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Building Code Act, 1992

S.O. 1992, CHAPTER 23

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INTERPRETATION

Definitions

1. (1) In this Act,

"building" means,

(a) a structure occupying an area greater than ten square metres consisting of a wall, roof and floor or any of them or a structural system serving the function thereof including all plumbing, works, fixtures and service systems appurtenant thereto,

(b) a structure occupying an area of ten square metres or less that contains plumbing, including the plumbing appurtenant thereto,

(c) plumbing not located in a structure,

(c.1) a sewage system, or

(d) structures designated in the building code; ("bâtiment")

"building code" means regulations made under section 34; ("code du bâtiment")

"change certificate" means a certificate prescribed under the building code or approved by the Minister as a change certificate; ("certificat de modification")

"chief building official" means a chief building official appointed or constituted under section 3 or 4; ("chef du service du bâtiment")

"code of conduct" means a code of conduct described in section 7.1; ("code de conduite")

"construct" means to do anything in the erection, installation, extension or material alteration or repair of a building and includes the installation of a building unit fabricated or moved from elsewhere and "construction" has a corresponding meaning; ("construire", "construction", "travaux de construction")

"demolish" means to do anything in the removal of a building or any material part thereof and "demolition" has a corresponding meaning; ("démolir", "démolition", "travaux de démolition")

"director" means the person appointed as director under section 2; ("directeur")

"final certificate" means a certificate prescribed under the building code or approved by the Minister as a final certificate; ("certificat définitif")

"inspector" means an inspector appointed under section 3, 3.1, 4, 6.1 or 6.2; ("inspecteur")

"maintenance inspection" means an inspection conducted under a maintenance inspection program; ("inspection d'entretien")

"maintenance inspection program" means a program established under clause 7 (1) (b.1) or subsection 34 (2.2); ("programme d'inspections d'entretien")

"Minister" means the Minister of Municipal Affairs and Housing; ("ministre")

"municipality" means a local municipality; ("municipalité")

"officer" means a property standards officer who has been assigned the responsibility of administering and enforcing by-laws passed under section 15.1; ("agent")

"planning board" means a planning board established under section 9 or 10 of the *Planning Act*; ("conseil d'aménagement")

"plans review certificate" means a certificate prescribed under the building code or approved by the Minister as a plans review certificate; ("certificat d'examen des plans")

"plumbing" means a drainage system, a venting system and a water system or parts thereof; ("installation de plomberie")

"principal authority" means,

(a) the Crown,

(b) the council of a municipality,

(c) an upper-tier municipality that has entered into an agreement under subsection 3 (5), 6.1 (1) or 6.2 (1),

(d) a board of health that has been prescribed for the purposes of subsection 3.1 (1) or has entered into an agreement under subsection 6.1 (2) or (3) or 6.2 (2),

(e) a planning board that has been prescribed for the purposes of subsection 3.1 (1), or

(f) a conservation authority that has been prescribed for the purposes of subsection 3.1 (1) or has entered into an agreement under subsection 6.2 (2); ("autorité principale")

"registered code agency" means a person that has the qualifications and meets the requirements described in subsection 15.11 (4); ("organisme inscrit d'exécution du code")

"regulations" means regulations made under this Act. ("règlements") 1992, c. 23, s. 1 (1); 1997, c. 24, s. 224 (1, 2); 1997, c. 30, Sched. B, s. 1; 1999, c. 12, Sched. M, s. 1; 2002, c. 17, Sched. F, Table.

Interpretation

(1.1) Except as provided in subsection (1.2), a reference to "this Act" in any provision of this Act shall be deemed to be a reference to this Act excluding sections 15.1 to 15.8. 1997, c. 24, s. 224 (3).

Same

(1.2) A reference to "this Act" in subsection 1 (1) and sections 2, 16, 19, 20, 21, 27, 31, 36 and 37 includes a reference to sections 15.1 to 15.8. 1997, c. 24, s. 224 (3).

Chief building official

(1.3) A reference to the "chief building official" in this Act, other than in subsections 1 (1), 3 (2), (3) and (6) and section 4, includes an inspector who has the same powers and duties as the chief building official,

(a) in relation to sewage systems by virtue of subsections 3.1 (3) or 6.2 (4); and

(b) in relation to plumbing by virtue of subsection 6.1 (5).

Exclusion

(2) This Act does not apply to structures used directly in the extraction of ore from a mine. 1992, c. 23, s. 1 (2).

Role of various persons

1.1 (1) It is the role of every person who causes a building to be constructed,

(a) to cause the building to be constructed in accordance with this Act and the building code and with any permit issued under this Act for the building;

(b) to ensure that construction does not proceed unless any permit required under this Act has been issued by the chief building official; and

(c) to ensure that construction is carried out only by persons with the qualifications and insurance, if any, required by this Act and the building code.

Role of designers

(2) It is the role of a designer,

(a) if the designer's designs are to be submitted in support of an application for a permit under this Act, to provide designs which are in accordance with this Act and the building code and to provide documentation that is sufficiently detailed to permit the design to be assessed for compliance with this Act and the building code and to allow a builder to carry out the work in accordance with the design, this Act and the building code;

(b) to perform the role described in clause (a) in respect of only those matters for which the designer has the qualifications, if any, required by this Act and the building code; and

(c) if the building code requires that all or part of the design or construction of a building be under general review, to perform the general review in respect of only those matters for which the designer has the qualifications, if any, required by this Act and the building code.

Role of builders

(3) It is the role of a builder,

(a) to ensure that construction does not proceed unless any permit required under this Act has been issued by the chief building official;

(b) to construct the building in accordance with the permit;

(c) to use appropriate building techniques to achieve compliance with this Act and the building code; and

(d) when site conditions affect compliance with the building code, to notify the designer and an inspector or the registered code agency, as appropriate.

Role of manufacturers, etc.

(4) It is the role of manufacturers, suppliers and retailers of products that are intended for use in Ontario in the construction of a building for a purpose that is regulated by this Act or the building code to ensure that the products comply with the standards established under this Act and the building code.

Role of registered code agencies

(5) It is the role of a registered code agency,

(a) to exercise powers and perform duties under this Act and the building code in connection with reviewing plans, issuing certificates, inspecting construction and performing other functions in accordance with this Act and the building code; and

(b) to carry out the duties of a registered code agency under this Act and the building code in respect of only those matters for which the registered code agency is qualified under this Act and the building code.

Role of chief building officials

(6) It is the role of a chief building official,

(a) to establish operational policies for the enforcement of this Act and the building code within the applicable jurisdiction;

(b) to co-ordinate and oversee the enforcement of this Act and the building code within the applicable jurisdiction;

(c) to exercise powers and perform the other duties assigned to him or her under this Act and the building code; and

(d) to exercise powers and perform duties in accordance with the standards established by the applicable code of conduct. 2002, c. 9, s. 3.

Role of inspectors

(7) It is the role of an inspector,

(a) to exercise powers and perform duties under this Act and the building code in connection with reviewing plans, inspecting construction and issuing orders in accordance with this Act and the building code;

(b) to exercise powers and perform duties in respect of only those matters for which he or she has the qualifications required by this Act and the building code; and

(c) to exercise powers and perform duties in accordance with the standards established by the applicable code of conduct.

Limitation

(8) Nothing in this section relieves any person or entity from the duty to comply with any part of this Act or the building code or affects the rights or duties of a person not mentioned in this section in respect of the construction of a building. 2002, c. 9, s. 3.

ENFORCEMENT AUTHORITIES

Administration

2. (1) The Minister is responsible for the administration of this Act.

Director

(2) There shall be a director of the Building and Development Branch of the Ministry of Municipal Affairs and Housing who is appointed by the Lieutenant Governor in Council for the purposes of this Act.

Acting director

(3) The director may designate in writing a public servant employed under Part III of the *Public Service of Ontario Act, 2006* who works in the Ministry of Municipal Affairs and Housing to exercise the powers and perform the duties of the director in his or her absence or if he or she is unable to act.

Delegation

(4) The director may delegate in writing any of his or her powers or duties to one or more public servants employed under Part III of the *Public Service of Ontario Act, 2006* who work in the Ministry of Municipal Affairs and Housing, and may impose conditions or restrictions with respect to the delegation.

Enforcement by municipalities

3. (1) The council of each municipality is responsible for the enforcement of this Act in the municipality, except where otherwise provided by this Act.

Chief building official, inspectors

(2) The council of each municipality shall appoint a chief building official and such inspectors as are necessary for the enforcement of this Act in the areas in which the municipality has jurisdiction. 1992, c. 23, s. 3 (2).

(2.1) REPEALED: 2002, c. 9, s. 6 (2).

Joint enforcement

(3) The councils of two or more municipalities may enter into an agreement,

(a) providing for the joint enforcement of this Act within their respective municipalities;

(b) providing for the sharing of costs incurred in the enforcement of this Act within their respective municipalities; and

(c) providing for the appointment of a chief building official and inspectors. 1992, c. 23, s. 3 (3).

Joint jurisdiction

(4) If an agreement under subsection (3) is in effect, the municipalities have joint jurisdiction in the area comprising the municipalities. 1992, c. 23, s. 3 (4).

Enforcement by upper-tier

(5) The council of an upper-tier municipality and of one or more municipalities in the upper-tier municipality may enter into an agreement for the enforcement by the upper-tier municipality of this Act in the municipalities and for charging the municipalities the whole or part of the cost. 2002, c. 17, Sched. F, Table.

Power of upper-tier

(6) If an agreement under subsection (5) is in effect, the upper-tier municipality has jurisdiction for the enforcement of this Act in the municipalities that are parties to the agreement and shall appoint a chief building official and such inspectors as are necessary for that purpose. 2002, c. 17, Sched. F, Table.

(7) REPEALED: 2002, c. 17, Sched. F, Table.

Certificate

(8) The clerk of the municipality or upper-tier municipality shall issue a certificate of appointment bearing the clerk's signature or a facsimile of it to the chief building official and each inspector appointed by the municipality or upper-tier municipality. 1992, c. 23, s. 3 (8); 2002, c. 17, Sched. F, Table.

Records

(9) Every municipality and every upper-tier municipality that has jurisdiction for the enforcement of this Act shall retain such records as may be prescribed by regulation for the prescribed period of time.

Enforcement, boards of health

3.1 (1) A board of health, a planning board or a conservation authority prescribed in the building code is responsible for the enforcement of the provisions of this Act and the building code related to sewage systems in the municipalities and territory without municipal organization prescribed in the building code. 1997, c. 30, Sched. B, s. 3; 1999, c. 12, Sched. M, s. 2 (1).

Inspectors

(2) The board of health, planning board or conservation authority shall appoint such sewage system inspectors as are necessary for the enforcement of this Act in the areas in which the board of health, planning board or conservation authority has jurisdiction under subsection (1). 1997, c. 30, Sched. B, s. 3; 1999, c. 12, Sched. M, s. 2 (2).

Powers

(3) A sewage system inspector appointed under this section in an area of jurisdiction or, if there is more than one inspector in the area of jurisdiction, the inspector designated by the board of health, planning board or conservation authority has the same powers and duties in relation to sewage systems as does the chief building official in respect of buildings. 1997, c. 30, Sched. B, s. 3; 1999, c. 12, Sched. M, s. 2 (3).

Jurisdiction

(4) A board of health, planning board or conservation authority prescribed for the purposes of subsection (1) has jurisdiction for the enforcement of this Act in the prescribed municipalities and territory without municipal organization. 1997, c. 30, Sched. B, s. 3; 1999, c. 12, Sched. M, s. 2 (4).

Responsibility

(5) If sewage system inspectors have been appointed under this section, the chief building official and inspectors appointed under section 3 or 4 shall not exercise their powers under this Act in respect of sewage systems. 1997, c. 30, Sched. B, s. 3.

Certificate

(6) The medical officer of health or the secretary-treasurer of a planning board or conservation authority shall issue a certificate of appointment bearing his or her signature, or a facsimile of it, to each sewage system inspector appointed by the board of health, planning board or conservation authority. 1997, c. 30, Sched. B, s. 3; 1999, c. 12, Sched. M, s. 2 (5).

Records

(7) Every board of health, planning board and conservation authority prescribed for the purposes of subsection (1) shall retain such records as may be prescribed by regulation for the prescribed period of time. 2002, c. 9, s. 7.

Provincial enforcement

4. (1) Subject to section 3.1, Ontario is responsible for the enforcement of this Act in a territory without municipal organization. 1992, c. 23, s. 4 (1); 1997, c. 30, Sched. B, s. 4.

Agreements

(2) The council of a municipality and the Crown in right of Ontario represented by the Minister may enter into an agreement providing for the enforcement of this Act in the municipality by Ontario subject to such payment in respect of costs as is set out in the agreement. 1992, c. 23, s. 4 (2).

Idem

(3) If an agreement under subsection (2) is in effect, Ontario has jurisdiction for the enforcement of this Act in the municipality. 1992, c. 23, s. 4 (3).

Inspectors

(4) Inspectors necessary for the enforcement of this Act in the areas in which Ontario has jurisdiction shall be appointed under Part III of the *Public Service of Ontario Act, 2006*. 1992, c. 23, s. 4 (4); 2006, c. 35, Sched. C, s. 8 (1).

Chief building official

(5) The director is the chief building official for the areas in which Ontario has jurisdiction. 1992, c. 23, s. 4 (5).

Certificate

(6) The Deputy Minister of Municipal Affairs and Housing shall issue a certificate of appointment bearing his or her signature or a facsimile of it to the director and each inspector appointed under subsection (4). 1992, c. 23, s. 4 (6); 1997, c. 24, s. 224 (5).

Enforcement by registered code agency appointed by a principal authority

4.1 (1) Subject to this Act and the building code, a principal authority may enter into agreements with registered code agencies authorizing the agency to perform the functions specified in the agreement in respect of the construction of any building or class of building specified in the agreement. 2002, c. 9, s. 8.

Appointment

(2) After entering into the agreement with the registered code agency, the principal authority may appoint the agency to perform specified functions in respect of the construction of a building or class of buildings. 2002, c. 9, s. 8.

Delegation of power to appoint

(3) The principal authority may delegate, in writing, to the chief building official the authority to make appointments described in subsection (2), and may impose conditions or restrictions with respect to the delegation. 2002, c. 9, s. 8.

Same

(4) Unless otherwise provided in the building code, an appointment of a registered code agency may authorize the agency to perform all of the applicable functions described in section 15.15,

(a) before a permit is issued under section 8;

(b) after a permit is issued under section 8; or

(c) both before and after a permit is issued under section 8. 2002, c. 9, s. 8.

Conflicts

(5) A registered code agency shall not accept an appointment in the circumstances set out in the building code or if it would have a conflict of interest as determined in accordance with the building code.

Effect of appointment

(6) A registered code agency shall perform the functions specified in the appointment for the construction of a specified building or class of buildings and subject to the restrictions set out in this Act and the building code, and shall do so in the manner and subject to the restrictions, if any, set out in the building code.

Same

(7) The duty of the registered code agency to perform those functions begins when the appointment is made and ends when the appointment expires as described in section 15.19 or is terminated in accordance with section 15.20.

Notice to the director

(8) A principal authority that appoints a registered code agency shall give the director such information as may be prescribed by regulation.

Enforcement by registered code agency appointed by an applicant

4.2 (1) This section applies only if a principal authority authorizes it, by regulation, by-law or resolution, as the case may be, to apply within the jurisdiction of the principal authority.

Appointment

(2) Subject to this Act and the building code, a prescribed person who is entitled to apply for a permit under section 8 of this Act may appoint a registered code agency to perform all of the functions described in section 15.15 in respect of the construction of a building.

Exception

(3) Subsection (2) does not apply,

(a) if a registered code agency has been appointed by a principal authority to perform any function in respect of the construction; or

(b) if an inspector has begun to perform any function in respect of the construction.

Manner of appointment

(4) The appointment must be made in writing in the prescribed manner and is subject to the prescribed conditions and restrictions.

Conflicts

(5) A registered code agency shall not accept an appointment in the circumstances set out in the building code or if it would have a conflict of interest as determined in accordance with the building code.

Effect of appointment

(6) A registered code agency shall perform its functions for the specified building subject to the restrictions set out in this Act and the building code and shall do so in the manner and subject to the restrictions, if any, set out in the building code.

Same

(7) The duty of the registered code agency to perform those functions begins when the appointment is made and ends when the appointment expires as described in section 15.19 or is terminated in accordance with section 15.20.

Replacement agency

(8) A person who has appointed a registered code agency under subsection (2) in respect of the construction of a building cannot replace the agency after it has begun to perform any function in respect of the construction unless the appointment of that agency has expired as described in section 15.19 or has been terminated in accordance with section 15.20.

Notice to director

(9) The person who appoints a registered code agency under this section shall give the director such information as may be prescribed by regulation.

Notice to chief building official

(10) The person who appoints a registered code agency under this section shall give the chief building official such information as may be prescribed by regulation.

Agreements re enforcement

5. (1) The council of a municipality adjacent to territory without municipal organization and the Crown in right of Ontario represented by the Minister may enter into an agreement providing for the enforcement of this Act by the municipality in such part of the territory without municipal organization and subject to such payment in respect of costs as is set out in the agreement. 1992, c. 23, s. 5 (1).

Area of municipal jurisdiction

(2) The municipality has jurisdiction for the enforcement of this Act in the area designated in the agreement. 1992, c. 23, s. 5 (2).

Application

(3) An agreement under this section may apply to the enforcement of all or any part of this Act or the building code. 1997, c. 30, Sched. B, s. 5.

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Agreement re review of plans

6. (1) Two or more principal authorities may enter into an agreement providing for,

(a) the review by a principal authority for compliance with the building code of plans and specifications for the construction of a building within its area of jurisdiction;

(b) an expedited review by another principal authority for compliance with the building code of plans and specifications for the construction of substantially similar buildings;

(c) the allocation of responsibility for reviews for compliance with the building code of plans and specifications for the construction of buildings;

(d) the resolution of disagreements about whether plans and specifications comply with the building code;

(e) indemnification; and

(f) such other matters as may be necessary to give effect to the agreement.

Delegation

(2) A principal authority may delegate to the chief building official the authority to make such decisions under an agreement as may be necessary for its implementation.

Agreement re: plumbing

6.1 (1) Despite any other provision of this Act, the council of an upper-tier municipality and of one or more municipalities in the upper-tier municipality may enter into an agreement for the enforcement by the upper-tier municipality of the provisions of this Act and the building code related to plumbing in the municipalities and for charging the municipalities the whole or part of the cost.

Delegation to health unit

(2) If an agreement under subsection (1) is in effect, the an upper-tier municipality may by agreement delegate its powers under subsection (1) to a board of health having jurisdiction in the municipalities that are parties to the agreement.

Delegation by municipality

(3) A municipality that is not a party to an agreement under subsection (1) may enter into an agreement with the board of health having jurisdiction in the municipality for the enforcement of the provisions of this Act and the building code relating to plumbing.

Plumbing inspectors

(4) The council of an upper-tier municipality or the board of health may appoint plumbing inspectors for the purpose of this section.

Powers

(5) A plumbing inspector appointed under this section or, if there is more than one inspector in the area of jurisdiction, the senior plumbing inspector has the same powers and duties in relation to plumbing as does the chief building official in respect of buildings other than the issuance of conditional permits.

Responsibility

(6) If plumbing inspectors have been appointed under this section, the chief building official and inspectors appointed under section 3 or 4 shall not exercise their powers under this Act in respect of plumbing.

Application

(7) Subsections 3 (8) and (9) and section 7 apply with necessary modifications to a the council of an upper-tier municipality or a board of health that has assumed responsibility for plumbing under this section.

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Transition, plumbing

(8) If, on July 1, 1993, an upper-tier municipality was carrying out plumbing inspections under the *Ontario Water Resources Act* in the municipalities that formed part of the upper-tier municipality, the upper-tier municipality shall enforce the provisions of this Act and the building code related to plumbing in all of the municipalities forming part of the upper-tier municipality until the council of the upper-tier municipality by by-law determines otherwise, whereupon section 3 applies.

See: 2002, c. 17, Sched. C, ss. 3 (5), 3 (12).

Same

(9) Subsections (4) to (7) apply with necessary modifications to an upper-tier municipality that has assumed responsibility for plumbing under subsection (8).

Interpretation

(10) For the purpose of subsection (8), an upper-tier municipality that has been deemed to be a county by any general or special Act for the purposes of section 76 of the *Ontario Water Resources Act*, as it read on June 30, 1993, shall be deemed to be an upper-tier municipality that was carrying out plumbing inspections under the *Ontario Water Resources Act* in the municipalities that formed part of the upper-tier municipality for municipal purposes on July 1, 1993.

Agreement re: sewage systems

6.2 (1) Despite any other provision of this Act, the council of an upper-tier municipality and of one or more municipalities in the upper-tier municipality may enter into an agreement for the enforcement by the upper-tier municipality of the provisions of this Act and the building code related to sewage systems in the municipalities and for charging the municipalities the whole or part of the cost.

Delegation

(2) A municipality that is not a party to an agreement under subsection (1) may enter into an agreement with a board of health or a conservation authority having jurisdiction in the municipality for the enforcement of the provisions of this Act and the building code related to sewage systems.

Inspectors

(3) The council of an upper-tier municipality, board of health or conservation authority may appoint sewage system inspectors for the purposes of this section. 2002, c. 9, s. 10; 2002, c. 17, Sched. C, s. 3 (9).

Powers

(4) A sewage system inspector appointed under this section in an area of jurisdiction or, if there is more than one inspector in the area of jurisdiction, the inspector designated by the council of an upper-tier municipality, board of health or conservation authority has the same powers and duties in relation to sewage systems as does the chief building official in respect of buildings. 2002, c. 9, s. 10; 2002, c. 17, Sched. C, s. 3 (10).

Responsibility

(5) If sewage system inspectors have been appointed under this section, the chief building official and inspectors appointed under section 3 or 4 shall not exercise their powers under this Act in respect of sewage systems. 2002, c. 9, s. 10.

Application

(6) Subsections 3 (8) and (9) and section 7 apply with necessary modifications to the council of an upper-tier municipality, board of health or conservation authority that has assumed responsibility for sewage systems under this section. 2002, c. 9, s. 10; 2002, c. 17, Sched. C, s. 3 (11).

By-laws, resolutions, regulations

7. (1) The council of a municipality or of an upper-tier municipality that has entered into an agreement under subsection 3 (5) or a board of health prescribed for the purposes of section 3.1 may pass by-laws, a planning board prescribed for the purposes of section 3.1 may pass resolutions and a conservation authority prescribed for the purposes of section 3.1 or the Lieutenant Governor in Council may make regulations, applicable in the area in which the municipality, upper-tier municipality, board of health, planning board, conservation authority or the Province of Ontario, respectively, has jurisdiction for the enforcement of this Act,

(a) prescribing classes of permits under this Act, including permits in respect of any stage of construction or demolition;

(b) providing for applications for permits and requiring the applications to be accompanied by such plans, specifications, documents and other information as is prescribed;

(b.1) subject to the regulations made under subsection 34 (2.1), establishing and governing a program to enforce standards prescribed under clause 34 (2) (b), in addition to any programs established under subsection 34 (2.2);

(b.2) subject to the regulations made under subsection 34 (2.2), governing a program established under subsection 34 (2.2);

(c) requiring the payment of fees on applications for and issuance of permits and prescribing the amounts thereof;

(c.1) requiring the payment of interest and other penalties, including payment of collection costs, when fees are unpaid or are paid after the due date;

(d) providing for refunds of fees under such circumstances as are prescribed;

(e) requiring a person specified in the building code to give notice to the chief building official or an inspector or to a registered code agency if one is appointed, of any of the stages of construction specified in the building code, in addition to the stages of construction prescribed under subsection 10.2 (1) and prescribing the period of time after such notice is given during which an inspection may be carried out;

(f) prescribing forms respecting permits and applications for permits and providing for their use;

(g) enabling the chief building official to require that a set of plans of a building or any class of buildings as constructed be filed with the chief building official on completion of the construction under such conditions as may be prescribed in the building code;

(h) providing for the transfer of permits when land changes ownership;

(i) requiring the person to whom a permit is issued to erect and maintain fences to enclose the site of the construction or demolition within such areas of the municipality as may be prescribed;

(j) prescribing the height and description of the fences required under clause (i).

Fees

(2) The total amount of the fees authorized under clause (1) (c) must not exceed the anticipated reasonable costs of the principal authority to administer and enforce this Act in its area of jurisdiction. 2002, c. 9, s. 11 (2).

Reduction in fees

(3) A regulation, by-law or resolution establishing fees under clause (1) (c) must provide for reduced fees to be payable in respect of the construction of a building for which a registered code agency is appointed under section 4.2. 2002, c. 9, s. 11 (2).

Report on fees

Report on fees

(4) Every 12 months, each principal authority shall prepare a report that contains such information as may be prescribed about any fees authorized under clause (1) (c) and costs of the principal authority to administer and enforce this Act in its area of jurisdiction. 2002, c. 9, s. 11 (2).

Same

(5) The principal authority shall make its report available to the public in the manner required by regulation. 2002, c. 9, s. 11 (2).

Change in fees

(6) If a principal authority proposes to change any fee imposed under clause (1) (c), the principal authority shall,

(a) give notice of the proposed changes in fees to such persons as may be prescribed; and

(b) hold a public meeting concerning the proposed changes. 2002, c. 9, s. 11 (2); 2006, c. 22, s. 112 (6).

Same, notice

(7) The notice of proposed changes in fees must contain the prescribed information, including information about the public meeting, and must be given in the prescribed manner. 2002, c. 9, s. 11 (2).

Same, public meeting

(8) The public meeting concerning proposed changes in fees must be held within the period specified by regulation before the regulation, by-law or resolution to implement the proposed changes is made. 2002, c. 9, s. 11 (2).

Fees may be added to tax roll

(8.1) Section 398 of the *Municipal Act, 2001* or section 264 of the *City of Toronto Act, 2006*, as the case may be, applies, with necessary modifications, to fees established by a municipality or local board under clause (1) (c) and, with the approval of the treasurer of a local municipality, to fees established under clause (1) (c) by a conservation authority whose area of jurisdiction includes any part of the local municipality. 2006, c. 22, s. 112 (7).

Forms

(9) The power to prescribe forms under clause (1) (f) does not include the power to prescribe a form for a particular purpose where there is a form for that purpose prescribed in the building code or approved by the Minister. 2002, c. 9, s. 11 (2); 2006, c. 21, Sched. F, s. 104 (4).

Code of conduct

7.1 (1) A principal authority shall establish and enforce a code of conduct for the chief building official and inspectors. 2002, c. 9, s. 12.

Purposes

(2) The following are the purposes of a code of conduct:

1. To promote appropriate standards of behaviour and enforcement actions by the chief building official and inspectors in the exercise of a power or the performance of a duty under this Act or the building code.
2. To prevent practices which may constitute an abuse of power, including unethical or illegal practices, by the chief building official and inspectors in the exercise of a power or the performance of a duty under this Act or the building code.
3. To promote appropriate standards of honesty and integrity in the exercise of a power or the performance of a duty under this Act or the building code by the chief building official and inspectors. 2002, c. 9, s. 12.

Contents

(3) A code of conduct must provide for its enforcement and include policies or guidelines to be used when responding to allegations that the code has been breached and disciplinary actions that may be taken if the code is breached. 2002, c. 9, s. 12.

Public notice

(4) The principal authority shall ensure that the code of conduct is brought to the attention of the public. 2002, c. 9, s. 12.

CONSTRUCTION AND DEMOLITION

Building permits

8. (1) No person shall construct or demolish a building or cause a building to be constructed or demolished unless a permit has been issued therefor by the chief building official. 1992, c. 23, s. 8 (1); 1997, c. 30, Sched. B, s. 7 (1).

Application for permit

(1.1) An application for a permit to construct or demolish a building may be made by a person specified by regulation and the prescribed form or the form approved by the Minister must be used and be accompanied by the documents and information specified by regulation. 2002, c. 9, s. 14 (1); 2006, c. 21, Sched. F, s. 104 (5).

Issuance of permits

(2) The chief building official shall issue a permit referred to in subsection (1) unless,

(a) the proposed building, construction or demolition will contravene this Act, the building code or any other applicable law;

(b) the applicant is a builder or vendor as defined in the *Ontario New Home Warranties Plan Act* and is not registered under that Act;

(b.1) the *Architects Act* or the *Professional Engineers Act* requires that the proposed construction of the building be designed by an architect or a professional engineer or a combination of both and the proposed construction is not so designed;

(c) a person who prepared drawings, plans, specifications or other documents or gave an opinion concerning the compliance of the proposed building or construction with the building code does not have the applicable qualifications, if any, set out in the building code or does not have the insurance, if any, required by the building code;

(d) the plans review certificate, if any, required for the application does not contain the prescribed information;

(e) the application for the permit is not complete; or

(f) any fees due have not been paid. 2002, c. 9, s. 14 (2); 2014, c. 7, Sched. 3, s. 1.

Restriction

(2.1) If the application includes a plans review certificate that contains the prescribed information, the chief building official is not entitled to refuse to issue the permit on the grounds that the proposed construction of the building to which the certificate relates does not comply with the building code. 2002, c. 9, s. 14 (2).

Decision

(2.2) If an application for a permit meets the requirements prescribed by regulation, the chief building official shall, unless the circumstances prescribed by regulation apply, decide within the period prescribed by regulation whether to issue the permit or to refuse to issue it. 2009, c. 33, Sched. 21, s. 2 (2).

Same, reasons for refusal

(2.3) If the chief building official refuses to issue the permit, he or she shall inform the applicant of all of the reasons for the refusal of the permit and shall do so within the period prescribed by regulation. 2002, c. 9, s. 14 (2).

Conditional permit

(3) Even though all requirements have not been met to obtain a permit under subsection (2), the chief building official may issue a conditional permit for any stage of construction if,

(a) compliance with by-laws passed under sections 34 and 38 of the *Planning Act* and with such other applicable law as may be set out in the building code has been achieved in respect of the proposed building or construction;

(b) the chief building official is of the opinion that unreasonable delays in the construction would occur if a conditional permit is not granted; and

(c) the applicant and such other person as the chief building official determines agree in writing with the municipality, upper-tier municipality, board of health, planning board, conservation authority or the Crown in right of Ontario to,

(i) assume all risk in commencing the construction,

(ii) obtain all necessary approvals in the time set out in the agreement or, if none, as soon as practicable,

(iii) file plans and specifications of the complete building in the time set out in the agreement,

(iv) at the applicant's own expense, remove the building and restore the site in the manner specified in the agreement if approvals are not obtained or plans filed in the time set out in the agreement, and

(v) comply with such other conditions as the chief building official considers necessary, including the provision of security for compliance with subclause (iv).

Delegation re conditional permits

(3.1) A principal authority may, in writing, delegate to the chief building official the power to enter into agreements described in clause (3) (c) and may impose conditions or restrictions with respect to the delegation.

Criteria

(4) In considering whether a conditional permit should be granted, the chief building official shall, among other matters, have regard to the potential difficulty in restoring the site to its original state and use if required approvals are not obtained. 1992, c. 23, s. 8 (4).

Registration

(5) Any agreement entered into under clause (3) (c) may be registered against the land to which it applies and the municipality, upper-tier municipality, board of health, planning board, conservation authority or the Province of Ontario, as the case may be, is entitled to enforce its provisions against the owner and, subject to the *Registry Act* and the *Land Titles Act*, any and all subsequent owners of the land.

Enforcement of agreement

(6) If the chief building official determines that a building has not been removed or a site restored as required by an agreement under clause (3) (c), the chief building official may cause the building to be removed and the site restored and for this purpose the chief building official, an inspector and their agents may enter upon the land and into the building governed by the agreement at any reasonable time without a warrant. 1992, c. 23, s. 8 (6).

Lien

(7) If the building is in a municipality, the municipality shall have a lien on the land for the amount spent on the removal of the building and restoration of the site under subsection (6) and the amount shall have priority lien status as described in section 1 of the *Municipal Act, 2001*, or the *City of Toronto Act, 2001*, as the case may be.

Deemed taxes

(8) If the building is in territory without municipal organization, the amount spent on the removal of the building and restoration of the site under subsection (6) shall be deemed to be taxes imposed under section 3 of the *Provincial Land Tax Act* for the purposes of sections 26 and 27 of that Act. 1992, c. 23, s. 8 (8).

Disclosure of prescribed information

(8.1) The chief building official shall, within the period and in the manner prescribed by regulation, give to the corporation designated under section 2 of the *Ontario New Home Warranties Plan Act* the information prescribed by regulation relating to permits issued under this section and the applications for those permits.

Referral of plans, etc.

(9) Upon reasonable grounds, the chief building official or registered code agency may refer drawings, plans or specifications accompanying applications for permits or the reports arising out of the general review of the construction of a building to the Association of Professional Engineers of Ontario or the Ontario Association of Architects for the purpose of determining if the *Professional Engineers Act* or the *Architects Act* is being contravened.

Same

(9.1) At the request of the Association of Professional Engineers of Ontario or the Ontario Association of Architects, the chief building official shall refer documents and information described in subsection (9) to those associations for the purpose of determining if the *Professional Engineers Act* or the *Architects Act* is being contravened.

Revocation of permits

(10) Subject to section 25, the chief building official may revoke a permit issued under this Act,

(a) if it was issued on mistaken, false or incorrect information;

(b) if, after six months after its issuance, the construction or demolition in respect of which it was issued has not, in the opinion of the chief building official, been seriously commenced;

(c) if the construction or demolition of the building is, in the opinion of the chief building official, substantially suspended or discontinued for a period of more than one year;

(d) if it was issued in error;

(e) if the holder requests in writing that it be revoked; or

(f) if a term of the agreement under clause (3) (c) has not been complied with. 1992, c. 23, s. 8 (10).

Prohibition

(11) No person shall construct or demolish a building or cause a building to be constructed or demolished except in accordance with this Act and the building code. 1992, c. 23, s. 8 (11).

Notice of change

(12) No person shall make a material change or cause a material change to be made to a plan, specification, document or other information on the basis of which a permit was issued without notifying, filing details with and obtaining the authorization of the chief building official. 1992, c. 23, s. 8 (12).

Prohibition

(13) No person shall construct or demolish a building or cause a building to be constructed or demolished except in accordance with the plans, specifications, documents and any other information on the basis of which a permit was issued or any changes to them authorized by the chief building official. 1992, c. 23, s. 8 (13).

Restriction

(14) If a request for authorization referred to in subsection (12) or (13) is accompanied by a change certificate that contains the prescribed information, the chief building official is not entitled to refuse to authorize the change on the grounds that the construction of the building to which the certificate relates does not comply with the building code.

See: 2002, c. 9, ss. 14 (5), 57.

Equivalent materials, etc.

9. (1) The chief building official or a registered code agency may allow the use of materials, systems and building designs that are not authorized in the building code if, in the opinion of the chief building official or registered code agency, the proposed materials, systems and building designs will achieve the level of performance required by the building code.

Conditions

(2) The chief building official or registered code agency, as the case may be, may impose conditions on the use of the materials, systems and building designs, including conditions relating to the construction, operation or maintenance of the building.

Restrictions

(3) The powers of the chief building official and registered code agency under subsection (1) to allow the use of materials, systems and building designs and under subsection (2) to impose conditions are subject to such conditions as may be set out in the building code.

Revocation

(4) The chief building official may alter or revoke a condition imposed under subsection (2).

Repeal

(5) This section is repealed on a day to be named by proclamation of the Lieutenant Governor.

Change of use

10. (1) Even though no construction is proposed, no person shall change the use of a building or part of a building or permit the use to be changed if the change would result in an increase in hazard, as determined in accordance with the building code, unless a permit has been issued by the chief building official. 2002, c. 9, s. 16.

Permit

(2) The chief building official shall issue a permit under subsection (1), unless,

(a) the building if used as proposed would result in a contravention of this Act or the building code or any other applicable law;

(b) the application for it is incomplete; or

(c) any fees due are unpaid. 1992, c. 23, s. 10 (2).

Prohibition re sewage systems

10.1 No person shall operate or maintain a sewage system or permit a sewage system to be operated or maintained except in accordance with this Act and the building code. 1997, c. 30, Sched. B, s. 9.

Notice of readiness for inspection

10.2 (1) At each stage of construction specified in the building code, the prescribed person shall notify the chief building official or the registered code agency, if any, that the construction is ready to be inspected.

Inspection

(2) After the notice is received, an inspector or the registered code agency, as the case may be, shall carry out the inspection required by the building code within the prescribed period.

Occupancy or use after completion

11. (1) Except as authorized by the building code, a person shall not occupy or use a building or part of a building that is newly erected or installed or permit it to be occupied or used until the requirements set out in this section are met.

Notice of date of completion

(2) Notice of the date of completion of the building or part must be given to the chief building official or the registered code agency, if any.

Final certificate

(3) If a registered code agency has been appointed for the building or part of the building by a principal authority to perform the functions described in clause 4.1 (4) (b) or (c) or has been appointed under section 4.2, a final certificate that contains the prescribed information must be issued.

Inspection, etc.

(4) If subsection (3) does not apply,

(a) either the building or part must be inspected or 10 days must elapse after notice of the date of completion is served on the chief building official; and

(b) any order made under section 12 must be complied with.

See: 2002, c. 9, ss. 18, 57.

Inspection of building site

Inspection of building site

12. (1) An inspector may enter upon land and into buildings at any reasonable time without a warrant for the purpose of inspecting the building or site in respect of which a permit is issued or an application for a permit is made. 1992, c. 23, s. 12 (1).

Order

(2) An inspector who finds a contravention of this Act or the building code may make an order directing compliance with this Act or the building code and may require the order to be carried out immediately or within such time as is specified in the order. 1992, c. 23, s. 12 (2).

Service

(3) The order shall be served on the person whom the inspector believes is contravening this Act or the building code. 1992, c. 23, s. 12 (3).

Form and contents

(4) The prescribed form or the form approved by the Minister must be used for the order and it must contain sufficient information to specify the nature of the contravention and its location and the nature of the compliance that is required. 2002. c. 9, s. 19; 2006, c. 21, Sched. F, s. 104 (6).

Posting

(5) The inspector may post a copy of the order on the site of the construction or demolition. 1992, c. 23, s. 12 (5).

Order not to cover

13. (1) An inspector may make an order prohibiting the covering or enclosing of any part of a building pending inspection. 1992, c. 23, s. 13 (1).

Form of order

(1.1) The prescribed form or the form approved by the Minister must be used for an order made under this section. 2002, c. 9, s. 20 (1); 2006, c. 21, Sched. F, s. 104 (7).

Service

(2) The order shall be served on the person to whom the permit is issued, if any, and on such other persons affected thereby as the inspector determines. 1992, c. 23, s. 13 (2).

Posting

(3) The inspector may post a copy of the order on the site of the construction. 1992, c. 23, s. 13 (3).

Inspection

(4) An inspection shall be made within a reasonable time after the person to whom the order is made has given notice that the part of the building is ready for inspection. 1992, c. 23, s. 13 (4).

Service

(5) Section 27 does not apply to a notice under subsection (4). 1992, c. 23, s. 13 (5).

Order to uncover

(6) A chief building official or registered code agency who has reason to believe that part of a building that is covered or enclosed has not been constructed in compliance with this Act or the building code may order the persons responsible for the construction to uncover the part at their own expense for the purpose of an inspection if,

(a) the part was covered or enclosed contrary to an order made under subsection (1);

(b) a notice required to be given to the chief building official, registered code agency or inspector before the part was covered or enclosed under a by-law, resolution or regulation made under clause 7 (e) was not given, or a notice required under section 10.2 was not received;

(c) in cases where a notice required under section 10.2 is received, the period prescribed under subsection 10.2 (2) did not elapse before the part was covered or enclosed;

(d) in cases where a notice required by a by-law, resolution or regulation made under clause 7 (e) is given,

(i) the inspection period prescribed under clause 7 (e) did not elapse before the part was covered or enclosed, or

(ii) if an inspection period is not prescribed under clause 7 (e), a reasonable period of time after the notice was given did not elapse before the part was covered or enclosed; or

(e) the part has been constructed without a permit being issued. 2006, c. 19, Sched. O, s. 1 (6).

Stop work order

Stop work order

14. (1) If an order made under section 12 or 13 is not complied with within the time specified in it, or where no time is specified, within a reasonable time, the chief building official or registered code agency, as the case may be, may order that all or any part of the construction or demolition cease. 1992, c. 23, s. 14 (1); 2002, c. 9, s. 21 (1).

Form of order

(1.1) The prescribed form or the form approved by the Minister must be used for the order. 2002, c. 9, s. 21 (2); 2006, c. 21, Sched. F, s. 104 (8).

Service

(2) The order shall be served on such persons affected thereby as the chief building official or registered code agency determines and a copy shall be posted on the site of the construction or demolition. 1992, c. 23, s. 14 (2); 2002, c. 9, s. 21 (3).

Timing

(3) The order is effective from the time it is posted under subsection (2). 1992, c. 23, s. 14 (3).

Effect of order

(4) If an order to cease construction or demolition is made, no person shall perform any act in the construction or demolition of the building in respect of which the order is made other than work necessary to carry out the order made under section 12 or 13. 1992, c. 23, s. 14 (4).

Referral to chief building official

(5) When a registered code agency makes an order under this section, the agency shall refer the matter to the chief building official as soon as practicable. 2002, c. 9, s. 21 (4).

Same

(6) The referral must be made in the prescribed manner. 2002, c. 9, s. 21 (4).

Effect of referral

(7) After making the referral, the registered code agency shall take no further steps in respect of the matter to which the order refers and the principal authority that issued the permit is responsible for the enforcement of this Act in respect of the matter. 2002, c. 9, s. 21 (4).

Powers of chief building official

(8) The chief building official may amend or rescind any order made by the registered code agency in respect of the matter. 2002, c. 9, s. 21 (4).

15. REPEALED: 2002, c. 9, s. 22.

PROPERTY STANDARDS

Municipal property standards

15.1 (1) In sections 15.1 to 15.8 inclusive,

"committee" means a property standards committee established under section 15.6; ("comité")

"occupant" means any person or persons over the age of 18 years in possession of the property; ("occupant")

"owner" includes,

(a) the person for the time being managing or receiving the rent of the land or premises in connection with which the word is used, whether on the person's own account or as agent or trustee of any other person, or who would receive the rent if the land and premises were let, and

(b) a lessee or occupant of the property who, under the terms of a lease, is required to repair and maintain the property in accordance with the standards for the maintenance and occupancy of property; ("propriétaire")

"property" means a building or structure or part of a building or structure, and includes the lands and premises appurtenant thereto and all mobile homes, mobile buildings, mobile structures, outbuildings, fences and erections thereon whether heretofore or hereafter erected, and includes vacant property; ("bien")

"repair" includes the provision of facilities, the making of additions or alterations or the taking of any other action that may be required to ensure that a property conforms with the standards established in a by-law passed under this section. ("réparation") 1997, c. 24, s. 224 (8).

Adoption of policy

(2) Where there is no official plan in effect in a municipality, the council of a municipality may, by by-law approved by the Minister, adopt a policy statement containing provisions relating to property conditions. 1997, c. 24, s. 224 (8).

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Standards for maintenance and occupancy

(3) The council of a municipality may pass a by-law to do the following things if an official plan that includes provisions relating to property conditions is in effect in the municipality or if the council of the municipality has adopted a policy statement as mentioned in subsection (2):

1. Prescribing standards for the maintenance and occupancy of property within the municipality or within any defined area or areas and for prohibiting the occupancy or use of such property that does not conform with the standards.
2. Requiring property that does not conform with the standards to be repaired and maintained to conform with the standards or the site to be cleared of all buildings, structures, debris or refuse and left in graded and levelled condition. 1997, c. 24, s. 224 (8).

No distinction on the basis of relationship

(4) The authority to pass a by-law under subsection (3) does not include the authority to pass a by-law that sets out requirements, standards or prohibitions that have the effect of distinguishing between persons who are related and persons who are unrelated in respect of the occupancy or use of a property, including the occupancy or use as a single housekeeping unit. 1997, c. 24, s. 224 (8).

Provision of no effect

(5) A provision in a by-law is of no effect to the extent that it contravenes the restrictions described in subsection (4). 1997, c. 24, s. 224 (8).

Inspection of property without warrant

15.2 (1) Where a by-law under section 15.1 is in effect, an officer may, upon producing proper identification, enter upon any property at any reasonable time without a warrant for the purpose of inspecting the property to determine,

(a) whether the property conforms with the standards prescribed in the by-law; or

(b) whether an order made under subsection (2) has been complied with. 1997, c. 24, s. 224 (8).

Contents of order

(2) An officer who finds that a property does not conform with any of the standards prescribed in a by-law passed under section 15.1 may make an order,

(a) stating the municipal address or the legal description of the property;

(b) giving reasonable particulars of the repairs to be made or stating that the site is to be cleared of all buildings, structures, debris or refuse and left in a graded and levelled condition;

(c) indicating the time for complying with the terms and conditions of the order and giving notice that, if the repair or clearance is not carried out within that time, the municipality may carry out the repair or clearance at the owner's expense; and

(d) indicating the final date for giving notice of appeal from the order. 1997, c. 24, s. 224 (8).

Service and posting of order

(3) The order shall be served on the owner of the property and such other persons affected by it as the officer determines and a copy of the order may be posted on the property. 1997, c. 24, s. 224 (8).

Registration of order

(4) The order may be registered in the proper land registry office and, upon such registration, any person acquiring any interest in the land subsequent to the registration of the order shall be deemed to have been served with the order on the day on which the order was served under subsection (3) and, when the requirements of the order have been satisfied, the clerk of the municipality shall forthwith register in the proper land registry office a certificate that such requirements have been satisfied, which shall operate as a discharge of the order. 1997, c. 24, s. 224 (8).

Appeal of order

15.3 (1) An owner or occupant who has been served with an order made under subsection 15.2 (2) and who is not satisfied with the terms or conditions of the order may appeal to the committee by sending a notice of appeal by registered mail to the secretary of the committee within 14 days after being served with the order. 1997, c. 24, s. 224 (8).

Confirmation of order

(2) An order that is not appealed within the time referred to in subsection (1) shall be deemed to be confirmed. 1997, c. 24, s. 224 (8).

Duty of committee

(3) The committee shall hear the appeal. 2002, c. 9, s. 24.

Powers of committee

(3.1) On an appeal, the committee has all the powers and functions of the officer who made the order and the committee may do any of the following things if, in the committee's opinion, doing so would maintain the general intent and purpose of the by-law and of the official plan or policy statement:

1. Confirm, modify or rescind the order to demolish or repair.
2. Extend the time for complying with the order. 2002, c. 9, s. 24.

Appeal to court

(4) The municipality in which the property is situate or any owner or occupant or person affected by a decision under subsection (3.1) may appeal to the Superior Court of Justice by notifying the clerk of the municipality in writing and by applying to the court within 14 days after a copy of the decision is sent. 2002, c. 9, s. 24.

Appointment

(5) The Superior Court of Justice shall appoint, in writing, a time and place for the hearing of the appeal and may direct in the appointment the manner in which and the persons upon whom the appointment is to be served. 2002, c. 9, s. 24.

Judge's powers

(6) On the appeal, the judge has the same powers and functions as the committee. 1997, c. 24, s. 224 (8).

Effect of decisions

(7) An order that is deemed to be confirmed under subsection (2) or that is confirmed or modified by the committee under subsection (3) or a judge under subsection (6), as the case may be, shall be final and binding upon the owner and occupant who shall carry out the repair or demolition within the time and in the manner specified in the order. 1997, c. 24, s. 224 (8).

Power of municipality if order not complied with

15.4 (1) If an order of an officer under section 15.2 (2) is not complied with in accordance with the order as deemed confirmed or as confirmed or modified by the committee or a judge, the municipality may cause the property to be repaired or demolished accordingly. 1997, c. 24, s. 224 (8).

Warrantless entry

(2) For the purpose of subsection (1), employees or agents of the municipality may enter the property at any reasonable time without a warrant in order to repair or demolish the property. 1997, c. 24, s. 224 (8).

No liability

(3) Despite subsection 31 (2), a municipal corporation or a person acting on its behalf is not liable to compensate the owner, occupant or any other person by reason of anything done by or on behalf of the municipality in the reasonable exercise of its powers under subsection (1). 1997, c. 24, s. 224 (8).

Lien

(4) The municipality shall have a lien on the land for the amount spent on the repair or demolition under subsection (1) and the amount shall have priority lien status as described in section 1 of the *Municipal Act, 2001* or section 3 of the of the City of Toronto Act, 2006, as the case may be.

Certificate of compliance

15.5 (1) An officer who, after inspecting a property, is of the opinion that the property is in compliance with the standards established in a by-law passed under section 15.1 may issue a certificate of compliance to the owner. 1997, c. 24, s. 224 (8).

Request for certificate

(2) An officer shall issue a certificate to an owner who requests one and who pays the fee set by the council of the municipality in which the property is located. 1997, c. 24, s. 224 (8).

Fee for certificate

(3) A council of a municipality may set a fee for the issuance of a certificate. 1997, c. 24, s. 224 (8).

Property standards committee

15.6 (1) A by-law passed under section 15.1 shall provide for the establishment of a committee composed of such persons, not fewer than three, as the council considers advisable to hold office for such term and on such conditions as the by-law may establish. 1997, c. 24, s. 224 (8).

Filling of vacancies

(2) The council of the municipality shall forthwith fill any vacancy that occurs in the membership of the committee. 1997, c. 24, s. 224 (8).

Compensation

(3) The members of the committee shall be paid such compensation as the council may provide. 1997, c. 24, s. 224 (8).

Chair

(4) The members shall elect a chair from among themselves; when the chair is absent through illness or otherwise, the committee may appoint another member as acting chair. 1997, c. 24, s. 224 (8).

Quorum

(5) A majority of the members constitutes a quorum for transacting the committee's business. 1997, c. 24, s. 224 (8).

Secretary

(6) The members shall provide for a secretary for the committee. 1997, c. 24, s. 224 (8).

Duty of secretary

(7) The secretary shall keep on file the records of all official business of the committee, including records of all applications and minutes of all decisions respecting those applications, and section 253 of the *Municipal Act, 2001* or section 199 of the *City of Toronto Act, 2006* apply with necessary modifications to the minutes and records. .

Rules of procedure and oaths

(8) The committee may, subject to subsection (9), adopt its own rules of procedure and any member may administer oaths. 1997, c. 24, s. 224 (8).

Where committee required to give notice

(9) The committee shall give notice or direct that notice be given of the hearing of an appeal to such persons as the committee considers advisable. 1997, c. 24, s. 224 (8).

Emergency order re dangerous non-conformity with standards

15.7 (1) If upon inspection of a property the officer is satisfied that there is non-conformity with the standards in a by-law passed under section 15.1 to such extent as to pose an immediate danger to the health or safety of any person, the officer may make an order containing particulars of the non-conformity and requiring remedial repairs or other work to be carried out immediately to terminate the danger. 1997, c. 24, s. 224 (8).

Service

(2) The order shall be served on the owner of the property and such other persons affected thereby as the officer determines and a copy shall be posted on the property. 1997, c. 24, s. 224 (8).

Emergency powers

(3) After making an order under subsection (1), the officer may, either before or after the order is served, take any measures necessary to terminate the danger and, for this purpose, the municipality may, through its employees and agents, at any time enter upon the property in respect of which the order was made without a warrant. 1997, c. 24, s. 224 (8).

No liability

(4) Despite subsection 31 (2), a municipal corporation or a person acting on its behalf is not liable to compensate the owner, occupant or any other person by reason of anything done by or on behalf of the municipality in the reasonable exercise of its powers under subsection (3). 1997, c. 24, s. 224 (8).

Service

(5) If the order was not served before measures were taken to terminate the danger, the officer shall serve copies of the order in accordance with subsection (2) as soon as practicable after the measures have been taken, and each copy of the order shall have attached to it a statement by the officer describing the measures taken by the municipality and providing details of the amount expended in taking the measures. 1997, c. 24, s. 224 (8).

Service of statement

(6) If the order was served before the measures were taken, the officer shall serve a copy of the statement mentioned in subsection (5) in accordance with subsection (2) as soon as practicable after the measures have been taken. 1997, c. 24, s. 224 (8).

Application to court

(7) As soon as practicable after the requirements of subsection (5) or (6) have been complied with, the officer shall apply to a judge of the Superior Court of Justice for an order confirming the order made under subsection (1) and the judge shall hold a hearing for that purpose. 1997, c. 24, s. 224 (8); 2002, c. 9, s. 25.

Powers of judge

(8) The judge in disposing of an application under subsection (7) shall,

(a) confirm, modify or rescind the order; and

(b) determine whether the amount spent on measures to terminate the danger may be recovered in whole, in part or not at all. 1997, c. 24, s. 224 (8).

Order final

(9) The disposition under subsection (8) is final. 1997, c. 24, s. 224 (8).

Lien

(10) The amount determined by the judge to be recoverable shall be a lien on the land and shall have priority lien status as described in section 1 of the *Municipal Act, 2001*, or the City of Toronto Act, 2001, as the case may be.

Inspection powers of officer

15.8 (1) For the purposes of an inspection under section 15.2, an officer may,

(a) require the production for inspection of documents or things, including drawings or specifications, that may be relevant to the property or any part thereof;

(b) inspect and remove documents or things relevant to the property or part thereof for the purpose of making copies or extracts;

(c) require information from any person concerning a matter related to a property or part thereof;

(d) be accompanied by a person who has special or expert knowledge in relation to a property or part thereof;

(e) alone or in conjunction with a person possessing special or expert knowledge, make examinations or take tests, samples or photographs necessary for the purposes of the inspection; and

(f) order the owner of the property to take and supply at the owner's expense such tests and samples as are specified in the order. 1997, c. 24, s. 224 (8).

Samples

(2) The officer shall divide the sample taken under clause (1) (e) into two parts and deliver one part to the person from whom the sample is taken, if the person so requests at the time the sample is taken and provides the necessary facilities. 1997, c. 24, s. 224 (8).

Same

(3) If an officer takes a sample under clause (1) (e) and has not divided the sample into two parts, a copy of any report on the sample shall be given to the person from whom the sample was taken. 1997, c. 24, s. 224 (8).

Receipt

(4) An officer shall provide a receipt for any document or thing removed under clause (1) (b) and shall promptly return them after the copies or extracts are made. 1997, c. 24, s. 224 (8).

Evidence

(5) Copies of or extracts from documents and things removed under this section and certified as being true copies of or extracts from the originals by the person who made them are admissible in evidence to the same extent as and have the same evidentiary value as the originals. 1997, c. 24, s. 224 (8).

UNSAFE BUILDINGS

Inspection of unsafe buildings

15.9 (1) An inspector may enter upon land and into buildings at any reasonable time without a warrant for the purpose of inspecting a building to determine,

(a) whether the building is unsafe; or

(b) whether an order made under subsection (4) has been complied with.

Interpretation

(2) A building is unsafe if the building is,

(a) structurally inadequate or faulty for the purpose for which it is used; or

(b) in a condition that could be hazardous to the health or safety of persons in the normal use of the building, persons outside the building or persons whose access to the building has not been reasonably prevented.

Sewage systems

(3) In addition to the criteria set out in subsection (2), a sewage system is unsafe if it is not maintained or operated in accordance with this Act and the building code.

Order

(4) An inspector who finds that a building is unsafe may make an order setting out the reasons why the building is unsafe and the remedial steps necessary to render the building safe and may require the order to be carried out within the time specified in the order.

Service

(5) The order shall be served on the owner and each person apparently in possession of the building and such other persons affected thereby as the chief building official determines and a copy of the order may be posted on the site of the building.

Order respecting occupancy

(6) If an order of an inspector under subsection (4) is not complied with within the time specified in it, or where no time is specified, within a reasonable time, the chief building official,

(a) may by order prohibit the use or occupancy of the building; and

(b) may cause the building to be renovated, repaired or demolished to remove the unsafe condition or take such other action as he or she considers necessary for the protection of the public.

Power of entry

(7) For the purpose of clause (6) (b), the chief building official, an inspector and their agents may enter upon land and into buildings at any reasonable time without a warrant.

Service

(8) The order under clause (6) (a) shall be served on the owner and each person apparently in possession of the building and such other persons affected thereby as the chief building official determines and a copy of the order shall be posted on the site of the building.

Timing

(9) The order under clause (6) (a) is effective from the time it is posted.

Lien

(10) If the building is in a municipality, the municipality shall have a lien on the land for the amount spent on the renovation, repair, demolition or other action under clause (6) (b) and the amount shall have priority lien status as described in section 1 of the *Municipal Act, 2001* or section 3 of the *City of Toronto Act, 2006*, as the case may be.

Deemed taxes

(11) If the building is in territory without municipal organization, the amount spent on the renovation, repair, demolition or other action under clause (6) (b) shall be deemed to be taxes imposed under section 3 of the *Provincial Land Tax Act* for the purposes of sections 26 and 27 of that Act.

Emergency order where immediate danger

15.10 (1) If upon inspection of a building an inspector is satisfied that the building poses an immediate danger to the health or safety of any person, the chief building official may make an order containing particulars of the dangerous conditions and requiring remedial repairs or other work to be carried out immediately to terminate the danger.

Service

(2) The order shall be served on the owner and each person apparently in possession of the building and such other persons affected thereby as the chief building official determines and a copy shall be posted on the site of the building.

Emergency powers

(3) After making an order under subsection (1), the chief building official may, either before or after the order is served, take any measures necessary to terminate the danger and, for this purpose, the chief building official, an inspector and their agents may at any time enter upon the land and into the building in respect of which the order was made without a warrant.

No liability

(4) Despite subsection 31 (2), the Crown a municipality, an upper-tier municipality, a board of health, a planning board or a conservation authority or a person acting on behalf of any of them is not liable to compensate the owner, occupant or any other person by reason of anything done by or on behalf of the chief building official or an inspector in the reasonable exercise of his or her powers under subsection (3).

Service

(5) If the order was not served before measures were taken to terminate the danger, the chief building official shall serve copies of the order in accordance with subsection (2) as soon as practicable after the measures have been taken and each copy of the order shall have attached to it a statement by the chief building official describing the measures taken and providing details of the amount spent in taking the measures.

Service of statement

(6) If the order was served before the measures were taken, the chief building official shall serve a copy of the statement mentioned in subsection (5) in accordance with subsection (2) as soon as practicable after the measures have been taken.

Application to court

(7) As soon as practicable after subsections (5) and (6) have been complied with, the chief building official shall apply to the Superior Court of Justice for an order confirming the order made under subsection (1) and the court shall hold a hearing for that purpose.

Powers of court

(8) In disposing of an application under subsection (7), the court shall,

(a) confirm, modify or rescind the order; and

(b) determine whether the amount spent on measures to terminate the danger may be recovered in whole, in part or not at all.

Order final

(9) The disposition under subsection (8) is final.

Lien

(10) If the building is in a municipality, the amount determined by the judge to be recoverable shall be a lien on the land and shall have priority lien status as described in section 1 of the *Municipal Act, 2001* or section 3 of the *City of Toronto Act, 2006*.

Deemed taxes

(11) If the building is in territory without municipal organization, the amount determined by the judge to be recoverable is a debt owing to the Crown and may be collected under the *Provincial Land Tax Act, 2006* as if it was tax imposed under that Act. 2002, c. 9, s. 26; 2006, c. 33, Sched. Z.3, s. 4 (3).

MAINTENANCE INSPECTION PROGRAMS

Maintenance inspections

15.10.1 (1) An inspector may enter upon land and into buildings at any reasonable time without a warrant for the purpose of conducting a maintenance inspection. 2006, c. 22, s. 112 (8).

Order

(2) An inspector who finds a contravention of this Act or the building code may make an order directing compliance with this Act or the building code and may require the order to be carried out immediately or within such time as is specified in the order. 2006, c. 22, s. 112 (8).

Service

(3) The order shall be served on the person whom the inspector believes is contravening this Act or the building code. 2006, c. 22, s. 112 (8).

Form and contents

(4) The prescribed form or the form approved by the Minister must be used for the order and it must contain sufficient information to specify the nature of the contravention and its location and the nature of the compliance that is required. 2006, c. 22, s. 112 (8).

Posting

(5) The inspector may post a copy of the order on the site of the maintenance inspection. 2006, c. 22, s. 112 (8).

QUALIFICATIONS

Qualifications for various positions

15.11 (1) A person is not eligible to be appointed as a chief building official unless he or she has the qualifications set out in the building code for the position. 2002, c. 9, s. 27.

Same

(2) Subsection (1) also applies to every inspector who has the same powers and duties as a chief building official in relation to sewage systems or to plumbing, to the extent of those powers and duties. 2002, c. 9, s. 27.

Qualifications for inspectors

(3) A person is not eligible to be appointed as an inspector under this Act unless he or she has the qualifications set out in the building code for the position. 2002, c. 9, s. 27.

Qualifications for registered code agencies

(4) A person is not eligible to be appointed as a registered code agency under this Act unless the person has the qualifications and meets the requirements set out in the building code. 2002, c. 9, s. 27; 2006, c. 19, Sched. O, s. 1 (7).

Qualifications for designers

(5) A person is not eligible to engage in any of the following activities unless he, she or it has the qualifications and meets the requirements set out in the building code to be a designer:

1. Prepare a design or give other information or opinion concerning whether a building or part of a building complies with the building code, if the design, information or opinion is to be submitted to a chief building official in connection with,
   i. an application for a permit,
   ii. a request for the authorization referred to in subsection 8 (12) or (13), or
   iii. a report described in paragraph 2.
2. If a general review of the construction of a building or part of a building is required by the building code, prepare a written report based on the general review. 2002, c. 9, s. 27; 2006, c. 19, Sched. O, s. 1 (7).

Same

(6) In subsection (5),

"design" includes a plan, specification, sketch, drawing or graphic representation respecting the construction of a building. 2002, c. 9, s. 27.

Prohibition

(7) No person shall represent, directly or indirectly, that he, she or it has the qualifications or meets the requirements established under this section if the person does not have those qualifications or does not meet those requirements. 2002, c. 9, s. 27; 2006, c. 19, Sched. O, s. 1 (7).

Non application

(8) Subsection (5) does not apply to a holder of any licence or certificate issued under the *Architects Act* or the *Professional Engineers Act*. 2014, c. 7, Sched. 3, s. 2.

Qualifications re sewage systems

15.12 (1) No person shall engage in the business of constructing on site, installing, repairing, servicing, cleaning or emptying sewage systems unless the person has the qualifications and meets the requirements set out in the building code. 2002, c. 9, s. 27; 2006, c. 19, Sched. O, s. 1 (8).

Prohibition

(2) No person shall represent, directly or indirectly, that he, she or it has the qualifications or meets the requirements referred to in subsection (1) if the person does not have those qualifications or does not meet those requirements. 2002, c. 9, s. 27; 2006, c. 19, Sched. O, s. 1 (8).

Duty to notify the chief building official

(3) If any part of the construction of a building will be undertaken by a person described in subsection (1) (a "specified person"), no person shall begin or continue the construction of a sewage system, or cause it to begin or continue, unless the person has given the chief building official the prescribed information about the specified person. 2002, c. 9, s. 27; 2006, c. 19, Sched. O, s. 1 (8).

Duty to have insurance

15.13 (1) Every registered code agency, every person referred to in subsection 15.11 (5) and such other persons as may be specified in the building code who construct buildings are required to have the insurance coverage specified by the building code. 2002, c. 9, s. 27.

Exception

(2) Subsection (1) does not apply to a person who is a builder or vendor within the meaning of the *Ontario New Home Warranties Plan Act* in respect of the construction of a building. 2002, c. 9, s. 27.

Prohibition

(3) No person shall represent, directly or indirectly, that he, she or it has the insurance coverage required by subsection (1) if the person does not have that insurance coverage. 2002, c. 9, s. 27.

Qualification or requirement

(4) If the building code so provides, the insurance coverage constitutes a qualification or requirement for the purposes of a position referred to in section 15.11. 2002, c. 9, s. 27.

Duty to notify the chief building official

(5) If any part of the construction of a building will be undertaken by a person who is required by subsection (1) to have insurance (a "specified person"), no person shall begin or continue the construction, or cause it to begin or continue, unless the person has given the chief building official the prescribed information about the specified person and the insurance coverage of the specified person. 2002, c. 9, s. 27.

POWERS AND DUTIES OF REGISTERED CODE AGENCIES

Notice to chief building official

15.14 (1) Every registered code agency shall give the chief building official such information as may be prescribed by regulation.

Notice to the director

(2) Every registered code agency shall give the director such information as may be prescribed by regulation.

Functions of registered code agencies

15.15 The following are the functions that a registered code agency may be appointed to perform in respect of the construction of a building:

1. Review designs and other materials to determine whether the proposed construction of a building complies with the building code.
2. Issue plans review certificates.
3. Issue change certificates.
4. Inspect the construction of a building for which a permit has been issued under this Act.
5. Issue final certificates.
6. Perform such other functions as may be authorized under this Act or in the building code.

Scope of agency's powers

15.16 (1) A registered code agency may exercise the powers and perform the duties specified in this Act and the building code in respect only of the functions and the building specified in a particular appointment.

Confidentiality

(2) A registered code agency shall not collect, use or disclose information except in accordance with the building code.

Persons acting on behalf of an agency

15.17 (1) A registered code agency may authorize, in writing, one or more prescribed persons to exercise powers and perform its functions under this Act, subject to such conditions as may be prescribed by regulation.

Certificate of authorization

(2) The registered code agency shall issue a certificate of authorization containing the prescribed information to the authorized person.

Powers and duties of inspector

(3) The authorized person may exercise the powers and perform the duties of an inspector under any of the following provisions, in respect of the construction of a building for which the agency is appointed under this Act:

1. Section 12 (inspection).
2. Section 13 (order not to cover).
3. Section 16 (entry to dwellings).
4. Section 18 (powers of inspector). 2002, c. 9, s. 28.

Duties re certificates and orders

15.18 (1) When a registered code agency makes an order under this Act, the agency shall give a copy of the order within the period prescribed by regulation to the chief building official. 2002, c. 9, s. 28.

Certificates

(2) A registered code agency shall issue such certificates and use such forms as may be required by the building code and shall include in them or provide such information as may be prescribed. 2002, c. 9, s. 28.

Same

(3) A certificate issued under this Act by a registered code agency must be in the prescribed form or the form approved by the Minister. 2002, c. 9, s. 28; 2006, c. 21, Sched. F, s. 104 (9).

Expiry of an agency's appointment

15.19 (1) The appointment of a registered code agency expires when the agency has performed the functions for which it was appointed in respect of construction of the specified building. 2002, c. 9, s. 28.

Same, by virtue of circumstances

(2) The appointment of a registered code agency that has not performed all of the functions for which it is appointed in respect of the construction expires if either of the following events occurs:

1. The chief building official refuses to issue a permit for construction of the specified building.
2. The permit for construction of the building is revoked. 2002, c. 9, s. 28.

Termination of an agency's appointment

15.20 (1) The appointment of a registered code agency shall not be terminated except in accordance with this section and the building code. 2002, c. 9, s. 28.

Same

(2) The building code may specify that the consent of the director to the termination of an appointment is required. 2002, c. 9, s. 28.

Effect of termination, appointment by principal authority

(3) If the registered code agency was appointed by a principal authority, upon the termination of the appointment the principal authority becomes responsible to ensure that the remaining functions of the agency are performed by the principal authority or another registered code agency. 2002, c. 9, s. 28.

Same, appointment by applicant

(4) If the registered code agency was appointed under section 4.2, upon the termination of the appointment the person who made the appointment becomes responsible to ensure that the remaining functions of the agency are performed by another registered code agency or, with the prior written agreement of the principal authority, by the principal authority or to ensure that work on the construction is halted. 2002, c. 9, s. 28.

Powers of the director

(5) When the appointment of a registered code agency is terminated, the director may give directions to anyone described in subsection (6) in order to facilitate the transfer of the agency's functions. 2002, c. 9, s. 28.

Same

(6) Directions may be given to the person who made the appointment that has been terminated, to the registered code agency whose appointment has been terminated and to a transferee registered code agency. 2002, c. 9, s. 28.

Duties

(7) The person to whom directions are given shall comply with them. 2002, c. 9, s. 28.

Order to suspend construction

15.21 (1) The chief building official may, by order, suspend all or part of the construction of the building to which the appointment of a registered code agency relates,

(a) if the chief building official has reason to believe that the registered code agency has ceased to perform the functions specified in the appointment; and

(b) if the appointment of the registered code agency has not expired or been terminated. 2002, c. 9, s. 28.

Same

(2) If the appointment of a registered code agency under section 4.2 is terminated, the chief building official shall, by order, suspend the construction of the applicable building until,

(a) another registered code agency is appointed to perform the remaining functions of the original registered code agency; or

(b) the principal authority agrees, in writing, to perform the remaining functions of the original registered code agency. 2002, c. 9, s. 28.

Delegation

(3) A principal authority may delegate to the chief building official the power to agree to perform the remaining functions of a registered code agency appointed under section 4.2 whose appointment is terminated and may impose conditions and restrictions on the delegation. 2002, c. 9, s. 28.

Effect of order

(4) If an order is issued under this section, no person shall perform any act in the construction of the building in respect of which the order is made, other than work necessary to secure the safety and security of the building and of the construction site. 2002, c. 9, s. 28.

Procedural matters

(5) Subsections 14 (2) and (3) apply with respect to an order under this section. 2002, c. 9, s. 28.

Conflict between appointment and Act, etc.

15.22 This Act and the building code prevail over the terms of an appointment of a registered code agency. 2002, c. 9, s. 28.

GENERAL POWERS OF INSPECTION AND ENFORCEMENT

Duty to carry identification

15.23 The chief building official, inspectors and persons authorized by a registered code agency to exercise powers and perform functions on its behalf shall carry their certificate of appointment or authorization, as the case may be, when performing their duties and shall produce them for inspection upon request. 2002, c. 9, s. 29.

Entry to dwellings

16. (1) Despite sections 8, 12, 15, 15.2, 15.4 and 15.9, an inspector or officer shall not enter or remain in any room or place actually being used as a dwelling unless,

(a) the consent of the occupier is obtained, the occupier first having been informed that the right of entry may be refused and entry made only under the authority of a warrant issued under this Act;

(a.1) a warrant issued under this Act is obtained;

(b) the delay necessary to obtain a warrant or the consent of the occupier would result in an immediate danger to the health or safety of any person;

(c) the entry is necessary to terminate a danger under subsection 15.7 (3) or 15.10 (3); or

(d) the requirements of subsection (2) are met and the entry is necessary to remove a building or restore a site under subsection 8 (6), to remove an unsafe condition under clause 15.9 (6) (b) or to repair or demolish under subsection 15.4 (1). 1992, c. 23, s. 16 (1); 1997, c. 24, s. 224 (9, 10); 2002, c. 9, s. 30; 2006, c. 19, Sched. O, s. 1 (11).

Notice

(2) Within a reasonable time before entering the room or place for a purpose described in clause (1) (d), the inspector or officer shall serve the occupier with notice of his or her intention to enter it. 1992, c. 23, s. 16 (2); 1997, c. 24, s. 224 (11).

17. REPEALED: 2002, c. 9, s. 31 (2).

Recovery of expenditures for repairs, etc.

17.1 (1) This section applies if money is spent by a board of health, planning board or conservation authority or, in the circumstances described in subsection (2), by the Crown or an upper-tier municipality or, in the circumstances described in subsection (4), by a municipality,

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(a) to carry out a removal and restoration under subsection 8 (6);

(b) to carry out a renovation, repair, demolition or other action under clause 15.9 (6) (b); or

(c) to perform remedial or other work under subsection 15.10 (1) where the amount spent is determined to be recoverable by a judge under subsection 15.10 (8).

In municipalities

(2) If the building in respect of which money was spent is in a municipality,

(a) the upper-tier municipality, board of health, planning board, conservation authority or the Crown may instruct the municipality to recover the amount spent;

(b) subsection 8 (7), 15.9 (10) or 15.10 (10), as the case may be, applies to the collection of the amount; and

(c) the money collected, less the costs reasonably attributable to the collection, shall be paid by the municipality to the upper-tier municipality, board of health, planning board, conservation authority or the Crown. 1999, c. 12, Sched. M, s. 8; 2002, c. 17, Sched. F, Table.

Not interest of the Crown

(3) Where the Crown instructs the municipality under clause (2) (a) to recover the amount spent, the lien referred to in subsection 8 (7), 15.9 (10) or 15.10 (10) is not an estate or interest of the Crown within the meaning of clause 379 (7) (b of the *Municipal Act, 2001*, or clause 350 (7) of the City of toronto Act, 2006.

In territory without municipal organization

(4) If the building in respect of which money was spent is in territory without municipal organization,

(a) the municipality, board of health, planning board or conservation authority may instruct the land tax collector appointed under the *Provincial Land Tax Act* to recover the amount spent;

(b) subsection 8 (8), 15.9 (11) or 15.10 (11), as the case may be, applies to the collection of the amount; and

(c) the money collected, less the costs reasonably attributable to the collection, shall be paid by the Crown to the municipality, board of health, planning board or conservation authority. 1999, c. 12, Sched. M, s. 8.

Powers of inspector

18. (1) For the purposes of an inspection under this Act, an inspector may,

(a) require the production for inspection of documents or things, including drawings or specifications, that may be relevant to the building or any part thereof;

(b) inspect and remove documents or things relevant to the building or part thereof for the purpose of making copies or extracts;

(c) require information from any person concerning a matter related to a building or part thereof;

(d) be accompanied by a person who has special or expert knowledge in relation to a building or part thereof;

(e) alone or in conjunction with a person possessing special or expert knowledge, make examinations or take tests, samples or photographs necessary for the purposes of the inspection; and

(f) order any person to take and supply at that person's expense such tests and samples as are specified in the order. 1992, c. 23, s. 18 (1); 1997, c. 30, Sched. B, s. 11.

Samples

(2) The inspector shall divide the sample taken under clause (1) (e) into two parts and deliver one part to the person from whom the sample is taken, if the person so requests at the time the sample is taken and provides the necessary facilities. 1992, c. 23, s. 18 (2).

Idem

(3) If an inspector takes a sample under clause (1) (e) and has not divided the sample into two parts, a copy of any report on the sample shall be given to the person from whom the sample was taken. 1992, c. 23, s. 18 (3).

Receipt

(4) An inspector shall provide a receipt for any document or thing removed under clause (1) (b) and shall promptly return them after the copies or extracts are made. 1992, c. 23, s. 18 (4).

Evidence

(5) Copies of or extracts from documents and things removed under this section and certified as being true copies of or extracts from the originals by the person who made them are admissible in evidence to the same extent as and have the same evidentiary value as the originals. 1992, c. 23, s. 18 (5).

Form of order

(6) The prescribed form must be used for an order under subsection (1).

18.1 REPEALED: 2002, c. 9, s. 34.

Obstruction of inspector, etc.

19. (1) No person shall hinder or obstruct, or attempt to hinder or obstruct, a chief building official, inspector or officer in the exercise of a power or the performance of a duty under this Act. 1997, c. 24, s. 224 (13).

Note: On a day to be named by proclamation of the Lieutenant Governor, subsection (1) is amended by the Statutes of Ontario, 2002, chapter 9, subsection 35 (1) by striking out "or officer" and substituting "officer or a person authorized by a registered code agency". See: 2002, c. 9, ss. 35 (1), 57.

Occupied dwellings

(2) A refusal of consent to enter or remain in a place actually used as a dwelling is not hindering or obstructing within the meaning of subsection (1) unless the inspector, officer or authorized person is acting under a warrant issued under this Act or in the circumstances described in clause 16 (1) (b), (c) or (d). 1997, c. 24, s. 224 (13).

Assistance

(3) Every person shall assist any entry, inspection, examination, testing or inquiry by an inspector, chief building official officer or a person authorized by a registered code agency in the exercise of a power or performance of a duty under this Act. 1997, c. 24, s. 224 (13).

Requirements

Same

(4) No person shall neglect or refuse,

(a) to produce any documents, drawings, specifications or things required under clause 15.8 (1) (a) or (e) by an officer or under clause 18 (1) (a) or (e) by an inspector or by a person authorized by a registered code agency; or

(b) to provide any information required under clause 15.8 (1) (c) by an officer or under clause 18 (1) (c) by an inspector or by a person authorized by a registered code agency.

Obstruction or removal of order

20. No person shall obstruct the visibility of an order and no person shall remove a copy of an order posted under this Act unless authorized to do so by an inspector , officer or registered code agency. 1997, c. 24, s. 224 (14).

Warrant for entry and search

21. (1) A provincial judge or justice of the peace may at any time issue a warrant in the prescribed form authorizing a person named in the warrant to enter and search a building, receptacle or place if the provincial judge or justice of the peace is satisfied by information on oath that there is reasonable ground to believe that,

(a) an offence under this Act has been committed; and

(b) the entry into and search of the building, receptacle or place will afford evidence relevant to the commission of the offence. 1992, c. 23, s. 21 (1).

Seizure

(2) In a search warrant, the provincial judge or justice of the peace may authorize the person named in the warrant to seize anything that there is reasonable ground to believe will afford evidence relevant to the commission of the offence. 1992, c. 23, s. 21 (2).

Same

(3) Anyone who seizes something under a search warrant shall,

(a) give a receipt for the thing seized to the person from whom it was seized; and

(b) bring the thing seized before the provincial judge or justice of the peace issuing the warrant or another provincial judge or justice to be dealt with according to law. 1992, c. 23, s. 21 (3).

Expiry of warrant

(4) A search warrant shall state the date on which it expires, which date shall be not later than fifteen days after the warrant is issued. 1992, c. 23, s. 21 (4).

Time for execution

(5) A search warrant may be executed only between 6 a.m. and 9 p.m. unless it provides otherwise. 1992, c. 23, s. 21 (5).

Application

(6) Sections 159 and 160 of the *Provincial Offences Act* apply with necessary modifications in respect of any thing seized under this section. 1992, c. 23, s. 21 (6).

DISPUTE RESOLUTION, REVIEWS AND APPEALS

Review of inspector's order

22. (1) The chief building official may review and amend or rescind an order made by an inspector. 1992, c. 23, s. 22 (1).

Powers

(2) A chief building official may exercise any of the powers or perform any of the duties of an inspector. 1992, c. 23, s. 22 (2).

Building Code Commission

23. (1) The Building Code Commission is continued under the name Building Code Commission in English and Commission du code du bâtiment in French and shall be composed of those persons appointed by the Lieutenant Governor in Council. 1992, c. 23, s. 23 (1).

Chair

(2) The Lieutenant Governor in Council may designate one of the members as chair and one or more of the members as vice-chair. 1992, c. 23, s. 23 (2).

Eligibility

(3) A person is not eligible to be a member of the Commission if the person is,

(a) a deputy minister of a ministry;

(b) a public servant employed under Part III of the *Public Service of Ontario Act, 2006*;

(c) an employee of a municipality; or

(d) in a prescribed relationship to a registered code agency. 2006, c. 35, Sched. C, s. 8 (2).

Remuneration

(4) The members of the Commission shall receive such remuneration and expenses as the Lieutenant Governor in Council may determine. 1992, c. 23, s. 23 (4).

Quorum

(5) Three members of the Commission constitute a quorum. 1992, c. 23, s. 23 (5).

Dispute resolution

24. (1) This section applies if there is a dispute,

(a) between an applicant for a permit, a holder of a permit or a person to whom an order is given and the chief building official, a registered code agency or an inspector concerning the sufficiency of compliance with the technical requirements of the building code;

(b) between an applicant for a permit and the chief building official concerning whether the official complied with subsection 8 (2.2) or (2.3); or

(c) between a holder of a permit and the chief building official, a registered code agency or an inspector concerning whether the requirements of subsection 10.2 (2) have been met.

Application for dispute resolution

(1.1) A party to the dispute may apply to the Building Code Commission to resolve the issue.

Hearing

(2) The Building Code Commission shall hold a hearing to decide the dispute and shall give the parties to the dispute notice of the hearing.

Same

(2.1) A hearing to decide a dispute described in clause (1) (b) or (c) must be held within the prescribed period.

~~**Powers**~~

Powers

(3) The Building Code Commission shall, by order, determine a dispute described in clause (1) (a) and, for that purpose, may substitute its opinion for that of the chief building official, registered code agency or inspector.

Same

(3.1) The Building Code Commission shall, by order, determine a dispute described in clause (1) (b) or (c) and, for that purpose, may require the chief building official, registered code agency or inspector, as the case may be, to comply with the applicable subsection of the Act.

Decision final

(4) The decision of the Building Code Commission is final. 1992, c. 23, s. 24 (4).

Restrictions on members

(5) Members of the Building Code Commission holding a hearing shall not,

(a) take part before the hearing in any investigation or consideration of the subject-matter of the hearing; or

(b) communicate directly or indirectly in relation to the subject-matter of the hearing with any person unless all parties are given notice and allowed to participate. 1992, c. 23, s. 24 (5).

Independent advice

(6) Despite subsection (5), members of the Building Code Commission may seek independent legal or technical advice but the nature of the advice shall be made known to the parties in order that they may make submissions. 1992, c. 23, s. 24 (6).

Evidence

(7) The findings of fact at a hearing shall be based exclusively on evidence admissible or matters that may be noticed under sections 15 and 16 of the *Statutory Powers Procedure Act*. 1992, c. 23, s. 24 (7).

Restriction

(8) Members of the Building Code Commission shall not participate in a decision of the Commission pursuant to a hearing unless they were present throughout the hearing. 1992, c. 23, s. 24 (8).

Idem

(9) Except with the consent of the parties, no decision of the Building Code Commission shall be given unless all members present throughout the hearing participate in the decision. 1992, c. 23, s. 24 (9).

Release of evidence

(10) Documents and things put in evidence at the hearing shall, upon the request of the person who produced them, be released by the Building Code Commission to that person within a reasonable time after the matter in issue has been finally determined. 1992, c. 23, s. 24 (10).

Appeal to court

25.(1) A person who considers themself aggrieved by an order or decision made by the chief building official, a registered code agency or an inspector under this Act (except a decision under subsection 8 (3) not to issue a conditional permit) may appeal the order or decision to the Superior Court of Justice within 20 days after the order or decision is made.

Extension of time

(2) A judge to whom an appeal is made may, upon such conditions as the judge considers appropriate, extend the time for making the appeal before or after the time set out in subsection (1), if the judge is satisfied that there is reasonable grounds for the appeal and for applying for the extension. 1992, c. 23, s. 25 (2).

Effect of appeal

(3) If an appeal is made under this section in respect of a matter in which a question is pending before the Building Code Commission, the proceeding before the Commission is terminated. 1992, c. 23, s. 25 (3).

Powers of judge

(4) On an appeal, a judge may affirm or rescind the order or decision and take any other action that the judge considers the chief building official, registered code agency or inspector ought to take in accordance with this Act and the regulations and, for those purposes, the judge may substitute his or her opinion for that of the official, agency or inspector.

Reference to Commission

(5) A judge may refer a question respecting the interpretation of the technical requirements of the building code or the sufficiency of compliance with the technical requirements of the building code to the Building Code Commission for a hearing and report to the judge. 1992, c. 23, s. 25 (5).

Procedure

(6) The procedure on the reference shall be the same as on an application under section 24. 1992, c. 23, s. 25 (6).

Stay of order or decision

(7) An appeal under subsection (1) does not stay the operation of the order or decision appealed from but a judge may, on such terms as are just, stay the operation of the order or decision until the disposition of the appeal. 2000, c. 26, Sched. K, s. 1.

Further appeal

26. (1) A party to the hearing before the Superior Court of Justice under section 25 may appeal from the decision to the Divisional Court. 1992, c. 23, s. 26 (1); 2002, c. 9, s. 41 (1).

Minister represented

(2) The Minister is entitled to be heard, by counsel or otherwise, upon the argument of an appeal under this section. 1992, c. 23, s. 26 (2).

Powers of Divisional Court

(3) An appeal under this section may be made on any question that is not a question of fact alone and the Divisional Court may,

(a) confirm or alter the decision of the judge;

(b) direct the chief building official, registered code agency or inspector to take any action that the official, agency or inspector is authorized to take under this Act;

(c) refer the matter back to the judge for reconsideration; or

(d) substitute its opinion for that of the chief building official, registered code agency, inspector or judge.

Service

27. (1) A notice or order required by this Act to be served may be served personally or by registered mail sent to the last known address of the person to whom notice is to be given or to that person's agent for service. 1992, c. 23, s. 27 (1).

Idem

(2) If a notice or order is served by registered mail, the service shall be deemed to have been made on the fifth day after the day of mailing unless the person to whom the notice or order is given or that person's agent for service establishes that, acting in good faith, through absence, accident, illness or other unintentional cause the notice was not received until a later date. 1992, c. 23, s. 27 (2); 1997, c. 24, s. 224 (15).

AUTHORIZATIONS AND RULINGS

Building Materials Evaluation Commission

28. (1) The Building Materials Evaluation Commission is continued under the name Building Materials Evaluation Commission in English and Commission d'évaluation des matériaux de construction in French and shall be composed of those persons appointed by the Lieutenant Governor in Council. 1992, c. 23, s. 28 (1).

Chair

(2) The Lieutenant Governor in Council may designate one of the members as chair and one of the members as vice-chair. 1992, c. 23, s. 28 (2).

Remuneration

(3) The members of the Commission shall receive such remuneration and expenses as the Lieutenant Governor in Council may determine. 1992, c. 23, s. 28 (3).

Powers and duties

(4) The Building Materials Evaluation Commission may,

(a) conduct research on, and examine, construction materials, systems and building designs or cause such research to be conducted and examinations to be undertaken;

(b) upon application therefor, authorize the use, subject to any conditions that may be set out, of any innovative material, system or building design in respect of any building or part thereof; and

(c) make recommendations to the Minister respecting changes in this Act or the building code. 1992, c. 23, s. 28 (4); 2002, c. 9, s. 43.

Innovative materials

(5) The use of any innovative material, system or building design in the manner approved by the Commission shall be deemed not to be a contravention of the building code. 1992, c. 23, s. 28 (5).

Binding interpretations by the Minister

28.1 (1) The Minister may issue a written interpretation of any provision of the building code, and the Minister's interpretation is binding on any person exercising a power or performing a duty under this Act and on any person who is subject to this Act. 2002, c. 9, s. 44.

Public notice

(2) A statement setting out the Minister's interpretation of a provision of the building code shall be made available to the public in the prescribed manner. 2002, c. 9, s. 44.

***Legislation Act, 2006*, Part III**

(3) The Minister's interpretation of a provision of the building code is not a regulation within the meaning of Part III (Regulations) of the *Legislation Act, 2006*. 2002, c. 9, s. 44; 2006, c. 21, Sched. F, s. 136 (1).

Delegation

(4) The Minister may delegate his or her power under subsection (1) to the director. 2002, c. 9, s. 44.

Rulings by Minister

29. (1) The Minister may, subject to such conditions as the Minister in his or her discretion considers appropriate, make rulings,

(a) approving the use of innovative materials, systems or building designs evaluated by a materials evaluation body designated in the building code;

(b) adopting an amendment to a code, formula, standard, guideline, protocol or procedure that has been adopted by reference in the building code; or

(c) approving the use of alternative materials, systems and building designs which, in the opinion of the Minister, will achieve the level of performance required by the building code. 1997, c. 30, Sched. B, s. 14 (1); 1999, c. 12, Sched. M, s. 9 (1); 2002, c. 9, s. 45 (1).

Delegation

(2) The Minister may by order delegate the power to make rulings to the director. 1992, c. 23, s. 29 (2).

Status

(3) A ruling is not a regulation within the meaning of Part III (Regulations) of the *Legislation Act, 2006*. 1992, c. 23, s. 29 (3); 2006, c. 21, Sched. F, s. 136 (1).

Publication

(4) Notice of a ruling shall be published at least once in *The Ontario Gazette* and made available, upon request, to members of the public. 1992, c. 23, s. 29 (4).

Application

(5) A ruling of the Minister under clause (1) (a) or (c) entitles a person to use the approved material, system or building design in all of Ontario unless the ruling states otherwise. 1999, c. 12, Sched. M, s. 9 (2).

Approved materials

(6) The use of an approved material, system or building design in the manner approved in a ruling under clause (1) (a) or (c) shall be deemed not to be a contravention of the building code. 1999, c. 12, Sched. M, s. 9 (2).

Conflicts

(7) In the event of a conflict between an authorization of the Building Materials Evaluation Commission and a ruling of the Minister under clause (1) (a) or (c), the ruling prevails. 1992, c. 23, s. 29 (7); 1997, c. 30, Sched. B, s. 14 (4); 2002, c. 9, s. 45 (2).

Restriction

(8) If a materials evaluation body designated in the building code has examined or has expressed its intention to examine an innovative material, system or building design, the Building Materials Evaluation Commission shall not exercise its power under subsection 28 (4) in respect of that material, system or building design. 1992, c. 23, s. 29 (8).

Inquiry

30. (1) If it appears to the Minister that there is or may be a failure in construction or demolition standards or in the enforcement of this Act or the building code, the Minister may designate a person to conduct an inquiry into the failure. 1992, c. 23, s. 30 (1).

Application of the Public Inquiries Act, 2009

(2) Section 33 of the Public Inquiries Act, 2009 applies to the inquiry.

GENERAL

Immunity from action

31. (1) No action or other proceeding for damages shall be instituted against the director, a member of the Building Code Commission or the Building Materials Evaluation Commission, or anyone acting under their authority, a person conducting an inquiry under section 30, a chief building official, an inspector or an officer for any act done in good faith in the execution or intended execution of any power or duty under this Act or the regulations or for any alleged neglect or default in the execution in good faith of that power or duty. 1992, c. 23, s. 31 (1); 1997, c. 24, s. 224 (16).

Liability

(2) Subsection (1) does not relieve the Crown, a municipality, an upper-tier municipality, a board of health, a planning board or a conservation authority of liability in respect of a tort committed by their respective chief building official or inspectors to which they would otherwise be subject and the Crown, municipality or upper-tier municipality, board of health, planning board or conservation authority is liable for any such tort as if subsection (1) were not enacted. 2002, c. 17, Sched. F, Table.

Immunity re registered code agencies

(3) The Crown, a municipal corporation, a municipality, an upper-tier municipality , a board of health, a planning board or a conservation authority is not liable for any harm or damage resulting from any act or omission by a registered code agency or by a person authorized by a registered code agency under subsection 15.17 (1) in the performance or intended performance of any function set out in section 15.15.

Same

(4) The Crown, a municipality, an upper-tier municipality, a board of health, a planning board or a conservation authority is not liable for any harm or damage resulting from any act or omission in the execution or intended execution of any power or duty under this Act or the regulations by their respective chief building official or inspectors if the act was done or omitted in reasonable reliance on a certificate issued or other information given under this Act by a registered code agency or by a person authorized by a registered code agency under subsection 15.17 (1).

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Regulations

34. (1) The Lieutenant Governor in Council may make regulations governing standards for the construction and demolition of buildings, including,

1. designating structures that are to be defined as buildings under subsection 1 (1);

1.1 prescribing the functions for which a registered code agency may be appointed under subsection 4.1 (4);

1.2 prescribing the information that a principal authority is required to give to the director under subsection 4.1 (8);

1.3 prescribing the persons who may appoint a registered code agency under subsection 4.2 (2);

1.4 prescribing the manner in which the appointment of a registered code agency under section 4.2 may be made and prescribing conditions and restrictions with respect to each appointment;

1.5 prescribing the information that a person who appoints a registered code agency is required to give to the director under subsection 4.2 (9) or to the chief building official under subsection 4.2 (10);

2. prescribing the conditions under which "as constructed plans" may be required by a chief building official under clause 7 (g);

2.1 prescribing the information about the fees and costs to be included in a report under subsection 7 (4) and the manner in which the report is to be made available to the public;

2.2 prescribing the persons to whom notice of proposed changes in fees is to be given under subsection 7 (6), the information to be included in the notice and the manner in which the notice is to be given;

2.3 prescribing the period within which the public meeting referred to in subsection 7 (6) must be held;

2.4 prescribing the records to be maintained by a principal authority and the period for which the records must be retained;

3. governing the manner of construction and types and quality of materials used therein;

3.1 establishing objectives governing the standards for the construction and demolition of buildings;

3.2 prescribing the persons who may apply for a permit under section 8 and the information to be provided with an application for a permit under section 8;

3.3 prescribing the information that a plans review certificate must contain for the purposes of clause 8 (2) (d);

3.4 prescribing the period within which the chief building official is required to make a decision under subsections 8 (2.2) and (2.3) and the manner of determining when the period begins;

3.5 prescribing the information that a plans review certificate must contain under subsection 8 (2.1) and a change certificate must contain under subsection 8 (14);

4. setting out the applicable laws with which compliance must be achieved before a conditional permit may be issued under subsection 8 (3);

4.1prescribing the information that a chief building official is required to give under subsection 8 (8.1) and prescribing the period within which and the manner in which the chief building official shall give the information;

5. governing the design of buildings and the use to which they may be put;

6. establishing conditions under which the use of materials, systems and building designs that are not authorized in the building code may be allowed under section 9 and circumstances in which the use of equivalent materials, systems and building designs may be made subject to conditions;

7. setting out rules and policies to be observed in the interpretation of the building code by any person exercising a power or discretion conferred under the Act or the building code;

8. determining an increase in hazard for the purposes of section 10;

9. adopting by reference, in whole or in part, with such changes as the Lieutenant Governor in Council considers necessary, any code, formula, standard, guideline, protocol or procedure and requiring compliance with any code, formula, standard, guideline, protocol or procedure that is so adopted;

9.1 requiring any part of the construction of a building described in clauses 11 (3) (a) and (b) of the *Architects Act* or subsection 12 (4) and clause 12 (5) (a) of the *Professional Engineers Act* to be designed by an architect or a professional engineer or a combination of both;

10. requiring any part of the design, construction or demolition of a building to be under the general review of an architect or a professional engineer or a combination of both and that copies of reports arising from the general review be provided to the chief building official or to a registered code agency;

11. designating organizations to test prefabricated building units to the standards prescribed by the building code and providing for the placing of their label on units that conform to the standards;

12. requiring the approval of an inspector or a registered code agency in respect of any method, matter or thing;

13. requiring the posting on buildings or sites of construction or demolition of such documents or information as is prescribed;

14. requiring such documents, information, records, drawings or specifications as are prescribed to be kept on the site of construction or demolition;

14.1 prescribing the records to be kept by any person and the returns of information and reports to be made by any person and providing for the inspection and examination of the records;

15. requiring notice to be given to the chief building official, an inspector or a registered code agency respecting any matter in the course of construction, including notice of readiness for inspection at the stages of construction of a building, and specifying the person required to give the notices;

15.1 prescribing the type and manner of inspections for the purposes of subsection 10.2 (2) (readiness for inspection) and prescribing the period within which the inspections must be carried out;

15.2 prescribing the information that must be given to the chief building official about a person who is required by subsection 15.12 (3) to have certain qualifications or to meet certain requirements or both;

15.3 prescribing the information that must be given to the chief building official under subsection 15.13 (5) about any person required to have insurance coverage and about the coverage;

15.4 prescribing the manner in which a referral to the chief building official under subsection 14 (5) must be made;

16. requiring notice to be given to the chief building official respecting the change in prescribed classes of use made of a building;

17. requiring the chief building official to transmit to the director such returns or reports as are prescribed;

18. prescribing conditions under which a building or any part of a building may be occupied, including requiring notice to be given to a chief building official or registered code agency and requiring permission to be received from the official or agency before the building or part may be occupied;

19. exempting any building or person or class thereof from compliance with all or any part of this Act and the regulations and prescribing conditions for the exemption;

20. prescribing the form of a warrant and the form in which the information upon oath will be taken under section 21;

21. requiring the alteration of any part of an existing building where construction in relation to the building affects that part;

22. requiring the payment of fees in respect of applications to the Building Materials Evaluation Commission and prescribing the amounts thereof;

22.1 prescribing the manner in which the Minister's written interpretations under section 28.1 are to be made available to the public;

23. designating materials evaluation bodies for the purposes of section 29;

24. establishing criteria to be followed by the Minister in respect of a ruling under section 29;

25. prescribing procedures of the Building Code Commission and the Building Materials Evaluation Commission;

26. prescribing the persons to whom notice shall be given of the issuance of a permit, the time for giving the notice and the class of buildings for which notice is required;

27. defining, for the purposes of this Act and the building code, any word or expression not defined in this Act, and in so doing may define a word or expression differently for different provisions;

28. prescribing forms and providing for their use or requiring that forms provided by the Minister or the director be used, and prescribing the information that must be contained in the forms;

29. prescribing boards of health, planning boards and conservation authorities that are responsible for the enforcement of the provisions of this Act related to sewage systems and the municipalities and territory without municipal organization in which they will have jurisdiction to carry out the enforcement;

30. permitting chief building officials or registered code agencies, subject to such conditions as are set out in the building code, to allow the use of materials, systems and building designs other than those prescribed in the building code with respect to the construction of buildings;

31. governing the location of sewage systems;

32. designating areas in which any class of sewage system may not be established;

33. prescribing qualifications for chief building officials, inspectors, registered code agencies, designers and other persons referred to in section 15.12 and related matters including,

    i. requiring different qualifications for different classes of officials, inspectors, agencies, designers and other persons,

    ii. requiring assessments or examinations in connection with obtaining or maintaining the required qualifications,

    iii. establishing one or more registers identifying persons with qualifications and such other information as the regulation may require, and

    iv. requiring fees to be paid in connection with the qualifications;

34. establishing certification, registration or licensing schemes for chief building officials, inspectors, registered code agencies, designers and other persons referred to in sections 15.11 (qualifications) and 15.12 (qualifications re sewage systems) which may include provision for,

    i. the eligibility or ineligibility of classes of persons to obtain certification, registration or a licence,

    ii. categories or classes of certification, registration or licence,

    iii. application for the issuance, amendment or renewal of a certificate, registration or a licence,

    iv. the issuance, amendment or renewal of a certificate, registration or a licence or the refusal to do so,

    v. suspension, revocation or cancellation of a certificate, registration or a licence,

    vi. the imposition of conditions relating to a certificate, registration or licence, including conditions relating to the qualifications of directors, officers, partners, employees and others associated with the holder of the certificate, registration or licence, conditions relating to the manner in which specified persons carry out activities under this Act and the building code and conditions relating to insurance coverage, including the kinds and amounts of insurance and the circumstances in which a person will be considered to be covered by insurance,

    vii. the establishment and maintenance of one or more registers containing information about the holders of certificates, registrations or licences and containing such information as may be given to the director under paragraph 35.1, and

    viii. fees payable in connection with certification, registration or licensing;

35. prescribing an appeal to a prescribed tribunal from a refusal to issue or renew a certificate, registration or licence or a suspension, revocation or cancellation of a certificate, registration or licence, prescribing the circumstances in which the decision appealed from takes effect immediately despite the appeal, and prescribing the circumstances in which the tribunal may stay the decision pending the outcome of the appeal;

35.1 requiring the Ontario Association of Architects and the Association of Professional Engineers of Ontario to give the prescribed information to the director;

35.2 prescribing fees payable to the Crown by the Ontario Association of Architects and the Association of Professional Engineers of Ontario in connection with the registers referred to in paragraphs 33 and 34 and in respect of the development of training materials for a purpose described in paragraph 33 or 34;

35.3 prescribing the persons who are required under subsection 15.13 (1) to have insurance coverage and prescribing the kinds and amounts of insurance that are required and the circumstances in which the person will be considered to be covered by insurance;

35.4 prescribing additional functions that registered code agencies may perform;

35.5 prescribing the manner in which registered code agencies and persons authorized by them under subsection 15.17 (1) are required to perform any of their functions;

35.6 prescribing the manner in which a registered code agency is authorized to collect, use and disclose information;

35.7 prescribing circumstances in which a registered code agency may be appointed in respect of a building even though an inspector or another registered code agency has already carried out a function described in section 15.15;

35.8 prescribing circumstances in which a registered code agency cannot be appointed, including circumstances that would constitute a conflict of interest for a registered code agency;

35.9 prescribing the information that a registered code agency is required to give to the director or to the chief building official;

35.10 prescribing the classes of persons that may be authorized by a registered code agency under subsection 15.17 (1), the conditions to which the authorization may be subject and the information that must be included in a certificate of authorization;

35.11 prescribing certificates and the form of certificates referred to in subsection 15.18 (2), the information that the certificates are required to contain and the circumstances and manner in which registered code agencies are permitted to issue them;

35.12 prescribing the circumstances in which the appointment of a registered code agency may be terminated and the conditions that must be met before the termination of an appointment, including,

i. requiring the consent of the director and authorizing the director to impose conditions and restrictions in connection with the consent, and

ii. authorizing an appeal to a person specified in the regulations from a decision of the director or conditions imposed by the director;

36. designating persons, specifying powers of a chief building official or inspector that those designated persons may exercise to enforce this Act and the building code in relation to the qualifications of persons described in sections 15.11 and 15.12 and the requirement in section 15.13 for insurance coverage, and establishing conditions for the exercise of the specified powers;

37. prescribing any transitional matters necessary for the regulation of sewage systems, including matters relating to,

i. licensing and certification and the qualifications of inspectors and persons described in subsection 15.12 (1),

ii. certificates of approval and orders issued under the *Environmental Protection Act*,

iii. enforcement issues,

iv. matters commenced under the *Environmental Protection Act*, including appeals,

v. records and documents to be kept or transferred and the payment of associated costs,

vi. certification of records and their use in courts,

vii. the continuation of matters commenced under the *Environmental Protection Act*, and

viii. the transfer of responsibilities involving any municipality or any board of health, conservation authority or planning board prescribed under section 3.1;

38. permitting the Building Code Commission to sit in one or more divisions simultaneously upon such conditions as may be prescribed in the regulation;

39. authorizing one member of the Building Code Commission, with the approval of the chair or vice-chair, to hear and determine any matter and deeming the member to constitute the commission for that purpose, under such conditions as may be prescribed in the regulation;

39.1 prescribing relationships for the purposes of subsection 23 (3) (ineligibility to be a member of the Commission);

39.2 prescribing the period within which the Building Code Commission must hold a hearing in respect of a dispute described in clause 24 (1) (b) or (c);

39.3 providing for transitional provisions relating to the effect of a repeal or re-enactment of any provision of this Act;

40. prescribing any matter referred to in this Act as prescribed. 1992, c. 23, s. 34 (1); 1997, c. 30, Sched. B, s. 17 (1-4); 1999, c. 12, Sched. M, s. 11; 2002, c. 9, s. 51 (1, 2, 4-14); 2006, c. 19, Sched. O, s. 1 (12-17); 2006, c. 35, Sched. C, s. 8 (3).

Standards for existing buildings

(2) The Lieutenant Governor in Council may make regulations to establish standards that existing buildings must meet even though no construction is proposed, including regulations,

(a) prescribing any or all of the matters set out in subsection (1) as applicable to existing buildings;

(b) establishing standards for maintenance, retrofit, operation, occupancy and repair;

(c) prescribing standards related to resource conservation and environmental protection; and

(d) prescribing standards, methods and equipment for the inspection, cleaning, disinfecting and emptying of sewage systems. 1992, c. 23, s. 34 (2); 1997, c. 30, Sched. B, s. 17 (5); 2006, c. 22, s. 112 (10).

Discretionary maintenance inspection programs

(2.1) The Lieutenant Governor in Council may make regulations governing programs established under clause 7 (1) (b.1), including regulations,

(a) governing the classes of buildings and area affected by a program;

(b) governing the type and manner of inspections that are conducted under a program and the frequency of the inspections;

(c) authorizing the principal authority that establishes a program, as an alternative to conducting an inspection, to accept a certificate, in a form approved by the Minister, that is signed by a person who belongs to a class of persons specified by the regulations and that confirms that the person has conducted an inspection and is of the opinion that the building that was inspected complies with the standards prescribed under clause (2) (b) that are enforced by the program. 2006, c. 22, s. 112 (11).

Sewage system maintenance inspection programs

(2.2) The Lieutenant Governor in Council may make regulations establishing and governing programs to enforce standards prescribed under clause (2) (b) in relation to sewage systems, including regulations,

(a) governing the classes of sewage systems affected by the program;

(b) requiring a principal authority that has jurisdiction in the area affected by the program to administer the program for that area and to conduct inspections under the program;

(c) governing the type and manner of inspections that are conducted under the program and the frequency of the inspections;

(d) authorizing the principal authority that administers the program, as an alternative to conducting an inspection, to accept a certificate, in a form approved by the Minister, that is signed by a person who belongs to a class of persons specified by the regulations and that confirms that the person has conducted an inspection and is of the opinion that the sewage system that was inspected complies with the standards prescribed under clause (2) (b) that are enforced by the program. 2006, c. 22, s. 112 (11).

Application

(3) A regulation made under this section applies to buildings whether erected before or after the coming into force of this Act. 1992, c. 23, s. 34 (3).

Limited application

(4) Any regulation made under this section may be limited in its application territorially or to any class of activity, matter, person or thing. 1997, c. 30, Sched. B, s. 17 (6).

Same

(4.1) A class under this Act may be defined with respect to any attribute, quality or characteristic and may be defined to consist of, include or exclude any specified member whether or not with the same attributes, qualities or characteristics.

Retroactive

(4.2) A regulation made under paragraph 37 of subsection (1) may be retroactive.

Purposes

(5) The purposes of the regulations made under this section are,

(a) to establish standards for public health and safety, fire protection, structural sufficiency, conservation, including, without limitation, energy and water conservation, and environmental integrity, and to establish barrier-free requirements, with respect to buildings; and

(b) to establish processes for the enforcement of the standards and requirements.

Review

(6) The Minister shall initiate a review of the building code with reference to standards for energy conservation on or before the day that is six months after the day Schedule J of the *Green Energy and Green Economy Act, 2009* comes into force and thereafter within five years of the end of the previous review.

Review, standards for water conservation

(7) The Minister shall initiate a review of the building code with reference to standards for water conservation on or before the day that is six months after the day section 1 of Schedule 2 to the *Water Opportunities and Water Conservation Act, 2010* comes into force and thereafter within five years of the end of the previous review.

Building Code Energy Advisory Council

34.1 (1) The Building Code Energy Advisory Council is continued under the name Building Code Conservation Advisory Council in English and Conseil consultatif des questions de conservation liées au code du bâtiment in French.

Same

(2) The Minister may appoint one or more persons to the Council and fix its terms of reference.

Functions

(3) The Council shall,

(a) advise the Minister on the building code with reference to standards for energy and water conservation; and

(b) perform such other functions as the Minister may specify.

Municipal by-laws

35. (1) This Act and the building code supersede all municipal by-laws respecting the construction or demolition of buildings.

Different treatments

(2) In the event that this Act or the building code and a municipal by-law treat the same subject matter in different ways in respect to standards for the use of a building described in section 10 orstandards for the maintenance or operation of a sewage system, this Act or the building code prevails and the by-law is inoperative to the extent that it differs from this Act or the building code.

Interpretation

(3) For the purpose of this section, a municipal by-law includes a by-law of an upper-tier municipality and a local board as defined in the *Municipal Affairs Act*.

Status of conservation authority regulations

35.1 A regulation made by a conservation authority under this Act is not a regulation within the meaning of Part III (Regulations) of the *Legislation Act, 2006*.

Offences

36. (1) A person is guilty of an offence if the person,

(a) knowingly furnishes false information in any application under this Act, in any certificate required to be issued or in any statement or return required to be furnished under this Act or the regulations;

(b) fails to comply with an order, direction or other requirement made under this Act; or

(c) contravenes this Act, the regulations, a by-law passed under section 7 or a condition imposed under section 9. 1992, c. 23, s. 36 (1); 1997, c. 24, s. 224 (17); 1997, c. 30, Sched. B, s. 19; 2002, c. 9, s. 53 (1).

Idem

(2) Every director or officer of a corporation who knowingly concurs in the furnishing of false information, the failure to comply or the contravention under subsection (1) is guilty of an offence. 1992, c. 23, s. 36 (2).

Penalties

(3) A person who is convicted of an offence is liable to a fine of not more than $50,000 for a first offence and to a fine of not more than $100,000 for a subsequent offence. 2005, c.33.

Corporations

(4) If a corporation is convicted of an offence, the maximum penalty that may be imposed upon the corporation is $100,000 for a first offence and $200,000 for a subsequent offence and not as provided in subsection (3). 2005, c.29.

Subsequent offence

(5) For the purposes of subsections (3) and (4), an offence is a subsequent offence if there has been a previous conviction under this Act. 1992, c. 23, s. 36 (5).

Continuing offence

(6) Every person who fails to comply with an order made by a chief building official under subsection 14 (1) or clause 15.9 (6) (a) is guilty of an offence and on conviction, in addition to the penalties mentioned in subsections (3) and (4), is liable to a fine of not more than $10,000 per day for every day the offence continues after the time given for complying with the order has expired. 1992, c. 23, s. 36 (6); 2002, c. 9, s. 53 (2).

Power to restrain

(7) If this Act or the regulations are contravened and a conviction is entered, in addition to any other remedy and to any penalty imposed by this Act, the court in which the conviction is entered, and any court of competent jurisdiction thereafter, may make an order prohibiting the continuation or repetition of the offence by the person convicted. 1992, c. 23, s. 36 (7).

Limitation period

(8) No proceeding under this section shall be commenced more than one year after the time when the subject-matter of the proceeding arose. 1992, c. 23, s. 36 (8).

Proceeds of fines

(9) If an offence under this section has been committed within a municipality, the proceeds of a fine imposed under this section shall be paid to the treasurer of that municipality, and section 2 of the *Administration of Justice Act* and section 4 of the *Fines and Forfeitures Act* do not apply in respect of the fine. 1992, c. 23, s. 36 (9).

Same, sewage system offences

(10) Despite subsection (9), if an offence under this section concerns the provisions of this Act and the building code related to sewage systems and if it is committed in a municipality or territory without municipal organization that is prescribed under subsection 3.1 (1), the proceeds of a fine imposed under this section shall be paid to the applicable board of health, planning board or conservation authority prescribed under subsection 3.1 (1), and section 2 of the *Administration of Justice Act* and section 4 of the *Fines and Forfeitures Act* do not apply in respect of the fine. 2002, c. 9, s. 53 (3).

Proof of directions, orders, etc.

37. (1) In any prosecution for an offence under this Act, a copy of a direction or order purporting to have been made under this Act or the regulations and purporting to have been signed by the person authorized by this Act to make the direction or order is, in the absence of evidence to the contrary, proof of the direction or order without proof of the signature or authority. 1992, c. 23, s. 37 (1).

Same

(2) A statement as to any matter of record in an office of the chief building official or an officer purporting to be certified by the chief building official or the officer is, without proof of the office or signature of the chief building official or officer, receivable in evidence as proof, in the absence of evidence to the contrary, of the facts stated therein in any civil proceeding or proceeding under the *Provincial Offences Act*. 1997, c. 24, s. 224 (18).

Restraining order

38. (1) Where it appears to a chief building official that a person does not comply with this Act, the regulations or an order made under this Act, despite the imposition of any penalty in respect of the non-compliance and in addition to any other rights he or she may have, the chief building official may apply to the Superior Court of Justice for an order directing that person to comply with the provision. 1992, c. 23, s. 38 (1); 2002, c. 9, s. 54.

Idem

(2) Upon the application under subsection (1), the judge may make the order or such other order as the judge thinks fit. 1992, c. 23, s. 38 (2).

Appeal

(3) An appeal lies to the Divisional Court from an order made under subsection (1). 1992, c. 23, s. 38 (3).

Suspension of licence

38.1 (1) If a person is in default of payment of a fine imposed upon conviction for an offence under this Act or the regulations, on the application of a prescribed person, an order may be made under subsection 69 (2) of the *Provincial Offences Act* directing that one or more of the licences of the person who is in default be suspended and no licence be issued to that person until the fine is paid. 1997, c. 30, Sched. B, s. 20.

Duty of prescribed person

(2) A prescribed person shall,

(a) on being informed of an order referred to in subsection (1), suspend the licence in accordance with the order; and

(b) on being informed that the fine and any applicable prescribed administrative fee for the reinstatement of the licence are paid, reinstate the licence. 1997, c. 30, Sched. B, s. 20.

No reinstatement

(3) The prescribed person shall not reinstate a licence under clause (2) (b) if he or she is informed that,

(a) there is another outstanding order referred to in subsection (1) directing that the licence be suspended; or

(b) the licence is suspended under any other order or under another statute. 1997, c. 30, Sched. B, s. 20.

Definition

(4) In this section,

"licence" means a licence, certification or registration under the building code. 2002, c. 9, s. 55.

Note: Despite the repeal of the* Building Code Act *(R.S.O. 1990, c. B.13) by the Statutes of Ontario, 1992, chapter 23, subsection 42 (1),

(a) a permit issued under subsection 5 (1) of that Act is continued as a permit issued under subsection 8 (1) of this Act;

(b) an order made under that Act is continued as an order made under the corresponding provision of this Act;

(c) an agreement under section 3 of that Act is continued as an agreement under section 3 of this Act.

39.-42. OMITTED (AMENDS OR REPEALS OTHER ACTS). 1992, c. 23, ss. 39-42.

43. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS ACT). 1992, c. 23, s. 43.

44. OMITTED (ENACTS SHORT TITLE OF THIS ACT). 1992, c. 23, s. 44.

Building Code Act, 1992
ONTARIO REGULATION 332/12
BUILDING CODE

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1.1.1. Organization of this Code

1.1.1.1. Scope of Division A

(1) Division A contains compliance and application provisions and the *objectives* and *functional statements* of this Code.

1.1.1.2. Scope of Division B

(1) Division B contains the *acceptable solutions* of this Code.

1.1.1.3. Scope of Division C

(1) Division C contains the administrative provisions of this Code.

1.1.1.4. Internal Cross-references

(1) If a provision of this Code contains a reference to another provision of this Code but no Division is specified, both provisions are in the same Division of this Code.

1.1.2. Application of Division B

1.1.2.1. Application of Parts 1, 7 and 12

(1) Part 1 of Division B applies to all *buildings*.

(2) Subject to Article 1.1.2.6., Parts 7 and 12 of Division B apply to all *buildings*.

1.1.2.2. Application of Parts 3, 4, 5 and 6

(1) Subject to Articles 1.1.2.6. and 1.3.1.2., Parts 3, 5 and 6 of Division B apply to all *buildings*,

(a) used for *major occupancies* classified as,

(i) Group A, *assembly occupancies*,

(ii) Group B, *care*, *care and treatment* or *detention occupancies*, or

(iii) Group F, Division 1, *high hazard industrial occupancies*, or

(b) exceeding 600 m^2 in *building area* or exceeding three *storeys* in *building height* and used for *major occupancies* classified as,

(i) Group C, *residential occupancies*,

(ii) Group D, *business and personal services occupancies*,

(iii) Group E, *mercantile occupancies*, or

(iv) Group F, Divisions 2 and 3, *medium hazard industrial occupancies* and *low hazard industrial occupancies*.

(2) Subject to Articles 1.1.2.6. and 1.3.1.2., Part 4 of Division B applies to,

(a) *post-disaster buildings*,

(b) *buildings* described in Sentence (1),

(c) a retaining wall exceeding 1 000 mm in exposed height adjacent to,

(i) public property,

(ii) access to a *building*, or

(iii) private property to which the public is admitted,

(e) a crane runway,

(f) an exterior storage tank and its supporting structure that is not regulated by the *Technical Standards and Safety Act, 2000*,

(g) signs regulated by Section 3.15. of Division B that are not structurally supported by a *building*,

(h) a structure that supports a wind turbine generator having a rated output of more than 3 kW,

(i) an *outdoor pool* that has a water depth greater than 3.5 m at any point, and

(j) a *permanent solid nutrient storage facility* with supporting walls exceeding 1 000 mm in exposed height.

(3) Section 3.11. of Division B applies to *public pools*.

(4) Section 3.12. of Division B applies to *public spas*.

(5) Section 3.15. of Division B applies to signs.

1.1.2.3. Application of Part 8

(1) Subject to Article 1.1.2.6 Part 8 of Division B applies to the design, *construction*, operation and maintenance *of all sewage systems and to the construction of buildings in the vicinity of sewage systems.*.

1.1.2.4. Application of Part 9

(1) Subject to Articles 1.1.2.6. and 1.3.1.2., Part 9 of Division B applies to all *buildings*,

(a) of three or fewer *storeys* in *building height*,

(b) having a *building area* not exceeding 600 m^2, and

(c) used for *major occupancies* classified as,

(i) Group C, *residential occupancies*,

(ii) Group D, *business and personal services occupancies*,

(iii) Group E, *mercantile occupancies*, or

(iv) Group F, Divisions 2 and 3, *medium hazard industrial occupancies* and *low hazard industrial occupancies*.

1.1.2.5. Application of Part 10

(1) Part 10 of Division B applies to existing *buildings* requiring a permit under section 10 of the Act.

1.1.2.6. Application of Part 11

(1) Except as provided in Sentence (2), Part 11 of Division B applies to the design and *construction* of existing *buildings*, or parts of existing *buildings*, that have been in existence for at least five years.

(2) If a *building* has been in existence for at least five years but includes an addition that has been in existence for less than five years, Part 11 of Division B applies to the entire *building*.

1.1.2.7. Existing Buildings

(1) Except as provided in Section 3.17. of Division B, Section 9.40. of Division B and Part 11 of Division B, if an existing *building* is extended or is subject to material alteration or repair, this Code applies only to the design and *construction* of the extensions and those parts of the *building* that are subject to the material alteration or repair.

(2) If an existing previously occupied *building* is moved from its original location to be installed elsewhere, or is dismantled at its original location and moved to be reconstituted elsewhere, this Code applies only to changes to the design and *construction* of the *building* required as a result of moving the *building*.

1.1.3. Building Size Determination

1.1.3.1. Building Size Determination of Building Divided by Firewalls

(1) Where a *firewall* divides a *building*, each portion of the *building* that is divided shall be considered as a separate *building*, except for the purposes of,

(a) a determination of *gross area* in Section 1.2. of Division C,

(b) a fire alarm and detection system in Sentence 3.2.4.2.(1) of Division B or Article 9.10.18.1. of Division B, and

(c) a *plumbing system* interconnected through a *firewall*.

1.1.3.2. Building Size Determination of Building Divided by Vertical Fire Separations

(1) Except as permitted in Sentence (2), if portions of a *building* are completely separated by a vertical *fire separation* that has a *fire-resistance rating* of at least 1 h and that extends through all *storeys* and *service spaces* of the separate portions, each separated portion may be considered to be a separate *building* for the purpose of determining *building height* if,

(a) each separated portion is not more than three *storeys* in *building height* and is used only for *residential occupancies*, and

(b) the unobstructed path of travel for a firefighter from the nearest *street* to one entrance to each separated portion is not more than 45 m.

(2) The vertical *fire separation* in Sentence (1) may terminate at the floor assembly immediately above a *basement* if the *basement* conforms to Article 3.2.1.2. of Division B.

Section 1.2. Compliance

1.2.1. Compliance with Division B

1.2.1.1 Compliance with Division B

(1) Compliance with Division B shall be achieved,

(a) by complying with the applicable *acceptable solutions* in Division B, or

(b) by using *alternative solutions* that will achieve the level of performance required by the applicable *acceptable solutions* in respect of the *objectives* and *functional statements* attributed to the applicable *acceptable solutions* in MMAH Supplementary Standard SA-1, “Objectives and Functional Statements Attributed to the Acceptable Solutions”.

(2) For the purposes of Clause (1)(b), the level of performance in respect of a *functional statement* refers to the performance of the *functional statement* as it relates to the *objective* with which it is associated in MMAH Supplementary Standard SA-1, “Objectives and Functional Statements Attributed to the Acceptable Solutions”.

1.2.2. Materials, Appliances, Systems and Equipment

1.2.2.1. Characteristics of Materials, Appliances, Systems and Equipment

(1) All materials, *appliances*, systems and equipment installed to meet the requirements of this Code shall possess the necessary characteristics to perform their intended functions when installed in a *building*.

1.2.2.2. Used Materials, Appliances and Equipment

(1) Unless otherwise specified, recycled materials in *building* products may be used and used materials, *appliances* and equipment may be reused when they meet the requirements of this Code for new materials and are satisfactory for their intended use.

Section 1.3. Interpretation

1.3.1. Interpretation

1.3.1.1. Designated Structures

(1) The following structures are designated for the purposes of clause (d) of the definition of *building* in subsection 1 (1) of the Act:

(a) a retaining wall exceeding 1 000 mm in exposed height adjacent to,

(i) public property,

(ii) access to a *building*, or

(iii) private property to which the public is admitted,

(b) a pedestrian bridge appurtenant to a *building*,

(c) a crane runway,

(d) an exterior storage tank and its supporting structure that is not regulated by the *Technical Standards and Safety Act, 2000*,

(e) signs regulated by Section 3.15. of Division B that are not structurally supported by a *building*,

(f) a solar collector that is mounted on a *building* and has a face area equal to or greater than 5 m^2,

(g) a structure that supports a wind turbine generator having a rated output of more than 3 kW,

(h) a dish antenna that is mounted on a *building* and has a face area equal to or greater than 5 m^2,

(i) an *outdoor pool*,

(j) an outdoor *public spa*, and

(k) a *permanent solid nutrient storage facility* with supporting walls exceeding 1 000 mm in exposed height.

1.3.1.2. Farm Buildings

(1) Except as provided in Sentences (2) to (6), *farm buildings* shall conform to the requirements in the CCBFC NRCC 38732, "National Farm Building Code of Canada".

(2) Articles 1.1.1.2. and 3.1.8.1. and Subsections 3.1.4. and 4.1.4. in the CCBFC NRCC 38732, "National Farm Building Code of Canada" do not apply to *farm buildings*.

(3) In the CCBFC NRCC 38732, "National Farm Building Code of Canada", references in Articles 1.1.1.3., 2.2.2.1., 2.2.2.2., 2.3.1.1., 2.3.2.1., 3.1.1.1., 3.1.1.2., 3.1.2.1. and 3.1.6.1. to the CCBFC NRCC 38726, "National Building Code of Canada", are deemed to be references to Ontario Regulation 403/97 (Building Code), as it on read on December 30, 2006.

(4) A *farm building* of *low human occupancy* having a *building area* not exceeding 600 m^2 and not more than three *storeys* in *building height* is deemed to comply with the structural requirements of the CCBFC NRCC 38732, "National Farm Building Code of Canada" if it is designed and constructed in conformance with MMAH Supplementary Standard SB-11, "Construction of Farm Buildings".

(5) A *liquid manure* storage tank shall comply with the requirements of Part 4 of Division B of this Code and the requirements of Part 4 of the CCBFC NRCC 38732, "National Farm Building Code of Canada".

(6) A *permanent solid nutrient storage facility* shall comply with the requirements of Part 4 of Division B of this Code.

Section 1.4. Terms and Abbreviations

1.4.1. Definitions of Words and Phrases

1.4.1.1. Non-defined Terms

(1) Definitions of words and phrases used in this Code that are not included in the list of definitions in Articles 1.4.1.2., 1.4.1.3. and 1.4.1.4. and are not defined in another provision of this Code shall have the meanings that are commonly assigned to them in the context in which they are used, taking into account the specialized use of terms by the various trades and professions to which the terminology applies.

1.4.1.2. Defined Terms

(1) Each of the words and terms in italics in this Code has,

(a) the same meaning as in subsection 1 (1) of the Act, if not defined in Clause (b) or (c),

(b) the same meaning as in each of the following provisions for the purposes described in the provision:

(i) Sentences 1.4.1.3.(1) and (2) of Division A, and

(ii) Sentences 3.13.1.2.(1), 7.1.3.1.(1), 8.1.1.2.(1) and 11.1.1.2.(1) of Division B, or

(c) the following meaning for the purposes of this Code:

Absorption trench means an excavation in *soil*, as defined in Part 8 of Division B, or in *leaching bed fill*, being part of a *leaching bed*, in which a *distribution pipe* is laid that allows infiltration of the *effluent* into the *soil*, as defined in Part 8 of Division B, or *leaching bed fill.*

Acceptable solution means a requirement stated in Parts 3 to 12 of Division B.

Accessible means, when applied to a *fixture*, connection, *plumbing appliance* , valve, *cleanout* or equipment, to be accessible with or without having to first remove an access panel, door or similar obstruction, but a *fixture*, connection, *plumbing appliance* , valve, *cleanout* or equipment is not accessible if access can be gained only by cutting or breaking materials.

Access to exit means that part of a *means of egress* within a *floor area* that provides access to an *exit* serving the *floor area.*

Additional circuit vent means a *vent pipe* that is installed between a *circuit vent* and a *relief vent* to provide additional air circulation.

Adfreezing means the adhesion of *soil* to a *foundation unit* resulting from the freezing of *soil* water.

Air admittance valve means a one-way valve designed to allow air to enter the *drainage system* when the pressure in the *plumbing system* is less than the atmospheric pressure.

Air barrier system means an assembly installed to provide a continuous barrier to the movement of air.

Air break means the unobstructed vertical distance between the lowest point of an *indirectly connected waste pipe* and the *flood level rim* of the *fixture* into which it discharges.

Air-conditioning is the process of treating air in a space to control simultaneously its temperature, humidity, cleanliness, and distribution to meet the comfort requirements of the occupants of the space.

Air gap means the unobstructed vertical distance through air between the lowest point of a water supply outlet and the *flood level rim* of the *fixture* or device into which the outlet discharges.

Air-supported structure means a structure consisting of a pliable membrane that achieves and maintains its shape and support by internal air pressure.

Alarm signal means an audible signal transmitted throughout one or more zones of a *building* or throughout a *building* to advise occupants that a fire emergency exists.

Alert signal means an audible signal to advise designated persons of a fire emergency.

Allowable bearing pressure means the maximum pressure that may be safely applied to a *soil* or *rock* by the *foundation unit* considered in design under expected loading and subsurface conditions.

Allowable load means the maximum load that may be safely applied to a *foundation unit* considered in design under expected loading and subsurface conditions.

Alternative solution means a substitute for an *acceptable solution.*

Appliance means a device to convert fuel into energy and includes all components, controls, wiring and piping required to be part of the device by the applicable standard referred to in this Code.

Architect means the holder of a licence, a certificate of practice or a temporary licence under the *Architects Act.*

Area affected by a significant drinking water threat means an area described in Clause 1.10.2.3.(2)(b) of Division C.

Artesian groundwater means a confined body of water under pressure in the ground.

As constructed plans means *construction* plans and specifications that show the *building* and the location of the *building* on the property as the *building* has been constructed.

Assembly occupancy means the *occupancy* or the use of a *building* or part of a *building* by a gathering of persons for civic, political, travel, religious, social, educational, recreational or similar purposes or for the consumption of food or drink.

Attic or roof space means the space between the roof and the ceiling of the top *storey* or between a dwarf wall and a sloping roof.

Auxiliary water supply means, when applied to premises, any water supply on or available to the premises other than the primary *potable* water supply for the premises.

Backflow means a flowing back or reversal of the normal direction of the flow.

Backflow preventer means a device or a method that prevents *backflow* in a *water distribution system*.

Back-siphonage means *backflow* caused by a negative pressure in the supply system.

Back-siphonage preventer means a device or a method that prevents *back-siphonage* in a *water distribution system*.

Back vent means a pipe that is installed to vent a *trap* off the horizontal section of a *fixture* drain or the *vertical leg* of a water closet or other *fixture* that has an integral siphonic flushing action and "*back vented*" has a corresponding meaning.

Backwater valve means a *check valve* designed for use in a gravity *drainage system*.

Barrier-free means, when applied to a *building* and its facilities, that the *building* and its facilities can be approached, entered and used by persons with physical or sensory disabilities.

Basement means one or more *storeys* of a *building* located below the *first storey*.

Bathroom group means a group of plumbing *fixtures* installed in the same room, consisting of one domestic-type lavatory, one water closet and either one bathtub, with or without a shower, or one one-headed shower.

Bearing surface means the contact surface between a *foundation unit* and the *soil* or *rock* on which the *foundation unit* bears.

Boarding, lodging or rooming house means a *building*,

(a) that has a *building height* not exceeding three *storeys* and a *building area* not exceeding 600 m²,

(b) in which lodging is provided for more than four persons in return for remuneration or for the provision of services or for both, and

(c) in which the lodging rooms do not have both bathrooms and kitchen facilities for the exclusive use of individual occupants.

Boiler means an *appliance* intended to supply hot water or steam for space heating, processing or power purposes.

Bottle trap means a *trap* that retains water in a closed chamber and that seals the water by submerging the inlet pipe in the liquids or by a partition submerged in the liquids.

Branch means a *soil* or *waste pipe* that is connected at its upstream end to the junction of two or more *soil* or *waste pipes* or to a *soil* or *waste stack* and that is connected at its downstream end to another *branch*, a sump, a *soil* or *waste stack* or a *building drain*.

Branch vent means a *vent pipe* that is connected at its lower end to the junction of two or more *vent pipes* and that, at its upper end, is connected to another *branch vent*, a *stack vent*, a *vent stack* or a *header*, or terminates in *open air*.

Breeching means a *flue pipe* or chamber for receiving *flue* gases from one or more *flue* connections and for discharging these gases through a single *flue* connection.

Building area means the greatest horizontal area of a *building* above *grade*,

(a) within the outside surface of exterior walls, or

(b) within the outside surface of exterior walls and the centre line of *firewalls*.

Building Code website means the website at www.ontario.ca/buildingcode.

Building control valve means the valve on a *water system* that controls the flow of *potable* water from the *water service pipe* to the *water distribution system*.

Building drain means the lowest horizontal piping, including any vertical *offset*, that conducts *sewage*, *clear water waste* or storm water by gravity to a *building sewer*.

Building height means the number of *storeys* contained between the roof and the floor of the *first storey*.

Building sewer means a *sanitary building sewer* or *storm building sewer*.

Building trap means a *trap* that is installed in a *sanitary building drain* or *sanitary building sewer* to prevent circulation of air between the *sanitary drainage system* and a public sewer.

Business and personal services occupancy means the *occupancy* or use of a *building* or part of a *building* for the transaction of business or the provision of professional or personal services.

Camp for housing of workers means a camp in which *buildings* or other structures or premises are used to accommodate five or more employees.

Campground means land or premises used as an overnight camping facility that is not a *recreational camp*.

Canopy means a roof-like structure projecting more than 300 mm from the exterior face of the *building*.

Carbon dioxide equivalent means a measure used to compare the impact of various greenhouse gases based on their global warming potential.

Care and treatment occupancy (Group B, Division 2) means an *occupancy* in which persons receive special care and treatment.

Care occupancy (Group B, Division 3) means an *occupancy* in which special care is provided by a facility, directly through its staff or indirectly through another provider, to residents of the facility,

(a) who require special care because of cognitive or physical limitations, and

(b) who, as a result of those limitations, would be incapable of evacuating the *occupancy*, if necessary, without the assistance of another person.

Cavity wall means a construction of masonry units laid with a cavity between the wythes, where the wythes are tied together with metal ties or bonding units and are relied on to act together in resisting lateral loads.

Certificate for the occupancy of a building described in Sentence 1.3.3.4.(1) of Dvision C means a certificate described in Sentence 3.7.4.3.(7) of Division C.

Certificate for the occupancy of a building not fully completed means a certificate described in Sentence 3.7.4.3.(5) of Division C.

Chamber means a structure that is constructed with an open bottom and that contains a pressurized *distribution pipe*.

Check valve means a valve that permits flow in only one direction and prevents a return flow.

Chimney means a shaft that is primarily vertical and that encloses at least one *flue* for conducting *flue* gases to the outdoors.

Chimney liner means a conduit containing a *chimney flue* used as a lining of a *masonry or concrete chimney*.

Circuit vent means a *vent pipe* that serves a number of *fixtures* and connects to the *fixture drain* of the most upstream *fixture*, and "*circuit vented*" has a corresponding meaning.

Class 1 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys water from the *water service pipe* or *fire service main* to the sprinkler/standpipe system's outlets, is *directly connected* to the public water supply main only, has no pumps or reservoirs and in which the sprinkler drains discharge to the atmosphere, to dry wells or to other safe outlets.

Class 2 fire sprinkler/standpipe system means a *Class 1 fire sprinkler/standpipe system* that includes a booster pump in its connection to the public water supply main.

Class 3 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys *potable* water from the *water service pipe* or *fire service main* to the sprinkler/standpipe system's outlets and that is *directly connected* to the public water supply main and to one or more of the following storage facilities, which are filled from the public water supply main only: elevated water storage, fire pumps supplying water from aboveground covered reservoirs or pressure tanks.

Class 4 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys water from the *water service pipe* or *fire service main* to the sprinkler/standpipe system's outlets and is *directly connected* to the public water supply main (similar to *Class 1* and *Class 2 fire sprinkler/standpipe systems*) and to an auxiliary water supply dedicated to fire department use that is located within 520 m of a pumper connection.

Class 5 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys water from the *water service pipe* or *fire service main* to the sprinkler/standpipe system's outlets, is *directly connected* to the public water supply main and is interconnected with an *auxiliary water supply*.

Class 6 fire sprinkler/standpipe system means an assembly of pipes and fittings that conveys water from the *water service pipe* or *fire service main* to the sprinkler/standpipe system's outlets and acts as a combined industrial water supply and fire protection system that is supplied from the public water supply main only, with or without gravity storage or pump suction tanks.

Cleanout means a fitting access in a *drainage system* or *venting system* that is installed to provide access for cleaning and inspection and that is provided with a readily replaceable air tight cover.

Clean water means water that has passed through a *recirculation system*.

Clear water waste means waste water containing no impurities or contaminants that are harmful to a person's health, plant or animal life or that impair the quality of the natural environment.

Closed container means a container so sealed by means of a lid or other device that neither liquid nor vapour will escape from it at ordinary temperatures.

Closure means a device or assembly for closing an opening through a *fire separation* or an exterior wall, such as a door, a shutter, wired glass and glass block, and includes all components such as hardware, closing devices, frames and anchors.

Combustible means that a material fails to meet the acceptance criteria of CAN/ULC-S114, "Test for Determination of Non-Combustibility in Building Materials".

Combustible construction means a type of construction that does not meet the requirements for *noncombustible construction*.

Combustible fibres means finely divided combustible vegetable or animal fibres and thin sheets or flakes of such materials which, in a loose, unbaled condition, present a flash fire hazard, and includes cotton, wool, hemp, sisal, jute, kapok, paper and cloth.

Combustible liquid means any liquid having a *flash point* at or above 37.8°C and below 93.3°C.

Compliance alternative means a substitute for a requirement in another Part of Division B that is listed in Part 10 or 11 of Division B, and "*C.A.*" has a corresponding meaning.

Compressed gas means,

(a) any contained mixture or material having a vapour pressure exceeding one or both of the following,

(i) 275.8 kPa (absolute) at 21°C, or

(ii) 717 kPa (absolute) at 54°C, or

(b) any liquid having a vapour pressure exceeding 275.8 kPa (absolute) at 37.8°C.

Computer room means a room,

(a) that contains electronic computer or data processing equipment such as main frame type,

(b) that is separated from the remainder of the *building* for the purpose of controlling the air quality in the room by a self-contained climate control system, and

(c) that has an *occupant load* of not more than one person for each 40 m² of the room.

Conditioned space means space within a *building* in which the temperature is controlled to limit variation in response to the exterior ambient temperature or interior differential temperatures by the provision, either directly or indirectly, of heating or cooling over substantial portions of the year.

Construction index means a level on a scale of 1 to 8 determined in accordance with Table 11.2.1.1.A. of Division B designating the expected *performance level* of the *building* structure with respect to the type of *construction* and fire protection of an existing *building*, and "*C.I.*" has a corresponding meaning.

Contained use area means a supervised area containing one or more rooms in which occupant movement is restricted to a single room by security measures not under the control of the occupant.

Continuous vent means a *vent pipe* that is an extension of a vertical section of a *branch or fixture drain*.

Cooktop means a cooking surface having one or more burners or heating elements.

Critical level means the level of submergence at which a *back-siphonage preventer* ceases to prevent *back-siphonage*.

Dangerous goods means those products or substances that are regulated by the *Transportation of Dangerous Goods Regulations* made under the *Transportation of Dangerous Goods Act, 1992* (Canada).

Day camp means a camp or resort that admits persons for a continuous period not exceeding 24 hours.

Day nursery means a day nursery as defined in the *Day Nurseries Act*.

Dead end means a pipe that terminates with a closed fitting.

Dead load means the weight of all permanent structural and nonstructural components of a *building*.

Deep foundation means a *foundation unit* that provides support for a *building* by transferring loads either by end-bearing to a *soil* or *rock* at considerable depth below the *building* or by adhesion or friction, or both, in the *soil* or *rock* in which it is placed. *Piles* are the most common type of *deep foundation*.

Design activities means the activities described in subsection 15.11 (5) of the Act.

Design bearing pressure means the pressure applied by a *foundation unit* to *soil* or *rock*, which pressure is not greater than the *allowable bearing pressure*.

Design capacity means, in the definition of *sewage system*, the total daily design *sanitary sewage* flow determined in accordance with Article 8.2.1.3. of Division B.

Designer means the person responsible for the design.

Design load means the load applied to a *foundation unit*, which load is not greater than the *allowable load*.

Detention occupancy (Group B, Division 1) means an *occupancy* in which persons are under restraint or are incapable of self preservation because of security measures not under their control.

Developed length means, when applied to a pipe and fittings, the length along the centre line of the pipe and fittings.

Directly connected means physically connected in such a way that neither water nor gas can escape from the connection.

Distilled beverage alcohol means a beverage that is produced by fermentation and contains more than 20% by volume of water-miscible alcohol.

Distillery means a *process plant* where *distilled beverage alcohols* are produced, concentrated or otherwise processed, and includes facilities on the same site where the concentrated products may be blended, mixed, stored or packaged.

Distributing pipe means a pipe or piping in a *water distribution system*.

Distribution box means a device for ensuring that *effluent* from a *treatment unit* is distributed in equal amounts to each line of *distribution pipe* in a *leaching bed*.

Distribution pipe means a line or lines of perforated or open jointed pipe or tile installed in a *leaching bed* for the purpose of distributing *effluent* from a *treatment unit* to the *soil*, as defined in Part 8 of Division B, or *leaching bed fill* in the *leaching bed*.

Diving board means a flexible board.

Diving platform means a rigid platform that is not a *starting platform*.

Drainage system means an assembly of pipes, fittings, *fixtures* and appurtenances on a property that is used to convey *sewage* and *clear water waste* to a main sewer or a *private sewage disposal system* , and includes a *private sewer*, but does not include *subsoil drainage piping*.

Drinking water system has the same meaning as in subsection 2 (1) of the *Safe Drinking Water Act* , *2002*.

Drum trap means a *trap* whose inlet and outlet are in the sides of the cylindrical body of the *trap*.

Dual vent means a *vent pipe* that serves two *fixtures* and connects at the junction of the *trap arms*.

Dwelling unit means a *suite* operated as a housekeeping unit, used or intended to be used by one or more persons and usually containing cooking, eating, living, sleeping and sanitary facilities.

Earth pit privy means a latrine consisting of an excavation in the ground surmounted by a superstructure.

Effluent means *sanitary sewage* that has passed through a *treatment unit*.

Electric space heating means an electric energy source that provides more than 10 per cent of the heating capacity provided for a *building* and includes,

(a) electric resistance unitary baseboard heating,

(b) electric resistance unitary cabinet heating,

(c) electric resistance ceiling cable or floor cable heating,

(d) electric resistance central furnace heating,

(e) electric hot water space heating, and

(f) air source heat pumps in combination with electric resistance backup heating.

Excavation means the space created by the removal of *soil*, *rock* or *fill* for the purposes of construction.

Exhaust duct means a duct through which air is conveyed from a room or space to the outdoors.

Exit means that part of a *means of egress*, including doorways, that leads from the *floor area* it serves to a separate *building*, an open public thoroughfare or an exterior open space protected from fire exposure from the *building* and having access to an open public thoroughfare.

Exit level means the level of an *exit* stairway in a *building* at which an exterior *exit* door or *exit* passageway leads to the exterior.

Exit storey means a *storey* having an exterior *exit* door in a *building* governed by Subsection 3.2.6. of Division B.

Exposing building face means that part of the exterior wall of a *building* that faces one direction and is located between ground level and the ceiling of its top *storey* or, where the *building* is divided into *fire compartments*, the exterior wall of a *fire compartment* that faces one direction.

Exterior cladding means those components of a *building* that are exposed to the outdoor environment and are intended to provide protection against wind, water or vapour.

Factory-built chimney means a *chimney* consisting entirely of factory-made parts, each designed to be assembled with the other without requiring fabrication on site.

Farm building means all or part of a *building*,

(a) that does not contain any area used for *residential occupancy*,

(b) that is associated with and located on land devoted to the practice of farming, and

(c) that is used essentially for the housing of equipment or livestock or the production, storage or processing of agricultural and horticultural produce or feeds.

Fill means *soil*, *rock*, rubble, industrial waste such as slag, organic material or a combination of these that is transported and placed on the natural surface of a *soil* or *rock* or organic terrain; it may or may not be compacted.

Fire block means a material, component or system that restricts the spread of fire within a concealed space or from a concealed space to an adjacent space.

Fire compartment means an enclosed space in a *building*,

(a) that is separated from all other parts of the *building* by enclosing construction that provides a *fire separation*, and

(b) that may be required to have a *fire-resistance rating*.

Fire damper means a *closure* that consists of a normally held open damper installed in an air distribution system or in a wall or floor assembly and designed to close automatically in the event of a fire in order to maintain the integrity of the *fire separation*.

Fire detector means a device that detects a fire condition and automatically initiates an electrical signal to actuate an *alert signal* or *alarm signal* and includes *heat detectors* and *smoke detectors*.

Fire load means, when applied to *occupancy*, the *combustible* contents of a room or *floor area* expressed in terms of the average weight of *combustible* materials per unit area, from which the potential heat liberation may be calculated based on the calorific value of the materials, and includes the furnishings, finished floor, wall and ceiling finishes, trim and temporary and movable *partitions*.

Fire-protection rating means the time in minutes or hours that a *closure* will withstand the passage of flame when exposed to fire under specified conditions of test and performance criteria, or as otherwise prescribed in this Code.

Fire-resistance rating means the time in minutes or hours that a material or assembly of materials will withstand the passage of flame and the transmission of heat when exposed to fire under specified conditions of test and performance criteria, or as determined by extension or interpretation of information derived from that test and performance as prescribed in this Code.

Fire-retardant treated wood means wood or a wood product that has been impregnated with fire-retardant chemicals to reduce its surface-burning characteristics such as flame spread, rate of fuel contribution and the density of smoke developed.

Fire separation means a construction assembly that acts as a barrier against the spread of fire.

Fire service main means a pipe and its appurtenances that are connected to a source of water and that are located on a property,

(a) between the source of water and the base of the riser of a water-based fire protection system,

(b) between the source of water and inlets to foam making systems,

(c) between the source of water and the base elbow of private hydrants or monitor nozzles,

(d) as fire pump suction and discharge piping not within a *building*, or

(e) beginning at the inlet side of the check valve on a gravity or pressure tank.

Fire stop means a system consisting of a material, component and means of support, used to fill gaps between *fire separations* or between *fire separations* and other assemblies, or used around items that wholly or partially penetrate a *fire separation*.

Fire stop flap means a device,

(a) that is intended for use in horizontal assemblies that are required to have a *fire-resistance rating* and incorporate protective ceiling membranes, and

(b) that operates to close off a duct opening through the membrane in the event of a fire.

Firewall means a type of *fire separation* of *noncombustible construction* that subdivides a *building* or separates adjoining *buildings* to resist the spread of fire and that has a *fire-resistance rating* as prescribed in this Code and the structural stability to remain intact under fire conditions for the required fire-rated time.

First storey means the *storey* that has its floor closest to *grade* and its ceiling more than 1.8 m above *grade*.

Fixture means a receptacle, *plumbing appliance*, apparatus or other device that discharges *sewage* or *clear water waste*, and includes a floor drain.

Fixture drain means the pipe that connects a *trap* serving a *fixture* to another part of a *drainage system*.

Fixture outlet pipe means a pipe that connects the waste opening of a *fixture* to the *trap* serving the *fixture*.

Fixture unit means, when applied to a *drainage system*, the unit of measure based on the rate of discharge, time of operation and frequency of use of a *fixture* that expresses the hydraulic load that is imposed by that *fixture* on the *drainage system*.

Fixture unit means, when applied to a *water distribution system*, the unit of measure based on the rate of supply, time of operation and frequency of use of a *fixture* or outlet that expresses the hydraulic load that is imposed by that *fixture* or outlet on the supply system.

Flame-spread rating means an index or classification indicating the extent of the spread of flame on the surface of a material or an assembly of materials, as determined in a standard fire test prescribed in this Code.

Flammable liquid means any liquid having a *flash point* below 37.8°C and having a vapour pressure not more than 275.8 kPa (absolute) at 37.8°C as determined by ASTM D323, "Vapor Pressure of Petroleum Products (Reid Method)".

Flash point means the minimum temperature at which a liquid within a container gives off vapour in sufficient concentration to form an ignitable mixture with air near the surface of the liquid.

Flood level rim means the top edge at which water can overflow from a *fixture* or device.

Floor area means the space on any *storey* of a *building* between exterior walls and required *firewalls*, including the space occupied by interior walls and *partitions*, but not including *exits*, *vertical service spaces* and their enclosing assemblies.

Flow control roof drain means a *roof drain* that restricts the flow of *storm water* into the *storm drainage system*.

Flue means an enclosed passageway for conveying *flue* gases.

Flue collar means the portion of a fuel-fired *appliance* designed for the attachment of the *flue pipe* or *breeching*.

Flue pipe means the pipe connecting the *flue collar* of an *appliance* to a *chimney*.

Food premises means a *floor area* where food or drink for human consumption, or an ingredient of food or drink for human consumption, is manufactured, processed, prepared, stored, displayed, handled, served, distributed, sold or offered for sale, but does not include,

(a) a private residence,

(b) a boarding house that provides meals for fewer than 10 boarders,

(c) a *building* to which Regulation 554 of the Revised Regulations of Ontario, 1990 (Camps in Unorganized Territory) or Regulation 568 of the Revised Regulations of Ontario, 1990 (Recreational Camps) made under the *Health Protection and Promotion Act* applies,

(d) a plant, as defined in the *Milk Act*, that is required to be operated under the authority of a licence issued under that Act,

(e) premises where a licensed activity, as defined in the *Food Safety and Quality Act*, *2001*, is carried on by a person who is required to hold a licence issued under that Act,

(f) an egg-grading station or an egg-processing station, as defined in subsection 1 (1) of Ontario Regulation 171/10 (Eggs and Processed Egg), made under the *Food Safety and Quality Act, 2001*,

(g) a *floor area* occupied by a church, service club or fraternal organization for the purpose of,

(i) preparing meals for special events for its members and personally invited guests, or

(ii) conducting bake sales, or

(h) a *farm building*.

Forced-air furnace means a *furnace* equipped with a fan that provides the primary means for the circulation of air.

Force main means a *sanitary drainage pipe* through which *sanitary sewage* is conveyed by mechanical or pneumatic propulsion.

Foundation means a system or arrangement of *foundation units* through which the loads from a *building* are transferred to supporting *soil* or *rock*.

Foundation unit means one of the structural members of the *foundation* of a *building*, such as a footing, raft and *pile*.

Fresh air inlet means a *vent pipe* that is installed in conjunction with a *building trap* and terminates in *open air*.

Frost action means the phenomenon that occurs when,

(a) water in *soil* is subjected to freezing which, because of the water ice phase change or ice lens growth, results in a total volume increase or the build-up of expansive forces under confined conditions or both, and

(b) the subsequent thawing leads to loss of *soil* strength and increased compressibility.

Functional statement means a function set out in Table 3.2.1.1. that a *building* or an element of a *building* is intended to perform.

Furnace means a *space-heating appliance* that uses warm air as the heating medium and usually provides for the attachment of ducts.

Gaming premises means premises that are a gaming site as defined in the *Ontario Lottery and Gaming Corporation Act, 1999*.

Gas vent means that portion of a venting system designed to convey vent gases to the outdoors,

(a) from the *vent connector* of a gas-fired *appliance*, or

(b) directly from the *appliance* when a *vent connector* is not used.

Grade means the average level of proposed or finished ground adjoining a *building* at all exterior walls.

Graded lumber means lumber that has been graded and stamped to indicate its grade, as determined by the NLGA, “Standard Grading Rules for Canadian Lumber”.

Greywater means *sanitary sewage* of domestic origin that is derived from *fixtures* other than *sanitary units*.

Gross area means the total area of all floors above *grade* measured between the outside surfaces of exterior walls or between the outside surfaces of exterior walls and the centre line of *firewalls*, except that, in any *occupancy* other than a *residential occupancy*, where an access or a *building* service penetrates a *firewall*, measurements shall not be taken to the centre line of such *firewall*.

Ground water means, when applied to a *sewage system*, water below the surface of the ground that occupies a zone of the earth’s mantle that is saturated with water.

Ground water table means, when applied to a *sewage system*, the elevation of the upper surface of the *ground water* existing in the area of the *sewage system*.

Groundwater means a free standing body of water in the ground.

Groundwater level means the top surface of *groundwater*.

Guard means a protective barrier, with or without openings through it, that is around openings in floors or at the open sides of stairs, landings, balconies, *mezzanines*, galleries, raised *walkways* or other locations to prevent accidental falls from one level to another.

Hauled sewage means *sanitary sewage* that,

(a) is not finally disposed of at the site where it is produced and is not conveyed by a sewer to *sewage works*, and

(b) is stored or retained at the site where it is produced for periodic collection, handling, treatment, transportation, storage or processing prior to final disposal at a place other than where it was produced,

and includes *sanitary sewage* that is removed from a *sewage system* for the purpose of cleaning or maintaining the system.

Hauled sewage system means works, installations, equipment, operations and land used in connection with the collection, handling, treatment, transportation, storage, processing and disposal of *hauled sewage*, as regulated under the *Environmental Protection Act*.

Hazard index means a level on a scale of 1 to 8 determined in accordance with Tables 11.2.1.1.B. to 11.2.1.1.N. of Division B, designating the life safety hazard to occupants of a *building* based on,

(a) use and *occupancy*,

(b) *occupant load*,

(c) the use and function of floor spaces,

(d) the difficulty of egress,

(e) the fire load of contents, finishes and furnishings,

(f) the configuration or compartmentation of floor spaces, and

(g) the size of the *building*,

and "*H.I.*" has a corresponding meaning.

Hazardous classroom means a classroom,

(a) that is supplied with flammable gas,

(b) that contains hazardous substances such as chemicals or explosive dusts,

(c) that contains large quantities of *combustible* materials, or

(d) where cooking equipment is used.

Hazardous room means a room containing sufficient quantities of a substance that, because of its chemical nature, may create an atmosphere or condition of imminent hazard to health.

Header means a *vent pipe* that connects two or more *vent stacks* or *stack vents* to *open air*.

Header line means a line of pipe with watertight joints installed in a *sewage system* for the purpose of distributing *effluent* from a *treatment unit* to the *distribution pipe* in a *leaching bed.*

Heat detector means a *fire detector* designed to operate at a predetermined temperature or rate of temperature rise.

Heavy timber construction means that type of *combustible construction* in which a degree of fire safety is attained,

(a) by placing limitations on the sizes of wood structural members and on the thickness and composition of wood floors and roofs, and

(b) by the avoidance of concealed spaces under floors and roofs.

Heritage building means a *building*,

(a) that is designated under the *Ontario Heritage Act*, or

(b) that is certified to be of significant architectural or historical value by a recognized, non-profit public organization whose primary object is the preservation of structures of architectural or historical significance and the certification has been accepted by the *chief building official*.

High ground water table means the highest elevation at which there is physical evidence that the *soil*, as defined in Part 8 of Division B, or the *leaching bed fill* has been saturated with water.

High hazard industrial occupancy (Group F, Division 1) means an *industrial occupancy* containing sufficient quantities of highly *combustible* and flammable or explosive materials to constitute a special fire hazard because of their inherent characteristics.

Holding tank means a tank designed to totally retain all *sanitary sewage* discharged into it and requiring periodic emptying.

Home for special care means a home for the care of persons requiring nursing, residential or sheltered care.

Horizontal branch means that part of a *waste pipe* that is horizontal and installed to convey the discharge from more than one *fixture*.

Horizontal exit means an *exit* from one *building* to another by means of a doorway, vestibule, *walkway*, bridge or balcony.

Horizontal service space means a space such as an attic, duct, ceiling, roof or crawl space,

(a) that is oriented essentially in a horizontal plane,

(b) that is concealed and generally inaccessible, and

(c) through which *building* service facilities such as pipes, ducts and wiring may pass.

Hotel means *floor areas*, a *floor area* or part of a *floor area* that contains four or more *suites* and that provides sleeping accommodation for the travelling public or for recreational purposes.

Hub drain means a drain opening for indirect liquid wastes,

(a) that does not serve as a floor drain,

(b) that has the same pipe *size*, material and venting requirements as a floor drain,

(c) that has a *flood level rim* above the floor in which it is installed, and

(d) that receives wastes that are discharged directly into the drain opening.

Impeded egress zone means a supervised area in which occupants have free movement but require the release, by security personnel, of security doors at the boundary before being able to leave the area, but does not include a *contained use area*.

Indirectly connected means not *directly connected*.

Indirect service water heater means a *service water heater* that derives its heat from a heating medium such as warm air, steam or hot water.

Individual vent means a *vent pipe* that serves one *fixture*.

Indoor pool means a *public pool* where the pool and *pool deck* are totally or partially covered by a roof.

Industrial occupancy means the *occupancy* or use of a *building* or part of a *building* for the assembling, fabricating, manufacturing, processing, repairing or storing of goods or materials.

Interceptor means a receptacle that is designed and installed to prevent oil, grease, sand or other materials from passing into a *drainage system*.

Interconnected floor space means superimposed *floor areas* or parts of *floor areas* in which floor assemblies that are required to be *fire separations* are penetrated by openings that are not provided with *closures*.

Lake Simcoe shoreline has the same meaning as in the Lake Simcoe Protection Plan established under the *Lake Simcoe Protection Act, 2008* and dated July, 2009.

Note: On January 1, 2016, Clause (c) is amended by adding the following definition: (See: O. Reg. 332/12, Sentences 4.2.1.1.(1), 4.4.1.1.(2))

Lake Simcoe watershed has the same meaning as in section 2 of the *Lake Simcoe Protection Act, 2008*.

Leaching means dispersal of liquid by downward or lateral drainage or both into permeable *soil*, as defined in Part 8 of Division B, or *leaching bed fill*.

Leaching bed means an absorption system constructed as *absorption trenches* or as a filter bed, located wholly in ground or raised or partly raised above ground, as required by local conditions, to which *effluent* from a *treatment unit* is applied for treatment and disposal and that is composed of,

(a) the *soil*, as defined in Part 8 of Division B, *leaching bed fill* or other filter media that is contained between the surface on which the *sanitary sewage* is applied and the bottom of the bed,

(b) the *distribution pipe* and the stone or gravel layer in which the *distribution pipe* is located, and

(c) the backfill above the *distribution pipe*, including the topsoil and sodding or other anti-erosion measure, and the side slopes of any portion elevated above the natural ground elevation.

Leaching bed fill means unconsolidated material suitable for the *construction* of a *leaching bed*, placed in the area of the *leaching bed* in order to obtain the required unsaturated zone below the *distribution pipes* and the required lateral extent such that the *effluent* is absorbed.

Leader means a pipe that is installed to carry storm water from a roof to a *storm building drain*, sewer or other place of disposal.

Limiting distance means the distance from an *exposing building face* to a property line, to the centre line of a *street*, lane or public thoroughfare or to an imaginary line between two *buildings* or *fire compartments* on the same property, measured at right angles to the *exposing building face*.

Listed means equipment or materials included in a list published by a certification organization accredited by the Standards Council of Canada.

Liquid manure means manure having a dry matter content of less than 18 per cent or a slump of more than 150 millimetres using the Test Method for the Determination of Liquid Waste (slump test) set out in Schedule 9 to Regulation 347 of the Revised Regulations of Ontario, 1990 (General — Waste Management) made under the *Environmental Protection Act*.

Live load means a variable load due to the intended use and *occupancy* that is to be assumed in the design of the structural members of a *building* and includes loads due to cranes and the pressure of liquids in containers.

Live/work unit means a *dwelling unit* having an area of not more than 200 m^2 that contains a subsidiary *business and personal services occupancy* or a subsidiary *low hazard industrial occupancy*, and which is used and operated by one or more persons of a single household.

Loadbearing means, when applied to a *building* element, subjected to or designed to carry loads in addition to its own *dead load*, but does not include a wall element subject only to wind or earthquake loads in addition to its own *dead load*.

Loading rate means the volume in litres of *effluent* per square metre applied in a single day to *soil*, as defined in Part 8 of Division B, or *leaching bed fill*.

Low hazard industrial occupancy (Group F, Division 3) means an *industrial occupancy* in which the *combustible* content is not more than 50 kg/m² or 1200 MJ/m² of *floor area*.

Low human occupancy means, when applied to a *farm building*, an *occupancy* in which the *occupant load* is not more than one person per 40 m² of *floor area* during normal use.

Major occupancy means the principal *occupancy* for which a *building* or part of a *building* is used or intended to be used, and is deemed to include the subsidiary *occupancies* that are an integral part of the principal *occupancy*. The *major occupancy* classifications used in this Code are as follows:

(a) Group A, Division 1 - *Assembly occupancies* intended for the production and viewing of the performing arts,

(b) Group A, Division 2 - *Assembly occupancies* not elsewhere classified in Group A,

(c) Group A, Division 3 - *Assembly occupancies* of the arena type,

(d) Group A, Division 4 - *Assembly occupancies* in which occupants are gathered in the open air,

(e) Group B, Division 1 - *Detention occupancies*,

(f) Group B, Division 2 - *Care and treatment occupancies*,

(g) Group B, Division 3 - *Care occupancies*,

(h) Group C - *Residential occupancies*,

(i) Group D - *Business and personal services occupancies*,

(j) Group E - *Mercantile occupancies*,

(k) Group F, Division 1 - *High hazard industrial occupancies*,

(l) Group F, Division 2 - *Medium hazard industrial occupancies*, and

(m) Group F, Division 3 - *Low hazard industrial occupancies*.

Make-up water means water added to a *public pool* from an external source.

Marquee means a *canopy* over an entrance to a *building*.

Masonry or concrete chimney means a *chimney* of brick, stone, concrete or masonry units constructed on site.

Means of egress includes *exits* and *access to exits* and means a continuous path of travel provided for the escape of persons from any point in a *building* or in a contained open space to,

(a) a separate *building*,

(b) an open public thoroughfare, or

(c) an exterior open space that is protected from fire exposure from the *building* and that has access to an open public thoroughfare.

Medium hazard industrial occupancy (Group F, Division 2) means an *industrial occupancy* in which the *combustible* content is more than 50 kg/m² or 1200 MJ/m² of *floor area* and that is not classified as a *high hazard industrial occupancy*.

Mercantile occupancy means the *occupancy* or use of a *building* or part of a *building* for the displaying or selling of retail goods, wares or merchandise.

Mezzanine means an intermediate floor assembly between the floor and ceiling of any room or *storey* and includes an interior balcony.

Modified pool means a *public pool* that has a basin-shaped floor sloping downward and inward toward the interior from the rim.

Modified stack venting means a *stack venting* arrangement in which the *stack vent* above the connection of the highest *stack vented fixture* is reduced in diameter.

Municipal drinking water system has the same meaning as in subsection 2 (1) of the *Safe Drinking Water Act, 2002*.

Nominally horizontal means at an angle of less than 45° with the horizontal.

Nominally vertical means at an angle of not more than 45° with the vertical.

Noncombustible means that a material meets the acceptance criteria of CAN/ULC-S114, “Test for Determination of Non-Combustibility in Building Materials”.

Noncombustible construction means a type of construction in which a degree of fire safety is attained by the use of *noncombustible* materials for structural members and other building assemblies.

Objective means an objective set out in Article 2.2.1.1.

Occupancy means the use or intended use of a *building* or part of a *building* for the shelter or support of persons, animals or property.

Occupant load means the number of persons for which a *building* or part of a *building* is designed.

Offset means the piping that connects the ends of two pipes that are parallel.

Offset relief vent means a *relief vent* that provides additional air circulation upstream and downstream of an *offset* in a *soil* or *waste stack*.

Open air means the atmosphere outside a *building*.

Open-air storey means a *storey* in which at least 25 per cent of the total area of its perimeter walls is open to the outdoors in a manner that will provide cross ventilation to the entire *storey*.

Outdoor pool means a *public pool* that is not an *indoor pool*.

Pail privy means a latrine in which the receptacle for human waste consists of a removable container surmounted by a superstructure.

Partition means an interior wall, one *storey* or part-*storey* in height, that is not *loadbearing*.

Party wall means a wall,

(a) that is jointly owned and jointly used by two parties under an easement agreement or by a right in law, and

(b) that is erected at or upon a line separating two parcels of land each of which is, or is capable of being, a separate real estate entity.

Perched groundwater means a free standing body of water in the ground extending to a limited depth.

Percolation time means the average time in minutes that is required for water to drop one centimetre during a percolation test or as determined by a *soil* evaluation or analysis.

Performance level means the level of performance under which all or part of an existing *building* functions with respect to its *building systems*.

Permanent solid nutrient storage facility has the same meaning as in subsection 1 (1) of Ontario Regulation 267/03 (General) made under the *Nutrient Management Act, 2002.*

Pharmacy means the premises in a *building* or the part of the premises in which prescriptions are compounded and dispensed for the public or in which drugs are sold by retail.

Pile means a slender *deep foundation unit*,

(a) that is made of materials such as wood, steel or concrete or a combination of them, and

(b) that is either pre-manufactured and placed by driving, jacking, jetting or screwing, or cast-in-place in a hole formed by driving, excavating or boring.

Plenum means a chamber forming part of an air duct system.

Plumbing appliance means a receptacle or equipment that receives or collects water, liquids or *sewage* and discharges water, liquid or *sewage* directly or indirectly to a *plumbing system*.

Plumbing system means a system of connected piping, fittings, valves, equipment, *fixtures* and appurtenances contained in *plumbing*.

Point of entry treatment unit has the same meaning as in subsection 1 (1) of Ontario Regulation 170/03 (Drinking Water Systems) made under the *Safe Drinking Water Act, 2002*.

Pool deck means the area immediately surrounding a *public pool*.

Portable privy means a portable latrine in which the receptacle for human body waste and the superstructure are combined structurally into one unit.

Post-disaster building means a *building* that is essential to the provision of services in the event of a disaster, and includes,

(a) hospitals, emergency treatment facilities and blood banks,

(b) telephone exchanges,

(c) power generating stations and electrical substations,

(d) control centres for land transportation,

(e) public water treatment and storage facilities,

(f) water and sewage pumping stations,

(g) emergency response facilities,

(h) fire, rescue and police stations,

(i) storage facilities for vehicles or boats used for fire, rescue and police purposes, and

(j) communications facilities, including radio and television stations.

Potable means fit for human consumption.

Potable water system means the *plumbing* that conveys *potable* water.

Pressurized distribution system means a *leaching bed* in which the *effluent* is distributed through the use of pressurized *distribution pipes*.

Private sewage disposal system means a *sewage system* or a *sewage works* that is not owned and operated by the Crown, a municipality or an organization acceptable to the Director responsible for issuing an environmental compliance approval required under section 53 of the *Ontario Water Resources Act*.

Private sewer means a sewer other than a *building sewer* that,

(a) is not owned or operated by a municipality, the Ministry of the Environment or another public agency,

(b) receives drainage from more than one *sanitary building drain* either directly or through more than one *sanitary building sewer* or receives drainage from more than one *storm building drain* either directly or through one or more *storm building sewers*, and connects to a main sewer, or

(c) serves as a place of disposal on the property,

but does not include,

(d) a sewer that carries only the sanitary waste or *storm sewage* from two semi-detached dwelling units,

(e) a sewer that carries only the sanitary waste or *storm sewage* from one main *building* that is of *care, care and treatment, detention, commercial or industrial occupancy* and one ancillary *building*, or

(f) a sewer that carries only the sanitary waste or *storm sewage* from a row housing complex having five or fewer single family residences.

Private use means, when applied to plumbing *fixtures, fixtures* in residences and apartments, in private bathrooms of hotels, and in similar installations in other *buildings* for a single household or an individual.

Private water supply means piping that serves as a source of supply on the property to more than one *water service pipe*.

Private water supply system means an assembly of pipes, fittings, valves, equipment and appurtenances that supplies water from a private source to a *potable water system*.

Privy vault means a latrine in which the receptacle for human waste consists of a constructed vault from which the waste is periodically removed.

Process plant means an *industrial occupancy* where materials, including *flammable liquids, combustible liquids* or gases, are produced or used in a process.

Professional engineer means a person who holds a licence or a temporary licence under the *Professional Engineers Act*.

Public corridor means a corridor that provides *access to exit* from more than one *suite*.

Public heritage building means a *heritage building* where the *occupancy* in whole or in part includes viewing of the *building* by the public provided that displays in it are limited to those relevant to the heritage significance of the *building*.

Public pool means a structure, basin, chamber or tank containing or intended to contain an artificial body of water for swimming, water sport, water recreation or entertainment, but does not include,

(a) pools operated in conjunction with less than six *dwelling units*, *suites* or single family residences or any combination of them,

(b) pools that are used only for commercial display and demonstration purposes,

(c) wading pools,

(d) hydro-massage pools, or

(e) pools that serve only as receiving basins for persons at the bottom of water slides.

Public spa means a hydro-massage pool that contains an artificial body of water, that is intended primarily for therapeutic or recreational use, that is not drained, cleaned or refilled before use by each individual and that utilizes hydrojet circulation, air induction bubbles, current flow or a combination of them over the majority of the pool area, but does not include,

(a) wading pools, or

(b) spas operated in conjunction with less than six *dwelling units*, *suites* or single family residences, or any combination of them, for the use of occupants or residents and their visitors.

Public use means, when applied to plumbing *fixtures*, *fixtures* in general washrooms of schools, gymnasiums, hotels, bars, public comfort stations and other installations in which *fixtures* are installed so that their use is unrestricted.

Public way means a sidewalk, *street*, highway, square or another open space to which the public has access, as of right or by invitation, expressed or implied.

Rainwater means *storm sewage* runoff that is collected from a roof or the ground, but not from accessible patios and driveways.

Recirculation system means a system,

(a) that maintains the circulation of water through a *public pool* by pumps, and

(b) that provides continuous treatment of the water, including filtration and chlorination or bromination and any other process that may be necessary for the treatment of the water.

Recreational camp means a camp for recreational activities consisting of one or more *buildings* or other structures established or maintained as living quarters, with or without charge, for the temporary *occupancy* of 10 or more persons for five or more days.

Relief vent means a *vent pipe* that is used in conjunction with a *circuit vent* to provide additional air circulation between a *drainage system* and a *venting system*.

Repair garage means a *building* or part of a *building* where facilities are provided for the repair or servicing of motor vehicles.

Residential full flow-through fir e sprinkler/standpipe system means an assembly of pipes and fittings installed in the residential portions of a *building* containing one or two *dwelling units* that conveys water from the *water service pipe* to outlets in the sprinkler and standpipe systems and is fully integrated into the *potable water system* to ensure a regular flow of water through all parts of the sprinkler and standpipe systems.

Residential occupancy means an *occupancy* in which sleeping accommodation is provided to residents who are not harboured for the purpose of receiving special care or treatment and are not involuntarily detained.

Residential partial flow-through sprinkler/standpipe system means an assembly of pipes and fittings installed in the residential portions of a *building* containing one or two *dwelling units* that conveys water from the *water service pipe* to outlets in the sprinkler and standpipe systems and in which flow occurs during inactive periods of the sprinkler and standpipe systems only through the main header to the water closet located at the farthest point of the sprinkler and standpipe systems.

Return duct means a duct for conveying air from a space being heated, ventilated or air-conditioned back to the heating, ventilating or *air-conditioning appliance*.

Riser means a water *distributing pipe* that extends through at least one full *storey*, as defined in Part 7 of Division B.

Rock means a portion of the earth's crust that is consolidated, coherent and relatively hard and that is a naturally formed, solidly bonded, mass of mineral matter that cannot readily be broken by hand.

Roof drain means a fitting or device that is installed in the roof to permit *storm sewage* to discharge into a *leader*.

Roof gutter means an exterior channel installed at the base of a sloped roof to convey *storm sewage*.

Sanitary building drain means a *building drain* that conducts *sewage* to a *building sewer* from the most upstream *soil* or *waste stack*, *branch* or *fixture drain* serving a water closet.

Sanitary building sewer means a pipe that is connected to a *sanitary building drain* 1 000 mm outside a wall of a *building* and that conducts *sewage* to a public sewer or *private sewage disposal system*.

Sanitary drainage pipe means all piping that conveys *sanitary sewage* to a place of disposal, including the *sanitary building drain*, *sanitary building sewer*, *soil pipe*, *soil stack*, *waste stack* and *waste pipe* but not the main sewer or piping in a *sewage* treatment plant.

Sanitary drainage system means a *drainage system* that conducts *sanitary sewage*.

Sanitary sewage means,

(a) liquid or water borne waste,

(i) of industrial or commercial origin, or

(ii) of domestic origin, including human body waste, toilet or other bathroom waste, and shower, tub, culinary, sink and laundry waste, or

(b) liquid or water borne waste discharged from a *public pool* to a drain.

Sanitary sewer means a sewer that conducts *sewage*.

Sanitary unit means a water closet, urinal, bidet or bedpan washer.

Self-service storage building means a *building* that is used to provide individual storage spaces to the public and that is open to the public only for those purposes.

Septic tank means a watertight vault in which *sanitary sewage* is collected for the purpose of removing scum, grease and solids from the liquid without the addition of air and in which solids settling and anaerobic digestion of the *sanitary sewage* takes place.

Service room means a room provided in a *building* to contain equipment associated with *building* services.

Service space means space provided in a *building* to facilitate or conceal the installation of building service facilities such as chutes, ducts, pipes, shafts or wires.

Service water heater means a device for heating water for *plumbing* services.

Sewage means *sanitary sewage* or *storm sewage*.

Sewage system means,

(a) a chemical toilet, an incinerating toilet, a recirculating toilet, a self-contained portable toilet and all forms of privy, including a *portable privy*, an *earth pit privy*, a *pail privy*, a *privy vault* and a composting toilet system,

(b) a *greywater* system,

(c) a cesspool,

(d) a *leaching bed* system, or

(e) a system that requires or uses a *holding tank* for the retention of *hauled sewage* at the site where it is produced before its collection by a *hauled sewage system*,

where these,

(f) have a *design capacity* of 10,000 litres per day or less,

(g) have, in total, a *design capacity* of 10,000 litres per day or less, where more than one of these are located on a lot or parcel of land, and

(h) are located wholly within the boundaries of the lot or parcel of land on which is located the *building* or *buildings* they serve.

Sewage works means sewage works as defined in subsection 1 (1) of the *Ontario Water Resources Act*.

Sewer lateral extension means the portion of a storm building sewer or sanitary building sewer that extends from the public sewer up to 1.5 m into the property.

Shallow buried trench means an *absorption trench* that contains a *chamber*.

Shallow foundation means a *foundation unit* that derives its support from *soil* or *rock* located close to the lowest part of the *building* that it supports.

Shelf and rack storage system means a self-contained structural system within a *building*, having one or more elevated platforms or walkway levels for personnel access that may also support conveyors and other material handling, storage and distribution equipment.

Significant drinking water threat has the same meaning as in subsection 2 (1) of the *Clean Water Act, 2006*.

Size means the nominal diameter by which a pipe, fitting, *trap* or other similar item is commercially designated.

Smoke alarm means a combined *smoke detector* and audible alarm device designed to sound an alarm within the room or *suite* in which it is located on the detection of smoke within that room or *suite*.

Smoke detector means a *fire detector* designed to operate when the concentration of airborne combustion products exceeds a pre-determined level.

Soil means, except for the purposes of Part 8 of Division B, a portion of the earth's crust that is fragmentary or such that individual particles of a dried sample may be readily separated by agitation in water, and includes boulders, cobbles, gravel, sand, silt, clay and organic matter.

Soil pipe means a *sanitary drainage pipe* that carries the discharge of a *sanitary unit*, with or without the discharge from any other *fixture*.

Soil stack means a vertical *soil pipe* that passes through one or more *storeys* and includes any *offset* that is part of the stack.

Source protection area has the same meaning as in subsection 2 (1) of the *Clean Water Act, 2006*.

Source protection plan has the same meaning as in subsection 2 (1) of the *Clean Water Act, 2006*.

Space heater means a *space-heating appliance* for heating the room or space within which it is located, without the use of ducts.

Space-heating appliance means an *appliance*,

(a) that is intended to supply heat directly to a room or space, such as a *space heater*, fireplace and *unit heater*, or

(b) that is intended to supply heat to rooms or spaces of a *building* through a heating system, such as a central *furnace* or *boiler*.

Sprinklered means equipped with a system of automatic sprinklers.

Stack vent means a *vent pipe* that connects the top of a *soil stack* or *waste stack* to a *header* or *open air* and "*stack vented*" has a corresponding meaning.

Stack venting means, when used with reference to *fixtures*, an arrangement such that the connections of the drainage piping from the *stack vented fixtures* to the stack provide venting to the *fixture traps* so that no additional *vent pipe* is required.

Stage means a space that is designed primarily for theatrical performances with provision for quick change scenery and overhead lighting, including environmental control for a wide range of lighting and sound effects, and that is traditionally, but not necessarily, separated from the audience by a proscenium wall and curtain opening.

Starting platform means a rigid platform located entirely on a *pool deck* that consists of a top that, if projected horizontally over the water surface, would be less than 1 000 mm in vertical height above the surface and that is designed to be used by a swimmer to dive from at the start of a swimming race.

Storage garage means a *building* or part of a *building* that is intended for the storage or parking of motor vehicles and that contains no provision for the repair or servicing of motor vehicles.

Storage-type service water heater means a *service water heater* with an integral hot water storage tank.

Storey means, except for the purposes of Part 7 of Division B, the portion of a *building*,

(a) that is situated between the top of any floor and the top of the floor next above it, or

(b) that is situated between the top of the floor and the ceiling above the floor, if there is no floor above it.

Storm building drain means a *building drain* that conducts storm water and is connected at its upstream end to a leader, sump or catch basin, and at its downstream end to a *building sewer* or a designated storm water disposal location.

Storm building sewer means a *building sewer* that conveys *storm sewage* to a place of disposal and commences 1 000 mm from the *building*.

Storm drainage pipe means all the connected piping that conveys *storm sewage* to a place of disposal and includes the *storm building drain*, *storm building sewer*, rain water *leader*, catch basin and area

drain installed to collect water from the property and the piping that drains water from a swimming pool, other than a *public pool*, or from water cooled *air-conditioning* equipment, but does not include,

(a) a *subsoil drainage pipe*, or

(b) a private sewage treatment and disposal facility designed for the treatment or retention of *storm sewage* prior to discharge to the natural environment.

Storm drainage system means a *drainage system* that conveys *storm sewage*.

Storm sewage means water that is discharged from a surface as a result of rainfall, snow melt or snowfall.

Storm sewer means a sewer that conveys *storm sewage*.

Stove means an *appliance* intended for cooking or space heating or both.

Street means any highway, road, boulevard, square or other improved thoroughfare that is 9 m or more in width, that has been dedicated or deeded for public use and that is accessible to fire department vehicles and equipment.

Subsoil drainage pipe means a pipe that is installed underground to intercept and convey subsurface water, and includes foundation drain pipes.

Subsurface investigation means the appraisal of the general subsurface conditions at a *building* site by analysis of information gained by methods such as geological surveys, in situ testing, sampling, visual inspection, laboratory testing of samples of the subsurface materials and *groundwater* observations and measurements.

Suite means a single room or series of rooms of complementary use, operated under a single tenancy, and includes,

(a) *dwelling units*,

(b) individual guest rooms in motels, hotels, boarding houses, rooming houses and dormitories, and

(c) individual stores and individual or complementary rooms for *business and personal services occupancies*.

Supply duct means a duct for conveying air from a heating, ventilating or *air-conditioning appliance* to a space to be heated, ventilated or air-conditioned.

Surface water means water on the surface of the ground.

Tarion Warranty Corporation means Tarion Warranty Corporation as designated under section 2 of the *Ontario New Home Warranties Plan Act*.

Theatre means a place of public assembly intended for the production and viewing of the performing arts or the screening and viewing of motion pictures, and consisting of an auditorium with permanently fixed seats intended solely for a viewing audience.

Trap means a fitting or device that is designed to hold a liquid seal that will prevent the passage of gas but will not materially affect the flow of a liquid.

Trap arm means that portion of a *fixture drain* between the *trap weir* and the *vent pipe* fitting.

Trap dip means the lowest part of the upper interior surface of a *trap*.

Trap seal depth means the vertical distance between the *trap dip* and the *trap weir*.

Trap standard means the *trap* for a *fixture* that is integral with the support for the *fixture*.

Trap weir means the highest part of the lower interior surface of a *trap*.

Treatment unit means a device that, when designed, installed and operated in accordance with its design specifications, provides a specific degree of *sanitary sewage* treatment to reduce the contaminant load from that of *sanitary sewage* to a given *effluent* quality.

Tribunal means the Licence Appeal Tribunal established under the *Licence Appeal Tribunal Act, 1999*.

Type A dispersal bed means a *leaching bed* that receives *effluent* from a Level IV *treatment unit* as described in Table 8.6.2.2. of Division B and that is comprised of a stone layer above an unsaturated sand layer as described in Subsection 8.7.7. of Division B.

Type B dispersal bed means a *leaching bed* comprised of a *pressurized distribution system* that uniformly distributes *effluent* from a Level IV *treatment unit* as described in Table 8.6.2.2. of Division B to the underlying *soil*, as defined in Part 8 of Division B, through a set of *distribution pipes* installed in a bed comprised of septic stone.

Unit heater means a suspended *space heater* with an integral air circulating fan.

Unprotected opening means, when applied to an *exposing building face,*

(a) a doorway, window or opening, other than one equipped with a closure having the required *fire-protection rating*, or

(b) any part of a wall forming part of the *exposing building face* that has a *fire-resistance rating* less than required for the *exposing building face*.

Unstable liquid means a liquid, including *flammable liquids* and *combustible liquids*, that is chemically reactive to the extent that it will vigorously react or decompose at or near normal temperature and pressure conditions or that is chemically unstable when subjected to impact.

Vacuum breaker means *back-siphonage preventer*.

Vapour barrier means the elements installed to control the diffusion of water vapour.

Vent connector means, when applied to a heating or cooling system, the part of a venting system that conducts the *flue* gases or vent gases from the *flue collar* of a gas *appliance* to the *chimney* or *gas vent*, and may include a draft control device.

Vent pipe means a pipe that is part of a *venting system*.

Vent stack means a *vent pipe* that is connected at its upper end to a *header* or is terminated in *open air* and that is used to limit pressure differential in a *soil* or *waste stack*.

Venting system means an assembly of pipes and fittings that connects a *drainage system* with *open air* for circulation of air and the protection of *trap* seals in the *drainage system*.

Vertical leg means the vertical portion of a *fixture* drain and includes the portion of a drain from the outlet of a water closet bowl to the point where the connecting piping changes to horizontal.

Vertical service space means a shaft that is oriented essentially vertically and that is provided in a *building* to facilitate the installation of *building* services, including mechanical, electrical and plumbing installations and facilities such as elevators, refuse chutes and linen chutes.

Vulnerable area has the same meaning as in subsection 2 (1) of the *Clean Water Act, 2006*.

Walkway means a covered or roofed pedestrian thoroughfare used to connect two or more *buildings*.

Waste pipe means a *sanitary drainage pipe* that carries the discharge from a *fixture* directly to a *waste stack*, *soil stack*, *sanitary building drain*, *branch* or *sewage system*.

Waste stack means a vertical *waste pipe* that passes through one or more *storeys* and includes any offset that is part of the stack that conducts liquid waste from *fixtures* other than *sanitary units*.

Water distribution system means an assembly of pipes, fittings, valves and appurtenances that conveys *potable water* to water supply outlets, *fixtures*, *plumbing appliances* and devices from the *water service pipe* or from a *point of entry treatment unit* located in the *building*.

Water purveyor means the owner or operator of a *drinking water system*.

Water service pipe means a pipe on the property that conveys *potable* water from a *drinking water system* or a *private water supply* to the inside of the *building*.

Water system means a *water service pipe*, a *private water supply*, a *water distribution system*, a *fire service main* or any part of any of them.

Wave action pool means a *public pool* equipped with a means for inducing wave motion in the water.

Wet vent means a *waste pipe* that also serves as a *vent pipe*.

Working capacity means the volume of liquid that a *treatment unit* or *holding tank* is capable of holding without overflowing while it is in its working position, but does not include the volume of liquid contained in a compartment in which a pump or siphon is installed.

X-ray equipment includes x-ray imaging systems, processing equipment and equipment directly related to the production of images for diagnosis or directly related to irradiation with x-rays for therapy.

X-ray machine means an electrically-powered device producing x-rays,

(a) for the irradiation of a human being or an animal for a therapeutic or diagnostic purpose, or

(b) for industrial use.

Yoke vent means a *vent pipe* that is connected at its lower end to a *soil* or *waste stack* and at its upper end to a *vent stack* or a *branch vent* that is connected to a *vent stack*.

1.4.1.3. Definition of Applicable Law

(1) For the purposes of clause 8 (2) (a) of the Act, *applicable law* means,

(a) the statutory requirements in the following provisions with respect to the following matters:

(i) section 114 of the *City of Toronto Act, 2006* with respect to the approval by the City of Toronto or the Ontario Municipal Board of plans and drawings,

(ii) section 59 of the *Clean Water Act, 2006* with respect to the issuance of a notice by the risk management official for the *construction* of a *building*,

(iii) section 5 of Regulation 262 of the Revised Regulations of Ontario, 1990 (General), made under the *Day Nurseries Act*, with respect to the approval of plans for a new *building* to be erected or an existing *building* to be used, altered or renovated for use as a day nursery or for alterations or renovations to be made to premises used by a day nursery,

(iv) section 194 of the *Education Act* with respect to the approval of the Minister for the *demolition* of a *building*,

(v) section 6 of Regulation 314 of the Revised Regulations of Ontario, 1990 (General), made under the *Elderly Persons Centres Act*, with respect to the approval of the Minister for the *construction* of a *building* project,

(vi) section 5 of the *Environmental Assessment Act* with respect to the approval of the Minister or the Environmental Review Tribunal to proceed with an undertaking,

(vii) section 46 of the *Environmental Protection Act* with respect to the approval of the Minister to use land or land covered by water that has been used for the disposal of waste,

(viii) section 47.3 of the *Environmental Protection Act* with respect to the issuance of a renewable energy approval,

(ix) section 168.3.1 of the *Environmental Protection Act* with respect to the *construction* of a *building* to be used in connection with a change of use of a property,

(x) paragraph 2 of subsection 168.6 (1) of the *Environmental Protection Act* if a certificate of property use has been issued in respect of the property under subsection 168.6 (1) of that Act,

(xi) section 14 of the *Milk Act* with respect to the permit from the Director for the *construction* or alteration of any *building* intended for use as a plant,

(xii) section 11.1 of Ontario Regulation 267/03 (General), made under the *Nutrient Management Act, 2002*, with respect to a proposed *building* or structure to house farm animals or store nutrients if that Regulation requires the preparation and approval of a nutrient management strategy before *construction* of the proposed *building* or structure,

(xiii) subsection 30 (2) of the *Ontario Heritage Act* with respect to a consent of the council of a *municipality* to the alteration or *demolition* of a *building* where the council of the *municipality* has given a notice of intent to designate the *building* under subsection 29 (3) of that Act,

(xiv) section 33 of the *Ontario Heritage Act* with respect to the consent of the council of a *municipality* for the alteration of property,

(xv) section 34 of the *Ontario Heritage Act* with respect to the consent of the council of a *municipality* for the *demolition* of a *building*,

(xvi) section 34.5 of the *Ontario Heritage Act* with respect to the consent of the Minister to the alteration or *demolition* of a designated *building*,

(xvii) subsection 34.7 (2) of the *Ontario Heritage Act* with respect to a consent of the Minister to the alteration or *demolition* of a *building* where the Minister has given a notice of intent to designate the *building* under section 34.6 of that Act,

(xviii) section 42 of the *Ontario Heritage Act* with respect to the permit given by the council of a *municipality* for the erection, alteration or *demolition* of a *building*,

(xix) section 14 of the *Ontario Planning and Development Act, 1994* with respect to any conflict between a development plan made under that Act and a zoning by-law that affects the proposed *building* or structure,

(xx) section 41 of the *Planning Act* with respect to the approval by the council of the *municipality* or the Ontario Municipal Board of plans and drawings,

(xxi) section 42 of the *Planning Act* with respect to the payment of money or making arrangements satisfactory to the council of a *municipality* for the payment of money, where the payment is required under subsection 42 (6) of that Act,

(xxii) section 2 of Ontario Regulation 239/13 (Activities on Public Lands and Shore Lands — Work Permits and Exemptions), made under the *Public Lands Act*, with respect to the work permit authorizing the *construction* or placement of a *building* on public land,

(xxii.1) section 5 of Ontario Regulation 239/13 with respect to the exemption from the requirement to obtain a work permit authorizing the *construction* or placement of a *building* within an unpatented mining claim,

(xxiii) section 34 or 38 of the *Public Transportation and Highway Improvement Act* with respect to the permit from the Minister for the placement, erection or alteration of any *building* or other structure or the use of land,

(b) the following provisions of Acts and regulations:

(i) subsection 102 (3) of the *City of Toronto Act, 2006*,

(ii) sections 28 and 53 of the *Development Charges Act*, *1997*,

(iii) sections 257.83 and 257.93 of the *Education Act*,

(iv) subsection 5 (4) of the *Environmental Assessment Act*,

(v) subsection 133 (4) of the *Municipal Act*, *2001*,

(vi) subsection 24 (3) of the *Niagara Escarpment Planning and Development Act*,

(vii) subsection 27 (3) of the *Ontario Heritage Act*,

(viii) section 33 of the *Planning Act* except where, in the case of the *demolition* of a residential property, a permit to *demolish* the property is obtained under that section,

(ix) section 46 of the *Planning Act*,

(c) regulations made by a conservation authority under clause 28 (1) (c) of the *Conservation Authorities Act* with respect to permission of the authority for the *construction* of a *building* or structure if, in the opinion of the authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development,

(d) by-laws made under section 108 of the *City of Toronto Act, 2006* , but only with respect to the issuance of a permit for the *construction* of a green roof if the *construction* of the roof is prohibited unless a permit is obtained,

(e) by-laws made under section 40.1 of the *Ontario Heritage Act*,

(f) by-laws made under section 34 or 38 of the *Planning Act*,

(g) subject to clause (h), by-laws made under Ontario Regulation 608/06 (Development Permits) made under the *Planning Act*,

(h) by-laws referred to in clause (g) in relation to the development of land, but only with respect to the issuance of a development permit if the development of land is prohibited unless a development permit is obtained,

(i) by-laws made under Ontario Regulation 246/01 (Development Permits) made under the *Planning Act* which continue in force despite the revocation of that Regulation by reason of section 17 of Ontario Regulation 608/06 (Development Permits) made under that Act,

(j) orders made by the Minister under section 47 of the *Planning Act* or subsection 17 (1) of the *Ontario Planning and Development Act*, *1994*, and

(k) by-laws made under any private Act that prohibit the proposed *construction* or *demolition* of the *building* unless the by-law is complied with.

(2) For the purposes of clause 10 (2) (a) of the Act, *applicable law* means any general or special Act, and all regulations and by-laws enacted under them that prohibit the proposed use of the *building* unless the Act, regulation or by-law is complied with.

1.4.1.4. Other definitions for the purposes of the Act

(1) For the purposes of the Act, *architect*, *as constructed plans* and *professional engineer* have the same meaning as that set out in Clause 1.4.1.2.(1)(c).

1.4.2. Symbols and Other Abbreviations

1.4.2.1. Symbols and Other Abbreviations

(1) In this Code, a symbol or abbreviation listed in Column 1 of Table 1.4.2.1. has the meaning listed opposite it in Column 2.

Table 1.4.2.1.
Symbols and Abbreviations

Forming Part of Sentence 1.4.2.1.(1)

Item	Column 1	Column 2
	Symbol or Abbreviation	Meaning
1.	1 in 2	slope of 1 vertical to 2 horizontal
2.	ASWG	American Steel Wire Gage
3.	ABS	acrylonitrile-butadiene-styrene
4.	Bq	becquerel(s)
5.	$CBOD_5$	the five day carbonaceous biochemical oxygen demand
6	cd	candela(s)
7.	CFU	colony forming units
8	cm	centimetre(s)
9.	cm^2	square centimetre(s)
10.	CPVC	chlorinated poly (vinyl chloride)
11.	dB(A)	A-weighted sound level
12.	°	degree(s)
13.	C	degree(s) Celsius
14.	diam	diameter
15.	DWV	drain, waste and vent
16.	ft	foot (feet)
17.	g	gram(s)
18.	ga	gauge
19.	gal	imperial gallon(s)
20.	gal/min	imperial gallon(s) per minute
21.	h	hour(s)
22.	HVAC	heating, ventilating and air-conditioning
23.	Hz	hertz
24.	in.	inch(es)
25.	J	joule(s)
26.	kg	kilogram(s)
27.	kg/m^2	kilograms per square metre
28.	kN	kilonewton(s)
28.	kPa	kilopascal(s)
30.	kW	kilowatt(s)
31.	L	litre(s)
32	L/min	litre(s) per minute

33.	L/s	litre(s) per second
34.	LPF	litres per flush
35.	lx	lux
36.	m	metre(s)
37.	m^2	square metre(s)
38	m^3	cubic metre(s)
39.	m/s	metre(s) per second
40.	max.	maximum
41.	mg/L	milligram(s) per litre
42.	min	minute(s)
43.	min.	minimum
44.	MJ	megajoule(s)
45.	mm	millimetre(s)
46.	MPa	megapascal(s)
47.	N	newton
48.	N/A	not applicable
49.	ng	nanogram(s)
50.	No.	number(s)
51.	nom.	nominal
52.	o.c.	on centre
53.	OSB	oriented strandboard
54.	Pa	pascal(s)
55.	PB	polybutylene
56.	PE	polyethylene
57.	PE/AL/PE	polyethylene/aluminum/polyethylene
58.	PEX	crosslinked polyethylene
59.	PEX/AL/PEX	crosslinked polyethylene/aluminum/crosslinked polyethylene
60.	PVC	poly (vinyl chloride)
61.	RSI	thermal resistance, International System of Units
62.	s	second(s)
63.	temp.	temperature
64.	T&G	tongue and groove
65.	W	watt(s)
66.	wt	weight
67.	%	per cent
68.	µg	microgram(s)
69.	µm	micron

Section 1.5. Referenced Documents and Organizations

1.5.1. Referenced Documents

1.5.1.1. Application of Referenced Documents

(1) The provisions of a referenced document in Divisions A and B apply only to the extent that the provisions relate to,

(a) *buildings*, and

(b) the *objectives* and *functional statements* attributed to the applicable *acceptable solutions* in Division B where the document is referenced.

1.5.1.2. Conflicting Requirements

(1) In the case of a conflict between the provisions of this Code and those of a referenced document, the provisions of this Code shall govern.

1.5.1.3. Applicable Editions

(1) Where documents are referenced in this Code, they shall be the editions designated in Subsection 1.3.1. of Division B.

1.5.2. Organizations

1.5.2.1. Abbreviations of Proper Names

(1) The abbreviations of proper names in this Code shall have the meanings assigned to them in Article 1.3.2.1. of Division B.

O. Reg. 332/12, Division A, Part 1.

PART 2

OBJECTIVES

2.1.	**Application**
2.1.1.	**Application**
2.2.	**Objectives**
2.2.1.	**Objectives**

Table	**Description**
2.2.1.1.	**OBJECTIVES**

Section 2.1. Application

2.1.1. Application

2.1.1.1. Application of Objectives

(1) The *objectives* set out in Table 2.2.1.1. apply only to the extent that they relate to compliance with this Code as required in Article 1.2.1.1.

Section 2.2. Objectives

2.2.1. Objectives

2.2.1.1. Objectives

(1) The *objectives* of this Code shall be those set out in Table 2.2.1.1.

Table 2.2.1.1.
Objectives

Forming Part of Sentence 2.2.1.1.(1)

Item	Column 1 Category	Column 2 Number	Column 3 *Objective*
1.	Safety	OS	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury.
	Safety — Fire Safety	OS1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to fire.
		OS1.1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to fire caused by a fire or explosion.
		OS1.2	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to fire caused by fire or explosion impacting areas beyond its point of origin.
		OS1.3	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to fire caused by the collapse of physical elements due to a fire or explosion.
		OS1.4	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to fire caused by fire safety systems failing to function as expected.

		OS1.5	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to fire caused by persons being delayed in or impeded from moving to a safe place during a fire emergency.
	Safety — Structural Safety	OS2	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to structural failure.
		OS2.1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to structural failure caused by loads bearing on the *building* elements that exceed their *loadbearing* capacity.
		OS2.2	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to structural failure caused by loads bearing on the *building* that exceed the *loadbearing* properties of the supporting medium.
		OS2.3	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to structural failure caused by damage to or deterioration of *building* elements.
		OS2.4	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to structural failure caused by vibration or deflection of *building* elements.
		OS2.5	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to structural failure caused by instability of the *building* or part of it.
		OS2.6	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to structural failure caused by collapse of the *excavation*.
	Safety — Safety in Use	OS3	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of the *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to hazards.

		OS3.1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to hazards caused by tripping, slipping, falling, contact, drowning or collision.
		OS3.2	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to hazards caused by contact with hot surfaces or substances.
		OS3.3	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to hazards caused by contact with energized equipment.
		OS3.4	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to hazards caused by exposure to hazardous substances.
		OS3.5	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to hazards caused by exposure to high levels of sound from fire alarm systems.
		OS3.6	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to hazards caused by persons becoming trapped in confined spaces.
		OS3.7	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of injury due to hazards caused by persons being delayed in or impeded from moving to a safe place during an emergency.
	Safety — Resistance to Unwanted Entry	OS4	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of injury due to the *building's* low level of resistance to unwanted entry.
		OS4.1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of injury due to the *building's* low level of resistance to unwanted entry caused by intruders being able to force their way through locked doors or windows.

		OS4.2	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of injury due to the *building's* low level of resistance to unwanted entry caused by occupants being unable to identify potential intruders as such.
2.	Health	OH	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person will be exposed to an unacceptable risk of illness.
	Health — Indoor Conditions	OH1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to indoor conditions.
		OH1.1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to indoor conditions caused by inadequate indoor air quality.
		OH1.2	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to indoor conditions caused by inadequate thermal comfort.
		OH1.3	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to indoor conditions caused by contact with moisture.
	Health — Sanitation	OH2	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in or adjacent to the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions.
		OH2.1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions caused by exposure to human or domestic waste.
		OH2.2	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions caused by consumption of contaminated water.

		OH2.3	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions caused by inadequate facilities for personal hygiene.
		OH2.4	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions caused by contact with contaminated surfaces.
		OH2.5	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions caused by contact with vermin and insects.
		OH2.6	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person adjacent to the *building* will be exposed to an unacceptable risk of illness due to unsanitary conditions caused by exposure to human or domestic waste.
	Health — Noise Protection	OH3	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to high levels of sound originating in adjacent spaces in the *building*.
		OH3.1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to high levels of sound originating in adjacent spaces in the *building* caused by exposure to airborne sound transmitted through assemblies separating *dwelling units* from adjacent spaces in the *building*.
	Health — Vibration and Deflection Limitation	OH4	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be exposed to an unacceptable risk of illness due to high levels of vibration or deflection of *building* elements.
	Health — Hazardous Substances Containment	OH5	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, the public will be exposed to an unacceptable risk of illness due to the release of hazardous substances from the *building*.
	Health — Privacy	OH6	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be provided with an unacceptable level of privacy.

	Health — View to the Outdoors	OH7	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person in the *building* will be unable to experience a view to the outdoors.
3.	Accessibility	OA	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person with a physical or sensory disability will be unacceptably impeded from accessing or using the *building* or its facilities.
	Accessibility — Barrier-free Path of Travel	OA1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person with a physical or sensory disability will be unacceptably impeded from accessing the *building* or circulating within it.
	Accessibility — Barrier-free Facilities	OA2	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a person with a physical or sensory disability will be unacceptably impeded from using the *building's* facilities.
4.	Fire, Structural, Water and Sewage Protection of Buildings	OP	An *objective* of this Code is to limit the probability that, as a result of its design or *construction*, the *building* or adjacent *building*s will be exposed to an unacceptable risk of damage due to fire or structural insufficiency, or the *building* or part of it will be exposed to an unacceptable risk of loss of use also due to structural insufficiency.
	Fire, Structural, Water and Sewage Protection of Buildings — Fire Protection of the Building	OP1	An *objective* of this Code is to limit the probability that, as a result of its design or *construction*, a *building* will be exposed to an unacceptable risk of damage due to fire.
		OP1.1	An *objective* of this Code is to limit the probability that, as a result of its design or *construction*, a *building* will be exposed to an unacceptable risk of damage due to fire caused by fire or explosion occurring.
		OP1.2	An *objective* of this Code is to limit the probability that, as a result of its design or *construction*, a *building* will be exposed to an unacceptable risk of damage due to fire caused by fire or explosion impacting areas beyond its point of origin.
		OP1.3	An *objective* of this Code is to limit the probability that, as a result of its design or *construction*, a *building* will be exposed to an unacceptable risk of damage due to fire caused by collapse of physical elements due to a fire or explosion.

		OP1.4	An *objective* of this Code is to limit the probability that, as a result of its design or *construction*, a *building* will be exposed to an unacceptable risk of damage due to fire caused by fire safety systems failing to function as expected.
	Fire, Structural, Water and Sewage Protection of Buildings — Structural Sufficiency of the Building	OP2	An *objective* of this Code is to limit the probability that, as a result of its design or *construction*, a *building* or part of it will be exposed to an unacceptable risk of damage or loss of use due to structural failure or lack of structural serviceability.
		OP2.1	An *objective* of this Code is to limit the probability that, as a result of its design or *construction*, a *building* or part of it will be exposed to an unacceptable risk of damage or loss of use due to structural failure or lack of structural serviceability caused by loads bearing on the *building* elements that exceed their *loadbearing* capacity.
		OP2.2	An *objective* of this Code is to limit the probability that, as a result of its design or *construction*, a *building* or part of it will be exposed to an unacceptable risk of damage or loss of use due to structural failure or lack of structural serviceability caused by loads bearing on the *building* that exceed the *loadbearing* properties of the supporting medium.
		OP2.3	An *objective* of this Code is to limit the probability that, as a result of its design or *construction*, a *building* or part of it will be exposed to an unacceptable risk of damage or loss of use due to structural failure or lack of structural serviceability caused by damage to or deterioration of *building* elements.
		OP2.4	An *objective* of this Code is to limit the probability that, as a result of its design or *construction*, a *building* or part of it will be exposed to an unacceptable risk of damage or loss of use due to structural failure or lack of structural serviceability caused by vibration or deflection of *building* elements.
		OP2.5	An *objective* of this Code is to limit the probability that, as a result of its design or *construction*, a *building* or part of it will be exposed to an unacceptable risk of damage or loss of use due to structural failure or lack of structural serviceability caused by instability of the *building* or part of it.

		OP2.6	An *objective* of this Code is to limit the probability that, as a result of its design or *construction*, a *building* or part of it will be exposed to an unacceptable risk of damage or loss of use due to structural failure or lack of structural serviceability caused by instability or movement of the supporting medium.
	Fire, Structural, Water and Sewage Protection of Buildings — Protection of Adjacent Buildings from Fire	OP3	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, adjacent *buildings* will be exposed to an unacceptable risk of damage due to fire.
		OP3.1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, adjacent *buildings* will be exposed to an unacceptable risk of damage due to fire caused by fire or explosion impacting areas beyond the *building* of origin.
	Fire, Structural, Water and Sewage Protection of Buildings — Protection of Adjacent Buildings from Structural Damage	OP4	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, adjacent *buildings* will be exposed to an unacceptable risk of structural damage.
		OP4.1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, adjacent *buildings* will be exposed to an unacceptable risk of structural damage caused by settlement of the medium supporting adjacent *buildings*.
		OP4.2	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of the *building*, adjacent *buildings* will be exposed to an unacceptable risk of structural damage caused by collapse of the *building* or portion of it onto adjacent *buildings*.
		OP4.3	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, adjacent *buildings* will be exposed to an unacceptable risk of structural damage caused by impact of the *building* on adjacent *buildings*.
		OP4.4	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, adjacent *buildings* will be exposed to an unacceptable risk of structural damage caused by collapse of the excavation.

	Fire, Structural, Water and Sewage Protection of Buildings — Water and Sewage Protection of Buildings and Facilities	OP5	An *objective* of this Code is to limit the probability that, as a result of its design or *construction*, a *building* will be exposed to unacceptable risk of damage due to leakage of service water or *sewage*.
5.	Resource Conservation	OR	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a resource will be exposed to an unacceptable risk of depletion or the capacity of the infrastructure supporting the use, treatment or disposal of the resource will be exposed to an unacceptable risk of being exceeded.
	Resource Conservation — Water and Energy Conservation	OR1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a resource will be exposed to an unacceptable risk of depletion.
		OR1.1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, water resources will be exposed to an unacceptable risk of depletion due to the consumption of water.
		OR1.2	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, a resource will be exposed to an unacceptable risk of depletion due to the consumption of energy.
	Resource Conservation — Infrastructure Capacity	OR2	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, the capacity of the infrastructure supporting the use, treatment or disposal of a resource will be exposed to an unacceptable risk of being exceeded.
		OR2.1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, the capacity of the infrastructure supporting the use, treatment or disposal of a resource will be exposed to an unacceptable risk of being exceeded due to excessive demand on the infrastructure.
6.	Environmental Integrity	OE	An *objective* of this Code is to limit the probability that, as a result of the design, *construction* or operation of a *building*, the natural environment will be exposed to an unacceptable risk of degradation.
	Environmental Integrity — Air Quality	OE1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, the natural environment will be exposed to an unacceptable risk of degradation due to emissions into the air.

		OE1.1	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, the natural environment will be exposed to an unacceptable risk of degradation due to emissions of greenhouse gases into the air.
		OE1.2	An *objective* of this Code is to limit the probability that, as a result of the design or *construction* of a *building*, the natural environment will be exposed to an unacceptable risk of degradation due to the release of contaminants, other than greenhouse gases, into the air.
	Environmental Integrity — Water and Soil Quality	OE2	An *objective* of this Code is to limit the probability that, as a result of the design, *construction* or operation of a *building*, the natural environment will be exposed to an unacceptable risk of degradation due to excessive release of contaminants into water or *soil*.
7.	Conservation of Buildings	OC	An *objective* of this Code is to limit the probability that, as a result of the extension, material alteration or repair of an existing *building* or a change in use of an existing *building*, the existing *building* cannot be acceptably conserved.

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PART 3
FUNCTIONAL STATEMENTS

3.1.	**Application**
3.1.1.	**Application of Functional Statements**
3.2.	**Functional Statements**
3.2.1.	**Functional Statements**

Table	Description
3.2.1.1.	**Functional Statements**

Section 3.1. Application

3.1.1. Application of Functional Statements

3.1.1.1. Application of Functional Statements

(1) The *functional statements* set out in Table 3.2.1.1. apply only to the extent that they relate to compliance with this Code as required in Article 1.2.1.1.

Section 3.2. Functional Statements

3.2.1. Functional Statements

3.2.1.1. Functional Statements

(1) The *functional statements* of this Code are those set out in Table 3.2.1.1.

Table 3.2.1.1.
Functional Statements

Forming Part of Sentence 3.2.1.1.(1)

Item	Column 1 Number	Column 2 Function
1.	F01	To minimize the risk of accidental ignition.
	F02	To limit the severity and effects of fire or explosions.
	F03	To retard the effects of fire on areas beyond its point of origin.
	F04	To retard failure or collapse due to the effects of fire.
	F05	To retard the effects of fire on emergency egress facilities.
	F06	To retard the effects of fire on facilities for notification, suppression and emergency response.
2.	F10	To facilitate the timely movement of persons to a safe place in an emergency.
	F11	To notify persons, in a timely manner, of the need to take action in an emergency.
	F12	To facilitate emergency response.
	F13	To notify emergency responders, in a timely manner, of the need to take action in an emergency.
3.	F20	To support and withstand expected loads and forces.
	F21	To limit or accommodate dimensional change.
	F22	To limit movement under expected loads and forces.
	F23	To maintain equipment in place during structural movement.
4.	F30	To minimize the risk of injury to persons as a result of tripping, slipping, falling, contact, drowning or collision.
	F31	To minimize the risk of injury to persons as a result of contact with hot surfaces or substances.
	F32	To minimize the risk of injury to persons as a result of contact with energized equipment.
	F33	To limit the level of sound of a fire alarm system.
	F34	To resist or discourage unwanted access or entry.
	F35	To facilitate the identification of potential intruders.
	F36	To minimize the risk that persons will be trapped in confined spaces.

5.	F40	To limit the level of contaminants.
	F41	To minimize the risk of generation of contaminants.
	F42	To resist the entry of vermin and insects.
	F43	To minimize the risk of release of hazardous substances.
	F44	To limit the spread of hazardous substances beyond their point of release.
	F45	To minimize the risk of the spread of diseases through communal shower facilities.
	F46	To minimize the risk of contamination of *potable* water.
6.	F50	To provide air suitable for breathing.
	F51	To maintain appropriate air and surface temperatures.
	F52	To maintain appropriate relative humidity.
	F53	To maintain appropriate indoor/outdoor air pressure differences.
	F54	To limit drafts.
	F55	To resist the transfer of air through environmental separators.
	F56	To limit the transmission of airborne sound into a *dwelling unit* from spaces elsewhere in the *building*.
7.	F60	To control the accumulation and pressure of water on and in the ground.
	F61	To resist the ingress of precipitation, water or moisture from the exterior or from the ground.
	F62	To facilitate the dissipation of water and moisture from the *building*.
	F63	To limit moisture condensation.
8.	F70	To provide *potable* water.
	F71	To provide facilities for personal hygiene.
	F72	To provide facilities for the sanitary disposal of human and domestic wastes.
	F73	To facilitate access to and circulation in the *building* and its facilities by persons with physical or sensory disabilities.
	F74	To facilitate the use of a *building's* facilities by persons with physical or sensory disabilities.
9.	F80	To resist deterioration resulting from expected service conditions.
	F81	To minimize the risk of malfunction, interference, damage, tampering, lack of use or misuse.
	F82	To minimize the risk of inadequate performance due to improper maintenance or lack of maintenance.
10.	F101	To limit unwanted visual exposure.
	F102	To provide a view to the outdoors in *buildings*.
11.	F110	To control the release of contaminants into *soil*, *groundwater*, *surface water* and air.
	F111	To minimize the risk of malfunction, damage or failure of a *sewage system*.
	F112	To provide adequate treatment of *sanitary sewage* and *effluent*.
	F113	To minimize the risk of injury as a result of contact with *sanitary sewage* or partially treated *effluent*.

12.	F120	To minimize the risk of injury to persons entering or exiting the pool, as a result of unfamiliarity with the pool.
	F121	To minimize the risk of injury to persons using the pool, as a result of unfamiliarity with the pool.
	F122	To minimize the risk of contamination of pool water.
	F123	To facilitate timely response to incapacitated pool users.
	F124	To minimize the risk of entrapment or injury to a person within the pool, as a result of water, air or vacuum action.
13.	F130	To limit excessive water consumption.
	F131	To limit excessive energy consumption.
	F132	To limit excessive demand on the infrastructure.
	F133	To limit excessive peak demand on the infrastructure.
14.	F140	To facilitate the reuse and material alteration and repair of existing *buildings*.
15.	F150	To limit excessive emissions of greenhouse gases into the air.
	F151	To limit excessive release of contaminants, other than greenhouse gases, into the air.

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DIVISION B

ACCEPTABLE SOLUTIONS

PART 1
GENERAL

1.1.	General
1.1.1.	Application
1.1.2.	Climatic Data
1.2.	Reserved
1.3.	Referenced Documents and Organizations
1.3.1.	Referenced Documents
1.3.2.	Abbreviations

Table	Description
3.2.1.1.	DOCUMENTS REFERENCED IN THE BUILDING CODE

Section 1.1. General

1.1.1. Application

1.1.1.1. Application

(1) This Part applies to all *buildings* covered in this Code.

1.1.2. Climatic Data

1.1.2.1. Climatic and Seismic Design Values

(1) The climatic and seismic values required for the design of *buildings* under this Code shall be in conformance with the climatic and seismic values provided in MMAH Supplementary Standard SB-1, "Climatic and Seismic Data".

(2) The outside winter design temperatures determined from MMAH Supplementary Standard SB-1, "Climatic and Seismic Data", shall be those listed for the January 2.5% values.

1.1.2.2. Depth of Frost Penetration

(1) Depth of frost penetration shall be established on the basis of local experience.

Section 1.2. Reserved

Section 1.3. Referenced Documents and Organizations

1.3.1. Referenced Documents

1.3.1.1. Effective Date

(1) Unless otherwise specified in this Code, the documents referenced in this Code shall include all amendments, revisions and supplements effective to June 30, 2012.

1.3.1.2. Applicable Editions

(1) **Where documents are referenced in this Code, they shall be in the editions designated in Column 2 of Table 1.3.1.2.**

Table 1.3.1.2.
Documents Referenced in the Building Code

Forming Part of Sentence 1.3.1.2.(1)

Item	Column 1 Issuing Agency	Column 2 Document Number	Column 3 Title of Document[1]	Column 4 Code Reference
1.	ACGIH	2013, 28th Edition	Industrial Ventilation Manual	6.2.1.1.(1) 6.2.2.4.(1)
2.	AISI	S201-07	North American Standard for Cold Formed Steel Framing – Product Data	9.24.1.2.(1)

3.	ANSI	A208.1-2009	Particleboard	Table 5.10.1.1. 9.23.14.2.(3) 9.29.9.1.(1) 9.30.2.2.(1)
4.	ANSI/ASHRAE	62.1-2010	Ventilation for Acceptable Indoor Air Quality	6.2.2.1.(2) 6.2.3.8.(15)
5.	ANSI/ASHRAE /IESNA	90.1-2010	Energy Standard for Buildings Except Low-Rise Residential Buildings	6.2.1.1.(1)
6.	ANSI/CSA	ANSI Z21.22-1999 / CSA 4.4-M99 (including Addenda 1 and 2)	Relief Valves for Hot Water Supply Systems	7.2.10.11.(1)
7.	APHA/AWWA/ WEF	2012, 22nd Edition	Standard Methods for the Examination of Water and Waste Water	8.9.2.4.(1)(b)
8.	ASHRAE	2013	Fundamentals	5.2.1.3.(1) 6.2.1.1.(1)
9.	ASHRAE	2011	HVAC Applications	6.2.1.1.(1)
10.	ASHRAE	2012	HVAC Systems and Equipment	6.2.1.1.(1)
11.	ASHRAE	2014	Refrigeration	6.2.1.1.(1)
12.	ASME	A112.19.8-2007	Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs	3.12.4.1.(9)
13.	ASME	B16.3-2011	Malleable Iron Threaded Fittings: Classes 150 and 300	7.2.6.6.(1)
14.	ASME	B16.4-2011	Gray Iron Threaded Fittings: Classes 125 and 250	7.2.6.5.(1) Table 7.2.11.2.
15.	ASME	B16.12-2009	Cast Iron Threaded Drainage Fittings	7.2.6.3.(1)
16.	ASME	B16.15-2011	Cast Copper Alloy Threaded Fittings: Classes 125 and 250	7.2.7.3.(1)
17.	ASME	B16.18-2012	Cast Copper Alloy Solder Joint Pressure Fittings	7.2.7.6.(1) 7.2.7.6.(2) Table 7.2.11.2.
18.	ASME	B16.22-2001	Wrought Copper and Copper Alloy Solder Joint Pressure Fittings	7.2.7.6.(1) Table 7.2.11.2.
19.	ASME	B16.23-2011	Cast Copper Alloy Solder Joint Drainage Fittings: DWV	7.2.7.5.(1)
20.	ASME	B16.24-2011	Cast Copper Alloy Pipe Flanges and Flanged Fittings: Classes 150, 300, 600, 900, 1500 and 2500	7.2.7.2.(1)

21.	ASME	B16.26-2011	Cast Copper Alloy Fittings for Flared Copper Tubes	7.2.7.7.(1) 7.2.7.7.(2) Table 7.2.11.2.
22.	ASME	B16.29-2007	Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings - DWV	7.2.7.5.(1)
23.	ASME	B18.6.1-1981	Wood Screws (Inch Series)	Table 5.10.1.1. 9.23.3.1.(3)
24.	ASME / CSA	ASME A17.1-2010 / CSA B44-10	Safety Code for Elevators and Escalators	3.5.2.2.(1) Table 4.1.5.11. 7.4.3.6.(1)
25.	ASME / CSA	ASME A112.18.1-2012 / CSA B125.1-12	Plumbing Supply Fittings	7.2.10.6.(1) 7.6.5.2.(1)
26.	ASME / CSA	ASME A112.18.2-2011 / CSA B125.2-11	Plumbing Waste Fittings	7.2.3.3.(1) 7.2.10.6.(2)
27.	ASME / CSA	ASME A112.19.1-2008 / CSA B45.2-08	Enamelled Cast Iron and Enamelled Steel Plumbing Fixtures	7.2.2.2.(3) 7.2.2.2.(4)
28.	ASME / CSA	ASME A112.19.2-2008 / CSA B45.1-08	Ceramic Plumbing Fixtures	7.2.2.2.(2)
29.	ASME / CSA	ASME A112.19.3-2008 / CSA B45.4-08	Stainless Steel Plumbing Fixtures	7.2.2.2.(5)
30.	ASME / CSA	ASME A112.19.7-2012 / CSA B45.10-12	Hydromassage Bathtub Systems	7.2.2.2.(7)
31.	ASPE	2005	Data Books	7.6.3.1.(2) 7.7.4.1.(1)
32.	ASSE	ANSI/ASSE 1010-2004	Water Hammer Arresters	7.2.10.15.(1)
33.	ASSE	1051-2009	Individual and Branch Type Air Admittance Valves for Sanitary Drainage Systems	7.2.10.16.(1)
34.	ASTM	A53 / A53M-10	Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless	7.2.6.7.(4)

35.	ASTM	A123 / A123M-09	Zinc (Hot Dip Galvanized) Coatings on Iron and Steel Products	Table 5.10.1.1. Table 9.20.16.1.
36.	ASTM	A153 / A153M-09	Zinc Coating (Hot-Dip) on Iron and Steel Hardware	Table 5.10.1.1. Table 9.20.16.1.
37.	ASTM	A252-10	Welded and Seamless Steel Pipe Piles	4.2.3.8.(1)
38.	ASTM	A283 / A283M-03	Low and Intermediate Tensile Strength Carbon Steel Plates	4.2.3.8.(1)
39.	ASTM	A518 / A518M-99	Corrosion-Resistant High-Silicon Iron Castings	7.2.8.1.(1)
40.	ASTM	A653 / A653M-11	Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process	Table 5.10.1.1. 9.3.3.2.(1)
41.	ASTM	A792 / A792M-10	Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process	9.3.3.2.(1)
42.	ASTM	A1008 / A1008M-11	Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, and High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable	4.2.3.8.(1)
43.	ASTM	A1011 / A1011M-10	Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength	4.2.3.8.(1)
44.	ASTM	B32-08	Solder Metal	7.2.9.2.(2)
45.	ASTM	B42-10	Seamless Copper Pipe, Standard Sizes	7.2.7.1.(1)
46.	ASTM	B43-09	Seamless Red Brass Pipe, Standard Sizes	7.2.7.1.(2)
47.	ASTM	B68 / B68M-11	Seamless Copper Tube, Bright Annealed	7.2.7.4.(3)
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68.	ASTM	C991-08e1	Flexible Fibrous Glass Insulation for Metal Buildings	Table 5.10.1.1.
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98.	AWWA	ANSI/AWWA C151 / A21.51-2009	Ductile-Iron Pipe, Centrifugally Cast	7.2.6.4.(1) Table 7.2.11.2.
99.	BCMOH	Version 2, 21st Sept, 2007	Sewerage System Standard Practice Manual	8.7.8.3.(2) 8.7.8.3.(3)
100.	BNQ	BNQ 3624-115-2007	Polyethylene (PE) Pipe and Fittings - Flexible Pipes for Drainage - Characteristics and Test Methods	Table 5.10.1.1. 9.14.3.1.(1)

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336.	MMAH	Supplementary Standard SB-4, September 14, 2012	Measures for Fire Safety in High Buildings	3.2.6.2.(1) 3.2.6.2.(6) 3.2.6.5.(3) 3.2.6.9.(1) 3.2.6.10.(2) 3.2.6.14.(1) Table 11.5.1.1.C. Table 11.5.1.1.D/E. Table 11.5.1.1.F.
337.	MMAH	Supplementary Standard SB-5, September 1, 2013	Approved Sewage Treatment Units	8.6.2.2.(5)
338.	MMAH	Supplementary Standard SB-6, September 14, 2012	Percolation Times and Soil Descriptions	8.2.1.2.(2)
339.	MMAH	Supplementary Standard SB-7, September 14, 2012	Guards for Housing and Small Buildings	9.8.8.2.(5)
340.	MMAH	Supplementary Standard SB-8, September 14, 2012	Design, Construction and Installation of Anchorage Systems for Fixed Access Ladders	3.6.1.5.(1)
341.	MMAH	Supplementary Standard SB-9, September 14, 2012	Requirements for Soil Gas Control	9.13.4.1.(1) 9.13.4.2.(2) to (4)
342.	MMAH	Supplementary Standard SB-10, September 14, 2012	Energy Efficiency Requirements	Table 9.7.3.3. 12.2.1.1.(2) 12.2.1.2.(2) 12.2.2.1.(1) 12.2.3.1.(1)
343.	MMAH	Supplementary Standard SB-11, September 14, 2012	Construction of Farm Buildings	1.3.1.2.(4) of Division A

344.	MMAH	Supplementary Standard SB-12, September 2, 2014	Energy Efficiency for Housing	Table 9.7.3.3. Table 11.5.1.1.C. 12.2.1.1.(3) 12.2.1.2.(3)
345.	MMAH	Supplementary Standard SB-13, September 14, 2012	Glass in Guards	3.1.20.1.(1)
346.	MMAH	Supplementary Standard SC-1, September 14, 2012	Code of Conduct for Registered Code Agencies	3.7.4.1.(2) of Division C
347.	MOE	PIBS 6879 2008	Design Guidelines for Sewage Works	7.1.5.5.(2)
348.	MOE	PIBS 6881e 2008	Design Guidelines for Drinking-Water Systems	7.1.5.5.(1)
349.	NFPA	2014 Publication	National Fire Codes	6.2.1.1.(1)
350.	NFPA	13-2013	Installation of Sprinkler Systems	3.1.9.1.(4) 3.2.4.9.(2) 3.2.4.17.(1) 3.2.5.13.(1) 3.2.8.4.(7) 3.3.2.12.(3) 3.15.1.1.(3) 3.15.1.1.(4) 3.15.1.5.(2) 3.15.1.6.(2) 3.15.2.1.(1) 3.15.2.2.(1) 3.15.3.1.(1) 9.10.9.6.(11)
351.	NFPA	13D-2010	Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes	3.2.5.13.(3)
352.	NFPA	13R-2010	Installation of Sprinkler Systems in Residential Occupancies up to and including Four Stories in Height	3.2.5.13.(2)
353.	NFPA	14-2010	Installation of Standpipe and Hose Systems	3.2.9.2.(1)
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356.	NFPA	68-2007	Explosion Protection by Deflagration Venting	3.3.6.3.(1) 3.3.6.4.(2) 3.3.6.4.(4)

357.	NFPA	72-2013	National Fire Alarm and Signaling Code	3.2.4.22.(13) 9.10.19.1.(2) 9.10.19.3.(3)
358.	NFPA	80-2010	Fire Doors and Other Opening Protectives	3.1.8.5.(2) 3.1.8.10.(2) 3.1.8.14.(1) 3.1.9.1.(5) 3.13.3.1.(2) 9.10.9.6.(13) 9.10.13.1.(1)
359.	NFPA	82-2009	Incinerators, Waste and Linen Handling Systems and Equipment	6.2.6.1.(1) 9.10.10.5.(2)
360.	NFPA	91-2010	Exhaust Systems for Air Conveying of Vapors, Gases, Mists and Noncombustible Particulate Solids	6.2.13.4.(1)
361.	NFPA	96-2011	Ventilation Control and Fire Protection of Commercial Cooking Operations	3.2.4.9.(2) 6.2.2.6.(1)
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364.	NFPA	214-2011	Water-Cooling Towers	6.2.3.14.(3)
365.	NFPA	701-2010	Fire Tests for Flame Propagation of Textiles and Films	3.14.1.6.(1) 3.14.2.5.(1)
366.	NLGA	2010	Standard Grading Rules for Canadian Lumber	1.4.1.2.(1) of Division A 9.3.2.1.(1) Table 9.3.2.1. Tables A-1 to A-10
367.	NRCan	January 2005, including all amendments, revisions and supplements effective to May 31, 2006	EnerGuide for New Houses: Administrative and Technical Procedures	12.2.1.1.(3) 12.2.1.2.(3)
368.	NSF	NSF/ANSI 46-2010	Evaluation of Components and Devices Used in Wastewater Treatment Systems	8.6.2.1.(2)
369.	NSF	NSF/ANSI 61-2013	Drinking Water System Components - Health Effects	7.2.10.7.(1)
370.	SMACNA	ANSI/SMACNA 006-2006, 3rd Edition 2005	HVAC Duct Construction Standards - Metal and Flexible	6.2.1.1.(1) 6.2.4.2.(3) 6.2.4.3.(11) 6.2.4.3.(12)

371.	TPIC	2011	Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses (Limit States Design)	9.23.13.11.(6)
372.	UL	ANSI/UL 300-2005	Fire Extinguishing Systems for Protection of Commercial Cooking Equipment	6.2.2.6.(2)
373.	UL	UL 2034-2008	Single and Multiple Station Carbon Monoxide Alarms	6.2.12.3.(1) 9.33.4.3.(1)
374.	ULC	CAN/ULC-S101-07	Fire Endurance Tests of Building Construction and Materials	3.1.5.12.(3) 3.1.5.12.(4) 3.1.5.12.(6) 3.1.7.1.(1) 3.1.11.7.(1) 3.2.3.8.(1) 3.2.6.5.(6) 9.10.16.3.(1)
375.	ULC	CAN/ULC-S102-10	Test for Surface Burning Characteristics of Building Materials and Assemblies	3.1.5.25.(1) 3.1.12.1.(1)
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380.	ULC	CAN/ULC-S105-09	Fire Door Frames Meeting the Performance Required by CAN4-S104	9.10.13.6.(1)
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390.	ULC	CAN/ULC-S114-05	Test for Determination of Non-Combustibility in Building Materials	1.4.1.2.(1) of Division A
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392.	ULC	CAN/ULC-S124-06	Test for the Evaluation of Protective Coverings for Foamed Plastic	3.1.5.12.(2)
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395.	ULC	CAN/ULC-S135-04	Test Method for the Determination of Combustibility Parameters of Building Materials Using an Oxygen Consumption Calorimeter (Cone Calorimeter)	3.1.5.1.(2)
396.	ULC	CAN/ULC-S138-06	Fire Test for Fire Growth of Insulated Building Panels in a Full-Scale Room Configuration	3.1.5.12.(7)
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424.	ULC	ULC/ORD-C199P-02	Combustible Piping for Sprinkler Systems	3.2.5.14.(2) 3.2.5.14.(5)
425.	ULC	ULC/ORD-C1254.6-1995	Fire Testing of Restaurant Cooking Area Fire Extinguishing System Units	6.2.2.6.(2) 3.6.4.3.(1)
426.	USDA	October 1993	Soil Survey Manual	8.2.1.2.(2)

Notes to Table 1.3.1.2.:

(1) Some titles have been abridged to omit superfluous wording.

Table 1.3.2.1.
Abbreviations of Proper Names

Item	Column 1 Abbreviation	Column 2 Meaning
1.	ACGIH	American Conference of Governmental Industrial Hygienists
2.	AISI	American Iron and Steel Institute
3.	ANSI	American National Standards Institute
4.	APHA	American Public Health Association
5.	ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
6.	ASME	The American Society of Mechanical Engineers
7.	ASPE	American Society of Plumbing Engineers
8.	ASSE	American Society of Sanitary Engineering
9.	ASTM	American Society for Testing and Materials
10.	AWPA	American Wood-Preservers' Association
11.	AWS	American Welding Society
12.	AWWA	American Water Works Association
13.	BCMOH	British Columbia Ministry of Health
14.	BNQ	Bureau de Normalisation du Québec
15.	CAN	National Standard of Canada designation The number or name following the CAN designation represents the agency under whose auspices the standard is issued. CAN1 designates CGA, CAN2 designates CGSB, CAN3 designates CSA, and CAN4 designates ULC.
16.	CCBFC	Canadian Commission on Building and Fire Codes
17.	CGSB	Canadian General Standards Board
18.	CSA	Canadian Standards Association
19.	CWC	Canadian Wood Council
20.	DBR	Division of Building Research, known as the Institute for Research in Construction since 1985
21.	EPA	Environmental Protection Agency
22.	FINA	Fédération Internationale de Natation
23.	HI	Hydronics Institute
24.	HRAI	Heating, Refrigerating and Air-Conditioning Institute of Canada
25.	HUD	U.S. Department of Housing and Urban Development
26.	HVI	Home Ventilating Institute
27.	IAPMO	International Association of Plumbing and Mechanical Officials
28.	IESNA	Illuminating Engineering Society of North America
29.	ISO	International Organization for Standardization
30.	MMAH	Ontario Ministry of Municipal Affairs and Housing
31.	MOE	Ontario Ministry of the Environment

32.	NFPA	National Fire Protection Association
33.	NLGA	National Lumber Grades Authority
34.	NRCan	Natural Resources Canada
35	NSF	NSF International, formerly called National Sanitation Federation
36.	SMACNA	Sheet Metal and Air Conditioning Contractors National Association Inc.
37.	TC	Transport Canada
38.	TPIC	Truss Plate Institute of Canada
39.	UL	Underwriters Laboratories Inc.
40.	ULC	Underwriters' Laboratories of Canada
41.	USDA	United States Department of Agriculture
42.	WEF	World Environment Federation

PART 2

(Reserved)

PART 3

FIRE PROTECTION, OCCUPANT SAFETY AND ACCESSIBILITY

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Section 3.1. General

3.1.1. Scope

3.1.1.1. Scope

(1) The scope of this Part shall be as described in Subsection 1.1.2. of Division A.

3.1.1.2. Radon

(1) In addition to all other requirements, a *building* in the following designated areas shall be designed and constructed so that the annual average concentration of radon 222 does not exceed 200 Bq/m^3 of air and the annual average concentration of the short lived daughters of radon 222 does not exceed 0.02 working levels inside the *building*:

(a) the City of Elliot Lake in the Territorial District of Algoma,

(b) the Township of Faraday in the County of Hastings, and

(c) the geographic Township of Hyman in the Territorial District of Sudbury.

3.1.1.3. Building in Flood Plains

(1) *Buildings* constructed on flood plains shall,

(a) be designed and constructed in accordance with good engineering practice to withstand anticipated vertical and horizontal hydrostatic pressures acting on the structure, and

(b) incorporate floodproofing measures that will preserve the integrity of *exits* and *means of egress* during times of flooding.

3.1.2. Classification of Buildings or Parts of Buildings by Major Occupancy

3.1.2.1. Classification of Buildings

(1) Except as provided by Articles 3.1.2.3. to 3.1.2.7., every *building* or part of it shall be classified according to its *major occupancy* as belonging to one of the Groups or Divisions described in Table 3.1.2.1.

(2) A *building* intended for use by more than one *major occupancy* shall be classified according to all *major occupancies* for which it is used or

(1) *Buildings* or parts of them used for the storage of baled *combustible fibres* shall be classified as *medium hazard industrial occupancies.*

3.1.3. Multiple Occupancy Requirements

3.1.3.1. Separation of Major Occupancies

(1) Except as provided by Sentences (2) to (5), *major occupancies* shall be separated from adjoining *major occupancies* by *fire separations* having *fire-resistance ratings* conforming to Table 3.1.3.1.

Table 3.1.3.1.
Major Occupancy Fire Separations[1]

Forming Part of Sentence 3.1.3.1.(1)

Item	Column 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13	Col. 14
	Major Occupancy	Minimum *Fire-Resistance Rating of Fire Separation*, h [1]												
		Adjoining *Major Occupancy*												
		A-1	A-2	A-3	A-4	B-1	B-2	B-3	C	D	E	F-1	F-2	F-3
1.	A-1	N/A	1	1	1	2	2	2	1	1	2	N/A	2	1
2.	A-2	1	N/A	1	1	2	2	2	1[2]	1[3]	2	N/A	2	1
3.	A-3	1	1	N/A	1	2	2	2	1	1	2	N/A	2	1
4.	A-4	1	1	1	N/A	2	2	2	1	1	2	N/A	2	1
5.	B-1	2	2	2	2	N/A	2	2	2	2	2	N/A	2	2
6.	B-2	2	2	2	2	2	N/A	1	2	2	2	N/A	2	2
7.	B-3	2	2	2	2	2	1	N/A	2	2	2	N/A	2	2
8.	C	1	1[2]	1	1	2	2	2	N/A	1	2[4]	N/A	2	1
9.	D	1	1[3]	1	1	2	2	2	1	N/A	N/A	3	N/A	N/A
10.	E	2	2	2	2	2	2	2	2[4]	N/A	N/A	3	N/A	N/A
11.	F-1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3	3	N/A	2	2
12.	F-2	2	2	2	2	2	2	2	2	N/A	N/A	2	N/A	N/A
13.	F-3	1	1	1	1	2	2	2	1	N/A	N/A	2	N/A	N/A

Notes to Table 3.1.3.1.:

[1] Section 3.3. contains requirements for the separation of *occupancies* and tenancies that are in addition to the requirements for the separation of *major occupancies*.

[2] See Sentence 3.1.3.1.(3).

[3] See Sentence 3.1.3.1.(4).

[4] See Sentence 3.1.3.1.(2).

(2) In a *building* not more than 3 *storeys* in *building height*, if not more than two *dwelling units* are contained together with a Group E *major occupancy*, the *fire resistance rating* of the *fire separation* between the two *major occupancies* need not be more than 1 h.

(3) In a *building* within the scope of Article 3.2.2.43A., a *fire separation* with a 2 h *fire-resistance rating* is required between the Group C and Group A, Division 2 *major occupancies*.

(4) In a *building* within the scope of Article 3.2.2.50A., a *fire separation* with a 2 h *fire-resistance rating* is required between the Group D and Group A, Division 2 *major occupancies*.

(5) The *fire separations* required between *major occupancies* in Sentence (1) are permitted to be penetrated by floor openings protected in conformance with Subsection 3.2.8., except for *fire*

Table 3.1.2.1.
Major Occupancy Classification

Forming Part of Sentences 3.1.2.1.(1), 3.1.2.2.(1) and 3.11.2.1.(3)

Item	Column 1	Column 2	Column 3
	Group	Division	Description of *Major Occupancies*
1.	A	1	*Assembly occupancies* intended for the production and viewing of the performing arts
2.	A	2	*Assembly occupancies* not elsewhere classified in Group A
3.	A	3	*Assembly occupancies* of the arena type
4.	A	4	*Assembly occupancies* in which occupants are gathered in the open air
5.	B	1	*Detention occupancies*
6.	B	2	*Care and treatment occupancies*
7.	B	3	*Care occupancies*
8.	C	---	*Residential occupancies*
9.	D	---	*Business and personal services occupancies*
10.	E	---	*Mercantile occupancies*
11.	F	1	*High hazard industrial occupancies*
12.	F	2	*Medium hazard industrial occupancies*
13.	F	3	*Low hazard industrial occupancies*

3.1.2.2. Occupancies of the Same Classification

(1) Any *building* is deemed to be occupied by a single *major occupancy*, notwithstanding its use for more than one *major occupancy*, provided that all *occupancies* are classified as belonging to the same Group classification or, where the Group is divided into Divisions, as belonging to the same Division classification described in Table 3.1.2.1.

3.1.2.3. Arena Type Buildings

(1) An arena type *building* intended for occasional use for trade shows and similar exhibition purposes shall be classified as Group A, Division 3 *occupancy*.

3.1.2.4. Police Stations

(1) A police station with detention quarters is permitted to be classified as a Group B, Division 2 *major occupancy* provided the station is not more than 1 *storey* in *building height* and 600 m^2 in *building area*.

3.1.2.5. Group B, Division 3 Occupancies

(1) Group B, Division 3 *occupancies* are permitted to be classified as Group C *major occupancies* provided,

(a) the occupants live as a single housekeeping unit in a *suite* with sleeping accommodation for not more than 10 persons, and

(b) not more than two occupants require assistance in evacuation in case of an emergency.

3.1.2.6. Restaurants

(1) A restaurant is permitted to be classified as a Group E *major occupancy* provided the restaurant is designed to accommodate not more than 30 persons consuming food or drink.

3.1.2.7. Storage of Combustible Fibres

penetrated by floor openings protected in conformance with Subsection 3.2.8., except for *fire separations* for Group F, Division 1 *major occupancies* and for *mezzanines* described in Sentence 3.2.8.2.(1).

3.1.3.2. Prohibition of Occupancy Combinations

(1) No *major occupancy* of Group F, Division 1 shall be contained within a *building* with any *occupancy* classified as Group A, B or C.

(2) Except as provided in Sentence (4) and Sentence 3.10.2.4.(9), not more than one *suite* of *residential occupancy* shall be contained within a *building* classified as a Group F, Division 2 *major occupancy*.

(3) A sleeping room or sleeping area shall not open directly into a room or area where food is intended to be stored, prepared, processed, distributed, served, sold or offered for sale.

(4) A Group F, Division 2 *major occupancy* is permitted in a *building* containing only *live/work units* if the *occupancy* is for the exclusive use of the occupants of the *live/work units*.

(5) A *building* within the scope of Article 3.2.2.43A. or 3.2.2.50A. shall not contain,

(a) a Group A, Division 1 or 3, Group B, or Group F, Division 1 or 2 *major occupancy*,

(b) a Group A, Division 2 or a Group E *major occupancy* above the second *storey*, or

(c) except as permitted by Sentence (6), a Group F, Division 3 *major occupancy*.

(6) A *storage garage* below the third *storey* is permitted in a *building* within the scope of Article 3.2.2.43A. or 3.2.2.50A.

3.1.4. Combustible Construction

3.1.4.1. Combustible Materials Permitted

(1) Except as required by this Part, a *building* permitted to be of *combustible construction* is permitted to be constructed of *combustible materials*, with or without *noncombustible* components.

3.1.4.2. Protection of Foamed Plastics

(1) Foamed plastics that form part of a wall or ceiling assembly in *combustible construction* shall be protected from adjacent spaces in the *building*, other than adjacent concealed spaces within *attic or roof spaces*, crawl spaces, and wall assemblies,

(a) by one of the interior finishes described in Subsections 9.29.4. to 9.29.9.,

(b) by any thermal barrier that meets the requirements of Sentence 3.1.5.12.(2), or

(c) where the *building* does not contain a Group B or Group C *major occupancy*, by sheet metal,

(i) mechanically fastened to the supporting assembly independent of the insulation,

(ii) not less than 0.38 mm thick, and

(iii) with a melting point not below 650°C.

(2) The *flame-spread rating* on any exposed surface of *combustible* insulation, or any surface that would be exposed by cutting through it in any direction, shall be not more than 500.

3.1.4.3. Wires and Cables

(1) Except as permitted by Sentences (2) and (3), optical fibre cables and electrical wires and cables with *combustible* insulation, jackets or sheathes installed in a *building* permitted to be of *combustible construction* shall,

(a) not convey flame or continue to burn for more than 1 min when tested in conformance with the Vertical Flame Test in Clause 4.11.1. of CSA C22.2 No. 0.3, “Test Methods for Electrical Wires and Cables” (FT1 Rating), or

(b) be located in,

(i) totally enclosed *noncombustible* raceways,

(ii) concealed spaces in walls,

(iii) concrete slabs, or

(iv) totally enclosed nonmetallic raceways conforming to Clause 3.1.5.20(1)(b).

(2) The requirement in Clause (1)(a) is considered to be met where the wires and cables,

(a) exhibit a vertical char of not more than 1.5 m when tested in conformance with the Vertical Flame Test – Cables in Cabletrough in Clause 4.11.4. of CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables" (FT4 Rating), or

(b) exhibit a flame-spread of not more than 1.5 m, a smoke density of not more than 0.5 at peak optical density and a smoke density not more than 0.15 at average optical density when tested in conformance with the Flame and Smoke Test in the Appendix to CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables" (FT6 Rating).

(3) Service-entrance cables for communication and community antennae distribution systems need not conform to Sentence (1) provided,

(a) the service-entrance cables are located in a *building* permitted to be of *combustible construction* and are not more than 3 m in length from the point of entry into the *building* or from the point of leaving protection as required in Clause (1)(b), or

(b) the service-entrance cables enter into an electrical or telephone *service room* separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

3.1.4.4. Nonmetallic Raceways

(1) Totally enclosed nonmetallic raceways used in a *plenum* in a *building* permitted to be of *combustible construction* shall meet the requirements of Clause 3.1.5.20.(1)(a).

3.1.4.5. Fire-Retardant Treated Wood

(1) If *fire-retardant treated wood* is specified in this Part, the wood shall,

(a) be pressure impregnated with fire-retardant chemicals in conformance with CAN/CSA-O80 Series-M, "Wood Preservation", and

(b) have a *flame-spread rating* not more than 25.

3.1.4.6. Heavy Timber Construction Alternative

(1) If *combustible construction* is permitted and is not required to have a *fire-resistance rating* more than 45 min, *heavy timber construction* is permitted to be used.

(2) If *heavy timber construction* is permitted, it shall conform to Article 3.1.4.7.

3.1.4.7. Heavy Timber Construction

(1) Wood elements in *heavy timber construction* shall be arranged in heavy solid masses and with essentially smooth flat surfaces to avoid thin sections and sharp projections.

(2) Except as permitted by Sentences (3) to (6) and (12), the minimum dimensions of wood elements in *heavy timber construction* shall conform to Table 3.1.4.7.

Table 3.1.4.7.
Heavy Timber Dimensions

Forming Part of Sentence 3.1.4.7.(2)

Item	Column 1 Supported Assembly	Column 2 Structural Element	Column 3 Solid Sawn (width × depth), mm × mm	Column 4 Glued-Laminated (width × depth), mm × mm	Column 5 Round (diam), mm
1.	Roofs only	Columns	140 × 191	130 × 190	180
		Arches supported on the tops of walls or abutments	89 × 140	80 × 152	---
		Beams, girders and trusses	89 × 140	80 × 152	---
		Arches supported at or near the floor line	140 × 140	130 × 152	---
2.	Floors, floors plus roofs	Columns	191 × 191	175 × 190	200
		Beams, girders, trusses and arches	140 × 241 or 191 × 191	130 × 228 or 175 × 190	---

(3) Where splice plates are used at splices of roof arches supported on the tops of walls or abutments, roof trusses, roof beams and roof girders in *heavy timber construction*, they shall be not less than 64 mm thick.

(4) Floors in *heavy timber construction* shall be of glued-laminated or solid sawn plank not less than,

(a) 64 mm thick, splined or tongued and grooved, or

(b) 38 mm wide and 89 mm deep set on edge and well-spiked together.

(5) Floors in *heavy timber construction* shall be laid,

(a) so that no continuous line of end joints will occur except at points of support, and covered with,

(i) tongued and grooved flooring not less than 19 mm thick laid cross-wise or diagonally, or

(ii) tongued and grooved phenolic-bonded plywood, strandboard or waferboard not less than 12.5 mm thick, and

(b) not closer than 15 mm to the walls to provide for expansion, with the gap covered at the top or bottom.

(6) Roofs in *heavy timber construction* shall be of tongued and grooved phenolic-bonded plywood not less than 28 mm thick, or glued-laminated or solid sawn plank that is,

(a) not less than 38 mm thick, splined or tongued and grooved, or

(b) not less than 38 mm wide and 64 mm deep set on edge and laid so that no continuous line of end joints will occur except at the points of support.

(7) Wood columns in *heavy timber construction* shall be continuous or superimposed throughout all *storeys*.

(8) Superimposed wood columns in *heavy timber construction* shall be connected by,

(a) reinforced concrete or metal caps with brackets,

(b) steel or iron caps with pintles and base plates, or

(c) timber splice plates fastened to the columns by metal connectors housed within the contact faces.

(9) Where beams and girders in *heavy timber construction* enter masonry, wall plates, boxes of the self-releasing type or hangers shall be used.

(10) Wood girders and beams in *heavy timber construction* shall be closely fitted to columns, and adjoining ends shall be connected by ties or caps to transfer horizontal loads across the joints.

(11) In *heavy timber construction*, intermediate wood beams used to support a floor shall be supported on top of the girders or on metal hangers into which the ends of the beams are closely fitted.

(12) Roof arches supported on the tops of walls or abutments, roof trusses, roof beams and roof girders in *heavy timber construction* are permitted to be not less than 64 mm wide provided,

(a) where two or more spaced members are used, the intervening spaces are,

(i) blocked solidly throughout, or

(ii) tightly closed by a continuous wood cover plate not less than 38 mm thick secured to the underside of the members, or

(b) the space below the roof deck or sheathing is *sprinklered*.

3.1.4.8. Cladding

(1) Except as permitted by Sentence 3.2.3.7.(6), cladding for a *building* within the scope of Article 3.2.2.43A. or 3.2.2.50A. that exceeds 4 *storeys* in *building height* or cladding for a *fire compartment* in such a *building* shall be *noncombustible*.

3.1.4.9. Combustible Piping

(1) Except as provided by Sentence (2), *combustible* piping and tubing and associated adhesives used in a *building* within the scope of Article 3.2.2.43A. or 3.2.2.50A. shall have a *flame-spread rating* not more than 25.

(2) Sentence (1) does not apply to,

(a) *combustible* sprinkler piping and associated adhesives,

(b) *combustible* tubing for pneumatic controls and associated adhesives, provided the tubing has an outside diameter not more than 10 mm,

(c) *combustible* piping and tubing and associated adhesives used in *public pools* and *public spas*, and

(d) *combustible* piping and tubing and associated adhesives concealed in a concrete floor slab.

3.1.5.1. Noncombustible Materials

(1) Except as permitted by Sentences (2) to (4) and Articles 3.1.5.2. to 3.1.5.25., 3.1.13.4. and 3.2.2.16., a *building* or part of a *building* required to be of *noncombustible construction*, shall be constructed with *noncombustible* materials.

(2) Notwithstanding the definition for *noncombustible* materials stated in Article 1.4.1.2. of Division A, a material is permitted to be used in *noncombustible construction* provided that, when tested in accordance with CAN/ULC-S135, "Test Method for the Determination of Combustibility Parameters of Building Materials Using an Oxygen Consumption Calorimeter (Cone Calorimeter)", at a heat flux of 50 kW/m^2,

(a) its average total heat release is not more than 3 MJ/m^2,

(b) its average total smoke extinction area is not more than 1.0 m^2, and

(c) the test duration is extended beyond the time stipulated in the referenced standard until it is clear that there is no further release of heat or smoke.

(3) If a material referred to in Sentence (2) consists of a number of discrete layers and testing reveals that the surface layer or layers protect the underlying layers such that the complete combustion of the underlying layers does not occur, the test shall be repeated by removing the outer layers sequentially until all layers have been exposed during testing, or until complete combustion has occurred.

(4) The acceptance criteria for a material tested in accordance with Sentence (3) shall be based on the cumulative emissions from all layers, which must not exceed the criteria stated in Clauses (2)(a) and (b).

3.1.5.2. Minor Combustible Components

(1) The following minor *combustible* components are permitted in a *building* required to be of *noncombustible construction*:

(a) paint,

(b) mastics and caulking materials applied to provide flexible seals between the major components of exterior wall construction,

(c) *fire stops* conforming to Sentence 3.1.9.1.(1) and *fire blocks* conforming to Article 3.1.11.7.,

(d) tubing for pneumatic controls provided it has an outside diameter not more than 10 mm,

(e) adhesives, *vapour barriers* and sheathing papers,

(f) electrical outlet and junction boxes,

A wall assembly permitted by Sentence (1) that includes *combustible* cladding of *fire-retardant treated wood* shall be tested for fire exposure after the cladding has been conditioned in conformance with ASTM D2898, "Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing".

(6) The requirements in this Article do not apply where foamed plastic insulation is used in an exterior wall assembly of a *building* and the insulation is protected in conformance with Sentences 3.2.3.8.(1) and (2).

3.1.5.6. Nailing Elements

(1) Wood nailing elements attached directly to or set into a continuous *noncombustible* backing for the attachment of interior finishes, are permitted in a *building* required to be of *noncombustible construction* provided the concealed space created by the wood elements is not more than 50 mm thick.

3.1.5.7. Combustible Millwork

(1) *Combustible* millwork, including interior trim, doors and door frames, show windows together with their frames, aprons and backing, handrails, shelves, cabinets and counters, is permitted in a *building* required to be of *noncombustible construction*.

3.1.5.8. Combustible Flooring Elements

(1) *Combustible stage* flooring supported on *noncombustible* structural members is permitted in a *building* required to be of *noncombustible construction*.

(2) Wood members more than 50 mm but not more than 375 mm high applied directly to or set into a *noncombustible* floor slab are permitted for the construction of a raised platform in a *building* required to be of *noncombustible construction* provided the concealed spaces created are divided into compartments by *fire blocks* in conformance with Sentence 3.1.11.3.(2).

(3) The floor system for the raised platform referred to in Sentence (2) is permitted to include *combustible* subfloor and *combustible* finished flooring.

(4) *Combustible* finished flooring is permitted in a *building* required to be of *noncombustible construction*.

3.1.5.9. Combustible Stairs in Dwelling Units

(1) *Combustible* stairs are permitted in a *dwelling unit* in a *building* required to be of *noncombustible construction*.

3.1.5.10. Combustible Interior Finish

(1) *Combustible* interior finish, including paint, wallpaper, and other interior finishes not more than 1 mm thick, is permitted in a *building* required to be of *noncombustible construction*.

(2) *Combustible* interior wall finishes, other than foamed plastics, are permitted in a *building* required to be of *noncombustible construction* provided they,

(a) are not more than 25 mm thick, and

(b) have a *flame-spread rating* not more than 150 on any exposed surface, or any surface that would be exposed by cutting through the material in any direction.

(3) *Combustible* interior ceiling finishes, other than foamed plastics, are permitted in a *building* required to be of *noncombustible construction* provided they,

(a) are not more than 25 mm thick, except for exposed *fire-retardant treated wood* battens, and

(b) have a *flame-spread rating* not more than 25 on any exposed surface, or on any surface that would be exposed by cutting through the material in any direction, or are of *fire-retardant treated wood*, except that not more than 10% of the ceiling area within each *fire compartment* is permitted to have a *flame-spread rating* not more than 150.

3.1.5.11. Gypsum Board

(1) Gypsum board with a tightly adhering paper covering not more than 1 mm thick is permitted in a *building* required to be of *noncombustible construction* provided the *flame-spread ratin*g of the surface is not more than 25.

3.1.5.12. Combustible Insulation and its Protection

(1) *Combustible* insulation, other than foamed plastics, is permitted in a *building* required to be of *noncombustible construction* provided that it has a *flame-spread rating* not more than 25 on any exposed surface, or any surface that would be exposed by cutting through the material in any direction, where the insulation is not protected as described in Sentences (3) and (4).

(2) Foamed plastic insulation having a *flame-spread rating* not more than 25 on any exposed surface, or any surface that would be exposed by cutting through the material in any direction, is permitted in a *building* required to be of *noncombustible construction* provided the insulation is protected from adjacent space in the *building*, other than adjacent concealed spaces within wall assemblies, by a thermal barrier consisting of,

(a) not less than 12.7 mm thick gypsum board mechanically fastened to a supporting assembly independent of the insulation,

(b) lath and plaster, mechanically fastened to a supporting assembly independent of the insulation,

(c) masonry,

(d) concrete, or

(e) any thermal barrier that meets the requirements of classification B when tested in conformance with CAN/ULC-S124, “Test for the Evaluation of Protective Coverings for Foamed Plastic”.

(3) *Combustible* insulation having a *flame-spread rating* more than 25 but not more than 500 on an exposed surface, or any surface that would be exposed by cutting through the material in any direction, is permitted in the exterior walls of a *building* required to be of *noncombustible construction*, provided the insulation is protected from adjacent space in the *building*, other than adjacent concealed spaces within wall assemblies, by a thermal barrier as described in Sentence (2), except that in a *building* that is not *sprinklered* and is more than 18 m high, measured between *grade* and the floor level of the top *storey*, or in a *building* that is not *sprinklered* and is regulated by the provisions of Subsection 3.2.6., the insulation shall be protected by a thermal barrier consisting of,

(a) gypsum board not less than 12.7 mm thick, mechanically fastened to a supporting assembly independent of the insulation and with all joints either backed or taped and filled,

(b) lath and plaster, mechanically fastened to a supporting assembly independent of the insulation,

(c) masonry or concrete not less than 25 mm thick, or

(d) any thermal barrier that, when tested in conformance with CAN/ULC-S101, "Fire Endurance Tests of Building Construction and Materials", will not develop an average temperature rise more than 140°C or a maximum temperature rise more than 180°C at any point on its unexposed face within 10 min

(4) *Combustible* insulation having a *flame-spread rating* more than 25 but not more than 500 on any exposed surface, or any surface that would be exposed by cutting through the material in any direction, is permitted in the interior walls, within ceilings and within roof assemblies of a *building* required to be of *noncombustible construction*, provided the insulation is protected from adjacent space in the *building*, other than adjacent concealed spaces within wall assemblies, by a thermal barrier as described in Sentence (2), except that in a *building* that is not *sprinklered* and is more than 18 m high, measured between *grade* and the floor level of the top *storey*, or in a *building* that is not *sprinklered* and is regulated by the provisions of Subsection 3.2.6., the insulation shall be protected by a thermal barrier consisting of,

(a) Type X gypsum board not less than 15.9 mm thick, mechanically fastened to a supporting assembly independent of the insulation and with all joints either backed or taped and filled, conforming to,

(i) ASTM C1396 / C1396M, "Gypsum Board", or

(ii) CAN/CSA-A82.27-M, "Gypsum Board",

(b) non-*loadbearing* masonry or concrete not less than 50 mm thick,

(c) *loadbearing* masonry or concrete not less than 75 mm thick, or

(d) any thermal barrier that, when tested in conformance with CAN/ULC-S101, "Fire Endurance Tests of Building Construction and Materials",

(i) will not develop an average temperature rise more than 140°C or a maximum temperature rise more than 180°C at any point on its unexposed face within 20 min, and

(ii) will remain in place for not less than 40 min.

(5) *Combustible* insulation, including foamed plastics, installed above roof decks, outside of *foundation walls* below ground level and beneath concrete slabs-on-ground is permitted to be used in a *building* required to be of *noncombustible construction*.

(6) Thermosetting foamed plastic insulation having a *flame-spread rating* not more than 500 that forms part of a factory-assembled exterior wall panel that does not incorporate an air space is permitted to be used in a *building* required to be of *noncombustible construction* provided,

(a) the foamed plastic is protected on both sides by sheet steel not less than 0.38 mm thick that will remain in place for not less than 10 min when the wall panel is tested

in conformance with CAN/ULC-S101, "Fire Endurance Tests of Building Construction and Materials",

(b) the *flame-spread rating* of the wall panel, determined by subjecting a sample including an assembled joint to the appropriate test described in Subsection 3.1.12., is not more than the *flame-spread rating* permitted for the room or space that it bounds,

(c) the *building* does not contain a Group B or Group C *major occupancy*, and

(d) the *building* is not more than 18 m high, measured between *grade* and the floor level of the top *storey*.

(7) A factory-assembled non-*loadbearing* interior or exterior wall or ceiling panel containing foamed plastic insulation having a *flame-spread rating* of not more than 500 is permitted to be used in a *building* required to be of *noncombustible construction* provided,

(a) the *building* is *sprinklered*,

(b) the *building* is not more than 18 m high, measured between *grade* and the floor level of the uppermost *storey*,

(c) the *building* does not contain a Group A, Group B or Group C *major occupancy*,

(d) the panel does not contain an air space,

(e) the panel, when tested in conformance with CAN/ULC-S138, "Test for Fire Growth of Insulated Building Panels in a Full-Scale Room Configuration", meets the criteria defined in the document, and

(f) the *flame-spread rating* of a panel, determined by subjecting a sample, including an assembled joint typical of field installation, to the appropriate test described in Subsection 3.1.12., is not more than the *flame-spread rating* permitted for the room or space that it bounds.

3.1.5.13. Combustible Elements in Partitions

(1) Except as permitted by Sentence (2), solid lumber *partitions* not less than 38 mm thick and wood framing in *partitions* located in a *fire compartment* not more than 600 m^2 in area are permitted to be used in a *building* required to be of *noncombustible construction* in a *floor area* that is not *sprinklered* provided the *partitions*,

(a) are not required *fire separations*, and

(b) are not located in a *care*, *care and treatment* or *detention occupancy*.

(2) *Partitions* installed in a *building* of *noncombustible construction* are permitted to contain wood framing provided,

(a) the *building* is not more than 3 *storeys* in *building height*,

(b) the *partitions* are not located in a *care*, *care and treatment* or *detention occupancy*, and

(c) the *partitions* are not installed as enclosures for *exits* or *vertical service spaces*.

(3) Solid lumber *partitions* not less than 38 mm thick and *partitions* that contain wood framing are permitted to be used in a *building* required to be of *noncombustible construction* provided,

(a) the *floor area* containing the *partitions* is *sprinklered*, and

(b) the *partitions* are not,

(i) located in a *care*, *care and treatment* or *detention occupancy*,

(ii) installed as enclosures for *exits* or *vertical service spaces*, or

(iii) used to satisfy the requirements of Clause 3.2.8.1.(1)(a).

3.1.5.14. Storage Lockers in Residential Buildings

(1) Storage lockers in storage rooms are permitted to be constructed of wood in a *building* of *residential occupancy* required to be of *noncombustible construction*.

3.1.5.15. Combustible Ducts

(1) Except as required by Sentence 3.6.4.3.(1), *combustible* ducts, including *plenums* and duct connectors, are permitted to be used in a *building* required to be of *noncombustible construction* provided these ducts and duct connectors are used only in horizontal runs.

(2) *Combustible* duct linings, duct coverings, duct insulation, vibration isolation connectors, duct tape, pipe insulation and pipe coverings are permitted to be used in a *building* required to be of *noncombustible construction* provided they conform to the appropriate requirements of Part 6.

(3) In a *building* required to be of *noncombustible construction*, *combustible* ducts need not comply with the requirements of Part 6 provided the ducts are,

(a) part of a duct system conveying only ventilation air, and

(b) contained entirely within a *dwelling unit*.

3.1.5.16. Combustible Piping Materials

(1) Except as permitted by Sentences (2) and (3) and by Clause 3.1.5.2.(1)(d) and Article 3.1.5.22., *combustible* piping and tubing and associated adhesives are permitted to be used in a *building* required to be of *noncombustible construction* provided that, except when concealed in a wall or concrete floor slab, they,

(a) have a *flame-spread rating* not more than 25, and

(b) if used in a *building* described in Subsection 3.2.6., have a smoke developed classification not more than 50.

(2) *Combustible* sprinkler piping is permitted to be used within a *sprinklered floor area* in a *building* required to be of *noncombustible construction*.

(3) Polypropylene pipes and fittings are permitted to be used for drain, waste and vent piping for the conveyance of highly corrosive materials and for piping used to distribute distilled or dialyzed water in laboratory and hospital facilities in a *building* required to be of *noncombustible construction*, provided,

(a) the *building* is *sprinklered*,

(b) the piping is not located in a vertical shaft, and

(c) piping that penetrates a *fire separation* is sealed at the penetration by a *fire stop* that has an FT rating not less than the *fire-resistance rating* of the *fire separation* when subjected to the fire test method in CAN/ULC-S115, "Fire Tests of Firestop Systems", with a pressure differential of 50 Pa between the exposed and unexposed sides, with the higher pressure on the exposed side.

3.1.5.17. Combustible Plumbing Fixtures

(1) *Combustible plumbing fixtures* are permitted in a *building* required to be of *noncombustible construction* if they are constructed of material having a *flame-spread rating* and smoke developed classification permitted in Subsection 3.1.13.

3.1.5.18. Wires and Cables

(1) Except as permitted by Sentence (2) and Articles 3.1.5.19. and 3.1.5.21., optical fibre cables and electrical wires and cables with *combustible* insulation, jackets or sheathes are permitted in a *building* required to be of *noncombustible construction*, provided,

(a) the wires and cables exhibit a vertical char of not more than 1.5 m when tested in conformance with the Vertical Flame Test – Cables in Cabletrough in Clause 4.11.4. of CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables", (FT4 Rating),

(b) the wires and cables are located in,

(i) totally enclosed *noncombustible* raceways,

(ii) concealed spaces in walls,

(iii) concrete slabs,

(iv) a *service room* separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h, or

(v) totally enclosed nonmetallic raceways conforming to Clause 3.1.5.20.(1)(b), or

(c) the wires and cables are communication cables used at the service entry to a *building* and are not more than 3 m long.

(2) The requirement in Clause (1)(a) is considered to be met where the wires and cables exhibit a flame-spread of not more than 1.5 m, a smoke density of not more than 0.5 at peak optical density and a smoke density not more than 0.15 at average optical density when tested in conformance with the Flame and Smoke Test in the Appendix to CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables", (FT6 Rating).

3.1.5.19. Combustible Travelling Cables for Elevators

(1) *Combustible* travelling cables are permitted on elevating devices in a *building* required to be of *noncombustible construction*.

3.1.5.20. Nonmetallic Raceways

(1) Except as provided by Subclause 3.6.4.3.(1)(a)(iv) and subject to limits on size for penetrations of *fire separations* as required by Sentence 3.1.9.3.(2), within a *fire compartment* of a *building* required to be of *noncombustible construction*, totally enclosed nonmetallic raceways not more than 175 mm in outside diameter, or an equivalent rectangular area, are permitted to be used to enclose optical fibre cables and electrical wires and cables, provided, where,

(a) the wires and cables in the raceways meet or exceed the requirements of Clause 3.1.5.18.(1)(a), the nonmetallic raceways meet the requirements for at least an FT4 rating in,

(i) CAN/CSA-C22.2 No. 262, "Optical Fiber Cable and Communication Cable Raceway Systems", or

(ii) CAN/ULC-S143, "Fire Tests for Non-Metallic Electrical and Optical Fibre Cable Raceway Systems", and

(b) the wires and cables in the raceways do not meet or exceed the requirements of Clause 3.1.5.18.(1)(a), the nonmetallic raceways exhibit a vertical char not more than 1.5 m when tested in conformance with the Vertical Flame Test (FT4) – Conduit or Tubing on Cable Tray in Clause 6.16 of CSA C22.2 No. 211.0, "General Requirements and Methods of Testing for Nonmetallic Conduit".

3.1.5.21. Wires in Computer Room Floors

(1) Optical fibre cables and electrical wires and cables with *combustible* insulation, jackets or sheathes, located in the space below a raised floor in a *computer room*, are permitted in a *building* required to be of *noncombustible construction* provided they do not convey flame or continue to burn for more than 1 min when tested in conformance with the Vertical Flame Test in Clause 4.11.1. of CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables", (FT1 Rating).

(2) The requirement in Sentence (1) is considered to be met where the wires and cables,

(a) exhibit a vertical char of not more than 1.5 m when tested in conformance with the Vertical Flame Test – Cables in Cabletrough in Clause 4.11.4. of CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables", (FT4 Rating), or

(b) exhibit a flame-spread of not more than 1.5 m, a smoke density of not more than 0.5 at peak optical density and a smoke density not more than 0.15 at average optical density when tested in conformance with the Flame and Smoke Test in the Appendix to CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables", (FT6 Rating).

3.1.5.22. Combustible Components in Public Pools and Public Spas

(1) *Combustible* fittings and components in a *public pool* or *public spa*, including main drains, piping, skimmers, return inlets, steps, ladder rungs and liners, are permitted in a *building* required to be of *noncombustible construction*.

3.1.5.23. Marquees Having Combustible Elements

(1) Except as permitted in Sentence (2), exterior *marquees*, not greater than 7.5 m from ground level to the top of the *marquee*, having *combustible* elements, other than fabrics

or films conforming to Sentence 3.1.16.1.(1), are permitted on a *building* required to be of *noncombustible construction*, provided every opening in the exposed wall of the *building* above the *marquee* is protected with wired glass in accordance with MMAH Supplementary Standard SB-2, "Fire Performance Ratings" where these openings are within,

(a) 4.5 m horizontally of the *marquee*, and

(b) 9 m vertically above the *marquee*.

(2) The protection required by Sentence (1) is permitted to be waived if the *building* is *sprinklered*.

3.1.5.24. Combustible Mezzanines

(1) In a *building* required to be of *noncombustible construction*, a *mezzanine* located within a *live/work unit* is permitted to be of *combustible construction*, provided the area of the *mezzanine* is not more than 25% of the *floor area* of the *live/work unit* or 20 m^2, whichever is less, and has no obstructions more than 1 070 mm above the floor.

3.1.5.25. Wood Decorative Cladding

(1) Wood decorative cladding is permitted to be used on exterior *marquee* fascias, of a *storey* having direct access to a *street* or access route, of a *building* required to be of *noncombustible construction*, provided the cladding is *fire-retardant treated wood* that, before testing to CAN/ULC-S102, "Test for Surface Burning Characteristics of Building Materials and Assemblies", has been conditioned in conformance with ASTM D2898, "Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing".

3.1.5.26. Combustible Solar Collector Systems

(1) A *combustible* solar collector system is permitted to be installed above the roof of a *building* required to be of *noncombustible construction*.

3.1.6. Reserved

3.1.7. Fire-Resistance Ratings

3.1.7.1. Determination of Ratings

(1) Except as permitted by Sentence (2) and Article 3.1.7.2., the rating of a material, assembly of materials or a structural member that is required to have a *fire-resistance rating*, shall be determined on the basis of the results of tests conducted in conformance with CAN/ULC-S101, "Fire Endurance Tests of Building Construction and Materials".

(2) A material, assembly of materials or a structural member is permitted to be assigned a *fire-resistance rating* on the basis of MMAH Supplementary Standard SB-2, "Fire Performance Ratings".

3.1.7.2. Exception for Exterior Walls

(1) The limit on the rise of temperature on the unexposed surface of an assembly as required by the tests referred to in Sentence 3.1.7.1.(1) shall not apply to an exterior wall that has a *limiting distance* of 1.2 m or more, provided correction is made for radiation from the unexposed surface in accordance with Sentence 3.2.3.1.(9).

3.1.7.3. Exposure Conditions for Rating

(1) Floor, roof and ceiling assemblies shall be rated for exposure to fire on the underside.

(2) *Firewalls* and interior vertical *fire separations* shall be rated for exposure to fire on each side.

(3) Exterior walls shall be rated for exposure to fire from inside the *building*.

3.1.7.4. Minimum Fire-Resistance Rating

(1) The use of materials or assemblies having a greater *fire-resistance rating* than required shall impose no obligation to exceed in whole or in part the minimum *fire-resistance ratings* required by this Part.

3.1.7.5. Rating of Supporting Construction

(1) Except as permitted by Sentence (2) and by Articles 3.2.2.20. to 3.2.2.83. for mixed types of construction, all *loadbearing* walls, columns and arches in the *storey* immediately below a floor or roof assembly required to have a *fire-resistance rating* shall have a *fire-resistance rating* not less than that required for the supported floor or roof assembly.

(2) *Loadbearing* walls, columns and arches supporting a *service room* or *service space* need not conform to Sentence (1).

(3) Except for *noncombustible construction* required by Subclauses 3.2.2.43A.(2)(c)(i) and 3.2.2.50A.(2)(c)(i), if an assembly is required to be of *noncombustible construction* and have a *fire-resistance rating*, it shall be supported by *noncombustible construction*.

3.1.8. Fire Separations and Closures

3.1.8.1. General Requirements

(1) Any wall, *partition* or floor assembly required to be a *fire separation* shall,

(a) except as permitted by Sentence (2), be constructed as a continuous element, and

(b) as required in this Part, have a *fire-resistance rating* as specified.

(2) Openings in a *fire separation* shall be protected with *closures*, shafts or other means in conformance with Articles 3.1.8.4. to 3.1.8.18. and Subsections 3.1.9. and 3.2.8.

3.1.8.2. Combustible Construction Support

(1) *Combustible construction* that abuts on or is supported by a *noncombustible fire separation* shall be constructed so that its collapse under fire conditions will not cause the collapse of the *fire separation*.

3.1.8.3. Continuity of Fire Separations

(1) Except as permitted by Sentence 3.6.4.2.(2), a *horizontal service space* or other concealed space located above a required vertical *fire separation*, including the walls of a vertical shaft, shall be divided at the *fire separation* by an equivalent *fire separation* within the *service space*.

(2) The *fire separation* required by Sentence (1) shall terminate so that smoke-tight joints are provided where it abuts on or intersects,

(a) a floor,

(b) a roof slab, or

(c) a roof deck.

(3) Except as required by Subsection 3.6.3. for a shaft penetrating a roof assembly, a shaft, including an *exit* enclosure, that penetrates a *fire separation*, shall,

(a) extend through any *horizontal service space* or any other concealed space, and

(b) terminate so that smoke-tight joints are provided where the shaft abuts on or intersects,

(i) a floor,

(ii) a roof slab, or

(iii) a roof deck.

(4) The continuity of a *fire separation* shall be maintained where it abuts another *fire separation*, a floor, a ceiling, or an exterior wall assembly.

3.1.8.4. Determination of Ratings

(1) Except as permitted by Sentences (2) and 3.1.8.14.(1), the *fire-protection rating* for a *closure* shall be determined on the basis of the results of tests conducted in conformance with the appropriate provisions in,

(a) CAN/ULC-S104, “Fire Tests of Door Assemblies”,

(b) CAN4-S106-M, “Fire Tests of Window and Glass Block Assemblies”, or

(c) CAN/ULC-S112, “Fire Test of Fire-Damper Assemblies”.

(2) Except as permitted by Sentence 3.1.8.10.(1), the *fire-protection rating* of a *closure* shall conform to Table 3.1.8.4. for the required *fire-resistance rating* of the *fire separation*.

Table 3.1.8.4.
Fire-Protection Rating of Closure

Forming Part of Sentence 3.1.8.4.(2) and Clause 3.1.9.1.(1)(a)

Item	Column 1 *Fire-Resistance Rating* of *Fire Separation*	Column 2 Required *Fire-Protection Rating* of *Closure*
1.	30 min	20 min
2.	45 min	45 min
3.	1 h	45 min
4.	1.5 h	1 h
5.	2 h	1.5 h
6.	3 h	2 h
7.	4 h	3 h

3.1.8.5. Installation of Closures

(1) Except where *fire dampers*, window assemblies and glass block are used as *closures*, *closures* of the same *fire-protection rating* installed on opposite sides of the same opening are deemed to have a *fire-protection rating* equal to the sum of the *fire-protection ratings* of the *closures.*

(2) Except as otherwise specified in this Part, every door, window assembly or glass block used as a *closure* in a required *fire separation*,

(a) shall be installed in conformance with NFPA 80, "Fire Doors and Other Opening Protectives", and

(b) where required to have a *fire-protection rating*, shall have labels or classification marks to identify the testing laboratory.

(3) If a door is installed so that it could damage the integrity of a *fire separation* if its swing is unrestricted, door stops shall be installed to prevent the damage.

3.1.8.6. Maximum Openings

(1) The size of an opening in an interior *fire separation* required to be protected with a *closure* shall be not more than 11 m^2, with no dimension more than 3.7 m, if a *fire compartment* on either side of the *fire separation* is not *sprinklered*.

(2) The size of an opening in an interior *fire separation* required to be protected with a *closure* shall be not more than 22 m^2, with no dimension more than 6 m, provided the *fire compartments* on both sides of the *fire separation* are *sprinklered*.

3.1.8.7. Fire Dampers

(1) Except as permitted by Article 3.1.8.8., a duct that penetrates an assembly required to be a *fire separation* shall be equipped with a *fire damper*.

3.1.8.8. Fire Dampers Waived

(1) *Fire dampers* need not be provided in *noncombustible* branch ducts that have a melting point above 760°C and that penetrate a required *fire separation* provided the ducts,

(a) serve only *air-conditioning* units or combined *air-conditioning* and heating units discharging air not more than 1 200 mm above the floor and have a cross-sectional area not more than 130 cm^2, or

(b) are connected to *exhaust duct* risers that are under negative pressure and in which the air flow is upward as required by Article 3.6.3.4. and are carried up inside the riser not less than 500 mm.

(2) A continuous *noncombustible* duct penetrating a vertical *fire separation* not required to have a *fire-resistance rating* need not be equipped with a *fire damper* at the *fire separation*.

(3) A *noncombustible* duct that penetrates a horizontal *fire separation* not required to have a *fire-resistance rating* need not be equipped with a *fire damper* at the *fire separation*.

(4) A *noncombustible* duct that penetrates a *fire separation* that separates a *vertical service space* from the remainder of the *building* need not be equipped with a *fire damper* at the *fire separation* provided,

(a) the duct has a melting point above 760°C, and

(b) each individual duct exhausts directly to the outside at the top of the *vertical service space*.

(5) A continuous *noncombustible* duct having a melting point above 760°C that penetrates a vertical *fire separation* as required by Sentence 3.3.1.1.(1) between *suites* of other than *care*, *care and treatment*, *detention* or *residential occupancy* need not be equipped with a *fire damper* at the *fire separation*.

(6) A duct that serves commercial cooking equipment and penetrates a required *fire separation* shall be,

(a) enclosed in a *vertical service space* that conforms to Sentence 3.6.3.1.(1),

(b) enclosed in a *horizontal service space* that conforms to Sentence 3.6.4.2.(1), or

(c) equipped with a *fire damper*, specifically designed for such use, at the *fire separation*.

(7) In elementary and secondary schools, a continuous *noncombustible* duct having a melting point above 760°C that pierces a *fire separation* having a *fire-resistance rating* of 30 min need not be equipped with a *fire damper* at the *fire separation*.

(8) In a Group B, Division 3 *occupancy* that contains sleeping accommodation for not more than 10 persons and not more than six occupants require assistance in evacuation in case of an emergency and which is equipped with a fire-alarm system, a duct need not be provided with a *fire damper* at a *fire separation* provided duct-type *smoke detectors* have been installed to control smoke circulation as described in Article 3.2.4.13.

3.1.8.9. Installation of Fire Dampers

(1) A *fire damper* shall be arranged to close automatically upon the operation of a fusible link conforming to ULC-S505, “Fusible Links for Fire Protection Service”, or other heat-actuated or smoke-actuated device.

(2) A heat-actuated device referred to in Sentence (1) shall,

(a) be located where it is readily affected by an abnormal rise of temperature in the duct, and

(b) have a temperature rating approximately 30°C above the maximum temperature that would exist in the system either with the system in operation or shut down.

(3) A *fire damper* shall be installed in the plane of the *fire separation* so as to stay in place should the duct be dislodged during a fire.

(4) A *fire damper* tested in the vertical or horizontal position shall be installed in the manner in which it was tested.

(5) A tightly fitted access door shall be installed for each *fire damper* to provide access for the inspection of the damper and the resetting of the release device.

3.1.8.10. Twenty-Minute Closures

(1) A door assembly having a *fire-protection rating* not less than 20 min is permitted to be used as a *closure* in,

(a) a *fire separation* not required to have a *fire-resistance rating* more than 1 h, located between,

(i) a *public corridor* and a *suite*,

(ii) a corridor and adjacent sleeping rooms, or

(iii) a corridor and adjacent classrooms, offices and libraries in Group A, Division 2 *major occupancies*, or

(b) a *fire separation* not required to have a *fire-resistance rating* more than 45 min, located in a *building* not more than 3 *storeys* in *building height*.

(2) The requirements for *noncombustible* sills and *combustible* floor coverings in NFPA 80, "Fire Doors and Other Opening Protectives", do not apply to a door described in Sentence (1).

(3) A door described in Sentence (1) shall have a clearance not more than 6 mm at the bottom and not more than 3 mm at the sides and top.

(4) In elementary and secondary schools, a door assembly conforming to Articles 9.10.13.2. and 9.10.13.3. is permitted to be used as a *closure* in a *fire separation* having a *fire-resistance rating* of 30 min.

3.1.8.11. Self-Closing Devices

(1) Except as provided in Sentences (2) to (5) and 3.3.3.2.(5), every door in a *fire separation* shall be equipped with a self-closing device designed to return the door to the closed position after each use.

(2) Self-closing devices need not be provided on doors to freight elevators and dumbwaiters.

(3) In a *building* that is not more than 3 *storeys* in *building height*, a self-closing device is not required on a door that is located between a classroom and a corridor providing *access to exit* from the classroom, except that a self-closing device is required on a door between a *hazardous classroom* and the corridor in an elementary or secondary school.

(4) In a *building* that is not more than 3 *storeys* in *building height*, a self-closing device is not required on a door between a *public corridor* and an adjacent room or *suite* of *business and personal services occupancy* if the door is not located in,

(a) a dead-end portion of the corridor, or

(b) a corridor that serves a *hotel*.

(5) Within a *fire compartment* in a hospital or long-term care home that complies with the requirements of Article 3.3.3.5., a self-closing device is not required on a door that is located between,

(a) a patient's or resident's sleeping room and a corridor serving the patient's or resident's sleeping room, or

(b) a patient's or resident's sleeping room and an adjacent room that serves the patient's or resident's sleeping room.

3.1.8.12. Hold-Open Devices

(1) A hold-open device is permitted on a door in a required *fire separation*, other than an *exit* stair door in a *building* more than 3 *storeys* in *building height*, and on a door for a vestibule required by Article 3.3.5.7., provided the device is designed to release the door in conformance with Sentences (2) to (7).

(2) Except as required by Sentences (3), (5), (6) and (7), a hold-open device permitted by Sentence (1) shall be designed to release by a signal from,

(a) an automatic sprinkler system,

(b) a heat-actuated device,

(c) fusible link, or

(d) a *smoke detector* located as described in CAN/ULC-S524, "Installation of Fire Alarm Systems".

(3) Except as required by Sentences (4), (5), (6) and (7), a hold-open device permitted by Sentence (1) shall be designed to release upon a signal from a *smoke detector* located as described in CAN/ULC-S524, "Installation of Fire Alarm Systems", if used on,

(a) an *exit* door,

(b) a door opening into a *public corridor*,

(c) an egress door referred to in Sentence 3.4.2.4.(2),

(d) a door serving,

(i) an *assembly occupancy*,

(ii) a *care occupancy*,

(iii) a *care and treatment occupancy*,

(iv) a *detention occupancy*, or

(v) a *residential occupancy*, or

(e) a door required to function as part of a smoke control system.

(4) Except as required by Sentences (5), (6) and (7), a hold-open device permitted by Sentence (1) shall be designed to release upon a signal from the *building* fire alarm system if a fire alarm system is provided, except that this requirement does not apply to,

(a) a hold-open device on a door located between a corridor used by the public and an adjacent sleeping room in a hospital or long-term care home, or

(b) a hold-open device that is designed to release by a heat-actuated device or a fusible link in conformance with Sentence (2).

(5) Sentences (2) and (3) do not apply in a hospital or long-term care home to,

(a) a door located between a corridor used by the public and an adjacent sleeping room, or

(b) paired doors described in Sentence 3.3.3.3.(4).

(6) A hold-open device on a door in Clause (5)(a) shall be designed to release the door upon a signal from,

(a) a *smoke detector* as required by Sentence 3.2.4.12.(1) for sleeping rooms in Group B *occupancies*, and

(b) the fire alarm system when an *alert signal* is initiated within the same *fire compartment* in Sentence 3.3.3.5.(2).

(7) A hold-open device on a door in Clause (5)(b) shall be designed to release the door upon a signal from the fire alarm system when an *alert signal* is initiated within the same *fire compartment* in Sentence 3.3.3.5.(2).

(8) A rolling steel fire door installed as a *closure* in a *fire separation* shall be equipped with a hold-open device designed to release the shutter as described in Sentence (2).

3.1.8.13. Door Latches

(1) Except as permitted by Sentence 3.3.3.2.(5) and Article 3.3.3.5., a swing-type door in a *fire separation* shall be equipped with a positive latching mechanism designed to hold the door in the closed position after each use.

3.1.8.14. Wired Glass and Glass Block

(1) Except as permitted by Articles 3.1.8.16. and 3.1.8.17. for the separation of *exits*, an opening in a *fire separation* having a *fire-resistance rating* not more than 1 h is permitted to be protected with fixed wired glass assemblies or glass blocks installed in conformance with NFPA 80, "Fire Doors and Other Opening Protectives".

(2) Wired glass assemblies permitted by Sentence (1) and described in MMAH Supplementary Standard SB-2, "Fire Performance Ratings", are permitted to be used as *closures* in vertical *fire separations* without being tested in accordance with Sentence 3.1.8.4.(1).

(3) Glass blocks permitted by Sentence (1) shall be installed in accordance with Subsection 4.3.2. and reinforced with steel reinforcement in each horizontal joint.

3.1.8.15. Temperature Rise Limit for Doors

(1) Except as permitted by Article 3.1.8.17., the maximum temperature rise on the opaque portion of the unexposed side of a door used as a *closure* in a *fire separation* in a location shown in Table 3.1.8.15., shall conform to the Table when tested in conformance with Sentence 3.1.8.4.(1).

Table 3.1.8.15.
Restrictions on Temperature Rise and Glazing for Closures

Forming Part of Articles of 3.1.8.15. and 3.1.8.16.

Item	Column 1 Location	Column 2 Minimum Required *Fire-Protection Rating* of Door	Column 3 Maximum Temperature Rise on Opaque Portion of Unexposed Side of Door, °C	Column 4 Maximum Area of Wired Glass in Door, m^2	Column 5 Maximum Aggregate Area of Glass Block and Wired Glass Panels not in Door, m^2
1.	Between a dead-end corridor and an adjacent *occupancy* where the corridor provides the only *access to exit* and is required to have a *fire-resistance rating*	Less than 45 min	No limit	No limit	No limit
		45 min	250 after 30 min	0.0645	0.0645
2.	Between an *exit* enclosure and	All ratings	No limit	0.8	0.8

	the remainder of the *floor area* in *buildings* not more than 3 *storeys* in *building height*				
3.	Between an *exit* enclosure and the remainder of the *floor area* (except as permitted above)	45 min	250 after 30 min	0.0645	0.0645
		1.5 h	250 after 1 h	0.0645	0.0645
		2 h	250 after 1 h	0.0645	0.0645
4.	In a *firewall*	1.5 h	250 after 30 min	0.0645	0
		3 h	250 after 1 h	0	0

3.1.8.16. Area Limits for Wired Glass and Glass Block

(1) Except as permitted by Article 3.1.8.17., the maximum area of wired glass in a door used in the locations shown in Table 3.1.8.15. shall conform to the Table.

(2) Except as permitted by Article 3.1.8.17., the maximum area of glass block and wired glass panels not in a door, used in the locations shown in Table 3.1.8.15., shall conform to the Table.

3.1.8.17. Temperature Rise and Area Limits Waived

(1) The temperature rise limits and glass area limits required by Articles 3.1.8.15. and 3.1.8.16. are waived for a *closure* between an *exit* enclosure and an enclosed vestibule or corridor provided,

(a) the vestibule or corridor is separated from the remainder of the *floor area* by a *fire separation* having a *fire-resistance rating* not less than 45 min,

(b) the *fire separation* required by Clause (a) contains no wired glass or glass block within 3 m of the *closure* into the *exit* enclosure, and

(c) the vestibule or corridor contains no *occupancy*.

3.1.8.18. Sprinkler Protected Glazed Wall Assembly

(1) A sprinkler protected glazed wall assembly shall be constructed in accordance with the requirements of ULC/ORD C263.1, “Sprinkler-Protected Windows Systems”.

(2) A sprinkler protected glazed wall assembly shall not be installed in,

(a) *fire separations* requiring a *fire resistance rating* of more than two hours,

(b) a *firewall*,

(c) a *high hazard industrial occupancy*, or

(d) any part of an *exit* serving,

(i) a *floor area* subject to the requirements of Subsection 3.2.6.,

(ii) a *care occupancy*,

(iii) a *care and treatment occupancy*,

(iv) a *detention occupancy*, or

(v) a *residential occupancy*.

(3) Where a sprinkler protected glazed wall assembly is installed in an *exit fire separation* permitted in Sentence (2),

(a) the *building* shall be *sprinklered*, and

(b) the *exits* protected with the sprinkler protected glazed wall assemblies shall not comprise more than one-half of the required number of *exits* from any *floor area*.

3.1.9. Penetrations in Fire Separations and Fire-Rated Assemblies

3.1.9.1. Fire Stops

(1) Except as required by Sentences (2) and (3) and permitted by Sentences (4) and (5), penetrations of a *fire separation* or a membrane forming part of an assembly required to have a *fire-resistance rating* shall be,

(a) sealed by a *fire stop* that, when subjected to the fire test method in CAN/ULC-S115, "Fire Tests of Firestop Systems", has an F rating not less than the *fire-protection rating* required for *closures* in the *fire separation* in conformance with Table 3.1.8.4., or

(b) tightly fitted.

(2) Penetrations of a *firewall* or a horizontal *fire separation* that is required to have a *fire-resistance rating* in conformance with Article 3.2.1.2. shall be sealed at the penetration by a *fire stop* that, when subjected to the fire test method in CAN/ULC-S115, "Fire Tests of Firestop Systems", has an FT rating not less than the *fire-resistance rating* required for the *fire separation*.

(3) Penetrations of a *fire separation* in conformance with Sentence 3.6.4.2.(2) shall be sealed by a *fire stop* that, when subjected to the fire test method in CAN/ULC-S115, "Fire Tests of Firestop Systems", has an FT rating not less than the *fire-resistance rating* required for the *fire separation* of the assembly.

(4) Sprinklers are permitted to penetrate a *fire separation* or a membrane forming part of an assembly required to have a *fire-resistance rating* without having to meet the *fire stop* requirements of Sentence (1), (2) or (3), provided the annular space created by the penetration of a fire sprinkler is covered by a metal escutcheon plate in accordance with NFPA 13, "Installation of Sprinkler Systems".

(5) Unless specifically designed with a *fire stop*, *fire dampers* are permitted to penetrate a *fire separation* or a membrane forming part of an assembly required to have a *fire-resistance rating* without having to meet the *fire stop* requirements of Sentence (1), (2) or (3), provided the *fire damper* is installed in conformance with NFPA 80, "Fire Doors and Other Opening Protectives".

3.1.9.2. Combustibility of Service Penetrations

(1) Except as permitted by Articles 3.1.9.3. and 3.1.9.4., pipes, ducts, electrical outlet boxes, totally enclosed raceways or other similar service equipment that penetrate an assembly required to have a *fire-resistance rating* shall be *noncombustible* unless the assembly has been tested incorporating that service equipment.

3.1.9.3. Penetration by Wires, Cables and Outlet Boxes

(1) Optical fibre cables and electrical wires and cables in totally enclosed *noncombustible* raceways are permitted to penetrate an assembly required to have a *fire-*

resistance rating without being incorporated in the assembly at the time of testing as required by Article 3.1.9.2.

(2) Except as permitted by Sentence (3), totally enclosed nonmetallic raceways conforming to Article 3.1.5.20., optical fibre cables, and electrical wires and cables, single or grouped, with *combustible* insulation, jackets or sheathes that conform to the requirements of Clause 3.1.5.18.(1)(a) and that are not installed in totally enclosed *noncombustible* raceways are permitted to penetrate an assembly required to have a *fire-resistance rating* without being incorporated in the assembly at the time of testing as required by Article 3.1.9.2., provided the overall diameter of the single or grouped wires or cables, or the raceways is not more than 25 mm.

(3) Single conductor metal sheathed cables with *combustible* jacketing that are more than 25 mm in overall diameter are permitted to penetrate a *fire separation* required to have a *fire-resistance rating* without being incorporated in the assembly at the time of testing as required by Article 3.1.9.2., provided the cables are not grouped and are spaced a minimum of 300 mm apart.

(4) *Combustible* totally enclosed raceways that are embedded in a concrete floor slab are permitted in an assembly required to have a *fire-resistance rating* without being incorporated in the assembly at the time of testing as required by Article 3.1.9.2., provided the concrete cover between the raceway and the bottom of the slab is not less than 50 mm.

(5) *Combustible* electrical outlet boxes are permitted in an assembly required to have a *fire-resistance rating* without being incorporated in the assembly at the time of testing as required by Article 3.1.9.2., provided the opening through the membrane into the box is not more than 160 cm^2.

(6) *Noncombustible* electrical outlet boxes that penetrate a *fire separation* or a membrane forming part of an assembly required to have a *fire-resistance rating* need not meet the requirements of Article 3.1.9.1. provided,

(a) they do not exceed,

(i) 100 cm^2 each in area, and

(ii) an aggregate area of 650 cm^2 in any 9.3 m^2 of surface area, and

(b) the annular space between the membrane and the box does not exceed 3 mm.

(7) Unless provided with a *fire stop* in accordance with CAN/ULC-S115, “Fire Tests of Firestop Systems”, electrical outlet boxes on opposite sides of a vertical *fire separation* required to have a *fire-resistance rating* shall be,

(a) separated by a horizontal distance of not less than 600 mm, or

(b) installed in adjacent stud cavities.

3.1.9.4. Combustible Piping Penetrations

(1) Except as permitted by Sentences (3) to (8), *combustible* piping shall not be used if any part of the piping system penetrates,

(a) a *fire separation* required to have a *fire-resistance rating*, or

(b) a membrane that forms part of an assembly required to have a *fire-resistance rating*.

(2) *Combustible* piping that is part of a system described in Sentence (1) shall not be located in a *vertical service space*.

(3) Except as provided by Sentences (4) to (7), *combustible* piping is permitted to penetrate a *fire separation* required to have a *fire-resistance rating* or is permitted to penetrate a membrane that forms part of an assembly required to have a *fire-resistance rating*, provided the piping is sealed at the penetration by a *fire stop* that has an F rating not less than the *fire-resistance rating* required for the *fire separation* when subjected to the fire test method in CAN/ULC-S115, "Fire Tests of Firestop Systems", with a pressure differential of 50 Pa between the exposed and unexposed sides, with the higher pressure on the exposed side.

(4) Except as required by Sentence (7), *combustible* drain piping is permitted to penetrate a horizontal *fire separation*, provided it leads directly from a *noncombustible* water closet through a concrete floor slab and the piping is sealed at the penetration by a *fire stop* in conformance with Clause 3.1.9.1.(1)(a).

(5) Except as required by Sentence (7), *combustible* piping is permitted to penetrate a vertical or horizontal *fire separation*, provided the *fire compartments* on each side of the *fire separation* are *sprinklered* and the piping is sealed at the penetration by a *fire stop* in conformance with Clause 3.1.9.1.(1)(a).

(6) Except as required by Sentence (7), *combustible* piping not more than 25 mm in diameter containing chlorine gas is permitted to penetrate a *fire separation* between a chlorine gas *service room* built in conjunction with a *public pool* or *public spa* and the remainder of the *building*, provided the piping is sealed at the penetration by a *fire stop* in conformance with Clause 3.1.9.1.(1)(a).

(7) Where *combustible* piping penetrates a *firewall* or a horizontal *fire separation* described in Sentence 3.2.1.2.(1), the piping shall be sealed at the penetration by a *fire stop* that has an FT rating not less than the *fire-resistance rating* required for the *firewall* or horizontal *fire separation* when subjected to the fire test method in CAN/ULC-S115, "Fire Tests of Firestop Systems", and,

(a) the *fire stop* shall have been tested with a pressure differential of 50 Pa between the exposed and unexposed sides, with the higher pressure on the exposed side, or

(b) the *fire compartments* on each side of the *firewall* or horizontal *fire separation* shall be *sprinklered*.

(8) *Combustible* piping for central vacuum cleaning systems is permitted to penetrate a *fire separation*, provided the installation conforms to the requirements that apply to *combustible* piping specified in Sentence (3).

3.1.9.5. Openings through a Membrane Ceiling

(1) A membrane ceiling forming part of an assembly assigned a *fire-resistance rating* on the basis of MMAH Supplementary Standard SB-2, "Fire Performance Ratings", is permitted to be penetrated by openings leading into ducts within the ceiling space provided,

(a) the ducts are sheet steel, and

(b) the amount of openings and their protection conform to the requirements of MMAH Supplementary Standard SB-2, “Fire Performance Ratings”.

(2) *Fire stop flaps* in ceiling membranes required in Sentence (1) shall conform to CAN/ULC-S112.2, “Fire Test of Ceiling Firestop Flap Assemblies”.

3.1.9.6. Plenums

(1) A ceiling assembly used as a *plenum* shall conform to Article 3.6.4.3.

3.1.10. Firewalls

3.1.10.1. Prevention of Firewall Collapse

(1) Except as permitted by Sentence (2), the connections and supports for structural framing members that are connected to or supported on a *firewall* and have a *fire-resistance rating* less than that required for the *firewall*, shall be designed so that the failure of the framing systems during a fire will not affect the integrity of the *firewall* during the fire.

(2) Sentence (1) does not apply to a *firewall* consisting of two separate wall assemblies each tied to its respective *building* frame but not to each other, provided each wall assembly is,

(a) a *fire separation* having one-half of the *fire-resistance rating* required for the *firewall* by Sentences 3.1.10.2.(1) and (2), and

(b) designed so that the collapse of one wall assembly will not cause the collapse of the other.

(3) A *firewall* is permitted to be supported on the structural frame of a *building* of *noncombustible construction* provided the supporting frame has a *fire-resistance rating* not less than that required for the *firewall*.

(4) Piping, ducts and totally enclosed *noncombustible* raceways shall be installed so that their collapse will not cause the collapse of the *firewall*.

3.1.10.2. Rating of Firewalls

(1) A *firewall* that separates a *building* or *buildings* with *floor areas* containing a Group E or a Group F, Division 1 or 2 *major occupancy* shall be constructed as a *fire separation* of *noncombustible construction* having a *fire-resistance rating* not less than 4 h, except that where the upper portion of a *firewall* separates *floor areas* containing other than Group E or Group F, Division 1 or 2 *major occupancies*, the *fire-resistance rating* of the upper portion of the *firewall* is permitted to be not less than 2 h.

(2) A *firewall* that separates a *building* or *buildings* with *floor areas* containing *major occupancies* other than Group E or Group F, Division 1 or 2 shall be constructed as a *fire separation* of *noncombustible construction* having a *fire-resistance rating* not less than 2 h.

(3) Except as permitted by Sentence (4), the required *fire-resistance rating* of a *firewall*, except for *closures*, shall be provided by masonry or concrete.

(4) A *firewall* permitted to have a *fire-resistance rating* not more than 2 h need not be constructed of masonry or concrete provided,

(a) the assembly providing the *fire-resistance rating* is protected against damage that would compromise the integrity of the assembly,

(b) the design conforms to Article 4.1.5.17.,

(c) the level of performance of the *firewall* is not less than of masonry or concrete in the areas of,

(i) performance during fire conditions,

(ii) mechanical damage during the normal use of the *building*, and

(iii) resistance to damage from moisture,

(d) the *firewall* separates *buildings* or *buildings* with *floor areas* that do not contain,

(i) a Group B, Division 1 *major occupancy*, or

(ii) a Group B, Division 2 *major occupancy*, and

(e) the *firewall* does not separate a *building* regulated by the provisions of Subsection 3.2.6. or a *building* within the scope of Article 3.2.2.43A. or 3.2.2.50A. from another *building* unless the *buildings* on both sides of the *firewall* are *sprinklered*.

3.1.10.3. Continuity of Firewalls

(1) A *firewall* shall extend from the ground continuously through, or adjacent to, all *storeys* of a *building* or *buildings* so separated, except that a *firewall* located above a *basement storage garage* conforming to Article 3.2.1.2. is permitted to commence at the floor assembly immediately above the *storage garage*.

(2) A *firewall* is permitted to terminate on the underside of a reinforced concrete roof slab provided,

(a) the roof slab on both sides of the *firewall* has a *fire-resistance rating* not less than,

(i) 1 h if the *firewall* is required to have a *fire-resistance rating* not less than 2 h, or

(ii) 2 h if the *firewall* is required to have a *fire-resistance rating* not less than 4 h, and

(b) there are no concealed spaces within the roof slab in that portion immediately above the *firewall*.

3.1.10.4. Parapets

(1) Except as permitted by Sentences (2) and 3.1.10.3.(2), a *firewall* shall extend above the roof surface to form a parapet not less than,

(a) 150 mm high for a *firewall* required to have a *fire-resistance rating* not less than 2 h, and

(b) 900 mm high for a *firewall* required to have a *fire-resistance rating* not less than 4 h.

(2) A *firewall* that separates two *buildings* with roofs at different elevations need not extend above the upper roof surface to form a parapet, provided the difference in elevation between the roofs is more than 3 m.

3.1.10.5. Maximum Openings

(1) Openings in a *firewall* shall conform to the size limits described in Article 3.1.8.6. and the aggregate width of openings shall be not more than 25% of the entire length of the *firewall*.

3.1.10.6. Exposure Protection for Adjacent Walls

(1) The requirements of Article 3.2.3.14. shall apply to the external walls of two *buildings* that meet at a *firewall* at an angle less than 135°.

3.1.10.7. Combustible Projections

(1) *Combustible* material shall not extend across the end of a *firewall* but is permitted to extend across a roof above a *firewall* that is terminated in conformance with Sentence 3.1.10.3.(2).

(2) If *buildings* are separated by a *firewall*, *combustible* projections on the exterior of one *building*, including balconies, platforms, *canopies*, eave projections and stairs, that extend outward beyond the end of the *firewall*, shall not be permitted within 2.4 m of *combustible* projections and window or door openings of the adjacent *building*.

3.1.11. Fire Blocks in Concealed Spaces

3.1.11.1. Separation of Concealed Spaces

(1) Concealed spaces in interior wall, ceiling and crawl spaces shall be separated from concealed spaces in exterior walls and *attic or roof spaces* by *fire blocks* conforming to Article 3.1.11.7.

3.1.11.2. Fire Blocks in Wall Assemblies

(1) Except as permitted by Sentence (2), *fire blocks* conforming to Article 3.1.11.7. shall be provided to block off concealed spaces within a wall assembly,

(a) at every floor level,

(b) at every ceiling level where the ceiling forms part of an assembly required to have a *fire-resistance rating*, and

(c) so that the maximum horizontal dimension is not more than 20 m and the maximum vertical dimension is not more than 3 m.

(2) *Fire blocks* conforming to Sentence (1) are not required provided,

(a) the wall space is filled with insulation,

(b) the exposed construction materials and any insulation within the wall space are *noncombustible*,

(c) the exposed materials within the wall space, including insulation but not including wiring, piping or similar services, have a *flame-spread rating* not more than 25 on any exposed surface, or on any surface that would be exposed by cutting through the material in any direction, and *fire blocks* are installed so that the vertical distance between them is not more than 10 m, or

(d) the insulated wall assembly contains not more than one concealed air space and the horizontal thickness of that air space is not more than 25 mm.

3.1.11.3. Fire Blocks between Nailing and Supporting Elements

(1) In a *building* required to be of *noncombustible construction*, a concealed space in which there is an exposed ceiling finish with a *flame-spread rating* more than 25, shall be provided with *fire blocks* conforming to Article 3.1.11.7. between wood nailing elements, so that the maximum area of the concealed space is not more than 2 m^2.

(2) In a *building* required to be of *noncombustible construction*, *fire blocks* conforming to Article 3.1.11.7. shall be provided in the concealed spaces created by the wood members permitted by Sentence 3.1.5.8.(2), so that the maximum area of a concealed space is not more than 10 m^2.

3.1.11.4. Fire Blocks between Vertical and Horizontal Spaces

(1) *Fire blocks* conforming to Article 3.1.11.7. shall be provided,

(a) at all interconnections between concealed vertical and horizontal spaces in interior coved ceilings, drop ceilings and soffits in which the exposed construction materials within the space have a *flame-spread rating* more than 25, and

(b) at the end of each run and at each floor level in concealed spaces between stair stringers in which the exposed construction materials within the space have a *flame-spread rating* more than 25.

3.1.11.5. Fire Blocks in Horizontal Concealed Spaces

(1) Except for a crawl space conforming to Sentence 3.1.11.6.(1), a horizontal concealed space within a floor assembly or roof assembly of *combustible construction*, in which sprinklers are not installed, shall be separated by construction conforming to Article 3.1.11.7. into compartments not more than,

(a) 600 m^2 in area with no dimension more than 60 m, if the exposed construction materials within the space have a *flame-spread rating* not more than 25, and

(b) 300 m^2 in area with no dimension more than 20 m, if the exposed construction materials within the space have a *flame-spread rating* more than 25.

(2) A concealed space in an exterior cornice, a mansard style roof, a balcony or a *canopy* in which exposed construction materials within the space have a *flame-spread rating* more than 25, shall be separated by construction conforming to Article 3.1.11.7.,

(a) at locations where the concealed space extends across the ends of required vertical *fire separations*, and

(b) so that the maximum dimension in the concealed space is not more than 20 m.

(3) Except as provided by Sentence (4), a horizontal concealed space within a floor assembly or roof assembly of *combustible construction* in a *building* within the scope of Article 3.2.2.43A. or 3.2.2.50A. shall be separated by construction conforming to Article 3.1.11.7. into compartments not more than,

(a) 600 m^2 in area with no dimension more than 60 m, if the exposed construction materials within the space have a *flame-spread rating* not more than 25, and

(b) 300 m^2 in area with no dimension more than 20 m, if the exposed construction materials within the space have a *flame-spread rating* more than 25.

(4) Sentence (3) does not apply if the horizontal concealed space within the floor assembly or roof assembly is entirely filled with *noncombustible* insulation such that any air gap between the top of the insulation and the underside of the floor or roof deck does not exceed 50 mm.

3.1.11.6. Fire Blocks in Crawl Spaces

(1) A crawl space that is not considered as a *basement* by Article 3.2.2.9. and in which sprinklers are not installed, shall be separated by construction conforming to Article 3.1.11.7. into compartments not more than 600 m^2 in area with no dimension more than 30 m.

3.1.11.7. Fire Block Materials

(1) Except as permitted by Sentences (2) to (4) and (7) materials used to separate concealed spaces into compartments shall remain in place and prevent the passage of flames for not less than 15 min when subjected to the standard fire exposure in CAN/ULC-S101, “Fire Endurance Tests of Building Construction and Materials”.

(2) Gypsum board not less than 12.7 mm thick and sheet steel not less than 0.38 mm thick need not be tested in conformance with Sentence (1) provided all joints have continuous support.

(3) In a *building* required to be of *noncombustible construction*, wood nailing elements described in Article 3.1.5.6. need not be tested in conformance with Sentence (1).

(4) In a *building* permitted to be of *combustible construction*, in a *combustible* roof system permitted by Sentence 3.1.5.3.(2), and in a raised platform permitted by Sentence 3.1.5.8.(2), materials used to separate concealed spaces into compartments are permitted to be,

(a) solid lumber not less than 38 mm thick,

(b) phenolic bonded plywood, waferboard, or strandboard not less than 12.5 mm thick with joints supported, or

(c) two thicknesses of lumber, each not less than 19 mm thick with joints staggered, where the width or height of the concealed space requires more than one piece of lumber not less than 38 mm thick to block off the space.

(5) Openings through materials referred to in Sentences (1) to (4) shall be protected to maintain the integrity of the construction.

(6) Where materials referred to in Sentences (1) to (4) are penetrated by construction elements or by service equipment, a *fire stop* shall be used to seal the penetration.

(7) In a *building* permitted to be of *combustible construction*, semi-rigid fibre insulation board, produced from glass, rock or slag, is permitted to be used to block the vertical space in a double wythe wall assembly formed at the intersection of the floor assembly and the walls, provided the insulation board,

(a) has a density not less than 45 kg/m^3,

(b) is securely fastened to one set of studs,

(c) extends from below the bottom of the top plates in the lower *storey* to above the top of the bottom plate in the upper *storey*, and

(d) completely fills the portion of the vertical space between the headers and between the wall plates.

3.1.12. Flame-Spread Rating and Smoke Developed Classification

3.1.12.1. Determination of Ratings

(1) Except as required by Sentence (2) and as permitted by Sentence (3), the *flame-spread rating* and smoke developed classification of a material, assembly, or structural member shall be determined on the basis of no fewer than three tests conducted in conformance with CAN/ULC-S102, "Test for Surface Burning Characteristics of Building Materials and Assemblies".

(2) The *flame-spread rating* and smoke developed classification of a material or assembly shall be determined on the basis of no fewer than three tests conducted in conformance with CAN/ULC-S102.2, "Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies", if the material or assembly,

(a) is designed for use in a relatively horizontal position with only its top surface exposed to air,

(b) cannot be tested in conformance with Sentence (1) without the use of supporting material that is not representative of the intended installation, or

(c) is thermoplastic.

(3) A material, assembly, or structural member is permitted to be assigned a *flame-spread rating* and smoke developed classification on the basis of MMAH Supplementary Standard SB-2, "Fire Performance Ratings".

3.1.13. Interior Finish

3.1.13.1. Interior Finish Description

(1) Interior finish material shall include any material that forms part of the interior surface of a floor, wall, *partition* or ceiling, including,

(a) interior cladding of plaster, wood or tile,

(b) surfacing of fabric, paint, plastic, veneer or wallpaper,

(c) doors, windows and trim,

(d) lighting elements, such as light diffusers and lenses forming part of the finished surface of the ceiling, and

(e) carpet material that overlies a floor that is not intended as the finished floor.

3.1.13.2. Flame-Spread Rating

(1) Except as otherwise required or permitted by this Subsection, the *flame-spread rating* of interior wall and ceiling finishes, including glazing and skylights, shall be not more than 150 and shall conform to Table 3.1.13.2.

Table 3.1.13.2.
Flame-Spread Ratings

Forming Part of Sentence 3.1.13.2.(1)

Item	Column 1	Column 2	Column 3
	Occupancy, Location or Element	Maximum *Flame-Spread Rating* for Walls and Ceilings	
		Sprinklered	Not *Sprinklered*
1.	Group A, Division 1 *occupancies*, including doors, skylights, glazing and light diffusers and lenses	150	75
2.	Group B *occupancies*	150	75 (2)
3.	*Exits*(1)	25	25
4.	Lobbies described in Sentence 3.4.4.2.(2)	25	25
5.	Covered vehicular passageways, except for roof assemblies of *heavy timber construction* in such passageways	25	25
6.	*Vertical service spaces*	25	25

Notes to Table 3.1.13.2.:

(1) See Articles 3.1.13.8. and 3.1.13.10.

(2) Group B *occupancies* are required to be *sprinklered*. See Part 11 for renovations of existing non-*sprinklered* Group B *occupancies*.

(2) Except as permitted by Sentence (3), doors, other than those in Group A, Division 1 *occupancies*, need not conform to Sentence (1) provided they have a *flame-spread rating* not more than 200.

(3) Doors within a *dwelling unit* need not conform to Sentences (1) and (2).

(4) Up to 10% of the total wall area and 10% of the total ceiling area of a wall or ceiling finish that is required by Sentence (1) to have a *flame-spread rating* less than 150 is permitted to have a *flame-spread rating* not more than 150, except that up to 25% of the total wall area of lobbies described in Sentence 3.4.4.2.(2) is permitted to have a *flame-spread rating* not more than 150.

(5) Except in the case of Group A, Division 1 *occupancies*, *combustible* doors, skylights, glazing and light diffusers and lenses shall not be considered in the calculation of wall and ceiling areas described in Sentence (4).

3.1.13.3. Plumbing Fixtures and Bathrooms Finishes

(1) The *flame-spread rating* of interior wall and ceiling finishes for a bathroom in a *suite* of *residential occupancy* shall be not more than 200.

(2) *Plumbing fixtures* shall have a *flame-spread rating* not more than 200.

3.1.13.4. Light Diffusers and Lenses

(1) The *flame-spread rating* of *combustible* light diffusers and lenses in all *occupancies* other than Group A, Division 1 is permitted to be more than the *flame-spread rating* limits required elsewhere in this Subsection, provided the light diffusers and lenses,

(a) have a *flame-spread rating* not more than 250 and a smoke developed classification not more than 600 when tested in conformance with CAN/ULC-S102.2, "Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies",

(b) fall to the bottom of the test apparatus before igniting when tested in conformance with ULC-S102.3, "Fire Test of Light Diffusers and Lenses",

(c) are not prevented from falling from the ceiling by construction located beneath the elements, and

(d) are not used in a corridor that is required to be separated from the remainder of the *building* by a *fire separation* or in an *exit* shaft unless individual diffusers or lenses are not more than 1 m^2 in area and are not less than 1.2 m apart.

3.1.13.5. Skylights

(1) Individual *combustible* skylights in a corridor that is required to be separated from the remainder of the *storey* by a *fire separation* shall be not more than 1 m^2 in area and not less than 1.2 m apart.

3.1.13.6. Corridors

(1) Except as permitted by Sentences (2) and (3), the *flame-spread rating* shall be not more than 75 for the interior wall finish of,

(a) a *public corridor*,

(b) a corridor used by the public in,

(i) an *assembly occupancy*, or

(ii) a *care*, *care and treatment* or *detention occupancy*,

(c) a corridor serving classrooms, or

(d) a corridor serving sleeping rooms in a *care*, *care and treatment* or *detention occupancy*.

(2) The *flame-spread rating* limit specified in Sentence (1) does not apply to corridors referred to in Sentence (1) provided the *flame-spread rating* is not more than,

(a) 25 on the upper half of the wall, and

(b) 150 on the lower half of the wall.

(3) The *flame-spread rating* limits specified in Sentences (1) and (2) for corridors referred to in Sentence (1) do not apply to a corridor in which the *flame-spread rating* is not more than 150 provided the *floor area* is *sprinklered*.

(4) The *flame-spread rating* limits specified in Sentences (1) to (3) apply to *occupancies* in the corridor as well as to the corridor itself.

(5) Except in a *floor area* that is *sprinklered* and as permitted in Sentence (6), the interior ceiling finish of corridors and *occupancies* referred to in Sentences (1) and (4) shall have a *flame-spread rating* not more than 25.

(6) The *flame-spread rating* limits specified in Sentence (5) do not apply to a corridor in which the *flame-spread rating* is not more than 150 provided the *floor area* is *sprinklered*.

3.1.13.7. High Buildings

(1) Except as permitted by Sentences (2) and (3), the interior wall, ceiling and floor finishes in a *building* regulated by the provisions of Subsection 3.2.6. shall conform to the *flame-spread rating* requirements in Articles 3.1.13.2. to 3.1.13.6. and to the *flame-spread rating* and smoke developed classification values in Table 3.1.13.7.

Table 3.1.13.7.
Flame-Spread Rating and Smoke Developed Classification in a High Building

Forming Part of Sentences 3.1.13.7.(1) and (2)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
	Location or Element	Maximum *Flame-Spread Rating*			Maximum Smoke Developed Classification		
		Wall Surface	Ceiling Surface (1)	Floor Surface	Wall Surface	Ceiling Surface (1)	Floor Surface
1.	*Exit* stairways, vestibules to *exit* stairs and lobbies described in Sentence 3.4.4.2.(2)	25	25	25	50	50	50
2.	Corridors not within *suites*	(2)	(2)	300	100	50	500
3.	Elevator cars	75	75	300	450	450	450
4.	Elevator vestibules	25	25	300	100	100	300
5.	*Service spaces* and *service rooms*	25	25	25	50	50	50
6.	Other locations and elements	(2)	(2)	No limit	300	50	No limit

Notes to Table 3.1.13.7.:

(1) See Sentence 3.1.13.4.(1) for lighting elements.

(2) Other requirements of this Part apply.

(2) Except for a *building* of Group B *major occupancy* and elevator cars, the *flame-spread rating* and smoke developed classification of interior wall, floor and ceiling finishes need not conform to the values in Table 3.1.13.7., provided the *building* is *sprinklered* and the sprinkler system is electrically supervised in conformance with Sentences 3.2.4.10.(3) and 3.2.4.17.(1).

(3) Trim, millwork and doors in an *exit* stairway, a vestibule to an *exit* stairway, a lobby described in Sentence 3.4.4.2.(2), or a corridor not within a *suite* need not conform to the *flame-spread rating* and smoke developed classification requirements of Sentence (1), provided they have,

(a) a *flame-spread rating* not more than 150,

(b) a smoke developed classification not more than 300, and

(c) an aggregate area not more than 10% of the area of the wall or ceiling on which they occur.

(4) Except as permitted in Sentences (5) to (7), *plumbing fixtures* in a *building* regulated by the provisions of Subsection 3.2.6. shall have a smoke developed classification not more than 300.

(5) A *plumbing fixture* that is not located in a Group B *occupancy* need not comply with Sentence (4) if the *building* is *sprinklered*.

(6) A *plumbing fixture* may have a smoke developed classification more than 300 but not more than 500 if,

(a) it is in a room where the wall surfaces have a smoke developed classification not more than 200, and

(b) it is located in,

(i) a Group C *occupancy*, or

(ii) a Group B *occupancy* and the *building* is *sprinklered*.

(7) A therapeutic bathing system in a Group B *occupancy* need not comply with Sentence (4) if the room in which it is located,

(a) does not open directly into patients' or residents' sleeping rooms, and

(b) is *sprinklered*.

3.1.13.8. Noncombustible Construction

(1) In a *building* required to be of *noncombustible construction*,

(a) the *flame-spread ratings* required by Subsection 3.1.5. shall apply in addition to the requirements in this Subsection, and

(b) the *flame-spread ratings* for *exits* in this Subsection shall also apply to any surface in the *exit* that would be exposed by cutting through the material in any direction, except that this requirement does not apply to doors, *heavy timber construction* in a *sprinklered building* and *fire-retardant treated wood*.

3.1.13.9. Underground Walkways

(1) Except for paint, the interior wall and ceiling finishes of an underground *walkway* shall be of *noncombustible* materials.

3.1.13.10. Exterior Exit Passageway

(1) The wall and ceiling finishes of an exterior *exit* passageway that provides the only *means of egress* from the rooms or *suites* it serves, including the soffit beneath and the *guard* on the passageway, shall have a *flame-spread rating* not more than 25, except that a *flame-spread rating* not more than 150 is permitted for up to 10% of the total wall area and for up to 10% of the total ceiling area.

3.1.13.11. Elevator Cars

(1) The wall and ceiling surfaces of elevator cars shall have a *flame-spread rating* not more than 75.

(2) The wall, ceiling and floor surfaces of elevator cars shall have a smoke developed classification not more than 450.

3.1.14. Roof Assemblies

3.1.14.1. Fire-Retardant Treated Wood Roof Systems

(1) If a *fire-retardant treated wood* roof system is used to comply with the requirements of Subsection 3.2.2., the roof deck assembly shall meet the conditions of acceptance of CAN/ULC-S126, "Test for Fire Spread Under Roof-Deck Assemblies".

(2) Supports for the roof deck assembly referred to in Sentence (1) shall consist of,

(a) *fire-retardant treated wood*,

(b) *heavy timber construction*,

(c) *noncombustible construction*, or

(d) a combination of the items described in Clauses (a) to (c).

3.1.14.2. Metal Roof Deck Assemblies

(1) Except as permitted by Sentence (2), a metal roof deck assembly shall meet the conditions of acceptance of CAN/ULC-S126, "Test for Fire Spread Under Roof-Deck Assemblies", if,

(a) it supports a *combustible* material above the deck that could propagate a fire beneath the roof deck assembly, and

(b) the deck is used to comply with the requirements of Sentences 3.2.2.25.(2), 3.2.2.32.(2), 3.2.2.53.(2), 3.2.2.59.(2), 3.2.2.70.(2) and 3.2.2.76.(2) for *noncombustible construction*.

(2) The requirements of Sentence (1) are waived provided,

(a) the *combustible* material above the roof deck is protected,

(i) by not less than 12.7 mm thick gypsum board, mechanically fastened to a supporting assembly if located beneath the roof deck, or

(ii) by a thermal barrier conforming to one of Clauses 3.1.5.12.(2)(c) to (e) that is located on the underside of the *combustible* material or beneath the roof deck,

(b) the *building* is *sprinklered*, or

(c) the roof assembly has a *fire-resistance rating* not less than 45 min.

3.1.15. Roof Covering

3.1.15.1. Roof Covering Classification

(1) A roof covering classification shall be determined in conformance with CAN/ULC-S107, "Fire Tests of Roof Coverings".

3.1.15.2. Roof Coverings

(1) Except as provided by Sentences (2) and (3), every roof covering shall have a Class A, B or C classification as determined in accordance with Article 3.1.15.1.

(2) A roof covering is not required to have a Class A, B or C classification for,

(a) a tent,

(b) an *air-supported structure*, or

(c) a *building* of Group A, Division 2 *occupancy* not more than 2 *storeys* in *building height* and not more than 1 000 m^2 in *building area*, provided the roof covering is underlaid with *noncombustible* material.

(3) *Combustible* roof coverings on *buildings* within the scope of Article 3.2.2.43A. or 3.2.2.50A. shall have a Class A classification.

3.1.16. Fabrics

3.1.16.1. Fabric Awnings, Canopies and Marquees

(1) Fabrics used as part of an awning, *canopy* or *marquee* that is located within or attached to a *building* of any type of construction shall conform to CAN/ULC-S109, "Flame Tests of Flame-Resistant Fabrics and Films".

3.1.17. Occupant Load

3.1.17.1. Occupant Load Determination

(1) The *occupant load* of a *floor area* or part of a *floor area*, or of a *building* or part of a *building* not having a *floor area*, shall be based on,

(a) the number of seats in an *assembly occupancy* having fixed seats,

(b) two persons per sleeping room or sleeping area in a *dwelling unit* or *suite*, or

(c) the number of persons,

(i) for which the area is designed, or

(ii) determined from Table 3.1.17.1. for *occupancies* other than those described in Clauses (a) and (b).

Table 3.1.17.1.
Occupant Load

Forming Part of Article 3.1.17.1.

Item	Column 1 Type of Use of *Building* or *Floor Area* or Part of *Floor Area*	Column 2 Area per Person, m^2
1.	**Assembly uses**	
	space with fixed seats	See Clause (1)(a)
	space with non-fixed seats	0.75
	stages for theatrical performances	0.75
	space with non-fixed seats and tables	0.95
	standing space	0.40
	stadia and grandstands	0.60
	bowling alleys, pool and billiard rooms	9.30

	classrooms	1.85
	school shops and vocational rooms	9.30
	reading or writing rooms or lounges	1.85
	dining, alcoholic beverage and cafeteria space	1.10
	laboratories in schools	4.60
	exhibition halls other than those classified in Group E	2.80
2.	**Care, care and treatment or detention uses**	
	B-1 : detention quarters	11.60
	B-2 : treatment and sleeping room areas	10.00
	B-3 : sleeping room areas	10.00
	(See also Article 3.7.1.3.)	
3.	**Residential uses**	
	dwelling units	See Clause (1)(b)
	dormitories	4.60
4.	**Business and personal services uses**	
	personal service shops	4.60
	offices	9.30
5.	**Mercantile uses**	
	basements and *first storeys*	3.70
	second *storeys* having a principal entrance from a pedestrian thoroughfare or a parking area	3.70
	dining, alcoholic beverage and cafeteria space	1.10
	other *storeys*	5.60
6.	**Industrial uses**	
	manufacturing or process rooms	4.60
	storage garages	46.00
	storage spaces (warehouse)	28.00
	aircraft hangars	46.00
7.	**Other uses**	
	cleaning and repair of goods	4.60
	kitchens	9.30
	storage	46.00
	public corridors intended for *occupancies* in addition to pedestrian travel	3.70

(2) If a *floor area* or part of it has been designed for an *occupant load* other than that determined from Table 3.1.17.1., a permanent sign indicating that *occupant load* shall be posted in a conspicuous location.

(3) For the purposes of this Article, *mezzanines*, tiers and balconies shall be regarded as part of the *floor area*.

(4) If a room or group of rooms is intended for different *occupancies* at different times, the value to be used from Table 3.1.17.1. shall be the value that gives the greatest number of persons for the *occupancies* concerned.

(5) Except as provided by Sentence (6) or (7), in dining, alcoholic beverage and cafeteria spaces the *occupant load* shall be determined from Table 3.1.17.1.

(6) The *occupant load* in Sentence (5) is permitted to be the number of persons for which the space is designed.

(7) The *occupant load* in Sentence (6) shall be not more than that determined by using an area of 0.6 m^2 per person.

3.1.17.2. Dance Floor

(1) The *occupant load* of a room in which a dance floor is situated shall be calculated in respect of that portion of the room that is not occupied by the dance floor.

3.1.17.3. Public Pools

(1) The *occupant load* of a *public pool*, except a *wave action pool*, shall be determined by the following formula:

$$\textit{occupant load} = \frac{D}{2.5} + \frac{S}{1.4}$$

where,

D = the water surface area in square metres of the part of the pool that is deeper than 1 350 mm; and

S = the water surface area in square metres of the part of the pool that is 1 350 mm in depth or less.

(2) The *occupant load* of a *wave action pool* shall be determined by the following formula:

$$\textit{occupant load} = \frac{D}{2.5} + \frac{S}{1.1}$$

where,

D = the water surface area in square metres of the part of the pool where the still water depth is greater than 1 000 mm; and

S = the water surface area in square metres of the part of the pool where the still water depth is 1 000 mm or less.

3.1.18. Drainage and Grades

3.1.18.1. Drainage

(1) The *building* shall be located and the *building* site graded so that water will not accumulate at or near the *building* and will not adversely affect any adjacent properties.

3.1.19. Above Ground Electrical Conductors

3.1.19.1. Clearance to Buildings

(1) A *building* shall not be located beneath existing above ground electrical conductors.

(2) The horizontal clearance measured from the maximum conductor swing to the *building*, including balconies, fire escapes, flat roofs or other accessible projections beyond the face of the *building*, shall,

(a) be not less than 1 m, for electrical conductors carrying voltages 750 V or less, except where necessary to connect to the electrical wiring of the *building*,

(b) be not less than 3 m, for electrical conductors carrying voltages greater than 750 V but not exceeding 46 kV,

(c) be not less than 3.7 m, for electrical conductors carrying voltages greater than 46 kV but not exceeding 69 kV, or

(d) conform to the requirements of CAN/CSA-C22.3 No.1, "Overhead Systems", for electrical conductors carrying voltages greater than 69 kV.

(3) Where the swing of an above ground electrical conductor not owned or operated by an electrical supply authority is not known, a swing of not less than 1.8 m shall be used.

(4) Sentences (1) to (3) do not apply to a *building* containing electrical equipment and electrical installations used exclusively in the generation, transformation or transmission of electrical power or energy intended for sale or distribution to the public.

3.1.20. Glass in Guards

3.1.20.1. Glass

(1) Except as provided in Sentence 3.3.4.7.(1), glass in *guards* shall conform to MMAH Supplementary Standard SB-13, "Glass in Guards".

Section 3.2. Building Fire Safety

3.2.1. General

3.2.1.1. Exceptions in Determining Building Height

(1) A rooftop enclosure provided for elevator machinery, a stairway or a *service room* used for no purpose other than for service to the *building*, shall not be considered as a *storey* in calculating the *building height*.

(2) Space under tiers of seats in a *building* of the arena type shall not be considered as adding to the *building height* provided the space is used only for dressing rooms, concession stands and similar purposes incidental to the *major occupancy* of the *building*.

(3) Except as required by Sentence (5), the space above a *mezzanine* need not be considered as a *storey* in calculating *building height* provided,

(a) the aggregate area of *mezzanines* that are not superimposed does not exceed 40% of the open area of the room in which they are located, and

(b) except as permitted in Sentence (8) and Sentence 3.3.2.11.(3) the space above the *mezzanine* is used as an open area without *partitions* or subdividing walls higher than 1 070 mm above the *mezzanine* floor.

(4) Except as required by Sentence (5), the space above a *mezzanine* need not be considered as a *storey* in calculating the *building height* provided,

(a) the aggregate area of *mezzanines* that are not superimposed and do not meet the conditions of Sentence (3) does not exceed 10% of the *floor area* in which they are located, and

(b) the area of *mezzanine* in a *suite* does not exceed 10% of the area of that *suite*.

(5) Except as permitted by Sentences (6) and (7), each level of *mezzanine* that is partly or wholly superimposed above the first level of *mezzanine* shall be considered as a *storey* in calculating the *building height*.

(6) Platforms intended solely for periodic inspection and elevated catwalks need not be considered as floor assemblies or *mezzanines* for the purpose of determining *building height* provided,

(a) they are not used for storage,

(b) they are constructed with *noncombustible* materials unless the *building* is permitted to be of *combustible construction*, and

(c) where they are intended to be occupied, they have an *occupant load* of not more than four persons.

(7) *Mezzanines*, elevated walkways and platforms that are intended to be occupied in Group F, Division 2 or 3 *major occupancies* need not be considered as *storeys* in calculating *building height* provided,

(a) the *building* is of *noncombustible construction*, and

(b) the *occupant load* is not more than four persons.

(8) The space above a *mezzanine* conforming to Sentence (3) is permitted to include an enclosed space whose area does not exceed 10% of the open area of the room in which the *mezzanine* is located, provided the enclosed space does not obstruct visual communication between the open space above the *mezzanine* and the room in which it is located.

(9) A *service space* in which facilities are included to permit a person to enter and to undertake maintenance and other operations pertaining to *building* services from within the *service space* need not be considered a *storey* if it conforms to Articles 3.2.5.15. and 3.3.1.23. and Sentences 3.2.4.20.(12), 3.2.7.3.(2), 3.3.1.3.(7), 3.4.2.4.(3) and 3.4.4.4.(9).

3.2.1.2. Storage Garage Considered as a Separate Building

(1) A *basement* used primarily as a *storage garage* is permitted to be considered as a separate *building* for the purposes of Subsection 3.2.2., provided the floor and roof assemblies above the *basement* and, except as permitted by Sentence (2), the exterior walls of the *basement* above the adjoining ground level are constructed as *fire separations* of,

(a) masonry or concrete having a *fire-resistance rating* not less than 2 h, or

(b) *noncombustible construction* having a *fire-resistance rating* of not less than 2 h, where the *building* conforms to Clauses 3.1.10.2.(4)(a) and (c) to (e).

(2) The exterior wall of a *basement* that is required to be a *fire separation* with a *fire-resistance rating* in accordance with Sentence (1) is permitted to be penetrated by openings that are not protected by *closures* provided,

(a) the *storage garage* is *sprinklered*,

(b) every opening in the exterior wall is separated from *storeys* above the opening by a projection of the floor or roof assembly above the *basement*, extending not less than,

(i) 1 m beyond the exterior face of the *storage garage* if the upper *storeys* are required to be of *noncombustible construction*, or

(ii) 2 m beyond the exterior face of the *storage garage* if the upper *storeys* are permitted to be of *combustible construction*, or

(c) the exterior walls of any *storeys* located above the floor or roof assembly referred to in Sentence (1) are recessed behind the outer edge of the assembly by not less than,

(i) 1 m if the upper *storeys* are required to be of *noncombustible construction*, or

(ii) 2 m if the upper *storeys* are permitted to be of *combustible construction*.

(3) The floor or roof assembly projection referred to in Clause (2)(b) shall have a *fire-resistance rating* not less than 2 h and shall have no openings within the projection.

3.2.1.3. Roof Considered as a Wall

(1) For the purposes of this Section any part of a roof that is pitched at an angle of 60° or more to the horizontal and is adjacent to a space intended for occupancy within a *building* shall be considered as part of an exterior wall of the *building*.

3.2.1.4. Floor Assembly over Basement

(1) Except as permitted by Sentence 3.2.2.42.(3), 3.2.2.43.(3), 3.2.2.44.(3), 3.2.2.45.(3), 3.2.2.46.(3), 3.2.2.47.(3) or 3.2.2.48.(3), a floor assembly immediately above a *basement* shall be constructed as a *fire separation* having a *fire-resistance rating* conforming to the requirements of Articles 3.2.2.20. to 3.2.2.83. for a floor assembly, but not less than 45 min.

(2) All *loadbearing* walls, columns and arches supporting a floor assembly immediately above a *basement* shall have a *fire-resistance rating* not less than that required by Sentence (1) for the floor assembly.

3.2.1.5. Fire Containment in Basements

(1) Except as permitted by Sentences (2) and 3.2.2.15.(3), in a *building* in which an automatic sprinkler system is not required to be installed by Articles 3.2.2.20. to 3.2.2.83., every *basement* shall,

(a) be *sprinklered*, or

(b) be subdivided into *fire compartments* not more than 600 m^2 in area by a *fire separation* having a *fire-resistance rating* not less than that required for the floor assembly immediately above the *basement*.

(2) An *open-air storey* need not conform to Sentence (1).

3.2.1.6. Mezzanines

(1) The floor assembly of a *mezzanine* that is required to be considered as a *storey* in calculating *building height* shall be constructed in conformance with the *fire separation* requirements for floor assemblies in Articles 3.2.2.20. to 3.2.2.83.

3.2.2. Building Size and Construction Relative to Occupancy

3.2.2.1. Application

(1) Except as permitted by Article 3.2.2.3., a *building* shall be constructed in conformance with this Subsection to prevent fire spread and collapse caused by the effects of fire.

3.2.2.2. Special and Unusual Structures

(1) A structure that cannot be identified with the characteristics of a *building* in Articles 3.2.2.20. to 3.2.2.83. shall be protected against fire spread and collapse in conformance with good fire protection engineering practice.

3.2.2.3. Exceptions to Structural Fire Protection

(1) Fire protection is not required for,

(a) steel lintels above openings not more than 2 m wide in *loadbearing* walls and not more than 3 m wide in non-*loadbearing* walls,

(b) steel lintels above openings more than 2 m wide in *loadbearing* walls and more than 3 m wide in non-*loadbearing* walls, provided the lintels are supported at intervals of not more than 2 m by structural members with the required *fire-resistance rating*,

(c) the bottom flanges of shelf angles and plates that are not a part of the structural frame,

(d) steel members for framework around elevator hoistway doorways, steel for the support of elevator and dumbwaiter guides, counterweights and other similar equipment, that are entirely enclosed in a hoistway and are not a part of the structural frame of the *building*,

(e) steel members of stairways and escalators that are not a part of the structural frame of a *building*,

(f) steel members of porches, exterior balconies, exterior stairways, fire escapes, cornices, *marquees* and other similar appurtenances, provided they are outside an exterior wall of a *building*, and

(g) *loadbearing* steel or concrete members wholly or partly outside a *building* face in a *building* not more than 4 *storeys* in *building height* and classified as Group A, B, C, D or F, Division 3 *major occupancy* provided the members are,

(i) not less than 1 m away from any *unprotected opening* in an exterior wall, or

(ii) shielded from heat radiation in the event of a fire within the *building* by construction that will provide the same degree of protection that would be necessary if the member was located inside the *building*, with the protection

extending on either side of the member a distance equal to the projection of the member from the face of the wall.

3.2.2.4. Buildings with Multiple Major Occupancies

(1) The requirements restricting fire spread and collapse for a *building* of a single *major occupancy* classification are provided in this Subsection according to its *building height* and *building area*.

(2) If a *building* contains more than one *major occupancy*, classified in more than one Group or Division, the requirements of this Subsection concerning *building* size and construction relative to *major occupancy* shall apply according to Articles 3.2.2.5. to 3.2.2.8.

3.2.2.5. Applicable Building Height and Area

(1) In determining the fire safety requirements of a *building* in relation to each of the *major occupancies* contained in it, the *building height* and *building area* of the entire *building* shall be used.

3.2.2.6. Multiple Major Occupancies

(1) Except as permitted by Articles 3.2.2.7. and 3.2.2.8. and Sentences 3.2.2.43A.(5) and 3.2.2.50A.(4), in a *building* containing more than one *major occupancy*, the requirements of this Subsection for the most restricted *major occupancy* contained shall apply to the whole *building*.

3.2.2.7. Superimposed Major Occupancies

(1) Except as permitted by Article 3.2.2.8. and Sentences 3.2.2.43A.(5) and 3.2.2.50A.(4), in a *building* in which one *major occupancy* is located entirely above another *major occupancy*, the requirements in this Subsection for each portion of the *building* containing a *major occupancy* shall apply to that portion as if the entire *building* was of that *major occupancy*.

(2) If one *major occupancy* is located above another *major occupancy*, the *fire-resistance rating* of the floor assembly between the *major occupancies* shall be determined on the basis of the requirements of this Subsection for the lower *major occupancy*.

3.2.2.8. Exceptions for Major Occupancies

(1) In a *building* in which the aggregate area of all *major occupancies* in a particular Group or Division is not more than 10% of the *floor area* of the *storey* in which they are located, these *major occupancies* need not be considered as *major occupancies* for the purposes of this Subsection, provided they are not classified as Group F, Division 1 or 2 *occupancies*.

(2) A helicopter landing area on the roof of a *building* need not be considered a *major occupancy* for purposes of Subsection 3.2.2. where such landing area is not more than 10% of the area of the roof.

3.2.2.9. Crawl Spaces

(1) For the purposes of Articles 3.2.1.4. and 3.2.1.5., a crawl space shall be considered as a *basement* if it is,

(a) more than 1 800 mm high between the lowest part of the floor assembly and the ground or other surface below,

(b) used for any *occupancy*,

(c) used for the passage of *flue pipes*, or

(d) used as a *plenum* in *combustible construction*.

(2) A floor assembly immediately above a crawl space is not required to be constructed as a *fire separation* and is not required to have a *fire-resistance rating* provided the crawl space is not required to be considered as a *basement* by Sentence (1).

3.2.2.10. Streets

(1) Every *building* shall face a *street* located in conformance with the requirements of Articles 3.2.5.4 and 3.2.5.5 for access routes.

(2) For the purposes of Subsections 3.2.2. and 3.2.5. an access route conforming to Subsection 3.2.5. is permitted to be considered as a *street*.

(3) A *building* within the scope of Article 3.2.2.43A. or 3.2.2.50A. is considered to face one *street* provided not less than 10% of the *building* perimeter is located within 15 m of a *street* or *streets*.

(4) A *building* is considered to face two *streets* provided not less than 50% of the *building* perimeter is located within 15 m of a *street* or *streets*.

(5) A *building* is considered to face three *streets* provided not less than 75% of the *building* perimeter is located within 15 m of a *street* or *streets*.

(6) Enclosed spaces, tunnels, bridges and similar structures, even though used for vehicular or pedestrian traffic, are not considered as *streets* for the purpose of this Part.

3.2.2.11. Exterior Balconies

(1) An exterior balcony shall be constructed in accordance with the type of construction required by Articles 3.2.2.20. to 3.2.2.83., as applicable to the *occupancy* classification of the *building*.

3.2.2.12. Exterior Passageways

(1) An elevated exterior passageway used as part of a *means of egress* shall conform to the requirements of Articles 3.2.2.20. to 3.2.2.83. for *mezzanines*.

3.2.2.13. Occupancy on Roof

(1) A portion of a roof that supports an *occupancy* shall be constructed in conformance with the *fire separation* requirements of Articles 3.2.2.20. to 3.2.2.83. for floor assemblies.

3.2.2.14. Rooftop Enclosures

(1) A rooftop enclosure for elevator machinery or for a *service room* shall be constructed in accordance with the type of construction required by Articles 3.2.2.20. to 3.2.2.83.

(2) A rooftop enclosure for elevator machinery or for a *service room*, not more than 1 *storey* high, is not required to have a *fire-resistance rating*.

(3) A rooftop enclosure for a stairway shall be constructed in accordance with the type of construction required by Articles 3.2.2.20. to 3.2.2.83.

(4) A rooftop enclosure for a stairway need not have a *fire-resistance rating* nor be constructed as a *fire separation*.

3.2.2.15. Storeys below Ground

(1) If a *building* is erected entirely below the adjoining finished ground level and does not extend more than 1 *storey* below that ground level, the minimum precautions against fire spread and collapse shall be the same as are required for *basements* under a *building* of 1 *storey* in *building height* having the same *occupancy* and *building area*.

(2) If any portion of a *building* is erected entirely below the adjoining finished ground level and extends more than 1 *storey* below that ground level, the following minimum precautions against fire spread and collapse shall be taken:

(a) except as permitted by Sentence (3), the *basements* shall be *sprinklered*,

(b) a floor assembly below the ground level shall be constructed as a *fire separation* with a *fire-resistance rating* not less than,

(i) 3 h if the *basements* are intended for use as Group E or Group F, Division 1 or 2 *occupancies*, or

(ii) 2 h if the *basements* are not intended for use as Group E or Group F, Division 1 or 2 *occupancies*, and

(c) all *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the construction that they support.

(3) If the *first storey* of a *building* is not required to be *sprinklered*, sprinklers are not required in the *storey* immediately below the *first storey*, provided the *storey* below,

(a) contains only *residential occupancies*, and

(b) has at least one unobstructed access opening conforming to Sentence 3.2.5.1.(2) installed on that *storey* for each 15 m of wall length in at least one wall required by this Subsection to face a *street*.

3.2.2.16. Heavy Timber Roof Permitted

(1) Unless otherwise permitted by Articles 3.2.2.20. to 3.2.2.83., a roof assembly in a *building* up to 2 *storeys* in *building height* is permitted to be of *heavy timber construction* regardless of *building area* or type of construction required, provided the *building* is *sprinklered*.

(2) If Sentence (1) permits a roof assembly to be of *heavy timber construction*, structural members in the *storey* immediately below the roof assembly are permitted to be of *heavy timber construction*.

3.2.2.17. Sprinklers in Lieu of Roof Rating

(1) The requirements in Articles 3.2.2.20. to 3.2.2.83. for roof assemblies to have a *fire-resistance rating* are permitted to be waived provided,

(a) Except as provided by Sentence (2), the *building* is *sprinklered*,

(b) the sprinkler system in Clause (a) is electrically supervised in conformance with Sentence 3.2.4.10.(3), and

(c) the operation of the sprinkler system in Clause (a) will cause a signal to be transmitted to the fire department in conformance with Sentence 3.2.4.8.(4).

(2) The *fire-resistance rating* of roof assemblies required by Clause 3.2.2.43A.(2)(b) or 3.2.2.50A.(2)(b) is not permitted to be waived.

3.2.2.18. Automatic Sprinkler System Required

(1) If an automatic sprinkler system is required by Articles 3.2.2.20. to 3.2.2.83., the system shall conform to the requirements of Articles 3.2.4.8. to 3.2.4.10. and 3.2.5.13.

3.2.2.19. Buildings Containing Impeded Egress Zones

(1) A *building* containing an *impeded egress zone* and conforming to the appropriate requirements of Articles 3.2.2.20. to 3.2.2.83. is not required to conform to the requirements of Articles 3.2.2.36. and 3.2.2.37. for a Group B, Division 1 *major occupancy* provided,

(a) the *building* is *sprinklered*,

(b) it is not more than 1 *storey* in *building height*,

(c) it does not include,

(i) a *contained use area*,

(ii) sleeping accommodation,

(iii) a *high hazard industrial occupancy*, or

(iv) a *mercantile occupancy*,

(d) the *building area* is not more than 6 400 m^2 if the *building* includes a *medium hazard industrial occupancy*,

(e) the *impeded egress zone* does not extend beyond the boundaries of the *fire compartment* in which it is located, and

(f) the *occupant load* of the *impeded egress zone* is not more than 100.

3.2.2.20. Group A, Division 1, Any Height, Any Area, Sprinklered

(1) Except as permitted by Articles 3.2.2.21. and 3.2.2.22., a *building* classified as Group A, Division 1 shall conform to Sentence (2).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered*,

(b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,

(c) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.21. Group A, Division 1, 1 Storey, Limited Area

(1) A *building* classified as Group A, Division 1 is permitted to conform to Sentence (2) provided,

(a) it is not more than 1 *storey* in *building height*,

(b) it has less than 40% of the area of the *building* as 2 *storeys* for the purpose of,

(i) development of productions including preparation of scenery and costumes and rehearsal of performers,

(ii) organization of performers, scenery and sound equipment,

(iii) preparation by performers for a performance,

(iv) managerial functions, or

(v) toilets, rest rooms and similar public facilities,

(c) it has no *occupancy* above or below the auditorium other than one that serves it or is dependent on it,

(d) it is not more than 600 m^2 in *building area*, and

(e) the *occupant load* is not more than 600.

(2) The *building* referred to in Sentence (1) is permitted to be of *heavy timber construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations*,

(i) with a *fire-resistance rating* not less than 45 min, or

(ii) of *heavy timber construction*, and

(b) *loadbearing* walls, columns and arches shall,

(i) have a *fire-resistance rating* not less than that required for the supported assembly, or

(ii) be of *heavy timber construction*.

3.2.2.22. Group A, Division 1, 1 Storey

(1) A *building* classified as Group A, Division 1 is permitted to conform to Sentence (2) provided,

(a) it is not more than 1 *storey* in *building height*,

(b) no part of an auditorium floor is more than 5 m above or below *grade*,

(c) no *occupancy* is above or below the auditorium other than one that serves it or is dependent on it, and

(d) the *occupant load* of the auditorium floor is not more than 300.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min,

(c) roof assemblies shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min, and

(d) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*, and

(e) *loadbearing* walls, columns and arches supporting a *fire separation* shall have a *fire-resistance rating* not less than that required for the *fire separation*.

3.2.2.23. Group A, Division 2, Any Height, Any Area, Sprinklered

(1) Except as permitted by Articles 3.2.2.24. to 3.2.2.28., a *building* classified as Group A, Division 2 shall conform to Sentence (2).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered*,

(b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,

(c) *mezzanines* shall have a *fire-resistance rating* not less 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.24. Group A, Division 2, up to 6 Storeys, Any Area, Sprinklered

(1) A *building* classified as Group A, Division 2, that is not limited by *building area*, is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), *the building* is *sprinklered*, and

(b) it is not more than 6 *storeys* in *building height*.

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(c) all *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.25. Group A, Division 2, up to 2 Storeys

(1) A *building* classified as Group A, Division 2 is permitted to conform to Sentence (2) provided,

(a) it is not more than 2 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.25.

Table 3.2.2.25.
Maximum Building Area, Group A, Division 2, up to 2 Storeys

Forming Part of Sentence 3.2.2.25.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	1 600	2 000	2 400
2.	2	800	1 000	1 200

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less 45 min,

(c) roof assemblies shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min, except that in a *building* not more than 1 *storey* in *building height*, the *fire-resistance rating* is permitted to be waived provided the roof assembly is constructed as a *fire-retardant treated wood* roof system conforming to Article 3.1.14.1., and the *building area* is not more than,

(i) 800 m^2 if facing one *street*,

(ii) 1 000 m^2 if facing two *streets*, or

(iii) 1 200 m^2 if facing three *streets*, and

(d) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

3.2.2.26. Group A, Division 2, up to 2 Storeys, Increased Area, Sprinklered

(1) A *building* classified as Group A, Division 2 is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 2 *storeys* in *building height*, and

(c) it has a *building area* not more than,

(i) 4 800 m^2 if 1 *storey* in *building height*, or

(ii) 2 400 m^2 if 2 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less 45 min, and

(c) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

3.2.2.27. Group A, Division 2, up to 2 Storeys, Sprinklered

(1) A *building* classified as Group A, Division 2 is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 2 *storeys* in *building height*, and

(c) it has a *building area* not more than,

(i) 2 400 m^2 if 1 *storey* in *building height* with no *basement*,

(ii) 1 200 m^2 if 1 *storey* in *building height*, or

(iii) 600 m^2 if 2 *storeys* in *building height*.

3.2.2.28. Group A, Division 2, 1 Storey

(1) A *building* classified as Group A, Division 2 is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, provided,

(a) it is not more than 1 *storey* in *building height*, and

(b) except as permitted by Sentence (2), it has a *building area* not more than,

(i) 400 m^2 if facing one *street*,

(ii) 500 m^2 if facing two *streets*, or

(iii) 600 m^2 if facing three *streets*.

(2) In a *building* referred to in Sentence (1) without a *basement*, the *building area* limits of Sentence (1) are permitted to be doubled provided a *fire separation* with a *fire-resistance rating* not less than 1 h is used to separate the *building* into *fire compartments*, each one of which does not exceed the area limits of Clause (1)(b).

3.2.2.29. Group A, Division 3, Any Height, Any Area

(1) Except as permitted by Articles 3.2.2.30. to 3.2.2.34., a *building* classified as Group A, Division 3 shall conform to Sentences (2) and (3).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered* if it is regulated by Subsection 3.2.6.,

(b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,

(c) *mezzanines* shall have a *fire-resistance rating* not less than 1 h,

(d) if the *building* is not *sprinklered*, roof assemblies shall have a *fire-resistance rating* not less than 1 h, and

(e) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(3) If intended for occasional use for trade shows and similar exhibition purposes, the *building* referred to in Sentence (1) that is more than 1 500 m^2 in *building area* shall be *sprinklered*.

3.2.2.30. Group A, Division 3, up to 2 Storeys

(1) A *building* classified as Group A, Division 3 is permitted to conform to Sentence (2) provided,

(a) it is not more than 2 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.30.

Table 3.2.2.30.
Maximum Building Area, Group A, Division 3, up to 2 Storeys

Forming Part of Sentence 3.2.2.30.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	4 000	5 000	6 000
2.	2	2 000	2 500	3 000

(2) Except as permitted by Clauses (c) and (d), the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h,

(c) roof assemblies shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *heavy timber construction*, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly, except that arches and structural members within the *storey* immediately below a roof assembly are permitted to be of *heavy timber construction*.

(3) If intended for occasional use for trade shows and similar exhibition purposes, the *building* referred to in Sentence (1) that is more than 1 500 m^2 in *building area* shall be *sprinklered*.

3.2.2.31. Group A, Division 3, up to 2 Storeys, Sprinklered

(1) A *building* classified as Group A, Division 3 is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered*,

(b) it is not more than 2 *storeys* in *building height*, and

(c) it has a *building area* not more than,

(i) 12 000 m^2 if 1 *storey* in *building height*, or

(ii) 6 000 m^2 if 2 *storeys* in *building height*.

(2) Except as permitted by Clause (c) and Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly, except that arches are permitted to be of *heavy timber construction*.

3.2.2.32. Group A, Division 3, 1 Storey, Increased Area

(1) A *building* classified as Group A, Division 3 is permitted to conform to Sentences (2)

and (3) provided,

(a) it is not more than 1 *storey* in *building height*, and

(b) it has a *building area* not more than,

(i) 2 400 m^2 if facing one *street*,

(ii) 3 000 m^2 if facing two *streets*, or

(iii) 3 600 m^2 if facing three *streets*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min,

(b) roof assemblies shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min, except that the *fire-resistance rating* is permitted to be waived provided the roof assembly is constructed as a *fire-retardant treated wood* roof system conforming to Article 3.1.14.1., and the *building area* is not more than,

(i) 1 200 m^2 if facing one *street*,

(ii) 1 500 m^2 if facing two *streets*, or

(iii) 1 800 m^2 if facing three *streets*, and

(c) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

(3) If intended for occasional use for trade shows and similar exhibition purposes, the *building* referred to in Sentence (1) that is more than 1 500 m^2 in *building area* shall be *sprinklered*.

3.2.2.33. Group A, Division 3, 1 Storey, Sprinklered

(1) A *building* classified as Group A, Division 3 is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 1 *storey* in *building height*, and

(c) it has a *building area* not more than 7 200 m^2.

3.2.2.34. Group A, Division 3, 1 Storey

(1) A *building* classified as Group A, Division 3 is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, provided,

(a) it is not more than 1 *storey* in *building height*, and

(b) it has a *building area* not more than,

(i) 1 000 m^2 if facing one *street*,

(ii) 1 250 m^2 if facing two *streets*, or

(iii) 1 500 m^2 if facing three *streets*.

3.2.2.35. Group A, Division 4

(1) Except as permitted by Sentences (2) and (3), a *building* classified as Group A, Division 4 shall be of *noncombustible construction*.

(2) Roof assemblies and supporting arches and columns are permitted to be of *heavy timber construction*.

(3) A *building* classified as Group A, Division 4 is permitted to be of *combustible construction* provided,

(a) the *occupant load* is less than 1 500, and

(b) the *building* has a *limiting distance* not less than 6 m.

(4) Sprinklers shall be installed in all spaces below tiers of seats in a *building* classified as Group A, Division 4 if those spaces are used for *occupancy*.

3.2.2.36. Group B, Division 1, Any Height, Any Area, Sprinklered

(1) Except as permitted by Article 3.2.2.37., a *building* classified as Group B, Division 1 shall conform to Sentence (2).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered*,

(b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,

(c) *mezzanines* shall have a *fire-resistance rating* not less 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.37. Group B, Division 1, up to 3 Storeys, Sprinklered

(1) A *building* classified as Group B, Division 1 is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1) the *building* is *sprinklered*,

(b) it is not more than 3 *storeys* in *building height*, and

(c) it has a *building area*,

(i) that is not limited if the *building* is not more than 1 *storey* in *building height*,

(ii) not more than 12 000 m^2 if 2 *storeys* in *building height*, or

(iii) not more than 8 000 m^2 if 3 *storeys* in *building height*.

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.38. Group B, Division 2 or Division 3, Any Height, Any Area, Sprinklered

(1) Except as permitted by Articles 3.2.2.39. to 3.2.2.41., a *building* classified as Group B, Division 2 or Division 3 shall conform to Sentence (2).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered*,

(b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,

(c) *mezzanines* shall have a *fire-resistance rating* not less 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.39. Group B, Division 2 or Division 3, up to 3 Storeys, Sprinklered

(1) A *building* classified as Group B, Division 2 or Division 3 is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(iii) not more than 8 000 m^2 if 3 *storeys* in *building height*.

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.38. Group B, Division 2 or Division 3, Any Height, Any Area, Sprinklered

(1) Except as permitted by Articles 3.2.2.39. to 3.2.2.41., a *building* classified as Group B, Division 2 or Division 3 shall conform to Sentence (2).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered*,

(b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,

(c) *mezzanines* shall have a *fire-resistance rating* not less 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.39. Group B, Division 2 or Division 3, up to 3 Storeys, Sprinklered

(1) A *building* classified as Group B, Division 2 or Division 3 is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 3 *storeys* in *building height*, and

(c) it has a *building area*,

(i) that is not limited if the *building* is not more than 1 *storey* in *building height*,

(ii) not more than 12 000 m^2 if 2 *storeys* in *building height*, or

(iii) not more than 8 000 m^2 if 3 *storeys* in *building height*.

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.40. Group B, Division 2 or Division 3, up to 2 Storeys, Sprinklered

(1) A *building* classified as Group B, Division 2 or Division 3 is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 2 *storeys* in *building height*, and

(c)it has a *building area* not more than,

(i) 2 400 m^2 if 1 *storey* in *building height*, or

(ii) 1 600 m^2 if 2 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.41. Group B, Division 2 or Division 3, 1 Storey, Sprinklered

(1) A *building* classified as Group B, Division 2 or Division 3 is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 1 *storey* in *building height*, and

(c) it has a *building area* not more than 500 m^2.

3.2.2.42. Group C, Any Height, Any Area, Sprinklered

(1) Except as permitted by Articles 3.2.2.43. to 3.2.2.48., a *building* classified as Group C shall conform to Sentence (2).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered*,

(b) except as permitted by Sentence (3), floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,

(c) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(3) In a *building* that contains *dwelling units* that have more than 1 *storey*, subject to the requirements of Sentence 3.3.4.2.(3), the floor assemblies, including floors over *basements*, which are entirely contained within these *dwelling units*, shall have a *fire-resistance rating* not less than 1 h but need not be constructed as *fire separations*.

3.2.2.43. Group C, up to 6 Storeys, Sprinklered, Noncombustible Construction

(1) A *building* classified as Group C is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 6 *storeys* in *building height*, and

(c) it has a *building area*,

(i) that is not limited if the *building* is not more than 2 *storeys* in *building height*,

(ii) not more than 12 000 m^2 if 3 *storeys* in *building height*,

(iii) not more than 9 000 m^2 if 4 *storeys* in *building height*,

(iv) not more than 7 200 m^2 if 5 *storeys* in *building height*, or

(v) not more than 6 000 m^2 if 6 *storeys* in *building height*.

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence (3), floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(3) In a *building* that contains *dwelling units* that have more than 1 *storey*, subject to the requirements of Sentence 3.3.4.2.(3), the floor assemblies, including floors over *basements*, which are entirely contained within these *dwelling units*, shall have a *fire-resistance rating* not less than 1 h but need not be constructed as *fire separations*.

3.2.2.43A. Group C, up to 6 Storeys, Sprinklered, Combustible Construction

(1) A *building* classified as Group C is permitted to conform to Sentence (2) provided,

(a) it is *sprinklered*,

(b) it is not more than 6 *storeys* in *building height*,

(c) it has a height of not more than 18 m, measured between the floor level of the *first storey* and the floor level of the uppermost *storey* or *mezzanine* that is not a rooftop enclosure provided for elevator machinery, a stairway or a *service room* used for no purpose other than for service to the *building*, and

(d) it has a *building area* of not more than,

(i) 9 000 m^2 if 1 *storey* in *building height*,

(ii) 4 500 m^2 if 2 *storeys* in *building height*,

(iii) 3 000 m^2 if 3 *storeys* in *building height*,

(iv) 2 250 m^2 if 4 *storeys* in *building height*,

(v) 1 800 m^2 if 5 *storeys* in *building height*, or

(vi) 1 500 m^2 if 6 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction*, used singly or in combination, and,

(a) except as permitted by Sentence (3), floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) roof assemblies shall have a *fire-resistance rating* not less than 1 h,

(c) except as provided by Sentence (4), where the roof assembly has a height greater than 25 m measured from the floor level of the *first storey* to the highest point of the roof assembly, the roof assembly shall,

(i) be of *noncombustible construction*, or

(ii) be constructed of *fire-retardant treated wood* conforming to Article 3.1.4.5.,

(d) *mezzanines* shall have a *fire-resistance rating* not less than 1 h,

(e) the *fire separation* of *exits* described in Sentence 3.4.4.1.(3) shall be of *noncombustible construction*, and

(f) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(3) In a *building* that contains *dwelling units* that have more than 1 *storey*, subject to the requirements of Sentence 3.3.4.2.(3), the floor assemblies, including floors over *basements*, which are entirely contained within these *dwelling units*, shall have a *fire-resistance rating* not less than 1 h but need not be constructed as *fire separations*.

(4) The construction of non-contiguous roof assemblies at different elevations is permitted to be evaluated separately to determine which roof assemblies are required to be constructed in accordance with Clause (2)(c).

(5) Group A, Division 2 *major occupancies*, Group E *major occupancies* and *storage garages* located in a *building* within the scope of this Article are permitted to be constructed in accordance with this Article provided they are located below the third *storey* of the *building*.

3.2.2.44. Group C, up to 4 Storeys, Noncombustible Construction

(1) A *building* classified as Group C is permitted to conform to Sentence (2) provided,

(a) it is not more than,

(i) 3 *storeys* in *building height*, or

(ii) 4 *storeys* in *building height* provided there is not more than one *dwelling unit* above another *dwelling unit*, and vertical *fire separations* of adjacent *dwelling units* conform to Sentence (4), and

(b) it has a *building area* not more than the value in Table 3.2.2.44.

Table 3.2.2.44.

Maximum Building Area, Group C, up to 4 Storeys

Forming Part of Sentence 3.2.2.44.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	not limited	not limited	not limited
2.	2	6 000	not limited	not limited
3.	3	4 000	5 000	6 000

4.	4	3 000	3 750	4 500

(2) The *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence (3), floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h,

(c) roof assemblies shall have a *fire-resistance rating* not less than 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(3) In a *building* that contains *dwelling units* that have more than 1 *storey*, subject to the requirements of Sentence 3.3.4.2.(3), the floor assemblies, including floors over *basements*, which are entirely contained within these *dwelling units*, shall have a *fire-resistance rating* not less than 1 h but need not be constructed as *fire separations*.

(4) The *dwelling units* described in Subclause (1)(a)(ii) shall be separated by continuous vertical *fire separations* that extend through all *storeys* and *service spaces* of the separated portions.

(5) A retirement home regulated under the *Retirement Homes Act, 2010* shall be *sprinklered*.

3.2.2.45. Group C, up to 4 Storeys, Sprinklered

(1) A *building* classified as Group C is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 4 *storeys* in *building height*, and

(c) it has a *building area* not more than,

(i) 7 200 m^2 if 1 *storey* in *building height*,

(ii) 3 600 m^2 if 2 *storeys* in *building height*,

(iii) 2 400 m^2 if 3 *storeys* in *building height*, or

(iv) 1 800 m^2 if 4 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) except as permitted by Sentences (3) and (4), floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(3) In a *building* that contains *dwelling units* that have more than 1 *storey*, subject to the requirements of Sentence 3.3.4.2.(3), the floor assemblies, including floors over *basements*, that are entirely contained within these *dwelling units*, shall have a *fire-resistance rating* not less than 1 h but need not be constructed as *fire separations*.

(4) In a *building* in which there is no *dwelling unit* above another *dwelling unit*, the *fire-resistance rating* for floor assemblies entirely within the *dwelling unit* is waived.

3.2.2.46. Group C, up to 3 Storeys, Increased Area

(1) A *building* classified as Group C is permitted to conform to Sentence (2) provided,

(a) it is not more than 3 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.46.

Table 3.2.2.46.
Maximum Building Area, Group C up to 3 Storeys, Increased Area

Forming Part of Sentence 3.2.2.46.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	2 400	3 000	3 600
2.	2	1 200	1 500	1 800
3.	3	800	1 000	1 200

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) except as permitted by Sentences (3) and (4), floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h,

(c) roof assemblies shall have a *fire-resistance rating* not less than 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(3) In a *building* that contains *dwelling units* that have more than 1 *storey*, subject to the requirements of Sentence 3.3.4.2.(3), the floor assemblies, including floors over *basements*, that are entirely contained within these *dwelling units*, shall have a *fire-resistance rating* not less than 1 h but need not be constructed as *fire separations*.

(4) In a *building* in which there is no *dwelling unit* above another *dwelling unit*, the *fire-resistance rating* for floor assemblies entirely within the *dwelling unit* is waived.

(5) A retirement home regulated under the *Retirement Homes Act, 2010* shall be *sprinklered*.

3.2.2.47. Group C, up to 3 Storeys

(1) A *building* classified as Group C is permitted to conform to Sentence (2) provided,

(a) it is not more than 3 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.47.

Table 3.2.2.47.
Maximum Building Area, Group C, up to 3 Storeys

Forming Part of Sentence 3.2.2.47.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	1 800	2 250	2 700
2.	2	900	1 125	1 350
3.	3	600	750	900

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) except as permitted by Sentences (3) and (4), floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(3) In a *building* that contains *dwelling units* that have more than 1 *storey*, subject to the requirements of Sentence 3.3.4.2.(3), the floor assemblies, including floors over *basements*, that are entirely contained within these *dwelling units*, shall have a *fire-resistance rating* not less than 45 min but need not be constructed as *fire separations*.

(4) In a *building* in which there is no *dwelling unit* above another *dwelling unit*, the *fire-resistance rating* for floor assemblies entirely within the *dwelling unit* is waived.

(5) A retirement home regulated under the *Retirement Homes Act, 2010* shall be *sprinklered*.

3.2.2.48. Group C, up to 3 Storeys, Sprinklered

(1) A *building* classified as Group C is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 3 *storeys* in *building height*, and

(c) it has a *building area* not more than,

(i) 5 400 m^2 if 1 *storey* in *building height*,

(ii) 2 700 m^2 if 2 *storeys* in *building height*, or

(iii) 1 800 m^2 if 3 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) except as permitted by Sentences (3) and (4), floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction* a *fire-resistance rating* not less than 45 min, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(3) In a *building* that contains *dwelling units* that have more than 1 *storey*, subject to the requirements of Sentence 3.3.4.2.(3), the floor assemblies, including floors over *basements*, that are entirely contained within these *dwelling units*, shall have a *fire-resistance rating* not less than 45 min but need not be constructed as *fire separations*.

(4) In a *building* in which there is no *dwelling unit* above another *dwelling unit*, the *fire-resistance rating* for floor assemblies entirely within the *dwelling unit* is waived.

3.2.2.49. Group D, Any Height, Any Area

(1) Except as permitted by Articles 3.2.2.50. to 3.2.2.56., a *building* classified as Group D shall conform to Sentence (2).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered* if it is regulated by Subsection 3.2.6.,

(b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,

(c) *mezzanines* shall have a *fire-resistance rating* not less 1 h,

(d) if the *building* is not *sprinklered*, roof assemblies shall have a *fire-resistance rating* not less than 1 h, except that in a *building* not more than 1 *storey* in *building height* this requirement is waived, and

(e) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.50. Group D, up to 6 Storeys

(1) A *building* classified as Group D is permitted to conform to Sentence (2) provided,

(a) it is not more than 6 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.50.

Table 3.2.2.50.
Maximum Building Area, Group D, up to 6 Storeys

Forming Part of Sentence 3.2.2.50.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	not limited	not limited	not limited
2.	2	7 200	not limited	not limited
3.	3	4 800	6 000	7 200
4.	4	3 600	4 500	5 400

5.	5	2 800	3 600	4 320
6.	6	2 400	3 000	3 600

(2) The *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h,

(c) roof assemblies shall have a *fire-resistance rating* not less than 1 h, except that in a *building* not more than 1 *storey* in *building height* this requirement is waived, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.50A. Group D, up to 6 Storeys, Sprinklered, Combustible Construction

(1) A *building* classified as Group D is permitted to conform to Sentence (2) provided,

(a) it is *sprinklered*,

(b) it is not more than 6 *storeys* in *building height*,

(c) it has a height of not more than 18 m, measured between the floor level of the *first storey* and the floor level of the uppermost *storey* or *mezzanine* that is not a rooftop enclosure provided for elevator machinery, a stairway or a *service room* used for no purpose other than for service to the *building*, and

(d) it has a *building area* of not more than,

(i) 18 000 m^2 if 1 *storey* in *building height*,

(ii) 9 000 m^2 if 2 *storeys* in *building height*,

(iii) 6 000 m^2 if 3 *storeys* in *building height*,

(iv) 4 500 m^2 if 4 *storeys* in *building height*,

(v) 3 600 m^2 if 5 *storeys* in *building height*, or

(vi) 3 000 m^2 if 6 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) roof assemblies shall have a *fire-resistance rating* not less than 1 h,

(c) except as provided by Sentence (3), where the roof assembly has a height greater than 25 m measured from the floor level of the *first storey* to the highest point of the roof assembly, the roof assembly shall,

(i) be of *noncombustible construction*, or

(ii) be constructed of *fire-retardant treated wood* conforming to Article 3.1.4.5.,

(d) *mezzanines* shall have a *fire-resistance rating* not less than 1 h,

(e) the *fire separation* of *exits* described in Sentence 3.4.4.1.(3) shall be of *noncombustible construction*, and

(f) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(3) The construction of non-contiguous roof assemblies at different elevations is permitted to be evaluated separately to determine which roof assemblies are required to be constructed in accordance with Clause (2)(c).

(4) Group A, Division 2 *major occupancies*, Group E *major occupancies* and *storage garages* located in a *building* within the scope of this Article are permitted to be constructed in accordance with this Article provided they are located below the third *storey* of the *building*.

3.2.2.51. Group D, up to 6 Storeys, Sprinklered, Noncombustible Construction

(1) A *building* classified as Group D is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 6 *storeys* in *building height*, and

(c) it has a *building area*,

(i) that is not limited if the *building* is not more than 2 *storeys* in *building height*,

(ii) not more than 14 400 m^2 if 3 *storeys* in *building height*,

(iii) not more than 10 800 m^2 if 4 *storeys* in *building height*,

(iv) not more than 8 640 m^2 if 5 *storeys* in *building height*, or

(v) not more than 7 200 m^2 if 6 *storeys* in *building height*.

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.52. Group D, up to 4 Storeys, Sprinklered

(1) A *building* classified as Group D is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 4 *storeys* in *building height*, and

(c) it has a *building area* not more than 3 600 m^2.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.53. Group D, up to 3 Storeys

(1) A *building* classified as Group D is permitted to conform to Sentence (2) provided,

(a) it is not more than 3 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.53.

Table 3.2.2.53.
Maximum Building Area, Group D, up to 3 Storeys

Forming Part of Sentence 3.2.2.53.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	4 800	6 000	7 200
2.	2	2 400	3 000	3 600
3.	3	1 600	2 000	2 400

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min,

(c) roof assemblies shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min, except that in a *building* not more than 1 *storey* in *building height*, the *fire-resistance rating* is permitted to be waived provided the roof assembly is constructed as a *fire-retardant treated wood* roof system conforming to Article 3.1.14.1., and the *building area* is not more than,

(i) 2 400 m^2 if facing one *street*,

(ii) 3 000 m^2 if facing two *streets*, or

(iii) 3 600 m^2 if facing three *streets*, and

(d) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

3.2.2.54. Group D, up to 3 Storeys, Sprinklered

(1) A *building* classified as Group D is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 3 *storeys* in *building height*, and

(c) it has a *building area* not more than,

(i) 14 400 m^2 if 1 *storey* in *building height,*

(ii) 7 200 m^2 if 2 *storeys* in *building height*, or

(iii) 4 800 m^2 if 3 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min, and

(c) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

3.2.2.55. Group D, up to 2 Storeys

(1) A *building* classified as Group D is permitted to conform to Sentence (2) provided,

(a) it is not more than 2 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.55.

Table 3.2.2.55.
Maximum Building Area, Group D, up to 2 Storeys

Forming Part of Sentence 3.2.2.55.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	1 000	1 250	1 500
2.	2	800	1 000	1 200

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min, and

(b) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

3.2.2.56. Group D, up to 2 Storeys, Sprinklered

(1) A *building* classified as Group D is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 2 *storeys* in *building height*, and

(c) it has a *building area* not more than,

(i) 3 000 m^2 if 1 *storey* in *building height*, or

(ii) 2 400 m^2 if 2 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min, and

(b) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

3.2.2.57. Group E, Any Height, Any Area, Sprinklered

(1) Except as permitted by Articles 3.2.2.58. to 3.2.2.62., a *building* classified as Group E

shall conform to Sentence (2).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered*,

(b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,

(c) *mezzanines* shall have a *fire-resistance rating* not less 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.58. Group E, up to 4 Storeys, Sprinklered

(1) A *building* classified as Group E is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 4 *storeys* in *building height*, and

(c) it has a *building area* not more than 1 800 m^2.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.59. Group E, up to 3 Storeys

(1) A *building* classified as Group E is permitted to conform to Sentence (2) provided,

(a) it is not more than 3 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.59.

Table 3.2.2.59.
Maximum Building Area, Group E, up to 3 Storeys

Forming Part of Sentence 3.2.2.59.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	1 500	1 500	1 500
2.	2	1 200	1 500	1 500
3.	3	800	1 000	1 500

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min,

(c) roof assemblies shall have a *fire-resistance rating* not less than 45 min, except that in a *building* not more than 1 *storey* in *building height*, the *fire-resistance rating* is permitted to be waived provided the roof assembly is of *noncombustible construction* or is constructed as a *fire-retardant treated wood* roof system conforming to Article 3.1.14.1.,

(d) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*, and

(e) *loadbearing* walls, columns and arches supporting a *fire separation* shall have a *fire-resistance rating* not less than that required for the *fire separation*.

3.2.2.60. Group E, up to 3 Storeys, Sprinklered

(1) A *building* classified as Group E is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 3 *storeys* in *building height*, and

(c) it has a *building area* not more than,

(i) 7 200 m^2 if 1 *storey* in *building height*,

(ii) 3 600 m^2 if 2 *storeys* in *building height*, or

(iii) 2 400 m^2 if 3 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min,

(c) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*, and

(d) *loadbearing* walls, columns and arches supporting a *fire separation* shall have a *fire-resistance rating* not less than that required for the *fire separation*.

3.2.2.61. Group E, up to 2 Storeys

(1) A *building* classified as Group E is permitted to conform to Sentence (2) provided,

(a) it is not more than 2 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.61.

Table 3.2.2.61.
Maximum Building Area, Group E, up to 2 Storeys

Forming Part of Sentence 3.2.2.61.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	1 000	1 250	1 500
2.	2	600	750	900

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 45 min, and

(b) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.62. Group E, up to 2 Storeys, Sprinklered

(1) A *building* classified as Group E is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 2 *storeys* in *building height*, and

(c) it has a *building area* not more than,

(i) 3 000 m^2 if 1 *storey* in *building height*, or

(ii) 1 800 m^2 if 2 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 45 min, and

(b) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.63. Group F, Division 1, up to 4 Storeys, Sprinklered

(1) Except as permitted by Articles 3.2.2.64. to 3.2.2.66., a *building* classified as Group F, Division 1 shall conform to Sentence (2) provided,

(a) it is not more than 4 *storeys* in *building height*, and

(b) it has a *building area* not more than,

(i) 9 000 m^2 if 1 *storey* in *building height*,

(ii) 4 500 m^2 if 2 *storeys* in *building height*,

(iii) 3 000 m^2 if 3 *storeys* in *building height*, or

(iv) 2 250 m^2 if 4 *storeys* in *building height*.

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered*,

(b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,

(c) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.64. Group F, Division 1, up to 3 Storeys, Sprinklered

(1) A *building* classified as Group F, Division 1 is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 3 *storeys* in *building height*, and

(c) it has a *building area* not more than,

(i) 3 600 m^2 if 1 *storey* in *building height*,

(ii) 1 800 m^2 if 2 *storeys* in *building height*, or

(iii) 1 200 m^2 if 3 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *heavy timber construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 45 min,

(b) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.65. Group F, Division 1, up to 2 Storeys, Sprinklered

(1) A *building* classified as Group F, Division 1 is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 2 *storeys* in *building height*, and

(c) it has a *building area* not more than,

(i) 2 400 m^2 if 1 *storey* in *building height*, or

(ii) 1 200 m^2 if 2 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min,

(b) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

3.2.2.66. Group F, Division 1, 1 Storey

(1) A *building* classified as Group F, Division 1 is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination provided,

(a) it is not more than 1 *storey* in *building height*, and

(b) it has a *building area* not more than 800 m^2.

3.2.2.67. Group F, Division 2, Any Height, Any Area, Sprinklered

(1) Except as permitted by Articles 3.2.2.68. to 3.2.2.72., a *building* classified as Group F, Division 2 shall conform to Sentence (2).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered*,

(b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,

(c) *mezzanines* shall have a *fire-resistance rating* not less 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.68. Group F, Division 2, up to 6 Storeys

(1) A *building* classified as Group F, Division 2 is permitted to conform to Sentence (2) provided,

(a) it is not more than 6 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.68.A. or Table 3.2.2.68.B.

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h,

(c) if the *building* is not *sprinklered*, roof assemblies shall have a *fire-resistance rating* not less than 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

Table 3.2.2.68.A.
Maximum Building Area, Group F, Division 2, up to 6 Storeys

Forming Part of Sentence 3.2.2.68.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	9 000	11 250	13 500
2.	2	4 500	5 625	6 750
3.	3	3 000	3 750	4 500
4.	4	2 250	2 810	3 375
5.	5	1 800	2 250	2 700
6.	6	1 500	1 875	2 250

Table 3.2.2.68.B.
Maximum Building Area, Group F, Division 2, up to 6 Storeys, Sprinklered

Forming Part of Sentence 3.2.2.68.(1)

Item	Column 1	Column 2
	No. of *Storeys*	Maximum Area, m^2
1.	1	27 000
2.	2	13 500
3.	3	9 000
4.	4	6 750
5.	5	5 400
6.	6	4 500

3.2.2.69. Group F, Division 2, up to 4 Storeys, Increased Area

(1) A *building* classified as Group F, Division 2 is permitted to conform to Sentence (2) provided,

(a) it is not more than 4 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.69.A. or Table 3.2.2.69.B.

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h,

(c) if the *building* is not *sprinklered*, roof assemblies shall have a *fire-resistance rating* not less than 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

Table 3.2.2.69.A.
Maximum Building Area, Group F, Division 2, up to 4 Storeys, Increased Area

Forming Part of Sentence 3.2.2.69.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	6 000	7 500	9 000
2.	2	3 000	3 750	4 500
3.	3	2 000	2 500	3 000
4.	4	1 500	1 875	2 250

Table 3.2.2.69.B.
Maximum Building Area, Group F, Division 2, up to 4 Storeys, Increased Area, Sprinklered

Forming Part of Sentence 3.2.2.69.(1)

Item	Column 1 No. of *Storeys*	Column 2 Maximum Area, m^2
1.	1	18 000
2.	2	9 000
3.	3	6 000
4.	4	4 500

3.2.2.70. Group F, Division 2, up to 4 Storeys

(1) A *building* classified as Group F, Division 2 is permitted to conform to Sentence (2) provided,

(a) it is not more than 4 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.70.A. or Table 3.2.2.70.B.

(2) The *building* referred to in Sentence (1) shall be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min,

(c) if the *building* is not *sprinklered*, roof assemblies shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min, except that in *buildings* not more than 1 *storey* in *building height*, the *fire-resistance rating* is permitted to be waived provided the roof assembly is constructed as a *fire-retardant treated wood* roof system conforming to Article 3.1.14.1., and the *building area* is not more than,

(i) 1 600 m^2 if facing one *street*,

(ii) 2 000 m^2 if facing two *streets*, or

(iii) 2 400 m^2 if facing three *streets*,

(d) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*, and

(e) *loadbearing* walls, columns and arches supporting a *fire separation* shall have a *fire-resistance rating* not less than that required for the supported assembly.

Table 3.2.2.70.A.
Maximum Building Area, Group F, Division 2, up to 4 Storeys

Forming Part of Sentence 3.2.2.70.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	3 200	4 000	4 800
2.	2	1 600	2 000	2 400
3.	3	1 070	1 340	1 600
4.	4	800	1 000	1 200

Table 3.2.2.70.B.
Maximum Building Area, Group F, Division 2, up to 4 Storeys, Increased Area, Sprinklered

Forming Part of Sentence 3.2.2.70.(1)

Item	Column 1	Column 2

	No. of *Storeys*	Maximum Area, m^2
1.	1	9 600
2.	2	4 800
3.	3	3 200
4.	4	2 400

3.2.2.71. Group F, Division 2, up to 2 Storeys

(1) A *building* classified as Group F, Division 2 is permitted to conform to Sentence (2) provided,

(a) it is not more than 2 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.71.

Table 3.2.2.71.
Maximum Building Area, Group F, Division 2, up to 2 Storeys

Forming Part of Sentence 3.2.2.71.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	1 000	1 250	1 500
2.	2	600	750	900

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min, and

(b) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

3.2.2.72. Group F, Division 2, up to 2 Storeys, Sprinklered

(1) A *building* classified as Group F, Division 2 is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 2 *storeys* in *building height*, and

(c) it has a *building area* not more than,

(i) 4 500 m^2 if 1 *storey* in *building height*, or

(ii) 1 800 m^2 if 2 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min, and

(b) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

3.2.2.73. Group F, Division 3, Any Height, Any Area

(1) Except as permitted by Articles 3.2.2.74. to 3.2.2.83., a *building* classified as Group F, Division 3 shall conform to Sentence (2).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered* if it is regulated by Subsection 3.2.6.,

(b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h, except that floor assemblies are permitted to be *fire separations* with a *fire-resistance rating* not less than 1 h in a *storage garage* with all *storeys* constructed as *open-air storeys*,

(c) *mezzanines* shall have a *fire-resistance rating* not less 1 h,

(d) if the *building* is not *sprinklered*, roof assemblies shall have a *fire-resistance rating* not less than 1 h, and

(e) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.74. Group F, Division 3, up to 6 Storeys

(1) A *building* classified as Group F, Division 3 is permitted to conform to Sentence (2) provided,

(a) it is not more than 6 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.74.

Table 3.2.2.74.
Maximum Building Area, Group F, Division 3, up to 6 Storeys

Forming Part of Sentence 3.2.2.74.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	not limited	not limited	not limited
2.	2	7 200	9 000	10 800
3.	3	4 800	6 000	7 200
4.	4	3 600	4 500	5 400
5.	5	2 880	3 600	4 320

6.	6	2 400	3 000	3 600

(2) The *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h,

(c) roof assemblies shall have a *fire-resistance rating* not less than 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.75. Group F, Division 3, up to 6 Storeys, Sprinklered

(1) A *building* classified as Group F, Division 3 is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 6 *storeys* in *building height*, and

(c) it has a *building area*,

(i) that is not limited if the *building* is not more than 1 *storey* in *building height*,

(ii) not more than 21 600 m^2 if 2 *storeys* in *building height*,

(iii) not more than 14 400 m^2 if 3 *storeys* in *building height*,

(iv) not more than 10 800 m^2 if 4 *storeys* in *building height*,

(v) not more than 8 640 m^2 if 5 *storeys* in *building height*, or

(vi) not more than 7 200 m^2 if 6 *storeys* in *building height*.

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.76. Group F, Division 3, up to 4 Storeys

(1) A *building* classified as Group F, Division 3 is permitted to conform to Sentence (2) provided,

(a) it is not more than 4 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.76.

Table 3.2.2.76.
Maximum Building Area, Group F, Division 3, up to 4 Storeys

Forming Part of Sentence 3.2.2.76.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	4 800	6 000	7 200
2.	2	2 400	3 000	3 600
3.	3	1 600	2 000	2 400
4.	4	1 200	1 500	1 800

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min,

(c) roof assemblies shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min, except that in a *building* not more than 1 *storey* in *building height*, the *fire-resistance rating* is permitted to be waived provided the roof assembly is constructed as a *fire-retardant treated wood* roof system conforming to Article 3.1.14.1., and the *building area* is not more than,

(i) 2 400 m^2 if facing one *street*,

(ii) 3 000 m^2 if facing two *streets*, or

(iii) 3 600 m^2 if facing three *streets*, and

(d) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

3.2.2.77. Group F, Division 3, up to 4 Storeys, Sprinklered

(1) A *building* classified as Group F, Division 3 is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 4 *storeys* in *building height*, and

(c) it has a *building area* not more than,

(i) 14 400 m^2 if 1 *storey* in *building height*,

(ii) 7 200 m^2 if 2 *storeys* in *building height*,

(iii) 4 800 m^2 if 3 *storeys* in *building height*, or

(iv) 3 600 m^2 if 4 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min, and

(c) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

3.2.2.78. Group F, Division 3, up to 2 Storeys

(1) A *building* classified as Group F, Division 3 is permitted to conform to Sentence (2) provided,

(a) it is not more than 2 *storeys* in *building height*, and

(b) it has a *building area* not more than the value in Table 3.2.2.78.

Table 3.2.2.78.
Maximum Building Area, Group F, Division 3, up to 2 Storeys

Forming Part of Sentence 3.2.2.78.(1)

Item	Column 1	Column 2	Column 3	Column 4
	No. of *Storeys*	Maximum Area, m^2		
		Facing 1 *Street*	Facing 2 *Streets*	Facing 3 *Streets*
1.	1	1 600	2 000	2 400
2.	2	800	1 000	1 200

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min,

(b) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

3.2.2.79. Group F, Division 3, up to 2 Storeys, Sprinklered

(1) A *building* classified as Group F, Division 3 is permitted to conform to Sentence (2) provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 2 *storeys* in *building height*, and

(c) it has a *building area* not more than,

(i) 7 200 m^2 if 1 *storey* in *building height*, or

(ii) 2 400 m^2 if 2 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and,

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min,

(b) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall,

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

3.2.2.80. Group F, Division 3, 1 Storey

(1) A *building* classified as Group F, Division 3 is permitted to be of *heavy timber construction* or *noncombustible construction* used singly or in combination provided,

(a) it is not more than 1 *storey* in *building height*, and

(b) it has a *building area* not more than,

(i) 5 600 m^2 if facing one *street*,

(ii) 7 000 m^2 if facing two *streets*, or

(iii) 8 400 m^2 if facing three *streets*.

3.2.2.81. Group F, Division 3, 1 Storey, Sprinklered

(1) A *building* classified as Group F, Division 3 is permitted to be of *heavy timber construction* or *noncombustible construction* used singly or in combination provided,

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 1 *storey* in *building height*, and

(c) it has a *building area* not more than 16 800 m^2.

3.2.2.82. Group F, Division 3, 1 Storey, Any Area, Low Fire Load Occupancy

(1) A *building* classified as Group F, Division 3 is permitted to conform to Sentence (2) provided it is,

(a) not more than 1 *storey* in *building height*,

(b) used solely for low *fire load occupancies* such as,

(i) power generating plants, or

(ii) plants for the manufacture or storage of *noncombustible* materials, and

(c) not limited in *building area*.

(2) The *building* referred to in Sentence (1) shall be of *noncombustible construction*.

3.2.2.83. Group F, Division 3, Storage Garages up to 22 m High

(1) A *building* used as a *storage garage* with all *storeys* constructed as *open-air storeys* and having no other *occupancy* above it is permitted to have its floor, wall, ceiling and roof assemblies constructed without a *fire-resistance rating* provided it is,

(a) of *noncombustible construction*,

(b) not more than 22 m high, measured between *grade* and the ceiling level of the top *storey*,

(c) not more than 10 000 m^2 in *building area*, and

(d) designed so that every portion of each *floor area* is within 60 m of an exterior wall opening.

3.2.3. Spatial Separation and Exposure Protection

3.2.3.1. Limiting Distance and Area of Unprotected Openings

(1) Except as permitted by Articles 3.2.3.10. to 3.2.3.12., the area of *unprotected openings* in an *exposing building face* for the applicable *limiting distance* shall be not more than the value determined in accordance with,

(a) Table 3.2.3.1.B. or Table 3.2.3.1.C. for an *exposing building face* conforming to Article 3.2.3.2. of a *building* or *fire compartment* that is not *sprinklered*, or

(b) Table 3.2.3.1.D. or Table 3.2.3.1.E. for an *exposing building face* conforming to Article 3.2.3.2. of a *sprinklered fire compartment* that is part of a *building* that is *sprinklered* in conformance with Section 3.2.

(2) The area of the *unprotected openings* in an *exposing building face* shall be the aggregate area of *unprotected openings* expressed as a percentage of the area of the *exposing building face* in Table 3.2.3.1.B., Table 3.2.3.1.C., Table 3.2.3.1.D. or Table 3.2.3.1.E.

(3) For the purpose of determining the type of construction and cladding and the *fire-resistance rating* of an exterior wall,

(a) the *exposing building face* shall be taken as the projection of the exterior wall onto a vertical plane located so that no portion of the exterior wall of the *building* or of a *fire compartment*, if the *fire compartment* complies with the requirements of Article 3.2.3.2., is between the vertical plane and the line to which the *limiting distance* is measured, and

(b) the area of *unprotected openings* shall be determined from Table 3.2.3.1.B., Table 3.2.3.1.C., Table 3.2.3.1.D. or Table 3.2.3.1.E.

(4) For the purpose of determining the actual percentage of *unprotected openings* permitted in an exterior wall, the location of the *exposing building face* is permitted to be taken at a vertical plane located so that there are no *unprotected openings* between the vertical plane and the line to which the *limiting distance* is measured.

(5) Except for *buildings* that are *sprinklered*, where the *limiting distance* is 2 m or less, the area of each individual *unprotected opening* in an *exposing building face* shall not be greater than,

(a) the area in Table 3.2.3.1.A., or

(b) for a *limiting distance* equal to or greater than 1.2 m, the area calculated as follows:

$$\text{Area} = 0.24\ [(2 \times \text{LD}) - 1.2]^2$$

where,

Area = area of the *unprotected opening* in m^2, and

LD = *limiting distance* in m.

Table 3.2.3.1.A
Maximum Concentrated Area of Unprotected Openings

Forming Part of Sentence 3.2.3.1.(5)

Item	Column 1 *Limiting Distance*, m	Column 2 Maximum Area of Individual *Unprotected Openings*, m^2
1.	1.2	0.35
2.	1.5	0.78
3.	2.0	1.88

(6) The distance between individual *unprotected openings* described in Sentence (5) that serve a single room or space described in Sentence (7) shall not be less than,

(a) 2 m measured horizontally where the *unprotected openings* are on the same *exposing building face*, or

(b) 2 m measured vertically where the *unprotected openings* both serve,

(i) the single room or space, or

(ii) another room or space on the same *storey*.

(7) For the purpose of Sentence (6), "single room or space" means a room or space that,

(a) is not divided by a wall,

(b) is divided by,

(i) a wall that extends less than 1.5 m from the interior face of the exterior wall, or

(ii) a partial height wall, or

(c) consists of two or more stacked spaces that are on the same *storey*.

(8) If a *building* has any *storey* that is not *sprinklered* and firefighting facilities cannot reach it within 10 min of the alarm being received, the required *limiting distance* shall be doubled.

(9) If the surface temperature on the unexposed surface of a wall assembly exceeds the temperature limit of a standard fire test as permitted by Article 3.1.7.2., an allowance shall be made for the radiation from the hot unexposed wall surface by adding an equivalent area of *unprotected opening* to the area of actual openings as follows:

$$A_C = A + (A_F \times F_{EO})$$

where,

A_C = corrected area of *unprotected openings* including actual and equivalent openings,

A = actual area of *unprotected openings*,

A_F = area of exterior surface of the *exposing building face*, exclusive of openings, on which the temperature limit of the standard test is exceeded, and

F_{EO} = an equivalent opening factor derived from the following expression:

$$F_{EO} = \frac{(T_u + 273)^4}{(T_e + 273)^4}$$

where,

T_u = average temperature in degrees Celsius of the unexposed wall surface at the time the required *fire-resistance rating* is reached under test conditions,

T_e = 892°C for a *fire-resistance rating* not less than 45 min, 927°C for a *fire-resistance rating* not less than 1 h, and 1 010°C for a *fire-resistance rating* not less than 2 h.

(10) Unless a *closure* used to protect an opening in an *exposing building face* has a protective performance equivalent to that required for the wall assembly in which it is located, an equivalent area of *unprotected opening*, determined in accordance with the procedures of Sentence (9) shall be added to the greater of,

(a) the actual area of *unprotected openings*, or

(b) the corrected area of *unprotected openings*.

(11) The required *limiting distance* for an *exposing building face* is permitted to be measured to a point beyond the property line that is not the centre line of a *street*, lane or public thoroughfare if,

(a) the owners of the properties on which the *limiting distance* is measured and the *municipality* enter into an agreement in which such owners agree that,

(i) each owner covenants that, for the benefit of land owned by the other covenantors, the owner will not *construct* a *building* on his or her property unless the *limiting distance* for *exposing building faces* in respect of the proposed *construction* is measured in accordance with the agreement,

(ii) the covenants contained in the agreement are intended to run with the lands, and the agreement shall be binding on the parties and their respective heirs, executors, administrators, successors and assigns,

(iii) the agreement shall not be amended or deleted from title without the consent of the *municipality*, and

(iv) they will comply with such other conditions as the *municipality* considers necessary, including indemnification of the *municipality* by the other parties, and

(b) the agreement referred to in Clause (a) is registered against the title of the properties to which it applies.

(12) Where an agreement referred to in Sentence (11) is registered against the title of a property, the *limiting distance* for *exposing building faces* shall be measured to the point referred to in the agreement.

Table 3.2.3.1.B.
Unprotected Opening Limits for a Building or Fire Compartment that is not Sprinklered

Forming Part of Article 3.2.3.1.

Item	*Exposing Building Face*		Area of *Unprotected Openings* for Groups A, C, D, and F, Division 3 *Occupancies*, %																										
	Maximum Area, m^2	Ratio (L/H or H/L)[1]	*Limiting Distance*, m																										
			0	1.2	1.5	2	2.5	3	4	5	6	7	8	9	10	11	12	13	14	16	18	20	25	30	35	40	45	50
1.	10	Less than 3:1	0	8	10	18	29	46	91	100																			
		3:1 to 10:1	0	8	12	21	33	50	96	100																			
		over 10:1	0	11	18	32	48	68	100																				
2.	15	Less than 3:1	0	7	9	14	22	33	63	100																			
		3:1 to 10:1	0	8	10	17	25	37	67	100																			
		over 10:1	0	10	15	26	39	53	87	100																			
3.	20	Less than 3:1	0	7	9	12	18	26	49	81	100																		
		3:1 to 10:1	0	8	10	15	21	30	53	85	100																		
		over 10:1	0	9	14	23	33	45	72	100																			
4.	25	Less than 3:1	0	7	8	11	16	23	41	66	98	100																	
		3:1 to 10:1	0	8	9	13	19	26	45	70	100																		
		over 10:1	0	9	13	21	30	39	62	90	100																		

5.	30	Less than 3:1	0	7	8	11	15	20	35	56	83	100																
		3:1 to 10:1	0	7	9	12	17	23	39	61	88	100																
		over 10:1	0	8	12	19	27	36	56	79	100																	
6.	40	Less than 3:1	0	7	8	10	13	17	28	44	64	89	100															
		3:1 to 10:1	0	7	8	11	15	20	32	48	69	93	100															
		over 10:1	0	8	11	17	24	31	47	66	88	100																
7.	50	Less than 3:1	0	7	8	9	12	15	24	37	53	72	96	100														
		3:1 to 10:1	0	7	8	10	14	18	28	41	57	77	100															
		over 10:1	0	8	10	15	21	28	41	57	76	97	100															
8.	60	Less than 3:1	0	7	8	9	11	14	21	32	45	62	81	100														
		3:1 to 10:1	0	7	8	10	13	16	25	36	49	66	85	100														
		over 10:1	0	8	10	14	20	25	38	51	67	85	100															
9.	80	Less than 3:1	0	7	7	8	10	12	18	26	36	48	62	79	98	100												
		3:1 to 10:1	0	7	8	9	11	14	21	29	40	52	67	84	100													
		over 10:1	0	8	9	13	17	22	32	44	56	70	86	100														
10.	100	Less than 3:1	0	7	7	8	9	11	16	22	30	40	51	65	80	97	100											
		3:1 to 10:1	0	7	8	9	11	13	18	25	34	44	56	69	84	100												
		over 10:1	0	7	9	12	16	20	29	39	49	61	74	89	100													
11.	150	Less than 3:1	0	7	7	8	9	10	13	17	22	29	37	46	56	67	79	93	100									

		3:1 to 10:1	0	7	7	8	10	11	15	20	26	33	41	50	60	71	84	97	100									
		over 10:1	0	7	8	11	13	17	24	31	39	48	57	68	79	91	100											
12.	250	Less than 3:1	0	7	7	7	8	9	10	13	16	20	25	30	36	43	51	59	68	87	100							
		3:1 to 10:1	0	7	7	8	9	10	12	15	19	24	28	34	40	47	55	63	72	92	100							
		over 10:1	0	7	8	9	11	14	19	24	30	36	43	50	57	65	73	82	92	100								
13.	350	Less than 3:1	0	7	7	7	8	8	9	11	14	16	20	24	28	33	38	44	50	64	81	99	100					
		3:1 to 10:1	0	7	7	8	9	9	11	13	16	19	23	27	32	37	42	48	55	69	85	100						
		over 10:1	0	7	8	9	10	12	16	21	25	30	36	41	47	53	59	66	73	88	100							
14.	500	Less than 3:1	0	7	7	7	7	8	9	10	12	14	16	19	22	25	29	33	37	47	59	71	100					
		3:1 to 10:1	0	7	7	7	8	8	10	12	14	16	19	22	25	29	33	37	41	52	63	76	100					
		over 10:1	0	7	7	8	9	11	14	18	22	25	30	34	38	43	48	53	58	70	82	96	100					
15.	1 000	Less than 3:1	0	7	7	7	7	7	8	9	9	10	12	13	14	16	18	20	22	27	33	39	58	82	100			
		3:1 to 10:1	0	7	7	7	7	8	9	10	11	12	14	15	17	19	21	23	26	31	37	43	63	86	100			
		over 10:1	0	7	7	8	8	9	11	13	16	19	21	24	27	30	33	36	39	46	53	60	82	100				
16.	2 000	Less than 3:1	0	7	7	7	7	7	7	8	8	9	9	10	11	12	13	14	15	17	20	23	33	44	58	74	93	100
		3:1 to 10:1	0	7	7	7	7	7	8	8	9	10	11	12	13	14	15	16	17	20	23	27	37	49	63	79	97	100
		over 10:1	0	7	7	7	8	8	9	11	12	14	16	18	19	21	23	25	27	32	36	40	53	66	82	99	100	

Notes to Table 3.2.3.1.B.:

(1) Apply whichever is greater,

L = Length of *exposing building face*,

H = Height of *exposing building face*.

Table 3.2.3.1.C.
Unprotected Opening Limits for a Building or Fire Compartment that is not Sprinklered

Forming Part of Article 3.2.3.1.

Notes to Table 3.2.3.1.C.:

(1) Apply whichever is greater,

L = Length of *exposing building face*,

H = Height of *exposing building face*.

Table 3.2.3.1.D.
Unprotected Opening Limits for a Building or Fire Compartment that is Sprinklered

Forming Part of Article 3.2.3.1.

Item	*Exposing Building Face*	Area of *Unprotected Opening* for Groups A, B, C, D and F, Division 3 *Occupancies, %*											
	Maximum Area, m^2	*Limiting Distance*, m											
		0	1.2	1.5	2	2.5	3	4	5	6	7	8	9
1,	10	0	16	24	42	66	100						
2.	15	0	16	20	34	50	74	100					
3.	20	0	16	20	30	42	60	100					
4.	25	0	16	18	26	38	52	90	100				
5.	30	0	14	18	24	34	46	78	100				
6.	40	0	14	16	22	30	40	64	96	100			
7.	50	0	14	16	20	28	36	56	82	100			
8.	60	0	14	16	20	26	32	50	72	98	100		
9.	80	0	14	16	18	22	28	42	58	80	100		
10.	100	0	14	16	18	22	26	36	50	68	88	100	
11.	150 or more	0	14	14	16	20	22	30	40	52	66	82	100

Table 3.2.3.1.E.
Unprotected Opening Limits for a Building or Fire Compartment that is Sprinklered

Forming Part of Article 3.2.3.1.

Item	*Exposing Building Face*	Area of *Unprotected Opening* for Groups E and F, Division 1 and 2 *Occupancies, %*																
	Maximum Area, m^2	*Limiting Distance*, m																
		0	1.2	1.5	2	2.5	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	10	0	8	12	20	34	50	96	100										
2.	15	0	8	10	16	26	36	68	100										
3.	20	0	8	10	14	22	30	54	86	100									
4.	25	0	8	10	14	18	26	44	70	100									
5.	30	0	8	8	12	18	24	40	60	88	100								
6.	40	0	8	8	12	16	20	32	48	68	94	100							
7.	50	0	8	8	10	14	18	28	40	58	76	10							

												0							
8.	60	0	8	8	10	12	16	24	36	50	66	86	100						
9.	80	0	8	8	10	12	14	20	30	40	52	66	84	100					
10.	100	0	8	8	8	10	12	18	26	34	44	56	70	84	100				
11.	150	0	8	8	8	10	12	16	20	26	32	40	50	60	72	84	98	100	
12.	200 or more	0	8	8	8	8	10	14	18	22	28	34	42	50	60	68	80	92	100

3.2.3.2. Area of Exposing Building Face

(1) Except as permitted by Sentences (2), and (3), the area of an *exposing building face* shall be calculated as the total area of exterior wall facing in one direction on any side of a *building* measured from the finished ground level to the uppermost ceiling.

(2) If a *building* is divided by *fire separations* into *fire compartments*, the area of *exposing building face* is permitted to be calculated for each *fire compartment* provided the *fire separations* have a *fire-resistance rating* not less than 45 min.

(3) In a *building* that contains an *interconnected floor space*, the area of the *exposing building face* for the *interconnected floor space* is permitted to be determined by considering each *storey* as a separate *fire compartment* notwithstanding openings through the floor assemblies.

3.2.3.3. Wall Enclosing Attic or Roof Space

(1) An exterior wall enclosing an *attic or roof space* and located above an *exposing building face*, shall be constructed in conformance with the requirements for the *exposing building face*.

3.2.3.4. Reserved

3.2.3.5. Wall with Limiting Distance Less Than 1.2 m

(1) Openings in a wall that has a *limiting distance* less than 1.2 m shall be protected by *closures* whose *fire-protection rating* is in conformance with the *fire-resistance rating* required for the wall.

(2) Wired glass or glass block shall not be used for a *closure* referred to in Sentence (1).

3.2.3.6. Combustible Projections

(1) Except for a *building* containing one or two *dwelling units* only, *combustible* projections on the exterior of a wall that could expose an adjacent *building* to fire spread and are more than 1 m above ground level, including balconies, platforms, *canopies* and stairs, shall not be permitted within,

(a) 1.2 m of a property line or the centre line of a *public way*, or

(b) 2.4 m of a *combustible* projection on another *building* on the same property.

(2) Where the *exposing building face* has a *limiting distance* of not more than 0.45 m, projecting roof soffits shall not be *constructed* above the *exposing building face*.

(3) Where the *exposing building face* has a *limiting distance* of more than 0.45 m, the face of roof soffits above the *exposing building face* shall not project to less than 0.45 m from the property line.

(4) Where roof soffits project to less than 1.2 m from the centre line of a lane or public thoroughfare or from an imaginary line between two *buildings* or *fire compartments* on the same property, they shall,

(a) have no openings, and

(b) be protected by,

(i) not less than 0.38 mm thick sheet steel,

(ii) unvented aluminum conforming to CAN/CGSB-93.2-M, "Prefinished Aluminum Siding, Soffits and Fascia, for Residential Use",

(iii) not less than 12.7 mm thick gypsum soffit board or gypsum ceiling board installed according to CSA A82.31-M, "Gypsum Board Application",

(iv) not less than 11 mm thick plywood,

(v) not less than 12.5 mm thick OSB or waferboard, or

(vi) not less than 11 mm thick lumber.

(5) For *buildings* of *combustible construction*, materials installed to provide the required protection of soffits may be covered with a *combustible* or *noncombustible* finish material.

3.2.3.7. Construction of Exposing Building Face

(1) Except as provided by Sentences (3) to (6) and Articles 3.2.3.10. and 3.2.3.11, the *fire-resistance rating*, construction and cladding for *exposing building faces* of *buildings* or *fire compartments* shall comply with Table 3.2.3.7.

(2) Reserved

(3) Except as provided by Sentences (4) to (6), cladding for *buildings* or *fire compartments* where the maximum permitted area of *unprotected openings* is more than 10% of the *exposing building face* need not be *noncombustible* where the wall assembly complies with the requirements of Sentences 3.1.5.5.(1), (3) and (4) when tested in conformance with CAN/ULC-S134, "Fire Test of Exterior Wall Assemblies".

(4) Except as provided by Sentence (6), cladding for *buildings* or *fire compartments* where the maximum permitted area of *unprotected openings* is more than 10% but not more than 25% of the *exposing building face* need not be *noncombustible* where the wall assembly complies with Article 3.1.5.5.

(5) Except as provided by Sentence (6), cladding for *buildings* or *fire compartments* where the maximum permitted area of *unprotected openings* is more than 25% but not more than 50% of the *exposing building face* need not be *noncombustible* where,

(a) the *limiting distance* is greater than 5 m,

(b) the *building* or *fire compartment* and all *combustible attic or roof spaces* are *sprinklered*,

(c) the cladding,

(i) conforms to Subsection 9.27.6., 9.27.7., 9.27.8., 9.27.9. or 9.27.10.,

(ii) is installed without furring members, or on furring not more than 25 mm thick, over gypsum sheathing at least 12.7 mm thick or over masonry, and

(iii) after conditioning in conformance with ASTM D2898, "Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing", has a *flame-spread rating* not greater than 25 on the exterior face when tested in accordance with Sentence 3.1.12.1.(1),

(d) the cladding,

(i) conforms to Subsection 9.27.12.,

(ii) is installed with or without furring members over gypsum sheathing at least 12.7 mm thick or over masonry,

(iii) has a *flame-spread rating* not greater than 25 when tested in accordance with Sentence 3.1.12.1.(2), and

(iv) does not exceed 2 mm in thickness exclusive of fasteners, joints and local reinforcements, or

(e) the wall assembly complies with Article 3.1.5.5.

(6) Subject to Sentence (7), cladding for *buildings* within the scope of Article 3.2.2.43A. or 3.2.2.50A. that exceed 4 *storeys* in *building height* or for *fire compartments* in such *buildings* where the maximum permitted area of *unprotected openings* is more than 10% of the *exposing building face* need not be *noncombustible* where the wall assembly complies with the requirements of Sentences 3.1.5.5.(3) and (4) when tested in accordance with CAN/ULC-S134, "Fire Test of Exterior Wall Assemblies".

(7) A wall assembly described in Sentence (6) that includes *combustible* cladding of *fire-retardant treated wood* shall be tested for fire exposure after the cladding has been conditioned in conformance with ASTM D2898, "Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing".

(8) The construction requirements for the *exposing building face* that are listed in Table 3.2.3.7. shall be satisfied before the area of *unprotected openings* may be increased as permitted by Sentence 3.2.3.12.(1).

Table 3.2.3.7.
Minimum Construction Requirements for Exposing Building Faces

Forming Part of Sentences 3.2.3.7.(1) and (8)

Item	Column 1 *Occupancy* Classification of *Building* or *Fire*	Column 2 Maximum Area of *Unprotected Openings*	Column 3 Minimum Required *Fire-Resistance Rating*	Column 4 Type of Construction Required	Column 5 Type of Cladding Required

	Compartment	Permitted, % of *Exposing Building Face* Area			
1.	Group A, B, C, D, or Group F, Division 3	0 to 10	1 h	*Noncombustible*	*Noncombustible*
		> 10 to 25	1 h	*Combustible* or *Noncombustible*	*Noncombustible*
		> 25 to 50	45 min	*Combustible* or *Noncombustible*	*Noncombustible*
		> 50 to < 100	45 min	*Combustible* or *Noncombustible*	*Combustible* or *Noncombustible* (1)
2.	Group E, or Group F, Division 1 or 2	0 to 10	2 h	*Noncombustible*	*Noncombustible*
		> 10 to 25	2 h	*Combustible* or *Noncombustible*	*Noncombustible*
		> 25 to 50	1 h	*Combustible* or *Noncombustible*	*Noncombustible*
		> 50 to < 100	1 h	*Combustible* or *Noncombustible*	*Combustible* or *Noncombustible* (1)

Notes to Table 3.2.3.7.:

(1) Cladding for *buildings* over 4 *storeys* in *building height* within the scope of Article 3.2.2.43A. or 3.2.2.50A. or for *fire compartments* in such *buildings* is required to be *noncombustible*.

3.2.3.8. Protection of Exterior Building Face

(1) Except as permitted by Sentence (3) and in addition to the requirements of Sentence 3.2.3.7.(1) and where the maximum permitted area of *unprotected openings* is greater than 10% of the *exposing building face*, foamed plastic insulation used in an exterior wall of a *building* more than 3 *storeys* in *building height* shall be protected on its exterior surface by,

(a) concrete or masonry not less than 25 mm thick, or

(b) *noncombustible* material that complies with the criteria for testing and conditions of acceptance of Sentence (2) when tested in conformance with CAN/ULC-S101, “Fire Endurance Tests of Building Construction and Materials”.

(2) The criteria for testing and the conditions of acceptance for a wall assembly to satisfy the requirements of Clause (1)(b) are that,

(a) the fire exposed area of the wall assembly shall be not less than 9.3 m^2 and have no dimension less than 2.75 m,

(b) the exposed surface will include typical vertical and horizontal joints,

(c) the test shall be continued for not less than 15 min and the standard time/temperature curve of the referenced standard shall be followed,

(d) the *noncombustible* protective material will remain in place and no through openings will develop that are visible when viewed normal to the face of the material, and

(e) the *noncombustible* protective material will not disintegrate in a manner that would permit fire to propagate along the surface of the test assembly.

(3) The requirements of Sentence (1) are waived for wall assemblies that comply with the requirements of Article 3.1.5.5.

3.2.3.9. Protection of Structural Members

(1) Structural members, including beams, columns and arches, placed wholly or partly outside an exterior face of a *building* that are less than 3 m from the property line or centreline of a public thoroughfare shall be protected from exterior fire by fire protection having a *fire-resistance rating* not less than that required by Articles 3.2.2.20. to 3.2.2.83. for their protection from interior fires, but not less than 1 h.

(2) Structural members of *heavy timber construction*, including beams, columns and arches, placed wholly or partly outside an exterior face of a *building* and 3 m or more from the property line or centreline of a public thoroughfare need not be covered with *noncombustible* cladding.

3.2.3.10. Unlimited Unprotected Openings

(1) An *exposing building face* of an *open-air storey* in a *storage garage* is permitted to have unlimited *unprotected openings* provided it has a *limiting distance* not less than 3 m.

(2) The *exposing building face* of a *storey* that faces a *street* and is at the same level as the *street* is permitted to have unlimited *unprotected openings* if the *limiting distance* is not less than 9 m.

3.2.3.11. Low Fire Load, 1 Storey Building

(1) An *exposing building face* of a *building* of *low hazard industrial occupancy* conforming to Article 3.2.2.82. is permitted to be of *noncombustible construction* without a *fire-resistance rating* provided,

(a) it is not a *loadbearing* wall, and

(b) the *limiting distance* is not less than 3 m.

3.2.3.12. Area Increase for Unprotected Openings

(1) Except as required by Sentence 3.2.3.7.(8), the maximum area of *unprotected openings* in any *exposing building face* or *fire compartment* of a *building* that is not *sprinklered* is permitted to be doubled if the openings are glazed with,

(a) glass block conforming to the requirements of Article 3.1.8.14., or

(b) wired glass assemblies conforming to MMAH Supplementary Standard SB-2, “Fire Performance Ratings”.

3.2.3.13. Protection of Exit Facilities

(1) Except as required by Sentence (3) and as permitted by Sentence 3.4.4.3.(1), if the plane of an exterior wall of an *exit* enclosure forms an angle less than 135° with the plane of an exterior wall of the *building* it serves, and an opening in the exterior wall of the *exit* enclosure could be exposed to fire from an opening in the exterior wall of the *building*,

the opening in either the exterior wall of the *exit* or the exterior wall of the *building* shall be protected in conformance with the requirements of Sentence (4) where the opening in the exterior wall of the *building* is within 3 m horizontally and,

(a) less than 10 m below an opening in the exterior wall of the *exit*, or

(b) less than 2 m above an opening in the exterior wall of the *exit*.

(2) If an unenclosed exterior *exit* stair or ramp could be exposed to fire from an opening in the exterior wall of the *building* it serves, the opening in the exterior wall of the *building* shall be protected in conformance with the requirements of Sentence (4) where the opening in the exterior wall of the *building* is within 3 m horizontally and,

(a) less than 10 m below the *exit* stair or ramp, or

(b) less than 5 m above the *exit* stair or ramp.

(3) Except as permitted by Sentence 3.4.4.3.(1), if an exterior *exit* door in one *fire compartment* is within 3 m horizontally of an opening in another *fire compartment* and the exterior walls of these *fire compartments* intersect at an exterior angle of less than 135°, the opening shall be protected in conformance with the requirements of Sentence (4).

(4) The opening protection referred to in Sentences (1) to (3) shall consist of,

(a) glass block conforming to the requirements of Article 3.1.8.14.,

(b) a wired glass assembly conforming to MMAH Supplementary Standard SB-2, “Fire Performance Ratings”, or

(c) a *closure* conforming to the requirements of Subsection 3.1.8. and Articles 3.2.3.1. and 3.2.3.14.

3.2.3.14. Wall Exposed to Another Wall

(1) Except as required by Sentences (3) and 3.2.3.13.(1) or as permitted by Sentence 3.2.3.19.(4), if an *unprotected opening* in an exterior wall of a *fire compartment* is exposed to an *unprotected opening* in the exterior wall of another *fire compartment*, and the planes of the two walls are parallel or at an angle less than 135°, measured from the exterior of the *building*, the *unprotected openings* in the two *fire compartments* shall be separated by a distance not less than D_O,

where,

D_O = 2D – [(θ/90) x D] but in no case less than 1 m, and

D = the greater required *limiting distance* for the *exposing building faces* of the two *fire compartments*, and

θ = the angle made by the intersecting planes of the *exposing building faces* of the two *fire compartments* (in the case where the exterior walls are parallel and face each other, θ = 0°).

(2) The exterior wall of each *fire compartment* referred to in Sentence (1) within the distance, D_O, shall have a *fire-resistance rating* not less than that required for the interior vertical *fire separation* between the *fire compartment* and the remainder of the *building*.

(3) Sentence (1) does not apply to *unprotected openings* of *fire compartments* within a *building* that is *sprinklered*, but shall apply to,

(a) *unprotected openings* of *fire compartments* on opposite sides of a *firewall*, and

(b) exposure from *unprotected openings* of a *fire compartment* that is not protected by an automatic sprinkler system.

3.2.3.15. Wall Exposed to Adjoining Roof

(1) Except as permitted by Sentence 3.2.3.19.(4), if a wall in a *building* is exposed to a fire hazard from an adjoining roof of a separate *fire compartment* that is not *sprinklered* in the same *building*, and the exposed wall contains windows within 3 *storeys* vertically and 5 m horizontally of the roof, the roof shall contain no skylights within 5 m of the exposed wall.

3.2.3.16. Protection of Soffits

(1) Except as permitted by Sentences (2) to (4), where a common *attic or roof space* spans more than two *suites* of *residential occupancy* or more than two patients' or residents' sleeping rooms in a Group B, Division 2 or 3 *occupancy*, and the common *attic or roof space* projects beyond the exterior wall of the *building*, the portion of any soffit or other surface enclosing the projection that is less than 2.5 m vertically above a window or door and less than 1.2 m from either side of the window or door, shall have no openings and shall be protected by,

(a) *noncombustible* material,

(i) not less than 0.38 mm thick, and

(ii) having a melting point not below 650°C,

(b) not less than 12.7 mm thick gypsum soffit board or gypsum wallboard installed according to CSA A82.31-M, "Gypsum Board Application",

(c) not less than 11 mm thick plywood,

(d) not less than 12.5 mm thick OSB or waferboard, or

(e) not less than 11 mm thick lumber.

(2) Where an *attic or roof space*, including its adjoining eave overhangs, is separated by construction conforming to Article 3.1.11.7. into compartments such that the resulting spaces are not common to more than two *suites* of *residential occupancy* or more than two patients' or residents' sleeping rooms in a Group B, Division 2 or 3 *occupancy*, the requirements in Sentence (1) do not apply.

(3) If an eave overhang is completely separated from the remainder of the *attic or roof space* by *fire blocks*, the requirements of Sentence (1) do not apply.

(4) The protection required by Sentence (1) for projections is permitted to be omitted if,

(a) the *fire compartments* behind the window and door openings are *sprinklered* in accordance with Article 3.2.5.13., and

(b) all rooms, including closets and bathrooms, having openings in the wall beneath the soffit are *sprinklered*, notwithstanding exceptions permitted in the standards referenced in Article 3.2.5.13. for the installation of automatic sprinkler systems.

3.2.3.17. Canopy Protection for Vertically Separated Openings

(1) Except as permitted by Sentences (2) and (3), if a *storey* classified as a Group E or Group F, Division 1 or 2 *major occupancy* is required to be separated from the *storey* above by a *fire separation*,

(a) every opening in the exterior wall of the lower *storey* that is located vertically below an opening in the *storey* above shall be separated from the *storey* above by a *canopy* projecting not less than 1 m from the face of the *building* at the intervening floor level, and

(b) the *canopy* required by Clause (a) shall have a *fire-resistance rating* not less than that required for the floor assembly but need not be more than 1 h, except as required elsewhere in this Subsection.

(2) Except as permitted by Sentence (3), the *canopy* required by Sentence (1) is permitted to be omitted if the exterior wall of the upper *storey* is recessed not less than 1 m behind the exterior wall containing the opening in the lower *storey*.

(3) The requirements of Sentences (1) and (2) are permitted to be waived if sprinklers are installed in,

(a) the lower *storey* referred to in Clause (1)(a), and

(b) the *storey* immediately above the lower *storey*.

3.2.3.18. Covered Vehicular Passageway

(1) A covered vehicular passageway designed as a receiving or shipping area shall be separated from every *building* or part of a *building* adjoining it by a *fire separation* having a *fire-resistance rating* not less than 1.5 h.

(2) A covered vehicular passageway constructed below *grade* shall be of *noncombustible construction*.

3.2.3.19. Walkway between Buildings

(1) Except as required by Sentence 3.2.3.20.(2), if *buildings* are connected by a *walkway*, each *building* shall be separated from the *walkway* by a *fire separation* with a *fire-resistance rating* not less than 45 min.

(2) Except as permitted by Sentence (3), a *walkway* connected to a *building* required to be of *noncombustible construction* shall also be of *noncombustible construction*.

(3) A *walkway* connected to a *building* required to be of *noncombustible construction* is permitted to be of *heavy timber construction* provided,

(a) not less than 50% of the area of any enclosing perimeter walls is open to the outdoors, and

(b) the *walkway* is at ground level.

(4) A *walkway* of *noncombustible construction* used only as a pedestrian thoroughfare need not conform to the requirements of Articles 3.2.3.14. and 3.2.3.15.

(5) A *walkway* between *buildings* shall be not more than 9 m wide.

3.2.3.20. Underground Walkway

(1) An underground *walkway* shall not be designed or used for any purpose other than pedestrian travel unless,

(a) the purpose is permitted, and

(b) sprinklers are installed in any space in the *walkway* containing an *occupancy*.

(2) *Buildings* connected by an underground *walkway* shall be separated from the *walkway* by a *fire separation* with a *fire-resistance rating* not less than 1 h.

(3) An underground *walkway* shall be of *noncombustible construction* suitable for an underground location.

(4) In an underground *walkway*,

(a) smoke barrier doors shall be installed at intervals of not more than 100 m, or

(b) the travel distance from the door of an adjacent room or space to the nearest *exit* shall be not more than one and a half times the least allowable travel distance to an *exit* for any of the adjacent *occupancies* as permitted by Sentence 3.4.2.5.(1).

(5) An underground *walkway* between *buildings* shall be not more than 9 m wide.

3.2.3.21. Service Lines under Buildings

(1) A *building* shall not be constructed over an existing buried flammable gas main unless the gas main is encased in a gas-tight conduit in conformance with CAN/CSA-Z662 / Z662.1, “Oil and Gas Pipeline Systems / Commentary on CAN/CSA-Z662-11, Oil and Gas Pipeline Systems”.

3.2.4. Fire Alarm and Detection Systems

3.2.4.1. Determination of Requirement for a Fire Alarm System

(1) Reserved

(2) Except as permitted by Sentences (3) to (5) and Sentence 3.2.4.2.(4), a fire alarm system shall be installed in a *building* that contains,

(a) a *contained use area*,

(b) an *impeded egress zone*,

(c) more than 3 *storeys*, including *storeys* below the *first storey*,

(d) a total *occupant load* more than 300, other than in open air seating areas,

(e) an *occupant load* more than 150 above or below the *first storey*, other than in open air seating areas,

(f) a school, college or child care facility, with an *occupant load* more than 40,

(g) a licensed beverage establishment or a restaurant, with an *occupant load* more than 150,

(h) a *medium hazard industrial occupancy* or a *low hazard industrial occupancy* with an *occupant load* more than 75 above or below the *first storey*,

(i) a *residential occupancy* with sleeping accommodation for more than 10 persons,

(j) a *high hazard industrial occupancy* with an *occupant load* more than 25,

(k) an *occupant load* more than 300 below an open air seating area,

(l) an *interconnected floor space* required to conform to Articles 3.2.8.3. to 3.2.8.11,

(m) a *care and treatment occupancy* for more than 10 persons receiving care or treatment, or

(n) a *care occupancy* for more than 10 persons receiving care.

(3) If each *dwelling unit* has direct access to an exterior *exit* facility leading to ground level, a fire alarm system is not required in an apartment *building*,

(a) in which not more than four *dwelling units* share a common *means of egress*, or

(b) that is not more than 3 *storeys* in *building height*.

(4) A fire alarm system is not required in a *hotel* 3 *storeys* or less in *building height* provided each *suite* has direct access to an exterior *exit* facility leading to ground level.

(5) A fire alarm system is not required in a *storage garage* conforming to Article 3.2.2.83. provided there are no other *occupancies* in the *building*.

3.2.4.2. Continuity of Fire Alarm System

(1) Except as permitted by Sentence (6), if there are openings through a *firewall*, other than those for piping, tubing, wiring and totally enclosed *noncombustible* raceways, the requirements in this Subsection shall apply to the *floor areas* on both sides of the *firewall* as if they were in the same *building*.

(2) Except as permitted by Sentence (4), if a *building* contains more than one *major occupancy* and a fire alarm system is required, a single system shall serve all *occupancies*.

(3) Except as permitted by Sentence (4), if a fire alarm system is required in any portion of a *building*, it shall be installed throughout the *building*.

(4) Except as required by Sentence (5), the requirements in this Subsection are permitted to be applied to each portion of a *building* not more than 3 *storeys* in *building height*, in which a vertical *fire separation* having a *fire-resistance rating* not less than 1 h separates the portion from the remainder of the *building* as if it were a separate *building*, provided there are no openings through the *fire separation*, other than those for piping, tubing, wiring and totally enclosed *noncombustible* raceways.

(5) The permission in Sentence (4) to consider separated portions of a *building* as separate *buildings* does not apply to *service rooms* and storage rooms.

(6) *Buildings* interconnected by *walkways* permitted in Articles 3.2.3.19. and 3.2.3.20. or by vestibules provided in conformance with Article 3.2.6.3. shall be treated as separate *buildings* for the purpose of fire alarm installation required by this Subsection.

3.2.4.3. Types of Fire Alarm Systems

(1) A fire alarm system shall be,

(a) a single stage system in a Group F, Division 1 *occupancy*,

(b) a two stage system in a Group B *occupancy* other than those described in Clause (c),

(c) a single or two stage system in a *building* 3 *storeys* or less in *building height* that contains a Group B, Division 3 *occupancy*,

(d) a single stage system in elementary and secondary schools, except for a special needs facility, and

(e) a single or two stage system in all other cases.

3.2.4.4. Description of Fire Alarm Systems

(1) A single stage fire alarm system shall, upon the operation of any manual pull station or *fire detector*, cause an *alarm signal* to sound on all audible signal devices in the system.

(2) A two stage fire alarm system shall,

(a) cause an *alert signal* to sound upon the operation of any manual pull station or *fire detector*,

(b) except for a Group B, Division 2 *occupancy*, automatically cause an *alarm signal* to sound if the *alert signal* is not acknowledged within 5 min of its initiation,

(c) have each manual pull station equipped so that the use of a key or other similar device causes an *alarm signal* to sound and continue to sound upon the removal of the key or similar device from the manual pull station, and

(d) in a *building* containing a *hotel*,

(i) cause an *alarm signal* to sound in the initiating fire zone in the *hotel*, and

(ii) cause an *alert signal* to sound throughout the *hotel* and such parts of the *building* as is necessary to alert *hotel* staff.

(3) A two stage fire alarm system is permitted to be zone coded so that, upon the operation of any manual pull station or *fire detector*,

(a) a coded *alert signal* is sounded indicating the zone of alarm initiation,

(b) the coded *alert signal* is repeated in its entirety no fewer than four times, and

(c) a continuous *alert signal* is sounded upon completion of the coded signals referred to in Clause (b) and Sentence (4).

(4) If a second manual pull station or *fire detector* is operated in a fire alarm system with zone coding as permitted by Sentence (3), in a zone other than that for which the first *alert signal* was sounded, the coded *alert signal* for the first zone shall be completed before the coded *alert signal* for the second zone is repeated no fewer than four times.

3.2.4.5. Installation and Verification of Fire Alarm Systems

(1) Fire alarm systems, including those with voice communication capability, shall be installed in conformance with CAN/ULC-S524, “Installation of Fire Alarm Systems”.

(2) A fire alarm system shall be verified in conformance with CAN/ULC-S537, “Verification of Fire Alarm Systems”, to ensure satisfactory operation.

3.2.4.6. Commissioning of Life Safety and Fire Protection Systems

(1) Where life safety and fire protection systems are installed to comply with the provisions of this Code or the Fire Code made under the *Fire Protection and Prevention Act, 1997*, the commissioning of these integrated systems must be performed as a whole to ensure the proper operation and inter-relationship between the systems.

3.2.4.7. Silencing of Alarm Signals

(1) Except as permitted by Sentence (3), a fire alarm system shall be designed so that when an *alarm signal* is actuated it cannot be silenced automatically before a period of time has elapsed that is not less than,

(a) 5 min for a *building* not required to be equipped with an annunciator, and

(b) 20 min for any other *building*.

(2) Except as permitted by Sentences 3.2.4.20.(9) and 3.2.4.23.(3) and (4), a fire alarm system shall not incorporate manual silencing switches other than those installed inside the fire alarm control unit.

(3) Except as provided by Clause 3.2.4.23.(4)(a), in a *care and treatment occupancy* an *alert signal* is permitted to be silenced automatically after 1 min.

3.2.4.8. Signals to Fire Department

(1) If a fire alarm system is required to be installed and a single stage system is provided, the system shall be designed to notify the fire department in conformance with Sentence (4) that an *alarm signal* has been initiated in,

(a) a Group A *occupancy* having an *occupant load* more than 300,

(b) a Group B *occupancy*,

(c) a Group F, Division 1 *occupancy*,

(d) a *building* regulated by the provisions of Subsection 3.2.6.,

(e) a *building* containing *interconnected floor space* required to conform to Articles 3.2.8.3. to 3.2.8.11., or

(f) a retirement home regulated under the *Retirement Homes Act, 2010* that is a Group C *occupancy*.

(2) A fire alarm system that includes waterflow indicating devices shall be designed to notify the fire department, in conformance with Sentence (4), that an alarm has been initiated.

(3) If a fire alarm system is required to be installed and a two stage system is provided, the system shall be designed to notify the fire department, in conformance with Sentence (4), that an *alert signal* has been initiated.

(4) Notification of the fire department required by Sentences (1) to (3) shall be by way of,

(a) signals to a central station conforming to CAN/ULC-S561, “Installation and Services for Fire Signal Receiving Centres and Systems”, or

(b) the municipal fire alarm system.

(5) Where a single stage fire alarm system is installed in a *building* that is not *sprinklered*, and Sentence (1) does not apply, a legible notice, that is not easily removed, shall be affixed to the wall near each manual pull station stating,

(a) that the fire department is to be notified in the event of a fire emergency, and

(b) the emergency telephone number for the *municipality* or the telephone number of the fire department.

3.2.4.9. Annunciator and Zone Indication

(1) Except as permitted by Sentences (3) to (5), an annunciator shall be installed in close proximity to a *building* entrance that faces a *street* or an access route for fire department vehicles that complies with Sentence 3.2.5.5.(1).

(2) Except as permitted by Sentence (6), the annunciator required by Sentence (1) shall have separate zone indication of the actuation of the alarm initiating devices in each,

(a) *floor area* so that in a *building* that is not *sprinklered*, the area of coverage for each zone is neither more than,

(i) 1 *storey*, nor

(ii) 2 000 m^2,

(b) *floor area* so that in a *building* that is *sprinklered*, the area of coverage for each zone is neither more than,

(i) 1 *storey*, nor

(ii) the system area limits as specified in NFPA 13, “Installation of Sprinkler Systems”,

(c) shaft required to be equipped with *fire detectors*,

(d) air handling system required to be equipped with *smoke detectors*,

(e) fire extinguishing system required by NFPA 96, “Ventilation Control and Fire Protection of Commercial Cooking Operations”,

(f) *contained use area*,

(g) *impeded egress zone*,

(h) *fire compartment* required in Sentence 3.3.3.5.(2), and

(i) *fire compartment* required to be separated by vertical *fire separations* having a *fire-resistance rating* not less than 2 h, other than *dwelling units* described in Subsection 3.3.4.

(3) An annunciator need not be provided for a fire alarm system if not more than one zone indicator is required in Sentence (2).

(4) If an annunciator is not installed as part of a fire alarm system in conformance with Sentence (1), a visual and audible trouble signal device shall be provided inside the main entrance of the *building*.

(5) The requirements in Sentence (1) are waived in a *building*,

(a) Reserved

(b) that has an aggregate area for all *storeys* of not more than 2 000 m^2, and

(c) that is not more than 3 *storeys* in *building height*.

(6) The area limits of Clause (2)(a) are waived for an interior undivided open space used as an arena, a rink or a swimming pool provided that other spaces in the *building* that are separated from the open space are individually zoned in accordance with the requirements of Sentence (2).

(7) A fire alarm control unit installed in close proximity to a *building* entrance that faces a *street* or an access route for fire department vehicles that complies with Sentence 3.2.5.5.(1), is deemed to satisfy the requirement for an annunciator provided all indicators required for an annunciator or trouble signal device are included on the control unit.

(8) In a *building* containing a *hotel* in which a trouble signal sounding device has a silencing switch, a trouble light shall be installed in,

(a) the main reception area serving the *hotel*, or

(b) another continually-supervised location.

(9) In a long-term care home, a remote audiovisual fire alarm trouble signal shall be located at the main nursing station.

3.2.4.10. Electrical Supervision

(1) Electrical supervision shall be provided for a fire alarm system.

(2) If a fire alarm system in a *building* is required by Sentence 3.2.4.9.(1) to have an annunciator, each valve controlling water supplies in a standpipe system, except for hose valves, shall be equipped with an electrically supervised switch for transmitting a trouble signal to the annunciator in the event of movement of the valve handle.

(3) If a fire alarm system is installed in a *building*, an automatic sprinkler system shall be electrically supervised to indicate a supervisory signal on the *building* fire alarm system annunciator for each of the following,

(a) movement of a valve handle that controls the supply of water to sprinklers,

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system,

(c) loss of air pressure in a dry pipe system,

(d) loss of air pressure in a pressure tank,

(e) a significant change in water level in any water storage container used for firefighting purposes,

(f) loss of power to any automatically starting fire pump, and

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for firefighting purposes.

(4) If a fire alarm system is installed in a *building*, a fire pump shall be electrically supervised in accordance with NFPA 20, “Installation of Stationary Pumps for Fire Protection”.

(5) If a fire alarm system is required in a *building*, electrical supervision shall be provided to indicate, on the fire alarm system annunciator, a loss of power to a heat tracing cable that is installed to heat,

(a) a standpipe riser,

(b) a sprinkler line as part of a fire suppression system, or

(c) an *exit* or *means of egress* to keep it free of ice and snow.

(6) In a *building* regulated by the provisions of Subsection 3.2.6., the indication of a supervisory signal in accordance with Sentence (3) shall be transmitted to a proprietary control centre or to an independent central station.

3.2.4.11. Fire Detectors

(1) *Fire detectors* required by this Article shall be connected to the fire alarm system.

(2) Except as provided in Article 3.2.4.16., if a fire alarm system is required, *fire detectors* shall be installed in each,

(a) storage room not within a *dwelling unit*,

(b) *service room* not within a *dwelling unit*,

(c) janitors' room,

(d) room in which hazardous substances are to be used or stored,

(e) elevator or dumbwaiter shaft,

(f) laundry room in a *building* of *residential occupancy*, but not one within a *dwelling unit*, and

(g) *hazardous classroom* and change room in an elementary or secondary school.

3.2.4.12. Smoke and Heat Detectors

(1) If a fire alarm system is required, *smoke detectors* shall be installed in,

(a) each sleeping room and each corridor serving as part of a *means of egress* from sleeping rooms in portions of a *building* classified as Group B *major occupancy*,

(b) each room in a *contained use area* and corridors serving those rooms,

(c) each corridor in portions of a *building* classified as Group A, Division 1 *major occupancy*,

(d) each *public corridor* in portions of a *building* classified as Group C *major occupancy*,

(e) each *exit* stair shaft,

(f) each corridor serving classrooms in elementary and secondary schools, and

(g) each elevator machine room or machinery space.

(2) Except as provided in Article 3.2.4.16., if a fire alarm system is required, *heat detectors* shall be installed in,

(a) every room in portions of *buildings* classified as Group A, Division 1,

(b) except in a *hotel*, in every *suite*, and every room not located within a *suite*, in portions of *buildings* classified as Group C *major occupancy* and more than 3 *storeys* in *building height*, and

(c) in a *floor area* containing a *hotel*, in every room in a *suite* and in every room not located in a *suite* other than washrooms within a *suite*, saunas, refrigerated areas and swimming pools.

(3) *Smoke detectors* required in sleeping rooms of *care*, *care and treatment* or *detention occupancy* shall upon actuation provide an audible and visible signal to staff serving those rooms so that the room or location containing the *smoke detector* can be easily identified.

(4) *Smoke detectors* required by Clause (1)(g) shall, upon actuation, recall the elevators served by machinery located in the machine room or machinery space in which the *smoke detector* is installed.

(5) Except as permitted by Sentences (6) and (7), where a *building* is required to be equipped with a fire alarm system, a *smoke detector* shall be located near the entrance to,

(a) a *walkway* described in Articles 3.2.3.19. and 3.2.3.20., or

(b) a vestibule provided in conformance with Article 3.2.6.3.

(6) *Smoke detectors* installed at the entrance to a *walkway* in conformance with Article 3.1.8.12. are deemed to meet the requirements of Sentence (5).

(7) *Fire detectors* are permitted to be installed in lieu of the *smoke detectors* required by Sentence (5) in Group F *occupancies* where the s*moke detectors* may be subjected to false alarms due to the activities within the *building*.

3.2.4.13. Prevention of Smoke Circulation

(1) If a fire alarm system is installed, an air handling system shall be designed to prevent the circulation of smoke upon a signal from a duct-type *smoke detector* if the air handling system,

(a) serves more than 1 *storey*,

(b) serves more than one *suite* in a *storey*,

(c) serves more than one *fire compartment* required by Sentence 3.3.3.5.(2), or

(d) is not provided with *fire dampers* as permitted by Sentence 3.1.8.8.(8).

3.2.4.14. Vacuum Cleaning System Shutdown

(1) A central vacuum cleaning system serving more than one *suite* or *storey* in a *building* equipped with a fire alarm system shall be designed to shut down upon actuation of the fire alarm system.

3.2.4.15. Elevator Emergency Return

(1) Except as permitted by Sentence (3), in a *building* having elevators that serve *storeys* above the *first storey* and that are equipped with an automatic emergency recall feature, *smoke detectors* shall be installed in the elevator lobbies on the recall level so that when these *smoke detectors* are actuated, the elevators will automatically return directly to an alternate floor level.

(2) *Smoke detectors* required by Sentence (1) shall be designed as part of the *building* fire alarm system.

(3) The alternate floor recall feature required by Sentence (1) is not required if the *floor area* containing the recall level is *sprinklered*.

3.2.4.16. Sprinklers in Lieu of Fire Detectors

(1) *Fire detectors* required by Article 3.2.4.11. and *heat detectors* required by Sentence 3.2.4.12.(2) need not be provided within a *floor area* if the *floor area* is *sprinklered* and the sprinkler system is electrically supervised in conformance with Sentence 3.2.4.10.(3).

3.2.4.17. System Monitoring

(1) An automatic sprinkler system shall be equipped with waterflow detecting devices and, if an annunciator is required by Article 3.2.4.9., shall be installed so that each device serves,

(a) not more than 1 *storey*, and

(b) an area on each *storey* that is not more than the system area limits as specified in NFPA 13, “Installation of Sprinkler Systems”.

(2) If a fire alarm system is provided, waterflow indicating devices required by Sentence (1) shall be connected to the fire alarm system so that on actuation an *alert signal* or an *alarm signal* is initiated.

3.2.4.18. Manual Pull Stations

(1) Except as permitted by Sentences (2) and (3), if a fire alarm system is installed, a manual pull station shall be installed,

(a) near the principal entrance to the *building*, and

(b) near every required *exit*.

(2) In a *building* that is *sprinklered*, a manual pull station is not required at an exterior egress doorway from a *suite* that does not lead to an interior shared *means of egress* in a *hotel* not more than 3 *storeys* in *building height*, provided each *suite* is served by an exterior *exit* facility leading directly to ground level.

(3) In a *building* that is *sprinklered*, a manual pull station is not required at an exterior egress doorway from a *dwelling unit* that does not lead to an interior shared *means of egress* in a *building* not more than 3 *storeys* in *building height* containing only *dwelling units*, provided each *dwelling unit* is served by an exterior *exit* facility leading directly to ground level.

(4) In a *building* referred to in Sentence (2) or (3), manual pull stations shall be installed near doorways leading from shared interior corridors to the exterior.

(5) In a *building* containing a *hotel*, a manual pull station shall be installed in the main reception area serving the *hotel*.

(6) Except as permitted by Sentence (3), in Group C apartment *buildings*, if a pull station is not installed on a *floor area* in accordance with Sentence (1) or (4),

(a) a manual pull station shall be installed in every *dwelling unit* in the *floor area* near each egress door leading from the *dwelling unit*,

(b) *smoke detectors* shall be installed in the *floor area* in *public corridors* and stairwells, and

(c) *fire detectors* shall be installed in the *floor area* in all common public areas and in rooms not located within *dwelling units*.

(7) In *floor areas* where the manual pull stations are located in *dwelling units*, a legible sign stating **FIRE ALARM PULL STATIONS LOCATED IN APARTMENT UNITS** shall be posted near every *exit* in a *public corridor*.

(8) Key switch activated pull stations are permitted in an *impeded egress zone* and a *contained use area* in Group B, Division 1 and 2 *occupancies*.

3.2.4.19. Alert and Alarm Signals

(1) In a two stage fire alarm system described in Sentence 3.2.4.4.(2), the same audible signal devices are permitted to be used to sound the *alert signals* and the *alarm signals.*

(2) If audible signal devices with voice reproduction capabilities are intended for paging and similar voice message use, other than during a fire emergency, they shall be installed so that *alert signals* and *alarm signals* take priority over all other signals.

(3) Audible signal devices forming part of a fire alarm or voice communication system shall not be used for playing music or background noise.

(4) Except as permitted by Sentence (6), visual signal devices shall be installed in addition to audible signal devices,

(a) in a *building* or portion of a *building* intended for use primarily by persons with hearing impairment,

(b) in a *public corridor* serving a Group A, B, C, D or E *occupancy*,

(c) in a corridor used by the public and in a *floor area* or part of a *floor area* where the public may congregate in a Group A *occupancy*,

(d) in not less than 10% of the *suites* of a *hotel* or motel,

(e) in a washroom for *public use* described in Sentence 3.8.2.3.(2), (3), (4) or (6), and

(f) in the living space in a *suite* of *residential occupancy* in a Group C *major occupancy* apartment *building*.

(5) Visual signal devices are permitted to be installed in lieu of audible signal devices in the compartments referred to in Article 3.3.3.6.

(6) Visual signal devices required by Clauses (4)(b) and (c) are not required in,

(a) a classroom, and

(b) a Group B, Division 3 *occupancy* that contains sleeping accommodation for not more than 10 persons and not more than six occupants require assistance in evacuation in case of an emergency.

3.2.4.20. Audibility of Alarm Systems

(1) Except as permitted by Sentence 3.2.4.19.(5) and except as required by Clause 3.2.4.4.(2)(d), audible signal devices forming part of a fire alarm system shall be installed in a *building* so that,

(a) *alarm signals* are clearly audible throughout the *floor area*, and

(b) *alert signals* are clearly audible in continuously staffed locations and, where there are no continuously staffed locations, throughout the *floor area*.

(2) The sound pattern of an *alarm signal* shall conform to the temporal pattern defined in Clause 4.2 of International Standard ISO 8201, "Acoustics — Audible Emergency Evacuation Signal".

(3) The sound patterns of *alert signals* shall be significantly different from the temporal patterns of *alarm signals*.

(4) In all normally occupied spaces, the fire *alarm signal* sound pressure level,

(a) shall be not more than 100 dBA when measured at a distance of 3 m from the device, or

(b) is permitted to be more than 100 dBA provided the sound pressure level measured 2 000 mm above floor level is not more than 100 dBA.

(5) The sound pressure level in a sleeping room from a fire alarm audible signal device shall be not less than 75 dBA in a *building* of *residential occupancy* when any intervening doors between the device and the sleeping room are closed.

(6) Except as required by Sentence (5), the sound pressure level from a fire alarm audible signal device in a *floor area* shall be not less than 10 dBA above the ambient noise level, but with a minimum value not less than 65 dBA.

(7) Fire alarm audible signal devices shall be supplemented by visual signal devices in any *floor area* in which,

(a) the ambient noise level is more than 87 dBA, or

(b) the occupants of the *floor area*,

(i) use ear protective devices,

(ii) are located within an audiometric booth, or

(iii) are located within sound insulated enclosures.

(8) Sentence (7) shall also apply in an *assembly occupancy* in which music and other sounds associated with performances could exceed 100 dBA.

(9) Except as permitted by Sentence (13), an audible signal device located within a *dwelling unit* shall incorporate a means that enables the device to be silenced for a period of not more than 10 min, after which the device shall restore to normal operation.

(10) Audible signal devices within a *dwelling unit* or a *suite* of *residential occupancy* shall be connected to the fire alarm system,

(a) in a manner such that a single open circuit at one device will not impair the operation of other audible signal devices on the same circuit that serve the other *dwelling units* or *suites* of *residential occupancy*, or

(b) on separate signal circuits that are not connected to the devices in any other *dwelling unit*, *public corridor* or *suites* of *residential occupancy*.

(11) In a *building* or part of it classified as a *residential occupancy*,

(a) separate circuits shall be provided for audible signal devices on each *floor area*, and

(b) audible signal devices within *dwelling units* or *suites* of *residential occupancy* shall be wired on separate signal circuits from those not within *suites* of *residential occupancy* or *dwelling units*.

(12) Audible signal devices shall be installed in a *service space* referred to in Sentence 3.2.1.1.(9) and shall be connected to the fire alarm system.

(13) Audible signal devices, within *dwelling units* that are wired on separate signal circuits, need not include a means for silencing as required by Sentence (9) provided the fire alarm system includes a provision for the automatic signal silence within *dwelling units*, where,

(a) the automatic signal silence cannot occur within the first 60 s of operation or within the zone of initiation,

(b) a subsequent alarm elsewhere in the *building* will reactuate the silenced audible signal devices within *dwelling units*,

(c) after a period of not more than 10 min, the silenced audible signal devices will be restored to continuous audible signal if the alarm is not acknowledged, and

(d) the voice communication system referred to in Article 3.2.4.23. has a provision to override the automatic signal to allow the transmission of voice messages through silenced audible signal device circuits that serve the *dwelling units*.

(14) If a two stage fire alarm system has been installed with an automatic signal silence as described in Sentence (13), the system shall be designed so that any silenced audible signal devices serving *dwelling units* are reactuated whenever an *alarm signal* is required to be transmitted as part of the second stage.

3.2.4.21. Visual Signals

(1) Visual signal devices required by Sentences 3.2.4.19.(4) and 3.2.4.20.(7) and (8) shall be installed so that the signal from at least one device is visible throughout the *floor area* or portion of it in which they are installed.

(2) Visual signal devices permitted by Sentence 3.2.4.19.(5) shall be installed so that the signal from at least one device is visible throughout the compartment in which they are installed.

3.2.4.22. Smoke Alarms

(1) Except as permitted by Sentence (6), *smoke alarms* conforming to CAN/ULC-S531, “Smoke Alarms”, shall be installed in each *dwelling unit* and, except for *care*, *care and treatment* or *detention occupancies* required to have a fire alarm system, in each sleeping room not within a *dwelling unit*.

(2) At least one *smoke alarm* shall be installed on each *storey* and *mezzanine* of a *dwelling unit*.

(3) On any *storey* of a *dwelling unit* containing sleeping rooms, a *smoke alarm* shall be installed in,

(a) each sleeping room, and

(b) a location between the sleeping rooms and the remainder of the *storey*, and if the sleeping rooms are served by a hallway, the *smoke alarm* shall be located in the hallway.

(4) A *smoke alarm* shall be installed on or near the ceiling.

(5) Except as permitted by Sentence (6), *smoke alarms* required by Sentence (1) shall,

(a) be installed with permanent connections to an electrical circuit,

(b) have no disconnect switch between the overcurrent device and the *smoke alarm*, and

(c) in case the regular power supply to the *smoke alarm* is interrupted, be provided with a battery as an alternative power source that can continue to provide power to the *smoke alarm* for a period of not less than seven days in the normal condition, followed by 4 min of alarm.

(6) *Suites* of *residential occupancy* are permitted to be equipped with *smoke detectors* in lieu of *smoke alarms*, provided the *smoke detectors*,

(a) are capable of independently sounding audible signals within the individual *suites*,

(b) except as provided by Sentence (7), are installed in conformance with CAN/ULC-S524, "Installation of Fire Alarm Systems", and verified in conformance with CAN/ULC-S537, "Verification of Fire Alarm Systems", and

(c) form part of the fire alarm system.

(7) *Smoke detectors* permitted to be installed in lieu of *smoke alarms* as provided in Sentence (6) are not required under Clause (6)(b) to sound an alarm throughout the rest of the *building*, provided they sound localized alarms within individual *suites* and otherwise meet the requirements of Clause (6)(b).

(8) If more than one *smoke alarm* is required in a *dwelling unit*, the *smoke alarms* shall be wired so that the actuation of one *smoke alarm* will cause all *smoke alarms* within the *dwelling unit* to sound.

(9) A *smoke alarm* required by Sentence (1) shall be installed in conformance with CAN/ULC-S553, "Installation of Smoke Alarms".

(10) Except as permitted by Sentence (11), a manually operated silencing device shall be incorporated within the circuitry of a *smoke alarm* installed in a *dwelling unit* so that it will silence the signal emitted by the *smoke alarm* for a period of not more than 10 min, after which the *smoke alarm* will reset and again sound the alarm if the level of smoke in the vicinity is sufficient to reactuate the *smoke alarm*.

(11) *Suites* of *residential occupancy* equipped with *smoke detectors* installed in conformance with CAN/ULC-S524, "Installation of Fire Alarm Systems", as part of the fire alarm system in lieu of *smoke alarms* as permitted by Sentence (6), need not incorporate the manually operated silencing device required by Sentence (10).

(12) The sound patterns of *smoke alarms* shall,

(a) meet the temporal patterns of *alarm signals*, or

(b) be a combination of temporal pattern and voice relay.

(13) *Smoke alarms* required by Sentence (1) shall have a visual signalling component conforming to the requirements in 18.5.3. (Light, Color and Pulse Characteristics) of NFPA 72, "National Fire Alarm and Signaling Code".

(14) The visual signalling component required by Sentence (13) need not,

(a) be integrated with the *smoke alarm* provided it is interconnected to it,

(b) be on battery backup, or

(c) have synchronized flash rates, when installed in a *dwelling unit*.

(15) The luminous intensity for visual signalling components required by Sentence (13) that are installed in sleeping rooms shall be a minimum of 175 cd.

3.2.4.23. Voice Communication Systems

(1) A voice communication system required by Sentences (7) to (10), Subsection 3.2.6. or Clause 3.3.2.4.(14)(f) shall consist of,

(a) a two-way means of communication with,

(i) the central alarm and control facility, and

(ii) the mechanical control centre from each *floor area*, and

(b) except as provided by Sentence (8), loudspeakers that are,

(i) operated from the central alarm and control facility, and

(ii) designed and located so that transmitted messages are audible and intelligible as required by Sentence (2) in all parts of the *building*, except in elevator cars.

(2) The voice communication system referred to in Clause (1)(b) shall be capable of broadcasting pre-recorded, synthesized or live messages with voice intelligibility meeting or exceeding the equivalent of a common intelligibility scale score of 0.70.

(3) The voice communication system referred to in Sentence (1) shall include a means to silence the *alarm signal* in a single stage fire alarm system while voice messages are being transmitted, but only after the *alarm signal* has initially sounded for not less than 30 s.

(4) The voice communication system referred to in Sentence (1) shall include a means to silence the *alert signal* and the *alarm signal* in a two stage fire alarm system while voice messages are being transmitted, but only after the *alert signal* has initially sounded for not less than,

(a) 10 s in hospitals that have supervisory personnel on duty for twenty-four hours each day, or

(b) 30 s for all other *occupancies*.

(5) The voice communication system referred to in Clause (1)(b) shall be designed so that the *alarm signal* can be selectively transmitted to any zone or zones while maintaining an *alert signal* or selectively transmitting voice messages to any other zone or zones in the *building*.

(6) The voice communication system referred to in Clause (1)(a) shall be installed so that emergency communication devices are located in each *floor area* near *exit* stair shafts.

(7) Except for Group B, Division 1 and Group F, Division 1 *major occupancies*, a voice communication system shall be installed in a *building* where,

(a) a fire alarm system is required under Subsection 3.2.4.,

(b) a two stage fire alarm system is installed, and

(c) the *occupant load* of the *building* exceeds 1 000.

(8) A voice communication system required by Sentence (7) shall consist of loudspeakers that are,

(a) operated from the central alarm and control facility or, in the absence of a central alarm and control facility, from a designated area, and

(b) designed and located so that transmitted messages are audible and intelligble in all parts of the *building*, except in elevator cars.

(9) Unless staff trained to provide instructions over the voice communication system referred to in Sentence (8) are present at all times, a pre-recorded message shall be provided.

(10) The voice communication system required by Sentence (7) shall meet the silencing and transmission requirements of Sentences (3) to (5).

3.2.5. Provisions for Firefighting

3.2.5.1. Access to Above Grade Storeys

(1) Except for *storeys* below the *first storey*, direct access for firefighting shall be provided from the outdoors to every *storey* that is not *sprinklered* and whose floor level is less than 25 m above *grade*, by at least one unobstructed window or access panel for each 15 m of wall in each wall required to face a *street* by Subsection 3.2.2.

(2) An opening for access required by Sentence (1) shall,

(a) have a sill no higher than 1 070 mm above the inside floor, and

(b) be not less than 1 100 mm high by not less than,

(i) 550 mm wide for a *building* not designed for the storage or use of *dangerous goods*, or

(ii) 750 mm wide for a *building* designed for the storage or use of *dangerous goods*.

(3) Access panels above the *first storey* shall be readily openable from both inside and outside, or the opening shall be glazed with plain glass.

3.2.5.2. Access to Basements

(1) Direct access from at least one *street* shall be provided from the outdoors to each *basement*,

(a) that is not *sprinklered*, and

(b) that has horizontal dimension more than 25 m.

(2) The access required by Sentence (1) is permitted to be provided by,

(a) doors, windows or other means that provide an opening not less than 1 100 mm high and 550 mm wide, with a sill no higher than 900 mm above the inside floor, or

(b) an interior stairway immediately accessible from the outdoors.

3.2.5.3. Roof Access

(1) On a *building* more than 3 *storeys* in *building height* where the slope of the roof is less than 1 in 4, all main roof areas shall be provided with direct access from the *floor areas* immediately below, either by,

(a) a stairway, or

(b) a hatch not less than 550 mm by 900 mm with a fixed ladder.

(2) Clearance and access around roof signs or other obstructions shall provide,

(a) a passage not less than 900 mm wide by 1 800 mm high, clear of all obstructions except for necessary horizontal supports not more than 600 mm above the roof surface,

(i) around every roof sign, and

(ii) through every roof sign at locations not more than 15 m apart, and

(b) a clearance of not less than 1 200 mm between any portion of a roof sign and any opening in the exterior wall face or roof of the *building* in which it is erected.

3.2.5.4. Access Routes

(1) A *building* that is more than 3 *storeys* in *building height* or more than 600 m^2 in *building area* shall be provided with access routes for fire department vehicles,

(a) to the *building* face having a principal entrance, and

(b) to each *building* face having access openings for firefighting as required by Articles 3.2.5.1. and 3.2.5.2.

3.2.5.5. Location of Access Routes

(1) Access routes required by Article 3.2.5.4. shall be located so that the principal entrance and every access opening required by Articles 3.2.5.1. and 3.2.5.2. are located not less than 3 m and not more than 15 m from the closest portion of the access route required for fire department use, measured horizontally from the face of the *building*.

(2) Access routes shall be provided to a *building* so that,

(a) for a *building* provided with a fire department connection, a fire department pumper vehicle can be located adjacent to the hydrants referred to in Article 3.2.5.16.,

(b) for a *building* not provided with a fire department connection, a fire department pumper vehicle can be located so that the length of the access route from a hydrant to the vehicle plus the unobstructed path of travel for the firefighter from the vehicle to the *building* is not more than 90 m, and

(c) the unobstructed path of travel for the firefighter from the vehicle to the *building* is not more than 45 m.

(3) The unobstructed path of travel for the firefighter required by Sentence (2) from the vehicle to the *building* shall be measured from the vehicle to the fire department connection provided for the *building*, except that if no fire department connection is provided, the path of travel shall be measured to the principal entrance of the *building*.

(4) If a portion of a *building* is completely cut off from the remainder of the *building* so that there is no access to the remainder of the *building*, the access routes required by Sentence (2) shall be located so that the unobstructed path of travel from the vehicle to one entrance of each portion of the *building* is not more than 45 m.

3.2.5.6. Access Route Design

(1) A portion of a roadway or yard provided as a required access route for fire department use shall,

(a) have a clear width not less than 6 m, unless it can be shown that lesser widths are satisfactory,

(b) have a centreline radius not less than 12 m,

(c) have an overhead clearance not less than 5 m,

(d) have a change of gradient not more than 1 in 12.5 over a minimum distance of 15 m,

(e) be designed to support the expected loads imposed by firefighting equipment and be surfaced with concrete, asphalt or other material designed to permit accessibility under all climatic conditions,

(f) have turnaround facilities for any dead-end portion of the access route more than 90 m long, and

(g) be connected with a public thoroughfare.

(2) A *building* within the scope of Article 3.2.2.43A. or 3.2.2.50A. shall have no portion of the required access route more than 20 m below the floor level of the uppermost *storey* or *mezzanine* that is not a rooftop enclosure provided for elevator machinery, a stairway or a *service room* used for no purpose other than for service to the *building*.

3.2.5.7. Water Supply

(1) An adequate water supply for firefighting shall be provided for every *building*.

(2) Hydrants shall be located within 90 m horizontally of any portion of a *building* perimeter that is required to face a *street* in Subsection 3.2.2.

3.2.5.8. Reserved

3.2.5.9. Reserved

3.2.5.10. Reserved

3.2.5.11. Reserved

3.2.5.12. Reserved

3.2.5.13. Automatic Sprinkler Systems

(1) Except as provided by Sentences (2) to (4), an automatic sprinkler system shall be designed, constructed, installed and tested in conformance with NFPA 13, "Installation of Sprinkler Systems".

(2) NFPA 13R, "Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height", is permitted to be used for the design, construction, installation and testing of an automatic sprinkler system installed in a *building*,

(a) of *residential occupancy* that is not more than 4 *storeys* in *building height*, or

(b) of Group B, Division 3 *occupancy* that contains sleeping accommodation for not more than 10 persons and not more than six occupants require assistance in evacuation in case of an emergency.

(3) Except as required by Sentence (9), NFPA 13D, "Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes", is permitted to be used for the design, construction, installation and testing of an automatic sprinkler system installed in a *building* of *residential occupancy* that contains not more than two *dwelling units*.

(4) If a *building* contains fewer than nine sprinklers, the water supply for these sprinklers is permitted to be supplied from the domestic water system for the *building* provided the required flow for the sprinklers can be met by the domestic system.

(5) If a water supply serves both an automatic sprinkler system and a system serving other equipment, control valves shall be provided so that either system can be shut off independently.

(6) Despite the requirements of the standards referenced in Sentences (1) and (2) for the installation of automatic sprinkler systems, sprinklers shall not be omitted in any room or closet in the *storey* immediately below a roof assembly if the *fire-resistance rating* of the roof assembly is waived as permitted by Article 3.2.2.17.

(7) Despite the requirements of the standards referenced in Sentences (1) and (2) for the installation of automatic sprinkler systems, sprinklers shall be provided for all balconies and decks forming part of a *building* within the scope of Article 3.2.2.43A. or 3.2.2.50A., other than,

(a) balconies or decks that are not more than 610 mm in depth measured perpendicular to the exterior wall of the *building*, or

(b) decks on the uppermost roof of the *building*.

(8) Sprinklers in elevator machine rooms shall have a temperature rating not less than that required for an intermediate temperature classification and shall be protected against physical damage.

(9) The sprinkler system described in Sentence (3) shall be provided with a minimum 20 min water supply when installed in a retirement home regulated under the *Retirement Homes Act, 2010*.

3.2.5.14. Combustible Sprinkler Piping

(1) *Combustible* sprinkler piping shall be used only for wet systems in *residential occupancies* and other light hazard *occupancies*.

(2) *Combustible* sprinkler piping shall meet the requirements of ULC/ORD-C199P, "Combustible Piping for Sprinkler Systems".

(3) Except as permitted by Sentence (5), *combustible* sprinkler piping shall be separated from the area served by the sprinkler system, and from any other *fire compartment*, by ceilings, walls, or soffits consisting of, as a minimum,

(a) lath and plaster,

(b) gypsum board not less than 9.5 mm thick,

(c) plywood not less than 13 mm thick, or

(d) a suspended membrane ceiling with,

(i) steel suspension grids, and

(ii) lay-in panels or tiles having a mass not less than 1.7 kg/m^2.

(4) Except as permitted by Sentence (5), *combustible* sprinkler piping may be located above a ceiling, provided that the distance between the edge of any ceiling opening that is not protected in conformance with Sentence (3) and the nearest sprinkler is not more than 300 mm.

(5) The protection required by Sentences (3) and (4) is permitted to be waived where *combustible* sprinkler piping has been tested in conformance with ULC/ORD-C199P, "Combustible Piping for Sprinkler Systems", and has been shown to meet the requirements in that document without additional protection.

3.2.5.15. Sprinklered Service Space

(1) An automatic sprinkler system shall be installed in a *service space* referred to in Sentence 3.2.1.1.(9) if flooring for access within the *service space* is other than catwalks.

(2) The sprinkler system required by Sentence (1) shall be equipped with waterflow detecting devices, with each device serving not more than 1 *storey*.

(3) The waterflow detecting devices required by Sentence (2) shall be connected to the fire alarm system to,

(a) initiate an *alert signal* in a two stage system or an *alarm signal* in a single stage system, and

(b) indicate separately on the fire alarm system annunciator the actuation of each device.

(4) If a *building* is *sprinklered*, sprinkler protection need not be provided in the space below a raised floor in a *computer room*,

(a) if the optical fibre cables and electrical wires and cables in this space conform to the test requirements in Article 3.1.5.21.,

(b) if the *building* is of *noncombustible construction* and other *combustible* components are limited to those permitted in Subsection 3.1.5.,

(c) if this space is used to circulate conditioned air and the air handling system is designed to prevent the circulation of smoke upon a signal from a *smoke detector*,

(d) if all of this space is easily accessible by providing access sections or panels in the raised floor, and

(e) if the *computer room* is more than 2 000 m^2 and the annunciator has separate zone indicators of the actuation of *smoke detectors* located in this space so that the coverage for each zone is not more than 2 000 m^2.

(5) Where a room, chute or bin is required to be *sprinklered* as indicated in Sentence 3.3.4.3.(1), Article 3.6.2.5. and Sentence 3.6.3.3.(6), the sprinklers may be supplied with water from the fire standpipe system provided that,

(a) except for a chute, not more than eight sprinklers are required to protect any room or bin based on a maximum coverage of 12 m^2 per sprinkler,

(b) the standpipe riser is,

(i) not less than 6 in. in diameter, or

(ii) hydraulically designed to meet combined water supply as specified in Clause (c),

(c) the water supply for a standpipe system, pumping capability and water storage facility, if required, is increased to supply 95 L/min for each sprinkler over and above the requirements for the standpipe system up to maximum 760 L/min for sprinklers,

(d) a waterflow detecting device shall be installed in the sprinkler main adjacent to the point of connection to the standpipe riser, and

(e) the activation of each waterflow detecting device in Clause (d) shall be indicated separately on the fire alarm system annunciator.

3.2.5.16. Fire Department Connections

(1) The fire department connection for a standpipe system shall be located so that the distance from the fire department connection to a hydrant is not more than 45 m and is unobstructed.

(2) The fire department connection for an automatic sprinkler system shall be located so that the distance from the fire department connection to a hydrant is not more than 45 m and is unobstructed.

(3) The fire department connections required in Sentences (1) and (2) shall be,

(a) located on the outside of a *building* adjacent to a *street* or an access route, not less than 300 mm and not more than 900 mm above ground level, and

(b) provided with two 65 mm hose connections with female swivel hose couplings.

3.2.5.17. Portable Fire Extinguishers

(1) Portable fire extinguishers shall be installed in all *buildings*, except within *dwelling units*, in conformance with the provisions of Part 6 of Division B of the Fire Code made under the *Fire Protection and Prevention Act, 1997*.

(2) In a Group B, Division 1 *major occupancy*, portable fire extinguishers are permitted to be located in secure areas, or in lockable cabinets provided,

(a) identical keys for all cabinets are located at all supervisory or security stations, or

(b) electrical remote release devices are provided and are connected to an emergency power supply.

3.2.5.18. Protection from Freezing

(1) Equipment forming part of a fire protection system shall be protected from freezing if,

(a) it could be adversely affected by freezing temperatures, and

(b) it is located in an unheated area.

3.2.5.19. Fire Pumps

(1) A fire pump having a rated net head pressure greater than 280 kPa shall be installed in accordance with the requirements of NFPA 20, "Installation of Stationary Pumps for Fire Protection".

3.2.6. Additional Requirements for High Buildings

3.2.6.1. Application

(1) This Subsection applies to a *building*,

(a) of Group A, D, E or F *major occupancy* classification that is more than,

(i) 36 m high, measured between *grade* and the floor level of the top *storey*, or

(ii) 18 m high, measured between *grade* and the floor level of the top *storey*, and in which the cumulative or total *occupant load* on or above any *storey* above *grade*, other than the *first storey*, divided by 1.8 times the width in metres of all *exit* stairs at that *storey*, exceeds 300,

(b) containing a Group B *major occupancy* in which the floor level of the highest *storey* of that *major occupancy* is more than 18 m above *grade*,

(c) containing a *floor area* or part of a *floor area* located above the third *storey* designed or intended as a Group B, Division 2 or 3 *occupancy*, and

(d) containing a Group C *major occupancy* whose floor level is more than 18 m above *grade*.

3.2.6.2. Limits to Smoke Movement

(1) A *sprinklered building* shall be designed in accordance with Sentences (2) to (5) and MMAH Supplementary Standard SB-4, "Measures for Fire Safety in High Buildings", to limit the danger to occupants and firefighters from exposure to smoke in a *building* fire.

(2) A *building* referred to in Sentence (1), shall be designed so that, during a period of 2 h after the start of a fire, each *exit* stair serving *storeys* below the lowest *exit level* will not contain more than 1% by volume of contaminated air from the fire floor, assuming an outdoor temperature equal to the January design temperature on a 2.5% basis determined

in conformance with MMAH Supplementary Standard SB-1, “Climatic and Seismic Data”.

(3) Each stairway that serves *storeys* above the lowest *exit level* shall have a vent to the outdoors, at or near the bottom of the stair shaft, that,

(a) has an openable area of 0.05 m^2 for every door between the stair shaft and a *floor area*, but not less than 1.8 m^2,

(b) opens directly to the outdoors or into a vestibule that has a similar opening to the outdoors, and

(c) has a door or *closure* that,

(i) is openable manually, and

(ii) can remain in the open position during a fire emergency.

(4) Measures shall be taken to limit movement of smoke from a fire in a *floor area* below the lowest *exit storey* into upper *storeys*.

(5) Except for exhaust fans in kitchens, washrooms and bathrooms in *dwelling units*, and except for fans used for smoke venting as required by Article 3.2.6.6., air moving fans in a system that serves more than 2 *storeys* shall be designed and installed so that in the event of a fire these fans can be stopped by means of a manually operated switch at the central alarm and control facility.

(6) A *building* that is not *sprinklered* shall be designed in accordance with MMAH Supplementary Standard SB-4, “Measures for Fire Safety in High Buildings”, to limit the danger to occupants and firefighters from exposure to smoke in a *building* fire.

3.2.6.3. Connected Buildings

(1) If a *building* described in Article 3.2.6.1. is connected to any other *building*, measures shall be taken to limit movement of contaminated air from one *building* into another during a fire.

3.2.6.4. Emergency Operation of Elevators

(1) Manual emergency recall shall be provided for all elevators serving *storeys* above the *first storey*.

(2) Key-operated switches for emergency recall described by Sentence (1) shall be provided in a conspicuous location at,

(a) each elevator lobby on the recall level, and

(b) the central alarm and control facility required in Article 3.2.6.7.

(3) In-car emergency service switches shall be provided in all elevator cars.

(4) Keys to operate the switches required by Sentences (2) and (3) shall be,

(a) provided in a suitably identified box conspicuously located on the outside of an elevator hoistway near the central alarm and control facility required by Article 3.2.6.7., and

(b) kept at the central alarm and control facility.

(5) In a *building* that is not *sprinklered*, automatic emergency recall operation shall be provided for all elevators serving *storeys* above the *first storey*.

(6) The automatic emergency recall feature in Sentence (5) shall be actuated by,

(a) *smoke detectors* installed in each elevator lobby on each *storey*, or

(b) the *building* fire alarm system.

(7) *Smoke detectors* in Sentence (6) shall be designed as part of the *building* fire alarm system.

3.2.6.5. Elevator for Use by Firefighters

(1) At least one elevator shall be provided for use by firefighters in conformance with Sentences (2) to (6).

(2) The elevator referred to in Sentence (1) shall have a useable platform area not less than 2.2 m^2 and shall be capable of carrying a load of 900 kg to the top floor that it serves from a landing on the *storey* containing the entrance for firefighter access referred to in Articles 3.2.5.4. and 3.2.5.5. within 1 min.

(3) Except where Measure K of MMAH Supplementary Standard SB-4, “Measures for Fire Safety in High Buildings”, is used, each elevator for use by firefighters shall,

(a) be provided with a *closure* at each shaft opening so that the interlock mechanism remains mechanically engaged and electrical continuity is maintained in the interlock circuits and associated wiring for a period of not less than 1 h when the assembly is subjected to the standard fire exposure described in CAN/ULC-S104, “Fire Tests of Door Assemblies”,

(b) be protected with a vestibule containing no *occupancy* and separated from the remainder of the *floor area* by a *fire separation* having a *fire-resistance rating* not less than 45 min, or

(c) be protected with a corridor containing no *occupancy* and separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(4) Except as permitted in Sentence (5), an elevator referred to in Sentence (1) shall be capable of providing transportation from the *storey* containing the entrance for firefighter access referred to in Articles 3.2.5.4. and 3.2.5.5. to every floor that is above *grade* in the *building* and that is normally served by the elevator system.

(5) If it is necessary to change elevators to reach any floor referred to in Sentence (4), the system shall be designed so that not more than one change of elevator is required when travelling to any floor in the *building* from the *storey* containing the entrance for firefighter access referred to in Articles 3.2.5.4. and 3.2.5.5.

(6) Electrical conductors for the operation of the elevator referred to in Sentence (1) shall be,

(a) installed in *service spaces* conforming to Section 3.6. that do not contain other *combustible* material, or

(b) protected against exposure to fire from the service entrance of the emergency power supply, or the normal service entrance of the normal power supply, to the equipment served, to ensure operation for a period of 1 h when subjected to the standard fire exposure described in CAN/ULC-S101, “Fire Endurance Tests of Building Construction and Materials”.

3.2.6.6. Venting to Aid Firefighting

(1) Means of venting each *floor area* to the outdoors shall be provided by windows, wall panels, smoke shafts or, except as provided by Sentence (5), the *building* exhaust system.

(2) Fixed glass windows shall not be used for the venting required by Sentence (1) if the breaking of the windows could endanger pedestrians below.

(3) Openable windows used for the venting required by Sentence (1) shall be permanently marked so that they are easily identifiable.

(4) Elevator hoistways shall not be designed for the venting required by Sentence (1).

(5) In a *building* that is not *sprinklered,* venting of *floor areas* required in Sentence (1) shall not be provided by the *building* exhaust system.

3.2.6.7. Central Alarm and Control Facility

(1) A central alarm and control facility shall be provided on the *storey* containing the entrance for firefighter access referred to in Articles 3.2.5.4. and 3.2.5.5. in a location that,

(a) is readily accessible to firefighters entering the *building,* and

(b) takes into account the effect of background noise likely to occur under fire emergency conditions, so that the facility can properly perform its required function under such conditions.

(2) The central alarm and control facility required in Sentence (1) shall include,

(a) means to control the voice communication system required by Article 3.2.6.8., so that messages can be sent to,

(i) all loudspeakers simultaneously,

(ii) individual *floor areas*, and

(iii) *exit* stairwells,

(b) means to indicate audibly and visually *alert signals* and *alarm signals* and a switch to,

(i) silence the audible portion of these signals, and

(ii) indicate visually that the audible portion has been silenced,

(c) means to indicate visually that elevators are on emergency recall,

(d) an annunciator conforming to Article 3.2.4.9.,

(e) means to transmit *alert signals* and *alarm signals* to the fire department in conformance with Article 3.2.4.8.,

(f) means to release hold-open devices on doors to vestibules,

(g) means to manually actuate *alarm signals* in the *building* selectively to any zone or zones,

(h) means to silence the *alarm signals* referred to in Clause (g) in conformance with Sentences 3.2.4.23.(3) and (4),

(i) means, as appropriate to the measure for fire safety provided in the *building*, to,

(i) actuate auxiliary equipment, or

(ii) communicate with a continually staffed auxiliary equipment control centre,

(j) means for two-way communications with every elevator car,

(k) means to indicate visually, individual sprinkler system waterflow signals,

(l) means to indicate audibly and visually, sprinkler and standpipe system supervisory signals and trouble signals,

(m) a switch to silence the audible portion of a supervisory signal or a trouble signal, and

(n) visual indication that the audible portion of a supervisory signal or a trouble signal has been silenced.

3.2.6.8. Voice Communication System

(1) A voice communication system conforming to Article 3.2.4.23. shall be provided in a *building* if,

(a) the floor of the top *storey* is more than 36 m above *grade*,

(b) a *floor area* or part of a *floor area* located above the third *storey* is designed or intended for use as a Group B, Division 2 or 3 *occupancy*, or

(c) a *floor area* or part of a *floor area* located more than 18 m above *grade* is designed or intended for use as a retirement home regulated under the *Retirement Homes Act, 2010* that is a Group C *occupancy*.

3.2.6.9. Testing

(1) The systems for control of smoke movement and mechanical venting required by Articles 3.2.6.2. and 3.2.6.6. shall be tested to ensure satisfactory operation in accordance with the procedures described in MMAH Supplementary Standard SB-4, “Measures for Fire Safety in High Buildings”.

3.2.7. Lighting and Emergency Power Systems

3.2.7.1. Minimum Lighting Requirements

(1) An *exit*, a *public corridor*, a corridor providing *access to exit* for the public, a corridor serving patients or residents in a Group B, Division 2 or 3 *occupancy*, a corridor serving classrooms, an electrical equipment room, a transformer vault and a hoistway pit shall be equipped to provide illumination to an average level not less than 50 lx at floor or tread level and at all points such as angles and intersections at changes of level where there are stairs or ramps.

(2) The minimum value of the illumination required by Sentence (1) shall not be less than 10 1x.

(3) Rooms and spaces used by the public shall be illuminated as described in Article 9.34.2.7.

(4) Lighting outlets in a *building* of *residential occupancy* shall be provided in conformance with Subsection 9.34.2.

(5) Elevator machine rooms shall be equipped to provide illumination to an average level of not less than 100 lx at floor level.

(6) Every place of assembly intended for the viewing of motion pictures or the performing arts, shall be equipped to provide an average level of illumination at floor level in the aisles of not less than 2 lx during the viewing.

(7) Every area where food is intended to be processed, prepared or manufactured and where equipment or utensils are intended to be cleaned shall be equipped to provide illumination to a level of not less than 500 lx measured at the floor level.

(8) Every storage room, dressing room, sanitary facility, service area and corridor serving the areas in Sentence (7) shall be equipped to provide illumination to a level of not less than 300 lx measured at the floor level.

3.2.7.2. Recessed Lighting Fixtures

(1) A recessed lighting fixture shall not be located in an insulated ceiling unless the fixture is designed for this type of installation.

3.2.7.3. Emergency Lighting

(1) Emergency lighting shall be provided to an average level of illumination not less than 10 lx at floor or tread level in,

(a) *exits*,

(b) principal routes providing *access to exit* in an open *floor area* and in *service rooms*,

(c) corridors used by the public,

(d) corridors serving patients' or residents' sleeping rooms in a Group B, Division 2 or 3 *occupancy*,

(e) corridors serving classrooms,

(f) underground *walkways*,

(g) *public corridors*,

(h) *floor areas* or parts of them where the public may congregate in,

  (i) Group A, Division 1 *occupancies*, or

  (ii) Group A, Divisions 2 and 3 *occupancies* having an *occupant load* of 60 or more,

(i) *floor areas* or parts of them in day care centres where persons are cared for,

(j) food preparation areas in commercial kitchens,

(k) principal routes providing *access to exit* in a *floor area* that is not subdivided into rooms or *suites* of rooms served by corridors in a *business and personal services occupancy*, a *mercantile occupancy* or an *industrial occupancy*, and

(l) internal corridors or aisles serving as principal routes to *exits* in a *business and personal services occupancy*, a *mercantile occupancy* or an *industrial occupancy* that is subdivided into rooms or *suites* of rooms, and is not served by a *public corridor*.

(2) Emergency lighting to provide an average level of illumination of not less than 10 lx at floor or catwalk level shall be included,

(a) in a *service space* referred to in Sentence 3.2.1.1.(9), and

(b) on a *shelf and rack storage system*, in locations described in Sentence 3.16.1.5.(2).

(3) The minimum value of the illumination required by Sentences (1) and (2) shall not be less than 1 lx.

(4) In addition to the requirements of Sentences (1) to (3), the installation of battery-operated emergency lighting in health care facilities shall conform to the appropriate requirements of CSA Z32, "Electrical Safety and Essential Electrical Systems in Health Care Facilities".

3.2.7.4. Emergency Power for Lighting

(1) An emergency power supply shall be,

(a) provided to maintain the emergency lighting required by this Subsection from a power source such as batteries or generators that will continue to supply power in the event that the regular power supply to the *building* is interrupted, and

(b) so designed and installed that upon failure of the regular power it will assume the electrical load automatically for a period of,

(i) 2 h for a *building* within the scope of Subsection 3.2.6.,

(ii) 1 h for a *building* of Group B *major occupancy* classification that is not within the scope of Subsection 3.2.6.,

(iii) 1 h for a *building* within the scope of Article 3.2.2.43A. or 3.2.2.50A., and

(iv) 30 min for any other *building*.

(2) If self-contained emergency lighting units are used, they shall conform to CSA C22.2 No. 141, "Emergency Lighting Equipment".

3.2.7.5. Emergency Power Supply Installation

(1) Except as required by Articles 3.2.7.6. and 3.2.7.7., an emergency electrical power system shall be installed in conformance with CSA C282, "Emergency Electrical Power Supply for Buildings".

(2) Every emergency power supply shall be equipped with an emergency audible and visual trouble indication.

3.2.7.6. Emergency Power for Hospitals

(1) Except as required by Article 3.2.7.7., an emergency electrical power system for emergency equipment required by this Part for health care facilities shall be installed in conformance with CSA Z32, "Electrical Safety and Essential Electrical Systems in Health Care Facilities".

3.2.7.7. Fuel Supply Shut-off Valves and Exhaust Pipes

(1) If a liquid or gas fuel-fired engine or turbine for an emergency electric power supply is dependent on a fuel supply from outside the *building*, the fuel supply shall be provided with a suitably-identified separate shut-off valve outside the *building*.

(2) Where pipes for exhaust gases from emergency power systems penetrate required *fire separations*, they shall be enclosed in a separate *service space* having a *fire-resistance rating* equal to that of the penetrated floor assembly, but not less than 45 min.

3.2.7.8. Emergency Power for Fire Alarm Systems

(1) Fire alarm systems, including those incorporating a voice communication system, shall be provided with an emergency power supply conforming to Sentences (2) to (4).

(2) The emergency power supply required by Sentence (1) shall be supplied from,

(a) a generator,

(b) batteries, or

(c) a combination of the items described in Clauses (a) and (b).

(3) The emergency power supply required by Sentence (1) shall be capable of providing,

(a) supervisory power for not less than 24 h, and

(b) immediately following, emergency power under full load for not less than,

(i) 2 h for a *building* within the scope of Subsection 3.2.6.,

(ii) 1 h for a *building* classified as Group B *major occupancy* that is not within the scope of Subsection 3.2.6.,

(iii) 1 h for a *building* within the scope of Article 3.2.2.43A. or 3.2.2.50A.,

(iv) 5 min for a *building* not required to be equipped with an annunciator, and

(v) 30 min for any other *building*.

(4) The emergency power supply required by Sentence (1) shall be designed so that, in the event of a failure of the normal power source, there is an immediate automatic transfer to emergency power with no loss of information.

3.2.7.9. Emergency Power for Building Services

(1) An emergency power supply capable of operating under a full load for not less than 2 h shall be provided by an emergency generator for,

(a) every elevator serving *storeys* above the *first storey* in a *building* that is more than 36 m high measured between *grade* and the floor level of the top *storey* and every elevator for firefighters in conformance with Sentence (2),

(b) water supply for firefighting in conformance with Article 3.2.5.7., if the supply is dependent on electrical power supplied to the *building*, and the *building* is within the scope of Subsection 3.2.6.,

(c) fans and other electrical equipment that are installed to maintain the air quality specified in Article 3.2.6.2., and

(d) fans required for venting by Article 3.2.6.6.

(2) Except as permitted by Sentence (3), the emergency power supply for elevators required by Clause (1)(a) shall be capable of operating all elevators for firefighters plus one additional elevator simultaneously.

(3) Sentence (2) does not apply if the time to recall all elevators under emergency power supply is not more than 5 min, each from its most remote *storey* to,

(a) the *storey* containing the entrance for firefighter access referred to in Articles 3.2.5.4 and 3.2.5.5., or

(b) to a transfer lobby.

(4) Except as provided by Sentence (5), an emergency power supply capable of operating under a full load for not less than 30 min shall be provided by emergency generator for water supply for firefighting in conformance with Article 3.2.5.7., if the supply is dependent on electrical power supplied to the *building*, and the *building* is not within the scope of Subsection 3.2.6.

(5) Sentence (4) does not apply to the water supply for a standpipe system.

3.2.7.10. Protection of Electrical Conductors

(1) Electrical conductors shall conform to Sentences (2) to (9) if they,

(a) are within *buildings* identified in Article 3.2.6.1. and serve,

(i) fire alarm systems, or

(ii) emergency equipment within the scope of Articles 3.2.6.2. to 3.2.6.8.,

(b) serve fire pumps required to be installed under Article 3.2.5.19.,

(c) serve mechanical systems related to,

(i) compartments referred to in Clause 3.3.3.6.(1)(b),

(ii) *contained use areas* referred to in Clauses 3.3.3.7.(4)(a) and (b), or

(iii) provisions of Articles 3.2.8.4. to 3.2.8.6. and 3.2.8.9., or

(d) serve emergency lighting described in Article 3.2.7.3.

(2) Except as required by Sentence (3) and except as permitted in this Article, electrical conductors referred to in Sentence (1) shall,

(a) conform to ULC-S139, “Fire Test for Evaluation of Integrity of Electrical Cables”, including the hose stream application, to provide a circuit integrity rating of not less than 1 h, or

(b) be located in a *service space* that is separated from the remainder of the *building* by a *fire separation* that has a *fire-resistance rating* of not less than 1 h.

(3) Electrical conductors that are used in conjunction with systems referred to in Clause (1)(c) shall,

(a) conform to ULC-S139, "Fire Test for Evaluation of Integrity of Electrical Cables", including the hose stream application, to provide a circuit integrity rating of not less than 2 h, or

(b) be located in a *service space* that is separated from the remainder of the *building* by a *fire separation* that has a *fire-resistance rating* of not less than 2 h.

(4) The *service spaces* referred to in Clause (2)(b) or (3)(b) shall not contain any *combustible* materials other than the electrical conductors being protected.

(5) Except as permitted by Sentences (7) and (9), the electrical conductors referred to in Sentence (1) are those that extend from the source of emergency power to,

(a) the equipment served, or

(b) the distribution equipment supplying power to the equipment served, if both are in the same room

(6) If a fire alarm transponder or annunciator located in one *fire compartment* is connected to a central processing unit or another transponder or annunciator located in a different *fire compartment*, the electrical conductors connecting them shall be protected in accordance with Sentence (2).

(7) Fire alarm system branch circuits within a *storey* that connect transponders and individual devices need not conform to Sentence (2).

(8) Except as permitted by Sentence (9), if a distribution panel supplies power to emergency lighting, the power supply conductors leading up to the distribution panel shall be protected in accordance with Sentence (2).

(9) Conductors leading from a distribution panel referred to in Sentence (8) to emergency lighting units in the same *storey* need not conform to Sentence (2).

3.2.8. Mezzanines and Openings through Floor Assemblies

3.2.8.1. Application

(1) Except as permitted by Article 3.2.8.2. and Sentence 3.3.4.2.(3), the portions of a *floor area* or a *mezzanine* that do not terminate at an exterior wall, a *firewall* or a vertical shaft shall,

(a) terminate at a vertical *fire separation* having a *fire-resistance rating* not less than that required for the floor assembly and extending from the floor assembly to the underside of the floor or roof assembly above, or

(b) be protected in conformance with the requirements of Articles 3.2.8.3. to 3.2.8.11.

(2) The penetration of a floor assembly by an *exit* or a *vertical service space* shall conform to the requirements of Sections 3.4. to 3.6.

(3) A *floor area* containing sleeping rooms in a *building* of Group B, Division 2 or 3 *major occupancy* shall not be constructed as part of an *interconnected floor space*.

(4) Except as permitted in Sentence (5), an elementary or secondary school shall not,

(a) contain an *interconnected floor space*, or

(b) be located in an *interconnected floor space*.

(5) An *interconnected floor space* is permitted in an elementary or secondary school provided,

(a) the *interconnected floor space* consists of the *first storey*, and the *storey* next above or below it, but not both,

(b) the *interconnected floor space* is *sprinklered*,

(c) the portions of the upper *floor area* that do not terminate at an exterior wall, a *firewall* or a vertical shaft shall terminate at a vertical *fire separation* extending from the floor assembly to the underside of the floor or roof assembly above,

(d) except as provided in Clause (e), the *fire separation* required in Clause (c) need not have a *fire-resistance rating*,

(e) where a corridor is located immediately adjacent to the *fire separation* required in Clause (c), the *fire separation* shall have a *fire-resistance rating* of not less than 30 min, and

(f) where a portion of a *floor area* is not within the *interconnected floor space*, the required *access to exit* from this portion of the *floor area* shall not lead through the *interconnected floor space*.

3.2.8.2. Exceptions to Special Protection

(1) A *mezzanine* need not terminate at a vertical *fire separation* nor be protected in conformance with the requirements of Articles 3.2.8.3. to 3.2.8.11. provided the *mezzanine*,

(a) serves a Group A, Division 1 *major occupancy*,

(b) serves a Group A, Division 3 *major occupancy* in a *building* not more than 2 *storeys* in *building height*,

(c) serves a Group A, C, D, E or F *major occupancy* and the *mezzanine* conforms to Sentence 3.2.1.1.(3) or (8),

(d) is not considered a *storey* in Sentence 3.2.1.1.(4) in calculating *building height* provided the *mezzanine* is not more than 500 m^2 in area and does not contain a Group B *occupancy*, or

(e) is not considered a *storey* in calculating *building height* in Sentence 3.2.1.1.(7).

(2) Except for floors referred to in Sentence 3.1.10.3.(1) and Article 3.2.1.2., openings through a horizontal *fire separation* for vehicular ramps in a *storage garage* are not required to be protected with *closures* and need not conform to this Subsection.

(3) If a *closure* in an opening in a *fire separation* would disrupt the nature of a manufacturing process, such as a continuous flow of material from *storey* to *storey*, the *closure* for the opening is permitted to be omitted provided precautions are taken to offset the resulting hazard.

(4) An *interconnected floor space* in a Group B, Division 1 *occupancy* need not conform to the requirements of Articles 3.2.8.3. to 3.2.8.11. provided the *interconnected floor space* does not interconnect more than 2 adjacent *storeys*.

(5) Except as permitted by Sentence (6), openings for stairways, escalators and inclined moving walks need not conform to the requirements in Articles 3.2.8.3. to 3.2.8.11. provided,

(a) the opening for each stairway, escalator or walk does not exceed 10 m^2,

(b) the *building* is *sprinklered* throughout, and

(c) the *interconnected floor space* contains only Group A, Division 1, 2 or 3, Group D or Group E *occupancies*.

(6) An *interconnected floor space* need not conform to the requirements of Articles 3.2.8.3. to 3.2.8.11. provided,

(a) the *interconnected floor space* consists of the *first storey* and the *storey* next above or below it, but not both,

(b) the *interconnected floor space* is *sprinklered*, and

(c) the *interconnected floor space* contains only Group A, Division 1, 2 or 3, Group D, Group E, or Group F, Division 2 or 3 *occupancies*.

3.2.8.3. Configuration

(1) In *buildings* constructed in conformance with Articles 3.2.8.4. to 3.2.8.11., the *unprotected openings* through floor assemblies in an *interconnected floor space* shall be of sufficient size and shall be positioned relative to each other so as to be capable of containing, within the full height of the *interconnected floor space*, a cylinder conforming to Sentence (2).

(2) The cylinder referred to in Sentence (1) shall have a cross-section that, where taken at a right angle to the longitudinal axis of such cylinder, is,

(a) a circle at least 9 m in diameter, or

(b) an ellipse at least 7 m wide along the minor axis and at least 65 m^2 in area.

3.2.8.4. Exits

(1) A *building* that is more than 18 m in height, measured between *grade* and the floor level of the top *storey*, and that contains an *interconnected floor space*, shall be designed to limit the passage of smoke from a fire into *exit* stairshafts opening into an *interconnected floor space* so that during a 2 h period after the start of fire, such stairshafts will not contain more than 1% by volume of contaminated air from the fire floor, assuming an outdoor temperature equal to the January design temperature on a 2.5% basis.

(2) Where a *building* containing an *interconnected floor space* is more than 75 m in height, measured between *grade* and the floor level of the top *storey*, the *exit* stairshaft protection required in Sentence (1) shall be accomplished by the provision, between each *floor area* and each *exit* stairshaft, of a vestibule provided with a mechanical air supply or with a vent opening to the outdoors.

(3) Where a vestibule protecting an *exit* stairshaft is incorporated into the design of the *building* to meet the requirements of Sentence (1) or (2), such vestibule shall,

(a) be designed so that each doorway for a door opening into the vestibule is located at least 1 800 mm from a door or doors opening outward from the vestibule,

(b) be separated from the remainder of the *floor area* by a *fire separation* having a *fire-resistance rating* at least equal to that required for the *exit* that it serves except that the *fire-resistance rating* of a *fire separation* between the vestibule and a *public corridor* need not exceed 45 min, and

(c) not have a door or doors opening into more than one *exit* stairshaft.

(4) Except where *exits* serving the *floor area* are at ground level, the increased travel distance to *exits* permitted by Clause 3.4.2.5.(1)(c) shall not apply to a *floor area* within an *interconnected floor space*.

(5) Where a portion of a *floor area* is not within an *interconnected floor space*, required *access to exit* from such portion of a *floor area* shall not lead through an *interconnected floor space*.

(6) Except as provided in Sentences (7) and (8), portions of an *interconnected floor space* that have floor levels more than 18 m above *grade* shall be served by *exits* that provide at least 0.3 m^2 of area of treads, landings and floor surface for each occupant of such portions of an *interconnected floor space*.

(7) The requirements of Sentence (6) need not be applied where a *floor area* that is a portion of an *interconnected floor space* and that has a floor level more than 18 m above *grade* is separated from the remainder of the *interconnected floor space* by a *fire separation* having a *fire-resistance rating* of at least 1 h, except that no *fire-resistance rating* is required for such *fire separation* where all of the *major occupancies* contained within the *interconnected floor space* may be classified as light hazard *occupancies* in conformance with Appendix A of NFPA 13 “Installation of Sprinkler Systems”.

(8) The requirements of Sentence (6) need not be applied where the *exit* stairs that serve *interconnected floor spaces* are designed so that the required width of each stair is cumulative.

3.2.8.5. Elevators

(1) Except as provided in Sentence (2), where an elevator shaft opens into an *interconnected floor space* and into *storeys* that are above such space and that have floor levels more than 18 m above *grade*, either the elevator doors opening into the *interconnected floor space* or the elevator doors opening into the *storeys* above the *interconnected floor space* shall be protected by vestibules that,

(a) are designed to restrict the passage of contaminated air to the limit described in Sentence 3.2.8.4.(1), and

(b) conform to the requirements of Sentence 3.2.8.4.(3).

(2) Where elevator doors opening into an *interconnected floor space* are protected by vestibules in conformance with Sentence (1), the elevator doors opening into the lowest *storey* of the *interconnected floor space* need not be protected by such vestibules.

3.2.8.6. Group B Sleeping Rooms

(1) Openings provided for access between an *interconnected floor space* and a *building* or a portion of a *building* containing Group B *major occupancy* sleeping rooms shall be provided with vestibules that are provided with a mechanical air supply and that are designed,

(a) to restrict the passage of smoke from the *interconnected floor space* into the area containing sleeping rooms in accordance with the limits described in Sentence 3.2.8.4.(1), and

(b) in conformance with Clause 3.2.8.4.(3)(a).

3.2.8.7. Sprinklers

(1) In a *building* containing an *interconnected floor space*, *storeys* that are wholly or partially within an *interconnected floor space* and all *storeys* below an *interconnected floor space* shall be *sprinklered*.

(2) In a *building* containing an *interconnected floor space*,

(a) waterflow alarm signals from sprinkler systems shall be transmitted to the fire department in conformance with Sentence 3.2.4.8.(4), and

(b) sprinkler systems shall be electrically supervised as required by Sentence 3.2.4.10.(3).

3.2.8.8. Fire Alarm and Detection System

(1) A *building* containing an *interconnected floor space* shall be provided with,

(a) a fire alarm system and electrically supervised annunciator conforming to Subsection 3.2.4.,

(b) a system of *smoke detectors* located,

(i) on the ceiling of each *storey* in the vicinity of the openings through floor assemblies described in Article 3.2.8.3., except within *dwelling units*, *heat detectors* may be installed instead of *smoke detectors*, and

(ii) as required for the activation of the smoke control system described in Sentences 3.2.8.9.(3), (4), (6) and (7), and

(c) facilities for transmitting a signal to the fire department in conformance with Article 3.2.4.8.

3.2.8.9. Smoke Control

(1) A smoke control system conforming to Sentences (2) to (8) shall be designed to control the movement of smoke within a *building* containing an *interconnected floor space*.

(2) The design of the smoke control system shall assume an outdoor temperature equal to the January design temperature on a 2.5% basis.

(3) Upon activation of the sprinkler system or automatic detection of smoke by at least two *smoke detectors* in a single zone within an *interconnected floor space*, the system shall,

(a) stop air moving fans that provide for the normal exhausting or re-circulating of air in an *interconnected floor space*,

(b) activate *exit* stairshaft protection required in Article 3.2.8.4.,

(c) activate elevator protection required in Article 3.2.8.5., and

(d) activate the vestibule air supply required in Sentence 3.2.8.6.(1).

(4) A *building* containing an *interconnected floor space* may be designed so that, in the event of a fire arising in a *floor area* or part of a *floor area* within the *interconnected floor space*, automatic detection of such fire will activate air handling equipment that,

(a) extracts air directly from such *floor area* or part of a *floor area* at the rate of at least six air changes per hour, and

(b) supplies air in sufficient quantities and at appropriate locations to prevent smoke from passing out of such *floor area* into other portions of the *interconnected floor space*.

(5) For purposes of Sentences (6) and (7), the volume of an *interconnected floor space* need not include the aggregate volume of those *floor areas* or portions of *floor areas* designed to have zoned air extraction in accordance with Sentence (4).

(6) A mechanical exhaust shall be provided to remove air at the top of an *interconnected floor space* at the rate of at least six air changes per hour, except that where the volume of the *interconnected floor space* exceeds 17 000 m^3, only four air changes per hour need be provided.

(7) Except where zoned mechanical exhaust described in Sentence (4) has been activated, upon automatic detection of smoke within the volume of the *interconnected floor space*, the mechanical exhaust described in Sentence (6) shall be automatically activated and supply air shall be provided in sufficient quantity and at appropriate locations to allow a consistent rate of removal of smoke throughout the volume of the *interconnected floor space*.

(8) Overriding manual controls for the smoke control system shall be provided for fire department use at an acceptable location in the vicinity of the fire alarm annunciator.

3.2.8.10. Emergency Power Supply

(1) In a *building* that is more than 18 m in height, measured between *grade* and the floor level of the top *storey*, an emergency power supply capable of operating under a full load for at least 2 h shall be provided by an emergency generator or by a separate service not supplied by the same substation as the primary source for fans required for smoke control purposes in Articles 3.2.8.4., 3.2.8.5., 3.2.8.6. and 3.2.8.9.

3.2.8.11. Testing

(1) The systems for smoke control and venting described in Articles 3.2.8.4., 3.2.8.5., 3.2.8.6. and 3.2.8.9. shall be tested to ensure satisfactory operation.

3.2.9. Standpipe Systems

3.2.9.1. Where Required

(1) Except as provided in Sentences (4) to (7), a standpipe system shall be installed in every *building* that,

(a) is more than 3 *storeys* in *building height*,

(b) is more than 14 m high measured between *grade* and the ceiling of the top *storey*, or

(c) is not more than 14 m high measured between *grade* and the ceiling of the top *storey* but has a *building area* exceeding the area shown in Table 3.2.9.1. for the applicable *building height* if the *building* is not *sprinklered*.

Table 3.2.9.1.
Building Limits without Standpipe Systems

Forming Part of Sentence 3.2.9.1.(1)

Item	Column 1	Column 2	Column 3	Column 4
	Occupancy Classification	*Building Area*, m^2		
		1 *Storey*	2 *Storeys*	3 *Storeys*
1.	A	2 500	2 000	1 500
2.	C	2 000	1 500	1 000
3.	D	4 000	3 000	2 000
4.	F, Division 2	2 000	1 500	1 000
5.	F, Division 3	3 000	2 000	1 000

(2) A standpipe system shall be installed in every *basement* of a *building* that requires a standpipe system above *grade*.

(3) A standpipe system shall be installed in every *basement* of a *building* that is regulated by Sentence 3.2.2.15.(2).

(4) A standpipe system is not required to be installed in the lowest *storey* in a *building* if this *storey* is a *service room* that has an area not more than 50 m^2.

(5) A standpipe system is not required to be installed in a rooftop enclosure if this enclosure has an area not more than 50 m^2.

(6) A standpipe system is not required to be installed in a *storage garage* conforming to Article 3.2.2.83. provided the *building* is not more than 15 m high.

(7) A standpipe system is not required to be installed in a *dwelling unit* that,

(a) extends not more than 3 *storeys* above adjacent ground level,

(b) is completely cut off from the remainder of the *building* so that there is no access to the remainder of the *building*, and

(c) has direct access to its interior by means of an exterior doorway located not more than 1 500 mm above or below adjacent finished ground level.

3.2.9.2. Standpipe System Design

(1) Except as otherwise provided in this Subsection, if a standpipe system is required, the design, construction, installation and testing of the system shall be in conformance with NFPA 14, “Installation of Standpipe and Hose Systems”.

(2) A dry standpipe that is not connected to a water supply shall not be considered as fulfilling the requirements of this Article.

(3) If more than one standpipe is provided, the total water supply need not be more than 30 L/s.

(4) The residual water pressure at the design flow rate at the hydraulically most remote hose connection of a standpipe system that is required to be installed in a *building* is permitted to be less than 450 kPa provided that,

(a) the *building* is *sprinklered*,

(b) the water supply at the base of the sprinkler riser is capable of meeting the design flow rate and pressure demand of the sprinkler system, including the inside and outside hose allowance, and

(c) fire protection equipment is available to deliver, by means of the fire department connection, the full demand flow rate at a residual water pressure of 450 kPa at the hydraulically most remote hose connection of the standpipe system.

(5) A fire department connection shall be provided for every standpipe system.

(6) Pumps required to have a rated net head pressure greater than 280 kPa and their controllers shall be *listed* and labelled.

(7) Couplings for hoses or other fittings used in connection with such couplings shall conform to ULC-S513, "Threaded Couplings for 38 mm and 65 mm Fire Hose" or CAN/ULC-S543, "Internal Lug Quick Connect Couplings for Fire Hose".

(8) If freezing of piping may occur, a dry standpipe system may be provided and so arranged through the use of *listed* devices to,

(a) automatically admit water to the system by opening of a hose valve, and

(b) transmit a signal to an attended location.

(9) A standpipe riser shall be located in,

(a) an *exit* stair shaft, or

(b) a *vertical service space* separated from the adjacent *floor area* by a *fire separation* having a *fire-resistance rating* conforming to Table 3.6.3.1.

3.2.9.3. Hose Connections

(1) If a standpipe system is required in a *building*, 38 mm diam hose connections shall be provided in each *storey* in the *building*.

(2) In addition to the requirements in Sentence (1), if a standpipe system is required, 65 mm diam hose connections shall be installed in each *storey* in the *building* if the *building*,

(a) is more than 25 m high, measured between *grade* and the ceiling of the top *storey*, or

(b) has a *building area* of more than 4 000 m^2.

3.2.9.4. Hose Stations

(1) If a standpipe system is required in a *building*, hose stations shall be provided in each *storey* in the *building*.

(2) Each hose station shall be equipped with a hose rack filled with not more than 30 m of 38 mm diam fire hose and the hose rack and fire hose shall be,

(a) *listed*, or

(b) approved by the Factory Mutual Research Corporation.

(3) Except in a Group F *occupancy*, at each hose station, hose connections, valves, fire hose, nozzle and hose rack shall be in a hose cabinet.

(4) A hose cabinet referred to in Sentence (3) shall be of sufficient size to,

(a) contain the equipment referred to in Sentence (3),

(b) contain a *listed* fire extinguisher, and

(c) provide sufficient clearance to permit the use of a standard fire department hose key.

(5) Hose stations shall be located,

(a) so that every portion of the *building* can be reached by a hose stream and is within 3 m of a nozzle attached to the hose required in Sentence (2),

(b) not more than 5 m from every required *exit* serving a *floor area*, except,

(i) for the *first storey*, or

(ii) if additional hose stations are required to achieve full coverage of the *floor area*, and

(c) in a conspicuous location where they are not likely to be obstructed.

(6) Except as permitted in Sentence (7), hose stations shall be located so that it is not necessary to penetrate an *exit* with a hose in order to provide the design coverage required in Clause (5)(a).

(7) A hose is permitted to penetrate an *exit* in order to provide the required coverage to,

(a) a *service room* referred to in Sentence 3.2.9.1.(4),

(b) a rooftop enclosure referred to in Sentence 3.2.9.1.(5),

(c) a room not more than 50 m^2 in area, or

(d) a room or group of rooms not more than 200 m^2 in area in a *sprinklered floor area*.

(8) A hose station located on one side of a *horizontal exit* shall be considered to serve only the *floor area* on that side of the *horizontal exit*.

(9) A hose cabinet shall be located so that its door, when fully opened, will not obstruct the required width of a *means of egress*.

(10) A hose station in a Group B, Division 1 *major occupancy* is permitted to be located in a secure area, or in a lockable cabinet provided that,

(a) identical keys for all cabinets are located at all guard stations, or

(b) electrical remote release devices are provided and are connected to an emergency power supply.

3.2.9.5. Supervisory Signal Annunciation for Valves

(1) If a fire alarm system in a *building* is required by Sentence 3.2.4.9.(1) to have an annunciator, valves controlling water supplies in a standpipe system, other than hose valves, shall be electrically supervised in accordance with Sentence 3.2.4.10.(2).

3.2.9.6. Water Supply for 38 mm Hose Connections

(1) If a standpipe and hose system is required, the water supply shall be sufficient to provide a flow, measured at each of the two hydraulically most remote 38 mm diam hose connections,

(a) of not less than 380 L/min,

(b) for not less than 30 min,

(c) at a pressure of not less than 450 kPa, and

(d) of not less than 190 L/min from each of the two outlets simultaneously.

3.2.9.7. Water Supply for 65 mm Hose Connections

(1) If 65 mm diam hose connections are required, the water supply shall be sufficient to provide a flow, measured at each of the two hydraulically most remote 65 mm diam hose connections,

(a) of not less than 1 890 L/min,

(b) for not less than 30 min,

(c) at a pressure of not less than 450 kPa, and

(d) of not less than 945 L/min from each of the two outlets simultaneously.

(2) If the *building* is less than 84 m high, measured between *grade* and the ceiling level of the top *storey*, the water supply required in Sentence (1) is permitted to be supplied through the fire department connection.

(3) If the *building* is 84 m or more high, measured between *grade* and the ceiling level of the top *storey*, the water supply required in Sentence (1) shall be provided by sufficient pumping capacity.

(4) If the *building* is 84 m or more high, measured between *grade* and the ceiling level of the top *storey*, the *building* shall be served by no fewer than two sources of water supply from a public water system.

Section 3.3. Safety Within Floor Areas

3.3.1. All Floor Areas

3.3.1.1. Separation of Suites

(1) Except as permitted by Sentences (2) and (3), each *suite* in other than *business and personal services occupancies* shall be separated from adjoining *suites* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(2) The *fire-resistance rating* of the *fire separation* required by Sentence (1) is permitted to be less than 1 h but not less than 45 min provided the *fire-resistance rating* required by Subsection 3.2.2. is permitted to be less than 1 h for,

(a) the floor assembly above the *floor area*, or

(b) the floor assembly below the *floor area*, if there is no floor assembly above.

(3) *Occupancies* that are served by *public corridors* conforming to Clause 3.3.1.4.(4)(b) in a *building* that is *sprinklered*, are not required to be separated from one another by *fire separations* provided the *occupancies* are,

(a) *suites* of *business and personal services occupancy*,

(b) fast food vending operations that do not provide seating for customers,

(c) *suites* of *mercantile occupancy*, or

(d) any combination of these *occupancies*.

3.3.1.2. Hazardous Substances, Equipment and Processes

(1) Except as provided in Subsection 3.3.6., the storage, handling and use of the hazardous substances shall be in conformance with,

(a) the Fire Code made under the *Fire Protection and Prevention Act, 1997*, or

(b) the CCBFC NRCC 53303, "National Fire Code of Canada", in the absence of regulations referred to in Clause (a).

(2) Cooking equipment, not within a *dwelling unit*, used in processes producing grease-laden vapours shall be designed and installed in conformance with Part 6.

(3) A fuel-fired *appliance* shall not be installed in a corridor serving as an *access to exit*.

3.3.1.3. Means of Egress

(1) *Access to exit* within *floor areas* shall conform to Subsections 3.3.2. to 3.3.6., in addition to the requirements of this Subsection.

(2) If a podium, terrace, platform or contained open space is provided, egress requirements shall conform to the appropriate requirements of Sentence 3.3.1.5.(1) for rooms and *suites*.

(3) *Means of egress* shall be provided from every roof that is intended for occupancy, and from every podium, terrace, platform or contained open space.

(4) At least two separate *means of egress* shall be provided from a roof, used or intended for an *occupant load* more than 60, to stairs designed in conformance with the *exit* stair requirements of Section 3.4.

(5) A rooftop enclosure shall be provided with an *access to exit* that leads to an *exit*,

(a) at the roof level, or

(b) on the *storey* immediately below the roof.

(6) A rooftop enclosure that is more than 200 m^2 in area shall be provided with at least two *means of egress*.

(7) Two points of egress shall be provided for a *service space* referred to in Sentence 3.2.1.1.(9) if,

(a) the area is more than 200 m^2, or

(b) the travel distance measured from any point in the *service space* to a point of egress is more than 25 m.

(8) Except as required by Sentence 3.3.4.4.(8) and permitted by Sentences 3.3.4.4.(5) and (6), each *suite* in a *floor area* that contains more than one *suite* shall have,

(a) an exterior *exit* doorway, or

(b) a doorway,

(i) into a *public corridor*, or

(ii) to an exterior passageway.

(9) Except as permitted by this Section and by Sentence 3.4.2.1.(2), at the point where a doorway referred to in Sentence (8) opens onto a *public corridor* or exterior passageway, it shall be possible to go in opposite directions to each of two separate *exits*.

(10) *Means of egress* from a roof for personnel servicing roof top equipment or for a below

ground *service room* that is not normally occupied, is permitted to be provided by stairways or fixed ladders.

3.3.1.4. Public Corridor Separations

(1) Except as otherwise required by this Part or as permitted by Sentence (4), a *public corridor* shall be separated from the remainder of the *storey* by a *fire separation*.

(2) Except as permitted by Sentence (3) and Clauses (4)(a) and (b), the *fire separation* between a *public corridor* and the remainder of the *storey* shall have a *fire-resistance rating* not less than 45 min.

(3) If a *storey* is *sprinklered*, no *fire-resistance rating* is required for a *fire separation* between a *public corridor* and the remainder of the *storey* provided the corridor does not serve a *care*, *care and treatment*, *detention* or *residential occupancy*.

(4) No *fire separation* is required in a *sprinklered floor area* between a *public corridor* and,

(a) except as required by Sentences 3.3.3.5.(9) and 3.3.4.2.(1) and notwithstanding Sentences 3.4.2.4.(2), the remainder of a *storey* provided the travel distance from any part of the *floor area* to an *exit* is not more than 45 m.,

(b) a room or *suite* provided the *public corridor* complies with Sentence 3.3.1.9.(6) and Clause 3.4.2.5.(1)(d), or

(c) a space containing *plumbing fixtures* required by Subsection 3.7.4. provided the space and the *public corridor* are separated from the remainder of the *storey* by a *fire separation* that has a *fire-resistance rating* not less than that required between the *public corridor* and the remainder of the *storey*.

(5) The sprinkler system in Sentences (3) and (4) shall be electrically supervised in conformance with Sentence 3.2.4.10.(3) and, upon operation, shall cause a signal to be transmitted to the fire department in conformance with Sentence 3.2.4.8.(4) when the corridor serves a Group E or Group F, Division 1 or 2 *occupancy*.

3.3.1.5. Egress Doorways

(1) Except for *dwelling units*, a minimum of two egress doorways located so that one doorway could provide egress from the room or *suite* as required by Article 3.3.1.3. if the other doorway becomes inaccessible to the occupants due to a fire that originates in the room or *suite*, shall be provided for every room and every *suite*,

(a) whose area is more than 15 m^2 and is used for,

(i) a *high hazard industrial occupancy*, or

(ii) a *hazardous room*,

(b) intended for an *occupant load* more than 60,

(c) in a *floor area* that is not *sprinklered* if,

(i) the area of a room or *suite* is more than the value in Table 3.3.1.5.A., or

(ii) the travel distance within the room or *suite* to the nearest egress doorway, is more than the value in Table 3.3.1.5.A.,

(d) in a *floor area* that is *sprinklered* and does not contain a *high hazard industrial occupancy* if,

(i) the travel distance to an egress doorway is more than 25 m, or

(ii) the area of the room or *suite* is more than the value in Table 3.3.1.5.B., or

(e) where the area of the room is more than 100 m^2 and it is a *hazardous classroom* in elementary or secondary school.

Table 3.3.1.5.A.
Egress in Floor Area, not Sprinklered

Forming Part of Sentences 3.3.1.5.(1) and (3)

Item	Column 1 *Occupancy* of Room or *Suite*	Column 2 Maximum Area of Room or *Suite*, m^2	Column 3 Maximum Distance to Egress Doorway, m
1.	Group A	150	15
2.	Group C	150(1)	25(1)
3.	Group D	200	25
4.	Group E	200	25
5.	Group F, Division 2	200	25
6.	Group F, Division 3	200	25

Notes to Table 3.3.1.5.A.:

(1) See Article 3.3.4.4. for *dwelling units*.

Table 3.3.1.5.B.
Egress in Sprinklered Floor Area

Forming Part of Sentences 3.3.1.5.(1) and (3)

Item	Column 1 *Occupancy* of Room or *Suite*	Column 2 Maximum Area of Room or *Suite*, m^2
1.	Group A	200
2.	Group B, Division 1	100
3.	Group B, Division 2 or 3	
	sleeping rooms	100
	other than sleeping rooms	200
4.	Group C	150(1)
5.	Group D	300
6.	Group E	200
7.	Group F, Division 2	200
8.	Group F, Division 3	300

Notes to Table 3.3.1.5.B.:

(1) See Article 3.3.4.4. for *dwelling units*.

(2) Where two egress doorways are required by Sentence (1), they shall be placed at a distance from one another equal to or greater than one-third of the maximum overall diagonal dimension of the room or *suite* to be served, measured as the shortest distance that smoke would have to travel between the nearest required egress doors.

(3) Except for a *mezzanine* within a *dwelling unit*, every *mezzanine* that is not required to terminate at a vertical *fire separation* in Article 3.2.8.2. shall have two egress facilities placed in such a manner that one facility could provide egress from the *mezzanine* if the other facility becomes inaccessible to the occupants of the *mezzanine* due to a fire that might originate in the room or *suite* in which the *mezzanine* is located,

(a) where the *occupancy* of the *mezzanine*, room or *suite* is classified as Group F, Division 1,

(b) where the *mezzanine* is intended for an *occupant load* of more than 60 persons,

(c) in a *floor area* that is not *sprinklered* if,

(i) the area of a *mezzanine* is more than the value in Table 3.3.1.5.A., or

(ii) the travel distance to an egress doorway or an egress facility is more than the value in Table 3.3.1.5.A., or

(d) in a *floor area* that is *sprinklered* if,

(i) the travel distance to an egress doorway or an egress facility is more than 25 m, or

(ii) the area of the *mezzanine* is more than the value in Table 3.3.1.5.B.

(4) For the purpose of Clauses (3)(c) and (d),

(a) if the room or *suite* in which the *mezzanine* is located is permitted to have one egress doorway, the travel distance is measured from any point on the *mezzanine* to that doorway, or

(b) if the room or *suite* in which the *mezzanine* is located is required to have more than one egress doorway, the travel distance is measured from any point on the *mezzanine* to the nearest egress facility leading from the *mezzanine*.

(5) Except for a *mezzanine* which is not considered as a *storey* in calculating *building height* in Sentence 3.2.1.1.(4), where the space below a *mezzanine* is enclosed, an egress facility from the *mezzanine* shall not lead into the enclosed space.

3.3.1.6. Travel Distance

(1) If more than one egress doorway is required from a room or *suite* referred to in Article 3.3.1.5., the travel distance within the room or *suite* to the nearest egress doorway shall not exceed the maximum travel distances specified in Clauses 3.4.2.5.(1)(a), (b), (c) and (f) for *exits*.

3.3.1.7. Protection on Floor Areas with a Barrier-Free Path of Travel

(1) Except as provided in Sentences (2) and (3), every *floor area* above or below the *first storey* that has a *barrier-free* path of travel shall,

(a) be served by an elevator,

(i) conforming to Sentences 3.2.6.5.(4) to (6),

(ii) protected against fire in conformance with Clause 3.2.6.5.(3)(b) or (c), and

(iii) in a *building* over 3 *storeys* in *building height*, protected against smoke movement so that the hoistway will not contain more than 1% by volume of contaminated air from a fire floor during a period of 2 h after the start of a fire, assuming an outdoor temperature equal to the January design temperature on a 2.5% basis determined in conformance with MMAH Supplementary Standard SB-1, “Climatic and Seismic Data”, or

(b) be divided into at least two zones by *fire separations* conforming to Sentences (4) to (6) so that,

(i) persons with physical disabilities can be accommodated in each zone,

(ii) the travel distance from any point in one zone to a doorway leading to another zone shall be not more than the value for travel distance permitted by Sentence 3.4.2.5.(1) for the *occupancy* classification of the zone, and

(iii) a b*arrier-free* path of travel is provided to an *exit*.

(2) In *residential occupancies*, the requirements of Sentence (1) are waived if a balcony conforming to Sentence (7) is provided for each *suite*, except for *suites* on the *storey* containing the *barrier-free* entrance described in Article 3.8.1.2.

(3) The requirements of Sentences (1) and (2) are waived when the *building* is *sprinklered*.

(4) Except as permitted by Sentence (5), the *fire separations* referred to in Clause (1)(b) shall have a *fire-resistance rating* not less than 1 h.

(5) The *fire-resistance rating* of the *fire separations* referred to in Clause (1)(b) is permitted to be less than 1 h but not less than 45 min provided the *fire-resistance rating* required by Subsection 3.2.2. is permitted to be less than 1 h for,

(a) the floor assembly above the *floor area*, or

(b) the floor assembly below the *floor area*, if there is no floor assembly above.

(6) A door acting as a *closure* in a *fire separation* referred to in Clause (1)(b) shall be weatherstripped or otherwise designed and installed to retard the passage of smoke.

(7) A balcony required by Sentence (2) shall,

(a) be provided with a door way having a clear width of not less that 800 mm when the door is in the open position,

(b) have no projection above the walking surface more than 13 mm,

(c) be not less than 1.5 m deep from the outside face of the exterior wall to the inside edge of the balcony, and

(d) provide not less than 0.5 m^2 for each occupant of the *suite*.

3.3.1.8. Headroom Clearance

(1) Except within the *floor area* of a *storage garage*, the minimum headroom clearance in every *access to exit* shall conform to the requirements of Article 3.4.3.5. for *exits*.

3.3.1.9. Corridors

(1) The minimum width of a *public corridor* shall be 1 100 mm.

(2) Except as required by Sentences 3.3.3.3.(2) and (3), the minimum unobstructed width shall be 1 100 mm for every,

(a) corridor used by the public,

(b) corridor serving classrooms, and

(c) corridor in a Group B, Division 2 or 3 *occupancy* where the corridor,

(i) serves a *service room*,

(ii) serves an administrative area,

(iii) will not be used by non-ambulatory outpatients, or

(iv) will not be used by non-ambulatory residents.

(3) Except as permitted by Sentence (4), obstructions located within 1 980 mm of the floor shall not project more than 100 mm horizontally in a manner that would create a hazard for a person with a visual disability traveling adjacent to the walls in,

(a) an *exit* passageway,

(b) a *public corridor*,

(c) a corridor used by the public,

(d) a corridor serving classrooms, or

(e) a corridor serving patients' or residents' sleeping rooms in a Group B, Division 2 or Division 3 *occupancy*.

(4) The horizontal projection of an obstruction referred to in Sentence (3) is permitted to be more than 100 mm provided the clearance between the obstruction and the floor is less than 680 mm.

(5) If a corridor contains an *occupancy*, the *occupancy* shall not reduce the unobstructed width of the corridor to less than its required width.

(6) If a *public corridor* conforming to Clause 3.4.2.5.(1)(d) contains an *occupancy*,

(a) the *occupancy* shall be located so that for pedestrian travel there is an unobstructed width not less than 3 m at all times adjacent and parallel to all rooms and *suites* that front onto the *public corridor*, and

(b) the combined area of all *occupancies* in the *public corridor* shall be not more than 15% of the area of the *public corridor*.

(7) Except as provided in Sentence 3.3.3.3.(1), a dead end corridor shall conform to Sentences (8) to (14).

(8) A dead end corridor is permitted in an *assembly occupancy* where there is a second and separate egress doorway from each room or *suite* not leading into a dead end corridor.

(9) In a *residential occupancy*, except for corridors served by a single *exit* as described in Sentence 3.3.4.4.(6), a dead end *public corridor* is permitted provided it is not more than 6 m long.

(10) Dead end corridors in Sentence (9) shall contain no door openings to *service rooms* containing fuel-fired *appliances* or rooms that may be considered a hazard.

(11) A dead end *public corridor* is permitted in a *business and personal services occupancy* where,

(a) the dead end corridor,

(i) serves an *occupant load* of not more than 30 persons,

(ii) is not more than 9 m long, and

(iii) is provided with doors having self-closing devices, or

(b) there is a second and separate egress doorway from each room or *suite* not leading into a dead end corridor.

(12) A dead end corridor is permitted in a *mercantile occupancy* where,

(a) the dead end corridor,

(i) serves an *occupant load* of not more than 30 persons,

(ii) is not more than 9 m long, and

(iii) is provided with doors having self-closing devices, or

(b) there is a second and separate egress doorway from each room or *suite* not leading into a dead end corridor.

(13) A dead end corridor is permitted in a *low* or *medium hazard industrial occupancy* where,

(a) the dead end corridor,

(i) serves an *occupant load* of not more than 30 persons,

(ii) is not more than 9 m long, and

(iii) is provided with doors having self-closing devices, or

(b) there is a second and separate egress doorway from each room or *suite* not leading into a dead end corridor.

(14) A dead end corridor is permitted in a *high hazard industrial occupancy* where there is a second and separate egress doorway from each room or *suite* not leading into a dead end corridor.

(15) Except as otherwise required by this Section, aisles shall be provided in conformance with the Fire Code made under the *Fire Protection and Prevention Act, 1997*.

3.3.1.10. Door Swing

(1) Except as permitted by Article 3.3.1.11., a door that opens into a corridor or other facility providing *access to exit* from a *suite*, or a room not located within a *suite*, shall swing on a vertical axis.

(2) Except as permitted by Article 3.3.1.11., a door that opens into a corridor or other facility providing *access to exit* from a room or *suite* shall swing in the direction of travel to the *exit* if the room or *suite* is used or intended for,

(a) an *occupant load* more than 60,

(b) a *high hazard industrial occupancy*, or

(c) a *hazardous classroom* in an elementary or secondary school.

(3) Every door that divides a corridor that is not wholly contained within a *suite* shall swing on a vertical axis in the direction of travel to the *exit* where the corridor provides *access to exit* for,

(a) an *occupant load* more than 60,

(b) a *high hazard industrial occupancy*,

(c) a *hazardous classroom* in an elementary or secondary school, or

(d) a Group B, Division 2 or 3 *occupancy*.

(4) If a pair of doors is installed in a corridor that provides *access to exit* in both directions, the doors shall swing in opposite directions, with the door on the right hand side swinging in the direction of travel to the *exit*.

3.3.1.11. Sliding Doors

(1) Except as permitted by Sentence (2), a sliding door provided in the locations described in Article 3.3.1.10. shall,

(a) be designed and installed to swing on the vertical axis in the direction of travel to the *exit* when pressure is applied, and

(b) be identified as a swinging door by means of a label or decal affixed to it.

(2) In a Group B, Division 1 *occupancy*, or in an *impeded egress zone* in other *occupancies*, sliding doors used in an *access to exit* need not conform to Sentence (1) and Article 3.3.1.10.

(3) Movable *partitions* used to separate a *public corridor* from an adjacent *business and personal services occupancy* or a *mercantile occupancy* need not conform to Sentence (1) and Sentences 3.3.1.10.(1) and (2) provided the *partitions* are not located in the only *means of egress*.

3.3.1.12. Doors and Door Hardware

(1) Except as required by Article 3.3.3.4., a door that opens into or is located within a *public corridor* or other facility that provides *access to exit* from a *suite* shall,

(a) provide a clear opening of not less than 800 mm if there is only one door leaf,

(b) in a doorway with multiple leaves, have the active leaf providing a clear opening of not less than 800 mm, and

(c) not open onto a step.

(2) A door in an *access to exit* shall be readily openable in travelling to an *exit* without requiring keys, special devices or specialized knowledge of the door opening mechanism, except that this requirement does not apply to a door serving a *contained use area*, or an *impeded egress zone*, provided the locking devices conform to Sentence (6).

(3) Except as permitted by Sentence (4), door release hardware shall be operable by one hand and the door shall be openable with not more than one releasing operation.

(4) An egress door from an individual *dwelling unit* or from a *suite* of *residential occupancy* is permitted to be provided with additional devices that require a releasing operation additional to the main door release hardware, provided the devices are readily operable from the inside without the use of keys, special devices or specialized knowledge.

(5) Door release hardware shall be installed not more than 1 200 mm above the finished floor.

(6) A door in a *means of egress* serving a *contained use area* or an *impeded egress zone* is permitted to be equipped with locking devices that can be released either locally or remotely in conformance with Sentence (7) or (8).

(7) Local locking devices permitted by Sentence (6) shall be operable by a key from both sides of the door.

(8) Controls for the remote release of door locking devices permitted by Sentence (6) shall be located in an area readily available to security personnel.

(9) Locking devices permitted by Sentence (6) that are electrically operated shall be,

(a) designed to operate on emergency power, and

(b) capable of manual release by security personnel.

(10) A door in an *access to exit* is permitted to be equipped with an electromagnetic locking device conforming to Sentence 3.4.6.16.(4), except that this permission does not apply to a door,

(a) in an elementary or secondary school,

(b) a door leading from a Group F, Division 1 *occupancy*, or

(c) except as provided in Sentence (11), requiring a latch release device by Article 3.3.2.6.

(11) A door in an *access to exit* in a *gaming premise* is permitted to be equipped with an electromagnetic locking device conforming to Sentences 3.4.6.16.(4) and (7).

3.3.1.13. Ramps and Stairways

(1) Except as permitted by Sentence (2), Article 3.3.4.7. and Subsection 3.3.2., ramps and stairways that do not serve as *exits* shall conform to the dimensional, *guard*, handrail and slip-resistance requirements for *exit* ramps and stairways of Sentence 3.4.3.2.(7) and Articles 3.4.3.5. and 3.4.6.1. to 3.4.6.9.

(2) Ramps and stairways that do not conform to the requirements of Sentence (1) and are intended only for occasional use for servicing equipment and machinery are permitted,

(a) to serve *service rooms* and *service spaces*, and

(b) in *industrial occupancies*.

3.3.1.14. Exterior Passageways

(1) An exterior passageway leading to a required *exit* shall conform to the requirements of Section 3.4. for exterior *exit* passageways.

3.3.1.15. Curved or Spiral Stairs

(1) A curved or spiral stair is permitted in a stairway not required as an *exit* provided the stair has,

(a) treads with,

(i) a minimum run not less than 150 mm, and

(ii) an average run not less than 200 mm, and

(b) risers in conformance with Sentence 3.4.6.8.(2).

3.3.1.16. Capacity of Access to Exits

(1) The capacity of an *access to exit* shall be based on the *occupant load* of the portion of the *floor area* served.

(2) In an *access to exit* the required width of ramps with a slope not more than 1 in 8, doorways, and corridors shall be based on not less than 6.1 mm per person.

(3) In an *access to exit* the required width of a ramp with a slope more than 1 in 8 shall be based on not less than 9.2 mm per person.

(4) In an *access to exit* from a *floor area* used or intended to be used for patients or residents in a Group B, Division 2 or Division 3 *occupancy*, the required width of corridors, doorways, and ramps shall be based on not less than 18.4 mm per person.

(5) The capacity of stairs in an *access to exit* shall conform to the requirements for stairs in Sentences 3.4.3.2.(1) to (3).

3.3.1.17. Guards

(1) Except as provided in Sentence (6) and Articles 3.3.2.8. and 3.3.4.7., a *guard* not less than 1 070 mm high shall be provided,

(a) around each roof to which access is provided for other than maintenance,

(b) at openings into smoke shafts referred to in Subsection 3.2.6. that are less than 1 070 mm above the floor, and

(c) at each raised floor, *mezzanine*, balcony, gallery, interior or exterior vehicular ramp, and at other locations where the difference in level is more than 600 mm.

(2) Except as provided in Sentence (3) and Sentence 3.3.2.8.(4), openings through any *guard* that is required by Sentence (1) shall be of a size that will prevent the passage of a sphere having a diameter more than 100 mm unless it can be shown that the location and size of openings that exceed this limit do not represent a hazard.

(3) Openings through any *guard* that is required by Sentence (1) and that is installed in a *building* of *industrial occupancy* shall be of a size which will prevent the passage of a sphere having a diameter more than 200 mm unless it can be shown that the location and size of openings that exceed this limit do not represent a hazard.

(4) Openings through any *guard* that is not required by Sentence (1) and that serves a *building* of other than *industrial occupancy*, shall be of a size that,

(a) will prevent the passage of a sphere having a diameter more than 100 mm, or

(b) will permit the passage of a sphere having a diameter more than 200 mm unless it can be shown that the location and size of openings that exceed these limits do not represent a hazard.

(5) Unless it can be shown that the location and size of openings do not present a hazard, a *guard* shall be designed so that no member, attachment or opening located between 140 mm and 900 mm above the level protected by the *guard* will facilitate climbing.

(6) Sentence (1) does not apply at the front edges of *stages*, floor pits in *repair garages* and loading docks.

3.3.1.18. Transparent Doors and Panels

(1) Except for *dwelling units* and as permitted by Sentence (4), a glass or transparent door shall be designed and constructed so that the existence and position of the door is readily apparent, by attaching non-transparent hardware, bars or other permanent fixtures to it.

(2) A glass door shall be constructed of,

(a) laminated or tempered safety glass conforming to CAN/CGSB-12.1-M, “Tempered or Laminated Safety Glass”, or

(b) wired glass conforming to CAN/CGSB-12.11-M, “Wired Safety Glass”.

(3) Except as permitted by Sentence (4), transparent panels used in an *access to exit* that, because of their physical configuration or design, could be mistaken as a *means of egress* shall be made inaccessible by barriers or railings.

(4) Sliding glass *partitions* that separate a *public corridor* from an adjacent *occupancy* and that are intended to be open during normal working hours need not conform to Sentences (1) and (3), provided the *partitions* are suitably marked to indicate their existence and position.

(5) Glass in doors and glass sidelights that could be mistaken for doors, within or at the entrances to *dwelling units* and in public areas, shall conform to the requirements of Article 9.6.1.4.

(6) A window in a public area that extends to less than 1 070 mm above the floor and is located above the second *storey* in a *building* of *residential occupancy*, shall be protected by a barrier or railing from the floor to not less than 1 070 mm above the floor, or the window shall be non-openable and designed to withstand the lateral design loads for balcony *guards* required by Article 4.1.5.14.

3.3.1.19. Exhaust Ventilation

(1) An exhaust ventilation system designed in conformance with the appropriate requirements of Part 6 shall be provided in a *building* or part of a *building* in which dust, fumes, gases, vapour or other impurities or contaminants have the potential to create a fire or explosion hazard.

(2) Explosion relief devices, vents or other protective measures conforming to Subsection 6.2.2. shall be provided for a space in which substances or conditions that have the potential to create an explosion hazard are present as a result of the principal use of a *building*.

3.3.1.20. Janitors’ Rooms

(1) Except as permitted by Sentences (2) and (3), a room or space within a *floor area* for the storage of janitorial supplies shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(2) The *fire-resistance rating* of the *fire separation* required by Sentence (1) is permitted to be not less than 45 min provided the *fire-resistance rating* required by Subsection 3.2.2. is permitted to be less than 1 h for,

(a) the floor assembly above the *floor area*, or

(b) the floor assembly below the *floor area*, if there is no floor assembly above.

(3) The *fire separation* required by Sentence (1) is not required to have a *fire-resistance rating* if the *floor area* in which the room or space is located is *sprinklered*.

3.3.1.21. Common Laundry Rooms

(1) Except as permitted by Sentences (2) and (3), in a *building* of *residential occupancy*, a laundry room in a *floor area* that is not within a *dwelling unit* shall be

separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(2) The *fire-resistance rating* of the *fire separation* required by Sentence (1) is permitted to be not less than 45 min provided the *fire-resistance rating* required by Subsection 3.2.2. is permitted to be less than 1 h for,

(a) the floor assembly above the *floor area*, or

(b) the floor assembly below the *floor area*, if there is no floor assembly above.

(3) The *fire separation* required by Sentence (1) is not required to have a *fire-resistance rating* if the *floor area* in which the laundry room is located is *sprinklered*.

3.3.1.22. Obstructions

(1) No obstruction shall be permitted in any *occupancy* that would restrict the width of a normal *means of egress* from any part of a *floor area* to less than 750 mm unless an unobstructed alternative *means of egress* is provided adjacent to, accessible from, and plainly visible from the obstructed *means of egress*.

3.3.1.23. Signs in Service Spaces

(1) Illuminated signs conforming to Sentence 3.4.5.1.(2) or (7) shall be provided to indicate the direction to egress points in a *service space* referred to in Sentence 3.2.1.1.(9).

3.3.1.24. Welding and Cutting

(1) Except as provided in Sentence (2), welding and cutting operations shall be located in a room,

(a) separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h, or

(b) protected by an automatic fire extinguishing system.

(2) Sentence (1) does not apply to an *industrial occupancy* where the welding and cutting operations do not present a fire or explosion hazard to adjacent areas.

3.3.2. Assembly Occupancy

3.3.2.1. Scope

(1) This Subsection applies to *assembly occupancies* and to outdoor places of assembly.

3.3.2.2. Fire Separations

(1) Except as permitted by Sentence (2), the seating area of a Group A, Division 1 *occupancy* shall be separated from adjacent *occupancies* in the *floor area* by a *fire separation* having a *fire-resistance rating* not less than 1 h if the *occupant load* in the seating area exceeds 200.

(2) The *fire-resistance rating* of the *fire separation* required by Sentence (1) is permitted to be less than 1 h but not less than 45 min provided the *fire-resistance rating* required by Subsection 3.2.2. is permitted to be less than 1 h for,

(a) the floor assembly above the *floor area*, or

(b) the floor assembly below the *floor area*, if there is no floor assembly above.

(3) If usable space exists under tiers of seats in arena type *buildings*, a *fire separation* with a *fire-resistance rating* not less than 45 min shall be provided between the space and the seats or the space shall be *sprinklered*.

(4) Except as required in Sentences (5) to (7), in an elementary or secondary school, a *hazardous classroom* shall be separated from the remainder of the *building* by a *fire-separation* having a *fire-resistance rating* not less than,

(a) 1 h where the *building* is not *sprinklered*, or

(b) 30 min where the *building* is *sprinklered*.

(5) Except as provided in Sentence (6), in an elementary or secondary school, a *hazardous classroom* containing an auto repair shop shall be separated from the remainder of the *building* by a *fire-separation* having a *fire-resistance rating* not less than,

(a) 2 h where the *building* is not *sprinklered*, or

(b) 1 h where the *building* is *sprinklered*.

(6) In an elementary or secondary school, if there is a group of *hazardous classrooms* or a group of *hazardous classrooms* and ancillary rooms of a complementary use, the *fire separation* required by Sentence (4) or (5) need not be provided within the group but the *fire separation* is required between the group and the remainder of the *building*.

(7) In an elementary or secondary school, a *hazardous classroom* containing a spray painting operation shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than,

(a) 2 h, or

(b) 1 h where the spray painting operation is separated from the classroom by a *fire-separation* having a *fire-resistance rating* not less than 1 h.

(8) Except as required in Sentence (9), in an elementary or secondary school, where the *occupant load* of a room exceeds 200 persons, the room and any ancillary rooms of a complementary use shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than,

(a) 1 h where the *building* is not *sprinklered*, or

(b) 30 min where the *building* is *sprinklered*.

(9) A kitchen shall not be located within the *fire compartment* required in Sentence (8).

3.3.2.3. Fixed Seats

(1) Except for the requirements of Article 3.3.2.7. for bench-type seats and except as required or permitted by Sentence (2) and Articles 3.3.2.9. and 3.3.2.10., fixed seats in places of assembly shall be,

(a) attached or secured to the floor, platform or platform riser,

(b) provided with arms and back, and

(c) arranged in rows having an unobstructed passage not less than 400 mm wide measured horizontally between plumb lines from the backs of the seats in one row and the edges of the furthest forward projection of the seats in the next row in the unoccupied position.

(2) For fixed seats with backs and with folding tablet arms, the value of 400 mm required by Clause (1)(c) shall be measured when the tablet arms are in the use position, but is permitted to be measured in the stored position provided,

(a) there are not more than seven seats between any seat and the nearest aisle,

(b) the seats are located in a lecture hall or an auditorium used for instructional purposes, and

(c) the tablet arm, when raised manually to a vertical position, falls by the force of gravity to the stored position.

(3) Except as permitted by Sentences (4) and (5), aisles shall be located so that there are not more than seven seats with backs or 20 seats without backs between any seat and the nearest aisle.

(4) The requirements of Sentence (3) do not apply if,

(a) egress doorways are provided to serve both ends of rows of seats,

(b) each doorway referred to in Clause (a) serves not more than three rows of seats, and

(c) each row contains not more than 100 seats.

(5) The requirements of Sentence (3) do not apply if,

(a) there are not more than seven seats between any seat and the nearest aisle, where the seats are served by a single aisle,

(b) there are not more than 20 seats between any seat and the nearest aisle, where the seats are served by two aisles,

(c) each row has an unobstructed passage with minimum width of 400 mm plus 6.1 mm for each additional seat above 16 seats in the row, and

(d) the travel distance is not more than 45 m measured along the path of travel from any seat to an *exit* or to an egress doorway.

(6) Seating arrangements that do not conform to the requirements of Sentences (3) to (5) are permitted provided the standard of safety is not reduced and the time required for egress is not increased.

3.3.2.4. Aisles

(1) Except as required by Articles, 3.3.2.9. and 3.3.2.10., aisles leading to egress doors or *exits* shall be provided in conformance with Sentences (2) to (27) in places of assembly that contain fixed seats.

(2) In this Subsection, a converging aisle is an aisle into which the occupants of two or more aisles converge in travelling to an *exit*.

(3) An aisle shall terminate at,

(a) a converging aisle,

(b) an egress doorway from the seating area, or

(c) an *exit* from the seating area.

(4) A converging aisle shall terminate at,

(a) an egress doorway from the seating area, or

(b) an *exit* from the seating area.

(5) The minimum clear width of aisles shall be not less than 1 100 mm , except that the width is permitted to be reduced to not less than,

(a) 750 mm if serving not more than 60 seats, and

(b) 900 mm if serving seats on one side only.

(6) The minimum clear width of each aisle shall be measured at the point in the aisle furthest from,

(a) an egress doorway referred to in Clause (15)(a),

(b) an *exit* referred to in Clause (15)(b), or

(c) an *exit* referred to in Sentence (16).

(7) Except for an aisle serving bleacher seats, where rows of seats discharge into an aisle, the minimum clear width required by Sentence (5) shall be increased by 25 mm for each metre of length of the aisle measured in the direction towards an *exit*.

(8) The width of a converging aisle shall be not less than the required width of the widest aisle plus 50% of the total required width of the remaining aisles that it serves.

(9) If rows of seats discharge directly into the converging aisle, the width required by Sentence (8) shall be increased by 25 mm for each metre of length of the aisle where the rows of seats discharge into the aisle.

(10) The width of an egress doorway or an *exit* leading directly from the seating area shall be not less than the required width of the widest aisle or converging aisle plus 50% of the total required width of the remaining aisles and converging aisles that it serves.

(11) The requirements in Sentences (5) to (10) and (17) do not apply if,

(a) the minimum clear width of an aisle is in accordance with Article 3.3.1.16., but is not less than 900 mm if serving seats on one side only,

(b) the minimum clear width of an aisle is in accordance with Article 3.3.1.16., but is not less than 1 200 mm if serving seats on both sides,

(c) the minimum clear width of a converging aisle is in accordance with Article 3.3.1.16., but not less than the width of the widest aisle leading to the converging aisle,

(d) the minimum clear width of an *exit* leading directly from the seating area is in accordance with Article 3.4.3.2.,

(e) except as provided in Clause (f), the minimum clear width of an egress doorway leading directly from the seating area is in accordance with Article 3.3.1.16., but not

less than the required width of the aisle or the converging aisle leading to the doorway, and

(f) if more than one vomitory is provided,

(i) the minimum total clear width of the egress doorways leading from one vomitory is not less than the required width of the aisle or the converging aisle leading to the doorways, and

(ii) the minimum clear width of egress doorways from additional vomitories is in accordance with Article 3.3.1.16.

(12) Except as provided in Sentences (13) and (14), dead-end aisles shall be not more than 6 m long.

(13) Dead-end aisles are permitted to be more than 6 m long, but not more than 10 m long if,

(a) the seating area is separated from other seating areas and adjacent *occupancies*, including a corridor serving any seating area, by a *fire separation* in accordance with Sentences 3.3.2.2.(1) and (2),

(b) the travel distance is not more than 25 m measured along the path of travel from any seat to an *exit*, to an egress doorway or to an opening into a vomitory,

(c) at least one *means of egress*, comprising not less than 30 per cent of the required *exit* capacity, is through an exterior *exit*, an *exit* stairway or a corridor not containing an *occupancy*,

(d) each row served by the dead-end aisle has a minimum unobstructed width of 400 mm plus 6.1 mm for each additional seat above seven seats in a row, but not more than 550 mm,

(e) the minimum ceiling height above the seating area is 3 m,

(f) the activation of a *fire detector* or a sprinkler head in the seating area will,

(i) cause the shutdown of the projection system serving the seating area, and

(ii) turn on the normal lighting in the seating area, and

(g) the *floor area* is *sprinklered*.

(14) Dead-end aisles are permitted to be more than 10 m long, but not more than 13 m long if,

(a) the seating area is separated from other seating areas and adjacent *occupancies*, including a corridor serving any seating area, by a *fire separation* in accordance with Sentences 3.3.2.2.(1) and (2),

(b) the travel distance is not more than 25 m measured along the path of travel from any seat to an *exit*, to an egress doorway or to an opening into a vomitory,

(c) at least one *means of egress*, comprising not less than 30 per cent of the required *exit* capacity, is through an exterior *exit*, an *exit* stairway or a corridor not containing an *occupancy*,

(d) each row served by a dead-end aisle has a minimum unobstructed width of 400 mm plus 6.1 mm for each additional seat above seven seats in a row, but not more than 550 mm,

(e) the activation of a *fire detector* or a sprinkler head in the seating area will,

(i) cause the shutdown of the projection system serving the seating area, and

(ii) turn on the normal lighting in the seating area,

(f) a voice communication system is installed in conformance with Article 3.2.4.23.,

(g) a smoke control system is installed to control movement of smoke in the seating area or a smoke exhaust system is provided so that, in the event of detection of smoke by a *smoke detector* in the seating area, air handling equipment is activated to extract air directly from the seating area at the rate of at least six air changes per hour, and

(h) the *floor area* is *sprinklered*.

(15) Where a seating area is separated as required by Sentences 3.3.2.2.(1) and (2) or 3.3.2.2.(8), the length of travel by any aisle shall be not more than 45 m measured from the most remote point of the aisle to,

(a) an egress doorway in the required separation, or

(b) an *exit* leading directly from the seating area.

(16) Where a seating area is not required to be separated by Sentences 3.3.2.2.(1) and (2) or 3.3.2.2.(8), the travel distance shall be not more than 45 m measured from the most remote point of the aisle to an *exit*.

(17) Side aisles shall be not less than 1 100 mm wide if seating is provided in conformance with Sentence 3.3.2.3.(4).

(18) An aisle that has a slope not more than 1 in 8 shall not be stepped.

(19) An aisle that slopes more than 1 in 8 shall be stepped.

(20) The passageway between rows of seats served by a stepped aisle shall be level at right angles to the line of travel.

(21) The riser of a step in an aisle shall be,

(a) not less than 110 mm high, and

(b) not more than 200 mm high.

(22) Variations are permitted in riser height provided,

(a) the height of adjacent risers does not vary by more than 6 mm, and

(b) the depth of a tread or a platform in the direction of travel is not less than 430 mm.

(23) Steps in an aisle shall,

(a) have a run not less than 230 mm exclusive of nosings,

(b) have a tread depth not less than 250 mm,

(c) extend to the adjacent rows of seats in a manner that will not create a hazard from tripping, and

(d) have a finish on the treads conforming to Sentence 3.4.6.1.(1).

(24) The location of every riser in an aisle shall be made apparent from both directions of travel by strategically placed lighting or contrasting marking stripes.

(25) A platform in an aisle shall be level, except that a slope not more than 1 in 50 is permitted for a platform that is not less than 430 mm deep in the direction of *exit* travel.

(26) If a step is used at the entry to a row of seats from a stepped aisle, an unobstructed platform not less than 800 mm square shall be provided adjacent to the aisle.

(27) The finish of the surface of a platform in or adjacent to a stepped aisle shall conform to Sentence 3.4.6.1.(1).

3.3.2.5. Corridors

(1) Except as permitted by Sentences (2) to (4), a corridor used by the public in an *assembly occupancy* as an *access to exit* shall be separated from the remainder of the *floor area* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(2) The *fire-resistance rating* of the *fire separation* required by Sentence (1) is permitted to be less than 1 h but not less than 45 min provided the *fire-resistance rating* required by Subsection 3.2.2. is permitted to be less than 1 h for,

(a) the floor assembly above the *floor area*, or

(b) the floor assembly below the *floor area*, if there is no floor assembly above.

(3) The *fire-resistance rating* required by Sentence (1) is permitted to be waived if the *floor area* in which the corridor is located is *sprinklered*.

(4) The *fire separation* required by Sentence (1) is permitted to be waived if the distance from any point in the *floor area* to an *exit* measured along the path of travel to an *exit* does not exceed the travel distance permitted by Article 3.4.2.5.

3.3.2.6. Doors

(1) A door equipped with a latching mechanism in an *access to exit* from a room or *suite* of *assembly occupancy* containing an *occupant load* more than 100 shall be equipped with a device that will release the latch and allow the door to swing wide open when a force not more than that specified in Sentence 3.8.3.3.(7) is applied to the device in the direction of travel to the *exit*.

3.3.2.7. Fixed Bench-Type Seats without Arms

(1) If fixed bench-type seats without arms are provided, the seat width per person shall be assumed to be 450 mm.

(2) The centre-to-centre spacing between rows of bench-type seats shall be not less than 760 mm if back rests are provided, and not less than 550 mm if back rests are not provided.

(3) A clear space of not less than 300 mm shall be provided between the back of each seat and the front of the seat immediately behind it.

3.3.2.8. Guards

(1) Except as required by Sentences (2) to (4) for bleacher seats, *guards* shall be installed in outdoor and indoor places of assembly with fixed seats so that,

(a) at the fascia of every box, balcony or gallery where the seats extend to the edge, the height of *guards* is not less than,

(i) 760 mm in front of the seats, and

(ii) 920 mm if located at the end of aisles or at the foot of steps,

(b) the height of *guards* along every cross aisle other than those adjacent to the fascia of every box, balcony or gallery is not less than 660 mm, except that *guards* need not be provided if the backs of the seats along the front side of the aisle are not less than 600 mm above the floor of the aisle, and

(c) where the seating is arranged in successive tiers and the height of rise between platforms is more than 450 mm, the height of *guards* is not less than 660 mm along the entire row of seats at the edge of the platform.

(2) The backs and ends of bleacher seats more than 1 200 mm above the ground or floor that are not adjacent to a wall shall be protected with a *guard*,

(a) not less than 1 070 mm high above an adjacent aisle surface or foot rest, and

(b) not less than 920 mm high above the centre of an adjacent seat board.

(3) If the front of a bleacher is more than 600 mm above the ground or floor, it shall be protected with a *guard* not less than 840 mm high above the front foot rest.

(4) Openings through any *guard* that is required by Sentences (2) and (3) shall be of a size that will prevent the passage of a sphere having a diameter more than 300 mm.

3.3.2.9. Outdoor Places of Assembly

(1) A Group A, Division 4 *occupancy* and each tier or balcony that has a capacity of more than,

(a) 1 000 persons shall have no fewer than three separate *exits*, or

(b) 4 000 persons shall have no fewer than four separate *exits*.

(2) In a Group A, Division 4 *occupancy*, every seat shall be located so that the travel distance is not more than 45 m measured along the path of travel from the seat to,

(a) the ground,

(b) an *exit*,

(c) an opening to a passageway leading from the seating area, or

(d) a portal, a vomitory or any other opening through the seating deck structure.

(3) *Exits* from outdoor stadia or grandstands shall be located not more than 25 m apart.

(4) The capacity of a *means of egress* for a Group A, Division 4 *occupancy* shall conform to the requirements of Sentence 3.4.3.2.(3).

(5) Aisles in a Group A, Division 4 *occupancy*,

(a) shall be located so that there are not more than 20 seats between any seat and the nearest aisle, and

(b) shall be not less than 1 200 mm wide, except that an aisle serving less than 60 persons is permitted to be 750 mm wide.

3.3.2.10. Bleachers

(1) Steps provided in aisles of bleachers of the telescopic type shall,

(a) have risers not more than 250 mm high, and

(b) have treads with a run not less than 280 mm.

(2) If the vertical distance between seating platforms in bleachers is more than 280 mm, an intermediate step shall be provided the full width of the aisle and proportioned to provide two equal risers between platforms.

(3) If the vertical distance between seating platforms in bleachers is more than 450 mm, two intermediate steps shall be provided the full width of the aisle so that there are three equal risers between platforms.

(4) If the passageway between rows of seats is not a closed deck, footboards shall be provided so that,

(a) the total width of the footboards shall be not less than three-quarters of the centre-to-centre spacing between rows of seats, and

(b) the spacing between footboard members shall be not more than 25 mm.

(5) Openings above footboards and below the seats in rows of bleachers shall be of a size that will prevent the passage of a sphere having a diameter more than 100 mm.

3.3.2.11. Libraries

(1) Except as permitted by Sentence (2), a library book storage room that is not normally accessible to the public shall be separated from the remainder of the *building* by a *fire separation* with a *fire-resistance rating* not less than 2 h if it,

(a) is more than 250 m^2 in area, or

(b) contains book stacks that,

(i) are more than 10 m high, or

(ii) penetrate more than one floor assembly.

(2) The *fire separation* required by Sentence (1) is not required if the book storage room is *sprinklered*.

(3) Open book shelves are permitted above and below a *mezzanine* floor in a library *building* provided the height of the shelves is not more than 2.1 m but not more than 75% of the floor-to-ceiling height of the space above or below the *mezzanine* floor assembly.

3.3.2.12. Stages for Theatrical Performances

(1) A *stage* for theatrical performances and ancillary spaces, including workshops, dressing rooms and storage areas, shall be *sprinklered*.

(2) A *fire separation* with a *fire-resistance rating* not less than 1 h shall be provided between a *stage* for theatrical performances and ancillary spaces, including workshops, dressing rooms and storage areas.

(3) Except as permitted by Sentence (6), a *stage* for theatrical performances and ancillary spaces, including workshops, dressing rooms and storage areas, shall be separated from the seating area by a *fire separation* having a *fire-resistance rating* not less than 1 h, except for a proscenium opening protected with,

(a) a sprinkler deluge system conforming to the requirements of NFPA 13 "Installation of Sprinkler Systems",

(b) an unframed fire curtain if the opening is not more than 20 m wide, or

(c) a semi-rigid fire curtain if the opening is more than 20 m wide.

(4) A fire curtain required by Sentence (3) shall be of a type designed to close,

(a) automatically upon the actuation of the sprinkler system,

(b) automatically upon actuation of the fire alarm system,

(c) manually by remote control devices located at the curtain control panel and at each side of the *stage*, and

(d) automatically by heat-actuated devices.

(5) At least two vents for the purpose of venting fire and smoke to the outside of a *building* shall be provided above a *stage* designed for theatrical performances and shall,

(a) have an aggregate area not less than one-eighth of the area of the *stage* behind the proscenium opening, and

(b) be arranged to open automatically upon actuation of the sprinkler system.

(6) The *fire separation* referred to in Sentence (3) is not required between a *stage* and a seating area in a *floor area* that is *sprinklered*, provided a sprinkler deluge system is installed at the boundary between the *stage* and the seating area.

3.3.2.13. Risers for Stairs

(1) In a Group A, Division 2 *occupancy* used for the serving of food and beverages, an interior flight of stairs with fewer than three risers is permitted provided it,

(a) is not less than 900 mm wide,

(b) is illuminated at all times that occupants are on the premises, and

(c) has a handrail on each side.

3.3.2.14. Storage Rooms

(1) A room intended for the storage of *flammable liquids* or *combustible liquids* required by the Fire Code made under the *Fire Protection and Prevention Act, 1997* shall not be located above or below the *first storey* of the *building*.

3.3.3. Care, Care and Treatment or Detention Occupancy

3.3.3.1. Scope

(1) This Subsection applies to *care occupancies*, *care and treatment occupancies* and *detention occupancies*.

3.3.3.2. Fire Separations

(1) The *fire separation* required by Sentence 3.3.5.5.(1) between a *care*, *care and treatment* or *detention occupancy* and a *repair garage* shall have no openings.

(2) Except as permitted by Sentence (4), in a Group B, Division 3 *occupancy*, walls between sleeping rooms and adjacent rooms shall be constructed as *fire separations* having a *fire-resistance rating* not less than 1 h, except that the *fire-resistance rating* need not be more than 45 min where the floor assembly is not required to be more than 45 min.

(3) Except as permitted by Sentence (4), in a Group B, Division 3 *occupancy*, walls separating corridors serving sleeping rooms from adjacent rooms shall be constructed as *fire separations* having a *fire-resistance rating* not less than 1 h, except that the *fire-resistance rating* need not be more than 45 min where the floor assembly is not required to be more than 45 min.

(4) The walls separating sleeping rooms from adjacent rooms and corridors in those parts of a *floor area* classified as a Group B, Division 3 *occupancy* shall be constructed as *fire separations* but are not required to have a *fire-resistance rating* if,

(a) those parts of the *floor area* contain sleeping accommodation for not more than 10 persons, and

(b) not more than six occupants require assistance in evacuation in case of an emergency.

(5) The door in the *fire-separation* required in Sentence (4) is permitted to be equipped with a roller latch and need not be provided with a self-closing device.

3.3.3.3. Corridors

(1) A corridor used by the public or serving patients or residents shall have no dead-end portion unless the area served by the dead-end portion has a second and separate *means of egress*.

(2) A corridor serving patients in a hospital shall be not less than 2 400 mm wide.

(3) Except as permitted in Sentence (5), a corridor serving residents who are not ambulatory in a Group B, Division 2 or 3 *occupancy* shall be not less than 1 650 mm wide.

(4) Paired doors in a corridor serving patients or residents shall,

(a) swing in opposite directions, the right hand door swinging in the direction of travel, and

(b) be not less than 1 100 mm wide.

(5) A corridor in a Group B, Division 3 *occupancy* that contains sleeping accommodation for not more than 10 persons and not more than six occupants require assistance in evacuation in case of an emergency need not comply with Sentence (3).

3.3.3.4. Doorway Width

(1) The minimum clear width of doorways serving patients or residents shall be 1 050 mm, except where, in a Group B, Division 2 or 3 *occupancy*, the door,

(a) serves a *service room*,

(b) serves an administrative area,

(c) will not be used by non-ambulatory outpatients,

(d) is located within a patient's or resident's sleeping room, or

(e) is in a long-term care home that will accommodate only ambulatory residents.

3.3.3.5. Hospitals and Long-Term Care Homes

(1) *Floor areas* containing patients' or residents' sleeping rooms in a hospital or long-term care home shall conform to Sentences (2) to (12).

(2) Except as permitted by Sentence (3), a *floor area* containing patients' or residents' sleeping rooms in a hospital or long-term care home shall be divided into no fewer than two *fire compartments*, each not more than 1 000 m^2 in area.

(3) The *floor area* on either side of a *horizontal exit* conforming to Article 3.4.6.10. is permitted to be considered as a *fire compartment* in applying the requirements of this Article.

(4) Except as permitted by Sentence (5), *fire separations* separating *fire compartments* required by Sentence (2) shall have a *fire-resistance rating* not less than 1 h.

(5) The *fire-resistance rating* of a *fire separation* referred to in Sentence (4) is permitted to be less than 1 h but not less than 45 min provided the *fire-resistance rating* required by Subsection 3.2.2. is permitted to be less than 1 h for,

(a) the floor assembly above the *floor area*, or

(b) the floor assembly below the *floor area*, if there is no floor assembly above.

(6) A c*losure* in a *fire separation* between *fire compartments* referred to in Sentence (2) shall be weatherstripped or otherwise designed and installed to retard the passage of smoke.

(7) The travel distance from any point within each *fire compartment* referred to in Sentence (2) to a door to an adjoining *fire compartment* shall be not more than 45 m.

(8) Each *fire compartment* referred to in Sentence (2) shall be capable of accommodating, in addition to its own occupants, the occupants of the largest adjacent *fire compartment* based on a clear floor space of 2.5 m^2 per patient or resident in the adjacent *fire compartment*.

(9) Except as permitted by Sentences (10) and (11), walls between patients' or residents' sleeping rooms and the remainder of the *floor area* shall be constructed as *fire separations* but are not required to have a *fire-resistance rating* unless a *fire-resistance rating* is required by other provisions in this Part.

(10) The *fire separation* requirements of Sentence (9) do not apply to walls within a group of intercommunicating patients' or residents' rooms, provided the group of rooms does not

(a) contain more than five patients or residents, or

(b) include storage, bathing or toilet facilities serving persons not occupying the group of rooms.

(11) A door in a *fire separation* required by Sentence (9) is permitted to be equipped with a roller latch.

(12) A *fire separation* required by Sentence (9) shall not contain any grilles, louvres or other openings.

3.3.3.6. Protection for Special Care and Treatment Facilities

(1) Compartments containing rooms such as operating rooms, recovery rooms, delivery rooms, intensive care units and critical care units, from which it is impracticable to move patients in an emergency, shall be,

(a) separated from adjacent spaces by *fire separations* having a *fire-resistance rating* not less than 1 h, and

(b) provided with a mechanical air supply so that during a period of 2 h after the start of a fire in another space, the compartments will not contain more than 1% by volume of contaminated air from the fire area.

3.3.3.7. Contained Use Areas

(1) A *contained use area* shall conform to Sentences (2) to (5).

(2) A *contained use area* shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(3) Except as permitted by Sentence (4), a *building* that includes a *contained use area* shall be *sprinklered*.

(4) A *contained use area*, in a *building* for which Articles 3.2.2.20. to 3.2.2.83. do not require the installation of an automatic sprinkler system, is not required to be *sprinklered* as required by Sentence (3) provided,

(a) the *building* is designed so that during a period of 2 h after the start of a fire in the *contained use area*, other *fire compartments* will not contain more than 1% by volume of contaminated air from the *contained use area*,

(b) the *building* is designed so that during a period of 2 h after the start of a fire in another part of the *building*, the *contained use area* will not contain more than 1% by volume of contaminated air from the other part of the *building*,

(c) all doors are designed to be remotely released in conformance with Sentence 3.3.1.12.(6), and

(d) the *contained use area* does not contain any rooms lined with *combustible* padding.

(5) A corridor serving a *contained use area* shall have no dead-end portion unless the area served by the dead-end portion has a second and separate *means of egress*.

3.3.3.8. Handrails

(1) Corridors and ramps used by residents in a long-term care home shall be equipped with handrails on each side conforming to Sentences 3.4.6.5.(3) to (5) and (9) to (11).

3.3.4. Residential Occupancy

3.3.4.1. Scope

(1) This Subsection applies to *residential occupancies*.

3.3.4.2. Fire Separations

(1) Except as permitted by Sentences (2) and 3.2.2.9.(2), *suites* of *residential occupancy* shall be separated from each other and the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(2) The *fire-resistance rating* of the *fire separation* required by Sentence (1) is permitted to be less than 1 h but not less than 45 min provided the *fire-resistance rating* required by Subsection 3.2.2. is permitted to be less than 1 h for,

(a) the floor assembly above the *floor area*, or

(b) the floor assembly below the *floor area*, if there is no floor assembly above.

(3) Floor assemblies within a *dwelling unit* need not be constructed as *fire separations* provided,

(a) the distance between the lowest floor level and the uppermost floor level within the *dwelling unit* is not more than 6 m, and

(b) the *dwelling unit* is separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than,

(i) 45 min if the *building* is *sprinklered* and is not more than 3 *storeys* in *building height*,

(ii) 1 h if the *building* is *sprinklered* and is more than 3 *storeys* in *building height*,

(iii) 1 h if the *building* is not *sprinklered* and is not more than 6 *storeys* in *building height*, or

(iv) 2 h if the *building* is not *sprinklered* and is more than 6 *storeys* in *building height*.

(4) The *fire-resistance rating* of the *fire separation* located between a *dwelling unit* and an attached *storage garage* need not conform to that required by Sentence 3.3.5.6.(1) provided,

(a) the *storage garage* contains not more than five vehicles,

(b) the *dwelling unit* and the attached *storage garage* are *sprinklered*,

(c) the *dwelling unit* is separated from the remainder of the *building* in conformance with Sentences (1) to (3),

(d) there are no air duct systems connecting the *storage garage* and the *dwelling unit*,

(e) the construction between the *storage garage* and the *dwelling unit* provides an effective barrier to gas and exhaust fumes, and

(f) every door between the *storage garage* and the *dwelling unit* is,

(i) tight fitting and weather-stripped to provide an effective barrier against the passage of gas and exhaust fumes,

(ii) fitted with a self-closing device, and

(iii) not located in a room intended for sleeping.

(5) The *fire separation* required by Sentence 3.3.5.6.(1) is not required between a *dwelling unit* and an attached *storage garage*, serving that *dwelling unit* only, provided,

(a) the *dwelling unit* and its attached *storage garage* are separated from the remainder of the *building* in conformance with Sentences (1) to (3),

(b) there are no air duct systems connecting the *storage garage* and the *dwelling unit*,

(c) the construction between the *storage garage* and the *dwelling unit* provides an effective barrier to gas and exhaust fumes, and

(d) every door between the *storage garage* and the *dwelling unit* is,

(i) tight fitting and weather-stripped to provide an effective barrier against the passage of gas and exhaust fumes,

(ii) fitted with a self-closing device, and

(iii) not located in a room intended for sleeping.

3.3.4.3. Storage Rooms

(1) Sprinklers shall be installed in a storage room provided for the use of tenants in a *residential occupancy* within a *floor area* but not contained within a *suite*.

(2) Except as permitted by Sentence (3), a storage room referred to in Sentence (1) shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(3) The *fire-resistance rating* of the *fire separation* required by Sentence (2) is permitted to be less than 1 h but not less than 45 min provided the *fire-resistance rating* required by Subsection 3.2.2. is permitted to be less than 1 h for,

(a) the floor assembly above the *floor area*, or

(b) the floor assembly below the *floor area*, if there is no floor assembly above.

(4) Except where located within a *dwelling unit*, a room intended for the storage of *flammable liquids* or *combustible liquids* required by the Fire Code made under the *Fire Protection and Prevention Act, 1997* shall not be located above or below the *first storey* of the *building*.

3.3.4.4. Egress from Dwelling Units

(1) Except as required by Sentence (8), single *storey dwelling units* in an apartment *building* need not lead to a *public corridor* or exterior passageway on the same *storey* provided the *dwelling units* are served by private stairways leading directly to a public *access to exit* on the *storey*,

(a) immediately above, and

(b) immediately below.

(2) Except as required by Sentence (8) and as permitted by Sentences (3) and (4), a *dwelling unit* containing more than 1 *storey* shall have an *exit* door or an egress door

opening directly into a public *access to exit* from the uppermost *storey* and from the lowest *storey* of the *dwelling unit* so that each *storey* is served by an *exit* or egress door located not more than 1.5 m above or below its floor level.

(3) A single *exit* is permitted from a *dwelling unit* provided the *exit* is an exterior doorway not more than 1.5 m above adjacent ground level and,

(a) it is not necessary to travel up or down more than 1 *storey* to reach the *exit* door, or

(b) the uppermost floor level opens to a balcony not more than 6 m above adjacent ground level.

(4) An egress door from either the uppermost *storey* or the lowest *storey* in a *dwelling unit*, as required in Sentence (2), need not be provided,

(a) except as required by Sentence (8), if that *storey* is served by a stairway that,

(i) leads to a public *access to exit*,

(ii) has no direct access to any other *storey* in the *dwelling unit*, and

(iii) is separated from the other *storeys* in the *dwelling unit* by a *fire separation* having a *fire-resistance rating* of not less than 45 min,

(b) on the uppermost *storey* in the *dwelling unit* if the *dwelling unit* has not more than 2 *storeys* above the *first storey* of the *building*,

(c) if it is not necessary to travel either more than 18 m or more than 1 *storey* up or down within the *dwelling unit* to reach the egress door, or

(d) if that *storey* is,

(i) provided with a balcony conforming to Sentence (7),

(ii) not more than 2 *storeys* above or below the *dwelling unit* egress door, and

(iii) in a *building* that is not more than 6 *storeys* in *building height*.

(5) In a *building* of *residential occupancy* not more than 3 *storeys* in *building height*, a doorway from a *dwelling unit* is permitted to open directly into an *exit* stairway provided the *dwelling unit* has a second and separate *means of egress*.

(6) If a *dwelling unit* has a second and separate *means of egress*, one *means of egress* from a *dwelling unit* is permitted to pass through,

(a) an interior corridor served by a single *exit*,

(b) an exterior balcony served by a single *exit* stairway, or

(c) an exterior passageway served by a single *exit* stairway.

(7) Where a balcony is provided to meet the requirements of Sentence (3) or (4), the balcony shall have,

(a) a solid floor having a *fire-resistance rating* not less than that required for a floor assembly between *suites*, and

(b) an area providing not less than 1.5 m^2 per *suite* occupant, based on *occupant load*, and a minimum dimension of 1 200 mm.

(8) Each *dwelling unit* in a *building* conforming to Subclause 3.2.2.44.(1)(a)(ii) shall be served by,

(a) a direct *exit* that is an exterior doorway located not more than 1.5 m above adjacent ground level, or

(b) a stairway that,

(i) leads to an exterior doorway not more than 1.5 m above adjacent ground level,

(ii) has no access to another *dwelling unit*, and

(iii) is separated from the remainder of the *building* with a *fire separation* having a *fire-resistance rating* not less than 1 h.

3.3.4.5. Automatic Locking Prohibition

(1) Except for *hotels*, a door opening onto a *public corridor* that provides *access to exit* from a *suite* shall be designed not to lock automatically.

3.3.4.6. Sound Transmission

(1) Sound transmission class ratings of *building* assemblies shall conform to Section 5.9.

3.3.4.7. Stairs, Ramps, Landings, Handrails and Guards for Dwelling Units

(1) Except as required by Article 3.3.4.8., stairs, ramps, landings, handrails and interior *guards* within a *dwelling unit* shall conform to the applicable requirements in Section 9.8.

(2) Except as provided in Sentence (3), exterior stairs, ramps, landings, handrails and *guards* serving a single *dwelling unit* shall conform to the applicable requirements in Section 9.8. and Sentence 3.1.20.1.(1).

(3) Loads on exterior *guards* serving a single *dwelling unit* shall comply with Part 4.

3.3.4.8. Protection of Openable Windows

(1) Except as provided by Sentence (2), openable windows in *suites* of *residential occupancy* shall be protected by,

(a) a *guard* with a minimum height of 1 070 mm constructed in accordance with Article 3.3.1.17., or

(b) a mechanism capable of controlling the free swinging or sliding of the openable part of the window so as to limit any clear unobstructed opening to a size that will prevent the passage of a sphere having a diameter more than 100 mm.

(2) Windows need not be protected in accordance with Sentence (1) where,

(a) the only opening having greater dimensions than those allowed by Clause (1)(b) is located higher than 1 070 mm above the finished floor, or

(b) the bottom edge of the openable portion of the window is located less than 1 800 mm above the floor or ground on the other side of the window.

3.3.4.9. Stud Wall Reinforcement

(1) If wood wall studs or sheet steel wall studs enclose the main bathroom in a *dwelling unit*, reinforcement shall be installed to permit the future installation of the following:

(a) for a water closet, a grab bar described in Clauses 3.8.3.8.(3)(a) and a grab bar described in Clause 3.8.3.8.(3)(c),

(b) for a shower, a grab bar described in Clause 3.8.3.13.(2)(f), and

(c) for a bathtub, a grab bar described in Clause 3.8.3.13.(4)(c).

3.3.4.10. Resistance to Forced Entry

(1) Resistance to forced entry into *dwelling units* shall conform to the applicable requirements in Articles 9.7.5.2. and 9.7.5.3.

3.3.5. Industrial Occupancy

3.3.5.1. Scope

(1) This Subsection applies to *industrial occupancies*.

3.3.5.2. Fire Extinguishing Systems

(1) In addition to other requirements in this Division for the installation of automatic fire extinguishing systems, an appropriate fire extinguishing system shall be installed in every *industrial occupancy floor area* to provide protection if required by,

(a) the Fire Code made under the *Fire Protection and Prevention Act, 1997*, or

(b) the CCBFC NRCC 53303, “National Fire Code of Canada”, in the absence of provisions referred to in Clause (a).

3.3.5.3. Basements

(1) A *basement* shall not be used for the storage, manufacture or handling of volatile solids, liquids or gases that generate explosive air-vapour mixtures or for processes that involve explosive dusts.

(2) Entrances and *exits* to a *basement* and to rooms containing *building* services shall be separate from the remainder of the *building* in a *building* in which,

(a) the storage, manufacture or handling of volatile materials can generate explosive air-vapour mixtures, or

(b) processes occur that produce explosive dusts.

(3) *Basements* and rooms referred to in Sentence (2) shall be separated from the remainder of the *building* with a vapour-tight separation.

3.3.5.4. Repair and Storage Garages

(1) If access is provided from a *storage garage* to a stair tower or elevator serving *occupancies* above the level of the *storage garage*, the access shall be through a vestibule conforming to Sentence 3.3.5.7.(3).

(2) Treads and landings in interior stairs that extend to the roof of a *storage garage* shall be designed to be free of accumulations of ice and snow.

(3) A mechanical *storage garage* not more than 4 *storeys* in *building height*, in which no persons other than parking attendants are permitted above the *street* floor level, need not have a *fire separation* between the *exits* and the remainder of the *building*.

(4) A garage shall be provided with natural or mechanical ventilation in conformance with the requirements of Subsection 6.2.2. to prevent excessive accumulation of carbon monoxide, exhaust fumes or flammable and toxic vapours.

(5) Except as required by Sentence 3.8.2.2.(2), the clear height in a *storage garage* shall be not less than 2 m.

(6) A continuous curb not less than 150 mm high and a *guard* not less than 1 070 mm high shall be provided at every garage floor opening and around the perimeter of every floor where the exterior walls are omitted.

(7) Except for *open-air storeys*, every *storey* of a *storage garage* or *repair garage* located below *grade* shall be *sprinklered*.

3.3.5.5. Repair Garage Separation

(1) A *repair garage* and any ancillary spaces serving it, including waiting rooms, reception rooms, tool and parts storage areas and supervisory office space, shall be separated from other *occupancies* by a *fire separation* having a *fire-resistance rating* not less than 2 h.

3.3.5.6. Storage Garage Separation

(1) Except as permitted by Sentences 3.3.4.2.(4) and (5), a *storage garage* shall be separated from other *occupancies* by a *fire separation* with a *fire-resistance rating* not less than 1.5 h.

3.3.5.7. Vestibules

(1) If access is provided through a *fire separation* between a *storage garage* and a Group A, Division 1 or Group B *occupancy*, the access shall be through a vestibule conforming to Sentence (3).

(2) In a *building* more than 3 *storeys* in *building height*, access through a *fire separation* between a *storage garage* and a Group A, Division 2, 3 or 4, or a Group C *occupancy*, shall be through a vestibule conforming to Sentence (3).

(3) If access is provided through a vestibule, as required by Sentences (1), (2) and 3.3.5.4.(1), the vestibule shall,

(a) be not less than 1.8 m long,

(b) be ventilated,

(i) naturally to outside air by a vent that has an unobstructed area of not less than 0.1 m^2 for each door that opens into the vestibule but not less than 0.4 m^2, or

(ii) mechanically at a rate of 14 m^3/h for each square metre of vestibule floor surface area, and

(c) have openings between the vestibule and an adjoining *occupancy* provided with self-closing doors with no hold-open devices.

3.3.5.8. Toe-Boards Required

(1) Where tools or other objects could fall from the floor of an upper level to a lower level in a room or space intended for use as a Group F *occupancy*, the edge of the floor at the upper level shall be provided with a toe-board extending from the floor surface to a height at least 125 mm above the floor surface.

3.3.6. Design of Hazardous Areas

3.3.6.1. Application

(1) This Subsection applies to design and fire protection requirements for *buildings* or parts of *buildings* intended for the storage, handling, use and processing of,

(a) *dangerous goods*,

(b) materials that involve a risk of explosion or high flammability, and

(c) materials that are highly reactive.

3.3.6.2. Storage of Explosives

(1) The design of *buildings* or parts of *buildings* intended for the storage of explosives, blasting agents, detonators, propellant explosives, fireworks, pyrotechnics and ammunition shall conform to the *Explosives Act* (Canada) and the *Explosives Regulations* made under that Act.

3.3.6.3. Indoor Storage of Compressed Gases

(1) Except as provided by Sentence (3), where required by the Fire Code made under the *Fire Protection and Prevention Act, 1997*, a room intended for the indoor storage of cylinders containing flammable *compressed gases* shall meet the following requirements,

(a) it is separated from the remainder of the *building* by a gas-tight *fire separation* having a *fire-resistance rating* of not less than 2 h,

(b) it is located on an exterior wall of the *building*,

(c) it can be entered from the exterior,

(d) it is ventilated in conformance with Sentence (4),

(e) it is constructed so that an exterior wall provides explosion venting,

(i) in the ratio of 0.2 m^2 for each cubic metre of room volume, or

(ii) in the ratio computed in accordance with NFPA 68, “Explosion Protection by Deflagration Venting”, but in no case less than 0.065 m^2 of vent area for each cubic metre of room volume,

(f) it is not intended to contain fuel-fired equipment or high temperature heating elements, and

(g) it is not intended to be used for a purpose other than the storage of *compressed gas*.

(2) Where a *closure* is installed in the *fire separation* separating the room from the remainder of the *building* in accordance with Clause (1)(a), it shall be,

(a) equipped with a self-closing device that keeps the *closure* closed when not in use, and

(b) constructed so as to prevent the migration of gases from the room into other parts of the *building*.

(3) Where required by the Fire Code made under the *Fire Protection and Prevention Act, 1997*, a room intended for the storage of not more than three cylinders of flammable *compressed gases* that are heavier than air and that have an aggregate capacity not exceeding 100 kg shall be,

(a) separated from the remainder of the *building* by a gas-tight *fire separation* having a *fire-resistance rating* of not less than 45 min,

(b) located at or above grade, and

(c) ventilated in conformance with Sentence (4).

(4) A room described in Sentence (1) or (3) shall be,

(a) mechanically vented to the outside so as to ensure at least one air change per hour, or

(b) naturally vented to the outside so as to ensure cross ventilation through non-closable louvered openings with,

(i) at least one opening having an aggregate free opening area of at least 0.2 m^2 per 100 m^2 of the *floor area* located not more than 300 mm from the ceiling, and

(ii) at least one opening having an aggregate free opening area of at least 0.2 m^2 per 100 m^2 of the *floor area* located not more than 300 mm from the floor.

(5) Except as permitted by Sentences (6) and (7), where required by the Fire Code made under the *Fire Protection and Prevention Act, 1997*, an area intended for the storage of cylinders containing *compressed gases* that may react with one another shall be divided into separate *fire compartments* having a *fire-resistance rating* of not less than 1 h.

(6) Separate *fire compartments* required by Sentence (5) need not be provided, if the area intended for the storage of cylinders containing *compressed gases* that are lighter than air is separated by a concrete or masonry wall having a height of at least 2.0 m and projecting at least 1.0 m, measured horizontally, beyond the cylinders.

(7) Separate *fire compartments* required by Sentence (5) need not be provided, if the area intended for the storage of cylinders containing *compressed gases* that are heavier than air is separated by a concrete or masonry wall having a height of at least 1.5 m and projecting such that the minimum distance that vapour can travel between two cylinders of gas that may react with each other is not less than 15 m, measured horizontally.

3.3.6.4. Storage and Dispensing Rooms for Flammable Liquids and Combustible Liquids

(1) A room intended for the storage of *flammable liquids* and *combustible liquids* shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* in conformance with the Fire Code made under the *Fire Protection and Prevention Act, 1997*.

(2) Except as provided by Sentences (3) and (4), a room intended for the storage or dispensing of Class IA or Class IB liquids in open containers shall be designed to prevent

critical structural and mechanical damage from an internal explosion in accordance with good engineering practice, such as that described in NFPA 68, "Explosion Protection by Deflagration Venting".

(3) Sentence (2) does not apply to a room intended for the storage of *distilled beverage alcohol*.

(4) A room in an *occupancy* or facility covered by Regulation 851 of the Revised Regulations of Ontario, 1990 (Industrial Establishments), made under the *Occupational Health and Safety Act*, or Ontario Regulation 67/93 (Health Care and Residential Facilities), made under that Act, where Class IA liquids are intended to be stored in *closed containers* or Class I liquids are intended to be dispensed or stored in open containers, shall be designed to prevent critical structural and mechanical damage from an internal explosion in accordance with good engineering practice, such as that described in NFPA 68, "Explosion Protection by Deflagration Venting".

(5) A dispensing room in an *occupancy* or facility described in Sentence (4) which has an area greater than 15 m^2 or in which the travel distance from any point to the nearest egress door is more than 4.5 m shall,

(a) be located in a *floor area* that has at least two *exits*, and

(b) have at least two egress doors.

(6) An egress door serving a room described in Sentence (5) shall,

(a) be equipped with a self-closing device, and

(b) swing on a vertical axis in the direction of travel to the *exit*.

(7) The minimum distance between the egress doors described in Clause (5)(b) shall be not less than three-quarters of the maximum diagonal dimension of the room.

(8) The travel distance within the room to the nearest egress door described in Clause (5)(b) shall be not more than 23 m.

3.3.6.5. Tire Storage

(1) A tire storage area intended for the storage of more than 375 m^3 of tires shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* of not less than 2 h.

3.3.6.6. Ammonium Nitrate Storage

(1) Where the Fire Code made under the *Fire Protection and Prevention Act, 1997* applies due to the quantity and nature of the stored product, a *building* intended for the storage of ammonium nitrate shall,

(a) be not more than one *storey* in *building height*,

(b) not contain a *basement* or a crawl space,

(c) not contain open floor drains, tunnels, elevator pits or other pockets that might trap molten ammonium nitrate,

(d) have *noncombustible* flooring materials in storage areas,

(e) be designed to prevent the ammonium nitrate from coming into contact with *building* materials that,

(i) will cause the ammonium nitrate to become unstable,

(ii) may corrode or deteriorate by reason of contact with the ammonium nitrate, or

(iii) will become impregnated with the ammonium nitrate, and

(f) have not less than 0.007 m^2 of vent area for each square metre of storage area, unless mechanical ventilation is provided.

3.3.6.7. Flooring Materials

(1) The floor in an area intended for the storage of *dangerous goods* shall be constructed of impermeable materials to prevent the absorption of chemicals.

3.3.6.8. Fire Separations in Process Plants

(1) In a *process plant*, an area intended as a location where *unstable liquids* are handled or small scale unit chemical processes occur shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* of not less than 2 h.

3.3.6.9. Basements and Pits

(1) A *process plant* intended as a location where Class I and Class II liquids are handled shall not contain a *basement* or a covered pit.

Section 3.4. Exits

3.4.1. General

3.4.1.1. Scope

(1) *Exit* facilities complying with this Section shall be provided from every *floor area* that is intended for occupancy.

3.4.1.2. Separation of Exits

(1) Except as permitted by Sentence (2), if more than one *exit* is required from a *floor area*, each *exit* shall be separate from every other *exit* leading from that *floor area*.

(2) If more than two *exits* are provided from a *floor area*, *exits* are permitted to converge in conformance with Sentence 3.4.3.1.(2), provided the cumulative capacity of the converging *exits* does not contribute more than 50% of the total required *exit* width for the *floor area*.

3.4.1.3. Access to Exits

(1) *Access to exits* shall conform to Section 3.3.

3.4.1.4. Types of Exit

(1) Subject to the requirements of this Section, an *exit* from any *floor area* shall be one of the following, used singly or in combination:

(a) an exterior doorway,

(b) an exterior passageway,

(c) an exterior ramp,

(d) an exterior stairway,

(e) a fire escape (conforming to Subsection 3.4.7.),

(f) a *horizontal exit*,

(g) an interior passageway,

(h) an interior ramp, or

(i) an interior stairway.

3.4.1.5. Exterior Exit Passageways

(1) Access to an exterior *exit* passageway from a *floor area* shall be through *exit* doors at the floor level.

(2) Every exterior *exit* passageway that has a drop of more than 500 mm on any side shall have *guards* on the open sides not less than 1 070 mm high.

3.4.1.6. Restricted Use of Horizontal Exits

(1) Except as permitted by Sentence (2), *horizontal exits* shall not comprise more than one-half of the required number of *exits* from any *floor area*.

(2) In a hospital or long-term care home, *horizontal exits* serving patients' or residents' sleeping rooms shall comprise not more than two-thirds of the required number of *exits* from any *floor area*.

(3) Where an elementary or secondary school is subdivided by a *firewall*, a *horizontal exit* shall not serve as an *exit* but is permitted to serve as an *access to exit*.

3.4.1.7. Slide Escapes

(1) A slide escape shall not be erected on any *building* as a required *exit*, but is permitted to be provided as an additional egress facility if unusual hazards are foreseen.

3.4.1.8. Transparent Doors and Panels

(1) Glass and transparent panels in an *exit* shall conform to the appropriate requirements of Article 3.3.1.18. for glass and transparent panels in an *access to exit*.

3.4.1.9. Mirrors near Exits

(1) No mirror shall be placed in or adjacent to any *exit* in a manner that would confuse the direction of *exit*.

3.4.1.10. Combustible Glazing in Exits

(1) *Combustible* glazing is not permitted in wall or ceiling assemblies or in *closures* used to *construct* an *exit* enclosure.

3.4.1.11. Exterior Stairway for Long-Term Care Homes

(1) No open exterior stairway shall serve as a *means of egress* for residents above the second floor of a long-term care home.

3.4.2. Number and Location of Exits from Floor Areas

3.4.2.1. Minimum Number of Exits

(1) Except as permitted by Sentences (2) to (4) and (6), every *floor area* intended for occupancy shall be served by at least two *exits*.

(2) A *floor area* in a *building* not more than 2 *storeys* in *building height*, is permitted to be served by one *exit* provided the total *occupant load* served by the *exit* is not more than 60 and,

(a) in a *floor area* that is not *sprinklered*, the *floor area* and the travel distance are not more than the values in Table 3.4.2.1.A., or

(b) in a *floor area* that is *sprinklered*,

(i) the travel distance is not more than 25 m, and

(ii) the *floor area* is not more than the value in Table 3.4.2.1.B.

Table 3.4.2.1.A.
Criteria for One Exit, Floor Area not Sprinklered

Forming Part of Sentence 3.4.2.1.(2)

Item	Column 1 *Occupancy* of *Floor Area*	Column 2 Maximum *Floor Area*, m^2	Column 3 Maximum Travel Distance, m
1.	Group A	150	15
2.	Group C	100	15
3.	Group D	200	25
4.	Group E	150	15
5.	Group F, Division 2	150	10
6.	Group F, Division 3	200	15

Table 3.4.2.1.B.
Criteria for One Exit, Floor Area Sprinklered

Forming Part of Sentence 3.4.2.1.(2)

Item	Column 1 *Occupancy* of *Floor Area*	Column 2 Maximum *Floor Area*, m^2
1.	Group A	200
2.	Group B	100
3.	Group C	150
4.	Group D	300
5.	Group E	200
6.	Group F, Division 2	200
7.	Group F, Division 3	300

(3) Except as permitted by Sentence (4), if Sentence (2) permits a single *exit* from a *floor area* classified as Group B or Group C *occupancy*, the *exit* shall be an exterior doorway not more than 1.5 m above adjacent ground level.

(4) The requirements of Sentences (1) and (2) are permitted to be waived for *dwelling units* having *access to exit* conforming to Sentences 3.3.4.4.(1) to (4) and (8).

(5) *Exits* are not required directly from rooftop enclosures that are provided with *access to exits* in conformance with Sentences 3.3.1.3.(5) and (6).

(6) Every room containing an *assembly occupancy* serving a *hotel*, and located in the *building* containing the *hotel*, shall be provided with no fewer than,

(a) three separate egress doorways from the room where the *occupant load* is more than 600 persons, and

(b) four separate egress doorways from the room where the *occupant load* is more than 1 000 persons.

(7) Each egress doorway in Sentence (6) shall be considered as contributing not more than,

(a) one-third of the required width where three egress doorways are required, and

(b) one-fourth of the required width where four egress doorways are required.

3.4.2.2. Mezzanine Exiting

(1) Except as permitted by Sentences (2) to (4), a *mezzanine* shall be provided with *exits* on the same basis as required for *floor areas* by this Section.

(2) A *mezzanine* need not conform to Sentence (1) provided Article 3.2.8.2. does not require it to terminate at a vertical *fire separation*.

(3) In a *floor area* that is not *sprinklered*, a *mezzanine* need not conform to Sentence (1) where Article 3.2.8.1. does require it to terminate at a vertical *fire separation* provided the total *occupant load* of the *mezzanine* is not more than 60 and,

(a) the area of the *mezzanine* does not exceed the area limits for rooms and *suites* in Table 3.3.1.5.A., and

(b) the distance limits in Table 3.3.1.5.A. are not exceeded from any point on the *mezzanine* to,

(i) the egress doorway from the room in which the *mezzanine* is located if that room has a single egress doorway, or

(ii) an egress facility leading from the *mezzanine* if the room in which the *mezzanine* is located has two egress doorways provided in conformance with Subsection 3.3.1.

(4) In a *floor area* that is *sprinklered*, a *mezzanine* need not conform to Sentence (1) where Article 3.2.8.1. does require it to terminate at a vertical *fire separation* provided the total *occupant load* of the *mezzanine* is not more than 60 and,

(a) the area of the *mezzanine* does not exceed the area limits for rooms and *suites* in Table 3.3.1.5.B., and

(b) the distance of travel is not more than 25 m when measured from any point on the *mezzanine* to,

(i) the egress doorway from the room in which the *mezzanine* is located if that room has a single egress doorway, or

(ii) an egress facility leading from the *mezzanine* if the room in which the *mezzanine* is located has two egress doorways provided in conformance with Subsection 3.3.1.

3.4.2.3. Distance between Exits

(1) Except as provided in Sentence (2), the least distance between two required *exits* from a *floor area* shall be,

(a) one-half the maximum diagonal dimension of the *floor area*, but need not be more than 9 m for a *floor area* having a *public corridor*, or

(b) one-half the maximum diagonal dimension of the *floor area*, but not less than 9 m for all other *floor areas*.

(2) *Exits* need not comply with Sentence (1) where,

(a) the *floor area* is divided so that not less than one-third of the *floor area* is on each side of the *fire separation*, and

(b) it is necessary to pass through the *fire separation* to travel from one *exit* to another *exit*.

(3) The minimum distance between *exits* referred to in Sentence (1) shall be the shortest distance that smoke would have to travel between the *exits*, assuming that the smoke will not penetrate an intervening *fire separation*.

3.4.2.4. Travel Distance

(1) Except as permitted by Sentence (2), for the purposes of this Subsection, travel distance means the distance from any point in the *floor area* to an *exit* measured along the path of travel to the *exit*.

(2) The travel distance from a *suite* or a room not within a *suite* is permitted to be measured from an egress door of the *suite* or room to the nearest *exit* provided,

(a) the *suite* or room is separated from the remainder of the *floor area* by a *fire separation*,

(i) having a *fire-resistance rating* not less than 45 min in a *floor area* that is not *sprinklered*, or

(ii) that is not required to have a *fire-resistance rating*, in a *floor area* that is *sprinklered*, and

(b) the egress door opens onto,

(i) an exterior passageway,

(ii) a corridor used by the public that is separated from the remainder of the *floor area* in conformance with the requirements in Article 3.3.1.4. for the separation of *public corridors*, or

(iii) a *public corridor* that is separated from the remainder of the *floor area* in conformance with Article 3.3.1.4.

(3) Travel distance to an *exit* shall be not more than 50 m from any point in a *service space* referred to in Sentence 3.2.1.1.(9).

(4) If there is a *firewall* in an elementary or secondary school, the travel distance shall not be measured to a door in the *firewall*, but shall be measured to an exterior *exit* door or an *exit* door to a stairway.

3.4.2.5. Location of Exits

(1) Except as permitted by Sentences (2), 3.2.8.4.(4) and 3.3.2.4.(13) to (16), if more than one *exit* is required from a *floor area*, the *exits* shall be located so that the travel distance to at least one *exit* shall be not more than,

(a) 25 m in a *high hazard industrial occupancy*,

(b) 40 m in a *business and personal services occupancy*,

(c) 45 m in a *floor area* that contains an *occupancy* other than a *high hazard industrial occupancy*, provided it is *sprinklered*,

(d) 105 m in any *floor area*, served by a *public corridor*, in which rooms and *suites* are not separated from the remainder of the *floor area* by a *fire separation*, provided,

(i) the *public corridor* is not less than 9 m wide,

(ii) the ceiling height in the *public corridor* is not less than 4 m above all floor surfaces,

(iii) the *building* is *sprinklered*, and

(iv) not more than one-half of the required egress doorways from a room or *suite* open into the *public corridor* if the room or *suite* is required to have more than one egress doorway,

(e) 60 m in any *storage garage* that conforms to the requirements of Article 3.2.2.83., and

(f) 30 m in any *floor area* other than those referred to in Clauses (a) to (e).

(2) Except for a *high hazard industrial occupancy*, Sentence (1) need not apply if *exits* are placed along the perimeter of the *floor area* and are not more than 60 m apart, measured along the perimeter, provided each main aisle in the *floor area* leads directly to an *exit*.

(3) *Exits* shall be located and arranged so that they are clearly visible or their locations are clearly indicated and they are accessible at all times.

3.4.2.6. Principal Entrance

(1) For the purposes of this Section, at least one door at every principal entrance from ground level shall be designed in accordance with the requirements for *exits*.

3.4.3. Width and Height of Exits

3.4.3.1. Exit Width Based on Occupant Load

(1) For the purpose of determining the aggregate width of *exits*, the *occupant load* of every room or *floor area* shall be determined in conformance with Subsection 3.1.17.

(2) Except as permitted by Sentence 3.4.3.2.(4), the required *exit* width shall be cumulative if two or more *exits* converge.

3.4.3.2. Exit Width

(1) Except as permitted by Sentence (3), the minimum aggregate required width of *exits* serving *floor areas* intended for *assembly occupancies*, *residential occupancies*, *business and personal services occupancies*, *mercantile occupancies*, and *industrial occupancies* shall be determined by multiplying the *occupant load* of the area served by,

(a) 6.1 mm per person for ramps with a slope of not more than 1 in 8, doorways, corridors and passageways,

(b) 8 mm per person for a stair consisting of steps whose rise is not more than 180 mm and whose run is not less than 280 mm, or

(c) 9.2 mm per person for,

(i) ramps with a slope of more than 1 in 8, or

(ii) stairs, other than stairs conforming to Clause (b).

(2) The minimum aggregate width of *exits* serving *floor areas* intended for a *care*, *care and treatment* or *detention occupancy* shall be determined by multiplying the *occupant load* of the area served by 18.4 mm per person.

(3) The minimum aggregate width of *means of egress* serving a Group A, Division 4 *occupancy* shall be determined by multiplying the *occupant load* of the area served by,

(a) 1.8 mm per person for,

(i) aisles,

(ii) stairs other than *exit* stairs, and

(iii) ramps and passageways in vomitories and *exits*, and

(b) 2.4 mm per person for *exit* stairs.

(4) Except as required by Sentence (5), the required *exit* width need not be cumulative in an *exit* serving two or more *floor areas* located one above the other.

(5) The required *exit* width for an *exit* stair in an assembly hall or *theatre* serving more than one balcony level shall conform to the appropriate requirements for stairs serving *interconnected floor spaces* in Article 3.2.8.4.

(6) If more than one *exit* is required, every *exit* shall be considered as contributing not more than one-half of the required *exit* width.

(7) The width of an *exit* shall be not less than,

(a) 1 100 mm for corridors and passageways,

(b) 1 100 mm for ramps not serving patients' or residents' sleeping rooms,

(c) 1 100 mm for stairs, not serving patients' or residents' sleeping rooms, that serve more than two *storeys* above the lowest *exit level* or more than one *storey* below the lowest *exit level*,

(d) 900 mm for stairs, not serving patients' or residents' sleeping rooms, that serve not more than two *storeys* above the lowest *exit level* or not more than one *storey* below the lowest *exit level*,

(e) 1 650 mm for stairs and ramps serving patients' or residents' sleeping rooms,

(f) 1 050 mm for doorways serving patients' or residents' sleeping rooms, and

(g) 790 mm for doorways not serving patients' or residents' sleeping rooms.

3.4.3.3. Exits from Interconnected Floor Space

(1) *Exit* stairs that serve *interconnected floor spaces* as provided in Articles 3.2.8.3. to 3.2.8.11. shall conform to the requirements in Article 3.2.8.4. and in this Section.

3.4.3.4. Exit Width Reduction

(1) Except as permitted by Sentences (2) to (4), no fixture, turnstile or construction shall project into or be fixed within the required width of an *exit*.

(2) *Exit* doors shall be hung so that, when open, they shall neither diminish nor obstruct the required width of the *exit* by more than 50 mm for each door leaf.

(3) Swinging doors in their swing shall not reduce the required width of *exit* stairs or landings to less than 750 mm or reduce the width of an *exit* passageway to less than the minimum required width.

(4) Handrails and construction below handrails are permitted to project into the required width of *means of egress* but the projections shall be not more than 100 mm on each side of the required width.

(5) In an elementary or secondary school, where a stair lift is installed in an *exit* stair, an intermediate handrail shall be installed between the path of travel of the stair lift and the remainder of the stair to ensure that the stair lift will not reduce the required width of the *exit* stair.

3.4.3.5. Headroom Clearance

(1) Except as provided by Sentences (2), (4) and (5), every *exit* shall have a clear height over the clear width of the *exit* of not less than 2 100 mm.

(2) The clear height of stairways shall be measured vertically, over the clear width of the stairway, from a straight line tangent to the tread and landing nosings to the lowest point above, and shall not be less than 2 050 mm.

(3) The clear height of landings shall be measured vertically, over the clear width of the landing, to the lowest point above.

(4) Except as permitted by Sentence (5), the clear height of doorways shall not be less than 2 030 mm.

(5) No door closer or other device shall be installed so as to reduce the clear height of a doorway to less than 1 980 mm.

3.4.4. Fire Separation of Exits

3.4.4.1. Fire-Resistance Rating of Exit Separations

(1) Except as provided by Sentences (2), (3) and (5) and Sentences 3.3.5.4.(3), 3.4.4.2.(2), 3.4.4.3.(1) and 3.13.3.1.(3), every *exit* shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than that required by Subsection 3.2.2., but not less than 45 min, for,

(a) the floor assembly above the *storey*, or

(b) the floor assembly below the *storey*, if there is no floor assembly above.

(2) The *fire-resistance rating* of the *fire separation* referred to in Sentence (1) need not be more than 2 h.

(3) In a *building* within the scope of Article 3.2.2.43A. or 3.2.2.50A., the *fire-resistance rating* of the *fire separation* referred to in Sentence (1) shall not be less than 1.5 h.

(4) If an *exit* stair in an assembly hall or *theatre* serves more than one balcony level, the *exit* stair shall be separated from the remainder of the *building* in conformance with Sentence (1).

(5) The path of *exit* travel may lead from an *exit* door or *exit* enclosure through *open air* parking that is located below a roof or floor assembly that is part of the *building* served by the *exit* door or *exit* enclosure where,

(a) the portion of the path of *exit* travel that leads through the *open air* parking is not more than 9 m in length measured from the *exit* door to a point at ground level at the perimeter of the *building*,

(b) measures are taken to prevent vehicles intended to park in spaces adjacent to the path of *exit* travel from encroaching on the path of *exit* travel, and

(c) an alternate *means of egress* not leading through the *open air* parking is available from the interior side of the door opening onto the path of *exit* travel through the *open air* parking area.

3.4.4.2. Exits through Lobbies

(1) Except as permitted by Sentence (2), no *exit* from a *floor area* above or below the *first storey* shall lead through a lobby.

(2) Not more than one *exit* from a *floor area* is permitted to lead through a lobby provided,

(a) the lobby floor is not more than 4.5 m above *grade*,

(b) the path of travel through the lobby to the outdoors is not more than 15 m,

(c) the adjacent rooms or premises having direct access to the lobby do not contain a *residential occupancy* or an *industrial occupancy*, except that *dwelling units* may open directly onto the lobby where,

(i) from the interior of the *exit* stair that opens onto the lobby there is alternate *means of egress* not leading through the lobby and such *means of egress* is entirely within the same *storey* as the lobby, or

(ii) the *floor area* is *sprinklered*,

(d) except as required by Clause (g), the lobby is not located within an *interconnected floor space* other than as described in Sentence 3.2.8.2.(6),

(e) the lobby conforms to the requirements for *exits*, except that,

(i) rooms other than *service rooms* and storage rooms are permitted to open onto the lobby,

(ii) the *fire separation* between the lobby and a room used for the sole purpose of control and supervision of the *building* need not have a *fire-resistance rating*,

(iii) the *fire separation* between the lobby and adjacent *occupancies* that are permitted to open onto the lobby need not have a *fire-resistance rating* provided the lobby and adjacent *occupancies* are *sprinklered*, and

(iv) passenger elevator entrances are permitted to open onto the lobby provided the elevator entrance doors are designed to remain closed except while loading and unloading,

(f) a *fire separation*, constructed in accordance with Sentence 3.4.4.1.(1), is maintained between the lobby and any *exit* permitted by this Sentence to lead through the lobby, and

(g) that if the *exit* serves a *hotel*, the lobby is not located within an *interconnected floor space*.

3.4.4.3. Exterior Passageway Exceptions

(1) The requirements of Sentences 3.4.4.1.(1) and 3.2.3.13.(1) and (3) do not apply to an exterior *exit* passageway provided,

(a) not less than 50% of the exterior side is open to the outdoors, and

(b) an *exit* stair is provided at each end of the passageway.

3.4.4.4. Integrity of Exits

(1) A *fire separation* that separates an *exit* from the remainder of the *building* shall have no openings except for,

(a) standpipe and sprinkler piping,

(b) electrical wires and cables, totally enclosed *noncombustible* raceways and *noncombustible* piping that serve only the *exit*,

(c) openings required by the provisions of Subsection 3.2.6.,

(d) *exit* doorways,

(e) wired glass and glass block permitted by Article 3.1.8.14., and

(f) a sprinkler protected glazed wall assembly conforming to Article 3.1.8.18.

(2) *Exits* within scissors stairs and other contiguous *exit* stairways shall be separated from each other by a smoke-tight *fire separation* having a *fire-resistance rating* not less than that required for the floor assembly through which they pass.

(3) *Fire separations* separating contiguous stairs described in Sentence (2) shall not be pierced by doorways, ductwork, piping or any other openings that affect the continuity of the separation.

(4) A fuel-fired *appliance* shall not be installed in an *exit*.

(5) An *exit* shall not be used as a *plenum* for a heating, ventilating or *air-conditioning* system.

(6) An *exit* shall be designed for no purpose other than for exiting, except that an *exit* is permitted also to be designed to serve as an access to a *floor area*.

(7) A *service room* shall not open directly into an *exit*.

(8) Storage rooms, washrooms, toilet rooms, laundry rooms and similar ancillary rooms shall not open directly into an *exit*.

(9) *Service spaces* referred to in Sentence 3.2.1.1.(9) shall not open directly into an *exit*.

(10) In elementary and secondary schools, an *exit* shall be designed so that it does not serve as an access from one portion of a *floor area* to another portion of the same *floor area*.

3.4.5. Exit Signs

3.4.5.1. Exit Signage

(1) Except as provided by Sentences (9) and (10), every *exit* door shall have an *exit* sign placed over or adjacent to it if the *exit* serves,

(a) a *building* more than 2 *storeys* in *building height*,

(b) a *building* having an *occupant load* of more than 150, or

(c) a room or *floor area* that has a fire escape as part of a required *means of egress*.

(2) Except as provided by Sentence (7), every *exit* sign shall,

(a) be visible on approach to the *exit*,

(b) consist of a green pictogram and white graphic symbol meeting the visibility specifications referred to in ISO 3864-1, “Graphical Symbols – Safety Colours and Safety Signs – Part 1: Design Principles for Safety Signs and Safety Markings”, and

(c) conform to the dimensions indicated in ISO 7010, “Graphical Symbols - Safety Colours and Safety Signs - Safety Signs Used in Workplaces and Public Areas” for the following symbols:

(i) E001 emergency exit left,

(ii) E002 emergency exit right,

(iii) E005 90-degree directional arrow, and

(iv) E006 45-degree directional arrow.

(3) Internally illuminated *exit* signs shall,

(a) be continuously illuminated, and

(b) where illumination of the sign is powered by an electrical circuit, be constructed in conformance with CSA 22.2 No. 141, “Emergency Lighting Equipment”.

(4) Externally illuminated *exit* signs shall be continuously illuminated by a light fixture supplied by an electrical circuit.

(5) Photoluminescent and self-luminous *exit* signs shall,

(a) conform to CAN/ULC-S572, "Photoluminescent and Self-Luminous Signs and Path Marking Systems",

(b) be labelled in accordance with the time duration for which they have been tested and *listed*,

(c) be so installed that upon failure of the regular power they will continue to be illuminated for the applicable time duration specified in Clause 3.2.7.4.(1)(b), and

(d) be continuously illuminated if reliant on an external energy source to energize the reflective coating of the sign.

(6) If illumination of an *exit* sign is provided from an electrical circuit, that circuit shall,

(a) serve no equipment other than emergency lighting in the area where *exit* signs are installed, and

(b) be connected to an emergency power supply as described in Sentence 3.2.7.4.(1)

(7) Where no *exit* is visible from a *public corridor*, from a corridor used by the public in a Group A or B *major occupancy* or from principal routes serving an open *floor area* having an *occupant load* of more than 150, an *exit* sign conforming to Clauses (2)(b) and (c) with an arrow or other indicator pointing at the direction of egress shall be provided.

(8) Except for egress doorways described in Sentence 3.3.2.3.(4), an *exit* sign conforming to Sentences (2) to (6) shall be placed over or adjacent to every egress doorway from rooms with an *occupant load* more than 60 in Group A, Division 1 *occupancies*, dance halls, licensed beverage establishments and other similar *occupancies* that, when occupied, have lighting levels below the level that would provide easy identification of the egress doorway.

(9) Except for *suite* doors opening directly to the exterior, every *exit* serving a *hotel* shall have an *exit* sign placed over or adjacent to it.

(10) An *exit* sign is not required within a *suite* containing a Group B, Division 3 *occupancy* if the following requirements are met:

(a) the *suite* contains sleeping accommodation for not more than 10 persons, and

(b) not more than 6 occupants require assistance in evacuation in case of an emergency.

3.4.5.2. Signs within Exit Facilities

(1) In a *building* more than 2 *storeys* in *building height*, any part of an *exit* ramp or stair that continues up or down past the lowest *exit level* shall be clearly marked by a sign indicating that it does not lead to an *exit*.

(2) An *exit* stair serving a *building* more than 6 *storeys* in *building height* shall be clearly marked by signs indicating that it does not lead to an *exit* at the roof level.

3.4.6. Types of Exit Facilities

3.4.6.1. Surface Finish of Ramps and Stairs

(1) The surfaces of ramps, landings and treads shall,

(a) have a finish that is slip-resistant, and

(b) if accessible to the public, have a colour contrast or a distinctive visual pattern to demarcate,

(i) the leading edge of the tread,

(ii) the leading edge of the landing, and

(iii) the beginning and end of a ramp.

(2) A tactile attention indicator conforming to Article 3.8.3.18. shall be installed,

(a) at the top of the stairs, starting one tread depth back from the edge of the top stair, and

(b) at the leading edge of landings where a doorway opens onto stairs, starting one tread depth back from the edge of the landing.

(3) Treads and landings of exterior *exit* stairs shall be designed to be free of ice and snow accumulations if the stairs,

(a) are more than 10 m high, or

(b) serve a *hotel*.

3.4.6.2. Minimum Number of Risers

(1) Except as permitted by Sentence 3.3.2.13.(1), every flight of interior stairs shall have no fewer than 3 risers.

3.4.6.3. Maximum Vertical Rise of Stair Flights and Required Landings

(1) No flight of stairs shall have a vertical rise of more than 3.7 m between floors or landings, except that a flight of stairs serving as an *exit* in a Group B, Division 2 or 3 *occupancy* shall have a vertical rise not more than 2.4 m between floors or landings.

(2) Except as provided by Sentence (3), a landing shall be provided,

(a) at the top and bottom of each flight of interior and exterior stairs,

(b) at the top and bottom of every section of ramp,

(c) where a doorway opens onto a stair or ramp,

(d) where a ramp opens onto a stair, and

(e) where a stair opens onto a ramp.

(3) A landing may be omitted at the bottom of an exterior stair or ramp, provided there is no gate, door or fixed obstruction within the lesser of,

(a) the width of the stair or ramp, or

(b) 1 100 mm.

3.4.6.4. Dimensions of Landings

(1) Except as provided by Sentence (4), the length and width of a landing shall be at least the width of the stairway or ramp in which it occurs, except that in a straight run the length of the landing need not be more than 1 100 mm.

(2) Where a doorway or stairway empties onto a ramp through a side wall, there shall be a level area extending across the full width of the ramp, and for a distance of 300 mm on either side of the wall opening, except one side if it abuts on an end wall.

(3) Where a doorway or stairway empties onto a ramp through an end wall, there shall be a level area extending across the full width of the ramp and along its length for not less than 900 mm.

(4) Where the direction of *exit* travel changes at a landing, the landing is permitted to be chamfered or curved in plan, provided the required width of the stair is maintained where measured perpendicular to the direction of *exit* travel across the landing.

3.4.6.5. Handrails

(1) A stairway shall have a handrail on at least one side, and if 1 100 mm or more in width, shall have handrails on both sides.

(2) If the required width of a ramp or flight of stairs is more than 2 200 mm, one or more intermediate handrails continuous between landings shall be provided, and located so that there will be not more than 1 650 mm between handrails.

(3) Handrails shall be continuously graspable along their entire length and shall have,

(a) a circular cross-section with an outside diameter not less than 30 mm and not more than 43 mm, or

(b) any non-circular shape with a graspable portion that has a perimeter not less than 100 mm and not more than 125 mm and whose largest cross-sectional dimension is not more than 45 mm.

(4) The height of handrails on stairs and ramps shall be measured vertically from the top of the handrail to,

(a) a straight line drawn tangent to the tread nosings of the stair served by the handrail, or

(b) the surface of the ramp, floor or landing served by the handrail.

(5) Except as provided by Sentences (6) and (7), the height of handrails on stairs and ramps shall be,

(a) not less than 865 mm, and

(b) not more than 965 mm.

(6) Handrails installed in addition to required handrails need not comply with Sentence (5).

(7) Where *guards* are required, handrails required on landings shall be not more than 1 070 mm in height.

(8) Except as required by Sentence (14) and except where interrupted by doorways or newels at changes in direction, at least one handrail shall be continuous throughout the length of a stairway or ramp, including landings.

(9) Handrails shall be terminated in a manner that will not obstruct pedestrian travel or create a hazard.

(10) At least one handrail shall,

(a) in the case of a stair,

(i) extend horizontally at the required height, not less than 300 mm beyond the top riser, and

(ii) continue to slope for a depth of one tread beyond the bottom riser followed by a 300 mm horizontal extension, and

(b) in the case of a ramp, extend horizontally at the required height, not less than 300 mm beyond the top and bottom edges of the incline.

(11) The clearance between a handrail and any surface behind it shall be not less than 50 mm.

(12) Handrails and their supports shall be designed and constructed to withstand the loading values obtained from the nonconcurrent application of,

(a) a concentrated load not less than 0.9 kN applied at any point and in any direction for all handrails, and

(b) a uniform load not less than 0.7 kN/m applied in any direction to handrails not located within *dwelling units*.

(13) A ramp shall have handrails on both sides.

(14) In a long-term care home and a Group B, Division 3 *occupancy*, a continuous handrail shall be provided on both sides of a stairway throughout the length of the stairway, including landings, except where a handrail is interrupted by doorways or newels at changes in direction.

3.4.6.6. Guards

(1) Every *exit* shall have a wall or a well-secured *guard* on each side.

(2) Except as required by Sentence (4), the height of *guards* for *exit* stairs shall be not less than 920 mm measured vertically to the top of the *guard* from a line drawn through the outside edges of the stair nosings and 1 070 mm around landings.

(3) *Exit* ramps and their landings shall be protected with *guards* not less than 1 070 mm measured vertically to the top of the *guard* from the ramp surface where the difference in elevation between the adjacent ground or floor level and the ramp is more than 600 mm.

(4) The height of *guards* for exterior stairs and landings more than 10 m above adjacent ground level shall be not less than 1 500 mm measured vertically to the top of the *guard* from the surface of the landing or a line drawn through the outside edges of the stair nosings.

(5) Except as provided in Sentence (6), openings through any *guard* that is required by Sentence (1) shall be of a size that will prevent the passage of a sphere having a diameter more than 100 mm unless it can be shown that the location and size of openings that exceed this limit do not represent a hazard.

(6) Openings through any *guard* that is required by Sentence (1) and that is installed in a *building* of *industrial occupancy* shall be of a size that will prevent the passage of a

sphere having a diameter more than 200 mm unless it can be shown that the location and size of openings that exceed this limit do not represent a hazard.

(7) In a stairway, a window for which the distance measured vertically between the bottom of the window and a line drawn through the outside edges of the stair nosings is less than 900 mm, or a window that extends to less than 1 070 mm above the landing, shall,

(a) be protected by a *guard* that is,

(i) located approximately 900 mm above a line drawn through the outside edges of the stair nosings, or

(ii) not less than 1 070 mm high measured to the top of the *guard* from the surface of the landing, or

(b) be fixed in position and designed to resist the lateral design loads specified for *guards* and walls in Articles 4.1.5.14. and 4.1.5.16.

(8) Unless it can be shown that the location and size of openings do not present a hazard, a *guard* shall be designed so that no member, attachment or opening located between 140 mm and 900 mm above the level being protected by the *guard* will facilitate climbing.

3.4.6.7. Ramp Slope

(1) Except as required for aisles by Article 3.3.2.4., the maximum slope of a ramp shall be,

(a) 1 in 10 in any *assembly*, *care*, *care and treatment*, *detention* or *residential occupancy*,

(b) 1 in 6 in rooms or *floor areas* classified as *mercantile occupancy* or *industrial occupancy*,

(c) 1 in 8 in any other *floor area*, and

(d) 1 in 10 for an exterior ramp.

3.4.6.8. Treads and Risers

(1) Except as permitted for *dwelling units* and by Sentence 3.4.7.5.(1) for fire escapes, steps for stairs shall have a run of not less than 255 mm and not more than 355 mm between successive steps.

(2) Steps for stairs referred to in Sentence (1) shall have a rise between successive treads not less than 125 mm and not more than 200 mm.

(3) Except in fire escape stairs and where an exterior stair adjoins a *walkway* as permitted by Sentence 3.4.6.3.(3), risers, measured as the vertical nosing-to-nosing distance, shall be of uniform height in any one flight, with a maximum tolerance of,

(a) 5 mm between adjacent treads or landings, and

(b) 10 mm between the tallest and shortest risers in a flight.

(4) Except in fire escape stairs, treads, measured as the horizontal nosing-to-nosing distance, shall have a uniform run with a maximum tolerance of,

(a) 5 mm between adjacent treads, and

(b) 10 mm between the deepest and shallowest treads in a flight.

(5) Treads and risers shall not differ significantly in run and rise in successive flights in any stair system.

(6) Where angled treads are incorporated into a stair, the treads in all sets of angled treads within a flight shall turn in the same direction.

(7) The slope on treads or landings shall not exceed 1 in 50.

(8) Except as permitted by Sentence (10), the top of the nosing of a stair tread shall have a rounded or bevelled edge extending not less than 6 mm and not more than 13 mm measured horizontally from the front of the nosing.

(9) The front edge of stair treads in *exits* and public *access to exits* shall be at right angles to the direction of *exit* travel.

(10) If resilient material is used to cover the nosing of a stair tread, the minimum radius or bevel required by Sentence (8) is permitted to be reduced to 3 mm.

3.4.6.9. Curved Stairs

(1) Except as permitted by Sentence (2), tapered treads shall not be used in an *exit*.

(2) A curved stair used as an *exit* shall have,

(a) a handrail on each side,

(b) treads with a minimum run of 240 mm exclusive of nosings,

(c) treads that conform to Article 3.4.6.8. where they are measured 230 mm away from the handrail at the narrow end of the tread, and

(d) an inside radius that is not less than twice the stair width.

3.4.6.10. Horizontal Exits

(1) Except in an elementary or secondary school that is subdivided by a *firewall*, the *floor area* on each side of a *horizontal exit* shall be sufficient to accommodate the occupants of both *floor areas*, allowing not less than 0.5 m^2 of clear floor space per person, except that 1.5 m^2 shall be provided for each person in a wheelchair and 2.5 m^2 for each patient in bed.

(2) If vestibules, enclosed balconies or bridges are used as parts of a *horizontal exit*, their clear width shall be not less than that of the *exit* doorways opening into them, except that handrails are not permitted to project into this clear width more than 100 mm.

(3) In a *horizontal exit* where there is a difference in level between the connected *floor areas*, slopes not more than those specified for ramps in Article 3.4.6.7. are permitted to be used.

(4) No stairs or steps shall be used at a *horizontal exit*.

(5) If two doors are provided in a *horizontal exit* that comprises a part of the required number of *exits* from the *floor areas* on both sides of the *exit*,

(a) the doors shall be mounted adjacent to each other with the door on the right side in the direction of travel through the *horizontal exit* swinging in the direction of travel through the *horizontal exit*, and

(b) signs shall be provided on each side of the *horizontal exit* to indicate the door that swings in the direction of travel from that side.

(6) If a *horizontal exit* utilizes bridges between *buildings* or outside balconies, the bridges or balconies shall conform to Article 3.2.3.19.

(7) Any change in floor level from one side of a *horizontal exit* to the other side shall not exceed 2 000 mm.

3.4.6.11. Doors

(1) The distance between a stair riser and the leading edge of a door during its swing shall be not less than 300 mm.

(2) No *exit* door shall open directly onto a step except that, if there is danger of blockage from ice or snow, an *exit* door is permitted to open onto not more than one step which shall be not more than 150 mm high.

(3) *Exit* doors shall be clearly identifiable.

(4) No door leaf in an *exit* doorway with more than one leaf shall be less than 600 mm wide.

3.4.6.12. Direction of Door Swing

(1) Except as permitted by Sentences (2) and (3) and Article 3.4.6.14., every *exit* door shall,

(a) open in the direction of *exit* travel, and

(b) swing on its vertical axis.

(2) A door serving a single *dwelling unit* shall swing on its vertical axis.

(3) Except in a *high hazard industrial occupancy*, an *exit* door need not swing in the direction of *exit* travel where it serves,

(a) a room, *suite* or *floor area* having an *occupant load* of not more than 60 persons, or

(b) as part of a *means of egress* from more than one *floor area* and the *floor areas* so served have a total *occupant load* of not more than 60 persons.

3.4.6.13. Self-Closing Devices

(1) An *exit* door that is normally required to be kept closed,

(a) shall be provided with a self-closing mechanism, and

(b) shall not be secured in an open position except as permitted by Sentence 3.1.8.12.(1).

3.4.6.14. Sliding Doors

(1) Except as permitted by Sentence (2) an *exit* door leading directly to outdoors at ground level is permitted to be a sliding door provided it is released in conformance with Sentence 3.3.1.11.(1).

(2) An *exit* door serving a Group B, Division 1 *occupancy*, or an *impeded egress zone* in other *occupancies*, is permitted to be a sliding door that does not conform to Sentence 3.3.1.11.(1) provided it is designed to be released in conformance with Article 3.3.1.12.

3.4.6.15. Revolving Doors

(1) Except as permitted by Sentence (3), a revolving door, if used, shall,

(a) be collapsible,

(b) have hinged doors providing equivalent exiting capacity located adjacent to it,

(c) be used as an *exit* from the ground floor level only,

(d) be not less than 3 m from the foot of any stairway, and

(e) have all glass in door leaves and enclosure panels conforming to,

(i) CAN/CGSB-12.1-M, “Tempered or Laminated Safety Glass”, or

(ii) CAN/CGSB-12.11-M, “Wired Safety Glass”.

(2) Except as permitted by Sentence (3), a revolving door shall not be considered to have an exiting capacity for more than 45 persons.

(3) An electrically powered revolving door is not required to conform to Sentences (1) and (2) provided,

(a) the door leaves will collapse and stop automatic rotation of the door system and not obstruct the doorway if a force not more than that specified in Sentence 3.4.6.16.(2) is applied at the centre of a door leaf,

(b) the door leaves are capable of being opened from inside the *building* without requiring keys, special devices, or specialized knowledge of the door opening mechanism,

(c) the allowable exiting capacity is based on the clear width of passage through the door enclosure when the doors are fully collapsed,

(d) a permanent sign, whose centreline is between 1 000 mm and 1 500 mm above the floor, is placed on each face of each door leaf indicating the method for collapsing the door leaf in an emergency, and

(e) glass used for door leaves and enclosure panels is safety glass conforming to,

(i) CAN/CGSB-12.1-M, “Tempered or Laminated Safety Glass”, or

(ii) CAN/CGSB-12.11-M, “Wired Safety Glass”.

3.4.6.16. Door Release Hardware

(1) Except for *dwelling units*, except for devices on doors serving a *contained use area* or an *impeded egress zone* designed to be released in conformance with Article 3.3.1.12., and except as permitted by Sentence (4), locking, latching and other fastening devices on every *exit* door shall permit the door to be readily opened from the inside with not more than one releasing operation and without requiring keys, special devices or specialized knowledge of the door opening mechanism.

(2) If a door is equipped with a latching mechanism, a device that will release the latch and allow the door to swing wide open when a force of not more than 90 N is applied to the device in the direction of travel to the *exit* shall be installed on,

(a) every *exit* door from a *floor area* containing an *assembly occupancy* having an *occupant load* more than 100,

(b) every door leading to an *exit* lobby from an *exit* stair shaft, and every exterior door leading from an *exit* stair shaft in a *building* having an *occupant load* more than 100, and

(c) every *exit* door from a *floor area* containing a *high hazard industrial occupancy*.

(3) Except as required by Sentence 3.8.3.3.(7), every *exit* door shall be designed and installed so that, when the latch is released, the door will open under a force of not more than 90 N, applied at the knob or other latch releasing device.

(4) Except as permitted by Sentence 3.3.1.12.(6), electromagnetic locks that do not incorporate latches, pins or other similar devices to keep the door in the closed position are permitted to be installed on *exit* doors other than doors described in Sentence (5) provided,

(a) the *building* is equipped with a fire alarm system conforming to Subsection 3.2.4.,

(b) the locking device, and all similar devices in the *access to exit* leading to the *exit* door, are installed as ancillary devices to the fire alarm system and release immediately upon activation of,

(i) the *alarm signal* where a single stage fire alarm system is installed,

(ii) except as provided in Subclause (iii), the *alert signal* where a two stage fire alarm system is installed, or

(iii) the *alarm signal* of a two stage fire alarm system installed in a *care*, *care and treatment* or *detention occupancy*,

(c) the locking device releases immediately upon loss of power to the fire alarm control panel or loss of power controlling the electromagnetic locking mechanism and its associated auxiliary controls,

(d) the locking device releases immediately upon actuation of a manually operated switch readily accessible only to authorized personnel and located near the main entrance of the *building* or in the central alarm and control facility of Sentence 3.2.6.7.(1),

(e) the locking device releases immediately upon a fault being detected in the electrical circuit between the fire alarm control panel and the controller of the locking device,

(f) the locking device releases immediately upon the operation of a manual pull station for the fire alarm system located on the wall not more than 600 mm from the door,

(g) a legible sign having the words **EMERGENCY EXIT UNLOCKED BY FIRE ALARM** is permanently mounted on the door,

(h) the lettering on the sign required in Clause (g) is at least 25 mm high with a 5 mm stroke,

(i) upon release, the locking device must be reset manually by the actuation of the switch referred to in Clause (d),

(j) the operation of any by-pass switch, where provided for testing of the fire alarm system, causes an audible signal and a visual signal to be indicated at the fire alarm annunciator panel and at the monitoring station referred to in Clause 3.2.4.8.(4) (a), and

(k) emergency lighting is provided at the doors.

(5) Except as permitted by Sentences (6) and (7), electromagnetic locks are not permitted to be installed on *exit* doors,

(a) described in Clause (2)(a), (b) or (c),

(b) serving an elementary or secondary school, or

(c) leading directly from a *high hazard industrial occupancy*.

(6) Electromagnetic locks are permitted to be installed on an exterior door leading from an *exit* stairway in a *building* serving only a Group B, Division 2 *major occupancy* or a Group B, Division 3 *major occupancy*.

(7) Electromagnetic locks are permitted to be installed on an *exit* door that serves only a *gaming premises* if,

(a) the *gaming premises* is located within a *sprinklered floor area*,

(b) *smoke detectors* are installed in each room and each corridor accessible to the public,

(c) a force of not more than 90 N applied to the door opening hardware initiates an irreversible process that will release the locking device within 15 s and not relock until the door has been opened, and

(d) a legible sign conforming with Clause (4)(h) is permanently mounted on the *exit* door to indicate that the locking device will release within 15 s of applying pressure to the door release hardware.

(8) Door hardware for the operation of the doors referred to in this Section shall be installed at a height not more than 1 200 mm above the finished floor.

3.4.6.17. Reserved

3.4.6.18. Emergency Access to Floor Areas

(1) In a *building* more than 6 *storeys* in *building height*,

(a) except as permitted by Sentence (3), doors providing access to *floor areas* from *exit* stairs shall not have locking devices to prevent entry into,

(i) any *floor area* designated as an area of refuge,

(ii) *floor areas* located at intervals of 5 *storeys* or less, and

(iii) at least one of the three highest *storeys*,

(b) doors referred to in Clause (a) that provide access into the *floor area* shall be identified by a sign on the stairway side to indicate that they are openable from that side, and

(c) a master key to fit all door locking devices that are intended to prevent entry into a *floor area* from an *exit* stair shall be provided in a designated location accessible to firefighters, or the door shall be provided with a wired glass panel not less than 0.0645 m^2 in area and located not more than 300 mm from the door opening hardware.

(2) If access to *floor areas* through unlocked doors is required by Clause (1)(a) or through electromagnetically locked doors as permitted by Sentence (3), it shall be possible for a person entering the *floor area* to have access through unlocked doors or through electromagnetically locked doors within the *floor area* to at least one other *exit*.

(3) Electromagnetic locking devices may be installed on the doors providing access to *floor areas* from *exit* stairs as required by Clause (1)(a), provided all locking device release and signage provisions in Sentence 3.4.6.16.(4) are installed on both sides of the doors.

(4) In a *building* not more than 6 *storeys* in *building height*, doors providing access from *exit* stairs to a *floor area* containing a *hotel* are permitted to have locking devices to prevent entry into the *floor area* provided the requirements in Clause (1)(c) are complied with.

3.4.6.19. Floor Numbering

(1) Arabic numerals indicating the assigned floor number shall,

(a) be mounted permanently on each side of doors to *exit* stair shafts,

(b) be not less than 60 mm high, raised approximately 0.7 mm above the surface,

(c) be located 1 500 mm from the finished floor, and

(d) be contrasting in colour with the surface to which they are applied.

(2) Upper case letters indicating the designation assigned to each *exit* stair shaft shall be mounted permanently on each side of doors to the *exit* stair shaft and shall,

(a) be not less than 60 mm high, raised approximately 0.7 mm above the surface,

(b) be located 1 500 mm from the finished floor, and

(c) be contrasting in colour with the surface on which they are applied.

3.4.7. Fire Escapes

3.4.7.1. Scope

(1) Except as permitted by Sentence (2), fire escapes shall not be erected on a *building*.

(2) If it is impracticable to provide one or more of the *exit* facilities listed in Article 3.4.1.4., fire escapes conforming to Articles 3.4.7.2. to 3.4.7.7. are permitted to serve *floor areas* in an existing *building* provided the *floor areas* served are,

(a) not in an elementary or secondary school,

(b) not more than 2 *storeys* above ground level in *care*, *care and treatment* or *detention occupancies*, and

(c) not more than 5 *storeys* above ground level in other *occupancies*.

3.4.7.2. Fire Escape Construction

(1) Fire escapes shall be of metal or concrete, of the stair type extending to ground level, constructed throughout in a strong substantial manner and securely fixed to the *building*, except that wooden fire escapes are permitted to be used on *buildings* of *combustible construction* if all posts and brackets are not less than 89 mm in their least dimension and all other woodwork is not less than 38 mm in its least dimension.

3.4.7.3. Access to Fire Escapes

(1) Access to fire escapes shall be from corridors through doors at floor level, except that access from a *dwelling unit* is permitted to be through a casement window having an unobstructed opening not less than 1 100 mm high by 550 mm wide with a sill height of not more than 900 mm above the inside floor.

(2) The clear area of a fire escape balcony onto which a door opens, shall be not less than 1 m^2.

3.4.7.4. Protection of Fire Escapes

(1) If a fire escape serves any *storey* above the second, openings located in a zone described in Sentence (2), including access doorways in the exterior walls of the *building* to which the fire escape is attached, shall be protected by *closures* conforming to Subsection 3.1.8.

(2) The zone referred to in Sentence (1) extends from any balcony, platform or stairway of a fire escape to a distance,

(a) 3 m horizontally,

(b) 10 m below, and

(c) 1 800 mm above.

3.4.7.5. Stairs

(1) Stairs shall be inclined at an angle of not more than 45° with the horizontal, and their steps shall have risers not more than 210 mm high and treads not less than 220 mm wide exclusive of nosing.

(2) Stairway headroom shall be not less than 1 950 mm plus the height of one riser measured vertically above the nosing of any tread or platform.

(3) The width of a fire escape shall conform to Articles 3.4.3.1., 3.4.3.2. and 3.4.3.4., except that the width is permitted to be reduced to 550 mm provided the fire escape serves,

(a) not more than 3 *storeys*, and

(b) not more than 15 persons.

(4) If a flight of stairs leading to the ground at the foot of a fire escape is not fixed in position, it shall,

(a) be held in the raised position without a latch or locking device,

(b) be fitted with a counterbalancing device,

(c) be easily and quickly brought into position for use, and

(d) reach the ground in the lowered position.

3.4.7.6. Guards and Railings

(1) The open sides of every platform, balcony and stairway forming part of a fire escape shall be protected by *guards* not less than 920 mm high measured vertically above the nosing of any tread or platform.

(2) The top rail of a *guard* is permitted to serve as a handrail if it is free from obstructions that could break a handhold.

(3) A wall handrail shall be installed if the fire escape is more than 550 mm wide.

(4) Openings through any *guard* that is required by Sentence (1) shall be of a size that will prevent the passage of a sphere having a diameter more than 100 mm unless it can be shown that the location and size of openings that exceed this limit do not represent a hazard.

(5) Unless it can be shown that the location and size of openings do not present a hazard, a *guard* for a fire escape shall be designed so that no member, attachment or opening located between 140 mm and 900 mm above a platform or the nosing of any tread will facilitate climbing.

3.4.7.7. Landings

(1) Platforms for a fire escape shall be provided in conformance with the requirements for stair landings in Articles 3.4.6.3. and 3.4.6.4.

Section 3.5. Vertical Transpo

rtation

3.5.1. General

3.5.1.1. Scope

(1) This Section applies to vertical transportation facilities installed in a *building*, including elevators, escalators and dumbwaiters.

(2) Elevators in a *building* within the scope of Subsection 3.2.6. shall conform to Articles 3.2.6.4. and 3.2.6.5.

3.5.2. Elevator Requirements

3.5.2.1. Required Elevator

(1) Except as provided in Sentence (2), in a Group B, Division 2 or 3 *occupancy*, if sleeping rooms or patient or resident services are provided on more than one floor level and the floor levels are not connected by ramps conforming to Article 3.8.3.4., such floor levels shall be served by at least one elevator that is large enough to accommodate a stretcher in a horizontal position.

(2) Sentence (1) does not apply to those parts of a *floor area* classified as a Group B, Division 3 *occupancy* if,

(a) those portions of the *floor area* contain sleeping accommodation for not more than 10 persons, and

(b) not more than six occupants require assistance in evacuating in the case of an emergency.

3.5.2.2. Barrier-Free Design

(1) Passenger elevators shall conform to Appendix E of ASME A17.1 / CSA B44, "Safety Code for Elevators and Escalators".

3.5.3. Fire Separations

3.5.3.1. Fire Separations for Elevator Hoistways

(1) Except as permitted by Sentence (2), a *vertical service space* used as an elevator hoistway shall be separated from all other portions of each adjacent *storey* by a *fire separation* having a *fire-resistance rating* conforming to Table 3.5.3.1. for the *fire-resistance rating* required by Subsection 3.2.2. for,

(a) the floor assembly above the *storey*, or

(b) the floor assembly below the *storey*, if there is no floor assembly above.

Table 3.5.3.1.
Fire Separation for Vertical Transportation Space

Forming Part of Sentences 3.5.3.1.(1) and 3.5.3.2.(1)

Item	Column 1 *Fire-Resistance Rating* of *Fire Separation* Required for Floor Assembly	Column 2 Minimum *Fire-Resistance Rating* of *Vertical Service Space* for Elevator Hoistway	Column 3 Minimum *Fire-Resistance Rating* of *Vertical Service Space* for Dumbwaiters
1.	less than 45 min	45 min	---
2.	45 min	45 min	45 min
3.	1 h	1 h	45 min
4.	1.5 h	1 h	1 h
5.	2 h or more	1.5 h	1 h

(2) Passenger elevators, other than those provided for firefighters in accordance with Article 3.2.6.5., are permitted to be located within or adjacent to the opening of an *interconnected floor space* protected in conformance with the requirements of Articles 3.2.8.3. to 3.2.8.11., Sentences 3.2.8.2.(4) and (6) without being enclosed in a hoistway separated from the remainder of the *interconnected floor space* provided the elevator machinery is located in a room separated from the remainder of the *building* by a *fire separation* whose *fire-resistance rating* is not less than that required for hoistways by Sentence (1).

(3) Where the elevator described in Sentence (2) has doors opening into *storeys* above or below the *interconnected floor space* it shall be protected by vestibules conforming to the requirements of Sentence 3.2.8.5.(1).

3.5.3.2. Vertical Service Spaces for Dumbwaiters

(1) A *vertical service space* containing a dumbwaiter shall be separated from all other portions of each adjacent *storey* by a *fire separation* having a *fire-resistance rating* conforming to Table 3.5.3.1. for the *fire-resistance rating* required by Subsection 3.2.2. for,

(a) the floor assembly above the *storey*, or

(b) the floor assembly below the *storey*, if there is no floor assembly above.

3.5.3.3. Fire Separations for Elevator Machine Rooms

(1) Except as permitted by Sentence (2), a room containing elevator machinery shall be separated from all other parts of the *building* by a *fire separation* having a *fire-resistance rating* not less than that required for the *vertical service space* containing the elevator hoistway.

(2) A room containing elevator machinery need not be separated from the elevator hoistway that it serves provided the room and the hoistway are separated from all other parts of the *building* by a *fire separation* having a *fire-resistance rating* not less than that required for the *vertical service space* containing the elevator hoistway.

3.5.4. Dimensions and Signs

3.5.4.1. Elevator Car Dimensions

(1) If an elevator is installed to conform to the requirements of Article 3.3.1.7., or if one or more elevators are provided in a *building* more than three *storeys* in *building height*, each *storey* having elevator service shall be served by at least one elevator that has inside dimensions that will accommodate and provide adequate access for a patient stretcher 2 010 mm long and 610 mm wide in the prone position.

(2) An elevator satisfying the requirements of Sentence (1) shall be clearly identified on the main entrance level of the *building*.

Section 3.6. Service Facilities

3.6.1. General

3.6.1.1. Scope

(1) The provisions of this Section apply to *horizontal service spaces*, *vertical service spaces*, *attic or roof spaces*, ducts, crawl spaces, shaft spaces, *service rooms*, and mechanical penthouses, and facilities contained in any of them.

(2) Except for *plenum* requirements in 3.6.4.3., the fire safety characteristics of heating, ventilating and *air-conditioning* systems shall comply with Part 6.

3.6.1.2. Reserved

3.6.1.3. Storage Use Prohibition

(1) *Service spaces* shall not be designed to facilitate subsequent use as storage space.

3.6.1.4. Reserved

3.6.1.5. Fixed Access Ladders

(1) If a fixed ladder is installed to provide access to a roof of a *building*, the design and installation of the attachment and anchorage system for the ladder shall be as described in MMAH Supplementary Standard SB-8, "Design, Construction and Installation of Anchorage System for Fixed Access Ladders".

3.6.2. Service Rooms

3.6.2.1. Fire Separations around Service Rooms

(1) Except as permitted by Sentences (2) and (8) to (10), fuel-fired *appliances* shall be installed in *service rooms* separated from the remainder of the *building* by *fire separations* having a *fire-resistance rating* not less than 1 h.

(2) Except as required by Sentence (3), a fuel-fired *appliance* that serves only one room or *suite* is not required to be installed in a *service room* separated from the remainder of the *building*.

(3) A solid fuel fired *appliance* shall not be located in a *repair garage*, a *storage garage*, or any other location where it could be exposed to flammable vapours or gases unless,

(a) it is enclosed in a *service room* that is separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h,

(b) it is supplied with combustion air directly from outside the *building*, and

(c) the heat that it generates is supplied indirectly to the space served by means of ducts or piping.

(4) A *service room* containing an incinerator shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 2 h.

(5) Equipment that uses a liquid having a *flash point* below 93.3°C shall be installed in a *service room* separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(6) Electrical equipment that is required to be located in a *service room* by a regulation made under the *Electricity Act, 1998*, shall be installed in a *service room* separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(7) Except as permitted by Sentence (8), in a *storey* that is not *sprinklered*, a *service room* that contains service equipment other than that addressed by Sentences (1) to (6), shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(8) If a *service room* referred to in Sentence (7) contains a limited quantity of service equipment, and the service equipment neither constitutes a fire hazard nor is essential to the operation of fire safety systems in the *building*, the requirements for a *fire separation* shall not apply.

(9) A *fire separation* is not required between a fireplace and the space it serves.

(10) A *fire separation* is not required between a rooftop *appliance* and the *building* it serves.

(11) The *fire separation* provisions for a fuel-fired *appliance* in a portable classroom shall conform to Article 3.9.3.7.

3.6.2.2. Service Rooms under Exits

(1) A *service room* containing service equipment subject to possible explosion, such as *boilers* operating in excess of 100 kPa (gauge) and some types of refrigerating machinery and transformers, shall not be located directly under a required *exit*.

3.6.2.3. Service Equipment

(1) A *service room* containing space heating, space cooling and service water heating *appliances* is permitted to contain other service equipment such as electrical service equipment.

3.6.2.4. Incinerator Rooms

(1) A *service room* containing an incinerator shall not contain other fuel-fired *appliances*.

3.6.2.5. Combustible Refuse Storage

(1) Except as required by Sentence 3.6.3.3.(9), a room for the storage of *combustible* refuse shall be,

(a) separated from the remainder of the *building* by a *fire separation* with a *fire-resistance rating* not less than 1 h, and

(b) *sprinklered*.

3.6.2.6. Door Swing for Service Rooms

(1) A swing-type door from a *service room* containing a *boiler* or incinerator shall swing outward from the room, except that the door shall swing inward if the door opens onto a corridor or any room used for an *assembly occupancy*.

3.6.2.7. Electrical Equipment Vaults

(1) Where an electrical equipment vault is required by the Electrical Safety Code adopted under Ontario Regulation 164/99 (Electrical Safety Code) made under the *Electricity Act, 1998*, the electrical equipment vault shall be totally enclosed by a *fire separation* of solid masonry or concrete construction having a *fire-resistance rating* of not less than 3 h if the vault is not provided with an automatic fire extinguishing system and not less than 2 h if the vault is so protected.

(2) Where a *building* is required to be *sprinklered*, the electrical equipment vault described in Sentence (1) need not be *sprinklered* provided,

(a) the vault is designed for no purpose other than to contain the electrical equipment, and

(b) a *smoke detector* is provided in the vault that will actuate the *building* fire alarm system in the event of a fire in the vault.

(3) A vault, that is part of a *building* and houses electrical equipment indoors, shall have,

(a) roofs or ceilings consisting of reinforced concrete of adequate strength for the conditions and not less than 150 mm thick, and

(b) floors consisting of reinforced concrete of adequate strength for the conditions and not less than 150 mm thick, except that floors that are at excavation level are permitted to be of reinforced concrete not less than 100 mm thick.

(4) Walls, roofs or ceilings, and floors shall be adequately anchored together in a manner designed to resist dislodgement by explosion.

(5) Only pipes or ducts necessary for fire protection or the proper operation of the electrical installation shall penetrate the *fire separations* surrounding the electrical equipment vault.

(6) A ventilation duct or opening, that penetrates the *fire separation* to the outdoors, need not be protected by a *closure* at the penetration.

(7) Each door to an electrical equipment vault shall be provided with a substantial lock or padlock.

(8) Explosion-relief devices and vents or other protective measures shall be provided for every electrical equipment vault containing dielectric liquid filled electrical equipment in conformance with Sentence 3.3.1.19.(2).

(9) Every electrical equipment vault shall be provided with a ventilation system designed in conformance with Part 6 to prevent the ambient temperature in the vault from exceeding 40°C.

(10) Where the vault ventilation system in Sentence (9) is directly from an outdoor area by natural ventilation without the use of ducts, and where the electrical equipment is the principal source of heat, the combined net area of inlet and outlet openings shall be not less than 0.002 m^2/kVa of electrical equipment capacity with a minimum of 0.093 m^2, except that,

(a) where equipment in the power class as described in CAN/CSA-C88-M, “Power Transformers and Reactors” is installed, ventilation requirements are permitted to be based on the actual full-load losses, or

(b) where the equipment is installed for emergency purposes only and is not normally energized, it need not be considered in determining the ventilation requirements.

(11) In the vault ventilation system in Sentence (10), the inlet for fresh air shall lead from an outdoor area and shall terminate at a point not more than 1 000 mm above the floor level of the vault.

(12) Where the vault ventilation system in Sentence (9) is a mechanical system, it shall be separate from the system for the remainder of the *building* and shall be designed so that,

(a) the vault temperature is thermostatically controlled,

(b) the fan is located so that it may be serviced without danger to personnel,

(c) a high temperature alarm is provided in the vault,

(d) the system is automatically shut off in the event of a fire in the vault, and

(e) a filter is provided in the air inlet if there is a possibility of dirt being drawn in.

(13) All ventilation openings shall be protected in conformance with Sentences 6.2.3.12.(3) and (4) and the protection shall be installed in such a manner that it cannot be removed from the outside by the use of common tools and it is tamperproof.

(14) Except as permitted in Sentence (15), the floor of the electrical equipment vault described in Sentences (1) and (2) shall be liquid tight and surrounded by liquid tight walls and sills of sufficient height to confine within the vault all of the liquid from the largest item of electrical equipment, but to a height of not less than 100 mm.

(15) The floor of the electrical equipment vault described in Sentences (1) and (2) may be provided with a floor drain connected to a covered sump capable of holding all of the liquid from the largest item of electrical equipment, and the connection shall have a *noncombustible* trap to prevent the spread of fire from the vault to the sump.

(16) Where the electrical equipment vault is located in a hazardous location classified as Class II, Division 1 in accordance with the Electrical Safety Code adopted under Ontario Regulation 164/99 (Electrical Safety Code) made under the *Electricity Act, 1998*, it shall have,

(a) no vent opening except to the exterior of the *building*, and

(b) suitable pressure-relief openings communicating only with the air outside the *building*.

(17) Where doors are provided between the vault described in Sentence (16) and the rest of the *building*, they shall have suitable seals such as weatherstripping to minimize the entrance of dust into the vault.

(18) Every electrical equipment vault shall be provided with,

(a) adequate lighting, controlled by one or more switches located near the entrance,

(b) luminaires located so that they may be relamped without danger to personnel, and

(c) a grounded receptacle located in a convenient location inside the vault, near the entrance.

3.6.2.8. Emergency Power Installations

(1) Where a generator intended to supply emergency power for lighting, fire safety and life safety systems is located in a *building*, it shall be located in a room that,

(a) is separated from the remainder of the *building* by a *fire separation* with a *fire-resistance rating* not less than,

(i) 2 h for *buildings* within the scope of Subsection 3.2.6., and

(ii) 1 h for other *buildings*, and

(b) contains only the generating set and equipment that is related to the emergency power supply system.

3.6.2.9. Storage of Oxygen Containers

(1) In a Group B, Division 2 or 3 *occupancy*, a room for the storage of oxygen containers shall be,

(a) separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h,

(b) designed for the storage of oxygen containers only,

(c) vapour tight,

(d) lined with *noncombustible* finish,

(e) separately exhausted to the exterior, and

(f) equipped with racks to store the containers.

3.6.3. Vertical Service Spaces and Service Facilities

3.6.3.1. Fire Separations for Vertical Service Spaces

(1) Except as required by Section 3.5., a *vertical service space* shall be separated from all other portions of each adjacent *storey* by a *fire separation* having a *fire-resistance rating* conforming to Table 3.6.3.1. for the *fire-resistance rating* required by Subsection 3.2.2. for,

(a) the floor assembly above the *storey*, or

(b) the floor assembly below the *storey*, if there is no floor assembly above.

Table 3.6.3.1.
Fire Separations for Vertical Service Space

Forming Part of Clause 3.2.9.2.(9)(b) and Sentence 3.6.3.1.(1)

Item	Column 1 *Fire-Resistance Rating* of *Fire Separation* Required for Floor Assembly	Column 2 Minimum *Fire-Resistance Rating* of *Vertical Service Space*
1.	less than 45 min	---
2.	45 min	45 min
3.	1 h	45 min
4.	1.5 h	1 h
5.	2 h or more	1 h

(2) A *vertical service space* that does not extend through the roof of a *building* shall be enclosed at the top with construction having a *fire-resistance rating* not less than that required for the *vertical service space* walls.

(3) A *vertical service space* that does not extend to the bottom of a *building* shall be enclosed at the lowest level with construction having a *fire-resistance rating* not less than that required for the *vertical service space* walls.

(4) A vent from a *vertical service space* not extending to the roof shall be enclosed within the *building* with construction having a *fire-resistance rating* not less than that required for the *vertical service space* walls.

(5) Only openings that are necessary for the use of the *vertical service space* shall be permitted through a *vertical service space* enclosure.

3.6.3.2. Foamed Plastic Protection

(1) Foamed plastic insulation in a *vertical service space* shall be protected in conformance with Article 3.1.5.12.

3.6.3.3. Linen and Refuse Chutes

(1) A linen chute or refuse chute shall,

(a) be impervious to moisture,

(b) have a smooth internal surface,

(c) be corrosion-resistant,

(d) be constructed of *noncombustible* material, and

(e) be located in a shaft in which there are no services other than *noncombustible* drain, waste and vent piping or *noncombustible* water piping.

(2) A shaft containing a linen chute or refuse chute shall have a *fire-resistance rating* conforming to Sentence 3.6.3.1.(1), but not less than,

(a) 1 h if the chute outlet for the discharge room is protected by an automatic, self-latching *closure* held open by a fusible link, or

(b) 2 h if no *closure* is provided at the chute outlet into the discharge room.

(3) An interior linen chute or refuse chute shall extend not less than 1 m above the roof and shall be vented above the roof with a vent that,

(a) has an unobstructed area not less than the cross-sectional area of the chute, and

(b) is equipped with a cover that will open automatically, or that can be opened manually, in the event of a fire in the chute.

(4) Intake openings for a linen chute or a refuse chute shall,

(a) have an area not more than 60% of the cross-sectional area of the chute, and

(b) be fitted with *closures* designed to close automatically and latch after use.

(5) Intake openings for a linen chute or a refuse chute shall be located in rooms or compartments that,

(a) have no dimension less than 750 mm,

(b) are separated from the remainder of the *building* by a *fire separation* with a *fire-resistance rating* not less than 45 min,

(c) are designed for no other purpose, and

(d) do not open directly into an *exit*.

(6) Sprinklers shall be installed at the top of each linen chute or refuse chute, at alternate floor levels and in the room or bin into which the chute discharges.

(7) The room into which a linen chute discharges shall be separated from the remainder of the *building* by a *fire separation* with a *fire-resistance rating* not less than 1 h.

(8) A refuse chute shall be equipped at the top with spray equipment for washing-down purposes.

(9) A refuse chute shall discharge only into a room or bin separated from the remainder of the *building* by a *fire separation* with a *fire-resistance rating* not less than 2 h.

(10) The room or bin into which a refuse chute discharges shall be of sufficient size to contain the refuse between normal intervals of emptying, be impervious to moisture and be equipped with a water connection and floor drain for washing-down purposes.

(11) A room into which a refuse chute discharges shall contain no service equipment that is not related to refuse handling and disposal.

3.6.3.4. Exhaust Duct Negative Pressure

(1) If a *vertical service space* contains an *exhaust duct* that serves more than one *fire compartment*, the duct shall have a fan located at or near the exhaust outlet to ensure that the duct is under negative pressure.

3.6.4. Horizontal Service Spaces and Service Facilities

3.6.4.1. Scope

(1) This Subsection applies to *horizontal service spaces* and service facilities, including ceiling spaces, duct spaces, crawl spaces and *attic or roof spaces*.

3.6.4.2. Fire Separations for Horizontal Service Spaces

(1) A *horizontal service space* that penetrates a required vertical *fire separation* shall be separated from the remainder of the *building* it serves in conformance with Sentence (2).

(2) If a *horizontal service space* or other concealed space is located above a required vertical *fire separation* other than a vertical shaft, this space need not be divided at the *fire separation* as required by Article 3.1.8.3. provided the construction between this space and the space below is a *fire separation* with a *fire-resistance rating* equivalent to that required for the vertical *fire separation*, except that the *fire-resistance rating* is permitted to be not less than 30 min if the vertical *fire separation* is not required to have a *fire-resistance rating* more than 45 min.

3.6.4.3. Plenum Requirements

(1) A concealed space used as a *plenum* within a floor assembly or within a roof assembly need not conform to Sentence 3.1.5.15.(1) and Article 6.2.3.2. provided,

(a) all materials within the concealed space have a *flame-spread rating* not more than 25 and a smoke developed classification not more than 50, except for,

(i) tubing for pneumatic controls,

(ii) optical fibre cables and electrical wires and cables that exhibit a flame spread not more than 1.5 m, a smoke density not more than 0.5 at peak optical density and a smoke density not more than 0.15 at average optical density when tested in conformance with the Flame and Smoke Test in the Appendix to CSA C22.2 No. 0.3, “Test Methods for Electrical Wires and Cables”, (FT6 Rating),

(iii) optical fibre cables and electrical wires and cables that are located in totally enclosed *noncombustible* raceways,

(iv) totally enclosed nonmetallic raceways that exhibit a horizontal flame distance of not more than 1.5 m, an average optical smoke density of not more than 0.15 and a peak optical smoke density of not more than 0.5 when tested in conformance with CAN/ULC-S102.4, "Fire and Smoke Characteristics of Electrical Wiring and Cables", (FT6 Rating), and

(v) single conductor electrical wires and cables that exhibit a vertical char of not more than 1.5 m when tested in conformance with the Vertical Flame Test — Cables in Cabletrough in Clause 4.11.4. of CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables", (FT4 Rating), and

(b) the supports for the ceiling membrane are of *noncombustible* material having a melting point not below 760°C.

(2) If a concealed space referred to in Sentence (1) is used as a return-air *plenum* and incorporates a ceiling membrane that forms part of the required *fire-resistance rating* of the assembly, every opening through the membrane shall be protected by a *fire stop flap* that shall,

(a) stop the flow of air into the concealed space in the event of a fire,

(b) be supported in a manner that will maintain the integrity of the ceiling membrane for the duration of time required to provide the required *fire-resistance rating*, and

(c) conform to CAN/ULC-S112.2, "Fire Test of Ceiling Firestop Flap Assemblies".

(3) Asbestos paper shall not be exposed in supply and return-air systems.

3.6.4.4. Attic or Roof Space Access

(1) An *attic or roof space* more than 600 mm high shall be provided with access from the floor immediately below by a hatchway not less than 550 mm by 900 mm or by a stairway.

3.6.4.5. Horizontal Service Space Access

(1) A *horizontal service space*, consisting of ceiling and duct spaces, that is more than 1 200 mm high and 600 mm wide shall have inspection doors not less than 300 mm in both horizontal and vertical dimensions placed so that the entire interior of the duct or space can be viewed.

3.6.4.6. Crawl Space Access

(1) A crawl space shall have at least one access opening not less than 550 mm by 900 mm.

Section 3.7. Health Requirements

3.7.1. Height and Area of Rooms

3.7.1.1. Room and Space Height

(1) The height of every room and space shall be sufficient so that the ceiling or ceiling fixtures do not obstruct movement or activities below.

(2) The unobstructed height in *dwelling units* and sleeping rooms in Group C *occupancies* shall conform to Subsection 9.5.3.

3.7.1.2. Residential Room Dimensions

(1) The areas of rooms in *dwelling units*, dormitories, boarding houses and rooming houses shall conform to Part 9.

3.7.1.3. Sleeping Areas in Group B and Child Care Facilities

(1) Except as provided in Sentence (2), a sleeping area in a Group B *occupancy* shall provide not less than 4.7 m^2 per person in a room having,

(a) an area not less than 7 m^2,

(b) a horizontal dimension not less than 2 000 mm, and

(c) a ceiling height not less than 2 300 mm.

(2) Sleeping rooms for residents in long-term care homes shall have, exclusive of space provided for washrooms and for built-in or portable clothes closets, a floor space not less than,

(a) 10.22 m^2 in a single-bed unit,

(b) 16.72 m^2 in a two-bed unit,

(c) 25.08 m^2 in a three-bed unit, and

(d) 29.73 m^2 in a four-bed unit.

(3) A child care facility shall provide sleeping accommodation having not less than 0.93 m^2 of floor surface area for each child with not less than 2 300 mm ceiling height over the entire room area.

3.7.1.4. Sleeping Areas in Camps

(1) *Recreational camps* shall have an area in the sleeping quarters of not less than 3.72 m^2 per camper or, if double or triple tier bunk units are used, 2.79 m^2 per camper.

(2) A *camp for housing of workers* shall have an area of not less than 3.72 m^2 per employee in every room used for sleeping purposes.

3.7.2. Windows

3.7.2.1. Window Areas

(1) Except as provided in Sentences (2) and (3) or otherwise permitted, every room used for sleeping in any *building*, and every principal room such as living room, dining room or combination of them in *dwelling units* shall be provided with windows having areas conforming to Part 9, except that Article 9.9.10.1. does not apply.

(2) Long-term care homes shall have,

(a) in an activity room, a sitting room or a lounge, one or more windows with a total unobstructed glass area, exclusive of skylights, of not less than 10% of the area of the room, and

(b) in a residents' sleeping room, one or more windows that,

(i) have a total unobstructed glass area, exclusive of skylights, of not less than 10% of the area of the room,

(ii) open to the outdoors and have a total unobstructed glass area, exclusive of skylights, of not less than 5% of the area of the room, and

(iii) are installed with the bottom edge of the glass of every window not more than 660 mm above the floor.

(3) Play activity rooms in a child care facility and work areas in *live/work units* shall have one or more windows that conform to Clause (2)(a).

3.7.3. Reserved

3.7.4. Plumbing Facilities

3.7.4.1. Plumbing and Drainage Systems

(1) Except as permitted in Sentence (3), each *building* situated on property that abuts on a *street* in which a public or municipal water main is located shall be provided with or have accessible to its occupants a *plumbing system* including a *potable* water supply, a *sanitary drainage system* and *plumbing fixtures.*

(2) When the installation of a *sanitary drainage system* is not possible because of the absence of a water supply, sanitary privies, chemical closets or other means for the disposal of human waste shall be provided.

(3) *Plumbing fixtures* need not be provided in a *building* that is not normally occupied by persons where such installations are impractical and other *fixtures* are available in nearby *buildings* when the subject *building* is in use.

3.7.4.2. Plumbing Fixtures, General

(1) For the purposes of this Subsection, the *occupant load* shall be determined in accordance with the provisions in Subsection 3.1.17. except that in a Group D *occupancy*, the area per person shall be 14 m^2.

(2) Except as provided in this Subsection, water closets shall be provided for each sex assuming that the *occupant load* is equally divided between males and females, unless the proportion of each sex expected in the *building* can be determined with reasonable accuracy.

(3) Except as provided in Sentence (4), urinals are permitted to be substituted for water closets required by this Subsection for males and may be counted as water closets provided the number of urinals is not more than,

(a) one-fifth of the required number of water closets in hospitals and long-term care homes, and

(b) two-thirds of the required number of water closets in any other *occupancy*.

(4) If only two water closets are required for males, one urinal is permitted to be substituted for one of the water closets.

(5) Except as required in this Subsection, at least one lavatory shall be provided in a room containing one or two water closets or urinals, and at least one additional lavatory shall be provided for each additional two water closets or urinals.

(6) Wash fountains in circular or straight trough form are permitted to be provided in lieu of required lavatories provided each 500 mm of circumference or trough length is considered to be the equivalent of one lavatory.

(7) The water closet and lavatory provided in the universal washroom described in Sentence 3.8.3.12.(1) may be counted as part of the *plumbing fixtures* required for males and females in this Subsection if,

(a) more than one water closet is required for males, and

(b) more than one water closet is required for females.

(8) Where one water closet is required for males and one water closet is required for females, the following may be provided in lieu of the water closets otherwise required by this Subsection:

(a) one universal washroom conforming to Sentence 3.8.3.12.(1), and

(b) one washroom containing one water closet that is permitted to be used by both sexes provided the door to the room can be locked from the inside.

(9) Both sexes are permitted to be served by a single water closet if the *occupant load* is not more than 10 persons in an *assembly occupancy* referred to in Article 3.7.4.3. except for,

(a) elementary and secondary schools,

(b) child care facilities,

(c) places of worship, and

(d) undertaking premises.

(10) Any shelf or projection above a lavatory shall be located so that it will not be a hazard.

(11) Except for *dwelling units*, lavatories required by Sentence (5) shall be equipped with faucets that,

(a) operate automatically, or

(b) have lever type handles that do not close under spring action.

3.7.4.3. Plumbing Fixtures for Assembly Occupancies

(1) Except as provided by Sentences (2) to (16) and Sentence 3.7.4.2.(9), the number of water closets required for *assembly occupancies* shall conform to Table 3.7.4.3.A.

Table 3.7.4.3.A.
Water Closets for Assembly Occupancies

Forming Part of Sentence 3.7.4.3.(1)

Item	Column 1 Number of Persons of Each Sex	Column 2 Minimum Number of Water Closets for Males	Column 3 Minimum Number of Water Closets for Females
1.	1 - 25	1	1
2.	26 - 50	1	2

3.	51 - 75	2	3
4.	76 - 100	2	4
5.	101 - 125	3	5
6.	126 - 150	3	6
7.	151 - 175	4	7
8.	176 - 200	4	8
9.	201 - 250	5	9
10.	251 - 300	5	10
11.	301 - 350	6	11
12.	351 - 400	6	12
13.	Over 400	7 plus 1 for each additional increment of 200 males in excess of 400	13 plus 1 for each additional increment of 100 females in excess of 400

(2) Except for motion picture *theatres*, the number of water closets required for Group A, Division 1 *occupancies* shall conform to Table 3.7.4.3.B.

Table 3.7.4.3.B.
Water Closets for Assembly Occupancies

Forming Part of Sentence 3.7.4.3.(2)

Item	Column 1 Number of Persons of Each Sex	Column 2 Minimum Number of Water Closets for Males	Column 3 Minimum Number of Water Closets for Females
1.	1 to 50	1	2
2.	51 to 75	2	3
3.	76 to 100	2	4
4.	101 to 125	3	5
5.	126 to 150	3	6
6.	151 to 175	4	7
7.	176 to 200	4	8
8.	201 to 250	5	9
9.	251 to 300	5	10
10.	301 to 350	6	11
11.	351 to 400	6	12
12.	over 400	7 plus 1 for each additional increment of 200 males in excess of 400	13 plus 1 for each additional increment of 100 females in excess of 400

(3) The number of water closets required shall conform to Table 3.7.4.3.C. for,

(a) motion picture *theatres*,

(b) Group A, Division 3 *occupancies*,

(c) Group A, Division 4 *occupancies*, and

(d) *outdoor pools*.

Table 3.7.4.3.C.
Water Closets for Assembly Occupancies

Forming Part of Sentences 3.7.4.3.(3) and 3.11.9.1.(4)

Item	Column 1 Number of Persons of Each Sex	Column 2 Minimum Number of Water Closets for Each Sex
1.	1 to 50	1
2.	51 to 150	2
3.	151 to 250	3
4.	251 to 375	4
5.	376 to 500	5
6.	over 500	6 plus 1 for each additional increment of 150 persons of each sex in excess of 500

(4) Except as provided in Sentences (6) and (7), the number of water closets required for dining rooms, restaurants and cafeteria shall conform to Table 3.7.4.3.D.

Table 3.7.4.3.D.
Water Closets for Assembly Occupancies

Forming Part of Sentences 3.7.4.3.(4) and (7)

Item	Column 1 Number of Persons of Each Sex	Column 2 Minimum Number of Water Closets for Each Sex
1.	1 to 20	1
2.	21 to 70	2
3.	71 to 105	3
4.	106 to 135	4
5.	136 to 165	5
6.	166 to 195	6
7.	196 to 225	7
8.	226 to 275	8
9.	276 to 325	9
10.	326 to 375	10
11.	376 to 425	11
12.	over 425	12 plus 1 for each additional increment of 50 persons of each sex in excess of 425

(5) The number of water closets required for establishments used primarily for the consumption of alcoholic beverages that provide limited or no food service shall conform to Table 3.7.4.3.E.

Table 3.7.4.3.E.
Water Closets for Assembly Occupancies

Forming Part of Sentences 3.7.4.3.(5) and 3.14.1.8.(1)

Item	Column 1	Column 2

	Number of Persons of Each Sex	Minimum Number of Water Closets for Each Sex
1.	1 to 50	2
2.	51 to 70	3
3.	71 to 90	4
4.	91 to 110	5
5.	111 to 140	6
6.	141 to 180	7
7.	181 to 220	8
8.	221 to 260	9
9.	over 260	10 plus 1 for each additional increment of 40 persons of each sex in excess of 260

(6) In every dining room, restaurant, cafeteria and alcoholic beverage establishment having more than 40 seats, separate sanitary facilities shall be provided for employees, in addition to facilities provided for patrons, and the number of water closets and lavatories required shall conform to Table 3.7.4.3.F.

Table 3.7.4.3.F.
Plumbing Fixtures for Assembly Occupancies

Forming Part of Sentence 3.7.4.3.(6)

Item	Column 1 Number of Employees of Each Sex	Column 2 Minimum Number of Water Closets and Lavatories for Males	Column 3 Minimum Number of Water Closets and Lavatories for Females
1.	1 to 9	1	1
2.	10 to 24	2	2
3.	25 to 49	3	3
4.	50 to 74	4	4
5.	75 to 100	5	5
6.	over 100	6 plus 1 for each additional increment of 30 male employees in excess of 100	6 plus 1 for each additional increment of 30 female employees in excess of 100

(7) Except as provided in Sentence (8), in every dining room, restaurant, cafeteria and alcoholic beverage establishment having not more than 40 seats, employees are permitted to share the sanitary facilities provided for patrons, and the minimum number of water closets shall conform to Table 3.7.4.3.D. based on,

(a) a male *occupant load* of 50% of the number of seats plus the number of male employees, and

(b) a female *occupant load* of 50% of the number of seats plus the number of female employees.

(8) Where a separate employee washroom is provided, the same room may be used by both female and male employees provided that,

(a) the total number of employees is not more than 5, and

(b) the door to the room can be locked from the inside.

(9) The number of employees in Sentences (6) to (8) shall be the maximum number of employees who are normally present on the premises at one time and shall include only those who are present for more than 25 per cent of the working day.

(10) For a parking lot that is part of a restaurant where patrons are intended to eat in vehicles parked on the lot, the number of water closets required shall conform to,

(a) Table 3.7.4.3.G. where food service by employees is not provided on the parking lot, or

(b) Table 3.7.4.3.H. where employees serve food on the parking lot.

Table 3.7.4.3.G.
Water Closets for Assembly Occupancies

Forming part of Sentence 3.7.4.3.(10)

Item	Column 1 Number of Parking Spaces	Column 2 Minimum Number of Water Closets for Each Sex
1.	1 to 20	1
2.	21 to 70	2
3.	71 to 105	3
4.	106 to 135	4
5.	136 to 165	5
6.	166 to 195	6
7.	196 to 225	7
8.	226 to 275	8
9.	276 to 325	9
10.	326 to 375	10
11.	376 to 425	11
12.	over 425	12 plus 1 for each additional increment of 50 parking spaces in excess of 425

Table 3.7.4.3.H.
Water Closets for Assembly Occupancies

Forming part of Sentences 3.7.4.3.(10) and (11)

Item	Column 1 Number of Parking Spaces	Column 2 Minimum Number of Water Closets for Each Sex
1.	1 to 40	1
2.	41 to 140	2

3.	141 to 210	3
4.	211 to 270	4
5.	271 to 330	5
6.	331 to 390	6
7.	391 to 450	7
8.	451 to 550	8
9.	551 to 650	9
10.	651 to 750	10
11.	751 to 850	11
12.	over 850	12 plus 1 for each additional increment of 100 parking spaces in excess of 850

(11) The number of water closets required for drive-in *theatres* shall conform to Table 3.7.4.3.H.

(12) The number of water closets required for dance halls and recreational establishments shall be at least one fixture for each 100 males and one fixture for each 75 females.

(13) In a child care facility the maximum number of children per water closet and lavatory shall conform to Table 3.7.4.3.I.

Table 3.7.4.3.I.
Plumbing Fixtures for a Child Care Facility

Forming Part of Sentence 3.7.4.3.(13)

Item	Column 1 Age of Children	Column 2 Maximum Number of Children per Water Closet and Lavatory
1.	under 2	10 without regard to number of each sex
2.	2 to 5	10 without regard to number of each sex
3.	6 to 9	15 for males; 15 for females
4.	over 9	30 for males; 26 for females

(14) The number of water closets required for elementary and secondary schools shall be at least one fixture for each 30 males and one fixture for each 26 females.

(15) The number of water closets required for non-residential college *buildings* shall be at least one fixture for each 100 males and one fixture for each 75 females.

(16) The number of water closets required for places of worship and undertaking premises shall be at least one fixture for each 150 persons of each sex.

3.7.4.4. Plumbing Fixtures for Care, Care and Treatment or Detention Occupancies

(1) The number of water closets and lavatories required for Group B, Division 1 *occupancies* shall be determined on the basis of the special needs of these *occupancies*.

(2) In a Group B, Division 2 or 3 *occupancy*, washrooms shall be provided so that each washroom,

(a) serves not more than four patients or residents,

(b) is accessible from patients' or residents' sleeping rooms,

(c) contains one water closet, and

(d) contains one lavatory.

(3) The number of water closets required for employees in Group B, Division 2 or 3 *occupancies* shall conform to Table 3.7.4.4.

Table 3.7.4.4.
Water Closets in Group B, Division 2 or 3 Occupancies

Forming Part of Sentence 3.7.4.4.(3)

Item	Column 1 Number of Persons of Each Sex	Column 2 Minimum Number of Water Closets for Each Sex
1.	up to 9	1
2.	10 to 24	2
3.	25 to 49	3
4.	50 to 74	4
5.	75 to 100	5
6.	over 100	6 plus 1 for each additional increment of 30 persons of each sex in excess of 100

3.7.4.5. Plumbing Facilities for Dwelling Units

(1) A *dwelling unit* where a piped water supply is available shall be provided with a,

(a) kitchen sink,

(b) lavatory,

(c) water closet or drainless composting water closet, and

(d) bathtub or shower stall.

3.7.4.6. Plumbing Fixtures for Other Residential Occupancies

(1) Except for *dwelling units* and as provided in Sentence (2), the number of water closets required for *residential occupancies* shall conform to Table 3.7.4.6.

Table 3.7.4.6.
Water Closets For Residential Occupancies

Forming Part of Sentence 3.7.4.6.(1)

Item	Column 1 Number of Persons of Each Sex	Column 2 Minimum Number of Water Closets for Each Sex
1.	up to 9	1
2.	10 to 24	2
3.	25 to 49	3
4.	50 to 74	4
5.	75 to 100	5
6.	over 100	6 plus 1 for each additional increment of 30 persons of each sex in excess of 100

(2) At least one water closet or privy shall be provided for every,

(a) 10 campers of each sex in a *recreational camp*, and

(b) 10 employees of each sex in a *camp for housing of workers*.

(3) In *recreational camps* and *camps for housing of workers*, no fewer than two lavatories or provision for a pail or other portable container of sound construction shall be provided for each of the water closets or privies required in Sentence (2).

(4) A *camp for housing of workers* shall include,

(a) at least one shower or other area of bathing, and

(b) provisions for at least one washing machine or laundry tub for every 15 beds.

3.7.4.7. Plumbing Fixtures for Business and Personal Services Occupancies

(1) Except as provided in Sentence (2), the number of water closets required for *business and personal services occupancies* shall conform to Table 3.7.4.7.

(2) Not more than one water closet to serve both sexes need be provided in a Group D *occupancy* having an *occupant load* of not more than 10 persons.

Table 3.7.4.7.
Water Closets for Business and Personal Services Occupancies

Forming Part of Sentence 3.7.4.7.(1)

Item	Column 1 Number of Persons of Each Sex	Column 2 Minimum Number of Water Closets for Each Sex
1.	up to 9	1
2.	10 to 24	2
3.	25 to 49	3

4.	50 to 74	4
5.	75 to 100	5
6.	over 100	6 plus 1 for each additional increment of 30 persons of each sex in excess of 100

3.7.4.8. Plumbing Fixtures for Mercantile Occupancies

(1) Except as provided in this Article, the number of water closets required for employees in *mercantile occupancies* shall conform to Table 3.7.4.8.

Table 3.7.4.8.
Water Closets for Mercantile Occupancies

Forming Part of Sentence 3.7.4.8.(1)

Item	Column 1 Number of Persons of Each Sex	Column 2 Minimum Number of Water Closets for Each Sex
1.	up to 9	1
2.	10 to 24	2
3.	25 to 49	3
4.	50 to 74	4
5.	75 to 100	5
6.	over 100	6 plus 1 for each additional increment of 30 persons of each sex in excess of 100

(2) Except as provided in Sentence (4), the number of water closets required for the public in *mercantile occupancies* shall be at least one fixture for each 300 males and one fixture for each 150 females, except that,

(a) water closets provided for employees are permitted to be counted as part of those required for the public when these water closets are made accessible to the public, and

(b) where the total area of the *mercantile occupancy*, excluding *basements*, is not more than 600 m^2, not more than one water closet for each sex need be provided.

(3) Not more than one water closet to serve both sexes need be provided in a Group E *occupancy* where,

(a) the *occupant load* is not more than nine persons, or

(b) where the total area of the *occupancy*, excluding *basements*, is not more than 300 m^2.

(4) For a restaurant classified as *mercantile occupancy*, the number of water closets and lavatories required shall conform to Article 3.7.4.3.

3.7.4.9. Plumbing Fixtures for Industrial Occupancies

(1) Except as provided in Sentence (2), the number of water closets and lavatories required for *industrial occupancies* shall conform to Table 3.7.4.9.

Table 3.7.4.9.
Plumbing Fixtures for Industrial Occupancies

Forming Part of Sentence 3.7.4.9.(1)

Item	Column 1 Number of Persons of Each Sex	Column 2 Minimum Number of Water Closets and Lavatories for Each Sex
1.	up to 9	1
2.	10 to 24	2
3.	25 to 49	3
4.	50 to 74	4
5.	75 to 100	5
6.	over 100	6 plus 1 for each additional increment of 30 persons of each sex in excess of 100

(2) Not more than one water closet to serve both sexes need be provided in a Group F *occupancy* where,

(a) the *occupant load* is not more than 10 persons, or

(b) the total area of the *occupancy*, excluding *basements*, is not more than 300 m^2.

3.7.4.10. Plumbing Fixtures for Mobile Home Facilities

(1) If mobile homes do not have individual plumbing facilities connected to a central water supply and drainage system, a service *building* shall be provided for public use.

(2) The service *building* required by Sentence (1) shall contain,

(a) at least one water closet for each sex if the service *building* facilities serve not more than 10 mobile homes, and

(b) an additional water closet for each sex for each additional 10 mobile homes.

(3) If a service *building* is required by Sentence (1) it shall contain lavatories as required by Sentence 3.7.4.2.(5) and at least,

(a) one laundry tray or similar facility, and

(b) one bathtub or shower for each sex.

3.7.4.11. Safety Glass

(1) Glass, other than safety glass, shall not be used for a shower or bathtub enclosure.

3.7.4.12. Surface Protection

(1) Wall and floor surfaces below the uppermost surfaces of urinals shall be protected from deterioration by impervious and durable material for a distance from the urinal to a point not less than 900 mm from the projected outline of the urinal on to the wall or floor.

(2) Floor surfaces around a water closet shall be protected from deterioration by impervious and durable material for a distance not less than 900 mm from the projected outline of the water closet on to the floor.

3.7.4.13. Floor Drains

(1) A floor drain shall be installed in a washroom for *public use* that contains a urinal or a water closet equipped with an automatic flushing device.

3.7.4.14. Grab Bar Installation

(1) Grab bars that are installed shall resist a minimum load of 1.3 kN applied vertically or horizontally.

3.7.4.15. Clearances for Water Closets

(1) Except in a *dwelling unit* and except as required by Section 3.8., a minimum clearance of 380 mm shall be provided in front of a water closet.

3.7.4.16. Privacy

(1) If a room contains not more than 1 water closet, the doorway to the room shall be provided with a full height door that is capable of being locked from the inside.

(2) Except in a room for *private use*, water closets, urinals, lavatories, showers and bathtubs shall not be visible from the entrance to the room where it contains at least,

(a) two water closets,

(b) one water closet and one urinal,

(c) one shower stall, or

(d) one bathtub.

3.7.4.17. Water Temperature Control

(1) A *water distribution system* supplying hot water to *plumbing fixtures* shall conform to the requirements in Subsection 7.6.5.

3.7.4.18. Drinking Water

(1) On every floor where work will be performed and within 100 m of any area where work will be performed, *potable* water shall be provided from,

(a) a fountain with an upward jet,

(b) a tap from a piped water supply, or

(c) a tap from a covered vessel.

3.7.4.19. Pharmacies

(1) Every *pharmacy* shall be provided with a sink with hot and cold *potable* water for washing utensils used in the preparation, service or storage of drugs.

3.7.5. Health Care Facility Systems

3.7.5.1. Electrical Systems

(1) In anaesthetizing locations, electrical systems shall be designed, constructed, installed and tested in conformance with CSA Z32, "Electrical Safety and Essential Electrical Systems in Health Care Facilities".

3.7.5.2. Medical Gas Piping

(1) All medical gas piping systems shall be designed, constructed, installed and tested in conformance with CSA Z7396.1, "Medical Gas Piping Systems - Part 1: Pipelines for Medical Gases and Vacuum".

3.7.5.3. Shielding of X-Ray Equipment

(1) Every installation of an *x-ray machine* or of *x-ray equipment* in a *building* shall be shielded to protect any person who could be exposed to radiation inside and outside the *building*.

3.7.6. Food Premises

3.7.6.1. Application

(1) The requirements of this Subsection apply to all *food premises*.

3.7.6.2. Room Finishes

(1) Except as provided in Sentence (2), floors and floor coverings shall be tight, smooth and non-absorbent in rooms where,

(a) food or drink for human consumption, or an ingredient of food or drink for human consumption, is manufactured, processed, prepared, stored, displayed, handled, served, distributed, sold or offered for sale,

(b) utensils are washed, or

(c) washing *fixtures* or toilet *fixtures* are located.

(2) Carpeting may be used in areas where food is served.

(3) Wall and ceiling finishes of rooms and passageways shall be easy to clean.

3.7.6.3. Location of Plumbing Fixtures

(1) A room containing a water closet shall be located where,

(a) it does not open directly into any room or area where food or drink for human consumption, or an ingredient of food or drink for human consumption, is intended to be stored, prepared, processed, distributed, served, sold or offered for sale, and

(b) it is not necessary for the public to go through the food preparation areas to gain access to the *plumbing fixtures*.

(2) Except as permitted in Sentence (3), a room containing *plumbing fixtures* for the public and employees in a restaurant shall be located in the restaurant.

(3) A room containing *plumbing fixtures* for the public in Sentence (2) need not be located in the restaurant if,

(a) the room is located in the *building* containing the restaurant, and

(b) the distance of travel between the restaurant and the room is not more than 45 m.

3.7.6.4. Lavatories, Appliances and Sinks

(1) A separate lavatory for the handwashing of employees shall be constructed in a location convenient for employees in each manufacturing, processing and preparation area.

(2) If equipment and facilities for the cleaning and sanitizing of utensils are provided, they shall consist of,

(a) mechanical equipment, or

(b) drainage racks of corrosion-resistant materials and,

(i) a three-compartment sink or three sinks, or

(ii) a two-compartment sink or two sinks, where the first compartment or sink can be used effectively for washing and rinsing and the second compartment or sink can be used effectively for sanitizing.

(3) A retail *food premises* is exempt from compliance with this Article if its eating and drinking area does not exceed 56 m^2 and any one or more of the following applies:

(a) it is designed to sell only cold drinks in or from the original container,

(b) it is designed to sell only frozen confections in the original package or wrapper,

(c) it is designed to prepare and sell only hot beverages,

(d) it is designed to prepare and sell only popped corn, roasted nuts or french-fried potatoes,

(e) it is designed to sell only food or drink for human consumption that,

(i) is pre-packaged at a premises other than the *food premises* at which it is being offered for sale, and

(ii) is not capable of supporting the growth of pathogenic organisms or the production of the toxins of such organisms.

3.7.6.5. Hot and Cold Water Supply

(1) A hot and cold water supply shall be provided to,

(a) every *plumbing appliance* and *fixture* required by Article 3.7.6.4.,

(b) every area where food or drink for human consumption, or an ingredient of food or drink for human consumption, is manufactured, processed or prepared, and

(c) every area where utensils are washed.

(2) This Article does not apply to a retail *food premises* described in Sentence 3.7.6.4.(3).

3.7.6.6. Employee Facilities

(1) In a *food premises*, where dressing rooms are provided for employees, there shall be separate dressing rooms for males and females that,

(a) are large enough for the employees to change and store their clothing, and

(b) are equipped with lockers or other facilities suitable for storing the clothing of the employees.

(2) Every room containing *sanitary units* for employees shall have a floor area not less than 2.3 m^2.

3.7.6.7. Sleeping Quarters

(1) A room or space intended to be used as sleeping quarters shall not open directly into any room where food or drink for human consumption, or an ingredient of food or drink for human consumption, is manufactured, processed, prepared, stored, displayed, handled, served, distributed, sold or offered for sale.

Section 3.8. Barrier-Free Design

3.8.1. General

3.8.1.1. Application

(1) The requirements of this Section apply to all *buildings* except,

(a) houses, including semi-detached houses, duplexes, triplexes, town houses, row houses and boarding or rooming houses with fewer than 8 boarders or roomers,

(b) *buildings* of Group F, Division 1 *major occupancy*,

(c) *buildings* that are not intended to be occupied on a daily or full time basis, including automatic telephone exchanges, pumphouses and substations, and

(d) *camps for housing of workers*.

3.8.1.2. Entrances

(1) Except as provided in Sentence 3.13.8.1.(2), the number of *barrier-free* entrances into a *building* shall conform to Table 3.8.1.2.

Table 3.8.1.2.
Minimum Number of Pedestrian Entrances Required to be Barrier-Free

Forming Part of Sentence 3.8.1.2.(1)

Item	Column 1 Number of Pedestrian Entrances into *Building*	Column 2 Minimum Number of Pedestrian Entrances Required to Be *Barrier-Free*
1.	1 to 3	1
2.	4 or 5	2
3.	More than 5	Not less than 50%

(2) One of the *barrier-free* entrances required by Sentence (1) shall be the principal entrance to the *building*.

(3) In addition to the *barrier-free* entrances required by Sentence (1), a *suite* of *assembly occupancy, business and personal services occupancy* or *mercantile occupancy*

that is located in the *first storey* of a *building* or in a *storey* to which a *barrier-free* path of travel is provided, and that is separated from the remainder of the *building* so that there is no access to the remainder of the *building*, shall have at least one *barrier-free* entrance.

(4) A *barrier-free* entrance shall,

(a) be designed in accordance with Article 3.8.3.3., and

(b) lead from,

(i) the outdoors at sidewalk level, or

(ii) a ramp that conforms to Article 3.8.3.4. and leads from a sidewalk.

(5) At a *barrier-free* entrance that includes more than one doorway, only one of the doorways is required to be designed in accordance with Article 3.8.3.3.

(6) If a *walkway* or pedestrian bridge connects two *barrier-free storeys* in different *buildings*, the path of travel from one *storey* to the other *storey* by means of the *walkway* or bridge shall be *barrier-free*.

3.8.1.3. Barrier-Free Path of Travel

(1) Except as required in Sentence (4) and except as permitted in Subsection 3.8.3., every *barrier-free* path of travel shall provide an unobstructed width of at least 1 100 mm for the passage of wheelchairs.

(2) Interior and exterior walking surfaces that are within a *barrier-free* path of travel shall,

(a) have no opening that will permit the passage of a sphere more than 13 mm in diam,

(b) have any elongated openings oriented approximately perpendicular to the direction of travel,

(c) be stable, firm and slip-resistant,

(d) be bevelled at a maximum slope of 1 in 2 at changes in level not more than 13 mm, and

(e) be provided with sloped floors or ramps at changes in level more than 13 mm.

(3) A *barrier-free* path of travel is permitted to include ramps, passenger elevators or other platform equipped passenger elevating devices to overcome a difference in level.

(4) Every *barrier-free* path of travel less than 1 600 mm in width shall be provided with an unobstructed space not less than 1 800 mm in width and 1 800 mm in length located not more than 30 m apart.

(5) Where the headroom of an area in a *barrier-free* path of travel is reduced to less than 1 980 mm, a guardrail or other barrier with its leading edge at or below 680 mm from the finished floor shall be provided.

(6) A normally occupied *floor area* that is not required by Article 3.8.2.1. to have a *barrier-free* path of travel shall meet the following requirements:

(a) interior walking surfaces throughout the normally occupied *floor area* shall comply with Clauses (2)(a) to (e), and

(b) where the headroom of an area in a corridor or aisle in the normally occupied *floor area* is reduced to less than 1 980 mm, a guardrail or other barrier with its leading edge at or below 680 mm from the finished floor shall be provided.

3.8.1.4. Escalators and Moving Walks

(1) In a *building* in which an escalator or inclined moving walk provides access to any floor level above or below the entrance floor level, an interior *barrier-free* path of travel shall be provided to that floor level.

(2) The route from the escalator or inclined moving walk to the *barrier-free* path of travel required by Sentence (1) shall be clearly indicated by appropriate signs.

(3) In a *building* in which a moving walk provides access between areas on the same floor level, a *barrier-free* path of travel shall be provided between the areas served by the moving walk.

3.8.1.5. Controls

(1) Except as required by Sentences 3.5.2.2.(1) and 3.8.3.5.(1) for elevators and Sentence 3.8.3.3.(17) for power door operator controls, controls for the operation of *building* services or safety devices, including electrical switches, thermostats and intercom switches, intended to be operated by the occupant and located in a *barrier-free* path of travel shall,

(a) be accessible to a person in a wheelchair using a side approach,

(b) be operable,

(i) using one hand and with a force of not more than 22.2 N, in the case of a manual pull station, and

(ii) using a closed fist and with a force of not more than 22.2 N, in the case of all other controls, and

(c) be mounted,

(i) 1 200 mm above the finished floor, in the case of a thermostat or a manual pull station, and

(ii) not less than 900 mm and not more than 1 100 mm above the finished floor, in the case of all other controls.

(2) A signal intended for the public to indicate the operation of a *building* security system that controls access to a *building* shall consist of an audible and visual signal.

3.8.1.6. Illumination

(1) All portions of a *barrier-free* path of travel shall be equipped to provide a level of illumination in accordance with Sentence 3.2.7.1.(1).

3.8.2. Occupancy Requirements

3.8.2.1. Areas Requiring Barrier-Free Path of Travel

(1) Except as permitted by Sentence (3), a *barrier-free* path of travel from the entrances required by Sentences 3.8.1.2.(1) and (3) to be *barrier-free* shall be provided,

(a) throughout the entrance *storey*,

(b) except as permitted by Sentence (2), to and throughout all normally occupied *floor areas* and rooftop amenity spaces, and

(c) throughout all normally occupied *floor areas* and rooftop amenity spaces that,

(i) are exempt from the application of Clause (b), and

(ii) are served by a passenger elevator, escalator, inclined moving walk, or other platform equipped passenger elevating device.

(2) A *barrier-free* path of travel described in Clause (1)(b) is not required to extend,

(a) to *floor areas* or portions of *floor areas* containing a Group B, Division 2 or 3 *occupancy* that are not required by Article 3.5.2.1. to be connected by a ramp or served by an elevator,

(b) to Group C or Group D *occupancies* that are in *floor areas* in a *building* that,

(i) is three or fewer *storeys* in *building height*, and

(ii) has a *building area* not exceeding 600 m^2,

(c) to Group F, Division 2 or 3 *occupancies* that are not required by Sentence 3.8.2.2.(1) to be served by an elevator,

(d) to portions of restaurants and licensed beverage establishments where the same amenities and uses are provided on other *floor areas* that have a *barrier-free* path of travel, or

(e) to portions of child care facilities that have all entrance doors at floor levels that do not have a *barrier-free* path of travel.

(3) A *barrier-free* path of travel described in Sentence (1) is not required to extend,

(a) into *service rooms*,

(b) into elevator machine rooms,

(c) into janitors' rooms,

(d) into *service spaces*,

(e) into crawl spaces,

(f) into *attic or roof spaces*,

(g) into *high hazard industrial occupancies*,

(h) to portions of a *floor area* with fixed seats in an *assembly occupancy* where these portions are not part of the *barrier-free* path of travel to,

(i) spaces designated for wheelchair use,

(ii) seats designated for *adaptable seating*, or

(iii) spaces for the storage of wheelchairs and *mobility assistive devices*,

(i) to *suites* of *residential occupancy* that are in *storeys* other than the entrance *storey* and that have all entrance doors at floor levels that are not required to have a *barrier-free* path of travel,

(j) except as required by Sentence (5), on the inside of a *suite* of *residential occupancy*, or

(k) to portions of a *floor area* that are not at the same level as the entry level, provided amenities and uses provided on any raised or sunken level are accessible on the entry level by means of a *barrier-free* path of travel.

(4) In an *assembly occupancy* with fixed seats, the minimum number of spaces designated for wheelchair use and the minimum number of fixed seats designated for *adaptable seating* shall conform to Table 3.8.2.1.

Table 3.8.2.1.
Designated Wheelchair Spaces and Adaptable Seating

Forming Part of Sentence 3.8.2.1.(4)

Item	Column 1 Number of Fixed Seats in Seating Area	Column 2 Minimum Number of Spaces Designated for Wheelchairs	Column 3 Minimum Number of Fixed Seats Designated for *Adaptable Seating*
1.	Up to 20	2	1
2.	21 to 40	2	2
3.	41 to 60	2	3
4.	61 to 80	2	4
5.	81 to 100	3	5
6.	Over 100	3% of the seating capacity	The greater of 5 seats or 5% of the aisle seating capacity

(5) In a Group C *major occupancy* apartment *building*, not less than 15% of all *suites* of *residential occupancy* shall be provided with a *barrier-free* path of travel from the *suite* entrance door into the following rooms and spaces that shall be located at the same level as the *barrier-free* path of travel:

(a) at least one bedroom,

(b) at least one bathroom conforming to Sentence (6),

(c) a kitchen or kitchen space, and

(d) a living room or space.

(6) Bathrooms required by Clause (5)(b) shall,

(a) contain a lavatory,

(b) contain a water closet,

(c) contain a bathtub or a shower,

(d) have wall reinforcement installed in conformance with Sentence 3.3.4.9.(1), and

(e) be designed to permit a wheelchair to turn in an open space not less than 1 500 mm in diameter.

(7) The number of *suites* described in Sentence (5) having 1, 2 or 3 or more bedrooms shall be in proportion to the number of *suites* of *residential occupancy* having 1, 2 or 3 or more bedrooms in the remainder of the *building*.

(8) The *suites* described in Sentence (5) shall be distributed among *storeys* that are required by Article 3.8.2.1. to have a *barrier-free* path of travel, having regard to the height of the *suite* above *grade*.

3.8.2.2. Access to Parking Areas

(1) A *barrier-free* path of travel shall be provided from the entrance described in Article 3.8.1.2. to,

(a) an exterior parking area, where exterior parking is provided, and

(b) at least one parking level, where a passenger elevator serves an indoor parking level.

(2) The vehicular entrance to and egress from at least one parking level described in Sentence (1) and all areas intended to be used by wheelchair accessible vehicles to gain access to a parking space on that level shall have a vertical clearance of not less than 2 100 mm.

(3) If an exterior passenger loading zone is provided, it shall have,

(a) an access aisle not less than 2 440 mm wide and 7 400 mm long adjacent and parallel to the vehicle pull-up space,

(b) a curb ramp, where there are curbs between the access aisle and the vehicle pull-up space, and

(c) a clearance height of not less than 3 600 mm at the vehicle pull-up space and along the vehicle access and egress routes.

3.8.2.3. Washrooms Required to be Barrier-Free

(1) A *barrier-free* path of travel shall be provided to *barrier-free* washrooms designed to accommodate persons with disabilities in conformance with the requirements in Articles 3.8.3.8. to 3.8.3.12.

(2) The number of universal washrooms conforming to Article 3.8.3.12. provided in a *building* in which a washroom is required by Subsection 3.7.4. shall conform to Table 3.8.2.3.A.

Table 3.8.2.3.A.
Minimum Number of Universal Washrooms per Building

Forming Part of Sentence 3.8.2.3.(2)

Item	Column 1	Column 2

	Number of *Storeys* in *Building*	Minimum Number of Universal Washrooms per *Building*
1.	1 to 3	1
2.	4 to 6	2
3.	Over 6	3, plus 1 for each additional increment of 3 *storeys* in excess of 6 *storeys*

(3) Where a washroom required by Subsection 3.7.4. is provided in a *storey* that is required by Article 3.8.2.1. to have a *barrier-free* path of travel,

(a) the washroom shall conform to Articles 3.8.3.8. to 3.8.3.11., and

(b) the number of *barrier-free* water closet stalls provided in the washroom shall conform to Table 3.8.2.3.B.

Table 3.8.2.3.B.
Minimum Number of Water Closet Stalls Required to be Barrier-Free

Forming Part of Sentence 3.8.2.3.(3)

Item	Column 1 Number of Water Closets per Washroom	Column 2 Minimum Number of *Barrier-Free* Water Closet Stalls per Washroom
1.	1 to 3	0, where a universal washroom is provided on the same floor level within 45 m of the washroom, or 1, where a universal washroom is not provided on the same floor level within 45 m of the washroom
2.	4 to 9	1
3.	10 to 16	2
4.	17 to 20	3
5.	21 to 30	4
6.	Over 30	5, plus 1 for each additional increment of 10 water closets per

		washroom in excess of 30 water closets per washroom

(4) Except as permitted in Sentence (5), where washrooms in excess of those required by Subsection 3.7.4. are provided in a *storey* that is required by Article 3.8.2.1. to have a *barrier-free* path of travel, the additional washrooms shall be designed to accommodate persons with disabilities in conformance with the requirements of,

(a) Articles 3.8.3.8. to 3.8.3.11., or

(b) Article 3.8.3.12.

(5) Washrooms need not conform to Sentence (4) provided,

(a) they are located within *suites* of *residential occupancy*,

(b) other *barrier-free* washrooms are provided on the same floor level within 45 m, or

(c) they are located in an individual *suite* that is,

(i) used for a *business and personal services occupancy*, a *mercantile occupancy* or an *industrial occupancy*,

(ii) less than 300 m^2 in area, and

(iii) completely separated from, and without access to, the remainder of the *building*.

(6) Where a washroom required by Subsection 3.7.4. is provided in a *storey* that is not required by Article 3.8.2.1. to have a *barrier-free* path of travel, the washroom shall,

(a) conform to Article 3.8.3.9. and Sentences 3.8.3.10.(5) and 3.8.3.11.(5), and

(b) be provided with at least one ambulatory water closet stall conforming to Sentence 3.8.3.8.(10).

3.8.2.4. Hotels

(1) Except as permitted in Sentence (2), at least 10% of the *suites* of a *hotel* shall,

(a) have a *barrier-free* path of travel extending to,

(i) the inside of each room, and

(ii) a balcony where required by Sentence 3.3.1.7.(2), and

(b) be distributed among *storeys* that are required by Article 3.8.2.1. to have a *barrier-free* path of travel, having regard to the height of the *suite* above *grade*.

(2) Not more than 20 *suites* need comply with Sentence (1).

(3) A *suite* having a *barrier-free* path of travel required by Sentence (1) shall have a bathroom that,

(a) conforms to Clauses 3.8.3.12.(1)(a) to (h) and (j),

(b) has an unobstructed area at least 1 200 mm in diameter extending the full height of the room, except that a door is permitted to open on the inside if it does not reduce the unobstructed area, and

(c) has a bathtub or shower that conforms to Article 3.8.3.13.

(4) Except as required by Sentence 3.8.3.3.(17) for power door operator controls, controls for the operation of *building* services or safety devices, including electrical switches, thermostats and intercom switches, intended to be operated by the occupant and located within a *suite* having a *barrier-free* path of travel required by Sentence (1) shall conform to Sentence 3.8.1.5.(1).

(5) An entrance door to a *suite* having a *barrier-free* path of travel required by Sentence (1) shall have,

(a) a power door operator conforming to Article 3.8.3.3., and

(b) a door viewer located at a height no higher than 1 100 mm above the finished floor.

(6) Where a door is provided between a *suite* having a *barrier-free* path of travel required by Sentence (1) and an adjoining *suite*, the door shall conform to Sentences 3.8.3.3. (1) and (3).

(7) Where an emergency power supply is supplied by a generator, it shall supply at least one emergency power receptacle in at least one of the *suites* having a *barrier-free* path of travel required by Sentence (1).

(8) The emergency power receptacle described in Sentence (7) shall be identified with a legible sign having the words **EMERGENCY POWER OUTLET** permanently mounted on the wall beside the receptacle.

3.8.3. Design Standards

3.8.3.1. Accessibility Signs

(1) Where a *building* is required to have a *barrier-free* entrance, signs incorporating the International Symbol of Access shall be installed to indicate the location of,

(a) that entrance,

(b) ramps located in a required *barrier-free* path of travel serving that entrance, and

(c) an exterior passenger loading zone conforming to Sentence 3.8.2.2.(3), if one is provided.

(2) Where a washroom, elevator, telephone or parking area is required to accommodate persons with disabilities, it shall be identified by a sign consisting of the International Symbol of Access and such other graphic, tactile or written directions as are needed to indicate clearly the type of facility available.

(3) Where a washroom is not designed to accommodate persons with disabilities in a *storey* that is required by Article 3.8.2.1. to have a *barrier-free* path of travel, signs shall be provided to indicate the location of a washroom required to be *barrier-free*.

(4) Signs incorporating the International Symbol of Access shall be installed where necessary to indicate the location of a *barrier-free means of egress*.

(5) Where a wall mounted tactile sign is provided in a *building*, characters, symbols or pictographs on the sign shall be located not less than 1 200 mm and not more than 1 500 mm above the finished floor.

(6) Where a wall mounted tactile sign is provided in a *storey* that is not required by Article 3.8.2.1. to have a *barrier-free* path of travel, characters, symbols or pictographs on the sign shall conform to Sentence (5).

3.8.3.2. Exterior Walks

(1) Except as provided in Sentence (2), exterior walks that form part of a *barrier-free* path of travel shall,

(a) be provided by means of a continuous plane not interrupted by steps or abrupt changes in level,

(b) have a permanent, firm and slip-resistant surface,

(c) except as required in Sentence 3.8.1.3.(4), have an uninterrupted width of not less than 1 100 mm and a gradient not exceeding 1 in 20,

(d) be designed as a ramp where the gradient is greater than 1 in 20,

(e) have not less than 1 100 mm wide surface of a different texture to that surrounding it, where the line of travel is level and even with adjacent walking surfaces,

(f) be free from obstructions for the full width of the walk to a minimum height of 1 980 mm, except that handrails are permitted to project not more than 100 mm from either side into the clear area,

(g) have a level area adjacent to the entrance doorway conforming to Clause 3.8.3.4.(1)(c), and

(h) have a tactile attention indicator conforming to Article 3.8.3.18. that is located to identify an entry into a vehicular route or area where no curbs or any other element separate the vehicular route or area from a pedestrian route.

(2) Where a difference in elevation between levels in a walkway is not more than 200 mm, a curb ramp conforming to Sentences (3) and (4) may be provided.

(3) The curb ramp permitted by Sentence (2) shall,

(a) have a running slope conforming to Table 3.8.3.2.,

(b) have a width of not less than 1 500 mm exclusive of flared sides,

(c) have a surface including flared sides that shall,

(i) be slip-resistant,

(ii) have a detectable warning surface that is colour- and texture-contrasted with the adjacent surfaces, and

(iii) have a smooth transition from the ramp and adjacent surfaces, and

(d) have flared sides with a slope of not more than 1:10 where pedestrians are likely to walk across them.

Table 3.8.3.2.
Ramp Rise and Slope

Forming Part of Sentence 3.8.3.2.(3)

Item	Column 1 Vertical Rise Between Surfaces, mm	Column 2 Slope
1.	75 to 200	1:10 to 1:12
2.	less than 75	1:8 to 1:10

(4) Curb ramps described in Sentence (3) do not require handrails or *guards*.

3.8.3.3. Doorways and Doors

(1) Every doorway that is located in a *barrier-free* path of travel shall have a clear width of not less than 860 mm when the door is in the open position.

(2) Except where no bathroom within the *suite* is at the level of the *suite* entrance door to which a *barrier-free* path of travel is provided in accordance with Sentence 3.8.2.1.(1), the doorway to at least one bathroom and to each bedroom at the same level as such bathroom within a *suite* of *residential occupancy* shall have, when the door is in the open position, a clear width of not less than,

(a) 760 mm where the door is served by a corridor or space not less than 1 060 mm wide, and

(b) 810 mm where the door is served by a corridor or space less than 1 060 mm wide.

(3) Door opening devices that are the only means of operation shall,

(a) be designed to be operable using a closed fist, and

(b) be mounted not less than 900 mm and not more than 1 100 mm above the finished floor.

(4) Except as permitted by Sentence (12), every door that provides a *barrier-free* path of travel through a *barrier-free* entrance required by Article 3.8.1.2. shall be equipped with a power door operator if the entrance serves a *building* containing a Group A, Group B, Division 2 or 3, Group C, Group D or Group E *occupancy*.

(5) Except as permitted by Sentence (12), where a *barrier-free* entrance required by Article 3.8.1.2. incorporates a vestibule, a door leading from the vestibule into the *floor area* shall be equipped with a power door operator in a *building* containing a Group A, Group B, Division 2 or 3, Group C, Group D or Group E *occupancy*.

(6) A door shall be equipped with a power door operator where the door serves,

(a) a washroom for *public use* required to be *barrier-free*, or

(b) a Group A *occupancy* within a Group C *major occupancy* apartment *building*.

(7) Except as permitted in Sentence (8), and except for doors with power operators, closers for doors in a *barrier-free* path of travel shall be designed to permit doors to open when a force of not more than 38 N is applied to the handles, push plates or latch-releasing devices in the case of exterior doors and 22 N in the case of interior doors.

(8) Sentence (7) does not apply to doors at the entrances to *dwelling units*, or where greater forces are required in order to close and latch the doors against prevailing differences in air pressures on opposite sides of the doors.

(9) Except for doors at the entrances to *dwelling units*, closers for interior doors in a *barrier-free* path of travel shall have a closing period of not less than 3 seconds measured from when the door is in an open position of 70° to the doorway, to when the door reaches a point 75 mm from the closed position, measured from the leading edge of the latch side of the door.

(10) Unless equipped with a power door operator, a door in a *barrier-free* path of travel shall have a clear space on the latch side extending the height of the doorway and not less than,

(a) 600 mm beyond the edge of the door opening if the door swings toward the approach side,

(b) 300 mm beyond the edge of the door opening if the door swings away from the approach side, and

(c) 300 mm beyond both sides of a sliding door.

(11) Vestibules located in a *barrier-free* path of travel,

(a) shall be arranged to allow the movement of wheelchairs between doors, and

(b) shall provide,

(i) where the doors into the vestibule are in series, a distance between the doors of at least 1 500 mm plus the width of any door that swings into the space in the path of travel from one door to another, and

(ii) where the doors into the vestibule are not aligned, a turning diameter of 1 500 mm within the vestibule clear of any door swing.

(12) Only the active leaf in a multiple leaf door in a *barrier-free* path of travel need conform to the requirements of this Article.

(13) Except as provided in Clause 3.8.3.4.(1)(c), the floor surface on each side of a door in a *barrier-free* path of travel shall be level within a rectangular area,

(a) as wide as the door plus the clearance required on the latch side by Sentence (10), and

(b) whose dimension perpendicular to the closed door is not less than the width of the *barrier-free* path of travel but need not exceed 1 500 mm.

(14) Where a vision panel is provided in a door in a *barrier-free* path of travel, such panel shall be at least 75 mm in width and be located so that,

(a) the bottom of the panel is not more than 900 mm above the finished floor, and

(b) the edge of the panel closest to the latch is not more than 250 mm from the latch side of the door.

(15) A door in a *barrier-free* path of travel consisting of a sheet of glass shall be marked with a continuous opaque strip that,

(a) shall be colour and brightness contrasted to the background of the door,

(b) shall be at least 50 mm wide,

(c) shall be located across the width of the door at a height of 1 350 mm to 1 500 mm above the finished floor, and

(d) may incorporate a logo or symbol provided such logo or symbol does not diminish,

(i) the opacity of the strip,

(ii) the width of the strip,

(iii) the colour and brightness contrast of the strip to the background of the door, and

(iv) the continuity of the strip across the width of the door.

(16) Where a power door operator is provided, it shall be installed on the latch side so as to allow persons to activate the opening of the door from either side.

(17) Except where a proximity scanning device is installed in conformance with Sentence (18), the control for a power door operator required by Sentence (4), (5) or (6) shall,

(a) have a face dimension of not less than,

(i) 150 mm in diameter where the control is circular, or

(ii) 50 mm by 100 mm where the control is rectangular,

(b) be operable using a closed fist,

(c) be located so that,

(i) its centre is located not less than 900 mm and not more than 1 100 mm from the finished floor or ground, or

(ii) it extends from not more than 200 mm to not less than 900 mm above the finished floor or ground,

(d) be located not less than 600 mm and not more than 1 500 mm beyond the door swing where the door opens towards the control,

(e) be located in a clearly visible position, and

(f) contain a sign incorporating the International Symbol of Access.

(18) A proximity scanning device that activates a power door shall be capable of detecting a person in a wheelchair.

(19) A normally occupied *floor area* that is not required by Article 3.8.2.1. to have a *barrier-free* path of travel shall comply with the following requirements:

(a) all doorways in *public corridors* in the normally occupied *floor area* shall comply with Sentence (1),

(b) door opening devices that are the only means of operation on doors in the normally occupied *floor area* shall comply with Sentence (3),

(c) where a vision panel is provided in a door in the normally occupied *floor area*, the panel shall comply with Sentence (14),

(d) doors consisting of a sheet of glass in the normally occupied *floor area* shall comply with Sentence (15), and

(e) where a power door operator is installed for doors in the normally occupied *floor area*, it shall comply with Sentences (16) and (17).

3.8.3.4. Ramps

(1) Ramps located in a *barrier-free* path of travel shall,

(a) have a minimum width of 900 mm between handrails,

(b) have a maximum gradient of 1 in 12,

(c) have a level area of at least 1 670 mm by 1 670 mm at the top and bottom of a ramp and where a door is located in a ramp, so that the level area extends at least 600 mm beyond the latch side of the door opening, except that where the door opens away from the ramp, the area extending beyond the latch side of the door opening may be reduced to 300 mm,

(d) have a level area at least 1 670 mm long and at least the same width as the ramp,

(i) at intervals of not more than 9 m along its length, and

(ii) where there is an abrupt change in the direction of the ramp,

(ii) where there is a change of 90° or more in the direction of the ramp,

(e) except as provided in Sentence (2), be equipped with handrails on both sides that shall,

(i) be continuously graspable along their entire length and have circular cross-section with an outside diameter not less than 30 mm and not more than 40 mm, or any non-circular shape with a graspable portion that has a perimeter not less than 100 mm and not more than 155 mm and whose largest cross-sectional dimension is not more than 57 mm,

(ii) be not less than 865 mm and not more than 965 mm high, measured vertically from the surface of the ramp, except that handrails not meeting these requirements are permitted provided they are installed in addition to the required handrail,

(iii) be terminated in a manner that will not obstruct pedestrian travel or create a hazard,

(iv) extend horizontally not less than 300 mm beyond the top and bottom of the ramp,

(v) be provided with a clearance of not less than 50 mm between the handrail and any wall or *guard* to which it is attached, and

(vi) be designed and constructed such that handrails and their supports will withstand the loading values obtained from the nonconcurrent application of a concentrated load not less than 0.9 kN applied at any point and in any direction

for all handrails and a uniform load not less than 0.7 kN/m applied in any direction to the handrail,

(f) except as provided in Sentence (2), have a wall or a *guard* on both sides and where a *guard* is provided the *guard* shall,

(i) be not less than 1 070 mm measured vertically to the top of the *guard* from the ramp surface, and

(ii) be designed so that no member, attachment or opening located between 140 mm and 900 mm above the ramp surface being protected by the *guard* will facilitate climbing,

(g) be provided,

(i) with a curb at least 50 mm high on any side of the ramp where no solid enclosure or solid *guard* is provided, and

(ii) with railings or other barriers that extend to within 50 mm of the finished ramp surface or have a curb not less than 50 mm high, and

(h) except as provided in Sentence (2), where the ramp is wider than 2 200 mm, have an intermediate handrail with a clear width of 900 mm between the intermediate handrail and one of the handrails described in Clause (e).

(2) Where a ramp serves as an aisleway for fixed seating, the requirements for handrails in Clauses (1)(e) and (h) and for walls or *guards* in Clause (1)(f) need not apply.

(3) Floors or walks in a *barrier-free* path of travel having a slope steeper than 1 in 20 shall be designed as ramps.

3.8.3.5. Passenger Elevating Devices

(1) A passenger elevating device referred to in Article 3.8.2.1. shall conform to CSA B355, “Lifts for Persons with Physical Disabilities”.

3.8.3.6. Wheelchair Spaces and Adaptable Seating

(1) Spaces designated for wheelchair use required by Sentence 3.8.2.1.(4) shall be,

(a) clear and level or level with removable seats,

(b) not less than 900 mm wide and not less than,

(i) 1 525 mm long where designed to permit a wheelchair to enter from a side approach, and

(ii) 1 220 mm long where designed to permit a wheelchair to enter from the front or rear of the space,

(c) arranged so that,

(i) at least two of the designated spaces are side by side, and

(ii) at least one fixed seat for a companion is located beside,

(A) each group of designated spaces, if two or more designated spaces are arranged side by side in a group, and

(B) each designated space that is not part of a group described in Sub-subclause (A),

(d) located adjoining a *barrier-free* path of travel without infringing on egress from any row of seating or any aisle requirements, and

(e) situated, as part of the designated seating plan, to provide a choice of viewing location and a clear view of the event taking place.

(2) Fixed seats designated for *adaptable seating* required by Sentence 3.8.2.1.(4) shall be,

(a) located adjoining a *barrier-free* path of travel without infringing on egress from any row of seating or any aisle requirements,

(b) equipped with a movable or removable armrest on the side of the seat adjoining the *barrier-free* path of travel, and

(c) situated, as part of the designated seating plan, to provide a choice of viewing location and a clear view of the event taking place.

(3) In an *assembly occupancy* with fixed seats, space shall be provided for the storage of wheelchairs and *mobility assistive devices* in accordance with the following requirements:

(a) at least one storage space not less than 810 mm by 1 370 mm shall be provided where the *assembly occupancy* has not more than 200 fixed seats and at least two such storage spaces shall be provided where the *assembly occupancy* has more than 200 fixed seats, and

(b) the storage space or spaces shall be located on the same level and in proximity to the spaces designated for wheelchair use and seats designated for *adaptable seating*.

3.8.3.7. Assistive Listening Devices

(1) In *buildings* of *assembly occupancy*, all classrooms, auditoria, meeting rooms and *theatres* with an area of more than 100 m^2 and an *occupant load* of more than 75 shall be equipped with assistive listening systems encompassing the entire seating area.

3.8.3.8. Water Closet Stalls

(1) Every *barrier-free* water closet stall in a washroom described in Sentence 3.8.2.3.(3) or (4) shall,

(a) have a clear turning space at least 1 500 mm in diameter,

(b) be equipped with a door that shall,

(i) be capable of being latched from the inside with a mechanism that is operable using a closed fist,

(ii) when the door is in an open position, have a clear opening of at least 860 mm,

(iii) swing outward, unless 820 mm by 1 440 mm clear floor area is provided within the stall to permit the door to be closed without interfering with the wheelchair,

(iv) be provided with spring-type or gravity hinges so that the door closes automatically,

(v) be provided with a door pull on both sides of the door, near the latch side of the door, located at a height not less than 900 mm and not more than 1 100 mm above the finished floor,

(vi) be aligned with a clear transfer space required by Subclause (2)(a)(ii) or Clause (2)(b), and

(vii) be capable of having the latch required by Subclause (i) released from the outside in case of an emergency,

(c) be equipped with a water closet conforming to Article 3.8.3.9. that is located in accordance with Clause (2)(a) or (b),

(d) Reserved

(e) be equipped with a coat hook mounted not more than 1 200 mm above the finished floor on a side wall and projecting not more than 50 mm from the wall,

(f) have a clearance of at least 1 700 mm between the outside of the stall face and the face of an in-swinging washroom door and 1 400 mm between the outside of the stall face and any wall-mounted fixture or other obstruction, and

(g) where a toilet paper dispenser is provided, provide a dispenser that is,

(i) wall mounted,

(ii) located below the grab bar,

(iii) in line with or not more than 300 mm in front of the seat, and

(iv) not less than 600 mm above the finished floor.

(2) A water closet described in Clause (1)(c) shall be,

(a) located so that,

(i) the centre line of the water closet is not less than 460 mm and not more than 480 mm from one side wall, and

(ii) a clear transfer space at least 900 mm wide and 1 500 mm deep is provided on the other side of the water closet, or

(b) located so that a clear transfer space at least 900 mm wide and 1 500 mm deep is provided on each side of the water closet.

(3) Where a water closet is located in accordance with Clause (2)(a),

(a) a grab bar conforming to Sentences (5) and (7) shall be provided on the side wall referred to in Subclause (2)(a)(i),

(b) a fold-down grab bar may be provided and, if one is provided, it shall conform to Sentence (8) and be provided on the side of the water closet opposite the grab bar described in Clause (a), and

(c) a grab bar conforming to Sentences (6) and (7) shall be provided on the wall behind the water closet.

(4) Where a water closet is located in accordance with Clause (2)(b),

(a) a fold-down grab bar conforming to Sentence (8) shall be provided on each side of the water closet, and

(b) a grab bar conforming to Sentences (6) and (7) shall be provided on the wall behind the water closet.

(5) A grab bar described in Clause (3)(a) shall,

(a) be continuous L-shaped with 750 mm long horizontal and vertical components, and

(b) be wall mounted with the horizontal component 750 mm above the finished floor and the vertical component 150 mm in front of the water closet.

(6) A grab bar described in Clause (3)(c) or (4)(b) shall,

(a) be at least 600 mm in length, and

(b) be wall mounted horizontally from 840 mm to 920 mm above the finished floor and, where the water closet has a water tank, be wall mounted 150 mm above the tank.

(7) A grab bar described in Clause (3)(a) or (c) or (4)(b) shall,

(a) be installed to resist a load of at least 1.3 kN applied vertically or horizontally,

(b) be not less than 35 mm and not more than 40 mm in diameter,

(c) have a clearance of not less than 38 mm and not more than 50 mm from the wall to the inside surface of the grab bar, and

(d) have a slip-resistant surface.

(8) A fold-down grab bar described in Clause (3)(b) or (4)(a) shall,

(a) be mounted on the wall behind the water closet,

(i) with the horizontal component 750 mm above the finished floor, and

(ii) not less than 390 mm and not more than 410 mm from the centre line of the water closet,

(b) not require a force of more than 22.2 N to pull it down,

(c) be at least 750 mm in length,

(d) be installed to resist a load of at least 1.3 kN applied vertically or horizontally,

(e) be not less than 35 mm and not more than 40 mm in diameter, and

(f) have a slip-resistant surface.

(9) A fold-down grab bar installed in accordance with Sentence (8) is permitted to encroach into,

(a) the clear turning space described in Clause (1)(a), or

(b) a clear transfer space described in Subclause (2)(a)(ii) or Clause (2)(b).

(10) Where an ambulatory water closet stall is required by Sentence 3.8.2.3.(6), it shall,

(a) be at least 1 500 mm in depth and be not less than 890 mm and not more than 940 mm in width,

(b) be equipped with a door that shall,

(i) be capable of being latched from the inside with a mechanism that is operable using a closed fist,

(ii) when the door is in an open position, have a clear opening of at least 810 mm,

(iii) swing outward, unless the minimum dimensions in Clause (a) are not located within the door swing,

(iv) be provided with spring-type or gravity hinges so that the door closes automatically,

(v) be provided with a door pull on both sides of the door, near the latch side of the door, located at a height not less than 900 mm and not more than 1 100 mm above the finished floor, and

(vi) be capable of having the latch required by Subclause (i) released from the outside in the case of an emergency,

(c) be equipped with a water closet conforming to Article 3.8.3.9. and located so that its centre line is centred between the partition walls,

(d) be equipped on each side of the water closet with grab bars conforming to Clause (3)(a), and

(e) be equipped with a coat hook conforming to Clause (1)(e).

3.8.3.9. Water Closets

(1) A water closet described in Clause 3.8.3.8.(1)(c) or (10)(c) or 3.8.3.12.(1)(d) shall,

(a) be equipped with a seat located at not less than 430 mm and not more than 485 mm above the finished floor,

(b) be equipped with hand-operated flushing controls that are easily accessible to a wheelchair user or be automatically operable,

(c) be equipped with a back support where there is no seat lid or tank, and

(d) not have a spring-activated seat.

(2) Hand-operated flushing controls required by Clause (1)(b) shall be operable using a closed fist and with a force of not more than 22.2 N.

3.8.3.10. Urinals

(1) Where more than one urinal is provided in a washroom described in Sentence 3.8.2.3.(3) or (4), at least one urinal shall be,

(a) wall mounted, with the rim located not more than 430 mm above the finished floor, or

(b) floor mounted, with the rim level with the finished floor.

(2) A urinal described in Sentence (1) shall have,

(a) no step in front,

(b) a vertically mounted grab bar installed on each side of the urinal that,

(i) is not less than 300 mm long,

(ii) has its centre line 1 000 mm above the finished floor,

(iii) is located not less than 380 mm and not more than 450 mm measured horizontally from the vertical centre line of the urinal, and

(iv) complies with Sentence 3.8.3.8.(7), and

(c) a minimum depth of 345 mm measured from the outer face of the urinal rim to the back of the fixture.

(3) Where manual flush controls are provided for a urinal described in Sentence (1), the flush controls shall be,

(a) operable using a closed fist, and

(b) mounted no higher than 1 200 mm above the finished floor.

(4) Where privacy screens are installed for a urinal described in Sentence (1), they shall,

(a) be mounted a minimum of 460 mm from the centre line of the urinal, and

(b) have a clearance of at least 50 mm from the grab bars required by Clause (2)(b).

(5) Where more than one urinal is provided in a washroom described in Sentence 3.8.2.3.(6), at least one urinal conforming to Sentences (1) to (4) shall be provided in the washroom.

3.8.3.11. Lavatories

(1) A washroom described in Sentence 3.8.2.3.(2), (3) or (4) shall be provided with a lavatory that shall,

(a) be located so that the distance between the centre line of the lavatory and the side wall is not less than 460 mm,

(b) be mounted so that the top of the lavatory is not more than 840 mm above the finished floor,

(c) have a clearance beneath the lavatory not less than,

(i) 920 mm wide,

(ii) 735 mm high at the front edge,

(iii) 685 mm high at a point 205 mm back from the front edge, and

(iv) 350 mm high from a point 300 mm back from the front edge to the wall,

(d) have insulated pipes where they would otherwise present a burn hazard or have water supply temperature limited to a maximum of 43°C,

(e) be equipped with faucets that have lever type handles without spring loading or operate automatically and that are located so that the distance from the centre line

of the faucet to the edge of the basin or, where the basin is mounted in a vanity, to the front edge of the vanity, is not more than 485 mm,

(f) have a minimum 1 370 mm deep floor space to allow for a forward approach, of which a maximum of 500 mm can be located under the lavatory,

(g) have a soap dispenser that is,

(i) located to be accessible to persons in wheelchairs,

(ii) located so that the dispensing height is not more than 1 200 mm above the finished floor,

(iii) located not more than 610 mm, measured horizontally, from the edge of the lavatory, and

(iv) operable with one hand, and

(h) have a towel dispenser or other hand drying equipment that is,

(i) located to be accessible to persons in wheelchairs,

(ii) located so that the dispensing height is not more than 1 200 mm above the finished floor,

(iii) operable with one hand, and

(iv) located not more than 610 mm, measured horizontally, from the edge of the lavatory.

(2) If mirrors are installed in a washroom described in Sentence 3.8.2.3.(2), (3) or (4), at least one mirror shall be,

(a) installed above a lavatory required by Sentence (1), and

(b) mounted with its bottom edge not more than 1 000 mm above the finished floor or inclined to the vertical to be usable by a person in a wheelchair.

(3) If dispensing or hand-operated washroom accessories, except those located in water closet stalls or described in Clause (1)(g), are provided, they shall be mounted so that,

(a) the dispensing height is not less than 900 mm and not more than 1 200 mm above the finished floor,

(b) the controls or operating mechanisms are mounted not less than 900 mm and not more than 1 200 mm above the finished floor, and

(c) a minimum 1 370 mm deep floor space is provided in front of the controls or operating mechanisms to allow for a front approach.

(4) Where a shelf is installed above a lavatory required by Sentence (1), it shall,

(a) be located not more than 200 mm above the top of the lavatory and not more than 1 100 mm above the finished floor, and

(b) project not more than 100 mm from the wall.

(5) A washroom described in Sentence 3.8.2.3.(6) shall be provided with a lavatory conforming to Clauses (1)(e), (g) and (h).

3.8.3.12. Universal Washrooms

(1) A universal washroom shall,

(a) be served by a *barrier-free* path of travel,

(b) have a door that is capable of being locked from the inside and released from the outside in case of emergency and that has,

(i) a graspable latch-operating mechanism located not less than 900 mm and not more than 1 000 mm above the finished floor,

(ii) if it is an outward swinging door, a door pull not less than 140 mm long located on the inside so that its midpoint is not less than 200 mm and not more than 300 mm from the latch side of the door and not less than 900 mm and not more than 1 100 mm above the finished floor, and

(iii) if it is an outward swinging door, a door closer, spring hinges or gravity hinges, so that the door closes automatically,

(c) have one lavatory conforming to Sentences 3.8.3.11.(1), (3) and (4),

(d) have one water closet conforming to Article 3.8.3.9. that is located in accordance with Clause 3.8.3.8.(2)(a) or (b),

(e) have grab bars conforming to,

(i) Sentence 3.8.3.8.(3), if the water closet is located in accordance with Clause 3.8.3.8.(2)(a), or

(ii) Sentence 3.8.3.8.(4), if the water closet is located in accordance with Clause 3.8.3.8.(2)(b),

(f) have no internal dimension between walls that is less than 1 700 mm,

(g) have a coat hook that conforms to Clause 3.8.3.8.(1)(e) and a shelf that is located not more than 1 100 mm above the finished floor and projects not more than 100 mm from the wall,

(h) be designed to permit a wheelchair to turn in an open space not less than 1 700 mm in diameter,

(i) be provided with a door equipped with a power door operator if the door is equipped with a self-closing device,

(j) be provided with a mirror,

(i) installed above a lavatory described in Clause (1)(c), and

(ii) mounted with its bottom edge not more than 1 000 mm above the finished floor or inclined to the vertical to be usable by a person in a wheelchair, and

(k) have lighting controlled by a motion sensor conforming to Sentence 12.2.4.1.(2).

(2) A universal washroom shall have,

(a) an emergency call system that consists of audible and visual signal devices inside and outside of the washroom that are activated by a control device inside the washroom, and

(b) an emergency sign that contains the words **IN THE EVENT OF AN EMERGENCY PUSH EMERGENCY BUTTON AND AUDIBLE AND VISUAL SIGNAL WILL ACTIVATE** in letters at least 25 mm high with a 5 mm stroke and that is posted above the emergency button.

(3) A clear space not less than 810 mm wide and 1 830 mm long shall be provided in each universal washroom for an adult-size change table.

(4) Where the clear space provided for an adult-size change table is adjacent to a wall, reinforcement shall be installed in the wall to permit the future installation of the change table.

(5) Where an adult-size change table is installed, it shall,

(a) when fully loaded, have a surface height above the finished floor that can be adjusted from between 450 mm and 500 mm at the low range to between 850 mm and 900 mm at the high range,

(b) be designed to carry a minimum load of 1.33 kN,

(c) have a clear floor space parallel to the long side of the table not less than 760 mm wide and 1 500 mm long, and

(d) in the case of a fold-down table,

(i) be installed so that it does not encroach into a clear transfer space described in Clause 3.8.3.8.(2)(a) or (b), and

(ii) have no operating mechanisms higher than 1 200 mm.

(6) A universal washroom need not conform to Sentences (3) and (4) if,

(a) it is located in an individual *suite* that,

(i) is used for an *assembly occupancy*, a *business and personal services occupancy*, a *mercantile occupancy* or an *industrial occupancy*, and

(ii) meets one of the following requirements,

(A) it is located in a *building* that is less than 300 m^2 in *building area*, or

(B) it is less than 300 m^2 in area, if located in a *building* that is at least 300 m^2 in *building area*, or

(b) another universal washroom conforming to this Article is provided on the same floor level within 45 m.

3.8.3.13. Showers and Bathtubs

(1) Except within a *suite* of *residential occupancy*, if showers are provided in a *building*, the number of *barrier-free* showers shall conform to Table 3.8.3.13.

Table 3.8.3.13.
Minimum Number of Barrier-Free Showers

Forming Part of Sentence 3.8.3.13.(1)

Item	Column 1	Column 2

	Number of Showers provided in a Group	Minimum Number of Showers Required to Be *Barrier-Free*
1.	1	0
2.	2 to 7	1
3.	Over 7	1, plus 1 for each additional increment of 7 showers in a group

(2) A *barrier-free* shower required by Sentence (1) shall,

(a) be not less than 1 500 mm wide and 900 mm deep,

(b) have a clear floor space at the entrance to the shower not less than 900 mm deep and the same width as the shower, except that fixtures are permitted to project into that space provided they do not restrict access to the shower,

(c) have a slip-resistant floor surface,

(d) have a threshold that is level with the adjacent finished floor or a bevelled threshold not more than 13 mm higher than the adjacent finished floor,

(e) have a hinged seat that is not spring-loaded or a fixed seat that shall be,

(i) not less than 450 mm wide and 400 mm deep,

(ii) mounted not less than 430 mm and not more than 485 mm above the finished floor,

(iii) designed to carry a minimum load of 1.3 kN, and

(iv) located so that the edge of the seat is within 500 mm of the shower controls,

(f) have a wall mounted continuous L-shaped grab bar conforming to Sentence 3.8.3.8.(7) located on the same wall as the controls, with the horizontal component of the grab bar,

(i) mounted not more than 850 mm above the finished floor, and

(ii) located so that the end of the horizontal component is within 100 mm from the edge of the shower seat,

(g) have a pressure-equalizing or thermostatic mixing valve controlled by a lever or other device operable using a closed fist from the seated position,

(h) have a hand-held shower head with not less than 1 500 mm of flexible hose located so that it can be reached from the seated position and equipped with a support so that it can operate as a fixed shower head, and

(i) have fully recessed soap holders that can be reached from the seated position.

(3) Individual showers that are provided for use by patients or residents in *buildings* of Group B, Division 2 or 3 *occupancy* shall conform to Sentence (2).

(4) Individual bathtubs that are provided for the use of patients or residents in *buildings* of Group B, Division 2 or 3 *occupancy* shall have,

(a) faucets that have lever type handles without spring loading or that operate automatically,

(b) faucet handles that are located so as to be usable by a person seated in the bathtub,

(c) unless the bathtub is free-standing, a continuous L-shaped grab bar conforming to Sentence 3.8.3.8.(7) with 900 mm long horizontal and vertical components mounted with,

(i) the horizontal component located not less than 150 mm and not more than 200 mm above and parallel to the rim of the bathtub, and

(ii) the vertical component located not less than 300 mm and not more than 450 mm from the control end of the bathtub, and

(d) unless the bathtub is free-standing, a grab bar conforming to Sentence 3.8.3.8.(7) that is located at each end of the bathtub and is,

(i) at least 750 mm long,

(ii) mounted vertically from a point 200 mm above the rim of the bathtub, and

(iii) mounted within 150 mm from the edge of the bathtub, measured horizontally.

(5) Where a *barrier-free* bathtub is provided, a clear floor space at least 900 mm wide and 1 440 mm long shall be provided along the full length of the bathtub.

3.8.3.14. Reserved

3.8.3.15. Shelves or Counters for Telephones

(1) Where more than one telephone is provided for public use, a built-in shelf or counter shall be provided for at least one telephone.

(2) A shelf or counter described in Sentence (1) shall,

(a) be level,

(b) be not less than 500 mm wide and 350 mm deep, and

(c) have, for each telephone provided, a clear space that,

(i) is not less than 810 mm wide and 1 370 mm deep, centred on the telephone, and

(ii) has no obstruction within 250 mm above the surface.

(3) The top surface of a section of the shelf or counter described in Sentence (1) shall,

(a) be located not less than 775 mm and not more than 875 mm from the finished floor, and

(b) have a knee space not less than 740 mm high.

(4) Where a wall-hung telephone is provided above the shelf or counter section described in Sentence (3), it shall be located so that the receiver and coin or card slot are not more than 1 200 mm from the finished floor.

(5) Where more than one telephone is provided for public use in a normally occupied *floor area* that is not required by Article 3.8.2.1. to have a *barrier-free* path of travel, a built-in shelf or counter that conforms to Sentences (2), (3) and (4) shall be provided for at least one telephone.

3.8.3.16. Drinking Fountains

(1) Where more than one drinking fountain is provided, at least one shall be a *barrier-free* fountain that conforms to Sentences (2) and (3).

(2) A *barrier-free* drinking fountain shall,

(a) have a spout located near the front of the unit not more than 915 mm above the finished floor,

(b) be equipped with controls that are easily operated from a wheelchair using one hand with a force of not more than 22 N or shall operate automatically,

(c) project the water at least 100 mm high,

(d) provide the water stream at a vertical angle of up to,

(i) 30^{o}, where the spout is located less than 75 mm from the front of the fountain, or

(ii) 15^{o}, where the spout is located not less than 75 mm and not more than 125 mm from the front of the fountain,

(e) be detectable by a cane at a level at or below 680 mm from the finished floor, and

(f) where the drinking fountain is cantilevered, meet the following requirements:

(i) be mounted not more than 915 mm above the finished floor,

(ii) provide a clearance height under the fountain of not less than 735 mm above the finished floor,

(iii) have a clear depth under the fountain of not less than 450 mm,

(iv) have a clear width under the fountain of not less than 760 mm,

(v) have a toe clearance height under the fountain of at least 350 mm above the finished floor from a point 300 mm back from the front edge to the wall, and

(vi) have a depth at the base of the fountain of at least 700 mm.

(3) A *barrier-free* drinking fountain required by Sentence (1) shall have a clear floor space in front of, or adjacent to, the fountain that is a minimum of 810 mm deep and 1 370 mm wide.

(4) Where more than one drinking fountain is provided in a normally occupied *floor area* that is not required by Article 3.8.2.1. to have a *barrier-free* path of travel, at least one shall be a *barrier-free* fountain that conforms to Sentences (2) and (3).

3.8.3.17. Platforms

(1) A tactile attention indicator conforming to Article 3.8.3.18. shall be installed along any edge of a platform that is,

(a) not protected by a *guard*, and

(b) higher than 250 mm above the finished floor or ground or sloped steeper than 1 in 3.

(2) Sentence (1) does not apply to the front edges of *stages*.

3.8.3.18. Tactile Attention Indicators

(1) Where a tactile attention indicator is required, it shall conform to Sentence (2) and Clauses 4.1.1. and 4.1.2. of ISO 23599, "Assistive Products for Blind and Vision-Impaired Persons – Tactile Walking Surface Indicators".

(2) The depth of the tactile attention indicator shall be not less than 300 mm and not more than 610 mm.

Section 3.9. Portable Classrooms

3.9.1. Scope

3.9.1.1. Application

(1) Except as provided in this Section, the requirements in this Division apply to portable classrooms.

3.9.1.2. Heating Systems

(1) Heating systems and equipment in a portable classroom shall be designed and installed in accordance with Section 6.2.

3.9.2. Interior Finish

3.9.2.1. Flame-Spread Ratings

(1) Interior finish material used on a wall or ceiling of a portable classroom shall have a *flame-spread rating* of 150 or less.

3.9.3. Application

3.9.3.1. Building Areas

(1) A single portable classroom shall be not more than 100 m^2 in *building area*, and not more than 1 *storey* in *building height*.

(2) For the purposes of Subsection 3.2.2., where the horizontal distance between portable classrooms is less than 6 m, a group of portable classrooms may be considered as a single *building* with a *building area* equal to the aggregate area of the portable classrooms.

3.9.3.2. Spatial Separations

(1) The requirements in Subsection 3.2.3. need not be provided between individual portable classrooms where the distance between the classrooms is 6 m or more.

(2) The requirements in Subsection 3.2.3. need not be provided between individual portable classrooms within a group where,

(a) the portable classrooms are in groups where,

(i) the distance between the classrooms is less than 6 m,

(ii) the number of classrooms in a group is not more than six, and

(iii) the distance between groups of classrooms is 12 m or more, or

(b) the portable classrooms are in groups where,

(i) the *means of egress* for each classroom within a group is by a common corridor or passageway,

(ii) the number of portable classrooms in a group is not more than six, and

(iii) the distance between groups of portable classrooms is 12 m or more.

3.9.3.3. Fire Alarm Systems

(1) Except as provided in Sentences (2) and (3), the fire alarm system in the main school *building* shall be extended to the portable classrooms with a separate zone indicator on the annunciator.

(2) The requirements in Sentence (1) need not be provided where there are not more than 12 portables on a site and where,

(a) Reserved

(b) the distance between portable classrooms is less than 6 m and the requirements of Subsection 3.2.3. are applied between the classrooms, or

(c) the portable classrooms are in groups where,

(i) the distance between the classrooms is less than 6 m,

(ii) the number of classrooms in a group does not exceed six,

(iii) within a group of classrooms, the facing walls have a *fire-resistance rating* of 45 min, rated from inside the classroom, and

(iv) the distance between groups of classrooms is 12 m or more.

(3) The requirements in Sentence (1) need not be provided where the distance between portable classrooms is 6 m or more.

3.9.3.4. Provisions for Firefighting

(1) The requirements in Articles 3.2.2.10. and 3.2.5.1. to 3.2.5.7. need not be provided where there are not more than 12 portable classrooms on a site and where,

(a) the distance between portable classrooms is 6 m or more,

(b) the distance between portable classrooms is less than 6 m and the requirements of Subsection 3.2.3. are applied between the classrooms, or

(c) the portable classrooms are in groups conforming with either Clause 3.9.3.2.(2)(a) or (b).

3.9.3.5. Portable Fire Extinguishers

(1) A fire extinguisher, in accordance with Article 3.2.5.17., shall be installed in each portable classroom.

3.9.3.6. Means of Egress

(1) Except as required in Sentence 3.9.3.7.(1), a portable classroom shall be provided with *means of egress* conforming to Sections 3.3. and 3.4.

3.9.3.7. Fuel-Fired Appliances

(1) Where there is only one egress door from a portable classroom, a fuel-fired *appliance* shall be separated from the remainder of the classroom by a *fire separation* with a *fire-resistance rating* of not less than 45 min.

(2) Except as provided in Sentences (3) and (4), if a portable classroom contains a fuel-fired *appliance*, the *appliance* shall be separated from the remainder of the classroom by a *fire separation* having a *fire-resistance rating* not less than,

(a) 1.5 h where the horizontal distance between portable classrooms is 1.5 m or less, and

(b) 45 min where the horizontal distance between portable classrooms is more than 1.5 m.

(3) If the horizontal distance between portable classrooms is 6 m or more, a fuel-fired *appliance* need not be separated from the remainder of the classroom by a *fire separation* provided,

(a) there is not more than one *appliance* per portable classroom, and

(b) the *appliance* is located not less than 4.5 m from an egress doorway or an *exit* from the portable classroom.

(4) Fuel-fired *appliances* with sealed combustion located in a portable classroom are not required to be separated from the remainder of the classroom,

(a) if there are not more than four portable classrooms in a group, and

(b) if the *appliance* is located not less than 4.5 m from an egress doorway or an *exit* from the portable classroom.

3.9.3.8. Washroom Facilities

(1) Washroom facilities need not be provided in a portable classroom where the facilities in the main school *building* comply with the requirements of Subsection 3.7.4. for the total *occupant load* of the main school *building* and the portable classrooms.

3.9.3.9. Barrier-Free Access

(1) The requirements of Section 3.8. for *barrier-free* access need not be provided for a portable classroom provided that the main school *building* complies with the requirements of Section 3.8.

Section 3.10. Self-Service Storage Buildings

3.10.1. Scope

3.10.1.1. Application

(1) Except as provided in this Section, the requirements in this Division apply to *self-service storage buildings*.

3.10.2. Requirements for All Buildings

3.10.2.1. Occupancy Classification

(1) A *self-service storage building*,

(a) shall comply with the requirements for a Group F, Division 2 *major occupancy*, and

(b) shall not contain a Group F, Division 1 *occupancy*.

3.10.2.2. Occupant Load

(1) The requirements based on *occupant load* shall not apply.

3.10.2.3. Structural Fire Protection

(1) Except as provided in Sentence (2) and Sentence 3.10.4.2.(1), the requirements in Subsections 3.2.1. and 3.2.2. shall apply.

(2) The *first storey* shall be subdivided into areas not more than 500 m^2 by a masonry or reinforced concrete *fire separation* having a *fire-resistance rating* not less than 1 h, or it shall be *sprinklered*.

3.10.2.4. Safety Requirements Within Floor Areas

(1) Except as provided in Sentences (2) to (12), the requirements in Section 3.3. shall apply.

(2) A corridor need not be constructed as a *public corridor* where the travel distance, measured from inside the rental space to the nearest *exit*, is not more than 15 m provided that the corridor walls,

(a) are of *noncombustible construction*,

(b) have no openings other than doors and the doors are of solid construction, and

(c) are continuous from the floor to the underside of the floor above, the ceiling or the roof.

(3) Where the *building* is *sprinklered*, doors in a *public corridor* do not require to be equipped with self-closing devices and latches provided that the travel distance is measured from inside the rental space to the nearest *exit*.

(4) Egress doors from a rental space are not required to swing in the direction of *exit* travel or swing on a vertical axis provided,

(a) the area of the rental space is not more than 50 m^2, and

(b) the distance of travel within the rental space is not more than 10 m.

(5) Where egress doors from a rental space open onto a corridor and swing in the direction of *exit* travel, the corridor shall be not less than 1 500 mm wide, and the doors shall be not more than 914 mm wide.

(6) Where egress doors from a rental space open onto a corridor and do not swing in the direction of *exit* travel, the corridor shall be not less than 1 100 mm in width.

(7) Dead end corridors are not permitted.

(8) Corridors shall be provided with,

(a) natural lighting that shall be uniformly distributed and be at least 4% of the corridor area, or

(b) emergency lighting, conforming to Sentences 3.2.7.4.(1) and (2), that shall provide average levels of illumination not less than 10 lx at floor level.

(9) Not more than two *dwelling units* shall be contained within one of the *buildings* on the property.

(10) Except as provided in Sentence (11), *dwelling units* shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 2 h.

(11) A *fire separation* is not required between a *dwelling unit* and an office where the office is not more than 50 m^2 in area.

(12) The *fire separations* required in Sentence 3.3.1.1.(1) need not be provided between individual rental spaces.

3.10.2.5. Exit Requirements

(1) Except as provided in Sentences (2) and (3), the requirements in Section 3.4. shall apply.

(2) The clear width of an *exit* stair shall be not less than 1 100 mm.

(3) *Exit* doors from rental spaces are not required to swing on a vertical axis provided,

(a) the area of the rental space is not more than 50 m^2, and

(b) the travel distance within the rental space is not more than 10 m.

3.10.2.6. Service Facilities

(1) Except as provided in Sentence (2), the requirements in Section 3.6. shall apply.

(2) Except where located in and serving only the *dwelling units*, a fuel-fired *appliance* shall be located in a *service room* separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

3.10.2.7. Sanitary Facilities

(1) Except as provided in Sentence (2), the requirements in Subsection 3.7.4. shall apply.

(2) Except as permitted in Sentences 3.7.4.1.(2) and (3), two washrooms, each containing a water closet and a lavatory, shall be provided within one of the *buildings* on the property.

3.10.3. Additional Requirements for Buildings Containing more than 1 Storey

3.10.3.1. Application

(1) The requirements in this Subsection apply to all *buildings* except a 1 *storey building* that does not contain a *basement* or *mezzanine*.

3.10.3.2. Spatial Separations

(1) Except as provided in Sentence (2), the requirements in Subsection 3.2.3. shall apply.

(2) The distance between *buildings* shall be not less than 9 m.

3.10.3.3. Fire Alarm Systems

(1) Except as provided in Sentences (2) and (3), the requirements in Subsection 3.2.4. shall apply.

(2) A fire alarm system shall be installed.

(3) Within the *first storey*, manual pull stations are required only in corridors.

3.10.3.4. Provisions for Firefighting

(1) Except as provided in Sentences (2) and (3), the requirements in Subsection 3.2.5. shall apply.

(2) Access routes for fire department vehicles shall be provided and shall be not less than 9 m wide.

(3) Hydrants shall be located in the access routes required in Sentence (2) so that,

(a) for a *building* provided with a fire department connection for a standpipe system or a sprinkler system,

(i) a fire department pumper vehicle can be located adjacent to a hydrant, and

(ii) the unobstructed path of travel for the firefighter from the vehicle to the fire department connection is not more than 45 m, and

(b) for a *building* that is not *sprinklered*, a fire department pumper vehicle can be located in the access route so that the unobstructed path of travel for the firefighter is not more than,

(i) 45 m from the hydrant to the vehicle, and

(ii) 45 m from the vehicle to every opening in the *building*.

3.10.3.5. Standpipe Systems

(1) Except as provided in Sentence (2), the requirements in Subsection 3.2.9. shall apply.

(2) Hose stations are not required in the *first storey*.

3.10.4. Additional Requirements for 1 Storey Buildings

3.10.4.1. Application

(1) The requirements in this Subsection apply to 1 *storey buildings* that do not contain a *basement* or *mezzanine*.

3.10.4.2. Building Area

(1) For the purposes of Subsection 3.2.2., *building area* means,

(a) the *building area* of each *building*,

(b) the total of the *building areas* of all *buildings* as a group, or

(c) the total of the *building areas* of any number or group of *buildings*.

3.10.4.3. Spatial Separations

(1) Except as provided in Sentences (2) to (4), the requirements in Subsection 3.2.3. shall apply.

(2) Where the *building area* conforms to Clause 3.10.4.2.(1)(b), the *limiting distance* requirements shall not apply between individual *buildings*.

(3) Where the *building area* conforms to Clause 3.10.4.2.(1)(c),

(a) the *limiting distance* requirements shall apply between each group of *buildings*, but not between individual *buildings* within a group, and

(b) the distance between each group of *buildings* shall be not less than 9 m.

(4) The distance between individual *buildings* within a group shall be not less than 6 m.

3.10.4.4. Fire Alarm Systems

(1) Except as provided in Sentence (2), the requirements in Subsection 3.2.4. shall not apply.

(2) The requirements for *smoke alarms* in Article 3.2.4.22. shall apply to a *dwelling unit*.

3.10.4.5. Provisions for Firefighting

(1) Except as provided in Sentences (2) to (7), the requirements in Subsection 3.2.5. shall not apply.

(2) Access routes for fire department vehicles shall be provided and shall be not less than 9 m wide.

(3) Hydrants shall be located in the access routes required in Sentence (2) so that the locations conform to Sentence 3.10.3.4.(3).

(4) The access routes required in Sentence (2) shall conform to the requirements in Sentence 3.2.5.6.(1).

(5) An adequate water supply for firefighting shall be provided for every *building*.

(6) Where a sprinkler system is installed, the system shall conform to the requirements in Articles 3.2.5.13., 3.2.5.16. and 3.2.5.18.

(7) Where *combustible* sprinkler piping is installed, it shall conform to the requirements in Article 3.2.5.14.

Section 3.11. Public Pools

3.11.1. General

3.11.1.1. Application

(1) This Section applies to every *public pool*.

(2) This Section applies to the design and construction of site assembled and manufactured pools that are intended for use as *public pools*.

(3) Where material alterations to a *public pool* or the equipment installed in a *public pool* affect the bottom slope, the water volume or the capacity of the *recirculation system*, the adversely affected portions shall comply with the requirements of this Division.

(4) Where material alterations or repairs concern any pool fitting passing water and/or air in or out of the pool tank, the affected fitting shall comply with Sentences 3.11.8.1.(14) to (20).

3.11.2. Designations of Public Pools

3.11.2.1. Pool Designations

(1) Every *public pool* shall be designated as being either a Class A pool or a Class B pool in accordance with Sentence (2) or (3).

(2) A Class A pool is a *public pool* to which the general public is admitted or that is,

(a) operated in conjunction with or as a part of a program of an educational, instructional, physical fitness or athletic institution or association, supported in whole or in part by public funds or public subscription, or

(b) operated on the premises of a *recreational camp*, for use by campers and their visitors and camp personnel.

(3) A Class B pool is a *public pool* that is,

(a) operated in conjunction with six or more *dwelling units*, *suites*, single family residences, or any combination of them for the use of occupants or residents and their visitors,

(b) operated in conjunction with a mobile home park for the use of residents or occupants and their visitors,

(c) operated on the premises of a *hotel* for the use of its guests and their visitors,

(d) operated on the premises of a *campground* for the use of its tenants and their visitors,

(e) operated in conjunction with a club for the use of its members and their visitors, or

(f) operated in conjunction with an establishment or institution classified in Table 3.1.2.1. as,

(i) Group B, Division 1, *major occupancy*, or

(ii) Group B, Division 2 or 3, *major occupancy*, for the use of residents or occupants and their visitors.

3.11.3. Pool and Pool Deck Design and Construction Requirements for All Class A and Class B Pools

3.11.3.1. Construction Requirements

(1) Except as otherwise required in Subsections 3.11.4., 3.11.5., 3.11.6. and 3.11.7. or otherwise exempted in Sentences (2) and (3), Class A pools and Class B pools shall be designed and constructed to comply with Sentences (2) to (26) and Articles 3.11.3.2. and 3.11.3.3..

(2) Where a Class B pool is constructed for use solely in conjunction with a club, child care facility, *day camp* or establishment or institution for the care of persons who are infirm, aged or in custodial care, the pool shall be exempt from the requirements of Clause (9)(a) and Sentences (13) and (14).

(3) Where a Class B pool is constructed for use solely in conjunction with an establishment or institution for the treatment of persons with disabilities or persons who are ill the pool shallbe exempt from the requirements of Sentences (6) and (7), Clause (9)(a) and Sentences (13) and (14).

(4) A *public pool* shall be constructed to have a water depth of not less than 750 mm except for,

(a) a *modified pool*,

(b) a *wave action pool*,

(c) a pool for therapeutic use,

(d) a beach entry ramp, and

(e) a pool described in Sentence 3.11.5.2.(1)

(5) The beach entry ramp permitted in Clause (4)(d) shall be protected with permanent barriers between 900 mm to 1 200 mm along the *pool deck* to prevent entry into the pool until the minimum water pool depth is 750 mm.

(6) Except for a *modified pool*, a *wave action pool* and a pool used exclusively for scuba diving, the slope of the bottom of any portion of a *public pool* shall not exceed,

(a) 8% where the water depth is 1 350 mm or less,

(b) 33% where the water depth is more than 1 350 mm and less than 2 000 mm, and

(c) 50% where the water depth is 2 000 mm or more.

(7) Except for a *modified pool* and *wave action pool*, where the slope of any portion of the bottom of a *public pool* is more than 8%, the walls of the pool shall be equipped with recessed fittings to which a safety line supported by buoys can be attached across the surface of the water and the recessed fittings shall be installed at a horizontal distance of at least 300 mm measured from the vertical projection of the top of the slope in the direction of the shallow end of the pool.

(8) Except for a *modified pool*, *wave action pool* and a pool described in Sentence 3.11.5.2.(1), the side and end walls of a *public pool* shall be vertical from the top of the walls to within 150 mm of the bottom except at steps or recessed ladders or in water depths of 1 350 mm or more.

(9) Except for a *modified pool* and *wave action pool* and except as provided in Sentence (11), a *public pool* shall be surrounded by a hard-surfaced *pool deck* that shall,

(a) except for a pool described in Sentence 3.11.5.2.(1), be not less than 1 800 mm wide,

(b) in the case of an *outdoor pool*, be sloped away from the pool to waste drains or to adjacent lower ground at a slope of between 2% and 4%, and

(c) in the case of an *indoor pool*, be impervious and sloped away from the pool to waste drains at a slope of between 1% and 4%.

(10) Where a *public pool* is constructed with a ledge, the ledge shall,

(a) be placed only in parts of the pool where the water depth is 1 350 mm or more,

(b) be not more than 200 mm wide,

(c) be at least 1 000 mm below the water surface,

(d) where located on the side of the pool, be gradually tapered towards the shallow end of the pool in such a manner as to prevent a harmful obstruction, and

(e) have a band of contrasting colour along the entire juncture of the side and top of the ledge.

(11) Notwithstanding Sentences (12) to (16), where a *public pool* is constructed on any level surface with walls rising above that surface and has a constant water depth not exceeding 1 100 mm and a water surface area not exceeding 100 m^2, the *pool deck* may be an elevated platform surrounding the pool if it has,

(a) an unobstructed width of not less than 900 mm,

(b) a height of at least 75 mm above grade or pavement elevation,

(c) 6 mm wide openings for drainage, and

(d) a non-slip surface that is capable of being kept clean and disinfected.

(12) Except for a *modified pool* and *wave action pool*, where a *pool deck* projects over the water surface, the projection shall not exceed 50 mm.

(13) Except for a *modified pool* and *wave action pool*, the *pool deck* shall be separated from any adjacent spectator area or gallery and from any spectator access to such area or gallery by a gate or other barrier.

(14) Except for a *modified pool* and *wave action pool*, the perimeter of the *pool deck* shall be clearly delineated by a tactile attention indicator conforming to Article 3.8.3.18. and located where any area contiguous to the *pool deck* may be confused with the deck.

(15) Perimeter drainage shall be provided where necessary to prevent surface run-off from draining onto the *pool deck*.

(16) Except for a *modified pool*, one or more hose bibbs shall be installed near the perimeter of the *pool deck* in locations convenient for flushing the *pool deck*.

(17) Except for a *modified pool* and *wave action pool*, where access to the pool enclosure is over any surface that is not subject to regular cleaning and sanitizing, a foot spray to wash feet by means of a spray running freely to waste shall be provided at each such access.

(18) Except for a *modified pool* and *wave action pool*, at least,

(a) one ladder or set of steps shall be provided in both the deep and shallow areas of a *public pool* for entry into and egress from the pool water, and

(b) one *barrier-free* access shall be provided for entry into and egress from the water of a *public pool* as required by Article 3.11.3.3.

(19) The *pool deck*, the submerged parts of a *public pool*, the walls or partitions adjacent to a *pool deck* and the pavement or floor adjacent to a *pool deck* shall have surfaces that permit thorough cleaning.

(20) Except for markings for safety or competition purposes, submerged surfaces in *public pools* shall be finished white or light in colour.

(21) Except in a *modified pool*, a black disc 150 mm in diameter on a white background shall be affixed to the bottom of a *public pool* within the area of its greatest depth.

(22) A *public pool* shall be equipped with lockable doors or other barriers capable of preventing public access to the *pool deck*.

(23) Except for a *modified pool*, *wave action pool* or a pool installed at a *recreational camp*, a Class A pool shall be provided with,

(a) where the water surface area is greater than 150 m^2 but not greater than 230 m^2, at least one lifeguard control station, and

(b) where the water surface area is greater than 230 m^2, at least two lifeguard control stations.

(24) Except for a *modified pool*, every *public pool* shall display on the deck clearly marked figures, not less than 100 mm high, that set out,

(a) the water depths indicating the deep points, the breaks between gentle and steep bottom slopes and the shallow points,

(b) the words **SHALLOW AREA** at one or more appropriate locations, and

(c) where the water depth exceeds 2 500 mm, the words **DEEP AREA** at one or more appropriate locations.

(25) Except for a *modified pool* and a pool to which Sentence 3.11.5.2.(2) applies, every *public pool* having a maximum water depth of 2 500 mm or less shall display a warning notice posted in a location clearly visible to divers on which are printed in letters at least 150 mm high the words **CAUTION — AVOID DEEP DIVES** or **SHALLOW WATER — NO DIVING**.

(26) Except where no space is provided between ladder treads and the pool wall, the space between the pool wall and submerged portions of any treads of a ladder for entry into and egress from the water shall be not more than 150 mm and not less than 75 mm.

3.11.3.2. Barrier-Free Path of Travel for Outdoor Pool Deck

(1) Where an *outdoor pool* is provided, a *barrier-free* path of travel shall be provided to and throughout the normally occupied portions of the *pool deck*.

3.11.3.3. Access into Public Pools

(1) Access for entry into and egress from the water of a *public pool* provided in a *storey* that is required by Article 3.8.2.1. to have a *barrier-free* path of travel shall be *barrier-free* and shall be provided by,

(a) a ramp conforming to,

(i) Article 3.11.5.1., and

(ii) Article 3.11.5.2., in the case of a pool described in Sentence 3.11.5.2.(1), or

(b) a pool lift conforming to the manufacturer's specifications and installation instructions and conforming to Sentences (2) to (6).

(2) Except where the entire pool depth is greater than 1 220 mm, where a pool lift is installed, at least one lift shall be located where the water level does not exceed 1 220 mm.

(3) The centre line of the seat for the pool lift shall be located over the deck and a minimum of 400 mm from the edge of the pool when in the raised position.

(4) A clear deck space located parallel with the seat for the pool lift and on the side of the seat opposite the water shall,

(a) be at least 915 mm wide, and

(b) extend forward not less than 1 220 mm from a line located 305 mm behind the rear edge of the seat.

(5) The pool lift shall be,

(a) designed to be operable without assistance from both the deck and water, and

(b) designed so that, when in use, its controls and operating mechanisms are unobstructed.

(6) The pool lift shall,

(a) have a weight capacity of at least 135 kg, and

(b) be capable of sustaining a static load of at least 1.5 times the rated load.

3.11.4. Public Pools Equipped with Diving Boards or Diving Platforms

3.11.4.1. Diving Boards or Platforms

(1) No *diving board* or *diving platform* shall be installed in a *public pool* unless the requirements of Sentences (5) to (17) are met but the requirements for a *diving platform* do not apply to a *starting platform*.

(2) No *diving board* or *diving platform* shall be installed in a *modified pool* or a *wave action pool*.

(3) Where a *public pool* is equipped with a *diving board* or a *diving platform*, the board or platform shall have a non-slip surface.

(4) Where a *diving board* or a *diving platform* in a *public pool* is more than 600 mm above the water surface, the board or platform shall be equipped with one or more adjacent handrails.

(5) Where a *public pool* is equipped with a *diving board* or a *diving platform* not more than 3 m in height above the water surface, the pool shall be designed and constructed in conformance with Sentences (6) to (15).

(6) The depth of water in the area directly below a horizontal semi-circle in front of a *diving board* or *diving platform* having a radius of 3 m measured from any point on the front end of the board or platform shall not be less than,

(a) 2 750 mm, where a board is 600 mm or less in height above the water surface,

(b) 3 m, where a board or platform is greater than 600 mm but not more than 1 000 mm in height above the water surface, and

(c) 3.65 m, where a board or platform is greater than 1 000 mm but not more than 3 m in height above the water surface.

(7) Except as permitted in Sentence (8), the water depth in a *public pool* shall be at least 1 350 mm at the horizontal arc having a radius of 9 m measured from any point on the front end of the *diving board* or *diving platform* and intersecting the vertical projections of the walls of the pool.

(8) Where a Class B pool is equipped with a *diving board* 600 mm or less in height above the water,

(a) the water depth shall be at least 1 350 mm at the horizontal arc having a radius of 7.5 m measured from any point on the front end of the *diving board*, and

(b) a warning notice, on which is printed in letters at least 150 mm high, the words **DANGER — AVOID DEEP OR LONG DIVES**, shall be posted in a location clearly visible to divers.

(9) The slope of the bottom of a *public pool* having a *diving board* or *diving platform* shall not change by more than 17% where the water depth is less than the applicable depth set out in Sentence (6) and greater than the depth set out in Sentence (7) or (8), as applicable.

(10) The horizontal distance between the vertical projection of the centre line of a *diving board* or *diving platform* and the vertical projection of the centre line of another board or platform shall be at least 2 750 mm.

(11) The horizontal distance between the centre line of a *diving board* or *diving platform* and the vertical projection of the closest side or any ledge on the closest side of a *public pool* shall be at least,

(a) 3 m, where a *diving board* or *diving platform* is 1 000 mm or less in height above the water surface, and

(b) 3.6 m, where a *diving board* or *diving platform* is greater than 1 000 mm in height above the water surface.

(12) A *diving board* or a *diving platform* 600 mm or less in height above the water surface shall project over the water a horizontal distance of at least 900 mm from the vertical projection of a pool wall under it.

(13) A *diving board* greater than 600 mm in height above the water surface shall project over the water a horizontal distance of at least 1 500 mm from the vertical projection of the pool wall under it.

(14) A *diving platform* greater than 600 mm in height above the water surface shall project a horizontal distance of at least 1 200 mm from the vertical projection of the pool wall under it.

(15) The space above a *diving board* or *diving platform* shall be unobstructed and shall consist of at least,

(a) a space having a width of 2 500 mm on each side of the centre line of the board or platform, a length equal to the sum of the horizontal distance the board or platform projects over the water plus 3 m, and a height of,

(i) 3.65 m above a *diving board* 3.65 m or less in length,

(ii) 5 m above a *diving board* greater than 3.65 m in length, or

(iii) 3 m above a *diving platform*, and

(b) the space below the planes originating from the front and sides of the uppermost horizontal plane of the space determined under Clause (a) and sloping downwards at 30° from the horizontal.

(16) A *diving board* or *diving platform* greater in height than 3 m above the water surface shall be equipped with a gate, barrier or other device capable of preventing access to the *diving board* or *diving platform*.

(17) Where a *public pool* is to be equipped with *diving boards* or *diving platforms* greater than 3 m in height above the water surface, the design of the *diving boards* or *diving platforms* and the corresponding water depths and clearances shall be in accordance with FINA, “Rules and Regulations - FINA Facilities Rules 2009-2013 - FR5 Diving Facilities”.

3.11.5. Ramps into Public Pools

3.11.5.1. Ramps into Public Pools

(1) Where *barrier-free* access for entry into and egress from the water of a *public pool* is provided by a ramp as required by Clause 3.11.3.3.(1)(a), the pool shall be designed and constructed in accordance with Sentences (2) to (4).

(2) A ramp shall have,

(a) along each side a handrail that,

(i) has a height of not less than 865 mm and not more than 965 mm, and

(ii) runs parallel to the slope of the ramp,

(b) a width of at least 1 100 mm,

(c) a curb or other means to prevent a wheelchair from falling off the side of the ramp,

(d) surface finishes capable of being kept clean, sanitary and free from slipperiness, and

(e) a landing at the bottom at least 1 500 mm in length and the same width as the ramp.

(3) Where a ramp that is not submerged is adjacent to the pool wall and is used for access to the water, the pool shall be constructed so that,

(a) the landing at the bottom of the ramp is at least 450 mm but not more than 550 mm below the top of the wall separating the ramp from the pool,

(b) the landing is equipped with a floor drain at its lowest point,

(c) the top of the wall between the pool and the ramp is at least 250 mm and not more than 300 mm in width,

(d) the *pool deck* is capable of accommodating a movable barrier separating the deck from the ramp,

(e) the water depth at the landing is accurately and clearly marked at the landing in figures at least 100 mm high on the top of the wall separating the pool from the ramp, and

(f) the ramp has a slope not exceeding 1 in 12.

(4) Where a submerged ramp is adjacent to the pool wall and is used for access to the water, the pool shall be constructed so that,

(a) the water depth at the bottom of the ramp is at least 600 mm and not greater than 900 mm,

(b) a hard-surfaced area that is at least 750 mm wide is contiguous to the entire length of the part of the submerged ramp that pierces any part of the deck,

(c) the area described in Clause (b) is capable of accommodating a movable barrier separating the area from the deck,

(d) the finishes in submerged portions of the ramps and curbs are different in colour or shade from each other and from that of the pool walls and bottom, and

(e) the submerged ramp has a slope not exceeding 1 in 9.

3.11.5.2. Public Pools in Group B, Division 2 or 3 Major Occupancies

(1) Despite Sentences 3.11.3.1.(4) and (8) and Clause 3.11.3.1.(9)(a), where a *public pool* is constructed in a *building* containing a Group B, Division 2 or 3 *major occupancy* and has a water depth not exceeding 1 500 mm and a water surface area not exceeding 100 m^2, the *pool deck* contiguous to not more than 50% of the total perimeter of the pool may be replaced by one or more ramps that will permit a bather seated in a wheelchair to enter the water with or without the wheelchair.

(2) Despite Sentence 3.11.3.1.(25), a warning notice, on which are printed in letters at least 150 mm high the words **CAUTION — NO DIVING**, shall be posted conspicuously on each wall or fence line enclosing a pool described in Sentence (1).

(3) There shall be a curb along the perimeter of a pool described in Sentence (1) except at steps, ladders and ramp entrances.

(4) The curb required by Sentence (3) shall have,

(a) a height of 50 mm,

(b) rounded edges,

(c) a coved base, and

(d) a raised nosing at the top to serve as a fingerhold for a bather in the water.

3.11.6. Modified Pools

3.11.6.1. Construction Requirements

(1) A *modified pool* is exempt from Sentences 3.11.3.1.(4) to (9), (12), (13), (14), (16), (17), (18), (21), (23), (24) and (25), Sentence 3.11.8.1.(12) and Article 3.11.3.3.

(2) A *modified pool* shall be designed and constructed to comply with Sentences (3) to (9).

(3) A *modified pool* and its *pool deck* shall be constructed of hard-surfaced material that permits thorough cleaning.

(4) The slope of the bottom of any portion of a *modified pool* shall not exceed exceed 1 in 12

(5) The depth of the water in any portion of a *modified pool* shall not be more than 1 800 mm.

(6) A *modified pool* shall be surrounded on all sides by a hard-surfaced *pool deck* that shall,

(a) be at least 3 m wide,

(b) have a continuous crest surrounding the pool at least 100 mm above the pool water surface, and

(c) be sloped to shed water from the crest to the outer perimeter of the *pool deck*.

(7) A *modified pool* shall be provided with two or more drain fittings covered with protective grilles with openings having an aggregate area of at least 10 times the internal cross-sectional area of the outlet pipe or pipes connected to the *recirculation system* that is capable of completely draining the pool.

(8) Provision shall be made for lifeguard control stations adjacent to the edge of the water at intervals of not more than 60 m.

(9) The bottom of a *modified pool* shall be marked with continuous black contour lines,

(a) 150 mm wide located where the water depth is 600 mm, and

(b) 300 mm wide located where the water depth is 1 200 mm.

3.11.7. Wave Action Pools

3.11.7.1. Construction Requirements

(1) A *wave action pool* is exempt from Sentences 3.11.3.1.(4) to (9), (12), (13), (14), (17), (18) and (23), Sentence 3.11.8.1.(12) and Article 3.11.3.3.

(2) A *wave action pool* shall be designed and constructed to comply with Sentences (3) to (11).

(3) The slope of the bottom of any portion of a *wave action pool*,

(a) shall not exceed 1 in 12 where the still water depth is less than 1 000 mm, and

(b) shall not exceed 1 in 9 where the still water depth is 1 000 mm or more.

(4) The walls of a *wave action pool* shall be vertical from the water surface to within 150 mm of the bottom.

(5) There shall be a hard-surfaced *pool deck* at least 3 m wide immediately adjacent to the pool wall at the shallow end of the pool and at least 1 500 mm wide immediately adjacent to all walls of the pool.

(6) Provision shall be made for two or more lifeguard control stations on each side of the *pool deck* adjacent to which the still water depth exceeds 1 000 mm.

(7) Sets of steps or ladders recessed into pool side walls and having continuous vertical grab bars on each side of them shall be located at intervals of not more than 7.5 m along portions of the pool where the still water depth exceeds 1 000 mm, except that no steps or ladders shall be located within 3 m of the corners at the deep end of the pool.

(8) Except at recessed steps or ladders, the *pool deck* along each side of a *wave action pool* adjacent to which the water depth is 2 300 mm or less shall be equipped with a barrier supported by posts or a wall that,

(a) is 1 000 mm in height,

(b) is located 1 000 mm or less from the side of the pool, and

(c) has warning notices affixed to the barrier or wall at intervals not exceeding 7.5 m signifying clearly that jumping and diving are prohibited along the sides of the pool.

(9) Skimming devices shall be designed and suitably located to remove surface film when no waves are induced in a *wave action pool*.

(10) A system capable of deactivating the wave-making equipment shall be installed with readily accessible push buttons located on the *pool deck* not more than 30 m apart, adjacent to each side and the deep end of the pool.

(11) A *wave action pool* shall be equipped with a first-aid room located within 50 m of the pool.

3.11.8. Recirculation for Public Pools

3.11.8.1. Recirculation Systems

(1) Every *public pool* shall be equipped with a *recirculation system*.

(2) For the purposes of this Subsection, the water in a *public pool* and its *recirculation system* is deemed not to be *potable* water.

(3) The water in a *public pool* and its *recirculation system* shall be separated from the *potable* water supply and from the sewer or drainage system into which it drains by *air gaps* or other devices that prevent,

(a) the water in the pool or its *recirculation system* from flowing back into the *potable* water supply, and

(b) the water in the sewer or *drainage system* from flowing back into the pool or its *recirculation system*.

(4) The *recirculation system* of a *public pool* shall be designed, constructed and equipped to comply with Sentences (5) to (20).

(5) The *recirculation system* of a *public pool* shall be capable of filtering, disinfecting and passing through the pool each day a volume of water of at least,

(a) in the case of a Class A pool, other than a *modified pool* or a *wave action pool*, six times the total water volume of the pool,

(b) in the case of a Class B pool, other than a *wave action pool*, four times the total water volume of the pool,

(c) in the case of a *modified pool*, three times the total water volume of the pool, and

(d) in the case of a *wave action pool*, six times the total water volume of the pool.

(6) A *recirculation system* shall be equipped with a flow meter registering the rate of water flow.

(7) All pools shall be provided with automatic *make-up water* devices and provided with water meters to register the volume of all *make-up water* added to a *public pool* or its *recirculation system*.

(8) Equipment shall be installed to continuously disinfect the water in a *public pool* by means of,

(a) a chlorination or hypochlorination system provided with a chemical controller for regulating the dosage of chlorine and capable of providing not less than,

(i) in the case of an *outdoor pool*, other than a *wave action pool*, 300 g of chlorine per day per 10 000 L of total pool capacity,

(ii) in the case of an *indoor pool*, other than a *wave action pool*, 200 g of chlorine per day per 10 000 L of total pool capacity,

(iii) in the case of an outdoor *wave action pool*, 1 200 g of chlorine per day per 10 000 L of total pool capacity, and

(iv) in the case of an indoor *wave action pool*, 800 g of chlorine per day per 10 000 L of total pool capacity, or

(b) a bromination system capable of maintaining in the pool water a total bromine residual of 3 mg/L.

(9) Chlorination equipment for a *public pool* shall contain a mechanism whereby the chlorine feed shall automatically terminate whenever the *recirculation system* ceases to supply *clean water* to the pool.

(10) All exposed *potable* water piping and chlorine piping within a *public pool* water treatment *service room* shall be colour coded by means of,

(a) painting the entire outer surface of the piping, or

(b) coloured bands at least 25 mm in width that are spaced along the piping at intervals of not more than 1 200 mm.

(11) The colour coding referred to in Sentence (10) shall be yellow for chlorine and green for *potable* water.

(12) Except for a *modified pool* and *wave action pool*, a *public pool* shall be equipped with overflow gutters or surface skimmers connected to the *recirculation system* that are capable of removing surface film from the surface of the water and withdrawing each day and discharging to the waste drains up to 15% of the total volume of pool water.

(13) A *public pool* shall be equipped with *clean water* inlets arranged in conjunction with surface skimmers or overflow gutters to provide uniform distribution and circulation of *clean water*.

(14) Except as permitted in Sentence (19), all fittings at or below the water surface that allow water and/or air to be passed to or from the *public pool* shall,

(a) have a maximum opening of 7 mm in one direction, and

(b) be securely held in place by corrosion resistance fastening that require a tool for removal and are galvanically compatible with the fittings and grilles or covers.

(15) Except as provided in Sentence 3.11.6.1.(7) for a *modified pool*, all fittings below the water surface that provide suction or gravity flow in a *public pool* shall,

(a) be provided with a minimum of two suction or gravity outlets interconnected to a full size manifold, and

(b) be separated by a clear distance of not less than 1 200 mm.

(16) Except as provided in Sentence 3.11.6.1.(7) for a *modified pool*, water in all *public pools* shall be capable of being emptied through the pool drains in 12 hours or less.

(17) Except as provided in Sentence 3.11.6.1.(7) for a *modified pool*, openings in suction or gravity fittings shall,

(a) be such that the flow of water does not exceed 0.45 m/s and the velocity is calculated assuming all possible sources of suction flow are present at one time, and

(b) be such that every suction fitting located within 1 000 mm of the water surface, except for skimmers and gutter fittings, contain openings with a minimum aggregate area of 0.2 m^2.

(18) Except for skimmers and gutters, all submerged suction and gravity fittings shall be clearly and permanently marked with a 50 mm wide band in a contrasting colour.

(19) Fittings returning water and/or air to the pool tank that are located within 300 mm of the water surface are permitted to have openings with one dimension more than 7 mm but shall contain no openings more than 25 mm in diameter.

(20) Submerged skimmer equalizer fittings and vacuum fittings are not permitted in *public pools*.

3.11.9. Dressing Rooms, Locker Facilities and Plumbing Facilities for All Public Pools

3.11.9.1. Dressing Rooms and Sanitary Facilities

(1) Except as otherwise permitted in Sentences (2) and (3), every *public pool* shall be equipped with dressing rooms, locker rooms, shower heads, water closets, urinals, lavatories and drinking fountains that shall be designed, constructed and equipped to comply with Sentences (4) to (14).

(2) Where a Class A pool is installed on the premises of a *recreational camp*, dressing rooms, locker rooms, shower heads, water closets, urinals, lavatories and drinking fountains are not required if,

(a) dressing, water closet and shower facilities are conveniently available for bathers elsewhere on the premises, and

(b) foot sprays are provided in accordance with Sentence 3.11.3.1.(17).

(3) Where a Class B pool is installed, dressing rooms, locker rooms, shower heads, lavatories, water closets, drinking fountains and urinals are not required if,

(a) dressing, water closet and shower facilities are conveniently available elsewhere on the premises for bathers when the pool is open for use, and

(b) foot sprays are provided in accordance with Sentence 3.11.3.1.(17).

(4) The minimum number of water closets, urinals and lavatories shall be determined from Article 3.7.4.3. and Table 3.7.4.3.C. for an *occupant load* based on,

(a) the formula in Sentence 3.1.17.3.(1) for all *public pools*, except a *wave action pool*, or

(b) the formula in Sentence 3.1.17.3.(2) for a *wave action pool*.

(5) A minimum of one shower head shall be provided for every 40 bathers.

(6) Where dressing and locker rooms, water closets and urinals are provided in conjunction with a *public pool*, they shall be located in such a manner that bathers, after using them, shall pass through or by a shower area to reach the *pool deck*.

(7) All shower heads shall be supplied with *potable* water at a pressure of at least 140 kPa.

(8) The shower water system shall have one or more tempering devices capable of being adjusted to ensure that water supplied to shower heads does not exceed 40°C.

(9) Floors in washrooms, shower areas and passageways used by bathers shall slope to waste drains at not less than 1% and shall be of hard surfaced materials that do not become slippery when wet.

(10) Joints between floors and walls shall be coved in areas described in Sentence (9) and in dressing and locker rooms.

(11) Hose bibbs shall be provided in safe locations convenient for flushing down the walls and floors in washrooms, shower areas and passageways used by bathers.

(12) *Partitions* or walls shall be provided to ensure privacy of dressing rooms, washrooms and shower areas.

(13) The bottom of interior *partitions* in dressing rooms and washrooms shall be between 250 mm and 350 mm above the floor.

(14) Dressing and locker room floors shall have non-slip surfaces that permit convenient and thorough cleaning and disinfecting.

3.11.10. Emergency Provisions for All Public Pools

3.11.10.1. Lighting and Emergency Provisions

(1) Except as provided in Sentences (2) and (3), rooms and spaces used by the public in conjunction with a *public pool* shall be capable of illumination to levels in compliance with Subsection 3.2.7.

(2) Dressing rooms, locker rooms, shower rooms, washrooms and passageways shall have an illumination level of at least 200 lx at floor level.

(3) An *indoor pool* or an *outdoor pool* that is intended to be open for use after sundown shall be equipped with a lighting system,

(a) that will maintain at any point on the *pool deck* and on the pool water surface an illumination level of at least,

(i) 200 lx in the case of an *indoor pool*, and

(ii) 100 lx in the case of an *outdoor pool*, and

(b) that makes the underwater areas of the pool clearly visible from any point on the *pool deck*.

(4) An *outdoor pool* that is intended to be open for use after sundown and an *indoor pool* shall be equipped with an independent emergency lighting system that automatically operates whenever the normal electrical power supply to a *public pool* lighting system fails.

(5) The independent emergency lighting system required in Sentence (4) shall be capable of illuminating the *pool deck*, washroom, shower, locker areas, pool water surface and all means of egress to a level of at least 10 lx.

(6) An emergency power supply for the emergency lighting system required in Sentence (4) shall comply with Sentences 3.2.7.4.(1) and 3.2.7.7.(1) and Article 3.2.7.5.

(7) An emergency telephone directly connected to an emergency service or to the local telephone utility shall be installed adjacent to the *pool deck* of every Class A pool.

(8) A telephone accessible for emergency use shall be installed for every Class B pool within 30 m of the pool.

(9) Every *wave action pool* shall have a public address system that shall be clearly audible in all portions of the pool.

(10) Every *wave action pool* shall have a communication system for the use of persons engaged in supervision or operation of the pool that shall be interconnected with each lifeguard control station, the first-aid room and the bather admission control centre.

(11) The public address system and the communication system described in Sentences (9) and (10) shall be interconnected.

(12) All recirculating pumps used in a *public pool* shall be capable of being deactivated by an emergency stop button clearly labelled and located at,

(a) a Class A pool beside the telephone that is required in Sentence (7), and

(b) a Class B pool on the deck area.

(13) The emergency stop button in Sentence (12) shall, when used, activate an audible and a visual signal located by the emergency stop.

(14) An emergency sign containing the words **IN THE EVENT OF AN EMERGENCY PUSH EMERGENCY STOP BUTTON AND USE EMERGENCY PHONE, AUDIBLE AND VISUAL SIGNAL WILL ACTIVATE** shall be in letters at least 25 mm high with a 5 mm stroke and posted above the emergency stop button.

3.11.11. Service Rooms and Storage for All Public Pools

3.11.11.1. Service Rooms and Storage Facilities

(1) In addition to the requirements of this Subsection, *service rooms* shall comply with the requirements of Sentences 3.6.2.1.(5), 3.6.2.1.(7) and 3.6.2.1.(8) and Articles 3.5.3.3. and 3.6.2.2.

(2) Where compressed chlorine gas is used as a pool water disinfectant, the cylinders or containers of gas shall be located in a *service room* that,

(a) except as provided in Sentences 3.1.9.4.(3) to (7), is separated from the remainder of the *building* by a 1 h *fire separation* that is substantially gas tight,

(b) is designed for the sole purpose of containing all installed pressurized chlorine gas apparatus and piping and storing all chlorine gas containers or chlorine gas cylinders that are individually secured against toppling,

(c) is located at or above ground level,

(d) is provided with an *exit* door opening to the outdoors,

(e) has screened openings to the outdoors with at least one opening located within 150 mm from the floor and at least one opening located within 150 mm from the ceiling, each opening being 2% of the area of the floor,

(f) is equipped with emergency mechanical ventilation capable of producing at least 30 air changes per hour, taking suction at a maximum of 900 mm above the floor level and discharging at least 2 500 mm above ground level directly to the outdoors, and

(g) contains a platform weigh scale of at least 135 kg capacity for each chlorine cylinder in use.

(3) Storage facilities shall be provided for the safe storage of all chemicals required in pool operations.

(4) The storage facilities shall be ventilated and shall be equipped with a water hose connection and a floor drain.

(5) *Service rooms* and storage facilities, including rooms and facilities that contain electrical or mechanical equipment or chemicals or chemical feeders, shall be equipped with a secure locking device.

Section 3.12. Public Spas

3.12.1. General

3.12.1.1. Application

(1) This Section applies to the design and *construction* of site-assembled *public spas* and factory-built *public spas*.

(2) If material alterations to a *public spa* or the equipment installed in a *public spa* affect the bottom slope, the water volume or the capacity of the water circulation system, the adversely affected portions shall comply with the requirements of this Division.

(3) Except as provided in Sentence (4), if material alterations or repairs concern any pool fitting that passes water or air, or both, in or out of the pool tank, the affected fitting shall comply with Sentences 3.11.8.1.(20) and 3.12.4.1.(4) to (10).

(4) If the material alterations or repairs concern a fitting cover or grille, the affected fitting cover or grille shall comply with Sentences 3.12.4.1.(7) to (10).

(5) For the purposes of this Section, every reference to a *public pool* or a *recirculation system* in a definition in Article 1.4.1.2. of Division A, or a Sentence or Clause in Section 3.11. that is made applicable to *public spas* by this Section, is deemed to be a reference to a *public spa* or water circulation system, respectively.

3.12.2. Public Spa and Deck Design and Construction Requirements

3.12.2.1. Construction Requirements

(1) In addition to the requirements of this Subsection, *public spas* shall comply with the requirements of Sentences 3.11.3.1.(13) to (17), (19), (20) and (22) and Clause 3.11.3.1.(24)(a).

(2) A *public spa* shall be constructed to have a water depth of not more than 1 200 mm.

(3) The slope of the bottom of any portion of a *public spa* shall not exceed 8%.

(4) A *public spa* shall be surrounded by a hard-surfaced *pool deck* that,

(a) shall have a minimum clear deck space of not less than 1.8 m at the main entrance point,

(b) shall have a clear deck space of 900 mm on all sides, except as required by Clause (a) and permitted by Sentence (5),

(c) shall be sloped away from the pool to waste drains or to adjacent lower ground at a slope of between 2% and 4%, in the case of an outdoor *public spa*, and

(d) shall be impervious and sloped away from the pool to waste drains at a slope of between 1% and 4%, in the case of an indoor *public spa*.

(5) One section of the hard-surfaced *pool deck* that does not exceed 25% of the perimeter of the *public spa* may have a minimum clear deck space of not more than 300 mm if,

(a) the *public spa* has an area less than 6 m^2, and

(b) the *public spa* has no interior dimension more than 2.5 m.

(6) The maximum depth of water to a seat or bench in a *public spa* shall be 600 mm.

(7) If a set of steps is provided for entry into and egress from the *public spa* water, the steps,

(a) shall be equipped with a handrail,

(b) shall have a non-slip surface, and

(c) shall have a band of contrasting colour along the entire juncture of the side and top of the edges.

(8) Every *public spa* shall be provided with dressing rooms, water closets and shower facilities that are conveniently available on the premises.

(9) Except where no space is provided between ladder treads and the spa wall, the space between the spa wall and submerged portions of any treads of a ladder for entry into and egress from the water shall be not more than 150 mm and not less than 75 mm.

3.12.3. Ramps and Access into Public Spas

3.12.3.1. Ramps into Public Spas

(1) Not more than 50% of the total perimeter of a *public spa* may be replaced by one or more ramps that permit a bather seated in a wheelchair to enter the water with or without the wheelchair.

(2) If a *public spa* has one or more ramps described in Sentence (1), the *public spa* shall comply with Article 3.11.5.1. and Sentences 3.11.5.2.(3) and (4).

3.12.3.2. Access into Public Spas

(1) Where more than one *public spa* is provided within a *suite* located on a *storey* that is required by Article 3.8.2.1. to have a *barrier-free* path of travel, a *barrier-free* access described in Sentence (2) shall be provided to at least one *public spa*.

(2) *Barrier-free* access for entry into and egress from a *public spa* shall be provided by,

(a) a ramp conforming to Article 3.12.3.1.,

(b) a pool lift conforming to the manufacturer's specifications and installation instructions and conforming to Sentences 3.11.3.3.(2) to (6), or

(c) a transfer wall conforming to Sentences (3) to (5).

(3) A transfer wall providing *barrier-free* access for entry into and egress from a *public spa* shall,

(a) have a height not less than 405 mm and not more than 485 mm measured from the *pool deck*,

(b) have a depth of at least 300 mm and not more than 400 mm,

(c) be slip-resistant and have edges that are rounded, and

(d) have at least one grab bar that,

(i) is perpendicular to the pool and extends the full depth of the transfer wall,

(ii) is located not less than 100 mm and not more than 150 mm above the transfer wall,

(iii) has a clearance of at least 610 mm on both sides,

(iv) complies with Clauses 3.8.3.8.(7)(a) and (b), and

(v) is made of a slip-resistant material.

(4) The deck area required to make a lateral transfer to the transfer wall shall,

(a) be outside and adjacent to the *barrier-free* path of travel described in Sentence (1),

(b) have no obstructions at the side of the transfer wall serving the transfer space,

(c) have a clear space of 900 mm by 2 200 mm, and

(d) have a slope less than 2% provided at the base of the transfer wall surface.

(5) The deck area described in Clause (4)(c) shall be centred on,

(a) the grab bar where one grab bar is provided, or

(b) the clear space between the grab bars where more than one grab bar is provided.

3.12.4. Water Circulation for Public Spas

3.12.4.1. Water Circulation Systems

(1) In addition to the requirements of this Subsection, the water circulation system of a *public spa* shall comply with the requirements of Sentences 3.11.8.1.(2), (3), (6), (7), (9), (10), (11), (13) and (20).

(2) A *public spa* shall be equipped with a water circulation system that is capable of filtering, disinfecting and passing the *public spa* water through the *public spa* with a turnover period of not more than,

(a) 30 minutes for a *public spa* with a volume of water that exceeds 6 m^3,

(b) 20 minutes for a *public spa* with a volume of water that exceeds 4 m^3 but does not exceed 6 m^3, or

(c) 15 minutes for a *public spa* with a volume of water that does not exceed 4 m^3.

(3) If cartridge-type filters are used for a *public spa*, the filters shall be a surface-type that is designed for a maximum flow rate of 0.27 L/s/m^2 effective filter area.

(4) Except as provided in Sentence (6), every circulation system in a *public spa* shall be served by a minimum of two suction or gravity outlets,

(a) that are interconnected to a full size manifold, and

(b) except as provided in Sentence (5), that are separated by a clear distance of not less than 900 mm.

(5) If compliance with Clause (4)(b) is impracticable because of dimensional restrictions at the bottom of the *public spa*, the outlets may be located on two different planes of the *public spa* if,

(a) at least one of the outlets through which the *public spa* can be emptied to a full-size manifold is located on the bottom of the *public spa*, and

(b) the bottom of all outlets, other than skimmers, are not more than 75 mm from the floor of the *public spa*.

(6) A circulation system in a factory-built *public spa* may be served by a built-in suction or gravity outlet with multiple openings that are connected to a full-size manifold.

(7) All fittings at or below the water surface that allow water or air or both to be passed to or from the *public spa* shall be securely held in place by corrosion resistant fastening that requires a tool for removal and is galvanically compatible with the fittings and grilles or covers.

(8) Except as provided in Sentence (9), all suction or gravity fittings installed at or below the water line of a *public spa* shall,

(a) have a maximum opening of 7 mm in one direction, and

(b) be designed so that the flow of water through the openings does not exceed 0.45 m/s.

(9) Sentence (8) does not apply to suction and gravity outlets that are equipped with anti-entrapment covers that comply with the requirements of ASME A112.19.8, “Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs”.

(10) The calculation of water velocities for the purposes of Clause (8)(b) and Sentences (11) and (12) and the calculation of water flow rates for the purposes of Sentence (9) shall be based on the assumption that all possible sources of suction flow are present at the same time.

(11) The water velocity in a suction pipe shall not exceed 1.8 m/s.

(12) The water velocity in a pressure pipe shall not exceed,

(a) 3.0 m/s for plastic piping, and

(b) 1.8 m/s for copper piping.

(13) Every suction system that serves a *public spa* shall be equipped with a vacuum relief mechanism that shall include,

(a) a vacuum release system,

(b) a vacuum limit system, or

(c) other engineered systems that are designed, constructed and installed to conform to good engineering practice appropriate to the circumstances.

(14) Equipment shall be installed to continuously disinfect the water in a *public spa* by means of a chlorination, hypochlorination or bromination system that is capable of regulating the dosage of chlorine or bromine.

(15) If a two-speed pump is utilized for a *public spa*, the filter and heater shall be sized to accommodate the maximum pump output, without exceeding the manufacturer's design flow rate of the filter element or heater and without by-passing the filter element.

(16) A *public spa* equipped with hydro-massage jet fittings shall be provided with a timing device,

(a) that controls the period of operation of the jet pump, and

(b) that is placed in a location where the user must exit the *public spa* to reset the timer.

(17) A *public spa* water heater shall be equipped with an upper limit cut-off device,

(a) that is independent of the normal *public spa* water temperature thermostat, and

(b) that limits the maximum water temperature of the *public spa* to 40°C.

(18) A *public spa* shall be equipped with a water circulation system that is capable of both completely and partially draining and refilling the *public spa* water.

3.12.5. Emergency Provisions for All Public Spas

3.12.5.1. Lighting and Emergency Provisions

(1) In addition to the requirements of this Subsection, *public spas* shall comply with the requirements of Sentences 3.11.10.1.(1) to (6).

(2) An emergency telephone directly connected to an emergency service or to the local telephone utility shall be installed within 30 m of the *public spa*.

(3) All pumps used in a *public spa* shall be capable of being deactivated by an emergency stop button that is,

(a) clearly labelled, and

(b) located at a point that is,

(i) readily accessible to and within sight of persons using the *public spa*, and

(ii) within 15 m of the *public spa*.

(4) The emergency stop button required in Sentence (3) shall,

(a) be a switch separate from the *public spa*'s timing device,

(b) activate an audible and a visual signal when used, and

(c) have an emergency sign conforming to Sentence 3.11.10.1.(14).

(5) If a *public spa* and *public pool* are located in the same room or space, the emergency stop buttons required in Sentences (3) and 3.11.10.1.(12) shall deactivate all pumps serving the *public spa* and *public pool*.

3.12.6. Service Rooms and Storage for All Public Spas

3.12.6.1. Service Rooms and Storage Facilities

(1) *Service rooms* and storage facilities for all *public spas* shall comply with the requirements of Article 3.11.11.1.

Section 3.13. Rapid Transit Stations

3.13.1. Scope and Definitions

3.13.1.1. Scope

(1) Except as provided in this Section the requirements in this Division apply to *rapid transit stations*.

3.13.1.2. Definitions

(1) In this Section:

Ancillary space means the rooms or spaces in the station used only by the transit agency to house or contain operating, maintenance or support equipment and functions, but does not include booths and kiosks used by the transit agency or *service rooms*.

Central supervising station means the operations centre where the transit agency controls and co-ordinates the system-wide movement of passengers and vehicles and from which communication is maintained with supervisory and operating personnel of the transit agency and with participating agencies when required.

Crush load means the total of the seating capacity and the standing capacity of a car where,

(a) the seating capacity is the number of seats in a car, and

(b) the standing capacity is 0.2 m^2 per person for the standing area which is measured 300 mm in front of the seats.

Egress capacity means the number of people able to travel from or through a type of egress facility in a specified period of time.

Entraining load means the number of passengers boarding the train at a station.

Fare-paid area means that portion of a *rapid transit station* to which access is gained by a pass or by paying a fare.

Fare-paid area control means the point where passengers enter or leave the *fare-paid area*.

Link load means the number of passengers on board the train(s) travelling between two stations.

Maximum calculated train load means the *crush load* per car multiplied by the maximum number of cars per train in the peak period.

Peak direction means, for each route, the direction of train travel having the largest passenger flow volume based on the sum of the incoming *link load* plus the *entraining load* per peak hour.

Protected route means that portion of a *means of egress* that starts at the point where passengers would not be vulnerable to exposure from a train fire and that leads to the exterior of the station or through an *exit* to an adjacent *building*.

Public area means the public circulation areas in a *rapid transit station* providing pedestrian access to and from trains.

Rapid transit station means a *building* or part of a *building* used for the purpose of loading and unloading passengers of a *rapid transit system* but does not include open air shelters at street level.

Rapid transit system means an electrified transportation system, utilizing guidance methods involving positive mechanical contact with the fixed way operating on a right-of-way for the mass movement of passengers.

3.13.2. Construction Requirements

3.13.2.1. Requirements for Stations

(1) Except as provided in this Subsection, the requirements in Subsections 3.2.1. and 3.2.2. do not apply to a *rapid transit station*.

(2) The requirements in Sentence (3) shall apply to,

(a) a *rapid transit station* erected entirely below the adjoining finished ground level, and

(b) the underground portion of a *rapid transit station*.

(3) Except as permitted in Sentence (4), an underground station or an underground portion of a station in Sentence (2) shall be of *noncombustible construction*, and,

(a) floor assemblies shall be *fire separations* having a *fire-resistance* rating not less than 2 h,

(b) roof assemblies below ground level, shall have a *fire-resistance rating* not less than 2 h, but a *fire-resistance rating* is not required where steel tunnel liners are left in place to form part of the assembly and the tunnel liners are in direct contact with *soil*, and

(c) all *loadbearing* walls, columns and arches shall have a *fire-resistance* rating not less than that required for the supported assembly.

(4) An interior stair extending to street level is permitted to be protected by a *combustible* roof.

(5) Where a *rapid transit station* is erected above and below the adjoining finished ground level, the above ground portion of the station shall be of *noncombustible construction* and shall conform to the requirements in Sentence (10).

(6) Where a *rapid transit station* is erected entirely above the adjoining finished ground level and is a stand-alone *building*, the station shall be of *noncombustible construction* and shall conform to the requirements in Sentence (11).

(7) Openings for stairways and escalators used by passengers are permitted to penetrate the *fire separations* required in Sentences (2) to (6).

(8) Elevator shafts are permitted to penetrate the *fire separations* required in Sentences (2) to (6) provided they are enclosed by,

(a) a *fire separation* having a *fire-resistance rating* not less than 1 h, or

(b) wired glass assemblies conforming to MMAH Supplementary Standard SB-2, “Fire Performance Ratings”.

(9) Openings for other than stairways, escalators or elevators are permitted to penetrate the *fire separations* required in Sentences (2) to (6) provided the openings are protected by a *closure* having a *fire-protection* rating not less than 45 min.

(10) The *building* shall be of *noncombustible construction* and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less 1 h,

(c) roof assemblies shall have a *fire-resistance rating* not less than 1 h, and

(d) all *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(11) Except as provided in Sentence (12), the *building* shall be of *noncombustible construction*, and,

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h,

(c) roof assemblies shall have a *fire-resistance rating* not less than 1 h, and

(d) all *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

(12) A *building* classified as Group A, Division 2 *occupancy* that is not more than 1 *storey* in *building height*, and in which the *building area* is not more than 3 200 m^2 if not *sprinklered*, or 6 400 m^2 if *sprinklered*, is permitted to be constructed with a roof of *heavy timber construction* and have columns of *heavy timber construction*.

3.13.3. Safety Requirements Within Stations

3.13.3.1. Application

(1) Except as provided in this Subsection and Subsection 3.13.4., the requirements in Subsections 3.3.1. and 3.6.2. apply to a *rapid transit station*.

(2) A door in a *fire separation* is permitted to be equipped with pivot hinges in conformance with NFPA 80, "Fire Doors and Other Opening Protectives".

(3) The requirements in Subsection 3.4.4. for *fire separation* of *exits* do not apply in a *rapid transit station*.

(4) Except as provided in Sentence (5), the requirements in Sentence 3.4.6.16.(1) for doors to be readily opened from the inside apply to required *exit* doors in a *rapid transit station*.

(5) Where a group of two or more doors serves as a single *exit* facility, only one door in the group is required to comply with Sentence 3.4.6.16.(1).

(6) A door that is required to be readily opened in Sentence (4) or (5) shall have a sign attached to it that,

(a) displays the words **EMERGENCY EXIT** with the letters not less than 25 mm high, and

(b) is visible from the *exit* approach.

3.13.3.2. Booths and Kiosks

(1) Booths and kiosks that are not more than 20 m^2 in area and are used only by the transit agency for fare collection, dissemination of information or similar non-*mercantile occupancies* shall be of *noncombustible construction* and are not required to be separated from the remainder of the *floor area* by a *fire separation*.

(2) Booths and kiosks that are more than 20 m^2 in area and are used only by the transit agency for fare collection, dissemination of information or similar non-*mercantile occupancies* shall be,

(a) *sprinklered*, and

(b) separated from the remainder of the *floor area* by a *fire separation* of *noncombustible construction* that is not required to have a *fire-resistance rating*.

(3) A door acting as a *closure* in the *fire separation* in Sentence (2) is not required to be equipped with a self-closing device.

3.13.3.3. Service Rooms and Ancillary Spaces

(1) An *ancillary space* in a *rapid transit station* shall be separated from the remainder of the *floor area* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(2) Except as provided in Sentence (3), a door opening from a *service room* onto a *means of egress* in a *rapid transit station* shall be located not less than 5 m from an escalator balustrade and from the top and bottom riser of a flight of stairs used as a *means of egress* from the *rapid transit station*.

(3) The requirements in Sentence (2) do not apply where,

(a) the *service room* is *sprinklered*, or

(b) there is a vestibule between the *service room* and the *means of egress*.

(4) Where a door from a *service room* opens onto a *means of egress* less than 5 m wide,

(a) the *service room* shall be *sprinklered*, or

(b) there shall be a vestibule between the *service room* and the *means of egress*.

3.13.3.4. Leased Areas

(1) All leased areas within a *rapid transit station* shall be,

(a) *sprinklered*, and

(b) separated from the remainder of the *floor area* by a *fire separation* of *noncombustible construction* that is not required to have a *fire-resistance rating*.

(2) A door acting as a *closure* in the *fire separation* in Clause (1)(b) is not required to be equipped with a self-closing device.

(3) Where leased areas are located on opposite sides of a *means of egress*, the width of the *means of egress* shall not be reduced to less than 5 m.

(4) Except as provided in Sentence (5), where the leased area on any floor level exceeds 15% of the *public area* on that level, the *public area* shall be *sprinklered*.

(5) In a *rapid transit station* that is erected entirely above the adjoining finished ground level and is a stand-alone *building*, where the leased area on any floor level exceeds 20% of the *public area* on that level, the *public area* shall be *sprinklered*.

(6) In determining the leased area in Sentences (4) and (5), it is not necessary to include a leased area that is separated from the *public area* by a *fire separation* having a *fire-resistance rating* not less than,

(a) 2 h where the leased area contains a *mercantile* or *medium hazard industrial occupancy*, or

(b) 1 h where the leased area contains any other *occupancy*.

(7) A leased area is permitted on a platform level provided it is,

(a) located not less than 5 m from the platform edge,

(b) located not less than 5 m from an egress facility, and

(c) not located in a dead end portion of the platform.

3.13.3.5. Vehicle Terminal

(1) Where an enclosed terminal serves vehicles powered by combustible fuels, and the terminal has direct access to a *rapid transit station*,

(a) the terminal shall be *sprinklered*, and

(b) the terminal shall be separated from the *rapid transit station*,

(i) by a *fire separation* having a *fire-resistance rating* not less than 1 h, or

(ii) by wired glass assemblies conforming to MMAH Supplementary Standard SB-2, "Fire Performance Ratings", with wired glass doors equipped with self-closing devices.

(2) Doors in the *fire separation* or in the wired glass assembly in Clause (1)(b) are not required to have latches where close spaced sprinkler protection is provided on the station side.

3.13.3.6. Access to Adjacent Building

(1) Where an access is provided between a *rapid transit station* and an adjacent *building*, the station and the *building* shall be separated by a *fire separation* having a *fire-resistance rating* not less than 2 h.

(2) The access in Sentence (1) shall be through a vestibule that is separated from the station and from the *building*,

(a) by a *fire separation* having a *fire-resistance rating* not less than 1 h, or

(b) by wired glass assemblies conforming to MMAH Supplementary Standard SB-2, "Fire Performance Ratings", with wired glass doors equipped with self-closing devices.

(3) The vestibule doors in Sentence (2),

(a) are not required to be equipped with latches, and

(b) shall swing in the direction of travel from the *rapid transit station*.

(4) Close spaced sprinkler protection shall be provided on each side of all vestibule doors.

(5) The vestibule shall not contain an *occupancy*.

(6) Where an access is provided between a *rapid transit station* and an adjacent *building*, and the *building* is regulated by the provisions of Subsection 3.2.6. or 3.2.8., these provisions are not required in the *rapid transit station*.

3.13.3.7. Emergency Lighting

(1) Emergency lighting shall be provided to average levels not less than 10 lx at floor or tread level in *public areas* in a *rapid transit station*.

(2) An emergency power supply conforming to Subsection 3.2.7. shall be provided to maintain the emergency lighting required in Sentence (1) for a period of 30 min after a power failure.

3.13.4. Means of Egress

3.13.4.1. Occupant Load

(1) The occupant load for *public areas* within a *rapid transit station* shall be,

(a) determined in conformance with this Subsection, and

(b) based on peak hour patronage as projected for design of the transit system.

(2) The platform occupant load for each platform in a *rapid transit station* shall be the greater of the a.m. or p.m. peak period loads calculated in accordance with Sentences (3) to (5).

(3) The a.m. and the p.m. peak period occupant loads for each platform shall be based on the simultaneous evacuation of the *entraining load* and the *link load* for that platform.

(4) The *entraining load* for each platform shall be the sum of the *entraining loads* for each track serving that platform and the *entraining load* for each track shall be based on the *entraining load* per train headway multiplied by,

(a) a factor of 1.3 to account for surges, and

(b) in the *peak direction* for each route, an additional factor of 2 to account for a missed headway.

(5) The *link load* for each platform shall be the sum of the *link loads* for each track serving that platform and, except as provided in Sentence (6), the *link load* for each track shall be based on the *link load* per train headway multiplied by,

(a) a factor of 1.3 to account for surges, and

(b) in the *peak direction* for each route, an additional factor of 2 to account for a missed headway.

(6) The maximum *link load* at each track shall be the *maximum calculated train load*.

3.13.4.2. General Requirements

(1) Except as provided in Sentence (2), escalators conforming to the requirements of Sentences 3.13.4.5.(3) and 3.13.4.6.(1) shall be acceptable as part of a required *means of egress* in a *rapid transit station*.

(2) Escalators forming part of a required *means of egress* shall not comprise more than one-half of the required *egress capacity* from any one level.

(3) *Horizontal exits* conforming to Sentence (4) may provide all of the required *egress capacity* from a *rapid transit station*.

(4) *Horizontal exits* to any one *building* shall not comprise more than one-half of the required *egress capacity* from any area within a *rapid transit station*.

(5) A *protected route* shall be provided with emergency ventilation conforming to Subsection 3.13.7.

(6) In an aboveground unenclosed station, the *protected route* is permitted to begin at the point of leaving the platform.

(7) In an enclosed or underground station, the protection for the *protected route* shall consist of,

(a) a *fire separation* having a *fire-resistance rating* not less than 1 h,

(b) construction having a *fire-resistance rating* not less than 1 h, or

(c) wired glass assemblies conforming to MMAH Supplementary Standard SB-2, “Fire Performance Ratings”.

3.13.4.3. Number and Location of Means of Egress

(1) Each platform in a *rapid transit station* shall be served by no fewer than two *means of egress* that are independent of and remote from each other from the platform to the exterior of the station.

(2) Where a continuous level walking surface is provided between two adjacent platforms, they may be considered as one platform for the purpose of conforming to this Subsection.

(3) At the platform level, the distance separating the egress facilities in Sentences (1) and (2) shall be the greater of one car length or 25 m.

(4) Except as required in Sentence (1), two or more *means of egress* are permitted to converge in conformance with Sentence 3.13.4.4.(6).

(5) *Means of egress* from platforms shall be located so that the travel time from the most remote point on a platform to a *protected route* does not exceed 4 min based on travel speeds of,

(a) 38 m/min for horizontal travel, and

(b) 21 m/min for vertical rise.

3.13.4.4. Egress Capacity

(1) For a *rapid transit station*, the required aggregate *egress capacity* from each platform shall be determined by dividing the platform occupant load determined in accordance with Sentences 3.13.4.1.(2) to (6) by the required platform clearance time determined in accordance with Sentence (3).

(2) Where two platforms are considered as one platform as provided in Sentence 3.13.4.3.(2), the required *egress capacity* for each platform shall be determined separately.

(3) The required platform clearance time shall be 4 min less the travel time between the platform and the entry into the *protected route* based on travel speeds of,

(a) 38 m/min for horizontal travel, and

(b) 21 m/min or vertical rise.

(4) For each *means of egress*, the required *egress capacity* at the platform shall be maintained for the entire length of the *means of egress*.

(5) Except as provided in Sentence (6), where two or more *means of egress* converge, the required *egress capacity* beyond that point shall be cumulative.

(6) The *egress capacity* in Sentence (5) need not be cumulative after converging where it can be shown that the platform clearance time in Sentence (3) is not exceeded.

3.13.4.5. Width of Means of Egress

(1) Except as otherwise required in this Subsection, the required width of *means of egress* serving platforms in a *rapid transit station* shall be determined based on,

(a) the required *egress capacity* determined in conformance with Article 3.13.4.4., and

(b) the pedestrian flow rate for the type of *means of egress* facility listed in Table 3.13.4.5.

Table 3.13.4.5.
Pedestrian Flow Rates

Forming Part of Sentence 3.13.4.5.(1)

Item	Column 1	Column 2	Column 3
	Type of Egress Facility	Flow Rate, pedestrians per minute	Flow Rate, pedestrians per minute per metre width
1.	Platforms	N/A	80
2.	Corridors	N/A	80
3.	Doorways	N/A	80
4.	Gates	N/A	80
5.	Ramps not more than 4%	N/A	80
6.	Ramps more than 4%	N/A	55(1)
7.	Stairs	N/A	55(1)
8.	Escalators moving in direction of egress travel, nominal width		
	: 1 200 mm	100	N/A
	: 800 mm	80	N/A
	: 600 mm	60	N/A
9.	Turnstiles, height of bar		
	: not more than 900 mm	45	N/A

	: more than 900 mm	25	N/A

Notes to Table 3.13.4.5.:

(1) Flow rate is applied vertically.

(2) In calculating the required width of corridors and ramps with a grade of less than 4%, 300 mm at each sidewall shall be added to the width determined based on required *egress capacity*.

(3) In calculating the required width of egress routes, one escalator at each level in a *rapid transit station* is deemed to be out of service and not available for egress purposes.

(4) Except as provided in Sentence (5), the minimum width of *means of egress* facilities serving platforms shall be,

(a) 1 750 mm for corridors and ramps,

(b) 1 750 mm for stairs,

(c) 430 mm for turnstiles,

(d) 500 mm for fare collection gates,

(e) 600 mm nominal width for escalators, and

(f) 900 mm for a door leaf.

(5) A second *means of egress* as required by Sentence 3.13.4.3.(1) is permitted to be not less than 1 100 mm wide.

(6) The minimum width of platforms shall be,

(a) 3.2 m for side platforms, and

(b) 6.4 m for island platforms.

(7) The minimum unobstructed width of platforms measured from the platform edge shall be 2.5 m.

3.13.4.6. Egress Facilities

(1) Escalators forming part of a required *means of egress* shall,

(a) where equipped to run reverse to the direction of egress travel, be capable of being stopped remotely and locally, and

(b) have a vertical rise not more than 12 m between floors or landings.

(2) Where electrically operated gates or turnstiles used for fare collection are intended to be used as part of a required *means of egress* from a *rapid transit station*, provision shall be made to release the gates or turnstiles in accordance with Sentence (4) to allow them to operate freely in the direction of egress travel.

(3) Where locked doors that prevent entry into a *fare-paid area* are to be used as part of a required *means of egress* from a *rapid transit station*, provision shall be made to release the doors in accordance with Sentence (4) to allow them to operate freely in the direction of egress travel.

(4) The release device required in Sentences (2) and (3) shall be installed as an ancillary device to the fire alarm system and shall release immediately,

(a) upon activation of the fire *alarm signal*,

(b) in the event of a power failure or ground fault, or

(c) upon actuation of a manually operated switch accessible to authorized personnel and located in,

(i) a fare collector's booth or kiosk at the station, or

(ii) the *central supervising station*.

(5) After release, the gates or turnstiles in Sentence (2) or the doors in Sentence (3) shall be capable of reactivation only by manual actuation of the switch in Clause (4)(c).

3.13.5. Fire Safety Provisions

3.13.5.1. Fire Alarm System

(1) Except as provided in this Subsection, a fire alarm system conforming to Subsection 3.2.4. shall be installed in a *rapid transit station*.

3.13.5.2. Exceptions

(1) Manual pull stations need not be installed in a *rapid transit station*.

(2) Audible signal appliances need not be installed in a *rapid transit station*.

3.13.5.3. Fire Detectors

(1) Except where the area is *sprinklered*, *fire detectors* shall be installed in every *service room*, *ancillary space*, leased space, booth and kiosk.

3.13.5.4. Central Supervising Station

(1) Each *rapid transit station* shall be monitored by a *central supervising station* conforming to CAN/ULC-S561, "Installation and Services for Fire Signal Receiving Centres and Systems".

3.13.5.5. Annunciators

(1) An annunciator shall be installed,

(a) in a location that is readily accessible to firefighters entering the *building*, and

(b) in the *rapid transit station*,

(i) in a designated collector's booth, or

(ii) within viewing distance of a designated collector's booth.

3.13.5.6. Annunciator Indication

(1) All fire alarm, *fire detectors*, valve switches and water flow indicator signals when activated in a *rapid transit station* shall be indicated on the annunciator at the station.

(2) The annunciator at a *rapid transit station* shall be monitored simultaneously at the *central supervising station*.

(3) Where a *means of egress* from a *rapid transit station* leads through an adjoining *building*, any *alarm signal* originating in the *building* within 2 *storeys* above a connection to the station shall,

(a) be indicated on the *rapid transit station* annunciator, and

(b) cause a message to flash a warning on a sign located in conformance with Sentence (4), that the *means of egress* shall not be used as an *exit* from the station.

(4) A sign required in Clause (3)(b) shall be located,

(a) at the doors from the *rapid transit station* to the adjoining *building*, and

(b) in the *means of egress* to the adjoining *building*, at the last point where there is a choice of direction to travel to at least one other *exit*.

3.13.5.7. Emergency Power

(1) An emergency power supply conforming to Article 3.2.7.8. shall be provided for the fire alarm system.

3.13.5.8. Communication Systems

(1) In a *rapid transit station*, a public address system shall be installed and shall include loudspeakers that,

(a) can be operated from the *central supervising station*,

(b) can be operated from the *rapid transit station* in which they are located, and

(c) designed and located so that voice messages can be heard intelligibly throughout the *public area* in a *rapid transit station*.

(2) A two-way communication system shall be installed in each *rapid transit station* with telephones located at,

(a) the collector's booth, and

(b) at each end of each platform.

(3) The telephones in Sentence (2) shall be provided with connections to the *central supervising station*.

3.13.5.9. Emergency Reporting Devices

(1) Emergency reporting devices shall be located on passenger platforms and throughout a *rapid transit station* such that the distance of travel from any point in the *public area* to such a device is not more than 90 m.

(2) The emergency reporting devices required in Sentence (1) are permitted to be public telephones with an emergency no charge capability and their location shall be plainly indicated by appropriate signs.

3.13.5.10. Sprinkler Systems

(1) Sprinkler systems shall conform with the requirements of Articles 3.2.5.13 to 3.2.5.16.

(2) In addition to the requirements of Subsection 3.13.3. the steel truss enclosure of an escalator shall be *sprinklered*.

(3) There shall be identification on a fire department connection for a sprinkler system in a *rapid transit station* to indicate that the connection is part of the station system.

3.13.5.11. Standpipe and Hose Systems

(1) A standpipe and hose system conforming to the requirements of Subsection 3.2.9. shall be installed in a *rapid transit station*, except as otherwise required or permitted in this Article.

(2) Where a *rapid transit station* includes more than one standpipe riser there shall be a cross-connection pipe having a diameter not less than 100 mm between each standpipe riser so that supplying of water through any fire department connection will furnish water throughout each riser.

(3) There shall be identification on a fire department connection for a standpipe system in a *rapid transit station* to indicate that the connection is part of the station system.

(4) Hose stations shall be located so that every portion of the *rapid transit station* can be reached by a hose stream and is within 3 m of a hose nozzle when the hose is extended.

(5) In addition to the requirements in Sentence (4), hose stations shall be located in each tunnel not more than 20 m from the end of the platform.

(6) The requirement for hose rack and fire hose in Sentence 3.2.9.4.(2) does not apply in a *rapid transit station*.

(7) Each hose station shall have a 38 mm hose connection and a 65 mm hose connection.

(8) All supply piping shall have a diameter not less than 100 mm.

3.13.6. Required Sanitary Facilities

3.13.6.1. Application

(1) Except as provided in this Subsection, Subsection 3.7.4. applies to a *rapid transit station*.

3.13.6.2. Washrooms Required

(1) Except as provided in Sentences (2) and (3), a washroom for each sex, containing at least one water closet and one lavatory, shall be provided in each *rapid transit station* for use by employees.

(2) Where the number of employees in a *rapid transit station* is not more than five, a washroom containing one water closet and one lavatory is permitted to be used by both sexes provided the door to the room can be locked from the inside.

(3) Where a *rapid transit station* is not staffed during operating hours, a washroom is not required in the station.

(4) In each *rapid transit station* located at the end of a line, a washroom for each sex, containing no fewer than three water closets and two lavatories, shall be provided for use by the public.

3.13.7. Emergency Ventilation

3.13.7.1. Application

(1) Every *rapid transit station* shall be provided with an emergency ventilation system conforming to NFPA 130, “Fixed Guideway Transit and Passenger Rail Systems”.

3.13.8. Barrier-Free Design

3.13.8.1. Application

(1) Except as provided in this Subsection, the requirements in Section 3.8. apply to *rapid transit stations*.

(2) A *rapid transit station* need not be provided with more than one *barrier-free* entrance described in Article 3.8.1.2.

(3) At least one *barrier-free* path of travel shall be provided from a *barrier-free* entrance,

(a) into the *fare-paid area*, and

(b) to each platform.

3.13.8.2. Exception

(1) Where an elevator is used to comply with the requirements of Article 3.3.1.7., the provisions of Clause 3.3.1.7.(1)(a) do not apply where the elevator system complies with Article 3.13.8.3.

3.13.8.3. Elevator Requirements

(1) Except as provided in Sentence (2), the elevator described in Article 3.13.8.2. shall be capable of providing transportation from each platform to a *barrier-free* entrance described in Article 3.8.1.2.

(2) Where it is necessary to change elevators to reach the entrance described in Sentence (1), the elevator system shall be designed so that not more than one change of elevator is required between,

(a) a platform and a *fare-paid area control*, and

(b) the *fare-paid area control* and the entrance.

3.13.8.4. Emergency Operation of Elevators

(1) Manual emergency recall operation shall be provided for all elevators.

(2) Key-operated switches for emergency recall described in Sentence (1) shall be provided and shall be located on the outside of each elevator shaft at the level of the *fare-paid area control*.

(3) In-car emergency service switches shall be provided in all elevator cars.

(4) Keys to operate the switches required in Sentences (2) and (3) shall be located at,

(a) the annunciator required in Clause 3.13.5.5.(1)(a), and

(b) the collector's booth designated in Clause 3.13.5.5.(1)(b).

3.13.8.5. Washrooms Required to be Barrier-Free

(1) A *barrier-free* path of travel shall be provided to the washrooms required in Article 3.13.6.2.

(2) Where a washroom required in Sentence 3.13.6.2.(1) contains only one water closet and one lavatory, the washroom shall be designed in conformance with the requirements in Article 3.8.3.12.

(3) Where a washroom required in Sentence 3.13.6.2.(1) contains more than one water closet, the washroom shall be designed in conformance with the requirements in Articles 3.8.3.8. to 3.8.3.11.

(4) The washroom required in Sentence 3.13.6.2.(2) shall be designed in conformance with the requirements in Article 3.8.3.12.

(5) The washrooms required in Sentence 3.13.6.2.(4) shall be designed in conformance with the requirements in Articles 3.8.3.8. to 3.8.3.11.

Section 3.14. Tents and Air-Supported Structures

3.14.1. Tents

3.14.1.1. Application

(1) Except as provided in this Subsection, tents are exempted from complying with the requirements of this Division.

3.14.1.2. General

(1) Except as provided in Sentence (2), the requirements of this Subsection shall apply to all tents.

(2) Articles 3.14.1.3., 3.14.1.7. and 3.14.1.8. do not apply to tents that,

(a) do not exceed 225 m^2 in ground area,

(b) do not exceed 225 m^2 in aggregate ground area and are closer than 3 m apart,

(c) do not contain bleachers, and

(d) are not enclosed with sidewalls.

3.14.1.3. Means of Egress

(1) Except as provided in Sentences (2) and (3), tents shall conform to Sections 3.3. and 3.4.

(2) A tent need not conform to Article 3.4.6.12. except where swing type doors are provided.

(3) Where the area between adjacent tents or a tent and the property line is used as a *means of egress*, the minimum width between stake lines shall be the width necessary for *means of egress*, but not less than 3 m.

3.14.1.4. Clearance to Other Structures

(1) Tents shall not be erected closer than 3 m to the property line.

(2) Except as provided in Sentences (3), (4) and (5), tents shall not be erected closer than 3 m to other tents or structures on the same property.

(3) A *walkway* between a *building* and a tent occupied by the public is permitted provided,

(a) the tent is not closer than 3 m from the *building*, and

(b) the *walkway* conforms to Article 3.2.3.19.

(4) Tents not occupied by the public need not be separated from one another, and are permitted to be erected less than 3 m from other structures on the same property, where such closer spacing does not create a hazard to the public.

(5) Tents located on fair grounds or similar open spaces, need not be separated from one another provided such closer spacing does not create a hazard to the public.

3.14.1.5. Clearances to Flammable Material

(1) The ground enclosed by a tent and for not less than 3 m outside of such structure shall be cleared of all flammable or *combustible* material or vegetation that will carry fire.

3.14.1.6. Flame Resistance

(1) Every tent, and tarpaulins, decorative materials, fabrics and films used in connection with tents, shall be certified to CAN/ULC-S109, “Flame Tests of Flame-

Resistant Fabrics and Films", or NFPA 701, "Fire Tests for Flame Propagation of Textiles and Films".

3.14.1.7. Bleachers

(1) Where bleachers are provided in tents, they shall be designed in conformance with Articles 3.3.2.8., 3.3.2.10. and Subsection 4.1.5.

3.14.1.8. Sanitary Facilities

(1) Except as provided in Sentence (3), the minimum number of water closets for tents shall be determined in accordance with Table 3.7.4.3.E.

(2) Article 3.7.4.17. applies to sanitary facilities in Sentence (1).

(3) Sanitary privies, chemical closets or other means for the disposal of human waste may be provided in lieu of toilet fixtures.

3.14.1.9. Provision for Firefighting

(1) Access shall be provided to all tents for the purpose of firefighting.

3.14.1.10. Electrical Systems

(1) The electrical system and equipment in a tent, including electrical fuses and switches, shall be inaccessible to the public.

(2) Cables on the ground in areas used by the public in a tent shall be placed in trenches or protected by covers to prevent damage from traffic.

3.14.2. Air-Supported Structures

3.14.2.1. Application

(1) Except as provided in this Subsection, the requirements of this Division apply to *air-supported structures*.

3.14.2.2. General

(1) *Air-supported structures* shall not be used for Groups B, C or Group F, Division 1 *major occupancies* or for classrooms.

(2) Except where no *fire separation* is required between *major occupancies*, *air-supported structures* shall contain not more than one *major occupancy*.

(3) Except as provided in Sentence (5), *air-supported structures* are exempt from complying with Articles 3.2.2.20. to 3.2.2.83., except for maximum *building* size.

(4) *Air-supported structures* may be designed with interior walls, *mezzanines*, or similar *construction*.

(5) Interior construction contained within *air-supported structures* must meet the construction requirements of Articles 3.2.2.20. to 3.2.2.83.

3.14.2.3. Spatial Separation

(1) Except as provided in Sentences (2), (3) and (4), *air-supported structures* shall not be erected closer than 3 m to other structures on the same property or to the property line.

(2) *Air-supported structures* not occupied by the public need not be separated from one another, and are permitted to be erected closer than 3 m from other structures on the same

property where such closer spacing does not create a hazard to the *building* occupants or the public.

(3) Except as provided in Sentence (4), an *air-supported structure* is permitted to be attached to another *building* provided the *building* to which it is attached,

(a) conforms to the requirements of other Parts of this Division based on the total *building areas* of the *air-supported structure* and the attached *building*,

(b) is *sprinklered*, and

(c) is separated from the *air-supported structure* by a *fire separation* having a *fire-resistance rating* of not less than 1 h.

(4) An *air-supported structure* is permitted to be attached to another *building* provided the *building* to which it is attached,

(a) has a *building area* not more than 200 m^2,

(b) conforms to the requirements of other Parts of the Code based on the *building area* of the attached *building*, and

(c) is *sprinklered* or separated from the *air-supported structure* by a *fire separation* having a *fire-resistance rating* of not less than 1 h.

3.14.2.4. Clearances to Flammable Material

(1) The ground enclosed by an *air-supported structure* and for not less than 3 m outside of such structure shall be clear of all flammable or *combustible* material or vegetation that will carry fire.

3.14.2.5. Flame Resistance

(1) *Air-supported structures* shall be constructed of material conforming to CAN/ULC-S109, "Flame Tests of Flame-Resistant Fabrics and Films", or NFPA 701, "Fire Tests for Flame Propagation of Textiles and Films".

(2) Materials for fabrics used in connection with *air-supported structures* are exempt from compliance with the requirements for *flame-spread ratings* for interior finishes in Subsection 3.1.13.

3.14.2.6. Emergency Air Supply

(1) An *air-supported structure* designed for an *assembly occupancy* with an *occupant load* of more than 200 persons shall have either an automatic emergency engine-generator set capable of powering one blower continuously for 4 h, or a supplementary blower powered by an automatic internal combustion engine.

3.14.2.7. Electrical Systems

(1) The electrical system and equipment in an *air-supported structure*, including electrical fuses and switches, shall be inaccessible to the public.

(2) Cables on the ground in areas used by the public in an *air-supported structure* shall be placed in trenches or protected by covers to prevent damage from traffic.

Section 3.15. Signs

3.15.1. Scope

3.15.1.1. Application

(1) Except as provided otherwise in Article 3.15.1.2. this Section shall apply to the erection of all signs.

3.15.1.2. Exceptions

(1) The following signs shall not be subject to the provisions of this Section,

(a) signs for regulating traffic or similar devices, legal notices or warnings at railroad crossings,

(b) signs in display windows including writing, representation, painting or lettering directly on the surface of any window or door, or other signs not affixed to the *building* interior,

(c) small signs displayed for the direction of the public including signs that identify rest rooms, freight entrances and such other similar directional signs,

(d) signs painted directly on a *building*, and

(e) incidental signs or other signs subject to municipal approval.

3.15.2. Alterations

3.15.2.1. Exceptions for Alterations

(1) The changing of movable parts of signs that are designed for changes, or the repainting of display matter shall not be deemed to be alterations.

3.15.3. Structural Requirements

3.15.3.1. Structural Design

(1) Except as provided in this Section, all sign structures shall be designed in accordance with Part 4.

3.15.4. Plastic Sign Facing Materials

3.15.4.1. Combustible Sign Faces

(1) Plastic materials used in the construction of sign faces shall,

(a) have an average burning rate not greater than 65 mm/min in sheets 1.5 mm thick when tested in accordance with ASTM D635, “Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position”,

(b) have an average burning rate not greater than 140 mm/min when tested in accordance with ASTM D568, “Rate of Burning and/or Extent and Time of Burning of Flexible Plastics in a Vertical Position”, and

(c) have a measurement of material thickness in accordance with Method B-Machinists’ Micrometer Without Ratchet of ASTM D374, “Thickness of Solid Electrical Insulation”.

(2) Except as provided in Sentence (3), where the *exterior cladding* of a wall is required to be *noncombustible*, a plastic sign face or a group of contiguous plastic sign faces may be placed over such cladding provided each such sign face or group of contiguous sign faces,

(a) does not exceed 30% of the wall area of the *storey* on which it is installed,

(b) does not exceed 15 m^2 in area or 1 200 mm in height at each *storey*, and

(c) when located above the *first storey*, is vertically separated from other plastic sign faces by 1 200 mm of *noncombustible construction* unless separated by a horizontal *noncombustible* projection such as a *canopy*, extending the full width of, and projecting at least 900 mm beyond the exterior sign face.

(3) Where a plastic exterior sign is mounted as a face on a metal sign box that is at least 200 mm in depth, the requirements of Sentence (2) need not apply provided the sign box is mounted on a *noncombustible* exterior wall.

(4) Notwithstanding the requirements of Sentence (5), the plastic portion of an interior sign placed over or forming part of an interior wall surface in corridors, covered or enclosed *walkways* at or above *grade* in *buildings* shall,

(a) not exceed 15% of the wall area in, or over which it may be installed,

(b) be supported by a device that will not detrimentally affect the *fire-resistance rating* of the interior wall to which it is attached or of which it may form a part, and encase the edges of the plastic sign face in metal,

(c) not be positioned or sized in such a manner that it is less than 600 mm from the vertical line separating two adjacent premises,

(d) be placed so that there is at least 600 mm vertical separation of *noncombustible* material between the top of the plastic sign surface and the ceiling surface,

(e) be permitted to have an increase of 100% in area required in Clause (a) and a decrease of 50% of the separation distances required in Clauses (c) and (d) if the area is *sprinklered*, and

(f) have a *flame-spreading rating* not more than 250.

(5) Signs in *exits* and underground *walkways* shall have a *flame-spread rating* not more than 25.

3.15.5. Location Restrictions

3.15.5.1. Obstructions not Permitted

(1) A sign shall not be located so as to obstruct openings required for light and ventilation, any required *means of egress* or required access for firefighting in accordance with Sentence 3.2.5.3.(2).

3.15.5.2. Clearance for Exterior Signs

(1) An exterior sign shall not be located so as to overhang a sidewalk or other pedestrian *walkway* unless the vertical distance, measured from the bottom of the overhanging portion of the sign to the surface of the sidewalk, is at least 2 400 mm.

(2) Except as provided in Sentence (3), a sign face shall not be located within 600 mm of the vehicular travelled portion of a private lane or roadway, or of a motor vehicle parking area, unless the minimum vertical distance between *grade* and the bottom of the overhanging sign face is at least 4.25 m.

(3) Where the height of all vehicles using any private road or parking area is permanently restricted, the vertical distance in Sentence (2) may be reduced to the amount of the actual height restriction, for as long as the said height restriction is in existence on the premises.

(4) A sign shall not be located in proximity to existing above ground electrical conductors, unless the sign meets the clearance requirements of Subsection 3.1.19.

Section 3.16. Shelf and Rack Storage Systems

3.16.1. Scope

3.16.1.1. Application

(1) The requirements of this Section apply to a *shelf and rack storage system*.

(2) The requirements of Subsection 3.2.8. do not apply to a *shelf and rack storage system* conforming to this Section.

(3) The requirements of Subsection 3.16.2. apply to a *shelf and rack storage system* for the storage of Class I, II, III and IV commodities as defined in NFPA 13, “Installation of Sprinkler Systems”.

(4) The requirements of Subsection 3.16.3. apply to a *shelf and rack storage system* for the storage of Group A, B and C plastics and rubber tires as defined in NFPA 13, “Installation of Sprinkler Systems”.

3.16.1.2. General

(1) A *shelf and rack storage system* shall not be designed for production, manufacturing, assembling, disassembling or ancillary administrative functions.

(2) A *shelf and rack storage system* may be designed for the storage, accessing, retrieval, packing and distribution of commodities.

(3) A *high hazard industrial occupancy* shall not contain a *shelf and rack storage system*.

(4) Except as required by Sentence 3.16.3.2.(3), a *shelf and rack storage system* shall not exceed 24 m in height.

3.16.1.3. Construction

(1) All structural components of a *shelf and rack storage system*, including posts, beams, decks, walkways, connections and their supports such as concrete slabs and *foundations*, shall be designed in accordance with Part 4.

(2) Except as required by Sentence 3.16.3.2.(2), platform and walkway levels shall be of,

(a) solid construction consisting of steel plate or steel roof decking with a top substrate that forms a serviceable floor area, or

(b) open construction consisting of steel grating or open steel floor planking.

(3) *Guards* and toe-boards shall be provided in accordance with Articles 3.3.1.17. and 3.3.5.8.

(4) Every platform or walkway level shall be provided with fire extinguishers installed in conformance with the Fire Code made under the *Fire Protection and Prevention Act, 1997*.

3.16.1.4. Signs

(1) A permanent sign shall be posted in a conspicuous location to indicate the maximum permissible *design loads* for each *shelf and rack storage system*.

(2) Permanent signs shall be posted in conspicuous locations with,

(a) the words **NO SMOKING** in black lettering not less than 50 mm high with a stroke not less than 12 mm on a yellow background, or

(b) a non-smoking symbol having a size not less than 150 mm by 150 mm.

3.16.1.5. Lighting

(1) Walkways and platforms shall be equipped to provide illumination to an average level not less than 50 lx at floor or tread level and at angles and intersections at changes of level where there are stairs or ramps.

(2) Emergency lighting on walkways, platforms, unenclosed egress stairs and *exits* providing *means of egress* shall conform to not less than,

(a) the illumination level in Sentences 3.2.7.3.(2) and (3), and

(b) the duration in Sentence 3.2.7.4.(1).

3.16.1.6. Sprinkler System

(1) An automatic sprinkler system conforming to this Article shall be installed in a *floor area* containing a *shelf and rack storage system*.

(2) The automatic sprinkler system shall be designed, constructed, installed and tested in conformance with NFPA 13, “Installation of Sprinkler Systems” or the appropriate NFPA sprinkler standard for the most severe hazard to which the storage system is exposed.

(3) Sprinkler protection shall be provided under all platforms and walkways.

(4) Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by *noncombustible* draft stops not less than 450 mm below the floors above.

(5) The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the *building* fire alarm system annunciator or where the *building* does not have a fire alarm system, to notify the person controlling the operation of the *building* for each of the situations listed in Sentence 3.2.4.10.(3).

(6) The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

(7) The notification to the person controlling the *building* and the fire department referred to in Sentences (5) and (6) shall be provided in accordance with Sentence 3.2.4.8.(4).

(8) A permanent sign shall be posted, at or near the sprinkler control valve, containing,

(a) the word **NOTICE** in contrasting letters,

(b) a description of the commodity class as defined in NFPA 13, “Installation of Sprinkler Systems”, and

(c) the sprinkler design criteria used for the *shelf and rack storage system*.

3.16.1.7. Exits and Means of Egress

(1) Except as permitted in Sentences (2) and (3), every walkway or platform level shall be provided with no fewer than two *exits* conforming to Section 3.4.

(2) An *access to exit* from an elevated platform level may be provided by means of open unenclosed stairs serving,

(a) not more than four platform levels, the highest of which shall be not more than 12 m above the main floor, where the *shelf and rack storage system* is intended for the storage of Class I, II, III and IV commodities, as defined in NFPA 13, “Installation of Sprinkler Systems”, and

(b) not more than two platform levels, where the *shelf and rack storage system* is intended for the storage of Group A, B and C plastics and rubber tires, as defined in NFPA 13, “Installation of Sprinkler Systems”.

(3) Any single platform or walkway in a *shelf and rack storage system* may be served by a single unenclosed stair leading to the platform or walkway level immediately below provided,

(a) the platform or walkway does not exceed 200 m^2 in area,

(b) the travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m, and

(c) the platform or walkway below is provided with two separate egress stairs or *exits*.

(4) The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m.

(5) The maximum travel distance on an elevated platform to an *exit* serving that platform shall not exceed 45 m.

(6) Except as permitted in Sentence (7), the maximum travel distance from the bottom of an unenclosed stair to an *exit* along a main aisle on the ground floor level shall not exceed 45 m.

(7) Where the travel distance in Sentence (6) exceeds 45 m,

(a) an egress system serving the *shelf and rack storage system* shall be designed on the basis of a time-based egress analysis using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the *shelf and rack storage system*,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the *shelf and rack storage system*, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each at-level conveyor cross-over shall be accorded a time of 5 seconds, and

(vi) a safety factor of 1.5 shall be used in calculating the total egress time,

(b) the total egress time shall be calculated using the following formula:

$$\text{Total Egress Time} = (H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) \cdot 1.5 \text{ (in seconds)}$$

where:

H_p = horizontal travel distance on the *shelf and rack storage system*, in metres,

V_p = vertical travel distance on the *shelf and rack storage system*, in metres,

H_m = horizontal travel distance on the main floor, in metres,

N_{lg} = number of lift gates in the *means of egress*,

N_{lc} = number of at-level cross overs in the *means of egress*,

(c) the total egress time from any point in the *shelf and rack storage system* shall be a maximum of 4 minutes,

(d) a fire alarm and detection system conforming to Subsection 3.2.4. shall be installed in the *building*,

(e) *smoke detectors* shall be provided under all solid decking and walkways,

(f) clearly identified and easily accessible pull stations shall be provided at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(g) the *occupant load* on each level of the *shelf and rack storage system* shall not exceed 10 persons per egress stair.

(8) A dead end aisle shall not exceed 9 m where the platform or walkway is provided with two or more egress facilities.

(9) An aisle serving a *shelf and rack storage system* shall have a clear-aisle width of not less than 760 mm.

(10) Conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway shall not reduce the clear-aisle width required in Sentence (9).

(11) Where *exits* are provided to comply with Sentence 3.4.2.5.(2), main aisles serving the *shelf and rack storage system* on the ground floor, leading from egress stairs directly to an *exit*, shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

(12) Where a lift-gate is incorporated along an egress route,

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a positive lock when open, and

(c) it shall be designed to automatically stop the conveyor belt that it serves when the lift-gate is open.

(13) Where an at-level conveyor cross-over is incorporated along an egress route,

(a) not more than two at-level conveyor cross-overs shall be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the at-level cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each at-level conveyor cross-over to provide a walking surface,

(d) at least two inserts not less than 100 mm wide shall be arranged symmetrically between the handrails serving the at-level cross-over,

(e) inserts shall be sized to support loads specified in Part 4,

(f) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each at-level cross-over, and

(g) stairs approaching at-level conveyor cross-overs shall be marked to indicate that they are readily identifiable as part of the egress route.

3.16.2. Storage of Class I, II, III and IV Commodities

3.16.2.1. Application

(1) The requirements in this Subsection apply to a *shelf and rack storage system* intended for the storage of Class I, II, III and IV commodities as defined in NFPA 13, "Installation of Sprinkler Systems".

3.16.2.2. Construction

(1) Where the height of a *shelf and rack storage system*, measured from the floor supporting the system to the topmost portion of the shelf, exceeds 18 m,

(a) a fire alarm and detection system conforming to Subsection 3.2.4. shall be installed with,

(i) pull stations located at all *exit* doors including *exit* doors serving elevated decks and walkways, and

(ii) *smoke detectors* located, at the ceiling of all rooms and areas containing the *shelf and rack storage system*, within *exit* stair enclosures at the top, and at every third level of elevated deck or walkway, and

(b) the fire alarm and detection system required by Clause (a), shall be designed to notify the fire department upon activation, and

(c) the *shelf and rack storage system* shall be designed only for the storage of Class I, II and III commodities as defined in NFPA 13, "Installation of Sprinkler Systems".

3.16.3. Storage of Group A, B and C Plastics and Rubber Tires

3.16.3.1. Application

(1) The requirements in this Subsection apply to a *shelf and rack storage system* intended for the storage of Group A, B and C plastics and rubber tires as defined in NFPA 13, "Installation of Sprinkler Systems".

3.16.3.2. Construction

(1) A *shelf and rack storage system* intended for the storage of rubber tires shall conform to,

(a) Article 3.3.6.5., and

(b) the Fire Code made under the *Fire Protection and Prevention Act, 1997*.

(2) Platform and walkway levels shall not be of open construction.

(3) A *shelf and rack storage system* shall not exceed 7 m in height.

Section 3.17. Additional Requirements for Existing Buildings

3.17.1. Scope

3.17.1.1. Application

(1) This Section applies where proposed *construction*,

(a) in respect of an existing *building* will result in any of the following changes of use of all or part of the *building*:

(i) a change of the *major occupancy* of all or part of a *building* that is designated with a "Y" in Table 1.3.1.4. of Division C,

(ii) a *suite* of a Group C *major occupancy* is converted into more than one *suite* of a Group C *major occupancy*,

(iii) a *suite* or part of a *suite* of a Group A, Division 2 or a Group A, Division 4 *major occupancy* is converted to a *gaming premises*,

(iv) a *farm building* or part of a *farm building* is changed to a *major occupancy*,

(v) a *building* or part of a *building* is changed to a *post-disaster building*,

(vi) a *building* or part of a *building* is changed to a retirement home regulated under the *Retirement Homes Act, 2010*, or

(vii) the use of a *building* or part of a *building* is changed and the previous *major occupancy* of the *building* or part of the *building* cannot be determined, or

(b) in respect of an existing *building* of *combustible construction* will extend the *building* by adding a *storey* or *storeys* such that the extended *building* will be more than four *storeys* in *building height*.

(2) For the purposes of this Section and Sentences 11.4.2.1.(1) and 11.4.2.5.(4), the changes of use set out in Subclauses (1)(a)(ii) to (iv) and (vi) shall also be deemed to constitute a change in *major occupancy*.

(3) The requirements of this Section are in addition to the requirements of other Parts of this Division as they apply to the proposed *construction*.

3.17.2. Additional Construction

3.17.2.1. Change of Use and Compensating Construction

(1) Where proposed *construction* will result in a change of use described in Subclauses 3.17.1.1.(1)(a)(i) to (iv) and (vi), additional *construction* shall be required in order that the *building* or part of a *building* subject to the change of use conforms to the requirements of Subsection 3.2.6. and Sections 3.7., 3.11. and 3.12. as they apply to the new *major occupancy* that the *building* or part of a *building* is to support.

(2) For the purposes of this Article, existing *buildings* shall be classified as to their *construction* and *occupancy* as provided for in Sentence 11.2.1.1.(1).

3.17.2.2. Performance Level and Compensating Construction

(1) The *performance level* of a *building* after *construction* shall not be less than the *performance level* of the *building* prior to *construction*.

(2) For the purposes of Sentence (1), reduction of *performance level* shall be determined in accordance with Articles 11.4.2.1., 11.4.2.3., 11.4.2.5. and 11.4.2.6.

(3) Where proposed *construction* would reduce the *performance level* of an existing *building*, compensating *construction* shall be required in conformance with Articles 11.4.3.1., 11.4.3.2., 11.4.3.4., 11.4.3.6. and 11.4.3.7.

(4) Section 11.5. applies in respect of the requirements of Sentences 11.4.3.4.(1), (3) and (4).

O. Reg. 332/12, Division B, Part 3; O. Reg. 151/13, ss. 3-27; O. Reg. 361/13, ss. 5-25; O. Reg. 368/13, ss. 3, 5, 7-12, 14-22, 25-32; O. Reg. 191/14, ss. 8-53.

PART 4

STRUCTURAL DESIGN

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Section 4.1. Structural Loads and Procedures

4.1.1. General

4.1.1.1. Scope

(1) The scope of this Part shall be as described in Subsection 1.1.2. of Division A.

4.1.1.2. Reserved

4.1.1.3. Design Requirements

(1) *Buildings* and their structural members and connections including formwork and falsework shall be designed to have sufficient structural capacity and structural integrity to safely and effectively resist all loads, effects of loads and influences that may reasonably be expected, having regard to the expected service life of *buildings*, and shall in any case satisfy the requirements of this Section.

(2) *Buildings* and their structural members shall be designed for serviceability, in accordance with Articles 4.1.3.4. to 4.1.3.6.

(3) All permanent and temporary structural members, including formwork and falsework of a *building*, shall be protected against loads exceeding the specified loads during the *construction* period except when, as verified by analysis or test, temporary overloading of a structural member would result in no impairment of that member or any other member.

(4) Precautions shall be taken during all stages of *construction* to ensure that the *building* is not damaged or distorted due to loads applied during *construction*.

4.1.1.4. Design Basis

(1) Except as provided in Sentence (2), *buildings* and their structural members shall be designed in conformance with the procedures and practices provided in this Part.

(2) Provided the design is carried out by a person especially qualified in the specific methods applied and provided the design demonstrates a level of safety and performance in accordance with the requirements of this Part, *buildings* and their structural components falling within the scope of this Part that are not amenable to analysis using a generally established theory may be designed by,

(a) evaluation of a full-scale structure or a prototype by a loading test, or

(b) studies of model analogues.

4.1.2. Specified Loads and Effects

4.1.2.1. Loads and Effects

(1) Except as provided in Article 4.1.2.2., the categories of loads, specified loads and effects set out in Table 4.1.2.1.A. shall be taken into consideration in the design of a *building* and its structural members and connections.

Table 4.1.2.1.A.
Categories of Loads, Specified Loads and Effects

Forming Part of Sentence 4.1.2.1.(1)

Item	Column 1	Column 2
	Symbol	Loads, Specified Loads and Effects (1)
1.	**D**	*dead load* – a permanent load (2) due to the weight of *building* components as specified in Subsection 4.1.4.

2.	**E**	earthquake load and effects – a rare load [4] due to an earthquake, as specified in Subsection 4.1.8.
3.	**H**	a permanent load [2] due to lateral earth pressure, including *groundwater*
4.	**L**	*live load* – a variable load [3] due to intended use and *occupancy* (including loads due to cranes and the pressure of liquids in containers), as specified in Subsection 4.1.5.
5.	$\mathbf{L_{XC}}$	*live load* exclusive of crane loads
6.	**C**	*live load* due to cranes including self weight
7.	$\mathbf{C_d}$	self weight of all cranes positioned for maximum effects
8.	$\mathbf{C_7}$	crane bumper impact load
9.	**P**	permanent effects caused by prestress
10.	**S**	variable load [3] due to snow including ice and associated rain, as specified in Article 4.1.6.2., or due to rain, as specified in Article 4.1.6.4.
11.	**T**	effects due to contraction, expansion, or deflection caused by temperature changes, shrinkage, moisture changes, creep, ground settlement, or a combination of them
12.	**W**	wind load – a variable load [3] due to wind, as specified in Subsection 4.1.7.

Notes to Table 4.1.2.1.A.:

[1] Load means the imposed deformations (i.e., deflections, displacements or motions that induce deformations and forces in the structure), forces and pressures applied to the *building* structure.

[2] Permanent load is a load that changes very little once it has been applied to the structure, except during repair.

[3] Variable load is a load that frequently changes in magnitude, direction or location.

[4] Rare load is a load that occurs infrequently and for a short time only.

(2) Minimum specified values of the loads described in Sentence (1), as set forth in Subsections 4.1.4. to 4.1.8., shall be increased to account for dynamic effects where applicable.

(3) For the purpose of determining specified loads **S**, **W** or **E** in Subsections 4.1.6. to 4.1.8., *buildings* shall be assigned an Importance Category based on intended use and *occupancy*, in accordance with Table 4.1.2.1.B.

Table 4.1.2.1.B.
Importance Categories for Buildings

Forming Part of Sentence 4.1.2.1.(3)

Item	Column 1	Column 2
	Use and *Occupancy*	Importance Category
1.	*Buildings* that represent a low direct or indirect hazard to human life in the event of failure, including: • low human-*occupancy buildings*, where it can be shown that collapse is not likely to cause injury or other serious consequences • minor storage *buildings*	Low
2.	All *buildings* except those listed in Importance Categories Low, High and Post-disaster	Normal
3.	*Buildings* that are likely to be used as post-disaster shelters, including *buildings* whose primary use is: • as an elementary, middle or secondary school	High

	• as a community centre Manufacturing and storage facilities containing toxic, explosive or other hazardous substances in sufficient quantities to be dangerous to the public if released	
4.	*Post-disaster buildings*	Post-disaster

4.1.2.2. Loads Not Listed

(1) Where a *building* or structural member can be expected to be subjected to loads, forces or other effects not listed in Article 4.1.2.1., such effects shall be taken into account in the design based on the most appropriate information available.

4.1.3. Limit States Design

4.1.3.1. Definitions

(1) In this Part, the term,

(a) "limit states" means those conditions of a *building* structure that result in the *building* ceasing to fulfill the function for which it was designed. (Those limit states concerning safety are called ultimate limit states (ULS) and include exceeding the load-carrying capacity, overturning, sliding and fracture; those limit states that restrict the intended use and *occupancy* of the *building* are called serviceability limit states (SLS) and include deflection, vibration, permanent deformation and local structural damage such as cracking; and those limit states that represent failure under repeated loading are called fatigue limit states),

(b) "specified loads (**C, D, E, H, L, P, S, T** and **W**)" mean those loads set out in Table 4.1.2.1.A.,

(c) "principal load" means the specified variable load or rare load that dominates in a given load combination,

(d) "companion load" means a specified variable load that accompanies the principal load in a given load combination,

(e) "service load" means a specified load used for the evaluation of a serviceability limit state,

(f) "principal-load factor" means a factor applied to the principal load in a load combination to account for the variability of the load and load pattern and the analysis of its effects,

(g) "companion-load factor" means a factor that, when applied to a companion load in the load combination, gives the probable magnitude of a companion load acting simultaneously with the factored principal load,

(h) "importance factor, I," means a factor applied in Subsections 4.1.6. to 4.1.8. to obtain the specified load and take into account the consequences of failure as related to the limit state and the use and *occupancy* of the *building*,

(i) "factored load" means the product of a specified load and its principal-load factor or companion-load factor,

(j) "effects" refers to forces, moments, deformations or vibrations that occur in the structure,

(k) "nominal resistance, R," of a member, connection or structure, is based on the geometry and on the specified properties of the structural materials,

(l) "resistance factor, Φ," means a factor applied to a specified material property or to the resistance of a member, connection or structure, and that, for the limit state under consideration, takes into

account the variability of dimensions and material properties, workmanship, type of failure and uncertainty in the prediction of resistance, and

(m) "factored resistance, ΦR," means the product of nominal resistance and the applicable resistance factor.

4.1.3.2. Strength and Stability

(1) A *building* and its structural components shall be designed to have sufficient strength and stability so that the factored resistance, ΦR, is greater than or equal to the effect of factored loads, which shall be determined in accordance with Sentence (2).

(2) Except as provided in Sentence (3), the effect of factored loads for a *building* or structural component shall be determined in accordance with the requirements of this Article and the following load combination cases, the applicable combination being that which results in the most critical effect:

(a) for load cases without crane loads, the load combinations listed in Table 4.1.3.2.A., and

(b) for load cases with crane loads, the load combinations listed in Table 4.1.3.2.B.

(3) Other load combinations that must also be considered are the principal loads acting with the companion loads taken as zero.

(4) Where the effects due to lateral earth pressure, **H**, restraint effects from pre-stress, **P**, and imposed deformation, **T**, affect the structural safety, they shall be taken into account in the calculations, with load factors of 1.5, 1.0 and 1.25 assigned to **H**, **P** and **T** respectively.

(5) Except as provided in Sentence 4.1.8.16.(1), the counteracting factored *dead load*, 0.9**D** in load combination cases 2, 3 and 4 and 1.0**D** in load combination case 5 of Table 4.1.3.2.A. and 0.9**D** in load combination cases 1 to 5 and 1.0**D** in load combination case 6 of Table 4.1.3.2.B., shall be used when the *dead load* acts to resist overturning, uplift, sliding, failure due to stress reversal, and to determine anchorage requirements and the factored resistance of members.

(6) The principal-load factor 1.5 for *live loads*, **L** in Table 4.1.3.2.A. and $\mathbf{L_{XC}}$ in Table 4.1.3.2.B. may be reduced to 1.25 for liquids in tanks.

(7) The companion-load factor 0.5 for *live loads*, **L** in Table 4.1.3.2.A. and $\mathbf{L_{XC}}$ in Table 4.1.3.2.B. shall be increased to 1.0 for storage areas and for equipment areas and *service rooms* referred to in Table 4.1.5.3.

(8) Except as provided in Sentence (9), the load factor 1.25 for *dead load*, **D**, for *soil*, superimposed earth, plants and trees given in Tables 4.1.3.2.A. and 4.1.3.2.B. shall be increased to 1.5, except that when the *soil* depth exceeds 1.2 m, the factor may be reduced to $1 + 0.6/h_s$ but not less than 1.25, where h_s is the depth of *soil* in metres supported by the structure.

(9) A principal-load factor of 1.5 shall be applied to the weight of saturated *soil* used in load combination case 1 of Table 4.1.3.2.A.

(10) Earthquake load, **E**, in load combination case 5 of Table 4.1.3.2.A. and case 6 of Table 4.1.3.2.B. includes horizontal earth pressure due to earthquake determined in accordance with Sentence 4.1.8.16.(4).

(11) Provision shall be made to ensure adequate stability of the structure as a whole and adequate lateral, torsional and local stability of all structural parts.

(12) Sway effects produced by vertical loads acting on the structure in its displaced configuration shall be taken into account in the design of *buildings* and their structural members.

Table 4.1.3.2.A.
Load Combinations without Crane Loads for Ultimate Limit States

Forming Part of Sentences 4.1.3.2.(2) and (5) to (10)

Item	Column 1	Column 2	Column 3
	Case	Load Combination[1]	
		Principal Loads	Companion Loads
1.	1	1.4**D**[2]	---
2.	2	(1.25**D**[3] or 0.9**D**[4]) +1.5**L**[5]	0.5**S**[6] or 0.4**W**
3.	3	(1.25**D**[3] or 0.9**D**[4]) +1.5**S**	0.5**L**[6][7] or 0.4**W**
4.	4	(1.25**D**[3] or 0.9**D**[4]) +1.4**W**	0.5**L**[7] or 0.5**S**
5.	5	1.0**D**[4] + 1.0**E**[8]	0.5**L**[6][7] + 0.25**S**[6]

Notes to Table 4.1.3.2.A.:

[1] See Sentences 4.1.3.2.(2), (3) and (4).

[2] See Sentence 4.1.3.2.(9).

[3] See Sentence 4.1.3.2.(8).

[4] See Sentence 4.1.3.2.(5).

[5] See Sentence 4.1.3.2.(6).

[6] See Article 4.1.5.5.

[7] See Sentence 4.1.3.2.(7).

[8] See Sentence 4.1.3.2.(10).

Table 4.1.3.2.B.
Load Combinations with Crane Loads for Ultimate Limit States

Forming Part of Sentences 4.1.3.2.(2), (5) to (8) and (10)

Item	Column 1	Column 2	Column 3
	Case	Load Combination[1]	
		Principal Loads	Companion Loads
1.	1	(1.25**D**[2] or 0.9**D**[3]) + (1.5**C** + 1.0$\mathbf{L_{XC}}$)	1.0**S**[4] or 0.4**W**
2.	2	(1.25**D**[2] or 0.9**D**[3]) +(1.0**C** + 1.5$\mathbf{L_{XC}}$[5])	0.5**S**[4] or 0.4**W**
3.	3	(1.25**D**[2] or 0.9**D**[3]) +1.5**S**	1.0**C** + 0.5$\mathbf{L_{XC}}$[4][6]
4.	4	(1.25**D**[2] or 0.9**D**[3]) +1.4**W**	1.0**C**[7] + 0.5$\mathbf{L_{XC}}$[4][6]
5.	5	(1.25**D**[2] or 0.9**D**[3]) +$\mathbf{C}_7$	---
6.	6	1.0**D**[3] + 1.0**E**[8]	1.0$\mathbf{C_d}$ + 0.5$\mathbf{L_{XC}}$[4][6] + 0.25**S**[4]

Notes to Table 4.1.3.2.B.:

[1] See Sentences 4.1.3.2.(2) to (4).

[2] See Sentence 4.1.3.2.(8).

[3] See Sentence 4.1.3.2.(5).

[4] See Article 4.1.5.5.

[5] See Sentence 4.1.3.2.(6).

(6) See Sentence 4.1.3.2.(7).

(7) Side thrust due to cranes need not be combined with full wind load.

(8) See Sentence 4.1.3.2.(10).

4.1.3.3. Fatigue

(1) A *building* and its structural components, including connections, shall be checked for fatigue failure under the effect of the cyclical loads, as required in the standards listed in Section 4.3.

(2) Where vibration effects, such as resonance and fatigue resulting from machinery and equipment, are likely to be significant, a dynamic analysis shall be carried out.

4.1.3.4. Serviceability

(1) A *building* and its structural components shall be checked for serviceability limit states as defined in Clause 4.1.3.1.(1)(a) under the effect of service loads for serviceability criteria specified or recommended in Articles 4.1.3.5. and 4.1.3.6. and in the standards listed in Section 4.3.

4.1.3.5. Deflection

(1) In proportioning structural members to limit serviceability problems resulting from deflections, consideration shall be given to,

(a) the intended use of the *building* or member,

(b) limiting damage to non-structural members made of materials whose physical properties are known at the time of design,

(c) limiting damage to the structure itself, and

(d) creep, shrinkage, temperature changes and prestress.

(2) The lateral deflection of *buildings* due to service wind and gravity loads shall be checked to ensure that structural elements and non-structural elements, whose nature is known at the time the structural design is carried out, will not be damaged.

(3) Except as provided in Sentence (4), the total drift per *storey* under service wind and gravity loads shall not exceed 1/500 of the *storey* height unless other drift limits are specified in the design standards referenced in Section 4.3.

(4) The deflection limits required in Sentence (3) do not apply to industrial *buildings* or sheds if experience has proven that greater movement will have no significant adverse effects on the strength and function of the *building*.

(5) The *building* structure shall be designed for lateral deflection due to **E**, in accordance with Article 4.1.8.13.

4.1.3.6. Vibration

(1) Floor systems susceptible to vibration shall be designed so that vibrations will have no significant adverse effects on the intended *occupancy* of the *building*.

(2) Where the fundamental vibration frequency of a structural system supporting an *assembly occupancy* used for rhythmic activities, such as dancing, concerts, jumping exercises or gymnastics, is less than 6 Hz, the effects of resonance shall be investigated by means of a dynamic analysis.

(3) A *building* susceptible to lateral vibration under wind load shall be designed in accordance with Article 4.1.7.2. so that the vibrations will have no significant adverse effects on the intended use and *occupancy* of the *building*.

4.1.4. Dead Loads

4.1.4.1. Dead Loads

(1) The specified *dead load* for a structural member consists of,

(a) the weight of the member itself,

(b) the weight of all materials of construction incorporated into the *building* to be supported permanently by the member,

(c) the weight of *partitions*,

(d) the weight of permanent equipment, and

(e) the vertical load due to earth, plants and trees.

(2) Except as provided in Sentence (5), in areas of a *building* where *partitions* other than permanent *partitions* are shown on the drawings, or where *partitions* might be added in the future, allowance shall be made for the weight of such *partitions*.

(3) The *partition* weight allowance in Sentence (2) shall be determined from the actual or anticipated weight of the *partitions* placed in any probable position, but shall be not less than 1 kPa over the area of floor being considered.

(4) *Partition* loads used in design shall be shown on the drawings.

(5) In cases where the *dead load* of the *partition* is counteractive, the load allowances referred to in Sentences (2) and (3) shall not be included in the design calculations.

(6) Except for structures where the *dead load* of *soil* is part of the load-resisting system, where the *dead load* due to *soil*, superimposed earth, plants and trees is counteractive, it shall not be included in the design calculations.

4.1.5. Live Loads Due to Use and Occupancy

4.1.5.1. Loads Due to Use of Floors and Roofs

(1) Except as provided in Sentence (2), the specified *live load* on an area of floor or roof depends on the intended use and *occupancy*, and shall not be less than whichever of the following loads produces the most critical effect:

(a) the uniformly distributed load patterns listed in Article 4.1.5.3.,

(b) the loads due to the intended use and *occupancy*, or

(c) the concentrated loads listed in Article 4.1.5.9.

(2) For *buildings* in the Low Importance Category as described in Table 4.1.2.1.B., a factor of 0.8 may be applied to the *live load*.

4.1.5.2. Uses Not Stipulated

(1) Except as provided in Sentence (2), where the use of an area of floor or roof is not provided for in Article 4.1.5.3., the specified *live loads* due to the use and *occupancy* of the area shall be determined from an analysis of the loads resulting from the weight of,

(a) the probable assembly of persons,

(b) the probable accumulation of equipment and furnishings, and

(c) the probable storage of materials.

(2) For *buildings* in the Low Importance Category as described in Table 4.1.2.1.B., a factor of 0.8 may be applied to the *live load*.

4.1.5.3. Full and Partial Loading

(1) The uniformly distributed *live load* shall be not less than the value listed in Table 4.1.5.3., which may be reduced as provided in Article 4.1.5.8., applied uniformly over the entire area, or on any portions of the area, whichever produces the most critical effects in the members concerned.

Table 4.1.5.3.
Specified Uniformly Distributed Live Loads on an Area of Floor or Roof

Forming Part of Sentence 4.1.5.3.(1)

Item	Column 1	Column 2
	Use of Area of Floor or Roof	Minimum Specified Load, kPa
1.	Assembly Areas (a) Except for those areas listed under (b), (c), (d) and (e), assembly areas with or without fixed seats including:	4.8
	Arenas (areas without fixed seats that have backs)	
	Auditoria	
	Churches and similar places of worship (areas without fixed seats that have backs)	
	Dance floors	
	Dining areas [(1)]	
	Foyers and entrance halls	
	Grandstands (areas without fixed seats that have backs), reviewing stands and bleachers	
	Gymnasia	
	Lecture halls (areas without fixed seats that have backs)	
	Museums	
	Promenades	
	Rinks	
	Stadia (areas without fixed seats that have backs)	
	Stages	
	Theatres (areas without fixed seats that have backs)	
	Other areas with similar uses	
	(b) Classrooms and courtrooms with or without fixed seats	2.4
	(c) Portions of assembly areas with fixed seats that have backs for the following uses:	2.9
	Arenas	
	Grandstands	
	Stadia	
	(d) Portions of assembly areas with fixed seats that have backs for the following uses:	2.4
	Churches and similar places of worship	

	Lecture halls	
	Theatres	
	(e) Vomitories, *exits*, lobbies and corridors	4.8
2.	Attics	
	Accessible by a stairway in *residential occupancies* only	1.4
	Having limited accessibility so that there is no storage of equipment or material	0.5
3.	Balconies	
	Exterior	4.8
	Interior and *mezzanines* that could be used by an assembly of people as a viewing area	4.8
	Interior and *mezzanines* other than above	(2)
4.	Corridors, lobbies and aisles	
	Other than those listed below	4.8
	Not more than 1 200 mm in width and all upper floor corridors of residential areas only of apartments, *hotels* and motels (that cannot be used by an assembly of people as a viewing area)	(2)
	In a Group B, Division 3 *occupancy* that contains sleeping accommodation for not more than 10 persons and not more than 6 occupants require assistance in evacuation in case of an emergency	2.4
5.	Equipment areas and *service rooms* including:	3.6(3)
	Generator rooms	
	Mechanical equipment exclusive of elevators	
	Machine rooms	
	Pump rooms	
	Transformer vaults	
	Ventilating or *air-conditioning* equipment	
6.	*Exits* and fire escapes	4.8
7.	Factories	6.0(3)
8.	Footbridges	4.8
9.	Garages for	
	Vehicles not exceeding 4 000 kg gross weight	2.4
	Vehicles exceeding 4 000 kg but not exceeding 9 000 kg gross weight	6.0
	Vehicles exceeding 9 000 kg gross weight	12.0
10.	Kitchens (other than residential)	4.8
11.	Libraries	
	Stack rooms	7.2
	Reading and study rooms	2.9
12.	Office areas (not including record storage and computer rooms) located in	
	Basement and the *first storey*	4.8
	Floors above the *first storey*	2.4
13.	Operating rooms and laboratories	3.6
14.	Patients' bedrooms	1.9
15.	Recreation areas that cannot be used for assembly purposes including:	3.6

	Billiard rooms	
	Bowling alleys	
	Pool rooms	
16.	Residential areas (within the scope of Article 1.1.2.2. of Division A)	
	Sleeping and living quarters in apartments, *hotels*, motels, boarding schools and colleges	1.9
	Work areas within *live/work units*	2.4
17.	Residential areas (within the scope of Article 1.1.2.4. of Division A)	
	Bedrooms and other areas	1.9
	Stairs within *dwelling units*	1.9
18.	Retail and wholesale areas	4.8
19.	Roofs	1.0(4)
20.	Sidewalks and driveways over areaways and *basements*	12.0(4)
21.	Storage areas, including locker rooms in apartment *buildings*	4.8(3)
22.	Toilet areas	2.4
23.	Underground slabs with earth cover	(4)
24.	Warehouses	4.8(3)

Notes to Table 4.1.5.3.:

(1) See Article 4.1.5.6.

(2) See Article 4.1.5.4.

(3) See Sentence 4.1.5.1.(1).

(4) See Article 4.1.5.5.

4.1.5.4. Loads for Occupancy Served

(1) The following shall be designed to carry not less than the specified load required for the *occupancy* they serve, provided they cannot be used by an assembly of people as a viewing area:

(a) corridors, lobbies and aisles not more than 1 200 mm wide,

(b) all corridors above the *first storey* of residential areas of apartments, *hotels* and motels, and

(c) interior balconies and *mezzanines.*

4.1.5.5. Loads on Exterior Areas

(1) Exterior areas accessible to vehicular traffic shall be designed for their intended use, including the weight of firefighting equipment, but not for less than the snow and rain loads prescribed in Subsection 4.1.6.

(2) Except as provided in Sentences (3) and (4), roofs shall be designed for the uniform *live loads* specified in Table 4.1.5.3., the concentrated *live loads* listed in Table 4.1.5.9., or the snow and rain loads prescribed in Subsection 4.1.6., whichever produces the most critical effects in the members concerned.

(3) Exterior areas accessible to pedestrian traffic, but not vehicular traffic, shall be designed for their intended use, but not for less than the greater of,

(a) the *live load* prescribed for assembly areas in Table 4.1.5.3., or

(b) the snow and rain loads prescribed in Subsection 4.1.6.

(4) Roof parking decks shall be designed for the uniformly distributed *live loads* specified in Table 4.1.5.3., the concentrated *live loads* listed in Table 4.1.5.9., or the roof snow load, whichever produces the most critical effect in the members concerned.

4.1.5.6. Loads for Dining Areas

(1) The minimum specified *live load* listed in Table 4.1.5.3. for dining areas may be reduced to 2.4 kPa for areas in *buildings* that are being converted to dining areas, provided that the *floor area* does not exceed 100 m² and the dining area will not be used for other assembly purposes, including dancing.

4.1.5.7. More Than One Occupancy

(1) Where an area of floor or roof is intended for 2 or more *occupancies* at different times, the value to be used from Table 4.1.5.3. shall be the greatest value for any of the *occupancies* concerned.

4.1.5.8. Variation with Tributary Area

(1) An area used for *assembly occupancies* designed for a *live load* of less than 4.8 kPa and roofs designed for the minimum loading specified in Table 4.1.5.3. shall have no reduction for tributary area.

(2) Where a structural member supports a tributary area of a floor or a roof, or a combination of them, that is greater than 80 m² and either used for *assembly occupancies* designed for a *live load* of 4.8 kPa or more, or used for storage, manufacturing, retail stores, garages or as a footbridge, the specified *live load* due to use and *occupancy* is the load specified in Article 4.1.5.3. multiplied by,

$$0.5 + \sqrt{}$$

where,

"A" is the tributary area in square metres for this type of use and *occupancy*.

(3) Where a structural member supports a tributary area of a floor or a roof or a combination of them, that is greater than 20 m² and used for any use or *occupancy* other than *assembly occupancies* and those indicated in Sentences (1) and (2), the specified *live load* due to use and *occupancy*, is the load specified in Article 4.1.5.3. multiplied by,

$$0.3 + \sqrt{}$$

where,

"B" is the tributary area in square metres for this type of use and *occupancy*.

(4) Where the specified *live load* for a floor is reduced in accordance with Sentence (2) or (3), the structural drawings shall indicate that a *live load* reduction factor for tributary area has been applied.

4.1.5.9. Concentrated Loads

(1) The specified *live load* due to possible concentrations of load resulting from the use of an area of floor or roof shall not be less than that listed in Table 4.1.5.9. applied over the loaded area noted in Table 4.1.5.9. and located so as to cause maximum effects, except that for *occupancies* not listed in Table 4.1.5.9., the concentrations of load shall be determined in accordance with Article 4.1.5.2.

Table 4.1.5.9.
Specified Concentrated Live Loads on an Area of Floor or Roof

Forming Part of Sentence 4.1.5.9.(1)

Item	Column 1	Column 2	Column 3

	Area of Floor or Roof	Minimum Specified Concentrated Load, kN	Loaded Area, mm x mm
1.	Roof surfaces	1.3	200 x 200
2.	Floors of classrooms	4.5	750 x 750
3.	Floors of offices, manufacturing *buildings*, hospital wards and *stages*	9.0	750 x 750
4.	Floors and areas used by vehicles not exceeding 4000 kg gross weight	18	120 x 120
5.	Floors and areas used by vehicles exceeding 4000 kg but not exceeding 9000 kg gross weight	36	120 x 120
6.	Floors and areas used by vehicles exceeding 9000 kg gross weight	54	250 x 600
7.	Driveways and sidewalks over areaways and *basements*	54	250 x 600

4.1.5.10. Sway Forces in Assembly Occupancies

(1) The floor assembly and other structural elements that support fixed seats in any *building* used for *assembly occupancies* accommodating large numbers of people at one time, such as grandstands, stadia and *theatre* balconies, shall be designed to resist a horizontal force equal to not less than 0.3 kN for each metre length of seats acting parallel to each row of seats, and not less then 0.15 kN for each metre length of seats acting at right angles to each row of seats, based on the assumption that these forces are acting independently of each other.

4.1.5.11. Crane-Supporting Structures and Impact of Machinery and Equipment

(1) The minimum specified load due to equipment, machinery or other objects that may produce impact shall be the sum of the weight of the equipment or machinery and its maximum lifting capacity, multiplied by an appropriate factor listed in Table 4.1.5.11.

Table 4.1.5.11.
Factors for the Calculation of Impact Loads

Forming Part of Sentence 4.1.5.11.(1)

Item	Column 1	Column 2
	Cause of Impact	Factor
1.	Operation of cab or radio-operated cranes	1.25
2.	Operation of pendant or hand-operated cranes	1.10
3.	Operation of elevators	(1)
4.	Supports for light machinery, shaft or motor-driven	1.20
5.	Supports for reciprocating machinery (e.g. compressors)	1.50
6.	Supports for power-driven units (e.g. piston engines)	1.50

Notes to Table 4.1.5.11.:

(1) See ASME A17.1 / CSA B44, “Safety Code for Elevators and Escalators.”

(2) Crane-supporting structures shall be designed for the appropriate load combinations listed in Article 4.1.3.2.

(3) Crane runway structures shall be designed to resist a horizontal force applied normal to the top of the rails equal to not less than 20% of the sum of the weights of the lifted load and the crane trolley, excluding other parts of the crane.

(4) The force described in Sentence (3) shall be equally distributed on each side of the runway and shall be assumed to act in either direction.

(5) Crane runway structures shall be designed to resist a horizontal force applied parallel to the top of the rails equal to not less than 10% of the maximum wheel loads of the crane.

4.1.5.12. Bleachers

(1) Bleacher seats shall be designed for a uniformly distributed *live load* of 1.75 kN for each linear metre or for a concentrated load of 2.2 kN distributed over a length of 750 mm, whichever produces the most critical effect on the supporting members.

(2) Bleachers shall be checked by the erector after erection to ensure that all structural members, including bracing specified in the design, have been installed.

(3) Telescopic bleachers shall be provided with locking devices to ensure stability while in use.

4.1.5.13. Helicopter Landing Areas

(1) Helicopter landing areas on roofs shall be constructed in conformance with the requirements for heliports contained in Part III of the *Canadian Aviation Regulations* made under the *Aeronautics Act* (Canada).

4.1.5.14. Loads on Guards

(1) The minimum specified horizontal load applied inward or outward at the minimum required height of every required *guard* shall be,

(a) 3.0 kN/m for open viewing stands without fixed seats and for *means of egress* in grandstands, stadia, bleachers and arenas,

(b) a concentrated load of 1.0 kN applied at any point for access ways to equipment platforms, contiguous stairs and similar areas where the gathering of many people is improbable, and

(c) 0.75 kN/m or a concentrated load of 1.0 kN applied at any point, whichever governs for locations other than those described in Clauses (a) and (b).

(2) Individual elements within the *guard*, including solid panels and pickets, shall be designed for a load of 0.5 kN applied over an area of 100 mm by 100 mm located at any point in the element or elements so as to produce the most critical effect.

(3) The loads required in Sentence (2) need not be considered to act simultaneously with the loads provided for in Sentences (1) and (4).

(4) The minimum specified load applied vertically at the top of every required *guard* shall be 1.5 kN/m and need not be considered to act simultaneously with the horizontal load provided for in Sentence (1).

(5) For loads on handrails, refer to Sentence 3.4.6.5.(12).

4.1.5.15. Loads on Vehicle Guardrails

(1) Vehicle guardrails shall be designed for a concentrated load of 22 kN applied horizontally outward at any point 500 mm above the floor surface.

4.1.5.16. Loads on Walls Acting As Guards

(1) Where the floor elevation on one side of a wall, including a wall around a shaft, is more than 600 mm higher than the elevation of the floor or ground on the other side, the wall shall be designed to resist the appropriate lateral design loads prescribed elsewhere in this Section or 0.5 kPa, whichever produces the more critical effect.

4.1.5.17. Firewalls

(1) *Firewalls* shall be designed to resist the maximum effect due to,

(a) the appropriate lateral design loads prescribed elsewhere in this Section, or

(b) a factored lateral load of 0.5 kPa under fire conditions, as described in Sentence (2).

(2) Under fire conditions, where the *fire-resistance rating* of the structure is less than that of the *firewall*,

(a) lateral support shall be assumed to be provided by the structure on one side only, or

(b) another structural support system capable of resisting the loads imposed by a fire on either side of the *firewall* shall be provided.

4.1.6. Loads Due to Snow and Rain

4.1.6.1. Specified Load Due to Rain or to Snow and Associated Rain

(1) The specified load on a roof or any other *building* surface subject to snow and associated rain shall be the snow load specified in Article 4.1.6.2., or the rain load specified in Article 4.1.6.4., whichever produces the more critical effect.

4.1.6.2. Specified Snow Load

(1) The specified load, **S**, due to snow and associated rain accumulation on a roof or any other *building* surface subject to snow accumulation shall be calculated from the formula,

$$S = I_s [S_s (C_b C_w C_s C_a) + S_r]$$

where,

I_s = importance factor for snow load as provided in Table 4.1.6.2.,

S_s = 1-in-50-year ground snow load, in kPa, determined in accordance with Subsection 1.1.2.,

C_b = basic roof snow load factor in Sentence (2),

C_w = wind exposure factor in Sentences (3) and (4),

C_s = slope factor in Sentences (5), (6) and (7),

C_a = shape factor in Sentence (8), and

S_r = 1-in-50-year associated rain load, in kPa, determined in accordance with Subsection 1.1.2., but not greater than $S_s(C_b C_w C_s C_a)$.

Table 4.1.6.2.
Importance Factor for Snow Load, I_S

Forming Part of Sentence 4.1.6.2.(1)

Item	Column 1	Column 2	Column 3
	Importance Category	Importance Factor, I_s	
		ULS	SLS
1.	Low	0.8	0.9

2.	Normal	1	0.9
3.	High	1.15	0.9
4.	Post-disaster	1.25	0.9

(2) The basic roof snow load factor, C_b, shall be 0.8, except that for large roofs it shall be,

(a) $1.0 – (30/l_c)^2$, for roofs with $C_w = 1.0$ and l_c greater than or equal to 70 m, or

(b) $1.3 – (140/l_c)^2$, for roofs with $C_w = 0.75$ or 0.5 and l_c greater than or equal to 200 m,

where,

l_c = characteristic length of the upper or lower roof, defined as $2w\text{-}w^2/l$, in metres,

w = smaller plan dimension of the roof, in metres,

l = larger plan dimension of the roof, in metres.

(3) Except as provided for in Sentence (4), the wind exposure factor, C_w, shall be 1.0.

(4) For *buildings* in the Low and Normal Importance Categories as set out in Table 4.1.2.1.B., the wind exposure factor given in Sentence (3) may be reduced to 0.75, or to 0.5 in exposed areas north of the treeline, where,

(a) the *building* is exposed on all sides to wind over open terrain as defined in Clause 4.1.7.1.(5)(a) , and is expected to remain so during its life,

(b) the area of roof under consideration is exposed to the wind on all sides with no significant obstructions on the roof, such as parapet walls, within a distance of at least 10 times the difference between the height of the obstruction and $C_bC_wS_s/\gamma$ metres, where γ is the unit weight of snow on roofs, and

(c) the loading does not involve the accumulation of snow due to drifting from adjacent surfaces.

(5) Except as provided for in Sentences (6) and (7), the slope factor, C_s, shall be,

(a) 1.0 where the roof slope, α, is equal to or less than 30°,

(b) $(70° - \alpha)/40°$ where α is greater than 30° but not greater than 70°, and

(c) 0 where α exceeds 70°.

(6) The slope factor, C_s, for unobstructed slippery roofs where snow and ice can slide completely off the roof shall be,

(a) 1.0 when the roof slope, α, is equal to or less than 15°,

(b) $(60° - \alpha)/45°$ when α is greater than 15°, but not greater than 60°, and

(c) 0 when α exceeds 60°.

(7) The slope factor, C_s, shall be 1.0 when used in conjunction with shape factors for increased snow loads as given in Clauses (8)(b) and (e).

(8) The shape factor, C_a, shall be 1.0, except that where appropriate for the shape of the roof, it shall be assigned other values that account for,

(a) non-uniform snow loads on gable, arched or curved roofs and domes,

(b) increased snow loads in valleys,

(c) increased non-uniform snow loads due to snow drifting onto a roof that is at a level lower than other parts of the same *building* or at a level lower than another *building* within 5 m of it,

(d) increased non-uniform snow loads on areas adjacent to roof projections, such as penthouses, large *chimneys* and equipment, and

(e) increased snow or ice loads due to snow sliding or meltwater draining from adjacent roofs.

4.1.6.3. Full and Partial Loading

(1) A roof or other *building* surface and its structural members subject to loads due to snow accumulation shall be designed for the specified load in Sentence 4.1.6.2.(1), distributed over the entire loaded area.

(2) In addition to the distribution in Sentence (1), flat roofs and shed roofs, gable roofs of 15° slope or less, and arched or curved roofs shall be designed for the specified uniform snow load indicated in Sentence 4.1.6.2.(1), which shall be calculated using C_a = 1.0, distributed on any one portion of the loaded area, and half of this load on the remainder of the loaded area, in such a way as to produce the most critical effects on the member concerned.

4.1.6.4. Specified Rain Load

(1) Except as provided in Sentence (4), the specified load, **S**, due to the accumulation of rainwater on a surface whose position, shape and deflection under load make such an accumulation possible, is that resulting from the one-day rainfall determined in conformance with Subsection 1.1.2. and applied over the horizontal projection of the surface and all tributary surfaces.

(2) The provisions of Sentence (1) apply whether or not the surface is provided with a means of drainage, such as rainwater *leaders*.

(3) Except as provided for in Sentence 4.1.6.2.(1), loads due to rain need not be considered to act simultaneously with loads due to snow.

(4) Where scuppers are provided and where the position, shape and deflection of the loaded surface make an accumulation of rainwater possible, the loads due to rain shall be the lesser of either the one-day rainfall determined in conformance with Subsection 1.1.2. or a depth of rainwater equal to 30 mm above the level of the scuppers, applied over the horizontal projection of the surface and tributary areas.

4.1.7. Wind Load

4.1.7.1. Specified Wind Load

(1) The specified external pressure or suction due to wind on part or all of a surface of a *building* shall be calculated using the following formula:

$$p = I_w q C_e C_g C_p$$

where,

p = specified external pressure acting statically and in a direction normal to the surface, either as a pressure directed towards the surface or as a suction directed away from the surface,

I_w = importance factor for wind load, as provided in Table 4.1.7.1.,

q = reference velocity pressure, as provided in Sentence (4),

C_e = exposure factor, as provided in Sentence (5),

C_g = gust effect factor, as provided in Sentence (6), and

C_p = external pressure coefficient, averaged over the area of the surface considered.

Table 4.1.7.1.
Importance Factor for Wind Load, L_W

Forming Part of Sentences 4.1.7.1.(1) and (3)

Item	Column 1	Column 2	Column 3
	Importance Category	Importance Factor, I_W	
		ULS	SLS
1.	Low	0.8	0.75
2.	Normal	1.0	0.75
3.	High	1.15	0.75
4.	Post-disaster	1.25	0.75

(2) The net wind load for the *building* as a whole shall be the algebraic difference of the loads on the windward and the leeward surfaces, and in some cases may be calculated as the sum of the products of the external pressures or suctions and the areas of the surfaces over which they are averaged as provided in Sentence (1).

(3) The net specified pressure due to wind on part or all of a surface of a *building* shall be the algebraic difference of the external pressure or suction as provided for in Sentence (1) and the specified internal pressure or suction due to wind calculated from,

$$p_i = I_w q C_e C_{gi} C_{pi}$$

where,

p_i = specified internal pressure acting statically and in a direction normal to the surface, either as a pressure directed toward the surface or as a suction directed away from the surface,

I_w = importance factor for wind load, as provided in Table 4.1.7.1.,

q = reference velocity pressure, as provided in Sentence (4),

C_e = exposure factor, as provided in Sentence (5),

C_{gi} = internal gust effect factor, as provided in Sentence (6), and

C_{pi} = internal pressure coefficient.

(4) The reference velocity pressure, q, shall be the appropriate value determined in conformance with Subsection 1.1.2. based on a probability of being exceeded in any one year of 1-in-50.

(5) The exposure factor C_e, shall be,

(a) $(h/10)^{0.2}$ but not less than 0.9 for open terrain, where open terrain is level terrain with only scattered *buildings*, trees or other obstructions, open water or shorelines, h being the reference height above *grade* in metres for the surface or part of the surface,

(b) $0.7(h/12)^{0.3}$ but not less than 0.7 for rough terrain, where rough terrain is suburban, urban or wooded terrain extending upwind from the *building* uninterrupted for at least 1 km or 20 times the height of the *building*, whichever is greater, h being the reference height above *grade* in metres for the surface or part of the surface,

(c) an intermediate value between the two exposures defined in Clauses (a) and (b) in cases where the site is less than 1 km or 20 times the height of the *building* from a change in terrain conditions, whichever is greater, provided an appropriate interpolation method is used, or

(d) if a dynamic approach to the action of wind gusts is used, an appropriate value depending on both height and shielding.

(6) The gust effect factor, C_g, shall be one of the following values:

(a) for the *building* as a whole and main structural members, $C_g = 2.0$,

(b) for external pressures and suctions on small elements including cladding, $C_g = 2.5$,

(c) for internal pressures, $C_{gi} = 2.0$ or a value determined by detailed calculation that takes into account the sizes of the openings in the *building* envelope, the internal volume and the flexibility of the *building* envelope, or

(d) if a dynamic approach to wind action is used, C_g is a value that is appropriate for the turbulence of the wind and the size and natural frequency of the structure.

4.1.7.2. Dynamic Effects of Wind

(1) Except as provided in Sentence (2), *buildings* whose height is greater than 4 times their minimum effective width, which is defined in Sentence (3), or greater than 60 m and *buildings* whose lowest natural frequency is less than 1 Hz, as determined by rational analysis, shall be designed by,

(a) experimental methods for the danger of dynamic overloading, vibration and the effects of fatigue, or

(b) using a dynamic approach to the action of wind gusts.

(2) *Buildings* whose lowest natural frequency is less than 1/4 Hz, as determined by rational analysis, shall be designed by experimental methods in accordance with Clause (1) (a).

(3) The effective width, w, of a *building* shall be calculated using the formula,

$$w = \frac{\sum h_i \, w_i}{\sum h_i}$$

where,

the summations are over the height of the *building* for a given wind direction,

h_i is the height above *grade* to level i, as defined in Sentence 4.1.7.1.(5),

w_i is the width normal to the wind direction at height h_i, and

the minimum effective width is the lowest value of the effective width considering all possible wind directions.

4.1.7.3. Full and Partial Loading

(1) *Buildings* and structural members shall be capable of withstanding the effects of,

(a) the full wind loads acting along each of the two principal horizontal axes considered separately,

(b) the wind loads as described in Clause (a) but with 100% of the load removed from any portion of the area,

(c) the wind loads as described in Clause (a) but considered simultaneously at 75% of their full value, and

(d) the wind loads as described in Clause (c) but with 50% of these loads removed from any portion of the area.

4.1.7.4. Interior Walls and Partitions

(1) In the design of interior walls and *partitions*, due consideration shall be given to differences in air pressure on opposite sides of the wall or *partition* that may result from,

(a) pressure differences between the windward and leeward sides of a *building*,

(b) stack effects due to a difference in air temperature between the exterior and interior of the *building*, and

(c) air pressurization by the mechanical services of the *building*.

4.1.8. Earthquake Load and Effects

4.1.8.1. Analysis

(1) The deflections and specified loading due to earthquake motions shall be determined according to the requirements in this Subsection, except that the requirements in this Subsection need not be considered in design if S(0.2), as defined in Sentence 4.1.8.4.(7), is less than or equal to 0.12.

4.1.8.2. Notation

(1) In this Subsection,

A_r = response amplification factor to account for type of attachment of mechanical/electrical equipment, as defined in Sentence 4.1.8.18.(1),

A_x = amplification factor at level x to account for variation of response of mechanical/electrical equipment with elevation within the *building*, as defined in Sentence 4.1.8.18.(1),

B_x = ratio at level x used to determine torsional sensitivity, as defined in Sentence 4.1.8.11.(9),

B = maximum value of B_x, as defined in Sentence 4.1.8.11.(9),

C_p = seismic coefficient for mechanical/electrical equipment, as defined in Sentence 4.1.8.18.(1),

D_{nx} = plan dimension of the *building* at level x perpendicular to the direction of seismic loading being considered,

e_x = distance measured perpendicular to the direction of earthquake loading between centre of mass and centre of rigidity at the level being considered,

F_a = acceleration-based site coefficient, as defined in Sentence 4.1.8.4.(4),

F_t = portion of V to be concentrated at the top of the structure, as defined in Sentence 4.1.8.11.(6),

F_v = velocity-based site coefficient, as defined in Sentence 4.1.8.4.(4),

F_x = lateral force applied to level x, as defined in Sentence 4.1.8.11.(6),

h_i, h_n, h_x = the height above the base (i = 0) to level i, n, or x respectively, where the base of the structure is the level at which horizontal earthquake motions are considered to be imparted to the structure,

h_s = interstorey height (h_i - h_{i-1}),

I_E = earthquake importance factor of the structure, as described in Sentence 4.1.8.5.(1),

J = numerical reduction coefficient for base overturning moment, as defined in Sentence 4.1.8.11.(5),

J_X = numerical reduction coefficient for overturning moment at level x, as defined in Sentence 4.1.8.11.(7),

Level i = any level in the *building*, i =1 for first level above the base,

Level n = level that is uppermost in the main portion of the structure,

Level x = level that is under design consideration,

M_v = factor to account for higher mode effect on base shear, as defined in Sentence 4.1.8.11.(5),

M_x = overturning moment at level x, as defined in Sentence 4.1.8.11.(7),

N = total number of *storeys* above exterior *grade* to level n,

$\bar{N}_{60}$ = Average Standard Penetration Resistance for the top 30 m, corrected to a rod energy efficiency of 60% of the theoretical maximum,

PGA = Peak Ground Acceleration expressed as a ratio to gravitational acceleration, as defined in Sentence 4.1.8.4.(1),

PI = plasticity index for clays,

R_d = ductility-related force modification factor reflecting the capability of a structure to dissipate energy through reversed cyclic inelastic behaviour, as given in Article 4.1.8.9.,

R_o = overstrength-related force modification factor accounting for the dependable portion of reserve strength in a structure designed according to these provisions, as defined in Article 4.1.8.9.,

S_P = horizontal force factor for part or portion of a *building* and its anchorage, as given in Sentence 4.1.8.18.(1),

S(T) = design spectral response acceleration, expressed as a ratio to gravitational acceleration, for a period of T, as defined in Sentence 4.1.8.4.(7),

$S_a(T)$ = 5% damped spectral response acceleration, expressed as a ratio to gravitational acceleration, for a period of T, as defined in Sentence 4.1.8.4.(1),

SFRS = Seismic Force Resisting System(s) is that part of the structural system that has been considered in the design to provide the required resistance to the earthquake forces and effects defined in Subsection 4.1.8.,

s_u = average undrained shear strength in the top 30 m of *soil*,

T = period in seconds,

T_a = fundamental lateral period of vibration of the *building* or structure in seconds in the direction under consideration, as defined in Sentence 4.1.8.11.(3),

T_x = floor torque at level x, as defined in Sentence 4.1.8.11.(10),

V = lateral earthquake design force at the base of the structure, as determined by Article 4.1.8.11.,

V_d = lateral earthquake design force at the base of the structure, as determined by Article 4.1.8.12.,

V_e = lateral earthquake elastic force at the base of the structure, as determined by Article 4.1.8.12.,

V_{ed} = lateral earthquake design elastic force at the base of the structure, as determined by Article 4.1.8.12.,

V_P = lateral force on a part of the structure, as determined by Article 4.1.8.18.,

$\bar{V}_S$ = average shear wave velocity in the top 30 m of *soil* or *rock*,

W = *dead load*, as defined in Article 4.1.4.1., except that the minimum *partition* load as defined in Sentence 4.1.4.1.(3) need not exceed 0.5 kPa, plus 25% of the design snow load specified in

Subsection 4.1.6., plus 60% of the storage load for areas used for storage, except that *storage garages* need not be considered storage areas, and the full contents of any tanks,

W_i, W_x = portion of W that is located at or is assigned to level i or x respectively,

W_P = weight of a part or portion of a structure, e.g., cladding, *partitions* and appendages,

δ_{ave} = average displacement of the structure at level x, as defined in Sentence 4.1.8.11.(9), and

δ_{max} = maximum displacement of the structure at level x, as defined in Sentence 4.1.8.11.(9).

4.1.8.3. General Requirements

(1) The *building* shall be designed to meet the requirements of this Subsection and of the design standards referenced in Section 4.3.

(2) Structures shall be designed with a clearly defined load path, or paths, that will transfer the inertial forces generated in an earthquake to the supporting ground.

(3) The structure shall have a clearly defined Seismic Force Resisting System(s) (SFRS), as defined in Article 4.1.8.2.

(4) The SFRS shall be designed to resist 100% of the earthquake loads and their effects.

(5) All structural framing elements not considered to be part of the SFRS must be investigated and shown to behave elastically or to have sufficient non-linear capacity to support their gravity loads while undergoing earthquake-induced deformations calculated from the deflections determined in Article 4.1.8.13.

(6) Stiff elements that are not considered part of the SFRS, such as concrete, masonry, brick or pre-cast walls or panels, shall be,

(a) separated from all structural elements of the *building* such that no interaction takes place as the *building* undergoes deflections due to earthquake effects as calculated in this Subsection, or

(b) made part of the SFRS and satisfy the requirements of this Subsection.

(7) Stiffness imparted to the structure from elements not part of the SFRS, other than those described in Sentence (6), shall not be used to resist earthquake deflections but shall be accounted for,

(a) in calculating the period of the structure for determining forces if the added stiffness decreases the fundamental lateral period by more than 15%,

(b) in determining the irregularity of the structure, except the additional stiffness shall not be used to make an irregular SFRS regular or to reduce the effects of torsion, and

(c) in designing the SFRS if inclusion of the elements not part of the SFRS in the analysis has an adverse effect on the SFRS.

(8) Structural modelling shall be representative of the magnitude and spatial distribution of the mass of the *building* and of the stiffness of all elements of the SFRS, including stiff elements that are not separated in accordance with Sentence 4.1.8.3.(6), and shall account for,

(a) the effect of cracked sections in reinforced concrete and reinforced masonry elements,

(b) the effect of the finite size of members and joints,

(c) sway effects arising from the interaction of gravity loads with the displaced configuration of the structure, and

(d) other effects that influence the lateral stiffness of the *building*.

4.1.8.4. Site Properties

(1) The peak ground acceleration (PGA) and the 5% damped spectral response acceleration values, $S_a(T)$, for the reference ground conditions (Site Class C in Table 4.1.8.4.A.) for periods T of 0.2 s, 0.5 s, 1.0 s, and 2.0 s, shall be determined in accordance with Subsection 1.1.2. and are based on a 2% probability of exceedance in 50 years.

(2) Site classifications for ground shall conform to Table 4.1.8.4.A. and shall be determined using $\bar{}_S$ except as provided in Sentence (3).

(3) If average shear wave velocity, $\bar{}_S$, is not known, Site Class shall be determined from energy-corrected Average Standard Penetration Resistance, $\bar{}_{60}$, or from *soil* average undrained shear strength, s_u, as noted in Table 4.1.8.4.A., $\bar{}_{60}$ and s_u being calculated based on rational analysis.

(4) Acceleration- and velocity-based site coefficients, F_a and F_v, shall conform to Tables 4.1.8.4.B. and 4.1.8.4.C. using linear interpolation for intermediate values of $S_a(0.2)$ and $S_a(1.0)$.

(5) Site-specific evaluation is required to determine F_a and F_v for Site Class F.

(6) For structures with a fundamental period of vibration equal to or less than 0.5 s that are built on liquefiable *soils*, Site Class and the corresponding values of F_a and F_v may be determined as described in Tables 4.1.8.4.A., 4.1.8.4.B., and 4.1.8.4.C. by assuming that the *soils* are not liquefiable.

(7) The design spectral acceleration values of S(T) shall be determined as follows, using linear interpolation for intermediate values of T:

$S(T) = F_aS_a(0.2)$ for $T \leq 0.2$ s

$= F_vS_a(0.5)$ or $F_aS_a(0.2)$, whichever is smaller for T = 0.5 s

$= F_vS_a(1.0)$ for T = 1.0 s

$= F_vS_a(2.0)$ for T = 2.0 s

$= F_vS_a(2.0)/2$ for $T \geq 4.0$ s

Table 4.1.8.4.A.
Site Classification for Seismic Site Response

Forming Part of Sentences 4.1.8.4.(1) to (3)

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Site Class	Ground Profile Name	Average Properties in Top 30 m		
			Average Shear Wave Velocity, $\bar{}_S$ (m/s)	Average Standard Penetration Resistance, $\bar{}_{60}$	*Soil* Undrained Shear Strength, s_u
1.	A	Hard *rock*(1) (2)	$\bar{}_S > 1500$	N/A	N/A
2.	B	*Rock*(1)	$760 < \bar{}_S \leq 1500$	N/A	N/A
3.	C	Very dense *soil* and soft *rock*	$360 < \bar{}_S < 760$	$\bar{}_{60} > 50$	$s_u > 100$kPa
4.	D	Stiff *soil*	$180 < \bar{}_S < 360$	$15 \leq \bar{}_{60} \leq 50$	50 kPa $< s_u \leq 100$ kPa
5.	E	Soft *soil*	$\bar{}_S < 180$	$\bar{}_{60} < 15$	$s_u < 50$ kPa
			Any profile with more than 3 m of *soil* with the following characteristics:		

			• plasticity index: PI>20 • moisture content w ≥40%, and • undrained shear strength: s_u < 25 kPa
6.	F	Other *soils*(3)	Site-specific evaluation required

Notes to Table 4.1.8.4.A.:

(1) Site Classes A and B, hard *rock* and *rock*, are not to be used if there is more than 3 m of softer materials between the *rock* and the underside of footing or mat *foundations*. The appropriate Site Class for such cases is determined on the basis of the average properties of the total thickness of the softer materials.

(2) If $\bar{}_S$ has been measured in-situ, the F_a and F_v values derived from Tables 4.1.8.4.B. and 4.1.8.4.C. may be multiplied by $(1500/\bar{}_S)^{1/2}$.

(3) Other *soils* include:

(a) liquefiable *soils*, quick and highly sensitive clays, collapsible weakly cemented *soils*, and other *soils* susceptible to failure or collapse under seismic loading,

(b) peat and/or highly organic clays greater than 3 m in thickness,

(c) highly plastic clays (PI > 75) more than 8 m thick, and

(d) soft to medium stiff clays more than 30 m thick.

Table 4.1.8.4.B.
Values of F_a as a Function of Site Class and $S_a(0.2)$

Forming Part of Sentence 4.1.8.4.(4)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Site Class	Values of F_a				
		$S_a(0.2)\leq 0.25$	$S_a(0.2)=0.5$	$S_a(0.2)=0.75$	$S_a(0.2)=1.00$	$S_a(0.2)\geq 1.25$
1.	A	0.7	0.7	0.8	0.8	0.8
2.	B	0.8	0.8	0.9	1.0	1.0
3.	C	1.0	1.0	1.0	1.0	1.0
4.	D	1.3	1.2	1.1	1.1	1.0
5.	E	2.1	1.4	1.1	0.9	0.9
6.	F	(1)	(1)	(1)	(1)	(1)

Notes to Table 4.1.8.4.B.:

(1) See Sentence 4.1.8.4.(5)

Table 4.1.8.4.C.
Values of F_v as a Function of Site Class and $S_a(1.0)$

Forming Part of Sentence 4.1.8.4.(4)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Site Class	Values of F_v				
		$S_a(1.0)\leq 0.1$	$S_a(1.0)=0.2$	$S_a(1.0)=0.3$	$S_a(1.0)=0.4$	$S_a(1.0)\geq 0.5$
1.	A	0.5	0.5	0.5	0.6	0.6
2.	B	0.6	0.7	0.7	0.8	0.8

3.	C	1.0	1.0	1.0	1.0	1.0
4.	D	1.4	1.3	1.2	1.1	1.1
5.	E	2.1	2.0	1.9	1.7	1.7
6.	F	(1)	(1)	(1)	(1)	(1)

Notes to Table 4.1.8.4.C.:

(1) See Sentence 4.1.8.4.(5)

4.1.8.5. Importance Factor

(1) The earthquake importance factor, I_E, shall be determined according to Table 4.1.8.5.

Table 4.1.8.5.
Importance Factor for Earthquake Loads and Effects, I_E

Forming Part of Sentence 4.1.8.5.(1)

Item	Column 1	Column 2	Column 3
	Importance Category	Importance Factor, I_E	
		ULS	SLS(1)
1.	Low	0.8	
2.	Normal	1.0	
3.	High	1.3	
4.	Post-disaster	1.5	

Notes to Table 4.1.8.5.:

(1) See Article 4.1.8.13.

4.1.8.6. Structural Configuration

(1) Structures having any of the features listed in Table 4.1.8.6. shall be designated irregular.

(2) Structures not classified as irregular according to Sentence 4.1.8.6.(1) may be considered regular.

(3) Except as required by Article 4.1.8.10., in cases where $I_E F_a S_a(0.2)$ is equal to or greater than 0.35, structures designated as irregular must satisfy the provisions referenced in Table 4.1.8.6.

Table 4.1.8.6.
Structural Irregularities(1)

Forming Part of Sentence 4.1.8.6.(1)

Item	Column 1	Column 2	Column 3
	Type	Irregularity Type and Definition	Notes
1.	1	**Vertical Stiffness Irregularity** Vertical stiffness irregularity shall be considered to exist when the lateral stiffness of the SFRS in a *storey* is less than 70% of the stiffness of any adjacent *storey*, or less than 80% of the average stiffness of the three *storeys* above or below.	(2)(3)
2.	2	**Weight (mass) Irregularity** Weight irregularity shall be considered to exist where the weight, W_i, of any *storey* is more than 150% of the weight of an adjacent *storey*. A roof that is lighter than the floor below need not be considered.	(2)

3.	3	**Vertical Geometric Irregularity** Vertical geometric irregularity shall be considered to exist where the horizontal dimension of the SFRS in any *storey* is more than 130% of that in an adjacent *storey*.	(2)(3)(4)
4.	4	**In-Plane Discontinuity in Vertical Lateral-Force-Resisting Element** Except for braced frames and moment-resisting frames, an in-plane discontinuity shall be considered to exist where there is an offset of a lateral-force-resisting element of the SFRS or a reduction in lateral stiffness of the resisting element in the *storey* below.	(2)(3)(4)
5.	5	**Out-of-Plane Offsets** Discontinuities in a lateral force path, such as out-of-plane offsets of the vertical elements of the SFRS.	(2)(3)(4)
6.	6	**Discontinuity in Capacity – Weak Storey** A weak *storey* is one in which the *storey* shear strength is less than that in the *storey* above. The *storey* shear strength is the total strength of all seismic-resisting elements of the SFRS sharing the *storey* shear for the direction under consideration.	(3)
7.	7	**Torsional Sensitivity (to be considered when diaphragms are not flexible)** Torsional sensitivity shall be considered to exist when the ratio B calculated according to Sentence 4.1.8.11.(9) exceeds 1.7.	(2)(3)(5)
8.	8	**Non-orthogonal Systems** A non-orthogonal system irregularity shall be considered to exist when the SFRS is not oriented along a set of orthogonal axes.	(6)

Notes to Table 4.1.8.6.:

(1) One-*storey* penthouses with a weight of less than 10% of the level below need not be considered in the application of this Table.

(2) See Article 4.1.8.7.

(3) See Article 4.1.8.10.

(4) See Article 4.1.8.15.

(5) See Sentences 4.1.8.11.(9) and (10) and 4.1.8.12.(4).

(6) See Article 4.1.8.8.

4.1.8.7. Methods of Analysis

(1) Analysis for design earthquake actions shall be carried out in accordance with the Dynamic Analysis Procedure described in Article 4.1.8.12., except that the Equivalent Static Force Procedure described in Article 4.1.8.11. may be used for structures that meet any of the following criteria:

(a) in cases where $I_E F_a S_a(0.2)$ is less than 0.35,

(b) regular structures that are less than 60 m in height and have a fundamental lateral period, T_a, less than 2 s in each of two orthogonal directions as defined in Article 4.1.8.8., or

(c) structures with structural irregularity, of Type 1, 2, 3, 4, 5, 6 or 8 as defined in Table 4.1.8.6., that are less than 20 m in height and have a fundamental lateral period, T_a, less than 0.5 s in each of two orthogonal directions as defined in Article 4.1.8.8.

4.1.8.8. Direction of Loading

(1) Earthquake forces shall be assumed to act in any horizontal direction, except that the following shall be considered to provide adequate design force levels in the structure:

(a) where components of the SFRS are oriented along a set of orthogonal axes, independent analyses about each of the principal axes of the structure shall be performed,

(b) where the components of the SFRS are not oriented along a set of orthogonal axes and $I_E F_a S_a(0.2)$ is less than 0.35, independent analyses about any two orthogonal axes is permitted, or

(c) where the components of the SFRS are not oriented along a set of orthogonal axes and $I_E F_a S_a(0.2)$ is equal to or greater than 0.35, analysis of the structure independently in any two orthogonal directions for 100% of the prescribed earthquake loads applied in one direction plus 30% of the prescribed earthquake loads in the perpendicular direction, with the combination requiring the greater element strength being used in the design.

4.1.8.9. SFRS Force Reduction Factors, System Overstrength Factors, and General Restrictions

(1) The values of R_d and R_o and the corresponding system restrictions shall conform to Table 4.1.8.9. and the requirements of this Subsection.

(2) When a particular va1ue of R_d is required by this Article, the corresponding R_o shall be used.

(3) For combinations of different types of SFRS acting in the same direction in the same *storey*, R_dR_o shall be taken as the lowest value of R_dR_o corresponding to these systems.

(4) For vertical variations of R_dR_o, excluding rooftop structures not exceeding two *storeys* in height whose weight is less than the greater of 10% of W and 30% of W_i of the level below, the value of R_dR_o used in the design of any *storey* shall be less than or equal to the lowest value of R_dR_o used in the given direction for the *storeys* above, and the requirements of Sentence 4.1.8.15.(5) must be satisfied.

(5) If it can be demonstrated through testing, research and analysis that the seismic performance of a structural system is at least equivalent to one of the types of SFRS mentioned in Table 4.1.8.9., then such a structural system will qualify for values of R_d and R_o corresponding to the equivalent type in that Table.

Table 4.1.8.9.
SFRS Ductility-Related Force Modification Factors, R_d, Overstrength-Related Force Modification Factors, R_o, and General Restrictions [1]

Forming Part of Sentence 4.1.8 9.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Type of SFRS			Restrictions[2]				
		R_d	R_o	Cases Where $I_E F_a S_a(0.2)$				Cases Where $I_E F_v S_a(1.0)$

				<0.2	≥0.2 to <0.35	≥0.35 to ≤0.75	>0.75	>0.3
1.	Steel Structures Designed and Detailed According to CSA S16[3]							
	Ductile moment-resisting frames	5.0	1.5	NL	NL	NL	NL	NL
	Moderately ductile moment-resisting frames	3.5	1.5	NL	NL	NL	NL	NL
	Limited ductility moment-resisting frames	2.0	1.3	NL	NL	60	30	30
	Moderately ductile concentrically braced frames							
	Tension-compression braces	3.0	1.3	NL	NL	40	40	40
	Tension only braces	3.0	1.3	NL	NL	20	20	20
	Limited ductility concentrically braced frames							
	Tension-compression braces	2.0	1.3	NL	NL	60	60	60
	Tension only braces	2.0	1.3	NL	NL	40	40	40
	Ductile buckling-restrained braced frames	4.0	1.2	NL	NL	40	40	40
	Ductile eccentrically braced frames	4.0	1.5	NL	NL	NL	NL	NL
	Ductile plate walls	5.0	1.6	NL	NL	NL	NL	NL
	Limited ductility plate walls	2.0	1.5	NL	NL	60	60	60
	Conventional construction of moment-resisting frames, braced frames or plate walls							
	Assembly occupancies	1.5	1.3	NL	NL	15	15	15
	Other *occupancies*	1.5	1.3	NL	NL	60	40	40
	Other steel SFRS(s) not defined above	1.0	1.0	15	15	NP	NP	NP
2.	Concrete Structures Designed and Detailed According to CAN/CSA-A23.3							
	Ductile moment-resisting frames	4.0	1.7	NL	NL	NL	NL	NL
	Moderately ductile moment-resisting frames	2.5	1.4	NL	NL	60	40	40
	Ductile coupled walls	4.0	1.7	NL	NL	NL	NL	NL
	Ductile partially coupled walls	3.5	1.7	NL	NL	NL	NL	NL
	Ductile shear walls	3.5	1.6	NL	NL	NL	NL	NL
	Moderately ductile shear walls	2.0	1.4	NL	NL	NL	60	60
	Conventional construction							
	Moment-resisting frames	1.5	1.3	NL	NL	15	NP	NP

	Shear walls	1.5	1.3	NL	NL	40	30	30
	Other concrete SFRS(s) not listed above	1.0	1.0	15	15	NP	NP	NP
3.	Timber Structures Designed and Detailed According to CSA O86							
	Shear walls							
	Nailed shear walls: wood-based panel	3.0	1.7	NL	NL	30	20	20
	Shear walls: wood-based and gypsum panels in combination	2.0	1.7	NL	NL	20	20	20
	Braced or moment-resisting frames with ductile connections							
	Moderately ductile	2.0	1.5	NL	NL	20	20	20
	Limited ductility	1.5	1.5	NL	NL	15	15	15
	Other wood-or gypsum-based SFRS(s) not listed above	1.0	1.0	15	15	NP	NP	NP
4.	Masonry Structures Designed and Detailed According to CSA S304.1							
	Moderately ductile shear walls	2.0	1.5	NL	NL	60	40	40
	Limited ductility shear walls	1.5	1.5	NL	NL	40	30	30
	Conventional construction							
	Shear walls	1.5	1.5	NL	60	30	15	15
	Moment-resisting frames	1.5	1.5	NL	30	NP	NP	NP
	Unreinforced masonry	1.0	1.0	30	15	NP	NP	NP
	Other masonry SFRS(s) not listed above	1.0	1.0	15	NP	NP	NP	NP
5.	Cold-Formed Steel Structures Designed and Detailed According to CAN/CSA-S136							
	Shear walls							
	Screw-connected shear walls - wood-based panel	2.5	1.7	20	20	20	20	20
	Screw-connected shear walls - wood-based and gypsum panels in combination	1.5	1.7	20	20	20	20	20
	Diagonal strap concentrically braced walls							
	Limited ductility	1.9	1.3	20	20	20	20	20
	Conventional construction	1.2	1.3	15	15	NP	NP	NP
	Other cold-formed SFRS(s) not listed above	1.0	1.0	15	15	NP	NP	NP

Notes to Table 4.1.8.9.:

(1) See Article 4.1.8.10.

(2) NP = system is not permitted.

NL = system is permitted and not limited in height as an SFRS; height may be limited in other Parts of the Code.

Numbers in Columns 4 to 8 are maximum height limits in m.

The most stringent requirement governs.

(3) Higher design force levels are prescribed in CSA S16 for some heights of *buildings*.

4.1.8.10. Additional System Restrictions

(1) Except as required by Clause (2)(b), structures with a Type 6 irregularity, Discontinuity in Capacity – Weak Storey, as described in Table 4.1.8.6., are not permitted unless $I_E F_a S_a(0.2)$ is less than 0.2 and the forces used for design of the SFRS are multiplied by $R_d R_o$.

(2) *Post-disaster buildings* shall,

(a) not have any irregularities conforming to Types 1, 3, 4, 5 and 7 as described in Table 4.1.8.6., in cases where $I_E F_a S_a(0.2)$ is equal to or greater than 0.35,

(b) not have a Type 6 irregularity as described in Table 4.1.8.6.,

(c) have an SFRS with an R_d of 2.0 or greater, and

(d) have no *storey* with a lateral stiffness that is less than that of the *storey* above it.

(3) For *buildings* having fundamental lateral periods, T_a, of 1.0 s or greater, and where $I_E F_v S_a(1.0)$ is greater than 0.25, shear walls that are other than wood-based and form part of the SFRS shall be continuous from their top to the *foundation* and shall not have irregularities of Type 4 or 5 as described in Table 4.1.8.6.

(4) For *buildings* constructed with more than 4 *storeys* of continuous wood construction and where $I_E F_a S_a(0.2)$ is equal to or greater than 0.35, timber SFRS of shear walls with wood-based panels, braced frames or moment-resisting frames as defined in Table 4.1.8.9. within the continuous wood construction shall not have irregularities of Type 4 or 5 as described in Table 4.1.8.6.

4.1.8.11. Equivalent Static Force Procedure for Structures Satisfying the Conditions of Article 4.1.8.7.

(1) The static loading due to earthquake motion shall be determined according to the procedures given in this Article.

(2) The minimum lateral earthquake force, V, shall be calculated using the formula,

$$V = S(T_a) M_v I_E W / (R_d R_o)$$

except,

(a) for walls, coupled walls and wall-frame systems, V shall not be less than,

$$S(4.0) M_v I_E W / (R_d R_o)$$

(b) for moment-resisting frames, braced frames and other systems, V shall not be less than,

$$S\,(2.0)\,M_v\,I_E W/\,(R_d R_o)$$

(c) for *buildings* located on a site other than Class F and having an SFRS with an R_d equal to or greater than 1.5, V need not be greater than,

$$\tfrac{2}{3} S(0.2) I_E W\,/\,(R_d R_o)$$

(3) The fundamental lateral period, T_a, in the direction under consideration in Sentence (2) shall be determined as,

(a) for moment-resisting frames that resist 100% of the required lateral forces and where the frame is not enclosed by or adjoined by more rigid elements that would tend to prevent the frame from resisting lateral forces, and where h_n is in metres,

(i) $0.085\,(h_n)^{3/4}$ for steel moment frames,

(ii) $0.075\,(h_n)^{3/4}$ for concrete moment frames, or

(iii) 0.1 N for other moment frames,

(b) $0.025\,h_n$ for braced frames where h_n is in metres,

(c) $0.05\,(h_n)^{3/4}$ for shear wall and other structures where h_n is in metres, or

(d) other established methods of mechanics using a structural model that complies with the requirements of Sentence 4.1.8.3.(8), except that,

(i) for moment-resisting frames, T_a shall not be taken greater than 1.5 times that determined in Clause (a),

(ii) for braced frames, T_a shall not be taken greater than 2.0 times that determined in Clause (b),

(iii) for shear wall structures, T_a shall not be greater than 2.0 times that determined in Clause (c),

(iv) for other structures, T_a shall not be taken greater than that determined in Clause (c), and

(v) for the purpose of calculating the deflections, the period without the upper limit specified in Subclauses (d)(i) to (iv) may be used, except that, for walls, coupled walls and wall-frame systems, T_a shall not exceed 4.0 s, and for moment-resisting frames, braced frames, and other systems, T_a shall not exceed 2.0 s.

(4) The weight, W, of the *building* shall be calculated using the formula,

$$W = \sum_{i=1}^{n} W_i$$

(5) The higher mode factor, M_v, and its associated base overturning moment reduction factor, J, shall conform to Table 4.1.8.11.

Table 4.1.8.11.
Higher Mode Factor, M_v, and Base Overturning Reduction Factor, J[(1)(2)]

Forming Part of Sentence 4.1.8.11.(5)

Item	Column 1 $S_a(0.2)/S_a(2.0)$	Column 2 Type of Lateral Resisting System	Column 3 M_V For $T_a \leq 1.0$	Column 4 M_V For $T_a = 2.0$	Column 5 M_V For $T_a \geq 4.0$	Column 6 J For $T_a \leq 0.5$	Column 7 J For $T_a = 2.0$	Column 8 J For $T_a \geq 4.0$
1.	< 8.0	Moment-resisting frames	1.0	1.0	(3)	1.0	0.9	(3)
		Coupled walls[(4)]	1.0	1.0	1.0	1.0	0.9	0.8
		Braced frames	1.0	1.0	(3)	1.0	0.8	(3)
		Walls, wall-frame systems	1.0	1.2	1.6	1.0	0.6	0.5
		Other systems[(5)]	1.0	1.2	(3)	1.0	0.6	(3)
2.	≥8.0	Moment-resisting frames	1.0	1.2	(3)	1.0	0.7	(3)
		Coupled walls[(4)]	1.0	1.2	1.2	1.0	0.7	0.6
		Braced frames	1.0	1.5	(3)	1.0	0.6	(3)
		Walls, wall-frame systems	1.0	2.2	3.0	1.0	0.4	0.3
		Other systems[(5)]	1.0	2.2	(3)	1.0	0.4	(3)

Notes to Table 4.1.8.11.:

(1) For values of M_v between fundamental lateral periods, T_a, of 1.0 s and 2.0 s and between 2.0 s and 4.0 s, the product $S(T_a) \cdot M_v$ shall be obtained by linear interpolation.

(2) Values of J between fundamental lateral periods, T_a, of 0.5 s and 2.0 s and between 2.0 s and 4.0 s shall be obtained by linear interpolation.

(3) For fundamental lateral periods, T_a, greater than 2.0 s, use the values for $T_a = 2.0$.

(4) A “coupled wall” is a wall system with coupling beams, where at least 66% of the base overturning moment resisted by the wall system is carried by the axial tension and compression forces resulting from shear in the coupling beams.

(5) For hybrid systems, values corresponding to walls must be used or a dynamic analysis must be carried out as per Article 4.1.8.12.

(6) The total lateral seismic force, V, shall be distributed such that a portion, F_t, shall be assumed to be concentrated at the top of the *building*, where F_t, is equal to $0.07\ T_a V$ but need not exceed 0.25 V and may be considered as zero, where the fundamental lateral period, T_a, does not exceed 0.7 s; the remainder, $V - F_t$, shall be distributed along the height of the *building*, including the top level, in accordance with the formula,

$$F_x = (V - F_t)\, W_x h_x \Big/ \left(\sum_{i=1}^{n} W_i h_i \right)$$

(7) The structure shall be designed to resist overturning effects caused by the earthquake forces determined in Sentence (6) and the overturning moment at level x, M_x, shall be determined using the formula,

$$M_x = J_x \sum_{i=x}^{n} F_i (h_i - h_x)$$

where,

J_x = 1.0 for $h_x \geq 0.6h_n$, and

J_x = $J + (1- J)(h_x / 0.6h_n)$ for $h_x, < 0.6h_n$

where,

J = base overturning moment reduction factor conforming to Table 4.1.8.11.

(8) Torsional effects that are concurrent with the effects of the forces mentioned in Sentence (6) and are caused by the simultaneous actions of the following torsional moments shall be considered in the design of the structure according to Sentence (10):

(a) torsional moments introduced by eccentricity between the centres of mass and resistance and their dynamic amplification, and

(b) torsional moments due to accidental eccentricities.

(9) Torsional sensitivity shall be determined by calculating the ratio B_x for each level x according to the following equation for each orthogonal direction determined independently:

$$B_x = \delta_{max} / \delta_{ave}$$

where,

B = maximum of all values of B_x in both orthogonal directions, except that the B_x for one-*storey* penthouses with a weight less than 10% of the level below need not be considered,

δ_{max} = maximum *storey* displacement at the extreme points of the structure, at level x in the direction of the earthquake induced by the equivalent static forces acting at distances ± 0.10 D_{nx} from the centres of mass at each floor, and

δ_{ave} =average of the displacements at the extreme points of the structure at level x produced by the above-mentioned forces.

(10) Torsional effects shall be accounted for as follows:

(a) for a *building* with B ≤1.7 or where $I_E F_a S_a(0.2)$ is less than 0.35, by applying torsional moments about a vertical axis at each level throughout the *building*, derived for each of the following load cases considered separately,

(i) $T_x = F_x(e_x + 0.10\ D_{nx})$, and

(ii) $T_x = F_x(e_x – 0.10\ D_{nx})$

where F_x is the lateral force at each level determined according to Sentence (6) and where each element of the *building* is designed for the most severe effect of the above load cases, or

(b) for a *building* with B >1.7, in cases where $I_E F_a S_a(0.2)$ is equal to or greater than 0.35, by a Dynamic Analysis Procedure as specified in Article 4.1.8.12.

(11) Where the fundamental lateral period, T_a, is determined by Clause (3)(d) and the *building* is constructed with more than 4 *storeys* of continuous wood construction and having a timber SFRS of shear walls with wood-based panels, braced frames or moment-resisting frames as defined in Table 4.1.8.9., the lateral earthquake force, V, as determined by Sentence (2) shall be multiplied by 1.2, but need not exceed that determined by Clause (2)(c).

4.1.8.12. Dynamic Analysis Procedure

(1) The Dynamic Analysis Procedure shall be in accordance with one of the following methods:

(a) Linear Dynamic Analysis by either the Modal Response Spectrum Method or the Numerical Integration Linear Time History Method using a structural model that complies with the requirements of Sentence 4.1.8.3.(8), or

(b) Nonlinear Dynamic Analysis, in which case a special study shall be performed.

(2) The spectral acceleration values used in the Modal Response Spectrum Method shall be the design spectral acceleration values, S(T), defined in Sentence 4.1.8.4.(7).

(3) The ground motion histories used in the Numerical Integration Linear Time History Method shall be compatible with a response spectrum constructed from the design spectral acceleration values, S(T), defined in Sentence 4.1.8.4.(7).

(4) The effects of accidental torsional moments acting concurrently with the lateral earthquake forces that cause them shall be accounted for by the following methods:

(a) the static effects of torsional moments due to $(\pm 0.10\ D_{nx})F_x$ at each level x, where F_x is either determined from the elastic dynamic analysis or determined from Sentence 4.1.8.11.(6) multiplied by R_dR_o/I_E, shall be combined with the effects determined by dynamic analysis, or

(b) if B, as defined in Sentence 4.1.8.11.(9), is less than 1.7, it is permitted to use a three-dimensional dynamic analysis with the centres of mass shifted by a distance of $-0.05\ D_{nx}$ and $+0.05\ D_{nx}$.

(5) Except as provided in Sentence (6), the design elastic base shear, V_{ed}, is equal to the elastic base shear, V_e, obtained from a Linear Dynamic Analysis.

(6) For structures located on sites other than Class F that have an SFRS with R_d equal to or greater than 1.5, the elastic base shear obtained from a Linear Dynamic Analysis may be multiplied by the following factor to obtain the design elastic base shear, V_{ed}:

$$\frac{2S(0.2)}{3S(T_a)} \leq 1.0$$

(7) The design elastic base shear, V_{ed}, shall be multiplied by the importance factor, I_E, as determined in Article 4.1.8.5., and shall be divided by R_dR_o, as determined in Article 4.1.8.9., to obtain the design base shear, V_d.

(8) Except as required by Sentences (9) and (12), if the base shear, V_d, obtained in Sentence (7) is less than 80% of the lateral earthquake design force, V, of Article 4.1.8.11., V_d shall be taken as 0.8 V.

(9) For irregular structures requiring dynamic analysis in accordance with Article 4.1.8.7., V_d shall be taken as the larger of the V_d determined in Sentence (7) and 100% of V.

(10) Except as required by Sentence (11), the values of elastic *storey* shears, *storey* forces, member forces, and deflections obtained from the Linear Dynamic Analysis, including the effect of accidental torsion determined in Sentence (4), shall be multiplied by V_d/V_e to determine their design values, where V_d is the base shear.

(11) For the purpose of calculating deflections, it is permitted to use a value for V based on the value for T_a determined in Clause 4.1.8.11.(3)(d) to obtain V_d in Sentences (8) and (9).

(12) *Buildings* with more than 4 *storeys* of continuous wood construction and having a timber SFRS of shear walls with wood-based panels, braced frames or moment-resisting frames as defined in Table 4.1.8.9., having a fundamental lateral period, T_a, as determined in Clause 4.1.8.11.(3)(d), shall have the base shear, V_d, taken as the larger of the base shear obtained in Sentence (7) and 100% of the lateral earthquake design force, V, as determined in Article 4.1.8.11.

4.1.8.13. Deflections and Drift Limits

(1) Lateral deflections of a structure shall be calculated in accordance with the loads and requirements defined in this Subsection.

(2) Lateral deflections obtained from a linear elastic analysis using the methods given in Articles 4.1.8.11. and 4.1.8.12. and incorporating the effects of torsion, including accidental torsional moments, shall be multiplied by R_dR_o/I_E to give realistic values of anticipated deflections.

(3) Based on the lateral deflections calculated in Sentence (2), the largest interstorey deflection at any level shall be limited to 0.01 h_s for *post-disaster buildings*, 0.02 h_s for High Importance Category *buildings*, and 0.025 h_s for all other *buildings*.

(4) The deflections calculated in Sentence (2) shall be used to account for sway effects as required by Sentence 4.1.3.2.(12).

4.1.8.14. Structural Separation

(1) Adjacent structures shall either be separated by the square root of the sum of the squares of their individual deflections calculated in Sentence 4.1.8.13.(2), or shall be connected to each other.

(2) The method of connection required in Sentence (1) shall take into account the mass, stiffness, strength, ductility and anticipated motion of the connected *buildings* and the character of the connection.

(3) Rigidly connected *buildings* shall be assumed to have the lowest R_dR_o value of the *buildings* connected.

(4) *Buildings* with non-rigid or energy-dissipating connections require special studies.

4.1.8.15. Design Provisions

(1) Except as provided in Sentences (2) and (3), diaphragms, collectors, chords, struts and connections shall be designed so as not to yield, and the design shall account for the

shape of the diaphragm, including openings, and for the forces generated in the diaphragm due to the following cases, whichever one governs:

(a) forces due to loads determined in Article 4.1.8.11. or 4.1.8.12. applied to the diaphragm are increased to reflect the lateral load capacity of the SFRS, plus forces in the diaphragm due to the transfer of forces between elements of the SFRS associated with the lateral load capacity of such elements and accounting for discontinuities and changes in stiffness in these elements, or

(b) a minimum force corresponding to the design-based shear divided by N for the diaphragm at level x.

(2) Steel deck roof diaphragms in *buildings* of less than 4 *storeys* or wood diaphragms that are designed and detailed according to the applicable referenced design standards to exhibit ductile behaviour shall meet the requirements of Sentence (1), except that they may yield and the forces shall be,

(a) for wood diaphragms acting in combination with vertical wood shear walls, equal to the lateral earthquake design force,

(b) for wood diaphragms acting in combination with other SFRS, not less than the force corresponding to $R_dR_o = 2.0$, and

(c) for steel deck roof diaphragms, not less than the force corresponding to $R_dR_o = 2.0$.

(3) Where diaphragms are designed in accordance with Sentence (2), the struts shall be designed in accordance with Clause (1)(a) and the collectors, chords and connections between the diaphragms and the vertical elements of the SFRS shall be designed for forces corresponding to the capacity of the diaphragms in accordance with the applicable CSA standards.

(4) In cases where $I_EF_aS_a(0.2)$ is equal to or greater than 0.35, the elements supporting any discontinuous wall, column or braced frame shall be designed for the lateral load capacity of the components of the SFRS they support.

(5) Where structures have vertical variations of R_dR_o satisfying Sentence 4.1.8.9.(4), the elements of the SFRS below the level where the change in R_dR_o occurs shall be designed for the forces associated with the lateral load capacity of the SFRS above that level.

(6) Where earthquake effects can produce forces in a column or wall due to lateral loading along both orthogonal axes, account shall be taken of the effects of potential concurrent yielding of other elements framing into the column or wall from all directions at the level under consideration and as appropriate at other levels.

(7) Except as provided in Sentence (8), the design forces associated with the lateral capacity of the SFRS need not exceed the forces determined in accordance with Sentence 4.1.8.7.(1) with R_dR_o taken as 1.0, unless otherwise provided by the applicable referenced design standards for elements, in which case the design forces associated with the lateral capacity of the SFRS need not exceed the forces determined in accordance with Sentence 4.1.8.7.(1) with R_dR_o taken as 1.3.

(8) If *foundation* rocking is accounted for, the design forces for the SFRS need not exceed the maximum values associated with *foundation* rocking, provided that R_d and R_o

for the type of SFRS used conform to Table 4.1.8.9. and that the *foundation* is designed in accordance with Sentence 4.1.8.16.(1).

4.1.8.16. Foundation Provisions

(1) *Foundations* shall be designed to resist the lateral load capacity of the SFRS, except that when the *foundations* are allowed to rock, the design forces for the *foundation* need not exceed those determined in Sentence 4.1.8.7.(1) using an R_dR_o equal to 2.0.

(2) The design of *foundations* shall be such that they are capable of transferring earthquake loads and effects between the *building* and the ground without exceeding the capacities of the *soil* and *rock*.

(3) In cases where $I_EF_aS_a(0.2)$ is equal to or greater than 0.35, the following requirements shall be satisfied:

(a) *piles* or *pile* caps, drilled piers, and caissons shall be interconnected by continuous ties in no fewer than two directions,

(b) *piles*, drilled piers, and caissons shall be embedded a minimum of 100 mm into the *pile* cap or structure, and

(c) *piles*, drilled piers, and caissons, other than wood *piles*, shall be connected to the *pile* cap or structure for a minimum tension force equal to 0.15 times the factored compression load on the *pile*.

(4) At sites where $I_EF_aS_a(0.2)$ is equal to or greater than 0.35, *basement* walls shall be designed to resist earthquake lateral pressures from backfill or natural ground.

(5) At sites where $I_EF_aS_a(0.2)$ is greater than 0.75, the following requirements shall be satisfied:

(a) *piles*, drilled piers, or caissons shall be designed and detailed to accommodate cyclic inelastic behaviour when the design moment in the element due to earthquake effects is greater than 75% of its moment capacity, and

(b) spread footings founded on *soil* defined as Site Class E or F shall be interconnected by continuous ties in no fewer than two directions.

(6) Each segment of a tie between elements that is required by Clause (3)(a) or (5)(b) shall be designed to carry by tension or compression a horizontal force at least equal to the greatest factored *pile* cap or column vertical load in the elements it connects, multiplied by a factor of 0.10 $I_EF_aS_a(0.2)$, unless it can be demonstrated that equivalent restraints can be provided by other means.

(7) The potential for liquefaction of the *soil* and its consequences, such as significant ground displacement and loss of *soil* strength and stiffness, shall be evaluated based on the ground motion parameters referenced in Subsection 1.1.2. and shall be taken into account in the design of the structure and its *foundations*.

4.1.8.17. Site Stability

(1) The potential for slope instability and its consequences, such as slope displacement, shall be evaluated based on site-specific material properties and ground motion parameters referenced in Subsection 1.1.2. and shall be taken into account in the design of the structure and its *foundations*.

4.1.8.18. Elements of Structures, Non-structural Components and Equipment

(1) Except as provided in Sentences (2) and (8), elements and components of *buildings* described in Table 4.1.8.18. and their connections to the structure shall be designed to accommodate the *building* deflections calculated in accordance with Article 4.1.8.13. and the element or component deflections calculated in accordance with Sentence (10), and shall be designed for a lateral force, V_P, applied through the centre of mass of the element or component that is equal to:

$$V_p = 0.3F_aS_a(0.2)\ I_ES_pW_p$$

where,

F_a = as defined in Table 4.1.8.4.B.,

$S_a(0.2)$ = spectral response acceleration value at 0.2 s, as defined in Sentence 4.1.8.4.(1),

I_E = importance factor for the *building*, as defined in Article 4.1.8.5.,

S_p = $C_pA_rA_x/R_p$ (the maximum value of S_p shall be taken as 4.0 and the minimum value of S_p shall be taken as 0.7), where,

C_p = element or component factor from Table 4.1.8.18.,

A_r = element or component force amplification factor from Table 4.1.8.18.,

A_x = height factor $(1 + 2\ h_x / h_n)$,

R_p = element or component response modification factor from Table 4.1.8.18., and

W_p = weight of the component or element.

(2) For *buildings* other than *post-disaster buildings*, where $I_EF_aS_a(0.2)$ is less than 0.35, the requirements of Sentence (1) need not apply to Categories 6 through 21 of Table 4.1.8.18.

(3) The values of C_p in Sentence (1) shall conform to Table 4.1.8.18.

(4) For the purpose of applying Sentence (1) and Categories 11 and 12 of Table 4.1.8.18., elements or components shall be assumed to be flexible or flexibly connected unless it can be shown that the fundamental period of the element or component and its connection is less than or equal to 0.06 s, in which case the element or component is classified as being rigid or rigidly connected.

(5) The weight of access floors shall include the *dead load* of the access floor and the weight of permanent equipment, which shall not be taken as less than 25% of the floor *live load*.

(6) When the mass of a tank plus its contents or the mass of a flexible or flexibly connected piece of machinery, fixture or equipment is greater than 10% of the mass of the supporting floor, the lateral forces shall be determined by rational analysis.

(7) Forces shall be applied in the horizontal direction that results in the most critical loading for design, except for Category 6 of Table 4.1.8.18., where the forces shall be applied up and down vertically.

(8) Connections to the structure of elements and components listed in Table 4.1.8.18. shall be designed to support the component or element for gravity loads, shall conform to the requirements of Sentence (1), and shall also satisfy these additional requirements:

(a) friction due to gravity loads shall not be considered to provide resistance to seismic forces,

(b) R_p for non-ductile connections, such as adhesives or power actuated fasteners, shall be taken as 1.0,

(c) R_p for anchorage using shallow expansion, chemical, epoxy or cast-in place anchors shall be 1.5, where shallow anchors are those with a ratio of embedment length to diameter of less than 8,

(d) power-actuated fasteners and drop-in anchors shall not be used for tension loads,

(e) connections for non-structural elements or components of Category 1, 2 or 3 of Table 4.1.8.18. attached to the side of a *building* and above the first level above *grade* shall satisfy the following requirements:

(i) for connections where the body of the connection is ductile, the body shall be designed for values of C_P, A_r and R_p given in Table 4.1.8.18., and all of the other parts of the connection, such as anchors, welds, bolts and inserts, shall be capable of developing 2.0 times the nominal yield resistance of the body of the connection, and

(ii) connections where the body of the connection is not ductile shall be designed for values of C_p=2.0, R_p =1.0 and A_r given in Table 4.1.8.18., and

(f) for the purpose of applying Clause (e), a ductile connection is one where the body of the connection is capable of dissipating energy through cyclic inelastic behaviour.

(9) Floors and roofs acting as diaphragms shall satisfy the requirements for diaphragms stated in Article 4.1.8.15.

(10) Lateral deflections of elements or components shall be based on the loads defined in Sentence (1) and lateral deflections obtained from an elastic analysis shall be multiplied by R_p/I_E to give realistic values of the anticipated deflections.

(11) The elements or components shall be designed so as not to transfer to the structure any forces unaccounted for in the design, and rigid elements such as walls or panels shall satisfy the requirements of Sentence 4.1.8.3.(6).

(12) Seismic restraint for suspended equipment, pipes, ducts, electrical cable trays, etc. shall be designed to meet the force and displacement requirements of this Article and be constructed in a manner that will not subject hanger rods to bending.

(13) Isolated suspended equipment and components, such as pendant lights, may be designed as a pendulum system provided that adequate chains or cables capable of supporting 2.0 times the weight of the suspended component are provided and the deflection requirements of Sentence (11) are satisfied.

Table 4.1.8.18.
Elements of Structures and Non-structural Components and Equipment

Forming Part of Sentence 4.1.8.18.(1)

Item	Column 1 Category	Column 2 Part or portion of *Building*	Column 3 C_p	Column 4 A_r	Column 5 R_p
1.	1	All exterior and interior walls except those in Category 2 or 3[1]	1.00	1.00	2.50
2.	2	Cantilever parapet and other cantilever walls except retaining walls[1]	1.00	2.50	2.50
3.	3	Exterior and interior ornamentations and appendages[1]	1.00	2.50	2.50
4.	4	Floors and roofs acting as diaphragms[2]	-	-	-
5.	5	Towers, *chimneys*, smokestacks and penthouses when connected to or forming part of a *building*	1.00	2.50	2.50
6.	6	Horizontally cantilevered floors, balconies, beams, etc.	1.00	1.00	2.50
7.	7	Suspended ceilings, light fixtures and other attachments to ceilings with independent vertical support	1.00	1.00	2.50
8.	8	Masonry veneer connections	1.00	1.00	1.50
9.	9	Access floors	1.00	1.00	2.50
10.	10	Masonry or concrete fences more than 1.8 m tall	1.00	1.00	2.50
11.	11	Machinery, fixtures, equipment, ducts and tanks (including contents)			
		that are rigid and rigidly connected[3]	1.00	1.00	1.25
		that are flexible or flexibly connected[3]	1.00	2.50	2.50
12.	12	Machinery, fixtures, equipment, ducts and tanks (including contents) containing toxic or explosive materials, materials having a *flash point* below 38°C or firefighting fluids			
		that are rigid and rigidly connected[3]	1.50	1.00	1.25
		that are flexible or flexibly connected[3]	1.50	2.50	2.50
13.	13	Flat bottom tanks (including contents) attached directly to a floor at or below *grade* within a *building*	0.70	1.00	2.50
14.	14	Flat bottom tanks (including contents) attached directly to a floor at or below *grade* within a *building* containing toxic or explosive materials, materials having a *flash point* below 38°C or firefighting fluids	1.00	1.00	2.50
15.	15	Pipes, ducts, cable trays (including contents)	1.00	1.00	3.00
16.	16	Pipes, ducts (including contents) containing toxic or explosive materials	1.50	1.00	3.00
17.	17	Electrical cable trays, bus ducts, conduits	1.00	2.50	5.00
18.	18	Rigid components with ductile material and connections	1.00	1.00	2.50
19.	19	Rigid components with non-ductile material or connections	1.00	1.00	1.00
20.	20	Flexible components with ductile material and connections	1.00	2.50	2.50
21.	21	Flexible components with non-ductile material or connections	1.00	2.50	1.00

Notes to Table 4.1.8.18.:

(1) See Sentence 4.1.8.18.(8).

(2) See Sentence 4.1.8.18.(9).

(3) See Sentence 4.1.8.18.(4).

Section 4.2. Foundations

4.2.1. General

4.2.1.1. Application

(1) This Section applies to *excavations* and *foundation* systems for *buildings*.

4.2.2. Subsurface Investigations and Reviews

4.2.2.1. Subsurface Investigation

(1) A *subsurface investigation*, including *groundwater* conditions, shall be carried out, by or under the direction of a person having knowledge and experience in planning and executing such investigations to a degree appropriate for the *building* and its use, the ground and the surrounding site conditions.

4.2.2.2. Field Review

(1) A field review shall be carried out by the *designer* or by another suitably qualified person to ascertain that the subsurface conditions are consistent with the design and that *construction* is carried out in accordance with the design and good engineering practice.

(2) The review required in Sentence (1) shall be carried out,

(a) on a continuous basis,

(i) during the *construction* of all *deep foundation units* with all pertinent information recorded for each *foundation unit*,

(ii) during the installation and removal of retaining structures and related backfilling operations, and

(iii) during the placement of engineered *fills* that are to be used to support the *foundation units*, and

(b) as required, unless otherwise directed by the *chief building official*,

(i) in the *construction* of all *shallow foundation units*, and

(ii) in excavating, dewatering and other related works.

4.2.2.3. Altered Subsurface Condition

(1) If during *construction*, the *soil*, *rock* or *groundwater* is found not to be of the type or in the condition used in design, and as indicated on the drawings, the design shall be reassessed by the *designer*.

(2) If during *construction*, climatic or any other conditions have changed the properties of the *soil*, *rock* or *groundwater*, the design shall be reassessed by the *designer*.

4.2.3. Materials Used in Foundations

4.2.3.1. Wood

(1) Wood used in *foundation*s or in support of *soil* or *rock* shall conform to the appropriate requirements of Subsection 4.3.1.

4.2.3.2. Preservation Treatment of Wood

(1) Wood exposed to *soil* or air above the lowest anticipated *groundwater* table shall be treated with preservative in conformance with CAN/CSA-O80 Series, "Wood Preservation", and the requirements of the appropriate commodity standard as follows:

(a) CAN/CSA-O80.2, "Processing and Treatment",

(b) CAN/CSA-O80.3, "Preservative Formulations", or

(c) CSA O80.15, "Preservative Treatment of Wood for Building Foundation Systems, Basements and Crawl Spaces by Pressure Processes".

4.2.3.3. Plain and Reinforced Masonry

(1) Plain or reinforced masonry used in *foundation*s or in support of *soil* or *rock* shall conform to the requirements of Subsection 4.3.2.

4.2.3.4. Prevention of Deterioration of Masonry

(1) Where plain or reinforced masonry in *foundation*s or in structures supporting *soil* or *rock* may be subject to conditions conducive to deterioration, protection shall be provided to prevent such deterioration.

4.2.3.5. Concrete

(1) Plain, reinforced or prestressed concrete used in *foundation*s or in support of *soil* or *rock* shall conform to the requirements of Subsection 4.3.3.

4.2.3.6. Protection Against Chemical Attack

(1) Where concrete in *foundation*s may be subject to chemical attack, it shall be treated in conformance with the requirements in CSA A23.1, "Concrete Materials and Methods of Concrete Construction".

4.2.3.7. Steel

(1) Steel used in *foundation*s or in support of *soil* or *rock* shall conform with the appropriate requirements of Subsections 4.3.3. or 4.3.4., unless otherwise specified in this Section.

4.2.3.8. Steel Piles

(1) Where steel *piles* are used in *deep foundation*s and act as permanent load-carrying members, the steel shall conform with one of the following standards:

(a) ASTM A252, "Welded and Seamless Steel Pipe Piles",

(b) ASTM A283 / A283M, "Low and Intermediate Tensile Strength Carbon Steel Plates",

(c) ASTM A1008 / A1008M , "Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, and High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable",

(d) ASTM A1011 / A1011M, “Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength”, or

(e) CSA G40.21, “General Requirements for Rolled or Welded Structural Quality Steel”.

4.2.3.9. High Strength Steel Tendons

(1) Where high strength steel is used for tendons in anchor systems used for the permanent support of a *foundation* or in the erection of temporary support of *soil* or *rock* adjacent to an *excavation*, it shall conform with the requirements of CSA A23.1, “Concrete Materials and Methods of Concrete Construction”.

4.2.3.10. Corrosion of Steel

(1) Where conditions are corrosive to steel, adequate protection of exposed steel shall be provided.

4.2.4. Design Requirements

4.2.4.1. Design Basis

(1) The design of *foundation*s, *excavations* and *soil*- and *rock*-retaining structures shall be based on a *subsurface investigation* carried out by a person competent in this field of work, and on any of the following:

(a) application of generally accepted geotechnical and civil engineering principles by a person especially qualified in this field of work as provided in this Section and other Sections of this Part,

(b) established local practice where such practice includes successful experience both with *soils* and *rocks* of similar type and condition and with a *foundation* or *excavation* of similar type, *construction* method, size and depth, or

(c) in situ testing of *foundation units* such as the load testing of *pile*s, anchors or footings carried out by a person competent in this field of work.

(2) The *foundations* of a *building* shall be capable of resisting all the loads stipulated in Section 4.1., in accordance with limit states design in Subsection 4.1.3.

(3) For the purpose of the application of the load combinations given in Table 4.1.3.2.A., the geotechnical components of loads and the factored geotechnical resistances at ULS shall be determined by a suitably qualified and experienced person.

(4) Geotechnical components of service loads and geotechnical reactions for SLS shall be determined by a suitably qualified and experienced person.

(5) The *foundation* of a *building* shall be designed to satisfy SLS requirements within the limits that the *building* is designed to accommodate, including total settlement and differential settlement, heave, lateral movement, tilt or rotation.

(6) Communication, interaction and coordination between the *designer* and the person responsible for the geotechnical aspects of the project shall take place to a degree commensurate with the complexity and requirements of the project.

4.2.4.2. Subsurface Investigation

(1) A *subsurface investigation* shall be carried out to the depth and extent to which the *building* or *excavation* will significantly change the stress in the *soil* or *rock*, or to such a depth and extent as to provide all the necessary information for the design and *construction* of the *excavation* or the *foundation*s.

4.2.4.3. Identification

(1) The identification and classification of *soil*, *rock* and *groundwater* and descriptions of their engineering and physical properties shall be in accordance with a widely accepted system.

4.2.4.4. Depth of Foundations

(1) Except as permitted in Sentence (2), the *bearing surface* of a *foundation* shall be below the level of potential damage, including damage resulting from *frost action*, and the *foundation* shall be designed to prevent damage resulting from *adfreezing* and frost jacking.

(2) The *bearing surface* of a *foundation* need not be below the level of potential damage from frost where the *foundation*,

(a) is designed against *frost action*, or

(b) overlies material not susceptible to *frost action*.

4.2.4.5. Sloping Ground

(1) Where a *foundation* is to rest on, in or near sloping ground, this particular condition shall be provided for in the design.

4.2.4.6. Eccentric and Inclined Loads

(1) Where there is eccentricity or inclination of loading in *foundation units*, this effect shall be fully investigated and provided for in the design.

4.2.4.7. Dynamic Loading

(1) Where dynamic loading conditions apply, the effects shall be assessed by a special investigation of these conditions and provided for in the design.

4.2.4.8. Hydrostatic Uplift

(1) Where a *foundation* or any part of a *building* is subject to hydrostatic uplift the effects shall be provided for in the design.

4.2.4.9. Groundwater Level Change

(1) Where proposed *construction* will result in a temporary or permanent change in the *groundwater level*, the effects of this change on adjacent *buildings* shall be fully investigated and provided for in the design.

4.2.4.10. Permafrost

(1) Where conditions of permafrost are encountered or proven to exist, the design of the *foundation* shall be based upon analysis of these conditions by a person especially qualified in that field of work.

4.2.4.11. Swelling and Shrinking Soils

(1) Where swelling or shrinking *soils*, in which movements resulting from moisture content changes may be sufficient to cause damage to a structure, are encountered or known to exist, such a condition shall be fully investigated and provided for in the design.

4.2.4.12. Expanding and Deteriorating Rock

(1) Where *rock* that expands or deteriorates when subjected to unfavourable environmental conditions or to stress release is known to exist, this condition shall be fully investigated and provided for in the design.

4.2.4.13. Construction on Fill

(1) *Buildings* may be placed on *fill* if it can be shown by *subsurface investigation* that,

(a) the *fill* is or can be made capable of safely supporting the *building*,

(b) detrimental movement of the *building* or services leading to the *building* will not occur, and

(c) explosive gases can be controlled or do not exist.

4.2.4.14. Structural Design

(1) The structural design of the *foundation* of a *building*, the procedures and *construction* practices shall conform with the appropriate Sections of this Code unless otherwise specified in this Section.

4.2.5. Excavations

4.2.5.1. Design of Excavations

(1) The design of *excavations* and of supports for the sides of *excavations* shall conform to the requirements of Subsection 4.2.4. and this Subsection.

4.2.5.2. Excavation Construction

(1) Every *excavation* shall be undertaken in such a manner as to prevent movement that would cause damage to adjacent *buildings* at all phases of *construction*.

(2) Material shall not be placed nor shall equipment be operated or placed in or adjacent to an *excavation* in a manner that may endanger the integrity of the *excavation* or its supports.

4.2.5.3. Supported Excavations

(1) The sides of an *excavation* in *soil* or *rock* shall be supported by a retaining structure conforming with the requirements of Articles 4.2.5.1. and 4.2.5.2., except as permitted in Article 4.2.5.4.

4.2.5.4. Unsupported Excavations

(1) The sides of an *excavation* in *soil* or *rock* may be unsupported where a design is prepared by a person especially qualified in this field of work in conformance with the requirements of Articles 4.2.5.1. and 4.2.5.2.

4.2.5.5. Control of Water Around Excavations

(1) *Surface water*, all *groundwater*, *perched groundwater* and in particular *artesian groundwater* shall be kept under control at all phases of *excavation* and *construction*.

4.2.5.6. Loss of Ground

(1) At all phases of *excavation* and *construction*, loss of ground due to water or any other cause shall be prevented.

4.2.5.7. Protection and Maintenance at Excavations

(1) All sides of an *excavation*, supported and unsupported, shall be continuously maintained and protected from possible deterioration by *construction* activity or by the action of frost, rain and wind.

4.2.5.8. Backfilling

(1) Where an *excavation* is backfilled, the backfill shall be placed so as to,

(a) provide lateral support to the *soil* adjacent to the *excavation*, and

(b) prevent detrimental movements.

(2) The material used as backfill or *fill* supporting a footing, *foundation* or a floor on *grade* shall be of a type that is not subject to detrimental volume change with changes in moisture content and temperature.

4.2.6. Shallow Foundations

4.2.6.1. Design of Shallow Foundations

(1) The design of *shallow foundation*s shall be in conformance with the requirements of Subsection 4.2.4. and this Subsection.

4.2.6.2. Support of Shallow Foundations

(1) Where a *shallow foundation* is to be placed on *soil* or *rock*, the *soil* or *rock* shall be cleaned of loose and unsound material and shall be adequate to support the *design load* taking into account temperature, precipitation, *construction* activities and other factors that may lead to changes of the properties of *soil* or *rock*.

4.2.6.3. Incorrect Placement of Shallow Foundations

(1) Where a *shallow foundation unit* has not been placed or located as indicated on the drawings,

(a) the error shall be corrected, or

(b) the design of the *foundation unit* shall be recalculated for the altered conditions by the *designer*.

4.2.6.4. Damaged Shallow Foundations

(1) Where a *shallow foundation unit* is damaged,

(a) it shall be repaired, or

(b) the *design* of the *foundation unit* shall be recalculated for the damaged condition by the *designer*.

4.2.7. Deep Foundations

4.2.7.1. General

(1) A *deep foundation unit* shall provide support for a *building* by transferring loads by end-bearing to a competent stratum at considerable depth below the structure, or by mobilizing resistance by adhesion or friction, or both, in the *soil* or *rock* in which it is placed.

4.2.7.2. Design for Deep Foundations

(1) *Deep foundation units* shall be designed in conformance with Subsection 4.2.4. and this Subsection.

(2) Where *deep foundation units* are load tested, as required in Clause 4.2.4.1.(1)(c), the determination of the number and type of load test and the interpretation of the results shall be carried out by a person especially qualified in this field of work.

(3) The design of *deep foundations* shall be determined on the basis of geotechnical considerations taking into account,

(a) the method of installation,

(b) the degree of inspection,

(c) the spacing of *foundation units* and group effects,

(d) other requirements of this Subsection, and

(e) the appropriate structural requirements of Section 4.1. and Subsections 4.3.1., 4.3.3. and 4.3.4.

(4) The portion of a *deep foundation unit* permanently in contact with *soil* or *rock* shall be structurally designed as a laterally supported compression member.

(5) The portion of a *deep foundation unit* that is not permanently in contact with *soil* or *rock* shall be structurally designed as a laterally unsupported compression member.

(6) The structural design of prefabricated *deep foundation units* shall allow for all stresses resulting from driving, handling and testing.

4.2.7.3. Tolerance in Alignment and Location

(1) Permissible deviations from the design alignment and the location of the top of *deep foundation units* shall be determined by design analysis and shall be indicated on the drawings.

4.2.7.4. Incorrect Alignment and Location

(1) Where a *deep foundation unit* has not been placed within the permissible deviations referred to in Article 4.2.7.3., the condition of the *foundation* shall be assessed by the *designer*.

4.2.7.5. Installation of Deep Foundations

(1) *Deep foundation units* shall be installed in such a manner as not to impair,

(a) the strength of the *deep foundation units* and the properties of the *soil* or *rock* on or in which they are placed beyond the calculated or anticipated limits,

(b) the integrity of previously installed *deep foundation units*, or

(c) the integrity of neighbouring *buildings*.

4.2.7.6. Damaged Deep Foundation Units

(1) Where inspection shows that a *deep foundation unit* is damaged or not consistent with design or good engineering practice,

(a) such a unit shall be reassessed by the *designer*, and

(b) any necessary changes shall be made and action taken as required.

4.2.8. Special Foundations

4.2.8.1. General

(1) Where special *foundation* systems are used, such systems shall conform to Subsection 4.2.4. and Sentence 4.1.1.4.(2).

4.2.8.2. Use of Existing Foundations

(1) Existing *foundations* may be used to support new or altered *buildings* provided they comply with all pertinent requirements of this Section.

Section 4.3. Design Requirements for Structural Materials

4.3.1. Wood

4.3.1.1. Design Basis for Wood

(1) *Buildings* and their structural members made of wood shall conform to CSA O86, "Engineering Design in Wood".

4.3.1.2. Glue-Laminated Members

(1) Glued-laminated members shall be fabricated in plants conforming to CSA O177, "Qualification Code for Manufacturers of Structural Glued-Laminated Timber".

4.3.1.3. Termites

(1) In areas known to be infested by termites, the requirements in Articles 9.3.2.9., 9.12.1.1. and 9.15.5.1. shall apply.

4.3.2. Plain and Reinforced Masonry

4.3.2.1. Design Basis for Plain and Reinforced Masonry

(1) *Buildings* and their structural members made of plain and reinforced masonry shall conform to CSA S304.1, "Design of Masonry Structures".

4.3.3. Plain, Reinforced and Prestressed Concrete

4.3.3.1. Design Basis for Plain, Reinforced and Prestressed Concrete

(1) *Buildings* and their structural members made of plain, reinforced or prestressed concrete shall conform to CAN/CSA-A23.3, "Design of Concrete Structures".

4.3.4. Steel

4.3.4.1. Design Basis for Structural Steel

(1) *Buildings* and their structural members made of structural steel shall conform to CSA S16, "Design of Steel Structures".

4.3.4.2. Design Basis for Cold Formed Steel

(1) *Buildings* and their structural members made of cold formed steel shall conform to CAN/CSA-S136, “North American Specification for the Design of Cold-Formed Steel Structural Members”.

4.3.4.3. Steel Building Systems

(1) Steel *building* systems shall be manufactured by companies certified in accordance with the requirements of CSA A660, “Certification of Manufacturers of Steel Building Systems”.

4.3.5. Aluminum

4.3.5.1. Design Basis for Aluminium

(1) *Buildings* and their structural members made of aluminum shall conform to CAN/CSA-S157 / S157.1, “Strength Design in Aluminum/Commentary on CSA S157-05, Strength Design in Aluminum”, using the loads stipulated in Section 4.1., in accordance with limit states design in Subsection 4.1.3.

4.3.6. Glass

4.3.6.1. Design Basis for Glass

(1) Glass used in *buildings* shall be designed in conformance with CAN/CGSB-12.20-M, "Structural Design of Glass for Buildings".

Section 4.4. Design Requirements for Special Structures

4.4.1. Air-Supported Structures

4.4.1.1. Design Basis for Air-Supported Structures

(1) The structural design of *air-supported structures* shall conform to CSA S367, "Air-, Cable-, and Frame-Membrane Supported Structures" using the loads stipulated in Section 4.1., in accordance with limit states design in Subsection 4.1.3.

4.4.2. Parking Structures

4.4.2.1. Design Basis for Parking Structures

(1) Parking structures shall be designed in conformance with CSA S413, "Parking Structures".

4.4.3. Guards over Retaining Walls

4.4.3.1. Guards over Retaining Walls

(1) Every retaining wall that is designated in Sentence 1.3.1.1.(1) of Division A shall be protected by *guards* on all open sides where the public has access to open space at the top of the retaining wall.

4.4.4. Anchor Systems on Building Exterior

4.4.4.1. Anchor Systems on Building Exterior

(1) Where suspended maintenance and window cleaning operations are intended to be carried out on the exterior of a *building* described in Article 1.1.2.2. of Division A, anchor systems shall be provided where any portion of the roof is more than 8 m above adjacent ground level.

(2) Except as provided in Sentence (3), the anchor systems in Sentence (1) shall be designed, installed and tested in conformance with CAN/CSA-Z91, "Health and Safety Code for Suspended Equipment Operations".

(3) Other anchor systems may be used where such systems provide an equal level of safety.

(4) The anchor system material shall be made of stainless steel, or other corrosion resistant base material, or from steel that is hot dipped galvanised, in accordance with CAN/CSA-G164-M, "Hot Dip Galvanising of Irregularly Shaped Articles".

4.4.5. Manure Storage Tanks

4.4.5.1. Liquid Manure Storage Tanks

(1) *Liquid manure* storage tanks shall be constructed of steel, reinforced concrete or prestressed concrete.

(2) *Liquid manure* storage tank walls, bases and appurtenances, including piping for the conveyance of *liquid manure* and associated connections and joints, shall be designed and constructed to prevent leakage of contents.

(3) Concrete for *liquid manure* storage tanks shall,

(a) be made from HS or HSb cement,

(b) have a 28-day strength of at least 32 MPa, and

(c) have a water/cement materials ratio of not more than 0.45.

(4) *Liquid manure* storage tanks shall be placed on undisturbed *soil* free of any organic, deleterious and extraneous materials and capable of supporting the superimposed design loads from the tanks.

(5) Where granular *fills* are used between the bases of *liquid manure* storage tanks and the undisturbed *soil*, the granular *fills* shall be compacted to a Standard Proctor density of not less than 95%.

O. Reg. 332/12, Division B, Part 4; O. Reg. 361/13, ss. 26-31.

PART 5
ENVIRONMENTAL SEPARATION

5.1.	General
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Table	Description
5.10.1.1.	Standards Applicable to Environmental Separators and Assemblies Exposed to the Exterior

Section 5.1. General

5.1.1. Scope

5.1.1.1. Scope

(1) The scope of this Part shall be as described in Subsection 1.1.2. of Division A.

5.1.2. Application

5.1.2.1. Exposure to Exterior Space or the Ground and Separation of Dissimilar Environments

(1) This Part applies to,

(a) *building* materials, components and assemblies exposed to exterior space or the ground, including those separating interior space from exterior space or separating interior space from the ground,

(b) *building* materials, components and assemblies separating environmentally dissimilar interior spaces, and

(c) site materials, components, assemblies and grading that may affect environmental loads on *building* materials, components and assemblies exposed to exterior space or the ground.

5.1.3. Definitions

5.1.3.1. Reserved

5.1.4. Resistance to Loads and Deterioration

5.1.4.1. Structural and Environmental Loads

(1) *Building* materials, components and assemblies that separate dissimilar environments or are exposed to the exterior shall be designed and constructed to provide sufficient capacity and integrity to resist or accommodate,

(a) all environmental loads, and effects of those loads, that may reasonably be expected having regard to,

(i) the intended use of the *building*, and

(ii) the environment to which the materials, components and assemblies are subject, and

(b) all structural loads, and effects of those loads, that may be reasonably expected.

(2) The design and construction required by Clause (1)(a) shall comply with Subsection 5.2.1.

(3) The design and construction required by Clause (1)(b) shall comply with Subsection 5.2.2., with regard to,

(a) materials, components and assemblies, and associated loads, that are identified in Part 4,

(b) air pressure loads imposed on *air barrier systems*,

(c) wind up-lift imposed on roofing, and

(d) hydrostatic pressure imposed on the means of protection from moisture in the ground.

(4) For materials, components, assemblies and loads to which Sentence (3) does not apply, the design and construction required by Clause (1)(b) shall,

(a) comply with Subsection 5.2.2. for individual applicable loads, or

(b) in the case of common materials, components and assemblies, and their installation, be based on proven past performance over a period of several years for individual applicable loads.

(5) Materials, components and assemblies separating dissimilar environments and assemblies exposed to the exterior, including their connections, that are subject to structural loads referred to in Article 5.2.2.1., shall,

(a) transfer such loads to the *building* structure without adverse effects on the performance of other materials, components or assemblies,

(b) not deflect to a degree that adversely affects the performance of other materials, components or assemblies, and

(c) be designed, and constructed according to that design, to accommodate,

(i) the maximum relative structural movement that may reasonably be expected, and

(ii) construction tolerances that may reasonably be expected.

5.1.4.2. Resistance to Deterioration

(1) Except as provided in Sentence (2), materials used in *building* components and assemblies that separate dissimilar environments, or in assemblies exposed to the exterior, shall be,

(a) compatible with adjoining materials, and

(b) resistant to any mechanisms of deterioration that may reasonably be expected given,

(i) the nature and function of the materials,

(ii) the exposure of the materials, and

(iii) the climatic conditions in which the materials will be installed.

(2) Material compatibility and deterioration resistance are not required where it can be shown that incompatibility or uncontrolled deterioration will not adversely affect any of,

(a) the health or safety of *building* users,

(b) the intended use of the *building*, or

(c) the operation of *building* services.

(3) Design and construction of assemblies separating dissimilar environments and assemblies exposed to the exterior shall be in accordance with good practice, such as described in CSA S478, “Guideline on Durability in Buildings”.

5.1.5. Other Requirements

5.1.5.1. Requirements in other Parts of the Code

(1) Structural and fire safety requirements in other Parts of the Code shall apply.

Section 5.2. Loads and Procedures

5.2.1. Environmental Loads and Design Procedures

5.2.1.1. Exterior Environmental Loads

(1) Above ground climatic loads shall be determined according to MMAH Supplementary Standard SB-1, “Climatic and Seismic Data”.

(2) Except as provided in Sentence (3), below ground exterior environmental loads not described in MMAH Supplementary Standard SB-1, “Climatic and Seismic Data”, shall be determined from existing geological and hydrological data or from site tests.

(3) Where local design and construction practice has shown *soil* temperature analysis to be unnecessary, *soil* temperatures need not be determined.

5.2.1.2. Interior Environmental Loads

(1) Interior environmental loads shall be determined in accordance with good engineering practice as described in Sentence 6.2.1.1.(1) based on the intended use of the space.

5.2.1.3. Environmental Load and Transfer Calculations

(1) Calculations related to the transfer of heat, air and moisture and the transmission of sound shall conform to good engineering practice such as that described in the ASHRAE Fundamentals Handbook.

(2) For the purposes of any analysis conducted to indicate conformance to the thermal resistance levels required in Article 5.3.1.2., *soil* temperatures shall be determined based on annual average *soil* temperature, seasonal amplitude of variation and attenuation of variation with depth.

(3) Wind load calculations shall conform to Subsection 4.1.7.

5.2.2. Structural Loads and Design Procedures

5.2.2.1. Determination of Structural Loads and Effects

(1) Where materials, components or assemblies that separate dissimilar environments or are exposed to the exterior, or their connections, are required to be designed for structural loads, these loads shall be determined in accordance with Part 4.

(2) Except as provided in Article 4.1.8.18., the structural loads referred to in Sentence (1) and their related effects shall include,

(a) *dead loads* transferred from structural elements,

(b) wind, snow, rain, hydrostatic and earth pressures,

(c) earthquake effects for *post-disaster buildings*, depending on their intended function,

(d) *live loads* due to use and *occupancy*, and

(e) loads due to thermal or moisture-related expansion and contraction, deflection, deformation, creep, shrinkage, settlement, and differential movement.

(3) Where materials, components or assemblies that separate dissimilar environments or are exposed to the exterior, or their connections, can be expected to be subject to loads or other effects not otherwise described in this Subsection or in Part 4, such loads or other effects shall be taken into account in the design based on the most current and applicable information available.

5.2.2.2. Determination of Wind Load

(1) This Article applies to the determination of wind load to be used in the design of materials, components and assemblies, including their connections, that separate dissimilar environments or are exposed to the exterior, where these are,

(a) subject to wind load, and

(b) required to be designed to resist wind load.

(2) Except as provided in Sentence (3), the wind load referred to in Sentence (1) shall be 100% of the specified wind load determined in accordance with Article 4.1.7.1.

(3) Where it can be shown by test or analysis that a material, component, assembly or connection described in Sentence (1) will be subject to less than 100% of the specified wind load, the wind load referred to in Sentence (1) shall be not less than the load determined by test or analysis.

5.2.2.3. Design Procedures

(1) Structural design shall be carried out in accordance with Subsection 4.1.3. and other applicable requirements in Part 4.

Section 5.3. Heat Transfer

5.3.1. Thermal Resistance of Assemblies

5.3.1.1. Required Resistance to Heat Transfer

(1) Except as provided in Sentence (2), where a *building* component or assembly will be subjected to an intended temperature differential, the component or assembly shall include materials to resist heat transfer or means to dissipate transferred heat in accordance with this Subsection.

(2) The installation of materials to resist heat transfer in accordance with this Subsection is not required where it can be shown that uncontrolled heat transfer will not adversely affect any of,

(a) the health or safety of *building* users,

(b) the intended use of the *building*, or

(c) the operation of *building* services.

5.3.1.2. Properties to Resist Heat Transfer or Dissipate Heat

(1) Materials and components installed to provide the required resistance to heat transfer or the means implemented to dissipate heat shall,

(a) provide sufficient resistance or dissipation,

(i) to minimize surface condensation on the warm side of the component or assembly,

(ii) in conjunction with other materials and components in the assembly, to minimize condensation within the component or assembly,

(iii) in conjunction with systems installed for space conditioning, to meet the interior design thermal conditions for the intended *occupancy*, and

(iv) to minimize ice damming on sloped roofs, and

(b) take into account the conditions on either side of the environmental separator.

5.3.1.3. Location and Installation of Materials Providing Thermal Resistance

(1) Where a material required by Article 5.3.1.1. is intersected by a *building* assembly, penetrated by a high conductance component or interrupted by expansion, control or construction joints, and where condensation is likely to occur at these intersections, penetrations or interruptions, sufficient thermal resistance shall be provided so as to minimize condensation at these locations.

(2) Materials providing required thermal resistance shall have sufficient inherent resistance to air flow or be positioned in the assembly so as to prevent convective air flow through and around the material.

(3) Spray-in-place polyurethane insulation shall be installed in accordance with the requirements of CAN/ULC-S705.2, “Thermal Insulation - Spray Applied Rigid Polyurethane Foam, Medium Density, Installer’s Responsibilities - Specification".

Section 5.4. Air Leakage

5.4.1. Air Barrier Systems

5.4.1.1. Required Resistance to Air Leakage

(1) Where a *building* component or assembly separates interior *conditioned space* from exterior space, interior space from the ground, or environmentally dissimilar interior spaces, the properties and position of the materials and components in those components or assemblies shall be such that they control air leakage or permit venting to the exterior so as to,

(a) provide acceptable conditions for the *building* occupants,

(b) maintain appropriate conditions for the intended use of the *building*,

(c) minimize the accumulation of condensation in and penetration of precipitation into the *building* component or assembly,

(d) control heat transfer to roofs where ice damming can occur, and

(e) not compromise the operation of *building* services.

(2) Except as provided in Sentence (3), an *air barrier system* shall be installed to provide the principal resistance to air leakage.

(3) An *air barrier system* is not required where it can be shown that uncontrolled air leakage will not adversely affect any of,

(a) the health or safety of *building* users,

(b) the intended use of the *building*, or

(c) the operation of *building* services.

5.4.1.2. Air Barrier System Properties

(1) Except as provided in Sentence (2), materials intended to provide the principal resistance to air leakage shall,

(a) have an air leakage characteristic not greater than 0.02 L/(s·m²) measured at an air pressure difference of 75 Pa, or

(b) conform to CAN/ULC-S741, “Air Barrier Materials – Specification”.

(2) The air leakage limit specified in Sentence (1) is permitted to be increased where it can be shown that the higher rate of leakage will not adversely affect any of,

(a) the health or safety of *building* users,

(b) the intended use of the *building*, or

(c) the operation of *building* services.

(3) The *air barrier system* shall be continuous,

(a) across construction, control and expansion joints,

(b) across junctions between different *building* assemblies, and

(c) around penetrations through the *building* assembly.

(4) The structural design of *air barrier systems* installed in assemblies subject to air pressure loads shall comply with Article 5.1.4.1. and Subsection 5.2.2.

Section 5.5. Vapour Diffusion

5.5.1. Vapour Barriers

5.5.1.1. Required Resistance to Vapour Diffusion

(1) Where a *building* component or assembly is subjected to differentials in temperature and water vapour pressure, the properties and position of the materials and components in those components or assemblies shall be such that they control vapour diffusion or permit venting to the exterior so as to minimize accumulation of condensation in the *building* component or assembly.

(2) Except as provided in Sentence (3), a *vapour barrier* shall be installed to provide the principal resistance to water vapour diffusion.

(3) A *vapour barrier* is not required where it can be shown that uncontrolled vapour diffusion will not adversely affect any of,

(a) the health or safety of *building* users,

(b) the intended use of the *building*, or

(c) the operation of *building* services.

5.5.1.2. Vapour Barrier Properties and Installation

(1) The *vapour barrier* shall have sufficiently low permeance and shall be positioned in the *building* component or assembly so as to,

(a) minimize moisture transfer by diffusion, to surfaces within the assembly that would be cold enough to cause condensation at the design temperature and humidity conditions, or

(b) reduce moisture transfer by diffusion, to surfaces within the assembly that would be cold enough to cause condensation at the design temperature and humidity conditions, to a rate that will not allow sufficient accumulation of moisture to cause deterioration or otherwise adversely affect any of,

(i) the health or safety of *building* users,

(ii) the intended use of the *building*, or

(iii) the operation of *building* services.

(2) Coatings applied to gypsum wallboard to provide required resistance to vapour diffusion shall conform to the requirements of Sentence (1) when tested in accordance with CAN/CGSB-1.501-M, “Method for Permeance of Coated Wallboard”.

(3) Coatings applied to materials other than gypsum wallboard to provide required resistance to vapour diffusion shall conform to the requirements of Sentence (1) when tested in accordance with ASTM E96 / E96M, “Water Vapor Transmission of Materials” by the desiccant method (dry cup).

Section 5.6. Precipitation

5.6.1. Protection from Precipitation

5.6.1.1. Required Protection from Precipitation

(1) Except as provided in Sentence (2), where a *building* component or assembly is exposed to precipitation, the component or assembly shall,

(a) minimize ingress of precipitation into the component or assembly, and

(b) prevent ingress of precipitation into interior space.

(2) Protection from ingress of precipitation is not required where it can be shown that such ingress will not adversely affect any of,

(a) the health or safety of *building* users,

(b) the intended use of the *building*, or

(c) the operation of *building* services.

5.6.1.2. Installation of Protective Materials

(1) Where a material applied to a sloped or horizontal assembly is installed to provide required protection from precipitation and its installation is covered in the scope of one of the following standards, installation shall conform to the requirements of the respective standard:

(a) CAN/CGSB-37.51-M, "Application of Hot Applied Rubberized Asphalt for Roofing and Waterproofing",

(b) CGSB 37-GP-55M, "Application of Sheet Applied Flexible Polyvinyl Chloride Roofing Membrane",

(c) CAN3-A123.51-M, "Asphalt Shingle Application on Roof Slopes 1:3 and Steeper", or

(d) CAN3-A123.52-M, "Asphalt Shingle Application on Roof Slopes 1:6 to less than 1:3".

(2) Where masonry applied to vertical assemblies is installed to provide required protection from precipitation, installation shall conform to the requirements of CAN/CSA-A371, "Masonry Construction for Buildings".

(3) Where protective materials are applied to assemblies to provide the required protection from precipitation, the materials shall be installed so as to shed precipitation or otherwise minimize its entry into the assembly and prevent its penetration through the assembly.

5.6.2. Sealing, Drainage, Accumulation and Disposal

5.6.2.1. Sealing and Drainage

(1) Except as provided in Sentence (2), materials, components, assemblies, joints in materials, junctions between components and junctions between assemblies exposed to precipitation shall be,

(a) sealed to prevent ingress of precipitation, or

(b) drained to direct precipitation to the exterior.

(2) Sealing or drainage are not required where it can be shown that the omission of sealing and drainage will not adversely affect any of,

(a) the health or safety of *building* users,

(b) the intended use of the *building*, or

(c) the operation of *building* services.

5.6.2.2. Accumulation and Disposal

(1) Where water, snow or ice can accumulate on a *building*, provision shall be made to minimize the likelihood of hazardous conditions arising from such accumulation.

(2) Where precipitation can accumulate on sloped or horizontal assemblies, provision shall be made for drainage conforming with Section 7.4.

(3) Where downspouts are provided and are not connected to a sewer, provisions shall be made to,

(a) divert the water from the *building*, and

(b) prevent *soil* erosion.

(4) Junctions between vertical assemblies, and sloped or horizontal assemblies, shall be designed and constructed to minimize the flow of water from the sloped or horizontal assembly onto the vertical assembly.

5.6.2.3. Solar Collector Systems

(1) A solar collector system is permitted to be installed above roofing materials conforming to Table 5.10.1.1.

Section 5.7. Surface Water

5.7.1. Protection from Surface Water

5.7.1.1. Prevention of Accumulation and Ingress

(1) Except as provided in Sentence (3), the *building* shall be located, the *building* site shall be graded or catch basins shall be installed so that *surface water* will not accumulate against the *building*.

(2) Except as provided in Sentence (3), the *foundation* walls shall be constructed so that *surface water* will not,

(a) enter the *building*, or

(b) damage moisture susceptible materials.

(3) *Buildings* specifically designed to accommodate accumulation of water at the *building* or the ingress of water need not comply with Sentence (1) or Clause (2)(a).

Section 5.8. Moisture in the Ground

5.8.1. Foundation and Floor Drainage

5.8.1.1. Required Drainage

(1) Except where a wall or floor is subject to continuous hydrostatic pressure, or unless it can be shown to be unnecessary, the bottom of every exterior *foundation* wall and every floor-on-ground shall be provided with drainage.

5.8.1.2. Drainage Materials and Installation

(1) Drainage shall be designed and installed to accommodate the drainage load.

5.8.2. Protection from Moisture in the Ground

5.8.2.1. Required Moisture Protection

(1) Except as provided in Sentence (2), where a *building* element separates interior space from the ground, materials, components or assemblies shall be installed to prevent moisture transfer into the space.

(2) Materials, components or assemblies need not be installed to prevent moisture transfer from the ground where it can be shown that such transfer will not adversely affect any of,

(a) the health or safety of *building* users,

(b) the intended use of the *building*, or

(c) the operation of *building* services.

5.8.2.2. Protective Material and Component Properties

(1) Except where it can be shown that lesser protection will not lead to adverse conditions, or as provided in Article 5.8.2.3., materials and components installed to provide required moisture protection shall conform to the requirements of this Article.

(2) Except as provided in Sentences (3) and (7), materials installed to provide the required moisture protection shall be capable of bridging,

(a) construction, control and expansion joints,

(b) junctions between different *building* assemblies, and

(c) junctions between *building* assemblies and elements penetrating *building* assemblies.

(3) Except as provided in Sentence (7), where the material installed to provide the required moisture protection is not capable of bridging construction, control and expansion joints, those joints shall be designed to maintain the continuity of the moisture protection.

(4) Materials and components installed to provide the required moisture protection shall have sufficiently low water permeance to resist moisture loads.

(5) Except as provided in Sentence (7), moisture protection shall be designed and constructed to resist design hydrostatic pressures as determined in accordance with Section 4.2.

(6) Except as provided in Sentence (7), materials covered in the scope of the following standards shall not be installed to provide the required resistance to moisture transfer:

(a) CGSB 37-GP-6Ma, “Asphalt, Cutback, Unfilled, for Dampproofing”, or

(b) CGSB 37-GP-18Ma, “Tar, Cutback, Unfilled, for Dampproofing”.

(7) Where the substrate is cast-in-place concrete, and a drainage layer is installed between the *building* assembly and the *soil*, and the assembly will not be subject to hydrostatic pressure,

(a) materials and components installed to provide the required resistance to moisture transfer need not conform to Sentences (2), (3), (5) and (6), and

(b) materials covered in the scope of the following standards are permitted to be installed to provide the required resistance to moisture transfer where those materials conform to the requirements of the standards:

(i) CGSB 37-GP-6Ma, "Asphalt, Cutback, Unfilled, for Dampproofing", or

(ii) CGSB 37-GP-18Ma, "Tar, Cutback, Unfilled, for Dampproofing".

5.8.2.3. Installation of Moisture Protection

(1) Except as provided in Sentence (2), where materials are installed to provide the required resistance to moisture transfer and their installation is covered in the scope of the following standards, installation shall conform to the waterproofing requirements of the respective standards:

(a) CAN/CGSB-37.3-M, "Application of Emulsified Asphalts for Dampproofing or Waterproofing",

(b) CGSB 37-GP-36M, "Application of Filled Cutback Asphalts for Dampproofing and Waterproofing",

(c) CGSB 37-GP-37M, "Application of Hot Asphalt for Dampproofing or Waterproofing", or

(d) CAN/CGSB-37.51-M, "Application of Hot Applied Rubberized Asphalt for Roofing and Waterproofing".

(2) Where the substrate is cast-in-place concrete, and a drainage layer is installed between the *building* assembly and the *soil*, and the assembly will not be subject to hydrostatic pressure,

(a) materials and components installed to provide the required resistance to moisture transfer and whose installation is covered in the scope of the standards listed in Sentence (1), are permitted to be installed in conformance with the dampproofing requirements of the standards listed in Sentence (1), or

(b) materials installed to provide the required resistance to moisture transfer and whose installation is covered in the scope of the following standards, shall be installed in conformance with the requirements of the respective standards:

(i) CGSB 37-GP-12Ma, "Application of Unfilled Cutback Asphalt for Dampproofing", or

(ii) CAN/CGSB-37.22-M, "Application of Unfilled Cutback Tar Foundation Coating for Dampproofing".

Section 5.9. Sound Transmission

5.9.1. Protection from Noise

5.9.1.1. Sound Transmission Class

(1) Sound transmission class ratings shall be determined in accordance with ASTM E413, "Classification for Rating Sound Insulation", using the results from measurements in accordance with,

(a) ASTM E90, "Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements", or

(b) ASTM E336, "Measurement of Airborne Sound Attenuation Between Rooms in Buildings".

5.9.1.2. Required Protection from Noise

(1) Except as provided in Sentence (2), a *dwelling unit* shall be separated from every other space in a *building* in which noise may be generated by construction providing a sound transmission class rating not less than 50, measured in accordance with the standards referenced in Sentence 5.9.1.1.(1).

(2) Construction separating a *dwelling unit* from an elevator hoistway or a refuse chute shall have a sound transmission class rating not less than 55, measured in accordance with the standards referenced in Sentence 5.9.1.1.(1).

Section 5.10. Standards

5.10.1. Applicable Standards

5.10.1.1. Compliance with Applicable Standards

(1) Except as provided in Sentence (2) and elsewhere in this Part, materials and components, and their installation, shall conform to the requirements of the applicable standards in Table 5.10.1.1. where those materials or components are,

(a) incorporated into environmental separators or assemblies exposed to the exterior, and

(b) installed to fulfill the requirements of this Part.

(2) The requirements for *flame-spread ratings* contained in thermal insulation standards shall be applied only as required in Part 3.

Table 5.10.1.1.
Standards Applicable to Environmental Separators and Assemblies Exposed to the Exterior

Forming Part of Sentence 5.10.1.1.(1)

Item	Column 1 **Issuing Agency**	Column 2 **Document Number**	Column 3 **Title of Document**
1.	ANSI	A208.1	Particleboard
2.	ASME	B18.6.1	Wood Screws (Inch Series)
3.	ASTM	A123 / A123M	Zinc (Hot Dip Galvanized) Coatings on Iron and Steel Products
4.	ASTM	A153 / A153M	Zinc Coating (Hot-Dip) on Iron and Steel Hardware
5.	ASTM	A653 / A653M	Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

6.	ASTM	C4	Clay Drain Tile and Perforated Clay Drain Tile
7.	ASTM	C73	Calcium Silicate Brick (Sand-Lime Brick)
8.	ASTM	C126	Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units
9.	ASTM	C212	Structural Clay Facing Tile
10.	ASTM	C412M	Concrete Drain Tile (Metric)
11.	ASTM	C444M	Perforated Concrete Pipe (Metric)
12.	ASTM	C553	Mineral Fiber Blanket Thermal Insulation for Commercial and Industrial Applications
13.	ASTM	C612	Mineral Fiber Block and Board Thermal Insulation
14.	ASTM	C700	Vitrified Clay Pipe, Extra Strength, Standard Strength and Perforated
15.	ASTM	C834	Latex Sealants
16.	ASTM	C920	Elastomeric Joint Sealants
17.	ASTM	C991	Flexible Fibrous Glass Insulation for Metal Buildings
18.	ASTM	C1002	Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs
19.	ASTM	C1177 / C1177M	Glass Mat Gypsum Substrate for Use as Sheathing
20.	ASTM	C1178 / C1178M	Coated Glass Mat Water-Resistant Gypsum Board Backing Panel
21.	ASTM	C1184	Structural Silicone Sealants
22.	ASTM	C1311	Solvent Release Sealants
23.	ASTM	C1330	Cylindrical Sealant Backing for Use with Cold Liquid-Applied Sealants
24.	ASTM	C1396 / C1396M	Gypsum Board
25.	ASTM	D2178	Asphalt Glass Felt Used in Roofing and Waterproofing
26.	ASTM	E2190	Insulating Glass Unit Performance and Evaluation
27.	AWPA	M4	Care of Preservative-Treated Wood Products
28.	BNQ	BNQ3624-115	Polyethylene (PE) Pipe and Fittings - Flexible Pipes for Drainage - Characteristics and Test Methods
29.	CGSB	CAN/CGSB-11.3-M	Hardboard
30.	CGSB	CAN/CGSB-11.5-M	Hardboard, Precoated, Factory Finished, for Exterior Cladding
31.	CGSB	CAN/CGSB-12.1-M	Tempered or Laminated Safety Glass
32.	CGSB	CAN/CGSB-12.2-M	Flat, Clear Sheet Glass
33.	CGSB	CAN/CGSB-12.3-M	Flat, Clear Float Glass
34.	CGSB	CAN/CGSB-12.4-M	Heat Absorbing Glass

35.	CGSB	CAN/CGSB-12.5-M	Mirrors, Silvered
36.	CGSB	CAN/CGSB-12.8	Insulating Glass Units
37.	CGSB	CAN/CGSB-12.10-M	Glass, Light and Heat Reflecting
38.	CGSB	CAN/CGSB-12.11-M	Wired Safety Glass
39.	CGSB	CAN/CGSB-34.22	Asbestos-Cement Drain Pipe
40.	CGSB	CAN/CGSB-37.1-M	Chemical Emulsified Type, Emulsified Asphalt for Dampproofing
41.	CGSB	CAN/CGSB-37.2-M	Emulsified Asphalt, Mineral Colloid Type, Unfilled, for Dampproofing and Waterproofing and for Roof Coatings
42.	CGSB	CAN/CGSB-37.3-M	Application of Emulsified Asphalts for Dampproofing or Waterproofing
43.	CGSB	CAN/CGSB-37.4-M	Fibrated, Cutback Asphalt, Lap Cement for Asphalt Roofing
44.	CGSB	CAN/CGSB-37.5-M	Cutback Asphalt Plastic Cement
45.	CGSB	37-GP-6Ma	Asphalt, Cutback, Unfilled, for Dampproofing
46.	CGSB	CAN/CGSB-37.8-M	Asphalt, Cutback, Filled, for Roof Coating
47.	CGSB	37-GP-9Ma	Primer, Asphalt, Unfilled, for Asphalt Roofing, Dampproofing and Waterproofing
48.	CGSB	37-GP-12Ma	Application of Unfilled Cutback Asphalt for Dampproofing
49.	CGSB	CAN/CGSB-37.16-M	Filled, Cutback Asphalt for Dampproofing and Waterproofing
50.	CGSB	37-GP-18Ma	Tar, Cutback, Unfilled, for Dampproofing
51.	CGSB	37-GP-21M	Tar, Cutback, Fibrated, For Roof Coating
52.	CGSB	CAN/CGSB-37.22-M	Application of Unfilled, Cutback Tar Foundation Coating for Dampproofing
53.	CGSB	37-GP-36M	Application of Filled Cutback Asphalt for Dampproofing or Waterproofing
54.	CGSB	37-GP-37M	Application of Hot Asphalt for Dampproofing or Waterproofing
55.	CGSB	CAN/CGSB-37.50-M	Hot Applied, Rubberized Asphalt for Roofing and Waterproofing
56.	CGSB	CAN/CGSB-37.51-M	Application for Hot Applied Rubberized Asphalt for Roofing and Waterproofing
57.	CGSB	37-GP-52M	Roofing and Waterproofing Membrane, Sheet Applied, Elastomeric
58.	CGSB	CAN/CGSB-37.54	Polyvinyl Chloride Roofing and Waterproofing Membrane

59.	CGSB	37-GP-55M	Application of Sheet Applied Flexible Polyvinyl Chloride Roofing Membrane
60.	CGSB	37-GP-56M	Membrane, Modified, Bituminous, Prefabricated, and Reinforced for Roofing
61.	CGSB	37-GP-64M	Mat Reinforcing, Fibrous Glass, for Membrane Waterproofing Systems and Built-up Roofing
62.	CGSB	41-GP-6M	Sheets, Thermosetting Polyester Plastics, Glass Fiber Reinforced
63.	CGSB	CAN/CGSB-41.24	Rigid Vinyl Siding, Soffits and Fascia
64.	CGSB	CAN/CGSB-51.32-M	Sheathing, Membrane, Breather Type
65.	CGSB	CAN/CGSB-51.33-M	Vapour Barrier, Sheet, Excluding Polyethylene, for Use in Building Construction
66.	CGSB	CAN/CGSB-51.34-M	Vapour Barrier, Polyethylene Sheet for Use in Building Construction
67.	CGSB	CAN/CGSB-93.1-M	Sheet, Aluminum Alloy, Prefinished Residential
68.	CGSB	CAN/CGSB-93.2-M	Prefinished Aluminum Siding, Soffits and Facsia for Residential Use
69.	CGSB	CAN/CGSB-93.3-M	Prefinished Galvanized and Aluminum-Zinc Alloy Steel Sheet for Residential Use
70.	CGSB	CAN/CGSB-93.4	Galvanized Steel and Aluminum-Zinc Alloy Coated Steel Siding, Soffits and Fascia, Prefinished, Residential
71.	CSA	A23.1	Concrete Materials and Methods of Concrete Construction
72.	CSA	CAN/CSA-A82.1-M	Burned Clay Brick (Solid Masonry Units Made From Clay or Shale)
73.	CSA	A82.4-M	Structural Clay Load-Bearing Wall Tile
74.	CSA	A82.5-M	Structural Clay Non-Load-Bearing Tile
75.	CSA	CAN3-A82.8-M	Hollow Clay Brick
76.	CSA	CAN/CSA-A82.27-M	Gypsum Board
77.	CSA	A82.30-M	Interior Furring, Lathing and Gypsum Plastering
78.	CSA	A82.31-M	Gypsum Board Application
79.	CSA	CAN3-A93-M	Natural Airflow Ventilators for Buildings
80.	CSA	A123.1/123.5	Asphalt Shingles Made from Organic Felt and Surfaced with Mineral Granules / Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules
81.	CSA	CAN/CSA-A123.2	Asphalt Coated Roofing Sheets
82.	CSA	A123.3	Asphalt Saturated Organic Roofing Felt
83.	CSA	CAN/CSA-A123.4	Asphalt for Constructing Built-Up Roof Coverings and Waterproofing Systems
84.	CSA	A123.17	Asphalt Glass Felt Used in Roofing and Waterproofing

85.	CSA	CAN3-A123.51-M	Asphalt Shingle Application on Roof Slopes 1:3 and Steeper
86.	CSA	CAN3-A123.52-M	Asphalt Shingle Application on Roof Slopes 1:6 to Less than 1:3
87.	CSA	CAN/CSA-A165.1	Concrete Block Masonry Units
88.	CSA	CAN/CSA-A165.2	Concrete Brick Masonry Units
89.	CSA	CAN/CSA-A165.3	Prefaced Concrete Masonry Units
90.	CSA	CAN3-A165.4-M	Autoclaved Cellular Units
91.	CSA	CAN/CSA-A179	Mortar and Grout for Unit Masonry
92.	CSA	CAN/CSA-A220.0	Performance of Concrete Roof Tiles
93.	CSA	CAN/CSA-A220.1	Installation of Concrete Roof Tiles
94.	CSA	CAN/CSA-A371	Masonry Construction for Buildings
95.	CSA	CAN/CSA-A3001	Cementitious Materials for Use in Concrete
96.	CSA	CAN/CSA-B182.1	Plastic Drain and Sewer Pipe and Pipe Fittings
97.	CSA	G40.21	General Requirements for Rolled or Welded Structural Quality Steel
98.	CSA	CAN/CSA-G401	Corrugated Steel Pipe Products
99.	CSA	CAN/CSA-O80 Series	Wood Preservation
100.	CSA	O115-M	Hardwood and Decorative Plywood
101.	CSA	O118.1	Western Cedars Shakes and Shingles
102.	CSA	O118.2	Eastern White Cedar Shingles
103.	CSA	O121	Douglas Fir Plywood
104.	CSA	O141	Softwood Lumber
105.	CSA	O151	Canadian Softwood Plywood
106.	CSA	O153-M	Poplar Plywood
107.	CSA	O325	Construction Sheathing
108.	CSA	O437.0	OSB and Waferboard
109.	CSA	S478	Guideline on Durability in Buildings
110.	ULC	CAN/ULC-S701	Thermal Insulation, Polystyrene, Boards and Pipe Covering
111.	ULC	CAN/ULC-S702	Mineral Fibre Thermal Insulation for Buildings
112.	ULC	CAN/ULC-S703	Cellulose Fibre Insulation (CFI) for Buildings
113.	ULC	CAN/ULC-S704	Thermal Insulation, Polyurethane and Polyisocyanurate Boards, Faced
114.	ULC	CAN/ULC-S705.1	Thermal Insulation - Spray Applied Rigid Polyurethane Foam, Medium Density - Material - Specification

115.	ULC	CAN/ULC-S705.2	Thermal Insulation - Spray Applied Rigid Polyurethane Foam, Medium Density, Installers's Responsibilities - Specification
116.	ULC	CAN/ULC-S706	Wood Fibre Thermal Insulation for Buildings

5.10.2. Windows, Doors and Skylights

5.10.2.1. General

(1) This Subsection applies to windows, doors and skylights, including their components, that separate,

(a) interior space from exterior space, or

(b) environmentally dissimilar interior spaces.

(2) For the purpose of this Subsection, the term "skylight" refers to unit skylights, roof windows and tubular daylighting devices.

(3) Where a wired glass assembly is installed in a required *fire separation*, it need not conform to the requirements of this Subsection.

5.10.2.2. Applicable Standards

(1) Windows, doors and skylights shall conform to the requirements in,

(a) AAMA/WDMA/CSA 101/I.S.2/A440, "NAFS – North American Fenestration Standard/Specification for Windows, Doors, and Skylights", and

(b) CSA A440S1, "Canadian Supplement to AAMA/WDMA/CSA 101/I.S.2/A440, NAFS – North American Fenestration Standard/Specification for Windows, Doors, and Skylights".

(2) Performance grades for windows, doors and skylights shall be selected according to the Canadian Supplement referenced in Clause (1)(b) so as to be appropriate for the conditions and geographic location in which the window, door or skylight will be installed.

(3) Windows, doors and skylights shall conform to the performance grades selected under Sentence (2) when tested in accordance with the standard referenced in Clause (1)(a).

5.10.2.3. Structural Loads, Air Leakage and Water Penetration

(1) Windows, doors, skylights and their components shall be designed and constructed in accordance with,

(a) Article 5.10.2.2., where they are covered in the scope of the standards listed in Sentence 5.10.2.2.(1), or

(b) Article 5.1.4.1. and Sections 5.4. and 5.6., in other cases.

5.10.2.4. Heat Transfer

(1) Windows, doors and skylights shall meet the heat transfer performance requirements in Section 5.3.

(2) Except as provided in Sentence (3), all metal-framed glazed assemblies separating interior *conditioned space* from interior unconditioned space or exterior space shall incorporate a thermal break to minimize condensation.

(3) Metal-framed glazed assemblies need not comply with Sentence (2) where these assemblies are,

(a) storm windows or doors, or

(b) windows or doors that are required to have a *fire-protection rating*.

O. Reg. 332/12, Division B, Part 5; O. Reg. 361/13, ss. 32, 33.

Note: On January 1, 2015, Section 5.10. is amended by adding the following Subsection: (See: O. Reg. 361/13, ss. 34, 140 (2))

5.10.3. Exterior Insulation Finish Systems

5.10.3.1. Applicable Standards

(1) Where exterior insulation finish systems are installed, the systems and their components shall conform to,

(a) Article 5.1.4.1. and Sections 5.3. to 5.6., and

(b) CAN/ULC-S716.1, “Exterior Insulation and Finish Systems (EIFS) – Materials and Systems”, if the systems are covered in the scope of that standard.

PART 6
HEATING, VENTILATION AND AIR CONDITIONING

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6.3.1. General

Section 6.1. General

6.1.1. Application

6.1.1.1. Scope

(1) The scope of this Part shall be as described in Subsection 1.1.2. of Division A.

(2) Where the method of operation of an existing heating, ventilating or *air-conditioning* system is altered, the repair or component replacements that change the capacity or extent of safety of the system shall conform to this Code.

6.1.1.2. Application

(1) This Part applies to systems and equipment for heating, ventilating and *air-conditioning* services.

Section 6.2. Design and Installation

6.2.1. General

6.2.1.1. Good Engineering Practice

(1) Heating, ventilating and *air-conditioning* systems, including related mechanical refrigeration systems, shall be designed, constructed and installed to conform to good engineering practice appropriate to the circumstances such as described in,

(a) the ASHRAE Handbooks as follows:

(i) Fundamentals,

(ii) Refrigeration,

(iii) HVAC Applications,

(iv) HVAC Systems and Equipment, and

(v) ANSI/ASHRAE/IESNA 90.1, “Energy Standard for Buildings Except Low-Rise Residential Buildings”,

(b) the CSA F280, “Determining the Required Capacity of Residential Space Heating and Cooling Appliances”, and the outside winter design temperatures shall conform to MMAH Supplementary Standard SB-1, “Climatic and Seismic Data”,

(c) CAN/CSA-F326-M, “Residential Mechanical Ventilation Systems”,

(d) the NFPA Fire Codes,

(e) the HRAI Digest,

(f) the Hydronics Institute Manuals,

(g) the SMACNA Manuals,

(h) ACGIH, “Industrial Ventilation Manual”,

(i) CAN/CSA-Z317.2, “Special Requirements for Heating, Ventilation, and Air Conditioning (HVAC) Systems in Health Care Facilities”,

(j) CCBFC NRCC 38730, “Model National Energy Code of Canada for Buildings”,

(k) CCBFC NRCC 54435, “National Energy Code of Canada for Buildings”, and

(l) EPA/625/R-92/016, “Radon Prevention in the Design and Construction of Schools and Other Large Buildings”.

6.2.1.2. Design Indoor Air Temperatures

(1) *Buildings* classified as Group B, Division 2 or 3 *occupancies* or Group C *residential occupancies* that are intended for use in the winter months on a continuing basis shall be insulated and be equipped with heating facilities that are capable of maintaining an indoor air temperature of 22°C at the outside winter design temperature referred to in Article 6.2.1.7.

(2) All other *buildings* intended for occupancy in the winter months on a continuing basis should be insulated and shall be equipped with heating facilities to maintain a minimum indoor air temperature of 18°C or commensurate with the use of the *building* at the outside winter design temperature described in Article 6.2.1.7.

6.2.1.3. Structural Movement

(1) Mechanical systems and equipment shall be designed and installed to accommodate the maximum relative structural movement provided for in the *construction* of the *building*.

6.2.1.4. Installation Standards

(1) The installation of solid fuel-burning *appliances* for central heating systems shall comply with CSA B365, “Installation Code for Solid-Fuel-Burning Appliances and Equipment” and the manufacturer’s installation instructions.

(2) The solid fuel-fired *appliances* in Sentence (1) shall conform to CSA B366.1, “Solid-Fuel-Fired Central Heating Appliances”.

(3) The design and installation of earth energy systems shall conform to CAN/CSA-C448.2, “Design and Installation of Earth Energy Systems for Residential and Other Small Buildings”, where such systems use groundwater, submerged heat exchangers or ground heat exchangers to serve,

(a) single *dwelling units*, or

(b) *buildings* where the *conditioned space* is not more than 1 400 m².

(4) The design and installation of earth energy systems shall conform to CAN/CSA-C448.1, “Design and Installation of Earth Energy Systems for Commercial and Institutional Buildings”, where such systems use groundwater, submerged heat exchangers or ground heat exchangers to condition a floor space area more than 1 400 m².

(5) The design and installation of solid fuel-burning *stoves*, ranges and *space heaters*, including the requirements for combustion air, shall conform to the requirements of CSA

B365, “Installation Code for Solid-Fuel-Burning Appliances and Equipment” and the manufacturer’s installation instructions.

(6) The design and installation of hydronic heating systems shall conform to,

(a) CAN/CSA-B214, “Installation Code for Hydronic Heating Systems”, or

(b) good engineering practice appropriate to the circumstances such as described in Article 6.2.1.1.

(7) Solid fuel-burning *stoves*, *furnaces* and hydronic heating systems designed to burn solid fuels, other than coal, shall conform to the particulate emission limits of,

(a) CSA B415.1, “Performance Testing of Solid-Fuel-Burning Heating Appliances”, or

(b) the “Standards of Performance for New Residential Wood Heaters”, set out in Subpart AAA of Part 60 of Title 40 of the Code of Federal Regulations, published by the United States Environmental Protection Agency, as it read on November 1, 2013.

6.2.1.5. Fireplaces

(1) Fireplaces shall conform to the requirements of Section 9.22.

6.2.1.6. Heat Recovery Ventilators

(1) Except as provided in Sentence (2), heat recovery ventilators with rated capacities of not less than 25 L/s and not more than 200 L/s shall be installed in accordance with Article 9.32.3.11.

(2) Where *electric space heating*, other than forced-air electric heating system, is provided in *buildings* of *residential occupancy* within the scope of Part 9, the mechanical ventilation system shall include heat recovery ventilators designed to provide the greater of,

(a) the minimum rated efficiency required by the *Green Energy Act, 2009*, or

(b) a minimum 55% sensible heat recovery efficiency when tested to the low temperature thermal and ventilation performance test method set out in CAN/CSA-C439, “Rating the Performance of Heat/Energy-Recovery Ventilators”, at a Station 1 test temperature of -25°C at an air flow not less than 30 L/s.

6.2.1.7. Outside Design Conditions

(1) The outside conditions to be used in designing heating, ventilating and *air-conditioning* systems shall be determined in conformance with MMAH Supplementary Standard SB-1, “Climatic and Seismic Data”.

6.2.1.8. Installation – General

(1) Equipment requiring periodic maintenance and forming part of a heating, ventilating or *air-conditioning* system shall be installed with provision for access for inspection, maintenance, repair and cleaning.

(2) Mechanical equipment shall be provided with guards to prevent injury.

(3) Heating, ventilating or *air-conditioning* systems shall be protected from freezing if they may be adversely affected by freezing temperatures.

6.2.1.9. Expansion, Contraction and System Pressure

(1) Heating and cooling systems shall be designed to allow for expansion and contraction of the heat transfer fluid and to maintain the system pressure within the rated working pressure limits of all components of the system.

6.2.1.10. Asbestos

(1) Asbestos shall not be used in air distribution systems or equipment in a form or in a location where asbestos fibres could enter the air supply or return systems.

6.2.1.11. Access Openings

(1) Any covering of an access opening through which a person could enter shall be openable from the inside without the use of keys where there is a possibility of the opening being accidentally closed while the system or equipment is being serviced.

6.2.1.12. Combustible Tubing

(1) *Combustible* tubing for pneumatic controls may be used in *buildings* required to be of *noncombustible construction* provided it has an outside diameter not exceeding 10 mm.

6.2.2. Ventilation

6.2.2.1. Required Ventilation

(1) Except as provided in Sentence (3), all *buildings* shall be ventilated in accordance with this Part.

(2) Except in *storage garages* and *repair garages* covered by Article 6.2.2.3., the rates at which outdoor air is supplied in *buildings* by ventilation systems shall be not less than the rates required by ANSI/ASHRAE 62.1, “Ventilation for Acceptable Indoor Air Quality”.

(3) Self-contained mechanical ventilation systems serving only one *dwelling unit* shall conform to,

(a) this Part, or

(b) Subsection 9.32.3.

(4) *Live/work units* shall be mechanically ventilated in accordance with the requirements of Sentence (1).

6.2.2.2. Natural Ventilation

(1) Except as permitted by Sentence (2), the ventilation required by Article 6.2.2.1. shall be provided by mechanical ventilation except that it can be provided by natural ventilation or a combination of natural and mechanical ventilation in,

(a) *buildings* of other than *residential occupancy* having an *occupant load* of not more than one person per 40 m^2 during normal use,

(b) *buildings* of *industrial occupancy* where the nature of the process contained in them permits or requires the use of large openings in the *building* envelope even during the winter, or

(c) seasonal *buildings* not intended to be occupied during the winter.

(2) Where climatic conditions permit, *buildings* containing *occupancies* other than *residential occupancies*, may be ventilated by natural ventilation methods in lieu of mechanical ventilation where engineering data demonstrates that such a method will provide the required ventilation for the type of *occupancy*.

6.2.2.3. Ventilation of Storage and Repair Garages

(1) Except as provided in Sentences (4) and (6), an enclosed *storage garage* shall have a mechanical ventilation system designed to,

(a) limit the concentration of carbon monoxide to not more than 100 parts per million of air when measured between 900 mm and 1 800 mm from the floor, where the majority of the vehicles stored are powered by gasoline fuelled engines,

(b) limit the concentration of nitrogen dioxide to not more than 3 parts per million parts of air when installed in accordance with manufacturer's instructions, where the majority of the vehicles stored are powered by diesel fuelled engines, or

(c) provide, during operating hours, a continuous supply of outdoor air at a rate of not less than 3.9 L/s for each square metre of floor area.

(2) Mechanical ventilation systems provided in accordance with Clause (1)(a) shall be controlled automatically by carbon monoxide monitoring devices and systems provided in accordance with Clause (1)(b) shall be controlled automatically by nitrogen dioxide or other acceptable monitoring devices, located so as to provide full protection throughout the *storage garage*.

(3) Mechanical ventilation systems provided in accordance with Sentence (1) shall be designed such that the pressure in the *storage garage* is less than the pressure in adjoining *buildings* of other *occupancy*, or in adjacent portions of the same *building* having a different *occupancy*.

(4) In *storage garages* subject to the requirements of Sentence (1), where motor vehicles are parked by mechanical means, the ventilation requirements may be reduced by one half.

(5) Except as provided in Sentence (6), ticket and attendant booths of *storage garages* shall be pressurized with a supply of outdoor air.

(6) The requirements of Sentences (1) to (5) shall not apply to *open-air storeys* in a *storage garage*.

(7) A *repair garage* shall have a mechanical ventilation system designed to limit the exposure of workers to,

(a) carbon monoxide to below the time weighted average concentration of 25 parts per million for a normal 8 hour workday or 40 hour work week, and

(b) nitrogen dioxide from diesel powered vehicles to below 0.72 parts per million for a normal 8 hour workday or 40 hour work week.

(8) In a *repair garage*, when a repair bay is not immediately adjacent to an outside garage door opening, a system capable of providing continuous general ventilation of not less than 700 L/s per internal bay shall be provided.

(9) The general ventilation system described in Sentence (8) shall be designed to,

(a) operate continuously, or

(b) be controlled automatically by carbon monoxide monitoring devices, located so as to provide full protection throughout the *repair garage*.

(10) The general ventilation system described in Sentence (8) is not required when tail pipes of vehicles are directly connected to local mechanical exhaust systems that terminate outdoors.

6.2.2.4. Air Contaminants

(1) Air contaminants released within *buildings* shall be removed insofar as possible at their points of origin and shall not be permitted to accumulate in concentrations greater than permitted in the ACGIH, "Industrial Ventilation Manual".

(2) Systems serving spaces that contain sources of contamination and systems serving other occupied parts of the *building* but located in or running through spaces that contain sources of contamination shall be designed in such a manner as to prevent spreading of such contamination to other occupied parts of the *building*.

(3) Heating, ventilating and *air-conditioning* systems shall be designed to minimize growth of micro-organisms according to good engineering practice as described in Sentence 6.2.1.1.(1).

(4) Mechanical rooms containing refrigeration equipment shall be ventilated in accordance with CSA-B52, "Mechanical Refrigeration Code".

6.2.2.5. Hazardous Gases, Dusts or Liquids

(1) Except as provided in Subsection 6.2.13., systems serving spaces that contain hazardous gases, dusts or liquids shall be designed, constructed and installed in conformance with the provisions of the Fire Code made under the *Fire Protection and Prevention Act, 1997*, or in the absence of requirements pertinent to such systems in the Fire Code, to good engineering practice such as is described in the publications of the National Fire Protection Association and in the CCBFC NRCC 53303, "National Fire Code of Canada".

(2) When indoor piping for Class I *flammable liquids* is installed in a trench, the trench shall be,

(a) provided with positive ventilation to the outdoors, or

(b) designed to prevent the accumulation of flammable vapours.

6.2.2.6. Commercial Cooking Equipment

(1) All commercial cooking equipment shall be provided with ventilation systems designed, constructed and installed to conform to NFPA 96, "Ventilation Control and Fire Protection of Commercial Cooking Operations", except as required by Sentence 3.6.3.1.(1) and Article 3.6.4.2.

(2) Fire protection systems for high efficiency, high temperature commercial cooking equipment using vegetable oil or animal fat shall conform to,

(a) ANSI/UL 300, "Fire Extinguishing Systems for Protection of Commercial Cooking Equipment", or

(b) ULC/ORD-C1254.6, “Fire Testing of Restaurant Cooking Area Fire Extinguishing System Units”.

6.2.2.7. Crawl Spaces and Attic or Roof Spaces

(1) Every crawl space and every *attic or roof space* shall be ventilated by natural or mechanical means.

6.2.3. Air Duct Systems

6.2.3.1. Application

(1) Except as provided in Sentence (2), this Subsection applies to the design, construction and installation of air duct distribution systems serving heating, ventilating and *air-conditioning* systems.

(2) This Subsection does not apply to the design, construction and installation of air duct distribution systems serving heating, ventilating and *air-conditioning* systems that serve individual *dwelling units* within the scope of Part 9.

6.2.3.2. Materials in Air Duct Systems

(1) Except as provided in Sentences (2) to (4) and in Article 3.6.4.3., all ducts, duct connectors, associated fittings and *plenums* used in air duct systems shall be constructed of steel, aluminum alloy, copper, clay, asbestos-cement or similar *noncombustible* material.

(2) Ducts, associated fittings and *plenums* are permitted to contain *combustible* material provided they,

(a) conform to the appropriate requirements for Class 1 duct materials in CAN/ULC-S110, “Test for Air Ducts”,

(b) conform to Article 3.1.5.15. in a *building* required to be of *noncombustible construction*,

(c) conform to Subsection 3.1.9.,

(d) are used only in horizontal runs in a *building* required to be of *noncombustible construction*,

(e) are not used in vertical runs serving more than 2 *storeys* in a *building* required to be of *noncombustible construction*, and

(f) are not used in air duct systems in which the air temperature may exceed 120°C.

(3) Duct sealants shall have a *flame-spread rating* of not more than 25 and a smoke developed classification of not more than 50.

(4) Duct connectors that contain *combustible* materials and that are used between ducts and air outlet units shall,

(a) conform to the appropriate requirements for Class 1 air duct materials in CAN/ULC-S110, “Test for Air Ducts”,

(b) be limited to 4 m in length,

(c) be used only in horizontal runs, and

(d) not penetrate required *fire separations*.

(5) Materials in Sentences (1) to (4) installed in a location where they may be subjected to excessive moisture shall have no appreciable loss of strength when wet and shall be corrosion-resistant.

(6) All ductwork and fittings shall be constructed and installed in conformance with SMACNA Manuals and ASHRAE Handbooks.

(7) All duct materials and fittings shall be,

(a) suitable for exposure to the temperature and humidity of the air being conveyed, and

(b) resistant to corrosion due to contaminants in the air being conveyed in the duct.

6.2.3.3. Connections and Openings in Air Duct Systems

(1) Air duct systems shall have,

(a) tight-fitting connections throughout, and

(b) no openings other than those required for proper operation, inspection and maintenance of the system.

(2) Access openings shall be provided in duct systems to allow the removal of material that may accumulate in *plenums* and ducts.

6.2.3.4. Duct Coverings, Linings, Adhesives and Insulation

(1) Coverings, linings and associated adhesives and insulation of air ducts, *plenums* and other parts of air duct systems shall be of *noncombustible* material when exposed to heated air or radiation from heat sources that would result in the exposed surface exceeding a temperature of 120°C.

(2) When *combustible* coverings and linings, including associated adhesives and insulation, are used, they shall have a *flame-spread rating* of not more than 25 on any exposed surface or any surface that would be exposed by cutting through the material in any direction, and a smoke developed classification of not more than 50, except that the outer covering of ducts, *plenums* and other parts of air duct systems used within an assembly of *combustible construction* may have an exposed surface *flame-spread rating* of not more than 75 and may have a smoke developed classification greater than 50.

(3) *Combustible* coverings and linings in Sentence (2) shall not flame, glow, smoulder or smoke when tested in accordance with the method of test in ASTM C411, “Hot-Surface Performance of High-Temperature Thermal Insulation” at the maximum temperature to which the coverings and linings are to be exposed in service.

(4) Except as provided in Sentence (5), foamed plastic insulation shall not be used as part of an air duct or for insulating an air duct.

(5) Foamed plastic insulation may be used in a ceiling space that acts as a return air *plenum* provided the foamed plastic insulation is protected from exposure to the *plenum* in accordance with Article 3.1.5.12.

(6) *Combustible* coverings and linings of ducts, including associated adhesives and insulation, shall be interrupted at the immediate area of operation of heat sources in a

duct system, such as electric resistance heaters or fuel-burning heaters or *furnaces*, and where the duct penetrates a *fire separation*.

(7) Linings of ducts shall be installed so that they will not interfere with the operation of volume or balancing dampers, *fire dampers*, *fire stop flaps* and other closures.

6.2.3.5. Underground Ducts

(1) Underground ducts shall,

(a) be constructed and installed with a slope to provide interior drainage to all low points,

(b) not be connected directly to a sewer, and

(c) be installed and constructed of materials in conformance with ASHRAE Handbooks, SMACNA Manuals and the HRAI Digest.

(2) A clean-out or pump-out connection shall be provided in an underground duct system at every low point of the duct system.

6.2.3.6. Fire Dampers

(1) *Fire dampers* shall conform to the requirements of Subsection 3.1.8.

6.2.3.7. Smoke Detector Control

(1) Air handling systems shall incorporate *smoke detector* control where required by Article 3.2.4.13.

6.2.3.8. Exhaust Ducts and Outlets

(1) Except as provided in Sentence (2), *exhaust ducts* of nonmechanical ventilating systems serving separate rooms or spaces shall not be combined.

(2) *Exhaust ducts* of nonmechanical ventilating systems serving similar *occupancies* may be combined immediately below the point of final delivery to the outside, such as at the base of a roof ventilator.

(3) *Exhaust ducts* of ventilating systems shall have provision for the removal of condensation where this may be a problem.

(4) Exhaust outlets shall be designed to prevent back draft under wind conditions.

(5) Except as permitted in Sentence (6), exhaust systems shall discharge directly to the outdoors.

(6) Auxiliary rooms, mechanical rooms or storage rooms are permitted to be ventilated into a *storage garage*, provided that,

(a) they are accessible only from that *storage garage*,

(b) they have no openings or duct penetrations through the walls separating the room from adjacent spaces other than that *storage garage* and other auxiliary, mechanical or storage rooms,

(c) the exhaust contains no contaminants that would adversely affect the air quality in the *storage garage*, and

(d) they are provided with,

(i) carbon monoxide monitoring devices in accordance with Sentences 6.2.2.3.(1) and (2), or

(ii) a light switch which is interlocked with the operation of the exhaust fan serving the room.

(7) *Exhaust ducts* connected to laundry drying equipment shall be,

(a) independent of other *exhaust ducts*,

(b) designed and installed so that the entire duct can be cleaned, and

(c) constructed of smooth corrosion-resistant material.

(8) Except as provided in Sentence (10) and except for self-contained systems serving individual *dwelling units*, *exhaust ducts* serving rooms containing water closets, urinals, basins, showers or slop sinks shall be independent of other *exhaust ducts*.

(9) Except as provided in Sentence (10) and except for self-contained systems serving individual *dwelling units*, *exhaust ducts* serving rooms containing residential cooking equipment shall be independent of other *exhaust ducts*.

(10) Two or more exhaust systems described in Sentences (8) and (9) may be interconnected or connected with *exhaust ducts* serving other areas of the *building* provided,

(a) the connections are made at the inlet of an exhaust fan, and all interconnected systems are equipped with suitable back pressure devices to prevent passage of odours from one system to another when the fan is not in operation, or

(b) the *exhaust ducts* discharge to a shaft that is served by an exhaust fan having a capacity that is equal to or greater than the combined capacity of the exhaust fans discharging to the *plenum* multiplied by the operation diversity factor, provided that the exhaust fan serving the shaft operates continuously.

(11) Where *exhaust ducts* containing air from *conditioned spaces* pass through or are adjacent to unconditioned spaces, the ducts shall be constructed to prevent condensation from forming inside or outside of the ducts.

(12) Where an *exhaust duct* system is used for smoke removal in a high *building*, the requirements of Article 3.2.6.6. shall apply.

(13) Where *exhaust duct* systems from more than one *fire compartment* are connected to an *exhaust duct* in a *vertical service space*, the requirements of Article 3.6.3.4. shall apply.

(14) Except as provided in Sentence (15), exhaust air shall be provided at a rate not less than 24 L/s for each water closet, urinal, shower or slop sink.

(15) Except as provided in Sentence 6.2.2.1.(3), exhaust air shall be provided for *fixtures* in *dwelling units* in accordance with ANSI/ASHRAE 62.1, “Ventilation for Acceptable Indoor Air Quality”.

(16) Except for wash basins (lavatories), sanitary facilities in a *food premises* shall be mechanically ventilated and shall be capable of exhausting air at the rate of not less than 24 L/s for each sanitary fixture listed in Sentence (17).

(17) The mechanical ventilation described in Sentence (16) applies to rooms containing water closets, urinals, basins, showers or slop sinks.

(18) Where collective venting of multiple installations of laundry-drying equipment is used, the ventilation system shall,

(a) be connected to a common *exhaust duct* that is vented by one central exhaust fan,

(b) incorporate one central lint trap,

(c) include an interlock to activate the central exhaust fan when laundry-drying equipment is in use, and

(d) be provided with make-up air.

(19) *Exhaust ducts* or vents connected to laundry-drying equipment shall discharge directly to the outdoors.

6.2.3.9. Interconnection of Systems

(1) In a *residential occupancy*, air from one *suite* shall not be circulated to any other *suite* or to a *public corridor* or public stairway.

(2) Except as permitted by Sentence (3) and Sentence 6.2.3.8.(6), air duct systems serving *storage garages* shall not be directly interconnected with ductwork serving other areas of the *building*.

(3) Where *exhaust ducts* are provided in conformance with Sentence 6.2.3.8.(6), they may exhaust through an enclosed *storage garage* prior to exhausting to the outdoors provided,

(a) the *storage garage* exhaust system runs continuously,

(b) the capacity of the *storage garage* exhaust system is equal to or exceeds the volume of the exhaust entering the garage, and

(c) a leakage rate 1 smoke/*fire damper* rated in accordance with CAN/ULC-S112.1, “Leakage Rated Dampers for Use in Smoke Control Systems”, is provided near the duct outlet location in the *storage garage* to prevent air from the *storage garage* from entering the exhaust ductwork system in the event the *building’s* exhaust fan is shut down.

(4) Except for corridors conforming to Sentence 3.3.1.4.(4) or as permitted in Sentences (5) and (6), a *public corridor* or corridor serving the public shall not be used as a portion of a supply, return or exhaust air system serving adjoining areas, other than as part of a supply air system serving toilet rooms, bathrooms, shower rooms and similar auxiliary spaces opening directly to the *public corridor* or corridor used by the public.

(5) A *public corridor* may be used as part of an engineered smoke control system.

(6) Infiltration due to corridor pressurization is permitted into a *residential occupancy* from a *public corridor*.

6.2.3.10. Ducts in Exits

(1) Except as permitted in Sentence (2), duct penetration of *fire separations* separating *exits* from the remainder of the *building* shall be in accordance with Article 3.4.4.4.

(2) Duct penetration of *fire separations* separating *exits* from the remainder of the *building* is permitted if the duct,

(a) is designed for the purposes of Subsection 3.2.6., or

(b) only serves the *exit* from a dedicated roof top air make-up unit.

6.2.3.11. Make-up Air

(2) Make-up air facilities required by Sentence (1) shall be interlocked with the exhaust devices they serve so that both operate together.

(3) Where make-up air facilities are intended to introduce air directly from the outdoors to occupied parts of the *building* in winter, they shall incorporate means of tempering that air to maintain the indoor design temperature.

6.2.3.12. Supply, Return, Intake and Exhaust Air Openings

(1) Supply, return and exhaust air openings located less than 2 000 mm above the floor in rooms or spaces in *buildings* shall be protected by grilles having openings of a size that will not allow the passage of a 15 mm diameter sphere.

(2) Outdoor air intakes and exhaust outlets on the exterior of *buildings* shall be designed or located so that the air entering the *building* system will not contain more contaminants than the normal exterior air of the locality in which the *building* is situated.

(3) Exterior openings for outdoor air intakes and exhaust outlets shall be shielded from the entry of snow and rain and shall be fitted with corrosion-resistant screens of mesh having openings not larger than 15 mm, except where experience has shown that climatic conditions require larger openings to avoid icing over of the screen openings.

(4) Screens required in Sentence (3) shall be accessible for maintenance.

(5) *Combustible* grilles, diffusers and other devices for supply, return and exhaust air openings in rooms shall conform to the *flame-spread rating* and smoke developed classification requirements for the interior finish of the surface on which they are installed.

6.2.3.13. Filters and Odour Removal Equipment

(1) Air filters for air duct systems shall conform to the requirements for Class 2 air filter units as described in ULC-S111, “Fire Tests For Air Filter Units”.

(2) When electrostatic-type filters are used, they shall be installed so as to ensure that the electric circuit is automatically de-energized when filter access doors are opened and, in *dwelling units*, when the system circulating fan is not operating.

(3) When odour removal equipment of the adsorption type is used it shall be,

(a) installed to provide access so that adsorption material can be reactivated or renewed, and

(b) protected from dust accumulation by air filters installed on the inlet side.

(4) Facilities for flushing and drainage shall be provided where filters are designed to be washed in place.

6.2.3.14. Air Washers and Evaporative Cooling Sections or Towers

(1) The filter and water evaporation medium of every air washer and evaporative cooling section enclosed within a *building* shall be made of *noncombustible* material.

(2) Sumps for air washer and evaporative cooling sections shall be constructed and installed so that they can be flushed and drained.

(3) Evaporative cooling sections or towers shall comply with the requirements of NFPA 214, “Water-Cooling Towers”.

6.2.3.15. Fans and Associated Air Handling Equipment

(1) Fans for heating, ventilating and *air-conditioning* systems shall be located and installed so that their operation,

(a) does not adversely affect the draft required for proper operation of fuel-fired *appliances*, and

(b) does not allow the air in the air duct system to be contaminated by air or gases from the *boiler*-room or *furnace*-room.

(2) Fans and associated air handling equipment, such as air washers, filters and heating and cooling units, when installed on the roof or elsewhere outside the *building*, shall be of a type designed for outdoor use.

6.2.3.16. Vibration Isolation Connectors

(1) Vibration isolation connectors in air duct systems shall be *noncombustible*, except that *combustible* fabric connectors are permitted provided they,

(a) do not exceed 250 mm in length,

(b) comply with the flame-resistance requirements of CAN/ULC-S109, "Flame Tests of Flame-Resistant Fabrics and Films", and

(c) are not used in a location where they are exposed to heated air or radiation from heat sources that may cause the exposed surface to exceed a temperature of 120°C.

6.2.3.17. Tape

(1) Tape used for sealing joints in air ducts, *plenums* and other parts of air duct systems shall meet the flame-resistance requirements for fabric in CAN/ULC-S109, "Flame Tests of Flame-Resistant Fabrics and Films".

6.2.3.18. Construction and Installation of Ducts and Plenums

(1) Rectangular panels in *plenums* and ducts more than 300 mm wide shall be shaped to provide sufficient stiffness.

(2) Where the installation of heating *supply ducts* in walls and floors creates a space between the duct and construction material, the space shall be fire stopped with *noncombustible* material at each end.

(3) Ducts shall be securely supported by metal hangers, straps, lugs or brackets, except that where zero clearance is permitted, wooden brackets may be used.

(4) All round duct joints shall be tight-fitting and lapped not less than 25 mm.

(5) Rectangular duct connections shall be made with S and drive cleats.

(6) Trunk *supply ducts* shall not be nailed directly to wood members.

(7) Branch ducts shall be supported at suitable spacings to maintain alignment and prevent sagging.

(8) Ducts in or beneath concrete slabs-on-ground shall be watertight, corrosion-, decay- and mildew-resistant.

(9) Where a *supply* or *return duct* is not protected by an insulated exterior wall or where the duct is exposed to an unheated space it shall be insulated to prevent condensation.

6.2.3.19. Clearances of Ducts and Plenums

(1) The clearances from *combustible* material and supply *plenums*, *supply ducts*, boots and register boxes of heating systems shall conform to the requirements of Subsection 6.2.4.

6.2.3.20. Return-Air System

(1) The return-air system shall be designed to handle the entire air supply.

(2) Where any part of a *return duct* will be exposed to radiation from the heat exchanger or other radiating part within the *furnace*, such part of a *return duct* directly above or within 600 mm of the outside *furnace* casing shall be *noncombustible*.

(3) *Return ducts* serving solid fuel-fired *furnaces* shall be constructed of *noncombustible* material.

(4) Where *combustible return ducts* are permitted, they shall be lined with *noncombustible* material below floor registers, at the bottom of vertical ducts and under *furnaces* having a bottom return.

(5) The return-air system shall be designed so that the negative pressure from the circulating fan cannot affect the *furnace* combustion air supply nor draw combustion products from joints or openings in the *furnace* or *flue pipe*.

(6) Return-air inlets shall not be installed in an enclosed room or crawl space that provides combustion air to a fuel-fired *appliance*.

6.2.4. Air Ducts for Low Capacity Systems

6.2.4.1. Application

(1) The requirements of this Subsection apply to the design, construction and installation of air duct distribution systems serving heating, ventilating and *air-conditioning* systems that serve individual *dwelling units* within the scope of Part 9.

6.2.4.2. Duct Design

(1) Materials in *supply ducts* shall conform to Article 6.2.3.2.

(2) Galvanized steel or aluminum *supply ducts* shall conform to Table 6.2.4.2.

Table 6.2.4.2.
Minimum Metal Thickness of Ducts

Forming Part of Sentences 6.2.4.2.(2) and (3)

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Type of Duct	Maximum Diameter, mm	Maximum Width or Depth, mm	Minimum Metal Thickness, mm	
				Duct Material	
				Galvanized Steel	Aluminum
1.	Round ducts serving single *dwelling units*	125 or less	---	0.254	0.30
2.	Round	350	---	0.33	0.30
		over 350	---	0.41	0.41
3.	Rectangular, enclosed	---	350	0.33	0.30
		---	over 350	0.41	0.41
4.	Rectangular, not enclosed, for single *dwelling units*, with required clearance up to 12 mm	---	350	0.33	0.41
		---	over 350	0.41	0.48
5.	Rectangular, not enclosed, with required clearance of more than 12 mm	---	350	0.41	0.41
		---	over 350	0.48	0.48

(3) The design of fitting for ducts shall conform to SMACNA, "HVAC Duct Construction Standards – Metal and Flexible", except that metal thickness shall conform to Table 6.2.4.2.

6.2.4.3. Construction and Installation of Ducts and Plenums

(1) Rectangular panels in *plenums* and ducts more than 300 mm wide shall be shaped to provide sufficient stiffness.

(2) Where the installation of heating *supply ducts* in walls and floors creates a space between the duct and construction material, the space shall be fire stopped with *noncombustible* material at each end.

(3) Ducts shall be securely supported by metal hangers, straps, lugs or brackets, except that where zero clearance is permitted, wooden brackets may be used.

(4) All round duct joints shall be tight-fitting and lapped not less than 25 mm.

(5) Rectangular duct connections shall be made with S and drive cleats.

(6) Trunk *supply ducts* shall not be nailed directly to wood members.

(7) Branch ducts shall be supported at suitable spacings to maintain alignment and prevent sagging.

(8) *Combustible* ducts in concrete slabs-on-ground that are connected to a *furnace* supply *plenum* shall be located not closer than 600 mm to that *plenum* and not less than 600 mm from its connection to a riser or register.

(9) Ducts in or beneath concrete slabs-on-ground shall be watertight, corrosion-, decay- and mildew-resistant.

(10) Where a *supply duct* or *return duct* is not protected by an insulated exterior wall or where the duct is exposed to an unheated space it shall be insulated to provide a thermal resistance of not less than RSI 2.1.

(11) Where a *supply duct* or *return duct* is located in an unconditioned space or outdoors, all joints of the ductwork shall be sealed to a Class A seal level in accordance with the SMACNA, "HVAC Duct Construction Standards – Metal and Flexible".

(12) Where a *supply duct* is located in a conditioned space, the ductwork shall be sealed to a Class C seal level in accordance with the SMACNA, "HVAC Duct Construction Standards – Metal and Flexible".

(13) Underground ducts shall,

(a) be constructed and installed with a slope to provide interior drainage to all low points,

(b) not be connected directly to a sewer, and

(c) be installed and constructed of materials in conformance with ASHRAE Handbooks, SMACNA Manuals and the HRAI Digest.

(14) A clean-out or pump-out connection shall be provided in an underground duct system at every low point of the duct system.

6.2.4.4. Warm-Air Supply Outlets

(1) In a *dwelling unit*, a warm-air supply outlet shall be provided in each finished room that is located adjacent to unheated space, exterior air or exterior soil.

(2) Except as provided in Sentence (3), when a room described in Sentence (1) is located adjacent to exterior walls, such outlets shall be located so as to bathe at least one exterior wall or window with warm air, except in bathrooms, utility rooms or kitchens, where this may not be practical.

(3) Where the heating system is also designed to provide ventilation air, ceiling outlets or outlets located high on interior walls may be installed, provided the outlets are,

(a) designed for this purpose, and

(b) installed with diffusers.

(4) At least one warm-air supply outlet shall be provided for each 40 m² of floor surface area in unfinished *basements* serving *dwelling units*, located so as to provide adequate distribution of warm air throughout the *basement*.

(5) At least one warm-air supply outlet shall be provided for each 80 m^2 of floor surface area in heated crawl spaces serving *dwelling units*, and it shall be located so as to provide adequate distribution of warm-air throughout the crawl space.

(6) Except for pipeless *furnaces* and floor *furnaces*, the capacity of warm-air supply outlets serving *dwelling units* shall be not less than the design heat loss from the area served and shall not exceed 3 kW per outlet.

(7) In *basements* and heated crawl spaces, the calculated heat gain from the *supply ducts* and *plenum* surfaces may be considered in calculating the design heat loss.

(8) The temperature of supply air at the warm-air supply outlets shall not exceed 70°C.

(9) Warm-air supply outlets located in finished areas shall be provided with diffusers and adjustable openings and shall not be located on a *furnace plenum*.

(10) Air duct systems serving *storage garages* shall not be interconnected with other parts of the *building*.

6.2.4.5. Reserved

6.2.4.6. Adjustable Dampers and Balance Stops

(1) All branch *supply ducts* for residential systems shall be equipped with volume control dampers at the boot to permit balancing or shall be fitted with a diffuser incorporating an adjustable and lockable volume control device that can be set in a fixed position.

6.2.4.7. Return-Air System

(1) The return-air system shall be designed to handle the entire air supply.

(2) Except as provided in Sentences (3) and (4), *return ducts* shall be constructed of material having a surface *flame-spread rating* of not more than 150.

(3) Where any part of a *return duct* will be exposed to radiation from the heat exchanger or other radiating part within the *furnace*, such part of a *return duct* directly above or within 600 mm of the outside *furnace* casing shall be *noncombustible*.

(4) *Return ducts* serving solid fuel-fired *furnaces* shall be constructed of *noncombustible* material.

(5) *Combustible return ducts* shall be lined with *noncombustible* material below floor registers, at the bottom of vertical ducts and under *furnaces* having a bottom return.

(6) Spaces between studs and joists used as *return ducts* shall be separated from the unused portions of such spaces by tight-fitting metal stops or wood blocking.

(7) A vertical *return duct* shall have openings to return air on not more than 1 floor.

(8) A *public corridor* shall comply with Sentences 6.2.3.9.(4) and (5).

(9) The return-air system shall be designed so that the negative pressure from the circulating fan cannot affect the *furnace* combustion air supply nor draw combustion products from joints or openings in the *furnace* or *flue pipe*.

(10) Return-air from a *dwelling unit* shall not be recirculated to any other *dwelling unit*.

(11) Except for floor levels that are less than 900 mm above or below an adjacent floor level that is provided with a return-air inlet, at least one return-air inlet shall be provided in each floor level in a *dwelling unit*.

(12) Provision shall be made for the return of air from all rooms by leaving gaps beneath doors, using louvred doors or installing *return duct* inlets.

(13) Return-air inlets shall not be installed in an enclosed room or crawl space that provides combustion air to a *furnace*.

6.2.4.8. Coverings, Linings and Insulation

(1) Foamed plastic insulation may be used in a ceiling space that acts as a return air *plenum*, provided the foamed plastic insulation is protected from exposure to the *plenum* in accordance with Article 3.1.5.12.

(2) Linings of ducts shall be installed so that they will not interfere with the operation of volume or balancing dampers.

6.2.4.9. Tape

(1) Tape used for sealing joints in air ducts, *plenums* and other parts of air duct systems shall meet the flame-resistance requirements for fabric in CAN/ULC-S109, “Flame Tests of Flame-Resistant Fabrics and Films”.

6.2.4.10. Clearances of Ducts and Plenums

(1) Where the *plenum* clearance is 75 mm or less, the clearance between a *supply duct* and *combustible* material shall,

(a) be equal to the required *plenum* clearance within 450 mm of the *plenum*, and

(b) be not less than 12 mm at a distance of 450 mm or more from the *plenum*, except that this clearance may be reduced to zero beyond a bend or offset in the duct sufficiently large to shield the remainder of the duct from direct radiation from the *furnace* heat exchanger.

(2) Where the *plenum* clearance is more than 75 mm but not more than 150 mm, the clearance between a *supply duct* and *combustible* material shall,

(a) be equal to the required *plenum* clearance within a horizontal distance of 1 800 mm of the *plenum*, and

(b) be not less than 12 mm at a horizontal distance of 1 800 mm or more from the *plenum*, except that this distance may be reduced to zero beyond a bend or offset in the duct sufficiently large to shield the remainder of the duct from direct radiation from the *furnace* heat exchanger.

(3) Where the *plenum* clearance is more than 150 mm, the clearance between a *supply duct* and *combustible* material shall,

(a) be equal to the required *plenum* clearance within a horizontal distance of 1 000 mm of the *plenum*,

(b) be not less than 150 mm within a horizontal distance between 1 000 mm and 1 800 mm from the *plenum*, and

(c) be not less than 25 mm at a horizontal distance of 1 800 mm or more from the *plenum*, except that this distance may be reduced to 8 mm beyond a bend or offset in the duct sufficiently large to shield the remainder of the *supply duct* from direct radiation from the *furnace* heat exchanger.

(4) Where a register is installed in a floor directly over a pipeless *furnace*, a double-walled register box with not less than 100 mm between walls, or a register box with the warm-air passage completely surrounded by the cold-air passage, shall be permitted in lieu of the clearances listed in Sentences (1), (2) and (3).

6.2.4.11. Exhaust Ducts and Outlets

(1) Where an *exhaust duct* passes through or is adjacent to unheated space, the duct shall be insulated to prevent moisture or condensation in the duct.

(2) Exhaust outlets shall be designed to prevent back draft under wind conditions.

(3) *Exhaust ducts* directly connected to laundry drying equipment shall be independent of other *exhaust ducts*.

(4) Exhaust systems shall discharge directly to the outdoors.

6.2.4.12. Make-up Air

(1) In ventilating systems that exhaust air to the outdoors, provision shall be made for the admission of a supply of make-up air in sufficient quantity so that the operation of the exhaust system and other exhaust equipment or combustion equipment is not adversely affected.

6.2.4.13. Supply, Return, Intake and Exhaust Air Openings

(1) Supply, return and exhaust air openings in rooms or spaces shall be protected by grilles having openings of a size that will not allow the passage of a 15 mm diameter sphere.

(2) Outdoor air intakes and exhaust outlets at the *building* exterior shall be designed or located so that the air entering the *building* system will not contain more contaminants than the normal exterior air.

(3) Exterior openings for outdoor air intakes and exhaust outlets shall be shielded from the entry of snow and rain and shall be fitted with corrosion-resistant screens of mesh having openings not larger than 15 mm, except where climatic conditions may require larger openings.

(4) Screens required in Sentence (3) shall be accessible for maintenance.

(5) *Combustible* grilles, diffusers and other devices for the supply and return air openings installed in walls and ceilings shall have a *flame-spread rating* of,

(a) not more than 200 in bathrooms, and

(b) not more than 150 in rooms or spaces other than bathrooms.

6.2.4.14. Air Filters and Equipment

(1) Air filters for air duct systems shall conform to the requirements for Class 2 air filter units as described in ULC-S111, “Fire Tests For Air Filter Units”.

(2) When electrostatic-type filters are used, they shall be installed so as to ensure that the electric circuit is automatically de-energized when filter access doors are opened or when the system circulating fan is not operating.

(3) When odour removal equipment of the adsorption type is used it shall be,

(a) installed to provide access so that adsorption material can be reactivated or renewed, and

(b) protected from dust accumulation by air filters installed on the inlet side.

6.2.5. Heating Appliances, General

6.2.5.1. Location of Appliances

(1) Except for *appliances* installed in *dwelling units*, fuel-fired heating *appliances* shall be located, enclosed or separated from the remainder of the *building* in conformance with Section 3.6.

6.2.5.2. Appliances Installed Outside the Building

(1) Fuel-fired *appliances* installed outside a *building* shall be,

(a) designed and constructed for outdoor use,

(b) installed not less than 1 200 mm from the property line, measured horizontally, and

(c) installed not less than 3 m from an adjacent wall of the same *building* when such wall contains an opening or openings within 3 *storeys* above and 5 m horizontally from the *appliance*, unless such openings are protected by a *closure* assembly having a 45 min *fire-protection rating* determined in conformance with Article 3.1.8.4., or by wired glass conforming to Article 3.1.8.14.

6.2.6. Incinerators

6.2.6.1. Applicable Standard

(1) The design, construction, installation and material alteration of every indoor incinerator shall conform to NFPA 82, “Incinerators, Waste and Linen Handling Systems and Equipment”.

6.2.7. Unit Heaters

6.2.7.1. Clearances

(1) Every *unit heater* using either steam or hot water as the heating medium shall be installed such that the clearances between the *appliance* and adjacent *combustible* material conform to Table 6.2.9.3.

6.2.8. Radiators and Convectors

6.2.8.1. Lining or Backing

(1) Every steam or hot water radiator and convector located in a recess or concealed space or attached to the face of a wall of *combustible construction* shall be provided with a *noncombustible* lining or backing.

(2) Every steam or hot water radiator and convector shall be installed to conform to the clearance requirements of Table 6.2.9.3.

6.2.9. Piping for Heating and Cooling Systems

6.2.9.1. Piping Materials and Installation

(1) Piping shall be made from materials designed to withstand the effects of temperatures and pressures that may occur in the system.

(2) Every pipe used in a heating or *air-conditioning* system shall be installed to allow for expansion and contraction due to temperature changes.

(3) Supports and anchors for piping in a heating or *air-conditioning* system shall be designed and installed to ensure that undue stress is not placed on the supporting structure.

6.2.9.2. Insulation and Coverings

(1) Insulation and coverings on pipes shall be composed of material suitable for the operating temperature of the system to withstand deterioration from softening, melting, mildew and mould.

(2) Insulation and coverings on pipes in which the temperature of the fluid exceeds 120°C,

(a) shall be made of *noncombustible* material, or

(b) shall not flame, glow, smoulder or smoke when tested in accordance with ASTM C411, "Hot-Surface Performance of High-Temperature Thermal Insulation", at the maximum temperature to which such insulation or covering is to be exposed in service.

(3) Except as provided in Sentence (7), where *combustible* insulation is used on piping in a *horizontal* or *vertical service space*, the insulation and coverings on such pipes shall have a *flame-spread rating* throughout the material of not more than 25 in *buildings* of *noncombustible construction* and not more than 75 in *buildings* of *combustible construction*.

(4) Except as provided in Sentence (7), insulation and coverings on piping located in rooms and spaces other than the *service spaces* described in Sentence (3) shall have a *flame-spread rating* of not more than that required for the interior finish for the ceiling of the room or space.

(5) Except as provided in Sentence (7), where *combustible* insulation and covering is used on piping in *buildings* described in Subsection 3.2.6., they shall have a smoke developed classification of not more than 100.

(6) Exposed piping or equipment subject to human contact shall be insulated so that the temperature of the exposed surface does not exceed 70°C.

(7) No *flame-spread rating* or smoke developed classification limitations are required where *combustible* insulation and coverings are used on piping when such piping is,

(a) located within a concealed space in a wall,

(b) located in a floor slab, or

(c) enclosed in a *noncombustible* raceway or conduit.

6.2.9.3. Clearances

(1) Clearances between *combustible* material and bare pipes carrying steam or hot water shall conform to Table 6.2.9.3.

Table 6.2.9.3.
Clearance Between Steam or Hot Water Pipes and Combustible Material

Forming Part of Sentences 6.2.7.1.(1), 6.2.8.1.(2) and 6.2.9.3.(1)

Item	Column 1	Column 2
	Steam or Water Temperature, °C	Minimum Clearance, mm
1.	not above 95	no clearance
2.	above 95 to 120	15
3.	above 120	25

6.2.9.4. Surface Temperature

(1) The exposed surface temperature of a steam or hot water radiator shall not exceed 70°C unless precautions are taken to prevent human contact.

6.2.9.5. Protection

(1) Where a pipe carrying steam or hot water at a temperature above 120°C passes through a *combustible* floor, ceiling or wall, the construction shall be protected by a sleeve of metal or other *noncombustible* material not less than 50 mm larger in diameter than the pipe.

(2) Unprotected steam or hot water pipes that pass through a storage space shall be covered with not less than 25 mm of *noncombustible* insulation to prevent direct contact with the material stored.

6.2.9.6. Piping in Shafts

(1) Where piping for heating or *air-conditioning* systems is enclosed in a shaft, the requirements of Article 3.6.3.1. for shafts shall apply.

6.2.10. Refrigerating Systems and Equipment for Air-Conditioning

6.2.10.1. Cooling Units

(1) Where a cooling unit is combined with a fuel-fired *furnace* in the same duct system, the cooling unit shall be installed,

(a) in parallel with the heating *furnace*,

(b) upstream of the *furnace*, provided the *furnace* is designed for such application, or

(c) downstream of the *furnace*, provided the cooling unit is designed to prevent excessive temperature or pressure in the refrigeration system.

6.2.11. Storage Bins

6.2.11.1. Storage Bins

(1) Service pipes passing through a storage bin for solid fuel shall be protected or so located as to avoid damage to the pipes.

(2) Except for fuel-thawing pipes, every pipe designed to operate at a temperature of 50°C or above shall be located where fuel cannot be stored in contact with it.

(3) A storage bin for solid fuel shall not be located above a sewer opening or drain opening.

(4) Storage bins for solid fuel shall be designed and constructed so that the air temperature in the bin or the surface temperature of any part of the floor or walls is below 50°C.

6.2.11.2. Ash Storage Bins

(1) Every ash storage bin shall be constructed of *noncombustible* material.

(2) Every opening in an ash storage bin shall be protected by a tight-fitting metal door with metal frame securely fastened to the bin.

6.2.12. Carbon Monoxide Alarms

6.2.12.1. Application

(1) This Subsection applies to every *building* that,

(a) contains a *residential occupancy*, and

(b) contains a fuel-burning *appliance* or a *storage garage*.

6.2.12.2. Location of Carbon Monoxide Alarms

(1) Where a fuel-burning *appliance* is installed in a *suite* of *residential occupancy*, a carbon monoxide alarm shall be installed adjacent to each sleeping area in the *suite*.

(2) Where a fuel-burning *appliance* is installed in a *service room* that is not in a *suite* of *residential occupancy*, a carbon monoxide alarm shall be installed,

(a) adjacent to each sleeping area in every *suite* of *residential occupancy* that is adjacent to the *service room*, and

(b) in the *service room*.

(3) Where a *storage garage* is located in a *building* containing a *residential occupancy*, a carbon monoxide alarm shall be installed adjacent to each sleeping area in every *suite* of *residential occupancy* that is adjacent to the *storage garage*.

6.2.12.3. Installation and Conformance to Standards

(1) The carbon monoxide alarms required by Article 6.2.12.2. shall,

(a) except as permitted in Sentence (2), be permanently connected to an electrical circuit and shall have no disconnect switch between the overcurrent device and the carbon monoxide alarm,

(b) be wired so that its activation will activate all carbon monoxide alarms within the *suite*, where located within a *suite* of *residential occupancy*,

(c) be equipped with an alarm that is audible within bedrooms when the intervening doors are closed, where located in a *suite* of *residential occupancy*, and

(d) conform to,

(i) CAN/CSA-6.19, "Residential Carbon Monoxide Alarming Devices", or

(ii) UL 2034, "Single and Multiple Station Carbon Monoxide Alarms".

(2) Where the *building* is not supplied with electrical power, carbon monoxide alarms are permitted to be battery operated.

6.2.13. Ventilation for Laboratories

6.2.13.1. Application

(1) This Subsection applies to laboratories intended as a location where *flammable liquids* and *combustible liquids* are used in normal laboratory operations in quantities or in a manner that create a fire or explosion hazard.

6.2.13.2. General Ventilation

(1) A laboratory shall be provided with continuous mechanical ventilation designed to ensure that flammable vapours,

(a) do not accumulate in the laboratory,

(b) are prevented from migrating to other parts of the *building*,

(c) do not accumulate in the ventilation system,

(d) are exhausted to the outdoors, and

(e) are not returned to the *building*.

(2) A ventilation system required in this Subsection shall be provided with monitoring devices that,

(a) indicate that the ventilation system is in operation, and

(b) sound an alarm if the ventilation system is malfunctioning.

6.2.13.3. Power-Ventilated Enclosure

(1) A power-ventilated enclosure required by the Fire Code made under the *Fire Protection and Prevention Act, 1997* shall be designed and constructed to conform to Articles 6.2.13.4. and 6.2.13.5.

6.2.13.4. Enclosure Exhaust Ventilation

(1) The ventilation system for a power-ventilated enclosure referred to in Article 6.2.13.3. shall,

(a) conform to NFPA 91, "Exhaust Systems for Air Conveying of Vapors, Gases, Mists and Noncombustible Particulate Solids",

(b) provide continuous exhaust ventilation at an air velocity sufficient to prevent the accumulation of *combustible* or reactive deposits in the power-ventilated enclosure and its *exhaust duct* system,

(c) confine flammable vapours and particles to the area where they are generated and exhaust them to the outdoors,

(d) not return the exhausted air to the *building*, and

(e) be provided with well identified control switches that are,

(i) located outside the power-ventilated enclosure, and

(ii) readily accessible in case of an emergency.

(2) *Fire dampers* are permitted to be used within the *exhaust duct* system of the ventilation system for a power-ventilated enclosure referred to in Article 6.2.13.3.

6.2.13.5. Enclosure Construction

(1) The power-ventilated enclosure referred to in Article 6.2.13.3. and its *exhaust duct* system shall,

(a) except as provided in Sentences (2) and (3), be constructed of *noncombustible* materials compatible with and chemically resistant to the flammable vapours and particles being exhausted, and

(b) be provided with access doors to permit inspection and maintenance of the fan assembly and *exhaust ducts*.

(2) *Combustible* materials are permitted in the power-ventilated enclosure described in Sentence (1) and its *exhaust duct* system if,

(a) such materials are required by the corrosive or reactive properties of the chemicals or liquids being used, and

(b) their *flame-spread rating* is not more than 25.

(3) The *flame-spread rating* required in Sentence (2) is permitted to be greater than 25 if an automatic fire suppression system is provided inside the power-ventilated enclosure and its *exhaust duct* system.

Section 6.3. Chimneys and Venting Equipment

6.3.1. General

6.3.1.1. Requirement for Venting

(1) Except as provided in Articles 6.3.1.2. and 6.3.1.3., the products of combustion from solid fuel-burning *appliances* shall be vented in conformance with the requirements in the applicable *appliance* installation standards listed in Article 6.2.1.4.

6.3.1.2. Masonry or Concrete Chimneys

(1) Rectangular *masonry or concrete chimneys* not more than 12 m in height shall conform to Part 9 if they serve,

(a) *appliances* with a combined total rated heat output of 120 kW or less, or

(b) fireplaces.

(2) *Masonry or concrete chimneys* other than those described in Sentence (1) shall be designed and installed in conformance with the appropriate requirements in NFPA 211, "Chimneys, Fireplaces, Vents and Solid Fuel-Burning Appliances".

6.3.1.3. Metal Smoke Stacks

(1) Single wall metal smoke stacks shall be designed and installed in conformance with NFPA 211, "Chimneys, Fireplaces, Vents and Solid Fuel-Burning Appliances".

6.3.1.4. Reserved

6.3.1.5. Access Ladders

(1) Access ladders for *chimneys*, when provided, shall consist of steel or bronze rungs, built into the walls of the *chimneys*.

(2) Rungs for external ladders shall begin at not less than 2 500 mm from ground level.

O. Reg. 332/12, Division B, Part 6; O. Reg. 361/13, ss. 35 (2)-38.

PART 7

PLUMBING

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Section 7.1. General

7.1.1. Scope

7.1.1.1. Scope

(1) The scope of this Part shall be as described in Subsection 1.1.2. of Division A.

7.1.2. Application

7.1.2.1. Application

(1) Except as provided in Sentence (2), this Part applies to the design and *construction* of *plumbing*.

(2) This Part does not apply to industrial process systems unless the industrial process system is interconnected with the *plumbing system*, in which case the interconnection shall be so designed and installed so that the *plumbing system* is protected against contamination or malfunction that may be caused by the industrial system.

7.1.3. Definitions

7.1.3.1. Definitions

(1) In this Part,

Storey means the interval between two successive floor levels including *mezzanine* floors that contain *plumbing* or between a floor level and roof.

7.1.4. Plumbing Facilities

7.1.4.1. Facilities Required

(1) *Plumbing* facilities shall be provided in accordance with Subsection 3.7.4. and Section 9.31.

7.1.4.2. Floor Drains

(1) Where gravity drainage to a *sanitary drainage system* is possible, a floor drain shall be installed in a basement forming part of a *dwelling unit*.

(2) Where gravity drainage to a *sanitary drainage system* is not possible, the floor drain required by Sentence (1) may be connected to a *storm drainage system*, dry well or drainage ditch provided it is located where it can receive only *clear water waste* or *storm sewage*.

(3) A floor drain shall be provided in a public laundry room, garbage room, incinerator room, *boiler* or heating room that is not located within a *dwelling unit*.

7.1.5. Service Connections

7.1.5.1. Sanitary Drainage Systems

(1) Every *sanitary drainage system* shall be connected to a public *sanitary sewer*, a public combined sewer or a *private sewage disposal system*.

(2) A combined *building drain* or a combined *building sewer* shall not be installed.

7.1.5.2. Storm Drainage Systems

(1) Every *storm drainage system* shall be connected to a public *storm sewage* works, a public combined *sewage* works or a designated storm water disposal location but shall not be connected to a *sanitary sewage* works.

7.1.5.3. Water Distribution Systems

(1) Except as provided in Sentence (2), every *water distribution system* shall be connected,

(a) to a watermain that is part of a *municipal drinking water system*, or

(b) to a *drinking water system*, if a watermain described in Clause (a) is not available.

(2) *Storm sewage* or *greywater* that is free of solids and treated to conform to Article 7.7.4.1. is permitted to be used as a water supply for,

(a) water closets,

(b) urinals,

(c) sub-surface irrigation, or

(d) the priming of *traps*.

(3) *Rainwater* that is free of solids and treated to conform to Article 7.7.4.1. is permitted to be used as a water supply for,

(a) clothes washers,

(b) laundry trays,

(c) mop sinks,

(d) bedpan washers,

(e) water closets,

(f) urinals,

(g) hose bibbs,

(h) sub-surface irrigation, or

(i) the priming of *traps*.

(4) Piping conveying the non-*potable* water described in Sentence (2) shall be installed in conformance with Section 7.7.

7.1.5.4. Separate Services

(1) Except as provided in Sentences (2) and (3), piping in any *building* shall be connected to the public services separately from piping of any other *building*.

(2) An ancillary *building* on the same property as the main *building* may be served by the same service.

(3) *Water service pipes* or *building sewers* serving *buildings* located on the same property may connect into a *private water supply* or a *private sewer* conforming to Article 7.1.5.5.

(4) No *plumbing* serving a *dwelling unit* shall be installed in or under another unit of the *building* unless the piping is located in a tunnel, pipe corridor, common *basement* or parking garage, so that the piping is *accessible* for servicing and maintenance throughout its length without encroachment on any private living space, but this Sentence does not prevent *plumbing* serving a unit located above another unit from being installed in or under the lower unit.

7.1.5.5. Private Sewers and Private Water Supply

(1) *Private water supply* pipes shall be designed and installed according to MOE PIBS 6881e, “Design Guidelines for Drinking-Water Systems”.

(2) *Private sewers* shall be designed and installed according to MOE PIBS 6879, "Design Guidelines for Sewage Works".

7.1.6. Location of Fixtures

7.1.6.1. Lighting and Ventilation Requirements

(1) *Plumbing fixtures* shall not be installed in a room that is not lighted and ventilated in accordance with the appropriate requirements in Parts 3 and 9.

7.1.6.2. Accessibility

(1) Every *fixture*, *plumbing appliance*, *interceptor*, *cleanout*, valve, device or piece of equipment shall be so located that it is readily *accessible* for use, cleaning and maintenance.

7.1.7. Accommodating Movement

7.1.7.1. Structural Movement

(1) *Plumbing* shall be designed and installed to accommodate the maximum relative structural movement provided for in the *construction* of the *building*.

Section 7.2. Materials and Equipment

7.2.1. General

7.2.1.1. Exposure of Materials

(1) Where unusual conditions exist such as excessively corrosive *soil* or water, only materials suited for use in such locations shall be used.

(2) Materials and equipment used in a *drainage system* where excessively corrosive wastes are present shall be suitable for the purpose.

7.2.1.2. Restrictions on Re-Use

(1) Used materials and equipment, including *fixtures*, shall not be reused unless they meet the requirements of this Part for new materials and equipment and are otherwise satisfactory for their intended use.

(2) Materials and equipment that have been used for a purpose other than the distribution of *potable* water shall not be subsequently used in a *potable water system*.

7.2.1.3. Identification and Certification

(1) Every length of pipe and every fitting shall have cast, stamped or indelibly marked on it the maker's name or mark and the weight or class or quality of the product, or it shall be marked in accordance with the relevant standard, and such markings shall be visible after installation.

(2) Where a component of a *plumbing system* is required by this Code to comply with a standard and the compliance is not certified by a testing agency accredited by the Standards Council of Canada for the testing of the component in question and, when an inspector requests proof of the compliance, proof of compliance shall be produced by the

person proposing to install or have installed the component, and without such proof the component shall not be installed as a permanent part of any *plumbing system*.

(3) The lack of certification markings on a product or *plumbing* component shall be regarded as proof, in the absence of evidence to the contrary, that no certification exists.

(4) If a component of a *plumbing system* is required to be certified to a standard, the certification shall be made by a testing agency accredited for that purpose by the Standards Council of Canada.

7.2.1.4. Pipe or Piping

(1) Where the term pipe or piping and fittings is used, it shall also apply to tube or tubing and fittings unless otherwise stated.

7.2.1.5. Withstanding Pressure

(1) Piping, fittings and joints used in pressure sewer, forcemain or sump pump discharge applications shall be capable of withstanding at least one and one-half times the maximum potential pressure.

7.2.2. Fixtures

7.2.2.1. Surface Requirements

(1) Except for the area designed to be slip proof in such *fixtures*, every exposed area of a *fixture* shall have a smooth, hard corrosion-resistant surface that is free from flaws and blemishes that may interfere with cleaning.

7.2.2.2. Conformance to Standards

(1) Water closets and urinals shall conform to the requirements in Article 7.6.4.2.

(2) Vitreous china fixtures shall conform to ASME A112.19.2 / CSA B45.1, “Ceramic Plumbing Fixtures”.

(3) Enamelled cast iron fixtures shall conform to ASME A112.19.1 / CSA B45.2, “Enamelled Cast Iron and Enamelled Steel Plumbing Fixtures”.

(4) Porcelain enamelled steel fixtures shall conform to ASME A112.19.1 / CSA B45.2, “Enamelled Cast Iron and Enamelled Steel Plumbing Fixtures”.

(5) Stainless steel fixtures shall conform to ASME A112.19.3 / CSA B45.4, “Stainless Steel Plumbing Fixtures”.

(6) Plastic fixtures shall conform to CSA B45.5 / IAPMO Z124, “Plastic Plumbing Fixtures”.

(7) Hydromassage bathtubs shall conform to ASME A112.19.7 / CSA B45.10, “Hydromassage Bathtub Systems”.

(8) Macerating toilet systems shall conform to CAN/CSA-B45.9, “Macerating Systems and Related Components”.

7.2.2.3. Showers

(1) Shower receptors shall be constructed and arranged so that water cannot leak through the walls or floor.

(2) Not more than six shower heads shall be served by a single shower drain.

(3) Where two or more shower heads are served by a shower drain, the floor shall be sloped and the drain located so that water from one head cannot flow over the area that serves another head.

(4) Except for column showers, when a battery of shower heads is installed, the horizontal distance between two adjacent shower heads shall be at least 750 mm.

7.2.2.4. Concealed Overflows

(1) A dishwashing sink and a food preparation sink shall not have concealed overflows.

7.2.2.5. Water Closets in Public Washrooms

(1) Except for Eastern-Style toilets, where a water closet is installed in a washroom for *public use* it shall be of the elongated type and provided with a seat of the open front type.

7.2.2.6. Lavatories

(1) A lavatory that does not have an overflow shall be equipped with a centre outlet waste fitting.

7.2.2.7. Trough Urinals

(1) No trough urinal shall be used as part of a *plumbing system*.

7.2.3. Traps and Interceptors

7.2.3.1. Traps

(1) Except as provided for in Sentence (2), every *trap* shall,

(a) have a *trap seal depth* of at least 38 mm,

(b) be so designed that failure of the seal walls will cause exterior leakage, and

(c) have a water seal that does not depend on the action of moving parts.

(2) The *trap seal depth* on *fixtures* draining to an acid waste system shall be a minimum of 50 mm.

(3) Except for a floor-mounted service sink, every *trap* that serves a lavatory, a sink or a laundry tray shall,

(a) be provided with a *cleanout* plug of a minimum ¾ in. *size* located at the lowest point of the *trap* and of the same material as the *trap*, except that a cast iron *trap* shall be provided with a brass *cleanout* plug,

(b) be designed so that the *trap dip* can be completely removed for cleaning purposes, or

(c) be provided with a *cleanout* installed above the floor as close as practical downstream of the *trap* when the *trap* is,

(i) installed below the floor, and

(ii) not readily *accessible* for cleaning as required by Clause (a).

(4) A bell *trap* or an S-*trap* shall not be installed in a *drainage system*.

(5) A *drum trap* shall not be installed in a *drainage system*.

(6) Except as permitted in Sentence (7), no *bottle trap* shall be used in a *plumbing system*.

(7) A *bottle trap* may be used on a laboratory sink or other *fixture* equipped with corrosion resistant fittings.

(8) No running *trap* shall be installed in a *plumbing system* unless an *accessible* handhole is provided for cleaning of the *trap*, and where the *trap* is too small to accommodate a handhole, a *cleanout* shall be provided.

7.2.3.2. Interceptors

(1) Every *interceptor* shall be designed so that it can be readily cleaned.

(2) Every grease *interceptor* shall be designed so that it does not become air bound.

(3) Where a grease *interceptor* is required by Sentence 7.4.4.3.(1), the *interceptor* shall conform to,

(a) CSA B481.1, "Testing and Rating of Grease Interceptors Using Lard", or

(b) CSA B481.2, "Testing and Rating of Grease Interceptors Using Oil".

7.2.3.3. Tubular Traps

(1) Tubular metal or plastic *traps* that conform to ASME A112.18.2 / CSA B125.2, "Plumbing Waste Fittings" shall be used in *accessible* locations.

7.2.4. Pipe Fittings

7.2.4.1. T and Cross Fittings

(1) A T fitting shall not be used in a *drainage system* except to connect a *vent pipe*.

(2) A cross fitting shall not be used in a *drainage system*.

7.2.4.2. Sanitary T Fittings

(1) A double sanitary T fitting shall not be used to connect the *fixture drains* of two urinals where no *cleanout* fitting is provided above the connection.

(2) No pipe fitting, joint or connection that would tend to intercept solids or reduce the flow through a pipe by more than 10 per cent shall be used in a *plumbing system*.

7.2.4.3. 90° Elbows

(1) Except as permitted in Sentences (2) and (3), 90° elbows of 4 in. *size* or less that have a centre-line radius that is less than the *size* of the pipe shall not be used to join two *soil* or *waste pipes*.

(2) 90° elbows of 4 in. *size* or less in *sanitary drainage systems* may be used,

(a) to change the direction of piping from horizontal to vertical, in the direction of flow,

(b) where a *trap arm* enters a wall, or

(c) to connect *trap arms* as permitted by Sentence 7.5.6.3.(2).

(3) A 90° elbow that is part of the pre-engineered wastewater heat recovery system is permitted to have a centre-line radius that is less than the *size* of the pipe.

7.2.4.4. Fittings Restricted in Use

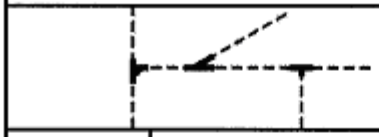
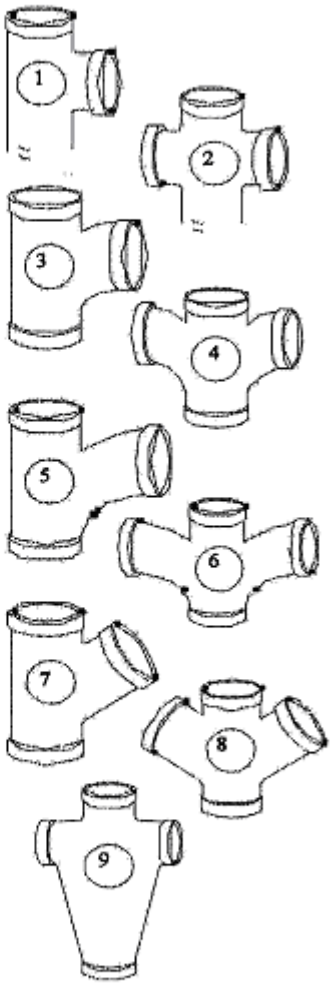
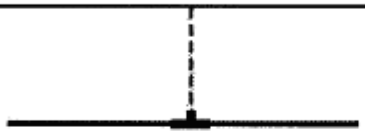
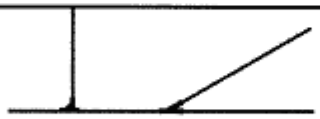
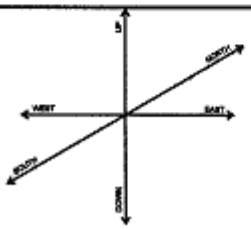
(1) No double Y, double TY, double T or double waste fitting shall be installed in a *nominally horizontal soil* or *waste pipe*.

7.2.4.5. Assembled Pipe or Tubing

(1) Pipe or tubing assembled to comprise a standard drain waste and venting system shall be connected with drain, waste and vent fittings in conformance with Table 7.2.4.5.

Table 7.2.4.5.
Pipe Arrangement for DWV Fittings

Forming Part of Sentence 7.2.4.5.(1)

Pipe Arrangement	Fittings	
	Acceptable	Type
	①③⑤⑦	
	②④⑥⑧⑨	
	①③⑤⑦	
	③⑤⑦	
	④*⑥⑧⑨*	
	⑤⑦	
	LEGEND (DWV BRANCH FITTINGS) Vent pipe ---------- Drainage pipe _____ * Acceptable only if vertical run is of 3 inches size or larger and horizontal branches are of 1 ¼, 1 ½, or 2 inches size	

1. Straight T
2. Double T or Cross
3. Sanitary T or Short Turn TY
4. Double Sanitary T or Short Turn Double TY
5. Combination Y & 1/8 Bend or Long Turn TY
6. Double Combination Y & 1/8 Bend or Double Long Turn TY
7. Y
8. Double Y
9. Double Waste Fitting

7.2.5. Non-Metallic Pipe and Fittings

7.2.5.1. Asbestos-Cement Drainage Pipe and Fittings

(1) Except as provided in Sentence (2), asbestos-cement pipe and its fittings for use in a drain, waste or vent system shall conform to,

(a) CAN/CGSB-34.22, “Asbestos-Cement Drain Pipe”, or

(b) CAN/CSA-B127.1, “Asbestos Cement Drain, Waste and Vent Fittings”.

(2) Asbestos-cement pipe and fittings used underground either outside a *building* or under a *building* shall conform to Sentence (1) or to,

(a) CAN/CGSB-34.9, “Asbestos-Cement Sewer Pipe”,

(b) CAN/CGSB-34.23, “Asbestos-Cement House Connection Sewer Pipe”, or

(c) CSA B127.2, “Components for Use in Asbestos-Cement Building Sewer Systems”.

7.2.5.2. Reserved

7.2.5.3. Concrete Pipe and Fittings

(1) Concrete pipe shall conform to CAN/CSA-A257 Series, “Standards for Concrete Pipe and Manhole Sections”.

(2) Joints with external elastomeric gaskets shall be made with corrosion resistant external band type flexible mechanical couplings that conform to CAN/CSA-B602, “Mechanical Couplings for Drain, Waste, and Vent Pipe and Sewer Pipe”.

(3) Concrete fittings field fabricated from lengths of pipe shall not be used.

(4) Concrete pipe shall not be used above ground inside a *building*.

(5) Precast reinforced circular concrete manhole sections, catch basins and fittings shall conform to CAN/CSA-A257.4, “Precast Reinforced Circular Concrete Manhole Sections, Catch Basins, and Fittings”.

7.2.5.4. Vitrified Clay Pipe and Fittings

(1) Vitrified clay pipe and fittings shall be certified to CSA A60.1-M, “Vitrified Clay Pipe”.

(2) Couplings and joints for vitrified clay pipe shall be certified to CSA A60.3-M, “Vitrified Clay Pipe Joints”.

(3) Vitrified clay pipe and fittings shall not be used except for an underground part of a *drainage system*.

7.2.5.5. Polyethylene Pipe and Fittings

(1) Polyethylene water pipe, tubing and fittings shall be certified to, and have a pressure rating meeting the requirements of, Series 160 or a higher series of CAN/CSA-B137.1, “Polyethylene (PE) Pipe, Tubing and Fittings for Cold Water Pressure Services”.

(2) Except as permitted in Sentence 7.2.5.7.(1), polyethylene water pipe shall not be used except for a *water service pipe*.

(3) Butt fusion fittings for polyethylene pipe shall conform to ASTM D3261, “Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing”.

7.2.5.6. Polyethylene Pipe Used Underground

(1) Polyethylene pipe used underground in a *drainage system* for rehabilitation of existing systems using trenchless technology shall conform to ASTM F714,

"Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter" and shall be HDPE 3408, SDR 17 or heavier.

7.2.5.7. Crosslinked Polyethylene Pipe and Fittings

(1) Cross-linked polyethylene pipe and its associated fittings used in hot and cold *potable water systems* shall be certified to CAN/CSA-B137.5, "Crosslinked Polyethylene (PEX) Tubing Systems for Pressure Applications".

7.2.5.8. PVC Pipe and Fittings

(1) PVC water pipe, fittings and solvent cement shall be certified to CAN/CSA-B137.3, "Rigid Polyvinylchloride (PVC) Pipe and Fittings for Pressure Applications" or CAN/CSA-B137.2, "Polyvinylchloride (PVC) Injection-Moulded Gasketed Fittings for Pressure Applications", and have a minimum pressure rating of 1 100 kPa.

(2) PVC water pipe and fittings in Sentence (1) shall not be used in a hot *water system*.

7.2.5.9. CPVC Pipe, Fittings and Solvent Cements

(1) CPVC hot and cold water pipe, fittings and solvent cements shall be certified to CAN/CSA-B137.6, "Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing and Fittings for Hot and Cold Water Distribution Systems".

(2) The design temperature and design pressure of a CPVC piping system shall conform to CAN/CSA-B137.6, "Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing and Fittings for Hot and Cold Water Distribution Systems".

7.2.5.10. Plastic Pipe, Fittings and Solvent Cement Used Underground

(1) Plastic pipe, fittings and solvent cement used underground outside a *building* or under a *building* in a *drainage system* shall be certified to,

(a) ASTM F628, "Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste and Vent Pipe With a Cellular Core",

(b) CAN/CSA-B181.1, "Acrylonitrile-Butadiene-Styrene (ABS) Drain, Waste, and Vent Pipe and Pipe Fittings",

(c) CAN/CSA-B181.2, "Polyvinylchloride (PVC) and Chlorinated Polyvinylchloride (CPVC) Drain, Waste, and Vent Pipe and Pipe Fittings",

(d) CAN/CSA-B182.1, "Plastic Drain and Sewer Pipe and Pipe Fittings",

(e) CAN/CSA-B182.2, "PSM Type Polyvinylchloride (PVC) Sewer Pipe and Fittings",

(f) CAN/CSA-B182.4, "Profile Polyvinylchloride (PVC) Sewer Pipe and Fittings",

(g) CAN/CSA-B182.6, "Profile Polyethylene (PE) Sewer Pipe and Fittings for Leak-Proof Sewer Applications",

(h) CAN/CSA-B137.2, "Polyvinylchloride (PVC) Injection-Moulded Gasketed Fittings for Pressure Applications", or

(i) CAN/CSA-B137.3, "Rigid Polyvinylchloride (PVC) Pipe and Fittings for Pressure Applications".

(2) Except as permitted in Clauses (h) and (i), plastic pipe used as described in Sentence (1) shall have a stiffness equal or greater than 320 kPa.

7.2.5.11. Transition Solvent Cement

(1) Solvent cement for transition joints shall conform to,

(a) CAN/CSA-B181.1, "Acrylonitrile-Butadiene-Styrene (ABS) Drain, Waste, and Vent Pipe and Pipe Fittings", or

(b) CAN/CSA-B181.2, "Polyvinylchloride (PVC) and Chlorinated Polyvinylchloride (CPVC) Drain, Waste, and Vent Pipe and Pipe Fittings".

(2) Transition solvent cement shall only be used for joining an ABS *plumbing system* to a PVC *plumbing system*.

7.2.5.12. Plastic Pipe, Fittings and Solvent Cement Used in Buildings

(1) Plastic pipe, fittings and solvent cement used inside or under a *building* in a *sanitary drainage system* or *venting system* shall be certified to,

(a) ASTM F628, "Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe With a Cellular Core",

(b) CAN/CSA-B181.1, "Acrylonitrile-Butadiene-Styrene (ABS) Drain, Waste, and Vent Pipe and Pipe Fittings", or

(c) CAN/CSA-B181.2, "Polyvinylchloride (PVC) and Chlorinated Polyvinylchloride (CPVC) Drain, Waste, and Vent Pipe and Pipe Fittings".

(2) Plastic pipe, fittings and solvent cement used inside a *building* in a *storm drainage system* shall be certified to,

(a) ASTM F628, "Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe With a Cellular Core",

(b) CAN/CSA-B181.1, "Acrylonitrile-Butadiene-Styrene (ABS) Drain, Waste, and Vent Pipe and Pipe Fittings",

(c) CAN/CSA-B181.2, "Polyvinylchloride (PVC) and Chlorinated Polyvinylchloride (CPVC) Drain, Waste, and Vent Pipe and Pipe Fittings",

(d) CAN/CSA-B182.1, "Plastic Drain and Sewer Pipe and Pipe Fittings", or

(e) CAN/CSA-B182.2, "PSM Type Polyvinylchloride (PVC) Sewer Pipe and Fittings".

(3) Plastic pipe used as described in Sentence (2) shall have a pipe stiffness equal or greater than 320 kPa.

(4) Requirements for *combustible* piping in relation to fire safety shall conform to Sentences 3.1.5.16.(1) and 9.10.9.6.(2) to (8) and Articles 3.1.9.4. and 9.10.9.7.

(5) Where *noncombustible* piping pierces a *fire separation* or a *fire block*, the requirements for fire stopping of Subsection 3.1.9., Sentence 9.10.9.6.(1) and Article 9.10.16.4. shall apply.

7.2.5.13. Polyethylene/Aluminum/Polyethylene Composite Pipe and Fittings

(1) PE/AL/PE composite pipe and fittings used for *potable water systems* shall conform to CAN/CSA-B137.9, "Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure-Pipe Systems".

(2) Except as provided in Sentences (3) and (4), PE/AL/PE pipe and fittings shall not be used in a hot *water system*.

(3) PE/AL/PE pipe with a pressure rating of 690 kPa or greater at 82ºC shall be permitted in a hot *water system*.

(4) PE/AL/PE pipe with a pressure rating of 690 kPa or greater at 82ºC shall be used with fittings that conform to CAN/CSA-B137.10, "Crosslinked Polyethylene/Aluminum/Crosslinked Polyethylene (PEX-AL-PEX) Composite Pressure-Pipe Systems", in a hot *water system*.

7.2.5.14. Crosslinked Polyethylene/Aluminum/Polyethylene Composite Pipe and Fittings

(1) PEX/AL/PEX composite pipe and fittings used for *potable water systems* shall conform to CAN/CSA-B137.10, "Crosslinked Polyethylene/Aluminum/Crosslinked Polyethylene (PEX-AL-PEX) Composite Pressure-Pipe Systems".

7.2.5.15. Polypropylene Pipe and Fittings

(1) Polypropylene pipe and fittings used for hot and cold *potable water systems* shall conform to CAN/CSA-B137.11, "Polypropylene (PP-R) Pipe and Fittings for Pressure Applications".

7.2.6. Ferrous Pipe and Fittings

7.2.6.1. Cast Iron Drainage and Vent Pipe and Fittings

(1) Drainage piping, vent piping and fittings made of cast iron shall be certified to CAN/CSA-B70, "Cast Iron Soil Pipe, Fittings and Means of Joining".

(2) Cast iron *soil pipe* and fittings shall not be used in a *water system*.

7.2.6.2. Cast Iron Fittings for Asbestos-Cement Drainage Pipe

(1) Cast iron fittings designed for use with asbestos-cement pipe for drainage purposes shall conform to the applicable requirements of,

(a) CAN/CSA-B127.1, "Asbestos Cement Drain, Waste and Vent Fittings", or

(b) CSA B127.2-M, "Components for Use in Asbestos Cement Building Sewer Systems".

7.2.6.3. Threaded Cast Iron Drainage Fittings

(1) Threaded cast iron drainage fittings shall conform to ASME B16.12, "Cast Iron Threaded Drainage Fittings".

(2) Threaded cast iron drainage fittings shall not be used in a *water system*.

7.2.6.4. Cast Iron Water Pipe

(1) Cast iron water pipes shall conform to ANSI/AWWA C151/A21.51, "Ductile-Iron Pipe, Centrifugally Cast".

(2) Cement-mortar lining for cast iron water pipes shall conform to ANSI/AWWA C104/A21.4, "Cement-Mortar Lining for Ductile-Iron Pipe and Fittings".

(3) Cast iron fittings for cast iron or ductile-iron water pipes shall conform to ANSI/AWWA C110/A21.10, "Ductile-Iron and Gray-Iron Fittings".

(4) Rubber gasket joints for cast iron and ductile-iron pressure pipe for water piping shall conform to ANSI/AWWA C111/A21.11, "Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings".

7.2.6.5. Screwed Cast Iron Water Fittings

(1) Screwed cast iron water fittings shall conform to ASME B16.4, "Gray Iron Threaded Fittings: Classes 125 and 250".

(2) Screwed cast iron water fittings used in a *water system* shall be cement-mortar lined or galvanized.

(3) Screwed cast iron water fittings shall not be used in a *drainage system*.

7.2.6.6. Screwed Malleable Iron Water Fittings

(1) Screwed malleable iron water fittings shall conform to ASME B16.3, "Malleable Iron Threaded Fittings: Classes 150 and 300".

(2) Screwed malleable iron water fittings used in a *water system* shall be cement-mortar lined or galvanized.

(3) Screwed malleable iron water fittings shall not be used in a *drainage system*.

7.2.6.7. Steel Pipe

(1) Except as provided in Sentences (2) and (3), welded and seamless steel pipe shall not be used in a *plumbing system*.

(2) Galvanized steel pipe may be used in a *drainage system* or a *venting system* above ground inside a *building*.

(3) Galvanized steel pipe and fittings shall not be used in a *water distribution system* except,

(a) in *buildings* of *industrial occupancy*, or

(b) for the repair of existing galvanized steel piping systems.

(4) Galvanized steel pipe and fittings shall conform to ASTM A53/A53M, "Pipe, Steel, Black and Hot Dipped, Zinc-Coated Welded and Seamless".

(5) Where galvanized steel pipe is used in a *drainage system*, it shall be used with drainage fittings.

(6) All steel pipe of 4 in. *size* and smaller shall be schedule 40 or heavier and fittings of less than 2 in. *size* shall be galvanized screw fittings.

7.2.6.8. Corrugated Steel Pipe and Couplings

(1) Corrugated steel pipe and couplings shall be certified to CAN/CSA-G401, "Corrugated Steel Pipe Products".

(2) Corrugated steel pipe shall only be used underground outside a *building* in a *storm drainage system*.

(3) Couplings for corrugated steel pipe shall be constructed so that when installed they shall,

(a) maintain the pipe alignment,

(b) resist the separation of adjoining lengths of pipe,

(c) prevent root penetration, and

(d) prevent the infiltration of surrounding material.

7.2.6.9. Sheet Metal Leaders

(1) A sheet metal *leader* shall not be used except above ground outside a *building*.

7.2.7. Non-Ferrous Pipe and Fittings

7.2.7.1. Copper and Brass Pipe

(1) Copper pipe shall conform to ASTM B42, "Seamless Copper Pipe, Standard Sizes".

(2) Brass pipe shall conform to ASTM B43, "Seamless Red Brass Pipe, Standard Sizes".

7.2.7.2. Brass or Bronze Pipe Flanges and Flanged Fittings

(1) Brass or bronze pipe flanges and flanged fittings shall conform to ASME B16.24, "Cast Copper Alloy Pipe Flanges and Flanged Fittings: Classes 150, 300, 600, 900, 1500 and 2500".

7.2.7.3. Brass or Bronze Threaded Water Fittings

(1) Brass or bronze threaded water fittings shall conform to ASME B16.15, "Cast Copper Alloy Threaded Fittings: Classes 125 and 250".

(2) Brass or bronze threaded water fittings shall not be used in a *drainage system*.

7.2.7.4. Copper Tube

(1) Copper tube in a *plumbing system* shall,

(a) be certified to ASTM B88, "Seamless Copper Water Tube", or

(b) comply with ASTM B306, "Copper Drainage Tube (DWV)".

(2) The use of copper tube shall conform to Table 7.2.7.4.

Table 7.2.7.4.
Permitted Use of Copper Tube and Pipe

Forming Part of Sentence 7.2.7.4.(2)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Type of Copper Tube or Pipe	*Water Distribution System*		*Building Sewer*	*Drainage System*		*Venting System*	
		Under ground	Above ground		Under ground	Above ground	Under ground	Above ground
1.	K & L hard	N	P	P	P	P	P	P
2.	K & L soft	P	P	N	N	N	N	N
3.	M hard	N	P	N	N	P	N	P
4.	M soft	N	N	N	N	N	N	N

5.	DWV	N	N	N	N	P	N	P

Notes to Table 7.2.7.4.:

P — Permitted

N — Not Permitted

(3) Copper tube used in a *plumbing appliance* shall conform to,

(a) ASTM B88, "Seamless Copper Water Tube", or

(b) ASTM B68 / B68M, "Seamless Copper Tube, Bright Annealed".

(4) Type K or L copper tube shall be used for the *potable* water side of a heat exchanger in a pre-engineered wastewater heat recovery system.

7.2.7.5. Solder-Joint Drainage Fittings

(1) Solder-joint fittings for *drainage systems* shall conform to,

(a) ASME B16.23, "Cast Copper Alloy Solder Joint Drainage Fittings: DWV", or

(b) ASME B16.29, "Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings – DWV".

(2) Solder-joint fittings for *drainage systems* shall not be used in a *water system*.

7.2.7.6. Solder-Joint Water Fittings

(1) Except as provided in Sentence (2), solder-joint fittings for *water systems* shall conform to,

(a) ASME B16.18, "Cast Copper Alloy Solder Joint Pressure Fittings", or

(b) ASME B16.22, "Wrought Copper and Copper Alloy Solder Joint Pressure Fittings".

(2) Solder-joint fittings for *water systems* not made by casting or the wrought process shall conform to the applicable requirements of ASME B16.18, "Cast Copper Alloy Solder Joint Pressure Fittings".

7.2.7.7. Flared-Joint Fittings for Copper Tube Water Systems

(1) Flared-joint fittings for copper tube *water systems* shall conform to ASME B16.26, "Cast Copper Alloy Fittings for Flared Copper Tubes".

(2) Flared-joint fittings for copper tube *water systems* not made by casting shall conform to the applicable requirements of ASME B16.26, "Cast Copper Alloy Fittings for Flared Copper Tubes".

7.2.7.8. Lead Waste Pipe and Fittings

(1) Lead *waste pipe* and fittings shall not be used in a *water system* or for a *building sewer*.

(2) When there is a change in *size* of a lead closet bend, the change shall be in the vertical section of the bend or made in such a manner that there shall be no retention of liquid in the bend.

7.2.8. Corrosion Resistant Materials

7.2.8.1. Pipe and Fittings

(1) Pipes and fittings to be used for drainage and venting of acid and corrosive wastes shall conform to,

(a) ASTM A518/A518M, "Corrosion-Resistant High-Silicon Iron Castings",

(b) ASTM C1053, "Boronsilicate Glass Pipe and Fittings for Drain, Waste, and Vent (DWV) Applications", or

(c) CAN/CSA-B181.3, "Polyolefin and Polyvinylidene Fluoride (PVDF) Laboratory Drainage Systems".

7.2.9. Jointing Materials

7.2.9.1. Cement-Mortar

(1) Cement-mortar shall not be used for jointing.

7.2.9.2. Solder and Fluxes

(1) Solders for solder joint fittings shall conform to ASTM B32, "Solder Metal" in accordance with the recommended use.

(2) Solders and fluxes having a lead content in excess of 0.2 per cent shall not be used in a *potable water system*.

(3) Fluxes for soldered joints shall conform to ASTM B813, "Liquid and Paste Fluxes for Soldering of Copper and Copper Alloy Tube".

(4) Brazing alloys shall conform to ANSI/AWS A5.8M/A5.8, "Specification for Filler Metals for Brazing and Brazed Welding", BCuP range.

7.2.10. Miscellaneous Materials

7.2.10.1. Floor Flanges

(1) Brass floor flanges shall be certified to CSA B158.1, "Cast Brass Solder Joint Drainage, Waste and Vent Fittings".

(2) ABS floor flanges shall be certified to CAN/CSA-B181.1, "Acrylonitrile-Butadiene-Styrene (ABS) Drain, Waste, and Vent Pipe and Pipe Fittings".

(3) PVC floor flanges shall be certified to CAN/CSA-B181.2, "Polyvinylchloride (PVC) and Chlorinated Polyvinylchloride (CPVC) Drain, Waste, and Vent Pipe and Pipe Fittings".

(4) Cast iron, copper and aluminum floor flanges shall be suitable for the purpose.

7.2.10.2. Screws, Bolts, Nuts and Washers

(1) Every screw, bolt, nut and washer shall be of materials that are resistant to corrosion, when used,

(a) to connect a water closet to a water closet flange,

(b) to anchor the water closet flange to the floor,

(c) to anchor the water closet to the floor, or

(d) to hold *cleanout* covers or floor drain grates.

7.2.10.3. Cleanout Fittings

(1) Every plug, cap, nut or bolt that is intended to be removable from a ferrous fitting shall be of a non-ferrous material.

(2) A *cleanout* fitting that as a result of normal maintenance operations cannot withstand the physical stresses of removal and reinstallation or cannot ensure a gas-tight seal shall not be installed.

(3) A screw cap or test cap shall not be used as a *cleanout* plug or cover.

7.2.10.4. Mechanical Couplings

(1) Groove and shoulder type mechanical pipe couplings shall conform to CSA B242, "Groove and Shoulder Type Mechanical Pipe Couplings".

(2) Mechanical Couplings for DWV and Sewer Pipe shall be certified to CAN/CSA-B602, "Mechanical Couplings for Drain, Waste, and Vent Pipe and Sewer Pipe".

7.2.10.5. Saddle Hubs

(1) Except as provided in Sentence (2), a saddle hub or fitting shall not be installed in *drainage systems*, *venting systems* or *water systems*.

(2) A saddle hub or saddle clamp may be installed in a *building drain* or *building sewer* of nominal diameter not less than 8 in. and that is in service provided that the connecting *branch* is at least two pipe *sizes* smaller than the run of the *building drain* or *building sewer* to which it is connected.

7.2.10.6. Supply and Waste Fittings

(1) Supply fittings shall conform to ASME A112.18.1 / CSA B125.1, "Plumbing Supply Fittings" or CSA B125.3, "Plumbing Fittings".

(2) Waste fittings shall conform to ASME A112.18.2 / CSA B125.2, "Plumbing Waste Fittings".

7.2.10.7. Linings and Coatings of Domestic Water Tanks

(1) Linings and coatings of domestic water tanks that come into contact with *potable* water shall be certified to NSF/ANSI 61, "Drinking Water System Components - Health Effects".

7.2.10.8. Direct Flush Valves

(1) Every direct flush valve shall,

(a) open fully and close positively under service pressure,

(b) complete its cycle of operation automatically,

(c) be provided with a means of regulating the volume of water that it discharges, and

(d) be provided with a *vacuum breaker* unless the *fixture* is designed so that *back-siphonage* cannot occur.

7.2.10.9. Drinking Fountain Bubblers

(1) The orifice of every drinking fountain bubbler shall,

(a) be of the shielded type, and

(b) direct the water upward to an angle of approximately 45°.

(2) Every drinking fountain bubbler shall include a means of regulating the flow to the orifice.

7.2.10.10. Back-Siphonage Preventers and Backflow Preventers

(1) Except as provided in Sentence (2), *back-siphonage preventers* and *backflow preventers* shall be certified to,

(a) CSA B64.0, "Definitions, General Requirements and Test Methods for Vacuum Breakers and Backflow Preventers",

(b) CSA B64.1.1, "Atmospheric Vacuum Breakers (AVB)",

(c) CSA B64.1.2, "Pressure Vacuum Breakers (PVB)",

(d) CSA B64.1.3, "Spill-resistant Pressure Vacuum Breakers (SRPVB)",

(e) CSA B64.1.4, "Vacuum Breaker, Air Space Type (ASVB)",

(f) CSA B64.2, "Hose Connection Vacuum Breakers (HCVB)",

(g) CSA B64.2.1, "Hose Connection Vacuum Breakers (HCVB) with Manual Draining Feature",

(h) CSA B64.2.1.1, "Hose Connection Dual Check Vacuum Breakers (HCDVB)",

(i) CSA B64.2.2, "Hose Connection Vacuum Breakers (HCVB) with Automatic Draining Feature",

(j) CSA B64.3, "Dual Check Valve Backflow Preventers with Atmospheric Port (DCAP)",

(k) CSA B64.3.1, "Dual Check Valve Backflow Preventers with Atmospheric Port for Carbonators (DCAPC)",

(l) CSA B64.4, "Reduced Pressure Principle (RP) Backflow Preventers",

(m) CSA B64.5, "Double Check Valve (DCVA) Backflow Preventers",

(n) CSA B64.6, "Dual Check Valve (DuC) Backflow Preventers",

(o) CSA B64.7, "Laboratory Faucet Vacuum Breakers (LFVB)",

(p) CSA B64.8, "Dual Check Valve Backflow Preventers with Intermediate Vent (DuCV)", or

(q) CSA B64.10, "Selection and Installation of Backflow Preventers".

(2) *Back-siphonage preventers* (anti-siphon fill valves) for tank type water closets shall be certified to CSA B125.3, "Plumbing Fittings".

7.2.10.11. Relief Valves

(1) Temperature relief, pressure relief, combined temperature and pressure relief and vacuum relief valves shall conform to ANSI Z21.22 / CSA 4.4-M, "Relief Valves for Hot Water Supply Systems".

7.2.10.12. Reducing Valves

(1) Direct acting water pressure reducing valves for domestic water supply systems shall conform to CAN/CSA-B356, "Water Pressure Reducing Valves for Domestic Water Supply Systems".

7.2.10.13. Solar Domestic Hot Water

(1) Equipment forming part of a packaged system for solar heating of *potable* water, shall conform to CAN/CSA-F379.1, "Packaged Solar Domestic Hot Water Systems (Liquid-to-Liquid Heat Transfer)".

7.2.10.14. Vent Pipe Flashing

(1) Flashing fabricated on site for *vent pipes* shall be fabricated from,

(a) copper sheet at least 0.33 mm thick,

(b) aluminum sheet at least 0.48 mm thick,

(c) alloyed zinc sheet at least 0.35 mm thick,

(d) lead sheet at least 1.73 mm thick,

(e) galvanized steel sheet at least 0.33 mm thick, or

(f) polychloroprene (neoprene) at least 2.89 mm thick.

(2) Prefabricated flashing for *vent pipes* shall be certified to CSA B272, "Prefabricated Self-Sealing Roof Vent Flashings".

7.2.10.15. Water Hammer Arresters

(1) Factory built water hammer arresters shall conform to ANSI/ASSE 1010, "Water Hammer Arresters".

7.2.10.16. Air Admittance Valves

(1) Air admittance valves shall conform to ASSE 1051, "Individual and Branch Type Air Admittance Valves for Sanitary Drainage Systems".

7.2.10.17. Drinking Water Treatment Systems

(1) A drinking water treatment system or device shall be certified to CAN/CSA-B483.1, "Drinking Water Treatment Systems".

7.2.11. Water Service Pipes and Fire Service Mains

7.2.11.1. Design, Construction, Installation and Testing

(1) Except as provided in Articles 7.2.11.2. to 7.2.11.4., and 7.3.7.2, the design, construction, installation and testing of *fire service mains* and *water service pipe* combined with *fire service mains* shall be in conformance with NFPA 24, "Installation of Private Fire Service Mains and Their Appurtenances".

7.2.11.2. Certification or Conformance

(1) *Water service pipes* and *fire service mains* shall be certified or conform to the standards for the materials listed in Table 7.2.11.2.

Table 7.2.11.2.
Water Service Pipe and Fire Service Main Materials

Forming Part of Sentence 7.2.11.2.(1)

Item	Column 1 Material	Column 2 Standard	Column 3 Limitations
1.	Polyethylene pipe and fittings	Certified to Series 160 or a higher series of CAN/CSA-B137.1, “Polyethylene (PE) Pipe, Tubing and Fittings for Cold Water Pressure Services”	
2.	Crosslinked polyethylene pressure pipe or tube and fittings	Certified to CAN/CSA-B137.5, “Crosslinked Polyethylene (PEX) Tubing Systems for Pressure Applications”	
3.	PVC pipe and fittings	Certified to CAN/CSA-B137.3, “Rigid Polyvinylchloride (PVC) Pipe and Fittings for Pressure Applications”, or certified to CAN/CSA-B137.2, “Polyvinylchloride (PVC) Injection-Moulded Gasketed Fittings for Pressure Applications”	Pipe and fittings must have a rated working pressure of 1 100 kPa or more
4.	CPVC pipe and fittings	Certified to CAN/CSA-B137.6, “Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing and Fittings for Hot and Cold Water Distribution Systems”	The design temperature and pressure shall conform to the requirements of the CAN/CSA-B137.6, “Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing and Fittings for Hot and Cold Water Distribution Systems”
5.	Cast iron water pipe	Conform to ANSI/AWWA C151/A21.51, “Ductile-Iron Pipe, Centrifugally Cast”	Pipe shall have a cement-mortar lining conforming to ANSI/AWWA C104/A21.4, “Cement-Mortar Lining for Ductile-Iron Pipe and Fittings”
6.	Iron fittings for cast iron or ductile-iron water pipes	Conform to ANSI/AWWA C110/A21.10, “Ductile-Iron and Gray-Iron Fittings”	Pipe shall have a cement-mortar lining conforming to ANSI/AWWA C104/A21.4, “Cement-Mortar Lining for Ductile-Iron Pipe and Fittings”
7.	Rubber gasket joints for cast iron and ductile-iron water pipes	Conform to ANSI/AWWA C111/A21.11, “Rubber Gasket Joints for Ductile-Iron Pressure Pipe and Fittings”	
8.	Screwed cast iron water fittings	Conform to ASME B16.4, “Gray Iron Threaded Fittings: Classes 125 and 250”	Screwed cast iron water fittings shall be cement-mortar lined or galvanized
9.	Type K soft copper	Certified to ASTM B88, “Seamless	

	tube	Copper Water Tube”	
10.	Solder-joint fittings for copper water systems	Conform to ASME B16.18, “Cast Copper Alloy Solder Joint Pressure Fittings”, or conform to ASME B16.22, “Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings”	Solder-joint fittings not made by casting or the wrought process shall conform to the applicable requirements of ASME B16.18, “Cast Copper Alloy Solder-Joint Pressure Fittings”
11.	Flared-joint fittings for copper water systems	Conform to ASME B16.26, “Cast Copper Alloy Fittings for Flared Copper Tubes”	Flared-joint fittings not made by casting shall conform to ASME B16.26, “Cast Copper Alloy Fittings for Flared Copper Tubes”
12.	PE/AL/PE pipe and fittings	Certified to CAN/CSA-B137.9, “Polyethylene/Aluminum/ Polyethylene (PE-AL-PE) Composite Pressure-Pipe Systems”	
13.	PEX/AL/PEX pipe and fittings	Certified to CAN/CSA-B137.10, “Crosslinked Polyethylene/ Aluminum/Crosslinked Polyethylene (PEX-AL-PEX) Composite Pressure-Pipe Systems”	

7.2.11.3. Tracer Wire

(1) Except as provided in Sentence (2), a 14 gauge TW solid copper light coloured plastic coated tracer wire shall be attached to every non-metallic *water service pipe* or *fire service main*.

(2) Where a *water service pipe* or *fire service main* is detectable without the tracer wire referenced in Sentence (1), the tracer wire may be omitted.

7.2.11.4. Required Check Valve

(1) Where a *water service pipe* is supplied with water by more than one *drinking water system*, a *check valve* shall be installed at each connection with a *drinking water system*.

(2) Where a *fire service main* is supplied with water by more than one source, a *check valve* shall be installed at each connection with a source of water.

Section 7.3. Piping

7.3.1. Application

7.3.1.1. Application

(1) This Section applies to the *construction* and use of joints and connections, and the arrangement, protection, support and testing of piping.

7.3.2. Construction and Use of Joints

7.3.2.1. Caulked Lead Drainage Joints

(1) Every caulked lead drainage joint shall be firmly packed with oakum and tightly caulked with lead to a depth of at least 25 mm.

(2) No paint, varnish or other coating shall be applied on the lead until after the joint has been tested.

(3) Caulked lead drainage joints shall not be used except for cast iron pipe in a *drainage system* or *venting system*, or between such pipe and,

(a) other ferrous pipe,

(b) brass and copper pipe,

(c) a caulking ferrule, or

(d) a *trap standard*.

(4) A length of hub and spigot pipe and pipe fittings in a *drainage system* shall be installed with the hub at the upstream end.

7.3.2.2. Wiped Joints

(1) Wiped joints shall not be used except for sheet lead or lead pipe, or between such pipe and copper pipe or a ferrule.

(2) Every wiped joint in straight pipe shall,

(a) be made of solder,

(b) have an exposed surface on each side of the joint at least 19 mm wide, and

(c) be at least 10 mm thick at the thickest part.

(3) Every wiped flanged joint shall be reinforced with a lead flange that is at least 19 mm wide.

7.3.2.3. Screwed Joints

(1) In making a screwed joint, the ends of the pipe shall be reamed or filed out to the *size* of the bore and all chips and cuttings shall be removed.

(2) No pipe-joint cement or paint shall be applied to the internal threads.

7.3.2.4. Solder Joints

(1) Soldered joints shall be made in accordance with ASTM B828, “Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings”.

7.3.2.5. Flared Joints

(1) In making a flared joint, the pipe shall be expanded with a proper flaring tool.

(2) Flared joints shall not be used for hard (drawn) copper tube.

7.3.2.6. Mechanical Joints

(1) Mechanical joints shall be made with compounded elastomeric couplings or rings held by stainless steel or cast iron clamps or contained within a compression connection or groove and shoulder type mechanical coupling.

7.3.2.7. Cold-Caulked Joints

(1) Cold-caulked joints shall not be used except for bell and spigot pipe in a *water system*, a *drainage system* or a *venting system*.

(2) The caulking compound used in cold-caulked joints shall be applied according to the manufacturer's directions.

(3) Every cold-caulked joint in a *drainage system* shall be firmly packed with oakum and tightly caulked with cold caulking compound to a depth of at least 25 mm.

7.3.3. Joints and Connections

7.3.3.1. Drilled and Tapped Joints

(1) Except as provided in Sentences (2) to (4), no water *distributing pipe*, drainage pipe or fittings shall be drilled, tapped or swaged.

(2) A water *distributing pipe* may be drilled or tapped to provide for a mechanically extracted T in copper tubing of Type L or K provided that all branch connections shall be notched and dimpled to limit depth of insertion and conform to the inner contour of the main.

(3) A copper water *distributing pipe* of 1 in. *size* or larger may be mechanically swaged to permit the joining of other copper pipe of equal *size*.

(4) A drainage pipe or fitting may be drilled or tapped,

(a) to provide for the connection of a *trap* seal primer line,

(b) to connect a device designed to dispense germicidal or odour control chemicals or *trap* seal water to a floor drain downstream of a *vacuum breaker* or flush valve in a flush tube connected to a *sanitary unit*,

(c) to provide a hole for a *branch* connection to a drainage pipe, where the *branch* connection is made with a saddle hub as permitted by Article 7.2.10.5. and where the hole is drilled to provide a smooth clean hole of the required *size* and orientation, or

(d) to provide for the connection of pipe or fittings to metal or rigid plastic pipe and fittings where the pipe or fittings are thick enough to be threaded or are bossed for tapping.

(5) No pipe adaption shall be made by the use of a bushing that leaves a square edge or shoulder on the inside of the pipe or fitting.

7.3.3.2. Reserved

7.3.3.3. Prohibition of Welding of Pipes and Fittings

(1) Cast iron *soil pipe* and fittings shall not be welded.

(2) Galvanized steel pipe and fittings shall not be welded.

7.3.3.4. Unions and Slip Joints

(1) Running thread and packing nut connections and unions with a gasket seal shall not be used downstream of a *trap weir* in a *drainage system* or in a *venting system*.

(2) A slip joint shall not be used,

(a) in a *venting system*, or

(b) in a *drainage system*, except to connect a *fixture trap* to a *fixture drain* in an *accessible* location.

7.3.3.5. Increaser or Reducer

(1) Every connection between two pipes of different *size* shall be made with an increaser or a reducer fitting installed so that it will permit the system to be completely drained.

7.3.3.6. Connection of Dissimilar Materials

(1) Adapters, connectors or mechanical joints used to join dissimilar materials shall be designed to accommodate the required transition.

7.3.3.7. Connection of Roof Drain to Leader

(1) Every *roof drain* shall be securely connected to a *leader* and provision shall be made for expansion.

7.3.3.8. Connection of Floor Outlet Fixtures

(1) Every pedestal urinal, floor-mounted water closet or S-*trap standard* shall be connected to a *fixture drain* by a floor flange, except that a cast iron *trap standard* may be caulked to a cast iron pipe.

(2) Except as provided in Sentence (3), every floor flange shall be of brass.

(3) Where cast iron or plastic pipe is used, a floor flange of the same material may be used.

(4) Every floor flange shall be securely set on a firm base and bolted to the *trap* flange of the *fixture*, and every joint shall be sealed with a natural rubber, synthetic rubber gasket, or with a closet setting compound.

(5) Where a lead water closet stub is used, the length of the stub below the floor flange shall be at least 75 mm.

7.3.3.9. Expansion and Contraction

(1) The design and installation of every piping system shall, where necessary, include means to accommodate expansion and contraction of the piping system caused by temperature change or *building* shrinkage.

7.3.3.10. Copper Tube

(1) Types M and DWV copper tube shall not be bent.

(2) Bends in copper tubing of soft or bending temper shall be made with tools manufactured and sized for the purpose.

7.3.3.11. Indirect Connections

(1) Where a *fixture* or device is *indirectly connected*, the connections shall be made by terminating the *fixture drain* above the *flood level rim* of a *directly connected fixture* to form an *air break*.

(2) The size of the *air break* shall be at least 25 mm.

7.3.3.12. Copper Joints Used Underground

(1) Except as provided in Sentence (2), joints in copper tubes installed underground shall be,

(a) made with either flared or compression fittings, or

(b) brazed using a brazing alloy within the American Welding Society's AWS-BCuP range.

(2) Compression fittings shall not be used underground under a *building*.

7.3.4. Support of Piping

7.3.4.1. Capability of Support

(1) Piping shall be provided with support that is capable of keeping the pipe in alignment and bearing the weight of the pipe and its contents.

(2) Every floor or wall mounted water closet bowl shall be securely attached to the floor or wall by means of a flange and shall be stable.

(3) Every wall mounted *fixture* shall be supported so that no strain is transmitted to the piping.

7.3.4.2. Independence of Support

(1) Piping, *fixtures*, tanks or devices shall be supported independently of each other.

7.3.4.3. Insulation of Support

(1) Where a hanger or support for copper tube or brass or copper pipe is of a material other than brass or copper, it shall be suitably separated and electrically insulated from the pipe to prevent galvanic action.

7.3.4.4. Support for Vertical Piping

(1) Except as provided in Sentence (2), vertical piping shall be supported at its base and at the floor level of alternate *storeys* by rests, each of which can bear the weight of pipe that is between it and the rest above it.

(2) The maximum spacing of supports shall be 7.5 m.

7.3.4.5. Support for Horizontal Piping

(1) *Nominally horizontal* piping that is inside a *building* shall be braced to prevent swaying and buckling and to control the effects of thrust.

(2) *Nominally horizontal* piping shall be supported so that,

(a) galvanized iron or steel pipe is supported at intervals not exceeding,

(i) 3.75 m if the pipe *size* is 6 in. or more, and

(ii) 2 500 mm if the pipe *size* is less than 6 in.,

(b) lead pipe is supported throughout its length,

(c) cast iron pipe is supported,

(i) at or adjacent to each hub or joint,

(ii) at intervals not exceeding 3 m, and

(iii) at intervals not exceeding 1 000 mm if the pipe has mechanical joints and the length of pipe between adjacent fittings is 300 mm or less,

(d) asbestos-cement pipe is supported,

(i) at intervals not exceeding 2 000 mm or have two supports for every 4 m length of pipe, and

(ii) at intervals not exceeding 1 000 mm where the length of pipe between adjacent fittings is 300 mm or less,

(e) ABS or PVC plastic DWV pipe is supported,

(i) at intervals not exceeding 1 200 mm,

(ii) at the ends of *branches*,

(iii) at changes of direction or elevation, and

(iv) if the pipe is a *fixture drain* that is more than 1 000 mm in length, as close as possible to the *trap*,

(f) plastic water pipe is supported at intervals not exceeding 1 000 mm,

(g) copper tube and copper and brass pipe is supported at intervals not exceeding,

(i) 3 m if the tube or pipe is hard temper and larger than 1 in. in *size*,

(ii) 2 500 mm if the tube or pipe is hard temper and 1 in. in *size* or less, and

(iii) 2 500 mm if the tube is soft temper,

(h) aluminum DWV pipe is supported,

(i) at intervals not greater than 3 m,

(ii) at both sides of all joints,

(iii) at all *branch* ends,

(iv) at all points where there is a change in direction, and

(v) as close to all *traps* as possible,

(i) supports and hangers for aluminum DWV pipe shall have a broad support base and shall be free of burrs and rough edges to prevent abrasion of the pipe,

(j) where joints in the piping are less rigid than the pipe, the support points shall be selected so as to minimize the shear and bending forces imposed on the joints,

(k) PE/AL/PE or PEX/AL/PEX composite pipe is supported at intervals not exceeding 1 000 mm, and

(l) PP-R plastic pipe is supported,

(i) at intervals not exceeding 1 000 mm,

(ii) at the end of *branches*, and

(iii) at changes of direction and elevation.

(3) Where plastic pipe or a composite pipe incorporating a plastic component is installed,

(a) the pipe shall be aligned without added strain on the piping,

(b) the pipe shall not be bent or pulled into position after being welded or joined, and

(c) hangers shall not compress, cut or abrade the pipe.

(4) Reserved

(5) Where hangers are used to support *nominally horizontal* piping, the hangers shall be,

(a) supported by metal rods of not less than,

(i) 6 mm diam for supporting pipe 2 in. or less in size,

(ii) 8 mm diam for supporting pipe 4 in. or less in size, and

(iii) 13 mm diam for supporting pipe over 4 in. in size, or

(b) solid or perforated metal straps not less than,

(i) 0.6 mm nominal thickness, 12 mm wide for pipe 2 in. or less in size, and

(ii) 0.8 mm nominal thickness, 18 mm wide for pipe 4 in. or less in size.

(6) Where a hanger is attached to concrete or masonry, it shall be fastened by metal or expansion-type plugs that are inserted or built into the concrete or masonry.

7.3.4.6. Support for Underground Horizontal Piping

(1) Except as provided in Sentence (2), *nominally horizontal* piping that is underground shall be supported on a base that is firm and continuous under the whole of the pipe.

(2) *Nominally horizontal* piping installed underground that is not supported as described in Sentence (1) may be installed using hangers fixed to a foundation or structural slab provided that the hangers are capable of,

(a) keeping the pipe in alignment, and

(b) supporting the weight,

(i) of the pipe,

(ii) its contents, and

(iii) the fill over the pipe.

7.3.4.7. Support for Vent Pipe Above a Roof

(1) Where a *vent pipe* terminates above the surface of a roof, it shall be supported or braced to prevent misalignment.

7.3.4.8. Compression Fittings

(1) No compression fitting connecting to plain end pipe or tube shall be used in a *plumbing system* unless the pipe or tube and fittings are sufficiently stayed, clamped, anchored or buttressed so as to prevent separation during normal service of the system allowing for surge pressures.

7.3.4.9. Thrust Restraint of Water Service Pipes

(1) Pipe clamps and tie-rods, thrust blocks, locked mechanical or push-on joints, mechanical joints utilizing set screw retainer glands, or other suitable means of thrust restraint shall be provided at each change of direction of a *water service pipe* 4 in. or more in *size* and at all tees, plugs, caps and bends.

(2) Backing for underground *water service pipes* shall be placed,

(a) between undisturbed earth and the fitting to be restrained and shall be of sufficient bearing area to provide adequate resistance to the thrust to be encountered, and

(b) so that the joints will be *accessible* for inspection and repair.

(3) Concrete thrust blocks shall have a minimum compressive strength of not less than 10 MPa after 28 days.

(4) Thrust blocks shall not be used to restrain vertical pipe.

7.3.5. Protection of Piping

7.3.5.1. Backfill of Pipe Trench

(1) Where piping is installed underground, the backfill shall be carefully placed and tamped to a height of 300 mm over the top of the pipe and shall be free of stones, boulders, cinders and frozen earth.

7.3.5.2. Protection of Non-Metallic Pipe

(1) Where asbestos-cement drainage pipe or vitrified clay is located less than 600 mm below a basement floor and the floor is constructed of other than 75 mm or more of concrete, the pipe shall be protected by a 75 mm layer of concrete installed above the pipe.

7.3.5.3. Isolation from Loads

(1) Where piping passes through or under a wall, it shall be installed so that the wall does not bear on the pipe.

7.3.5.4. Protection from Frost

(1) Where piping may be exposed to freezing conditions, it shall be protected from the effects of freezing.

7.3.5.5. Protection from Mechanical Damage

(1) *Plumbing*, piping and equipment exposed to mechanical damage shall be protected.

7.3.5.6. Protection from Condensation

(1) Piping used for internal *leaders*, which may be subject to condensation, shall be installed in a manner that limits the risk of damage to the *building* due to condensation.

7.3.5.7. Spatial Separation

(1) Except as permitted in Sentences (2) and (3), a buried *water service pipe* shall be separated from the *building drain*, *building sewer* and a *private sewage disposal system*, by not less than 2 440 mm measured horizontally, of undisturbed or compacted earth.

(2) The *water service pipe* may be closer than 2 440 mm or be placed in the same trench with the *building drain* or *building sewer* if,

(a) the following conditions are met:

(i) the bottom of the *water service pipe* at all points is at least 500 mm above the top of the *building drain* or *building sewer*, and

(ii) when in a common trench with the *building drain* or *building sewer*, the *water service pipe* is placed on a shelf at one side of the common trench,

(b) the *water service pipe* is constructed of a single run of pipe with no joints or fittings between the street line or source of supply on the property and the inside face of the *building*, or

(c) the *building drain* or *building sewer* is constructed of piping which is pressure tested in accordance with Subsection 7.3.7. at 345 kPa.

(3) A buried *water service pipe* may pass under a *building drain* or *building sewer* if,

(a) a vertical separation of not less than 500 mm is provided between the invert of the *building drain* or *building sewer* and the crown of the *water service pipe*,

(b) adequate structural support is provided for the *building drain* or *building sewer* to prevent excessive deflection of joints and settling, and

(c) the length of the *water service pipe* is located so that there are no joints within 2 440 mm measured horizontally from the intersection with the *building drain* or *building sewer*.

(4) A buried *water service pipe* shall be constructed of a single run of pipe with no joints or fittings between the street line or source of supply on the property and the inside face of the *building* if the *water service pipe* is less than 15 m from,

(a) a *private sewage disposal system*, or

(b) a source of pollution other than a *private sewage disposal system*.

7.3.6. Testing of Drainage and Venting Systems

7.3.6.1. Tests and Inspection of Drainage or Venting Systems

(1) Except in the case of an external *leader*, after a section of *drainage system* or a *venting system* has been roughed in, and before any *fixture* is installed or piping is covered, a water or an air test shall be conducted.

(2) Where a *chief building official* requires a final test, it shall be carried out after every *fixture* is installed and before any part of the *drainage system* or *venting system* is placed in operation.

(3) Where a prefabricated system is assembled off the *building* site in such a manner that it cannot be inspected and tested on site, off-site inspections and tests shall be conducted.

(4) Where a prefabricated system is installed as part of a *drainage system* and *venting system*, all other *plumbing* work shall be tested and inspected and a final test shall be carried out on the complete system.

(5) A ball test shall be carried out on a *sanitary building drain*, *sanitary building sewer*, *storm building drain* and a *storm building sewer* buried underground.

(6) A *sewer lateral extension* need not be tested and inspected if the *sewer lateral extension* was constructed, tested and inspected at the time of the installation of the public sewer.

7.3.6.2. Tests of Pipes in Drainage Systems

(1) Every pipe in a *drainage system*, except an external *leader* or *fixture outlet pipe*, shall be capable of withstanding without leakage a water test, air test and final test.

7.3.6.3. Tests of Venting Systems

(1) Every *venting system* shall be capable of withstanding without leakage a water test, air test and final test.

7.3.6.4. Water Tests in Drain, Waste and Vent Systems

(1) Where a water test is made, all joints shall be tested with a water column of not less than 3 m.

(2) In making a water test,

(a) every opening except the highest shall be tightly closed with a testing plug or a test cap, and

(b) the system or the section shall be kept filled with water for 15 min.

7.3.6.5. Air Tests

(1) Where an air test is made, it shall be conducted in accordance with the manufacturer's instructions for the piping materials, and,

(a) air shall be forced into the system until a gauge pressure of 35 kPa is created, and

(b) this pressure shall be maintained for at least 15 min without a drop in pressure.

7.3.6.6. Final Tests

(1) Where a final test is made,

(a) every *trap* shall be filled with water,

(b) the bottom of the system being tested shall terminate at the *building trap*, test plug or cap,

(c) except as provided in Sentence (2), smoke from smoke-generating machines shall be forced into the system,

(d) when the smoke appears from all roof terminals they shall be closed, and

(e) a pressure equivalent to a 25 mm water column shall be maintained for 15 min without the addition of more smoke.

(2) The smoke referred to in Clauses (1)(c) and (d) may be omitted provided the roof terminals are closed and the system is subjected to an air pressure equivalent to a 25 mm water column maintained for 15 min without the addition of more air.

7.3.6.7. Ball Tests

(1) Where a ball test is made, a hard ball dense enough not to float shall be rolled through the pipe.

(2) The diameter of the ball shall be not less than 50 mm where the *size* of the pipe is 4 in. or more.

7.3.7. Testing of Potable Water Systems

7.3.7.1. Application of Tests

(1) After a section of a *potable water system* has been completed, and before it is placed in operation, a water test or an air test shall be conducted.

(2) A test may be applied to each section of the system or to the system as a whole.

(3) Where a prefabricated system is assembled off the *building* site in such a manner that it cannot be inspected and tested on site, off-site inspections and tests shall be conducted.

(4) Where a prefabricated system is installed as part of a *water system*,

(a) all other *plumbing* work shall be tested and inspected, and

(b) the complete system shall be pressure tested.

7.3.7.2. Tests of Potable Water Systems

(1) Every *potable water system* shall be capable of,

(a) withstanding without leakage a water pressure that is at least 1 000 kPa for at least 1 h, or

(b) withstanding for at least 2 h without a drop in pressure an air pressure that is at least 700 kPa.

7.3.7.3. Water Tests

(1) Where a water test is made, all air shall be expelled from the system before *fixture* control valves or faucets are closed.

(2) *Potable* water shall be used to test a *potable water system*.

Section 7.4. Drainage Systems

7.4.1. Application

7.4.1.1. Application of Drainage Systems

(1) This Section applies to *sanitary drainage systems* and *storm drainage systems*.

7.4.2. Connections to Drainage Systems

7.4.2.1. Connections to Sanitary Drainage Systems

(1) Every *fixture* shall be directly connected to a *sanitary drainage system*, except that,

(a) drinking fountains may be,

(i) *indirectly connected* to a *sanitary drainage system*, or

(ii) connected to a *storm drainage system* provided that where the system is subject to *backflow*, a *check valve* is installed in the fountain *waste pipe*,

(b) laundry *plumbing appliances* may be *indirectly connected* to a *sanitary drainage system*,

(c) *fixtures* or *plumbing appliances*, other than floor drains, except as provided in Sentence 7.1.4.2.(2), that discharge only *clear water waste* may be connected to a *storm drainage system*,

(d) the following devices shall be *indirectly connected* to a *drainage system*:

(i) a device for the display, storage, preparation or processing of food or drink,

(ii) a sterilizer,

(iii) a device that uses water as a cooling or heating medium,

(iv) a water operated device,

(v) a water treatment device,

(vi) a drain or overflow from a *water system* or a heating system, or

(vii) a drain line from an HVAC system or equipment, and

(e) floor drains within walk-in coolers shall be connected to a *sanitary drainage system*,

(i) indirectly with an *air break*, or

(ii) directly with a *backwater valve* installed on the *drainage system* before connection to the *sanitary building drain*.

(2) The connection of a *soil* or *waste pipe* to a *nominally horizontal soil* or *waste pipe* or to a *nominally horizontal offset* in a *soil* or *waste stack* shall be respectively at least 1 500 mm measured horizontally from the bottom of a *soil* or *waste stack* or from the bottom of the upper vertical section of the *soil* or *waste stack* that,

(a) receives a discharge of 30 or more *fixture units*, or

(b) receives a discharge from *fixtures* located on 2 or more *storeys*.

(3) No other *fixture* shall be connected to a lead bend or stub that serves a water closet.

(4) Where a change in direction of more than 45° occurs in a *soil* or *waste pipe* that serves more than one clothes washer, and in which pressure zones are created by detergent suds, no other *soil* or *waste pipe* shall be connected to it within a length less than,

(a) 40 times the *size* of the *soil* or *waste pipe* or 2.44 m maximum vertical, whichever is less, before the change in direction, and

(b) 10 times the *size* of the *nominally horizontal soil* or *waste pipe* after the change in direction.

(5) Where a *vent pipe* is connected into a suds pressure zone referred to in Sentence (4), no other *vent pipe* shall be connected to that *vent pipe* within the height of the suds pressure zone.

7.4.2.2. Connection of Overflows from Rainwater Tanks

(1) Where an overflow from a *rainwater* tank is connected to a *storm drainage system*, it shall be connected by,

(a) an *air break*, or

(b) a *backwater valve* installed on the *storm drainage pipe* before the connection to the *storm building drain*.

7.4.2.3. Direct Connections

(1) Two or more *fixture outlet pipes* that serve outlets from a single *fixture* that is listed in Clause 7.4.2.1.(1)(d) may be *directly connected* to a *branch* that,

(a) has a *size* of at least 1 ¼ in., and

(b) is terminated above the *flood level rim* of a *directly connected fixture* with a minimum diameter waste of 1 ½ in. to form an *air break*.

(2) *Fixture drains* from *fixtures* that are listed in Subclauses 7.4.2.1.(1)(d)(i) and (ii) may be *directly connected* to a pipe that,

(a) is terminated to form an *air break* above the *flood level rim* of a *fixture* that is *directly connected to* a *sanitary drainage system*, and

(b) is extended through the roof when *fixtures* that are on 3 or more *storeys* are connected to it.

(3) *Fixture drains* from *fixtures* that are listed in Subclauses 7.4.2.1.(1)(d)(iii) to (vi) may be *directly connected* to a pipe that,

(a) is terminated to form an *air break* above the *flood level rim* of a *fixture* that is *directly connected* to a *storm drainage system*, and

(b) is extended through the roof when *fixtures* that are on 3 or more *storeys* are connected to it.

(4) Every *waste pipe* carrying waste from a device for the display, storage, preparation or processing of food or drink shall be trapped and have a minimum diameter equal to the diameter of the drain outlet from the device.

7.4.3. Location of Fixtures

7.4.3.1. Plumbing Fixtures

(1) *Sanitary units*, bathtubs and shower baths shall not be installed adjacent to wall and floor surfaces that are pervious to water.

7.4.3.2. Restricted Locations of Indirect Connections and Traps

(1) Indirect connections or any *trap* that may overflow shall not be located in a crawl space or any other unfrequented area.

7.4.3.3. Equipment Restrictions Upstream of Interceptors

(1) Except as provided in Sentence (2), equipment discharging waste with organic solids shall not be located upstream of an *interceptor*.

(2) If a food scrap *interceptor* has been installed upstream of the grease *interceptor*, equipment discharging waste with organic solids may discharge through a grease *interceptor*.

7.4.3.4. Fixtures Located in Chemical Storage Locations

(1) A floor drain or other *fixture* located in an oil transformer vault, a high voltage room or any room where flammable, dangerous or toxic chemicals are stored or handled shall not be connected to a *drainage system*.

7.4.3.5. Macerating Toilet System

(1) A maceration toilet system shall only be installed,

(a) where no connection to a gravity *sanitary drainage system* is available, and

(b) in accordance with the manufacturer's instructions.

7.4.3.6. Drains Serving Elevator Pits

(1) If a floor drain is provided in an elevator pit, it shall be installed in accordance with Section 2.2. of ASME A17.1 / CSA B44, "Safety Code for Elevators and Escalators".

7.4.4. Treatment of Sewage and Wastes

7.4.4.1. Sewage Treatment

(1) Where a *fixture* or equipment discharges *sewage* or waste that may damage or impair the *sanitary drainage system* or the functioning of a *sanitary sewage* works or *sanitary sewage* system, provision shall be made for treatment of the *sewage* or waste before it is discharged to the *sanitary drainage system*.

7.4.4.2. Protection for Drainage System

(1) Where a *fixture* discharges *sewage* or *clear water waste* that has been heated, the *drainage system* shall be suitable for the temperature of the *sewage* or *clear water waste* being discharged.

7.4.4.3. Interceptors

(1) Except for *suites* of *residential occupancy*, where a *fixture* discharges *sewage* that includes fats, oils or grease and is located in an area where food is cooked, processed or prepared, it shall discharge through a grease *interceptor*.

(2) Except as provided in Sentence (3), oil *interceptors* shall be provided as follows:

(a) service stations, repair shops and garages or any establishment where motor vehicles are repaired, lubricated or maintained shall be provided with an oil *interceptor*, and

(b) establishments which use oily or *flammable liquids* or have such wastes as a result of an industrial process shall be provided with an engineered oil *interceptor*.

(3) Oil *interceptors* are not required for a drain in a hydraulic elevator pit, parking lot, car wash or a garage used exclusively as a motor vehicle parking area.

(4) Where a *fixture* discharges sand, grit or similar materials, an *interceptor* designed for the purpose of intercepting such discharges shall be installed.

(5) Every *interceptor* shall have sufficient capacity to perform the service for which it is provided.

(6) An on site constructed *interceptor* shall be constructed to the requirements of a manufactured *interceptor*.

(7) A grease *interceptor* shall be located as close as possible to the *fixture* or *fixtures* it serves.

(8) The flow rate through a grease *interceptor* shall not exceed its rated capacity and the flow rate shall be determined using the following:

$$Q = (\sum_{1}^{N}(0.75\frac{V}{DDT})) + PD$$

where:

Q is the flow rate to a grease interceptor in L/s.

V is the volume of the *fixture* in L.

DDT is the drain down time, 60 or 120 seconds.

PD is any pump discharge in L/s.

N is the number of *fixtures* to go through the interceptor.

(9) All grease and oil *interceptors* shall have an internal flow control and, where the head will exceed five feet, a secondary flow control shall be required.

(10) Floor drains that conform to Sentence 7.4.5.1.(3) are not required to be separately trapped and vented, and may be gang trapped when discharging through an oil *interceptor*.

7.4.4.4. Neutralizing and Dilution Tanks

(1) Where a *fixture* or equipment discharges corrosive or acid waste, it shall discharge into a neutralizing or diluting tank that is connected to the *sanitary drainage system* through,

(a) a *trap*, or

(b) *indirect connection*.

(2) Each neutralizing or diluting tank shall have a method for neutralizing the liquid.

7.4.5. Traps

7.4.5.1. Traps for Sanitary Drainage Systems

(1) Except as provided in Sentences (2) and (3) and Article 7.4.5.2., every *fixture* shall be protected by a separate *trap*.

(2) One *trap* may protect,

(a) all the trays or compartments of a two or three compartment sink,

(b) a two or three compartment laundry tray, or

(c) two similar type single compartment *fixtures* located in the same room.

(3) One *trap* may serve a group of floor drains and *hub drains*, a group of shower drains, a group of washing machines or a group of laboratory sinks if the *fixtures*,

(a) are in the same room, and

(b) are not located where they can receive food or other organic matter.

(4) Reserved

(5) A grease *interceptor* shall not serve as a *fixture trap* and each *fixture* discharging through the *interceptor* shall be trapped and vented.

(6) Where a domestic dishwashing machine equipped with a drainage pump discharges through a direct connection into the *fixture outlet pipe* of an adjacent kitchen sink or disposal unit, the pump discharge line shall,

(a) rise as high as possible to just under the counter, and

(b) connect,

(i) on the inlet side of the sink *trap* by means of a Y fitting, or

(ii) to the disposal unit.

7.4.5.2. Traps for Storm Drainage Systems

(1) Where a *storm drainage system* is connected to a public combined sewer, a *trap* shall be installed between any opening in the system and the drain or sewer, except that no *trap* is required if the opening is the upper end of a *leader* that terminates,

(a) at a roof that is used only for weather protection,

(b) not less than 1 000 mm above or not less than 3.5 m in any other direction from any air inlet, openable window or door, and

(c) not less than 1 800 mm from a property line.

7.4.5.3. Connection of Subsoil Drainage Pipe to a Sanitary Drainage System

(1) Except as permitted in Sentence (2), no foundation drain or *subsoil drainage pipe* shall connect to a *sanitary drainage system*.

(2) Where a *storm drainage system* is not available or *soil* conditions prevent drainage to a culvert or dry well, a foundation drain or *subsoil drainage pipe* may connect to a *sanitary drainage system*.

(3) Where a *subsoil drainage pipe* may be connected to a *sanitary drainage system*, the connection shall be made on the upstream side of a *trap* with a *cleanout* or a trapped sump.

7.4.5.4. Location and Cleanout for Building Traps

(1) Where a *building trap* is installed, it shall,

(a) be provided with a *cleanout* fitting on the upstream side of and directly over the *trap*,

(b) be located upstream of the *building cleanout*, and

(c) be located,

(i) inside the *building* as close as practical to the place where the *building drain* leaves the *building*, or

(ii) outside the *building* in a manhole.

7.4.5.5. Trap Seals

(1) Provision shall be made for maintaining the *trap* seal of a floor drain or a *hub drain* by the use of a *trap* seal primer, by using the drain as a receptacle for an *indirectly connected* drinking fountain, or by equally effective means.

(2) Where a mechanical device is installed to furnish water to a *trap*, the pipe or tube conveying water from the device to the *trap* shall be at least ⅜ in. inside diameter.

7.4.6. Arrangement of Drainage Piping

7.4.6.1. Separate Systems

(1) No vertical *soil* or *waste pipe* shall conduct both *sanitary sewage* and *storm sewage*.

(2) There shall be no unused open ends in a *drainage system* and *dead ends* shall be so graded that water will not collect in them.

7.4.6.2. Location of Soil or Waste Pipes

(1) A *soil* or *waste pipe* shall not be located directly above,

(a) non-pressure *potable* water storage tanks,

(b) manholes in pressure *potable* water storage tanks, or

(c) food-handling or processing equipment.

7.4.6.3. Sumps or Tanks

(1) Only piping that is too low to drain into a *building sewer* by gravity shall be drained to a sump or receiving tank.

(2) Where the sump or tank receives *sanitary sewage* it shall be water and air-tight and shall be vented.

(3) Equipment such as a pump or ejector that can lift the contents of the sump or tank and discharge it into the *sanitary building drain* or *sanitary building sewer* shall be installed.

(4) Where the equipment does not operate automatically, the *capacity* of the sump shall be sufficient to hold at least a 24 hours accumulation of liquid.

(5) Where there is a *building trap*, the discharge pipe from the equipment shall be connected to the *sanitary building drain* downstream of the *trap*.

(6) The discharge pipe from every pumped *sanitary sewage* sump shall be equipped with a union, a *check valve* and a shut-off valve installed in that sequence in the direction of discharge.

(7) The discharge piping from a pump or ejector shall be sized for optimum flow velocities at pump design conditions.

(8) The discharge pipe from every pumped *storm sewage* sump shall be equipped with,

(a) a union and a *check valve* installed in that sequence in the direction of discharge and pumped to above grade level, or

(b) a union, a *check valve* and a shut-off valve installed in that sequence in the direction of discharge.

7.4.6.4. Protection from Backflow

(1) Except as permitted in Sentence (2), a *backwater valve* that would prevent free circulation of air shall not be installed in a *building drain* or in a *building sewer*.

(2) A *backwater valve* may be installed in a *building drain* provided that,

(a) it is a "normally open" design conforming to,

(i) CAN/CSA-B70, "Cast Iron Soil Pipe, Fittings, and Means of Joining",

(ii) CAN/CSA-B181.1, "Acrylonitrile-Butadiene-Styrene (ABS) Drain, Waste, and Vent Pipe and Pipe Fittings",

(iii) CAN/CSA-B181.2, "Polyvinylchloride (PVC) and Chlorinated Polyvinylchloride (CPVC) Drain, Waste, and Vent Pipe and Pipe Fittings", or

(iv) CAN/CSA-B182.1, "Plastic Drain and Sewer Pipe and Pipe Fittings", and

(b) it does not serve more than one *dwelling unit*.

(3) Except as provided in Sentences (4) and (5), where a *building drain* or a *branch* may be subject to *backflow*,

(a) a *backwater valve* shall be installed on every *fixture drain* connected to it when the *fixture* is located below the level of the adjoining street, or

(b) a *backwater valve* shall be installed to protect *fixtures* which are below the upstream sanitary manhole cover when a *residential building* is served by a public *sanitary sewer*.

(4) Where more than one *fixture* is located on a *storey* and all are connected to the same *branch*, the *backwater valve* may be installed on the *branch*.

(5) A *subsoil drainage pipe* that drains into a *sanitary drainage system* that is subject to surcharge shall be connected in such a manner that *sewage* cannot back up into the *subsoil drainage pipe*.

7.4.6.5. Mobile Home Sewer Service

(1) A *building sewer* intended to serve a mobile home shall,

(a) be not less than 4 in. in *size*,

(b) be terminated above ground,

(c) be provided with,

(i) a tamperproof terminal connection that is capable of being repeatedly connected, disconnected and sealed,

(ii) a protective concrete pad, and

(iii) a means to protect it from frost heave, and

(d) be designed and constructed in accordance with good engineering practice.

7.4.6.6. Building Drain Ends

(1) Where a *building drain* enters a *building* above the elevation of the bottom of the wall of a *building*, the *building drain* may be deemed to terminate at the first point that the drainage pipe changes direction from the horizontal to the vertical.

7.4.7. Cleanouts

7.4.7.1. Cleanouts for Drainage Systems

(1) Every *sanitary drainage system* and *storm drainage system* shall be provided with *cleanouts* that will permit cleaning of the entire system.

(2) A *cleanout* fitting shall be provided on the upstream side and directly over every running *trap*.

(3) Every interior *leader* shall be provided with a *cleanout* fitting at the bottom of the *leader* or not more than 1 000 mm upstream from the bottom of the *leader*.

(4) Where a *cleanout* is required on a *building sewer* 8 in. or larger in *size*, it shall be a manhole.

(5) Where there is a change of direction greater than 45° in a *sanitary building drain* or a *sanitary building sewer*, a *cleanout* shall be installed at each change in direction.

(6) Every *sanitary building drain* or *storm building drain* shall be provided with a *cleanout* fitting that is located as close as practical to the place where the drain leaves the *building*.

(7) Every *soil* or *waste stack* shall be provided with a *cleanout* fitting,

(a) at the bottom of the stack,

(b) not more than 1 000 mm upstream of the bottom of the stack, or

(c) on a Y fitting connecting the stack to the *building drain* or *branch*.

(8) A *cleanout* shall be provided to permit the cleaning of the piping immediately downstream of an *interceptor*.

(9) Every indirect drainage pipe carrying waste from a food receptacle shall have a *cleanout* access at every change of direction of more than 45°.

(10) A *cleanout* shall be installed on a *trap arm* serving a kitchen sink as close as practical to the *trap* outlet and shall be readily *accessible*.

7.4.7.2. Size and Spacing of Cleanouts

(1) Except as provided in Sentences (2) and (3), on drainage piping of 4 in. *size* and smaller, the minimum *size cleanout* opening shall be the same *size* as the drainage pipe and on drainage piping larger than the 4 in. *size*, the *cleanout* opening shall be 4 in. or larger and the maximum spacing between *cleanouts* on horizontal pipe shall be,

(a) in the case of a sink *waste pipe*, 6 m,

(b) in the case of a horizontal *sanitary drainage pipe*, or *storm drainage pipe*, other than a *waste pipe* from a sink, 15 m, and

(c) in the case of a horizontal *sanitary drainage pipe* or *storm drainage pipe* larger than 4 in. *size*, 30 m.

(2) The spacing between manholes serving a *building sewer*,

(a) 24 in. or less in *size* shall not exceed 90 m, and

(b) over 24 in. in *size* shall not exceed 150 m.

(3) The *developed length* of a *building sewer* between the *building* and the first manhole to which the *building sewer* connects shall not exceed 30 m.

(4) *Cleanouts* that allow rodding in one direction only shall be installed to permit rodding in the direction of flow.

(5) Manholes shall be located at all junctions and all changes in grade, *size* or alignment (except for curvilinear alignment) on a *sanitary building sewer* that is 8 in. or larger in *size*.

(6) Manholes shall be located at changes of grade, *size* or alignment (except for curvilinear alignment) on a *storm building sewer* or exterior *storm drainage pipe* that is 8 in. or larger in *size.*

7.4.7.3. Manholes

(1) A manhole including the cover shall be designed to support all loads imposed upon it.

(2) A manhole shall be provided with,

(a) a cover which shall provide an airtight seal if located within a *building*,

(b) a rigid ladder of a corrosion-resistant material where the depth exceeds 1 000 mm, and

(c) a vent to the exterior if the manhole is located within a *building*.

(3) A manhole shall have a minimum horizontal dimension of 1 200 mm, except that the top 1 500 mm may be tapered from 1 200 mm down to a minimum of 600 mm at the top.

(4) A manhole in a *sanitary drainage system* shall be channelled to direct the flow of effluent.

7.4.7.4. Location of Cleanouts

(1) *Cleanouts* and access covers shall be located so that the openings are readily *accessible* for drain cleaning purposes.

(2) A *cleanout* shall not be located in a floor assembly in a manner that may constitute a hazard and shall not be used as a floor drain.

(3) Reserved

(4) Each change of direction of the piping between a *cleanout* fitting and the drainage piping or *vent piping* that it serves shall be accomplished by using 45° bends.

(5) A *cleanout* shall be provided to serve vertical drainage piping from a wall hung urinal and shall extend above the *flood level rim* of the *fixture*.

(6) A *cleanout* serving a *fixture* in health care facilities, mortuaries, laboratories and similar *occupancies*, where contamination by body fluids is likely, shall be located a minimum of 150 mm above the *flood level rim* of the *fixture*.

7.4.8. Minimum Slope and Length of Drainage Pipes

7.4.8.1. Minimum Slope

(1) Except as provided in Sentences (2) and (3), every drainage pipe that has a *size* of 3 in. or less shall have a downward slope in the direction of flow of at least 1 in 50.

(2) Sentence (1) does not apply to a *force main*.

(3) Where it is not possible to comply with Sentence (1), a lesser slope may be used if it will produce a gravity flow of not less than 0.6 m per second.

7.4.8.2. Length of Fixture Outlet Pipes

(1) Except for *fixture outlet pipes* installed in conformance with Sentence 7.4.5.1.(3), the *developed length* of every *fixture outlet pipe* shall not exceed 1 200 mm.

7.4.9. Size of Drainage Pipes

7.4.9.1. No Reduction in Size

(1) Except as permitted in Sentence (3), no drainage pipe that is of minimum *size* required by this Part for the purpose for which it is installed shall be so connected as to drain to other drainage pipe of lesser *size*.

(2) Where a *building drain* connects to a stack through a wall or floor, the drain shall retain its full *size* through the wall or floor.

(3) A *sanitary drainage pipe* may be connected to a pre-engineered waste water heat recovery system that incorporates piping of a lesser *size* than required by Sentence (1) provided that it does not convey *sewage*,

(a) from a *sanitary unit*, or

(b) that contains solids.

7.4.9.2. Serving Water Closets

(1) The *size* of every drainage pipe that serves a water closet shall be at least 3 in.

(2) The *size* of every horizontal drainage pipe downstream of the third water closet *fixture drain* connection shall be at least 4 in.

(3) The *size* of every *soil stack* that serves more than six water closets shall be at least 4 in.

(4) The *size* of the discharge pipe serving a macerating toilet system shall be at least ¾ in.

(5) No *vertical leg* of the drainage pipe from a water closet or other *fixture* that has an integral siphonic flushing action shall exceed 1 000 mm.

7.4.9.3. Size of Fixture Outlet Pipes

(1) Except as provided in Sentence (2), the *size* of every *fixture outlet pipe* shall conform to Table 7.4.9.3.

Table 7.4.9.3.
Minimum Permitted Size of Fixture Outlet Pipe and Hydraulic Loads for Fixtures

Forming Part of Sentences 7.4.9.3.(1) and 7.4.10.2.(1)

Item	Column 1 *Fixture*	Column 2 Minimum *Size* of *Fixture Outlet Pipe*, in.	Column 3 Hydraulic Load, *fixture units*
1.	Autopsy table	1 ½	2
2.	Bathroom group		
	(a) with flush tank		6
	(b) with direct flush valve		8
3.	Bathtub (with or without shower)	1 ½	1 ½
4.	Bath: foot, sitz or slab	1 ½	1 ½
5.	Bed pan washer	3	6
6.	Beer cabinet	1 ½	1 ½
7.	Bidet	1 ¼	1
8.	Chinese range	1 ½	3
9.	Clothes washer		
	(a) domestic	N/A	1 ½ with 2 in. *trap*
	(b) commercial	N/A	2 with 2 in. *trap*
10.	Cup Sinks	1 ¼	½
11.	Dental unit or cuspidor	1 ¼	1
12.	Dishwasher		
	(a) domestic	1 ½	1 (no load if connected to garbage grinder or domestic sink)
	(b) commercial type	2	3
13.	Drinking fountain	1 ¼	½
14.	Fish tank or tray	1 ½	1 ½
15.	Floor drain	2	2 with 2 in. *trap*
			3 with 3 in. *trap*
16.	Garbage grinder, commercial type	2	3
17.	Icebox	1 ¼	1
18.	Laundry tray		
	(a) single or double units or 2 single units with common *trap*	1 ½	1 ½
	(b) 3 compartments	1 ½	2
19.	Lavatory		
	(a) barber or beauty parlor	1 ½	1 ½
	(b) dental	1 ¼	1
	(c) domestic type single, or 2 single with common *trap*	1 ¼	1 with 1 ¼ in. *trap*
			1 ½ with 1 ½ in. *trap*

	(d) multiple or industrial type	1 ½	3
20.	Macerating Toilet System	3/4	4
21.	Potato Peeler	2	3
22.	Shower drain		
	(a) from 1 head	1 ½	1 ½
	(b) from 2 or 3 heads	2	3
	(c) from 4 to 6 heads	3	6
23.	Sink		
	(a) domestic and other small type with or without garbage grinders, single, double or 2 single with a common trap	1 ½	1 ½
	(b) other sinks	1 ½	1 ½ with 1 ½ in. trap
			2 with 2 in. trap
			3 with 3 in. trap
24.	Urinal		
	(a) pedestal, siphon jet or blowout type	2	4
	(b) stall, washout type	2	2
	(c) wall		
	(i) washout type	1 ½	1 ½
	(ii) other types	2	3
25.	Water closet		
	(a) with flush tank	3	4
	(b) with direct flush	3	6

(2) The part of the *fixture outlet pipe* that is common to three compartments of a sink shall be one *size* larger than the largest *fixture outlet pipe* of the compartments that it serves.

(3) Where clothes washers do not drain to a laundry tray, the *trap* inlet shall be fitted with a vertical standpipe that is not less than 600 mm long measured from the *trap weir* and the top of the standpipe shall terminate above the *flood level rim* of the clothes washer it serves.

7.4.9.4. Minimum Size of Building Drains and Sewers

(1) Every *sanitary building drain* and every *sanitary building sewer* shall be at least 4 in. in *size*.

(2) Every *storm building drain* and every *storm building sewer* shall be at least 4 in. in *size*.

7.4.10. Hydraulic Loads

7.4.10.1. Total Load on a Pipe

(1) The hydraulic load on a pipe is the total load from,

(a) every *fixture* that is connected to the system upstream of the pipe,

(b) every *fixture* for which provision is made for future connection upstream of the pipe, and

(c) all roofs and paved surfaces that drain into the system upstream of the pipe.

7.4.10.2. Hydraulic Loads for Fixtures

(1) The hydraulic load from a *fixture* that is listed in Table 7.4.9.3. is the number of *fixture units* set forth in the Table.

(2) Except as provided in Sentence (1), the hydraulic load from a *fixture* that is not listed in Table 7.4.9.3. is the number of *fixture units* set forth in Table 7.4.10.2. for the *trap* of the *size* that serves the *fixture*.

Table 7.4.10.2.
Permitted Hydraulic Load from a Fixture Based on Size of Trap

Forming Part of Sentence 7.4.10.2.(2)

Item	Column 1 *Size* of *Trap*, in.	Column 2 Hydraulic Load, *fixture units*
1.	1 ¼	1
2.	1 ½	2
3.	2	3
4.	2 ½	4
5.	3	5
6.	4	6

7.4.10.3. Hydraulic Loads from Fixtures with Continuous or Semi-continuous Flow

(1) Except as provided in Sentence (2), the hydraulic load from a *fixture* that produces a continuous flow, such as a pump or an air-conditioning *fixture*, is 31.7 *fixture units* for each litre per second of flow.

(2) Where a *fixture* or equipment that produces a continuous or semi-continuous flow drains to a *storm drainage system*, the hydraulic load from the *fixture* is 900 litres for each litre per second of flow.

(3) The hydraulic load from a *fixture* or equipment that produces a semi-continuous flow shall conform to Table 7.4.10.3.

Table 7.4.10.3.
Maximum Permitted Hydraulic Load from Fixtures with Semi-continuous Flows

Forming Part of Sentence 7.4.10.3.(3)

Item	Column 1	Column 2	Column 3
	Maximum Permitted Flows by *Trap Size*		
	Trap Size, in.	Flow, L/s	Hydraulic Load, *fixture units*
1.	1 ½	0.00 - 0.090	3
2.	2	0.091 - 0.190	6
3.	3	0.191 - 0.850	27
4.	4	0.851 - 5.700	180

7.4.10.4. Hydraulic Loads from Roofs or Paved Surfaces

(1) Except as provided in Sentence (2), the hydraulic load in litres from a roof or paved surface is the maximum 15 min rainfall determined in conformance with MMAH Supplementary Standard SB-1, "Climatic and Seismic Data", multiplied by the sum of,

(a) the area in square metres of the horizontal projection of the surface drained, and

(b) one-half the area in square metres of the largest adjoining vertical surface.

(2) *Flow control roof drains* may be installed provided,

(a) the maximum drain down time does not exceed 24 h,

(b) the roof structure is designed to carry the load of the stored water,

(c) one or more scuppers are installed not more than 30 m apart along the perimeter of the *building* so that,

(i) the scuppers are designed to handle at least 200% of the 15-minute rainfall intensity, and

(ii) the maximum depth of controlled water is limited to 150 mm,

(d) they are located not more than 15 m from the edge of the roof and not more than 30 m from adjacent drains, and

(e) there is at least one drain for each 900 m^2.

(3) Where the height of the parapet is more than 150 mm or exceeds the height of the adjacent wall flashing,

(a) emergency roof overflows or scuppers described in Clause (2) (c) shall be provided, and

(b) there shall be a minimum of two roof drains.

7.4.10.5. Conversion of Fixture Units to Litres and Gal/min

(1) Except as provided in Sentence 7.4.10.3.(2), where the hydraulic load is to be expressed in litres, *fixture units* shall be converted as follows:

(a) when the number of *fixture units* is 260 or fewer, the load is 2 360 L, and

(b) when the number of *fixture units* exceeds 260, the load is 9.1 L for each *fixture unit*.

(2) Where the hydraulic load is to be expressed in gal/min, *fixture units* shall be converted in accordance with Table 7.4.10.5.

Table 7.4.10.5.
Maximum Probable Drainage Rate, gal/min

Forming Part of Sentence 7.4.10.5.(2)

Item	Column 1	Column 2	Column 3	Column 4
	Fixture Units in Service	*Fixture Units*	*Fixture Units*	*Fixture Units*
		Col. 1	Col. 1 × 10	Col. 1 × 100
1.	100	53	174	900
2.	90	51	164	835

3.	80	49	153	750
4.	70	47	140	680
5.	60	44	128	600
6.	50	41	115	520
7.	40	38	102	435
8.	30	33	88	350
9.	20	27	72	262
10.	10	21	53	174

7.4.10.6. Hydraulic Loads to Soil or Waste Pipes

(1) Except as provided in Sentence (2), the hydraulic load that is drained to every *soil* or *waste stack* shall conform to Table 7.4.10.6.

Table 7.4.10.6.
Maximum Permitted Hydraulic Load Drained to Soil or Waste Stack

Forming Part of Sentence 7.4.10.6.(1)

Item	Column 1 Pipe *Size*, in.	Column 2 Maximum Hydraulic Load, *fixture units*	Column 3 Maximum *Fixture Units* Drained from any one *Storey*
1.	1 ¼	2	2
2.	1 ½	8	5
3.	2	24	10
4.	3	102	18
5.	4	540	100
6.	5	1 400	250
7.	6	2 900	500
8.	8	7 600	830
9.	10	15 000	2 700
10.	12	26 000	4 680
11.	15	50 000	9 000

(2) Where the *nominally horizontal offset* in a *soil* or *waste stack* is 1 500 mm or more, the hydraulic load that is served by it shall conform to Table 7.4.10.8.

(3) Vertical *sanitary drainage pipe* shall be designed to carry no more than 29% of its full capacity.

7.4.10.7. Hydraulic Loads on Branches

(1) No horizontal *sanitary drainage pipe* of less than 3 in. *size* shall have a *fixture* loading in excess of that permitted by Table 7.4.10.7.

Table 7.4.10.7.
Maximum Permitted Hydraulic Load Drained to a Branch

Forming Part of Sentence 7.4.10.7.(1)

Item	Column 1 *Size* of	Column 2 Maximum Load, *fixture*

	Branch, in.	*units*
1.	1 ¼	2
2.	1 ½	4
3.	2	6

7.4.10.8. Hydraulic Loads on Sanitary Horizontal Drain

(1) Except as permitted by Article 7.4.10.7., the hydraulic load that is drained to a horizontal *sanitary drainage pipe* shall conform to Table 7.4.10.8., based on the *size* and slope.

(2) Horizontal *sanitary drainage pipe* shall be designed to carry no more than 65% of its full capacity.

Table 7.4.10.8.
Maximum Permitted Hydraulic Load Drained to a Horizontal Sanitary Drainage Pipe

Forming Part of Sentences 7.4.10.6.(2) and 7.4.10.8.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
	Drain *Size*, Nominal in.	Maximum Hydraulic Load, *fixture units*					
		Slope[(1)]					
		1 in 400	1 in 200	1 in 133	1 in 100	1 in 50	1 in 25
1.	3	---	---	---	---	27	36
2.	4	---	---	---	180	240	300
3.	5	---	---	380	390	480	670
4.	6	---	---	600	700	840	1300
5.	8	---	1400	1500	1600	2250	3370
6.	10	---	2500	2700	3000	4500	6500
7.	12	2240	3900	4500	5400	8300	13000
8.	15	4800	7000	9300	10400	16300	22500

Notes to Table 7.4.10.8.:

(1) Slope is the ratio of rise to run, in whatever measurement units are chosen.

7.4.10.9. Hydraulic Loads on Horizontal Storm Drains

(1) The hydraulic load that is drained to a horizontal *storm drainage pipe* shall conform to Table 7.4.10.9., based on the *size* and slope.

Table 7.4.10.9.
Maximum Permitted Hydraulic Load Drained to a Horizontal Storm Drainage Pipe

Forming Part of Sentences 7.4.10.9.(1) and 7.4.10.10.(2)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Size of Drain or Sewer, in.	Maximum Hydraulic Load, L						
		Slope[(1)]						

		1 in 400	1 in 200	1 in 133	1 in 100	1 in 68	1 in 50	1 in 25
1.	3	------	------	------	------	------	2 770	3 910
2.	4	------	------	------	4 220	5 160	5 970	8 430
3.	5	------	------	6 760	7 650	9 350	10 800	15 300
4.	6	------	------	10 700	12 400	15 200	17 600	24 900
5.	8	------	18 900	23 200	26 700	32 800	37 800	53 600
6.	10	------	34 300	41 900	48 500	59 400	68 600	97 000
7.	12	37 400	55 900	68 300	78 700	96 500	112 000	158 000
8.	15	71 400	101 000	124 000	143 000	175 000	202 000	287 000

Notes to Table 7.4.10.9.:

(1) Slope is the ratio of rise to run, in whatever measurement units are chosen.

7.4.10.10. Rain Leaders

(1) No change in the *size* of a rain *leader* with a *nominally horizontal offset* is required if the *offset*,

(a) is located immediately under the roof,

(b) is not more than 6 m long, and

(c) has a slope not less than 1 in 50.

(2) If the horizontal *offset* is more than 6 m long, the rain *leader* shall conform to Table 7.4.10.9.

(3) The hydraulic load that is drained to a rain *leader* shall conform to Table 7.4.10.10.

Table 7.4.10.10.
Maximum Permitted Hydraulic Load Drained to a Circular Rain Leader

Forming Part of Sentence 7.4.10.10.(3)

Item	Column 1 *Size*, in.	Column 2 Maximum Hydraulic Load, L
1.	2	1 700
2.	2 ½	3 070
3.	3	5 000
4.	4	10 800
5.	5	19 500
6.	6	31 800
7.	8	68 300

Section 7.5. Venting Systems

7.5.1. Vent Pipes for Traps

7.5.1.1. Venting for Traps

(1) Except as provided in Sentences (3) and (4), every *trap* shall be protected by a *vent pipe*.

(2) *Drainage systems* shall be protected by the installation of a system as provided in Subsections 7.5.4. and 7.5.5. by the installation of,

(a) *additional circuit vents*,

(b) *branch vents*,

(c) *circuit vents*,

(d) *continuous vents*,

(e) *dual vents*,

(f) *fresh air inlets*,

(g) *headers*,

(h) *individual vents*,

(i) *offset relief vents*,

(j) *relief vents*,

(k) *stack vents*,

(l) *vent stacks*,

(m) *wet vents*, or

(n) *yoke vents*.

(3) A *trap* that serves a floor drain or *hub drain* need not be protected by a *vent pipe* separately where,

(a) the *size* of the *trap* is not less than 3 in.,

(b) the length of the *fixture drain* is not less than 450 mm,

(c) the fall on the *fixture drain* does not exceed its *size*, and

(d) the *trap* is connected to a horizontal drainage pipe that terminates at its upstream end in a 3 in. *stack*.

(4) A *trap* need not be protected by a *vent pipe*,

(a) where it serves,

(i) a *subsoil drainage pipe*, or

(ii) a *storm drainage system*, or

(b) where it forms part of an indirect *drainage system*.

7.5.2. Wet Venting

7.5.2.1. Wet Venting

(1) A *soil* or *waste pipe* may serve as a *wet vent* provided that,

(a) the hydraulic load is in accordance with Table 7.5.8.1.,

(b) the number of wet vented water closets does not exceed two,

(c) when two water closets are installed, they are connected at the same level to a vertical part of the stack by means of a double fitting in accordance with Table 7.2.4.5.,

(d) the water closets are installed downstream of all other *fixtures*,

(e) *trap arms* and *fixture drains* connected to the *wet vent* do not exceed 2 in. in *size*, except for connections from floor drains in accordance with Clauses 7.5.1.1.(3)(a) to (c),

(f) the total hydraulic load on the *wet vent* does not exceed the limits stated in Table 7.5.8.1. when separately vented *branches* or *fixture drains* in the same *storey*, having a total hydraulic load not greater than two *fixture units*, are connected to a *wet vent* or a wet vented water closet *trap arm*,

(g) the hydraulic load of separately vented *fixtures* that drain into the *wet vent* is not included when sizing the *continuous vent* that serves the *wet vent*,

(h) where a *wet vent* extends through more than 1 *storey*, the total discharge from any 1 *storey* above the *first storey* does not exceed four *fixture units*,

(i) where a *wet vent* extends through more than 1 *storey*, there is not more than one *nominally horizontal offset* in the *wet vent*, and,

(i) the *offset* does not exceed 1 200 mm for pipes 2 in. or less in *size*, or

(ii) the *offset* does not exceed 2 500 mm for pipes larger than 2 in. in *size*,

(j) the wet vented portion is not reduced in *size* except for the portion that is upstream of floor drains in accordance with Clauses 7.5.1.1.(3)(a) to (c),

(k) the highest *fixture* is connected to a vertical portion of the *wet vent*, upstream of any other *fixtures*, in the form of a *continuous vent*, and

(l) the length of the *wet vent* is not limited.

7.5.3. Circuit Venting

7.5.3.1. Circuit Venting

(1) A section of a *horizontal branch* may be *circuit vented* provided,

(a) a *circuit vent* is connected to it,

(b) all *fixtures* served by the *circuit vent* are located in the same *storey* and located at the most distant upstream section of the *horizontal branch*, and

(c) no *soil* or *waste stack* is connected to it upstream of a circuit vented *fixture*.

(2) *Fixtures* with *fixture outlet pipes* less than 2 in. in *size* shall be separately vented or separately circuit vented.

(3) Except as provided in Sentences (4) and (5), a *relief vent* shall be connected to the *branch* that forms part of a circuit vented system, downstream of the connection of the most downstream circuit vented *fixture*.

(4) A *soil* or *waste pipe* having a hydraulic load not greater than six *fixture units* may act as a *relief vent* for a *branch* that is being circuit vented.

(5) A symmetrically connected *relief vent* may serve as a combined *relief vent* for a maximum of two *branches* that are circuit vented, provided there are not more than eight circuit vented *fixtures* connected between the combined *relief vent* and each *circuit vent*.

(6) *Additional circuit vents* shall be required,

(a) when each cumulative horizontal change in direction of a *branch* served by a *circuit vent* exceeds 45° between *vent pipe* connections, or

(b) where more than eight circuit vented *fixtures* are connected to a *branch* between *vent pipe* connections.

(7) A *soil* or *waste pipe* may serve as an *additional circuit vent* in accordance with Sentence (6) provided that the *soil* or *waste pipe* is sized as a *wet vent* in conformance with Article 7.5.8.1. and is not less than 2 in. in *size*.

(8) Connections to *circuit vents* and *additional circuit vents* in accordance with Sentence (6) shall conform to Sentence 7.5.4.5.(1).

(9) A circuit vented *branch*, including the *fixture drain* downstream of the *circuit vent* connection, shall be sized in accordance with Articles 7.4.10.7. and 7.4.10.8., except that it shall be not less than,

(a) 2 in., where *traps* less than 2 in. in *size* are circuit vented, or

(b) 3 in., where *traps* 2 in. in *size* or larger are circuit vented.

(10) *Additional circuit vents* shall be sized in accordance with Table 7.5.7.1. and Sentence 7.5.7.3.(1).

(11) The hydraulic load on a *circuit vent* shall include the hydraulic load from *fixtures* connected to the *branch* served by the *circuit vent*, but shall not include the hydraulic load from *fixtures* permitted by Sentences (3), (4) and (5).

7.5.4. Vent Pipes for Soil or Waste Stacks

7.5.4.1. Stack Vents

(1) The upper end of every *soil* or *waste stack* shall terminate in a *stack vent* and the *stack vent* shall terminate in *open air* outside the *building*, or connect directly or through a *header* to another *stack vent* or *vent stack* that does terminate in *open air* outside the *building*.

7.5.4.2. Vent Stacks

(1) Except as provided in Sentence (2), every *soil* or *waste stack* draining *fixtures* from more than 4 *storeys* shall have a *vent stack*.

(2) A *soil* or *waste stack* that serves as a *wet vent* does not require a *vent stack*.

(3) The *vent stack* required by Sentence (1) shall be connected to a vertical section of the *soil* or *waste stack* at or immediately below the lowest *soil* or *waste pipe* connected to the *soil* or *waste stack*.

(4) *Fixtures* may be connected to a *vent stack* provided,

(a) the total hydraulic load of the connected *fixtures* does not exceed eight *fixture units*,

(b) at least one *fixture* is connected to a vertical portion of the *vent stack* and upstream of any other *fixtures*,

(c) no other *fixture* is connected downstream of a water closet,

(d) all *fixtures* are located in the lowest *storey* served by the *vent stack*, and

(e) the section of the *vent pipe* that acts as a *wet vent* conforms to the requirements regarding *wet vents*.

7.5.4.3. Yoke Vents

(1) Except as provided in Sentence (4), where a *soil* or *waste stack* receives the discharge from *fixtures* located on more than 11 *storeys*, a *yoke vent* shall be,

(a) installed for each section of 5 *storeys* or part of them counted from the top down,

(b) installed at or immediately above each *offset* or double *offset*, and

(c) sized in accordance with Sentence 7.5.7.5.(1).

(2) The *yoke vent* shall be connected to the *soil* or *waste stack* by means of a drainage fitting at or immediately below the lowest *soil* or *waste pipe* from the lowest *storey* of the sections described in Sentence (1).

(3) The *yoke vent* shall connect to the *vent stack* at least 1 000 mm above the floor level of the lowest *storey* in the section described in Sentence (1).

(4) A *yoke vent* need not be installed provided the *soil* or *waste stack* is interconnected with the *vent stack* in each *storey* of the section in which *fixtures* are located by means of a *vent pipe* equal in *size* to the *branch* or *fixture drain* or 2 in. in *size*, whichever is smaller.

7.5.4.4. Offset Relief Vents

(1) A *soil* or *waste stack* that has a *nominally horizontal offset* more than 1 500 mm long and above which the upper vertical portion of the stack passes through more than 2 *storeys* and receives a hydraulic load of more than 100 *fixture units* shall be vented by an *offset relief vent* connected to the vertical section immediately above the *offset*, and by another *offset relief vent*,

(a) connected to the lower vertical section at or above the highest *soil* or *waste pipe* connection, or

(b) extended as a vertical continuation of the lower section.

7.5.4.5. Fixtures Draining into Vent Pipes

(1) The *trap arm* of a *fixture* that has a hydraulic load of not more than 1 ½ *fixture units* may be connected to the vertical section of a *circuit vent*, *additional circuit vent*, *offset relief vent* or *yoke vent*, provided that,

(a) not more than two *fixtures* are connected to the *vent pipe*,

(b) where two *fixtures* are connected to the *vent pipe*, the connection is by means of a double fitting, in accordance with Table 7.2.4.5., and

(c) the section of the *vent pipe* that acts as a *wet vent* conforms to the requirements regarding *wet vents*.

7.5.5. Miscellaneous Vent Pipes

7.5.5.1. Venting of Sanitary Sewage Sumps

(1) Every sump or tank that receives *sanitary sewage* shall be provided with a *vent pipe* that is connected to the top of the sump or tank.

7.5.5.2. Venting of Interceptors

(1) Every oil *interceptor* shall be provided with 2 *vent pipes* that,

(a) connect to the *interceptor* at opposite ends,

(b) extend independently to *open air*,

(c) terminate not less than 2 000 mm above ground and at elevations differing by at least 300 mm, and

(d) do not connect to each other or any other *vent pipe*.

(2) Adjacent compartments within every oil *interceptor* shall be connected to each other by a *vent* opening.

(3) Where a secondary receiver for oil is installed in conjunction with an oil *interceptor*, it shall be vented in accordance with the manufacturer's recommendations, and the *vent pipe* shall,

(a) in no case be less than 1 ½ in. in *size*,

(b) extend independently to *open air*, and

(c) terminate not less than 2 000 mm above ground.

(4) The *vent pipes* referred to in Sentence (1) are permitted to be one *size* smaller than the largest connected drainage pipe but not less than 1 ¼ in. in *size*, or can be sized in accordance with the manufacturer’s recommendations.

(5) Every *vent pipe* that serves an oil or grease *interceptor* and is located outside a *building* shall be not less than 3 in. in *size* in areas where it may be subject to frost closure.

(6) Every grease *interceptor* shall have a *vent pipe* that is not less than 1 ½ in. in *size* connected to the outlet pipe, that connects to the *plumbing venting system*.

(7) A *vent pipe* shall be provided within 1 500 mm of the inlet to a grease *interceptor* complete with a *cleanout* to provide cleaning of the *vent pipe*.

(8) Where an acid waste dilution tank is installed, it shall be provided with a *vent pipe* connected at the top of the tank and that is sized in accordance with Article 7.5.7.7.

7.5.5.3. Venting of Corrosive Drain Piping and Dilution Tanks

(1) *Venting systems* for drain piping or dilution tanks conveying corrosive waste shall extend independently and terminate in *open air*.

7.5.5.4. Fresh Air Inlets

(1) Where a *building trap* is installed, a *fresh air inlet* not less than 4 in. in *size* shall be connected upstream and within 1 200 mm of the *building trap* and downstream of any other connection.

7.5.5.5. Provision for Future Installations

(1) Where provision is made for a *fixture* to be installed in the future, the *drainage system* and *venting system* shall be sized accordingly and provision made for the necessary future connections.

(2) Except as required in Sentence 7.5.7.7.(2), where a *plumbing system* is installed in a *building*, every *storey* in which *plumbing* is or may be installed, including the basement of a single family dwelling, shall have extended into it or passing through it a *vent pipe* that is at least 1 ½ in. in *size* for the provision of future connections.

7.5.6. Arrangement of Vent Pipes

7.5.6.1. Drainage of Vent Pipes

(1) Every *vent pipe* shall be installed without depression in which moisture can collect.

(2) Every *waste pipe* shall be installed and *back vented* at the same time.

7.5.6.2. Vent Pipe Connections

(1) Every *vent pipe* in a *plumbing system* shall be installed so as to be direct as possible to a *vent stack* or *open air*, as the case may be, and so that any horizontal run below the flood level of the *fixture* to which the *vent pipe* is installed is eliminated where structurally possible.

(2) Except for *wet vents*, where a *vent pipe* is connected to a *nominally horizontal soil* or *waste pipe*, the connection shall be above the horizontal centre line of the *soil* or *waste pipe*.

(3) Unused *vent pipes* installed for future connections shall be permanently capped with an end *cleanout* or an adapter and plug.

7.5.6.3. Location of Vent Pipes

(1) Except as provided in Sentences (2) and (3), a *vent pipe* that protects a *fixture trap* shall be located so that,

(a) the *developed length* of the *trap arm* is not less than twice the *size* of the *fixture drain*,

(b) the total fall of the *trap arm* is not greater than its inside diameter, and

(c) the *trap arm* does not have a cumulative change in direction of more than 135°.

(2) The *trap arm* of water closets, S-*trap standards* or any other *fixture* that also discharges vertically and depends on siphonic action for its proper functioning shall not have a cumulative change in direction of more than 225°.

(3) A *vent pipe* that protects a water closet or any other *fixture* that also depends on siphonic action for its proper functioning shall be located so that the distance between the connections of the *fixture drain* to the *fixture* and the *vent pipe* shall not exceed,

(a) 1 000 mm in the vertical plane, and

(b) 3 m in the horizontal plane.

(4) The maximum length and minimum slope of every *trap arm* shall conform to Table 7.5.6.3.

Table 7.5.6.3.
Length of Trap Arm

Forming Part of Sentence 7.5.6.3.(4)

Item	Column 1 *Size* of *Trap* Served, in.	Column 2 Maximum *Trap Arm*, m	Column 3 Minimum Slope
1.	1 ¼	1.5	1 in 50
2.	1 ½	1.8	1 in 50
3.	2	2.4	1 in 50
4.	3	3.6	1 in 50
5.	4	4.9	1 in 50
6.	4	9.8	1 in 100

(5) The *vent pipe* from a water closet or any other *fixture* that has an integral siphonic flushing action may be connected to the *vertical leg* of its drainage pipe.

7.5.6.4. Connection of Vents above Fixtures Served

(1) Except for a *wet vent*, every *vent pipe* shall extend above the *flood level rim* of every *fixture* that it serves before being connected to another *vent pipe*.

(2) No *vent pipe* shall be connected in such a manner that a blockage in a *soil* or *waste pipe* would cause waste to drain through the *vent pipe* to the *drainage system*.

7.5.6.5. Terminals

(1) Except as provided in Sentence (3), the upper end of every *vent pipe* that is not terminated in *open air* shall be connected to a *venting system* that terminates through a roof to *open air*.

(2) The upper end of every *vent pipe* that is terminated in *open air*, other than a *vent pipe* that serves an oil *interceptor* or a *fresh air inlet*, shall be extended above the roof.

(3) Where a *vent pipe* is installed as a result of additions or alterations to a *plumbing system* in an existing *building*, the *vent pipe* may be erected outside the *building*, provided that,

(a) no single change of direction of the *vent pipe* exceeds 45°,

(b) all parts of the *vent pipe* are *nominally vertical*,

(c) the *vent pipe* is increased to not less than 3 in. in *size* before penetrating a wall or roof, and

(d) where the *building* is 4 *storeys* or less in height, the *vent pipe* terminates above the roof of the *building*.

(4) Except for a *fresh air inlet*, where a *vent pipe* is terminated in *open air*, the terminal shall be located,

(a) not less than 1 000 mm above or not less than 3.5 m in any other direction from every air inlet, openable window or door,

(b) not less than 2 000 mm above or not less than 3.5 m in any other direction from a roof that supports an *occupancy*, and

(c) not less than 2 000 mm above ground.

(5) Where a *vent pipe* passes through a roof, it shall,

(a) be terminated high enough to prevent the entry of roof drainage but not less than 150 mm above the roof or above the surface of storm water, which could pond on the roof, and

(b) be equipped with flashing to prevent the entry of water between the *vent pipe* and the roof or the wall.

(6) Where a *vent pipe* passes through a roof or an outside wall of a *building*, it shall be protected from frost closure by increasing its diameter at least one *size*, but not less than 3 in. in *size*, immediately before it penetrates the roof or the wall.

(7) Where a *vent pipe* is located 2 000 mm or more above a roof, it shall be so constructed as to be stable and secure.

(8) Flashing shall be of material specified in Article 7.2.10.14. and on a shingled roof shall have a minimum dimension of 500 mm by 500 mm.

(9) Where a sleeve flashing is installed on a flat roof, it shall extend at least 150 mm above the flood level and on a sloped roof shall be at least 150 mm high on the short side.

(10) No bore of a *vent stack* or *stack vent* shall be reduced or obstructed by the installation of a flashing.

7.5.7. Minimum Size of Vent Pipes

7.5.7.1. General

(1) The *size* of every *vent pipe* shall conform to Table 7.5.7.1.

Table 7.5.7.1.
Minimum Permitted Size of Vent Pipe Based on Size of Trap

Forming Part of Sentence 7.5.7.1.(1)

Item	Column 1 *Size* of *Trap* Served, in.	Column 2 Minimum *Size* of *Vent Pipe*, in.
1.	1 ¼	1 ¼
2.	1 ½	1 ¼
3.	2	1 ½
4.	3	1 ½
5.	4	1 ½
6.	5	2
7.	6	2

7.5.7.2. Size Restriction

(1) The *size* of a *branch vent, stack vent, vent stack* or *header* shall be not less than the *size* of the *vent pipe* to which it is connected.

(2) Every *sanitary building drain* shall terminate at its upstream end in a stack of at least 3 in. *size*.

(3) A stack referred to in Sentence (2) shall be a *soil stack* if one is available and may be a *vent stack* or *waste stack* that provides at least 3 in. *stack vent* and that goes to *open air* above the roof, either directly or through a *header*.

7.5.7.3. Additional Circuit Vents and Relief Vents

(1) Except as provided in Article 7.5.7.1. and in Sentence 7.5.3.1.(7), the minimum *size* of an *additional circuit vent* or *relief vent* installed in conjunction with a *circuit vent* is permitted to be one *size* smaller than the required *size* of the *circuit vent*, but need not be larger than 2 in.

(2) The *size* of the *soil* or *waste pipe* acting as a *relief vent* in accordance with Sentence 7.5.3.1.(4) shall be in conformance with Table 7.4.10.6., 7.4.10.7. or 7.5.8.1. or Article 7.5.7.1., whichever *size* is the largest considering the hydraulic load drained into the *soil* or *waste pipe*.

7.5.7.4. Offset Relief Vents

(1) Except as provided in Article 7.5.7.1., the minimum *size* of an *offset relief vent* is permitted to be one *size* smaller than the *size* of the *stack vent*.

7.5.7.5. Yoke Vents

(1) *Yoke vents* required by Sentence 7.5.4.3.(1) are permitted to be one *size* smaller than the *size* of the smallest pipe to which they are connected.

7.5.7.6. Vent Pipes for Manholes

(1) The minimum *size* of a *vent pipe* that serves a manhole within a *building* shall be 2 in.

7.5.7.7. Vents for Sanitary Sewage Sumps or Tanks, Dilution Tanks and Macerating Toilet Systems

(1) Except as provided in Sentences (2) and (3), the minimum *size* of the *vent pipe* for a *sanitary sewage* sump or tank, or dilution tank shall be one *size* smaller than the *size* of the largest *branch* or *fixture drain* draining to the sump or tank.

(2) The *size* of every *vent pipe* for a *sanitary sewage* sump or tank, or dilution tank shall be not less than 2 in., but need not be greater than 4 in.

(3) The *size* of every *vent pipe* for a macerating toilet system with a sump or tank shall be not less than 1 ½ in.

7.5.8. Sizing of Vent Pipes

7.5.8.1. Hydraulic Loads Draining to Wet Vents

(1) The hydraulic load that drains to a *wet vent* shall conform to Table 7.5.8.1.

(2) When determining the *size* of a *wet vent*, the hydraulic load from the most downstream *fixture* or symmetrically connected *fixtures* shall not be included.

Table 7.5.8.1.
Maximum Permitted Hydraulic Loads Drained to a Wet Vent

Forming Part of Articles 7.5.2.1. and 7.5.8.1.

Item	Column 1	Column 2	Column 3
	Size of *Wet Vent*, in.	Maximum Hydraulic Load, *Fixture Units*	
		Not Serving Water Closets	Serving Not More Than Two Water Closets
			Fixtures Other Than Water Closets
1.	1 ½	2	N/A
2.	2	4	3
3.	3	12	8
4.	4	36	14
5.	5	N/A	18
6.	6	N/A	23

7.5.8.2. Individual Vents and Dual Vents

(1) The *size* of *individual vents* and *dual vents* shall be determined using Table 7.5.7.1. according to the largest *trap* served.

(2) When sizing an *individual vent* or a *dual vent*, the length is not taken into consideration.

7.5.8.3. Branch Vents, Headers, Continuous Vents and Circuit Vents

(1) *Branch vents*, *headers*, *circuit vents* and *continuous vents* shall be sized in accordance with Table 7.5.8.3., unless they are *individual vents* or *dual vents*.

Table 7.5.8.3.
Sizing of Branch Vents, Headers, Continuous Vents and Circuit Vents

Forming Part of Article 7.5.8.3.

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
	Total Hydraulic Load Served by Vent, *fixture units*	Size of *Vent Pipe*, in.							
		1 ¼	1 ½	2	3	4	5	6	8
		Maximum Length of *Vent Pipe*, m[(1)(2)]							
1.	2	9	NL	NL	NL	NL	NL	NL	NL
2.	8	9	30	61	NL	NL	NL	NL	NL
3.	20	7.5	15	46	NL	NL	NL	NL	NL
4.	24	4.5	9	30	NL	NL	NL	NL	NL
5.	42	NP	9	30	NL	NL	NL	NL	NL
6.	60	NP	4.5	15	120	NL	NL	NL	NL
7.	100	NP	NP	11	79	305	NL	NL	NL

8.	200	NP	NP	9	76	275	NL	NL	NL
9.	500	NP	NP	6	55	215	NL	NL	NL
10.	1 100	NP	NP	NP	15	61	215	NL	NL
11.	1 900	NP	NP	NP	6	21	61	215	NL
12.	2 200	NP	NP	NP	NP	9	27	105	335
13.	3 600	NP	NP	NP	NP	7.5	18	76	245
14.	5 600	NP	NP	NP	NP	NP	7.5	18	76

Notes to Table 7.5.8.3.:

(1) NL means not limited.

(2) NP means not permitted.

(2) For the purposes of Table 7.5.8.3., the length of a *branch vent* shall be its *developed length* from the most distant *soil* or *waste pipe* connection to a *vent stack*, *stack vent*, *header* or *open air*.

(3) For the purposes of Table 7.5.8.3., the length of a *header* shall be its *developed length* from the most distant *soil* or *waste pipe* connection to *open air*.

(4) For the purposes of Table 7.5.8.3., the length of a *circuit vent* shall be its *developed length* from the horizontal *soil* or *waste pipe* connection to a *vent stack*, *stack vent*, *header* or *open air*.

(5) For the purposes of Table 7.5.8.3., the length of a *continuous vent* shall be its *developed length* from the vertical *soil* or *waste pipe* connection to a *vent stack*, *stack vent*, *header* or *open air*.

7.5.8.4. Vent Stacks, or Stack Vents

(1) A *vent stack*, or *stack vent* shall be sized in accordance with Table 7.5.8.4. based on,

(a) the length of the *vent stack* or *stack vent*, and

(b) the total hydraulic load that is drained to the lowest section of *soil* or *waste stack* or stacks served by the *vent pipe*, plus any additional vent loads connected to the *vent stack* or *stack vent*.

Table 7.5.8.4.
Size and Developed Length of Stack Vents and Vent Stacks

Forming Part of Sentence 7.5.8.4.(1)

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10	Column 11	Column 12	Column 13
Size of *Soil* or *Waste Stack*, in.	Total Hydraulic Load Being Vented,	Water OccupiedArea	*Size* of *Stack Vent* or *Vent Stack*, in.									

	fixture units										
			1¼	1 ½	2	3	4	5	6	8	10	12
			Maximum Length of *Stack Vent* or *Vent Stack*, m[(1)(2)]									
1¼	2	0.29	9	NL	NL	NL	NL	NL	NL	NL	NL	NL
1½	8	0.25	15	46	NL	NL	NL	NL	NL	NL	NL	NL
2	12	0.25	9	23	61	NL	NL	NL	NL	NL	NL	NL
	24	.29	8	15	46	NL	NL	NL	NL	NL	NL	NL
3	10	0.15	NP	13	46	317	NL	NL	NL	NL	NL	NL
	21	.20	NP	10	33.5	247	NL	NL	NL	NL	NL	NL
	53	.25	NP	8	28.5	207	NL	NL	NL	NL	NL	NL
	102	.29	NP	7.5	26	189	NL	NL	NL	NL	NL	NL
4	43	0.15	NP	NP	10.5	76	299	NL	NL	NL	NL	NL
	140	.20	NP	NP	8	61	229	NL	NL	NL	NL	NL
	320	.25	NP	NP	7	52	195	NL	NL	NL	NL	NL
	540	.29	NP	NP	6.5	46	177	NL	NL	NL	NL	NL
5	190	0.15	NP	NP	NP	25	97.5	302	NL	NL	NL	NL
	490	.20	NP	NP	NP	19	76	232	NL	NL	NL	NL
	940	.25	NP	NP	NP	16	64	204	NL	NL	NL	NL
	1 400	.29	NP	NP	NP	15	58	180	NL	NL	NL	NL
6	500	0.15	NP	NP	NP	10	39.5	122	305	NL	NL	NL
	1 100	.20	NP	NP	NP	8	30.5	94.5	238	NL	NL	NL
	2 000	.25	NP	NP	NP	6.5	25.5	79	201	NL	NL	NL
	2 900	.29	NP	NP	NP	6	23.5	73	183	NL	NL	NL
8	1 800	0.15	NP	NP	NP	NP	9.5	29	73	287	NL	NL
	3 400	.20	NP	NP	NP	NP	7	22	58	219.5	NL	NL
	5 600	.25	NP	NP	NP	NP	6	19	49	186	NL	NL
	7 600	.29	NP	NP	NP	NP	5.5	17	43	170.5	NL	NL
10	4 000	0.15	NP	NP	NP	NP	NP	9.5	24	94.5	292.5	NL
	7 200	.20	NP	NP	NP	NP	NP	7	18	73	225.5	NL
	11 000	.25	NP	NP	NP	NP	NP	6	15.5	61	192	NL
	15 000	.29	NP	NP	NP	NP	NP	5.5	14	55	174	NL
12	7 300	0.15	NP	NP	NP	NP	NP	NP	9.5	36.5	116	287
	13 000	.20	NP	NP	NP	NP	NP	NP	7	28.5	91	219.5
	20 000	.25	NP	NP	NP	NP	NP	NP	6	24	76	186
	26 000	.29	NP	NP	NP	NP	NP	NP	5.5	22	70	152
15	15 000	0.15	NP	NP	NP	NP	NP	NP	NP	12	39.5	94.5
	25 000	.20	NP	NP	NP	NP	NP	NP	NP	9.5	29	73
	38 000	.25	NP	NP	NP	NP	NP	NP	NP	8	24.5	62
	50 000	.29	NP	NP	NP	NP	NP	NP	NP	7	22.5	55

Notes to Table 7.5.8.4.:

(1) NL means not limited.

(2) NP means not permitted.

(2) For the purposes of Table 7.5.8.4., the length of a *stack vent* or *vent stack* shall be its *developed length* from its lower end to *open air*.

(3) The minimum *size* of *vent stack* or *stack vent* shall be one-half the *size* of the *soil* or *waste stack* at its base.

(4) A *stack vent* serving a *wet vent* stack that is over 4 *storeys* high shall extend the full *size* of the *wet vent* to *open air*.

(5) Every *sanitary building drain* shall be provided with at least one *vent* that is not less than 3 in. in *size*.

7.5.8.5. Lengths for other Vent Pipes

(1) When sizing an *additional circuit vent*, *offset relief vent*, *relief vent*, *yoke vent* and the *vent pipe* for an *interceptor*, dilution tank, *sanitary sewage* tank or sump, or manhole, length is not taken into consideration.

7.5.9. Air Admittance Valves

7.5.9.1. Air Admittance Valve as a Vent Terminal

(1) *Individual vents* may terminate with a connection to an *air admittance valve* as provided in Articles 7.5.9.2. and 7.5.9.3.

7.5.9.2. Air Admittance Valves

(1) *Air admittance valves* shall only be used to vent,

(a) *fixtures* in *buildings* undergoing renovation, and

(b) installations where connection to a *vent* may not be practical.

(2) The *air admittance valves* shall be located,

(a) above the *flood level rim* of the *fixture* it serves,

(b) within the maximum *developed length* permitted for the *vent*,

(c) not less than 150 mm above insulation materials, and

(d) installed in a location not subject to back pressure.

(3) *Air admittance valves* shall,

(a) only vent *fixtures* located on the same *storey*, and

(b) be connected to the horizontal *fixture drain*.

7.5.9.3. Installation Conditions

(1) *Air admittance valves* shall not be installed in supply or return air *plenums*, or in locations where they may be exposed to freezing temperatures.

(2) *Air admittance valves* shall be installed in accordance with the manufacturer's installation instructions.

(3) *Air admittance valves* shall be rated for the *size* of *vent pipe* to which they are connected.

(4) Installed *air admittance valves* shall be,

(a) *accessible*, and

(b) located in a space that allows air to enter the valve.

(5) Every *drainage system* shall have one *vent* that terminates to *open air* in conformance with Sentence 7.5.6.5.(1).

Section 7.6. Potable Water Systems

7.6.1. Arrangement of Piping

7.6.1.1. Design

(1) Every *fixture* supplied with separate hot and cold water controls shall have the hot water control on the left and the cold on the right.

(2) Where hot and cold water are mixed and the temperature is regulated by a single, unmarked, manual control, a movement to the left shall increase the temperature and a movement to the right shall decrease the temperature.

(3) In a hot *water distribution system* of a *developed length* of more than 30 m or supplying more than 4 *storeys*, the water temperature shall be maintained by,

(a) recirculation, or

(b) a self-regulating heat tracing system.

7.6.1.2. Drainage

(1) A *water distribution system* shall be installed so that the system can be drained or blown out with air and outlets for this purpose shall be provided.

7.6.1.3. Control and Shut-off Valves

(1) A *building control valve* shall be provided,

(a) on every *water service pipe* at the location where the *water service pipe* enters the *building*, or

(b) on the *water distribution system* at a location immediately downstream of the *point of entry treatment unit*, where the *building* is served by a *point of entry treatment unit* located in the *building*.

(2) Except as provided in Sentence (3), a drain port shall be provided on the *water distribution system* immediately downstream of the *building control valve* required by Sentence (1) and if there is a meter, the drain port shall be installed immediately downstream of the meter on the *water distribution system*.

(3) Where the *building control valve* required by Sentence (1) is of 1 in. trade *size* or smaller, the drain port may be an integral part of the *building control valve* in the form of a stop and waste valve and the drain port shall be located on the *water distribution system* side of the stop and waste valve.

(4) Every pipe that is supplied with water from a tank on the property that is a gravity water tank or a tank of a *drinking water system* shall be provided with a shut-off valve located close to the tank.

(5) Where the water supply is to be metered, the installation of the meter, including the piping that is part of the meter installation and the valving arrangement for the meter installation, shall be according to the *water purveyor's* requirements.

(6) For the purpose of identifying the pipe material where plastic water pipe is used underground for a service pipe, the end of the pipe inside the *building* shall be brought above ground for a distance not less than 300 mm and not greater than 450 mm.

7.6.1.4. Shut-off Valves

(1) Except for a single-family dwelling, every *riser* shall be provided with a shut-off valve at the source of supply.

7.6.1.5. Water Closets

(1) Every water closet shall be provided with a shut-off valve on its water supply pipe.

7.6.1.6. Suites

(1) Shut-off valves shall be installed in every *suite* in a *building* of *residential occupancy* as may be necessary to ensure that when the supply to one *suite* is shut off the supply to the remainder of the *building* is not interrupted.

7.6.1.7. Public Washrooms

(1) The water supply to each *fixture* in a washroom for *public use* shall be individually valved and each valve shall be *accessible*.

7.6.1.8. Tanks

(1) Every water pipe that supplies a hot water tank, pressure vessel, *plumbing appliance* or water using device shall be provided with a shut-off valve located close to the tank, pressure vessel, *plumbing appliance* or water using device.

7.6.1.9. Protection for Exterior Water Supply

(1) Every pipe that passes through an exterior wall to supply water to the exterior of the *building* shall be provided with,

(a) a frost-proof hydrant with a separate shut-off valve located inside the *building*, or

(b) a stop-and-waste cock located inside the *building* and close to the wall.

7.6.1.10. Check Valves

(1) A *check valve* shall be installed at the *building* end of the *water service pipe* where the pipe is made of plastic that is suitable for cold water use only.

7.6.1.11. Flushing Devices

(1) Every flushing device that serves a water closet or one or more urinals shall have sufficient capacity and be adjusted to deliver at each operation a volume of water that will thoroughly flush the *fixture* or *fixtures* that it serves.

(2) Where a manually operated flushing device is installed, it shall serve only one *fixture*.

7.6.1.12. Relief Valves

(1) Every pressure vessel that is part of a *plumbing system* or connected to a *plumbing system* shall be equipped with a pressure relief valve designed to open when the water pressure in the tank reaches the rated working pressure of the tank, and so located that the pressure in the tank shall not exceed 1 100 kPa or one-half the maximum test pressure sustained by the tank, whichever is the lesser.

(2) Every hot water tank of a *storage-type service water heater* shall be equipped with a temperature relief valve with a temperature sensing element,

(a) located within the top 150 mm of the tank, and

(b) designed to open and discharge sufficient water from the tank to keep the temperature of the water in the tank from exceeding 99°C under all operating conditions.

(3) A pressure relief valve and temperature relief valve may be combined where Sentences (1) and (2) are complied with.

(4) Every *indirect service water heater* shall be equipped with,

(a) a pressure relief valve, and

(b) a temperature relief valve on every storage tank that forms part of the system.

(5) Every pipe that conveys water from a temperature relief, pressure relief, or a combined temperature and pressure relief valve shall,

(a) be of a *size* at least equal to the *size* of the outlet of the valve,

(b) be rigid, slope downward from the valve, and,

(i) terminate with an indirect connection above a floor drain, sump or other safe location, with an *air break* of not more than 300 mm, or

(ii) terminate at a distance not less than 150 mm and not more than 300 mm from a floor and discharge vertically down,

(c) have no thread at its outlet, and

(d) be capable of operating at a temperature of not less than 99°C.

(6) The temperature relief valve required in Clause (4)(b) shall,

(a) have a temperature sensing element located within the top 150 mm of the tank, and

(b) be designed to open and discharge sufficient water to keep the temperature of the water in the tank from exceeding 99°C under all operating conditions.

(7) No shut-off valve shall be installed on the pipe between any tank and the relief valves or on the discharge lines from such relief valves.

7.6.1.13. Solar Domestic Hot Water Systems

(1) Except as provided in Sentence (2), a system for solar heating of *potable* water shall be installed in accordance with good engineering practice.

(2) Packaged systems for solar heating of *potable* water in *residential occupancies* shall be installed in conformance with CAN/CSA-F383, “Installation of Packaged Solar Domestic Hot Water Systems”.

7.6.1.14. Water Hammer

(1) Provision shall be made to protect the *water distribution system* from the adverse effects of water hammer.

7.6.1.15. Mobile Home Water Service

(1) A *water service pipe* intended to serve a mobile home shall,

(a) be not less than ¾ in. in *size*,

(b) be terminated above ground, and

(c) be provided with,

(i) a tamperproof terminal connection that is capable of being repeatedly connected, disconnected and sealed,

(ii) a protective concrete pad,

(iii) a means to protect it from frost heave, and

(iv) a curb stop and a means of draining that part of the pipe located above the frost line when not in use.

7.6.1.16. Thermal Expansion

(1) Protection against thermal expansion shall be required when a *check valve* is required by Article 7.6.1.10., a *backflow preventer* is required by Article 7.6.2.2., or a pressure reducing valve is required by Article 7.6.3.3.

7.6.2. Protection from Contamination

7.6.2.1. Connection of Systems

(1) Connections to *potable water systems* shall be designed and installed so that non-*potable* water or substances that may render the water non-*potable* cannot enter the system.

(2) No connection shall be made between a *potable water system* supplied with water from a *drinking water system* and any other *potable water system* without the consent of the *water purveyor*.

7.6.2.2. Back-Siphonage

(1) Every *potable water system* that supplies a *fixture* or tank that is not subject to pressures above atmospheric shall be protected against *back-siphonage* by a *backflow preventer*.

(2) Where a *potable* water supply is connected to a boiler, tank, cooling jacket, lawn sprinkler system or other device where a non-*potable* fluid may be under pressure that is above atmospheric or the water outlet may be submerged in the non-*potable* fluid, the water supply shall be protected against *backflow* by a *backflow preventer*.

(3) Where a hose bibb is installed outside a *building*, inside a garage, or where there is an identifiable risk of contamination, the *potable water system* shall be protected against *backflow* by a *backflow preventer*.

7.6.2.3. Protection from Backflow

(1) Except as provided in Sentence (3) and Articles 7.6.2.4. to 7.6.2.6., where a *backflow preventer* is required by this Subsection, the *backflow preventer* shall be selected, installed and tested in conformance with CSA B64.10, "Selection and Installation of Backflow Preventers".

(2) *Backflow preventers* shall be provided in conformance with Sentence 7.2.10.10.(1).

(3) Tank type water closet valves shall be provided with a *back-siphonage preventer* in conformance with Sentence 7.2.10.10.(2).

7.6.2.4. Backflow from Fire Protection Systems

(1) A *backflow preventer* shall not be required in a *residential full flow through fire sprinkler system*, in which the pipe and fittings are constructed of *potable water system* materials.

(2) Except as required in Sentence (4), *potable water system* connections to fire sprinkler and standpipe systems shall be protected against *backflow* caused by *back-siphonage* or *back pressure* in conformance with the following Clauses:

(a) *Residential partial flow through fire sprinkler systems* in which the pipes and fittings are constructed of *potable water system* materials shall be protected by a dual *check valve backflow preventer* conforming to CSA B64.6.1, "Dual Check Valve Backflow Preventers for Fire Protection Systems (DuCF)",

(b) *Class 1 fire sprinkler/standpipe systems* shall be protected by a single *check valve backflow preventer* conforming to CSA B64.9, "Single Check Valve Backflow Preventers for Fire Protection Systems (SCVAF)", provided that the systems do not use antifreeze or other additives of any kind and all pipes and fittings are constructed of *potable water system* materials,

(c) *Class 1 fire sprinkler/standpipe systems* not covered by Clause (b) as well as *Class 2* and *Class 3 fire sprinkler/standpipe systems* shall be protected by a double *check valve backflow preventer* conforming to CSA B64.5.1, "Double Check Valve Backflow Preventers for Fire Protection Systems (DCVAF)", provided that the systems do not use antifreeze or other additives of any kind,

(d) *Class 1, Class 2* or *Class 3 fire sprinkler/standpipe systems*, in which antifreeze or other additives are used, shall be protected by a reduced pressure principle *backflow preventer* conforming to CSA B64.4.1, "Reduced Pressure Principle Backflow Preventers for Fire Protection Systems (RPF)", installed on the portion of the system that uses the additives and the balance of the system shall be protected as required by Clause (b) or (c),

(e) *Class 4* and *Class 5 fire sprinkler/standpipe systems* shall be protected by a reduced pressure principle *backflow preventer* conforming to CSA B64.4.1, "Reduced Pressure Principle Backflow Preventers for Fire Protection Systems (RPF)",

(f) *Class 6 fire sprinkler/standpipe systems* shall be protected,

(i) by a double *check valve backflow preventer* conforming to CSA B64.5.1, "Double Check Valve Backflow Preventers for Fire Protection Systems (DCVAF)", or

(ii) where a severe hazard may be caused by *backflow*, by a reduced pressure principle *backflow preventer* conforming to CSA B64.4.1, "Reduced Pressure Principle Backflow Preventers for Fire Protection Systems (RPF)", and

(g) *backflow preventers* on fire sprinkler and standpipe systems shall be selected and installed in conformance with Table 7.6.2.4.

Table 7.6.2.4.
Backflow Preventers on Fire Sprinkler and Standpipe Systems

Forming Part of Sentence 7.6.2.4.(2)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	CSA Standard Number	Type of Device(1)	System Made with Potable Water System Materials		System Not Made with Potable Water System Materials	
			Minor Hazard(2) Residential Partial Flow-Through System	Minor Hazard(2) Class 1 System	Moderate Hazard(2) Class 1, 2, 3 and 6 Systems	Severe Hazard(2) – Any Class of System in which Antifreeze or Other Additives Are Used
1.	B64.6.1	DuCF	P	NP	NP	NP
2.	B64.9	SCVAF	P	P	NP	NP
3.	B64.5.1	DCVAF	P	P	P	NP
4.	B64.4.1	RPF	P	P	P	P

Notes to Table 7.6.2.4.:

P – Permitted

NP – Not Permitted

(1) The product is only permitted for use on fire sprinkler and standpipe systems.

(2) Minor Hazard, Moderate Hazard and Severe Hazard have the same meaning as indicated in CSA B64.10 "Selection and Installation of Backflow Preventers".

(3) The *backflow preventer* required by Sentence (2) shall be installed upstream of the fire department pumper connection.

(4) Where a reduced pressure principle *backflow preventer* is required on the *water service pipe* at a service connection located on the same premises as the *fire service main* in *Class 3, 4, 5* and *6 fire sprinkler/standpipe systems*, a reduced pressure principle *backflow preventer* conforming to CSA B64.4.1, "Reduced Pressure Principle Backflow Preventers for Fire Protection Systems (RPF)", shall also be provided on the fire service connection.

7.6.2.5. Backflow from Buildings with a Solar Domestic Hot Water System

(1) Except as permitted by Sentence (2) and as provided in Sentences (3) and (4), a *potable water system* shall be protected against *backflow* where the heat transfer loop of a solar domestic hot water system is *directly connected* to the *potable water system*.

(2) Where the heat transfer loop of the solar domestic hot water system consists of direct flow-through of *potable* water only, protection against *backflow* is not required.

(3) A *potable water system* that is *directly connected* to the heat transfer loop of a solar domestic hot water system that serves a *residential occupancy* within the scope of Part 9 shall be provided with a *backflow preventer* selected in accordance with CAN/CSA-F379.1, "Packaged Solar Domestic Hot Water Systems (Liquid-to-Liquid Heat Transfer)".

(4) Where a solar domestic hot water system includes a single wall heat exchanger and contains only a relatively harmless heat transfer fluid as described in CAN/CSA-F379.1, "Packaged Solar Domestic Hot Water Systems (Liquid-to-Liquid Heat Transfer)", the *backflow* prevention required in Sentence (1) is permitted to be a dual *check valve backflow preventer* conforming to CSA B64.3, "Dual Check Valve Backflow Preventers with Atmospheric Port (DCAP)".

7.6.2.6. Premise Isolation

(1) *Buildings* or facilities where a moderate hazard or severe hazard may be caused by *backflow* shall be provided with premise isolation of the *potable water system* by the installation of a *backflow preventer* selected in accordance with Clauses 5.3.4.2.(b) and (c) of CSA B64.10, "Selection and Installation of Backflow Preventers".

(2) *Buildings* of *residential occupancy* within the scope of Part 9 are not required to be isolated unless they have access to an *auxiliary water supply*.

(3) Except as provided in Sentence (1), where no direct connection exists between the *auxiliary water supply* and the *potable water system*, premise isolation shall be provided by a dual *check valve backflow preventer* conforming to CAN/CSA-B64.6, "Dual Check Valve Backflow Preventers (DuC)".

7.6.2.7. Reserved

7.6.2.8. Cleaning of Systems

(1) A newly installed part of a *potable water system* shall be cleaned and then flushed with *potable* water before the system is put into operation.

7.6.2.9. Air Gap

(1) An *air gap* shall not be located in a noxious environment.

(2) Every *air gap* shall be not less than 25 mm high and at least twice the diameter of the opening of the water supply outlet in height.

7.6.2.10. Vacuum Breakers and Flood Levels

(1) Where the *critical level* is not marked on an atmospheric *vacuum breaker* or pressure *vacuum breaker*, the *critical level* shall be taken as the lowest point on the device.

(2) Where an atmospheric *vacuum breaker* is installed, it shall be located on the downstream side of the *fixture* control valve or faucet so that it will be subject to water supply pressure,

(a) only when the *fixture* control valve or faucet is open, and

(b) for periods of use not to exceed 12 h continuous.

(3) An atmospheric *vacuum breaker* shall be installed so that the *critical level* is at least the distance specified by the manufacturer at which the device will operate safely but not less than 25 mm above,

(a) the *flood level rim* of a *fixture* or tank, or

(b) the highest point open to atmosphere in an irrigation system.

(4) A pressure *vacuum breaker* shall be installed with its *critical level* at least 300 mm above,

(a) the *flood level rim* of a *fixture* or tank, or

(b) the highest point open to atmosphere in an irrigation system.

7.6.3. Size and Capacity of Pipes

7.6.3.1. Design, Construction and Installation

(1) Every *water distribution system* shall be designed to provide peak demand flow when the flow pressures at the supply openings conform to the plumbing supply fitting manufacturer's specifications.

(2) A *potable water system* shall be designed, constructed and installed to conform to good engineering practice appropriate to the circumstances, such as that described in the ASHRAE Handbooks and ASPE Data Books.

(3) Every pipe that supplies a *fixture* shall have a capacity that will produce a flow in the *fixture* that will flush the *fixture* and keep it in a sanitary condition.

7.6.3.2. Hydraulic Load

(1) Except as provided in Sentence (3), the hydraulic load of a *fixture* or device that is listed in Table 7.6.3.2.A. shall be the number of *fixture units* given in the Table.

(2) Except as provided in Sentences (1) and (3), the hydraulic load of a *fixture* that is not listed in Table 7.6.3.2.A. is the number of *fixture units* listed in Table 7.6.3.2.D.

(3) Where *fixtures* are supplied with both hot and cold water, the hydraulic loads for maximum separate demands shall be 75% of the hydraulic load of the *fixture units* given in Tables 7.6.3.2.A. and 7.6.3.2.D. when using a detailed engineering design method.

(4) The hydraulic load of urinals and water closets with direct flush valves shall be the number of *fixture units* listed in Tables 7.6.3.2.B. and 7.6.3.2.C.

Table 7.6.3.2.A.
Sizing of Water Distribution Systems(1)(2)

Forming Part of Sentences 7.6.3.2.(1) to (3) and 7.6.3.4.(2), (3) and (5)

Ite	Column 1	Column	Column	Column	Column	Column	Column	Column

m		2	3	4	5	6	7	8
	Fixture or Device	Minimum *Size* of Supply Pipe, in.	*Private Use* Hydraulic Load, *fixture units*			*Public Use* Hydraulic Load, *fixture units*		
			Cold	Hot	Total	Cold	Hot	Total
1.	*Bathroom group* with 6 LPF flush tank[3]	N/A	2.7	1.5	3.6	-	-	-
2.	*Bathroom group* with greater than 6 LPF flush tank[3]	N/A	4	3	6	-	-	-
3.	*Bathroom group* with more than 3 *fixtures*	-	-	-	[4]	-	-	-
4.	Bathtub with or without shower head	1/2	1	1	1.4	3	3	4
5.	Bathtub with ¾ in. spout	3/4	7.5	7.5	10	7.5	7.5	10
6.	Bedpan washer	1	-	-	-	7.5	7.5	10
7.	Bidet	3/8	1.5	1.5	2	-	-	-
8.	Clothes washer, 3.5 kg	1/2	1	1	1.4	2.25	2.25	3
9.	Clothes washer, 6.8 kg	1/2	-	-	-	3	3	4
10.	Clothes washer, commercial[5]	-	-	-	-	-	-	-
11.	Dental lavatory	3/8	-	-	-	1.5	1.5	2
12.	Dental unit, cuspidor	3/8	-	-	-	1	-	1
13.	Dishwasher, commercial[5]	-	-	-	-	-	-	-
14.	Dishwasher, domestic	3/8	-	1.4	1.4	-	-	-
15.	Drinking fountain or water cooler	3/8	-	-	-	0.25	-	0.25
16.	Hose bibb	1/2	2.5	-	2.5	2.5	-	2.5
17.	Hose bibb	3/4	3	-	3	6	-	6
18.	Hose bibb, combination hot and cold	1/2	1.9	1.9	2.5	1.9	1.9	2.5
19.	Lavatory, 8.3 L/min or less	3/8	0.5	0.5	0.7	1.5	1.5	2
20.	Lavatory, greater than 8.3 L/min	3/8	0.75	0.75	1	1.5	1.5	2
21.	Shower head, 9.5 L/min or less per head	1/2	1	1	1.4	3	3	4
22.	Shower head, greater than 9.5 L/min per head	1/2	1.5	1.5	2	3	3	4
23.	Shower, spray, multi-head, *fixture unit* per head	[5]	1	1	1.4	3	3	4
24.	Sink, bar	3/8	0.75	0.75	1	1.5	1.5	2
25.	Sink, clinic service faucet	1/2	-	-	-	2.25	2.25	3
26.	Sink, clinic service with direct flush valve	1	-	-	-	6	-	6

27.	Sink, kitchen, commercial, per faucet	1/2	-	-	-	3	3	4
28.	Sink, kitchen, domestic, 8.3 L/min or less	3/8	1	1	1.4	1	1	1.4
29.	Sink, kitchen, domestic, greater than 8.3 L/min	3/8	1.5	1.5	2	1.5	1.5	2
30.	Sink, laboratory	3/8	-	-	-	1.5	1.5	2
31.	Sink, laundry (1 or 2 compartments)	3/8	1	1	1.4	1	1	1.4
32.	Sink, service or mop basin	1/2	-	-	-	2.25	2.25	3
33.	Sink, washup, per faucet	1/2	-	-	-	1.5	1.5	2
34.	Urinal, with direct flush valve	3/4	(6)	-	(6)	(6)	-	(6)
35.	Urinal, with flush tank	3/8	3	-	3	3	-	3
36.	Urinal, with self-closing metering valve	1/2	2	-	2	4	-	4
37.	Water closet, 6 LPF or less with flush tank	3/8	2.2	-	2.2	2.2	-	2.2
38.	Water closet, greater than 6 LPF with flush tank	3/8	3	-	3	5	-	5
39.	Water closet, with direct flush valve	1	(6)	-	(6)	(6)	-	(6)

Notes to Table 7.6.3.2.A.:

(1) The *fixture unit* values in this Table are not applicable in certain *assembly occupancies* because of surges in use by the occupants. For such *occupancies*, refer to specific design information.

(2) For *fixtures* not indicated in this Table, refer to Table 7.6.3.2.D.

(3) *Bathroom group* is based on a ½ in. *size* bathtub supply pipe.

(4) Add additional *fixture* to the *fixture* load for *bathroom group*.

(5) Refer to the manufacturer's recommendations.

(6) For *fixture unit* values for *fixtures* with direct flush valves, see Sentence 7.6.3.2.(4) and Tables 7.6.3.2.B. and 7.6.3.2.C.

Table 7.6.3.2.B.
Sizing of Water Distribution Systems for Urinals with Direct Flush Valves

Forming Part of Sentences 7.6.3.2.(4) and 7.6.3.4.(5)

Item	Column 1 Number of Valves	Column 2 Individual *Fixture Units* Assigned in Decreasing Values	Column 3 *Fixture Units* in Accumulative Values(1)
1.	1	20	20
2.	2	15	35
3.	3	10	45

4.	4	8	53
5.	5 or more	5 each	58, plus 5 for each additional *fixture* in excess of 5

Notes to Table 7.6.3.2.B.:

(1) The accumulative *fixture unit* values are the total values to be used in conjunction with Table 7.6.3.2.A.

Table 7.6.3.2.C.
Sizing of Water Distribution Systems for Water Closets with Direct Flush Valves

Forming Part of Sentences 7.6.3.2.(4) and 7.6.3.4.(5)

Item	Column 1 Number of Valves	Column 2 Individual *Fixture Units* Assigned in Decreasing Values	Column 3 *Fixture Units* in Accumulative Values(1)
1.	1	40	40
2.	2	30	70
3.	3	20	90
4.	4	15	105
5.	5 or more	10 for each *public use*, and 6 for each *private use*	115, plus 10 for each *public use* additional *fixture* in excess of 5, and 111, plus 6 for each *private use* additional *fixture* in excess of 5

Notes to Table 7.6.3.2.C.:

(1) The accumulative *fixture unit* values are the total values to be used in conjunction with Table 7.6.3.2.A.

Table 7.6.3.2.D.
Hydraulic Loads of Fixtures Not Listed in Table 7.6.3.2.A.

Forming Part of Sentences 7.6.3.2.(2) and (3) and 7.6.3.4.(5)

Item	Column 1	Column 2	Column 3
	Size of Supply Pipe, in.	Hydraulic Load, *fixture units*	
		Private Use	*Public Use*
1.	⅜	1	2
2.	½	2	4
3.	¾	3	6
4.	1	6	10

7.6.3.3. Static Pressure

(1) Where the static pressure at any *fixture* may exceed 550 kPa, a pressure reducing valve conforming to Article 7.2.10.12. shall be installed to limit the maximum static pressure at the *fixture* to 550 kPa.

7.6.3.4. Size

(1) Every *water service pipe* shall be sized according to the peak demand flow but shall not be less than ¾ in. in *size*.

(2) Except as permitted in Sentence (3), the *size* of a supply pipe that serves a *fixture* or device shall conform to Table 7.6.3.2.A.

(3) For *fixtures* listed in Table 7.6.3.2.A that have a permitted supply pipe *size* of ⅜ in., a connector not more than 750 mm long and not less than 6.3 mm inside diameter may be used to supply water to the *fixture* or device.

(4) No *water system* between the point of connection with the *water service pipe* or the water meter and the first branch that supplies a water heater that serves more than one *fixture* shall be less than ¾ in. in *size*.

(5) Where both hot and cold water is supplied to *fixtures* in residential *buildings* containing one or two *dwelling units* or row houses with separate *water service pipes*, the *water system* may be sized in accordance with Table 7.6.3.4. where,

(a) the hydraulic loads for maximum separate demands on *water distribution system* piping are not less than 100% of the total hydraulic load of the *fixture units* given in Tables 7.6.3.2.A., 7.6.3.2.B., 7.6.3.2.C. and 7.6.3.2.D. for *private use*,

(b) the minimum water pressure at the entry to the *building* is 200 kPa, and

(c) the total maximum length of the *water system* is 90 m.

Table 7.6.3.4.
Water Pipe Sizing for Buildings Containing One or Two Dwelling Units or Row Houses with Separate Water Service Pipes

Forming Part of Sentence 7.6.3.4.(5)

Item	Column 1	Column 2	Column 3
	Size of Water Pipe, in.	Water Velocity m/s[(1)]	
		2.4	1.5
		Hydraulic Load, *fixture units*	
1.	1/2	7	4
2.	3/4	16	9
3.	1	31	18
4.	1-1/4	57	30

Notes to Table 7.6.3.4.:

(1) Table 7.6.3.4. is not intended to limit water velocities that are permitted by Sentence 7.6.3.5.(1).

7.6.3.5. Velocity

(1) The maximum permitted water velocities shall be those recommended by the pipe and fitting manufacturer.

7.6.4. Water Efficiency

7.6.4.1. Water Supply Fittings

(1) The flow rates of fittings that supply water to a *fixture* shall not exceed the maximum flow rates at the test pressures listed for that fitting in Table 7.6.4.1.

Table 7.6.4.1.
Maximum Flow Rates for Water Supply Fittings

Forming Part of Sentence 7.6.4.1.(1)

Item	Column 1 Fitting	Column 2 Maximum Flow, L/min	Column 3 Test Pressure, kPa
1.	Lavatory Faucet	8.35	413
2.	Kitchen Faucet	8.35	413
3.	Shower Heads in *Residential Occupancy*	7.6	550
4.	Shower Heads in Other *Occupancies*	9.5	550

(2) Sentence (1) does not apply to a *fixture* located in a *heritage building*.

7.6.4.2. Plumbing Fixtures

(1) Water closets and urinals shall be certified to CAN/CSA-B45.0, “General Requirements for Plumbing Fixtures”.

(2) Except as provided in Sentence (3), the flush cycle for each *fixture* that is a water closet or urinal shall not exceed the maximum water consumption per flush cycle listed for that *fixture* in Table 7.6.4.2.A.

Table 7.6.4.2.A.
Maximum Water Consumption per Flush Cycle for Sanitary Fixtures

Forming Part of Sentence 7.6.4.2.(2)

Item	Column 1 *Fixture*	Column 2 Maximum Water Consumption per Flush Cycle, LPF
1.	Water Closet (Tank Type)	6.0
2.	Water Closet (Direct Flush)	6.0
3.	Urinal (Tank Type)	1.9[(1)]
4.	Urinal (Direct Flush)	1.9[(1)]

Notes to Table 7.6.4.2.A.:

[(1)] Urinals equipped with automatic flushing devices shall be controlled to prevent unnecessary flush cycles during *building* down time.

(3) In *buildings* classified as Group C *occupancy*, the flush cycle for each *fixture* that is a water closet or urinal shall not exceed the maximum water consumption per flush cycle listed for that *fixture* in Table 7.6.4.2.B.

Table 7.6.4.2.B.
Maximum Water Consumption per Flush Cycle for Sanitary Fixtures in a Group C Occupancy

Forming Part of Sentence 7.6.4.2.(3)

Item	Column 1 *Fixture*	Column 2 Maximum Water Consumption per Flush Cycle, LPF
1.	Water Closet (Tank Type)	4.8(1)
2.	Water Closet (Direct Flush)	4.8
3.	Urinal (Tank Type)	1.9(2)
4.	Urinal (Direct Flush)	1.9(2)

Notes to Table 7.6.4.2.B.:

(1) Water closets which provide a dual flush cycle option of both 4.1 LPF or less and 6.0 LPF are deemed to comply.

(2) Urinals equipped with automatic flushing devices shall be controlled to prevent unnecessary flush cycles during *building* down time.

(4) Sentences (2) and (3) do not apply to a *fixture* located in an existing *building* where the *chief building official* is satisfied that compliance with the requirement is impracticable because of maintenance or operational difficulties.

7.6.5. Water Temperature Control

7.6.5.1. Maximum Temperature of Hot Water

(1) Except as provided in Sentences (2) and 7.6.5.3.(1), the maximum temperature of hot water supplied by fittings to *fixtures* in a *residential occupancy* shall not exceed 49°C.

(2) Sentence (1) does not apply to hot water supplied to installed dishwashers or clothes washers.

7.6.5.2. Showers

(1) Except as provided for in Sentences (2) and (3), all valves supplying fixed location shower heads, shall be individually pressure-balanced or thermostatic-mixing valves, conforming to ASME A112.18.1 / CSA B125.1, “Plumbing Supply Fittings”.

(2) An individually pressure-balanced or thermostatic-mixing valve shall not be required for showers if a single temperature water supply for such showers is controlled by a master thermostatic-mixing valve conforming to CSA B125.3, “Plumbing Fittings”.

(3) Deck-mounted, hand-held, flexible-hose spray attachments are exempt from the thermal shock requirements of Sentence (1).

(4) Pressure-balanced or thermostatic-mixing valves shall be,

(a) designed so that the outlet temperature does not exceed 49°C, or

(b) equipped with high-limit stops which shall be adjusted to a maximum hot water setting of 49°C.

7.6.5.3. Temperature Control Devices

(1) A *water distribution system* supplying hot water to any bathtub, shower or hand basin that is accessible to a patient or resident in a Group B, Division 2 or 3 occupancy or a resident of a group home, *home for special care* or residence for adults with developmental disabilities shall have one or more temperature gauges and control devices that are,

(a) accessible only to supervisory staff, and

(b) capable of being adjusted to ensure that the temperature of the water supplied to the *fixtures* does not exceed 49°C.

Section 7.7. Non-Potable Water Systems

7.7.1. Connection

7.7.1.1. Non-Potable Connection

(1) Except as permitted by Sentences (2) and (3), a non-*potable water system* shall not be connected to a *potable water system*.

(2) Make-up water may be supplied to the non-*potable water system* by,

(a) a reduced pressure *backflow preventer*, or

(b) an *air gap*.

(3) Where a clothes washer is supplied by a *rainwater* system and a *potable water system*, the *potable water system* shall be protected by dual *check valve backflow preventers* conforming to CSA B64.6, “Dual Check Valve (DuC) Backflow Preventers” for,

(b) premise isolation.

7.7.2. Identification

7.7.2.1. Markings Required

(1) Non-*potable* water piping shall be identified by markings that are permanent, distinct and easily recognized.

(2) Non-*potable water system* for re-use purposes shall be marked in accordance with Section 12 of CAN/CSA-B128.1, “Design and Installation of Non-Potable Water Systems”.

(3) A sign containing the words **NON-POTABLE WATER, DO NOT DRINK** shall be in letters at least 25 mm high with a 5 mm stroke and posted immediately above a *fixture* that is permitted to receive non-*potable* water.

7.7.3. Location

7.7.3.1. Pipes

(1) Non-*potable* water piping shall not be located,

(a) where food is prepared in a food processing plant,

(b) above food-handling equipment,

(c) above a non-pressurized *potable* water tank, or

(d) above a cover of a pressurized *potable* water tank.

7.7.3.2. Outlets

(1) Except as permitted in Sentence 7.1.5.3.(3), an outlet from a non-*potable water system* shall not be located where it can discharge into,

(a) a sink or lavatory,

(b) a *fixture* into which an outlet from a *potable water system* is discharged, or

(c) a *fixture* that is used for a purpose related to the preparation, handling or dispensing of food, drink or products that are intended for human consumption.

7.7.4. Non-Potable Water Systems for Re-use Purposes

7.7.4.1. Conformance to Standards

(1) Non-*potable water systems* for re-use purposes shall be designed, constructed and installed to conform to good engineering practice appropriate to the circumstances such as described in,

(a) the ASHRAE Handbooks,

(b) ASPE Data Books, or

(c) CAN/CSA-B128.1, “Design and Installation of Non-Potable Water Systems”.

O. Reg. 332/12, Division B, Part 7; O. Reg. 361/13, ss. 39-46.

PART 8
SEWAGE SYSTEMS

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Section 8.1. General

8.1.1. Scope

8.1.1.1. Scope

(1) The scope of this Part shall be as described in Subsection 1.1.2. of Division A.

8.1.1.2. Definitions

(1) In this Part,

Soil means in-situ, naturally occurring, unconsolidated mineral or organic material, at the earth's surface that is at least 100 mm thick and capable of supporting plant growth, and includes material compacted or cemented by soil forming processes, but does not include displaced materials such as gravel dumps, mine spoils, or like deposits.

8.1.2. Application

8.1.2.1. Classification of Systems

(1) All *sewage systems* shall be classed as one of the following:

(a) Class 1 — a chemical toilet, an incinerating toilet, a recirculating toilet, a self-contained portable toilet and all forms of privy including a *portable privy*, an *earth pit privy*, a *pail privy*, a *privy vault* and a composting toilet system,

(b) Class 2 — a *greywater* system,

(c) Class 3 — a cesspool,

(d) Class 4 — a *leaching bed* system, or

(e) Class 5 — a system that requires or uses a *holding tank* for the retention of *hauled sewage* at the site where it is produced prior to its collection by a *hauled sewage system*.

8.1.2.2. Operation and Maintenance

(1) Operation and maintenance of *sewage systems* shall comply with Section 8.9.

8.1.3. Limitations

8.1.3.1. Discharge

(1) Except as provided in Sentences (2) to (6), the *sewage system* shall be designed and *constructed* to receive only *sanitary sewage* of domestic origin.

(2) Where laundry waste is not more than 20% of the total daily design *sanitary sewage* flow, it may discharge to a *sewage system*.

(3) Where industrial process waste water is treated to the contaminant levels found in domestic *sanitary sewage*, it may discharge to a *leaching bed* provided the *treatment unit* and *sewage system* are designed in accordance with good engineering practice.

(4) Where kitchen waste water from a restaurant has passed through an operating grease *interceptor*, it may discharge to a *leaching bed* provided the *sewage system* has been designed in accordance with good engineering practice.

(5) Waste water from a kitchen equipped with a garbage grinder may be directed to the *sewage system* provided the system has been designed to accept such waste water.

(6) Water softener and iron filter discharge may be directed to the *sewage system* provided the system has been designed to accept such discharges.

(7) *Storm sewage* shall not be discharged into a *sewage system*.

(8) The *interceptor* required in Sentence (4) shall,

(a) have a minimum flow rate as required by Sentence 7.4.4.3.(8) using a 60 second drain down time, and

(b) conform to,

(i) CSA-B481.1, "Testing and Rating of Grease Interceptors Using Lard", or

(ii) CSA-B481.2, "Testing and Rating of Grease Interceptors Using Oil".

Section 8.2. Design Standards

8.2.1. General Requirements

8.2.1.1. Scope

(1) This Subsection applies to the design of *sewage systems*.

8.2.1.2. Site Evaluation

(1) A site evaluation shall be conducted on every site where a new or replacement *sewage system* is to be installed.

(2) The *percolation time* shall be determined by,

(a) conducting percolation tests, or

(b) classifying the *soil* according to one of the following methods,

(i) the Unified Soil Classification System as described in MMAH Supplementary Standard SB-6, "Percolation Time and Soil Descriptions", or

(ii) the Soil Texture Classification as described in Chapter 3 of USDA, "Soil Survey Manual".

(3) Where the *percolation time* is determined by a percolation test, there shall be a minimum of 3 locations selected, suitably spaced to accurately evaluate the *leaching bed* area, with the highest *percolation time* of the tests being used.

8.2.1.3. Sewage System Design Flows

(1) For *residential occupancies*, the total daily design *sanitary sewage* flow shall be at least the value in Column 2 as determined from Table 8.2.1.3.A.

(2) For all other *occupancies*, the total daily design *sanitary sewage* flow shall be at least the value in Column 2 as determined from Table 8.2.1.3.B.

(3) Where a *building* contains more than one establishment, the total daily design *sanitary sewage* flow shall be the sum of the total daily design *sanitary sewage* flow for each establishment.

(4) Where an *occupancy* is not listed in Table 8.2.1.3.B., the highest of metered flow data from at least 3 similar establishments shall be acceptable for determining the total daily design *sanitary sewage* flow.

Table 8.2.1.3.A.
Residential Occupancy

Forming Part of Sentence 8.2.1.3.(1)

Item	Column 1	Column 2
	Residential Occupancy	Volume, litres
1.	Apartments, Condominiums, Other Multi-family Dwellings - per person(1)	275
2.	Boarding Houses	
	a) Per person,	
	i) with meals and laundry facilities, or,	200
	ii) without meal or laundry facilities, and	150
	b) Per non-resident staff per 8 hour shift	40
3.	Boarding School - per person	300
4.	Dwellings	
	a) 1 bedroom dwelling	750
	b) 2 bedroom dwelling	1100
	c) 3 bedroom dwelling	1600
	d) 4 bedroom dwelling	2000
	e) 5 bedroom dwelling	2500
	f) Additional flow for(2)	
	i) each bedroom over 5,	500
	ii) A) each 10 m^2 (or part of it) over 200 m^2 up to 400 m^2 (3),	100
	B) each 10 m^2 (or part of it) over 400 m^2 up to 600 m^2 (3), and	75
	C) each 10 m^2 (or part of it) over 600 m^2 (3), or	50
	iii) each fixture unit over 20 fixture units	50
5.	Hotels and Motels (excluding bars and restaurants)	
	a) Regular, per room	250
	b) Resort hotel, cottage, per person	500
	c) Self service laundry, add per machine	2500
6.	Work Camp/Construction Camp, semi-permanent per worker	250

Notes to Table 8.2.1.3.A.:

(1) The *occupant load* shall be calculated using Subsection 3.1.17.

(2) Where multiple calculations of *sanitary sewage* volume is permitted, the calculation resulting in the highest flow shall be used in determining the design daily *sanitary sewage* flow.

(3) Total finished area, excluding the area of the finished *basement*.

Table 8.2.1.3.B.
Other Occupancies

Forming Part of Sentence 8.2.1.3.(2)

Item	Column 1	Column 2
	Establishments(1)	Volume, litres
1.	Airports, Bus Terminals, Train Stations, Dock/Port Facilities (Food Services excluded)	
	a) Per passenger, and	20

	b) Per employee per 8 hour shift	40
2.	Assembly Hall - per seat	
	a) No food service, or	8
	b) Food service provided	36
3.	Barber Shop/Beauty Salon - per service chair	650
4.	Bowling Alleys (Food Service not included) - per lane	400
5.	Churches and Similar Places of Worship - per seat	
	a) No kitchen facilities, or	8
	b) Kitchen facilities provided	36
6.	Country Club (excluding Food Service)	
	a) Per resident,	375
	b) Per employee per 8 hour shift, and	50
	c) Per member or patron	40
7.	Day Care Facility per person (staff and children)	75
8.	Dentist Office	
	a) Per wet service chair, and	275
	b) Per dry service chair	190
9.	Doctors Office	
	a) Per practitioner, and	275
	b) Per employee per 8 hour shift	75
10.	Factory (excluding process or cleaning waters) - per employee per 8 hour shift	
	a) No showers, or	75
	b) Including showers	125
11.	Flea Markets(2) (open not more than 3 days per week)	
	a) Per non-food service vendor space,	60
	b) Per food service establishment / 9.25 m^2 of floor space, and	190
	c) Per limited food service outlet	95
12.	Food Service Operations	
	a) Restaurant (not 24 hour), per seat	125
	b) Restaurant (24 hour), per seat	200
	c) Restaurant on controlled-access highway, per seat	400
	d) Paper service restaurant, per seat	60
	e) Donut shop, per seat	400
	f) Bar and cocktail lounge, per seat	125
	g) Drive-in restaurant per parking space	60
	h) Take-out restaurant (no seating area)	
	i) per 9.25 m^2 of floor area, and	190
	ii) per employee per 8 hour shift	75
	i) Cafeteria - per meal	12
	j) Food outlet	
	i) excluding delicatessen, bakery and meat department, per 9.25 m^2 of floor space,	40
	ii) per 9.25 m^2 of delicatessen floor space,	190
	iii) per 9.25 m^2 of bakery floor space,	190

	iv) per 9.25 m^2 of meat department floor space, and	380
	v) per water closet	950
13.	Hospitals - per bed	
	a) Including laundry facilities, or	750
	b) Excluding laundry facilities	550
14.	Long-Term Care Homes, etc. - per bed	450
15.	Office Building[3]	
	a) Per employee per 8 hour shift, or	75
	b) Per each 9.3 m^2 of floor space	75
16.	Public Parks	
	a) With toilets only per person, or	20
	b) With bathhouse, showers, and toilets per person	50
17.	Recreational Vehicle or Campground Park	
	a) Per site without water or sewer hook-up, or	275
	b) Per site with water and sewer hook-up	425
18.	Schools - per student	
	a) Day school,	30
	b) With showers,	30
	c) With cafeteria, and	30
	d) Per non-teaching employee per 8 hour shift	50
19.	Service Stations (no vehicle washing)[3]	
	a) Per water closet, and	950
	i) per fuel outlet[4], or	560
	ii) per vehicle served	20
20.	Shopping Centre (excluding food and laundry) - per 1.0 m^2 of floor space	5
21.	Stadiums, Race Tracks, Ball Parks - per seat	20
22.	Stores[3]	
	a) Per 1.0 m^2 of floor area, or	5
	b) Per water closet	1230
23.	Swimming and Bathing Facilities (Public) - per person	40
24.	*Theatres*	
	a) Indoor, auditoriums per seat,	20
	b) Outdoor, drive-ins per space, or	40
	c) Movie theatres per seat	15
25.	Veterinary Clinics	
	a) Per practitioner,	275
	b) Per employee per 8 hour shift, and	75
	c) Per stall, kennel or cage if floor drain connected	75
26.	Warehouse	
	a) Per water closet, and	950
	b) Per loading bay	150

Notes to Table 8.2.1.3.B.:

[1] The *occupant load* shall be calculated using Subsection 3.1.17.

(2) Flea markets open more than 3 days per week shall be assessed using the volumes stated under the heading “Stores”.

(3) Where multiple calculations of *sanitary sewage* volume is permitted, the calculation resulting in the highest flow shall be used in determining the design daily *sanitary sewage* flow.

(4) The number of fuel outlets is considered the maximum number of fuel nozzles that could be in use at the same time.

8.2.1.4. Clearances

(1) Unless it can be shown to be unnecessary, where the *percolation time* is 10 minutes or greater, the location of all components within a *sewage system* shall be in conformance with the clearances listed in Article 8.2.1.5. or 8.2.1.6.

(2) Unless it can be shown to be unnecessary, where the *percolation time* is less than 10 minutes, the clearances listed in Articles 8.2.1.5. and 8.2.1.6. for wells, lakes, ponds, reservoirs, rivers, springs or streams shall be increased to compensate for the lower *percolation time*.

(3) No *building* shall be *constructed* closer to any part of a *sewage system* than the clearances listed in Article 8.2.1.5. or 8.2.1.6.

(4) If more than one *sewage system* is located on a lot or parcel of land, there shall be no overlap of any part of the systems.

8.2.1.5. Clearance Distances for Class 1, 2 and 3 Sewage Systems

(1) Except as provided in Sentences 8.2.1.4.(1) and (2), no Class 1, 2 or 3 *sewage system* shall have a horizontal distance of less than that permitted by Table 8.2.1.5.

Table 8.2.1.5.
Clearance Distances for Class 1, 2 and 3 Sewage Systems

Forming Part of Sentence 8.2.1.5.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Sewage System	Minimum horizontal distance in metres from a well with watertight casing to a depth of at least 6 m	Minimum horizontal distance in metres from a spring used as a source of *potable* water or well other than a well with a watertight casing to a depth of at least 6 m	Minimum horizontal distance in metres from a lake, river, pond, stream, reservoir, or a spring not used as a source of *potable* water	Minimum horizontal distance in metres from a property line
1.	Earth Pit Privy	15	30	15	3
2.	Privy Vault Pail Privy	10	15	10	3
3.	*Greywater* System	10	15	15	3
4.	Cesspool	30	60	15	3

8.2.1.6. Clearances for a Class 4 or 5 Sewage System

(1) Except as provided in Sentences 8.2.1.4.(1) and (2), a *treatment unit* shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.A.

Table 8.2.1.6.A.
Minimum Clearances for Treatment Units

Forming Part of Sentence 8.2.1.6.(1)

Item	Column 1	Column 2
	Object	Minimum Clearance, m
1.	Structure	1.5
2.	Well	15
3.	Lake	15
4.	Pond	15
5.	Reservoir	15
6.	River	15
7.	Spring	15
8.	Stream	15
9.	Property Line	3

(2) Except as provided in Sentences 8.2.1.4.(1) and (2), a *distribution pipe* shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B. and these distances shall be increased when required by Sentence 8.7.4.2.(11).

Table 8.2.1.6.B.
Minimum Clearances for Distribution Piping

Forming Part of Sentence 8.2.1.6.(2)

Item	Column 1	Column 2
	Object	Minimum Clearance, m
1.	Structure	5
2.	Well with a watertight casing to a depth of at least 6 m	15
3.	Any other well	30
4.	Lake	15
5.	Pond	15
6.	Reservoir	15
7.	River	15
8.	Spring not used as a source of *potable* water	15
9.	Stream	15
10.	Property Line	3

(3) Except as provided in Sentences 8.2.1.4.(1) and (2), a *holding tank* shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.C.

Table 8.2.1.6.C.
Minimum Clearances for Holding Tanks

Forming Part of Sentence 8.2.1.6.(3)

Item	Column 1	Column 2
	Object	Minimum Clearance, m
1.	Structure	1.5
2.	Well with a watertight casing to a depth of at least 6 m	15
3.	Any other well	15
4.	Spring	15
5.	Property Line	3

8.2.2. Treatment and Holding Tanks

8.2.2.1. Application

(1) This Subsection applies to any tank used in a *sewage system* for collecting, treating, holding or storing *sanitary sewage*.

8.2.2.2. Tanks

(1) Subject to Sentence (3), a tank that is used as a *treatment unit* in a Class 4 *sewage system* or a *holding tank* in a Class 5 *sewage system* shall conform to the requirements of CSA B66, "Design, Material, and Manufacturing Requirements for Prefabricated Septic Tanks and Sewage Holding Tanks".

(2) Subject to Sentence (3), material standards, access and construction methods and practices for a tank used for other Classes of *sewage systems* shall conform to the requirements of CSA B66, "Design, Material, and Manufacturing Requirements for Prefabricated Septic Tanks and Sewage Holding Tanks".

(3) Tanks referred to in Sentences (1) and (2) are not required to conform to the requirements of Clause 10.2.(j) of CSA B66 "Design, Material, and Manufacturing Requirements for Prefabricated Septic Tanks and Sewage Holding Tanks".

(4) Sentence (2) does not apply to a tank that is an integral part of a prefabricated Class 1 *sewage system*.

(5) Access openings shall be located to facilitate the pumping of all compartments and the servicing of the inlet and outlet of each compartment not accessible by removal of the tank top or part of it.

(6) A tank shall not be covered by *soil* or *leaching bed fill* having a depth greater than the maximum depth of burial that the tank is designed to withstand.

(7) A tank shall be securely anchored when located in an area subject to flooding or where *ground water* levels may cause hydrostatic pressures.

8.2.2.3. Septic Tanks

(1) The minimum *working capacity* of a *septic tank* shall be the greater of 3 600 L and,

(a) in *residential occupancies*, twice the daily design *sanitary sewage* flow, or

(b) in non-*residential occupancies*, three times the daily design *sanitary sewage* flow.

(2) Every *septic tank* shall be constructed in such a manner that any *sanitary sewage* flowing through the tank will pass through at least 2 compartments.

(3) The *working capacity* of the compartments required in Sentence (2) shall be sized such that,

(a) the first compartment is at least 1.3 times the daily design *sanitary sewage* flow but in no case less than 2 400 L, and

(b) each subsequent compartment shall be at least 50% of the first compartment.

(4) Where multiple tanks are to be used to meet the requirements of Sentences (2) and (3), the tanks shall be connected in series such that,

(a) the first tank in the series shall have at least a capacity as calculated in Clause (3)(a), however at no time shall a tank having a *working capacity* of less than 3 600 L be used,

(b) all additional tanks after the first tank, excluding pump or dosing tanks shall have at least a *working capacity* equal to the volume required by Clause (3)(b),

(c) the pipe between the outlet of one tank and the inlet of the next tank in the series shall have a minimum slope of 2 per cent,

(d) there shall be no partitions in the tank except where a partition is required to maintain the structural integrity of the tank, in which case openings within the partition shall be provided to allow the free movement of *sanitary sewage* throughout the tank, and

(e) all piping between tanks shall be continuous and shall be connected to the tank through the use of flexible watertight seals that will permit differential movement between the tanks.

(5) Partitions separating the *septic tank* into compartments shall extend at least 150 mm above the liquid level at the outlet, and there shall be one or more openings through or above the partition.

(6) The openings required between compartments referred to in Sentence (2) shall have a total cross-sectional area of at least three times the area of the inlet pipe and be located between the top and a level 150 mm above the liquid level at the outlet to provide for the free flow of air between compartments.

(7) *Sanitary sewage* shall pass from one compartment to another of the *septic tank* as follows:

(a) by means of a device similar to that described in CSA B66, “Design, Material, and Manufacturing Requirements for Prefabricated Septic Tanks and Sewage Holding Tanks” for outlet devices, or

(b) through two or more openings through the partition located in a horizontal line, and evenly spaced across the width of the partition, centred at approximately 40% of the liquid depth below the surface of the liquid, and having a total area of between three and five times that of the cross-sectional area of the inlet pipe.

(8) A *septic tank* shall be of such design and construction as will permit the collection and holding of *sanitary sewage* in it to a depth of not less than 1 000 mm, except that a depth of not less than 900 mm is permitted where the excavation is in rock, or to avoid rupture or displacement of the tank due to *ground water* pressure.

(9) Except as provided in Sentences (10) and (11), every *septic tank* shall be installed in such a manner that the access openings are located not more than 300 mm below the ground surface.

(10) Where the top of the *septic tank* is located more than 300 mm below the ground surface, it shall be equipped with risers that extend from the access opening of the *septic tank* to within 300 mm of the ground surface.

(11) Where risers are used they shall conform to the requirements of CSA B66, "Design, Material, and Manufacturing Requirements for Prefabricated Septic Tanks and Sewage Holding Tanks", and shall have adequate access openings to allow for regular maintenance of the *septic tank*.

8.2.2.4. Holding Tanks

(1) All *holding tanks* shall be of such design and construction as will allow the complete removal of solid matter that can be expected to settle in the *holding tank* through an apparatus or device suitable for allowing the contents of the *holding tank* to be removed from the *holding tank*.

(2) A *holding tank* shall have a *working capacity* of not less than 9 000 L.

(3) Where two or more tanks are used to meet the requirement of Sentence (2), they shall be deemed to be one *holding tank* provided they are connected in such a manner as will allow the *sanitary sewage* contained in them to flow between the tanks.

(4) The *working capacity* of the tanks described in Sentence (3) shall not include any portion of any tank that cannot be completely drained due to the manner in which the connections are made.

Section 8.3. Class 1 Sewage Systems

8.3.1. General Requirements

8.3.1.1. Scope

(1) This Section applies to the *construction* of a Class 1 *sewage system*.

8.3.1.2. Application

(1) Except as provided in Sentence (2), a Class 1 *sewage system* shall be designed to receive only human body waste for disposal.

(2) Where the *sewage system* is specifically designed for the biological decomposition of non-waterborne biodegradable kitchen wastes or requires the addition of small quantities of plant matter to improve the decomposition of human body waste, it may receive such wastes in addition to human body waste.

(3) Where the *sewage system* is designed with a drain for the removal of excess liquid, then the *sewage system* shall drain to a Class 3, 4, or 5 *sewage system*.

8.3.2. Superstructure Requirements

8.3.2.1. Construction Requirements

(1) A privy as described in Subsections 8.3.3. to 8.3.5. shall be enclosed with a superstructure that,

(a) is *constructed* of strong durable weatherproof materials,

(b) has a solid floor supported by a sill *constructed* of treated timber, masonry or other material of at least equal strength and durability,

(c) is easily sanitized,

(d) unless it is equipped solely as a urinal, is equipped with one or more seats each having a cover and being supported by an enclosed bench or riser that is lined with an impervious material on all interior vertical surfaces,

(e) is equipped with a self-closing door,

(f) has one or more openings for purposes of ventilation, all of which are screened,

(g) has a ventilation duct that is screened at the top end and that extends from the underside of the bench or riser to a point above the roof of the superstructure, and

(h) shall not have any openings for the reception of human body waste, other than urinals and those *constructed* in accordance with Clause (1)(d).

8.3.3. Earth Pit Privy

8.3.3.1. Construction Requirements

(1) An *earth pit privy* shall be *constructed* in the following manner:

(a) the bottom of the pit shall be at least 900 mm above the *high ground water table*,

(b) the sides of the pit shall be reinforced so as to prevent their collapse,

(c) the pit shall be surrounded on all sides and on its bottom by not less than 600 mm of *soil* or *leaching bed fill*, and

(d) the *soil* or *leaching bed fill* around the base of the sides of the superstructure of the *earth pit privy* shall be raised or mounded to a height of at least 150 mm above ground level.

8.3.4. Privy Vaults and Pail Privy

8.3.4.1. Construction Requirements

(1) A *privy vault* or a *pail privy* shall be *constructed* in the following manner:

(a) the container or structure that is to be used for the holding or storage of *sanitary sewage* shall be watertight and made of a material that can be easily cleaned,

(b) the *soil* or *leaching bed fill* around the base of the sides of the superstructure shall be raised or mounded to a height of at least 150 mm above ground level, and

(c) the surface of the ground in the area of the *privy vault* or *pail privy* shall be so graded that surface drainage will be diverted away from the privy.

8.3.5. Portable Privy

8.3.5.1. Construction Requirements

(1) A *portable privy* shall be *constructed* in the following manner:

(a) the *portable privy* shall have a watertight receptacle that shall be suitable for the holding and storage of any *sanitary sewage* deposited in it,

(b) the receptacle for the holding and storage of sewage shall be designed and *constructed* in such a manner as to allow it to be easily emptied and cleaned, and

(c) the *portable privy* shall be *constructed* of such material and in such a manner that it can withstand the stresses to which it will be subjected during its transportation to and from sites where it is to be used and during loading and unloading from vehicles used for the transportation of the *portable privy* to and from sites where it is to be used.

Section 8.4. Class 2 Sewage Systems

8.4.1. General Requirements

8.4.1.1. Scope

(1) This Section applies to the *construction* of a Class 2 *sewage system*.

8.4.1.2. Application

(1) A Class 2 *sewage system* shall be designed only for the treatment and disposal of *greywater*.

(2) The total daily design flow for a Class 2 *sewage system* shall be calculated based on the *fixtures* discharging to the system as follows:

(a) 200 L per *fixture unit* where there is a supply of pressurized water, and

(b) 125 L per *fixture unit* where there is no supply of pressurized water.

8.4.2. Design and Construction Requirements

8.4.2.1. Construction Requirements

(1) The bottom of the pit shall be at least 900 mm above the *high ground water table*.

(2) The pit shall be *constructed* in such a manner as to prevent the collapse of its sidewalls.

(3) Any material used to support or form the sidewalls of the pit shall be an open jointed material of a type that will permit *leaching* from the pit.

(4) The pit shall be provided with a tight, strong cover that shall remain over the pit except when it is necessary to remove it for purposes of adding *greywater* to or removing *greywater* from the pit or for purposes of maintenance of the pit.

(5) The earth around the perimeter of the pit shall be raised or mounded to a height of at least 150 mm above ground level.

(6) The surface of the ground in the area of the pit shall be so graded that surface drainage in the area will be diverted away from the pit.

(7) The pit shall be surrounded on all sides and on its bottom by at least 600 mm of *soil* having a *percolation time* of less than 50 minutes.

8.4.2.2. Maximum Sewage Flow

(1) A Class 2 *sewage system* shall not be *constructed* where the daily design *greywater* flow to the system exceeds 1 000 L/day.

8.4.2.3. Sizing

(1) A Class 2 *sewage system* shall be designed and *constructed* so that the loading rate to the side walls shall be not more than the value calculated using the formula,

$$L_R = \frac{400}{T}$$

where,

L_R = *loading rate* of the sidewalls in litres per day/m^2, and

T = *percolation time*.

Section 8.5. Class 3 Sewage Systems

8.5.1. General Requirements

8.5.1.1. Scope

(1) This Section applies to the *construction* of a Class 3 *sewage system*.

8.5.1.2. Application

(1) A Class 3 *sewage system* shall not be *constructed* where the daily design *sanitary sewage* flow to the system exceeds 1 000 L/day.

(2) A Class 3 *sewage system* shall be designed to receive only the contents of a Class 1 *sewage system* or *effluent* from a Class 1 *sewage system* for disposal.

8.5.2. Design and Construction Requirements

8.5.2.1. Construction Requirements

(1) The bottom of the cesspool shall be at least 900 mm above the *high ground water table*.

(2) The cesspool shall be *constructed* in such a manner as to prevent the collapse of its sidewalls.

(3) Any material used to support or form the sidewalls of the cesspool shall be an open jointed material of a type that will permit *leaching* from the cesspool.

(4) The cesspool shall be provided with a tight strong cover that shall remain over the cesspool except when it is necessary to remove it for the purposes of adding *sanitary sewage* to or removing *sanitary sewage* from the cesspool or for purposes of maintenance of the cesspool.

(5) Where the cesspool extends to the ground surface, the cover required in Sentence (4) shall be lockable.

(6) The *soil* or *leaching bed fill* around the perimeter of the cesspool shall be raised or mounded to a height of at least 150 mm above ground level.

(7) The surface of the ground in the area of the cesspool shall be graded such that surface drainage in the area will be diverted away from the cesspool.

(8) The cesspool shall be surrounded on all sides and on its bottom by at least 600 mm of *soil* or *leaching bed fill*, except the top where the cesspool extends to the surface of the ground.

Section 8.6. Class 4 Sewage Systems

8.6.1. General Requirements

8.6.1.1. Scope

(1) This Section applies to the *construction* of a Class 4 *sewage system*.

8.6.1.2. General Requirements

(1) The *treatment unit* shall be connected to a *leaching bed constructed* in accordance with the requirements of Section 8.7.

8.6.1.3. Pumps and Siphons

(1) Where the total length of *distribution pipe* required is 150 m or more, the *sewage system* shall have at least one pump or a siphon contained in a dosing tank that may be a separate compartment within the tank structure, for distribution of the *effluent*.

(2) Alternating siphons shall not be installed in a *sewage system*.

(3) Where 2 or more pumps are employed within a dosing tank, the pumps shall be designed such that the pumps alternate dosing, and dosing shall continue in the event that one pump fails.

(4) Where a pump or siphon is required, the pump or siphon shall be designed to discharge a dose of at least 75% of the internal volume of the *distribution pipe* within a time period not exceeding fifteen minutes.

8.6.2. Treatment Units

8.6.2.1. Septic Tank Systems

(1) An *effluent* filter shall be installed in the outlet flow path of every *septic tank* that discharges *effluent* to a *leaching bed*.

(2) The *septic tank effluent* filter required by Sentence (1) shall,

(a) conform to the requirements of NSF/ANSI 46, "Evaluation of Components and Devices Used in Wastewater Treatment Systems",

(b) be sized to filter particles of 1.6 mm,

(c) have a minimum area of 550 cm^2, and

(d) be installed in accordance with the manufacturer's recommendations.

(3) A secured access opening to allow for regular maintenance of the *effluent* filter shall be provided at the ground surface.

8.6.2.2. Other Treatment Units

(1) Except as provided in Sentence (2), a *treatment unit*, other than a *septic tank*, shall be designed such that the *effluent* does not exceed, for the level of the *treatment unit* set out in Column 1 of Table 8.6.2.2., the maximum concentrations set out opposite it in Columns 2 and 3 of Table 8.6.2.2.

Table 8.6.2.2.
Other Treatment Unit Effluent Quality Criteria

Forming Part of Sentences 8.6.2.2.(1) and (2)

Item	Column 1	Column 2	Column 3
	Classification of Treatment Unit(1)	Suspended Solids(2)	$CBOD_5$(2)
1.	Level II	30	25
2.	Level III	15	15
3.	Level IV	10	10

Notes to Table 8.6.2.2.:

(1) The classifications of *treatment units* specified in Column 1 correspond to the levels of treatment described in CAN/BNQ 3680-600, "Onsite Residential Wastewater Treatment Technologies".

(2) Maximum concentration in mg/L based on a 30 day average.

(2) A *treatment unit* that is used in conjunction with a *leaching bed constructed* as a *shallow buried trench*, *Type A dispersal bed* or *Type B dispersal bed* shall be designed such that the *effluent* does not exceed the maximum concentrations set out opposite a Level IV *treatment unit* in Columns 2 and 3 of Table 8.6.2.2.

(3) All *treatment units* referred to in Sentences (1) and (2) that contain mechanical components shall be equipped with an audible and visual warning alarm so located to warn the occupants of the *building* served or the operator of the *treatment unit* of a malfunction in the operation of the *treatment unit*.

(4) All *treatment units* referred to in Sentences (1) and (2) shall permit the sampling of the *effluent*.

(5) A *treatment unit* is deemed to comply with Sentences (1) and (2) if it has been certified to CAN/BNQ 3680-600, "Onsite Residential Wastewater Treatment Technologies" using a temperature condition listed under option a) or b) of Clause 8.2.2. of that standard.

(6) Every operator of a *treatment unit* shall obtain, from the manufacturer or distributor of the *treatment unit*, literature that describes the unit in detail and provides complete instructions regarding the operation, servicing, and maintenance requirements of the unit and its related components necessary to ensure the continued proper operation in accordance with the original design and specifications.

Section 8.7. Leaching Beds

8.7.1. General Requirements

8.7.1.1. Scope

(1) This Section applies to the *construction* of *leaching beds*.

8.7.1.2. Limitation on Installation

(1) The design and installation of a *shallow buried trench*, *Type A dispersal bed* or *Type B dispersal bed* shall be carried out by a person competent in this field of work.

8.7.2. Design and Construction Requirements

8.7.2.1. General Requirements

(1) A *leaching bed* shall not be located,

(a) in an area that has an average slope that exceeds one unit vertically to four units horizontally,

(b) in *soil* or *leaching bed fill* having a *percolation time* of,

(i) less than one minute, or greater than 125 minutes if *constructed* as a *shallow buried trench*, or

(ii) less than one minute, or greater than 50 minutes for all other *leaching beds*, or

(c) in or on an area that is subject to flooding that may be expected to cause damage to the *leaching bed* or impair the operation of the *leaching bed*.

(2) A *leaching bed* shall not be covered with any material having a hydraulic conductivity less than 0.01 m/day.

(3) The surface of the *leaching bed* shall be shaped to shed water and together with the side slopes of any raised portion, shall be protected against erosion in such a manner as to not inhibit the evaporation and transpiration of waters from the *soil* or *leaching bed fill*, and to not cause plugging of the *distribution pipe*.

(4) No part of a *leaching bed* shall be sloped steeper than 1 unit vertically to 4 units horizontally.

(5) A *leaching bed* shall be designed to be protected from compaction or any stress or pressure that may result in,

(a) the impairment or destruction of any pipe in the *leaching bed*, or

(b) the smearing of the *soil* or *leaching bed fill*.

8.7.2.2. Distribution Pipes within Leaching Beds

(1) Sentence (2) applies to the design and *construction* of a *leaching bed* with *distribution pipes* used within the *leaching bed*.

(2) The *header line* and *distribution pipes* within a *leaching bed* shall be designed and *constructed* so that they can be detected by,

(a) magnetic means,

(b) means of a 14 gauge TW solid copper light coloured plastic coated tracer wire, or

(c) other means of subsurface detection.

8.7.3. Absorption Trench Construction

8.7.3.1. Length of Distribution Pipe

(1) The total length of *distribution pipe* shall,

(a) not be less than 30 m when *constructed* as a *shallow buried trench*, or

(b) not be less than 40 m for any other *absorption trench*.

(2) Except as provided in Sentences (1), (3), and (4) every *leaching bed constructed* by means of *absorption trenches* shall have a total length of *distribution pipe* not less than the value determined by the formula,

$$L = \frac{QT}{200}$$

where,

L = total length of *distribution pipe* in metres,

Q = the total daily design *sanitary sewage* flow in litres, and

T = the design *percolation time*.

(3) Except as provided in Sentence (1), where a *leaching bed* receives *effluent* from a Level II, Level III or Level IV *treatment unit* as described in Table 8.6.2.2., the *leaching bed* may have a total length of *distribution pipe* not less than the value determined by the formula,

$$L = \frac{QT}{300}$$

where,

L = total length of *distribution pipe* in metres,

Q = the total daily design *sanitary sewage* flow in litres, and

T = the design *percolation time*.

(4) Except as provided in Sentence (1), where the *leaching bed* is *constructed* as a *shallow buried trench*, the total length of the *distribution pipe* shall not be less than the value determined by Table 8.7.3.1.

Table 8.7.3.1.
Length of Distribution Pipe in Shallow Buried Trench

Forming Part of Sentence 8.7.3.1.(4)

Item	Column 1	Column 2
	Percolation Time, (T) of *Soil*, min	Length of *Distribution Pipe*, m
1.	$1 < T \leq 20$	Q/75
2.	$20 < T \leq 50$	Q/50
3.	$50 < T < 125$	Q/30

where,

Q = the total daily design *sanitary sewage* flow in litres, and

T = the design *percolation time*.

8.7.3.2. Absorption Trenches

(1) Except as provided in Sentence (2), *absorption trenches* shall be,

(a) approximately the same length and not more than 30 m in length,

(b) not less than 500 mm and not more than 1 000 mm in width,

(c) not less than 600 mm and not more than 900 mm in depth,

(d) centred not less than 1 600 mm apart,

(e) located so that the bottom of the *absorption trench* is not less than 900 mm above the *high ground water table*, rock or *soil* with a *percolation time* of more than 50 minutes, and

(f) backfilled, after the installation of the *distribution pipe* with *leaching bed fill*, so as to ensure that after the *leaching bed fill* settles, the surface of the *leaching bed* will not form any depressions.

(2) *Absorption trenches constructed* as a *shallow buried trench* shall be,

(a) approximately the same length and not more than 30 m in length,

(b) not less than 300 mm and not more than 600 mm in width,

(c) not less than 300 mm and not more than 600 mm in depth,

(d) centred not less than 2 000 mm apart,

(e) not less than 900 mm at all points on the bottom of the *absorption trench* above the *high ground water table* or rock, and

(f) backfilled, after the installation of the *distribution pipe* with *leaching bed fill*, so as to ensure that after the *leaching bed fill* settles, the surface of the *leaching bed* will not form any depressions.

8.7.3.3. Distribution Pipe

(1) Except for a *shallow buried trench*, the *distribution pipe* used in the *construction* of a *leaching bed* shall be,

(a) not less than 3 in. trade *size* for gravity flow systems,

(b) installed with a uniform downward slope from the inlet with a drop of not less than 30 mm and not more than 50 mm for each 10 m of *distribution pipe* for gravity flow systems, and

(c) installed within a layer of stone conforming to Sentence (5).

(2) Prior to backfilling, the stone layer required by Clause (1)(c) shall be protected in such a manner so as to prevent *soil* or *leaching bed fill* from entering the stone by completely covering it with,

(a) untreated building paper, or

(b) a permeable geo-textile fabric.

(3) Every pressurized *distribution pipe* shall be self-draining so as to prevent freezing of its contents.

(4) Every pressurized *distribution pipe* shall,

(a) be not less than 1 in. trade *size*, and

(b) have orifices of at least 3 mm in diameter, spaced equally along the length of the pipe.

(5) The stone layer required by Clause (1)(c) shall,

(a) be comprised of washed septic stone, free of fine material, with gradation conforming to Table 8.7.3.3.,

(b) be not less than 500 mm in width,

(c) extend not less than 150 mm below the *distribution pipe*, and

(d) extend not less than 50 mm above the *distribution pipe*.

Table 8.7.3.3.
Gradation of Septic Stone

Forming Part of Sentences 8.7.3.3.(5) and 8.7.8.2.(6)

Item	Column 1	Column 2
	Particle Size	Percent Passing
1.	53 mm	100
2.	19 mm	0-5
3.	75 µm	0-1

8.7.4. Fill Based Absorption Trenches

8.7.4.1. Loading Requirements

(1) The area described in Sentence 8.7.4.2.(1) shall be designed such that the *loading rate* does not exceed, for *soil* having a *percolation time* set out in Column 1 of Table 8.7.4.1., the maximum value set out opposite it in Column 2 of Table 8.7.4.1.

Table 8.7.4.1.
Loading Rates for Fill Based Absorption Trenches and Filter Beds

Forming Part of Sentences 8.7.4.1.(1) and 8.7.5.2.(2)

Item	Column 1	Column 2
	Percolation Time (T) of *Soil*, min	Loading Rates, (L/m^2)/day
1.	$1 < T \leq 20$	10
2.	$20 < T \leq 35$	8

3.	$35 < T \leq 50$	6
4.	$T > 50$	4

8.7.4.2. Construction Requirements

(1) Except for a *shallow buried trench*, a *leaching bed* comprised of *absorption trenches* may be *constructed* in *leaching bed fill*, if unsaturated *soil* or *leaching bed fill* complying with Subclause 8.7.2.1.(1)(b)(ii) extends,

(a) to a depth of at least 250 mm over the area covered by the *leaching bed fill*, and

(b) for at least 15 m beyond the outer *distribution pipes* in any direction in which the *effluent* entering the *soil* or *leaching bed fill* will move horizontally.

(2) If the unsaturated *soil* or *leaching bed fill* described in Sentence (1) has a *percolation time* greater than 15 minutes, any additional *leaching bed fill* added to it to form the *leaching bed* shall have a *percolation time* not less than 75% of the *percolation time* of the unsaturated *soil* or *leaching bed fill* to which it is added.

(3) *Leaching bed fill* that does not meet the requirements of Sentence (2) may be used to form the *leaching bed* if,

(a) the distance from the bottom of the *absorption trench* to the underlying *soil* is not less than 900 mm, or

(b) where the distance from the bottom of the *absorption trench* to the underlying *soil* is less than 900 mm, the *percolation time* of the least permeable *soil* or *leaching bed fill* within 900 mm from the bottom of the *absorption trench* is used to calculate the length of the *distribution pipe* under Article 8.7.3.1.

(4) Sentence (2) does not apply to any *leaching bed fill* added as backfill above the stone layer in which the *distribution pipe* is located.

(5) All *leaching bed fill* added shall be stabilized against erosion.

(6) The site to which the *leaching bed fill* is added shall be generally clear of vegetation.

(7) The *leaching bed fill* that is added shall be compacted in layers in such a manner as to avoid uneven settlement of the *distribution pipes*.

(8) Any *distribution boxes*, *header lines*, *absorption trenches*, or *distribution pipes* shall be installed only after the *leaching bed fill* has been compacted in accordance with Sentence (7).

(9) Except as provided in Sentence (10), the sides of the added *leaching bed fill* shall be sloped to ensure stability, but shall not be steeper than one unit vertically to four units horizontally.

(10) The side slope of the *leaching bed fill* may be increased up to one unit vertically to three units horizontally if measures are taken to prevent erosion and ensure stability of the *leaching bed fill*.

(11) The distances set out in Column 2 of Table 8.2.1.6.B. shall be increased by twice the height that the *leaching bed* is raised above the original grade.

8.7.5. Filter Beds

8.7.5.1. Application

(1) The total daily design *sanitary sewage* flow shall not exceed,

(a) 5 000 L where the *treatment unit* is a *septic tank*, or

(b) 10 000 L where the *treatment unit* is a Level II, Level III or Level IV *treatment unit* as described in Table 8.6.2.2.

8.7.5.2. Loading Requirements

(1) The effective area of the surface of the filter medium in each filter bed shall be at least 10 m^2 and not more than 50 m^2.

(2) The area described in Sentence 8.7.4.2.(1) shall be designed such that the *loading rate* does not exceed, for *soil* having a *percolation time* set out in Column 1 of Table 8.7.4.1., the maximum value set out opposite it in Column 2 of Table 8.7.4.1.

(3) Except as provided in Sentence (5), where the total daily design *sanitary sewage* flow does not exceed 3 000 L, the effective area shall be such that the loading on the surface of the filter medium does not exceed 75 L/m^2 per day.

(4) Except as provided in Sentence (5), where the total daily design *sanitary sewage* flow exceeds 3 000 L,

(a) the effective area shall be such that the loading on the surface of the filter medium does not exceed 50 L/m^2 per day, and

(b) the *leaching bed* shall be comprised of more than one filter bed, each of similar size and adjacent to each other.

(5) Where a Level II, Level III or Level IV *treatment unit* as described in Table 8.6.2.2. is used in conjunction with a filter bed, the effective area shall be such that the loading on the surface of the filter medium does not exceed 100 L/m^2 per day.

8.7.5.3. Construction Requirements

(1) Sentences 8.7.4.2.(1), (2) and (4) to (11) apply to the *construction* of a filter bed.

(2) The lines of *distribution pipe* shall be evenly spaced over the surface of the filter medium to which the *sanitary sewage* is applied.

(3) The filter medium shall have a minimum depth of 750 mm below the stone layer and shall be clean sand comprised of particles ranging in size between the limits of,

(a) an effective size of 0.25 mm with a uniformity coefficient not less than 3.5,

(b) an effective size of 2.5 mm with a uniformity coefficient not greater than 1.5, and

(c) having a uniformity coefficient not greater than 4.5.

(4) The filter medium shall be unsaturated for its entire depth.

(5) Where there is more than one filter bed in a *leaching bed*, the filter beds shall be separated by at least 5 m between the *distribution pipes* of the filter beds.

(6) The base of the filter medium shall extend to a thickness of at least 250 mm over an area meeting the requirements of the following formula:

$$A = \frac{QT}{850}$$

where,

A = the area of contact in square metres between the base of the filter medium and the underlying *soil*,

Q = the total daily design *sanitary sewage* flow in litres, and

T = the lesser of 50 and the *percolation time* of the underlying *soil*.

(7) The stone layer required by Clause 8.7.3.3.(1)(c) shall be not less than 900 mm above the *high ground water table*, rock or *soil* with a *percolation time* of more than 50 minutes.

8.7.6. Shallow Buried Trench

8.7.6.1. Construction Requirements

(1) The *treatment unit* used in conjunction with a *leaching bed constructed* as a *shallow buried trench* shall provide an *effluent* quality that does not exceed the maximum concentrations set out opposite a Level IV *treatment unit* in Columns 2 and 3 of Table 8.6.2.2.

(2) The *effluent* shall be distributed through a *pressurized distribution system* having a pressure head of not less than 600 mm when measured to the most distant point from the pump.

(3) The pump chamber shall be sized to provide sufficient storage volume so that the *effluent* is evenly dosed on an hourly basis over a 24-hour period.

(4) A *shallow buried trench* shall not be *constructed* unless the *soil* or *leaching bed fill* is sufficiently dry to resist compaction and smearing during excavation.

(5) Every *chamber* shall be as wide as the *shallow buried trench* in which it is contained, and the cross-sectional height of the *chamber* at its centre point shall not be less than half the width of the trench.

(6) Every *chamber* shall contain only one pressurized *distribution pipe*.

8.7.7. Type A Dispersal Beds

8.7.7.1. Construction Requirements

(1) The *treatment unit* used in conjunction with a *leaching bed constructed* as a *Type A dispersal bed* shall provide an *effluent* quality that does not exceed the maximum concentrations set out opposite a Level IV *treatment unit* in Columns 2 and 3 of Table 8.6.2.2.

(2) A *Type A dispersal bed* shall be backfilled with *leaching bed fill* so as to ensure that, after the *leaching bed fill* settles, the surface of the *leaching bed* will not form any depressions.

(3) The combined thickness of the sand layer and the stone layer of a *Type A dispersal bed* shall not be less than 500 mm.

(4) Except as provided in Sentence (5), the sand layer shall,

(a) be comprised of sand that has,

(i) a *percolation time* of at least 6 and not more than 10 min, and

(ii) not more than 5% fines passing through a 0.074 mm (No. 200) sieve,

(b) have a minimum thickness of 300 mm, and

(c) have an area that is not less than the lesser of,

(i) the area of the stone layer determined in accordance with Sentence (6), and

(ii) the value determined by the formula,

$$A = \frac{QT}{850}$$

where,

A = the area of contact in square metres between the base of the sand and the underlying *soil*,

Q = the total daily design *sanitary sewage* flow in litres, and

T = the lesser of 50 and the *percolation time* of the underlying *soil*.

(5) Where the underlying *soil* has a *percolation time* of more than 15 min, the sand layer referred to in Sentence (4) shall,

(a) extend to at least 15 m beyond the perimeter of the *treatment unit*, or *distribution pipes* if utilized, in any direction that the *effluent* entering the *soil* will move horizontally, and

(b) have an area that is not less than the value determined by the formula,

$$A = \frac{QT}{400}$$

where,

A = the area of contact in square metres between the base of the sand and the underlying *soil*, or *leaching bed fill* if utilized,

Q = the total daily design *sanitary sewage* flow in litres, and

T = the lesser of 50 and the *percolation time* of the underlying *soil*.

(6) The stone layer shall,

(a) be rectangular in shape with the long dimension parallel to the site contours,

(b) have a minimum thickness of 200 mm,

(c) be protected in the manner described in Sentence 8.7.3.3.(2), and

(d) be *constructed* such that the bottom of the stone layer is at least 600 mm above the *high ground water table*, rock or *soil* with a *percolation time* of 1 min or less or greater than 50 min.

(e) have a minimum area not less than the value determined by the formula,

$$A = Q/B$$

where,

A = the area of the stone layer in square metres,

B = the following amount,

(i) 50, if the total daily design *sanitary sewage* flow exceeds 3 000 litres, or

(ii) 75, if the total daily design *sanitary sewage* flow does not exceed 3 000 litres, and

Q = the total daily design *sanitary sewage* flow in litres.

(7) *Leaching bed fill* with a *percolation time* not exceeding 15 min may be used to satisfy the vertical separation requirements of Clause (6)(d), provided that the *leaching bed fill* conforms to the requirements specified in Sentence (5) regardless of the *percolation time* of the underlying *soil*.

(8) The *effluent* shall be evenly distributed within the stone layer to within 600 mm of the perimeter of the stone layer.

(9) The stone layer shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B. and these distances shall be increased when required by Sentence 8.7.4.2.(11).

8.7.8. Type B Dispersal Beds

8.7.8.1. General Requirements

(1) Except as provided in Sentence (2) and Sentence 8.7.8.2.(2), a *Type B dispersal bed* shall conform to the requirements of Article 8.7.2.1.

(2) A *Type B dispersal bed* shall not be located in an area that has an average slope that exceeds one unit vertically to seven units horizontally.

8.7.8.2. Construction Requirements

(1) The *treatment unit* used in conjunction with a *leaching bed constructed* as a *Type B dispersal bed* shall provide an *effluent* quality that does not exceed the maximum concentrations set out opposite a Level IV *treatment unit* in Columns 2 and 3 of Table 8.6.2.2.

(2) A *Type B dispersal bed* shall be,

(a) rectangular in shape with the long dimension parallel to the site contours,

(b) not more than 1 000 mm in depth measured from the bottom of the stone layer to the finished grade when installed in *soil* with a *percolation time* that exceeds 15 min, and

(c) backfilled with *leaching bed fill* so as to ensure that, after the *leaching bed fill* settles, the surface of the *leaching bed* will not form any depressions.

(3) The bottom of the stone layer shall be at least 600 mm above the *high ground water table*, rock or *soil* with a *percolation time* greater than 50 min.

(4) The *effluent* shall be distributed over the *Type B dispersal bed* through a *pressurized distribution system* having a pressure head of not less than 600 mm when measured to the most distant point from the pump.

(5) The *distribution pipes* shall,

(a) be self-draining so as to prevent freezing of their contents, and

(b) have orifices of at least 3 mm in diameter, spaced equally along the length of the pipes.

(6) The stone layer containing the *distribution pipes* shall,

(a) be comprised of washed septic stone, free of fine material, with gradation conforming to Table 8.7.3.3.,

(b) extend not less than 250 mm below the *distribution pipe*, and

(c) extend not less than 50 mm above the *distribution pipe*.

(7) The *distribution pipes* shall be spaced not more than 1.2 m apart with the outermost pipe spaced not more than 600 mm from the edge of the bed.

(8) The pump chamber shall be sized to provide sufficient storage volume so that the *effluent* is evenly dosed on an hourly basis over a 24-hour period.

(9) When there is more than one *Type B dispersal bed* in a *leaching bed*, the *Type B dispersal beds* shall be separated by at least 5 m measured from the edge of the stone layers.

(10) A *Type B dispersal bed* shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B. and these distances shall be increased when required by Sentence 8.7.4.2.(11).

8.7.8.3. Design Requirements

(1) The area of a *Type B dispersal bed* shall not be less than the minimum area determined in accordance with Clause (2)(a) or (b).

(2) For the purposes of Sentence (1), the minimum area is either of the following,

(a) the area calculated based on the *loading rates* for Type 2 effluent set out in the Column headed "Type 2" found in Table 2-8 of the BCMOH, "Sewerage System Standard Practice Manual", or

(b) the value determined by the formula,

$$A = \frac{QT}{400}$$

where,

A = the area of contact in square metres between the stone layer and the underlying *soil*,

Q = the total daily design *sanitary sewage* flow in litres, and

T = the *percolation time* of the underlying *soil*.

(3) The linear *loading rates* of the underlying *soil* shall not be greater than,

(a) the linear *loading rates* set out in Table 2-11 of BCMOH, "Sewerage System Standard Practice Manual", where the area of the *Type B dispersal bed* is determined in accordance with Clause (2)(a), or

(b) the following linear *loading rate*, where the area of the *Type B dispersal bed* is determined in accordance with Clause (2)(b),

(i) 40 L/m, for *soil* having a *percolation time* equal to or greater than 24 min, or

(ii) 50 L/m, for *soil* having a *percolation time* less than 24 min.

(4) The width of a *Type B dispersal bed* shall not exceed 4 m.

Section 8.8. Class 5 Sewage Systems

8.8.1. Application

8.8.1.1. Prohibited Installation

(1) Except as provided in Article 8.8.1.2., a Class 5 *sewage system* shall not be installed.

8.8.1.2. Acceptable Installation

(1) A Class 5 *sewage system* may be installed in the following circumstances:

(a) where the proposed use of the *sewage system* is for a temporary operation, excluding seasonal recreational use, not exceeding 12 months in duration,

(b) to remedy an unsafe *sewage system* where the remediation of the unsafe condition by the installation of a Class 4 *sewage system* is impracticable,

(c) to upgrade a *sewage system* serving an existing *building*, where upgrading through the use of a Class 4 *sewage system* is not possible due to lot size, site slope or clearance limitations, or

(d) as an interim measure for a lot or parcel of land until municipal sewers are available, provided that the municipality undertakes to ensure the continued operation of an approved *hauled sewage system* until the municipal sewers are available.

(2) Where a Class 5 *sewage system* is installed, a written agreement for the disposal of *sanitary sewage* from the *sewage system* shall be entered into with a *hauled sewage system* operator.

8.8.2. General Requirements

8.8.2.1. Construction Requirements

(1) All Class 5 *sewage systems* shall be equipped with a device that shall produce an audible and visual warning alarm so located to warn that the *sewage system* is nearing capacity.

(2) The device required in Sentence (1) shall be designed to provide suitable advance warning to the *building* occupants considering,

(a) the total daily design *sanitary sewage* flow,

(b) the location of the Class 5 *sewage system*, and

(c) the response time of the *hauled sewage system* contractor.

(3) Except as provided in Sentence (4), all *holding tanks* shall be provided with a vent that,

(a) is not less than 3 in. trade *size*,

(b) terminates at least,

(i) 300 mm above finished grade with a vent cap, or

(ii) 600 mm above finished grade with a vent cap when the *holding tank* is located in an area subject to flooding, and

(c) terminates at least 3.5 m away from any air inlet, window, or door.

(4) A vent from a *holding tank* may connect into the *venting system* of the *building* served by the *holding tank* provided that,

(a) the vent is not less than 3 in. trade *size*, and

(b) the installation of the vent shall conform to the requirements in Part 7.

8.8.2.2. Sizing of Holding Tanks

(1) All *holding tanks* used in residential dwellings shall have a minimum 7 day holding capacity based on the total daily design *sanitary sewage* flow.

Section 8.9. Operation and Maintenance

8.9.1. General

8.9.1.1. Scope

(1) This Section applies to the operation and maintenance of all *sewage systems*.

8.9.1.2. General Requirements for Operation and Maintenance

(1) Every *sewage system* shall be operated and maintained so that,

(a) the *sewage system* or any part of it shall not emit, discharge or deposit *sanitary sewage* or *effluent* onto the surface of the ground,

(b) *sanitary sewage* or *effluent* shall not emit, discharge, seep, leak or otherwise escape from the *sewage system* or any part of it other than from a place or part of the *sewage system* where the system is designed or intended to discharge the *sanitary sewage* or *effluent*, and

(c) except as provided in Sentence (2), *sanitary sewage* or *effluent* shall not emit, discharge, seep, leak or otherwise escape from the *sewage system* or any part of it into a piped water supply, well water supply, a watercourse, *ground water* or *surface water*.

(2) Clause (1)(c) does not apply to the use of a *sewage system* designed and operated such that properly treated *effluent* is discharged into *soil*.

8.9.2. Operation

8.9.2.1. Scope

(1) The requirements of this Subsection are in addition to the requirements of Subsection 8.9.1.

8.9.2.2. General

(1) Every *sewage system* shall be operated in accordance with,

(a) the basis on which the *construction* and use of the *sewage system* was approved or required under the Act or predecessor legislation, as the case may be, and

(b) the requirements of the manufacturer of the *sewage system*.

8.9.2.3. Class 4 Sewage Systems

(1) Every Class 4 *sewage system* shall be operated in accordance with the literature required by Sentence 8.6.2.2.(6).

(2) No person shall operate a *treatment unit* other than a *septic tank* unless the person has entered into an agreement whereby servicing and maintenance of the *treatment unit* and its related components will be carried out by a person who,

(a) possesses a copy of the literature required by Sentence 8.6.2.2.(6), and

(b) is authorized by the manufacturer to service and maintain that type of *treatment unit*.

(3) The person authorized by the manufacturer to service and maintain the *treatment unit* and who has entered into the agreement referred to in Sentence (2) with the person operating the *treatment unit* shall notify the *chief building official* if,

(a) the agreement is terminated, or

(b) access for service and maintenance of the *treatment unit* is denied by the person operating the *treatment unit*.

8.9.2.4. Sampling of Treatment Units

(1) Every person operating a *treatment unit* that is used in conjunction with a *leaching bed constructed* as a *shallow buried trench*, *Type A dispersal bed* or *Type B dispersal bed* shall,

(a) take a grab sample of the *effluent* to determine the level of $CBOD_5$ and suspended solids in the *effluent*,

(b) carry out the sampling required by Clause (1)(a) in accordance with the methods described in the APHA/AWWA/WEF, “Standard Methods for the Examination of Water and Wastewater”, and

(c) promptly submit the results of the sampling required by Clause (a) to the *chief building official*.

(2) Except as provided in Sentence (4), the sampling required by Sentence (1) shall be conducted,

(a) initially, once during the first 12 months after the *sewage system* was put into use, and

(b) thereafter, once during every 12 month period, at least 10 months and not more than 18 months after the previous sampling has been completed.

(3) The concentration of $CBOD_5$ and suspended solids in the grab sample described in Sentences (1) and (4) is deemed to comply with the maximum concentration requirements set out in Table 8.6.2.2. when it does not exceed 20 mg/L for each of these parameters.

(4) If the results of the sampling required by Sentence (1) do not comply with Sentence (3), the person operating the *treatment unit* shall,

(a) resample the *effluent* in accordance with Clauses (1)(a) and (b) within 6 months after the previous sampling has been completed, and

(b) promptly submit the results of the resampling required by Clause (a) to the *chief building official*.

8.9.2.5. Class 5 Sewage Systems

(1) Every Class 5 *sewage system* shall be operated in accordance with the agreement referred to in Sentence 8.8.1.2.(2).

(2) No Class 5 *sewage system* shall be operated once it is filled with *sanitary sewage* until such time as the *sanitary sewage* is removed from the *sewage system*.

8.9.3. Maintenance

8.9.3.1. Scope

(1) The requirements of this Subsection are in addition to the requirements of Subsection 8.9.1.

8.9.3.2. General

(1) Every *sewage system* shall be maintained so that,

(a) the *construction* of the *sewage system* remains in accordance with,

(i) the basis on which the *construction* and use of the *sewage system* was approved or required under the Act or predecessor legislation, as the case may be, and

(ii) the requirements of the manufacturer of the *sewage system*, and

(b) all components of the *sewage system* function in their intended manner.

(2) The land in the vicinity of a *sewage system* shall be maintained in a condition that will not cause damage to, or impair the functioning of, the *sewage system*.

8.9.3.3. Interceptors

(1) Every grease *interceptor* referred to in Article 8.1.3.1. shall be maintained in accordance with CSA-B481.4, “Maintenance of Grease Interceptors”.

8.9.3.4. Class 4 Sewage Systems

(1) *Septic tanks* and other *treatment units* shall be cleaned whenever sludge and scum occupy one-third of the *working capacity* of the tank.

8.9.3.5. Pressurized Distribution Systems

(1) The pressure head at the furthest point from the pump in all *distribution pipes* shall be checked for compliance with Articles 8.7.6.1. and 8.7.8.2. and the design specification at least every 36 months.

O. Reg. 332/12, Division B, Part 8; O. Reg. 361/13, ss. 47, 48.

PART 9
HOUSING AND SMALL BUILDINGS

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A-28	**Maximum Spans for Steel Beams Supporting a Roof and one Floor in Dwelling Units Where Beams Support Exterior Stud Walls with Brick Veneer – 3.0 kPa Specified Roof Design Snow Load**
A-29	**Maximum Spans for Steel Beams Supporting a Roof and one Floor in Dwelling Units Where Beams Support Interior Stud Walls or Exterior Stud Walls with Siding – 3.0 kPa Specified Roof Design Snow Load**
A-30	**Sizes for Spruce-Pine-Fir No. 2 Grade Exterior Wall Studs with Brick Veneer**
A-31	**Sizes for Spruce-Pine-Fir No. 2 Grade Exterior Wall Studs with Siding**
A-32	**Sizes for Northern Species No. 2 Grade Exterior Wall Studs with Brick Veneer**
A-33	**Sizes for Northern Species No. 2 Grade Exterior Wall Studs with Siding**
A-34	**Minimum Number of 38 × 89 mm Spruce-Pine-Fir Stud Posts in Exterior Stud Walls Supporting Girder Trusses and Roof Beams**
A-35	**Minimum Number of 38 × 140 mm Spruce-Pine-Fir Stud Posts in Exterior Stud Walls Supporting Girder Trusses and Roof Beams**
A-36	**Minimum Number of 38 × 89 mm Northern Species Stud Posts in Exterior Stud Walls Supporting Girder Trusses and Roof Beams**
A-37	**Minimum Number of 38 × 140 mm Northern Species Stud Posts in Exterior Stud Walls Supporting Girder Trusses and Roof Beams**

Section 9.1. General

9.1.1. Application

9.1.1.1. Scope

(1) The scope of this Part shall be as described in Subsection 1.1.2. of Division A.

9.1.1.2. Signs

(1) Signs shall conform to the requirements in Section 3.15.

9.1.1.3. Self-Service Storage Buildings

(1) *Self-service storage buildings* shall conform to the requirements in Section 3.10.

9.1.1.4. Tents and Air-Supported Structures

(1) Tents shall conform to the requirements in Subsection 3.14.1.

(2) *Air-supported structures* shall conform to the requirements in Subsection 3.14.2.

9.1.1.5. Proximity to Existing above Ground Electrical Conductors

(1) Where a *building* is constructed in close proximity to existing above ground electrical conductors, the requirements of Subsection 3.1.19. shall apply.

9.1.1.6. Food Premises

(1) The requirements of Subsection 3.7.6. apply to all *food premises*.

9.1.1.7. Radon

(1) In addition to all other requirements, a *building* in the following designated areas shall be designed and constructed so that the annual average concentration of radon 222 does not exceed 200 Bq/m^3 of air and the annual average concentration of the short lived daughters of radon 222 does not exceed 0.02 working levels inside the *building* for,

(a) the City of Elliot Lake in the Territorial District of Algoma,

(b) the Township of Faraday in the County of Hastings, and

(c) the geographic Township of Hyman in the Territorial District of Sudbury.

9.1.1.8. Building in Flood Plains

(1) *Buildings* constructed on flood plains shall,

(a) be designed and constructed in accordance with good engineering practice to withstand anticipated vertical and horizontal hydrostatic pressures acting on the structure, and

(b) incorporate floodproofing measures that will preserve the integrity of *exits* and *means of egress* during times of flooding.

9.1.1.9. Site Assembled and Factory-Built Buildings

(1) Except as provided in Sentence (2), a manufactured *building* intended for *residential occupancy* is deemed to comply with this Code if it is designed and constructed in compliance with,

(a) CSA Z240.2.1, “Structural Requirements for Manufactured Homes”, if the *building* is constructed in sections not wider than 4.88 m, or

(b) CSA A277, “Procedures for Factory Certification of Buildings”.

(2) The requirements of this Code shall apply to,

(a) *building* components designed and constructed outside the place of manufacture, and

(b) site installation of such *buildings*.

9.1.1.10. Public Pools and Public Spas

(1) *Public pools* shall conform to the requirements of Section 3.11. and *public spas* shall conform to the requirements of Section 3.12.

9.1.1.11. Shelf and Rack Storage Systems

(1) *Shelf and rack storage systems* shall conform to the requirements of Section 3.16.

Section 9.2. Reserved

Section 9.3. Materials, Systems and Equipment

9.3.1. Concrete

9.3.1.1. General

(1) Except as provided in Sentence (2), unreinforced and nominally reinforced concrete shall be designed, mixed, placed, cured and tested in accordance with the requirements for "R" class concrete stated in Clause 8.13 of CSA A23.1, "Concrete Materials and Methods of Concrete Construction".

(2) Unreinforced and nominally reinforced site-batched concrete shall be designed, mixed, placed and cured in accordance with Articles 9.3.1.2. to 9.3.1.9.

(3) Except as provided in Sentence (4), Subsection 9.15.4. and Section 9.39., reinforced concrete shall be designed to conform to the requirements of Part 4.

(4) For flat insulating concrete form walls not exceeding 2 *storeys* in *building height*, and having a maximum floor to floor height of 3 m, in *buildings* of light-frame construction containing only a single *dwelling unit*, the concrete and reinforcing shall comply with Part 4 or,

(a) the concrete shall conform to CSA A23.1, "Concrete Materials and Methods of Concrete Construction", with a maximum aggregate size of 19 mm, and

(b) the reinforcing shall,

(i) conform to CSA G30.18, "Carbon Steel Bars for Concrete Reinforcement",

(ii) have a minimum specified yield strength of 400 MPa, and

(iii) be lapped a minimum of 450 mm for 10M bars and 650 mm for 15M bars.

9.3.1.2. Cement

(1) Cement shall meet the requirements of CAN/CSA-A3001, "Cementitious Materials for Use in Concrete".

9.3.1.3. Concrete in Contact with Sulfate Soil

(1) Concrete in contact with sulfate *soil*, which is deleterious to normal cement, shall conform to the requirements in Clause 4.1.1.6. of CSA A23.1, "Concrete Materials and Methods of Concrete Construction".

9.3.1.4. Aggregates

(1) Aggregates shall,

(a) consist of sand, gravel, crushed rock, crushed air-cooled blast furnace slag, expanded shale or expanded clay conforming to CSA A23.1, "Concrete Materials and Methods of Concrete Construction", and

(b) be clean, well-graded and free of injurious amounts of organic and other deleterious material.

9.3.1.5. Water

(1) Water shall be clean and free of injurious amounts of oil, organic matter, sediment or any other deleterious material.

9.3.1.6. Compressive Strength

(1) Except as provided elsewhere in this Part, the compressive strength of unreinforced concrete after 28 days shall be not less than,

(a) 32 MPa for garage floors, carport floors and all exterior flatwork,

(b) 20 MPa for interior floors other than those for garages and carports, and

(c) 15 MPa for all other applications.

(2) Concrete used for garage and carport floors and exterior steps shall have air entrainment of 5 to 8%.

9.3.1.7. Concrete Mixes

(1) For site-batched concrete, the concrete mixes described in Table 9.3.1.7. shall be considered acceptable if the ratio of water to cementing materials does not exceed,

(a) 0.45 for garage floors, carport floors and all exterior flatwork,

(b) 0.65 for interior floors other than those for garages and carports, and

(c) 0.70 for all other applications.

(2) The size of aggregate in unreinforced concrete mixes referred to in Sentence (1) shall not exceed,

(a) 1/5 the distance between the sides of vertical forms, or

(b) 1/3 the thickness of flatwork.

Table 9.3.1.7.
Concrete Mixes

Forming Part of Sentence 9.3.1.7.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
	Maximum Size of Coarse Aggregate, mm	Materials, volume					
		Cement		Fine Aggregate (damp average coarse sand)		Coarse Aggregate (gravel or crushed stone)	
		Parts	L[(1)]	Parts	L	Parts	L
1.	14	1	28	1.75	49	2	56
2.	20	1	28	1.75	49	2.5	70
3.	28	1	28	2	56	3	84
4.	40	1	28	2	56	3.5	98

Notes to Table 9.3.1.7.:

[(1)] A 40 kg bag of cement contains 28 L.

9.3.1.8. Admixtures

(1) Admixtures shall conform to ASTM C260 / C260M, “Air-Entraining Admixtures for Concrete”, or ASTM C494 / C494M, “Chemical Admixtures for Concrete”, as applicable.

9.3.1.9. Cold Weather Requirements

(1) When the air temperature is below 5°C , concrete shall be,

(a) kept at a temperature of not less than 10°C or more than 25°C while being mixed and placed, and

(b) maintained at a temperature of not less than 10°C for 72 h after placing.

(2) No frozen material or ice shall be used in concrete described in Sentence (1).

9.3.2. Lumber and Wood Products

9.3.2.1. Grade Marking

(1) Lumber for joists, rafters, trusses and beams and for the uses listed in Table 9.3.2.1. shall be identified by a grade stamp to indicate its grade as determined by the NLGA, “Standard Grading Rules for Canadian Lumber”.

Table 9.3.2.1.
Minimum Lumber Grades for Specific End Uses

Forming Part of Sentences 9.3.2.1.(1) and 9.3.2.2.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Use	Boards			Framing
		Paragraph in the NLGA Grading Rules Under Which Boards are Graded			
		All Species		Eastern White Pine & Red Pine	All Species
		Para 113	Para 114	Para 118	
1.	Stud wall framing (*loadbearing* members)	—	—	—	Stud, Standard, No. 2
2.	Stud wall framing (non-*loadbearing* members)	—	—	—	Stud, Utility, No. 3
3.	Plank frame construction (*loadbearing* members)	No. 3 Common	—	No. 3 Common	No. 2
4.	Plank frame construction (non-*loadbearing* members)	No. 5 Common	—	No. 5 Common	Economy, No. 3
5.	Post and beams less than 114 mm in thickness	—	—	—	Standard, No.2
6.	Post and beams not less than 114 mm in thickness	—	—	—	Standard
7.	Roof sheathing	No. 3 Common	Standard	No. 4 Common	—
8.	Subflooring	No. 3 common	Standard	No. 3 Common	—
9.	Wall sheathing when required as a nailing base	No. 4 Common	Utility	No. 4 Common	—
10.	Wall sheathing not required as a nailing base	No. 5 Common	Economy	No. 5 Common	—

9.3.2.2. Lumber Grades

(1) Except for joists, rafters, trusses and beams, visually graded lumber shall conform to the grades in Table 9.3.2.1.

9.3.2.3. Machine Stress Rated Lumber

(1) Machine stress rated lumber shall conform to the requirements of Subsection 4.3.1.

9.3.2.4. OSB, Waferboard and Plywood Marking

(1) OSB, waferboard and plywood used for roof sheathing, wall sheathing and subflooring shall be legibly identified on the face of the material indicating,

(a) the manufacturer of the material,

(b) the standard to which it is produced, and

(c) that the material is of an exterior type.

9.3.2.5. Moisture Content

(1) Moisture content of lumber shall be not more than 19% at the time of installation.

9.3.2.6. Lumber Dimensions

(1) Lumber dimensions referred to in this Part are actual dimensions determined in conformance with CSA O141, “Softwood Lumber”.

9.3.2.7. Panel Thickness Tolerances

(1) The thickness specified in this Part for plywood, hardboard, particleboard, OSB and waferboard shall be subject to the tolerances permitted in the standards referenced for these products unless specifically indicated in this Part.

9.3.2.8. Undersized Lumber

(1) Joist, rafter, lintel and beam members up to 5% less than the actual Canadian standard sizes are permitted to be used provided the allowable spans for the grade and species of lumber under consideration are reduced 5% from those shown in the span tables for full size members.

9.3.2.9. Termite and Decay Protection

(1) In localities where termites are known to occur,

(a) clearance between structural wood elements and the finished ground level directly below them shall be not less than 450 mm and, except as provided in Sentence (2), all sides of the supporting elements shall be visible to permit inspection, or

(b) structural wood elements, supported by elements in contact with the ground or exposed over bare soil, shall be pressure-treated with a chemical that is toxic to termites.

(2) In localities where termites are known to occur and *foundations* are insulated or otherwise finished in a manner that could conceal a termite infestation,

(a) a metal or plastic barrier shall be installed through the insulation and any other separation or finish materials above finished ground level to control the passage of termites behind or through the insulation, separation or finish materials, and

(b) all sides of the finished supporting assembly shall be visible to permit inspection.

(3) Structural wood elements shall be pressure-treated with a preservative to resist decay, where the vertical clearance between structural wood elements and the finished ground level is less than 150 mm.

(4) In localities where termites are known to occur and where windows or other openings at or below *grade* contain wood elements, the bottom of window wells or

adjacent ground shall be at least 150 mm below the nearest wood unless the wood is pressure-treated with a chemical toxic to termites.

(5) Structural wood elements used in retaining walls and cribbing shall be pressure-treated with a preservative to resist decay, where,

(a) the retaining wall or cribbing supports ground that is critical to the stability of *building foundations*, or

(b) the retaining wall or cribbing is greater than 1.2 m in height.

(6) Where wood is required by this Article to be treated to resist termites or decay, such treatment shall be in accordance with Table 2, "Use Categories for Specific Products, Uses, and Exposures", of CAN/CSA-O80.1, "Specification of Treated Wood", as follows:

(a) Use Category 1, where the wood member is used in,

(i) interior construction,

(ii) above-ground applications, and

(iii) applications where the wood member remains dry,

(b) Use Category 2, where the wood member is used in,

(i) interior construction,

(ii) above-ground applications, and

(iii) applications where the wood member may be subjected to occasional sources of moisture,

(c) Use Category 3.2, where the wood member is used in,

(i) exterior construction,

(ii) above-ground applications, and

(iii) applications where the wood member is uncoated or is used in a configuration conducive to moisture accumulation,

(d) Use Category 4.1, where,

(i) the wood member is used in contact with the ground,

(ii) the wood member is used in contact with fresh water, or

(iii) the vertical clearance between the wood element and the finished ground level is less than 150 mm and the wood elements are not separated from permeable supporting materials by a moisture barrier, or

(e) Use Category 4.2, where the wood member is used in critical structural components, including permanent wood *foundations*.

(7) Where wood is protected in accordance with Use Category 1 or Use Category 2 using an inorganic boron preservative, the wood shall be,

(a) protected from direct exposure to water during and after the completion of construction, and

(b) separated from permeable supporting materials by a moisture barrier that is resistant to all expected mechanisms of deterioration in the service environment if the vertical clearance to the ground is less than 150 mm.

(8) Wood that is required by this Article to be treated to resist termites or decay shall be identified by a mark to indicate the type of preservative used and conformance to the relevant required Use Category.

9.3.3. Metal

9.3.3.1. Sheet Metal Thickness

(1) Minimum thicknesses for sheet metal material required in this Part refer to the actual minimum base metal thicknesses measured at any point of the material, and in the case of galvanized steel described in Sentence 9.3.3.2.(1), include the thickness of the galvanizing coating unless otherwise indicated.

9.3.3.2. Galvanized Sheet Steel

(1) Where sheet steel is required to be galvanized, it shall be metallic-coated with zinc or an alloy of 55% aluminium-zinc meeting the requirements of,

(a) ASTM A653 / A653M, “Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process”, or

(b) ASTM A792 / A792M, “Sheet Steel, 55% Aluminum-Zinc Alloy-Coated by the Hot Dip Process”.

(2) Where galvanized sheet steel is intended for use in locations exposed to the weather or as a flashing material, it shall have a zinc coating not less than the G90 (Z275) coating designation or an aluminum-zinc alloy coating not less than the AZM150 coating designation, as referred to in Sentence (1).

Section 9.4. Structural Requirements

9.4.1. Structural Design Requirements and Application Limitations

9.4.1.1. General

(1) Subject to the application limitations defined elsewhere in this Part, structural members and their connections shall,

(a) conform to requirements provided elsewhere in this Part,

(b) be designed according to good engineering practice such as provided in the CWC, “Engineering Guide for Wood Frame Construction”, or

(c) be designed according to Part 4 using the loads and deflection and vibration limits specified in,

(i) this Part, or

(ii) Part 4.

(2) Where floor framing is designed in accordance with Clause (1)(b) or (c) and where supporting wall framing and fastenings, or footings, are designed according to Clause (1)(a), the specified *live load* on the floor according to Table 4.1.5.3. shall not exceed 2.4 kPa.

(3) Location-specific information for structural design, including snow and wind loads and seismic spectral response accelerations, shall be determined according to MMAH Supplementary Standard SB-1, "Climatic and Seismic Data".

9.4.2. Specified Loads

9.4.2.1. Application

(1) This Subsection applies to light-frame construction whose wall, floor and roof planes are generally comprised of frames of small repetitive structural members, and where,

(a) the roof and wall planes are clad, sheathed or braced on at least one side,

(b) the small repetitive structural members are spaced not more than 610 mm o.c.,

(c) the clear span of any structural member does not exceed 12.20 m,

(d) the maximum deflection of the structural roof members conforms to Article 9.4.3.1.,

(e) the maximum total roof area, notwithstanding any separation of adjoining *buildings* by *firewalls*, is 4 550 m^2, and

(f) for flat roofs, there are no significant obstructions on the roof, such as parapet walls, spaced closer than the distance calculated by,

$$D_o = 10(H_o - 0.8\ S_s/\gamma)$$

where,

D_o = minimum distance between obstructions, m,

H_o = height of the obstruction above the roof, m,

S_s = ground snow load, kPa, and

γ = unit weight of snow, kN/m^3.

9.4.2.2. Specified Snow Loads

(1) Except as provided in Sentences (2) and (3), specified snow loads shall be not less than those calculated using the following formula:

$$S = C_b \cdot S_s + S_r$$

where,

S = specified snow load,

C_b = basic snow load roof factor, which is 0.45 where the entire width of a roof does not exceed 4.3 m and 0.55 for all other roofs,

S_s = 1-in-50 year ground snow load in kPa, determined according to MMAH Supplementary Standard SB-1, "Climatic and Seismic Data", and

S_r = associated 1-in-50 year rain load in kPa, determined according to MMAH Supplementary Standard SB-1, "Climatic and Seismic Data".

(2) In no case shall the specified snow load be less than 1 kPa.

(3) Bow string, arch or semi-circular roof trusses having an unsupported span greater than 6 m shall be designed in conformance with the snow load requirements in Subsection 4.1.6.

9.4.2.3. Platforms Subject to Snow and Occupancy Loads

(1) Balconies, decks and other accessible exterior platforms intended for an *occupancy* and subject to snow loads shall be designed to carry the specified roof snow load or 1.9 kPa, whichever is greater, where the platform, or each segregated area of the platform, serves a single *dwelling unit*.

9.4.2.4. Attics and Roof Spaces

(1) Ceiling joists or truss bottom chords in residential *attic or roof spaces* having limited accessibility that precludes the storage of equipment or material shall be designed for a total specified load of not less than 0.35 kPa, where the total specified load is the sum of the specified *dead load* plus the specified *live load* of the ceiling.

9.4.3. Deflections

9.4.3.1. Deflections

(1) The maximum deflection of structural members shall conform to Table 9.4.3.1.

(2) *Dead loads* need not be considered in computing deflections referred to in Sentence (1).

Table 9.4.3.1.
Maximum Deflections

Forming Part of Sentence 9.4.3.1.(1)

Item	Column 1	Column 2	Column 3
	Structural Members	Type of Ceiling Supported	Max. Allowable Deflection as an Expressed Ratio of the Clear Span
1.	Roof rafters, roof joists and roof beams	No ceiling	1/180
		Other than plaster or gypsum board	1/240
		Plaster or gypsum board	1/360
2.	Ceiling joists	Other than plaster or gypsum board	1/240
		Plaster or gypsum board	1/360
3.	Floor beams, floor joists and floor decking	All cases	1/360
4.	Beams, joists and decking for balconies, decks and other accessible exterior platforms	Serving a single *dwelling unit*	1/240
		Other	1/360

9.4.4. Foundation Conditions

9.4.4.1. Allowable Bearing Pressures

(1) Footing sizes for *shallow foundations* shall be,

(a) determined in accordance with Section 9.15., or

(b) designed in accordance with Section 4.2. using,

(i) the maximum *allowable bearing pressures* in Table 9.4.4.1., or

(ii) *allowable bearing pressures* determined from *subsurface investigation*.

Table 9.4.4.1.
Allowable Bearing Pressure for Soil or Rock

Forming Part of Sentence 9.4.4.1.(1)

Item	Column 1	Column 2
	Type and Condition of *Soil* or *Rock*	Maximum *Allowable Bearing Pressure*, kPa
1.	Dense or compact sand or gravel	150
2.	Loose sand or gravel	50
3.	Dense or compact silt	100
4.	Stiff clay	150
5.	Firm clay	75
6.	Soft clay	40
7.	Till	200
8.	Clay shale	300
9.	Sound *rock*	500

(2) The design procedures described in Section 4.2. are permitted to be used in lieu of the design procedures in this Subsection.

(3) The design procedures described in Section 4.2. shall be used where,

(a) *deep foundations* are used,

(b) the footing size falls outside the scope of this Section, or

(c) the *foundation* is constructed on peat, filled ground or on sensitive clays as described in Article 9.15.1.1.

9.4.4.2. Foundation Capacity in Weaker Soil and Rock

(1) Where a *soil* or *rock* within a distance equal to twice the footing width below the *bearing surface* has a lower *allowable bearing pressure* than that at the *bearing surface* as shown in Article 9.4.4.1., the design capacity of the *foundation* shall not be greater than would cause the weakest *soil* or *rock* to be stressed beyond its *allowable bearing pressure*.

(2) In calculating subsurface pressures referred to in Sentence (1), the loads from the footings shall be assumed to be distributed uniformly over a horizontal plane within a frustum extending downward from the footing at an angle of 60° to the horizontal.

9.4.4.3. High Water Table

(1) Where a *foundation* bears on gravel, sand or silt, and the water table is within a distance below the *bearing surface* equal to the width of the *foundation*, the *allowable bearing pressure* shall be 50% of that determined in Article 9.4.4.1.

9.4.4.4. Soil Movement

(1) Where a *foundation* is located in an area where *soil* movement caused by changes in *soil* moisture content, freezing, or chemical-microbiological oxidation is known to occur to the extent that it will damage a *building*, measures shall be taken to preclude such movement or to reduce the effects on the *building* so that the *building's* stability and the performance of assemblies will not be adversely affected.

9.4.4.5. Reserved

9.4.4.6. Walls Supporting Drained Earth

(1) Except where constructed in accordance with Section 9.15., walls supporting drained earth shall be designed,

(a) for a pressure equivalent to that exerted by a fluid with a density of not less than 480 kg/m^3 and a depth equal to that of the retained earth, or

(b) in accordance with Section 4.2. so as to be able to resist the loads and effects described in Article 4.1.2.1.

(2) Walls supporting other than drained earth shall be designed,

(a) for the pressure described in Clause (1)(a) plus the fluid pressure of the surcharge, or

(b) in accordance with Section 4.2. so as to be able to resist the loads and effects described in Article 4.1.2.1.

Section 9.5. Design of Areas, Spaces and Doorways

9.5.1. General

9.5.1.1. Application

(1) Except as otherwise specified in this Part, this Section applies only to *dwelling units* that are intended for use on a continuing or year-round basis as the principal residence of the occupant.

9.5.1.2. Method of Measurement

(1) Except as otherwise specified in this Part, the areas, dimensions and heights of rooms or spaces shall be measured between finished wall surfaces and between finished floor and ceiling surfaces.

9.5.1.3. Floor Areas

(1) Minimum floor areas specified in this Section do not include closets or built-in bedroom cabinets unless otherwise indicated.

9.5.1.4. Combination Rooms

(1) Two or more areas may be considered as a combination room if the opening between the areas occupies the larger of 3 m^2 or 40% or more of the wall measured on the side of the dependent area.

(2) Where the dependent area is a bedroom, direct passage shall be provided between the two areas.

(3) The opening required in Sentence (1) shall not contain doors or windows.

9.5.1.5. Lesser Areas and Dimensions

(1) Areas of rooms and spaces are permitted to be less than required in this Section provided it can be shown that the rooms and spaces are adequate for their intended use, such as by the provision of built-in furniture to compensate for reduced sizes.

9.5.2. Barrier-Free Design

9.5.2.1. General

(1) Except as provided in Sentence (2) and Article 3.8.1.1., every *building* shall be designed in conformance with Section 3.8.

(2) The requirements of Section 3.8. need not be provided for houses, including semi-detached houses, duplexes, triplexes, town houses, row houses and boarding or rooming houses with fewer than eight boarders or roomers.

9.5.2.2. Protection on Floor Areas with a Barrier-Free Path of Travel

(1) Where a *barrier-free* path of travel required in Article 9.5.2.1. is provided to any *storey* above the *first storey*, the requirements in Article 3.3.1.7. shall apply.

9.5.2.3. Stud Wall Reinforcement

(1) If wood wall studs or sheet steel wall studs enclose the main bathroom in a *dwelling unit*, reinforcement shall be installed to permit the future installation of the following:

(a) for a water closet, a grab bar described in Clauses 3.8.3.8.(3)(a) and a grab bar described in Clause 3.8.3.8.(3)(c),

(b) for a shower, a grab bar described in Clause 3.8.3.13.(2)(f), and

(c) for a bathtub, a grab bar described in Clause 3.8.3.13.(4)(c).

9.5.3. Ceiling Heights

9.5.3.1. Ceiling Heights of Rooms or Spaces

(1) The ceiling heights of rooms or spaces in *residential occupancies* and *live/work units* shall conform to Table 9.5.3.1.

(2) Areas in rooms or spaces over which ceiling height is not less than the minimum specified in Table 9.5.3.1. shall be contiguous with the entry or entries to those rooms or spaces.

Table 9.5.3.1.
Room Ceiling Heights

Forming Part of Sentences 9.5.3.1.(1) and (2)

Item	Column 1	Column 2
	Room or Space	Minimum Heights[(1)]
1.	Living room or space, dining room or space, kitchen or kitchen space	2 300 mm over at least 75% of the required floor area with a clear height of 2 100 mm at any point over the required area
2.	Bedroom or bedroom space	2 300 mm over at least 50% of the required area or 2 100 mm over all of the required floor area. Any part of the floor having a clear height of less than 1 400 mm shall not be considered in computing the required floor area
3.	*Basement* space	2 100 mm over at least 75% of the *basement* area except that under beams and ducts the clearance is permitted to be reduced to 1 950 mm

4.	Bathroom, water closet room or laundry area above *grade*	2 100 mm in any area where a person would normally be in a standing position
5.	Passage, hall or main entrance vestibule and finished rooms not specifically mentioned above	2 100 mm

Notes to Table 9.5.3.1.:

(1) Area of the space shall be measured at floor level.

9.5.3.2. Mezzanines

(1) The ceiling height above and below a *mezzanine* floor assembly in all *occupancies* shall be not less than 2 100 mm.

9.5.3.3. Storage Garages

(1) The clear height in a *storage garage* shall be not less than 2 000 mm.

9.5.4. Living Rooms or Spaces within Dwelling Units

9.5.4.1. Areas of Living Rooms and Spaces

(1) Living areas within *dwelling units*, either as separate rooms or in combination with other spaces, shall have an area not less than 13.5 m².

(2) Where the area of a living space is combined with a kitchen and dining area, the living area alone in a *dwelling unit* that contains sleeping accommodation for not more than two persons shall be not less than 11 m².

9.5.5. Dining Rooms or Spaces within Dwelling Units

9.5.5.1. Area of Dining Rooms or Spaces

(1) A dining space in combination with other space shall have an area of not less than 3.25 m².

(2) Dining rooms not combined with other space shall have a minimum area of 7 m².

9.5.6. Kitchens within Dwelling Units

9.5.6.1. Kitchen Areas

(1) Kitchen areas within *dwelling units* either separate from or in combination with other spaces, shall have an area of not less than 4.2 m² including the area occupied by the base cabinets, except that in *dwelling units* containing sleeping accommodation for not more than two persons, the minimum area shall be 3.7 m².

9.5.7. Bedrooms or Spaces in Dwelling Units and Dormitories

9.5.7.1. Areas of Bedrooms

(1) Except as provided in Articles 9.5.7.2. and 9.5.7.3., bedrooms in *dwelling units* shall have an area not less than 7 m² where built-in cabinets are not provided and not less than 6 m² where built-in cabinets are provided.

9.5.7.2. Areas of Master Bedrooms

(1) Except as provided in Article 9.5.7.3., at least one bedroom in every *dwelling unit* shall have an area of not less than 9.8 m² where built-in cabinets are not provided and not less than 8.8 m² where built-in cabinets are provided.

9.5.7.3. Areas of Combination Bedrooms

(1) Bedroom spaces in combination with other spaces in *dwelling units* shall have an area not less than 4.2 m².

9.5.7.4. Areas of Other Sleeping Rooms

(1) Sleeping rooms other than in *dwelling units* shall have an area not less than 7 m² per person for single *occupancy* and 4.6 m² per person for multiple *occupancy*.

9.5.7.5. Recreational Camps

(1) *Recreational camps* shall have an area in the sleeping quarters of at least 3.72 m² per camper or, if double or triple tier bunk units are used, 2.79 m² per camper.

9.5.7.6. Camps for Housing Workers

(1) A *camp for housing of workers* shall have a minimum area of 3.72 m² per employee in every room used for sleeping purposes.

9.5.8. Combined Spaces

9.5.8.1. Combined Living, Dining, Bedroom and Kitchen Spaces

(1) Despite Subsections 9.5.4. to 9.5.7., where living, dining, bedroom and kitchen spaces are combined in a *dwelling unit* that contains sleeping accommodation for not more than two persons, the area of the combined spaces shall be not less than 13.5 m^2.

9.5.9. Bathrooms and Water Closet Rooms

9.5.9.1. Space to Accommodate Fixtures

(1) In every *dwelling unit* an enclosed space of sufficient size shall be provided to accommodate a water closet, lavatory and bathtub or shower stall.

9.5.9.2. Doors to Rooms Containing Water Closets

(1) A door shall be provided to each room containing a water closet within a *dwelling unit*.

9.5.10. Hallways

9.5.10.1. Hallway Width

(1) The unobstructed width of a hallway within a *dwelling unit* shall be not less than 860 mm, except that the hallway width is permitted to be 710 mm, where,

(a) there are only bedrooms and bathrooms at the end of the hallway furthest from the living area, and

(b) a second *exit* is provided,

(i) in the hallway near the end furthest from the living area, or

(ii) in each bedroom served by the hallway.

9.5.11. Doorway Sizes

9.5.11.1. Doorway Opening Sizes

(1) Except as provided in Articles 9.5.11.3., 9.9.6.2. and 9.9.6.3., doorway openings within *dwelling units* shall be designed to accommodate at least the door sizes in Table 9.5.11.1. for swing-type doors or folding doors.

Table 9.5.11.1.
Minimum Door Sizes

Forming Part of Sentence 9.5.11.1.(1)

Item	Column 1	Column 2	Column 3
	At Entrance to:	Minimum Width, mm	Minimum Height, mm
1.	*Dwelling unit* (required entrance) Vestibule or entrance hall	810	1 980
2.	Stairs to a floor level that contains a finished space All doors in at least one line of passage from the exterior to the *basement* Utility rooms	810	1 980
3.	Walk-in closet	610	1 980
4.	Bathroom, water closet room, shower room(1)	610	1 980
5.	Rooms located off hallways that are permitted to be 710 mm wide	610	1 980
6.	Rooms not mentioned above, exterior balconies	760	1 980

Notes to Table 9.5.11.1.:

(1) See Article 9.5.11.3.

9.5.11.2. Doors to Public Water Closet Rooms

(1) Doors to public water closet rooms shall be not less than 810 mm wide and 2 030 mm high.

9.5.11.3. Doors to Bathrooms

(1) Where a *barrier-free* path of travel conforming to Section 3.8. is provided into a *suite* of *residential occupancy* and where a bathroom within the *suite* is at the level of the *suite* entrance door, the doorway to such bathroom and to each bedroom at the same level as such bathroom shall have, when the door is in the open position, a clear width of not less than,

(a) 760 mm where the door is served by a corridor or space not less than 1 060 mm wide, and

(b) 810 mm where the door is served by a corridor or space less than 1 060 mm wide.

Section 9.6. Glass

9.6.1. General

9.6.1.1. Application

(1) This Section applies to,

(a) glass in,

(i) interior windows and interior doors and their sidelights,

(ii) clothes closets,

(iii) site-built exterior windows, doors and skylights,

(iv) shower or bathtub enclosures,

(v) glazed panels and *partitions*, and

(b) the protection of glass.

9.6.1.2. Material Standards for Glass

(1) Glass shall conform to,

(a) CAN/CGSB-12.1-M, “Tempered or Laminated Safety Glass,”

(b) CAN/CGSB-12.2-M, “Flat, Clear Sheet Glass”,

(c) CAN/CGSB-12.3-M, “Flat, Clear Float Glass”,

(d) CAN/CGSB-12.4-M, “Heat-Absorbing Glass,”

(e) CAN/CGSB-12.8, “Insulating Glass Units”,

(f) CAN/CGSB-12.10-M, “Glass, Light and Heat Reflecting”,

(g) CAN/CGSB-12.11-M, “Wired Safety Glass”, or

(h) ASTM E2190, “Insulating Glass Unit Performance and Evaluation”.

(2) Mirrored glass doors are permitted to be used only at the entrance to clothes closets and shall conform to the requirements of CAN/CGSB-82.6-M, “Doors, Mirrored Glass, Sliding or Folding, Wardrobe”.

(3) Mirrored glass doors reinforced with a film backing shall meet the impact resistance requirements specified in CAN/CGSB-12.5-M, “Mirrors, Silvered”.

9.6.1.3. Structural Sufficiency of Glass

(1) Glass shall be designed in conformance with CAN/CGSB-12.20-M, “Structural Design of Glass for Buildings”.

(2) The maximum area of individual panes of glass for doors shall conform to Table 9.6.1.3.

Table 9.6.1.3.
Maximum Glass Area for Doors

Forming Part of Sentence 9.6.1.3.(2)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Glass Thickness, mm	Maximum Glass Area, m^2						
		Type of Glass						
		Annealed	Annealed Multiple-Glazed Factory-Sealed Units	Laminated	Wired	Heat Strengthened	Fully Tempered	Fully Tempered Multiple-Glazed Factory-Sealed Units
1.	3	0.50	0.70	(1)	(1)	1.00	1.00	2.00
2.	4	1.00	1.50	(1)	(1)	1.50	4.00	4.00
3.	5	1.50	1.50	(1)	(1)	1.50	No limit	No limit
4.	6	1.50	1.50	1.20	1.00	1.50	No limit	No limit

Notes to Table 9.6.1.3.:

(1) Not generally available.

9.6.1.4. Types of Glass and Protection of Glass

(1) Glass sidelights greater than 500 mm wide that could be mistaken for doors, glass in storm doors and glass in sliding doors within or at every entrance to a *dwelling unit* and in public areas shall be,

(a) safety glass of the tempered or laminated type conforming to CAN/CGSB-12.1-M, "Tempered or Laminated Safety Glass", or

(b) wired glass conforming to CAN/CGSB-12.11-M, "Wired Safety Glass".

(2) Except as provided in Sentence (4), glass in entrance doors to *dwelling units* and in public areas, other than the entrance doors described in Sentence (1), shall be safety glass or wired glass of the type described in Sentence (1) where the glass area exceeds 0.5 m^2 and extends to less than 900 mm from the bottom of the door.

(3) Except as provided in Sentence (4), transparent panels that could be mistaken as a *means of egress* shall be protected by barriers or railings.

(4) Sliding glass *partitions* that separate a *public corridor* from an adjacent *occupancy* and that are open during normal working hours need not conform to Sentences (2), (3) and (5), except that such *partitions* shall be suitably marked to indicate their existence and position.

(5) Except as provided in Sentence (4), every glass or transparent door accessible to the public shall be equipped with hardware, bars or other permanent fixtures designed so that the existence and position of such doors is readily apparent.

(6) Glass, other than safety glass, shall not be used for a shower or bathtub enclosure.

Section 9.7. Windows, Doors and Skylights

9.7.1. General

9.7.1.1. Application

(1) This Section applies to,

(a) windows, doors and skylights separating *conditioned space* from unconditioned space or the exterior, and

(b) main entrance doors.

(2) For the purpose of this Section, the term "skylight" refers to unit skylights, roof windows and tubular daylighting devices.

(3) For the purpose of this Section, the term "doors" includes glazing in doors and sidelights for doors.

9.7.2. Required Windows, Doors and Skylights

9.7.2.1. Entrance Doors

(1) A door shall be provided at each entrance to a *dwelling unit*.

(2) Main entrance doors to *dwelling units* shall be provided with,

(a) a door viewer or transparent glazing in the door, or

(b) a sidelight.

9.7.2.2. Other Requirements for Windows, Doors and Skylights

(1) Minimum sizes of doorways and doors within a *barrier-free* path of travel shall conform to Section 9.5.

(2) The protection of window and door openings against persons falling through the window or door opening shall conform to Article 9.8.8.1.

(3) Properties of windows and doors within *exits* shall conform to Section 9.9.

(4) Windows and doors installed to provide the required *means of egress* from bedrooms shall conform to Subsection 9.9.10.

(5) The location and protection of windows, doors and skylights in order to control the spread of fire shall conform to Subsection 9.10.12.

(6) Doors between *dwelling units* and attached garages shall conform to Article 9.10.13.15.

(7) The surface *flame-spread rating* for doors and skylights shall conform to Article 9.10.17.1.

(8) Windows and doors installed to provide the required access to a *building* for firefighting purposes shall conform to Subsection 9.10.20.

(9) Windows and skylights installed to provide required non-heating season ventilation shall conform to Article 9.32.2.1.

9.7.2.3. Minimum Window Areas

(1) Except as required in Article 9.9.10.1. and Sentence (3), the minimum window glass area for rooms in *buildings* of *residential occupancy* or rooms that are used for sleeping shall conform to Table 9.7.2.3.

Table 9.7.2.3.
Glass Areas for Rooms of Residential Occupancy

Forming Part of Sentence 9.7.2.3.(1)

Item	Column 1 Location	Column 2 Minimum Unobstructed Glass Area With No Electric Lighting	Column 3 Minimum Unobstructed Glass Area With Electric Lighting
1.	Laundry, *basement* recreation room, unfinished *basement*	4% of area served	Windows not required
2.	Water closet room	0.37 m²	Windows not required
3.	Kitchen, kitchen space, kitchen alcove	10% of area served	Windows not required
4.	Living rooms and dining rooms	10% of area served	10% of area served

5.	Bedrooms and other finished rooms not mentioned above	5% of area served[(1)]	5% of area served[(1)]

Notes to Table 9.7.2.3.:

[(1)] See Subsection 9.9.10.

(2) The unobstructed glass area of a door or skylight is considered equivalent to that of a window.

(3) Work areas in *live/work units* shall conform to Clause 3.7.2.1.(2)(a).

(4) Where rooms with different requirements for window glass area are combined as described in Sentence 9.5.1.4.(1), the more restrictive requirement shall govern.

9.7.3. Performance of Windows, Doors and Skylights

9.7.3.1. General Performance Criteria

(1) Except as provided in Sentences (2) to (4), windows, doors and skylights and their components separating *conditioned space* from unconditioned space or the exterior shall be designed, constructed and installed so that, when in the closed position, they,

(a) resist the ingress of precipitation into interior space,

(b) resist wind loads,

(c) control air leakage,

(d) resist the ingress of insects and vermin,

(e) where required, resist forced entry, and

(f) are easily operable, unless they are fixed units.

(2) Skylights and their components shall be designed, constructed and installed so that, when in the closed position, they resist snow loads.

(3) Main entrance doors and their components shall be designed, constructed and installed so that, when in the closed position, they,

(a) control air leakage,

(b) resist the ingress of insects and vermin,

(c) resist forced entry, and

(d) are easily operable.

(4) Storm doors, sliding doors and their components shall be designed, constructed and installed so that, when in the closed position, they,

(a) resist wind loads,

(b) control air leakage to a minimum allowable 5 m^3h/m and a maximum allowable 8.35 m^3h/m,

(c) resist the ingress of insects and vermin, and

(d) are easily operable.

(5) Compliance with the performance requirements described in Sentences (1) to (4) shall be demonstrated by,

(a) compliance with the requirements in,

(i) Subsection 9.7.4. or 9.7.5., and

(ii) Subsection 9.7.6., or

(b) design and construction conforming to Part 5.

9.7.3.2. Heat Transfer Performance

(1) Windows, doors and skylights described in Clause 9.7.1.1.(1)(a) and their components shall be designed, constructed and installed to,

(a) minimize surface condensation on the warm side of the component, and

(b) ensure comfortable conditions for the occupants.

(2) Compliance with the heat transfer performance requirements described in Sentence (1) shall be demonstrated by,

(a) compliance with the requirements in Article 9.7.3.3., or

(b) design and construction conforming to Part 5.

9.7.3.3. Thermal Characteristics of Windows, Doors and Skylights

(1) Except as permitted in Sentence (2), metal frames and sash of windows, doors and skylights shall incorporate a thermal break.

(2) Windows and doors described in Sentence (1) do not require a thermal break where they are installed as,

(a) vehicular access doors,

(b) storm windows and doors, or

(c) windows and doors that are required to have a *fire-resistance rating*.

(3) Windows, doors and skylights, with or without storm doors or sash, that are installed in *buildings* where the intended use of the interior space will not result in high moisture generation shall have a maximum thermal transmittance (U-value) or minimum temperature index (I) in accordance with Table 9.7.3.3.

(4) Windows, doors and skylights, with or without storm doors or sash, that are installed in portions of *buildings* where the intended use of the interior space will result in high moisture generation shall be designed in conformance with Subsection 5.3.

Table 9.7.3.3.
Maximum U-value or Minimum Temperature Index (I) for Windows, Doors and Skylights (1) (2) (3)

Forming Part of Sentence 9.7.3.3.(3)

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Component	2.5% January Design Temperature			
		Between -15°C and -30°C		Colder than -30°C	

		max. U-value, W/m^2K	min. I	max. U-value, W/m^2K	min. I
1.	Windows and Doors	2.0	68	1.7	77
2.	Skylights	3.0	(2)	2.7	(2)

Notes to Table 9.7.3.3.:

(1) U-values for specific products can be determined according to measures referenced in AAMA/WDMA/CSA 101/I.S.2/A440, "NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights". Temperature index (I) is determined according to the physical test procedure given in CSA A440.2/A440.3, "Fenestration Energy Performance/User Guide to CSA A440.2-09, Fenestration Energy Performance".

(2) There is no appropriate test procedure available for testing the condensation resistance of sloped glazing.

(3) Where the U-value in this Table differs from the U-value provided in MMAH Supplementary Standard SB-10, "Energy Efficiency Requirements" or MMAH Supplementary Standard SB-12, "Energy Efficiency for Housing", the most restrictive U-value shall apply.

9.7.4. Manufactured Windows, Doors and Skylights

9.7.4.1. Application

(1) This Subsection applies to windows, doors and skylights that are within the scope of AAMA/WDMA/CSA 101/I.S.2/A440, "NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights".

9.7.4.2. General

(1) Manufactured and pre-assembled windows, doors and skylights and their installation shall conform to,

(a) AAMA/WDMA/CSA 101/I.S.2/A440, "NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights",

(b) CSA A440S1, "Canadian Supplement to AAMA/WDMA/CSA 101/I.S.2/A440, NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights",

(c) this Subsection, and

(d) the applicable requirements in Subsection 9.7.6.

9.7.4.3. Performance Requirements

(1) Performance grades for windows, doors and skylights shall be selected according to CSA A440S1, "Canadian Supplement to AAMA/WDMA/CSA 101/I.S.2/A440, NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights" so as to be appropriate for the conditions and geographic location in which the window, door or skylight will be installed.

(2) Windows, doors and skylights shall conform to the performance grades selected under Sentence (1) when tested in accordance with AAMA/WDMA/CSA 101/I.S.2/A440, "NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights".

(3) The minimum level of performance required for windows, doors and skylights shall be that of the Performance Class R.

(4) Exterior wood doors shall conform to CAN/CSA-O132.2 Series, "Wood Flush Doors" and shall have legibly indicated on them,

(a) the name of the manufacturer,

(b) the standard to which they were produced, and

(c) that they are of an exterior type.

9.7.5. Site-Built Windows, Doors and Skylights

9.7.5.1. Application and Compliance

(1) Materials, design, construction and installation of windows, doors and skylights that separate *conditioned space* from unconditioned space or the exterior but that are not within the scope of AAMA/WDMA/CSA 101/I.S.2/A440, "NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights" shall,

(a) conform to,

(i) this Subsection or Subsection 9.7.4., and

(ii) the applicable requirements in Subsection 9.7.6., or

(b) conform to Part 5.

(2) Glass for site-built windows, doors, sidelights for doors, and skylights shall comply with Section 9.6.

9.7.5.2. Resistance to Forced Entry for Doors

(1) Except for exterior doors to garages and to other ancillary spaces, this Article applies to,

(a) swinging entrance doors to *dwelling units*,

(b) swinging doors between *dwelling units* and attached garages or other ancillary spaces, and

(c) swinging doors that provide access directly or indirectly from a *storage garage* to a *dwelling unit*.

(2) Doors, frames and hardware that conform to a security level of at least Grade 10 as described in the Annex to ASTM F476, "Security of Swinging Door Assemblies", are not required to conform to Sentences (3) to (7).

(3) Except as provided in Sentence (2), wood doors described in Sentence (1) shall,

(a) be solid core or stile-and-rail type,

(b) be not less than 45 mm thick, and

(c) if of the stile-and-rail panel type, have a panel thickness of not less than 19 mm, with a total panel area not more than half of the door area.

(4) Except as provided in Sentence (2), doors described in Sentence (1) shall be provided with,

(a) a deadbolt lock with a cylinder having no fewer than five pins, and

(b) a bolt throw not less than 25 mm long, protected with a solid or hardened free-turning ring or bevelled cylinder housing.

(5) Except as provided in Sentence (2), an inactive leaf in double doors used in locations specified in Sentence (1) shall be provided with heavy-duty bolts top and bottom having an engagement of not less than 15 mm.

(6) Except as provided in Sentence (2), hinges for doors described in Sentence (1) shall be fastened,

(a) to wood doors with wood screws not less than 25 mm long and to wood frames with wood screws such that at least two screws per hinge penetrate not less than 30 mm into solid wood, or

(b) to metal doors and metal frames with machine screws not smaller than No. 10 and not less than 10 mm long.

(7) Except as provided in Sentence (2), strikeplates for deadbolts described in Sentence (4) shall be fastened,

(a) to wood frames with wood screws that penetrate not less than 30 mm into solid wood, or

(b) to metal frames with machine screws not smaller than No. 8 and not less than 10 mm long.

(8) Except for storm doors or screen doors, doors described in Sentence (1) that swing outward shall be provided with hinges or pins so that the doors cannot be removed when they are in the closed position.

(9) Solid blocking shall be provided on both sides at the lock height between the jambs for doors described in Sentence (1) and the structural framing so that the jambs will resist spreading by force.

9.7.5.3. Resistance to Forced Entry for Windows

(1) In *dwelling units*, windows, any part of which is located within 2 m of adjacent ground level, shall conform to the requirements for resistance to forced entry as described in Clause 5.3.5 of AAMA/WDMA/CSA 101/I.S.2/A440, “NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights”.

9.7.6. Installation

9.7.6.1. Installation of Windows, Doors and Skylights

(1) The installation of windows, doors and skylights shall conform to CAN/CSA-A440.4, “Window, Door and Skylight Installation”, except that,

(a) shims used to support windows, doors and skylights are permitted to be of treated plywood, and

(b) protection from precipitation for walls incorporating windows or doors and for roofs incorporating skylights, and the interfaces of these walls with windows or doors and of roofs with skylights, shall conform to Section 9.27.

(2) The installation of manufactured and pre-assembled windows, doors and skylights and the field assembly of manufactured window and door combination units shall conform to the manufacturer's instructions.

(3) Windows, doors and skylights shall be sealed to air barriers and *vapour barriers*.

9.7.6.2. Sealants, Trim and Flashing

(1) The sealing compound used to seal the glass component of an insulating glazing unit to the sash component shall be compatible with the sealing compound used to edge seal the glass component.

(2) Flashing used to protect openings shall conform to Articles 9.27.3.7. and 9.27.3.8.

(3) Sealants shall be applied between window frames or trim and the exterior cladding or masonry in conformance with Subsection 9.27.4.

(4) All unfinished portions of the frame and other components of aluminum windows, doors or skylights in contact with the edges of masonry, concrete, stucco or plaster shall be protected with an alkali-resistant coating.

Section 9.8. Stairs, Ramps, Handrails and Guards

9.8.1. Application

9.8.1.1. General

(1) This Section applies to the design and construction of interior and exterior stairs, steps, ramps, handrails and *guards*.

9.8.1.2. Stairs, Ramps, Landings, Handrails and Guards in Garages

(1) Except as provided in Sentence 9.8.6.2. (3), stairs, ramps, landings, handrails and *guards* in a garage that serves a single *dwelling unit* shall conform to the requirements for stairs, ramps, landings, handrails and *guards* within a *dwelling unit*.

9.8.1.3. Exit Stairs, Ramps and Landings

(1) Where a stair, ramp or landing forms part of an *exit*, the appropriate requirements in Sections 9.9. and 9.10. shall also apply.

9.8.1.4. Escalators and Moving Walks

(1) Escalators and moving walks shall conform to the appropriate requirements in Part 3.

9.8.2. Stair Dimensions

9.8.2.1. Stair Width

(1) Except as provided in Sentence (2), required *exit* stairs and public stairs serving *buildings* of *residential occupancy* shall have a width, measured between wall faces or *guards*, of not less than 900 mm.

(2) At least one stair between each floor level within a *dwelling unit*, and exterior stairs and required *exit* stairs serving a single *dwelling unit*, shall have a width of not less than 860 mm.

(3) Required *exit* stairs and public stairs serving *buildings* of other than *residential occupancy* shall have a width of not less than the greater of,

(a) 900 mm, or

(b) 8 mm per person based on the *occupant load* limits specified in Table 3.1.17.1.

9.8.2.2. Height over Stairs

(1) The clear height over stairs shall be,

(a) measured vertically, over the clear width of the stair, from a straight line tangent to the tread and landing nosings to the lowest point above, and

(b) not less than,

(i) 1 950 mm for stairs serving a single *dwelling unit*, and

(ii) 2 050 mm for stairs not serving a single *dwelling unit*.

9.8.3. Stair Configurations

9.8.3.1. Straight and Curved Runs in Stairs

(1) Except as provided in Sentence (2), stairs shall consist of,

(a) straight-runs, or

(b) curved-runs.

(2) Stairs within *dwelling units* shall consist of,

(a) straight-runs,

(b) curved-runs,

(c) straight-runs with winders, or

(d) straight-runs with curved-runs.

9.8.3.2. Minimum Number of Risers

(1) Except for stairs within a *dwelling unit*, at least three risers shall be provided in interior flights.

9.8.3.3. Maximum Height of Stairs

(1) The vertical height between any landings shall not exceed 3.7 m.

9.8.4. Step Dimensions

9.8.4.1. Dimensions for Risers

(1) The rise, which is measured as the vertical nosing-to-nosing distance, shall conform to Table 9.8.4.1.

Table 9.8.4.1.
Rise, Run and Tread Depth for Rectangular Treads

Forming Part of Sentences 9.8.4.1.(1) and 9.8.4.2.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
	Stair Type	All Steps		Rectangular Treads			
		Rise, mm		Run, mm		Tread Depth, mm	
		max.	min.	max.	min.	max.	min.
1.	Service and *mezzanines* in *live/work units*(1)	no limit	125	355	no limit	355	no limit
2.	Private(2)	200	125	355	210	355	235
3.	Public(3)	180	125	no limit	280	no limit	280

Notes to Table 9.8.4.1.:

(1) Service stairs are stairs that serve areas used only as *service rooms* or *service spaces* and stairs that serve *mezzanines* not exceeding 20 m^2 within *live/work units*.

(2) Private stairs are interior stairs within *dwelling units* and exterior stairs serving a single *dwelling unit* or a garage that serves a single *dwelling unit*.

(3) Public stairs are all stairs not described as service stairs or private stairs.

9.8.4.2. Dimensions for Rectangular Runs and Treads

(1) The run, which is measured as the horizontal nosing-to-nosing distance, and the tread depth of rectangular treads shall conform to Table 9.8.4.1.

(2) The depth of a rectangular tread shall be not less than its run and not more than its run plus 25 mm.

9.8.4.3. Dimensions for Angled Treads

(1) Angled treads in required *exit* stairs shall conform to the requirements in Article 3.4.6.9.

(2) Except as provided in Article 9.8.4.5., angled treads in other than required *exit* stairs shall have an average run, which is measured as the horizontal nosing-to-nosing distance, of not less than 200 mm and a minimum run of 150 mm.

(3) The depth of an angled tread shall be not less than its run, measured as the horizontal nosing-to-nosing distance, at any point and not more than its run at any point plus 25 mm.

9.8.4.4. Uniformity and Tolerances for Risers and Treads

(1) Except as provided in Sentence (2), risers shall be of uniform height in any one flight with a maximum tolerance of,

(a) 5 mm between adjacent treads or landings, and

(b) 10 mm between the tallest and shortest risers in a flight.

(2) Except for required *exit* stairs, where the top or bottom riser in a stair adjoins a sloping finished walking surface such as a garage floor, driveway or sidewalk, the height of the riser across the stair shall vary by not more than 1 in 12.

(3) Treads shall have uniform run with a maximum tolerance of,

(a) 5 mm between adjacent treads, and

(b) 10 mm between the deepest and shallowest treads in a flight.

(4) Where angled treads or winders are incorporated into a stair, the treads in all sets of angled treads or winders within a flight shall turn in the same direction.

(5) The slope of treads shall not exceed 1 in 50.

9.8.4.5. Winders

(1) Stairs within *dwelling units* are permitted to contain winders that converge to a centre point provided,

(a) the winders turn through an angle of not more than 90°,

(b) individual treads turn through an angle of not less than 30° or not more than 45°, and

(c) adjacent winders turn through the same angle.

(2) Where more than one set of winders described in Sentence (1) is provided in a single stairway between adjacent floor levels, such winders shall be separated in plan by at least 1 200 mm.

9.8.4.6. Leading Edges of Treads

(1) Leading edges of treads that are bevelled or rounded shall,

(a) not reduce the required tread depth by more than 15 mm, and

(b) not, in any case, exceed 25 mm horizontally.

9.8.4.7. Interior Stairs Extending through the Roof

(1) Interior stairways extending through the roof of a *building* shall be protected from ice and snow.

9.8.5. Ramps

9.8.5.1. Application

(1) This Subsection applies to pedestrian ramps except ramps in a *barrier-free* path of travel.

(2) Ramps in a *barrier-free* path of travel shall conform to the requirements in Article 3.8.3.4.

9.8.5.2. Ramp Width

(1) Except as provided in Sentence (2), *exit* ramps and public ramps serving *buildings* of *residential occupancy* shall have a clear width of not less than 900 mm.

(2) A ramp serving a single *dwelling unit* shall have a width of not less than 860 mm.

(3) *Exit* ramps and public ramps serving *buildings* of other than *residential occupancy* shall have a clear width of not less than the greater of,

(a) 900 mm, or

(b) 8 mm per person based on the *occupant load* limits specified in Table 3.1.17.1.

9.8.5.3. Height over Ramps

(1) The clear height over ramps shall be not less than,

(a) 1 950 mm for ramps serving a single *dwelling unit*, and

(b) 2 050 mm for ramps not serving a single *dwelling unit*.

9.8.5.4. Slope

(1) The slope of ramps shall be not more than,

(a) 1 in 10 for exterior ramps,

(b) 1 in 10 for interior ramps serving *residential occupancies*,

(c) 1 in 6 for *mercantile* or *industrial occupancies*, and

(d) 1 in 8 for all other *occupancies*.

9.8.5.5. Maximum Rise

(1) Where the slope of the ramp is greater than 1 in 12, the maximum rise between floors or landings shall be 1 500 mm.

9.8.6. Landings

9.8.6.1. Application

(1) This Subsection applies to landings, except landings for ramps in a *barrier-free* path of travel.

(2) Landings for ramps in a *barrier-free* path of travel shall conform to the requirements in Article 3.8.3.4.

(3) Finished floors, and ground surfaces with a slope not exceeding 1 in 50, at the top and bottom of stairs or ramps shall be considered as landings.

9.8.6.2. Required Landings

(1) Except as provided in Sentences (2) to (4) and Sentence 9.9.6.6.(2), a landing shall be provided,

(a) at the top and bottom of each flight of interior and exterior stairs, including stairs in garages,

(b) at the top and bottom of every ramp with a slope greater than 1 in 50, and

(c) where a doorway opens onto a stair or ramp.

(2) Where a door at the top of a stair in a *dwelling unit* swings away from the stair, no landing is required between the doorway and the stair.

(3) A landing may be omitted at the top of an exterior stair serving a garage or a secondary entrance to a single *dwelling unit*, including an entrance from an attached garage, provided,

(a) the stair does not contain more than three risers,

(b) except as provided in Clause (c), the door is a sliding door or swings away from the stair, and

(c) where a storm or screen door is provided, it may swing over the stair if it is equipped with hardware to hold it open.

(4) A landing may be omitted at the bottom of an exterior stair or ramp provided there is no obstruction, such as a gate or door, within the lesser of the width of the stair or ramp, or,

(a) 900 mm for stairs or ramps serving a single *dwelling unit*, and

(b) 1100 mm for stairs or ramps not serving a single *dwelling unit*.

9.8.6.3. Dimensions of Landings

(1) Except as provided in Sentences (3) to (6), the width and length of landings shall comply with Table 9.8.6.3.

Table 9.8.6.3.
Dimensions of Landings

Forming Part of Sentence 9.8.6.3.(1)

Item	Column 1 Application	Column 2 Landing Configuration	Column 3 Minimum Width, mm	Column 4 Length, mm
1.	Stairs and ramps serving a single *dwelling unit*	In straight-run stair or ramp, or landing turning through less than 30°, within a *dwelling unit*	Width of stair or ramp	Not less than 860
		In straight-run exterior stair or ramp, or exterior landing turning through less than 30°	Width of stair or ramp	Not less than 900
		Landing turning through an angle of 30° or more, but less than 90°	Width of stair or ramp measured at right angle to path of travel	(a) Not less than 230 measured at the inside edge of the landing, and (b) Not less than 370 measured 230 from the inside edge of landing or handrail

		Landing turning through not less than 90°	Width of stair or ramp measured at right angle to path of travel	Not less than width of stair or ramp landing
2.	Stairs and ramps serving other than single *dwelling units*	In straight-run stair or ramp, or landing turning through less than 30°	Width of stair or clear width of ramp	Lesser of required width of stair or clear width of ramp, or 1 100
		Landing turning through 30° or more	Width of stair or clear width of ramp measured at right angle to path of travel	Not less than width of stair or clear width of ramp

(2) Reserved

(3) Where stairs or ramps of different widths adjoin a single landing, the minimum width of the landing shall be,

(a) not less than the greater required stair or ramp width, where one or more of the stair or ramp widths do not exceed their respective required widths, or

(b) not less than the lesser actual stair or ramp width, where all of the widths of the stairs or ramps exceed their respective required widths.

(4) Where a door swings toward a stair, the full arc of the swing shall be over the landing.

(5) The slope of landings shall not exceed 1 in 50.

(6) Where a doorway or stairway opens onto the side of a ramp, the landing shall extend for a distance of not less than 300 mm on either side of the doorway or stairway, except on a side abutting an end wall.

9.8.6.4. Height over Landings

(1) The clear height over landings shall be not less than,

(a) 1 950 mm for landings serving a single *dwelling unit*, and

(b) 2 050 mm for landings not serving a single *dwelling unit*.

9.8.7. Handrails

9.8.7.1. Required Handrails

(1) Except as provided in Sentences (2) to (4), a handrail shall be installed on stairs and ramps in conformance with Table 9.8.7.1.

Table 9.8.7.1.
Handrails for Stairs and Ramps

Forming Part of Sentence 9.8.7.1.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Location of Stair or	Handrails			Handrails Serving Ramps	

	Ramp	Serving Stairs				
		Stairs < 1 100 mm Wide		Stairs ≥ 1 100 mm Wide	Ramps < 1 100 mm Wide	Ramps ≥ 1 100 mm Wide
		Straight	Curved	All	Straight or Curved	All
		Number of Sides Required to have a Handrail				
1.	Within a *dwelling unit*	1	1	1	1	2
2.	All other locations	1	2	2	2	2

(2) Where a stair or a ramp is required to be at least 2 200 mm wide due to the *occupant load*, a handrail shall be installed such that no position on the stair or ramp is more than 825 mm from a handrail.

(3) A handrail is not required for stairs and ramps serving a single *dwelling unit*, where,

(a) interior stairs have not more than two risers,

(b) exterior stairs have not more than three risers, or

(c) ramps rise not more than 400 mm.

(4) Only one handrail is required on exterior stairs having more than three risers, provided such stairs serve a single *dwelling unit*.

9.8.7.2. Continuity of Handrails

(1) Except as provided in Sentence (2), at least one required handrail shall be continuous throughout the length of the stair or ramp, including landings, except where interrupted by,

(a) doorways, or

(b) newel posts at changes in direction.

(2) For stairs or ramps serving a single *dwelling unit*, at least one required handrail shall be continuous throughout the length of the stair or ramp, except where interrupted by,

(a) doorways,

(b) landings, or

(c) newel posts at changes in direction.

9.8.7.3. Termination of Handrails

(1) Handrails shall be terminated in a manner that will not obstruct pedestrian travel or create a hazard.

(2) Except for stairs and ramps serving a single *dwelling unit*, at least one handrail at the sides of a stair or ramp shall extend horizontally not less than 300 mm beyond the top and bottom of each stair or ramp.

9.8.7.4. Height of Handrails

(1) The height of handrails on stairs and ramps shall be measured vertically from the top of the handrail to,

(a) a straight line drawn tangent to the tread nosings of the stair served by the handrail, or

(b) the surface of the ramp, floor or landing served by the handrail.

(2) Except as provided in Sentences (3) and (4), the height of handrails on stairs and ramps shall be,

(a) not less than 865 mm, and

(b) not more than 965 mm.

(3) Where *guards* are required, handrails required on landings shall be not more than 1 070 mm in height.

(4) Handrails installed in addition to required handrails need not comply with Sentence (2).

9.8.7.5. Ergonomic Design

(1) A clearance of not less than 50 mm shall be provided between a handrail and any surface behind it.

(2) All handrails shall be constructed so as to be continually graspable along their entire length with no obstruction on or above them to break a handhold, except where the handrail is interrupted by newels at changes in direction.

9.8.7.6. Projections into Stairs and Ramps

(1) Handrails and projections below handrails, including handrail supports and stair stringers, shall not project more than 100 mm into the required width of a stair or ramp.

9.8.7.7. Design and Attachment of Handrails

(1) Handrails and any *building* element that could be used as a handrail shall be designed and attached in such a manner as to resist,

(a) a concentrated load at any point of not less than 0.9 kN, and

(b) for handrails other than those serving a single *dwelling unit*, a uniformly distributed load of 0.7 kN/m.

(2) Where a handrail serving a single *dwelling unit* is attached to wood studs or blocking, the attachment shall be deemed to comply with Sentence (1), where,

(a) the attachment points are spaced not more than 1.2 m apart,

(b) the first attachment point at either end is located not more than 300 mm from the end of the handrail, and

(c) the fasteners consist of no fewer than two wood screws at each point, penetrating not less than 32 mm into solid wood.

9.8.8. Guards

9.8.8.1. Required Guards

(1) Except as provided in Sentences (2) and (3), every surface to which access is provided for other than maintenance purposes, including but not limited to flights of steps and ramps, exterior landings, porches, balconies, *mezzanines*, galleries and raised walkways, shall be protected by a *guard* on each side that is not protected by a wall for the length, where,

(a) there is a difference in elevation of more than 600 mm between the walking surface and the adjacent surface, or

(b) the adjacent surface within 1.2 m from the walking surface has a slope of more than 1 in 2.

(2) *Guards* are not required,

(a) at loading docks,

(b) at floor pits in *repair garages*, or

(c) where access is provided for maintenance purposes only.

(3) When an interior stair has more than two risers or an interior ramp rises more than 400 mm, the sides of the stair or ramp and the landing or floor level around the stairwell or ramp shall be protected by a *guard* on each side that is not protected by a wall.

(4) Doors in *buildings* of *residential occupancy*, where the finished floor on one side of the door is more than 600 mm above the floor or other surface or ground level on the other side of the door, shall be protected by,

(a) a *guard* in accordance with this Subsection, or

(b) a mechanism capable of controlling the free swinging or sliding of the door so as to limit any clear unobstructed opening to not more than 100 mm.

(5) Except as provided in Sentence (6), openable windows in *buildings* of *residential occupancy* shall be protected by,

(a) a *guard* in accordance with this Subsection, or

(b) a mechanism capable of controlling the free swinging or sliding of the openable part of the window so as to limit any clear unobstructed opening to a size that will prevent the passage of a sphere having a diameter more than 100 mm.

(6) Windows need not be protected in accordance with Sentence (5), where,

(a) the window serves a *dwelling unit* that is not located above another *suite*,

(b) the only opening having greater dimensions than those allowed by Clause (5)(b) is a horizontal opening at the top of the window,

(c) the top surface of the window sill is located more than 480 mm above the finished floor on one side of the window, or

(d) the window is located in a room or space with the finished floor described in Clause (c) located less than 1 800 mm above the floor or ground on the other side of the window.

(7) Except as provided in Sentence (8), glazing installed over stairs, ramps and landings that extends to less than 1 070 mm above the surface of the treads, ramp or landing shall be,

(a) protected by *guards* in accordance with this Subsection, or

(b) non-openable and designed to withstand the specified lateral loads for *guards* as provided in Article 4.1.5.14.

(8) In *dwelling units*, glazing installed over stairs, ramps and landings that extends to less than 900 mm above the surface of the treads, ramp or landing shall be,

(a) protected by *guards* in accordance with this Subsection, or

(b) non-openable and designed to withstand the specified lateral loads for *guards* as provided in Article 4.1.5.14.

(9) Glazing installed in public areas that extends to less than 1 000 mm from the floor and is located above the second *storey* in *buildings* of *residential occupancy* shall be,

(a) protected by *guards* in accordance with this Subsection, or

(b) non-openable and designed to withstand the specified lateral loads for *guards* as provided in Article 4.1.5.14.

9.8.8.2. Loads on Guards

(1) Except as provided in Sentence (5), *guards* shall be designed to resist the specified loads prescribed in Table 9.8.8.2.

Table 9.8.8.2.
Specified Loads for Guards

Forming Part of Sentence 9.8.8.2.(1)

Item	Column 1	Column 2	Column 3	Column 4
	Location of *Guard*	Minimum Specified Loads		
		Horizontal Load Applied Inward or Outward at any Point at the Minimum Required Height of the *Guard*	Horizontal Load Applied Inward or Outward on Elements Within the *Guard*, Including Solid Panels and Pickets	Evenly Distributed Vertical Load Applied at the Top of the *Guard*
1.	*Guards* within *dwelling units* and exterior *guards* serving not more than 2 *dwelling units*	0.5 kN/m or concentrated load of 1.0 kN applied at any point(1)	0.5 kN applied over a maximum width of 300 mm and a height of 300 mm(2)	1.5 kN/m
2.	*Guards* serving access walkways to equipment platforms, contiguous stairs and similar areas	Concentrated load of 1.0 kN applied at any point	Concentrated load of 0.5 kN applied at any point on individual elements	1.5 kN/m

3.	All other *guards*	0.75 kN/m or concentrated load of 1.0 kN applied at any point[(1)]	Concentrated load of 0.5 kN applied at any point on individual elements	1.5 kN/m

Notes to Table 9.8.8.2.:

[(1)] The load that creates the most critical condition shall apply.

[(2)] See Sentence (2).

(2) Where the width and spacing of balusters in *guards* within *dwelling units* and in exterior *guards* serving not more than two *dwelling units* is such that three balusters can be engaged by a load imposed over a 300 mm width, the load shall be imposed so as to engage three balusters.

(3) None of the specified loads prescribed in Table 9.8.8.2. need be considered to act simultaneously.

(4) For *guards* within *dwelling units* and for exterior *guards* serving not more than 2 *dwelling units*, Table 9.8.8.2. need not apply where the *guard* construction has been demonstrated to provide effective performance.

(5) *Guards* constructed in accordance with the requirements in MMAH Supplementary Standard SB-7, "Guards for Housing and Small Buildings" shall be deemed to satisfy the requirements of Sentence (1).

9.8.8.3. Height of Guards

(1) Except as provided in Sentences (2) to (6), all *guards* shall be not less than 1 070 mm high.

(2) All *guards* within *dwelling units* shall be not less than 900 mm high.

(3) Exterior *guards* serving not more than one *dwelling unit* shall be not less than 900 mm high where the walking surface served by the *guard* is not more than 1 800 mm above the finished ground level.

(4) *Guards* for flights of steps, except in required *exit* stairs, shall be not less than 900 mm high.

(5) Except as provided in Sentence (6), the height of *guards* shall be not less than,

(a) 920 mm for required *exit* stairs, and

(b) 1 070 mm around landings.

(6) The height of *guards* for exterior stairs and landings more than 10 m above adjacent ground level shall be not less than 1 500 mm.

(7) The height of *guards* for stairs and landings shall be measured vertically from the top of the *guard* to,

(a) a straight line drawn tangent to the tread nosings of the stair, or

(b) the surface of the landing.

9.8.8.4. Guards for Floors and Ramps in Garages

(1) Except for floors of garages referred to in Section 9.35., where garage floors or ramps are 600 mm or more above the adjacent ground or floor level, every opening through a garage floor and the perimeter of floors and ramps that have no exterior walls shall be provided with,

(a) a continuous curb not less than 150 mm in height, and

(b) a *guard* not less than 1 070 mm above the floor level.

(2) Vehicle guardrails shall be designed for a concentrated horizontal load of 22 kN applied outward at any point 500 mm above the floor surface.

9.8.8.5. Openings in Guards

(1) Except as provided in Sentence (2), openings through any *guard* that is required by Article 9.8.8.1. shall be of a size that will prevent the passage of a spherical object having a diameter of 100 mm unless it can be shown that the location and size of openings that exceed this limit do not represent a hazard.

(2) Openings through any *guard* that is required by Article 9.8.8.1. and that is installed in a *building* of *industrial occupancy* shall be of a size that will prevent the passage of a spherical object having a diameter of 200 mm, unless it can be shown that the location and size of openings that exceed this limit do not represent a hazard.

(3) Unless it can be shown that the location and size of openings that do not comply with the following limits do not represent a hazard, openings through any *guard* that is not required by Article 9.8.8.1. and that serves a *building* of other than *industrial occupancy*, shall be of a size that,

(a) will prevent the passage of a spherical object having a diameter of 100 mm, or

(b) will permit the passage of a spherical object having a diameter of 200 mm.

9.8.8.6. Guards Designed Not to Facilitate Climbing

(1) *Guards* required by Article 9.8.8.1., except those in *industrial occupancies* and where it can be shown that the location and size of openings do not represent a hazard, shall be designed so that no member, attachment or opening located between 140 mm and 900 mm above the floor or walking surface protected by the *guard* will facilitate climbing.

9.8.8.7. Glass in Guards

(1) Glass in *guards* shall be,

(a) safety glass of the laminated or tempered type conforming to CAN/CGSB-12.1-M, “Tempered or Laminated Safety Glass”, or

(b) wired glass conforming to CAN/CGSB-12.11-M, “Wired Safety Glass”.

9.8.9. Construction

9.8.9.1. Loads on Stairs and Ramps

(1) Except as required in Articles 9.8.9.4. and 9.8.9.5., stairs and ramps shall be designed for strength and rigidity under uniform loading criteria to support specified loads of,

(a) 1.9 kPa for stairs and ramps serving a single *dwelling unit*, and

(b) 4.8 kPa for other stairs and ramps.

9.8.9.2. Exterior Concrete Stairs

(1) Exterior concrete stairs with more than two risers and two treads shall be,

(a) supported on unit masonry or concrete walls or piers not less than 150 mm in cross-section, or

(b) cantilevered from the main *foundation* wall.

(2) Stairs described in Sentence (1), when cantilevered from the *foundation* wall, shall be constructed and installed in conformance with Subsection 9.8.10.

(3) The depth below ground level for *foundations* for exterior steps shall conform to the requirements in Section 9.12.

9.8.9.3. Exterior Wood Steps

(1) Exterior wood steps shall not be in direct contact with the ground unless suitably treated with a wood preservative.

9.8.9.4. Wooden Stair Stringers

(1) Wooden stair stringers shall,

(a) have a minimum effective depth of 90 mm, measured perpendicularly to the bottom of the stringer at the point of minimum cross-section, and an overall depth of not less than 235 mm,

(b) be supported and secured top and bottom,

(c) be not less than 25 mm actual thickness if supported along their length and 38 mm actual thickness if unsupported along their length, and

(d) except as permitted in Sentence (2), be spaced not more than 900 mm o.c. for stairs serving not more than one *dwelling unit*, and 600 mm o.c. in other stairs.

(2) For stairs serving not more than one *dwelling unit*, where risers support the front portion of the tread, the space between stringers shall be not more than 1 200 mm.

9.8.9.5. Treads

(1) Stair treads of lumber, plywood or O-2 grade OSB within *dwelling units* shall be not less than 25 mm actual thickness, except that if open risers are used and the distance between stringers exceeds 750 mm, the treads shall be not less than 38 mm actual thickness.

(2) Stair treads of plywood or OSB, that are not continuously supported by the riser shall have their face grain or direction of face orientation at right angles to the stringers.

9.8.9.6. Finish for Treads, Landings and Ramps

(1) Except as required by Sentence (5), the finish for treads, landings and ramps shall be,

(a) wear-resistant,

(b) slip-resistant, and

(c) smooth, even and free from open defects.

(2) The finish for treads, landings and ramps in *dwelling units*, including those from an attached garage serving a single *dwelling unit*, shall be deemed to comply with Sentence (1) where these treads, landings or ramps are finished with,

(a) hardwood,

(b) vertical grain softwood,

(c) resilient flooring,

(d) low-pile carpet,

(e) mat finish ceramic tile,

(f) concrete, or

(g) for stairs to unfinished *basements* and to garages, plywood.

(3) Stairs and ramps, except those serving a single *dwelling unit*, *service rooms* or *service spaces*, shall have a colour contrast or a distinctive visual pattern to demarcate,

(a) the leading edge of the treads,

(b) the leading edge of the landing, and

(c) the beginning and end of a ramp.

(4) Except for stairs serving a single *dwelling unit*, *service rooms* or *service spaces*, a tactile attention indicator conforming to Article 3.8.3.18. shall be installed,

(a) at the top of the stairs, starting one tread depth back from the edge of the top stair, and

(b) at the leading edge of landings where a doorway opens onto stairs, starting one tread depth back from the edge of the landing.

(5) Treads and landings of interior and exterior stairs and ramps, other than those within *dwelling units*, shall have a slip-resistant finish or be provided with slip-resistant strips that extend not more than 1 mm above the surface.

9.8.10. Cantilevered Precast Concrete Steps

9.8.10.1. Design

(1) Exterior concrete steps and their anchorage system that are cantilevered from a *foundation* wall shall be designed and installed to support the loads to which they may be subjected.

9.8.10.2. Anchorage

(1) Cantilevered concrete steps referred to in Article 9.8.10.1. shall be anchored to concrete *foundation* walls at least 200 mm thick.

9.8.10.3. Prevention of Damage Due to Frost

(1) Suitable precautions shall be taken during backfilling and grading operations to ensure that subsequent freezing of the *soil* will not cause uplift forces on the underside of cantilevered concrete steps to the extent that the steps or the walls to which they are attached will be damaged.

Section 9.9. Means of Egress

9.9.1. General

9.9.1.1. Application

(1) Stairways, handrails and *guards* in a *means of egress* shall conform to the requirements in Section 9.8. as well as to the requirements in this Section.

9.9.1.2. Fire Protection

(1) In addition to the fire protection requirements provided in Subsection 9.9.4., *flame-spread ratings*, *fire-resistance ratings* and *fire-protection ratings* for *means of egress* shall conform to Section 9.10.

9.9.1.3. Occupant Load

(1) The *occupant load* of a *floor area* or part of a *floor area*, or of a *building* or part of a *building* not having a *floor area*, shall be based on,

(a) two persons per sleeping room or sleeping area in a *dwelling unit* or *suite*, and

(b) for *occupancies* other than as described in Clause (a), the number of persons,

(i) for which the area is designed, or

(ii) determined from Table 3.1.17.1.

9.9.2. Types and Purpose of Exits

9.9.2.1. Types of Exits

(1) Except as otherwise provided in this Section, an *exit* from any *floor area* shall be one of the following used singly or in combination:

(a) an exterior doorway,

(b) an exterior passageway,

(c) an exterior ramp,

(d) an exterior stairway,

(e) a fire escape (as described in Subsection 3.4.7.),

(f) a *horizontal exit*,

(g) an interior passageway,

(h) an interior ramp, or

(i) an interior stairway.

(2) Fire escapes are permitted to be used as *exits* on existing *buildings* provided they are designed and installed in conformance with Subsection 3.4.7.

(3) Fire escapes shall not be installed on any new *building*.

(4) Where a *horizontal exit* is used, it shall conform to Sentence 3.4.1.6.(1) and Article 3.4.6.10.

9.9.2.2. Purpose of Exits

(1) An *exit* shall be designed for no purpose other than for exiting, except that an *exit* may also serve as an access to a *floor area*.

9.9.2.3. Elevators, Slide Escapes and Windows as Means of Egress

(1) Elevators, slide escapes or windows shall not be considered as part of a required *means of egress*.

(2) Except for *floor areas* of *mercantile occupancy*, casement windows not less than 1 060 mm high, 560 mm wide, with a sill height not more than 900 mm above the inside floor, are permitted to be considered part of a required *means of egress* to provide access to fire escapes, when fire escapes are permitted.

9.9.2.4. Principal Entrances

(1) Except for doors serving a single *dwelling unit*, at least one door at every principal entrance to a *building* providing access from the exterior at ground level shall be designed in accordance with the requirements for *exits*.

9.9.2.5. Front Edge of Stair Treads

(1) Except for curved stairs, the front edge of stair treads in *exits* and *access to exits* shall be at right angles to the direction of *exit* travel.

9.9.2.6. Exterior Exit Stairs that Serve a Hotel

(1) Treads and landings of exterior *exit* stairs that serve a *hotel* shall be designed to be free from ice and snow accumulation.

9.9.3. Dimensions of Means of Egress

9.9.3.1. Application

(1) This Subsection applies to every *means of egress* except *exits* that serve not more than one *dwelling unit* and *access to exits* within *dwelling units*.

9.9.3.2. Exit Width

(1) Except for doors and corridors, the width of every *exit* facility shall be not less than 900 mm.

9.9.3.3. Width of Corridors

(1) The width of every *public corridor*, corridor used by the public, and *exit* corridor shall be not less than 1 100 mm.

9.9.3.4. Clear Height

(1) Except for stairways, doorways and *storage garages*, the minimum clear height in *exits* and *access to exits* shall be 2 100 mm.

(2) The clear height in *exits* and *access to exits* in a *storage garage* shall be not less than 2 000 mm.

9.9.4. Fire Protection of Exits

9.9.4.1. Application

(1) Except as provided in Articles 9.9.4.4. and 9.9.4.6., this Subsection applies to the fire protection of all *exits* except *exits* serving a single *dwelling unit*.

9.9.4.2. Fire Separation for Exits

(1) Except as provided in Sentence (5) and Article 9.9.8.5., every *exit* other than an *exit* doorway shall be separated from each adjacent *floor area* or from another *exit* by a *fire separation* having a *fire-resistance rating* not less than that required for the floor assembly above the *floor area*.

(2) Where there is no floor assembly above, the *fire-resistance rating* required in Sentence (1) shall not be less than that required by Subsection 9.10.8. for the floor assembly below, but in no case shall the *fire-resistance rating* be less than 45 min.

(3) A *fire separation* common to two *exits* shall be smoke-tight and not be pierced by doorways, duct work, piping or any other opening that may affect the continuity of the separation.

(4) A *fire separation* that separates an *exit* from the remainder of the *building* shall have no openings except those for electrical wiring, *noncombustibl*e conduit and *noncombustible* piping that serve only the *exit*, and for standpipes, sprinkler piping, *exit* doorways and wired glass and glass block permitted in Article 9.9.4.3.

(5) The requirements in Sentence (1) do not apply to an exterior *exit* passageway provided the passageway has at least 50 per cent of its exterior sides open to the outdoors and is served by an *exit* stair at each end of the passageway.

9.9.4.3. Wired Glass or Glass Block

(1) This Article applies to wired glass in doors, and wired glass or glass block in sidelights, where these are installed in *fire separations* between *exit* enclosures and *floor areas*.

(2) Except as provided in Sentence (3), the combined area of glazing in doors and sidelights shall not exceed 0.8 m².

(3) Where an *exit* enclosure connects with a *floor area* through an enclosed vestibule or corridor separated from the *floor area* by *fire separations* having not less than a 45 min *fire-resistance rating*, the glazed areas described in Sentence (1) need not be limited as required in Sentence (2).

9.9.4.4. Openings Near Unenclosed Exit Stairs and Ramps

(1) Where an unenclosed exterior *exit* stair or ramp provides the only *means of egress* from a *suite*, and is exposed to fire from openings in the exterior walls of another *fire compartment*, the openings in the exterior walls of the *building* shall be protected with wired glass in fixed steel frames or glass block conforming to Articles 9.10.13.5. and 9.10.13.7. when the openings in the exterior walls of the *building* are within 3 m horizontally and less than 10 m below or less than 5 m above the *exit* stair or ramp.

9.9.4.5. Openings in Exterior Walls of Exits

(1) Either openings in the exterior walls of an *exit* or openings in adjacent exterior walls of the *building* the *exit* serves shall be protected with wired glass in fixed steel frames or glass block installed in accordance with Articles 9.10.13.5. and 9.10.13.7., where,

(a) the *exit* enclosure has exterior walls that intersect the exterior walls of the *building* at an angle of less than 135° measured on the outside of the *building*, and

(b) the openings in the exterior walls of the *building* are within 3 m horizontally and less than 2 m above the openings in the exterior walls of the *exit*.

9.9.4.6. Openings near Exit Doors

(1) This Article applies to,

(a) *exit* doors serving other than single *dwelling units*, and

(b) *exit* doors serving single *dwelling units* where there is no second and separate *exit* from the *dwelling unit*.

(2) Where an exterior *exit* door described in Sentence (1) in one *fire compartment* is within 3 m horizontally of an *unprotected opening* in another *fire compartment* and the exterior walls of these *fire compartments* intersect at an exterior angle of less than 135°, the opening shall be protected with wired glass in fixed steel frames or glass block conforming to Articles 9.10.13.5. and 9.10.13.7. or with a rated *closure* conforming to Table 9.10.13.1. with respect to the rating of the *fire separation* between the two compartments.

9.9.4.7. Stairways in Group D or E Buildings

(1) Notwithstanding the requirements of Sentences 9.9.4.2.(1), 9.9.8.2.(1) and Article 9.10.9.5., where a *suite* of Group D or E *occupancy* is located partly on the *first storey* and partly on the second *storey* or partly on the second *storey* and partly on the third *storey*, stairways serving that *suite* need not be constructed as *exit* stairs, provided,

(a) the *building* is not greater than three *storeys* in *building height*,

(b) the *suite* is separated from other *occupancies* by a *fire separation* having a *fire-resistance rating* of not less than 45 min,

(c) the area occupied by the *suite* is not greater than 100 m² per *storey*, other than the *exit* level *storey*,

(d) the maximum travel distance from any point in the *suite* to an exterior *exit* is not greater than 25 m,

(e) the floor assemblies have a *fire-resistance rating* of not less than 45 min or are of *noncombustible construction*,

(f) the *basement* and *first storey* are separated by a *fire separation* having a *fire-resistance rating* of not less than 45 min, and

(g) a *smoke alarm* is installed on each floor of the *suite*, including the *basement*, in accordance with Subsection 9.10.19.

(2) REVOKED: O. Reg. 191/14, s. 99.

9.9.5. Obstructions and Hazards in Means of Egress

9.9.5.1. Application

(1) This Subsection applies to obstructions and hazards in every *means of egress* except those within a *dwelling unit* or serving a single *dwelling unit*.

9.9.5.2. Occupancies in Corridors

(1) Where a corridor contains an *occupancy*, the *occupancy* shall not reduce the unobstructed width of the corridor to less than the required width of the corridor.

9.9.5.3. Obstructions in Public Corridors

(1) Except as permitted in Sentence (2), obstructions located within 1 980 mm of the floor shall not project horizontally more than 100 mm into *exit* passageways, corridors used by the public or *public corridors* in a manner that would create a hazard for persons with no or low vision travelling adjacent to walls.

(2) The horizontal projection of an obstruction in Sentence (1) is permitted to exceed 100 mm where the obstruction extends to less than 680 mm above the floor.

9.9.5.4. Obstructions in Exits

(1) Except as permitted in Subsection 9.9.6. and Article 9.8.7.6., no fixture, turnstile or construction shall project within the required width of an *exit*.

9.9.5.5. Obstructions in Means of Egress

(1) No obstructions such as posts or turnstiles shall be placed so as to restrict the width of a required *means of egress* from a *floor area* or part of a *floor area* to less than 750 mm unless an alternate unobstructed *means of egress* is provided adjacent to and plainly visible from the restricted egress.

(2) Except as provided in Sentence (3), no obstructions, such as counter gates, that do not meet the requirements for *exit* doors, shall be placed in a required *means of egress* from a *floor area* or part of a *floor area* unless an alternate unobstructed *means of egress* is provided adjacent to and plainly visible from the restricted egress.

(3) Obstructions, such as counter gates, that do not satisfy Sentence (2), are permitted to be placed in a required *means of egress* from a part of a *floor area* in *mercantile occupancies* and *business and personal services occupancies*, provided that the part of the *floor area* served by the obstructed *means of egress* is not generally accessible to the public.

9.9.5.6. Mirrors or Draperies

(1) No mirror shall be placed in or adjacent to any *exit* so as to cause confusion regarding the direction of *exit*, and no mirror or draperies shall be placed on or over *exit* doors.

9.9.5.7. Fuel-Fired Appliances

(1) Fuel-fired *appliances* shall not be installed in an *exit* or corridor serving as an *access to exit*.

9.9.5.8. Service Rooms

(1) *Service rooms* containing equipment subject to possible explosion, such as *boilers* designed to operate at a pressure in excess of 100 kPa, and certain types of refrigerating and transformer equipment, shall not be located under required *exits*.

9.9.5.9. Ancillary Rooms

(1) Ancillary rooms such as storage rooms, washrooms, toilet rooms, laundry rooms and *service rooms* shall not open directly into an *exit*.

9.9.6. Doors in a Means of Egress

9.9.6.1. Obstructions by Doors

(1) Except as provided in Sentence (4), swinging doors in their swing shall conform to Sentences (2) and (3),

(a) at *exit* doors,

(b) at doors that open into or are located within a *public corridor*, and

(c) at doors that open into or are located within another facility that provides *access to exit* from a *suite*.

(2) When fully open, doors described in Sentence (1) shall not decrease the required *exit* width by more than,

(a) 100 mm in *exit* corridors, and

(b) 50 mm for other *exit* facilities.

(3) The swing of doors described in Sentence (1) shall not reduce the width of the path of travel to less than,

(a) the required *exit* width in *exit* corridors and passageways, and

(b) 750 mm on *exit* stairs or landings.

(4) Doors serving a single *dwelling unit* need not comply with Sentences (2) and (3).

9.9.6.2. Clear Opening Height at Doorways

(1) Except as provided in Sentences (2) and (3), the clear opening height of doorways shall be not less than 2 030 mm high at,

(a) *exit* doors,

(b) doors that open into or are located within a *public corridor*, and

(c) doors that open into or are located within another facility that provides *access to exit* from a *suite*.

(2) The clear opening height under door closers and other devices in doorways described in Sentence (1) shall be not less than 1 980 mm.

(3) Doorways serving a single *dwelling unit* need not comply with Sentences (1) and (2).

9.9.6.3. Clear Opening Width at Doorways

(1) Except as provided in Sentence (4), the clear opening width of doorways shall comply with Sentence (2) at,

(a) *exit* doors, and

(b) doors that open into or are located,

(i) within a *public corridor*, or

(ii) within another facility that provides *access to exit* from a *suite*.

(2) Doorways described in Sentence (1) shall be not less than,

(a) 800 mm wide where there is only one door leaf,

(b) 800 mm wide where multiple-leaf doors are installed with only one active leaf with a latching mechanism described in Article 9.9.6.7., and

(c) 1210 mm wide where multiple-leaf doors are installed with two active leaves.

(3) In doorways described in Sentence (1) that have multiple-leaf doors installed,

(a) no active leaf shall be less than 810 mm wide where only one leaf is active, and

(b) no single leaf shall be less than 610 mm wide where two leaves are active.

(4) Doorways serving a single *dwelling unit* need not comply with Sentence (2).

9.9.6.4. Door Action

(1) Except as provided in Sentences (4) and (5), required *exit* doors and doors in required *means of egress*, except doors in *means of egress* within *dwelling units*, shall swing on the vertical axis.

(2) Except as provided in Sentence (5), breakaway sliding doors, installed as required *exit* doors or required doors in *means of egress*, shall be identified as swinging doors by means of a label or decal affixed to the door.

(3) Revolving doors shall comply with Article 3.4.6.15.

(4) Movable *partitions* used to separate a *public corridor* from an adjacent *business and personal services occupancy* or a *mercantile occupancy* need not conform to Sentence (1), provided the *partitions* are not located in the only *means of egress*.

(5) *Exit* doors need not conform to Sentence (1) or (2), where,

(a) the doors serve accessory *buildings* where life safety is not adversely affected, or

(b) the doors serve *storage garages* or other accessory *buildings* serving a single *dwelling unit*.

9.9.6.5. Direction of Door Swing

(1) Except as permitted by Sentence (2) and except for doors serving a single *dwelling unit*, *exit* doors that are required to swing shall swing in the direction of *exit* travel.

(2) An *exit* door need not swing in the direction of *exit* travel where it serves,

(a) a room, *suite* or *floor area* having an *occupant load* of not more than 60 persons, or

(b) as part of a *means of egress* from more than one *floor area* and the *floor areas* so served have a total *occupant load* of not more than 60 persons.

(3) Doors that open onto a corridor or other facility that provides *access to exit* from a room or *suite* having an *occupant load* of more than 60 persons shall swing on the vertical axis in the direction of *exit* travel.

(4) Doors that divide a corridor that is not wholly contained within a *suite* shall swing in the direction of *exit* travel.

(5) Where a pair of doors is installed in a corridor that provides *access to exit* in both directions, the doors shall,

(a) swing in opposite directions, with the door on the right hand side swinging in the direction of *exit* travel, or

(b) swing in both directions.

9.9.6.6. Proximity of Doors to Stairs

(1) Except as provided in Sentence (2), the distance between a stair riser and the leading edge of a door in its swing, except for doors serving a single *dwelling unit*, shall be not less than 300 mm.

(2) Where there is a danger of blockage from ice or snow, an *exit* door, including a door serving a single *dwelling unit*, may open onto not more than one step provided the riser of such step does not exceed 150 mm.

9.9.6.7. Door Latching, Locking and Opening Mechanisms

(1) Principal entrance doors, *exit* doors and doors to *suites*, including exterior doors to *dwelling units*, and other doors in an *access to exit* shall,

(a) be openable from the inside or in travelling to an *exit* without requiring keys, special devices or specialized knowledge of the door opening mechanism, or

(b) in the case of *exit* doors, be controlled by electromagnetic locking mechanisms in accordance with Sentence 3.4.6.16.(4).

(2) Except for doors serving a single *dwelling unit* and doors to accessory *buildings* and to garages serving a single *dwelling unit*, door release hardware on doors in a *means of egress* shall be operable with one hand and the door shall be openable with not more than one releasing operation.

(3) Door release hardware on doors in a *means of egress* shall be installed not more than 1 200 mm above the finished floor.

(4) Except for *hotels*, a door opening onto a *public corridor* that provides *access to exit* from *suites* shall be designed not to lock automatically when such doors are equipped with an automatic self-closing device.

9.9.6.8. Effort Required to Open

(1) Except as required by Sentence 3.8.3.3.(7), every *exit* door, except doors serving a single *dwelling unit*, shall be designed and installed so that when the latch is released the door will open in the direction of *exit* travel under a force of not more than 90 N applied to the door release hardware.

9.9.7. Access to Exits

9.9.7.1. Egress from Roof Area, Podiums, Terraces, Platforms and Contained Open Spaces

(1) An *access to exit* shall be provided from every roof intended for occupancy and from every podium, terrace, platform or contained open space.

(2) Where a roof is intended for an *occupant load* of more than 60 persons, at least two separate *means of egress* shall be provided from the roof to stairs designed in conformance with the requirements for *exit* stairs and located remote from each other.

(3) Where a podium, terrace, platform or contained open space is provided, egress requirements shall conform to the appropriate requirements for rooms or *suites* in Article 9.9.7.4.

9.9.7.2. Means of Egress from Suites

(1) Except as required by Sentence 9.9.9.3.(1), each *suite* in a *floor area* occupied by more than one *suite* shall have,

(a) an exterior *exit* doorway,

(b) a doorway to a *public corridor*, or

(c) a doorway to an exterior passageway.

(2) Except as provided in Sentences 9.9.7.3.(1) and 9.9.8.2.(2), from the point where a doorway described in Clause (1)(b) or (c) enters the *public corridor* or exterior passageway, it shall be possible to go in opposite directions to each of two separate *exits*.

9.9.7.3. Dead-End Corridors

(1) A dead-end *public corridor* is permitted in an *occupancy* shown in Table 9.9.7.3., where,

(a) the dead-end corridor,

(i) does not exceed the distance of travel measured from the most remote point of the dead-end to a point where it is possible to go in opposite directions to each of two separate *exits*, and

(ii) is provided with doors equipped with self-closing devices, or

(b) there is a second and separate egress doorway from each room or *suite* not leading into the dead-end corridor.

Table 9.9.7.3.
Dead-End Public Corridors

Forming Part of Sentence 9.9.7.3.(1)

Item	Column 1 *Occupancy*	Column 2 Maximum Length of Dead-End *Public Corridor*, m	Column 3 Maximum *Occupant Load* or *Suites* Served by Dead-End *Public Corridor*
1.	Group C	6	4 *suites*
2.	Group D	6	30
3.	Group E	9	30
4.	Group F	9	30

(2) Dead-end *public corridors* in *residential occupancies* and *business and personal services occupancies* shall contain only *suite* door openings arranged so that not more than two such doors have to be passed to reach the nearest *exit*.

(3) The area of wired glass in doors required by Sentence (2) shall not exceed 645 cm².

9.9.7.4. Number and Spacing of Egress Doors

(1) Except for *dwelling units*, at least two egress doors shall be provided where,

(a) the area of a room or *suite* exceeds 200 m² in a Group D, E, F2 and F3 *occupancy*, or 150 m² in a Group C *occupancy*, or

(b) the distance measured from any point within a room or *suite* to the nearest egress door exceeds 25 m.

(2) Doors required in Sentence (1) shall be spaced so that in the event one door is made inaccessible by a fire within such a room or *suite*, the other door will provide safe egress.

9.9.7.5. Independent Access to Exit

(1) Required *access to exit* from *suites* shall not be through any other *dwelling unit*, *service room* or other *occupancy*.

9.9.7.6. Travel Distance within Rooms and Suites

(1) Except for *dwelling units*, the travel distance from any point within the room or *suite* to the nearest egress door shall not exceed the maximum travel distance in Article 9.9.8.2.

9.9.8. Exits from Floor Areas

9.9.8.1. Measurement of Travel Distance

(1) Except as provided in Sentences (2) and (3), for the purposes of this Subsection, travel distance means the distance from any point in the *floor area* to an *exit* measured along the path of *exit* travel.

(2) Where a room or *suite* is separated from the remainder of the *floor area* by a *fire separation* having a *fire-resistance rating* of at least 45 min, or in a *sprinklered building*, by a *fire separation* that is not required to have a *fire-resistance rating*, the travel distance is permitted to be measured from an egress door of the room or *suite* to the nearest *exit*.

(3) Where a *public corridor* is not less than 9 m wide and conforms to Clause 3.4.2.5.(1)(d), the travel distance is permitted to be determined in accordance with that Clause.

9.9.8.2. Number of Required Exits

(1) Except as provided in Sentences (2) and (3) and Subsection 9.9.9., at least two *exits* shall be provided from every *floor area*, spaced so that the travel distance to the nearest *exit* is not more than,

(a) 40 m in the case of *business and personal services occupancies*,

(b) 45 m for all *occupancies* where the *floor area* is *sprinklered*, and

(c) 30 m for all other *occupancies*.

(2) Except as provided in Subsection 9.9.9., a single *exit* is permitted from each *storey* in *buildings* of 1 and 2 *storeys* in *building height* provided the *floor area* and travel distance requirements conform to those required in Article 9.9.7.4. and the total *occupant load* served by an *exit* facility does not exceed 60 persons.

(3) In *boarding, lodging or rooming houses*,

(a) where sleeping accommodation is provided for not more than eight persons, a single *exit* is permitted from each *floor area*, or

(b) where sleeping accommodation is not provided in the *basement*, a single *exit* is permitted from the *basement floor area*.

9.9.8.3. Contribution of Each Exit

(1) Where more than one *exit* is required from a *floor area*, each *exit* shall be considered as contributing not more than half the required *exit* width.

9.9.8.4. Location of Exits

(1) Where more than one *exit* is required from a *floor area*, at least two *exits* shall be independent of each other and be placed remote from each other along the path of travel between them.

9.9.8.5. Exiting through a Lobby

(1) Not more than one *exit* from a *floor area* is permitted to lead through a lobby.

(2) The floor of the lobby referred to in Sentence (1) shall be not more than 4.5 m above *grade*, and the path of travel through the lobby to the outdoors shall not exceed 15 m.

(3) The lobby referred to in Sentence (1) shall conform in all respects to the requirements for *exits*, except that rooms other than *service rooms*, storage rooms and rooms of *residential* or *industrial occupancy* are permitted to open directly onto such lobby.

(4) Except as provided in Sentence (6), an *exit* is permitted to lead through a lobby referred to in Sentence (1) provided the lobby is not located within an *interconnected floor space* other than as described in Sentence 3.2.8.2.(6).

(5) Passenger elevators are permitted to open onto the lobby referred to in Sentence (1) provided the elevator doors are designed to remain closed except while loading and unloading.

(6) An *exit* that serves a *hotel* is permitted to lead through a lobby referred to in Sentence (1) provided the lobby is not located within an *interconnected floor space*.

(7) Where the lobby referred to in Sentence (1) and adjacent *occupancies* that are permitted to open into the lobby are *sprinklered*, the *fire separation* between such *occupancies* and the lobby need not have a *fire-resistance rating*.

9.9.8.6. Mezzanine Means of Egress

(1) Except as provided by Sentences (2) and (3), the space above a *mezzanine* shall be served by at least two *means of egress* leading to *exits* accessible at the *mezzanine* level on the same basis as *floor areas*.

(2) One *means of egress* from a *mezzanine* is permitted, where,

(a) the *mezzanine* is not required to terminate at a vertical *fire separation*, as permitted by Sentence 9.10.12.1.(2),

(b) the *occupant load* of the *mezzanine* is not more than 60,

(c) the area of the *mezzanine* does not exceed the area limits of Clause 9.9.7.4.(1)(a), and

(d) the distance limits of Clause 9.9.7.4.(1)(b) measured along the path of travel, are not exceeded from any point on the *mezzanine* to,

(i) an egress door serving the space that the *mezzanine* overlooks if the space is served by a single egress door, or

(ii) an egress stairway leading to an *access to exit* in the space below if that space is required to be served by two or more egress doorways in conformance with Sentence 9.9.7.4.(1).

(3) One of the *means of egress* from a *mezzanine* that is not required to terminate at a *fire separation* as permitted by Sentence 9.10.12.1.(2) and that exceeds the limits of Sentence (2), is permitted to lead through the room in which the *mezzanine* is located provided all other *means of egress* from that *mezzanine* lead to *exits* accessible at the *mezzanine* level.

(4) Except as provided in Sentence (2), the maximum travel distance from any point on a *mezzanine* to the nearest *exit* shall be not more than,

(a) 40 m in a *business and personal services occupancy*,

(b) 45 m in a *floor area* that is *sprinklered* provided it does not contain a *high hazard industrial occupancy*, or

(c) 30 m in any *floor area* not referred to in Clause (a) or (b).

9.9.9. Egress from Dwelling Units

9.9.9.1. Travel Limit to Exits or Egress Doors

(1) Except as provided in Sentences (2) and (3), every *dwelling unit* containing more than 1 *storey* shall have *exits* or egress doors located so that it shall not be necessary to travel up or down more than 1 *storey* to reach a level served by,

(a) an egress door to a *public corridor*, enclosed *exit* stair or exterior passageway, or

(b) an *exit* doorway not more than 1 500 mm above adjacent ground level.

(2) Where a *dwelling unit* is not located above or below another *suite*, the travel limit from a floor level in the *dwelling unit* to an *exit* or egress door is permitted to exceed 1 *storey* where that floor level is served by an openable window or door,

(a) providing an unobstructed opening of not less than 1 000 mm in height and 550 mm in width, and

(b) located so that the sill is not more than,

(i) 1 000 mm above the floor, and

(ii) 7 m above adjacent ground level.

(3) The travel limit from a floor level in a *dwelling unit* to an *exit* or egress door is permitted to exceed 1 *storey* where that floor level has direct access to a balcony.

9.9.9.2. Two Separate Exits

(1) Except as provided in Sentence 9.9.7.3.(1), where an egress door from a *dwelling unit* opens onto a *public corridor* or exterior passageway it shall be possible from the location where the egress door opens onto the corridor or exterior passageway to go in opposite directions to two separate *exits* unless the *dwelling unit* has a second and separate *means of egress*.

9.9.9.3. Shared Egress Facilities

(1) A *dwelling unit* shall be provided with a second and separate *means of egress* where an egress door from the *dwelling unit* opens onto,

(a) an *exit* stairway serving more than one *suite*,

(b) a *public corridor*,

(i) serving more than one *suite*, and

(ii) served by a single *exit*,

(c) an exterior passageway,

(i) serving more than one *suite*,

(ii) served by a single *exit* stairway or ramp, and

(iii) more than 1.5 m above adjacent ground level, or

(d) a balcony,

(i) serving more than one *suite*,

(ii) served by a single *exit* stairway or ramp, and

(iii) more than 1.5 m above adjacent ground level.

9.9.10. Egress from Bedrooms

9.9.10.1. Egress Windows or Doors for Bedrooms

(1) Except where a door on the same floor level as the bedroom provides direct access to the exterior, every floor level containing a bedroom in a *suite* shall be provided with at least one outside window that,

(a) is openable from the inside without the use of tools,

(b) provides an individual, unobstructed open portion having a minimum area of 0.35 m^2 with no dimension less than 380 mm, and

(c) maintains the required opening described in Clause (b) without the need for additional support.

(2) Except for *basement* areas, the window required in Sentence (1) shall have a maximum sill height of 1 000 mm above the floor.

(3) When sliding windows are used, the minimum dimension described in Sentence (1) shall apply to the openable portion of the window.

(4) Where the sleeping area within a *live/work unit* is on a *mezzanine* with no obstructions more than 1 070 mm above the floor, the window required in Sentence (1)

may be provided on the main level of the *live/work unit* provided the *mezzanine* is not more than 25% of the area of the *live/work unit* or 20 m^2, whichever is less, and an unobstructed direct path of travel is provided from the *mezzanine* to this window.

(5) Where a window required in Sentence (1) opens into a window well, a clearance of not less than 550 mm shall be provided in front of the window.

(6) Where the sash of a window referred to in Sentence (5) swings towards the window well, the operation of the sash shall not reduce the clearance in a manner that would restrict escape in an emergency.

(7) Where a protective enclosure is installed over the window well referred to in Sentence (5), such enclosure shall be openable from the inside without the use of keys, tools or special knowledge of the opening mechanism.

9.9.11. Signs

9.9.11.1. Application

(1) This Subsection applies to all *exits* except those serving not more than one *dwelling unit*.

9.9.11.2. Visibility of Exits

(1) *Exits* shall be located so as to be clearly visible or their locations shall be clearly indicated.

9.9.11.3. Exit Signs

(1) Except as required in Sentence (7), every *exit* door shall have an *exit* sign placed over it or adjacent to it if the *exit* serves,

(a) a *building* that is 3 *storeys* in *building height*,

(b) a *building* having an *occupant load* of more than 150, or

(c) a room or *floor area* that has a fire escape as part of a required *means of egress*.

(2) Except as required in Sentence (6), every *exit* sign shall,

(a) be visible on approach to the *exit*,

(b) except as provided in Sentence (3), consist of a green pictogram and a white or lightly tinted graphical symbol meeting the colour specifications referred to in ISO 3864-1, “Graphical Symbols – Safety Colours and Safety Signs – Part 1: Design Principles for Safety Signs and Safety Markings”, and

(c) conform to the dimensions indicated in ISO 7010, “Graphical Symbols – Safety Colours and Safety Signs – Safety Signs Used in Workplaces and Public Areas”, for the following symbols:

(i) E001 emergency exit left,

(ii) E002 emergency exit right,

(iii) E005 90-degree directional arrow, and

(iv) E006 45-degree directional arrow.

(3) Internally illuminated *exit* signs shall be continuously illuminated, and,

(a) where illumination of the sign is powered by an electrical circuit, be constructed in conformance with CSA 22.2 No. 141, "Emergency Lighting Equipment", or

(b) where illumination of the sign is not powered by an electrical circuit, be,

(i) constructed in conformance with CAN/ULC-S572, "Photoluminescent and Self-Luminous Signs and Path Marking Systems", and

(ii) labelled in accordance with the time duration for which they have been tested and *listed*.

(4) Externally illuminated *exit* signs shall be illuminated at all times by a light fixture supplied by an electrical circuit.

(5) The circuitry serving lighting for externally and internally illuminated *exit* signs shall,

(a) serve no equipment other than emergency lighting in the area where the *exit* signs are installed, and

(b) be connected to an emergency power supply as described in Sentences 9.9.12.3.(2), (3) and (7).

(6) An *exit* sign conforming to Clauses (2)(b) and (c) with an arrow or other indicator pointing at the direction of egress shall be provided where no *exit* is visible from,

(a) a *public corridor*,

(b) a corridor used by the public, or

(c) a principal route serving an open *floor area* having an *occupant load* of more than 150.

(7) Except for *suite* doors opening directly to the exterior, every *exit* serving a *hotel* shall have an *exit* sign placed over it or adjacent to it.

9.9.11.4. Signs for Stairs and Ramps at Exit Level

(1) In *buildings* that are 3 *storeys* in *building height*, any part of an *exit* ramp or stairway that continues up or down past the lowest *exit level* shall be clearly marked to indicate that it does not lead to an *exit* where the portion below *exit level* may be mistaken as the direction of *exit* travel.

9.9.11.5. Floor Numbering

(1) Arabic numerals indicating the assigned floor number shall be,

(a) except in *hotels*, mounted permanently on the stair side of the wall at the latch side of doors to *exit* stair shafts,

(b) in *hotels*, mounted permanently on each side of the *exit* doors to the *exit* stair shaft,

(c) not less than 60 mm high, raised approximately 0.8 mm above the surface,

(d) located 1 500 mm from the finished floor and not more than 300 mm from the door, and

(e) contrasting in colour with the surface on which they are applied.

9.9.12. Lighting

9.9.12.1. Application

(1) This Subsection applies to the lighting of all *means of egress* except those within *dwelling units*.

9.9.12.2. Required Lighting in Egress Facilities

(1) Every *exit*, *public corridor* or corridor providing *access to exit* for the public shall be equipped to provide illumination to an average level of not less than 50 lx at floor or tread level and at all points such as angles and intersections at changes of level where there are stairs or ramps.

(2) The minimum value of the illumination required by Sentence (1) shall be not less than 10 1x.

9.9.12.3. Emergency Lighting

(1) Emergency lighting shall be provided in,

(a) *exits*,

(b) principal routes providing *access to exit* in an open *floor area*,

(c) corridors used by the public,

(d) underground walkways, and

(e) *public corridors*.

(2) Emergency lighting required in Sentence (1) shall be provided from a source of energy separate from the electrical supply for the *building*.

(3) Lighting required in Sentence (1) shall be designed to be automatically actuated for a period of not less than 30 min when the electric lighting in the affected area is interrupted.

(4) Illumination from lighting required in Sentence (1) shall be provided to average levels of not less than 10 lx at floor or tread level.

(5) The minimum value of the illumination required by Sentence (4) shall be not less than 1 1x.

(6) Where incandescent lighting is provided, lighting equal to 1 W/m² of *floor area* shall be considered to meet the requirement in Sentence (4).

(7) Where self-contained emergency lighting units are used, they shall conform to CSA C22.2 No. 141, “Emergency Lighting Equipment”.

Section 9.10. Fire Protection

9.10.1. Definitions and Application

9.10.1.1. Support of Noncombustible Construction

(1) Where an assembly is required to be of *noncombustible construction* and to have a *fire-resistance rating*, it shall be supported by *noncombustible construction*.

9.10.1.2. Sloped Roofs

(1) For the purposes of this Section, roofs with slopes of 60° or more to the horizontal and that are adjacent to a room or space intended for occupancy shall be considered as a wall.

9.10.1.3. Items Under Part 3 Jurisdiction

(1) Tents, *air-supported structures*, transformer vaults, *walkways*, elevators and escalators shall conform to Part 3.

(2) Where rooms or spaces are intended for an *assembly occupancy*, such rooms or spaces shall conform to Part 3.

(3) *Basements* containing more than 1 *storey* or exceeding 600 m^2 in area shall conform to Part 3.

(4) Where rooms or spaces are intended for the storage, manufacture or use of hazardous or explosive material, such rooms or spaces shall conform to Part 3.

(5) Reserved

(6) Openings through floors that are not protected by shafts or *closures* shall be protected in conformance with Subsection 3.2.8.

(7) Chutes and shafts shall conform to Subsection 3.6.3. except where they are contained entirely within a *dwelling unit*.

(8) Sprinkler systems shall be designed, constructed and installed in conformance with Sentence 3.2.5.7.(1), Articles 3.2.5.13. to 3.2.5.16. and Article 3.2.5.18.

(9) Standpipe and hose systems shall be designed, constructed and installed in conformance with Article 3.2.5.18. and Subsection 3.2.9.

(10) Fire pumps shall be installed in conformance with Articles 3.2.5.18. and 3.2.5.19.

9.10.1.4. Items Under Part 6 Jurisdiction

(1) In kitchens containing commercial cooking equipment used in processes producing grease-laden vapours, the equipment shall be designed and installed in conformance with Part 6.

(2) Where fuel-fired *appliances* are installed on a roof, such *appliances* shall be installed in conformance with Part 6.

9.10.2. Occupancy Classification

9.10.2.1. Occupancy Classification

(1) Every *building* or part of it shall be classified according to its *major occupancy* as belonging to one of the groups or divisions described in Table 9.10.2.1.

Table 9.10.2.1.
Occupancy Classifications

Forming Part of Sentence 9.10.2.1.(1)

Item	Column 1 Group	Column 2 Division	Column 3 Description of *Major Occupancies*

1.	C	—	*Residential occupancies*
2.	D	—	*Business and personal services occupancies*
3.	E	—	*Mercantile occupancies*
4.	F	2	*Medium hazard industrial occupancies*
5.	F	3	*Low hazard industrial occupancies* (Does not include *storage garages* serving individual *dwelling units*)

9.10.2.2. Reserved

9.10.2.3. Major Occupancies above Other Major Occupancies

(1) Except as permitted in Article 9.10.2.4., in any *building* containing more than 1 *major occupancy* in which one *major occupancy* is located entirely above another, the requirements of Article 9.10.8.1. for each portion of the *building* containing a *major occupancy* shall be applied to that portion as if the entire *building* was of that *major occupancy*.

9.10.2.4. Buildings Containing More Than One Major Occupancy

(1) In a *building* containing more than 1 *major occupancy*, where the aggregate area of all *major occupancies* in a particular group or division does not exceed 10% of the *floor area* on the *storey* on which they are located, they need not be considered as *major occupancies* for the purposes of Articles 9.10.2.3. and 9.10.8.1. provided they are not classified as Group F, Division 2 *occupancies*.

9.10.3. Ratings

9.10.3.1. Fire-Resistance and Fire-Protection Ratings

(1) Where a *fire-resistance rating* or a *fire-protection rating* is required in this Section for an element of a *building*, such rating shall be determined in conformance with the test methods described in Part 3, or in accordance with MMAH Supplementary Standard SB-2, “Fire Performance Ratings”, or MMAH Supplementary Standard SB-3, “Fire and Sound Resistance of Building Assemblies”.

9.10.3.2. Flame-Spread Rating

(1) Where a *flame-spread rating* is required in this Section for an element of a *building*, such rating shall be determined in accordance with the test methods described in Part 3, or in accordance with MMAH Supplementary Standard SB-2, “Fire Performance Ratings”.

(2) Unless the *flame-spread rating* is referred to in this Part as a “surface *flame-spread rating*”, it shall apply to any surface of the element being considered that would be exposed by cutting through it as well as to the exposed surface of the element.

9.10.3.3. Fire Exposure

(1) Floor, roof and ceiling assemblies shall be rated for exposure to fire on the underside.

(2) Exterior walls shall be rated for exposure to fire from inside the *building*, except that such walls need not comply with the temperature rise limitations required by the standard tests referred to in Article 9.10.3.1. if such walls have a *limiting distance* of not

less than 1.2 m, and due allowance is made for the effects of heat radiation in accordance with the requirements in Part 3.

(3) *Firewalls* and interior vertical *fire separations* required to have *fire-resistance ratings* shall be rated for exposure to fire on each side.

9.10.3.4. Suspended Membrane Ceiling

(1) Where a ceiling construction has a suspended membrane ceiling with lay-in panels or tiles that contribute to the required *fire-resistance rating*, hold down clips or other means shall be provided to prevent the lifting of such panels or tiles in the event of a fire.

9.10.4. Building Size Determination

9.10.4.1. Mezzanines not Considered as Storeys

(1) *Mezzanines* shall not be considered as *storeys* for the purpose of determining *building height* where the aggregate area of *mezzanine* floors does not exceed 10% of,

(a) the *suite* in which it is located, where there is more than one *suite* in the *storey*, or

(b) the *storey* in which it is located, in all other cases.

(2) *Mezzanines* shall not be considered as *storeys* for the purpose of determining *building height* where they occupy an aggregate area not exceeding 40% of the area of the room or the *storey* in which they are located provided the space above the *mezzanine* floor has no visual obstructions more than 1 070 mm above such floors.

9.10.4.2. More Than One Level of Mezzanine

(1) Where more than 1 level of *mezzanine* is provided in a *storey*, each level additional to the first shall be considered as a *storey*.

9.10.4.3. Basement Storage Garages

(1) Where a *basement* is used primarily as a *storage garage*, the *basement* is permitted to be considered as a separate *building* for the purposes of this Section provided the floor above the *basement* and the exterior walls of the *basement* above the adjoining ground level are constructed as *fire separations* of masonry or concrete having a *fire-resistance rating* of not less than 2 h.

9.10.4.4. Rooftop Enclosures

(1) Rooftop enclosures provided for elevator machinery, stairways and *service rooms*, used for no purpose other than for service to the *building*, shall not be considered as a *storey* in calculating the *building height*.

9.10.5. Permitted Openings in Wall and Ceiling Assemblies

9.10.5.1. Permitted Openings in Wall and Ceiling Membranes

(1) Except as permitted in Sentences (2) and (4), a membrane forming part of an assembly required to have a *fire-resistance rating* shall not be pierced by openings into the assembly unless the assembly has been tested and rated for such openings.

(2) A wall or ceiling membrane forming part of an assembly required to have a *fire-resistance rating* is permitted to be pierced by openings for electrical and similar service outlet boxes provided such outlet boxes are tightly fitted.

(3) Where boxes referred to in Sentence (2) are located on both sides of walls required to provide a *fire-resistance rating*, they shall be offset where necessary to maintain the integrity of the *fire separation.*

(4) A membrane ceiling forming part of an assembly assigned a *fire-resistance rating* on the basis of Table 2 of MMAH Supplementary Standard SB-3, "Fire and Sound Resistance of Building Assemblies", is permitted to be pierced by openings leading to ducts within the ceiling space provided the ducts, the amount of openings and their protection conform to the requirements in MMAH Supplementary Standard SB-2, "Fire Performance Ratings".

9.10.6. Construction Types

9.10.6.1. Combustible Elements in Noncombustible Construction

(1) Where a *building* or part of a *building* is required to be of *noncombustible construction*, *combustible* elements shall be limited in conformance with the requirements in Subsection 3.1.5.

9.10.6.2. Heavy Timber Construction

(1) *Heavy timber construction* shall be considered to have a 45 min *fire-resistance rating* when it is constructed in accordance with the requirements for *heavy timber construction* in Article 3.1.4.7.

9.10.7. Steel Members

9.10.7.1. Protection of Structural Steel Members

(1) Except as provided in Article 3.2.2.3., structural steel members used in construction required to have a *fire-resistance rating* shall be protected to provide the required *fire-resistance rating*.

9.10.8. Fire-Resistance, Combustibility and Sprinklers in Relation to Occupancy, Height and Supported Elements

9.10.8.1. Fire-Resistance Ratings for Floors and Roofs

(1) Except as otherwise provided in this Subsection, the *fire-resistance ratings* of floors and roofs shall conform to Table 9.10.8.1.

Table 9.10.8.1.
Fire Resistance Ratings for Structural Members and Assemblies

Forming Part of Sentence 9.10.8.1.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Major Occupancy	Maximum *Building Height, Storeys*	Minimum *Fire-Resistance Rating* by *Building* Element, min		
			Floors Except Floors over Crawl Spaces	*Mezzanine* Floors	Roofs
1.	*Residential* (Group C)	3	45	45	—
2.		2	45	—	—

	All other *occupancies*	3	45	45	45

9.10.8.2. Fire-Resistance Ratings in Sprinklered Buildings

(1) Except for roofs that support an *occupancy*, the requirements in Table 9.10.8.1. for roof assemblies to have a *fire-resistance rating* are permitted to be waived in *sprinklered buildings* where,

(a) the sprinkler system is electrically supervised in conformance with Sentence 3.2.4.10.(3), and

(b) the operation of the sprinkler system will cause a signal to be transmitted to the fire department in conformance with Sentence 3.2.4.8.(4).

9.10.8.3. Fire-Resistance Ratings for Walls, Columns and Arches

(1) Except as otherwise provided in this Subsection, all *loadbearing* walls, columns and arches in the *storey* immediately below a floor or roof assembly shall have a *fire-resistance rating* of not less than that required for the supported floor or roof assembly.

9.10.8.4. Automatic Sprinkler Systems

(1) A retirement home regulated under the *Retirement Homes Act, 2010* shall be *sprinklered* in accordance with Sentence 9.10.1.3.(8).

9.10.8.5. Service Rooms

(1) Construction supporting a *service room* need not conform to Article 9.10.8.3.

9.10.8.6. Mezzanines

(1) *Mezzanines* required to be counted as *storeys* in Articles 9.10.4.1. and 9.10.4.2. shall be constructed in conformance with the requirements for “Floors Except Floors over Crawl Spaces” in Table 9.10.8.1.

9.10.8.7. Roofs Supporting an Occupancy

(1) Where a portion of a roof supports an *occupancy*, that portion shall be constructed as a *fire separation* having a *fire-resistance rating* conforming to the rating for “Floors Except Floors over Crawl Spaces” in Table 9.10.8.1.

9.10.8.8. Floors of Exterior Passageways

(1) Except as provided in Sentences (2) and (3), the floor assembly of every exterior passageway used as part of a *means of egress* shall have a *fire-resistance rating* of not less than 45 min or be of *noncombustible construction*.

(2) No *fire-resistance rating* is required for floors of exterior passageways serving *buildings* of Group D, E or F *major occupancy* that are not more than 2 *storeys* in *building height*.

(3) No *fire-resistance rating* is required for floors of exterior passageways serving a single *dwelling unit* where no *suite* is located above or below the *dwelling unit*.

9.10.8.9. Crawl Spaces

(1) Where a crawl space exceeds 1 800 mm in height or is used for any *occupancy* or as a *plenum* in *combustible construction* or for the passage of *flue pipes*, it shall be considered as a *basement* in applying the requirements in Article 9.10.8.1.

9.10.8.10. Application to Houses

(1) Table 9.10.8.1. does not apply to a *dwelling unit* that has no other *dwelling unit* above or below it or to a *dwelling unit* that is not above or below another *major occupancy*.

9.10.8.11. Part 3 as an Alternative

(1) The *fire-resistance ratings* of floors, roofs, *loadbearing* walls, columns and arches need not conform to this Subsection if such assemblies conform in all respects to the appropriate requirements in Section 3.2.

9.10.9. Fire Separations Between Rooms and Spaces Within Buildings

9.10.9.1. Application

(1) This Subsection applies to *fire separations* required between rooms and spaces in *buildings* except between rooms and spaces within a *dwelling unit*.

9.10.9.2. Continuous Barrier

(1) Except as permitted in Article 9.10.9.3., a wall or floor assembly required to be a *fire separation* shall be constructed as a continuous barrier against the spread of fire.

(2) The continuity of a *fire separation* shall be maintained where it abuts another *fire separation*, a floor, a ceiling, a roof or an exterior wall assembly.

9.10.9.3. Openings to be Protected With Closures

(1) Except as permitted in Articles 9.10.9.5. to 9.10.9.7., openings in required *fire separations* shall be protected with *closures* conforming to Subsection 9.10.13.

9.10.9.4. Floor Assemblies

(1) Except as permitted in Sentences (2) to (4), all floor assemblies shall be constructed as *fire separations*.

(2) Floor assemblies contained within *dwelling units* need not be constructed as *fire separations*.

(3) Floor assemblies for which no *fire-resistance rating* is required by Subsection 9.10.8. and floors of *mezzanines* not required to be counted as *storeys* in Articles 9.10.4.1. and 9.10.4.2. need not be constructed as *fire separations*.

(4) Where a crawl space is not required by Article 9.10.8.9. to be constructed as a *basement*, the floor above it need not be constructed as a *fire separation*.

9.10.9.5. Interconnected Floor Spaces

(1) Except as permitted in Article 9.9.4.7., *interconnected floor spaces* shall conform to the requirements of Subsection 3.2.8.

9.10.9.6. Penetration of Fire Separations

(1) Piping, tubing, ducts, *chimneys*, wiring, conduit, electrical outlet boxes and other similar service equipment that penetrate a required *fire separation* shall be tightly fitted or fire stopped to maintain the integrity of the separation.

(2) Penetrations of a *firewall* shall be sealed at the penetration by a *fire stop* that, when subjected to the fire test method in CAN/ULC-S115, "Fire Tests of Firestop Systems", has an FT rating not less than the *fire-resistance rating* for the *fire separation*.

(3) Except as provided in Sentences (4) to (12) and Article 9.10.9.7., pipes, ducts, electrical outlet boxes, totally enclosed raceways or other similar service equipment that partly or wholly penetrate an assembly required to have a *fire-resistance rating* shall be *noncombustible* unless the assembly has been tested incorporating such equipment.

(4) Electrical wires or other similar wiring enclosed in *noncombustible* totally enclosed raceways are permitted to partly or wholly penetrate an assembly required to have a *fire-resistance rating* without being incorporated in the assembly at the time of testing as required in Sentence (3).

(5) Single conductor metal-sheathed cables with *combustible* jacketing that are more than 25 mm in overall diameter are permitted to penetrate a *fire separation* required to have a *fire-resistance rating* without being incorporated in the assembly at the time of testing as required in Sentence (3), provided the cables are not grouped and are spaced a minimum of 300 mm apart.

(6) Electrical wires or cables, single or grouped, with *combustible* insulation or jacketing that is not totally enclosed in raceways of *noncombustible* material, are permitted to partly or wholly penetrate an assembly required to have a *fire-resistance rating* without being incorporated in the assembly at the time of testing as required in Sentence (3), provided the overall diameter of the wiring is not more than 25 mm.

(7) *Combustible* totally enclosed raceways that are embedded in a concrete floor slab are permitted in an assembly required to have a *fire-resistance rating* without being incorporated in the assembly at the time of testing as required in Sentence (3), where the concrete provides at least 50 mm of cover between the raceway and the bottom of the slab.

(8) *Combustible* outlet boxes are permitted in an assembly required to have a *fire-resistance rating* without being incorporated in the assembly at the time of testing as required in Sentence (3), provided the opening through the membrane into the box does not exceed 160 cm².

(9) *Combustible* water distribution piping is permitted to partly or wholly penetrate a *fire separation* that is required to have a *fire-resistance rating* without being incorporated in the assembly at the time of testing as required in Sentence (3), provided the piping is protected with a *fire stop* in conformance with Sentence 3.1.9.4.(4).

(10) *Combustible* sprinkler piping is permitted to penetrate a *fire separation* provided the *fire compartments* on each side of the *fire separation* are *sprinklered*.

(11) Sprinklers are permitted to penetrate a *fire separation* or a membrane forming part of an assembly required to have a *fire-resistance rating* without having to meet the *fire stop* requirements of Sentence (1), provided the annular space created by the penetration

of a fire sprinkler is covered by a metal escutcheon plate in accordance with NFPA 13, "Installation of Sprinklers".

(12) *Combustible* piping for central vacuum systems is permitted to penetrate a *fire separation* provided the installation conforms to the requirements that apply to *combustible* piping in Sentences 9.10.9.7.(2) to (6).

(13) *Fire dampers* are permitted to penetrate a *fire separation* or a membrane forming part of an assembly required to have a *fire-resistance rating* without having to meet the *fire stop* requirements of Sentence (1), provided the *fire damper* is,

(a) installed in conformance with NFPA 80, "Fire Doors and Other Opening Protectives," or

(b) designed specifically with a *fire stop*.

9.10.9.7. Combustible Piping

(1) Except as permitted in Sentences (2) to (6), *combustible* piping shall not be used where any part of a piping system partly or wholly penetrates a *fire separation* required to have a *fire-resistance rating* or penetrates a membrane that contributes to the required *fire-resistance rating* of an assembly.

(2) *Combustible* piping not located in a vertical shaft is permitted to penetrate a *fire separation* required to have a *fire-resistance rating* or a membrane that forms part of an assembly required to have a *fire-resistance rating*, provided the piping is sealed at the penetration by a *fire stop* that has an F rating not less than the *fire-resistance rating* required for the *fire separation*.

(3) The rating referred to in Sentence (2) shall be based on CAN/ULC-S115, "Fire Tests of Firestop Systems", with a pressure differential of 50 Pa between the exposed and unexposed sides, with the higher pressure on the exposed side.

(4) *Combustible* drain piping is permitted to penetrate a horizontal *fire separation* or a membrane that contributes to the required *fire-resistance rating* of a horizontal *fire separation*, provided it leads directly from a *noncombustible* water closet through a concrete floor slab.

(5) *Combustible* piping is permitted,

(a) on one side of a vertical *fire separation* provided it is not located in a vertical shaft, and

(b) to penetrate a vertical or horizontal *fire separation* when the *fire compartment* on each side of the *fire separation* is *sprinklered*.

(6) In *buildings* containing 2 *dwelling units* only, *combustible* piping is permitted on one side of a horizontal *fire separation*.

9.10.9.8. Collapse of Combustible Construction

(1) *Combustible construction* that abuts on or is supported by a *noncombustible fire separation* shall be constructed so that its collapse under fire conditions will not cause collapse of the *fire separation*.

9.10.9.9. Reduction in Thickness of Fire Separation by Beams and Joists

(1) Where pockets for the support of beams or joists are formed in a masonry or concrete *fire separation*, the remaining total thickness of solid masonry and/or grout and/or concrete shall be not less than the required equivalent thickness shown for Type S monolithic concrete in Table 2.1.1. of MMAH Supplementary Standard SB-2, "Fire Performance Ratings", for the required *fire-resistance rating*.

9.10.9.10. Concealed Spaces above Fire Separations

(1) Except as provided in Sentence (2), a *horizontal service space* or other concealed space located above a required vertical *fire separation* shall be divided at the *fire separation* by an equivalent *fire separation* within the space.

(2) Where a *horizontal service space* or other concealed space is located above a required vertical *fire separation* other than a vertical shaft, such space need not be divided as required in Sentence (1) provided the construction between such space and the space below is constructed as a *fire separation* having a *fire-resistance rating* not less than that required for the vertical *fire separation*, except that where the vertical *fire separation* is not required to have a *fire-resistance rating* greater than 45 min, the *fire-resistance rating* of the ceiling is permitted to be reduced to 30 min.

9.10.9.11. Separation of Residential Occupancies

(1) Except as provided in Sentences (2) and (4), *residential occupancies* shall be separated from all other *major occupancies* by a *fire separation* having a *fire-resistance rating* of not less than 1 h.

(2) Except as provided in Sentence (3), a *major occupancy* classified as a *residential occupancy*, including *live/work units*, shall be separated from other *major occupancies* classified as *mercantile* or *medium hazard industrial occupancies* by a *fire separation* having a *fire-resistance rating* of not less than 2 h.

(3) Where not more than 2 *dwelling units* or *live/work units* are located in a *building* containing a *mercantile occupancy*, such *mercantile occupancy* shall be separated from the *dwelling units* or *live/work units* by a *fire separation* having not less than 1 h *fire-resistance rating*.

(4) The requirement for *fire separations* between *major occupancies* in Sentence (1) is waived for the *occupancies* allowed within *live/work units*.

9.10.9.12. Residential Suites, Live/Work Units and Industrial Buildings

(1) Except as provided in Sentence (2), not more than 1 *suite* of *residential occupancy* shall be contained within a *building* classified as a Group F, Division 2 *major occupancy*.

(2) Except where a Group F Division 2 *major occupancy* is directly related to *live/work units*, not more than one *suite* of *residential occupancy* shall be contained within a *building* classified as Group F, Division 2 *major occupancy*.

9.10.9.13. Separation of Suites

(1) Except as required in Article 9.10.9.14. and as permitted by Sentence (2), each *suite* in other than *business and personal services occupancies* shall be separated from adjoining *suites* by a *fire separation* having a *fire-resistance rating* of not less than 45 min.

(2) In *sprinklered buildings*, *suites* of *business and personal services occupancy* and *mercantile occupancy* that are served by *public corridors* conforming with Sentence 3.3.1.4.(4) are not required to be separated from each other by *fire separations*.

9.10.9.14. Separation of Residential Suites

(1) Except as provided in Sentences (2) and (3) and Article 9.10.21.2., *suites* in *residential occupancies* shall be separated from adjacent rooms and *suites* by a *fire separation* having a *fire-resistance rating* of not less than 45 min.

(2) Sleeping rooms in *boarding, lodging or rooming houses* where sleeping accommodation is provided for not more than 8 boarders or lodgers shall be separated from the remainder of the *floor area* by a *fire separation* having a *fire-resistance rating* of not less than 30 min where the sleeping rooms form part of the proprietor's residence and do not contain cooking facilities.

(3) *Dwelling units* that contain 2 or more *storeys* including *basements* shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* of not less than 1 h.

9.10.9.15. Separation of Public Corridors

(1) Except as provided in Sentences (2) and (3), *public corridors* shall be separated from the remainder of the *building* by a *fire separation* having not less than a 45 min *fire-resistance rating*.

(2) In other than *residential occupancies*, no *fire-resistance rating* is required for *fire separations* between a *public corridor* and the remainder of the *building* if,

(a) the *floor area* is *sprinklered*,

(b) the sprinkler system is electrically supervised in conformance with Sentence 3.2.4.10.(3), and

(c) the operation of the sprinkler system will cause a signal to be transmitted to the fire department in conformance with Sentence 3.2.4.8.(4).

(3) In other than *residential occupancies*, no *fire separation* is required between a *public corridor* and the remainder of the *building* if,

(a) the *floor area* is *sprinklered*,

(b) the sprinkler system is electrically supervised in conformance with Sentence 3.2.4.10.(3),

(c) the operation of the sprinkler system will cause a signal to be transmitted to the fire department in conformance with Sentence 3.2.4.8.(4), and

(d) the corridor exceeds 5 m in width.

9.10.9.16. Separation of Storage Garages

(1) Except as provided in Sentences (2) and (3), a *storage garage* shall be separated from other *occupancies* by a *fire separation* having not less than a 1.5 h *fire-resistance rating*.

(2) Except as permitted in Sentence (3), *storage garages* containing 5 motor vehicles or fewer shall be separated from other *occupancies* by a *fire separation* of not less than 1 h.

(3) Where a *storage garage* serves only the *dwelling unit* it is attached to or built into, it shall be considered as part of that *dwelling unit* and the *fire separation* required in Sentence (2) need not be provided between the garage and the *dwelling unit*.

(4) Where a *storage garage* is attached to or built into a *building* of *residential occupancy*,

(a) an *air barrier system* conforming to Subsection 9.25.3. shall be installed between the garage and the remainder of the *building* to provide an effective barrier to gas and exhaust fumes, and

(b) every door between the garage and the remainder of the *building* shall conform to Article 9.10.13.15.

(5) Where membrane materials are used to provide the required airtightness in the *air barrier system*, all joints shall be sealed and structurally supported.

9.10.9.17. Separation of Repair Garages

(1) Except as provided in Sentences (2) and (3), a *repair garage* shall be separated from other *occupancies* by a *fire separation* having a *fire-resistance rating* of not less than 2 h.

(2) Ancillary spaces directly serving a *repair garage*, including waiting rooms, reception rooms, tool and parts storage areas and supervisory office space, need not be separated from the *repair garage* but shall be separated from other *occupancies* as required in Sentence (1).

(3) The *fire separation* referred to in Sentence (1) shall have a *fire-resistance rating* of not less than 1 h, where,

(a) the *building* is not more than one *storey* in *building height*,

(b) the *building* is operated as a single *suite*, and

(c) the only *occupancy* other than the *repair garage* is a *mercantile occupancy*.

(**4)** Where a *building* containing a *repair garage* also contains a *dwelling unit*, an *air barrier system* conforming to Subsection 9.25.3. shall be installed between the *dwelling unit* and the *suite* containing the garage to provide an effective air barrier to gas and exhaust fumes.

(5) Where membrane materials are used to provide the required airtightness in the *air barrier system*, all joints shall be sealed and structurally supported.

9.10.9.18. Exhaust Ducts Serving More Than One Fire Compartment

(1) Where a *vertical service space* contains an *exhaust* duct that serves more than one *fire compartment*, the duct shall have a fan located at or near the exhaust outlet to ensure that the duct is under negative pressure.

(2) Individual *fire compartments* referred to in Sentence (1) shall not have fans that exhaust directly into the duct in the *vertical service space*.

9.10.9.19. Central Vacuum Systems

(1) Except as permitted by Sentence 9.10.18.7.(1), a central vacuum system shall serve not more than one *suite*.

9.10.10. Service Rooms

9.10.10.1. Application

(1) This Subsection applies to *service rooms* in all *buildings* except rooms located within a *dwelling unit*.

9.10.10.2. Service Room Floors

(1) The *fire-resistance rating* requirements in this Subsection do not apply to the floor assembly immediately below a *service room*.

9.10.10.3. Separation of Service Rooms

(1) Except as provided in Sentence (2) and Articles 9.10.10.5. and 9.10.10.6., *service rooms* shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* of not less than 1 h when the *floor area* containing the *service room* is not *sprinklered*.

(2) Where a room contains a limited quantity of service equipment and the service equipment does not constitute a fire hazard, the requirements in Sentence (1) shall not apply.

9.10.10.4. Appliances and Equipment to be Located in a Service Room

(1) Except as provided in Sentences (2) and (3) and Article 9.10.10.5., fuel-fired *appliances* shall be located in a *service room* separated from the remainder of the *building* by a *fire separation* having not less than a 1 h *fire-resistance rating*.

(2) Except as required in the *appliance* installation standards referenced in Sentences 6.2.1.4.(1) and 9.33.1.2.(1), fuel-fired *space-heating appliances*, space-cooling *appliances* and *service water heaters* need not be separated from the remainder of the *building* as required in Sentence (1) where the equipment serves,

(a) not more than one room or *suite*, or

(b) a *building* with a *building* area of not more than 400 m² and a *building height* of not more than 2 *storeys*.

(3) Sentence (1) does not apply to fireplaces and cooking *appliances*.

9.10.10.5. Incinerators

(1) *Service rooms* containing incinerators shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* of not less than 2 h.

(2) The design, construction, installation and alteration of each indoor incinerator shall conform to NFPA 82, “Incinerators, Waste and Linen Handling Systems and Equipment”.

(3) Every incinerator shall be connected to a *chimney flue* conforming to the requirements in Section 9.21. and serving no other *appliance*.

(4) An incinerator shall not be located in a room with other fuel-fired *appliances*.

9.10.10.6. Storage Rooms

(1) Rooms for the temporary storage of *combustible* refuse in all *occupancies* or for public storage in *residential occupancies* shall be separated from the remainder of the *building* by a *fire separation* having not less than a 1 h *fire-resistance rating*, except that a 45 min *fire separation* is permitted where the *fire-resistance rating* of the floor assembly is not required to exceed 45 min, or where such rooms are *sprinklered*.

9.10.10.7. Emergency Power Installations

(1) Where a generator intended to supply emergency power for lighting, fire safety and life safety systems is located in a *building*, it shall be located in a room that,

(a) is separated from the remainder of the *building* by a *fire separation* with a *fire-resistance rating* not less than,

(i) 1 h, if the floor assembly is not required to have a *fire-resistance rating* of more than 1 h, and

(ii) 2 h, if the floor assembly is required to have a *fire-resistance rating* of more than 1 h, and

(b) contains only the generating set and equipment that is related to the emergency power supply system.

9.10.11. Firewalls

9.10.11.1. Required Firewalls

(1) Except as provided in Articles 9.10.11.2. and 9.10.11.4., a *party wall* on a property line shall be constructed as a *firewall*.

9.10.11.2. Firewalls Not Required

(1) In a *building* of *residential occupancy* in which there is no *dwelling unit* above another *dwelling unit*, a *party wall* on a property line between *dwelling units* need not be constructed as a *firewall* provided it is constructed as a *fire separation* having not less than a 1 h *fire-resistance rating*.

(2) The wall described in Sentence (1) shall provide continuous protection from the top of the footings to the underside of the roof deck.

(3) Any space between the top of the wall described in Sentence (1) and the roof deck shall be tightly filled with mineral wool or *noncombustible* material.

9.10.11.3. Construction of Firewalls

(1) Where *firewalls* are used, the requirements in Part 3 shall apply.

9.10.11.4. Firewalls in Detached Garages

(1) Where a garage is detached from the *dwelling unit* but attached to another garage on the adjacent property, the *party wall* so formed shall be constructed as a *fire separation* having a *fire-resistance rating* of not less than 45 min.

9.10.12. Prevention of Fire Spread at Exterior Walls and Between Storeys

9.10.12.1. Termination of Floors or Mezzanines

(1) Except as provided in Sentence (2) and in Articles 9.10.1.3. and 9.10.9.5., the portions of a *floor area* or *mezzanine* that do not terminate at an exterior wall, a *firewall* or a vertical shaft, shall terminate at a vertical *fire separation* having a *fire-resistance rating* not less than that required for the floor assembly that terminates at the separation.

(2) A *mezzanine* need not terminate at a vertical *fire separation* where the *mezzanine* is not required to be considered as a *storey* in Articles 9.10.4.1. and 9.10.4.2.

9.10.12.2. Location of Skylights

(1) Where a wall in a *building* is exposed to a fire hazard from an adjoining roof of a separate unsprinklered *fire compartment* in the same *building*, the roof shall contain no skylights within a horizontal distance of 5 m of the windows in the exposed wall.

9.10.12.3. Exterior Walls Meeting at an Angle

(1) Except as provided in Article 9.9.4.5., where exterior walls of a *building* meet at an external angle of less than 135°, the horizontal distance from an opening in one wall to an opening in the other wall shall be not less than 1.2 m where the openings are in different *fire compartments*.

(2) The exterior wall of each *fire compartment* referred to in Sentence (1) within the 1.2 m distance, shall have a *fire-resistance rating* not less than that required for the interior vertical *fire separation* between the compartment and the remainder of the *building*.

9.10.12.4. Protection of Soffits

(1) This Article applies to the portion of any soffit enclosing a projection that is,

(a) less than 2.5 m vertically above a window or door, and

(b) less than 1.2 m from either side of the window or door.

(2) Except as provided in Sentences (4) and (5), the soffit described in Sentence (1) shall be protected in accordance with Sentence (3) where the soffit encloses,

(a) a common *attic or roof space* that spans more than 2 *suites* of *residential occupancy* and projects beyond the exterior wall of the *building*,

(b) a floor space where an upper *storey* projects beyond the exterior wall of a lower *storey* and a *fire separation* is required at the floor between the two *storeys*, or

(c) a floor space where an upper *storey* projects beyond the exterior wall of a lower *storey*, and the projection is continuous across a vertical *fire separation* separating two *suites*.

(3) Protection required by Sentence (2) shall be provided by,

(a) *noncombustible* material having a minimum thickness of 0.38 mm and a melting point not below 650°C,

(b) not less than 12.7 mm thick gypsum soffit board or gypsum wallboard installed according to CSA A82.31-M, “Gypsum Board Application,”

(c) not less than 11 mm thick plywood,

(d) not less than 12.5 mm thick OSB or waferboard, or

(e) not less than 11 mm thick lumber.

(4) In the case of a soffit described in Sentence (1) that is at the edge of an *attic or roof space*, and completely separated from the remainder of the *attic or roof space* by *fire blocks*, the requirements in Sentence (2) do not apply.

(5) Where all *suites* spanned by a common *attic or roof space* or situated above or below the projecting floor are *sprinklered*, the requirements in Sentence (2) do not apply provided that all rooms, including closets and bathrooms, having openings in the wall beneath the soffit are *sprinklered*, notwithstanding any exceptions in the sprinkler standards referenced in Article 3.2.5.13.

9.10.13. Doors, Dampers and Other Closures in Fire Separations

9.10.13.1. Closures

(1) Except as provided in Article 9.10.13.2., openings in required *fire separations* shall be protected with a *closure* conforming to Table 9.10.13.1. and shall be installed in conformance with NFPA 80, "Fire Doors and Other Opening Protectives", unless otherwise specified in this Part.

Table 9.10.13.1.
Fire-Protection Ratings for Closures

Forming Part of Sentence 9.10.13.1.(1)

Item	Column 1 Required *Fire-Resistance Rating* of *Fire Separation*	Column 2 Required *Fire-Protection Rating* of *Closure*
1.	30 or 45 min	20 min[(1)]
2.	1 h	45 min[(1)]
3.	1.5 h	1 h
4.	2 h	1.5 h
5.	3 h	2 h
6.	4 h	3 h

Notes to Table 9.10.13.1.:

[(1)] See Article 9.10.13.2.

9.10.13.2. Solid Core Wood Door as a Closure

(1) A 45 mm thick solid core wood door is permitted to be used where a minimum *fire-protection rating* of 20 min is permitted or between a *public corridor* and a *suite* provided the door conforms to CAN/ULC-S113, "Wood Core Doors Meeting the Performance Required by CAN/ULC-S104 for Twenty Minute Fire Rated Closure Assemblies".

(2) Doors described in Sentence (1) shall have not more than a 6 mm clearance beneath and not more than 3 mm at the sides and top.

9.10.13.3. Unrated Wood Door Frames

(1) Doors required to provide a 20 min *fire-protection rating* or permitted to be 45 mm solid core wood shall be mounted in a wood frame of at least 38 mm thickness where the frame has not been tested and rated.

9.10.13.4. Doors as a Means of Egress

(1) Doors forming part of an *exit* or a public *means of egress* shall conform to Subsection 9.9.6. in addition to this Subsection.

9.10.13.5. Wired Glass as a Closure

(1) Wired glass conforming to Article 9.6.1.2. that has not been tested in accordance with Article 9.10.3.1. is permitted as a *closure* in a vertical *fire separation* required to have a *fire-resistance rating* of not more than 1 h provided such glass is not less than 6 mm thick and is mounted in conformance with Sentence (2).

(2) Wired glass described in Sentence (1) shall be mounted in fixed steel frames having a minimum metal thickness of not less than 1.35 mm and a glazing stop of not less than 20 mm on each side of the glass.

(3) Individual panes of glass described in Sentence (1) shall not exceed 0.8 m² in area or 1.4 m in height or width, and the area of glass not structurally supported by mullions shall not exceed 7.5 m².

9.10.13.6. Steel Door Frames

(1) Steel door frames forming part of a *closure* in a *fire separation*, including anchorage requirements, shall conform to CAN/ULC-S105, “Fire Door Frames Meeting the Performance Required by CAN/ULC-S104”.

9.10.13.7. Glass Block as a Closure

(1) Glass block that has not been tested in accordance with Article 9.10.3.1. is permitted as a *closure* in a *fire separation* required to have a *fire-resistance rating* of not more than 1 h.

9.10.13.8. Maximum Size of Opening

(1) The size of an opening in an interior *fire separation*, even where protected with a *closure*, shall not exceed 11 m², with no dimension greater than 3.7 m, if a *fire compartment* on either side of the *fire separation* is not *sprinklered*.

(2) The size of an opening in an interior *fire separation*, even where protected with a *closure*, shall not exceed 22 m², with no dimension greater than 6 m, when the *fire compartments* on both sides of the *fire separation* are *sprinklered*.

9.10.13.9. Door Latch

(1) Every swing type door in a *fire separation* shall be equipped with a latch.

9.10.13.10. Self-Closing Device

(1) Except as described in Sentence (2), every door in a *fire separation* shall have a self-closing device.

(2) Self-closing devices are not required between *public corridors* and *suites* in *business and personal services occupancies*, except in,

(a) dead-end corridors, or

(b) a corridor that serves a *hotel*.

9.10.13.11. Hold-Open Devices

(1) Where hold-open devices are used on doors in required *fire separations*, they shall be installed in accordance with Article 3.1.8.12.

9.10.13.12. Service Room Doors

(1) Swing-type doors shall open into *service rooms* containing fuel-fired equipment where such doors lead to *public corridors* or rooms used for assembly but shall swing outward from such rooms in all other cases.

9.10.13.13. Fire Dampers

(1) Except as permitted in Sentences (2) to (5) and Sentence 9.10.5.1.(4), a duct that penetrates an assembly required to be a *fire separation* with a *fire-resistance rating* shall be equipped with a *fire damper* in conformance with Articles 3.1.8.4. and 3.1.8.9.

(2) A *fire damper* is not required where a *noncombustible* branch duct pierces a required *fire separation* provided the duct,

(a) has a melting point not below 760°C,

(b) has a cross-sectional area less than 130 cm², and

(c) supplies only *air-conditioning* units or combined *air-conditioning* and heating units discharging air at not more than 1.2 m above the floor.

(3) A *fire damper* is not required where a *noncombustible* branch duct pierces a required *fire separation* around an *exhaust duct* riser in which the air flow is upward provided,

(a) the melting point of the branch duct is not below 760°C,

(b) the branch duct is carried up inside the riser at least 500 mm, and

(c) the *exhaust duct* is under negative pressure as described in Article 9.10.9.18.

(4) *Noncombustible* ducts that penetrate a *fire separation* separating a *vertical service space* from the remainder of the *building* need not be equipped with a *fire damper* at the *fire separation* provided,

(a) the ducts have a melting point above 760°C, and

(b) each individual duct exhausts directly to the outside at the top of the *vertical service space*.

(5) A duct serving commercial cooking equipment and piercing a required *fire separation* need not be equipped with a *fire damper* at the *fire separation*.

9.10.13.14. Fire Stop Flaps

(1) *Fire stop flaps* in ceiling membranes required in Sentence 9.10.5.1.(4) shall be constructed in conformance with MMAH Supplementary Standard SB-2, “Fire Performance Ratings”.

9.10.13.15. Doors Between Garages and Dwelling Units

(1) A door between an attached or built-in garage and a *dwelling unit* shall be tight-fitting and weatherstripped to provide an effective barrier against the passage of gases and exhaust fumes and shall be fitted with a self-closing device.

(2) A doorway between an attached or built-in garage and a *dwelling unit* shall not be located in a room intended for sleeping.

9.10.13.16. Door Stops

(1) Where a door is installed so that it may damage the integrity of a *fire separation* if its swing is unrestricted, door stops shall be installed to prevent such damage.

9.10.14. Spatial Separation Between Buildings

9.10.14.1. Application

(1) Except as permitted in Subsection 9.10.15., this Subsection applies to all *buildings*.

9.10.14.2. Area and Location of Exposing Building Face

(1) The area of an *exposing building face* shall be,

(a) taken as the exterior wall area facing in one direction on any side of a *building*, and

(b) calculated as,

(i) the total area measured from the finished ground level to the uppermost ceiling, or

(ii) the area for each *fire compartment*, where a *building* is divided into *fire compartments* by *fire separations* with *fire-resistance ratings* not less than 45 min.

(2) For the purpose of using Table 9.10.14.4. to determine the maximum aggregate area of *unprotected openings* permitted in an irregularly-shaped or skewed exterior wall, the location of the *exposing building face* shall be taken as a vertical plane located so that there are no *unprotected openings* between the vertical plane and the line to which *limiting distance* is measured.

(3) For the purpose of using Table 9.10.14.5. to determine the required type of construction, cladding and *fire-resistance rating* for an irregularly-shaped or skewed exterior wall,

(a) the *exposing building face* is permitted to be divided into any number of portions and the *fire-resistance rating*, type of cladding and percentage of *unprotected openings* limitations is permitted to be determined individually for each portion based on the *limiting distance* for each portion so divided,

(b) the *exposing building face* shall be taken as the projection of the exterior wall onto a vertical plane located so that no portion of the exterior wall of the *building* is between the vertical plane and the line to which the *limiting distance* is established in Clause (a), and

(c) for the purpose of determining the actual area of *unprotected openings* permitted in an exterior wall, the *unprotected openings* shall be projected onto the vertical plane established in Clause (b).

(4) The required *limiting distance* for an *exposing building face* is permitted to be measured to a point beyond the property line that is not the centre line of a *street*, lane or public thoroughfare if,

(a) the owners of the properties on which the *limiting distance* is measured and the *municipality* enter into an agreement in which such owners agree that,

(i) each owner covenants that, for the benefit of land owned by the other covenantors, the owner will not *construct* a *building* on his or her property unless the *limiting distance* for *exposing building faces* in respect of the proposed *construction* is measured in accordance with the agreement,

(ii) the covenants contained in the agreement are intended to run with the lands, and the agreement shall be binding on the parties and their respective heirs, executors, administrators, successors and assigns,

(iii) the agreement shall not be amended or deleted from title without the consent of the *municipality*, and

(iv) they will comply with such other conditions as the *municipality* considers necessary, including indemnification of the *municipality* by the other parties, and

(b) the agreement referred to in Clause (a) is registered against the title of the properties to which it applies.

(5) Where an agreement referred to in Sentence (4) is registered against the title of a property, the *limiting distance* for *exposing building faces* in respect of the *construction* of any *buildings* on the property shall be measured to the point referred to in the agreement.

9.10.14.3. Inadequate Firefighting Facilities

(1) Where there is no fire department or where a fire department is not organized, trained and equipped to meet the needs of the community, the required *limiting distance* determined from Sentences 9.10.14.4.(2), (5) and (6) and Sentence 9.10.14.5.(6), shall be doubled for a *building* that is not *sprinklered*.

9.10.14.4. Openings in Exposing Building Face

(1) Except as provided in Sentences (3) to (7) and Sentence 9.10.14.6.(1), the maximum aggregate area of *unprotected openings* in an *exposing building face* shall,

(a) conform to Table 9.10.14.4.,

(b) conform to Subsection 3.2.3., or

(c) where the limiting distance is not less than 1.2 m, be equal to or less than,

(i) the *limiting distance* squared, for *residential occupancies*, *business and personal services occupancies* and *low hazard industrial occupancies*, and

(ii) half the *limiting distance* squared, for *mercantile occupancies* and *medium hazard industrial occupancies*.

Table 9.10.14.4.
Maximum Aggregate Area of Unprotected Openings in Exterior Walls

Forming Part of Sentence 9.10.14.4.(1)

Item	Column 1	Column 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Occupancy Classification of *Building*	Maximum Total Area of *Exposing Building Face*, m²	Maximum Aggregate Area of *Unprotected Openings*, % of *Exposing Building Face* Area													
			Limiting Distance, m													
			Less than 1.2	1.2	1.5	2	2.5	3	4	6	8	10	12	16	20	25
1.	*Residential, business and personal services*, and *low-hazard industrial*	10	0	8	12	21	33	55	96	100	—	—	—	—	—	—
		15	0	8	10	17	25	37	67	100	—	—	—	—	—	—
		20	0	8	10	15	21	30	53	100	—	—	—	—	—	—
		25	0	8	9	13	19	26	45	100	—	—	—	—	—	—
		30	0	7	9	12	17	23	39	88	100	—	—	—	—	—
		40	0	7	8	11	15	20	32	69	100	—	—	—	—	—
		50	0	7	8	10	14	18	28	57	100	—	—	—	—	—
		100	0	7	8	9	11	13	18	34	56	84	100	—	—	—
		Over 100	0	7	7	8	9	10	12	19	28	40	55	92	100	—
2.	*Mercantile* and *medium-hazard industrial*	10	0	4	6	10	17	25	48	100	—	—	—	—	—	—
		15	0	4	5	8	13	18	34	82	100	—	—	—	—	—
		20	0	4	5	7	11	15	27	63	100	—	—	—	—	—
		25	0	4	5	7	9	13	22	51	94	100	—	—	—	—
		30	0	4	4	6	9	12	20	44	80	100	—	—	—	—
		40	0	4	4	6	8	10	16	34	61	97	100	—	—	—

		50	0	4	4	5	7	9	14	29	50	79	100	—	—	—
		100	0	4	4	4	5	6	9	17	28	42	60	100	—	—
		Over 100	0	4	4	4	4	5	6	10	14	20	27	46	70	100

(2) Except as provided in Sentence 9.10.14.6.(1), openings in a wall having a *limiting distance* of less than 1.2 m shall be protected by *closures*, of other than wired glass or glass block, whose *fire protection rating* is in conformance with the *fire-resistance rating* required for the wall.

(3) The maximum aggregate area of *unprotected openings* shall be not more than twice the area determined according to Sentence (1) where the *unprotected openings* are glazed with,

(a) wired glass in steel frames as described in Article 9.10.13.5., or

(b) glass blocks, as described in Article 9.10.13.7.

(4) Where the *building* is *sprinklered*, the maximum aggregate area of *unprotected openings* shall be not more than twice the area determined according to Sentence (1) provided all rooms, including closets and bathrooms, that are adjacent to the *exposing building face* and that have *unprotected openings* are *sprinklered*, notwithstanding any exemptions in the sprinkler standards referenced in Article 3.2.5.13.

(5) The maximum aggregate area of *unprotected openings* in an *exposing building face* of a *storage garage* need not comply with Sentence (1) where,

(a) all *storeys* are constructed as *open-air storeys*, and

(b) the *storage garage* has a *limiting distance* of not less than 3 m.

(6) The maximum aggregate area of *unprotected openings* in an *exposing building face* of a *storey* that faces a *street* and is the same level as the *street* need not comply with Sentence (1) where the *limiting distance* is not less than 9 m.

(7) The limits on the area of *unprotected openings* need not apply to the *exposing building face* of a detached garage or accessory *building* facing a *dwelling unit*, where,

(a) the detached garage or accessory *building* serves a single *dwelling unit*,

(b) the detached garage or accessory *building* is located on the same property as that *dwelling unit*, and

(c) the *dwelling unit* served by the detached garage or accessory *building* is the only *major occupancy* on the property.

9.10.14.5. Construction of Exposing Building Face and Walls above Exposing Building Face

(1) Except as provided in Sentences (2) to (7), each *exposing building face* and any exterior wall located above an *exposing building face* that encloses an *attic or roof space* shall be constructed in conformance with Table 9.10.14.5. and Subsection 9.10.8.

Table 9.10.14.5.
Minimum Construction Requirements for Exposing Building Faces

Forming Part of Sentences 9.10.14.5.(1) to (3)

Item	Column 1 *Occupancy* Classification of *Building*	Column 2 Maximum Area of *Unprotected Openings* Permitted, % of *Exposing Building Face* Area	Column 3 Minimum Required *Fire-Resistance Rating*	Column 4 Type of Construction Required	Column 5 Type of Cladding Required
1.	*Residential, business and personal services,* and *low-hazard industrial*	0 - 10	1 h	*Noncombustible*	*Noncombustible*
		>10 but ≤25	1 h	*Combustible* or *noncombustible*	*Noncombustible*
		>25 but <100	45 min	*Combustible* or *noncombustible*	*Combustible* or *noncombustible*
2.	*Mercantile* and *medium-hazard industrial*	0 - 10	2 h	*Noncombustible*	*Noncombustible*
		>10 but ≤25	2 h	*Combustible* or *noncombustible*	*Noncombustible*
		>25 but <100	1 h	*Combustible* or *noncombustible*	*Combustible* or *noncombustible*

(2) Cladding on *exposing building faces* and exterior walls located above *exposing building faces* need not conform to the type of cladding required by Table 9.10.14.5. where,

(a) the *exposing building face* is constructed with no *unprotected openings*,

(b) the *limiting distance* is not less than 0.6 m, and

(c) the cladding,

(i) conforms to Subsection 9.27.12.,

(ii) is installed without furring members over not less than 12.7 mm thick gypsum sheathing or over masonry,

(iii) has a *flame-spread rating* not more than 25 when tested in accordance with Sentence 3.1.12.1.(2), and

(iv) is not more than 2 mm in thickness exclusive of fasteners, joints and local reinforcements.

(3) Except as provided in Sentence (4), where a garage or accessory *building* serves a single *dwelling unit* and is detached from any *building*, the *exposing building face*,

(a) need not conform to the minimum required *fire-resistance rating* in Table 9.10.14.5., where the *limiting distance* is 0.6 m or more,

(b) shall have a *fire-resistance rating* of not less than 45 min where the *limiting distance* is less than 0.6 m, and

(c) need not conform to the type of cladding required in Table 9.10.14.5. regardless of the *limiting distance*.

(4) The requirements for *fire-resistance rating*, type of construction and type of cladding need not apply to the *exposing building faces* of a *dwelling unit* and a detached garage or accessory *building* that face each other, where,

(a) the detached garage or accessory *building* serves a single *dwelling unit*,

(b) the detached garage or accessory *building* is located on the same property as that *dwelling unit*, and

(c) the *dwelling unit* served by the detached garage or accessory *building* is the only *major occupancy* on the property.

(5) Except for *buildings* containing 1 or 2 *dwelling units* only, *combustible* projections on the exterior of a wall that are more than 1 000 mm above ground level, such as balconies, platforms, *canopies*, eave projections and stairs, and that could expose an adjacent *building* to fire spread, shall not be permitted within,

(a) 1.2 m of a property line or the centre line of a *public way*, or

(b) 2.4 m of a *combustible* projection on another *building* on the same property.

(6) Heavy timber and steel columns need not conform to the requirements of Sentence (1) provided the *limiting distance* is not less than 3 m.

(7) Non-*loadbearing* wall components need not have a minimum *fire-resistance rating* where,

(a) the *building* is 1 *storey* in *building height*,

(b) the *building* is of *noncombustible construction*,

(c) the *building* is classified as *low hazard industrial occupancy* and is used only for low *fire load occupancies* such as power generating plants or plants for the manufacture or storage of *noncombustible* materials, and

(d) the *exposing building face* has a *limiting distance* of 3 m or more.

9.10.14.6. Minor Openings in Exposing Building Face

(1) An opening in an *exposing building face* not more than 130 cm^2 shall not be considered an *unprotected opening*.

9.10.15. Spatial Separation Between Houses

9.10.15.1. Application

(1) This Subsection applies to *buildings* that,

(a) contain only *dwelling units* and have no *dwelling unit* above another *dwelling unit*, and

(b) are not designed in accordance with Subsection 9.10.14.

9.10.15.2. Area and Location of Exposing Building Face

(1) The area of an *exposing building face* shall be,

(a) taken as the exterior wall area facing in one direction on any side of a *building*, and

(b) calculated as,

(i) the total area measured from the finished ground level to the uppermost ceiling,

(ii) the area for each *fire compartment* where a *building* is divided into *fire compartments* by *fire separations* with *fire-resistance ratings* not less than 45 min, or

(iii) where Table 9.10.15.4. is used to determine maximum area of glazed openings, the area of any number of individual vertical portions of the wall measured from the finished ground level to the uppermost ceiling.

(2) For the purpose of using Table 9.10.15.4. to determine the maximum permitted area of glazed openings in an irregularly-shaped or skewed exterior wall, the location of the *exposing building face* shall be taken as a vertical plane located so that there are no glazed openings between the vertical plane and the line to which the *limiting distance* is measured.

(3) In determining the required cladding-sheathing assembly and *fire-resistance rating* for an irregularly-shaped or skewed exterior wall, the location of the *exposing building face* shall be taken as a vertical plane located so that no portion of the actual *exposing building face* is between the vertical plane and the line to which the *limiting distance* is measured.

(4) The required *limiting distance* for an *exposing building face* is permitted to be measured to a point beyond the property line that is not the centre line of a *street*, lane or public thoroughfare if,

(a) the owners of the properties on which the *limiting distance* is measured and the *municipality* enter into an agreement in which such owners agree that,

(i) each owner covenants that, for the benefit of land owned by the other covenantors, the owner will not *construct* a *building* on his or her property unless the *limiting distance* for *exposing building faces* in respect of the proposed *construction* is measured in accordance with the agreement,

(ii) the covenants contained in the agreement are intended to run with the lands, and the agreement shall be binding on the parties and their respective heirs, executors, administrators, successors and assigns,

(iii) the agreement shall not be amended or deleted from title without the consent of the *municipality*, and

(iv) they will comply with such other conditions as the *municipality* considers necessary, including indemnification of the *municipality* by the other parties, and

(b) the agreement referred to in Clause (a) is registered against the title of the properties to which it applies.

(5) Where an agreement referred to in Sentence (4) is registered against the title of a property, the *limiting distance* for *exposing building faces* in respect of the *construction* of any *buildings* on the property shall be measured to the point referred to in the agreement.

9.10.15.3. Inadequate Firefighting Facilities

(1) Where there is no fire department or where a fire department is not organized, trained and equipped to meet the needs of the community, the required *limiting distance* determined from Sentences 9.10.15.4.(2) and (5) and Sentence 9.10.15.5.(6), shall be doubled for a *building* that is not *sprinklered*.

9.10.15.4. Glazed Openings in Exposing Building Face

(1) Except as provided in Sentences (3) to (5), the maximum area of glazed openings in an *exposing building face* shall,

(a) conform to Table 9.10.15.4.,

(b) conform to Subsection 3.2.3. as if the glazed openings were *unprotected openings*, or

(c) where the *limiting distance* is not less than 1.2 m, be equal to or less than the *limiting distance* squared.

Table 9.10.15.4.
Maximum Area of Glazed Openings in Exterior Walls of Houses

Forming Part of Sentences 9.10.15.4.(1) and (2)

Item	Column 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Maximum Total Area of *Exposing Building Face*, m²	Maximum Aggregate Area of Glazed Openings, % of *Exposing Building Face* Area													
		Limiting Distance, m													
		Less than 1.2	1.2	1.5	2	2.5	3	4	6	8	10	12	16	20	25
1.	10	0	8	12	21	33	55	96	100	—	—	—	—	—	—
2.	15	0	8	10	17	25	37	67	100	—	—	—	—	—	—
3.	20	0	8	10	15	21	30	53	100	—	—	—	—	—	—
4.	25	0	8	9	13	19	26	45	100	—	—	—	—	—	—
5.	30	0	7	9	12	17	23	39	88	100	—	—	—	—	—
6.	40	0	7	8	11	15	20	32	69	100	—	—	—	—	—
7.	50	0	7	8	10	14	18	28	57	100	—	—	—	—	—
8.	100	0	7	8	9	11	13	18	34	56	84	100	—	—	—
9.	Over 100	0	7	7	8	9	10	12	19	28	40	55	92	100	—

(2) Where the limits on the area of glazed openings are determined for individual portions of the exterior wall, as described in Subclause 9.10.15.2.(1)(b)(iii), the maximum aggregate area of glazed openings for any portion shall not exceed the values in the row of Table 9.10.15.4. for the total area of the entire *exposing building face* based on the *limiting distance* of the individual portion.

(3) The limits on the area of glazed openings shall not apply to the *exposing building face* of a *dwelling unit* facing a detached garage or accessory *building*, where,

(a) the detached garage or accessory *building* serves only one *dwelling unit*,

(b) the detached garage or accessory *building* is located on the same property as that *dwelling unit*, and

(c) the *dwelling unit* served by the detached garage or accessory *building* is the only *major occupancy* on the property.

(4) Except as provided in Sentence (5), openings in a wall having a *limiting distance* of less than 1.2 m shall be protected by *closures*, of other than wired glass or glass block, whose *fire-protection rating* is in conformance with the *fire-resistance rating* required for the wall.

(5) An opening in an *exposing building face* not more than 130 cm^2 shall not be considered an *unprotected opening*.

9.10.15.5. Construction of Exposing Building Face of Houses

(1) Except as provided in Sentences (2) to (4) and (6), each *exposing building face* and any exterior wall located above an *exposing building face* that encloses an *attic or roof space* shall be constructed in conformance with Subsection 9.10.8.,

(a) for the *exposing building face* as a whole, or

(b) for any number of separate portions of the *exposing building face*.

(2) Sentence (1) does not apply where,

(a) the *limiting distance* is not less than 1.2 m,

(b) the *limiting distance* is less than 1.2 m but not less than 0.6 m, provided that the *exposing building face* has a *fire-resistance rating* of not less than 45 min, or

(c) the *limiting distance* is less than 0.6 m, provided that the *exposing building face* has a *fire-resistance rating* of not less than 45 min and is clad with *noncombustible* material.

(3) Where the *limiting distance* is less than 0.6 m, cladding on the *exposing building face* and on exterior walls located above the *exposing building face* that enclose an *attic or roof spaces* need not be *noncombustible*, provided the cladding,

(a) conforms to Subsection 9.27.12.,

(b) is installed without furring members over not less than 12.7 mm thick gypsum sheathing or over masonry,

(c) has a *flame-spread rating* not more than 25 when tested in accordance with Sentence 3.1.12.1.(2), and

(d) is not more than 2 mm in thickness exclusive of fasteners, joints and local reinforcements.

(4) The requirements for *fire-resistance rating*, type of construction and type of cladding need not apply to the *exposing building faces* of a *dwelling unit* and a detached garage or accessory *building* that face each other, where,

(a) the detached garage or accessory *building* serves a single *dwelling unit*,

(b) the detached garage or accessory *building* is located on the same property as that *dwelling unit*, and

(c) the *dwelling unit* served by the detached garage or accessory *building* is the only *major occupancy* on the property.

(5) Except for *buildings* containing 1 or 2 *dwelling units* only, *combustible* projections on the exterior of a wall that are more than 1 000 mm above ground level, such as balconies, platforms, *canopies*, eave projections and stairs, and that could expose an adjacent *building* to fire spread, shall not be permitted within,

(a) 1.2 m of a property line or the centre line of a *public way*, or

(b) 2.4 m of a *combustible* projection on another *building* on the same property.

(6) Heavy timber and steel columns need not conform to the requirements of Sentence (1) provided the *limiting distance* is not less than 3 m.

9.10.16. Fire Blocks

9.10.16.1. Required Fire Blocks in Concealed Spaces

(1) Concealed spaces in interior walls, ceilings, floors and crawl spaces shall be separated by *fire blocks* from concealed spaces in exterior walls and *attic or roof spaces*.

(2) *Fire blocks* shall be provided at all interconnections between concealed vertical and horizontal spaces in interior coved ceilings, drop ceilings and soffits where the exposed construction materials within the concealed spaces have a surface *flame-spread rating* greater than 25.

(3) *Fire blocks* shall be provided at the top and bottom of each run of stairs where they pass through a floor containing concealed space in which the exposed construction materials within the space have a surface *flame-spread rating* greater than 25.

(4) In unsprinklered *buildings* of *combustible construction*, every concealed space created by a ceiling, roof space or unoccupied attic space shall be separated by *fire blocks* into compartments of not more than 300 m² in area where such space contains exposed construction materials having a surface *flame-spread rating* greater than 25.

(5) No dimension of the concealed space described in Sentence (4) shall exceed 20 m.

(6) Concealed spaces in mansard or gambrel style roofs, exterior cornices, balconies and canopies of *combustible construction* in which the exposed construction materials within the space have a surface *flame-spread rating* exceeding 25 shall have vertical *fire blocks* at intervals of not more than 20 m and at points where such concealed spaces extend across the ends of required vertical *fire separations*.

9.10.16.2. Required Fire Blocks in Wall Assemblies

(1) Except as permitted in Sentence (2), *fire blocks* shall be provided to block off concealed spaces within wall assemblies, including spaces created by furring,

(a) at each floor level,

(b) at each ceiling level where the ceiling contributes to part of the required *fire-resistance rating*, and

(c) at other locations within the wall, so that the distance between *fire blocks* does not exceed 20 m horizontally and 3 m vertically.

(2) *Fire blocks* required in Sentence (1) need not be provided, if,

(a) the insulated wall assembly contains not more than one concealed air space and the horizontal thickness of that air space is not more than 25 mm,

(b) the exposed construction materials within the space are *noncombustible*, or

(c) the exposed construction materials within the space, including insulation, but not including wiring, piping or similar services, have a *flame-spread rating* of not more than 25.

9.10.16.3. Fire Block Materials

(1) Except as permitted in Sentences (2) and (3), *fire blocks* shall be constructed of materials that will remain in place and prevent the passage of flames for not less than 15 min when subjected to the standard fire exposure in CAN/ULC-S101, “Fire Endurance Tests of Building Construction and Materials”.

(2) *Fire blocks* are deemed to comply with Sentence (1), if they are constructed of not less than,

(a) 0.38 mm sheet steel,

(b) 12.7 mm gypsum wallboard,

(c) 12.5 mm plywood, OSB or waferboard, with joints having continuous supports,

(d) 2 layers of 19 mm lumber with joints staggered, or

(e) 38 mm lumber.

(3) In a *building* permitted to be of *combustible construction*, semi-rigid fibre insulation board produced from glass, rock or slag, is permitted to be used to block the vertical space in a double-frame wall assembly formed at the intersection of the floor assembly and the walls, provided the width of the vertical space is not more than 25 mm and the insulation board,

(a) has a density not less than 45 kg/m^3,

(b) is securely fastened to one set of studs,

(c) extends from below the bottom of the top plates in the lower *storey* to above the top of the bottom plate in the upper *storey*, and

(d) completely fills the nominal gap of 25 mm between the headers and between the wall plates.

9.10.16.4. Penetration of Fire Blocks

(1) Where *fire blocks* are pierced by pipes, ducts or other elements, the effectiveness of the *fire blocks* shall be maintained around such elements.

9.10.17. Flame Spread Limits

9.10.17.1. Flame-Spread Rating of Interior Surfaces

(1) Except as otherwise provided in this Subsection, the exposed surface of every interior wall and ceiling, including skylights and glazing, shall have a surface *flame-spread rating* of not more than 150.

(2) Except as permitted in Sentence (3), doors need not conform to Sentence (1) provided they have a surface *flame-spread rating* of not more than 200.

(3) Doors within *dwelling units*, other than vehicle garage doors, need not conform to Sentences (1) and (2).

9.10.17.2. Ceilings in Exits or Public Corridors

(1) At least 90% of the exposed surface of every ceiling in an *exit* or unsprinklered ceiling in a *public corridor* shall have a surface *flame-spread rating* of not more than 25.

9.10.17.3. Walls in Exits

(1) Except as provided in Sentence (2), at least 90% of the exposed surfaces of every wall in an *exit* shall have a surface *flame-spread rating* of not more than 25.

(2) At least 75% of the wall surface of a lobby used as an *exit* in Article 9.9.8.5. shall have a surface *flame-spread rating* of not more than 25.

9.10.17.4. Exterior Exit Passageways

(1) Where an exterior *exit* passageway provides the only *means of egress* from the rooms or *suites* it serves, the wall and ceiling finishes of that passageway, including the soffit beneath and the *guard* on the passageway, shall have a surface *flame-spread rating* of not more than 25, except that up to 10% of the total wall area and 10% of the total ceiling area is permitted to have a surface *flame-spread rating* of not more than 150.

9.10.17.5. Walls in Public Corridors

(1) At least 90% of the total wall surface in any unsprinklered *public corridor* shall have a surface *flame-spread rating* of not more than 75, or at least 90% of the upper half of such walls shall have a surface *flame-spread rating* of not more than 25.

9.10.17.6. Calculation of Wall and Ceiling Areas

(1) Skylights, glazing, *combustible* doors, and *combustible* light diffusers and lenses shall not be considered in the calculation of wall and ceiling areas in this Subsection.

9.10.17.7. Corridors Containing an Occupancy

(1) Where a *public corridor* or a corridor used by the public contains an *occupancy*, the interior finish materials used on the walls or ceiling of such *occupancy* shall have a surface *flame-spread rating* in conformance with that required for *public corridors*.

9.10.17.8. Light Diffusers and Lenses

(1) Light diffusers and lenses having *flame-spread ratings* that exceed those permitted for the ceiling finish, shall conform to the requirements of Sentence 3.1.13.4.(1).

9.10.17.9. Combustible Skylights

(1) Individual *combustible* skylights in corridors required to be separated from the remainder of the *building* by *fire separations* shall not exceed 1 m² in area and shall be spaced not less than 1.2 m apart.

9.10.17.10. Protection of Foamed Plastics

(1) Except as provided in Sentence (2), foamed plastics that form part of a wall or ceiling assembly in *combustible construction* shall be protected from adjacent space in the *building*, other than adjacent concealed spaces within *attic or roof spaces*, crawl spaces and wall assemblies, by,

(a) one of the finishes described in Subsections 9.29.4. to 9.29.9.,

(b) sheet metal mechanically fastened to the supporting assembly independent of the insulation and having a thickness of not less than 0.38 mm and a melting point not below 650°C provided the *building* does not contain a Group C *major occupancy*, or

(c) any thermal barrier that meets the requirements of Clause 3.1.5.12.(2)(e).

(2) Foamed plastic insulation having a *flame-spread rating* of not more than 500 is permitted to be used in factory-assembled doors in *storage garages* serving *buildings* of *residential occupancy* provided that,

(a) the insulation is covered on the interior with a metallic foil,

(b) the assembly has a surface *flame-spread rating* of not more than 200, and

(c) the assembly incorporates no air spaces.

9.10.17.11. Walls and Ceilings in Bathrooms

(1) The interior finish of walls and ceilings in bathrooms within *suites* of *residential occupancy* shall have a surface *flame-spread rating* of not more than 200.

9.10.17.12. Coverings or Linings of Ducts

(1) Where a covering or a lining is used with a duct, such lining or covering shall have a *flame-spread rating* conforming to Part 6.

9.10.18. Alarm and Detection Systems

9.10.18.1. Access Provided through a Firewall

(1) Where access is provided through a *firewall*, the requirements in this Subsection shall apply to the *floor areas* on both sides of the *firewall* as if they were in the same *building*.

9.10.18.2. Fire Alarm System Required

(1) Except as provided in Sentence (2), a fire alarm system shall be installed,

(a) in every *building* that contains more than 3 *storeys*, including *storeys* below the *first storey*,

(b) where the total *occupant load* exceeds 300, or

(c) when the *occupant load* for any *major occupancy* in Table 9.10.18.2. is exceeded.

(2) A fire alarm system is not required in a *residential occupancy* where an *exit* or *public corridor* serves not more than 4 *suites* or where each *suite* has direct access to an exterior *exit* facility leading to ground level.

Table 9.10.18.2.
Maximum Occupant Load for Buildings without Fire Alarm Systems

Forming Part of Sentence 9.10.18.2.(1)

Item	Column 1 *Major Occupancy* Classification	Column 2 *Occupant Load* Above which Fire Alarm System is Required
1.	*Residential*	10 (sleeping accommodation)
2.	*Business and personal services, mercantile*	150 above or below the *first storey*
3.	*Low-* or *medium-hazard industrial*	75 above or below the *first storey*

9.10.18.3. Design and Installation Requirements

(1) Except as provided in Sentence (2), fire alarm, fire detection and smoke detection devices and systems, and their installation, shall conform to Subsection 3.2.4. and Articles 3.2.7.8. and 3.2.7.10.

(2) Articles 3.2.4.1., 3.2.4.11., 3.2.4.12., 3.2.4.13., 3.2.4.14., 3.2.4.22. and 3.2.4.23. do not apply to Part 9 *buildings*.

9.10.18.4. Rooms and Spaces Requiring Heat Detectors or Smoke Detectors

(1) Where a fire alarm system is required, every *public corridor* in *buildings* of *residential occupancy* and every *exit* stair shaft shall be provided with *smoke detectors*.

(2) Except as provided in Sentence (3), if a fire alarm system is required in a *building*, *fire detectors* shall be installed in the following spaces:

(a) storage rooms not within *dwelling units*,

(b) *service rooms* not within *dwelling units*,

(c) janitors' rooms,

(d) rooms in which hazardous substances are to be used or stored,

(e) elevator hoistways, chutes and dumbwaiter shafts, and

(f) laundry rooms in *buildings* of *residential occupancy*, except those within *dwelling units*.

(3) Except as required in Sentence (4), *heat detectors* and *smoke detectors* described in Sentence (2), are not required in *dwelling units* or in *sprinklered buildings* in which the sprinkler system is electrically supervised and equipped with a water flow alarm.

(4) Where a fire alarm system is required in a *hotel*, *heat detectors* shall be installed in every room in a *suite* and in every room not located in a *suite* in a *floor area* containing a *hotel*, other than washrooms within a *suite*, saunas, refrigerated areas and swimming pools.

9.10.18.5. Smoke Detectors in Recirculating Air Handling Systems

(1) Except for a recirculating air system serving not more than one *dwelling unit*, where a fire alarm system is required to be installed, every recirculating air handling system shall be designed to prevent the circulation of smoke upon a signal from a duct-type *smoke detector* where such system supplies more than one *suite* on the same floor or serves more than 1 *storey*.

9.10.18.6. Portions of Buildings Considered as Separate Buildings

(1) Except as provided in Sentence (2), where a vertical *fire separation* having a *fire-resistance rating* of at least 1 h separates a portion of a *building* from the remainder of the *building* and there are no openings through the *fire separation* other than those for piping, tubing, wiring and conduit, the requirements for fire alarm and detection systems is permitted to be applied to each portion so separated as if it were a separate *building*.

(2) The permission in Sentence (1) to consider separated portions of a *building* as separate *buildings* does not apply to *service rooms* and storage rooms.

9.10.18.7. Central Vacuum Systems

(1) A central vacuum cleaning system serving more than one *suite* or *storey* in a *building* equipped with a fire alarm system shall be designed to shut down upon activation of the fire alarm system.

9.10.18.8. Open-Air Storage Garages

(1) Except as required in Article 9.10.18.1., a fire alarm system is not required in a *storage garage* conforming to Article 3.2.2.83. provided there are no other *occupancies* in the *building*.

9.10.18.9. Fire Alarm System in a Hotel

(1) If a fire alarm system is required in a *building* containing a *hotel*, a single stage fire alarm system shall be provided.

9.10.18.10. Commissioning of Life Safety and Fire Protection Systems

(1) Where life safety and fire protection systems are installed to comply with the provisions of this Code or the Fire Code made under the *Fire Protection and Prevention Act, 1997*, the commissioning of these integrated systems must be performed as a whole to ensure the proper operation and inter-relationship of the systems.

(2) Sentence (1) does not apply to a *building* that contains only *dwelling units* and has no *dwelling unit* above another *dwelling unit.*

9.10.19. Smoke Alarms

9.10.19.1. Required Smoke Alarms

(1) *Smoke alarms* conforming to CAN/ULC-S531, “Smoke Alarms”, shall be installed in each *dwelling unit* and in each sleeping room not within a *dwelling unit.*

(2) *Smoke alarms* required in Sentence (1) shall have a visual signalling component conforming to the requirements in 18.5.3. (Light, Color and Pulse Characteristics) of NFPA 72, “National Fire Alarm and Signaling Code”.

(3) The visual signalling component required in Sentence (2) need not,

(a) be integrated with the *smoke alarm* provided it is interconnected to it,

(b) be on battery backup, or

(c) have synchronized flash rates, when installed in a *dwelling unit*.

(4) The luminous intensity for visual signalling components required in Sentence (2) that are installed in sleeping rooms shall be a minimum of 175 cd.

(5) *Smoke alarms* required in Sentence (1) shall be installed on or near the ceiling.

9.10.19.2. Sound Patterns of Smoke Alarms

(1) The sound patterns of *smoke alarms* shall,

(a) meet the temporal patterns of *alarm signals*, or

(b) be a combination of temporal pattern and voice relay.

9.10.19.3. Location of Smoke Alarms

(1) Within *dwelling units*, sufficient *smoke alarms* shall be installed so that,

(a) there is at least one *smoke alarm* installed on each *storey*, including *basements*, and

(b) on any *storey* of a *dwelling unit* containing sleeping rooms, a *smoke alarm* is installed,

(i) in each sleeping room, and

(ii) in a location between the sleeping rooms and the remainder of the *storey*, and if the sleeping rooms are served by a hallway, the *smoke alarm* shall be located in the hallway.

(2) A *smoke alarm* required in Sentence (1) shall be installed in conformance with CAN/ULC-S553, “Installation of Smoke Alarms”.

(3) A *smoke alarm* required in Sentence (1) shall have a visual signalling component conforming to the requirements in 18.5.3. (Light, Color and Pulse Characteristics) of NFPA 72, “National Fire Alarm and Signaling Code”.

(4) The visual signalling component required in Sentence (3) need not,

(a) be integrated with the *smoke alarm* provided it is interconnected to it,

(b) be on battery backup, or

(c) have synchronized flash rates, when installed in a *dwelling unit*.

(5) The luminous intensity for visual signalling components required in Sentence (3) that are installed in sleeping rooms shall be a minimum of 175 cd.

(6) *Smoke alarms* required in Sentence (1) shall be installed on or near the ceiling.

9.10.19.4. Power Supply

(1) Except as provided in Sentences (2) and (3), *smoke alarms* required in Sentence 9.10.19.1.(1) shall,

(a) be installed with permanent connections to an electrical circuit,

(b) have no disconnect switch between the overcurrent device and the *smoke alarm*, and

(c) in case the regular power supply to the *smoke alarm* is interrupted, be provided with a battery as an alternative power source that can continue to provide power to the *smoke alarm* for a period of not less than 7 days in the normal condition, followed by 4 min of alarm.

(2) Where the *building* is not supplied with electrical power, *smoke alarms* are permitted to be battery operated.

(3) *Suites* of *residential occupancy* are permitted to be equipped with *smoke detectors* in lieu of *smoke alarms*, provided the *smoke detectors*,

(a) are capable of independently sounding audible signals within the individual *suites*,

(b) except as provided by Sentence (4), are installed in conformance with CAN/ULC-S524, "Installation of Fire Alarm Systems", and

(c) form part of the fire alarm system.

(4) *Smoke detectors* permitted to be installed in lieu of *smoke alarms* as provided in Sentence (3) are permitted to sound localized alarms within individual *suites*, and need not sound an alarm throughout the rest of the *building*.

9.10.19.5. Interconnection of Smoke Alarms

(1) Where more than one *smoke alarm* is required in a *dwelling unit*, the *smoke alarms* shall be wired so that the activation of one alarm will cause all alarms within the *dwelling unit* to sound.

9.10.19.6. Silencing of Smoke Alarms

(1) Except as permitted in Sentence (2), a manually operated device shall be incorporated within the circuitry of a *smoke alarm* installed in a *dwelling unit* so that the signal emitted by the *smoke alarm* can be silenced for a period of not more than 10 min, after which the *smoke alarm* will reset and sound again if the level of smoke in the vicinity is sufficient to reactuate it.

(2) *Suites* of *residential occupancy* equipped with *smoke detectors* installed to CAN/ULC-S524, "Installation of Fire Alarm Systems", which are part of the fire alarm system in lieu of *smoke alarms* as permitted in Sentence 9.10.19.4.(3), need not incorporate the manually operated device required in Sentence (1).

9.10.19.7. Instructions for Maintenance and Care

(1) Where instructions are necessary to describe the maintenance and care required for *smoke alarms* to ensure continuing satisfactory performance, they shall be posted in a location where they will be readily available to the occupants for reference.

9.10.20. Firefighting

9.10.20.1. Windows or Access Panels Required

(1) Except as provided in Sentence (3), a window or access panel providing an opening not less than 1 100 mm high and 550 mm wide and having a sill height of not more than 900 mm above the floor shall be provided on the second and third *storeys* of every *building* in at least one wall facing on a *street* if such *storeys* are not *sprinklered*.

(2) Access panels required in Sentence (1) shall be readily openable from both inside and outside or be glazed with plain glass.

(3) Access panels required in Sentence (1) need not be provided in *buildings* containing only *dwelling units* where there is no *dwelling unit* above another *dwelling unit*.

9.10.20.2. Access to Basements

(1) Except in *basements* serving not more than one *dwelling unit*, each unsprinklered *basement* exceeding 25 m in length or width shall be provided with direct access to the outdoors to at least one *street*.

(2) Access required in Sentence (1) is permitted to be provided by a door, window or other means that provides an opening not less than 1 100 mm high and 550 mm wide, the sill height of which shall not be more than 900 mm above the floor.

(3) Access required in Sentence (1) is also permitted to be provided by an interior stair accessible from the outdoors.

9.10.20.3. Fire Department Access to Buildings

(1) Access for fire department equipment shall be provided to each *building* by means of a *street*, private roadway or yard.

(2) Where access to a *building* as required in Sentence (1) is provided by means of a roadway or yard, the design and location of such roadway or yard shall take into account connection with public thoroughfares, weight of firefighting equipment, width of roadway, radius of curves, overhead clearance, location of fire hydrants, location of fire department connections and vehicular parking.

9.10.20.4. Portable Fire Extinguishers

(1) Portable fire extinguishers shall be installed in all *buildings*, except within *dwelling units*, in conformance with the provisions of the Fire Code made under the *Fire Protection and Prevention Act, 1997*.

9.10.20.5. Freeze Protection for Fire Protection Systems

(1) Equipment forming part of a fire protection system that may be adversely affected by freezing temperatures and that is located in an unheated area shall be protected from freezing.

9.10.21. Fire Protection for Construction Camps

9.10.21.1 Requirements for Construction Camps

(1) Except as provided in Articles 9.10.21.2. to 9.10.21.9., *camps for housing of workers* shall conform to Subsections 9.10.1. to 9.10.20.

9.10.21.2. Separation of Sleeping Rooms

(1) Except for sleeping rooms within *dwelling units*, sleeping rooms in a *building* in a *camp for housing of workers* shall be separated from each other and from the remainder of the *building* by a *fire separation* having not less than a 30 min *fire-resistance rating*.

9.10.21.3. Floor Assemblies Between the First and Second Storey

(1) Except in a *dwelling unit*, a floor assembly in a *building* in a *camp for housing of workers* separating the *first storey* and the second *storey* shall be constructed as a *fire separation* having not less than a 30 min *fire-resistance rating*.

9.10.21.4. Walkways Connecting Buildings

(1) *Walkways* of *combustible construction* connecting *buildings* shall be separated from each connected *building* by a *fire separation* having not less than a 45 min *fire-resistance rating*.

9.10.21.5. Spatial Separations

(1) *Buildings* in a *camp for housing of workers* shall be separated from each other by a distance of not less than 10 m unless otherwise permitted in Subsection 9.10.14.

9.10.21.6. Flame-Spread Ratings

(1) Except in *dwelling units* and except as provided in Sentence (2), the surface *flame-spread rating* of wall and ceiling surfaces in corridors and *walkways*, exclusive of doors, shall not exceed 25 over not less than 90 per cent of the exposed surface area and not more than 150 over the remaining surface area.

(2) Except within *dwelling units*, corridors that provide *access to exit* from sleeping rooms and that have a *fire-resistance rating* of not less than 45 min shall have a *flame-spread rating* conforming to the appropriate requirements in Subsection 9.10.17.

9.10.21.7. Smoke Detectors

(1) Except in *dwelling units*, corridors providing *access to exit* from sleeping rooms in every *building* in a *camp for housing of workers* with sleeping accommodation for more than 10 persons shall have a *smoke detector* connected to the *building* alarm system.

9.10.21.8. Portable Fire Extinguishers

(1) Each *building* in a *camp for housing of workers* shall be provided with portable fire extinguishers in conformance with the provisions of the Fire Code made under the *Fire Protection and Prevention Act, 1997*.

9.10.21.9. Hose Stations

(1) Every *building* in a *camp for housing of workers* providing sleeping accommodation for more than 30 persons shall be provided with a hose station that is protected from freezing and equipped with a hose of sufficient length so that every portion of the *building* is within the range of a hose stream.

(2) Hose stations required in Sentence (1) shall be located near an *exit*.

(3) Hoses referred to in Sentence (1) shall be not less than 19 mm inside diam and shall be connected to a central water supply or to a storage tank having a capacity of at least 4 500 L with a pumping system capable of supplying a flow of at least 5 L/s at a gauge pressure of 300 kPa.

9.10.22. Fire Protection for Gas, Propane and Electric Cooktops

9.10.22.1. Installation of Ranges

(1) Reserved

(2) Clearances for and protection around gas, propane and electric ranges shall be not less than those provided in Articles 9.10.22.2. and 9.10.22.3.

9.10.22.2. Vertical Clearances above Cooktops

(1) Except as provided in Sentence (2), framing, finishes and cabinetry installed directly above the location of the *cooktop* shall be not less than 750 mm above the level of *cooktop* burners or elements.

(2) The vertical clearance described in Sentence (1) for framing, finishes and cabinets located directly above the location of the *cooktop* is permitted to be reduced to 600 mm above the level of the elements or burners provided the framing, finishes and cabinets,

(a) are *noncombustible*, or

(b) are protected by,

(i) asbestos millboard not less than 6 mm thick, covered with sheet metal not less than 0.33 mm thick, or

(ii) a metal hood with a 125 mm projection beyond the framing, finishes and cabinets.

9.10.22.3. Protection Around Cooktops

(1) Except as provided in Sentences (2) and (3), *combustible* wall framing, finishes or cabinets within 450 mm of the area where the *cooktop* is to be located shall be protected above the level of the heating elements or burners by material providing fire resistance not less than that of a 9.5 mm thickness of gypsum board.

(2) Countertop splash boards or back plates that extend above the level of the heating elements or burners need not be protected as described in Sentence (1).

(3) Except for cabinetry described in Article 9.10.22.2., cabinetry located not less than 450 mm above the level of the heating elements or burners need not be protected as described in Sentence (1).

Section 9.11. Sound Control

9.11.1. Sound Transmission Class Rating (Airborne Sound)

9.11.1.1. Determination of Sound Transmission Class Ratings

(1) Sound transmission class ratings shall be determined in accordance with ASTM E413, "Classification for Rating Sound Insulation", using results from measurements in accordance with,

(a) ASTM E90, "Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements", or

(b) ASTM E336, "Measurement of Airborne Sound Attenuation Between Rooms in Buildings".

9.11.2. Required Sound Control Locations (Airborne Sound)

9.11.2.1. Minimum Sound Transmission Class Ratings

(1) Except as provided in Sentence (2), every *dwelling unit* and every *suite* in *hotels* shall be separated from every other space in a *building* in which noise may be generated, by an assembly providing a sound transmission class rating of at least 50, measured in accordance with Subsection 9.11.1. or as listed in Tables 1 and 2 of MMAH Supplementary Standard SB-3, "Fire and Sound Resistance of Building Assemblies".

(2) Where a *dwelling unit* or *suite* in a *hotel* is adjacent to an elevator shaft or a refuse chute, the separating assembly shall have a sound transmission class rating of at least 55, measured in accordance with Subsection 9.11.1. or as listed in Tables 1 and 2 of MMAH Supplementary Standard SB-3, "Fire and Sound Resistance of Building Assemblies".

9.11.2.2. Building Services in an Assembly

(1) *Building* services located in an assembly required to have a sound transmission class rating shall be installed in a manner that will not decrease the required rating of the assembly.

Section 9.12. Excavation

9.12.1. General

9.12.1.1. Removal of Topsoil and Organic Matter

(1) The topsoil and vegetable matter in all unexcavated areas under a *building* shall be removed.

(2) In localities where termite infestation is known to be a problem, all stumps, roots and other wood debris shall be removed from the *soil* to a depth of not less than 300 mm in unexcavated areas under a *building*.

(3) The bottom of every *excavation* shall be free of all organic material.

9.12.1.2. Standing Water

(1) *Excavations* shall be kept free of standing water.

9.12.1.3. Protection from Freezing

(1) The bottom of *excavations* shall be kept from freezing throughout the entire construction period.

9.12.1.4. Precautions During Excavation

(1) Every *excavation* shall be undertaken in such a manner to prevent damage to adjacent property, existing structures, utilities, roads and sidewalks at all stages of construction.

(2) Material shall not be placed nor shall equipment be operated or placed in or adjacent to an *excavation* in a manner that may endanger the integrity of the *excavation* or its supports.

9.12.2. Depth

9.12.2.1. Excavation to Undisturbed Soil

(1) *Excavations* for *foundations* shall extend to undisturbed *soil*.

9.12.2.2. Minimum Depth of Foundations

(1) Except as provided in Sentences (4) to (7), the minimum depth of *foundations* below finished ground level shall conform to Table 9.12.2.2.

Table 9.12.2.2.
Minimum Depths of Foundations

Forming Part of Sentence 9.12.2.2.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Type of *Soil*	Minimum Depth of *Foundation* Containing Heated *Basement* or Crawl Space[1]		Minimum Depth of *Foundation* Containing no Heated Space[2]	
		Good *Soil* Drainage	Poor *Soil* Drainage	Good *Soil* Drainage	Poor *Soil* Drainage
1.	*Rock*	No limit	No limit	No limit	No limit
2.	Coarse grained *soils*	No limit	No limit	No limit	Below the depth of frost penetration
3.	Silt	No limit	No limit	Below the depth of frost penetration[3]	Below the depth of frost penetration
4.	Clay or *soils* not clearly defined	1.2 m[3]	1.2 m	1.2 m but not less than the depth of frost penetration[3]	1.2 m but not less than the depth of frost penetration

Notes to Table 9.12.2.2.:

[1] *Foundation* not insulated to reduce heat loss through the footings.

[2] Including *foundations* containing heated space insulated to reduce heat loss through the footings.

[3] Good *soil* drainage to not less than the depth of frost penetration.

(2) Where a *foundation* is insulated in a manner that will reduce the heat flow to the *soil* beneath the footings, the *foundation* depth shall conform to that required for *foundations* containing no heated space.

(3) The minimum depth of *foundation*s for exterior concrete steps with more than 2 risers shall conform to Sentences (1), (2) and (5).

(4) Concrete steps with 1 and 2 risers are permitted to be laid on ground level.

(5) The *foundation* depths required in Sentence (1) are permitted to be decreased where experience with local *soil* conditions shows that lesser depths are satisfactory, or where the *foundation* is designed for lesser depths.

(6) The *foundation* depths required in Sentence (1) do not apply to *foundation*s for,

(a) *buildings*,

(i) that are not of masonry or masonry veneer construction, and

(ii) whose superstructure conforms with the requirements of the deformation resistance test in CSA Z240.2.1, "Structural Requirements for Manufactured Homes", or

(b) accessory *buildings*,

(i) that are not of masonry or masonry veneer construction,

(ii) not more than 1 *storey* in *building height*,

(iii) not more than 55 m² in *building area*, and

(iv) where the distance from the finished ground to the underside of the floor joists is not more than 600 mm.

(7) The *foundation* depths required in Sentence (1) do not apply to *foundations* for decks and other accessible exterior platforms,

(a) that are of not more than 1 *storey*,

(b) that are not more than 55 m² in area,

(c) where the distance from the finished ground to the underside of the floor joists is not more than 600 mm,

(d) that are not supporting a roof, and

(e) that are not attached to another structure, unless it can be demonstrated that differential movement will not adversely affect the performance of that structure.

9.12.3. Backfill

9.12.3.1. Placement of Backfill

(1) Backfill shall be placed to avoid damaging the *foundation* wall, the drainage tile, drainage layer, externally applied thermal insulation, waterproofing and dampproofing of the wall.

9.12.3.2. Grading of Backfill

(1) Backfill shall be graded to prevent drainage towards the *foundation* after settling.

9.12.3.3. Deleterious Debris and Boulders

(1) Backfill within 600 mm of the *foundation* shall be free of deleterious debris and boulders larger than 250 mm diam.

(2) Except as permitted in Sentence (3), backfill shall not contain pyritic material or material that is susceptible to ice lensing in concentrations that will damage the *building* to a degree that would adversely affect its stability or the performance of assemblies separating dissimilar environments.

(3) Backfill with material of any concentration that is susceptible to ice lensing is permitted where *foundation* walls are cast-in-place concrete, concrete block insulated on the exterior or concrete block protected from the backfill by a material that serves as a slip plane.

9.12.3.4. Lateral Support of Foundation Wall

(1) Where the height of *foundation* wall is such that lateral support is required, or where the required concrete strength of the wall has not been reached, the wall shall be braced or laterally supported before backfilling.

9.12.4. Trenches Beneath Footings

9.12.4.1. Compacting or Filling With Concrete

(1) The *soil* in trenches beneath footings for sewers and watermains shall be compacted by tamping up to the level of the footing base, or shall be filled with concrete having a strength not less than 10 MPa to support the footing.

Section 9.13. Dampproofing, Waterproofing and Soil Gas Control

9.13.1. General

9.13.1.1. Application

(1) This Section applies to the control of moisture and *soil* gas ingress through walls, floors, and roofs in contact with the ground.

9.13.2. Dampproofing

9.13.2.1. Dampproofing

(1) Except as provided in Article 9.13.3.1., where the exterior finished ground level is at a higher elevation than the ground level inside the *foundation* walls, exterior surfaces of *foundation* walls below ground level shall be dampproofed.

(2) Except as provided in Sentence (3) and Article 9.13.3.1., floors-on-ground shall be dampproofed.

(3) Floors in garages, floors in unenclosed portions of *buildings* and floors installed over granular *fill* in conformance with Article 9.16.2.1. need not be dampproofed.

(4) Dampproofing in Sentence (1) is not required where the exterior surfaces of *foundation* walls below ground level are waterproofed.

9.13.2.2. Material Standards

(1) Except as otherwise specified in this Section, materials used for exterior dampproofing shall conform to,

(a) CAN/CGSB-37.1-M, “Chemical Emulsified Type, Emulsified Asphalt for Dampproofing”,

(b) CAN/CGSB-37.2-M, “Emulsified Asphalt, Mineral Colloid Type, Unfilled, for Dampproofing and Waterproofing and for Roof Coatings”,

(c) CGSB 37-GP-6Ma, “Asphalt, Cutback, Unfilled, for Dampproofing”,

(d) CAN/CGSB-37.16-M, “Filled, Cutback Asphalt for Dampproofing and Waterproofing”,

(e) CGSB 37-GP-18Ma, “Tar, Cutback, Unfilled, for Dampproofing”,

(f) CAN/CGSB-51.34-M, “Vapour Barrier, Polyethylene Sheet, for Use in Building Construction”,

(g) CAN/CSA-A123.4, “Asphalt for Constructing Built-Up Roof Coverings and Waterproofing Systems,” or

(h) CGSB 37-GP-56M, “Membrane, Modified, Bituminous, Prefabricated, and Reinforced for Roofing”.

9.13.2.3. Standards for Application

(1) The method of application of all bituminous dampproofing materials shall conform to,

(a) CAN/CGSB-37.3-M, “Application of Emulsified Asphalts for Dampproofing or Waterproofing”,

(b) CGSB 37-GP-12Ma, “Application of Unfilled Cutback Asphalt for Dampproofing”, or

(c) CAN/CGSB-37.22-M, “Application of Unfilled, Cutback Tar Foundation Coating for Dampproofing”.

9.13.2.4. Preparation of Surface

(1) Unit masonry walls to be dampproofed shall be,

(a) parged on the exterior face below ground level with not less than 6 mm of mortar conforming to Section 9.20., and

(b) coved over the footing when the first course of block is laid.

(2) Concrete walls to be dampproofed shall have holes and recesses resulting from the removal of form ties sealed with cement mortar or dampproofing material.

(3) The surface of insulating concrete form walls to be dampproofed shall be repaired and free of projections and depressions that could be detrimental to the performance of the membrane to be applied.

9.13.2.5. Application of Dampproofing Material

(1) Dampproofing material shall be applied over the parging or concrete below ground level.

9.13.2.6. Moisture Protection for Interior Finishes

(1) The interior surface of *foundation* walls below ground level shall be protected by means that minimize the ingress of moisture from the *foundation* wall into interior spaces where,

(a) a separate interior finish is applied to a concrete or unit masonry wall that is in contact with the *soil*, or

(b) wood members are placed in contact with such walls for the installation of insulation or finish.

(2) Except as provided in Sentence (3), where the protection of interior finishes required in Sentence (1) consists of membranes or coatings,

(a) the membrane or coating shall extend from the *basement* floor surface up to the highest extent of the interior insulation or finish, but not higher than the exterior finished ground level, and

(b) no membrane or coating with a permeance less than 170 ng/(Pa·s·m^2) shall be applied to the interior surface of the *foundation* wall above ground level between the insulation and the *foundation* wall.

(3) Where insulation functions as both moisture protection for interior finishes and as a *vapour barrier* in accordance with Subsection 9.25.4., it shall be applied over the entire interior surface of the *foundation* wall.

9.13.2.7. Dampproofing of Floors-on-Ground

(1) Where floors are dampproofed, the dampproofing shall be installed below the floor, except that where a separate floor is provided over a slab, the dampproofing is permitted to be applied to the top of the slab.

(2) Where installed below the floor, dampproofing membranes shall consist of polyethylene not less than 0.15 mm thick, or Type S roll roofing.

(3) Joints in dampproofing membranes described in Sentence (2) shall be lapped not less than 100 mm.

(4) Where installed above the slab, dampproofing shall consist of,

(a) no fewer than 2 mopped-on coats of bitumen,

(b) not less than 0.05 mm polyethylene, or

(c) other material providing equivalent performance.

9.13.2.8. Dampproofing of Preserved Wood Foundation Walls

(1) Preserved wood *foundation* walls shall be dampproofed as described in CAN/CSA-S406, "Construction of Preserved Wood Foundations".

9.13.3. Waterproofing

9.13.3.1. Required Waterproofing

(1) Where hydrostatic pressure occurs, waterproofing is required for exterior surfaces of,

(a) floors-on-ground, and

(b) below ground walls, where the exterior finished ground level is at a higher elevation than the ground level inside the *foundation* walls.

(2) Roofs of underground structures shall be waterproofed to prevent the entry of water into the structure.

9.13.3.2. Material Standards

(1) Except as otherwise specified in this Section, materials used for exterior waterproofing shall conform to,

(a) CAN/CGSB-37.2-M, "Emulsified Asphalt, Mineral-Colloid Type, Unfilled, for Dampproofing and Waterproofing and for Roof Coatings",

(b) CAN/CGSB-37.16-M, "Filled, Cutback Asphalt for Dampproofing and Waterproofing",

(c) CAN/CSA-A123.4, "Asphalt for Constructing Built-Up Roof Coverings and Waterproofing Systems", or

(d) CGSB 37-GP-56M, "Membrane, Modified, Bituminous, Prefabricated, and Reinforced for Roofing".

9.13.3.3. Standards for Application

(1) The method of application of all bituminous waterproofing materials shall conform to CAN/CGSB-37.3-M, "Application of Emulsified Asphalts for Dampproofing or Waterproofing".

9.13.3.4. Preparation of Surface

(1) Unit masonry walls that are to be waterproofed shall be parged on exterior surfaces below ground level with not less than 6 mm of mortar conforming to Section 9.20.

(2) Concrete walls that are to be waterproofed shall have all holes and recesses resulting from removal of form ties sealed with mortar or waterproofing material.

(3) The surface of insulating concrete form walls that are to be waterproofed shall be repaired and free of projections and depressions that could be detrimental to the performance of the membrane to be applied.

9.13.3.5. Application of Waterproofing Membranes

(1) Concrete or unit masonry walls to be waterproofed shall be covered with no fewer than 2 layers of bitumen-saturated membrane, with each layer cemented in place with bitumen and coated overall with a heavy coating of bitumen.

9.13.3.6. Floor Waterproofing System

(1) *Basement* floors-on-ground to be waterproofed shall have a system of membrane waterproofing provided between 2 layers of concrete, each of which shall be not less than 75 mm thick, with the floor membrane mopped to the wall membrane to form a complete seal.

9.13.4. Soil Gas Control

9.13.4.1. Soil Gas Control

(1) Where methane or radon gases are known to be a problem, construction shall comply with the requirements for *soil* gas control in MMAH Supplementary Standard SB-9, “Requirements for Soil Gas Control”.

9.13.4.2. Required Soil Gas Control

(1) Except as provided in Sentence (2), all wall, roof and floor assemblies in contact with the ground shall be constructed to resist the leakage of *soil* gas from the ground into the *building*.

(2) Construction to resist leakage of *soil* gas into the *building* is not required for,

(a) garages and unenclosed portions of *buildings*,

(b) *buildings* constructed in areas where it can be demonstrated that *soil* gas does not constitute a hazard, or

(c) *buildings* that contain a single *dwelling unit* and are constructed to provide for subfloor depressurization in accordance with MMAH Supplementary Standard SB-9, “Requirements for Soil Gas Control”.

(3) Where *soil* gas control is required, a *soil* gas barrier shall be installed at walls and roofs in contact with the ground according to MMAH Supplementary Standard SB-9, “Requirements for Soil Gas Control”.

(4) Where *soil* gas control is required, it shall consist of one of the following at floors in contact with the ground:

(a) a *soil* gas barrier installed according to MMAH Supplementary Standard SB-9, “Requirements for Soil Gas Control”, or

(b) where the *building* contains a single *dwelling unit* only, a subfloor depressurization system installed according to MMAH Supplementary Standard SB-9, “Requirements for Soil Gas Control”.

9.13.4.3. Material Standards

(1) Materials used to provide a barrier to *soil* gas ingress through floors-on-ground shall conform to CAN/CGSB-51.34-M, "Vapour Barrier, Polyethylene Sheet, for Use in Building Construction".

Section 9.14. Drainage

9.14.1. Scope

9.14.1.1. Application

(1) This Section applies to subsurface drainage and to surface drainage.

9.14.1.2. Crawl Spaces

(1) Drainage for crawl spaces shall conform to Section 9.18.

9.14.1.3. Floors-on-Ground

(1) Drainage requirements beneath floors-on-ground shall conform to Section 9.16.

9.14.2. Foundation Drainage

9.14.2.1. Foundation Wall Drainage

(1) Unless it can be shown to be unnecessary, drainage shall be provided at the bottom of every *foundation* wall that contains the *building* interior.

(2) Except as provided in Sentences (4) and (5), where the insulation on a *foundation* wall extends to more than 900 mm below the adjacent exterior ground level,

(a) a drainage layer shall be installed adjacent to the exterior surface of a *foundation* wall consisting of,

(i) not less than 19 mm mineral fibre insulation with a density of not less than 57 kg/m^3, or

(ii) not less than 100 mm of free draining granular material, or

(b) a system shall be installed that can be shown to provide equivalent performance to that provided by the materials described in Clause (a).

(3) Where mineral fibre insulation, crushed rock backfill or other drainage layer medium is provided adjacent to the exterior surface of a *foundation* wall,

(a) the insulation, backfill or other drainage layer medium shall extend to the footing level to facilitate drainage of ground water to the *foundation* drainage system, and

(b) any pyritic material in the crushed rock shall be limited to a concentration that will not damage the *building* to a degree that would adversely affect its stability or the performance of assemblies separating dissimilar environments.

(4) Except when the insulation provides the drainage layer required in Clause (2)(a), when exterior insulation is provided, the drainage layer shall be installed on the exterior face of the insulation.

(5) The drainage layer required in Sentence (2) is not required,

(a) when the *foundation* wall is not required to be dampproofed, or

(b) when the *foundation* wall is waterproofed.

(6) Where drainage is required in Sentence (1), the drainage shall conform to Subsection 9.14.3. or 9.14.4.

9.14.3. Drainage Tile and Pipe

9.14.3.1. Material Standards

(1) Drain tile and drain pipe for *foundation* drainage shall conform to,

(a) ASTM C4, "Clay Drain Tile and Perforated Clay Drain Tile",

(b) ASTM C412M, "Concrete Drain Tile (Metric)",

(c) ASTM C444M, "Perforated Concrete Pipe (Metric)",

(d) ASTM C700, "Vitrified Clay Pipe, Extra Strength, Standard Strength and Perforated",

(e) CAN/CGSB-34.22, "Asbestos-Cement Drain Pipe",

(f) CAN/CSA-B182.1, "Plastic Drain and Sewer Pipe and Pipe Fittings",

(g) CAN/CSA-G401, "Corrugated Steel Pipe Products", or

(h) BNQ 3624-115, "Polyethylene (PE) Pipe Fittings – Flexible Pipes for Drainage – Characteristics and Test Methods".

9.14.3.2. Minimum Size

(1) Drain tile or pipe used for *foundation* drainage shall be not less than 100 mm in diam.

9.14.3.3. Installation

(1) Drain tile or pipe shall be laid on undisturbed or well-compacted *soil* so that the top of the tile or pipe is below the bottom of the floor slab or the ground cover of the crawl space.

(2) Drain tile or pipe with butt joints shall be laid with 6 mm to 10 mm open joints.

(3) The top half of joints referred to in Sentence (2) shall be covered with sheathing paper, 0.10 mm polyethylene or No. 15 asphalt or tar-saturated felt.

(4) The top and sides of drain pipe or tile shall be covered with not less than 150 mm of crushed stone or other coarse clean granular material containing not more than 10% of material that will pass a 4 mm sieve.

9.14.4. Granular Drainage Layer

9.14.4.1. Type of Granular Material

(1) Granular material used to drain the bottom of a *foundation* shall consist of a continuous layer of crushed stone or other coarse clean granular material containing,

(a) not more than 10% of material that will pass a 4 mm sieve, and

(b) no pyritic material in a concentration that would adversely affect its stability or the performance of assemblies separating dissimilar environments.

9.14.4.2. Installation

(1) Granular material described in Article 9.14.4.1. shall be laid on undisturbed or compacted *soil* to a minimum depth of not less than 125 mm beneath the footing of the *building* and extend not less than 300 mm beyond the outside edge of the footings.

9.14.4.3. Grading

(1) The bottom of an *excavation* drained by a granular layer shall be graded so that the entire area described in Article 9.14.4.2. is drained to a sump conforming to Article 9.14.5.2.

9.14.4.4. Wet Site Conditions

(1) Where because of wet site conditions *soil* becomes mixed with the granular drainage material, sufficient additional granular material shall be provided so that the top 125 mm is kept free of *soil*.

9.14.5. Drainage Disposal

9.14.5.1. Drainage Disposal

(1) *Foundation* drains shall drain to a sewer, drainage ditch or dry well.

9.14.5.2. Sump Pits

(1) Where gravity drainage is not practical, a covered sump with an automatic pump shall be installed to discharge the water into a sewer, drainage ditch or dry well.

(2) Covers for sump pits shall be,

(a) designed to resist removal by children, and

(b) sealed in accordance with Sentence 9.25.3.3.(16).

9.14.5.3. Dry Wells

(1) Dry wells are permitted to be used only when located in areas where the natural *groundwater* level is below the bottom of the dry well.

(2) Dry wells shall be not less than 5 m from the *building foundation* and located so that drainage is away from the *building*.

9.14.6. Surface Drainage

9.14.6.1. Surface Drainage

(1) The *building* shall be located or the *building* site graded so that water will not accumulate at or near the *building* and will not adversely affect adjacent properties.

9.14.6.2. Drainage away from Wells or Leaching Beds

(1) Surface drainage shall be directed away from the location of a water supply well or *leaching bed*.

9.14.6.3. Window Wells

(1) Every window well shall be drained to the footing level or other suitable location.

9.14.6.4. Catch Basin

(1) Where runoff water from a driveway is likely to accumulate or enter a garage, a catch basin shall be installed to provide adequate drainage.

9.14.6.5. Downspouts

(1) Downspouts shall conform to Article 9.26.18.2.

Section 9.15. Footings and Foundations

9.15.1. Application

9.15.1.1. General

(1) Except as provided in Articles 9.15.1.2. and 9.15.1.3., this Section applies to,

(a) concrete or unit masonry *foundation* walls and concrete footings not subject to surcharge,

(i) on stable *soils* with an *allowable bearing pressure* of 75 kPa or greater, and

(ii) for *buildings* of wood frame or masonry construction,

(b) wood frame *foundation* walls and wood or concrete footings not subject to surcharge,

(i) on stable *soils* with an *allowable bearing pressure* of 75 kPa or greater, and

(ii) for *buildings* of wood frame construction, and

(c) flat insulating concrete form *foundation* walls and concrete footings not subject to surcharge,

(i) on stable *soils* with an *allowable bearing pressure* of 75 kPa or greater, and

(ii) for *buildings* of light frame or flat insulating concrete form construction that are not more than 2 *storeys* in *building height*, with a maximum floor to floor height of 3 m, and containing only a single *dwelling unit*.

(2) *Foundations* for applications other than as described in Sentence (1) shall be designed in accordance with Section 9.4.

(3) Where a *foundation* is erected on filled ground, peat or sensitive clay, the footing sizes shall be designed in conformance with Section 4.2.

(4) For the purpose of Sentence (3), sensitive clay means the grain size of the majority of the particles is smaller than 0.002 mm, including leda clay.

9.15.1.2. Permafrost

(1) *Buildings* erected on permafrost shall have *foundations* designed by a *designer* competent in this field in accordance with the appropriate requirements of Part 4.

9.15.1.3. Foundations for Deformation Resistant Buildings

(1) Where the superstructure of a detached *building* conforms to the requirements of the deformation resistance test in CSA Z240.2.1, “Structural Requirements for Manufactured Homes”, the *foundation* shall be constructed in conformance with,

(a) this Section, or

(b) CSA Z240.10.1, “Site Preparation, Foundation, and Anchorage of Manufactured Homes”.

9.15.2. General

9.15.2.1. Concrete

(1) Concrete shall conform to Section 9.3.

9.15.2.2. Unit Masonry Construction

(1) Concrete block shall conform to CAN/CSA-A165.1, “Concrete Block Masonry Units”, and shall have a compressive strength over the average net cross-sectional area of the block of not less than 15 MPa.

(2) Mortar, grout, mortar joints, corbelling and protection for unit masonry shall conform to Section 9.20.

(3) For concrete block *foundation* walls required to be reinforced,

(a) mortar shall be Type S, conforming to CAN/CSA-A179, “Mortar and Grout for Unit Masonry”,

(b) grout shall be coarse, conforming to CAN/CSA-A179, “Mortar and Grout for Unit Masonry”, and

(c) placement of grout shall conform to CAN/CSA-A371, “Masonry Construction for Buildings”.

9.15.2.3. Pier Type Foundations

(1) Where pier type *foundations* are used, the piers shall be designed to support the applied loads from the superstructure.

(2) Where piers are used as a *foundation* system in a *building* of 1 *storey* in *building height*, the piers shall be installed to support the principal framing members and shall be spaced not more than 3.5 m apart along the framing, unless the piers and their footings are designed for larger spacings.

(3) The height of piers described in Sentence (2) shall not exceed 3 times their least dimension at the base of the pier.

(4) Where concrete block is used for piers described in Sentence (2), they shall be laid with cores placed vertically, and where the width of the *building* is 4.3 m or less, placed with their longest dimension at right angles to the longest dimension of the *building*.

9.15.2.4. Wood Frame Foundations

(1) *Foundations* of wood frame construction shall conform to,

(a) CAN/CSA-S406, "Construction of Preserved Wood Foundations", or

(b) Part 4.

9.15.3. Footings

9.15.3.1. Footings Required

(1) Footings shall be provided under walls, pilasters, columns, piers, fireplaces and *chimneys* that bear on *soil* or *rock*, except that footings are permitted to be omitted under piers or monolithic concrete walls if the safe *loadbearing* capacity of the *soil* or *rock* is not exceeded.

9.15.3.2. Support of Footings

(1) Footings shall rest on undisturbed *soil*, *rock* or compacted granular *fill*.

(2) Granular *fill* shall not contain pyritic material in a concentration that would adversely affect its stability or the performance of assemblies separating dissimilar environments.

9.15.3.3. Application of Footing Width and Area Requirements

(1) Except as provided in Sentence 9.15.3.4.(2), the minimum footing width or area requirements provided in Articles 9.15.3.4. to 9.15.3.7. shall apply to footings where,

(a) the footings support,

(i) *foundation* walls of masonry, concrete, or flat insulating concrete form walls,

(ii) above ground walls of masonry, flat insulating concrete form walls or light wood frame construction, and

(iii) floors and roofs of light wood frame construction,

(b) the span of supported joists does not exceed 4.9 m, and

(c) the specified *live load* on any floor supported by the footing does not exceed 2.4 kPa.

(2) Except as provided in Sentence 9.15.3.4.(2), where the span of the supported joists exceeds 4.9 m, footings shall be designed in accordance with Section 4.2.

(3) Where the specified *live load* exceeds 2.4 kPa footings shall be designed in accordance with Section 4.2.

9.15.3.4. Basic Footing Widths and Areas

(1) Except as provided in Sentences (2) and (3) and in Articles 9.15.3.5. to 9.15.3.7., the minimum footing width or area shall comply with Table 9.15.3.4.

Table 9.15.3.4.
Minimum Footing Sizes

Forming Part of Sentence 9.15.3.4.(1)

Item	Column 1	Column 2	Column 3	Column 4
	Number of Floors Supported	Minimum Width of Strip Footings, mm		Minimum Footing Area for Columns Spaced 3 m o.c.[1], m^2
		Supporting Exterior Walls[2]	Supporting Interior Walls[3]	
1.	1	250	200	0.40
2.	2	350	350	0.75
3.	3	450	500	1.0

Notes to Table 9.15.3.4.:

[1] See Sentence 9.15.3.7.(1).

[2] See Sentences 9.15.3.5.(1).

[3] See Sentence 9.15.3.6.(1).

(2) Where the supported joist span exceeds 4.9 m in *buildings* with light wood frame walls, floors and roofs, footing widths shall be determined according to,

(a) Section 4.2., or

(b) the following formula:

$$W = w \cdot [\sum sjs / (storeys \cdot 4.9)]$$

where,

W = minimum footing width,

w = minimum width of footings supporting joists not exceeding 4.9 m, as defined by Table 9.15.3.4.,

$\sum$ sjs = the sum of the supported joist spans on each *storey* whose load is transferred to the footing, and

storeys = number of *storeys* supported by the footing.

(3) Where a *foundation* rests on gravel, sand or silt in which the water table level is less than the width of the footings below the *bearing surface*,

(a) the footing width for walls shall be not less than twice the width required by Sentences (1) and (2), and Articles 9.15.3.5. and 9.15.3.6., and

(b) the footing area for columns shall be not less than twice the area required by Sentences (1) and (2), and Article 9.15.3.7.

9.15.3.5. Adjustments to Footing Widths for Exterior Walls

(1) The strip footing widths for exterior walls shown in Table 9.15.3.4. shall be increased by,

(a) 65 mm for each *storey* of masonry veneer over wood frame construction supported by the *foundation* wall,

(b) 130 mm for each *storey* of masonry construction supported by the *foundation* wall, and

(c) 150 mm for each *storey* of flat insulating concrete form wall construction supported by the *foundation* wall.

9.15.3.6. Adjustments to Footing Widths for Interior Walls

(1) The minimum strip footing widths for interior *loadbearing* masonry walls shown in Table 9.15.3.4. shall be increased by 100 mm for each *storey* of masonry construction supported by the footing.

(2) Footings for interior non-*loadbearing* masonry walls shall be not less than 200 mm wide for walls up to 5.5 m high and the width shall be increased by 100 mm for each additional 2.7 m of height.

9.15.3.7. Adjustments to Footing Area for Columns

(1) The footing area for column spacings other than shown in Table 9.15.3.4. shall be adjusted in proportion to the distance between columns.

9.15.3.8. Footing Thickness

(1) Footing thickness shall be not less than the greater of,

(a) 100 mm, or

(b) the width of the projection of the footing beyond the supported element.

9.15.3.9. Step Footings

(1) Where step footings are used,

(a) the vertical rise between horizontal portions shall not exceed 600 mm, and

(b) the horizontal distance between risers shall be not less than 600 mm.

9.15.4. Foundation Walls

9.15.4.1. Permanent Form Material

(1) Insulating concrete form units shall be manufactured of polystyrene conforming to the performance requirements of CAN/ULC-S701, “Thermal Insulation, Polystyrene, Boards and Pipe Covering”, for Type 2, 3 or 4 polystyrene.

9.15.4.2. Foundation Wall Thickness and Required Lateral Support

(1) Except as required in Sentence (2), the thickness of *foundation* walls made of unreinforced concrete block or solid concrete and subject to lateral earth pressure shall conform to Table 9.15.4.2.A. for walls not exceeding 3.0 m in unsupported height.

Table 9.15.4.2.A.
Thickness of Solid Concrete and Unreinforced Concrete Block Foundation Walls

Forming Part of Sentence 9.15.4.2.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Type of *Foundation* Wall	Minimum Wall Thickness, mm	Maximum Height of Finish Ground Above *Basement* Floor or Crawl Space Ground Cover, m			

			Height of *Foundation* Wall Laterally Unsupported at the Top[1][2]	Height of *Foundation* Wall Laterally Supported at the Top[1][2]		
			≤3.0 m	≤2.5 m	>2.5 m and ≤2.75 m	>2.75 m and ≤3.0 m
1.	Solid concrete, 15 MPa min. strength	150	0.8	1.5	1.5	1.4
		200	1.2	2.15	2.15	2.1
		250	1.4	2.3	2.6	2.5
		300	1.5	2.3	2.6	2.85
2.	Solid concrete, 20 MPa min. strength	150	0.8	1.8	1.6	1.6
		200	1.2	2.3	2.3	2.2
		250	1.4	2.3	2.6	2.85
		300	1.5	2.3	2.6	2.85
3.	Unreinforced concrete block	140	0.6	0.8	-	-
		190	0.9	1.2	[3]	[3]
		240	1.2	1.8	[3]	[3]
		290	1.4	2.2	-	-

Notes to Table 9.15.4.2.A.:

[1] See Article 9.15.4.3.

[2] See Article 9.15.4.6.

[3] See Table 9.15.4.2.B.

(2) The thickness of concrete in flat insulating concrete form *foundation* walls shall be not less than the greater of,

(a) 140 mm, or

(b) the thickness of the concrete in the wall above.

(3) *Foundation* walls made of flat insulating concrete form units shall be laterally supported at the top and at the bottom.

(4) The thickness and reinforcing of *foundation* walls made of reinforced concrete block and subject to lateral earth pressure shall conform to Table 9.15.4.2.B. and Sentences (5) to (8) where,

(a) the walls are laterally supported at the top,

(b) average stable *soils* are encountered, and

(c) wind loads on the exposed portion of the *foundation* are no greater than 0.70 kPa.

Table 9.15.4.2.B.
Reinforced Concrete Block Foundation Walls Laterally Supported at the Top[1]

Forming Part of Sentence 9.15.4.2.(4)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7

	Maximum Height of Finished Ground above *Basement* Floor or Crawl Space Ground Cover, m[2]	Size and Spacing of Continuous Vertical Reinforcement, M at mm o.c.					
		190 mm Minimum Wall Thickness			240 mm Minimum Wall Thickness		
		Foundation Wall Height			*Foundation* Wall Height		
		≤ 2.5 m	≤ 2.75 m	≤ 3.0 m	≤ 2.5 m	≤ 2.75 m	≤ 3.0 m
1.	0.8	(3)	(3)	(3)	(3)	(3)	(3)
2.	1.0	(3)	1-15M at 1 800	1-15M at 1 800	(3)	(3)	(3)
3.	1.2	(3)	1-15M at 1 600	1-15M at 1 600	(3)	1-20M at 2 000	1-20M at 2 000
4.	1.4	1-15M at 1 600	1-15M at 1 600	1-15M at 1 600	(3)	1-20M at 1 800	1-20M at 1 800
5.	1.6	1-15M at 1 400	1-15M at 1 400	1-15M at 1 400	(3)	1-20M at 1 600	1-20M at 1 600
6.	1.8	1-15M at 1 400	1-15M at 1 400	1-15M at 1 200	(3)	1-20M at 1 600	1-20M at 1 600
7.	2.0	1-15M at 1 200	1-15M at 1 000 or 1-20M at 1 200	2-15M at 1 200	1-20M at 1 600	1-20M at 1 600	1-20M at 1 600
8.	2.2	2-15M at 1 200	2-15M at 1 000	2-15M at 1 000	1-20M at 1 400	1-20M at 1 400	1-20M at 1 400
9.	2.4	2-15M at 1 000	2-15M at 1 000	2-15M at 800	1-20M at 1 400	1-20M at 1 400	1-20M at 1 200
10.	2.6	N/A	2-15M at 800 or 1-25M at 1 000	2-15M at 800 or 1-25M at 1 000	N/A	1-20M at 1 000	1-20M at 1 000
11.	2.8	N/A	N/A	1-20M at 600	N/A	N/A	1-20M at 800 or 2-15M at 1 000
12.	3.0	N/A	N/A	1-20M at 400 or 1-25M at 600	N/A	N/A	2-15M at 800

Notes to Table 9.15.4.2.B.:

(1) See Article 9.15.4.3.

(2) See Article 9.15.4.6.

(3) No reinforcement required.

(5) For concrete block walls required to be reinforced, continuous vertical reinforcement shall,

(a) be provided at wall corners, wall ends, wall intersections, at changes in wall height, at the jambs of all openings and at movement joints,

(b) extend from the top of the footing to the top of the *foundation* wall, and

(c) where *foundation* walls are laterally supported at the top, have not less than 50 mm embedment into the footing, if the floor slab does not provide lateral support at the wall base.

(6) For concrete block walls required to be reinforced, a continuous horizontal bond beam containing at least one 15M bar shall be installed,

(a) along the top of the wall,

(b) at the sill and head of all openings greater than 1.2 m in width, and

(c) at structurally connected floors.

(7) In concrete block walls required to be reinforced, all vertical bar reinforcement shall be installed along the centre line of the wall.

(8) In concrete block walls required to be reinforced, ladder or truss type lateral reinforcement not less than 3.8 mm in diameter (No. 9 ASWG) shall be installed in the bed joint of every second masonry course.

9.15.4.3. Foundation Walls Considered to be Laterally Supported at the Top

(1) Sentences (2) to (4) apply to lateral support for walls described in Sentence 9.15.4.2.(1).

(2) *Foundation* walls shall be considered to be laterally supported at the top if,

(a) such walls support solid masonry superstructure,

(b) the floor joists are embedded in the top of the *foundation* walls, or

(c) the floor system is anchored to the top of the *foundation* walls with anchor bolts, in which case the joists may run either parallel or perpendicular to the *foundation* walls.

(3) Unless the wall around an opening is reinforced to withstand earth pressure, the portion of the *foundation* wall beneath an opening shall be considered laterally unsupported, if,

(a) the opening is more than 1.2 m wide, or

(b) the total width of the openings in the *foundation* wall constitutes more than 25% of the length of the wall.

(4) For the purposes of Sentence (3), the combined width of the openings shall be considered as a single opening if the average width is greater than the width of solid wall between them.

(5) Flat insulating concrete form *foundation* walls shall be considered to be laterally supported at the top if the floor joists are installed according to Article 9.20.17.5.

9.15.4.4. Foundation Walls Considered to be Laterally Supported at the Bottom

(1) Flat insulating concrete form *foundation* walls shall be considered to be laterally supported at the bottom where the *foundation* wall,

(a) supports backfill not more than 1.2 m in height,

(b) is supported at the footing by a shear key and is supported at the top by the ground floor framing, or

(c) is dowelled to the footing with not less than 15M bars spaced not more than 1.2 m o.c.

9.15.4.5. Reinforcement for Flat Insulating Concrete Form Foundation Walls

(1) Horizontal reinforcement in flat insulating concrete form *foundation* walls shall,

(a) consist of,

(i) one 10M bar placed not more than 300 mm from the top of the wall, and

(ii) 10M bars spaced not more than 600 mm o.c., and

(b) be located,

(i) in the inside half of the wall section, and

(ii) with a minimum cover of 30 mm from the inside face of the concrete.

(2) Vertical wall reinforcement in flat insulating concrete form *foundation* walls shall,

(a) conform to,

(i) Table 9.15.4.5.A. for 140 mm walls,

(ii) Table 9.15.4.5.B. for 190 mm walls, and

(iii) Table 9.15.4.5.C. for 240 mm walls,

(b) be located in the inside half of the wall section with a minimum cover of 30 mm from the inside face of the concrete wall, and

(c) where interrupted by wall openings, be placed not more than 600 mm from each side of the openings.

(3) Cold joints in flat insulating concrete form *foundation* walls shall be reinforced with at least one 15M bar spaced not more than 600 mm o.c. and embedded not less than 300 mm on both sides of the joint.

(4) Reinforcing around openings in flat insulating concrete form *foundation* walls shall comply with Article 9.20.17.3. or 9.20.17.4.

Table 9.15.4.5.A.
Vertical Reinforcement for 140 mm Flat Insulating Concrete Form Foundation Walls

Forming Part of Sentence 9.15.4.5.(2)

Item	Column 1	Column 2	Column 3	Column 4
	Maximum Height of Finished Ground Above Finished *Basement* Floor, m	Minimum Vertical Reinforcement		
		Maximum Unsupported *Basement* Wall Height		
		2.44 m	2.75 m	3.00 m
1.	1.35	10M at 400 mm o.c.	10M at 400 mm o.c.	10M at 400 mm o.c.
2.	1.60	10M at 400 mm o.c.	10M at 380 mm o.c.	10M at 380 mm o.c.
3.	2.00	10M at 380 mm o.c.	10M at 380 mm o.c.	10M at 380 mm o.c.
4.	2.20	10M at 250 mm o.c.	10M at 250 mm o.c.	10M at 250 mm o.c.

5.	2.35	n/a	10M at 250 mm o.c.	10M at 250 mm o.c.
6.	2.60	n/a	10M at 250 mm o.c.	10M at 250 mm o.c.
7.	3.00	n/a	n/a	10M at 250 mm o.c.

Table 9.15.4.5.B.
Vertical Reinforcement for 190 mm Flat Insulating Concrete Form Foundation Walls

Forming Part of Sentence 9.15.4.5.(2)

Item	Column 1	Column 2	Column 3	Column 4
	Maximum Height of Finished Ground Above Finished *Basement* Floor, m	Minimum Vertical Reinforcement		
		Maximum Unsupported *Basement* Wall Height		
		2.44 m	2.75 m	3.00 m
1.	2.20	none required	10M at 400 mm o.c.	10M at 400 mm o.c.
2.	2.35	n/a	10M at 300 mm o.c.	10M at 300 mm o.c.
3.	2.60	n/a	10M at 300 mm o.c.	15M at 400 mm o.c.
4.	3.00	n/a	n/a	15M at 400 mm o.c.

Table 9.15.4.5.C.
Vertical Reinforcement for 240 mm Flat Insulating Concrete Form Foundation Walls

Forming Part of Sentence 9.15.4.5.(2)

Item	Column 1	Column 2	Column 3	Column 4
	Maximum Height of Finished Ground Above Finished *Basement* Floor, m	Minimum Vertical Reinforcement		
		Maximum Unsupported *Basement* Wall Height		
		2.44 m	2.75 m	3.00 m
1.	2.20	none required	none required	none required
2.	2.60	n/a	15M at 400 mm o.c.	15M at 400 mm o.c.
3.	3.00	n/a	n/a	15M at 400 mm o.c.

9.15.4.6. Extension above Ground Level

(1) Exterior *foundation* walls shall extend not less than 150 mm above finished ground level.

9.15.4.7. Reduction in Thickness

(1) Where the top of a *foundation* wall is reduced in thickness to permit the installation of floor joists, the reduced section shall be not more than 350 mm high and not less than 90 mm thick.

(2) Where the top of a *foundation* wall is reduced in thickness to permit the installation of a masonry exterior facing, the reduced section shall be,

(a) not less than 90 mm thick, and

(b) tied to the facing material with metal ties conforming to Sentence 9.20.9.4.(3) spaced not more than,

(i) 200 mm o.c. vertically, and

(ii) 900 mm o.c. horizontally.

(3) The space between wall and facing described in Sentence (2) shall be filled with mortar.

9.15.4.8. Corbelling

(1) Corbelling of masonry *foundation* walls supporting *cavity walls* shall conform to Article 9.20.12.2.

9.15.4.9. Crack Control Joints

(1) Crack control joints shall be provided in *foundation* walls more than 25 m long at intervals of not more than 15 m.

(2) Joints required in Sentence (1) shall be designed to resist moisture penetration and shall be keyed to prevent relative displacement of the wall portions adjacent to the joint.

9.15.4.10. Interior Masonry Walls

(1) Interior masonry *foundation* walls not subject to lateral earth pressure shall conform to Section 9.20.

9.15.5. Support of Joists and Beams on Masonry Foundation Walls

9.15.5.1. Support of Floor Joists

(1) Except as permitted in Sentence (2), *foundation* walls of hollow unit masonry supporting floor joists shall be,

(a) capped with not less than 50 mm of solid masonry or concrete, or

(b) have the top course filled with mortar or concrete.

(2) Capping required in Sentence (1) is permitted to be omitted,

(a) in localities where termites are not known to occur,

(b) when the joists are supported on a wood plate not less than 38 mm by 89 mm, and

(c) when the siding overlaps the *foundation* wall not less than 12 mm.

9.15.5.2. Support of Beams

(1) Not less than a 190 mm depth of solid masonry shall be provided beneath beams supported on masonry.

(2) Where the beam referred to in Sentence (1) is supported below the top of the *foundation* walls, the ends of such beams shall be protected from the weather.

9.15.5.3. Pilasters

(1) Pilasters shall be provided under beams that frame into unit masonry *foundation* walls 140 mm or less in thickness.

(2) Pilasters required in Sentence (1) shall be not less than 90 mm by 290 mm and shall be bonded or tied into the wall.

(3) The top 200 mm of pilasters required in Sentence (1) shall be solid.

9.15.6. Parging and Finishing of Foundation Walls

9.15.6.1. Foundation Walls Below Ground

(1) Concrete block *foundation* walls shall be parged on the exterior face below ground level as required in Section 9.13.

9.15.6.2. Foundation Walls Above Ground

(1) Exterior surfaces of concrete block *foundation* walls above ground level shall have tooled joints, or shall be rendered, parged or otherwise suitably finished.

9.15.6.3. Form Ties

(1) All form ties shall be removed at least flush with the concrete surface.

Section 9.16. Floors-on-Ground

9.16.1. Scope

9.16.1.1. Application

(1) This Section applies to floors that are supported on ground or granular *fill* and that do not provide structural support for the superstructure.

9.16.1.2. Structural Floor Slabs

(1) Floors-on-ground that support loads from the superstructure shall be designed in conformance with Part 4.

9.16.1.3. Required Floors-on-Ground

(1) All spaces within *dwelling units*, except crawl spaces, shall be provided with a floor-on-ground, where,

(a) access is provided to the space, and

(b) a floor supported by the structure is not provided.

9.16.1.4. Dampproofing and Waterproofing

(1) Dampproofing and waterproofing shall conform to Section 9.13.

9.16.2. Material Beneath Floors

9.16.2.1. Required Installation of Granular Fill

(1) Except as provided in Sentence (2), not less than 100 mm of coarse clean granular material containing not more than 10% of material that will pass a 4 mm sieve shall be placed beneath floors-on-ground.

(2) Granular material need not be installed under,

(a) slabs in garages, carports or accessory *buildings*, or

(b) *buildings* of *industrial occupancy* where the nature of the process contained in the *occupancy* permits or requires the use of large openings in the *building* envelope even during the winter.

9.16.2.2. Support of Floors

(1) Material that is susceptible to changes in volume due to variations in moisture content or chemical-microbiological oxidation shall not be used as *fill* beneath floors-on-ground in a concentration that will damage the *building* to a degree that would adversely affect its stability or the performance of assemblies separating dissimilar environments.

(2) Material that is susceptible to changes in volume due to freezing shall not be used as *fill* beneath floors-on-ground that will be subjected to freezing temperatures.

(3) Except as provided in Sentence (4), *fill* beneath floors-on-ground shall be compacted.

(4) *Fill* beneath floors-on-ground need not be compacted where the material is clean coarse aggregate containing not more than 10% of material that will pass a 4 mm sieve.

9.16.3. Drainage

9.16.3.1. Control of Water Ingress

(1) Except as provided in Article 9.16.3.2. or where it can be shown to be unnecessary, ingress of water underneath a floor-on-ground shall be prevented by grading or drainage.

9.16.3.2. Hydrostatic Pressure

(1) Where *groundwater* levels may cause hydrostatic pressure beneath a floor-on-ground, the floor-on-ground shall be,

(a) a cast-in-place concrete slab, and

(b) designed to resist such pressures.

9.16.3.3. Floor Drains

(1) When floor drains are required, the floor surface shall be sloped so that no water can accumulate.

9.16.4. Concrete

9.16.4.1. Surface Finish

(1) The finished surface of concrete floor slabs shall be trowelled smooth and even.

(2) Dry cement shall not be added to the floor surfaces to absorb surplus water.

9.16.4.2. Topping Course

(1) Where a topping course is provided for a concrete floor slab, it shall consist of 1 part cement to 2.5 parts clean, well graded sand by volume, with a water/cement ratio approximately equal to that of the base slab.

(2) When concrete topping is provided it shall not be less than 20 mm thick.

9.16.4.3. Thickness

(1) Concrete slabs shall be not less than 75 mm thick exclusive of concrete topping.

9.16.4.4. Bond Break

(1) A bond-breaking material shall be placed between the slab and footings or *rock*.

9.16.4.5. Compressive Strength

(1) Where dampproofing is not provided, the concrete used for floors-on-ground shall have a compressive strength of not less than 25 MPa after 28 days.

(2) Where dampproofing is provided as described in Article 9.13.2.7., the concrete used for floors-on-ground shall have a compressive strength of not less than 15 MPa after 28 days.

9.16.5. Wood

9.16.5.1. Wood Frame Floors

(1) Floors-on-ground constructed of wood shall conform to CAN/CSA-S406, "Construction of Preserved Wood Foundations".

Section 9.17. Columns

9.17.1. Scope

9.17.1.1. Application

(1) This Section applies to columns used to support,

(a) beams carrying loads from not more than 2 wood frame floors where,

(i) the supported length of joists bearing on such beams does not exceed 5 m, and

(ii) the *live load* on any floor does not exceed 2.4 kPa,

(b) beams or header joists carrying loads from not more than 2 levels of wood frame balconies, decks or other accessible exterior platforms, or 1 level and the roof, where,

(i) the supported length of joists bearing on such beams or joists does not exceed 5 m,

(ii) the sum of the specified snow load and the load due to use and *occupancy* does not exceed 4.8 kPa, and

(iii) the platform serves only a single *suite* of *residential occupancy*, or

(c) carport roofs.

(2) Columns for applications other than as described in Sentence (1) shall be designed in accordance with Part 4.

9.17.2. General

9.17.2.1. Location

(1) Columns shall be centrally located on a footing conforming to Section 9.15.

9.17.2.2. Lateral Support

(1) Columns shall be securely fastened to the supported member to reduce the likelihood of lateral differential movement between the column and the supported member.

(2) Except as permitted by Sentence (3), columns shall be laterally supported,

(a) directly, or

(b) by connection to the supported members.

(3) Columns need not be provided with lateral support as described in Sentence (2) where,

(a) the length of the columns are not more than 600 mm measured from the finished ground to the underside of the supported member, and

(b) the columns support a deck with no superstructure.

9.17.3. Steel Columns

9.17.3.1. Size and Thickness

(1) Except as permitted by Sentence (2), steel pipe columns shall have an outside diameter of not less than 73 mm and a wall thickness of not less than 4.76 mm.

(2) Columns of sizes other than as specified in Sentence (1) are permitted to be used where the *loadbearing* capacities are shown to be adequate.

9.17.3.2. End Bearing Plates

(1) Except as permitted in Sentence (2), steel columns shall be fitted with not less than 100 mm by 100 mm by 6.35 mm thick steel plates at each end, and where the column supports a wooden beam, the top plate shall extend across the full width of the beam.

(2) The top plate required in Sentence (1) need not be provided where a column supports a steel beam and provision is made for the attachment of the column to the beam.

9.17.3.3. Paint

(1) Exterior steel columns susceptible to corrosion shall be treated on the outside surface with at least one coat of rust-inhibitive paint.

9.17.3.4. Design of Adjustable Steel Columns

(1) Where the imposed load does not exceed 36 kN, adjustable steel columns shall conform to CAN/CGSB-7.2, “Adjustable Steel Columns”.

(2) Adjustable steel columns other than those described in Sentence (1) shall be designed in accordance with Part 4.

9.17.4. Wood Columns

9.17.4.1. Column Sizes

(1) The width or diameter of a wood column shall be not less than the width of the supported member.

(2) Except as provided in Article 9.35.4.2., columns shall be not less than 184 mm for round columns and 140 mm by 140 mm for rectangular columns, unless calculations are provided to show that lesser sizes are adequate.

9.17.4.2. Materials

(1) Wood columns shall be either solid, glue-laminated or built-up.

(2) Built-up columns shall consist of not less than 38 mm thick full-length members,

(a) bolted together with not less than 9.52 mm diam bolts spaced not more than 450 mm o.c., or

(b) nailed together with not less than 76 mm nails spaced not more than 300 mm o.c.

(3) Glued-laminated columns shall conform to Section 4.3.

9.17.4.3. Columns in Contact with Concrete

(1) Wood columns shall be separated from concrete in contact with the ground by 0.05 mm polyethylene film or Type S roll roofing.

9.17.4.4. Wood Column Termite Protection

(1) Where termites are known to exist, exterior wood columns, such as porch supports, shall be,

(a) pressure-treated with a chemical that is toxic to such termites, in accordance with Article 9.3.2.9., or

(b) supported on non-cellulosic material extending not less than 150 mm above the finished ground and shall be located not less than 50 mm from the exterior wall of an adjacent *building*.

9.17.5. Unit Masonry Columns

9.17.5.1. Materials

(1) Unit masonry columns shall be built of masonry units,

(a) conforming to CAN/CSA-A165.1, “Concrete Block Masonry Units”, and

(b) having a compressive strength over the net area of the block of not less than 15 MPa.

9.17.5.2. Sizes

(1) Unit masonry columns shall be not less than 290 mm by 290 mm or 240 mm by 380 mm in size.

9.17.6. Solid Concrete Columns

9.17.6.1. Materials

(1) Concrete shall conform to Section 9.3.

9.17.6.2. Sizes

(1) Concrete columns shall be not less than 200 mm by 200 mm for rectangular columns and 230 mm diam for circular columns.

Section 9.18. Crawl Spaces

9.18.1. General

9.18.1.1. Application

(1) In this Section, a crawl space refers to an enclosed space between the underside of a floor assembly and the ground cover directly below, with a clearance less than 1 800 mm in height.

9.18.1.2. Foundations

(1) *Foundation* walls enclosing crawl spaces shall conform to Section 9.15.

9.18.1.3. Heated and Unheated Crawl Spaces

(1) Crawl spaces shall be considered to be heated where the space,

(a) is used as a warm air *plenum*,

(b) contains heating ducts or heating pipes that are not sealed and insulated to minimize heat loss to the space, or

(c) is not separated from heated space in accordance with Section 9.25.

(2) Heating of heated crawl spaces shall conform to Section 9.33.

(3) Insulation, an *air barrier system* and a *vapour barrier* shall be installed in the walls of heated crawl spaces in accordance with Section 9.25.

9.18.2. Access

9.18.2.1. Access Openings

(1) An access opening of not less than 500 mm by 700 mm shall be provided to each crawl space where the crawl space serves a single *dwelling unit*, and not less than 550 mm by 900 mm for other crawl spaces.

(2) Access openings shall be fitted with a door or hatch, except when the crawl space is heated and the access opening into the crawl space is from the adjacent heated space.

9.18.3. Ventilation

9.18.3.1. Ventilation of Unheated Crawl Spaces

(1) Unheated crawl spaces shall be ventilated by natural or mechanical means.

(2) Where an unheated crawl space is ventilated by natural means, ventilation shall be provided to the outside air by not less than 0.1 m² of unobstructed vent area for every 50 m² of *floor area*.

(3) Vents shall be,

(a) uniformly distributed on opposite sides of the *building*, and

(b) designed to prevent the entry of snow, rain and insects.

9.18.3.2. Ventilation of Heated Crawl Spaces

(1) Heated crawl spaces shall be ventilated in accordance with Section 9.32.

9.18.4. Clearance

9.18.4.1. Access Way to Services

(1) Where equipment requiring service such as plumbing cleanouts, traps and burners is located in crawl spaces, an access way with a height and width of not less than 600 mm shall be provided from the access door to the equipment and for a distance of 900 mm on the side or sides of the equipment to be serviced.

9.18.5. Drainage

9.18.5.1. Drainage

(1) Except where it can be shown to be unnecessary, the ingress of water into a crawl space shall be controlled by grading or drainage.

(2) Drainage of *foundation* walls shall conform to Article 9.14.2.1.

(3) Drainage of the ground cover or floor-on-ground in the crawl space shall conform to Subsection 9.16.3.

(4) Drains shall conform to Section 9.14.

9.18.6. Ground Cover

9.18.6.1. Ground Cover in Unheated Crawl Spaces

(1) Where a crawl space is unheated, a ground cover shall be provided consisting of not less than,

(a) 50 mm of asphalt paving material,

(b) 100 mm of 15 MPa Portland cement concrete,

(c) Type S roll roofing, or

(d) 0.10 mm polyethylene.

(2) Joints in sheet-type ground cover required in Sentence (1) shall be lapped not less than 100 mm and weighted down.

9.18.6.2. Ground Cover in Heated Crawl Spaces

(1) Where a crawl space is heated, a ground cover consisting of not less than 0.15 mm polyethylene sheet conforming to CAN/CGSB-51.34-M, “Vapour Barrier, Polyethylene Sheet, for Use in Building Construction”, shall be installed as part of an *air barrier system* in accordance with Subsection 9.25.3.

(2) The ground cover required in Sentence (1) shall,

(a) have its joints lapped not less than 300 mm, and sealed and weighted down, or

(b) be covered with a concrete skim coat not less than 50 mm thick.

(3) The perimeter of the ground cover required in Sentence (1) shall be sealed to the *foundation* wall.

9.18.7. Fire Protection

9.18.7.1. Crawl Spaces as Warm Air Plenums

(1) Only crawl spaces under 1-*storey* portions of *dwelling units* shall be used as warm air *plenums*.

(2) Enclosing material in crawl spaces described in Sentence (1), including insulation, shall have a surface *flame-spread rating* not greater than 150.

(3) *Combustible* ground cover used as enclosing material in Sentence (2) shall be covered with *noncombustible* material.

(4) *Noncombustible* material described in Sentence (3) shall,

(a) extend not less than 300 mm beyond the projection of a register opening, and

(b) have turned-up edges.

Section 9.19. Roof Spaces

9.19.1. Venting

9.19.1.1. Required Venting

(1) Except where it can be shown to be unnecessary, where insulation is installed between a ceiling and the underside of the roof sheathing, a space shall be provided between the insulation and the sheathing, and vents shall be installed to permit the movement of air from the space to the exterior.

9.19.1.2. Vent Requirements

(1) Except as provided in Sentence (2), the unobstructed vent area shall be not less than 1/300 of the insulated ceiling area.

(2) Where the roof slope is less than 1 in 6 or in roofs that are constructed with roof joists, the unobstructed vent area shall be not less than 1/150 of the insulated ceiling area.

(3) Required vents are permitted to be roof type, eave type, gable-end type or any combination of them, and shall be distributed,

(a) uniformly on opposite sides of the *building*,

(b) with not less than 25% of the required openings located at the top of the space, and

(c) with not less than 25% of the required openings located at the bottom of the space.

(4) Except where each roof joist space referred to in Sentence (2) is separately vented, roof joist spaces shall be interconnected by installing purlins not less than 38 mm by 38 mm on the top of the roof joists.

(5) Vents shall comply with CAN3-A93-M, “Natural Airflow Ventilators for Buildings”.

9.19.1.3. Clearances

(1) Except as provided in Sentence (2), where venting is provided to a roof joist space, not less than 63 mm of space shall be provided between the top of the insulation and the underside of the roof sheathing.

(2) Where venting is provided at the junction of sloped roofs and exterior walls and where preformed baffles are used to contain the insulation, the baffles shall,

(a) provide an unobstructed air space between the insulation and the underside of the roof sheathing, that is,

(i) not less than 25 mm in dimension, and

(ii) of sufficient cross area to meet the *attic or roof space* venting requirements of Article 9.19.1.2., and

(b) extend vertically not less than 50 mm above the top of the insulation.

(3) Ceiling insulation shall be installed in a manner that will not restrict a free flow of air through roof vents or through any portion of the *attic or roof space*.

9.19.1.4. Mansard or Gambrel Roof

(1) The lower portion of a mansard or gambrel style roof need not be ventilated.

(2) The upper portion of roofs described in Sentence (1) shall be ventilated in conformance with the requirements in Articles 9.19.1.1. to 9.19.1.3.

9.19.2. Access

9.19.2.1. Access

(1) Every *attic or roof space* shall be provided with an access hatch where the *attic or roof space*,

(a) measures not less than,

(i) 10 m² in area,

(ii) 1 000 mm in length or width, and

(iii) 600 mm in height over at least the area described in Subclauses (i) and (ii), or

(b) contains a fuel-fired *appliance*.

(2) Except where an *attic or roof space* contains a fuel-fired *appliance*, the hatch required in Sentence (1) shall be not less than 550 mm by 900 mm except that, where the hatch serves a single *dwelling unit*, the hatch may be reduced to,

(a) 0.32 m^2 in area with no dimension less than 545 mm, or

(b) 500 mm by 700 mm.

(3) Hatchways to *attic or roof spaces* shall be fitted with doors or covers.

Section 9.20. Masonry and Insulating Concrete Form Walls Not in Contact with the Ground

9.20.1. Application

9.20.1.1. General

(1) Except as provided in Article 9.20.1.2., this Section applies to,

(a) unreinforced masonry and masonry veneer walls not in contact with the ground, where,

(i) the height of the walls constructed on the *foundation* walls does not exceed 11 m, and

(ii) the roof or floor assembly above the *first storey* is not of concrete construction, and

(b) flat insulating concrete form walls not in contact with the ground that,

(i) have a maximum floor to floor height of 3 m,

(ii) are erected in *buildings* not more than 2 *storeys* in *building height* and containing only a single *dwelling unit*, and

(iii) are erected in locations where the seismic spectral response acceleration, $S_a(0.2)$, is not greater than 0.4.

(2) For walls other than those described in Sentence (1), or where the masonry walls or insulating concrete form walls not in contact with the ground are designed for specified loads on the basis of ultimate and serviceability limit states, Subsection 4.3.2. shall apply.

9.20.1.2. Earthquake Reinforcement

(1) In locations where the seismic spectral response acceleration, $S_a(0.2)$, is greater than 0.55, *loadbearing* elements of masonry *buildings* more than 1 *storey* in *building height* shall be reinforced with not less than the minimum amount of reinforcement as required in Subsection 9.20.15.

(2) In locations where the seismic spectral response acceleration, $S_a(0.2)$, is greater than 0.35, but less than or equal to 0.55, *loadbearing* elements of masonry *buildings* 3 *storeys* in *building height* shall be reinforced with not less than the minimum amount of reinforcement as required in Subsection 9.20.15.

9.20.2. Masonry Units

9.20.2.1. Masonry Unit Standards

(1) Masonry units shall comply with,

(a) ASTM C73, “Calcium Silicate Brick (Sand-Lime Brick)”,

(b) ASTM C126, “Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units”,

(c) ASTM C212, “Structural Clay Facing Tile”,

(d) CAN/CSA-A82.1-M, “Burned Clay Brick (Solid Masonry Units Made from Clay or Shale)”,

(e) CSA A82.4-M, “Structural Clay Load-Bearing Wall Tile”,

(f) CSA A82.5-M, “Structural Clay Non-Load-Bearing Tile”,

(g) CAN3-A82.8-M, “Hollow Clay Brick”,

(h) CAN/CSA-A165.1, “Concrete Block Masonry Units”,

(i) CAN/CSA-A165.2, “Concrete Brick Masonry Units”,

(j) CAN/CSA-A165.3, “Prefaced Concrete Masonry Units”, or

(k) CAN3-A165.4-M, “Autoclaved Cellular Units”.

9.20.2.2. Used Brick

(1) Used bricks shall be free of old mortar, soot or other surface coating and shall conform to Article 9.20.2.1.

9.20.2.3. Glass Blocks

(1) Glass blocks shall not be used as *loadbearing* units or in the construction of fireplaces or *chimneys*.

9.20.2.4. Cellular Concrete

(1) Masonry made with cellular concrete shall not be used in contact with the *soil* or exposed to the weather.

9.20.2.5. Stone

(1) Stone shall be sound and durable.

9.20.2.6. Concrete Units Exposed to the Weather

(1) Concrete blocks exposed to the weather shall have weight and water absorption characteristics conforming to Classes A, B, C or D, described in CAN/CSA-A165.1, "Concrete Block Masonry Units".

9.20.2.7. Compressive Strength

(1) The compressive strength of concrete blocks shall conform to Table 9.20.2.7.

Table 9.20.2.7.
Compressive Strength of Concrete Blocks

Forming Part of Sentence 9.20.2.7.(1)

Item	Column 1	Column 2	Column 3
	Type of Block	Minimum Compressive Strength Over Net Area, MPa	
		Exposed to Weather	Not Exposed to Weather
1.	Solid or hollow concrete blocks	15	10
2.	Solid *loadbearing* cellular blocks	Not permitted	5
3.	Solid non-*loadbearing* cellular blocks	Not permitted	2

9.20.3. Mortar

9.20.3.1. Mortar Materials

(1) Cementitious materials and aggregates for mortar and grout shall comply with CAN/CSA-A179, "Mortar and Grout for Unit Masonry".

(2) Water and aggregate shall be clean and free of significant amounts of deleterious materials.

(3) Lime used in mortar shall be hydrated.

(4) If lime putty is used in mortar, it shall be made by slaking quicklime in water for not less than 24 h or soaking hydrated lime in water for not less than 12 h.

9.20.3.2. Mortar and Grout Mixes

(1) Mortar types shall conform to Table 9.20.3.2.A.

(2) Mortar for glass block masonry shall be,

(a) Type S Portland cement-lime where exposed to the exterior, or

(b) Type S or N where protected from the exterior.

(3) Mortar mix proportions shall conform to Table 9.20.3.2.B., with sufficient water to bring the mixture to a consistency adequate for laying masonry units.

(4) Grout mix proportions shall conform to Table 9.20.3.2.C., with sufficient water to provide a suitable flow to fill all voids completely, without excessive segregation or bleeding.

(5) Except as provided in Sentence (6), mortar shall be used and placed in final position,

(a) within 1.5 h after mixing when the air temperature is 25°C or higher, and

(b) within 2.5 h after mixing when the air temperature is less than 25°C.

(6) Mortar and grout containing a set-control admixture shall be manufactured off-site in a batching plant and shall be used and placed in final position within a time not exceeding the useful life as stipulated by the manufacturer.

(7) Grout used for reinforced masonry shall be placed in accordance with the requirements of CAN/CSA-A371, “Masonry Construction for Buildings”.

Table 9.20.3.2.A.
Mortar Use

Forming Part of Sentence 9.20.3.2.(1)

Item	Column 1	Column 2	Column 3
	Location	*Building* Element	Mortar Type
1.	Exterior, above ground	*Loadbearing* walls and columns	S
		Non-*loadbearing* walls and columns	N or S
		Parapets, *chimneys* and masonry veneer	N or S
2.	Exterior, at or below ground	*Foundation* walls and *chimneys*	S
3.	Interior	*Loadbearing* walls and columns	N
		Non-*loadbearing* walls and columns	N

Table 9.20.3.2.B.
Mortar Mix Proportions (by Volume)

Forming Part of Sentence 9.20.3.2.(3)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Mortar Type	Portland Cement	Lime	Masonry Cement Type N	Masonry Cement Type S	Fine Aggregate (damp, loose-state sand)
1.	S	1	½	-	-	3½ to 4½
		-	-	-	1	2¼ to 3
		½	-	1	-	3½ to 4½
2.	N	1	1	-	-	4½ to 6
		-	-	1	-	2¼ to 3

Table 9.20.3.2.C.
Grout Mix Proportions (by Volume)

Forming Part of Sentence 9.20.3.2.(4)

Column 1	Column 2	Column 3	Column 4
Portland Cement	Lime	Fine Aggregate (sand)	Coarse Aggregate
1	0 to 1/10	2¼ to 3 times the sum of the cement and lime volumes	1 to 2 times the sum of the cement and lime volumes

9.20.4. Mortar Joints

9.20.4.1. Thickness

(1) Except as provided in Sentence (2), mortar joint thickness for burned clay brick and concrete masonry units shall be 10 mm.

(2) Permitted tolerances in head and bed joints shall be -5 mm to +10 mm.

9.20.4.2. Solid Masonry Units

(1) Except for head joints left open for weep holes and ventilation, solid masonry units shall be laid with full head and bed joints.

9.20.4.3. Hollow Masonry Units

(1) Hollow masonry units shall be laid with mortar applied to head and bed joints of both inner and outer face shells.

(2) Vertically aligned webs of hollow masonry units shall be laid in a full bed of mortar,

(a) under the starting course,

(b) in all courses of columns, and

(c) where adjacent to cells or cavities that are to be filled with grout.

9.20.5. Masonry Support

9.20.5.1. Masonry Support

(1) All masonry shall be supported on masonry, concrete or steel, except that masonry veneer walls are permitted to be supported on *foundations* of wood frame constructed in conformance with Sentence 9.15.2.4.(1).

(2) Every masonry wall shall be at least as thick as the wall it supports, except as otherwise permitted in Article 9.20.12.2.

9.20.5.2. Lintels or Arches

(1) Masonry over openings shall be supported by steel, reinforced concrete lintels or masonry arches designed to support the imposed loads.

(2) Except as provided in Sentences (3) and (6), steel angle lintels supporting masonry above openings shall conform to Table 9.20.5.2.A.

(3) Steel angle lintels supporting masonry veneer above openings shall conform to Table 9.20.5.2.B.

(4) Steel lintels described in Sentences (2) and (3) shall,

(a) have even and level bearing and shall have not less than 150 mm length of bearing at end supports, and

(b) bear on masonry, concrete or steel.

(5) Steel angle lintels supporting masonry shall be primed or painted or otherwise protected from corrosion.

(6) Steel beams supporting masonry veneer and wood stud walls above openings shall conform to Table 9.20.5.2.C.

(7) Steel beams described in Sentence (6) shall be supported at each end by a steel column, and have a minimum 6 mm plate welded to the flange to support the masonry veneer.

Table 9.20.5.2.A.
Loose Steel Lintels for Masonry – No. & Size of Angles Required[6] [7]

Forming Part of Sentence 9.20.5.2.(2)

Item	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11
	Clear Span[1][3]	Exterior Angles, mm		Wall Thickness, mm	Interior Angles, mm						
		For Brick	For Stone		Maximum Floor Loads per Metre of Span in Newtons[2][4][5]						
		100 mm	100 mm + 50 mm stone facing		None	3 650	7 300	10 950	14 600	18 250	21 900
		No Floor Load									
1.	1.2 m or less	L-89 × 89 × 6.4	L-127 × 89 × 7.9	203	L-89 × 89 × 6.4	L-89 × 89 × 6.4	L-89 × 89 × 7.9	L-102 × 89 × 7.9	L-127 × 89 × 7.9	L-127 × 89 × 11	L-127 × 89 × 13
				305	2Ls-89 × 89 × 7.9	2Ls-89 × 89 × 7.9	2Ls-89 × 89 × 7.9	2Ls-89 × 89 × 7.9	2Ls-89 × 89 × 7.9	2Ls-102 × 89 × 7.9	2Ls-102 × 89 × 7.9
2.	1.5 m	L-89 × 89 × 7.9	L-127 × 89 × 7.9	203	L-89 × 89 × 7.9	L-89 × 89 × 7.9	L-127 × 89 × 7.9	L-127 × 89 × 11	L-127 × 89 × 13	L-152 × 89 × 11	
				305	2Ls-89 × 89 × 7.9	2Ls-89 × 89 × 7.9	2Ls-89 × 89 × 7.9	2Ls-127 × 89 × 7.9	2Ls-127 × 89 × 7.9	2Ls-127 × 89 × 7.9	2Ls-127 × 89 × 11
3.	1.8 m	L-102 × 89 × 7.9	L-127 × 127 × 7.9	203	L-102 × 89 × 7.9	L-127 × 89 × 7.9	L-127 × 89 × 7.9	L-152 × 102 × 11			
				305	2Ls-102 × 89 × 7.9	2Ls-102 × 89 × 7.9	2Ls-127 × 89 × 7.9	2Ls-127 × 89 × 7.9	2Ls-127 × 89 × 11	2Ls-152 × 102 × 11	2Ls-152 × 102 × 11
4.	2.1 m	L-102 × 89 × 7.9	L-127 × 127 × 7.9	203	L-102 × 89 × 7.9	L-127 × 89 × 11	L-152 × 102 × 11				
				305	2Ls-102 × 89 × 7.9	2Ls-127 × 89 × 11	2Ls-127 × 89 × 11	2Ls-152 × 102 × 11	2Ls-152 × 102 × 11		
5.	2.4 m	L-127 × 89 × 7.9	L-127 × 127 × 7.9	203	L-127 × 89	L-152 × 102					

					× 7.9	× 11				
				305	2Ls-127 × 89 × 7.9	2Ls-127 × 89 × 13	2Ls-152 × 102 × 11			
6.	2.7 m	L-127 × 89 × 11	L-127 × 127 × 11	203	L-127 × 89 × 11					
				305	2Ls-127 × 152 × 11	2Ls-152 × 102 × 11				
7.	3.0 m	L-152 × 102 × 11	L-127 × 127 × 13	203	L-152 × 102 × 11					
				305	2Ls-152 × 102 × 11					

Notes to Table 9.20.5.2.A.:

(1) See Sentence 9.20.5.2.(4).

(2) Omit floor load in lintel when distance to bottom of floor construction is greater than width of opening.

(3) Interior and exterior angles in 200 mm walls and interior angles in 300 mm walls are bolted together when clear span is over 1 800 mm.

(4) When masonry lighter than brick is used over interior angles floor load may be increased by the difference in weight per square metre times the width of the opening. Not generally available.

(5) Interior angles have been designed for floor load plus brick masonry of height equal to width of opening.

(6) fs = 138 MPa., Deflection maximum = 1/700 span.

(7) The figures in the Table indicating wall thickness and angle cross-section are in mm.

Table 9.20.5.2.B.
Maximum Allowable Spans for Steel Lintels Supporting Masonry Veneer, m

Forming Part of Sentence 9.20.5.2.(3)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Minimum Angle Size, mm			Maximum Allowable Spans, m		
	Vertical Leg	Horizontal Leg	Thickness	70 mm Brick	90 mm Brick	100 mm Stone
1.	89	76	6.4	2.55	—	—
2.	89	89	6.4	2.59	2.47	2.30
3.	102	89	6.4	2.79	2.66	2.48

4.	127	89	7.9	3.47	3.31	3.08
5.	127	89	11	3.64	3.48	3.24
6.	127	89	13	3.82	3.59	3.33
7.	152	89	11	4.06	3.82	3.54
8.	152	89	13	4.32	4.07	3.77
9.	152	102	13	4.37	4.12	3.82
10.	178	102	11	4.57	4.30	3.99
11.	178	102	13	4.87	4.59	4.25

Table 9.20.5.2.C.
Maximum Allowable Spans for Steel Beams Supporting Masonry Veneer, m[(1), (2)]

Forming Part of Sentence 9.20.5.2.(6)

Item	Column 1	Column 2	Column 3	Column 4
	Section	70 mm Brick	90 mm Brick	100 mm Stone
1.	W 150 × 22	4.23	4.09	3.92
2.	W 150 × 30	4.68	4.52	4.32
3.	W 200 × 27	5.26	5.08	4.84
4.	W 200 × 31	5.57	5.37	5.11
5.	W 200 × 36	5.70	5.49	5.23

Notes toTable 9.20.5.2.C.:

(1) These spans assume that the beam supports the veneer, a wood stud wall and a maximum specified roof live load of 2.3 kN/m.

(2) Where the steel beam carries floor loads or larger roof loads, refer to Article 9.23.4.3.

9.20.6. Thickness and Height

9.20.6.1. Thickness of Exterior Walls

(1) Masonry exterior walls, other than *cavity walls*, in 1 *storey buildings* and the top *storeys* of 2 and 3 *storey buildings* shall be not less than 140 mm thick provided the walls are not more than 2.8 m high at the eaves and 4.6 m high at the peaks of gable ends.

(2) The exterior walls of the bottom *storeys* of 2 *storey buildings*, and exterior walls of the bottom 2 *storeys* of 3 *storey buildings* shall be not less than 190 mm thick.

(3) In exterior walls composed of more than one wythe, each wythe shall be not less than 90 mm thick.

9.20.6.2. Cavity Walls

(1) *Cavity walls* shall be made with not less than 90 mm wide units if the joints are raked and not less than 75 mm wide units if the joints are not raked.

(2) The width of a cavity in a *cavity wall* shall be not less than 50 mm and not greater than 150 mm.

(3) The minimum thickness of *cavity walls* above the supporting base shall be 230 mm for the top 7.6 m and 330 mm for the remaining portion, except that where 75 mm wide units are used, the wall height above the top of the *foundation* wall shall not exceed 6 m.

9.20.6.3. Thickness of Interior Walls

(1) The thickness of *loadbearing* interior walls shall be determined on the basis of the maximum lateral support spacing as provided in Sentences 9.20.10.1.(2) and (3).

(2) The thickness of interior non-*loadbearing* walls shall be,

(a) determined on the basis of the maximum lateral support spacing as provided in Sentences 9.20.10.1.(2) and (3), and

(b) in any case, not less than 65 mm.

9.20.6.4. Masonry Veneer

(1) Except for masonry veneer where each masonry unit is supported individually by the structural backing, masonry veneer shall be of solid units not less than 70 mm thick.

(2) Veneer described in Sentence (1) over wood frame walls shall have not less than a 25 mm air space behind the veneer.

(3) Masonry veneer less than 90 mm thick shall have unraked joints.

(4) Masonry veneer shall conform to Subsection 4.3.2. where the masonry units are required to be individually supported by the structural backing.

9.20.6.5. Parapet Walls

(1) The height of parapet walls above the adjacent roof surface shall be not more than three times the parapet wall thickness.

(2) Parapet walls shall be solid from the top of the parapet to not less than 300 mm below the adjacent roof level.

9.20.6.6. Stone or Concrete Facings

(1) Slab and panel facings of precast concrete and natural or artificial stone shall conform to Subsection 4.3.2.

9.20.7. Chases and Recesses

9.20.7.1. Maximum Dimensions

(1) Except as provided in Sentence 9.20.7.2.(2) and Article 9.20.7.4., the depth of any chase or recess shall not exceed one-third the thickness of the wall, and the width of the chase or recess shall not exceed 500 mm.

9.20.7.2. Minimum Wall Thickness

(1) Except as provided in Sentence (2) and Article 9.20.7.4., no chase or recess shall be constructed in any wall 190 mm or less in thickness.

(2) Recesses may be constructed in 190 mm walls provided they do not exceed 100 mm in depth, 750 mm in height and 500 mm in width.

9.20.7.3. Separation of Chases and Recesses

(1) Chases and recesses shall be not less than,

(a) four times the wall thickness apart, and

(b) 600 mm away from any pilaster, cross wall, buttress or other vertical element providing required lateral support for the wall.

9.20.7.4. Non-Conforming Chases or Recesses

(1) Chases or recesses that do not conform to the limits specified in Articles 9.20.7.1. to 9.20.7.3. shall be considered as openings, and any masonry supported above such a chase or recess shall be supported by a lintel or arch as provided in Article 9.20.5.2.

9.20.7.5. Chases or Recesses Cut into Walls

(1) Chases or recesses shall not be cut into walls made with hollow units after the masonry units are in place.

9.20.8. Support of Loads

9.20.8.1. Capping of Hollow Masonry Walls

(1) Except as permitted in Sentence (2), *loadbearing* walls of hollow masonry units supporting roof or floor framing members shall be capped with not less than 50 mm of solid masonry or have the top course filled with concrete.

(2) Capping required in Sentence (1) may be omitted where the roof framing is supported on a wood plate not less than 38 mm by 89 mm.

9.20.8.2. Cavity Walls Supporting Framing Members

(1) Floor joists supported on *cavity walls* shall be supported on solid units not less than 57 mm high.

(2) Floor joists described in Sentence (1) shall not project into the cavity.

(3) Roof and ceiling framing members bearing on *cavity walls* shall be supported on,

(a) not less than 57 mm of solid masonry, bridging the full thickness of the wall, or

(b) a wood plate not less than 38 mm thick, bearing not less than 50 mm on each wythe.

9.20.8.3. Bearing of Beams and Joists

(1) The bearing area under beams and joists shall be sufficient to carry the supported load.

(2) In no case shall the minimum length of end bearing of beams supported on masonry be less than 90 mm.

(3) The length of end bearing of floor, roof or ceiling joists supported on masonry shall be not less than 40 mm.

9.20.8.4. Support of Beams and Columns

(1) Beams and columns supported on masonry walls shall be supported on pilasters where the thickness of the masonry wall or wythe is less than 190 mm.

(2) Not less than 190 mm depth of solid masonry or concrete shall be provided under the beam or column referred to in Sentence (1).

(3) Pilasters required in Sentence (1) shall be bonded or tied to masonry walls.

(4) Concrete pilasters required in Sentence (1) shall be not less than 50 mm by 300 mm.

(5) Unit masonry pilasters required in Sentence (1) shall be not less than 100 mm by 290 mm.

9.20.8.5. Distance to Edge of Supporting Members

(1) Masonry veneer of hollow units resting on bearing support shall not project more than,

(a) 30 mm beyond the supporting base where the veneer is not less than 90 mm thick, and

(b) 12 mm beyond the supporting base where the veneer is less than 90 mm thick.

(2) Masonry veneer of solid units resting on bearing support shall not project more than one-third of the width of the veneer.

(3) Where the masonry veneer described in Sentence (2) is rough stone masonry,

(a) the projection shall be measured as the average projection of the units, and

(b) the width of the veneer shall be measured as the average width of the veneer.

9.20.9. Bonding and Tying

9.20.9.1. Joints to be Offset or Reinforced

(1) Vertical joints in adjacent masonry courses shall be offset unless each wythe of masonry is reinforced with the equivalent of no fewer than two corrosion-resistant steel bars of 3.76 mm diam placed in the horizontal joints at vertical intervals not exceeding 460 mm.

(2) Where joints in the reinforcing referred to in Sentence (1) occur, the bars shall be lapped not less than 150 mm.

9.20.9.2. Bonding or Tying of Other than Masonry Veneer

(1) Except as provided in Article 9.20.9.5 for masonry veneer, masonry walls that consist of two or more wythes shall have the wythes bonded or tied together with masonry bonding units as described in Article 9.20.9.3. or with metal ties as described in Articles 9.20.9.4.

9.20.9.3. Bonding

(1) Where wythes are bonded together with masonry units, the bonding units shall comprise not less than 4 per cent of the wall surface area.

(2) Bonding units described in Sentence (1) shall be spaced not more than 600 mm vertically and horizontally in the case of brick masonry and 900 mm o.c. in the case of block or tile.

(3) Units described in Sentence (1) shall extend not less than 90 mm into adjacent wythes.

9.20.9.4. Tying

(1) Where two or more wythes are tied together with metal ties of the individual rod type, the ties shall conform to the requirements in Sentences (3) to (6).

(2) Other ties may be used where it can be shown that such ties provide walls that are at least as strong and as durable as those made with the individual rod type.

(3) Metal ties of the individual rod type shall,

(a) be corrosion-resistant,

(b) have a minimum cross-sectional area of not less than 17.8 mm^2, and

(c) have not less than a 50 mm portion bent at right angles at each end.

(4) Metal ties of the individual rod type shall,

(a) extend from within 25 mm of the outer face of the wall to within 25 mm of the inner face of the wall,

(b) be completely embedded in mortar except for the portion exposed in *cavity walls*, and

(c) be staggered from course to course.

(5) Where two or more wythes in walls other than *cavity walls* and masonry veneer/masonry back-up walls are tied together with metal ties of the individual rod type, the space between wythes shall be completely filled with mortar.

(6) Ties described in Sentence (5) shall be,

(a) located within 300 mm of openings and spaced not more than 900 mm apart around openings, and

(b) spaced not more than 900 mm apart horizontally and 460 mm apart vertically at other locations.

(7) Except as required in Sentences (8) and (9), where the inner and outer wythes of *cavity walls* are tied with individual wire ties, the ties shall be spaced not more than 900 mm apart horizontally and 400 mm apart vertically.

(8) Within 100 mm of the bottom of each floor or roof assembly where the cavity extends below the assemblies, the ties described in Sentence (7) shall be spaced not more than 600 mm apart horizontally.

(9) Within 300 mm of any openings, the ties described in Sentence (7) shall be spaced not more than 900 mm apart.

9.20.9.5. Ties for Masonry Veneer

(1) Masonry veneer 70 mm or more in thickness and resting on a bearing support shall be tied to masonry back-up or to wood framing members with straps that are,

(a) corrosion-resistant,

(b) not less than 0.76 mm thick,

(c) not less than 22 mm wide,

(d) shaped to provide a key with the mortar, and

(e) spaced in accordance with Table 9.20.9.5.

Table 9.20.9.5.
Veneer Tie Spacing

Forming Part of Sentence 9.20.9.5.(1)

Item	Column 1	Column 2
	Maximum Vertical Spacing, mm	Maximum Horizontal Spacing, mm
1.	400	800
2.	500	600
3.	600	400

(2) The straps described in Sentence (1) that are fastened to the wood framing members shall be,

(a) bent at a right angle within 6 mm from the fastener, and

(b) fastened with corrosion resistant 3.18 mm diam screws or spiral nails having a wood penetration of not less than 30 mm.

(3) Masonry veneer individually supported by masonry or wood frame back-up shall be secured to the back-up in conformance with Subsection 4.3.2.

(4) The straps described in Sentence (1) may be installed against one of the sheathings listed in Table 9.23.16.2.A. provided that,

(a) the tie is in contact with the exterior surface of the sheathing, and

(b) the sheathing beneath the tie is not compressed.

9.20.9.6. Reinforcing for Glass Block

(1) Glass block shall have horizontal joint reinforcement of two corrosion-resistant bars of not less than 3.76 mm diam or expanded metal strips not less than 75 mm wide,

(a) spaced at vertical intervals of not more than 600 mm for units 190 mm or less in height, and

(b) installed in every horizontal joint for units higher than 190 mm.

(2) Reinforcement required in Sentence (1) shall be lapped not less than 150 mm.

9.20.10. Lateral Support

9.20.10.1. Lateral Support Required

(1) Masonry walls shall be laterally supported by floor or roof construction or by intersecting masonry walls or buttresses.

(2) The spacing of supports required in Sentence (1) shall be not more than,

(a) 20 times the wall thickness for all *loadbearing* walls and exterior non-*loadbearing* walls, and

(b) 36 times the wall thickness for interior non-*loadbearing* walls.

(3) In applying Sentence (2), the thickness of *cavity walls* shall be taken as the greater of,

(a) two-thirds of the sum of the thicknesses of the wythes, or

(b) the thickness of the thicker wythe.

(4) Floor and roof structural elements providing lateral support for walls as required in Sentence (1) shall be constructed to transfer lateral loads to walls or buttresses approximately at right angles to the laterally supported walls.

9.20.11. Anchorage of Roofs, Floors and Intersecting Walls

9.20.11.1. Anchorage of Floor or Roof Assemblies

(1) Where required to receive lateral support, masonry walls shall be anchored to each floor or roof assembly at maximum intervals of 2 m, except that anchorage of floor joists not more than 1 m above grade may be omitted.

(2) Anchors required in Sentence (1) shall be corrosion-resistant and be not less than the equivalent of 40 mm by 4.76 mm thick steel straps.

(3) Anchors required in Sentence (1) shall be shaped to provide a mechanical key with the masonry and shall be securely fastened to the horizontal support to develop the full strength of the anchor.

(4) When joists are parallel to the wall, anchors required in Sentence (1) shall extend across no fewer than three joists.

9.20.11.2. Bonding and Tying of Intersecting Walls

(1) Where required to provide lateral support, intersecting walls shall be bonded or tied together.

(2) Where bonding is used to satisfy the requirements of Sentence (1), 50% of the adjacent masonry units in the intersecting wall, distributed uniformly over the height of the intersection, shall be embedded in the laterally supported wall.

(3) Where tying is used to satisfy the requirements of Sentence (1), the ties shall be,

(a) corrosion-resistant metal,

(b) equivalent to not less than 4.76 mm by 40 mm steel strapping,

(c) spaced not more than 800 mm o.c. vertically, and

(d) shaped at both ends to provide sufficient mechanical key to develop the strength of the ties.

9.20.11.3. Wood Frame Walls Intersecting Masonry Walls

(1) Wood frame walls shall be tied to intersecting masonry walls with not less than 4.76 mm diam corrosion-resistant steel rods spaced not more than 900 mm o.c. vertically.

(2) Ties required in Sentence (1) shall be anchored to the wood framing at one end and shaped to provide a mechanical key at the other end to develop the strength of the tie.

9.20.11.4. Wood Frame Roof Systems

(1) Except as permitted in Sentence (2), roof systems of wood frame construction shall be tied to exterior masonry walls by not less than 12.7 mm diam anchor bolts,

(a) spaced not more than 2.4 m apart,

(b) embedded not less that 90 mm into the masonry, and

(c) fastened to a rafter plate of not less than 38 mm thick lumber.

(2) The roof system described in Sentence (1) is permitted to be anchored by nailing the wall furring strips to the side of the rafter plate.

9.20.11.5. Cornices, Sills and Trim

(1) Cornices, sills or other trim of masonry material that project beyond the wall face shall have not less than 65% of their mass, but not less than 90 mm, within the wall or shall be adequately anchored to the wall with corrosion-resistant anchors.

9.20.11.6. Piers

(1) Where anchor bolts are to be placed in the top of a masonry pier, the pier shall conform to the requirements of Sentence 9.15.2.3.(4) and shall be capped with concrete or reinforced masonry not less than 200 mm thick.

9.20.12. Corbelling

9.20.12.1. Corbelling

(1) All corbelling shall consist of solid units.

(2) The units referred to in Sentence (1) shall be corbelled so that the horizontal projection of any unit does not exceed 25 mm and the total projection does not exceed one-third of the total wall thickness.

9.20.12.2. Corbelling for Cavity Walls

(1) *Cavity walls* of greater thickness than the *foundation* wall on which they rest shall not be corbelled but may project 25 mm over the outer face of the *foundation* wall disregarding parging.

(2) Where the *foundation* wall referred to in Sentence (1) is unit masonry, it is permitted to be corbelled to meet flush with the inner face of a *cavity wall* provided,

(a) the projection of each course does not exceed half the height or one-third the width of the corbelled unit, and

(b) the total corbel does not exceed one-third of the *foundation* wall thickness.

9.20.12.3. Corbelling for Masonry Veneer

(1) Masonry veneer resting on a bearing support shall not project more than 25 mm beyond the supporting base where the veneer is at least 90 mm thick, and 12 mm beyond the supporting base where the veneer is less than 90 mm thick.

(2) In the case of rough stone veneer, the projection, measured as the average projection of the stone units, shall not exceed one-third the bed width beyond the supporting base.

9.20.13. Control of Rain Water Penetration

9.20.13.1. Materials for Flashing

(1) Materials used for flashing shall conform to Table 9.20.13.1.

(2) Aluminum flashing in contact with masonry or concrete shall be effectively coated or separated from the masonry or concrete by an impervious membrane.

Table 9.20.13.1.
Flashing Materials

Forming Part of Sentence 9.20.13.1.(1)

Item	Column 1	Column 2	Column 3
	Material	Minimum Thickness, mm	
		Exposed Flashing	Concealed Flashing
1.	Aluminum	0.48	—
2.	Copper	0.46	0.46
3.	Copper or aluminum laminated to felt or kraft paper	—	0.05
4.	Hot dipped or galvanized steel	0. 33	0.33
5.	Lead sheet	1.73	1.73
6.	Polyethylene	—	0.50
7.	Roll roofing, Type S	—	standard
8.	Zinc	0.46	0.46

9.20.13.2. Fastening of Flashing

(1) Fastening devices for flashing shall be corrosion-resistant and, where metal flashing is used, shall be compatible with the flashing with respect to galvanic action.

9.20.13.3. Location of Flashing

(1) Flashing shall be installed in masonry and masonry veneer walls,

(a) beneath jointed masonry window sills,

(b) over the back and top of parapet walls,

(c) over the heads of glass block panels,

(d) beneath weep holes, and

(e) over the heads of window and door openings in exterior walls when the vertical distance between the top of a window or door frame and the bottom edge of the eave exceeds one-quarter of the horizontal eave overhang.

(2) Throughwall flashing shall be provided in a masonry veneer wall such that any moisture that accumulates in the air space will be directed to the exterior of the *building*.

9.20.13.4. Extension of Flashing

(1) When installed beneath jointed masonry window sills and jointed masonry copings or over the heads of openings, flashing shall extend from the front edge of the masonry up behind the sill or lintel.

(2) A flashing may be omitted when the masonry at the sill of a wall opening or the top of a wall is protected by an impervious non-jointed masonry coping that conforms to Article 9.20.13.12.

9.20.13.5. Flashing for Weep Holes in Masonry Veneer/Masonry Walls

(1) Flashing beneath weep holes in *cavity walls* and masonry veneer/masonry back-up walls shall,

(a) be bedded not less than 25 mm in the inside wythe,

(b) extend to not less than 5 mm beyond the outer face of the *building* element below the flashing, and

(c) be installed with a nominally horizontal slope toward the outside wythe.

9.20.13.6. Flashing for Weep Holes in Masonry Veneer

(1) Flashing beneath weep holes in masonry veneer over masonry back-up walls shall conform to the flashing requirements for *cavity walls* and masonry veneer/masonry back-up walls in Article 9.20.13.5.

(2) Flashing beneath weep holes in masonry veneer over wood frame walls shall be installed so that it extends from a point not less than 5 mm beyond the outer face of the *building* element below the flashing to a point 150 mm up the wood frame wall.

(3) Where the frame wall is sheathed with a sheathing membrane, a non-wood-based rigid exterior insulating sheathing or a semi-rigid insulating sheathing with an integral sheathing membrane, the flashing shall be installed behind the sheathing membrane or insulating sheathing.

(4) Flashing described in Sentence (2) is permitted to conform to the requirements for concealed flashing in Table 9.20.13.1.

9.20.13.7. Flashing Joints

(1) Joints in flashing shall be made watertight.

9.20.13.8. Required Weep Holes

(1) Weep holes spaced not more than 800 mm apart shall be provided at the bottom of,

(a) cavities in *cavity walls*, and

(b) cavities or air spaces in masonry veneer walls.

(2) The cavities or air spaces described in Sentence (1) shall include those above lintels over window and door openings required to be flashed in conformance with Article 9.20.13.3.

(3) The weep holes required in Sentence (1) shall be in a location such that any water that collects in the cavity or space will be directed to the exterior of the *building*.

9.20.13.9. Protection of Interior Finish

(1) Except as provided in Sentence (3), where the interior finish of the exterior walls of a *building* is a type that may be damaged by moisture, exterior masonry walls, other than *cavity walls* or walls that are protected for their full height by a roof of a carport or porch, shall be,

(a) parged on the interior surface, and

(b) covered with No. 15 breather-type asphalt-saturated paper conforming to CAN/CGSB-51.32-M, “Sheathing, Membrane, Breather Type”, and shall be lapped not less than 100 mm at the joints.

(2) In situations described in Sentence (1), flashing shall be provided where water will accumulate, to lead it to the exterior.

(3) Where the insulation effectively limits the passage of water vapour and is applied by a waterproof adhesive or by mortar directly to the masonry, the requirements for sheathing paper do not apply.

9.20.13.10. Mortar Droppings

(1) *Cavity walls* shall be constructed so that mortar droppings are prevented from forming a bridge to allow the passage of rain water across the cavity.

9.20.13.11. Caulking at Door and Window Frames

(1) The junction of door and window frames with masonry shall be caulked in conformance with Subsection 9.27.4.

9.20.13.12. Drips Beneath Window Sills

(1) Except for wall openings located less than 150 mm above ground level, where a concealed flashing is not installed beneath window and door sills, such sills shall be provided with an outward slope and a drip located not less than 25 mm from the wall surface.

9.20.14. Protection During Work

9.20.14.1. Laying Temperature of Mortar and Masonry

(1) Mortar and masonry shall be maintained at a temperature not below 5°C during installation and for not less than 48 h after installation.

(2) No frozen material shall be used in the mortar mix.

9.20.14.2. Protection from Weather

(1) The top surface of uncompleted masonry exposed to the weather shall be completely covered with a waterproofing material when construction is not in progress.

9.20.15. Reinforcement for Earthquake Resistance

9.20.15.1. Amount of Reinforcement

(1) Where reinforcement is required in this Section, masonry walls shall be reinforced horizontally and vertically with steel having a total cross-sectional area of not less than 0.002 times the horizontal cross-sectional area of the wall, so that not less than one-third of the required steel area is installed either horizontally or vertically and the remainder in the other direction.

9.20.15.2. Installation Standard

(1) Where reinforcement for masonry is required in this Section, it shall be installed in conformance with the requirements for reinforced masonry as contained in CAN/CSA-A371, “Masonry Construction for Buildings”.

9.20.16. Corrosion Resistance

9.20.16.1. Corrosion Resistance of Connectors

(1) Carbon steel connectors required to be corrosion-resistant shall be galvanized to at least the minimum standards in Table 9.20.16.1.

Table 9.20.16.1.
Minimum Requirements for Galvanizing

Forming Part of Sentence 9.20.16.1.(1)

Item	Column 1	Column 2	Column 3
	Connector Material	ASTM Standard	Coating Class
1.	Wire ties and continuous reinforcing (hot-dipped galvanizing)	A153 / A153M	Class B2 or 458 g/m²
2.	Hardware and bolts	A153 / A153M	See A153 / A153M
3.	Strip, plate, bars, and rolled sections (not less than 3.18 mm thick)	A123 / A123M	610 g/m²
4.	Sheet (less than 3.18 mm thick)	A123 / A123M	305 g/m² on material 0.76 mm thick(1)

Notes to Table 9.20.16.1.:

(1) ASTM A123 / A123M does not apply to metal less than 3.18 mm thick. Galvanizing coatings may be interpolated for thicknesses between 3.18 mm and 0.76 mm.

9.20.17. Above-Ground Flat Insulating Concrete Form Walls

9.20.17.1. Thickness of Flat Insulating Concrete Form Walls

(1) The thickness of concrete in flat insulating concrete form walls not in contact with the ground shall be,

(a) not less than 140 mm, and

(b) constant for the entire height of the wall.

9.20.17.2. Reinforcement for Flat Insulating Concrete Form Walls

(1) Horizontal reinforcement in above-grade flat insulating concrete form walls shall,

(a) consist of,

(i) one 10M bar placed not more than 300 mm from the top of the wall, and

(ii) 10M bars spaced not more than 600 mm o.c., and

(b) be placed in the middle third of the wall section.

(2) Vertical reinforcement in above-grade flat insulating concrete form walls shall,

(a) consist of 10M bars spaced not more than 400 mm o.c., and

(b) be placed in the middle third of the wall section.

(3) Vertical reinforcement required in Sentence (2) and interrupted by wall openings shall be placed not more than 600 mm from each side of the opening.

9.20.17.3. Openings in Non-Loadbearing Flat Insulating Concrete Form Walls

(1) No openings shall occur within 1.2 m of interior and exterior corners of exterior non-*loadbearing* flat insulating concrete form walls.

(2) Portions of walls over openings in non-*loadbearing* flat insulating concrete form walls shall have a minimum depth of concrete of not less than 200 mm over the width of the opening.

(3) Openings more than 600 mm but not more than 3 m in width in non-*loadbearing* flat insulating concrete form walls shall be reinforced at the top and bottom with one 10M bar.

(4) Openings more than 3 m in width in non-*loadbearing* flat insulating concrete form walls shall be reinforced on all four sides with two 10M bars.

(5) Reinforcing bars described in Sentences (3) and (4) shall extend not less than 600 mm beyond the edges of the opening.

(6) The cumulative width of openings in non-*loadbearing* flat insulating concrete form walls shall be not more than 70% of the length of any wall.

9.20.17.4. Openings in Loadbearing Flat Insulating Concrete Form Walls

(1) No openings shall occur within 1.2 m of interior and exterior corners of exterior *loadbearing* flat insulating concrete form walls.

(2) In *loadbearing* flat insulating concrete form walls, lintels shall be provided over all openings wider than 900 mm.

(3) Lintels described in Sentence (2) shall be constructed in accordance with Tables A-17, A-18 or A-19.

(4) Lintels described in Sentence (2) over openings wider than 1.2 m shall be reinforced for shear with 10M stirrups at a maximum spacing of half the distance from the bottom reinforcing bar to the top of the lintel.

9.20.17.5. Framing Supported on Flat Insulating Concrete Form Walls

(1) Floor joists supported on the side of flat insulating concrete form walls shall be supported with joist hangers secured to wood ledger boards.

(2) The ledger boards described in Sentence (1) shall be not less than,

(a) 38 mm thick, and

(b) the depth of the floor joists.

(3) Anchor bolts shall be used to secure ledger boards to flat insulating concrete form walls and shall be,

(a) embedded in the wall to a depth not less than 100 mm, and

(b) spaced in accordance with Table 9.20.17.5.

(4) Floor joists and *building* frames supported on top of flat insulating concrete form walls shall be anchored in conformance with Article 9.23.6.1.

Table 9.20.17.5.
Maximum Anchor Bolt Spacing for the Connection of Ledger Boards to Flat Insulating Concrete Form Walls

Forming Part of Sentence 9.20.17.5.(3)

Item	Column 1	Column 2	Column 3
	Maximum Clear Floor Span, m	Maximum Anchor Bolt Spacing, mm	
		Staggered 12.7 mm Diameter Anchor Bolts	Staggered 16 mm Diameter Anchor Bolts
1.	2.44	450	500
2.	3.00	400	450
3.	4.00	300	400
4.	5.00	275	325

9.20.17.6. Anchoring of Roof Framing to Top of Flat Insulating Concrete Form Walls

(1) Roof framing supported on the top of flat insulating concrete form walls shall be fixed to the top plates, which shall be anchored to the wall with anchor bolts,

(a) not less than 12.7 mm in diameter, and

(b) spaced not more than 1.2 m o.c.

(2) The anchor bolts described in Sentence (1) shall be placed in the centre of the flat insulating concrete form wall and shall be embedded not less than 100 mm into the concrete.

(3) Attachment of roof framing to wood top plates shall be in accordance with Table 9.23.3.4.

9.20.17.7. Protection from Precipitation and Damage

(1) Above ground flat insulating concrete form walls shall be protected from precipitation and damage in conformance with Section 9.27.

Section 9.21. Masonry and Concrete Chimneys and Flues

9.21.1. General

9.21.1.1. Application

(1) This Section applies to,

(a) rectangular *masonry or concrete chimneys* not more than 12 m in height serving fireplaces or serving *appliances* having a combined total rated heat output of 120 kW or less, and

(b) *flue pipes* serving solid fuel-burning *appliances*.

(2) Except as provided in Sentence 9.21.1.3.(1), *chimneys* (other than those described in Sentence (1) and Sentence 9.21.1.2.(1), *gas vents* and *flue pipes* serving gas-, oil- or solid fuel-burning *appliances* and associated equipment shall conform to Section 6.3.

9.21.1.2. Factory-Built Chimneys

(1) *Factory-built chimneys* serving solid fuel-burning *appliances*, and their installation, shall conform to CAN/ULC-S629-M, “650°C Factory-Built Chimneys”.

9.21.1.3. Flue Pipes

(1) *Flue pipes* serving solid fuel-burning *stoves*, *cooktops* and *space heaters* shall conform to CSA B365, "Installation Code for Solid-Fuel-Burning Appliances and Equipment".

9.21.1.4. Chimney or Flue Pipe Walls

(1) The walls of any *chimney* or *flue pipe* shall be constructed to be smoke- and flame-tight.

9.21.2. Chimney Flues

9.21.2.1. Chimney Flue Limitations

(1) A *chimney flue* that serves a fireplace or incinerator shall not serve any other *appliance*.

(2) A *chimney flue* that serves a solid fuel-burning *appliance* shall not be connected to a natural gas- or propane-fired *appliance*.

(3) A *chimney flue* that serves a solid fuel-burning *appliance* shall not be connected to an oil-burning *appliance* unless the solid fuel-burning *appliance* is *listed* for such installation and the installation of both *appliances* meets their respective installation requirements.

9.21.2.2. Connections of More Than One Appliance

(1) Except as required in Article 9.21.2.1., two or more fuel-burning *appliances* are permitted to be connected to the same *chimney flue* provided adequate draft is maintained for the connected *appliances* and the connections are made as described in Sentences (2) and (3).

(2) Where two or more solid fuel-burning *appliances* are connected to the same *chimney flue*, the *appliances* must be located on the same *storey*.

(3) The connection referred to in Sentence (2) for a solid fuel-burning *appliance* shall be made below connections for *appliances* burning other fuels.

9.21.2.3. Inclined Chimney Flues

(1) *Chimney flues* shall not be inclined more than 45° to the vertical.

9.21.2.4. Size of Chimney Flues

(1) Except for *chimneys* serving fireplaces, the size of a *chimney flue* shall conform to the requirements of the solid fuel-burning *appliance* installation standard referenced in Sentence 6.2.1.4.(1) and Article 9.33.1.2.

(2) Where a *chimney flue* serves only one solid fuel-burning *appliance*, the *flue* area shall be at least equal to that of the *flue pipe* connected to it.

9.21.2.5. Fireplace Chimneys

(1) The size of a *chimney flue* serving a masonry fireplace shall be within the allowable range specified in Table 9.21.2.5.A. or Table 9.21.2.5.B.

Table 9.21.2.5.A.
Diameter of Round Flues for Fireplace Chimneys

Forming Part of Sentence 9.21.2.5.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
	Fireplace Opening, m^2	*Chimney* Height, m							
		3.0 to 4.5		> 4.5 to 5.9		> 5.9 to 8.9		> 8.9 to 12	
		Flue diameter, mm							
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1.	Up to 0.150	110	170	100	160	90	150	90	150

2.	0.151 to 0.250	150	210	130	190	130	190	120	180
3.	0.251 to 0.350	180	240	160	220	150	210	140	200
4.	0.351 to 0.500	220	280	200	260	190	250	170	230
5.	0.501 to 0.650	260	320	230	290	220	280	200	260
6.	0.651 to 0.800	290	350	260	320	240	300	220	280
7.	0.801 to 1.00	330	390	290	350	270	330	250	310
8.	1.01 to 1.20	360	420	320	380	300	360	270	330
9.	1.21 to 1.40	390	450	350	410	330	390	300	360
10.	1.41 to 1.60	420	480	380	440	350	410	320	380
11.	1.61 to 1.80	—	—	400	460	370	430	340	400
12.	1.81 to 2.00	—	—	—	—	400	460	360	420
13.	2.01 to 2.20	—	—	—	—	—	—	380	440

Table 9.21.2.5.B.
Rectangular Flue Sizes for Fireplace Chimneys

Forming Part of Sentence 9.21.2.5.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
	Fireplace Opening, m²	*Chimney* Height, m							
		3.0 to 4.5		> 4.5 to 5.9		> 5.9 to 8.9		> 8.9 to 12	
		Flue Size, mm							
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1.	Up to 0.150	200 × 200	200 × 200	100 × 200	100 × 200	100 × 200	100 × 200	100 × 200	100 × 200
2.	0.151 to 0.250	200 × 200	200 × 200	200 × 200	200 × 200	200 × 200	200 × 200	200 × 200	200 × 200
3.	0.251 to 0.350	200 × 300	200 × 300	200 × 200	200 × 300	200 × 200	200 × 200	200 × 200	200 × 200
4.	0.351 to 0.500	300 × 300	300 × 300	200 × 300	200 × 300	200 × 300	200 × 300	200 × 200	200 × 300
5.	0.501 to 0.650	300 × 300	300 × 400	300 × 300	300 × 300	300 × 300	300 × 300	200 × 300	200 × 300
6.	0.651 to 0.800	300 × 400	300 × 400	300 × 300	300 × 400	300 × 300	300 × 300	300 × 300	300 × 300
7.	0.801 to 1.00	400 × 400	400 × 400	300 × 400	300 × 400	300 × 400	300 × 400	300 × 300	300 × 300
8.	1.01 to 1.20	400 × 400	400 × 400	400 × 400	400 × 400	300 × 400	300 × 400	300 × 400	300 × 400
9.	1.21 to 1.40	—	—	400 × 400	400 × 400	400 × 400	400 × 400	300 × 400	300 × 400
10	1.41 to 1.60	—	—	—	—	400 × 400	400 × 400	400 × 400	400 × 400
11.	1.61 to 1.80	—	—	—	—	—	—	400 × 400	400 × 400
12.	1.81 to 2.00	—	—	—	—	—	—	400 × 400	400 × 400

9.21.2.6. Oval Chimney Flues

(1) The width of an oval *chimney flue* shall be not less than two-thirds its breadth.

9.21.3. Chimney Lining

9.21.3.1. Lining Materials

(1) Every *masonry or concrete chimney* shall have a lining of clay, concrete, firebrick or metal.

9.21.3.2. Joints in Chimney Liners

(1) Joints of *chimney liners* shall be sealed to provide a barrier to the passage of flue gases and condensate into the cavity between the liner and the surrounding masonry.

(2) Joints of clay, concrete or firebrick *chimney liners* shall be struck flush to provide a straight, smooth, aligned *chimney flue*.

9.21.3.3. Clay Liners

(1) Clay liners shall conform to CAN/CSA-A324-M, "Clay Flue Liners".

(2) Liners referred to in Sentence (1) shall be not less than 15.9 mm thick and shall be capable of resisting, without softening or cracking, a temperature of 1100°C.

9.21.3.4. Firebrick Liners

(1) Firebrick liners shall conform to ASTM C27, "Classification of Fireclay and High Alumina Refractory Brick".

(2) Firebrick liners shall be laid with high temperature cement mortar conforming to CAN/CGSB-10.3, "Air Setting Refractory Mortar".

9.21.3.5. Concrete Liners

(1) Concrete *flue* liners shall conform to Clause 4.2.6.4. of CAN/CSA-A405-M, "Design and Construction of Masonry Chimneys and Fireplaces".

9.21.3.6. Metal Liners

(1) Metal liners shall be constructed of at least 0.3 mm thick stainless steel.

(2) Except as provided in Sentence 9.22.10.2.(3), metal liners referred to in Sentence (1) shall only be used in *chimneys* serving gas- or oil-burning *appliances*.

9.21.3.7. Installation of Chimney Liners

(1) *Chimney liners* shall be installed when the surrounding masonry or concrete is placed.

9.21.3.8. Spaces Between Liners and Surrounding Masonry

(1) A space not less than 10 mm wide shall be left between a *chimney liner* and the surrounding masonry.

(2) The space required in Sentence (1) shall not be filled with mortar.

9.21.3.9. Mortar for Chimney Liners

(1) *Chimney liners* used in *chimneys* for solid fuel-burning *appliances* shall be laid in a full bed of,

(a) high temperature cement mortar conforming to CAN/CGSB-10.3, "Air Setting Refractory Mortar", or

(b) mortar consisting of one part Portland cement to three parts sand by volume.

(2) *Chimney liners* used in *chimneys* for oil- or gas-burning *appliances* shall be laid in a full bed of mortar consisting of one part Portland cement to three parts sand by volume.

9.21.3.10. Extension of Chimney Liners

(1) *Chimney liners* shall extend from a point not less than 200 mm below the lowest *flue pipe* connection to a point not less than 50 mm or more than 100 mm above the *chimney* cap.

9.21.4. Masonry and Concrete Chimney Construction

9.21.4.1. Unit Masonry

(1) Unit masonry shall conform to Section 9.20.

9.21.4.2. Concrete

(1) Concrete shall conform to Section 9.3.

9.21.4.3. Footings

(1) Footings for masonry *chimneys* and concrete *chimneys* shall conform to the requirements in Section 9.15.

9.21.4.4. Height of Chimney Flues

(1) A *chimney flue* shall extend not less than,

(a) 900 mm above the highest point at which the *chimney* comes in contact with the roof, and

(b) 600 mm above the highest roof surface or structure within 3 m of the *chimney*.

9.21.4.5. Lateral Stability

(1) Except as provided in Sentence (2), *chimneys* shall be braced in accordance with Subsection 4.3.2. to provide stability under wind loads.

(2) A *chimney* need not be laterally braced provided,

(a) no horizontal outside dimension is less than 400 mm, and

(b) the *chimney* extends not more than 3.6 m above a roof or the masonry wall of which it forms a part.

9.21.4.6. Chimney Caps

(1) The top of a *chimney* shall have a waterproof cap of reinforced concrete, masonry or metal.

(2) The cap required in Sentence (1) shall slope from the lining and be provided with a drip not less than 25 mm from the *chimney* wall.

(3) Cast-in-place concrete caps shall be separated from the *chimney liner* by a bond break and be sealed at that location.

(4) Jointed precast concrete or masonry *chimney* caps shall have flashing installed beneath the cap extending from the liner to the drip edge.

9.21.4.7. Cleanout

(1) Except for a *chimney flue* constructed to serve a masonry fireplace, a cleanout opening with a metal frame and tight-fitting metal door shall be installed near the base of the *chimney flue*.

9.21.4.8. Wall Thickness

(1) The walls of a masonry *chimney* shall be built of solid units not less than 70 mm thick.

9.21.4.9. Separation of Flue Liners

(1) *Flue* liners in the same *chimney* shall be separated by not less than 70 mm of masonry or concrete exclusive of liners where clay liners are used, or 90 mm of firebrick where firebrick liners are used.

(2) *Flue* liners referred to in Sentence (1) shall be installed to prevent significant lateral movement.

9.21.4.10. Flashing

(1) Junctions with adjacent materials shall be adequately flashed to shed water.

9.21.5. Clearance from Combustible Construction

9.21.5.1. Clearance from Combustible Materials

(1) The clearance between *masonry or concrete chimneys* and *combustible* framing material shall be not less than,

(a) 50 mm for interior *chimneys*, and

(b) 12 mm for exterior *chimneys*.

(2) A clearance of not less than 150 mm shall be provided between a cleanout opening and *combustible* material.

(3) *Combustible* flooring, subflooring and ceiling finishes shall have not less than a 12 mm clearance from *masonry or concrete chimneys*.

9.21.5.2. Sealing of Spaces

(1) All spaces between *masonry or concrete chimneys* and *combustible* material shall be sealed top or bottom with *noncombustible* material.

9.21.5.3. Support of Joists or Beams

(1) Joists or beams may be supported on masonry walls that enclose *chimney flues* provided the *combustible* members are separated from the *flue* by a minimum of 290 mm of solid masonry.

Section 9.22. Fireplaces

9.22.1. General

9.22.1.1. Application

(1) Except as otherwise specifically stated in this Part, this Section applies to masonry fireplaces constructed on site.

9.22.1.2. Masonry and Concrete

(1) Except as otherwise stated in this Section, unit masonry shall conform to Section 9.20. and concrete to Section 9.3.

(2) Masonry above openings shall be supported by steel lintels conforming to Sentence 9.20.5.2.(2), reinforced concrete or a masonry arch.

9.22.1.3. Footings

(1) Footings for masonry and concrete fireplaces shall conform to Section 9.15.

9.22.1.4. Combustion Air

(1) Every solid fuel-fired fireplace, including a factory-built fireplace, shall have a supply of combustion air from outdoors in accordance with Sentences (2) to (7).

(2) The combustion air shall be supplied by a *noncombustible* and corrosion-resistant supply duct.

(3) The supply duct shall have,

(a) a diameter of not less than 100 mm or equivalent area, and

(b) an exterior intake for entry of air from the outdoors.

(4) The supply duct shall contain a tight-fitting damper that shall be located close to the interior outlet and be operable from the room containing the fireplace.

(5) The operating mechanism shall clearly indicate the actual position of the damper.

(6) The interior outlet shall,

(a) be located as close as possible to the opening in the face of the fireplace, and

(b) be designed to prevent embers from entering the supply duct.

(7) Where a supply of combustion air is provided directly to the fire chamber of a fireplace, including a factory-built fireplace or a steel fireplace liner, the installation shall comply with the "Outdoor Air Supply" requirements provided in CAN/CSA-A405-M, "Design and Construction of Masonry Chimneys and Fireplaces".

9.22.2. Fireplace Liners

9.22.2.1. Brick or Steel Liners

(1) Except where a fireplace is equipped with a steel liner, every fireplace shall have a firebrick liner.

9.22.2.2. Firebrick Liners

(1) Fireplace liners shall be not less than,

(a) 50 mm thick for the sides and back, and

(b) 25 mm thick for the floor.

(2) Firebrick liners shall be laid with high temperature cement mortar conforming to CAN/CGSB-10.3, "Air Setting Refractory Mortar".

(3) Joints between a firebrick liner and the adjacent back-up masonry shall be offset.

9.22.2.3. Steel Liners

(1) Steel liners for fireplaces shall conform to CAN/ULC-S639M, "Steel Liner Assemblies for Solid-Fuel Burning Masonry Fireplaces", and shall be installed in accordance with the installation instructions in that standard.

9.22.3. Fireplace Walls

9.22.3.1. Thickness of Walls

(1) Except as provided in Sentence (2), the thickness of the back and sides of a fireplace, including the thickness of any firebrick liner, shall be not less than 190 mm where a metal liner or a firebrick liner less than 51 mm thick is used.

(2) When a steel fireplace liner is used with an air circulating chamber surrounding the firebox, the back and sides of the fireplace shall consist of,

(a) solid masonry units not less than 90 mm thick, or

(b) hollow masonry units not less than 190 mm thick.

9.22.4. Fire Chamber

9.22.4.1. Fire Chamber Dimensions

(1) The distance from the back of the fire chamber to the plane of the fireplace opening shall be not less than 300 mm.

9.22.5. Hearth

9.22.5.1. Hearth Extension

(1) Except as required in Sentence (2), fireplaces shall have a *noncombustible* hearth extending not less than 400 mm in front of the fireplace opening measured from the facing, and not less than 200 mm beyond each side of the fireplace opening.

(2) Where the fire chamber floor is elevated more than 150 mm above the hearth, the dimension of the hearth measured perpendicular to the plane of the fireplace opening shall be increased by not less than,

(a) 50 mm for an elevation above 150 mm and not more than 300 mm, and

(b) an additional 25 mm for every 50 mm in elevation above 300 mm.

9.22.5.2. Support of Hearth

(1) Except as permitted in Sentence (2), the fire chamber floor and hearth shall be supported on a reinforced concrete slab not less than a 100 mm thick at its supports and, if cantilevered, not less than 50 mm thick at its unsupported edge.

(2) A hearth for a fireplace with an opening raised not less than 200 mm from a *combustible* floor is permitted to be supported on that floor provided the requirements of Clauses 5.3.6.5. to 5.3.6.7. of CAN/CSA-A405-M, “Design and Construction of Masonry Chimneys and Fireplaces”, are followed.

9.22.6. Damper

9.22.6.1. Required Damper and Size

(1) The throat of every fireplace shall be equipped with a metal damper sufficiently large to cover the full area of the throat opening.

9.22.7. Smoke Chamber

9.22.7.1. Slope of Smoke Chamber

(1) The sides of the smoke chamber connecting a fireplace throat with a *flue* shall not be sloped at an angle greater than 45° to the vertical.

9.22.7.2. Wall Thickness

(1) The thickness of masonry walls surrounding the smoke chamber shall be not less than 190 mm at the sides, front and back, except that the portions of the back exposed to the outside may be 140 mm thick.

9.22.8. Factory-Built Fireplaces

9.22.8.1. Conformance to Standard

(1) Factory-built fireplaces and their installation shall conform to CAN/ULC-S610-M, “Factory-Built Fireplaces”.

9.22.9. Clearance of Combustible Material

9.22.9.1. Clearance to the Fireplace Opening

(1) *Combustible* material shall not be placed on or near the face of a fireplace within 150 mm of the fireplace opening, except that where the *combustible* material projects more than 38 mm out from the face of the fireplace above the opening, such material shall be at least 300 mm above the top of the opening.

9.22.9.2. Metal Exposed to the Interior

(1) Metal exposed to the interior of a fireplace such as the damper control mechanism shall have at least a 50 mm clearance from any *combustible* material on the face of the fireplace where such metal penetrates through the face of the fireplace.

9.22.9.3. Clearance to Combustible Framing

(1) Not less than a 100 mm clearance shall be provided between the back and sides of a solid fuel-burning fireplace and *combustible* framing, except that a 50 mm clearance is permitted where the fireplace is located in an exterior wall.

(2) Not less than a 50 mm clearance shall be provided between the back and sides of the smoke chamber of a solid fuel-burning fireplace and *combustible* framing, except that a 25 mm clearance is permitted where the fireplace is located in an exterior wall.

9.22.9.4. Heat Circulating Duct Openings

(1) The clearance of *combustible* material above heat circulating duct openings from those openings shall be not less than,

(a) 300 mm where the *combustible* material projects not less than 38 mm from the face, and

(b) 150 mm where the projection is less than 38 mm.

9.22.10. Fireplace Inserts and Hearth-Mounted Stoves

9.22.10.1. Appliance Standard

(1) Fireplace inserts and hearth mounted *stoves* vented through the throat of a fireplace shall conform to ULC-S628, “Fireplace Inserts”.

9.22.10.2. Installation

(1) The installation of fireplace inserts and hearth mounted *stoves* vented through the throat of a fireplace shall conform to CSA B365, “Installation Code for Solid-Fuel-Burning Appliances and Equipment”.

(2) Fireplace inserts and hearth mounted *stoves* vented through the throat of a fireplace described in Sentence (1) may be installed in existing fireplaces only if a minimum thickness of 190 mm of solid masonry is provided between the smoke chamber and any existing *combustible* materials, unless the insert is *listed* for lesser clearances.

(3) A fireplace insert installed in a masonry fireplace shall have,

(a) a *listed* metal *chimney* liner installed from the insert collar to the top of the *chimney*, or

(b) a direct sealed connection to the *chimney flue* where such provision is part of an insert conforming to Sentence 9.22.10.1.(1).

Section 9.23. Wood Frame Construction

9.23.1. Application

9.23.1.1. Limitations

(1) This Section applies where wall, floor and roof planes are generally comprised of lumber frames of small repetitive structural members, or engineered components, and where,

(a) roof and wall planes are clad, sheathed or braced on at least one side,

(b) the small repetitive structural members are spaced not more than 610 mm o.c.,

(c) the walls do not serve as *foundations*,

(d) the specified *live load* on supported subfloors and floor framing does not exceed 2.4 kPa, and

(e) the span of any structural member does not exceed 12.20 m.

(2) Where the conditions in Sentence (1) are exceeded for wood construction, the design of the framing and fastening shall conform to Subsection 4.3.1.

9.23.2. General

9.23.2.1. Strength and Rigidity

(1) All members shall be so framed, anchored, fastened, tied and braced to provide the necessary strength and rigidity.

9.23.2.2. Protection from Decay

(1) Ends of wood joists, beams and other members framing into masonry or concrete shall be treated to prevent decay where the bottom of the member is at or below ground level, or a 12 mm air space shall be provided at the end and sides of the member.

(2) Air spaces required in Sentence (1) shall not be blocked by insulation, *vapour barriers* or air tight materials.

9.23.2.3. Protection from Dampness

(1) Except as permitted in Sentence (2), wood framing members that are not pressure-treated with a wood preservative and that are supported on concrete in contact with the ground or *fill* shall be separated from the concrete by not less than 0.05 mm polyethylene film or Type S roll roofing.

(2) Dampproofing material referred to in Sentence (1) is not required where the wood member is at least 150 mm above the ground.

9.23.2.4. Lumber

(1) Lumber shall conform to the appropriate requirements in Subsection 9.3.2.

9.23.2.5. Termite Protection

(1) Where termites are known to exist, unless pressure-treated with a chemical that is toxic to such termites in accordance with Article 9.3.2.9., wood steps shall rest on a non-cellulosic base or apron extending at least 150 mm above the ground.

(2) Wood lattice or skirting around porches shall be separated from piers and *soil* by at least 50 mm.

9.23.3. Fasteners

9.23.3.1. Standards for Nails and Screws

(1) Except as provided in Sentence (2) and elsewhere in this Part, nails specified in this Section shall be common steel wire nails or common spiral nails, conforming to,

(a) ASTM F1667, “Driven Fasteners: Nails, Spikes and Staples”, or

(b) CSA B111, “Wire Nails, Spikes and Staples”.

(2) Nails used to comply with Table 9.23.3.4. shall have a diameter not less than that required by Table 9.23.3.1.

Table 9.23.3.1.
Diameter of Nails for Framing

Forming Part of Sentence 9.23.3.1.(2)

Item	Column 1 Minimum Length of Nails, mm	Column 2 Minimum Diameter of Nails, mm
1.	57	2.87
2.	62	3.25
3.	76	3.66
4.	82	3.66
5.	101	4.88

(3) Wood screws specified in this Section shall conform to ANSI/ASME B18.6.1., “Wood Screws (Inch Series)”.

9.23.3.2. Length of Nails

(1) All nails shall be long enough so that not less than half their required length penetrates into the second member.

9.23.3.3. Prevention of Splitting

(1) Splitting of wood members shall be minimized by staggering the nails in the direction of the grain and by keeping nails well in from the edges.

9.23.3.4. Nailing of Framing

(1) Except as provided in Sentence (2), nailing of framing shall conform to Table 9.23.3.4.

Table 9.23.3.4.
Nailing for Framing

Forming Part of Sentence 9.23.3.4.(1)

Item	Column 1 Construction Detail	Column 2 Minimum Length of Nails, mm	Column 3 Minimum Number or Maximum Spacing of Nails
1.	Floor joist to plate – toe nail	82	2
2.	Wood or metal strapping to underside of floor joists	57	2
3.	Cross bridging to joists	57	2 at each end
4.	Double header or trimmer joists	76	300 mm (o.c.)
5.	Floor joist to stud (balloon construction)	76	2
6.	Ledger strip to wood beam	82	2 per joist
7.	Joist to joist splice (See also Table 9.23.13.8.)	76	2 at each end
8.	Header joist end nailed to joists along perimeter	101	3
9.	Tail joist to adjacent header joist	82	5
	(end nailed) around openings	101	3
10.	Each header joist to adjacent trimmer joist	82	5

	(end nailed) around openings	101	3
11.	Stud to wall plate (each end) toe nail	62	4
	or end nail	82	2
12.	Doubled studs at openings, or studs at walls or wall intersections and corners	76	750 mm (o.c.)
13.	Doubled top wall plates	76	600 mm (o.c.)
14.	Bottom wall plate or sole plate to joists or blocking (exterior walls)[(1)]	82	400 mm (o.c.)
15.	Interior walls to framing or subflooring	82	600 mm (o.c.)
16.	Horizontal member over openings in non-*loadbearing* walls – each end	82	2
17.	Lintels to studs	82	2 at each end
18.	Ceiling joist to plate – toe nail each end	82	2
19.	Roof rafter, roof truss or roof joist to plate – toe nail	82	3
20.	Rafter plate to each ceiling joist	101	2
21.	Rafter to joist (with ridge supported)	76	3
22.	Rafter to joist (with ridge unsupported)	76	See Table 9.23.13.8.
23.	Gusset plate to each rafter at peak	57	4
24.	Rafter to ridge board – toe nail – end nail	82	3
25.	Collar tie to rafter – each end	76	3
26.	Collar tie lateral support to each collar tie	57	2
27.	Jack rafter to hip or valley rafter	82	2
28.	Roof strut to rafter	76	3
29.	Roof strut to *loadbearing* wall – toe nail	82	2
30.	38 mm × 140 mm or less plank decking to support	82	2
31.	Plank decking wider than 38 mm × 140 mm to support	82	3
32.	38 mm edge laid plank decking to support (toe nail)	76	1
33.	38 mm edge laid plank to each other	76	450 mm (o.c.)

Notes to Table 9.23.3.4.:

[(1)] See Sentence 9.23.3.4.(2).

(2) Where the bottom wall plate or sole plate of an exterior wall is not nailed to joists or blocking in conformance with Table 9.23.3.4., the exterior wall may be fastened to the floor framing by,

(a) having plywood, OSB or waferboard sheathing extend down over floor framing and fastened to the floor framing by nails or staples conforming to Article 9.23.3.5., or

(b) tying the wall framing to the floor framing by 50 mm wide galvanized-metal strips,

(i) not less than 0.41 mm in thickness,

(ii) spaced not more than 1.2 m apart, and

(iii) fastened at each end with at least two 63 mm nails.

9.23.3.5. Fastening for Sheathing or Subflooring

(1) Except as required by Sentence (5), fastening of sheathing and subflooring shall conform to Table 9.23.3.5.

Table 9.23.3.5.
Fasteners for Sheathing and Subflooring

Forming Part of Sentence 9.23.3.5.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Element	Minimum Length of Fasteners, mm				Minimum Number or Maximum Spacing of Fasteners
		Common or Spiral Nails	Ring Thread Nails or Screws	Roofing Nails	Staples	
1.	Board lumber 184 mm or less wide	51	45	N/A	51	2 per support
2.	Board lumber more than 184 mm wide	51	45	N/A	51	3 per support
3.	Fibreboard sheathing up to 13 mm thick	N/A	N/A	44	28	150 mm (o.c.) along edges and 300 mm (o.c.) along intermediate supports
4.	Gypsum sheathing up to 13 mm thick	N/A	N/A	44	N/A	
5.	Plywood, OSB or waferboard up to 10 mm thick	51	45	N/A	38	
6.	Plywood, OSB or waferboard over 10 mm and up to 20 mm thick	51	45	N/A	51	
7.	Plywood, OSB or waferboard over 20 mm and up to 25 mm thick	57	51	N/A	N/A	

(2) Staples shall not be less than 1.6 mm in diameter or thickness, with not less than a 9.5 mm crown driven with the crown parallel to framing.

(3) Roofing nails for the attachment of fibreboard or gypsum sheathing shall not be less than 3.2 mm in diameter with a minimum head diameter of 11.1 mm.

(4) Flooring screws shall not be less than 3.2 mm in diameter.

(5) Where roof sheathing supports are spaced at more than 406 mm o.c., the maximum spacing of fasteners for roof sheathing shall be 150 mm along edges and intermediate supports.

9.23.4. Maximum Spans

9.23.4.1. Application

(1) Spans provided in this Subsection for joists, beams and lintels supporting floors shall apply only where,

(a) the floors serve residential areas as described in Table 4.1.5.3., or

(b) the uniformly distributed *live load* on the floors does not exceed that specified for residential areas as described in Table 4.1.5.3.

(2) Spans for joists, beams and lintels supporting floors shall be determined according to Subsection 4.1.3. where the supported floors,

(a) serve other than residential areas, or

(b) support a uniform *live load* in excess of that specified for residential areas.

9.23.4.2. Spans for Joists, Rafters and Beams

(1) Except as required in Sentence (2) and Article 9.23.13.10., the spans for wood joists and rafters shall conform to the spans shown in Tables A-1 to A-7 for the uniform *live loads* shown in the Tables.

(2) Spans for floor joists that are not selected from Tables A-1 and A-2 and that are required to be designed for the same loading conditions, shall not exceed the design requirements for uniform loading and vibration criteria.

(3) Spans for built-up wood and glued-laminated timber floor beams shall conform to the spans in Tables A-8 to A-11.

(4) Spans for roof ridge beams shall conform to the spans in Table A-12 for the uniform snow load shown.

9.23.4.3. Steel Beams

(1) The spans for steel beams with laterally supported top flanges shall conform to Table 9.23.4.3. for floors and Tables A-20 to A-29 for roofs and floors.

Table 9.23.4.3.
Maximum Spans for Steel Beams Supporting Floors in Dwelling Units

Forming Part of Sentence 9.23.4.3.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
		Supported Joist Length, m (Half the sum of joist spans on both sides of the beam)						
		2.4	3.0	3.6	4.2	4.8	5.4	6.0
	Section	One *Storey* Supported						
1.	W150 × 22	5.5	5.2	4.9	4.8	4.6	4.5	4.3
2.	W200 × 21	6.5	6.2	5.9	5.7	5.4	5.1	4.9
3.	W200 × 27	7.3	6.9	6.6	6.3	6.1	5.9	5.8
4.	W200 × 31	7.8	7.4	7.1	6.8	6.6	6.4	6.2
5.	W250 × 24	8.1	7.6	7.3	7.0	6.6	6.2	5.9
6.	W250 × 33	9.2	8.7	8.3	8.0	7.7	7.5	7.3
7.	W250 × 39	10.0	9.4	9.0	8.6	8.4	8.1	7.9
8.	W310 × 31	10.4	9.8	9.4	8.9	8.4	8.0	7.6
9.	W310 × 39	11.4	10.7	10.2	9.8	9.5	9.2	9.0
	Section	Two *Storeys* Supported						
10.	W150 × 22	4.9	4.4	4.1	3.8	3.5	3.4	3.2
11.	W200 × 21	5.6	5.1	4.6	4.3	4.1	3.8	3.7
12.	W200 × 27	6.4	6.1	5.6	5.3	4.9	4.7	4.4
13.	W200 × 31	6.9	6.5	6.2	5.8	5.4	5.1	4.9
14.	W250 × 24	6.8	6.1	5.6	5.2	4.9	4.6	4.4
15.	W250 × 33	8.2	7.7	7.0	6.5	6.1	5.8	5.5
16.	W250 × 39	8.8	8.3	7.8	7.2	6.8	6.4	6.1

17.	W310 × 31	8.7	7.8	7.2	6.7	6.2	5.9	5.6
18.	W310 × 39	10.0	9.3	8.5	7.9	7.4	7.0	6.7

(2) Beams described in Sentence (1) shall at least meet the requirements for Grade 350 W steel in CSA G40.21, "General Requirements for Rolled or Welded Structural Quality Steel".

(3) A beam may be considered to be laterally supported if,

(a) the wood joists bear on its top flange at intervals of 610 mm or less over its entire length,

(b) the load being applied to this beam is transmitted through the joists, and

(c) 19 mm by 38 mm wood strips in contact with the top flange are nailed on both sides of the beam to the bottom of the joist supported.

9.23.4.4. Concrete Topping

(1) Except as permitted in Sentence (2), where a floor is required to support a concrete topping, the joist spans shown in Table A-1 or the spacing of the members shall be reduced to allow for the loads due to the topping.

(2) Where a floor is required to support a concrete topping, joist spans are permitted to be selected from Table A-2 provided the concrete,

(a) is 38 to 51 mm thick,

(b) is normal weight,

(c) is placed directly on the subflooring, and

(d) has not less than 20 MPa compressive strength after 28 days.

(3) Where a floor is required to support a concrete topping not more than 51 mm thick, the beam spans shown in Tables A-8 to A-11 shall be multiplied by 0.8 or the supported length of the floor joists shall be reduced to allow for the loads due to the topping.

9.23.4.5. Heavy Roofing Materials

(1) Where a roof is required to support an additional uniform *dead load* from roofing materials such as concrete roofing tile, or materials other than as specified in Section 9.26., such as clay roofing tiles, the additional load shall be allowed for by reducing,

(a) the spans for roof joists and rafters in Tables A-4 to A-7, or the spacing of the members, and

(b) the spans for ridge beams and lintels in Tables A-12 to A-16.

9.23.5. Notching and Drilling

9.23.5.1. Holes Drilled in Framing Members

(1) Holes drilled in roof, floor or ceiling framing members shall be not larger than one-quarter the depth of the member and shall be located not less than 50 mm from the edges, unless the depth of the member is increased by the size of the hole.

9.23.5.2. Notching of Framing Members

(1) Floor, roof and ceiling framing members are permitted to be notched provided the notch is located on the top of the member within half the joist depth from the edge of bearing and is not deeper than one-third the joist depth, unless the depth of the member is increased by the size of the notch.

9.23.5.3. Wall Studs

(1) Wall studs shall not be notched, drilled or otherwise damaged so that the undamaged portion of the stud is less than two-thirds the depth of the stud if the stud is *loadbearing* or 40 mm if the stud is non-*loadbearing*, unless the weakened studs are suitably reinforced.

9.23.5.4. Top Plates

(1) Top plates in walls shall not be notched, drilled or otherwise weakened to reduce the undamaged width to less than 50 mm unless the weakened plates are suitably reinforced.

9.23.5.5. Roof Trusses

(1) Roof truss members shall not be notched, drilled or otherwise weakened unless such notching or drilling is allowed for in the design of the truss.

9.23.6. Anchorage

9.23.6.1. Anchorage of Building Frames

(1) *Building* frames shall be anchored to the *foundation* unless a structural analysis of wind and earth pressures shows anchorage is not required.

(2) Except as provided in Article 9.23.6.3., anchorage shall be provided by embedding the ends of the first floor joists in concrete, or fastening the sill plate to the *foundation* with not less than 12.7 mm diam anchor bolts spaced not more than 2.4 m o.c.

(3) Anchor bolts referred to in Sentence (2) shall be fastened to the sill plate with nuts and washers and shall be embedded not less than 100 mm in the *foundation* and so designed that they may be tightened without withdrawing them from the *foundation*.

9.23.6.2. Anchorage of Columns and Posts

(1) Except as provided in Sentences (2) and (3), exterior columns and posts shall be anchored to resist uplift and lateral movement.

(2) Except as provided in Sentence (3), where columns or posts support balconies, decks, verandas and other exterior platforms, and the columns or posts extend not more than 600 mm above finished ground level, the supported joists or beams shall be,

(a) anchored to a *foundation* to resist uplift and lateral movement, or

(b) directly anchored to the ground to resist uplift.

(3) Anchorage is not required for platforms described in Sentence (2) that,

(a) are not more than 1 *storey*,

(b) are not more than 55 m² in area,

(c) do not support a roof, and

(d) are not attached to another structure, unless it can be demonstrated that differential movement will not adversely affect the performance of that structure.

9.23.6.3. Anchorage of Smaller Buildings

(1) *Buildings* not more than 4.3 m wide and not more than 1 *storey* in *building height* are permitted to be anchored in conformance with the requirements of CSA Z240.10.1, “Site Preparation, Foundation and Anchorage of Manufactured Homes”.

9.23.7. Sill Plates

9.23.7.1. Size of Sill Plates

(1) Where sill plates provide bearing for the floor system they shall be not less than 38 mm by 89 mm material.

9.23.7.2. Levelling of Sill Plates

(1) Sill plates shall be,

(a) levelled by setting them on a full bed of mortar, or

(b) laid directly on the *foundation* where the top of the *foundation* is level.

(2) The joint between the sill plate for exterior walls and the *foundation* shall be sealed in accordance with Subsection 9.25.3.

9.23.8. Beams to Support Floors

9.23.8.1. Bearing for Beams

(1) Beams shall have even and level bearing and shall have not less than 89 mm length of bearing at end supports, except as required in notes to Tables A-8 to A-11.

9.23.8.2. Priming of Steel Beams

(1) Exterior steel beams susceptible to corrosion shall be shop primed with rust-inhibitive paint.

9.23.8.3. Built-up Wood Beams

(1) Where a beam is made up of individual pieces of lumber that are nailed together, the individual members shall be 38 mm or greater in thickness and installed on edge.

(2) Except as permitted in Sentence (3), where individual members of a built-up beam are butted together to form a joint, the joint shall occur over a support.

(3) Where a beam is continuous over more than one span, individual members are permitted to be butted together to form a joint at or within 150 mm of the end quarter points of the clear spans, provided the quarter points are not those closest to the ends of the beam.

(4) Members joined at quarter points shall be continuous over adjacent supports.

(5) Joints in individual members of a beam that are located at or near the end quarter points shall not occur in adjacent members at the same quarter point and shall not reduce the effective beam width by more than half.

(6) Not more than one butt joint shall occur in any individual member of a built-up beam within any one span.

(7) Except as provided in Sentence (8), where 38 mm members are laid on edge to form a built-up beam, individual members shall be nailed together with a double row of nails not less than 89 mm in length, spaced not more than 450 mm apart in each row with the end nails located 100 mm to 150 mm from the end of each piece.

(8) Where 38 mm members in built-up wood beams are not nailed together as provided in Sentence (7), they shall be bolted together with not less than 12.7 mm diam bolts equipped with washers and spaced not more than 1.2 m o.c., with the end bolts located not more than 600 mm from the ends of the members.

9.23.9. Floor Joists

9.23.9.1. End Bearing for Joists

(1) Except when supported on ribbon boards, floor joists shall have not less than 38 mm length of end bearing.

(2) Ribbon boards referred to in Sentence (1) shall be not less than 19 mm by 89 mm lumber let into the studs.

9.23.9.2. Joists Supported by Beams

(1) Floor joists may be supported on the tops of beams or may be framed into the sides of beams.

(2) When framed into the side of a wood beam, joists referred to in Sentence (1) shall be supported on,

(a) joist hangers or other acceptable mechanical connectors, or

(b) not less than 38 mm by 64 mm ledger strips nailed to the side of the beam, except that 38 mm by 38 mm ledger strips may be used provided each joist is nailed to the beam by at least four 89 mm nails, in addition to the nailing for the ledger strip required in Table 9.23.3.4.

(3) When framed into the side of a steel beam, joists referred to in Sentence (1) shall be supported on the bottom flange of the beam or on not less than 38 mm by 38 mm lumber bolted to the web with not less than 6.3 mm diam bolts spaced not more than 600 mm apart.

(4) Joists referred to in Sentence (3) shall be spliced above the beam with not less than 38 mm by 38 mm lumber at least 600 mm long to support the flooring.

(5) Not less than a 12 mm space shall be provided between the splice required in Sentence (4) and the beam to allow for shrinkage of the wood joists.

9.23.9.3. Restraint of Joist Bottoms

(1) Except as provided in Sentence 9.23.9.4.(1), bottoms of floor joists shall be restrained from twisting at each end by toe-nailing to the supports, end-nailing to the header joists or by providing continuous strapping, blocking between the joists or cross-bridging near the supports.

9.23.9.4. Strapping and Bridging in Tables A-1 and A-2

(1) Except as permitted by Sentence (5), where strapping is specified in Table A-1, it shall be,

(a) not less than 19 mm by 64 mm, nailed to the underside of floor joists,

(b) located not more than 2.1 m from each support or other rows of strapping, and

(c) fastened at each end to a sill or header.

(2) Where bridging is specified in Table A-1, it shall consist of not less than 19 mm by 64 mm or 38 mm by 38 mm cross bridging located not more than 2.1 m from each support or other rows of bridging.

(3) Where bridging and strapping are specified in Table A-1,

(a) bridging shall,

(i) comply with Sentence (2), or

(ii) consist of 38 mm solid blocking located not more than 2.1 m from each support or other rows of bridging and securely fastened between the joists, and

(b) except as provided in Sentence (5), strapping shall comply with Sentence (1) and be installed under the bridging.

(4) Bridging specified in Table A-2 shall consist of,

(a) bridging as described in Sentence (2), or

(b) 38 mm solid blocking located not more than 2.1 m from each support or other rows of bridging and securely fastened between the joists.

(5) Strapping described in Sentence (1) and Clause (3)(b) is not required where,

(a) furring strips complying with Table 9.29.3.1. are fastened directly to the joists, or

(b) a panel-type ceiling finish complying with Subsection 9.29.5., 9.29.6., 9.29.7., 9.29.8., or 9.29.9. is attached directly to the joists.

(6) Where a ceiling attached to wood furring is specified in Table A-2,

(a) the ceiling finish shall consist of gypsum board, plywood or OSB not less than 12.7 mm thick, and

(b) the furring shall be,

(i) 19 mm by 89 mm wood furring spaced at not more than 610 mm o.c., or

(ii) 19 mm by 64 mm wood furring spaced at not more than 406 mm o.c.

9.23.9.5. Header Joists

(1) Header joists around floor openings shall be doubled when they exceed 1.2 m in length.

(2) The size of header joists exceeding 3.2 m in length shall be determined by calculations.

9.23.9.6. Trimmer Joists

(1) Trimmer joists around floor openings shall be doubled when the length of the header joist exceeds 800 mm.

(2) When the header joist exceeds 2 m in length, the size of the trimmer joists shall be determined by calculations.

9.23.9.7. Support of Tail and Header Joists

(1) When tail joists and header joists are supported by the floor framing, they shall be supported by suitable joist hangers or nailing in accordance with Table 9.23.3.4.

9.23.9.8. Support of Walls

(1) Non-*loadbearing* walls parallel to the floor joists shall be supported by joists beneath the wall or on blocking between the joists.

(2) Blocking referred to in Sentence (1) for the support of non-*loadbearing* walls shall be not less than 38 mm by 89 mm lumber, spaced not more than 1.2 m apart.

(3) Non-*loadbearing* interior walls at right angles to the floor joists are not restricted as to location.

(4) *Loadbearing* interior walls parallel to floor joists shall be supported by beams or walls of sufficient strength to transfer safely the design loads to vertical supports.

(5) *Loadbearing* interior walls at right angles to floor joists shall be located not more than 900 mm from the joist support when the wall does not support a floor, and not more than 600 mm from the joist support when the wall supports one or more floors, unless the joist size is designed to support such loads.

9.23.9.9. Cantilevered Floor Joists

(1) Floor joists supporting roof loads shall not be cantilevered more than 400 mm beyond their supports where 38 mm by 184 mm joists are used and not more than 600 mm beyond their supports where 38 mm by 235 mm or larger joists are used.

(2) The cantilevered portions referred to in Sentence (1) shall not support floor loads from other *storeys* unless calculations are provided to show that the design resistances of the cantilevered joists are not exceeded.

(3) Where cantilevered floor joists described in Sentences (1) and (2) are at right angles to the main floor joists, the tail joists in the cantilevered portion shall,

(a) extend inward away from the cantilever support a distance equal to not less than six times the length of the cantilever, and

(b) shall be end nailed to an interior doubled header joist in conformance with Table 9.23.3.4.

9.23.10. Wall Studs

9.23.10.1. Stud Size and Spacing

(1) Except as provided in Sentence (2), the size and spacing of studs shall conform to Table 9.23.10.1.

Table 9.23.10.1.
Size and Spacing of Studs

Forming Part of Sentence 9.23.10.1.(1)

Item	Column 1 Type of Wall	Column 2 Supported Loads (including *dead loads*)	Column 3 Minimum Stud Size, mm	Column 4 Maximum Stud Spacing, mm	Column 5 Maximum Unsupported Height, m
1.	Interior	No load	38 × 38	406	2.4
			38 × 89 flat(1)	406	3.6
		Attic not accessible by a stairway	38 × 64	610	3.0
			38 × 64 flat(1)	406	2.4
			38 × 89	610	3.6
			38 × 89 flat(1)	406	2.4
		Attic accessible by a stairway plus 1 floor Roof load plus 1 floor Attic not accessible by stairway plus 2 floors	38 × 89	406	3.6
		Roof load, Attic accessible by a stairway	38 × 64	406	2.4
		Attic not accessible by a stairway plus 1 floor	38 × 89	610	3.6
		Attic accessible by a stairway plus 2 floors	38 × 89	305	3.6
		Roof load plus 2 floors	64 × 89	406	3.6
			38 × 140	406	4.2
		Attic accessible by a stairway plus 3 floors Roof load plus 3 floors	38 × 140	305	4.2
2.	Exterior	Roof with or without attic storage	38 × 64	406	2.4
			38 × 89	610	3.0
		Roof with or without attic storage plus 1 floor	38 × 89	406	3.0
			38 × 140	610	3.0
		Roof with or without attic storage plus 2 floors	38 × 89	305	3.0
			64 × 89	406	3.0

			38 × 140	406	3.6
		Roof with or without attic storage plus 3 floors	38 × 140	305	1.8

Notes to Table 9.23.10.1.:

(1) See Article 9.23.10.3.

(2) Studs for walls not listed in Table 9.23.10.1. and supporting roof loads shall conform to Tables A-30 to A-33, provided,

(a) the studs are clad with not less than 9.5 mm thick plywood, OSB or waferboard sheathing on the exterior face, and not less than 12.5 mm gypsum board on the interior face,

(b) solid bridging is provided at not more than 1.2 m o.c,

(c) the studs are fastened to the top and bottom plates with no fewer than three 82 mm toe-nails,

(d) the double top plates are fastened together with not less than 76 mm nails spaced not more than 200 mm o.c,

(e) roof framing members spaced not more than 610 mm are fastened to the top plates with no fewer than four 82 mm toe-nails, and

(f) the bottom plate is fastened to the floor joists, blocking or rim joist with not less than 82 mm nails spaced not more than 200 mm o.c.

9.23.10.2. Bracing and Lateral Support

(1) Except as provided in Sentence (2), each exterior wall in each *storey* shall be braced with at least one diagonal brace conforming to Sentence (3).

(2) Bracing is not required where the walls,

(a) have an interior finish conforming to the requirements of Section 9.29., or

(b) where the walls are,

(i) clad with panel-type siding,

(ii) diagonally sheathed with lumber, or

(iii) sheathed with plywood, OSB, waferboard, gypsum or fibreboard sheathing.

(3) Where bracing is required, it shall,

(a) consist of not less than 19 mm by 89 mm wood members,

(b) be applied to the studs at an angle of approximately 45° to the horizontal, and

(c) extend the full height of the wall on each *storey*.

(4) Bracing described in Sentence (3) shall be nailed to each stud and wall plate by at least two 63 mm nails.

(5) Where *loadbearing* interior walls are not finished in accordance with Sentence (2), blocking or strapping shall be fastened to the studs at mid-height to prevent sideways buckling.

9.23.10.3. Orientation of Studs

(1) Except as permitted in Sentences (2) and (3), all studs shall be placed at right angles to the wall face.

(2) Studs on the flat are permitted to be used in gable ends of roofs that contain only unfinished space or in non-*loadbearing* interior walls within the limits described in Article 9.23.10.1.

(3) Wall studs that support only a load from an attic not accessible by a stairway are permitted to be placed on the flat within the limits permitted in Article 9.23.10.1. provided,

(a) the studs are clad on at least one side with plywood, OSB or waferboard sheathing fastened to the face of the studs with a structural adhesive, and

(b) the portion of the roof supported by the studs does not exceed 2.1 m in width.

9.23.10.4. Continuity of Studs

(1) Wall studs shall be continuous for the full *storey* height except at openings and shall not be spliced except by finger-jointing with a structural adhesive.

9.23.10.5. Support for Cladding Materials

(1) Corners and intersections shall be designed to provide adequate support for the vertical edges of interior finishes, sheathing and cladding materials, and in no instance shall exterior corners be framed with less than the equivalent of two studs.

(2) Where the vertical edges of interior finishes at wall intersections are supported at vertical intervals by blocking or furring, the vertical distance between such supports shall not exceed the maximum distance between supports specified in Section 9.29.

9.23.10.6. Studs at Sides of Openings

(1) Except as provided in Sentence (2), studs shall be doubled on each side of openings so that the inner studs extend from the lintel to the bottom wall plate and the outer studs extend from the top wall plates to the bottom wall plate.

(2) Single studs are permitted to be used on either side of openings,

(a) in non-*loadbearing* interior walls not required to have *fire-resistance ratings*, provided the studs extend from the top wall plate to the bottom wall plate, or

(b) in *loadbearing* or non-*loadbearing* interior or exterior walls, provided,

(i) the opening is less than and within the required stud spacing, and

(ii) no two such openings of full stud space width are located in adjacent stud spaces.

9.23.10.7. Stud Posts Built into Walls

(1) Except as provided in Sentences (2) and (3), stud posts shall be designed in accordance with Part 4.

(2) The number of studs in a wall directly below a girder truss or roof beam shall conform to Tables A-34 to A-37, provided,

(a) the studs are fastened together to form a post in accordance with Sentence 9.17.4.2.(2),

(b) the wall is not less than 1.2 m long and sheathed on at least one side with plywood, OSB, waferboard or gypsum sheathing, and

(c) the wall sheathing is fastened to the stud post with at least one row of fasteners conforming to Article 9.23.3.5. and spaced not more than 150 mm o.c.

(3) The width of the stud post shall be not less than the width of the girder or beam that it supports.

9.23.11. Wall Plates

9.23.11.1. Size of Wall Plates

(1) Except as provided in Sentence (2), wall plates shall be,

(a) not less than 38 mm thick, and

(b) not less than the required width of the wall studs.

(2) In non-*loadbearing* walls and in *loadbearing* walls where the studs are located directly over framing members, the bottom wall plate may be 19 mm thick.

9.23.11.2. Bottom Wall Plates

(1) A bottom wall plate shall be provided in all cases.

(2) The bottom plate in exterior walls shall not project more than one-third the plate width over the support.

9.23.11.3. Top Plates

(1) Except as permitted in Sentences (2) to (4), no fewer than two top plates shall be provided in *loadbearing* walls.

(2) A single top plate is permitted to be used in a section of a *loadbearing* wall containing a lintel provided the top plate forms a tie across the lintel.

(3) A single top plate is permitted to be used in *loadbearing* walls where the concentrated loads from ceilings, floors and roofs are not more than 50 mm to one side of the supporting studs and in all non-*loadbearing* walls.

(4) The top plates need not be provided in a section of *loadbearing* wall containing a lintel provided the lintel is tied to the adjacent wall section with,

(a) not less than 75 mm by 150 mm by 0.91 mm thick galvanized steel, or

(b) 19 mm by 89 mm by 300 mm wood splice nailed to each wall section with at least three 63 mm nails.

9.23.11.4. Joints in Top Plates

(1) Joints in the top plates of *loadbearing* walls shall be staggered not less than one stud spacing.

(2) The top plates in *loadbearing* walls shall be lapped or otherwise suitably tied at corners and intersecting walls in accordance with Sentence (4).

(3) Joints in single top plates used with *loadbearing* walls shall be tied in accordance with Sentence (4).

(4) Ties referred to in Sentences (2) and (3) shall be the equivalent of not less than 75 mm by 150 mm by 0.91 mm thick galvanized steel nailed to each wall with at least three 63 mm nails.

9.23.12. Framing Over Openings

9.23.12.1. Openings in Non-Loadbearing Walls

(1) Except as provided in Sentence (2), openings in non-*loadbearing* walls shall be framed with not less than 38 mm material the same width as the studs securely nailed to adjacent studs.

(2) Openings for doors in *non-loadbearing* walls required to be *fire separations* with a *fire-resistance rating* shall be framed with the equivalent of at least two 38 mm thick members that are the same width as the wall plates.

9.23.12.2. Openings in Loadbearing Walls

(1) Openings in *loadbearing* walls greater than the required stud spacing shall be framed with lintels designed to carry the superimposed loads to adjacent studs.

(2) Except as provided in Sentence 9.23.12.3.(2), where two or more members are used in lintels, they shall be fastened together with not less than 82 mm nails in a double row, with nails not more than 450 mm apart in each row.

(3) Lintel members may be separated by filler pieces.

9.23.12.3. Lintel Spans and Sizes

(1) Spans and sizes of wood lintels shall conform to the spans shown in Tables A-12 to A-16,

(a) for *buildings* of *residential occupancy*,

(b) where the wall studs exceed 38 mm by 64 mm in size,

(c) where the spans of supported joists do not exceed 4.9 m, and

(d) where the spans of trusses do not exceed 9.8 m.

(2) In *loadbearing* exterior and interior walls of 38 mm by 64 mm framing members, lintels shall consist of,

(a) solid 64 mm thick members on edge, or

(b) 38 mm thick and 19 mm thick members fastened together with a double row of nails not less than 63 mm long and spaced not more than 450 mm apart.

(3) Lintels referred to in Sentence (2),

(a) shall be not less than 50 mm greater in depth than those shown in Tables A-12 to A-16 for the maximum spans shown, and

(b) shall not exceed 2.24 m in length.

9.23.13. Roof and Ceiling Framing

9.23.13.1. Continuity of Rafters and Joists

(1) Roof rafters and joists and ceiling joists shall be continuous or shall be spliced over vertical supports that extend to suitable bearing.

9.23.13.2. Framing around Openings

(1) Roof and ceiling framing members shall be doubled on each side of openings greater than two rafter or joist spacings wide.

9.23.13.3. End Bearing Length

(1) The length of end bearing of joists and rafters shall be not less than 38 mm.

9.23.13.4. Location and Attachment of Rafters

(1) Rafters shall be located directly opposite each other and tied together at the peak, or may be offset by their own thickness if nailed to a ridge board not less than 17.5 mm thick.

(2) Except as permitted in Sentence (3), framing members shall be connected by gusset plates or nailing at the peak in conformance with Table 9.23.3.4.

(3) Where the roof framing on opposite sides of the peak is assembled separately, such as in the case of factory-built houses, the roof framing on opposite sides is permitted to be fastened together with galvanized-steel strips not less than 200 mm by 75 mm by 0.41 mm thick spaced not more than 1.2 m apart and nailed at each end to the framing by at least two 63 mm nails.

9.23.13.5. Shaping of Rafters

(1) Rafters shall be shaped at supports to provide even bearing surfaces and supported directly above the exterior walls.

9.23.13.6. Hip and Valley Rafters

(1) Hip and valley rafters shall be not less than 50 mm greater in depth than the common rafters and not less than 38 mm thick, actual dimension.

9.23.13.7. Intermediate Support for Rafters and Joists

(1) Ceiling joists and collar ties of not less than 38 mm by 89 mm lumber are permitted to be assumed to provide intermediate support to reduce the span for rafters and joists where the roof slope is 1 in 3 or greater.

(2) Collar ties referred to in Sentence (1) more than 2.4 m long shall be laterally supported near their centres by not less than 19 mm by 89 mm continuous members at right angles to the collar ties.

(3) Dwarf walls and struts may be used to provide intermediate support to reduce the span for rafters and joists.

(4) When struts are used to provide intermediate support, they shall be not less than 38 mm by 89 mm material extending from each rafter to a *loadbearing* wall at an angle of not less than 45° to the horizontal.

(5) When dwarf walls are used for rafter support, they shall be framed in the same manner as *loadbearing* walls and securely fastened top and bottom to the roof and ceiling framing to prevent overall movement.

(6) Solid blocking shall be installed between floor joists beneath dwarf walls referred to in Sentence (5) that enclose finished rooms.

9.23.13.8. Ridge Support

(1) Except as provided in Sentence (4), roof rafters and joists shall be supported at the ridge of the roof by,

(a) a *loadbearing* wall extending from the ridge to suitable bearing, or

(b) a ridge beam supported by not less than 89 mm length of bearing.

(2) Except as provided in Sentence (3), the ridge beam referred to in Sentence (1) shall conform to the sizes and spans shown in Table A-12, provided,

(a) the supported rafter or joist length does not exceed 4.9 m, and

(b) the roof does not support any concentrated loads.

(3) The ridge beam referred to in Sentence (1) need not comply with Sentence (2) where,

(a) the beam is of not less than 38 mm by 140 mm material, and

(b) the beam is supported at intervals not exceeding 1.2 m by not less than 38 mm by 89 mm members extending vertically from the ridge to suitable bearing.

(4) When the roof slope is 1 in 3 or more, ridge support need not be provided when the lower ends of the rafters are adequately tied to prevent outward movement.

(5) Ties required in Sentence (4) are permitted to consist of tie rods or ceiling joists forming a continuous tie for opposing rafters and nailed in accordance with Table 9.23.13.8.

(6) Ceiling joists referred to in Sentence (5) shall be fastened together with at least one more nail per joist splice than required for the rafter to joist connection shown in Table 9.23.13.8.

(7) Members referred to in Sentence (6) are permitted to be fastened together either directly or through a gusset plate.

Table 9.23.13.8.
Rafter-to-Joist Nailing (Unsupported Ridge)

Forming Part of Sentences 9.23.13.8.(5) and (6)

Item	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13	Col. 14
	Roof Slope	Rafter Spacing, mm	Minimum Number of Nails not less than 75 mm Long											
			Rafter Tied to every Joist						Rafter Tied to Joist every 1.2 m					
			Building Width up to 8.0 m			*Building* Width up to 9.8 m			*Building* Width up to 8.0 m			*Building* Width up to 9.8 m		
			Roof Snow Load, kPa			Roof Snow Load, kPa			Roof Snow Load, kPa			Roof Snow Load, kPa		
			1.0 or less	1.5	2.0 or more	1.0 or less	1.5	2.0 or more	1.0 or less	1.5	2.0 or more	1.0 or less	1.5	2.0 or more
1.	1 in 3	406	4	5	6	5	7	8	11	—	—	—	—	—
		610	6	8	9	8	—	—	11	—	—	—	—	—
2.	1 in 2.4	406	4	4	5	5	6	7	7	10	—	9	—	—
		610	5	7	8	7	9	11	7	10	—	—	—	—
3.	1 in 2	406	4	4	4	4	4	5	6	8	9	8	—	—
		610	4	5	6	5	7	8	6	8	9	8	—	—
4.	1 in 1.71	406	4	4	4	4	4	4	5	7	8	7	9	11
		610	4	4	5	5	6	7	5	7	8	7	9	11
5.	1 in 1.33	406	4	4	4	4	4	4	4	5	6	5	6	7
		610	4	4	4	4	4	5	4	5	6	5	6	7
6.	1 in 1	406	4	4	4	4	4	4	4	4	4	4	4	5
		610	4	4	4	4	4	4	4	4	4	4	4	5

9.23.13.9. Restraint of Joist Bottoms

(1) Roof joists supporting a finished ceiling, other than plywood, OSB or waferboard, shall be restrained from twisting along the bottom edges by means of furring, blocking, cross bridging or strapping conforming to Article 9.23.9.3.

9.23.13.10. Ceiling Joists Supporting Roof Load

(1) Except as provided in Sentence (2), ceiling joists supporting part of the roof load from the rafters shall be not less than 25 mm greater in depth than required for ceiling joists not supporting part of the roof load.

(2) When the roof slope is 1 in 4 or less, the ceiling joist sizes referred to in Sentence (1) shall be determined from the span tables for roof joists.

9.23.13.11. Wood Roof Trusses

(1) Roof trusses that are not designed in accordance with Part 4 shall,

(a) be capable of supporting a total ceiling load (*dead load* plus *live load*) of 0.35 kPa plus two and two-thirds times the specified live roof load for 24 h, and

(b) not exceed the deflections shown in Table 9.23.13.11. when loaded with the ceiling load plus one and one-third times the specified roof snow load for 1 h.

Table 9.23.13.11.
Maximum Roof Truss Deflections

Forming Part of Sentence 9.23.13.11.(1)

Item	Column 1 Truss Span	Column 2 Type of Ceiling	Column 3 Maximum Deflection
1.	4.3 m or less	Plaster or gypsum board	1/360 of the span
		Other than plaster or gypsum board	1/180 of the span
2.	Over 4.3 m	Plaster or gypsum board	1/360 of the span
		Other than plaster or gypsum board	1/240 of the span

(2) The joint connections used in trusses described in Sentence (1) shall be designed in conformance with the requirements in Subsection 4.3.1.

(3) Where the length of compression web members in roof trusses described in Sentence (1) exceeds 1.83 m, such web members shall be provided with continuous bracing to prevent buckling.

(4) Bracing required in Sentence (3) shall consist of not less than 19 mm by 89 mm lumber nailed at right angles to the web members near their centres with at least two 63 mm nails for each member.

(5) Where the ability of a truss design to satisfy the requirements of Sentence (1) is demonstrated by testing, it shall consist of a full scale load test carried out in conformance with CSA S307-M, “Load Test Procedure for Wood Trusses for Houses and Small Buildings”.

(6) Where the ability of a truss design to satisfy the requirements of Sentence (1) is demonstrated by analysis, it shall be carried out in accordance with good engineering practice such as described in TPIC, “Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses (Limit States Design)”.

9.23.14. Subflooring

9.23.14.1. Subflooring Required

(1) Subflooring shall be provided beneath finish flooring where the finish flooring does not have adequate strength to support the design loads.

9.23.14.2. Material Standards

(1) Except as provided in Sentence (2), wood-based panels for subfloors shall conform to,

(a) CSA O121, “Douglas Fir Plywood”,

(b) CSA O151, “Canadian Softwood Plywood”,

(c) CSA O153-M, “Poplar Plywood”,

(d) CSA O325, “Construction Sheathing”, or

(e) CSA O437.0, “OSB and Waferboard”.

(2) Particleboard subflooring may be used only where a *building* is constructed in a factory so that the subfloor will not be exposed to the weather.

(3) Subflooring described in Sentence (2) shall conform to grade D-2 or D-3 in ANSI A208.1, “Particleboard”.

(4) Subflooring described in Sentence (2) shall have its upper surface and all edges treated to restrict water absorption where the subfloor is used in bathrooms, kitchens, laundry rooms or other areas subject to periodic wetting.

9.23.14.3. Edge Support

(1) Where the edges of panel-type subflooring are required to be supported, such support shall consist of tongue-and-groove panel edges or not less than 38 mm by 38 mm blocking securely nailed between framing members.

9.23.14.4. Direction of Installation

(1) Plywood subflooring shall be installed with the surface grain at right angles to the joists and with joints parallel to floor joists staggered.

(2) OSB subflooring conforming to CSA O325, “Construction Sheathing”, or to O-1 and O-2 grades in CSA O437.0, “OSB and Waferboard”, and waferboard subflooring conforming to R-1 grade in CSA O437.0 shall be installed so that the direction of face orientation is at right angles to the joists and the joints parallel to the floor joists are staggered.

9.23.14.5. Subfloor Thickness or Rating

(1) Except as provided in Sentences (2) and (3), subfloors shall conform to Table 9.23.14.5.A. or 9.23.14.5.B.

Table 9.23.14.5.A.
Thickness of Subflooring

Forming Part of Sentences 9.23.14.5.(1) and 9.23.15.7.(1)

Item	Column 1 Maximum Spacing of Supports, mm	Column 2 Minimum Thickness, mm Plywood and OSB, O-2 Grade	Column 3 Minimum Thickness, mm OSB, O-1 Grade, and Waferboard, R-1 Grade	Column 4 Minimum Thickness, mm Particleboard	Column 5 Minimum Thickness, mm Lumber
1.	406	15.5	15.9	15.9	17.0
2.	508	15.5	15.9	19.0	19.0
3.	610	18.5	19.0	25.4	19.0

Table 9.23.14.5.B.
Rating for Subfloor when Applying CSA O325

Forming Part of Sentences 9.23.14.5.(1) and 9.23.15.7.(1)

Item	Column 1 Maximum Spacing of Supports, mm	Column 2 Panel Mark Subfloor	Column 3 Panel Mark Subfloor Used with Panel-Type Underlay
1.	406	1F16	2F16
2.	508	1F20	2F20
3.	610	1F24	2F24

(2) Where the finished flooring consists of not less than 19 mm matched wood strip flooring laid at right angles to joists, spaced not more than 610 mm o.c., subflooring shall be permitted to consist of not less than,

(a) 12.5 mm thick plywood,

(b) 12.5 mm thick OSB conforming to O-2 grade,

(c) 12.7 mm thick OSB conforming to O-1 grade,

(d) 12.7 mm thick waferboard conforming to R-1 grade, or

(e) OSB conforming to 2R32 / 2F16 grade.

(3) Except where the flooring consists of ceramic tiles applied with adhesive, where a separate panel-type underlay or concrete topping is applied to a subfloor on joists spaced not more than 406 mm o.c., the subfloor may consist of not less than,

(a) 12.5 mm thick plywood,

(b) 12.5 mm thick OSB conforming to O-2 grade,

(c) 12.7 mm thick OSB conforming to O-1 grade,

(d) 12.7 mm thick waferboard conforming to R-1 grade, or

(e) OSB conforming to 2R32 / 2F16 grade.

9.23.14.6. Annular Grooved Nails

(1) When resilient flooring is applied directly to an OSB, waferboard, particleboard or plywood subfloor, the subfloor shall be fastened to the supports with annular grooved nails.

9.23.14.7. Lumber Subflooring

(1) Lumber subflooring shall be laid at an angle of not less than 45° to the joists.

(2) Lumber subflooring shall be fully supported at the ends on solid bearing.

(3) Lumber for subflooring shall be of uniform thickness and not more than 184 mm wide.

9.23.15. Roof Sheathing

9.23.15.1. Required Roof Sheathing

(1) Except as provided in Section 9.26., continuous lumber or panel-type roof sheathing shall be installed to support the roofing.

9.23.15.2. Material Standards

(1) Wood-based panels used for roof sheathing shall conform to the requirements of,

(a) CSA O121, “Douglas Fir Plywood”,

(b) CSA O151, “Canadian Softwood Plywood”,

(c) CSA O153-M, “Poplar Plywood”,

(d) CSA O325, “Construction Sheathing”, or

(e) CSA O437.0, “OSB and Waferboard”.

9.23.15.3. Direction of Installation

(1) Plywood roof sheathing shall be installed with the surface grain at right angles to the roof framing.

(2) OSB roof sheathing conforming to CSA O325, “Construction Sheathing”, or to O-1 and O-2 grades as specified in CSA O437.0, “OSB and Waferboard”, shall be installed with the direction of face orientation at right angles to the roof framing members.

9.23.15.4. Joints in Panel-Type Sheathing

(1) Panel-type sheathing board shall be applied so that joints perpendicular to the roof ridge are staggered where,

(a) the sheathing is applied with the surface grain parallel to the roof ridge, and

(b) the thickness of the sheathing is such that the edges are required to be supported.

(2) A gap of not less than 2 mm shall be left between sheets of plywood, OSB or waferboard.

9.23.15.5. Lumber Roof Sheathing

(1) Lumber roof sheathing shall not be more than 286 mm wide and shall be applied so that all ends are supported with end joints staggered.

9.23.15.6. Edge Support

(1) Except as permitted in Sentence (2), where panel-type roof sheathing requires edge support, the support shall consist of,

(a) metal H clips, or

(b) not less than 38 mm by 38 mm blocking securely nailed between framing members.

(2) The supports referred to in Sentence (1) are not required when tongued-and-grooved edged panel-type sheathing board is used.

9.23.15.7. Thickness or Rating

(1) The thickness or rating of roof sheathing on a flat roof used as a walking deck shall conform to either Table 9.23.14.5.A. or Table 9.23.14.5.B. for subfloors.

(2) The thickness or rating of roof sheathing on a roof not used as a walking deck shall conform to either Table 9.23.15.7.A. or Table 9.23.15.7.B.

Table 9.23.15.7.A.
Thickness of Roof Sheathing

Forming Part of Sentence 9.23.15.7.(2)

Item	Column 1 Maximum Spacing of Supports, mm	Column 2 Minimum Thickness, mm Plywood and OSB, O-2 Grade Edges Supported	Column 3 Minimum Thickness, mm Plywood and OSB, O-2 Grade Edges Unsupported	Column 4 Minimum Thickness, mm OSB, O-1 Grade and Waferboard, R-1 Grade Edges Supported	Column 5 Minimum Thickness, mm OSB, O-1 Grade and Waferboard, R-1 Grade Edges Unsupported	Column 6 Minimum Thickness, mm Lumber

1.	305	7.5	7.5	9.5	9.5	17.0
2.	406	7.5	9.5	9.5	11.1	17.0
3.	610	9.5	12.5	11.1	12.7	19.0

Table 9.23.15.7.B.
Rating for Roof Sheathing When Applying CSA O325

Forming Part of Sentence 9.23.15.7.(2)

Item	Column 1 Maximum Spacing of Supports, mm	Column 2 Panel Mark - Edges Supported	Column 3 Panel Mark - Edges Unsupported
1.	406	2R16	1R16
2.	508	2R20	1R20
3.	610	2R24	1R24

(3) Asphalt-coated or asphalt-impregnated fibreboard not less than 11.1 mm thick conforming to CAN/ULC-S706, “Wood Fibre Thermal Insulation for Buildings”, is permitted to be used as a roof sheathing over supports spaced not more than 406 mm o.c., provided the roofing consists of,

(a) a continuous sheet of galvanized steel not less than 0.33 mm in thickness, or

(b) a continuous sheet of aluminum not less than 0.61 mm in thickness.

(4) All edges of sheathing described in Sentence (3) shall be supported by blocking or framing.

9.23.16. Wall Sheathing

9.23.16.1. Required Sheathing

(1) Exterior walls and gable ends shall be sheathed when the *exterior cladding* requires intermediate fastening between supports or if the *exterior cladding* requires solid backing.

9.23.16.2. Thickness, Rating and Material Standards

(1) Where wall sheathing is required for the purpose of complying with this Section, it shall conform to Table 9.23.16.2.A. or Table 9.23.16.2.B.

Table 9.23.16.2.A.
Wall Sheathing Thickness and Specifications

Forming Part of Sentence 9.23.16.2.(1)

Item	Column 1 Type of Sheathing	Column 2 Minimum Thickness, mm[(1)] With Supports 406 mm o.c.	Column 3 Minimum Thickness, mm[(1)] With Supports 610 mm o.c.	Column 4 Material Standards
1.	Fibreboard (insulating)	9.5	11.1	CAN/ULC-S706
2.	Gypsum Sheathing	9.5	12.7	CAN/CSA-A82.27-M ASTM C1177 / C1177M ASTM C1396 / C1396M

3.	Lumber	17.0	17.0	See Table 9.3.2.1.
4.	Mineral Fibre, Rigid Board, Type 2	25	25	CAN/ULC-S702
5.	OSB, O-2 Grade	6.0	7.5	CSA O437.0
6.	OSB, O-1 Grade, and Waferboard, R-1 Grade	6.35	7.9	CSA O437.0
7.	Phenolic, faced	25	25	CAN/CGSB-51.25-M
8.	Plywood (exterior type)	6	7.5	CSA O121 CSA O151 CSA O153-M
9.	Polystyrene, Types 1 and 2	38	38	CAN/ULC-S701
10.	Polystyrene, Types 3 and 4	25	25	CAN/ULC-S701
11.	Polyurethane and Polyisocycanurate Type 1, faced	38	38	CAN/ULC-S704
12.	Polyurethane and Polyisocycanurate Types 2 and 3, faced	25	25	CAN/ULC-S704

Notes to Table 9.23.16.2.A.:

(1) See also Sentences 9.27.5.1.(2) to (4).

Table 9.23.16.2.B.
Rating For Wall Sheathing When Applying CSA O325

Forming Part of Sentence 9.23.16.2.(1)

Item	Column 1 Maximum Spacing of Supports, mm	Column 2 Panel Mark
1.	406	W16
2.	508	W20
3.	610	W24

9.23.16.3. Attachment of Cladding to Sheathing

(1) Gypsum sheathing, rigid insulation and fibreboard shall not be used for the attachment of siding materials.

(2) Nails used in attaching the materials listed in Sentence (1) shall be not less than 3.2 mm diam with a minimum head diameter of 11 mm.

9.23.16.4. Lumber Sheathing

(1) Lumber wall sheathing shall be applied so that all ends are supported.

(2) Where lumber wall sheathing is required to provide bracing according to Article 9.23.10.2., it shall be applied with end joints staggered.

9.23.16.5. Joints in Panel-Type Sheathing

(1) A gap of not less than 2 mm shall be left between sheets of plywood, OSB, waferboard or fibreboard.

9.23.16.6. Mansard Style Roofs

(1) Where the bottom portions of mansard style roofs are vented, the vertical framing members behind the sloping portions shall be considered on the same basis as exterior wall studs and shall conform to the appropriate requirements in Articles 9.27.3.2. to 9.27.3.6.

Section 9.24. Sheet Steel Stud Wall Framing

9.24.1. General

9.24.1.1. Application

(1) This Section applies to sheet steel studs for use in non-*loadbearing* exterior and interior walls.

(2) Where *loadbearing* steel studs are used, they shall be designed in conformance with Part 4.

9.24.1.2. Material Standards

(1) Steel studs and runners shall conform to AISI S201, "North American Standard for Cold Formed Steel Framing – Product Data".

9.24.1.3. Metal Thickness

(1) Metal thickness specified in this Section shall be the minimum base steel thickness exclusive of coatings.

9.24.1.4. Screws

(1) Screws for the application of cladding, sheathing or interior finish materials to steel studs, runners and furring channels shall conform to,

(a) ASTM C954, "Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness", or

(b) ASTM C1002, "Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs".

9.24.1.5. Cladding, Sheathing and Interior Finish Required

(1) Cladding or sheathing, and interior finish shall be installed on steel stud framing and shall be fastened with screws,

(a) spaced at the appropriate spacing described in Section 9.29., and

(b) penetrating not less than 10 mm through the metal.

9.24.2. Size of Framing

9.24.2.1. Size and Spacing of Studs in Interior Walls

(1) Except as required in Articles 9.24.2.3. and 9.24.2.4., the size and spacing of steel studs for non-*loadbearing* interior walls shall conform to Table 9.24.2.1.

Table 9.24.2.1.
Steel Studs for Non-Loadbearing Interior Walls(1)

Forming Part of Sentence 9.24.2.1.(1)

Item	Column 1 Minimum Stud Size, mm	Column 2 Maximum Stud Spacing, mm	Column 3 Maximum Wall Height, m
1.	32 × 41	406	3.0
		610	2.7

2.	32 × 64	305	4.4
		406	4.0
		610	3.5
3.	32 × 89	305	5.2
		406	4.6
		610	3.9
4.	32 x 152	305	6.6
		406	5.8
		610	4.9

Notes to Table 9.24.2.1.:

(1) The values in the Table are based on a single layer of 12.7 mm gypsum panel sheathing installed on each side of the studs. Where one side is not accessible, gypsum panels on only one side will suffice. The values are also based on attaching gypsum panel sheathing using screws not smaller than No. 6 spaced at a maximum of 300 mm at edges and at intermediate supports.

9.24.2.2. Thickness of Studs

(1) Except as required in Article 9.24.2.4., steel studs in non-*loadbearing* interior walls shall have a metal thickness of not less than 0.46 mm.

9.24.2.3. Runners

(1) Runners for interior and exterior non-*loadbearing* walls shall have a thickness of not less than the thickness of the corresponding studs and shall have not less than 30 mm flanges.

9.24.2.4. Openings in Fire Separations

(1) Where openings for doors in non-*loadbearing fire separations* required to have a *fire-resistance rating* do not exceed 1.2 m in width,

(a) the width of steel studs shall be not less than 63 mm, and

(b) the steel thickness shall be not less than 0.46 mm.

(2) Where openings described in Sentence (1) exceed 1.2 m in width,

(a) the width of steel studs shall be not less than 91 mm, and

(b) the metal thickness shall be not less than 0.85 mm.

(3) The distance to the first stud beyond the jamb of any door opening in a *fire separation* required to have a *fire-resistance rating* shall not exceed 400 mm.

(4) Where the distance between the framing over the opening referred to in Sentence (3) and the top runner exceeds 400 mm in such walls, intermediate support shall be installed at intervals of not more than 400 mm above the opening.

9.24.2.5. Size and Spacing of Studs in Exterior Walls

(1) The size and spacing of non-*loadbearing* steel studs for exterior walls shall conform to Table 9.24.2.5.

Table 9.24.2.5.
Size and Spacing of Steel Studs for Non-Loadbearing Exterior Walls

Forming Part of Sentence 9.24.2.5.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5

	Minimum Stud Size, mm	Minimum Metal Thickness, mm	Maximum Stud Length, m		
			Spacing of Studs		
			305 mm (o.c.)	406 mm (o.c.)	610 mm (o.c.)
1.	30 × 91	0.53	3.0	2.4	—
2.	30 × 91	0.69	3.3	2.7	2.4
3.	30 × 91	0.85	3.6	3.0	2.7
4.	30 × 91	1.0	4.0	3.3	3.0

9.24.3. Installation

9.24.3.1. Installation of Runners

(1) Runners shall be provided at the tops and bottoms of walls.

(2) Runners required in Sentence (1) shall be securely attached to the *building* at approximately 50 mm from the ends, and at intervals of not more than 610 mm o.c. for interior walls and 305 mm o.c. for exterior walls.

(3) Fasteners used for attachment described in Sentence (2) shall consist of the equivalent of 63 mm nails or 25 mm screws.

(4) Studs at openings and that are not full wall height shall be supported by a runner at the ends of the studs, securely fastened to the full length studs at the sides of the opening.

9.24.3.2. Fire-Rated Walls

(1) Steel studs used in walls required to have a *fire-resistance rating* shall be installed so that there is not less than a 12 mm clearance between the top of the stud and the top of the runner to allow for expansion in the event of fire.

(2) Except as provided in Article 9.24.3.6., studs in walls referred to in Sentence (1) shall not be attached to the runners in a manner that will prevent such expansion.

(3) Framing above doors with steel door frames in non-*loadbearing fire separations* required to have a *fire-resistance rating* shall consist of two runners on the flat fastened back to back.

(4) The lower runner required in Sentence (3) shall be cut through the flanges and be bent at each end to extend upwards at least 150 mm and fastened to the adjacent studs.

9.24.3.3. Orientation of Studs

(1) Steel studs shall be installed with webs at right angles to the wall face and, except at openings, shall be continuous for the full wall height.

9.24.3.4. Support for Cladding Materials

(1) Corners and intersections of walls shall be constructed to provide support for the cladding materials.

9.24.3.5. Framing around Openings

(1) Studs shall be doubled on each side of every opening where such openings involve more than one stud space, and shall be tripled where the openings in exterior walls exceed 2.4 m in width.

(2) Studs described in Sentence (1) shall be fastened together by screws, crimping or welding to act as a single structural unit in resisting transverse loads.

9.24.3.6. Attachment of Studs to Runners

(1) Studs shall be attached to runners by screws, crimping or welding around wall openings, and elsewhere where necessary to keep the studs in alignment during construction.

(2) Where clearance for expansion is required in Article 9.24.3.2., attachment required in Sentence (1) shall be applied between studs and bottom runners only.

9.24.3.7. Openings for Fire Dampers

(1) Openings for *fire dampers* in non-*loadbearing fire separations* required to have a *fire-resistance rating* shall be framed with double studs on each side of the opening.

(2) The sill and header for openings described in Sentence (1) shall consist of a runner track with right angle bends made on each end so as to extend 300 mm above the header or below the sill and fastened to the studs.

(3) The openings described in Sentence (1) shall be lined with a layer of gypsum board at least 12.7 mm thick fastened to stud and runner webs.

Section 9.25. Heat Transfer, Air Leakage and Condensation Control

9.25.1. General

9.25.1.1. Scope and Application

(1) This Section applies to heat, air and water vapour transfer and measures to control condensation.

(2) All walls, ceilings and floors separating *conditioned space* from unconditioned space, the exterior air or the ground shall be,

(a) provided with,

(i) thermal insulation conforming to Subsection 9.25.2.,

(ii) an *air barrier system* conforming to Subsection 9.25.3., and

(iii) a *vapour barrier* conforming to Subsection 9.25.4., and

(b) constructed in such a way that the properties and relative position of all materials conform to Subsection 9.25.5.

(3) Insulation and sealing of heating and ventilating ducts shall conform to Sections 9.32. and 9.33.

9.25.2. Thermal Insulation

9.25.2.1. Required Insulation

(1) All walls, ceilings and floors separating heated space from unheated space, the exterior air or the exterior *soil* shall be provided with thermal insulation in conformance with Section 12.2. to prevent moisture condensation on their room side during the winter and to ensure comfortable conditions for the occupants.

9.25.2.2. Insulation Materials

(1) Except as required in Sentence (2), thermal insulation shall conform to the requirements of,

(a) CAN/CGSB-51.25-M, “Thermal Insulation, Phenolic, Faced”,

(b) CGSB 51-GP-27M, “Thermal Insulation, Polystyrene, Loose Fill”,

(c) CAN/ULC-S701, “Thermal Insulation, Polystyrene, Boards and Pipe Covering”,

(d) CAN/ULC-S702 “Mineral Fibre Thermal Insulation for Buildings”,

(e) CAN/ULC-S703, “Cellulose Fibre Insulation (CFI) for Buildings”,

(f) CAN/ULC-S704, “Thermal Insulation, Polyurethane and Polyisocyanurate, Boards, Faced”,

(g) CAN/ULC-S705.1, “Thermal Insulation – Spray Applied Rigid Polyurethane Foam, Medium Density – Material – Specification”, or

(h) CAN/ULC-S706, “Wood Fibre Thermal Insulation for Buildings”.

(2) The *flame-spread rating* requirements contained in the standards listed in Sentence (1) shall not apply.

(3) Insulation in contact with the ground shall be inert to the action of *soil* and water and be such that its insulative properties are not significantly reduced by moisture.

(4) Type 1 expanded polystyrene insulation as described in CAN/ULC-S701, “Thermal Insulation, Polystyrene, Boards and Pipe Covering”, shall not be used as roof insulation applied above the roofing membrane.

9.25.2.3. Installation of Thermal Insulation

(1) Insulation shall be installed so that there is a reasonably uniform insulating value over the entire face of the insulated area.

(2) Insulation shall be applied to the full width and length of the space between furring or framing.

(3) Except where the insulation provides the principal resistance to air leakage, thermal insulation shall be installed so that at least one face is in full and continuous contact with an element with low air permeance.

(4) Insulation on the interior of *foundation* walls enclosing a crawl space shall be applied so that there is not less than a 50 mm clearance above the crawl space floor if the insulation is of a type that may be damaged by water.

(5) Insulation around concrete slabs-on-ground shall be located so that heat from the *building* is not restricted from reaching the ground beneath the perimeter, where exterior walls are not supported by footings extending below frost level.

(6) Where insulation is exposed to the weather and subject to mechanical damage, it shall be protected with not less than,

(a) 6 mm asbestos-cement board,

(b) 6 mm preservative-treated plywood, or

(c) 12 mm cement parging on wire lath applied to the exposed face and edge.

(7) Except as permitted in Sentence (8), insulation and *vapour barrier* shall be protected from mechanical damage by a covering such as gypsum board, plywood, particleboard, OSB, waferboard or hardboard.

(8) In unfinished *basements*, the protection required in Sentence (7) need not be provided for mineral fibre insulation, provided it is covered with polyethylene *vapour barrier* of at least 0.15 mm in thickness.

(9) Insulation in factory-built *buildings* shall be installed so that it will not become dislodged during transportation.

9.25.2.4. Installation of Loose-Fill Insulation

(1) Except as provided in Sentences (2) to (6), loose-fill insulation shall be used on horizontal surfaces only.

(2) Where loose-fill insulation is installed in an unconfined sloped space, such as an attic space over a sloped ceiling, the supporting slope shall not be more than,

(a) 4.5 in 12 for mineral fibre or cellulose fibre insulation, and

(b) 2.5 in 12 for other types of insulation.

(3) Loose-fill insulation may be used in wood frame walls of existing *buildings*.

(4) Where blown-in insulation is installed in above-ground or below-ground wood frame walls of new *buildings*,

(a) the density of the installed insulation shall be sufficient to preclude settlement,

(b) the insulation shall be installed behind a membrane that will permit visual inspection prior to installation of the interior finish,

(c) the insulation shall be installed in a manner that will not interfere with the installation of the interior finish, and

(d) no water shall be added to the insulation, unless it can be shown that the added water will not adversely affect other materials in the assembly.

(5) Water repellent loose-fill insulation may be used between the outer and inner wythes of masonry *cavity walls*.

(6) Where soffit venting is used, measures shall be taken,

(a) to prevent loose-fill insulation from blocking the soffit vents and to maintain an open path for circulation of air from the vents into the *attic or roof space*, and

(b) to minimize air flow into the loose-fill insulation near the soffit vents to maintain the thermal performance of the material.

9.25.2.5. Installation of Spray-Applied Polyurethane

(1) Spray-applied polyurethane insulation shall be installed in accordance with CAN/ULC-S705.2, “Thermal Insulation – Spray-Applied Rigid Polyurethane Foam, Medium Density – Application”.

9.25.3. Air Barrier Systems

9.25.3.1. Required Barrier to Air Leakage

(1) Wall, ceiling and floor assemblies that separate *conditioned spaces* from unconditioned spaces or from the ground shall be constructed so as to include an *air barrier system* that will provide a continuous barrier to air leakage,

(a) from the interior of the *building* into wall, floor, *attic or roof spaces* sufficient to prevent excessive moisture condensation in such spaces during the heating season, and

(b) from the exterior inward sufficient to prevent moisture condensation on the room side during the heating season.

(2) The continuity of the *air barrier system* shall extend throughout the *basement*.

9.25.3.2. Air Barrier System Properties

(1) Sheet and panel type materials intended to provide the principal resistance to air leakage shall have an air leakage characteristic not greater than 0.02 $L/(s \cdot m^2)$ measured at an air pressure differential of 75 Pa.

(2) Where polyethylene sheet is used to provide the air-tightness in the *air barrier system*, it shall conform to CAN/CGSB-51.34-M, "Vapour Barrier, Polyethylene Sheet for Use in Building Construction".

9.25.3.3. Continuity of the Air Barrier System

(1) Where the *air barrier system* consists of an air-impermeable panel-type material, all joints shall be sealed to minimize air leakage.

(2) Where the *air barrier system* consists of flexible sheet material, all joints shall be,

(a) sealed with compatible material such as tape or flexible sealant, or

(b) except as required by Sentence (3), lapped not less than 100 mm and clamped, such as between framing members, furring or blocking and rigid panels.

(3) Where an *air barrier system* consisting of flexible sheet material is installed at locations where it is not supported by an interior finish, such as a behind a bath tub, shower enclosure or fireplace, the continuity of the air barrier shall be maintained by sealing its joints.

(4) Where an interior wall meets an exterior wall, ceiling, floor or roof required to be provided with an air barrier protection, the *air barrier system* shall extend across the intersection and shall be sealed in accordance with Sentences (1) and (2).

(5) Where an interior wall projects through a ceiling or extends to become an exterior wall, spaces in the wall shall be blocked to provide continuity across those spaces with the *air barrier system* in the abutting walls or ceiling by,

(a) sealing each air barrier to the blocking, or

(b) wrapping each air barrier around the transition and sealing in accordance with Sentences (1) and (2).

(6) Where an interior floor projects through an exterior wall or extends to become an exterior floor, continuity of the *air barrier system* shall be maintained from the abutting walls across the floor assembly.

(7) Where an interior floor projects through an exterior wall to become an exterior floor,

(a) the air barrier of the wall under the floor shall be continuous with or sealed to the subfloor or the air barrier on the underside of the floor,

(b) the air barrier of the wall above the floor shall be continuous with or sealed to the subfloor or the air barrier on the top of the floor, and

(c) the spaces between floor joists shall be blocked and sealed.

(8) Where a header wrap is used as an air barrier, it shall be sealed or lapped to the wall air barrier above and below in accordance with Sentences (1) and (2).

(9) Penetrations of the *air barrier system*, such as those created by the installation of electrical wiring, electrical boxes, piping or ductwork, shall be sealed with compatible material such as tape or caulking to maintain the integrity of the *air barrier system* over the entire surface.

(10) Penetrations of the *air barrier system*, such as those created by the installation of doors, windows and other fenestration shall be sealed to maintain the integrity of the *air barrier system* over the entire surface.

(11) Where an interior air barrier is penetrated by doors, windows and other fenestration, the air barrier shall be sealed to the door frame or window frame with,

(a) compatible tape, or

(b) spray foam insulation.

(12) Where an exterior air barrier is penetrated by doors, windows and other fenestration, the air barrier shall be sealed to the door frame or window frame with,

(a) compatible flexible flashing material,

(b) caulking, or

(c) spray foam insulation.

(13) An access hatch installed through an assembly constructed with an *air barrier system* shall be weatherstripped around the perimeter to minimize air leakage.

(14) Clearances between *chimneys* or *gas vents* and the surrounding construction that would permit air leakage from within the *building* into a wall or *attic or roof space* shall be sealed by *noncombustible* material to prevent such leakage and shall be sealed to the air barrier with tape or another compatible material, and to the vent with high temperature caulking in accordance with the manufacturer's installation instructions.

(15) Where the *foundation* wall and floor slab are used as an air barrier, they shall be caulked at all joints, intersections and penetrations.

(16) Sump pit covers shall be sealed to maintain continuity of the *air barrier system*.

9.25.3.4. Vapour Barriers Used as Air Barriers

(1) A *vapour barrier* used as an air barrier shall comply with the requirements of this Subsection.

9.25.4. Vapour Barriers

9.25.4.1. Required Barrier to Vapour Diffusion

(1) Thermally insulated wall, ceiling and floor assemblies shall be constructed with a *vapour barrier* sufficient to prevent condensation in the wall spaces, floor spaces or *attic or roof spaces*.

9.25.4.2. Vapour Barrier Materials

(1) *Vapour barriers* shall have a permeance not greater than 60 ng/(Pa·s·m^2), measured in accordance with ASTM E96 / E96M, "Water Vapor Transmission of Materials", using the desiccant method (dry cup).

(2) Where the intended use of the interior space will result in high moisture generation, the assembly shall be designed according to Part 5.

(3) Where polyethylene is installed to serve as the *vapour barrier*, it shall conform to CAN/CGSB-51.34-M, "Vapour Barrier, Polyethylene Sheet for Use in Building Construction".

(4) Membrane-type *vapour barriers* other than polyethylene shall conform to CAN/CGSB-51.33-M, "Vapour Barrier, Sheet, Excluding Polyethylene, for Use in Building Construction".

(5) Where a coating is applied to gypsum board to function as the *vapour barrier*, the permeance of the coating shall be determined in accordance with CAN/CGSB-1.501-M, "Method for Permeance of Coated Wallboard".

(6) Where insulation functions as the *vapour barrier*, it shall be sufficiently thick so as to meet the requirement of Sentence (1).

9.25.4.3. Installation of Vapour Barriers

(1) Products installed to function as the *vapour barrier* shall protect the warm side of wall, ceiling and floor assemblies.

(2) Where different products are used for the *vapour barrier* and the insulation, the *vapour barrier* shall be installed sufficiently close to the warm side of the insulation to prevent condensation at design conditions.

(3) Where the same product is used for the *vapour barrier* and the insulation, the product shall be installed sufficiently close to the warm side of the assembly to prevent condensation at design conditions.

9.25.5. Properties and Position of Materials in Building Envelope

9.25.5.1. General

(1) Sheet and panel-type materials incorporated into assemblies described in Article 9.25.1.1. shall conform to Article 9.25.5.2. where,

(a) the material has,

(i) an air leakage characteristic less than 0.1 L/(s·m^2) at 75 Pa, and

(ii) a water vapour permeance less than 60 ng/(Pa·s·m^2) when measured in accordance with ASTM E96,/E96M "Water Vapor Transmission of Materials", using the desiccant method (dry cup), and

(b) the intended use of the interior space where the materials are installed will not result in high moisture generation.

(2) Where the intended use of the interior space will result in high moisture generation, the assembly shall be designed according to Part 5.

(3) Wood-based sheathing materials not more than 12.5 mm thick and complying with Article 9.23.16.2. need not comply with Sentence (1).

9.25.5.2. Position of Low Permeance Materials

(1) Sheet and panel-type materials described in Article 9.25.5.1. shall be installed,

(a) on the warm face of the assembly,

(b) at a location where the ratio between the total thermal resistance of all materials outboard of its innermost impermeable surface and the total thermal resistance of all materials inboard of that surface is not less than that required by Table 9.25.5.2., or

(c) outboard of an air space that is vented to the outdoors.

Table 9.25.5.2.
Ratio of Outboard to Inboard Thermal Resistance

Forming Part of Sentence 9.25.5.2.(1)

Item	Column 1	Column 2
	Heating Degree Days of *Building* Location(1), Celsius Degree-days	Minimum Ratio, Total Thermal Resistance Outboard of Material's Inner Surface to Total Thermal Resistance Inboard of Material's Inner Surface
1.	Up to 4 999	0.20
2.	5 000 to 5 999	0.30
3.	6 000 to 6 999	0.35
4.	7 000 to 7 999	0.40

Notes to Table 9.25.5.2.:

(1) See MMAH Supplementary Standard SB-1, "Climatic and Seismic Data".

(2) For walls, the air space described in Clause (1)(c) shall be drained and ventilated and shall be not less than 10 mm deep behind the cladding, over the full height and width of the wall.

Section 9.26. Roofing

9.26.1. General

9.26.1.1. Purpose of Roofing

(1) Roofs shall be protected with roofing, including flashing, installed to shed rain effectively and prevent water from entering the roof as a result of ice damming.

(2) For the purpose of Sentence (1), roofs shall include platforms that effectively serve as roofs with respect to accumulation or drainage of precipitation.

9.26.1.2. Alternate Installation Methods

(1) Methods described in CAN3-A123.51-M, "Asphalt Shingle Application on Roof Slopes 1:3 and Steeper", or CAN3-A123.52-M, "Asphalt Shingle Application on Roof Slopes 1:6 to Less than 1:3", are permitted to be used for asphalt shingle applications not described in this Section.

9.26.1.3. Solar Collector Systems

(1) A solar collector system is permitted to be installed above roofing materials conforming to Sentence 9.26.2.1.(1).

9.26.2. Roofing Materials

9.26.2.1. Material Standards

(1) Roofing materials shall conform to,

(a) CAN/CGSB-37.4-M, "Fibrated, Cutback Asphalt, Lap Cement for Asphalt Roofing",

(b) CAN/CGSB-37.5-M, "Cutback Asphalt Plastic, Cement",

(c) CAN/CGSB-37.8-M, "Asphalt, Cutback, Filled, for Roof Coating",

(d) CGSB 37-GP-9Ma, “Primer, Asphalt, Unfilled, for Asphalt Roofing, Dampproofing and Waterproofing”,

(e) CGSB 37-GP-21M, “Tar, Cutback, Fibrated, for Roof Coating”,

(f) CAN/CGSB-37.50-M, “Hot Applied, Rubberized Asphalt for Roofing and Waterproofing”,

(g) CGSB 37-GP-52M, “Roofing and Waterproofing Membrane, Sheet Applied, Elastomeric”,

(h) CAN/CGSB-37.54, “Polyvinyl Chloride Roofing and Waterproofing Membrane”,

(i) CGSB 37-GP-56M, “Membrane, Modified, Bituminous, Prefabricated, and Reinforced for Roofing”,

(j) CGSB 41-GP-6M, “Sheets, Thermosetting Polyester Plastics, Glass Fiber Reinforced”,

(k) CAN/CGSB-51.32-M, “Sheathing, Membrane, Breather Type”,

(l) CSA A123.1 / A123.5, “Asphalt Shingles Made from Organic Felt and Surfaced with Mineral Granules / Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules”,

(m) CAN/CSA-A123.2, “Asphalt Coated Roofing Sheets”,

(n) CSA A123.3, “Asphalt Saturated Organic Roofing Felt”,

(o) CAN/CSA-A123.4, “Asphalt for Constructing Built-Up Roof Coverings and Waterproofing Systems”,

(p) CSA A123.17, “Asphalt Glass Felt Used in Roofing and Waterproofing”,

(q) CAN/CSA-A220.0-M, “Performance of Concrete Roof Tiles”,

(r) CSA O118.1, “Western Red Cedar Shakes and Shingles”, or

(s) CSA O118.2-M, “Eastern White Cedar Shingles”.

9.26.2.2. Nails

(1) Nails used for roofing shall be corrosion-resistant roofing or shingle nails conforming to,

(a) ASTM F1667, “Driven Fasteners: Nails, Spikes and Staples”, or

(b) CSA B111, “Wire Nails, Spikes and Staples”.

(2) Nails shall have sufficient length to penetrate through or 12 mm into roof sheathing.

(3) Nails used with asphalt roofing shall have a head diameter of not less than 9.5 mm and a shank thickness of not less than 2.95 mm.

(4) Nails used with wood shingles or shakes shall have a head diameter of not less than 4.8 mm and a shank thickness of not less than 2.0 mm and shall be stainless steel, aluminum or hot-dipped galvanized.

9.26.2.3. Staples

(1) Staples used to apply asphalt or wood shingles shall be corrosion-resistant and shall be driven with the crown parallel to the eaves.

(2) Staples used with asphalt shingles shall be not less than 19 mm long, 1.6 mm diam or thickness, with not less than a 25 mm crown, except that an 11 mm crown may be used as provided in Sentence 9.26.7.4.(2).

(3) Staples used with wood shingles shall be not less than 29 mm long, 1.6 mm diam or thickness, with not less than a 9.5 mm crown and shall be stainless steel or aluminum.

9.26.3. Slope of Roof Surfaces

9.26.3.1. Slope

(1) Except as provided in Sentences (2) and (3), the slopes on which roof coverings may be applied shall conform to Table 9.26.3.1.

Table 9.26.3.1.
Roofing Types and Slope Limits

Forming Part of Sentence 9.26.3.1.(1)

Item	Column 1	Column 2	Column 3
	Type of Roofing	Minimum Slope	Maximum Slope
1.	Asbestos-Cement Corrugated Sheets	1 in 4	no limit
2.	Asphalt Shingles		
	Low slope application	1 in 6	no limit
	Normal application	1 in 3	no limit
3.	Built-up Roofing		
	Asphalt base (without gravel)	1 in 25	1 in 2
	Asphalt base (gravelled)	1 in 50(1)	1 in 4
	Coal-tar base (gravelled)	1 in 50(1)	1 in 25
	Cold process	1 in 25	1 in 1.33
4.	Cedar Shakes	1 in 3	no limit
5.	Clay Tile	1 in 2	no limit
6.	Glass Fibre Reinforced Polyester Roofing Panels	1 in 4	no limit
7.	Modified Bituminous Membranes	1 in 50	1 in 4
8.	Profiled Metal Roofing	1 in 4(2)	no limit
9.	Roll Roofing		
	480 mm wide selvage asphalt roofing	1 in 6	no limit
	Cold application felt	1 in 50	1 in 1.33
	Smooth and mineral surfaced	1 in 4	no limit
10.	Sheet Metal Shingles	1 in 4(2)	no limit
11.	Slate Shingles	1 in 2	no limit
12	Wood Shingles	1 in 4	no limit

Notes to Table 9.26.3.1.:

(1) See Sentence 9.26.3.1.(2).

(2) See Sentence 9.26.3.1.(3).

(2) Asphalt and gravel or coal tar and gravel roofs may be constructed with lower slopes than required in Sentence (1) when effective drainage is provided by roof drains located at the lowest points on the roofs.

(3) Profiled metal roof cladding systems specifically designed for low-slope applications are permitted to be installed with lower slopes than required in Sentence (1), provided they are installed in conformance with the manufacturer’s written recommendations.

(4) Except where back-slope will not adversely affect adjacent supported or supporting elements due to water ingress, roofs and elements that effectively serve as roofs shall be constructed with sufficient slope away from,

(a) exterior walls, and

(b) *guards* that are connected to the roof, or to an element that effectively serves as a roof, by more than pickets or posts.

(5) The slope required in Sentence (4) shall be sufficient to maintain a positive slope,

(a) after expected shrinkage of the *building* frame, where these surfaces are supported by exterior walls and on exterior columns, and

(b) once design loading is taken into consideration, where these surfaces are cantilevered from exterior walls.

9.26.4. Flashing at Intersections

9.26.4.1. Required Flashing at Intersections

(1) Except where the omission will not adversely affect adjacent supported or supporting elements, flashing shall be installed at junctions between roofs and,

(a) walls that rise above the roof, and

(b) *guards* that are connected to the roof by other than pickets or posts.

(2) For the purpose of Sentence (1), roofs shall include platforms that effectively serve as roofs with respect to accumulation or drainage of precipitation.

9.26.4.2. Materials

(1) Sheet metal flashing shall consist of not less than,

(a) 1.73 mm thick sheet lead,

(b) 0.33 mm thick galvanized steel,

(c) 0.33 mm thick copper,

(d) 0.35 mm thick zinc, or

(e) 0.48 mm thick aluminum.

9.26.4.3. Valley Flashing

(1) Where sloping surfaces of shingled roofs intersect to form a valley, the valley shall be flashed.

(2) Valley flashing shall be installed over continuous sheathing.

(3) Closed valleys shall not be used with rigid shingles on slopes of less than 1 in 1.2.

(4) Closed valley flashing shall consist of sheet metal, self sealing composite membranes consisting of polyethylene and bituminous material or one layer of either Type S smooth surface roll roofing or Type M mineral surface roll roofing (mineral surface down) not less than 600 mm wide, and nails shall not penetrate the flashing within 75 mm of its edge or 124 mm of the bottom of the valley centreline.

(5) Open valleys shall be flashed with,

(a) at least one layer of sheet metal not less than 600 mm wide, or

(b) no fewer than two layers of roll roofing.

(6) The bottom layer of roofing required in Sentence (4) shall consist of not less than Type S smooth roll roofing or Type M mineral surface roll roofing (mineral surface down) not less than 457 mm wide, centred in the valley and fastened with nails spaced not more than 450 mm o.c. located 25 mm away from the edges.

(7) The top layer of roofing required in Sentence (4) shall consist of not less than Type M mineral surface roll roofing (mineral surface up), 914 mm wide, centred in the valley, applied over a 100 mm wide strip of cement along each edge of the bottom layer, and fastened with a sufficient number of nails to hold it in place until the shingles are applied.

9.26.4.4. Intersection of Shingle Roofs and Masonry

(1) The intersection of shingle roofs and masonry walls or *chimneys* shall be protected with flashing.

(2) Counter flashing required in Sentence (1) shall be embedded not less than 25 mm in the masonry and shall extend not less than 150 mm down the masonry and lap the lower flashing not less than 100 mm.

(3) Flashing along the slopes of a roof described in Sentence (1) shall be stepped so that there is not less than a 75 mm head lap in both the lower flashing and counter flashing.

(4) Where the roof described in Sentence (1) slopes upwards from the masonry, the flashing shall extend up the roof slope to a point equal in height to the flashing on the masonry, but not less than 1.5 times the shingle exposure.

9.26.4.5. Intersection of Shingle Roofs and Walls Other Than Masonry

(1) The intersection of shingle roofs and walls clad with other than masonry shall be protected with flashing.

(2) Flashing required in Sentence (1) shall be installed so that it extends up the wall not less than 75 mm behind the sheathing paper, and extends not less than 75 mm horizontally.

(3) Along the slope of the roof, the flashing required in Sentence (1) shall be stepped with not less than a 75 mm head lap.

9.26.4.6. Intersection of Built-Up Roofs and Masonry

(1) The intersection of built-up roofs with masonry walls or *chimneys* shall have a cant strip at the intersection and a roofing membrane shall be mopped over the cant strip and not less than 150 mm up the wall.

(2) Counter flashing installed over the intersection referred to in Sentence (1) shall be embedded not less than 25 mm in the masonry, and shall be of sufficient length to extend down not less than 150 mm, lapping the membrane on the masonry not less than 100 mm.

9.26.4.7. Intersection of Built-Up Roofs and Walls other than Masonry

(1) The intersection of built-up roofs with walls clad with other than masonry shall have a cant strip at the intersection.

(2) The roofing membrane shall be mopped over the cant strip referred to in Sentence (1).

(3) Flashing plies shall extend not less than 150 mm up the wall referred to in Sentence (1) behind the sheathing paper.

9.26.4.8. Chimney Saddles

(1) Except as otherwise permitted in Sentence (5), *chimney* saddles shall be installed where the upper side of a *chimney* on a sloping roof is more than 750 mm wide.

(2) *Chimney* saddles shall be covered with sheet metal or roofing material of weight and quality equivalent to the roofing.

(3) Saddles shall be flashed where they intersect the roof.

(4) The intersection of the saddle and the *chimney* shall be flashed and counterflashed as required in Article 9.26.4.4.

(5) A *chimney* saddle need not be installed if the intersection between the *chimney* and roof is protected by sheet metal flashing that extends up the *chimney* to a height equal to at least one-sixth the width of the *chimney*, but not less than 150 mm, and up the roof slope to a point equal in height to the flashing on the *chimney*, but not less than 1.5 times the shingle exposure.

(6) Flashing described in Sentence (5) at the *chimney* shall be counterflashed as required by Article 9.26.4.4.

9.26.5. Eave Protection for Shingles and Shakes

9.26.5.1. Required Eave Protection

(1) Except as provided in Sentence (2), eave protection shall be provided on shingle, shake or tile roofs, extending from the edge of the roof a minimum of 900 mm up the roof slope to a line not less than 300 mm inside the inner face of the exterior wall.

(2) Eave protection is not required,

(a) over unheated garages, carports and porches,

(b) where the roof overhang exceeds 900 mm measured along the roof slope from the edge of the roof to the inner face of the exterior wall,

(c) on roofs of asphalt shingles installed in accordance with Subsection 9.26.8.,

(d) on roofs with slopes of 1 in 1.5 or greater, or

(e) in regions with 3 500 or fewer degree-days.

9.26.5.2. Materials

(1) Eave protection shall be laid beneath the starter strip and shall consist of,

(a) No. 15 asphalt-saturated felt laid in two plies lapped 480 mm and cemented together with lap cement,

(b) Type M or S roll roofing laid with not less than 100 mm head and end laps cemented together with lap cement,

(c) glass fibre or polyester fibre coated base sheets, or

(d) self-sealing composite membranes consisting of modified bituminous coated material.

9.26.6. Underlay Beneath Shingles

9.26.6.1. Materials

(1) Except as required in Sentence (2), when underlay is used beneath shingles, it shall be,

(a) asphalt-saturated sheathing paper weighing not less than 0.195 kg/m^2, or

(b) No. 15 plain or perforated asphalt-saturated felt.

(2) Underlay used beneath wood shingles shall be breather type.

9.26.6.2. Installation

(1) When used with shingles, underlay shall be installed parallel to the eaves with head and end lap of not less than 50 mm.

(2) The top edge of each strip referred to in Sentence (1) shall be fastened with sufficient roofing nails to hold it in place until the shingles are applied.

(3) The underlay referred to in Sentence (1) shall overlap the eave protection by not less than 100 mm.

9.26.7. Asphalt Shingles on Slopes of 1 in 3 or Greater

9.26.7.1. Coverage

(1) Coverage shall be not less than two thicknesses of shingle over the entire roof, disregarding cutouts.

9.26.7.2. Starter Strip

(1) A starter strip shall be installed along the lower edge of the roof so that it extends approximately 12 mm beyond the eaves and rake of the roof and fastened along the bottom edge with nails spaced not more than 300 mm o.c.

(2) Starter strips shall be,

(a) at least Type M mineral-surfaced roll roofing not less than 300 mm wide,

(b) shingles of the same weight and quality as those used as a roof covering with tabs facing up the roof slope, or

(c) pre-manufactured starter strips installed with sealant at the eaves.

(3) Starter strips need not be provided where eave protection of not less than Type M mineral-surfaced roll roofing is provided or self-sealing composite membranes consisting of polyethylene and bituminous material is provided.

9.26.7.3. Head Lap

(1) Shingles shall have a head lap of not less than 50 mm.

9.26.7.4. Fasteners

(1) Except as provided in Sentence (2), shingles shall be fastened with at least four nails or staples for 1 000 mm wide shingles so that no nails or staples are exposed.

(2) Where staples with an 11 mm crown are used, shingles shall be fastened with at least six staples.

(3) Fasteners may be reduced for narrower shingles in proportion to the width of the shingle or when shingles incorporating interlocking devices are used.

(4) Fasteners referred to in Sentences (1) and (2) shall be located 25 mm to 40 mm from each end of each strip shingle with other fasteners equally spaced between them.

(5) Fasteners referred to in Sentences (1) and (2) shall be located not less than 12 mm above the tops of the cutouts.

9.26.7.5. Securing of Tabs

(1) Shingle tabs shall be secured by a spot of plastic cement not exceeding 25 mm diam under the centre of each tab or by interlocking devices or self-sealing strips.

9.26.7.6. Hips and Ridges

(1) Shingles on hips and ridges shall be applied so they extend not less than 100 mm on either side of the hip or ridge, and shall be lapped not less than 150 mm.

(2) Shingles referred to in Sentence (1) shall be fastened with nails or staples on each side located not more than 25 mm from the edge and 25 mm above the butt of the overlying shingle.

9.26.7.7. Eave Protection

(1) Eave protection shall conform to Subsection 9.26.5.

9.26.7.8. Flashing

(1) Flashing shall conform to Subsection 9.26.4.

9.26.8. Asphalt Shingles on Slopes of Less Than 1 in 3

9.26.8.1. Coverage

(1) Except for the first two courses, coverage shall be not less than three thicknesses of shingle over the entire roof, disregarding cutouts.

9.26.8.2. Starter Strip

(1) A starter strip shall be installed as in Article 9.26.7.2.

(2) Starter strips required in Sentence (1) shall be laid in a continuous band of cement not less than 200 mm wide.

9.26.8.3. Securing of Tabs

(1) Shingle tabs shall be secured with cold application cement applied at the rate of not less than 0.5 L/m² of cemented area, or hot application asphalt applied at the rate of 1 kg/m² of cemented area.

9.26.8.4. Securing of Shingle Courses

(1) The first course of shingles shall be secured by a continuous band of cement along the eaves applied so that the width of the band equals the shingle exposure plus 100 mm.

(2) The succeeding courses of shingles shall be secured by a continuous band of cement applied so that the width of the band equals the shingle exposure plus 50 mm.

(3) The band required in Sentence (2) shall be located not more than 50 mm above the butt of the overlying course of shingles.

9.26.8.5. Hips and Ridges

(1) Shingles on hips and ridges shall be not less than 300 mm wide applied to provide triple coverage.

(2) Shingles referred to in Sentence (1) shall be cemented to the roof shingles and to each other with a coat of cement and fastened with nails or staples located 40 mm above the butt of the overlying shingle and 50 mm from each edge.

9.26.8.6. Flashing

(1) Flashing shall conform to Subsection 9.26.4.

9.26.8.7. Fastening

(1) Shingles shall be fastened in accordance with Article 9.26.7.4.

9.26.9. Wood Roof Shingles

9.26.9.1. Decking

(1) Decking for wood shingled roofs may be continuous or spaced.

9.26.9.2. Grade

(1) Western cedar shingles shall be not less than No. 2 grade.

(2) Eastern white cedar shingles shall be not less than B (clear) grade.

9.26.9.3. Size

(1) Wood shingles shall be not less than 400 mm long and not less than 75 mm nor more than 350 mm wide.

9.26.9.4. Spacing and Joints

(1) Shingles shall be spaced approximately 6 mm apart and offset at the joints in adjacent courses not less than 40 mm so that joints in alternate courses are staggered.

9.26.9.5. Fastening

(1) Shingles shall be fastened with two nails or staples located approximately 20 mm from the sides of the shingle and 40 mm above the exposure line.

9.26.9.6. Exposure

(1) The exposure of wood roof shingles shall conform to Table 9.26.9.6.

Table 9.26.9.6.
Exposure of Wood Shingles

Forming Part of Sentence 9.26.9.6.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
	Roof Slope	Maximum Exposure, mm					
		No. 1 or A Grade Length of Shingle, mm			No. 2 or B Grade Length of Shingle, mm		
		400	450	600	400	450	600
1.	<1 in 3	100	115	165	90	100	140
2.	≥1 in 3	125	140	190	100	115	165

9.26.9.7. Flashing

(1) Flashing shall conform to Subsection 9.26.4.

9.26.9.8. Eave Protection

(1) Eave protection shall conform to Subsection 9.26.5.

9.26.10. Cedar Roof Shakes

9.26.10.1. Size and Thickness

(1) Shakes shall be not less than 450 mm long and not less than 100 mm nor more than 350 mm wide with a butt thickness of not more than 32 mm and not less than 9 mm.

9.26.10.2. Underlay

(1) Where eave protection is not provided, an underlay conforming to the requirements in Article 9.26.6.1. for wood shingles shall be laid as a strip not less than 900 mm wide along the eaves.

(2) A strip of material similar to that described in Sentence (1) not less than 450 mm wide shall be interlayed between each course of shakes with the bottom edge of the strip positioned above the butt line at a distance equal to double the exposure of the shakes.

(3) Interlayed strips in Sentence (2) shall be lapped at least 150 mm at hips and ridges in a manner that will prevent water from reaching the roof sheathing.

9.26.10.3. Spacing and Joints

(1) Shakes shall be spaced 6 mm to 9 mm apart and the joints in one course shall be separated not less than 40 mm from joints in adjacent courses.

9.26.10.4. Fastening

(1) Shakes shall be fastened with nails located approximately 20 mm from the sides of the shakes and 40 mm above the exposure line.

9.26.10.5. Exposure

(1) The exposure of wood shakes shall not exceed,

(a) 190 mm for shakes not less than 450 mm long, and

(b) 240 mm for shakes not less than 600 mm long.

9.26.10.6. Flashing

(1) Flashing shall conform to Subsection 9.26.4.

9.26.10.7. Eave Protection

(1) Eave protection shall conform to Subsection 9.26.5.

9.26.10.8. Grade

(1) Shakes shall be not less than No. 1 or Handsplit grade.

9.26.11. Built-Up Roofs

9.26.11.1. Quantity of Materials

(1) The quantities of bituminous materials used on built-up roofs shall conform to Table 9.26.11.1.

Table 9.26.11.1.
Quantities of Bitumen for Built-Up Roofs

Forming Part of Sentence 9.26.11.1.(1)

Item	Column 1	Column 2	Column 3
	Type of Roof	Amount of Bitumen per Square Metre of Roof Surface	
		Mopping Coats Between Layers	Flood Coat
1.	Asphalt and aggregate	1 kg	3 kg
2.	Coal-tar and aggregate	1.2 kg	3.6 kg
3.	Cold process roofing	0.75 L cold process cement	2 L cold process top coating

9.26.11.2. Coal-Tar and Asphalt Products

(1) Coal-tar products and asphalt products shall not be used together in built-up roof construction.

9.26.11.3. Roof Felts

(1) Bitumen roofing felts shall be not less than No.15 felt.

9.26.11.4. Aggregate Surfacing

(1) Aggregate used for surfacing built-up roofs shall be clean, dry and durable and shall consist of particles of gravel, crushed stone or air-cooled blast furnace slag having a size of from 6 mm to 15 mm.

(2) The minimum amount of aggregate surfacing per square metre of roof surface shall be 15 kg gravel or crushed stone or 10 kg crushed slag.

9.26.11.5. Flashing

(1) Flashing shall conform to Subsection 9.26.4.

9.26.11.6. Number of Layers

(1) Built-up roofing shall consist of at least three mopped-down layers of roofing felt flood coated with bitumen.

9.26.11.7. Installation of Layers

(1) In hot process applications, each layer of bitumen-saturated felt shall be laid while the bitumen is hot, with each layer overlapping the previous one.

(2) The full width under each lap referred to in Sentence (1) shall be coated with bitumen so that in no place does felt touch felt.

(3) Felt shall be laid free of wrinkles and shall be rolled directly into the hot bitumen and broomed forward and outward from the centre to ensure complete adhesion.

9.26.11.8. Roofing over Wood-Based Sheathing

(1) Except as permitted in Sentence (2), built-up roofing applied over wood, plywood, OSB or waferboard roof sheathing shall be laid over an additional base layer of felt laid dry over the entire roof deck with at least a 50 mm headlap and a 50 mm sidelap between each sheet.

(2) Where plywood, OSB or waferboard roof sheathing is used, the dry layer of felt required in Sentence (1) may be omitted when the joints are taped and the sheathing is primed with asphalt.

9.26.11.9. Attachment to Decking

(1) Roofing shall be securely attached to the decking or where insulation is applied above the deck, the insulation shall be securely attached to the deck before the first layer of felt is fastened to the insulation.

9.26.11.10. Cant Strips

(1) Except as permitted in Sentence (4), a cant strip shall be provided at the edges of roofs.

(2) No fewer than two plies of the roofing membrane shall be carried over the top of the cant strip.

(3) Flashing shall extend over the top of the cant strip and be shaped to form a drip.

(4) The cant strip required in Sentence (1) may be omitted where a gravel stop is provided at the edge of roofs.

(5) The roofing membranes shall be carried over the edge of the roof before the gravel stop referred to in Sentence (4) is fastened and two plies of roofing membrane mopped to the top surface of the gravel stop before the flood coat is applied.

(6) The gravel stop referred to in Sentence (4) shall extend over the edge of the roof to form a drip or shall be flashed so that the flashing extends over the edge to form a drip.

9.26.12. Selvage Roofing

9.26.12.1. Double Coverage

(1) Wide selvage asphalt roofing shall provide double coverage over the entire roof surface.

9.26.12.2. Joints

(1) Plies of selvage roofing shall be cemented together to ensure a water-tight joint.

9.26.13. Sheet Metal Roofing

9.26.13.1. Thickness

(1) Sheet metal roofing shall be not less than,

(a) 0.33 mm thick galvanized steel,

(b) 0.46 mm thick copper,

(c) 0.46 mm thick zinc, or

(d) 0.48 mm thick aluminum.

9.26.13.2. Support

(1) Where sheet metal roofing is not supported by roof decking but spans between spaced supports, the panels shall be designed to support the specified *live loads* for roofs.

9.26.14. Glass Reinforced Polyester Roofing

9.26.14.1. Support

(1) Where glass reinforced polyester roofing panels are not supported by roof decking but span between spaced supports, the panels shall be designed to support the specified roof loads.

9.26.15. Hot Applied Rubberized Asphalt Roofing

9.26.15.1. Installation

(1) Hot applied rubberized asphalt roofing shall be installed in accordance with CAN/CGSB-37.51-M, “Application for Hot Applied Rubberized Asphalt for Roofing and Waterproofing”.

9.26.16. Polyvinyl Chloride Sheet Roofing

9.26.16.1. Installation

(1) Polyvinyl chloride sheet applied roofing membrane shall be installed in accordance with CGSB 37-GP-55M, “Application of Sheet Applied Flexible Polyvinyl Chloride Roofing Membrane”.

9.26.17. Concrete Roof Tiles

9.26.17.1. Installation

(1) Concrete roof tiles shall be installed according to CAN/CSA-A220.1-M, “Installation of Concrete Roof Tiles”.

9.26.18. Roof Drains and Downspouts

9.26.18.1. Roof Drains

(1) When roof drains are provided they shall conform to Part 7.

9.26.18.2. Downspouts

(1) Where downspouts are provided and are not connected to a sewer, extensions shall be provided to carry rainwater away from the *building* in a manner that will prevent *soil* erosion.

Section 9.27. Cladding

9.27.1. Application

9.27.1.1. General

(1) Where lumber, wood shingles, shakes, fibre-cement shingles, planks and sheets, plywood, OSB, waferboard, hardboard, vinyl, aluminum and steel, including trim and soffits, are installed as cladding on wood frame walls exposed to precipitation, the cladding assembly shall comply with,

(a) Subsections 9.27.2. to 9.27.12., or

(b) Part 5.

(2) Where stucco is installed as cladding on wood frame or masonry walls exposed to precipitation, the cladding assembly shall comply with,

(a) Subsections 9.27.2. to 9.27.4., and Section 9.28., or

(b) Part 5.

(3) Where masonry serves as cladding on wood frame or masonry walls exposed to precipitation, the cladding assembly shall comply with,

(a) Subsections 9.27.2. to 9.27.4., and Section 9.20., or

(b) Part 5.

(4) Where asphalt shingles are installed as cladding on wood frame walls exposed to precipitation, the cladding assembly shall comply with,

(a) Subsections 9.26.7. and 9.27.2. to 9.27.4., or

(b) Part 5.

(5) Where cladding materials other than those described in Sentences (1) to (4) are installed, or where these are installed on substrates other than those identified in Sentences (1) to (4), the materials and installation shall comply with Part 5.

Note: On January 1, 2015, Sentence (5) is revoked and the following substituted: (See: O. Reg. 361/13, ss. 70, 140 (2))

(5) Where an exterior insulation finish system is installed as cladding on wood-frame, masonry, cold-formed steel stud or cast-in-place concrete walls exposed to precipitation, the cladding assembly shall comply with,

(a) Subsections 9.25.5., 9.27.2. to 9.27.4. and 9.27.13., or

(b) Part 5.

(6) Where cladding materials or systems other than those described in Sentences (1) to (5) are installed, or where these are installed on substrates other than those identified in Sentences (1) to (5), the cladding materials or systems and their installation shall comply with Part 5.

9.27.2. Required Protection from Precipitation

9.27.2.1. Minimizing and Preventing Ingress and Damage

(1) Except where exterior walls are protected from precipitation or where it can be shown that ingress will not adversely affect occupant health or safety, exterior walls shall be designed and constructed to,

(a) minimize the ingress of precipitation into the assembly, and

(b) prevent ingress into interior space.

(2) Except where exterior walls are protected from specific mechanisms of deterioration, such as mechanical impact and ultraviolet radiation, exterior walls shall be designed and constructed to

minimize the likelihood of their required performance being reduced to an unacceptable level as a result of those mechanisms.

9.27.2.2. Minimum Protection from Precipitation Ingress

(1) Exterior walls exposed to precipitation shall be protected against ingress of precipitation with an exterior cladding assembly consisting of a first plane of protection and a second plane of protection where the wall encloses spaces of *residential occupancy* or spaces that directly serve spaces of *residential occupancy*.

9.27.2.3. First and Second Planes of Protection

(1) Where walls required to provide protection from precipitation comprise assemblies with first and second planes of protection,

(a) the first plane of protection shall,

(i) consist of cladding, with appropriate trim, accessory pieces and fasteners, and

(ii) be designed and constructed to minimize the passage of rain and snow into the wall by minimizing holes and managing precipitation ingress caused by kinetic energy of raindrops, surface tension, capillarity, gravity, and air pressure differences,

(b) the second plane of protection shall be designed and constructed to,

(i) intercept all precipitation that gets past the first plane of protection, and

(ii) effectively dissipate any precipitation to the exterior, and

(c) the protection provided by the first and second planes of protection shall be maintained at,

(i) wall penetrations created by the installation of components and services such as windows, doors, ventilation ducts, piping, wiring and electrical outlets, and

(ii) the interface with other wall assemblies.

9.27.2.4. Protection of Cladding from Moisture

(1) A clearance of not less than 200 mm shall be provided between finished ground and cladding that is adversely affected by moisture, such as untreated wood, plywood, OSB, waferboard and hardboard.

(2) A clearance of not less than 50 mm shall be provided between a roof surface and cladding that is adversely affected by moisture, such as untreated wood, plywood, OSB, waferboard and hardboard.

9.27.3. Second Plane of Protection

9.27.3.1. Elements of the Second Plane of Protection

(1) The second plane of protection shall consist of a drainage plane with appropriate inner boundary and flashing to dissipate rainwater to the exterior.

(2) The inner boundary of the drainage plane shall comply with,

(a) Articles 9.27.3.2. to 9.27.3.6., or

(b) Subsection 9.27.13.

(3) The protection provided by the second plane of protection shall be maintained,

(a) at wall penetrations created by the installation of components and services such as windows, doors, ventilation ducts, piping, wiring and electrical outlets, and

(b) at the interface with other wall assemblies.

(4) Flashing material and installation shall comply with Articles 9.27.3.7. and 9.27.3.8.

9.27.3.2. Sheathing Membrane Material Standard

(1) Sheathing membranes shall conform to the performance requirements of CAN/CGSB-51.32-M, "Sheathing, Membrane, Breather Type".

9.27.3.3. Required Sheathing Membrane and Installation

(1) Except as provided in Articles 9.27.3.4. to 9.27.3.6., at least one layer of sheathing membrane shall be applied beneath siding, stucco or masonry veneer.

(2) Sheathing membrane required in Sentence (1) shall be applied so that joints are lapped not less than 100 mm.

(3) Where sheathing membrane required in Sentence (1) is applied horizontally, the upper sheets shall overlap the lower sheets.

9.27.3.4. Insulating Sheathing in Lieu of Sheathing Membrane

(1) Where non-wood-based rigid exterior insulating sheathing, or exterior insulating sheathing with an integral sheathing membrane is installed, a separate sheathing membrane is not required.

(2) Where insulating sheathing is installed as provided in Sentence (1),

(a) sheathing panels subject to moisture deterioration shall be sealed at all joints, and

(b) the joints of sheathing panels not subject to moisture deterioration shall be,

(i) sealed at all joints, or

(ii) lapped or tongue and groove, and detailed to ensure drainage of water to the exterior.

9.27.3.5. Sheathing Membranes in Lieu of Sheathing

(1) Except as provided in Article 9.27.3.6., where no sheathing is used, at least two layers of sheathing membrane shall be applied beneath the cladding.

(2) All joints in the sheathing membrane required in Sentence (1) shall occur over framing, and the membrane shall be fastened to the framing with roofing nails or staples spaced not more than 150 mm along the edges of the outer layer of sheathing paper.

(3) Wall sheathing is permitted to be used in lieu of one layer of sheathing membrane required in Sentence (1), and the thickness need not conform to Table 9.23.16.2.A.

9.27.3.6. Face Sealed Cladding

(1) Sheathing membrane is permitted to be omitted beneath cladding when the joints in the cladding are formed to effectively prevent the passage of wind and rain in conformance with Sentence (2) or (3), as applicable.

(2) Cladding consisting of sheets of plywood, hardboard, OSB, waferboard or fibre cement is considered to meet the requirements of Sentence (1), provided the cladding is applied so that,

(a) all edges are directly supported by framing,

(b) the vertical joints between adjacent sheets are sealed and,

(i) covered with battens,

(ii) shiplapped, or

(iii) otherwise matched to provide weathertight joints, and

(c) the horizontal joints between adjacent sheets are sealed and,

(i) shiplapped, or

(ii) otherwise matched to provide weathertight joints.

(3) Metal siding consisting of sheets of metal is considered to meet the requirements of Sentence (1) where the joints between sheets are of the locked-seam type.

9.27.3.7. Flashing Materials

(1) Flashing shall consist of not less than,

(a) 1.73 mm thick sheet lead,

(b) 0.33 mm thick galvanized steel,

(c) 0.46 mm thick copper,

(d) 0.46 mm thick zinc,

(e) 0.48 mm thick aluminum, or

(f) 1.02 mm thick vinyl.

9.27.3.8. Flashing Installation

(1) Except as provided in Sentence (2), flashing shall be installed at,

(a) every horizontal junction between claddings elements,

(b) every horizontal offset in the cladding, and

(c) every horizontal line where the cladding substrates change and where,

(i) the substrates differ sufficiently for stresses to be concentrated along that line, or

(ii) the installation of the cladding on the lower substrate may compromise the drainage of moisture from behind the cladding above.

(2) Flashing need not be installed as described in Sentence (1),

(a) where the upper cladding elements overlap the lower cladding elements by not less than 25 mm,

(b) where,

(i) the cladding above and below the joint is installed outboard of a drained and vented air space, and

(ii) the horizontal detail is constructed so as to minimize ingress of precipitation into the air space, or

(c) at horizontal construction joints in stucco, where,

(i) the joint is finished with an expansion-contraction strip, and

(ii) the cladding is installed outboard of a drained and vented air space.

(3) Flashing shall be installed over exterior wall openings where the vertical distance from the bottom of the eave to the top of the trim is more than one-quarter of the horizontal overhang of the eave.

(4) Flashing described in Sentences (1) and (3) shall,

(a) extend not less that 50 mm upward inboard of the sheathing membrane or sheathing installed in lieu of the sheathing membrane,

(b) have a slope of not less than 6% toward the exterior after the expected shrinkage of the *building* frame,

(c) terminate at each end with an end-dam,

(i) with a height in millimetres not less than 25 mm or 1/10 of the value of the 1 in 5 driving rain wind pressure in Pa, and

(ii) at the height defined in Subclause (i), extending to the face of the adjacent cladding,

(d) lap not less than 10 mm vertically over the *building* element below, and

(e) terminate in a drip extending not less than 5 mm outward from the outer face of the *building* element below.

(5) Where the sills of windows and doors installed in exterior walls are not self-flashing, flashing shall be installed between the underside of the window or door and the wall construction below.

9.27.4. Sealants

9.27.4.1. Required Sealants

(1) Sealant shall be provided where required to prevent the entry of water into the structure.

(2) Sealant shall be provided between masonry, siding or stucco and the adjacent door and window frames or trim, including sills unless such locations are completely protected from the entry of rain.

(3) Sealant shall be provided at vertical joints between different cladding materials unless the joint is suitably lapped or flashed to prevent the entry of rain.

9.27.4.2. Materials

(1) Sealants shall be,

(a) non-hardening types suitable for exterior use,

(b) selected for their ability to resist the effects of weathering, and

(c) compatible with, and adhere to, the substrate to which they are applied.

(2) Sealants shall conform to,

(a) ASTM C834, “Latex Sealants”,

(b) ASTM C920, “Elastomeric Joint Sealants”,

(c) ASTM C1184, “Structural Silicone Sealants”, or

(d) ASTM C1311, “Solvent Release Sealants”.

(3) Backer rod shall conform to ASTM C1330, “Cylindrical Sealant Backing for Use with Cold Liquid-Applied Sealants”.

9.27.5. Attachment of Cladding

9.27.5.1. Attachment

(1) Except as permitted in Sentences (2) to (7), cladding shall be fastened to the framing members or furring members, or to blocking between the framing members.

(2) Vertical lumber and stucco lath or reinforcing are permitted to be attached to sheathing only where the sheathing consists of not less than,

(a) 14.3 mm lumber,

(b) 12.5 mm plywood, or

(c) 12.5 mm OSB or waferboard.

(3) Vertically applied metal siding and wood shingles and shakes are permitted to be attached to the sheathing only where the sheathing consists of not less than,

(a) 14.3 mm lumber,

(b) 7.5 mm plywood, or

(c) 7.5 mm OSB or waferboard.

(4) Asbestos-cement shingles are permitted to be attached to the sheathing only when the sheathing consists of not less than,

(a) 14.3 mm lumber,

(b) 9.5 mm plywood, or

(c) 9.5 mm OSB or waferboard.

(5) Where wood shingles or shakes are applied to sheathing that is not suitable for attaching the shingles or shakes, the shingles or shakes may be attached to a wood lath not less than 38 mm by 9.5 mm thick securely nailed to the framing and applied as described in Article 9.27.7.5.

(6) Where asbestos-cement shingles are applied to sheathing that is not suitable for attaching the shingles, the shingles may be fastened to a wood lath not less than 89 mm by 9.5 mm thick securely nailed to the framing.

(7) Lath referred to in Sentence (6) shall be applied so that it overlaps the preceding shingle course by not less than 20 mm.

9.27.5.2. Blocking

(1) Blocking for the attachment of cladding shall be not less than 38 mm by 38 mm lumber securely nailed to the framing and spaced not more than 610 mm o.c.

9.27.5.3. Furring

(1) Except as permitted in Sentences 9.27.5.1.(5) and (6), furring for the attachment of cladding shall be not less than 19 mm by 38 mm lumber when applied over sheathing.

(2) When applied without sheathing, furring referred to in Sentence (1) shall be not less than,

(a) 19 mm by 64 mm lumber on supports spaced not more than 406 mm o.c., or

(b) 19 mm by 89 mm on supports spaced not more than 610 mm o.c.

(3) Furring referred to in Sentence (1) shall be,

(a) securely fastened to the framing, and

(b) spaced not more than 610 mm o.c.

9.27.5.4. Size and Spacing of Fasteners

(1) Nail or staple size and spacing for the attachment of cladding and trim shall conform to Table 9.27.5.4.

Table 9.27.5.4.
Attachment of Cladding

Forming Part of Sentence 9.27.5.4.(1)

Item	Column 1	Column 2	Column 3	Column 4
	Type of Cladding	Minimum Nail or Staple Length, mm	Minimum Number of Nails or Staples	Maximum Nail or Staple Spacing, mm (o.c.)
1.	Wood trim	51	—	600
2.	Lumber siding or horizontal siding made from sheet metal	51	—	600
3.	Metal cladding	38	—	600 (nailed to framing)
				400 (nailed to sheathing only)
4.	Wood shakes			
	up to 200 mm in width	51	2	—
	over 200 mm in width	51	3	—
5.	Wood shingles			
	200 mm in width	32	2	—
	over 200 mm in width	32	3	—
6.	Asbestos-cement shingles	32	2	—
7.	Panel or sheet type cladding			
	up to 7 mm thick	38	—	150 (along edges)
	more than 7 mm thick	51	—	300 (along intermediate supports)

9.27.5.5. Fastener Materials

(1) Nails or staples for the attachment of cladding and wood trim shall be corrosion-resistant and shall be compatible with the cladding material.

9.27.5.6. Expansion and Contraction

(1) Fasteners for metal or vinyl cladding shall be positioned to permit expansion and contraction of the cladding.

9.27.5.7. Penetration of Fasteners

(1) Fasteners for shakes and shingles shall penetrate through the nail-holding base or not less than 19 mm into the framing.

(2) Fasteners for cladding other than that described in Sentence (1) shall penetrate through the nail-holding base or not less than 25 mm into the framing.

9.27.6. Lumber Siding

9.27.6.1. Materials

(1) Lumber siding shall be sound, free of knot holes, loose knots, through checks or splits.

9.27.6.2. Thickness and Width

(1) Drop, rustic, novelty, lapped board and vertical wood siding shall be not less than 14.3 mm thick and not more than 286 mm wide.

(2) Bevel siding shall be,

(a) not less than 5 mm thick at the top, and

(b) not less than,

(i) 12 mm thick at the butt for sidings 184 mm or less in width, and

(ii) 14.3 mm thick at the butt for sidings wider than 184 mm.

(3) Bevel siding shall be not more than 286 mm wide.

9.27.6.3. Joints

(1) Lumber siding shall prevent water from entering at the joints by the use of lapped or matched joints or by vertical wood battens.

(2) Siding shall overlap not less than 1 mm per 16 mm width of lumber, but not less than,

(a) 9.5 mm for matched siding,

(b) 25 mm for lapped bevel siding, or

(c) 12 mm for vertical battens.

9.27.7. Wood Shingles and Shakes

9.27.7.1. Materials

(1) Shingles and shakes shall conform to,

(a) CSA O118.1, “Western Red Cedar Shakes and Shingles”, or

(b) CSA O118.2-M, “Eastern White Cedar Shingles”.

(2) Western cedar shakes shall be not less than No. 1 grade or Handsplit grade, and western cedar shingles not less than No. 2 grade, except that No. 3 grade may be used for undercoursing.

(3) Eastern white cedar shakes shall be at least B (clear) grade, except that C grade may be used for undercoursing.

9.27.7.2. Width

(1) Shingles and shakes shall be not less than 65 mm or more than 350 mm wide.

9.27.7.3. Fasteners

(1) Shingles or shakes shall be fastened with nails located approximately 20 mm from each edge and not less than 25 mm above the exposure line for single-course applications, or approximately 50 mm above the butt for double-course applications.

9.27.7.4. Offsetting of Joints

(1) In single-course application, joints in succeeding courses shall be offset at least 40 mm so that joints in any two of three consecutive courses are staggered.

(2) In double-course application, joints in the outer course shall be offset from joints in the under-course by not less than 40 mm, and joints in succeeding courses shall be offset not less than 40 mm.

9.27.7.5. Fastening to Lath

(1) When lath is used with double-course application (see Sentence 9.27.5.1.(5)), it shall be spaced according to the exposure and securely fastened to the framing.

(2) The butts of the under-course of the application referred to in Sentence (1) shall rest on the top edge of the lath.

(3) The outer course of the application referred to in Sentence (1) shall be fastened to the lath with nails of sufficient length to penetrate through the lath.

(4) The butts of the shingles or shakes shall be so located that they project not less than 12 mm below the bottom edge of the lath referred to in Sentence (1).

(5) If wood lath is not used, the butts of the under-course shingles or shakes of the application referred to in Sentence (1) shall be located 12 mm above the butts of the outer course.

9.27.7.6. Exposure and Thickness

(1) The exposure and butt thickness of shingles and shakes shall conform to Table 9.27.7.6.

Table 9.27.7.6.
Exposure and Thickness of Wood Shingles and Shakes

Forming Part of Sentence 9.27.7.6.(1)

Item	Column 1	Column 2	Column 3	Column 4
	Shake or Shingle Length, mm	Maximum Exposure, mm		Minimum Butt Thickness, mm
		Single Coursing	Double Coursing	
1.	400	190	305	10
2.	450	216	356	11
3.	600	292	406	13

9.27.8. Plywood

9.27.8.1. Material Standards

(1) Plywood cladding shall be exterior type conforming to,

(a) CSA O115-M, “Hardwood and Decorative Plywood”,

(b) CSA O121, “Douglas Fir Plywood”,

(c) CSA O151, “Canadian Softwood Plywood”, or

(d) CSA O153-M, “Poplar Plywood”.

9.27.8.2. Thickness

(1) Plywood cladding shall be not less than 6 mm thick when applied directly to sheathing.

(2) When applied directly to framing or over furring strips, plywood cladding thickness shall conform to Table 9.27.8.2.

Table 9.27.8.2.
Minimum Plywood Cladding Thickness

Forming Part of Sentence 9.27.8.2.(2)

Item	Column 1	Column 2	Column 3
	Spacing of Supports, mm	Minimum Thickness, mm, where Face Grain Parallel to Supports	Minimum Thickness, mm, where Face Grain at Right Angles to Supports
1.	406	8	6
2.	610	11	8

(3) The thickness of grooved or textured plywood shall be measured at the point of least thickness.

9.27.8.3. Edge Treatment

(1) The edges of plywood cladding shall be treated with a suitable paint or sealer.

9.27.8.4. Panel Cladding

(1) Plywood applied in panels shall have all edges supported.

(2) Not less than a 2 mm gap shall be provided between panels referred to in Sentence (1).

(3) Vertical joints in cladding referred to in Sentence (1) shall be protected with batten strips or caulking when the plywood joints are not matched.

(4) Horizontal joints in cladding referred to in Sentence (1) shall be lapped not less than 25 mm or shall be suitably flashed.

9.27.8.5. Lapped Strip Siding

(1) Plywood applied in horizontal lapped strips shall have not less than a 2 mm gap provided at the butted ends, which shall be caulked.

(2) The horizontal joints of siding described in Sentence (1) shall be lapped not less than 25 mm.

(3) Wedges shall be inserted under all vertical butt joints and at all corners when horizontal lapped plywood is applied without sheathing.

9.27.9. Hardboard

9.27.9.1. Material Standards

(1) Factory-finished hardboard cladding shall conform to CAN/CGSB-11.5M, “Hardboard, Precoated, Factory-Finished, for Exterior Cladding”.

(2) Hardboard cladding that is not factory finished shall conform to Types 1, 2 or 5 in CAN/CGSB-11.3-M, “Hardboard”.

9.27.9.2. Thickness

(1) Type 1 or 2 hardboard cladding shall be not less than,

(a) 6.0 mm thick when applied over sheathing that provides continuous support, and

(b) 7.5 mm thick when applied to furring or framing members not more than 406 mm o.c.

(2) Type 5 hardboard cladding shall be not less than 9.0 mm thick when applied over sheathing that provides continuous support or over furring or framing members spaced not more than 406 mm o.c.

(3) Where hardboard cladding is grooved, the grooves shall not extend more than 1.5 mm into the minimum required thickness.

9.27.9.3. Panel Cladding

(1) Hardboard cladding applied in panels shall have all edges supported with not less than a 5 mm gap provided between sheets.

(2) Vertical joints in cladding described in Sentence (1) shall be protected with batten strips or caulking when the joints are not matched.

(3) Horizontal joints in cladding described in Sentence (1) shall be lapped not less than 25 mm or shall be suitably flashed.

9.27.9.4. Lapped Strip Siding

(1) Hardboard applied in horizontal lapped strips shall have not less than a 5 mm gap provided at the butted ends, which shall be caulked or otherwise protected with suitable mouldings.

(2) The horizontal joints of siding described in Sentence (1) shall overlap not less than 1 mm per 16 mm width of siding board but not less than 9.5 mm for matched joint siding or 25 mm for lapped siding.

9.27.9.5. Clearance

(1) Not less than 3 mm clearance shall be provided between hardboard siding and door or window frames.

9.27.10. OSB and Waferboard

9.27.10.1. Material Standard

(1) OSB and waferboard cladding shall conform to CSA O437.0, “OSB and Waferboard”.

9.27.10.2. Thickness

(1) OSB conforming to O-2 grade shall be not less than 6.0 mm thick where applied directly to sheathing.

(2) OSB conforming to O-2 grade applied directly to framing or over furring strips shall conform to the thickness shown for plywood in Table 9.27.8.2.

(3) OSB conforming to O-1 grade and waferboard conforming to R-1 grade shall be not less than 7.9 mm thick where applied directly to sheathing.

(4) Where applied directly to framing or over furring strips, OSB conforming to O-1 grade and waferboard conforming to R-1 grade shall be not less than,

(a) 9.5 mm thick on supports spaced not more than 406 mm o.c., and

(b) 12.7 mm thick on supports spaced not more than 610 mm o.c.

9.27.10.3. Panel Cladding

(1) OSB and waferboard applied in panels shall have all edges supported and treated with a primer or sealer.

(2) Not less than a 3 mm gap shall be provided between sheets in cladding described in Sentence (1).

(3) Vertical joints in cladding described in Sentence (1) shall be protected with batten strips or caulking when the OSB and waferboard joints are not matched.

(4) Horizontal joints in cladding described in Sentence (1) shall be lapped not less than 25 mm or shall be suitably flashed.

9.27.10.4. Clearance

(1) At least a 3 mm clearance shall be provided between OSB and waferboard cladding and door or window frames.

9.27.11. Metal

9.27.11.1. Material Standards

(1) Horizontal and vertical strip steel siding, including flashing and trim accessories, shall conform to CAN/CGSB-93.4, “Galvanized Steel and Aluminum-Zinc Alloy Coated Steel Siding, Soffits and Fascia, Prefinished, Residential”.

(2) Steel sheet cladding shall have a minimum thickness of 0.3 mm and conform to CAN/CGSB-93.3-M, “Prefinished Galvanized and Aluminum-Zinc Alloy Steel Sheet for Residential Use”.

(3) Horizontal and vertical strip aluminum siding, including flashing and trim accessories, shall conform to CAN/CGSB-93.2-M, “Prefinished Aluminum Siding, Soffits and Fascia, for Residential Use”.

(4) Aluminum sheet cladding shall conform to CAN/CGSB-93.1-M, “Sheet, Aluminum Alloy, Prefinished, Residential” and shall have a thickness of not less than 0.58 mm, except that siding supported by backing or sheathing shall have a thickness of not less than 0.46 mm.

9.27.12. Vinyl Siding

9.27.12.1. Material Standard

(1) Vinyl siding, including flashing and trim accessories, shall conform to CAN/CGSB-41.24, “Rigid Vinyl Siding, Soffits and Fascia”.

9.27.12.2. Attachment

(1) The attachment of vinyl siding shall conform to the requirements in Subsection 9.27.5. for metal siding.

9.27.13. Exterior Insulation Finish Systems

9.27.13.1. Application

(1) Except as provided in Sentence (2), this Subsection applies to exterior insulation finish systems that,

(a) are covered in the scope of CAN/ULC-S716.1, “Exterior Insulation and Finish Systems (EIFS) – Materials and Systems”, and

(b) have a geometrically defined drainage cavity with a minimum cavity depth of 6 mm and an open area equal to not less than 13% of the area of a full-size exterior insulation finish systems panel.

(2) Exterior insulation finish systems not described in Sentence (1) and their components shall comply with Article 5.10.3.1.

9.27.13.2. Materials

(1) The materials used in exterior insulation finish systems shall conform to CAN/ULC-S716.1, “Exterior Insulation and Finish Systems (EIFS) – Materials and Systems”.

(2) The substrate on which an exterior insulation finish system is installed shall,

(a) be compatible with that particular system, and

(b) comply with the structural requirements for sheathing materials set out in Section 9.23.

9.27.13.3. Design and Installation

(1) The design of an exterior insulation finish system shall comply with CAN/ULC-S716.3, "Exterior Insulation and Finish Systems (EIFS) – Design Application".

(2) The installation of an exterior insulation finish system shall comply with CAN/ULC-S716.2, "Exterior Insulation and Finish Systems (EIFS) – Installation of EIFS Components and Water Resistive Barrier".

Section 9.28. Stucco

9.28.1. General

9.28.1.1. Sheathing Beneath Stucco

(1) Sheathing shall be provided beneath stucco applied over wood frame walls except as permitted in Article 9.28.4.2.

(2) Where applied beneath stucco, sheathing shall conform to Subsection 9.23.16.

9.28.1.2. Lath and Reinforcing

(1) Stucco lath or reinforcing shall be used to attach stucco to any substrate other than masonry.

(2) Stucco lath or reinforcing shall be used to attach stucco to masonry where,

(a) the masonry is soft-burned tile or brick of less strength than the stucco, or

(b) the masonry surface is not sound, clean and sufficiently rough to provide a good key.

(3) Stucco applied over masonry *chimneys* shall be reinforced.

9.28.1.3. Concrete Masonry Units

(1) Stucco finish shall not be applied over concrete masonry units less than one month old unless the units have been cured by the autoclave process.

9.28.1.4. Clearance over Ground Level

(1) Stucco shall be not less than 200 mm above finished ground level except when it is applied over concrete or masonry.

9.28.1.5. Flashing and Sealants

(1) Flashing and sealants used with stucco shall conform to Subsections 9.27.3. and 9.27.4., except that if aluminum flashing is used, it shall be separated from the stucco by an impervious membrane or coating.

9.28.2. Stucco Materials

9.28.2.1. Portland Cement

(1) Portland cement shall conform to CAN/CSA-A3001, "Cementitious Materials for Use in Concrete".

9.28.2.2. Aggregate

(1) Aggregate shall be clean, well-graded natural sand or sand manufactured from crushed stone, gravel or air-cooled blast furnace slag and shall contain no significant amounts of deleterious material.

(2) Aggregate grading shall conform to Table 9.28.2.2.

Table 9.28.2.2.
Aggregate Grading for Stucco

Forming Part of Sentence 9.28.2.2.(2)

Item	Column 1	Column 2	Column 3
	Sieve Sizes, mm	% Aggregate Passing Sieve	
		Maximum	Minimum
1.	4	—	100
2.	2	—	90
3.	1	90	60
4.	0.5	60	45
5.	0.25	30	10
6.	0.125	5	—

9.28.2.3. Water

(1) Water shall be clean and free of significant amounts of deleterious material.

9.28.3. Fasteners

9.28.3.1. Materials

(1) Fasteners for stucco lath or reinforcing shall be corrosion-resistant and of a material other than aluminum.

9.28.3.2. Nails and Staples

(1) Nails for stucco lath or reinforcing shall be not less than 3.2 mm diam with a head diameter of not less than 11.1 mm.

(2) Staples for stucco lath reinforcing shall be not less than 1.98 mm diam or thickness.

(3) Staples and nails for attaching stucco lath or reinforcing to vertical surfaces shall be of sufficient length to penetrate 25 mm into framing members or to the full depth of the sheathing where the sheathing is used for attachment.

(4) On horizontal surfaces nails for stucco lath or reinforcing shall be not less than 38 mm long.

9.28.4. Stucco Lath

9.28.4.1. Materials

(1) Rib lath or expanded metal stucco mesh shall be,

(a) copper-alloy steel coated with rust-inhibitive paint after fabrication, or

(b) galvanized.

(2) Woven or welded wire mesh shall be galvanized.

9.28.4.2. No Sheathing Required

(1) Sheathing need not be provided beneath stucco where not less than 1.19 mm diam galvanized wire is applied horizontally to the framing at vertical intervals not exceeding 150 mm, or where paper-backed welded wire metal lath is used.

9.28.4.3. Stucco Lath Specifications

(1) Stucco lath shall conform to Table 9.28.4.3.

Table 9.28.4.3.
Stucco Lath

Forming Part of Sentence 9.28.4.3.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Location	Type of Lath	Minimum Diam of Wire, mm	Maximum Mesh Opening	Minimum Mass, kg/m^2
1.	Vertical surfaces	Welded or woven wire	1.15	25 mm	—
			1.30	38 mm	—
			1.50	51 mm	—
		Stucco mesh reinforcing (expanded metal)	—	25.8 cm^2	0.98
2.	Horizontal surfaces	9.5 mm rib lath	—	—	1.84
		Cedar lath	—	—	—

9.28.4.4. Self-Furring Devices

(1) Stucco lath shall be held not less than 6 mm away from the backing by means of suitable self-furring devices.

9.28.4.5. Application of Stucco Lath

(1) Stucco lath shall be applied with the long dimension horizontal.

(2) Horizontal and vertical joints in stucco lath shall be lapped not less than 50 mm.

(3) End joints of stucco lath shall be staggered and shall occur over framing members.

(4) External corners of stucco lath shall be reinforced with a vertical strip of lath or reinforcing extending not less than 150 mm on both sides of the corner, or the lath or reinforcing shall extend around corners not less than 150 mm.

9.28.4.6. Fastening

(1) Stucco lath shall be fastened in conformance with Subsection 9.27.5.

(2) Fasteners on vertical surfaces shall be spaced not more than,

(a) 150 mm o.c. vertically and 406 mm o.c. horizontally, or

(b) 100 mm o.c. vertically and 610 mm o.c. horizontally.

(3) Nailing patterns other than those required in Sentence (2) are permitted to be used provided there are not fewer than 20 fasteners per square metre of wall surface.

(4) Fasteners on horizontal surfaces shall be spaced not more than,

(a) 150 mm o.c. along the framing members when members are spaced not more than 406 mm o.c., and

(b) 100 mm o.c. along members when members are spaced not more than 610 mm o.c.

9.28.5. Stucco Mixes

9.28.5.1. Mixes

(1) Stucco mixes shall conform to Table 9.28.5.1.

Table 9.28.5.1.
Stucco Mixes

Forming Part of Sentence 9.28.5.1.(1)

Item	Column 1	Column 2	Column 3	Column 4
	Materials, volume			
	Portland Cement	Masonry Cement	Lime	Aggregate
1.	1	—	0.25 to 1	3.25 to 4 parts per part of cementitious material
2.	1	1	—	

9.28.5.2. Pigments

(1) Pigment if used shall consist of pure mineral oxides inert to the action of sun, lime and cement.

(2) Pigment shall not exceed 6% of the portland cement by weight.

9.28.5.3. Mixing

(1) Materials shall be thoroughly mixed before and after water is added.

(2) Stucco shall be applied not later than 3 h after the initial mixing.

9.28.6. Stucco Application

9.28.6.1. Low Temperature Conditions

(1) The base for stucco shall be maintained above freezing.

(2) Stucco shall be maintained at a temperature of not less than 10°C during application and for not less than 48 h afterwards.

9.28.6.2. Number of Coats and Total Thickness

(1) Stucco shall be applied with at least two base coats and one finish coat, providing a total thickness of not less than 15 mm, measured from the face of the lath or face of the masonry where no lath is used.

9.28.6.3. First Coat

(1) The first coat shall be not less than 6 mm thick, measured from the face of the lath or masonry, fully embedding the lath.

(2) The surface of the first coat shall be scored to provide a key with the second coat.

9.28.6.4. Second Coat

(1) The second coat shall be not less than 6 mm thick.

(2) The surface of the second coat shall be lightly roughened to provide a key with the finish coat if the finish coat is other than stone dash.

9.28.6.5. Finish Coat

(1) When the finish coat is other than stone dash, the base shall be dampened but not saturated before the finish coat is applied.

(2) The thickness of the finish coat shall be not less than 3 mm.

(3) When a stone dash finish is used, the stone shall be partially embedded in the second coat before the second coat starts to set or stiffen.

Section 9.29. Interior Wall and Ceiling Finishes

9.29.1. General

9.29.1.1. Fire Protection and Sound Control

(1) A wall or ceiling finish shall also conform to the appropriate requirements in Sections 9.10. and 9.11. in addition to the requirements in this Section.

9.29.2. Waterproof Wall Finish

9.29.2.1. Where Required

(1) Waterproof finish shall be provided to a height of not less than,

(a) 1 800 mm above the floor in shower stalls,

(b) 1 200 mm above the rims of bathtubs equipped with showers, and

(c) 400 mm above the rims of bathtubs not equipped with showers.

9.29.2.2. Materials

(1) Waterproof finish shall consist of ceramic, plastic or metal tile, sheet vinyl, tempered hardboard, laminated thermosetting decorative sheets or linoleum.

9.29.3. Wood Furring

9.29.3.1. Size and Spacing of Furring

(1) Wood furring for the attachment of wall and ceiling finishes shall conform to Table 9.29.3.1.

Table 9.29.3.1.
Size and Spacing of Furring

Forming Part of Sentence 9.29.3.1.(1)

Item	Column 1	Column 2	Column 3	Column 4
	Maximum Spacing of Furring, mm	Minimum Size of Furring, mm		
		Maximum Spacing of Furring Supports		
		Continuous Supports	406 mm (o.c.)	610 mm (o.c.)
1.	305	19 × 38	19 × 38	19 × 64
2.	406	19 × 38	19 × 38	19 × 64
3.	610	19 × 38	19 × 64	19 × 89

9.29.3.2. Fastening

(1) Furring shall be fastened to the framing or to wood blocks with not less than 51 mm nails.

9.29.4. Plastering

9.29.4.1. Application

(1) Application of plaster wall and ceiling finishes, including installation of metal or gypsum lath, shall conform to CSA A82.30-M, “Interior Furring, Lathing and Gypsum Plastering”.

9.29.5. Gypsum Board Finish (Taped Joints)

9.29.5.1. Application

(1) The requirements for application of gypsum board in this Subsection apply to the single layer application of gypsum board to wood furring or framing using nails or screws.

(2) Gypsum board applications not described in this Subsection shall conform to CSA A82.31-M, "Gypsum Board Application".

9.29.5.2. Materials

(1) Gypsum products shall conform to,

(a) CAN/CSA-A82.27-M, "Gypsum Board",

(b) ASTM C1178 / C1178M, "Coated Glass Mat Water-Resistant Gypsum Backing Panel", or

(c) ASTM C1396 / C1396M, "Gypsum Board".

9.29.5.3. Maximum Spacing of Supports

(1) Maximum spacing of supports for gypsum board applied as a single layer shall conform to Table 9.29.5.3.

Table 9.29.5.3.
Spacing of Supports for Gypsum Board

Forming Part of Sentence 9.29.5.3.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Thickness, mm	Orientation of Board to Framing	Maximum Spacing of Supports, mm o.c.		
			Walls	Ceilings	
				Painted Finish	Water-Based Texture Finish
1.	Gypsum board conforming to Sentence 9.29.5.2.(1) (except Sections 9 and 12 of ASTM C1396 / C1396M)				
	9.5	Parallel	—	—	—
		Perpendicular	406	406	—
	12.7	Parallel	610	406	—
		Perpendicular	610	610	406
	15.9	Parallel	610	406	—
		Perpendicular	610	610	610
2.	Gypsum board conforming to Clause 9.29.5.2.(1)(c) (only Section 12 of ASTM C1396 / C1396M)				
	12.7	Parallel	610	406	—
		Perpendicular	610	610	610

9.29.5.4. Support of Insulation

(1) Gypsum board supporting insulation shall be at least 12.7 mm thick.

9.29.5.5. Length of Fasteners

(1) The length of fasteners for gypsum board shall conform to Table 9.29.5.5., except that lesser depths of penetration are permitted for assemblies required to have a *fire-resistance rating* provided it can be shown, on the basis of fire tests, that such depths are adequate for the required rating.

Table 9.29.5.5.
Fastener Penetration into Wood Supports

Forming Part of Sentence 9.29.5.5.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Required *Fire-Resistance Rating* of Assembly	Minimum Penetration, mm			
		Walls		Ceilings	
		Nails	Screws	Nails	Screws
1.	Not required	20	15	20	15
2.	45 min	20	20	30	30
3.	1 h	20	20	45	45
4.	1.5 h	20	20	60	60

9.29.5.6. Nails

(1) Nails for fastening gypsum board to wood supports shall conform to,

(a) ASTM F1667, “Driven Fasteners: Nails, Spikes and Staples”, or

(b) CSA B111, “Wire Nails, Spikes and Staples”.

9.29.5.7. Screws

(1) Screws for fastening gypsum board to wood supports shall conform to ASTM C1002, “Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs”.

9.29.5.8. Spacing of Nails

(1) For single-layer application on ceilings, nails shall be spaced,

(a) not more than 180 mm o.c. on ceiling supports, or

(b) every 300 mm o.c. along ceiling supports, in pairs about 50 mm apart.

(2) Where the ceiling sheets are supported by the wall sheets around the perimeter of the ceiling, this support may be considered as equivalent to nailing at this location.

(3) Except as required by Sentence (4), for single-layer application on walls, nails shall be spaced,

(a) not more than 200 mm o.c. on vertical wall supports, or

(b) every 300 mm o.c. along vertical wall supports, in pairs about 50 mm apart.

(4) For single-layer application on walls, where gypsum board is required to provide bracing, lateral support or fire protection, nails shall be spaced not more than 200 mm o.c. on,

(a) vertical wall supports, and

(b) top and bottom plates.

(5) The uppermost nails on vertical wall supports shall be not more than 200 mm below the ceiling.

(6) Nails shall be located not less than 10 mm from the side or edge of the board.

(7) Nails shall be driven so that the heads do not puncture the paper.

9.29.5.9. Spacing of Screws

(1) For single-layer application on a ceiling, screws shall be spaced not more than 300 mm o.c. on ceiling supports.

(2) Where the ceiling sheets are supported by the wall sheets around the perimeter of the ceiling, this support may be considered as equivalent to screwing at this location.

(3) Except as required by Sentence (4), for single-layer application on walls, screws shall be spaced,

(a) not more than 300 mm o.c. on vertical wall supports where the supports are more than 406 mm o.c., or

(b) not more than 400 mm o.c. on vertical wall supports where the supports are not more than 406 mm o.c.

(4) Except as permitted by Sentence (5), for single-layer application on walls, where gypsum board is required to provide bracing, lateral support or fire protection, screws shall be spaced not more than 300 mm o.c. on,

(a) vertical wall supports, and

(b) top and bottom plates.

(5) Where a *fire-resistance rating* is determined based on Table 1 of MMAH Supplementary Standard SB-3, "Fire and Sound Resistance of Building Assemblies", Sentence (4) need not apply for the purpose of fire protection.

(6) Screws shall be located not less than 10 mm from the side or edge of the board.

(7) Screws shall be driven so that the heads do not puncture the paper.

9.29.5.10. Low Temperature Conditions

(1) In cold weather, heat shall be provided to maintain a temperature of not below 10°C for 48 h prior to taping and finishing and maintained for not less than 48 h after that.

9.29.6. Plywood Finish

9.29.6.1. Thickness

(1) Except as provided in Sentences (2) and (3), the minimum thickness of plywood interior finish shall conform to Table 9.29.6.1.

Table 9.29.6.1.
Thickness of Plywood Interior Finish

Forming Part of Articles 9.29.6.1., 9.29.6.2. and 9.29.9.2.

Item	Column 1	Column 2	Column 3
	Maximum Spacing of Supports, mm o.c.	Minimum Thickness, mm(1), on Supports with no Horizontal Blocking	Minimum Thickness, mm(1), on Supports with Blocking at Vertical Intervals not Exceeding 1.2 m
1.	406	4.7	4.0
2.	610	8.0	4.7

Notes to Table 9.29.6.1.

(1) Thickness limits shall apply to the net effective thickness (NET) of grooved, striated, textured and/or embossed panels and to the actual thickness of flat panels.

(2) A manufacturing tolerance of -0.4 mm may be applied to the thicknesses listed in Table 9.29.6.1.

(3) No minimum thickness is required where plywood is applied over continuous backing.

9.29.6.2. Grooved Plywood

(1) Except as permitted in Sentence (2), where plywood for interior finish is grooved, the grooves shall not extend through the face ply and into the plies below the face ply unless the groove is supported by framing or furring.

(2) If the grain of the face ply is at right angles to the supporting members, the groove is permitted to extend into the plies below the face ply provided the thickness of the plywood exceeds the value shown in Table 9.29.6.1. by an amount equal to not less than the depth of penetration of the grooves into the plies below the face ply.

9.29.6.3. Nails and Staples

(1) Nails for attaching plywood finishes shall not be less than 38 mm casing or finishing nails spaced not more than 150 mm o.c. along edge supports and 300 mm o.c. along intermediate supports, except that staples providing equivalent lateral resistance may also be used.

9.29.6.4. Edge Support

(1) All plywood edges shall be supported by furring, blocking or framing.

9.29.7. Hardboard Finish

9.29.7.1. Material Standard

(1) Hardboard shall conform to CAN/CGSB-11.3-M, “Hardboard”.

9.29.7.2. Thickness

(1) Hardboard shall be not less than,

(a) 3 mm thick where applied over continuous back-up,

(b) 6 mm thick where applied to supports spaced not more than 406 mm o.c., and

(c) 9 mm thick where applied to supports spaced not more than 610 mm o.c.

9.29.7.3. Nails

(1) Nails for fastening hardboard shall be casing or finishing nails not less than 38 mm long, spaced not more than 150 mm o.c. along edge supports and 300 mm o.c. along intermediate supports.

9.29.7.4. Edge Support

(1) All hardboard edges shall be supported by furring, blocking or framing where the back-up is not continuous.

9.29.8. Insulating Fibreboard Finish

9.29.8.1. Material Standard

(1) Insulating fibreboard shall conform to CAN/ULC-S706, “Wood Fibre Thermal Insulation for Buildings”.

9.29.8.2. Thickness

(1) Insulating fibreboard sheets shall be not less than 11.1 mm thick on supports not more than 406 mm o.c.

(2) Insulating fibreboard tile shall be not less than 12.7 mm thick on supports spaced not more than 406 mm o.c.

9.29.8.3. Nails

(1) Nails for fastening fibreboard sheets shall be not less than 2.6 mm shank diameter casing or finishing nails of sufficient length to penetrate not less than 20 mm into the supports.

(2) Nails shall be spaced not more than 100 mm o.c. along edge supports and 200 mm o.c. along intermediate supports.

9.29.8.4. Edge Support

(1) All fibreboard edges shall be supported by blocking, furring or framing.

9.29.9. Particleboard, OSB or Waferboard Finish

9.29.9.1. Material Standard

(1) Particleboard finish shall conform to ANSI A208.1, “Particleboard”.

(2) OSB or waferboard finish shall conform to,

(a) CAN/CSA-O325, “Construction Sheathing”, or

(b) CSA O437.0, “OSB and Waferboard”.

9.29.9.2. Minimum Thickness

(1) Except as provided in Sentences (2) and (3), the minimum thickness of O-2 grade OSB used as an interior finish shall conform to that shown for plywood in Table 9.29.6.1.

(2) Thickness listed in Table 9.29.6.1. shall permit a manufacturing tolerance of -0.4 mm.

(3) No minimum thickness is required where O-2 grade OSB is applied over continuous backing.

(4) OSB conforming to O-1 grade, waferboard conforming to R-1 grade and particleboard shall be,

(a) not less than 6.35 mm thick on supports not more than 406 mm o.c.,

(b) not less than 9.5 mm thick on supports not more than 610 mm o.c., and

(c) not less than 6.35 mm thick on supports not more than 610 mm o.c. in walls where blocking is provided at midwall height.

(5) OSB conforming to CSA-O325, “Construction Sheathing”, shall meet the minimum panel mark of,

(a) W16, on supports not more than 406 mm o.c.,

(b) W24, on supports not more than 610 mm o.c., and

(c) W16, on supports not more than 610 mm o.c. where blocking is provided at midwall height.

9.29.9.3. Nails

(1) Nails for fastening particleboard, OSB or waferboard shall be not less than 38 mm casing or finishing nails spaced not more than 150 mm o.c. along edge supports and 300 mm o.c. along intermediate supports.

9.29.9.4. Edge Support

(1) All particleboard, OSB or waferboard edges shall be supported by furring, blocking or framing.

9.29.10. Wall Tile Finish

9.29.10.1. Tile Application

(1) Ceramic tile shall be set in a mortar base or applied with an adhesive.

(2) Plastic tile shall be applied with an adhesive.

9.29.10.2. Mortar Base

(1) When ceramic tile is applied to a mortar base the cementitious material shall consist of one part Portland cement to not more than one-quarter part lime by volume.

(2) The cementitious material described in Sentence (1) shall be mixed with no fewer than three nor more than five parts of aggregate per part of cementitious material by volume.

(3) Mortar shall be applied over metal lath or masonry.

(4) Ceramic tile applied to a mortar base shall be thoroughly soaked and pressed into place forcing the mortar into the joints while the tile is wet.

9.29.10.3. Adhesives

(1) Adhesives to attach ceramic and plastic tile shall be applied to the finish coat or brown coat of plaster that has been steel-trowelled to an even surface or to gypsum board or to masonry provided the masonry has an even surface.

9.29.10.4. Moisture Resistant Backing

(1) Ceramic and plastic tile installed on walls around bathtubs or showers shall be applied over moisture resistant backing.

9.29.10.5. Joints between Tiles and Bathtub

(1) The joints between wall tiles and a bathtub or shower shall be suitably caulked with material conforming to CAN/CGSB-19.22-M, “Mildew Resistant Sealing Compound for Tubs and Tile”.

Section 9.30. Flooring

9.30.1. General

9.30.1.1. Required Finish Flooring

(1) Finished flooring shall be provided in all *residential occupancies*.

9.30.1.2. Water Resistance

(1) Finished flooring in bathrooms, kitchens, public entrance halls, laundry and general storage areas shall consist of resilient flooring, felted-synthetic-fibre floor coverings, concrete, terrazzo, ceramic tile, mastic or other types of flooring providing similar degrees of water resistance.

9.30.1.3. Sleepers

(1) Wood sleepers supporting finished flooring over a concrete base supported on the ground shall be not less than 19 mm by 38 mm and shall be treated with a wood preservative.

9.30.1.4. Finish Quality

(1) Finished flooring shall have a surface that is smooth, even and free from roughness or open defects.

9.30.2. Panel-Type Underlay

9.30.2.1. Required Underlay

(1) A panel-type underlay shall be provided under resilient flooring, parquet flooring, ceramic tile, felted-synthetic-fibre floor coverings or carpeting laid over lumber subflooring.

(2) A panel-type underlay shall be provided under resilient flooring, parquet flooring, felted-synthetic-fibre floor coverings or carpeting on panel-type subflooring whose edges are unsupported.

(3) Panel-type underlay shall be provided under ceramic tile applied with adhesive.

(4) Panel-type underlay shall be provided under resilient flooring on waferboard or strandboard subflooring.

9.30.2.2. Materials and Thickness

(1) Panel-type underlay shall be not less than 6 mm thick and shall conform to,

(a) ANSI A208.1, “Particleboard”,

(b) CAN/CGSB-11.3-M, “Hardboard”,

(c) CSA O115-M, “Hardwood and Decorative Plywood”,

(d) CSA O121, “Douglas Fir Plywood”,

(e) CSA O151, “Canadian Softwood Plywood”,

(f) CSA O153-M, “Poplar Plywood”, or

(g) CSA O437.0, “OSB and Waferboard”.

9.30.2.3. Fastening

(1) Panel-type underlay shall be fastened to the subfloor with staples, annular grooved flooring nails or spiral nails, spaced not more than 150 mm o.c. along the edges and 200 mm o.c. both ways at other locations.

(2) Nails for panel-type underlay shall be not less than 19 mm long for 6 mm thick underlay and 22 mm long for 7.9 mm thick underlay.

(3) Staples for panel-type underlay shall,

(a) have not less than a 1.2 mm shank diameter or thickness with a 4.7 mm crown, and

(b) be not less than,

(i) 22 mm long for 6 mm underlay, and

(ii) 28 mm long for 7.9 mm and 9.5 mm underlay.

9.30.2.4. Joints Offset

(1) Where panel-type underlay is required to be installed over plywood, or OSB or waferboard, the joints in the underlay shall be offset at least 200 mm from the joints in the underlying subfloor.

9.30.2.5. Surface Defects

(1) Underlay beneath resilient or ceramic floors applied with an adhesive shall have all holes or open defects on the surface patched so that the defects will not be transmitted to the finished surface.

9.30.3. Wood Strip Flooring

9.30.3.1. Thickness

(1) The thickness of wood strip flooring shall conform to Table 9.30.3.1.

Table 9.30.3.1.
Thickness of Wood Strip Flooring

Forming Part of Sentence 9.30.3.1.(1)

Item	Column 1	Column 2	Column 3	Column 4
	Type of Flooring	Maximum Joist Spacing, mm	Minimum Thickness of Flooring, mm	
			With Subfloor	No Subfloor
1.	Matched hardwood (interior use only)	406	7.9	19.0
		610	7.9	33.3
2.	Matched softwood (interior or exterior use)	406	19.0	19.0
		610	19.0	31.7
3.	Square edge softwood (exterior use only)	406	—	25.4
		610	—	38.1

9.30.3.2. Strip Direction and End Joints

(1) Wood strip flooring shall not be laid parallel to lumber subflooring unless a separate underlay is provided.

(2) If wood strip flooring is applied without a subfloor, it shall be laid at right angles to the joists so that the end joints are staggered and occur over supports or are end matched.

(3) If the flooring is end matched, it shall be laid so that no two adjoining strips break joints in the same space between supports and each strip bears on no fewer than two supports.

9.30.3.3. Nailing

(1) When nails are used, wood strip flooring shall be toe nailed or face nailed with at least one nail per strip at the spacings shown in Table 9.30.3.3., except that face nailed strips of more than 25 mm in width shall have at least two nails per strip.

(2) Face nails shall be countersunk.

Table 9.30.3.3.
Nailing of Wood Strip Flooring

Forming Part of Sentence 9.30.3.3.(1)

Item	Column 1	Column 2	Column 3
	Finish Floor Thickness, mm	Minimum Length of Flooring Nails, mm	Maximum Spacing of Flooring Nails, mm
1.	7.9	38(1)	200
2.	11.1	51	300
3.	19.0	57	400
4.	25.4	63	400
5.	31.7	70	600
6.	38.1	83	600

Notes to Table 9.30.3.3.:

(1) See Article 9.30.3.4.

9.30.3.4. Staples

(1) Staples are permitted to be used to fasten wood strip flooring not more than 7.9 mm in thickness and not more than 50 mm in width provided the staples,

(a) are not less than 29 mm long,

(b) have a shank diameter of not less than 1.19 mm,

(c) have a crown of not less than 4.7 mm, and

(d) are spaced not more than 400 mm o.c.

(2) Staples are permitted to be used to fasten wood strip flooring not more than 19 mm in thickness and not more than 83 mm in width provided the staples,

(a) are not less than 51 mm long,

(b) have a shank diameter of not less than 1.82 mm,

(c) have a crown of not less than 12.7 mm, and

(d) are spaced not more than 400 mm o.c.

9.30.4. Parquet Flooring

9.30.4.1. Adhesive

(1) Adhesive used to attach parquet block flooring shall be suitable for bonding wood to the applicable subfloor material.

9.30.5. Resilient Flooring

9.30.5.1. Materials

(1) Resilient flooring used on concrete slabs supported on ground shall consist of asphalt, rubber, vinyl-asbestos, unbacked vinyl or vinyl with an inorganic type backing.

(2) Flooring described in Sentence (1) shall be attached to the base with a suitable waterproof and alkali-resistant adhesive.

9.30.6. Ceramic Tile

9.30.6.1. Substrate

(1) Ceramic tile shall be set in a mortar bed or applied to a sound smooth base with a suitable adhesive.

(2) Panel-type subfloor to which ceramic tile is to be applied with adhesive shall have its edges supported according to Article 9.23.14.3.

Section 9.31. Plumbing Facilities

9.31.1. Scope

9.31.1.1. Application

(1) Except as provided in Sentence (2), this Section applies to *plumbing* facilities and *plumbing systems* serving *dwelling units*.

(2) *Plumbing* facilities, grab bars, floor drains and floor and wall finishes around urinals shall conform to Subsection 3.7.4. and Article 7.1.5.2. in,

(a) a *recreational camp*,

(b) a *camp for housing of workers*, or

(c) all other *buildings* not described in Sentence (1).

(3) Medical gas piping systems shall conform to Subsection 3.7.5.

9.31.2. General

9.31.2.1. General

(1) The *construction* of *plumbing systems* shall conform to Part 7.

9.31.2.2. Corrosion Protection

(1) Metal pipes in contact with cinders or other corrosive material shall be protected by a heavy coating of bitumen or other corrosion protection.

9.31.2.3. Grab Bars

(1) When provided, grab bars shall be capable of resisting a load of not less than 1.3 kN applied vertically or horizontally.

9.31.3. Water Supply and Distribution

9.31.3.1. Required Water Supply

(1) Every *dwelling unit* shall be supplied with a *water distribution system* where a *drinking water system* is available.

9.31.3.2. Required Connections

(1) In a *dwelling unit* with a *water distribution system*, piping for hot and cold water shall be connected to every kitchen sink, lavatory, bathtub, shower, slop sink and laundry area.

(2) Piping for cold water shall be run to every water closet.

9.31.4. Required Facilities

9.31.4.1. Required Fixtures

(1) A *dwelling unit* with a *water distribution system* shall contain,

(a) a kitchen sink,

(b) a lavatory,

(c) a bathtub or shower stall, and

(d) a water closet or a drainless composting toilet.

9.31.4.2. Laundry Fixtures

(1) Laundry facilities or a space for laundry facilities shall be provided in every *dwelling unit* or grouped elsewhere in the *building* in a location conveniently accessible to occupants of every *dwelling unit*.

9.31.4.3. Hot Water Supply

(1) In a *dwelling unit* with a *water distribution system*, a hot water supply shall be provided.

(2) A *water distribution system* supplying hot water to *plumbing fixtures* shall conform to the requirements in Subsection 7.6.5.

9.31.4.4. Floor Drains

(1) A floor drain shall be installed in a *basement* forming part of a *dwelling unit*.

9.31.5. Reserved

9.31.6. Service Water Heating Facilities

9.31.6.1. Hot Water Temperature

(1) Where a hot water supply is required by Article 9.31.4.3., equipment shall be installed to provide to every *dwelling unit* an adequate supply of service hot water with a temperature range from 45°C to 60°C.

(2) An electric *storage-type service water heater* shall have a minimum set storage temperature of 60°C.

9.31.6.2. Equipment and Installation

(1) Every *service water heater* and its installation shall conform to Part 7.

(2) Reserved

(3) Where the *building* is in a location where the spectral response acceleration, $S_a(0.2)$, is greater than 0.55, *service water heaters* shall be secured to the structure to resist overturning and displacement.

9.31.6.3. Corrosion-Resistant Coating

(1) Where storage tanks for *service water heaters* are steel, they shall be coated with zinc, vitreous enamel (glass lined), hydraulic cement or other corrosion-resistant material.

9.31.6.4. Fuel-Burning Heaters

(1) Fuel-burning *service water heaters* shall be connected to a *chimney flue* conforming to Section 9.21.

9.31.6.5. Heating Coils

(1) Heating coils of *service water heaters* shall not be installed in a *flue* or in the combustion chamber of a *boiler* or furnace heating a *building*.

Section 9.32. Ventilation

9.32.1. General

9.32.1.1. Application

(1) This Section applies to the ventilation of rooms and spaces in *residential occupancies* by natural ventilation and to self-contained mechanical ventilation systems serving only one *dwelling unit*.

(2) Mechanical ventilation systems, other than self-contained systems serving single *dwelling units*, shall conform to Part 6.

(3) Ventilation of rooms and spaces in other than *residential occupancies* shall conform to Part 6.

(4) A *storage garage* for more than five cars shall be ventilated in accordance with Part 6.

(5) A clothes dryer *exhaust duct* system shall conform to Part 6.

9.32.1.2. Mechanical Ventilation for Dwelling Units

(1) Every *dwelling unit* that is supplied with electrical power shall be provided with a mechanical ventilation system in accordance with Subsection 9.32.3.

9.32.1.3. Ventilation of Rooms and Spaces

(1) Except as permitted in Sentence (2), rooms or spaces in a *dwelling unit* shall be ventilated by natural means in accordance with Subsection 9.32.2.

(2) The natural ventilation of rooms or spaces required in Sentence (1) may be provided by mechanical means.

(3) Where a room or space is not provided with natural ventilation as described in Sentence (1), mechanical ventilation shall be provided to exhaust inside air from or to introduce outside air to that room or space at the rate of one-half air change per hour if the room or space is mechanically cooled in summer, and one air change per hour if it is not.

9.32.2. Natural Ventilation

9.32.2.1. Natural Ventilation Area

(1) The unobstructed openable ventilation area to the outdoors for rooms and spaces in residential *buildings* ventilated by natural means shall conform to Table 9.32.2.1.

Table 9.32.2.1.
Natural Ventilation

Forming Part of Sentence 9.32.2.1.(1)

Item	Column 1	Column 2	Column 3
	Location		Minimum Unobstructed Area
1.	Within a *dwelling unit*	Bathrooms or water closet rooms	0.09 m²
		Unfinished *basement* space	0.2 percent of the floor area
		Dining rooms, living rooms, bedrooms, kitchens, combined rooms, dens, recreation rooms and all other finished rooms	0.28 m² per room or combination of rooms
2.	Other than within a *dwelling unit*	Bathrooms or water closet rooms	0.09 m² per water closet
		Sleeping areas	0.14 m² per occupant
		Laundry rooms, kitchens, recreation rooms	4 percent of the floor area
		Corridors, storage rooms and other similar public rooms or spaces	2 percent of the floor area
		Unfinished *basement* space not used on a shared basis	0.2 percent of the floor area

(2) Where a vestibule opens directly off a living or dining room within a *dwelling unit*, ventilation to the outdoors for such rooms may be through the vestibule.

9.32.2.2. Protection from Weather and Insects

(1) Openings for natural ventilation other than windows shall be constructed to provide protection from the weather and insects.

(2) Screening shall be of rust-proof material.

9.32.3. Mechanical Ventilation

9.32.3.1. General

(1) For the purposes of this Subsection a non-solid fuel-fired *appliance* shall be classified as,

(a) direct vented whereby the combustion air is supplied directly from the outdoors to the combustion chamber via a sealed passageway, and the products of combustion are exhausted directly outdoors through an independent sealed vent,

(b) mechanically vented induced draft whereby combustion air is supplied from within the *building* envelope and the products of combustion are positively conveyed to the outdoors by means of a dedicated sealed vent, or

(c) natural draft whereby combustion air is supplied from within the *building* envelope and the products of combustion are conveyed to the outdoors through a *chimney* or Type B vent.

(2) For the purposes of this Subsection a *dwelling unit* shall be categorized as,

(a) Type I when,

(i) all fuel-fired combustion *appliances* located in the *dwelling unit* are direct vented or, except for fireplaces, are mechanically vented induced draft, and

(ii) the *dwelling unit* does not contain a solid fuel-fired combustion *appliance*,

(b) Type II when a solid fuel-fired combustion *appliance* is installed in a Type I *dwelling unit*,

(c) Type III when a mechanically vented induced draft non-solid fuel-fired fireplace or a natural draft *appliance* is present, or

(d) Type IV when *electric space heating* is present.

9.32.3.2. Required Mechanical Ventilation

(1) The mechanical ventilation system required in Article 9.32.1.2. shall comply with,

(a) Part 6, or

(b) this Subsection for a mechanical ventilation system in a Type I, Type II or Type IV *dwelling unit*.

9.32.3.3. Total Ventilation Capacity

(1) The minimum total ventilation capacity of the ventilation system required in Clause 9.32.3.2.(1)(b) shall be the sum of the individual room capacities given in Table 9.32.3.3.

Table 9.32.3.3.
Ventilation Capacity

Forming Part of Sentence 9.32.3.3.(1)

Item	Column 1	Column 2
	Room	Capacity, L/s
1.	Master bedroom(1)	10
2.	Other bedrooms	5
3.	Living room(2)	5
4.	Dining room(2)	5
5.	Kitchen	5
6.	Family room(2)	5
7.	Recreation room	5

8.	*Basement*[3]	10
9.	Other habitable rooms[4]	5
10.	Bathroom or water closet room	5
11.	Laundry room	5
12.	Utility room	5

Notes to Table 9.32.3.3.:

[1] At least one bedroom in each *dwelling unit* shall be designated as the master bedroom.

[2] Ventilation capacities assigned to any combined living/dining or family/dining space shall be determined as if the spaces were individual rooms.

[3] Where a *basement* incorporates rooms of the types designated in this Table, the assigned ventilation capacities for each room shall be as specified for those types of rooms. *Basement* areas used for other purposes that exceed ⅔ of the total *basement* floor area shall be assigned a fan capacity of 10 L/s. Those that are less than ⅔ of the total floor area shall be assigned 5 L/s.

[4] Other habitable rooms shall be assigned a ventilation capacity of 5 L/s. This does not include spaces intended solely for access, egress, storage or service equipment.

9.32.3.4. Principal Exhaust

(1) A principal exhaust fan shall be installed and shall be rated to provide not less than the capacity given in Table 9.32.3.4.A.

Table 9.32.3.4.A.
Principal Exhaust Fan Capacity

Forming Part of Sentence 9.32.3.4.(1)

Item	Column 1	Column 2
	Number of Bedrooms in *Dwelling Unit*	Capacity, L/s
1.	1	15
2.	2	22.5
3.	3	30
4.	4	37.5
5.	5	45
6.	More than 5	System must comply with Sentence 6.2.1.1.(1)

(2) Except as permitted in Sentence (3), the principal exhaust fan shall be controlled by a manual switch.

(3) A principal exhaust fan required under this Article may be controlled by a dehumidistat or other automatic control device where the manual switch required in Sentence (2) is capable of activating the fan regardless of the setting of the automatic control.

(4) The switches required in Sentences (2) and (3) shall be centrally located in the *dwelling unit* and shall be identified with the words **VENTILATION FAN**.

(5) The principal exhaust required in this Article may be provided by means of a heat recovery ventilator installed in accordance with Article 9.32.3.11.

(6) Where the installed capacity of the principal exhaust fan exceeds the minimum capacity required in Sentence (1) by more than 50%, the control required in Sentence (2) shall include provision to allow reduction of the flow to within ±10% of the minimum capacity specified in Sentence (1).

(7) Where an exhaust air intake for the principal exhaust fan is connected directly to the duct system of a forced air heating system or other central air circulating system, it shall,

(a) be connected to the return air side of the system, and

(b) be connected not less than 1 000 mm upstream from any outdoor air supply duct.

(8) Where an exhaust air intake for the principal exhaust fan is located in the kitchen, it shall be located in the ceiling or on the wall within 300 mm of the ceiling.

(9) Single or multiple *exhaust ducts* serving the principal exhaust fan required by Sentence (1) shall be sized according to Part 6 except that they may be sized according to Table 9.32.3.4.B. where,

(a) the longest total duct length, from intake grille to outdoor hood, does not exceed 12 m, and

(b) the number of elbows does not exceed 4,

but, in any case, they shall not be smaller than recommended by the manufacturer of the fan.

Table 9.32.3.4.B.
Principal Exhaust Duct Size

Forming Part of Sentences 9.32.3.4.(9) and (10)

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Number of Bedrooms in *Dwelling Unit*	Minimum *Exhaust Duct* Diameter			
		Ducts Connected to Inlet and Outlet of Principal Exhaust Fan		Ducts Connected to One Side Only of Principal Exhaust Fan	
		Smooth Duct, mm	Flexible Duct, mm	Smooth Duct, mm	Flexible Duct, mm
1.	1	100	125	100	125
2.	2	125	150	125	150
3.	3	125	150	150	175
4.	4	150	175	150	175
5.	5	150	175	150	175
6.	More than 5	Part 6 design	Part 6 design	Part 6 design	Part 6 design

(10) In applying Table 9.32.3.4.B.,

(a) where there is more than one exhaust air inlet duct connected directly to the fan, the diameter of the inlet ducts may be decreased by 25 mm, and

(b) where the *exhaust duct* is connected to the duct system of a forced air heating system, the duct diameter shall be increased by 25 mm.

9.32.3.5. Supplemental Exhaust

(1) Additional supplemental exhaust capacity shall be installed as necessary so that the total capacity of all kitchen, bathroom, water closet room and other supplemental exhaust air intakes is not less than the total ventilation capacity, as required in Article 9.32.3.3., minus the principal exhaust fan capacity, as required in Article 9.32.3.4.

(2) An exhaust air intake shall be installed in each kitchen, bathroom and water closet room.

(3) Where the intake for a supplemental exhaust fan, other than a cooking *appliance* exhaust fan serving a *cooktop*, is installed in a kitchen, it shall be installed in the ceiling or on the wall within 300 mm of the ceiling.

(4) *Exhaust ducts* serving the required kitchen, bathroom, water closet room and other supplemental exhaust air intakes shall be sized according to Part 6 except that they may be sized according to Table 9.32.3.5. where,

(a) the total duct length does not exceed 9 m, and

(b) the number of elbows does not exceed 4,

but, in any case, they shall not be smaller than recommended by the manufacturer of the fans.

Table 9.32.3.5.
Kitchen, Bathroom and Water Closet Room Exhaust Duct Size

Forming Part of Sentence 9.32.3.5.(4)

Item	Column 1	Column 2	Column 3
	Fan Capacity, L/s	Minimum *Exhaust Duct* Diameter[(1)]	
		Ducts Connected to Inlet and Outlet of Exhaust Fan, mm	Ducts Connected to One Side Only of Exhaust Fan, mm
1.	25	125	125
2.	50	150	150

Notes to Table 9.32.3.5.:

[(1)] Where flexible duct is used, the duct diameter shall be increased by 25 mm.

(5) A supplemental exhaust fan required by this Article shall be controlled by a manual switch located in the room served by the exhaust fan.

(6) Where the supplemental exhaust is provided by an exhaust fan serving multiple exhaust air intakes required in rooms described in Sentence (2), the exhaust fan shall be controlled by a manual switch located in each room served by that exhaust fan and wired in parallel.

(7) Where the supplemental exhaust is provided by a principal exhaust fan serving multiple exhaust air intakes required in rooms described in Sentence (2), the principal exhaust fan shall be controlled by a manual switch located in each room served by that exhaust fan and wired in parallel with the manual switch required in Sentence 9.32.3.4.(4).

(8) Where a supplemental fan required by this Article is controlled by a dehumidistat or other automatic control device in addition to the manual switch required by Sentences (5) to (7), the manual switch shall be capable of activating the fan regardless of the setting of the automatic control.

(9) Supplemental exhaust required in this Article may be provided by means of a heat recovery ventilator installed in accordance with Article 9.32.3.11.

9.32.3.6. Ventilation Systems Coupled with Forced Air Heating Systems

(1) This Article applies to a mechanical ventilation system in a *dwelling unit* that contains a forced air heating system which is used for delivery of ventilation air.

(2) In a Type I *dwelling unit*, a ventilation supply inlet is not required.

(3) In a Type II *dwelling unit*, the mechanical ventilation system shall include a heat recovery ventilator, coupled to the forced air heating system, installed in accordance with Article 9.32.3.11.

(4) The forced air heating system circulation fan shall be controlled by a manual switch located adjacent to the ventilation fan switch required in Sentence 9.32.3.4.(4).

(5) The switch required in Sentence (4) shall be identified by the words **CIRCULATION FAN**.

9.32.3.7. Ventilation Systems Not Coupled with Forced Air Heating Systems

(1) This Article applies to a mechanical ventilation system in a *dwelling unit* that,

(a) does not contain a forced air heating system, or

(b) contains a forced air heating system which is not used for circulation of the ventilation air.

(2) The mechanical ventilation system shall introduce air to and circulate air throughout the *dwelling unit* in compliance with this Article.

(3) The mechanical system in this Article shall include a heat recovery ventilator installed in accordance with Article 9.32.3.11.

(4) Outdoor air shall be distributed by a ductwork system from the heat recovery ventilator required in Sentence (3) to each bedroom, to any *storey* without a bedroom and, if there is no *storey* without a bedroom, to the principal living area.

(5) A *supply duct* from the outdoors to the heat recovery ventilator required in Sentence (3) and a main distribution trunk duct shall be provided and shall be sized according to Part 6, except that the *supply duct* and the main distribution trunk duct may be sized according to Table 9.32.3.7.A. where,

(a) the total duct length from the outdoor hood to any supply register does not exceed 21 m, and

(b) the total number of fittings does not exceed 8.

Table 9.32.3.7.A.
Minimum Outdoor Air Supply and Main Trunk Duct Sizes

Forming Part of Sentence 9.32.3.7.(5)

Item	Column 1	Column 2
	Number of Bedrooms in *Dwelling Unit*	Minimum Outdoor Air Supply and Main Distribution Trunk Duct Diameter, mm
1.	1	150
2.	2	150
3.	3	175
4.	4	175
5.	5	175
6.	More than 5	System must comply with Sentence 6.2.1.1.(1)

(6) The outside air *supply duct* required by Sentence (5) shall not be considered to provide combustion and/or dilution air to fuel-burning *appliances*.

(7) Branch *supply ducts* leading from the main distribution trunk duct required by Sentence (5) to the rooms to which outdoor air is to be distributed shall be provided and shall be sized according to Part 6, except that the branch *supply ducts* may be sized according to Table 9.32.3.7.B. where,

(a) the total duct length from the outdoor hood to any supply register does not exceed 21 m, and

(b) the total number of fittings does not exceed 8.

Table 9.32.3.7.B.
Minimum Branch Supply Duct Sizes

Forming Part of Sentence 9.32.3.7.(7)

Item	Column 1	Column 2	Column 3
	Room, Space or *Storey* Served	Minimum Branch *Supply Duct* Diameter, mm	
		1 and 2 Bedroom *Dwelling Units*	3, 4 and 5 Bedroom *Dwelling Units*
1.	Master bedroom	100	100
2.	Other bedrooms	75	75
3.	*Storey* with no bedrooms or living area	75	100

(8) In applying Sentence (7), where the *dwelling unit* has more than 5 bedrooms, ducting shall be sized according to Part 6.

(9) All branch *supply ducts* that are not fitted with diffusers with adjustable balance stops shall be supplied with accessible dampers that can be adjusted and fixed in their adjusted positions and that include devices to indicate the positions of the dampers.

(10) Provision shall be made for the free flow of air to all rooms by leaving gaps beneath doors, using louvred doors or installing grilles in doors.

9.32.3.8. Protection Against Depressurization

(1) When determining the need to provide protection against depressurization, consideration must be given to,

(a) whether the presence of *soil* gas is deemed to be a problem, and

(b) the presence of solid fuel-fired combustion *appliances*.

(2) Where a solid fuel-fired combustion *appliance* is installed, the ventilation system shall include a heat recovery ventilator that is designed to operate so that the flow of exhaust air does not exceed the flow of intake air in any operating mode, and that complies with the requirements of Article 9.32.3.11.

(3) The provision of make-up air is not required for mechanical exhausting devices operating a subfloor depressurization system installed for the purpose of reducing the risk of radon ingress.

9.32.3.9. Fan Ratings

(1) Except as provided in Sentence (4), capacity ratings for required fans shall be determined in accordance with,

(a) CAN/CSA-C260-M, “Rating the Performance of Residential Mechanical Ventilating Equipment”, or

(b) HVI 916, “Airflow Test Procedure”.

(2) Sound ratings for required fans shall be determined in accordance with,

(a) CAN/CSA-C260-M, “Rating the Performance of Residential Mechanical Ventilating Equipment”, or

(b) HVI 915, “Procedure for Loudness Rating of Residential Fan Products”.

(3) Capacity ratings for required fans shall be based on a static pressure differential of 50 Pa, 25 Pa or 7.5 Pa depending on whether the fan is installed with ductwork connected on both sides, one side or neither side, respectively.

(4) Except for heat recovery ventilators, exhaust fans required to make up any part of the total ventilation capacity required by Article 9.32.3.3. shall have a sound rating not greater than that specified in Table 9.32.3.9.

Table 9.32.3.9.
Fan Sound Rating

Forming Part of Sentence 9.32.3.9.(4)

Item	Column 1	Column 2	Column 3
	Fan Application	Maximum Sound Rating, sones	
		Rated according to CAN/CSA-C260-M	Rated according to HVI 915
1.	Principal exhaust fan	2.0	2.5
2.	Supplemental exhaust fans installed in bathrooms and water closet rooms and their make-up air fans	2.5	3.5
3.	Supplemental exhaust fans installed in kitchens and their make-up air fans	no rating required	no rating required

(5) Required fans shall be installed according to the manufacturer's instructions.

(6) Mechanical ventilation devices shall conform to CSA C22.2 No. 113, “Fans and Ventilators”.

9.32.3.10. Ducts

(1) Ventilation ducts shall conform to the requirements of Part 6 for *supply ducts*, except that *exhaust ducts* that serve only a bathroom or water closet room may be of *combustible* material provided the duct is reasonably airtight and constructed of a material impervious to water.

(2) *Exhaust ducts* shall not discharge into heated or unheated enclosed spaces.

(3) Where an *exhaust duct* passes through or is adjacent to unheated space, the duct shall be insulated to not less than RSI 0.5.

(4) Where a duct carrying outdoor air that is not tempered or not mixed with indoor air passes through heated space, it shall be insulated to not less than RSI 0.5 except that, where such a duct is exposed in the heated space for more than 3 m of length in the heated space, it shall be,

(a) insulated to not less than the values listed in Table 9.32.3.10.A., and

(b) provided with a *vapour barrier*.

Table 9.32.3.10.A.
Insulation of Ducts Carrying Outdoor Air

Forming Part of Sentence 9.32.3.10.(4)

Item	Column 1	Column 2

	Outside Winter Design Temperature as per MMAH Supplementary Standard SB-1, "Climatic and Seismic Data"(1), °C	Minimum Thermal Resistance, RSI
1.	–7 to –11	0.5
2.	–12 to –17	0.9
3.	–18 to –24	1.2
4.	–25 to –29	1.4
5.	–30 to –34	1.8
6.	–35 and colder	2.1

Notes to Table 9.32.3.10.A.:

(1) The outside winter design temperatures shall be those listed for the January 2.5 percent values.

(5) A kitchen *exhaust duct* not equipped with a filter at the inlet end shall be designed and installed so that the entire duct can be cleaned.

(6) Ductwork for cooking *appliance* exhaust fans shall,

(a) be of *noncombustible*, corrosion-resistant material, and

(b) lead directly to the outdoors without connection to other exhaust fans or ducts.

(7) Ductwork for cooking *appliance* exhaust fans shall be equipped with a grease filter at the intake.

(8) All ductwork shall be permanently supported or clipped to prevent sagging, excessive movement and vibration.

(9) All ducting connected to supply and exhaust fans shall be constructed so as to inhibit air leakage at joints.

(10) Where rectangular duct is used in place of round duct, it shall be selected according to Table 9.32.3.10.B.

Table 9.32.3.10.B.
Equivalent Duct Sizes

Forming Part of Sentence 9.32.3.10.(10)

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Required Round Duct Size, mm	Permitted Equivalent Rectangular Duct Size, mm			
		Stack Duct	100 mm Depth	125 mm Depth	150 mm Depth
1.	75	82 × 250	57 × 100		
2.	100	82 × 250	89 × 100	75 × 125	75 × 150
3.	125	82 × 250	125 × 100	100 × 125	89 × 150
4.	150	82 × 300	200 × 100	150 × 125	125 × 150
5.	175	82 × 350	275 × 100	200 × 125	175 × 150
6.	More than 175	Part 6 design	Part 6 design	Part 6 design	Part 6 design

9.32.3.11. Heat Recovery Ventilators

(1) Where a heat recovery ventilator is installed to provide all or part of the requirements of this Subsection, this Article shall apply.

(2) Heat recovery ventilators shall be designed to provide a minimum 55% sensible heat recovery efficiency when tested to the low temperature thermal and ventilation performance test method set out in CAN/CSA-C439, "Rating the Performance of Heat/Energy-Recovery Ventilators", at a Station 1 test temperature of –25°C at an air flow not less than 30 L/s.

(3) Where a heat recovery ventilator is connected to a forced air heating system, the supply side of the ventilator shall be directly connected to the return air side of the forced air heating system.

(4) Two or more heat recovery ventilators shall not be connected in parallel air flow to a common air *supply duct* unless specifically recommended by the manufacturer.

(5) Two or more heat recovery ventilators shall not be connected in parallel air flow to a common downstream *exhaust duct*.

(6) Heat recovery ventilators installed in unheated spaces shall be installed so as to avoid condensation of moisture on fans and motors in exhaust air, in accordance with the manufacturer's instructions.

(7) All start-up procedures recommended by the manufacturer including air balancing and air-flow determination shall be followed.

(8) Free flow of condensate shall be provided in accordance with the manufacturer's recommendations or, in their absence, a condensate drain of minimum ½ inch nominal pipe size pitched in the direction of flow and complete with a trap or condensate pump with sufficient capacity shall be installed.

(9) The heat recovery ventilator and all condensate lines shall be installed in a space where the ambient temperature will not adversely affect the operation of the system.

(10) When operating at the rate required in Article 9.32.3.4., the supply and exhaust airflow rates of the heat recovery ventilator shall be balanced so that the value of the lesser flow shall be at least 90% of the value of the greater flow, unless otherwise recommended by the manufacturer.

9.32.3.12. Outdoor Intake and Exhaust Openings

(1) Separate air intake and exhaust outlet openings, when located on the same wall or roof, shall be installed so as to avoid contamination of the ventilation air by the exhaust air.

(2) Intake openings shall be located so as to avoid contamination of the ventilation air from other local sources such as automobile exhausts and exhaust from adjacent *buildings*.

(3) The distance from the bottom of an air intake opening to finished ground level or to any nearer and lower permanent horizontal surface shall be not less than 450 mm or the depth of expected snow accumulation, whichever is greater.

(4) The distance separating air intakes from *building* envelope penetrations that are potential sources of contaminants, such as *gas vents* or oil fill pipes, shall be not less than 900 mm.

(5) Air intakes shall be clearly labelled as such for identification from locations outside the *dwelling unit*.

(6) The distance from the bottom of an exhaust outlet to finished ground level or to any nearer and lower permanent horizontal surface shall be not less than 100 mm.

(7) Where air intake and exhaust openings are in exposed locations, provision shall be made to protect them from the entry of precipitation by the use of louvres, weather cowls or other suitable protection.

(8) Air intake openings shall incorporate screens or grilles to protect against the entry of animals and insects.

(9) Except for exhaust outlets serving heat recovery ventilators, exhaust outlets shall incorporate backdraft dampers.

(10) Except for clothes dryers, exhaust outlets shall be fitted with screens of mesh not larger than 15 mm, except where climatic conditions may require larger openings.

(11) Where a screen or grille required by Sentences (8) and (10) has a screen mesh less than 6 mm, the screen or grille shall be removable for cleaning.

(12) The gross area of the screens or grilles installed in intake and exhaust openings shall be three times that of the duct served.

(13) Screens and grilles shall be of corrosion-resistant material.

(14) The net free area of an air intake or exhaust outlet shall be equal to or greater than the cross-sectional area of the duct served.

9.32.3.13. Installation

(1) Installation of fans and heat recovery ventilators shall be in accordance with manufacturer's instructions for minimizing noise and vibration transmission and achieving the required sound rating.

(2) Where flow-regulating dampers are required, they shall be adjustable and accessible without requiring the removal of fans, motors, or insulating materials and without the need for specialized tools.

(3) Ventilation equipment shall be accessible for inspection, maintenance, repair and cleaning.

(4) Ventilation equipment installed in unheated spaces shall be installed so as to avoid condensation of moisture on fans and motors in accordance with the manufacturer's instructions.

Section 9.33. Heating and Air-Conditioning

9.33.1. General

9.33.1.1. Design and Installation Requirements

(1) The design and installation of central heating systems, including requirements for combustion air, shall conform to Part 6 and this Section.

(2) The design and installation of *air-conditioning* systems shall conform to Part 6.

(3) Repairs or component replacements that change the capacity or extent of safety of an existing heating, ventilating or *air-conditioning* system and that alter the method of operation shall conform to this Code.

9.33.1.2. Solid Fuel-Burning Appliances

(1) The design, construction and installation, including the provision of combustion air, of solid-fuel burning *appliances* and equipment, including *stoves*, *cooktops* and *space heaters*, shall conform to CSA-B365, "Installation Code for Solid-Fuel-Burning Appliances and Equipment".

(2) Solid fuel-burning *stoves*, *furnaces* and hydronic heating systems designed to burn solid fuels, other than coal, shall conform to the particulate emission limits of,

(a) CSA B415.1, "Performance Testing of Solid-Fuel-Burning Heating Appliances", or

(b) the "Standards of Performance for New Residential Wood Heaters", set out in Subpart AAA of Part 60 of Title 40 of the Code of Federal Regulations, published by the United States Environmental Protection Agency, as it read on November 1, 2013.

9.33.1.3. Structural Movement

(1) Where the *building* is in a location where the spectral response acceleration, $S_a(0.2)$, is greater than 0.55, heating and *air-conditioning* equipment with fuel or power connections shall be secured to the structure to resist overturning and displacement.

9.33.2. Required Heating Systems

9.33.2.1. Residential Heating Systems

(1) Residential *buildings* intended for use in the winter months on a continuing basis shall be equipped with heating facilities conforming to this Section.

9.33.2.2. Equipment Sizing

(1) The heating system capacity shall be based on the heating load calculated in accordance with Sentence 6.2.1.1.(1).

(2) Where a cooling system is installed, the cooling system capacity shall be based on the cooling load calculated in accordance with Sentence 6.2.1.1.(1).

(3) The heating and cooling equipment capacities shall be determined in accordance with the requirements of CSA F280, "Determining the Required Capacity of Residential Space Heating and Cooling Appliances".

9.33.3. Design Temperatures

9.33.3.1. Indoor Design Temperatures

(1) At the outside design temperature, required heating facilities shall be capable of maintaining an indoor air temperature of not less than,

(a) 22°C in all living spaces,

(b) 22°C in unfinished *basements*, and

(c) 15°C in heated crawl spaces.

9.33.3.2. Outdoor Design Temperatures

(1) The outdoor conditions to be used in designing heating, ventilating and *air-conditioning* systems shall be the appropriate values for the location as set out in MMAH Supplementary Standard SB-1, "Climatic and Seismic Data", using 2.5 percent design temperature criteria.

9.33.4. Carbon Monoxide Alarms

9.33.4.1. Application

(1) This Subsection applies to every *building* that,

(a) contains a *residential occupancy*, and

(b) contains a fuel-burning *appliance* or a *storage garage*.

9.33.4.2. Location of Carbon Monoxide Alarms

(1) Where a fuel-burning *appliance* is installed in a *suite* of *residential occupancy*, a carbon monoxide alarm shall be installed adjacent to each sleeping area in the *suite*.

(2) Where a fuel-burning *appliance* is installed in a *service room* that is not in a *suite* of *residential occupancy*, a carbon monoxide alarm shall be installed,

(a) adjacent to each sleeping area in every *suite* of *residential occupancy* that is adjacent to the *service room*, and

(b) in the *service room*.

(3) Where a *storage garage* is located in a *building* containing a *residential occupancy***,** a carbon monoxide alarm shall be installed adjacent to each sleeping area in every *suite* of *residential occupancy* that is adjacent to the *storage garage*.

(4) Where a *storage garage* serves only the *dwelling unit* to which it is attached or built in, a carbon monoxide alarm shall be installed adjacent to each sleeping area in the *dwelling unit*.

(5) A carbon monoxide alarm shall be mechanically fixed,

(a) at the manufacturer's recommended height, or

(b) in the absence of specific instructions, on or near the ceiling.

9.33.4.3. Installation and Conformance to Standards

(1) The carbon monoxide alarm required by Article 9.33.4.2. shall,

(a) except as permitted in Sentence (2), be permanently connected to an electrical circuit and shall have no disconnect switch between the overcurrent device and the carbon monoxide alarm,

(b) be wired so that its activation will activate all carbon monoxide alarms within the *suite*, where located within a *suite* of *residential occupancy*,

(c) be equipped with an alarm that is audible within bedrooms when the intervening doors are closed, where located adjacent to a sleeping area, and

(d) conform to,

(i) CAN/CSA-6.19, "Residential Carbon Monoxide Alarming Devices", or

(ii) UL 2034, "Single and Multiple Station Carbon Monoxide Alarms".

(2) Where the *building* is not supplied with electrical power, carbon monoxide alarms are permitted to be battery operated.

Section 9.34. Electrical Facilities

9.34.1. General

9.34.1.1. Reserved

9.34.1.2. Required Facilities

(1) Where electrical services are available, electrical facilities shall be provided for every *building* in conformance with this Section.

9.34.1.3. Location of Equipment in Public Areas

(1) Entrance switches, meters, panel boxes, splitter boxes, time clocks and other similar equipment shall not be located in any public area unless adequate precautions are taken to prevent interference with the equipment.

9.34.1.4. Recessed Lighting Fixtures

(1) Recessed lighting fixtures shall not be located in insulated ceilings unless the fixtures are designed for such installations.

9.34.1.5. Wiring and Cables

(1) Except for *dwelling units* and except as required in Sentence (2), optical fibre cables and electrical wires and cables installed in *buildings* permitted to be of *combustible construction* shall,

(a) not convey flame or continue to burn for more than 1 min when tested in conformance with the Vertical Flame Test in Clause 4.11.1. of CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables", (FT1 Rating), or

(b) be located in,

(i) totally enclosed *noncombustible* raceways,

(ii) masonry walls,

(iii) concrete slabs, or

(iv) totally enclosed non metallic raceways conforming to Clause 3.1.5.20.(1)(b).

(2) Where a concealed space in a floor or ceiling assembly is used as a *plenum*, electrical wires and cables within the *plenum* shall conform to Sentence 3.6.4.3.(1).

9.34.2. Lighting Outlets

9.34.2.1. Lighting of Entrances

(1) An exterior lighting outlet with fixture controlled by a wall switch located within the *building* shall be provided at every entrance to *buildings* of *residential occupancy*.

(2) The exterior lighting outlet with fixture required by Sentence (1) may be controlled by a wall switch or panel accessible to authorized personnel only, where it serves,

(a) a *building* entrance serving multiple *suites* of *residential occupancy*,

(b) multiple *dwelling unit* entrances,

(c) *hotels*, or

(d) motels.

9.34.2.2. Outlets in Dwelling Units

(1) Except as provided in Sentence (2), a lighting outlet with fixture controlled by a wall switch shall be provided in kitchens, bedrooms, living rooms, utility rooms, laundry rooms, dining rooms, bathrooms, water closet rooms, vestibules and hallways in *dwelling units*.

(2) Where a receptacle controlled by a wall switch is provided in bedrooms or living rooms, such rooms need not conform to the requirements of Sentence (1).

9.34.2.3. Stairways

(1) Every stairway shall be lighted.

(2) Except as provided in Sentence (3), 3-way wall switches located at the head and foot of every stairway shall be provided to control at least one lighting outlet with fixture for stairways with four or more risers in *dwelling units*.

(3) The stairway lighting for *basements* that do not contain finished space or lead to an outside entrance or built-in garage and that serve not more than one *dwelling unit* is permitted to be controlled by a single switch located at the head of the stairs.

9.34.2.4. Basements

(1) A lighting outlet with fixture shall be provided for each 30 m² of floor area or fraction of it in unfinished *basements*.

(2) The outlet required in Sentence (1) nearest the stairs shall be controlled by a wall switch located at the head of the stairs.

9.34.2.5. Storage Rooms

(1) A lighting outlet with fixture shall be provided in storage rooms.

9.34.2.6. Garages and Carports

(1) A lighting outlet with fixture shall be provided for an attached, built-in or detached garage or carport.

(2) Except as provided in Sentence (3), lighting outlets required in Sentence (1) shall be controlled by a wall switch near the doorway.

(3) Where the lighting outlet and fixture required in Sentence (1) are ceiling mounted above an area not normally occupied by a parked car, or are wall mounted, a fixture with a built-in switch is permitted to be used.

(4) Where a carport is lighted by a light at the entrance to a *dwelling unit*, additional carport lighting is not required.

9.34.2.7. Public and Service Areas

(1) Every public or service area in *buildings*, including a *recreational camp* and a *camp for housing of workers*, shall have lighting outlets with fixtures controlled by a wall switch or panel to illuminate such areas.

(2) When provided by incandescent lighting, illumination required in Sentence (1) shall conform to Table 9.34.2.7.

(3) When other types of lighting are used, illumination equivalent to that shown in Table 9.34.2.7. shall be provided.

Table 9.34.2.7.
Lighting for Public Areas

Forming Part of Sentences 9.34.2.7.(2) and (3)

Item	Column 1	Column 2	Column 3
	Room or Space	Minimum Illumination, lx	Minimum Lighting Power Density, W/m^2 of *floor area* (incandescent lighting)
1.	Storage rooms	50	5
2.	*Service rooms* and laundry areas	200	20
3.	Garages	50	5
4.	Public water closet rooms	100	10
5.	Service hallways and stairways	50	5
6.	Recreation rooms	100	10
7.	Hallways, corridors, stairways and sleeping areas in *recreational camps* and *camps for housing of workers*	100	10
8.	Kitchen in *recreational camps* and *camps for housing of workers*	500	50

9.	All other rooms in *recreational camps* and *camps for housing of workers*	250	25

9.34.3. Emergency Lighting

9.34.3.1. Emergency Lighting

(1) Emergency lighting shall conform to Subsection 9.9.12.

Section 9.35. Garages and Carports

9.35.1. Scope

9.35.1.1. Application

(1) This Section applies to garages and carports serving a single *dwelling unit.*

9.35.1.2. Construction Requirements

(1) The construction of a garage or carport shall conform to the requirements for other *buildings* in this Part except as provided in this Section.

9.35.2. General

9.35.2.1. Carport Considered to be Garage

(1) Where a roofed enclosure used for the storage or parking of motor vehicles has more than 60 per cent of the total perimeter enclosed by walls, doors or windows, the enclosure shall be considered a garage.

9.35.2.2. Garage Floor

(1) Where an attached or built-in garage is provided, the garage floor shall be sloped to drain liquids to the outdoors.

9.35.3. Foundations

9.35.3.1. Foundation Required

(1) Except as permitted in this Subsection, *foundations* conforming to Sections 9.12. and 9.15. shall be provided for the support of carport and garage super-structures, including that portion beneath garage doors.

9.35.3.2. Protection from Damage due to Soil Movement

(1) In clay-type *soils* subject to significant movement with a change in *soil* moisture content, the *foundation* depth of carports or garages connected to a *dwelling unit* directly or by a breezeway shall be approximately the same depth as the main *building foundation*.

(2) Where slab-on-ground construction is used, a construction joint shall be provided between the main *building* slab and the garage or breezeway or carport slab.

(3) Except as provided in Section 9.12., *foundations* for attached unheated garages or carports shall be below frost level.

9.35.3.3. Small Garages

(1) Detached garages of less than 55 m² floor area and not more than 1 *storey* in height may be supported on wood mud sills provided the garage is not of masonry or masonry veneer construction.

9.35.3.4. Column Piers

(1) Piers for the support of carport columns shall extend not less than 150 mm above ground level.

(2) Piers referred to in Sentence (1) shall project not less than 25 mm beyond the base of the column but in no case be less than 190 mm by 190 mm in size.

9.35.4. Walls and Columns

9.35.4.1. Interior Finish

(1) Interior finish need not be applied to garage and carport walls.

9.35.4.2. Columns

(1) Columns for garages and carports shall conform to Section 9.17., except that 89 mm by 89 mm wood columns may be used.

9.35.4.3. Anchorage

(1) Garage or carport walls and columns shall be anchored to the *foundation* to resist wind uplift in conformance with Subsection 9.23.6., except that where a garage is supported on the surface of the ground, ground anchors shall be provided to resist wind uplift.

Section 9.36. Cottages

9.36.1. Scope

9.36.1.1. Application

(1) This Section applies to *buildings* of *residential occupancy* used or intended to be used as seasonal recreational *buildings*.

(2) The *buildings* described in Sentence (1) shall comply with all the requirements of this Part, except where they are specifically exempted in this Section.

9.36.2. General

9.36.2.1. Exclusions

(1) Except as provided in Subsection 9.10.15. and Articles 9.36.2.4. and 9.36.3.1., *buildings* used or intended to be used as seasonal recreational *buildings* need not comply with Sections 9.5. to 9.7. and 9.9. to 9.11.

(2) Flooring need not comply with Section 9.30., but tight-fitting floors shall be provided to support the *live* and *dead loads*.

(3) Except as provided in Sentence (4), thermal insulation, *vapour barrier*, air barrier construction, interior finishes, plumbing, heating, mechanical ventilation, *air-conditioning* and electrical facilities, need not be provided, but where any of these are provided, they shall comply with the requirements of this Part.

(4) Where heating and *air-conditioning* are provided, Article 9.33.3.1. need not be complied with.

9.36.2.2. Foundations

(1) Continuous perimeter *foundation* walls are not required, but when they are provided, they shall comply with the requirements of this Part.

(2) Where unit masonry columns are used, the height of such columns shall not exceed,

(a) in the case of hollow masonry units, 4 times the least dimension of the units,

(b) in the case of solid masonry units or hollow units with voids filled with concrete, 10 times the least dimension of the column, or

(c) where the column is reinforced with at least four 13 mm diam bars and filled with concrete, 18 times the least dimension of the column.

(3) Columns in excess of the height limitations of Clauses (2)(a) to (c) shall be designed in accordance with Part 4.

9.36.2.3. Waterproofing and Dampproofing

(1) Where *foundations* below ground level and concrete floors on ground are used, they shall comply with Section 9.13.

9.36.2.4. Smoke Alarms

(1) Every *dwelling unit* within the scope of this Section shall be provided with a *smoke alarm* in accordance with Subsection 9.10.19.

9.36.3. Tourist Accommodation

9.36.3.1. Buildings for Seasonal Tourist Accommodation or for Rent

(1) Where *buildings* are used or intended to be used for seasonal tourist accommodation or for rent, they shall comply with Sections 9.5. to 9.8. in addition to the requirements of this Section.

Section 9.37. Log Construction

9.37.1. General

9.37.1.1. Material Requirements

(1) Logs that are sound and free of fractures may be used for *foundations*, beams, posts and similar members, provided it can be shown by a structural analysis or tests or previous experience that the strength of the member is adequate for its intended purposes.

9.37.1.2. Requirement for Wood Preservative

(1) The portion of any log coming in contact with masonry or concrete at or below *grade* shall be treated with a wood preservative to prevent decay.

9.37.1.3. Exterior Joints

(1) All exterior joints between logs shall be rendered water-tight by methods such as machined joints, oakum packing, cement parging, chinking, caulking or a combination of these.

9.37.2. Walls

9.37.2.1. Logs

(1) Walls may be built of natural or manufactured logs.

9.37.2.2. Attachment of Logs

(1) Walls made of logs in a horizontal position shall have interlocking intersections that will prevent the collection of water in the joints, or the horizontal logs shall butt to a vertical corner post to which the horizontal logs shall be firmly attached.

9.37.2.3. Joining Logs

(1) Each log in a horizontal position shall be scribed as close as possible to its bearer and fastened to the bearer in at least three places throughout its length, by dowels, continuous machined joints, vertical framing members or interlocking intersections or any combination of these, but in no case shall the distance between fastenings exceed 1 800 mm.

9.37.2.4. Vertical Logs

(1) Each log in a wall built of vertical logs shall be scribed to fit as closely as possible to the adjacent logs.

9.37.2.5. Plates

(1) Logs used in a vertical position shall have a plate at the top and a plate at the bottom and the plates shall be at least as wide as the largest end diameter of any of the logs.

9.37.3. Lintels

9.37.3.1. Support Over Openings

(1) Logs placed in vertical position shall be supported over window and door openings by lintels meeting the requirements of Tables A-12 to A-16.

9.37.3.2. Clearance

(1) At every opening in a wall made of logs in a horizontal position where shrinkage can occur there shall be a clearance between the rough buck header and the lintel log of not less than 13 mm in width for each 300 mm of height to allow for settlement.

Section 9.38. Park Model Trailers

9.38.1. Scope

9.38.1.1. Application

(1) This Section applies to manufactured *buildings* designed and constructed in conformance with CAN/CSA-Z241 Series, “Park Model Trailers”, and used or intended to be used as a seasonal recreational *building* of *residential occupancy*.

9.38.2. General

9.38.2.1. General

(1) Except as provided in Subsection 9.38.3., a manufactured *building* used or intended to be used as a seasonal recreational *building* of *residential occupancy* is deemed to comply with this Code if it is designed and constructed in conformance with CAN/CSA-Z241 Series, “Park Model Trailers”.

9.38.3. Requirements

9.38.3.1. Other Building Components

(1) The requirements of this Code shall apply to *building* components designed and *constructed* outside the place of manufacture of a *building* described in Article 9.38.1.1.

9.38.3.2. Spatial Separation

(1) *Buildings* described in Article 9.38.1.1. shall comply with Section 9.10. where the *building* is,

(a) used or intended to be used for seasonal tourist accommodation, or

(b) leased or intended to be leased.

9.38.3.3. Foundations and Anchorage

(1) *Buildings* described in Article 9.38.1.1. shall be supported and anchored in conformance with the manufacturer's installation instructions.

9.38.3.4. Proximity to Above Ground Electrical Conductors

(1) *Buildings* described in Article 9.38.1.1. shall comply with Article 9.1.1.5.

Section 9.39. Reinforced Concrete Slabs

9.39.1. Scope

9.39.1.1. Application

(1) This Section applies to,

(a) reinforced concrete slabs that are suspended over cold rooms in *basements*, and are supported by *foundation* walls along the perimeter of the slab with no additional interior supports, and

(b) slabs in which the clear span between supporting walls is not more than 2.5 m along the shortest dimension of the slab.

(2) Slabs for conditions other than described in Sentence (1) shall be designed in accordance with Part 4.

(3) This Section does not apply to reinforced concrete slabs intended to support motor vehicles.

9.39.1.2. Concrete

(1) Concrete shall conform to Section 9.3.

9.39.1.3. Reinforcing Steel

(1) Reinforcing steel shall conform to Grade 400 in CSA-G30.18, Carbon Steel Bars for Concrete Reinforcement".

9.39.1.4. Slab Construction

(1) Concrete shall be cast against form work in accordance with CSA A23.1, "Concrete Materials and Methods of Concrete Construction".

(2) The slab shall be not less than 125 mm thick.

(3) The slab shall be reinforced with 10M bars spaced not more than 200 mm o.c. in each direction, with 30 mm clear cover from the bottom of the slab to the first layer of bars, and the second layer of bars laid directly on top of the lower layer in the opposite direction.

(4) The slab shall bear not less than 75 mm on the supporting *foundation* walls and be anchored to the walls with 600 mm× 600 mm 10M bent dowels spaced at not more than 600 mm o.c.

(5) Exposed slabs shall be sloped to effectively shed water away from the exterior wall.

Section 9.40. Additional Requirements for Change of Use

9.40.1. Scope

9.40.1.1. Application

(1) This Section applies where proposed *construction* in respect of an existing *building* will result in any of the following changes of use of all or part of the *building*:

(a) a change of the *major occupancy* of all or part of a *building* that is designated with a "Y" in Table 1.3.1.4. of Division C,

(b) a *suite* of a Group C *major occupancy* is converted into more than one *suite* of a Group C *major occupancy*,

(c) a *farm building* or part of a *farm building* is changed to a *major occupancy*,

(d) a *building* or part of a *building* is changed to a *post-disaster building*,

(e) a *building* or part of a *building* is changed to a retirement home regulated under the *Retirement Homes Act, 2010*, or

(f) the use of a *building* or part of a *building* is changed and the previous *major occupancy* of the *building* or part of the *building* cannot be determined.

(2) For the purposes of this Section and Sentences 11.4.2.1.(1) and 11.4.2.5.(4), the changes of use set out in Clauses (1)(b) to (f) are also deemed to constitute a change in *major occupancy*.

(3) The requirements of this Section are in addition to the requirements of other Parts of the Code as they apply to the proposed *construction.*

9.40.2. Additional Construction

9.40.2.1. Change of Use and Compensating Construction

(1) Where proposed *construction* will result in a change of use described in Clauses 9.40.1.1.(1)(a) to (e), additional *construction* shall be required in order that the *building* or part of a *building* subject to the change of use conforms to the requirements of Subsections 9.5.1. and 9.5.3. to 9.5.10., Section 9.6., Article 9.7.2.3. Sentences 9.7.5.1.(2) and 9.7.6.2.(1) and (3), Articles 9.8.8.1. and 9.9.10.1., Subsection 9.10.17. and Sections 9.31., 9.32. and 9.34. as they apply to the new *major occupancy* that the *building* or part of a *building* is to support.

(2) For the purposes of this Article, existing *buildings* shall be classified as to their *construction* and *occupancy* as provided for in Sentence 11.2.1.1.(1).

9.40.2.2. Performance Level Evaluation and Compensating Construction

(1) The *performance level* of a *building* after *construction* shall not be less than the *performance level* of the *building* prior to *construction.*

(2) For the purposes of Sentence (1), reduction of *performance level* shall be determined in accordance with Articles 11.4.2.1., 11.4.2.3. and 11.4.2.5.

(3) Where the proposed *construction* would reduce the *performance level* of an existing *building*, compensating *construction* shall be required in conformance with Articles 11.4.3.1., 11.4.3.2., 11.4.3.4. and 11.4.3.6.

(4) Section 11.5. applies in respect of the requirements of Sentences 11.4.3.4.(1), (3) and (4).

Table A-1
Maximum Spans for Floor Joists – General Cases[(1)]

Forming Part of Sentence 9.23.4.2.(1)

Item	Column 1	Column 2	Column 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12
	Commercial Designation	Grade	Joist Size, mm	Maximum Span, m								
				With Strapping[(2)]			With Bridging			With Strapping[(2)] and Bridging		

				Joist Spacing, mm			Joist Spacing, mm			Joist Spacing, mm		
				305	406	610	305	406	610	305	406	610
1.	Douglas Fir – Larch (includes Douglas Fir and Western Larch)	Select Structural	38 × 89	2.13	1.97	1.73	2.19	1.99	1.73	2.19	1.99	1.73
			38 × 140	3.23	3.07	2.73	3.44	3.12	2.73	3.44	3.12	2.73
			38 × 184	3.88	3.69	3.51	4.18	3.92	3.59	4.37	4.07	3.59
			38 × 235	4.57	4.34	4.13	4.86	4.57	4.29	5.05	4.70	4.39
			38 × 286	5.21	4.95	4.71	5.49	5.16	4.85	5.66	5.28	4.92
		No. 1 and No. 2	38 × 89	2.00	1.85	1.66	2.09	1.90	1.66	2.09	1.90	1.66
			38 × 140	3.09	2.91	2.62	3.29	2.99	2.62	3.29	2.99	2.62
			38 × 184	3.71	3.53	3.36	4.00	3.76	3.44	4.19	3.90	3.44
			38 × 235	4.38	4.16	3.96	4.66	4.38	4.11	4.84	4.51	4.20
			38 × 286	4.99	4.75	4.52	5.26	4.94	4.65	5.43	5.06	4.72
		No. 3	38 × 89	1.90	1.69	1.38	1.95	1.69	1.38	1.95	1.69	1.38
			38 × 140	2.78	2.41	1.97	2.78	2.41	1.97	2.78	2.41	1.97
			38 × 184	3.38	2.93	2.39	3.38	2.93	2.39	3.38	2.93	2.39
			38 × 235	4.14	3.58	2.93	4.14	3.58	2.93	4.14	3.58	2.93
			38 × 286	4.80	4.16	3.39	4.80	4.16	3.39	4.80	4.16	3.39
		Construction	38 × 89	1.90	1.77	1.61	2.03	1.84	1.61	2.03	1.84	1.61
		Standard	38 × 89	1.81	1.63	1.33	1.88	1.63	1.33	1.88	1.63	1.33
2.	Hem – Fir (includes Western Hemlock and Amabilis Fir)	Select Structural	38 × 89	2.08	1.93	1.71	2.16	1.96	1.71	2.16	1.96	1.71
			38 × 140	3.18	3.03	2.69	3.39	3.08	2.69	3.39	3.08	2.69
			38 × 184	3.82	3.64	3.46	4.12	3.87	3.54	4.31	4.02	3.54
			38 × 235	4.50	4.28	4.08	4.80	4.51	4.23	4.98	4.64	4.33
			38 × 286	5.14	4.89	4.65	5.42	5.09	4.78	5.59	5.21	4.86
		No. 1 and No. 2	38 × 89	2.00	1.85	1.66	2.09	1.90	1.66	2.09	1.90	1.66
			38 × 140	3.09	2.91	2.62	3.29	2.99	2.62	3.29	2.99	2.62

			38 × 184	3.71	3.53	3.36	4.00	3.76	3.44	4.19	3.90	3.44
			38 × 235	4.38	4.16	3.96	4.66	4.38	4.11	4.84	4.51	4.20
			38 × 286	4.99	4.75	4.52	5.26	4.94	4.65	5.43	5.06	4.72
		No. 3	38 × 89	1.90	1.77	1.61	2.03	1.84	1.61	2.03	1.84	1.61
			38 × 140	2.99	2.78	2.43	3.19	2.90	2.43	3.19	2.90	2.43
			38 × 184	3.60	3.42	2.95	3.88	3.61	2.95	4.06	3.61	2.95
			38 × 235	4.24	4.03	3.61	4.51	4.24	3.61	4.68	4.37	3.61
			38 × 286	4.84	4.60	4.19	5.10	4.79	4.19	5.26	4.90	4.19
		Construction	38 × 89	1.90	1.77	1.61	2.03	1.84	1.61	2.03	1.84	1.61
		Standard	38 × 89	1.81	1.68	1.39	1.96	1.71	1.39	1.96	1.71	1.39
3.	Spruce – Pine – Fir (includes Spruce (all species except Coast Sitka Spruce), Jack Pine, Lodgepole Pine, Balsam Fir and Alpine Fir)	Select Structural	38 × 89	1.95	1.81	1.64	2.06	1.87	1.64	2.06	1.87	1.64
			38 × 140	3.05	2.85	2.57	3.24	2.95	2.57	3.24	2.95	2.57
			38 × 184	3.66	3.48	3.31	3.94	3.70	3.38	4.12	3.84	3.38
			38 × 235	4.31	4.10	3.90	4.59	4.31	4.05	4.76	4.44	4.14
			38 × 286	4.91	4.67	4.45	5.18	4.87	4.57	5.34	4.98	4.64
		No. 1 and No. 2	38 × 89	1.86	1.72	1.58	1.99	1.81	1.58	1.99	1.81	1.58
			38 × 140	2.92	2.71	2.49	3.14	2.85	2.49	3.14	2.85	2.49
			38 × 184	3.54	3.36	3.20	3.81	3.58	3.27	3.99	3.72	3.27
			38 × 235	4.17	3.96	3.77	4.44	4.17	3.92	4.60	4.29	4.00
			38 × 286	4.75	4.52	4.30	5.01	4.71	4.42	5.17	4.82	4.49
		No. 3	38 × 89	1.81	1.68	1.55	1.96	1.78	1.55	1.96	1.78	1.55
			38 × 140	2.84	2.64	2.43	3.08	2.80	2.43	3.08	2.80	2.43
			38 × 184	3.47	3.30	2.95	3.74	3.52	2.95	3.92	3.61	2.95
			38 × 235	4.09	3.89	3.61	4.36	4.09	3.61	4.52	4.22	3.61
			38 × 286	4.67	4.44	4.19	4.92	4.62	4.19	5.08	4.73	4.19

		Construction	38 × 89	1.81	1.68	1.55	1.96	1.78	1.55	1.96	1.78	1.55
		Standard	38 × 89	1.70	1.58	1.44	1.88	1.71	1.44	1.88	1.71	1.44
4.	Northern Species (includes any Canadian Species covered by the NLGA Standard Grading Rules)	Select Structural	38 × 89	1.65	1.53	1.42	1.84	1.68	1.46	1.84	1.68	1.46
			38 × 140	2.59	2.41	2.24	2.90	2.63	2.30	2.90	2.63	2.30
			38 × 184	3.27	3.11	2.94	3.52	3.31	3.03	3.69	3.44	3.03
			38 × 235	3.85	3.66	3.48	4.10	3.85	3.62	4.26	3.97	3.70
			38 × 286	4.39	4.18	3.97	4.63	4.35	4.09	4.78	4.45	4.15
		No. 1 and No. 2	38 × 89	1.59	1.48	1.37	1.80	1.64	1.43	1.80	1.64	1.43
			38 × 140	2.51	2.33	2.16	2.83	2.57	2.25	2.83	2.57	2.25
			38 × 184	3.19	3.04	2.84	3.44	3.23	2.96	3.60	3.36	2.96
			38 × 235	3.76	3.58	3.41	4.01	3.77	3.54	4.16	3.88	3.62
			38 × 286	4.29	4.08	3.88	4.53	4.25	4.00	4.67	4.35	4.06
		No. 3	38 × 89	1.54	1.43	1.32	1.74	1.57	1.36	1.76	1.60	1.36
			38 × 140	2.42	2.24	1.94	2.74	2.38	1.94	2.75	2.38	1.94
			38 × 184	3.12	2.90	2.37	3.35	2.90	2.37	3.35	2.90	2.37
			38 × 235	3.67	3.49	2.89	3.91	3.54	2.89	4.06	3.54	2.89
			38 × 286	4.19	3.98	3.36	4.42	4.11	3.36	4.55	4.11	3.36
		Construction	38 × 89	1.54	1.43	1.32	1.74	1.57	1.40	1.76	1.60	1.40
		Standard	38 × 89	1.48	1.37	1.15	1.63	1.41	1.15	1.63	1.41	1.15

Notes to Table A-1:

(1) Spans apply only where the floors serve residential areas as described in Table 4.1.5.3., or the uniformly distributed *live load* on the floor does not exceed that specified for residential areas as described in Table 4.1.5.3.

(2) See Sentence 9.23.9.4.(5) for alternatives to strapping.

Table A-2
Maximum Spans for Floor Joists – Special Cases(1)

Forming Part of Sentences 9.23.4.2.(1) and 9.23.4.4.(2)

Item	Column 1	Column 2	Column 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12

	Commercial Designation	Grade	Joist Size, mm	Maximum Span, m								
				Joists with Ceilings Attached to Wood Furring						Joists with Concrete Topping		
				Without Bridging			With Bridging			With or Without Bridging[2]		
				Joist Spacing, mm			Joist Spacing, mm			Joist Spacing, mm		
				305	406	610	305	406	610	305	406	610
1.	Douglas Fir – Larch (includes Douglas Fir and Western Larch)	Select Structural	38 × 89	2.19	1.99	1.73	2.19	1.99	1.73	2.19	1.99	1.73
			38 × 140	3.44	3.12	2.73	3.44	3.12	2.73	3.44	3.12	2.73
			38 × 184	4.24	3.99	3.59	4.52	4.11	3.59	4.52	4.11	3.59
			38 × 235	4.98	4.69	4.29	5.47	5.20	4.58	5.77	5.24	4.58
			38 × 286	5.67	5.34	4.88	6.19	5.89	5.54	6.83	6.37	5.58
		No. 1 and No. 2	38 × 89	2.09	1.90	1.66	2.09	1.90	1.66	2.09	1.90	1.66
			38 × 140	3.29	2.99	2.62	3.29	2.99	2.62	3.29	2.99	2.55
			38 × 184	4.06	3.83	3.44	4.33	3.93	3.44	4.33	3.81	3.11
			38 × 235	4.78	4.50	4.11	5.24	4.98	4.31	5.37	4.65	3.80
			38 × 286	5.44	5.12	4.68	5.93	5.64	5.00	6.24	5.40	4.41
		No. 3	38 × 89	1.95	1.69	1.38	1.95	1.69	1.38	1.72	1.49	1.21
			38 × 140	2.78	2.41	1.97	2.78	2.41	1.97	2.45	2.12	1.73
			38 × 184	3.38	2.93	2.39	3.38	2.93	2.39	2.98	2.58	2.11
			38 × 235	4.14	3.58	2.93	4.14	3.58	2.93	3.65	3.16	2.58
			38 × 286	4.80	4.16	3.39	4.80	4.16	3.39	4.23	3.66	2.99
		Construction	38 × 89	2.03	1.84	1.61	2.03	1.84	1.61	2.03	1.84	1.61
		Standard	38 × 89	1.88	1.63	1.33	1.88	1.63	1.33	1.66	1.44	1.17
2.	Hem – Fir (includes Western Hemlock and Amabilis Fir)	Select Structural	38 × 89	2.16	1.96	1.71	2.16	1.96	1.71	2.16	1.96	1.71
			38 × 140	3.39	3.08	2.69	3.39	3.08	2.69	3.39	3.08	2.69
			38 × 184	4.18	3.94	3.54	4.46	4.05	3.54	4.46	4.05	3.54

			38 × 235	4.92	4.63	4.23	5.39	5.13	4.52	5.69	5.17	4.52
			38 × 286	5.60	5.27	4.82	6.10	5.81	5.47	6.74	6.28	5.50
		No. 1 and No. 2	38 × 89	2.09	1.90	1.66	2.09	1.90	1.66	2.09	1.90	1.66
			38 × 140	3.29	2.99	2.62	3.29	2.99	2.62	3.29	2.99	2.62
			38 × 184	4.06	3.83	3.44	4.33	3.93	3.44	4.33	3.93	3.26
			38 × 235	4.78	4.50	4.11	5.24	4.98	4.39	5.53	4.88	3.99
			38 × 286	5.44	5.12	4.68	5.93	5.64	5.25	6.54	5.66	4.63
		No. 3.	38 × 89	2.03	1.84	1.61	2.03	1.84	1.61	2.03	1.83	1.50
			38 × 140	3.19	2.90	2.43	3.19	2.90	2.43	3.02	2.62	2.14
			38 × 184	3.94	3.61	2.95	4.17	3.61	2.95	3.68	3.18	2.60
			38 × 235	4.63	4.36	3.61	5.08	4.42	3.61	4.50	3.89	3.18
			38 × 286	5.27	4.96	4.19	5.74	5.13	4.19	5.22	4.52	3.69
		Construction	38 × 89	2.03	1.84	1.61	2.03	1.84	1.61	2.03	1.84	1.61
		Standard	38 × 89	1.96	1.71	1.39	1.96	1.71	1.39	1.74	1.50	1.23
3.	Spruce – Pine – Fir (includes Spruce (all species except Coast Sitka Spruce), Jack Pine, Lodgepole Pine, Balsam Fir and Alpine Fir)	Select Structural	38 × 89	2.06	1.87	1.64	2.06	1.87	1.64	2.06	1.87	1.64
			38 × 140	3.24	2.95	2.57	3.24	2.95	2.57	3.24	2.95	2.57
			38 × 184	4.00	3.77	3.38	4.26	3.87	3.38	4.26	3.87	3.38
			38 × 235	4.70	4.43	4.05	5.16	4.91	4.32	5.45	4.95	4.32
			38 × 286	5.35	5.04	4.61	5.84	5.55	5.23	6.45	6.01	5.26
		No. 1 and No. 2	38 × 89	1.99	1.81	1.58	1.99	1.81	1.58	1.99	1.81	1.58
			38 × 140	3.14	2.85	2.49	3.14	2.85	2.49	3.14	2.85	2.49
			38 × 184	3.87	3.64	3.27	4.12	3.75	3.27	4.12	3.75	3.27
			38 × 235	4.55	4.28	3.91	4.99	4.75	4.18	5.27	4.79	4.13
			38 × 286	5.18	4.88	4.46	5.65	5.37	5.06	6.23	5.81	4.79
		No. 3	38 × 89	1.96	1.78	1.55	1.96	1.78	1.55	1.96	1.78	1.50

			38 × 140	3.08	2.80	2.43	3.08	2.80	2.43	3.02	2.62	2.14
			38 × 184	3.80	3.58	2.95	4.05	3.61	2.95	3.68	3.18	2.60
			38 × 235	4.47	4.21	3.61	4.90	4.42	3.61	4.50	3.89	3.18
			38 × 286	5.09	4.79	4.19	5.55	5.13	4.19	5.22	4.52	3.69
		Construction	38 × 89	1.96	1.78	1.55	1.96	1.78	1.55	1.96	1.78	1.55
		Standard	38 × 89	1.88	1.71	1.44	1.88	1.71	1.44	1.80	1.56	1.27
4.	Northern Species (includes any Canadian Species covered by the NLGA Standard Grading Rules)	Select Structural	38 × 89	1.84	1.68	1.46	1.84	1.68	1.46	1.84	1.68	1.46
			38 × 140	2.90	2.63	2.30	2.90	2.63	2.30	2.90	2.63	2.30
			38 × 184	3.58	3.37	3.03	3.81	3.46	3.03	3.81	3.46	3.03
			38 × 235	4.20	3.96	3.62	4.61	4.39	3.86	4.87	4.42	3.86
			38 × 286	4.79	4.51	4.12	5.22	4.96	4.68	5.76	5.37	4.54
		No. 1 and No. 2	38 × 89	1.80	1.64	1.43	1.80	1.64	1.43	1.80	1.64	1.43
			38 × 140	2.83	2.57	2.25	2.83	2.57	2.25	2.83	2.57	2.23
			38 × 184	3.50	3.29	2.96	3.72	3.38	2.96	3.72	3.32	2.71
			38 × 235	4.11	3.87	3.54	4.51	4.29	3.76	4.69	4.06	3.31
			38 × 286	4.68	4.40	4.03	5.10	4.85	4.36	5.44	4.71	3.84
		No. 3	38 × 89	1.76	1.60	1.36	1.76	1.60	1.36	1.70	1.47	1.20
			38 × 140	2.75	2.38	1.94	2.75	2.38	1.94	2.42	2.10	1.71
			38 × 184	3.35	2.90	2.37	3.35	2.90	2.37	2.95	2.55	2.08
			38 × 235	4.01	3.54	2.89	4.09	3.54	2.89	3.61	3.12	2.55
			38 × 286	4.56	4.11	3.36	4.75	4.11	3.36	4.18	3.62	2.96
		Construction	38 × 89	1.76	1.60	1.40	1.76	1.60	1.40	1.76	1.60	1.37
		Standard	38 × 89	1.63	1.41	1.15	1.63	1.41	1.15	1.44	1.25	1.02

Notes to Table A-2:

(1) Spans apply only where the floors serve residential areas as described in Table 4.1.5.3., or the uniformly distributed *live load* on the floor does not exceed that specified for residential areas as described in Table 4.1.5.3.

(2) No bridging is assumed for spans for floor joists with concrete topping.

Table A-3
Maximum Spans for Ceiling Joists – Attic not Accessible by a Stairway

Forming Part of Sentence 9.23.4.2.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Commercial Designation	Grade	Joist Size, mm	Maximum Span, m		
				Joist Spacing, mm		
				305	406	610
1.	Douglas Fir – Larch (includes Douglas Fir and Western Larch)	Select Structural	38 × 89	3.41	3.10	2.71
			38 × 140	5.37	4.88	4.26
			38 × 184	7.05	6.41	5.60
			38 × 235	9.01	8.18	7.15
			38 × 286	10.96	9.96	8.70
		No. 1 and No. 2	38 × 89	3.27	2.97	2.59
			38 × 140	5.14	4.67	4.08
			38 × 184	6.76	6.14	5.36
			38 × 235	8.63	7.84	6.85
			38 × 286	10.50	9.54	8.34
		No. 3	38 × 89	3.17	2.88	2.42
			38 × 140	4.89	4.23	3.46
			38 × 184	5.95	5.15	4.20
			38 × 235	7.27	6.30	5.14
			38 × 286	8.44	7.31	5.97
		Construction	38 × 89	3.17	2.88	2.51
		Standard	38 × 89	3.06	2.78	2.34
2.	Hem – Fir (includes Western Hemlock and Amabilis Fir)	Select Structural	38 × 89	3.36	3.06	2.67
			38 × 140	5.29	4.81	4.20
			38 × 184	6.96	6.32	5.52
			38 × 235	8.88	8.07	7.05
			38 × 286	10.81	9.82	8.58
		No. 1 and No. 2	38 × 89	3.27	2.97	2.59
			38 × 140	5.14	4.67	4.08
			38 × 184	6.76	6.14	5.36
			38 × 235	8.63	7.84	6.85
			38 × 286	10.50	9.54	8.34

		No. 3	38 × 89 38 × 140 38 × 184 38 × 235 38 × 286	3.17 4.98 6.55 8.36 10.18	2.88 4.53 5.95 7.60 9.01	2.51 3.95 5.19 6.34 7.36
		Construction	38 × 89	3.17	2.88	2.50
		Standard	38 × 89	3.06	2.78	2.43
3.	Spruce – Pine – Fir (includes Spruce (all species except Coast Sitka Spruce), Jack Pine, Lodgepole Pine, Balsam Fir and Alpine Fir)	Select Structural	38 × 89 38 × 140 38 × 184 38 × 235 38 × 286	3.22 5.06 6.65 8.50 10.34	2.92 4.60 6.05 7.72 9.40	2.55 4.02 5.28 6.74 8.21
		No. 1 and No. 2	38 × 89 38 × 140 38 × 184 38 × 235 38 × 286	3.11 4.90 6.44 8.22 10.00	2.83 4.45 5.85 7.47 9.09	2.47 3.89 5.11 6.52 7.94
		No. 3	38 × 89 38 × 140 38 × 184 38 × 235 38 × 286	3.06 4.81 6.32 8.07 9.82	2.78 4.37 5.74 7.33 8.93	2.43 3.82 5.02 6.34 7.36
		Construction	38 × 89	3.06	2.78	2.43
		Standard	38 × 89	2.94	2.67	2.33
4.	Northern Species (includes any Canadian Species covered by the NLGA Standard Grading Rules)	Select Structural	38 × 89 38 × 140 38 × 184 38 × 235 38 × 286	2.88 4.53 5.95 7.60 9.25	2.61 4.11 5.40 6.90 8.40	2.28 3.59 4.72 6.03 7.34
		No. 1 and No. 2	38 × 89 38 × 140 38 × 184 38 × 235 38 × 286	2.81 4.42 5.81 7.42 9.03	2.55 4.02 5.28 6.74 8.21	2.23 3.51 4.61 5.89 7.17
		No. 3	38 × 89 38 × 140 38 × 184 38 × 235 38 × 286	2.74 4.31 5.67 7.19 8.34	2.49 3.92 5.09 6.23 7.23	2.18 3.42 4.16 5.08 5.90

		Construction	38 × 89	2.74	2.49	2.18
		Standard	38 × 89	2.67	2.43	2.03

Table A-4
Maximum Spans for Roof Joists – Specified Roof Snow Loads 1.0 to 2.0 kPa

Forming Part of Sentence 9.23.4.2.(1)

Item	Column 1	Column 2	Column 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12
	Commercial Designation	Grade	Joist Size, mm	Maximum Span, m								
				Specified Snow Load, kPa								
				1.0			1.5			2.0		
				Joist Spacing, mm			Joist Spacing, mm			Joist Spacing, mm		
				305	406	610	305	406	610	305	406	610
1.	Douglas Fir – Larch (includes Douglas Fir and Western Larch)	Select Structural	38 × 89	2.71	2.46	2.15	2.37	2.15	1.88	2.15	1.95	1.71
			38 × 140	4.26	3.87	3.38	3.72	3.38	2.95	3.38	3.07	2.68
			38 × 184	5.60	5.09	4.44	4.89	4.44	3.88	4.44	4.04	3.53
			38 × 235	7.15	6.49	5.67	6.24	5.67	4.96	5.67	5.15	4.50
			38 × 286	8.70	7.90	6.91	7.60	6.91	6.03	6.91	6.27	5.48
		No. 1 and No. 2	38 × 89	2.59	2.36	2.06	2.27	2.06	1.80	2.06	1.87	1.63
			38 × 140	4.08	3.71	3.24	3.57	3.24	2.83	3.24	2.94	2.57
			38 × 184	5.36	4.87	4.26	4.69	4.26	3.72	4.26	3.87	3.38
			38 × 235	6.85	6.22	5.44	5.98	5.44	4.74	5.44	4.94	4.22
			38 × 286	8.34	7.57	6.40	7.28	6.62	5.50	6.62	6.00	4.90
		No. 3	38 × 89	2.49	2.16	1.76	2.14	1.85	1.51	1.91	1.65	1.35
			38 × 140	3.56	3.08	2.51	3.06	2.65	2.16	2.72	2.36	1.92
			38 × 184	4.33	3.75	3.06	3.72	3.22	2.63	3.31	2.87	2.34
			38 × 235	5.29	4.58	3.74	4.55	3.94	3.22	4.05	3.51	2.86
			38 × 286	6.14	5.32	4.34	5.28	4.57	3.73	4.70	4.07	3.32

		Construction	38 × 89	2.51	2.28	1.99	2.20	1.99	1.74	1.99	1.81	1.58
		Standard	38 × 89	2.41	2.08	1.70	2.07	1.79	1.46	1.84	1.60	1.30
2.	Hem – Fir (includes Western Hemlock and Amabilis Fir)	Select Structural	38 × 89	2.67	2.43	2.12	2.33	2.12	1.85	2.12	1.93	1.68
			38 × 140	4.20	3.82	3.33	3.67	3.33	2.91	3.33	3.03	2.65
			38 × 184	5.52	5.02	4.38	4.82	4.38	3.83	4.38	3.98	3.48
			38 × 235	7.05	6.41	5.60	6.16	5.60	4.89	5.60	5.09	4.44
			38 × 286	8.58	7.80	6.81	7.50	6.81	5.95	6.81	6.19	5.41
		No. 1 and No. 2	38 × 89	2.59	2.36	2.06	2.27	2.06	1.80	2.06	1.87	1.63
			38 × 140	4.08	3.71	3.24	3.57	3.24	2.83	3.24	2.94	2.57
			38 × 184	5.36	4.87	4.26	4.69	4.26	3.72	4.26	3.87	3.38
			38 × 235	6.85	6.22	5.44	5.98	5.44	4.75	5.44	4.94	4.32
			38 × 286	8.34	7.57	6.62	7.28	6.62	5.77	6.62	6.01	5.25
		No. 3	38 × 89	2.51	2.28	1.99	2.20	1.99	1.74	1.99	1.81	1.58
			38 × 140	3.95	3.59	3.10	3.45	3.14	2.67	3.14	2.85	2.37
			38 × 184	5.20	4.62	3.77	4.54	3.97	3.24	4.09	3.54	2.89
			38 × 235	6.53	5.65	4.61	5.61	4.86	3.97	5.00	4.33	3.53
			38 × 286	7.57	6.56	5.35	6.51	5.64	4.60	5.80	5.02	4.10
		Construction	38 × 89	2.51	2.28	1.99	2.20	1.99	1.74	1.99	1.81	1.58
		Standard	38 × 89	2.43	2.18	1.78	2.12	1.88	1.53	1.93	1.67	1.36
3.	Spruce – Pine – Fir (includes Spruce (all species except Coast Sitka Spruce), Jack Pine, Lodgepole Pine, Balsam Fir and Alpine Fir)	Select Structural	38 × 89	2.55	2.32	2.03	2.23	2.03	1.77	2.03	1.84	1.61
			38 × 140	4.02	3.65	3.19	3.51	3.19	2.79	3.19	2.90	2.53
			38 × 184	5.28	4.80	4.19	4.61	4.19	3.66	4.19	3.81	3.33
			38 × 235	6.74	6.13	5.35	5.89	5.35	4.68	5.35	4.86	4.25
			38 × 286	8.21	7.46	6.52	7.17	6.52	5.69	6.52	5.92	5.17
		No. 1 and No. 2	38 × 89	2.47	2.24	1.96	2.16	1.96	1.71	1.96	1.78	1.56
			38 × 140	3.89	3.53	3.08	3.40	3.08	2.69	3.08	2.80	2.45

			38 × 184	5.11	4.64	4.05	4.46	4.05	3.54	4.05	3.68	3.22
			38 × 235	6.52	5.93	5.18	5.70	5.18	4.52	5.18	4.70	4.11
			38 × 286	7.94	7.21	6.30	6.94	6.30	5.50	6.30	5.73	5.00
		No. 3	38 × 89	2.43	2.20	1.93	2.12	1.93	1.68	1.93	1.75	1.53
			38 × 140	3.82	3.47	3.03	3.33	3.03	2.65	3.03	2.75	2.37
			38 × 184	5.02	4.56	3.77	4.38	3.97	3.24	3.98	3.54	2.89
			38 × 235	6.41	5.65	4.61	5.60	4.86	3.97	5.00	4.33	3.53
			38 × 286	7.57	6.56	5.35	6.51	5.64	4.60	5.80	5.02	4.10
		Construction	38 × 89	2.43	2.20	1.93	2.12	1.93	1.68	1.93	1.75	1.53
		Standard	38 × 89	2.33	2.12	1.85	2.04	1.85	1.59	1.85	1.68	1.41
4.	Northern Species (includes any Canadian Species covered by the NLGA Standard Grading Rules)	Select Structural	38 × 89	2.28	2.07	1.81	1.99	1.81	1.58	1.81	1.65	1.44
			38 × 140	3.59	3.26	2.85	3.14	2.85	2.49	2.85	2.59	2.26
			38 × 184	4.72	4.29	3.75	4.12	3.75	3.27	3.75	3.40	2.97
			38 × 235	6.03	5.48	4.79	5.27	4.79	4.18	4.79	4.35	3.80
			38 × 286	7.34	6.67	5.82	6.41	5.82	5.09	5.82	5.29	4.62
		No. 1 and No. 2	38 × 89	2.23	2.03	1.77	1.95	1.77	1.55	1.77	1.61	1.41
			38 × 140	3.51	3.19	2.79	3.07	2.79	2.43	2.79	2.53	2.21
			38 × 184	4.61	4.19	3.66	4.03	3.66	3.20	3.66	3.33	2.91
			38 × 235	5.89	5.35	4.68	5.15	4.68	4.09	4.68	4.25	3.68
			38 × 286	7.17	6.52	5.58	6.26	5.69	4.80	5.69	5.17	4.27
		No. 3	38 × 89	2.18	1.98	1.73	1.90	1.73	1.50	1.73	1.57	1.33
			38 × 140	3.42	3.05	2.49	2.99	2.62	2.14	2.69	2.33	1.90
			38 × 184	4.28	3.71	3.03	3.68	3.19	2.60	3.28	2.84	2.32
			38 × 235	5.23	4.53	3.70	4.50	3.90	3.18	4.01	3.47	2.83
			38 × 286	6.07	5.26	4.29	5.22	4.52	3.69	4.65	4.03	3.29

		Construction	38 × 89	2.18	1.98	1.73	1.90	1.73	1.51	1.73	1.57	1.37
		Standard	38 × 89	2.09	1.81	1.48	1.80	1.56	1.27	1.60	1.38	1.13

Table A-5
Maximum Spans for Roof Joists – Specified Roof Snow Loads 2.5 and 3.0 kPa

Forming Part of Sentence 9.23.4.2.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
	Commercial Designation	Grade	Joist Size, mm	Maximum Span, m					
				Specified Snow Load, kPa					
				2.5			3.0		
				Joist Spacing, mm			Joist Spacing, mm		
				305	406	610	305	406	610
1.	Douglas Fir – Larch (includes Douglas Fir and Western Larch)	Select Structural	38 × 89	1.99	1.81	1.58	1.88	1.71	1.49
			38 × 140	3.14	2.85	2.49	2.95	2.68	2.34
			38 × 184	4.12	3.75	3.27	3.88	3.53	3.08
			38 × 235	5.27	4.79	4.18	4.96	4.50	3.93
			38 × 286	6.41	5.82	5.09	6.03	5.48	4.79
		No. 1 and No. 2	38 × 89	1.91	1.74	1.52	1.80	1.63	1.43
			38 × 140	3.01	2.73	2.39	2.83	2.57	2.25
			38 × 184	3.95	3.59	3.14	3.72	3.38	2.90
			38 × 235	5.05	4.59	3.84	4.75	4.32	3.55
			38 × 286	6.14	5.46	4.46	5.78	5.05	4.12
		No. 3	38 × 89	1.74	1.50	1.23	1.60	1.39	1.13
			38 × 140	2.48	2.15	1.75	2.29	1.98	1.62
			38 × 184	3.01	2.61	2.13	2.79	2.41	1.97
			38 × 235	3.69	3.19	2.61	3.41	2.95	2.41
			38 × 286	4.28	3.70	3.03	3.95	3.42	2.79
		Construction	38 × 89	1.85	1.68	1.47	1.74	1.58	1.38

		Standard	38 × 89	1.68	1.45	1.19	1.55	1.34	1.10
2.	Hem – Fir (includes Western Hemlock and Amabilis Fir)	Select Structural	38 × 89	1.97	1.79	1.56	1.85	1.68	1.47
			38 × 140	3.10	2.81	2.46	2.91	2.65	2.31
			38 × 184	4.07	3.70	3.23	3.83	3.48	3.04
			38 × 235	5.20	4.72	4.12	4.89	4.44	3.88
			38 × 286	6.32	5.75	5.02	5.95	5.41	4.72
		No. 1 and No. 2	38 × 89	1.91	1.74	1.52	1.80	1.63	1.43
			38 × 140	3.01	2.73	2.39	2.83	2.57	2.25
			38 × 184	3.95	3.59	3.14	3.72	3.38	2.95
			38 × 235	5.05	4.59	4.01	4.75	4.32	3.72
			38 × 286	6.14	5.58	4.68	5.78	5.25	4.32
		No. 3	38 × 89	1.85	1.68	1.47	1.74	1.58	1.38
			38 × 140	2.91	2.65	2.16	2.74	2.45	2.00
			38 × 184	3.72	3.22	2.63	3.44	2.98	2.43
			38 × 235	4.55	3.94	3.22	4.20	3.64	2.97
			38 × 286	5.28	4.57	3.73	4.88	4.22	3.45
		Construction	38 × 89	1.85	1.68	1.47	1.74	1.58	1.38
		Standard	38 × 89	1.76	1.52	1.24	1.62	1.40	1.15
3.	Spruce – Pine – Fir (includes Spruce (all species except Coast Sitka Spruce), Jack Pine, Lodgepole Pine, Balsam Fir and Alpine Fir)	Select Structural	38 × 89	1.88	1.71	1.49	1.77	1.61	1.41
			38 × 140	2.96	2.69	2.35	2.79	2.53	2.21
			38 × 184	3.89	3.54	3.09	3.66	3.33	2.91
			38 × 235	4.97	4.52	3.94	4.68	4.25	3.71
			38 × 286	6.05	5.50	4.80	5.69	5.17	4.52
		No. 1 and No. 2	38 × 89	1.82	1.65	1.44	1.71	1.56	1.36
			38 × 140	2.86	2.60	2.27	2.69	2.45	2.14
			38 × 184	3.76	3.42	2.99	3.54	3.22	2.81

			38 × 235	4.81	4.37	3.82	4.52	4.11	3.59
			38 × 286	5.85	5.31	4.64	5.50	5.00	4.37
		No. 3	38 × 89	1.79	1.62	1.42	1.68	1.53	1.34
			38 × 140	2.81	2.56	2.16	2.65	2.40	2.005
			38 × 184	3.70	3.22	2.63	3.44	2.98	2.43
			38 × 235	4.55	3.94	3.22	4.20	3.64	2.97
			38 × 286	5.28	4.57	3.73	4.88	4.22	3.45
		Construction	38 × 89	1.79	1.62	1.42	1.68	1.53	1.34
		Standard	38 × 89	1.72	1.56	1.29	1.62	1.46	1.19
4.	Northern Species (includes any Canadian Species covered by the NLGA Standard Grading Rules)	Select Structural	38 × 89	1.68	1.53	1.34	1.58	1.44	1.26
			38 × 140	2.65	2.40	2.10	2.49	2.26	1.98
			38 × 184	3.48	3.16	2.76	3.27	2.97	2.60
			38 × 235	4.44	4.04	3.53	4.18	3.80	3.32
			38 × 286	5.41	4.91	4.29	5.09	4.62	4.04
		No. 1 and No. 2	38 × 89	1.64	1.49	1.31	1.55	1.41	1.23
			38 × 140	2.59	2.35	2.05	2.43	2.21	1.93
			38 × 184	3.40	3.09	2.70	3.20	2.91	2.53
			38 × 235	4.34	3.94	3.35	4.09	3.71	3.10
			38 × 286	5.28	4.76	3.89	4.97	4.40	3.59
		No. 3	38 × 89	1.60	1.46	1.21	1.51	1.37	1.12
			38 × 140	2.45	2.12	1.73	2.26	1.96	1.60
			38 × 184	2.98	2.58	2.11	2.76	2.39	1.95
			38 × 235	3.65	3.16	2.58	3.37	2.92	2.38
			38 × 286	4.23	3.66	2.99	3.91	3.39	2.76
		Construction	38 × 89	1.60	1.46	1.27	1.51	1.37	1.20

		Standard	38 × 89	1.46	1.26	1.03	1.34	1.16	0.95

Table A-6
Maximum Spans for Roof Rafters – Specified Roof Snow Loads 1.0 to 2.0 kPa

Forming Part of Sentence 9.23.4.2.(1)

Item	Column 1	Column 2	Column 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12
	Commercial Designation	Grade	Rafter Size, mm	Maximum Span, m								
				Specified Snow Load, kPa								
				1.0			1.5			2.0		
				Rafter Spacing, mm			Rafter Spacing, mm			Rafter Spacing, mm		
				305	406	610	305	406	610	305	406	610
1.	Douglas Fir – Larch (includes Douglas Fir and Western Larch)	Select Structural	38 × 89	3.41	3.10	2.71	2.98	2.71	2.37	2.71	2.46	2.15
			38 × 140	5.37	4.88	4.26	4.69	4.26	3.72	4.26	3.87	3.38
			38 × 184	7.05	6.41	5.60	6.16	5.60	4.89	5.60	5.09	4.44
			38 × 235	9.01	8.18	7.15	7.87	7.15	6.24	7.15	6.49	5.62
			38 × 286	10.96	9.96	8.70	9.58	8.70	7.40	8.70	7.90	6.52
		No. 1 and No. 2	38 × 89	3.27	2.97	2.59	2.86	2.59	2.27	2.59	2.36	2.06
			38 × 140	5.14	4.67	3.95	4.49	4.08	3.34	4.08	3.60	2.94
			38 × 184	6.76	5.88	4.80	5.74	4.97	4.06	5.06	4.38	3.58
			38 × 235	8.30	7.19	5.87	7.02	6.08	4.96	6.19	5.36	4.38
			38 × 286	9.63	8.34	6.81	8.14	7.05	5.76	7.18	6.22	5.08
		No. 3	38 × 89	2.65	2.30	1.87	2.24	1.94	1.58	1.98	1.71	1.40
			38 × 140	3.78	3.28	2.68	3.20	2.77	2.26	2.82	2.44	1.99
			38 × 184	4.61	3.99	3.26	3.89	3.37	2.75	3.43	2.97	2.43
			38 × 235	5.63	4.88	3.98	4.76	4.12	3.37	4.20	3.64	2.97
			38 × 286	6.53	5.66	4.62	5.52	4.78	3.91	4.87	4.22	3.44
		Construction	38 × 89	3.17	2.88	2.42	2.77	2.50	2.04	2.51	2.21	1.80

		Standard	38 × 89	2.56	2.22	1.81	2.17	1.88	1.53	1.91	1.65	1.35
2.	Hem – Fir (includes Western Hemlock and Amabilis Fir)	Select Structural	38 × 89	3.36	3.06	2.67	2.94	2.67	2.33	2.67	2.43	2.12
			38 × 140	5.29	4.81	4.20	4.62	4.20	3.67	4.20	3.82	3.33
			38 × 184	6.96	6.32	5.52	6.08	5.52	4.82	5.52	5.02	4.38
			38 × 235	8.88	8.07	7.05	7.76	7.05	6.16	7.05	6.41	5.54
			38 × 286	10.81	9.82	8.58	9.45	8.58	7.28	8.58	7.80	6.42
		No. 1 and No. 2	38 × 89	3.27	2.97	2.59	2.86	2.59	2.27	2.59	2.36	2.06
			38 × 140	5.14	4.67	4.08	4.49	4.08	3.50	4.08	3.71	3.08
			38 × 184	6.76	6.14	5.04	5.90	5.21	4.26	5.31	4.60	3.75
			38 × 235	8.63	7.54	6.16	7.36	6.37	5.20	6.49	5.62	4.59
			38 × 286	10.11	8.75	7.15	8.54	7.40	6.04	7.53	6.52	5.33
		No. 3	38 × 89	3.17	2.83	2.31	2.76	2.39	1.95	2.44	2.11	1.72
			38 × 140	4.67	4.04	3.30	3.95	3.42	2.79	3.48	3.01	2.46
			38 × 184	5.68	4.92	4.02	4.80	4.16	3.40	4.23	3.67	2.99
			38 × 235	6.95	6.02	4.91	5.87	5.08	4.15	5.18	4.48	3.66
			38 × 286	8.06	6.98	5.70	6.81	5.90	4.82	6.01	5.20	4.25
		Construction	38 × 89	3.17	2.88	2.51	2.77	2.51	2.14	2.51	2.28	1.89
		Standard	38 × 89	2.68	2.32	1.90	2.27	1.96	1.60	2.00	1.73	1.41
3.	Spruce – Pine – Fir (includes Spruce (all species except Coast Sitka Spruce), Jack Pine, Lodgepole Pine, Balsam Fir and Alpine Fir)	Select Structural	38 × 89	3.22	2.92	2.55	2.81	2.55	2.23	2.55	2.32	2.03
			38 × 140	5.06	4.60	4.02	4.42	4.02	3.51	4.02	3.65	3.19
			38 × 184	6.65	6.05	5.28	5.81	5.28	4.61	5.28	4.80	4.19
			38 × 235	8.50	7.72	6.74	7.42	6.74	5.89	6.74	6.13	5.35
			38 × 286	10.34	9.40	8.21	9.03	8.21	7.17	8.21	7.46	6.52
		No. 1 and No. 2	38 × 89	3.11	2.83	2.47	2.72	2.47	2.16	2.47	2.24	1.96
			38 × 140	4.90	4.45	3.89	4.28	3.89	3.40	3.89	3.53	3.08
			38 × 184	6.44	5.85	5.11	5.62	5.11	4.41	5.11	4.64	3.89

			38 × 235	8.22	7.47	6.38	7.18	6.52	5.39	6.52	5.82	4.75
			38 × 286	10.00	9.06	7.40	8.74	7.66	6.25	7.80	6.76	5.52
		No. 3	38 × 89	3.06	2.78	2.31	2.67	2.39	1.95	2.43	2.11	1.72
			38 × 140	4.67	4.04	3.30	3.95	3.42	2.79	3.48	3.01	2.46
			38 × 184	5.68	4.92	4.02	4.80	4.16	3.40	4.23	3.67	2.99
			38 × 235	6.95	6.02	4.91	5.87	5.08	4.15	5.18	4.48	3.66
			38 × 286	8.06	6.98	5.70	6.81	5.90	4.82	6.01	5.20	4.25
		Construction	38 × 89	3.06	2.78	2.43	2.67	2.43	2.12	2.43	2.20	1.93
		Standard	38 × 89	2.78	2.41	1.97	2.35	2.04	1.66	2.07	1.79	1.47
4.	Northern Species (includes any Canadian species covered by the NLGA Standard Grading Rules)	Select Structural	38 × 89	2.88	2.61	2.28	2.51	2.28	1.99	2.28	2.07	1.81
			38 × 140	4.53	4.11	3.59	3.95	3.59	3.14	3.59	3.26	2.85
			38 × 184	5.95	5.40	4.72	5.20	4.72	4.12	4.72	4.29	3.68
			38 × 235	7.60	6.90	6.03	6.64	6.03	5.11	6.03	5.48	4.51
			38 × 286	9.25	8.40	7.01	8.08	7.26	5.93	7.34	6.40	5.23
		No. 1 and No. 2	38 × 89	2.81	2.55	2.23	2.46	2.23	1.95	2.23	2.03	1.77
			38 × 140	4.42	4.02	3.44	3.86	3.51	2.91	3.51	3.14	2.56
			38 × 184	5.81	5.13	4.19	5.00	4.33	3.54	4.41	3.82	3.12
			38 × 235	7.24	6.27	5.12	6.12	5.30	4.33	5.40	4.67	3.82
			38 × 286	8.40	7.27	5.94	7.10	6.15	5.02	6.26	5.42	4.43
		No. 3	38 × 89	2.62	2.27	1.85	2.22	1.92	1.57	1.95	1.69	1.38
			38 × 140	3.74	3.24	2.65	3.16	2.74	2.24	2.79	2.42	1.97
			38 × 184	4.56	3.94	3.22	3.85	3.33	2.72	3.40	2.94	2.40
			38 × 235	5.57	4.82	3.94	4.71	4.08	3.33	4.15	3.60	2.94
			38 × 286	6.46	5.60	4.57	5.46	4.73	3.86	4.82	4.17	3.41
		Construction	38 × 89	2.74	2.49	2.11	2.40	2.18	1.90	2.18	1.93	1.57

		Standard	38 × 89	2.22	1.93	1.57	1.88	1.63	1.33	1.66	1.44	1.17

Table A-7
Maximum Spans for Roof Rafters – Specified Roof Snow Loads 2.5 and 3.0 kPa

Forming Part of Sentence 9.23.4.2.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
	Commercial Designation	Grade	Rafter Size, mm	Maximum Span, m					
				Specified Snow Load, kPa					
				2.5			3.0		
				Rafter Spacing, mm			Rafter Spacing, mm		
				305	406	610	305	406	610
1.	Douglas Fir – Larch (includes Douglas Fir and Western Larch)	Select Structural	38 × 89	2.51	2.28	1.99	2.37	2.15	1.88
			38 × 140	3.95	3.59	3.14	3.72	3.38	2.95
			38 × 184	5.20	4.72	4.12	4.89	4.44	3.83
			38 × 235	6.64	6.03	5.08	6.24	5.67	4.68
			38 × 286	8.08	7.23	5.90	7.60	6.65	5.43
		No. 1 and No. 2	38 × 89	2.41	2.19	1.86	2.27	2.06	1.71
			38 × 140	3.76	3.26	2.66	3.46	3.00	2.45
			38 × 184	4.58	3.96	3.24	4.21	3.65	2.98
			38 × 235	5.60	4.85	3.96	5.15	4.46	3.64
			38 × 286	6.50	5.63	4.59	5.98	5.17	4.23
		No. 3	38 × 89	1.79	1.55	1.26	1.64	1.42	1.16
			38 × 140	2.55	2.21	1.80	2.35	2.03	1.66
			38 × 184	3.10	2.69	2.20	2.86	2.47	2.02
			38 × 235	3.80	3.29	2.68	3.49	3.02	2.47
			38 × 286	4.41	3.82	3.12	4.05	3.51	2.87
		Construction	38 × 89	2.30	2.00	1.63	2.12	1.84	1.50
		Standard	38 × 89	1.73	1.50	1.22	1.59	1.38	1.12
2.	Hem – Fir (includes Western Hemlock and Amabilis Fir)	Select Structural	38 × 89	2.48	2.25	1.97	2.33	2.12	1.85
			38 × 140	3.90	3.54	3.10	3.67	3.33	2.91
			38 × 184	5.13	4.66	4.07	4.82	4.38	3.77
			38 × 235	6.55	5.95	5.01	6.16	5.60	4.61
			38 × 286	7.97	7.12	5.81	7.50	6.55	5.34
		No. 1 and No. 2	38 × 89	2.41	2.19	1.91	2.27	2.06	1.80
			38 × 140	3.79	3.42	2.79	3.57	3.14	2.57
			38 × 184	4.80	4.16	3.40	4.42	3.83	3.12
			38 × 235	5.87	5.08	4.15	5.40	4.68	3.82
			38 × 286	6.81	5.90	4.82	6.27	5.43	4.43
		No. 3	38 × 89	2.21	1.91	1.56	2.03	1.76	1.43

			38 × 140	3.15	2.73	2.23	2.90	2.51	2.05
			38 × 184	3.83	3.32	2.71	3.52	3.05	2.49
			38 × 235	4.68	4.06	3.31	4.31	3.73	3.05
			38 × 286	5.53	4.71	3.84	5.00	4.33	3.54
		Commercial	38 × 89	2.33	2.09	1.71	2.20	1.93	1.57
		Standard	38 × 89	1.81	1.57	1.28	1.66	1.44	1.18
3.	Spruce – Pine – Fir (includes Spruce (all species except Coast Sitka Spruce), Jack Pine, Lodgepole Pine, Balsam Fir and Alpine Fir)	Select Structural	38 × 89	2.37	2.15	1.88	2.23	2.03	1.77
			38 × 140	3.73	3.39	2.96	3.51	3.19	2.79
			38 × 184	4.90	4.45	3.89	4.61	4.19	3.66
			38 × 235	6.26	5.69	4.97	5.89	5.35	4.68
			38 × 286	7.62	6.92	5.90	7.17	6.52	5.43
		No. 1 and No. 2	38 × 89	2.29	2.08	1.82	2.16	1.96	1.71
			38 × 140	3.61	3.28	2.86	3.40	3.08	2.66
			38 × 184	4.74	4.31	3.52	4.46	3.96	3.23
			38 × 235	6.06	5.27	4.30	5.59	4.84	3.96
			38 × 286	7.06	6.11	4.99	6.49	5.62	4.59
		No. 3	38 × 89	2.21	1.91	1.56	2.03	1.76	1.43
			38 × 140	3.15	2.73	2.23	2.90	2.51	2.05
			38 × 184	3.83	3.32	2.71	3.52	3.05	2.49
			38 × 235	4.68	4.06	3.31	4.31	3.73	3.05
			38 × 286	5.43	4.71	3.84	5.00	4.33	3.54
		Construction	38 × 89	2.25	2.05	1.77	2.12	1.93	1.63
		Standard	38 × 89	1.87	1.62	1.33	1.72	1.49	1.22
4.	Northern Species (includes any Canadian species covered by the NLGA Standard Grading Rules)	Select Structural	38 × 89	2.12	1.93	1.68	1.99	1.81	1.58
			38 × 140	3.33	3.03	2.65	3.14	2.85	2.49
			38 × 184	4.38	3.98	3.33	4.12	3.75	3.07
			38 × 235	5.60	4.99	4.08	5.27	4.59	3.75
			38 × 286	6.69	5.79	4.73	6.15	5.33	4.35
		No. 1 and No. 2	38 × 89	2.07	1.88	1.62	1.95	1.77	1.49
			38 × 140	3.26	2.84	2.32	3.02	2.61	2.13
			38 × 184	3.99	3.46	2.82	3.67	3.18	2.60
			38 × 235	4.88	4.23	3.45	4.49	3.89	3.17
			38 × 286	5.66	4.90	4.00	5.21	4.51	3.68
		No. 3	38 × 89	1.77	1.53	1.25	1.63	1.41	1.15
			38 × 140	2.52	2.19	1.78	2.32	2.01	1.64
			38 × 184	3.07	2.66	2.17	2.82	2.45	2.00
			38 × 235	3.76	3.25	2.66	3.45	2.99	2.44
			38 × 286	4.36	3.77	3.08	4.01	3.47	2.83

		Construction	38 × 89	2.01	1.74	1.42	1.85	1.60	1.31
		Standard	38 × 89	1.50	1.30	1.06	1.38	1.19	0.98

Table A-8
Maximum Spans for Built-up Floor Beams Supporting not more than One Floor[1][2]

Forming Part of Sentence 9.23.4.2.(3)

Item	Column 1	Column 2	Column 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12
	Commercial Designation	Grade	Supported Length, m[3][4]	Maximum Span, m[5][6]								
				Size of Built-up Beam, mm								
				3 – 38 × 184	4 – 38 × 184	5 – 38 × 184	3 – 38 × 235	4 – 38 × 235	5 – 38 × 235	3 – 38 × 286	4 – 38 × 286	5 – 38 × 286
1.	Douglas Fir – Larch (includes Douglas Fir and Western Larch)	Select Structural	2.4	3.36	3.70	3.99	4.30	4.73	5.09	5.23	5.66	5.99
			3.0	3.12	3.44	3.70	3.99	4.39	4.73	4.84	5.34	5.66
			3.6	2.94	3.23	3.48	3.75	4.13	4.45	4.41	5.03	5.41
			4.2	2.79	3.07	3.31	3.52	3.92	4.23	4.09	4.72	5.14
			4.8	2.67	2.94	3.17	3.29	3.75	4.04	3.82	4.41	4.92
			5.4	2.54	2.83	3.04	3.11	3.59	3.89	3.60	4.16	4.65
			6.0	2.41	2.73	2.94	2.95	3.40	3.75	3.42	3.95	4.41
		No. 1 and No. 2	2.4	2.97	3.42	3.82	3.63	4.19	4.68	4.21	4.86	5.43
			3.0	2.65	3.06	3.42	3.24	3.75	4.19	3.76	4.35	4.86
			3.6	2.42	2.80	3.13	2.96	3.42	3.82	3.44	3.97	4.44
			4.2	2.24	2.59	2.89	2.74	3.17	3.54	3.18	3.67	4.11
			4.8	2.10	2.42	2.71	2.56	2.96	3.31	2.98	3.44	3.84
			5.4	1.98	2.28	2.55	2.42	2.79	3.12	2.81	3.24	3.62
			6.0	1.88	2.17	2.42	2.29	2.65	2.96	2.66	3.07	3.44
2.	Hem – Fir (includes Western Hemlock and Amabilis Fir)	Select Structural	2.4	3.32	3.65	3.93	4.24	4.66	5.03	5.16	5.61	5.93
			3.0	3.08	3.39	3.65	3.93	4.33	4.66	4.76	5.27	5.61
			3.6	2.90	3.19	3.44	3.70	4.08	4.39	4.35	4.96	5.34
			4.2	2.75	3.03	3.27	3.47	3.87	4.17	4.02	4.65	5.07
			4.8	2.63	2.90	3.12	3.24	3.70	3.99	3.66	4.35	4.85
			5.4	2.49	2.79	3.00	2.95	3.53	3.83	3.32	4.10	4.58
			6.0	2.28	2.69	2.90	2.70	3.35	3.70	3.04	3.87	4.35
		No. 1 and No. 2	2.4	3.11	3.55	3.82	3.80	4.39	4.88	4.41	5.10	5.70
			3.0	2.78	3.21	3.55	3.40	3.93	4.39	3.95	4.56	5.10
			3.6	2.54	2.93	3.28	3.11	3.59	4.01	3.60	4.16	4.65

			4.2	2.35	2.72	3.04	2.88	3.32	3.71	3.34	3.85	4.31
			4.8	2.20	2.54	2.84	2.69	3.11	3.47	3.12	3.60	4.03
			5.4	2.07	2.39	2.68	2.54	2.93	3.27	2.94	3.40	3.80
			6.0	1.97	2.27	2.54	2.41	2.78	3.11	2.79	3.22	3.60
3.	Spruce – Pine – Fir (includes Spruce (all species except Coast Sitka Spruce), Jack Pine, Lodgepole Pine, Balsam Fir and Alpine Fir)	Select Structural	2.4	3.17	3.49	3.76	4.05	4.46	4.81	4.93	5.42	5.73
			3.0	2.95	3.24	3.49	3.76	4.14	4.46	4.58	5.04	5.42
			3.6	2.77	3.05	3.29	3.54	3.90	4.20	4.31	4.74	5.11
			4.2	2.63	2.90	3.12	3.36	3.70	3.99	4.09	4.51	4.85
			4.8	2.52	2.77	2.99	3.22	3.54	3.81	3.82	4.31	4.64
			5.4	2.42	2.67	2.87	3.09	3.41	3.67	3.60	4.14	4.46
			6.0	2.34	2.57	2.77	2.95	3.29	3.54	3.32	3.95	4.31
		No. 1 and No. 2	2.4	3.07	3.38	3.64	3.92	4.32	4.65	4.57	5.25	5.59
			3.0	2.85	3.14	3.38	3.52	4.01	4.32	4.09	4.72	5.25
			3.6	2.63	2.95	3.18	3.22	3.71	4.06	3.73	4.31	4.82
			4.2	2.44	2.80	3.02	2.98	3.44	3.84	3.46	3.99	4.46
			4.8	2.28	2.63	2.89	2.79	3.22	3.60	3.23	3.73	4.17
			5.4	2.15	2.48	2.77	2.63	3.03	3.39	3.05	3.52	3.93
			6.0	2.04	2.35	2.63	2.49	2.88	3.22	2.89	3.34	3.73
4.	Northern Species (includes any Canadian species covered by the NLGA Standard Grading Rules)	Select Structural	2.4	2.84	3.12	3.36	3.62	3.99	4.30	4.33	4.85	5.23
			3.0	2.63	2.90	3.12	3.34	3.70	3.99	3.88	4.47	4.85
			3.6	2.48	2.73	2.94	3.05	3.48	3.75	3.54	4.08	4.57
			4.2	2.31	2.59	2.79	2.82	3.26	3.57	3.28	3.78	4.23
			4.8	2.16	2.48	2.67	2.64	3.05	3.41	3.06	3.54	3.96
			5.4	2.04	2.35	2.57	2.49	2.87	3.21	2.89	3.34	3.73
			6.0	1.93	2.23	2.48	2.36	2.73	3.05	2.74	3.16	3.54
		No. 1 and No. 2	2.4	2.59	2.99	3.29	3.16	3.65	4.08	3.67	4.24	4.74
			3.0	2.31	2.67	2.99	2.83	3.27	3.65	3.28	3.79	4.24
			3.6	2.11	2.44	2.73	2.58	2.98	3.33	3.00	3.46	3.87
			4.2	1.95	2.26	2.52	2.39	2.76	3.09	2.77	3.20	3.58
			4.8	1.83	2.11	2.36	2.24	2.58	2.89	2.59	3.00	3.35
			5.4	1.72	1.99	2.23	2.11	2.43	2.72	2.45	2.82	3.16
			6.0	1.64	1.89	2.11	2.00	2.31	2.58	2.32	2.68	3.00

Notes to Table A-8:

(1) Beam spans apply only where the floors serve residential areas as described in Table 4.1.5.3., or the uniformly distributed *live load* on the floors does not exceed that specified for residential areas as described in Table 4.1.5.3.

(2) When the floors have a concrete topping of not more than 51 mm, the spans must be multiplied by 0.8.

(3) Supported length means half the sum of the joists spans on both sides of the beam.

(4) Straight interpolation may be used for other supported lengths.

(5) Spans are clear spans between supports. For total span, add two bearing lengths.

(6) 3-ply beams with supported lengths greater than 4.2 m require minimum bearing length of 114 mm. All other beams require minimum bearing length of 76 mm.

Table A-9
Maximum Spans for Built-up Floor Beams Supporting not more than Two Floors(1)(2)

Forming Part of Sentence 9.23.4.2.(3)

Item	Column 1	Column 2	Column 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12
	Commercial Designation	Grade	Supported Length, m(3)(4)	Maximum Span, m(5)(6)								
				Size of Built-up Beam, mm								
				3 – 38 × 184	4 – 38 × 184	5 – 38 × 184	3 – 38 × 235	4 – 38 × 235	5 – 38 × 235	3 – 38 × 286	4 – 38 × 286	5 – 38 × 286
1.	Douglas Fir – Larch (includes Douglas Fir and Western Larch)	Select Structural	2.4	2.80	3.08	3.32	3.49	3.93	4.24	4.05	4.67	5.16
			3.0	2.55	2.86	3.08	3.12	3.60	3.93	3.62	4.18	4.67
			3.6	2.33	2.69	2.90	2.85	3.29	3.68	3.30	3.82	4.27
			4.2	2.16	2.49	2.75	2.64	3.04	3.40	2.99	3.53	3.95
			4.8	2.00	2.33	2.60	2.38	2.85	3.18	2.69	3.30	3.69
			5.4	1.82	2.20	2.45	2.17	2.68	3.00	2.45	3.08	3.48
			6.0	1.67	2.08	2.33	2.00	2.51	2.85	2.26	2.83	3.30
		No. 1 and No. 2	2.4	2.22	2.56	2.87	2.72	3.14	3.51	3.15	3.64	4.07
			3.0	1.99	2.29	2.56	2.43	2.80	3.14	2.82	3.25	3.64
			3.6	1.81	2.09	2.34	2.22	2.56	2.86	2.57	2.97	3.32
			4.2	1.68	1.94	2.17	2.05	2.37	2.65	2.38	2.75	3.07
			4.8	1.57	1.81	2.03	1.92	2.22	2.48	2.23	2.57	2.88
			5.4	1.48	1.71	1.91	1.81	2.09	2.34	2.10	2.43	2.71
			6.0	1.40	1.62	1.81	1.72	1.98	2.22	1.99	2.30	2.57
2.	Hem – Fir (includes Western Hemlock and Amabilis Fir)	Select Structural	2.4	2.76	3.04	3.27	3.43	3.88	4.18	3.99	4.60	5.09
			3.0	2.51	2.82	3.04	2.97	3.55	3.88	3.34	4.12	4.60
			3.6	2.15	2.65	2.86	2.56	3.24	3.62	2.88	3.65	4.20
			4.2	1.90	2.40	2.72	2.26	2.85	3.35	2.55	3.21	3.87
			4.8	1.70	2.15	2.56	2.03	2.56	3.08	2.30	2.88	3.46

			5.4	1.56	1.95	2.35	1.86	2.32	2.79	2.11	2.62	3.14
			6.0	1.44	1.79	2.15	1.72	2.14	2.56	1.96	2.42	2.88
		No. 1 and No. 2	2.4	2.33	2.69	3.01	2.85	3.29	3.68	3.30	3.82	4.27
			3.0	2.08	2.41	2.69	2.55	2.94	3.29	2.96	3.41	3.82
			3.6	1.90	2.20	2.45	2.33	2.68	3.00	2.70	3.12	3.48
			4.2	1.76	2.03	2.27	2.15	2.49	2.78	2.50	2.88	3.22
			4.8	1.65	1.90	2.13	2.01	2.33	2.60	2.30	2.70	3.02
			5.4	1.55	1.79	2.00	1.86	2.19	2.45	2.11	2.54	2.84
			6.0	1.44	1.70	1.90	1.72	2.08	2.33	1.96	2.41	2.70
3.	Spruce – Pine – Fir (includes Spruce (all species except Coast Sitka Spruce), Jack Pine, Lodgepole Pine, Balsam Fir and Alpine Fir)	Select Structural	2.4	2.64	2.91	3.13	3.37	3.71	4.00	4.05	4.52	4.87
			3.0	2.45	2.70	2.91	3.12	3.45	3.71	3.62	4.18	4.52
			3.6	2.31	2.54	2.73	2.79	3.24	3.49	3.14	3.82	4.25
			4.2	2.07	2.41	2.60	2.46	3.04	3.32	2.77	3.50	3.95
			4.8	1.85	2.31	2.48	2.21	2.79	3.17	2.50	3.14	3.69
			5.4	1.69	2.13	2.39	2.02	2.53	3.00	2.28	2.85	3.42
			6.0	1.56	1.95	2.31	1.86	2.32	2.79	2.11	2.62	3.14
		No. 1 and No. 2	2.4	2.41	2.79	3.03	2.95	3.41	3.81	3.42	3.95	4.42
			3.0	2.16	2.49	2.79	2.64	3.05	3.41	3.06	3.53	3.95
			3.6	1.97	2.27	2.54	2.41	2.78	3.11	2.79	3.23	3.61
			4.2	1.82	2.11	2.35	2.23	2.57	2.88	2.59	2.99	3.34
			4.8	1.71	1.97	2.20	2.09	2.41	2.69	2.42	2.79	3.12
			5.4	1.61	1.86	2.08	1.97	2.27	2.54	2.28	2.63	2.95
			6.0	1.53	1.76	1.97	1.86	2.15	2.41	2.11	2.50	2.79
4.	Northern Species (includes any Canadian species covered by the NLGA Standard Grading Rules)	Select Structural	2.4	2.29	2.60	2.80	2.80	3.23	3.57	3.24	3.75	4.19
			3.0	2.04	2.36	2.60	2.50	2.89	3.23	2.90	3.35	3.75
			3.6	1.87	2.16	2.41	2.28	2.64	2.95	2.65	3.06	3.42
			4.2	1.73	2.00	2.23	2.11	2.44	2.73	2.45	2.83	3.17
			4.8	1.62	1.87	2.09	1.98	2.28	2.55	2.29	2.65	2.96
			5.4	1.52	1.76	1.97	1.86	2.15	2.41	2.11	2.50	2.79
			6.0	1.44	1.67	1.87	1.72	2.04	2.28	1.96	2.37	2.65
		No. 1 and No. 2	2.4	1.94	2.24	2.50	2.37	2.73	3.06	2.75	3.17	3.55
			3.0	1.73	2.00	2.24	2.12	2.44	2.73	2.46	2.84	3.17
			3.6	1.58	1.83	2.04	1.93	2.23	2.50	2.24	2.59	2.90
			4.2	1.46	1.69	1.89	1.79	2.07	2.31	2.08	2.40	2.68
			4.8	1.37	1.58	1.77	1.67	1.93	2.16	1.94	2.24	2.51
			5.4	1.29	1.49	1.67	1.58	1.82	2.04	1.83	2.11	2.36
			6.0	1.22	1.41	1.58	1.50	1.73	1.93	1.74	2.01	2.24

Notes to Table A-9:

(1) Beam spans apply only where the floors serve residential areas as described in Table 4.1.5.3., or the uniformly distributed *live load* on the floors does not exceed that specified for residential areas as described in Table 4.1.5.3.

(2) When the floors have a concrete topping of not more than 51 mm, the spans must be multiplied by 0.8.

(3) Supported length means half the sum of the joists spans on both sides of the beam.

(4) Straight interpolation may be used for other supported lengths.

(5) Spans are clear spans between supports. For total span, add two bearing lengths.

(6) 3-ply beams require minimum bearing length of 114 mm. 4-ply and 5-ply beams with supported lengths greater than 3 m require minimum bearing length of 114 mm. All other beams require minimum bearing length of 76 mm.

Table A-10
Maximum Spans for Built-up Floor Beams Supporting not more than Three Floors(1)(2)

Forming Part of Sentence 9.23.4.2.(3)

Item	Column 1	Column 2	Column 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12
	Commercial Designation	Grade	Supported Length, m(3)(4)	Maximum Span, m(5)(6)								
				Size of Built-up Beam, mm								
				3 – 38 × 184	4 – 38 × 184	5 – 38 × 184	3 – 38 × 235	4 – 38 × 235	5 – 38 × 235	3 – 38 × 286	4 – 38 × 286	5 – 38 × 286
1.	Douglas Fir – Larch (includes Douglas Fir and Western Larch)	Select Structural	2.4	2.38	2.74	2.95	2.91	3.36	3.75	3.37	3.89	4.35
			3.0	2.13	2.46	2.74	2.60	3.00	3.36	2.92	3.48	3.89
			3.6	1.88	2.24	2.51	2.24	2.74	3.06	2.53	3.18	3.56
			4.2	1.66	2.08	2.32	1.99	2.49	2.84	2.25	2.81	3.29
			4.8	1.50	1.88	2.17	1.80	2.24	2.65	2.04	2.53	3.02
			5.4	1.38	1.71	2.05	1.65	2.04	2.44	1.88	2.31	2.75
			6.0	1.28	1.58	1.88	1.53	1.89	2.24	1.75	2.14	2.53
		No. 1 and No. 2	2.4	1.85	2.14	2.39	2.26	2.61	2.92	2.63	3.03	3.39
			3.0	1.66	1.91	2.14	2.02	2.34	2.61	2.35	2.71	3.03
			3.6	1.51	1.74	1.95	1.85	2.13	2.39	2.14	2.48	2.77
			4.2	1.40	1.62	1.81	1.71	1.98	2.21	1.99	2.29	2.56
			4.8	1.31	1.51	1.69	1.60	1.85	2.07	1.86	2.14	2.40
			5.4	1.23	1.42	1.59	1.51	1.74	1.95	1.75	2.02	2.26
			6.0	1.17	1.35	1.51	1.43	1.65	1.85	1.66	1.92	2.14
2.		Select	2.4	2.22	2.70	2.91	2.64	3.31	3.70	2.98	3.78	4.29

	Hem – Fir (includes Western Hemlock and Amabilis Fir)	Structural	3.0	1.85	2.35	2.70	2.21	2.79	3.31	2.50	3.14	3.78
			3.6	1.61	2.02	2.43	1.92	2.40	2.89	2.18	2.71	3.24
			4.2	1.43	1.78	2.14	1.71	2.13	2.54	1.95	2.40	2.86
			4.8	1.30	1.61	1.92	1.56	1.92	2.28	1.77	2.18	2.58
			5.4	1.19	1.47	1.74	1.44	1.76	2.08	1.64	2.00	2.35
			6.0	1.11	1.36	1.61	1.34	1.63	1.92	1.53	1.85	2.18
		No. 1 and No. 2	2.4	1.94	2.24	2.51	2.37	2.74	3.06	2.75	3.18	3.56
			3.0	1.74	2.00	2.24	2.12	2.45	2.74	2.46	2.84	3.18
			3.6	1.58	1.83	2.05	1.92	2.24	2.50	2.18	2.60	2.90
			4.2	1.43	1.69	1.89	1.71	2.07	2.32	1.95	2.40	2.69
			4.8	1.30	1.58	1.77	1.56	1.92	2.17	1.77	2.18	2.51
			5.4	1.19	1.47	1.67	1.44	1.76	2.04	1.64	2.00	2.35
			6.0	1.11	1.36	1.58	1.34	1.63	1.92	1.53	1.85	2.18
3.	Spruce – Pine – Fir (includes Spruce (all species except Coast Sitka Spruce), Jack Pine, Lodgepole Pine, Balsam Fir and Alpine Fir)	Select Structural	2.4	2.35	2.58	2.78	2.89	3.30	3.55	3.24	3.89	4.33
			3.0	2.02	2.40	2.58	2.40	3.00	3.30	2.71	3.42	3.89
			3.6	1.74	2.20	2.43	2.08	2.62	3.06	2.35	2.95	3.54
			4.2	1.55	1.94	2.31	1.85	2.31	2.77	2.10	2.61	3.12
			4.8	1.40	1.74	2.09	1.68	2.08	2.48	1.91	2.35	2.80
			5.4	1.28	1.59	1.90	1.54	1.90	2.26	1.76	2.16	2.55
			6.0	1.19	1.47	1.74	1.44	1.76	2.08	1.64	2.00	2.35
		No. 1 and No. 2	2.4	2.01	2.32	2.60	2.46	2.84	3.17	2.85	3.29	3.68
			3.0	1.80	2.08	2.32	2.20	2.54	2.84	2.55	2.95	3.29
			3.6	1.64	1.90	2.12	2.01	2.32	2.59	2.33	2.69	3.01
			4.2	1.52	1.75	2.96	1.85	2.15	2.40	2.10	2.49	2.78
			4.8	1.40	1.64	1.84	1.68	2.01	2.24	1.91	2.33	2.60
			5.4	1.28	1.55	1.73	1.54	1.89	2.12	1.76	2.16	2.46
			6.0	1.19	1.47	1.64	1.44	1.76	2.01	1.64	2.00	2.33
4.	Northern Species (includes any Canadian species covered by the NLGA Standard Grading Rules)	Select Structural	2.4	1.91	2.20	2.46	2.33	2.69	3.01	2.70	3.12	3.49
			3.0	1.70	1.97	2.20	2.08	2.41	2.69	2.42	2.79	3.12
			3.6	1.56	1.80	2.01	1.90	2.20	2.46	2.18	2.55	2.85
			4.2	1.43	1.66	1.86	1.71	2.03	2.27	1.95	2.36	2.64
			4.8	1.30	1.56	1.74	1.56	1.90	2.13	1.77	2.18	2.47
			5.4	1.19	1.47	1.64	1.44	1.76	2.01	1.64	2.00	2.33
			6.0	1.11	1.36	1.56	1.34	1.63	1.90	1.53	1.85	2.18
		No. 1 and	2.4	1.61	1.86	2.08	1.97	2.28	2.55	2.29	2.64	2.96

		No. 2	3.0	1.44	1.67	1.86	1.76	2.04	2.28	2.05	2.36	2.64
			3.6	1.32	1.52	1.70	1.61	1.86	2.08	1.87	2.16	2.41
			4.2	1.22	1.41	1.57	1.49	1.72	1.93	1.73	2.00	2.23
			4.8	1.14	1.32	1.47	1.40	1.61	1.80	1.62	1.87	2.09
			5.4	1.08	1.24	1.39	1.32	1.52	1.70	1.53	1.76	1.97
			6.0	1.02	1.18	1.32	1.25	1.44	1.61	1.45	1.67	1.87

Notes to Table A-10:

(1) Beam spans apply only where the floors serve residential areas as described in Table 4.1.5.3., or the uniformly distributed *live load* on the floors does not exceed that specified for residential areas as described in Table 4.1.5.3.

(2) When the floors have a concrete topping of not more than 51 mm, the spans must be multiplied by 0.8.

(3) Supported length means half the sum of the joists spans on both sides of the beam.

(4) Straight interpolation may be used for other supported lengths.

(5) Spans are clear spans between supports. For total span, add two bearing lengths.

(6) 3-ply beams with supported lengths greater than 4.2 m require minimum bearing length of 152 mm. All other beams require minimum bearing length of 114 mm.

Table A-11
Maximum Spans for Glue-Laminated Floor Beams – 20f-E Grade(1)

Forming Part of Sentence 9.23.4.2.(3)

Item	Column 1	Column 2	Column 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10
	Number of *Storeys* Supported	Beam Width, mm	Supported Length, m(2)(3)	Maximum Span, m(4)(5)(6)(7)						
				Beam Depth, mm						
				228	266	304	342	380	418	456
1.	1	80	2.4	4.32	5.04	5.76	6.48	7.20	7.92	8.64
			3.0	3.87	4.51	5.15	5.80	6.44	7.09	7.73
			3.6	3.53	4.12	4.70	5.29	5.88	6.47	7.06
			4.2	3.27	3.81	4.36	4.90	5.44	5.99	6.53
			4.8	3.06	3.57	4.07	4.58	5.09	5.60	6.11
			5.4	2.88	3.36	3.84	4.32	4.80	5.28	5.76
			6.0	2.73	3.19	3.64	4.10	4.56	5.01	5.47
		130	2.4	5.51	6.43	7.35	8.26	9.18	10.10	11.02
			3.0	4.93	5.75	6.57	7.39	8.21	9.03	9.86
			3.6	4.50	5.25	6.00	6.75	7.50	8.25	9.00
			4.2	4.16	4.86	5.55	6.25	6.94	7.64	8.33
			4.8	3.90	4.54	5.19	5.84	6.49	7.14	7.79
			5.4	3.67	4.28	4.90	5.51	6.12	6.73	7.35
			6.0	3.48	4.07	4.65	5.23	5.81	6.39	6.97

2.	2	80	2.4	3.28	3.83	4.37	4.92	5.47	6.01	6.56
			3.0	2.93	3.42	3.91	4.40	4.89	5.38	5.87
			3.6	2.68	3.12	3.57	4.02	4.46	4.91	5.36
			4.2	2.48	2.89	3.31	3.72	4.13	4.54	4.96
			4.8	2.32	2.71	3.09	3.48	3.86	4.25	4.64
			5.4	2.19	2.55	2.91	3.28	3.64	4.01	4.37
			6.0	2.07	2.42	2.77	3.11	3.46	3.80	4.15
		130	2.4	4.18	4.88	5.57	6.27	6.97	7.66	8.36
			3.0	3.74	4.36	4.99	5.61	6.23	6.85	7.48
			3.6	3.41	3.98	4.55	5.12	5.69	6.26	6.83
			4.2	3.16	3.69	4.21	4.74	5.27	5.79	6.32
			4.8	2.96	3.45	3.94	4.43	4.93	5.42	5.91
			5.4	2.79	3.25	3.72	4.18	4.64	5.11	5.57
			6.0	2.64	3.08	3.53	3.97	4.41	4.85	5.29
3.	3	80	2.4	2.75	3.21	3.66	4.12	4.58	5.04	5.50
			3.0	2.46	2.87	3.28	3.69	4.10	4.51	4.92
			3.6	2.24	2.62	2.99	3.37	3.74	4.11	4.49
			4.2	2.08	2.42	2.77	3.12	3.46	3.81	4.15
			4.8	1.94	2.27	2.59	2.91	3.24	3.56	3.89
			5.4	1.83	2.14	2.44	2.75	3.05	3.36	3.66
			6.0	1.74	2.03	2.32	2.61	2.90	3.19	3.48
		130	2.4	3.50	4.09	4.67	5.25	5.84	6.42	7.01
			3.0	3.13	3.66	4.18	4.70	5.22	5.74	6.27
			3.6	2.86	3.34	3.81	4.29	4.77	5.24	5.72
			4.2	2.65	3.09	3.53	3.97	4.41	4.85	5.30
			4.8	2.48	2.89	3.30	3.72	4.13	4.54	4.95
			5.4	2.34	2.72	3.11	3.50	3.89	4.28	4.67
			6.0	2.22	2.58	2.95	3.32	3.69	4.06	4.43

Notes to Table A-11:

(1) Spans apply only where the floors serve residential areas as described in Table 4.1.5.3., or the uniformly distributed *live load* on the floor does not exceed that specified for residential areas as described in Table 4.1.5.3.

(2) Supported length means half the sum of the joist spans on both sides of the beam.

(3) Straight interpolation may be used for other supported lengths.

(4) Spans are valid for glued-laminated timber conforming to CAN/CSA-O122 and CSA O177.

(5) Spans are clear spans between supports. For total span, add two bearing lengths.

(6) Provide a minimum bearing length of 89 mm. (Alternatively, the bearing length may be designed in accordance with Part 4.)

(7) Top edge of beam assumed to be fully laterally supported by joists.

Table A-12
Maximum Spans for Built-up Ridge Beams and Lintels Supporting the Roof and Ceiling Only – No. 1 or No. 2 Grade

Forming Part of Sentences 9.23.4.2.(4), 9.23.12.3.(1) and (3), 9.23.13.8.(2) and 9.37.3.1.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
	Commercial Designation	Beam or Lintel Size, mm	Maximum Span, m[(1)(2)(3)]				
			Specified Snow Load, kPa				
			1.0	1.5	2.0	2.5	3.0
1.	Douglas Fir – Larch (includes Douglas Fir and Western Larch)	3 – 38 × 184	2.65	2.28	2.03	1.85	1.71
		4 – 38 × 184	3.06	2.64	2.35	2.14	1.97
		5 – 38 × 184	3.43	2.95	2.62	2.39	2.21
		3 – 38 × 235	3.25	2.79	2.49	2.26	2.09
		4 – 38 × 235	3.75	3.22	2.87	2.61	2.41
		5 – 38 × 235	4.19	3.60	3.21	2.92	2.70
		3 – 38 × 286	3.77	3.24	2.88	2.62	2.43
		4 – 38 × 286	4.35	3.74	3.33	3.03	2.80
		5 – 38 × 286	4.86	4.18	3.72	3.39	3.13
2.	Hem – Fir (includes Western Hemlock and Amabilis Fir)	3 – 38 × 184	2.78	2.39	2.13	1.94	1.79
		4 – 38 × 184	3.21	2.76	2.46	2.24	2.07
		5 – 38 × 184	3.59	3.09	2.75	2.50	2.31
		3 – 38 × 235	3.40	2.93	2.61	2.37	2.19
		4 – 38 × 235	3.93	3.38	3.01	2.74	2.53
		5 – 38 × 235	4.39	3.78	3.36	3.06	2.83
		3 – 38 × 286	3.95	3.40	3.02	2.75	2.54
		4 – 38 × 286	4.56	3.92	3.49	3.18	2.94
		5 – 38 × 286	5.10	4.38	3.90	3.55	3.28
3.	Spruce – Pine – Fir (includes Spruce (all species except Coast Sitka Spruce), Jack Pine, Lodgepole Pine, Balsam Fir and Alpine Fir)	3 – 38 × 184	2.88	2.48	2.21	2.01	1.86
		4 – 38 × 184	3.30	2.86	2.55	2.32	2.14
		5 – 38 × 184	3.55	3.10	2.82	2.59	2.40
		3 – 38 × 235	3.53	3.03	2.70	2.46	2.27
		4 – 38 × 235	4.07	3.50	3.12	2.84	2.62
		5 – 38 × 235	4.54	3.91	3.49	3.17	2.93
		3 – 38 × 286	4.09	3.52	3.13	2.85	2.63
		4 – 38 × 286	4.72	4.06	3.62	3.29	3.04
		5 – 38 × 286	5.28	4.54	4.04	3.68	3.40

Notes to Table A-12:

(1) Beam and lintel spans are calculated based on a maximum supported length of 4.9 m. Spans may be increased by 5% for supported lengths of not more than 4.3 m, by 10% for

supported lengths of not more than 3.7 m, and by 25% for supported lengths of not more than 2.4 m.

(2) For ridge beams, supported length means half the sum of the rafter, joist or truss spans on both sides of the beam. For lintels, supported length means half the sum of truss, roof joist or rafter spans supported by the lintel plus the length of the overhang beyond the lintel.

(3) Provide a minimum bearing length of 76 mm.

Table A-13
Maximum Spans for Douglas Fir – Larch Lintels – No. 1 or No. 2 Grade – Non-Structural Sheathing(1)

Forming Part of Sentences 9.23.12.3.(1) and (3) and 9.37.3.1.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Lintel Supporting	Lintel Size, mm(2)	Maximum Span, m(3)(4)					
			Exterior Walls					Interior Walls
			Specified Snow Load, kPa					
			1.0	1.5	2.0	2.5	3.0	
1.	Limited attic storage and ceiling	2 – 38 × 89	This Area Intentionally Left Blank					1.25
		2 – 38 × 140						1.78
		2 – 38 × 184						2.17
		2 – 38 × 235						2.65
		2 – 38 × 286						3.08
2.	Roof and ceiling only (tributary width of 0.6 m maximum)(5)	2 – 38 × 89	2.68	2.34	2.13	1.97	1.86	1.97
		2 – 38 × 140	4.21	3.68	3.34	3.10	2.92	3.10
		2 – 38 × 184	5.50	4.84	4.39	4.08	3.84	4.08
		2 – 38 × 235	6.61	5.97	5.56	5.21	4.88	5.21
		2 – 38 × 286	7.66	6.92	6.44	6.09	5.66	6.09
3.	Roof and ceiling only (tributary width of 4.9 m maximum)(6)	2 – 38 × 89	1.25	1.07	0.96	0.87	0.80	0.87
		2 – 38 × 140	1.78	1.53	1.36	1.24	1.15	1.24
		2 – 38 × 184	2.17	1.86	1.66	1.51	1.40	1.51
		2 – 38 × 235	2.65	2.28	2.03	1.85	1.71	1.85
		2 – 38 × 286	3.08	2.64	2.35	2.14	1.98	2.14
4.	Roof, ceiling and 1 *storey*(3)(6)(7)	2 – 38 × 89	0.96	0.88	0.82	0.77	0.73	0.68
		2 – 38 × 140	1.37	1.26	1.17	1.10	1.04	0.97
		2 – 38 × 184	1.67	1.53	1.42	1.34	1.26	1.18
		2 – 38 × 235	2.04	1.88	1.74	1.63	1.54	1.44
		2 – 38 × 286	2.37	2.18	2.02	1.90	1.79	1.67
5.		2 – 38 × 89	0.86	0.81	0.77	0.73	0.70	0.61

	Roof, ceiling and 2 *storeys*[3][6][7]	2 – 38 × 140	1.23	1.16	1.09	1.04	0.99	0.87
		2 – 38 × 184	1.50	1.41	1.33	1.27	1.21	1.06
		2 – 38 × 235	1.84	1.72	1.63	1.55	1.48	1.30
		2 – 38 × 286	2.13	2.00	1.89	1.80	1.72	1.51
6.	Roof, ceiling and 3 *storeys*[3][6][7]	2 – 38 × 89	0.81	0.77	0.73	0.71	0.68	0.57
		2 – 38 × 140	1.15	1.10	1.05	1.01	0.97	0.82
		2 – 38 × 184	1.40	1.33	1.28	1.22	1.18	1.00
		2 – 38 × 235	1.71	1.63	1.56	1.50	1.44	1.22
		2 – 38 × 286	1.99	1.89	1.81	1.74	1.67	1.41

Notes to Table A-13:

[1] Where structural sheathing is used, lintel spans may be increased by 15%. Structural sheathing consists of a minimum 9.5 mm thick structural panel conforming to CSA O121, CSA O151, CSA O325 or CSA O437.0 fastened with at least two rows of fasteners to the exterior face of the lintel, and a single row to the top plates and studs. Fasteners shall conform to Table 9.23.3.5.

[2] A single piece of 89 mm thick lumber may be used in lieu of 2 pieces of 38 mm thick lumber on edge.

[3] If floor joists span the full width of the *building* without support, lintel spans shall be reduced by 15% for "Roof, ceiling and 1 *storey*", by 20% for "Roof, ceiling and 2 *storeys"*, and by 25% for "Roof, ceiling and 3 *storeys"*.

[4] For ends of lintels fully supported by walls, provide minimum bearing length of 38 mm for lintel spans up to 3 m, or minimum bearing length of 76 mm for lintel spans greater than 3 m.

[5] Spans for 0.6 m tributary width are calculated for lintels in end walls that support only a 0.6 m width of roof and ceiling, but do not support roof joists, roof rafters or roof trusses.

[6] Lintel spans are calculated based on a maximum floor joist, roof joist or rafter span of 4.9 m and a maximum roof truss span of 9.8 m. Lintel spans may be increased by 5% if rafter and joist spans are not more than 4.3 m and roof truss spans are not more than 8.6 m. Spans may be increased by 10% if rafter and joist spans are not more than 3.7 m and roof trusses are not more than 7.4 m.

[7] Spans apply only where the floors serve residential areas as described in Table 4.1.5.3., or the uniformly distributed *live load* does not exceed that specified for residential areas as described in Table 4.1.5.3.

Table A-14
Maximum Spans for Hem – Fir Lintels – No. 1 or No. 2 Grade – Non-Structural Sheathing[1]

Forming Part of Sentences 9.23.12.3.(1) and (3) and 9.37.3.1.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8

	Lintel Supporting	Lintel Size, mm[2]	Maximum Span, m[3][4]					
			Exterior Walls					Interior Walls
			Specified Snow Load, kPa					
			1.0	1.5	2.0	2.5	3.0	
1.	Limited attic storage and ceiling	2 – 38 × 89	This Area Intentionally Left Blank					1.31
		2 – 38 × 140						1.87
		2 – 38 × 184						2.27
		2 – 38 × 235						2.78
		2 – 38 × 286						3.23
2.	Roof and ceiling only (tributary width of 0.6 m maximum)[5]	2 – 38 × 89	2.68	2.34	2.13	1.97	1.86	1.97
		2 – 38 × 140	4.21	3.68	3.34	3.10	2.92	3.10
		2 – 38 × 184	5.50	4.84	4.39	4.08	3.84	4.08
		2 – 38 × 235	6.61	5.97	5.56	5.21	4.90	5.21
		2 – 38 × 286	7.66	6.92	6.44	6.09	5.82	6.09
3.	Roof and ceiling only (tributary width of 4.9 m maximum)[6]	2 – 38 × 89	1.31	1.13	1.00	0.91	0.84	0.91
		2 – 38 × 140	1.87	1.61	1.43	1.30	1.20	1.30
		2 – 38 × 184	2.27	1.95	1.74	1.58	1.42	1.58
		2 – 38 × 235	2.78	2.39	2.13	1.92	1.71	1.92
		2 – 38 × 286	3.23	2.77	2.47	2.17	1.94	2.17
4.	Roof, ceiling and 1 *storey*[3][6][7]	2 – 38 × 89	1.01	0.93	0.86	0.81	0.76	0.69
		2 – 38 × 140	1.44	1.32	1.23	1.14	1.05	0.95
		2 – 38 × 184	1.75	1.61	1.47	1.34	1.23	1.12
		2 – 38 × 235	2.14	1.96	1.76	1.60	1.48	1.35
		2 – 38 × 286	2.49	2.22	2.00	1.82	1.69	1.55
5.	Roof, ceiling and 2 *storeys*[3][6][7]	2 – 38 × 89	0.91	0.85	0.80	0.76	0.72	0.60
		2 – 38 × 140	1.29	1.21	1.13	1.05	0.98	0.82
		2 – 38 × 184	1.57	1.44	1.33	1.24	1.16	0.98
		2 – 38 × 235	1.90	1.73	1.60	1.49	1.40	1.19
		2 – 38 × 286	2.15	1.97	1.82	1.70	1.60	1.37
6.	Roof, ceiling and 3 *storeys*[3][6][7]	2 – 38 × 89	0.85	0.81	0.77	0.74	0.69	0.55
		2 – 38 × 140	1.21	1.14	1.06	1.00	0.95	0.76
		2 – 38 × 184	1.43	1.33	1.25	1.18	1.12	0.91
		2 – 38 × 235	1.72	1.60	1.50	1.42	1.35	1.10
		2 – 38 × 286	1.95	1.82	1.72	1.63	1.55	1.27

Notes to Table A-14:

[1] Where structural sheathing is used, lintel spans may be increased by 15%. Structural sheathing consists of a minimum 9.5 mm thick structural panel conforming to CSA O121, CSA O151, CSA O325 or CSA O437.0 fastened with at least two rows of

fasteners to the exterior face of the lintel, and a single row to the top plates and studs. Fasteners shall conform to Table 9.23.3.5.

(2) A single piece of 89 mm thick lumber may be used in lieu of 2 pieces of 38 mm thick lumber on edge.

(3) If floor joists span the full width of the *building* without support, lintel spans shall be reduced by 15% for "Roof, ceiling and 1 *storey*", by 20% for "Roof, ceiling and 2 *storeys"*, and by 25% for "Roof, ceiling and 3 *storeys"*.

(4) For ends of lintels fully supported by walls, provide minimum bearing length of 38 mm for lintel spans up to 3 m, or minimum bearing length of 76 mm for lintel spans greater than 3 m.

(5) Spans for 0.6 m tributary width are calculated for lintels in end walls that support only a 0.6 m width of roof and ceiling, but do not support roof joists, roof rafters or roof trusses.

(6) Lintel spans are calculated based on a maximum floor joist, roof joist or rafter span of 4.9 m and a maximum roof truss span of 9.8 m. Lintel spans may be increased by 5% if rafter and joist spans are not more than 4.3 m and roof truss spans are not more than 8.6 m. Spans may be increased by 10% if rafter and joist spans are not more than 3.7 m and roof trusses are not more than 7.4 m.

(7) Spans apply only where the floors serve residential areas as described in Table 4.1.5.3., or the uniformly distributed *live load* does not exceed that specified for residential areas as described in Table 4.1.5.3.

Table A-15
Maximum Spans for Spruce – Pine – Fir Lintels – No. 1 or No. 2 Grade – Non-Structural Sheathing(1)

Forming Part of Sentences 9.23.12.3.(1) and (3) and 9.37.3.1.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Lintel Supporting	Lintel Size, mm(2)	Maximum Span, m(3)(4)					
			Exterior Walls					Interior Walls
			Specified Snow Load, kPa					
			1.0	1.5	2.0	2.5	3.0	
1.	Limited attic storage and ceiling	2 – 38 × 89	This Area Intentionally Left Blank					1.27
		2 – 38 × 140						1.93
		2 – 38 × 184						2.35
		2 – 38 × 235						2.88
		2 – 38 × 286						3.34
2.	Roof and ceiling only (tributary width of 0.6 m maximum)(5)	2 – 38 × 89	2.55	2.23	2.02	1.88	1.77	1.88
		2 – 38 × 140	4.01	3.50	3.18	2.96	2.78	2.96
		2 – 38 × 184	5.27	4.61	4.18	3.88	3.66	3.88

		2 – 38 × 235	6.37	5.76	5.34	4.96	4.67	4.96
		2 – 38 × 286	7.38	6.67	6.21	5.87	5.61	5.87
3.	Roof and ceiling only (tributary width of 4.9 m maximum)[6]	2 – 38 × 89	1.27	1.11	1.01	0.93	0.87	0.93
		2 – 38 × 140	1.93	1.66	1.48	1.35	1.25	1.35
		2 – 38 × 184	2.35	2.02	1.80	1.64	1.52	1.64
		2 – 38 × 235	2.88	2.47	2.20	2.01	1.84	2.01
		2 – 38 × 286	3.34	2.87	2.56	2.33	2.09	2.33
4.	Roof, ceiling and 1 *storey*[3][6][7]	2 – 38 × 89	1.05	0.96	0.89	0.84	0.79	0.74
		2 – 38 × 140	1.49	1.37	1.27	1.19	1.13	1.02
		2 – 38 × 184	1.82	1.67	1.55	1.44	1.33	1.20
		2 – 38 × 235	2.22	2.04	1.89	1.73	1.59	1.45
		2 – 38 × 286	2.58	2.36	2.15	1.96	1.81	1.66
5.	Roof, ceiling and 2 *storeys*[3][6][7]	2 – 38 × 89	0.94	0.88	0.83	0.79	0.76	0.64
		2 – 38 × 140	1.34	1.26	1.19	1.13	1.06	0.88
		2 – 38 × 184	1.63	1.53	1.44	1.33	1.25	1.05
		2 – 38 × 235	1.99	1.87	1.72	1.60	1.50	1.27
		2 – 38 × 286	2.31	2.12	1.96	1.82	1.71	1.45
6.	Roof, ceiling and 3 *storeys*[3][6][7]	2 – 38 × 89	0.88	0.83	0.80	0.77	0.74	0.59
		2 – 38 × 140	1.25	1.19	1.14	1.08	1.02	0.81
		2 – 38 × 184	1.52	1.44	1.35	1.27	1.21	0.97
		2 – 38 × 235	1.86	1.73	1.62	1.53	1.45	1.17
		2 – 38 × 286	2.11	1.96	1.84	1.74	1.66	1.35

Notes to Table A-15:

[1] Where structural sheathing is used, lintel spans may be increased by 15%. Structural sheathing consists of a minimum 9.5 mm thick structural panel conforming to CSA O121, CSA O151, CSA O325 or CSA O437.0 fastened with at least two rows of fasteners to the exterior face of the lintel, and a single row to the top plates and studs. Fasteners shall conform to Table 9.23.3.5.

[2] A single piece of 89 mm thick lumber may be used in lieu of 2 pieces of 38 mm thick lumber on edge.

[3] If floor joists span the full width of the *building* without support, lintel spans shall be reduced by 15% for "Roof, ceiling and 1 *storey*", by 20% for "Roof, ceiling and 2 *storeys*", and by 25% for "Roof, ceiling and 3 *storeys*".

[4] For ends of lintels fully supported by walls, provide minimum bearing length of 38 mm for lintel spans up to 3 m, or minimum bearing length of 76 mm for lintel spans greater than 3 m.

[5] Spans for 0.6 m tributary width are calculated for lintels in end walls that support only a 0.6 m width of roof and ceiling, but do not support roof joists, roof rafters or roof trusses.

[6] Lintel spans are calculated based on a maximum floor joist, roof joist or rafter span of 4.9 m and a maximum roof truss span of 9.8 m. Lintel spans may be increased by 5% if rafter and joist spans are not more than 4.3 m and roof truss spans are not more than 8.6

m. Spans may be increased by 10% if rafter and joist spans are not more than 3.7 m and roof trusses are not more than 7.4 m.

(7) Spans apply only where the floors serve residential areas as described in Table 4.1.5.3., or the uniformly distributed *live load* does not exceed that specified for residential areas as described in Table 4.1.5.3.

Table A-16
Maximum Spans for Glued-Laminated Timber Lintels – 20f-E Stress Grade – Exterior Walls – Roof and Ceiling Load Only

Forming Part of Sentences 9.23.12.3.(1) and (3) and 9.37.3.1.(1)

Item	Col. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Lintel Size, mm	Maximum Span, m(1)(2)(3)														
		Specified Snow Load, kPa														
		1.0			1.5			2.0			2.5			3.0		
		Supported Length, m(4)(5)			Supported Length, m(4)(5)			Supported Length, m(4)(5)			Supported Length, m(4)(5)			Supported Length, m(4)(5)		
		2.4	3.6	4.8	2.4	3.6	4.8	2.4	3.6	4.8	2.4	3.6	4.8	2.4	3.6	4.8
1.	130 × 304	6.23	5.63	5.24	5.63	5.09	4.73	5.24	4.73	4.40	4.95	4.48	4.17	4.73	4.28	3.87
2.	80 × 380	6.52	5.89	5.48	5.89	5.32	4.96	5.48	4.96	4.52	5.19	4.69	4.11	4.96	4.39	3.80
3.	130 × 342	6.80	6.15	5.72	6.15	5.56	5.17	5.72	5.17	4.81	5.41	4.89	4.55	5.17	4.67	4.35
4.	80 × 418	7.00	6.33	5.89	6.33	5.72	5.32	5.89	5.32	4.96	5.57	5.03	4.52	5.32	4.81	4.18
5.	130 × 380	7.36	6.65	6.19	6.65	6.01	5.59	6.19	5.59	5.21	5.86	5.29	4.92	5.59	5.06	4.70
6.	80 × 456	7.48	6.76	6.29	6.76	6.10	5.68	6.29	5.68	5.29	5.95	5.37	4.93	5.68	5.13	4.56
7.	130 × 418	7.91	7.15	6.65	7.15	6.46	6.01	6.65	6.01	5.59	6.29	5.68	5.29	6.01	5.43	5.05
8.	80 × 494	7.94	7.17	6.68	7.17	6.48	6.03	6.68	6.03	5.61	6.31	5.71	5.31	6.03	5.45	4.94
9.	80 × 532	8.39	7.58	7.06	7.58	6.85	6.38	7.06	6.38	5.93	6.67	6.03	5.61	6.38	5.76	5.32
10.	130 × 456	8.44	7.63	7.10	7.63	6.89	6.41	7.10	6.41	5.97	6.71	6.07	5.65	6.41	5.80	5.39

Notes to Table A-16:

(1) Spans are valid for glued-laminated timber conforming to CAN/CSA-O122 and CSA O177.

(2) Provide a minimum bearing length of 89 mm. (Alternatively, the bearing length may be calculated in accordance with Part 4.)

(3) Top edge of lintel assumed to be fully laterally supported.

(4) Supported Length means half the length of trusses or rafters, plus the length of overhang beyond the wall.

(5) For intermediate supported lengths, straight interpolation may be used.

Table A-17
Maximum Allowable Clear Spans for Lintels in Flat Loadbearing Insulating Concrete Form (ICF) Walls[1][2][3] (1-10M Bottom Bar)

Forming Part of Sentence 9.20.17.4.(3)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Minimum Lintel Thickness, mm	Minimum Lintel Depth, mm	Maximum Clear Span, m			
			Supporting Light-Frame Roof Only		Supporting ICF Second *Storey* and Light-Frame Roof	
			Maximum Ground Snow Load, kN/m^2			
			1.50	3.33	1.50	3.33
1.	140	200	1.41	1.18	1.03	0.93
		300	1.78	1.50	1.30	1.18
		400	2.08	1.75	1.53	1.38
		500	2.33	1.97	1.72	1.56
		600	2.55	2.16	1.89	1.71
2.	150	200	1.41	1.18	1.02	0.92
		300	1.78	1.50	1.29	1.17
		400	2.08	1.75	1.51	1.37
		500	2.33	1.97	1.70	1.54
		600	2.54	2.15	1.87	1.70
3.	160	200	1.41	1.18	1.01	0.91
		300	1.78	1.50	1.28	1.16
		400	2.07	1.75	1.50	1.36
		500	2.32	1.96	1.68	1.53
		600	2.53	2.15	1.85	1.68
4.	190	200	1.41	1.19	0.98	0.89
		300	1.78	1.50	1.24	1.13
		400	2.06	1.74	1.45	1.32
		500	2.30	1.95	1.63	1.49
		600	2.51	2.13	1.78	1.63
5.	200	200	1.41	1.19	0.97	0.89
		300	1.77	1.49	1.23	1.12
		400	2.06	1.74	1.43	1.31
		500	2.30	1.95	1.61	1.48
		600	2.50	2.13	1.77	1.62
6.	240	200	1.41	1.19	0.94	0.86
		300	1.76	1.49	1.18	1.09
		400	2.04	1.73	1.38	1.27
		500	2.27	1.93	1.55	1.43
		600	2.47	2.11	1.70	1.56

Notes to Table A-17:

(1) Deflection criteria is L/240, where "L" is the clear span of the lintel.

(2) Linear interpolation is permitted between ground snow loads and between lintel depths.

(3) 10M stirrups are required at a maximum d/2 spacing for spans greater than 1 200 mm, where "d" is the distance from the top of the lintel to the level of the bottom reinforcing bar in the lintel.

Table A-18
Maximum Allowable Clear Spans for Lintels in Flat Loadbearing Insulating Concrete Form (ICF) Walls(1)(2)(3) (1-15M Bottom Bar)

Forming Part of Sentence 9.20.17.4.(3)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Minimum Lintel Thickness, mm	Minimum Lintel Depth, mm	Maximum Clear Span, m			
			Supporting Light-Frame Roof Only		Supporting ICF Second *Storey* and Light-Frame Roof	
			Maximum Ground Snow Load, kN/m^2			
			1.50	3.33	1.50	3.33
1.	140	200 300 400 500 600	1.63 2.43 2.90 3.26 3.58	1.46 2.08 2.44 2.75 3.03	1.31 1.81 2.13 2.41 2.65	1.23 1.64 1.93 2.18 2.40
2.	150	200 300 400 500 600	1.67 2.48 2.90 3.26 3.57	1.49 2.08 2.44 2.75 3.02	1.33 1.79 2.11 2.38 2.62	1.25 1.62 1.91 2.16 2.38
3.	160	200 300 400 500 600	1.70 2.48 2.90 3.25 3.56	1.53 2.08 2.44 2.75 3.02	1.35 1.78 2.09 2.36 2.59	1.26 1.61 1.90 2.14 2.36
4.	190	200 300 400 500 600	1.80 2.48 2.89 3.23 3.53	1.61 2.09 2.44 2.74 3.00	1.36 1.73 2.03 2.29 2.51	1.24 1.58 1.85 2.09 2.30
5.	200	200 300 400 500 600	1.83 2.48 2.88 3.22 3.52	1.64 2.09 2.44 2.74 2.99	1.35 1.71 2.01 2.26 2.48	1.23 1.57 1.84 2.07 2.28

6.	240	200	1.93	1.65	1.30	1.20
		300	2.47	2.08	1.66	1.52
		400	2.86	2.43	2.94	1.78
		500	3.19	2.72	2.18	2.01
		600	3.47	2.97	2.39	2.20

Notes to Table A-18:

(1) Deflection criteria is L/240, where "L" is the clear span of the lintel.

(2) Linear interpolation is permitted between ground snow loads and between lintel depths.

(3) 10M stirrups are required at a maximum d/2 spacing for spans greater than 1 200 mm, where "d" is the distance from the top of the lintel to the level of the bottom reinforcing bar in the lintel.

Table A-19
Maximum Allowable Clear Spans for Lintels in Flat Loadbearing Insulating Concrete Form (ICF) Walls(1)(2)(3) (2-15M Bottom Bar)

Forming Part of Sentence 9.20.17.4.(3)

Item	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Minimum Lintel Thickness, mm	Minimum Lintel Depth, mm	Maximum Clear Span, m			
			Supporting Light-Frame Roof Only		Supporting ICF Second *Storey* and Light-Frame Roof	
			Maximum Ground Snow Load, kN/m^2			
			1.50	3.33	1.50	3.33
1.	140	200	1.63	1.46	1.31	1.23
		300	2.43	2.18	1.96	1.84
		400	3.22	2.90	2.60	2.42
		500	4.00	3.60	3.25	2.70
		600	4.71	4.20	3.61	2.97
2.	150	200	1.67	1.49	1.33	1.25
		300	2.48	2.23	1.99	1.87
		400	3.29	2.96	2.64	2.45
		500	4.80	3.68	3.29	2.74
		600	4.87	4.20	3.64	3.02
3.	160	200	1.70	1.53	1.35	1.27
		300	2.53	2.28	2.02	1.90
		400	3.36	3.02	2.68	2.48
		500	4.16	3.76	3.27	2.78
		600	4.95	4.20	3.61	3.08
4.	190	200	1.80	1.61	1.39	1.32
		300	2.67	2.40	2.09	1.97
		400	3.53	3.19	2.77	2.56

		500 600	4.38 4.92	3.81 4.19	3.18 3.50	2.90 3.21
5.	200	200 300 400 500 600	1.83 2.87 3.78 4.46 4.86	1.64 2.44 3.24 3.81 4.18	1.41 2.11 2.79 3.15 3.47	1.33 2.00 2.55 2.89 3.18
6.	240	200 300 400 500 600	2.07 3.07 3.95 4.40 4.78	1.74 2.59 3.38 3.80 4.16	1.46 2.18 2.70 3.04 3.34	1.38 2.07 2.48 2.80 3.08

Notes to Table A-19:

(1) Deflection criteria is L/240, where "L" is the clear span of the lintel.

(2) Linear interpolation is permitted between ground snow loads and between lintel depths.

(3) 10M stirrups are required at a maximum d/2 spacing for spans greater than 1 200 mm, where "d" is the distance from the top of the lintel to the level of the bottom reinforcing bar in the lintel.

Table A-20
Maximum Spans for Steel Beams Supporting a Roof and One Floor in Dwelling Units Where Beams Support Exterior Stud Walls with Brick Veneer – 1.0 kPa Specified Roof Snow Load

Forming Part of Sentence 9.23.4.3.(1)

Column 1		Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
Maximum Span, m									
Roof *Live Load*, kPa		1.0							
Supported Roof Length, m(1)		2.4		3.6		4.8		6.0	
Supported Floor Length, m(2)		2.4	3.6	2.4	3.6	2.4	3.6	2.4	3.6
Steel Beam Section	W 150 × 22	2.96	2.79	2.86	2.71	2.78	2.65	2.71	2.59
	W 150 × 30	3.32	3.14	3.22	3.05	3.13	2.98	3.04	2.91
	W 150 × 37	3.62	3.41	3.50	3.32	3.40	3.24	3.32	3.17
	W 200 × 27	3.80	3.59	3.68	3.49	3.58	3.41	3.49	3.33
	W 200 × 31	4.06	3.83	3.93	3.73	3.82	3.64	3.72	3.56
	W 200 × 36	4.17	3.94	4.04	3.83	3.93	3.74	3.82	3.65
	W 200 × 42	4.42	4.18	4.29	4.06	4.16	3.96	4.05	3.87
	W 250 × 33	4.71	4.44	4.56	4.32	4.43	4.22	4.31	4.12
	W 250 × 39	5.04	4.76	4.88	4.63	4.75	4.52	4.62	4.41
	W 250 × 49	5.32	5.02	5.15	4.89	5.01	4.77	4.87	4.66

	W 310 × 39	5.66	5.34	5.49	5.20	5.33	5.07	5.19	4.96
	W 310 × 45	5.96	5.62	5.77	5.47	5.61	5.34	5.46	5.22
	W 310 × 52	6.33	5.98	6.13	5.82	5.96	5.67	5.8	5.54
	W 310 × 60	6.50	6.14	6.30	5.98	6.12	5.83	5.96	5.69
	W 360 × 33	5.61	5.29	5.43	5.15	5.28	5.03	5.14	4.91
	W 360 × 39	6.01	5.68	5.83	5.53	5.66	5.39	5.51	5.27
	W 360 × 45	6.38	6.03	6.19	5.87	6.01	5.72	5.85	5.59
	W 360 × 51	6.70	6.32	6.49	6.16	6.31	6.00	6.14	5.87
	W 360 × 57	7.00	6.61	6.78	6.43	6.59	6.28	6.42	6.13

Notes to Table A-20:

(1) Supported roof length means half the sum of the roof framing spans on both sides of the beam.

(2) Supported floor length means half the sum of the floor framing spans on both sides of the beam.

Table A-21
Maximum Spans for Steel Beams Supporting a Roof and One Floor in Dwelling Units Where Beams Support Interior Stud Walls or Exterior Stud Walls with Siding – 1.0 kPa Specified Roof Snow Load

Forming Part of Sentence 9.23.4.3.(1)

Column 1		Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
Maximum Span, m									
Roof *Live Load*, kPa		1.0							
Supported Roof Length, m(1)		2.4		3.6		4.8		6.0	
Supported Floor Length, m(2)		2.4	3.6	2.4	3.6	2.4	3.6	2.4	3.6
Steel Beam Section	W 150 × 22	4.20	3.82	3.98	3.67	3.81	3.51	3.66	3.35
	W 150 × 30	4.72	4.30	4.48	4.13	4.28	3.98	4.11	3.85
	W 150 × 37	5.14	4.68	4.88	4.49	4.66	4.33	4.48	4.19
	W 200 × 27	5.41	4.92	5.13	4.72	4.90	4.56	4.71	4.41
	W 200 × 31	5.77	5.25	5.48	5.04	5.23	4.86	5.02	4.71
	W 200 × 36	5.93	5.40	5.63	5.18	5.38	5.00	5.16	4.84
	W 200 × 42	6.29	5.72	5.97	5.50	5.70	5.30	5.47	5.13
	W 250 × 33	6.69	6.09	6.35	5.85	6.06	5.64	5.82	5.45
	W 250 × 39	7.17	6.52	6.80	6.26	6.49	6.04	6.24	5.85
	W 250 × 49	7.56	6.88	7.17	6.61	6.85	6.37	6.58	6.17
	W 310 × 39	8.05	7.32	7.63	7.03	7.29	6.78	7.01	6.56
	W 310 × 45	8.47	7.71	8.03	7.40	7.68	7.14	7.37	6.91

Notes to Table A-21:

(1) Supported roof length means half the sum of the roof framing spans on both sides of the beam.

(2) Supported floor length means half the sum of the floor framing spans on both sides of the beam.

Table A-22
Maximum Spans for Steel Beams Supporting a Roof and One Floor in Dwelling Units Where Beams Support Exterior Stud Walls with Brick Veneer – 1.5 kPa Specified Roof Design Snow Load

Forming Part of Sentence 9.23.4.3.(1)

Column 1		Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
Maximum Span, m									
Roof *Live Load*, kPa		1.5							
Supported Roof Length, m(1)		2.4		3.6		4.8		6.0	
Supported Floor Length, m(2)		2.4	3.6	2.4	3.6	2.4	3.6	2.4	3.6
Steel Beam Section	W 150 × 22	2.86	2.71	2.74	2.62	2.64	2.53	2.55	2.46
	W 150 × 30	3.22	3.05	3.08	2.94	2.97	2.85	2.87	2.76
	W 150 × 37	3.50	3.32	3.36	3.20	3.23	3.10	3.13	3.01
	W 200 × 27	3.68	3.49	3.53	3.37	3.40	3.26	3.29	3.16
	W 200 × 31	3.93	3.73	3.77	3.60	3.63	3.48	3.51	3.38
	W 200 × 36	4.04	3.83	3.88	3.70	3.73	3.58	3.61	3.47
	W 200 × 42	4.29	4.06	4.11	3.92	3.96	3.79	3.82	3.68
	W 250 × 33	4.56	4.32	4.37	4.17	4.21	4.03	4.07	3.91
	W 250 × 39	4.88	4.63	4.68	4.47	4.51	4.32	4.36	4.19
	W 250 × 49	5.15	4.89	4.94	4.71	4.76	4.56	4.60	4.42
	W 310 × 39	5.49	5.20	5.26	5.01	5.06	4.85	4.89	4.71
	W 310 × 45	5.77	5.47	5.53	5.28	5.33	5.11	5.15	4.95
	W 310 × 52	6.13	5.82	5.88	5.61	5.66	5.43	5.47	5.26
	W 310 × 60	6.30	5.98	6.04	5.76	5.81	5.57	5.62	5.41
	W 360 × 33	5.43	5.15	5.21	4.97	5.01	4.81	4.85	4.66
	W 360 × 39	5.83	5.53	5.58	5.33	5.38	5.15	5.20	5.00
	W 360 × 45	6.19	5.87	5.93	5.65	5.71	5.47	5.52	5.31
	W 360 × 51	6.49	6.16	6.22	5.93	5.99	5.74	5.79	5.57
	W 360 × 57	6.78	6.43	6.50	6.20	6.26	6.00	6.05	5.82

Notes to Table A-22:

(1) Supported roof length means half the sum of the roof framing spans on both sides of the beam.

(2) Supported floor length means half the sum of the floor framing spans on both sides of the beam.

Table A-23
Maximum Spans for Steel Beams Supporting a Roof and One Floor in Dwelling Units Where Beams Support Interior Stud Walls or Exterior Stud Walls with Siding – 1.5 kPa Specified Roof Snow Load

Forming Part of Sentence 9.23.4.3.(1)

Column 1		Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
Maximum Span, m									
Roof *Live Load*, kPa		1.5							
Supported Roof Length, m[1]		2.4		3.6		4.8		6.0	
Supported Floor Length, m[2]		2.4	3.6	2.4	3.6	2.4	3.6	2.4	3.6
Steel Beam Section	W 150 × 22	3.98	3.67	3.73	3.48	3.53	3.30	3.36	3.12
	W 150 × 30	4.48	4.13	4.19	3.91	3.97	3.74	3.78	3.59
	W 150 × 37	4.88	4.49	4.56	4.26	4.32	4.07	4.12	3.91
	W 200 × 27	5.13	4.72	4.80	4.48	4.54	4.28	4.33	4.11
	W 200 × 31	5.48	5.04	5.12	4.78	4.85	4.57	4.62	4.39
	W 200 × 36	5.63	5.18	5.27	4.92	4.98	4.70	4.75	4.51
	W 200 × 42	5.97	5.50	5.58	5.21	5.28	4.98	5.04	4.78
	W 250 × 33	6.35	5.85	5.94	5.54	5.62	5.30	5.36	5.09
	W 250 × 39	6.80	6.26	6.36	5.94	6.02	5.67	5.74	5.45
	W 250 × 49	7.17	6.61	6.71	6.27	6.35	5.99	6.06	5.75
	W 310 × 39	7.63	7.03	7.14	6.67	6.76	6.37	6.45	6.12
	W 310 × 45	8.03	7.40	7.52	7.02	7.11	6.71	6.78	6.44

Notes to Table A-23:

[1] Supported roof length means half the sum of the roof framing spans on both sides of the beam.

[2] Supported floor length means half the sum of the floor framing spans on both sides of the beam.

Table A-24
Maximum Spans for Steel Beams Supporting a Roof and One Floor in Dwelling Units Where Beams Support Exterior Stud Walls with Brick Veneer – 2.0 kPa Specified Roof Snow Load

Forming Part of Sentence 9.23.4.3.(1)

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
Maximum Span, m								
Roof *Live Load*, kPa	2.0							
Supported Roof Length, m[1]	2.4		3.6		4.8		6.0	
Supported Floor	2.4	3.6	2.4	3.6	2.4	3.6	2.4	3.6

Length, m[2]									
Steel Beam Section	W 150 × 22	2.78	2.65	2.64	2.53	2.53	2.43	2.43	2.35
	W 150 × 30	3.13	2.98	2.97	2.85	2.84	2.74	2.73	2.64
	W 150 × 37	3.40	3.24	3.23	3.10	3.09	2.98	2.97	2.88
	W 200 × 27	3.58	3.41	3.40	3.26	3.25	3.13	3.13	3.02
	W 200 × 31	3.82	3.64	3.63	3.48	3.47	3.34	3.34	3.23
	W 200 × 36	3.93	3.74	3.73	3.58	3.57	3.44	3.43	3.32
	W 200 × 42	4.16	3.96	3.96	3.79	3.78	3.64	3.64	3.52
	W 250 × 33	4.43	4.22	4.21	4.03	4.02	3.88	3.87	3.74
	W 250 × 39	4.75	4.52	4.51	4.32	4.31	4.15	4.15	4.01
	W 250 × 49	5.01	4.77	4.76	4.56	4.55	4.38	4.37	4.23
	W 310 × 39	5.33	5.07	5.06	4.85	4.84	4.66	4.65	4.50
	W 310 × 45	5.61	5.34	5.33	5.11	5.10	4.91	4.90	4.74
	W 310 × 52	5.96	5.67	5.66	5.43	5.41	5.21	5.21	5.03
	W 310 × 60	6.12	5.83	5.81	5.57	5.56	5.36	5.35	5.17
	W 360 × 33	5.28	5.03	5.01	4.81	4.80	4.62	4.61	4.46
	W 360 × 39	5.66	5.39	5.38	5.15	5.14	4.95	4.94	4.78
	W 360 × 45	6.01	5.72	5.71	5.47	5.46	5.26	5.25	5.08
	W 360 × 51	6.31	6.00	5.99	5.74	5.73	5.52	5.51	5.33
	W 360 × 57	6.59	6.28	6.26	6.00	5.99	5.77	5.76	5.57

Notes to Table A-24:

(1) Supported roof length means half the sum of the roof framing spans on both sides of the beam.

(2) Supported floor length means half the sum of the floor framing spans on both sides of the beam.

Table A-25
Maximum Spans for Steel Beams Supporting a Roof and One Floor in Dwelling Units Where Beams Support Interior Stud Walls or Exterior Stud Walls with Siding – 2.0 kPa Specified Roof Snow Load

Forming Part of Sentence 9.23.4.3.(1)

Column 1		Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
Maximum Span, m									
Roof *Live Load*, kPa		2.0							
Supported Roof Length, m[1]		2.4		3.6		4.8		6.0	
Supported Floor Length, m[2]		2.4	3.6	2.4	3.6	2.4	3.6	2.4	3.6
Steel Beam Section	W 150 × 22	3.81	3.54	3.53	3.33	3.32	3.13	3.15	2.94
	W 150 × 30	4.28	3.98	3.97	3.74	3.73	3.55	3.54	3.39
	W 150 × 37	4.66	4.33	4.32	4.70	4.06	3.86	3.85	3.69
	W 200 × 27	4.90	4.56	4.54	4.28	4.27	4.06	4.05	3.88

	W 200 × 31	5.23	4.86	4.85	4.57	4.56	4.34	4.32	4.14
	W 200 × 36	5.38	5.00	4.98	4.70	4.68	4.46	4.45	4.26
	W 200 × 42	5.70	5.30	5.28	4.98	4.96	4.72	4.71	4.51
	W 250 × 33	6.06	5.64	5.62	5.30	5.28	5.03	5.01	4.80
	W 250 × 39	6.49	6.04	6.02	5.67	5.66	5.38	5.37	5.14
	W 250 × 49	6.85	6.37	6.35	5.99	5.97	5.68	5.67	5.43
	W 310 × 39	7.29	6.78	6.76	6.37	6.35	6.04	6.03	5.77
	W 310 × 45	7.68	7.14	7.11	6.71	6.69	6.36	6.35	6.08

Notes to Table A-25:

(1) Supported roof length means half the sum of the roof framing spans on both sides of the beam.

(2) Supported floor length means half the sum of the floor framing spans on both sides of the beam.

Table A-26
Maximum Spans for Steel Beams Supporting a Roof and One Floor in Dwelling Units Where Beams Support Exterior Stud Walls with Brick Veneer – 2.5 kPa Specified Roof Snow Load

Forming Part of Sentence 9.23.4.3.(1)

Column 1		Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
Maximum Span, m									
Roof *Live Load*, kPa		2.5							
Supported Roof Length, m(1)		2.4		3.6		4.8		6.0	
Supported Floor Length, m(2)		2.4	3.6	2.4	3.6	2.4	3.6	2.4	3.6
Steel Beam Section	W 150 × 22	2.71	2.59	2.55	2.46	2.43	2.35	2.33	2.26
	W 150 × 30	3.04	2.91	2.87	2.76	2.73	2.64	2.62	2.54
	W 150 × 37	3.32	3.17	3.13	3.01	2.97	2.88	2.85	2.77
	W 200 × 27	3.49	3.33	3.29	3.16	3.13	3.02	2.99	2.91
	W 200 × 31	3.72	3.56	3.51	3.38	3.34	3.23	3.20	3.10
	W 200 × 36	3.82	3.65	3.61	3.47	3.43	3.32	3.29	3.19
	W 200 × 42	4.05	3.87	3.82	3.68	3.64	3.52	3.48	3.38
	W 250 × 33	4.31	4.12	4.07	3.91	3.87	3.74	3.71	3.60
	W 250 × 39	4.62	4.41	4.36	4.19	4.15	4.01	3.97	3.85
	W 250 × 49	4.87	4.66	4.60	4.42	4.37	4.23	4.19	4.07
	W 310 × 39	5.19	4.96	4.89	4.71	4.65	4.50	4.46	4.33
	W 310 × 45	5.46	5.22	5.15	4.95	4.90	4.74	4.69	4.55
	W 310 × 52	5.80	5.54	5.47	5.26	5.21	5.03	4.98	4.84
	W 310 × 60	5.96	5.69	5.62	5.41	5.35	5.17	5.12	4.97
	W 360 × 33	5.14	4.91	4.85	4.66	4.61	4.46	4.42	4.29
	W 360 × 39	5.51	5.27	5.20	5.00	4.94	4.78	4.73	4.60

	W 360 × 45	5.85	5.59	5.52	5.31	5.25	5.08	5.03	4.88
	W 360 × 51	6.14	5.87	5.79	5.57	5.51	5.33	5.27	5.12
	W 360 × 57	6.42	6.13	6.05	5.82	5.76	5.57	5.51	5.35

Notes to Table A-26:

(1) Supported roof length means half the sum of the roof framing spans on both sides of the beam.

(2) Supported floor length means half the sum of the floor framing spans on both sides of the beam.

Table A-27
Maximum Spans for Steel Beams Supporting a Roof and One Floor in Dwelling Units Where Beams Support Interior Stud Walls or Exterior Stud Walls with Siding – 2.5 kPa Specified Roof Snow Load

Forming Part of Sentence 9.23.4.3.(1)

Column 1		Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
Maximum Span, m									
Roof *Live Load,* kPa		2.5							
Supported Roof Length, m[1]		2.4		3.6		4.8		6.0	
Supported Floor Length, m[2]		2.4	3.6	2.4	3.6	2.4	3.6	2.4	3.6
Steel Beam Section	W 150 × 22	3.66	3.43	3.36	3.19	3.15	2.98	2.98	2.79
	W 150 × 30	4.11	3.85	3.78	3.59	3.54	3.39	3.35	3.23
	W 150 × 37	4.48	4.19	4.12	3.91	3.85	3.69	3.64	3.51
	W 200 × 27	4.71	4.41	4.33	4.11	4.05	3.88	3.83	3.69
	W 200 × 31	5.02	4.71	4.62	4.39	4.32	4.14	4.09	3.94
	W 200 × 36	5.16	4.84	4.75	4.51	4.45	4.26	4.21	4.05
	W 200 × 42	5.47	5.13	5.04	4.78	4.71	4.51	4.46	4.30
	W 250 × 33	5.82	5.46	5.36	5.09	5.01	4.80	4.74	4.54
	W 250 × 39	6.24	5.85	5.74	5.45	5.37	5.14	5.08	4.90
	W 250 × 49	6.58	6.17	6.06	5.75	5.67	5.43	5.36	5.17
	W 310 × 39	7.01	6.56	6.45	6.12	6.03	5.78	5.70	5.47
	W 310 × 45	7.37	6.91	6.78	6.44	6.35	6.08	6.00	5.79

Notes to Table A-27:

[1] Supported roof length means half the sum of the roof framing spans on both sides of the beam.

[2] Supported floor length means half the sum of the floor framing spans on both sides of the beam.

Table A-28
Maximum Spans for Steel Beams Supporting a Roof and One Floor in Dwelling Units Where Beams Support Exterior Stud Walls with Brick Veneer – 3.0 kPa Specified Roof Snow Load

Forming Part of Sentence 9.23.4.3.(1)

Column 1		Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
Maximum Span, m									
Roof *Live Load,* kPa		3.0							
Supported Roof Length, m[1]		2.4		3.6		4.8		6.0	
Supported Floor Length, m[2]		2.4	3.6	2.4	3.6	2.4	3.6	2.4	3.6
Beam	W 150 × 22	2.64	2.53	2.48	2.39	2.35	2.28	2.24	2.18
	W 150 × 30	2.97	2.85	2.78	2.69	2.64	2.56	2.52	2.45
	W 150 × 37	3.23	3.10	3.03	2.93	2.87	2.79	2.74	2.67

	W 200 × 27	3.40	3.26	3.19	3.08	3.02	2.93	2.88	2.81
	W 200 × 31	3.63	3.48	3.40	3.28	3.22	3.13	3.08	3.00
	W 200 × 36	3.73	3.58	3.50	3.38	3.31	3.21	3.16	3.08
	W 200 × 42	3.96	3.79	3.71	3.58	3.51	3.41	3.35	3.26
	W 250 × 33	4.21	4.03	3.94	3.81	3.74	3.62	3.57	3.47
	W 250 × 39	4.51	4.32	4.23	4.08	4.00	3.88	3.82	3.72
	W 250 × 49	4.76	4.56	4.46	4.30	4.22	4.10	4.03	3.93
	W 310 × 39	5.06	4.85	4.74	4.58	4.49	4.36	4.29	4.18
	W 310 × 45	5.33	5.11	4.99	4.82	4.73	4.59	4.51	4.40
	W 310 × 52	5.66	5.43	5.31	5.12	5.03	4.88	4.80	4.67
	W 310 × 60	5.81	5.57	5.45	5.26	5.16	5.01	4.93	4.80
	W 360 × 33	5.01	4.81	4.70	4.54	4.45	4.32	4.25	4.14
	W 360 × 39	5.38	5.15	5.04	4.86	4.77	4.63	4.56	4.44
	W 360 × 45	5.71	5.47	5.35	5.16	5.07	4.92	4.84	4.71
	W 360 × 51	5.99	5.74	5.61	5.42	5.32	5.16	5.08	4.94
	W 360 × 57	6.26	6.00	5.87	5.66	5.56	5.39	5.31	5.17

Notes to Table A-28:

(1) Supported roof length means half the sum of the roof framing spans on both sides of the beam.

(2) Supported floor length means half the sum of the floor framing spans on both sides of the beam.

Table A-29
Maximum Spans for Steel Beams Supporting a Roof and One Floor in Dwelling Units Where Beams Support Interior Stud Walls or Exterior Stud Walls with Siding – 3.0 kPa Specified Roof Snow Load

Forming Part of Sentence 9.23.4.3.(1)

Column 1		Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
Maximum Span, m									
Roof *Live Load,* kPa		3.0							
Supported Roof Length, m(1)		2.4		3.6		4.8		6.0	
Supported Floor Length, m(2)		2.4	3.6	2.4	3.6	2.4	3.6	2.4	3.6
Steel Beam Section	W 150 × 22	3.53	3.33	3.23	3.08	3.01	2.85	2.83	2.66
	W 150 × 30	3.97	3.74	3.63	3.47	3.38	3.26	3.19	3.09
	W 150 × 37	4.32	4.07	3.95	3.77	3.68	3.55	3.48	3.37
	W 200 × 27	4.54	4.28	4.15	3.97	3.87	3.73	3.65	3.52
	W 200 × 31	4.85	4.57	4.43	4.23	4.13	3.98	3.90	3.78
	W 200 × 36	4.98	4.70	4.56	4.35	4.25	4.09	4.01	3.88
	W 200 × 42	5.28	4.98	4.83	4.61	4.50	4.34	4.25	4.12
	W 250 × 33	5.62	5.30	5.14	4.91	4.79	4.61	4.52	4.33
	W 250 × 39	6.02	5.67	5.51	5.26	5.13	4.94	4.84	4.69
	W 250 × 49	6.35	5.99	5.81	5.55	5.42	5.21	5.11	4.95
	W 310 × 39	6.76	6.37	6.18	5.90	5.76	5.55	5.44	5.21

	W 310 × 45	7.11	6.71	6.51	6.21	6.07	5.84	5.72	5.54

Notes to Table A-29:

(1) Supported roof length means half the sum of the roof framing spans on both sides of the beam.

(2) Supported floor length means half the sum of the floor framing spans on both sides of the beam.

Table A-30
Sizes for Spruce-Pine-Fir No. 2 Grade Exterior Wall Studs with Brick Veneer(1)(2)

Forming Part of Sentence 9.23.10.1.(2)

Item	Column 1	2	3	4	5	6	7	8	9	10
	Stud Size and Spacing									
	Hourly Wind Pressure (1/50), kPa		0.40		0.45		0.50		0.60	
	Specified Roof Snow Load, kPa	Stud Length, m	Supported Roof Length, m		Supported Roof Length, m		Supported Roof Length, m		Supported Roof Length, m	
			3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
1.	1.0	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	B	B	B	B
		4.6	B	B	B	B	C	C	C	C
		5.0	C	C	C	C	C	C	D	D
		5.3	C	C	C	C	D	D	D	D
		5.6	C	C	D	D	D	D		
2.	1.5	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	B	B	B	B
		4.6	B	B	B	B	C	C	C	C
		5.0	C	C	C	C	C	C	D	D
		5.3	C	C	C	C	D	D	D	D
		5.6	C	C	D	D	D	D		
3.	2.0	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	B	B	B	B
		4.6	B	B	B	B	C	C	C	C
		5.0	C	C	C	C	C	C	D	D
		5.3	C	C	C	C	D	D	D	D
		5.6	C	C	D	D	D	D		
4.	2.5	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	B	B	B	B
		4.6	B	B	B	B	C	C	C	C
		5.0	C	C	C	C	C	C	D	D
		5.3	C	C	C	C	D	D	D	D
		5.6	C	C	D	D	D	D		
5.	3.0	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	B	B	B	B

		4.6	B	B	B	B	C	C	C	C
		5.0	C	C	C	C	C	C	D	D
		5.3	C	C	C	C	D	D	D	D
		5.6	C	C	D	D	D	D		

Legend - Stud Size and Spacing

A = 38 × 140 mm at 406 mm on centre

B = 38 × 140 mm at 305 mm on centre

C = two 38 × 140 mm studs at 406 mm on centre

D = two 38 × 140 mm studs at 305 mm on centre

Notes to Table A-30:

(1) A roof dead load of 0.5 kPa has been assumed. The Table does not apply where the stud supports additional loads from heavy roofing materials such as concrete tiles or clay roofing tiles.

(2) Wall construction shall conform to the requirements of Sentence 9.23.10.1.(2).

Table A-31
Sizes for Spruce-Pine-Fir No. 2 Grade Exterior Wall Studs with Siding(1)(2)

Forming Part of Sentence 9.23.10.1.(2)

Item	Column 1	2	3	4	5	6	7	8	9	10
	Stud Size and Spacing									
	Hourly Wind Pressure (1/50), kPa		0.40		0.45		0.50		0.60	
	Specified Roof Snow Load, kPa	Stud Length, m	Supported Roof Length, m		Supported Roof Length, m		Supported Roof Length, m		Supported Roof Length, m	
			3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
1.	1.0	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	A	A	A	A
		4.6	A	A	A	A	A	A	A	A
		5.0	A	A	A	A	A	A	B	B
		5.3	A	A	A	A	B	B	B	B
		5.6	A	A	B	B	B	B	C	C
2.	1.5	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	A	A	A	A
		4.6	A	A	A	A	A	A	A	A
		5.0	A	A	A	A	A	A	B	B
		5.3	A	A	A	A	B	B	B	B
		5.6	A	A	B	B	B	B	C	C
3.	2.0	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	A	A	A	A
		4.6	A	A	A	A	A	A	A	A
		5.0	A	A	A	A	A	A	B	B
		5.3	A	A	A	A	B	B	B	B

		5.6	A	A	B	B	B	B	C	C
4.	2.5	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	A	A	A	A
		4.6	A	A	A	A	A	A	A	A
		5.0	A	A	A	A	A	A	B	B
		5.3	A	A	A	A	B	B	B	B
		5.6	A	B	B	B	B	B	C	C
5.	3.0	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	A	A	A	A
		4.6	A	A	A	A	A	A	A	A
		5.0	A	A	A	A	A	A	B	B
		5.3	A	B	A	B	B	B	B	B
		5.6	A	B	B	B	B	B	C	C

Legend - Stud Size and Spacing

A = 38 × 140 mm at 406 mm on centre

B = 38 × 140 mm at 305 mm on centre

C = two 38 × 140 mm studs at 406 mm on centre

D = two 38 × 140 mm studs at 305 mm on centre

Notes to Table A-31:

(1) A roof dead load of 0.5 kPa has been assumed. The Table does not apply where the stud supports additional loads from heavy roofing materials such as concrete tiles or clay roofing tiles.

(2) Wall construction shall conform to the requirements of Sentence 9.23.10.1.(2).

Table A-32
Sizes for Northern Species No. 2 Grade Exterior Wall Studs with Brick Veneer(1)(2)

Forming Part of Sentence 9.23.10.1.(2)

Item	Column 1	2	3	4	5	6	7	8	9	10
	Stud Size and Spacing									
	Hourly Wind Pressure (1/50), kPa		0.40		0.45		0.50		0.60	
	Specified Roof Snow Load, kPa	Stud Length, m	Supported Roof Length, m		Supported Roof Length, m		Supported Roof Length, m		Supported Roof Length, m	
			3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
1.	1.0	3.8	A	A	A	A	B	B	B	B
		4.2	B	B	B	B	C	C	C	C
		4.6	C	C	C	C	C	C	D	D
		5.0	C	C	D	D	D	D		
		5.3	D	D	D	D				
		5.6								
2.	1.5	3.8	A	A	A	A	B	B	B	B
		4.2	B	B	B	B	C	C	C	C

		4.6	C	C	C	C	C	C	D	D
		5.0	C	C	D	D	D	D		
		5.3	D	D	D	D				
		5.6								
3.	2.0	3.8	A	A	A	A	B	B	B	B
		4.2	B	B	B	B	C	C	C	C
		4.6	C	C	C	C	C	C	D	D
		5.0	C	C	D	D	D	D		
		5.3	D	D	D	D				
		5.6								
4.	2.5	3.8	A	A	A	A	B	B	B	B
		4.2	B	B	B	B	C	C	C	C
		4.6	C	C	C	C	C	C	D	D
		5.0	C	C	D	D	D	D		
		5.3	D	D	D	D				
		5.6								
5.	3.0	3.8	A	A	A	A	B	B	B	B
		4.2	B	B	B	B	C	C	C	C
		4.6	C	C	C	C	C	C	D	D
		5.0	C	C	D	D	D	D		
		5.3	D	D	D	D				
		5.6								

Legend - Stud Size and Spacing

A = 38 × 140 mm at 406 mm on centre

B = 38 × 140 mm at 305 mm on centre

C = two 38 × 140 mm studs at 406 mm on centre

D = two 38 × 140 mm studs at 305 mm on centre

Notes to Table A-32:

(1) A roof dead load of 0.5 kPa has been assumed. The Table does not apply where the stud supports additional loads from heavy roofing materials such as concrete tiles or clay roofing tiles.

(2) Wall construction shall conform to the requirements of Sentence 9.23.10.1.(2).

Table A-33
Sizes for Northern Species No. 2 Grade Exterior Wall Studs with Siding(1)(2)

Forming Part of Sentence 9.23.10.1.(2)

Item	Column 1	2	3	4	5	6	7	8	9	10
	Stud Size and Spacing									
	Hourly Wind Pressure (1/50), kPa		0.40		0.45		0.50		0.60	

	Specified Roof Snow Load, kPa	Stud Length, m	Supported Roof Length, m		Supported Roof Length, m		Supported Roof Length, m		Supported Roof Length, m	
			3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0
1.	1.0	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	A	A	A	A
		4.6	A	A	A	A	A	A	B	B
		5.0	A	A	B	B	B	B	C	C
		5.3	B	B	B	B	C	C	C	C
		5.6	C	C	C	C	C	C	D	D
2.	1.5	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	A	A	A	A
		4.6	A	A	A	A	A	A	B	B
		5.0	A	A	B	B	B	B	C	C
		5.3	B	B	B	B	C	C	C	C
		5.6	C	C	C	C	C	C	D	D
3.	2.0	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	A	A	A	A
		4.6	A	A	A	A	A	A	B	B
		5.0	A	A	B	B	B	B	C	C
		5.3	B	B	B	B	C	C	C	C
		5.6	C	C	C	C	C	C	D	D
4.	2.5	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	A	A	A	A
		4.6	A	A	A	A	A	A	B	B
		5.0	A	B	B	B	B	B	C	C
		5.3	B	B	B	B	C	C	C	C
		5.6	C	C	C	C	C	C	D	D
5.	3.0	3.8	A	A	A	A	A	A	A	A
		4.2	A	A	A	A	A	A	A	A
		4.6	A	B	A	B	A	B	B	B
		5.0	A	B	B	B	B	B	C	C
		5.3	B	C	B	C	C	C	C	C
		5.6	C	C	C	C	C	C	D	D

Legend - Stud Size and Spacing

A = 38 × 140 mm at 406 mm on centre

B = 38 × 140 mm at 305 mm on centre

C = two 38 × 140 mm studs at 406 mm on centre

D = two 38 × 140 mm studs at 305 mm on centre

Notes to Table A-33:

(1) A roof dead load of 0.5 kPa has been assumed. The Table does not apply where the stud supports additional loads from heavy roofing materials such as concrete tiles or clay roofing tiles.

(2) Wall construction shall conform to the requirements of Sentence 9.23.10.1.(2).

Table A-34
Minimum Number of 38 × 89 mm Spruce-Pine-Fir Stud Posts in Exterior Stud Walls Supporting Girder Trusses and Roof Beams(1)(2)(3)

Forming Part of Sentence 9.23.10.7.(2)

Col. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Minimum Number of Studs																					
Stud Height, m	Span of Beam or Girder, m	Specified Roof Snow Load, kPa																			
		1.0				1.5				2.0				2.5				3.0			
		Supported Length, m				Supported Length, m				Supported Length, m				Supported Length, m				Supported Length, m			
		2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0
2.4	2.4	1	1	2	2	1	2	2	2	1	2	2	3	2	2	3	3	2	2	3	3
	3.6	1	2	2	2	2	2	3	3	2	2	3	4	2	3	4	4	2	3	4	5
	4.8	2	2	3	3	2	3	3	4	2	3	4	5	3	4	5		3	4	5	
	6.0	2	2	3	4	2	3	4	5	3	4	5		3	4			3	5		
	7.2	2	3	4	4	3	4	5		3	4			4	5			4			
	8.4	2	3	4	5	3	4	5		3	5			4				5			
	9.6	3	4	5		3	5			4				5				5			
	10.8	3	4	5		4	5			4				5							
	12.0	3	4			4				5											
3.0	2.4	1	2	2	2	2	2	3	3	2	2	3	4	2	3	4	4	2	3	4	5
	3.6	2	2	3	3	2	3	4	4	2	3	4	5	3	4	5		3	4		
	4.8	2	3	4	4	3	4	5		3	4			4	5			4			
	6.0	2	3	4	5	3	4			4	5			4				5			
	7.2	3	4	5		4	5			4				5							
	8.4	3	4			4				5											
	9.6	4	5			5															
	10.8	4				5															
	12.0	4																			

Notes to Table A-34:

(1) A roof dead load of 0.62 kPa has been assumed.

(2) Roof beams require a minimum bearing length of 89 mm.

(3) Girder trusses require a minimum bearing length of 89 mm unless otherwise specified by the truss manufacturer.

Table A-35
Minimum Number of 38 × 140 mm Spruce-Pine-Fir Stud Posts in Exterior Stud Walls Supporting Girder Trusses and Roof Beams(1)(2)(3)

Forming Part of Sentence 9.23.10.7.(2)

Col. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22

Minimum Number of Studs																					
Stud Height, m	Span of Beam or Girder, m	Specified Roof Snow Load, kPa																			
		1.0				1.5				2.0				2.5				3.0			
		Supported Length, m				Supported Length, m				Supported Length, m				Supported Length, m				Supported Length, m			
		2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0
3.0	2.4	1	1	1	1	1	1	1	1	1	1	1	2	1	1	2	2	1	1	2	2
	3.6	1	1	1	1	1	1	2	2	1	1	2	2	1	2	2	2	1	2	2	3
	4.8	1	1	2	2	1	2	2	2	1	2	2	3	2	2	3	3	2	2	3	4
	6.0	1	1	2	2	1	2	2	3	2	2	3	3	2	2	3	4	2	3	4	4
	7.2	1	2	2	2	2	2	3	3	2	2	3	4	2	3	4	4	2	3	4	5
	8.4	1	2	2	3	2	2	3	4	2	3	4	4	2	3	4	5	3	4	5	
	9.6	2	2	3	3	2	3	3	4	2	3	4	5	3	4	5		3	4	5	
	10.8	2	2	3	3	2	3	4	4	2	3	4	5	3	4	5		3	5		
	12.0	2	2	3	4	2	3	4	5	3	4	5		3	4			4	5		
3.6	2.4	1	1	1	1	1	1	1	2	1	1	2	2	1	1	2	2	1	2	2	2
	3.6	1	1	1	2	1	1	2	2	1	2	2	3	1	2	2	3	2	2	3	3
	4.8	1	1	2	2	1	2	2	3	2	2	3	3	2	2	3	4	2	3	4	4
	6.0	1	2	2	3	2	2	3	3	2	3	3	4	2	3	4	5	2	3	4	5
	7.2	1	2	2	3	2	2	3	4	2	3	4	5	2	3	4	5	3	4	5	
	8.4	2	2	3	3	2	3	4	4	2	3	4	5	3	4	5		3	4		
	9.6	2	2	3	4	2	3	4	5	3	4	5		3	4			4	5		
	10.8	2	3	3	4	2	3	4	5	3	4	5		3	5			4			
	12.0	2	3	4	5	3	4	5		3	5			4	5			4			

Notes to Table A-35:

(1) A roof dead load of 0.62 kPa has been assumed.

(2) Roof beams require a minimum bearing length of 140 mm.

(3) Girder trusses require a minimum bearing length of 140 mm unless otherwise specified by the truss manufacturer.

Table A-36
Minimum Number of 38 × 89 mm Northern Species Stud Posts in Exterior Stud Walls Supporting Girder Trusses and Roof Beams(1)(2)(3)

Forming Part of Sentence 9.23.10.7.(2)

Col. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Minimum Number of Studs																					
Stud Height, m	Span of Beam or	Specified Roof Snow Load, kPa																			
		1.0				1.5				2.0				2.5				3.0			
		Supported Length, m				Supported Length, m				Supported Length, m				Supported Length, m				Supported Length, m			

	Girder, m	2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0
2.4	2.4	1	2	2	2	2	2	3	3	2	2	3	4	2	3	4	4	2	3	4	5
	3.6	2	2	3	3	2	3	4	4	2	3	4	5	3	4	5		3	4		
	4.8	2	3	4	4	3	4	5		3	4			4	5			4			
	6.0	2	3	4	5	3	4			4	5			4				5			
	7.2	3	4	5		4	5			4				5							
	8.4	3	4			4				5											
	9.6	4	5			5															
	10.8	4				5															
	12.0	4																			
3.0	2.4	2	2	3	3	2	3	3	4	2	3	4	5	3	4	5		3	4		
	3.6	2	3	4	5	3	4	5		3	5			4	5			4			
	4.8	3	4	5		3	5			4				5							
	6.0	3	5			4				5											
	7.2	4	5			5															
	8.4	4																			
	9.6	5																			
	10.8	5																			
	12.0																				

Notes to Table A-36:

(1) A roof dead load of 0.62 kPa has been assumed.

(2) Roof beams require a minimum bearing length of 89 mm.

(3) Girder trusses require a minimum bearing length of 89 mm unless otherwise specified by the truss manufacturer.

Table A-37
Minimum Number of 38 × 140 mm Northern Species Stud Posts in Exterior Stud Walls Supporting Girder Trusses and Roof Beams(1)(2)(3)

Forming Part of Sentence 9.23.10.7.(2)

Col. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Minimum Number of Studs																					
Stud Height, m	Span of Beam or Girder, m	Specified Roof Snow Load, kPa																			
		1.0				1.5				2.0				2.5				3.0			
		Supported Length, m				Supported Length, m				Supported Length, m				Supported Length, m				Supported Length, m			
		2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0	2.4	3.6	4.8	6.0
3.0	2.4	1	1	1	1	1	1	2	2	1	1	2	2	1	2	2	2	1	2	2	3
	3.6	1	1	2	2	1	2	2	2	1	2	2	3	2	2	3	3	2	3	3	4
	4.8	1	2	2	2	2	2	3	3	2	2	3	4	2	3	4	4	2	3	4	5

	6.0	1	2	2	3	2	2	3	4	2	3	4	5	2	3	4	5	3	4	5	
	7.2	2	2	3	3	2	3	4	4	2	3	4	5	3	4	5		3	5		
	8.4	2	3	3	4	2	3	4	5	3	4	5		3	5			4	5		
	9.6	2	3	4	4	3	4	5		3	4			4	5			4			
	10.8	2	3	4	5	3	4	5		3	5			4				5			
	12.0	2	3	4	5	3	4			4	5			4				5			
3.6	2.4	1	1	1	2	1	1	2	2	1	2	2	3	1	2	2	3	2	2	3	3
	3.6	1	2	2	2	1	2	2	3	2	2	3	4	2	3	3	4	2	3	4	5
	4.8	1	2	2	3	2	2	3	4	2	3	4	5	2	3	4	5	3	4	5	
	6.0	2	2	3	4	2	3	4	5	3	4	5		3	4	5		3	5		
	7.2	2	3	3	4	2	3	4	5	3	4	5		3	5			4			
	8.4	2	3	4	5	3	4	5		3	5			4				4			
	9.6	2	3	4	5	3	4			4	5			4				5			
	10.8	3	4	5		3	5			4				5							
	12.0	3	4	5		4	5			5				5							

Notes to Table A-37:

(1) A roof dead load of 0.62 kPa has been assumed.

(2) Roof beams require a minimum bearing length of 140 mm.

(3) Girder trusses require a minimum bearing length of 140 mm unless otherwise specified by the truss manufacturer.

O. Reg. 332/12, Division B, Part 9; O. Reg. 151/13, s. 28-30; O. Reg. 361/13, ss. 49-69, 72, 74-81, 83-96.

PART 10
CHANGE OF USE

10.1.	**General**
10.1.1.	**Scope**
10.2.	**Classification of Existing Buildings**
10.2.1.	**Classification**
10.3.	**Requirements**
10.3.1.	**General**
10.3.2.	**Performance Level**
10.4.	**Compliance Alternatives**
10.4.1.	**Compliance Alternatives**

Table	Description
10.3.2.2.A.	**For Evaluation of Early Warning/Evacuation**
10.3.2.2.B	**Additional Upgrading for Multiple Major Occupancies**

Section 10.1. General

10.1.1. Scope

10.1.1.1. Scope

(1) The scope of this Part shall be as described in Subsection 1.1.2. of Division A.

10.1.1.2. Change in Major Occupancy

(1) The following changes of use are also deemed to be a change in *major occupancy* for the purposes of this Part:

(a) a *suite* of a Group C *major occupancy* is converted into more than one *suite* of a Group C *major occupancy*,

(b) a *suite* or part of a *suite* of a Group A, Division 2 or Group A, Division 4 *major occupancy* is converted to a *gaming premises*,

(c) a *farm building* or part of a *farm building* is changed to a *major occupancy*,

(d) a *building* or part of a *building* is changed to a *post-disaster building*,

(e) a *building* or part of a *building* is changed to a retirement home regulated under the *Retirement Homes Act, 2010*, or

(f) the use of a *building* or part of a *building* is changed and the previous *major occupancy* of the *building* or part of the *building* cannot be determined.

Section 10.2. Classification of Existing Buildings

10.2.1. Classification

10.2.1.1. Classification of Major Occupancy

(1) Every existing *building* or part of it shall be classified according to its *major occupancy* in accordance with the requirements of Subsection 3.1.2.

10.2.1.2. Classification According to Construction and Occupancy

(1) For the purposes of this Part, existing *buildings* shall be classified as to their *construction* and *occupancy* as provided for in Sentence 11.2.1.1.(1).

10.2.1.3. Building Size and Construction

(1) The requirements of Articles 3.2.2.20. to 3.2.2.83. do not apply to this Part.

Section 10.3. Requirements

10.3.1. General

10.3.1.1. General

(1) Except as provided in Section 10.4., a *building* or part of a *building* subject to a change of *major occupancy* shall conform to the requirements of Subsection 3.2.6., Sections 3.7., 3.11. and 3.12., Sentences 6.2.2.1.(2), 6.2.3.9.(1) and 6.2.4.7.(1), Subsections 9.5.1. and 9.5.3. to 9.5.10., Sentences 9.6.1.4.(3), (4) and (7) to (9), Article 9.7.2.3., Sentences 9.8.8.1.(5) to (9) and 9.9.10.1.(1) to (7), Subsection 9.10.17., Sections 9.31. and 9.32., and Subsections 9.34.1. to 9.34.3. as they apply to the new *major occupancy* that the *building* or part of a *building* is to support.

10.3.2. Performance Level

10.3.2.1. General

(1) The *performance level* of a *building* after the change of *major occupancy* shall not be less than the *performance level* prior to the change of *major occupancy*.

(2) For the purposes of Sentence (1), reduction of *performance level* shall be determined in accordance with Article 10.3.2.2.

10.3.2.2. Reduction in Performance Level

(1) Except as provided in Sentence (2), the *performance level* of a *building* or part of a *building* is reduced where the existing structural floor and roof framing systems and their supporting members are not adequate to support the proposed *dead loads* and *live loads* of the new *major occupancy* that the *building* is to support.

(2) The inadequacy of the existing structural floor or roof framing system and its supporting members to support the proposed *dead loads* and *live loads* does not reduce the *performance level* of the *building* if the portion of the floor affected by the proposed loads is restricted to the loading it will support and signs stating the restrictions are posted.

(3) Except as provided in Section 10.4., the *performance level* of a *building* or part of a *building* is reduced where the early warning and evacuation systems requirements of the *building* do not meet the early warning and evacuation systems requirements set out in Table 10.3.2.2.A. for the new *major occupancy* that the *building* is to support.

Table 10.3.2.2.A.
For Evaluation of Early Warning/Evacuation

Forming Part of Sentence 10.3.2.2.(3)

<table>
<tr><td>Column 1</td><td>Column 2</td></tr>
<tr><td>Early Warning / Evacuation Evaluation</td><td>Compliance Alternative (1)</td></tr>
<tr><td>Early Warning and Evacuation to be checked against
(a) access to exit widths based on occupant load in Subsection 3.3.1. or 9.9.3.;
(b) exit widths based on occupant load in Subsection 3.4.3. or 9.9.3.;
(c) exit signs in Subsection 3.4.5. or 9.9.11.;
(d) lighting of exits, lighting of access to exits and emergency lighting in Subsection 3.2.7. or 9.9.12.;
(e) fire alarm system in Subsection 3.2.4. or 9.10.18.;
(f) smoke alarms in Subsection 9.10.19.;
(g) travel distance and number of exits in other Parts of this Division;
(h) smoke control measures, and at least one elevator to permit transport of firefighters to all floors in hotels whose floor level is more than 18 m high, measured between grade and floor level of the top storey as per Subsection 3.2.6.; and</td><td>EARLY WARNING
(a) Compliance alternatives as listed may be used.
EVACUATION
(b) Compliance alternatives as listed to access to exit and exit widths, number of exits, door release hardware, and travel distance may be used.</td></tr>
<tr><td>(i) door release hardware requirements in Articles 3.3.1.12. and 3.4.6.16.,
and deficiencies shall be upgraded.</td><td></td></tr>
</table>

Notes to Table 10.3.2.2.A.:

(1) See Tables 11.5.1.1.A., 11.5.1.1.B., 11.5.1.1.C., 11.5.1.1.D/E. and 11.5.1.1.F. for *compliance alternatives* that may be used.

(4) Except as provided in Sentence (5), the *performance level* of an existing *building* is reduced where a change in use will result in a change of the *major occupancy* of all or part of an existing *building* to another *major occupancy* of a greater *hazard index*.

(5) Except as provided in Sentence (6), if the *hazard index* of the new *major occupancy* is greater than the *hazard index* of the existing *major occupancy*, the *performance level* is not reduced where the *hazard index* of the new *major occupancy* is not greater than the *construction index* of the existing *building*.

(6) Small or medium sized existing *buildings* as determined in Tables 11.2.1.1.B. to 11.2.1.1.N. facing multiple *streets* may be assigned a *hazard index* credit of 1, which may be subtracted from the *hazard index* of the new *major occupancy* provided,

(a) the *building* does not contain a Group B, Division 1, a Group C, or a Group F, Division 1 *occupancy*, and

(b) firefighting access complying with Articles 3.2.5.1. to 3.2.5.5. or Subsection 9.10.20. is provided.

(7) Except as provided in Sentence (8), the *performance level* of a *building* or part of a *building* is reduced in an existing *building combustible construction* where,

(a) the *occupancy* is changed to a *residential occupancy* in all or part of the *building*, and

(b) if the *building* was new, it would have been required to be constructed of *noncombustible construction or to be constructed in accordance with article 3.2.2.*43A or 3.2.2.50A

(8) A change in the *occupancy* of a *building* or part of a *building* to a *residential occupancy* does not reduce the *performance level* of the *building* or part of the *building* where,

(a) the *building* is *sprinklered*, and

(b) the *building* does not exceed 6 *storeys* in *building height*.

(9) The *performance level* of a *building* or part of a *building* is reduced where the new *major occupancy* in an existing *building* of multiple *occupancy* is not separated from adjoining *major occupancies* by *fire separations* having *fire-resistance ratings* conforming to Article 3.1.3.1., Subsection 9.10.9. or Table 10.3.2.2.B.

Table 10.3.2.2.B.(1)
Additional Upgrading for Multiple Major Occupancies

Forming Part of Sentence 10.3.2.2.(9)

Column 1	Column 2	Column 3	Column 4
New *Major Occupancy*	Code Requirements	*Compliance Alternative*	
All	Table 3.1.3.1. and Subsection 9.10.9.	For Existing *Building*	If *Sprinklered*
	Where:	Reduce to	Reduce to
	1 h rating required	45 min	30 min
	2 h rating required	1.5 h	1 h
	3 h rating required	2 h	1.5 h

Notes to Table 10.3.2.2.B.:

[1] For *buildings* with multiple *major occupancies* only, where there is a change in *major occupancy*.

(10) The *performance level* of a *building* is reduced where the *building* after the change of *major occupancy* will not comply with Article 3.1.3.2. or 9.10.9.12.

(11) The *performance level* of a *building* or part of a *building* is reduced where, after a change of *major occupancy*,

(a) the total daily design *sanitary sewage* flow of the new *major occupancy*, calculated in accordance with Article 8.2.1.3., exceeds the capacity of any component of a *sewage system* serving the *building*, or

(b) the type or amount of *sanitary sewage* that will, under the new *major occupancy*, be discharged to a *sewage system* serving the *building* is prohibited by Article 8.1.3.1.

(12) The *performance level* of an existing *building* or part of an existing *building* is reduced where,

(a) the use of the *building* or part of the *building* is changed to a retirement home regulated under the *Retirement Homes Act, 2010*, and

(b) any of the following applies:

(i) the retirement home is not *sprinklered*,

(ii) Clause 3.2.6.8.(1)(b) or (c), as applicable, requires that a voice communication system conforming to Article 3.2.4.23. be provided in the *building* and such a system is not provided in the *building*, or

(iii) the retirement home contains one or more doors to *suites* or sleeping rooms not within *suites*, other than doors leading directly to the exterior, that are not equipped with self-closing devices.

Section 10.4. Compliance Alternatives

10.4.1. Compliance Alternatives

10.4.1.1. Substitution

(1) Except as provided in Sentence (3), a *compliance alternative* to a requirement contained in Part 3, 4, 6 or 8 that is shown in Tables 11.5.1.1.A., 11.5.1.1.B., 11.5.1.1.C., 11.5.1.1.D/E. or 11.5.1.1.F. may be substituted for the requirement where the *chief building official* is satisfied that compliance with the requirement is impracticable because,

(a) of structural or *construction* difficulties, or

(b) it is detrimental to the preservation of a *heritage building*.

(2) Except as provided in Sentence (3), a *compliance alternative* to a requirement contained in Part 9 or 12 shown in Tables 11.5.1.1.C., 11.5.1.1.D/E. or 11.5.1.1.F. may be substituted for the requirement without satisfying the *chief building official* that the requirement is impracticable.

(3) Where the *building* has been in existence for less than five years, *compliance alternatives* may only be used in respect of requirements of this Division that are referenced in Sentences 10.3.2.2.(3), (5) and Table 10.3.2.2.B.

O. Reg. 332/12, Division B, Part 10; O. Reg. 151/13, ss. 31, 32.

PART 11
RENOVATION

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11.2.1. Classification

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Section 11.1. General

11.1.1. Scope

11.1.1.1. Scope

(1) The scope of this Part shall be as described in Subsection 1.1.2. of Division A.

11.1.1.2. Definitions

(1) In this Part,

Building system means a combination of elements or components that form a complete major division of *construction* in the design of a *building* or part of a *building*, including a structural or framing system, a waterproofing system, a *drainage system*, an *exterior cladding* system, a roofing system, a window system, a *partition* system, a corridor system, a stair system, a fire alarm and detection system, a sprinkler system or a heating, ventilation or *air-conditioning* system, a *foundation* system, a standpipe and hose system, a flooring system, a *plumbing system*, a *sewage system* or an electrical system.

11.1.2. Application

11.1.2.1. Extension, Material Alteration or Repair

(1) Where an existing *building* is subject to extension, material alteration or repair,

(a) the proposed *construction* shall comply with Section 11.3., and

(b) the *performance level* of the *building* shall be evaluated and compensating *construction* shall be undertaken in accordance with Section 11.4.

Section 11.2. Classification of Existing Buildings

11.2.1. Classification

11.2.1.1. Construction Index and Hazard Index

(1) Where proposed *construction* will result in the change of *major occupancy* of all or part of an existing *building* to another *major occupancy*, the *building* shall be classified as to its,

(a) *construction* on the basis of its *construction index* as provided for in this Part, including Table 11.2.1.1.A., and

(b) *occupancy* on the basis of its *hazard index* as provided for in this Part, including Tables 11.2.1.1.B. to 11.2.1.1.N.

(2) Small or medium sized existing *buildings* as determined in Tables 11.2.1.1.B. to 11.2.1.1.N. facing multiple *streets* may be assigned a *hazard index* credit of 1, which may be subtracted from the *hazard index* of the proposed *major occupancy* to reduce the additional upgrading required by Table 11.4.3.4.A. provided,

(a) the *building* does not contain a Group B, Division 1, a Group C, or a Group F, Division 1 *occupancy*, and

(b) firefighting access complying with Articles 3.2.5.1. to 3.2.5.5. or Subsection 9.10.20. is provided.

(3) The requirements of Articles 3.2.2.20. to 3.2.2.83. do not apply to this Part.

11.2.1.2. Multiple Occupancies

(1) The classification of an existing *building* of multiple *occupancy* under Article 11.2.1.1. shall be applied according to Articles 3.2.2.5. to 3.2.2.8.

11.2.1.3. Prohibition of Occupancy Combinations

(1) Nothing in this Part relieves an applicant from complying with the requirements of Article 3.1.3.2. or 9.10.9.12.

Section 11.3. Proposed Construction

11.3.1. New and Existing Building Systems

11.3.1.1. Material Alteration or Repair of a Building System

(1) Where an existing *building system* is materially altered or repaired, the *performance level* of the *building* after the material alteration or repair shall be at least equal to the *performance level* of the *building* prior to the material alteration or repair.

11.3.1.2. New Building Systems and Extension of Existing Building Systems

(1) Except as provided in Article 11.3.3.1. and Section 11.5., the design and *construction* of a new *building system* or the extension of an existing *building system*, shall comply with all other Parts.

11.3.2. Extension of Buildings

11.3.2.1. Portion of Extended Buildings

(1) Where an existing *building* is extended,

(a) this Part applies to the existing portion of the *building*, and

(b) the extended portion of the *building* shall comply with all other Parts.

(2) REVOKED: O. Reg. 361/13, s. 97 (2).

11.3.3. Renovation

11.3.3.1. Basic Renovation

(1) Except as provided in Sentence (2) and Article 11.3.3.2., *construction* may be carried out to maintain the existing *performance level* of all or part of an existing *building*, by the reuse, relocation or extension of the same or similar materials or components, to retain the existing character, structural uniqueness, heritage value, or aesthetic appearance of all or part of the *building*, if the *construction* will not adversely affect the early warning and evacuation systems, *fire separations* or the structural adequacy or will not create an unhealthy environment in the *building*.

(2) *Construction* in respect of a *hotel*, a Group B, Division 3 *occupancy* or a retirement home regulated under the *Retirement Homes Act, 2010* that is a Group C *occupancy* may be carried out in accordance with Sentence (1) only if the *construction* will be in conformance with the Fire Code made under the *Fire Protection and Prevention Act, 1997*.

11.3.3.2. Extensive Renovation

(1) Where existing interior walls or ceilings or floor assemblies or roof assemblies are substantially removed in an existing *building* and new interior walls, ceilings, floor assemblies or roof assemblies are installed in the *building*, structural and fire-resistance elements shall be constructed in compliance with the requirements of the other Parts.

(2) Except as provided in Section 11.5., the proposed *construction* within an existing *suite* shall comply with the requirements of Section 3.8. where,

(a) the existing interior walls or floor assemblies within the *suite* are substantially removed in an existing *building*,

(b) new interior walls or floor assemblies are installed,

(c) the *suite* has an area greater than 300 m^2, and

(d) the *suite* is located on,

(i) a *floor area* where the existing difference in elevation between the adjacent ground level and the floor level is not more than 200 mm, or

(ii) a normally occupied *floor area* which is accessible by a passenger type elevator or other platform equipped passenger elevating device from an entrance *storey* where the existing difference in elevation between the adjacent ground level and the entrance *storey* level is not more than 200 mm.

(3) Except as provided in Sentence (4), where existing interior walls or ceilings or floor assemblies or roof assemblies are substantially removed on any *storey* in an existing *building* and new interior walls, ceilings, floor assemblies or roof assemblies are installed, the *storey* shall be *sprinklered* if,

(a) the *storey* will contain a Group C *major occupancy*, and

(b) the *building* is over 3 *storeys* in *building height*.

(4) Sentence (3) does not apply where the *building*,

(a) conforms to Subclause 3.2.2.44.(1)(a)(ii), and

(b) contains *dwelling units* having *means of egress* conforming to Sentence 3.3.4.4.(8).

(5) Where existing interior walls or ceilings or floor assemblies or roof assemblies are substantially removed and new interior walls, ceilings, floor assemblies or roof assemblies are installed in an existing *building* or part of an existing *building* that is a retirement home regulated under the *Retirement Homes Act, 2010*, the following requirements apply:

(a) the retirement home shall be *sprinklered*,

(b) a voice communication system conforming to Article 3.2.4.23. shall be provided in the *building*, if Clause 3.2.6.8.(1)(b) or (c), as applicable, requires that such a voice communication system be provided in the *building*, and

(c) doors to *suites* and sleeping rooms not within *suites* in the retirement home, other than doors leading directly to the exterior, shall be equipped with self-closing devices.

11.3.3.2. Extensive Renovation

(1) Where existing interior walls or ceilings or floor assemblies or roof assemblies are substantially removed in an existing *building* and new interior walls, ceilings, floor assemblies or roof assemblies are installed in the *building*, structural and fire-resistance elements shall be constructed in compliance with the requirements of the other Parts.

(2) Except as provided in Section 11.5., the proposed *construction* within an existing *suite* shall comply with the requirements of Section 3.8. where,

(a) new interior walls or floor assemblies are installed,

(b) the *suite* has an area greater than 300 m^2, and

(c) the *suite* is located in,

(i) a *floor area* where the existing difference in elevation between the adjacent ground level and the floor level is not more than 200 mm, or

(ii) a normally occupied *floor area* which is accessible by a passenger type elevator or other platform equipped passenger elevating device from an entrance *storey* where the existing difference in elevation between the adjacent ground level and the entrance *storey* level is not more than 200 mm.

(3) Except as provided in Section 11.5., the proposed *construction* within an existing *suite*, other than a *suite* described in Sentence (2) or a *suite* in a *building* described in Clause 3.8.1.1.(1)(a), (b), (c) or (d), shall comply with the requirements of Sentences 3.8.1.3.(6), 3.8.2.3.(6), 3.8.3.1.(6), 3.8.3.3.(19), 3.8.3.7.(1), 3.8.3.15.(5) and 3.8.3.16.(4) where new interior walls or floor assemblies are installed.

(4) Except as provided in Sentence (5), where existing interior walls or ceilings or floor assemblies or roof assemblies are substantially removed on any *storey* in an existing *building* and new interior walls, ceilings, floor assemblies or roof assemblies are installed, the *storey* shall be *sprinklered* if,

(a) the *storey* will contain a Group C *major occupancy*, and

(b) the *building* is over 3 *storeys* in *building height*.

(5) Sentence (4) does not apply where the *building*,

(a) conforms to Subclause 3.2.2.44.(1)(a)(ii), and

(b) contains *dwelling units* having *means of egress* conforming to Sentence 3.3.4.4.(8).

(6) Where existing interior walls or ceilings or floor assemblies or roof assemblies are substantially removed and new interior walls, ceilings, floor assemblies or roof assemblies are installed in an existing *building* or part of an existing *building* that is a retirement home regulated under the *Retirement Homes Act, 2010*, the following requirements apply:

(a) the retirement home shall be *sprinklered*,

(b) a voice communication system conforming to Article 3.2.4.23. shall be provided in the *building*, if Clause 3.2.6.8.(1)(b) or (c), as applicable, requires that such a voice communication system be provided in the *building*, and

(c) doors to *suites* and sleeping rooms not within *suites* in the retirement home, other than doors leading directly to the exterior, shall be equipped with self-closing devices.

11.3.4. Plumbing

11.3.4.1. Extension, Material Alteration or Repair

(1) Despite Subsections 11.3.1. to 11.3.3., when an existing *building* is extended or subject to material alteration or repair, Part 7 applies,

(a) to the design and *construction* of *plumbing* in the extensions and those parts of the *building* subject to material alteration and repair, and

(b) to *plumbing* which is adversely affected by the extension, alteration or repair.

11.3.5. Sewage Systems

11.3.5.1. Existing Septic Tanks

(1) Despite Subsections 11.3.1. to 11.3.3., where an existing *septic tank* is subject to material alteration, repair or replacement, the *construction* of the *septic tank* shall comply with Part 8.

11.3.5.2. Vertical Separations and Existing Sewage Systems

(1) Despite Subsections 11.3.1. to 11.3.3., where an existing *sewage system* is extended or is subject to material alteration or repair, the requirements respecting the vertical separation to the water table set out in Part 8 apply to the extended, altered or repaired portions of the *sewage system* as well as to the existing portions of the *sewage system*.

Section 11.4. Performance Level Evaluation and Compensating Construction

11.4.1. General

11.4.1.1. Performance Level

(1) The *performance level* of a *building* after *construction* shall not be less than the *performance level* of the *building* prior to *construction.*

(2) For the purposes of Sentence (1), reduction of *performance level* shall be determined in accordance with Subsection 11.4.2.

(3) Where the proposed *construction* would reduce the *performance level* of an existing *building*, compensating *construction* shall be required in conformance with Subsection 11.4.3.

11.4.2. Reduction in Performance Level

11.4.2.1. Structural

(1) The *performance level* of an existing *building* is reduced where after proposed *construction* in all or part of an existing *building*,

(a) the *major occupancy* will change to a different *major occupancy*,

(b) the *occupant load* will increase by more than 15%, or

(c) the *live load* will increase due to change in use within the same *major occupancy*,

and the existing structural floor and roof framing systems and their supporting members after the *construction* are not adequate to support the proposed *dead loads* and *live loads*.

11.4.2.2. Increase in Occupant Load

(1) Except as provided in Sentences 11.4.2.5.(2) and (3), the *performance level* of an existing *building* is reduced where proposed *construction* will increase the *occupant load* of an existing *building* by more than 15%.

(2) The *performance level* of an existing *building* is reduced where proposed *construction* will increase the *occupant load* by 15% or less and the new *occupant load* will be more than 15% above the *occupant load* for which a fire alarm system is required under Sentence 3.2.4.1.(2).

(3) The *performance level* of an existing *building* is reduced where proposed *construction* will increase the *occupant load* by 15% or less and the new *occupant load* will be more than 15% above the existing *exit* capacity as required under Article 3.4.3.2.

11.4.2.3. Change of Major Occupancy

(1) Except as provided in Sentence 11.4.2.5.(4), the *performance level* of an existing *building* is reduced where proposed *construction* will result in,

(a) the change of the *major occupancy* of all or part of an existing *building* to another *major occupancy* of a greater *hazard index*,

(b) the conversion of a *suite* of a Group C *major occupancy* into more than one *suite* of Group C *major occupancy*,

(c) the conversion of a *suite* or part of a *suite* of a Group A, Division 2 or a Group A, Division 4 *major occupancy* into a *gaming premises*,

(d) the change of a *farm building* or part of a *farm building* to a *major occupancy*,

(e) the change of a *building* or part of a *building* to a *post-disaster building*,

(f) the change of a *building* or part of a *building* to a retirement home regulated under the *Retirement Homes Act, 2010*, or

(g) the change in use of a *building* or part of a *building* where the previous *major occupancy* of the *building* or part of the *building* cannot be determined.

(2) For the purpose of this Article and Sentences 11.4.2.1.(1) and 11.4.2.5.(4), the change of use set out in Clauses (1)(b) to (g) is also deemed to constitute a change in *major occupancy*.

(3) The *performance level* of an existing *building* is reduced where the early warning and evacuation systems requirements of other Parts for the proposed *major occupancy* exceed those of the existing *building*.

(4) The *performance level* of an existing *building* is reduced where the proposed *major occupancy* in the *building* is not separated from the adjoining *major occupancies* by *fire separations* having *fire-resistance ratings* conforming to Tables 3.1.3.1. and 11.4.3.4.B.

(5) The *performance level* of an existing *building* is reduced where the *occupancy* of all or part of an existing *building* of *combustible construction* is changed to a new *major occupancy* that would require the *building*, if it were a new *building*, to be of *noncombustible construction* or to be constructed in accordance with Article 3.2.2.43A. or 3.2.2.50A.

(6) Despite Clause (1)(a), the *performance level* of an existing *building* is reduced where proposed *construction* will result in the change of the *major occupancy* of all or part of an existing *building* to a Group C *major occupancy* in a *building* over 3 *storeys* in *building height*, except in a *building* conforming to Subclause 3.2.2.44.(1)(a)(ii) and having an egress facility conforming to Sentence 3.3.4.4.(8).

11.4.2.4. Plumbing

(1) The *performance level* of an existing *building* is reduced where the existing *building* is extended or subject to material alteration or repair, and *plumbing* in the existing *building* is adversely affected by the extension, alteration or repair.

11.4.2.5. Sewage Systems

(1) The *performance level* of an existing *building* is reduced where the existing *building* is extended or subject to material alteration or repair and a *sewage system* serving the existing *building* is adversely affected by the extension, alteration or repair of the existing *building*.

(2) Except as provided in Sentence (3), the *performance level* of an existing *building* is reduced where proposed *construction* will increase the *occupant load* of an existing *building*, and the new *occupant load* will result in the total daily design *sanitary sewage* flow of the *building*, calculated in accordance with Article 8.2.1.3., exceeding the capacity of any component of a *sewage system* serving the *building*.

(3) The *performance level* of an existing *dwelling unit* is reduced where *proposed construction* that,

(a) increases the number of bedrooms in the *dwelling unit*,

(b) exceeds 15% of the finished area of the *dwelling unit*, or

(c) adds new *plumbing fixtures* to the *dwelling unit*,

will result in the total daily design *sanitary sewage* flow of the *dwelling unit*, calculated in accordance with Article 8.2.1.3., exceeding the capacity of any component of a *sewage system* serving the *dwelling unit*.

(4) The *performance level* of an existing *building* is reduced where proposed *construction* will result in the change of a *major occupancy* of all or part of the existing *building* to another *major occupancy* and,

(a) the total daily design *sanitary sewage* flow of the proposed *major occupancy*, calculated in accordance with Article 8.2.1.3., exceeds the capacity of any component of a *sewage system* serving the *building*, or

(b) the type or amount of *sanitary sewage* which will, under the proposed *major occupancy*, be discharged to a *sewage system* serving the *building*, is prohibited by Article 8.1.3.1.

11.4.2.6. Extension of Buildings of Combustible Construction

(1) The *performance level* of an existing *building* of *combustible construction* is reduced where the existing *building* is extended by adding a *storey* or *storeys* such that the extended *building* will be more than four *storeys* in *building height*.

11.4.3. Compensating Construction

11.4.3.1. General

(1) Where the *performance level* of an existing *building* is reduced under Subsection 11.4.2., compensating *construction* shall be carried out in accordance with this Subsection.

(2) Except as provided in Sentence (3), compensating *construction* required under this Subsection applies to the part of the *building* being altered and shall include,

(a) *fire separations*, with the required *fire-resistance ratings*, separating the part being altered from the *floor areas* immediately above and below and from the immediate adjacent areas, and

(b) *access to exits* and *exits* from the *building*, where the alteration adversely affects the *exit* system of the *building*.

(3) Compensating *construction* required under this Subsection applies to the existing *building systems* that are adversely affected by the proposed *construction*.

11.4.3.2. Structural

(1) Where the *performance level* of an existing *building* is reduced under Sentence 11.4.2.1.(1),

(a) remedial measures shall be taken to support the proposed loads, or

(b) the portion of the floor affected by the proposed loads shall be restricted to the loading it will support and signs stating the restrictions shall be posted.

11.4.3.3. Increase in Occupant Load

(1) Where the *performance level* of an existing *building* is reduced under Sentence 11.4.2.2.(1), (2) or (3), the *building* shall be evaluated, and the early warning and evacuation systems shall be upgraded, in conformance with the applicable requirements of Table 11.4.3.3.

(2) Sentence (1) does not apply in a Group C *occupancy* where the new total *occupant load* is,

(a) 14 persons or fewer in a *boarding, lodging or rooming house*, except that where the *occupant load* is between 10 and 15 persons, an interconnected system of *smoke alarms* in corridors near stairways is required, or

(b) 16 persons or fewer in a *building* containing residential *suites* which are *dwelling units*, except that where the *occupant load* is between 10 and 17 persons, an interconnected system of *smoke alarms* in corridors near stairways is required.

(3) Where the *performance level* of an existing *building* is reduced under Sentence 11.4.2.2.(1), additional *construction* shall be required in order that the *building* or part of the *building* subject to the increase in *occupant load* conforms to the requirements of Sentence 6.2.2.1.(2), Subsection 3.7.4. and Article 9.31.1.1.

11.4.3.4. Change in Major Occupancy

(1) Where the *performance level* of an existing *building* is reduced under Clause 11.4.2.3.(1)(a), (b), (c), (d), (e) or (g), additional upgrading shall be required in conformance with Table 11.4.3.4.A. and so that the *construction index* of the *building* is increased to at least equal the *hazard index* of the new *major occupancy* that the *building* is to support.

(2) A *building* or part of the *building* subject to a change of *major occupancy* shall conform to the requirements of Subsection 3.2.6., Sections 3.7., 3.11., 3.12., Sentences 6.2.2.1.(2), 6.2.3.9.(1) and 6.2.4.7.(10), Subsections 9.5.1. and 9.5.3. to 9.5.10., Section 9.7., Subsection 9.10.17., Sections 9.31. and 9.32., and Subsections 9.34.1. to 9.34.3. as they apply to the new *major occupancy* that the *building* or part of the *building* is to support.

(3) Where the *performance level* of an existing *building* is reduced under Sentence 11.4.2.3.(3), the *building* shall be evaluated, and the early warning and evacuation systems shall be upgraded, in conformance with the applicable requirements of Table 11.4.3.3.

(4) Where the *performance level* of an existing *building* is reduced under Sentence 11.4.2.3.(4), upgrading of the *fire separations* shall be required in conformance with the applicable requirements of Article 3.1.3.1. and Table 11.4.3.4.B.

(5) Where the *performance level* is reduced under Sentence 11.4.2.3.(5), the requirement for the *building* to be of *noncombustible construction* or to be constructed in accordance with Article 3.2.2.43A. or 3.2.2.50A. is satisfied if the *building* is *sprinklered*.

(6) Where the *performance level* is reduced under Sentence 11.4.2.3.(6), the *storey* subject to the change shall be *sprinklered*.

(7) Where the *performance level* of an existing *building* is reduced under Clause 11.4.2.3.(1)(f), the following requirements apply:

(a) the retirement home shall be *sprinklered*,

(b) a voice communication system conforming to Article 3.2.4.23. shall be provided in the *building*, if Clause 3.2.6.8.(1)(b) or (c), as applicable, requires that such a voice communication system be provided in the *building*, and

(c) doors to *suites* and sleeping rooms not within *suites* in the retirement home, other than doors leading directly to the exterior, shall be equipped with self-closing devices.

11.4.3.5. Plumbing

(1) Where the *performance level* of an existing *building* is reduced under Sentence 11.4.2.4.(1), upgrading of *plumbing* in the existing *building* which is adversely affected by the extension, alteration or repair shall be required in conformance with Part 7.

11.4.3.6. Sewage Systems

(1) Where the *performance level* of an existing *building* is reduced under Article 11.4.2.5., upgrading of a *sewage system* which is adversely affected by the *construction*, increase in *occupant load*, increase in the total daily design *sanitary sewage* flow or change in amount or type of *sanitary sewage* shall be required in conformance with Part 8.

11.4.3.7. Extension of Buildings of Combustible Construction

(1) Where the *performance level* of an existing *building* is reduced under Article 11.4.2.6., the *building* shall be *sprinklered*.

Section 11.5. Compliance Alternatives

11.5.1. Compliance Alternatives

11.5.1.1. Compliance Alternatives

(1) A *compliance alternative* shown in Table 11.5.1.1.A., 11.5.1.1.B., 11.5.1.1.C., 11.5.1.1.D/E. or 11.5.1.1.F. may be substituted for a requirement contained in Part 3, 4, 6 or 8 where the *chief building official* is satisfied that compliance with the requirement is impracticable because,

(a) of structural or *construction* difficulties, or

(b) it is detrimental to the preservation of a *heritage building*.

(2) A *compliance alternative* shown in Table 11.5.1.1.A., 11.5.1.1.B., 11.5.1.1.C., 11.5.1.1.D/E. or 11.5.1.1.F. may be substituted for a requirement contained in Part 9 or 12 without satisfying the *chief building official* that compliance with the requirement is impracticable.

Table 11.2.1.1.A.
Construction Index

Forming Part of Sentence 11.2.1.1.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	Fire-Resistance Rating			Type of *Construction*	*C.I.*[2]

	Floors over *Basement*	Other Floors	Roof		
1.	3 h	3 h	1.5 h	*Noncombustible*	8[1]
2.	2 h	2 h	1 h	*Noncombustible*	7
3.	1 h	1 h	45 min	*Noncombustible*	6
4.	45 min	45 min	0 h	*Noncombustible*	5
5.	45 min	45 min	45 min	*Heavy Timber*	5
6.	45 min	45 min	45 min	*Combustible*	5
7.	45 min	0 h	0 h	*Noncombustible*	4
8.	45 min	45 min	0 h	*Combustible*	4
9.	30 min	0 h	0 h	*Noncombustible*	3
10.	30 min	30 min	0 h	*Combustible*	3
11.	0 h	30 min	0 h	*Combustible*	2
12.	0 h	0 h	0 h	*Combustible*	1[1]

Notes to Table 11.2.1.1.A.:

(1) *C.I.* of 1 is lowest fire protection *performance level* and *C.I.* of 8 is highest.

(2) Take highest rating for *C.I.* from Table 11.2.1.1.A. for existing *building*.

Table 11.2.1.1.B. (1)(4)
Hazard Index

Forming Part of Sentences 11.2.1.1.(1) and (2)

Item	Column 1	Column 2	Column 3	Column 4
	Group A	*Occupancy H.I.*(5)		
	Division 1	Small	Medium	Large
1.	Dinner Theatres	4	5	6
2.	Live Theatres	4	5	6
3.	Motion Picture Theatres	4	5	6
4.	Opera Houses	4	5	6
5.	Television Studios (With Audience)	4	5	6

Notes to Table 11.2.1.1.B.:

(1)

Building Size (Maximum) (2)(3)	
- 300 *occupant load* maximum / 1 *storey*	Small
- 600 m^2 / 600 *occupant load* maximum / 1 *storey* with less than 40% 2 *storey* (6)	Medium
- Any area / not exceeding 18 m high, measured between *grade* and the floor level of the top *storey*	Large
- Over 18 m high, measured between *grade* and the floor level of the top *storey*	*H.I.* = 7

(2) Sizes are based on *building area* and *building height*, unless noted.

(3) *Building* size is based on the existing *building* facing one *street*.

(4) For existing *buildings* facing multiple *streets*, see Sentence 11.2.1.1.(2) and Table 11.4.3.4.A.

(5) Take lowest rating for *H.I.* from Table for *major occupancy* change.

(6) *Building* may have less than 40% of its area as 2 *storeys* for purposes as described in Clauses 3.2.2.21.(1)(b) and (c).

Table 11.2.1.1.C. (1)(4)(6)
Hazard Index

Forming Part of Sentences 11.2.1.1.(1) and (2)

Item	Column 1	Column 2	Column 3	Column 4
	Group A Division 2	*Occupancy H.I.*(5)		
		Small	Medium	Large
1.	Art Galleries	3	4	6
2.	Auditoria	3	4	6
3.	Billiard Halls, Amusement Arcades	3	4	6
4.	Bowling Alleys	3	4	6
5.	Churches	3	4	6
6.	Clubs, Lodges (Non-Residential)	3	4	6
7.	Community Halls	3	4	6
8.	Concert Halls	3	4	6
9.	Court Rooms	3	4	6
10.	Dance Halls	3	4	6
11.	Daycare Centres	3	4	6
12.	Exhibition Halls (Without Sales)	3	4	6
13.	Exhibition Halls (With Sales)	See Group E		
14.	*Gaming premises*	3	4	6
15.	Gymnasia (Multi-Purpose)	3	4	6
16.	Gymnasia (Athletic)	3	4	6
17.	Lecture Halls	3	4	6
18.	Libraries	3	4	6
19.	Licensed Beverage Establishments	3	4	6
20.	Licensed Clubs, Lodges	3	4	6
21.	Museums	3	4	6
22.	Passenger Stations / Depots	3	4	6
23.	*Public Heritage Buildings*	3		
24.	Recreational Piers	3	4	6
25.	Restaurants	3	4	6
26.	Schools, Colleges	3	4	6
27.	Undertaking Premises	3	4	6

Notes to Table 11.2.1.1.C.:

(1)

Building Size (Maximum) (2)(3)	
- 400 m^2 / 1 *storey*	Small
- 250 m^2 / 3 *storey* (*Public Heritage Building*)	Small

- 800 m^2 / 2 *storey*	Medium
- Any area / not exceeding 18 m high, measured between *grade* and the floor level of the top *storey*	Large
- Over 18 m high, measured between *grade* and the floor level of the top *storey*	*H.I.* = 7

(2) Sizes are based on *building area* and *building height*, unless noted.

(3) *Building* size is based on the existing *building* facing one *street*.

(4) For existing *buildings* facing multiple *streets*, see Sentence 11.2.1.1.(2) and Table 11.4.3.4.A.

(5) Take lowest rating for *H.I.* from Table for *major occupancy* change.

(6) *Buildings* which exceed 3 *storeys* in *building height* and are of *combustible construction* shall be *sprinklered*.

Table 11.2.1.1.D. (1)(4)
Hazard Index

Forming Part of Sentences 11.2.1.1.(1) and (2)

Item	Column 1	Column 2	Column 3	Column 4
	Group A Division 3	*Occupancy H.I.*(5)		
		Small	Medium	Large
1.	Arenas (No Occupancy On Activity Surface)	3	4	6
2.	Armouries (No Occupancy On Activity Surface)	3	4	6
3.	Enclosed Stadia or Grandstand	3	4	6
4.	Ice Rinks (No Occupancy On Activity Surface)	3	4	6
5.	Indoor Swimming Pools	3	4	6

Notes to Table 11.2.1.1.D.:

(1)

Building Size (Maximum) (2)(3)	
- 1000 m^2 / 1 *storey*	Small
- 2000 m^2 / 2 *storey*	Medium
- Any area / not exceeding 18 m high, measured between *grade* and the floor level of the top *storey*	Large
- Over 18 m high, measured between *grade* and the floor level of the top *storey*	*H.I.* = 7

(2) Sizes are based on *building area* and *building height*, unless noted.

(3) *Building* size is based on the existing *building* facing one *street*.

(4) For existing *buildings* facing multiple *streets*, see Sentence 11.2.1.1.(2) and Table 11.4.3.4.A.

(5) Take lowest rating for *H.I.* from Table for *major occupancy* change.

Table 11.2.1.1.E. [1][3]
Hazard Index

Forming Part of Sentences 11.2.1.1.(1) and (2)

Item	Column 1	Column 2	Column 3	Column 4
	Group A Division 4	*Occupancy H.I.* [4]		
		Small	Medium	Large
1.	Amusement Park Structures	2	3	5
2.	Bleachers	1	3	5
3.	Grandstands (Open)	1	3	5
4.	Reviewing Stands	1	3	5
5.	Stadia (Open)	1	3	5

Notes to Table 11.2.1.1.E.:

[1]

Building Size (Maximum) [2]	
- 2,500 *occupant load* max. / min. *limiting distance* of 6 m (*combustible*)	Small
- 15,000 *occupant load* maximum (with roof at least ½ rating if *combustible*)	Medium
- Unlimited *occupant load*	Large

[2] *Building* size is based on the existing *building* facing one *street*.

[3] For existing *buildings* facing multiple *streets*, see Sentence 11.2.1.1.(2) and Table 11.4.3.4.A.

[4] Take lowest rating for *H.I.* from Table for *major occupancy* change.

[5] REVOKED: O. Reg. 191/14, s. 137 (3).

Table 11.2.1.1.F. [1]
Hazard Index

Forming Part of Sentences 11.2.1.1.(1) and (2)

Item	Column 1	Column 2	Column 3	Column 4
	Group B Division 1	*Occupancy H.I.* [3][5]		
		Small	Medium	Large
1.	Detention Facilities (Minimum Security)[4]	4	5	6
2.	Detention Facilities (All Other Types of Security)	6	6	7
3.	Police Station with Detention	3		

Notes to Table 11.2.1.1.F.:

[1]

Building Size (Maximum)[2]	
- Any area / 1 *storey*	Small
- 600 m^2 / 1 *storey* (Police Station with Detention)	Small
- Any area (*noncombustible*) / 2 *storey*	Medium
- Any area (*noncombustible*); 500 m^2 (*combustible*) / 2 *storey*	Large

- Over 18 m high, measured between *grade* and the floor level of the top *storey* (*noncombustible*)	*H.I.* = 7
- Over 500 m^2 (*combustible*) / over 2 *storey*	*H.I.* = 7

(2) Sizes are based on *building area* and *building height*, unless noted.

(3) When the size of a *building* falls into more than one category, the *H.I.* for the least restrictive is permitted to be used.

(4) Minimum security means occupants free to exit *building* in a fire emergency.

(5) *Detention occupancy* with any *H.I.* shall be *sprinklered*.

Table 11.2.1.1.G. (1)(4)
Hazard Index

Forming Part of Sentences 11.2.1.1.(1) and (2)

Item	Column 1	Column 2	Column 3	Column 4
	Group B Division 2	*Occupancy H.I.* (5)(7)		
		Small	Medium	Large
1.	Hospital, Long-Term Care Home (Immobile) (6)	4	5	7
2.	Hospital, Long-Term Care Home (Non-Ambulatory) (6)	4	5	6
3.	Hospital, Long-Term Care Home (Ambulatory) (6)	3	4	6
4.	Psychiatric Facility (Maximum Confinement)	4	5	7
5.	Psychiatric Facility (Minimum Confinement)	3	4	6
6.	Police Station With Detention (as Permitted in Article 3.1.2.4.)	3		

Notes to Table 11.2.1.1.G.:

(1)

Building Size (Maximum)(2)(3)	
- 250 m^2 / 1 *storey*	Small
- 600 m^2 / 1 *storey* (Police Station with Detention)	Small
- 500 m^2 / 2 *storey*; 1000 m^2 / 1 *storey*	Medium
- Any area (*noncombustible*); 500 m^2 (*combustible*) / 2 *storey*	Medium
- Any area / not exceeding 18 m high, measured between *grade* and the floor level of the top *storey*	Large
- Over 18 m high, measured between *grade* and the floor level of the top *storey*	*H.I.* = 7

(2) Sizes are based on *building area* and *building height*, unless noted.

(3) *Building* size is based on the existing *building* facing one *street*.

(4) For existing *buildings* facing multiple *streets*, see Sentence 11.2.1.1.(2) and Table 11.4.3.4.A.

(5) When the size of a *building* falls into more than one category, the *H.I.* for the least restrictive is permitted to be used.

(6) Immobile means patients are attached to life support systems and cannot be moved. Non-Ambulatory means patients are confined to bed and require transportation. Ambulatory means patients may walk on their own.

(7) *Care and treatment occupancy* with any *H.I.* shall be *sprinklered*.

Table 11.2.1.1.H. (1)
Hazard Index

Forming Part of Sentences 11.2.1.1.(1) and (2)

Item	Column 1	Column 2	Column 3	Column 4
	Group B	*Occupancy H.I.*(4)(5)		
	Division 3	Small	Medium	Large
1.	Residential care facilities			
	(Ambulatory) (6)	3	4	6
	(Non-Ambulatory) (6)	4	5	6
2.	Children Custodial Homes	3	4	6
3.	Convalescent Homes			
	(Ambulatory) (6)	3	4	6
	(Non-Ambulatory) (6)	4	5	6
4.	Group Homes For Adult Residents with Developmental Disabilities			
	(Minimum Confinement)	3	4	6
	(Maximum Confinement)	4	5	6

Notes to Table 11.2.1.1.H.:

(1)

Building Size (Maximum)(2)(3)	
- 600 m^2 / 1 *storey*	Small
- 500 m^2 / 2 *storey;* 1000 m^2 / 1 *storey*	Medium
- Any area / not exceeding 18 m high, measured between *grade* and the floor level of the top *storey*	Large
- Over 18 m high, measured between *grade* and the floor level of the top *storey*	*H.I.* = 7

(2) Sizes are based on *building area* and *building height*, unless noted.

(3) *Building* size is based on the existing *building* facing one *street*.

(4) When the size of a *building* falls into more than one category, the *H.I.* for the least restrictive is permitted to be used.

(5) *Care occupancy* with any *H.I.* shall be *sprinklered*.

(6) Non-Ambulatory means patients are confined to bed and require transportation. Ambulatory means patients may walk on their own.

Table 11.2.1.1.I. (1)
Hazard Index

Forming Part of Sentences 11.2.1.1.(1) and (2)

Item	Column 1	Column 2	Column 3	Column 4
	Group C	*Occupancy H.I.*(4)		

		Small	Medium	Large
1.	Apartments	3	4	6
2.	Boarding Houses/Group Homes	3		
3.	Clubs, Residential	3	4	6
4.	Colleges, Residential	3	4	6
5.	Convents	3	4	6
6.	Dormitories/Hostels	3	4	6
7.	*Hotels*	3	5	6
8.	Houses	2	2	
9.	Lodging Houses	3		
10.	*Live/work units*	4	5	7
11.	Monasteries	3	4	6
12.	*Public Heritage Buildings*	3		
13.	Rectories	2		
14.	Retirement Homes	3	4	6
15.	Rooming Houses	3		
16.	Schools, Residential	3	4	6

Notes to Table 11.2.1.1.I.:

(1)

Building Size (Maximum) (2)(3)	
- 600 m^2 / 3 *storey*	Small
- 250 m^2 / 3 *storey* (*Public Heritage Building*)	Small
- 2000 m^2 / not exceeding 6 *storeys*	Medium
- Any area / not exceeding 36 m high, measured between *grade* and the floor level of the top *storey*	Large
- Over 36 m high, measured between *grade* and the floor level of the top *storey*	*H.I.* = 7
- *Hotels* over 18 m high, measured between *grade* and the floor level of the top *storey*	*H.I.* = 7

(2) Sizes are based on *building area* and *building height*, unless noted.

(3) *Buildings* which exceed 3 *storeys* in *building height* and are of *combustible construction* shall be *sprinklered*.

(4) Take lowest rating for *H.I.* from Table for *major occupancy* change.

Table 11.2.1.1.J. (1)(4)(6)
Hazard Index

Forming Part of Sentences 11.2.1.1.(1) and (2)

Item	Column 1	Column 2	Column 3	Column 4
	Group D	*Occupancy H.I.*(5)		
		Small	Medium	Large

1.	Advertising and Sales Offices	3	3	5
2.	Automatic Bank Deposit	3	4	5
3.	Barber/Hairdresser Shops	3	4	5
4.	Beauty Parlours	3	4	5
5.	Branch Banks	3	4	5
6.	Car Rental Premises	3	3	5
7.	Chiropractic Offices	3	4	5
8.	Communications Offices (Telecommunications)	3	4	5
9.	Communications Offices (Courier)	3	3	5
10.	Computer Centres	3	4	5
11.	Construction Offices	3	3	5
12.	Costume Rental Premises	3	4	5
13.	Dental Offices (Denture Clinic)	3	4	5
14.	Dental Offices (General)	3	4	5
15.	Dental Offices (Surgical/Anaesthesia)	4	5	6
16.	Dry Cleaning Depots	3	4	5
17.	Dry Cleaning Premises (Self-Serve)	4	4	5
18.	Health/Fitness Clubs	3	4	5
19.	Laundries (Self-Serve)	4	4	5
20.	Massage Parlours	3	4	5
21.	Medical Offices (Examination)	3	4	5
22.	Medical Offices (Surgical/Anaesthesia)	4	5	6
23.	Offices (Business)	3	3	5
24.	Offices (Charitable)	3	3	5
25.	Offices (Legal/Accounting)	3	3	5
26.	Offices/Studios (Design)	3	4	5
27.	Pharmacy Offices	3	4	5
28.	Photographic Studios	3	4	5
29.	Physiotherapy Offices	3	4	5
30.	Police Stations (No Detention)	3	4	5
31.	Printing and Duplicating	4	5	6
32.	*Public Heritage Buildings*	3		
33.	Public Saunas	3	4	5
34.	Radio Stations (No Audience)	3	4	5
35.	Small Tool Rental Premises	3	4	5
36.	Suntan Parlours	3	4	5
37.	Veterinary Offices	3	4	5

Notes to Table 11.2.1.1.J.:

(1)

Building Size (Maximum) [(2)(3)]	
- 800 m^2 / 2 *storey*	Small
- 250 m^2 / 3 *storey* (*Public Heritage Building*)	Small

- 1600 m^2 / 3 *storey*	Medium
- Any area / not exceeding 18 m high, measured between *grade* and the floor level of the top *storey*	Large
- Over 18 m high, measured between *grade* and the floor level of the top *storey*, but not exceeding 36 m high, measured between *grade* and the floor level of the top *storey*	*H.I.* = 6
- Over 36 m high, measured between *grade* and the floor level of the top *storey*	*H.I.* = 7

(2) Sizes are based on *building area* and *building height*, unless noted.

(3) *Building* size is based on the existing *building* facing one *street*.

(4) For existing *buildings* facing multiple *streets*, see Sentence 11.2.1.1.(2) and Table 11.4.3.4.A.

(5) When the size of a *building* falls into more than one category, the *H.I.* for the least restrictive is permitted to be used.

(6) *Buildings* which exceed 3 *storeys* in *building height* and are of *combustible construction* shall be *sprinklered*.

Table 11.2.1.1.K. (1)(4)(6)
Hazard Index

Forming Part of Sentences 11.2.1.1.(1) and (2)

Item	Column 1	Column 2	Column 3	Column 4
	Group E	*Occupancy H.I.*(5)		
		Small	Medium	Large
1.	Automotive/Hardware Department Stores	4	5	7
2.	China Shops	3	4	6
3.	Department Stores	4	5	7
4.	Electrical Stores (Fixtures)	3	3	5
5.	Exhibition Halls (With Sales)	4	5	7
6.	“Fast Food” Outlets	3	4	5
7.	Feed and Seed Stores	4	5	7
8.	Flea Markets	4	5	7
9.	Flowers Shops	3	4	6
10.	“Food” and Vegetable Markets	3	4	6
11.	Garden Shops	3	4	6
12.	“Gas” Bars	4	5	7
13.	Gift Shops	3	4	6
14.	Home Improvement Stores	4	5	7
15.	Kitchen/Bathroom Cupboards Stores	3	4	6
16.	Plumbing Stores (Fixtures/Accessories)	3	3	5
17.	“Pop” Shops	3	4	6
18.	*Public Heritage Buildings*	3		
19.	Rentals (See “Group D”)			
20.	Restaurants (Not More Than 30 Persons as Permitted by Article 3.1.2.6.)	3	4	5

21.	Shopping Malls	4	5	7
22.	Stationery/Office Supply Stores	3	4	6
23.	Stores (Art)	3	4	6
24.	Stores (Baked Goods)	3	4	6
25.	Stores (Beer)	3	4	6
26.	Stores (Book)	3	4	6
27.	Stores (Camera)	3	4	6
28.	Stores (Candy)	3	4	6
29.	Stores (Clothing)	3	4	6
30.	Stores (Drugs)	4	4	6
31.	Stores (Electronic)	3	4	6
32.	Stores (Floor Coverings)	4	5	7
33.	Stores (Food)	3	3	6
34.	Stores (Furniture/Appliances)	3	4	6
35.	Stores (Hardware)	4	5	7
36.	Stores (Health)	4	4	6
37.	Stores (Hobby)	3	4	6
38.	Stores (Jewellery)	3	3	5
39.	Stores (Paint/Wallpaper)	4	5	7
40.	Stores (Pet)	3	4	6
41.	Stores (Records/Tapes)	3	4	6
42.	Stores (Spirits)	4	5	7
43.	Stores (Toys)	4	5	7
44.	Stores (Variety)	4	4	6
45.	Stores (Video Sales/Rental)	3	4	6
46.	Supermarkets	3	4	6

Notes to Table 11.2.1.1.K.:

(1)

Building Size (Maximum) (2)(3)	
- 600 m^2 / 2 *storey*	Small
- 250 m^2 / 3 *storey* (*Public Heritage Building*)	Small
- 800 m^2 / 3 *storey*	Medium
- Any area / up to 18 m high, measured between *grade* and the floor level of the top *storey*	Large
- Over 18 m high, measured between *grade* and the floor level of the top *storey*	*H.I.* = 7

(2) Sizes are based on *building area* and *building height*, unless noted.

(3) *Building* size is based on the existing *building* facing one *street*.

(4) For existing *buildings* facing multiple *streets*, see Sentence 11.2.1.1.(2) and Table 11.4.3.4.A.

(5) When the size of a *building* falls into more than one category, the *H.I.* for the least restrictive is permitted to be used.

(6) All *buildings* 1 500 m^2 and over are to be *sprinklered*.

Table 11.2.1.1.L. (1)(4)(5)
Hazard Index

Forming Part of Sentences 11.2.1.1.(1) and (2)

Item	Column 1	Column 2	Column 3	Column 4
	Group F	*Occupancy H.I.*(3)		
	Division 1	Small	Medium	Large
1.	Ammunition Manufacturing and Storage	3	6	8
2.	Black Powder Manufacturing and Storage	3	6	8
3.	Bulk Plants for Flammable Liquids	3	6	8
4.	Bulk Storage Warehouse (Hazardous Substances)	3	6	8
5.	Cereal and Feed Mills	3	6	8
6.	Chemical Manufacturing/Processing Plant	3	6	8
7.	*Distilleries*	3	6	8
8.	Dry Cleaning Plants (Flammable)	3	6	8
9.	Explosives Manufacturing and Storage	3	6	8
10.	Fertilizer Manufacturing Plants	3	6	8
11.	Fireworks Manufacturing and Storage	3	6	8
12.	Flour Mills	3	6	8
13.	Gas (Flammable) Compressor Stations	3	6	8
14.	Gas (Flammable) Manufacturing and Storage	3	6	8
15.	Grain Elevators	3	6	8
16.	Lacquer Factories	3	6	8
17.	Loading Area for all Group F, Division 1	3	6	8
18.	Mattress Factories (High Fire Load)	3	6	8
19.	Paint/Varnish/Pyroxylin Factories	3	6	8
20.	Petrochemical Plants	3	6	8
21.	Refineries	3	6	8
22.	Rubber Processing Plants	3	6	8
23.	Spray Painting Operations	3	6	8
24.	Waste Paper Processing Plants (Dry)	3	6	8

Notes to Table 11.2.1.1.L.:

(1)

Building Size (Maximum) (2)	
- 400 m^2 / 2 *storey*	Small
- 600 m^2 / 4 *storey*	Medium
- 1 500 m^2 / 4 *storey*	Large

(2) Sizes are based on *building area* and *building height*.

(3) When the size of a *building* falls into more than one category, the *H.I.* for the least restrictive is permitted to be used.

(4) All *buildings* 1 500 m^2 and over are to be *sprinklered*.

(5) All floor assemblies shall be *fire separations*.

Table 11.2.1.1.M. (1)(4)(6)
Hazard Index

Forming Part of Sentences 11.2.1.1.(1) and (2)

Item	Column 1	Column 2	Column 3	Column 4
	Group F	*Occupancy H.I.*(5)		
	Division 2	Small	Medium	Large
1.	Aircraft Hangars	3	5	6
2.	Abattoirs	3	4	5
3.	Bakeries	3	5	6
4.	Body Shops	3	5	6
5.	Candy Plants	3	4	5
6.	Cold Storage Plants *Combustible* Insulation Flammable Refrigerant *Combustible* Packaging	3	5	7
	Combustible Insulation Flammable Refrigerant *Noncombustible* Packaging	3	5	6
	Combustible Insulation Non-Flammable Refrigerant *Noncombustible* Packaging	3	4	5
	Noncombustible Insulation Non-Flammable Refrigerant *Noncombustible* Packaging	2	3	4
7.	Dry Cleaning Establishments (Non-flammable or Non-explosive)	3	4	5
8.	Electrical Substations	3	4	5
9.	Factories (High Fire Load)	3	5	6
10.	Freight Depots (High Fire Load)	3	5	6
11.	Helicopter Landings (On Roof)	3	4	5
12.	Laboratories (High Fire Load)	3	5	6
13.	Laundries (Not Self-Serve)	3	4	5
14.	Manufacturer Sales (High Fire Load)	3	5	6
15.	Mattress Factories	3	4	5
16.	Meat Packing Plants	3	4	5
17.	Packaging Manufacturers (Cellulose)	3	4	5
18.	Packaging Manufacturers (Noncombustible)	2	3	4
19.	Packaging Manufacturers (Plastics)	3	5	6
20.	Paper Processing Plants (Wet)	3	5	6
21.	Planing Mills	3	5	6

22.	Printing Plants	3	4	5
23.	*Public Heritage Buildings*	3	3	
24.	Repair Garages	3	5	6
25.	Sample Display Rooms (High Fire Load)	3	5	6
26.	Self-Service Storage Buildings	3	4	5
27.	Service Stations (No Spray Painting)	3	5	6
28.	Storage Rooms (High Fire Load)	3	5	6
29.	Television Studios (No Audience)	3	4	5
30.	Tire Storage	3	5	6
31.	Warehouses (High Fire Load)	3	5	6
32.	Welding Shops	3	5	6
33.	Wholesale Rooms (High Fire Load)	3	5	6
34.	Wood Working Factories	3	5	6
35.	Workshops (High Fire Load)	3	5	6

Notes to Table 11.2.1.1.M.:

(1)

Building Size (Maximum) (2)(3)	
- 600 m^2 / 2 *storey*	Small
- 800 m^2 /4 *storey*	Medium
- 600 m^2 / 3 *storey* (*Public Heritage Building*)	Medium
- Any area / 6 *storey* not exceeding 18 m high, measured between *grade* and the floor level of the top *storey*	Large
- Over 18 m high, measured between *grade* and the floor level of the top *storey*	*H.I.* = 7

(2) Sizes are based on *building area* and *building height*, unless noted.

(3) *Building* size is based on the existing *building* facing one *street*.

(4) For existing *buildings* facing multiple *streets*, see Sentence 11.2.1.1.(2) and Table 11.4.3.4.A.

(5) When the size of a *building* falls into more than one category, the *H.I.* for the least restrictive is permitted to be used.

(6) All *buildings* 1 500 m^2 and over are to be *sprinklered*.

Table 11.2.1.1.N. (1)(4)
Hazard Index

Forming Part of Sentences 11.2.1.1.(1) and (2)

Item	Column 1	Column 2	Column 3	Column 4
	Group F	*Occupancy H.I.*(5)		
	Division 3	Small	Medium	Large
1.	Creameries	2	2	3
2.	Factories (Low Fire Load)	2	3	4
3.	Freight Depots (Low Fire Load)	2	3	4
4.	Laboratories (Low Fire Load)	2	3	4

5.	Manufacturers Sales (Low Fire Load)	2	3	4
6.	Power Plants	3	4	5
7.	*Public Heritage Buildings*	3	3	
8.	Sample Display Rooms (Low Fire Load)	2	3	4
9.	Storage Garages	2	3	4
10.	Storage Rooms (Low Fire Load)	2	3	4
11.	Warehouses (Low Fire Load)	2	3	4
12.	Wholesale Rooms (Low Fire Load)	2	3	4
13.	Workshops (Low Fire Load)	2	3	4

Notes to Table 11.2.1.1.N.:

(1)

Building Size (Maximum) (2)(3)	
- 800 m^2 / 2 *storey*	Small
- 1200 m^2 / 4 *storey*	Medium
- 600 m^2 / 3 *storey* (*Public Heritage Building*)	Medium
- Any area / 6 *storey* not exceeding 18 m high, measured between *grade* and the floor level of the top *storey*	Large
- Over 18 m, but not exceeding 36 m high, measured between *grade* and the floor level of the top *storey*	*H.I.* = 5
- Over 36 m high, measured between *grade* and the floor level of the top *storey*	*H.I.* = 6

(2) Sizes are based on *building area* and *building height*, unless noted.

(3) *Building* size is based on the existing *building* facing one *street*.

(4) For existing *buildings* facing multiple *streets*, see Sentence 11.2.1.1.(2) and Table 11.4.3.4.A.

(5) When the size of a *building* falls into more than one category, the *H.I.* for the least restrictive is permitted to be used.

2.	Factories (Low Fire Load)	2	3	4
3.	Freight Depots (Low Fire Load)	2	3	4
4.	Laboratories (Low Fire Load)	2	3	4
5.	Manufacturers Sales (Low Fire Load)	2	3	4
6.	Power Plants	3	4	5
7.	*Public Heritage Buildings*	3	3	
8.	Sample Display Rooms (Low Fire Load)	2	3	4
9.	Storage Garages	2	3	4
10.	Storage Rooms (Low Fire Load)	2	3	4
11.	Warehouses (Low Fire Load)	2	3	4
12.	Wholesale Rooms (Low Fire Load)	2	3	4
13.	Workshops (Low Fire Load)	2	3	4

Notes to Table 11.2.1.1.N.:

(1)

Building Size (Maximum) (2)(3)	
- 800 m^2 / 2 *storey*	Small
- 1200 m^2 / 4 *storey*	Medium
- 600 m^2 / 3 *storey* (*Public Heritage Building*)	Medium
- Any area / 6 *storey* not exceeding 18 m in *building height*	Large
- Over 18 m, but not exceeding 36 m in *building height*	*H.I.* = 5
- Over 36 m in *building height*	*H.I.* = 6

(2) Sizes are based on *building area* and *building height*.

(3) *Building* size is based on the existing *building* facing one *street*.

(4) For existing *buildings* facing multiple *streets*, see Sentence 11.2.1.1.(2) and Table 11.4.3.4.A.

(5) When the size of a *building* falls into more than one category, the *H.I.* for the least restrictive is permitted to be used.

Table 11.4.3.3.
For Evaluation and Upgrading of Early Warning/Evacuation

Forming Part of Sentences 11.4.3.3.(1) and 11.4.3.4.(3)

Col. 1	Column 2	Column 3
Notes	Early Warning and Evacuation, Evaluation and Upgrading	Part 11 *Compliance Alternative* (1)
(2)	Early warning and evacuation to be checked against (a) *access to exit* widths based on *occupant load* in Subsection 3.3.1. or 9.9.3.; (b) *exit* widths based on *occupant load* in Subsection 3.4.3. or 9.9.3.; (c) *exit* signs in Subsection 3.4.5. or 9.9.11.; (d) lighting of *exits*, lighting of *access to exits* and emergency lighting in Subsection 3.2.7. or 9.9.12.; (e) fire alarm system in Subsection 3.2.4. or 9.10.18.; (f) *smoke alarms* in Subsection 9.10.19.;	EARLY WARNING (a) *Compliance alternatives* as listed may be used. EVACUATION (b) *Compliance alternatives* as listed to

	(g) travel distance and number of *exits* in other Parts; and (h) door release hardware requirements in Articles 3.3.1.12. and 3.4.6.16., and deficiencies shall be upgraded.	*access to exit* and *exit* widths, number of *exits*, door release hardware, and travel distance may be used.
(3)	Early warning and evacuation to be checked against (a) *access to exit* widths based on *occupant load* in Subsection 3.3.1. or 9.9.3.; (b) *exit* widths based on *occupant load* in Subsection 3.4.3. or 9.9.3.; (c) *exit* signs in Subsection 3.4.5. or 9.9.11.; (d) lighting of *exits*, lighting of *access to exits* and emergency lighting in Subsection 3.2.7. or 9.9.12.; (e) fire alarm system in Subsection 3.2.4. or 9.10.18.; (f) *smoke alarms* in Subsection 9.10.19.; (g) travel distance and number of *exits* in other Parts; (h) smoke control measures, and at least one elevator to permit transport of firefighters to all floors in *hotels* whose floor level is more than 18 m high measured between *grade* and floor level of the top *storey* as per Subsection 3.2.6., and (i) door release hardware requirements in Articles 3.3.1.12. and 3.4.6.16., and deficiencies shall be upgraded.	EARLY WARNING (a) *Compliance alternatives* as listed may be used. EVACUATION (b) *Compliance alternatives* as listed to *access to exit* and *exit* widths, number of *exits*, door release hardware, and travel distance may be used.

Notes to Table 11.4.3.3.:

(1) See Tables 11.5.1.1.A. to 11.5.1.1.F. for *compliance alternatives* that may be used.

(2) Applies to change of *major occupancy* to one of equal or lesser hazard, and to increase in *occupant load* by 15% or less.

(3) Applies to change of *major occupancy* to one of greater hazard, and to increase in *occupant load* greater than 15%.

Table 11.4.3.4.A.
Additional Upgrading

Forming Part of Sentences 11.2.1.1.(2) and 11.4.3.4.(1)

Item	Column 1	Column 2	Column 3	Column 4	Column 5
	New *Major Occupancy* (*H.I.*) Number (3)	Increase of *C.I.* to Equal *H.I.* to Support New *Major Occupancy*	Additional Required Upgrading	Part 11 Alternative Compliance (A.C.)	Comments (1),(2)

1.	*H.I.*2	*C.I.* 1 to 2	Comply with Table 11.2.1.1.A. ratings for *C.I.* of 2	(a) Provide early warning system, or (b) Comply with any A.C.'s in Col. 4.	
2.	*H.I.*3	*C.I.* (1 or 2) to 3	Comply with Table 11.2.1.1.A. ratings for *C.I.* of 3	(a) Provide early warning system, or (b) Comply with any A.C.'s in Col. 4.	*Combustible* to *Combustible* only.
3.	*H.I.*4	*C.I.* (1, 2 or 3) to 4	Comply with Table 11.2.1.1.A. ratings for *C.I.* of 4	Provide sprinklers in locations where assemblies do not comply with Table 11.2.1.1.A.	*Combustible* to *Combustible. Noncombustible* to *Noncombustible.*
4.	*H.I.*5	*C.I.* 4 to 5	Comply with Table 11.2.1.1.A. ratings for *C.I.* of 5	Provide sprinklers in locations where assemblies do not comply with Table 11.2.1.1.A.	
5.	*H.I.*5	*C.I.* (1, 2 or 3) to 5	Comply with Table 11.2.1.1.A. ratings for *C.I.* of 5	Provide sprinklers in locations where assemblies do not comply with Table 11.2.1.1.A.	*Combustible* to *Combustible. Noncombustible* to *Noncombustible.*
6.	*H.I.*6	*C.I.* 5 (*Noncombustible*) to 6	Comply with Table 11.2.1.1.A. ratings for *C.I.* of 6	(a) Provide sprinkler system, plus 45 min roof rating.	
7.	*H.I.*6	*C.I.* 5 (*Heavy timber*) to 6	Comply with A.C.	(b) Provide sprinkler system.	
8.	*H.I.*6	*C.I.* 5 (*Combustible*) to 6	Comply with A.C.	(c) Provide 1 h rating plus sprinkler system.	
9.	*H.I.*6	*C.I.* (3 or 4) to 6*	Comply with Table 11.2.1.1.A. ratings for *C.I.* of 6	(d) Provide sprinkler system, plus 45 min rating.	* For *Noncombustible construction* only.

10.	*H.I.*6	*C.I.* (1, 2, 3 or 4) to 6**	Comply with A.C.	(e) Provide 1 h rating plus sprinkler system.	** For *Combustible construction* only.
11.	*H.I.*7	*C.I.* 6 to 7	Comply with Table 11.2.1.1.A. ratings for *C.I.* of 7	(a) Provide sprinkler system.	
12.	*H.I.*7	*C.I.* (3, 4 or 5) to 7*	Comply with Table 11.2.1.1.A. ratings for *C.I.* of 7	(b) Provide 1 h rating plus sprinkler system.	* For *Noncombustible construction* only.
13.	*H.I.*8	*C.I.* 7 to 8	Comply with Table 11.2.1.1.A. ratings for *C.I.* of 8	(a) Provide sprinkler system.	
14.	*H.I.*8	*C.I.* 6 to 8	Comply with Table 11.2.1.1.A. ratings for *C.I.* of 8	(b) Provide supervised sprinkler system.	
15.	*H.I.*8	*C.I.* (3, 4 or 5) to 8*	Comply with Table 11.2.1.1.A. ratings for *C.I.* of 8	(d) Provide sprinkler system, plus 1 h rating.	* For *Noncombustible construction* only.

Notes to Table 11.4.3.4.A.:

(1) One asterisk (*) refers to *noncombustible construction*.

(2) Two asterisks (**) refers to *combustible construction*.

(3) Group B, *occupancy* with any *H.I.* shall be *sprinklered*.

Table 11.4.3.4.B.(1)
Additional Upgrading for Multiple Major Occupancies

Forming Part of Sentences 11.4.2.3.(4) and 11.4.3.4.(4)

Column 1	Column 2	Column 3	Column 4
New *Major Occupancy*	Code Requirements	Part 11 *Compliance Alternative*	
All(2)	Table 3.1.3.1. and Subsection 9.10.9.	For Existing *Building* Reduce to	If *Sprinklered* Reduce to
	Where:		
	1 h rating required	45 min	30 min

	2 h rating required	1.5 h	1 h
	3 h rating required	2 h	1.5 h

Notes to Table 11.4.3.4.B.:

(1) For *buildings* with multiple *major occupancies* only, where there is a change in *major occupancy*.

(2) See Section 11.4.

Table 11.5.1.1.A.
Compliance Alternatives for Assembly Occupancies

Forming Part of Article 11.5.1.1.

Item	Col. 1	Column 2	Column 3
	NUMBER	**PART 3 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
1.	A1	3.1.4.7.	Existing *heavy timber construction* acceptable where *construction* is within 90% of member sizes listed in Part 3.
2.	A2	3.1.5.2. to 3.1.5.4.; 3.1.5.6.	Existing acceptable.
3.	A3	3.1.5.7. to 3.1.5.10.	Except for exposed foamed plastics, existing acceptable. To match existing, materials may be added from on or off site.
4.	A4	3.1.5.15. to 3.1.5.17.; 3.1.5.21.; 3.1.5.23.	Existing acceptable.
5.	A5	3.1.7.1.	*Fire-resistance ratings* may also be used where they are based on: 1. HUD Rehabilitation Guidelines, “Guideline on Fire Ratings of Archaic Materials and Assemblies”. 2. DBR Technical Paper No. 194, “Fire Endurance of Protected Steel Columns and Beams”. 3. DBR Technical Paper No. 207, “Fire Endurance of Unit Masonry Walls”. 4. DBR Techncial Paper No. 222, “Fire Endurance of Light-Framed and Miscellaneous Assemblies”.
6.	A6	3.1.7.5.(3)	Existing assemblies required to be of *noncombustible construction* may be supported by *combustible construction* having at least the same *fire-resistance rating* as that supported.
7.	A7	3.1.8.5.(2)	(a) Existing functional and sound doors in existing *buildings* that are either hollow metal or kalamein and containing wired glass at least 6 mm thick and conforming to Sentence 3.1.8.14.(2) are permitted in lieu of doors not required to exceed 45 min,

			(b) all existing functional and sound hollow metal or kalamein doors which carry existing 1.5 h labels are acceptable in lieu of current 1.5 h labels and may contain wired glass panels not exceeding 0.0645 m², at least 6 mm thick and conforming to Sentence 3.1.8.14.(2), and (c) every fire door, window assembly or glass block used as a *closure* in a required *fire separation* shall be installed in conformance with good engineering practice.
8.	A8	3.1.8.7. to 3.1.8.9.	*Fire dampers* or *fire stop flaps* are not required to be installed in existing ducts at penetrations of existing *fire separations*.
9.	A9	3.1.8.10.(1)	Existing 45 mm solid core wood doors acceptable.
10.	A10	3.1.8.11.(1)	Existing functionally operable self-closing devices acceptable.
11.	A11	3.1.8.13.	Existing functionally operable latching devices, excluding draw bolts, are acceptable.
12.	A12	3.1.8.14.	Existing transoms or sidelights located in required *fire separations* may be retained if wired glass at least 6 mm thick is securely fixed to a steel frame with steel stops. Operable transoms shall be fixed closed.
13.	A13	3.1.8.15. to 3.1.8.17.	Existing acceptable.
14.	A14	3.1.11.	Where the concealed space is being materially altered, smoke or heat detection in that space in lieu of *fire blocks* and tied into fire alarm system is acceptable.
15.	A15	3.1.13.10.	Existing acceptable.
16.	A16	3.2.2.17.(1)(b) and (c)	Existing sprinkler systems need not comply.
17.	A17	3.2.3.	Existing windows. (a) Existing windows in walls may be relocated to another part of the wall, provided the existing opening is blocked up to provide the same fire rating for the wall, and the projection of the new opening, at a right angle to the property line onto another *building*, lies not closer than 300 mm from a window in such other *building*, where the “opposite” window is less than 2 400 mm from the opposite new opening, and (b) except relocation of units, shall be restricted to the same *fire compartment* and shall conform to the requirements of Article 3.2.3.14. or 9.10.12.3. where applicable, or (c) where a *building* does not satisfy the requirements of Subsection 3.2.3. for the amount of openings facing a yard or space that does not have sufficient *limiting distance*, such existing openings are allowed to be relocated provided:

			(i) such openings are not increased in size and they are protected with wired glass in steel frames conforming to Sentence 3.1.8.14.(2), or (ii) the *building* is *sprinklered.*
18.	A18	3.2.3.6.(3)	Existing roof soffit projections acceptable.
19.	A19	3.2.4.	(a) Existing fire alarm system may remain except that Article 3.2.4.5. does not apply where the fire safety plan (as described in the Fire Code made under the *Fire Protection and Prevention Act, 1997*) for the *building* addresses the intent of Subsection 3.2.4. (i.e. "stage" system, electrical supervision, detection as required, Fire Department connection and emergency power supply), and (b) extension of an existing system must ensure continuity and compatibility, and integrity of the system.
20.	A20	3.2.4.9.(2)(e)	Does not apply to existing installations in *buildings*.
21.	A21	3.2.4.10.(5)(c)	Does not apply to existing installations in *buildings*.
22.	A22	3.2.5.3.(1) and (2)	Existing acceptable.
23.	A23	3.2.5.4. to 3.2.5.6.	Existing acceptable provided the *building* is *sprinklered*.
24.	A24	3.2.5.7.	Does not apply, except where a change in *major occupancy* occurs from a lesser *hazard index*.
25.	A25	3.2.5.13.	Existing sprinkler systems in existing *buildings* that do not conform to NFPA 13 may be altered, added to, or extended from the existing system without complying with NFPA 13, provided the system is operational and adequate with respect to coverage, water supply and controls, and provided the system is evaluated by a qualified designer.
26.	A26	3.2.9.	(a) Does not apply to *buildings* 6 *storeys* and less. (b) Does not apply to *sprinklered buildings*.
27.	A27	3.3.1.5.	One egress door is allowed where the *occupant load* is not greater than 100 persons, provided *floor area* is *sprinklered* and travel distance does not exceed 25 m.
28.	A28	3.3.1.9.	Existing width of *public corridors* of not less than 914 mm is acceptable.
29.	A29	3.3.1.9.(8)	An existing dead end corridor is permitted where the *occupant load* is not greater than 20 persons, provided travel distance is not greater than 6 m plus corridor width to "*exit* choice" point.
30.	A30	3.3.1.10.; 3.3.1.11.	Existing door swings may remain in *heritage buildings*, existing or being restored, with no change in *major occupancy* and with *occupant load* no greater than 100.
31.	A31	3.3.1.12.	Existing doors may remain in a *heritage building*, existing or being restored, with no change in *major occupancy*.

32.	A32	3.3.1.18.	Existing stained, etched, bevelled, leaded or figured glass acceptable.
33.	A33	3.3.5.4.(1); 3.3.5.7.(1) to (3)	Need not comply where a gasketed door and self closer are provided in the existing *fire separation*.
34.	A34	3.4.1.5.(1)	Existing acceptable.
35.	A35	3.4.1.5.(2)	Existing acceptable provided the existing *guard* is not less than 914 mm.
36.	A36	3.4.1.8.	Existing stained, etched, bevelled, leaded or figured glass acceptable.
37.	A37	3.4.2.5.(1)	Existing travel distance acceptable where *floor area* is *sprinklered* and where there is no change in *major occupancy*.
38.	A38	3.4.3.2.(5)	Need not comply where there is no increase in *occupant load*.
39.	A39	3.4.3.2.(7)	Existing width of *exits* acceptable provided the *occupant load* is not more than 15% above the *exit* capacity.
40.	A40	3.4.3.4.	Existing acceptable.
41.	A41	3.4.3.5.	Existing headroom clearance of not less than 1 980 mm is acceptable.
42.	A42	3.4.4.4.(8)	Existing washrooms opening directly into an *exit* stairwell shall be separated from the *exit* stairwell by a 45 min *closure*.
43.	A43	3.4.5.1.(2) and (9)	Existing illuminated legible *exit* signs are acceptable.
44.	A44	3.4.6.2.	Existing acceptable, if visually apparent.
45.	A45	3.4.6.3.	Existing acceptable.
46.	A46	3.4.6.4.	Existing acceptable.
47.	A47	3.4.6.5.(2) to (11)	Existing acceptable.
48.	A48	3.4.6.6.(2), (4) and (5)	Existing acceptable.
49.	A49	3.4.6.7.(1)	Existing acceptable.
50.	A50	3.4.6.8.	Existing acceptable.
51.	A51	3.4.6.9.	Existing acceptable.
52.	A52	3.4.6.11.(1), (2) and (4)	Existing acceptable.
53.	A53	3.4.6.12.	Existing acceptable in *public heritage buildings* or a change in *occupancy* with no increase in *occupant load*.
54.	A54	3.4.6.16.(2) and (3)	Existing functionally operable panic hardware acceptable.
55.	A55	3.4.7.2.	*Combustible* fire escapes which are protected from fire in accordance with Sentence 3.2.3.14.(2) are permitted or may be reconstructed or recreated (as in the case of a *heritage building*).
56.	A56	3.5.1.	Existing acceptable.
57.	A57	3.6.2.1.(7)	Existing *fire separation* of not less than 30 min is acceptable.
58.	A58	3.6.2.2.	Existing acceptable where explosion-resistant *construction* or venting is provided.
59.	A59	3.6.2.6.	Existing acceptable.

60.	A60	3.6.2.7.(1)	2 h *fire separation* acceptable.
61.	A61	3.6.3.1.(1) to (5)	45 min *fire separation* acceptable.
62.	A62	3.6.3.3.(1) to (5) and (8)	Existing acceptable.
63.	A63	3.6.3.3.(9)	1 h acceptable if *sprinklered*.
64.	A64	3.6.3.3.(10)	Existing acceptable.
65.	A65	3.6.3.4.	Existing acceptable.
66.	A66	3.6.4.	Existing acceptable.
67.	A67	3.7.1.3.(3)	2.1 m is acceptable.
68.	A68	3.7.2.1.(3)	The minimum glass areas may be reduced by 50%.
69.	A69	3.7.4.	Where the *occupant load* is increased by more than 15% above the capacity of the existing facilities, facilities to be added to accommodate the increase.
76.	A76	3.8.3.13.(1)(f)	Existing grab bar is acceptable.
	NUMBER	**PART 4 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
77.	A77	4.1.8.	The requirements under this Subsection do not apply.
	NUMBER	**PART 6 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
78.	A78	6.2.2.1.(2)	Required outdoor air rates may be provided by mechanical, natural or combination of natural and mechanical means.
	NUMBER	**PART 8 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
79.	A79	8.2.1.4.	Existing clearances acceptable where a *sewage system* is replaced with another *sewage system* within the same class and the capacity of the replacement *sewage system* does not exceed the capacity of the existing *sewage system*.
80.	A80	8.2.1.4.	Existing clearances are acceptable where a replacement *sewage system* requires lesser clearances than those required in Part 8 for the existing *sewage system.*

70.	A70	3.8.1.2.	Existing accessible entrance acceptable. (See *C.A.* A74) Existing curb ramp conforming to Sentence 3.8.3.2.(3) is acceptable. Existing principal entrance acceptable, provided at least one *barrier-free* entrance is available.
71.	A71	3.8.1.3.(1)	Existing unobstructed width of 920 mm minimum is acceptable.
72.	A72	3.8.1.3.(4)	Existing unobstructed space not less than 1 500 mm in width and 1 500 mm in length located not more than 30 m apart is acceptable.
72.1	A72.1	3.8.3.2.(3)(b)	Existing curb ramp acceptable, provided width not less than 1 200 mm.
73.	A73	3.8.3.3.(1)	Existing doorway acceptable, provided not less than 810 mm wide.
73.1	A73.1	3.8.3.3.(11)(a)	Existing distance acceptable, provided not less than 1 200 mm plus the width of any door that swings into the space in the path of travel.
74.	A74	3.8.3.4.(1)(a)	Existing ramp acceptable, provided not less than 870 mm between handrails.
75.	A75	3.8.3.8.(5)	Existing grab bar is acceptable.
75.1	A75.1	3.8.3.12.	Existing universal washroom acceptable.
76.	A76	3.8.3.13.(2)(f)	Existing grab bar is acceptable.
76.1	A76.1	3.8.3.16.	Existing drinking fountain conforming to Clauses 3.8.3.16.(2)(a) and (b) acceptable.
76.2	A76.2	3.11.3.1.(9)	Existing clear width acceptable, provided not less than 900 mm.
76.3	A76.3	3.11.3.1.(14)	Existing painted line acceptable.

Table 11.5.1.1.B.
Compliance Alternatives for Care, Care and Treatment or Detention Occupancies

Forming Part of Article 11.5.1.1.

Item	Col. 1	Column 2	Column 3
	NUMBER	**PART 3 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
1.	B1	3.1.5.2. to 3.1.5.4.; 3.1.5.6.	Existing acceptable.
2.	B2	3.1.5.7. to 3.1.5.10.	Except for exposed foamed plastics, existing acceptable.
3.	B3	3.1.5.15. to 3.1.5.17.; 3.1.5.21.; 3.1.5.23.	Existing acceptable.
4.	B4	3.1.7.1.	*Fire-resistance ratings* may also be used where they are based on: 1. HUD Rehabilitation Guidelines, “Guideline on Fire Ratings of Archaic Materials and Assemblies”.

			2. DBR Technical Paper No. 194, “Fire Endurance of Protected Steel Columns and Beams”. 3. DBR Technical Paper No. 207, “Fire Endurance of Unit Masonry Walls”. 4. DBR Technical Paper No. 222, “Fire Endurance of Light-Framed and Miscellaneous Assemblies”.
5.	B5	3.1.7.5.(3)	Existing assemblies required to be of *noncombustible construction* may be supported by *combustible construction* having at least the same *fire-resistance rating* as that supported.
6.	B6	3.1.8.5.(2)	(a) Existing functional and sound doors in existing *buildings* that are either hollow metal or kalamein and containing wired glass at least 6 mm thick and conforming to Sentence 3.1.8.14.(2) are permitted in lieu of doors not required to exceed 45 min, (b) all existing functional and sound hollow metal or kalamein doors which carry existing 1.5 h labels are acceptable in lieu of current 1.5 h labels and may contain wired glass panels not exceeding 0.0645 m², at least 6 mm thick and conforming to Sentence 3.1.8.14.(2), and (c) every fire door, window assembly or glass block used as a *closure* in a required *fire separation* shall be installed in conformance with good engineering practice.
7.	B7	3.1.8.7. to 3.1.8.9.	*Fire dampers* or *fire stop flaps* are not required to be installed in existing ducts at penetrations of existing *fire separations*.
8.	B8	3.1.8.10.(1)	For existing unlabelled doors in existing *buildings*, at least 45 mm solid core wood or metal clad are acceptable.
9.	B9	3.1.8.11.(1)	Existing functionally operable self-closing devices acceptable, including devices with “pause” hardware.
10.	B10	3.1.8.12.(1) and (2)	Between patient or inmate rooms, and corridors, existing “pause” type self-closing devices may be used as hold-open devices where functionally operable.
11.	B11	3.1.8.13.	Existing functionally operable latching devices, excluding draw bolts, are acceptable.
12.	B12	3.1.8.14.(1) and (2)	Except in zone or *exit fire separations* not required to be greater than 1 h, existing wired glass installations are acceptable provided they are set in steel or metal clad frames.
13.	B13	3.1.8.14.(3)	Existing glass block acceptable.
14.	B14	3.1.8.15. to 3.1.8.17.	Existing acceptable.

15.	B15	3.1.9.5.(1) and (2)	Existing openings in existing ceiling membranes to remain. Existing openings may be moved to another location in the same ceiling provided the aggregate area of openings does not increase and are not cumulative, and the existing opening is blocked up to provide the same rating as the ceiling assembly.
16.	B16	3.1.11.	Where the concealed space is being materially altered, provide smoke or heat detection in that space in lieu of *fire blocks* and tie into fire alarm system.
17.	B17	3.1.14.; 3.1.15.	Existing roof assemblies and roof coverings acceptable.
18.	B18	3.2.3.	Existing windows. (a) Existing windows in walls may be relocated to another part of the wall, provided the existing opening is blocked up to provide the same fire rating for the wall, and the projection of the new opening, at a right angle to the property line onto another *building*, lies no closer than 300 mm from a window in such other *building*, where the "opposite" window is less than 2 400 mm from the opposite new opening, and (b) except relocation of units, to be restricted to the same *fire compartment* and shall conform to the requirements of Article 3.2.3.14. or 9.10.12.3. where applicable, or (c) where a *building* does not satisfy the requirements of Subsection 3.2.3. for the amount of openings facing a yard or space that does not have sufficient *limiting distance*, such existing openings are allowed to be relocated provided: (i) such openings are not increased in size and they are protected with wired glass in steel frames conforming to Sentence 3.1.8.14.(2), or (ii) the *building* is *sprinklered*.
19.	B19	3.2.3.6.(3)	Existing roof soffit projections acceptable.
20.	B20	3.2.4.	(a) Existing fire alarm system may remain except that Article 3.2.4.5. does not apply where the fire safety plan (as described in the Fire Code made under the *Fire Protection and Prevention Act, 1997*) for the *building* addresses the intent of Subsection 3.2.4. (i.e. "stage" system, electrical supervision, detection as required, Fire Department connection and emergency power supply), and (b) extension of an existing system must ensure continuity and compatibility, and integrity of the system.
21.	B21	3.2.4.9.(2)(e)	Does not apply to existing installations in *buildings*.
22.	B22	3.2.4.10.(5)(c)	Does not apply to existing installations in *buildings*.

23.	B23	3.2.5.1.; 3.2.5.2.	Existing access to an existing *occupancy* acceptable. Where the existing *building* is changed to a "B" *occupancy*, existing access are acceptable.
24.	B24	3.2.5.3.(1)	Existing acceptable, except where a change in *occupancy* occurs to a "B1" or "B2" *occupancy*.
25.	B25	3.2.5.3.(2)	Existing acceptable.
26.	B26	3.2.5.4. to 3.2.5.6.	Existing access route to existing *occupancy* is acceptable if the *building* is *sprinklered*. Where existing *building* is changed to a "B" *occupancy*, access route shall be provided.
27.	B27	3.2.5.7.; 3.2.5.18.	Does not apply except where a change in *occupancy* occurs to a "B1" or "B2" *occupancy*, where occupants are not normally evacuated from the *building*.
28.	B28	3.2.5.13.	Existing sprinkler systems in existing *buildings* that do not conform to NFPA 13 may be altered, added to, or extended from the existing system without complying with NFPA 13, provided the system is operational and adequate with respect to coverage, water supply and controls, and provided the system is evaluated by a qualified designer.
29.	B29	3.2.9.	Does not apply except where a change in *occupancy* occurs to a Group B *occupancy*, where occupants are not normally evacuated from the *building*.
30.	B30	3.3.1.9.	Existing width of *public corridors* of not less than 914 mm is acceptable, except as provided in Sentence 3.3.3.3.(2).
31.	B31	3.3.1.10.; 3.3.1.11.	Existing door swings may remain in *heritage buildings*, existing or being restored, with no change in *major occupancy* and with *occupant load* no greater than 100.
32.	B32	3.3.1.12.	Existing doors acceptable.
33.	B33	3.3.1.15.	Existing acceptable.
34.	B34	3.3.1.16.	Existing non-conforming capacities of *access to exits* are acceptable, provided that the excessive capacity is no greater than 15% and, (a) corridor *fire separations* are rated to Code plus early warning system provided, or (b) there are sprinklers, plus *smoke alarms* in *suites*.
35.	B35	3.3.1.17.	Existing acceptable.
36.	B36	3.3.1.18.	Existing stained, etched, bevelled, leaded or figured glass acceptable.
37.	B37	3.3.3.3.(1)	Existing dead end corridors acceptable with 30 min *fire separation* of corridor plus sprinklering of *floor area*, provided the *occupant load* is not greater than 10 persons and travel distance not greater than 6 m plus corridor width to "*exit* choice" point.
38.	B38	3.3.3.7.	45 min *fire separation* acceptable.

39.	B39	3.3.5.4.(1); 3.3.5.7.(3)	Need not comply where a gasketed door and self closer are provided in the existing *fire separation*.
40.	B40	3.4.1.8.	Existing stained, etched, bevelled, leaded or figured glass acceptable.
41.	B41	3.4.2.5.(1)	Existing travel distance acceptable where *floor area* is *sprinklered* and provided *fire separations* comply with Part 3.
42.	B42	3.4.3.2.(7)	Existing acceptable provided there is no change in *occupancy* to a “B2” or “B3”.
43.	B43	3.4.3.4.	Existing acceptable.
44.	B44	3.4.3.5.	Existing headroom clearance of not less than 1 980 mm is acceptable.
45.	B45	3.4.5.1.(2) and (9)	Existing illuminated legible *exit* signs are acceptable.
46.	B46	3.4.6.2.	Existing acceptable, if visually apparent.
47.	B47	3.4.6.3.(1)	Existing acceptable with rise no greater than 3.7 m.
48.	B48	3.4.6.4.(1)	Existing acceptable provided there is no change in *occupancy* to a “B2” or “B3”.
49.	B49	3.4.6.4.(2) to (4)	Existing acceptable.
50.	B50	3.4.6.5.(2) to (11)	Existing acceptable.
51.	B51	3.4.6.6.(2) to (5)	Existing acceptable.
52.	B52	3.4.6.7.(1)	Existing acceptable.
53.	B53	3.4.6.8.	Existing acceptable.
54.	B54	3.4.6.9.	Existing acceptable where there is no change in *major occupancy* or increase in *occupant load* greater than 15%.
55.	B55	3.4.6.11.(1), (2) and (4)	Existing acceptable.
56.	B56	3.4.6.12.	Existing acceptable in *public heritage buildings*.
57.	B57	3.4.6.16.(2) and (3)	Existing functionally operable panic hardware acceptable.
58.	B58	3.4.6.18.(1)(c)	Existing access to existing *occupancy* is acceptable Where the existing *building* is changed to a “B” *occupancy*, existing access is acceptable.
59.	B59	3.4.7.2.	*Combustible* fire escapes which are protected from fire in accordance with Sentence 3.2.3.14.(2) are permitted or may be reconstructed or recreated (as in the case of a *heritage building*). Where serving non-ambulatory persons, minimum width shall be 1 100 mm.
60.	B60	3.5.1.	Existing acceptable, except where *building* is classified under Subsection 3.2.6.
61.	B61	3.6.2.1.(7)	45 min *fire separation* acceptable.
62.	B62	3.6.2.6.	Existing acceptable.
63.	B63	3.6.2.7.(1)	2 h *fire separation* acceptable.
64.	B64	3.6.3.1.(1) to (5)	45 min *fire separation* acceptable.
65.	B65	3.6.3.3.(1), (3), (4)(a), (5) and (10)	Existing acceptable.
66.	B66	3.6.3.3.(2)(a)	45 min *fire separation* acceptable.

67.	B67	3.6.4.	Existing acceptable, except where a change in *occupancy* occurs to a Group B *occupancy*.
68.	B68	3.7.1.3.(1)	Existing acceptable.
69.	B69	3.7.2.1.(2)	The minimum glass areas may be reduced by 50%.
70.	B70	3.7.4.	Where the *occupant load* is increased by more than 15% above the capacity of the existing facilities, facilities to be added to accommodate the increase.
	NUMBER	**PART 4 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
78.	B78	4.1.8.	The requirements under this Subsection do not apply.
	NUMBER	**PART 6 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
79.	B79	6.2.2.1.(2)	Required outdoor air rates may be provided by mechanical, natural or combination of natural and mechanical means.
	NUMBER	**PART 8 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
80.	B80	8.2.1.4.	Existing clearances acceptable where a *sewage system* is replaced with another *sewage system* within the same class and the capacity of the replacement *sewage system* does not exceed the capacity of the existing *sewage system*.
81.	B81	8.2.1.4.	Existing clearances are acceptable where a replacement *sewage system* requires lesser clearances than those required in Part 8 for the existing *sewage system.*

Note: On January 1, 2015, Items 71 to 77 are revoked and the following substituted: (See: O. Reg. 368/13, ss. 39, 43)

71.	B71	3.8.1.2.	Existing accessible entrance acceptable. (See *C.A.* B75) Existing curb ramp conforming to Sentence 3.8.3.2.(3) is acceptable. Existing principal entrance acceptable, provided at least one *barrier-free* entrance is available.
72.	B72	3.8.1.3.(1)	Existing unobstructed width of 920 mm minimum is acceptable.
73.	B73	3.8.1.3.(4)	Existing unobstructed space not less than 1 500 mm in width and 1 500 mm in length located not more than 30 m apart is acceptable.
73.1	B73.1	3.8.3.2.(3)(b)	Existing curb ramp acceptable, provided width not less than 1 200 mm.
74.	B74	3.8.3.3.(1)	Existing doorway acceptable, provided not less than 810 mm wide.
74.1	B74.1	3.8.3.3.(11)(a)	Existing distance acceptable, provided not less than 1 200 mm plus the width of any door that swings into the space in the path of travel.
75.	B75	3.8.3.4.(1)(a)	Existing ramp acceptable, provided not less than 870 mm between handrails.
76.	B76	3.8.3.8.(5)	Existing grab bar is acceptable.
76.1	B76.1	3.8.3.12.	Existing universal washroom acceptable.
77.	B77	3.8.3.13.(2)(f)	Existing grab bar is acceptable.
77.1	B77.1	3.8.3.16.	Existing drinking fountain conforming to Clauses 3.8.3.16.(2)(a) and (b) acceptable.
77.2	B77.2	3.11.3.1.(9)	Existing clear width acceptable, provided not less than 900 mm.
77.3	B77.3	3.11.3.1.(14)	Existing painted line acceptable.

Table 11.5.1.1.C.
Compliance Alternatives for Residential Occupancies

Forming Part of Article 11.5.1.1.

Item	Col. 1	Column 2	Column 3
	NUMBER	**PART 3 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
1.	C1	3.1.4.7.	Existing *heavy timber construction* acceptable where *construction* is within 90% of member sizes listed in Part 3.
2,	C2	3.1.5.2. to 3.1.5.4.; 3.1.5.6.	Existing acceptable.
3.	C3	3.1.5.7. to 3.1.5.10.	Except for exposed foamed plastics, existing acceptable. To match existing, materials may be added from on or off site.
4.	C4	3.1.5.14. to 3.1.5.17.; 3.1.5.21.; 3.1.5.23.	Existing acceptable.
5.	C5	3.1.7.1.	*Fire-resistance ratings* may also be used where they are based on:

			1. HUD Rehabilitation Guidelines, "Guideline on Fire Ratings of Archaic Materials and Assemblies". 2. DBR Technical Paper No. 194, "Fire Endurance of Protected Steel Columns and Beams". 3. DBR Technical Paper No. 207, "Fire Endurance of Unit Masonry Walls". 4. DBR Technical Paper No. 222, "Fire Endurance of Light-Framed and Miscellaneous Assemblies".
6.	C6	3.1.7.5.(3)	Existing assemblies required to be of *noncombustible construction* may be supported by *combustible construction* having at least the same *fire-resistance rating* as that supported.
7.	C7	3.1.8.1.(2); 3.1.8.6.(1) and (2)	Existing functional *closures* are acceptable and may be relocated within the same existing *fire separation*.
8.	C8	3.1.8.5.(2)	(a) Existing functional and sound doors in existing *buildings* that are either hollow metal or kalamein and containing wired glass at least 6 mm thick and conforming to Sentence 3.1.8.14.(2) are permitted in lieu of doors not required to exceed 45 min, (b) all existing functional and sound hollow metal or kalamein doors which carry existing 1.5 h labels are acceptable in lieu of current 1.5 h labels and may contain wired glass panels not exceeding 0.0645 m², at least 6 mm thick and conforming to Sentence 3.1.8.14.(2), and (c) every fire door, window assembly or glass block used as a *closure* in a required *fire separation* shall be installed in conformance with good engineering practice.
9.	C9	3.1.8.7. to 3.1.8.9.	Except for *hotels*, *fire dampers* or *fire stop flaps* are not required to be installed in existing ducts at penetrations of existing *fire separations*.
10.	C10	3.1.8.10.(1)	For existing unlabeled doors in existing *buildings*, at least 45 mm solid core wood or metal clad are acceptable. Except for *residential occupancies*, existing closure rating of 20 min will not be required where the entire *floor area* is *sprinklered*.
11.	C11	3.1.8.13.	Existing functionally operable latching devices, excluding draw bolts, are acceptable.
12.	C12	3.1.8.14.	Existing transoms or sidelights located in *fire separations* not required to be greater than 1 h may be retained if wired glass, at least 6 mm thick, is securely fixed to a wood frame of at least 50 mm thickness with steel stops. Operable transoms shall be fixed closed.
13.	C13	3.1.8.15. to 3.1.8.17.	Existing acceptable.

14.	C14	3.1.11.	Where the concealed space is being materially altered, provide smoke or heat detection in that space in lieu of *fire blocks* and tie into fire alarm system.
15.	C15	3.2.2.17.(1)(b) and (c)	Existing sprinkler systems in 1 *storey buildings* need not comply.
16.	C16	3.2.3.	Existing windows. (a) Existing windows in walls may be relocated to another part of the wall, provided the existing opening is blocked up to provide the same fire rating for the wall, and the projection of the new opening, at a right angle to the property line onto another *building*, lies not closer than 300 mm from a window in such other *building*, where the "opposite" window is less than 2 400 mm from the opposite new opening, and (b) except relocation of units, shall be restricted to the same *fire compartment* and shall conform to the requirements of Article 3.2.3.14. or 9.10.12.3. where applicable, or (c) where a *building* does not satisfy the requirements of Subsection 3.2.3. for the amount of openings facing a yard or space that does not have sufficient *limiting distance*, such existing openings are allowed to be relocated provided: (i) such openings are not increased in size and they are protected with wired glass in steel frames conforming to Sentence 3.1.8.14.(2), or (ii) the *building* is *sprinklered.*
17.	C17	3.2.3.6.(3)	Existing roof soffit projections acceptable.
18.	C18	3.2.4.	(a) Existing fire alarm system may remain except that Article 3.2.4.5. does not apply where the fire safety plan (as described in the Fire Code made under the *Fire Protection and Prevention Act, 1997*) for the *building* addresses the intent of Subsection 3.2.4. (i.e. "stage" system, electrical supervision, detection as required, Fire Department connection, and emergency power supply), and (b) extension of an existing system must ensure continuity and compatibility, and integrity of the system.
19.	C19	3.2.4.9.(2)(e)	Does not apply to existing installations in *buildings*.
20.	C20	3.2.4.10.(5)(c)	Does not apply to existing installations in *buildings*.
21.	C21	3.2.4.22.	Such *smoke alarms* may be battery operated.
22.	C22	3.2.5.1.; 3.2.5.2.	Existing acceptable.
23.	C23	3.2.5.3.(1)	Existing access acceptable.
24.	C24	3.2.5.3.(2)	Existing acceptable.

25.	C25	3.2.5.4. to 3.2.5.6.	(a) For *buildings* 6 *storeys* and less, existing access to existing *occupancy* is acceptable, and (b) where existing *building* is changed to a "C" *occupancy*, an access route shall be provided, or the existing access is acceptable provided the *building* is *sprinklered*.
26.	C26	3.2.5.7.	Existing water supply and hydrants are acceptable in *buildings* up to 6 *storeys* in *building height*.
27.	C27	3.2.5.13.	Existing sprinkler systems in existing *buildings* that do not conform to NFPA 13 may be altered, added to, or extended from the existing system without complying with NFPA 13, provided the system is operational and adequate with respect to coverage, water supply and controls, and provided the system is evaluated by a qualified designer.
28.	C28	3.2.9.	Does not apply to *buildings* 4 *storeys* and less. For existing *buildings* over 4 *storeys* in *building height*, existing standpipe and hose systems water supply is acceptable provided it can deliver a minimum flow rate of 265 L/min for 30 min at 345 kPa (gauge) at the two highest and most remote hose valves, with not less than 132 L/min from each of the two simultaneously.
29.	C29	3.3.1.4.(1); 3.3.4.2.(1)	30 min is acceptable to separate corridors or *exits* in *buildings* not exceeding 6 *storeys* in *building height*, except that 45 min is required for *exits* in *buildings* exceeding 3 *storeys* in *building height*. For *buildings* exceeding 6 *storeys* in *building height*, 30 min is acceptable where *smoke detectors* are installed in corridors, except 1 h is required in *exits*. 30 min is acceptable to separate *public corridors*, *exits* or *suites* in *hotels*, provided *fire detectors* are installed in every room in a *suite* and in every room not located in a *suite*, other than corridors, washrooms, closets in *suites*, saunas, refrigerated areas and swimming pools.
30.	C30	3.3.1.5.(1)(c); Tables 3.3.1.5.A. and 3.3.1.5.B.	In Column 2, maximum area of room or *suite* to be unlimited.
31.	C31	3.3.1.9.	Existing width of *public corridors* of not less than 914 mm is acceptable.
32.	C32	3.3.1.10.; 3.3.1.11.	Existing door swings may remain in *heritage buildings*, existing or being restored, with no change in *major occupancy* and with *occupant load* no greater than 100.
33.	C33	3.3.1.12.	Existing doors acceptable, provided not less than 600 mm wide.
34.	C34	3.3.1.15.	Existing curved or spiral stairs acceptable.
35.	C35	3.3.1.16.	Existing non-conforming capacities of *access to exits* are acceptable, provided that the excessive capacity is no greater than 15% and,

			(a) corridor *fire separations* are rated to Code plus early warning system provided, or (b) there are sprinklers, plus *smoke alarms* in *suites*.
36.	C36	3.3.1.17.	Does not apply to *heritage buildings*.
37.	C37	3.3.1.18.	Existing stained, etched, bevelled, leaded or figured glass acceptable.
38.	C38	3.3.4.2.(3)(b)(i) 3.3.4.2.(3)(b)(ii), (iii) 3.3.4.2.(3)(b)(iv)	30 min *fire separation* acceptable. 45 min *fire separation* acceptable. 1.5 h *fire separation* acceptable.
39.	C39	3.3.4.4.(4) and (5)	For *buildings* 6 *storeys* and less, doorway from *dwelling unit* will be permitted to open directly into *exit* stairway or interior corridor served by a single *exit* if a fire alarm system complying with Subsection 3.2.4. is installed and the *dwelling unit* has a second and separate *means of egress*.
40.	C40	3.3.5.4.(1) and 3.3.5.7.(3)	Need not comply where a gasketed door and self closer are provided in the existing *fire separation*.
41.	C41	3.4.1.4.	Except for *hotels*, the following types of *exits* may also be used for *buildings* not over 6 *storeys* in *building height*: (a) connected balconies, which connect across *firewalls*, or connect to another *exit*, or with access to ground level, (b) areas of refuge where fire service rescue is possible and that comply with Measure L of Sentences (4) to (10), (18) and Clauses (20)(a), (b) and (d) in MMAH Supplementary Standard SB-4, “Measures for Fire Safety in High Buildings”.
42.	C42	3.4.1.8.	Existing stained, etched, bevelled, leaded or figured glass acceptable.
43.	C43	3.4.2.5.(1)	Existing travel distance acceptable where *floor area* is *sprinklered* and provided *fire separations* comply with Part 3.
44.	C44	3.4.3.2.(7)	Existing width of *exits* acceptable provided the *occupant load* is not more than 15% above the *exit* capacity.
45.	C45	3.4.3.4.	Except for *heritage buildings*, existing acceptable, provided not less than 800 mm.
46.	C46	3.4.3.5.	Existing headroom clearance of not less than 1 980 mm is acceptable.
47.	C47	3.4.4.1.(1)	Except for *exits*, no rating required where *floor areas* are *spinklered*.
48.	C48	3.4.4.1.	*Fire separations* of *exits* permitted in *buildings*: - 30 min, up to 3 *storeys* in *building height*; - 45 min, in *hotels* up to 3 *storeys* in *building height*; - 45 min, up to 6 *storeys* in *building height*; - 1 h, over 6 *storeys* in *building height*.

49.	C49	3.4.4.4.(8)	Existing washrooms opening directly into an *exit* stairwell shall be separated from the *exit* stairwell by a 45 min *closure*.
50.	C50	3.4.5.1.(2) and (9)	Existing illuminated legible *exit* signs are acceptable.
51.	C51	3.4.6.1.	Existing acceptable.
52.	C52	3.4.6.2.	Existing acceptable, if visually apparent.
53.	C53	3.4.6.3.(1)	Existing acceptable with rise no greater than 3.7 m.
54.	C54	3.4.6.4.(1)	Existing acceptable.
55.	C55	3.4.6.4.(2) and (3)	Existing acceptable.
56.	C56	3.4.6.5.(2) and (11)	Existing acceptable.
57.	C57	3.4.6.6.(2) and (4)	Existing acceptable.
58.	C58	3.4.6.7.(1)	Existing acceptable.
59.	C59	3.4.6.8.	Existing acceptable.
60.	C60	3.4.6.9.	Existing acceptable.
61.	C61	3.4.6.10.(2) to (6)	Existing acceptable.
62.	C62	3.4.6.11.(1) and (2)	Existing acceptable.
63.	C63	3.4.6.12.	Existing acceptable in *heritage buildings* provided the *occupant load* is not more than 60.
64.	C64	3.4.6.16.(1) to (3)	Existing functionally operable panic hardware acceptable.
65.	C65	3.4.7.2.	*Combustible* fire escapes which are protected from fire in accordance with Sentence 3.2.3.13.(2) are permitted or may be reconstructed or recreated (as in the case of a *heritage building*).
66.	C66	3.5.1.	Existing acceptable except where *building* is classified under Subsection 3.2.6.
67.	C67	3.6.2.1.(7)	45 min *fire separation* acceptable.
68.	C68	3.6.2.2.	Existing acceptable where explosion-resistant *construction* or venting is provided.
69.	C69	3.6.2.6.	Existing acceptable.
70.	C70	3.6.2.7.(1)	2 h *fire separation* acceptable.
71.	C71	3.6.3.1.(1) to (5)	45 min *fire separation* acceptable up to 6 *storeys*.
72.	C72	3.6.3.3.(2)	Where 2 h *fire separation* is required,1 h is acceptable. Except for linen discharge rooms where 1 h *fire separation* is required, 45 min is acceptable.
73.	C73	3.6.3.3.(4) and (5)	Existing sizes acceptable.
74.	C74	3.6.3.3.(9)	Where 2 h *fire separation* is required,1 h is acceptable.
75.	C75	3.6.4.2.	Ceiling *fire separation* need not have a *fire-resistance rating* where sprinklering, subject to *C.A.* C27, of *fire compartments* on both sides of vertical *fire separation* is provided and where such *fire separation* is not required to exceed 1 h.
76.	C76	3.6.4.3.(1)	Existing to meet *flame-spread rating* of 25 or to be *sprinklered*.
77.	C77	3.6.4.4. to 3.6.4.6.	Existing access acceptable.

78.	C78	3.7.1.1.(2)	Minimum room height shall be not less than 1 950 mm over the required floor area and any location that would normally be used as a *means of egress*.
79.	C79	3.7.2.1.	(a) Where windows are not used as *means of egress* and where they do not conflict with ventilation requirements, the minimum glass areas as shown in Table 9.7.2.3. may be reduced by 50%, or (b) an existing room converted to an interior room, created by an addition, shall not require a window, provided there is an opening in a dividing wall occupying not less than 30% of the separating plane to an adjoining room, where the adjoining room has a minimum of 5% window area of the combined floor areas, and provided the required ventilation for the combined room is maintained.
80.	C80	3.7.4.	Where the *occupant load* is increased by more than 15% above the capacity of the existing facilities, facilities to be added to accommodate the increase.
	NUMBER	**PART 4 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
88.	C88	4.1.8.	The requirements under this Subsection do not apply.
	NUMBER	**PART 6 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
89.	C89	6.2.2.1.(2)	Required outdoor air rates may be provided by mechanical, natural or combination of natural and mechanical means.
90.	C90	6.2.3.2.; 6.2.3.8.; 6.2.3.18; 6.2.3.19.	Existing acceptable.

91.	C91	6.2.3.9.(1)	In a *building* containing not more than four *dwelling units* or residential *suites*, the existing heating or *air-conditioning* system may be altered to serve more than one *dwelling unit* or *suite*, provided *smoke alarms* are installed in each *dwelling unit* or *suite* and provided a *smoke detector* is installed in the supply or return air duct system serving the entire *building* which would turn off the fuel supply and electrical power to the heating system upon activation of such detector.
92.	C92	6.2.3.12.	Existing openings, grilles and diffusers acceptable.
93.	C93	6.2.4.2.(1); 6.2.4.3.(1) to (3), (5), (11) and (12)	Existing acceptable.
94.	C94	6.2.4.3.(10)	Where the duct system is being altered, lesser amounts and extent of insulation will be permitted.
95.	C95	6.2.4.7.(10)	In a *building* containing not more than four *dwelling units* or residential *suites*, the existing heating or *air-conditioning* system may be altered to serve more than one *dwelling unit* or *suite*, provided *smoke alarms* are installed in each *dwelling unit* or *suite* and provided a *smoke detector* is installed in the supply or return air duct system serving the entire *building* which would turn off the fuel supply and electrical power to the heating system upon activation of such detector.
96.	C96	6.2.9.2.	Existing acceptable.
97.	C97	6.2.12.3.(1)	Carbon monoxide alarms may be battery operated or plugged into an electrical outlet.
98.	C98	6.3.1.	Existing acceptable, provided products of combustion are safely vented.
	NUMBER	**PART 8 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
99.	C99	8.2.1.4.	Existing clearances acceptable where a *sewage system* is replaced with another *sewage system* within the same class and the capacity of the replacement *sewage system* does not exceed the capacity of the existing *sewage system*.
100.	C100	8.2.1.4.	Existing clearances are acceptable where a replacement *sewage system* requires lesser clearances than those required in Part 8 for the existing *sewage system.*
	NUMBER	**PART 9 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
101.	C101	9.3.2.1.	Sound used lumber may be acceptable for reuse without a grade stamp provided that: (a) visual examination shows no excessive weakening by holes, notches, nail splits or other damage, (b) where the grade or species is unknown, the minimum grade shall apply for span table use, and (c) lumber has not been subjected to termite infestation.

102.	C102	9.5.3.1.	In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, (a) minimum room height shall not be less than 1 950 mm over the required floor area and in any location that would normally be used as a *means of egress*, or (b) minimum room height shall not be less than 2 030 mm over at least 50% of the required floor area, provided that any part of the floor having a clear height of less than 1 400 mm shall not be considered in computing the required floor area.
103.	C103	9.5.11.1.	Doors may be lesser heights to suit ceiling heights.
104.	C104	9.5.11.2.	Existing acceptable, provided not less than 600 mm.
105.	C105	9.6.1.2.(2) and (3); 9.6.1.4.(1) and (2)	Existing doors and sidelights being reused or relocated need not conform if identified or protected.
106.	C106	9.6.1.4.(3)	Existing acceptable, if marked to indicate their existence and position.
107.	C107	9.7.2.3.	(a) Where windows are not used as a *means of egress* and where they do not conflict with ventilation requirements, the minimum glass areas as shown in Table 9.7.2.3. may be reduced by 50%, and (b) an existing room converted to an interior room, created by an addition, shall not require a window, provided there is an opening in a dividing wall occupying not less than 30% of the separating plane to an adjoining room, where the adjoining room has a minimum of 5% window area of the combined floor areas, and provided the required ventilation for the combined room is maintained.
108.	C108	9.7	Existing acceptable.
109.	C109	9.8.1. to 9.8.4.	Replacement or extension of existing stair systems shall be exempt from the provisions of these Subsections, except that they shall have: (a) a minimum width between wall faces of 700 mm, and (b) a minimum clear height over tread nosing or landing of 1 800 mm.
110.	C110	9.8.4.3.	Existing curved or spiral stairs are acceptable.
111.	C111	9.8.4.5.	Where a stair complies with Subsection 9.8.4., an extension to a stair may contain two sets of winders provided that they are separated by at least three treads or a landing.
112.	C112	9.8.5.1.(2)	Existing ramps acceptable, where practical.
113.	C113	9.8.7.	Existing handrails acceptable, unless considered unsafe by *chief building official*.
114.	C114	9.8.8.	Existing *guards* acceptable, unless considered unsafe by *chief building official*.

115.	C115	9.8.9.6.(4)	Existing acceptable.
116.	C116	9.9.2.1.(1) to (3)	Except for *hotels*, the following types of *exits* may also be used: (a) connected balconies, which connect across *firewalls*, or connect to another *exit*, or with access to grade, (b) areas of refuge approved by the *chief building official*, where fire service rescue is possible, or (c) *combustible* or *noncombustible* exterior stairways or fire escapes which are protected in accordance with Sentence 3.2.3.13.(2). These may be reconstructed or recreated (as in the case of a *heritage building*).
117.	C117	9.9.2.1.(4)	Except for *hotels*, existing acceptable.
118.	C118	9.9.3.2.	(a) In a *building* containing not more than four *dwelling units*, the width of every *exit* facility may be as the existing, but not less than 800 mm, or (b) in a *building* containing more than four *dwelling units*, the width of every *exit* facility may be as the existing, but not less than 900 mm.
119.	C119	9.9.3.3.	(a) In a *building* containing not more than four *dwelling units*, the minimum width of a *public corridor* may be 800 mm, or (b) in a *building* containing more than four *dwelling units*, the minimum width of a *public corridor* may be 900 mm.
120.	C120	9.9.3.4.	Existing clear height of not less than 1 950 mm is acceptable.
121.	C121	9.9.4.2.	Except as permitted in *C.A.* C136, in a *building* containing not more than four *dwelling units* or *suites*, one *exit* need not be separated from the remainder of the *building* at the *first storey* where there are one or more other *exits* complying with *C.A.* C122.
122.	C122	9.9.4.2.(1) and (2)	30 min *fire separation* acceptable.
123.	C123	9.9.5.4.	Existing acceptable.
124.	C124	9.9.5.8.	Existing acceptable provided minimum 45 min *fire separation* and where explosion-resistant *construction* or venting is provided.
125.	C125	9.9.5.9.	Existing acceptable, provided that the enclosure has a 45 min *fire-resistance rating*.
126.	C126	9.9.6.1.	Except for *hotels*, existing acceptable.
127.	C127	9.9.6.2.	Existing clear opening height of not less than 1 950 mm is acceptable.
128.	C128	9.9.6.3.	Existing door widths are acceptable, provided *exit* widths conform to *C.A.* C118.
129.	C129	9.9.6.5.	Existing door swings acceptable. Existing acceptable in *public heritage buildings*, where approved by *chief building official*.

130.	C130	9.9.6.6.(1)	Where *exit* doors open onto a landing, they shall not extend beyond the face of the first riser.
131.	C131	9.9.6.8.	Existing functionally operable passage or panic hardware acceptable.
132.	C132	9.9.7.4.(1)(a)	Maximum area of existing room or *suite* does not apply.
133.	C133	9.9.7.5.	Except as provided in *C.A.* C136, in detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, the Code requirement applies.
134.	C134	9.9.8.2.(1)	Existing travel distance acceptable where *floor area* is *sprinklered* and provided *fire separations* comply with Part 9.
135.	C135	9.9.8.5.	In a *building* containing not more than four *dwelling units* or *suites*, existing glazed solid wood doors to lobby may remain in lieu of new 20 minute doors, provided the *fire separations* for the floor above or below are provided as per *C.A.* C147, and a second *means of egress* from the *dwelling units* complies with the Code requirements.
136.	C136	9.9.9.	In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, *exit* requirements are acceptable if at least one of the following conditions exists: (a) a door, including a sliding door, that opens directly to the exterior from a *dwelling unit*, serves only that *dwelling unit* and has reasonable access to ground level, and the *dwelling units* are equipped with *smoke alarms* installed in conformance with Subsection 9.10.19., (b) an *exit* that is accessible to more than one *dwelling unit* and provides the only *means of egress* from each *dwelling unit*, provided that the *means of egress* is separated from the remainder of the *building* and common areas by a *fire separation* having a 30 min *fire-resistance rating* and provided further that the required *access to exit* from any *dwelling unit* cannot be through another *dwelling unit*, *service room* or other *occupancy*, and both *dwelling units* and common areas are provided with *smoke alarms* that are installed in conformance with Subsection 9.10.19. and are interconnected, or (c) access to an *exit* from one *dwelling unit* which leads through another *dwelling unit* where, (i) an additional means of escape is provided through a window that conforms to the following: (A) the sill height is not more than 1 000 mm above or below adjacent ground level,

			(B) the window can be opened from the inside without the use of tools, (C) the window has an individual unobstructed open portion having a minimum area of 0.38 m² with no dimension less than 460 mm, (D) the sill height does not exceed 900 mm above the floor or fixed steps, (E) where the window opens into a window well, a clearance of not less than 1 000 mm shall be provided in front of the window, and (F) *smoke alarms* are installed in every *dwelling unit* and in common areas in conformance with Subsection 9.10.19. and are interconnected, (ii) an additional means of escape is provided through a window that conforms to the following: (A) a casement window not less than 1 060 mm high, 560 mm wide, with a sill height not more than 900 mm above the inside floor, (B) the sill height of the window is not more than 5 m above adjacent ground level, and (C) *smoke alarms* are installed in every *dwelling unit* and in common areas in conformance with Subsection 9.10.19. and are interconnected, or (iii) the *building* is *sprinklered* and the *dwelling units* are equipped with *smoke alarms* installed in conformance with Subsection 9.10.19.
137.	C137	9.9.10.1.	In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, existing acceptable, where there is direct access to the exterior.
138.	C138	9.9.11.	In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, the requirements under this Subsection do not apply.
139.	C139	9.9.11.3.	Existing illuminated legible signs are acceptable for *exit* signs, if approved by *chief building official*.
140.	C140	9.9.12.	In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, the requirements under this Subsection apply only where the condition described in (b) of *C.A.* C136 exists.
141.	C141	9.10.1.1.	Assemblies required to be of *noncombustible construction* may be supported by *combustible construction* having at least the same *fire-resistance rating* as that supported.
142.	C142	9.10.1.3.(8) to (10)	Existing installations acceptable subject to *C.A.*'s C26, C27 and C28.

143.	C143	9.10.3.	*Fire-resistance ratings* may also be used where they are based on: 1. HUD Rehabilitation Guidelines, "Guideline on Fire Ratings of Archaic Materials and Assemblies". 2. DBR Technical Paper No. 194, "Fire Endurance of Protected Steel Columns and Beams". 3. DBR Technical Paper No. 207, "Fire Endurance of Unit Masonry Walls". 4. DBR Technical Paper No. 222, "Fire Endurance of Light-Framed and Miscellaneous Assemblies".
144.	C144	9.10.5.1.	(a) Existing openings in existing wall or ceiling membranes to remain. (b) Existing openings may be moved to another location in the same wall or ceiling, provided the aggregate area of openings does not increase and are not cumulative, and the existing opening is blocked up to provide the same rating as the existing wall or ceiling assembly.
145.	C145	9.10.6.2.	Existing *heavy timber construction* acceptable where *construction* is within 90% of member sizes listed in Part 3.
146.	C146	9.10.7.	Existing acceptable for *heritage buildings*, subject to approval of *chief building official*.
147.	C147	9.10.8.1.; 9.10.8.3.; 9.10.8.8.	(a) Except as provided in (b) and (c), 30 min rating is acceptable. (b) In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, 15 min horizontal *fire separation* is acceptable where, (i) *smoke alarms* are installed in every *dwelling unit* and in common areas in conformance with Subsection 9.10.19., and (ii) *smoke alarms* are interconnected. (c) In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, the *fire-resistance rating* of the *fire separation* is waived where the *building* is *sprinklered*.
148.	C148	9.10.9.7.; 9.10.9.9.	Existing acceptable in existing *fire separations*.
149.	C149	9.10.9.10.(1)	Ceiling *fire separation* need not have a *fire-resistance rating* where sprinklering, subject to *C.A.* C27, of *fire compartments* on both sides of vertical *fire separation* is provided and where such *fire separation* is not required to exceed 1 h.
150.	C150	9.10.9.11.(1)	Except for *hotels*, 30 min *fire separation* acceptable.

151.	C151	9.10.9.11.(2)	In lieu of the 2 h *fire separation*, sprinklers may be used in the *mercantile occupancy* or *medium hazard industrial occupancy*, with a 1 h *fire separation*.
152.	C152	9.10.9.14.(1) and (3); 9.10.9.15.(1)	(a) Except as provided in (b) and (c), 30 min *fire separation* is acceptable. (b) In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, 15 min horizontal *fire separation* is acceptable where, (i) *smoke alarms* are installed in every *dwelling unit* and in common areas in conformance with Subsection 9.10.19., and (ii) *smoke alarms* are interconnected. (c) In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, the *fire-resistance rating* of the *fire separation* is waived where the *building* is *sprinklered*.
153.	C153	9.10.10.3.	(a) Except as provided in (b) and (c) and in Articles 9.10.10.5. and 9.10.10.6., 30 min *fire separation* is acceptable. (b) In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, the *fire-resistance rating* of the vertical *fire separation* is waived where, (i) *smoke alarms* are installed in every *dwelling unit* and in common areas in conformance with Subsection 9.10.19., and (ii) *smoke alarms* are interconnected. (c) In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, the *fire-resistance rating* of the vertical *fire separation* is waived where *service rooms* are *sprinklered*.
154.	C154	9.10.11.2.(1)	In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, a *party wall* with 1 h *fire-resistance rating* is acceptable.
155.	C155	9.10.13.1	Existing functional *closures* are acceptable subject to *C.A.*'s C8 and C156.
156.	C156	9.10.13.2.(1)	In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, existing unlabelled doors at least 45 mm solid core wood or metal clad are acceptable. For existing *closures*, ratings of 20 min will not be required where the entire *floor area* is *sprinklered*.

157.	C157	9.10.13.2.(1)	In a *building* containing not more than four *dwelling units* or *suites*, existing glazed solid wood doors to corridors may remain in lieu of new 20 min doors, provided they are not located in a dead end corridor.
158.	C158	9.10.13.3.	Existing acceptable provided that wood door frames are secured with hinge screws going through frame into the stud.
159.	C159	9.10.13.5.	Existing wired glass acceptable. Existing transoms or sidelights located in required *fire separations* may be retained if wired glass, at least 6 mm thick, is securely fixed to a wood frame of at least 50 mm thickness with steel stops. Operable transoms shall be fixed closed.
160.	C160	9.10.13.6.	Existing steel door frames acceptable.
161.	C161	9.10.13.7.	Existing glass block acceptable.
162.	C162	9.10.13.8.	Existing sizes acceptable.
163.	C163	9.10.13.9.	Existing operable latches acceptable.
164.	C164	9.10.13.10.(1)	Existing functionally operable self-closing devices acceptable.
165.	C165	9.10.13.11.	Existing operable self-releasing electromagnetic hold-open device acceptable, and except for *hotels*, fusible link hold-open devices acceptable.
166.	C166	9.10.13.12.	Existing swings acceptable.
167.	C167	9.10.13.13.(1)	Except as permitted in *C.A.* C168, in a *building* containing not more than four *dwelling units*, the existing heating or *air-conditioning* system may be altered to serve more than one *dwelling unit*, provided *smoke alarms* are installed in each *dwelling unit* and provided a *smoke detector* is installed in the supply or return air duct system serving the entire *building* which would turn off the fuel supply and electrical power to the heating system upon activation of such detector.
168.	C168	9.10.13.13.(1)	In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, existing acceptable.
169.	C169	9.10.13.14.; 9.10.5.1.	Except as permitted in *C.A.* C170, in a *building* containing not more than four *dwelling units*, the existing heating or *air-conditioning* system may be altered to serve more than one *dwelling unit*, provided *smoke alarms* are installed in each *dwelling unit* and provided a *smoke detector* is installed in the supply or return air duct system serving the entire *building* which would turn off the fuel supply and electrical power to the heating system upon activation of such detector.
170.	C170	9.10.13.14.; 9.10.5.1.	In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, existing acceptable.

171.	C171	9.10.14.2.(2) and (3); 9.10.14.4.(2); 9.10.15.2.(2) and (3); 9.10.15.4.(4)	Where an addition to an existing residential *building* has its *exposing building face* further distant from the line than the existing *exposing building face* and the *limiting distance* is at least 1 200 mm, the total area of allowable *unprotected openings* may be determined under Sentence 9.10.14.2.(2) or 9.10.15.2.(2) for the combined new and existing *exposing building faces* and, (a) where the existing *exposing building face* has no *unprotected openings*, or the existing *unprotected openings* are to be filled in, the total allowable area of *unprotected openings* may be installed in the new *exposing building face*, or (b) where the existing *unprotected openings* are to remain, (i) their area shall be deducted from the total allowable area of *unprotected openings*, and the balance may be installed in the new *exposing building face*, and (ii) Sentences 9.10.14.2.(3) and 9.10.14.4.(2) or Sentences 9.10.15.2.(3) and 9.10.15.4.(4) apply only to the new *exposing building face*.
172.	C172	9.10.14.4.; 9.10.15.4.	Existing windows. (a) Existing windows in walls may be relocated to another part of the wall, provided the existing opening is blocked up to provide the same fire rating for the wall, and the projection of the new opening, at a right angle to the property line onto another *building*, lies no closer than 300 mm from a window in such other *building*, where the "opposite" window is less than 2 400 mm from the opposite new opening, and (b) except relocation of units, to be restricted to the same *fire compartment* and shall conform to the requirements of Article 3.2.3.14. or 9.10.12.3. where applicable, or (c) where a *building* does not satisfy the requirements of Subsection 3.2.3. for the amount of openings facing a yard or space that does not have sufficient *limiting distance*, such existing openings are allowed to be relocated provided: (i) such openings are not increased in size and they are protected with wired glass in steel frames conforming to Sentence 3.1.8.14.(2), or (ii) the *building* is *sprinklered*.
173.	C173	9.10.16.2.(1)	Where balloon framing is exposed during renovation, *fire blocks* shall be provided.

174.	C174	9.10.18.	(a) Subject to approval by the *chief building official*, existing fire alarm system may remain where the fire safety plan (as described in the Fire Code made under the *Fire Protection and Prevention Act, 1997*) for the *building* addresses the intent of Subsection 3.2.4. (i.e. "stage" system, electrical supervision, detection as required, Fire Department connection, and emergency power supply), and (b) extension of an existing system must ensure continuity and compatibility, and integrity of the system.
175.	C175	9.10.19.4.	*Smoke alarms* may be battery operated.
176.	C176	9.10.20.	Existing access acceptable.
177.	C177	9.14.2.1.(2)	Existing acceptable.
178.	C178	9.18.2.	Existing access acceptable.
179.	C179	9.18.3.	Existing vents and ventilation acceptable.
180.	C180	9.19.	Existing acceptable.
181.	C181	9.20.2.2.	Used masonry may be reused for patching and filling openings to match adjacent work. Used interior brick may not be used for exterior applications.
182.	C182	9.20.3.	Archaic mortars may be used to match existing jointing.
183.	C183	9.20.4.1.	Sound jointing techniques may be employed to match existing archaic joints.
184.	C184	9.20.12.1.	Corbelling may be constructed to match existing or original details, provided that it is structurally adequate for the proposed use.
185.	C185	9.21.	Existing acceptable, provided the products of combustion are safely vented and provided no fire hazard is created.
186.	C186	9.22.1. to 9.22.7.	Sound period materials, designs and techniques may be employed in recreated fireplaces, provided no fire hazard is created. Existing need not comply with Article 9.22.1.4.
187.	C187	9.23.	Existing acceptable.
188.	C188	9.24.	Existing acceptable.
189.	C189	9.25.	A *vapour barrier* may consist of paint or other coating with specified perm rating such as two coats of leafing aluminum pigmented paint.
190.	C190	9.26.	Existing acceptable, except when removing and replacing shingles, comply with the eave protection requirements of Subsection 9.26.5.
191.	C191	9.27.	Existing acceptable.
192.	C192	9.28.	All replacement or recreation of existing stucco may be compatible with the existing materials and application.
193.	C193	9.29.4.	Existing acceptable. All replacement or recreation of existing plaster may be compatible with the existing materials and application.

194.	C194	9.32.	In detached houses, semi-detached houses, townhouses and row houses containing not more than two *dwelling units*, rooms or spaces in *dwelling units* to be ventilated by natural means in accordance with Subsection 9.32.2. or by providing adequate mechanical ventilation.
195.	C195	9.33.1.1.	In a *building* containing not more than four *dwelling units*, the existing heating or *air-conditioning* system may be altered to serve more than one *dwelling unit*, provided *smoke alarms* are installed in each *dwelling unit* and provided a *smoke detector* is installed in the supply or return air duct system serving the entire *building* which would turn off the fuel supply and electrical power to the heating system upon activation of such detector.
196.	C196	9.33.1.2.	Sound, used or antique *appliances* are acceptable, provided that: (a) visual examination shows no excessive weakening by corrosion or other damage, (b) no structural parts are missing, (c) no cracks are present in the components intended to support the *appliance* or enclose the fire, and (d) loading and ash removal door latches and hinges hold the door closed.
197.	C197	9.33.4.3.(1)	Carbon monoxide alarms may be battery operated or plugged into an electrical outlet.
198.	C198	9.37.	Sound used materials shall be acceptable for reuse, subject to the following limitations: (a) visual examination shows no excessive weakening by holes, notches, nail splits or other damage, and (b) logs have not been subjected to termite infestation.
	NUMBER	**PART 12 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
199.	C199	12.2.1.1.(3)	(a) Where the framing systems are being altered to match the existing framing, lesser amounts and extent of insulation and *vapour barrier* is acceptable. (b) Existing acceptable for Article 2.1.1.9. of MMAH Supplementary Standard SB-12, “Energy Efficiency for Housing”. (c) Existing previously occupied log houses that are dismantled and reconstructed are exempt from Article 2.1.1.5. of MMAH Supplementary Standard SB-12, “Energy Efficiency for Housing”.

81.	C81	3.8.1.2.	Existing accessible entrance acceptable. (see *C.A.* C85) Existing curb ramp conforming to Sentence 3.8.3.2.(3) is acceptable. Existing principal entrance acceptable, provided at least one *barrier-free* entrance is available.
82.	C82	3.8.1.3.(1)	Existing unobstructed width of 920 mm minimum is acceptable.
83.	C83	3.8.1.3.(4)	Existing unobstructed space not less than 1 500 mm in width and 1 500 mm in length located not more than 30 m apart is acceptable.
83.1	C83.1	3.8.3.2.(3)(b)	Existing curb ramp acceptable, provided width not less than 1 200 mm.
84.	C84	3.8.3.3.(1)	Existing doorway acceptable, provided not less than 810 mm wide.
84.1	C84.1	3.8.3.3.(11)(a)	Existing distance acceptable, provided not less than 1 200 mm plus the width of any door that swings into the space in the path of travel.
85.	C85	3.8.3.4.(1)(a)	Existing ramp acceptable, provided not less than 870 mm between handrails.
86.	C86	3.8.3.8.(5)	Existing grab bar is acceptable.
86.1	C86.1	3.8.3.12.	Existing universal washroom acceptable.
87.	C87	3.8.3.13.(2)(f)	Existing grab bar is acceptable.
87.1	C87.1	3.8.3.16.	Existing drinking fountain conforming to Clauses 3.8.3.16.(2)(a) and (b) acceptable.
87.2	C87.2	3.11.3.1.(9)	Existing clear width acceptable, provided not less than 900 mm.
87.3	C87.3	3.11.3.1.(14)	Existing painted line acceptable.

Table 11.5.1.1.D/E.
Compliance Alternatives for Business/Mercantile Occupancies

Forming Part of Article 11.5.1.1.

Item	Col. 1	Column 2	Column 3
	NUMBER	**PART 3 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
1.	DE1	3.1.4.7.	Existing *heavy timber construction* acceptable where *construction* is within 90% of member sizes listed in Part 3.
2.	DE2	3.1.5.2. to 3.1.5.4.; 3.1.5.6.	Existing acceptable.
3.	DE3	3.1.5.7. to 3.1.5.10.	Except for exposed foamed plastics, existing acceptable. To match existing, materials may be added from on or off site.
4.	DE4	3.1.5.15. to 3.1.5.17.; 3.1.5.21.; 3.1.4.23.	Existing acceptable.
5.	DE5	3.1.7.1.	*Fire-resistance ratings* may also be used where they are based on:

			1. HUD Rehabilitation Guidelines, “Guideline on Fire Ratings of Archaic Materials and Assemblies”. 2. DBR Technical Paper No. 194, “Fire Endurance of Protected Steel Columns and Beams”. 3. DBR Technical Paper No. 207, “Fire Endurance of Unit Masonry Walls”. 4. DBR Technical Paper No. 222, “Fire Endurance of Light-Framed and Miscellaneous Assemblies”.
6.	DE6	3.1.7.5.(3)	Existing assemblies required to be of *noncombustible construction* may be supported by *combustible construction* having at least the same *fire-resistance rating* as that supported.
7.	DE7	3.1.8.1.(2); 3.1.8.6.	Existing functional *closures* are acceptable and may be relocated within the same existing *fire separation*.
8.	DE8	3.1.8.5.(2)	(a) Existing functional and sound doors in existing *buildings* that are either hollow metal or kalamein and containing wired glass at least 6 mm thick and conforming to Sentence 3.1.8.14.(2) are permitted in lieu of doors not required to exceed 45 min, (b) all existing functional and sound hollow doors which carry existing 1.5 h labels are acceptable in lieu of current 1.5 h labels and may contain wired glass panels not exceeding 0.0645 m², at least 6 mm thick and conforming to Sentence 3.1.8.14.(2), and (c) every fire door, window assembly or glass block used as a *closure* in a required *fire separation* shall be installed in conformance with good engineering practice.
9.	DE9	3.1.8.7.; 3.1.8.9.	*Fire dampers* or *fire stop flaps* are not required to be installed in existing ducts at penetrations of existing *fire separations*.
10.	DE10	3.1.8.10.(1)	For existing unlabelled doors in existing *buildings*, at least 45 mm solid core wood or metal clad are acceptable.
11.	DE11	3.1.8.13.	Existing functionally operable latching devices, excluding draw bolts, are acceptable.
12.	DE12	3.1.8.14.	Existing transoms or sidelights located in required *fire separations* may be retained if wired glass, at least 6 mm thick, is securely fixed to a wood frame of at least 50 mm thickness with steel stops. Operable transoms shall be fixed closed.
13.	DE13	3.1.8.15. to 3.1.8.17.	Existing acceptable.
14.	DE14	3.1.11.	Where the concealed space is being materially altered, smoke or heat detection in that space in lieu of *fire blocks* and tied into fire alarm system is acceptable.
15.	DE15	3.2.2.17.(1)(b) and (c)	Existing sprinkler systems in 1 *storey buildings* need not comply.

16.	DE16	3.2.3.	Existing windows. (a) Existing windows in walls may be relocated to another part of the wall, provided the existing opening is blocked up to provide the same fire rating for the wall, and the projection of the new opening, at a right angle to the property line onto another *building*, lies not closer than 300 mm from a window in such other *building*, where the "opposite" window is less than 2 400 mm from the opposite new opening, and (b) except relocation of units, shall be restricted to the same *fire compartment* and shall conform to the requirements of Article 3.2.3.14. or 9.10.12.3. where applicable, or (c) where a *building* does not satisfy the requirements of Subsection 3.2.3. for the amount of openings facing a yard or space that does not have sufficient *limiting distance*, such existing openings are allowed to be relocated provided: (i) such openings are not increased in size and they are protected with wired glass in steel frames conforming to Sentence 3.1.8.14.(2), or (ii) the *building* is *sprinklered*.
17.	DE17	3.2.3.6.(3)	Existing roof soffit projections acceptable.
18.	DE18	3.2.3.17.	Need not comply for "E" *occupancy*.
19.	DE19	3.2.4.	(a) Existing fire alarm system may remain except that Article 3.2.4.5. does not apply where the fire safety plan (as described in the Fire Code made under the *Fire Protection and Prevention Act, 1997*) for the *building* addresses the intent of Subsection 3.2.4. (i.e. "stage" system, electrical supervision, detection as required, Fire Department connection, and emergency power supply), and (b) extension of an existing system must ensure continuity and compatibility, and integrity of the system.
20.	DE20	3.2.4.9.(2)(e)	Does not apply to existing installations in *buildings*.
21.	DE21	3.2.4.10.(5)(c)	Does not apply to existing installations in *buildings*.
22.	DE22	3.2.5.1.; 3.2.5.2.	Existing acceptable.
23.	DE23	3.2.5.3.	Existing access acceptable.
24.	DE24	3.2.5.4. to 3.2.5.6.	Existing acceptable provided the *building* is *sprinklered*.
25.	DE25	3.2.5.7.	Does not apply, except where a change in *major occupancy* occurs from a lesser *hazard index*.

26.	DE26	3.2.5.13.	Existing sprinkler systems in existing *buildings* that do not conform to NFPA 13 may be altered, added to, or extended from the existing system without complying with NFPA 13, provided the system is operational and adequate with respect to coverage, water supply and controls, and provided the system is evaluated by a qualified designer.
27.	DE27	3.2.9.	Does not apply to *buildings* 6 *storeys* and less. Does not apply to *sprinklered buildings*.
28.	DE28	3.3.1.5.(1)(c); Tables 3.3.1.5.A. and 3.3.1.5.B.	In Column 2, maximum area of room or *suite* to be unlimited.
29.	DE29	3.3.1.9.(1)	Existing width of *public corridors* of not less than 914 mm is acceptable.
30.	DE30	3.3.1.10.; 3.3.1.11.	Existing door swings may remain in *heritage buildings*, existing or being restored, with no change in *major occupancy* and with *occupant load* no greater than 100.
31.	DE31	3.3.1.12.	Existing doors acceptable, provided not less than 600 mm wide.
32.	DE32	3.3.1.15.	Existing curved or spiral stairs acceptable.
33.	DE33	3.3.1.16.	Existing non-conforming capacities of *access to exits* are acceptable, provided that: (a) the increase in *occupant load* is not greater than 15%, (b) the corridor *fire separations* are rated to Code, and (c) early warning systems are provided, or (d) there are sprinklers, plus *smoke alarms* in *suites*.
34.	DE34	3.3.1.17.	Does not apply to *heritage buildings*.
35.	DE35	3.3.1.18.	Existing stained, etched, bevelled, leaded or figured glass acceptable.
36.	DE36	3.3.5.4.; 3.3.5.7.(3)	Need not comply where a gasketed door and self closer are provided in the existing *fire separation*.
37.	DE37	3.4.1.4.	The following types of *exits* may also be used for *buildings* not over 6 *storeys* in *building height*: (a) connected balconies, which connect across *firewalls*, or connect to another *exit*, or with access to grade, (b) areas of refuge where fire service rescue is possible and that comply with Measure L of Sentences (4) to (10), (18), and Clauses (20)(a), (b) and (d) in MMAH Supplementary Standard SB-4, “Measures for Fire Safety in High Buildings”.
38.	DE38	3.4.1.8.	Existing stained, etched, bevelled, leaded or figured glass acceptable.
39.	DE39	3.4.2.5.(1)	Existing travel distance acceptable where *floor area* is *sprinklered*.
40.	DE40	3.4.3.2.(7)	Existing width of *exits* acceptable provided the *occupant load* is not more than 15% above the *exit* capacity.
41.	DE41	3.4.3.4.	Existing acceptable.

42.	DE42	3.4.3.5.	Existing headroom clearance of not less than 1 980 mm is acceptable.
43.	DE43	3.4.4.1.	*Fire separations* of *exits* permitted in *buildings*: - 30 min, up to 3 *storeys* in *building height*; - 45 min, up to 6 *storeys* in *building height*; - 1 h, over 6 *storeys* in *building height*.
44.	DE44	3.4.4.4.(8)	Existing washrooms opening directly into *exit* stairwell shall be separated from *exit* stairwell by a 45 min *closure*.
45.	DE45	3.4.5.1.(2) and (9)	Existing illuminated legible *exit* signs are acceptable.
46.	DE46	3.4.6.1.	Existing acceptable.
47.	DE47	3.4.6.2.	Existing acceptable, if visually apparent.
48.	DE48	3.4.6.3.(1)	Existing acceptable with rise no greater than 3.7 m.
49.	DE49	3.4.6.4.(1)	Existing acceptable.
50.	DE50	3.4.6.4.(2) and (3)	Existing acceptable.
51.	DE51	3.4.6.5.(2) to (11)	Existing acceptable.
52.	DE52	3.4.6.6.(1) to (5)	Existing acceptable.
53.	DE53	3.4.6.7.(1)	Existing acceptable.
54.	DE54	3.4.6.8.	Existing acceptable.
55.	DE55	3.4.6.9.	Existing acceptable.
56.	DE56	3.4.6.10.(2) to (6)	Existing acceptable.
57.	DE57	3.4.6.11.(1) and (2)	Existing acceptable.
58.	DE58	3.4.6.12.	Existing acceptable in *public heritage buildings* or a change in *occupancy* with no increase in *occupant load*.
59.	DE59	3.4.6.13.	Existing acceptable.
60.	DE60	3.4.6.14.	Existing acceptable.
61.	DE61	3.4.6.16.	Existing functionally operable panic hardware acceptable.
62.	DE62	3.4.7.2.	*Combustible* fire escapes which are protected from fire in accordance with Sentence 3.2.3.13.(2) are permitted or may be reconstructed or recreated (as in the case of a *heritage building*).
63.	DE63	3.5.1.	Existing acceptable except where *building* is classified under Subsection 3.2.6.
64.	DE64	3.6.2.1.(7)	Existing *fire separation* of not less than 30 min is acceptable
65.	DE65	3.6.2.2.	Existing acceptable where explosion-resistant *construction* or venting is provided.
66.	DE66	3.6.2.6.	Existing acceptable.
67.	DE67	3.6.2.7.(1)	2 h *fire separation* acceptable.
68.	DE68	3.6.3.1.(1) to (5)	45 min *fire separation* acceptable up to 6 *storeys*.
69.	DE69	3.6.3.3.	(a) Where 2 h *fire separation* is required, 1 h is acceptable. (b) Where 1 h *fire separation* is required, 45 min is acceptable.

			(c) Existing need not comply with Sentence 3.6.3.3.(5).
70.	DE70	3.6.4.2.	Ceiling *fire separation* need not have a *fire-resistance rating* where sprinklering, subject to *C.A.* DE27, of *fire compartments* on both sides of vertical *fire separation* is provided and where such *fire separation* is not required to exceed 1 h.
71.	DE71	3.6.4.3.(1)	Existing to meet *flame-spread rating* of 25 or to be *sprinklered*.
72.	DE72	3.6.4.4. to 3.6.4.6.	Existing access acceptable.
73.	DE73	3.7.4.	Where the *occupant load* is increased by more than 15% above the capacity of the existing facilities, facilities to be added to accommodate the increase.
	NUMBER	**PART 4 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
81.	DE81	4.1.8.	The requirements under this Subsection do not apply.
	NUMBER	**PART 6 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
82.	DE82	6.2.2.1.(2)	Required outdoor air rates may be provided by mechanical, natural or combination of natural and mechanical means.
83.	DE83	6.2.3.2.; 6.2.3.9.; 6.2.3.18; 6.2.3.19.	Existing acceptable.
84.	DE84	6.2.3.8.(18)	Existing acceptable.
85.	DE85	6.2.3.12.	Existing openings, grilles and diffusers acceptable, subject to approval of *chief building official*.
	NUMBER	**PART 8 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
86.	DE86	8.2.1.4.	Existing clearances acceptable where a *sewage system* is replaced with another *sewage system* within the same class and the capacity of the replacement *sewage system* does not exceed the capacity of the existing *sewage system*.

87.	DE87	8.2.1.4.	Existing clearances are acceptable where a replacement *sewage system* requires lesser clearances than those required in Part 8 for the existing *sewage system.*
	NUMBER	**PART 9 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
88.	DE88	9.3.2.1.	Sound used lumber may be acceptable for reuse without a grade stamp provided that: (a) visual examination shows no excessive weakening by holes, notches, nail splits or other damage, (b) where the grade or species is unknown, the minimum grade shall apply for span table use, and (c) lumber has not been subjected to termite infestation.
89.	DE89	9.5.11.2.	Existing acceptable, provided not less than 600 mm.
90.	DE90	9.6.1.2.(2) and (3); 9.6.1.4.(1) and (2)	Existing doors and sidelights being reused or relocated need not conform if identified or protected.
91.	DE91	9.6.1.4.(3) and (4); 9.8.8.1.(7) and (9)	Existing acceptable.
92.	DE92	9.7.	Existing acceptable.
93.	DE93	9.8.1. to 9.8.4.	Replacement or extension of existing stair systems shall be exempt from the provisions of these Subsections, except that they shall have: (a) a minimum width between wall faces of 700 mm, and (b) a minimum clear height over tread nosing or landing of 1 800 mm.
94.	DE94	9.8.3.2.	Existing acceptable.
95.	DE95	9.8.4.3.	Existing curved or spiral stairs acceptable.
96.	DE96	9.8.5.1.(2)	Existing ramps acceptable, where practical.
97.	DE97	9.8.7.	Existing handrails acceptable, unless considered unsafe by *chief building official*.
98.	DE98	9.8.8.	Existing *guards* acceptable, unless considered unsafe by *chief building official*.
99.	DE99	9.9.1.1.	Existing acceptable.
100.	DE100	9.9.2.1.(1) to (3)	The following types of *exits* may also be used: (a) connected balconies, which connect across *firewalls*, or connect to another *exit*, or with access to grade, (b) areas of refuge approved by the *chief building official*, where fire service rescue is possible, or (c) *combustible* or *noncombustible* exterior stairways or fire escapes which are protected in accordance with Sentence 3.2.3.13.(2). These may be reconstructed or recreated (as in the case of a *heritage building*).
101.	DE101	9.9.2.1.(4)	Existing acceptable.
102.	DE102	9.9.3.2.	Existing width of *exits* acceptable.
103.	DE103	9.9.3.3.	Existing width of *public corridors* of not less than 965 mm is acceptable.

104.	DE104	9.9.3.4.	Existing clear height of not less than 1 950 mm is acceptable.
105.	DE105	9.9.4.2.	30 min *fire separation* acceptable.
106.	DE106	9.9.5.4.; 9.9.5.5.	Existing acceptable.
107.	DE107	9.9.5.8.	Existing acceptable provided minimum 45 min *fire separation* and where explosion-resistant *construction* or venting is provided.
108.	DE108	9.9.5.9.	Existing acceptable, provided that the enclosure has a 45 min *fire-resistance rating*.
109.	DE109	9.9.6.1.	Existing acceptable.
110.	DE110	9.9.6.2.	Existing clear opening height of not less than 1 950 mm is acceptable.
111.	DE111	9.9.6.3.	Existing door widths are acceptable, provided *exit* widths comply with *C.A.* DE103.
112.	DE112	9.9.6.5.	Existing door swings are acceptable. Existing acceptable in *public heritage buildings*, where approved by *chief building official*.
113.	DE113	9.9.6.6.(1)	Where *exit* doors open onto a landing, they shall not extend beyond the face of the first riser.
114.	DE114	9.9.6.8.	Existing functionally operable passage or panic hardware acceptable.
115.	DE115	9.9.7.4.	Maximum area of existing room or *suite* to be unlimited.
116.	DE116	9.9.8.2.(1)	Existing travel distance acceptable where *floor area* is *sprinklered* and provided *fire separations* comply with Part 9.
117.	DE117	9.9.11.3.	Existing illuminated legible signs are acceptable for *exit* signs, if approved by *chief building official*.
118.	DE118	9.10.1.1.	Assemblies required to be of *noncombustible construction* may be supported by *combustible construction* having at least the same *fire-resistance rating* as that supported.
119.	DE119	9.10.1.3.(8) to (10)	Existing installations acceptable subject to *C.A.*'s DE26 and DE27.
120.	DE120	9.10.3.	*Fire-resistance ratings* may also be used where they are based on: 1. HUD Rehabilitation Guidelines, "Guideline on Fire Ratings of Archaic Materials and Assemblies". 2. DBR Technical Paper No. 194, "Fire Endurance of Protected Steel Columns and Beams". 3. DBR Technical Paper No. 207, "Fire Endurance of Unit Masonry Walls". 4. DBR Technical Paper No. 222, "Fire Endurance of Light-Framed and Miscellaneous Assemblies".
121.	DE121	9.10.5.1.	(a) Existing openings in existing wall or ceiling membranes to remain.

			(b) Existing openings may be moved to another location in the same wall or ceiling, provided the aggregate area of openings does not increase and are not cumulative, and the existing opening is blocked up to provide the same rating as the existing wall or ceiling assembly.
122.	DE122	9.10.6.2.	Existing *heavy timber construction* acceptable where *construction* is within 90% of the member sizes listed in Part 3.
123.	DE123	9.10.7.	Existing acceptable for *heritage buildings*, subject to approval of *chief building official*.
124.	DE124	9.10.8.1.	Existing 30 min rating acceptable.
125.	DE125	9.10.8.2.	Existing sprinkler systems complying with *C.A.* DE27 and Sentence 3.2.2.17.(1) are acceptable.
126.	DE126	9.10.8.3.	Existing acceptable, subject to approval of the *chief building official*.
127.	DE127	9.10.8.8.	30 min rating acceptable.
128.	DE128	9.10.9.7.; 9.10.9.9.	Existing acceptable in existing *fire separations*.
129.	DE129	9.10.9.10.(1)	Ceiling *fire separation* need not be fire-resistance rated where sprinklering of *fire compartments* on both sides of vertical *fire separation* is provided and where such *fire separation* is not required to exceed 1 h.
130.	DE130	9.10.9.11.(2)	In lieu of the 2 h *fire separation*, sprinklers may be used in the *mercantile occupancy* with a 1 h *fire separation*.
131.	DE131	9.10.9.13.	30 min *fire separation* acceptable.
132.	DE132	9.10.9.15.(1)	30 min *fire separation* acceptable.
133.	DE133	9.10.9.15.(3)	Need not comply for *mercantile occupancy*.
134.	DE134	9.10.10.3.(1)	45 min *fire separation* acceptable.
135.	DE135	9.10.13.1.	Existing functional *closures* are acceptable subject to *C.A.* DE8.
136.	DE136	9.10.13.2.	Existing acceptable.
137.	DE137	9.10.13.3.	Existing acceptable, provided that wood door frames are secured with hinge screws going through frame into the stud.
138.	DE138	9.10.13.5.	Existing acceptable. Existing transoms or sidelights located in required *fire separations* may be retained if wired glass, at least 6 mm thick, is securely fixed to a wood frame of at least 50 mm thickness with steel stops. Operable transoms shall be fixed closed.
139.	DE139	9.10.13.6.	Existing steel door frames acceptable.
140.	DE140	9.10.13.7.	Existing glass block acceptable.
141.	DE141	9.10.13.8.	Existing sizes acceptable.
142.	DE142	9.10.13.9.	Existing operable latches acceptable.
143.	DE143	9.10.13.10.(1)	Existing functionally operable self-closing devices acceptable.

144.	DE144	9.10.13.10.(2)	Existing functionally operable self-closing devices acceptable in "E" *occupancy*.
145.	DE145	9.10.13.11.	Existing operable self-releasing electromagnetic and fusible link hold-open devices acceptable.
146.	DE146	9.10.13.12.	Existing swings acceptable.
147.	DE147	9.10.14.4.	Existing windows. (a) Existing windows in walls may be relocated to another part of the wall, provided the existing opening is blocked up to provide the same fire rating for the wall, and the projection of the new opening, at a right angle to the property line onto another *building*, lies no closer than 300 mm from a window in such other *building*, where the "opposite" window is less than 2 400 mm from the opposite new opening, and (b) except relocation of units, to be restricted to the same *fire compartment* and shall conform to the requirements of Article 3.2.3.14. or 9.10.12.3. where applicable, or (c) where a *building* does not satisfy the requirements of Subsection 3.2.3. for the amount of openings facing a yard or space that does not have sufficient *limiting distance*, such existing openings are allowed to be relocated provided: (i) such openings are not increased in size and they are protected with wired glass in steel frames conforming to Sentence 3.1.8.14.(2), or (ii) the *building* is *sprinklered*.
148.	DE148	9.10.16.2.(1)	Where balloon framing is exposed during renovation, *fire blocks* shall be provided.
149.	DE149	9.10.18.	(a) Subject to approval by the *chief building official*, existing fire alarm system may remain where the fire safety plan (as described in the Fire Code made under the *Fire Protection and Prevention Act, 1997*) for the *building* addresses the intent of 3.2.4. (i.e. "stage' system, electrical supervision, detection as required, Fire Department connection, and emergency power supply), and (b) extension of an existing system must ensure continuity and compatibility, and integrity of the system.
150.	DE150	9.10.20.	Existing access acceptable.
151.	DE151	9.18.2.	Existing access acceptable.
152.	DE152	9.18.3.	Existing vents and ventilation acceptable.
153.	DE153	9.19.	Existing acceptable.

154.	DE154	9.20.2.2.	Used masonry may be reused for patching and filling openings to match adjacent work. Used interior brick may not be used for exterior applications.
155.	DE155	9.20.3.	Archaic mortars may be used to match existing jointing.
156.	DE156	9.20.4.1.	Sound jointing techniques may be employed to match existing archaic joints.
157.	DE157	9.20.12.1.	Corbelling may be constructed to match existing or original details, provided that it is structurally adequate for the proposed use.
158.	DE158	9.21.	Existing acceptable, provided the products of combustion are safely vented and provided no fire hazard is created.
159.	DE159	9.22.1. to 9.22.7.	Sound period materials, designs and techniques may be employed in recreated fireplaces, provided no fire hazard is created. Existing need not comply with Article 9.22.1.4.
160.	DE160	9.23.	Existing acceptable.
161.	DE161	9.24.	Existing acceptable.
162.	DE162	9.26.	Existing acceptable, except when removing and replacing shingles, comply with eave protection requirements in Subsection 9.26.5.
163.	DE163	9.27.	Existing acceptable.
164.	DE164	9.28.	All replacement or recreation of existing stucco may be compatible with the existing materials and application.
165.	DE165	9.29.4.	Existing acceptable. All replacement or recreation of existing plaster may be compatible with the existing materials and application.
166.	DE166	9.33.1.2.	Sound, used or antique *appliances* are acceptable, provided that: (a) visual examination shows no excessive weakening by corrosion or other damage, (b) no structural parts are missing, (c) no cracks are present in the components intended to support the *appliance* or enclose the fire, and (d) loading and ash removal door latches and hinges hold the door closed.
167.	DE167	9.37.	Sound used materials shall be acceptable for reuse, subject to the following limitations: (a) visual examination shows no excessive weakening by holes, notches, nail splits or other damage, and (b) logs have not been subjected to termite infestation.

74.	DE74	3.8.1.2.	Existing accessible entrance acceptable. (See *C.A.* DE78)

			Existing curb ramp conforming to Sentence 3.8.3.2.(3) is acceptable. Existing principal entrance acceptable, provided at least one *barrier-free* entrance is available.
75.	DE75	3.8.1.3.(1)	Existing unobstructed width of 920 mm minimum is acceptable.
76.	DE76	3.8.1.3.(4)	Existing unobstructed space not less than 1 500 mm in width and 1 500 mm in length located not more than 30 m apart is acceptable.
76.1	DE76.1	3.8.3.2.(3)(b)	Existing curb ramp acceptable, provided width not less than 1 200 mm.
77.	DE77	3.8.3.3.(1)	Existing doorway acceptable, provided not less than 810 mm wide.
77.1	DE77.1	3.8.3.3.(11)(a)	Existing distance acceptable, provided not less than 1 200 mm plus the width of any door that swings into the space in the path of travel.
78.	DE78	3.8.3.4.(1)(a)	Existing ramp acceptable, provided not less than 870 mm between handrails.
79.	DE79	3.8.3.8.(5)	Existing grab bar is acceptable.
79.1	DE79.1	3.8.3.12.	Existing universal washroom acceptable.
80.	DE80	3.8.3.13.(2)(f)	Existing grab bar is acceptable.
80.1	DE80.1	3.8.3.16.	Existing drinking fountain conforming to Clauses 3.8.3.16.(2)(a) and (b) acceptable.

Table 11.5.1.1.F.
Compliance Alternatives for Industrial Occupancies

Forming Part of Article 11.5.1.1.

Item	Col. 1	Column 2	Column 3
	NUMBER	**PART 3 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
1.	F1	3.1.4.7.	Existing *heavy timber construction* acceptable where *construction* is within 90% of member sizes listed in Part 3.
2.	F2	3.1.5.2. to 3.1.5.4.; 3.1.5.6.	Existing acceptable.
3.	F3	3.1.5.7. to 3.1.5.10.	Except for exposed foamed plastics, existing acceptable for “F2” and “F3” *occupancies*. To match existing, materials may be added from on or off site.
4.	F4	3.1.5.15. to 3.1.5.17.; 3.1.5.21.; 3.1.5.23.	Existing acceptable.
5.	F5	3.1.7.1.	*Fire-resistance ratings* may also be used where they are based on: 1. HUD Rehabilitation Guidelines, “Guideline on Fire Ratings of Archaic Materials and Assemblies”. 2. DBR Technical Paper No. 194, “Fire Endurance of Protected Steel Columns and Beams”.

			3. DBR Technical Paper No. 207, "Fire Endurance of Unit Masonry Walls". 4. DBR Technical Paper No. 222, "Fire Endurance of Light-Framed and Miscellaneous Assemblies".
6.	F6	3.1.7.5.(3)	Existing assemblies required to be of *noncombustible construction* may be supported by *combustible construction* having at least the same *fire-resistance rating* as that supported.
7.	F7	3.1.8.1.(2); 3.1.8.6.	Existing functional *closures* are acceptable and may be relocated within the same existing *fire separation*.
8.	F8	3.1.8.5.(2)	(a) Existing functional and sound doors in existing *buildings* that are either hollow metal or kalamein and containing wired glass at least 6 mm thick and conforming to Sentence 3.1.8.14.(2) are permitted in lieu of doors not required to exceed 45 min, (b) all existing functional and sound hollow metal or kalamein doors which carry existing 1.5 h labels are acceptable in lieu of current 1.5 h labels and may contain wired glass panels not exceeding 0.0645 m², at least 6 mm thick and conforming to Sentence 3.1.8.14.(2), and (c) every fire door, window assembly or glass block used as a *closure* in a required *fire separation* shall be installed in conformance with good engineering practice.
9.	F9	3.1.8.7.; 3.1.8.9.	*Fire dampers* or *fire stop flaps* are not required to be installed in existing ducts at penetrations of existing *fire separations*.
10.	F10	3.1.8.10.(1)	For existing unlabelled doors in existing *buildings*, at least 45 mm solid core wood or metal clad are acceptable.
11.	F11	3.1.8.11.(1)	Existing functionally operable devices acceptable for "F2" and "F3" *occupancies*.
12.	F12	3.1.8.13.	Existing functionally operable latching devices, excluding draw bolts, are acceptable.
13.	F13	3.1.8.14.	Existing transoms or sidelights located in required *fire separations* may be retained if wired glass, at least 6 mm thick, is securely fixed to a wood frame of at least 50 mm thickness with steel stops. Operable transoms shall be fixed closed.
14.	F14	3.1.8.15. to 3.1.8.17.	Existing acceptable.
15.	F15	3.1.11.	Where the concealed space is being materially altered, smoke or heat detection in that space in lieu of *fire blocks* and tied into fire alarm system is acceptable.
16.	F16	3.2.2.17.(1)(b) and (c)	Existing sprinkler systems in 1 *storey buildings* need not comply.

17.	F17	3.2.3.	Existing need not comply with Article 3.2.3.18. for "F2" *occupancy*. Existing windows. (a) Existing windows in walls may be relocated to another part of the wall, provided the existing opening is blocked up to provide the same fire rating for the wall, and the projection of the new opening, at a right angle to the property line onto another *building*, lies not closer than 300 mm from a window in such other *building*, where the "opposite" window is less than 2 400 mm from the opposite new opening, and (b) except relocation of units, shall be restricted to the same *fire compartment* and shall conform to the requirements of Article 3.2.3.14. or 9.10.12.3. where applicable, or (c) where a *building* does not satisfy the requirements of Subsection 3.2.3. for the amount of openings facing a yard or space that does not have sufficient *limiting distance*, such existing openings are allowed to be relocated provided: (i) such openings are not increased in size and they are protected with wired glass in steel frames conforming to Sentence 3.1.8.14.(2), or (ii) the *building* is *sprinklered*.
18.	F18	3.2.3.6.(3)	Existing roof soffit projections acceptable.
19.	F19	3.2.3.17.	Need not comply for "F2" *occupancy*.
20.	F20	3.2.4.	(a) Existing fire alarm system may remain except that Article 3.2.4.5. does not apply where the fire safety plan (as described in the Fire Code made under the *Fire Protection and Prevention Act, 1997*) for the *building* addresses the intent of Subsection 3.2.4. (i.e. "stage" system, electrical supervision, detection as required, Fire Department connection, and emergency power supply), and (b) extension of an existing system must ensure continuity and compatibility, and integrity of the system.
21.	F21	3.2.4.9.(2)(e)	Does not apply to existing installations in *buildings*.
22.	F22	3.2.4.10.(5)(c)	Does not apply to existing installations in *buildings*.
23.	F23	3.2.5.1; 3.2.5.2.	Existing acceptable.
24.	F24	3.2.5.3.	Existing access acceptable.
25.	F25	3.2.5.4. to 3.2.5.6.	Existing acceptable provided the *building* is *sprinklered*.
26.	F26	3.2.5.7.	Does not apply, except where a change in *major occupancy* occurs from a lesser *hazard index*.

27.	F27	3.2.5.13.	Existing sprinkler systems in existing *buildings* that do not conform to NFPA 13 may be altered, added to, or extended from the existing system without complying with NFPA 13, provided the system is operational and adequate with respect to coverage, water supply and controls, and provided the system is evaluated by a qualified designer.
28.	F28	3.2.9.	Does not apply to *buildings* 6 *storeys* and less of "F2" and "F3" *occupancies*. Does not apply to *sprinklered buildings*.
29.	F29	3.3.1.4.(1)	30 min is acceptable to separate *public corridors* or *exits* in *buildings* not exceeding 6 *storeys* in *building height*, except that 45 min is required for *exits* in *buildings* exceeding 3 *storeys* in *building height*. Except for *exits*, no rating required where *floor areas* are *sprinklered*.
30.	F30	3.3.1.5.(1)(c); Tables 3.3.1.5.A. and 3.3.1.5.B.	For "F2" and "F3" *occupancies* in Column 2, maximum area of room or *suite* to be unlimited.
31.	F31	3.3.1.9.	Existing width of *public corridors* of not less than 914 mm is acceptable.
32.	F32	3.3.1.9.(13) and (14)	Need not comply where connected balcony or area of refuge is provided in compliance with *C.A.* F39.
33.	F33	3.3.1.10.; 3.3.1.11.	Existing door swings may remain in *heritage buildings*, existing or being restored, with no change in *major occupancy* and with *occupant load* no greater than 100.
34.	F34	3.3.1.12.	Existing doors acceptable, provided not less than 600 mm wide.
35.	F35	3.3.1.15.	Existing curved or spiral stairs acceptable.
36.	F36	3.3.1.18.	Existing stained, etched, bevelled, leaded or figured glass acceptable.
37.	F37	3.3.5.4.(2), (3) and (5)	Existing acceptable.
38.	F38	3.3.5.6.; 3.3.5.7.	Need not comply where a gasketed door and self closer are provided in the existing *fire separation*.
39.	F39	3.4.1.4.	For "F2" and "F3" *occupancies*, the following types of *exits* may also be used for *buildings* not over 6 *storeys* in *building height*: (a) connected balconies, which connect across *firewalls*, or connect to another *exit*, or with access to grade, (b) areas of refuge where fire service rescue is possible and that comply with Measure L in Sentences (4) to (10), (18) and Clauses (20)(a), (b) and (d) in MMAH Supplementary Standard SB-4, "Measures for Fire Safety in High Buildings".
40.	F40	3.4.1.8.	Existing stained, etched, bevelled, leaded or figured glass acceptable.

41.	F41	3.4.2.5.(1)	For “F2” and “F3” *occupancies*, existing travel distance acceptable where the *floor area* is *sprinklered*.
42.	F42	3.4.3.2.(7)	For “F2” and “F3” *occupancies*, existing width of *exits* acceptable provided the *occupant load* is not more than 15% above the *exit* capacity.
43.	F43	3.4.3.4.	Existing acceptable.
44.	F44	3.4.3.5.	Existing headroom clearance of not less than 1 980 mm is acceptable.
45.	F45	3.4.4.1.	*Fire separations* of *exits* permitted in *buildings*: - 30 min, up to 3 *storeys* in *building height*; - 45 min, up to 6 *storeys* in *building height*; - 1 h, over 6 *storeys* in *building height*.
46.	F46	3.4.4.4.(8)	Existing washrooms opening directly into *exit* stairwell shall be separated from *exit* stairwell by 45 min *closure*.
47.	F47	3.4.5.1.(2) and (9)	Existing illuminated legible *exit* signs are acceptable.
48.	F48	3.4.6.1.	Existing acceptable.
49.	F49	3.4.6.2.	Existing acceptable, if visually apparent.
50.	F50	3.4.6.3.(1)	Existing acceptable with rise no greater than 3.7 m.
51.	F51	3.4.6.4.(1)	Existing acceptable.
52.	F52	3.4.6.4.(2) and (3)	Existing acceptable.
53.	F53	3.4.6.5.(2) to (11)	Existing acceptable.
54.	F54	3.4.6.6.(1) to (5)	Existing acceptable.
55.	F55	3.4.6.7.(1)	Existing acceptable.
56.	F56	3.4.6.8.	Existing acceptable.
57.	F57	3.4.6.9.	Existing acceptable.
58.	F58	3.4.6.10.(2) to (6)	Existing acceptable.
59.	F59	3.4.6.11.(1) and (2)	Existing acceptable.
60.	F60	3.4.6.12.	For “F2” and “F3” *occupancies*, existing acceptable in *public heritage buildings* or a change in *occupancy* with no increase in *occupant load*.
61.	F61	3.4.6.13.; 3.4.6.14.	Existing acceptable.
62.	F62	3.4.6.16.	Existing functionally operable panic hardware acceptable.
63.	F63	3.4.7.2.	*Combustible* fire escapes which are protected from fire in accordance with Sentence 3.2.3.13.(2) are permitted or may be reconstructed or recreated (as in the case of a *heritage building*).
64.	F64	3.5.1.	Existing acceptable, except where *building* classified under Subsection 3.2.6. and except where existing elevators are “open” type.
65.	F65	3.6.2.1.(7)	45 min *fire separation* acceptable.
66.	F66	3.6.2.2.	Existing acceptable where explosion-resistant *construction* or venting is provided.
67.	F67	3.6.2.6.	Existing acceptable.
68.	F68	3.6.2.7.(1)	2 h *fire separation* acceptable.

69.	F69	3.6.3.1.(1) to (5)	45 min *fire separation* acceptable up to 6 *storeys*.
70.	F70	3.6.3.3.	(a) Where 2 h *fire separation* is required, 1 h is acceptable. (b) Where 1 h *fire separation* is required, 45 min is acceptable. (c) Existing need not comply with Sentences 3.6.3.3.(4) and (5).
71.	F71	3.6.4.2.	Ceiling *fire separation* need not be fire-resistance rated where sprinklering, subject to *C.A.* F27, of *fire compartments* on both sides of vertical *fire separation* is provided and where such *fire separation* is not required to exceed 1 h.
72.	F72	3.6.4.3.(1)	Existing to meet *flame-spread rating* of 25 or to be *sprinklered*.
73.	F73	3.6.4.4. to 3.6.4.6.	Existing access acceptable.
74.	F74	3.7.4.	Where the *occupant load* is increased by more than 15% above the capacity of the existing facilities, facilities to be added to accommodate the increase.
	NUMBER	**PART 4 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
82.	F82	4.1.8.	The requirements under this Subsection do not apply.
	NUMBER	**PART 6 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
83.	F83	6.2.2.3.(1), (3) and (4)	*Storage garages* with a total capacity of fewer than 20 motor vehicles need not have mechanical ventilating systems if the downward slope of the floor to the outside door is 1 in 120 and the garage floor is above outside ground level.
84.	F84	6.2.3.2.; 6.2.3.9.; 6.2.3.18; 6.2.3.19.	Existing acceptable for “F2” and “F3” *occupancies*.
85.	F85	6.2.3.12.	Existing openings, grilles and diffusers acceptable.
86.	F86	6.2.9.2.	Existing acceptable for “F2” and “F3” *occupancies*.

	NUMBER	PART 8 REQUIREMENTS	PART 11 *COMPLIANCE ALTERNATIVE*
87.	F87	8.2.1.4.	Existing clearances acceptable where a *sewage system* is replaced with another *sewage system* within the same class and the capacity of the replacement *sewage system* does not exceed the capacity of the existing *sewage system*.
88.	F88	8.2.1.4.	Existing clearances are acceptable where a replacement *sewage system* requires lesser clearances than those required in Part 8 for the existing *sewage system.*
	NUMBER	**PART 9 REQUIREMENTS**	**PART 11 *COMPLIANCE ALTERNATIVE***
89.	F89	9.3.2.1.	Sound used lumber is acceptable for reuse without a grade stamp provided that: (a) visual examination shows no excessive weakening by holes, notches, nail splits or other damage, (b) where the grade or species is unknown, the minimum grade shall apply for span table use, and (c) lumber has not been subjected to termite infestation.
90.	F90	9.5.11.2.	Existing acceptable, provided not less than 600 mm.
91.	F91	9.6.1.2.(2) and (3); 9.6.1.4.(1) and (2)	Existing doors and sidelights being reused or relocated need not conform if identified or protected.
92.	F92	9.6.1.4.(3) and (4); 9.8.8.1.(7) and (9)	Existing barriers acceptable.
93.	F93	9.7.	Existing acceptable.
94.	F94	9.8.1. to 9.8.4.	Replacement or extension of existing stair systems shall be exempt from the provisions of these Articles, except that they shall have: (a) a minimum width between wall faces of 700 mm, and (b) a minimum clear height over tread nosing or landing of 1 800 mm.
95.	F95	9.8.4.3.	Existing curved or spiral stairs acceptable.
96.	F96	9.8.5.1.(2)	Existing ramps acceptable, where practical.
97.	F97	9.8.7.	Existing handrails acceptable, unless considered unsafe by *chief building official*.
98.	F98	9.8.8.	Existing *guards* acceptable, unless considered unsafe by *chief building official*.
99.	F99	9.8.9.6.(4)	Existing acceptable.
100.	F100	9.9.1.1.	Existing acceptable.
101.	F101	9.9.2.1.(1) to (3)	The following types of *exits* may also be used: (a) connected balconies, which connect across *firewalls*, or connect to another *exit*, or with access to grade, (b) areas of refuge approved by the *chief building official*, where fire service rescue is possible, or

			(c) *combustible* or *noncombustible* exterior stairways or fire escapes which are protected in accordance with Sentence 3.2.3.13.(2). These may be reconstructed or recreated (as in the case of a *heritage building*).
102.	F102	9.9.2.1.(4)	Existing acceptable.
103.	F103	9.9.3.2.	Existing width of *exits* acceptable.
104.	F104	9.9.3.3.	Existing width of *public corridors* of not less than 965 mm is acceptable.
105.	F105	9.9.3.4.	Existing clear height of not less than 1 950 mm is acceptable.
106.	F106	9.9.4.2.	30 min *fire separation* acceptable.
107.	F107	9.9.5.4.	Existing acceptable.
108.	F108	9.9.5.8.	Existing acceptable provided minimum 45 min *fire separation* and where explosion-resistant *construction* or venting is provided.
109.	F109	9.9.5.9.	Existing acceptable, provided that the enclosure has a 45 min *fire-resistance rating*.
110.	F110	9.9.6.3.	Existing door widths are acceptable, provided *exit* widths comply with *C.A.* F104.
111.	F111	9.9.6.5.	Existing door swings acceptable. Existing acceptable in *public heritage buildings*, where approved by *chief building official*.
112.	F112	9.9.6.6.(1)	Where *exit* doors open onto a landing, such doors shall not extend beyond the face of the first riser.
113.	F113	9.9.6.8.	Existing functionally operable passage or panic hardware acceptable.
114.	F114	9.9.7.4.	Maximum area of existing room or *suite* does not apply.
115.	F115	9.9.8.2.(1)	Existing travel distance acceptable where *floor area* is *sprinklered* and provided *fire separations* comply with Part 9.
116.	F116	9.9.11.3.	Existing illuminated legible signs are acceptable for *exit* signs, if approved by *chief building official*.
117.	F117	9.10.1.1.	Assemblies required to be of *noncombustible construction* may be supported by *combustible construction* having at least the same *fire-resistance rating* as that supported.
118.	F118	9.10.1.3.(8) to (10)	Existing acceptable subject to *C.A.*'s F27 and F28.
119.	F119	9.10.3.	*Fire-resistance ratings* may also be used where they are based on: 1. HUD Rehabilitation Guidelines, "Guideline on Fire Ratings of Archaic Materials and Assemblies". 2. DBR Technical Paper No. 194, "Fire Endurance of Protected Steel Columns and Beams". 3. DBR Technical Paper No. 207, "Fire Endurance of Unit Masonry Walls".

			4. DBR Technical Paper No. 222. Fire Endurance of Light-Framed and Miscellaneous Assemblies".
120.	F120	9.10.5.1.	Existing openings in existing wall or ceiling membranes to remain. Existing openings may be moved to another location in the same wall or ceiling, provided the aggregate area of openings does not increase and are not cumulative, and the existing opening is blocked up to provide the same rating as the existing wall or ceiling assembly.
121.	F121	9.10.6.2.	Existing *heavy timber construction* acceptable where *construction* is within 90% of the member sizes listed in Part 3.
122.	F122	9.10.7.	Existing acceptable for *heritage buildings*, subject to approval of *chief building official*.
123.	F123	9.10.8.1.	Existing 30 min rating acceptable.
124.	F124	9.10.8.2.	Existing sprinkler systems complying with *C.A.* F27 and Sentence 3.2.2.17.(1) are acceptable.
125.	F125	9.10.8.3.	Existing acceptable, subject to approval of *chief building official*.
126.	F126	9.10.8.8.	30 min rating acceptable.
127.	F127	9.10.9.7.; 9.10.9.9.	Existing acceptable in existing *fire separations*.
128.	F128	9.10.9.10.(1)	Ceiling *fire separation* need not be *fire-resistance rated* where sprinklering of *fire compartments* on both sides of vertical *fire separation* is provided and where such *fire separation* is not required to exceed 1 h.
129.	F129	9.10.9.11.(2)	In lieu of the 2 h *fire separation*, sprinklers may be used in the *medium hazard industrial occupancy* with a 1 h *fire separation*.
130.	F130	9.10.9.13.; 9.10.9.15.(1)	30 min *fire separation* acceptable.
131.	F131	9.10.10.3.(1)	45 min *fire separation* acceptable.
132.	F132	9.10.13.1.	Existing functional *closures* are acceptable subject to *C.A.* F8.
133.	F133	9.10.13.2.	Existing acceptable.
134.	F134	9.10.13.3.	Existing acceptable, provided that wood door frames are secured with hinge screws going through frame into the stud.
135.	F135	9.10.13.5.	Existing wired glass acceptable. Existing transoms or sidelights located in required *fire separations* may be retained if wired glass, at least 6 mm thick, is securely fixed to a wood frame of at least 50 mm thickness with steel stops. Operable transoms shall be fixed closed.
136.	F136	9.10.13.6.	Existing steel door frames acceptable.
137.	F137	9.10.13.7.	Existing glass block acceptable.
138.	F138	9.10.13.8.	Existing sizes acceptable.
139.	F139	9.10.13.9.	Existing operable latches acceptable.

140.	F140	9.10.13.10.(1)	Existing functionally operable self-closing devices acceptable.
141.	F141	9.10.13.11.	Existing operable self-releasing electromagnetic and fusible link hold-open devices acceptable.
142.	F142	9.10.13.12.	Existing swings acceptable.
143.	F143	9.10.14.4.	Existing windows. (a) Existing windows in walls may be relocated to another part of the wall, provided the existing opening is blocked up to provide the same fire rating for the wall, and the projection of the new opening, at a right angle to the property line onto another *building*, lies no closer than 300 mm from a window in such other *building*, where the "opposite" window is less than 2 400 mm from the opposite new opening, and (b) except relocation of units, to be restricted to the same *fire compartment* and shall conform to the requirements of Article 3.2.3.14. or 9.10.12.3. where applicable, or (c) where a *building* does not satisfy the requirements of Subsection 3.2.3. for the amount of openings facing a yard or space that does not have sufficient *limiting distance*, such existing openings are allowed to be relocated provided: (i) such openings are not increased in size and they are protected with wired glass in steel frames conforming to Sentence 3.1.8.14.(2), or (ii) the *building* is *sprinklered*.
144.	F144	9.10.16.2.(1)	Where balloon framing is exposed during renovation, *fire blocks* shall be provided.
145.	F145	9.10.18.	(a) Subject to approval by the *chief building official*, existing fire alarm system may remain where the fire safety plan (as described in the Fire Code made under the *Fire Protection and Prevention Act, 1997*) for the *building* addresses the intent of Subsection 3.2.4. (i.e. "stage" system, electrical supervision, detection as required, Fire Department connection, and emergency power supply), and (b) extension of an existing system must ensure continuity and compatibility, and integrity of the system.
146.	F146	9.10.20.	Existing access acceptable.
147.	F147	9.18.2.	Existing access acceptable.
148.	F148	9.18.3.	Existing vents and ventilation acceptable.
149.	F149	9.19.2.1.	Existing access acceptable.

150.	F150	9.20.2.2.	Used masonry may be reused for patching and filling openings to match adjacent work. Used interior brick may not be used for exterior applications.
151.	F151	9.20.3.	Archaic mortars may be used to match existing jointing.
152.	F152	9.20.4.1.	Sound jointing techniques may be employed to match existing archaic joints.
153.	F153	9.20.12.1.	Corbelling may be constructed to match existing or original details, provided that it is structurally adequate for the proposed use.
154.	F154	9.21.	Existing acceptable, provided the products of combustion are safely vented and provided no fire hazard is created.
155.	F155	9.22.1. to 9.22.7.	Sound period materials, designs and techniques may be employed in recreated fireplaces provided no fire hazard is created. Existing need not comply with Article 9.22.1.4.
156.	F156	9.23.	Existing acceptable.
157.	F157	9.24.	Existing acceptable.
158.	F158	9.26.	Existing acceptable.
159.	F159	9.27.	Existing acceptable.
160.	F160	9.28.	All replacement or recreation of existing stucco may be compatible with the existing materials and application.
161.	F161	9.29.4.	Existing acceptable. All replacement or recreation of existing plaster may be compatible with the existing materials and application.
162.	F162	9.33.1.2.	Sound, used or antique *appliances* are acceptable, provided that: (a) visual examination shows no excessive weakening by corrosion or other damage, (b) no structural parts are missing, (c) no cracks are present in the components intended to support the *appliance* or enclose the fire, and (d) loading and ash removal door latches and hinges hold the door closed.
163.	F163	9.37.	Sound used materials shall be acceptable for reuse, subject to the following limitations: (a) visual examination shows no excessive weakening by holes, notches, nail splits or other damage, and (b) logs have not been subjected to termite infestation.

75.	F75	3.8.1.2.	Existing accessible entrance acceptable. (See *C.A.* F79) Existing curb ramp conforming to Sentence 3.8.3.2.(3) is acceptable. Existing principal entrance acceptable, provided at least one *barrier-free* entrance is available.

76.	F76	3.8.1.3.(1)	Existing unobstructed width of 920 mm minimum is acceptable.
77.	F77	3.8.1.3.(4)	Existing unobstructed space not less than 1 500 mm in width and 1 500 mm in length located not more than 30 m apart is acceptable.
77.1	F77.1	3.8.3.2.(3)(b)	Existing curb ramp acceptable, provided width not less than 1 200 mm.
78	F78	3.8.3.3.(1)	Existing doorway acceptable, provided not less than 810 mm wide.
78.1	F78.1	3.8.3.3.(11)(a)	Existing distance acceptable, provided not less than 1 200 mm plus the width of any door that swings into the space in the path of travel.
79.	F79	3.8.3.4.(1)(a)	Existing ramp acceptable, provided not less than 870 mm between handrails.
80.	F80	3.8.3.8.(5)	Existing grab bar is acceptable.
80.1	F80.1	3.8.3.12.	Existing universal washroom acceptable.
81.	F81	3.8.3.13.(2)(f)	Existing grab bar is acceptable.
81.1	F81.1	3.8.3.16.	Existing drinking fountain conforming to Clauses 3.8.3.16.(2)(a) and (b) acceptable.

O. Reg. 332/12, Division B, Part 11; O. Reg. 151/13, ss. 33-37; O. Reg. 361/13, ss. 97-113.

PART 12
RESOURCE CONSERVATION AND ENVIRONMENTAL INTEGRITY

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12.2.	**Energy Efficiency, Carbon Dioxide Equivalents and Peak Electric Demand**
12.2.1.	**Energy Efficiency Design**
12.2.2.	**Carbon Dioxide Equivalents**
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12.3.	**Energy Efficiency for Buildings of Residential Occupancy Within the Scope of Part 9**
12.3.1.	**General**
12.4.	**Water Efficiency**
12.4.1.	**General**

Section 12.1. General

12.1.1. Application

12.1.1.1. Scope

(1) The scope of this Part shall be as described in Subsection 1.1.2. of Division A.

12.1.1.2. Application

(1) This Part applies to resource conservation and environmental integrity in the design and *construction* of *buildings*.

Section 12.2. Energy Efficiency, Carbon Dioxide Equivalents and Peak Electric Demand

12.2.1. Energy Efficiency Design

12.2.1.1. Energy Efficiency Design Before January 1, 2017

(1) This Article applies to *construction* for which a permit has been applied for before January 1, 2017.

(2) Except as provided in Sentences (3) and (4), the energy efficiency of all *buildings* shall conform to Division 1 and Division 2 or 4 of MMAH Supplementary Standard SB-10, "Energy Efficiency Requirements".

(3) Except as provided in Sentence (4), the energy efficiency of a *building* or part of a *building* of *residential occupancy* that is within the scope of Part 9 and is intended for occupancy on a continuing basis during the winter months shall,

(a) meet the performance level that is equal to a rating of 80 or more when evaluated in accordance with NRCan, "EnerGuide for New Houses: Administrative and Technical Procedures", or

(b) conform to Chapters 1 and 2 of MMAH Supplementary Standard SB-12, "Energy Efficiency for Housing".

(4) This Article does not apply to,

(a) a *farm building*,

(b) a *building* that does not use electrical power or fossil fuel,

(c) a manufactured *building* described in Article 9.1.1.9., or

(d) a seasonal recreational *building* described in Section 9.36. or 9.38.

12.2.1.2. Energy Efficiency Design After December 31, 2016

(1) This Article applies to *construction* for which a permit has been applied for after December 31, 2016.

(2) Except as provided in Sentences (3) and (4), the energy efficiency of all *buildings* shall,

(a) be designed to exceed by not less than 13% the energy efficiency levels required by Sentence 12.2.1.1.(2), or

(b) conform to Division 1 and Division 3 or 5 of MMAH Supplementary Standard SB-10, "Energy Efficiency Requirements".

(3) Except as provided in Sentence (4), the energy efficiency of a *building* or part of a *building* of *residential occupancy* that is within the scope of Part 9 and is intended for occupancy on a continuing basis during the winter months shall,

(a) be designed to exceed by not less than 15% the energy efficiency levels required by Sentence 12.2.1.1.(3), or

(b) conform to Chapters 1 and 3 of MMAH Supplementary Standard SB-12, "Energy Efficiency for Housing".

(4) This Article does not apply to,

(a) a *farm building*,

(b) a *building* that does not use electrical power or fossil fuel,

(c) a manufactured *building* described in Article 9.1.1.9., or

(d) a seasonal recreational *building* described in Section 9.36. or 9.38.

12.2.2. Carbon Dioxide Equivalents

12.2.2.1. Carbon Dioxide Equivalents

(1) Except as provided in Sentence (2), all *buildings* shall be designed to conform to the CO_2e emission requirements set out in MMAH Supplementary Standard SB-10, "Energy Efficiency Requirements".

(2) This Article does not apply to,

(a) a *building* or part of a *building* of *residential occupancy* that is within the scope of Part 9 and is intended for occupancy on a continuing basis during the winter months,

(b) a *farm building*,

(c) a *building* that does not use electrical power or fossil fuel,

(d) a manufactured *building* described in Article 9.1.1.9., or

(e) a seasonal recreational *building* described in Section 9.36. or 9.38.

12.2.3. Peak Electric Demand

12.2.3.1. Peak Electric Demand

(1) Except as provided in Sentence (2), all *buildings* shall be designed to conform to the peak electric demand requirements set out in MMAH Supplementary Standard SB-10, "Energy Efficiency Requirements".

(2) This Article does not apply to,

(a) a *building* or part of a *building* of *residential occupancy* that is within the scope of Part 9 and is intended for occupancy on a continuing basis during the winter months,

(b) a *farm building*,

(c) a *building* that does not use electrical power or fossil fuel,

(d) a manufactured *building* described in Article 9.1.1.9., or

(e) a seasonal recreational *building* described in Section 9.36. or 9.38.

12.2.4. Motion Sensors

12.2.4.1. Motion Sensors

(1) Lighting installed to provide the minimum illumination levels required by this Code may be controlled by motion sensors except where the lighting,

(a) is installed in an *exit*,

(b) is installed in a corridor serving patients or residents in a Group B, Division 2 or Division 3 *occupancy*, or

(c) is required to conform to Sentence 3.2.7.1.(6).

(2) Where motion sensors are used to control minimum lighting in a *public corridor* or corridor providing *access to exit* for the public, the motion sensors shall be installed with switch controllers equipped for fail-safe operation and illumination timers set for a minimum 15-minute duration.

(3) A motion sensor shall not be used to control emergency lighting.

Section 12.3. Energy Efficiency for Buildings of Residential Occupancy Within the Scope of Part 9

12.3.1. General

12.3.1.1. Application

(1) This Section applies to the energy efficiency of a *building* or part of a *building* of *residential occupancy* that is within the scope of Part 9 and is intended for occupancy on a continuing basis during the winter months.

12.3.1.2. Windows and Sliding Glass Doors

(1) The energy rating and the overall coefficient of heat transfer required for windows and sliding glass doors shall be determined in conformance with,

(a) CAN/CSA-A440.2, “Fenestration Energy Performance”, or

(b) NFRC 100, “Procedure for Determining Fenestration Product U-factors” and NFRC 200, “Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence”.

12.3.1.3. Temperature Control in Dwelling Units

(1) Except as provided in Sentence (3) and except where space heating energy is provided by a solid fuel-burning *appliance* or a ground source heat pump, the indoor air temperature in a *dwelling unit* shall be controlled by at least one programmable thermostatic control device.

(2) The programmable thermostatic control device required in Sentence (1) shall,

(a) allow the setting of different air temperatures for at least,

(i) four time periods per day, and

(ii) two different day-types per week,

(b) include a manual override, and

(c) allow the setting of the air temperature to,

(i) 13°C or lower in heating mode, and

(ii) 29°C or higher in cooling mode, where *air-conditioning* is provided.

(3) A manual thermostatic control device is permitted if it,

(a) controls a heating or cooling system where the heating or cooling capacity is not more than 2 kW, or

(b) serves an individual room or space.

12.3.1.4. Hot Water Piping Insulation

(1) Hot water pipes that are vertically connected to a hot water storage tank shall have heat traps on both inlet and outlet piping as close as practical to the tank, except where the tank,

(a) has an integral heat trap, or

(b) serves a recirculating system.

(2) The first 2.5 m of hot water outlet piping of a hot water storage tank serving a non-recirculating system shall be insulated to provide a thermal resistance of not less than RSI 0.62.

(3) The inlet pipe of a hot water storage tank between the heat trap and the tank serving a non-recirculating system shall be insulated to provide a thermal resistance of not less than RSI 0.62.

12.3.1.5. Residential Furnaces After December 31, 2014

(1) Sentence (2) applies to *construction* for which a permit has been applied for after December 31, 2014.

(2) A furnace serving a *dwelling unit* shall be equipped with a brushless direct current motor.

12.3.1.6. Energy Supply for Kitchen and Laundry Facilities After December 31, 2014

(1) This Article applies to *construction* for which a permit has been applied for after December 31, 2014.

(2) In order to supply energy to cooking appliances and clothes dryers, every kitchen and laundry space shall be provided with,

(a) an electrical outlet,

(b) a natural gas line, or

(c) a propane line.

Section 12.4. Water Efficiency

12.4.1. General

12.4.1.1. Plumbing Systems

(1) All *buildings* shall conform to the water efficiency requirements of Subsection 7.6.4.

O. Reg. 332/12, Division B, Part 12; O. Reg. 361/13, ss. 114-119.

DIVISION C
ADMINISTRATIVE PROVISIONS

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GENERAL

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Section 1.1. Administration

1.1.1. Administration

1.1.1.1. Conformance with Administrative Requirements

(1) This Code shall be administered in conformance with the Act.

Section 1.2. Design and General Review

1.2.1. Design

1.2.1.1. Application

(1) Article 1.2.1.2. applies with respect to a *building* described in clause 11 (3) (a) or (b) of the *Architects Act* or subsection 12 (4) or clause 12 (5) (a) of the *Professional Engineers Act*.

1.2.1.2. Design by Architect or Professional Engineer

(1) Where the *foundations* of a *building* are to be *constructed* below the level of the footings of an adjacent *building* and within the angle of repose of the *soil*, as drawn from the bottom of the footings, the *foundations* shall be designed by a *professional engineer*.

(2) A sprinkler protected glazed wall assembly described in Article 3.1.8.18. of Division B shall be designed by a *professional engineer*.

(3) A *shelf and rack storage system* described in Section 3.16. of Division B shall be designed by a *professional engineer*.

(4) The time-based egress analysis for a *shelf and rack storage system* described in Sentence 3.16.1.7.(7) of Division B shall be prepared or provided by an *architect* or a *professional engineer* or a combination of both.

(5) The supporting framing structure and anchorage system for a tent occupying an area greater than 225 m^2 shall be designed by a *professional engineer*.

(6) A sign structure attached in any manner to a *building* shall be designed by an *architect* or a *professional engineer* or a combination of both where it is,

(a) a projecting sign that weighs more than 115 kg, or

(b) a roof sign that has any face that is more than 10 m^2.

(7) A projecting sign attached in any manner to a parapet wall shall be designed by an *architect* or a *professional engineer* or a combination of both.

1.2.2. General Review

1.2.2.1. General Review by Architect or Professional Engineer

(1) The *construction*, including, for greater certainty, enlargement or alteration, of every *building* or part of it described in Table 1.2.2.1. shall be reviewed by an *architect* or a *professional engineer* or a combination of both as set out in Column 3 of the Table.

Table 1.2.2.1.(4)
General Review

Forming Part of Sentence 1.2.2.1.(1)

Item	Column 1 *Building* Classification by *Major Occupancy*	Column 2 *Building* Description	Column 3 General Review by:
1.	*Assembly occupancy* only	Every *building*	*Architect* and *professional engineer*(1)
2.	*Assembly occupancy* and any other *major occupancy* except *industrial*	Every *building*	*Architect* and *professional engineer*(1)
3.	*Care, care and treatment* or *detention occupancy* only	Every *building*	*Architect* and *professional engineer*(1)
4.	*Care, care and treatment* or *detention occupancy* and any other *major occupancy* except *industrial*	Every *building*	*Architect* and *professional engineer*(1)
5.	*Residential occupancy* only	Every *building* that exceeds 3 *storeys* in *building height*	*Architect* and *professional engineer*(1)
		Every *building* that exceeds 600 m^2 in *gross area* and that contains a *residential occupancy* other than a *dwelling unit* or *dwelling units*	*Architect*(2)
6.	*Residential occupancy* only	Every *building* that exceeds 600 m^2 in *gross area* and contains a *dwelling unit* above another *dwelling unit*	*Architect*(2)
		Every *building* that exceeds 600 m^2 in *building area*, contains 3 or more *dwelling units* and has no *dwelling unit* above another *dwelling unit*	*Architect*(2)
7.	*Residential occupancy* and any other *major occupancy* except *assembly, care, care and treatment, detention* or *industrial occupancy*	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*Architect* and *professional engineer*(1)
8.	*Business and personal services occupancy* only	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*Architect* and *professional engineer*(1)

9.	*Business and personal services occupancy* and any other *major occupancy* except *assembly*, *care*, *care and treatment*, *detention* or *industrial occupancy*	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*Architect* and *professional engineer*(1)
10.	*Mercantile occupancy* only	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*Architect* and *professional engineer*(1)
11.	*Mercantile occupancy* and any other *major occupancy* except *assembly*, *care*, *care and treatment*, *detention* or *industrial occupancy*	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*Architect* and *professional engineer*(1)
12.	*Industrial occupancy* only and where there are no subsidiary *occupancies*	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*Architect* or *professional engineer*(3)
13.	*Industrial occupancy* and one or more other *major occupancies* where the portion of the area occupied by one of the other *major* or subsidiary *occupancies* exceeds 600 m^2	The non-industrial portion of every *building*	*Architect* and *professional engineer*(1)
		The industrial portion of every *building*	*Architect* or *professional engineer*(3)
14.	*Industrial occupancy* and one or more other *major occupancies* where no portion of the area occupied by one of the other *major* or subsidiary *occupancies* exceeds 600 m^2	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*Architect* or *professional engineer*(3)

Notes to Table 1.2.2.1.:

(1) An *architect* shall provide general review services within the practice of architecture and a *professional engineer* shall provide general review services within the practice of professional engineering.

(2) An *architect* may engage a *professional engineer* to provide general review services within the practice of professional engineering.

(3) Only a *professional engineer* may provide general review services within the practice of professional engineering.

(4) Requirements for general review by an *architect* or a *professional engineer* or a combination of both for the *construction*, including, for greater certainty, enlargement or alteration, of a *building* are set out in the *Architects Act* and the *Professional Engineers Act*.

(2) A person who intends to *construct* or have *constructed* a *building* or part of it required by Sentences (1) and (4) to (9) to be reviewed by an *architect* or a *professional engineer* or a combination of both, shall ensure that an *architect*, *professional engineer* or both are retained to undertake the general review of the *construction* of the *building* in accordance with the performance standards of the Ontario Association of Architects or the Association of Professional Engineers of Ontario, as applicable, to determine whether

the *construction* is in general conformity with the plans, sketches, drawings, graphic representations, specifications and other documents that form the basis for the issuance of a permit under section 8 of the Act or any changes to it authorized by the *chief building official*.

(3) The *architect*, *professional engineer* or both who have been retained to undertake the general review of the *construction* of a *building*, shall forward copies of written reports arising out of the general review to the *chief building official* or *registered code agency*, as the case may be.

(4) Where the *foundations* of a *building* are to be *constructed* below the level of the footings of an adjacent *building* and within the angle of repose of the *soil*, as drawn from the bottom of the footings, the *construction* of the *foundations* shall be reviewed by a *professional engineer*.

(5) The *construction* of a sprinkler protected glazed wall assembly described in Article 3.1.8.18. of Division B shall be reviewed by a *professional engineer*.

(6) The *construction* of a *shelf and rack storage system* described in Section 3.16. of Division B shall be reviewed by a *professional engineer*.

(7) The *construction* of a supporting framing structure and anchorage system for a tent occupying an area greater than 225 m^2 shall be reviewed by a *professional engineer*.

(8) The *construction* of a sign structure shall be reviewed by an *architect* or a *professional engineer* or a combination of both, where the sign is,

(a) a ground sign that exceeds 7.5 m in height above the adjacent finished ground,

(b) a projecting sign that weighs more than 115 kg, or

(c) a roof sign that has any face that is more than 10 m^2.

(9) The *construction* of a projecting sign attached in any manner to a parapet wall shall be reviewed by an *architect*, *professional engineer* or a combination of both.

1.2.2.2. Restriction for General Review

(1) Only an *architect* may carry out or provide the general review of the *construction* of a *building*,

(a) that is *constructed* in accordance with a design prepared or provided by an *architect*, or

(b) in relation to services that are provided by an *architect* in connection with the design in accordance with which the *building* is *constructed*.

(2) Only a *professional engineer* may carry out or provide the general review of the *construction* of a *building*,

(a) that is *constructed* in accordance with a design prepared or provided by a *professional engineer*, or

(b) in relation to services that are provided by a *professional engineer* in connection with the design in accordance with which the *building* is *constructed*.

1.2.2.3. Demolition of a Building

(1) The applicant for a permit respecting the *demolition* of a *building* shall retain a *professional engineer* to undertake the general review of the project during *demolition*, where,

(a) the *building* exceeds 3 *storeys* in *building height* or 600 m² in *building area*,

(b) the *building* structure includes pre-tensioned or post-tensioned members,

(c) it is proposed that the *demolition* will extend below the level of the footings of any adjacent *building* and occur within the angle of repose of the *soil*, as drawn from the bottom of such footings, or

(d) explosives or a laser are to be used during the course of *demolition*.

Section 1.3. Permits and Inspections

1.3.1. Permits

1.3.1.1. Requirement for Permits

(1) A person is exempt from the requirement to obtain a permit under section 8 of the Act,

(a) for the *demolition* of a *building* located on a farm,

(b) subject to Sentence (2), for the *construction* or *demolition* of a *building* in territory without municipal organization, or

(c) for the *construction* of a Class 1 *sewage system*.

(2) The exemption in Clause (1)(b) from the requirement to obtain a permit does not apply to the *construction* of a *sewage system* in territory without municipal organization.

(3) The application for a permit respecting the *demolition* of a *building* to which Sentence 1.2.2.3.(1) applies shall include descriptions of the structural design characteristics of the *building* and the method of *demolition* of the *building*.

(4) No person shall commence *demolition* of a *building* or any part of a *building* before the *building* has been vacated by the occupants except where the safety of the occupants is not affected.

(5) A tent or group of tents is exempt from the requirement to obtain a permit under section 8 of the Act and is exempt from compliance with the Code provided that the tent or group of tents are,

(a) not more than 60 m^2 in aggregate ground area,

(b) not attached to a *building*, and

(c) constructed more than 3 m from other structures.

1.3.1.2. Applications for Permits under Section 8 of the Act

(1) An application for a permit under section 8 of the Act to *construct* or *demolish* a *building* shall be made by,

(a) the owner of the property on which the proposed *construction* or *demolition* is to take place, or

(b) the authorized agent of the owner referred to in Clause (a).

(2) An application referred to in Sentence (1) shall be in a form approved by the *Minister*.

(3) In Sentence (1),

"owner" includes, in respect of the property on which the *construction* or *demolition* will take place, the registered owner, a lessee and a mortgagee in possession.

1.3.1.3. Period Within Which a Permit is Issued or Refused

(1) Subject to Sentences (2) and (3) and unless the circumstances set out in Sentence (6) exist, if an application for a permit under subsection 8 (1) of the Act that meets the requirements of Sentence (5) is submitted to a *chief building official*, the *chief building official* shall, within the time period set out in Column 2 of Table 1.3.1.3. corresponding to the class of *building* described in Column 1 of Table 1.3.1.3. for which the application is made,

(a) issue the permit, or

(b) refuse to issue the permit and provide in writing all of the reasons for the refusal.

(2) If an application for a permit under subsection 8 (1) of the Act proposes *construction* or *demolition* of two or more *buildings* of different classes described in Column 1 of Table 1.3.1.3. that have different time periods in Column 2 of Table 1.3.1.3., the longer of the time periods shall be the time period for the purposes of Sentence (1).

(3) If an application for a permit under subsection 8 (1) of the Act proposes *construction* or *demolition* of a *building* described in Sentence (4), the time period for the purposes of Sentence (1) shall be the longer of,

(a) 10 days, and

(b) the time period corresponding to the class of the *building* described in Column 1 of Table 1.3.1.3. that the *building* described in Sentence (4) serves, if any.

(4) A *building* referred to in Sentence (3) is,

(a) a structure occupying an area of 10 m^2 or less that contains *plumbing*, including the *plumbing* appurtenant to it,

(b) *plumbing* not located in a structure,

(c) a *sewage system*, or

(d) a structure designated in Article 1.3.1.1. of Division A.

(5) The requirements that an application for a permit under subsection 8 (1) of the Act must meet for the purposes of Sentence (1) are,

(a) that the application is made in the form described in Sentence 1.3.1.2.(2),

(b) that the applicant for the permit is a person described in Clause 1.3.1.2.(1)(a) or (b),

(c) that all applicable fields on the application form and required schedules are completed,

(d) that all required schedules are submitted with the application,

(e) that payment is made of all fees that are required, under the applicable by-law, resolution or regulation made under clause 7 (1) (c) of the Act, to be paid when the application is made, and

(f) that the applicant has declared in writing that,

(i) the application meets all the requirements set out in Clauses (a) to (e),

(ii) the application is accompanied by the plans and specifications prescribed by the applicable by-law, resolution or regulation made under clause 7 (1) (b) of the Act,

(iii) the application is accompanied by the information and documents prescribed by the applicable by-law, resolution or regulation made under clause 7 (1) (b) of the Act which enable the *chief building official* to determine whether the proposed *building*, *construction* or *demolition* will contravene any *applicable law*, and

(iv) the proposed *building*, *construction* or *demolition* will not contravene any *applicable law*.

(6) The *chief building official* is not required to make a decision within the time period required by Sentence (1) with respect to an application that meets the requirements of Sentence (5) if the *chief building official*,

(a) determines that,

(i) the application is not accompanied by the plans, specifications, information and documents referred to in Subclauses (5)(f)(ii) and (iii), or

(ii) the proposed *building*, *construction* or *demolition* will contravene any *applicable law*, and

(b) advises the applicant of his or her determination and provides in writing the reasons for the determination within two days.

(7) Subject to Sentences (9) and (10), the time period described in Sentences (1) to (3) and in Clause (6)(b) shall begin on the day following the day on which an application that meets the requirements of Sentence (5) is submitted to the *chief building official*.

(8) The time periods described in Column 2 of Table 1.3.1.3. and in Clause (6)(b) shall not include Saturdays, holidays and all other days when the offices of the *principal authority* are not open for the transaction of business with the public.

(9) The time period in Sentence (10) applies where,

(a) an application is made for the *construction* of a *building* that is served by a *sewage system*,

(b) *construction* is proposed in respect of the *sewage system* that serves the *building*, and

(c) a board of health, conservation authority, planning board or the council of an upper-tier municipality is responsible for the enforcement of the provisions of the Act and this Code related to the *sewage system* under section 3.1 of the Act or pursuant to an agreement under section 6.2 of the Act.

(10) The time period described in Sentences (1) to (3) and in Clause (6)(b) for an application referred to in Clause (9)(a) shall begin on the day following the later of,

(a) the day on which an application that meets the requirements of Sentence (5) is submitted to the *chief building official*, and

(b) the day on which a permit for the *construction* of the *sewage system* referred to in Clause (9)(b) is issued.

Table 1.3.1.3.
Period Within Which Permit Shall be Issued or Refused

Forming Part of Article 1.3.1.3.

Item	Column 1 Class of *Building*	Column 2 Time Period
1.	(a) A detached house, semi-detached house, townhouse, or row house where no *dwelling unit* is located above another *dwelling unit*. (b) A detached structure that serves a *building* described in Clause (a) and does not exceed 55 m^2 in *building area*. (c) A tent to which Section 3.14. of Division B applies. (d) A sign to which Section 3.15. of Division B applies.	10 days
2.	(a) *Buildings* described in Clause 1.1.2.4.(1)(a), (b) or (c) of Division A, other than *buildings* described in Column 1 of any of Items 1 and 4 of this Table. (b) *Farm buildings* that do not exceed 600 m^2 in *building area*.	15 days
3.	(a) *Buildings* described in Clause 1.1.2.2.(1)(a) or (b) of Division A, other than *buildings* described in Column 1 of any of Items 1 and 4 of this Table. (b) *Farm buildings* exceeding 600 m^2 in *building area*.	20 days
4.	(a) *Post-disaster buildings*. (b) *Buildings* to which Subsection 3.2.6. of Division B or any provision in Articles 3.2.8.3. to 3.2.8.11. of Division B applies.	30 days

1.3.1.4. Permits Under Section 10 of the Act

(1) Except as provided in Sentence (2), the following changes in use of a *building* or part of a *building* constitute an increase in hazard for the purposes of section 10 of the Act and require a permit under section 10 of the Act:

(a) a change of the *major occupancy* of all or part of a *building* that is designated with a "Y" in Table 1.3.1.4. takes place,

(b) a *suite* of a Group C *major occupancy* is converted into more than one *suite* of Group C *major occupancy*,

(c) a *suite* or part of a *suite* of a Group A, Division 2 or a Group A, Division 4 *major occupancy* is converted to a *gaming premises*,

(d) a *farm building* or part of a *farm building* is changed to a *major occupancy*,

(e) a *building* or part of a *building* is changed to a *post-disaster building*,

(f) a *building* or part of a *building* is changed to a retirement home regulated under the *Retirement Homes Act, 2010*, or

(g) the use of a *building* or part of a *building* is changed and the previous *major occupancy* of the *building* or part of the *building* cannot be determined.

Table 1.3.1.4.
Permit Required for Change of Use

Forming Part of Sentence 1.3.1.4.(1)[1]

		FROM[2]												
		A-1	A-2	A-3	A-4	B-1	B-2	B-3	C	D	E	F-1	F-2	F-3
TO[3]	A-1	N[5]	Y	Y	N[5]	Y	Y	Y	Y	Y	Y	Y	Y	Y
	A-2	Y	N[5]	Y	N[5]	Y	Y	Y	Y	Y	Y	Y	Y	Y
	A-3	Y	Y	N[5]	N[5]	Y	Y	Y	Y	Y	Y	Y	Y	Y
	A-4	Y	Y	Y	N[5]	Y	Y	Y	Y	Y	Y	Y	Y	Y
	B-1	Y	Y	Y	N[5]	N[5]	Y	Y	Y	Y	Y	Y	Y	Y
	B-2	Y	Y	Y	N[5]	Y	N[5]	Y	Y	Y	Y	Y	Y	Y
	B-3	Y	Y	Y	N[5]	Y	N[5]	N[5]	Y	Y	Y	Y	Y	Y
	C	Y	Y	Y	N[5]	Y	N[5]	N[5]	[4]	Y	Y	Y	Y	Y
	D	N[5]	N[5]	Y	N[5]	Y	N[5]	N[5]	Y	N[5]	Y	Y	N[5]	N[5]
	E	Y	Y	Y	N[5]	Y	Y	Y	Y	Y	N[5]	Y	Y	Y
	F-1	Y	Y	Y	N[5]	Y	Y	Y	Y	Y	Y	N[5]	Y	Y
	F-2	Y	Y	Y	N[5]	Y	Y	Y	Y	Y	Y	N[5]	N[5]	Y
	F-3	Y	N[5]	Y	N[5]	Y	Y	Y	Y	N[5]	N[5]	N[5]	N[5]	N[5]

Notes to Table 1.3.1.4.:

[1] See Clause 1.3.1.4.(1)(a), Subclause 3.17.1.1.(1)(a)(i) of Division B and Clause 9.40.1.1.(1)(a) of Division B.

[2] *Major occupancy* of all or part of a *building* before change of use.

[3] *Major occupancy* of all or part of a *building* after change of use.

[4] See Clause 1.3.1.4.(1)(b), Subclause 3.17.1.1.(1)(a)(ii) of Division B and Clauses 9.40.1.1.(1)(b) and 11.4.2.3.(1)(b) of Division B.

[5] "N" is only applicable where the *major occupancy* of the entire *suite* is changed.

(2) A person is exempt from the requirement to obtain a permit under section 10 of the Act where the change in use of the *building* or part of the *building* will result from proposed *construction* and a permit under section 8 of the Act has been issued in respect of such *construction*.

(3) A person is exempt from the requirement to obtain a permit under section 10 of the Act for the change of use of a *building* in unorganized territory.

1.3.1.5. Conditional Permits

(1) The *chief building official* shall not issue a conditional permit for any stage of *construction* under subsection 8 (3) of the Act unless compliance with the following applicable laws has been achieved in respect of the proposed *building* or *construction*:

(a) regulations made by a conservation authority under clause 28 (1) (c) of the *Conservation Authorities Act* with respect to permission of the authority for the *construction* of a *building* or structure if, in the opinion of the authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development,

(b) section 5 of the *Environmental Assessment Act* with respect to the approval of the Minister or the Environmental Review Tribunal to proceed with an undertaking,

(c) subsection 24 (3) of the *Niagara Escarpment Planning and Development Act*,

(d) subsection 27 (3) of the *Ontario Heritage Act*,

(e) subsection 30 (2) of the *Ontario Heritage Act* with respect to a consent of the council of a *municipality* to the alteration or *demolition* of a *building* where the council of the *municipality* has given a notice of intent to designate the *building* under subsection 29 (3) of that Act,

(f) section 33 of the *Ontario Heritage Act* with respect to the consent of the council of a *municipality* for the alteration of property,

(g) section 34 of the *Ontario Heritage Act* with respect to the consent of the council of a *municipality* for the *demolition* of a *building*,

(h) section 34.5 of the *Ontario Heritage Act* with respect to the consent of the Minister to the alteration or *demolition* of a designated *building*,

(i) subsection 34.7 (2) of the *Ontario Heritage Act* with respect to a consent of the Minister to the alteration or *demolition* of a *building* where the Minister has given a notice of intent to designate the *building* under section 34.6 of that Act,

(j) by-laws made under section 40.1 of the *Ontario Heritage Act*,

(k) section 42 of the *Ontario Heritage Act* with respect to the permit given by the council of a *municipality* for the erection, alteration or *demolition* of a *building*.

(2) For the purposes of issuing a conditional permit under subsection 8 (3) of the Act, a person is exempt from the requirement in clause 8 (3) (a) of the Act of compliance with by-laws passed under sections 34 and 38 of the *Planning Act* where,

(a) a committee of adjustment has made a decision under section 45 of the *Planning Act* authorizing one or more minor variances from the provisions of any by-laws made under sections 34 and 38 of that Act,

(b) such minor variance or variances result in the achievement of full compliance with such by-laws, and

(c) no person informed the committee of adjustment of objections to the minor variances either in writing or in person at the hearing of the application.

(3) For the purposes of issuing a conditional permit under subsection 8 (3) of the Act, a person is exempt from the requirement in clause 8 (3) (a) of the Act of compliance with by-laws passed under sections 34 and 38 of the *Planning Act* where the *construction* in respect of which the conditional permit is issued is required in order to comply with an order issued under subsection 21 (1) of the *Fire Protection and Prevention Act, 1997* or under subsection 15.9 (4) of the Act.

(4) A permit issued under subsection 8 (3) of the Act shall indicate its conditional nature.

1.3.1.6. Information to be given to Tarion Warranty Corporation

(1) This Article prescribes, for the purposes of subsection 8 (8.1) of the Act, the information relating to permits issued under section 8 of the Act and the applications for those permits that the *chief building official* is required to give to *Tarion Warranty Corporation* and the time within which the information is required to be given.

(2) The *chief building official* shall give the following information to *Tarion Warranty Corporation* with respect to permits issued under section 8 of the Act in respect of the *construction* of *buildings* described in Sentence (4),

(a) the dates the permits are issued and the numbers or other identifying symbols for the permits, and

(b) the information contained in the application forms submitted in respect of the permits, other than the information contained in the schedules or other attachments to the application forms.

(3) Despite Sentence (2), the *chief building official* is not required to give to *Tarion Warranty Corporation* information which relates to the extension or material alteration or repair of an existing *building*.

(4) The *buildings* referred to in Sentence (2) are any *building* whose proposed use is classified as a Group C *major occupancy* and which is not a *boarding, lodging or rooming house* or a *building* containing a *hotel*.

(5) The *chief building official* shall give the information described in Sentence (2) within 45 days after the day on which the permits to which the information relates are issued.

(6) The time period described in Sentence (5) shall not include Saturdays, holidays and all other days when the offices of the *principal authority* are not open for the transaction of business with the public.

1.3.2. Site Documents

1.3.2.1. Permit Posting

(1) Where a permit has been issued pursuant to the Act, the person to whom it is issued shall have the permit or a copy of it posted at all times during *construction* or *demolition* in a conspicuous place on the property in respect of which the permit was issued.

1.3.2.2. Documentation on Site

(1) The person in charge of the *construction* of the *building* shall keep and maintain on the site of the *construction*,

(a) at least one copy of drawings and specifications certified by the *chief building official* or a person designated by the *chief building official* to be a copy of those submitted with the application for the permit to *construct* the *building*, together with changes that are authorized by the *chief building official* or a person designated by the *chief building official*,

(b) copies of authorizations of the Building Materials Evaluation Commission on the basis of which the permit was issued, and

(c) copies of rulings of the *Minister*, made under clause 29 (1) (a) or (c) of the Act, on the basis of which the permit was issued.

1.3.3. Occupancy of Buildings

1.3.3.1. Occupancy Permit — General

(1) Except as permitted in Sentence 1.3.3.2.(1), a person may occupy or permit to be occupied any *building* or part of it that has not been fully completed at the date of occupation where the *chief building official* or a person designated by the *chief building official* has issued a permit authorizing occupation of the *building* or part of it prior to its completion in accordance with Sentence (3).

(2) Sentence (1) does not apply in respect of the occupancy of a *building* to which Article 1.3.3.4. or 1.3.3.5. applies.

(3) The *chief building official* or a person designated by the *chief building official* shall issue a permit authorizing occupation of a *building*, where,

(a) the structure of the *building* or part of it is completed to the roof,

(b) the enclosing walls of the *building* or part of them are completed to the roof,

(c) the walls enclosing the space to be occupied are completed, including balcony *guards*,

(d) all required *fire separations* and *closures* are completed on all *storeys* to be occupied,

(e) all required *exits* are completed, including all *fire separations*, doors, door hardware, self-closing devices, *guards* and handrails, from the uppermost floor to be occupied down to *grade* level and below if an *exit* connects with lower *storeys*,

(f) all shafts including *closures* are completed to the floor-ceiling assembly above the *storey* to be occupied and have a temporary *fire separation* at such assembly,

(g) measures have been taken to prevent access to parts of the *building* and site that are incomplete or still under construction,

(h) floors, halls, lobbies and required *means of egress* are free of loose materials and other hazards,

(i) if *service rooms* should be in operation, required *fire separations* and *closures* are completed,

(j) all *building drains*, *building sewers*, *water systems*, *drainage systems* and *venting systems* are complete and tested as operational for the *storeys* to be occupied,

(k) required lighting, heating and electrical supply are provided for the *suites*, rooms and common areas to be occupied,

(l) required lighting in corridors, stairways and *exits* is completed and operational up to and including all *storeys* to be occupied,

(m) required standpipe, sprinkler and fire alarm systems are complete and operational up to and including all *storeys* to be occupied, together with required pumper connections for such standpipes and sprinklers,

(n) required fire extinguishers have been installed on all *storeys* to be occupied,

(o) main garbage rooms, chutes and ancillary services are completed to all *storeys* to be occupied,

(p) required firefighting access routes have been provided and are accessible, and

(q) the *sewage system* has been completed and is operational.

(4) Where a *registered code agency* has been appointed to perform the functions described in clause 4.1 (4) (b) or (c) of the Act in respect of the *construction* of the *building*, the *chief building official* or a person designated by the *chief building official* shall issue the permit referred to in Sentence (3) after receipt of a *certificate for the occupancy of a building not fully completed* issued by the *registered code agency* in respect of the *building*.

1.3.3.2. Conditions for Residential Occupancy

(1) A person may occupy or permit to be occupied a *building* intended for *residential occupancy* that has not been fully completed at the date of occupation provided that,

(a) the *building*,

(i) is of three or fewer *storeys* in *building height* and has a *building area* not exceeding 600 m²,

(ii) has not more than 1 *dwelling unit* above another *dwelling unit*,

(iii) has not more than 2 *dwelling units* sharing a common *means of egress*, and

(iv) has no accommodation for tourists,

(b) the following *building* components and systems are complete, operational and inspected:

(i) required *exits*, handrails and *guards*, fire alarm and detection systems, and *fire separations*,

(ii) required exhaust fume barriers and self-closing devices on doors between an attached or built-in garage and a *dwelling unit*,

(iii) water supply, sewage disposal, lighting and heating systems, and

(iv) protection of foamed plastics required by Article 9.10.17.10. of Division B,

(c) the following *building* components and systems are complete, operational, inspected and tested:

(i) *water systems*,

(ii) *building drains* and *building sewers*, and

(iii) *drainage systems* and *venting systems*, and

(d) where applicable, the *building* conforms to Article 9.1.1.7. of Division B.

(2) Sentence (1) does not apply in respect of the occupancy of a *building* to which Article 1.3.3.4. or 1.3.3.5. applies.

1.3.3.3. Notification

(1) Where a person has occupied or permitted the occupancy of a *building* under Article 1.3.3.1. or 1.3.3.2., such person shall notify the *chief building official* forthwith upon completion of the *building*.

1.3.3.4. Occupancy Permit — Certain Buildings of Residential Occupancy

(1) No person shall occupy or permit to be occupied a *building* described in Sentence (3), or part of it, unless the *chief building official* or a person designated by the *chief building official* has issued a permit authorizing occupation of the *building* or part of it in accordance with Sentence (4).

(2) This Article does not apply in respect of the occupancy of an existing *building*, or part of it, that has been subject to extension or material alteration or repair.

(3) A *building* referred to in Sentence (1) is a *building* intended for *residential occupancy* that,

(a) is of three or fewer *storeys* in *building height* and has a *building area* not exceeding 600 m²,

(b) has no accommodation for tourists,

(c) does not have a *dwelling unit* above another *dwelling unit*, and

(d) does not have any *dwelling units* sharing a common *means of egress*.

(4) The *chief building official* or a person designated by the *chief building official* shall issue a permit authorizing occupation of a *building* described in Sentence (3), where,

(a) the structure of the *building* with respect to the *dwelling unit* to be occupied is substantially complete and ready to be used for its intended purpose,

(b) the *building* envelope, including, but not limited to, cladding, roofing, windows, doors, assemblies requiring *fire-resistance ratings*, *closures*, insulation, *vapour barriers* and air barriers, with respect to the *dwelling unit* to be occupied, is substantially complete,

(c) the walls enclosing the *dwelling unit* to be occupied conform to Sentence 9.25.2.3.(7) of Division B,

(d) required electrical supply is provided for the *dwelling unit* to be occupied,

(e) required firefighting access routes to the *building* have been provided and are accessible,

(f) the following *building* components and systems are complete and operational for the *dwelling unit* to be occupied:

(i) required *exits*, floor access and egress systems, handrails, *guards*, *smoke alarms*, carbon monoxide alarms and *fire separations*, including, but not limited to, *fire stops*,

(ii) required exhaust fume barriers and self-closing devices on doors between an attached or built-in garage and the *dwelling unit*,

(iii) water supply, sewage disposal, lighting and heating systems, and

(iv) protection of foamed plastics required by Article 9.10.17.10. of Division B,

(g) the following *building* components and systems are complete, operational and tested for the *dwelling unit* to be occupied:

(i) *water system*,

(ii) *building drain* and *building sewer*, and

(iii) *drainage system* and *venting system*,

(h) required *plumbing fixtures* in the *dwelling unit* to be occupied are substantially complete and operational, and

(i) where applicable, the *building* conforms to Article 9.1.1.7. of Division B with respect to the *dwelling unit* to be occupied.

(5) Where a *registered code agency* has been appointed to perform the functions described in clause 4.1 (4) (b) or (c) of the Act in respect of the *construction* of a *building* described in Sentence (3), the *chief building official* or a person designated by the *chief building official* shall issue the permit referred to in Sentence (4) after receipt of a *certificate for the occupancy of a building described in Sentence 1.3.3.4.(3) of Division C* issued by the *registered code agency* in respect of the *building*.

1.3.3.5. Occupancy Permit — Buildings within the scope of Article 3.2.2.43A. or 3.2.2.50A.

(1) No person shall occupy or permit to be occupied a *building* within the scope of Article 3.2.2.43A. or 3.2.2.50A. of Division B, or part of it, unless the *chief building official* or a person designated by the *chief building official* has issued a permit authorizing occupation of the *building* or part of it in accordance with Sentence (3).

(2) This Article does not apply in respect of the occupancy of an existing *building*, or part of it, that has been subject to extension or material alteration or repair.

(3) The *chief building official* or a person designated by the *chief building official* shall issue a permit authorizing occupation of a *building* described in Sentence (1), where,

(a) the structure of the *building* is completed to the roof,

(b) the *building* envelope, including, but not limited to, cladding, roofing, windows, doors, assemblies requiring *fire-resistance ratings*, *closures*, insulation, *vapour barriers* and air barriers, is complete,

(c) the walls enclosing the space to be occupied are completed, including balcony *guards*,

(d) all required *fire separations* and *closures* are completed,

(e) all required *exits* are completed, including all *fire separations*, doors, door hardware, self-closing devices, *guards* and handrails,

(f) all shafts including *closures* are completed,

(g) measures have been taken to prevent access to parts of the *building* and site that are incomplete or still under construction,

(h) floors, halls, lobbies and required *means of egress* are free of loose materials and other hazards,

(i) if *service rooms* should be in operation, required *fire separations* and *closures* are completed,

(j) all *building drains*, *building sewers*, *water systems*, *drainage systems* and *venting systems* are complete and tested as operational for the *storeys* to be occupied,

(k) required lighting, heating and electrical supply are provided for the *suites*, rooms and common areas to be occupied,

(l) required lighting in corridors, stairways and *exits* is completed and operational,

(m) required standpipe, sprinkler and fire alarm systems are complete and operational, together with required pumper connections for such standpipes and sprinklers,

(n) required *smoke alarms* and carbon monoxide alarms are complete and operational,

(o) required fire extinguishers have been installed,

(p) main garbage rooms, chutes and ancillary services are completed to all *storeys* to be occupied,

(q) required firefighting access routes have been provided and are accessible, and

(r) the *sewage system* has been completed and is operational.

(4) Where a *registered code agency* has been appointed to perform the functions described in clause 4.1 (4) (b) or (c) of the Act in respect of the *construction* of a *building* described in Sentence (1), the *chief building official* or a person designated by the *chief building official* shall issue the permit referred to in Sentence (3) after receipt of a *certificate for the occupancy of a building described in Sentence 1.3.3.5.(1) of Division C* issued by the *registered code agency* in respect of the *building*.

1.3.4. Fire Department Inspection

1.3.4.1. Fire Department Approval

(1) Subject to Sentence (2), if the council of a *municipality* assigns specific responsibility for the enforcement of any portion of this Code respecting fire safety matters to an *inspector* who is the chief of the fire department of the *municipality*, the *chief building official* shall not issue a permit to *construct* a *building* unless the *inspector* approves the drawings submitted with the application for the permit as complying with that portion of this Code.

(2) If a *registered code agency* has been appointed under clause 4.1 (4) (a) or (c) of the Act,

(a) a *municipality* shall not assign responsibility under Sentence (1) to the chief of the fire department with respect to a *building* for which the *registered code agency* has been appointed, and

(b) any assignment of responsibility under Sentence (1) with respect to a *building* for which the *registered code agency* is appointed shall be cancelled as of the date of the appointment.

1.3.5. Notices and Inspections

1.3.5.1. Prescribed Notices

(1) This Article sets out the notices that are required under section 10.2 of the Act.

(2) The person to whom a permit under section 8 of the Act is issued shall notify the *chief building official* or, where a *registered code agency* is appointed under the Act in respect of the *construction* to which the notice relates, the *registered code agency* of,

(a) readiness to *construct* footings,

(b) substantial completion of footings and *foundations* prior to commencement of backfilling,

(c) substantial completion of structural framing and ductwork and piping for heating and *air-conditioning* systems, if the *building* is within the scope of Part 9 of Division B,

(d) substantial completion of structural framing and roughing-in of heating, ventilation, *air-conditioning* and air-contaminant extraction equipment, if the *building* is not a *building* to which Clause (c) applies,

(e) substantial completion of insulation and *vapour barriers*,

(f) substantial completion of *air barrier systems*,

(g) substantial completion of all required *fire separations* and *closures* and all fire protection systems including standpipe, sprinkler, fire alarm and emergency lighting systems,

(h) substantial completion of fire access routes,

(i) readiness for inspection and testing of,

(i) *building sewers* and *building drains*,

(ii) *water service pipes*,

(iii) *fire service mains*,

(iv) *drainage systems* and *venting systems*,

(v) the *water distribution system*, and

(vi) *plumbing* fixtures and *plumbing* appliances,

(j) readiness for inspection of suction and gravity outlets, covers and suction piping serving outlets of an *outdoor pool* described in Clause 1.3.1.1.(1)(j) of Division A, a *public pool* or a *public spa*,

(k) substantial completion of the circulation / *recirculation system* of an *outdoor pool* described in Clause 1.3.1.1.(1)(j) of Division A, a *public pool* or *public spa* and substantial completion of the pool before it is first filled with water,

(l) readiness to *construct* the *sewage system*,

(m) substantial completion of the installation of the *sewage system* before the commencement of backfilling,

(n) substantial completion of installation of *plumbing* not located in a structure, before the commencement of backfilling,

(o) completion of *construction* and installation of components required to permit the issue of an occupancy permit under Sentence 1.3.3.1.(3) or to permit occupancy under Sentence 1.3.3.2.(1), if the *building* or part of the *building* to be occupied is not fully completed, and

(p) completion of *construction* and installation of components required to permit the issue of an occupancy permit under Sentence 1.3.3.4.(4) or 1.3.3.5.(3).

1.3.5.2. Additional Notices

(1) A by-law, resolution or regulation made by a *principal authority* under clause 7 (1) (e) of the Act may require that notice of one or more of the following stages of *construction* be given by the person to whom a permit is issued under section 8 of the Act:

(a) commencement of *construction* of the *building*,

(b) substantial completion of structural framing for each *storey*, if the *building* is a type of *building* that is within the scope of Division B, other than Part 9,

(c) commencement of *construction* of,

(i) masonry fireplaces and masonry *chimneys*,

(ii) factory-built fireplaces and allied *chimneys*, or

(iii) *stoves*, ranges, *space heaters* and add-on *furnaces* using solid fuels and allied *chimneys*,

(d) substantial completion of interior finishes,

(e) substantial completion of heating, ventilating, *air-conditioning* and air-contaminant extraction equipment,

(f) substantial completion of exterior cladding,

(g) substantial completion of site grading,

(h) substantial completion of the pool deck and dressing rooms for a *public pool* or *public spa* and readiness for inspection of the emergency stop system for a *public pool* or *public spa*,

(i) completion and availability of drawings of the *building* as constructed, and

(j) completion of a *building* for which an occupancy permit is required under Article 1.3.3.4. or 1.3.3.5.

1.3.5.3. Prescribed Inspections

(1) Except as provided in Sentence (2), an *inspector* or *registered code agency*, as the case may be, shall, not later than two days after receipt of a notice given under Sentence 1.3.5.1.(2), undertake a site inspection of the *building* to which the notice relates.

(2) Where a notice given under Sentence 1.3.5.1.(2) relates to matters described in Clause 1.3.5.1.(2)(l) or (m), an *inspector* or *registered code agency*, as the case may be, shall, not later than five days after receipt of the notice, undertake a site inspection of the *sewage system* to which the notice relates.

(3) When undertaking an inspection required under Sentence (1) or (2), the *inspector* or *registered code agency*, as the case may be, may consider reports concerning whether the *building* or a part of the *building* complies with the Act or this Code.

(4) The time periods referred to in Sentences (1) and (2) shall begin on the day following the day on which the notice is given.

(5) The time periods referred to in Sentences (1) and (2) shall not include Saturdays, holidays and all other days when the offices of the *principal authority* are not open for the transaction of business with the public.

1.3.5.4. Construction of Sewage Systems

(1) The following information is prescribed for the purposes of subsection 15.12 (3) of the Act and must be provided to the *chief building official* before the commencement of the *construction* of a *sewage system*:

(a) the information described in Sentence 3.3.4.1.(2) as it relates to,

(i) the person registered under Article 3.3.3.2., and

(ii) the person with the qualifications described in Clause 3.3.3.2.(1)(a) who will supervise *construction* on-site of the *sewage system*, and

(b) the name and telephone number of the representative of the person described in Subclause (a)(i) who may be contacted by the *chief building official* in respect of the *construction* of the *sewage system*.

1.3.5.5. Orders

(1) An order issued under subsection 12 (2), 13 (1) or (6), 14 (1) or 15.10.1 (2) or clause 18 (1) (f) of the Act shall be in a form approved by the *Minister*.

1.3.6. As Constructed Plans

1.3.6.1. Application

(1) Where a by-law, resolution or regulation has been made by a *principal authority* under clause 7 (1) (g) of the Act, the *chief building official* may require that *as constructed plans* for the whole of, or any part or system of, a *building* or any class of *buildings* be provided by the persons responsible for the *construction*.

Section 1.4. Search Warrant

1.4.1. Forms

1.4.1.1. Information & Warrant Forms

(1) An information to obtain a warrant to enter and search a *building*, receptacle or place under subsection 21 (1) of the Act shall be in Form 1.4.1.1.A.

(2) A warrant to enter and search a *building*, receptacle or place under subsection 21 (1) of the Act shall be in Form 1.4.1.1.B.

FORM 1.4.1.1.A.
INFORMATION TO OBTAIN SEARCH WARRANT UNDER SECTION 21 OF THE BUILDING CODE ACT, 1992

Building Code Act, 1992

ONTARIO COURT OF JUSTICE
PROVINCE OF ONTARIO
This is the information of _____
(name)
of _____, _____
(address) (occupation)
I have reasonable ground to believe and do believe that the offence of _____
_____ contrary to *Building Code Act, 1992*
Section _____ has been committed and that the entry into and search of a certain building, receptacle or place, namely,

_____
(building, receptacle or place)

_____
of _____, at _____
(owner) (address)
will afford the following evidence: _____

_____
(describe evidence to be searched for, including things to be seized, if any)
relevant to the commission of the offence.
And I further say that my grounds for so believing are:

_____

_____

Therefore, I request that a search warrant be issued to
enter into and search the said _____
(building, receptacle or place)
_____ for the said evidence.

Check appropriate box

enter into and search the said _____
(building, receptacle or place)
_____ for the said evidence and to seize the following things: _____
(describe things to be seized)

_____
Informant

Sworn before me at _____,
this _____ day of _____, _____

_____
Provincial Judge or Justice of the Peace in and for the Province o Ontario

FORM 1.4.1.1.B.
SEARCH WARRANT UNDER SECTION 21 OF THE BUILDING CODE ACT, 1992

Building Code Act, 1992

ONTARIO COURT OF JUSTICE
PROVINCE OF ONTARIO
To: _____

Whereas, on the information on oath of _____, I am satisfied that there is reasonable ground to believe that the offence of _____ contrary to *Building Code Act, 1992* Section _____ has been committed and that

_____
(describe evidence to be searched for, including things to be seized, if any)

_____
that there is reasonable ground to believe will afford evidence of the said offence may be found at _____

_____
(building, receptacle or place)

of _____, at _____
(owner) (address)

hereinafter called the premises.
This is therefore to authorize you to enter such _____

_____
(name or location of building, receptacle or place)

between the hours of 6:00 a.m. and 9:00 p.m., or _____
(time warrant to be executed)

and to search for the said evidence.

Check appropriate box

and to search for the said evidence and to seize the following things: _____
(describe things to be seized)

and carry them before me or another Provincial Judge or Justice of the Peace so that they may be dealt with according to the law.

This warrant expires on the _____ day of _____, _____, a day not later than the fifteenth day after its issue.
Issued at _____,
this _____ day of _____, _____

_____
Provincial Judge or Justice of the Peace in and for the Province of

Section 1.5. Designated Persons and Powers

1.5.1. General

1.5.1.1. General

(1) The *director* and employees in the Ministry of Municipal Affairs and Housing who work under the supervision of the *director* and are specified by the *director* are designated for the purposes of the enforcement of the Act and this Code in relation to the qualifications of,

(a) *chief building officials*,

(b) *inspectors*,

(c) *registered code agencies*,

(d) persons engaging in the activities described in subsection 15.11 (5) of the Act, and

(e) persons engaged in the business of *constructing* on site, installing, repairing, servicing, cleaning or emptying *sewage systems*.

(2) The *director* may, for the purposes set out in Sentence (1), exercise the following powers under the Act of a *chief building official*:

(a) certify for the purposes of subsection 37 (2) of the Act statements as to any matter of record in the office of the *director*, and

(b) apply for an order under section 38 of the Act.

(3) The employees in the Ministry of Municipal Affairs and Housing designated by the *director* may, for the purposes set out in Sentence (1), exercise the following powers under the Act of an *inspector*:

(a) subject to section 16 of the Act, exercise the powers of entry for inspection purposes in subsection 12 (1) of the Act, and

(b) exercise the powers of an *inspector* under section 18 of the Act.

(4) Sections 15.23 and 19 of the Act apply to the exercise of powers under this Article by the *director* and employees in the Ministry of Municipal Affairs and Housing designated by the *director*.

Section 1.6. Prescribed Person

1.6.1. General

1.6.1.1. General

(1) The *director* is prescribed for the purposes of section 38.1 of the Act.

Section 1.7. Enforcement of the Provisions of the Act and this Code Related to Sewage Systems

1.7.1. General

1.7.1.1. General

(1) The boards of health and conservation authorities listed in Column 1 of Table 1.7.1.1. are prescribed, for the purposes of subsection 3.1 (1) of the Act, as the boards of health and conservation authorities that are responsible for the enforcement of the provisions of the Act and this Code related to *sewage systems* in the *municipalities* and territory without municipal organization prescribed in Column 2 of Table 1.7.1.1.

Table 1.7.1.1.
Enforcement of the provisions of the Act and this Code Related to Sewage Systems

Forming Part of Sentence 1.7.1.1.(1)

Item	Column 1	Column 2
	Board of Health or Conservation Authority	Geographic Area
1.	Board of Health of the Northwestern Health Unit	All *municipalities* and territory without municipal organization located in the Northwestern Health Unit
2.	Board of Health of the Thunder Bay District Health Unit	All *municipalities* and territory without municipal organization located in the Thunder Bay District Health Unit
3.	Board of Health of the Porcupine Health Unit	All *municipalities* and territory without municipal organization located in the Porcupine Health Unit
4.	Board of Health of the Algoma Health Unit	All *municipalities* and territory without municipal organization located in the Algoma Health Unit
5.	Board of Health of the Sudbury and District Health Unit	All *municipalities* and territory without municipal organization located in the Sudbury and District Health Unit
6.	Board of Health of the Timiskaming Health Unit	All *municipalities* and territory without municipal organization located in the Timiskaming Health Unit
7.	North Bay-Mattawa Conservation Authority	All *municipalities* and territory without municipal organization located in: a. the District of Nipissing, except those parts of the District of Nipissing located in the Timiskaming Health Unit, and b. the District of Parry Sound, except for the Township of The Archipelago, the geographic Townships of Blair, Brown, Harrison, Henvey, Mowat and Wallbridge and the unsurveyed territory north of the geographic Township of Henvey to the French River.

Section 1.8. Language

1.8.1. Language

1.8.1.1. Language Used on Required Signs

(1) All required signs in this Code shall be displayed in the English language or in the English and French languages, including operational material on all life safety equipment and devices.

Section 1.9. Fees

1.9.1. Fees

1.9.1.1. Annual Report

(1) The report referred to in subsection 7 (4) of the Act shall contain the following information in respect of fees authorized under clause 7 (1) (c) of the Act:

(a) total fees collected in the 12-month period ending no earlier than three months before the release of the report,

(b) the direct and indirect costs of delivering services related to the administration and enforcement of the Act in the area of jurisdiction of the *principal authority* in the 12-month period referred to in Clause (a),

(c) a breakdown of the costs described in Clause (b) into at least the following categories:

(i) direct costs of administration and enforcement of the Act, including the review of applications for permits and inspection of *buildings*, and

(ii) indirect costs of administration and enforcement of the Act, including support and overhead costs, and

(d) if a reserve fund has been established for any purpose relating to the administration or enforcement of the Act, the amount of the fund at the end of the 12-month period referred to in Clause (a).

(2) The *principal authority* shall give notice of the preparation of a report under subsection 7 (4) of the Act to every person and organization that has requested that the *principal authority* provide the person or organization with such notice and has provided an address for the notice.

1.9.1.2. Change of Fees

(1) Before passing a by-law or resolution or making a regulation under clause 7 (1) (c) of the Act to introduce or change a fee imposed for applications for a permit, for the issuance of a permit or for a maintenance inspection, a *principal authority* shall,

(a) hold the public meeting required under subsection 7 (6) of the Act,

(b) ensure that a minimum of 21 days notice of the public meeting is given in accordance with Clause (c), including giving 21 days notice to every person and organization that has, within five years before the day of the public meeting, requested that the *principal authority* provide the person or organization with such notice and has provided an address for the notice,

(c) ensure that the notice under Clause (b),

(i) sets out the intention of the *principal authority* to pass the by-law or resolution or make a regulation under section 7 of the Act and whether the by-law, resolution or regulation would impose any fee that was not in effect on the day the notice is given or would change any fee that was in force on the day the notice is given,

(ii) is sent by regular mail to the last address provided by the person or organization that requested the notice in accordance with Clause (b), and

(iii) sets out the information described in Clause (d) or states that the information will be made available at no cost to any member of the public upon request, and

(d) make the following information available to the public:

(i) an estimate of the costs of administering and enforcing the Act by the *principal authority*,

(ii) the amount of the fee or of the change to the existing fee, and

(iii) the rationale for imposing or changing the fee.

Section 1.10. Sewage System Maintenance Inspection Programs

1.10.1. Discretionary Maintenance Inspection Programs

1.10.1.1. Scope

(1) This Subsection governs, for the purposes of subsection 34 (2.1) of the Act, *maintenance inspection programs* established under clause 7 (1) (b.1) of the Act in respect of *sewage systems*.

1.10.1.2. Application and Inspections

(1) A *maintenance inspection program* referred to in Sentence 1.10.1.1.(1) shall apply to all *sewage systems* in the area affected by the *maintenance inspection program*.

(2) A *maintenance inspection program* referred to in Sentence 1.10.1.1.(1) shall provide that, subject to Article 1.10.1.3., an *inspector* shall inspect all *sewage systems* affected by the *maintenance inspection program* for compliance with the standards prescribed under clause 34 (2) (b) of the Act in relation to *sewage systems* that are enforced by the program.

1.10.1.3. Certificate as Alternative to Maintenance Inspection

(1) A *principal authority* that establishes a *maintenance inspection program* in respect of *sewage systems* may, as an alternative to conducting an inspection of a *sewage system* required under Sentence 1.10.1.2.(2) accept a certificate described in Sentence (2) from the owner of the property on which the *sewage system* is located.

(2) The certificate referred to in Sentence (1) shall,

(a) be in a form approved by the *Minister*,

(b) be signed by a person described in Sentence (3), and

(c) confirm that the person,

(i) has conducted an inspection of the *sewage system* to which the certificate relates, and

(ii) is satisfied on reasonable grounds that, on the date on which the certificate is signed, the *sewage system* to which the certificate relates is in compliance with the standards prescribed under clause 34 (2) (b) of the Act in relation to *sewage systems* that are enforced by the *maintenance inspection program*.

(3) Subject to Sentence (4), the following persons are authorized to sign a certificate referred to in Sentence (1):

(a) a person registered under Article 3.2.4.2. in the class of registration set out in Column 1 of Item 10 of Table 3.5.2.1.,

(b) a person registered under Article 3.3.3.2.,

(c) an *architect*,

(d) a *professional engineer*.

(4) A person shall not sign a certificate referred to in Sentence (1) if the person would be in a conflict of interest.

(5) For the purposes of Sentence (4), a person would be in a conflict of interest if the person, or an officer, director, partner or employee of the person (where the person is a corporation or partnership), or any person engaged by the person to perform functions for the person,

(a) has participated or participates, in any capacity, in *design activities* or *construction* relating to any part of the *sewage system* to which the certificate relates,

(b) is or has been employed within the previous 180 days by a person who carried out *design activities* or *construction* relating to any part of the *sewage system* to which the certificate relates,

(c) has a professional or financial interest in,

(i) the *construction* of the *sewage system* to which the certificate relates,

(ii) the *sewage system* to which the certificate relates, or

(iii) the person responsible for the design of the *sewage system* to which the certificate relates, or

(d) is an elected official, officer or employee of a *principal authority*.

1.10.2. Mandatory Maintenance Inspection Program

1.10.2.1. Scope

(1) This Subsection establishes and governs, for the purposes of subsection 34 (2.2) of the Act, a *maintenance inspection program* in respect of standards prescribed under clause 34 (2) (b) of the Act in relation to *sewage systems*.

1.10.2.2. Administration of Maintenance Inspection Program

(1) The *principal authority* that has jurisdiction in an area affected by the *maintenance inspection program* established under Sentence 1.10.2.3.(1) shall administer the program for that area and shall conduct inspections under the program in accordance with this Subsection.

1.10.2.3. Maintenance Inspection Program

(1) Subject to Article 1.10.2.5., an *inspector* shall inspect all *sewage systems* located in whole or in part in the areas set out in Sentence (2) for compliance with the requirements of Section 8.9. of Division B.

(2) The areas referred to in Sentence (1) are:

(a) the strip of land that is located along the *Lake Simcoe shoreline* and that is 100 m wide measured horizontally and perpendicular to and upland from the *Lake Simcoe shoreline*, except for the portions of the strip of land that are described in Sentence (3),

(a.1) portions of the strip of land along the *Lake Simcoe shoreline* described in Sentence (3),

(a.2) the strip of land that is located along each of the following rivers, streams, lakes or ponds and that is 100 m wide measured horizontally and perpendicular to and upland from the river, stream, lake or pond,

(i) any river or stream in the *Lake Simcoe watershed* that continually flows in an average year,

(ii) any lake or pond in the *Lake Simcoe watershed* that is connected on the surface to a river or stream described in Subclause (i), and

(iii) any other lake or pond in the *Lake Simcoe watershed* that has a surface area greater than 8 hectares, and

(b) areas within a *vulnerable area* that are located in a *source protection area* and that are identified in the most recent of the following documents as the areas where an activity described in Sentence (4) is or would be a *significant drinking water threat*:

(i) the assessment report for the *source protection area*, as initially approved under the *Clean Water Act, 2006* or as most recently approved following any updating under that Act, or

(ii) the *source protection plan* for the *source protection area*, as initially approved under the *Clean Water Act, 2006* or as most recently approved following any amendments or reviews under that Act.

(3) The excepted portions of the strip of land along the *Lake Simcoe shoreline* referred to in Clause (2)(a) are:

(a) that portion of the strip of land in the geographic Township of Oro, now in the municipal Township of Oro-Medonte, in the County of Simcoe, and in the geographic Townships of Innisfil and Vespra, now in the City of Barrie, being bounded on the north by the east limit of Lot 1, Concession 1 East Penetanguishene Road of the said geographic Township of Oro and its southerly prolongation and on the south by the east limit of Lot 14, Concession 13 of the said geographic Township of Innisfil and its northerly prolongation,

(b) that portion of the strip of land in the geographic Townships of North Gwillimbury and Georgina, now in the Town of Georgina, and in the geographic Township of East Gwillimbury, now in the Town of East Gwillimbury, all in The Regional Municipality of York, being bounded on the west by the west limit of Lot 6, Concession 1 of the said geographic Township of North Gwillimbury and its northerly prolongation and on the east by the east limit of Lot 3, Concession 8 of the said geographic Township of Georgina and its northerly prolongation, and

(c) that portion of the strip of land in the geographic Township of Mara, now in the municipal Township of Ramara, in the County of Simcoe, and in the geographic Township of Thorah, now in the municipal Township of Brock, in The Regional Municipality of Durham, being bounded on the north by the west limit of Lot 13, Concession C of the said geographic Township of Mara and its southerly prolongation and on the south by the west limit of Lot 14, Concession 6 of the said geographic Township of Thorah and its northerly prolongation.

(4) The activity referred to in Clause (2)(b) is an activity that is subject to the Act and that is described in paragraph 2 of subsection 1.1 (1) of Ontario Regulation 287/07 (General) made under the *Clean Water Act, 2006*.

1.10.2.4. Time Periods for Maintenance Inspections

(1) An inspection required under Sentence 1.10.2.3.(1) shall be conducted in respect of a *sewage system* in an area described in Clause 1.10.2.3.(2)(a),

(a) initially, no later than,

(i) January 1, 2016, in the case of a *sewage system constructed* before January 1, 2011, or

(ii) five years after the *construction* of the *sewage system*, in the case of a *sewage system constructed* on or after January 1, 2011, and

(b) thereafter, every five years after the most recent inspection of the *sewage system* has been conducted.

(1.1) An inspection required under Sentence 1.10.2.3.(1) shall be conducted in respect of a *sewage system* in an area described in Clause 1.10.2.3.(2)(a.1) or (a.2),

(a) initially, no later than,

(i) January 1, 2021, in the case of a *sewage system constructed* before January 1, 2016, or

(ii) five years after the *construction* of the *sewage system*, in the case of a *sewage system constructed* on or after January 1, 2016, and

(b) thereafter, every five years after the most recent inspection of the *sewage system* has been conducted.

(2) An inspection required under Sentence 1.10.2.3.(1) shall be conducted in respect of a *sewage system* in an *area affected by a significant drinking water threat*,

(a) initially, no later than,

(i) five years after the date on which notice of the approval of one of the following documents is published on the environmental registry under the *Clean Water Act, 2006*, in the case of a *sewage system constructed* before the date of publication,

(A) the assessment report for the *source protection area*, if the *source protection plan* is one prepared under section 22 of the *Clean Water Act, 2006*, or

(B) the *source protection plan* for the *source protection area*, if the *source protection plan* is one prepared under section 26 or 33 of the *Clean Water Act, 2006*, or

(ii) five years after the *construction* of the *sewage system*, in the case of a *sewage system constructed* on or after the date of publication, and

(b) thereafter, every five years after the most recent inspection of the *sewage system* has been conducted.

(3) If additional *areas affected by a significant drinking water threat* are identified for a *source protection area* after the date of publication referred to in Clause (2)(a), an inspection required under Sentence 1.10.2.3.(1) shall be conducted in respect of a *sewage system* in those additional areas,

(a) initially, no later than,

(i) five years after the following date of approval or publication, as applicable, in the case of a *sewage system constructed* before that date,

(A) the date of approval under section 19 of the *Clean Water Act, 2006* of the updated assessment report in which the additional areas are identified, or

(B) the date of publication on the environmental registry under the *Clean Water Act, 2006* of notice of the approval of the amended or updated *source protection plan* in which the additional areas are identified, or

(ii) five years after the *construction* of the *sewage system*, in the case of a *sewage system constructed* on or after the date of approval or publication, as applicable, and

(b) thereafter, every five years after the most recent inspection of the *sewage system* has been conducted.

1.10.2.5. Certificate as Alternative to Maintenance Inspection

(1) The *principal authority* that administers the *maintenance inspection program* established under Sentence 1.10.2.3.(1), may, as an alternative to conducting an inspection of a *sewage system* required under Sentence 1.10.2.3.(1), accept a certificate described in Sentence (2) from the owner of the property on which the *sewage system* is located.

(2) The certificate required by Sentence (1) shall satisfy the requirements of Sentence 1.10.1.3.(2) and for these purposes Sentences 1.10.1.3.(3) to (5) apply with necessary modifications.

PART 2
ALTERNATIVE SOLUTIONS, DISPUTES, RULINGS AND INTERPRETATIONS

2.1.	**Alternative Solutions**
2.1.1.	**Documentation of Alternative Solutions**
2.2.	**Building Code Commission**
2.2.1.	**Hearings**
2.3.	**Building Materials Evaluation Commission**
2.3.1.	**Application Fee**
2.4.	**Rulings and Interpretations**
2.4.1.	**Designated Materials Evaluation Bodies**
2.4.2.	**Minister's Rulings**
2.4.3.	**Interpretations By Minister**

Section 2.1. Alternative Solutions

2.1.1. Documentation of Alternative Solutions

2.1.1.1. Documentation

(1) The person proposing the use of an *alternative solution* shall provide documentation to the *chief building official* or *registered code agency* that,

(a) identifies applicable *objectives*, *functional statements* and *acceptable solutions*, and

(b) establishes on the basis of past performance, tests described in Article 2.1.1.2. or other evaluation that the proposed *alternative solution* will achieve the level of performance required under Article 1.2.1.1. of Division A.

(2) The documentation described in Sentence (1) shall include information about relevant assumptions, limiting or restricting factors, testing procedures, studies or *building* performance parameters, including any commissioning, operational and maintenance requirements.

2.1.1.2. Tests

(1) Where no published test method to establish the suitability of an *alternative solution* proposed under Article 2.1.1.1. exists, then the tests used for the purposes of that Article shall be designed to simulate or exceed anticipated service conditions or shall be designed to compare the performance of the material or system with a similar material or system that is known to be acceptable.

(2) The results of tests or evaluations based on test standards, other than as described in this Code, may be used for the purposes of Sentence (1), if the alternate test standards provide comparable results.

Section 2.2. Building Code Commission

2.2.1. Hearings

2.2.1.1. Divisions

(1) The Building Code Commission may sit in two or more divisions simultaneously so long as a quorum of each division is present.

2.2.1.2. Single Member

(1) One member of the Building Code Commission may, with the approval of the chair or vice-chair, hear and determine any dispute set out in Sentence (2) and, for that purpose, the member has all the jurisdiction and powers of the Commission.

(2) The disputes referred to in Sentence (1) are,

(a) any dispute described in clause 24 (1) (a) of the Act respecting the sufficiency of compliance with technical requirements of this Code related to *sewage systems*, and

(b) any dispute described in clause 24 (1) (b) or (c) of the Act.

2.2.1.3. Time Period

(1) A hearing to decide a dispute described in Clause 2.2.1.2.(2)(b) shall be held not more than five days after the Commission receives an application for a hearing in a form approved by the Commission.

(2) The time period described in Sentence (1) commences on the day after the Commission receives the application and excludes Saturdays, holidays and all other days when the offices of the Government of Ontario are not open for the transaction of business with the public.

2.2.1.4. Eligibility

(1) The following relationships to a *registered code agency* are prescribed for the purposes of clause 23 (3) (d) of the Act as relationships to a *registered code agency* that make a person ineligible to be a member of the Commission:

(a) the person is registered under Article 3.4.3.2. as a *registered code agency*,

(b) the person is an officer, director, partner or employee of a *registered code agency*, or

(c) the person is engaged by a *registered code agency* to perform functions under the Act on behalf of the *registered code agency*.

2.2.1.5. Application Fee

(1) The fee on an application to the Building Code Commission under subsection 24 (1.1) of the Act is,

(a) $170, for 2014, and

(b) the amount determined in accordance with Sentences (2) and (3) rounded to the nearest dollar, for 2015 and subsequent calendar years.

(2) On and after January 1, 2015, the fee for a calendar year is the fee for the previous calendar year adjusted by the percentage change from year to year in the Consumer Price Index for Ontario (All-Items) as reported monthly by Statistics Canada under the authority of the *Statistics Act* (Canada), averaged over the 12-month period that ends on March 31 of the previous calendar year, rounded to the first decimal point.

(3) Despite Sentence (2), if the percentage change results in a negative amount, the fee for a calendar year shall remain at the same level as the previous calendar year.

Section 2.3. Building Materials Evaluation Commission

2.3.1. Application Fee

2.3.1.1. Application Fee

(1) The fee on an application to the Building Materials Evaluation Commission is,

(a) $5,000, for 2015,

(b) $7,000, for 2016,

(c) $9,000, for 2017, and

(d) $11,000, for 2018 and subsequent calendar years.

Section 2.4. Rulings and Interpretations

2.4.1. Minister's Rulings — Innovative Materials, Systems or Building Designs

2.4.1.1. Designated Materials Evaluation Bodies

(1) The following body is designated as a materials evaluation body for the purposes of clause 29 (1) (a) of the Act:

Canadian Construction Materials Centre of the National Research Council of Canada

2.4.1.2. Fee

(1) The fee on a request for a ruling under clause 29 (1) (a) of the Act is,

(a) $560, for 2014, and

(b) the amount determined in accordance with Sentences (2) and (3) rounded to the nearest dollar, for 2015 and subsequent calendar years.

(2) On and after January 1, 2015, the fee for a calendar year is the fee for the previous calendar year adjusted by the percentage change from year to year in the Consumer Price Index for Ontario (All-Items) as reported monthly by Statistics Canada under the authority of the *Statistics Act* (Canada), averaged over the 12-month period that ends on March 31 of the previous calendar year, rounded to the first decimal point

averaged over the 12-month period that ends on March 31 of the previous calendar year, rounded to the first decimal point.

(3) Despite Sentence (2), if the percentage change results in a negative amount, the fee for a calendar year shall remain at the same level as the previous calendar year.

2.4.2. Minister's Rulings — Alternative Materials, Systems or Building Designs

2.4.2.1. Criteria

(1) Sentence (2) sets out criteria to be followed by the *Minister* when making a ruling under clause 29 (1) (c) of the Act to approve the use of an alternative material, system or *building* design.

(2) The *Minister's* approval of the use of an alternative material, system or *building* design referred to in Sentence (1) may be granted only if the approval is consistent with,

(a) a decision of the Building Code Commission in respect of a dispute described in clause 24 (1) (a) of the Act,

(b) an approval of the use of the material, system or *building* design in the whole of another province or territory in accordance with the law of that province or territory, or

(c) a revision of the CCBFC NRCC 53301, "National Building Code of Canada", or the CCBFC NRCC 53302, "National Plumbing Code of Canada", that has been approved by the Canadian Commission on Building and Fire Codes.

2.4.3. Interpretations By Minister

2.4.3.1. Interpretations By Minister

(1) Every interpretation issued by the *Minister* under section 28.1 of the Act shall be made available to the public,

(a) by posting the interpretation on the *Building Code website*, and

(b) by providing a written copy of the interpretation on receipt of a request for it.

O. Reg. 332/12, Division C, Part 2; O. Reg. 360/13, ss. 1-3.

PART 3
QUALIFICATIONS

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Section 3.1. Qualifications for Chief Building Officials and Inspectors

3.1.1. Scope and Definition

3.1.1.1. Scope

(1) Except as provided in Sentence (2), this Section prescribes, for the purposes of subsections 15.11 (1), (2) and (3) of the Act,

(a) the qualifications that a person must satisfy to be appointed and to remain appointed as,

(i) a *chief building official* under the Act, or

(ii) an *inspector* who has the same powers and duties as a *chief building official* in relation to *plumbing*,

(b) the qualifications that a person must satisfy to be appointed and to remain appointed as,

(i) an *inspector* who has the same powers and duties as a *chief building official* in relation to *sewage systems*, or

(ii) an *inspector* whose duties include plans review or inspection of *sewage systems* under the Act, and

(c) the qualifications that a person must satisfy to be appointed and to remain appointed as an *inspector* under the Act, other than an *inspector* described in Subclause (a)(ii) or (b)(i) or (ii).

(2) The qualification requirements for *chief building officials* and *inspectors* in Sentence (1) do not apply to plans review and inspection of,

(a) site services including,

(i) surface drainage, and

(ii) *plumbing* located underground either outside a *building* or under a *building*,

(b) *construction* of a factory-built house certified to CSA A277, “Procedure for Factory Certification of Buildings”,

(c) *construction* of a mobile home conforming to CSA Z240 MH Series, “Manufactured Homes”,

(d) *construction* of a park model trailer conforming to CAN/CSA-Z241 Series, “Park Model Trailers”, or

(e) signs.

3.1.1.2. Definition

(1) In this Section,

“registered” means registered under Sentence 3.1.2.2.(1), 3.1.3.2.(1) or 3.1.4.2.(1), as applicable.

3.1.2. Chief Building Officials

3.1.2.1. Qualifications

(1) The following are prescribed as qualifications for a person to be appointed and to remain appointed under the Act as a *chief building official* or as an *inspector* who has the same powers and duties as a *chief building official* in relation to *sewage systems* or *plumbing*:

(a) the person must be registered with the *director*.

(2) A registration shall be in a form established by the *director*.

(3) A person who was qualified on December 31, 2014 under Sentence 3.1.2.1.(1), as it read on that date, is deemed to have the qualification set out in Sentence (1) until the earlier of,

(a) the day the person is registered under Sentence 3.1.2.2.(1), and

(b) March 31, 2015.

3.1.2.2. Registration and Renewal of a Registration

(1) Subject to Article 3.1.5.7., the *director* may register an applicant, or renew a registration, if,

(a) the applicant or registered person has successfully completed the examination program administered or authorized by the Ministry of Municipal Affairs and Housing relating to the person's knowledge of the Act and this Code and the powers and duties of *chief building officials*,

(b) the applicant or registered person also has the qualification set out in Sentence 3.1.4.1.(1), in the case of an applicant or registered person who, under subsection 22 (2) of the Act, will also exercise any of the powers or perform any of the duties of an *inspector*,

(c) the application is complete, and

(d) all fees required under Article 3.1.5.3. are paid.

(2) For the purposes of a registration or a renewal of a registration, a person who was qualified on December 31, 2014 under Sentence 3.1.2.1.(1), as it read on that date, is deemed to have the qualifications set out in Clause (1)(a).

(3) If a person is given notice of a knowledge maintenance examination either after December 31, 2014 under Sentence 3.1.5.6.(1) or, on or before December 31, 2014, under Sentence 3.1.5.1.(2), as it read on that date, and does not successfully complete the knowledge maintenance examination referred in the notice by the end of the eighteenth month following the month in which the *director* gives notice of the knowledge maintenance examination to the person, Sentence (2) ceases to apply to the person at the end of that period.

3.1.3. Supervisors and Managers

3.1.3.1. Qualifications

(1) The following are prescribed as qualifications for a person to be appointed and to remain appointed under the Act as an *inspector* whose duties are solely the supervision or management of *inspectors*:

(a) the person must be registered with the *director*.

(2) A registration shall be in a form established by the *director*.

(3) A person who was qualified on December 31, 2014 under Sentence 3.1.3.1.(1), as it read on that date, is deemed to have the qualification set out in Sentence (1) until the earlier of,

(a) the day the person is registered under Sentence 3.1.3.2.(1), and

(b) March 31, 2015.

3.1.3.2. Registration and Renewal of a Registration

(1) Subject to Article 3.1.5.7., the *director* may register an applicant, or renew a registration, if,

(a) the applicant or registered person has successfully completed the examination program administered or authorized by the Ministry of Municipal Affairs and Housing relating to the person's knowledge of the Act and this Code and the powers and duties of *chief building officials*,

(b) the applicant or registered person has successfully completed the examination program administered or authorized by the Ministry of Municipal Affairs and Housing relating to the person's knowledge of the Act and this Code in any one category of qualification set out in Column 2 of Table 3.5.2.1.,

(c) the application is complete, and

(d) all fees required under Article 3.1.5.3. are paid.

(2) For the purposes of a registration or a renewal of a registration, a person who was qualified on December 31, 2014 under Sentence 3.1.3.1.(1), as it read on that date, is deemed to have the qualifications set out in Clauses (1)(a) and (b).

(3) If a person is given notice of a knowledge maintenance examination that relates to the subject matter of an examination program referred to in Clause (1)(a) or (b), as applicable, either after December 31, 2014 under Sentence 3.1.5.6.(1) or, on or before December 31, 2014, under Sentence 3.1.5.1.(2), as it read on that date, and does not successfully complete the knowledge maintenance examination referred in the notice by the end of the eighteenth month following the month in which the *director* gives notice of the knowledge maintenance examination to the person, Sentence (2) ceases to apply to the person at the end of that period with respect to the qualifications set out in Clause (1)(a) or (b), as applicable.

3.1.4. Inspectors

3.1.4.1. Qualifications

(1) Except as provided in Article 3.1.4.3. or 3.1.4.4., the following are prescribed as qualifications for a person to be appointed and to remain appointed under the Act as an *inspector* whose duties include plans review or inspection under the Act:

(a) the person must be registered with the *director*.

(2) A registration shall be in a form established by the *director*.

(3) A person who was qualified on December 31, 2014 under Sentence 3.1.4.1.(1) in a category of qualification set out in Column 2 of Table 3.5.2.1., as they read on that date,

is deemed to be registered in the class of registration that corresponds to that category of qualification until the earlier of,

(a) the day the person is registered in that class of registration under Sentence 3.1.4.2.(1), and

(b) March 31, 2015.

3.1.4.2. Registration and Renewal of a Registration

(1) Subject to Article 3.1.5.7., the *director* may register an applicant, or renew a registration, in each class of registration applied for, if,

(a) the applicant or registered person has successfully completed the examination program administered or authorized by the Ministry of Municipal Affairs and Housing relating to the person's knowledge of the Act and this Code in the category of qualification set out in Column 2 of Table 3.5.2.1. that corresponds to each class of registration set out in Column 1 of Table 3.5.2.1. for which application is made,

(b) the application is complete, and

(c) all fees required under Article 3.1.5.3. are paid.

(2) For the purposes of a registration or a renewal of a registration in a class of registration, a person who was qualified on December 31, 2014 under Sentence 3.1.4.1.(1) in a category of qualification set out in Column 2 of Table 3.5.2.1., as they read on that date, is deemed to have the qualifications set out in Clause (1)(a) in that category of qualification.

(3) If a person is given notice of a knowledge maintenance examination that relates to the subject matter of an examination program in the category of qualification either after December 31, 2014 under Sentence 3.1.5.6.(1) or, on or before December 31, 2014, under Sentence 3.1.5.1.(2), as it read on that date, and does not successfully complete the knowledge maintenance examination referred in the notice by the end of the eighteenth month following the month in which the *director* gives notice of the knowledge maintenance examination to the person, Sentence (2) ceases to apply to the person at the end of that period.

3.1.4.3. Qualifications for Intern Inspectors

(1) A person may be appointed or remain appointed under the Act as an intern *inspector* whose duties include supervised plans review or inspection under the Act, even if the person does not have the qualification set out in Article 3.1.4.1., provided the person is enrolled in an internship program approved by the *Minister*.

(2) An intern *inspector* who is exempt under Sentence (1) shall be supervised by an *inspector* or *chief building official* who is registered in the class of registration in respect of which the intern *inspector* will exercise the powers or perform the duties.

(3) An intern *inspector* who is exempt under Sentence (1) shall not,

(a) issue orders under the Act except orders under subsection 12 (2) or 13 (1) of the Act, or

(b) undertake a site inspection of a *building* related to a notice in respect of,

(i) substantial completion of footings and *foundations* prior to commencement of backfilling, or

(ii) completion of *construction* and installation of components required to permit the issuance of an occupancy permit under Sentence 1.3.3.1.(3), 1.3.3.4.(4) or 1.3.3.5.(3) or to permit occupancy under Sentence 1.3.3.2.(1), if the *building* or part of the *building* to be occupied is not fully completed.

3.1.4.4. Qualifications for Maintenance Program Inspectors

(1) A person may be appointed or remain appointed under the Act as an *inspector* whose duties include *maintenance inspections* of *sewage systems*, even if the person does not have the qualification set out in Article 3.1.4.1. in respect of these duties.

(2) An *inspector* who is exempt under Sentence (1) is authorized to conduct *maintenance inspections* of *sewage systems* only if the following conditions are met:

(a) the person is supervised by an *inspector* or *chief building official* who is registered in the class of registration described in Column 1 of Item 10 of Table 3.5.2.1., and

(b) the person does not issue orders under the Act.

3.1.5. Qualifications — Chief Building Officials, Supervisors and Managers, and Inspectors

3.1.5.1. Application for Registration or Renewal of a Registration

(1) An application for registration or renewal of a registration shall be made to the *director* in a form established by the *director*.

(2) An application for renewal of a registration shall be made at least 60 days before the expiry of the registration to be renewed.

(3) An application for registration or renewal of a registration shall include an undertaking by the applicant or registered person to comply with the conditions set out in Article 3.1.5.5.

(4) An application for registration or renewal of a registration shall,

(a) set out the applicant's or registered person's name, residence address, residential mailing address, if different from the residence address, and email address, if applicable,

(b) set out the name and address of every *principal authority* that has appointed the person as a *chief building official* or *inspector* under the Act, and

(c) contain evidence, provided by the applicant or registered person, that the applicant or registered person has the qualifications set out in Clauses 3.1.2.2.(1)(a) and (b), 3.1.3.2.(1)(a) and (b), or 3.1.4.2.(1)(a), as applicable.

3.1.5.2. Term

(1) A registration expires one year after it is issued but the *director* may, for the purposes of staggering the renewal dates of the registrations, issue the initial registration for a term of not less than 90 days and not more than 18 months.

3.1.5.3. Fees

(1) The fee payable for an application to take an examination that is part of an examination program referred to in Clause 3.1.2.2.(1)(a), 3.1.3.2.(1)(a) or (b) or 3.1.4.2.(1)(a) is $150.

(2) The fee for a registration or renewal of a registration is,

(a) $105, for 2015, and

(b) the amount determined in accordance with Sentences (3) and (4) rounded to the nearest dollar, for 2016 and subsequent calendar years.

(3) On and after January 1, 2016, the fee for a calendar year is the fee for the previous calendar year adjusted by the percentage change from year to year in the Consumer Price Index for Ontario (All-Items) as reported monthly by Statistics Canada under the authority of the *Statistics Act* (Canada), averaged over the 12-month period that ends on March 31 of the previous calendar year, rounded to the first decimal point.

(4) Despite Sentence (3), if the percentage change results in a negative amount, the fee for a calendar year shall remain at the same level as the previous calendar year.

3.1.5.4. Not Transferable

(1) A registration is not transferable.

3.1.5.5. Conditions

(1) The following are the conditions of a registration:

(a) the registered person shall, within 15 days after the event, notify the *director* in writing of any change in the information set out in Clause 3.1.5.1.(4)(a) or (b),

(b) in the case of a registered person who is given notice of a knowledge maintenance examination under Sentence 3.1.5.6.(1), the person shall successfully complete the knowledge maintenance examination referred to in the notice by the end of the eighteenth month following the month in which the *director* gives notice of the knowledge maintenance examination to the person, and

(c) in the case of an *inspector* registered under Sentence 3.1.4.2.(1), the person shall exercise his or her powers and perform his or her duties only in respect of the type of *buildings* described in Column 3 of Table 3.5.2.1. that correspond to the class or classes of registration held by the person.

3.1.5.6. Knowledge Maintenance

(1) The *director* shall give notice of a knowledge maintenance examination administered or authorized by the Ministry of Municipal Affairs and Housing in respect of changes described in Sentence (2) that relate to the subject matter of an examination program referred to in Clause 3.1.2.2.(1)(a), 3.1.3.2.(1)(a) or (b) or 3.1.4.2.(1)(a), as applicable, to every person who, on December 31, 2013, has the qualifications set out in Sentence 3.1.2.1.(1), 3.1.3.1.(1) or 3.1.4.1.(1), as applicable, of Division C of Ontario Regulation 350/06 (Building Code) made under the Act.

(2) The changes referred to in Sentence (1) are changes made to the Act and Ontario Regulation 350/06 from December 31, 2006 to December 31, 2013 and changes made at the time that regulation is replaced by this Code on January 1, 2014.

(3) The *director* may give the notice referred to in Sentence (1) by sending it,

(a) by regular mail to the last address of the person that has been filed with the *director*, or

(b) by email to the last email address of the person that has been filed with the *director*.

3.1.5.7. Suspension, Revocation, Refusal to Register or Renew a Registration

(1) The *director* may, in the circumstances set out in Sentence (2),

(a) refuse to register an applicant or to renew a registration, or

(b) suspend or revoke a registration.

(2) The circumstances referred to in Sentence (1) are,

(a) the registered person is in breach of a condition of the registration,

(b) the registration was issued on the basis of mistaken, false or incorrect information,

(c) an order under subsection 69 (2) of the *Provincial Offences Act* is in effect directing that the registration of the person be suspended and that no registration be issued to that person until a fine is paid,

(d) the application is incomplete, or

(e) any fees required under Article 3.1.5.3. remain unpaid.

(3) If the *director* proposes to refuse to register or renew a registration or proposes to suspend or revoke a registration, the *director* shall serve a notice of the proposal, together with the reasons for it, on the applicant or registered person.

(4) A notice under Sentence (3) shall state that the applicant or registered person is entitled to a hearing before the *Tribunal* if the applicant or registered person, within 15 days after service of the notice referred to in Sentence (3), serves the *director* and the *Tribunal* with notice in writing requesting a hearing.

(5) If the applicant or registered person does not request a hearing by the *Tribunal* in accordance with Sentence (4), the *director* may carry out the proposal stated in the notice under Sentence (3).

(6) If the applicant or registered person requests a hearing before the *Tribunal* in accordance with Sentence (4), the *Tribunal* shall appoint a time for and hold a hearing and may by order direct the *director* to carry out the *director's* proposal or refrain from carrying it out and to take such other action as the *Tribunal* considers the *director* ought to take in accordance with the Act and this Code, and for those purposes, the *Tribunal* may substitute its opinion for that of the *director*.

(7) The *director*, the applicant or registered person who requested the hearing, and such other persons as the *Tribunal* may specify, are parties to proceedings before the *Tribunal*.

(8) Sentences (3) to (7) do not apply and the *director* may cancel the registration of a registered person upon receipt of a request in writing for cancellation from the registered person in a form established by the *director*.

(9) If, within the time period set out in Sentence 3.1.5.1.(2), the registered person has applied for renewal of a registration and paid the fee required under Article 3.1.5.3., the registration is deemed to continue until the earlier of,

(a) the day the registration is renewed, and

(b) if the registered person is served with notice that the *director* proposes to refuse to renew the registration, the day the time for giving notice requesting a hearing expires or, if a hearing is held, the day the *Tribunal* makes its order.

3.1.6. Public Register

3.1.6.1. Public Register

(1) The *director* shall establish and maintain a register available to the public that lists every person who has the qualifications required by subsections 15.11 (1), (2) and (3) of the Act and has been appointed as a *chief building official* or *inspector* by a *principal authority*.

(2) The register referred to in Sentence (1) shall contain the following information with respect to each registered person:

(a) the name of the registered person,

(b) any identifying number assigned by the *director* to the registered person,

(c) the name and address of each *principal authority* that has appointed the registered person as a *chief building official* or *inspector*, and

(d) the classes of registration of the registered person.

3.1.7. Classes of Registration and Categories of Qualifications

3.1.7.1. Classes and Categories

(1) Table 3.5.2.1. contains the classes of registration and categories of qualifications for the purposes of this Section.

Section 3.2. Qualifications for Designers

3.2.1. Scope

3.2.1.1. Scope

(1) This Section prescribes, for the purposes of clause 8 (2) (c) and subsection 15.11 (5) of the Act, the qualifications for a person who carries out *design activities*.

3.2.2.2. Other Designers

(1) Every person who carries out *design activities* must have the qualification set out in Sentence 3.2.5.1.(1), if the person is not required to have the qualification set out in Sentence 3.2.4.1.(1).

3.2.3. Definition

3.2.3.1. Definition

(1) "Registered" means,

(a) in Subsection 3.2.4., registered under Sentence 3.2.4.2.(1), and

(b) in Subsection 3.2.5., registered under Sentence 3.2.5.2.(1).

3.2.4. Qualifications – Persons Engaged in the Business of Providing Design Activities to the Public

3.2.4.1. General

(1) Except as provided in Sentences (3) and (4), every person engaged in the business of providing *design activities* to the public must have the following qualification:

(a) the person must be registered with the *director*.

(2) A registration shall be in a form established by the *director*.

(3) A person is exempt from the requirement to comply with the qualification in Sentence (1), if the person's *design activities* relate only to,

(a) *construction* of a home as defined under the *Ontario New Home Warranties Plan Act* that will be constructed or sold by that person, if the person is a builder or vendor as defined in that Act and is registered under that Act,

(b) *construction* of a *building* that is owned by that person,

(c) *construction* of a *farm building* that,

(i) is of *low human occupancy*,

(ii) is 2 *storeys* or less in *building height*, and

(iii) has a *building area* of less than 600 m^2,

(d) the extension, material alteration or repair of a detached house, semi-detached house, townhouse or row house containing not more than two *dwelling units* in each house,

(e) a *sewage system* to be constructed by that person if the person is registered under Article 3.3.3.2.,

(f) *construction* of tents described in Sentence 3.14.1.2.(2) of Division B,

(g) *construction* of signs,

(h) *construction* of site services, including,

(i) surface drainage, and

(ii) *plumbing* located underground, either outside a *building* or under a *building*,

(i) *construction* of a factory-built house certified to CSA A277, "Procedure for Factory Certification of Buildings",

(j) *construction* of a mobile home conforming to CSA Z240 MH Series, "Manufactured Homes",

(k) *construction* of a park model trailer conforming to CAN/CSA-Z241 Series, "Park Model Trailers",

(l) *construction* of pre-engineered elements of a *building*, if the design of the elements is carried out by a person competent in the specific discipline appropriate to the circumstances,

(m) *construction* of appliances, equipment and similar incidental components of a *building*, or

(n) *construction* of a *building* for which a permit under section 8 of the Act is applied for or issued before January 1, 2006 and for which *construction* is commenced within six months after the permit is issued.

(4) A person is exempt from the requirements to comply with the qualification in Sentence (1), if the person's *design activities* are with respect to a detached house, semi-detached house, townhouse or row house containing not more than two *dwelling units* in each house and the *design activities* relate only to,

(a) a *plumbing* system,

(b) a heating, ventilation and *air-conditioning* system, or

(c) ancillary *buildings* such as garages.

3.2.4.2. Registration and Renewal of a Registration

(1) Subject to Articles 3.2.4.9. and 3.2.4.10., the *director* may register an applicant, or renew a registration, in each class of registration applied for, if,

(a) the applicant or registered person or, if the applicant or registered person is a corporation or partnership, a director, officer, partner or employee of the applicant or registered person, has successfully completed the examination program administered or authorized by the Ministry of Municipal Affairs and Housing relating to the person's knowledge of the Act and this Code in the category of qualification set out in Column 2 of Table 3.5.2.1. that corresponds to each class of registration set out in Column 1 of Table 3.5.2.1. for which application is made,

(b) all other persons engaged by the applicant or registered person who will review and take responsibility for *design activities* provided to the public by the applicant or registered person for the purposes of Clause 3.2.4.7.(1)(d) have successfully completed the examination program administered or authorized by the Ministry of Municipal Affairs and Housing relating to the person's knowledge of the Act and this Code in the category of qualification set out in Column 2 of Table 3.5.2.1. that corresponds to each class of registration set out in Column 1 of Table 3.5.2.1. for which application is made,

(c) the applicant or registered person is covered by the insurance required under Subsection 3.6.2. during the term of the registration applied for,

(d) the application is complete, and

(e) all fees required under Article 3.2.4.5. are paid.

(2) Subject to Articles 3.2.4.9. and 3.2.4.10., a person who, on December 31, 2013, is registered in a class of registration under Sentence 3.2.4.2.(1) of Division C of Ontario Regulation 350/06 (Building Code) made under the Act and complies with the conditions of registration set out in Article 3.2.4.7. of Division C of that regulation is deemed to be registered in the class of registration under Sentence 3.2.4.2.(1) of this Code, and for these purposes, the person's registration in the class of registration is deemed to continue until its term expires.

(3) For the purposes of a registration or a renewal of a registration, a person who, on December 31, 2013, has the qualifications set out in Clause 3.2.4.2.(1)(a) or (b), as applicable, of Division C of Ontario Regulation 350/06 in a class of registration is deemed to have the qualifications set out in Clause 3.2.4.2.(1)(a) or (b), as applicable, of this Code, in the class of registration, but ceases to be deemed to have these qualifications if the person does not successfully complete a knowledge maintenance examination as required under Subclause 3.2.4.7.(1)(d)(i) or (ii), as applicable.

3.2.4.3. Application for Registration or Renewal of a Registration

(1) An application for registration or renewal of a registration shall be made to the *director* in a form established by the *director*.

(2) An application for renewal of a registration shall be made at least 60 days before the expiry of the registration to be renewed.

(3) An application for registration or renewal of a registration shall include an undertaking by the applicant or registered person to comply with the conditions set out in Article 3.2.4.7.

(4) If a partnership or a corporation is the applicant for registration or renewal of a registration, the application shall set out the names and residence addresses of all its partners, directors or officers, as the case may be.

(5) An application for registration or renewal of a registration shall contain the names of all partners, directors, officers or employees of the applicant or registered person, as the case may be, and all other persons engaged by the applicant or registered person, who,

(a) have the qualifications set out in Clause 3.2.4.2.(1)(a) in the class or classes of registration for which the application is made, and

(b) have the qualifications set out in Clause 3.2.4.2.(1)(b) and will review and take responsibility for the *design activities* provided to the public by the applicant or registered person in the class or classes of registration for which the application is made.

(6) An application for registration or renewal of a registration shall contain evidence, provided by the applicant or registered person, that the persons referred to in Sentence (5) have the qualifications set out in Clause 3.2.4.2.(1)(a) or (b).

(7) An application for registration or renewal of a registration shall contain evidence, provided by the applicant or registered person in such form and in such detail as may be required by the *director*, that the applicant or registered person is covered by the insurance required under Subsection 3.6.2. during the term of the registration applied for.

3.2.4.4. Term

(1) A registration expires one year after it is issued but the *director* may, for the purposes of staggering the renewal dates of the registrations, issue the initial registration for a term of not less than 90 days and not more than 18 months.

3.2.4.5. Fees

(1) The fee payable for an application to take an examination that is part of an examination program referred to in Clause 3.2.4.2.(1)(a) or (b) is $150.

(2) The fee for a registration is,

(a) $165, for 2015, and

(b) the amount determined in accordance with Sentences (5) and (6) rounded to the nearest dollar, for 2016 and subsequent calendar years.

(3) The fee for the addition of a new class of registration is,

(a) $35, for 2015, and

(b) the amount determined in accordance with Sentences (5) and (6) rounded to the nearest dollar, for 2016 and subsequent calendar years.

(4) The fee for renewal of a registration is,

(a) $125, for 2015, and

(b) the amount determined in accordance with Sentences (5) and (6) rounded to the nearest dollar, for 2016 and subsequent calendar years.

(5) On and after January 1, 2016, the fee for a calendar year is the fee for the previous calendar year adjusted by the percentage change from year to year in the Consumer Price Index for Ontario (All-Items) as reported monthly by Statistics Canada under the authority of the *Statistics Act* (Canada), averaged over the 12-month period that ends on March 31 of the previous calendar year, rounded to the first decimal point.

(6) Despite Sentence (5), if the percentage change results in a negative amount, the fee for a calendar year shall remain at the same level as the previous calendar year.

3.2.4.6. Not Transferable

(1) A registration is not transferable.

3.2.4.7. Conditions

(1) The following are the conditions of a registration:

(a) the registered person shall carry out *design activities* only in respect of the type of *buildings* described in Column 3 of Table 3.5.2.1. that correspond to the class or classes of registration held by the registered person,

(b) if the registered person is a corporation or partnership, there must throughout the term of the registration be an officer, director, partner or employee of the registered person who has the qualifications set out in Clause 3.2.4.2.(1)(a) for each class of registration set out in Column 1 of Table 3.5.2.1. that is held by the registered person,

(c) the registered person shall ensure that a person who has the qualifications set out in Clause 3.2.4.2.(1)(a) or (b) in respect of the class of registration set out in Column 1 of Table. 3.5.2.1. to which the *design activities* relate will review and take responsibility for *design activities* in each class of registration that are provided to the public by the registered person,

(d) by the end of the eighteenth month following the month in which the *director* gives notice of a notice of a knowledge maintenance examination to the registered person under Sentence 3.2.4.8.(1), the registered person shall ensure that the following persons have successfully completed the knowledge maintenance examination referred to in the notice:

(i) the registered person and the persons described in Clause (b) who are deemed under Sentence 3.2.4.2.(3) to have the qualifications set out in Clause 3.2.4.2.(1)(a) in the class of registration to which the notice relates, and

(ii) persons described in Clause (c) who are deemed under Sentence 3.2.4.2.(3) to have the qualifications set out in Clause 3.2.4.2.(1)(b) in respect of the class of registration to which the notice relates and who will review and take responsibility for *design activities* provided to the public by the registered person in the class of registration,

(e) the registered person shall ensure that a person described in Clause (c) who reviews and takes responsibility for *design activities* provided to the public by the registered person shall include the following information on any document submitted to a *chief building official* or *registered code agency* in the circumstances set out in subsection 15.11 (5) of the Act:

(i) the name of the registered person and any registration number issued to the registered person by the *director*,

(ii) a statement that the person has reviewed and taken responsibility for the *design activities*,

(iii) the person's name and any identifying number issued to the person by the *director* in respect of the qualifications described in Clause 3.2.4.2.(1)(a) or (b) that the person has, and

(iv) the person's signature,

(f) the registered person shall, during the term of the registration, be covered by the insurance required under Subsection 3.6.2.,

(g) the registered person shall, within 15 days after the event, notify the *director* in writing of,

(i) any change in address of the registered person for correspondence relating to the registration, and

(ii) any change in the information set out in Sentences 3.2.4.3.(4) and (5),

(h) the registered person shall give prompt written notice to the *director* of any material change in any of the information, other than the information referred to in Clause (g), that is contained in or accompanies an application for registration or renewal of a registration,

(i) the registered person shall, from time to time, at the registered person's expense, give the *director* such documents or information relating to the registration or to activities carried out under the registration as the *director* may reasonably require, and

(j) the registered person shall allow the representatives of the *director* access to the registered person's books and records during normal business hours for the purpose of confirming matters related to the registration.

3.2.4.8. Knowledge Maintenance

(1) The *director* shall give notice of a knowledge maintenance examination administered or authorized by the Ministry of Municipal Affairs and Housing in respect of changes described in Sentence (2) that relate to the subject matter of an examination program referred to in Clause 3.2.4.2.(1)(a) or (b) to every person who is registered under Sentence 3.2.4.2.(1) in a class of registration to which the knowledge maintenance examination relates.

(2) The changes referred to in Sentence (1) are changes made to the Act and Ontario Regulation 350/06 (Building Code) from December 31, 2006 to December 31, 2013 and changes made at the time that regulation is replaced by this Code on January 1, 2014.

(3) The *director* may give the notice referred to in Sentence (1) by sending it,

(a) by regular mail to the last address of the registered person that has been filed with the *director*, or

(b) by email to the last email address of the registered person that has been filed with the *director*.

3.2.4.9. Suspension, Revocation, Refusal to Register or Renew a Registration

(1) The *director* may, in the circumstances set out in Sentence (2),

(a) refuse to register an applicant or to renew a registration, or

(b) suspend or revoke a registration.

(2) The circumstances referred to in Sentence (1) are,

(a) the registered person is in contravention of the Act or this Code,

(b) the registered person is in breach of a condition of the registration other than the condition set out in Clause 3.2.4.7.(1)(f),

(c) the registration was issued on the basis of mistaken, false or incorrect information,

(d) the *director* is of the opinion that the past conduct of the applicant or registered person or, if the applicant or registered person is a partnership or a corporation, the partners, officers or directors of the applicant or registered person, as the case may be, affords reasonable grounds for belief that the business that would be or is authorized by the registration will not be carried on in accordance with law,

(e) the application is incomplete, or

(f) any fees required under Article 3.2.4.5. remain unpaid.

(3) If the *director* proposes to refuse to register or renew a registration or proposes to suspend or revoke a registration under Sentence (1), the *director* shall serve a notice of the proposal, together with the reasons for it, on the applicant or registered person.

(4) A notice under Sentence (3) shall state that the applicant or registered person is entitled to a hearing before the *Tribunal* if the applicant or registered person, within 15

days after service of the notice referred to in Sentence (3), serves the *director* and the *Tribunal* with notice in writing requesting a hearing.

(5) If the applicant or registered person does not request a hearing by the *Tribunal* in accordance with Sentence (4), the *director* may carry out the proposal stated in the notice under Sentence (3).

(6) If the applicant or registered person requests a hearing before the *Tribunal* in accordance with Sentence (4), the *Tribunal* shall appoint a time for and hold a hearing and may by order direct the *director* to carry out the *director's* proposal or refrain from carrying it out and to take such other action as the *Tribunal* considers the *director* ought to take in accordance with the Act and this Code, and for those purposes the *Tribunal* may substitute its opinion for that of the *director*.

(7) The *director*, the applicant or registered person who requested the hearing, and such other persons as the *Tribunal* may specify, are parties to proceedings before the *Tribunal*.

(8) Sentences (3) to (7) do not apply and the *director* may cancel the registration of a registered person upon receipt of a request in writing for cancellation from the registered person in a form established by the *director*.

(9) If, within the time period set out in Sentence 3.2.4.3.(2), the registered person has applied for renewal of a registration, paid the fee required under Article 3.2.4.5. and provided evidence satisfactory to the *director* that the registered person is covered by insurance required under Subsection 3.6.2. for the term of the renewal of the registration, the registration is deemed to continue until the earliest of,

(a) the day the registration is renewed,

(b) if the registered person is served with notice that the *director* proposes to refuse to renew the registration, the day the time for giving notice requesting a hearing expires or, if a hearing is held, the day the *Tribunal* makes its order, and

(c) the day when the registered person ceases to be covered by the insurance required under Subsection 3.6.2.

3.2.4.10. Mandatory Suspension or Revocation of Registration or Refusal to Register or Renew Registration

(1) The *director* shall, in the circumstances set out in Sentence (2),

(a) refuse to register an applicant,

(b) refuse to renew a registration, or

(c) suspend or revoke a registration.

(2) The circumstances referred to in Sentence (1) are that,

(a) the applicant or registered person is not covered by the insurance required under Subsection 3.6.2., or

(b) an order under subsection 69 (2) of the *Provincial Offences Act* is in effect directing that the registration of the person be suspended and no registration be issued to the person until a fine is paid.

(3) If the *director* refuses to register an applicant, refuses to renew a registration or suspends or revokes a registration under Sentence (1), the *director* shall serve a notice of the refusal, suspension or revocation, together with the reasons for it, on the applicant or registered person.

(4) A suspension or revocation of a registration under Sentence (1) takes effect immediately and the commencement of a proceeding before the *Tribunal* does not stay the operation of the suspension or revocation of the registration.

(5) A notice under Sentence (3) shall state that the applicant or registered person is entitled to a hearing before the *Tribunal* if the applicant or registered person, within 15 days after service of the notice referred to in Sentence (3), serves the *director* and the *Tribunal* with notice in writing requesting a hearing.

(6) The *Tribunal* may, on the application of the registered person, stay the operation of a decision of the *director* to suspend or revoke the registration, and may grant the stay subject to conditions.

(7) If the applicant or registered person requests a hearing before the *Tribunal* in accordance with Sentence (5), the *Tribunal* shall appoint a time for and hold a hearing and may by order confirm, alter or revoke the decision of the *director* to refuse to register or to suspend or revoke the registration, as the case may be, and may take such action as the *Tribunal* considers the *director* ought to take in accordance with the Act and this Code, and for those purposes the *Tribunal* may substitute its opinion for that of the *director*.

(8) The *director*, the applicant or registered person who requested the hearing, and such other persons as the *Tribunal* may specify, are parties to proceedings before the *Tribunal*.

3.2.5. Qualifications — Other Designers

3.2.5.1. General

(1) Except as provided in Sentence (3), a person who carries out *design activities* but is not required under Sentence 3.2.4.1.(1) to be registered with the *director* under Sentence 3.2.4.2.(1) must have the following qualification:

(a) the person must be registered with the *director* under Sentence 3.2.5.2.(1).

(2) A registration shall be in a form established by the *director*.

(3) A person is exempt from the requirement to comply with the qualification in Sentence (1), if his or her *design activities* relate only to,

(a) *design activities* in respect of which a person described in Clause 3.2.4.7.(1)(c) or who has the qualification required under Sentence (1) will review and take responsibility,

(b) *construction* of,

(i) a detached house, semi-detached house, townhouse or row house owned by the person and containing not more than two *dwelling units* in each house, or

(ii) an ancillary *building* that serves a *building* described in Subclause (i),

(c) *construction* of a *farm building* that,

(i) is of *low human occupancy*,

(ii) is 2 *storeys* or less in *building height*, and

(iii) has a *building area* of less than 600 m^2,

(d) a *sewage system* to be *constructed* by that person and,

(i) the person is registered under Article 3.3.3.2., or

(ii) the *sewage system* is owned by the person,

(e) *construction* of tents described in Sentence 3.14.1.2.(2) of Division B,

(f) *construction* of signs,

(g) *construction* of site services including,

(i) surface drainage, and

(ii) *plumbing* located underground, either outside a *building* or under a *building*,

(h) *construction* of pre-engineered elements of a *building*, if the design of the elements is carried out by a person competent in the specific discipline appropriate to the circumstances,

(i) *construction* of appliances, equipment and similar incidental components of a *building*,

(j) *construction* of an ancillary *building*,

(i) that serves a detached house, semi-detached house, townhouse or row house if the house contains not more than two *dwelling units*, and

(ii) that has a *building area* of not more than 55 m^2, or

(k) *construction* of a *building* for which a permit under section 8 of the Act is applied for or issued before January 1, 2006 and for which *construction* is commenced within six months after the permit is issued.

(4) A person who was qualified on December 31, 2014 under Sentence 3.2.5.1.(1) in a category of qualification set out in Column 2 of Table 3.5.2.1., as they read on that date, is deemed to be registered in the class of registration that corresponds to that category of qualification until the earlier of,

(a) the day the person is registered in that class of registration under Sentence 3.2.5.2.(1), and

(b) March 31, 2015.

3.2.5.2. Registration and Renewal of a Registration

(1) Subject to Article 3.2.5.8., the *director* may register an applicant, or renew a registration, in each class of registration applied for, if,

(a) the applicant or registered person has successfully completed the examination program administered or authorized by the Ministry of Municipal Affairs and Housing relating to the person's knowledge of the Act and this Code in the category

of qualification set out in Column 2 of Table 3.5.2.1. that corresponds to each class of registration set out in Column 1 of Table 3.5.2.1. for which application is made.

(b) the application is complete, and

(c) all fees required under Article 3.2.5.5. are paid.

(2) For the purposes of a registration or a renewal of a registration in a class of registration, a person who was qualified on December 31, 2014 under Clauses 3.2.5.1.(1)(a) and (b) in a category of qualification set out in Column 2 of Table 3.5.2.1., as they read on that date, is deemed to have the qualifications set out in Clause (1)(a) in that category of qualification.

(3) If a person is given notice of a knowledge maintenance examination that relates to the subject matter of an examination program in the category of qualification either after December 31, 2014 under Sentence 3.2.5.7.(1) or, on or before December 31, 2014, under Sentence 3.2.5.2.(2), as it read on that date, and does not successfully complete the knowledge maintenance examination referred in the notice by the end of the eighteenth month following the month in which the *director* gives notice of the knowledge maintenance examination to the person, Sentence (2) ceases to apply to the person at the end of that period.

3.2.5.3. Application for Registration or Renewal of a Registration

(1) An application for registration or renewal of a registration shall be made to the *director* in a form established by the *director*.

(2) An application for renewal of a registration shall be made at least 60 days before the expiry of the registration to be renewed.

(3) An application for registration or renewal of a registration shall include an undertaking by the applicant or registered person to comply with the conditions set out in Article 3.2.5.6.

(4) An application for registration or renewal of a registration shall,

(a) set out the applicant's or registered person's name, residence address, residential mailing address, if different from the residence address, and email address, if applicable, and

(b) contain evidence, provided by the applicant or registered person, that the applicant or registered person has the qualifications set out in Clause 3.2.5.2.(1)(a).

3.2.5.4. Term

(1) A registration expires one year after it is issued but the *director* may, for the purposes of staggering the renewal dates of the registrations, issue the initial registration for a term of not less than 90 days and not more than 18 months.

3.2.5.5. Fees

(1) The fee payable for an application to take an examination that is part of an examination program referred to in Clause 3.2.5.2.(1)(a) is $150.

(2) The fee for a registration or renewal of a registration is,

(a) $105, for 2015, and

(b) the amount determined in accordance with Sentences (3) and (4) rounded to the nearest dollar, for 2016 and subsequent calendar years.

(3) On and after January 1, 2016, the fee for a calendar year is the fee for the previous calendar year adjusted by the percentage change from year to year in the Consumer Price Index for Ontario (All-Items) as reported monthly by Statistics Canada under the authority of the *Statistics Act* (Canada), averaged over the 12-month period that ends on March 31 of the previous calendar year, rounded to the first decimal point.

(4) Despite Sentence (3), if the percentage change results in a negative amount, the fee for a calendar year shall remain at the same level as the previous calendar year.

3.2.5.6. Conditions

(1) The following are the conditions of a registration:

(a) the registered person shall carry out *design activities* only in respect of the type of *buildings* described in Column 3 of Table 3.5.2.1. that correspond to the class or classes of registration held by the registered person,

(b) in the case of a registered person who is given notice of a knowledge maintenance examination under Sentence 3.2.5.7.(1), the person shall successfully complete the knowledge maintenance examination referred to in the notice by the end of the eighteenth month following the month in which the *director* gives notice of the knowledge maintenance examination to the person,

(c) the registered person shall, within 15 days after the event, notify the *director* in writing of any change in the information set out in Clause 3.2.5.3.(4)(a),

(d) the registered person shall include the following information on any document respecting *design activities* that the person has reviewed and taken responsibility for and that is submitted to a *chief building official* or *registered code agency* in the circumstances set out in subsection 15.11 (5) of the Act:

(i) the person's name and any identifying number assigned to the person by the *director* in respect of the person's registration,

(ii) a statement that the person has reviewed and taken responsibility for the *design activities*, and

(iii) the person's signature.

3.2.5.7. Knowledge Maintenance

(1) The *director* shall give notice of a knowledge maintenance examination administered or authorized by the Ministry of Municipal Affairs and Housing in respect of changes described in Sentence (2) that relate to the subject matter of an examination program referred to in Clause 3.2.5.2.(1)(a) to every person who, on December 31, 2013, has the qualifications set out in Clauses 3.2.5.1.(1)(a) and (b) of Division C of Ontario Regulation 350/06 (Building Code) made under the Act.

(2) The changes referred to in Sentence (1) are changes made to the Act and Ontario Regulation 350/06 from December 31, 2006 to December 31, 2013 and changes made at the time that regulation is replaced by this Code on January 1, 2014.

(3) The *director* may give the notice referred to in Sentence (1) by sending it,

(a) by regular mail to the last address of the person that has been filed with the *director*, or

(b) by email to the last email address of the person that has been filed with the *director*.

3.2.5.8. Suspension, Revocation, Refusal to Register or Renew a Registration

(1) The *director* may, in the circumstances set out in Sentence (2),

(a) refuse to register an applicant or to renew a registration, or

(b) suspend or revoke a registration.

(2) The circumstances referred to in Sentence (1) are,

(a) the registered person is in breach of a condition of the registration,

(b) the registration was issued on the basis of mistaken, false or incorrect information,

(c) an order under subsection 69 (2) of the *Provincial Offences Act* is in effect directing that the registration of the person be suspended and that no registration be issued to that person until a fine is paid,

(d) the application is incomplete, or

(e) any fees required under Article 3.2.5.5. remain unpaid.

(3) If the *director* proposes to refuse to register or renew a registration or proposes to suspend or revoke a registration, the *director* shall serve a notice of the proposal, together with the reasons for it, on the applicant or registered person.

(4) A notice under Sentence (3) shall state that the applicant or registered person is entitled to a hearing before the *Tribunal* if the applicant or registered person, within 15 days after service of the notice referred to in Sentence (3), serves the *director* and the *Tribunal* with notice in writing requesting a hearing.

(5) If the applicant or registered person does not request a hearing by the *Tribunal* in accordance with Sentence (4), the *director* may carry out the proposal stated in the notice under Sentence (3).

(6) If the applicant or registered person requests a hearing before the *Tribunal* in accordance with Sentence (4), the *Tribunal* shall appoint a time for and hold a hearing and may by order direct the *director* to carry out the *director's* proposal or refrain from carrying it out and to take such other action as the *Tribunal* considers the *director* ought to take in accordance with the Act and this Code, and for those purposes, the *Tribunal* may substitute its opinion for that of the *director*.

(7) The *director*, the applicant or registered person who requested the hearing, and such other persons as the *Tribunal* may specify, are parties to proceedings before the *Tribunal*.

(8) Sentences (3) to (7) do not apply and the *director* may cancel the registration of a registered person upon receipt of a request in writing for cancellation from the registered person in a form established by the *director*.

(9) If, within the time period set out in Sentence 3.2.5.3.(2), the registered person has applied for renewal of a registration and paid the fee required under Article 3.2.5.5., the registration is deemed to continue until the earlier of,

(a) the day the registration is renewed, and

(b) if the registered person is served with notice that the *director* proposes to refuse to renew the registration, the day the time for giving notice requesting a hearing expires or, if a hearing is held, the day the *Tribunal* makes its order.

3.2.6. Public Register

3.2.6.1. Public Register

(1) The *director* shall establish and maintain a register available to the public that lists every person who has the qualifications required by clause 8 (2) (c) and subsection 15.11 (5) of the Act.

(2) The register referred to in Sentence (1) shall contain the following information with respect to every person registered under Sentence 3.2.4.2.(1):

(a) the name of the registered person,

(b) any identifying number assigned by the *director* to the registered person,

(c) the business address of the registered person,

(d) the classes of registration of the registered person,

(e) the names of the person or persons who will review and take responsibility for *design activities* carried out by the registered person in each class of registration, and

(f) any identifying number assigned by the *director* to the person or persons referred to in Clause (e).

(3) The register referred to in Sentence (1) shall contain the following information with respect to every person registered under Sentence 3.2.5.2.(1):

(a) the name of the registered person,

(b) any identifying number assigned by the *director* to the registered person, and

(c) the classes of registration of the registered person.

3.2.7. Classes of Registration and Categories of Qualifications

3.2.7.1. Classes and Categories

(1) Table 3.5.2.1. contains the classes of registration and categories of qualifications for the purposes of this Section.

Section 3.3. Qualifications for Persons Engaged in the Business of Constructing On Site, Installing, Repairing, Servicing, Cleaning or Emptying Sewage Systems

3.3.1. Scope

3.3.1.1. Scope

(1) This Section prescribes, for the purposes of subsection 15.12 (1) of the Act, the qualifications for persons engaged in the business of *constructing* on site, installing, repairing, servicing, cleaning or emptying *sewage systems*.

3.3.2. Definition

3.3.2.1. Definition

(1) In this Section,

"registered" means registered under Sentence 3.3.3.2.(1).

3.3.3. Qualifications

3.3.3.1. General

(1) Persons engaged in the business of *constructing* on site, installing, repairing, servicing, cleaning or emptying *sewage systems* shall have the following qualification:

(a) the person must be registered with the *director*.

(2) A registration shall be in a form established by the *director*.

(3) A person is exempt from the requirement to comply with the qualification in Sentence (1) in respect of the activities of cleaning and emptying *sewage systems* if,

(a) the person has been issued,

(i) before October 31, 2011, a certificate of approval under section 39 of the *Environmental Protection Act* in respect of these activities, or

(ii) on or after October 31, 2011, an environmental compliance approval under the *Environmental Protection Act* in respect of these activities, and

(b) the certificate of approval or the environmental compliance approval, as applicable, has not been suspended or revoked under that Act.

3.3.3.2. Registration and Renewal of a Registration

(1) Subject to Article 3.3.3.9., the *director* may register an applicant, or renew a registered person's registration, if,

(a) all persons who will supervise the *construction* on site, installation, repair, servicing, cleaning or emptying of *sewage systems* carried out by the applicant or registered person have successfully completed the examination program administered or authorized by the Ministry of Municipal Affairs and Housing relating to the person's knowledge of the Act, this Code and the *construction*, maintenance and operation of *sewage systems*,

(b) the application is complete, and

(c) all fees required under Article 3.3.3.5. are paid.

(2) Subject to Article 3.3.3.9., a person who, on December 31, 2013, is registered under Sentence 3.3.3.2.(1) of Division C of Ontario Regulation 350/06 (Building Code) made under the Act and complies with the conditions of registration set out in Article 3.3.3.7. of Division C of that regulation is deemed to be registered under Sentence 3.3.3.2.(1) of this Code, and for these purposes, the person's registration is deemed to continue until its term expires.

(3) For the purposes of a registration or a renewal of a registration, a person who, on December 31, 2013, has the qualifications set out in Clause 3.3.3.2.(1)(a) of Division C of Ontario Regulation 350/06 is deemed to have the qualifications set out in Clause 3.3.3.2.(1)(a) of this Code, but ceases to be deemed to have these qualifications if the

person does not successfully complete a knowledge maintenance examination as required under Clause 3.3.3.7.(1)(b).

3.3.3.3. Application for Registration or Renewal of a Registration

(1) An application for registration or renewal of a registration shall be made to the *director* in a form established by the *director*.

(2) An application for renewal of a registration shall be made at least 60 days before the expiry of the registration to be renewed.

(3) An application for registration or renewal of a registration shall include an undertaking by the applicant or registered person to comply with the conditions set out in Article 3.3.3.7.

(4) If a partnership or a corporation is the applicant for registration or renewal of a registration, the application shall set out the names and residence addresses of all its partners, directors or officers, as the case may be.

(5) An application for registration or renewal of a registration shall contain the names of all partners, directors, officers or employees of the applicant or registered person, as the case may be, and all other persons engaged by the applicant or registered person, who,

(a) have the qualifications set out in Clause 3.3.3.2.(1)(a), and

(b) will supervise the *construction* on site, installation, repair, servicing, cleaning or emptying of *sewage systems* to be carried out by the applicant or registered person.

(6) An application for registration or renewal of a registration shall contain evidence, provided by the applicant or registered person, that the persons referred to in Sentence (5) have the qualifications set out in Clause 3.3.3.2.(1)(a).

3.3.3.4. Term

(1) A registration expires one year after the date of its issuance.

(2) Despite Sentence (1), a registration expires three years after the date of its issuance, if the application for registration or renewal of a registration is made before January 1, 2015.

3.3.3.5. Fees

(1) The fee payable for an application to take an examination that is part of an examination program referred to in Clause 3.3.3.2.(1)(a) is $150.

(2) The fee for a registration or renewal of a registration is,

(a) $105, for 2015, and

(b) the amount determined in accordance with Sentences (3) and (4) rounded to the nearest dollar, for 2016 and subsequent calendar years.

(3) On and after January 1, 2016, the fee for a calendar year is the fee for the previous calendar year adjusted by the percentage change from year to year in the Consumer Price Index for Ontario (All-Items) as reported monthly by Statistics Canada under the authority of the *Statistics Act* (Canada), averaged over the 12-month period that ends on March 31 of the previous calendar year, rounded to the first decimal point.

(4) Despite Sentence (3), if the percentage change results in a negative amount, the fee for a calendar year shall remain at the same level as the previous calendar year.

3.3.3.6. Not Transferable

(1) A registration is not transferable.

3.3.3.7. Conditions

(1) The following are the conditions of a registration:

(a) the registered person shall ensure that the *construction* on site, installation, repair, servicing, cleaning or emptying of *sewage systems* carried out by the registered person is supervised by a person who has the qualifications set out in Clause 3.3.3.2.(1)(a),

(b) by the end of the eighteenth month following the month in which the *director* gives notice of a knowledge maintenance examination to the registered person under Sentence 3.3.3.8.(1), the registered person shall ensure that persons who are deemed under Sentence 3.3.3.2.(3) to have the qualifications set out in Clause 3.3.3.2.(1)(a) and who will supervise the *construction* on site, installation, repair, servicing, cleaning or emptying of *sewage systems* carried out by the registered person have successfully completed the knowledge maintenance examination referred to in the notice,

(c) the registered person shall, within 15 days after the event, notify the *director* in writing of,

(i) any change in address of the registered person for correspondence relating to the registration, and

(ii) any change in the information set out in Sentences 3.3.3.3.(4) and (5),

(d) the registered person shall give prompt written notice to the *director* of any material change in any of the information, other than the information referred to in Clause (c), that is contained in or accompanies an application for registration or renewal of a registration,

(e) the registered person shall, from time to time, at the registered person's expense, give the *director* such documents or information relating to the registration or to activities carried out under the registration as the *director* may reasonably require, and

(f) the registered person shall allow the representatives of the *director* access to the registered person's books and records during normal business hours for the purpose of confirming matters related to the registration.

3.3.3.8. Knowledge Maintenance

(1) The *director* shall give notice of a knowledge maintenance examination administered or authorized by the Ministry of Municipal Affairs and Housing in respect of changes described in Sentence (2) that relate to the subject matter of an examination program referred to in Clause 3.3.3.2.(1)(a) to every person who is registered under Sentence 3.3.3.2.(1).

(2) The changes referred to in Sentence (1) are changes made to the Act and Ontario Regulation 350/06 (Building Code) from December 31, 2006 to December 31, 2013 and changes made at the time that regulation is replaced by this Code on January 1, 2014.

(3) The *director* may give the notice referred to in Sentence (1) by sending it,

(a) by regular mail to the last address of the registered person that has been filed with the *director*, or

(b) by email to the last email address of the registered person that has been filed with the *director*.

3.3.3.9. Suspension, Revocation, Refusal to Register or Renew a Registration

(1) The *director* may, in the circumstances set out in Sentence (2),

(a) refuse to register an applicant or to renew a registration, or

(b) suspend or revoke a registration.

(2) The circumstances referred to in Sentence (1) are,

(a) the registered person is in contravention of the Act or this Code,

(b) the registered person is in breach of a condition of the registration,

(c) the registration was issued on the basis of mistaken, false or incorrect information,

(d) the *director* is of the opinion that the past conduct of the applicant or registered person or, if the applicant or registered person is a partnership or a corporation, the partners, officers or directors of the applicant or registered person, as the case may be, affords reasonable grounds for belief that the business that would be or is authorized by the registration will not be carried on in accordance with law,

(e) an order under subsection 69 (2) of the *Provincial Offences Act* is in effect directing that the registration of the person be suspended and that no registration be issued to that person until a fine is paid,

(f) the application is incomplete, or

(g) any fees required under Article 3.3.3.5. remain unpaid.

(3) If the *director* proposes to refuse to register or renew a registration or proposes to suspend or revoke a registration, the *director* shall serve a notice of the proposal, together with the reasons for it, on the applicant or registered person.

(4) A notice under Sentence (3) shall state that the applicant or registered person is entitled to a hearing before the *Tribunal* if the applicant or registered person, within 15 days after service of the notice referred to in Sentence (3), serves the *director* and the *Tribunal* with notice in writing requesting a hearing.

(5) If the applicant or registered person does not request a hearing by the *Tribunal* in accordance with Sentence (4), the *director* may carry out the proposal stated in the notice under Sentence (3).

(6) If the applicant or registered person requests a hearing before the *Tribunal* in accordance with Sentence (4), the *Tribunal* shall appoint a time for and hold a hearing and may by order direct the *director* to carry out the *director's* proposal or refrain from

carrying it out and to take such other action as the *Tribunal* considers the *director* ought to take in accordance with the Act and this Code, and for those purposes the *Tribunal* may substitute its opinion for that of the *director*.

(7) The *director*, the applicant or registered person who requested the hearing, and such other persons as the *Tribunal* may specify, are parties to proceedings before the *Tribunal*.

(8) Sentences (3) to (7) do not apply and the *director* may cancel the registration of a registered person upon receipt of a request in writing for cancellation from the registered person in a form established by the *director*.

(9) If, within the time period set out in Sentence 3.3.3.3.(2), the registered person has applied for renewal of a registration and paid the fee required under Article 3.3.3.5., the registration is deemed to continue until the earlier of,

(a) the day the registration is renewed, and

(b) if the registered person is served with notice that the *director* proposes to refuse to renew the registration, the day the time for giving notice requesting a hearing expires or, if a hearing is held, the day the *Tribunal* makes its order.

3.3.4. Public Register

3.3.4.1. Public Register

(1) The *director* shall establish and maintain a register available to the public that lists every person who has the qualifications required by subsection 15.12 (1) of the Act.

(2) The register referred to in Sentence (1) shall contain the following information with respect to every registered person:

(a) the name of the registered person,

(b) any identifying number assigned by the *director* to the registered person,

(c) the business address of the registered person,

(d) the names of the person or persons who will supervise the *construction* on site, installation, repair, servicing, cleaning or emptying of *sewage systems* carried out by the registered person, and

(e) any identifying number assigned by the *director* to the person or persons referred to in Clause (d).

Section 3.4. Qualifications for Registered Code Agencies

3.4.1. Scope

3.4.1.1. Scope

(1) This Section prescribes, for the purposes subsection 15.11 (4) of the Act, the qualifications that a person must have in order to be eligible to be appointed as a *registered code agency* under the Act.

3.4.2. Definition

3.4.2.1. Definition

(1) In this Section,

"registered" means registered under Sentence 3.4.3.2.(1).

3.4.3. Qualifications

3.4.3.1. General

(1) The following are prescribed as qualifications for persons to be appointed under the Act as a *registered code agency*:

(a) the person must be registered with the *director*.

(2) A registration shall be in a form established by the *director*.

3.4.3.2. Registration and Renewal of a Registration

(1) Subject to Articles 3.4.3.9. and 3.4.3.10., the *director* may register an applicant, or renew a registered person's registration, in each class of registration applied for, if,

(a) the applicant or registered person or, if the applicant or registered person is a corporation or partnership, a director, officer, partner or employee of the applicant or registered person, has successfully completed the examination program administered or authorized by the Ministry of Municipal Affairs and Housing relating to the person's knowledge of the Act and this Code and the powers and duties of a *registered code agency*,

(b) the applicant or registered person or, if the applicant or registered person is a corporation or partnership, one or more directors, officers, partners or employees of the applicant or registered person, have successfully completed the examination program administered or authorized by the Ministry of Municipal Affairs and Housing relating to the person's knowledge of the Act and this Code in the category of qualification set out in Column 2 of Table 3.5.2.2. that corresponds to each class of registration set out in Column 1 of Table 3.5.2.2. for which application is made,

(c) all persons who will carry out plans review and inspection activities on behalf of the registered person have successfully completed the examination program administered or authorized by the Ministry of Municipal Affairs and Housing relating to the person's knowledge of the Act and this Code in the category of qualification set out in Column 2 of Table 3.5.2.2. that corresponds to each class of registration set out in Column 1 of Table 3.5.2.2. for which application is made,

(d) the applicant or registered person has in place a quality management plan referred to in Sentence 3.4.3.3.(3) for carrying out the activities of the applicant or registered person under the registration that is acceptable to the *director*,

(e) the applicant or registered person is covered by the insurance required under Subsection 3.6.2. during the term of the registration applied for,

(f) the application is complete, and

(g) all fees required under Article 3.4.3.5. are paid.

(2) Subject to Articles 3.4.3.9. and 3.4.3.10., a person who, on December 31, 2013, is registered in a class of registration under Sentence 3.4.3.2.(1) of Division C of Ontario Regulation 350/06 (Building Code) made under the Act and complies with the conditions

of registration set out in Article 3.4.3.7. of Division C of that regulation is deemed to be registered in the class of registration under Sentence 3.4.3.2.(1) of this Code, and for these purposes, the person's registration in the class of registration is deemed to continue until its term expires.

(3) For the purposes of a registration or a renewal of a registration,

(a) a person who, on December 31, 2013, has the qualifications set out in Clause 3.4.3.2.(1)(a) of Division C of Ontario Regulation 350/06 is deemed to have the qualifications set out in Clause 3.4.3.2.(1)(a) of this Code, but ceases to be deemed to have these qualifications if the person does not successfully complete a knowledge maintenance examination as required under Clause 3.4.3.7.(1)(c),

(b) a person who, on December 31, 2013, has the qualifications set out in Clause 3.4.3.2.(1)(b) of Division C of Ontario Regulation 350/06 in a class of registration is deemed to have the qualifications set out in Clause 3.4.3.2.(1)(b) of this Code in the class of registration, but ceases to be deemed to have these qualifications if the person does not successfully complete a knowledge maintenance examination as required under Clause 3.4.3.7.(1)(c), and

(c) a person who, on December 31, 2013, has the qualifications set out in Clause 3.4.3.2.(1)(c) of Division C of Ontario Regulation 350/06 in a class of registration is deemed to have the qualifications set out in Clause 3.4.3.2.(1)(c) of this Code in the class of registration, but ceases to be deemed to have these qualifications if the person does not successfully complete a knowledge maintenance examination as required under Sentence 3.7.4.2.(2).

3.4.3.3. Application for Registration or Renewal of a Registration

(1) An application for registration or renewal of a registration shall be made to the *director* in a form established by the *director*.

(2) An application for renewal of a registration shall be made at least 60 days before the expiry of the registration to be renewed.

(3) An application for registration or renewal of a registration shall include a quality management plan for carrying out the activities of the applicant or registered person under the registration, including, without limitation,

(a) procedures relating to the commencement of activities as a *registered code agency*, including procedures to verify that the applicant or registered person is qualified to undertake the activities and to verify that there exists no conflict of interest within the meaning of Sentence 3.7.2.1.(4),

(b) identification of the responsibilities of persons who will carry out plans review and inspection activities of the applicant or registered person and procedures for the supervision of those persons,

(c) procedures for assessing plans and specifications for conformity with this Code, including procedures for the assessment of *alternative solutions*,

(d) procedures for inspecting the *construction* of *buildings*,

(e) procedures for receipt of notices that *construction* is ready for inspection and of written reports from *architects* and *professional engineers* arising out of the general review of the *construction* of *buildings*,

(f) procedures for the issuance of certificates and orders under the Act, including the responsibility of the persons with the qualifications set out in Sentences 3.7.4.3.(1) and (2),

(g) procedures for referral of matters to a *chief building official* under subsection 14 (5) of the Act,

(h) procedures for participation of the applicant or registered person in proceedings before the Building Code Commission under section 24 of the Act and before the Superior Court of Justice under section 25 of the Act,

(i) procedures for documenting the activities of the applicant or registered person under the registration, including data control, records retention and the maintenance of security and confidentiality of records, and transferring records to the *principal authority*,

(j) procedures for training and supervision of personnel, and

(k) procedures for the review and updating of the quality management plan.

(4) An application for registration or renewal of a registration shall include an undertaking by the applicant or registered person to comply with the conditions set out in Article 3.4.3.7.

(5) If a partnership or a corporation is the applicant for registration or renewal of a registration, the application shall set out the names and residence addresses of all its partners, directors or officers, as the case may be.

(6) An application for registration or renewal of a registration shall contain the names of all partners, directors, officers or employees of the applicant or registered person, as the case may be, and all other persons engaged by the applicant or registered person, who,

(a) have the qualifications set out in Clause 3.4.3.2.(1)(a),

(b) have the qualifications set out in Clause 3.4.3.2.(1)(b) in the class or classes of registration for which the application is made, and

(c) have the qualifications set out in Clause 3.4.3.2.(1)(c) in the class or classes of registration for which the application is made and will exercise powers and perform functions under the Act on behalf of the applicant or registered person in that class of registration.

(7) An application for registration or renewal of a registration shall contain evidence, provided by the applicant or registered person, that the persons referred to in Sentence (6) have the qualifications set out in Clause 3.4.3.2.(1)(a), (b) or (c).

(8) An application for registration or renewal of a registration shall contain evidence, provided by the applicant or registered person in such form and in such detail as may be required by the *director*, that the applicant or registered person is covered by the insurance required under Subsection 3.6.2. during the term of the registration applied for.

3.4.3.4. Term

(1) A registration expires one year after the date of its issuance.

3.4.3.5. Fees

(1) The fee payable for an application to take an examination that is part of an examination program referred to in Clause 3.4.3.2.(1)(a), (b) or (c) is $150.

(2) The fee for a registration is,

(a) $395, for 2015, and

(b) the amount determined in accordance with Sentences (5) and (6) rounded to the nearest dollar, for 2016 and subsequent calendar years.

(3) The fee for the addition of a new class of registration is,

(a) $65, for 2015, and

(b) the amount determined in accordance with Sentences (5) and (6) rounded to the nearest dollar, for 2016 and subsequent calendar years.

(4) The fee for renewal of a registration is,

(a) $290, for 2015, and

(b) the amount determined in accordance with Sentences (5) and (6) rounded to the nearest dollar, for 2016 and subsequent calendar years.

(5) On and after January 1, 2016, the fee for a calendar year is the fee for the previous calendar year adjusted by the percentage change from year to year in the Consumer Price Index for Ontario (All-Items) as reported monthly by Statistics Canada under the authority of the *Statistics Act* (Canada), averaged over the 12-month period that ends on March 31 of the previous calendar year, rounded to the first decimal point.

(6) Despite Sentence (5), if the percentage change results in a negative amount, the fee for a calendar year shall remain at the same level as the previous calendar year.

3.4.3.6. Not Transferable

(1) A registration is not transferable.

3.4.3.7. Conditions

(1) The following are the conditions of a registration:

(a) the registered person shall carry out activities under the registration in accordance with the Act, this Code and the quality management plan described in Clause 3.4.3.2.(1)(d),

(b) if the registered person is a corporation or partnership, during the term of the registration there must be,

(i) an officer, director, partner or employee of the registered person who has the qualifications set out in Clause 3.4.3.2.(1)(a), and

(ii) one or more officers, directors, partners or employees of the registered person who have the qualifications set out in Clause 3.4.3.2.(1)(b) in respect of each class of registration that is held by the registered person,

(c) by the end of the eighteenth month following the month in which the *director* gives notice of a knowledge maintenance examination to the registered person under Sentence 3.4.3.8.(1), the registered person shall ensure that the persons who are deemed under Clause 3.4.3.2.(3)(a) or (b) to have the qualifications set out in Clause 3.4.3.2.(1)(a) or (b), as applicable, have successfully completed the knowledge maintenance examination referred to in the notice,

(d) the registered person shall, during the term of the registration, be covered by the insurance required under Subsection 3.6.2.,

(e) the registered person shall, within 15 days after the event, notify the *director* in writing of,

(i) any change in address of the registered person for correspondence relating to the registration, and

(ii) any change in the information set out in Sentences 3.4.3.3.(5) and (6) ,

(f) the registered person shall give prompt written notice to the *director* of any material change in any of the information, other than the information referred to in Clause (e), that is contained in or accompanies an application for registration or renewal of a registration,

(g) the registered person shall, from time to time, at the registered person's expense, give to the *director* such documents or information relating to the registration or to activities carried out under the registration as the *director* may reasonably require, and

(h) the registered person shall allow the representatives of the *director* access to the registered person's books and records during normal business hours for the purpose of confirming matters related to the registration.

3.4.3.8. Knowledge Maintenance

(1) The *director* shall give notice of a knowledge maintenance examination administered or authorized by the Ministry of Municipal Affairs and Housing in respect of changes described in Sentence (2) that relate to the subject matter of an examination program referred to in Clause 3.4.3.2.(1)(a), (b) or (c) to every person who is registered under Sentence 3.4.3.2.(1) in a class of registration set out in Column 1 of Table 3.5.2.2. to which the examination relates.

(2) The changes referred to in Sentence (1) are changes made to the Act and Ontario Regulation 350/06 (Building Code) from December 31, 2006 to December 31, 2013 and changes made at the time that regulation is replaced by this Code on January 1, 2014.

(3) The *director* may give the notice referred to in Sentence (1) by sending it,

(a) by regular mail to the last address of the registered person that has been filed with the *director*, or

(b) by email to the last email address of the registered person that has been filed with the *director*.

3.4.3.9. Suspension, Revocation, Refusal to Register or Renew a Registration

(1) The *director* may, in the circumstances set out in Sentence (2),

(a) refuse to register an applicant,

(b) refuse to renew a registration, or

(c) suspend or revoke a registration.

(2) The circumstances referred to in Sentence (1) are,

(a) the registered person is in contravention of the Act or this Code,

(b) the registered person is in breach of a condition of the registration other than the condition set out in Clause 3.4.3.7.(1)(d),

(c) the registration was issued on the basis of mistaken, false or incorrect information,

(d) the *director* is of the opinion that the past conduct of the applicant or registered person or, if the applicant or registered person is a partnership or a corporation, the partners, officers or directors of the applicant or registered person, as the case may be, affords reasonable grounds for belief that the business that would be or is authorized by the registration will not be carried on in accordance with law,

(e) the *director* is of the opinion that there are reasonable grounds for belief that the activities of the applicant or registered person are or will be carried on in a manner that poses a threat to public safety,

(f) the application is incomplete, or

(g) any fees required under Article 3.4.3.5. remain unpaid.

(3) If the *director* proposes to refuse to register or renew a registration or proposes to suspend or revoke a registration under Sentence (1), the *director* shall serve a notice of the proposal, together with the reasons for it, on the applicant or registered person.

(4) A notice under Sentence (3) shall state that the applicant or registered person is entitled to a hearing before the *Tribunal* if the applicant or registered person, within 15 days after service of the notice referred to in Sentence (3), serves the *director* and the *Tribunal* with notice in writing requesting a hearing.

(5) If an applicant or registered person does not request a hearing by the *Tribunal* in accordance with Sentence (4), the *director* may carry out the proposal stated in the notice under Sentence (3).

(6) If the applicant or registered person requests a hearing before the *Tribunal* in accordance with Sentence (4), the *Tribunal* shall appoint a time for and hold a hearing and may by order direct the *director* to carry out the *director's* proposal or refrain from carrying it out and to take such other action as the *Tribunal* considers the *director* ought to take in accordance with the Act and this Code, and for those purposes the *Tribunal* may substitute its opinion for that of the *director*.

(7) The *director*, the applicant or registered person who requested the hearing, and such other persons as the *Tribunal* may specify, are parties to proceedings before the *Tribunal*.

(8) A proposal to suspend or revoke a registration by reason of Clause (2)(e) takes effect immediately and the commencement of a proceeding before the *Tribunal* does not stay the operation of the proposal to suspend or revoke the registration.

(9) The *Tribunal* may, on the application of the registered person, stay the operation of the proposal of the *director* to suspend or revoke the registration, and may grant the stay subject to conditions.

(10) Sentences (3) to (9) do not apply and the *director* may cancel the registration of a registered person upon receipt of a request in writing for cancellation from the registered person in a form established by the *director*.

(11) Subject to Sentence (8), if within the time period set out in Sentence 3.4.3.3.(2) a registered person has applied for renewal of a registration, paid the fee required under Article 3.4.3.5. and provided evidence satisfactory to the *director* that the registered person is covered by insurance required under Subsection 3.6.2. for the term of the renewal of the registration, the registration is deemed to continue until the earliest of,

(a) the day the registration is renewed,

(b) if the registered person is served with notice that the *director* proposes to refuse to renew the registration, the day the time for giving notice requesting a hearing expires or, if a hearing is held, the day the *Tribunal* makes its order, and

(c) the day when the registered person ceases to be covered by the insurance required under Subsection 3.6.2.

3.4.3.10. Mandatory Suspension or Revocation of Registration or Refusal to Register or Renew a Registration

(1) The *director* shall, in the circumstances set out in Sentence (2),

(a) refuse to register an applicant,

(b) refuse to renew a registration, or

(c) suspend or revoke a registration.

(2) The circumstances referred to in Sentence (1) are that,

(a) the applicant or registered person is not covered by the insurance required under Subsection 3.6.2., or

(b) an order under subsection 69 (2) of the *Provincial Offences Act* is in effect directing that the registration of the person be suspended and no registration be issued to that person until a fine is paid.

(3) If the *director* refuses to register an applicant, refuses to renew a registration or suspends or revokes a registration under Sentence (1), the *director* shall serve a notice of the refusal, suspension or revocation, together with the reasons for it, on the applicant or registered person.

(4) A suspension or revocation of a registration under Sentence (1) takes effect immediately and the commencement of a proceeding before the *Tribunal* does not stay the operation of the suspension or revocation of the registration.

(5) The *Tribunal* may, on the application of the registered person, stay the operation of a decision of the *director* to suspend or revoke the registration, and may make the stay subject to conditions.

(6) A notice under Sentence (3) shall state that the applicant or registered person is entitled to a hearing before the *Tribunal* if the applicant or registered person, within 15 days after service of the notice referred to in Sentence (3), serves the *director* and the *Tribunal* with notice in writing requesting a hearing.

(7) If the applicant or registered person requests a hearing before the *Tribunal* in accordance with Sentence (6), the *Tribunal* shall appoint a time for and hold a hearing and may by order confirm, alter or revoke the decision of the *director* to refuse to register or to suspend or revoke the registration, as the case may be, and may take such action as the *Tribunal* considers the *director* ought to take in accordance with the Act and this Code, and for such purposes the *Tribunal* may substitute its opinion for that of the *director*.

(8) The *director*, the applicant or registered person who requested the hearing, and such other persons as the *Tribunal* may specify, are parties to proceedings before the *Tribunal*.

3.4.4. Public Register

3.4.4.1. Public Register

(1) The *director* shall establish and maintain a register available to the public that lists every person who has the qualifications required by subsection 15.11 (4) of the Act.

(2) The register referred to in Sentence (1) shall contain the following information with respect to every registered person:

(a) the name of the registered person,

(b) any identifying number assigned by the *director* to the registered person,

(c) the business address of the registered person,

(d) the classes of registration of the registered person, and

(e) the names of any persons who will exercise powers and perform functions under the Act on behalf of the registered person in each class of registration and any identifying number assigned by the *director* to that person.

3.4.5. Classes of Registration and Categories of Qualifications

3.4.5.1. Classes and Categories

(1) Table 3.5.2.2. contains the classes of registration and categories of qualifications for the purposes of this Section.

Section 3.5. Classes of Registration and Categories of Qualifications

3.5.1. Scope

3.5.1.1. Scope

(1) This Section sets out classes of registration and categories of qualifications for the purposes of Sections 3.1., 3.2., 3.4. and 3.7.

3.5.2. Classes of Registration and Categories of Qualifications

3.5.2.1. Inspectors and Persons Who Carry out Design Activities

(1) Table 3.5.2.1. sets out the classes of registration and categories of qualifications for *inspectors* and persons who carry out *design activities*.

Table 3.5.2.1.
Classes of Registration and Categories of Qualifications for Inspectors and Persons Who Carry out Design Activities(1) (2)

Forming Part of Sentence 3.5.2.1.(1)

Item	Column 1 Classes of Registration for *Inspectors* and Persons Who Carry out *Design Activities*	Column 2 Categories of Qualifications for *Inspectors* and Persons Described in Clauses 3.2.4.2.(1)(a) and (b) and 3.2.5.2.(1)(a)	Column 3 Type of *Building*
1.	House	House	(a) A detached house, semi-detached house, townhouse or row house containing not more than two *dwelling units* in each house and the *building* systems, works, fixtures and service systems appurtenant to these *buildings*, including: (b) an ancillary *building* that serves the *building*, and excluding: (c) *buildings* and parts of *buildings* described in Column 3 of any of Items 5, 6, 7, 8, 10 and 11 of this Table.
2.	Small *Buildings*	Small *Buildings*	(a) *Buildings* described in Sentence 1.1.2.4.(1) of Division A and the *building* systems, works, fixtures and service systems appurtenant to these *buildings*, including: (b) *buildings* and parts of *buildings*, (i) described in Column 3 of Item 1 of this Table, or (ii) to which any of Sections 3.10., 3.11., 3.12., 3.14. and 3.15. of Division B apply and that are appurtenant to or serve *buildings* described in Clause (a), excluding: (c) *buildings* and parts of *buildings* described in Column 3 of any of Items 4 to 10 of this Table, and

			(d) signs described in Clause 1.3.1.1.(1)(e) of Division A.
3.	Large *Buildings*	Large *Buildings*	(a) *Buildings* described in Sentence 1.1.2.2.(1), (3) or (4) of Division A and the *building* systems, works, fixtures and service systems appurtenant to these *buildings*, excluding: (b) *buildings* and parts of *buildings* described in Column 3 of any of Items 4 to 11 of this Table, and (c) signs described in Clause 1.3.1.1.(1)(e) of Division A.
4.	Complex *Buildings*	Complex *Buildings*	*Building* systems, works, fixtures and service systems to which Subsection 3.2.6. of Division B or any provision in Articles 3.2.8.3. to 3.2.8.11. of Division B applies.
5.	*Plumbing* – House	*Plumbing* - House	All *plumbing* systems to which Part 7 of Division B applies that are appurtenant to a *building* that is a detached house, semi-detached house, townhouse or row house containing not more than two *dwelling unit*s in each house.
6.	*Plumbing* - All *Buildings*	*Plumbing* - All *Buildings*	(a) All *plumbing* systems to which Part 7 of Division B applies, including: (b) *buildings* and parts of *buildings* described in Column 3 of Item 5 of this Table.
7.	HVAC – House	HVAC – House	All *building* systems, works, fixtures and service systems to which Section 9.32. or 9.33. of Division B applies that are appurtenant to a *building* that is a detached house, semi-detached house, townhouse or row house containing not more than two *dwelling unit*s in each house.
8.	*Building* Services	*Building* Services	(a) *Building* systems, works, fixtures and service systems that are appurtenant to *buildings* described in Sentence 1.1.2.2.(1), (3) or (4) or Sentence 1.1.2.4.(1) of Division A and that relate to fire suppression, fire detection, smoke control, exhaust, vertical movement of smoke, energy efficiency, lighting and emergency power, and

			(b) *building* systems, works, fixtures and service systems appurtenant to *buildings* to which Part 6 of Division B applies or to which Section 9.32. or 9.33. of Division B applies, including: (c) *buildings* and parts of *buildings* described in Column 3 of Item 7 or 11 of this Table.
9.	*Building* Structural	*Building* Structural	Internal and external *loadbearing* structural elements essential to the stability or strength of a *building* described in Sentence 1.1.2.2.(2) or 1.1.2.4.(1) of Division A and that resist *dead loads* or *live loads* including, but not limited to, *foundations*, floors, walls, roofs, columns and beams.
10.	On-site *Sewage Systems*	On-site *Sewage Systems*	*Sewage systems* to which Part 8 of Division B applies.
11.	Detection, Lighting and Power	Detection, Lighting and Power	Early warning and electrical systems including systems appurtenant to *buildings* described in Sentence 1.1.2.2.(1) or 1.1.2.4.(1) of Division A and that relate to fire alarm and detection systems, voice communication systems, lighting systems, emergency lighting systems or emergency power systems for *building* services in all *buildings*.
12.	Fire Protection	Fire Protection	Fire suppression, fire detection, firefighting and fire safety systems appurtenant to *buildings* described in Sentence 1.1.2.2.(1) or Sentence 1.1.2.4.(1) of Division A.

Notes to Table 3.5.2.1.:

(1) An *inspector* registered in one class of registration may carry out plans review and inspection in another class where to do so does not constitute a substantial part of the plans review or inspection on any project.

(2) A person registered in one class of registration may carry out *design activities* in another class where to do so does not constitute a substantial part of the *design activities* on any project.

3.5.2.2. Registered Code Agencies

(1) Table 3.5.2.2. sets out the classes of registration for *registered code agencies* and the categories of qualifications for persons described in Clauses 3.4.3.2.(1)(a) to (c).

Table 3.5.2.2.
Classes of Registration and Categories of Qualifications for Registered Code Agencies

Forming Part of Sentence 3.5.2.2.(1)

Item	Column 1	Column 2	Column 3
	Classes of Registration for *Registered Code Agencies*	Category of Qualification for Persons Described in Clauses 3.4.3.2.(1)(a) to (c)	Type of *Building* Reference to Table 3.5.2.1.
1.	House	House	Column 3 of Item 1
		Plumbing - House	Column 3 of Item 5
		HVAC – House	Column 3 of Item 7
		On-Site *Sewage Systems*	Column 3 of Item 10
2.	Small *Buildings*	Small *Buildings*	Column 3 of Item 2
		Plumbing - All *Buildings*	Column 3 of Item 6
		Building Services	Column 3 of Item 8
		Building Structural	Column 3 of Item 9
		On-Site *Sewage Systems*	Column 3 of Item 10
3.	Large *Buildings*	Large *Buildings*	Column 3 of Item 3
		Plumbing - All Buildings	Column 3 of Item 6
		Building Services	Column 3 of Item 8
		Building Structural	Column 3 of Item 9
		On-site *Sewage Systems*	Column 3 of Item 10
4.	Complex *Buildings*	Complex *Buildings*	Column 3 of Item 4
		Plumbing - All *Buildings*	Column 3 of Item 6
		Building Services	Column 3 of Item 8
		Building Structural	Column 3 of Item 9
		On-site *Sewage Systems*	Column 3 of Item 10
5.	On-site *Sewage Systems*	On-site *Sewage Systems*	Column 3 of Item 10

Section 3.6. Insurance

3.6.1. Scope

3.6.1.1. Scope

(1) This Section prescribes, for the purposes of subsection 15.13 (1) of the Act, the insurance coverage that *registered code agencies* and persons referred to in subsection 15.11 (5) of the Act must have.

3.6.2. Insurance for Registered Code Agencies and Persons Referred to in Subsection 15.11 (5) of the Act

3.6.2.1. Definition

(1) In this Subsection,

"registered person" means a person who is registered under Sentence 3.2.4.2.(1) or 3.4.3.2.(1).

3.6.2.2. Scope

(1) Every registered person shall have insurance coverage under an insurance policy that satisfies the requirements set out in Article 3.6.2.3.

3.6.2.3. Insurance Coverage

(1) The insurance policy,

(a) shall indemnify the registered person against liability imposed by law arising out of the performance of or the failure to perform services as a registered person during any time while the person is registered under Sentence 3.2.4.2.(1) or 3.4.3.2.(1) for claims that are first made and reported to the insurer during the period of insurance or during any extended reporting period required by Clause (1)(c),

(b) shall set out the name of the registered person,

(c) in the case of a *registered code agency* registered under Sentence 3.4.3.2.(1),

(i) shall require an extended reporting period of two years for the purposes of giving notice of any claim or occurrence that the *registered code agency* could reasonably foresee might give rise to a claim, with respect to an event that occurs prior to the person ceasing to be insured,

(ii) shall provide that the extended reporting period described in Subclause (i) shall commence on the day the *registered code agency* ceases to be insured, and

(iii) shall require the *registered code agency* to make full payment of all premiums for the extended reporting period referred to in Subclause (i) as part of the premiums for the issuance of the insurance policy,

(d) shall provide for insurance coverage to commence,

(i) on the date the registered person becomes registered, or

(ii) in the case of a registered person previously insured in accordance with this Article, on the expiry of the previous policy,

(e) shall require the insurer to provide prompt written notice to the *director* if the policy is declared void for material misrepresentation,

(f) shall specify a limit of indemnity for any one claim and in the aggregate during any one period of insurance that is not less than,

(i) in the case of persons registered under Sentence 3.2.4.2.(1),

(A) $1,000,000 per claim and $2,000,000 in the aggregate, if the person billed $100,000 or more in fees in the 12 months immediately before the issuance of the policy,

(B) $500,000 per claim and $1,000,000 in the aggregate, if the person billed more than $50,000 and less than $100,000 in fees in the 12 months immediately before the issuance of the policy,

(C) $250,000 per claim and $500,000 in the aggregate, if the person billed $50,000 or less in fees in the 12 months immediately before the issuance of the policy, or

(D) the limits of indemnity for any one claim and in the aggregate that are set out in Sub-subclause (A), (B) or (C), as determined by reference to the person's estimated fees billings for the 12-month period immediately after the issuance of the policy, if the person has been registered less than one year before the issuance of the policy, and

(ii) in the case of a *registered code agency* registered under Sentence 3.4.3.2.(1), $1,000,000 per claim and $2,000,000 in the aggregate, except that those limits shall apply exclusively to the exercise of the powers and performance of the duties of a *registered code agency* under the Act and shall be in addition to any insurance applicable to any other activities carried on by the *registered code agency*,

(g) shall provide that any costs and expenses necessarily incurred by the insurer in the investigation, defence or settlement of claims under the policy shall not be part of the limit of indemnity set out in Clause (f) unless the limit of indemnity from any one claim exceeds $2,000,000,

(h) shall not provide that the insured shall be responsible for the first portion of any sum that the insured becomes legally liable to pay in respect of a claim made against him, her or it in respect of any one claim or occurrence in an amount exceeding the lesser of,

(i) $70,000, and

(ii) 5% of,

(A) the amount of fees billed by the insured in the 12 months immediately before the issuance of the policy, or

(B) the amount of the insured's estimated fees billings for the 12-month period immediately after the issuance of the policy, if the insured has been registered under Sentence 3.2.4.2.(1) less than one year before the issuance of the policy,

(i) shall provide that it cannot be cancelled by the insured unless,

(i) the insured immediately replaces the policy with another policy that satisfies the requirements of this Article,

(ii) the insurer has given notice in writing of the proposed cancellation to the *director*, and

(iii) the notice described in Subclause (ii) was received by the *director* at least 30 days before the day the policy is cancelled,

(j) shall provide that it cannot be cancelled by the insurer unless,

(i) it is cancelled for non-payment of a premium,

(ii) the insurer has given notice in writing of the proposed cancellation to the *director*, and

(iii) the notice described in Subclause (ii) was sent to the *director* at least 30 days before the day the policy is cancelled,

(k) shall provide for the continuation of coverage if the insured is adjudged a bankrupt, insolvent, incompetent or dies during the period of insurance, and

(l) may provide that coverage be subject to such exclusions and conditions and otherwise on such terms as are consistent with normal insurance industry practice from time to time.

Section 3.7. Registered Code Agencies

3.7.1. When a Registered Code Agency may not be Appointed under Section 4.1 of the Act

3.7.1.1. Agreements

(1) A *registered code agency* may not be appointed under subsection 4.1 (2) of the Act, unless the agreement entered into between a *principal authority* and the *registered code agency* complies with the requirements set out in Sentences (2) and (3).

(2) An agreement described in Sentence (1) shall,

(a) be made in writing,

(b) specify the functions that the *registered code agency* is authorized to perform,

(c) specify the *construction* of the *building* or class of *buildings* in respect of which the functions will be performed,

(d) set out the procedure by which the *principal authority* will appoint the *registered code agency* to perform specified functions in respect of the *construction* of a *building* or class of *buildings*,

(e) require that the *registered code agency* carry out its functions under the agreement in accordance with the Act and this Code and the quality management plan described in Clause 3.4.3.2.(1)(d), and

(f) provide for the provision by the *principal authority* to the *registered code agency* of such plans, specifications and other information, including applications for permits, that the *registered code agency* may require in order to act under the appointment.

(3) An agreement described in Sentence (1),

(a) may contain provisions in addition to the provisions required under Sentence (2) if the additional provisions are not inconsistent with the provisions required under that Sentence, and

(b) shall not contain any provision that relates to the *construction* of *buildings* for a class of registration for which the *registered code agency* is not registered under Sentence 3.4.3.2.(1).

3.7.1.2. Appointments

(1) A *registered code agency* may not be appointed under subsection 4.1 (2) of the Act unless the appointment complies with the requirements of Sentences (2) and (3).

(2) An appointment described in Sentence (1) shall,

(a) be made in writing,

(b) specify the *construction* of the *building* or class of *buildings* in respect of which the appointment relates,

(c) specify the functions described in section 15.15 of the Act that the *registered code agency* is appointed to perform, and

(d) require that the *registered code agency* carry out its functions under the appointment in accordance with the Act and this Code and the quality management plan described in Clause 3.4.3.2.(1)(d).

(3) An appointment described in Sentence (1) may contain provisions in addition to the provisions required under Sentence (2) if the additional provisions are not inconsistent with the provisions required under that Sentence.

3.7.2. When a Registered Code Agency may not be Appointed or Continue to Act under an Appointment

3.7.2.1. General

(1) A *registered code agency* may not be appointed to perform functions under section 15.15 of the Act in respect of a *building* or continue to act under an appointment in respect of a *building* if the *registered code agency*,

(a) is not registered under Sentence 3.4.3.2.(1) in respect of the class of registration to which the *construction* of the *building* relates, or

(b) is in breach of a condition of its registration under Article 3.4.3.7.

(2) Where the design and general review of *construction* of a *building* must be undertaken by an *architect* or a *professional engineer* or a combination of both, a *registered code agency* may not be appointed to perform functions under section 15.15 of the Act or continue to act under an appointment in respect of the *construction* of the *building* unless the *registered code agency* or an officer, director, partner or employee of the *registered code agency* is an *architect* or *professional engineer* or both, as the case may be.

(3) A *registered code agency* may not be appointed under the Act or continue to act under an appointment if the *registered code agency* would be in a conflict of interest.

(4) For the purposes of Sentence (3), a *registered code agency* would be in a conflict of interest if the *registered code agency* or an officer, director, partner or employee of the *registered code agency* or any person engaged by the *registered code agency* to perform functions for it,

(a) has participated or participates, in any capacity, in *design activities* or *construction* relating to any part of the *building* to which an appointment relates,

(b) is or has been employed within the previous 180 days by a person who carried out *design activities* or *construction* relating to any part of the *building*,

(c) has a professional or financial interest in,

(i) the *construction* of the *building* to which the appointment relates,

(ii) the *building* to which the appointment relates, or

(iii) the person responsible for the design of the *building* to which the appointment relates, or

(d) is an elected official, officer or employee of a *principal authority*.

(5) For the purposes of Clause (4)(c), involvement with a *building* as a *registered code agency* and entitlement to any fee paid for acting as a *registered code agency* in respect of a *building* shall not be considered to be a professional or financial interest in the *construction* of the *building*, the *building* or the person responsible for the design of the *building*.

3.7.3. Additional Functions that Registered Code Agencies may be Appointed to Perform

3.7.3.1. General

(1) In addition to the functions described in paragraphs 1 to 5 of section 15.15 of the Act, a *registered code agency* may be appointed to perform the functions set out in Sentence 3.7.4.3.(5) or (6).

3.7.4. Manner in Which Registered Code Agency Shall Perform Functions

3.7.4.1. General

(1) The *registered code agency* shall perform the functions specified in an appointment in accordance with the Act and this Code and the quality management plan described in Clause 3.4.3.2.(1)(d).

(2) The *registered code agency* shall perform the functions specified in an appointment in accordance with the code of conduct set out in MMAH Supplementary Standard SC-1, “Code of Conduct for Registered Code Agencies”.

3.7.4.2. Plans Review and Inspection Activities

(1) The *registered code agency* shall ensure that plans review and inspection activities of the *registered code agency* are carried out by a person who has the qualifications set out in Clause 3.4.3.2.(1)(b) or (c) in respect of the type of *building* set out in Column 3 of Table 3.5.2.2. for which the person is carrying out the activities.

(2) By the end of the eighteenth month following the month in which the *director* gives notice of a knowledge maintenance examination to the *registered code agency* under Sentence 3.4.3.8.(1), the *registered code agency* shall ensure that the persons described in Sentence (1) who are deemed under Clause 3.4.3.2.(3)(b) or (c), as applicable, to have the qualifications set out in Clause 3.4.3.2.(1)(b) or (c), as applicable, in the category of qualification to which the notice relates and who will carry out plans review and inspection activities of the *registered code agency* in that category of qualification, have successfully completed the knowledge maintenance examination referred to in the notice.

(3) A *registered code agency* shall prepare written records of every inspection of the *construction* of a *building* that is undertaken by the *registered code agency* in the course of performing functions under an appointment.

(4) The record required under Sentence (3) shall include,

(a) the date of receipt of the notice of readiness for inspection, if any,

(b) the date of the inspection,

(c) the reason for the inspection, and

(d) whether non-compliance with this Code was observed in the course of the inspection and the details of the non-compliance.

(5) If a *registered code agency* has issued an order under subsection 12 (2), 13 (1) or 13 (6) of the Act, the *registered code agency* shall prepare a written record consisting of,

(a) a copy of the order,

(b) the persons on whom the order was served and the date and manner of service,

(c) when and how the order was complied with, and

(d) if the order has not been complied with, the efforts made by the *registered code agency* to achieve compliance by the persons responsible for compliance.

3.7.4.3. Issuance of Certificates by Registered Code Agencies

(1) Subject to Sentence (2), every certificate issued under the Act by a *registered code agency* shall, in accordance with the quality management plan described in Clause 3.4.3.2.(1)(d), be signed by the *registered code agency* or, if the *registered code agency* is a corporation or partnership, by a person who has the qualifications set out in Clause 3.4.3.2.(1)(a).

(2) If the certificate is issued in respect of the *construction* of a *building* that would be required to be designed by and under the general review of an *architect* or a *professional engineer* or a combination of both, the certificate shall also be signed on behalf of the *registered code agency* by an *architect* or a *professional engineer* or both, as the case may be, who is an officer, director, partner or employee of the *registered code agency*.

(3) A *registered code agency* may issue a *plans review certificate* if the *registered code agency*,

(a) has been appointed to perform the functions described in clause 4.1 (4) (a) or (c) of the Act in respect of the proposed *construction* of the *building* to which the *plans review certificate* applies,

(b) has, in conformity with the Act, this Code and the quality management plan described in Clause 3.4.3.2.(1)(d), carried out the applicable functions for which the *registered code agency* was appointed, and

(c) is satisfied on reasonable grounds that, on date on which the *plans review certificate* is issued, the proposed *construction* of the *building* to which the *plans review certificate* relates is in compliance with this Code.

(4) A *registered code agency* may issue a *change certificate* if the *registered code agency*,

(a) has been appointed to perform the functions described in clause 4.1 (4) (a), (b) or (c) of the Act in respect of the *construction* or proposed *construction* of the *building* to which the *change certificate* applies,

(b) has, in conformity with the Act, this Code and the quality management plan described in Clause 3.4.3.2.(1)(d) , carried out the applicable functions for which the *registered code agency* was appointed, and

(c) is satisfied on reasonable grounds that, on the date on which the *change certificate* is issued, the proposed *construction* of the *building* to which the *change certificate* relates is in compliance with this Code.

(5) A *registered code agency* may issue a *certificate for the occupancy of a building not fully completed* if the *registered code agency*,

(a) has been appointed to perform the functions described in clause 4.1 (4) (b) or (c) of the Act in respect of the *construction* of the *building* to which the *certificate for the occupancy of a building not fully completed* applies,

(b) has, in conformity with the Act, this Code and the quality management plan described in Clause 3.4.3.2.(1)(d), carried out the applicable functions for which the *registered code agency* was appointed, and

(c) is satisfied on reasonable grounds that, on the date on which the *certificate for the occupancy of a building not fully completed* is issued, the *construction* of the *building* to which the *certificate for the occupancy of a building not fully completed* relates is in compliance with Clauses 1.3.3.1.(3)(a) to (q).

(6) A *registered code agency* may issue a *certificate for the occupancy of a building described in Sentence 1.3.3.4.(3) of Division C* if the *registered code agency*,

(a) has been appointed to perform the functions described in clause 4.1 (4) (b) or (c) of the Act in respect of the *construction* of a *building* described in Sentence 1.3.3.4.(3) to which the certificate applies,

(b) has, in conformity with the Act, this Code and the quality management plan described in Clause 3.4.3.2.(1)(d), carried out the applicable functions for which the *registered code agency* was appointed, and

(c) is satisfied on reasonable grounds that, on the date on which the *certificate for the occupancy of a building described in Sentence 1.3.3.4.(3) of Division C* is issued, the *construction* of the *building* to which the certificate relates is in compliance with Clauses 1.3.3.4.(4)(a) to (i).

(7) A *registered code agency* may issue a *certificate for the occupancy of a building described in Sentence 1.3.3.5.(1) of Division C* if the *registered code agency*,

(a) has been appointed to perform the functions described in clause 4.1 (4) (b) or (c) of the Act in respect of the *construction* of a *building* described in Sentence 1.3.3.5.(1) to which the certificate applies,

(b) has, in conformity with the Act, this Code and the quality management plan described in Clause 3.4.3.2.(1)(d), carried out the applicable functions for which the *registered code agency* was appointed, and

(c) is satisfied on reasonable grounds that, on the date on which the *certificate for the occupancy of a building described in Sentence 1.3.3.5.(1) of Division C* is issued,

the *construction* of the *building* to which the certificate relates is in compliance with Clauses 1.3.3.5.(3)(a) to (r).

(8) A *registered code agency* may issue a *final certificate* if the *registered code agency*,

(a) has been appointed to perform the functions described in clause 4.1 (4) (b) or (c) of the Act in respect of the *construction* of the *building* to which the *final certificate* applies,

(b) has, in conformity with the Act, this Code and the quality management plan described in Clause 3.4.3.2.(1)(d), carried out the applicable functions for which the *registered code agency* was appointed, and

(c) is satisfied on reasonable grounds that on the date on which the *final certificate* is issued, the *construction* of the *building* to which the *final certificate* relates is in compliance with this Code.

(9) Every certificate issued under the Act by a *registered code agency* shall be in a form approved by the *Minister*.

3.7.4.4. Issuance of Orders by Registered Code Agencies

(1) Orders under subsections 13 (6) and 14 (1) of the Act shall, in accordance with the quality management plan described in Clause 3.4.3.2.(1)(d), be signed by the *registered code agency* or a person who has the qualifications set out in Clause 3.4.3.2.(1)(a).

(2) Orders under subsections 12 (2) and 13 (1) and clause 18 (1) (f) of the Act shall, in accordance with the quality management plan described in Clause 3.4.3.2.(1)(d), be signed by the *registered code agency* or by a person who has the qualifications set out in Clause 3.4.3.2.(1)(b) or (c).

3.7.4.5. Authorized Persons

(1) Persons who have the qualifications set out in Clause 3.4.3.2.(1)(a), (b) or (c) are prescribed for the purposes of subsection 15.17 (1) of the Act.

(2) The certificate of authorization referred to in subsection 15.17 (2) of the Act shall, in accordance with the quality management plan described in Clause 3.4.3.2.(1)(d), be signed by a representative of the *registered code agency* who has the qualifications set out in Clause 3.4.3.2.(1)(a) and shall contain the following information:

(a) the name of the *registered code agency* and any identifying number issued by the *director* to the *registered code agency*,

(b) the title, business address and business telephone number of a representative of the *registered code agency* who may be contacted to answer questions about the certificate and the authorization to which it relates,

(c) the name of the authorized person and any identifying number issued by the *director* to the authorized person in respect of that person's qualifications,

(d) the scope of the powers that may be exercised and the functions that may be performed by the authorized person,

(e) the date of issuance of the certificate.

(3) Every person described in Sentence (1) shall carry his or her certificate of authorization when performing duties and shall produce the certificate for inspection upon request.

3.7.4.6. Prohibition

(1) A *registered code agency* shall not dismiss, suspend, demote, discipline, harass or otherwise disadvantage an employee, or deny an employee a benefit of employment, by reason that,

(a) the employee, acting in good faith and on the basis of reasonable belief, has disclosed to the *director* that the *registered code agency* or any other person has contravened or intends to contravene a provision of the Act or this Code or a predecessor of this Code,

(b) the employee, acting in good faith and on the basis of reasonable belief, has refused or stated an intention of refusing to do anything that is a contravention of a provision of the Act or this Code or a predecessor of this Code,

(c) the employee, acting in good faith and on the basis of reasonable belief, has done or stated an intention of doing anything that is required to be done in order that a provision of the Act or this Code or a predecessor of this Code not be contravened, or

(d) the *registered code agency* believes that the employee will do anything referred to in Clause (a), (b) or (c).

(2) Nothing in this Section impairs any right of an employee either at law or under an employment contract or collective agreement.

(3) In this Article,

"employee" includes an independent contractor and "employer" includes the person who retains an employee who is an independent contractor.

3.7.4.7. Information and Records

(1) The *registered code agency* shall maintain records of all plans review and inspection activity, of all certificates and orders and of any other activities taken in carrying out functions under an appointment in accordance with the quality management plan described in Clause 3.4.3.2.(1)(d).

(2) Any information collected by a *registered code agency* in the course of the exercise of powers and the performance of duties under the Act may be used only for the purpose of performing functions under an appointment under subsection 4.1 (2) of the Act and may be disclosed only,

(a) to a *principal authority* pursuant to an agreement under subsection 4.1 (1) of the Act,

(b) to a *principal authority* to aid the enforcement in any manner of the Act, or

(c) where required or permitted under the Act, this Code, other applicable legislation or an order of a court.

(3) A *registered code agency* shall ensure that any agreement under which the *registered code agency* engages a person to assist the *registered code agency* to perform functions under an appointment includes a provision that requires the person to comply with Sentences (1) and (2).

3.7.5. Termination of Appointment of a Registered Code Agency

3.7.5.1. Termination of an Appointment Made under Subsection 4.1 (2) of the Act

(1) A *principal authority* may, in accordance with the terms of an agreement under subsection 4.1 (1) of the Act, terminate the appointment of a *registered code agency* before the appointment expires under section 15.19 of the Act.

3.7.6. Information to be Provided

3.7.6.1. Information to be Provided by a Principal Authority to the Director

(1) If a *principal authority* that has appointed a *registered code agency* terminates the appointment before the appointment expires under section 15.19 of the Act, the *principal authority* shall, as soon as possible after the termination, give the *director* notice of the termination and such other information concerning the circumstances of the termination and as may be required by the *director*.

(2) If a *chief building official* has issued an order under subsection 15.21 (1) of the Act, the *principal authority* shall as soon as possible after the order is issued give the *director* a copy of the order and such other information concerning the circumstances of the order and as may be required by the *director*.

3.7.6.2. Information to be Provided by a Registered Code Agency to the Director

(1) A *registered code agency* that becomes or expects to become unable to carry out the functions for which the *registered code agency* was appointed shall as soon as possible give notice to the *director* of this situation.

3.7.6.3. Information to be Provided by a Registered Code Agency to the Chief Building Official

(1) A *registered code agency* shall notify the *chief building official* if the *registered code agency* becomes or expects to become unable to carry out the functions for which the *registered code agency* was appointed.

(2) A *registered code agency* shall give copies of the following records to the *chief building official*,

(a) all orders issued by the *registered code agency* under subsections 12 (2), 13 (1) and 13 (6) of the Act,

(b) all written records prepared by the *registered code agency* under Sentences 3.7.4.2.(3), (4) and (5),

(c) all *final certificates* that are issued by the *registered code agency*,

(d) records described in Section 2.1. relating to the use of an *alternative solution*, and

(e) any records of information, copies of documents or things, tests, samples or photographs produced, removed, required, taken or ordered to be taken under subsection 18 (1) of the Act.

(3) The documents referred to in Sentence (2) shall be given to the *chief building official*,

(a) within the time period specified in any agreement under Article 3.7.1.1. or appointment under Article 3.7.1.2. in respect of which the documents relate, whichever time period ends earlier,

(b) within 15 days after the expiry or termination of the appointment of the *registered code agency* in respect of which the documents relate, if there is no time period specified in the agreement or appointment referred to in Clause (a), or

(c) if the *chief building official* has given notice to the *registered code agency* that he or she requires the documents before the time set out in Clause (a) or (b), within 2 days after the request for documents.

(4) The requirements of Sentence (2) apply even if the *registered code agency* is no longer registered under Sentence 3.4.3.2.(1).

(5) If a *registered code agency* in the course of carrying out functions under an appointment has reason to believe that a *building* described in Sentence (7) is unsafe within the meaning of subsection 15.9 (2) or (3) of the Act, the *registered code agency* shall as soon as possible give notice to the *chief building official* of,

(a) the location of the *building*, and

(b) the reason why the *registered code agency* has reason to believe that the *building* is unsafe.

(6) A *registered code agency* that has given a notice to the *chief building official* under Sentence (5) shall give the *chief building official* such other information about the unsafe condition as the *chief building official* may require.

(7) Sentence (5) applies to,

(a) a *building* in respect of which the *registered code agency* has been appointed to perform functions, and

(b) a *building* that has been adversely affected by the *construction* of a *building* referred to in Clause (a).

(8) For the purposes of Sentence (3), a time period referred to in Clause (3)(a), (b) or (c),

(a) does not start until the day after the day on which the obligation to provide the documents arises, and

(b) does not include Saturdays, holidays and all other days on which the offices of the *principal authority* are not open for the transaction of business with the public.

3.7.7. Referral of Stop Work Order

3.7.7.1. Referral

(1) A *registered code agency* shall refer a matter under subsection 14 (5) of the Act to the *chief building official* by giving the *chief building official*, as soon as possible,

(a) a report that contains the following information:

(i) a copy of the order made under section 12 or 13 of the Act that was not complied with and of the order under section 14 of the Act,

(ii) the persons on whom the orders were served and the date and manner of service,

(iii) a statement that the orders have not been complied with, and

(iv) the efforts made by the *registered code agency* to achieve compliance with the orders by the persons responsible for compliance, and

(b) such other information as the *chief building official* may require in respect of the matter that has been referred.

(2) The report under Clause (1)(a) shall be signed, in accordance with the quality management plan described in Clause 3.4.3.2.(1)(d), by the *registered code agency* or, if the *registered code agency* is a corporation or partnership, by a person who has the qualifications set out in Clause 3.4.3.2.(1)(a).

O. Reg. 332/12, Division C, Part 3; O. Reg. 360/13, ss. 4, 8, 9, 11, 12, 15, 17-19, 21, 22 (2), 23; O. Reg. 361/13, ss. 123-136.

PART 4
TRANSITION, AMENDMENTS, REVOCATION AND COMMENCEMENT

Section 4.1. Transition Rule
4.1.1. Transition, January 2014
4.1.2. Transition, January 2015
4.1.3 Transition January 2017

Section 4.1. Transition Rule

4.1.1. Transition, January 2014

4.1.1.1. Transition Rule

(1) Subject to Sentence (2), Ontario Regulation 350/06 (Building Code) made under the Act, as it read on December 31, 2013, is deemed to continue in force with respect to *construction* for which a permit has been applied for before January 1, 2014.

(2) Sentence (1) does not apply unless the *construction* is commenced within six months after the permit is issued.

4.1.2. Transition, January 2015

4.1.2.1. Transition Rule

(1) Subject to Sentence (2), this Regulation, as it read on December 31, 2014, is deemed to continue in force with respect to *construction* for which a permit has been applied for before January 1, 2015.

(2) Sentence (1) does not apply unless the *construction* is commenced within six months after the permit is issued.

(1) applies, on and after that date, to a person who engages in the activity at that location. 2006, c. 22, s. 58 (3).

Same

(4) If an activity was engaged in at a particular location immediately before the source protection plan took effect and the risk management official gives notice to a person who is engaged in the activity at that location that, in the opinion of the risk management official, subsection (1) should apply to the person, subsection (1) applies to a person who engages in the activity at that location on and after a date specified in the notice that is at least 120 days after the date the notice is given. 2006, c. 22, s. 58 (4).

Agreement on risk management plan

(5) Subject to subsections (15) and (16), a person engaged in an activity or proposing to engage in an activity and a risk management official may agree to a risk management plan for the activity at a particular location if,

(a) a source protection plan designates the activity as an activity to which this section should apply and an area within which this section should apply to the activity; and

(b) the location is in the area referred to in clause (a). 2006, c. 22, s. 58 (5).

Notice of plan

(6) If a risk management official and a person agree to a risk management plan under subsection (5), the risk management official shall provide written notice to the person and shall attach a copy of the plan to the notice. 2006, c. 22, s. 58 (6).

Deadline for agreement

(7) The risk management official may give a person a notice indicating that, if no risk management plan is agreed to under subsection (5) by a date specified in the notice, the risk management official intends to establish a risk management plan for the activity at the location. 2006, c. 22, s. 58 (7).

Specified date

(8) A date specified in a notice under subsection (7) shall be at least 120 days after the date the notice is given. 2006, c. 22, s. 58 (8).

Waiving notice period

(9) A person to whom a notice has been given under subsection (7) may consent in writing to the establishment of the risk management plan before the date specified in the notice. 2006, c. 22, s. 58 (9).

Order establishing risk management plan

(10) Subject to subsections (9), (15) and (16), if a notice is given under subsection (7) and no risk management plan is agreed to under subsection (5) by the date specified in the notice, the risk management official shall, by order, establish a risk management plan for the activity at the location. 2006, c. 22, s. 58 (10).

Application for risk management plan

(11) A person engaged in an activity or proposing to engage in an activity to which this section applies at a location within an area to which this section applies may apply to the risk management official for the establishment of a risk management plan for the activity at the location. 2006, c. 22, s. 58 (11).

Order establishing plan

(12) Subject to subsections (15) and (16), if an application is made under subsection (11), the risk management official shall, by order, establish a risk management plan for the activity at the location. 2006, c. 22, s. 58 (12).

Amendment of risk management plan

(13) Subject to subsections (14) and (17), subsections (5) to (12) apply, with necessary modifications,

(a) to the amendment of a risk management plan agreed to or established under this section; and

(b) to the amendment of a risk management plan agreed to or established under section 56, if, pursuant to subsection 56 (12), the plan cannot be amended under that section. 2006, c. 22, s. 58 (13).

Amendment; deadline

(14) For the purpose of subsection (13), the 120-day period referred to in subsection (8) may be shortened by the risk management official if,

(a) the risk management official is of the opinion that the amendment of the risk management plan is required to prevent a drinking water health hazard; and

(b) the notice given under subsection (7) sets out the reasons for the opinion referred to in clause (a). 2006, c. 22, s. 58 (14).

Criteria for agreeing to or establishing risk management plan

(15) Subject to subsection (16), a risk management official shall agree to or establish a risk management plan for an activity at a location under this section if, and only if, all applicable fees have been paid and,

(a) the risk management official,

(i) is satisfied that the risk management plan complies with the requirements, if any, of the regulations, rules and source protection plan, and

(ii) is satisfied that the activity will not be a significant drinking water threat if it is engaged in at that location in accordance with the risk management plan; or

(b) in circumstances prescribed under clause 55 (1) (h), a person with qualifications prescribed by the regulations has stated, in a form obtained from or approved by the Director, that the person,

(i) is satisfied that the risk management plan complies with the requirements, if any, of the regulations, rules and source protection plan, and

(ii) is satisfied that the activity will not be a significant drinking water threat if it is engaged in at that location in accordance with the risk management plan. 2006, c. 22, s. 58 (15).

Refusal to establish plan

(16) The risk management official may refuse to agree to or establish a risk management plan if the past conduct of the applicant or, if the applicant is a corporation, of its officers or directors, affords reasonable grounds to believe that the applicant will not engage in the activity in accordance with the risk management plan. 2006, c. 22, s. 58 (16).

Application of subss. (15) and (16) to amendments

(17) Subsections (15) and (16) apply, with necessary modifications, to the amendment of a risk management plan and, for that purpose, a reference in subsection (15) or (16) to a risk management plan shall be deemed to be a reference to the amended plan. 2006, c. 22, s. 58 (17).

Compliance with risk management plan

(18) If a risk management plan is agreed to or established under this section for an activity at a location, a person shall not engage in that activity at that location except in accordance with the plan. 2006, c. 22, s. 58 (18).

Restricted land uses

59. (1) If a source protection plan that is in effect designates a land use as a land use to which this section should apply and an area within which this section should apply,

(a) a person shall not make an application under a provision of the *Planning Act* prescribed by the regulations for the purpose of using land for that land use at any location within that area; and

(b) despite section 58, a person shall not construct or change the use of a building at any location within that area, if the building will be used in connection with that land use,

unless the risk management official issues a notice to the person under subsection (2). 2006, c. 22, s. 59 (1).

Issuance of notice

(2) The risk management official shall, on application, issue a notice to a person for the purpose of subsection (1) if, and only if, the applicant has paid all applicable fees and,

(a) neither section 57 nor section 58 applies to the activity for which the land is to be used at the location where the land is to be used; or

(b) section 58 applies to the activity for which the land is to be used at the location where the land is to be used and a risk management plan that applies to that activity at that location has been agreed to or established under section 56 or 58. 2006, c. 22, s. 59 (2).

Time for application

(3) If section 58 applies to the activity for which the land is to be used at the location where the land is to be used, an application for the issuance of a notice under subsection (2) may be made at the same time that an application is made in respect of the activity under section 58 or 60. 2006, c. 22, s. 59 (3).

Copies

(4) If a risk management official issues a notice under subsection (2), he or she shall give a copy of the notice to the persons prescribed by the regulations. 2006, c. 22, s. 59 (4).

Definitions

(5) In this section,

"building" has the same meaning as in the *Building Code Act, 1992*; ("bâtiment")

"construct" has the same meaning as in the *Building Code Act, 1992*. ("construire") 2006, c. 22, s. 59 (5).

Risk assessment can exclude application of ss. 56, 57 and 58

60. (1) Sections 56, 57 and 58 do not apply to an activity that is engaged in at a particular location if,

(a) a risk assessment relating to the activity at that location has been submitted to the risk management official;

(b) the risk assessment concludes that the activity, if engaged in at that location, is not a significant drinking water threat at that location; and

(c) the risk management official has accepted the risk assessment under this section. 2006, c. 22, s. 60 (1).

Acceptance of risk assessment

(2) On application, the risk management official shall accept a risk assessment that concludes that an activity is not a significant drinking water threat if, and only if, all applicable fees have been paid and,

(a) the risk management official is satisfied that the activity has been assessed in accordance with the regulations and the rules; or

(b) in circumstances prescribed under clause 55 (1) (h), a person with qualifications prescribed by the regulations has stated, in a form obtained from or approved by the Director, that the person is satisfied that the activity has been assessed in accordance with the regulations and the rules. 2006, c. 22, s. 60 (2).

Report on activity

61. (1) A risk management official may, by order, require a person who engages in or proposes to engage in an activity to which section 56 or 58 applies to provide the risk management official with a report that describes the manner in which the activity is being or is proposed to be engaged in, including any risk management measures that are being or are proposed to be taken with respect to the protection of drinking water sources. 2006, c. 22, s. 61 (1).

Same

(2) A person who is required to provide a report under subsection (1) shall ensure that it is prepared and submitted to the risk management official in accordance with the order. 2006, c. 22, s. 61 (2).

Inspections

62. (1) Subject to subsections (2) and (3), a risk management inspector may, for the purpose of enforcing this Part, enter property, without the consent of the owner or occupier and without a warrant, if,

(a) the risk management inspector has reasonable grounds to believe that an activity to which section 56, 57 or 58 applies is being engaged in on the property; or

(b) the risk management inspector has reasonable grounds to believe that there are documents or data on the property that relate to an activity to which section 56, 57 or 58 applies. 2006, c. 22, s. 62 (1).

Training

(2) A risk management inspector shall not enter property unless the risk management inspector has received training prescribed by the regulations. 2006, c. 22, s. 62 (2).

Dwellings

Definition

(3) In this section,

"trailer camp" means any land on which a trailer is kept. 2006, c. 11, Sched. A, s. 95 (3).

Restrictions re group homes

96. (1) The City shall not pass by-laws under paragraph 11 of subsection 8 (2) providing for a system of licences for group homes unless there is in effect in the City a by-law passed under section 34 of the *Planning Act* that permits the establishment and use of group homes in the City. 2006, c. 11, Sched. A, s. 96 (1).

Same

(2) A by-law under paragraph 11 of subsection 8 (2) providing for a system of licences for group homes may prohibit a person from carrying on the business of a group home without a licence and may provide for the following conditions, but shall not provide for any additional conditions concerning the operation of the group home:

1. The by-law may require the payment of licence fees.
2. The by-law may require a licensee or an applicant for a licence to give the City such information as the City considers appropriate concerning the business name, ownership and method of contacting the licensee or applicant. 2006, c. 11, Sched. A, s. 96 (2).

CLOSING OF BUSINESS ESTABLISHMENTS

Closing of business establishments

97. (1) Without limiting sections 7 and 8, those sections authorize the City to require business establishments to be closed to the public at any time. 2006, c. 11, Sched. A, s. 97 (1).

Same

(2) Despite subsection (1), a by-law described in that subsection applies to only those premises where goods or services are sold or offered for sale by retail. 2006, c. 11, Sched. A, s. 97 (2).

Exemptions

(3) The by-law does not apply to the sale or offering for sale by retail of,

(a) goods or services in the form of or in connection with prepared meals or living accommodation;

(a.1) liquor under the authority of a licence or permit issued under the *Liquor Licence Act*; and

(b) any other prescribed goods or services. 2006, c. 11, Sched. A, s. 97 (3); 2006, c. 32, Sched. B, s. 18.

HEALTH, SAFETY AND WELL-BEING

Smoking in public places, etc.

98. (1) This section applies to a city by-law to prohibit or regulate the smoking of tobacco in public places and workplaces. 2006, c. 11, Sched. A, s. 98 (1).

Crown bound

(2) The by-law binds the Crown. 2006, c. 11, Sched. A, s. 98 (2).

Restriction

(3) The by-law shall not apply to a highway but may apply to public transportation vehicles and taxicabs on a highway. 2006, c. 11, Sched. A, s. 98 (3).

Scope of by-law

(4) The by-law may,

(a) define "public place" for the purpose of the by-law;

(b) require the owner or occupier of a public place, the employer of a workplace, other than a public transportation vehicle and a taxicab, or the owner or operator of a public transportation vehicle or a taxicab to ensure compliance with the by-law. 2006, c. 11, Sched. A, s. 98 (4).

Conflicts

(5) Despite section 11, if there is a conflict between a provision of any Act or regulation and a provision of the by-law, the provision that is the most restrictive of the smoking of tobacco prevails. 2006, c. 11, Sched. A, s. 98 (5).

Definitions

(6) In this section,

"smoking of tobacco" includes the holding of lighted tobacco; ("usage du tabac")

"workplace" includes a public transportation vehicle and a taxicab. ("lieu de travail") 2006, c. 11, Sched. A, s. 98 (6).

Entry on land re emergency communication system

99. For the purposes of establishing, maintaining and operating a centralized communication system for emergency response purposes, the City may at any reasonable time enter upon land to affix numbers to buildings or erect signs setting out numbers on land. 2006, c. 11, Sched. A, s. 99.

Pits and quarries

100. A city by-law prohibiting or regulating the operation of pits and quarries does not apply to a pit or quarry, as those terms are defined in the *Aggregate Resources Act*, located in a part of Ontario designated in a regulation under subsection 5 (2) of that Act. 2006, c. 11, Sched. A, s. 100.

Repairs or alterations, authorized entry

101. (1) The City may authorize the owner or occupant of land to enter adjoining land, at any reasonable time, for the purpose of making repairs or alterations to any building, fence or other structures on the land of the owner or occupant but only to the extent necessary to carry out the repairs or alterations. 2006, c. 11, Sched. A, s. 101 (1).

Conditions

(2) The following apply to a power of entry under a by-law under this section:

1. The power of entry may be exercised by an employee or agent of the owner or occupant of land.
2. A person exercising the power of entry must display or, on request, produce proper identification.
3. Nothing in a by-law under this section authorizes entry into a building.
4. The owner or occupant shall provide reasonable notice of the proposed entry to the occupier of the adjoining land.
5. The owner or occupant of land shall, in so far as is practicable, restore the adjoining land to its original condition and shall provide compensation for any damages caused by the entry or by anything done on the adjoining land. 2006, c. 11, Sched. A, s. 101 (2).

Fortification of land

102. (1) This section applies to a city by-law,

(a) regulating in respect of the fortification of and protective elements applied to land in relation to the use of the land; and

(b) prohibiting the excessive fortification of land or excessive protective elements being applied to land in relation to the use of the land. 2006, c. 11, Sched. A, s. 102 (1).

Definitions

(2) In this section,

"land" means land, including buildings, mobile homes, mobile buildings, mobile structures, outbuildings, fences, erections, physical barriers and any other structure on the land or on or in any structure on the land; ("bien-fonds")

"protective elements" include surveillance equipment. ("éléments protecteurs") 2006, c. 11, Sched. A, s. 102 (2).

By-law and building code

(3) A permit shall not be issued under the *Building Code Act, 1992* if the proposed building or construction or use of the building will contravene a by-law to which this section applies. 2006, c. 11, Sched. A, s. 102 (3); 2009, c. 33, Sched. 21, s. 4 (2).

Conflict

(4) Despite section 35 of the *Building Code Act, 1992*, if there is a conflict between the building code under the *Building Code Act, 1992* and a by-law to which this section applies, the building code prevails. 2006, c. 11, Sched. A, s. 102 (4); 2009, c. 33, Sched. 21, s. 4 (3).

Period for compliance for existing fortifications

(5) If the City makes an order to do work under subsection 385 (1) with respect to a contravention of the by-law, the order shall give not less than three months to complete the work if the fortifications or protective elements were present on the land on the day the by-law is passed. 2006, c. 11, Sched. A, s. 102 (5).

Conveyance of prisoners

103. If the attendance of a prisoner in a correctional institution is required at a hearing or proceeding and if the City was responsible for delivering the prisoner to the correctional institution, the City is responsible for conveying the prisoner from the correctional institution to the place of the hearing or proceeding and for the prisoner's return. 2006, c. 11, Sched. A, s. 103.

NATURAL ENVIRONMENT

Trees

104. (1) This section applies to a city by-law prohibiting or regulating the destruction or injuring of trees. 2006, c. 11, Sched. A, s. 104 (1).

Same

(2) In passing a by-law prohibiting or regulating the destruction or injuring of trees in woodlands, the City shall have regard to good forestry practices as defined in the *Forestry Act*. 2006, c. 11, Sched. A, s. 104 (2).

Exception from by-law

(3) The by-law does not apply to,

(a) activities or matters undertaken under a licence issued under the *Crown Forest Sustainability Act, 1994*;

(b) the injuring or destruction of trees by a person licensed under the *Surveyors Act* to engage in the practice of cadastral surveying or his or her agent, while making a survey;

(c) the injuring or destruction of trees imposed after December 31, 2002 as a condition to the approval of a site plan, a plan of subdivision or a consent under section 41, 51 or 53, respectively, of the *Planning Act* or as a requirement of a site plan agreement or subdivision agreement entered into under those sections;

(c.1) the injuring or destruction of trees imposed under subsection 114 (11) as a condition to the approval of plans or drawings for a site plan control area;

(d) the injuring or destruction of trees imposed after December 31, 2002 as a condition to a development permit authorized by regulation made under section 70.2 of the *Planning Act* or as a requirement of an agreement entered into under the regulation;

(e) the injuring or destruction of trees by a transmitter or distributor, as those terms are defined in section 2 of the *Electricity Act, 1998*, for the purpose of constructing and maintaining a transmission system or a distribution system, as those terms are defined in that section;

(f) the injuring or destruction of trees undertaken on land described in a licence for a pit or quarry or a permit for a wayside pit or wayside quarry issued under the *Aggregate Resources Act*; or

(g) the injuring or destruction of trees undertaken on land in order to lawfully establish and operate or enlarge any pit or quarry on land,

(i) that has not been designated under the *Aggregate Resources Act* or a predecessor of that Act, and

(ii) on which a pit or quarry is a permitted land use under a by-law passed under section 34 of the *Planning Act*. 2006, c. 11, Sched. A, s. 104 (3); 2006, c. 32, Sched. B, s. 19; 2009, c. 33, Sched. 21, s. 4 (4).

Definition

(4) In this section,

"woodlands" means woodlands as defined in the *Forestry Act* that are one hectare or more in area. 2006, c. 11, Sched. A, s. 104 (4).

Site alteration

105. (1) This section applies to a city by-law with respect to prohibiting or regulating,

(a) the placing or dumping of fill;

(b) the removal of topsoil; or

(c) the alteration of the grade of land. 2006, c. 11, Sched. A, s. 105 (1).

Exemptions

(2) The by-law does not apply to,

(a) the placing or dumping of fill, removal of topsoil or alteration of the grade of land imposed after December 31, 2002 as a condition to the approval of a site plan, a plan of subdivision or a consent under section 41, 51 or 53, respectively, of the *Planning Act* or as a requirement of a site plan agreement or subdivision agreement entered into under those sections;

(a.1) the placing or dumping of fill, removal of topsoil or alteration of the grade of land imposed under subsection 114 (11) as a condition to the approval of plans or drawings for a site plan control area;

(b) the placing or dumping of fill, removal of topsoil or alteration of the grade of land imposed after December 31, 2002 as a condition to a development permit authorized by regulation made under section 70.2 of the *Planning Act* or as a requirement of an agreement entered into under that regulation;

(c) the placing or dumping of fill, removal of topsoil or alteration of the grade of land undertaken by a transmitter or distributor, as those terms are defined in section 2 of the *Electricity Act, 1998*, for the purpose of constructing and maintaining a transmission system or a distribution system, as those terms are defined in that section;

(d) the placing or dumping of fill, removal of topsoil or alteration of the grade of land undertaken on land described in a licence for a pit or quarry or a permit for a wayside pit or wayside quarry issued under the *Aggregate Resources Act*;

(e) the placing or dumping of fill, removal of topsoil or alteration of the grade of land undertaken on land in order to lawfully establish and operate or enlarge any pit or quarry on land,

(i) that has not been designated under the *Aggregate Resources Act* or a predecessor of that Act, and

(ii) on which a pit or quarry is a permitted land use under a by-law passed under section 34 of the *Planning Act*;

(f) the placing or dumping of fill, removal of topsoil or alteration of the grade of land undertaken as an incidental part of drain construction under the *Drainage Act* or the *Tile Drainage Act*. 2006, c. 11, Sched. A, s. 105 (2); 2006, c. 32, Sched. B, s. 20.

Exceptions

(3) The by-law respecting the removal of topsoil does not apply to the removal of topsoil as an incidental part of a normal agricultural practice including such removal as an incidental part of sod-farming, greenhouse operations and nurseries for horticultural products. 2006, c. 11, Sched. A, s. 105 (3).

Exclusion

(4) The exception described in subsection (3) respecting the removal of topsoil as an incidental part of a normal agricultural practice does not include the removal of topsoil for sale, exchange or other disposition. 2006, c. 11, Sched. A, s. 105 (4).

By-law ceases to have effect

(5) If a regulation is made under section 28 of the *Conservation Authorities Act* respecting the placing or dumping of fill, removal of topsoil or alteration of the grade of land in any area of the municipality, a by-law passed under this section is of no effect in respect of that area. 2006, c. 11, Sched. A, s. 105 (5).

Definition

(6) In this section,

"topsoil" means those horizons in a soil profile, commonly known as the "O" and the "A" horizons, containing organic material and includes deposits of partially decomposed organic matter such as peat. 2006, c. 11, Sched. A, s. 105 (6).

Power of entry re: dangerous trees

105.1 (1) The City may enter on land, without notice to the owner, tenant or occupant of the land, to inspect a tree located on the land that, in the opinion of the City, is in a condition creating an immediate danger to persons or property. 2006, c. 32, Sched. B. s. 21.

Elimination of immediate danger

(2) If, upon inspection under subsection (1) or under subsection 375 (1) in respect of a by-law described in subsection (3), a tree on the land appears, in the opinion of the City, to be in a condition creating an immediate danger to persons or property, the City may enter on the land after making reasonable efforts to notify the owner, tenant or occupant of the land and remove the tree or otherwise eliminate the condition creating the immediate danger. 2006, c. 32, Sched. B. s. 21.

Subject of by-law

(3) A by-law for the purpose of subsection (2) is a by-law requiring owners or persons in charge of any premises to remove decayed, damaged or dangerous trees or branches that pose a danger to persons or property. 2006, c. 32, Sched. B. s. 21.

Lien

(4) Any amount spent by the City in doing what is authorized under subsection (2), together with interest at a rate to be determined by the City, is payable to the City and shall have priority lien status, and the certificate of the city clerk as to the amount is final. 2006, c. 32, Sched. B. s. 21.

Added to tax roll

(5) The amount payable to the City may be added to the tax roll to be collected in one year or to be collected in instalments over a period of not more than five years. 2006, c. 32, Sched. B. s. 21.

General provision not applicable

(6) Paragraphs 4 and 5 of subsection 375 (1) do not apply to the powers of entry under this section. 2006, c. 32, Sched. B. s. 21.

Registration of agreements respecting ravines

105.2 (1) An agreement described in subsection (2) may be registered against the land to which it applies and the City may enforce its provisions against the owner and, subject to the *Registry Act* and the *Land Titles Act*, any and all subsequent owners of the land. 2006, c. 32, Sched. B. s. 21.

Same

(2) Subsection (1) applies to an agreement that the City has entered into with the owner of land, under a City by-law, as a condition of a consent to destroy trees or other natural vegetation on a ravine, to excavate, grade or otherwise alter in elevation or contour any ravine or to provide facilities for and methods of disposal of storm, surface and waste water from any ravine and from any buildings or structures on the ravine and that deals with,

(a) walls, fences, hedges, trees, shrubs or other groundcover or facilities for the landscaping of the land of the owner or the protection of adjoining lands; or

(b) grading or alteration in elevation or contour of the land of the owner and the provision of facilities for and methods of disposal of storm, surface and waste water from the land and from any building or structure on the land. 2006, c. 32, Sched. B. s. 21.

ANIMALS

Impounding animals

106. If the City passes a by-law regulating or prohibiting with respect to the being at large or trespassing of animals, it may provide for,

(a) the seizure and impounding of animals being at large or trespassing contrary to the by-law;

(b) the sale of impounded animals,

(i) if they are not claimed within a reasonable time,

(ii) if the expenses of the City respecting the impounding of the animals are not paid, or

(iii) at such time and in such manner as is provided in the by-law. 2006, c. 11, Sched. A, s. 106.

Muzzling of dogs

107. (1) If the City requires the muzzling of a dog under any circumstances, city council shall, upon the request of the owner of the dog, hold a hearing to determine whether or not to exempt the owner in whole or in part from the requirement. 2006, c. 11, Sched. A, s. 107 (1).

Conditions

(2) An exemption may be granted subject to such conditions as council considers appropriate. 2006, c. 11, Sched. A, s. 107 (2).

Request does not stay requirement

(3) A request of the owner of a dog for a hearing under this section does not act as a stay of the muzzling requirement. 2006, c. 11, Sched. A, s. 107 (3).

STRUCTURES, INCLUDING FENCES AND SIGNS

Construction of green roofs or alternative roof surfaces

108. (1) Without limiting sections 7 and 8, those sections authorize the City to pass a by-law requiring and governing the construction of green roofs or of alternative roof surfaces that achieve similar levels of performance to green roofs if the provisions of the by-law do not conflict with the provisions of a regulation made under the *Building Code Act, 1992* respecting public health and safety, fire protection, structural sufficiency, conservation and environmental protection and the requirements respecting barrier-free access. 2006, c. 11, Sched. A, s. 108 (1); 2006, c. 32, Sched. B, s. 22 (1); 2009, c. 33, Sched. 21, s. 4 (5).

Same

(2) A by-law under subsection (1) prevails over a regulation made under the *Building Code Act, 1992*, despite section 35 of that Act. 2006, c. 11, Sched. A, s. 108 (2); 2006, c. 32, Sched. B, s. 22 (2).

Definition

(3) For the purposes of subsection (1),

"green roof" means a roof surface that supports the growth of vegetation over a substantial portion of its area for the purpose of water conservation or energy conservation. 2006, c. 11, Sched. A, s. 108 (3).

Repeal

(4) **This section is repealed on a day to be named by proclamation of the Lieutenant Governor. 2006, c. 11, Sched. A, s. 108 (4).**

Non-application of *Line Fences Act*

109. (1) The City may provide that the *Line Fences Act* does not apply to all or any part of the City. 2006, c. 11, Sched. A, s. 109 (1).

Exclusion

(2) Despite a by-law passed under subsection (1), section 20 of the *Line Fences Act* continues to apply throughout the City. 2006, c. 11, Sched. A, s. 109 (2).

Advertising devices

110. (1) A City by-law respecting advertising devices, including signs, does not apply to an advertising device that was lawfully erected or displayed on the day the by-law comes into force if the advertising device is not substantially altered, and the maintenance and repair of the advertising device or a change in the message or contents displayed is deemed not in itself to constitute a substantial alteration. 2006, c. 32, Sched. B, s. 23.

Lien for costs and charges

(2) All costs and charges incurred by the City for the removal, care and storage of an advertising device that is erected or displayed in contravention of a City by-law are a lien on the advertising device that may be enforced by the City under the *Repair and Storage Liens Act*. 2006, c. 32, Sched. B, s. 23.

Disposal costs

(3) All costs and charges incurred for disposing of an advertising device described in subsection (2) may be recovered by the City as a debt owed by the owner of the device. 2006, c. 32, Sched. B, s. 23.

Demolition and conversion of residential rental properties

111. (1) The City may prohibit and regulate the demolition of residential rental properties and may prohibit and regulate the conversion of residential rental properties to a purpose other than the purpose of a residential rental property. 2006, c. 11, Sched. A, s. 111 (1).

Same

(2) The power to pass a by-law respecting a matter described in subsection (1) includes the power,

(a) to prohibit the demolition of residential rental properties without a permit;

(b) to prohibit the conversion of residential rental properties to a purpose other than the purpose of a residential rental property without a permit; and

(c) to impose conditions as a requirement of obtaining a permit. 2006, c. 11, Sched. A, s. 111 (2).

Restriction

(3) The City cannot prohibit or regulate the demolition or conversion of a residential rental property that contains less than six dwelling units. 2006, c. 11, Sched. A, s. 111 (3).

Effect of building code, etc.

(4) Despite section 35 of the *Building Code Act, 1992*, in the event that the *Building Code Act, 1992* or a regulation made under that Act and a by-law prohibiting or regulating the demolition or conversion of a residential rental property treat the same subject matter in different ways, that Act or the regulation under that Act prevails and the by-law is inoperative to the extent that the Act or regulation and the by-law treat the same subject matter. 2006, c. 11, Sched. A, s. 111 (4).

Same

(5) If a permit to demolish a residential rental property is issued under this section, no permit is required under section 8 of the *Building Code Act, 1992* to demolish the property. 2006, c. 11, Sched. A, s. 111 (5).

Report

(6) The City shall report statistics and other information concerning the demolition and conversion of residential rental properties to the Minister of Municipal Affairs and Housing and shall do so at the times and in the form and manner specified by the Minister. 2006, c. 11, Sched. A, s. 111 (6).

112. REPEALED: 2006, c. 32, Sched. B, s. 24.

Zoning by-laws re area, density and height

113. (1) The authority to regulate provided in paragraph 4 of subsection 34 (1) of the *Planning Act* includes and, despite the decision of any court, is deemed always to have included the authority to regulate the minimum area of the parcel of land mentioned therein and to regulate the minimum and maximum density and the minimum and maximum height of development in the City or in the area or areas defined in the by-law. 2006, c. 11, Sched. A, s. 113 (1).

Zoning with conditions

(2) If the official plan in effect in the City contains policies relating to zoning with conditions, the City may, in a by-law passed under section 34 of the *Planning Act*, permit a use of land or the erection, location or use of buildings or structures and impose one or more prescribed conditions on the use, erection or location. 2006, c. 11, Sched. A, s. 113 (2).

Same

(2.1) The prescribed conditions referred to in subsection (2) may be made subject to such limitations as may be prescribed. 2006, c. 32, Sched. B, s. 25.

Same

(3) When a prescribed condition is imposed under subsection (2),

(a) the City may require an owner of land to which the by-law applies to enter into an agreement with the City relating to the condition;

(b) the agreement may be registered against the land to which it applies; and

(c) the City may enforce the agreement against the owner and any and all subsequent owners of the land. 2006, c. 11, Sched. A, s. 113 (3).

Notice or public meeting not required

113.1 Despite section 34 of the *Planning Act*, the City may amend by-laws passed under that section without giving notice to any person and without holding open houses, public meetings or public hearings if the effect of the amending by-law is only to set out the municipal addresses to which the original by-law applies. 2006, c. 32, Sched. B, s. 26.

Front yard parking

Definitions

113.2 (1) In this section,

"front yard" means that portion of private property located between the front wall of a residential building on the property and the abutting public highway; ("cour avant")

"front yard parking" means the parking of a private passenger motor vehicle or motorcycle in a front yard. ("stationnement en cour avant") 2006, c. 32, Sched. B, s. 26.

Conflict between by-laws

(2) Despite section 71 of the *Planning Act*, in the event of a conflict between a by-law passed under sections 7 and 8 authorizing front yard parking and a by-law passed under the *Planning Act*, or a predecessor of that Act, prohibiting front yard parking, the by-law passed under sections 7 and 8 prevails. 2006, c. 32, Sched. B, s. 26.

Site plan control area

Definition

114. (1) In this section,

"development" means the construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of substantially increasing the size or usability thereof, or the laying out and establishment of a commercial parking lot or of sites for the location of three or more trailers or of sites for the location of three or more mobile homes as defined in subsection 46 (1) of the *Planning Act* or of sites for the construction, erection or location of three or more land lease community homes as defined in subsection 46 (1) of the *Planning Act*. 2006, c. 11, Sched. A, s. 114 (1).

Establishment of site plan control area

(2) Where in an official plan an area is shown or described as a proposed site plan control area, the City may, by by-law, designate the whole or any part of such area as a site plan control area. 2006, c. 11, Sched. A, s. 114 (2).

Designation of site plan control area

(3) A by-law passed under subsection (2) may designate a site plan control area by reference to one or more land use designations contained in a by-law passed under section 34 of the *Planning Act*. 2006, c. 11, Sched. A, s. 114 (3).

Consultation

(4) The City,

(a) shall permit applicants to consult with the City before submitting plans and drawings for approval under subsection (5); and

(b) may, by by-law, require applicants to consult with the City as described in clause (a). 2006, c. 11, Sched. A, s. 114 (4).

Approval of plans or drawings

(5) No person shall undertake any development in an area designated under subsection (2) unless the City or, where a referral has been made under subsection (15), the Ontario Municipal Board has approved one or both, as the City may determine, of the following:

1. Plans showing the location of all buildings and structures to be erected and showing the location of all facilities and works to be provided in conjunction therewith and of all facilities and works required under clause (11) (a).
2. Drawings showing plan, elevation and cross-section views for each building to be erected, except a building to be used for residential purposes containing less than 25 dwelling units, which drawings are sufficient to display,

i. the massing and conceptual design of the proposed building,

ii. the relationship of the proposed building to adjacent buildings, streets, and exterior areas to which members of the public have access,

iii. the provision of interior walkways, stairs, elevators and escalators to which members of the public have access from streets, open spaces and interior walkways in adjacent buildings,

iv. matters relating to exterior design, including without limitation the character, scale, appearance and design features of buildings, and their sustainable design, but only to the extent that it is a matter of exterior design, if an official plan and a by-law passed under subsection (2) that both contain provisions relating to such matters are in effect in the City, and

v. the sustainable design elements on any adjoining highway under the City's jurisdiction, including without limitation trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers and bicycle parking facilities, if an official plan and a by-law passed under subsection (2) that both contain provisions relating to such matters are in effect in the City. 2006, c. 11, Sched. A, s. 114 (5).

Exclusions from site plan control

(6) The following matters are not subject to site plan control:

1. The interior design.
2. The layout of interior areas, excluding interior walkways, stairs, elevators and escalators referred to in subparagraph 2 iii of subsection (5).
3. The manner of construction and construction standards. 2006, c. 11, Sched. A, s. 114 (6).

Dispute about scope of site plan control

(7) The owner of land or the City may make a motion for directions to have the Ontario Municipal Board determine a dispute about whether a matter referred to in paragraph 1 or 2 of subsection (5) is subject to site plan control. 2006, c. 11, Sched. A, s. 114 (7).

Final determination

(8) The Ontario Municipal Board's determination under subsection (7) is not subject to appeal or review. 2006, c. 11, Sched. A, s. 114 (8).

Drawings for residential buildings

(9) Despite the exception provided in paragraph 2 of subsection (5), city council may require the drawings mentioned in that paragraph for a building to be used for residential purposes containing less than 25 dwelling units if the proposed building is to be located in an area specifically designated in the official plan mentioned in subsection (2) as an area in which such drawings may be required. 2006, c. 11, Sched. A, s. 114 (9).

Proviso

(10) Nothing in this section is deemed to confer on the City power to limit the height or density of buildings to be erected on the land. 2006, c. 11, Sched. A, s. 114 (10).

Conditions to approval of plans

(11) As a condition to the approval of the plans and drawings referred to in subsection (5), the City may require the owner of the land to,

(a) provide to the satisfaction of and at no expense to the City any or all of the following:

(i) subject to subsection (12), widenings of highways that abut on the land,

(ii) facilities to provide access to and from the land such as access ramps and curbings and traffic direction signs,

(iii) off-street vehicular loading and parking facilities, either covered or uncovered, access driveways, including driveways for emergency vehicles, and the surfacing of such areas and driveways,

(iv) walkways and walkway ramps, including the surfacing thereof, and all other means of pedestrian access,

(v) facilities for the lighting, including floodlighting, of the land or of any buildings or structures thereon,

(vi) walls, fences, hedges, trees, shrubs or other groundcover or facilities for the landscaping of the lands or the protection of adjoining lands,

(vii) vaults, central storage and collection areas and other facilities and enclosures for the storage of garbage and other waste material,

(viii) easements conveyed to the City for the construction, maintenance or improvement of watercourses, ditches, land drainage works, sanitary sewage facilities and other public utilities of the City on the land,

(ix) grading or alteration in elevation or contour of the land and provision for the disposal of storm, surface and waste water from the land and from any buildings or structures thereon;

(b) maintain to the satisfaction of the City and at the sole risk and expense of the owner any or all of the facilities or works mentioned in subclauses (a) (ii) to (ix), including the removal of snow from access ramps and driveways, parking and loading areas and walkways;

(c) enter into one or more agreements with the City dealing with and ensuring the provision of any or all of the facilities, works or matters mentioned in clause (a) or (e) and the maintenance thereof as mentioned in clause (b) or with the provision and approval of the plans and drawings referred to in subsection (5);

(d) enter into one or more agreements with the City ensuring that development proceeds in accordance with the plans and drawings approved under subsection (5);

(e) subject to subsection (13), convey part of the land to the City to the satisfaction of and at no expense to the City for a public transit right of way. 2006, c. 11, Sched. A, s. 114 (11).

Widening must be described in official plan

(12) An owner may not be required to provide a highway widening under subclause (11) (a) (i) unless the highway to be widened is shown on or described in an official plan as a highway to be widened and the extent of the proposed widening is likewise shown or described. 2006, c. 11, Sched. A, s. 114 (12).

Limitation

(13) An owner of land may not be required to convey land under clause (11) (e) unless the public transit right of way to be provided is shown on or described in an official plan. 2006, c. 11, Sched. A, s. 114 (13).

Registration of agreements

(14) Any agreement entered into under clause (11) (c) or (d) may be registered against the land to which it applies and the City is entitled to enforce the provisions thereof against the owner and, subject to the provisions of the *Registry Act* and the *Land Titles Act*, any and all subsequent owners of the land. 2006, c. 11, Sched. A, s. 114 (14).

Appeal to O.M.B.

(15) If the City fails to approve the plans or drawings referred to in subsection (5) within 30 days after they are submitted to the City or if the owner of the land is not satisfied with any requirement made by the City under subsection (11) or with any part thereof, including the terms of any agreement required, the owner may require the plans or drawings or the unsatisfactory requirements, or parts thereof, including the terms of any agreement required, to be referred to the Ontario Municipal Board by written notice to the secretary of the Board and to the city clerk. 2006, c. 11, Sched. A, s. 114 (15).

Hearing

(16) The Ontario Municipal Board shall hear and determine the matter in issue and determine the details of the plans or drawings and determine the requirements, including the provisions of any agreement required, and the decision of the Board is final. 2006, c. 11, Sched. A, s. 114 (16).

Classes of development, delegation

(17) Where the City has designated a site plan control area under this section, the City may, by by-law,

(a) define any class or classes of development that may be undertaken without the approval of plans and drawings otherwise required under subsection (5); and

(b) delegate to either a committee of city council or to an appointed officer of the City identified in the by-law either by name or position occupied, any of the City's powers or authority under this section, except the authority to define any class or classes of development as mentioned in clause (a). 2006, c. 11, Sched. A, s. 114 (17).

Development permit system

114.1 A regulation made under section 70.2 of the *Planning Act* may,

(a) vary, supplement or override section 113 or 114 of this Act or any by-law passed under either of those sections as necessary to establish a development permit system;

(b) authorize or require the City to pass a by-law to vary, supplement or override a by-law passed under section 113 or 114 as necessary to establish a development permit system;

(c) if the City has adopted or established a development permit system,

(i) exempt it from any provision of section 113 or 114 set out in the regulation,

(ii) prohibit it from passing a by-law under those provisions of section 113 or 114 that are specified in the regulation. 2006, c. 32, Sched. B, s. 27.

Appeal body for local land use planning matters

115. (1) The City may by by-law constitute and appoint one appeal body for local land use planning matters, composed of such persons as the City considers advisable, subject to subsections (2), (3) and (4). 2006, c. 11, Sched. A, s. 115 (1).

Term and qualifications

(2) A person who is appointed to the appeal body,

(a) shall serve for the prescribed term, or if no term is prescribed, for the term specified in the by-law; and

(b) shall have the prescribed qualifications, if any. 2006, c. 11, Sched. A, s. 115 (2).

Eligibility criteria

(3) In appointing persons to the appeal body, the City shall have regard to any prescribed eligibility criteria. 2006, c. 11, Sched. A, s. 115 (3).

Restriction

(4) The City shall not appoint to the appeal body a person who is,

(a) a city employee;

(b) a member of city council, a land division committee, a committee of adjustment or a planning advisory committee; or

(c) a member of a prescribed class. 2006, c. 11, Sched. A, s. 115 (4).

Power to hear appeals

(5) The City may by by-law empower the appeal body to hear appeals under,

(a) subsection 45 (12) of the *Planning Act*;

(b) subsections 53 (14), (19) and (27) of the *Planning Act*; or

(c) the provisions listed in both clauses (a) and (b). 2006, c. 11, Sched. A, s. 115 (5).

Effect of by-law under subs. (5)

(6) If a by-law has been passed under subsection (5),

(a) the appeal body has all the powers and duties of the Ontario Municipal Board under this section and the relevant provisions of the *Planning Act*;

(b) all references in this section and the *Planning Act* to the Ontario Municipal Board in connection with appeals shall be read as references to the appeal body; and

(c) appeals under the relevant provisions shall be made to the appeal body, not to the Ontario Municipal Board. 2006, c. 11, Sched. A, s. 115 (6).

Prescribed requirements

(7) The appeal body shall comply with any prescribed requirements, including, without limitation, requirements for the rules governing the practice and procedure before the appeal body. 2006, c. 11, Sched. A, s. 115 (7).

Fee

the authority may levy the minimum sum against the municipality. R.S.O. 1990, c. C.27, s. 27 (4); 1996, c. 1, Sched. M, s. 47 (3).

Notice of apportionment

(5) The secretary-treasurer of the authority, forthwith after the amounts have been apportioned under subsections (2), (3) and (4), shall certify to the clerk of each participating municipality the total amount that has been levied under those subsections, and the amount shall be collected by the municipality in the same manner as municipal taxes for general purposes. R.S.O. 1990, c. C.27, s. 27 (5).

Levy where only part of municipality in area

(6) Where only a part of a participating municipality is situated in the area over which the authority has jurisdiction, the amount apportioned to that municipality may be charged only against the rateable property in that part of the municipality and shall be collected in the same manner as municipal taxes for general purposes. R.S.O. 1990, c. C.27, s. 27 (6).

Enforcement of payment

(7) An authority may enforce payment against any participating municipality of any portion of the maintenance costs or administration costs levied against the municipality as a debt due by the municipality to the authority. R.S.O. 1990, c. C.27, s. 27 (7).

Appeal

(8) A municipality against which a levy is made under this section may appeal the levy to the Mining and Lands Commissioner appointed under the *Ministry of Natural Resources Act*. 1996, c. 1, Sched. M, s. 47 (4).

Time for appeal

(9) The appeal must be commenced within 30 days after the municipality receives notice of the levy from the authority. 1996, c. 1, Sched. M, s. 47 (4).

Parties

(10) The parties to the appeal are the municipality, the authority and any other person added as a party by the Commissioner. 1996, c. 1, Sched. M, s. 47 (4).

Compliance pending determination

(11) The municipality shall comply with the levy pending the determination of the appeal. 1996, c. 1, Sched. M, s. 47 (4).

Matters to be considered at hearing

(12) The Commissioner shall hold a hearing on the appeal and shall consider,

(a) whether the levy complies with this section and the regulations made under subsection (16); and

(b) whether the levy is otherwise appropriate. 1996, c. 1, Sched. M, s. 47 (4).

Powers of Commissioner

(13) The Commissioner may, by order, confirm, rescind or vary the amount of the levy and may order the authority or the municipality to pay any amount owing as a result. 1996, c. 1, Sched. M, s. 47 (4).

No appeal

(14) No appeal lies from the decision of the Commissioner. 1996, c. 1, Sched. M, s. 47 (4).

When subss. (8-14) begin to apply

(15) Subsections (8) to (14) do not apply until the first regulation made under subsection (16) comes into force. 1996, c. 1, Sched. M, s. 47 (4).

Regulations re levies

(16) The Lieutenant Governor in Council may make regulations governing the nature and amount of the levies made by authorities under this section, including regulations that restrict or prohibit the making of levies described in the regulations. 1996, c. 1, Sched. M, s. 47 (4).

Regulations by authority re area under its jurisdiction

28. (1) Subject to the approval of the Minister, an authority may make regulations applicable in the area under its jurisdiction,

(a) restricting and regulating the use of water in or from rivers, streams, inland lakes, ponds, wetlands and natural or artificially constructed depressions in rivers or streams;

(b) prohibiting, regulating or requiring the permission of the authority for straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse, or for changing or interfering in any way with a wetland;

(c) prohibiting, regulating or requiring the permission of the authority for development if, in the opinion of the authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development;

(d) providing for the appointment of officers to enforce any regulation made under this section or section 29;

(e) providing for the appointment of persons to act as officers with all of the powers and duties of officers to enforce any regulation made under this section. 1998, c. 18, Sched. I, s. 12.

Delegation of powers

(2) A regulation made under subsection (1) may delegate any of the authority's powers or duties under the regulation to the authority's executive committee or to any other person or body, subject to any limitations and requirements that may be set out in the regulation. 1998, c. 18, Sched. I, s. 12.

Conditional permission

(3) A regulation made under clause (1) (b) or (c) may provide for permission to be granted subject to conditions and for the cancellation of the permission if conditions are not met. 1998, c. 18, Sched. I, s. 12.

References to maps

(4) A regulation made under subsection (1) may refer to any area affected by the regulation by reference to one or more maps that are filed at the head office of the authority and are available for public review during normal office business hours. 1998, c. 18, Sched. I, s. 12.

Minister's approval of development regulations

(5) The Minister shall not approve a regulation made under clause (1) (c) unless the regulation applies only to areas that are,

(a) adjacent or close to the shoreline of the Great Lakes-St. Lawrence River System or to inland lakes that may be affected by flooding, erosion or dynamic beach hazards;

(b) river or stream valleys;

(c) hazardous lands;

(d) wetlands; or

(e) other areas where, in the opinion of the Minister, development should be prohibited or regulated or should require the permission of the authority. 1998, c. 18, Sched. I, s. 12.

Regulations by L.G. in C. governing content of authority's regulations

(6) The Lieutenant Governor in Council may make regulations governing the content of regulations made by authorities under subsection (1), including flood event standards and other standards that may be used, and setting out what must be included or excluded from regulations made by authorities under subsection (1). 1998, c. 18, Sched. I, s. 12.

Invalid regulation

(7) A regulation made by an authority under subsection (1) that does not conform with the requirements of a regulation made by the Lieutenant Governor in Council under subsection (6) is not valid. 1998, c. 18, Sched. I, s. 12.

Transition

(8) Subject to subsection (9), if a regulation is made by the Lieutenant Governor in Council under subsection (6), subsection (7) does not apply to a regulation that was previously made by an authority

under subsection (1) until two years after the regulation made by the Lieutenant Governor in Council comes into force. 1998, c. 18, Sched. I, s. 12.

Same

(9) If a regulation made by the Lieutenant Governor in Council under subsection (6) is amended by an amending regulation, subsection (7) does not apply, in respect of the amendment, to a regulation that was made by an authority under subsection (1) before the amending regulation, until such time as may be specified in the amending regulation. 1998, c. 18, Sched. I, s. 12.

Exceptions

(10) No regulation made under subsection (1),

(a) shall limit the use of water for domestic or livestock purposes;

(b) shall interfere with any rights or powers conferred upon a municipality in respect of the use of water for municipal purposes;

(c) shall interfere with any rights or powers of any board or commission that is performing its functions for or on behalf of the Government of Ontario; or

(d) shall interfere with any rights or powers under the *Electricity Act, 1998* or the *Public Utilities Act.* 1998, c. 15, Sched. E, s. 3 (8); 1998, c. 18, Sched. I, s. 12.

Activities under the *Aggregate Resources Act*

(11) A requirement for permission of an authority in a regulation made under clause (1) (b) or (c) does not apply to an activity approved under the *Aggregate Resources Act* after the *Red Tape Reduction Act, 1998* received Royal Assent. 1998, c. 18, Sched. I, s. 12.

Right to hearing

(12) Permission required under a regulation made under clause (1) (b) or (c) shall not be refused or granted subject to conditions unless the person requesting the permission has been given the opportunity to require a hearing before the authority or, if the authority so directs, before the authority's executive committee. 1998, c. 18, Sched. I, s. 12.

Powers of authority

(13) After holding a hearing under subsection (12), the authority or executive committee, as the case may be, shall,

(a) refuse the permission; or

(b) grant the permission, with or without conditions. 1998, c. 18, Sched. I, s. 12.

Grounds for refusing permission

(13.1) If the permission that the person requests is for development related to a renewable energy project, as defined in section 1 of the *Green Energy Act, 2009*, the authority or executive committee, as the case may be,

(a) shall not refuse the permission unless it is necessary to do so to control pollution, flooding, erosion or dynamic beaches; and

(b) shall not impose conditions unless they relate to controlling pollution, flooding, erosion or dynamic beaches. 2009, c. 12, Sched. L, s. 2.

Reasons for decision

(14) If the authority or its executive committee, after holding a hearing, refuses permission or grants permission subject to conditions, the authority or executive committee, as the case may be, shall give the person who requested permission written reasons for the decision. 1998, c. 18, Sched. I, s. 12.

Appeal

(15) A person who has been refused permission or who objects to conditions imposed on a permission may, within 30 days of receiving the reasons under subsection (14), appeal to the Minister who may,

(a) refuse the permission; or

(b) grant the permission, with or without conditions. 1998, c. 18, Sched. I, s. 12.

(2) For the purposes of clause (1) (a), the following matters shall be embodied in the corporation's letters patent:

1. The corporation shall have at least five directors.
2. No employee of the corporation may be a director of it.
3. The corporation shall not purchase goods or services from any director, officer or person related to a director or officer of the corporation unless there is only one available source of the goods or services within a reasonable distance of the day nursery.
4. The corporation shall not sell goods or services, other than child care services, to any director, officer or person related to a director or officer of the corporation.
5. The corporation shall not lend money to or borrow money from any director, officer or person related to a director or officer of the corporation.
6. The corporation shall not rent property to or from any director, officer or person related to a director or officer of the corporation.
7. The corporation shall not engage in any other transaction which may directly or indirectly confer a financial benefit on one of its directors.
8. The directors of the corporation shall serve as directors without remuneration but may be reimbursed for reasonable expenses incurred in the performance of their duties.
9. No director of the corporation shall directly or indirectly receive any form of money or money's worth as a result of his or her position as director.
10. Upon dissolution of the corporation and after payment of all of its debts and liabilities, the remaining property of the corporation shall be distributed or disposed of only to charitable or non-profit organizations which provide child care, which are beneficial to the community and which operate solely in Ontario. O. Reg. 708/92, s. 2; O. Reg. 17/94, s. 1 (2); O. Reg. 505/06, s. 2.

(3) For the purposes of paragraphs 3, 4 and 5 of subsection (2), a person is related to a director or officer if,

(a) the person is married to the director or officer;

(b) the person is living in a conjugal relationship outside marriage with the director or officer;

(c) the person is the son or daughter or mother or father of the director or officer;

(d) the person is a relative of the director or officer and they have the same home;

(e) the person is a corporation and voting securities in the corporation that together carry more than 10 per cent of the voting rights attached to all voting securities of the corporation outstanding at the time are beneficially owned directly or indirectly by any combination of,

(i) the director or officer,

(ii) any of the persons referred to in clauses (a) to (d), and

(iii) the partner or the employer of the director or officer. O. Reg. 708/92, s. 2; O. Reg. 38/00, s. 2; O. Reg. 287/05, s. 2.

ORGANIZATION AND MANAGEMENT

3. (1) Subject to subsections (2) and (3), every operator shall be responsible for the operation and management of each day nursery or private-home day care agency operated by the operator, including the program, financial and personnel administration of each such day nursery or private-home day care agency. R.R.O. 1990, Reg. 262, s. 3 (1).

(2) An operator may appoint a person who shall be responsible to the operator for the day-to-day operation and management of each day nursery or private-home day care agency in accordance with subsection (1). R.R.O. 1990, Reg. 262, s. 3 (2).

(3) Where an operator or a person appointed under subsection (2) is absent, the powers and duties of the operator or the person appointed under subsection (2) shall be exercised and performed by such person as the operator designates. R.R.O. 1990, Reg. 262, s. 3 (3).

(4) Every operator of a private-home day care agency shall employ at least one full-time private-home day care visitor, who shall be a person described in section 61, for each twenty-five locations where private-home day care is provided by the operator, unless otherwise approved by a Director, who shall provide support and supervision at each location where private-home day care is provided by the operator and who shall be responsible to the operator. R.R.O. 1990, Reg. 262, s. 3 (4).

(5) Every operator of a day nursery shall employ a supervisor, who shall be a person described in section 58, who shall plan and direct the program of the day nursery, be in charge of the children, oversee the staff and who shall be responsible to the operator. R.R.O. 1990, Reg. 262, s. 3 (5).

BUILDING AND ACCOMMODATION

4. (1) Every person who applies for a licence to establish, operate or maintain a day nursery under section 11 of the Act shall at the time of application file with a Director evidence that the premises used or to be used as a day nursery comply with,

(a) the laws affecting the health of inhabitants of the municipality or the reserve of a band, as the case may be;

(b) any rule, regulation, direction or order of the local board of health and any direction or order of the local medical officer of health that may affect the operation;

(c) any by-law of the municipality or any by-law of the council of the band on the reserve, as the case may be, and any other law for the protection of persons from fire hazards;

(d) any restricted area, standard of housing or building by-law passed by the municipality in which the premises are located pursuant to Part V of the *Planning Act* or any predecessor thereof and any by-law of the council of the band on the reserve to regulate the construction, repair or use of buildings;

(e) the requirements of the Building Code made under the *Building Code Act, 1992*, where applicable; and

(f) the requirements of the Fire Code made under the *Fire Protection and Prevention Act, 1997*, where applicable. R.R.O. 1990, Reg. 262, s. 4 (1); O. Reg. 505/06, s. 3.

(2) Every person who applies for a licence to establish, operate or maintain a private-home day care agency under section 11 of the Act shall ensure that each location used or to be used by the person to provide private-home day care complies with clauses (1) (a), (b), (c) and (d). R.R.O. 1990, Reg. 262, s. 4 (2).

5. (1) Where a person proposes that a new building be erected or an existing building be used, altered or renovated for use as a day nursery or that alterations or renovations be made to premises used by a day nursery, the person shall not commence the erection, use, alteration or renovation until plans, including those of the playground area for the day nursery, are approved by a Director, except where the plans are approved by the Minister under section 69. R.R.O. 1990, Reg. 262, s. 5 (1).

(2) The plans referred to in subsection (1) shall include space designated for each of the following:

1. Washing, dressing, toileting and isolation.
2. Storage for toys, indoor play materials and equipment.
3. Storage for food.
4. Storage of required records.
5. Storage for medical supplies, cleaning materials and equipment and other hazardous substances.
6. Heating and electrical equipment. R.R.O. 1990, Reg. 262, s. 5 (2).

(3) Every operator of a day nursery shall ensure that the spaces in each day nursery operated by the operator that are referred to in paragraphs 5 and 6 of subsection (2) are inaccessible to children. R.R.O. 1990, Reg. 262, s. 5 (3).

(4) The operator of a day nursery that has a program that runs for six hours or more in a day shall ensure that in addition to the spaces referred to in subsection (2) the day nursery has space designated for each of the following:

1. Eating and resting.
2. The preparation of food if meals are prepared on the premises.
3. Storage for beds and linen.
4. A staff rest area.
5. Storage for outdoor play equipment.
6. Office area. R.R.O. 1990, Reg. 262, s. 5 (4).

6. (1) Subject to subsection (2), every operator of a day nursery shall ensure that each day nursery operated by the operator has play activity space of at least 2.8 square metres of unobstructed floor space for each child based on the licensed capacity. R.R.O. 1990, Reg. 262, s. 6 (1).

(2) In the case of a day nursery for handicapped children, the play activity space referred to in subsection (1) shall,

(a) be at least five square metres of unobstructed floor space for each child based on the licensed capacity; and

(b) where more than twelve children but fewer than twenty-four children are enrolled, be divided into two separate rooms with one additional room being provided for each twelve children or less where there are in excess of twenty-three children. R.R.O. 1990, Reg. 262, s. 6 (2).

7. Every operator of an integrated day nursery that enrols handicapped children funded under the Act or the *Developmental Services Act* shall ensure that each such day nursery operated by the operator has one room or area set aside as a resource area for individual and small group training of the handicapped children. R.R.O. 1990, Reg. 262, s. 7; O. Reg. 435/01, s. 2.

8. (1) Every operator of a day nursery shall ensure that each day nursery operated by the operator has,

(a) where the day nursery is licensed to enrol children under eighteen months of age,

(i) a separate play activity room for each ten children or less based on the licensed capacity, and

(ii) a separate sleeping area that is separated from any play activity space for each ten children or less based on the licensed capacity;

(b) where a day nursery is licensed to care for children eighteen months of age or over up to and including thirty months of age, a separate play activity room for each fifteen children or less based on the licensed capacity;

(c) where the day nursery is licensed to care for children thirty-one months of age or over up to and including five years of age, a separate play activity room for each twenty-four children or less based on the licensed capacity;

(d) where the day nursery is licensed to care for children 44 months of age or over and up to and including 67 months of age as of August 31 of the year, a separate play activity room for each 20 children or less based on the licensed capacity;

(e) where the day nursery is licensed to care for children 56 months of age or over and up to and including 67 months of age as of August 31 of the year, a separate play area for each 24 children or less based on the licensed capacity; and

(f) where the day nursery is licensed to care for children 68 months of age or over as of August 31 of the year up to and including 12 years of age, a separate play area for each 30 children or less based on the licensed capacity, unless otherwise approved by a Director. R.R.O. 1990, Reg. 262, s. 8; O. Reg. 505/06, s. 4 (1).

(2) In respect of operators who held a licence before November 3, 2006, this section as it read immediately before November 3, 2006 continues to apply to those operators until the licence is renewed under subsection 75 (7). O. Reg. 505/06, s. 4 (2).

9. Every operator of a day nursery shall ensure that each room in each day nursery operated by the operator that is for the use of children under six years of age or for the use of handicapped children is on or below the second storey unless otherwise approved by a Director. R.R.O. 1990, Reg. 262, s. 9.

10. Every operator of a day nursery shall ensure that the window glass area in each play activity room of each day nursery operated by the operator that has a program that runs for six hours or more and that was licensed for the first time after the 31st day of December, 1983, contains an area that is at least equivalent to 10 per cent of the floor area of the play activity room. R.R.O. 1990, Reg. 262, s. 10.

11. Every operator of a day nursery shall ensure that artificial illumination in each play activity room of each day nursery operated by the operator is at the level of at least 55 dekalux. R.R.O. 1990, Reg. 262, s. 11.

12. Every operator shall ensure that in each day nursery operated by the operator and in each location where private-home day care is provided by the operator, the temperature is maintained at a level of at least twenty degrees Celsius. R.R.O. 1990, Reg. 262, s. 12.

13. (1) Every operator of a private-home day care agency shall ensure that before a premises is used as a location where private-home day care is to be provided by the operator, the premises, including the outdoor play space, is inspected by a private-home day care visitor employed by the operator to ensure compliance with the Act and this Regulation and, where the premises is so used, that further inspections

(2) The notice required under this section must be mailed not later than 20 days after the day the council's decision is made. 1997, c. 27, s. 21 (2).

Appeal of council's decision

22. (1) A complainant may appeal the decision of the council of the municipality to the Ontario Municipal Board by filing with the clerk of the municipality, on or before the last day for appealing the decision, a notice of appeal setting out the reasons for the appeal. 1997, c. 27, s. 22 (1).

Additional ground

(2) A complainant may also appeal to the Ontario Municipal Board if the council of the municipality does not deal with the complaint within 60 days after the complaint is made by filing with the clerk of the municipality a notice of appeal. 1997, c. 27, s. 22 (2).

Clerk's duties on appeal

23. (1) If a notice of appeal under subsection 22 (1) is filed with the clerk of the municipality on or before the last day for appealing a decision, the clerk shall compile a record that includes,

(a) a copy of the development charge by-law certified by the clerk;

(b) the original or a true copy of the complaint and all written submissions and material received in support of the complaint;

(c) a copy of the council's decision certified by the clerk; and

(d) an affidavit or declaration certifying that notice of the council's decision and of the last day for appealing it was given in accordance with this Act. 1997, c. 27, s. 23 (1).

Same

(2) If a notice of appeal under subsection 22 (2) is filed with the clerk of the municipality, the clerk shall compile a record that includes,

(a) a copy of the development charge by-law certified by the clerk; and

(b) the original or a true copy of the complaint and all written submissions and material received in support of the complaint. 1997, c. 27, s. 23 (2).

Same

(3) The clerk shall forward a copy of the notice of appeal and the record to the secretary of the Ontario Municipal Board within 30 days after the notice is received and shall provide such other information and material that the Board may require in respect of the appeal. 1997, c. 27, s. 23 (3).

OMB hearing of appeal

24. (1) The Ontario Municipal Board shall hold a hearing to deal with any notice of appeal relating to a complaint forwarded by the clerk of a municipality. 1997, c. 27, s. 24 (1).

Parties

(2) The parties to the appeal are the appellant and the municipality. 1997, c. 27, s. 24 (2).

Notice to parties

(3) The Ontario Municipal Board shall give notice of the hearing to the parties. 1997, c. 27, s. 24 (3).

Powers of OMB

(4) After the hearing, the Ontario Municipal Board may do anything that could have been done by the council of the municipality under subsection 20 (6). 1997, c. 27, s. 24 (4).

Dismissal without hearing

(5) Despite subsection (1), the Ontario Municipal Board may, where it is of the opinion that the complaint set out in the notice of appeal is insufficient, dismiss the appeal without holding a full hearing after notifying the appellant and giving the appellant an opportunity to make representations as to the merits of the appeal. 1997, c. 27, s. 24 (5).

Refund if development charge reduced

25. (1) If a development charge that has already been paid is reduced by the council of a municipality under section 20 or by the Ontario Municipal Board under section 24, the municipality shall immediately refund the overpayment. 1997, c. 27, s. 25 (1).

Interest

(2) The municipality shall pay interest on an amount it refunds at a rate not less than the prescribed minimum interest rate from the time the amount was paid to the municipality to the time it is refunded. 1997, c. 27, s. 25 (2).

COLLECTION OF DEVELOPMENT CHARGES

When development charge is payable

26. (1) A development charge is payable for a development upon a building permit being issued for the development unless the development charge by-law provides otherwise under subsection (2). 1997, c. 27, s. 26 (1).

Special case, approval of plan of subdivision

(2) A municipality may, in a development charge by-law, provide that a development charge for services set out in paragraphs 1, 2, 3, 4 or 5 of subsection 5 (5) for development that requires approval of a plan of subdivision under section 51 of the *Planning Act* or a consent under section 53 of the *Planning Act* and for which a subdivision agreement or consent agreement is entered into, be payable immediately upon the parties entering into the agreement. 1997, c. 27, s. 26 (2).

Agreement prevails

(3) This section does not apply in cases where there is an agreement under section 27. 1997, c. 27, s. 26 (3).

Agreement, early or late payment

27. (1) A municipality may enter into an agreement with a person who is required to pay a development charge providing for all or any part of a development charge to be paid before or after it would otherwise be payable. 1997, c. 27, s. 27 (1).

Amount of charge payable

(2) The total amount of a development charge payable under an agreement under this section is the amount of the development charge that would be determined under the by-law on the day specified in the agreement or, if no such day is specified, at the earlier of,

(a) the time the development charge or any part of it is payable under the agreement;

(b) the time the development charge would have been payable in the absence of the agreement. 1997, c. 27, s. 27 (2).

Interest on late payments

(3) An agreement under this section may allow the municipality to charge interest, at a rate stipulated in the agreement, on that part of the development charge paid after it would otherwise be payable. 1997, c. 27, s. 27 (3).

Withholding of building permit until charge paid

28. Despite any other Act, a municipality is not required to issue a building permit for development to which a development charge applies unless the development charge has been paid. 1997, c. 27, s. 28.

Upper-tier municipalities, development charges

29. If a development charge is imposed by an upper-tier municipality on a development in an area municipality, the following apply:

1. The treasurer of the upper-tier municipality shall certify to the treasurer of the area municipality that the charge has been imposed, the amount of the charge, the manner in which the charge is to be paid and when the charge is payable.
2. The treasurer of the area municipality shall collect the charge when it is payable and shall, unless otherwise agreed by the upper-tier municipality, pay the charge to the treasurer of the upper-tier

municipality on or before the 25th day of the month following the month in which the charge is received by the area municipality.

3. If the charge is collected by the upper-tier municipality, the treasurer of the upper-tier municipality shall certify to the treasurer of the area municipality that the charge has been collected. 1997, c. 27, s. 29.

If upper-tier issues building permits

30. If an upper-tier municipality issues building permits, the treasurer of each area municipality within the upper-tier municipality shall, when all development charges are paid with respect to a development in the area municipality, certify to the chief building official of the upper-tier municipality that those charges have been paid. 1997, c. 27, s. 30; 1997, c. 31, s. 146.

Agreement, upper-tier to collect charges

31. (1) If building permits are issued by an upper-tier municipality, the upper-tier municipality may agree with an area municipality to collect all the development charges on development in the area municipality. 1997, c. 27, s. 31 (1); 1997, c. 31, s. 146.

Sections 29 and 30

(2) If an agreement is made under this section, sections 29 and 30 do not apply with respect to development in the area municipality. 1997, c. 27, s. 31 (2).

Unpaid charges added to taxes

32. (1) If a development charge or any part of it remains unpaid after it is payable, the amount unpaid shall be added to the tax roll and shall be collected in the same manner as taxes. 1997, c. 27, s. 32 (1).

Treasurer certifies unpaid amount

(2) If a development charge or any part of it imposed by an upper-tier municipality remains unpaid after it is payable, the treasurer of the upper-tier municipality shall certify to the treasurer of the area municipality in which the land is located the amount that is unpaid. 1997, c. 27, s. 32 (2).

RESERVE FUNDS AND THE USE OF DEVELOPMENT CHARGES

Reserve funds

33. A municipality that has passed a development charge by-law shall establish a separate reserve fund for each service to which the development charge relates. 1997, c. 27, s. 33.

Development charges paid into reserve funds

34. The municipality shall pay each development charge it collects into the reserve fund or funds to which the charge relates. 1997, c. 27, s. 34.

Use of reserve funds

35. The money in a reserve fund established for a service may be spent only for capital costs determined under paragraphs 2 to 8 of subsection 5 (1). 1997, c. 27, s. 35.

Municipality may borrow from reserve fund

36. Despite section 35, a municipality may borrow money from a reserve fund but if it does so, the municipality shall repay the amount used plus interest at a rate not less than the prescribed minimum interest rate. 1997, c. 27, s. 36.

Exclusions

37. (1) Subsections 417 (2), (3) and (4) and 418 (3) and (4) of the *Municipal Act, 2001* and any equivalent provisions of, or made under, the *City of Toronto Act, 2006* do not apply to development charges collected by a municipality. 2002, c. 17, Sched. F, Table; 2006, c. 32, Sched. C, s. 12 (2).

Limitation

(2) Development charges may not be advanced by a municipality to its capital account as interim financing of capital undertakings of the municipality, except for those capital undertakings for which the development charges may be spent under this Act. 2002, c. 17, Sched. F, Table.

Clerk's duties if objection

48. (1) If the clerk of the municipality receives a notice of objection on or before the last day for filing an objection, the clerk shall compile a record that includes,

(a) a copy, certified by the clerk, of every development charge by-law that applies to the area defined in the front-ending agreement;

(b) a copy of the front-ending agreement certified by the clerk;

(c) an affidavit or declaration certifying that notice of the front-ending agreement and of the last day for filing an objection to it was given in accordance with this Act. 1997, c. 27, s. 48 (1).

Same

(2) The clerk shall forward a copy of the notice of objection and the record to the secretary of the Ontario Municipal Board within 30 days after the last day for filing an objection and shall provide such other information or material as the Board may require in respect of the objection. 1997, c. 27, s. 48 (2).

Affidavit, declaration conclusive evidence

(3) An affidavit or declaration of the clerk of a municipality that notice of the front-ending agreement and of the last day for filing an objection to it was given in accordance with this Act is conclusive evidence of the facts stated in the affidavit or declaration. 1997, c. 27, s. 48 (3).

OMB hearing of objection

49. (1) The Ontario Municipal Board shall hold a hearing to deal with any notice of objection to a front-ending agreement forwarded by the clerk of a municipality. 1997, c. 27, s. 49 (1).

Powers of OMB

(2) After the hearing, the Ontario Municipal Board may,

(a) dismiss the objection in whole or in part;

(b) terminate the agreement;

(c) order that the agreement is terminated unless the parties amend it in accordance with the Board's order. 1997, c. 27, s. 49 (2).

Same

(3) If the Ontario Municipal Board terminates the agreement or makes an order under clause (2) (c), the Board may order the municipality to refund any amount paid under the agreement in excess of,

(a) if the agreement is terminated, what would have been payable under the development charge by-law; or

(b) if the agreement is amended, what would have been payable under the amended agreement. 1997, c. 27, s. 49 (3).

Effective date of amendment

(4) An amendment in accordance with an order under clause (2) (c) shall be deemed to have come into force on the day the agreement comes into force. 1997, c. 27, s. 49 (4).

Dismissal without hearing

(5) Despite subsection (1), the Ontario Municipal Board may, where it is of the opinion that the objection to the agreement set out in the notice of objection is insufficient, dismiss the objection without holding a full hearing after notifying the person filing the objection and giving that person an opportunity to make representations as to the merits of the objection. 1997, c. 27, s. 49 (5).

Objections to amendments

50. Sections 46 to 49 apply, with necessary modifications, to an amendment to a front-ending agreement other than an amendment pursuant to an order of the Ontario Municipal Board. 1997, c. 27, s. 50.

MISCELLANEOUS

When agreements in force

51. (1) A front-ending agreement comes into force on the day the agreement is made. 1997, c. 27, s. 51 (1).

If agreement terminated

(2) A front-ending agreement that is terminated by the Ontario Municipal Board shall be deemed to have never come into force. 1997, c. 27, s. 51 (2).

Application to amendments

(3) This section applies, with necessary modifications, with respect to amendments to front-ending agreements. 1997, c. 27, s. 51 (3).

Non-parties bound by agreement

52. (1) A person who develops land within the area defined in a front-ending agreement shall pay any amount the agreement provides under clause 44 (1) (c). 1997, c. 27, s. 52 (1).

When amounts payable

(2) An amount that is payable under subsection (1) is payable upon a building permit being issued for the development unless the front-ending agreement provides for the amount to be payable on a later day or on an earlier day as allowed under subsection (3). 1997, c. 27, s. 52 (2).

Same

(3) A front-ending agreement may provide that an amount payable under subsection (1) for development that requires approval of a plan of subdivision under section 51 of the *Planning Act* or a consent under section 53 of the *Planning Act* and for which a subdivision agreement or consent agreement is entered into, be payable immediately upon the parties entering into the subdivision or consent agreement. 1997, c. 27, s. 52 (3).

Amounts paid to municipality

(4) Amounts paid under subsection (1) shall be paid to the municipality. 1997, c. 27, s. 52 (4).

Building permits withheld until amounts paid

53. If an amount is payable under a front-ending agreement by a person who develops land, no municipality shall issue a building permit for the development until the amount is paid. 1997, c. 27, s. 53.

Use of money received under an agreement

54. (1) A municipality that receives money under a front-ending agreement shall place the money in a special account. 1997, c. 27, s. 54 (1).

Use of money in special account

(2) The money in the special account shall be used, in accordance with the agreement, only for the following purposes:

1. To pay for work provided for under the agreement.
2. To reimburse those who, under the agreement, have a right to be reimbursed. 1997, c. 27, s. 54 (2).

Return of excess funds

(3) Despite subsection (2), if the municipality receives money from parties to the agreement to pay for work provided under the agreement, the municipality shall, if the agreement so provides, return to the parties any amounts that are not needed to pay for the work. 1997, c. 27, s. 54 (3).

Money held until objections disposed of

(4) If an objection to a front-ending agreement is made, the municipality shall retain any money received from persons who are not parties to the agreement until all the objections to the agreement are disposed of by the Ontario Municipal Board. If the Board makes an order that the agreement be terminated unless the parties amend it in accordance with the Board's order the municipality shall retain the money until the agreement is either terminated or amended. 1997, c. 27, s. 54 (4).

Application to amendments

(5) Subsection (4) applies with necessary modifications with respect to amendments to front-ending agreements. 1997, c. 27, s. 54 (5).

Credits

55. (1) A person is entitled to be given a credit towards a development charge for the amount of their non-reimbursable share of the costs of work under a front-ending agreement. 1997, c. 27, s. 55 (1).

Restriction on the amount

(2) If the work would result in a level of service that exceeds the average level of the service in the 10-year period immediately preceding the preparation of the background study for the development charge by-law, the amount of the credit must be reduced in the same proportion that the costs of the work that relate to a level of service that exceeds that average level of service bear to the costs of the work. Any regulations relating to the level of service and average level of service for the purposes of paragraph 4 of subsection 5 (1) also apply with necessary modifications for the purposes of this subsection. 1997, c. 27, s. 55 (2).

Credits are treated like s. 38 credits

(3) Credits under this section shall be treated, for the purposes of this Act, as though they were credits under section 38. 1997, c. 27, s. 55 (3).

Registration of agreement

56. A party to a front-ending agreement may register the agreement or a certified copy of it against the land to which it applies. 1997, c. 27, s. 56.

Notice to other tier

57. (1) An upper-tier municipality that is a party to a front-ending agreement shall, within 20 days after the agreement is made or amended, give a copy of the agreement or amendment to any area municipality that is not a party to the agreement and whose territory includes any part of the area defined in the agreement. 1997, c. 27, s. 57 (1).

Same

(2) An area municipality that is a party to a front-ending agreement shall, within 20 days after the agreement is made or amended, give a copy of the agreement or amendment to the upper-tier municipality that the area municipality is part of, if the upper-tier municipality is not a party to the agreement. 1997, c. 27, s. 57 (2).

PART IV
GENERAL

58. REPEALED: 2009, c. 33, Sched. 2, s. 24.

***Planning Act*, ss. 51, 53**

59. (1) A municipality shall not, by way of a condition or agreement under section 51 or 53 of the *Planning Act*, impose directly or indirectly a charge related to a development or a requirement to construct a service related to development except as allowed in subsection (2). 1997, c. 27, s. 59 (1).

Exception for local services

(2) A condition or agreement referred to in subsection (1) may provide for,

(a) local services, related to a plan of subdivision or within the area to which the plan relates, to be installed or paid for by the owner as a condition of approval under section 51 of the *Planning Act*;

(b) local services to be installed or paid for by the owner as a condition of approval under section 53 of the *Planning Act*. 1997, c. 27, s. 59 (2).

Limitation

(3) This section does not prevent a condition or agreement under section 51 or 53 of the *Planning Act* from requiring that services be in place before development begins. 1997, c. 27, s. 59 (3).

Notice of development charges at transfer

(4) In giving approval to a draft plan of subdivision under subsection 51 (31) of the *Planning Act*, the approval authority shall use its power to impose conditions under clause 51 (25) (d) of the *Planning Act*

(d) respecting the establishment of bodies to represent the public for the purpose of the public consultations;

(e) governing the intervals at which a board may adopt a new policy or amend an existing policy providing for the payment of honoraria under this section. 2006, c. 10, s. 16.

General or particular

(5) A regulation made under subsection (4) may be general or particular. 2006, c. 10, s. 16.

Same

(6) Without limiting the generality of subsection (5), a regulation made under subsection (4) may treat district school boards and school authorities differently. 2006, c. 10, s. 16.

Retroactivity

(7) A regulation made under subsection (4) may be retroactive to a date no earlier than September 1, 2005. 2006, c. 10, s. 16.

Transition

(8) Despite the repeal of sections 191 and 191.1 by section 16 of the *Education Statute Law Amendment Act (Student Performance), 2006*, a board may continue to pay honoraria in accordance with section 191 or 191.1, as the case may be, until honoraria may lawfully be paid under section 191, as re-enacted by section 16 of the *Education Statute Law Amendment Act (Student Performance), 2006*. 2006, c. 10, s. 16.

191.1 REPEALED: 2006, c. 10, s. 16.

Expenses

Travel expenses to attend board and committee meetings

191.2 (1) In respect of travel of a member of a board to and from his or her residence to attend a meeting of the board, or of a committee of the board, that is held within the area of jurisdiction of the board, the board may,

(a) reimburse the member for his or her out-of-pocket expenses reasonably incurred or such lesser amount as may be determined by the board; or

(b) pay the member an allowance at a rate per kilometre determined by the board. 1997, c. 31, s. 97.

Other travel expenses

(2) A board may by resolution authorize a member, teacher or official of the board to travel on specific business of the board and may reimburse the member, teacher or official for his or her out-of-pocket expenses reasonably incurred or such lesser amount as may be determined by the board. 1997, c. 31, s. 97.

Other expenses

(3) A board may establish a policy under which a member of the board may be reimbursed for all or part of his or her out-of-pocket expenses reasonably incurred in connection with carrying out the responsibilities of a board member. 1997, c. 31, s. 97.

Same

(4) A board may, in accordance with a policy established by it under subsection (3), reimburse a member for his or her out-of-pocket expenses reasonably incurred in connection with carrying out the responsibilities of a board member. 1997, c. 31, s. 97.

Deduction because of absence

(5) A board may provide for a deduction of a reasonable amount from the allowance of a member because of absence from meetings of the board or of a committee of the board. 1997, c. 31, s. 97.

Committee members

(6) Subsections (1) to (4) apply with necessary modifications to members of a committee established by the board who are not members of the board. 1997, c. 31, s. 97.

Deemed expenses

191.3 Despite this Act or any other Act, where an elected member of a board is, under a by-law or resolution of the board, paid a salary, indemnity, allowance or other remuneration, one-third of such amount shall be deemed to be for expenses incident to the discharge of his or her duties as a member of the board. 2002, c. 17, Sched. F, Table.

PROPERTY

Property vested in board for school purposes

192. (1) All lands that before the 24th day of July, 1850, were granted, devised or otherwise conveyed to any person or persons in trust for common school purposes and held by such person or persons and their heirs or other successors in the trust, and have been heretofore vested in a public school board or a board of education having jurisdiction in the municipality in which the lands are situate, continue to be vested in such board, and continue to be held by it and its successors upon the like trusts and subject to the same conditions and for the estates upon or subject to or for which the lands are respectively held. R.S.O. 1990, c. E.2, s. 192 (1).

Same

(1.1) In subsection (1),

"public school board" and "board of education" have the same meaning as they had immediately before the *Education Quality Improvement Act, 1997* received Royal Assent. 1997, c. 31, s. 98.

Same

(2) All property heretofore granted or devised to, acquired by or vested in any person or corporation,

(a) for the secondary school purposes of a secondary school district or any part thereof; or

(b) for the separate school purposes in a separate school zone,

is vested in the board having jurisdiction in the secondary school district or separate school zone, as the case may be. R.S.O. 1990, c. E.2, s. 192 (2).

Dealings with property

193. (1) A board may take possession of all property acquired or given for school purposes and hold and apply it according to the terms on which it was acquired or given. R.S.O. 1990, c. E.2, s. 193 (1).

Idem

(2) A Roman Catholic board has power to acquire and hold as a corporation, by any title whatsoever, land, movable property, money or income given to or acquired by the board at any time for school purposes and hold or apply the same according to the terms on which it was acquired or received. R.S.O. 1990, c. E.2, s. 193 (2); 1997, c. 31, s. 99 (1).

Same

(3) A public district school board may appropriate any property acquired by it or in its possession or control for any of the purposes of the board. 1997, c. 31, s. 99 (2).

Dealings with property

Disposal of realty

194. (1) A board that is in possession of real property that was originally granted by the Crown for school purposes and that has reverted or may have reverted to the Crown may continue in possession of the real property for school purposes and when the board determines that the real property is no longer required for school purposes, the board may, with the approval of the Lieutenant Governor in Council and subject to such conditions as are prescribed by the Lieutenant Governor in Council, sell, lease or otherwise dispose of the real property. R.S.O. 1990, c. E.2, s. 194 (1).

Application for removal of restrictions on use of school lands

(2) Where land, the use of which is restricted by deed in any manner to school purposes so as to appear that some other person may have an interest therein, has been vested in a board for at least fifty years, the board may apply to the Superior Court of Justice to remove the restriction, and the court may make such order on the application as it considers just including, where the land adjoins land being used as a farm, a requirement that the board shall, where the board intends to sell the land, first offer it at a

reasonable price to the owner or owners of such adjoining land. R.S.O. 1990, c. E.2, s. 194 (2); 2000, c. 11, s. 21.

Lease or sale of site or property

(3) Subject to subsections (3.3) and (4), a board has power to sell, lease or otherwise dispose of any school site or part of a school site of the board or any property of the board,

(a) on the adoption of a resolution that the site or part or property is not required for the purposes of the board; or

(b) on the adoption of a resolution that the sale, lease or other disposition is a reasonable step in a plan to provide accommodation for pupils on the site or part or property. 1997, c. 31, s. 100 (1); 2002, c. 18, Sched. G, s. 7 (1).

Application of proceeds

(3.1) The board shall apply the proceeds of a sale, lease or other disposition under subsection (3) for the purposes of the board and shall advise the Minister of the sale or disposition or of the lease, where the term of the lease exceeds one year, of any of its schools. 1997, c. 31, s. 100 (1).

Conflict

(3.2) In the event of a conflict between subsection (3.1) and a regulation referred to in clause (3.4) (c), the regulation prevails. 1997, c. 31, s. 100 (1).

Regulations

(3.3) The Minister may make regulations governing the sale, lease or other disposition of school sites or parts of school sites or property to which resolutions referred to in clause (3) (a) apply. 1997, c. 31, s. 100 (1).

Same

(3.4) Regulations that may be made under subsection (3.3) include but are not limited to regulations,

(a) respecting to whom school sites or parts of school sites or property must be offered;

(b) respecting the price or other consideration for a disposition or class of dispositions;

(c) respecting the use of the proceeds of a disposition or class of dispositions;

(d) respecting the purposes for which school sites or parts of school sites or property that is disposed of to other boards must be used by the transferee board;

(e) requiring a transferee board to return a school site or part of a school site or property to the transferor board if no longer used for the purposes referred to in clause (d);

(f) respecting the price or other consideration for a return or class of returns required under clause (e). 1997, c. 31, s. 100 (1).

General or particular

(3.5) A regulation made under this section may be general or particular and may be made to apply to any class of boards. 1997, c. 31, s. 100 (1).

Classes

(3.6) A class may be defined with respect to any attribute and may be defined to consist of or to exclude any specified member of the class, whether or not with the same attributes. 1997, c. 31, s. 100 (1).

Approval of Minister re disposition, demolition

(4) Despite any provision of this or any other Act, a board shall not sell, lease or otherwise dispose of a school site, part of a school site or property or demolish a building unless, in addition to any other approval that may be required, the board has obtained the approval of the Minister. 2002, c. 18, Sched. G, s. 7 (2).

(4.1) REPEALED: 2002, c. 18, Sched. G, s. 7 (3).

Exceptions

(5) Subsection (4) does not apply,

(a) in respect of a school site, part of a school site or property to which a resolution referred to in clause (3) (a) applies;

(b) to the use of a building or part thereof pursuant to an agreement under section 183; or

(c) to the use of a building or part of a building for a purpose that does not interfere with the proper conduct of a school, if the building or part of the building is in use as a school. 2002, c. 18, Sched. G, s. 7 (4).

Dealings with property

Board may purchase or expropriate within its jurisdiction

195. (1) Subject to the provisions of section 90 as to the approval of the site of a new school by a rural separate school board, every board may select and may acquire, by purchase, lease or otherwise, or may expropriate, a school site that is within its area of jurisdiction. R.S.O. 1990, c. E.2, s. 195 (1); 1997, c. 31, s. 101 (1).

Purchase or lease of site in adjoining jurisdiction

(2) A public board may, with the approval of the Minister, acquire by purchase, lease or otherwise a school site in an adjoining school section or secondary school district, as the case may be, for the purpose of operating a school thereon, but the board shall not expropriate any such site. R.S.O. 1990, c. E.2, s. 195 (2); 1997, c. 31, s. 101 (2).

School outside designated area

(3) A separate district school board may, with the approval of the Minister, acquire by purchase, lease or otherwise, a school site that is outside the area of jurisdiction established in respect of the board by regulation made under subsection 58.1 (2) and may operate a separate school on the site, but a separate district school board shall not expropriate such a site. 1997, c. 31, s. 101 (3).

Buildings on land owned by board

(4) Subject to section 196 or subsection 197 (1), a board may erect, add to or alter buildings for its purposes on land owned by the board. R.S.O. 1990, c. E.2, s. 195 (4).

Buildings on leased land

(5) A board may erect a school building on land that is leased by the board where the term of the lease, the school site and the plans of the school building are approved by the Minister. R.S.O. 1990, c. E.2, s. 195 (5).

Additions or alterations

(6) A board may, with the approval of the Minister, make an addition, alteration or improvement to a school building that is acquired by the board under a lease. R.S.O. 1990, c. E.2, s. 195 (6).

Agreement for multi-use building

196. Where a board plans to provide, other than by way of a lease, accommodation for pupils on a school site that is not to be occupied or used exclusively by the board, the board shall obtain the prior approval of the Minister to enter into negotiations with a person, other than a board or a municipality, in respect of the provision of such accommodation, and an agreement for such purposes may be entered into with such person only after the proposed agreement, the plans of the school and of the building of which it may be a part and the site have been approved by the Minister. R.S.O. 1990, c. E.2, s. 196.

OUT-OF-CLASSROOM PROGRAMS

Dealings with land for out-of-classroom programs

197. (1) Where a board acquires a school site under subsection 195 (1), (2) or (3) for the purpose of conducting thereon a natural science program and other out-of-classroom programs, the board shall obtain the approval of the Minister before it erects, adds to or alters buildings on or makes other improvements to the school site for such purpose. R.S.O. 1990, c. E.2, s. 197 (1).

Same

(a) a copy of the education development charge by-law, as amended to the day the amending by-law was passed, certified by the secretary;

(b) a copy of the amending by-law certified by the secretary;

(c) a copy of the education development charge background study for the education development charge by-law;

(d) a copy of the information made available to the public under subclause 257.72 (b) (ii) for the amending by-law and all previous amending by-laws amending the education development charge by-law; and

(e) an affidavit or declaration certifying that notice of the passing of the amending by-law and of the last day for appealing it was given in accordance with this Division. 1997, c. 31, s. 113 (5).

Same

(2) The secretary shall forward a copy of the notice of appeal and the record to the secretary of the Ontario Municipal Board within 30 days after the last day of appeal and shall provide such other information or material as the Ontario Municipal Board may require in respect of the appeal. 1997, c. 31, s. 113 (5).

Affidavit, declaration conclusive evidence

(3) An affidavit or declaration of the secretary of a board that notice of the passing of the amending by-law and of the last day for appealing it was given in accordance with this Division is conclusive evidence of the facts stated in the affidavit or declaration. 1997, c. 31, s. 113 (5).

OMB hearing of appeal

257.76 (1) The Ontario Municipal Board shall hold a hearing to deal with any notice of appeal of a by-law amending an education development charge by-law forwarded by the secretary of a board. 1997, c. 31, s. 113 (5).

Who to get notice

(2) The Ontario Municipal Board shall determine who shall be given notice of the hearing and in what manner. 1997, c. 31, s. 113 (5).

Powers of OMB

(3) After the hearing, the Ontario Municipal Board may,

(a) dismiss the appeal in whole or in part;

(b) order the board to repeal or amend the amending by-law in accordance with the Ontario Municipal Board's order;

(c) repeal or amend the amending by-law in such manner as the Ontario Municipal Board may determine. 1997, c. 31, s. 113 (5).

Limitation on powers

(4) The Ontario Municipal Board may not amend or order the amendment of an amending by-law so as to,

(a) increase the amount of an education development charge that will be payable in any particular case under the education development charge by-law as amended by the amending by-law;

(b) remove, or reduce the scope of, an exemption under the education development charge by-law as amended by the amending by-law;

(c) change the date the education development charge by-law will expire as provided in that by-law as amended by the amending by-law. 1997, c. 31, s. 113 (5).

Dismissal without hearing

(5) Despite subsection (1), the Ontario Municipal Board may, where it is of the opinion that the objection to the amending by-law set out in the notice of appeal is insufficient, dismiss the appeal without holding a full hearing after notifying the appellant and giving the appellant an opportunity to make representations as to the merits of the appeal. 1997, c. 31, s. 113 (5).

When OMB ordered repeals, amendments effective

257.77 The repeal or amendment of a by-law amending an education development charge by-law by the Ontario Municipal Board, or by a board pursuant to an order of the Ontario Municipal Board, shall be deemed to have come into force on the day the amending by-law came into force. 1997, c. 31, s. 113 (5).

Refunds, if OMB repeals by-law, etc.

257.78 Section 257.69 applies, with necessary modifications, with respect to the repeal or amendment of a by-law amending an education development charge by-law by the Ontario Municipal Board or pursuant to an order of the Ontario Municipal Board. 1997, c. 31, s. 113 (5).

Non-application of certain provisions to OMB amendments

257.79 Subsection 257.70 (2) and sections 257.71 to 257.77 do not apply with respect to the amendment, by the Ontario Municipal Board or pursuant to an order of the Ontario Municipal Board, of an education development charge by-law or a by-law amending an education development charge by-law. 1997, c. 31, s. 113 (5).

COLLECTION OF EDUCATION DEVELOPMENT CHARGES

When charge payable

257.80 An education development charge is payable upon a building permit being issued. 1997, c. 31, s. 113 (5).

Who charge payable to

257.81 An education development charge is payable to the municipality issuing the building permit. 1997, c. 31, s. 113 (5).

Education development charge accounts

257.82 (1) A board that has passed an education development charge by-law shall establish education development charge accounts in accordance with the regulations. 1997, c. 31, s. 113 (5); 2009, c. 34, Sched. I, s. 18.

Deposit of charges into accounts

(2) A municipality that receives an education development charge shall deposit the charge in the appropriate education development charge account not later than the 25th day of the month after the month in which the charge was received. 1997, c. 31, s. 113 (5); 2009, c. 34, Sched. I, s. 21.

Withholding of building permit until charge paid

257.83 Despite any other Act, a municipality shall not issue a building permit for development to which an education development charge applies unless the charge has been paid. 1997, c. 31, s. 113 (5).

Land given for credit

257.84 (1) A board that has passed a by-law imposing education development charges on land of an owner may, with the consent of the Minister, accept land for pupil accommodation in place of the payment of all or a part of the education development charges. 1997, c. 31, s. 113 (5).

Same

(2) A board that accepts land under subsection (1) shall, in accordance with the regulations made under section 257.101, give the owner credits toward the education development charges imposed on the owner by the board. 1997, c. 31, s. 113 (5).

COMPLAINTS ABOUT EDUCATION DEVELOPMENT CHARGES

Complaint to council of municipality

257.85 (1) An owner, the owner's agent or a board, may complain to the council of the municipality to which an education development charge is payable that,

(a) the amount of the education development charge was incorrectly determined;

(b) a credit is or is not available to be used against the education development charge, or that the amount of a credit was incorrectly determined; or

(c) there was an error in the application of the education development charge by-law. 1997, c. 31, s. 113 (5).

Time limit

(2) A complaint may not be made under subsection (1) later than 90 days after the day the education development charge, or any part of it, is payable. 1997, c. 31, s. 113 (5).

Form of complaint

(3) The complaint must be in writing, must state the complainant's name, the address where notice can be given to the complainant and the reasons for the complaint. 1997, c. 31, s. 113 (5).

Parties

(4) The parties to the complaint are the complainant and,

(a) the board if the complainant is the owner or the owner's agent; or

(b) the owner if the complainant is the board. 1997, c. 31, s. 113 (5).

Hearing

(5) The council shall hold a hearing into the complaint and shall give the parties an opportunity to make representations at the hearing. 1997, c. 31, s. 113 (5).

Notice of hearing

(6) The clerk of the municipality shall mail a notice of the hearing to the parties at least 14 days before the hearing. 1997, c. 31, s. 113 (5).

Council's powers

(7) After hearing the evidence and submissions of the parties, the council may dismiss the complaint or rectify any incorrect determination or error that was the subject of the complaint. 1997, c. 31, s. 113 (5).

Notice of decision and time for appeal

257.86 (1) The clerk of the municipality shall mail to the parties a notice of the council's decision, and of the last day for appealing the decision, which shall be the day that is 40 days after the day the decision is made. 1997, c. 31, s. 113 (5).

Requirements of notice

(2) The notice required under this section must be mailed not later than 20 days after the day the council's decision is made. 1997, c. 31, s. 113 (5).

Appeal of council's decision

257.87 (1) A party may appeal the decision of the council of the municipality to the Ontario Municipal Board by filing with the clerk of the municipality, on or before the last day for appealing the decision, a notice of appeal setting out the reasons for the appeal. 1997, c. 31, s. 113 (5).

Additional ground

(2) A party may also appeal to the Ontario Municipal Board if the council of the municipality does not deal with the complaint within 60 days after the complaint is made by filing with the clerk of the municipality a notice of appeal. 1997, c. 31, s. 113 (5).

Clerk's duties on appeal

257.88 (1) If a notice of appeal under subsection 257.87 (1) is filed with the clerk of the municipality on or before the last day for appealing a decision, the clerk shall compile a record that includes,

(a) a copy of the education development charge by-law certified by the clerk;

(b) the original or a true copy of the complaint and all written submissions and material received from the parties;

(c) a copy of the council's decision certified by the clerk; and

(d) an affidavit or declaration certifying that notice of the council's decision and of the last day for appealing it was given in accordance with this Division. 1997, c. 31, s. 113 (5).

Same

(2) If a notice of appeal under subsection 257.87 (2) is filed with the clerk of the municipality, the clerk shall compile a record that includes,

(a) a copy of the education development charge by-law certified by the clerk; and

(b) the original or a true copy of the complaint and all written submissions and material received from the parties. 1997, c. 31, s. 113 (5).

Same

(3) The clerk shall forward a copy of the notice of appeal and the record to the secretary of the Ontario Municipal Board within 30 days after the notice is received and shall provide such other information and material that the Board may require in respect of the appeal. 1997, c. 31, s. 113 (5).

OMB hearing of appeal

257.89 (1) The Ontario Municipal Board shall hold a hearing to deal with any notice of appeal relating to a complaint forwarded by the clerk of a municipality. 1997, c. 31, s. 113 (5).

Notice to parties

(2) The Ontario Municipal Board shall give notice of the hearing to the parties. 1997, c. 31, s. 113 (5).

Powers of OMB

(3) After the hearing, the Ontario Municipal Board may do anything that could have been done by the council of the municipality under subsection 257.85 (7). 1997, c. 31, s. 113 (5).

Refund if education development charge reduced

257.90 (1) If an education development charge that has already been paid is reduced by the council of a municipality under section 257.85 or by the Ontario Municipal Board under section 257.89, the overpayment shall immediately be refunded. 1997, c. 31, s. 113 (5).

Interest

(2) Interest shall be paid on an amount refunded under subsection (1) at the prescribed interest rate from the time the amount was paid to the time it is refunded. 1997, c. 31, s. 113 (5).

Source of refund, interest

(3) An amount refunded under subsection (1) and interest paid under subsection (2) shall be paid out of the appropriate education development charge account. 1997, c. 31, s. 113 (5); 2009, c. 34, Sched. I, s. 21.

Who refund paid to

(4) An amount refunded under subsection (1) and any interest on it shall be paid to the person who paid the education development charge. 1997, c. 31, s. 113 (5).

Payment if education development charge increased

257.91 If an education development charge that has already been paid is increased by the council of a municipality under section 257.85 or by the Ontario Municipal Board under section 257.89, the increase shall immediately be paid by the person who paid the education development charge. 1997, c. 31, s. 113 (5).

SPECIAL CASES

Territory without municipal organization

257.92 If there is an education development charge on land that is in territory without municipal organization, sections 257.81 to 257.91 apply with the following modifications:

1. Under section 257.81, the charge is payable to the board under whose by-law the charge is imposed and subsection 257.82 (2) applies to the board.
2. Section 257.83 applies to the official responsible for issuing building permits for the area the land is in.

3. Complaints under section 257.85 may be made to the board by the owner or the owner's agent. The complainant is the only party to the complaint. In sections 257.85 to 257.90, all references to the municipality or the council of the municipality shall be deemed to be references to the board and all references to the clerk of the municipality shall be deemed to be references to the secretary of the board.
4. If the decision of the board is appealed to the Ontario Municipal Board under section 257.87, the parties to the appeal are the complainant and the board. 1997, c. 31, s. 113 (5).

Areas where province issues building permits

257.93 If the council of a municipality has entered into an agreement providing for the enforcement of the *Building Code Act, 1992* by Ontario, sections 257.81 to 257.91 apply with the modifications set out in the regulations. 1997, c. 31, s. 113 (5).

MISCELLANEOUS

Different types of boards treated the same

257.94 In doing anything under this Division the Ontario Municipal Board shall treat English-language public boards, English-language Roman Catholic boards, French-language public district school boards and French-language separate district school boards in the same manner. 1997, c. 31, s. 113 (5).

Registration of by-law

257.95 A board that has passed an education development charge by-law may register the by-law or a certified copy of it against the land to which it applies. 1997, c. 31, s. 113 (5).

Recovery of unpaid amounts, lien on land

257.96 Section 349 of the *Municipal Act, 2001* or section 314 of the *City of Toronto Act, 2006*, as the case may be, applies with necessary modifications with respect to an education development charge or any part of it that remains unpaid after it is payable. 1997, c. 31, s. 113 (5); 2002, c. 17, Sched. F, Table; 2006, c. 32, Sched. C, s. 15 (33).

Reports by municipalities to boards

257.97 (1) Each month a municipality shall make a report to a board if, in the period that the report would cover, any education development charges payable under an education development charge by-law of the board would be payable to the municipality. 1997, c. 31, s. 113 (5).

When due

(2) The monthly reports shall be made on or before the 5th day of each month. 1997, c. 31, s. 113 (5).

Contents

(3) The monthly reports shall contain the prescribed information. 1997, c. 31, s. 113 (5).

Statement of treasurer

257.98 (1) The treasurer of a board shall each year on or before such date as the board may direct, give the board a financial statement relating to education development charge by-laws and education development charge accounts. 1997, c. 31, s. 113 (5); 2009, c. 34, Sched. I, s. 19 (1).

Requirements

(2) A statement must include, for the preceding year, statements of the opening and closing balances of the education development charge accounts and of the transactions relating to the accounts and such other information as is prescribed in the regulations. 1997, c. 31, s. 113 (5); 2009, c. 34, Sched. I, s. 19 (2).

Copy to Minister

(3) The treasurer shall give a copy of a statement to the Minister within 60 days after giving the statement to the board. 1997, c. 31, s. 113 (5).

Board may borrow from account

257.99 A board may borrow money from an education development charge account but if it does so, the board shall repay the amount used plus interest at a rate not less than the prescribed minimum interest rate. 1997, c. 31, s. 113 (5); 2009, c. 34, Sched. I, s. 21.

257.100 REPEALED: 2009, c. 33, Sched. 2, s. 25 (2).

Regulations

257.101 (1) The Lieutenant Governor in Council may make regulations that may have general or particular application in respect of a board,

(a) prescribing any matter that is referred to as prescribed in this Division;

(b) for the purposes of clause 257.54 (3) (b), prescribing classes of residential buildings, prescribing the maximum number of additional dwelling units, not exceeding two, for buildings in such classes, prescribing restrictions and governing what constitutes a separate building;

(c) defining or clarifying "gross floor area" and "existing industrial building" for the purposes of this Division;

(d) dividing the area of the jurisdiction of a board into two or more prescribed regions for the purposes of section 257.57;

(e) governing the expiry of education development charge by-laws that are passed by different boards but that apply to the same area;

(f) for the purposes of clause 257.63 (1) (b), subsection 257.64 (2), clause 257.72 (a) and subsection 257.73 (2), governing notices referred to in those provisions;

(g) prescribing modifications to the application of sections 257.81 to 257.91 in the circumstances set out in section 257.93;

(h) prescribing information to be included in monthly reports under section 257.97 and prescribing the period that each report must cover;

(i) prescribing the interest rate or a method for determining the interest rate that shall be paid under subsections 257.69 (3) and 257.90 (2);

(j) prescribing the minimum interest rate or a method for determining the minimum interest rate that boards shall pay under section 257.99;

(k) governing education development charge accounts, including,

(i) governing the establishment and administration of such accounts,

(ii) the use of money from such accounts,

(iii) requiring the approval of the Minister in respect of the manner in which or the rate at which the money is withdrawn from such accounts;

(l) requiring the approval of the Minister to any factor, criterion, rate, amount, portion, estimate or project used in determining an education development charge;

(m) prescribing the manner of calculating or determining education development charges and prescribing classes of persons that may make determinations necessary for the calculation of education development charges;

(n) providing for the sharing of proceeds where more than one board establishes education development charges in respect of the same area;

(o) prescribing information that boards must provide to other boards and to the Minister for the purposes of developing education development charges under this Division;

(p) prescribing the terms of agreements for credit in lieu of payment of education development charges, determining the amount of the credit and governing the allocation of the credit between or among boards;

(q) requiring a board to exempt an owner from an educational development charge if the owner meets the prescribed conditions;

(c) the purchase or other acquisition of vacant land for the purpose of constructing a building or buildings thereon,

(d) the erection of a new building, or any part thereof,

(e) the demolition of a building,

(f) the installation of public utilities, sewers and items or services necessary for access to the land or building or buildings. ("projet de construction")

(2) The amount of capital grant payable under the Act for a building project of a municipality or an approved corporation shall be equal to 30 per cent of the approved cost of the building project. R.R.O. 1990, Reg. 314, s. 3.

4. (1) An application for a capital grant shall be made to the Minister on a form provided by the Minister.

(2) An applicant who applies under subsection (1) shall file with the Minister two copies of a site plan showing the location of the building or buildings, if any, on the site and, in the case of a building project with one or more of the elements referred to in clause (a), (b), (d) or (f) of the definition of "building project" in subsection 3 (1),

(a) building plans and specifications prepared by an architect or professional engineer showing the structure, fixtures and arrangements of the building or buildings and describing the areas of the building or buildings to be used for the purposes of the Act; or

(b) where the Minister approves structural sketches and specifications prepared by a person other than an architect or professional engineer describing the building or buildings and the areas of the building or buildings or contiguous to the building or buildings to be used for the purposes of the Act.

(3) No plan, specification or structural sketch filed with the Minister shall be amended or altered without the approval of the Minister. R.R.O. 1990, Reg. 314, s. 4.

5. (1) No payment of a capital grant shall be made for a building project except where,

(a) the building project has been approved by the Minister; and

(b) the approved cost has been determined.

(2) An approval of a building project by the Minister referred to in subsection (1) expires on the first anniversary of the date upon which the approval is given unless the building project has been commenced before such anniversary date.

(3) A capital grant may be paid as a single payment or in two or more instalments and, except where the Minister directs otherwise, the aggregate of the amounts of the capital grant paid at any point in time shall not exceed the greater of,

(a) an amount that bears the same proportion to the estimated total payment as the amount of progress made at the time towards completion of the project bears to the total estimated amount of work required for completion; and

(b) an amount that bears the same proportion to the estimated total payment as the amount of cost incurred at the time bears to the total estimated cost of the project.

(4) A single payment, or in the case of payment in two or more instalments, the final payment of an amount payable for a building project shall not be made until,

(a) an architect or professional engineer certifies, or the Minister is otherwise satisfied, that the building project has been completed in accordance with the plans filed under clause 4 (2) (a) or the sketches thereof approved by the Minister under clause 4 (2) (b) and the building or addition is ready for use and occupancy; and

(b) the applicant for the payment submits a report containing,

(i) a statement of the actual cost of the building project,

(ii) a statement indicating that all refundable sales tax has been taken into account,

(iii) a statement indicating that the total amount of the unpaid accounts applicable to the building project does not exceed the amount of the grant remaining to be paid, and

(iv) an undertaking that the amount of the grant remaining to be paid will be applied first to the payment of the unpaid accounts,

and, where the applicant is an approved corporation, an authorized officer of the board of directors of the approved corporation certifies that the council of the municipality in which the centre is situate, or the council of that municipality together with the councils of one or more contiguous municipalities, has directed payment to the corporation of an amount equal to at least 20 per cent of the actual cost of the building project, or contributed to the corporation real or personal property, approved by the Minister, that is equivalent in value to at least 20 per cent of the actual cost of the building project. R.R.O. 1990, Reg. 314, s. 5.

6. No applicant for or recipient of a capital grant for a building project shall, without the written approval of the Minister,

(a) acquire a building or land for the building project;

(b) call tenders for the building project;

(c) commence construction of the building project; or

(d) erect any temporary or permanent sign, tablet or plaque on the site or building project. R.R.O. 1990, Reg. 314, s. 6.

7. It is a term and condition of a payment of a capital grant under the Act in respect of a building, buildings or land forming part of a building project that the applicant for payment shall enter into an agreement with the Minister in which the applicant shall,

(a) agree not to change the site, structure, use of or sell, agree to sell, lease, mortgage, encumber, donate or otherwise dispose of all or any part of the building, buildings or land without the approval of the Minister;

(b) agree not to demolish or make alterations or additions to all or any part of the building or buildings without the approval of the Minister; and

(c) agree to reimburse the Ministry in the same ratio as the Ministry's contribution to the acquisition of the building, buildings or land, the construction of the building or buildings or the renovations upon termination of the agreement or where there is a contravention of any term of the agreement or where a circumstance set out in clause (a) or (b) takes place. R.R.O. 1990, Reg. 314, s. 7.

8. Expenditures incurred by a municipality or an approved corporation for furnishings or equipment that are not replacements or for repairs to or maintenance of a capital asset that,

(a) are approved by the Minister as capital expenditures;

(b) are, in the opinion of the Minister, necessary for the efficient operation of an approved centre and the cost of which is not excessive for the purpose; and

(c) are in excess of $3,000,

are capital expenditures for which a grant may be paid under subsection 4 (1) of the Act upon application by the municipality or the approved corporation in an amount equal to 30 per cent of the approved expenditures incurred. R.R.O. 1990, Reg. 314, s. 8; O. Reg. 391/08, s. 1.

9. A municipality or an approved corporation shall in respect of every approved centre operated by it keep and maintain a current inventory of all furnishings and equipment acquired by the centre and the inventory shall set forth each addition to or removal from inventory and the reasons therefor and shall be prepared in such manner and contain such additional information as the Director may require. R.R.O. 1990, Reg. 314, s. 9.

10. (1) An application by a municipality or an approved corporation for payment of the subsidy under subsection 4 (2) of the Act shall be made in a form provided by the Minister and may be submitted monthly, quarter-yearly, half-yearly or yearly and shall be submitted to the Director not later than the last day of the month immediately following the period for which the application is made. R.R.O. 1990, Reg. 314, s. 10 (1).

(2) Subject to subsections (3) and (4), the monthly amount to be paid under subsection 4 (2) of the Act shall be up to 50 per cent of the net monthly cost to the municipality or approved corporation of maintaining and operating its approved centre or centres, determined in accordance with the form referred to in subsection (1). R.R.O. 1990, Reg. 314, s. 10 (2).

(3) In respect of expenditures incurred on and after April 1, 2008, the amount to be paid in a fiscal year under subsection 4 (2) of the Act for any approved centre maintained and operated by a municipality or approved corporation shall not exceed,

(a) $32,000, for the period beginning on April 1, 2008 and ending on March 31, 2010; and

(b) $42,700, after March 31, 2010. O. Reg. 391/08, s. 2.

(4) In determining the maximum net monthly expenditure under subsection (2),

(a) the Director may average the expenditure for any approved centre by the municipality or approved corporation, as the case may be, over the fiscal year of the approved centre or approved corporation;

(b) the cost of rent or the monthly amount repaid for principal and interest under a mortgage in respect of an approved centre for which a capital grant has been paid under subsection 4 (1) of the Act shall not be included. R.R.O. 1990, Reg. 314, s. 10 (4).

11. The sum payable by a municipality or municipalities to an approved corporation under subsection 4 (2) of the Act shall be equal to,

(a) for corporations that are approved under subsection 2 (1) of the Act on or after April 1, 2008, at least 20 per cent of the net monthly cost to the approved corporation of maintaining and operating its approved centre or centres determined in accordance with the form referred to in subsection 10 (1); and

(b) for corporations that were approved under subsection 2 (1) of the Act before April 1, 2008, at least 20 per cent of the net monthly cost to the approved corporation in the 2007-2008 fiscal year of maintaining and operating its approved centre or centres determined in accordance with the form referred to in subsection 10 (1). O. Reg. 391/08, s. 3.

12. It is a term and condition of payment of a grant under subsection 4 (2) of the Act that the net monthly cost of maintaining and operating an approved centre for the purposes of the form referred to in subsection 10 (1) be approved by the Director. R.R.O. 1990, Reg. 314, s. 12.

13. A grant may be paid under section 5 of the Act to a municipality or to an approved corporation for costs of a program of services for elderly persons in an approved centre, but in no case shall the total grant under section 5 of the Act exceed $15,000 for any approved centre for any fiscal year. R.R.O. 1990, Reg. 314, s. 13.

14. A municipality or an approved corporation shall in respect of every approved centre operated by it,

(a) provide a program of services approved by the Minister;

(b) provide, when requested by the Director, a letter from the local fire chief stating that the premises meet all the requirements of any statute, regulation or by-law for the protection from fire of persons using the premises;

(c) establish requirements and policies for the admission of elderly persons to the facilities and services of a centre that are satisfactory to the Director;

(d) keep separate books of account,

(i) setting forth the revenue and expenditures of the centre,

(ii) containing a separate record of the money received by the centre from sources other than under the Act, and

(iii) that are audited at least once a year by a licensed public accountant in the case of the approved corporation and an auditor licensed and appointed in accordance with the *Municipal Act* in the case of the municipality,

and each book of account shall be retained for at least six years from the date of the last entry in a book for a particular year;

(e) furnish to the Director not later than the last day of the fourth month following the end of each fiscal year the financial statement of the centre for the immediately preceding fiscal year, together with a report of a licensed public accountant in the case of the approved corporation or of an auditor licensed in accordance with the *Municipal Affairs Act* and appointed in accordance with the *Municipal Act* in the case of the municipality, stating whether in the person's opinion,

(i) the person has received all the information and explanations the person has required,

(ii) the financial statement and the claims for provincial subsidy are in accordance with the books and records of the centre and approved corporation, as the case may be,

(iii) the calculation of the provincial subsidy is in accordance with the regulations, and

(iv) the financial statement has been prepared in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year,

(2) The Minister may by order vary or dispense with a requirement imposed under this Act with respect to the undertaking in order to facilitate the effective operation of the requirements of both jurisdictions. 1996, c. 27, s. 2.

Declaration of non-application

(3) The Minister may by order declare that this Act does not apply with respect to the undertaking. 1996, c. 27, s. 2.

Notice and comment

(4) When the Minister proposes to make an order under this section, the Minister shall give adequate public notice of the proposed order and shall ensure that members of the public have an opportunity to comment on it. 1996, c. 27, s. 2.

Reasons

(5) When making an order, the Minister shall give written reasons. 1996, c. 27, s. 2.

Declaration

3.2 (1) With the approval of the Lieutenant Governor in Council or of such ministers of the Crown as the Lieutenant Governor in Council may designate, the Minister may by order,

(a) declare that this Act, the regulations or a matter provided for under the Act does not apply with respect to a proponent, a class of proponents, an undertaking or a class of undertakings;

(b) suspend or revoke the declaration;

(c) impose conditions on the declaration; or

(d) amend or revoke conditions imposed on the declaration,

if the Minister considers that it is in the public interest to do so having regard to the purpose of this Act and weighing it against the injury, damage or interference that might be caused to any person or property by the application of this Act to the undertaking or class. 1996, c. 27, s. 2.

***Legislation Act, 2006*, Part III**

(2) Part III (Regulations) of the *Legislation Act, 2006* does not apply with respect to an order made under subsection (1). 1996, c. 27, s. 2; 2006, c. 21, Sched. F, s. 136 (1).

Exclusion of traffic calming measures

3.3 (1) A traffic calming measure is not an undertaking for the purposes of this Act and cannot be included in the definition of a class for the purposes of this Act. 2006, c. 11, Sched. B, s. 5.

Same

(2) Sections 3.0.1 and 3.1 do not apply with respect to traffic calming measures. 2006, c. 11, Sched. B, s. 5.

Transition

(3) If an application, or part of an application, made under a provision of this Act in respect of proposed traffic calming measures is not finally determined before the day on which section 5 of Schedule B to the *Stronger City of Toronto for a Stronger Ontario Act, 2006* comes into force, the application or part thereof in respect of traffic calming measures is discontinued on that day. 2006, c. 11, Sched. B, s. 5.

Same

(4) If any process, or part of a process, in respect of proposed traffic calming measures under an approved class environmental assessment has not been completed before the day on which section 5 of Schedule B to the *Stronger City of Toronto for a Stronger Ontario Act, 2006* comes into force, the process or part thereof in respect of the proposed traffic calming measures are discontinued on that day. 2006, c. 11, Sched. B, s. 5.

Immunity

(5) No damages, amount in lieu of damages or other amount is payable by the Crown, a public body, a municipality or any other person as a result of or relating to the enactment of this section. 2006, c. 11, Sched. B, s. 5.

Definition

(6) In this section,

"traffic calming measures" means physical measures designed to control traffic speeds and to encourage driving behaviour that is appropriate to the environment. 2006, c. 11, Sched. B, s. 5.

The Crown

4. This Act binds the Crown. R.S.O. 1990, c. E.18, s. 4.

PART II
ENVIRONMENTAL ASSESSMENTS

Application For Approval

Approval for undertaking

5. (1) Every proponent who wishes to proceed with an undertaking shall apply to the Minister for approval to do so. 1996, c. 27, s. 3.

Application

(2) The application consists of the proposed terms of reference submitted under subsection 6 (1) and the environmental assessment subsequently submitted under subsection 6.2 (1). 1996, c. 27, s. 3.

Prohibition

(3) No person shall proceed with an undertaking unless the Minister gives his or her approval to proceed under section 9 or the Tribunal gives its approval under section 9.1. 1996, c. 27, s. 3; 2000, c. 26, Sched. F, s. 11 (6).

Same

(4) No person shall proceed with an undertaking in a manner inconsistent with a condition imposed by the Minister or the Tribunal for proceeding with it. 1996, c. 27, s. 3; 2000, c. 26, Sched. F, s. 11 (6).

Potential non-compliance

(5) A proponent who has received approval to proceed with an undertaking shall promptly notify the Minister if the proponent may not be able to comply with the approval as a result of a change in circumstances. 1996, c. 27, s. 3.

Obligation to consult

5.1 When preparing proposed terms of reference and an environmental assessment, the proponent shall consult with such persons as may be interested. 1996, c. 27, s. 3.

Terms of reference

6. (1) The proponent shall give the Ministry proposed terms of reference governing the preparation of an environmental assessment for the undertaking. 1996, c. 27, s. 3.

Same

(2) The proposed terms of reference must,

(a) indicate that the environmental assessment will be prepared in accordance with the requirements set out in subsection 6.1 (2);

(b) indicate that the environmental assessment will be prepared in accordance with such requirements as may be prescribed for the type of undertaking the proponent wishes to proceed with; or

(c) set out in detail the requirements for the preparation of the environmental assessment. 1996, c. 27, s. 3.

Same

(3) The proposed terms of reference must be accompanied by a description of the consultations by the proponent and the results of the consultations. 1996, c. 27, s. 3.

Public notice

(3.1) The proponent shall give public notice of the proposed terms of reference and shall do so by the prescribed deadline and in the manner required by the Director. 2000, c. 26, Sched. E, s. 2 (2).

Same

(3.2) The public notice must indicate where and when members of the public may inspect the proposed terms of reference and state that they may give their comments about the proposed terms of reference to the Ministry. It must also contain such other information as may be prescribed or as the Director may require. 2000, c. 26, Sched. E, s. 2 (2).

Notice to clerk of a municipality

(3.3) The proponent shall give the information contained in the public notice to the clerk of each municipality in which the undertaking is to be carried out and shall do so by the deadline for giving the public notice. 2000, c. 26, Sched. E, s. 2 (2).

Notice to other persons

(3.4) The proponent shall give the information contained in the public notice to such other persons as the Director may require and shall do so by the deadline for giving the public notice. 2000, c. 26, Sched. E, s. 2 (2).

Public inspection

(3.5) Any person may inspect the proposed terms of reference in the places and at the times set out in the public notice. 2000, c. 26, Sched. E, s. 2 (2).

Comments

(3.6) Any person may comment in writing on the proposed terms of reference to the Ministry and, if the person wishes the comments to be considered by the Minister in deciding whether to approve the proposed terms of reference, shall submit the comments by the prescribed deadline. 2000, c. 26, Sched. E, s. 2 (2).

Approval

(4) The Minister shall approve the proposed terms of reference, with any amendments that he or she considers necessary, if he or she is satisfied that an environmental assessment prepared in accordance with the approved terms of reference will be consistent with the purpose of this Act and the public interest. 2000, c. 26, Sched. E, s. 2 (3).

Mediation

(5) Before approving proposed terms of reference, the Minister may refer a matter in connection with them to mediation and section 8 applies with necessary modifications. 1996, c. 27, s. 3.

Deadline

(6) The Minister shall notify the proponent whether or not the proposed terms of reference are approved and shall do so by the prescribed deadline. 1996, c. 27, s. 3.

Same

(7) Different deadlines may be prescribed with respect to proposed terms of reference that are referred to mediation and with respect to those that are not. 1996, c. 27, s. 3.

Preparation of environmental assessment

6.1 (1) The proponent shall prepare an environmental assessment for an undertaking in accordance with the approved terms of reference. 1996, c. 27, s. 3.

Contents

(2) Subject to subsection (3), the environmental assessment must consist of,

(a) a description of the purpose of the undertaking;

(b) a description of and a statement of the rationale for,

(i) the undertaking,

(ii) the alternative methods of carrying out the undertaking, and

(5) Subsections (1) to (4) do not relieve any person from liability except liability as owner of waste that is delivered to and accepted by the operator of a waste disposal site in accordance with law including an applicable environmental compliance approval, applicable renewable energy approval or applicable regulation made under clause 176 (2.4) (e). 2009, c. 12, Sched. G, s. 3 (2); 2010, c. 16, Sched. 7, s. 2 (32).

Owner of land

(6) Where the operator of a waste disposal site is not the owner of the land on which the site is located, subsections (1) and (2) do not prevent the ownership of waste that is accepted or deposited at the site from being transferred to the owner of the land. R.S.O. 1990, c. E.19, s. 42 (6).

Order for removal of waste

43. Where waste has been deposited upon, in, into or through any land or land covered by water or in any building that has not been approved as a waste disposal site or in respect of which no registration under Part II.2 is in effect, the Director may issue an order to remove the waste and to restore the site to a condition satisfactory to the Director to,

(a) an owner or previous owner or a person who otherwise has or had charge and control of the land or building or waste;

(b) an occupant or previous occupant of the land or building; or

(c) a person that the Director reasonably believes engaged in an activity prohibited by section 40 or 41 that resulted in the deposit of the waste. 1998, c. 35, s. 6; 2010, c. 16, Sched. 7, s. 2 (33).

Order by Director

44. Where a waste management system or a waste disposal site is not in conformity with this Part or the regulations, the Director may order an owner or previous owner to take such action as is required to bring the system or the site into conformity with this Part or the regulations within the time specified in the order. R.S.O. 1990, c. E.19, s. 44.

Right to compensation

45. (1) Within thirty days after the receipt of notice that the Director has refused to renew or has suspended or revoked an environmental compliance approval, any owner who has suffered pecuniary loss as a result of such decision affecting the owner's waste disposal site or waste management system may apply to the Director for compensation for such loss where such owner,

(a) has received an environmental compliance approval for the waste disposal site or waste management system affected by the Director's decision; and

(b) since receiving the environmental compliance approval, has strictly complied with this Act and the regulations. R.S.O. 1990, c. E.19, s. 45 (1); 2010, c. 16, Sched. 7, s. 2 (34-36).

Same

(1.1) Within 30 days after the receipt of notice or an order that the Director has suspended a registration under Part II.2 or removed a registration under Part II.2 from the registry established under that Part, any owner who has suffered pecuniary loss as a result of such decision affecting the owner's waste disposal site or waste management system may apply to the Director for compensation for such loss where such owner,

(a) has received a confirmation of registration under Part II.2 in respect of the waste disposal site or waste management system affected by the Director's decision; and

(b) since registering the activity, has strictly complied with this Act and the regulations. 2010, c. 16, Sched. 7, s. 2 (37).

Exception

(1.2) Subsection (1.1) does not apply if the Director removes the registration from the registry as a result of issuing an order under section 20.18, unless the Director refuses to issue an environmental compliance approval in respect of the waste disposal site or waste management system. 2010, c. 16, Sched. 7, s. 2 (38).

Notice of decision and right to appeal

(2) A notice of the decision of the Director in disposing of the application and a notice stating the right to an appeal under this section shall be served on the owner either personally or by registered mail addressed to the owner at the owner's last known address. R.S.O. 1990, c. E.19, s. 45 (2).

Right to appeal

(3) Within fifteen days after receipt of the notices referred to in subsection (2), the owner may by written notice received by the Ministry and the Tribunal, appeal the amount of compensation, if any, to the Tribunal, and such appeal shall be a new hearing and the Tribunal may dismiss the appeal or alter the decision of the Director establishing the amount of the compensation, if any, and the decision of the Tribunal shall be final. R.S.O. 1990, c. E.19, s. 45 (3); 2000, c. 26, Sched. F, s. 12 (12).

Payment of compensation

(4) Where the Director or the Tribunal, as the case may be, has established the amount of the compensation, if any, the Minister of the Environment shall certify the amount thereof to the Minister of Finance and the Minister of Finance shall pay such amount to the person entitled thereto out of the Consolidated Revenue Fund. R.S.O. 1990, c. E.19, s. 45 (4); 2000, c. 26, Sched. F, s. 12 (12); 2001, c. 9, Sched. G, s. 5 (2).

Former disposal sites

46. No use shall be made of land or land covered by water which has been used for the disposal of waste within a period of twenty-five years from the year in which such land ceased to be so used unless the approval of the Minister for the proposed use has been given. R.S.O. 1990, c. E.19, s. 46.

Security Fund

47. (1) There shall be an account in the Consolidated Revenue Fund to be known in English as "The Waste Well Disposal Security Fund" and in French as "Caisse de garantie des propriétaires de puits d'élimination des déchets", referred to in this section as the "Fund", into which shall be paid the prescribed fees received under this Act. R.S.O. 1990, c. E.19, s. 47 (1).

Interest

(2) Interest shall be credited to the Fund out of the Consolidated Revenue Fund at a rate to be determined from time to time by the Lieutenant Governor in Council, and such interest shall be made up at the close of each fiscal year upon the balance in the Fund at the end of the previous calendar year. R.S.O. 1990, c. E.19, s. 47 (2).

Owner of waste disposal well to pay fee

(3) The owner of every well that is a waste disposal site shall pay a fee calculated upon the amount and type of waste disposed of in the well. R.S.O. 1990, c. E.19, s. 47 (3).

Fee paid to Minister of Finance

(4) The fee shall be paid to the Minister of Finance for payment into the Fund. R.S.O. 1990, c. E.19, s. 47 (4); 2001, c. 9, Sched. G, s. 5 (22).

Calculation and payment of fee

(5) The fee shall be at the rate or rates prescribed by the regulations, shall be paid upon the amount and type of waste disposed of in the well in each calendar year and shall be paid in advance in each calendar year. R.S.O. 1990, c. E.19, s. 47 (5).

Estimate by Director

(6) The Director shall estimate the amount of the fee for each calendar year based upon the amount and type of waste disposed of in the well in the previous calendar year and where waste was not disposed of in the well in the previous calendar year the Director shall estimate the fee on the basis of the amount and type of waste that in the Director's opinion will be disposed of in the well in the current calendar year and may revise such estimate at any time before payment of the estimated fee as required by subsection (7). R.S.O. 1990, c. E.19, s. 47 (6).

Payment of estimated fee

(7) The estimated fee for each calendar year shall be paid within thirty days after receipt of the notice or revised notice by the owner of the well of the amount of the fee estimated by the Director. R.S.O. 1990, c. E.19, s. 47 (7).

Adjustment of fee

(8) At the end of each calendar year, the Director shall calculate the amount of the fee for the year and,

(a) where the fee estimated and paid for the year is less than the calculated fee, the Director shall add the difference to the estimated fee for the next calendar year or may, by a notice in writing, require the owner of the well to pay the difference forthwith to the Minister of Finance; and

(b) where the fee estimated and paid for the year is greater than the calculated fee, the Director shall deduct the difference from the estimated fee for the next calendar year or may certify to the Minister of Finance the amount of such difference and the Minister of Finance shall pay such amount to the owner of the well. R.S.O. 1990, c. E.19, s. 47 (8); 2001, c. 9, Sched. G, s. 5 (22).

Person suffering damage to be compensated

(9) Where the water in any well, lake, river, pond, spring, stream, reservoir or other water or watercourse that any person takes for ordinary household purposes or for the watering of livestock, poultry, home gardens or lawns, or for the watering or irrigation of crops grown for sale, is rendered unfit for such use by reason of the operation of any well that is a waste disposal site, the person is entitled to be compensated out of the Fund so far as the Fund is sufficient for that purpose, having regard to any other charges thereon, if the person gives notice to the Director forthwith after becoming aware that the water has been rendered unfit and makes a claim therefor under subsection (10) within six months, or such longer period of time as may be determined by the Director, from the date that the Director received the notice that the water has been rendered unfit. R.S.O. 1990, c. E.19, s. 47 (9).

Claim for compensation

(10) A person claiming to be entitled to compensation out of the Fund shall make application therefor to the Director in writing, setting out therein the person's full name and address and the particulars of the person's claim and shall furnish to the Director such additional information with respect to the subject-matter of the claim that the Director may require and that is within the person's knowledge. R.S.O. 1990, c. E.19, s. 47 (10).

Determination by Director

(11) The Director shall investigate or cause an investigation to be made and shall determine whether there are reasonable grounds for believing that the water referred to in subsection (9) has been rendered unfit for any of the purposes set out therein and for which it was used and that it has been rendered unfit by the disposal of waste in any well that is a waste disposal site and in such case shall determine the amount of the claimant's reasonable and necessary expenses incurred in obtaining a temporary or permanent alternate supply of water substantially equivalent in quantity and quality to such water. R.S.O. 1990, c. E.19, s. 47 (11); 2005, c. 12, s. 1 (12).

Director's certificate

(12) The Director shall set out his or her determination in a certificate together with written reasons therefor and send a copy thereof to the claimant by registered mail at the address set out in the application. R.S.O. 1990, c. E.19, s. 47 (12).

When certificate final

(13) The certificate of the Director is final at the end of thirty days from the date of mailing it to the claimant unless notice of appeal is served within that time. R.S.O. 1990, c. E.19, s. 47 (13).

Appeal

(14) The claimant may appeal to the Tribunal at any time before the certificate of the Director becomes final and the procedure thereon shall be the same as upon an appeal from an order of the Director under Part XIII. R.S.O. 1990, c. E.19, s. 47 (14); 2000, c. 26, Sched. F, s. 12 (12).

Payment out of Fund

(15) Where the Director has sent the certificate by registered mail to the claimant and the time for any appeal has expired or, where an appeal is taken, it is disposed of, and it is finally determined that the claimant is entitled to payment of compensation out of the Fund, the Director shall certify to the Minister of Finance the sum found to be payable and the Minister of Finance shall pay such sum to the claimant out of the Fund. R.S.O. 1990, c. E.19, s. 47 (15); 2001, c. 9, Sched. G, s. 5 (22).

Recovery of money

(16) Where a claimant who has received any payment out of the Fund recovers any money directly or indirectly from the owner of a well that is a waste disposal site, in respect of the expenses for which the payment was made out of the Fund, the claimant shall repay to the Minister of Finance for credit to the Fund an amount equal to the payment out of the Fund or the money received from the owner of the well, whichever is the lesser, and such amount may be recovered with costs in any court of competent jurisdiction as a debt due to the Crown. R.S.O. 1990, c. E.19, s. 47 (16); 2001, c. 9, Sched. G, s. 5 (22).

Recovery of fees owing

(17) Any fee or any difference between the estimated fee and the calculated fee referred to in clause (8) (a) that is payable under this section may be recovered in any court of competent jurisdiction as a debt due to the Crown. R.S.O. 1990, c. E.19, s. 47 (17).

PART V.0.1
RENEWABLE ENERGY

Definition

47.1 In this Part,

"environment" has the same meaning as in the *Environmental Assessment Act*. 2009, c. 12, Sched. G, s. 4 (1).

Purpose

47.2 (1) The purpose of this Part is to provide for the protection and conservation of the environment. 2009, c. 12, Sched. G, s. 4 (1).

Application of s. 3 (1)

(2) Subsection 3 (1) does not apply to this Part. 2009, c. 12, Sched. G, s. 4 (1).

Requirement for renewable energy approval

47.3 (1) A person shall not engage in a renewable energy project except under the authority of and in accordance with a renewable energy approval issued by the Director if engaging in the project involves engaging in any of the following activities:

1. An activity for which, in the absence of subsection (2), subsection 9 (1) of this Act would require an environmental compliance approval.
2. An activity for which, in the absence of subsection (2), subsection 27 (1) of this Act would require an environmental compliance approval.
3. An activity for which, in the absence of subsection (2), subsection 34 (3) of the *Ontario Water Resources Act* would require a permit.

Note: On the later of the day subsection 4 (1) of Schedule G to the *Green Energy and Green Economy Act, 2009* comes into force and the day subsection 1 (8) of the *Safeguarding and Sustaining Ontario's Water Act, 2007* comes into force, paragraph 3 is repealed and the following substituted:

3. An activity for which, in the absence of subsection (2), subsection 34 (1) of the *Ontario Water Resources Act* would require a permit, if the activity would not involve a transfer as defined in subsection 34.5 (1) of that Act.

See: 2009, c. 12, Sched. G, ss. 4 (2), 26 (2).

4. An activity for which, in the absence of subsection (2), section 36 of the *Ontario Water Resources Act* would require a well construction permit.
5. An activity for which, in the absence of subsection (2), subsection 53 (1) of the *Ontario Water Resources Act* would require an environmental compliance approval.
6. An activity for which, in the absence of subsection (2), a provision prescribed by the regulations would require an approval, permit or other instrument.
7. Any other activity prescribed by the regulations. 2009, c. 12, Sched. G, s. 4 (1); 2010, c. 16, Sched. 7, s. 2 (39-41).

Exemptions

(2) The following provisions do not apply to a person who is engaging in a renewable energy project:

1. Subsection 9 (1) of this Act.
2. Subsection 27 (1) of this Act.
3. Subsection 34 (3) of the *Ontario Water Resources Act*.

Note: On the later of the day subsection 4 (1) of Schedule G to the *Green Energy and Green Economy Act, 2009* comes into force and the day subsection 1 (8) of the *Safeguarding and Sustaining Ontario's Water Act, 2007* comes into force, paragraph 3 is repealed and the following substituted:

3. Subsection 34 (1) of the *Ontario Water Resources Act*, if the person engaging in the renewable energy project is not engaged in a taking of water that involves a transfer as defined in subsection 34.5 (1) of that Act.

See: 2009, c. 12, Sched. G, ss. 4 (3), 26 (2).

4. Section 36 of the *Ontario Water Resources Act*.

5. Section 53 of the *Ontario Water Resources Act*.

6. A provision prescribed by the regulations for the purpose of paragraph 6 of subsection (1). 2009, c. 12, Sched. G, s. 4 (1); 2010, c. 16, Sched. 7, s. 2 (42).

Application

47.4 (1) An application for the issue or renewal of a renewable energy approval shall be prepared in accordance with the regulations and submitted to the Director. 2009, c. 12, Sched. G, s. 4 (1).

Director may require information

(2) The Director may require an applicant under subsection (1) to submit any plans, specifications, engineers' reports or other information and to carry out and report on any tests or experiments relating to the renewable energy project. 2009, c. 12, Sched. G, s. 4 (1).

Director's powers

47.5 (1) After considering an application for the issue or renewal of a renewable energy approval, the Director may, if in his or her opinion it is in the public interest to do so,

(a) issue or renew a renewable energy approval; or

(b) refuse to issue or renew a renewable energy approval. 2009, c. 12, Sched. G, s. 4 (1).

Terms and conditions

(2) In issuing or renewing a renewable energy approval, the Director may impose terms and conditions if in his or her opinion it is in the public interest to do so. 2009, c. 12, Sched. G, s. 4 (1).

Other powers

(3) On application or on his or her own initiative, the Director may, if in his or her opinion it is in the public interest to do so,

(a) alter the terms and conditions of a renewable energy approval after it is issued;

(b) impose new terms and conditions on a renewable energy approval; or

(c) suspend or revoke a renewable energy approval. 2009, c. 12, Sched. G, s. 4 (1).

Same

(4) A renewable energy approval is subject to any terms and conditions prescribed by the regulations. 2009, c. 12, Sched. G, s. 4 (1).

Water transfers: Great Lakes-St. Lawrence River, Nelson and Hudson Bay Basins

47.6 A renewable energy approval shall not authorize a person to take water contrary to subsection 34.3 (2) of the *Ontario Water Resources Act*. 2009, c. 12, Sched. G, s. 4 (1).

Policies, renewable energy approvals

47.7 (1) The Minister may, in writing, issue, amend or revoke policies in respect of renewable energy approvals. 2009, c. 12, Sched. G, s. 4 (1).

Same

(2) A policy or the amendment or revocation of a policy takes effect on the later of the following days:

1. The day that notice of the policy, amendment or revocation, as the case may be, is given in the environmental registry established under the *Environmental Bill of Rights, 1993*.

2. The effective day specified in the policy, amendment or revocation, as the case may be. 2009, c. 12, Sched. G, s. 4 (1).

Same

(3) Subject to section 145.2.2, decisions made under this Act in respect of renewable energy approvals shall be consistent with any policies issued under subsection (1) that are in effect on the date of the decision. 2009, c. 12, Sched. G, s. 4 (1).

PART V.1
VEHICLE PERMITS AND NUMBER PLATES

Seizure of permits and number plates

Definitions, ss. 48 to 55

48. (1) In this section and in sections 49 to 55,

"number plates" means number plates issued under the *Highway Traffic Act*; ("plaques d'immatriculation")

"offence" means offence under this Act, the *Nutrient Management Act, 2002*, the *Ontario Water Resources Act*, the *Pesticides Act*, the *Safe Drinking Water Act, 2002* or the *Toxics Reduction Act, 2009*; ("infraction")

"permit" means permit issued under section 7 of the *Highway Traffic Act*; ("certificat d'immatriculation")

"Registrar" means Registrar of Motor Vehicles under the *Highway Traffic Act*. ("registrateur") R.S.O. 1990, c. E.19, s. 48 (1); 1998, c. 35, s. 8 (1, 2); 2002, c. 4, s. 62 (2); 2009, c. 19, s. 67 (2).

Seizure of permit and number plates

(2) A police officer or a provincial officer may seize the permit and the number plates for a vehicle where he or she reasonably believes that the vehicle was used or is being used in connection with the commission of an offence and the seizure is necessary to prevent the continuation or repetition of the offence. 1998, c. 35, s. 8 (3).

Safekeeping

(3) The police officer or provincial officer,

(a) shall deliver the permit and the number plates into the custody of the Registrar pending disposition as provided in sections 49 to 55; and

(b) shall give notice to the Registrar of the date when the permit and the number plates were seized. R.S.O. 1990, c. E.19, s. 48 (3).

Notice by Registrar

(4) The Registrar shall give notice of the delivery into custody and of the date of the seizure to the person to whom the permit and the number plates were issued. R.S.O. 1990, c. E.19, s. 48 (4).

Suspension of permit and detention of number plates

49. (1) Where a person is convicted of an offence, the court may order the suspension of the permit and the detention of the number plates for any vehicle that the court is satisfied was used in connection with the commission of the offence. 1998, c. 35, s. 9 (1).

Term of suspension and detention

(2) The court may fix such period of time, not exceeding five years, for the suspension of the permit and the detention of the number plates as the court considers proper.

Idem

(3) Where the permit and the number plates were seized under section 48, the period of the suspension and detention shall be calculated from the day of the seizure.

Order for seizure

(4) Where the permit and the number plates have not been seized, the court may order that the permit and the number plates shall be seized and delivered to the Registrar.

Out-of-province permit and number plates

(5) Where the permit to drive the vehicle on a highway and the number plates were issued by an authority outside Ontario and not under the *Highway Traffic Act*, the court shall not act under subsection (1) but may order the Registrar to return the permit and the number plates to the authority that issued them.

Order is additional to any other penalty

Same

(4) In an inspection under subsection (2), the provincial officer or police officer may,

(a) require the driver of the motor vehicle to submit the motor vehicle to such tests at such places and times as the provincial officer or police officer considers reasonable;

(b) require the driver of the motor vehicle to produce any documents, including licenses and permits, related to the operation or ownership of the motor vehicle; and

(c) require the driver of the motor vehicle to operate, use or set in motion the vehicle or any part of the vehicle, under the conditions specified by the provincial officer or police officer.

Police assistance

(5) Where a provincial officer considers it necessary or expedient to do so, he or she may call for the assistance of any member of the Ontario Provincial Police Force or the police force in the area where the assistance is required for an inspection under subsection (2), and it is the duty of every member of a police force to render the assistance. 1998, c. 35, s. 26.

167. REPEALED: 1998, c. 35, s. 27.

Matters confidential

168. (1) Except as to information in respect of the deposit, addition, emission or discharge of a contaminant into the natural environment, every provincial officer shall preserve secrecy in respect of all matters that come to his or her knowledge in the course of any survey, examination, test or inquiry under this Act or the regulations and shall not communicate any such matters to any person except,

(a) as may be required in connection with the administration of this Act and the regulations or any proceeding under this Act or the regulations;

(a.1) as authorized under the *Regulatory Modernization Act, 2007*;

(b) to the provincial officer's counsel; or

(c) with the consent of the person to whom the information relates. R.S.O. 1990, c. E.19, s. 168 (1); 2007, c. 4, s. 30 (2); 2009, c. 19, s. 67 (9).

Testimony in civil suit

(2) Except in a proceeding under this Act or the regulations, no provincial officer shall be required to give testimony, other than testimony in respect of the deposit, addition, emission or discharge of a contaminant into the natural environment, in any civil suit or proceeding with regard to information obtained by him or her in the course of any survey, examination, test or inquiry under this Act or the regulations. R.S.O. 1990, c. E.19, s. 168 (2); 2009, c. 19, s. 67 (9).

PART XV.1
RECORDS OF SITE CONDITION

Definitions, Part XV.I

168.1 In this Part,

"building" has the same meaning as in the *Building Code Act, 1992*; ("bâtiment")

"construct" has the same meaning as in the *Building Code Act, 1992*; ("construire")

"owner" includes a person prescribed by the regulations; ("propriétaire")

"phase one environmental site assessment" means an assessment of property conducted in accordance with the regulations by or under the supervision of a qualified person to determine the likelihood that one or more contaminants have affected any land or water on, in or under the property; ("évaluation environnementale de site de phase I")

"phase two environmental site assessment" means an assessment of property conducted in accordance with the regulations by or under the supervision of a qualified person to determine the location and concentration of one or more contaminants in the land or water on, in or under the property; ("évaluation environnementale de site de phase II")

"qualified person" means a person who meets the qualifications prescribed by the regulations; ("personne compétente")

"Registry" means the Environmental Site Registry; ("Registre")

"risk assessment" means an assessment of risks prepared in accordance with the regulations by or under the supervision of a qualified person. ("évaluation des risques") 2001, c. 17, s. 2 (36); 2007, c. 7, Sched. 13, s. 3.

Interpretation, effect on cause of action

168.2 (1) Except as provided in subsections 168.3 (3) and (4) and 168.9 (12), this Part shall not be construed as affecting any cause of action that a person would have in the absence of this Part. 2001, c. 17, s. 2 (36); 2006, c. 19, Sched. K, s. 2 (4); 2007, c. 7, Sched. 13, s. 4 (1).

Interpretation, meeting standards

(2) For purposes of this Part, a property meets the applicable site condition standards prescribed by the regulations for all contaminants prescribed by the regulations or the standards specified in a risk assessment for a contaminant if the concentration of the contaminants in the land and water on, in or under the property does not exceed the standards. 2007, c. 7, Sched. 13, s. 4 (2).

Environmental Site Registry

168.3 (1) The Director shall establish, maintain and operate a registry known in English as the Environmental Site Registry and in French as Registre environnemental des sites. 2001, c. 17, s. 2 (36).

Purposes

(2) The purposes of the Registry are:

1. To allow the filing of records of site condition for the purposes of this Part.
2. To facilitate public access to information contained in records of site condition that have been filed under this Part and to other information filed in accordance with this Act and the regulations.
3. Such other purposes as are prescribed. 2001, c. 17, s. 2 (36); 2007, c. 7, Sched. 13, s. 5 (1).

Protection from liability

(3) Despite subsection 180 (2), no action or other proceeding shall be commenced against the Crown in right of Ontario, a public servant employed under Part III of the *Public Service of Ontario Act, 2006*, a person or body to whom powers and duties of the Director are delegated under section 168.9 or an employee of a person or body to whom powers and duties of the Director are delegated under section 168.9 arising from any inaccuracy contained in a record of site condition that is filed in the Registry under this Act. 2001, c. 17, s. 2 (36); 2006, c. 35, Sched. C, s. 36 (6).

Same

(4) No action or other proceeding shall be commenced against a municipality or a conservation authority or against an officer, employee or agent of a municipality or conservation authority in relation to the following, if the action or proceeding arises from any inaccuracy contained in a record of site condition that is filed in the Registry under this Act:

1. The issuance of a permit under section 8 or 10 of the *Building Code Act, 1992*.
2. Any act done in the execution or intended execution of any power or duty under the *Planning Act* or any alleged neglect or default in the execution of any such power or duty.
3. Any act done in the execution or intended execution of any power or duty under any other prescribed Act or any prescribed provisions under a prescribed Act or any alleged neglect or default in the execution of any such power or duty. 2007, c. 7, Sched. 13, s. 5 (2).

Prohibition on certain changes of use

168.3.1 (1) Subject to subsection (2), a person shall not,

(a) change the use of a property from industrial or commercial use to residential or parkland use;

(b) change the use of a property in a manner prescribed by the regulations; or

(c) construct a building if the building will be used in connection with a change of use that is prohibited by clause (a) or (b). 2001, c. 17, s. 2 (37).

Exception

(2) Subsection (1) does not apply if,

(a) a record of site condition has been filed in the Registry in respect of the property under section 168.4; and

(b) the use specified under paragraph 3 of subsection 168.4 (2) in the record of site condition is the use to which the property is changed under clause (1) (a) or (b). 2001, c. 17, s. 2 (37).

Submission for filing, record of site condition

168.4 (1) An owner of a property may submit for filing in the Registry a record of site condition in respect of the property if all of the following criteria are satisfied:

1. A qualified person has certified in the record of site condition that a phase one environmental site assessment of the property has been conducted.
2. A qualified person has certified in the record of site condition that,
   i. a phase two environmental site assessment of all or part of the property was conducted with respect to one or more contaminants, or
   ii. as of the certification date, no phase two environmental site assessment is required by the regulations for any part of the property and, in the opinion of the qualified person, it is not necessary for any other reason to conduct a phase two environmental site assessment for any part of the property.
3. If a phase two environmental site assessment was conducted but for only part of the property, a qualified person has certified in the record of site condition that, as of the certification date,
   i. no phase two environmental site assessment was required by the regulations for any other part of the property, and
   ii. in the opinion of the qualified person, it was not necessary for any other reason to conduct a phase two environmental site assessment for any other part of the property.
4. If a phase two environmental site assessment was conducted for all or part of the property, a qualified person has certified in the record of site condition that,
   i. as of the certification date, the property for which the phase two environmental site assessment was conducted meets,
      A. the applicable full depth background site condition standards prescribed by the regulations for all contaminants prescribed by the regulations, except for those contaminants specified by the qualified person,
      B. the applicable full depth generic site condition standards prescribed by the regulations for all contaminants prescribed by the regulations, except for those contaminants specified by the qualified person, or
      C. the applicable stratified site condition standards prescribed by the regulations for all contaminants prescribed by the regulations, except for those contaminants specified by the qualified person, and
   ii. for each contaminant excepted by the qualified person from the certification under subparagraph i,
      A. a risk assessment was prepared for the contaminant with respect to the property for which the phase two environmental site assessment was conducted,
      B. the Director has accepted the risk assessment under clause 168.5 (1) (a), and
      C. as of the certification date, the property for which the phase two environmental site assessment was conducted meets the standards specified in the risk assessment for the contaminant.
5. The record of site condition contains everything required by subsection (2) and has been completed in accordance with the regulations. 2001, c. 17, s. 2 (36); 2007, c. 7, Sched. 13, s. 6 (1).

Contents of record of site condition

(2) The person who submits for filing a record of site condition in respect of a property shall ensure that, in accordance with the regulations, the record of site condition contains the following:

1. A description of the property.
2. The name of the person submitting the record of site condition for filing and the names of any other owners of the property.
3. The type of property use to which the property for which the record of site condition is submitted for filing is to be put.

4. Which standards prescribed by the regulations were applied for the purpose of the record of site condition.
5. A description of any soil removals or other action taken to reduce the concentration of contaminants on, in or under the property.
6. For each contaminant for which sampling and analysis has been performed, the maximum known concentration of the contaminant on, in or under the property as of the certification date.
7. A statement indicating whether a certificate of property use has been issued in respect of the property.
8. A list of all reports relied on by qualified persons in making the certifications referred to in subsection (1).
9. Such other certifications, information and documents as are prescribed by the regulations. 2001, c. 17, s. 2 (36); 2007, c. 7, Sched. 13, s. 6 (2-5).

Submitting a record of site condition

(3) If a record of site condition is submitted for filing under this section in respect of a property, the Director shall,

(a) give a notice of receipt to the owner who submitted the record of site condition, once the Director is satisfied that everything required by subsection (2) has been submitted for filing; and

(b) within the time prescribed by the regulations from the date set out in the notice of receipt given under clause (a), give a notice or acknowledgement under subsection (3.1) to the owner who submitted the record of site condition. 2007, c. 7, Sched. 13, s. 6 (6).

Same

(3.1) The Director shall give one of the following to the person to whom the Director has given a notice of receipt under clause (3) (a):

1. Written notice that the record of site condition cannot be filed because it has not been completed in accordance with the regulations.
2. Written notice stating that the Director intends to conduct a review in relation to the record of site condition before the record of site condition can be filed in the Registry.
3. Written acknowledgement, specifying the date, that the record of site condition has been filed in the Registry. 2007, c. 7, Sched. 13, s. 6 (6).

Notice that a record of site condition cannot be filed

(3.2) A notice given under paragraph 1 of subsection (3.1) shall identify the manner in which the record of site condition has not been completed in accordance with the regulations. 2007, c. 7, Sched. 13, s. 6 (6).

Notice after review relating to record of site condition

(3.3) If a notice is given under paragraph 2 of subsection (3.1), after conducting the review, the Director shall,

(a) give a notice to the owner indicating that a defect prescribed by the regulations has been found in relation to the record of site condition; or

(b) give a written acknowledgment to the owner, specifying the date, that the record of site condition has been filed in the Registry. 2007, c. 7, Sched. 13, s. 6 (6).

Correction of defect

(3.4) If an owner to whom notice has been given under clause (3.3) (a),

(a) submits for filing a new record of site condition in respect of the property under subsection (1); or

(b) submits further information or documents to the Director in relation to the original record of site condition that was submitted under subsection (1),

and the Director is satisfied that, as a result of the submission, there is no defect prescribed by the regulations in relation to the record of site condition, the Director shall give a written acknowledgment to the owner, specifying the date, that the record of site condition has been filed in the Registry. 2007, c. 7, Sched. 13, s. 6 (6).

Date of filing

(4) A record of site condition is deemed to have been filed in the Registry under this section on the date specified in the acknowledgement given by the Director under this section. 2007, c. 7, Sched. 13, s. 6 (7).

Retention of reports

(5) If a qualified person has relied on a report in making a certification referred to in subsection (1) or (2) in a record of site condition that has been filed under this section, the following persons shall retain a copy of the report for the period prescribed by the regulations:

1. The owner of the property who submitted the record of site condition for filing or who filed the record of site condition.
2. The qualified person who made the certification. 2007, c. 7, Sched. 13, s. 6 (8, 9).

Transition

(6) If, pursuant to the Ministry publication entitled "Guideline for Use at Contaminated Sites in Ontario", originally dated June 1996 and later revised, a record of site condition in respect of a property was submitted to the Ministry before this section came into force, the owner of the property may, despite subsections (1) and (2), file the record of site condition in the Registry if both of the following criteria are satisfied:

1. The Ministry has acknowledged in writing receipt of the record of site condition.
2. The owner of the property files a notice in the Registry certifying that the requirements prescribed by the regulations have been complied with. 2001, c. 17, s. 2 (36).

Same

(7) If a record of site condition is filed in the Registry under subsection (6),

(a) the notice referred to in paragraph 2 of subsection (6) shall be deemed to be part of the record of site condition;

(b) the land use specified in the record of site condition shall be deemed to have been specified as the type of property use under paragraph 3 of subsection (2); and

(c) the record of site condition shall be deemed to contain,

(i) a certification under sub-subparagraph 4 i A of subsection (1), if the record of site condition indicates that a background assessment or restoration approach was used,

(ii) a certification under sub-subparagraph 4 i B of subsection (1), if the record of site condition indicates that a generic full depth assessment or restoration approach was used,

(iii) a certification under sub-subparagraph 4 i C of subsection (1), if the record of site condition indicates that a generic stratified assessment or restoration approach was used, or

(iv) a certification under subparagraph 4 ii of subsection (1), if the record of site condition indicates that a site specific risk assessment approach was used. 2001, c. 17, s. 2 (36).

Acknowledgment of filing

(8) If a record of site condition is filed in the Registry under subsection (6), the Director shall promptly give the person who filed the record of site condition a written acknowledgment. 2007, c. 7, Sched. 13, s. 6 (10).

Date of filing

(9) A record of site condition that is filed in the Registry under subsection (6) shall be deemed to have been filed in the Registry on the date specified in the acknowledgment given under subsection (8). 2007, c. 7, Sched. 13, s. 6 (10).

Note: On a day to be named by proclamation of the Lieutenant Governor, section 168.4 is amended by the Statutes of Ontario, 2007, chapter 7, Schedule 13, subsection 6 (11) by adding the following subsection:

Correction of errors

(10) If an owner of property for which a record of site condition has been filed in the Registry under this section requests the Director to correct an error in the record of site condition, the Director shall correct the error in the record of site condition if the error is of a prescribed type and if the correction is made in the circumstances that satisfy the criteria, if any, prescribed by the regulations and does not contravene any prohibition, if any, prescribed by the regulations. 2007, c. 7, Sched. 13, s. 6 (11).

See: 2007, c. 7, Sched. 13, ss. 6 (11), 14 (2).

Director's response to risk assessment

168.5 (1) If an owner of property submits a risk assessment relating to a contaminant and the property to the Director, the Director shall, within the time prescribed by the regulations,

(a) give the person notice in writing that the Director accepts the risk assessment; or

(b) give the person notice in writing that the Director does not accept the risk assessment for reasons specified by the Director in the notice. 2001, c. 17, s. 2 (36).

Validity of decision

(2) A decision of the Director to accept or not accept a risk assessment is not invalid solely on the ground that the decision was not made within the time prescribed by the regulations. 2001, c. 17, s. 2 (36).

Certificate of property use

168.6 (1) If a risk assessment relating to a property has been accepted under clause 168.5 (1) (a), the Director may issue a certificate of property use to the owner of the property, requiring the owner to do any of the following things:

1. Take any action that is specified in the certificate and that, in the Director's opinion, is necessary to prevent, eliminate or ameliorate any adverse effect that has been identified in the risk assessment, including installing any equipment, monitoring any contaminant or recording or reporting information for that purpose.
2. Refrain from using the property for any use specified in the certificate or from constructing any building specified in the certificate on the property. 2001, c. 17, s. 2 (36); 2006, c. 19, Sched. K, s. 2 (5, 6); 2007, c. 7, Sched. 13, s 7.

Restriction

(2) A certificate of property use shall not require an owner of property to take any action that would have the effect of reducing the concentration of a contaminant on, in or under the property to a level below the level that is required to meet the standards specified for the contaminant in the risk assessment. 2001, c. 17, s. 2 (36).

Revocation or amendment

(3) The Director may, on his or her own initiative or on application by the owner of the property in respect of which a certificate has been issued under subsection (1),

(a) alter any terms and conditions in the certificate or impose new terms and conditions; or

(b) revoke the certificate. 2001, c. 17, s. 2 (36).

Occupants

(4) If a certificate of property use contains a provision requiring the owner of property to refrain from using the property for a specified use or from constructing a specified building on the property,

(a) the owner of the property shall ensure that a copy of the provision is given to every occupant of the property;

(b) the provision applies, with necessary modifications, to every occupant of the property who receives a copy of the provision; and

(c) the owner of the property shall ensure that every occupant of the property complies with the provision. 2001, c. 17, s. 2 (36).

Notice to prescribed persons

(5) If a certificate of property use is issued, altered or revoked under this section, the Director shall give notice of the certificate, alteration or revocation to the persons prescribed by the regulations. 2001, c. 17, s. 2 (38).

Prohibition on construction or use

(6) Despite any other Act, if a certificate of property use contains a provision requiring the owner of property to refrain from using the property for a specified use or from constructing a specified building on the property, no permit, licence, approval or other instrument shall be issued to any person, under any provision prescribed by the regulations, that would authorize the person to use the property for the

specified use, to construct the specified building or to construct a building that will be used for the specified use. 2001, c. 17, s. 2 (38).

Consequences of filing record of site condition

168.7 (1) If a record of site condition is filed in the Registry in accordance with section 168.4 with respect to a property, no order shall be issued to any of the following persons under section 7, 8, 12, 17, 18, 97, 157 or 157.1 in respect of a contaminant that was discharged into the natural environment before the certification date and was on, in or under the property as of the certification date:

1. The person who filed or who submitted for filing the record of site condition or a subsequent owner of the property.
2. A person who is in occupation of the property or who was in occupation of the property at any time after the record of site condition was filed.
3. A person who has charge, management or control of the property or who had charge, management or control of the property at any time after the record of site condition was filed.
4. A person who meets the requirements prescribed by the regulations and who, before the certification date,
   i. owned the property,
   ii. was in occupation of the property, or
   iii. had charge, management or control of the property. 2001, c. 17, s. 2 (36); 2007, c. 7, Sched. 13, s. 8 (1, 2).

False or misleading information, etc.

(2) Subsection (1) does not apply if the record of site condition contains false or misleading information or false or misleading certifications. 2007, c. 7, Sched. 13, s. 8 (3).

Contaminants that move to other property

(3) Subsection (1) does not apply if, after the certification date, any of the contaminant moved from the property to which the record of site condition relates to another property. 2001, c. 17, s. 2 (36).

Note: On a day to be named by proclamation of the Lieutenant Governor, subsection (3) is repealed by the Statutes of Ontario, 2007, chapter 7, Schedule 13, subsection 8 (4) and the following substituted:

Contaminants that move to other property

(3) Subject to section 168.7.1, subsection (1) does not apply if, after the certification date, any of the contaminant moved from the land or water on, in or under the property for which a record of site condition has been filed to another property. 2007, c. 7, Sched. 13, s. 8 (4).

See: 2007, c. 7, Sched. 13, ss. 8 (4), 14 (2).

Different use

(4) If the actual use of the property is different from the use specified under paragraph 3 of subsection 168.4 (2) in the record of site condition, subsection (1) does not apply to a person who causes or permits the change in use and who owns, occupies or has charge, management or control of the property at the time of the change unless,

(a) the record of site condition did not contain any certification under subparagraph 4 ii of subsection 168.4 (1);

(b) all of the full depth background site condition standards that are applicable under the regulations to the actual use are the same as or less stringent than the full depth background site condition standards that are applicable to the use specified in the record of site condition, if the record of site condition contained a certification under sub-subparagraph 4 i A of subsection 168.4 (1);

(c) all of the full depth generic site condition standards that are applicable under the regulations to the actual use are the same as or less stringent than the full depth generic site condition standards that are applicable to the use specified in the record of site condition, if the record of site condition contained a certification under sub-subparagraph 4 i B of subsection 168.4 (1); and

(d) all of the stratified site condition standards that are applicable under the regulations to the actual use are the same as or less stringent than the stratified site condition standards that are applicable to the use specified in the record of site condition, if the record of site condition contained a certification under sub-subparagraph 4 i C of subsection 168.4 (1). 2007, c. 7, Sched. 13, s. 8 (5).

Idem

(2) Any person who is a producer and distributor shall be deemed to have received in the capacity of a distributor, from himself, herself or itself in the capacity of a producer, the milk that the person both produces and distributes, and to have contracted in that capacity with himself, herself or itself in the capacity of a producer for the marketing of the milk, upon the condition that the regulations, orders, directions, agreements and awards and the renegotiated agreements and awards made under this Act apply. R.S.O. 1990, c. M.12, s. 10 (2).

Idem

(3) A producer or group of two or more producers who, directly or through a corporation of which the producer or producers is or are members or shareholders, or through an agent, arranges for the distributing, on the account of the producer or producers, by a distributor of any milk produced by the producer or producers, shall be deemed to be a producer and distributor or producers and distributors for the purposes of subsections (1) and (2). R.S.O. 1990, c. M.12, s. 10 (3).

Producer-processors

11. (1) Any person who is a producer and processor is entitled in the person's respective capacities as a producer and as a processor to all the rights and privileges and is subject to all the duties and obligations of a producer and of a processor. R.S.O. 1990, c. M.12, s. 11 (1).

Idem

(2) Any person who is a producer and processor shall be deemed to have received in the capacity of a processor from himself, herself or itself in the capacity of a producer, the milk that the person both produces and processes, and to have contracted in that capacity with himself, herself or itself in the capacity of a producer for the marketing of the milk, upon the condition that the regulations, orders, directions, agreements and awards and the renegotiated agreements and awards made under this Act apply. R.S.O. 1990, c. M.12, s. 11 (2).

Idem

(3) A producer or group of two or more producers who, directly or through a corporation of which the producer or producers is or are members or shareholders, or through an agent, arrange for the processing, on the account of the producer or producers, by a processor of any milk produced by the producer or producers, shall be deemed to be a producer and processor or producers and processors for the purposes of subsections (1) and (2). R.S.O. 1990, c. M.12, s. 11 (3).

12. REPEALED: 1997, c. 44, s. 6.

Production of books, etc., to field-person

13. (1) Every person engaged in the producing, processing or marketing of milk or milk products, when requested so to do by a field-person appointed for the exercise of the powers and the performance of the duties of the Director, shall, in respect of milk and milk products, produce the person's books, records and documents and permit inspection thereof and furnish copies thereof or extracts therefrom and permit inspection of the person's premises and any equipment, milk or milk products therein. R.S.O. 1990, c. M.12, s. 13 (1).

Obstruction of field-person

(2) No person shall hinder or obstruct an officer or field-person mentioned in subsection (1) in the course of his or her duties, furnish him or her with false information or refuse to furnish him or her with information. R.S.O. 1990, c. M.12, s. 13 (2).

Certificate of appointment of field-person

(3) The production by a field-person mentioned in subsection (1) of a certificate of appointment purporting to be signed by the Director shall be accepted by any person engaged in the producing, processing or marketing of milk or milk products as proof of such appointment. R.S.O. 1990, c. M.12, s. 13 (3).

CONSTRUCTION AND OPERATION OF PLANTS

Permits re plants

Permit to construct plant

14. (1) No person shall construct or alter any building intended for use as a plant without a permit from the Director. R.S.O. 1990, c. M.12, s. 14 (1).

Permit to alter plant

(2) No person shall alter a plant without a permit from the Director. R.S.O. 1990, c. M.12, s. 14 (2).

Conditions precedent to issue of permit

(3) No permit shall be issued by the Director unless,

(a) in the opinion of the Director, the plant is necessary and desirable, having regard to the needs of the producers in the locality in which it is proposed to locate the plant and to the facilities of the existing plants in operation; and

(b) the proposed plant complies with the regulations. R.S.O. 1990, c. M.12, s. 14 (3).

Licences

Licence to operate plant

15. (1) No person shall operate a plant without a licence therefor from the Director. R.S.O. 1990, c. M.12, s. 15 (1).

Licence to operate as distributor

(2) No person shall carry on business as a distributor without a licence therefor from the Director. R.S.O. 1990, c. M.12, s. 15 (2).

Prohibitions

Shade of butter

16. (1) Except as provided in the regulations, no person shall process, sell, offer for sale or have in possession for sale butter that has a tint or shade containing less than one and six-tenths degrees or more than ten and one-half degrees of yellow, or of yellow and red collectively, measured in terms of the Lovibond tintometer scale or the equivalent of such measurement. R.S.O. 1990, c. M.12, s. 16 (1).

Reconstituted milk

(2) Except as provided in the regulations, no person shall process, sell, offer for sale or have in possession for sale reconstituted milk. R.S.O. 1990, c. M.12, s. 16 (2).

Basis of payment for milk and cream

17. All milk and cream received at a plant shall be paid for on the basis of its milk-fat content or on such other basis as is prescribed in the regulations. R.S.O. 1990, c. M.12, s. 17.

18. REPEALED: 2002, c. 18, Sched. P, s. 42.

Regulations with respect to the operation of plants

19. (1) The Commission may make regulations,

1. providing for the issue, renewal, suspension or revocation of or refusal to issue or renew licences for the operation of any class of plant, and prescribing the fees payable for licences or the renewal thereof;

2. providing for the issue, renewal, suspension or revocation of or refusal to issue or renew licences for any class of distributor, and prescribing the fees payable for licences or the renewal thereof;

3. prescribing the terms and conditions upon which licences under paragraphs 1 and 2 are issued, renewed, suspended or revoked;

4. providing that the Director may impose such terms and conditions upon a licence under paragraphs 1 and 2 as the Director considers proper;

4.1 exempting classes of persons from the requirement under section 14 to hold a permit and under section 15 to hold a licence, in such circumstances as may be prescribed and subject to such restrictions as may be prescribed;

5. subject to subsection (2), providing for the imposition, amount, disposition and use of penalties where, after a hearing, the Director is of the opinion that the applicant or licensee has failed to

comply with or has contravened any term or condition of a licence under paragraphs 1 and 2 or any provision of this Act, the regulations, any plan or any order or direction of the Commission;

6. requiring and providing for the furnishing of security or proof of financial responsibility or of a performance bond by a distributor or class of distributors or any person engaged in the operation of a plant or any class of plant;
7. providing for the administration, forfeiture and disposition by the Commission or Director of bonds or any money recovered under any such bonds or any money or securities furnished as proof of financial responsibility by a distributor or by an operator of a plant;
8. providing for the submission of drawings and specifications for the construction or alteration of a building intended for use as a plant or for the alteration of a plant;
9. prescribing the methods of construction or alteration of a building intended for use as a plant and the materials that shall be used for such construction or alteration;
10. prescribing the location of plants, the equipment that shall be used in connection with plants and the sanitary requirements for plants;
11. providing for the issue of permits for the construction or alteration of a building intended for use as a plant and for the alteration of a plant, and prescribing the terms and conditions therefor;
12. respecting the health of cows;
13. respecting sanitary conditions of cows, premises on which cows are kept or milked and the equipment used in connection with the producing, handling, storing or transporting of milk or cream, or any class thereof;
14. respecting the premises and equipment used in connection with the producing, handling, storing, testing, or transporting of milk or cream, or any class thereof;
15. prohibiting the delivering, selling or offering for sale to a plant or the receiving at a plant of milk or cream, or any class thereof, that is not produced, handled, stored, collected, delivered, supplied, received or transported in accordance with the regulations or that has been rejected in accordance with the regulations;
16. prescribing conditions for the delivering, supplying, selling or offering for sale to a plant or the receiving at a plant of milk or cream, or any class thereof, that has been graded at or on behalf of another plant in accordance with the regulations;
17. providing for the addition of a food colouring to milk or cream, or any class thereof, that has been delivered or offered for sale to a plant and rejected in accordance with the regulations;
18. governing the collection, transportation, delivery, handling, storing, supplying or receiving of milk or cream, or any class thereof, and prescribing the time therefor;
19. providing for the identification, labelling and use of containers used for transporting milk or cream, or any class thereof;
20. providing for the cleaning and sanitation of vehicles used in transporting, collecting, delivering, supplying or receiving milk or cream, or any class thereof, and prescribing methods therefor;
21. respecting the quality of milk or cream, or any class thereof, delivered, supplied, sold or offered for sale to a plant or received at a plant;
22. providing for,
    (a) the control of the quality of milk by the imposing on and collecting from a producer of penalties where any milk supplied by the producer fails to comply with the standards of quality for such milk prescribed by the regulations or is produced on premises or with equipment that fails to comply with the regulations and, without limiting the generality of the foregoing, where such milk,
        (i) contains any substance prohibited by the regulations,
        (ii) contains a substance in excess of the amount thereof permitted by the regulations, or
        (iii) has a substance removed therefrom contrary to the regulations;

(3) A by-law under this section does not apply to a pit or a quarry, as those terms are defined in the *Aggregate Resources Act*, located in a part of Ontario designated in a regulation under subsection 5 (2) of that Act. 2001, c. 25, s. 124 (3).

Heating and cooking appliances

125. Without limiting sections 9, 10 and 11, a local municipality may regulate,

(a) the use and installation of heating and cooking appliances;

(b) the storage of fuel for use in heating and cooking appliances. 2006, c. 32, Sched. A, s. 66.

Public fairs and events

126. Without limiting sections 9, 10 and 11, a local municipality may,

(a) regulate cultural, recreational and educational events including public fairs;

(b) prohibit the activities described in clause (a) unless a permit is obtained from the municipality for those activities and may impose conditions for obtaining, continuing to hold and renewing the permit, including requiring the submission of plans. 2006, c. 32, Sched. A, s. 66.

Refuse and debris

127. Without limiting sections 9, 10 and 11, a local municipality may,

(a) require the owner or occupant of land to clean and clear the land, not including buildings, or to clear refuse or debris from the land, not including buildings;

(b) regulate when and how matters required under clause (a) shall be done;

(c) prohibit the depositing of refuse or debris on land without the consent of the owner or occupant of the land; and

(d) define "refuse" for the purpose of this section. 2001, c. 25, s. 127; 2006, c. 32, Sched. A, s. 67.

Public nuisances

128. (1) Without limiting sections 9, 10 and 11, a local municipality may prohibit and regulate with respect to public nuisances, including matters that, in the opinion of council, are or could become or cause public nuisances. 2001, c. 25, s. 128 (1); 2006, c. 32, Sched. A, s. 68.

Not subject to review

(2) The opinion of council under this section, if arrived at in good faith, is not subject to review by any court. 2001, c. 25, s. 128 (2).

Noise, odour, dust, etc.

129. Without limiting sections 9, 10 and 11, a local municipality may,

(a) prohibit and regulate with respect to noise, vibration, odour, dust and outdoor illumination, including indoor lighting that can be seen outdoors; and

(b) prohibit the matters described in clause (a) unless a permit is obtained from the municipality for those matters and may impose conditions for obtaining, continuing to hold and renewing the permit, including requiring the submission of plans. 2006, c. 32, Sched. A, s 69.

130. REPEALED: 2006, c. 32, Sched. A, s. 69.

Wrecking, salvaging of motor vehicles

131. Without limiting sections 9, 10 and 11, a local municipality may prohibit and regulate the use of any land for the storage of used motor vehicles for the purpose of wrecking or dismantling them or salvaging parts from them for sale or other disposition. 2006, c. 32, Sched. A, s. 69.

Repairs or alterations

132. (1) A local municipality may authorize the owner or occupant of land to enter adjoining land, at any reasonable time, for the purpose of making repairs or alterations to any building, fence or other structures on the land of the owner or occupant but only to the extent necessary to carry out the repairs or alterations. 2001, c. 25, s. 132 (1).

Conditions

(2) The following apply to a power of entry under a by-law under this section:

1. The power of entry may be exercised by an employee or agent of the owner or occupant of land.
2. A person exercising the power of entry must display or, on request, produce proper identification.
3. Nothing in a by-law under this section authorizes entry into a building.
4. The owner or occupant shall provide reasonable notice of the proposed entry to the occupier of the adjoining land.
5. The owner or occupant of land shall, in so far as is practicable, restore the adjoining land to its original condition and shall provide compensation for any damages caused by the entry or by anything done on the adjoining land. 2001, c. 25, s. 132 (2).

Fortification of land

133. (1) Without limiting sections 9, 10 and 11, a municipality that is responsible for the enforcement of the *Building Code Act, 1992* may,

(a) regulate in respect of the fortification of and protective elements applied to land in relation to the use of the land; and

(b) prohibit the excessive fortification of land or excessive protective elements being applied to land in relation to the use of the land. 2001, c. 25, s. 133 (1); 2006, c. 32, Sched. A, s. 70 (1).

Definitions

(2) In this section,

"land" means land, including buildings, mobile homes, mobile buildings, mobile structures, outbuildings, fences, erections, physical barriers and any other structure on the land or on or in any structure on the land; ("bien-fonds")

"protective elements" include surveillance equipment. ("éléments protecteurs") 2001, c. 25, s. 133 (2).

(3) REPEALED: 2006, c. 32, Sched. A, s. 70 (2).

By-law and building code

(4) A permit shall not be issued under the *Building Code Act, 1992* if the proposed building or construction or use of the building will contravene a by-law to which this section applies. 2001, c. 25, s. 133 (4); 2009, c. 33, Sched. 21, s. 6 (1).

Conflict

(5) Despite section 35 of the *Building Code Act, 1992*, if there is a conflict between the building code under the *Building Code Act, 1992* and a by-law to which this section applies, the building code prevails. 2001, c. 25, s. 133 (5); 2009, c. 33, Sched. 21, s. 6 (2).

Period for compliance for existing fortifications

(6) If a municipality makes an order to do work under subsection 445 (1) with respect to a contravention of the by-law, the order shall give not less than three months to complete the work if the fortifications or protective elements were present on the land on the day the by-law is passed. 2006, c. 32, Sched. A, s. 70 (3).

(7)-(9) REPEALED: 2006, c. 32, Sched. A, s. 70 (3).

Conveyance of prisoners

134. If the attendance of a prisoner in a correctional institution is required at a hearing or proceeding, the municipality that was responsible for delivering the prisoner to the correctional institution is responsible for conveying the prisoner from the correctional institution to the place of the hearing or proceeding and for the prisoner's return. 2001, c. 25, s. 134.

NATURAL ENVIRONMENT

Tree by-laws

135. (1) Subject to subsection (4) and without limiting sections 9, 10 and 11, a local municipality may prohibit or regulate the destruction or injuring of trees. 2006, c. 32, Sched. A, s. 71 (1).

Woodlands

(2) Without limiting sections 9, 10 and 11, an upper-tier municipality may prohibit or regulate the destruction or injuring of trees in woodlands designated in the by-law. 2006, c. 32, Sched. A, s. 71 (1).

Definition

(3) In this section,

"woodlands" means woodlands as defined in the *Forestry Act* that are one hectare or more in area. 2001, c. 25, s. 135 (3).

Restriction

(4) If an upper-tier municipality by-law in respect of woodlands is in effect in a lower-tier municipality, the lower-tier municipality may not prohibit or regulate the destruction of trees in any woodlands designated in the upper-tier by-law and any lower-tier by-law, whether passed before or after the upper-tier by-law comes into force, is inoperative to the extent that it applies to trees in the designated woodlands. 2001, c. 25, s. 135 (4).

Factor to be considered

(5) In passing a by-law regulating or prohibiting the injuring or destruction of trees in woodlands, a municipality shall have regard to good forestry practices as defined in the *Forestry Act*. 2001, c. 25, s. 135 (5); 2002, c. 17, Sched. A, s. 27 (1).

Notice

(6) An upper-tier municipality shall immediately notify its lower-tier municipalities of the passing of a by-law under subsection (2). 2001, c. 25, s. 135 (6).

Conditions

(7) Without limiting sections 9, 10 and 11, a municipality may, in a by-law passed under this section,

(a) require that a permit be obtained to injure or destroy trees; and

(b) impose conditions to a permit, including conditions relating to the manner in which destruction occurs and the qualifications of persons authorized to injure or destroy trees. 2001, c. 25, s. 135 (7); 2006, c. 32, Sched. A, s. 71 (2).

Delegation to lower-tier municipality

(8) An upper-tier municipality may delegate all or part of its power to pass a by-law respecting the destruction or injuring of trees in woodlands to one or more of its lower-tier municipalities with the agreement of the lower-tier municipality or municipalities, as the case may be. 2001, c. 25, s. 135 (8).

Effect of delegation

(9) Subsection (4) does not apply to that part of a lower-tier by-law authorized by the delegation of power from the upper-tier municipality. 2001, c. 25, s. 135 (9).

Delegation to upper-tier municipality

(10) A lower-tier municipality may delegate all or part of its power to pass a by-law respecting the destruction or injuring of trees to its upper-tier municipality with the agreement of the upper-tier municipality. 2001, c. 25, s. 135 (10).

(11) REPEALED: 2006, c. 32, Sched. A, s. 71 (3).

Exemption from by-law

(12) A by-law passed under this section does not apply to,

(a) activities or matters undertaken by a municipality or a local board of a municipality;

(b) activities or matters undertaken under a licence issued under the *Crown Forest Sustainability Act, 1994*;

(c) the injuring or destruction of trees by a person licensed under the *Surveyors Act* to engage in the practice of cadastral surveying or his or her agent, while making a survey;

20. When the Niagara Escarpment Plan is in effect, the Minister may, out of the money appropriated therefor by the Legislature, provide financial assistance to any person, organization or corporation, including a municipal corporation, undertaking any policy or program that implements the Plan. R.S.O. 1990, c. N.2, s. 20; 2009, c. 12, Sched. L, ss. 7, 16.

Transfer of Commission functions

21. (1) Where, in the opinion of the Lieutenant Governor in Council, the Niagara Escarpment Plan has been substantially completed for any part of the Niagara Escarpment Planning Area, the Lieutenant Governor in Council may by order and subject to such terms and conditions as the Lieutenant Governor in Council considers appropriate, transfer any of the functions of the Commission to the council of an upper-tier municipality or of a single-tier municipality outside of an upper-tier municipality. R.S.O. 1990, c. N.2, s. 21 (1); 2000, c. 5, s. 16 (2); 2002, c. 17, Sched. F, Table; 2009, c. 12, Sched. L, s. 7.

Limitation

(2) No order shall be made under subsection (1) except upon application made to the Lieutenant Governor in Council by the council of the municipality, and every such application shall include a statement of the administrative procedures intended to be followed in the exercise of such functions. R.S.O. 1990, c. N.2, s. 21 (2); 2000, c. 5, s. 16 (3).

Regulations

22. The Minister may make regulations designating any area or areas of land within the Niagara Escarpment Planning Area as an area of development control. R.S.O. 1990, c. N.2, s. 22.

Regulations

23. The Minister may make regulations,

(a) providing that where an area of development control is designated, such zoning by-laws and such orders made under section 47 of the *Planning Act*, or any part thereof, as are designated in the regulation, cease to have effect in the area or in any defined part thereof, provided that where land is removed from an area of development control such land is thereupon subject again to the aforementioned by-laws or orders or parts thereof, as the case may be, unless in the meantime such by-laws or orders or parts thereof have been repealed or revoked;

(b) providing for the issuance of development permits and prescribing terms and conditions of permits;

(c) providing for the exemption of any class or classes of development within any development area from the requirement of obtaining a development permit;

(d) prescribing the form of application for a development permit;

(e) defining urban uses. R.S.O. 1990, c. N.2, s. 23; 2005, c. 1, s. 25 (4).

Regulations by L.G. in C.

23.1 Despite any other Act, the Lieutenant Governor in Council may, in respect of the area covered by the Niagara Escarpment Plan, make regulations to vary, supplement or override any provision in this Act or the Niagara Escarpment Plan in order to facilitate the effective operation of the Greenbelt Plan established under section 3 of the *Greenbelt Act, 2005*. 2005, c. 1, s. 25 (5); 2009, c. 12, Sched. L, ss. 7, 16.

Development permits

24. (1) Despite any other general or special Act, if an area of development control is established by regulation made under section 22, no person shall undertake any development in the area unless such development is exempt under the regulations or unless the development complies with a development permit issued under this Act. 1999, c. 12, Sched. N, s. 4 (9).

Terms and conditions

(2) The Minister may issue development permits and may include such terms and conditions as he or she considers advisable. 1999, c. 12, Sched. N, s. 4 (9).

Agreements

(2.1) The Minister may, as a condition of issuing a development permit, enter into an agreement with an owner of land, the agreement may be registered against the land and the Minister is entitled to enforce the provisions of the agreement against the owner and, subject to the *Registry Act* and the *Land Titles Act*, against any subsequent owners of the land. 2000, c. 26, Sched. L, s. 7 (10).

Other permits

(3) No building permit, work order, certificate or licence that relates to development shall be issued, and no approval, consent, permission or other decision that is authorized or required by an Act and that relates to development shall be made, in respect of any land, building or structure within an area of development control, unless the development is exempt under the regulations or,

(a) a development permit relating to the land, building or structure has been issued under this Act; and

(b) the building permit, work order, certificate, licence, approval, consent, permission or decision is consistent with the development permit. 1999, c. 12, Sched. N, s. 4 (9).

Offence

(4) Every person who contravenes subsection (1) is guilty of an offence and on conviction is liable,

(a) on a first conviction to a fine of not more than $25,000; and

(b) on a subsequent conviction to a fine of not more than $10,000 for each day or part thereof upon which the contravention has continued after the day on which the person was first convicted. R.S.O. 1990, c. N.2, s. 24 (4).

Corporation

(5) Despite subsection (4), if a corporation is convicted under subsection (1), the maximum penalty that may be imposed is,

(a) on a first conviction a fine of not more than $50,000; and

(b) on a subsequent conviction a fine of not more than $25,000 for each day or part thereof upon which the contravention has continued after the day on which the corporation was first convicted. R.S.O. 1990, c. N.2, s. 24 (5).

Order to demolish, etc.

(6) Where any person undertakes any development that is in contravention of subsection (1), the Minister may order such person to demolish any building or structure erected in connection with the development or to restore the site to the condition it was in prior to the undertaking of the development, or both, within such time as the order specifies. R.S.O. 1990, c. N.2, s. 24 (6).

Order to stop work, etc.

(6.1) If a person undertakes any development that is in contravention of subsection (1) and the Minister has reasonable grounds to believe that the contravention is causing or is likely to cause a risk to public safety or significant environmental damage, the Minister may order the person to,

(a) stop work on the development;

(b) take such steps as the Minister considers necessary to protect public safety or prevent environmental damage, within such time as the order specifies. 2000, c. 26, Sched. L, s. 7 (11).

Cost of work

(7) Where a person to whom an order is directed under subsection (6) or (6.1) fails to comply with the order within the time specified in it, the Minister may cause the necessary work to be done and charge such person with the cost thereof, which cost may be recovered with costs, as a debt due to Her Majesty, in any court of competent jurisdiction. R.S.O. 1990, c. N.2, s. 24 (7); 2000, c. 26, Sched. L, s. 7 (12).

Offence

(7.1) Every person who contravenes an order made under subsection (6) or (6.1) is guilty of an offence and on conviction is liable,

(a) on a first conviction, to a fine of not more than $10,000 for each day or part of a day on which the contravention continued; and

(b) on a subsequent conviction, to a fine of not more than $25,000 for each day or part of a day on which the contravention continued. 2000, c. 26, Sched. L, s. 7 (13).

Penalty for corporation

(7.2) Despite subsection (7.1), if a corporation is convicted of an offence under subsection (7.1), the maximum penalty that may be imposed is,

(a) on a first conviction, a fine of not more than $25,000 for each day or part of a day on which the contravention continued; and

(b) on a subsequent conviction, a fine of not more than $50,000 for each day or part of a day on which the contravention continued. 2000, c. 26, Sched. L, s. 7 (13).

Delegation of authority

(8) Subject to subsection (9), where the Minister has delegated his or her authority under section 25, the delegate has, in lieu of the Minister, all the powers and rights of the Minister under this section. 2000, c. 26, Sched. L, s. 7 (14).

Same

(9) Subsection (8) does not apply to the powers and rights of the Minister under subsection (6.1) unless the delegate is the Commission or the director of the Commission. 2000, c. 26, Sched. L, s. 7 (14).

Delegation

25. (1) Subject to subsection (2), the Minister may in writing, and subject to such conditions as he or she considers appropriate, delegate authority to issue development permits to,

(a) the Commission;

(b) an officer or employee of the Commission who is designated by the Commission;

(c) an upper-tier municipality having jurisdiction in the Niagara Escarpment Planning Area or any part thereof; or

(d) a single-tier municipality outside an upper-tier municipality having jurisdiction in the Niagara Escarpment Planning Area or any part thereof. 1999, c. 12, Sched. N, s. 4 (11); 2002, c. 17, Sched. F, Table.

Limitation on delegation

(2) No delegation shall be made under subsection (1) to a municipality, except where the municipality on application therefor has been designated by order of the Minister as a municipality to which may be delegated the authority to issue development permits under subsection (1), and every such application shall include a statement of the organizational structure to be established and the administrative procedures intended to be followed. 2002, c. 17, Sched. F, Table.

Withdrawal of delegation

(3) The Minister may in writing withdraw any delegation made under subsection (1) where, in his or her opinion, it is in the public interest to do so. R.S.O. 1990, c. N.2, s. 25 (3).

Delegate's power of decision

(4) Where the Minister has delegated his or her authority under subsection (1), the delegate, on receiving an application for a development permit and, after giving consideration to the merits of the application, may make a decision in accordance with the Niagara Escarpment Plan to issue the development permit or to refuse to issue the permit or to issue the permit subject to such terms and conditions as the delegate considers desirable. 1999, c. 12, Sched. N, s. 4 (12); 2000, c. 26, Sched. L, s. 7 (15); 2009, c. 12, Sched. L, s. 7.

Notice of decision

(5) The delegate to whom the Minister has delegated his or her authority under subsection (1) shall give notice of decision on any application for a development permit as follows:

1. By regular or registered mail or personal service to the Minister, to the applicant for the permit, to persons who have requested to receive notice of the decision, to persons whom the delegate

(2) The exemption described in subsection (1) does not apply to a storage site or facility used for the storage of NASM if,

(a) the NASM is intended for use on a different farm unit; or

(b) the storage site or facility is subject to an environmental compliance approval issued in respect of an activity mentioned in subsection 27 (1) of the *Environmental Protection Act*. O. Reg. 338/09, s. 9; O. Reg. 266/11, s. 4.

PART II
NUTRIENT MANAGEMENT STRATEGIES, PLANS AND NASM PLANS: GENERAL

NUTRIENT MANAGEMENT STRATEGIES

Application of strategies

9. (1) A nutrient management strategy applies to an agricultural operation carried out on a farm unit. O. Reg. 338/09, s. 11.

(2) A separate nutrient management strategy is required for each farm unit on which an agricultural operation to which a nutrient management strategy applies is carried out. O. Reg. 338/09, s. 11.

Compliance with strategy

10. (1) A person who owns or controls an agricultural operation to which this section applies shall ensure that prescribed materials generated on a farm unit in the course of the operation are managed in accordance with a nutrient management strategy that is in force with respect to the operation and the farm unit. O. Reg. 338/09, s. 12.

(2) No person shall manage prescribed materials that are generated on a farm unit in the course of an agricultural operation to which this section applies except in accordance with a nutrient management strategy that is in force with respect to the operation and the farm unit. O. Reg. 338/09, s. 12.

(3) This section does not apply to an agricultural fair at which farm animals are present for 25 days or less if all of the manure generated at the fair is disposed of under a broker agreement. O. Reg. 267/03, s. 10 (3).

Phasing-in, agricultural operations

11. (1) Section 10 applies to an agricultural operation that generates agricultural source materials if the person who owns or controls the land, on which the operation is carried out and that the current owner acquired under a single transfer as defined in the *Land Registration Reform Act*, has not carried out the operation on the land at any time before September 30, 2003 and submits an application, on or after that date and before December 31, 2005, for a building permit under the *Building Code Act, 1992* with respect to any building or structure that is used to house farm animals and that is located or to be located on the land. O. Reg. 267/03, s. 11 (1); O. Reg. 511/05, s. 4 (1).

(2) REVOKED: O. Reg. 511/05, s. 4 (2).

(3) Section 10 applies to an agricultural operation that generates agricultural source materials if the number of farm animals on a farm unit on which the operation is carried out is sufficient, at any time on or after July 1, 2005, to generate 300 or more nutrient units annually. O. Reg. 511/05, s. 4 (3).

(4) Section 10 applies to an agricultural operation that generates agricultural source materials if, at any time on or after December 31, 2005, a person who owns or controls the land on which the operation is carried out,

(a) submits an application for a building permit under the *Building Code Act, 1992* in respect of any building or structure that is used to house farm animals or to store manure and that is located or to be located on the land;

(b) constructs or causes to be constructed any building or structure that is used to house farm animals or to store manure and that is located or to be located on the land, if a building permit in respect of the building or structure would be required under the *Building Code Act, 1992*, but for the application of clause 1.3.1.1. (1) (b) of Division C of the Building Code made under that Act; or

(c) constructs or causes to be constructed a permanent nutrient storage facility made of earth on the land. O. Reg. 511/05, s. 4 (3); O. Reg. 338/09, s. 13.

(4.1) Section 10 applies to an agricultural operation carried out on a farm unit that receives off-farm anaerobic digestion materials for treatment through mixed anaerobic digestion in a regulated mixed anaerobic digestion facility. O. Reg. 394/07, s. 3 (1).

(5) Section 10 applies to an agricultural operation that generates agricultural source materials at the earliest time that subsections (1), (3), (4) and (4.1) determine that the section is to apply and continues to apply to the operation during each year in which the operation generates agricultural source materials. O. Reg. 511/05, s. 4 (3); O. Reg. 394/07, s. 3 (2).

Construction of buildings or structures

11.1 (1) If this Regulation requires a person who owns or controls an agricultural operation to have a nutrient management strategy for carrying out the operation, no person shall construct a building or structure on a farm unit on which the operation is carried out, where the building or structure is used to house farm animals or store nutrients, unless,

(a) the nutrient management strategy applicable to the operation carried out on the farm unit contemplates the construction of the building or structure; and

(b) the nutrient management strategy has been approved in accordance with this Regulation. O. Reg. 394/07, s. 4.

(2) No person shall construct a regulated mixed anaerobic digestion facility on a farm unit on which an agricultural operation is carried out unless the nutrient management strategy applicable to the operation carried out on the farm unit contemplates the construction of the facility and has been approved in accordance with this Regulation. O. Reg. 394/07, s. 4.

12. REVOKED: O. Reg. 338/09, s. 14 (2).

NUTRIENT MANAGEMENT PLANS

Application of plans

13. (1) A nutrient management plan applies to an agricultural operation carried out on a farm unit. O. Reg. 267/03, s. 13 (1).

(2) A separate nutrient management plan is required for each farm unit on which an agricultural operation to which a nutrient management plan applies is carried out. O. Reg. 267/03, s. 13 (2).

Compliance with plan

14. (1) A person who owns or controls an agricultural operation to which this section applies shall ensure that any nutrients that are applied to the land of a farm unit in the course of the operation are managed in accordance with a nutrient management plan that is in force with respect to the operation and the farm unit. O. Reg. 338/09, s. 15.

(2) No person shall manage nutrients that are stored on or applied to the land of a farm unit in the course of an agricultural operation to which this section applies except in accordance with a nutrient management plan that is in force with respect to the operation and the farm unit. O. Reg. 338/09, s. 15.

Phasing-in

15. (1) Subject to subsection (2), section 14 applies to an agricultural operation that is carried out on a farm unit as soon as the person who owns or controls it is required to have a nutrient management strategy for carrying out the operation on the farm unit. O. Reg. 267/03, s. 15; O. Reg. 511/05, s. 5 (1).

(2) Subject to subsection (3), if on the day subsection (1) requires the person who owns or controls an agricultural operation in the course of which nutrients are applied to the land of a farm unit to ensure that the nutrients are managed in accordance with a nutrient management plan, the number of farm animals on the farm unit is not sufficient to generate 300 or more nutrient units annually, section 14 does not apply to the operation until the day on which the number of farm animals on the farm unit is increased to a level that is sufficient to generate 300 or more nutrient units annually. O. Reg. 338/09, s. 16 (2).

(3) Subsection (2) does not apply to an agricultural operation that generates agricultural source materials if any portion of the land of the farm unit used for the operation lies within 100 metres of a municipal well. O. Reg. 511/05, s. 5 (2).

(4), (5) REVOKED: O. Reg. 266/11, s. 5.

NASM PLANS

Application of NASM plans

15.1 (1) A NASM plan applies to an agricultural operation carried out on a NASM plan area if Category 2 or Category 3 NASM is,

(a) applied to a NASM application area that is part of the NASM plan area; or

(b) stored in an associated NASM storage facility. O. Reg. 338/09, s. 17.

(2) A separate NASM plan is required for each NASM plan area within which Category 2 or Category 3 NASM is applied to land or stored. O. Reg. 338/09, s. 17.

Compliance with NASM plan

15.2 (1) A person who owns or controls an agricultural operation to which this section applies shall ensure that any Category 2 or Category 3 NASM that is applied to the land of a NASM application area in the course of the operation is managed in accordance with a NASM plan that is in force with respect to the operation and the NASM plan area. O. Reg. 338/09, s. 17.

(2) No person shall manage nutrients that are stored on or applied to the land of a NASM plan area in the course of an agricultural operation to which this section applies except in accordance with a NASM plan that is in force with respect to the operation and the NASM plan area. O. Reg. 338/09, s. 17.

Phasing-in

15.3 (1) Subject to subsections (2), (3) and (4), section 15.2 applies to an agricultural operation in the course of which Category 2 or Category 3 NASM is stored on or applied to the land of a NASM plan area on and after January 1, 2011. O. Reg. 338/09, s. 17.

(2) If, on January 1, 2011, a certificate of approval or provisional certificate of approval under Part V of the *Environmental Protection Act* authorizing the application of the NASM to the land has been issued, has not been suspended or revoked and has not expired, ceased to be in force or otherwise ceased to authorize the application of the NASM to the land, section 15.2 does not apply to the agricultural operation until the earlier of the following:

1. The day the certificate is suspended or revoked or expires, ceases to be in force or otherwise ceases to authorize the application of the NASM to the land.
2. January 1, 2016. O. Reg. 338/09, s. 17.

(3) If, on January 1, 2011, a nutrient management plan that provides for the application of the NASM to the land has been approved under section 28 and the approval has not been suspended or revoked and has not ceased to be in force, section 15.2 does not apply to the agricultural operation until the day on which,

(a) the nutrient management plan is suspended or revoked or ceases to be in force;

(b) the person who owns or controls the agricultural operation,

(i) applies NASM to a part of the land of the farm unit that is not identified in the plan as land to which NASM will be applied,

(ii) applies NASM, other than the specific NASM provided for in the plan, to the land of the farm unit, or

(iii) stores NASM on the land of the farm unit in a NASM storage facility that is not identified as such in the plan; or

(c) there is a change of ownership or control of the agricultural operation. O. Reg. 338/09, s. 17.

(4) After December 31 of the last year set out in a NASM plan, section 15.2 does not apply to the agricultural operation carried out on the NASM plan area unless Category 2 or Category 3 NASM is stored on or applied to the land of the NASM plan area on or after January 1 of the next year. O. Reg. 338/09, s. 17.

PART III
NUTRIENT MANAGEMENT STRATEGIES, PLANS AND NASM PLANS: PREPARATION

PRECONDITION

Requirement for other agreements

16. (1) A person who is required to have a nutrient management strategy, plan or NASM plan that mentions a transfer agreement that a person is required to enter into under subsection 20 (1) or an agreement that a broker is required to enter into under subsection 36 (1) or 37 (1) shall,

(a) enter into those agreements that are applicable to the person or the person's agricultural operation; and

(b) ensure that the agreements mentioned in clause (a) are in force at the time the strategy, plan or NASM plan comes into force. O. Reg. 338/09, s. 19.

(7) The heritage standards and guidelines approved under this section are not regulations within the meaning of Part III (Regulations) of the *Legislation Act, 2006*. 2005, c. 6, s. 13; 2006, c. 21, Sched. F, s. 136 (1).

Application

25.3 Section 37 applies with necessary modifications to property to which this Part applies. 2005, c. 6, s. 13.

PART IV
CONSERVATION OF PROPERTY OF CULTURAL HERITAGE VALUE OR INTEREST

Definitions and Application

Definition

26. (1) In this Part,

"property" means real property and includes all buildings and structures thereon. 2005, c. 6, s. 14.

Same

(2) In sections 27 to 34.4,

"designated property" means property designated by a municipality under section 29. 2005, c. 6, s. 14.

Publication of notice, City of Toronto

(3) Where the City of Toronto is required by this Part to publish a notice in a newspaper having general circulation in the municipality, notice given in accordance with a policy adopted by the City under section 212 of the *City of Toronto Act, 2006* is deemed to satisfy the requirement of this Part to publish notice in a newspaper. 2006, c. 11, Sched. B, s. 11 (1).

Publication of notice

(4) Where a municipality is required by this Part to publish a notice in a newspaper having general circulation in the municipality, notice given in accordance with a policy adopted by the municipality under section 270 of the *Municipal Act, 2001* is deemed to satisfy the requirement of this Part to publish notice in a newspaper. 2006, c. 32, Sched. D, s. 13 (1).

Application

26.1 (1) This Part does not apply to property described in clause 25.2 (2) (a). 2005, c. 6, s. 14.

Conflict

(2) If a property described in clause 25.2 (2) (b) is designated under section 29 or under section 34.5, and if there is a conflict between a provision of the heritage standards and guidelines prepared under Part III.1 and a provision in Part IV as they apply to that property, the provision in Part IV prevails. 2005, c. 6, s. 14.

Exception

(3) Nothing in subsection (1) shall prevent a municipality acting under subsection 27 (1.2) from including in the register referred to in that subsection a reference to property described in clause 25.2 (2) (a). 2005, c. 6, s. 14.

Register and Municipal Heritage Committee

Register

27. (1) The clerk of a municipality shall keep a register of property situated in the municipality that is of cultural heritage value or interest. 2005, c. 6, s. 15.

Contents of register

(1.1) The register kept by the clerk shall list all property situated in the municipality that has been designated by the municipality or by the Minister under this Part and shall contain, with respect to each property,

(a) a legal description of the property;

(b) the name and address of the owner; and

(c) a statement explaining the cultural heritage value or interest of the property and a description of the heritage attributes of the property. 2005, c. 6, s. 15.

Same

(1.2) In addition to the property listed in the register under subsection (1.1), the register may include property that has not been designated under this Part but that the council of the municipality believes to be of cultural heritage value or interest and shall contain, with respect to such property, a description of the property that is sufficient to readily ascertain the property. 2005, c. 6, s. 15.

Consultation

(1.3) Where the council of a municipality has appointed a municipal heritage committee, the council shall, before including a property that has not been designated under this Part in the register under subsection (1.2) or removing the reference to such a property from the register, consult with its municipal heritage committee. 2005, c. 6, s. 15.

Extracts

(2) The clerk of a municipality shall issue extracts from the Register referred to in subsection (1) to any person on payment of the fee set by the municipality by by-law. R.S.O. 1990, c. O.18, s. 27 (2); 2002, c. 18, Sched. F, s. 2 (6).

Restriction on demolition, etc.

(3) If property included in the register under subsection (1.2) has not been designated under section 29, the owner of the property shall not demolish or remove a building or structure on the property or permit the demolition or removal of the building or structure unless the owner gives the council of the municipality at least 60 days notice in writing of the owner's intention to demolish or remove the building or structure or to permit the demolition or removal of the building or structure. 2006, c. 11, Sched. B, s. 11 (2).

Same

(4) Subsection (3) applies only if the property is included in the register under subsection (1.2) before any application is made for a permit under the *Building Code Act, 1992* to demolish or remove a building or structure located on the property. 2006, c. 11, Sched. B, s. 11 (2).

Same

(5) The notice required by subsection (3) shall be accompanied by such plans and shall set out such information as the council may require. 2006, c. 11, Sched. B, s. 11 (2).

Municipal heritage committee

28. (1) The council of a municipality may by by-law establish a municipal heritage committee to advise and assist the council on matters relating to this Part, matters relating to Part V and such other heritage matters as the council may specify by by-law. 2002, c. 18, Sched. F, s. 2 (7).

Members

(2) The committee shall be composed of not fewer than five members appointed by the council. 2002, c. 18, Sched. F, s. 2 (7).

Continuation of old committees

(3) Every local architectural conservation advisory committee established by the council of a municipality before the day subsection 2 (7) of Schedule F to the *Government Efficiency Act, 2002* comes into force is continued as the municipal heritage committee of the municipality, and the persons who were the members of the local architectural conservation advisory committee immediately before that day become the members of the municipal heritage committee. 2002, c. 18, Sched. F, s. 2 (7).

DESIGNATION OF PROPERTIES BY MUNICIPALITIES

Designation by municipal by-law

29. (1) The council of a municipality may, by by-law, designate a property within the municipality to be of cultural heritage value or interest if,

(a) where criteria for determining whether property is of cultural heritage value or interest have been prescribed by regulation, the property meets the prescribed criteria; and

(b) the designation is made in accordance with the process set out in this section. 2005, c. 6, s. 17 (1).

Notice required

(1.1) Subject to subsection (2), if the council of a municipality intends to designate a property within the municipality to be of cultural heritage value or interest, it shall cause notice of intention to designate the property to be given by the clerk of the municipality in accordance with subsection (3). 2005, c. 6, s. 17 (1).

Consultation

(2) Where the council of a municipality has appointed a municipal heritage committee, the council shall, before giving notice of its intention to designate a property under subsection (1), consult with its municipal heritage committee. R.S.O. 1990, c. O.18, s. 29 (2); 2002, c. 18, Sched. F, s. 2 (9).

Notice of intention

(3) Notice of intention to designate under subsection (1) shall be,

(a) served on the owner of the property and on the Trust; and

(b) published in a newspaper having general circulation in the municipality. R.S.O. 1990, c. O.18, s. 29 (3); 2005. c. 6. s. 1.

Contents of notice

(4) Notice of intention to designate property that is served on the owner of property and on the Trust under clause (3) (a) shall contain,

(a) an adequate description of the property so that it may be readily ascertained;

(b) a statement explaining the cultural heritage value or interest of the property and a description of the heritage attributes of the property; and

(c) a statement that notice of objection to the designation may be served on the clerk within 30 days after the date of publication of the notice of intention in a newspaper of general circulation in the municipality under clause (3) (b). 2005, c. 6, s. 17 (2).

Same

(4.1) Notice of intention to designate property that is published in a newspaper of general circulation in a municipality under clause (3) (b) shall contain,

(a) an adequate description of the property so that it may be readily ascertained;

(b) a statement explaining the cultural heritage value or interest of the property;

(c) a statement that further information respecting the proposed designation is available from the municipality; and

(d) a statement that notice of objection to the designation may be served on the clerk within 30 days after the date of publication of the notice of intention in a newspaper of general circulation in the municipality under clause (3) (b). 2005, c. 6, s. 17 (2).

Objection

(5) A person who objects to a proposed designation shall, within thirty days after the date of publication of the notice of intention, serve on the clerk of the municipality a notice of objection setting out the reason for the objection and all relevant facts. R.S.O. 1990, c. O.18, s. 29 (5); 1996, c. 4, s. 55 (2); 2009, c. 33, Sched. 11, s. 6 (4).

If no notice of objection

(6) If no notice of objection is served within the 30-day period under subsection (5), the council,

(a) shall,

(i) pass a by-law designating the property,

(ii) cause a copy of the by-law, together with a statement explaining the cultural heritage value or interest of the property and a description of the heritage attributes of the property,

(A) to be served on the owner of the property and on the Trust, and

(B) to be registered against the property affected in the proper land registry office, and

(iii) publish notice of the by-law in a newspaper having general circulation in the municipality; or

(b) shall withdraw the notice of intention to designate the property by causing a notice of withdrawal,

(i) to be served on the owner of the property and on the Trust, and

(ii) to be published in a newspaper having general circulation in the municipality. 2002, c. 18, Sched. F, s. 2 (11); 2005, c. 6, ss. 1, 17 (3).

Referral to Review Board

(7) Where a notice of objection has been served under subsection (5), the council shall, upon expiration of the thirty-day period under subsection (4), refer the matter to the Review Board for a hearing and report. R.S.O. 1990, c. O.18, s. 29 (7).

Hearing

(8) Pursuant to a reference by the council under subsection (7), the Review Board, as soon as is practicable, shall hold a hearing open to the public to determine whether the property in question should be designated, and the council, the owner, any person who has filed an objection under subsection (5) and such other persons as the Review Board may specify, are parties to the hearing. R.S.O. 1990, c. O.18, s. 29 (8).

Place of hearing

(9) A hearing under subsection (8) shall be held at such place in the municipality as the Review Board may determine, and notice of such hearing shall be published in a newspaper having general circulation in the municipality at least ten days prior to the date of such hearing. R.S.O. 1990, c. O.18, s. 29 (9).

Review Board may combine hearings

(10) The Review Board may combine two or more related hearings and conduct them in all respects and for all purposes as one hearing. R.S.O. 1990, c. O.18, s. 29 (10).

(11) REPEALED: 2005, c. 6, s. 17 (4).

Report

(12) Within thirty days after the conclusion of a hearing under subsection (8), the Review Board shall make a report to the council setting out its findings of fact, its recommendations as to whether or not the property should be designated under this Part and any information or knowledge used by it in reaching its recommendations, and the Review Board shall send a copy of its report to the other parties to the hearing. R.S.O. 1990, c. O.18, s. 29 (12).

Failure to report

(13) Where the Review Board fails to make a report within the time limited by subsection (12), such failure does not invalidate the procedure. R.S.O. 1990, c. O.18, s. 29 (13).

Decision of council

(14) After considering the report under subsection (12), the council, without a further hearing,

(a) shall,

(i) pass a by-law designating the property,

(ii) cause a copy of the by-law, together with a statement explaining the cultural heritage value or interest of the property and a description of the heritage attributes of the property,

(A) to be served on the owner of the property and on the Trust, and

(B) to be registered against the property affected in the proper land registry office, and

(iii) publish notice of the by-law in a newspaper having general circulation in the municipality; or

(b) shall withdraw the notice of intention to designate the property by causing a notice of withdrawal,

(i) to be served on the owner of the property and on the Trust, and

(ii) to be published in a newspaper having general circulation in the municipality. 2002, c. 18, Sched. F, s. 2 (12); 2005, c. 6, ss. 1, 17 (5).

Decision final

(14.1) The decision of the council under subsection (14) is final. 2002, c. 18, Sched. F, s. 2 (12).

Withdrawal of objection

(15) A person who has served a notice of objection under subsection (5) may withdraw the objection at any time before the conclusion of a hearing into the matter by serving a notice of withdrawal on the clerk of the municipality and on the Review Board. 2009, c. 33, Sched. 11, s. 6 (5).

No hearing

(15.1) If the Review Board has received notices of withdrawal for all the notices of objection that were served under subsection (5), the Review Board shall not hold a hearing into the matter or, if a hearing into the matter is in progress, shall discontinue the hearing and the council shall act in accordance with subsection (6) as if no notice of objection had been served. 2009, c. 33, Sched. 11, s. 6 (5).

Transition

(16) If, on the day subsection 2 (8) of Schedule F to the *Government Efficiency Act, 2002* comes into force, the clerk of a municipality has given a notice of intention to designate a property as a property of historic or architectural value or interest but the council has not yet passed a by-law so designating the property and has not withdrawn its notice of intention,

(a) this section does not apply to the notice of intention;

(b) despite its amendment by section 2 of Schedule F to the *Government Efficiency Act, 2002*, this section, as it read immediately before its amendment, continues to apply to the notice of intention. 2002, c. 18, Sched. F, s. 2 (13).

Same

(17) If, on or before the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, the clerk of a municipality had given a notice of intention to designate a property that complied with subsection (4) as it read immediately before that day but, as of that day, the council had not yet passed a by-law designating the property under this section and had not withdrawn the notice,

(a) the notice continues to have been validly given; and

(b) the requirements of subsection (4) or (4.1), as enacted on that day by subsection 17 (2) of the *Ontario Heritage Amendment Act, 2005*, do not apply to the notice of intention. 2005, c. 6, s. 17 (6).

Effect of notice of designation
Permits void

30. (1) If a notice of intention to designate a property as property of cultural heritage value or interest is given under section 29, any permit that allowed for the alteration or demolition of the property and that was issued by the municipality under any Act, including a building permit, before the day the notice was served on the owner of the property and on the Trust and published in a newspaper is void as of the day the notice of intention is given in accordance with subsection 29 (3). 2005, c. 6, s. 18.

Interim control of alteration, demolition or removal

(2) Sections 33 and 34 apply with necessary modifications to property as of the day notice of intention to designate the property is given under subsection 29 (3) as though the designation process were complete and the property had been designated under section 29. 2005, c. 6, s. 18.

Amendment of designating by-law

30.1 (1) The council of a municipality may, by by-law, amend a by-law designating property made under section 29 and section 29 applies with necessary modifications to an amending by-law as though it were a by-law to designate property under that section. 2005, c. 6, s. 19.

Exception

(2) Despite subsection (1), subsections 29 (1) to (6) do not apply to an amending by-law if the purpose of the amendment is,

(a) to clarify or correct the statement explaining the property's cultural heritage value or interest or the description of the property's heritage attributes;

(b) to correct the legal description of the property; or

(c) to otherwise revise the language of the by-law to make it consistent with the requirements of this Act or the regulations. 2005, c. 6, s. 19.

Same

(3) If the council of a municipality proposes to make an amendment described in subsection (2), the council shall give the owner of the designated property written notice of the proposed amendment in accordance with subsection (4). 2005, c. 6, s. 19.

Content of notice

(4) A notice of a proposed amendment shall,

(a) contain an explanation of the purpose and effect of the proposed amendment; and

(b) inform the owner of the right to object to the proposed amendment by filing a notice of objection with the clerk of the municipality within 30 days of receiving the notice. 2005, c. 6, s. 19.

Consultation with committee

(5) The council of a municipality shall consult with its municipal heritage committee, if one has been established, before giving notice of a proposed amendment to the owner of property under subsection (3). 2005, c. 6, s. 19.

Objection

(6) The owner of a property who receives notice of a proposed amendment from a municipality under subsection (3) may, within 30 days of receiving notice of the amendment, file a notice of objection to the amendment with the clerk of the municipality setting out the reasons for the objection and all relevant facts. 2005, c. 6, s. 19.

Where no objection

(7) If no notice of objection is filed within the 30-day period under subsection (6), the council of the municipality may pass the proposed amending by-law described in subsection (2). 2005, c. 6, s. 19.

Application of s. 29

(8) If the owner of the property files a notice of objection under subsection (6) in relation to a proposed amendment described in subsection (2), subsections 29 (7) to (15.1) apply with necessary modifications to the notice of objection. 2005, c. 6, s. 19; 2009, c. 33, Sched. 11, s. 6 (6).

Notice of amendment

(9) The clerk of a municipality shall provide a copy of the by-law, as amended under this section, to the owner of the property and to the Trust and shall register the by-law against the property in the proper land registry office. 2005, c. 6, s. 19.

Requirement to update old by-laws

(10) If the council of a municipality proposes to amend a by-law designating property made under section 29 before the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, the council shall include in the amendment such changes as are necessary to ensure that the by-law satisfies the requirements of section 29, as it read on the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent. 2005, c. 6, s. 19.

Repeal of designating by-law, council's initiative

31. (1) Subject to subsection (2), where the council of a municipality intends to repeal a by-law or part thereof designating property, it shall cause notice of intention to repeal the by-law or part thereof to be given by the clerk of the municipality in accordance with subsection (3). R.S.O. 1990, c. O.18, s. 31 (1).

Consultation

(2) Where the council of a municipality has appointed a municipal heritage committee, the council shall, before repealing a by-law or part thereof designating property, consult with its municipal heritage committee. R.S.O. 1990, c. O.18, s. 31 (2); 2002, c. 18, Sched. F, s. 2 (14).

Notice of intention

(3) Notice of intention to repeal a by-law or part thereof under subsection (1) shall be,

(a) served on the owner of the property and on the Trust; and

(b) published in a newspaper having general circulation in the municipality. R.S.O. 1990, c. O.18, s. 31 (3); 2005, c. 6, s. 1.

Contents of notice

(4) Notice of intention to repeal a by-law or part thereof under subsection (1) shall contain,

(a) an adequate description of the property so that it may be readily ascertained;

(b) a statement of the reason for the proposed repealing by-law; and

(c) a statement that notice of objection to the repealing by-law may be served on the clerk within thirty days of the date of publication of the notice of intention in a newspaper having general circulation in the municipality. R.S.O. 1990, c. O.18, s. 31 (4); 1996, c. 4, s. 56 (1).

Objection

(5) A person who objects to a proposed repealing by-law shall object to the repealing by-law in the manner set out in subsection 29 (5). R.S.O. 1990, c. O.18, s. 31 (5).

Application

(6) Subsections 29 (6) to (15.1) as they apply to an intention to designate a property apply with necessary modifications to an intention to repeal a by-law or part thereof designating a property under this section. R.S.O. 1990, c. O.18, s. 31 (6); 1996, c. 4, s. 56 (2); 2009, c. 33, Sched. 11, s. 6 (7).

Deletion from Register

(7) Where the council of a municipality passes a by-law repealing the designation of a property under this section, it shall cause the clerk of the municipality to delete any reference to the property from the Register referred to in subsection 27 (1). R.S.O. 1990, c. O.18, s. 31 (7).

Repeal of designating by-law, owner's initiative

32. (1) An owner of property designated under this Part may apply to the council of the municipality in which the property is situate to repeal the by-law or part thereof designating the property. R.S.O. 1990, c. O.18, s. 32 (1).

Decision of council

(2) After consultation with its municipal heritage committee, where one is established, the council shall consider an application under subsection (1) and within ninety days of receipt thereof shall,

(a) refuse the application and cause notice of its decision to be given to the owner and to the Trust; or

(b) consent to the application and,

(i) cause notice of the intention to repeal the by-law to be served on the owner and the Trust, and

(ii) publish notice of the intention to repeal the by-law in a newspaper of general circulation in the municipality. R.S.O. 1990, c. O.18, s. 32 (2); 2002, c. 18, Sched. F, s. 2 (15); 2005, c. 6, ss. 1, 20 (1).

Extension of time

(3) The applicant and the council may agree to extend the time under subsection (2) and, where the council fails to notify the applicant of its decision within such extended time as may be agreed upon, the council shall be deemed to have consented to the application. R.S.O. 1990, c. O.18, s. 32 (3).

Application for hearing

(4) Where the council refuses the application under subsection (2), the owner may within thirty days after receipt of the notice under subsection (2) apply to the council for a hearing before the Review Board. R.S.O. 1990, c. O.18, s. 32 (4).

Referral to Review Board

(5) The council shall, upon receipt of an application under subsection (4), refer the matter to the Review Board for a hearing and report, and shall publish a notice of the hearing in a newspaper having general circulation in the municipality at least ten days prior to the date of the hearing. R.S.O. 1990, c. O.18, s. 32 (5).

Hearing

(6) The Review Board shall as soon as is practicable hold a hearing open to the public to review the application, and the council and the owner and such other persons as the Review Board may specify are parties to the hearing. R.S.O. 1990, c. O.18, s. 32 (6).

Place of hearing

(7) A hearing under subsection (6) shall be held at such place in the municipality as the Review Board may determine. R.S.O. 1990, c. O.18, s. 32 (7).

(8) REPEALED: 2005, c. 6, s. 20 (2).

Report

(9) Within thirty days after the conclusion of a hearing under subsection (6), the Review Board shall make a report to the council setting out its findings of fact, its recommendations as to whether or not the application should be approved, and any information or knowledge used by it in reaching its recommendations, and shall send a copy of its report to the other parties to the hearing. R.S.O. 1990, c. O.18, s. 32 (9).

Failure to report

(10) Where the Review Board fails to make a report within the time limited by subsection (9), such failure does not invalidate the procedure. R.S.O. 1990, c. O.18, s. 32 (10).

Decision of council

(11) After considering a report under subsection (9), the council without further hearing shall,

(a) refuse the application and cause notice of its decision to be given to the owner; or

(b) consent to the application and,

(i) cause notice of the intention to repeal the by-law to be served on the owner and the Trust, and

(ii) publish notice of the intention to repeal the by-law in a newspaper of general circulation in the municipality. 2005, c. 6, s. 20 (3).

Decision final

(11.1) A decision made under clause (11) (a) is final. 2005, c. 6, s. 20 (3).

(12) REPEALED: 2005, c. 6, s. 20 (4).

Withdrawal of application

(13) The owner may withdraw an application made under subsection (4) at any time before the conclusion of a hearing into the matter by serving a notice of withdrawal on the clerk of the municipality and on the Review Board and, upon receipt of the notice of withdrawal, the Review Board shall not hold a hearing into the matter or, if a hearing into the matter is in progress, shall discontinue the hearing and the council shall act in accordance with subsection (2) as if no application had been made under subsection (4). 1996, c. 4, s. 57.

Objection

(14) Any person may, within 30 days after the date of publication of the notice of intention under subclause (2) (b) (ii) or (11) (b) (ii), serve on the clerk of the municipality a notice of objection to the repeal of a by-law, or a part of a by-law, designating property as property of cultural heritage value or interest. 2005, c. 6, s. 20 (5).

Content of notice of objection

(15) A notice of objection shall set out the reason for the objection. 2005, c. 6, s. 20 (5).

If no objection made

(16) If no notice of objection is served within the 30-day period referred to in subsection (14), the council shall pass a by-law repealing the by-law, or the part of the by-law, that designated the property as property of cultural heritage value or interest and cause,

(a) a copy of the repealing by-law to be served on the owner of the property and the Trust;

(b) the reference to the property in the Register referred to in subsection 27 (1) to be deleted;

(c) notice of the repealing by-law to be published in a newspaper of general circulation in the municipality; and

(d) a copy of the repealing by-law to be registered against the property in the proper land registry office. 2005, c. 6, s. 20 (5).

Referral of objection to Review Board

(17) If a notice of objection is served on the municipality under subsection (14), the council shall, upon expiration of the 30-day period referred to in that subsection, refer the matter to the Review Board for a hearing and report. 2005, c. 6, s. 20 (5).

Application

(18) Subsections 29 (7) to (13) apply with necessary modifications to the hearing and report by the Review Board required under subsection (17). 2005, c. 6, s. 20 (5).

Decision of council

(19) After considering the report of the Review Board, the council shall, without a further hearing,

(a) refuse the application and cause notice of its decision to be given to the owner; or

(b) consent to the application, pass a by-law repealing the by-law, or the part of the by-law, that designated the property as property of cultural heritage value or interest and cause,

(i) a copy of the repealing by-law to be served on the owner of the property and the Trust,

(ii) the reference to the property in the Register referred to in subsection 27 (1) to be deleted,

(iii) notice of the repealing by-law to be published in a newspaper of general circulation in the municipality, and

(iv) a copy of the repealing by-law to be registered against the property in the proper land registry office. 2005, c. 6, s. 20 (5).

Decision final

(20) The decision of the council under subsection (19) is final. 2005, c. 6, s. 20 (5).

Withdrawal of objection

(21) A person who has served a notice of objection under subsection (14) may withdraw the objection at any time before the conclusion of a hearing into the matter by serving a notice of withdrawal on the clerk of the municipality and on the Review Board. 2005, c. 6, s. 20 (5).

No hearing

(22) If the Review Board has received notices of withdrawal for all the notices of objection that were served under subsection (14), the Review Board shall not hold a hearing into the matter or, if a hearing into the matter is in progress, shall discontinue the hearing and the council shall act in accordance with subsection (16) as if no notice of objection had been served. 2009, c. 33, Sched. 11, s. 6 (8).

Reapplication

(23) Where the council refuses an application under clause (11) (a) or (19) (a), the owner of the property may not reapply to have the by-law, or the part of the by-law, that designates the property as property of cultural heritage value or interest revoked for 12 months from the service of the notice under clause (19) (a), except with the consent of the council. 2005, c. 6, s. 20 (5).

Alteration of property

33. (1) No owner of property designated under section 29 shall alter the property or permit the alteration of the property if the alteration is likely to affect the property's heritage attributes, as set out in the description of the property's heritage attributes that was required to be served and registered under subsection 29 (6) or (14), as the case may be, unless the owner applies to the council of the municipality in which the property is situate and receives consent in writing to the alteration. 2002, c. 18, Sched. F, s. 2 (16); 2005, c. 6, s. 21 (1).

Transition

(1.1) If property is designated under this Part as property of historic or architectural value or interest, either before the day section 29 of this Act is amended by section 2 of Schedule F to the *Government Efficiency Act, 2002* or under subsection 29 (16) of this Act after that day,

(a) subsection (1) of this section does not apply to the property;

(b) despite its amendment by subsection 2 (16) of Schedule F to the *Government Efficiency Act, 2002*, subsection (1) of this section, as it read immediately before the day subsection 2 (16) of Schedule F to the *Government Efficiency Act, 2002* came into force, continues to apply to the property. 2002, c. 18, Sched. F, s. 2 (16).

Application

(2) An application under subsection (1) shall be accompanied by a detailed plan and shall set out such information as the council may require. R.S.O. 1990, c. O.18, s. 33 (2).

Notice of receipt

(3) The council, upon receipt of an application under subsection (1) together with such information as it may require under subsection (2), shall cause a notice of receipt to be served on the applicant. R.S.O. 1990, c. O.18, s. 33 (3).

Decision of council

(4) Within 90 days after the notice of receipt is served on the applicant under subsection (3), the council, after consultation with its municipal heritage committee, if one is established,

(a) shall,

(i) consent to the application,

(ii) consent to the application on terms and conditions, or

(iii) refuse the application; and

(b) shall give notice of its decision to the owner of the property and to the Trust. 2002, c. 18, Sched. F, s. 2 (17); 2005, c. 6, s. 1.

Extension of time

(5) The applicant and the council may agree to extend the time under subsection (4) and, where the council fails to notify the applicant of its decision within ninety days after the notice of receipt is served on the applicant or within such extended time as may be agreed upon, the council shall be deemed to have consented to the application. R.S.O. 1990, c. O.18, s. 33 (5).

Application for hearing

(6) Where the council consents to an application upon certain terms and conditions or refuses the application, the owner may, within thirty days after receipt of the notice under subsection (4), apply to the council for a hearing before the Review Board. R.S.O. 1990, c. O.18, s. 33 (6).

Referral to Review Board

(7) The council shall, upon receipt of a notice under subsection (6), refer the matter to the Review Board for a hearing and report, and shall publish a notice of the hearing in a newspaper having general circulation in the municipality, at least ten days prior to the date of such hearing. R.S.O. 1990, c. O.18, s. 33 (7).

Hearing

(8) The Review Board shall as soon as is practicable hold a hearing open to the public to review the application, and the council and the owner and such other persons as the Review Board may specify are parties to the hearing. R.S.O. 1990, c. O.18, s. 33 (8).

Place for hearing

(9) A hearing under subsection (8) shall be held at such place in the municipality as the Review Board may determine. R.S.O. 1990, c. O.18, s. 33 (9).

(10) REPEALED: 2005, c. 6, s. 21 (2).

Report

(11) Within thirty days after the conclusion of a hearing under subsection (8), the Review Board shall make a report to the council setting out its findings of fact, its recommendations as to whether or not the application should be approved, and any information or knowledge used by it in reaching its recommendations, and shall send a copy of its report to the other parties to the hearing. R.S.O. 1990, c. O.18, s. 33 (11).

Failure to report

(12) Where the Review Board fails to make a report within the time limited by subsection (11), the failure does not invalidate the procedure. R.S.O. 1990, c. O.18, s. 33 (12).

Decision of council

(13) After considering the report under subsection (11), the council without a further hearing shall confirm or revise its decision under subsection (4) with such modifications as the council considers proper and shall cause notice of its decision to be served on the owner and the Trust and to the other parties to the hearing, and its decision is final. R.S.O. 1990, c. O.18, s. 33 (13); 2005, c. 6. s. 1.

Withdrawal of application

(14) The owner may withdraw an application made under subsection (6) at any time before the conclusion of a hearing into the matter by serving a notice of withdrawal on the clerk of the municipality and on the Review Board and, upon receipt of the notice of withdrawal, the Review Board shall not hold a hearing into the matter or, if a hearing into the matter is in progress, shall discontinue the hearing and the council shall act in accordance with subsection (4) as if no application had been made under subsection (6). 1996, c. 4, s. 58.

Delegation of council's consent

(15) The power to consent to alterations to property under this section may be delegated by by-law by the council of a municipality to an employee or official of the municipality if the council has established a municipal heritage committee and has consulted with the committee prior to delegating the power. 2005, c. 6, s. 21 (3).

Scope of delegation

(16) A by-law that delegates the council's power to consent to alterations to a municipal employee or official may delegate the power with respect to all alterations or with respect to such classes of alterations as are described in the by-law. 2005, c. 6, s. 21 (3).

Demolition or removal of structure

34. (1) No owner of property designated under section 29 shall demolish or remove a building or structure on the property or permit the demolition or removal of a building or structure on the property unless the owner applies to the council of the municipality in which the property is situate and receives consent in writing to the demolition or removal. 2002, c. 18, Sched. F, s. 2 (18); 2005, c. 6, s. 22 (1).

Application

(1.1) An application made under subsection (1) shall be accompanied by any plans and set out any information the council may require. 2009, c. 33, Sched. 11, s. 6 (9).

Notice of receipt

(1.2) The council, on receipt of an application under subsection (1) together with any information it may require under subsection (1.1), shall serve a notice of receipt on the applicant. 2009, c. 33, Sched. 11, s. 6 (9).

Decision of council

(2) Within 90 days after the notice of receipt is served on the applicant under subsection (1.2) or within such longer period as is agreed upon by the owner and the council, the council, after consultation with its municipal heritage committee, if one is established,

(a) may,

(i) consent to the application,

(i.1) consent to the application, subject to such terms and conditions as may be specified by the council, or

(ii) refuse the application;

(b) shall give notice of its decision to the owner and to the Trust; and

(c) shall publish its decision in a newspaper having general circulation in the municipality. 2002, c. 18, Sched. F, s. 2 (18); 2005, c. 6, ss. 1, 22 (2); 2009, c. 33, Sched. 11, s. 6 (10).

(3) REPEALED: 2005, c. 6, s. 22 (3).

Deemed consent

(4) If the council fails to notify the owner under clause (2) (b) within the time period mentioned in subsection (2), the council shall be deemed to have consented to the application. 2002, c. 18, Sched. F, s. 2 (18).

Transition

(5) If, on or before the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, an owner of property designated under section 29 had applied to a municipality for consent to demolish or remove a building or structure on the property and no decision had been made by the council of the municipality as of that day,

(a) the council's decision shall be made in accordance with subsection (2), as amended by subsection 22 (2) of the *Ontario Heritage Amendment Act, 2005*; and

(b) subsections (5) and (7), as they read immediately before the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, do not apply if the council decides to refuse the application. 2005, c. 6, s. 22 (4).

Same

(6) If, on or before the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, an owner of property designated under section 29 had applied to a municipality for consent to demolish or remove a building or structure on the property and the council of the municipality had refused the application under subsection (2), then, even though 180 days had elapsed since the date of the council's decision and the owner had complied with the requirements of clause (5) (b) or (7) (b), as they read immediately before that day,

(a) subsections (5) and (7), as they read immediately before the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, do not apply with respect to the refusal of the application; and

(b) the owner shall not demolish or remove the building or structure on the property. 2005, c. 6, s. 22 (4).

Same, exception

(7) Despite subsections (5) and (6), if, on the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, a situation described in subsection (6) existed and the owner of the property had not only prepared the property for the demolition or removal of a building or structure but was in the course of demolishing or removing the building or structure, then,

(a) subsections (5) and (7), as they read immediately before the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, continue to apply to the refusal of the application;

(b) the owner may continue the demolition or removal of the building or structure; and

(c) sections 34.1, 34.2 and 34.3, as they read immediately before the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, continue to apply to the application. 2005, c. 6, s. 22 (4).

(8) REPEALED: 2005, c. 6, s. 22 (4).

Appeal to Board

34.1 (1) If the council of a municipality consents to an application subject to terms and conditions under subclause 34 (2) (a) (i.1) or refuses an application under subclause 34 (2) (a) (ii), the owner of the property that was the subject of the application may appeal the council's decision to the Board within 30 days of the day the owner received notice of the council's decision. 2005, c. 6, s. 23.

Notice of appeal

(2) An owner of property who wishes to appeal the decision of the council of a municipality shall, within 30 days of the day the owner received notice of the council's decision, give notice of appeal to the Board and to the clerk of the municipality. 2005, c. 6, s. 23.

Content of notice

(3) A notice of appeal shall set out the reasons for the objection to the decision of the council of the municipality and be accompanied by the fee prescribed under the *Ontario Municipal Board Act*. 2005, c. 6, s. 23.

Hearing

(4) Upon receiving notice of an appeal, the Board shall set a time and place for hearing the appeal and give notice of the hearing to the owner of the property and to such other persons or bodies as the Board may determine. 2005, c. 6, s. 23.

Notice of hearing

(5) The Board shall give notice of a hearing in such manner as the Board determines necessary. 2005, c. 6, s. 23.

Powers of Board

(6) After holding a hearing, the Board may order,

(a) that the appeal be dismissed; or

(b) that the municipality consent to the demolition or removal of a building or structure without terms and conditions or with such terms and conditions as the Board may specify in the order. 2005, c. 6, s. 23.

Decision final

(7) The decision of the Board is final. 2005, c. 6, s. 23.

Transition, appeal to Board

34.2 (1) Within 90 days of the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, the owner of property designated under section 29 who, before that day, had been refused an application to demolish or remove a building or structure from the property under subsection 34 (2) by the council of a municipality, may appeal the decision to the Board if,

(a) the owner has lost his right to demolish or remove the building or structure 180 days after the day the council of the municipality refused the application under subsection 34 (2) by virtue of subsection 34 (6); and

(b) subsection 34 (7) does not apply to the application. 2005, c. 6, s. 23.

Notice of appeal

(2) An owner of property who wishes to appeal the decision of the council of a municipality under subsection (1) shall, within 90 days of the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, give notice of appeal to the Board and to the clerk of the municipality. 2005, c. 6, s. 23.

Application

(3) Subsections 34.1 (3) to (7) apply with necessary modifications to an appeal under this section. 2005, c. 6, s. 23.

Repeal of by-law designating property

34.3 (1) The council of a municipality shall pass a by-law to repeal a by-law or the part thereof designating a property under section 29 if the owner of the property has applied in writing to the council for consent to the demolition or removal of a building or structure on the property and,

(a) the council consents to the application under subclause 34 (2) (a) (i) or (i.1) or is deemed to have consented to the application under subsection 34 (4); or

(b) the Board has ordered that the municipality give its consent under clause 34.1 (6) (b). 2005, c. 6, s. 24.

Duties upon passing a repealing by-law

(2) When the council passes a repealing by-law under this section, the council shall cause,

(a) a copy of the repealing by-law to be served on the owner of the property and on the Trust;

(b) notice of the repealing by-law to be published in a newspaper having general circulation in the municipality;

(c) reference to the property to be deleted from the Register referred to in subsection 27 (1); and

(d) a copy of the repealing by-law to be registered against the property affected in the proper land registry office. 2002, c. 18, Sched. F, s. 2 (18); 2005, c. 6, s. 1.

Transition

34.4 A process relating to a matter dealt with in any of sections 34 to 34.3 that was commenced but not completed under an Act or a part of an Act repealed by section 4 of Schedule F to the *Government Efficiency Act, 2002*, that was continued under sections 34 to 34.3 of this Act by this section on the day subsection 2 (18) of Schedule F to the *Government Efficiency Act, 2002* came into force, and that was not complete on the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, shall be continued under sections 34 to 34.3 as they read on and after the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent. 2005, c. 6, s. 25.

DESIGNATION OF PROPERTIES BY MINISTER

Designation by Minister

34.5 (1) After consultation with the Trust, the Minister may, by order, designate any property within a municipality or in unorganized territory as property of cultural heritage value or interest of provincial significance if,

(a) the property meets the criteria prescribed by regulation; and

(b) the designation is made in accordance with the process set out in section 34.6. 2005, c. 6, s. 26.

Effect of designation

(2) If property is designated by the Minister under subsection (1), the owner of the property shall not,

(a) carry out or permit an alteration of the property of a kind described in subsection (3) unless the Minister consents to the alteration; or

(b) carry out or permit the demolition or removal of a building or structure on the property unless the Minister consents to the demolition or removal or the Board orders the demolition or removal under subsection (6). 2005, c. 6, s. 26.

Alterations to property

(3) Clause (2) (a) applies in respect of alterations that are likely to affect the property's heritage attributes as described in the notice of intention to designate the property given under section 34.6. 2005, c. 6, s. 26.

Application for consent, alteration

(4) The owner of a property designated under subsection (1) may apply to the Minister for the Minister's consent to an alteration of the property and subsections 33 (2) to (14) apply with necessary modifications to such an application. 2005, c. 6, s. 26.

Same

(5) For the purposes of the application of subsection 33 (4) to an application for the Minister's consent made under subsection (4), subsection 33 (4) shall be deemed to require the Minister to consult with the Trust, and not with a municipal heritage committee, before rendering a decision under that subsection. 2005, c. 6, s. 26.

Same, demolition or removal

(6) The owner of a property designated under subsection (1) may apply to the Minister for the Minister's consent to the demolition or removal of a building or structure on the property. 2005, c. 6, s. 26.

Decision of Minister

(7) Within 90 days after receipt of an application under subsection (6), or within such longer period as is agreed upon by the owner and the Minister, the Minister, having consulted with the Trust, may,

(a) consent to the application;

(b) consent to the application, subject to such terms and conditions as may be specified by the Minister; or

(c) refuse the application. 2005, c. 6, s. 26.

Notice of decision

(8) The Minister shall, within the time period specified in subsection (7), give notice of its decision under subsection (7) to the owner of the property and to the Trust and,

(a) in the case of property situated in a municipality, shall publish the decision in a newspaper having general circulation in the municipality; and

(b) in the case of property situated in unorganized territory, shall publish its decision or otherwise make its decision known in a manner and at such times as the Minister considers adequate to give the public in the territory reasonable notice. 2005, c. 6, s. 26.

Deemed consent

(9) If the Minister fails to give notice of its decision to the owner within the time period specified in subsection (7), the Minister shall be deemed to have consented to the application. 2005, c. 6, s. 26.

Application, appeal to Board

(10) Section 34.1 applies with necessary modifications where the Minister refuses an application for consent under clause (7) (c) or consents to the application, subject to terms and conditions specified by the Minister under clause (7) (b). 2005, c. 6, s. 26.

Delegation

(11) The Minister may delegate in writing his or her power to consent to the alteration of a property designated under subsection (1) and to consent to the demolition or removal of a building or structure on property designated under subsection (1),

(a) to the Trust, or to an official of the Trust designated by the Trust for the purposes of such a delegation; or

(b) in the case of property situated in a municipality, to the council of the municipality or to an official of the municipality designated by the council of the municipality for the purposes of such a delegation. 2005, c. 6, s. 26.

Scope of delegation

(12) The Minister may limit a delegation under subsection (11) so as to delegate the power to consent to only one of the types of changes to property described in subsection (11), or to such combination thereof as may be specified in the delegation, or to consent to such classes of alterations as are set out in the delegation. 2005, c. 6, s. 26.

Designation process

34.6 (1) If the Minister intends to designate property as property of cultural heritage value or interest of provincial significance, the Minister shall ensure that a notice of intention to designate the property is,

(a) served on the owner of the property and, if the property is situated in a municipality, on the clerk of the municipality;

(b) in the case of property situated in a municipality, published in a newspaper of general circulation in the municipality; and

(c) in the case of property situated in unorganized territory, published or otherwise made known in the territory in a manner and at such times as the Minister considers adequate to give the public in the territory reasonable notice. 2005, c. 6, s. 26.

Content of notice

(2) A notice of intention to designate property served on an owner of property and on the clerk of a municipality under clause (1) (a) shall contain,

(a) an adequate description of the property so that it may be readily ascertained;

(b) a statement explaining the cultural heritage value or interest of the property and a description of the heritage attributes of the property; and

(c) a statement that notice of objection to the designation may be served on the Minister, within 30 days after the day the notice of intention was first published or made known to the public under clause (1) (b) or (c). 2005, c. 6, s. 26.

Same

(3) A notice of intention to designate property published under clause (1) (b) or (c) shall contain,

(a) an adequate description of the property so that it may be readily ascertained;

(b) a statement explaining the cultural heritage value or interest of the property;

(c) a statement that further information respecting the proposed designation is available from the Minister; and

(d) a statement that notice of objection to the designation may be served on the Minister, within 30 days after the day the notice of intention was first published or made known to the public under clause (1) (b) or (c). 2005, c. 6, s. 26.

Objection

(4) Within 30 days after the day the notice of intention was first published or made known to the public under clause (1) (b) or (c), a person may serve on the Minister a notice of objection setting out the reason for the objection and all relevant facts. 2005, c. 6, s. 26.

If no notice of objection

(5) If no notice of objection is served within the 30-day period referred to in subsection (4), the Minister,

(a) shall make an order designating the property as property of cultural heritage value or interest of provincial significance and shall,

(i) cause a copy of the order together with a statement explaining the cultural heritage value or interest of the property and a description of the heritage attributes of the property,

(A) to be served on the owner of the property, on the Trust and, if the property is situated in a municipality, on the clerk of the municipality, and

(B) to be registered against the property affected in the proper land registry office,

(ii) in the case of property situated in a municipality, publish notice of the order in a newspaper of general circulation in the municipality, and

(iii) in the case of property situated in unorganized territory, publish notice of the order or otherwise make it known in the territory in a manner and at such times as the Minister considers adequate to give the public in the territory reasonable notice; or

(b) shall withdraw the notice of intention to designate the property by causing a notice of withdrawal,

(i) to be served on the owner of the property, on the Trust and, if the property is situated in a municipality, on the clerk of the municipality,

(ii) in the case of property situated in a municipality, to be published in a newspaper of general circulation in the municipality, and

(iii) in the case of property situated in unorganized territory, to be published or otherwise made known in the territory in a manner and at such times as the Minister considers adequate to give the public in the territory reasonable notice. 2005, c. 6, s. 26.

Referral of objection to Review Board

(6) If a notice of objection is served on the Minister under subsection (4), the Minister shall, upon expiration of the 30-day period referred to in that subsection, refer the matter to the Review Board for a hearing and report. 2005, c. 6, s. 26.

Hearing

(7) If a matter is referred to the Review Board under subsection (6), the Review Board shall hold a hearing as soon as practicable to determine whether the property in question should be designated as property of cultural heritage value or interest of provincial significance. 2005, c. 6, s. 26.

Parties

(8) The Minister, the owner of the property in question, any person who has served a notice of objection under subsection (4) and such other persons as the Review Board may specify are parties to the hearing. 2005, c. 6, s. 26.

Open hearing

(9) A hearing under subsection (7) is open to the public. 2005, c. 6, s. 26.

Place of hearing

(10) A hearing under subsection (7) shall be held at such place in the municipality or in the unorganized territory, as the case may be, as the Review Board may determine. 2005, c. 6, s. 26.

Notice of hearing

(11) Notice of a hearing under subsection (7) shall be,

(a) if the hearing is with respect to property situated in a municipality, published in a newspaper of general circulation in the municipality at least 10 days before the day of the hearing; and

(b) if the hearing is with respect to property situated in unorganized territory, published or otherwise made known in the territory in a manner and at such times as the Review Board considers adequate to give the public in the territory reasonable notice of the hearing. 2005, c. 6, s. 26.

Combining hearings

(12) The Review Board may combine two or more related hearings and conduct them in all respects and for all purposes as one hearing. 2005, c. 6, s. 26.

Reports

(13) Within 30 days after the conclusion of a hearing under subsection (7) or as soon thereafter as is practicable, the Review Board shall make a report to the Minister setting out its findings of fact, its recommendations as to whether or not the property in question should be designated under section 34.5 and any information or knowledge used by it in reaching its recommendations. 2005, c. 6, s. 26.

Copies

(14) The Review Board shall send a copy of its report to the other parties to the hearing. 2005, c. 6, s. 26.

Decision of Minister

(15) After considering the report of the Review Board, the Minister, without further hearing, shall make any order or take any action set out in subsection (5) and follow the requirements of that subsection. 2005, c. 6, s. 26.

Decision final

(16) The decision of the Minister under subsection (15) is final. 2005, c. 6, s. 26.

Withdrawal of objection

(17) A person who has served a notice of objection under subsection (4) may withdraw the objection at any time before the conclusion of a hearing into the matter by serving notice of withdrawal on the Minister and on the Review Board. 2005, c. 6, s. 26.

No hearing

(18) If the Review Board has received notices of withdrawal for all the notices of objection that were served under subsection (4), the Review Board shall not hold a hearing into the matter or, if a hearing into the matter is in progress, shall discontinue the hearing and the council shall act in accordance with subsection (5) as if no notice of objection had been served. 2009, c. 33, Sched. 11, s. 6 (11).

Effect of notice of designation
Permits void

34.7 (1) If a notice of intention to designate a property as property of cultural heritage value or interest of provincial significance is given under section 34.6, any permit that allowed for the alteration or demolition of the property and that was issued under any Act, including a building permit, before the day the notice was served on the owner of the property and on the Trust and published or made known under subsection 34.6 (1) is void as of that day. 2005, c. 6, s. 26.

Interim control of alteration, demolition or removal

(2) Subsections 34.5 (2) to (10) apply with necessary modifications to property as of the day a notice of intention to designate the property is given under section 34.6 as though the designation process were complete and the property had been designated under subsection 34.5 (1). 2005, c. 6, s. 26.

Repeal of order, Minister's initiative

34.8 (1) If, after consultation with the Trust, the Minister decides to repeal an order designating property as property of cultural heritage value or interest of provincial significance, the Minister shall give notice of intention to repeal the order in accordance with subsection (2). 2005, c. 6, s. 26.

Notice of intention

(2) A notice of intention to repeal an order designating property shall be served on the owner of the property and on the Trust and,

(a) in the case of property situated in a municipality, shall be published in a newspaper of general circulation in the municipality; or

(b) in the case of property situated in unorganized territory, shall be published or otherwise made known in the territory in a manner and at such times as the Minister considers adequate to give the public in the territory reasonable notice. 2005, c. 6, s. 26.

Content of notice

(3) A notice of intention to repeal an order designating property shall contain,

(a) an adequate description of the property so that it may be readily ascertained;

(b) a short statement of the reason for repealing the order; and

(c) a statement that notice of objection to the repeal of the order may be served on the Minister, within 30 days after the day the notice of intention was first published or made known to the public under clause (2) (a) or (b). 2005, c. 6, s. 26.

Objection

(4) Within 30 days after the day the notice of intention was first published or made known to the public under clause (2) (a) or (b), a person may serve on the Minister a notice of objection to the repeal of an order designating property setting out the reason for the objection and all relevant facts. 2005, c. 6, s. 26.

Application

(5) Subsections 34.6 (5) to (18), as they apply to an intention to make an order to designate property, apply with necessary modifications to an intention to make an order repealing the designation of the property. 2005, c. 6, s. 26.

Repeal of order, owner's initiative

34.9 (1) An owner of a property designated under subsection 34.5 (1) may apply to the Minister for a repeal of the order designating the property. 2005, c. 6, s. 26.

Decision of Minister

(2) Within 90 days of receipt of an application under subsection (1), the Minister, having consulted with the Trust, shall,

(a) refuse the application and cause notice of its decision to be given to the owner and to the Trust; or

(b) consent to the application and,

(i) cause notice of the intention to repeal the order to be served on the owner and the Trust,

(ii) if the property is situated in a municipality, publish notice of the intention to repeal the order in a newspaper of general circulation in the municipality, and

(iii) if the property is situated in unorganized territory, publish or otherwise make known the notice of intention to repeal the order in a manner and at such times as the Minister considers adequate to give the public in the territory reasonable notice. 2005, c. 6, s. 26.

Extension of time

(3) The applicant and the Minister may agree to extend the time under subsection (2) within which the Minister is to make a decision. 2005, c. 6, s. 26.

Deemed decision

(4) If the Minister fails to notify the applicant of his or her decision within the 90-day period referred to in subsection (2) or within such further time as may have been agreed to under subsection (3), the Minister shall be deemed to have consented to the application. 2005, c. 6, s. 26.

Application for hearing

(5) Within 30 days of receipt of a notice of a refusal of an application under clause (2) (a), the owner of the property in question may apply to the Minister for a hearing before the Review Board. 2005, c. 6, s. 26.

Application

(6) Subsections 32 (5) to (10) and (13) apply with necessary modifications to a hearing by the Review Board under this section. 2005, c. 6, s. 26; 2009, c. 33, Sched. 11, s. 6 (12).

Decision of Minister

(7) After considering the report of the Review Board, the Minister, without further hearing, shall,

(a) refuse the application and cause notice of its decision to be given to the owner and to the Trust; or

(b) consent to the application and,

(i) cause notice of the intention to repeal the order to be served on the owner and the Trust,

(ii) if the property is situated in a municipality, publish notice of the intention to repeal the order in a newspaper of general circulation in the municipality, and

(iii) if the property is situated in unorganized territory, publish or otherwise make known the notice of intention to repeal the order in a manner and at such times as the Minister considers adequate to give the public in the territory reasonable notice. 2005, c. 6, s. 26.

Objection

(8) Within 30 days after the day the notice of intention was first published or made known to the public under clause (2) (b) or (7) (b), a person may serve on the Minister a notice of objection to the repeal of an order designating property setting out the reason for the objection and all relevant facts. 2005, c. 6, s. 26.

Application

(9) Subsections 34.6 (5) to (18), as they apply to an intention to make an order to designate property, apply with necessary modifications to an intention to make an order repealing the designation of the property. 2005, c. 6, s. 26.

Reapplication

(10) Where the Minister refuses an application under this section, the owner of the property may not reapply to have the order that designates the property as property of cultural heritage value or interest of provincial significance revoked for 12 months from day the owner receives notice of the Minister's decision, except with the consent of the Minister. 2005, c. 6, s. 26.

GENERAL

Notice of change of ownership

35. (1) Where there is a change in the ownership of property designated under section 29 by a municipality, the new owner of the property shall give notice of the change to the clerk of the municipality within 30 days of becoming the owner of the property. 2005, c. 6, s. 27.

Same, Minister

(2) Where there is a change in the ownership of property designated under section 34.5 by the Minister, the new owner of the property shall give notice of the change to the Minister within 30 days of becoming the owner of the property. 2005, c. 6, s. 27.

Conflict

35.1 In the event of a conflict between an order by the Minister designating property under section 34.5 and a municipal by-law that affects the same property, the order prevails to the extent of the conflict, but in all other respects the by-law remains in full force and effect. 2005, c. 6, s. 27.

Stop order

35.2 (1) The Minister may issue a stop order with respect to any property in the Province to prevent the alteration of the property, any damage to the property or the demolition or removal of any building or structure on the property if the Minister is of the opinion that,

(a) the property may be property of cultural heritage value or interest of provincial significance; and

(b) the property is likely to be altered or damaged or a building or structure located on the property is likely to be removed or demolished. 2005, c. 6, s. 27.

Same

(2) The Minister may make an order under this section with respect to property designated under section 29 even if the municipality has consented to the alteration, demolition or removal in question. 2005, c. 6, s. 27.

Order

(3) A stop order issued under this section shall direct the owner of the property in question or any person in apparent possession of the property to ensure that any activity that is likely to result in the alteration of or damage to the property or the demolition or removal of any building or structure on the property not be commenced or be discontinued for a period of up to 60 days. 2005, c. 6, s. 27.

Assessment

(4) During the time that a stop order is in effect, the Minister, or any person authorized by the Minister in writing, may prepare a study to assist in determining whether the property is property of cultural heritage value or interest of provincial significance and which procedures, if any, should be commenced under this Act or otherwise, in order to protect and conserve the property. 2005, c. 6, s. 27.

Service of order

(5) The Minister may serve a stop order issued under this section on the owner of the property in question or any person in apparent possession of the property by any method of service described in subsection 67 (1) and by posting the order in a conspicuous place on the property to which it applies. 2009, c. 33, Sched. 11, s. 6 (13).

Service deemed effective

(6) Service under subsection (5) is effective from the earlier of the date of posting or the effective date of service described in subsections 67 (2) to (4). 2009, c. 33, Sched. 11, s. 6 (13).

Building standards by-law

35.3 (1) If a by-law passed under section 15.1 of the *Building Code Act, 1992* setting out standards for the maintenance of property in the municipality is in effect in a municipality, the council of the municipality may, by by-law,

(a) prescribe minimum standards for the maintenance of the heritage attributes of property in the municipality that has been designated by the municipality under section 29 or by the Minister under section 34.5; and

(b) require property that has been designated under section 29 or 34.5 and that does not comply with the standards to be repaired and maintained to conform with the standards. 2005, c. 6, s. 27.

Application

(2) Sections 15.2, 15.3, 15.4, 15.5 and 15.8 of the *Building Code Act, 1992* apply with necessary modifications to the enforcement of a by-law made under subsection (1). 2005, c. 6, s. 27.

Purchase or lease by-laws

36. (1) The council of a municipality may pass by-laws providing for acquiring, by purchase, lease or otherwise, any property or part thereof designated under this Part, including any interest therein, for the use or purposes of this Part and for disposing of such property, or any interest therein, by sale, lease or otherwise, when no longer so required, upon such terms and conditions as the council considers necessary for the purposes of this Part. R.S.O. 1990, c. O.18, s. 36 (1).

Expropriating by-law

(2) Subject to the *Expropriations Act*, the council of every municipality may pass by-laws providing for the expropriation of any property designated under this Part and required for the purposes of this Part and may sell, lease or otherwise dispose of the property, when no longer so required, upon such terms and conditions as the council considers necessary for the purposes of this Part. R.S.O. 1990, c. O.18, s. 36 (2).

Delegation

(3) The council of a municipality that forms part of an upper-tier municipality may delegate its power under this Part to the council of the upper-tier municipality. 2002, c. 17, Sched. F, Table.

Easements

37. (1) Despite subsection 36 (1), after consultation with its municipal heritage committee, if one is established, the council of a municipality may pass by-laws providing for the entering into of easements or covenants with owners of real property or interests in real property, for the conservation of property of cultural heritage value or interest. 2002, c. 18, Sched. F, s. 2 (19).

Idem

(2) Any easement or covenant entered into by a council of a municipality may be registered, against the real property affected, in the proper land registry office. R.S.O. 1990, c. O.18, s. 37 (2).

Idem

(3) Where an easement or covenant is registered against real property under subsection (2), such easement or covenant shall run with the real property and the council of the municipality may enforce such easement or covenant, whether positive or negative in nature, against the owner or any subsequent owners of the real property, and the council of the municipality may enforce such easement or covenant even where it owns no other land which would be accommodated or benefited by such easement or covenant. R.S.O. 1990, c. O.18, s. 37 (3).

Assignment

(4) Any easement or covenant entered into by the council of a municipality under subsection (2) may be assigned to any person and such easement or covenant shall continue to run with the real property and the assignee may enforce the easement or covenant as if it were the council of the municipality and it

owned no other land which would be accommodated or benefited by such easement or covenant. R.S.O. 1990, c. O.18, s. 37 (4).

Conflict

(5) Where there is a conflict between an easement or covenant entered into by a council of a municipality under subsection (1) and section 33 or 34, the easement or covenant shall prevail. R.S.O. 1990, c. O.18, s. 37 (5).

Inspection

38. (1) For the purpose of carrying out this Part, any person authorized by the council of a municipality in writing may, upon producing proper identification, inspect at any reasonable time property designated or property proposed to be designated under this Part where a notice of intention to designate has been served and published under subsection 29 (3).

Obstruction of investigator

(2) No person shall obstruct a person authorized to make an investigation under this section or conceal or destroy anything relevant to the subject-matter of the investigation. R.S.O. 1990, c. O.18, s. 38.

Grants and loans

39. (1) The council of a municipality may pass by-laws providing for the making of a grant or loan to the owner of a property designated under this Part for the purpose of paying for the whole or any part of the cost of alteration of such designated property on such terms and conditions as the council may prescribe. R.S.O. 1990, c. O.18, s. 39 (1).

Loan is lien or charge on land

(2) The amount of any loan made under a by-law passed under subsection (1), together with interest at a rate to be determined by the council, may be added by the clerk of the municipality to the collector's roll and collected in like manner as municipal taxes over a period fixed by the council, not exceeding five years, and such amount and interest shall, until payment thereof, be a lien or charge upon the land in respect of which the loan was made. R.S.O. 1990, c. O.18, s. 39 (2).

Non-application of s. 106 of *Municipal Act, 2001*

(3) Section 106 of the *Municipal Act, 2001* does not apply to a grant or loan made under subsection (1). 2009, c. 33, Sched. 11, s. 6 (14).

PART V
HERITAGE CONSERVATION DISTRICTS

Definition

39.1 (1) In this Part,

"property" means real property and includes all buildings and structures thereon. 2002, c. 18, Sched. F, s. 2 (20).

Publication of notice, City of Toronto

(2) Where the City of Toronto is required by this Part to publish a notice in a newspaper having general circulation in the municipality, notice given in accordance with a policy adopted by the City under section 212 of the *City of Toronto Act, 2006* is deemed to satisfy the requirement of this Part to publish notice in a newspaper. 2006, c. 11, Sched. B, s. 11 (3).

Publication of notice

(3) Where a municipality is required by this Part to publish a notice in a newspaper having general circulation in the municipality, notice given in accordance with a policy adopted by the municipality under section 270 of the *Municipal Act, 2001* is deemed to satisfy the requirement of this Part to publish notice in a newspaper. 2006, c. 32, Sched. D, s. 13 (2).

Application

39.1.1 (1) This Part does not apply to property described in clause 25.2 (2) (a). 2005, c. 6. s. 28.

Conflict

(2) If a property described in clause 25.2 (2) (b) is included in a heritage conservation study area designated under section 40.1 or in a heritage conservation district designated under section 41, and if there is a conflict between a provision of the heritage standards and guidelines prepared under Part III.1 and a provision in Part V as they apply to that property, the provision in Part V prevails. 2005, c. 6. s. 28.

Register

39.2 (1) The clerk of a municipality shall keep a register of all heritage conservation districts designated under this Part that are situate in the municipality and shall ensure that the register contains a map or description of the area of each such heritage conservation district. 2002, c. 18, Sched. F, s. 2 (21).

Extracts

(2) The clerk of a municipality shall issue extracts from the register referred to in subsection (1) to any person on payment of the fee set by the municipality by by-law. 2002, c. 18, Sched. F, s. 2 (21).

Area study

40. (1) The council of a municipality may undertake a study of any area of the municipality for the purpose of designating one or more heritage conservation districts. 2005, c. 6. s. 29.

Scope of study

(2) A study under subsection (1) shall,

(a) examine the character and appearance of the area that is the subject of the study, including buildings, structures and other property features of the area, to determine if the area should be preserved as a heritage conservation district;

(b) examine and make recommendations as to the geographic boundaries of the area to be designated;

(c) consider and make recommendations as to the objectives of the designation and the content of the heritage conservation district plan required under section 41.1;

(d) make recommendations as to any changes that will be required to the municipality's official plan and to any municipal by-laws, including any zoning by-laws. 2005, c. 6. s. 29.

Consultation

(3) If the council of a municipality has established a municipal heritage committee under section 28, the council shall consult with the committee with respect to the study. 2005, c. 6. s. 29.

Designation of study area

40.1 (1) If the council of a municipality undertakes a study under section 40, the council may by by-law designate the area specified in the by-law as a heritage conservation study area for a period of up to one year. 2005, c. 6. s. 29.

Same

(2) A by-law made under subsection (1) may prohibit or set limitations with respect to,

(a) the alteration of property situated in the heritage conservation study area; and

(b) the erection, demolition or removal of buildings or structures, or classes of buildings or structures, in the heritage conservation study area. 2005, c. 6. s. 29.

Notice of by-law

(3) If the council of a municipality passes a by-law under subsection (1), the council shall, within 30 days after the by-law is passed, cause notice of the by-law,

(a) to be served on each owner of property located in the heritage conservation study area and on the Trust; and

(b) to be published in a newspaper of general circulation in the municipality. 2005, c. 6. s. 29.

Appeal to Board

(4) Any person who objects to a by-law passed under subsection (1) may appeal to the Board by giving the clerk of the municipality, within 30 days after the date of publication under clause (3) (b), a

notice of appeal setting out the objection to the by-law and the reasons in support of the objection, accompanied by the fee prescribed under the *Ontario Municipal Board Act*. 2005, c. 6. s. 29.

Application

(5) Subsections 41 (6) to (9) apply with necessary modifications to an appeal under subsection (4). 2005, c. 6. s. 29; 2006, c. 11, Sched. B, s. 11 (4).

Limitation

(6) Where the designation of a study area in a municipality ceases to be in effect, the council of the municipality shall not, during the following three years, pass a by-law designating another study area that includes an area that was part of the previously designated study area. 2005, c. 6. s. 29.

Designation of heritage conservation district

41. (1) Where there is in effect in a municipality an official plan that contains provisions relating to the establishment of heritage conservation districts, the council of the municipality may by by-law designate the municipality or any defined area or areas thereof as a heritage conservation district. R.S.O. 1990, c. O.18, s. 41 (1); 2002, c. 18, Sched. F, s. 2 (23).

Property designated under Part IV

(2) A property that is designated under Part IV may subsequently be included in an area designated as a heritage conservation district under this Part, and a property that is included in an area designated as a heritage conservation district under this Part may subsequently be designated under Part IV. 2002, c. 18, Sched. F, s. 2 (24).

Which Part applies

(2.1) A property that is designated by the Minister under subsection 34.5 (1) and is included in an area designated as a heritage conservation district under this Part is subject to subsections 34.5 (2) to (12), and not to this Part, with respect to any alterations of the property or any demolition or removal of buildings or structures on the property. 2005, c. 6. s. 30 (1).

Same

(2.2) A property that is designated by a municipality under section 29 and is included in an area designated as a heritage conservation district under this Part is subject to section 30 and sections 33 to 34.4, and not to this Part, with respect to any alterations of the property or any demolition or removal of buildings or structures on the property if,

(a) the designation of the heritage conservation district was made before the day section 41.1 came into force; and

(b) no heritage conservation district plan has been adopted by the council of the municipality under section 41.1 with respect to the heritage conservation district. 2005, c. 6. s. 30 (1).

Same

(2.3) Subject to subsection (2.4), a property that is designated by a municipality under section 29 and is included in an area designated as a heritage conservation district under this Part for which a heritage conservation district plan has been adopted under section 41.1 is subject to this Part and to the plan with respect to any alterations of the property or demolition or removal of buildings or structures on the property, and is not subject to section 30 or to sections 33 to 34.4. 2005, c. 6. s. 30 (1).

Same

(2.4) If the owner of a property referred to in subsection (2.3) intends to alter or permit alterations to the interior of a building or structure on the property, the owner shall comply with the requirements of section 33. 2005, c. 6. s. 30 (1).

Notice of by-law

(3) If the council of a municipality passes a by-law under this section designating the municipality or any defined area or areas of the municipality as a heritage conservation district, the council shall cause notice of the passage of the by-law,

(a) to be served on each owner of property located in the heritage conservation district and on the Trust; and

(b) to be published in a newspaper having general circulation in the municipality. 2002, c. 18, Sched. F, s. 2 (25); 2005, c. 6. s. 1.

Appeal to Board

(4) Any person who objects to the by-law may appeal to the Board by giving the clerk of the municipality, within 30 days after the date of publication under clause (3) (b), a notice of appeal setting out the objection to the by-law and the reasons in support of the objection, accompanied by the fee prescribed under the *Ontario Municipal Board Act*. 2002, c. 18, Sched. F, s. 2 (25).

If no notice of appeal

(5) If no notice of appeal is given to the clerk within the time period specified in subsection (4),

(a) the by-law comes into force on the day following the last day of the period; and

(b) the clerk shall ensure that a copy of the by-law is registered against the properties affected by the by-law in the appropriate land registry office. 2005, c. 6. s. 30 (2).

If notice of appeal

(6) If a notice of appeal is given to the clerk within the time period specified in subsection (4), the Board shall hold a hearing open to the public and, before holding the hearing, shall give notice of the hearing to such persons or bodies and in such manner as the Board may determine. 2002, c. 18, Sched. F, s. 2 (25).

Powers of Board

(7) After holding the hearing, the Board shall,

(a) dismiss the appeal; or

(b) allow the appeal in whole or in part and,

(i) repeal the by-law,

(ii) amend the by-law in such manner as the Board may determine,

(iii) direct the council of the municipality to repeal the by-law, or

(iv) direct the council of the municipality to amend the by-law in accordance with the Board's order. 2002, c. 18, Sched. F, s. 2 (25).

Dismissal without hearing of appeal

(8) Despite the *Statutory Powers Procedure Act* and subsections (6) and (7), the Board may, on its own motion or on the motion of any party, dismiss all or part of the appeal without holding a hearing on the appeal if,

(a) the Board is of the opinion that,

(i) the reasons set out in the notice of appeal do not disclose any apparent ground upon which the Board could allow all or part of the appeal, or

(ii) the appeal is not made in good faith, is frivolous or vexatious, or is made only for the purpose of delay;

(b) the appellant has not provided written reasons in support of the objection to the by-law;

(c) the appellant has not paid the fee prescribed under the *Ontario Municipal Board Act*;

(d) the appellant has not responded to a request by the Board for further information within the time specified by the Board; or

(e) the appellant has not participated in the public process for the adoption of the relevant heritage conservation district plan under section 41.1 by either making an oral submission at a public meeting or by submitting written submissions to the council of the municipality and the Board believes there is no reasonable explanation for failing to do so. 2002, c. 18, Sched. F, s. 2 (25); 2005, c. 6, s. 30 (3).

Representations

(9) Before dismissing all or part of an appeal on any of the grounds mentioned in subsection (8), the Board shall,

(a) notify the appellant of the proposed dismissal; and

(b) hold a hearing with respect to the proposed dismissal or give the appellant an opportunity to make representations with respect to the proposed dismissal. 2002, c. 18, Sched. F, s. 2 (25).

Coming into force

(10) If one or more notices of appeal are given to the clerk within the time period specified in subsection (4),

(a) the by-law comes into force when all of such appeals have been withdrawn or dismissed;

(b) if the by-law is amended by the Board under subclause (7) (b) (ii), the by-law, as amended by the Board, comes into force on the day it is so amended; or

(c) if the by-law is amended by the council pursuant to subclause (7) (b) (iv), the by-law, as amended by the council, comes into force on the day it is so amended. 2002, c. 18, Sched. F, s. 2 (25).

Registration of by-law

(10.1) The clerk of a municipality shall ensure that a copy of the by-law made under this section is registered in the appropriate land registry office promptly after it comes into force. 2005, c. 6, s. 30 (4).

Transition

(11) If, on the day subsection 2 (25) of Schedule F to the *Government Efficiency Act, 2002* comes into force, a by-law designating a heritage conservation district has been passed by a municipality and the Board has not begun to hold a hearing under subsection (6) of this section, as it read immediately before that day, subsections (3) to (10) of this section apply to the by-law. 2002, c. 18, Sched. F, s. 2 (25).

Same

(12) If, on the day subsection 2 (25) of Schedule F to the *Government Efficiency Act, 2002* comes into force, a by-law designating a heritage conservation district has been passed by a municipality and the Board has completed or has begun to hold a hearing under subsection (6) of this section, as it read before that day, but has not yet issued its formal order,

(a) subsections (3) to (10) of this section do not apply to the by-law;

(b) despite their repeal by subsection 2 (25) of Schedule F to the *Government Efficiency Act, 2002*, subsections (3) to (8) of this section, as they read immediately before the day subsection 2 (25) of Schedule F to the *Government Efficiency Act, 2002* came into force, continue to apply to the by-law. 2002, c. 18, Sched. F, s. 2 (25).

Heritage conservation district plans

41.1 (1) A by-law under section 41 designating one or more heritage conservation districts in a municipality shall adopt a heritage conservation district plan for each district that is designated in the by-law. 2005, c. 6, s. 31.

Same, where district already designated

(2) If, on or before the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, the council of a municipality had passed a by-law designating one or more heritage conservation districts, it may pass a by-law adopting a heritage conservation district plan for any one of the designated districts. 2005, c. 6, s. 31.

Notice

(3) If the council of a municipality passes a by-law adopting a heritage conservation district plan under subsection (2), the council shall cause notice of the by-law,

(a) to be served on each owner of property located in the heritage conservation district and on the Trust; and

(b) to be published in a newspaper having general circulation in the municipality. 2005, c. 6, s. 31.

Application

(4) Subsections 41 (4) to (10) apply with necessary modifications to a by-law passed under subsection (2). 2005, c. 6, s. 31.

Content of plan

(5) A heritage conservation district plan shall include,

(a) a statement of the objectives to be achieved in designating the area as a heritage conservation district;

(b) a statement explaining the cultural heritage value or interest of the heritage conservation district;

(c) a description of the heritage attributes of the heritage conservation district and of properties in the district;

(d) policy statements, guidelines and procedures for achieving the stated objectives and managing change in the heritage conservation district; and

(e) a description of the alterations or classes of alterations that are minor in nature and that the owner of property in the heritage conservation district may carry out or permit to be carried out on any part of the property, other than the interior of any structure or building on the property, without obtaining a permit under section 42. 2005, c. 6, s. 31.

Consultation

(6) Before a by-law adopting a heritage conservation district plan is made by the council of a municipality under subsection 41 (1) or under subsection (2), the council shall ensure that,

(a) information relating to the proposed heritage conservation district plan, including a copy of the plan, is made available to the public;

(b) at least one public meeting is held with respect to the proposed heritage conservation district plan; and

(c) if the council of the municipality has established a municipal heritage committee under section 28, the committee is consulted with respect to the proposed heritage conservation district plan. 2005, c. 6, s. 31.

Notice of public meeting

(7) The clerk of a municipality shall give notice of a public meeting to discuss a proposed heritage conservation district plan in such manner as the council of the municipality determines is appropriate and to such persons and bodies the council believes may have an interest in the plan. 2005, c. 6, s. 31.

Time of public meeting

(8) The public meeting shall take place 20 days after notice is given under subsection (7) or at such later time as may be specified in the notice. 2005, c. 6, s. 31.

Oral representations

(9) Any person attending the public meeting shall be given an opportunity to make oral representations with respect to the plan. 2005, c. 6, s. 31.

Information provided at meeting

(10) The council of a municipality shall ensure that information is provided to persons attending a public meeting explaining that, in accordance with subsection 41 (8), a person who does not raise objections to the adoption of a proposed heritage conservation district plan by making oral representations under subsection (9) or written submissions under subsection (11) may be later denied an opportunity to appeal the passing of a by-law adopting the plan under subsection 41 (1) or under subsection (2). 2005, c. 6, s. 31.

Written submissions

(11) Any person or body may make written submissions with respect to a proposed heritage conservation district plan to the council of a municipality at any time before the by-law adopting the plan is made. 2005, c. 6, s. 31.

Copies of proposed plan available

(12) The council shall provide copies of a proposed heritage conservation district plan to any person upon request. 2005, c. 6, s. 31.

Consistency with heritage conservation district plan

41.2 (1) Despite any other general or special Act, if a heritage conservation district plan is in effect in a municipality, the council of the municipality shall not,

(a) carry out any public work in the district that is contrary to the objectives set out in the plan; or

(b) pass a by-law for any purpose that is contrary to the objectives set out in the plan. 2005, c. 6, s. 31.

Conflict

(2) In the event of a conflict between a heritage conservation district plan and a municipal by-law that affects the designated district, the plan prevails to the extent of the conflict, but in all other respects the by-law remains in full force. 2005, c. 6, s. 31.

Erection, demolition, etc.

42. (1) No owner of property situated in a heritage conservation district that has been designated by a municipality under this Part shall do any of the following, unless the owner obtains a permit from the municipality to do so:

1. Alter, or permit the alteration of, any part of the property, other than the interior of any structure or building on the property.
2. Erect, demolish or remove any building or structure on the property or permit the erection, demolition or removal of such a building or structure. 2005, c. 6, s. 32 (1).

Exception

(2) Despite subsection (1), the owner of a property situated in a designated heritage conservation district may, without obtaining a permit from the municipality, carry out such minor alterations or classes of alterations as are described in the heritage conservation district plan in accordance with clause 41.1 (5) (e) to any part of the property in respect of which a permit would otherwise be required under subsection (1). 2005, c. 6, s. 32 (1).

Application for permit

(2.1) The owner of property situated in a designated heritage conservation district may apply to the municipality for a permit to alter any part of the property other than the interior of a building or structure on the property or to erect, demolish or remove a building or structure on the property. 2005, c. 6, s. 32 (1).

Content of application

(2.2) An application under this section shall include such information as the council of the municipality may require. 2005, c. 6, s. 32 (1).

Notice of receipt

(3) The council, upon receipt of an application under this section together with such information as it may require under subsection (2), shall cause a notice of receipt to be served on the applicant. 2002, c. 18, Sched. F, s. 2 (26); 2005, c. 6, s. 32 (2).

Decision of council

(4) Within 90 days after the notice of receipt is served on the applicant under subsection (3) or within such longer period as is agreed upon by the applicant and the council, the council may give the applicant,

(a) the permit applied for;

(b) notice that the council is refusing the application for the permit; or

(c) the permit applied for, with terms and conditions attached. 2005, c. 6, s. 32 (3).

Consultation

(4.1) If the council of a municipality has established a municipal heritage committee under section 28, the council shall, before taking any action under subsection (4) with respect to an application to

demolish or remove any building or structure on property in a heritage conservation district, consult with its municipal heritage committee. 2005, c. 6, s. 32 (3).

Deemed permit

(5) If the council fails to do any of the things mentioned in subsection (4) within the time period mentioned in subsection (4), the council shall be deemed to have given the applicant the permit applied for. 2002, c. 18, Sched. F, s. 2 (26).

Appeal to Board

(6) If the council refuses the permit applied for or gives the permit with terms and conditions attached, the owner of the property may appeal to the Board. 2005, c. 6, s. 32 (4).

Notice of appeal

(7) To appeal to the Board, the owner must give a notice of appeal to the Board within 30 days after the owner receives notice that the council is refusing the application, or receives the permit with the terms and conditions attached, as the case may be. 2002, c. 18, Sched. F, s. 2 (26).

Board's powers

(8) The Board shall hear the appeal and shall,

(a) dismiss the appeal; or

(b) direct that the permit be issued without terms and conditions or with such terms and conditions as the Board by its order may direct. 2002, c. 18, Sched. F, s. 2 (26).

Transition, prior failure to give permit or notice

(9) If, on the day subsection 2 (26) of Schedule F to the *Government Efficiency Act, 2002* comes into force, an appeal to the Board, that was commenced under subsection 44 (1) of this Act as a result of the council's failure to make a decision within the period provided for in section 43 of this Act, has not been finally disposed of,

(a) subsection (5) of this section does not apply;

(b) despite its repeal by subsection 2 (26) of Schedule F to the *Government Efficiency Act, 2002*, subsection 44 (1) of this Act, as it read immediately before the day subsection 2 (26) of Schedule F to the *Government Efficiency Act, 2002* came into force, continues to apply to the appeal. 2002, c. 18, Sched. F, s. 2 (26).

Transition

(10) If, on or before the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, an owner of property situated in a designated heritage conservation district had applied to a municipality for a permit to demolish or remove a building or structure on the property and no decision had been made by the council of the municipality as of that day,

(a) the council's decision shall be made in accordance with subsection (4), as amended by subsection 32 (3) of the *Ontario Heritage Amendment Act, 2005*; and

(b) subsections (10) and (12), as they read immediately before the day *Ontario Heritage Amendment Act, 2005* received Royal Assent, do not apply if the council decides to refuse the application. 2005, c. 6, s. 32 (5).

Same

(11) If, on or before the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, an owner of property situated in a designated heritage conservation district had applied to a municipality for a permit to demolish or remove a building or structure on the property and the council of the municipality had refused the application under subsection (4), then, even though 180 days had elapsed since the date of the council's decision and the owner had complied with the requirements of clause (10) (b) or (12) (b), as they read immediately before that day,

(a) subsections (10) and (12), as they read immediately before the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, do not apply with respect to the refusal of the application; and

(b) the owner shall not demolish or remove the building or structure on the property. 2005, c. 6, s. 32 (5).

Same, exception

(12) Despite subsections (10) and (11), if, on the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, a situation described in subsection (11) existed and the owner of the property had not only prepared the property for the demolition or removal of a building or structure but was in the course of demolishing or removing the building or structure, then,

(a) subsections (10) and (12), as they read immediately before the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, continue to apply to the refusal of the application;

(b) the owner may continue the demolition or removal of the property; and

(c) section 43, as it read immediately before the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, continues to apply to the application. 2005, c. 6, s. 32 (5).

Transition, appeal to Board

(13) Within 90 days of the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, the owner of property situated in a heritage conservation district designated under section 41 who, before that day, had been refused an application to demolish or remove a building or structure from the property under subsection (4) by the council of a municipality, may appeal the decision to the Board if,

(a) the owner has lost his right to demolish or remove the building or structure 180 days after the day the council of the municipality refused the application under subsection (4) by virtue of subsection (11); and

(b) subsection (12) does not apply to the application. 2005, c. 6, s. 32 (5).

Notice of appeal

(14) An owner of property who wishes to appeal the decision of the council of a municipality under subsection (13) shall, within 90 days of the day the *Ontario Heritage Amendment Act, 2005* received Royal Assent, give notice of appeal to the Board and to the clerk of the municipality. 2005, c. 6, s. 32 (5).

Application

(15) Subsections (7) and (8) apply with necessary modification to an appeal under this section. 2005, c. 6, s. 32 (5).

Delegation

(16) The council of a municipality may delegate by by-law its power to grant permits for the alteration of property situated in a heritage conservation district designated under this Part to an employee or official of the municipality if the council has established a municipal heritage committee and consulted with it before the delegation. 2005, c. 6, s. 32 (6).

Same

(17) A by-law under subsection (16) may specify the alterations or classes of alterations in respect of which power to grant permits is delegated to the employee or official of the municipality. 2005, c. 6, s. 32 (6).

43. REPEALED: 2005, c. 6, s. 33.

44. REPEALED: 2005, c. 6, s. 33.

Application, ss. 36 to 39

45. Sections 36, 37, 38 and 39 apply in respect of any building or structure and the land appurtenant thereto that is situate within the area that has been designated by by-law under this Part as a heritage conservation district. R.S.O. 1990, c. O.18, s. 45.

Building standards by-law

45.1 (1) If a by-law passed under section 15.1 of the *Building Code Act, 1992* setting out standards for the maintenance of property in the municipality is in effect in a municipality, the council of the municipality may, by by-law,

(a) prescribe minimum standards for the maintenance of the heritage attributes of property situated in a heritage conservation district designated under this Part; and

(b) require property that is situated in a heritage conservation district designated under this Part and that does not comply with the standards to be repaired and maintained to conform with the standards. 2005, c. 6, s. 34.

Application

(2) Sections 15.2, 15.3, 15.4, 15.5 and 15.8 of the *Building Code Act, 1992* apply with necessary modifications to the enforcement of a by-law made under subsection (1). 2005, c. 6, s. 34.

Delegation

46. The council of a municipality that forms part of an upper-tier municipality may delegate its power under this Part to the council of the upper-tier municipality. 2002, c. 17, Sched. F, Table.

PART VI
CONSERVATION OF RESOURCES OF ARCHAEOLOGICAL VALUE

Definitions, Part VI

47. In this Part,

"designated property" means property that is designated by the Minister under this Part; ("bien désigné")

"property" means real property, but does not include buildings or structures other than ruins, burial mounds, petroglyphs and earthworks. ("bien") R.S.O. 1990, c. O.18, s. 47.

Licence, activity on archaeological sites

48. (1) Subject to subsection (2), no person shall do any of the following unless the person applies to the Minister and is issued a licence under this Part that allows the person to carry out the activity in question:

1. Carry out archaeological fieldwork.
2. Knowing that a site is a marine or other archaeological site, within the meaning of the regulations, alter the site or remove an artifact or any other physical evidence of past human use or activity from the site.
3. With respect to a marine archaeological site that is prescribed by regulation,
   i. Dive within 500 metres of the site or within any other distance of the site as may be prescribed by regulation.
   ii. Operate within 500 metres of the site or within any other distance of the site as may be prescribed by regulation any type of submersible vehicle, including a remotely operated vehicle, autonomous underwater vehicle or submarine.
   iii. Operate within 500 metres of the site or within any other distance of the site as may be prescribed by regulation any type of equipment, machine, device or thing capable of being used to conduct a survey, whether towed or not, including a side scan sonar or a camera. 2002, c. 18, Sched. F, s. 2 (27); 2005, c. 6, s. 35; 2009, c. 33, Sched. 11, s. 6 (15).

No licence required

(2) A licence is not required if,

(a) the site is prescribed, or belongs to a class of sites prescribed, by the regulations;

(b) the activity undertaken can be classified as normal agricultural work or the routine maintenance of property; or

(c) the activity undertaken is prescribed, or belongs to a class of activities prescribed, by the regulations. 2002, c. 18, Sched. F, s. 2 (27).

Same

(3) A licence is not required under subsection (1) if,

(a) a licensee under this Part,

Options

(4) If submissions are received by the Minister under subsection (2), the Minister may,

(a) appoint a hearing officer to conduct a hearing with respect to the proposed amendment and make a written recommendation on it;

(b) refer the matter to the Ontario Municipal Board to conduct a hearing with respect to the proposed amendment and make a written recommendation on it; or

(c) after considering the submissions, approve the proposed amendment in whole or in part or make modifications to it and approve the amendment as modified or refuse the proposed amendment in whole or in part. 1994, c. 23, Sched. A, s. 7 (4).

Submissions received

8. (1) If submissions are received by the Minister within the time specified by the Minister under clause 6 (7) (a) or (b), the Minister may,

(a) appoint a hearing officer to conduct a hearing with respect to the proposed amendment and make a written recommendation on it;

(b) refer the matter to the Ontario Municipal Board to conduct a hearing with respect to the proposed amendment and make a written recommendation on it;

(c) after considering the submissions, approve the proposed amendment in whole or in part or make modifications to it and approve the amendment as modified; or

(d) after considering the submissions, propose to refuse the proposed amendment in whole or in part. 1994, c. 23, Sched. A, s. 8 (1).

Proposed refusal

(2) If the Minister proposes to refuse a requested amendment under clause (1) (d), subsections 7 (2) to (4) apply with necessary modifications to the refusal. 1994, c. 23, Sched. A, s. 8 (2).

Hearing officer

9. (1) If a hearing officer is appointed, the Minister shall fix the time and place for a hearing and shall require that notice be given to such persons and public bodies and in such manner as the Minister may determine. 1994, c. 23, Sched. A, s. 9 (1).

Time of hearing

(2) At least 30 days notice shall be given before the hearing is held. 1994, c. 23, Sched. A, s. 9 (2).

Procedures

(3) The hearing officer may adopt rules of procedure for the hearing. 1994, c. 23, Sched. A, s. 9 (3).

Protection from personal liability

(4) A hearing officer is not personally liable for anything done by him or her in good faith in the execution of his or her duty under this Act or for any neglect or default in the execution in good faith of his or her duty. 1994, c. 23, Sched. A, s. 9 (4).

Presentation at hearing

(5) At any hearing, the proposed amendment and the reasons for it shall be presented by,

(a) the Minister, if the Minister initiated the proposed amendment; or

(b) the applicant, if the applicant initiated the proposed amendment. 1994, c. 23, Sched. A, s. 9 (5).

Report

(6) Not more than 30 days after the conclusion of the hearing or within such extended time as the Minister determines, the hearing officer shall make a written recommendation to the Minister and to the parties to the hearing recommending whether the Minister should approve the proposed amendment, in

whole or in part, make modifications and approve the amendment as modified or refuse the proposed amendment, in whole or in part, and giving reasons for the recommendation. 1994, c. 23, Sched. A, s. 9 (6).

Inspection

(7) The recommendation and the reasons for the recommendation of the hearing officer shall be made available to the public for inspection in the offices of the Ministry of Municipal Affairs and Housing, in the office of the clerk of each municipality or secretary-treasurer of the planning board which is within the area covered by the proposed amendment and in such other locations as the Minister determines. 1994, c. 23, Sched. A, s. 9 (7); 2002, c. 17, Sched. F, Table.

Hearing by O.M.B.

10. (1) If a matter is referred to the Ontario Municipal Board, it shall conduct a hearing. 1994, c. 23, Sched. A, s. 10 (1).

Notice

(2) Notice of the hearing shall be given to such persons or bodies and in such manner as the Board may determine and the Board shall make a written recommendation to the Minister stating whether the Minister should approve the proposed amendment, in whole or in part, make modifications and approve the amendment as modified or refuse the proposed amendment, in whole or in part, and giving reasons for the recommendation. 1994, c. 23, Sched. A, s. 10 (2).

Decision of the Minister

11. After considering the submissions and comments received and the recommendation of the hearing officer or the Ontario Municipal Board, the Minister may approve the proposed amendment, in whole or in part, make modifications and approve the amendment as modified or refuse the amendment, in whole or in part. 1994, c. 23, Sched. A, s. 11.

Notice of decision

12. The Minister shall forward a copy of his or her decision to the clerk of each municipality or secretary-treasurer of each planning board which is within the area covered by the proposed amendment, the parties to the hearing and such other persons or public bodies as the Minister may determine. 1994, c. 23, Sched. A, s. 12.

By-laws, etc., to conform to plan

13. Despite any other Act, if a development plan is in effect,

(a) no municipality or local board as defined in the *Municipal Affairs Act* having jurisdiction over the area covered by the plan or in any part of it and no ministry shall undertake any public work, any improvement of a structural nature or any other undertaking within the area covered by the development plan that conflicts with the plan; and

(b) no municipality or planning board having jurisdiction in such area shall pass a by-law for any purpose that conflicts with the plan. 1994, c. 23, Sched. A, s. 13; 2002, c. 17, Sched. F, Table.

Conflicts

14. Despite any other Act, if there is a conflict between a development plan and an official plan or zoning by-law covering part or all of the same area, the development plan prevails. 1994, c. 23, Sched. A, s. 14.

Resolutions of conflicts

15. (1) If, in the opinion of the Minister, an official plan or a zoning by-law is in conflict with a development plan that covers, in whole or in part, the same area, the Minister shall advise the council of the municipality or the planning board that adopted the official plan or that passed the zoning by-law of the particulars of the conflict and shall invite the municipality or the planning board to submit, within such time as the Minister specifies, proposals for the resolution of the conflict. 1994, c. 23, Sched. A, s. 15 (1).

Power to amend local plan

(2) If the council of a municipality or the planning board fails to submit proposals to resolve the conflict within the time specified by the Minister or, if after consultation with the Minister on such proposals, the conflict cannot be resolved and the Minister so notifies the council or the board in writing, the Minister may by order amend the official plan to make it conform to the development plan. 1994, c. 23, Sched. A, s. 15 (2).

Effect of order

(3) An order under subsection (2) shall have the same effect as though it were an amendment to the official plan adopted by the council of the municipality or the planning board and approved by the appropriate approval authority. 1994, c. 23, Sched. A, s. 15 (3).

Not regulation

(4) An order under subsection (2) is not a regulation within the meaning of Part III (Regulations) of the *Legislation Act, 2006*. 1994, c. 23, Sched. A, s. 15 (4); 2006, c. 21, Sched. F, s. 136 (1).

Official plan or zoning by-law required

16. (1) If a development plan is in effect in a municipality or any part of it and the municipality does not have an official plan in effect or has not passed a zoning by-law covering the municipality or that part of the municipality covered by the development plan, the council of the municipality, upon being notified in writing by the Minister, shall, within such time as is specified in the notice, prepare and adopt a plan for approval as an official plan or pass a zoning by-law that conforms to the development plan and submit the plan for approval. 1994, c. 23, Sched. A, s. 16 (1).

Official plan or zoning by-law required

(2) If a development plan is in effect in a planning area or any part of it and the planning board does not have an official plan in effect or has not passed a zoning by-law covering that part of the planning area consisting of territory without municipal organization that is covered by the development plan, the planning board, upon being notified in writing by the Minister, shall, within such time as is specified in the notice, prepare and adopt a plan for approval as an official plan or pass a zoning by-law that conforms to the development plan and submit the plan for approval. 1994, c. 23, Sched. A, s. 16 (2).

Minister's order

17. (1) The Minister may, in respect of any land in the area covered by a development plan, make orders exercising any of the powers conferred upon the Minister under clause 47 (1) (a) and subsection 47 (2) of the *Planning Act*. 1994, c. 23, Sched. A, s. 17 (1).

Same

(2) Section 3 of the *Planning Act* does not apply to an order under subsection (1) and an order need not conform to an official plan in effect in the area covered by the order. 1994, c. 23, Sched. A, s. 17 (2).

Zoning orders

18. Nothing in this Act derogates from the power of the Minister to make an order under section 47 of the *Planning Act* even if there is a development plan in effect in the area to be covered by the order. 1994, c. 23, Sched. A, s. 18.

Power to acquire land

19. (1) For the purpose of developing any feature of a development plan, the Minister may, in the name of Her Majesty, acquire by purchase, lease or otherwise or, subject to the *Expropriations Act*, expropriate any land or interest in it within the area covered by the plan and sell, lease or otherwise dispose of any such land or interest. 1994, c. 23, Sched. A, s. 19 (1).

Designated minister

(2) The Lieutenant Governor in Council may designate any minister of the Crown to have responsibility over any land acquired under subsection (1) and the minister so designated may, for the purpose of developing any feature of the development plan,

(a) clear, grade or otherwise prepare the land for development or construct, repair or improve buildings, works and facilities on it; or

(b) sell, lease or otherwise dispose of any of the land or interest in it. 1994, c. 23, Sched. A, s. 19 (2).

Financial assistance

20. If a development plan is in effect, the Minister may provide financial assistance to any person, organization or corporation, including a municipal corporation or a planning board, undertaking any policy or program that implements the plan, including expenditures incurred in preparing a plan for adoption as an official plan, an official plan amendment or a zoning by-law. 1994, c. 23, Sched. A, s. 20.

Regulations

21. The Minister may make regulations prescribing information and material that must be submitted in an application to amend any development plan. 1994, c. 23, Sched. A, s. 21.

Transition, Parkway Belt Plan

22. (1) The Parkway Belt Plan, also known as the Parkway Belt West Plan, shall be deemed to be a plan under this Act. 1994, c. 23, Sched. A, s. 22 (1).

Applications continued

(2) An application for an amendment to the Parkway Belt Plan, also known as the Parkway Belt West Plan, shall be deemed to have been made and shall be continued under this Act. 1994, c. 23, Sched. A, s. 22 (2).

Land use regulations

(3) A land use regulation made under section 4 of the *Parkway Belt Planning and Development Act* shall be deemed to be an order under section 17. 1994, c. 23, Sched. A, s. 22 (3).

Amendments

(4) An application for an amendment to a land use regulation made under section 4 of the *Parkway Belt Planning and Development Act* shall be deemed to have been made and shall be continued under section 17. 1994, c. 23, Sched. A, s. 22 (4).

Development planning areas

(5) A development planning area established under the *Parkway Belt Planning and Development Act* shall be deemed to be a development planning area under this Act. 1994, c. 23, Sched. A, s. 22 (5).

Proposed development plan

(6) A proposed development plan commenced under the *Ontario Planning and Development Act* (R.S.O. 1990, c. O.35) shall be continued under this Act. 1994, c. 23, Sched. A, s. 22 (6).

Amendments to the Parkway Belt Plan

22.1 (1) On the day section 27 of the *Greenbelt Act, 2005* comes into force,

(a) the Parkway Belt Plan, also known as the Parkway Belt West Plan, referred to in section 22 shall cease to apply to the lands that are part of the Niagara Escarpment Planning Area and described in paragraphs 26, 30, 31 and 33 of the Schedule to Regulation 684 of the Revised Regulations of Ontario, 1980 (as the Schedule read on December 31, 1990); and

(b) the provisions of the Parkway Belt Plan, also known as the Parkway Belt West Plan, that describe the lands to which the Plan applies shall be deemed not to refer to the lands referred to in clause (a). 2005, c. 1, s. 27.

Non-application

leased or otherwise disposed of unless the person or authority to whom it is disposed of enters into a written agreement with the municipality that the person or authority will keep and maintain the land and building and the use thereof in conformity with the community improvement plan until such a by-law or amending by-law is in force, but the municipality may, during the period of the development of the plan, lease any land or any building or part thereof in the area for any purpose, whether or not in conformity with the community improvement plan, for a term of not more than three years at any one time. R.S.O. 1990, c. P.13, s. 28 (10).

Registration of agreement

(11) An agreement concerning a grant or loan made under subsection (7) or an agreement entered into under subsection (10), may be registered against the land to which it applies and the municipality shall be entitled to enforce the provisions thereof against any party to the agreement and, subject to the provisions of the *Registry Act* and the *Land Titles Act*, against any and all subsequent owners or tenants of the land. R.S.O. 1990, c. P.13, s. 28 (11); 2006, c. 23, s. 14 (10).

Debentures

(12) Despite subsection 408 (3) of the *Municipal Act, 2001* or any regulation under section 256 of the *City of Toronto Act, 2006*, debentures issued by the municipality for the purpose of this section may be for such term of years as the debenture by-law, with the approval of the Municipal Board, provides. 2002, c. 17, Sched. B, s. 9; 2006, c. 32, Sched. C, s. 47 (4).

Dissolution of area

(13) When the council is satisfied that the community improvement plan has been carried out, the council may, by by-law, dissolve the community improvement project area. R.S.O. 1990, c. P.13, s. 28 (13).

Agreement re studies and development

29. (1) A municipality, with the approval of the Minister, may enter into agreement with any governmental authority or any agency thereof created by statute, for the carrying out of studies and the preparation and implementation of plans and programs for the development or improvement of the municipality.

Where approval of Minister not required

(2) Despite subsection (1), a municipality may enter into agreement with one or more other municipalities under subsection (1) without the approval of the Minister. R.S.O. 1990, c. P.13, s. 29.

Agreements for grants in aid of community improvement

30. The Minister, with the approval of the Lieutenant Governor in Council, and a municipality may enter into agreement providing for payment to the municipality on such terms and conditions and in such amounts as may be approved by the Lieutenant Governor in Council to assist in the community improvement of a community improvement project area as defined in section 28, including the carrying out of studies for the purpose of selecting areas for community improvement. R.S.O. 1990, c. P.13, s. 30.

31. REPEALED: 1997, c. 24, s. 226 (1).

Note: Despite the repeal of section 31, an order made under that section is continued as an order made under the corresponding provision of the *Building Code Act, 1992*. See: 1997, c. 24, ss. 226 (2), 228.

Grants or loans for repairs

32. (1) When a by-law under section 15.1 of the *Building Code Act, 1992* is in force in a municipality, the council of the municipality may pass a by-law for providing for the making of grants or loans to the registered owners or assessed owners of lands in respect of which an order has been made under subsection 15.2 (2) of that Act to pay for the whole or any part of the cost of the repairs required to be done, or of the clearing, grading and levelling of the lands, on such terms and conditions as the council may prescribe. R.S.O. 1990, c. P.13, s. 32 (1); 1997, c. 24, s. 226 (3).

Loans collected as taxes, lien on land

(2) The amount of any loan made under a by-law passed under this section, together with interest at a rate to be determined by the council, may be added by the clerk of the municipality to the collector's roll

and collected in like manner as municipal taxes over a period fixed by the council, and such amount and interest shall, until payment thereof, be a lien or charge upon the land in respect of which the loan has been made.

Registration of certificate

(3) A certificate signed by the clerk of the municipality setting out the amount loaned to any owner under a by-law passed under this section, including the rate of interest thereon, together with a description of the land in respect of which the loan has been made, sufficient for registration, shall be registered in the proper land registry office against the land, and, upon repayment in full to the municipality of the amount loaned and interest thereon, a certificate signed by the clerk of the municipality showing such repayment shall be similarly registered, and thereupon the lien or charge upon the land in respect of which the loan was made is discharged. R.S.O. 1990, c. P.13, s. 32 (2, 3).

Demolition control area

33. (1) In this section,

"dwelling unit" means any property that is used or designed for use as a domestic establishment in which one or more persons may sleep and prepare and serve meals; ("logement")

"residential property" means a building that contains one or more dwelling units, but does not include subordinate or accessory buildings the use of which is incidental to the use of the main building. ("immeuble d'habitation") R.S.O. 1990, c. P.13, s. 33 (1).

Establishment of demolition control area by by-law

(2) When a by-law under section 15.1 of the *Building Code Act, 1992* or a predecessor thereof is in force in a municipality or when a by-law prescribing standards for the maintenance and occupancy of property under any special Act is in force in a municipality, the council of the local municipality may by by-law designate any area within the municipality to which the standards of maintenance and occupancy by-law applies as an area of demolition control and thereafter no person shall demolish the whole or any part of any residential property in the area of demolition control unless the person is the holder of a demolition permit issued by the council under this section. R.S.O. 1990, c. P.13, s. 33 (2); 1997, c. 24, s. 226 (4).

Council may issue or refuse to issue permit

(3) Subject to subsection (6), where application is made to the council for a permit to demolish residential property, the council may issue the permit or refuse to issue the permit.

Appeal to O.M.B.

(4) Where the council refuses to issue the permit or neglects to make a decision thereon within thirty days after the receipt by the clerk of the municipality of the application, the applicant may appeal to the Municipal Board and the Board shall hear the appeal and either dismiss the same or direct that the demolition permit be issued, and the decision of the Board shall be final.

Notice of appeal

(5) The person appealing to the Municipal Board under subsection (4) shall, in such manner and to such persons as the Board may direct, give notice of the appeal to the Board.

Application for demolition permit where building permit issued

(6) Subject to subsection (7), the council shall, on application therefor, issue a demolition permit where a building permit has been issued to erect a new building on the site of the residential property sought to be demolished.

Conditions of demolition permit

(7) A demolition permit under subsection (6) may be issued on the condition that the applicant for the permit construct and substantially complete the new building to be erected on the site of the residential property proposed to be demolished by not later than such date as the permit specifies, such date being not less than two years from the day demolition of the existing residential property is commenced, and on the condition that on failure to complete the new building within the time specified in the permit, the clerk of the municipality shall be entitled to enter on the collector's roll, to be collected in like manner as municipal taxes, such sum of money as the permit specifies, but not in any case to exceed the sum of $20,000 for each dwelling unit contained in the residential property in respect of which the demolition

permit is issued and such sum shall, until payment thereof, be a lien or charge upon the land in respect of which the permit to demolish the residential property is issued.

Registration of notice

(8) Notice of any condition imposed under subsection (7) may be registered in the proper land registry office against the land to which it applies.

Registration of certificate

(9) Where the clerk of the municipality adds a sum of money to the collector's roll under subsection (7), a certificate signed by the clerk setting out the sum added to the roll, together with a description of the land in respect of which the sum has been added to the roll, sufficient for registration, shall be registered in the proper land registry office against the land, and upon payment in full to the municipality of the sum added to the roll, a certificate signed by the clerk of the municipality showing such payment shall be similarly registered, and thereupon the lien or charge upon the land in respect of which the sum was added to the roll is discharged.

Appeal to O.M.B.

(10) Where an applicant for a demolition permit under subsection (6) is not satisfied as to the conditions on which the demolition permit is proposed to be issued, the applicant may appeal to the Municipal Board for a variation of the conditions and, where an appeal is brought, the Board shall hear the appeal and may dismiss the same or may direct that the conditions upon which the permit shall be issued be varied in such manner as the Board considers appropriate, and the decision of the Board shall be final.

Application to council for relief from conditions of demolition permit

(11) Where a condition has been imposed under subsection (7) and the holder of the demolition permit considers that it is not possible to complete the new building within the time specified in the permit or where the holder of the permit is of the opinion that the construction of the new building has become not feasible on economic or other grounds, the permit holder may apply to the council of the municipality for relief from the conditions on which the permit was issued.

Notice of application

(12) Notice of application under subsection (11) shall be sent by registered mail to the clerk of the municipality not less than sixty days before the time specified in the permit for the completion of the new building and, where the council under subsection (14) extends the time for completion of the new building, application may similarly be made for relief by sending notice of application not less than sixty days before the expiry of the extended completion time.

Extension of time

(13) Despite subsection (12), the council may, at any time, extend the date specified in that subsection for the making of an application for relief from the conditions on which the permit was issued.

Powers of council on application

(14) Where an application is made under subsection (11), the council shall consider the application and may grant the same or may extend the time for completion of the new building for such period of time and on such terms and conditions as the council considers appropriate or the council may relieve the person applying from the requirement of constructing the new building.

Appeal to O.M.B.

(15) Any person who has made application to the council under subsection (11) may appeal from the decision of the council to the Municipal Board within twenty days of the mailing of the notice of the decision, or where the council refuses or neglects to make a decision thereon within thirty days after the receipt by the clerk of the application, the applicant may appeal to the Municipal Board and the Board shall hear the appeal and the Board on the appeal has the same powers as the council has under subsection (14) and the decision of the Board shall be final.

Offence

(16) Every person who demolishes a residential property, or any portion thereof, in contravention of subsection (2) is guilty of an offence and on conviction is liable to a fine of not more than $50,000 for

each dwelling unit contained in the residential property, the whole or any portion of which residential property has been demolished.

Standards for health and safety remain in force

(17) The provisions of any general or special Act and any by-law passed thereunder respecting standards relating to the health or safety of the occupants of buildings and structures remain in full force and effect in respect of residential property situate within an area of demolition control. R.S.O. 1990, c. P.13, s. 33 (3-17).

Certain proceedings stayed

(18) Subject to subsection (17), an application to the council for a permit to demolish any residential property operates as a stay to any proceedings that may have been initiated under any by-law under section 15.1 of the *Building Code Act, 1992* or a predecessor thereof or under any special Act respecting maintenance or occupancy standards in respect of the residential property sought to be demolished, until the council disposes of the application, or where an appeal is taken under subsection (4), until the Municipal Board has heard the appeal and issued its order thereon. R.S.O. 1990, c. P.13, s. 33 (18); 1997, c. 24, s. 226 (5).

Exemption re Building Code

(19) Where a permit to demolish residential property is obtained under this section, it is not necessary for the holder thereof to obtain the permit mentioned in subsection 8 (1) of the *Building Code Act, 1992*. R.S.O. 1990, c. P.13, s. 33 (19); 1997, c. 24, s. 226 (6).

PART V
LAND USE CONTROLS AND RELATED ADMINISTRATION

Zoning by-laws

34. (1) Zoning by-laws may be passed by the councils of local municipalities:

Restricting use of land

1. For prohibiting the use of land, for or except for such purposes as may be set out in the by-law within the municipality or within any defined area or areas or abutting on any defined highway or part of a highway.

Restricting erecting, locating or using of buildings

2. For prohibiting the erecting, locating or using of buildings or structures for or except for such purposes as may be set out in the by-law within the municipality or within any defined area or areas or upon land abutting on any defined highway or part of a highway.

Marshy lands, etc.

3. For prohibiting the erection of any class or classes of buildings or structures on land that is subject to flooding or on land with steep slopes, or that is rocky, low-lying, marshy, unstable, hazardous, subject to erosion or to natural or artificial perils.

Contaminated lands; sensitive or vulnerable areas

3.1 For prohibiting any use of land and the erecting, locating or using of any class or classes of buildings or structures on land,

i. that is contaminated,

ii. that contains a sensitive groundwater feature or a sensitive surface water feature, or

iii. that is within an area identified as a vulnerable area in a drinking water source protection plan that has taken effect under the *Clean Water Act, 2006*.

Natural features and areas

3.2 For prohibiting any use of land and the erecting, locating or using of any class or classes of buildings or structures within any defined area or areas,

i. that is a significant wildlife habitat, wetland, woodland, ravine, valley or area of natural and scientific interest,

ii. that is a significant corridor or shoreline of a lake, river or stream, or

iii. that is a significant natural corridor, feature or area.

Significant archaeological resources

3.3 For prohibiting any use of land and the erecting, locating or using of any class or classes of buildings or structures on land that is the site of a significant archaeological resource.

Construction of buildings or structures

4. For regulating the type of construction and the height, bulk, location, size, floor area, spacing, character and use of buildings or structures to be erected or located within the municipality or within any defined area or areas or upon land abutting on any defined highway or part of a highway, and the minimum frontage and depth of the parcel of land and the proportion of the area thereof that any building or structure may occupy.

Minimum elevation of doors, etc.

5. For regulating the minimum elevation of doors, windows or other openings in buildings or structures or in any class or classes of buildings or structures to be erected or located within the municipality or within any defined area or areas of the municipality.

Loading or parking facilities

6. For requiring the owners or occupants of buildings or structures to be erected or used for a purpose named in the by-law to provide and maintain loading or parking facilities on land that is not part of a highway. R.S.O. 1990, c. P.13, s. 34 (1); 1994, c. 23, s. 21 (1, 2); 1996, c. 4, s. 20 (1-3); 2006, c. 22, s. 115.

Pits and quarries

(2) The making, establishment or operation of a pit or quarry shall be deemed to be a use of land for the purposes of paragraph 1 of subsection (1). R.S.O. 1990, c. P.13, s. 34 (2).

Area, density and height

(3) The authority to regulate provided in paragraph 4 of subsection (1) includes and, despite the decision of any court, shall be deemed always to have included the authority to regulate the minimum area of the parcel of land mentioned therein and to regulate the minimum and maximum density and the minimum and maximum height of development in the municipality or in the area or areas defined in the by-law. 2006, c. 23, s. 15 (1).

City of Toronto

(3.1) Subsection (3) does not apply with respect to the City of Toronto. 2006, c. 23, s. 15 (2).

Interpretation

(4) A trailer as defined in subsection 164 (4) of the *Municipal Act, 2001* or subsection 3 (1) of the *City of Toronto Act, 2006*, as the case may be, and a mobile home as defined in subsection 46 (1) of this Act are deemed to be buildings or structures for the purpose of this section. 2006, c. 32, Sched. C, s. 47 (5).

Prohibition of use of land, etc., availability of municipal services

(5) A by-law passed under paragraph 1 or 2 of subsection (1) or a predecessor of that paragraph may prohibit the use of land or the erection or use of buildings or structures unless such municipal services as may be set out in the by-law are available to service the land, buildings or structures, as the case may be. R.S.O. 1990, c. P.13, s. 34 (5).

Certificates of occupancy

(6) A by-law passed under this section may provide for the issue of certificates of occupancy without which no change may be made in the type of use of any land covered by the by-law or of any building or structure on any such land, but no such certificate shall be refused if the proposed use is not prohibited by the by-law. R.S.O. 1990, c. P.13, s. 34 (6).

Use of maps

(7) Land within any area or areas or abutting on any highway or part of a highway may be defined by the use of maps to be attached to the by-law and the information shown on such maps shall form part of the by-law to the same extent as if included therein. R.S.O. 1990, c. P.13, s. 34 (7).

Acquisition and disposition of non-conforming lands

(8) The council may acquire any land, building or structure used or erected for a purpose that does not conform with a by-law passed under this section and any vacant land having a frontage or depth less than the minimum established for the erection of a building or structure in the defined area in which such land is situate, and the council may dispose of any of such land, building or structure or may exchange any of such land for other land within the municipality. R.S.O. 1990, c. P.13, s. 34 (8); 1996, c. 4, s. 20 (4).

Excepted lands and buildings

(9) No by-law passed under this section applies,

(a) to prevent the use of any land, building or structure for any purpose prohibited by the by-law if such land, building or structure was lawfully used for such purpose on the day of the passing of the by-law, so long as it continues to be used for that purpose; or

(b) to prevent the erection or use for a purpose prohibited by the by-law of any building or structure for which a permit has been issued under subsection 8 (1) of the *Building Code Act, 1992*, prior to the day of the passing of the by-law, so long as the building or structure when erected is used and continues to be used for the purpose for which it was erected and provided the permit has not been revoked under subsection 8 (10) of that Act. R.S.O. 1990, c. P.13, s. 34 (9); 2009, c. 33, Sched. 21, s. 10 (1).

By-law may be amended

(10) Despite any other provision of this section, any by-law passed under this section or a predecessor of this section may be amended so as to permit the extension or enlargement of any land, building or structure used for any purpose prohibited by the by-law if such land, building or structure continues to be used in the same manner and for the same purpose as it was used on the day such by-law was passed. R.S.O. 1990, c. P.13, s. 34 (10).

Consultation

(10.0.1) The council,

(a) shall permit applicants to consult with the municipality before submitting applications to amend by-laws passed under this section; and

(b) may, by by-law, require applicants to consult with the municipality as described in clause (a). 2006, c. 23, s. 15 (3).

Prescribed information

(10.1) A person or public body that applies for an amendment to a by-law passed under this section or a predecessor of this section shall provide the prescribed information and material to the council. 1996, c. 4, s. 20 (5).

Other information

(10.2) A council may require that a person or public body that applies for an amendment to a by-law passed under this section or a predecessor of this section provide any other information or material that the council considers it may need, but only if the official plan contains provisions relating to requirements under this subsection. 2006, c. 23, s. 15 (4).

Refusal and timing

(10.3) Until the council has received the information and material required under subsections (10.1) and (10.2), if any, and any fee under section 69,

(a) the council may refuse to accept or further consider the application for an amendment to the by-law; and

(b) the time period referred to in subsection (11) does not begin. 2006, c. 23, s. 15 (4).

Response re completeness of application

(10.4) Within 30 days after the person or public body that makes the application for an amendment to a by-law pays any fee under section 69, the council shall notify the person or public body that the information and material required under subsections (10.1) and (10.2), if any, have been provided, or that they have not been provided, as the case may be. 2006, c. 23, s. 15 (4).

Motion re dispute

(10.5) Within 30 days after a negative notice is given under subsection (10.4), the person or public body or the council may make a motion for directions to have the Municipal Board determine,

(a) whether the information and material have in fact been provided; or

(b) whether a requirement made under subsection (10.2) is reasonable. 2006, c. 23, s. 15 (4).

Same

(10.6) If the council does not give any notice under subsection (10.4), the person or public body may make a motion under subsection (10.5) at any time after the 30-day period described in subsection (10.4) has elapsed. 2006, c. 23, s. 15 (4).

Notice of particulars and public access

(10.7) Within 15 days after the council gives an affirmative notice under subsection (10.4), or within 15 days after the Municipal Board advises the clerk of its affirmative decision under subsection (10.5), as the case may be, the council shall,

(a) give the prescribed persons and public bodies, in the prescribed manner, notice of the application for an amendment to a by-law, accompanied by the prescribed information; and

(b) make the information and material provided under subsections (10.1) and (10.2) available to the public. 2006, c. 23, s. 15 (4).

Final determination

(10.8) The Municipal Board's determination under subsection (10.5) is not subject to appeal or review. 2006, c. 23, s. 15 (4).

Notice of refusal

(10.9) When a council refuses an application to amend its by-law, it shall, not later than 15 days after the day of the refusal, ensure that written notice of the refusal, containing the prescribed information, is given to,

(a) the person or public body that made the application;

(b) each person and public body that filed a written request to be notified of a refusal; and

(c) any prescribed person or public body. 2006, c. 23, s. 15 (4).

Appeal to O.M.B.

(11) Where an application to the council for an amendment to a by-law passed under this section or a predecessor of this section is refused or the council refuses or neglects to make a decision on it within 120 days after the receipt by the clerk of the application, any of the following may appeal to the Municipal Board by filing a notice of appeal with the clerk of the municipality:

1. The applicant.
2. The Minister. 2006, c. 23, s. 15 (5).

Consolidated Hearings Act

(11.0.1) Despite the *Consolidated Hearings Act*, the proponent of an undertaking shall not give notice to the Hearings Registrar under subsection 3 (1) of that Act in respect of an application for an amendment to a by-law unless the council has made a decision on the application or the time period referred to in subsection (11) has expired. 2006, c. 23, s. 15 (5).

Appeal to O.M.B.

(11.0.2) The Municipal Board shall hear the appeal under subsection (11) and shall,

(a) dismiss it;

(b) amend the by-law in such manner as the Board may determine; or

(c) direct that the by-law be amended in accordance with the Board's order. 2006, c. 23, s. 15 (5).

Time for filing certain appeals

(11.0.3) A notice of appeal under subsection (11) with respect to the refusal of an application shall be filed no later than 20 days after the day that the giving of notice under subsection (10.9) is completed. 2006, c. 23, s. 15 (5).

Appeals restricted re certain amendments

(11.0.4) Despite subsection (11), there is no appeal in respect of all or any part of an application for an amendment to a by-law if the amendment or part of the amendment proposes to implement,

(a) an alteration to all or any part of the boundary of an area of settlement; or

(b) a new area of settlement. 2006, c. 23, s. 15 (5).

Same

(11.0.5) Despite subsection (11), if the official plan contains policies dealing with the removal of land from areas of employment, there is no appeal in respect of all or any part of an application for an amendment to a by-law if the amendment or part of the amendment proposes to remove any land from an area of employment, even if other land is proposed to be added. 2006, c. 23, s. 15 (5).

Withdrawal of appeal

(11.1) If all appeals under subsection (11) are withdrawn, the secretary of the Municipal Board shall notify the clerk of the municipality and the decision of the council is final and binding or the council may proceed to give notice of the public meeting or pass or refuse to pass the by-law, as the case may be. 1999, c. 12, Sched. M, s. 25 (1).

Information and public meeting; open house in certain circumstances

(12) Before passing a by-law under this section, except a by-law passed pursuant to an order of the Municipal Board made under subsection (11.0.2) or (26),

(a) the council shall ensure that,

(i) sufficient information and material is made available to enable the public to understand generally the zoning proposal that is being considered by the council, and

(ii) at least one public meeting is held for the purpose of giving the public an opportunity to make representations in respect of the proposed by-law; and

(b) in the case of a by-law that is required by subsection 26 (9) or is related to a development permit system, the council shall ensure that at least one open house is held for the purpose of giving the public an opportunity to review and ask questions about the information and material made available under subclause (a) (i). 2006, c. 23, s. 15 (6); 2009, c. 33, Sched. 21, s. 10 (2).

Notice

(13) Notice of the public meeting required under subclause (12) (a) (ii) and of the open house, if any, required by clause (12) (b),

(a) shall be given to the prescribed persons and public bodies, in the prescribed manner; and

(b) shall be accompanied by the prescribed information. 2006, c. 23, s. 15 (6).

Timing of open house

(14) The open house required by clause (12) (b) shall be held no later than seven days before the public meeting required under subclause (12) (a) (ii) is held. 2006, c. 23, s. 15 (6).

Timing of public meeting

(14.1) The public meeting required under subclause (12) (a) (ii) shall be held no earlier than 20 days after the requirements for giving notice have been complied with. 2006, c. 23, s. 15 (6).

Participation in public meeting

(14.2) Every person who attends a public meeting required under subclause (12) (a) (ii) shall be given an opportunity to make representations in respect of the proposed by-law. 2006, c. 23, s. 15 (6).

Alternative procedure

(14.3) If an official plan sets out alternative measures for informing and securing the views of the public in respect of proposed zoning by-laws, and if those measures are complied with, subsections (12) to (14.2) do not apply to the proposed by-laws, but subsections (14.4) and (14.6) do apply. 2006, c. 23, s. 15 (6).

Open house

(14.4) If subsection (14.3) applies and the proposed by-law is required by subsection 26 (9) or is related to a development permit system,

(a) the council shall ensure that at least one open house is held for the purpose of giving the public an opportunity to review and ask questions about the proposed by-law; and

(b) if a public meeting is also held, the open house shall be held no later than seven days before the public meeting. 2006, c. 23, s. 15 (6).

Information

(14.5) At a public meeting under subclause (12) (a) (ii), the council shall ensure that information is made available to the public regarding who is entitled to appeal under subsections (11) and (19). 2006, c. 23, s. 15 (6).

Where alternative procedures followed

(14.6) If subsection (14.3) applies, the information required under subsection (14.5) shall be made available to the public at a public meeting or in the manner set out in the official plan for informing and securing the views of the public in respect of proposed zoning by-laws. 2006, c. 23, s. 15 (6).

Information to public bodies

(15) The council shall forward to such public bodies as the council considers may have an interest in the zoning proposal sufficient information to enable them to understand it generally and such information shall be forwarded not less than twenty days before passing a by-law implementing the proposal. R.S.O. 1990, c. P.13, s. 34 (15); 1994, c. 23, s. 21 (5).

Conditions

(16) If the official plan in effect in a municipality contains policies relating to zoning with conditions, the council of the municipality may, in a by-law passed under this section, permit a use of land or the erection, location or use of buildings or structures and impose one or more prescribed conditions on the use, erection or location. 2006, c. 23, s. 15 (7).

Same

(16.1) The prescribed conditions referred to in subsection (16) may be made subject to such limitations as may be prescribed. 2006, c. 23, s. 15 (7).

Same

(16.2) When a prescribed condition is imposed under subsection (16),

(a) the municipality may require an owner of land to which the by-law applies to enter into an agreement with the municipality relating to the condition;

(b) the agreement may be registered against the land to which it applies; and

(c) the municipality may enforce the agreement against the owner and, subject to the *Registry Act* and the *Land Titles Act*, any and all subsequent owners of the land. 2006, c. 23, s. 15 (7).

City of Toronto

(16.3) Subsections (16), (16.1) and (16.2) do not apply with respect to the City of Toronto. 2006, c. 23, s. 15 (8).

Further notice

(17) Where a change is made in a proposed by-law after the holding of the public meeting mentioned in subclause (12) (a) (ii), the council shall determine whether any further notice is to be given in respect of the proposed by-law and the determination of the council as to the giving of further notice is final and not subject to review in any court irrespective of the extent of the change made in the proposed by-law. R.S.O. 1990, c. P.13, s. 34 (17); 2006, c. 23, s. 15 (9).

Notice of passing of by-law

(18) If the council passes a by-law under this section, except a by-law passed pursuant to an order of the Municipal Board made under subsection (11.0.2) or (26), the clerk of the municipality shall give written notice of the passing of the by-law not later than 15 days after the day the by-law is passed in the manner and in the form and to the persons or public bodies prescribed and the notice shall contain the prescribed information. 1994, c. 23, s. 21 (7); 1996, c. 4, s. 20 (7); 2009, c. 33, Sched. 21, s. 10 (3).

Appeal to O.M.B.

(19) Not later than 20 days after the day that the giving of notice as required by subsection (18) is completed, any of the following may appeal to the Municipal Board by filing with the clerk of the municipality a notice of appeal setting out the objection to the by-law and the reasons in support of the objection, accompanied by the fee prescribed under the *Ontario Municipal Board Act*:

1. The applicant.
2. A person or public body who, before the by-law was passed, made oral submissions at a public meeting or written submissions to the council.
3. The Minister. 2006, c. 23, s. 15 (10).

No appeal re second unit policies

(19.1) Despite subsection (19), there is no appeal in respect of a by-law that gives effect to the policies described in subsection 16 (3), including, for greater certainty, no appeal in respect of any requirement or standard in such a by-law. 2011, c. 6, Sched. 2, s. 5.

When giving of notice deemed completed

(20) For the purposes of subsection (19), the giving of written notice shall be deemed to be completed,

(a) where notice is given by publication in a newspaper, on the day that such publication occurs;

(b) where notice is given by personal service, on the day that the serving of all required notices is completed;

(c) where notice is given by mail, on the day that the mailing of all required notices is completed; and

(d) where notice is given by telephone transmission of a facsimile of the notice, on the day that the transmission of all required notices is completed. R.S.O. 1990, c. P.13, s. 34 (20); 1994, c. 23, s. 21 (9).

When by-law deemed to have come into force

(21) When no notice of appeal is filed under subsection (19), the by-law shall be deemed to have come into force on the day it was passed except that where the by-law is passed under circumstances mentioned in subsection 24 (2) the by-law shall not be deemed to have come into force on the day it was passed until the amendment to the official plan comes into effect. R.S.O. 1990, c. P.13, s. 34 (21); 1994, c. 23, s. 21 (10); 1996, c. 4, s. 20 (8).

Affidavit re no appeal, etc.

(22) An affidavit or declaration of an employee of the municipality that notice was given as required by subsection (18) or that no notice of appeal was filed under subsection (19) within the time allowed for appeal shall be conclusive evidence of the facts stated therein. R.S.O. 1990, c. P.13, s. 34 (22); 1996, c. 4, s. 20 (9).

Record

(23) The clerk of a municipality who receives a notice of appeal under subsection (11) or (19) shall ensure that,

(a) a record that includes the prescribed information and material is compiled;

(b) the notice of appeal, record and fee are forwarded to the Municipal Board within 15 days after the last day for filing a notice of appeal under subsection (11.0.3) or (19), as the case may be; and

(c) such other information or material as the Municipal Board may require in respect of the appeal is forwarded to the Board. 2006, c. 23, s. 15 (11).

Withdrawal of appeals

(23.1) If all appeals to the Municipal Board under subsection (19) are withdrawn and the time for appealing has expired, the secretary of the Board shall notify the clerk of the municipality and the decision of the council is final and binding. 1993, c. 26, s. 53 (3).

Exception

(23.2) Despite clause (23) (b), if all appeals under subsection (19) are withdrawn within 15 days after the last day for filing a notice of appeal, the municipality is not required to forward the materials described under clauses (23) (b) and (c) to the Municipal Board. 1999, c. 12, Sched. M, s. 25 (2).

Decision final

(23.3) If all appeals to the Municipal Board under subsection (19) are withdrawn within 15 days after the last day for filing a notice of appeal, the decision of the council is final and binding. 1999, c. 12, Sched. M, s. 25 (2).

Hearing and notice thereof

(24) On an appeal to the Municipal Board, the Board shall hold a hearing of which notice shall be given to such persons or bodies and in such manner as the Board may determine. R.S.O. 1990, c. P.13, s. 34 (24).

Restriction re adding parties

(24.1) Despite subsection (24), in the case of an appeal under subsection (11) that relates to all or part of an application for an amendment to a by-law that is refused, or in the case of an appeal under subsection (19), only the following may be added as parties:

1. A person or public body who satisfies one of the conditions set out in subsection (24.2).
2. The Minister. 2006, c. 23, s. 15 (12).

Same

(24.2) The conditions mentioned in paragraph 1 of subsection (24.1) are:

1. Before the by-law was passed, the person or public body made oral submissions at a public meeting or written submissions to the council.
2. The Municipal Board is of the opinion that there are reasonable grounds to add the person or public body as a party. 2006, c. 23, s. 15 (12).

New information and material at hearing

(24.3) This subsection applies if information and material that is presented at the hearing of an appeal described in subsection (24.1) was not provided to the municipality before the council made the decision that is the subject of the appeal. 2006, c. 23, s. 15 (12).

Same

(24.4) When subsection (24.3) applies, the Municipal Board may, on its own initiative or on a motion by the municipality or any party, consider whether the information and material could have materially affected the council's decision, and if the Board determines that it could have done so, it shall not be admitted into evidence until subsection (24.5) has been complied with and the prescribed time period has elapsed. 2006, c. 23, s. 15 (12).

Notice to council

(24.5) The Municipal Board shall notify the council that it is being given an opportunity to,

(a) reconsider its decision in light of the information and material; and

(b) make a written recommendation to the Board. 2006, c. 23, s. 15 (12).

Council's recommendation

(24.6) The Municipal Board shall have regard to the council's recommendation if it is received within the time period mentioned in subsection (24.4), and may but is not required to do so if it is received afterwards. 2006, c. 23, s. 15 (12).

Conflict with *SPPA*

(24.7) Subsections (24.1) to (24.6) apply despite the *Statutory Powers Procedure Act*. 2006, c. 23, s. 15 (12).

Dismissal without hearing

(25) Despite the *Statutory Powers Procedure Act* and subsections (11.0.2) and (24), the Municipal Board may dismiss all or part of an appeal without holding a hearing, on its own initiative or on the motion of any party, if,

(a) it is of the opinion that,

(i) the reasons set out in the notice of appeal do not disclose any apparent land use planning ground upon which the Board could allow all or part of the appeal,

(ii) the appeal is not made in good faith or is frivolous or vexatious,

(iii) the appeal is made only for the purpose of delay, or

(iv) the appellant has persistently and without reasonable grounds commenced before the Board proceedings that constitute an abuse of process;

(a.1) REPEALED: 2006, c. 23, s. 15 (15).

(b) the appellant has not provided written reasons for the appeal;

(c) the appellant has not paid the fee prescribed under the *Ontario Municipal Board Act*; or

(d) the appellant has not responded to a request by the Municipal Board for further information within the time specified by the Board. 1994, c. 23, s. 21 (11); 1996, c. 4, s. 20 (11, 12); 2006, c. 23, s. 15 (13-15); 2009, c. 33, Sched. 21, s. 10 (4).

Representation

(25.1) Before dismissing all or part of an appeal, the Municipal Board shall notify the appellant and give the appellant the opportunity to make representation on the proposed dismissal but this subsection does not apply if the appellant has not complied with a request made under clause (25) (d). 2000, c. 26, Sched. K, s. 5 (2).

Same

(25.1.1) Despite the *Statutory Powers Procedure Act* and subsections (11.0.2) and (24), the Municipal Board may, on its own initiative or on the motion of the municipality or the Minister, dismiss all or part of an appeal without holding a hearing if, in the Board's opinion, the application to which the appeal relates is substantially different from the application that was before council at the time of its decision. 2006, c. 23, s. 15 (16).

Dismissal

(25.2) Despite the *Statutory Powers Procedure Act*, the Municipal Board may dismiss all or part of an appeal after holding a hearing or without holding a hearing on the motion under subsection (25) or (25.1.1), as it considers appropriate. 2006, c. 23, s. 15 (17).

Powers of O.M.B.

(26) The Municipal Board may,

(a) dismiss the appeal; or

(b) allow the appeal in whole or in part and repeal the by-law in whole or in part or amend the by-law in such manner as the Board may determine or direct the council of the municipality to repeal the by-law in whole or in part or to amend the by-law in accordance with the Board's order. R.S.O. 1990, c. P.13, s. 34 (26).

Matters of provincial interest

(27) Where an appeal is made to the Municipal Board under subsection (11) or (19), the Minister, if he or she is of the opinion that a matter of provincial interest is, or is likely to be, adversely affected by the by-law, may so advise the Board in writing not later than 30 days before the day fixed by the Board for the hearing of the appeal and the Minister shall identify,

(a) the part or parts of the by-law by which the provincial interest is, or is likely to be, adversely affected; and

(b) the general basis for the opinion that a matter of provincial interest is, or is likely to be, adversely affected. 2004, c. 18, s. 6 (3).

No hearing or notice required

(28) The Minister is not required to give notice or to hold a hearing before taking any action under subsection (27). 2004, c. 18, s. 6 (3).

No order to be made

(29) If the Municipal Board has received notice from the Minister under subsection (27) and has made a decision on the by-law, the Board shall not make an order under subsection (11.0.2) or (26) in respect of the part or parts of the by-law identified in the notice. 2004, c. 18, s. 6 (3); 2009, c. 33, Sched. 21, s. 10 (5).

Action of L.G. in C.

(29.1) The Lieutenant Governor in Council may confirm, vary or rescind the decision of the Municipal Board in respect of the part or parts of the by-law identified in the notice and in doing so may repeal the by-law in whole or in part or amend the by-law in such a manner as the Lieutenant Governor in Council may determine. 2004, c. 18, s. 6 (3).

Coming into force

(30) If one or more appeals have been filed under subsection (19), the by-law does not come into force until all of such appeals have been withdrawn or finally disposed of, whereupon the by-law, except for those parts of it repealed or amended under subsection (26) or as are repealed or amended by the Lieutenant Governor in Council under subsection (29.1), shall be deemed to have come into force on the day it was passed. 1996, c. 4, s. 20 (13); 2004, c. 18, s. 6 (4).

Unappealed portions

(31) Despite subsection (30), before all of the appeals have been finally disposed of, the Municipal Board may make an order providing that any part of the by-law not in issue in the appeal shall be deemed to have come into force on the day the by-law was passed. 1993, c. 26, s. 53 (5).

Method

(32) The Municipal Board may make an order under subsection (31) on its own initiative or on the motion of any person or public body. 1993, c. 26, s. 53 (5); 1996, c. 4, s. 20 (14); 2006, c. 23, s. 15 (18).

Notice and hearing

(33) The Municipal Board may,

(a) dispense with giving notice of a motion under subsection (32) or require the giving of such notice of the motion as it considers appropriate; and

(b) make an order under subsection (31) after holding a hearing or without holding a hearing on the motion, as it considers appropriate. 1993, c. 26, s. 53 (5).

Notice

(34) Despite clause (33) (a), the Municipal Board shall give notice of a motion under subsection (32) to any person or public body who filed with the Board a written request to be notified if a motion is made. 1993, c. 26, s. 53 (5); 1994, c. 23, s. 21 (14).

No distinction on the basis of relationship

35. (1) REPEALED: 1996, c. 4, s. 21 (1).

No distinction on the basis of relationship

(2) The authority to pass a by-law under section 34, subsection 38 (1) or section 41 does not include the authority to pass a by-law that has the effect of distinguishing between persons who are related and persons who are unrelated in respect of the occupancy or use of a building or structure or a part of a building or structure, including the occupancy or use as a single housekeeping unit. 1994, c. 2, s. 43.

Provision of no effect

(3) A provision in a by-law passed under section 34, subsection 38 (1) or section 41 or in an order made under subsection 47 (1) is of no effect to the extent that it contravenes the restrictions described in subsection (2). 1994, c. 2, s. 43; 1996, c. 4, s. 21 (2).

(4) REPEALED: 1996, c. 4, s. 21 (3).

By-laws to give effect to second unit policies

35.1 (1) The council of each local municipality shall ensure that the by-laws passed under section 34 give effect to the policies described in subsection 16 (3). 2011, c. 6, Sched. 2, s. 6.

Regulations

(2) The Minister may make regulations,

(a) authorizing the use of residential units referred to in subsection 16 (3);

(b) establishing requirements and standards with respect to residential units referred to in subsection 16 (3). 2011, c. 6, Sched. 2, s. 6.

Regulation applies as zoning by-law

(3) A regulation under subsection (2) applies as though it is a by-law passed under section 34. 2011, c. 6, Sched. 2, s. 6.

Regulation prevails

(4) A regulation under subsection (2) prevails over a by-law passed under section 34 to the extent of any inconsistency, unless the regulation provides otherwise. 2011, c. 6, Sched. 2, s. 6.

Exception

(5) A regulation under subsection (2) may provide that a by-law passed under section 34 prevails over the regulation. 2011, c. 6, Sched. 2, s. 6.

Regulation may be general or particular

(6) A regulation under subsection (2) may be general or particular in its application and may be restricted to those municipalities or parts of municipalities set out in the regulation. 2011, c. 6, Sched. 2, s. 6.

Holding provision by-law

36. (1) The council of a local municipality may, in a by-law passed under section 34, by the use of the holding symbol "H" (or "h") in conjunction with any use designation, specify the use to which lands, buildings or structures may be put at such time in the future as the holding symbol is removed by amendment to the by-law. R.S.O. 1990, c. P.13, s. 36 (1).

Condition

(2) A by-law shall not contain the provisions mentioned in subsection (1) unless there is an official plan in effect in the local municipality that contains provisions relating to the use of the holding symbol mentioned in subsection (1). R.S.O. 1990, c. P.13, s. 36 (2).

Appeal to O.M.B.

(3) Where an application to the council for an amendment to the by-law to remove the holding symbol is refused or the council refuses or neglects to make a decision thereon within 120 days after receipt by the clerk of the application, the applicant may appeal to the Municipal Board and the Board shall hear the appeal and dismiss the same or amend the by-law to remove the holding symbol or direct that the by-law be amended in accordance with its order. R.S.O. 1990, c. P.13, s. 36 (3); 1994, c. 23, s. 22 (1); 2004, c. 18, s. 7 (1).

Matters of provincial interest

(3.1) Where an appeal is made to the Municipal Board under subsection (3), the Minister, if he or she is of the opinion that a matter of provincial interest is, or is likely to be, adversely affected by the by-law, may so advise the Board in writing not later than 30 days before the day fixed by the Board for the hearing of the appeal and the Minister shall identify,

(a) the part or parts of the by-law by which the provincial interest is, or is likely to be, adversely affected; and

(b) the general basis for the opinion that a matter of provincial interest is, or is likely to be, adversely affected. 2004, c. 18, s. 7 (2).

No hearing or notice required

(3.2) The Minister is not required to give notice or to hold a hearing before taking any action under subsection (3.1). 2004, c. 18, s. 7 (2).

No order to be made

(3.3) If the Municipal Board has received notice from the Minister under subsection (3.1) and has made a decision on the by-law, the Board shall not make an order under subsection (3) in respect of the part or parts of the by-law identified in the notice. 2004, c. 18, s. 7 (2).

Action of L.G. in C.

(3.4) The Lieutenant Governor in Council may confirm, vary or rescind the decision of the Municipal Board in respect of the part or parts of the by-law identified in the notice and in doing so may repeal the by-law in whole or in part or amend the by-law in such a manner as the Lieutenant Governor in Council may determine. 2004, c. 18, s. 7 (2).

Application of subss. 34 (10.7, 10.9-25.1)

(4) Subsections 34 (10.7) and (10.9) to (25.1) do not apply to an amending by-law passed by the council to remove the holding symbol, but the council shall, in the manner and to the persons and public bodies and containing the information prescribed, give notice of its intention to pass the amending by-law. R.S.O. 1990, c. P.13, s. 36 (4); 1994, c. 23, s. 22 (2); 1996, c. 4, s. 22; 2009, c. 33, Sched. 21, s. 10 (6).

Increased density, etc., provision by-law

37. (1) The council of a local municipality may, in a by-law passed under section 34, authorize increases in the height and density of development otherwise permitted by the by-law that will be permitted in return for the provision of such facilities, services or matters as are set out in the by-law.

Condition

(2) A by-law shall not contain the provisions mentioned in subsection (1) unless there is an official plan in effect in the local municipality that contains provisions relating to the authorization of increases in height and density of development.

Agreements

(3) Where an owner of land elects to provide facilities, services or matters in return for an increase in the height or density of development, the municipality may require the owner to enter into one or more agreements with the municipality dealing with the facilities, services or matters.

Registration of agreement

(4) Any agreement entered into under subsection (3) may be registered against the land to which it applies and the municipality is entitled to enforce the provisions thereof against the owner and, subject to the provisions of the *Registry Act* and the *Land Titles Act*, any and all subsequent owners of the land. R.S.O. 1990, c. P.13, s. 37.

Interim control by-law

38. (1) Where the council of a local municipality has, by by-law or resolution, directed that a review or study be undertaken in respect of land use planning policies in the municipality or in any defined area or areas thereof, the council of the municipality may pass a by-law (hereinafter referred to as an interim control by-law) to be in effect for a period of time specified in the by-law, which period shall not exceed one year from the date of the passing thereof, prohibiting the use of land, buildings or structures within

the municipality or within the defined area or areas thereof for, or except for, such purposes as are set out in the by-law.

Extension of period by-law in effect

(2) The council of the municipality may amend an interim control by-law to extend the period of time during which it will be in effect, provided the total period of time does not exceed two years from the date of the passing of the interim control by-law. R.S.O. 1990, c. P.13, s. 38 (1, 2).

Notice of passing of by-law

(3) No notice or hearing is required prior to the passing of a by-law under subsection (1) or (2) but the clerk of the municipality shall, in the manner and to the persons and public bodies and containing the information prescribed, give notice of a by-law passed under subsection (1) or (2) within thirty days of the passing thereof. R.S.O. 1990, c. P.13, s. 38 (3); 1994, c. 23, s. 23 (1).

Appeal to O.M.B.

(4) Any person or public body to whom notice of a by-law was given under subsection (3) may, within sixty days from the date of the passing of the by-law, appeal to the Municipal Board by filing with the clerk of the municipality a notice of appeal setting out the objection to the by-law and the reasons in support of the objection. R.S.O. 1990, c. P.13, s. 38 (4); 1994, c. 23, s. 23 (2).

Application

(5) If a notice of appeal is filed under subsection (4), subsections 34 (23) to (26) apply with necessary modifications to the appeal. 1996, c. 4, s. 23.

When prior zoning by-law again has effect

(6) Where the period of time during which an interim control by-law is in effect has expired and the council has not passed a by-law under section 34 consequent on the completion of the review or study within the period of time specified in the interim control by-law, or where an interim control by-law is repealed or the extent of the area covered thereby is reduced, the provisions of any by-law passed under section 34 that applied immediately prior to the coming into force of the interim control by-law again come into force and have effect in respect of all lands, buildings or structures formerly subject to the interim control by-law. R.S.O. 1990, c. P.13, s. 38 (6).

Where by-law appealed

(6.1) If the period of time during which an interim control by-law is in effect has expired and the council has passed a by-law under section 34 consequent on the completion of the review or study within the period of time specified in the interim control by-law, but there is an appeal of the by-law under subsection 34 (19), the interim control by-law continues in effect as if it had not expired until the date of the order of the Municipal Board or until the date of a notice issued by the secretary of the Board under subsection 34 (23.1) unless the interim control by-law is repealed. 1994, c. 23, s. 23 (3).

Prohibition

(7) Where an interim control by-law ceases to be in effect, the council of the municipality may not for a period of three years pass a further interim control by-law that applies to any lands to which the original interim control by-law applied.

Application of s. 34 (9)

(8) Subsection 34 (9) applies with necessary modifications to a by-law passed under subsection (1) or (2). R.S.O. 1990, c. P.13, s. 38 (7, 8).

Temporary use provisions

39. (1) The council of a local municipality may, in a by-law passed under section 34, authorize the temporary use of land, buildings or structures for any purpose set out therein that is otherwise prohibited by the by-law. R.S.O. 1990, c. P.13, s. 39 (1).

(1.1), (1.2) REPEALED: 2002, c. 17, Sched. B, s. 11 (1).

Area and time in effect

(2) A by-law authorizing a temporary use under subsection (1) shall define the area to which it applies and specify the period of time for which the authorization shall be in effect, which shall not exceed three years from the day of the passing of the by-law. 2002, c. 17, Sched. B, s. 11 (2).

Extension

(3) Despite subsection (2), the council may by by-law grant further periods of not more than three years each during which the temporary use is authorized. R.S.O. 1990, c. P.13, s. 39 (3).

Non-application of cl. 34 (9) (a)

(4) Upon the expiry of the period or periods of time mentioned in subsections (2) and (3), clause 34 (9) (a) does not apply so as to permit the continued use of the land, buildings or structures for the purpose temporarily authorized. R.S.O. 1990, c. P.13, s. 39 (4).

Garden suites

39.1 (1) As a condition to passing a by-law authorizing the temporary use of a garden suite under subsection 39 (1), the council may require the owner of the suite or any other person to enter into an agreement with the municipality dealing with such matters related to the temporary use of the garden suite as the council considers necessary or advisable, including,

(a) the installation, maintenance and removal of the garden suite;

(b) the period of occupancy of the garden suite by any of the persons named in the agreement; and

(c) the monetary or other form of security that the council may require for actual or potential costs to the municipality related to the garden suite. 2002, c. 17, Sched. B, s. 12; 2009, c. 33, Sched. 21, s. 10 (7).

Definition

(2) In this section,

"garden suite" means a one-unit detached residential structure containing bathroom and kitchen facilities that is ancillary to an existing residential structure and that is designed to be portable. 2002, c. 17, Sched. B, s. 12.

Area and time in effect

(3) Despite subsection 39 (2), a by-law authorizing the temporary use of a garden suite shall define the area to which it applies and specify the period of time for which the authorization shall be in effect, which shall not exceed 20 years from the day of the passing of the by-law. 2011, c. 6, Sched. 2, s. 7.

Extension

(4) Despite subsection (3), the council may by by-law grant further periods of not more than three years each during which the temporary use is authorized. 2002, c. 17, Sched. B, s. 12.

Non-application

(5) Upon the expiry of the period or periods of time mentioned in subsections (3) and (4), clause 34 (9) (a) does not apply so as to permit the continued use of the garden suite. 2002, c. 17, Sched. B, s. 12.

Agreement exempting owner from requirement to provide parking

40. (1) Where an owner or occupant of a building is required under a by-law of a local municipality to provide and maintain parking facilities on land that is not part of a highway, the council of the municipality and such owner or occupant may enter into an agreement exempting the owner or occupant, to the extent specified in the agreement, from the requirement of providing or maintaining the parking facilities. R.S.O. 1990, c. P.13, s. 40 (1).

Payment of money

(2) An agreement entered into under subsection (1) shall provide for the making of one or more payments of money to the municipality as consideration for the granting of the exemption and shall set forth the basis upon which such payment is calculated. R.S.O. 1990, c. P.13, s. 40 (2).

Special account

(3) All money received by a municipality under an agreement entered into under this section shall be paid into a special account and,

(a) the money in that account shall be applied for the same purposes as a reserve fund established under the *Municipal Act, 2001* or the *City of Toronto Act, 2006*, as the case may be;

(b) the money in that account may be invested in securities in which the municipality is permitted to invest under the *Municipal Act, 2001* or the *City of Toronto Act, 2006*, as the case may be;

(c) earnings derived from the investment of the money in the special account shall be paid into that account; and

(d) the auditor of the municipality, in the auditor's annual report, shall report on the activities and position of the account. 2002, c. 17, Sched. B, s. 13 (1); 2006, c. 32, Sched. C, s. 47 (6).

Registration of agreement

(4) An agreement entered into under this section may be registered in the proper land registry office against the land to which it applies and, when so registered, any money payable to the municipality under the agreement that has become due for payment shall have priority lien status as described in section 1 of the *Municipal Act, 2001* or section 3 of the *City of Toronto Act, 2006*, as the case may be. 2002, c. 17, Sched. B, s. 13 (2); 2006, c. 32, Sched. C, s. 47 (7).

Certificate

(5) When all money payable to the municipality under an agreement registered under subsection (4) has been paid, or such agreement has been terminated, the clerk of the municipality shall, at the request of the owner of the land, provide a certificate in a form registrable in the proper land registry office, certifying that the money has been paid or that the agreement has been terminated. R.S.O. 1990, c. P.13, s. 40 (5).

Site plan control area

41. (1) In this section,

"development" means the construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of substantially increasing the size or usability thereof, or the laying out and establishment of a commercial parking lot or of sites for the location of three or more trailers as defined in subsection 164 (4) of the *Municipal Act, 2001* or subsection 3 (1) of the *City of Toronto Act, 2006*, as the case may be, or of sites for the location of three or more mobile homes as defined in subsection 46 (1) of this Act or of sites for the construction, erection or location of three or more land lease community homes as defined in subsection 46 (1) of this Act. R.S.O. 1990, c. P.13, s. 41 (1); 1994, c. 4, s. 14; 2002, c. 17, Sched. B, s. 14 (1); 2006, c. 32, Sched. C, s. 47 (8).

Exception

(1.1) The definition of "development" in subsection (1) does not include the placement of a portable classroom on a school site of a district school board if the school site was in existence on January 1, 2007. 2006, c. 23, s. 16 (1).

Establishment of site plan control area

(2) Where in an official plan an area is shown or described as a proposed site plan control area, the council of the local municipality in which the proposed area is situate may, by by-law, designate the whole or any part of such area as a site plan control area. R.S.O. 1990, c. P.13, s. 41 (2).

Designation of site plan control area

(3) A by-law passed under subsection (2) may designate a site plan control area by reference to one or more land use designations contained in a by-law passed under section 34. R.S.O. 1990, c. P.13, s. 41 (3).

Consultation

(3.1) The council,

(a) shall permit applicants to consult with the municipality before submitting plans and drawings for approval under subsection (4); and

(b) may, by by-law, require applicants to consult with the municipality as described in clause (a). 2006, c. 23, s. 16 (2).

Approval of plans or drawings

(4) No person shall undertake any development in an area designated under subsection (2) unless the council of the municipality or, where a referral has been made under subsection (12), the Municipal Board has approved one or both, as the council may determine, of the following:

1. Plans showing the location of all buildings and structures to be erected and showing the location of all facilities and works to be provided in conjunction therewith and of all facilities and works required under clause (7) (a), including facilities designed to have regard for accessibility for persons with disabilities.
2. Drawings showing plan, elevation and cross-section views for each building to be erected, except a building to be used for residential purposes containing less than twenty-five dwelling units, which drawings are sufficient to display,
   (a) the massing and conceptual design of the proposed building;
   (b) the relationship of the proposed building to adjacent buildings, streets, and exterior areas to which members of the public have access;
   (c) the provision of interior walkways, stairs, elevators and escalators to which members of the public have access from streets, open spaces and interior walkways in adjacent buildings;
   (d) matters relating to exterior design, including without limitation the character, scale, appearance and design features of buildings, and their sustainable design, but only to the extent that it is a matter of exterior design, if an official plan and a by-law passed under subsection (2) that both contain provisions relating to such matters are in effect in the municipality;
   (e) the sustainable design elements on any adjoining highway under a municipality's jurisdiction, including without limitation trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers and bicycle parking facilities, if an official plan and a by-law passed under subsection (2) that both contain provisions relating to such matters are in effect in the municipality; and
   (f) facilities designed to have regard for accessibility for persons with disabilities. R.S.O. 1990, c. P.13, s. 41 (4); 2002, c. 9, s. 56 (1); 2006, c. 23, s. 16 (3, 4); 2009, c. 33, Sched. 21, s. 10 (9).

Exclusions from site plan control

(4.1) The following matters relating to buildings described in paragraph 2 of subsection (4) are not subject to site plan control:

1. Interior design.
2. The layout of interior areas, excluding interior walkways, stairs, elevators and escalators referred to in subparagraph 2 (c) of subsection (4).
3. The manner of construction and standards for construction. 2006, c. 23, s. 16 (5).

Dispute about scope of site plan control

(4.2) The owner of land or the municipality may make a motion for directions to have the Municipal Board determine a dispute about whether a matter referred to in paragraph 1 or 2 of subsection (4) is subject to site plan control. 2006, c. 23, s. 16 (5).

Final determination

(4.3) The Municipal Board's determination under subsection (4.2) is not subject to appeal or review. 2006, c. 23, s. 16 (5).

Drawings for residential buildings

(5) Despite the exception provided in paragraph 2 of subsection (4), the council of the municipality may require the drawings mentioned therein for a building to be used for residential purposes containing less than twenty-five dwelling units if the proposed building is to be located in an area specifically designated in the official plan mentioned in subsection (2) as an area wherein such drawings may be required. R.S.O. 1990, c. P.13, s. 41 (5).

Proviso

(6) Nothing in this section shall be deemed to confer on the council of the municipality power to limit the height or density of buildings to be erected on the land. R.S.O. 1990, c. P.13, s. 41 (6).

Conditions to approval of plans

(7) As a condition to the approval of the plans and drawings referred to in subsection (4), a municipality may require the owner of the land to,

(a) provide to the satisfaction of and at no expense to the municipality any or all of the following:

1. Subject to the provisions of subsections (8) and (9), widenings of highways that abut on the land.
2. Subject to the *Public Transportation and Highway Improvement Act*, facilities to provide access to and from the land such as access ramps and curbings and traffic direction signs.
3. Off-street vehicular loading and parking facilities, either covered or uncovered, access driveways, including driveways for emergency vehicles, and the surfacing of such areas and driveways.
4. Walkways and walkway ramps, including the surfacing thereof, and all other means of pedestrian access.

4.1 Facilities designed to have regard for accessibility for persons with disabilities.

5. Facilities for the lighting, including floodlighting, of the land or of any buildings or structures thereon.
6. Walls, fences, hedges, trees, shrubs or other groundcover or facilities for the landscaping of the lands or the protection of adjoining lands.
7. Vaults, central storage and collection areas and other facilities and enclosures for the storage of garbage and other waste material.
8. Easements conveyed to the municipality for the construction, maintenance or improvement of watercourses, ditches, land drainage works, sanitary sewage facilities and other public utilities of the municipality or local board thereof on the land.
9. Grading or alteration in elevation or contour of the land and provision for the disposal of storm, surface and waste water from the land and from any buildings or structures thereon;

(b) maintain to the satisfaction of the municipality and at the sole risk and expense of the owner any or all of the facilities or works mentioned in paragraphs 2, 3, 4, 5, 6, 7, 8 and 9 of clause (a), including the removal of snow from access ramps and driveways, parking and loading areas and walkways;

(c) enter into one or more agreements with the municipality dealing with and ensuring the provision of any or all of the facilities, works or matters mentioned in clause (a) or (d) and the maintenance thereof as mentioned in clause (b) or with the provision and approval of the plans and drawings referred to in subsection (4);

(c.1) enter into one or more agreements with the municipality ensuring that development proceeds in accordance with the plans and drawings approved under subsection (4);

(d) subject to subsection (9.1), convey part of the land to the municipality to the satisfaction of and at no expense to the municipality for a public transit right of way. R.S.O. 1990, c. P.13, s. 41 (7); 1996, c. 4, s. 24 (1, 2); 2006, c. 23, s. 16 (6, 7).

Where area is in upper-tier municipality

(8) If an area designated under subsection (2) is within an upper-tier municipality, plans and drawings in respect of any development proposed to be undertaken in the area shall not be approved until the upper-tier municipality has been advised of the proposed development and afforded a reasonable opportunity to require the owner of the land to,

(a) provide to the satisfaction of and at no expense to the upper-tier municipality any or all of the following:

(i) subject to subsection (9), widenings of highways that are under the jurisdiction of the upper-tier municipality and that abut on the land,

(ii) subject to the *Public Transportation and Highway Improvement Act*, where the land abuts a highway under the jurisdiction of the upper-tier municipality, facilities to provide access to and from the land such as access ramps and curbings and traffic direction signs,

(iii) where the land abuts a highway under the jurisdiction of the upper-tier municipality, offstreet vehicular loading and parking facilities, either covered or uncovered, access driveways, including driveways for emergency vehicles, and the surfacing of such areas and driveways,

(iv) where the land abuts a highway under the jurisdiction of the upper-tier municipality, grading or alteration in elevation or contour of the land in relation to the elevation of the highway and provision for the disposal of storm and surface water from the land,

(v) where the land abuts a highway under the jurisdiction of the upper-tier municipality, facilities designed to have regard for accessibility for persons with disabilities;

(b) enter into one or more agreements with the upper-tier municipality dealing with and ensuring the provision of any or all of the facilities, works or matters mentioned in clause (a) or (c) and the maintenance thereof at the sole risk and expense of the owner, including the removal of snow from access ramps and driveways and parking and loading areas;

(c) subject to subsection (9.1), convey part of the land to the upper-tier municipality to the satisfaction of and at no expense to the municipality for a public transit right of way. 2002, c. 17, Sched. B, s. 14 (2); 2006, c. 23, s. 16 (8).

Widening must be described in official plan

(9) An owner may not be required to provide a highway widening under paragraph 1 of clause (7) (a) or under paragraph 1 of clause (8) (a) unless the highway to be widened is shown on or described in an official plan as a highway to be widened and the extent of the proposed widening is likewise shown or described. R.S.O. 1990, c. P.13, s. 41 (9).

Limitation

(9.1) An owner of land may not be required to convey land under clause (7) (d) or (8) (c) unless the public transit right of way to be provided is shown on or described in an official plan. 1994, c. 23, s. 24 (3); 1996, c. 4, s. 24 (3).

Registration of agreements

(10) Any agreement entered into under clause (7) (c) or (c.1) or under clause (8) (b) may be registered against the land to which it applies and the municipality is entitled to enforce the provisions thereof against the owner and, subject to the provisions of the *Registry Act* and the *Land Titles Act*, any and all subsequent owners of the land. R.S.O. 1990, c. P.13, s. 41 (10); 2002, c. 17, Sched. B, s. 14 (3); 2006, c. 23, s. 16 (9).

Application of *Municipal Act, 2001* or *City of Toronto Act, 2006*

(11) Section 446 of the *Municipal Act, 2001* or section 386 of the *City of Toronto Act, 2006*, as the case may be, applies to any requirements made under clauses (7) (a) and (b) and to any requirements made under an agreement entered into under clause (7) (c) or (c.1). R.S.O. 1990, c. P.13, s. 41 (11); 2002, c. 17, Sched. B, s. 14 (4); 2006, c. 23, s. 16 (10); 2006, c. 32, Sched. C, s. 47 (9).

Appeal to O.M.B.

(12) If the municipality fails to approve the plans or drawings referred to in subsection (4) within 30 days after they are submitted to the municipality or if the owner of the land is not satisfied with any requirement made by the municipality under subsection (7) or by the upper-tier municipality under subsection (8) or with any part thereof, including the terms of any agreement required, the owner may require the plans or drawings or the unsatisfactory requirements, or parts thereof, including the terms of any agreement required, to be referred to the Municipal Board by written notice to the secretary of the Board and to the clerk of the municipality or upper-tier municipality, as appropriate. 2002, c. 17, Sched. B, s. 14 (5).

Hearing

(12.1) The Municipal Board shall hear and determine the matter in issue and determine the details of the plans or drawings and determine the requirements, including the provisions of any agreement required, and the decision of the Board is final. 2002, c. 17, Sched. B, s. 14 (5).

Classes of development, delegation

(13) Where the council of a municipality has designated a site plan control area under this section, the council may, by by-law,

(a) define any class or classes of development that may be undertaken without the approval of plans and drawings otherwise required under subsection (4) or (5); and

(b) delegate to either a committee of the council or to an appointed officer of the municipality identified in the by-law either by name or position occupied, any of the council's powers or authority under this section, except the authority to define any class or classes of development as mentioned in clause (a). R.S.O. 1990, c. P.13, s. 41 (13).

Proviso

(14) Section 35a of *The Planning Act*, being chapter 349 of the Revised Statutes of Ontario, 1970, as it existed on the 21st day of June, 1979, shall be deemed to continue in force in respect of any by-law passed under that section on or before that day. R.S.O. 1990, c. P.13, s. 41 (14).

Certain agreements declared valid and binding

(15) Every agreement entered into by a municipality after the 16th day of December, 1973 and before the 22nd day of June, 1979, to the extent that the agreement deals with facilities and matters mentioned in subsection 35a (2) of *The Planning Act*, being chapter 349 of the Revised Statutes of Ontario, 1970, as it existed on the 21st day of June, 1979, is hereby declared to be valid and binding. R.S.O. 1990, c. P.13, s. 41 (15).

City of Toronto

(16) This section does not apply to the City of Toronto, except for subsection (1.1), paragraph 1 of subsection (4), subparagraph 2 (f) of subsection (4) and paragraph 4.1 of clause (7) (a), which provisions apply with necessary modifications. 2006, c. 23, s. 16 (11).

Conveyance of land for park purposes

42. (1) As a condition of development or redevelopment of land, the council of a local municipality may, by by-law applicable to the whole municipality or to any defined area or areas thereof, require that land in an amount not exceeding, in the case of land proposed for development or redevelopment for commercial or industrial purposes, 2 per cent and in all other cases 5 per cent of the land be conveyed to the municipality for park or other public recreational purposes. R.S.O. 1990, c. P.13, s. 42 (1).

Definition

(2) For the purposes of subsection (3),

"dwelling unit" means any property that is used or designed for use as a domestic establishment in which one or more persons may sleep and prepare and serve meals. R.S.O. 1990, c. P.13, s. 42 (2).

Alternative requirement

(3) Subject to subsection (4), as an alternative to requiring the conveyance provided for in subsection (1), in the case of land proposed for development or redevelopment for residential purposes, the by-law may require that land be conveyed to the municipality for park or other public recreational purposes at a rate of one hectare for each 300 dwelling units proposed or at such lesser rate as may be specified in the by-law. R.S.O. 1990, c. P.13, s. 42 (3).

Official plan requirement

(4) The alternative requirement authorized by subsection (3) may not be provided for in a by-law passed under this section unless there is an official plan in effect in the local municipality that contains specific policies dealing with the provision of lands for park or other public recreational purposes and the use of the alternative requirement. R.S.O. 1990, c. P.13, s. 42 (4).

Use and sale of land

(5) Land conveyed to a municipality under this section shall be used for park or other public recreational purposes, but may be sold at any time. R.S.O. 1990, c. P.13, s. 42 (5).

Payment instead of conveyance

(6) The council of a local municipality may require the payment of money to the value of the land otherwise required to be conveyed under this section in lieu of the conveyance. 2006, c. 23, s. 17 (1).

No building without payment

(6.1) If a payment is required under subsection (6), no person shall construct a building on the land proposed for development or redevelopment unless the payment has been made or arrangements for the payment that are satisfactory to the council have been made. 2006, c. 23, s. 17 (1).

Redevelopment, reduction of payment

(6.2) If land in a local municipality is proposed for redevelopment, a part of the land meets sustainability criteria set out in the official plan and the conditions set out in subsection (6.3) are met, the council shall reduce the amount of any payment required under subsection (6) by the value of that part. 2006, c. 23, s. 17 (1).

Same

(6.3) The conditions mentioned in subsection (6.2) are:

1. The official plan contains policies relating to the reduction of payments required under subsection (6).
2. No land is available to be conveyed for park or other public recreational purposes under this section. 2006, c. 23, s. 17 (1).

Determination of value

(6.4) For the purposes of subsections (6) and (6.2), the value of the land shall be determined as of the day before the day the building permit is issued in respect of the development or redevelopment or, if more than one building permit is required for the development or redevelopment, as of the day before the day the first permit is issued. 2006, c. 23, s. 17 (1).

Where land conveyed

(7) If land has been conveyed or is required to be conveyed to a municipality for park or other public purposes or a payment of money in lieu of such conveyance has been received by the municipality or is owing to it under this section or a condition imposed under section 51.1 or 53, no additional conveyance or payment in respect of the land subject to the earlier conveyance or payment may be required by a municipality in respect of subsequent development or redevelopment unless,

(a) there is a change in the proposed development or redevelopment which would increase the density of development; or

(b) land originally proposed for development or redevelopment for commercial or industrial purposes is now proposed for development or redevelopment for other purposes. 1994, c. 23, s. 25.

Non-application

(8) Despite clauses 74.1 (2) (h) and (i), subsection (7) does not apply to land proposed for development or redevelopment if, before this subsection comes into force, the land was subject to a condition that land be conveyed to a municipality for park or other public purposes or that a payment of money in lieu of such conveyance be made under this section or under section 51 or 53. 1994, c. 23, s. 25.

Changes

(9) If there is a change under clause (7) (a) or (b), the land that has been conveyed or is required to be conveyed or the payment of money that has been received or that is owing, as the case may be, shall be included in determining the amount of land or payment of money in lieu of it that may subsequently be required under this section on the development, further development or redevelopment of the lands or part of them in respect of which the original conveyance or payment was made. 1994, c. 23, s. 25.

Disputes

(10) In the event of a dispute between a municipality and an owner of land on the value of land determined under subsection (6.4), either party may apply to the Municipal Board to have the value determined and the Board shall, in accordance as nearly as may be with the *Expropriations Act*, determine the value of the land and, if a payment has been made under protest under subsection (12), the Board may order that a refund be made to the owner. 1994, c. 23, s. 25; 2006, c. 23, s. 17 (2).

Same

(11) In the event of a dispute between a municipality and an owner of land as to the amount of land or payment of money that may be required under subsection (9), either party may apply to the Municipal Board and the Board shall make a final determination of the matter. 1994, c. 23, s. 25.

Payment under protest

(12) If there is a dispute between a municipality and the owner of land under subsection (10), the owner may pay the amount required by the municipality under protest and shall make an application to the Municipal Board under subsection (10) within 30 days of the payment of the amount. 1994, c. 23, s. 25.

Notice

(13) If an owner of land makes a payment under protest and an application to the Municipal Board under subsection (12), the owner shall give notice of the application to the municipality within 15 days after the application is made. 1994, c. 23, s. 25.

Park purposes

(14) The council of a municipality may include in its estimates an amount to be used for the acquisition of land to be used for park or other public recreational purposes and may pay into the fund provided for in subsection (15) that amount, and any person may pay any sum into the same fund. 1994, c. 23, s. 25.

Special account

(15) All money received by the municipality under subsections (6) and (14) and all money received on the sale of land under subsection (5), less any amount spent by the municipality out of its general funds in respect of the land, shall be paid into a special account and spent only for the acquisition of land to be used for park or other public recreational purposes, including the erection, improvement or repair of buildings and the acquisition of machinery for park or other public recreational purposes. 1994, c. 23, s. 25; 2009, c. 33, Sched. 21, s. 10 (10).

Investments

(16) The money in the special account may be invested in securities in which the municipality is permitted to invest under the *Municipal Act, 2001* or the *City of Toronto Act, 2006*, as the case may be, and the earnings derived from the investment of the money shall be paid into the special account, and the auditor in the auditor's annual report shall report on the activities and status of the account. 1994, c. 23, s. 25; 1996, c. 32, s. 82 (5); 2002, c. 17, Sched. B, s. 15; 2006, c. 32, Sched. C, s. 47 (10).

Application of subss. 34 (12-34)

43. (1) Subsections 34 (12) to (34) do not apply to a by-law that amends a by-law only to express a word, term or measurement in the by-law in a unit of measurement set out in Schedule I of the *Weights and Measures Act* (Canada) in accordance with the definitions set out in Schedule II of that Act and that,

(a) does not round any measurement so expressed further than to the next higher or lower multiple of 0.5 metres or 0.5 square metres, as the case may be; or

(b) does not vary by more than 5 per cent any measurement so expressed. R.S.O. 1990, c. P.13, s. 43 (1); 1993, c. 26, s. 55.

Effect of amendment that conforms with subs. (1)

(2) Any land, building or structure that otherwise conforms with a by-law passed under section 34 or a predecessor thereof or an order made by the Minister under section 47 or a predecessor thereof does not cease to conform with the by-law or order by reason only of an amendment to the by-law or order that conforms with subsection (1). R.S.O. 1990, c. P.13, s. 43 (2).

Committee of adjustment

44. (1) If a municipality has passed a by-law under section 34 or a predecessor of such section, the council of the municipality may by by-law constitute and appoint a committee of adjustment for the municipality composed of such persons, not fewer than three, as the council considers advisable. R.S.O. 1990, c. P.13, s. 44 (1).

Copy of by-law to Minister

(2) Where a by-law is passed under subsection (1), a certified copy of the by-law shall be sent to the Minister by registered mail by the clerk of the municipality within thirty days of the passing thereof. R.S.O. 1990, c. P.13, s. 44 (2).

Term of office

(3) The members of the committee who are not members of a municipal council shall hold office for the term of the council that appointed them and the members of the committee who are members of a municipal council shall be appointed annually. R.S.O. 1990, c. P.13, s. 44 (3).

Idem

(4) Members of the committee shall hold office until their successors are appointed, and are eligible for reappointment, and, where a member ceases to be a member before the expiration of his or her term, the council shall appoint another eligible person for the unexpired portion of the term. R.S.O. 1990, c. P.13, s. 44 (4).

Quorum

(5) Where a committee is composed of three members, two members constitute a quorum, and where a committee is composed of more than three members, three members constitute a quorum. R.S.O. 1990, c. P.13, s. 44 (5).

Vacancy not to impair powers

(6) Subject to subsection (5), a vacancy in the membership or the absence or inability of a member to act does not impair the powers of the committee or of the remaining members. R.S.O. 1990, c. P.13, s. 44 (6).

Chair

(7) The members of the committee shall elect one of themselves as chair, and, when the chair is absent through illness or otherwise, the committee may appoint another member to act as acting chair. R.S.O. 1990, c. P.13, s. 44 (7).

Secretary-treasurer, employees

(8) The committee shall appoint a secretary-treasurer, who may be a member of the committee, and may engage such employees and consultants as is considered expedient, within the limits of the money appropriated for the purpose. R.S.O. 1990, c. P.13, s. 44 (8).

Remuneration

(9) The members of the committee shall be paid such compensation as the council may provide. R.S.O. 1990, c. P.13, s. 44 (9).

Filing of documents, etc.

(10) The secretary-treasurer shall keep on file minutes and records of all applications and the decisions thereon and of all other official business of the committee, and section 253 of the *Municipal Act, 2001* or section 199 of the *City of Toronto Act, 2006*, as the case may be, applies with necessary modifications to such documents. R.S.O. 1990, c. P.13, s. 44 (10); 2002, c. 17, Sched. B, s. 16; 2006, c. 32, Sched. C, s. 47 (11).

Rules of procedure

(11) In addition to complying with the requirements of this Act, the committee shall comply with such rules of procedure as are prescribed. R.S.O. 1990, c. P.13, s. 44 (11).

Powers of committee

45. (1) The committee of adjustment, upon the application of the owner of any land, building or structure affected by any by-law that is passed under section 34 or 38, or a predecessor of such sections, or any person authorized in writing by the owner, may, despite any other Act, authorize such minor

variance from the provisions of the by-law, in respect of the land, building or structure or the use thereof, as in its opinion is desirable for the appropriate development or use of the land, building or structure, if in the opinion of the committee the general intent and purpose of the by-law and of the official plan, if any, are maintained. R.S.O. 1990, c. P.13, s. 45 (1); 2006, c. 23, s. 18 (1); 2009, c. 33, Sched. 21, s. 10 (11).

Restriction

(1.1) Subsection (1) does not allow the committee to authorize a minor variance from conditions imposed under subsection 34 (16) of this Act or under subsection 113 (2) of the *City of Toronto Act, 2006*. 2006, c. 23, s. 18 (2).

Other powers

(2) In addition to its powers under subsection (1), the committee, upon any such application,

(a) where any land, building or structure, on the day the by-law was passed, was lawfully used for a purpose prohibited by the by-law, may permit,

(i) the enlargement or extension of the building or structure, if the use that was made of the building or structure on the day the by-law was passed, or a use permitted under subclause (ii) continued until the date of the application to the committee, but no permission may be given to enlarge or extend the building or structure beyond the limits of the land owned and used in connection therewith on the day the by-law was passed, or

(ii) the use of such land, building or structure for a purpose that, in the opinion of the committee, is similar to the purpose for which it was used on the day the by-law was passed or is more compatible with the uses permitted by the by-law than the purpose for which it was used on the day the by-law was passed, if the use for a purpose prohibited by the by-law or another use for a purpose previously permitted by the committee continued until the date of the application to the committee; or

(b) where the uses of land, buildings or structures permitted in the by-law are defined in general terms, may permit the use of any land, building or structure for any purpose that, in the opinion of the committee, conforms with the uses permitted in the by-law. R.S.O. 1990, c. P.13, s. 45 (2).

Power of committee to grant minor variances

(3) A council that has constituted a committee of adjustment may by by-law empower the committee of adjustment to grant minor variances from the provisions of any by-law of the municipality that implements an official plan, or from such by-laws of the municipality as are specified and that implement an official plan, and when a committee of adjustment is so empowered subsection (1) applies with necessary modifications. R.S.O. 1990, c. P.13, s. 45 (3).

Time for hearing

(4) The hearing on any application shall be held within thirty days after the application is received by the secretary-treasurer. R.S.O. 1990, c. P.13, s. 45 (4).

Notice of hearing

(5) The committee, before hearing an application, shall in the manner and to the persons and public bodies and containing the information prescribed, give notice of the application. R.S.O. 1990, c. P.13, s. 45 (5); 1994, c. 23, s. 26 (1).

Hearing

(6) The hearing of every application shall be held in public, and the committee shall hear the applicant and every other person who desires to be heard in favour of or against the application, and the committee may adjourn the hearing or reserve its decision. R.S.O. 1990, c. P.13, s. 45 (6).

Oaths

(7) The chair, or in his or her absence the acting chair, may administer oaths. R.S.O. 1990, c. P.13, s. 45 (7).

Decision

(8) No decision of the committee on an application is valid unless it is concurred in by the majority of the members of the committee that heard the application, and the decision of the committee, whether

granting or refusing an application, shall be in writing and shall set out the reasons for the decision, and shall be signed by the members who concur in the decision. R.S.O. 1990, c. P.13, s. 45 (8).

Conditions in decision

(9) Any authority or permission granted by the committee under subsections (1), (2) and (3) may be for such time and subject to such terms and conditions as the committee considers advisable and as are set out in the decision. R.S.O. 1990, c. P.13, s. 45 (9).

Agreement re terms and conditions

(9.1) If the committee imposes terms and conditions under subsection (9), it may also require the owner of the land to enter into one or more agreements with the municipality dealing with some or all of the terms and conditions, and in that case the requirement shall be set out in the decision. 2006, c. 23, s. 18 (3).

Registration of agreement

(9.2) An agreement entered into under subsection (9.1) may be registered against the land to which it applies and the municipality is entitled to enforce the agreement against the owner and, subject to the *Registry Act* and the *Land Titles Act*, against any and all subsequent owners of the land. 2006, c. 23, s. 18 (3).

Notice of decision

(10) The secretary-treasurer shall not later than ten days from the making of the decision send one copy of the decision, certified by him or her,

(a) to the Minister, if the Minister has notified the committee by registered mail that he or she wishes to receive a copy of all decisions of the committee;

(b) to the applicant; and

(c) to each person who appeared in person or by counsel at the hearing and who filed with the secretary-treasurer a written request for notice of the decision,

together with a notice of the last day for appealing to the Municipal Board. R.S.O. 1990, c. P.13, s. 45 (10).

Additional material

(11) Where the secretary-treasurer is required to send a copy of the decision to the Minister under subsection (10), he or she shall also send to the Minister such other information and material as may be prescribed. R.S.O. 1990, c. P.13, s. 45 (11).

Appeal to O.M.B.

(12) The applicant, the Minister or any other person or public body who has an interest in the matter may within 20 days of the making of the decision appeal to the Municipal Board against the decision of the committee by filing with the secretary-treasurer of the committee a notice of appeal setting out the objection to the decision and the reasons in support of the objection accompanied by payment to the secretary-treasurer of the fee prescribed by the Municipal Board under the *Ontario Municipal Board Act* as payable on an appeal from a committee of adjustment to the Board. 1994, c. 23, s. 26 (2).

Idem

(13) The secretary-treasurer of a committee, upon receipt of a notice of appeal filed under subsection (12), shall forthwith forward the notice of appeal and the amount of the fee mentioned in subsection (12) to the Municipal Board by registered mail together with all papers and documents filed with the committee of adjustment relating to the matter appealed from and such other documents and papers as may be required by the Board. R.S.O. 1990, c. P.13, s. 45 (13).

Exception

(13.1) Despite subsection (13), if all appeals under subsection (12) are withdrawn within 15 days after the last day for filing a notice of appeal, the secretary-treasurer is not required to forward the materials described under subsection (13) to the Municipal Board. 1999, c. 12, Sched. M, s. 26.

Decision final

(13.2) If all appeals under subsection (12) are withdrawn within 15 days after the last day for filing a notice of appeal, the decision of the committee is final and binding and the secretary-treasurer of the committee shall notify the applicant and file a certified copy of the decision with the clerk of the municipality. 1999, c. 12, Sched. M, s. 26.

Where no appeal

(14) If within such 20 days no notice of appeal is given, the decision of the committee is final and binding, and the secretary-treasurer shall notify the applicant and shall file a certified copy of the decision with the clerk of the municipality. R.S.O. 1990, c. P.13, s. 45 (14); 1994, c. 23, s. 26 (3).

Where appeals withdrawn

(15) Where all appeals to the Municipal Board are withdrawn, the decision of the committee is final and binding and the secretary of the Board shall notify the secretary-treasurer of the committee who in turn shall notify the applicant and file a certified copy of the decision with the clerk of the municipality. R.S.O. 1990, c. P.13, s. 45 (15); 1994, c. 23, s. 26 (4).

Hearing

(16) On an appeal to the Municipal Board, the Board shall, except as provided in subsections (15) and (17), hold a hearing of which notice shall be given to the applicant, the appellant, the secretary-treasurer of the committee and to such other persons or public bodies and in such manner as the Board may determine. R.S.O. 1990, c. P.13, s. 45 (16); 1994, c. 23, s. 26 (5).

Dismissal without hearing

(17) Despite the *Statutory Powers Procedure Act* and subsection (16), the Municipal Board may dismiss all or part of an appeal without holding a hearing, on its own initiative or on the motion of any party, if,

(a) it is of the opinion that,

(i) the reasons set out in the notice of appeal do not disclose any apparent land use planning ground upon which the Board could allow all or part of the appeal,

(ii) the appeal is not made in good faith or is frivolous or vexatious,

(iii) the appeal is made only for the purpose of delay, or

(iv) the appellant has persistently and without reasonable grounds commenced before the Board proceedings that constitute an abuse of process;

(b) the appellant has not provided written reasons for the appeal;

(c) the appellant has not paid the fee prescribed under the *Ontario Municipal Board Act*; or

(d) the appellant has not responded to a request by the Municipal Board for further information within the time specified by the Board. 1994, c. 23, s. 26 (6); 2006, c. 23, s. 18 (4, 5).

Representation

(17.1) Before dismissing all or part of an appeal, the Municipal Board shall notify the appellant and give the appellant the opportunity to make representation on the proposed dismissal but this subsection does not apply if the appellant has not complied with a request made under clause (17) (d). 2000, c. 26, Sched. K, s. 5 (3).

Dismissal

(17.2) The Municipal Board may dismiss all or part of an appeal after holding a hearing or without holding a hearing on the motion under subsection (17), as it considers appropriate. 2000, c. 26, Sched. K, s. 5 (3).

Powers of O.M.B.

(18) The Municipal Board may dismiss the appeal and may make any decision that the committee could have made on the original application. R.S.O. 1990, c. P.13, s. 45 (18).

Amended application

(18.1) On an appeal, the Municipal Board may make a decision on an application which has been amended from the original application if, before issuing its order, written notice is given to the persons

and public bodies who received notice of the original application under subsection (5) and to other persons and agencies prescribed under that subsection. 1993, c. 26, s. 56; 1994, c. 23, s. 26 (7).

Exception

(18.1.1) The Municipal Board is not required to give notice under subsection (18.1) if, in its opinion, the amendment to the original application is minor. 1996, c. 4, s. 25 (1).

Notice of intent

(18.2) Any person or public body who receives notice under subsection (18.1) may, not later than thirty days after the day that written notice was given, notify the Board of an intention to appear at the hearing or the resumption of the hearing, as the case may be. 1993, c. 26, s. 56; 1994, c. 23, s. 26 (8).

Order

(18.3) If, after the expiry of the time period in subsection (18.2), no notice of intent has been received, the Board may issue its order. 1993, c. 26, s. 56.

Hearing

(18.4) If a notice of intent is received, the Board may hold a hearing or resume the hearing on the amended application or it may issue its order without holding a hearing or resuming the hearing. 1996, c. 4, s. 25 (2).

Notice of decision

(19) When the Municipal Board makes an order on an appeal, the secretary of the Board shall send a copy thereof to the applicant, the appellant and the secretary-treasurer of the committee. R.S.O. 1990, c. P.13, s. 45 (19).

Idem

(20) The secretary-treasurer shall file a copy of the order of the Municipal Board with the clerk of the municipality. R.S.O. 1990, c. P.13, s. 45 (20).

Mobile homes, land lease community homes

46. (1) In this section,

"land lease community home" means any dwelling that is a permanent structure where the owner of the dwelling leases the land used or intended for use as the site for the dwelling, but does not include a mobile home; ("maison de communauté de terrains à bail")

"mobile home" means any dwelling that is designed to be made mobile, and constructed or manufactured to provide a permanent residence for one or more persons, but does not include a travel trailer or tent trailer or trailer otherwise designed; ("maison mobile")

"parcel of land" means a lot or block within a registered plan of subdivision or any land that may be legally conveyed under the exemption provided in clause 50 (3) (b) or clause 50 (5) (a). ("parcelle de terrain") R.S.O. 1990, c. P.13, s. 46 (1); 1994, c. 4, s. 15 (1).

One mobile home per parcel of land

(2) Unless otherwise authorized by a by-law in force under section 34 or an order of the Minister made under clause 47 (1) (a), or a permit issued under section 13 of the *Public Lands Act*, no person shall erect or locate or use or cause to be erected, located or used, a mobile home except on a parcel of land as defined in subsection (1), and in no case except as otherwise so authorized shall any person erect, locate or use or cause to be erected, located or used more than one mobile home on any such parcel of land. R.S.O. 1990, c. P.13, s. 46 (2).

One land lease community home per parcel of land

(2.1) Unless otherwise authorized by a by-law in force under section 34 or an order of the Minister made under clause 47 (1) (a), or a permit issued under section 13 of the *Public Lands Act*, no person shall construct or erect or locate or use or cause to be constructed, erected, located or used a land lease community home except on a parcel of land as defined in subsection (1), and in no case except as otherwise so authorized shall any person construct, erect, locate or use or cause to be constructed, erected, located or used more than one land lease community home on any such parcel of land. 1994, c. 4, s. 15 (2).

Saving

(3) This section does not apply to prevent the continued use in the same location of any mobile home that,

(a) was erected or located and in use prior to the 1st day of June, 1977; or

(b) was erected or located in accordance with a building permit issued prior to the 1st day of June, 1977. R.S.O. 1990, c. P.13, s. 46 (3).

Same

(4) This section does not apply to prevent the continued use in the same location of any land lease community home that,

(a) was constructed, erected or located and in use prior to the day the *Land Lease Statute Law Amendment Act, 1994* receives Royal Assent; or

(b) was constructed, erected or located in accordance with a building permit issued prior to the day the *Land Lease Statute Law Amendment Act, 1994* receives Royal Assent. 1994, c. 4, s. 15 (3).

Power of Minister re zoning and subdivision control

47. (1) The Minister may by order,

(a) in respect of any land in Ontario, exercise any of the powers conferred upon councils by section 34, 38 or 39, but subsections 34 (11) to (34) do not apply to the exercise of such powers; and

(b) in respect of any land in Ontario, exercise the powers conferred upon councils by subsection 50 (4). R.S.O. 1990, c. P.13, s. 47 (1); 1994, c. 23, s. 27 (1).

Power of Minister to allow minor variances

(2) Where an order has been made under clause (1) (a), the Minister, in respect of the lands affected by the order, has all the powers in respect of such order as a committee of adjustment has under subsections 45 (1) and (2) in respect of a by-law passed under section 34, but subsections 45 (4) to (8) and (10) to (20) do not apply to the exercise by the Minister of such powers. R.S.O. 1990, c. P.13, s. 47 (2).

Order prevails over by-law in event of conflict

(3) In the event of a conflict between an order made under clause (1) (a) and a by-law that is in effect under section 34 or 38, or a predecessor thereof, the order prevails to the extent of such conflict, but in all other respects the by-law remains in full force and effect. R.S.O. 1990, c. P.13, s. 47 (3).

Deemed by-law of municipality

(4) The Minister may, in the order or by separate order, provide that all or part of an order made under clause (1) (a) and any amendments to it in respect of land in a municipality, the council of which has the powers conferred by section 34, shall be deemed for all purposes, except the purposes of section 24, to be and to always have been a by-law passed by the council of the municipality in which the land is situate. 2001, c. 9, Sched. J, s. 2 (1).

Notice

(5) No notice or hearing is required prior to the making of an order under subsection (1) but the Minister shall give notice of any such order within thirty days of the making thereof in such manner as the Minister considers proper and shall set out in the notice the provisions of subsections (8), (9) and (10). R.S.O. 1990, c. P.13, s. 47 (5).

Idem

(6) The Minister shall cause a duplicate or certified copy of an order made under clause (1) (a),

(a) where the land affected is situate in a local municipality, to be lodged in the office of the clerk of the municipality, or where the land affected is situate in two or more local municipalities, in the office of the clerk of each of such municipalities; and

(b) where the land affected is situate in territory without municipal organization, to be lodged in the proper land registry office, where it shall be made available to the public as a production. R.S.O. 1990, c. P.13, s. 47 (6); 2002, c. 17, Sched. B, s. 17.

Registration

(7) The Minister shall cause a certified copy or duplicate of an order made under clause (1) (b) to be registered in the proper land registry office. R.S.O. 1990, c. P.13, s. 47 (7).

Revocation or amendment

(8) The Minister may, on his or her own initiative or at the request of any person or public body, by order, amend or revoke in whole or in part any order made under subsection (1). R.S.O. 1990, c. P.13, s. 47 (8); 1994, c. 23, s. 27 (2).

Information

(8.1) A request under subsection (8) shall include the prescribed information and material and such other information or material as the Minister may require. 1993, c. 26, s. 57 (2).

Refusal to consider

(8.2) The Minister may refuse to accept or further consider a request under subsection (8) until the prescribed information and material and the required fee are received. 1994, c. 23, s. 27 (3).

Notice

(9) Except as provided in subsection (10), the Minister before amending or revoking in whole or in part an order made under subsection (1) shall give notice or cause to be given notice thereof in such manner as the Minister considers proper and shall allow such period of time as he or she considers appropriate for the submission of representations in respect thereof. R.S.O. 1990, c. P.13, s. 47 (9).

Hearing by O.M.B.

(10) Where an application is made to the Minister to amend or revoke in whole or in part any order made under subsection (1), the Minister may, and on the request of any person or public body shall, request the Municipal Board to hold a hearing on the application and thereupon the Board shall hold a hearing as to whether the order should be amended or revoked in whole or in part. R.S.O. 1990, c. P.13, s. 47 (10); 1994, c. 23, s. 27 (4).

Reasons

(10.1) A request for a hearing must set out the reasons for the request and be accompanied by the fee prescribed under the *Ontario Municipal Board Act*. 1994, c. 23, s. 27 (5).

Refusal to refer

(11) The Minister may refuse to refer a request under subsection (10) to the Municipal Board if,

(a) the Minister is of the opinion that,

(i) the reasons set out in the request do not disclose any apparent land use planning ground upon which the Municipal Board could amend or revoke or refuse to revoke all or part of the order,

(ii) the request is not made in good faith or is frivolous or vexatious, or

(iii) the request is made only for the purpose of delay;

(b) the person or public body requesting the hearing has not provided written reasons for the request. 1994, c. 23, s. 27 (6); 1996, c. 4, s. 26 (1).

Notice of hearing

(12) Where the Minister has requested the Municipal Board to hold a hearing as provided for in subsection (10), notice of the hearing shall be given in such manner and to such persons as the Board may direct, and the Board shall hear any submissions that any person may desire to bring to the attention of the Board. R.S.O. 1990, c. P.13, s. 47 (12).

Dismissal without hearing

(12.1) Despite the *Statutory Powers Procedure Act* and subsection (10), the Municipal Board may dismiss a request to hold a hearing without holding a hearing, on its own initiative or on the motion of any party, if,

(a) it is of the opinion that,

(i) the reasons set out in the request do not disclose any apparent land use planning ground upon which the Board could amend or revoke or refuse to amend or revoke all or part of the order,

(ii) the request is not made in good faith or is frivolous or vexatious,

(iii) the request is made only for the purpose of delay, or

(iv) the person or public body requesting the hearing has persistently and without reasonable grounds commenced before the Board proceedings that constitute an abuse of process;

(b) the person or public body requesting the hearing has not provided written reasons for the request;

(c) the person or public body requesting the hearing has not paid the fee prescribed under the *Ontario Municipal Board Act*; or

(d) the person or public body requesting the hearing has not responded to a request by the Municipal Board for further information within the time specified by the Board. 1994, c. 23, s. 27 (7); 1996, c. 4, s. 26 (2); 2006, c. 23, s. 19 (1, 2).

Representation

(12.2) Before dismissing a request to hold a hearing, the Municipal Board shall notify the person or public body requesting the hearing and give the person or public body the opportunity to make representation on the proposed dismissal but this subsection does not apply if the person or public body has not complied with a request made under clause (12.1) (d). 2000, c. 26, Sched. K, s. 5 (4).

Dismissal

(12.3) The Municipal Board may dismiss a request after holding a hearing or without holding a hearing on the motion under subsection (12.1), as it considers appropriate. 2000, c. 26, Sched. K, s. 5 (4).

Decision of O.M.B.

(13) The Municipal Board after the conclusion of the hearing shall make a decision to either amend or revoke the order in whole or in part or refuse to amend or revoke the order in whole or in part and the Minister shall give effect to the decision of the Board. R.S.O. 1990, c. P.13, s. 47 (13); 1996, c. 4, s. 26 (3).

Minister's notice re matters of provincial interest

(13.1) If the Municipal Board has been requested to hold a hearing as provided for in subsection (10) and the Minister is of the opinion that a matter of provincial interest is, or is likely to be, adversely affected by the requested amendment or revocation, the Minister may so notify the Board in writing, not later than 30 days before the day fixed by the Board for the hearing. 2006, c. 23, s. 19 (3).

Same

(13.2) The Minister's notice shall identify,

(a) the provisions of the order by whose amendment or revocation the provincial interest is, or is likely to be, adversely affected; and

(b) the general basis for the opinion that a matter of provincial interest is, or is likely to be, adversely affected. 2006, c. 23, s. 19 (3).

Same

(13.3) The Minister is not required to give notice or to hold a hearing before giving notice under subsection (13.1). 2006, c. 23, s. 19 (3).

Effect of notice

(13.4) If the Municipal Board receives notice from the Minister under subsection (13.1), the decision of the Board is not final and binding with respect to the amendment or revocation of provisions identified in the notice, until the Lieutenant Governor in Council confirms the decision in that respect. 2006, c. 23, s. 19 (3).

Power of Lieutenant Governor in Council

(13.5) The Lieutenant Governor in Council may confirm, vary or rescind the Municipal Board's decision with respect to the amendment or revocation of provisions identified in the notice, and may direct the Minister to amend or revoke the order, in whole or in part. 2006, c. 23, s. 19 (3).

Notification of decision

(14) A copy of the decision of the Municipal Board shall be sent to each person who appeared at the hearing and made representations and to any person who in writing requests a copy of the decision. R.S.O. 1990, c. P.13, s. 47 (14).

(15)-(17) REPEALED: 1994, c. 23, s. 27 (8).

Effect of land use order

(18) An order of the Minister made under clause (1) (b) has the same effect as a by-law passed under subsection 50 (4). R.S.O. 1990, c. P.13, s. 47 (18).

Deemed by-law

(19) The Minister may, in the order or by separate order, provide that all or part of an order made under clause (1) (a) and any amendments to it in respect of land in the planning area of a planning board shall be deemed to be and to always have been a by-law passed under section 34 by the planning board in which the land is situate. 2001, c. 9, Sched. J, s. 2 (2).

Where licence, etc., not to issue

48. Despite the provisions of any other general or special Act, a licence, permit, approval or permission shall not be issued or granted nor any utility or service provided by a utilities distributor or a public or Crown agency in respect of any land, building or structure where the proposed use of the land or the erection or proposed use of the building or structure would be in contravention of section 46 or of an order made under section 47 or of a by-law passed by a planning board under section 34 or 38. R.S.O. 1990, c. P.13, s. 48; 1994, c. 23, s. 28; 2006, c. 23, s. 20.

Power of entry

49. (1) In this section,

"officer" means an officer who has been assigned the responsibility of enforcing section 46, orders of the Minister made under clause 47 (1) (a) or zoning by-laws passed under section 34.

Entry and inspection

(2) Subject to subsection (3), where an officer believes on reasonable grounds that section 46, an order of the Minister made under clause 47 (1) (a) or a by-law passed under section 34 or 38 is being contravened, the officer or any person acting under his or her instructions may, at all reasonable times and upon producing proper identification, enter and inspect any property on or in respect of which he or she believes the contravention is occurring. R.S.O. 1990, c. P.13, s. 49 (1, 2).

Where warrant required

(3) Except under the authority of a search warrant issued under section 49.1, an officer or any person acting under his or her instructions shall not enter any room or place actually used as a dwelling without requesting and obtaining the consent of the occupier, first having informed the occupier that the right of entry may be refused and entry made only under the authority of a search warrant. R.S.O. 1990, c. P.13, s. 49 (3); 1994, c. 2, s. 45 (1).

Obstruction

(4) No person shall obstruct or attempt to obstruct an officer or a person acting under the officer's instructions in the exercise of a power under this section. 1994, c. 2, s. 45 (2).

Search warrant

49.1 (1) A provincial judge or justice of the peace may at any time issue a warrant in the prescribed form authorizing a person named in the warrant to enter and search a building, receptacle or place if the provincial judge or justice of the peace is satisfied by information on oath that there are reasonable grounds to believe that,

(a) an offence under section 67 has been committed; and

Français

Planning Act

ONTARIO REGULATION 608/06
DEVELOPMENT PERMITS

Consolidation Period: From August 3, 2007 to the e-Laws currency date.

Last amendment: O. Reg. 448/07.

This is the English version of a bilingual regulation.

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Schedule 1	Information and material to be provided in an application for approval of a development permit

Definition

1. (1) In this Regulation,

"development" means,

(a) the construction, erection or placing of one or more buildings or structures on land,

(b) the making of an addition or alteration to a building or structure that has the effect of substantially increasing its size or usability,

(c) the laying out and establishment of,

(i) a commercial parking lot,

(ii) sites for the location of three or more mobile homes as defined in subsection 46 (1) of the Act,

(iii) sites for the construction, erection or location of three or more land lease community homes as defined in subsection 46 (1) of the Act, or

(iv) sites for the location of three or more trailers as defined in subsection 164 (4) of the *Municipal Act, 2001*,

(d) site alteration, including but not limited to,

(i) alteration of the grade of land, and

(ii) placing or dumping fill, or

(e) the removal of vegetation. O. Reg. 608/06, s. 1 (1).

(2) Subsection (1) applies instead of the definition of "development" in subsection 41 (1) of the Act or subsection 114 (1) of the *City of Toronto Act, 2006*. O. Reg. 608/06, s. 1 (2); O. Reg. 448/07, s. 1.

Development permit system

2. The council of a local municipality may by by-law establish a development permit system within the municipality for any area or areas set out in the by-law. O. Reg. 608/06, s. 2.

Conditions re official plan

3. (1) The council shall not pass a development permit by-law for any area in the municipality unless, before the passing of the by-law, the official plan in effect in the municipality,

(a) identifies the area as a proposed development permit area;

(b) sets out the scope of the authority that may be delegated and any limitations on the delegation, if the council intends to delegate any authority under the development permit by-law; and

(c) for each proposed development permit area identified under clause (a),

(i) contains a statement of the municipality's goals, objectives and policies in proposing a development permit system for the area,

(ii) sets out the types of criteria that may be included in the development permit by-law for determining whether any class of development or any use of land may be permitted by development permit, and

(iii) sets out the types of conditions that may be included in the development permit by-law in accordance with clause 4 (2) (i) and subsections 4 (4), (5) and (6). O. Reg. 608/06, s. 3 (1).

(2) The types of criteria described in subclause (1) (c) (ii) and the types of conditions described in subclause (1) (c) (iii) shall be in accordance with the goals, objectives and policies described in subclause (1) (c) (i). O. Reg. 608/06, s. 3 (2).

(3) For greater certainty, subsection (1) is subject to subsection 24 (2) of the Act. O. Reg. 608/06, s. 3 (3).

(4) The official plan may,

(a) set out information and materials that are required, in addition to those set out in Schedule 1, in an application for a development permit; and

(b) exempt any class of development or any use of land from any of the requirements of Schedule 1, but only if the official plan sets out what information and materials are to be provided in an application that falls within that class or use. O. Reg. 608/06, s. 3 (4).

(5) The official plan may contain policies relating to the application of paragraph 5 of subsection 4 (5), respecting conditions requiring the provision of specified facilities, services and matters in exchange for a specified height or density of development, which may be within the ranges set out under clause 4 (2) (c) or outside those ranges as set out under clause 4 (3) (f). O. Reg. 608/06, s. 3 (5).

Development permit by-law

4. (1) Section 34 of the Act, section 113 of the *City of Toronto Act, 2006* and the regulations made under those sections apply, with necessary modifications, to the making of a development permit by-law, and the by-law is deemed to be a by-law passed under section 34 of the Act, except as set out in this Regulation. O. Reg. 608/06, s. 4 (1).

(2) A development permit by-law shall,

(a) contain a description of the area to which the by-law applies, which shall be within the boundaries of an area identified in the official plan as a proposed development permit area;

(b) set out and define the permitted uses of land;

(c) set out a list of minimum and maximum standards for development;

(d) set out any internal review procedures regarding decisions made under subsection 10 (8);

(e) set out the manner in which notice shall be given, under subsection 10 (12), of decisions made under subsection 10 (8);

(f) provide that a development permit may be amended as described in the by-law;

(g) provide that an agreement referred to in paragraph 7 of subsection (5) may be amended as described in the by-law;

(h) provide that an agreement referred to in section 6 may be amended in the same way as an agreement referred to in paragraph 7 of subsection (5);

(i) if the council wishes to impose conditions in making decisions under subsection 10 (8), outline the conditions;

(j) if the council is delegating any authority under the by-law, set out the scope of the authority that is delegated and any limitations on the delegation; and

(k) state that the placement of a portable classroom on a school site of a district school board is exempt from the requirement for a development permit if the school site was in existence on January 1, 2007, in accordance with section 16. O. Reg. 608/06, s. 4 (2).

(3) A development permit by-law may, in addition to the matters set out in subsection 34 (1) of the Act,

(a) prohibit any development or change of use of land unless a development permit is obtained;

(b) set out and define classes of development;

(c) exempt any defined class of development or use of land from the requirement for a development permit;

(d) set out a list of classes of development or uses of land that may be permitted if the criteria set out in the official plan and in the by-law have been met;

(e) set out criteria that the council shall use in making decisions under subsection 10 (8); and

(f) set out a range of possible variations from the standards referred to in clause (2) (c) that may be authorized in connection with the issuing of a development permit. O. Reg. 608/06, s. 4 (3).

(4) A condition that is outlined for the purposes of clause (2) (i),

(a) shall be of a type that is permitted by the official plan;

(b) shall be reasonable for and related to the appropriate use of the land; and

(c) shall not conflict with federal and provincial statutes and regulations. O. Reg. 608/06, s. 4 (4).

(5) Some examples of conditions that may be outlined for the purposes of clause (2) (i) are:

1. A condition that is permitted by section 34, 40, 41 or 42 of the Act or by section 113 or 114 of the *City of Toronto Act, 2006*.
2. A condition that is related to the removal or restoration of vegetation.

3. A condition that is related to site alteration, including but not limited to,
   i. alteration or restoration of the grade of land, and
   ii. placing or dumping fill.
4. A condition that is related to ongoing monitoring requirements that are considered necessary for the protection of,
   i. public health and safety, or
   ii. the natural environment.
5. A condition that requires the provision of specified facilities, services and matters in exchange for a specified height or density of development, which may be within the ranges set out under clause (2) (c) or outside those ranges as set out under clause (3) (f).
6. With respect to land described in paragraph 3, 3.1 or 3.2 of subsection 34 (1) of the Act, a condition that is related to the matters that would otherwise be prohibited under those paragraphs.
7. A condition requiring the owner of the land to enter into one or more agreements with the municipality respecting one or more other conditions imposed under clause 10 (8) (c), (d) or (e). O. Reg. 608/06, s. 4 (5).

(6) A condition described in paragraph 5 of subsection (5) may be imposed only if,

(a) the official plan sets out policies relating to the application of that paragraph;

(b) the by-law specifically identifies the area of the municipality in respect of which a condition described in that paragraph may be imposed; and

(c) the by-law establishes a proportional relationship between the quantity or monetary value of the facilities, services and matters that may be required and the height or density of development that may be allowed. O. Reg. 608/06, s. 4 (6).

Agreement between municipality and owner

5. (1) An agreement referred to in paragraph 7 of subsection 4 (5) may be registered against the land to which it applies, and the municipality is entitled to enforce it against the owner and, subject to the *Registry Act* and the *Land Titles Act*, against any and all subsequent owners of the land. O. Reg. 608/06, s. 5 (1).

(2) The ability to impose a condition referred to in paragraph 7 of subsection 4 (5) is in addition to the powers set out in clauses 41 (7) (c) and (c.1) of the Act and in clauses 114 (11) (c) and (d) of the *City of Toronto Act, 2006*. O. Reg. 608/06, s. 5 (2).

Pre-existing agreements under s. 41 of Act or s. 114 of *City of Toronto Act, 2006*

6. When an agreement has been entered into by a municipality under section 41 of the Act or section 114 of the *City of Toronto Act, 2006*, and afterwards a development permit by-law that applies to the same land as the agreement comes into force under this Regulation,

(a) the agreement continues to be valid and binding; and

(b) the agreement may be amended as if it were an agreement referred to in paragraph 7 of subsection 4 (5). O. Reg. 608/06, s. 6.

Notice of proposed by-law

7. In addition to the requirements set out in section 6 of Ontario Regulation 545/06 (Zoning By-laws, Holding By-laws and Interim Control By-laws) made under the Act, written notice of a proposed development permit by-law shall contain,

(a) a description of the purpose and effect of the development permit system in the municipality;

(b) a description of the proposed development permit area or areas;

(c) a statement that an appeal to the Municipal Board against a decision on a development permit application may be made only by the owner of the land to which the application relates; and

(d) a description of any internal review procedures contained in the by-law. O. Reg. 608/06, s. 7.

Non-application of certain provisions of Act and *City of Toronto Act, 2006*

8. (1) Subsection 34 (21) and section 45 of the Act do not apply to a development permit by-law. O. Reg. 608/06, s. 8 (1).

(2) Section 37 and subsections 41 (2), (3) and (13) of the Act and subsections 114 (2), (3) and (17) of the *City of Toronto Act, 2006* do not apply to land subject to a development permit by-law. O. Reg. 608/06, s. 8 (2).

Commencement of by-law

9. (1) A development permit by-law comes into force on,

(a) the day after the last day for filing a notice of appeal, if there are no appeals; or

(b) the day after the day on which all the appeals are disposed of by the Municipal Board, or such later date as the Board may otherwise order, subject to subsection (2). O. Reg. 608/06, s. 9 (1).

(2) If there are appeals that have not yet been disposed of, the Municipal Board may, on its own initiative or on the motion of any person or public body, make an order providing that any part of the development permit by-law that is not in issue in such an appeal is deemed to have come into force on,

(a) the day after the last day for filing a notice of appeal; or

(b) such later date as the Board may otherwise order. O. Reg. 608/06, s. 9 (2).

(3) On the day the development permit by-law comes into force, all by-laws passed under section 34 of the Act are deemed to be repealed with respect to the area covered by the development permit by-law. O. Reg. 608/06, s. 9 (3).

(4) If subsection (2) applies, the relevant parts of by-laws passed under section 34 of the Act are deemed to be repealed with respect to the area covered by the part of the development permit by-law that is deemed to have come into force early. O. Reg. 608/06, s. 9 (4).

Application for development permit

10. (1) An owner of land or the owner's authorized agent may apply to the council of the municipality for a development permit with respect to land subject to a development permit by-law. O. Reg. 608/06, s. 10 (1).

(2) An application for a development permit shall contain the information and material set out in Schedule 1, except as provided in subsection 3 (4). O. Reg. 608/06, s. 10 (2).

(3) The council may require that additional information and materials be included in an application for a development permit, as described in clause 3 (4) (a). O. Reg. 608/06, s. 10 (3).

(4) Until the council has received the information and material referred to in subsections (2) and (3), if any, and any fee under section 69 of the Act,

(a) the council may refuse to accept or further consider the application; and

(b) the 45-day period referred to in subsection 12 (1) does not begin. O. Reg. 608/06, s. 10 (4).

(5) When an applicant applies for a development permit, the applicant or the municipality may make a motion for directions to have the Municipal Board determine,

(a) whether the information and material required under subsections (2) and (3) have in fact been provided; or

(b) whether a requirement made under subsection (3) is reasonable. O. Reg. 608/06, s. 10 (5).

(6) The council shall consider the application for a development permit,

(a) when the information and material and fee have been received as described in subsection (4); or

(b) when the Municipal Board makes a determination to that effect under subsection (5). O. Reg. 608/06, s. 10 (6).

(7) If the Municipal Board makes the determination described in clause (6) (b), the 45-day period referred to in subsection 12 (1) is counted from the day on which the information, material and fee referred to in subsection (4) had all been received. O. Reg. 608/06, s. 10 (7).

(8) On considering the application, the council may,

(a) refuse the application;

(b) approve the application and issue a development permit with no conditions attached;

(c) approve the application and require that conditions be met before issuing a development permit;

(d) approve the application and issue a development permit with conditions attached; or

(e) approve the application, require that conditions be met before issuing a development permit and, when the conditions have been met, issue a development permit with conditions attached. O. Reg. 608/06, s. 10 (8).

(9) A condition that is imposed under clause (8) (c), (d) or (e) shall meet the following requirements:

1. The condition shall be clear, precise and quantifiable.
2. The condition shall include a clear statement of whether it must be complied with before construction, renovation or change of use of a building.
3. The condition shall not deal with the following aspects of buildings and structures:
   i. interior design,
   ii. the layout of interior areas, other than interior walkways, stairs, elevators and escalators to which members of the public have access from streets, open spaces and interior walkways in adjacent buildings,
   iii. the manner of construction and construction standards. O. Reg. 608/06, s. 10 (9).

(10) When the council attaches a condition to a development permit under clause (8) (d) or (e), it may require that the fulfilment of the condition be secured in a way that is satisfactory to the council. O. Reg. 608/06, s. 10 (10).

(11) The council, in considering an application for a development permit, may confer with any persons or public bodies that the council considers to have an interest in the application. O. Reg. 608/06, s. 10 (11).

(12) Within 15 days after the council makes a decision under subsection (8), written notice of the decision, including reasons and any conditions imposed, shall be given to the applicant and to each person or public body that filed a written request to be informed of the decision with the clerk of the municipality. O. Reg. 608/06, s. 10 (12).

(13) Section 41 of the Act or section 114 of the *City of Toronto Act, 2006* applies, with necessary modifications, to an application for a development permit, except as otherwise provided in this Regulation. O. Reg. 608/06, s. 10 (13).

(14) Subsections 41 (6), (12) and (12.1) of the Act and subsections 114 (10), (15) and (16) of the *City of Toronto Act, 2006* do not apply to an application for a development permit. O. Reg. 608/06, s. 10 (14).

Motion for directions re fulfillment of condition

11. In the case of a decision under clause 10 (8) (c), (d) or (e) the applicant may, at any time, make a motion for directions to have the Municipal Board determine whether a specified condition has been fulfilled. O. Reg. 608/06, s. 11.

Appeal to O.M.B.

12. (1) If the council fails to make a decision under subsection 10 (8) within 45 days after the date on which the information and material and fee are received as described in subsection 10 (4) or (7), the applicant may appeal to the Municipal Board against the failure to make a decision. O. Reg. 608/06, s. 12 (1).

(2) The applicant may appeal any decision made under subsection 10 (8) to the Municipal Board no later than 20 days after the day notice of the decision is given. O. Reg. 608/06, s. 12 (2).

(3) The appeal may be made by filing with the clerk of the municipality a notice of appeal setting out the reasons for the appeal, accompanied by the fee prescribed under the *Ontario Municipal Board Act*. O. Reg. 608/06, s. 12 (3).

Duties of clerk

13. On receiving a notice of appeal under section 12, the clerk of the municipality shall ensure that,

(a) a record is compiled that includes,
   (i) the original or a true copy of the application,
   (ii) a copy of the development permit by-law, certified by the clerk,
   (iii) a copy of any decision of council relating to the application, certified by the clerk, and
   (iv) an affidavit or sworn declaration by an employee of the municipality that the notice requirements of subsection 10 (12) have been complied with; and

(b) the notice of appeal, the record and the fee are forwarded to the Municipal Board within 15 days after the notice of appeal is received under section 12. O. Reg. 608/06, s. 13.

Decision of O.M.B.

14. (1) On an appeal under section 12, the Municipal Board,

(a) shall hold a hearing and determine the matter in issue; and

(b) may make any decision that the council could have made under subsection 10 (8). O. Reg. 608/06, s. 14 (1).

(2) The Municipal Board's decision is final. O. Reg. 608/06, s. 14 (2).

(3) If the Municipal Board orders that a development permit be issued, the council shall issue it, except that if the Municipal Board imposes conditions, the development permit shall not be issued until,

(a) in the case of conditions that are required to be met before the development permit is issued, the council is satisfied that the conditions have been met;

(b) in the case of conditions that are attached to the development permit, their fulfillment has been secured in a way that is satisfactory to the council. O. Reg. 608/06, s. 14 (3).

(4) Subsection 10 (12) applies to orders of the Municipal Board, with necessary modifications. O. Reg. 608/06, s. 14 (4).

Delegation by council

15. (1) If clauses 3 (1) (b) and 4 (2) (j) have been complied with, the council may delegate the authority described in subsection (2) to,

(a) a committee appointed by the council, including a committee of the council; or

(b) an employee of the municipality, identified by name or position. O. Reg. 608/06, s. 15 (1).

(2) The authority that may be delegated is authority to,

(a) make any decision that the council is authorized to make under subsection 10 (8); and

(b) enter into agreements referred to in paragraph 7 of subsection 4 (5). O. Reg. 608/06, s. 15 (2).

(3) The authority delegated as described in clause (2) (a) or (b) or as described in both clauses may be made subject to any limitations that are set out in the delegation. O. Reg. 608/06, s. 15 (3).

Exemption

16. The placement of a portable classroom on a school site of a district school board is exempt from the requirement for a development permit if the school site was in existence on January 1, 2007. O. Reg. 608/06, s. 16.

Transition

17. (1) In this section,

"development permit by-law" means By-law 2004-180 of the Township of Lake of Bays, including any amendments made before the day this Regulation comes into force. O. Reg. 608/06, s. 17 (1).

(2) Until the council of the Township of Lake of Bays revokes the development permit by-law and replaces it in accordance with this Regulation,

(a) despite the revocation of Ontario Regulation 246/01, the development permit by-law continues to be in force, shall be interpreted and may be amended as if that regulation were still in force;

(b) the council may amend the development permit by-law to extend its application to any area within the Township of Lake of Bays in addition to the land described in section 3 of Schedule 1 to Ontario Regulation 246/01. O. Reg. 608/06, s. 17 (2).

18. OMITTED (REVOKES OTHER REGULATIONS). O. Reg. 608/06, s. 18.

19. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 608/06, s. 19.

SCHEDULE 1
INFORMATION AND MATERIAL TO BE PROVIDED IN AN APPLICATION FOR APPROVAL OF A DEVELOPMENT PERMIT

1. The name, address, telephone number and, if applicable, the e-mail address of the owner of the subject land, and of the agent if the applicant is an authorized agent.

2. The current designation of the subject land in the applicable official plan and the land uses that the designation authorizes.

3. Whether a variation is requested within the provisions set out in the development permit by-law.

4. Whether the proposed use is,

(a) a permitted use; or

(b) a use that may be permitted subject to criteria as set out in the development permit by-law.

5. If the answer to section 3 or clause 4 (b) is yes, a statement regarding how the applicable criteria have been addressed.

6. A description of the subject land, including such information as the municipality, concession and lot numbers, registered plan and lot numbers, reference plan and part numbers and street names and numbers.

7. The frontage, depth and area of the subject land, in metric units.

8. Whether access to the subject land is,

(a) by a provincial highway, a municipal road that is maintained all year or seasonally, another public road or a right of way; or

(b) by water.

9. If access to the subject land is by water only, the parking and docking facilities used or to be used and the approximate distance of these facilities from the subject land and the nearest public road.

10. The existing uses of the subject land.

11. Whether there are any buildings or structures on the subject land.

12. If the answer to section 11 is yes, the following information for each building or structure:

(a) the type of building or structure; and

(b) in metric units, the setback from the front lot line, rear lot line and side lot lines, the height of the building or structure and its dimensions or floor area.

13. The proposed uses of the subject land.

14. Whether any buildings or structures are proposed to be built on the subject land.

15. If the answer to section 14 is yes, the following information for each proposed building or structure:

(a) the type of building or structure; and

(b) in metric units, the setback from the front lot line, rear lot line and side lot lines, the height of the building or structure and its dimensions or floor area.

16. Whether the proposed building or structure is within an area described in the official plan and development permit by-law as an area within which plans and drawings under subsection 41 (4) or (5) of the Act or subsection 114 (5) or (9) of the *City of Toronto Act, 2006* may be required.

17. One or both of the following, as required by the development permit by-law:

1. Plans that show the location of all buildings and structures to be erected, the location of all facilities and works to be provided in conjunction with the buildings and structures, and the location of all facilities and works required under clause 41 (7) (a) of the Act or clause 114 (11) (a) of the *City of Toronto Act, 2006*, including facilities designed to have regard for accessibility for persons with disabilities.

2. Drawings that show plan, elevation and cross-section views for each building to be erected and are sufficient to display,

   i. the massing and conceptual design of the proposed building,

ii. the relationship of the proposed building to adjacent buildings, streets, and exterior areas to which members of the public have access,

iii. the provision of interior walkways, stairs, elevators and escalators to which members of the public have access from streets, open spaces and interior walkways in adjacent buildings,

iv. matters relating to exterior design, including without limitation the character, scale, appearance and design features of the proposed building, and its sustainable design, but only to the extent that it is a matter of exterior design, if the official plan contains provisions relating to such matters,

v. the sustainable design elements on any adjoining highway under a municipality's jurisdiction, including without limitation trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers and bicycle parking facilities, and

vi. facilities designed to have regard for accessibility for persons with disabilities.

18. Plans and drawings referred to in section 17 shall not include the following:

1. Interior design.

2. The layout of interior areas, other than the interior walkways, stairs, elevators and escalators referred to in subparagraph 2 iii of section 17.

3. The manner of construction and standards for construction.

19. If known,

(a) the date the subject land was acquired by the current owner;

(b) the date any existing buildings or structures on the subject land were constructed; and

(c) the length of time that the existing uses of the subject land have continued.

20. Whether water is provided to the subject land by a publicly owned and operated piped water system, a privately owned and operated individual or communal well, a lake or other water body or other means.

21. Whether sewage disposal is provided to the subject land by a publicly owned and operated sanitary sewage system, a privately owned and operated individual or communal septic system, a privy or other means.

22. Whether storm drainage is provided by sewers, ditches, swales or other means.

23. If known,

(a) whether the subject land has ever been the subject of an application under the Act for approval of a plan of subdivision or a consent;

(b) if the answer to clause (a) is yes, the file number and status of the application;

(c) whether the subject land has ever been the subject of an application under section 34 or 45 of the Act; and

(d) if the answer to clause (c) is yes, the file number and status of the application.

24. A sketch showing, in metric units,

(a) the boundaries and dimensions of the subject land;

(b) the location, size and type of all existing and proposed buildings and structures on the subject land, indicating their distance from the front yard lot line, rear yard lot line and side yard lot lines;

(c) the approximate location of all natural and artificial features (for example, buildings, railways, roads, watercourses, drainage ditches, banks of rivers or streams, wetlands, wooded areas, wells and septic tanks) that,

(i) are located on the subject land and on land that is adjacent to it, and

(ii) in the applicant's opinion, may affect the application;

(d) the current uses of land that is adjacent to the subject land;

(e) the location, width and name of any roads within or abutting the subject land, indicating whether it is an unopened road allowance, a public travelled road, a private road or a right of way;

(f) if access to the subject land is by water only, the location of the parking and docking facilities to be used; and

(g) the location and nature of any easement or restrictive covenant affecting the subject land.

25. An affidavit or sworn declaration by the applicant that the information required under this Schedule and provided by the applicant is accurate.

O. Reg. 608/06, Sched. 1.

Français

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INTERPRETATION

Interpretation

1. (1) In this Regulation,

"building" means a structure consisting of a roof, wall or floor, but does not include floating structures, docks, boathouses, tents or ice huts;

"dredge" means to remove or displace material from any shore lands, but does not include the removal or displacement of material for the purpose of installing service cables, heat loops or water intakes for private residences;

"invasive aquatic vegetation" means plants listed in the document entitled "Ontario's Invasive Aquatic Plant List" and dated March 11, 2013, that is published by the Ministry and available on the Ministry website;

"in-water work related to an activity" means any work related to the activity that is conducted in the water of a lake, river, stream or pond;

"In-water Work Timing Window Guidelines" means the document entitled "In-water Work Timing Window Guidelines" and dated March 11, 2013, that is published by the Ministry and available on the Ministry website;

"native aquatic vegetation" means plants that grow partly or wholly in water and that may be rooted or floating, but does not include invasive aquatic vegetation;

"Registry" means the registry known as the Ministry of Natural Resources Registry available on the Ministry website;

"road" has the same meaning as in Part II of the Act;

"shore lands" means lands covered or seasonally inundated by the water of a lake, river, stream or pond;

"trail" means a path over public lands that is not used for mineral exploration or extraction;

"water crossing" means a bridge, culvert or causeway constructed to provide access to two points separated by water;

"waterfront property" means a parcel of land having a boundary on a lake, river, stream or pond;

"work permit" means a work permit issued under the Act. O. Reg. 239/13, s. 1 (1).

(2) A reference in this Regulation to a person carrying out an activity is deemed to include a reference to a person causing the activity to be carried out. O. Reg. 239/13, s. 1 (2).

PROHIBITED ACTIVITIES AND REQUIREMENT TO OBTAIN A WORK PERMIT

Activities prohibited unless carried out in accordance with work permits

2. (1) No person shall carry out any of the following activities except under the authority of and in accordance with the terms and conditions of a work permit that authorizes the activity:

1. Construct or place a building on public land.
2. Construct a trail, water crossing or road on public land.
3. Dredge shore lands.
4. Fill shore lands.
5. Remove invasive aquatic vegetation or native aquatic vegetation by mechanical means or by hand from shore lands.
6. Construct or place a structure or combination of structures that occupies more than 15 square metres on shore lands. O. Reg. 239/13, s. 2 (1).

(2) For the purposes of paragraph 5 of subsection (1), removal by mechanical means includes removal with a rake, cutter-bar device or mechanical harvester, but does not include dredging. O. Reg. 239/13, s. 2 (2).

Non-application of prohibition under s. 2

3. Nothing in section 2 prohibits a person from acting under the authority of and in accordance with the terms and conditions of an instrument that,

(a) is granted under the Act; and

(b) authorizes an activity that would otherwise be prohibited, except if carried out under the authority of and in accordance with the terms and conditions of a work permit. O. Reg. 239/13, s. 3.

Non-application of prohibition under par. 2 of s. 2 (1)

4. (1) The prohibition under paragraph 2 of subsection 2 (1) does not apply with respect to a trail, water crossing or road that has been authorized under a forest management plan under the *Crown Forest Sustainability Act, 1994* or constructed as part of a forest operation to which that Act applies. O. Reg. 239/13, s. 4 (1).

(2) The prohibition under paragraph 2 of subsection 2 (1) does not apply with respect to minor maintenance activities carried out on a trail, water crossing or road, including the following activities:

1. Water crossing cleaning for the purpose of maintaining the flow of water.
2. Superficial grading of trails or roads.
3. Clearing of existing ditches.
4. Spot gravelling.
5. Clearing or brushing of existing road or trail surface.
6. Snow plowing.
7. Sanding or dust control.
8. Repair or replacement of posted signage. O. Reg. 239/13, s. 4 (2).

EXEMPTIONS FROM REQUIREMENT TO OBTAIN A WORK PERMIT

Construction or placement of buildings within unpatented mining claims

5. (1) A person is not required under paragraph 1 of subsection 2 (1) to obtain a work permit to construct or place one or more buildings within the boundaries of an unpatented mining claim for the purpose of mineral exploration and development, if the person complies with the requirements set out in subsection (2). O. Reg. 239/13, s. 5 (1).

(2) The requirements referred to in subsection (1) are the following:

1. The person is the holder of the unpatented mining claim on which the construction or placement of the building or buildings is to be carried out.
2. The person must ensure that the building or buildings meet the following requirements:
   i. The building or buildings must not be constructed or placed within the 120 metre shoreline reservation authorized by subsection 40 (1) of the *Mining Act*.
   ii. The building or buildings must not be constructed or placed on land to which the surface rights are held by another person.
3. At least 10 business days before the commencement date of the construction or placement of the building or buildings, the person gives the Minister notice of the fact that the person is about to begin the activity, by submitting a notice of activity form available on the Registry to the Minister through the Registry and the notice must include a description of the activity and of the location where it is to be carried out.
4. The person follows the requirements of subsections (3) and (4) with respect to the completion of the notice of activity form and the keeping of records relating to the notice of activity form. O. Reg. 239/13, s. 5 (2).

(3) Before submitting a notice of activity form to the Minister, the person must ensure that,

(a) all mandatory information requested on the form, including the person's contact information, has been provided; and

(b) the information provided on the form is complete and accurate. O. Reg. 239/13, s. 5 (3).

(4) After submitting a notice of activity form to the Minister, the person must,

(a) promptly upon obtaining from the Ministry confirmation that a notice of activity form submitted through the Registry has been received by the Minister, make a record of the confirmation; and

(b) for as long as the activity is being carried out,

(i) keep the record of the confirmation on site, and

(ii) make the record of the confirmation available to the Ministry upon receiving a request for it. O. Reg. 239/13, s. 5 (4).

(5) A person who provides incomplete, false or misleading information on a notice of activity form is deemed not to have submitted the notice of activity form. O. Reg. 239/13, s. 5 (5).

(6) For the purposes of this section,

"commencement date of the construction or placement of the building or buildings" means the first day of operation of machinery or equipment,

(a) in connection with the construction or placement of the building, if there is one building; or

(b) in connection with the construction or placement of the first building, if there is more than one building. O. Reg. 239/13, s. 5 (6).

Dredging of shore lands previously dredged

6. (1) A person is not required under paragraph 3 of subsection 2 (1) to obtain a work permit to dredge shore lands that were initially dredged under the authority of a work permit, if the person complies with the requirements set out in subsection (2). O. Reg. 239/13, s. 6 (1).

(2) The requirements referred to in subsection (1) are the following:

1. The person is the owner of the waterfront property adjacent to the shore lands where the proposed dredging is to be carried out.
2. The person carried out the initial dredging under the authority of a work permit issued on or after January 1, 2009.
3. The commencement date of the proposed dredging is,
   i. in the case of the first dredging following the initial dredging, no later than on the fifth anniversary of the day the work permit referred to in paragraph 2 is issued, and
   ii. in the case of each subsequent dredging, no later than on the fifth anniversary of the date of completion of the immediately preceding dredging.
4. The person carries out the activity in accordance with the following requirements:
   i. The activity must be carried out within the straight line production of the sidelines of the waterfront property.
   ii. The area to be dredged must comply with the requirements of subsections (4) and (5) with respect to its dimensions and location.
   iii. Blasting or open water disposal must not be used in connection with the activity.
   iv. In-water work related to the activity must not be carried out during the timing windows when in-water work related to the activity is restricted, as determined in accordance with the In-water Work Timing Window Guidelines.
   v. If any work related to the activity is likely to disturb sediments, sediment controls containing the area where the work is carried out,
      A. must be installed before the work begins,
      B. must be maintained for the duration of the work, and
      C. must not be removed until after the area has stabilized.
   vi. Wheeled or tracked machinery or equipment used in connection with the activity,
      A. must be used on dry land or used from a barge or vessel,
      B. must be operated from dry land or operated from a barge or vessel, and
      C. must be stored on dry land or stored on a barge or vessel.
   vii. Any material that results from the activity, including sediment, debris and aquatic vegetation, must be disposed of on dry land and in a manner that prevents it from entering or re-entering any lake, river, stream or pond. O. Reg. 239/13, s. 6 (2).

(3) For the purposes of an exemption under this section, if the commencement date referred to in paragraph 3 of subsection (2) falls within a timing window referred to in subparagraph 4 iv of subsection

31. (1) Despite anything in any general or special Act, no person, including a municipality and a local board, as defined in the *Municipal Affairs Act*,

(a) shall obstruct or deposit material on, along, under or across the King's Highway or take up or in any way interfere with the King's Highway; or

(b) shall construct or change the use of any private road, entranceway, gate or other structure or facility as a means of access to the King's Highway, other than a controlled-access highway,

except in accordance with the conditions of a permit issued therefor by the Minister and those conditions may include such fees or other consideration as the Minister may specify. R.S.O. 1990, c. P.50, s. 31 (1); 1994, c. 17, s. 63; 2002, c. 17, Sched. F, Table.

Offence

(2) Every person who contravenes subsection (1) is guilty of an offence and on conviction is liable to a fine of not less than $200 and not more than $5,000. R.S.O. 1990, c. P.50, s. 31 (2).

Use of highway by vehicles and animals

32. (1) The Minister may make regulations prohibiting or regulating the use of the King's Highway by any class of vehicles or animals and may impose penalties for contravention thereof, but no such regulation has any force or effect until approved by the Lieutenant Governor in Council after notice to any municipality affected thereby.

Horses, cattle, etc., on highway

(2) Every person who, being the owner or having the care, custody or control of horses, cattle, swine, sheep or goats, suffers or permits them or any of them to run at large within the limits of the King's Highway is guilty of an offence and on conviction is liable to a fine of not more than $50 for every such animal found at large upon the highway, but this section does not create any civil liability on the part of the owner of the animal for damage caused to the property of others as a result of the animal running at large within the limits of the King's Highway. R.S.O. 1990, c. P.50, s. 32.

Ministry to maintain and repair

33. (1) The King's Highway shall be maintained and kept in repair by the Ministry and any municipality in which any part of the King's Highway is situate is relieved from any liability therefor, but this does not apply to any sidewalk or municipal undertaking or work constructed or in course of construction by a municipality or which a municipality may lawfully do or construct upon the highway, and the municipality is liable for want of repair of the sidewalk, municipal undertaking or work, whether the want of repair is the result of nonfeasance or misfeasance, in the same manner and to the same extent as in the case of any other like work constructed by the municipality. R.S.O. 1990, c. P.50, s. 33 (1).

Liability for damage in case of default

(2) In case of default by the Ministry to keep the King's Highway in repair, the Crown is liable for all damage sustained by any person by reason of the default, and the amount recoverable by a person by reason of the default may be agreed upon with the Minister before or after the commencement of an action for the recovery of damages. R.S.O. 1990, c. P.50, s. 33 (2).

Insufficiency of fence, etc.

(3) No action shall be brought against the Crown for the recovery of damages caused by the presence or absence or insufficiency of any wall, fence, guide rail, railing or barrier adjacent to or in, along or upon the King's Highway or caused by or on account of any construction, obstruction or erection or any situation, arrangement or disposition of any earth, rock, tree or other material or thing adjacent to or in, along or upon the King's Highway that is not on the roadway. R.S.O. 1990, c. P.50, s. 33 (3).

Notice claim

(4) No action shall be brought for the recovery of the damages mentioned in subsection (2) unless notice in writing of the claim and of the injury complained of has been served upon or sent by registered letter to the Minister within ten days after the happening of the injury, but the failure to give or the insufficiency of the notice is not a bar to the action if a judge finds that there is reasonable excuse for the want or insufficiency of the notice and that the Crown is not thereby prejudiced in its defence. R.S.O. 1990, c. P.50, s. 33 (4); 2002, c. 24, Sched. B, s. 45.

(5) REPEALED: 2002, c. 24, Sched. B, s. 25.

Judgment, how payable

(6) All damages and costs recovered under this section and any amount payable as the result of an agreement in settlement of a claim for damages and costs that has been approved of in writing by counsel is payable in the same manner as in the case of a judgment recovered against the Crown in any other action. R.S.O. 1990, c. P.50, s. 33 (6).

Style of action

(7) In an action against the Crown under this section, the defendant shall be described as "Her Majesty the Queen in right of the Province of Ontario, represented by the Minister of Transportation for the Province of Ontario" in English or as "Sa Majesté du chef de l'Ontario, représentée par le Ministre des Transports de l'Ontario" in French, and it is not necessary to proceed by petition of right or to procure the fiat of the Lieutenant Governor or the consent of the Attorney General before commencing the action, but every such action may be instituted and carried on and judgment may be given thereon in the same manner as in an action brought by a subject of Her Majesty against another subject. R.S.O. 1990, c. P.50, s. 33 (7).

Counterclaims and third party proceedings

(8) Despite any general or special Act, in an action against the Crown under this section, the defendant may set up by way of counterclaim any right or claim, whether the right or claim sounds in damages or not, and may claim contribution or indemnity from or any other relief over against any person not a party to the action, and every such counterclaim and claim may be instituted and carried on and judgment may be given as if such counterclaim or claim was made by a subject of Her Majesty against another subject. R.S.O. 1990, c. P.50, s. 33 (8).

Action to be tried without jury

(9) An action against the Crown under this section shall be tried by a judge without the intervention of a jury, and the trial shall take place in the county in which the default occurred unless otherwise ordered upon an application by any party. R.S.O. 1990, c. P.50, s. 33 (9).

Liability not to exceed that of municipality

(10) The liability imposed by this section does not extend to a case in which a municipality having jurisdiction and control over the highway would not have been liable for the damage sustained. R.S.O. 1990, c. P.50, s. 33 (10).

Roadside controls, King's Highway

34. (1) In this section,

"agricultural product" means an agricultural product that is not edible, an agricultural food product or a food product that is processed on a farm in Ontario from an agricultural food product; ("produit agricole")

"centre point of an intersection" is the point where the centre line of the through part or parts of the King's Highway meets the centre line of or the centre line of the prolongation of any other highway that intersects or meets the King's Highway; ("point central d'une intersection")

"portable sign" means a sign or advertising device that is not permanently attached to the ground, a building or a structure or that is designed to be moved from place to place. ("panneau portatif") R.S.O. 1990, c. P.50, s. 34 (1); 2008, c. 22, s. 1 (1).

Interpretation, agricultural product

(1.1) For the purposes of this section, an agricultural product that is processed on a farm in Ontario from an agricultural food product shall be deemed to be produced on the premises on which the agricultural food product is produced. 2008, c. 22, s. 1 (2).

Roadside buildings, trees, signs, activities, etc.

(2) Despite any general or special Act, regulation, by-law or other authority, no person shall, except under a permit therefor from the Minister,

(a) place, erect or alter any building, fence, gasoline pump or other structure or any road upon or within 45 metres of any limit of the King's Highway or upon or within 180 metres of the centre point of an intersection;

(b) place any tree, shrub or hedge within 45 metres of any limit of the King's Highway or within 180 metres of the centre point of an intersection;

(c) display any sign, notice or advertising device, whether it contains words or not, within 400 metres of any limit of the King's highway, other than,

(i) one sign not more than 60 centimetres by 30 centimetres in size displaying the name or the name and occupation of the owner of the premises where it is displayed or the name of the premises,

(ii) a maximum of two single-sided signs, each being not more than 122 centimetres by 122 centimetres in size and facing in different directions, or one single-sided sign not more than 122 centimetres by 244 centimetres in size if,

(A) the signs display information about the sale of agricultural products, other than tobacco, that are produced and offered for sale on the premises where the signs are displayed, and

(B) the signs are displayed on premises that is zoned for agricultural uses and that is not owned by the Crown in right of Canada or the public sector as defined in subsection 2 (1) of the *Public Sector Salary Disclosure Act, 1996*, or

(iii) a maximum of two single-sided signs, each being not more than 122 centimetres by 122 centimetres in size and facing in different directions, or one single-sided sign not more than 122 centimetres by 244 centimetres in size if,

(A) the signs display directions to a place where agricultural products produced in Ontario, other than tobacco, are offered for sale or information about the sale,

(B) the owner of the signs also owns or rents the land on which the agricultural products mentioned in sub-subclause (A) were produced,

(C) the signs are displayed on premises that is zoned for agricultural uses and that is not owned by the Crown in right of Canada or the public sector as defined in subsection 2 (1) of the *Public Sector Salary Disclosure Act, 1996*, and

(D) the signs are displayed only during the season during which the agricultural products mentioned in sub-subclause (A) are offered for sale;

(d) use any land, any part of which lies within 800 metres of any limit of the King's Highway, for the purposes of a shopping centre, stadium, fair ground, race track, drive-in theatre or any other purpose that causes persons to congregate in large numbers;

(e) sell, offer for sale or display produce, goods or merchandise upon the King's Highway; or

(f) construct or use any private road, entranceway, gate or other structure or facility as a means of access to the King's Highway. R.S.O. 1990, c. P.50, s. 34 (2); 2008, c. 22, s. 1 (3).

Direction to stop sales, etc.

(3) The Minister may direct any person to stop selling, offering for sale or displaying any produce, goods or merchandise within 45 metres of any limit of the King's Highway or within 180 metres of the centre point of an intersection and every person to whom such direction is given shall forthwith comply with the direction. R.S.O. 1990, c. P.50, s. 34 (3).

No authorization by others

(4) No person shall authorize or permit any act prohibited by subsection (2). R.S.O. 1990, c. P.50, s. 34 (4).

Application

(5) The Minister may order that subsection (2) or such clauses thereof as the Minister specifies do not apply within the limits of any local municipality or such parts thereof as the Minister specifies. R.S.O. 1990, c. P.50, s. 34 (5); 2002, c. 17, Sched. F, Table.

Order not regulation

(5.1) An order made by the Minister under subsection (5) is not a regulation within the meaning of Part III (Regulations) of the *Legislation Act, 2006*. 2006, c. 21, Sched. F, s. 128 (6).

Direction to remove, etc.

(6) The Minister may direct any owner of land,

(a) to remove therefrom or alter thereon any building, fence, gasoline pump or other structure or any road, tree, shrub or hedge placed, erected or altered;

(b) to remove therefrom or alter thereon any sign, notice or advertising device displayed; or

(c) to close up any private road, entranceway, gate or other structure or facility constructed or used,

in contravention of subsection (2). R.S.O. 1990, c. P.50, s. 34 (6).

Exception

(7) Clause (6) (b) does not apply to a portable sign. R.S.O. 1990, c. P.50, s. 34 (7).

Direction to remove

(8) Where a portable sign is displayed contrary to subsection (2), the Minister may direct,

(a) the owner of the portable sign, if the Minister is able to ascertain who and where the owner is;

(b) the person on whose behalf the portable sign is displayed, if clause (a) does not apply but the Minister is able to ascertain who and where that person is; or

(c) the owner of the land on which the portable sign is displayed, if clauses (a) and (b) do not apply,

to remove the sign. R.S.O. 1990, c. P.50, s. 34 (8).

Removal of sign

(9) Where a sign in respect of which a direction is given under subsection (8) is not removed within five days after the direction is given, the Minister may in writing authorize any person to enter upon the land involved and to do whatever is necessary to remove the sign. R.S.O. 1990, c. P.50, s. 34 (9).

Service of direction

(10) Every direction given under subsection (3), (6), (8), 38 (5) or 38 (7) shall be in writing and shall be served personally or by registered letter and in the case of service by registered letter shall be deemed to have been received on the second day following its mailing. R.S.O. 1990, c. P.50, s. 34 (10).

Failure to comply with direction

(11) Where a direction given under subsection (6) or 38 (5) is not complied with within thirty days after its receipt, the Minister may in writing authorize any person to enter upon the land involved to do whatever is necessary to comply with the direction. R.S.O. 1990, c. P.50, s. 34 (11).

No liability for damages

(12) An authorization under subsection (9), (11) or 38 (8) is authority to the person named therein to enter on the land described therein and to remove the sign as directed and neither the Minister nor that person is liable for any damages that may be caused in effecting the removal. R.S.O. 1990, c. P.50, s. 34 (12).

Offence

(13) Every person who contravenes subsection (2), (4), 38 (2) or 38 (3) or who fails to comply with a direction given under subsection (3), (6), (8), 38 (5) or 38 (7) is guilty of an offence and on conviction is liable to a fine of not less than $50 and not more than $500 for a first offence and not less than $200 and not more than $1,000 for any subsequent offence. R.S.O. 1990, c. P.50, s. 34 (13).

Compensation

(14) Where a direction given under subsection (6) has been complied with, the Minister shall make due compensation to the owner of the land if the building, fence, gasoline pump or other structure or a road, tree, shrub, hedge, sign, notice or advertising device was placed, erected or altered, as the case may be,

(a) before the 24th day of March, 1950, and in compliance with *The Highway Improvement Act*, being chapter 56 of the Revised Statutes of Ontario, 1937, and the regulations thereunder;

(b) before the day on which the King's Highway was so designated and in compliance with *The Highway Improvement Act* that was in force on that day; or

(c) in compliance with a permit therefor, in which case the making of compensation is subject to the provisions of the permit. R.S.O. 1990, c. P.50, s. 34 (14).

Procedure

(15) Every claim for such compensation shall be determined in accordance with subsections 14 (2) to (5). R.S.O. 1990, c. P.50, s. 34 (15).

Permits

(16) The Minister may issue permits under this section in such form and upon such terms and conditions as he or she considers proper, and may in his or her discretion cancel any such permit at any time. R.S.O. 1990, c. P.50, s. 34 (16).

Fee

(17) The Minister may prescribe the fee to be paid for any permit or class of permit under this section. R.S.O. 1990, c. P.50, s. 34 (17).

Intersections, territory without municipal organization

35. (1) In this section,

"intersection" means the part of the King's Highway contained within the prolongation or connection of the boundary lines of a private road that crosses the King's Highway.

Private road, King's Highway intersections in unorganized territory

(2) The Lieutenant Governor in Council may make regulations designating provisions of the *Highway Traffic Act* or the regulations thereunder that shall not apply in intersections in territory without municipal organization. R.S.O. 1990, c. P.50, s. 35.

PART II
CONTROLLED-ACCESS HIGHWAYS

Controlled-access highway designation

36. (1) The Lieutenant Governor in Council may designate any,

(a) highway; or

(b) proposed highway,

as a controlled-access highway and every highway so designated shall be deemed to be part of the King's Highway and the provisions of this Act and the regulations that apply to the King's Highway apply with necessary modifications to such controlled-access highway. R.S.O. 1990, c. P.50, s. 36 (1).

Previous controlled-access designation

(2) Any part of the King's Highway heretofore designated as a controlled-access highway under this Act or a predecessor thereof shall be deemed to have been designated in accordance with this section. R.S.O. 1990, c. P.50, s. 36 (2).

Order in council to be registered

(3) The order in council designating a highway or proposed highway as a controlled-access highway shall be registered in the proper land registry office and any such order in council heretofore registered shall be deemed to have been required to be so registered. R.S.O. 1990, c. P.50, s. 36 (3).

Designation not regulation

(4) A designation under this section is not a regulation within the meaning of Part III (Regulations) of the *Legislation Act, 2006*. R.S.O. 1990, c. P.50, s. 36 (4); 2006, c. 21, Sched. F, s. 136 (1).

Closing of intersecting municipal roads

37. (1) In this section,

"road" includes an unopened road allowance. R.S.O. 1990, c. P.50, s. 37 (1).

Same

(2) Subject to the approval of the Board, the Minister may close any road, other than a highway that is under the jurisdiction and control of the Ministry, that intersects or runs into a controlled-access highway. R.S.O. 1990, c. P.50, s. 37 (2).

Application for approval

(3) The Board may direct that notice of an application for approval of the closing of a road under this section shall be given at such time, in such manner and to such persons, including municipalities and local boards, as defined in the *Municipal Affairs Act*, as the Board determines, and may further direct that particulars of objections to the closing shall be filed with the Board and the Minister within such time as the Board directs. R.S.O. 1990, c. P.50, s. 37 (3); 2002, c. 17, Sched. F, Table.

Powers of Board

(4) Upon the hearing of the application, the Board may make an order refusing its approval or granting its approval upon such terms and conditions as it considers proper. R.S.O. 1990, c. P.50, s. 37 (4).

Appeal

(5) The Minister or a person, including a municipality or local board, as defined in the *Municipal Affairs Act*, that has filed particulars of an objection may, with leave of the Divisional Court, appeal to that court from any order made under subsection (4), and subsections 14 (4) and (5) apply with necessary modifications thereto. R.S.O. 1990, c. P.50, s. 37 (5); 2002, c. 17, Sched. F, Table.

Effect of physical closing

(6) Any road heretofore or hereafter closed under this section by the Minister in accordance with the approval of the Board by the placing or erecting of a fence, barricade or other work on the limit of a controlled-access highway shall be deemed to have been thereby legally closed. R.S.O. 1990, c. P.50, s. 37 (6).

Roadside controls, controlled-access highways

38. (1) In this section,

"centre point of an intersection" is the point where the centre line of the through part or parts of a controlled-access highway meets the centre line of or the centre line of the prolongation of any other highway that intersects or meets the controlled-access highway; ("point central d'une intersection")

"portable sign" means a sign or advertising device that is not permanently attached to the ground, a building or a structure or that is designed to be moved from place to place. ("panneau portatif") R.S.O. 1990, c. P.50, s. 38 (1).

Roadside buildings, trees, signs, activities, etc.

(2) Despite any general or special Act, regulation, by-law or other authority, no person shall, except under a permit therefor from the Minister,

(a) place, erect or alter any building, fence, gasoline pump or other structure or any road upon or within 45 metres of any limit of a controlled-access highway or upon or within 395 metres of the centre point of an intersection;

(b) place any tree, shrub or hedge within 45 metres of any limit of a controlled-access highway or within 395 metres of the centre point of an intersection;

(c) sell, offer or expose for sale any vegetables, fruit or other produce or any goods or merchandise upon or within 45 metres of any limit of a controlled-access highway or within 395 metres of the centre point of an intersection;

(d) place, erect or alter any power line, pole line or other transmission line within 400 metres of any limit of a controlled-access highway;

(e) display any sign, notice or advertising device, whether it contains words or not, other than one sign not more than sixty centimetres by thirty centimetres in size displaying the name or the name and occupation of the owner of the premises to which it is affixed or the name of such premises within 400 metres of any limit of a controlled-access highway;

(f) use any land, any part of which lies within 800 metres of any limit of a controlled-access highway, for the purposes of a shopping centre, stadium, fair ground, race track, drive-in theatre or any other purpose that causes persons to congregate in large numbers; or

(g) construct or use any private road, entranceway, gate or other structure or facility as a means of access to a controlled-access highway. R.S.O. 1990, c. P.50, s. 38 (2).

No authorization by others

(3) No person shall authorize or permit any act prohibited by subsection (2). R.S.O. 1990, c. P.50, s. 38 (3).

Application

(4) The Minister may order that subsection (2) or such clauses thereof as the Minister specifies do not apply within the limits of any local municipality or such parts thereof as the Minister specifies. R.S.O. 1990, c. P.50, s. 38 (4); 2002, c. 17, Sched. F, Table.

Order not regulation

(4.1) An order made by the Minister under subsection (4) is not a regulation within the meaning of Part III (Regulations) of the *Legislation Act, 2006*. 2006, c. 21, Sched. F, s. 128 (7).

Direction to remove, etc.

(5) The Minister may direct any owner of land,

(a) to remove therefrom or alter thereon any building, fence, gasoline pump or other structure or any road, tree, shrub, hedge, power line, pole line or other transmission line placed, erected or altered;

(b) to remove therefrom or alter thereon any sign, notice or advertising device displayed; or

(c) to close up any private road, entranceway, gate or other structure or facility constructed or maintained as a means of access to a controlled-access highway,

in contravention of subsection (2). R.S.O. 1990, c. P.50, s. 38 (5).

Exception

(6) Clause (5) (b) does not apply to a portable sign. R.S.O. 1990, c. P.50, s. 38 (6).

Direction to remove

(7) Where a portable sign is displayed contrary to the provisions of subsection (2), the Minister may direct,

(a) the owner of the portable sign, if the Minister is able to ascertain who and where the owner is;

(b) the person on whose behalf the portable sign is displayed, if clause (a) does not apply but the Minister is able to ascertain who and where that person is; or

(c) the owner of the land on which the portable sign is displayed, if clauses (a) and (b) do not apply,

to remove the sign. R.S.O. 1990, c. P.50, s. 38 (7).

Removal of sign

(8) Where a sign in respect of which a direction is given under subsection (7) is not removed within five days after the direction is given, the Minister may in writing authorize any person to enter upon the land involved and to do whatever is necessary to remove the sign. R.S.O. 1990, c. P.50, s. 38 (8).

Compensation

(9) Where a direction given under subsection (5) has been complied with, the Minister shall make due compensation to the owner of the land if the building, fence, gasoline pump or other structure or any road, tree, shrub, hedge, power line, pole line or other transmission line, sign, notice or advertising device, private road, entranceway, gate or other structure or facility was placed, erected, altered, constructed or used, as the case may be,

(a) before the 24th day of March, 1950, and in compliance with *The Highway Improvement Act*, being chapter 56 of the Revised Statutes of Ontario, 1937, and the regulations thereunder;

(b) before the day on which the controlled-access highway was so designated and in compliance with *The Highway Improvement Act* that was in force on that day; or

(c) in compliance with a permit therefor, in which case the making of compensation is subject to the provisions of the permit. R.S.O. 1990, c. P.50, s. 38 (9).

Procedure

(10) Every claim for such compensation shall be determined in accordance with subsections 14 (2) to (5). R.S.O. 1990, c. P.50, s. 38 (10).

Permits

(11) The Minister may issue permits under this section in such form and upon such terms and conditions as he or she considers proper and may in his or her discretion cancel any such permit at any time. R.S.O. 1990, c. P.50, s. 38 (11).

Fee

(12) The Minister may prescribe the fee to be paid for any permit or class of permit under this section. R.S.O. 1990, c. P.50, s. 38 (12).

Service roads

39. The Minister and any municipality may enter into agreements for the establishment, construction and apportionment of the cost of roads within the municipality for the purpose of providing means of access to a controlled-access highway at a point where access is permitted. R.S.O. 1990, c. P.50, s. 39.

PART III
SECONDARY HIGHWAYS

Secondary highways, designation

40. (1) The Lieutenant Governor in Council may designate any highway as a secondary highway and thereupon Part I and all the other provisions of this Act and the regulations that apply to the King's Highway apply with necessary modifications to such secondary highway. R.S.O. 1990, c. P.50, s. 40.

Designation not regulation

(2) A designation under this section is not a regulation within the meaning of Part III (Regulations) of the *Legislation Act, 2006*. 2006, c. 21, Sched. F, s. 128 (8).

PART IV
TERTIARY ROADS

Tertiary roads, designation

41. (1) The Lieutenant Governor in Council may designate an existing road that is in whole or in part in territory without municipal organization as a tertiary road, and thereupon the provisions of this Act and the regulations that apply to the King's Highway, except sections 33 and 34, apply with necessary modifications to such tertiary road. R.S.O. 1990, c. P.50, s. 41 (1).

maintenance

(2) Subject to subsections (4) and (5), a tertiary road shall be maintained by the Ministry, but such maintenance does not include the clearing or removal of snow therefrom or the application of chemicals or abrasives to the icy surfaces thereof. R.S.O. 1990, c. P.50, s. 41 (2).

liability for damages

(3) No action shall be brought against the Crown for damages caused by the default of the Ministry in maintaining a tertiary road, and the Crown is not liable for any damage sustained by any person using a tertiary road. R.S.O. 1990, c. P.50, s. 41 (3).

snow removal

(4) The Minister may enter into an agreement with any person for the removal of snow from a tertiary road or the application of chemicals or abrasives to the ice surfaces thereof, and the agreement shall provide that not more than 50 per cent of the cost of the work shall be paid out of the money appropriated therefor by the Legislature. R.S.O. 1990, c. P.50, s. 41 (4).

maintenance contributions

(5) Where the Minister considers it desirable that persons who own land in territory without municipal organization in which a tertiary road is situate should establish a local roads area and maintain it under the *Local Roads Boards Act* or elect road commissioners and maintain it under the *Statute Labour Act* or become incorporated under the *Municipal Act, 2001* or otherwise contribute to its maintenance, it shall not be maintained by the Ministry unless the interested persons enter into an agreement with the Minister for such maintenance, and the agreement shall provide that not more than 50 per cent of the cost of the work shall be paid out of money appropriated therefor by the Legislature. R.S.O. 1990, c. P.50, s. 41 (5); 2002, c. 17, Sched. F, Table.

Designation not regulation

(6) A designation under this section is not a regulation within the meaning of Part III (Regulations) of the *Legislation Act, 2006*. 2006, c. 21, Sched. F, s. 128 (9).

PART V
RESOURCE ROADS

Resource roads, designation

42. (1) The Lieutenant Governor in Council may designate a tertiary road as a resource road. R.S.O. 1990, c. P.50, s. 42 (1).

Load limits, etc., do not apply

(2) Sections 80, 108, 109, 110, 111 and 114 of the *Highway Traffic Act* do not apply to a resource road or to vehicles operated upon a resource road, as the case may be. R.S.O. 1990, c. P.50, s. 42 (2).

Designation not regulation

(3) A designation under this section is not a regulation within the meaning of Part III (Regulations) of the *Legislation Act, 2006*. 2006, c. 21, Sched. F, s. 128 (10).

PART VI
INDUSTRIAL ROADS

Industrial roads, designation

43. (1) The Minister may designate as an industrial road a private road that he or she considers necessary for the development or operation of the lumbering, pulp or mining industry but which in his or her opinion should also be used by the public for road purposes other than those of the industry. R.S.O. 1990, c. P.50, s. 43 (1).

Maintenance

(2) The Minister and the owner of an industrial road may enter into an agreement for the maintenance of the industrial road by the owner, and as long as the owner permits the public to use the industrial road the Minister may direct payment out of the money appropriated therefor by the Legislature of such proportion of the cost of maintenance as he or she considers requisite. R.S.O. 1990, c. P.50, s. 43 (2).

Jurisdiction and control

(3) Despite any other Act, an industrial road remains a private road under the jurisdiction and control of the owner, but subject to the use of the public as described in subsections (1) and (2). R.S.O. 1990, c. P.50, s. 43 (3).

Designation not regulation

(4) A designation under this section is not a regulation within the meaning of Part III (Regulations) of the *Legislation Act, 2006*. 2006, c. 21, Sched. F, s. 128 (11).

PART VII REPEALED

44. REPEALED: 2002, c. 17, Sched. F, Table.

45. REPEALED: 1996, c. 1, Sched. M, s. 52.

46. REPEALED: 2002, c. 17, Sched. F, Table.

47.-53. REPEALED: 1996, c. 1, Sched. M, s. 54.

54., 55. REPEALED: 2002, c. 17, Sched. F, Table.

ALPHABETICAL QUICKLINKS TO BUILDING LAW COURT CASES BY NAME

NUMBERED NAMES	A	B	C	D	E	F
G	H	I&J	K	L	M	N&O
P	Q&R	S	T	U&V	W	X-Z

CLICK HERE TO LINK TO THE INDEX TO BUILDING LAW COURT CASES BY STATUTORY REFERENCE

SHORT TITLE	DESCRIPTION	CITATIONS	*STATUTE REF.*
1121472 Ontario Inc. v. Toronto (City)	**The scale of a dance floor and entertainment provided removed a use from being a 'restaurant' to an 'entertainment facility'.**	**(1998), 39 OR. (3d) 535 (Ont. CA)**	***PA s. 34.***
1218897 Ontario Limited v. Ann Borooah, Chief Building Official,City of Toronto and Ryding Auto Body Ltd.	**New evidence in addition to the information before the CBO may be entered on an appeal from the CBO's decision.** **The burden is on the applicant to show the CBO's decision was unreasonable or wrong in law.** **A standard close to correctness will be applied to decisions based on law or jurisdiction and a standard of reasonableness will be applied to questions of fact. Within the standard of reasonableness, the degree of deference or the "weight" to be given to any particular determination will depend on the circumstances.** **The relevant legality of a non-conforming use concerns it's status under the terms of the zoning by-law. Any unlawful or illegal matter relating to the use or occupation of the lands outside of the *Planning Act* is irrelevant.** **The requirement of continuity for a legal non-conforming use can be met although use/occupation has been interrupted by an event beyond the owner's control where there is a an intention to continue the non-conforming use and that use is continued as far as possible in the circumstances.**	**Ontario Superior Court of Justice, Court File No: 05-CV-285838PD2, 2005/10/28**	***BCA s.25*** ***PA s. 34(9)***
1514904 Ontario Ltd. and Wilson Bassile v. the Corporation of The Town of Mississippi Mills	**Where the basis of a challenge to a CBO's decision is not directed at its legal correctness but another aspect, the test is reasonableness of the decision. In the latter regard, it is not enough that the reviewing appeal body may have come to a different decision. The challenged decision must be unreasonable.**	**Ontario Superior Court of Justice, Perth Court File No: 686/05, 2005/08/25**	***BCA s. 25***

1423107 Ontario Inc. v. Woodstock (City)	**Any doubt about the compliance of a use to the zoning should be resolved in favour of the proponent. The use of premises for full nudity non-therapeutic body massage is not permitted by the applicable zoning by-laws permission for a 'health club', nor is the operation of a tanning bed facility. The building permit was properly refused.**	**[2001] O.J. No. 1330 , Court File No. 462/00 , Ontario Superior Court of Justice , Woodstock, Ontario , Heeney J. , Judgment: April 2, 2001.**	***BCA s. 8(2), PA s. 34.***
382671 Ontario Ltd. v. London (City) Chief Building Official	**Space within an apartment building which has the status of a legal non-conforming use may be converted to another apartment unit. In this regard, a building can be altered beyond its precise non-conforming status so long as such is reasonable.**	**28 O.R. (3d) 718, [1996] O.J. No. 1352, Court File No. 20060/96 Ontario Court (General Division), Killeen J., April 4, 1996**	***BCA s. 8(2), PA S. 34(9).***
723 Rymal Inc. v. Hamilton (City) Chief Building Official	**A zoning by-law permitting a (i) "Community and Residential Care Access Centre"; and, (ii) a restaurant, required both uses to exist to comply with the zoning. A demolition permit for an existing building, identified in a site plan approval of the restaurant use, is properly denied as the result would be the remaining "Community and Residential Care Access Centre" would violate the by-law.**	**[2001] O.J. No. 832, Court File No. 00-2262, Ontario Superior Court of Justice, Lofchik J., January 9, 2001.**	***BCA s. 8(1), PA s. 34.***
861168 Ontario Inc. v Foreshew, CBO of Lindsay (Town)	**Neither the costs of renovation nor the change in income-generating ability are determinative of whether the work requires site plan approval. If fewer people will be using a building after renovations that is indicative of the usability of the building being reduced. changes in 'usability' should be measured in relation to the facilities and matters set out in sec. 41(7)(a) of the Planning Act.**	**(1991), 3 OR. (3d) 721, 6 M.P.L.R. (2d) 84 (Gen. Div.)**	***BCA s. 8(2), PA s. 41..***

Alaimo v. York (City) Chief Building Official	**A CBO is under no common law duty to protect property neighbouring the site of new construction which would allow him to refuse a building permit for construction that complies with the BC. The law of nuisance is not applicable law for the consideration of building permit issuance. New construction which would put the chimney on a neighbouring building out of compliance with building standards is nonetheless legal.**	**(1995), 26 M.P.L.R. (2d) 69 (Ont. Gen. Div.)**	***BCA S. 8(2), BC s.9.21.4.4***
Albert Bloom Ltd. v. Bentinck	**A by-law passed to lift a holding 'H' provision in a zoning by-law is not capable of being tested against official plan conformity.**	**(1996), 31 OR. (3d) 317,37 M.P.L.R. (2d) 156,**	***PA s. 24, 36***
Albert Bloom Ltd. v. Bentinck (Township) Chief Building Official	**Where the issuance of a building permit is challenged by a third party evidence can be introduced by the permit applicant which was not before the CBO.**	**(August 17, 1995). Doc. No. RE 4858/95 (Ont. Gen. Div.)**	***BCA s. 25***
Association of PEO v. Minister of Municipal Affairs and David Brezer, Director	**The Building Code Act does not authorize a regulation which duplicates the professional regulation of Professional Engineers in Ontario, particularly as it respects their conduct or competency. To the extent the Building Code imposes such conditions, it should be read as excluding those members of professions already subject to a statutory professional regulatory regime.**	**March 28, 2007, Ont. Div. Ct. COURT FILE NO.: DC-06-081239-00**	***BCA s. 1.1, 8, and 15 (5) to (7) BC Art. 2.3.1.1, 2.17***
A.W Banfield Construction Ltd. v. Oshawa (City)	**The fact a demolition permit for an existing residential building has not been issued is not good reason to refuse the issuance of a building permit for a new building.**	**(1978) 6 M.P.L.R. 61,21 OR. (2d) 157 (Div. Ct.)**	***BCA S. 8, PA s. 33***
Axelrod Toronto (City)	**A By-law which provides that where a building of a certain type presently exists, it may only be replaced by a building with the height, floor area and density limitations prescribed in the by-law is not concerned with use of property or construction standards but rather with limiting future use where certain structures presently exist. While this may be a proper and meritorious planning purpose, it is not a purpose authorized by The Planning Act and such a by-law is invalid.**	**(1981), 15 M.P.L.R. 143 (Div. Ct.)**	***PA s. 34.***
Ayerswood Development Corporation v. London (City)	**A condition to the issuance of a building permit requiring the repair or replacement of a gabion wall specified in a site plan agreement was authorized by the Building Code Act as the site plan agreement imposed on-going maintenance responsibilities in respect of the gabion wall (which had failed) and therefore bore a nexus to the use of the land.**	**Docket: 33338;1501, 2006 CanLII 18521 (ON S.C.D.C.)**	***B.C.A. Sec. 8(3) P.A. Sec. 41 (13)***

Bakhtiari v. Axes Investments Inc.	**The plans examiner failed to require interior fire separation doors in a building although a by-law called for them in plain language.. If the employee had a problem with the requirement, he acted unreasonably in failing to take it up with his superiors and obtain an interpretation. That is enough for liability. By way of defence, there must be a reasonable explanation for how this could happen if their employee had exercised reasonable care. This is a life safety matter whose importance is well known in the industry. It is utterly foreseeable that failure to require these devices would, in the case of fire, place the health and lives of the occupants at risk.**	**[2001] O.J. No. 4720 , Court File No. 95-CQ-61731CM , Ontario Superior Court of Justice, November 30, 2001**	***BCAs. 31, CL.***
Bice v. Mississaugas of the New Credit	**A legal non-conforming use may be established even though it is not in operation i.e. a gasoline station which is set up but has not sold any product. The lack of proof of necessary certification of fuel tanks prevents the establishment of a legal non-conforming use.**	**DRS 98-09722 ,Court File No. T-1410-96 ,Federal Court, Trial Division ,Jerome, A.C.J. ,March 25, 1998.**	***PA s. 34 (9)***
Bondy v. Lessard	**A permit issued with full information regarding illegal construction on a property cannot subsequently be revoked when the relevant facts have not changed.**	**[1996] O.J. No. 3108 , DRS 97-04913, Court File No. 96-GD-35852, Ontario Court of Justice (General Division), Windsor, Ontario**	***BCA s. 8(10).***
Brantford (Township) v. Doctor	**The Ontario BCA and BC apply to construction on Indian Lands.**	**(1995), 29 M.P.L.R. (2d) 300, [1996] 1 C.N.L.R. 49 (Ont. Gen. Div.)**	***Fed., BCA s. 8(2)***
Budman v. Gravenhurst (Town)	**A building permit issued for a lawful extension of a legal non-conforming building is properly revoked if the existing building is demolished.**	**(1983), 44 OR. (2d) 696, 24 M.P.L.R. 195, 1 O.A.C. 267 (Div. Ct.)**	***BCA s. 8(10)(a), PA s. 34(9)***

Calicloth Textiles Inc. v. Smith Falls (Town)	**The payment of $2.175,000 in damages caused by the collapse of a faultily built roof were shared between the municipality and the building contractor.**	**[2001] O.J. No. 4946 , Court File No. 96-CV-100668 , Ontario Superior Court of Justice**	***BCA s.31, CL.***
Campeau Corp. v. Gloucester(Township)	**Where statute requires the by-laws of a local municipality to conform with the official plan of an upper-tier municipality, a building permit should not be issued for a use which conflicts with the upper-tier official plan.**	**(1978), 21 OR. (2d) 4, M.P.L.R. 290, 89 D.L.R. (3d) 135, affirmed (1979), 22 OR. (2d) 652, 8 M.P.L.R. 147, 96 D.L.R. (3d) 321 (CA.)**	***BCA s. 8, PA s. 24.***
Chapeskie v. Lake of Bays (Township)	**Damages awarded by the court on a suit by the purchaser of a dwelling against it's builder and the municipality were divided 50:50 as between the two defendants. The ignorance of standards and failures of the builder were matched by the inadequacy exhibited by the Township's inspections and misleading occupancy permit.**	**File No. G13082/94, Ontario Superior Court of Justice, Newmarket, Howden J., July 9, 1999**	***BCA s. 31, CL.***
Cogan v. Toronto (City)	**The entitlement to a building permit will not be denied where the application was not complete provided the corrections were specific and in train.**	**(1974), 3 OR. (2d) 661, 46 D.L.R. (3d) 481 (Div. Ct.) 8(2)(a);**	***BCA s.8, 25, PA s.34(9)***
Conin Construction Co. v. Scarborough (Borough)	**Unless authorized by statute, a municipality cannot make the payment of a development charge a condition of issuing a building permit [Ed. note: this case is rendered largely obsolete by the specific authority given by the Development Charges Act]. Monies paid under the practical compulsion of necessity are recoverable if there was no legal authority for their collection.**	**(1981), 15 M.P.L.R. 133, 32 OR. (2d) 500, 122 D.L.R. (3d) 291 (H.C.)**	***BCA s. 8, DCA.***
Country Pork Ltd. v. Ashfield (Township)	**The failure to provide a nutrient management plan as part of a building permit application was fatal to the right to receive the permit when an intervening interim control by-law prohibited the use.**	**[2001] O.J. No. 1127, Court File No. 30858, Ontario Superior Court of Justice, Leitch J., Judgment: February 28, 2001**	***BCA s. 8(2), PA s. 38.***

Country Pork Ltd. v. Township of Ashfield	**It is a judge's discretion to refuse an application under the Municipal Act to quash an interim control by-law on the basis the issue is best deferred to be dealt with by the OMB in an appeal under section 38 of the Planning Act.** **Where the code does not deal with a specific type of building (tank) it is appropriate for a CBO to require information from the project engineer acting for the applicant.**	**DOCKETC36040, COURT OF APPEAL FOR ONTARIO CATZMAN, DOHERTY AND BORINS JJ.A., July 29, 2002**	***BCA S. 25, PA s. 38.***
Craft Bilt Materials Ltd. V. City of Toronto	**A Chief Building Official is an employee of a municipality and so in not an independent decision maker.** **A reviewing tribunal may receive additional evidence not before the CBO when the latter's decision was made.** **The determination of whether a building product complies with the Building Code is a matter of statutory interpretation and so a review of the CBO's decision is a legal matter to be judged on a standard of correctness.** **Once the alternative criteria for compliance set out the in the Code is satisfied then the Code itself is satisfied.** **Ministry bulletins regarding the Code do not have the force of law and are at best advisory.**	**Court File No.: 05-CV-302521 PD2**	***B.C.A. Sec 8, 9, 28, B.C. Part 4 (4.1.1,4(1)) (4.3.5.1)***
Csele v. Pelham (Town)	**Where an upper-tier municipality has the authority to zone lands in conformity to it's official plan, a conflict between local zoning and an upper tier official plan will be irrelevant and a building permit should be issued for a use even though the use conflicts with the upper-tier official plan.**	**(1985), 29 M.P.L.R. 188 (Dist. Ct.)**	***BCA s. 8, PA s. 24.***
Czumak v. Etobicoke (City)	**An order to comply cannot prohibit all work from proceeding, but is limited to prohibiting work which does not comply with the building permit. A stop work order is not effective to stop work which is not prohibited by a proper order to comply. Failure to assist a search which is illegal will not found a charge.**	**(September 16, 1994), (Ont. Prov. Div.)**	***BCA s. 12(2), 14, 19(3), 36(1).***

David Gallo Building Co. v. Toronto (City)	**Revisions to permit plans which described a building which is taller, larger, and differently configured is a new application and not an amendment to the original. Rights arising from the original application are not inherited by the revision where the applicant had failed to clearly declare a willingness to alter the plans to comply with the zoning and the alterations are not specific and in train.**	**[1934] 3 OR. 892, 38 D.L.R. (3d) 536 (Div. Ct.)**	***BCA s. 8(2), PA s. 34(9).***
Davison v. Orangeville (Town)	**The compliance of a use to an official plan policy is irrelevant where the proposed use conflicts with zoning in force which predates the OP policy.**	**(1996), 36 M.P.L.R. (2d) 74 (Ont. Gen. Div.)**	***BCA s. *9s), PA s. 24.***
Dominion Stores Ltd. v. Etobicoke (Borough)	**A municipality cannot prohibit access to a site from abutting local roads as a condition of site plan approval. Where a municipality imposes unlawful conditions to site plan approval the applicant is entitled to a building permit notwithstanding the site plan approval is outstanding. An applicant for site plan approval is not obliged to appeal to the OMB to resolve an illegal condition [Ed. note: When section 41(4.3) of the Planning Act is proclaimed the OMB will be the body to determine the latter].**	**(1982), 37 OR. (2d) 661, 135 D.L.R. (3d) 301, 19 M.P.L.R. 88, 26 R.P.R. 1 (Div. Ct.)**	
Dusevic v. Columbia Shuswap (Regional District)	**At common law a municipality is under no obligation to enforce it's by-laws and is not civilly liable to persons suffering from the non-enforcement. This is unchanged where there is no statutory direction to the contrary i.e. in the by-law.**	**(1989), 44 M.P.L.R. 160 (B.C.S.C.)**	***BCA s. 3, 15(2)(2), 31, PA s. 67***

Egarhos v. Ottawa (City)	**Increasing the number of residential apartments in a mixed use building by 10% through the conversion of unrentable office space is a 'development'.**	**(1985), 52 OR. (2d) 190 (Dist. Ct.)**	***PA s. 41(1), 42(1).***
Eramosa (Township) Chief Building Official v. Hilts	**Although the court is reluctant to order such a destructive result as the demolition of an illegally erected building, to permit such to remain would encourage disobedience of and promote disrespect for the law.**	**File No. 630/94, Ontario Court of Justice (General Division), Guelph, Ontario, Langdon J., September 8, 1997**	***BCA s. 38.***
Erin Dancer Holding Corp. v. Richmond Hill (Town)	**Rights to the refund of permit fees are not lost by the repeal of the by-law refund provisions after the fees have been paid.**	**(1996), 33 M.P.L.R. (2d) 1 (Ont. Div. Ct.)**	***BCA s. 7(d)***
Erin Dancer Holding Corp. v. Richmond Hill (Town)	**A permit fee by-law which provided for refunds if the applicant 'disagrees' with the value ascribed by the CBO requires notice of disagreement to be given at the time the fee is paid. Silence will indicate acceptance.**	**(1998) 109 O.A.C. 188, 38 OR. (3d) 452 (C.A.), reversing (1996), 33 M.P.L.R. (2d) 1 (Div. Ct.)**	***BCA s. 7(d)***
Essex 143 Joint Venture Ltd. v. Her Majesty The Queen In Right of Ontario as represented by the Minister of Transportation	**Where an agreement between the MTO and owner under section 38 of the Public Highway and Transportation Improvement Act entered into as a condition of the issuance of a permit under the PHTIA for a commercial component of a mixed use development provides that subsequent phases of a project are subject to permits, a permit must be obtained although the subsequent phase in issuance is residential. This is so regardless of whether a permit would have, absent the agreement, been required for the subsequent phase.**	**Court of Appeal for Ontario Docket: C43573, 2006/05/08**	***PTHIA s. 38(2)***

Famous Players Inc. v. Toronto (City)	**Where a building stands on two abutting properties the owner of one of the properties is a person 'aggrieved' and has standing to challenge a building permit issued to the other owner.**	**(1987), 47 R.P.R. 270, 37 M.P.L.R. 49 (Ont. Dist. Ct.)**	***BCA s 25.***
Flamborough (Town) v. 436291 Ontario Ltd.	**Facilitating the establishment of mobile homes is a violation of the Planning Act, sec. 46.**	**(1990), 2 OR. (3d) 31, M.P.L.R. (2d) 12 (Dist. Ct.)**	***PA s. 462).***
Forster v. Waterloo (City)	**The action of City Council in enacting a down-zoning by-law hard on the heels of the receipt of a report, having delayed its consideration of the applicant's site plan while at the same time instructing engineering and planning staff to continue negotiations with the applicant with respect to engineering and planning issues, constitutes bad faith and brings the situation into the category of extraordinary circumstances in which site plan approval is not required as a pre-condition to the issuance of a building permit.**	**Action No. 3415/92, Ontario Court of Justice - General Division, Kitchener, , Sills J., February 12, 1993**	***BCA s. 8(2), PA s. 41.***
Friends of McNichol Park v. Burlington (City)	**A person is 'aggrieved' by the issuance of a building permit for a use not permitted by the zoning on the simple basis that this deprives the person of their right to oppose any rezoning by-law.**	**31 O.R. (3d) 405, Court File No. 512/96, Ontario Court (General Division), Divisional Court, Steele, McRae and Corbett JJ., November 27, 1996**	***BCA s. 25.***
Friends of Toronto Park/and v. Toronto (City)	**To have standing to raise a challenge to a CBS's decision a person must have reasonable grounds for considering being 'aggrieved'.**	**(1991), 86 D.L.R. (4th) 669, 8 M.P.L.R. (2d) 127, 6 OR. (3d) 196, 53 OR. 376 (Div. Ct.)**	***BCA s. 25(1).***

Gadutsis v. Milne	**A disclaimer of damages for revocation of a building permit, contained in a municipal permit form, will not protect a municipality from damages due to negligent municipal advice regarding applicable zoning and the negligent issuance of permit.**	**[1973] 2 OR. 503,34 D.L.R. (3d) 455 (H.C.)**	***BCA s. 31, CL***
Galway & Cavendish (United Townships) v. Windover	**Municipalities have the authority to zone lands covered by water provided they do not interfere with navigation. This is so even though the bed of the waterbody is owned by the Province, provided the by-law does not work at cross-purposes to provincial legislation. Zoning by-laws should be given a liberal interpretation. A floating boathouse is a structure within the meaning of the BC.**	**(1995), 30 M.P.L.R. (2d) 109, 130 D.L.R. (4th) 710 (Ont. Gen. Div.)**	***BCA s. 1, PA s. 34.***
Giangregorio v. Hamilton (City)	**An appellant under s. 25 of the [Building Code Act] has the burden of demonstrating by means of evidence placed before the court that the decision below was not reasonable or that it was wrong as a matter of law. In attempting to discharge that burden the appellant may tender additional evidence before the court, as may the respondents to the appeal.**	**[2001] O.J. No. 5670, Court File No. 01-4377, Ontario Superior Court of Justice, Matheson J., June 27, 2001**	***BCA s. 25.***
Greater Toronto Airports Authority v. Mississauga (City)	**The Building Code and municipal development charge by-laws can have no application to lands owned by Canada where a lease from Canada specifically deals with the use of the lands in the same context as a municipal zoning by-law. The physical structures comprising an airport are within the exclusive jurisdiction of the Federal government and would also intrude over the federal jurisdiction over federal works and undertakings.**	**(1999), 43 OR. (3d) 9, 50 M.P.L.R. (2d) 54, 45 C.L.R. (2d) 212 (Ont. Gen. Div.)**	***CA, PA s. 34, DCA***
Greater Toronto Airports Authority v. Mississauga (City)	**The Building Code and municipal development charge by-laws can have no application to lands owned by Canada where a lease from Canada specifically deals with the use of the lands in the same context as a municipal zoning by-law. The physical structures comprising an airport are within the exclusive jurisdiction of the Federal government and would also intrude over the federal jurisdiction over federal works and undertakings.**	**Docket Nos. C31539 and C31557, Ontario Court of Appeal, Toronto, Ontario, McMurtry C.J.O., Laskin and Charron JJ.A., November 3, 2000**	***CA, PA s. 34, DCA***
Green v. Dixon	**Where a septic system was installed contrary to original plans, but was subsequently approved by the Health Unit, the CBO bears no liability if the**	**(March 24, 1995), Doc. Nos. Barrie G858 1, G858 IA (Ont. Gen. Div.)**	***BCA s. 8(2), CL.***

system malfunctions.	

H & D International Group v. Toronto (City)	**An Interim Control By-law passed after the decision of the CBO has no application to the consideration of the correctness of the CB0's decision.**	**(1988), 44 M.P.L.R. 187 (Ont. Dist. Ct.)**	***BCA s. 8(2), PA s. 38.***
H.L. & M. Shoppers Ltd. v. Berwick (Town)	**A building official owes a duty of care to applicants and the official's municipal employer will be civilly liable for the consequences of negligently providing information.**	**(1977), 3 M.P.L.R. 241, 28 N.S.R. (2d) 229, 82 D.L.R. (3d) 23,**	***BCA s. 31.***
Haldimand-Norfolk (Regional Municipality) v. Beres	**The demolition of a legal non-conforming building will effect the abandonment of grandparent rights. A replacement building is illegal and it's occupation will be restrained.**	**(1980), 106 D.L.R. (3d) 760, 27 OR. (2d) 373 (H.C.)**	***BCA s. 36(7), PA s. 34(9).***
Haldimand-Norfolk (Regional Municipality) v. Copland	**The removal of a trailer home from a property causes the loss of the propery's legal non-conforming status. It's subsequent replacement, being a larger park model home, was an entirely different structure.**	**(1993), 28 M.P.L.R. (2d) 308, 131 D.L.R. (4th) 114 (Ont. Div. Ct.)**	***BCA s. 8(2),PA s. 34(9), 46.***
Hastings Corp. Ltd. v. Borooah	**The appropriate standard of review of a decision of the CBO respecting the interpretation of a zoning by-law is closer to correctness than reasonableness. A zoning by-law which was passed before a permit application, continues an existing zoning permission for the subject of the application, but is under OMB appeal, is not applicable law as any changes withdrawing the permission would not be retroactive to the date of passage of the by-law.**	**DIVISIONAL COURT FILE NO.: 145/04, SUPERIOR COURT FILE NOS.:03-CV-255048CM1 & 03-CV-257685CM1, June 22, 2004**	***BCA s. 25, PA s. 34(30).***
Henry LePage v The Archipelago (Township)	**A floating dock attached to land is subject to the BCA. A zoning by-law is applicable law. An official plan is not applicable law and it should not be used to interpret a zoning by-law. Site plan approval is not applicable law [Ed. Note: The latter conclusion is, in it's breadth, wrong].**	**(July 7, 1989), Doc. No. 924/89 (Dist. Ct.)**	***BCA s. 1, 8(2), PA s. 41.***
Heutinck v. Oakland (Township)	**To be legally non-conforming a use must be the same legally non-conforming use existing at the date the by-law restriction was passed.**	**(1997), 42 M.P.L.R. (2d) 258 (Ont. CA.)**	***PA s. 34(9).***
Hewitson v. Hughes	**The demolition of buildings constructed without a building permit will be ordered where the use did not comply with land use restrictions and the failure to obtain the permit(s) was deliberate and defiant and without an honest belief that such was not required.**	**(1980), 31 OR. (2d) 536, 119 D.L.R. (3d) 117 (H.C.)**	***BCA s. 38(2).***

Hill and Hill Farms Ltd. v Bluewater (Muncipality)	**Zoning bylaws are 'municipal bylaws' within the meaning of the Farming and Food Production Protection Act, 1998.** **The determination under the Farming and Food Production Protection Act, 1998 of what is a normal farming practice must be consistent with the Minister of Agriculture's directives, guidelines or policies. Reduction by half of a minimum separation distance cannot be considered is directly contradictory with Ministry directives and cannot stand.**	**Docket: C43637 Ontario Court of Appeal**	PA s. 3
Hilton Canada Inc. v. Magil Construction Ltd.	**A municipality is absolved from civil liability relating to an improperly designed and constructed building where the municipality had a bona fide, rational, policy of reviewing structural plans in a cursory way, relying on the seals of an architect and an engineer, and that policy was not carried out negligently.**	**(July 28, 1998), Doc. Toronto 91 -CQ-7497, 91 -CQ-7497C (Out. Gen. Div.)**	***BCA s. 31, BC s. 3.3.2.2, CL***
Hirmann v. Toronto (City)	**Where a use is permitted by the 'in force' zoning, will be retroactively prohibited by a passed, but appealed, zoning by-law which had been passed several years earlier and for which there is no timetable for the disposition of the appeals, a building permit will issue.**	**(1993), 13 OR. (3d) 54, (sub nom. Hirmann v. Toronto (City) Chief Building Official) 14 M.P.L.R. (2d) 256 (Gen. Div.)**	***BCA s. 8(2), PA s. 34(30)***
Hodgins v. Toronto (City)	**A CBO's decision to revoke a permit must be on one of the bases set out in the BCA. The CBO has no inherent jurisdiction to revoke a permit.**	**(1983), 21 M.P.L.R. 165 (Co. Ct.)**	***BCA s. 8(9),***

Ingles v Tutkaluk Construction Ltd.	**An owner who allows his contractor to proceed with construction without a building permit will bear some responsibility for his consequent damages.**	**(1994), 24 M.P.L.R. (2d) 293 (Ont. Gen. Div.),**	***BCA s. 12, 31,CL.***
Ingles v Tutkaluk Construction Ltd.	**A municipality is not absolved by the negligence of an owner of a building under construction. To avoid liability, a municipality must show that its inspectors exercised the standard of care that would be expected of an ordinary, reasonable and prudent inspector in the same circumstances.**	**Appeal allowed, [2000] 1 S.C.R. , 298**	***BCA s. 12, 31, CL.***
Innisfil (Township) v. Shakell	**A mobile home is a 'building' and is subject to the pre-requisite of a building permit. An owner of lands should not be held responsible for the illegal actions of tenants in their introduction of illegal mobile homes.**	**(1980). 32 OR. (2d) 329, 14 M.P.L.R. 225, 121 D.L.R. (3d) 366 (H.C.)**	***BCA s. 1, PA s. 46.***
J & R Rite Holdings (Oshawa) Inc. v. Oshawa (City)	**A CBO may refuse to issue a building permit where the proposed use conflicts with the official plan of an upper tier municipality, there is a statutory obligation for local zoning by-laws to be amended to conform with the upper-tier OP, even though the local zoning permits the use.**	**(1988), 64 OR. (2d) 471, 38 M.P.L.R. 97 (H.C.)**	***BCA s. 8(2), PA24.***
Jessie's Centre Non-Profit Home Corp. v. Bottan	**A municipal by-law authorizing technical trespass in order to construct a building can be relied on as a sword against spite-motivated actions by an abutting landowner to frustrate the exercise of the by-law created right.**	**(1991), 47 C.L.R. 113 (Ont. Gen.Div.)**	***G***
Just v. British Columbia	**True policy decisions should be exempt from tortious claims so that governments are not restricted in making decisions based upon social, political or economic factors. However, the implementation of those decisions may well be subject to claims in tort.**	**(1989), 64 D.L.R. (4th) 689. 1 C.C.L.T. (2d) 1, [1989] 2 5CR. 1228, 18 M.V.R. (2d) 1, [1990] 1 W.W.R. 385,41 B.C.L.R. (2d) 350, 103 N.R. 1, 41 Admin. L.R. 161, [1990] R.R.A. 1404**	***CL.***

Kally s Restaurant Inc. v. Scarborough (City)	**A municipality cannot require the provision of more parking than that required by it's zoning by-law, as it stood on the date of the application for site plan approval, as a condition of site plan approval. Where a municipality imposes unlawful conditions to site plan approval the applicant is entitled to a building permit notwithstanding the site plan approval is outstanding.**	**(1993), 12 OR. (3d) 312, 14 M.P.L.R. (2d) 117, 99 D.L.R. (4th) 381, 62 O.A.C. 143 (Div. Ct.)**	***BCA s. 8(2), PA s. 41(4), (9).***
Kally's Restaurant Inc. v. Scarborough (City)	**Where the zoning examiner calculated a buildings parking requirement based on an erroneous interpretation of the by-law the court will direct the rescission of the permit with a direction that a new permit be issued if the plans are in accordance with the correct by-law interpretation.**	**Ontario Judgments: [1989] O.J. No. 1994, Action No. M186156/89 Ontario District Court - York Judicial District, Toronto, Ontario, Haley D.C.J., November 22, 1989.**	***BCA s. 25.***
Kamloops (City) v. Nielsen	**In order to obtain recovery for economic loss there must be a private law duty to the injured landowner alongside the public law duty. The plaintiff has to belong to the limited class of owners or occupiers of the property at the time the damage manifests itself. Loss caused as a result of policy decisions made by the public authority in the bona fide exercise of discretion will not be compensable. Loss caused in the implementation of policy decisions will not be compensable if the operational decision includes a policy element. Loss caused in the implementation of policy decisions, i.e. operational negligence will be compensable. Loss will also be compensable if the implementation involves policy considerations and the discretion exercised by the public authority is not exercised in good faith. Economic loss will only be recoverable if as a matter of statutory interpretation it is a type of loss the statute intended to guard against.**	**[1984] 2 SCR. 2, [1984] 5 W.W.R. 1. 10 D.L.R. (4th) 641, 29 C.C.L.T. 97, 26 M.P.L.R. 81, 8 C.L.R. 1, 54 N.R. 1, 66 B.C.L.R. 273**	***CL.***
Kim v. Mississauga (City)	**The BCA does not authorize 'part permits'. A permit issued to allow the plumbing for a car wash gives the car wash building, not just it's plumbing, protection from subsequently passed zoning by-laws.**	**(1996), 33 M.P.L.R. (2d) 135, 29 C.L.R. (2d) 98 (Ont. Gen.Div.)**	***BCA s. 1(1)(c), 7(a), 8(2), PA s. 34(9).***

Kingsbridge Development Inc. v. Hanson Needler Corp.	**A right included in an agreement of purchase and sale to allow the purchaser a subterranean easement for building purposes on the vendor's retained lands, is not denied or violated by the fact there are utilities in the easement area since their placement did not frustrate the construction necessary for the purchaser's building.**	**(1990), 71 OR. (2d) 636, 37 C.L.R. 180 (H.C.)**	***CL.***

La Sucrerie Casselman Inc. v. Cambridge (Township)	**The issuance of a building permit for a building on catastrophe-prone erosion area was a breach of the municipalities duty of care and rendered it liable to make good the damages. In the circumstances of this case there were no damages.**	**[2000] O.J. No. 4650, Court File No. 97-CV-002942-CM, Ontario Superior Court of Justice , Morin J.**	***BCA s.31, CL.***
Leeds & Grenville Board of Education v. Gerrard	**A geothermal heat pump system related to a new building is a 'building' as defined by the BCA. The Environmental Protection Act is 'applicable law'.**	**(1991), 8 C.E.L.R. (N.S.) 266 (Ont. Gen. Div.)**	***BCA s. 1, 8(2), EPA.***
Littler v. Mission (District)	**An inspector is under a duty of care not to issue permits/licenses which do not comply with zoning by-laws and liability will exist for damages suffered by the owner relying on the issuance.**	**(1991), 6 M.P.L.R. (2d) 164 (B.C. S.C.)**	***BCA s. 31, CL.***
Loblaws Inc. v. Ancaster (Town) Chief Building Official	**A building constructed pursuant to a permit issued for an intended use which does not comply with the zoning by-law is to require the occupant to comply with the by-law. The permit need not be rescinded. The official plan can be looked at to interpret the meaning of a zoning by-law provision. A use which is comprised of permitted and prohibited activities is not in compliance with zoning and the remedy is to limit the use to the permitted activities.**	**(1993), 13 M.RL.R. (2d) 94, 95 D.L.R. (4th) 695, 10 C.P.C. 232 (Ont. Gen. Div.)**	***BCA s. 8(2), 25, PA s. 34.***
Lock v. Middlesex Centre (Township) Chief Building Official	**In reviewing a decision of a CBO a standard of correctness will generally be applied to decisions based on law or jurisdiction and a standard of reasonableness will be applied to questions of fact. With respect to questions of mixed fact and law, the more the decision of the chief building official is a determination of law, the closer the standard will be to correctness whereas if the decision is dependent upon factual determinations within the special expertise of the chief building official the more deferential will be the standard. A nutrient management by-law which adopts the provinces minimum distance separation formulas is applicable law. THE MDS II formula does not apply to a single lot zoning residential, but to an area zoned residential.**	**[2001] O.J. No. 3588 , Court File No. 30955, Ontario Superior Court of Justice , Leitch June 29, 2001.**	***BCA 8(2), PA , S. 3(1).***

Lofaro v. North York (City) Chief Building Official	**Minor variances which relate to an 'existing' dwelling cease to have application when the building has ceased to exist except for a small fragment.**	**Action No. 17/91 and 439/91, 11 M.P.L.R. (2d) 278, Ontario Court of Justice - General Division, Toronto, Sheard J., July 14, 1992**	***BCA s. 8(2), PA s. 34(9).***

Maitland Valley Conservation v Cranbrook Swine	**To successfully defend charges on the basis of 'officially-induced error' the accused must show: (1) he considered the legal consequences of its actions and sought legal advice, (2) the legal advice obtained must have been given by an appropriate official, (3) the legal advice was erroneous, (4) the person receiving the advice relied on it, and (5) the reliance was reasonable.**	**DOCKET: C37250 and C37262, COURT OF APPEAL, ABELLA, MACPHERSON and SIMMONS JJ.A., APR 28 2003**	***BCA s. 36.***
Manchester v. North York (City) Chief Building Official	**Interim Control By-laws should be given a strict construction. The municipality's failure to give timely notice of passage of an ICB makes the by-law ineffective from the last date to give notice and not from the date of the by-law's passage.**	**(1994), 20 M.P.L.R. (2d) 213, 18 OR. (3d) 540, 115 D.L.R. (4th) 432, 72 O.A.C. 263 (Div. Ct.)(1993), affirming 15 OR. (3d) 690, 17 M.P.L.R.(2d) 150, 106 D.L.R. (4th) 646 (Gen. Div.)**	***BCA s. 8(2), PA s. 38.***
Mariani v. Puslinch Twp.	**A vendor who constructs his own house has the same obligation as a commercial builder-for-sale for damages suffered by a subsequent owner by negligent construction which raises a foreseeable risk of injury to persons or danger to property. The damages are the cost of putting the house in a non-dangerous state.**	**ONTARIO COURT OF APPEAL, MAY 12 2004**	***CL.***
Mayhew v. Hamilton (Twp.)	**A building permit is properly issued for a parcel of land which was required by the terms of a subdivision agreement to be zoned so as to prohibit buildings, but which in fact was zoned to allow buildings, as a subdivision agreement is not applicable law.**	**Court File No. 004918 Feb. 6, 2002**	***BCA s. 8(2) PA s. 51(26)***
McDonald's Restaurants of Canada Ltd. v. Humm	**No ownership in the lands is necessary to make a permit application. Certainly the owner of a leasehold interest in the lands under a long-term lease is entitled to apply. Section 5(2) of the 1983 Building Code Act which gives power to council to enact by-laws as to the application forms should not be construed to allow council to extend its authority in effect by compelling the applicant to agree to do anything. The applicant cannot be required to enter into an agreement with the applicant. The CBO does not make a discretionary decision in deciding to issue or deny a permit. Private agreements restricting the use of a site are not 'applicable law'.**	**(1983), 24 M.P.L.R. 103 (Co. Ct.)**	***BCA s. 7(b), 8(2).***
McLear v. Mason	**An unlicensed salvage yard was an illegal non-conforming use due to the lack of a license.**	**(1988), 65 OR. (2d) 228, 39 M.P.L.R. 111 (H.C.)**	***BCA s. 8(2), PA s. 34(9).***

Midland (Town) v. Fred DaSilva Enterprises Ltd.	**A building permit issued ostensibly for a weeping tile bed for a shopping centre will give the intended building grandparent rights over a subsequently passed zoning restriction prohibiting the use.**	**(1977), 3 M.P.L.R. 158, 16 OR. (2d) 657, 79 D.L.R. (3d) 88 (CA.)**	***BCA s. 8(2), PA s. 34(9).***
Mississauga (City of) , Peel District Public School Board et al v. Britannia North Holdings Inc.	**A condition of draft subdivision approval requiring satisfaction of the school boards regarding the adequate provision and distribution of educational facilities is within the jurisdiction of the approval authority. The 'adequate provision and distribution' of educational facilities is distinct from 'the adequacy of school sites'.**	**Ontario Superior Court of Justice, Divisional Court, MacFarland, Dunnet and McCartney JJ. Judgment: December 3, 1999**	***PA s. 51(24)(j).***
Mississauga (City) v. Vandenbergh	**Section 76(1) of the Planning Act does not authorize the increase in the number of apartment units within an existing multi-unit building.**	**Court File No. A4740/96, Ontario Court of Justice (General Division), Brampton, MacKenzie J., January 7, 1998**	***PA s. 76(1).***
Mortimer v. Cameron	**The failure by a plans examiner and a site inspector to use reasonable care in the approval of a renovation was the causative factor in personal damages awarded in the amount of $4.5 millions.**	**(1994), 19 M.P.L.R. (2d) 286, 17 OR. (3d) 1, 68 O.A.C. 332,111 D.L.R. (4th) 428 (CA.), additional reasons at (June 24, 1994), Doc. CAC12036 (Ont. CA.). leave to appeal to SCC. refused (1994), 23 M.P.L.R. (2d) 314 (note) 114 D.L.R. (4th) vii (note), 19 OR. (3d) xvi (note), 76 O.A.C. 400 (note), 178 N.R. 146 (note) (SCC.)**	***BCA s. 12,CL.***

Nicholls v. Merrickville-Wolford (Village)	**A zoning exception permitting uses of a municipality, local boards, and the like, does not extend to lessees of such bodies. A health centre operated under lease by a non-profit group is not permitted by such an exception.**	**Ontario Court of Justice (General Division), Ottawa, Panet J., December 22, 1998**	***PA s. 34.***
Nixon v. Greymac Mortgage Corp.	**An order was given requiring a tenant to make application for a required building permit within 30 days or to cease using the premises.**	**(1984), 35 R.P.R. 271 (H.C.)**	***BCA s. 38.***
Noddle v. Toronto (City)	**An employee of a facility seeking a permit has status to challenge the issuance of the permit on the grounds of zoning compliance.**	**(1982), 19 M.P.L.R. 95, 37 OR. (2d) 421, 19 M.P.L.R. 95 (H.C.)**	***BCA s. 25.***
Olmstead v. Greenberg	**Breaches of the Building Code may be challenged by a third party in an action even though the same relief might have been provided in a section 25 application.**	**[2001] O.J. No. 4545, Court File No. 01-CV-205761, Ontario Superior Court of Justice, Day J., Judgment: November 21, 2001.**	***BCA s. 25.***
Olympia & York Developments Ltd. v. Toronto (City)	**For the purposes of a site plan agreement a municipality is entitled to demand the registered owner, not only a long-term ground lessee, execute the agreement. A ground lessee is not an owner.**	**(1980), 29 OR. (2d) 353. 12 M.P.L.R. 219, 113 D.L.R. (3d) 695 (Div. Ct.)**	***BCA s. 8(2), PA s. 41.***
Ottawa (City of) v. The Chief Building Official of the City of Ottawa and 1479333 Ontario, Inc.	**For a law to be relevant and applicable to the question of the issuance of a building permit a real and logical nexus must exist between the applicable law and the essential purpose of the BCA, which is the construction, and demolition of buildings.**	**Ontario Divisional Court, November 21, 2003, [2003] O.J. No. 4530, Court File No. 03-DV-857**	***BCA s. 8***
Ottawa (City) v Shore & Horwitz Construction Co.	**A building constructed for the federal crown on federal land is not subject to provincial building permit regulation.**	**[1960] OWN. 137, 22 D.L.R. (2d) 247 (H.C.)**	***BCA s. 8(2).***
Oxbow Lake Cottagers Association v. Lake of Bays (Township)	**The protection provided by the Planning Act to legal non-conforming uses does not extend to permitting the introduction of new buildings or structures for the protected uses.**	**2006 CanLII 32324 (ON S.C.), Court File No. 04-B7727**	***P.A. Sec. 34(9)***

Paris (Town) v Smith	**A term in a site plan agreement restricting the use of the site was an illegal, but severable, provision.**	**(1995), 29 M.P.L.R. (2d) 277 (Ont. Gen. Div.)**	***PA s. 41.***
Peacock v. CBO of Norfolk County	**An applicant's permit rights crystallize on the date the CBO makes the decision to issue or refuse a permit. An interim control by-law passed after an application is filed but before the decision must, absent extraordinary facts, be taken into account. A statute prohibiting the discharge of contaminants is applicable law relative to a permit application for a hog barn. The doctrine of legal non-conforming use cannot be used to protect expansion that necessarily entails grave environmental and public safety dangers.**	**SUPERIOR COURT OF JUSTICE, COURT FILE NO.: 0002/02, 2003/07/03** **Ontario Court of Appeal Court File no. C42944, June 28, 2006**	***BCA s. 8(2), 25, PA s. 34(9).***
Pedwell v. Pelham (Town)	**The fact a condition precedent to the issuance of a building permit (Health Unit septic approval) is not satisfied is irrelevant where the municipality frustrated the satisfaction of the condition by advising the approval authority that the proposed land use was prohibited by the zoning by-law. A municipal council has no authority to direct the CBO to not do an act which the CBO is statue bound to carry out. Compensation for damages follows the wrongful refusal to issue a building permit.**	**(1998). 47 M.P.L.R. (2d) 222 (Ont. Gen. Div.), additional reasons at (February 26, 1999), Doc. Toronto 5650.5/95 (Ont. Gen. Div.)**	***BCA s. 8(2), 31.***
Pedwll V Town of Pelham	**A CBO has a right to consult with other Town officials but must make an independent decision. The Environmental Assessment Act is applicable law.**	**DOCKET: C30587, COURT OF APPEAL, WEILER, ROSENBERG and ARMSTRONG JJ.A., MAY 9, 2003**	***BCA s. 8, EAA.***
Pension Fund Realty Ltd. v. Ottawa (City)	**A park levy relating to an addition to an existing building is to be calculated without regard for the portion of the site relating to the existing building. Where lands have been cleared of existing buildings, new construction is proposed 'development' and not 'redevelopment' .**	**(1981), 32 OR. (2d) 611, 122 D.L.R. (3d) 308 (H.C.)**	***PA s. 42(1).***
Peterson v. Ajax (Town) Fire Marshal	**In the absence of any evidence that a change in facts has increased fire hazards in a building neither an order of a fire marshall nor a Fire Code Commission ruling can be sustained.**	**Ontario Court of Justice (General Division), Divisional Court, [1998] O.J. No. 3303, Court File No. 750-9, B. Wright J., August 18, 1998.**	***BCA s. 12(2), FC s. 21, 26, 27.***

Petruzzi v. Coveny	**The purchaser of a house constructed by the previous owner is entitled to damages jointly from the owner/builder and the municipality whose inspector was negligent in inspecting the work. Mental distress damages are properly awarded. The original owner/builder is also responsible for damages relating to non-building code defects.**	**(1991), 7 M.P.L.R. (2d) 183, 48 C.L.R. 225 (Ont. Gen. Div.)**	***BCA s. 12, 31, CL.***
Pettinato v. Oakville (Town)	**Clear language is required to avoid an interpretation of a zoning by-law which advances a residential community's quality of life.**	**(1996), 33 M.P.L.R. (2d) 216 (Ont. Gen. Div.)**	***PA s. 34.***
Philpott v. Innisfil (Town)	**It is not correct/reasonable to respond to a building permit application submitted after the passage of a zoning by-law amendment which would have (inadvertently) permitted the building/use which was the subject of the permit where the by-law error was subsequently corrected (and at no time was the by-law in law amended to permit the said building/use).**	**2006 CanLII 28741 (ON S.C.), Docket: CV-06-145** **Appeal Dismissed Mar. 28/07 ONCA, CT. FILE NO.: DC-06-081239-00**	***B.C.A. Sec. 8 P.A. Sec 34***
Phi Delta Beta of London Inc. v. London (City) C.B.O.	**A CBO is entitled to consider the intended use of a property in considering the conformity to zoning although that use has not yet been established. A fraternity house cannot be considered a 'single housekeeping unit'.**	**(1995), 25 M.P.L.R. (2d) 140 (Ont. Gen. Div.), aff'd (1996), 36 M.P.L.R. 319 (Ont. Div. Ct.)**	***BCA s. 8(2), PA s. 35.***
Pickle Lake (Township of) v. Shetterly Enterprises Ltd.	**The test of "reasonableness" is applicable to review of an application under Section 15(10)(1) of the BCA to confirm an order of a CBO consequent on the CBO's decision that there existed an "immediate danger to the health or safety of any person" and to obtain an order respecting the reimbursement of costs.**	**Ontario Superior Court of Justice, Court File No: 05-114, Date: 2006-02-27**	***BCA s. 15(10)***
Polla v. Toronto (City) Chief Building Official	**Where the legality of site plan conditions is in issue the court has jurisdiction and will exercise it even though an appeal may be lodged with the OMB. A site plan condition requiring the removal of a lawful structure is illegal.**	**[2000] O.J. No. 4399, Court File No. 00-CV-194025, Superior Court of Justice, Molloy J., November 21, 2000.**	***BCA s. 8(2), PA s. 41.***
Putnam v. Stirling-Rawdon (Township)	**A dwelling and garage connected by an underground tunnel is one building. As the CBO issued a building permit for a structure at a location not permitted by the by-law the municipality is estopped from challenging the regularity of the garage.**	**[2000] O.J. No. 734, Belleville Court File No. 1880/99, Superior Court of Justice, Belch J., March 6, 2000.**	***BCA s. 1, 12.***

Quay West v. Toronto (City)	**A proposed development does not have grandparent rights where a building permit 'ought to have been issued' before the passage of a prohibitory by-law, but had not in fact been issued. Site plan approval is a prerequisite to the issuance of a building permit, absent unusual circumstances.**	**(1989), 47 M.P.L.R. 109 (Ont. Div. Ct.), leave to appeal to CA. refused (1989), 47 M.P.L.R. 109 (Ont. CA.)**	***BCA, s. 8(2), PA s. 34(9), 38(8).***
R. Pickles	**The limitation period for laying a charge for building without a permit starts the day the work is complete, not the day the municipality discovers the offence was committed. The discoverability rule is not applicable.**	**COURT OF APPEAL FOR ONTARIO, DOHERTY, MACPHERSON and SIMMONS JJ.A, February 24, 2004.**	***BCA s.36(8).***
R. v. 1267017 Ontario Ltd.	**A charge of failing to comply with an order to stop work until a building permit is obtained will be dismissed, despite the recipient's subsequent failure to obtain a permit, where there is no evidence that work continued. An order to comply requiring a building permit to be obtained is violated regardless of when the illegal work was done when no permit is applied for.**	**[2001] O.J. No. 3412, Ontario Court of Justice Newmarket, Ontario, Lampkin J. Oral judgment: July 19, 2001**	***BCA s. 12(2), 14.***
R. v. 593288 Ontario Ltd.	**In the case of proceedings for failure to comply with an order to comply, the one year limitation in section 36 (8) runs from the time when damage manifested itself.**	**[1998] O.J. No. 5670, DRS 99-07931, Ontario Court of Justice (Provincial Division), Newmarket, Lampkin Prov. J., December 18, 1998**	***BCA s. 36(8).***
R. v. King Insulation Services Ltd.	**The installation of insulation requires a building permit even though no structural alterations are involved. Such installation is a material alteration of a building.**	**(1981), 13 M.P.L.R. 127 (Div. Ct.)**	***BCA s. 1.***
R. v. Springman,	**At common law, a 'building or structure' does not include mobile trailers.**	**[1964] SCR. 267, 42 CR. 407, 47 W.W.R. 298, [1964] 3 CCC. 105**	***BCA s. 1.***
Re Ontario Cancer Treatment and Research Foundation and Corporation of the City of Ottawa et al.	**A Foundation incorporated by an Act which includes a provision exempting the Foundation from taxation for municipal or provincial purposes is exempt from charges under the Development Charges Act, 1990.**	**38 O.R. (3d) 224, Docket No. C22850, Court of Appeal for Ontario, Finlayson, Osborne and Labrosse JJ.A., February 12, 1998**	***DCA***

Re Russell and Banbury et al	**In obiter dicta, a judge expressed the opinion that permits under predecessor legislation did not allow permits to be issued after the fact and that any so issued would be invalid. [Editorial note: This early, and off-hand, view does not accord with a broad and liberal mandate as directed by the Interpretations Act.]**	**[1955] O.R. 653-667, WILSON J., 8th JUNE 1955**	***BCA s. 8.***
Revenue Properties Co. v. Toronto (City)	**A building permit may be issued even where site plan approval is required but not yet obtained; however, construction under the permit cannot commence until site plan approval is obtained.**	**(1984), 26 M.P.L.R. 165 (Co. Ct.)**	***BCA s. 8(2), PA . 41.***
Rexlington Heights Ltd. v. Her Majesty the Queen	**The provisions of the Code are only triggered upon the commencement of constructing an extension or making a material alteration or repair. In the absence of such activity, the building is subject to the standards in place at the time that it was built.** **A municipal property standards by-law passed under Section 15.1.3 can require the 'retrofitting' of an existing building to bring it into compliance with a new standard even where the Building Code would not require such; however, the language used to direct such a result must be clear. A simple reference to compliance with the Building Code will not be read as require retrofitting to Code standards which apply to, for example, only new buildings.** **A Property Committee in an appeal under Section 15.3(3.1) may grant relief from a requirement such as an obligation to retrofit the stair handrails of an existing building.**	**Ontario Superior Court of Justice, [2005] O.J. No. 4223, Court File Nos. 04-SC-000039 and 05-SC000051, October 5, 2005.**	***BCA s. 15.3(4)*** ***s. 15.1.3*** ***BC 3.4.6.4. and 3.4.6.5.***
Riverside Developments Bobcaygeon Ltd. v. Bobcaygeon	**When the Chief Building Official for the municipality advises a developer that plans met the requirements of the Building Code for the Province, it is reasonable for the developer to rely on those assurances. It is also reasonable that the developer relied on the building inspector to check the construction as it advanced. Damages of some $14m. were awarded against the municipality.**	**COURT FILE NO.: 001779, 2004-01-19, SUPERIOR COURT OF JUSTICE, Justice B. Glass, Court of Appeal, July 18, 2005.**	***BCA s. 31, CL.***

Roman Catholic Episcopal Corp. for the Diocese of Peterborough in Ontario, Canada v. Cobourg (Town)	**A judge acting under sec 25 should do what the CBO ought to have done. A judge has no other powers than that of the CBO and no discretion which the CBO does not also have. A heritage easement agreement can be applicable law. A CBO who issues a demolition permit for work which conflicts with a heritage easement agreement act correctly in revoking the permit on the basis of the error.**	**(May 7, 1998), Doc. Cobourg 000401/98 (Ont. Gen. Div.) see also court file no. 49173/98**	***BCA s. 8(10)(a), 25, OHA s. 37.***
Ross v. Muskoka Lakes (Township)	**The more the Chief Building Official's decision is a determination of law, the closer the standard will be to correctness. The more the initial decisions depended upon factual determinations within the special expertise of the Chief Building Official, the more deferential will be the standard. The general rule is that site plan approval is required before the building permit is to be issued because site plan approval is "other applicable law". Only where there is bad faith or other unlawful conduct should the court exercise the jurisdiction given to it under the Building Code Act to rectify an injustice by granting a building permit in the absence of site plan approval.**	**COURT FILE NO.: 257-02, Bracebridge, ONTARIO SUPERIOR COURT OF JUSTICE, January 19, 2004.**	***BCA s.8(2), 25, PA s.41***
Rothfield v. Manolakos,	**The breach of a building by-law by an owner does not discharge the municipality from it's duty to competently inspect construction, although damages will be reduced by the contributory negligence of the owner.**	**[1989] 2 SCR. 1259, [1990] 1 W.W.R. 408, 63 D.L.R. (4th) 449, 41 B.C.L.R. (2d) 374, (sub nom. Manolakos v. Gohmann) 46 M.P.L.R. 217, 1 C.C.L.T. (2d) 233, (sub nom. Manolakos v. Vernon (City)) 102 N.R. 249**	***BCA s. 31, CL.***
Rotstein v. North York (City)	**Two or more lots on a plan of subdivision may be a single 'lot' in the context of zoning. A registered subdivision agreement is not applicable law.**	**(December 13, 1994), Doc. No. RE4602/94 (Ont. Gen. Div.), leave to appeal refused (January 11, 1995), O'Leary J. (Ont. Div. Ct.)**	***BCA s. 8(2), PA s. 34, 51(26).***

Saint-Romuald (City) *v.* Olivier	**Merely continuing the precise pre-existing activity, even at an intensified level, is protected as legally non-conforming unless there is an intensification of such a degree as to create an altogether different use. The landowner overreaches itself if (i) the scale or intensity of the activity can be said to bring about a change in the type of use, or if (ii) the addition of new activities or modification of old ones is seen by the Court as too remote from the earlier activities to be entitled to protection, or if (iii) the new or modified activities can be shown to create undue additional or aggravated problems for the municipality, the local authorities, or the neighbours. The factors are balanced against one another.** **Substitution of nude dancers for country and western singers is not such an extreme variation in the nightclub or cabaret formula as to constitute a wholly different and therefore unprotected use. The pre-existing use can appropriately be characterized as the commercial offering of a combination of food, drink, ambiance and lawful entertainment to the public. The switch to a different form of entertainment is within this general nightclub purpose.**	**Supreme Ct. of Canada, [2001] 2 S.C.R. 898, September 27, 2001.**	***PA s. 34(9)***
Sapone v. Clarington (Municipality)	**A municipality has no legal duty to enforce it's by-laws and a damage suit against it premised on such a claim will be dismissed.**	**[2001] O.J. No. 4991, Court File No. 6746/01, Ontario Superior Court of Justice, Lane J., December 18, 2001**	***BCA s. 31, PA s. 67, CL.***
Seel Enterprises Ltd. v. Toronto (City)	**The failure to have a lodging house licence and the existence of building code violations at the time a prohibitory by-law was passed prevent a use from claiming legal non-conforming status.**	**(1982), 17 M.P.L.R. 315 (Div. Ct.).**	***BCA s. 8(2), PA s. 34(9).***

Shell Canada Products Ltd. v. Barrie (City) Chief Building Official	**The lack of site plan approval and an intervening interim control by-law disentitled an applicant to a building permit.**	**(1992), 11 M.P.L.R. (2d) 43, 2 C.L.R. (2d) 200 (Ont. Gen. Div.), additional reasons at (1992), 13 M.P.L.R. (2d) 279 (Ont. Gen. Div.)**	***BCA, s. 8(2), PA s. 34(9), 38(8).***
Sixteenth Warden Ltd. v. Markham (Town)	**Section 34(9) of the Planning Act can be interpreted as including a situation where a 'permit ought to have been issued' where a permit should have been issued, notwithstanding the post-permit application passage of an interim control by-law. Site plan approval is not a prerequisite to the issuance of a building permit where the approval was improperly withheld.**	**(1993), 12 OR. (3d) 653. 18 M.P.L.R. (2d) 70 (Gen. Div.)**	***BCA s 8(2), PA s. 34(9), s. 38.***
Stacey v. Oxford-on-Rideau (Township)	**The Conservation Authorities Act and regulations is applicable law. "Construction" in the Conservation Authorities Act does not include the reconstruction of a fire-damaged building.**	**(1989), 46 M.P.L.R. 15 (Ont. Dist. Ct.)**	***BCA s 8(2), CAA.***
Summit Glen Development Corp. v. Toronto (City)	**The entitlement to a building permit should be judged as of the date of the CBO's decision.**	**(1989), 44 M.P.L.R. 50 (Ont. Dist. Ct.)**	***BCA s. 25.***
Superior Propane Inc. v. York (City)	**A zoning by-law restricting and regulating propane filling stations does not enhance provincial regulation on the same subject and, being in conflict, is invalid.**	**(1995), 27 M.P.L.R. (2d) 1,23 OR. (3d) 161, 123 D.L.R. (4th) 445, 17 C.E.L.R. (N.S.) 1, 80 O.A.C. 362 (C.A.)**	***BCA s. 8(2), PA s. 34.***

T.H. Critelli Ltd. v. Lincoln Trust & Savings Co.	**The design of a new building which produced excessive snow loads on the roof of an abutting building was actionable nuisance.**	**(1978), 20 OR. (2d) 81, 4 C.C.L.T. 217, 2 R.P.R. 290, 86 D.L.R. (3d) 724 (H.C.)**	***CL.***
Teperman & Sons Ltd. v. Toronto (City)	**The right to a demolition permit crystallizes on the day the application is made.**	**(1975), 7 OR. (2d) 533, 55 D.L.R. (3d) 653 (CA.)**	***BCA s. 8(1).***
Thomas C. Assaly Com'p. v. Ottawa (City)	**Minor construction such as a small portion of a building is neither 'development' or 'redevelopment'.**	**(1977), 18 OR. (2d) 198,4 M.P.L.R. 213,82 D.L.R. (3d) 124 (Div. Ct.)**	***PA s. 41.***
Thomas Furniture Ltd. v. Toronto	**A facility providing temporary shelter and food to homeless persons is a' crisis care facility' and not a hostel.**	**[2002] O.J. No. 929, Court File No. 01-CV-222738, Ontario Superior Court of Justice**	***BCA s. 8(2), PA . 34.***
Thorman v. Cambridge (City)	**In a single family zoned area, the exemption provided by s. 34(9) of the Planning Act allows a building containing 3 dwelling units to use space formerly occupied by a butcher shop for another dwelling unit.**	**(1977), 4 M.P.L.R. 220, 18 OR. (2d) 142, 81 D.L.R. (3d) 736 (H.C.)**	***PA s. 34(9).***
Thunder Bay (City) v. Kasstan Estate	**An unauthorized inspection of a dwelling violated the occupant's Charter Rights and, in consequence, the municipality was denied an order to recover the costs of a related property clean-up.**	**(1999), 43 OR. (3d) 703, 50 M.P.L.R. (2d) 301, 61 C.R.R. (2d) 164 (Ont. Gen. Div.)**	***BCA s. 15.4(2), 15.7(8), 16.***
Toronto (City) Chief Building Official v. Andriano	**A court order requiring the demolition of an addition constructed without a permit should allow 90 days for execution rather than 30 days, as the addition was not dangerous.**	**Court File No. 97-CV-128925, Ontario Court of Justice (General Division), Pitt J., September 30, 1998**	***BCA s. 38.***
Toronto (City) Chief Building Official v. Vaghela Holdings Inc.	**In the absence of bad faith or similar illegal reasons for refusing a building permit, an applicant who has not received a permit is subject to the terms of a subsequently passed interim control by-law and will be subject to a compliance order.**	**(1993), 16 M.P.L.R. (2d) 99 (Ont. Gen. Div.)**	***BCA s. 13(2), PA s. 38.***
Toronto (City) Official Plan Amendment 333, Re	**The installation of services by a developer under a subdivision agreement with a municipality is not subject to the Environmental Assessment Act.**	**(1986), 33 M.P.L.R. 177 (O.M.B)**	***EAA'***

Toronto (City) Official Plan Residential Development Amendment (Re) Minto BYG Incorporated	**A requirement for a contribution pursuant to Section 37 must fall within the scope of a Section 34 by-law amendment.**	**O.M.B. File No. O000062 et al, File Nos. PL000351, O000062, Z000049, M000053, October 27, 2000**	***PA s. 37.***
Toronto (City) v. P & M Construction Ltd.	**It is appropriate to require internal renovations which conflicted with the plans for the issued permit to be brought into conformity with the plans as filed.**	**(1981), 16 M.P.L.R. 85 (H.C.)**	***BCA s.38.***
Toronto Area Transit Operating Authority v. Mississauga (City)	**A Crown in Right of Ontario agent is not required to obtain site plan approval, apply for a building permit, or pay parks levies, for it's building**	**(1996), 32 M.P.L.R. (2d) 97, 133 D.L.R. (4th) 257 (Ont. Gen. Div.)**	***BCA s. 8, PA s. 41.***
Toronto College Street Centre v. Toronto (City)	**A building permit application which conflicted with a Heritage Easement Agreement was properly refused. The Ontario Heritage Act should be given a broad and liberal interpretation.**	**(1986), 56 OR. (2d) 522. 17 O.A.C. 113, 31 D.L.R. (4th) 402,34 M.P.L.R. 138 (CA.), leave to appeal to 5CC. Refused (1987), 34 M.P.L.R. xxxi (note), 23 O.A.C. 160 (note), 79 N.R. 400 (note), 61 OR. (2d) 669 (note)**	***BCA s. 8(2), OHA.***
Tridan Developments v Shell Canada Products	**The damages caused by a gasoline spill onto an abutting property are properly calculated to be the sum of removing all contamination ($350,000) and the cost of installing an below grade barrier to shield against subsequent seepage from the site of the spill. As the resulting cleaned-up site would be pristine, there should be no damages for 'stigma'. As the site's owner suffered no other loss, no pre-judgment interest should be awarded.**	**DOCKET:C34404,**	***CL.***
Trivest Developments Ltd. v. Toronto (City)	**The Building Code Act and the Planning Act are not in pari materia insofar as the meaning of 'demolition' is concerned.**	**(1986), 54 OR. (2d) 728, 39 R.P.R.255, 32 M.P.L.R. 124 (H.C.), affirmed (1986), 57 OR. (2d) 799 (CA)**	***BCA S.8(1), PA s. 33.***

Trucena Properties Ltd. v. Toronto (City)	**Site plan approval is not a prerequisite for the issuance of a building permit.**	**(1988), Doc. No. M l6550 1/88 (Ont. Dist. Ct.)**	***BCA s.8(2), PA s.41.***
Turnbull v. Bayfield (Village)	**It is appropriate to defer consideration of a building permit application until the applicant proves his ownership interest in the related lands.**	**(1984), 47 OR. (2d) 694 (Co. Ct.)**	***BCA s. 8(2).***

Union Gas Ltd. v. Dawn (Township)	**Zoning restrictions pertaining to facilities approved for construction by the Ontario Energy Board are in conflict with provincial legislation and invalid.**	**(1977), 15 OR. (2d) 722, 2 M.P.L.R 23, 76 D.L.R. (3d) 613 (Div. Ct.)**	***PA s. 34.***
Upper Thames Conservation Authority v. London (City)	**Internal renovations may not be subject to conservation regulations and so a building permit may be issued without conservation authority approval.**	**(1989), 67 OR. (2d) 784, 42 M.P.L.R. 241, 2 R.P.R. (2d) 58 (Dist. Ct.)**	***BCA s. 8(2), CAA s. 28(1)(c), (25).***
Vanderschot v. North Easthope (Township)	**Municipal Interim control by-laws passed to control the height of structures in the vicinity of an airport were the exercise delegated federal authority validly received by the Municipality and authorized by the province. As such they were constitutionally valid.**	**(1995), 24 OR. (3d) 286 (sub nom. Re Ellice (Township) Zoning By-laws 2-94 &/or 26-94) 28 M.P.L.R. (2d) 1 (Div. Ct.)**	***BCA s. 8(2), PA s. 34, 38.***
Vann Niagara v Oakville	**A sign by-law which prohibits all billboard signs and all third party signs violates the Charter of Rights guarantee of freedom of expression. The municipality failed to show its objective in passing the sign by-law is pressing and substantial; that the by-law is rationally connected to that objective; that the by-law minimally impairs the right to freedom of expression; and finally, that there is proportionality between the effects and the objectives of the by-law. The by-law limitations are invalid.**	**DOCKET: C36773, COURT OF APPEAL, BORINS, FELDMAN AND MACPHERSON JJ.A., June 14, 2002**	***BCA s. 8(2), MA s. 99.***
Vann Niagara v Oakville	**A sign by-law which limits signs to an area of 80 sq. ft. freedom of expression, but minimally, and is constitutionally valid.**	**[2003] 3 S.C.R. 15, 2004-01-20, Docket: 29359**	***BCA s. 8(2), MA s. 99.***

Watts and Watts v. Shawn Benvenuti and Kim Alderson	**The factors which are to be considered in determining if an allegedly legally non-conforming use is a new use or an iteration of a pre-existing use are:** **1. The purpose of the pre-existing use and the activities that were carried on the property prior to the enactment of the new bylaw.** **2. Whether the new proposed use is simply an intensification of the old use or goes beyond the old use by a matter of degree and constitutes, in terms of community impact, a difference in kind.** **3. The remoteness of the change of the activity from the earlier activity.** **4. The extent to which the new activities are within the original scope of usage.** **5. The neighborhood effects as established.** **6. The proper balance in the characterization of the legal non-conforming use (not too general so as to liberate the owner from the constraints of what he actually did and not so narrow as to rob him of flexibility).** **A conversion of a cash crop agricultural operation into a horse farm is protected by legal non-conforming status where the number of horses is not excessive.**	**Ontario Superior Court of Justice, 2005 CanLII 27154 (ON S.C.), Court File No: 9/05, July 25, 2005**	***PA s. 34(9)***
W. Kirby v. Coquitlam (City)	**Where the CBO was unaware of the existence of fill on site which would have required additional consideration before issuing a permit, there is no actionable negligence if the subsequently constructed building proves inadequate for the actual site conditions. A reasonably prudent building inspector would not have alerted to the condition.**	**(1996), 27 C.L.R. (2d) 120, 37 M.P.L.R. (2d) 113 (B.C. S.C.)**	***BCA s. 18(1), 31, CL***
Walker v. Kingston (City)	**A permit issued on the applicant's advice that the building was a two-family dwelling when it was not so used is properly revoked as given on 'mistaken or false information'.**	**(1991), 6 M.P.L.R. (2d) 316 (Ont. Gen. Div.)**	***BCA s.8(10)(a).***

Walton v. Lincoln (Town)	**Legal non-conforming use status is lost by a fire which destroys the building containing the use. A CBO acts correctly in taking into account not only the structural design of a building but also it's intended use in refusing a permit application. Zoning is applicable law at the plan review stage.**	**(1997), 43 M.P.L.R. (2d) 291 (Ont. Gen. Div.)**	***BCA s. 8(2), PA s. 34(9).***
Water & Ice Ltd. v. Muskoka Lakes (Township)	**Site Plan Approval must conform to Provincial Policy Statements. Where the municipal Official Plan requires an environmental impact statement in the circumstances, the failure to have same justifies the withholding of site plan approval and does not evidence 'extraordinary circumstances' which would allow a building permit to be issued without site plan approval.**	**23 M.P.L.R. (4th) 87**	***B.C. A. Sec. 8 P.A. Sec 41.***
Weinberg v. Township of Euphrasia et al.	**The phrase 'any person who considers himself aggrieved' applies where there are reasonable grounds for a person believing themself to having been wrongfully deprived of something or having title to something wrongfully affected.**	**Action No. 1238/89, Ontario District Court - Zelinski D.C.J., December 12, 1989**	***BCA s. 25.***
Welwood v. Huron-Kinloss (Township)	**In terms of the standard of review of a CBO's decision on questions of law, the CBO is required to be correct, on questions of fact the CBO is required to meet a standard of reasonableness, and on mixed questions of law and fact, the CBO is required to meet a standard of reasonableness. The Environmental Protection Act is not applicable law as it relates to a building permit for the two hog barns.**	**[2002] O.J. No. 1131, Court File No. 31433, Ontario Superior Court of Justice, Browne J.,March 26, 2002.**	***BCA s. 25, EPA s. 6.***
Whistler Service Park Ltd. v. Whistler (Muni.)	**A policy to enforce by-laws on a 'complaint driven' basis is proper, absent bad faith.**	**(1990), 50 M.P.L.R. 233, 41 C.L.R. 132 (B.C. S.C.)**	***BCA s.15(2), PA s. 67.***
Whitchurch-Stouffville Chief Building Official v. 893472 Ontario Ltd.	**A building permit is required for a concrete batching plant. Concrete pads were 'floors', block walls for material holding pens were 'walls' and were a building.**	**(1994). 23 M.P.L.R. (2d) 307 (Ont. Div. Ct.)**	***BCA s 1, 8(1).***
White v. Vaughan (City)	**Neither the property standards committee nor a judge has the power to limit the municipalities rights to obtain payment of it's costs incurred in cleaning up a property subject to an order which was ignored.**	**(1998), 47 M.P.L.R. (2d) 153 (Ont. Gen. Div.),**	***BCA 15.3(3.1), 14.4(4).***
William F. White Ltd. V. Toronto Chief Building Official	**Once compliance with applicable laws is shown, there is an absolute duty on the chief building official to issue the permit.**	**(1999) 44 O.R. (3d) 750, Superior Court of Justice, Stinson J., June 29, 1999**	***BCA s 8.***

Wirth v. Vancouver (City)	**Where there is no foreseeable risk of personal injury or damage to property a municipality is under no duty of care to an owner of property abutting a site for which a building permit was negligently issued. Economic loss, whether foreseeable or not, does not create a duty of care.**	**50 M.P.L.R. 105. 47 B.C.L.R. (2d) 340, 3 C.C.L.T. (2d) 282,71 D.L.R. (4th) 745, [1990] 6 W.W.R. 225 (CA.)**	***BCA s. 31, CL.***
Wolfond v. North York Building Commissioner	**Administrative delay in issuing a building permit should not deprive a permit applicant of grandparent rights which would have existed had a permit been promptly issued. An applicant's rights crystallize on the date of the CBO'S decision.**	**(1990), 1 M.P.L.R. (2d) 189, 74 OR. (2d) 466 (Dist. Ct.)**	***BCA s. 8, PA s. 34(9).***
Woodglen & Co. Ltd. v. North York (City)	**Although the Divisional court has jurisdiction to order the issuance of a building permit under the Judicial Review Procedures Act, section [25] of the Building Code Act sets out the proper avenue for such relief.**	**(1983), 42 OR. (2d) 385, 23 M.P.L.R. 13, 149 D.L.R. (3d) 186 (Div. Ct.)**	***BCA s. 25.***
Woodglen & Co. Ltd. v. North York (City)	**Official Plan policies are not applicable law. A judge acting under sec 25 should do what the CBO ought to have done. A judge has no other powers than that of the CBO and no discretion which the CBO does not also have.**	**(1983), 43 OR. (2d) 289, 23 M.P.L.R. 18 (Co. Ct.), affirmed (1984), 47 OR. (2d) 614, 9 C.L.R. 232, 26 M.P.L.R. 40, 5 O.A.C. 313, 12 D.L.R. (4th) 146 (Div. Ct.)**	***BCA s. 8(2), 25.***
Woolridge v. Stack	**A municipality will not bear civil liability for non-inspection of construction where it had no statutory obligation to inspect and decided not to for valid policy reasons.**	**(1993), 107 Nfld. & P.E.I.R. 280, 336 APR. 280 (Nfld. T.D.)**	***BCA s. 31, CL.***

Re A.W. Banfield Construction Ltd. et al. and City of Oshawa et al.

21 O.R. (2d) 157
ONTARIO

ONTARIO
HIGH COURT OF JUSTICE
DIVISIONAL COURT
GRIFFITHS, RUTHERFORD AND STEELE, JJ.
5TH SEPTEMBER 1978.

APPLICATION to compel the issuance of building and demolition permits.

J. G. Parkinson, Q.C., for applicants.

R. M. Holland, for respondents.

The judgment of the Court was delivered orally by

STEELE, J.:-- This is an application for judicial review and for an order directing the City of Oshawa and its building commissioner to issue a building permit to the applicants to permit them to build an eight-unit apartment building on certain lands in the city owned by the applicant, and a further order directing the city to deliver a demolition permit to the applicants with respect to the structure now on the lands.

The lands are zoned in such a manner as to permit the use of the site for the proposed apartment and the city, by its building commissioner, has in fact approved the plans for construction of the building.

The lands are subject to a demolition control by-law enacted pursuant to s. 37a of the Planning Act, R.S.O. 1970, c. 349, as amended [1974, c. 53, s. 6], and demolition is required in connection with the applicant's plans to replace the existing structure with the proposed apartment building.

The applicant applied to the city for a demolition permit and on November 21, 1977, Council of the city passed a resolution as follows:

> That Council advise the Applicant that should he wish to proceed with construction of the proposed building, his plans will be reviewed at the time of application for a building permit and should the proposed building conform to the existing zoning of the site, Council will then issue a demolition permit for the existing structure at 105 Agnes Street.

Subsequently, the applicant filed the permit and received a letter from the building commissioner which read, in part, as follows:

> Subject to the foregoing, please be advised that the building permit is available from this office for the proposed apartment building at the reference location, upon approval by Oshawa City Council re Park Dedication (By-law number 165-75) and Demolition Control (By-law number 9-75).

It has subsequently been ascertained that the proper park dedication in accordance with By-law 165-75 is $2,100 and the applicant has tendered such sum in payment therefor. I might also indicate that the applicant has tendered various sums in purported compliance with sewer connections and other matters that may be properly applicable to the application.

As a result of this communication, the applicants were advised by the employees of the City of Oshawa that the application would be before City Council on December 19th. At that meeting, the solicitor for the applicants attended the Council meeting and requested permission to make representations. The Council refused to hear him and referred the application back to the Planning and Development Committee and, at the same time, Council refused to deliver the demolition permit in accordance with its earlier resolution.

At a meeting in April of 1978, the Council rescinded its earlier resolution with respect to the demolition permit and from that date, until the present, neither a building permit nor a demolition permit has been issued by the city and, in

fact, such issuance is resisted.

The basic argument of the city is that a building permit should not be issued until the demolition permit has been issued and relies on its by-law passed under s. 37a of the Planning Act. The argument is that s-s. (3) of s. 37a relates to a straightforward demolition permit application and gives the Council a discretion to issue or to refuse, and that that section is applicable to the present case. It says that s-s. (6) is not applicable, because no building permit has been issued. Subsection (6) provides that a council must issue a demolition permit where a building permit has been issued to erect a new building.

I reject this submission because I am of the opinion that it does not reflect the intention of the Legislature in enacting s. 37a. It should be noted that s. 37a provides authority only when the municipality has a by-law enacted under s. 36 [rep. & sub. 1972, c. 118, s. 7] in force. Section 36 of the Planning Act relates to by-laws prescribing standards for the maintenance and occupancy of residential property. Considering this in light of the fact that the only conditions that a municipality may impose upon a demolition permit relate to an assurance that a new building will be erected and the provision of a penalty if it is not erected, I am of the opinion that s. 37a was enacted to maintain residential properties within a municipality. Section 37a has two purposes. First, under s-s. (3), to provide for a demolition permit where a person proposes to demolish a residential building without any immediate future plans. Secondly, under s-s. (6), to provide that a municipality must issue a demolition permit where a building permit for the erection of a new building has been issued. In this latter case, the municipality may impose conditions.

It was submitted that because there was a right of appeal from the Council's refusal to issue a demolition permit, either
under s-s. (3) or s-s. (6) to the Ontario Municipal Board that the jurisdiction of this Court was fettered and relief in the nature of mandamus should not issue. I am of the opinion that there is nothing in s. 37a which interferes with the normal rights of an applicant to obtain a building permit where he is otherwise clearly entitled thereto. If the Legislature had intended otherwise, it should have said so in clear and unambiguous terms.

I am of the opinion that the principles set out in City of Ottawa et al. v. Boyd Builders Ltd., [1965] S.C.R. 408, 50 D.L.R. (2d) 704, are applicable and that the applicants have a prima facie right to the building permit requested. An order will issue directing such permit upon the applicants paying to the city the $2,100 park levy and such other appropriate sewer connection fees, or other matters that have already been tendered. I do not go into the details of such fees because I am sure that they are not matters which are in issue and are not matters which would warrant, in any respect, the refusal to order the building permit.

With respect to the application to order the issuance of the demolition permit, I am of the opinion that other factors prevail. While it may be that the city has acted in a manner which leaves much to be desired by reason of their recession of their stated resolution, I do not think that this Court has authority to order the issuance of a demolition permit at this time. The original city resolution may merely be a statement of what in fact the law is, as we have found it, that a demolition permit shall issue after the issuance of the building permit. However, the conduct of the city would indicate that for some reason unknown to this Court, they have changed their mind and wish to delay the construction of building in this area. Be that as it may, there is clear authority under s. 37a(6) of the Planning Act for the city to impose conditions upon a demolition permit and that, if the applicant is dissatisfied with such conditions, there is a right of appeal or application to the Ontario Municipal Board not only in the first instance, but even after the initial conditions have been imposed if they are found not to be able to be complied with at a later date. The order of this Court ordering the issuance of the building permit does not in fact issue such permit. That is within the control of the municipality. Although we may assume that the municipality will comply with the order given by this Court, the permit has not in fact been issued at the present time. In addition, the Council has authority to impose conditions and

there is a right of appeal to the Ontario Municipal Board. There being another remedy open to the applicant with respect to the demolition permit the remedy of mandamus should not be granted. The application for an order for the issuance of the demolition permit will therefore be refused.

The costs of this application will be payable by the respondents to the applicants.

Order accordingly.

Alaimo v. York (City) (Chief Building Official)

Between
Peter Alaimo, applicant, and
P.D. Hansen, Chief Building Official, City of York, respondent

[1995] O.J. No. 862
DRS 95-15150
Court File No: RE4741/94

Ontario Court of Justice (General Division)
D. Lane J.
Heard: January 31, 1995.
Judgment: March 30, 1995.

Counsel:
Karl D. Jaffary, Q.C., for the applicant.
Brian W. Haley, for the respondent.

[para1] D. LANE J.:-- This is an application by Peter Alaimo, a property owner in the City of York, against the Chief Building Official of that City. The application is brought pursuant to s. 25(1) of the Building Code Act which provides that any person who considers himself aggrieved by an order or decision made by a Chief Building Official may appeal the decision to a Judge of the Ontario Court (General Division).

[para2] The decision appealed from is contained in a letter dated November 30, 1994 in which the Respondent refused to issue a permit for certain construction on lands known municipally as 46 Snider Avenue in the City of York.

[para3] The Applicant seeks an order requiring the Respondent to issue the building permit, and costs.

[para4] The most significant facts are not in dispute. The Applicant obtained certain variations to the City of York zoning by-law from the Committee of Adjustment of the City of York on March 13, 1990. Thereafter, on May 4, 1992, the Applicant's agent applied for a building permit based on certain plans that were examined by the Respondent's staff, which took the position that s. 9.21.4.4(1) of the Ontario Building Code prohibited the intended construction because of the proximity and height of chimneys on the adjacent building. Shortly put, the Code requires that a chimney must extend not less than 600mm above the highest surface within 3 metres of the chimney. A permit for the building was not issued. The Applicant acknowledges that, in the belief that a permit would be issued shortly, he proceeded with form work for the new foundation, but he was ordered to stop work on June 2, 1992 and did so.

[para5] Attempts to find a solution satisfactory to the Building Department were not successful and on April 6, 1993, the Respondent classified the application as "non-active". In 1994, the Applicant submitted a new set of drawings. The design of the second floor had been revised in a fashion that would satisfy the concerns of the Respondent. The second floor level was set back to provide a separation from the neighbouring chimneys. A permit based on those drawings was issued on August 3, 1994. The Applicant states that it was his hope that he would be able to construct the building he had originally applied for, and that before construction reached the second floor level, he would have solved the problem of the adjacent chimneys in some other way.

[para6] Sometime after the issuance of the building permit, the Applicant learned of the provisions of s. 24 of the Building Code Act, providing for an application to the Building Code Commission for the resolution of any dispute between any applicant or holder of a permit and the Chief Building Official. The Applicant applied to the Building Code Commission which conducted a hearing and issued a ruling on November 22, 1994. The Building Code Commission considered the interpretation of Article 9.21.4.4 of the Building Code Act and the submissions of both the Applicant and the

Respondent Chief Building Official. At the hearing, the Respondent put his position, that the article prevented new construction based on the location of the two existing chimneys on the adjacent property. He also argued that he had a common law duty of care extending to neighbouring properties

and that he considered the common law to be "applicable law" under s. 8(2) of the Building Code Act.

[para7] The Commission ruled in favour of the Applicant. It decided that Article 9.21.4.4 applied only to the proposed construction on the Applicant's property and was not applicable to existing chimneys on adjacent properties. It also ruled that the Code does not address any adverse effect to adjacent properties in the matter of chimney flues, and that if there is any cause for concern after construction, with regard to life safety and the protection of property of the adjacent buildings, other legislation is available. It appears to me that this decision of a statutory tribunal acting within its powers in a dispute between the very parties before me renders the merits of the dispute res judicata. The principle is not confined to decisions of courts. However, the case was not argued on the basis of res judicata and accordingly I will not decide it on that ground.

[para8] Shortly after the Building Code Commission decision, the Applicant again attempted to obtain a permit for the building he wished to build, the one shown in the drawings filed in 1992. Applicant's counsel advised the City of York that the Applicant persisted in his demand for a permit. On December 1, 1994, the Applicant received the letter dated November 30, 1994 giving the Respondent's decision. The Applicant reattended at the municipal offices on December 2, 1994 to make certain that it was clear that he was seeking a permit on the drawings that are before the court. In his affidavit, the Applicant says that a member of the City of York Building Department advised that "a permit cannot be issued on the plans because they do not address the issue of the chimney".

[para9] This application was then launched on December 8, 1994.

[para10] Section 8(2) of the Building Code Act provides in part as follows:

> "The Chief Building Official shall issue a permit...unless,
>
> (a) the proposed building, construction or demolition will contravene this Act or the building code or any other applicable law;"

[para11] The Building Code provides in s. 1.1.3.2, the definition section, in part as follows:

> "The words and terms in italics in this code have the following meaning for the purposes of this Code, and where indicated, the following meaning for the Act as well."

[para12] The following definition was added to the Code by Ontario Regulation 160/93:

> "Applicable law means, for the purposes of s. 8 of the Act, any general or special Act, and all regulations and by-laws enacted thereunder, which prohibit the proposed construction or demolition of the building unless the Act, regulation or by-law is complied with." (emphasis in original)

[para13] The Applicant submits that "the common law right of every man is to build upon his own land whatever kind of building he sees fit so long as it is not a nuisance, public or private. It requires an express statute to take away that right of property": City of Toronto v. King (1923) 54 O.L.R. 100, 102, (App.Div.). That has been the law since long before the enactment of the Ontario Building Code Act. In Mackenzie v. City of Toronto [1915] O.W.N. 820, at 821, Middleton J. observed:

> "When the plans and specifications of the proposed building conform to the building by-law the duty of the civic official is to issue the permit. ... The company proceeds entirely at its own risk, and must at its peril avoid committing any nuisance or the violation of any valid regulation applicable to its undertaking."

[para14] Rogers, Canadian Law of Municipal Corporations at p. 862.17 cites Mackenzie, supra, in support of the statement:

> "So a permit cannot be refused on the grounds that the building may be used in such a manner as to become a
>
> nuisance....".

[para15] Rogers, supra, also notes at p. 862.16:

> "The question has arisen in some cases whether the duty to issue a permit is absolute once compliance with all by-laws is shown or whether the council or its official has a discretion to refuse a permit notwithstanding. It seems that in all provinces the duty to issue a permit is an absolute one and does not involve an exercise of discretion as there is in the granting of municipal trade or business licences";

and at p. 862.17:

> "Thus it appears that a building permit cannot be refused for reasons which are extraneous to the question whether the plans for the building comply with the by-laws in force relating to construction and whether the intended uses of the property are within the permitted uses of the by-law."

[para16] Accordingly, it is well established that: "An

owner who has been refused a permit to erect or alter a building which conforms with the requirements of a building construction or building restriction by-law is entitled to a mandatory order directing the issue of the permit.": Roseburg v. North Grimsby, [1952] O.W.N. 745 (C.A.).

[para17] These authorities show that an official has no discretion to refuse to issue a permit when all of the statutory requirements have been fulfilled.

[para18] The Applicant further submits that the Respondent cannot rely on any general common law duty of care to adjoining residents, unless such duties can be grounded in "applicable law" within the meaning of the Ontario Building Code Act.

[para19] The Respondent finds support for the concept of common law power for Chief Building Officials in the decision of Cosgrove J. in Leeds and Grenville v. Gerard, (unreported, Oct. 4, 8, [1991] O.J. No. 1825). Cosgrove J. found that the Chief Official was required to act "responsibly - that is professionally and reasonably" and that he had a duty of care to persons whose relationship was sufficiently close that they

should be within his contemplation as likely to be injured by a breach of that duty. The Leeds case turned on the issue of whether persons proposing to pump a toxic chemical into pipes that could leak into the ground water required a certificate of approval under the Environmental Protection Act, and the court found that such an approval was required.

[para20] The Leeds case proceeds upon the basis that the Chief Building Official has a duty at common law not to grant a permit where the result might be to cause damage to someone. I think that is what Cosgrove J. meant by saying the official must act "responsibly - that is professionally and reasonably" and by citing the duty of care referred to in City of Kamloops v. Nielsen et al, [1984] 2 S.C.R. 2.

[para21] Since 1991, when Leeds was decided, the Building Code has been amended to define "applicable law" in terms that confine it to statutes, regulations or by-laws which prohibit the proposed construction of the building unless complied with. This definition excludes common law considerations such as nuisance. It also confines the relevant enactments to those prohibiting the erection of buildings unless complied with. It seems to me that the decision in Leeds has not

survived this statutory change.

[para22] If I am wrong in this conclusion, I turn to the common law as put forward by the respondent.

[para23] It is argued that the Chief Building Official has

a common law duty of care to those who foreseeably may be affected by his act of approving the building permit: City of Kamloops v. Nielsen and Hughes, [1984] 2 S.C.R. 2. Accepting that to be the law, does that justify withholding the permit in the instant case? In my view, it does not for two reasons:

> (1) The duty of care may be fully discharged by warning the neighbouring land owner to review the effectiveness of his chimney in the new circumstances. There is no need to prohibit the erection of the nearby building.
>
> (2) The Chief Building official can only be liable if he acts in breach of his duty under the statute. Kamloops, supra, is not authority for the view that the Municipality is liable for the consequences to neighbours of every building erected under a permit issued by it. There must be an underlying breach of duty under the Code
>
> before there can be any question of liability to others. In Kamloops itself, the Municipality knew of the placing of the foundations upon fill rather than solid ground and did not effectively prevent the builder from continuing construction without remedying the defect.

[para24] At p. 21, Wilson J. defined the two important questions: "(1) What was it that the building inspector failed to do that is alleged to have contributed to the plaintiff's damage? and (2) Was he under a duty to do that thing?" She goes on to point out that unless the inspector was under a duty to do what he failed to do, there could be no liability. In short, Kamloops widens the scope of persons affected by a municipality's breach of duty, but does not create new duties.

[para25] In the case at bar, the prospect of civil liability does not add to the Chief Building Official's powers nor to his obligations. They remain the same, as defined in the statute - to issue the permit unless the proposed structure would contravene the Building Code Act or any other applicable law. There is no power to attach extraneous conditions through some right derived in common law: Napanee v. Doornekamp, [1970] 2 O.R. 419, 424 (H.C.J.).

[para26] The essence of the Chief Building Officer's position is set out in his letter of November 30, 1994:

> "Although the Code may or may not directly deal with the problems relative to the neighbouring chimney, I am under a common law duty not to permit construction which may create a hazard with respect to the functioning of the neighbours chimney(s)."

[para27] In my view, no such common law duty exists. Its existence would be in direct conflict with the Building Code Act which commands the issuance of the permit unless a contravention of applicable law as defined is shown.

[para28] Neither the Respondent's belief in the proper interpretation of s. 9.21.4.4 of the Ontario Building Code, nor his objections to the decision of the Building Code Commission set out in paragraph 33 of his affidavit, can be a basis for withholding a permit.

[para29] The Respondent refers in paragraph 34 of his affidavit to the Code of the American National Fire Protection

Association, to a textbook on gas utilization and to excerpts from publications by the British Department of the Environment and by the Canadian Standards Association. None of these documents is "applicable law" within the meaning of the Building Code Act.

[para30] The Respondent, in paragraph 35 of his affidavit, advises that since the commencement of these proceedings he has become aware of certain provisions of the Ontario Gas Utilization Code, 1989. The Energy Act, in s. 28(1), provides that regulations may be made for the "handling and use of hydrocarbons", and particular examples of the exercise of that power are listed in subsections (a) through (p). Subsection (b) of s. 28 provides as follows:

> (b) requiring and providing for the approval of design and construction standards for appliances and works.

[para31] Section 1 of the Energy Act contains the

following definitions:

"Appliance" means a device that uses a hydrocarbon and includes all valves, fittings, controls and components

attached or to be attached thereto;

"Work" used as a noun means the facilities used in the handling of a hydrocarbon.

[para32] Pursuant to the power contained in s. 28(1), Regulation 331 of the Revised Regulations of Ontario was enacted entitled "Gas Utilization Code". By s. 9 of that Regulation, the Ontario Gas Utilization Code, 1989 is adopted by reference into the Building Code.

[para33] Section 5.14 of the Ontario Gas Utilization Code does set standards for the height of the chimneys of gas appliances in relation to both the roof of the building through which it passes and "any other obstruction". The regulations contemplated by s. 28(1)(b) of the Energy Act are regulations governing the construction and the standards for works used in the handling of a hydrocarbon. Regulations under that Act do not purport to regulate construction of adjacent structures or buildings. No such power is contained in the Energy Act, or purported to be given by that Act's power to make regulations. While incorporation into the Building Code makes them "applicable law", it does not alter

their substantive effect. If it were otherwise, any owner of a building with a low chimney and a gas furnace would, by the act of building his chimney, have imposed height restrictions on his neighbour's land. No statute, by-law or code in Ontario purports to create such restriction. The sections of the Code relied on do not regulate adjacent buildings; they regulate chimneys. It is for the owner of the regulated gas appliance to bring and keep his machinery and his chimney in compliance with the regulations that govern its operation.

[para34] As the Commission ruled, if there is any cause for concern following construction, other legislation is available. I add to that the common law of nuisance: T.H. Critelli Ltd. v Lincoln Trust and Savings Co. et al. (1978) 20 O.R. (2d) 81, (H.C.J.). While those who build in a way that has an adverse impact on neighbouring buildings may be liable in damages for nuisance, it is no part of a Chief Building Official's duty to anticipate such a claim, or to attempt to prevent construction that might be adjudged in the future to have given a property owner a civil remedy. The law of nuisance is not "applicable law" within the meaning of the Building Code Act.

[para35] It is clear that the Respondent has been adamant in his view since June of 1992. Notwithstanding the "final" resolution of the matter by the Building Code Commission on November 22, 1994, the Respondent has refused to do his statutory duty and issue the permit. Instead he launched a collateral attack on the Commission's ruling by the manner in which this application was defended, particularly paragraph 33 of the Respondent's affidavit. It was submitted that the Applicant should have his costs on a solicitor and client basis. There is much merit in this submission, but there is another matter that bears on the disposition of costs. The Chief Building Official's affidavit discloses that the Applicant, having obtained the building permit as a result of revising his application to show the second floor set back to create separation from the chimney, then proceeded to build the second floor without the set-back. It would be incongruous to reward such conduct with a higher level of costs. As well, I accept that the Respondent was throughout actuated by a genuine concern for his duty as he saw it. In the circumstances the Applicant will have party and party costs.

[para36] The Applicant is therefore entitled to:

(a) an order requiring the Respondent to issue a permit forthwith for the building as shown on the plans that are Exhibit "B" to the Affidavit of Peter Alaimo; and

(b) the costs of this application, on a party and party basis.

D. LANE J.

Albert Bloom Ltd. v. Bentinck (Township) (Chief Building Official)

Application under Section 25 of the Building Code Act

Application under section Part IX of the Municipal Act

Between
Albert Bloom Limited and 280703 Ontario Limited carrying on business as Hanover County Fair Plaza, applicants, and
Joe Gray, Chief Building Official of the Township of Bentinck and Bentan Investments Limited, respondents

And between
Albert Bloom Limited and 280703 Ontario Limited carrying on business as Hanover County Fair Plaza, applicants, and
The Corporation of the Township of Bentinck and Bentan Investments Limited, respondents

[1995] O.J. No. 2425
DRS 95-18465
Court File Nos. RE 4858/95 and RE 4886/95

Ontario Court of Justice (General Division)
Motions Court
Sharpe J.
Heard: August 14, 1995.
Oral judgment: August 17, 1995.

Counsel:
A.J. Brown, counsel for the applicants.
J. Worzman, counsel for the defendant Joe Gray.

[para1] SHARPE J. (orally):-- This motion arises from an application by way of an appeal from the decision of the respondent Joe Gray, Chief Building Official of the Township of Bentinck, to issue a building permit to Bentan Investments Limited and a related application for an order quashing a by-law removing a holding provision from a site specific by-law governing the lands which are the subject of this matter.

[para2] This motion is brought pursuant to rule 25.11 and asks for an order striking out certain affidavit evidence which has been filed by Bentan on these two matters. The affidavit material relates, in particular, to the appeal from the decision of the Chief Building Official. It is alleged by the applicants that the affidavit material offends rule 25.11 in that it is scandalous, frivolous or vexatious.

[para3] The by-law in question provides "the use must be 'dry' in nature, not requiring a piped water and municipal sewage system to accommodate it". The affidavit evidence which Bentan seeks to have before the judge hearing this appeal relates to that provision of the by-law. It is the position of the applicants/appellants that an appeal to the court pursuant to s. 25 of the Building Code Act, S.O. 1992, c. 23, requires the judge hearing the appeal to stand in the shoes of the Building Official and to decide the matter on the basis of the situation as it appeared to the Building Official at the time the building permit was granted. It is the position of the applicants/appellants that the parties seeking the building permit cannot bolster the decision on appeal by supplying affidavit evidence with respect to facts which, although relevant to the criteria of the by-law, were not given to the Building Official at the time he or she made the decision.

[para4] In my view, the motion to strike out this affidavit material should be dismissed. First of all, it is my view that matters of this kind are best dealt with by the judge who actually hears the appeal. This may mean, as counsel contended, that certain steps have to be taken by way of cross-examination or filing responding material which prove unnecessary should the judge reject the evidence. On balance, however, it is preferable that a matter of this kind not be dealt with piecemeal but rather be dealt with at one time by the judge who is seized of the appeal proper.

[para5] Secondly, it is also my view that, in any event,

the applicants/appellants have failed to meet the test of rule 25.11 in the context of this proceeding. Their position represents too rigid an approach given the nature of the proceedings before the Building Official and the purpose of an appeal from that decision. As counsel for the respondent has submitted, the proceedings before the Building Official are not in the nature of a trial. The matter proceeds on the basis of a written application provided to the Building Official and he or she makes a decision based on that material. In this case, that decision has been challenged by someone who was not a party to that proceeding and who has filed voluminous material, including affidavit evidence attacking the decision of the Building Official. The respondent seeks to meet that challenge and to provide the court with what it submits are relevant facts.

[para6] As I have indicated, the final decision as to the admissibility or weight or relevance to be attached to the evidence sought to be adduced is not for me but for the judge hearing the appeal. However, I do not think the applicants/appellants have met the test of rule 25.11, which would justify striking that evidence as a preliminary or threshold matter. In my view, the cases cited by the applicants, namely, Summit Glen v. Toronto (City) (1989), 44 M.P.L.R. 50 and Re Woodglen & Co. Ltd. and City of North York (1984), 47 O.R. (2d) 614 are both distinguishable. Those cases hold that, on appeal, the matter is to be determined on the basis of the law as it existed at the time the Building Official granted or refused the building permit. Those cases dealt not with evidence as to the facts as they existed at the time the Building Official dealt with the matter but were concerned with legal changes to the by-laws subsequent to the decision of the building official.

[para7] In my view, it would be unfairly prejudicial to an applicant for a building permit if the applicant's position were accepted. The result would be that a party submits a simple written application for a building permit, is successful on that application, finds the decision challenged on a number of grounds by someone who was not privy to the original application, the challenge is supported by extensive evidence, but the party obtaining the building permit would not be permitted to file responding material.

[para8] Accordingly, this motion to strike out the affidavit evidence in question is dismissed.

[para9] Costs in favour of the respondent Bentan Investments Limited fixed at $2,500 payable forthwith.

SHARPE J.

Re **Albert Bloom Limited** et al. and Gray, Chief Building Official of the Township of Bentinck et al.

31 O.R. (3d) 317
[1996] O.J. No. 4096
No. C24739

Court of Appeal of Ontario
Doherty, Weiler and Laskin JJ.A.
November 22, 1996

BY THE COURT: -- The appellants raised four grounds of appeal. The second and third grounds (as numbered in the appellants' factum) are:

> (2) The proposed Wal-Mart store constitutes a "Retail Store", a use not permitted in the Space Extensive Commercial zone.
>
> (3) By-law 40-1994 purports to authorize uses of the subject lands which do not comply with the requirements of the Township's site-specific by-law (By-law 213-90).

Both issues were fully canvassed and rejected in the extensive reasons provided by the trial judge ((1996), 29 O.R. (3d) 681, 33 M.P.L.R. (2d) 53). In deciding both issues against the appellants, the trial judge preferred the evidence of certain witnesses and made findings of fact. We cannot interfere with those findings and are in substantial agreement with those reasons of the trial judge. We would not give effect to either argument.

The first ground of appeal was framed by the appellants in these terms:

> By-law 40-1994 purports to authorize uses of the subject lands which do not conform with the Township's Official Plan and therefore contravenes section 24(1) of the Planning Act.

The Township of Bentinck's "Official Plan" ("O.P."), as amended in 1989, redesignated lands, including the property in question, from "Restricted Rural" to "Space Extensive Commercial". The O.P. also provided:

> The commercial uses must be "dry" in nature. A "dry" use is one which does not require a piped water and municipal sewage system to accommodate it, and is one where the only waste water discharges are from employee washrooms.

(Emphasis added)

In 1990, pursuant to s. 34 of the Planning Act, R.S.O. 1990, c. P.13, the Township passed By-law 213-90 which amended the zoning of the relevant land from "Restricted Rural" to "Space Extensive Commercial/Holding".

The by-law contained a definition of Space Extensive Commercial use. That definition included the following:

> The use must be "dry" in nature, not requiring a piped water and municipal sewage system to accommodate it.

The reference to "dry" in the by-law included only the first part of the corresponding reference in the O.P. The words "is one where the only waste water discharges are from employee washrooms" appear in the O.P. but not in By-law 213-90.

The appellants do not purport to challenge the validity of By-law 213-90 in these proceedings. Indeed they cannot. By-law 213-90 was not challenged when passed and by operation of s. 24(4) of the Planning Act is conclusively deemed to be in conformity with the O.P.

By-law 213-90 fixed the uses to which the relevant property could be put. The property could not, however, be used for those purposes immediately as the by-law was subject to a holding designation. Section 36 of the Planning Act allows a municipality to designate property for certain uses, but to further designate that property may not be used for such purposes until the holding designation is lifted. In 1994, the Township passed By-law 40-1994 amending By-law 213-90 by lifting the holding provision. By-law 40-1994 said nothing about the uses to which the property could be put, but merely authorized the uses provided for in By-law 213-90.

The appellants contend that the legality of all by-laws must

be tested against s. 24(1) of the Planning Act. That section provides in part:

> 24(1) . . . where an Official Plan is in effect, no public work shall be undertaken and except as provided in subsections (2) and (4) no by-law shall be passed for any purpose that does not conform therewith.

The appellants submit that By-law 40-1994 contemplates uses which require public washrooms and therefore permits uses which go beyond those contemplated by the O.P.

We do not agree with these submissions. By-law 40-1994 was passed pursuant to s. 36 of the Planning Act and had nothing to do with the use to which the property could be put. That use was settled by By-law 213-90 which is deemed to be in conformity with the O.P. In our view, a by-law passed under s. 36 of the Planning Act for the purpose of lifting the holding designation placed on property is not a by-law which is passed for a purpose which is capable or indeed incapable of conforming with an O.P. In our view, it is the earlier by-law which zones the property which must be tested against s. 24 of the Planning Act. The time for challenging By-law 213-90 has long since passed.

The planning process would be thrown into disarray if the appellants' submissions were accepted. The planning process with respect to these lands was completed some six years ago. The respondents were entitled to rely on by-laws which were conclusively deemed to be in compliance with the O.P. and to proceed accordingly. The appellants, who could have challenged decisions made in the course of the planning process, but chose not to, cannot now turn the clock back six years and challenge those decisions by way of a challenge to the validity of the by-law lifting the holding designation.

The fourth ground of appeal raises an issue which was not raised in the court below. The appellants put this issue in these terms:

> The agreement between Bentan and the Township, conditional to the lifting of the holding designation, is unauthorized by law, thereby rendering By-law 40-1994 invalid.

The appellants argue that the Township placed certain obligations on Bentan Investments in the site plan and that these obligations violated s. 41 of the Planning Act. The appellants contend that as a consequence, By-law 40-1994 is invalid. The irony of this submission is striking. The appellants rely on the Township's alleged improper imposition of certain burdens on Bentan Investments Limited as a basis for striking down a by-law which Bentan Investments Limited insists is perfectly valid.

The factual premise for this submission rests in the appellants' contention that the Township would not have enacted By-law 40-1994 in the absence of an approved site plan agreement binding Bentan Investments to undertake certain matters as conditions of site plan approval. This premise is based on an assumption and not on evidence. We are not prepared to make that assumption.

The appellants are trying to launch a collateral attack on By-law 40-1994 by challenging the legality of the by-law referable to the site plan agreement. Assuming that the appellants, as strangers to the site plan agreement, have some right to challenge that agreement, there is simply no evidence that the enactment of By-law 40-1994 was conditional upon Bentan Investments' agreement to the provisions of the site plan agreement which the appellants contend contravened the Planning Act.

The appeal is dismissed with costs.

Counsel are to be commended for their excellent written and oral presentations. We are also indebted to the trial judge for his thorough and clear analysis of the evidence and the legal issues.

Bryan Finlay, Q.C., Ian James Lord and Barnet Kussner, for appellant.
J. Robert Boxma, for respondents, Corporation of the Township of Bentinck and Joe Gray.
James M. Wortzman, for respondent, Bentan Investments Ltd.

Axelrod v. Toronto (City)

IN THE MATTER OF The Judicial Review Procedure Act, S.O.1971, c. 48

Between
Ben Axelrod and Ben Axelrod Holdings Limited, applicants, and
The Corporation of the City of Toronto and M.L. Nixon, Chief Building Official, respondents

[1981] O.J. No. 709

Ontario Supreme Court - High Court of Justice
Divisional Court
Osler, Saunders and Callaghan JJ.
Heard: May 12 and 13, 1981.
Judgment: June 25, 1981.

Counsel:
J. Spence Stewart, Q.C., for the applicants.

Morris J. Winer, for the respondents.

The judgment of the Court was delivered by

[para1] SAUNDERS J.:-- This is an application for an order in the nature of mandamus requiring the Chief Building Official of the City of Toronto to issue a building permit and for an order quashing two city by-laws.

[para2] The corporate applicant, Ben Axelrod Holdings Limited, is the registered owner of three apartment buildings on the north side of Eglinton Avenue between Old Forest Hill Road and Bathurst Street containing in the aggregate a hundred and thirty-five units. The applicant, Ben Axelrod, is the beneficial owner of part of the property. The corporate applicant proposes to demolish the present buildings and construct on the lands a condominium apartment building containing ninety-eight units. There is opposition to the proposal because it is said that it would deprive the tenants in the present buildings of accommodation at affordable rates. The proposal is an illustration of a problem said to exist throughout the municipality that is giving concern to members of city council and to city planning officials. On October 1,

1980, the city amended its zoning by-laws by enacting By-law 734-80, 735-80 and 736-80 to deal with the problem in a general way. By-law 735-80 applies to the lands owned by the applicants. By-law 395-80, enacted in April, 1980, also amended the zoning by-law relating to the lands by restricting the length of apartment buildings. City officials have taken the position that By-law 395-80 also applies to the building proposed to be constructed by the applicant. A building permit has not been issued and the applicants have applied for an order requiring it to be issued and for an order quashing both By-law 735-80 and 395-80.

[para3] The last word in the building permit process prior to the launching of this application was a city examiner's notice dated January 6, 1981 which it is agreed fully sets out the current position on the permit application taken by the respondent Chief Building Official. Such notice states as follows:

> Further to my Examiner's Notices dated October 10, 1980 and October 17, 1980 and following your most recent submission of revised plans and letter dated December 18, 1980 that purports to address the matters raised in my

Examiner's Notice of October 17, 1980 I advise that the set of plans submitted on December 18, 1980 contravene applicable By-laws as follows:

1. Forest Hill Village By-law 1051 which restricts the height of apartment buildings to 3 storeys above the finished ground level.

2. Forest Hill Village By-law 1643 which restricts the use of land for apartment building purposes in this location to the lands situated within 100' 0" north from the north street line of Eglinton Ave. W.

3. Forest Hill Village By-law 913 which requires a 25' 0" setback from Old Forest Hill Rd.

4. By-law 395-80 which restricts the length of apartment buildings on lots with a front lot line of less than 61 metres to that of 17 metres beyond the minimum front lot line set back requirement (the length of the proposed building is 130.9 metres).

5. By-law 291-68 in the following respects:

   (i) gross floor area exceeds the permitted maximum of 17,338.304 sq. metres (186,630 sq.ft.) by approximately 944 sq. metres (10,161 sq. ft.)

   (ii) height of the westerly portion of the building exceeds the permitted maximum of 18.3 metres by approximately 3.475 metres (11' 4 1/2").

   (iii) external walls that face each other do not comply with Section 3 Subsection 5.

   (iv) the circular drive at the front of the building does not comply with Section 3 Subsection 6(a) (slope more than 2%).

   (v) proposal contravenes the provisions of Section 15(2) (f) which:

      (a) limits the gross floor area to one times the lot area (proposed is over two times the lot area).

      (b) restricts the height of the building to that of 11.0 metres above "grade" (proposed is 17.919 metres above "grade"), and

      (c) limits the number of dwelling units on this site to that of 86 (proposed number of dwelling units is 98)

   (vi) the recently annexed lands, known as #142 Old Forest Hill Road, are zoned R.1. A.2. Since such zoning designation does not permit apartment houses, the aforesaid lands cannot be incorporated with the lands comprising the lot of the proposed apartment house for the purpose of lengthening the frontage of such lot on Old Forest Hill Road.

In view of the above this department is unable to approve your application for permit at this time.

This is a Zoning examination only and does not constitute an examination under the Ontario Building Code.

[para4] It is agreed that Forest Hill By-laws 1051, 1643 and 913 (referred to in paragraphs 1, 2 and 3 of the examiner's notes) have no application and can be disregarded. The remaining alleged contraventions will have to be considered. By-law 395-80 (paragraphs 4 and 5 (vi) of the examiner's notes):

[para5] The applicants attack the validity of the by-law and further say that in any event non-compliance with it cannot be raised on an application for a building permit. I will deal with those two issues later but will for now assume that the by-law may be cited by the examiner if its terms are applicable. The by-law restricts the length of apartment buildings to seventeen metres where the front lot line of a property is less than sixty-one metres. The applicants say that there is a frontage on Eglinton well in excess of sixty-one metres. The city's reply is that the proposed building is on a corner lot so that it is the frontage on Old Forest Hill Road that is relevant which is less than sixty-one metres. The applicants then say that the property is not a "corner lot" within the meaning set out in s. 1(64) (a) of By-law 291-68. Without detailing the by-law provisions, it is clear that a corner lot may be a parcel of land situated at

the intersection of two streets and that at least part of the property is a corner lot within the meaning of the by-law. This means that it is the frontage on Old Forest Hill Road that must be considered which is less than sixty-one metres. In order to meet this objection, the applicant, Ben Axelrod, has agreed to purchase additional frontage on Old Forest Hill Road immediately to the north of the subject property. The property to be purchased presently contains a single family residence and is in a residential zone which prohibits the use and erection of apartment buildings. In my opinion, if the additional property were to be purchased, the existing residence demolished and no part of the proposed condominium apartment placed on the additional property, the added frontage still could not be taken into account for the purpose of bringing the permit application into compliance with By-law 395-80. The acquired lands would have to be considered as part of the overall property and the condominium apartment would be constructed on lands which were partly in a zone in which such a building was prohibited. The acquired lands would thus be used for a purpose prohibited by the general zoning by-law.

By-law 291-68 (paragraph 5 of the examiner's notes):

(i) The gross floor area in the plans exceeds the maximum permitted by the by-law by over five per cent. It was submitted that uncertainties over the location of the main level and service facilities made it difficult to determine how the plans might be changed to bring them into compliance. Nevertheless, as the plans have not been altered and as the difference is substantial, the Chief Building Inspector was, in my view, entitled not to issue a building permit on that ground alone.

(ii) The height of the westerly portion of the building exceeds the permitted maximum. The court was told that the plans had been amended to remove the excess and that this item need not be further considered.

(iii) There are external walls facing each other. While this may be a technical objection, the plans have not as yet been altered to conform with the by-law requirement.

(iv) The slope of the circular driveway does not comply with the by-law. This would appear to be a minor matter which could easily be corrected in the course of construction. This

item alone should not stand in the way of a building permit.

(v) The matters set out in paragraph 5(v) of the examiner's report all refer to non-compliance with provisions in By-law 735-80 which amended By-law 291-68. It is not necessary to discuss these items in detail as the applicant concedes that if By-law 735-80 is applicable, the proposed condominium apartment cannot be built.

[para6] Even disregarding By-laws 395-80 and 735-80, there was good reason for the examiner on January 6, 1981 to advise the applicant that his department was then unable to approve the application for a building permit. There was substantial non-compliance with By-law 291-68 (as it stood apart from the amendments made by By-law 395-80 and 735-80) and there had as yet been no examination under the Ontario Building Code. The application for an order in the nature of mandamus is, to say the least, premature and should be dismissed. (See Re Cambridge Leaseholds Ltd. and City of Toronto et al. (1973), 3 O.R. 378 and Karavos v. City of Toronto et al. (1948), O.W.N. 17).

[para7] While the application for mandamus has been disposed of, there is one matter that was raised in the course of argument on which a comment should be made. Section 6(1)(a) of The Building Code Act, S.O. 1974, c. 74 provides as follows:-

> 6.- (1) The chief official shall issue a permit except where,
>
> (a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law; or ...

[para8] It was submitted on behalf of the applicants that municipal zoning by-laws could not be considered as "applicable law" on the basis of an unreported decision of His Honour Judge Shapiro in Riverview Heights Ratepayers Association v. Menu Foods Limited et al. - November 28, 1980. A review of the reasons in that case clearly shows that the learned Judge was considering the ambit of appeals under The Building Code Act and that his decision does not stand for the proposition that the Chief Building Official is precluded from considering zoning by-law compliance on a building permit application. It would be irrational to hold that he was so precluded. Such a holding would mean that he could not refuse to issue a permit for a factory in a residential zone if the Building Code and all other applicable laws were complied with.

[para9] There remains the issue of the validity of By-laws 395-80 and 735-80. An application to quash a municipal by-law may be brought by a resident of the municipality within one year of its passage. The applicant, Ben Axelrod, is described as "of the City of Toronto" and no objection was made to his status to bring the application.

[para10] By-law 395-80 was enacted on April 28, 1980. As previously indicated, it amends zoning By-law 291-68 by in effect preventing the erection of apartment buildings longer than seventeen metres on lots having a frontage of less than sixty-one metres. City council expressed its intent to enact the by-law in June, 1978. The evidence, in my opinion, falls far short of showing bad faith on the part of the city council in enacting the by-law. Counsel for the applicants did not strenuously urge that it was an invalid by-law but rather

stated that it was inapplicable to the subject property. The application to quash By-law 395-80 is dismissed.

[para11] By-law 735-80 was enacted on October 1, 1980. City council had before it at the meeting at which it was passed a report of its planning and development department which contained the following statement:-

> 2. Need for an Interim Holding By-law
> Pending the completion of a land use study to determine the characteristics of the City's rental housing stock, its vulnerability to redevelopment pressures, the implications of redevelopment and appropriate changes to zoning policies, it would be appropriate for Council to impose restrictions on the height and density of any new buildings erected to replace apartment buildings built before 1960; that is, built with building permits issued after December 31, 1959. It would be appropriate to request that the Ontario Municipal Board approve such a holding by-law for a period of two years.

[para12] By-law 735-80 was enacted pursuant to the recommendation contained in the report and provides as follows:

> No. 735-80. A BY-LAW
>
> To amend By-law No. 291-68 respecting the replacement of certain buildings in the City of Toronto formerly comprising parts of the Village of Forest Hill.
>
> (Passed October 1, 1980.)
>
> The Council of the Corporation of the City of Toronto enacts as follows:
>
> 1. Subsection (2) of Section 15 of Bylaw No. 291-68, being "A By-law To regulate the use of land and the erection, use, bulk, height, spacing of and other matters relating to buildings and structures and to prohibit certain uses of lands and the erection and use of certain buildings and structures in certain areas of the City of Toronto formerly comprising parts of the Village of Forest Hill", is amended by adding thereto paragraph (f) as follows:
>
> "(f) (1) No person shall erect or use a building on a lot on which, on the 1st day of October, 1980, a building containing 6 or more dwelling units or an apartment house is erected, unless
>
> (i) the building or structure which is proposed to be erected does not exceed a height of 11.0 metres above grade,
>
> (ii) the gross floor area of such building or structure proposed to be erected does not exceed 1.0 times the area of the lot, and
>
> (iii) the number of dwelling units proposed to be contained in such building or structure does not exceed 100 units per hectare.
>
> (2) This paragraph shall not apply to prevent the erection or use of a building containing 6 or more dwelling units or an apartment house in respect of which the building permit was issued after December 31, 1959."
>
> 2. This by-law shall not come into force without the

approval of the Ontario Municipal Board.

[para13] The word "use" in paragraph 1 is troublesome and might be unnecessary to carry out the recommendation. As presently worded, there is a prohibition against existing use which however would remain permissible as a prior non-conforming use.

[para14] Paragraph (2) is even more troublesome. It seems to say that a building containing six or more dwelling units or an apartment house may be erected or used if a building permit is obtained after 1959. Such a provision may render paragraph (1) ineffective and the whole by-law an absurdity. Clearly an amendment of paragraph (2) is required to carry out the recommendation in the report. Paragraph (2) might be amended by adding after the word "building", where it first appears, the words " ... on a lot on which on the first day of October, 1980 a building ... ". Alternatively, there might be added in paragraph (1), after the word "erected" where it first appears, the words "in respect of which a building permit was issued before January 1, 1960 ... ".

[para15] The court has no power to amend a by-law by adding words that are not there and it must strain to interpret the words in the by-law to avoid an absurdity. Doing the best I can, I conclude that nothing in paragraph (1) can prevent the erection or use of the kind of building described in paragraph (2) provided a building permit is obtained and the requirements of paragraph (1) are complied with. Such an interpretation would result in a substantially different application from that recommended by the planning and development department.

[para16] It is fundamental that an owner of land has the right to use and improve it as he sees fit subject only to restrictions imposed by law and to not creating a nuisance. It is also fundamental that the municipality may only act within the powers conferred on it by the provincial legislature.

[para17] The city submits that By-law 735-80 may be passed under the authority conferred by ss. 35(1) - 4 and 35(1a) of The Planning Act, R.S.O. 1970, c. 349 which provide as follows:-

> 35.- (1) By-laws may be passed by the councils of municipalities:
>
> ...
>
> 4. For regulating the cost or type of construction and the height, bulk, location, size, floor area, spacing, external design, character and use of buildings or structures to be erected within the municipality or within any defined area or areas or upon land abutting on any defined highway or part of a highway, and the minimum frontage and depth of the parcel of land and the proportion of the area thereof that any building or structure may occupy.
> ...
>
> (1a) The authority to regulate provided in paragraph 4 of subsection 1 includes and, notwithstanding the decision of any court, shall be deemed always to have included the authority to regulate the minimum area of the parcel of land mentioned therein and to regulate the density of development in the municipality or in the area or areas defined in the by-law.

[para18] In considering a municipal by-law, there is a presumption of validity. If a by-law is capable of an intra vires interpretation, it should be so interpreted. It is submitted that the judicial approach should be to interpret it benevolently and to support it if possible. It is further submitted that in determing whether a by-law is authorized by statute, the court must look at the "essence" and "substance" of the by-law. In essence and substance, By-law 735-80 provides that where a building of a certain type presently exists, it may only be replaced by a building with the height, floor area and density limitations prescribed in the by-law. The by-law can receive no more beneficial interpretation. It follows that where buildings of the specified type do not exist in the municipality or in any area thereof, the limitations do not apply. In substance, the by-law is not concerned with use of property or construction standards but rather with limiting future use where certain structures presently exist. While this may be a proper and meritorious planning purpose, it is not a purpose authorized by The Planning Act. There is nothing in s. 35 that authorizes the preservation of existing buildings. The impugned by-law does not apply to buildings or structures to be erected within the municipality or within any defined area or areas as provided for in s. 35(1) - 4 of The Planning Act but rather applies to buildings or structures in undefined areas in the municipality where certain types of structures presently exist. In my opinion, the by-law is ultra vires and should be quashed.

[para19] It is, therefore, unnecessary to deal with the other grounds advanced by the applicants to attack the validity of the by-law.

[para20] In the result, there will be an order quashing By-law 735-80. The remainder of the application will be dismissed. As success is divided, there will be no order as to costs.

SAUNDERS J.
OSLER J.
CALLAGHAN J.

Bice v. Council of the Mississaugas of the New Credit

Between
Lawrence Bice, applicant, and
The Council of the Mississaugas of the New Credit, respondent

[1998] F.C.J. No. 393
DRS 98-09722
Court File No. T-1410-96

Federal Court of Canada - Trial Division
Toronto, Ontario
Jerome, A.C.J.
Heard: December 2, 1997
Judgment: March 25, 1998

Counsel:
Lonny Bomberry, for the applicant.
Peter Quinlan, for the respondent.

[para1] JEROME J. (Reasons for Order):-- This application for judicial review of a decision by the respondent denying the applicant permission to establish a gas station on an Indian reserve came on for hearing before me at Toronto, Ontario, on December 2, 1997. The applicant seeks a declaration that his gas station does not violate By-Law No. 1996-01 passed by the Council of the Mississaugas of New Credit. At the close of oral argument, I took the matter under reserve.

[para2] The applicant is a member of the Mississaugas of the New Credit band and resides on the New Credit Indian Reserve No. 40A in Ontario. The respondent is the government of the Mississaugas Indian Reserve and is elected by the membership of the Mississaugas of the New Credit in accordance with section 74 of the Indian Act, R.S.C. 1985. c. I-5.

[para3] On November 2, 1994, the applicant purchased a parcel of land on the reserve in order to construct a gasoline station to sell gasoline products to the public. In spring 1995, the applicant commenced construction of the gas station and, by July 1995, he had excavated and levelled the land and put approximately $10,000 of gravel onto it. In June of 1995, the applicant informed the respondent that he was constructing a gasoline station on the land. He also requested its approval to approach the Motor Fuels and Tobacco Tax Branch of the Ministry of Finance of Ontario to obtain tax-exempt vouchers in order to sell tax-exempt gas to Indians at the location.

[para4] On July 11, 1995, the Chief Councillor of the respondent advised the applicant that the respondent had denied him permission to build the gasoline station. At that time, there was no by-law in effect to prevent the applicant from constructing and operating a gasoline station on the reserve.

[para5] In summer and early fall of 1995, the applicant installed gasoline tanks and poured the concrete kiosk. By November 7, 1995, the applicant had obtained approval from the Ontario government's Fuels Safety Branch to sell gasoline subject to final inspection. On November 2, 1995, the respondent submitted a letter to the Motor Fuels and Tobacco Tax Branch demanding that the branch not issue a permit to the applicant to sell gasoline. In December 1995, the applicant had electricity connected to his station, filled the tanks with gasoline and was ready to commence operations subject to final inspection by the Fuels Safety Branch. From December 1995 to February 1996, the applicant made frequent requests of the Fuels Safety Branch to make a final inspection but this was refused due to the respondent's letter.

[para6] On February 9, 1996, the respondent approved a zoning by-law passed pursuant to section 81(1)(g), (h), (q) and (r) of the Indian Act that prohibited the operation of a gasoline station on this land. The by-law was approved by the Deputy Minister of Indian Affairs on February 27, 1996 and became effective as of that date.

[para7] On April 1, 1996, the applicant's solicitor advised the respondent that the applicant had established a non-conforming use to the zoning by-law and asked the

respondent to cease withholding its approval. On June 6, 1996, the applicant was told that the respondent would not sanction the applicant's gasoline station since it violated the bylaw passed on February 9, 1996.

[para8] At the hearing, the respondent conceded that the gas bar began construction before the by-law was passed. The gas bar is currently in contravention of the terms of the by-law. It is unclear whether the applicant was selling gasoline prior to the passing of the by-law.

[para9] The respondent's first argument is that the applicant is not the proper party to bring this application because his wife, Irene Laforme, is the actual land owner. The respondent transferred the land to her in November 1995. Thus, the respondent submits that the applicant is not directly affected by the matter and therefore has no standing to apply for judicial review pursuant to subsection 18.1(1):

> 18.1(1) Application for judicial review - An application for judicial review may be made by the Attorney General of Canada or by anyone directly affected by the matter in respect of which relief is sought.

[para10] Although the applicant does not own the land, his actions are directly in issue. The respondent is concerned with the use of the land, specifically, the construction and operation of a gas station in an area which is no longer zoned for that use. The only communications concerning this issue are between the applicant, the respondent, their solicitors and various government officials. The decision for which judicial review is sought was directed at the applicant. The applicant's wife has remained, at best, a silent partner in this whole affair. The "matter" in issue is the applicant's use of the land and thus the applicant is directly affected by it and should be entitled to seek relief. In my opinion, the applicant has standing to seek judicial review.

[para11] Another issue of minor dispute between the parties was whether the applicant had established use of the property as a gas station prior to the date the by-law came into effect. Although there is some question whether the applicant had sold gas at that date, a finding that the station was not operational is not fatal. In Town of Richmond Hill v. Miller Paving Ltd. (1978), 22 O.R. (2d) 779 (H.C.J.) [hereinafter Town of Richmond Hill], the court cited the decisions in Re Hartley and City of Toronto (1924), 56 O.L.R. 433 (C.A.) [hereinafter Hartley], and Central Jewish Institute v. City of Toronto, [1948] S.C.R. 101 where the owners in both cases had engaged in hastily-arranged limited use due to an anticipated restrictive by-law. In both cases the position of the owner was upheld. In Hartley, Hodgins, J.A., said at page 435:

> Where possession is taken so far as it can be done and in good faith for the purpose for which the building was acquired, the law ought to be, and I think is, that that user is such as the enactment contemplates as saving the property from the restriction under the statute, and is not affected by mere temporary use of a part, necessitated by or consequent upon the effect of a change of ownership. The test of the bona fides of the user must be whether the acts done disclose a real intention to use the building for its intended purpose and an actual user so far as that purpose could be carried out at the time.

The court in Town of Richmond Hill agreed with that statement and added that "any doubt as to prior use should be resolved in favour of the owner ..." (at page 782). These principles have been accepted in recent cases including British Columbia Custom Car Assn. v. Mission (District) (1990), 3 M.P.L.R. (2d) 278 (B.C.S.C.) and Cowichan Valley (Regional District) v. Yole (1988), 41 M.P.L.R. 78 (B.C.C.A.).

[para12] The applicant had installed and filled the gasoline tanks, constructed the concrete kiosk and connected electricity to the station, acts which disclose a real intention to use the premises as a gasoline station. Although I have no doubt as to its use, if I had any it would have been resolved in favour of the applicant.

[para13] The main issue here is whether the applicant had established a legal non-conforming use before the by-law came into effect. The respondent claims that the applicant has not

proven compliance with the Gasoline Handling Act, R.S.O. 1990, c. G.4, and therefore the applicant has not established a legal non-conforming use. The applicant contends that provincial law does not apply to reserve land and so his use was legal and occurred prior to the passing of the by-law.

[para14] A review of the jurisprudence reveals that provincial laws apply to aboriginals and aboriginal lands unless they fall under certain exceptions carved out in the case law. In Native Law (looseleaf) (Toronto: Carswell, 1989), Woodward sets out these exceptions as follows:

> 1) provincial laws cannot derogate from constitutionally protected Indian rights;
>
> 2) provincial laws may not affect "Indianness" - the status or capacities of Indians;
>
> 3) provincial laws may not single out Indians for special treatment;
>
> 4) provincial laws may not affect the Indian interest in
>
> land;
>
> 5) provincial laws are subject to paramount federal legislation.

[para15] Although one might argue that the fourth exclusion should exclude the operation of the Gasoline Handling Act, I do not think that this statute should be characterized as one that regulates the Indian interest in land. In Cardinal v. Alberta (Attorney General), [1974] S.C.R. 695, Martland J., speaking for the majority, discussed the application of provincial statutes to Indians and Indian Reserves at page 703:

> A Provincial Legislature could not enact legislation in relation to Indians, or in relation to Indian Reserves, but this is far from saying that the effect of s. 91(24) of the British North America Act, 1867, was to create enclaves within a Province within the boundaries of which Provincial legislation could have no application. In my opinion, the test as to the application of Provincial legislation within a Reserve is the same as with respect to its application within the Province and that is that
>
> it must be within the authority of s. 92 and must not be in relation to a subject-matter assigned exclusively to the Canadian Parliament under s. 91. Two of those subjects are Indians and Indian Reserves, but if Provincial legislation within the limits of s. 92 is not construed as being legislation in relation to those classes of subjects (or any other subject under s. 91) it is applicable anywhere in the Province, including Indian Reserves, even though Indians or Indian Reserves might be affected by it. My point is that s. 91(24) enumerates classes of subjects over which the Federal Parliament has the exclusive power to legislate, but it does not purport to define areas within a Province within which the power of a Province to enact legislation, otherwise within its powers, is to be excluded.

[para16] Following this approach (most recently adopted on a similar issue in Rempel Brothers Concrete Ltd. v. Chilliwack (District) (1994), 88 B.C.L.R. (2d) 209 (C.A.)), one must examine the pith and substance of the statute. In this case, it appears that the pith and substance concerns the safe handling of gasoline. It is true that some sections of the Gasoline Handling Code (which is adopted as part of the regulations to the Gasoline Handling Act pursuant to O. Reg. 521/93) provide, for example, the depth that an underground storage tank must be buried and would therefore have an effect on the land. However, these effects are incidental to the prime focus of the legislation which is safety.

[para17] The case at bar is also similar to R. v. Fiddler (1993), 108 Sask. R. 5 (Q.B.) where the court held that section 15(a) of the Prairie and Forest Fires Act, 1982 S.S. 1982-83, c. P-22.1 applied to an Indian who had set an outdoor fire without taking sufficient precautions. The court cited with approval the submission of the Attorney General that the impugned section was "manifestly the type of regulation that controls the conduct and activities of people and not the use

of land. Any requirement to actually do something to the land in order to comply with the section is so incidental that it cannot change the characterization of the law into a land use law" (at page 15). Moreover, the court noted that a fire can spread beyond the borders of the reserve and damage life and property which falls within provincial jurisdiction. A similar finding can be made in this case because a gas leak can easily spread outside the reserve borders, particularly since the applicant's gas station was located just inside the reserve.

Similarly, the Gasoline Handling Act is a law of general application concerned with safety in the handling of gasoline and should apply on an Indian reserve.

[para18] The remaining question is whether the applicant has satisfied the court that he was engaged in a legal non-conforming use prior to the date the by-law came into effect (see City of Toronto v. San Joaquin Investments Ltd. et al. (1978), 18 O.R. (2d) 730 (H.C.J.)). Although the applicant could not receive a final inspection because an official from the Fuels Safety Branch was not allowed on the reserve, there is no evidence that the applicant had received certification for any of the other requirements under the Gasoline Handling Act. The storage tanks, whether underground or aboveground, must be certified pursuant to the Gasoline Handling Code, but there is no evidence of this certification. The record is devoid of evidence of any inspections. This applicant has not met the evidenciary burden required to persuade me of the existence of a non-conforming use which would exempt him from the application of this by-law.

[para19] For the reasons outlined above, this application for judicial review is dismissed.

JEROME A.C.J.

Brantford (Township) v. Doctor

Between
The Corporation of the Township of Brantford, applicant, and
Leslie Doctor and Helen Doctor, respondents

[1995] O.J. No. 3061
DRS 95-20117
Court File No. 1820/93

Ontario Court of Justice (General Division)
Brantford, Ontario
Kent J.
September 26, 1995.

KENT J.:
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ISSUE:

[para1] Do provisions contained in the Ontario Building Code Act, S.O. 1992 c. 23, apply to the respondents who are "Status Indians"?

BACKGROUND:

[para2] The respondents, husband and wife, describe themselves as Status Indians and have provided the court with evidence to establish that legal status. They occupy, use and benefit from, certain lands within the geographic boundaries of the Township of Brantford, namely part of lot 45, concession 2. For several years, the respondents have operated a trailer park on the lands in question. They also maintain a residence on the premises for themselves. Other residents of the respondents' trailer park are neither First Nations persons or Status Indians.

[para3] The respondents have erected a building and constructed a swimming pool on the subject lands. The Chief Building Official of the Township of Brantford, who is responsible for the enforcement of the Ontario Building Code Act within the Township, states that the respondents failed to obtain a building permit, failed to comply with the Public Pool provisions, failed to respond to an Order to Comply and failed to stop work when he issued a Stop Work Order. All of the foregoing constitute non-compliance with the Building Code Act and regulations thereunder.

[para4] The respondents do not dispute any of the foregoing. They contend, however, that because their lands are "Indian lands" they cannot be required to comply with the requirements of Provincial Legislation.

HISTORY OF THE LANDS:

[para5] The lands in question were part of what has come to be known as the Haldimand Grant or Deed made the 25th day of October, 1784 and registered the 20th day of March, 1795. That document authorized and permitted Mohawk Indians and others of the Six Nations to take possession of and settle upon lands six miles deep on either side of the Grand River from Lake Erie to the head of the said river, forever. The area in which the subject lands are located came to be known as the Johnson Settlement. Peter Green, an ancestor of the respondent, Leslie Doctor, took possession of a portion of the lands in the Johnson Settlement and the use and benefit of the subject lands has devolved through the descendants of Peter Green, ultimately to the respondent, Leslie Doctor and his spouse, Helen. No deed exists for the lands in question, but the respondents have presented sufficient evidence to satisfy me that it is more probable than not that they have derived their current occupation, use and benefit of the subject lands from a devolution traceable to the aforementioned Peter Green.

[para6] As I understand the evidence, the practice that has developed to permit a deed to be obtained is that a conditional, or less than absolute, release or surrender of lands is made to the Crown and the Crown then executes and delivers a patent or deed as directed by the surrendering party or parties. Another means that has been used to create documentation of title is for the individual occupant of lands or a band council to make an absolute surrender of land or lands to the Crown with the Crown then being free to grant a

patent of those lands at some subsequent point in time.

[para7] Although the possibility exists that there may have been either an absolute surrender or a conditional surrender of the subject lands as part of some larger surrender, on the evidence that I heard, it seems more probable than not that neither an absolute surrender or a conditional surrender of the subject lands has ever taken place. If that is correct then the respondents have the most significant interest in the lands, namely possession, use and benefit. However, the Band Council may have an underlying reversionary interest and the Crown may also have an underlying interest. These underlying interests exist because no patent or deed may be created without the involvement of the Band Council and the Crown.

[para8] Depending on the application of the definition of "designated lands" found in Section 2 of the Indian Act, R.S.C., 1985, c. I-5, it is also possible that the lands are part of an Indian Reserve.

[para9] Given the foregoing, it is safe to assume, for purposes of this application, without actually deciding the point, that the subject lands are "Indian Lands".

LAW:

[para10] Although the Supreme Court of Canada has ruled that Provinces may legislate, within their sphere of jurisdiction, over Indians, certain rules have evolved which create exclusions for Indians and Indian lands. See Dick v. The Queen [1985] 2 S.C.R. 309. Woodward in his text on Native Law addresses the exclusions at pages 120 to 124. No Provincial legislation that encroaches upon constitutionally protected native rights can apply to Indians or Indian lands. There was no evidence on this application that the respondents relied on any such rights.

[para11] Provincial legislation may not impair the status or capacity of Indians. There is no suggestion in the evidence or argument that the Provincial legislation in question affects the essential characteristics of the respondents as Indian persons.

[para12] The Provincial legislation may not single out Indians or Indian lands for special treatment. The subject legislation treats all persons occupying land in the Province of Ontario in the same fashion.

[para13] The Provincial legislation may not affect the Indian right to possession of reserve lands. The subject legislation does not purport to affect possession.

[para14] The Provincial legislation may not come into conflict with the provisions of the Indian Act of Canada or other Federal enactments relating to Indians. The normal rules of paramountcy apply and if there is actual conflict Federal legislation prevails.

[para15] If none of the five exceptions above apply, and they do not appear to apply in this matter, then the basic rule is that Provincial laws may apply to Indians and Indian lands.

[para16] Counsel for the respondents refers to two cases which appear to provide general support for the respondents contention that the subject legislation should not apply to them. The decision of the British Columbia Court of Appeal Surrey v. Peace Arch Enterprises Ltd. and Surfside Recreations Ltd. reported 74 W.W.R. at 380 was subsequently upheld by the Supreme Court of Canada but it arose in 1970 and the decision was not referred to by the Supreme Court of Canada in Dick. In Palm Dairies v. The Queen, a 1978 decision in the trial division of the Federal Court the Provincial legislation sought to be applied was clearly going to affect an Indian interest in land. It, therefore, fell within one of the above exceptions, addressed by Woodward and could not be applied to Indians or Indian Bands. The Surrey and Palm Dairies cases are the strongest authorities in support of the respondents' position. They may both be distinguishable and were decided well before the decision of the Supreme Court of Canada in Dick.

[para17] I have concluded that the Provincial legislation

in question is a law of general application. I have reviewed the relevant Federal Legislation set out in the various provisions of the Indian Act and in particular Sections 64, 66, 73, 83 and 88. I am satisfied that no Federal legislation occupies the field sought to be occupied by the Provincial legislation in question. The Provincial legislation may then move into that unoccupied field.

PUBLIC POLICY:

[para18] The societal interest sought to be protected by the Provincial legislation is the safety and health of all inhabitants of the Province. In order to protect that interest, the Province seeks to regulate all those who engage in building and construction projects. Enforcement of the legislation is delegated to the municipality. There is no policy reason why the Provincial legislation should not extend to protect all residents of the Province. There should be no enclave where some persons are left unprotected because others are not required to comply with codified safe and healthy building and construction practices. The legislation applies directly and specifically to conduct. It only incidentally relates to land.

DECISION:

[para19] Neither the law nor any public policy consideration can exclude the applicability of the Ontario Building Code Act to the respondents. Accordingly, an Order will go restraining the respondents from using or occupying or allowing the use or occupation by anyone of the administration building and/or pool in question until such time as they have complied with the Ontario Building Code Act.

KENT J.

Re Budman and Town of Gravenhurst et al.

44 O.R. (2d) 696

ONTARIO
HIGH COURT OF JUSTICE
DIVISIONAL COURT
OSLER, STEELE AND EBERLE JJ.
1ST DECEMBER 1983.

APPEAL from a judgment of Hogg D.C.J. upholding the revocation of a building permit; APPLICATION for judicial review of a stop-work order.

M. H. Chusid, Q.C., for appellant.

W. G. Beatty, for respondent.

The judgment of the court was delivered orally by

STEELE J.:-- This is an appeal from the decision of the Honourable Judge Hogg with respect to a building permit application and termination thereof. It is also an application for judicial review of the decision of the building inspector of the Town of Gravenhurst placing a "stop-work" order on the building.

The appellant is the owner of lands in the Town of Gravenhurst. He applied to the committee of adjustment for a minor variance to permit a 460 sq. ft. addition to an existing cabin on the property. He filed with the application a sketch of the existing cabin which showed the shape and size of the addition sought. It provided for an addition of some 23 ft. on one side and 12 ft. on the other side. In addition, he filed a plan showing the reproduced floor plan of the finished product. These same plans were subsequently filed with the building inspector at the time of the application for building permit.

It is clear that the application to the committee of adjustment was for an addition to an existing building and the reasons of the committee clearly show that that was what was granted. It was on the basis of that decision of the committee of adjustment that the building permit was applied for and issued for the same purpose. The appellant commenced work on the project and on June 4, 1981, the building inspector for the town arrived at the scene and posted a "stop-work" order on the work. It is conceded that the former building had been totally demolished except for some building blocks lying on the ground that had formed the foundation of the former building. Judge Hogg found as a fact that the former building had been substantially demolished.

The appellant appealed to Judge Hogg under the provisions of the Building Code Act, R.S.O. 1980, c. 51, stating that the

permit was improperly revoked. It is my opinion that under the factual circumstances so found there was no building to which the outstanding permit to construct an addition could apply. By the appellant's own acts the facts had totally changed at the time of the "stop-work" order and revocation of the permit from those stated at the time that the permit was issued.

A committee of adjustment has power to permit the extension or enlargement of an existing legal non-conforming use. It has no power to permit the replacement of such a use. Each case is a question of fact as to what extent alterations to an existing building may be required to permit the addition or extension. However, in the present case on the facts as found by the district court judge it was not a necessary alteration, it was a total demolition.

We are not concerned with these issues of fact, because they have already been determined and we see no error therein. It is our view, however, that if the submission of the appellant were adopted, in effect, what would happen would be that the appellant would be allowed to build a totally new building on the site as opposed to what was authorized by the building permit and the committee of adjustment. Under the provisions of s. 6(4) of the Building Code Act, the building permit was issued on mistaken information, because if it had been known to the building commissioner that a total replacement of the building was to take place, he would not have had power to

issue the permit. It is my opinion that there was power to the building inspector to revoke the permit and we therefore see no reason to interfere with the decision of Judge Hogg.

I turn now to deal with the application for judicial review. If it is argued that a person should be entitled to a hearing by a building commissioner before a permit is revoked, I do not agree. The Act has provided for an appeal to the district court judge who has all the powers of the building inspector. That appeal and hearing has now been had. In our view, on the facts of this case where the applicant has himself demolished the building and created his own problem, we do not think that it is a situation where we should exercise our discretion to grant any relief. For these reasons, the appeal will be dismissed and the application for judicial review will also be dismissed. The respondent should have its costs.

Appeal and application dismissed.

Campeau Corporation v. Township of Gloucester et al.

21 O.R. (2d) 4
ONTARIO

ONTARIO
HIGH COURT OF JUSTICE
R. E. HOLLAND, J.
31ST AUGUST 1978.

APPLICATIONS to prohibit a municipality from issuing a building permit.

G. F. Henderson, Q.C., and R. Nelson, for plaintiff, Campeau Corporation.

P. D. Rasmussen, for plaintiff, Regional Municipality of Ottawa-Carleton.

T. Kerzner and C. B. MacFarlane, for plaintiff, City of Ottawa.

R. W. Macauley, Q.C., and J. Robert Boxma, for defendant, Township of Gloucester.

J. J. Carthy, Q.C., for defendants, Cadillac Fairview

Corporation Ltd. and Tartan Development Corporation.

R. E. HOLLAND, J.:-- There are three applications before me for injunctive relief. The first by Campeau Corporation (Campeau) against the Corporation of the Township of Gloucester (Gloucester) and Paul Lahey, the second by the Regional Municipality of Ottawa-Carleton against Gloucester and Lahey and the third by the Corporation of the City of Ottawa against Gloucester and Lahey. Cadillac Fairview Corporation Limited (Cadillac) was added as a party defendant in the Campeau action by order of Grange, J. There was a preliminary application before me by Cadillac to be added as a party defendant in the second and third action and by Tartan Development Corporation (Tartan) to be added as a party defendant in all three actions. Tartan is a co-venturer with Cadillac in the land in question (Blossom Park). Against the opposition of the plaintiffs, I exercised my discretion to make the order adding these parties. I did so because the added parties are vitally interested financially in the outcome of the litigation and because damages suffered by such parties by reason of any injunction may be substantial and will be different from the damages suffered by the municipal corporations.

The applications before me were originally for interlocutory injunctions but, on the application of counsel for Cadillac and Tartan, unopposed by all other counsel, I directed that the applications be turned into motions for judgment pursuant to Rule 222 [enacted O. Reg. 107/74, s. 3].

The injunction sought is to restrain the issue of a building permit for the construction of a shopping centre on the Blossom Park site, located in Gloucester, at the south-east corner of Highway 31 and Sieveright Rd., being part of Lots 6 and 7, Concession 4, Rideau front, until those portions of the official plan of the Regional Municipality of Ottawa-Carleton, dealing with the area in question and referred to the Ontario Municipal Board have been disposed of by that Board.

The township is a municipality in the south-east portion of the regional municipality. Lahey is the building inspector for the township. Since the mid-1960s Campeau has owned a parcel of approximately 50 acres of land in the City of Ottawa (the South Keyes site), which parcel is located about half a mile from Blossom Park. Campeau is attempting to get permission to develop South Keyes as a regional shopping centre. Cadillac and

Tartan are also attempting to develop Blossom Park as a regional shopping centre. The area will not support two regional shopping centres.

Blossom Park was originally the subject of zoning under By-law 26 of 1960 of the township. It was zoned "C" -- Commercial. The uses permitted included the use of the property for a shopping centre. As of June 15, 1968, pursuant to the

Regional Municipality of Ottawa-Carleton Act, 1968 (Ont.), c. 115, the inhabitants of the regional area, which includes the township and the City of Ottawa, were constituted a body corporate under the name of the Regional Municipality of Ottawa-Carleton. The new regional area was designated a planning area pursuant to the Planning Act of Ontario, R.S.O. 1970, c. 349. Under the Regional Municipality of Ottawa-Carleton Act, R.S.O. 1970, c. 407, the regional government is charged with the duty of preparing a regional official plan. On October 9, 1974, the Council of the regional municipality enacted the official plan. The Minister approved the plan on August 30, 1976. Blossom Park is shown as residential on the official plan. The question of the location of the regional shopping centre in the area is to be dealt with in a hearing before the Ontario Municipal Board scheduled for September 11, 1978.

With this background the plaintiffs are faced with the expressed intention of the township to issue a building permit to Cadillac and Tartan for the construction of a shopping centre at Blossom Park. If such a shopping centre is constructed then the planned shopping centre in the City of Ottawa, proposed by Campeau, is no longer feasible. If a building permit is issued then it may well be that by virtue of s. 35(7)(b) of the Planning Act any by-law passed in the future would not prevent the erection of the shopping centre and Cadillac and Tartan would have established a legal non-conforming use.

Section 68(7) of the Regional Municipality of Ottawa-Carleton Act reads as follows:

> 68(7) When the Minister has approved an official plan adopted by the Regional Council,
>
> (a) every official plan and every by-law passed under section 35 of The Planning Act or a predecessor thereof then in effect in the planning area affected thereby shall be amended forthwith to conform therewith;
>
> (b) no official plan of a subsidiary planning area shall be approved that does not conform therewith.

It is the submission of the applicants that the area in question having been designated as residential on the official plan, there is a statutory obligation on the township to amend its by-laws forthwith to conform therewith and it is submitted that the by-laws not having been amended there is an obligation on the township not to issue a building permit that would fly in the face of the official plan. It is suggested that the official plan indicates a clear planning intention to rezone and that as such any application for mandamus for a building permit would be refused and the application adjourned until the question of rezoning had been fully dealt with by the Ontario Municipal Board.

On behalf of the defendants it is submitted first that the applicants have no status to bring this application and second, that the official plan is only a statement of future policy and that Cadillac and Tartan have a right to a building permit under the present zoning.

I will deal first with the question of status. It is submitted on behalf of the defendants that the plaintiffs have no status either by statute or at common law.

Section 470 of the Municipal Act, R.S.O. 1970, c. 284, is as follows:

> 470. Where any by-law of a municipality or of a local board thereof, passed under the authority of this or any other general or special Act, is contravened, in addition to any other remedy and to any penalty imposed by the by-law, such contravention may be restrained by action at the instance of a ratepayer or the corporation or local board.

It is suggested that this section does not apply since no by-law is being contravened but only, at the most, a section of a statute. It is pointed out on behalf of the plaintiffs that the official plan was passed by by-law and that the official plan is being contravened as well as a statute of the provincial Legislature.

It is further submitted on behalf of the defendants that

there is no status in the plaintiffs at common law and reliance is placed upon the decision of the House of Lords in Gouriet v. Union of Post Office Workers et al., [1977] 3 All E.R. 70. The plaintiff in Gouriet, however, had no interest other than as a member of the public. In this case all the plaintiffs have a special interest in the subject-matter of the litigation and, in addition, in my view, the municipal plaintiffs have a statutory right of action by virtue of s. 343 of the Municipal Act, which section reads, in part, as follows:

> 343. Where a duty, obligation or liability is imposed by statute upon any person in favour of a municipal corporation, or the inhabitants, or some of the inhabitants, of a municipality ... the corporation has the right by action to enforce it and to obtain as complete and as full relief and remedy as could be obtained in an action by the Minister of Justice and Attorney General, as plaintiff ...

For the above reasons I have come to the conclusion that all plaintiffs have status to maintain the actions.

The applications are strongly resisted on the basis that Cadillac and Tartan are entitled to a building permit upon application. Section 6(1) of the Building Code Act, 1974 (Ont.), c. 74, reads as follows:

> 6(1) The chief official shall issue a permit except where,
>
> (a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law; or
>
> (b) the application therefor is incomplete or any fees due are unpaid.

It is submitted that there is no applicable law that would prohibit the issue of the permit in this case and that the land in question is zoned so as to permit shopping centre development. Reliance is placed upon Re Steven Polon Ltd. and Metropolitan Licensing Com'n, [1961] O.R. 810, 29 D.L.R. (2d) 620, in which Mr. Justice McLennan held that an official plan, although adopted by a municipality, is merely a statement of intention as to future plans when not implemented by a zoning by-law and held in that case that a licensing commission could not consider the official plan in deciding whether or not to issue a licence for specific use of certain land. Reference is also made to s. 1(h) of the Planning Act, which defines "official plan" as meaning "a program and policy ... approved by the Minister from time to time ...". The matter was dealt with by Henry, J., in Re Cadillac Development Corp. Ltd. et al. and City of Toronto (1973), 1 O.R. (2d) 20 at p. 28, 39 D.L.R. (3d) 188 at p. 195:

> The Official Plan therefore, as it is in effect from time to time, represents a policy or program having legislative effect, governing the area to which it applies. It is clear from the scheme of the Act that the Official Plan is not immutable (s. 17) and does not have effect to implement the policy outlined by it. Implementation is to be effected by by-laws of the Municipal Council that conform to the policy specified in the plan.

In my view, the distinguishing feature of this case is that the official plan in question is the official plan of the regional municipality, and the provisions of s. 68(7) of the Regional Municipality of Ottawa-Carleton Act, which requires the amendment forthwith of By-law 26 of 1960 of the township to conform with the official plan. It is nearly two years now since the official plan was approved by the Minister and under any interpretation of the word "forthwith" time for amendment has surely long since expired. It is true that the Legislature could have been more definite in its legislation as, for example, in Saskatchewan where s. 4(3) of 1973-74 (Sask.), c. 76 [amending s. 38 of the Planning and Development Act, 1973 (Sask.), c. 73], provides that any zoning controls that are inconsistent with the municipal development plan shall to the extent that they are inconsistent with the plan be of no effect. However, I do not think that this is necessary. There is a statutory obligation imposed upon the municipality to amend its by-laws and in the interim the municipality should refuse any application for a building permit, even though such application complies with its by-law if the by-law does not conform to the official plan of the regional municipality.

For the above reasons I have come to the conclusion that a building permit should not be issued in this case because it would contravene the applicable law. This result, it seems to me, is also equitable. The municipalities and developers are engaged in a contest for the right to construct a shopping centre and it is only fair that the matter proceed in an orderly way for proper evaluation before the Ontario Municipal Board.

An application was made by counsel on behalf of the regional municipality to amend the writ to claim in addition to an injunction a mandatory order directing the township to amend its existing By-law 26 of 1960, to conform with the official plan of the regional municipality. This application was really made in order to underpin the application for an injunction but, in my view, the amendment sought is so wide that it should not be permitted on a motion for an injunction which has been turned into a motion for judgment. A separate action may be brought for this relief if necessary. The application is, therefore, refused. In my view an injunction should issue in this matter because the plaintiffs are entitled to succeed and damages will not be an adequate remedy for the plaintiffs should the building permit issue. The injunction will maintain the status quo and will permit the Ontario Municipal Board to proceed with its hearing as scheduled on September 11th next. The plaintiffs are entitled to their costs of the applications against the defendant municipality. The action will be dismissed without costs as against the defendants Cadillac and Tartan. Judgment will issue accordingly.

Judgment accordingly.

Re **Cogan et al. and City of Toronto** et al.

(1974), 3 O.R. (2d) 661

ONTARIO
HIGH COURT OF JUSTICE
DIVISIONAL COURT
DONOHUE, KEITH and
CROMARTY, JJ.
13TH MAY 1974

APPLICATION for an order of mandamus directing the respondents to issue a building permit.

J.J. Carthy, Q.C., for applicants.

D.H. Sandler and E.R. Finn, for respondents.

The judgment of the Court was delivered by

KEITH, J.:-- The applicants seek an order directing the respondents to issue to the applicants a building permit providing for the construction of a 20-storey retail store and office building approximately 250 ft. in height, with three basement levels which would include underground parking as required. The site of the proposed building is on the north side of Bloor St., west of Bay St., Toronto, and known municipally as Nos. 110-28 Bloor St. W. The applicants claim to be entitled as of right to such building permit pursuant to its application filed June 8, 1973, as revised on November 2, 1973.

The evidence discloses that in early 1972, Messrs. Crang & Boake, a well-known firm of architects in Toronto, were instructed to design the building that is the subject of this application. There were many factors to be considered having regard to the site. Pedestrian and vehicular traffic in the area is heavily congested and it was recognized that the impact of a new and substantial building on the traffic situation would inevitably be serious unless special arrangements were made.

In the same year, 1972, the City of Toronto Department of Development issued a sketch of the area in central Toronto bounded on the west by Avenue Rd. and Queen's Park, on the north by Yorkville Ave., on the east by Park Rd. and on the south to a distance a little north of Sultan and Hayter Sts. This of course included the site of the building proposed by the applicants. The sketch was entitled Bloor-Bay-Yonge Area -- Proposed Pedestrian Mall System integrated with development and showed projects completed, projects under construction, projects imminent including a large parking garage, areas of potential future development, the location of proposed underground and above ground pedestrian malls and the location of existing subway stations: see ex. B to affidavit of Derry Menzies Robertson, sworn November 8, 1973.

This sketch contemplated a pedestrian bridge above ground connecting the applicants' proposed building with a large existing building known as the Colonnade directly opposite on the south side of Bloor St. W.

The sketch further indicated an underground pedestrian mall commencing from a point directly below the northern end of the above-ground bridge, within the site of the applicants' proposed building and continuing north and east until it connected with the subway stations.

The applicants' site is bounded on the north by a public thoroughfare known as Critchley Lane which continues easterly until it connects with Bellair St., a narrow street running north from Bloor St. W., intersecting Cumberland St. and ending with its intersection with Yorkville Ave.

Critchley Lane ends approximately at the western limit of the applicants' site. A survey of the area prepared by the City of Toronto surveyor and entered in evidence on consent discloses that the north boundary of the applicants' site is approximately 190 ft. in length from east to west and that for all but the easterly 10 ft., Critchley Lane to the north is about 10 ft. 9 in. wide. From the point mentioned easterly to Bellair St., Critchley Lane is 18 ft. 6 in. wide.

North of Critchley Lane to Cumberland St., a distance of a little over 80 ft. is a municipal parking lot and subway station. The westerly section to the north of the narrow part of Critchley Lane is owned by the Municipality of Metropolitan Toronto, and leased to the City of Toronto Parking Authority and the easterly section is owned by the City of Toronto.

It is conceded that there is no legal impediment to provide for vehicular access to the applicant's proposed building from Bloor St. but it is equally conceded that any such design would result in creating a chaotic situation for vehicles and pedestrians on Bloor St.

As a result, and with full consultation with the City of Toronto authorities and all others interested, the building was in fact designed to provide for the overhead pedestrian bridge from the proposed building to the Colonnade and for vehicular access to the underground parking facilities by a ramp leading south from Cumberland St. at the west end of the Metropolitan Toronto property and entering the proposed building below grade at the westerly end of the north face of the building.

In addition, provision was made for pedestrian traffic underground for the purposes already noted.

Prior to May, 1973, it appeared that the municipal authorities and neighbourhood interests became very interested in the conversion of the existing motor-car parking lot on the south side of Cumberland St. through to Critchley Lane, into a municipal park and recreation area. To accommodate this concept the architects made provision for retail store display windows to be inserted in the otherwise blank facade on the north side of the proposed building.

It is clear from the evidence that the applicants and their architects from the very inception of planning for this building, whose cost is estimated at nearly $11,000,000 to be built on an extremely expensive site, have worked closely and in harmony not only with the municipal authorities, departments and committees, but also with representatives of the neighbourhood and adjacent landowners, services such as electric and gas companies, and the municipal transit commission.

In April, 1973, an application was made for a permit to demolish the existing buildings on the site and such permit was granted on May 9, 1973. The clearing of the site has been largely completed in accordance with this permit.

On June 8, 1973, formal application was made for a building permit conforming to the foregoing planning factors together with supporting drawings, which as far as the applicants and their architects knew, were in accordance with the newly-established municipal procedures.

Under date of July 5, 1973, the architects received the usual examiner's notice with respect to the application and documents submitted, which notice stated that the proposed building contravened the City of Toronto Zoning By-law 20623 in two respects -- namely, that the gross floor area exceeded permissible limits by about 14,000 sq. ft. and that some 96 parking spaces were too short. The first problem was quickly resolved and the second proved to be erroneous. Neither objection has been raised since and it is agreed that they are no longer of concern.

It was of course realized, that agreements would have to be concluded with services, adjacent landowners and others affected, but these were well in hand and at the time of this application are available.

Unfortunately in the summer of 1973, difficulties arose with respect to the proposed public park including serious questions as to how the ramp access from Cumberland St. to the underground area of the proposed building would affect the park.

On September 4, 1973, at a meeting of a so-called working committee for "Cumberland Park" a decision was reached that consultants should be retained to advise on the park. A perusal of the minutes of that meeting makes it abundantly clear that agreement, if it would ever be reached, was far in the future and without such agreement the planned ramp access to the building could not be proceeded with.

In addition, other serious problems were developing. On February 28, 1973, the mayor of Toronto submitted a memorandum to the Buildings and Development Committee premising that the city's zoning by-law initiated in 1953 "is not sufficient to create orderly growth and stability in Toronto", complaining that the city is "completely unable to influence the form of development" and concluding with the following recommendations:

> Recommendation: Accordingly, I would ask this Committee to recommend that Council request the Planning Board, in conjunction with the Commissioner of Development to:
>
> (1) Identify areas of change in which increased control powers would be desirable.
>
> (2) Establish priorities for detailed studies of such areas (where none have been done) and for revisions to the Official Plan and the Zoning By-law as they apply to these areas.
>
> (3) Prepare with the City Solicitor, a Draft Official Plan Amendment outlining the policies and criteria which will govern the enacting of Holding By-laws and Development Control By-laws. (See Note II-Re Criteria.)
>
> (4) Prepare, in conjunction with the City Solicitor, one or more Draft Holding By-laws. (See Note I-Re Holding By-laws.)
>
> (5) Prepare with the City Solicitor a new Draft of a Private Bill empowering the City to engage in general development control.

From this start, Toronto City Council on September 14, 1973, adopted the following recommendations, among others, of the Buildings and Development Committee:

> (3) That Council indicate its intention to pass by-laws covering the Downtown and Midtown Planning Areas, in the general form of the by-law contained in Appendix C of the Chief Planner's report, prohibiting the erection of buildings exceeding 45 feet in height and 40,000 square feet in gross floor area to apply to the following areas;--
>
> . . . . .
>
> Midtown:
>
> the area bounded (1) on the south by a line parallel to and distant 100 feet from the north limit of College and Carlton Streets (2) on the west by a line parallel to and distant 100 feet west of the west limit of Spadina Avenue and Spadina Road (3) on the east by the east limit of Sherbourne Street, thence parallel to and 100 feet north of the north limit of Bloor Street to Jarvis Street, thence parallel to and distant 100 feet northeast of Rosedale Valley Road to Yonge Street, thence parallel to and distant 100 feet west of the west limit of Yonge Street from Rosedale Valley Road to the CPR tracks and (4) on the north by the CPR tracks as shown on Map 2 of the Chief Planner's report;

The applicant's original hope was to have commenced actual construction by June, 1973. As of November, 1973, their out-of-pocket expenses included rental of the site (it is held on a long-term lease) of $75,000 per month with no return as the previously existing buildings have been demolished, realty taxes of $47,000 per year, consultants fees of nearly $300,000 to date, an expense of $260,000 to buy in unexpired terms of leases and demolition costs of about $35,000.

In view of all these matters, the solicitors for the applicants wrote to the respondent Hadley on October 22, 1973, as follows:

> Dear Sir:
>
> Re: 110 Bloor Street West
>
> We are presently advising the developers of the above property as to their legal position and have come to the conclusion that the interest of our client is best served by

stating to the city precisely the position we find ourselves in and asking the city for a statement of its position.

I will not go into a history of the planning for this site as it is well known to everyone concerned at City Hall. It is sufficient to say that as of this summer full plans for a building permit had been filed but a permit had not been issued because negotiations for the pedestrian walkway across Bloor Street were still under way as were discussions concerning the access ramp from the rear of the premises to Cumberland Street on the north and the tunnel to the subway. Our position became confused by the city retaining a consultant to advise on the best ultimate use of the area to the north of this site and was further confused by the processing of the proposed holding by-law in September.

The consultant's study is to our knowledge not completed but interim findings suggest alternatives that may or may not accommodate the ramp from our site to Cumberland. We and you have no present knowledge of when or in what form the conclusions of that study will become definitive planning.

With respect to the proposed holding by-law we are unable to do more than put an interpretation upon its wording as to whether or not the city intends to exclude this site from its application. It is not a specifically excluded site and may or may not be excluded, depending upon whether the city takes the position that full plans had been filed prior to September 14th.

This has created a further uncertainty and stands against the ongoing steps of the developer towards construction. Demolition pursuant to the demolition permit is almost complete, contracts are being let, and construction is to start in the spring. This dictates that our client must know its position in the very near future.

With this in mind, a small alteration is being made to the plans for the building so as to eliminate the below grade access at the rear and bring that access up to grade to permit the use of Critchley Lane. We will then be asking for a permit and if one is issued we will proceed to construction, prepared at any time when appropriate decisions have been made to construct the ramp as originally planned, the connection to the subway, and the connection across Bloor Street. None of those items are or will be part of the building permit application but all will be available to the city.

That approach makes most sense to me because it makes available everything that the city has indicated it has wanted but it also assures that the developer is not prejudiced and can proceed as planned.

In other circumstances it might well be suggested that we await the consultant's report or some other decision. However, in view of the proposed holding by-law and the threat it imposes, our client's legal rights must be tested immediately in court or they will be lost, mandamus being a remedy that is only granted to a person who proceeds with expedition. In addition, we are also under severe time pressure because of the construction schedule.

Therefore, if the city does not see fit to issue a permit when this change is made in the plans the developer will be compelled to take immediate steps in court to assert its rights if it has any.

To the best of my ability this is a frank presentation of the position of our clients and we simply ask that the city give consideration to its position and make a frank and early response to us so that we will both know where we stand.

Mr. Hadley's reply dated October 26, 1973, reads as follows:

Dear Sir:

Re: 110 Bloor Street West

Your letter dated October 22, 1973 concerning the proposed building at 110 Bloor Street West is acknowledged.

The plans submitted with the application cannot be approved because of lack of legal access to the underground parking

areas.

Considering the intent of Council passed September 14, 1973 limiting buildings to 45 feet in height and 40,000 square feet gross floor area at this location, I cannot entertain revised plans to bring the application into compliance.

The revisions referred to in the solicitor's letter were submitted to the respondents on November 2, 1973. The architects were informed that although the revised drawings would be received, they would not be processed in view of Mr. Hadley's letter already quoted.

These revisions are described in more detail in para. 24 of Mr. Robertson's affidavit of November 8, 1973, as follows:

24. The changes made in the drawings are quite modest and are limited to bringing the access point up to the surface, bringing the internal ramp up to meet that access point and making certain other rearrangements of space within the building to accommodate the change in location of the ramp. In addition, the tunnel to the subway has been removed from the submission. The effect of this change is to make the vehicle access along Critchley Lane and into the building at grade rather than down a ramp from Cumberland Street and into the building below grade. To my knowledge all of this is in complete accordance with the by-laws applicable.

This application was launched on November 8, 1973. On December 7, 1973, the Council of the City of Toronto enacted By-laws 347-73 and 348-73.

By-law 347-73 consists of an amendment to the City of Toronto Official Plan and reads as follows:

NO. 347-73. A BY-LAW

To adopt Section 8.7 of the Official Plan for the City of Toronto.

[Passed December 7, 1973.]

The Council of The Corporation of the City of Toronto enacts as follows:

1. The Official Plan of the portion of the City of Toronto

Planning Area comprising the City of Toronto as constituted on the 31st day of December, 1966, and the area which on such date comprised the Village of Swansea is hereby amended by the adoption of the following Section 8.7, namely:

"8.7 Notwithstanding any other provisions of this Plan, Council may pass by-laws, for which an approval period of not more than two years will be sought, applicable to any area, imposing land use restrictions additional to those in force in such area, subject to such by-laws having the effect of permitting in such area only such buildings and uses, or buildings and uses, as are in the opinion of Council not detrimental to the character and functions of such area. Such by-laws shall include a preamble wherein the reason or reasons for their enactment are stated. It is the policy of Council, concurrent with the enactment of by-laws of this type, to request that a planning study of the area affected by the by-law be undertaken.

It is the policy of Council to enact special by-laws to exempt buildings or uses from the provisions of by-laws of this type, provided, in the opinion of Council, such buildings or uses are not inappropriate in, nor will

prejudicially affect the character of the areas subject to such by-laws.

It is the policy of Council, in the event that the studies as aforesaid are incomplete at the time of expiry of the effective period of a by-law of this type, to apply for extensions to said period or to enact a new by-law having the effect of continuing the provisions of the expired by-law."

2. The Clerk is hereby directed to submit this By-law to the Treasurer of Ontario and Minister of Economics and

Intergovernmental Affairs pursuant to The Planning Act.

The Court was informed by counsel that although this by-law has been submitted in accordance with para. 2 thereof, it is still awaiting approval.

By-law 348-73 was passed to implement the resolution of the City Council of September 14, 1973, by amending the Zoning By-law 23063 and the relevant portions read as follows:

Whereas as expressed in the Official Plan for the City of

Toronto Planning Area, it is the policy of Council to encourage and take measures to provide for the efficiency, amenity, appearance, and enjoyability of the area; to maintain and enhance the distinctive character of parts of this area; to improve and maintain the quality of its residence areas and to improve the quality of life for each resident, by, among other things,

providing convenient and rapid access by a full range of transportation services, particularly mass transit,

formulating overall design concepts for the important centres of the City,

providing public open space, including local and district parks,

providing landscaping, plazas, pedestrian ways and other features,

regulating the form, function and location of buildings and the spaces between them,

maintaining a high standard of design for all public works and facilities,

designating buildings and sites of historical and architectural merit and taking all necessary steps to ensure their preservation;

And whereas the Planning Board and Core Area Task Force are undertaking planning studies of the area for the purpose of developing policies and action whereby the objectives outlined above and established by the planning studies could be achieved, with the intention that such policies and programmes for action shall be recommended to Council;

And whereas, until such policies as may be recommended by the aforesaid planning studies or other policies in lieu thereof, may become effective, it is desirable that the City have power to review significant development proposals within the area;

1. Subsection (2) of Section 16 of By-law No. 20623, being "A By-law To regulate the use of land and the erection, use, bulk, height, spacing of and other matters

relating to buildings and structures and to prohibit certain uses of lands and the erection and use of certain buildings and structures in various areas of the City of Toronto", is amended by adding thereto paragraph (cccc) as follows:

"(cccc) (1) No person shall, within the area hereinafter firstly described, erect or use any building or structure having a height exceeding 45 feet above grade.

(2) No person shall, within the area hereinafter firstly described, erect or use any building or structure having a gross floor area exceeding 40,000 square feet.

. . . . .

(4) None of the provisions of this paragraph shall apply to prevent the erection or use of any building or structure the plans for which have, prior to September 28, 1973, been approved by the Commissioner of Buildings for

the Corporation.

(5) None of the provisions of this paragraph shall apply to prevent the erection or use of any building or structure for which an application was made, before September 14, 1973, for a building permit, if such application and the materials filed therewith show that such building or structure would comply with all the by-laws of the Corporation and any other relevant enactments."

2. This By-law shall not come into force without the approval of the Ontario Municipal Board.

The Court was informed that although an application for approval of this by-law by the Ontario Municipal Board has been filed, no date for hearing has as yet been set.

In resisting this application for mandamus the respondent municipality, in addition and alternatively to asserting that the applicants are not entitled to the order sought, ask that final disposal of this application be deferred until By-law 348-73 has been dealt with by the Ontario Municipal Board.

In view of the enactment of these by-laws and the reliance placed on them by the respondent municipality, the applicants by supplementary notice of motion seek a declaration that the said by-laws are void or in the alternative, that they cannot affect the applicants' rights.

The first question to be decided then is whether the applicants' material as presently before the respondents is such that mandamus ought to be granted, having regard to the by-laws of the municipality in full force and effect from the date of the initial application on June 8, 1973, down to the present time. For this purpose By-law 348-73 must be disregarded as it is still lacking Municipal Board approval.

I have already dealt with the two points raised in the examiner's notice of July 5, 1973, alleging contraventions of Zoning By-law 20623, and have noted that these were promptly resolved.

There were four other requirements set out in the examiner's notice, all of which related to matters incidental to the proposed ramp access from Cumberland St. These, of course, are now irrelevant since access to the underground facilities is now directly from Critchley Lane, according to the revision of the plans on November 2, 1973.

Although the respondents declined to process the plans as revised, material has been filed on this application alleging deficiencies in these plans which the respondents assert are sufficiently major in nature as to disentitle the applicants to even a conditional order. These are classified as zoning deficiencies and deficiencies in compliance with City of Toronto Building By-law 300-68 as amended.

Dealing then with the alleged zoning deficiencies, the first of these was based on an allegation that Critchley Lane is not available to the applicants for access to their proposed building by reason of a one foot reserve strip owned by the City of Toronto and never dedicated to public highway purposes. This objection was withdrawn by counsel for the respondents and need not be further considered.

The second alleged zoning deficiency also concerns Critchley Lane in that by reason of its constriction to 10 ft. 9 in. along the full northern face of the proposed building, the lane is inadequate for modern vehicle access. This argument is based on the following provisions of the zoning by-law:

13. The owner or occupant of every building or structure to be erected or used for the purpose of [then follows a list of purposes ranging from private residences to office buildings] shall provide and maintain motor vehicle parking spaces ... to the extent at least prescribed in the schedule hereto for the respective classes of buildings or structures set out therein.

This is followed by a schedule and then the by-law continues:

(a) For the purpose of this sub-section ... "parking space"

> means an unobstructed area at least nineteen (19) feet, six (6) inches in length, and at least eight (8) feet, six (6) inches in width which is readily accessible at all times for the parking and removal of a motor vehicle without the necessity of moving any other motor vehicle and which, ... is entered by means of a driveway or passageway having a minimum unobstructed width of eighteen (18) feet.
>
> (b) Ingress and egress to and from the parking facilities prescribed by this subsection shall be provided by a sufficient number of adequate, unobstructed driveways or passageways.

Based on the above-quoted provisions and particularly the passage that I have italicized, the respondents assert that since Critchley Lane abutting the proposed building is substantially less than 18 ft., the applicants fail to comply with these provisions of the zoning by-law.

Counsel for the applicants argues that the provisions quoted are referable only to on-site driveways or passageways and not to the width of public thoroughfares, or other off-site approaches to the parking facilities.

I think on a fair reading of these provisions the position of the applicants is sound. I am fortified in this view by the language of another subsection of the zoning by-law put in evidence by the respondents as follows:

> 6.(a) Where ingress or egress to or from motor vehicle parking or loading facilities in a building ... is provided by way of a ramp, no part of such ramp between the levels of one (1) foot above and one (1) foot below street level shall be located closer to a street than twenty (20) feet and the lateral boundaries of any driveway or passageway connecting such ramp with the street shall, within such distance of twenty (20) feet ... be constructed at right angles to the street.
>
> (b) For the purposes of paragraph (a), "ramp" means a driveway or passageway, or portion thereof, inclined at a slope equal to or greater than one (1) foot vertical to each fifty (50) feet horizontal; and "street level" means the average elevation of the portion of the street abutting the driveway or passageway connecting a ramp with such street.

It is obvious that all references to driveways and passageways deal with driveways and passageways ending at a street and hence must be on site and not referable to a street. "Street" is defined in the zoning by-law itself as "a public highway or private thoroughfare". Reference may also be made to By-law 12519, a by-law "Respecting Streets" where street is defined as follows:

> The word "street" wherever used shall mean and include any public highway, road, street, lane, alley, square, place, thoroughfare or way within the City of Toronto.

These definitions to my mind make it abundantly clear that for the purposes of the zoning by-law, Critchley Lane is a "street" and the objection of the respondents based on any alleged inadequacy in width of Critchley Lane is simply not sustainable.

The third and last zoning deficiency alleged by the respondents is that the proposed building does not comply with By-law 348-73 in that it will be far in excess of the height and gross floor areas sought to be established by that by-law.

There is no question but that this is so. However, that by-law has not as yet been approved by the Municipal Board and hence unless the Court accedes to the submission of the respondents that this application should be adjourned to await the decision of the Municipal Board, its existence can have no legal or practical effect on the applicants.

Disregarding for the moment the application for a building permit made on June 8, 1973, since the application for mandamus before the Court is based on the revised application filed on November 2, 1973, two things are clear; namely, that as of that date, having regard to the then and now existing zoning by-laws in full force and effect, the applicants had a clear prima facie right to the order sought, and secondly, that as of

November 2, 1973, and indeed ever since September 14, 1973, the municipality through its Council had expressed a clear and unmistakable intent to amend the zoning by-law in the manner set out in By-law 348-73.

Many authorities were cited to us by counsel, illustrative of cases where the Courts in some instances had granted the adjournment sought and in others, had refused such adjournment and made the mandatory order sought.

In my view, no useful purpose is served in quoting passages from such authorities one way or the other, because the result in each case clearly depended on many factors and not solely on a comparison of the relative dates of the expression of a legislative intent and the date of the filing of an application for a building permit.

Moreover, in this case By-law 348-73 is acknowledged to be an attempt by the municipality to restrict new building in the areas affected in such a way, having regard to land values and economic use that no building of any consequence could be expected to be planned for this central area of Toronto, let alone receive a building permit until "such policies as may be recommended by the aforesaid planning studies or other policies in lieu thereof, may become effective" to quote from the preamble of By-law 348-73.

As counsel for the applicants put it, this by-law discloses only an intention to plan for the areas in question when studies have been completed and recommendations brought forward in due course within a period of two years from December, 1973, the declared intended life-span of this "Holding By-law".

Counsel for the respondents frankly conceded that no by-law such as this one has ever been the subject of judicial decision up to the present time. The by-laws that have had to be considered in relation to an application for an adjournment of a motion for mandamus have been by-laws specifically rezoning specified areas, large and small.

It is equally obvious from the history of the planning for this building as already recited, that it in no way is at variance with any rezoning contemplated for this particular site. Indeed, it is clear from the evidence that the long period involved in the planning for the applicants' building was not occasioned in any way by problems with or objections to the building itself, but with peripheral matters of concern to the municipality such as the creation of a park, the use of an access route over the parking lot, the pedestrian bridge over Bloor St., and so on. The applicants were under no legal obligation to become involved in these matters. In my view, having been delayed so long in an endeavour to cooperate in solving municipal problems, it is most unjust and inequitable that these applicants should, as suggested by counsel for the respondents, await approval of By-law 348-73 by the Municipal Board (if such be forthcoming), at some unknown time in the future and then seek a further amendment to the zoning by-law as amended by By-law 378-73 to exempt the applicants' site.

This proposal would, of course, involve continuing heavy financial loss to the applicants, without the slightest assurance as to when such an application would be dealt with, or that it would receive the blessing of City Council to whose uncontrolled discretion the applicants would be subjected. One cannot take such a proposal seriously.

The proposal is even more remarkable having regard to a report of the City of Toronto Planning Board dated January 29, 1974, on the subject as stated thereon, namely, a "Report on guidelines for dealing with requests for exemption from By-law 348-73 (The Holding By-Law) prior to its approval by the Ontario Municipal Board". It is to be noted that By-law 348-73 as enacted by City Council contained specific exemptions from it.

The report notes that as of December 17, 1973, there were no less than 59 formal written requests for exemption from this by-law including one by the present applicants. These are listed with what are called relevant basic details, and the note appended to the reference to the applicants' property reads "(Building Permit applied for June 8, 1973 -- refused for lack of legal access and other Building By-law contraventions. A Mandamus Action is pending and discussions are being

continued with applicant)".

After listing these 59 applications the report continues:

4. Eligibility for Exemption

Eight applications, listed in Appendix "A", have already been granted exemption by the Committee on Buildings and Development upon the recommendation of the Technical Planning Committee, the latter having reviewed them against the criteria contained in Clause 1 of Report 25 of the Committee on Buildings and Development, as amended and adopted by City Council. A further application in that Appendix has been reported upon by the Technical Planning Committee.

With respect to applications for which City Council, its Committees or officials have been negotiating with a developer over a lengthy period of time prior to the enactment of By-law 348-73, or where there is a lease requirement by the Metropolitan Subway Property Committee, or where an approved application has been made for a payment in lieu of providing parking, it would seem reasonable that these negotiations be continued with a view to considering exemption from the Holding By-law.

However, if the project for which exemption is sought would involve the demolition of a designated historic building or is located in an area serviced by an active Working Committee which is negotiating on changes in the submitted form of the project, that project should not be afforded exemption.

Eight of the applications involve buildings on the Toronto Historical Board list of buildings of architectural or historic merit. These applications are listed in Appendix "B" and are recommended to be required to be dealt with as rezoning applications, during the processing of which full examination of the disposition of the historic building or buildings on the site could be undertaken. Application No. 7, D-W-S Holdings Limited (former Dow Brewery site at Dundas and St. Patrick Streets), is currently the subject of negotiation between the developer and the South-east Spadina Working Committee, the latter seeking the inclusion of a residential component within the commercial office development now planned. This application should, therefore, not be considered for exempton.

Those applications for which exemption is sought and which do not appear to have been the subject of prior consultation or Municipal commitment should not be considered for exemption from the By-law, but should be the subject of future rezoning applications. These applications are listed in Appendix "C".

Finally, Appendix "D" lists eight applications which would appear to meet the criteria for eligibility for consideration for exemption as used in this report, together with an application involving the long and short term expansion of Molson's Brewery. It is recommended that these applications be referred to the Technical Planning Committee for reports, with the applicants requested to submit copies of available plans in sufficient numbers for the purposes of the members of that Committee; direction would be given that all reports as received by that Committee be forwarded to the Chief Planner for his report on the application to the Committee on Buildings and Development.

Reporting would continue to involve an assessment of each application against the criteria set forth in Clause 1 of Report 25 of the Committee on Buildings and Development.

The report concludes with a series of recommendations as follows:

RECOMMENDATIONS:

1. That only those applications listed in Appendix "D" to this report be further considered for exemption, and that each application on this list be referred to the Technical Planning Committee for reports.

2. That the applicant in the case of each application listed

in Appendix "D" be requested to file all material normally required in connection with applications for rezoning, in those cases where this has not already been done.

3. That the Chief Planner be requested to report on each of the applications listed in Appendix "D" upon receipt of reports from the Technical Planning Committee, and to recommend whether or not the exemption should be granted, his recommendation to be based not only on the review of the application by the Technical Planning Committee, but also on his own evaluation of the intended development against the City's existing or emerging planning objectives for the area in which the development site is located, as they appear to him at the present time.

4. That the City Solicitor be requested to report on the methods of exemption as set forth under Section 5 of this report or other methods that may appear to him to merit consideration.

5. That all applications for exemption not listed in Appendix "D" be required to be filed and processed as standard rezoning applications, which will not be reported on until the development of interim criteria as stated on Page 4 of this report.

The applicants' property is one of those listed in App. "D" as eligible for further consideration for exemption.

There could be no clearer evidence that from the planning point of view, there is no intention to alter the existing zoning affecting the applicants' property.

In these circumstances the judgment of this Court in Re Bismark Holdings Ltd. et al. and City of Toronto et al., [1973] 3 O.R. 887, 38 D.L.R. (3d) 531, becomes decidedly relevant. I quote from that judgment at pp. 890-1 O.R., pp. 534-5 D.L.R.:

> This raises a type of question that our Courts are often called upon to decide. Under certain circumstances where certain requirements have been met there are cases where an application for mandamus is adjourned until the municipality has an opportunity of obtaining the approval of the Ontario Municipal Board to a proposed zoning by-law. The principles applicable to such cases have been very fully dealt with in Hammond and Hammond v. City of Hamilton, [1954] O.R. 209, [1954] 2 D.L.R. 604; City of Ottawa et al. v. Boyd Builders Ltd., [1965] S.C.R. 408, 50 D.L.R. (2d) 704; R. v. City of Barrie et al., Ex p. Bernick, [1970] 1 O.R. 200, 8 D.L.R. (3d) 52; Re Bruce and City of Toronto et al., [1971] 3 O.R. 62, 19 D.L.R. (3d) 386, and Re Donald Bye Excavating Co. Ltd. and City of Peterborough, [1973] 1 O.R. 139, 30 D.L.R. (3d) 415, and the cases therein cited. I also refer to the recent case of Re Cambridge Leaseholds Ltd. and City of Toronto et al., which is a judgment of Osler, J., released March 30, 1973, and not yet reported. My information is that an appeal is pending in that case and in any event I do not feel it necessary to rely on it [now reported, ante, p. 378, 37 D.L.R. (3d) 60]. I refer to a quotation from the judgment of Spence, J., for the Court in City of Ottawa v. Boyd Builders Ltd., supra, which is quoted frequently in cases such as the present one. It reads [at p. 410 S.C.R., p.705 D.L.R.]:
>
> > "An owner has a prima facie right to utilize his own property in whatever manner he deems fit subject only to the rights of surrounding owners, e.g., nuisance, etc. This prima facie right may be defeated or superseded by rezoning if three prerequisites are established by the municipality, (a) a clear intent to restrict or zone existing before the application by the owner for a building permit, (b) that council has proceeded in good faith, and (c) that council has proceeded with dispatch."
>
> That excerpt is very helpful but was directed to its particular facts. The more recent cases in the Court of Appeal, particularly R. v. City of Barrie et al., Ex p. Bernick, supra, and Re Bruce and City of Toronto et al., supra, indicate that the considerations in that excerpt may not be completely exhaustive, and somewhat wider consideration that indicated by it, may, in appropriate cases, be given to the equities as between the citizens of a municipality as represented by its council and the applicant

for a building permit.

In the present case we are all of the opinion that the crucial date is July 13th. On that date an application was made which was in compliance with the zoning and other requirements then existing in all matters of substance and at that time had been no indication whatsoever of an intention to change the applicable by-law. It has been held on more than one occasion, including Ottawa v. Boyd, supra, that these rather minor defects in details in such an application do not preclude the Court granting the remedy of mandamus subject to them being remedied. In the instant case we understand this has already been done.

The respondent city in my view had not satisfied all the requirements that would entitle it to an adjournment, under the principles discussed in the Boyd case. To do so it would have to show such a situation that having regard to all the evidence, the Court should exercise its discretion to adjourn the matter until the municipality has had an opportunity to bring the by-law before the Ontario Municipal Board so as to complete what was necessary from the by-law to be fully effective in law. Quite apart from the specific tests set out in the Boyd case, in our opinion, the equities as between the parties were such that no adjournment should be granted.

(Emphasis added.)

In the result then, the application by the respondents for an adjournment of the application for mandamus is refused.

As a corollary, it becomes unnecessary to deal with the motion by the applicants to quash By-laws 347-73 and 348-73.

It may not be amiss however, to raise serious doubts as to the propriety of municipal legislation that openly invites uneven application to citizens, private or corporate. Such legislation would appear to fly in the face of a principle enshrined in the Canadian Bill of Rights, namely, that all citizens are equal before the law. This legislation openly provides for special treatment for some, who for reasons that can never be truly known, will obtain exemptions from By-law 348-73 or amendments to the zoning by-law and others will be refused. Apart from the objection that it is designed to be unequally applied, despite the declared benevolent intention of such legislation, it is fraught with obvious possibilities for abuse.

I have considered the judgment of the Supreme Court of Canada in Sanbay Developments Ltd. v. City of London et al., 45 D.L.R. (3d) 403, pronounced April 29, 1974, but in view of my finding that it is unnecessary to deal with the motion to quash By-laws 347-73 and 348-73, it is not necessary to consider the implications of that judgment in so far as these by-laws are concerned.

There remains to be considered the deficiencies alleged by the respondents to exist with respect to the application for a building permit on November 2, 1973, in so far as the building by-laws and other matters not connected with the zoning by-law are concerned.

In my view these, even if valid, which with respect to some is more than doubtful, have either been resolved or can readily be resolved. I am satisfied that with respect to such deficiencies, if any still exist, amendments thereto are "specific and in train" which satisfies the test adopted by this Court in Re David Gallo Building Co. Ltd. and City of Toronto, [1973] 3 O.R. 892 at p. 903, 38 D.L.R. (3d) 536 at p. 547.

Having dealt with this matter generally, I now refer to the specific deficiencies alleged:

(a) "The proposed plans have not been approved by the Dept. of Labour." In support of this objection, counsel for the respondents argues that there must be compliance with s. 16(1) [now s. 17(1)], of the Industrial Safety Act, R.S.O. 1970, c. 220, [repealed by s. 46 of and replaced by Industrial Safety Act, 1971, Vol. 2, c. 43] before a building permit can be issued. That section reads as follows:

16(1) No person shall commence to construct or reconstruct

a building or add to or alter an existing building,

(a) that is to be or is used as a factory;

(b) that is to be or is used as a shop or office building and is to be or is more than two storeys in height; or

(c) that is to be or is used as a shop or office building and is to have or has more than 5,000 square feet of gross horizontal area in any storey enclosed within,

(i) exterior walls, or

(ii) any combination of exterior walls and interior fire-resistive walls without any opening to another building,

or install or alter in an industrial establishment any equipment, machinery or device designated by the regulations until the drawings and specifications thereof have been approved by an engineer of the Department.

The short answer to this objection is that it is no part of the business of the City of Toronto or its employees to see to the observance of this statute.

(b) "Certain of the work for the proposed building was to encroach over the street line onto the City property and such encroachment is not permitted unless the approval of the Department of Public Works is obtained."

This no doubt was a valid objection but that permission has now been obtained.

(c) "Certain of the tie-backs during the construction of the proposed building were to be placed into the property of adjoining property owners. Such encroachment is not permitted without the consent of adjoining land owners."

This again is a meddlesome objection of no validity. The matter is purely a civil one between the applicant and its neighbours. If the applicant trespasses he does so on his own responsibility and the municipality neither can nor should attempt to police the matter.

(d) "The area of unprotected openings, namely windows, on the north face of the building is in excess of the area

permitted."

This is a valid objection, but the applicants are ready to delete the extra windows if required to do so. Provision was made for them in the form of retail display windows, not originally planned, but to make the north face of the building more attractive to users of the projected municipal park area.

If the city wants them eliminated to comply with the building by-law, that must and will be done. The city may prefer to grant an exemption however.

(e) "The architectural plans filed with the application were lacking in detail and no structural plans were filed."

If this objection ever had any factual validity, the evidence is that all required plans have long since been filed.

In the result, therefore, an unconditional order directing the respondents to issue to the applicants a building permit providing for the construction of a building municipally known as Nos. 110 to 128 Bloor St. W. in accordance with the application for such permit originally filed with the respondents on June 8, 1973, but as revised on November 2, 1973, will issue.

The applicants are entitled to their costs.

Application granted.

Conin Construction Co. Ltd. v. Borough of Scarborough;

Premium Forest Products Ltd., Third Party

32 O.R. (2d) 500
122 D.L.R. (3d) 291

ONTARIO
HIGH COURT OF JUSTICE
SAUNDERS J.
13TH APRIL 1981.

ACTION to recover money paid to a municipality as a charge imposed under a municipal by-law.

A. C. Gluek, for plaintiff.

L. C. Mangoff, for defendant.

V. A. R. Lampkin, for third party.

SAUNDERS J.:-- The issue in this action is whether the plaintiff may recover an amount paid by it to a municipality as a charge imposed under a municipal by-law.

The plaintiff, Conin Construction Company Limited ("Conin") had agreed with the third party, Premium Forest Products Limited ("Premium") to demolish certain buildings and to construct a new building on lands owned by Premium in the Borough of Scarborough.

After several prior consultations with municipal officials, Conin applied on August 10, 1977, for a building permit to do the work. In the application form, Conin is described as the "Applicant" and Premium is described as the "Owner". Scarborough By-law 16830 under the Building Code Act, 1974 (Ont.), c. 74, requires an application for a building permit to be signed by the owner or his authorized agent and this was done by James W. Booth, the president of Conin, who described himself as the agent for the owner.

On September 2, 1977, Conin was told that the building permit was ready to be picked up. When Mr. Booth attended at the municipal offices to obtain the permit, he was advised for the first time that a charge under By-law 16902 would have to be paid before the permit would be issued.

It is agreed that By-law 16902 was enacted pursuant to s. 359 [since am. 1978, c. 87, s. 40(5)] of the Municipal Act, R.S.O. 1970, c. 284. Section 359 provides as follows:

359(1) With the approval of the Municipal Board, councils of local municipalities may, by by-law, define the class or classes of buildings to be erected or enlarged after the effective date of the by-law that impose or may impose a heavy load on the sewer system or water system, or both, by reason of which expenditures are or may be required to provide additional sanitary or storm sewer or water supply capacity that in the opinion of a council would not otherwise be required, and may impose upon the owners of such buildings a special charge or charges over and above all other rates and charges to pay for all or part of the cost of providing the additional capacity.

(2) The special charge or charges under any by-law shall refer specifically to sewage works or water works as defined in section 362, or to both, as the case may be.

(3) The proceeds of the charge or charges authorized by any such by-law shall be deemed to be a reserve fund established under section 308.

(4) The by-law may provide that the charge or charges imposed under it are a lien upon the land on which the building is erected, and may be collected in the same manner and with the same remedies as provided by this Act for the collection of real property taxes.

(5) Any charge or charges to be imposed under the by-law may be made payable on an application for a building permit or at any time thereafter.

(6) The following are exempt from any charge or charges

imposed under the by-law:

1. Every building on land exempt from taxation under any general or special Act.

2. Every building on land in respect of which an agreement has been entered into with the municipality under section 33 of The Planning Act or any predecessor thereof.

3. Every building or any land in respect of which a contribution to provide sanitary or storm sewers or water supply facilities has been made within the ten years previous to the application for a building permit, to the extent of the contribution so made.

4. Every residential building having not more than two dwelling units.

5. Every building, other than a residential building, with an inside floor area of not more than 3,000 square feet.

By-law 16902 was approved by the Ontario Municipal Board on July 6, 1976, and was in force at all relevant times. It provides as follows:

BOROUGH OF SCARBOROUGH

BY-LAW NUMBER 16902

being a by-law to impose a special charge on classes of buildings that impose or may impose a heavy load on the municipal sewer and water systems.

WHEREAS the erection or enlargement of residential, commercial and industrial buildings impose or may impose a heavy load on the municipal sewer and water systems by reason of which municipal expenditures are or may be required to provide additional sanitary and storm sewer and water supply capacity that would not otherwise be required;

AND WHEREAS authorization has been given to impose a special charge over and above all other rates and charges to pay for all or part of the cost providing such additional capacity;

AND WHEREAS The Ontario Municipal Board by its Order No. M 7661 approved the imposition of the special charges hereinafter set forth.

THEREFORE the Council of the Borough of Scarborough enacts as follows:--

1. THAT from and after the passage of this by-law, as a condition of the issuance of a building permit for the erection or enlargement of any of the classes of buildings set out in Column I of the Table, the charges in the amounts set out in Column II of the Table in respect of Storm and Sanitary Sewers and in the amounts set out in Column III of the Table in respect of Water Supply Facilities, shall be payable over and above all other rates and charges, prior to and as a condition of the issuance of such building permit.

[See original judgment for table]

2. THAT the lot area for commercial and industrial buildings be calculated as the minimum lot on which the building or addition could be erected under the coverage provisions of the appropriate Zoning By-law.

3. THAT the following are exempt from any charges imposed under this By-Law:

(a) Every building on land exempt from taxation under any general or special Act.

(b) Every building on land in respect of which an agreement has been entered into with the municipality under Section 33 of The Planning Act or any predecessor thereof.

(c) Every building or any land in respect of which a contribution to provide sanitary or storm sewers or water supply facilities has been made within the ten years previous to the application for a building permit, to the extent of

the contribution so made.

(d) Every residential building having not more than two dwelling units.

(e) Every building, other than a residential building, with an inside floor area of not more than 3,000 square feet.

4. THIS By-Law shall not be effective until approved by The Ontario Municipal Board.

5. THAT By-Law Number 17181 is hereby repealed.

The amount of the charge under the by-law, as calculated by the municipal officials, was $8,546.48 and that amount was paid by Conin to the borough on September 2, 1977. Conin contends that it should not have been charged because the by-law is invalid.

A by-law enacted pursuant to legislation similar to s. 359 and containing provisions of general application without reference to actual or estimated expenditures has been upheld: City of Ottawa v. Royal Trust Co. et al., [1964] S.C.R. 526, 45 D.L.R. (2d) 220. In another case, the validity of a similar by-law was not questioned: Re Rose Park St. James Investments Ltd. et al. and City of Toronto, a decision of the Divisional Court released on February 28, 1979, 23 O.R. (2d) 683, 97 D.L.R. (3d) 149. It would appear that a charge may be imposed even if, as in the case at bar, the particular construction could not possibly require expenditures to provide additional sanitary or storm sewers or water supply capacity that would not otherwise be required.

Conin attacks the by-law on two grounds. First, while s. 359 entitles the municipality to impose a charge on the owner, the by-law does not specify who is liable for the charge and as the charge is imposed as a condition to the issuance of a building permit, it might be levied on persons who are not owners. Second, while s. 359 provides that the charge may be payable on an application for a building permit, the section does not authorize imposing the charge as a condition precedent to the issuance of such a permit.

It is trite to say that a municipality may only act within the powers conferred on it by its enabling legislation. Section 359 authorized the imposition of a charge on an owner. The by-law does not state the person upon whom the charge is imposed nor does it refer to the enabling legislation. The charge is imposed as a condition to the issuance of a building permit. If the by-law is not defective for lack of specifying the person liable for the charge, such person must be ascertained by examining the wording of the by-law. It would seem that such person must be the applicant for the building permit as he must pay the charge as a condition of the issuance of the permit to him. The Building Code Act, 1974 does not specify who may apply for a building permit. It would seem that not only owners but other persons apply for building permits: see Re Chief Building Official for City of Toronto and Manolan Enterprises Ltd. et al. (1978), 22 O.R. (2d) 60, where an owner was not held responsible for the failure of a tenant to obtain a building permit. Scarborough By-law 16830, which regulates the issuance of building permits, requires that applications must be signed by an owner or his authorized agent but draws a distinction throughout the by-law between an owner and an applicant. The form of application used by the borough indicates that the owner and the applicant may be different persons. Bearing in mind that a municipality is presumed to intend to act within the powers conferred upon it and as it may be that in Scarborough an application for a building permit must be made either by an owner or his agent, I would hesitate to declare By-law 16902 invalid on the ground that it does not specify that the charge is imposed on the owner.

The second ground of attack is that the enabling legislation does not authorize the imposition of the charge as a condition of issuance of the permit. Counsel for the borough contends that s. 359(5) authorizes the municipality to make the payment of the charge a condition of issuance. It seems to me, however, that in imposing the condition the borough has done more than it was authorized to do by statute. A municipality may not impose a financial requirement as a condition without statutory authorization: see Re Sorokolit et al. and Regional Municipality of Peel et al. (1977), 16 O.R. (2d) 607, 78 D.L.R. (3d) 715, 2 M.P.L.R. 249 sub nom. Re Sorokolit et al. and

Mississauga. The by-law could have provided (although it did not) that the charge would be a lien on the land and might be collected in the same manner and with the same remedies as real property taxes. In my opinion, all the municipality was entitled to do under s. 359(5) was to provide that the charge would be payable on the application. The enabling legislation did not entitle the municipality to go the extra step and impose payment as a condition. The enabling legislation provides for collection by other procedures.

Plaintiff's counsel referred to Chateau Developments Ltd. v. City of Edmonton et al. (1977), 4 Alta. L.R. (2d) 19, 7 A.R. 612, 4 M.P.L.R. 25, a decision of the Trial Division of the Alberta Supreme Court. In that case, enabling legislation empowered the municipality to levy a development charge at the time that an application for development permit was received. The by-law provided for the imposition of the charge "at the time the development permit is issued ... and as a condition thereof" and required payment to be made prior to the issuance of the building permit. The provisions of the by-law imposing the charge and requiring it to be paid was held to be void. It should be pointed out that in other provisions in the enabling legislation dealing with similar charges, the municipality was authorized to refuse to issue a permit until the specified charge had been paid. The absence of such a provision in the part of the enabling legislation under consideration influenced the Court in making its decision. However, it should be observed that s. 359 does provide for a means of collection of the charge and it might be said that if the Legislature intended that the municipality should be able to impose the charge as a condition it could have so provided.

I recognize that if payment is not made at the time of issuance, the municipality might be able to resist an order for mandamus requiring it to issue a permit. In my view, that is a different matter and would depend on the circumstances in each individual case.

I therefore find that the by-law is invalid as exceeding the power granted by the enabling legislation and that the municipality therefore was not entitled to demand the payment charged to the plaintiff.

It must next be determined whether the moneys paid to the municipality may now be recovered. Subject to certain exceptions, money paid under a mutual mistake of law cannot be recovered. One exception is where the payment is made under the practical compulsion of necessity. Lord Reading C.J. in Maskell v. Horner, [1915] 3 K.B. 106, said of such a payment [at p. 118]:

> The payment is made for the purpose of averting a threatened evil and is made not with the intention of giving up a right but under immediate necessity and with the intention of preserving the right to dispute the legality of the demand.

A further exception is where the parties cannot be said to be in pari delicto. In Kiriri Cotton Co. Ltd. v. Dewani, [1960] A.C. 192, Lord Denning said at p. 204:

> If there is something more in addition to a mistake of law --if there is something in the defendant's conduct which shows that, of the two of them, he is the one primarily responsible for the mistake--then it may be recovered back. Thus, if as between the two of them the duty of observing the law is placed on the shoulders of the one rather than the other--it being imposed on him specially for the protection of the other--then they are not in pari delicto and the money can be recovered back ... Likewise, if the responsibility for the mistake lies more on the one than the other--because he had misled the other when he ought to know better--then again they are not in pari delicto and the money can be recovered back ...

In Eadie v. Township of Brantford, [1967] S.C.R. 573, 63 D.L.R. (2d) 561, the appellant as a taxpayer and inhabitant of the defendant corporation was dealing with the clerk-treasurer of the corporation. The Supreme Court of Canada held that the clerk-treasurer was under a duty towards the appellant and other taxpayers of the municipality. When that clerk-treasurer demanded payment of a sum of money on the basis of an illegal by-law, the Court further held that he was not in pari delicto to the taxpayer who was required to pay the sum even if the clerk-treasurer did not then know of its illegality.

Conin had entered into a fixed price contract with Premium which was required to be completed by June 1, 1978, subject to extension in the event of certain delays. Under the contract, Conin agreed to provide all necessary consents and permits from the municipality. In my opinion, a delay in obtaining a permit might not have entitled Conin under the contract to an extension of the completion date.

Conin was anxious to get the foundations and footings completed before the fall freeze-up and Mr. Booth felt that if this was not done, it would be difficult to complete the contract within the stipulated time. The work which was to be done involved taking down an existing building and constructing a new building which was disruptive to the employees and operations of Premium.

Until September 2, 1977, when he went to pick up the licence, Mr. Booth had never heard of the charge under By-law 16902. He was upset and tried to obtain an explanation from the municipal officials which was not given to his satisfaction. He was told that if he did not pay he would not get the permit which was an approach consistent with the terms of the by-law. If he was unable to obtain the permit and could not start the building on time, he was in danger not only of increasing his costs but also of breaking his contract. Commencing construction without a permit was not a practical alternative.

Mr. Booth concluded that he had no choice but to pay the charge as required but advised the officials that he would seek to recover the amount and was told, in effect, that he would be able to apply for such recovery.

The facts would seem to fit within the dictum of Lord Reading. The payment was made not with the intention of giving up a right but under immediate practical necessity and with the intention of preserving the right to dispute the legality of the demand. Furthermore, the circumstances under which the payment was demanded are similar to those in Eadie, supra. The officials of the defendant borough were not, in the circumstances, in pari delicto with the plaintiff.

I therefore conclude that the plaintiff is entitled to recover from the defendant the amount of $8,546.48 together with interest in accordance with the provisions of the Judicature Act, R.S.O. 1970, c. 228, and costs. The third party action will be dismissed with costs.

Judgment for plaintiff.

Csele v. Pelham (Town)

Between
Arthur Csele, applicant, and
Corporation of the Town of Pelham and Judge, Chief Building Official for the Town of Pelham, respondents

[1985] O.J. No. 1829
Suit No. 112/85

Ontario District Court - Niagara South Judicial District
Fleury D.C.J.
Oral Judgment: February 19, 1985

Counsel:
A.T. Lacavera, for the applicant.
G.F. Brooks, for the respondents.

[para1] FLEURY D.C.J. (orally):-- This is an application pursuant to s. 15 of the Building Code Act of Ontario, R.S.O. 1980, c. 51, to rescind a decision of the chief building inspector for the Town of Pelham.

[para2] The application was launched by notice of application dated February 7, 1985 and was originally returnable on Wednesday, the 20th day of February, 1985. As a result of conflicting Court schedules it was agreed between counsel that the matter could be heard on Tuesday, the 19th of February 1985 and I take it that neither counsel is objecting to that particular procedure. Is that correct? Mr. Brooks: Yes your Honour. Mr. Lacavera: Yes.

[para3] In considering this application I have had to accept certain facts outlined in the materials before me and I will summarize these facts very briefly.

[para4] The applicant in this case, Arthur Csele, purchased certain lands under an agreement of purchase and sale, dated, August 9, 1984. The agreement of purchase and sale contained certain conditions outlining the prerequisites that Mr. Csele was imposing on the closing of this transaction, one of these conditions being the obtention of certain "necessary absolute permits". I am not sure of the exact significance of the words used but generally speaking these could be considered as referring to the obtaining of building permits.

[para5] One or about the 5th day of November 1984, the applicant through his solicitor received a letter from the chief building official for the Town of Pelham the respondent in this particular application, indicating that the lands in question were zoned for commercial use, that services were available on Highway 20 which is in the immediate vicinity of the lands in question. The last paragraph of this letter contains the following statement:

> "The town will permit connection of the services, (water and sewer). However, Ministry of Transportation and Communication permits will be required".

[para6] The inescapable conclusion arising from a reading of this letter, dated, November 5, 1984, was that the Town of Pelham would raise no objections to the proposals put forth by the applicant. On the faith of this particular letter the conditions which had been included in the agreement of purchase and sale were withdrawn by a document dated the same day, November 5, 1984 and signed by Mr. Csele on November 6, 1984. That document is appended as Ex. C, in the application record of the applicant. A transaction was eventually completed and an application for a building permit was eventually forwarded to the Town of Pelham, that application for building permit being dated, January 10, 1985.

[para7] Subsequent to the application for the building permit and during the process of obtaining the usual clearance from various departments, the Town of Pelham was made aware of certain conflicting provisions between the Regional Municipality Official Plan and the town's own official plan. As a result of this, the same official who had written the November 5, 1984, letter, Mr. Judge, the chief building official, sent a letter to Mr. Csele indicating that the application for a building permit was refused. The reason for refusing the building permit was stated in the last paragraph of the first page of the letter dated, February 5, 1985, which is shown as Ex. E in the application record:

"The Zoning By-Law for the Town being By-Law No. 279 (1974), as amended, zones this property as Commercial General however, the Regional Municipality of Niagara's Official Plan designates the property as Good Tender Fruit Area and it would appear that this document supercedes the

Town's Zoning By-Law and thereby nullifies the Commercial General Zone."

[para8] It should be pointed out that no such comment or any similar paragraph was contained in the letter dated, November 5, 1984, which was forwarded to the applicant's solicitor.

[para9] It does appear and it was certainly made very clear during the argument of this application that what prompted the reversal of its position by the Town of Pelham, was the conflicting line of cases heard in the Supreme Court of Ontario, on applications similar to this one. Counsel were very helpful in providing me with a case brief and in very eloquently and expertly, analyzing the various provisions of the various lines of cases which have produced the somewhat confusing legal situation that appears to prevail today.

[para10] The first line of cases appears to date back to a conflict which occurred in the Regional Municipality of Ottawa-Carleton, in the year 1978. It is the Campeau Corp. v. Gloucester, (1978), 21 O.R. (2d) 4. In that particular decision, Mr. Justice Holland, of the Supreme Court of Ontario, was hearing three applications for injunctive relief. The injunction sought in those cases was to restrain the issue of a building permit for the construction of a shopping centre in a certain location located in the Township of Gloucester until those portions of the Official Plans of the Regional Municipality of Ottawa-Carleton dealing with the particular question of this shopping centre had been disposed of by the Municipal Board.

[para11] It seems very clear from my reading of the Campeau Corp. case, that the learned trial Judge was preoccupied, firstly, with the equities in that particular case. He makes a statement on p. 6 of the report which very clearly spells out some of the problems that could arise from a decision by the building inspector to issue the building permit and that statement is that, "the area will not support two regional shopping centres".

[para12] In the face of that conclusion that the learned trial Judge made I assume after hearing evidence on that aspect of the matter, he also comments on the fact that the township had apparently determined to issue a building permit to one of the applicants despite the known provisions of the proposed Regional Municipality of Ottawa - Carleton Official Plan.

[para13] He then goes on to consider the question of s. 6 of the Building Code Act which is the section which I am asked to interpret today and he distinguishes previous decisions on the basis of the alleged special character of a Regional Municipality Official Plan. In the Campeau Corp. case there appeared to be an obligation under the Regional Municipality Ottawa - Carleton Act for all of the local municipalities to amend their zoning by-laws to conform with the official plan of the regional municipality, and that obligation was to do so forthwith. The local municipality in that case, the Township of Gloucester had not amended the zoning by-law and the learned trial Judge concluded that there was a statutory obligation imposed upon the municipality to amend its by-laws and that this statutory obligation as contained in the Regional Municipality of Ottawa - Carleton Act, R.S.O. 1970, c. 407, amounted to what could be described as, "other applicable law", as contained in s. 6(1)(a) of the Building Code Act of Ontario.

[para14] This decision was appealed and the Court of Appeal in a very succinct judgment simply affirmed the decision of the trial Judge and did not provide the legal profession with much clarification as to how the Court of Appeal had reached that particular decision.

[para15] I am satisfied that the learned trial Judge in the Campeau Corp. case was dealing with different principles than the ones that I am asked to consider today. The principles he was looking at involved primarily an application for injunctive relief which calls in the equitable jurisdiction of the Supreme Court of Ontario. Any applicant for equitable remedies must come to Court with clean hands. I am satisfied that in that particular case the learned trial Judge concluded that some of

the applicants for mandamus did not come to Court with clean hands. He states at p 9 of the report; "this result it seems to me is also equitable, the municipalities and developers are engaged in a contest for the right to construct a shopping centre and it is only fair that the matter proceed in an orderly way for proper evaluation before the Ontario Municipal Board". I am satisfied that those factors had a major impact on the trial Judge's decision and on his interpretation of s. 68(7) of the Regional Municipality of Ottawa - Carleton Act.

[para16] The second line of cases I have had to look at is a more recent one and stems from a decision of Mr. Justice Southey speaking for the Divisional Court in Re Woodglen & Co. and North York (1984), 47 O.R. (2d) 614, and it appears to be on all fours with the situation which I have to decide this morning. In that particular decision the conflict was between the local official plan and the zoning by-law enacted under a predecessor of the official plan that was apparently being violated in that particular case. In that case, Mr. Justice Southey in summarizing the law of Ontario as it relates to official plans indicated very clearly at p. 617 O.R. that official plans are a recommendation, or statement of intention only which may or may not be implemented by the municipality by the enactment of appropriate zoning by-laws.

[para17] In reviewing the grounds for this decision I also referred to the Planning Act, S.O. 1983, c. 1, and to the definition section in s. 1(h) of the Planning Act, which defines that:

> " 'official plan' means a document approved by the Minister containing objectives and policies established primarily to provide guidelines for the physical development of a municipality, or a part thereof, or an area that is without municipal organization while having regard to relevant social, economic and environmental matters."

[para18] I think it is trite law to say that official plans are basically an outline of long-term objectives proposed by a municipality and certainly do not take any legal significance until they have actually been implemented by the passage of appropriate zoning by-laws.

[para19] I am satisfied that there is a requirement for the passing of a by-law even though a municipality may wish to amend the official plan. In this case, I was told during the hearing of this application that the Town OF Pelham had proposed revisions to its official plan and that these revisions were presently before the Minister and this was raised as an element and I was urged to consider this in determing whether or not the building permit should be issued. Section 24(2), of the Planning Act of of 1983, very clearly provides for this very eventuality. It says:

> "Where a council has adopted an amendment to an official plan, it may before the Minister has approved the amendment, pass a by-law that does not conform with the official plan but will conform therewith if the amendment is approved, and the by-law shall be conclusively deemed to
>
> have conformed with the official plan on and from the day it was passed if the Minister approves the amendment to the official plan;".

[para20] Therefore, in this particular case had the Town of Pelham been concerned about the potential for redevelopment of this particular area, or of all the areas, as they were affected by the regional municipality official plan it certainly could have passed a by-law which although it would not have conformed to the existing official plan would have conformed to the proposed official plan.

[para21] I am also aware of the provision of s. 27 of the Planning Act 1983, which provides for the overriding power of a regional municipality to in effect enact local zoning by-laws and amendments to the local official plans:

> "Where the local municipality fails to act where there is a conflict between the regional plan and the local plan;".

[para22] The remedies provided in s. 27(2) are remedies that are available to regional municipalities and if they do not avail themselves of these remedies then they can hardly later on criticize the local municipalities for acting in accordance with existing zoning by-laws which have not been altered either by the local authorities, or by the regional authorities.

[para23] It seems to me that the legal background has changed considerably since the Campeau decision and that in light of the present legislation it would not be necessary anymore to apply for a mandamus or a prohibition order to prevent what was happening in the Campeau situation. It may very well be that the Campeau decision prompted the amendments, or some of the amendments that were made to the Planning Act.

[para24] I note that in the Woodglen case, there had been first of all a refusal by the Divisional Court to hear an application for a mandamus, it was felt that there were other appropriate remedies available to the applicant in that case and that the other remedies should be followed. That also lends some authority to my interpretation that the background of the law has changed and therefore makes it a much clearer area in which to reach a decision on this point.

[para25] I am in complete agreement with the ratio of the Woodglen case, I consider that Mr. Justice Southey has accurately expressed the law as it presently stands in Ontario. I am satisfied that as a Judge sitting in an appeal under s. 15(1), of the Building Code Act, I have very little discretion; that my jurisdiction is to consider the decision that was made by the chief official under the Act and to rescind, or affirm the order, or decision of the inspector, or chief official and to order what I consider that the inspector, or chief official should have done if he had properly interpreted the Act.

[para26] I am satisfied that in this case there is no applicable law that would be contravened if a building permit were to issue in the instant case and therefore that the building inspector was in error in refusing to grant the building permit and I therefore find for the applicant and I order that a building permit be issued forthwith.

FLEURY D.C.J.

Czumak v. Etobicoke (City) (Ont. Ct. (Prov. Div.))

Between
John Czumak, Peter Czumak and Cherry Park Contracting Inc.,
Appellants, and
City of Etobicoke, Respondent

[1994] O.J. No. 2247
DRS 95-01084

Ontario Court of Justice - Provincial Division
Toronto, Ontario
Fairgrieve Prov. Div. J.
September 16, 1994.

Mark Carniglia, for the Appellants.
J.R. Hart, for the Respondent.

[para1] FAIRGRIEVE PROV. DIV. J.:-- The three appellants are two brothers, John and Peter Czumak, and their incorporated home renovation business, Cherry Park Contracting Inc. On February 9, 1994, they were convicted by a justice of the peace in the Provincial Offences Court at Etobicoke of all 41 charges against them under the Building Code Act, S.O. 1992, Chap. 23. The same day, fines totalling $454,500 were imposed. They have appealed now against all of the convictions and sentences, with the exception of one conviction for each of them on a charge relating to construction that was not in accordance with a building permit that had been issued. The abandoned that particular appeal when the appeals were argued on August 15, 1994.

[para2] The number of convictions and the magnitude of the fines imposed convey, in my opinion, a completely wrong impression of the seriousness of the appellants' conduct, and it will quickly become apparent that I take a view of this case that differs substantially from that taken by the justice at trial. In fact, I see no reason to defer a statement of the inescapable conclusion that the learned justice of the peace both fundamentally misinterpreted the provisions of the statute and misapprehended the legal significance of the evidence she heard. Moreover, in my view, she went on to impose fines which were grossly disproportionate to the gravity of the offences she erroneously found had been committed, and she ignored the principles which govern sentence in cases of this kind.

[para3] In fairness to the justice of the peace at trial, however, it should be noted that the defendant, John Czumak, appeared before her without counsel and as agent for the other unrepresented defendants. As a consequence, the trial court did not have the benefit of the very able and helpful submissions that were made by Mr. Carniglia on the appeal. As well, some of the provisions of the Building Code Act can be regarded as rather technical in nature and might, understandably, not have been very familiar to the presiding justice. This was the sort of case, then, where any court would have found itself particularly reliant on the assistance of counsel to identify the issues and to argue the respective positions taken. The absence of defence counsel at trial made the task for the justice of the peace much more difficult than it might otherwise have been. Having said that, however, it obviously did not relieve the court of its duty to apply the law properly and to deal with the defendants fairly: see R. v. McGibbon (1988), 45 C.C.C. (3d) 334 at p. 347 (Ont. C.A.).

Overview of the Case

[para4] Although it will still be necessary to review the evidence in some detail so that it can be related to the various charges, it might be helpful to put matters in context first by providing a brief overview of the case. Without wanting to oversimplify, I think it is fair to say that the whole case really boiled down to a situation where the defendants, making renovations to their family's house, proceeded to make some changes to a second storey addition which were not in accordance with the plans which had been approved by the municipality at the time that work commenced. These changes were described as an additional window on one side of the house, an enlargement of the master bedroom, and the movement of a second-floor ensuite bathroom from its

original position. It was conceded that this work started before the architect had finished revised drawings for submission to the City, and before a new building permit could be issued. It was pointed out on the appeal, although not necessarily understood at trial, that the City was obliged to grant approval of these changes and to issue the new permit, because the revised construction complied with all of the legal requirements. Approval was ultimately given and the revised permit was issued, but not until at least two weeks after the work had commenced.

[para5] During the period before the revised permit was obtained, an "Order to Comply" was issued by a building inspector, and some work continued thereafter. There was no proof, however, that any of the work after the "Order to Comply" was issued was not in accordance with the original building permit. In any event, the fact that work continued led to a "Stop Work Order" being posted. Even after this "Stop Work Order", some construction was observed to have continued.

[para6] On seven occasions from October 22 to November 1, 1993, Mr. Chalmers, the senior building inspector, attended at the house, but entry was refused to him by one or other of the defendants. At the same time, although Mr. Chalmers testified that he had not been aware of it before trial, other inspectors were allowed to enter so that they could conduct inspections, and they approved the work that had been done. Mr. Chalmers was finally allowed to enter on November 1st, but only after he produced a warrant for entry or search, and only after Mr. Czumak had spoken to his lawyer concerning the warrant.

[para7] On the basis of those facts essentially, the defendants were convicted of the 41 offences and fined, as already stated, a total of $454,500, as follows:

[See original for chart]

The Evidence

[para8] There was very little dispute concerning the facts. The prosecution called two witnesses, Randy Chalmers, the senior building inspector, and Enzo Galli, a building inspector, both employed by the City of Etobicoke. John Czumak gave evidence for the defence, not so much to challenge the evidence given by the prosecution witnesses as to explain the defendants' conduct from his perspective. The justice of the peace was not really called upon to make findings of credibility, given that all three witnesses were obviously honest, reasonable people who had provided reliable and generally consistent evidence.

[para9] John Czumak and Peter Czumak lived with their parents in a house located at 1 Sunnydale Drive in Etobicoke. The parents had bought this house in the summer of 1993, and the two brothers, as part of their corporate business, proceeded to renovate the house that Fall, converting what had been an ordinary suburban bungalow into what the photographs showed to be a handsome two-storey dwelling. Mr. Czumak testified that as well as enlarging and improving his family's accommodation, the renovated house was intended to provide a showpiece of their craftsmanship for prospective clients. Local approval had been given for the construction, including the second storey addition, after drawings had been filed, and work had started under the building permit which had been issued by the City on September 1, 1993.

[para10] On September 27th, in answer to a neighbour's complaint that a window had been installed upstairs on one side of the house that had not been shown on the approved drawing, Mr. Galli went to the house, although he did not say what, if anything, he did on that occasion. On October 12th, Mr. Galli was called by the defendants to come to the house to conduct what he described as a "framing inspection". Mr. Galli testified that he found the work to be well done, although he did not have the approved plans with him at that time. The next day, Mr. Galli received a report from the heating inspector that the pipes and a partition did not line up according to the approved drawing, and that the defendants had apparently extended the master bedroom on the second floor over the back of the garage further than had been approved. On October 14th, Mr. Galli called Peter Czumak to ask him about what had been reported to him. Mr. Czumak

acknowledged that the report was accurate, and advised him that they were having revised drawings prepared that he would submit to the City. Mr. Galli also testified that they had some minor plumbing and heating work to be rectified or which

required revised drawings.

[para11] Later the same day, October 14th, Mr. Galli attended the property and observed himself that a bedroom had been made larger and that the bathroom had been moved from its original position on the drawing to a spot over behind the garage. Mr. Galli then issued what he referred to as "a compliance". This "Order to Comply", dated October 14, 1993, was filed as an exhibit. It read, in part, as follows:

> An inspection of the property/building at the above location has disclosed the following contravention(s) of the Building Code Act, R.S.O. 1992 [sic] and/or Ontario Regulation 413/90 as amended. In accordance with subsection 12(2) of the Act, you are hereby directed to comply with the corresponding provisions by taking corrective action.
> Act/Code Reference: Ontario Building Code Act, Section 8(13)
>
> Contravention: No construction except in accordance with approved plans
>
> Remarks: 2nd floor addition not per approved plans. Cease all work and submit revised plans showing deviations and changes for authorization by the Chief Building Official. [emphasis added]
>
> [Above] shall be carried out forthwith. [emphasis in original]

[para12] Mr. Galli next visited the house on October 20th, after checking with his office to find that no application for revision had been received; in fact, his records showed that the application was not received until the following day, October 21st When Mr. Galli attended on October 20th, he found that "work was still in progress" and that "it had been drywalled and... taping was going on". The work at that time was not otherwise described.

[para13] Mr. Chalmers, the senior inspector, went to the address the next morning, October 21st, and posted a "Stop Work Order", signed by himself and the Chief Building Official. This document was also entered as an exhibit Under very large lettering saying "Stop Work Order", it read as follows:

> In accordance with Subsection 14(1) of the Building Code Act and pursuant to the Order to Comply issued by Inspector Enzo Galli dated October 14, 1993, it was found that on October 21, 1993, the contraventions identified on the said Order have not been rectified. You are hereby ordered to cease all work immediately except for any corrective work necessary to eliminate the contraventions and any work necessary to alleviate hazardous conditions.

When asked by the prosecutor what the purpose of the "Stop Work Order" had been, Mr. Chalmers replied that work had continued in contravention of the "Order to Comply" which had been issued on October 14th. Mr. Chalmers stated, "The Order was issued on October 14th and work was continuing up until October -- and on October 21st". He also testified that on October 21st, he observed that "there was masonry work continuing on the front of the house and there were workers inside working on drywall", and he produced a photograph taken that day showing workmen doing masonry work on the second floor balcony at the left front of the house. It is of some significance, I think, that the stone balcony was in fact part of the original approved plan, and that there was no evidence of where in the building the continuing drywall work was being done.

[para14] Because the defendants were convicted of numerous offences allegedly committed over the following days, it is necessary to state briefly what occurred on each of those dates.

[para15] Mr. Chalmers testified that when he returned to the house on the Friday morning, October 22nd, the day after the "Stop Work Order" was posted, he observed workmen cleaning and removing construction debris from the house. He also stated that he noted that the building permit card was not posted, as required, in a conspicuous place, and he asked that it be posted on the site. Mr. Chalmers returned during the afternoon of the same day and spoke to Peter Czumak, who told him that there would be no entry allowed into the house. The reasons given then by Mr. Czumak were that there were people in the house, and he was not prepared for an inspection because he was applying for a new permit that had not yet been issued. Peter Czumak told Mr. Chalmers that he would allow him entry the following Monday morning.

[para16] On Monday, October 25th, Peter Czumak phoned Mr. Chalmers to cancel the inspection and to make further inquiries concerning the progress with his permit. Mr. Chalmers attended nonetheless, bringing Mr. Galli with him. Although a person, identified by Mr. Chalmers simply as "the builder", told him that he-would allow him entry as long as he left his camera outside, which Mr. Chalmers agreed to do, he was then refused entry to the property. Mr. Chalmers took photographs of masonry work going on on the second floor balcony and the front porch of the house. Mr. Chalmers also observed that the "Stop Work Order" was still in place, but the building permit had not been posted.

[para17] The next day, October 26th, Mr. Chalmers again spoke to Peter Czumak on the phone to make him aware that work was continuing in violation of the "Stop Work Order" and that they were being denied entry into the house. Mr. Czumak repeated that there would be no entry allowed into the house. Mr. Chalmers and Mr. Galli went to the house anyway. At that time, Peter Czumak told them that he would not allow them to enter, saying that he thought people were sleeping in the house, and that they were trespassing and should not come on the property again. Mr. Chalmers testified that on that day he observed some soil removal and grading work going on at the front of the house. The building permit card was still not posted, according to Mr. Chalmers' evidence.

[para18] The following afternoon, on October 27th, Mr. Chalmers returned to the house Peter Czumak told them again that they were trespassing. Mr. Chalmers testified that work was continuing on the front balcony, and that he heard the noise of hammering and skilsaws coming from inside the house. He also observed that the building permit card was still not displayed, although a Cherry Park Contracting Inc. advertising sign had been put up. In terms of the additional work since his last visit, Mr. Chalmers pointed to the photographs which showed changes to the front pillars and the floor of the second floor balcony.

[para19] Mr. Chalmers went back the next day, October 28th, to find that workmen were putting down marble for a stone floor on the balcony. Peter Czumak told him to get off the property, and not to trespass. He also warned Mr. Chalmers that if he entered the property again, he would be removed.

[para20] The following day, Friday, October 29th, Mr. Chalmers and Mr. Galli went to the house and found that the sodding in the front yard had been completed. Mr. Chalmers also testified that they were refused entry to the property again, this time by John Czumak. The building permit card, he said, was still not posted.

[para21] Also on October 29th, the additional permit that had been applied for on October 21st was issued. It was accepted that this permit provided proper authority for the changes from the original approved drawing. Mr. Chalmers testified that according to the Building Code Regulations, the "Stop Work Order" would have been lifted with the issuance of the new permit.

[para22] Mr. Chalmers returned to the house the following Monday, November 1, 1993, with a warrant. He testified that he was not given entry on his first attempt John Czumak testified that he told the inspectors to wait while he called his lawyer to seek advice concerning the validity of the warrant, and that there was a 20-minute delay before he allowed Mr. Chalmers in. Mr. Chalmers ultimately found that the additional permit had been issued the previous Friday.

[para23] Mr. Galli agreed in cross-examination that he had been told by both Peter Czumak and John Czumak that he could attend the property at any time to inspect it, as long as he was not with Mr. Chalmers. Mr. Galli further testified that in fact he had gone there without Mr. Chalmers after the "Stop Work Order" had been posted, and that he had been allowed in on those occasions. John Czumak testified that the defendants never denied access to any inspector except for Mr. Chalmers. In reply, Mr. Chalmers conceded that he had been unaware of Mr. Galli's visits until the morning of trial. The reason why they did not want to let Mr. Chalmers in, according to Mr. Czumak's evidence, was that when the senior inspector first attended, he had wanted to come in with a camera, and they did not want him to take pictures. Mr. Czumak testified that Mr. Chalmers had replied that "he didn't need to take pictures to gather evidence for court, so we felt threatened at that point in time, so we never let him in".

[para24] Mr. Czumak also testified that all the work that was done after the "stop work" did not worsen or "affect the situation at all". He stated that the work on the balcony continued because it was a hazard with no railings there, and that they kept going with other work because his whole family was living in the dwelling and they were anxious to complete it before the cold weather.

[para25] With respect to the delay in obtaining approval for the changes and the revised permit, Mr. Czumak explained that the new drawings took some time to be produced by their architect, and that the approval process, which a clerk behind the counter had said might take two or three hours, ended up taking two weeks. The preparation of the revised plan, he testified, had started before the "Order to Comply" was issued. Mr. Czumak also testified as to his knowledge of other projects where revisions were approved on the spot, without the need to submit revised plans, but he did not suggest that even if that had occurred on other occasion, it would have provided them with any defence to the charge here of construction that was not in accordance with the approved plans.

The Convictions

(a) Construction not in accordance with approved plans

[para26] At the commencement of the hearing of the appeal, as already stated, the defendants abandoned their appeals from their convictions on the counts against each of them that on October 14, 1993, they committed the offence of "constructing or causing to be constructed a building addition except in accordance with the plans and specifications and other information on the basis of which a permit was issued or any changes thereto authorized by the Chief Official", contrary to sections 8(13) and 36 of the Building Code Act. Those appeals are accordingly dismissed as abandoned.

(b) Failure to comply with the Inspector's Order

[para27] The three defendants were each convicted of an offence, contrary to s. 12(2) of the Act, alleged to have been committed on October 20, 1993. The section reads as follows:

> 12(2) - Order. An inspector who finds a contravention of this Act or the building code may make an order directing compliance with this Act or the building code and may require the order to be carried out immediately or within such time as is specified in the order.

Failure to comply with such an order is made an offence by s. 36(1)(b) of the Act:

> 36(1) - Offences. A person is guilty of an offence if the person,
>
> ...
>
> (b) fails to comply with an order, direction or other requirement made under this Act; ...

[para28] The difficulty with the "Order to Comply" issued by Mr. Galli on October 14th was that it included a direction

to "cease all work" that Mr. Galli was not authorized by the statute to give. While he could have ordered no further construction except in accordance with the building permit, that is not what his "Order to Comply" said, nor does it appear to have been the interpretation given to the Order by Mr. Chalmers or by the learned justice of the peace at trial. The charges themselves were framed in a way that alleged a failure to comply with Mr. Galli's order, inter alia, "requiring that all work cease".

[para29] The only evidence concerning October 20th was, as already noted, that unspecified "work was still in progress" and that "it had been drywalled and... taping was going on". There was no evidence that any of this work on October 20th was not in accordance with the original building permit. In convicting the defendants on the basis of that evidence, the only evidence before her, the learned justice must have considered it sufficient that any work at all after the "Order to Comply" had been issued made out the offence. She was in error, in my respectful view, if that was her assumption.

[para30] The other reference in the charge to Mr. Galli's "Order to Comply" was its "requiring that ... revised drawings be submitted for authorization by the Chief Building Officer". Indeed, Mr. Galli's Order required that this be done "forthwith". The unchallenged evidence, however, was that the defendants' architects were in the process of preparing the revised drawings when the Order was issued, and they were in fact submitted within seven days. I do not think that it would be reasonable to interpret "forthwith" in the context of Mr. Galli's Order to mean simply "immediately", as if such drawings would instantly materialize upon their being demanded. The Order must be read, in my opinion, as a direction to be complied with "as soon as reasonably practicable" in the circumstances which, in this case, meant as soon as the architectural drawings were completed and available for submission. In R. v. Thomsen (1988), 40 C.C.C. (3d) 411 at pp. 419-20 (S.C.C.), LeDain J. referred to the authorities supporting the appellant's submission there that there is no difference between forthwith" and "forthwith or as soon as practicable", and he went on to quote, without expressing any disagreement, from the judgment of Finlayson J.A. in R. v. Seo (1986), 25 C.C.C. (3d) 385 at p. 409 (Ont. C.A.):

> In my opinion, there is no difference in meaning between "forthwith" and "forthwith or as soon as practicable". Both mean the same thing having regard to the nature of the test and the condition that it is designed to monitor. The breath sample under s. 234.1 or s. 235 is to he provided as quickly as it effectively can be and if this means waiting for the device to arrive or taking the detained person to a place where there is such a device, this would be within the definition of "forthwith". It does not mean "immediately".

Even if the later decision of the Supreme Court of Canada in R. v. Grant (1991), 67 C.C.C. (3d) 268, casts doubt on that conclusion in the particular context of roadside screening tests, I do not think it changes the meaning to be ascribed to "forthwith" in the context here.

[para31] Once Mr. Galli's "Order to Comply" is properly construed, I do not think the evidence permitted a finding that this part of the Order had not been complied with. In any event, the learned justice in her reasons gave no indication that she based her finding of guilt concerning these counts on the failure to submit drawings, to which she made no reference at all. Rather, it was apparent that the convictions resulted from her conclusion, which was wrong in my view, that any continued construction established the offence charged.

[para32] In my opinion, the prosecution failed to prove any failure to comply with the Order issued on October 14th by Mr. Galli, if the Order is interpreted in a way that conforms with the authority he had under s. 12(2) to make it. It follows that the appeal from the convictions in relation to that offence must be allowed, the convictions set aside, and acquittals entered.

(c) Contraventions of the "Stop Work Order"

[para33] The three defendants were each convicted of five counts alleging violations of the "Stop Work Order" that had been posted by Mr. Chalmers on October 21, 1993. These offences were found to have been committed on the five days following the posting of the Order. The provisions regarding a "Stop Work Order" are set out in s. 14 of the Act, as follows:

> 14.-(1) Stop Work Over. If an order made under section 12 or 13 is not complied with within the time specified in it, or where no time is specified, within a reasonable time, the chief
>
> building official may order that all or any part of the construction or demolition cease.
>
> (2) Service. The order shall be served on such persons affected thereby as the chief building official determines and a copy shall be posted on the site of the construction or demolition.
>
> (3) Timing. The order is effective from the time it is posted under subsection (2).
>
> (4) Effect of Order. If an order to cease construction or demolition is made, no person shall perform any act in the construction or demolition of the building in respect of which the order is made other than work necessary to carry out the order made under section 12 or 13.

The appellants challenged both the validity of the "Stop Work Order" and the adequacy of the evidence to establish violations of it.

[para34] Mr. Hart fairly conceded that there was no evidence of any "construction or demolition" on October 22, 1993, and that the defendants should not have been found guilty of the three charges relating to that date. The only evidence concerning October 22nd was that there was some "cleaning" and "removal of debris" observed. Although it clearly would have been preferable for the prosecutor to have made the same concession at trial, and for the justice to have examined the evidence more carefully before entering the convictions and imposing $31,000 in fines for this innocuous conduct, Mr. Hart's concession was still appropriate. The appeals against the convictions for violating the "Stop Work Order" on October 22, 1993, are accordingly allowed, the convictions set aside, and acquittals entered.

[para35] Similarly, with respect to October 26th, another of the five alleged offence dates, the only evidence in support of the charge was Mr. Chalmers' evidence that when he went to the house, he observed some "soil removal" and "grading work" going on in front of the house. "Construction" and "demolition" are both defined in s. 1(1) of the Act, and the definitions do not encompass the work in the yard observed by Mr. Chalmers. The offences alleged to have been committed on October 26th were not proved, and the appeals relating to those counts will be allowed, the convictions set aside, and acquittals entered.

[para36] With respect to the three remaining dates on which the "Stop Work Order" was alleged to have been contravened, October 25th, 27th and 28th, the appellants' position was that an offence could be committed only if the "Stop Work Order" was valid. One of the conditions required by s. 14(1) for a "Stop Work Order" is a failure to comply with an order under s. 12, in this case, Mr. Galli's Order issued on October 14th. Mr. Carniglia submitted that since no failure to comply with Mr. Galli's Order had been proved, both because no unauthorized work was proved to have been done after the Order was made and because the revised drawings had been filed on October 21st, the chief building official had no authority to make the "Stop Work Order". I agree with this submission. If the "Stop Work Order" was made outside the authority conferred by the statute, then there was no obligation on the part of the appellants to comply with it: see Regina v. Grant supra, per Lamer C.J.C. at pp. 276-7.

[para37] The appeals against all of the convictions for failing to comply with the "Stop Work Order" must be allowed,

then, with acquittals being substituted for the convictions that are set aside.

(d) Failing to assist entry

[para38] The two individual defendants were each convicted on seven counts alleging violations of s. 19(3) of the Act. The section reads as follows:

> 19.-(3) Assistant. Every person shall assist any entry, inspection, examination, testing or inquiry by an inspector or chief building official in the exercise of a power or a performance of a duty under this Act.

There was evidence that either Peter Czumak or John Czumak had, on six of the seven specified dates; refused Mr. Chalmers entry to the property. On the seventh date, November 1, 1993, John Czumak did not initially allow Mr. Chalmers' entry, but did so only after a delay of about 20 minutes, after he had spoken to his lawyer.

[para39] The issue of whether each individual defendant was a party to an offence allegedly committed by his brother was not raised either at trial or on the appeal. Although on each occasion involving a refusal to allow Mr. Chalmers entry, only one of the brothers dealt with him, there might have been evidence sufficient to establish that both were parties to each offence, within the meaning of s. 77 of the Provincial Offences Act, R.S.O. 1990, c. P.33. I do not think that such a conclusion was inevitable, however, and I think that before convicting both persons on each of the counts, the learned justice ought to have at least analyzed the evidence in this regard. Her bald statement that "I find you both liable, responsible and guilty" was not, it seems to me, adequate in the circumstances. In any event, I think the appeals from these convictions can be decided without considering the point.

[para40] An offence under s. 19(3) requires that an inspector, in this case Mr. Chalmers, be engaged "in the exercise of a power or a performance of a duty" under the Act. The prosecutor's position at trial was that on each occasion when Mr. Chalmers attempted to gain entry to the premises, he was exercising his power under s. 12(1) of the

Act, which reads as follows:

> 12.-(1) Inspection. An inspector may enter upon land and into buildings at any reasonable time without a warrant for the purpose of inspecting the building or site in respect of which a permit is issued or an application for a permit is made.

Although not brought to the attention of the learned justice of the peace, another provision of the Building Code Act is also relevant. Section 16(1) provides:

> 16.-(1) Entry to Dwellings. Despite sections 8, 12 and 15, an inspector shall not enter or remain in any room or place actually being used as a dwelling unless,
>
> (a) the consent of the occupier or a warrant issued under this Act is obtained;
>
> (b) the delay necessary to obtain a warrant or the consent of the occupier would result in an immediate danger to the health or safety of
>
> any person;
>
> (c) the entry is necessary to terminate a danger under subsection 17(3); or
>
> (d) the requirements of subsection (2) are met and the entry is necessary either to remove a building or restore a site under subsection 8(6) or to remove an unsafe condition under clause 15(5)(b).

Further, s. 21(1) provides for the warrant referred to in s. 16(1)(a):

> 21.-(1) Warrant for Entry and Search. A provincial judge or justice of the peace may at any time issue a warrant in the prescribed form authorizing a person named in the warrant to enter and search a building, receptacle or place if the provincial judge or justice of the peace is satisfied by information on oath that there is reasonable ground to believe that,
>
> (a) an offence under this Act has been committed; and
>
> (b) the entry into and search of the building, receptacle or place will afford evidence relevant to the commission of the offence.

[para41] In his submissions before the defendants were found guilty of all the offences, Mr. Czumak made the following argument:

> ... All my inspections were passed by each individual inspector, except for the heating inspector and he was never denied access. My plumbing inspection was passed, my electrical, my insulation inspection was passed, so the only thing left to check to Code, which there is no Code for, is the heating inspection.
> As for rights to come into the house, I'm not sure if people have the right just to walk into somebody's dwelling whenever they please, while somebody's living there. That will be all, thank you.

[para42] In her reasons for judgment, the justice of the peace stated as follows:

> Just to get the formalities out of the way, Mr. Czumak, I find in each case the Crown has made its case out beyond any doubt, and I convict both Peter and yourself and this company.
>
> What has caused me tremendous concern, sir, is that I see the exhibits and I see that you are a registered party to the company known as Cherry Park Contracting Inc. And I am concerned and alarmed that you would conduct yourself in the fashion you have. Denying access to Mr. Chalmers, notwithstanding the fact that he is indeed a representative of the City of Etobicoke and a building inspector.
>
> As for your last comment, sir, I am looking at the Building Code, section 18. Under section 18, it is the powers of the inspector, and I am quoting ...
>
> You had no right to deny Mr. Chalmers access merely by virtue of what you feel is justifiable, because he had a camera. And even when he chose to set the camera aside, sir, again you denied him access. Now, I am going to go through each day and I am going to endorse on the record what my findings are, sir, but generally speaking, it is alarming to hear that you can stand before me and feel that you have done nothing wrong.
>
> Indeed I find that each turn, sir, at each occasion, you obstructed wilfully the inspection of the property on Sunnydale, because for no other reason than you thought you could. You forced the City of Etobicoke to take the drastic step of obtaining a search warrant, because you refused access inside the building. And again, sir, considering yourself to be a professional in the contracting business, that causes me concern. ...
>
> ...
>
> It appears that your defence has been one of it is well, it was inconvenient to allow them in, because people were living in the building. Whether or not people were living in the building, it does not prohibit the inspectors authority, rights or obligations to enter the property.

[para43] The evidence was uncontradicted both that the property was at all times a place actually being used as a dwelling occupied by the Czumak family, and that access to the premises was given to all of the City inspectors, except for Mr. Chalmers or persons in his company, whenever they sought it. While the apparent personality conflict between the senior building inspector and the defendants may have been unfortunate, I do not think it warranted the finding that the defendants had defied the City's authority or disregarded their obligations under the statute in the way the justice suggested.

[para44] In any event, it is apparent that s. 16(1) prohibited Mr. Chalmers from entering the dwelling without having either the consent of the occupier or a warrant. Prior to November 1st, he had neither. While one can readily understand that the justice of the peace would not be familiar with the particular section of the Building Code Act, it is a little surprising that she would consider that a municipal building inspector would have statutory authority, without prior authorization and in the absence of exigent circumstances, to override the reasonable expectations of privacy that occupants of dwelling houses have come to expect the law to protect. In R. v. Landry (1986), 25 C.C.C. (3d) 1 (S.C.C.), La Forest J., while dissenting in the result, stated at p. 16:

> The sanctity of the home is deeply rooted in our traditions. It serves to protect the security of the person and individual privacy. The same thought was expressed as early as 1604 in the language of the day in the first proposition of the celebrated Semayne's Case (1604), 5 Co. Rep. 91a at p. 91b, 77 E.R. 194 at p. 195, as follows:
>
> > "That the house of every one is to him as his castle and fortress, as well for his defence against injury and violence, as for his repose."

Recent judgments of the Supreme Court of Canada have made it clear that s. 8 of the Charter provides protection against warrantless searches of the perimeters of dwellings as well: see R. v. Kokesch (1990), 61 C.C.C. (3d) 207 (S.C.C.), Wiley v. The Queen (1993), 84 C.C.C. (3d) 161 (S.C.C.), R. v. Grant (1993), 84 C.C.C. (3d) 173 (S.C.C.), and R. v. Plant (1993), 84 C.C.C. (3d) 203 (S.C.C.). I think it is apparent that Mr. Czumak's layman's instinct concerning his right to refuse Mr. Chalmers entry to his family's home was right in law, and that the justice of the peace was in error.

[para45] Quite apart from the legal error at trial, I might say that I have considerable difficulty understanding why Mr. Chalmers, who was evidently aware of the warrant provisions that he ultimately resorted to, would return to the Czumak residence day after day after the occupants' lack of consent to his entry had already been communicated to him. Because none of the participants in the trial asked him why he did not use the warrant procedure after the first refusal, it is not possible to assess the sincerity of his attempts to enter the premises or the reasons for the unnecessary repeated confrontations with members of the Czumak family.

[para46] While the right of the defendants to refuse entry prior to a warrant being obtained provides an answer to the six charges between October 22nd and 29th, the appellants were also convicted of an offence relating to Mr. Chalmers' visit on November 1st after he had obtained the warrant. The evidence was that Mr. Chalmers' initial attempt was unsuccessful, because Mr. Czumak wanted to call his lawyer to obtain legal advice concerning the warrant. Entry was delayed for 20 minutes until after he had spoken to his lawyer, and the senior inspector had returned with police officers. It appeared to be the prosecutor's position, since he sought and obtained a conviction relating to this conduct, that Mr. Czumak's seeking legal advice before admitting Mr. Chalmers constituted the alleged offence, and one, incidentally, that Mr. Hart later submitted called for fines approximating the $27,000 actually imposed by the justice of the peace.

[para47] I think it is wrong to characterize the defendant's conduct in the way the prosecutor contended. By way of analogy, in the context of failing or refusing to supply breath samples for breathalyzer testing, it has been

held both that the failure or refusal must be clear and unequivocal, and that a denial of the right to counsel provides a reasonable excuse for failing to comply with a lawful demand that was made. In Jumaga v. The Queen (1976), 29 C.C.C. (2d) 271 (S.C.C.), Laskin C.J.C., in a judgment which dissented on other grounds, stated at p. 272 that the Manitoba Court of Appeal had erred in regarding as a "refusal" the accused's deferring a decision pending a requested opportunity to consult with a lawyer by telephone:

> The statutory meaning of a refusal cannot be made to depend on whether an accused says "no, I wish to consult my lawyer" rather than "please wait until I consult my lawyer". On any reasonable construction, there is no refusal in either case.

Pigeon J., for the majority at pp. 276-7, expressly agreed with the Chief Justice on the point I think that Mr. Czumak's conduct should be viewed in the same way. The evidence was that the defendant, in effect, deferred his decision as to whether to allow entry until speaking to his lawyer, and that 20 minutes later, he allowed Mr. Chalmers to enter. Those facts do not make out an offence of "failing to assist entry", contrary to s. 19(3), and in my opinion, the charges relating to November 1st should have been dismissed as well.

[para48] The appeals against all of the convictions for failing to assist entry are allowed, the convictions set aside, and acquittals entered.

(e) The failure to post the building permit

[para49] The three appellants were each convicted of two counts of failing to post the building permit in a conspicuous place relating to October 25 and 26, 1993, contrary to s. 2.4.2.1. of the Building Code Regulation, O. Reg. 160/93. The section in question reads as follows:

> 2.4.2.1. Where a permit has been issued pursuant to the Act, the person to whom it is issued shall have the permit or a copy thereof posted at all times during construction or demolition in a conspicuous place on the property in respect of which the permit was issued.

While the building permit which had been issued and which should have been posted was not itself filed as an exhibit, Mr. Chalmers testified that the building permit for the property, No. 71981, issued on September 1, 1993, was issued to John Czumak. Both the "Order to Comply" and the "Stop Work Order", which were made exhibits, also referred to the same permit as "Issued to John Czumak".

[para50] There was no evidence, then, that the permit had been issued to anyone other than John Czumak. It follows, I think, that there was no evidence of either of the other appellants having had any duty, under s. 2.4.2.1. of the Regulation, to post the permit. There was also no evidence that either of them aided, abetted, counselled or procured the commission of this alleged offence by John Czumak, within the meaning of s. 77 or s. 78 of the Provincial Offences Act. The convictions, therefore, of Peter Czumak and. the corporation were, I think, unreasonable and unsupported by the evidence. Their appeals are allowed, their convictions set aside, and acquittals entered.

[para51] Mr. Chalmers testified that when he visited the property on October 25th and 26th, he observed that the building permit in question had not been posted. Although Mr. Chalmers did not actually observe any construction work being done on October 26th, there was evidence of work both before and after that date, so I think the duty to post the permit "during construction" applied to that date as well. A different conclusion was not suggested by Mr. Carniglia. Mr. Chalmers' evidence was not contradicted by the defence at trial, although during the reasons for sentence given by the justice of the peace, when she referred to these offences, Mr. Czumak stated, "The permit was posted". Although I think it would have been fairer, particularly since he was unrepresented by counsel, if the learned justice had brought to his attention that he had given no evidence concerning that matter and made further inquiries about whether he wished to apply to reopen the defence, no complaint was made about her failure to do so. Rather, Mr. Carniglia argued that

the "rules of natural justice" required a specific warning to be issued, prior to charging a person with this offence. I reject that submission. The obligation imposed by the Regulation is clear, and the evidence supported the findings made by the justice in this regard.

[para52] John Czumak's appeals against his two convictions for failing to post his building permit are dismissed.

The Sentence Appeals

[para53] Mr. Hart quite candidly described the sentences imposed by the learned justice of the peace as "unique" and "out of whack". Mr. Carniglia suggested that the justice appeared to have lost sight of the fact that she was dealing with real people whose lives would be devastated by her injudicious actions. While harsh, I do not think that observation is without foundation. The fines imposed, however, were still less than the sentences Mr. Hart had sought, and he repeated that his instructions had been to recommend for the "less serious offences", 10% of the maximum fines for each defendant for each count, and 50% of the maximum penalty for the "serious charges", into which category he put the failure to assist entry and the violation of the "Stop Work Order" offences. The maximum penalty for a first offence prescribed by s. 36(3) and (4) of the Act is a $25,000 fine for a person and a $50,000 fine for a corporation.

[para54] Mr. Hart also suggested that the justice of the peace, because of the number of counts and the large amounts of the fines she imposed, had simply lost track of the arithmetic. He likened the experience for him to playing a slot machine and having it spew out endless money. While it may be that counsel acting on behalf of municipalities prosecuting provincial charges do not consider themselves to have the same obligations of fairness and reason that Crown Attorneys have when prosecuting criminal cases, although I do not know why their responsibilities should be different, I think it is obvious that the justice of the peace was seriously misled by the submissions that were made. The result was that outrageously excessive fines were imposed and a serious injustice occurred.

[para55] In any event, of the 41 convictions at trial, the ones that remain are one conviction for each appellant on a charge of construction not in accordance with a building permit and, in the case of John Czumak, two convictions for failing to post his building permit on two successive days. For the first of the offences, the justice of the peace imposed fines of $2,000 on the individual defendants, and $5,000 on the corporation. With respect to John Czumak's failures to post his building permit, she imposed a fine of $4,000 for the first and $5,000 for the second. They are all clearly outside the appropriate range, in my view, and require adjustment.

[para56] It is an error in principle to impose a fine without an investigation into the defendant's ability to pay it, or to impose a fine which he or she lacks the means to pay within a reasonable time: see R. v. Ward (1980), 56 C.C.C. (2d) 15 (Ont. C.A.), and R. v. Snider (1977), 37 C.C.C. (2d) 189 (Ont. C.A.). As well, s. 57(3) of the Provincial Offences Act provides that the court may make such inquiries concerning the defendant's economic circumstances as it considers desirable. In this case, after the prosecutor's submissions concerning sentence, Mr. Czumak stated simply, "I can't afford those fines". He went on to explain that he and his brother did not have any assets, and that their company was almost insolvent Mr. Czumak stated that they had not been paid for their last three projects. As well, although the prosecutor referred to evidence that the defendants' parents had purchased the house for $220,000 and that it was then listed for sale at $449,000, Mr. explained that with the cost of the property and the construction, there would be Czumak little profit. The purpose of the project had been to demonstrate their workmanship to obtain spin-off work, and because the house had been over-improved for the area, their margin was very slim.

[para57] It was not clear whether the fact that the total fines approximated the listing price of the house was merely

a coincidence or whether they were intended to penalize both the parents for what they had invested in their home and the brothers for the cost of the work that they had done. Even if the evidence had supported the justice's findings concerning all the offences, there was still no rational basis that I can see for imposing fines of the magnitude she imposed. On even the most sinister interpretation of the appellants' conduct, one could not justify fines which would have the effect of bankrupting the business or financially ruining the family.

[para58] Mr. Hart did not dispute Mr. Carniglia's further submissions as to sentence which were made on the appeal. These included reference to the defendants' circumstances that had not been elicited in the trial court. No prior record of any kind was alleged for any of the defendants. Although not stated expressly, John Czumak appeared to be in his late twenties or early thirties. Although the brothers had been struggling with their business, they had contributed substantial voluntary construction work for local charitable organizations, including Ronald McDonald House and Sunnybrook Hospital. There was no basis, in my view, for regarding the defendants as ether than decent, hard-working and productive members of the community who, on this isolated occasion, contravened the Building Code Act by committing the relatively minor offences.

[para59] General deterrence is important when dealing with Building Code violations, having regard to the statute's safety and consumer protection objectives. The Act ensures compliance with minimum construction standards and allows municipalities to maintain the quality of their neighbourhoods. The courts have a role to play in the enforcement of the statute by imposing penalties which appropriately repudiate the offences that are found to have been committed and which persuade builders that compliance with the law is required.

[para60] Mr. Carniglia, a former city prosecutor himself, suggested that the usual sentence for construction not in accordance with a building permit ranged from a suspended sentence, which is not uncommon, to perhaps a $1,000 fine where particular aggravating factors are present. He challenged Mr. Hart to cite any case where more than a $2,000 fine had been imposed. Mr. Hart did not do so, but he pressed his submission that a far more severe penalty was required. It is significant, I think, that this was not a case where an owner proceeded with major construction without any permit at all, or where the work was found not to have been of good quality or not to have been authorized by a revised permit issued only a few days later. The defendants permitted access to inspectors not accompanied by Mr. Chalmers, so that there was no attempt to conceal the work or to avoid the Building Code Act approval procedures.

[para61] Having regard to the circumstances, I think a $300 fine would be appropriate for the violation concerning the work that was not in accordance with the building permit. This amount would reflect the need for deterrence, I think, but still take the mitigating factors into account. Since the corporation was the vehicle used by the brothers for their renovation work. I do not think that any purpose would be served by dividing the fine among the defendants or imposing separate individual fines which total more than that amount.

For the convictions relating to this offence, then, a fine of $300 is imposed on Cherry Park Contracting Inc., with the 15 days to pay provided by s. 66(1) of the P.O.A. With respect to John Czumak and Peter Czumak, sentence will be suspended, with probation for six months on only the conditions set out in s. 72(2) of the P.O.A.

[para62] With respect to John Czumak's convictions for failing to post his building permit, there will be a fine of $100 for the count relating to October 25, 1993, and a suspended sentence, with the same probation already ordered, for the continuation of the same offence the following day. Mr. Czumak will also have the 15 days provided by the P.O.A. to pay this fine.

Costs

[para63] This is a case where the appellants should have all their costs of the appeal, pursuant to s. 129(1) of the

Provincial Offences Act. If the parties are unable to agree as to the amount to be paid by way of costs to the appellants by the respondent, the appellants may apply to me within thirty days following release of this judgment for an order, pursuant to s. 129(2), fixing the amount, directing payment to the clerk of the trial court for payment over to the appellants, and fixing the period within which the costs shall be paid.

Disposition

[para64] For the reasons stated, the appeals are allowed with costs. Of the 41 convictions, 36 are set aside, and acquittals are entered. The sentences with respect to the remaining convictions are varied by reducing the fine imposed on the corporation for construction not in accordance with the approved plans from $5,000 to $300, with 15 days to pay, and for the individual appellants, from $2,000 to a suspended sentence in each case. With respect to John Czumak's convictions for failing to post his building permit, the fine on the first count is reduced from $4,000 to $100, with 15 days to pay, and on the second count, from $5,000 to a suspended sentence.

FAIRGRIEVE PROV. DIV. J.

Re **David Gallo Building** Co. Ltd. and City of Toronto et al.

[1973] 3 O.R. 892

ONTARIO
HIGH COURT OF JUSTICE
DIVISIONAL COURT
WELLS, C.J.H.C., FRASER and WRIGHT,JJ.
14TH MAY 1973

APPLICATION for judicial review for an order in the nature of mandamus to compel the issue of a building permit.

T.R. Hawkins, for applicant.

D.C. Lyons, for respondents.

The judgment of the Court was delivered by

WRIGHT, J.,:-- This is an application under the Judicial Review Procedure Act, 1971 (Ont.), Vol. 2 c. 48, for an order "in the nature of mandamus" requiring the issue of a building permit for an apartment hotel and retail store building at the south-east corner of Danforth and Westlake Aves. in the City of Toronto.

Although it stands on its own feet, it is in fact one of a series of applications for judicial review of the refusal of the City of Toronto to issue building permits for apartment hotels except in areas now defined in Toronto City By-law 51-73. This was enacted February 27, 1973, and is subject to the approval of the Ontario Municipal Board, which has not yet been given although notice of application for it is now in train.

A. The general background of this and like applications

It is convenient, therefore, in this case to outline the general background of this series of applications and to deal with some of the arguments on the authorities which have become common to most of the applications made in this Court in this particular series, without in any way foreclosing the right of other applicants to renew the arguments on issues not germane to our decision in this case.

From the evidence before us, it appears that from September, 1972, and even before, there had been active concern among some public building and planning officials in Toronto, about the practice of granting permits for new residential construction and commercial "apartment hotels" on lands zoned for industrial or commercial use. The land for such buildings has already been assembled for other commercial uses and has been available at comparatively low prices in relation to the price of land in residential districts. The prevailing densites in commercial districts, and the standards applicable in such districts under the City of Toronto zoning by-law, are markedly different to those applicable to residential districts. Nevertheless the respondent corporation has supported certain of these projects in the past three years, to help to alleviate the shortage of much needed low income housing. The city's chief planner, in a report on January 18, 1973, referred to these developments as "what might be colloquially termed a big loop hole in the Zoning By-Law".

Late in January, 1973, the Committee on Buildings and Development of the City Council submitted reports on these developments to the Toronto Executive Committee and City Council recommending that City Council express its intention of passing a by-law to prohibit hotels and apartment hotels anywhere in the city except in two defined central areas, that such intention be advertised in the daily newspaper and that a special meeting of City Council be called within three weeks "to hear those in support of and opposing the enactment of such a by-law".

These recommendations were adopted in Council on January 31, 1973. Public notice of Council's intention was given on February 9 and 12, 1973. A special meeting of City Council was held on February 19th to consider the enactment of a by-law to prohibit hotels, apartment hotels and dwelling units in C1, C2, C3, and C4 districts and to hear representations from interested parties on this proposal. It met from 2 p.m. until 6 p.m. that day. It then adjourned and met again on February 23, 1973, in this matter from 8:30 p.m. until 12:50 a.m., made

two amendments to the bill amending the city's zoning by-law and passed it as amended as By-Law 51-73 on February 27, 1973. Ths city os proceeding with reasonable expedition towards the approval of the Ontario Municipal Board.

B. The particular facts of this application

The applicant intending to build an apartment hotel sought by an agreement of purchase and sale of the lands in question, accepted on August 11, 1972, to buy the lands for $325,000, conditional on a commitment for new financing, and subject to what would appear to be a representation or condition that the property was zoned "C1-V1". This permitted apartment hotels and retail stores at that time. All the lands were so zoned except for a strip along the south boundary 130 ft. long and from four to eight feet wide.

The applicant, in August, 1972, employed George G. Feher as its architect for the buildings it proposed, and on September 5, 1972, applied for building permits for excavation, foundation, and superstructure of an apartment hotel building of 94 apartment suites, and 95 hotel-rooms on the lands in question. Structural, mechanical and electrical drawings, specifications and quantities were not submitted with those applications as required by art. 6 of the City Building By-law 300-68. On October 4, 1972, the respondents sent Mr. Feher an examiner's notice, that the proposal "now complies with the requirements of Zoning By-Law 20623, as amended".

The applicant had delayed closing the transaction of purchase and sale until the preliminary zoning approval of October 4th was received. The transaction was closed on December 12, 1972. During November and December, 1972, the applicant secured five commitments to lease some retail stores in the proposed building. It took soil tests.

In December, 1972, the applicant changed from its architect, Mr. Feher, and retained the firm Huang and Danczkay Limited. The project was then changed in a number of ways, but it was considered by the applicant and its advisors to be still within the provisions of the zoning by-law.

The work of preparing plans, drawings and specifications proceeded in December, 1972, and January, 1973.

On February 2, 1973, city officials refused to accept "completed architectural drawings for the Applicant's project as a revision to the application or applications made by the Applicant on or about the 5th day of September, 1972", and insisted that a new permit be applied for, supported by the architectural drawings and completed mechanical, electrical and shoring drawings. It is alleged that the applicant was not then told that the intentions expressed by City Council on January 31, 1973, were "so clear that it was pointless to do so". Close to 20-25 people worked on fresh drawings which were completed on Febraury 11, 1973, and submitted on February 12th. A new permit was applied for on a latter day to meet the requirement of the city's Department of Buildings.

On February 15, 1973, the Department of Buildings wrote the applicant reciting the relevant proceedings of City Council on January 31st and stating that the respondent Milne was precluded from issuing a permit in view of the prohibition in the by-law which Council had expressed its intention to enact.

On February 16, 1973, the same department wrote the applicant stating, in effect, that the materials filed on September 5, 1972, were incomplete and that they did not constitute an application for a building permit.

On February 16, 1973, the applicant's solicitors wrote the respondent Milne outlining its position under the application of September 5, 1972, and saying:

> We can appreciate that some minor matters in the plans may require amendments but if you would advise us in this regard, we will advise the applicant to make such amendments forthwith.

When Mr. Pattantyus, a principal of the applicant's incorporated engineers, was being cross-examined on April 6,

1973, on an affidavit, he made it clear that any additional information required by the city would be furnished and that

any changes required to meet the city's interpretations of its by-laws would be made. This was repeated by Mr. Hawkins before us. Mr. Dennis Williams, a zoning plan examiner in the city's Department of Buildings, testified on his cross-examination on one of his affidavits filed, that the normal procedure in the department was "if plans submitted were found to be not in compliance with the zoning By-law, the Applicant would be permitted, if the changes were not too severe, to revise the plans and work under the same application". He also admitted that it was "possible" that the changes later suggested by Mr. Pattantyus to meet his objections could be made.

The applicant, in purchasing the land and preparing its project, has assumed mortgage debts of $284,000 and has incurred expenses and liabilities in excess of $160,000. If the permits are not granted, it claims that "it will suffer the loss of the expenses and liabilities, it has incurred for architects' fees, mortgage deposits, stand-by fees, soil tests and real estate commission in a sum in excess of $108,000".

C. The issue before the Court

The notice of application for judicial review dated March 5, 1972, asked for an order for a bulding permit for the applications made on September 5, 1972, as modified on February 12, 1973, on the grounds that respondents acted arbitrarily in failing to consider that applications complied with the city by-laws and that the applicant had a legal right to its permits, and that the respondents acted only on the expressed intention of City Council. Before us, Mr. Hawkins asked for an order directing the respondents issue a building permit in accordance with materails filed on February 12, 1973, conditional on the applicant doing what is necessary to comply with the city's zoning and building by-laws or, in the alternative, an order in the same terms with respect to the material filed on and after September 5, 1973.

D. Questions to be considered by the Court

In the particular circumstances of this case and in the light of the argument before us, we apprehend that our decision depends on the answers to the following questions which will be discussed under the lettered headings indicated.

E. Was the application of September 5, 1972, in order at the time it was made?

F. Have any deficiencies it may have had been cured by the conduct of the respondents?

G. Were the details of the application of February 12, 1973, simply modifications of the project for which a permit was applied for on September 5, 1972?

H. Was the application of February 12, 1973, in order at the time at which it was made?

I. Can any deficiencies in either application now be cured or disregarded, or should a conditional mandatory order be made?

E. Was the application of September 5, 1972, in order at the time it was made?

It complied with the zoning by-law, but it did not satisfy important requirements of the building by-law. It was argued in effect that by specific waivers and consistent practice, the respondents had wavied the requirements of the by-law, or had at least lulled the applicant into a false sense of security, and that this should be considered in exercising discretion and granting a mandatory order in favour of the applicant. We do not agree with these arguments in this case. In general, such conduct by the respondents cannot convert a basically deficient application into one worthy of a mandatory order for a permit.

F. Have any deficiencies it may have had been cured by the conduct of the respondents?

Much was sought to be made, in this case, of the way in which civic employees carried on their duties with regard to applications for building permits, and in the light of the declared intention of City Council to amend the zoning by-law.

It was argued:

(1) That the respondents could not, to the prejudice of the applicant, alter the way in which they invited applications for building permits and considered them.

(2) That the civic employees had no right to require a fresh application for a building permit on February 2nd without at least warning the applicant how pointless it would be.

(3) That the civic employees concerned had a duty to tell the applicant that if the proposed by-law passed, no permit would be granted nor would one be issued meanwhile, no matter how regular the application for it might otherwise be.

(4) That the fact that the civic employees did not tell the applicant on February 2, 1973, of the Council's intent to pass the amending by-law, was evidence that the city had then no clear intention of passing it.

(5) That the respondents' letter of February 15, 1973, stating they were precluded from issuing a permit by reason of Council's intention to enact the by-law, was misleading and did not frankly outline the other objections to the application.

(6) That the respondents' letter of February 16, 1973, rejecting the application of September 5, 1972, was belated and unfair.

These alleged improprieties were in some respects relied on as evidence that there was no clear intent to pass the projected by-law and, in other aspects, as evidence that the respondents were not acting in good faith. But these considerations are relevant to the issue of whether the municipality is entitled to an adjournment, not to the issue of whether the applicant is entitled to a permit.

In any event we no not agree with these criticisms. The actions of the civic empolyees were dictated either by their duty to do what they were told from time to time, or be benevolent consideration of some of the practical problems created for applicants under the by-law.

Courtesy, kindness and consistent dealing towards applicants are graceful attributes to the discharge of public responsibilities but they are not legal duties nor is their absence necessarily evidence of bad faith; nor do they create in others entitlements to mandatory orders.

Those who rely on legal rights must comply with the legal requirements. They cannot absolutely rely on the sensible indulgences often granted by public servants: Karavos v. City of Toronto and Gillies, [1948] O.W.N. 17 at p. 19-20, [1948] 3 D.L.R. 294 at pp. 228-9, per Lailaw, J.A. (Ont. C.A.). These may be discontinued as readily as they were instituted or maintained.

I have already said in R. v. City of Toronto et al., Ex p. Lawson, [1971] 1 O.R. 451 at p. 454, 15 D.L.R. (3d) 553 at p. 556, that once a City Council has passed a by-law, "its employees are bound to do the business of the city, when they have a discretion to exercise, in accordance with the by-law, even if the by-law has not passed the Municipal Board". But this can be asserted more broadly and can be extended to the duty of civic employees to conform to the declared intention or policy of Council, and of course to the normal obedience to direction that every employee, in the course of his duties, owes to his employer. In this case, once Council had expressed its intention to enact the by-law and had set in motion the machinery to do this, civic officials were bound to act accordingly. In acting as they did, they only did their bounden duty, in the circumstances.

Much was sought to be made of the futility of the applicant proceeding further after Council's resolution of January 31, 1973, and the obligation of the civic officials to make this plain to the applicant in their communications.

We do not think that once a clear intention is expressed or a by-law passed, the cause of an applicant is perforce lose. If the applicant wishes the assistance of the Court in judicial

review, it must do all it can to justify the issue of a permit. In the Bismark case, above, this was done and was a powerful factor in the mandatory order granted by this Court. In this case, if the applicant had expeditiously completed its orginal application of September 5, 1972, it might well have been successful. It was for the applicant and its advisors to decide what it should do. It was no part of the duty of the civic officials to advise them on its position, or the law, or what it should do.

G. Were the details of the application of February 12, 1973, simply modifications of the project for which a permit was applied for on September 5, 1972?

We agree with the opinions of Mr. Dennis Williams, a zoning plan examiner for the respondent city, that the second application is substantially different from the first, and is a new and different one and not a modification of the first. As he establishes: the first application is for a nine-storey building, the second for a twelve-storey building; no part of the building in the first application extends into an area zoned residential, the basement of the second does; the building in the first is rectangular, in the second irregular; the floor area in each application and for each floor differ significantly; in the first, stairways are within the confines of the general perimeter, in the second, they project outside; in the first application there is one basement for parking, in the second two, including a dining-room and kitchen and game, hobby and health rooms; the parking arrangements differ significantly. It is evident from the cross-examination of Mr. Pattantyus that he was unfamiliar with the plans for the earlier project and, indeed, he admitted that he did not "know any details of the first plans". What appears to have happened is that the first project, which was well within the zoning by-law, was displaced by the second project in which it was sought to use every available square foot under the zoning by-law. The project was thus significantly altered and the zoning by-law broken. We find that the new project of February 12, 1973, was substantially different from the first one of

September 5, 1972, and not merely a modification of it.

H. Was the application of February 12, 1973, in order at the time at which it was made?

Here again we agree with opinions of Mr. Williams, the zoning plan examiner, and find that the second application of February 12, 1973, was not in conformity with the city zoning by-law in the following respects:

(a) Eighteen of the required parking spaces extend from three feet to seven feet into an area zoned residential, as do portions of the basement.

(b) Only one loading space is provided and the by-law calls for two.

(c) The gross floor area permitted under the by-law had been exceeded.

(d) The ramp to the underground garages is not shown to comply with the by-law.

I. Can any deficiencies in either application now be cured or disregarded, or should a conditional mandatory order be?

Much evidence was presented to us of adjustments that might be made to the plans submitted on February 12, 1973, to comply with the zoning by-law, and we were invited to make a conditional mandatory order so that these adjustments might be made and the project carried on with them. It is clear that we have some discretion to do so with regard to the building By-law 300-68, as had the Commissioner of Buildings under art. 10 of that by-law: Re Permanent Investment Corp. Ltd. and Township of Ops and Graham, [1967] 2 O.R. 13 at p. 17, 62 D.L.R. (2d) 258 at p. 262, per Schroeder, J.A. (Ont. C.A.).

But the situation under the zoning By-law 20623 may be different. In it there is no explicit power of variation. There is provision under s. 42(1) of the Planning Act, R.S.O. 1970, c. 349, for the committee of adjustment to authorize such minor variance from the by-law "as in its opinion is desirable for the appropriate development or use of the land, building or structure, provided that in the opinion of the committee the

general intent and purpose of the by-law and the official plan, if any, are maintained". The Legislature having given that power of variation to the committee of adjustment, this Court cannot exercise it: Re Bruce and City of Toronto et al., [1971] 3 O.R. 62 at p. 68, 19 D.L.R. (3d) 386 at p. 392, per Kelly J.A. In so far as the integrity of planning and zoning by-laws and minor variance are concerned, the Court can in those cases, only grant mandatory relief on the condition that application be made successfully to the committee of adjustment for such variance.

It was basic to the applicant's case before us, that once an application for a building permit for an apartment hotel on the C-zoned portion of the applicant's land had been made, the applicant was at liberty to alter it, and if it did not as altered comply with the building or zoning by-law, the applicant could undertake to make specific changes to meet objections, or could undertake generally to make changes to meet changes to meet any and all objections the respondents might have and a conditional order could be issued.

There are three answers to these propositions in this case:

(1) The prior position taken by the applicant with regard to the objections was that they were unsound and that the applications had fully complied with the by-laws.

(2) The letter of the applicant's solicitors of February 16, 1973, did not undertake, on behalf of the applicant, to make amendments, but merely said that if there were minor matters requiring amendment, the solicitors would advise the applicant to make such amendments forthwith. That is a severly limited undertaking and in no way bound the applicant.

(3) It was not until the cross-examination of Mr. Pattantyus on April 6, 1973, that the willingness of the applicant to meet the city's objections was made clear. Up to that time the applicant had maintained that it was entitled to a building permit without amendment, although it had suggested a number of changes or arguments, to meet the respondents' case. In our view, that was not too late. In Re Bismark Holdings Ltd. et al., and City of Toronto et al. (unreported April 10, 1973 [now reported, ante, p. 887]), decided in favour of the applicant in that case, there was no argument against the objections by the owner who made it clear throughout that it would meet the city's objections and who, in fact, did.

We do not regard Mr. Williams' evidence that the changes were possible, as anything more than that they were not impossible, a limited opinion that carries the applicant's case no distance in its way.

In our view, the blanket willingness to meet any objections of the city at any time, is not enough. The original application for a building permit must be essentially in order, and any amendments should be specific and in train. Otherwise it would be sufficient to file any application for a building permit, undertake to comply with any city requirements, and ask for a conditional mandatory order. No owner is entitled to such an order in such circumstances.

J. Disposition of the issues

In the light of the answers which we have given to these question, we conclude that the applicant's original application of September 5, 1972, was not then in proper form, nor subsequently perfected, that the changes finally submitted as a new application on February 1, 1973, were not modifications but substantially a new application which did not conform with the by-laws then in force, that it has never been put in proper form and that this is not a case for a conditional order.

This application is, therefore, dismissed with costs.

Application dismissed.

Davison v. Orangeville (Town)

Between
Shannah Gail Davison, applicant, and
The Corporation of the Town of Orangeville, respondent

[1996] O.J. No. 3469
DRS 97-01393
Court File No. 404/96

Ontario Court of Justice (General Division)
Zelinski J.
July 22, 1996.

Counsel:
William B. Stutz, for the applicant.
Allan Young, Director of Planning Agent, for the respondent.

ZELINSKI J.:--

THE ISSUES

[para1] On June 14th, 1996, I concluded that this application was not governed by s. 41 of the Planning Act, R.S.O. 1990 c. P.13, (the "Planning Act"), with the result that site approval is not required irrespective of the result of the remaining issue on which I reserved.

[para2] That unresolved issue can be stated as follows:

> The site in question is zoned C5. The Applicant seeks to renovate an existing triplex to convert it into combined residential and commercial uses. If the application is successful, the present three unit residential use is to continue, however, certain of the former residential space will become retail, with the balance of the commercial space to be converted to an office.
>
> It is conceded that each of the intended uses is an appropriate use in a C5 zone, when not combined.

HISTORY OF THE OFFICIAL PLAN POLICY

[para3] Since 1994 when an amendment to its official plan was adopted by council, (the "O.P. Amendment") the relief sought conforms to Official Plan policy. That present policy is stated, in part, as follows:

> E2.9 RESTRICTED COMMERCIAL/RESIDENTIAL
>
> E2.9.2 Permitted uses include commercial and residential uses, alone or in combination ...

[para4] The Respondent's By-law #22-90 is its Zoning By-law (the "Zoning By-law"). When that By-law was enacted in 1990, the Official Plan policy did not contemplate residential and commercial uses in combination in Restricted Commercial/Residential zones. Prior to the O.P. Amendment, such zones were classified, in the Official Plan, as areas in transition.

THE LAW

[para5] This Application is framed in s. 25 of the Building Code Act S.O. 1992, c. 23 ("BCA"). Its success is dependent upon the present Official Plan policy, as stated in the O.P. Amendment, being incorporated into the "applicable law" which the Chief Building Official ("CBO") must consider when determining whether a building permit will issue.

[para6] Counsel for the Applicant relies upon s. 24(1) of the Planning Act to assist him to advance this interpretation.

[para7] For convenience those statutory provisions which are relevant, are set out as follows:

PLANNING ACT

[para8]

> 24(1) Despite any other general or special Act, where an official plan is in effect, no public work shall be

undertaken and, except as provided in subsections (2) and (4), no by-law shall be passed for any purpose that does not conform therewith. 1983, c. 1, s. 24(1).

27(1) When the Minister has approved an official plan adopted by a county or by a regional, metropolitan or district municipality,

(a) every official plan; and

(b) every zoning by-law passed under section 34 of this Act or a predecessor thereof, that is then in effect in the area affected ... shall be amended to conform therewith.

BCA

[para9]

8(1) No person shall construct or demolish a building or cause a building to be constructed or demolished in a municipality unless a permit has been issued therefor by the chief building official.

(2) The chief building official shall issue a permit under subsection (1) unless,

(a) the proposed building, construction or demolition will contravene this Act or the building code of any other applicable law ... (Emphasis added)

25(1) Any person who considers themself aggrieved by an order or decision made by an inspector or chief building official under this Act or the regulations, except a decision not to issue a conditional permit under subsection 8(3), may, within twenty days after the order or decision is made, appeal the order or decision to a judge of the Ontario Court (General Division).

(4) If an appeal is made under this section, the judge shall hold a hearing and may rescind or affirm the order or decision of the inspector or chief building official or take such action as the judge considers the inspector or chief building official ought to take in accordance with this Act and the regulations and, for such purpose, may substitute his or her opinion for that of the inspector or chief building official.

[para10] Section 24(1) of the Planning Act is clearly prospective in its application. The Respondent's Zoning By-law was passed on a basis which was consistent and in conformity with the Official Plan then in effect. While, pursuant to s. 24(1) of the Planning Act, no amendments to the Zoning By-law can now be passed without regard to the policy set out in the O.P. Amendment, the fact that the existing Zoning By-law is more restrictive than present policy does not in any way offend s. 24(1) of the Planning Act. The Zoning By-law continues to be valid.

[para11] Under s. 8(1) BCA, the CBO must issue a building permit if the present Official Plan, which includes the O.P. Amendment, is "applicable law". His failure to do so would otherwise be in contravention of "applicable law".

[para12] In Re Woodglen & Co. Ltd. and City of North York (1984) 43 O.R. (2d) 289, Haley, J. concluded that an Official Plan does not constitute "applicable law" with reference to s. 8(1) BCA determinations. In an appeal to the Divisional Court

((1984) 47 O.R. (2d) 614) Southey, J. confirmed the findings of Judge Haley, as she then was, stating at p. 617:

Counsel for the appellants argued that the official plan was part of the "applicable law" within the meaning of s. 6(1)(a) of the Building Code Act, and that the chief building officer was not obliged to issue a permit to cover construction that would not be in conformance with the official plan. In my judgment, the learned county court judge was right in rejecting that submission, on the ground that an official plan and amendments thereto are not effective in themselves to regulate land use and

> are not part of the applicable law which the chief official is to obey. As appears from the authorities to which the learned judge referred, an official plan is recommendation, or statement of intention only, which may or may not be implemented by the municipality by the enactment of appropriate zoning by-laws: see Re Steven Polon Ltd. and Metropolitan Licensing Com'n, [1961] O.R. 810, 29 D.L.R. (2d) 620; Re Township of Southwold and Caplice et al. (1978), 22 O.R. (2d) 804, 94 D.L.R. (3d) 134, 8 M.P.L.R. 1; Cadillac Development Corp. Ltd. et al. and City of Toronto (1973), 1 O.R. (2d) 20, 39 D.L.R. (3d) 188.

[para13] In her analysis, Madam Justice Haley, as she now is, went on to consider, at p. 297, those authorities which were distinguishable on the basis that "there was a specific statutory duty placed upon the municipality to bring its Zoning By-laws into conformity within the Official Plan of the Region." There was no such statutory duty in her case. Similarly, in this case, the parties have not referred to any "specific statutory duty on the [Respondent] to effect such compliance", as would be the case if s. 27(1) of the Planning Act had application. (See J. & R. Rite Holdings (Oshawa) Inc. and City of Oshawa (1988) 64 O.R. (2d) 471).

[para14] Summing up on this point, the Official Plan and its amendment are not "applicable law" which the CBO was required to consider.

[para15] In Re Woodglen, Haley, J. was proceeding under s. 15(1) of the BCA which is the predecessor of the present s. 25(1) BCA. She went on to consider at p. 298 "... whether I have any broader powers under the appeal provisions in [s. 25] of the Building Code Act to review the decision of the chief officer by applying the principles in the Boyd case." (City of Ottawa et al. v. Boyd Builders Ltd. [1965] S.C.R. 408)

[para16] She concluded that she had such powers as an appellate court. Those powers included the granting of an order of mandamus.

[para17] At p. 300, Haley, J. summarized the principles upon which equitable relief should be granted, on the basis of the Boyd case as follows:

> Application of equitable principles. Before, the passing of the Building Code Act appeals were taken from decisions of building inspectors on building permits by way of mandamus applications to the High Court. Mandamus being an equitable remedy, the court was able to develop building permits on grounds not open to the building inspector. Such principles are reflected in the three tests in the Boyd Builders case referred to above.
>
> As I have said, the onus is on the municipality in persuading the court to exercise its equitable discretion to show it has fulfilled three prerequisites:
>
> (a) a clear intent to restrict or zone existing before the application by the owner for a building permit;
>
> (b) that council has proceeded in good faith;
>
> (c) that council has proceeded with dispatch.

[para18] In this application the clear intent of the OP Amendment is to permit multiple uses in combination. Bad faith as a result of the failure of council to amend the Zoning By-law to assure consistency with the amendment was not argued. In Re Woodglen, the "delay in proceeding" between the approval of the district plan and the application before Madam Justice Haley was some ten years. In the case before me the delay between the O.P. Amendment and this application is approximately two years.

[para19] I questioned Mr. Young, representing the Respondent, whether the Zoning By-law and the "combination of uses" policy stated in the O.P. Amendment were not mutually exclusive. He agreed that they were. He then conceded that, until the Zoning By-law is itself amended, the O.P. Amendment and the Zoning By-law will not conform to each other. His response to my concerns about the failure to amend the Zoning

By-law to incorporate present policy was, essentially, to "trust us", citing problems inherent in procedures necessary to amend a Zoning By-law as the basis of delay.

[para20] While I am not completely satisfied with that response I am satisfied that Mr. Young has a legitimate concern about the problems he contemplates.

[para21] Thus, while it has not been satisfactorily established that council will, shortly, proceed in good faith to pass amendments to the Zoning By-law so as to conform to the O.P. Amendment, there has not been undue delay at this time.

[para22] I am certain that these reasons will be treated as notice to the Respondent's council of the priority of getting on with the task of amending its Zoning By-law. Failure to do so may, on another occasion, cause a different result.

[para23] The language of the Zoning By-law is inconsistent with combinations of uses, at present, in C5 zones. If it were, the O.P. Amendment would not have been necessary. In other commercial zones where combinations of uses are permitted in the Zoning By-law, that by-law specifically includes language which permits such combinations. In relation to the subject site, the Zoning By-law is silent in that respect.

[para24] The Respondent relies on the reasons of Fraser, J. in S.R.V. Developments Ltd. v. Courtenay (City) (1992) 12 M.P.L.R. (2d) p. 154, wherein at p. 155, the learned justice defined a similar issue as follows:

> In the separate zones designated in the zoning by-law as "Commercial One" (C-1), the "Central Commercial" zones, "Liquor store" is a specifically permitted use. The city concedes that a liquor store could come within the expression "retail or wholesale outlet" but says that, by specifically designating "liquor store" as a permitted use in C-1, it has winkled out and excluded the use from the more general one in C-2.

[para25] Fraser, J. accepted this argument, following, in part, the reasons of MacGillivray, J.A. in Cambridge Leaseholds Ltd. v. Hewitson (O.C.A.) [Unreported]. I adopt his conclusion. When there are references, as here, to combinations of uses in certain zones, but silence on that point in the subject zone, that silence has the result of excluding combinations of uses in the subject zone.

CONCLUSION

[para26] The decision of the CBO not to issue a Building Permit was correct.

[para27] The exercise of my jurisdiction to make an order in the nature of mandamus is premature at this stage.

[para28] The Application is denied.

[para29] Mr. Young is a planner and not counsel. He was permitted to argue before me on the basis of an authorization from the Town, and the consent of Mr. Stutz. This procedure should not be encouraged in my view.

[para30] No order as to costs.

ZELINSKI J.

Dominion Stores Ltd. v. Etobicoke, Borough of et al.

(1982), 37 O.R. (2d) 661

ONTARIO
HIGH COURT OF JUSTICE
DIVISIONAL COURT
GALLIGAN, OSBORNE and TRAINOR JJ.
APRIL 28, 1982*

Released June 21, 1982

APPLICATION for judicial review to order the issuance of a building permit.

J. L. McDougall, Q.C., and R. L. Armstrong, for applicant.

J. H. Reble, for respondents.

The judgment of the Court was delivered orally by

GALLIGAN J.:-- This application for judicial review seeks an order requiring the issuance of a building permit. The facts are not in dispute and I do not intend to make very much reference to them. The applicant's land is bounded by Eglinton Avenue, Lloyd Manor Road and Warrender Road. Eglinton Avenue is a Metropolitan Toronto road. The latter two are local streets under the municipality's jurisdiction. Because the municipality of Metropolitan Toronto owns a 17-ft. strip between the applicant's land and Eglingtion Avenue, the only means of access to the applicant's lands is by Lloyd Manor or Warrender Road.

The applicant wishes to build and operate a large supermarket on the site. The proposed use is in all respects in compliance with the zoning by-laws of the municipality. The applicant applied for a building permit and it is admitted that it has complied in all respects with the requirements therefore. Accordingly it is prima facie entitled to a building permit; City of Ottawa et al. v. Boyd Builders Ltd., [1965] S.C.R. 408, 50 D.L.R. (2d) 704.

The respondent has refused to issue the building permit because it has not given development control approval under s. 40 of the Planning Act, R.S.O. 1980, c. 379. It is clear beyond peradventure that the only reason that the respondent has not given its approval is that it does not want to permit access onto the applicant's lands from either of the local streets. It has refused to approve any development plans or drawings or enter into any development agreement which in any way provide access to or from the proposed supermarket onto those local streets.

The issue before this Court is whether the municipality is legally entitled to refuse to give development approval on that ground. While a certain amount of discussion took place before us as to whether development approval under s. 40 of the Planning Act is or is not a condition precedent to the issue of a building permit I do not think it is necessary for the purposes of this application to decide that issue. I am of the opinion assuming without deciding that development approval is a condition precedent to the issuance of the building permit, that a municipality may not withhold such approval for a reason that is not authorized by law. If it were otherwise an applicant's legal right to a building permit could easily be frustrated.

In this case the applicant's lands are landlocked unless it has access to either Lloyd Manor or Warrender Road. Its proposed use of its lands for a supermarket is authorized by the zoning by-laws. It is clear that at common law a land owner was entitled to access to a public road touching his land and that a municipality in the absence of an express statutory right to the contrary could not by denying access deprive him of the lawful use of his land. See Toronto Transportation Com'n v. Village of Swansea, [1935] S.C.R. 455, 457, [1935] 3 D.L.R. 619, and Marshall et al. v. Blackpool Corp., [1935] A.C. 16, 22. In the light of that principle s. 40 of the Planning Act must be scrutinized because if statutory authority is to be found justifying the respondent's refusal to approve, it is not suggested that it can be found anywhere else but in that section. The relevant parts of s. 40 of the Planning Act are s-ss. (1) to (6) inclusive.

40(1) In this section, "development" means the

construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of substantially increasing the size or usability thereof, or the laying out and establishment of a commercial parking lot.

(2) Where there is an official plan in effect in a municipality, the council of the municipality may, by by-law, designate the whole or any part of the area covered by the official plan as a site plan control area, but nothing herein authorizes the council to designate an area that is not within the limits of the municipality of which it is the council.

(3) A by-law passed under subsection (2) may designate a site plan control area by reference to one or more land use designations contained in a by-law passed under section 39.

(4) No person shall undertake any development in an area designated under subsection (2) unless the council of the municipality or, where a referral has been made under subsection (9), the Municipal Board has approved one or both, as the council may determine, of the following:

1. Plans showing the location of all buildings and structures to be erected and showing the location of all facilities and works to be provided in a conjunction therewith and of all facilities and works required under clause (6)(a).

2. Drawings showing plan, elevation and cross-section views for each industrial and commercial building to be erected and for each residential building containing twenty-five or more dwelling sites to be erected which are sufficient to display,

   (a) the massing and conceptual design of the proposed building;

   (b) the relationship of the proposed building to adjacent buildings, streets, and exterior areas to which members of the public have access; and

   (c) the provision of interior walkways, stairs and escalators to which members of the public have access from streets, open spaces and interior walkways in adjacent buildings,

   but which exclude the layout of interior areas, other than the interior walkways, stairs and escalators referred to in clause (c), the colour, texture and type of materials, window detail, construction details, architectural detail and interior design.

(5) Nothing in this section shall be deemed to confer on the council of the municipality power to limit the height or density of buildings to be erected on the land.

(6) As a condition to the approval of the plans and drawings referred to in subsection (4), a municipality may require the owner of the land to,

(a) provide to the satisfaction of and at no expense to the municipality any or all of the following:

1. Widening of highways that abut on the land.

2. Subject to the Public Transportation and Highway Improvement Act, facilities to provide access to and from the land such as access ramps and curbings and traffic direction signs.

3. Off-street vehicular loading and parking facilities, either covered or uncovered, access driveways, including driveways for emergency vehicles, and the surfacing of such areas and driveways.

4. Walkways, including the surfacing thereof, and all other means of pedestrian access.

5. Facilities for the lighting, including floodlighting, of the land or of any buildings or structures thereon.

6. Walls, fences, hedges, trees, shrubs or other

groundcover or facilities for the landscaping of the lands or the protection of adjoining lands.

7. Vaults, central storage and collection areas and other facilities and enclosures for the storage of garbage and other waste material.

8. Easements conveyed to the municipality for the construction, maintenance or improvement of watercourses, ditches, land drainage works and sanitary sewerage facilities on the land.

9. Grading or alteration in elevation or contour of the land and provision for the disposal of storm, surface and waste water from the land and from any buildings or structures thereon;

(b) maintain to the satisfaction of the municipality and at the sole risk and expense of the owner any or all of the facilities or works mentioned in paragraphs 2, 3, 4, 5, 6, 7, 8 and 9 of clause (a), including the removal of snow from access ramps and driveways, parking and loading areas and walkways;

(c) enter into one or more agreements with the municipality dealing with any or all of the facilities, works or matters mentioned in clause (a) or with the provision and approval of the plans and drawings referred to in subsection (4).

Subsections (4) and (6) respectively authorize a municipality to approve plans for the provision of and to extract from the land owner an undertaking to provide for facilities for access to and from the land, such as access ramps and curbings and traffic direction signs. Those subsections do not expressly authorize a municipality to deny access for the purpose of denying the lawful use of the property. I cannot find any implication of such power in the language of those provisions. Those subsections authorize approval of plans that provide access. In my opinion they cannot be tortured into legislative sanction for the refusal of approval of plans for the reason that they provide for facilities of access to and from the land.

The record in this case is extensive. A close perusal of it leads me to the inescapable conclusion that the sole reason for the refusal to approve the development plans is that they provide for access to those local streets. It is my opinion that that reason is not one authorized by law. I do not think that a municipality is entitled to refuse developmental approval for an unlawful reason and thereby efffectively frustrate a land owner's prima facie right to issue of the building permit. The municipality withheld this building permit for a reason that is not authorized by law. It follows therefore, that it must now issue it. In my opinion therefore, the applicant is entitled to its building permit and the municipality is ordered to issue it.

Mr. Reble argued that s. 40(9) of the Planning Act provides the applicant an alternative remedy and that therefore, this Court should refuse to exercise its discretion in favour of the applicant.

(9) Where the municipality fails to approve the plans or drawings referred to in subsection (4) within thirty days after they are submitted to the municipality for approval or where the owner of the land is not satisfied with any of the requirements made by the municipality under subsection (6) or with any part thereof, including the terms of any agreement required, the owner of the land may require the plans or drawings or the unsatisfactory requirements or parts thereof or the agreement, as the case may be, to be referred to the Municipal Board by written notice to the secretary of the Board and to the clerk of the municipality, and the Board shall then hear and determine the matter in issue and settle and determine the details of the plans or drawings and approve the same and settle and determine the requirements, including the provisions of any agreement required, and the decision of the Board is final.

That section provides a means of arbitrating a dispute about the details of plans or drawings or the terms of an agreement. If this case involved a legitimate dispute about details or terms there would be great force in that argument. But in this case I think that there is no legitimate dispute. There is

what seems to me to be nothing more nor less then unlawful obstinacy. Therefore I do not think that the applicant is required to go to the Ontario Municipal Board before coming to this Court.

I make it clear that this Court does not order that the municipality approve the application for developmental control approval which has been submitted to it. It does declare that the municipality's reason for refusing that approval is unlawful. In the event of failure of approval or to arrive at an agreement for some lawful reason then s. 40(9) provides an adequate remedy.

In the result an order will go directing the issue of the building permit.

Order granted.

Doublerink Arenas Ltd. v. North York (City) Chief Building Official

Between
Doublerink Arenas Limited, applicant, and
E.Y. Uzumeri, in his capacity as Chief Building Official of The Corporation of the City of North York and Lauridon Sports Management Inc., respondents

[1996] O.J. No. 3519
DRS 97-02524
Court File No. RE6080/95

Ontario Court of Justice (General Division)
Lax J.
October 9, 1996.
(2 pp.)

Costs -- Party and party costs -- Excessive costs.

HELD: Lauridon's costs were fixed at $10,000. The costs claimed were excessive. The matter was not complex and the City was the main respondent.

Counsel:
Ronald D. Kanter and Jeffrey E. Canto-Thaler for the applicant.
Stephen R. LeDrew and Ian R. Dick for the respondent, Lauridon Sports Management Inc.

[para1] LAX J. (endorsement):-- I have been asked to fix the costs of the respondent, Lauridon in this matter which was before me on June 6 and 7, 1996. I have considered the written cost submissions of Doublerink and of Lauridon. It is my view that the costs claimed by Lauridon (some $53,000.00) are out of all proportion to the costs which ought to be awarded to a successful party following an application of this kind. The issue was novel, but not complex. The solicitors for Lauridon concentrate in this area of law. The principal respondent was the City of North York. It has settled its costs for $7,500.00 which it describes as "an extremely low figure" and Doublerink describes as "a reasonable amount". I recognize that there is a difference between the interests of the two respondents. I also recognize that the outcome was of importance to Lauridon in view of its financial investment in the project at issue. But, I do not agree that this 1 1/2 day argument required almost 300 hours of work from four senior counsel, at rates of $180.00 to $200.00 per hour, particularly when the City defended the action, filed comprehensive materials and participated fully in the argument.

[para2] Costs of Lauridon are fixed at $10,000.00 plus disbursements and G.S.T.

LAX J.

Dusevic v. Columbia Shuswap (Regional District)

IN THE MATTER OF Purcell Helicopters Skiing Ltd. and East Kootenay Assessment Authority, P.I.D. 008-062-978, Lot 1, Section 18, Township 27, Range 21, West of the Fifth Meridian, Kootenay District Plan 10108

Between
Joe Dusevic, Evelyn Dusevic, Reginald Bishop, Marsha Bishop, John Gareb, Teressa Gareb, J. Les Youn Ghusband, Joan Youn Ghusband, William Corbett, Rhea Corbett, Petitioners, and Columbia Shuswap Regional District, Purcell Helicopter Skiing Ltd., Respondents

Vancouver Registry No. A890281

[1989] B.C.J. No. 668

British Columbia Supreme Court
Vancouver, British Columbia (In Chambers)
Maczko J.

Heard: February 23, 1989
Judgment: April 17, 1989

Counsel for the Petitioners: Tom R.I. Dusevic.
Counsel for the Respondents: Grant Anderson.

Maczko J.:--

FACTS

The petitioners apply for an order of mandamus to compel the respondent Regional District to exercise its power pursuant to s. 751 of the Municipal Act, R.S.B.C. 1979, c. 290, to restrain the respondent Purcell Helicopter Skiing Ltd. ("Purcell") from using the subject property in a manner that does not conform to the permitted uses outlined in Highway Planning Area No. 1 Development Permit Bylaw 1979, No. 282 and Schedule "A" thereto ("by-law"). Regulation 3.04 provides:

> The use of land, buildings and structures in Zone No. 1 is restricted to:
>
> (a) residential;
>
> (b) farming, namely cultivating land,or using land for agricultural, horticultural, poultry raisirg, stock raising, dairying, fur farming, veterinary clinics and beekeeping purposes or any or all of them;
>
> (c) extraction and removal of natural resources;
>
> and all other uses are prohibited.

Since approximately December 4, 1988, Purcell has been using the subject property to operate a helicopter skiing business and landing pad for helicopters. This use is in clear contravention of the aforementioned regulation.

The petitioners do not have the authority to compel compliance with the by-law. Only the Regional District has this authority, which derives from s. 751 of the Municipal Act. Section 751 provides:

> 751. Where a building is erected or used, or land is used, in contravention of a bylaw adopted under this Act, in addition to any other remedy provided in this Act, and to any
>
> penalty imposed by the bylaw, the contravention may be restramed by a court proceeding at the instance of the municipality alone.

BACKGROUND

In late June, 1987 Purcell submitted an application to rezone the subject property to permit commercial use. After having conducted the requisite public hearings, the by-law having had second and third reading by the Regional Board, and having obtained the requisite approval from the Minister of Transportation and Highways, it was learned on June 10th, 1988 that the Minister of Municipal Affairs did not approve the

proposed by-law. Purcell then relocated its landing area in the fall of 1988. On November 7th, 1988 Purcell submitted a new application for rezoning, together with a letter indicating it was prepared to grant a covenant restricting helicopter activity to the east side of the property, which is the side furthest away from the petitioners' property. Again, the proposed by-law received first and second reading and public hearings were conducted. On December 7th, 1988 the petitioners

wrote to the Regional District requesting that the Board enforce the existing by-law. At an in-camera meeting of the Board on December 16th, 1988 the Board confirmed its policy not to enforce a zoning by-law when an active application was in progress. This policy was communicated to the petitioners in a January 13th, 1989 letter.

PETITIONERS' ARGUMENT

The petitioners argue as follows:

(i) the Regional District has a duty to enforce the existing bylaw, which it has failed to discharge;

(ii) even if enforcement of the existing bylaw is a discretionary power of the Regional District, this discretion has been exercised in bad faith, since the Regional District has permitted the ongoing non-conforming use of the property notwithstanding the disapproval of the Minister of Municipal Affairs;

(iii) even if the discretionary power of the Regional District has been exercised in good faith, by refusing to

enforce the existing bylaw, the Regional District in effect has circumvented the legislation and rezoned the property by resolution rather than through a bylaw as required by statute.

Are the petitioners entitled to their order of mandamus?

The prerequisites to the granting of an order of mandamus are set out in the Canadian Encyclopedic Digest (Western), 3rd ed., Vol. 28, at Title 117 Prerogative Remedies pp. 117-80:

(1) a clear legal right to performance of a duty: (2) evidence that the performance of the duty is owed: (3) an absence of discretion as to whether the duty must be performed: and (4) proof of a demand that the duty be performed and a refusal thereof.

These prerequisites are also set out in Karavos v. Toronto and Gilles, [1948] 3 D.L.R. 294 (Ont. C.A.) at p. 297, which case is judicially noticed in Dombrowski v. Dalhousie University (1976), 15 N.S.R. (2d) (N.S.C.A.) at pp. 309-10.

I do not intend to deal with each of these prerequisites

because I find that the petitioners cannot be successful if they fail on any one of them. I find that the duty to enforce the by-law is discretionary and mandamus would only issue if the respondent Regional District exercised that discretion in bad faith.

DUTY TO ENFORCE THE BY-LAW

The language of ss. 294 and 750(1) of the Municipal Act is permissive. Those sections read as follows:

294. The council of a municipality may make bylaws for the purposes of enforcing the bylaws of the municipality by fine, imprisonment or both, and for inflicting fines, penalties and costs.

750. (1) A bylaw adopted under this Act may be enforced, and the breach of this Act or a bylaw, resolution or regulation of the council restrained by a proceeding in the Supreme Court or the County Court whether or not a penalty has been imposed for the breach.

There are no other sections in the statute which would compel the Regional District to enforce its by-laws. Absent any statutory duty to enforce the by-law, is there common law duty to enforce? Certainly prior to Kamloops v. Nelson, [1984] 5 W.W.R. (S.C.C.), no such common law duty existed. McIntyre, J.

(Estey, J. concurring) said, at p. 12:

> It has been held that a municipality has no duty to enforce by-laws passed under statutory powers which leave a discretion as to whether such powers may be exercised or not. The provisions of the Municipal Act of British Columbia which empower the passage of a building by-law are found in s. 714 of the Act and are clearly permissive. The provisions of ss. 734, 735 and 715, cited above, give a power to take legal steps towards enforcement but impose no duty.

McIntyre, J. then went on to review several judgments which dealt with the issue of the common law duty to enforce a by-law by instituting legal proceedings. He stated at p. 12:

> In Brown v. Hamilton (1902), 4 O.L.R. 249 (H.C.), the city of Hamilton had passed a by-law which prohibited the setting off of fireworks in the city streets. The by-law had for many years been ignored by the public and, presumably, by the city. The plaintiff was injured by a roman candle during a display of fireworks in the streets. He sued the city for damages arising from its failure to enforce its by-law. In the High Court, Chancellor Boyd said, at p. 251:
>
> > Having enacted such a by-law, there is no duty cast on the municipality to see to its enforcement.

McIntyre, J. then quoted, at p. 15, from Toronto v. Polai (1969), 8 D.L.R. (3d) 689 (Ont. C.A.) (affirmed [1973] S.C.R. 38), where it was held at pp. 707-8:

> Municipal council has a discretion as to when it will prosecute for a breach of or sue to enforce the provisions of the zoning by-law. To deny the discretion in municipal council would be to place the most technical breach of the by-law beside the most blatant and to remove from consideration the harm done to the offender and the value to the community of the proposed proceedings when considering when they ought to be taken. The discretion when to prosecute or when to sue which rests with the municipal corporation or the comparable discretion which rests with public authorities charged with the responsibility of enforcirg the rights of the public when they are violated, is one of the great strengths of our system of justice.

Much like the Attorney General's prosecutorial discretion, the exercise of a municipality's discretion is not a matter that is judiciary reviewable unless it is exercised in bad faith. As stated by Schroeder, J.A. in Toronto v. Polai, supra, at pp. 696-7:

> As members of the city corporation the inhabitants are entitled to look to the duly elected representatives who comprise the municipal council for enforcement of the provisions of by-laws passed for their protection, and in
>
> enforcing those by-laws the corporation, whether by means of a prosecution or in a suit for injunctive relief, acts on behalf of all the inhabitants. The municipality acting through its council and duly appointed officials, occupies in a more restricted sense the same position as does the Attorney General who represents the Crown in its capacity as parens patriae charged with the responsibility of enforcing the rights of the public when they are violated. The decision whether or not the Attorney General sbould prosecute or sue is a matter for him, and the Courts have no power to question his right to do so or to refrain from doing so as distinct from his right to refief.

This statement was adopted by McIntyre, J. at p. 13. At p. 20, McIntyre, J. concluded:

> At common law, a municipality has no duty to enforce its by-laws by court proceedings. The matter is discretionary. Failure to exercise enforcement powers in court does not give rise to a private cause of action in negligence to those suffering harm from nort-enforcement.

The majority decision in Kamloops v. Neilson, on the other hand, recognized that at least insofar as "operational" decision-making was concerned, a municipality did have a

private law duty to prevent foreseeable harm to its "neighbours" caused by its failure to enforce municipal by-laws. Wilson, J. (for the majority) discounted the "floodgates" argument and held at pp. 37-8:

> ... the applicable legislation or the subordinate legislation enacted pursuant to it must impose a private law duty on the municipality or public official before the principle in Anns applies. Further, the principle will not apply to purely policy decisions made in the bona fide exercise of discretion. This is, in my view, an extremely important feature of the Anns principle because it prevents the courts from usurping the proper authority of elected representatives and their officials. At the same time, however, the principle ensures that in the operational area, i.e., in implementing their policy decisions, public officials wit be exposed to the same liability as other people if they fail in discharging their duty to take reasonable care to avoid injury to their neighbours.

I conclude that the Kamloops decision is not of assistance to the petitioner, as it can be distinguished from the case at bar. First, in the Kamloops case, a provision of the building by-law passed by the City pursuant to the discretionary provision of the Municipal Act, dealt specifically with enforcement and stated:

> The building inspector shall enforce the provisions of this by-law and administer the by-law.

The by-law in the case at bar is silent on the question of enforcement. In this statutory vacuum the existence of a duty to enforce must be determined according to the common law, which seems to dictate that the responsibility for by-law enforcement is in fact no more than a "power" and is therefore discretionary.

Secondly, the resolution at issue in the case at bar cannot be characterized as an operational decision, which is a prerequisite to Wilson, J.'s test for the existence of a private law "duty" to enforce. She held at p. 37:

> ... the city could have made a policy decision either to prosecute or to seek an injunction. If it had taken either of those steps, it could not be faulted. Moreover, if it had considered taking either of those steps and decided against them, it could likewise not be faulted. But not to consider taking them at all was not open to it. In other words, as I read his reasons, his view was that the city at the very least had to give serious consideration to taking the steps that were open to it. If it decided against taking them, say on economic grounds, then that would be a legitimate policy decision within the operational context and the courts should not interfere with it. It would be a decision made, as Lord Wilberforce put it, within the limits of a discretion bona fide exercised.

I find that the Regional District considered the question of whether to enforce the by-law and made a policy decision not to enforce it, pending the outcome of the rezoning application. Section 751 of the Municipal Act gives the Regional District a discretion and the courts should not interfere with the clear intention of the Legislature.

BAD FAITH

Did the Regional District act in bad faith when it passed the resolution not to enforce, given the prior disapproval of the proposed by-law by the Minister of Municipal Affairs?

Where the court is satisfied that a municipal council has acted in good faith and within the limits of its power, the court should refrain from interfering with its decision (Sundance Beach v. W.A.W. Holdings Ltd., [1981] 1 W.W.R. 581 (Alta. C.A.)). As stated by Dickson, J. (as he then was) in Prince George v. Payne, [1977] 4 W.W.R. 275 (S.C.C.) at p. 281:

> It is the prerogative of the council to make the decision one way or the other provided its discretion is exercised within the limitations imposed by law and is not activated by indirect or improper motives or based upon irrelevant or alien grounds, or exercised without taking relevant facts into consideration.

In the absence of evidence to the contrary, bona fides are assumed. The by-law or resolution itself, when considered in terms of the public interest, may provide objective evidence as to whether or not the council was acting in good faith, quite apart from any subjective evidence on that point (W.A.W. Holdings Ltd. v. Sundance Beach, [1980] 1 W.W.R. 97 (Alta. Q.B.) p. 115, per Miller, J.). Miller, J. stated at p. 116:

> This approach of finding objective evidence that the improper motives or lack of good faith existed in the decision itself has been accepted by the House of Lords in Roberts v. Hopwood, [1925] A.C. 578. In the opinion of Lord Atkinson, at p. 593:
>
> > In the absence of precise and detailed information as to the grounds on which the Council acted, their action, must, in my opinion, be judged by its results.

The mere fact that the operation of a by-law appears to benefit one party more than others does not necessarily establish a motive inconsistent with the "public interest". As held by Brown, J. in Re Central Burnaby Citizens' and Ratepayers' Ass'n (1956), 6 D.L.R. (2d) 511 (B.C.S.C.) at p. 518:

> But, though the operation of a by-law benefits one or more persons more than others, it does not follow that by enacting it a corporation must be taken to "give any bonus" within the Municipal Act, 1906, sec. 194, nor can a by-law be said to be outside the powers conferred by sec. 125 of the Vancouver Act, 1900, merely because steps taken in the public interest are accompanied by benefit specifically accruing to private persons.

Is there something inherently improper about a decision not to act in the face of a blatant contravention of a municipal by-law? In my opinion, there may be bona fide policy reasons in the public interest which argue in favour of temporarily suspending the enforcement of a by-law while it is under review and subject to change, e.g., avoidance of the unnecessary expense of enforcement proceedings which may become superfluous if the by-law is amended, or unnecessarily putting a company out of business.

Even though a municipality is at liberty to decide against enforcement of a particular by-law for valid policy reasons, it cannot adopt a general policy not to enforce its by-laws. Quoting from Toronto v. Polai, supra, McIntyre, J. held, at p. 14 of the Kamloops decision:

> ... the Court has neither the right nor the power to control the exercise of Council's discretion by either direct or indirect means, except possibly, in a case where Council lays down a general policy not to enforce its restrictive zoning by-laws.

The only evidence which the petitioners have adduced to support their allegation "improper motive" is the fact that the enforcement of the existing by-law was suspended notwithstanding the Minister of Municipal Affairs' disapproval of the initial application for rezoning. However, the impugned resolution was passed subsequent to a renewed application, which was predicated on new circumstances (i.e. the granting of a covenant by Purcell). It is possible that the Minister's decision might be different as a result of the new circumstances. In the absence of more cogent evidence of bad faith, I must assume that the impugned resolution was passed with the public interest in mind.

This is not a case of a municipality adopting a general policy not to enforce its restrictive zoning by-laws. Due consideration was given to the question of whether or not the Regional District would enforce this particular by-law against Purcell. Because of bona fide policy reasons for which the Regional District is entitled to receive the benefit of the doubt, I conclude that it acted with the public interest in mind when it passed the resolution at issue.

The petitioners have failed to discharge the onus upon them to prove bad faith on the part of the Regional District.

REZONING

Where a municipality exercises its statutory discretion to do a certain act in a colourable attempt to rezone a property, rather than invoking the rezoning machinery provided for in the Municipal Act, this act can be assailed.

The courts seem concerned that the "many safeguards" in place to protect the zoning process from abuse should not be circumvented through an improper and colourable use of a municipality's discretionary powers. For this reason, where the courts have concluded that the "sole object" of a municipality's action was to circumvent the statutory rezoning machinery, an order of mandamus was justified. See Active Trading v. City of New Westminster, [1947] 5 W.W.R. 354 (B.C.S.C.) and Wilcox v. Township of Pickering et al. (1961) 29 D.L.R. (2d), 428 (Ont. H.C.).

It does not necessarily follow that every time a municipality's discretionary power is used in a way that incidentally alters a zoning requirement, it must be viewed as an "unlawfW exercise of power". There may be bona fide policy reasons for taking such a course of action, in which case this exercise of discretion retains its lawfulness.

In Toronto v. Polai, supra, the zoning by-law dating back many years, stipulated that certain dwellings could be used only as "private detached" (and not multiple family) "dwelling houses". Since 1949, the city had maintained a "deferred list" of known offenders of the by-law against whom no prosecution would be brought. The rationale for the development of this list in the first instance related to the fact that during the preceding war years it was necessary that certain dwellings be used in a manner contrary to the by-law. The plaintiff municipality sought a restraining order to prevent the unlawful use of a particular dwelling as a multiple family dwelling. The

defendant argued that the plaintiff was not entitled to such relief since it had acted inequitably by maintaining the deferred list. The defendant was successful at trial, and the municipality appealed on the ground that it had a discretion in carrying out the by-law, and the Court had no power to dictate the manner in which that discretion could be exercised. It was held by Brooke, J.A., at p. 706:

> There was very little evidence as to the conditions which prevailed at the time of the passing of this resolution. The probability is that there were a considerable number of premises being used in violation of the suspended prohibitory provisions of the by-laws. I think it is probable that what was sought by the resolution was an orderly termination of these uses. The deferred list, then, if this was its origin, and I believe it was, was born of necessity and not for the purpose of some motive which might be criticized.

Even though the municipality effected a change in the zoning by-law without the safeguards provided by statute, the Court held that there was nothing improper about the discretion exercised by the municipality. Schroeder, J.A. held, at p. 694-5:

> It is of prime importance that the Committee did not inaugurate a policy of granting perpetual immunity to violators of the by-law but merely deferred action in cases which on due consideration they approved ...

Similarly, in the case at bar it cannot be said that the Regional District in passing the resolution at issue was driven by "some motive which might be criticized". This particular resolution as wet did not grant "perpetual immunity to violators of the by-law".

The time of enforcement of municipal by-laws is a matter that is properly within the discretion of a municipality. At p. 656 of Re Cornenki and Township of Tecumseth (1971), 19 D.L.R. (3d) 655 (O.H.C.), Oster, J. held:

> While there is undoubtedly a duty towards the citizens on the part of a municipal council to look to enforcement of the by-laws it enacts, the particular time, place and mode of enforcement must be left, except under most exceptional circumstances, to the discretion of the elected council and is not the type of duty that can be enforced by mandamus in the very general way requested in this application.

In the case at bar, the Regional District adopted a policy to stay enforcement proceedings against a by-law violator pending the outcome of a zoning application which might impact on the existing by-law. Because no evidence of an improper motive was adduced, I must assume that there were valid reasons for adopting this policy. It is true that in so acting the Regional District managed to rezone the subject property without the safeguards afforded by the legislative scheme. However, this was an incidental effect of an otherwise valid exercise of discretion and for this reason the decision of the Regional District is not assailed. If, however, there was evidence that the Regional District was attempting to circumvent the legislative scheme by postponing enforcement indefinitely, it might show evidence of bad faith. Even if the Regional District was acting in good faith, in the sense that it was acting in what it perceived to be the public interest, mandamus might issue if the effect of its decision was to amend the by-law without complying with all aspects of the statute. The decision to delay enforcement cannot be continued indefinitely. I think it is not an unreasonable decision to delay enforcement until the Minister makes a decision on the new set of circumstances, provided that the Regional District proceeds expeditiously to present the by-law for approval.

Costs follow the event.

Maczko J.

Egarhos v. City of Ottawa

52 O.R. (2d) 190

ONTARIO
DISTRICT COURT OF ONTARIO
SOUBLIERE D.C.J.
12TH JUNE 1985.

ACTION to recover a development fee paid under protest.

Gordon E. Sheiner, for plaintiff.

Pierre DesRoches, for defendant.

SOUBLIERE D.C.J. (orally):-- The plaintiff brings this claim for return of the sum of $7,260 which he paid to the City of Ottawa when he decided in 1980 to make changes to one of the floors of his apartment building. He paid the sum to the city in order to obtain the building permit to effect the changes. The city alleged that such levy was payable as the proposed changes constituted a redevelopment pursuant to the Planning Act, R.S.O. 1970, c. 349, s. 35a, and therefore attracted payment of 5% of the value of the lands in lieu of park land.

The defendant city in its pleadings raises, as a defence, the fact that these moneys had been paid voluntarily and that, regardless of whether the sum was justly payable, the plaintiff is not entitled to a refund of the sum because he had, in fact, paid the moneys voluntarily. Counsel for the city did not press the matter in front of me and I may say that on that point I would have found against him. The sum indeed had been paid under practical compulsion and the authorities cited to me would have justified the payment then as well as a refund now.

The issue

The real issue which is before me deals with the nature of the changes made by Mr. Egarhos. Are they a redevelopment within the meaning of the Planning Act?

The facts

Mr. Egarhos is the owner of the building at 263 McLaren St. in which there are 13 floors; one is the basement, the main floor was a lobby and an elevator, the second floor was office space and the remaining 10 floors consisted of 80 apartment units. When he acquired the building it was fully occupied, save and except for the office space on the second floor. He has filed, I believe as exs. 2 and 3, statements showing the income and expenses related to the apartment building and these reflect that he was, in fact, incurring a deficit of some $18,000 or $19,000 in his cash flow by reason of the fact that the office space on the second floor was not rented despite his best efforts to do so. Accordingly, he decided to convert these to apartment units much the same as the other 10 floors and he hired Mr. Koffman, an architect in Ottawa, to make the necessary plans and specifications and to apply to the City of Ottawa for the building permit. The City of Ottawa processed the application and granted it but demanded as a prerequisite a fee payable pursuant to the provisions of the Planning Act and a by-law which the city had passed pursuant to those provisions. The plaintiff paid the sum of $7,260 on December 12, 1980, under protest and now brings this action for repayment of the sum.

We are not told what was the total value or the purchase price of the apartment building when the plaintiff acquired it or its value at the time of this application, however, some idea of its value can be gleaned from the statements of income and expenses that have been filed, as well as the mortgages payable, etc. We do know from the application for the building permit that the nature and the cost of the renovations was in the area of $50,000 and Mr. Koffman gave evidence as to what was necessary in order to effect those renovations.

There were no changes made to the outside of the building and as to the interior, there were no structural changes, however, new partitions were required in order to divide the second floor into eight units or apartments. Obviously, carpeting, walls, and ceilings were changed in order to provide the

necessary amenities required for apartments as opposed to the existing office space and back walls. Also, there were stairs leading from the lobby to the second floor; these were filled in and replaced on the ground floor by a rental office and upstairs by an apartment unit. The net effect of the changes was to increase the total residential units from 80 on the other 10 floors to 88, including this additional floor; in other words, eight additional units were created on the second floor.

The City of Ottawa takes the position that those changes constitute a development or redevelopment of these lands under the provisions of the Planning Act and its by-law and are therefore subject to the levy of a fee for park land.

The position of the plaintiff is that the changes do not constitute a development or redevelopment and that, in any event, even if they are, having in mind the magnitude of the work, it does not attract the application of the relevant sections.

The law

To decide this matter, it is essential to set out and consider the history of the relevant legislation and by-law. At the time the by-law was passed (in 1974), s. 35a of the Planning Act defined "redevelopment" as follows:

> 35a(1) ... "redevelopment" means the removal of buildings or structures from land and the construction or erection of other buildings or structures thereon.

There was no definition in the Act of the word "development". It is not surprising, therefore, that By-law 40-74 does not define "development" either and that para. 1 of its provisions contained a definition of "redevelopment" in identical words to those in the Act as it then was.

In 1979 [c. 59, s. 1] the Planning Act was amended, s. 35a was repealed, and a new section enacted. Strangely, the section now omits a definition of "redevelopment" but defines "development" as follows:

> 35a(1) ... the construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of substantially increasing the size or usability thereof, or the laying out and establishment of a commercial parking lot.

The changes in the definition of "development" and "redevelopment" are important because the only three authorities cited to me that are relevant predate this amendment and the decisions do not consider the section in its present wording. However, By-law 40-74 has not been modified so as to conform to the Planning Act as amended. Is there then any significance to the apparent anomaly of a definition of "development" in the Act far different from the definition of "redevelopment" in the by-law and in the absence of further definitions? For our purposes I find not. First, I note that para. 2 of the by-law reads as follows:

> Subject to Section 3, no person shall develop or redevelop land for residential purposes unless and until the owner of the land has:
>
> (a) conveyed to the Corporation five (5) percent of the land proposed for development or redevelopment for park purposes or other purposes, or,
>
> (b) paid to the Corporation money to the value of five (5) percent of the land proposed for development or redevelopment for park purposes or other purposes.

Under the by-law, both development and redevelopment attract the levy of the same fee. The work done by the plaintiff was clearly not a redevelopment under the by-law: no buildings or structures were removed. If the plaintiff is to be liable to payment of the fee, it must be on account of a "development". I find that the test to be applied is development as defined in the Act, without reference to the definition of "redevelopment" in the by-law. The municipality cannot exceed the powers granted to it under the Act. Further, in the absence of a definition of "development" in the by-law, that contained in the Act must apply. Finally, it is clear the relevant

amendments were passed to clear up any ambiguity that may have resulted following the decisions in Re Slau Ltd. and City of Ottawa et al. (1976), 14 O.R. (2d) 514, 74 D.L.R. (3d) 181, 1 M.P.L.R. 234 (Div. Ct.), Re Thomas C. Assaly Corp. Ltd. in Trust and City of Ottawa (1977), 18 O.R. (2d) 198, 82 D.L.R. (3d) 124, 4 M.P.L.R. 213 (Div. Ct.), and Pension Fund Realty Ltd. v. City of Ottawa (1981), 32 O.R. (2d) 611, 122 D.L.R. (3d) 308 (H.C.J.); affirmed 40 O.R. (2d) 501n, 139 D.L.R. (3d) 576n (C.A.). Effect should be given to this intent. It is not necessary for me to decide what effect the amendment would have in the event of a "redevelopment" and I expressly refrain from doing so.

Hence the court must decide whether the changes made by the plaintiff were a development as defined in the amendment. For our purposes, the question can be put as follows: Was the change "the making of an addition or alteration to a building or structure that has the effect of substantially increasing the size or usability thereof "? Here, there was no addition, there was no increase in size; the total area remained the same. We are left then to consider if the change was an alteration to the building or structure that has the effect of substantially increasing the usability thereof.

I have consulted three dictionaries for the meaning of "usability". None defined that term but they refer the reader to the term "use". In the Shorter Oxford English Dictionary on Historical Principles, 3rd ed., at p. 2441, under the word "use", the first definition reads as follows: "I. Act of using or fact of being used. 1. The act of using a thing for any (esp. a profitable) purpose; the fact, state, or condition of being so used". Paragraph 2 deals with the habit of using, the third one with the manner of using, and the fourth paragraph deals with the purpose served, and under that particular subheading there are the following definitions:

> 1. A purpose, object, or end, esp. of a useful or advantageous nature. 2. The fact or quality of serving the needs or ends of a person or persons. 3. Law. The advantage of a specified person or persons in respect of profit or benefit from lands, etc. ... 5. The character, property, or quality which makes a thing useful or suitable for some purpose; utility; advantage, benefit.

Black's Law Dictionary, 4th ed., at p. 1710, defines "use" as follows: "Act of employing everything, or state of being employed; application; employment, as the use of a pen, or his machines are in use. Also the fact of being used or employed habitually."

Further down: "The purpose served, a purpose, object or end for useful or advantageous nature."

Butterworth's Words and Phrases, 2nd ed., makes reference to three cases at p. 266: "The first meaning assigned to the word 'use' in Johnson's Dictionary is 'to employ to any purpose'; it is, therefore, a word of wide significance." That same definition is approved of in another case recited therein where it says: "The word 'use' in its natural meaning is a word of wide import ... " and that case adopts that same definition. And, finally, from a third case: " 'Use' is not a word of precise meaning, but in general it conveys the idea of enjoyment derived by the user from the corpus of the object enjoyed."

In order to apply these definitions, I have to deal with the benefits that the plaintiff obtained from the change or alterations. Whereas he formerly had office space which he was not able to rent, despite his best efforts, he then renovated the second floor into eight apartment units which he was able to rent immediately. He thereby obtained an immediate benefit or advantage from these alterations and in my mind comes within the wording of the definition in that it was an alteration that had the effect of increasing the usability thereof. I find comfort in attributing that meaning from the wording of the amendment itself and the obvious intention of the amendment to include changes to a building or structure which, without changing the size of it, would obtain some benefit to the person making the changes by reason of the increased usability of the building itself. That being so, then the question that remains for the Court is whether or not the increase of the usability was substantial.

Those same dictionaries define the word "substantially". In the Shorter Oxford English Dictionary on Historical Principles, at p. 2172, under the heading "substantial", the following appears (and I omit irrelevant passages):

> A. 1. That is, or exists as, a substance, having a real existence ... 4. That is, constitutes, or involves an essential part, point, or feature; 5. Of food, a meal: Affording ample or abundant nourishment. 6. Of structures, etc: Of solid material or workmanship. 7. Of ample or considerable amount, quantity or dimensions ... 9. Of acts, measures, etc: Having weight, force and effect; 10. Possessing "substance", property, or wealth; 11. Of real worth, reliability, or repute ... 13. Having substance, not imaginary, unreal, or apparent only;

In Black's Law Dictionary, at p. 1597, there appears under the word "substantial":

> Of real worth and importance; of considerable value; valuable. Belonging to substance; actually existing; real, not seeming or imaginary; not illusive; solid; true; veritable. Something worth while as distinguishable from something without value or merely nominal. Synonymous with material.

And, finally, in Butterworth's Words and Phrases, there are several pages dealing with "substantial" which I quote, in part, from p. 141:

> What does "substantial" mean? It is plain that the phrase requires a comparison with the whole rent, and the whole rent means the entire contractual rent payable by the tenant in return for the occupation of the premises together with all the other covenants of the landlord. "Substantial" in this connection is not the same as "not unsubstantial", i.e. just enough to avoid the "de minimus" principle. One of the primary meanings of the word is equivalent to considerable, solid, or big. It is in this sense that we speak of a substantial fortune, a substantial meal, a substantial man, a substantial argument or ground of defence. Applying the word in this sense, it must be left to the discretion of the judge of fact to decide as best he can according to the circumstances in each case, the onus being on the landlord.

It would appear, therefore, that the word "substantial" admits of various meanings, depending in which context it is employed. Obviously, in order to give the word its proper legal interpretation, one has to look at the entire phrase: "an alteration to a building or structure that has the effect of substantially increasing the usability thereof ".

I have come to the conclusion that the changes did substantially increase the usability of the property. It cannot be said that the changes were minimal: They had the immediate effect of adding eight further residential units which constitutes an increase of 10% in residential units that the owner was then renting. Economically, the new units will provide a substantially larger revenue both by reason of the better utilization of the space itself, as well as by reason of the existence of eight individual rental units, as opposed to the potential use of one office area before. Such a change is also more in tune with the rest of the building and with modern design of apartment buildings which frequently have the first floor for commercial use and the remaining ones for residential use. In addition, one cannot help but note that the provisions of the Planning Act were intended to control subdivisions of land and their zoning. More particularly, s. 41 was designed specifically in mind to allow a municipality to obtain land for park purposes (or the equivalent thereof) in the event of new residential subdivisions. Such is the case here; there will be eight new family units residing in this area.

For these reasons, I find that the city was justified in exacting the levy, the plaintiff is not entitled to reimbursement of the sum so paid, and the action will therefore be dismissed.

I have given close consideration to the three cases relied on by the plaintiff, and as well, relied upon by the defendant, cited by me earlier, and all involving the City of Ottawa. While those cases are of substantial assistance to me in placing the subject-matter of this trial in its proper perspective, none the less because of the amendment to the

definition of "development", they do not immediately assist the court in arriving at its conclusion.

It may at first blush be unfair that the owner be required to pay this levy, notwithstanding that the former owner may have also paid it at the outset, and that, further, the basis for the calculation of the payment is the same in both cases. I agree; however, this is an anomaly in the law which was obviously intended by the legislator and the court cannot derogate from such a clear intention.

[Submissions heard on costs]

THE COURT: As I have already pointed out to Mr. DesRoches, the matter of any costs on the proceedings for interpretation are not before me; I do not have to deal with them and I do not take that into consideration. As pointed out by counsel for the plaintiff, this is a new point that arises by reason of the extension of the definition of "development". There were no previous cases.

I must say that the court reluctantly came to the conclusion which it did; my sympathy was with the plaintiff. Had the definition section been without the amendment, I would probably

have given judgment in his favour, however, the amendment was, in my mind, conclusive of the matter.

Also, even if the court has found that these alterations were substantial, none the less having regard to the entire cost, namely, $50,000, having regard to the fact that the levy is based on the total square footage of the land, whereas the alterations were mainly to the second floor of a 12-storey building, I think the ends of justice are best served by not allowing any costs on this matter. Each party will pay its own costs.

I have endorsed the action: "Action dismissed. No costs to either party."

Judgment for defendant.

Erin Dancer Holding Corp. v. Richmond Hill
(Town)

Between
Erin Dancer Holding Corporation, applicant, and
The Corporation of the Town of Richmond Hill, respondent

[1996] O.J. No. 5118
Doc. 35682/95

Ontario Court of Justice (General Division)
Divisional Court
McRae, Howden and MacPherson JJ.
Heard: March 18, 1996.
Judgment: March 22, 1996.

Counsel:
L. Naijar, for the appellant.
K. Jaffary, for the respondent.

Reasons for judgment were delivered by McRae J., concurred in by Howden J. Separate reasons were delivered by

MacPherson J.

[para1] McRAE J.:-- I am of the view that the application should succeed.

[para2] The by-law for the Town of Richmond Hill provided for a refund of excessive building permit fees if three conditions are fulfilled.

[para3] If the applicant disagrees with the prescribed value of the work, the applicant must pay the prescribed fee, complete the work, and submit to the chief building inspector an audited statement detailing the costs of all component parts of the work if the actual cost is found to be less than the prescribed value. On following this procedure the by-law entitled the applicant to consideration by the Town's Chief Building Official within the terms of the by-law and, if that official is satisfied that the submission covers all parts of the work, to a refund in accordance with it.

[para4] The applicants have attempted to fully comply with the by-law. Despite repeal by the Town of this provision shortly after receipt of the first set of applications for the completed subdivisions, the applicants had a vested right to consideration by the Building Official of the Town of their applications within the terms of the by-law, and to a refund if he is satisfied that the statements comply. His discretion is not to be exercised arbitrarily or on irrelevant factors. Falconbridge Nickel Mines Limited v. Ontario (Minister of Revenue) (1981), 121 D.L.R. (3d) 403 at p. 411.

[para5] The following statement was cited by the Court of Appeal with approval in Falconbridge at p. 410 and applies to this case (from Director of Public Works v. Sang, [1961] 2 All E.R. 721, by Lord Morris of Borth-y-Gest):

> It may be ... that, under some repealed enactment, a right has been given but that, in respect of it, some investigation or legal proceeding is necessary. The right is then unaffected and preserved. It will be preserved even if a process of quantification is necessary. But there is a manifest distinction between an investigation in respect of a right and an investigation which is to decide whether some right should or should not be given. On a repeal, the former is preserved by the Interpretation Act. The latter is not.

[para6] And the Court of Appeal stated at p. 418, again I find with direct application to this case:

> A right is no less a right recognized by the law solely because all of the steps necessary to be taken before it can be acted upon may not yet have been taken. In this case the right to claim a refund came into being once the overpayment of tax had been made. At that time there was

> no restriction in the law on the time within which the claim could be advanced ...

[para7] I see no difference in principal between the repeal of the refund provision in this case after fees were paid, work was completed and applications for refunds began, and the case of enactment of a limitation period which could not be complied with in Falconbridge.

[para8] This By-law was not retrospective nor could it have been. It did not extinguish the applicants' vested rights. The rescinding by-law did not state, in clear and precise words, that it was retrospective and in any event the Town does not have jurisdiction to cancel vested rights. Interpretation Act, R.S.O. 1990, ch. I. 11 Rogers, Law of Canadian Municipal Corporations (2nd Ed.), pp. 488.16-.20.

[para9] There is no merit in the Town's much belated argument that the onus was on the applicant to somehow articulate its disagreement with the prescribed value at the time the fees were paid. Nothing in the by-law suggests that this is the case. The Town, by virtue of the by-law, has always known it was in jeopardy of being required to remit excess fees "if the actual cost of the work is found to be less than the prescribed value."

[para10] The By-law section reads:

> (1) The Chief Official shall determine the prescribed value of the work proposed and the applicant shall pay the fees based on such prescribed value in accordance with Schedule "A" and no permit shall be issued until the fees therefore have been paid in full.
>
> (2) If the applicant disagrees with such prescribed value, the prescribed fees shall be paid and upon completion of the work if the actual cost of the work is found to be less than the prescribed value determined by the Chief Official, an audited statement may be submitted detailing the costs of all component parts of the work. Where the Chief Official is satisfied that the statement contains the cost of all component parts of the work upon which the prescribed value is required to be based, the fees shall be adjusted in accordance with this statement and a refund, if required, shall be paid.

[para11] The refund provisions provide a detailed scheme for applying for and obtaining a refund. It anticipates that only "upon the completion of the work if the actual cost of the work is found to be less than the prescribed value" (my emphasis), an audited statement may be submitted and if the Chief Building Official is satisfied with its completeness, a refund "shall be paid" in accordance therewith.

[para12] The scheme does not require that there be notice of disagreement at the time the permit fees are paid. The scheme instead sets out steps to be taken, all in the future. As well, it contains no limitation period as the Town had attempted to suggest; in fact, it assumes some delay as the audited costs could not be known until after the subdivision construction was completed which took several years.

[para13] It is submitted for the Town that it was entitled to notice of disagreement at the time of payment and that because of not knowing of the disagreement from the start, it loses the ability to monitor costs as the work proceeds. Apart from the lack of any requirement for a contemporaneous notice of disagreement in the by-law passed by the Town as I have noted, the evidence establishes that there was no system in the building department to receive a notice of disagreement - no form to be filled in and no practice to be followed. The evidence also establishes that the Town would be unable to monitor the cost of an individual building as it was being constructed. They simply lacked the resources. This submission also ignores the fact that costs could not be known in any event until completion of the work, something the Town's by-law specifically allowed for.

[para14] The Town implicitly acknowledged this by the letter of September 25, 1990 to the Green Park consortium from

David Potter, now Chief Building Official for the Town. He acknowledged that construction costs had turned downward and that "our by-law does allow for adjustments provided an audited statement is verified following construction of a dwelling". The letter also is proof of the fact that the Town, at least on September 7, 1990, became aware that construction costs had dropped significantly.

[para15] In view of this letter and all of the attempts by the Town since then to avoid liability including some which it no longer argues, it is clear to me that the Town is simply trying by all means to avoid its clear duty to honour its obligations to the applicants.

[para16] The Town's argument that the audited statements are inadequate is another belated attempt to obstruct the applicants. In my view the only solution to this issue in fairness to both parties is to direct a new review of the audited statements by the Town's Building Official, this time on proper principles free of what I find to be uncalled for, irrelevant and improper factors not in the by-law's refund procedure or requirements.

[para17] The applicants have attempted in good faith to comply with the requirement for audited statements - the Town has simply obstructed and delayed its efforts to obtain whatever its legitimate refunds may properly be found to be, if any.

[para18] Therefore, judgment should issue in the following terms:

A. an order quashing the decision of the Chief Building Official;

B. a declaration that the applications are not precluded from consideration or affected by By-law 102-92 which purported to repeal the refund provision;

C. a declaration that the applications for refunds comply with all requirements of the Town's by-laws 13-81, 25-82, 67-85, 201-88 and 363-90, save and except the acceptability on accounting principles and coverage of the work in the audited statements, the satisfaction for which is for the Chief Building Official to determine, based on a building by building cost, and

D. an order in the nature of mandamus that the Chief Building Official reconsider, on proper principles and in accordance with the provisions of the by-law effective at the time the fees were paid, the applications for refunds and to provide written reasons for his decision.

E. The question of costs is reserved to be decided on receipt of written argument.

[para19] Counsel for the applicant should have his argument in and circulated by Monday, April 1, 1996. Counsel for the Respondent will be given until April 8, 1996 to reply.

McRAE J.
HOWDEN J. -- I concur.

[para20] MacPHERSON J. (dissenting):-- This is an application for judicial review of the decision of the Chief Building Official of the Town of Richmond Hill. It began as an application to compel the Chief Building Official to consider the applicants' request for building fee refunds and to provide written reasons for his decision. The Chief Building Official has done this, so the application proceeds on a second track, namely an attempt to set aside his decision and compel him to reconsider the applicants' request on proper legal principles.

[para21] The crucial provisions at the heart of this application are ss. 7(1) and 7(2) of by-law 201-88 of the Corporation of the Town of Richmond Hill (later repealed) which provide:

7. FEES

(1) The Chief Official shall determine the prescribed value of the work proposed and the applicant shall pay the fees based on such prescribed value in accordance with Schedule "A" and no permit shall be issued until the fees therefore have been paid in full.

(2) If the applicant disagrees with such prescribed value, the prescribed fees shall be paid and upon completion of the work if the actual cost of the work is found to be less than the prescribed value determined by the Chief Official, an audited statement may be submitted detailing the costs of all component parts of the work. Where the Chief Official is satisfied that the statement contains the cost of all component parts of the work upon which the prescribed value is required to be based, the fees shall be adjusted in accordance with this statement and a refund, if required, shall be paid.

[para22] The applicants have submitted requests for refunds pursuant to s. 7(2). These requests were made long after, sometimes years after, the fees were paid. The applicants did not challenge the quantum of the fees at the time they paid them. They decided to do this later on the ground that their actual costs of construction were less than the prescribed value of the work which formed the basis for the fees they had paid.

[para23] The Chief Building Official has rejected the applicants' submission on several bases.

[para24] First, he says that the applicants must disagree with his determination of the prescribed value of the work before they obtain their building permits. The applicants did not indicate such disagreement; indeed they raised their objections only after construction was completed.

[para25] I agree with the Chief Building Official's interpretation for three reasons. First, and most importantly, it is consistent with the wording of ss. 7(1) and 7(2) which links disagreement with payment of the fees under protest. Section 7(1) authorizes the Chief Building Official to determine the prescribed value of the work. Then s. 7(2) says that "if" the applicant disagrees with this prescribed value he should nevertheless pay the fees and then later "if" the actual cost of the work is less than the prescribed value he can seek a refund for some of the fees paid by providing appropriate documentation. In my view, there is a chronology in ss. 7(1) and 7(2). Read together, and paying particular attention to the word "if" in two places in s. 7(2), the chronology is this:

Step 1 - Chief Building Official determines prescribed value of work;

Step 2 - builder disagrees with this determination;

Step 3 - builder pays fees anyway;

Step 4 - builder proceeds with construction; it keeps

records;

Step 5 - builder requests a refund if actual construction costs are lower than prescribed value of work.

[para26] Second, the Chief Building Officer's interpretation makes sense because it puts the Town on notice that a builder disagrees with the fees it is paying. This permits the Town to monitor construction in the full knowledge that a claim for a refund may be forthcoming.

[para27] Third, this interpretation also makes sense because it forces both the Town and the builder to address the issue of fees in a year when the fees are part of the Town's revenue. If the builder could disagree about a fee years later, there would potentially be large problems of evidence (on both sides). Such an interpretation is not required by the wording of s. 7(2); indeed as I suggested above, an

interpretation linking disagreement with the payment of the fee is a coherent and permissible interpretation.

[para28] For these reasons, I agree with the Chief Building Official's decision that the applicants cannot advance a claim for refund because they did not signal their disagreement with the prescribed value of the work when they paid their fees.

[para29] A second basis on which the Chief Building Officer rejected the applicants' claims for refunds was his conclusion that the information provided by the applicants was insufficient to support their claims. He deals with this aspect of the claim in considerable detail at pp. 5-11 of his decision.

[para30] I note that s. 7(2) says that the fees should be adjusted "where the Chief Official is satisfied" that the information presented by the builder contains the costs of all component parts of the construction work. I do not believe that a court should interfere lightly with the determination by a senior and experienced government official on a complex question relating to the adequacy of financial statements tendered to support a claim for a refund. Moreover, a court should be especially reluctant to interfere with an official's decision when the legal standard for that decision is the subjective one of his satisfaction.

[para31] In any case, there is, in my view, more than enough evidence on the record to justify the Chief Building Officer's decision. Without repeating in detail the factors analyzed at pp. 5-11 of that decision, I would highlight the following:

1. Even the applicants concede that the financial statements they filed originally were completely inadequate. Since then, they have engaged in a long process of trying to patch together more and better financial material to support their claims.

2. Two of the six applicants did not even make a claim until February, 1995. This was years after construction was completed. This is, in my view, a ridiculously long time to wait to make a substantial claim on public funds. It puts the Town in a very difficult position with respect to verification of construction costs and trying to find funds for refunds.

3. Even in oral argument, counsel for the applicants admitted that there are still errors in the applicants' financial statements.

4. The Chief Building Officer's conclusion that the audited statements in support of a claim must be on a lot-by-lot basis, rather than subdivision-by-subdivision basis, in order for him to be able to determine that the applicant has, pursuant to s. 7(2), "detail[ed] the costs of all component parts of the work" is, in my view, an entirely reasonable conclusion. In any case, it is precisely this type of administrative decision that should not be lightly interfered with by courts performing a judicial review function.

5. The Chief Building Officer's careful analysis of the omissions and discrepancies in the financial statements filed by the applicants is, in my view, persuasive.

[para32] For these reasons, I do not think that the decision of the Chief Building Official that he was not satisfied that the financial statements provided by the applicants were sufficient to justify refunds should be overturned.

[para33] In summary, I believe that the Chief Building Official's decision was correct on both of the main points he considered.

[para34] For the sake of completeness, on the vested

rights/retrospectivity issue, I agree with the reasoning and conclusion of my colleagues. The Chief Building Officer erred on this issue. However, since he was correct in his analysis on the two issues I considered above, it follows that, in my view, his overall decision was correct. Hence, unlike my colleagues, I would dismiss the application.

MacPHERSON J.

ERIN DANCER v TOWN OF RICHMOND HILL

Date: 19980515

Docket:**C25975**
COURT OF APPEAL FOR ONTARIO
RE: ERIN DANCER HOLDING CORP., as trustee for ERIN DANCER HOLDINGS JOINT VENTURE, a co-tenancy, KENLEY ESTATES INC., as trustee for KENLEY ESTATES JOINT VENTURE, a co-tenancy, WILDFUR INVESTMENTS INC., as trustee for BAYVIEW HILL PHASE II CO-TENANCY, a co-tenancy, CUPOLA PROPERTIES LTD., as trustee for CUPOLA PROPERTIES JOINT VENTURE, a co-tenancy, KINGSGLEN DEVELOPMENTS INC., as trustee for KINGSGLEN DEVELOPMENTS JOINT VENTURE, a co-tenancy, and AVONGREEN ESTATES INC., as trustee for AVONGREEN ESTATES JOINT VENTURE, a co-tenancy (Applicants\Respondents in Appeal) v. THE CORPORATION OF THE TOWN OF RICHMOND HILL and THE CHIEF BUILDING OFFICIAL FOR THE CORPORATION OF THE TOWN OF RICHMOND HILL (Respondents\Appellants)
BEFORE: DOHERTY, WEILER and GOUDGE JJ.A.
COUNSEL: George H. Rust-D'Eye and Barnet H. Kussner for the appellants
Larry M. Najjar and Gregory W. Roberts for the respondents
Richard E. Shibley, Q.C. and Thomas McRae for the intervener
HEARD: May 11, 1998

E N D O R S E M E N T

[1] The appellant ("the Town") appeals from a decision of the Divisional Court requiring the Chief Building Official to reconsider certain applications for partial refunds of building permit fees paid by the respondent developers and builders ("the builders").

[2] The issues raised on this appeal involve the interpretation of s.7 of By-Law 201 Section 7 states:

(1) The Chief Official shall determine the prescribed value of the work proposed and the applicant shall pay the fees based on such prescribed value in accordance with Schedule"A", and no permit shall be issued until the fees therefore have been paid in full.

(2) If the applicant disagrees with such prescribed value, the prescribed fees shall be paid and, upon completion of the work, if the actual cost of the work is found to be less than the prescribed value determined by the Chief Official, an audited statement may be submitted detailing the costs of all component parts of the work. Where the Chief Official is satisfied that the statement contains the cost of all component parts of the work upon which the prescribed value is required to be based, the fees shall be adjusted in accordance with this statement and a refund, if required, shall be paid.

[3] The term "prescribed value" is defined in s. 2(1) (g) as:

Prescribed value means, as determined by the Chief official, the value of construction of a proposed building including the total value of all work, services and materials in respect of its construction and of all professional and related services.

[4] The by-law does not explicitly state that notice of a disagreement must be communicated to the Town at the time that the fees are paid. The majority of the Divisional Court held that, as a result, there is no requirement that the applicant articulate its disagreement with the prescribed value at the time the fees were paid. McPherson J., in dissent, was of the opinion that the by-law implicitly required the applicants to indicate their disagreement prior to payment of the fees. His opinion was based in part on the wording of the section which says, "if" the applicant disagrees, the prescribed fee should be paid nevertheless. The use of the word "if" implies that some indication of disagreement must be given before the fees are paid. The

approach of requiring notice of a disagreement was, in McPherson J.'s opinion, in accord with the chronology set forth in the section, namely: (1) a determination by the Chief Building Official of the value of the work; (2) disagreeent by the builder with this determination; (3) payment by the builder of the fee in any event; (4) construction of the work; and (5) request by the builder of a refund if actual construction costs are lower than the prescribed value of the work. McPherson J. also held that the Town's position of prior notice of disagreement by the builder before payment of the fee made sense because it would enable the Town to monitor construction in the knowledge that a claim for a refund could be made and also because it enabled the Town to consider the impact of a refund on its revenue.

[5] We agree with McPherson J.'s interpretation and conclusion respecting s.7 of the by-law. The majority of the Divisional Court would read ss.7(2) of the by-law to permit a builder to apply for a refund simply on the basis that the actual cost of the work has proven to be less than the prescribed value. This approach ignores the phrase, "if the applicant disagrees with such prescribed value," in the opening words of ss. 7(2). The definition of prescribed value refers to the value of construction of a "proposed building" and not a completed building. When ss. 7(2) is read with the definition of prescribed value, the subsection indicates that if the applicant disagrees with the "value of construction of a proposed building," the prescribed fees must be paid in any event. The word disagreement requires of the builder a positive course of action in relation to a proposed building and not a completed building. Silence is not consistent with disagreement. A silent difference of opinion which is not expressed is not a disagreement. Absent expression of disagreement, there is an implied acceptance of the Building Inspector's fee. Such an interpretation of the by-law is not only a rational way of reading the by-law, it is consistent with the notion of estoppel by conduct.

[6] It is clear that, in interpreting legislation, the consequences of a proposed interpretation may be taken into account. The interpretation of the majority of the Divisional Court would expose the Town to contingent liability for an unlimited period of time for every fee paid. Given the absence of a limitation period from ss.7(2), this interpretation creates a result which would produce an unacceptable consequence to the Town. The Town would not have intended this result. By contrast, the absence of a limitation period is of no moment if the by-law is interpreted in a manner which requires the builder to indicate its disagreement at the time the fee is paid.

[7] The requirement of notice of a disagreement also accords with a contextual interpretation of the by-law. There are three options available to an applicant for a building permit: (1) elect to accept the assessment; (2) challenge the valuation by resort to s.15(1) of the *Building Code Act*; or (3) record a disagreement under s.7(2) of the by-law. Under the Building Code, if a builder disagrees with the prescribed value of a building, there is an appeal process which must be triggered within a period of twenty days of the officer's determination of prescribed value. The appeal delays construction and is of no assistance if, at the end of the project, the actual costs are lower than the prescribed value. There is no opportunity to reserve rights and to go ahead with construction under the *Building Code Act.* Section 7(2) of the by-law in question provides an alternative procedure to an appeal under the *Building Code Act* by enabling a builder to object to the prescribed value and to reserve the right to a reassessment until the end of the project. The by-law is thus complementary legislation to the *Building Code Act* which solves the problem of enabling construction to proceed in a timely manner while still reserving rights to the builder. In order to avail itself of the benefit of the section, the builder is required to indicate his disagreement as to the prescribed value at that time. It is an alternative to the appeal process under that Act which puts in place a different mechanism.

[8] The majority of the Divisional Court erred in deciding that the builders were not required to advise the Town, at the time the building permits were issued, of a dispute or disagreement regarding the amount of building permit fees payable. Such communication was a condition precedent to preserving the right to a refund. None of the builders did this and consequently the Chief Official's decision that no partial refunds of building fees are payable, was correct, as was McPherson J.'s conclusion that the application for judicial review should be dismissed.

[9] As we have concluded that the builders were not entitled to apply for a refund under s.7(2), it follows that their cross-appeal challenging the Divisional Court's holding that lot-by-lot audited financial statements were

required under s.7(2) must be dismissed. We express no opinion on this question.

[10] We would allow the appeal and set aside the order of the Divisional Court with costs to the appellant.

May 15, 1998

Erin Dancer Holding Corp. v. Richmond Hill [CA] (Town)

[1996] O.J. No. 3893
DRS 97-04745
Court File No. M18063

Ontario Court of Appeal
Toronto, Ontario
Carthy, Austin and Charron JJ.A.
November 5, 1996.
(2 pp.)

Application for leave to appeal.

HELD: Leave to appeal granted.

Statutes, Regulations and Rules Cited:
Judicial Review Procedure Act, R.S.O. 1990, c. J.1.

Counsel:
Karl D. Jaffary, Q.C. for the respondents (appellants).
No counsel mentioned for the applicants.

The following judgment was delivered by

[para1] THE COURT (endorsement):-- Leave to appeal granted, costs in the discretion of full panel. We do not think this is an appropriate case to set forth particular questions for consideration. The argument should be directed to the correctness of the order of the Divisional Court. Estimated twice - 1 day.

CARTHY J.A.
AUSTIN J.A.
CHARRON J.A.

Famous Players Inc. v. Toronto (City)

Between
Famous Players Inc. and 730995 Ontario Inc., Applicants, and
Corporation of the City of Toronto and Michael L. Nixon,
Respondents

Ontario Judgments: [1987] O.J. No. 1699
Action No. M157628/87

Ontario District Court - York Judicial District
Toronto, Ontario
Hudson D.C.J.
December 9, 1987

J.D. Brownlie, Q.C., for the Applicants.
P. Gordon, for the Respondents.
R.J. Rolls, Q.C., for Cineplex Odeon Corporation.

HUDSON D.C.J.:-- Cineplex Odeon Corporation, hereinafter referred to as "Cineplex", is the owner of the northerly portion of a building, and Famous Players Inc., hereinafter referred to as "Famous Players", is the owner of the southerly portion of the same building. The entire building was formerly operated as the Imperial Six Thea-tre and is located on the west side of Victoria Street between Dundas Square and Shuter Street in the City of Toronto.

On or about November 20th, 1987, Michael L. Nixon, chief official, Toronto, hereinafter referred to as "Nixon", issued a building permit to Cineplex. Cineplex has worked industriously pursuant to the building permit to prepare the building for its official opening as the Pantages Theatre on December 10th, 1987.

On December 4th, 1987, Famous Players commenced an application pursuant to s. 15(1) of the Building Code Act, R.S.O. 1980, Chapter 51, hereinafter referred to as "the Act", to rescind the aforesaid building permit. The grounds are that the building permit should not have been issued because the Cineplex plans did not comply with the Ontario Building Code. This application is returnable December 18th, 1987. It should be observed that this is eight days after the planned official opening of the Pantages Theatre.

Counsel for Cineplex were advised on December 8th, 1987, by the Legal Department of the City of Toronto to cease all work immediately. This advice was given because it is the City's understanding that the application of Famous Players under s. 15(1) of the Act operated as an automatic stay of the building permit. Counsel for Cineplex were also advised that if they wished to proceed with the construction, then they should bring a motion under s. 15(6) of the Act for an order that the building permit not be stayed.

Counsel for Cineplex moved with lightning speed. The motion under s. 15(6) of the Act was argued before me today, December 9th, 1987.

Section 15(1) of the Act reads:

> 15(1) Any person who considers himself aggrieved by an order given or decision made by an inspector or chief official under this Act or the regulations may, within twenty days after the order or decision is made, apply to the judge of the county or district court for a hearing and appeal."

As previously stated, Famous Players is the owner of the southerly portion of the building, and Cineplex is the owner of the northerly portion of the same building. The premises owned by the two parties adjoin each other. In my opinion, Famous Players has status to commence an application as an aggrieved party under s. 15(1) of the Act.

There is no complaint that they were out of time or that there was any other irregularity.

In my opinion, the building permit was issued pursuant to a decision or order of an inspector or chief official.

Does such an application operate as an automatic stay of the decision to issue a building permit? Counsel have given me the benefit of their thoughtful and careful submissions. Obviously, I must give my decision today. Unfortunately, time does not permit me to do justice to the very helpful arguments of counsel.

Section 15(6) of the Act reads:

> 15(6) The judge may, upon application therefor which may be made ex parte, order that the order or decision appealed from be not stayed pending the outcome of the appeal but shall take effect immediately where, in his opinion, such action is necessary in the interest of Public safety and would not destroy the subject-matter of the appeal."

Although the section provides that the application "Under s. 15(6) may be made ex parte, in my opinion, it was not only proper but necessary that counsel for Cineplex advise counsel for Famous Players of this motion, and such was done. Counsel for Famous Players was in attendance today.

Section 15(6) of the Act only makes sense if the drafters of the legislation proceeded on the understanding that an appeal or application under s. 15(1) operated as an automatic stay of the decision to issue a building permit.

Section 25(1) of the Statutory Powers Procedures Act:

> 25(1) Unless it is expressly provided to the contrary in the Act under which the proceedings arise, an appeal from a decision of a tribunal to a court or other appellate tribunal operates as a stay in the matter except where the tribunal or the court or other body to which the appeal is taken otherwise orders."

Tribunal is defined in s. 1(1)(e) of the same Act. Tribunal means one or more persons, whether or not incorporated and however described, upon which a statutory power of decision is conferred by or under a statute. Therefore, in my opinion, Nixon, acting in his official capacity, is included within the definition of a tribunal.

Therefore, in my opinion, the decision to issue the building permit is automatically stayed by virtue of s. 25(1) of the Statutory Powers Procedure Act.

If I am correct that there is an automatic stay, then should I order the decision to be not stayed pending the outcome of the appeal or application commenced by Famous Players, which application is to be argued December 18th, 1987?

I am advised by counsel for Nixon that the building permit was issued in compliance with the Ontario Building Code and that the construction by Cineplex has proceeded in compliance with the building permit.

I am advised by counsel for Cineplex that:

> (a) Cineplex has completed all of the construction referred to in tbe Notice of Application of Famous Players;
>
> (b) that the Pantages Theatre cannot be opened to the public without a permit issued by the office of the appropriate fire inspection authorities;
>
> (c) that Cineplex has spent hundreds of thousands of dollars doing its construction and advertising and promoting its official opening tomorrow;
>
> (d) that the most profitable time to open a new theatre is during the Christmas season.

I am satisfied that there is no danger to the public if I order that the building permit be not stayed because

(a) the construction has proceeded in compliance with the building permit which was issued in compliance with the Building Code;

(b) the Pantages Theatre cannot be opened to the public without a permit issued by, the office of the appropriate fire inspection authorities.

I am also satisfied that Cineplex will suffer substantial pecuniary loss that will be difficult or impossible to calculate if it is not able to open the Pantages Theatre tomorrow as planned.

In my opinion, the damages suffered by Famous Players as a result of the Pantages Theatre opening tomorrow can be fairly readily calculated if Famous Players is successful upon its application December 18th, 1987.

Therefore, the overwhelming balance of convenience is to order that the building permit be not stayed; however, I must pay attention to the wording of s. 15(6) of the Act.

It is not necessary in the interest of public safety that the building permit be not stayed. On the other hand, it is not contrary to the interest of public safety that the building permit be not stayed. In my opinion, the section should not be narrowly and restrictively interpreted so as to unreasonably limit my discretion in a situation where the overwhelming balance of convenience is in favour of the exercise of such discretion.

Clearly, referring to the last few words of s. 15(6) of the Act, the subject-matter of the Famous Players' application for appeal will not be destroyed if I exercise my discretion. In the result, therefore, I have decided that the building permit should not be stayed.

Corporation of the Town of **Flamborough v.436291 Ontario** Ltd. and Hughes

2 O.R. (3d) 31

ONTARIO
District Court of Ontario
McTurk D.C.J.
September 6, 1990

ACTION for a declaratory judgment and injunctions pursuant to s. 45 of the Planning Act, 1983.

Brent J. Foreman, for plaintiff.

David J. Sherman, for 436291 Ontario Limited, defendant.

S. Vasan, for Edward Hughes, defendant.

MCTURK D.C.J.:-- At the opening of the trial on May 14, 1990, on consent, the action was dismissed against the defendant Hughes, costs related thereto to be dealt with at the end of the trial. The evidence at the trial continued on May 14, 15 and 16 and at the conclusion of the evidence written submissions were ordered; such submissions to have been delivered as follows: by the plaintiff, June 8, 1990; by the defendant, June 22, 1990 and reply by the plaintiff, if any, June 29, 1990.

Before the commencement of the evidence there was an application by Mr. Sherman on behalf of the defendant, 436291 Ontario Limited, that the action be stayed until some or all of the occupants of the various units on the land owned by the numbered company were notified. Such application was refused.

It was admitted at the outset that the real property in question consisted of approximately 75 acres being part of Lot Four in the eleventh concession of the Township of Flamborough which was owned by the defendant corporation since 1981.

Exhibits 1(a) to (d) inclusive were four aerial photos taken of the subject property in September of 1983. Exhibits 2(a) to (e) were five aerial photos taken of the same property in April of 1987.

In this action the plaintiff alleges that the defendant corporation is operating a mobile home park on part or all of its property contrary to s. 45 of the Planning Act, 1983, S.O. 1983, c. 1 as amended. The plaintiff seeks a declaratory judgment that the defendant's property is subject to the provisions of s. 45 of the said Act and further claims an injunction restraining the defendant from locating or causing to be located or used, a mobile home or homes on the subject property, contrary to the Act and further claims a mandatory injunction requiring the defendant to remove or cause to be removed any and all mobile homes located on the subject property. Section 45(2) of the Planning Act, 1983 provides as follows:

> (2) Unless otherwise authorized by a by-law in force under section 34 ... no person shall erect or locate or use or cause to be erected, located or used, a mobile home except on a parcel of land as defined in clause (1)(b) of this section, and in no case except as otherwise so authorized shall any person erect, locate or use or cause to be erected, located or used more than one mobile home on any such parcel of land.

(The parties hereto are agreed that references in s. 45(2) to orders of the Minister or to permits issued under the Public Lands Act, R.S.O. 1980, c. 413, are not relevant to this proceeding.)

Section 45(3) provides an exception to s. 45(2) insofar as it exempts the continued use in the same location of any mobile home that:

(a) was erected or located and in use prior to the 1st day of June, 1977; or

(b) was erected or located in accordance with a building permit issued prior to the 1st day of June, 1977.

The position of the defendant is as follows:

1. that the plaintiff has failed to establish that the various units on the property are mobile homes as defined by the

Planning Act, 1983;

2. in the alternative, if those units are mobile homes, the plaintiff has failed to establish that the defendant caused the erection or location of the said homes on the defendant's property;

3. in the further alternative, that the plaintiff has failed to establish that such units were not located as otherwise authorized by s. 34 [am. S.O. 1989, c. 5, s. 14] of the Planning Act, 1983 or;

4. in the further alternative, that the plaintiff has failed to establish that the units were not used continuously in the same location having been erected or located in accordance with a building permit issued prior to June 1, 1977;

5. the defendant further submits that the relief of a mandatory injunction should not be granted in the absence of notice to each and every unit owner, giving that owner the right to take part in the proceedings.

It is clear on the evidence and I find that the defendant corporation has been the owner of the subject property since early 1981. The evidence of Cindy Willis, president of the defendant company, indicates that the company has been operating a park on the property since 1981; that they charge fees for sites rented to unit home-owners or to people who wish to use the property for the recreational facilities that are available. The rates charged for the units include monthly and seasonal rates and indicate that there are many of the units that are there for extended periods of time (Exhibit 15 indicates a list of some 22 tenants who have lived on the property for ten months or more. Many of the unit sites are serviced with hydro, septic and water connections; that many of the larger units brought on the property are directed to a specific site on which the unit is to be located; that many of the larger units are in excess of 50 feet in length and required to be set up by a crew. Some units have additional facilities attached to them when set up such as bump-out additions to the units, fences, TV masts, steel chimneys, some hydro meters attached to the structures, some underground hydro service, some have small verandahs and wood stairs providing access to the units.

The main issue to be decided is whether the defendant is using the lands herein for the operation of a mobile home park contrary to the Planning Act, 1983. Section 45(2) of the Planning Act, 1983 provides as follows:

> (2) Unless otherwise authorized by a by-law in force under section 34 ... no person shall erect or locate or use or cause to be erected, located or used, a mobile home except on a parcel of land as defined in clause (1)(b) of this section, and in no case except as otherwise so authorized shall any person erect, locate or use or cause to be erected, located or used more than one mobile home on any such parcel of land.

The evidence of Guy Paparella, director of planning for the plaintiff, whose uncontradicted evidence I accept, is that there is no by-law in force which authorizes the operation of a mobile home park on the subject property. I further find that the current zoning by-law of the township, By-law 75-65-EF-Z (Exhibit 6) designates the property as agricultural and limits the uses to which it can be put to the permitted uses described in s. 8.1, which I find did not authorize a mobile home park although it did, by para. 8.1(f), include the operation of a trailer or tourist park. The previous zoning by-law, No. 1341 (Exhibit 7), I find did not authorize the operation of a mobile home park on the subject property.

The by-law governing mobile homes, namely By-law 75-59-M (para. 1, part (a), s. 2) provides that no mobile home shall be located in the municipality except in an approved mobile home park or where permitted by by-law. I accept the evidence of Mr. Paparella that the subject park is not an approved mobile home park and that there have been no zoning amendments or zoning by-laws passed to permit the operation of a mobile home park on the subject property.

The first question to be decided then is whether any of the units located on the subject property as disclosed in the evidence are mobile homes.

Section 45(1) of the Planning Act, 1983 defines "mobile home" as follows:

> ... any dwelling that is designed to be made mobile, and constructed or manufactured to provide a permanent residence for one or more persons, but does not include a travel trailer or tent trailer or trailer otherwise designed.

It will be seen that the two elements to establish a mobile home are (1) that it is designed to be made mobile and (2) that it is constructed or manufactured to provide a permanent residence for one or more persons. The evidence of Miss Willis confirmed that many of the larger units are dwelling units which are mobile in the sense that they were manufactured elsewhere and brought onto the property by a truck and the unit set up on blocks or pillars, connected to the hydro, telephone and septic services by a crew.

In dealing with the second element, that is whether they were constructed or manufactured to provide a permanent residence for one or more persons but do not include travel trailers, tent trailers or trailers otherwise designed, one must consider whether these units come within the definition of a trailer.

The Municipal Act, R.S.O. 1980, c. 302 [s. 210 para. 95(a)] defines "trailer" as follows:

> ... any vehicle so constructed that it is suitable for being attached to a motor vehicle for the purpose of being drawn or propelled by the motor vehicle, and capable of being used for the living, sleeping or eating accommodation of persons, notwithstanding that such vehicle is jacked-up or that its running gear is removed.

Before a "mobile home" can be a "trailer" it must be found to be a vehicle. This matter was dealt with by the Supreme Court of Canada in Farr v. Moore (Township), [1978] 2 S.C.R. 504, 81 D.L.R. (3d) 755, 19 N.R. 341. I found the judgment of Mr. Justice Spence of considerable help and very appropriate to the matter before the court. At p. 508 S.C.R. of the judgment, Justice Spence says as follows:

> Before there can be any determination that the mobile home is a "trailer", the mobile home must be found to be a "vehicle". I am of the opinion that each particular apparatus purchased and installed by each of these appellants was not a "vehicle". It was not a means of conveyance, although it was provided with wheels, and it was not used for the carriage of persons or goods. The purpose of the apparatus, and it is quite apparent from the evidence, was that it should be hauled quite empty to a site and there placed on the site and used, not for the conveyance of persons or goods, but for the installation of goods, to wit, furniture and the residence of people. I am of the view that this determination would be sufficient to dispose of the appeal.

In arriving at this conclusion Mr. Justice Spence noted that in the Farr case the units had been brought onto the site by truck, wheels had been removed, units set on blocks or pillars and the units connected to hydro, telephone, water, septic services, provisions made for heating with oil tanks erected outside the units. Cindy Willis indicated in her evidence that some of the units were brought onto the site by truck and assembled there by a crew. While there was no evidence as to the inside facilities of the various units, there have been filed, as Exhibit 3 and Exhibit 4, photographs with information sheets attached as to the type of units located on the property. It has been said that a picture is worth a thousand words. While this may not always be the case, the photographs as shown in Exhibit 3 and Exhibit 4, together with the information sheets attached, clearly indicated and led one to no other conclusion than [that] many of the units shown are not vehicles. I find that many of the units depicted are intended to be hauled empty to a site, placed thereon; that such units were not conveyances for persons or goods but for the installation of furniture and to use as residences for people

on a more or less permanent basis, certainly over an extended period of time, and I find such units to be mobile homes. This

view is reinforced by the photographs which show that many of the units have fences around part of the property, TV masts installed, steel chimneys attached, hydro meters attached to the sides of the structures, some have steps leading up to the entrances; the size of many of the units exceeds that which would normally be applied to vehicles to permit them being moved along a highway without a special permit being obtained under the Highway Traffic Act, R.S.O. 1980, c. 198. Many of the units have bump-outs or structural additions added to the original unit themselves.

It has been put forward in argument that the court should make a finding with respect to each unit located on the property according to the evidence. I find that this is neither feasible nor necessary under the circumstances. I find that the defendant is carrying on the operation of a mobile home park on the property and without making an exhaustive finding with respect to each unit on the property on the basis of Exhibit 4, which contains some 62 photographs and information sheets of units located on the property, and without in any way finding this to be an exhaustive list, I would find that the following are mobile homes: Exhibit 4, scene 2; Exhibit 4, scene 3; Exhibit 4, scene 4; Exhibit 4, scene 5; Exhibit 4, scene 6; Exhibit 4, scene 7; Exhibit 4, scene 8; Exhibit 4, scene 10; Exhibit 4, scene 11; Exhibit 4, scene 12; Exhibit 4, scene 14; Exhibit 4, scene 15; Exhibit 4, scene 16; Exhibit 4, scene 17; Exhibit 4, scene 18; Exhibit 4, scene 19; Exhibit 4, scene 20; Exhibit 4, scene 21; Exhibit 4, scene 22; Exhibit 4, scene 23; Exhibit 4, scene 24; Exhibit 4, scene 25; Exhibit 4, scene 26; Exhibit 4, scene 27; Exhibit 4, scene 28; Exhibit 4, scene 29; Exhibit 4, scene 30; Exhibit 4, scene 31; Exhibit 4, scene 32; Exhibit 4, scene 33; Exhibit 4, scene 35; Exhibit 4, scene 36; Exhibit 4, scene 41; Exhibit 4, scene 53; Exhibit 4, scene 54; Exhibit 4, scene 61; Exhibit 4, scene 67.

Having found that the property in question has been used as a mobile home park, the next question to be determined is whether it is in breach of the Planning Act, 1983 in so doing.

Section 45 of the Planning Act, 1983 permits the location or use of mobile homes only under the following circumstances:

(a) where such mobile homes are authorized by by-law as referred to in s. 45(2) of the Planning Act, 1983 or

(b) where such mobile homes have been used continuously in the same location since prior to June 1977 or have been used continuously in the same location after having been erected or located in accordance with a building permit issued prior to June, 1977.

In dealing with the first exception, that is, that the mobile homes are authorized by by-law as referred to in s. 45(2) of the Planning Act, 1983, I find on the uncontradicted evidence of the witness Paparella, that there are no by-laws authorizing the operation of a mobile home park on the property.

With respect to the second exception that such homes have been used continuously since prior to 1977 or located thereon with a building permit issued prior to June 1, 1977, it is my view that the onus to show that the operation comes within that exception is upon the defendant on the balance of probabilities. No such evidence has been called and there is no evidence before the court which establishes that a mobile home was operating within such exception. In the event that it should be held that the onus is not upon the defendant to show that it comes within such exception, it is my view that there is still a duty upon the defendant to call evidence as to the situation which exists if it hopes to come within such exception. No such evidence was called. [See] Toronto (City) v. San Joaquin Investments Ltd. (1978), 18 O.R. (2d) 730, 83 D.L.R. (3d) 584, 5 M.P.L.R. 113 (H.C.J.) [affd (1979), 26 O.R. (2d) 775, 106 D.L.R. (3d) 546, 11 M.P.L.R. 83 (C.A.); leave to appeal to S.C.C. refused (1980), 26 O.R. (2d) 775n, 106 D.L.R. (3d) 546n, 32 N.R. 442n (S.C.C.)], at p. 739 O.R., where Steele J. stated as follows:

> There is an onus upon a defendant to prove that he has an exemption to a by-law which proof must go not only to the use of the lands at the time of the amendment to the by-law but also to its continued use until the time of the issuance of the writ.

In any event I agree with the submission of the plaintiff and

I find that the evidence discloses that many of the units found to be mobile homes had been brought onto the property subsequent to June 1, 1977.

There is no evidence to support the suggestion by counsel for the respondent that these units may have been brought onto the property by a building permit issued prior to June of 1977 and I discount that argument out of hand.

A further matter to be decided is: has the plaintiff established that the defendant corporation erected, located or used or caused to be erected, located or used, more than one mobile home on the parcel of land contrary to s. 45(2) of the Planning Act, 1983?

It seems clear on the evidence that the defendant did not erect, locate or use more than one mobile home on the lands in question but the issue is, as well: did the defendant cause such erection, location or use? The evidence of Cindy Willis, president of the defendant corporation, indicates that the company had been operating a park on the property since 1981. This operation included the charging of fees for sites rented to unit owners on a weekend, weekly, monthly or seasonal basis. The rates charged for the unit sites varied. A substantial number of long term tenants reside on the property. Many of the sites are serviced with hydro, septic [and] water connections. The defendant corporation has allowed a substantial number of larger units to be brought on the property since 1981 and in my view, a most important consideration is that, on bringing a unit onto the property, the occupant must first obtain permissions from the defendant company who advises the owner where to locate the unit and can require the owner to remove the unit on completion of the period of occupancy. These factors, I find, clearly indicate that the defendant corporation "caused" the location and use of the mobile homes on the lands in question. It is a reasonable inference to draw that from the evidence of Cindy Willis as well as from the exhibits filed, the owners, certainly of the larger units, were invited to install such homes as permanent residences. I reject the submission on behalf of the respondent that the respondent merely stood by and permitted the various owners to install their homes on the sites in question and I find that the actions of the defendant were positive acts and fall within the prohibition in s. 45(2) of the Planning Act, 1983.

The respondent submits that notwithstanding the fact that the plaintiff's current Zoning By-law 75-65-EF-Z (Exhibit 6) does not authorize the operation of a tourist or trailer camp on the property and that the previous Zoning By-law 1431 (Exhibit 7) did not authorize such an operation, nonetheless such an operation was ongoing and had been recognized by the plaintiff as being a legal non-conforming use. No evidence was led with respect to the operation at the time of the municipality's by-law. While the evidence discloses that there were some trailers which used the site from time to time, the evidence as to the exact nature of the use was vague and certainly, in my view, did not establish its use as a mobile home park. The use of the lands by the defendants or their predecessors has not been shown to be a pre-existing use which would become a non-conforming one by reason of a subsequent by-law prohibiting that use and, in my view, does not fall within the category of a legal non-conforming use. In addition the evidence discloses that there was a substantial increase in the area used and operated as a business by the respondents over the past few years and even if it could be said that the lands had been used as a trailer park, the extent of the increase of their use and the nature of their use and the type of units and facilities provided would raise a serious question as to whether or not it had changed the character of its original use.

Having found therefore, that the defendant corporation has been operating a mobile home park on the lands in question, contrary to s. 45 of the Planning Act, 1983, I hold that the plaintiff is entitled to a judgment declaring that the property is subject to s. 45 of the Planning Act, 1983; that the operation of a mobile home within the property in question is contrary to the Planning Act, 1983. The plaintiff is further entitled to an injunction restraining the defendant from locating, using or causing to be located or used, a mobile home or homes on the subject property, contrary to the Act.

It has been submitted that such relief should not be obtained since individual occupants would not have a right to be heard,

they not having been made parties to the action. In my view it would not be appropriate on this hearing to make an order with respect to individual units but to leave that matter to be determined between the defendant corporation and the various occupants since there may well be different circumstances and situations and agreements under which the occupancy has occurred. For instance, the Landlord and Tenant Act, R.S.O. 1980, c. 232, may apply to some, may not apply to others. Some units may be in for storage purposes or under a separate specialized agreement; the occupants may have other claims between themselves and the defendant which would be more appropriately dealt with at the same time. Therefore, the issues between the individual occupants and the defendant should not be dealt with on this application except as to state that the defendant must discontinue the operation of a mobile home park on the lands in question.

As indicated at the conclusion of the trial, counsel may arrange to speak to me on the question of costs together with counsel for Edward Hughes against whom the action was dismissed at the opening of the hearing.

Judgment for plaintiff accordingly.

Friends of Toronto Parkland v. Corp. of the City of Toronto and Nixon, Commissioner and Chief Building Official for Corp. of the City of Toronto

6 O.R. (3d) 196
[1991] O.J. No. 2205
Action No. 280/91

ONTARIO
Ontario Court (General Division), Divisional Court,
O'Driscoll, Hartt and O'Brien JJ.
December 12, 1991

APPEAL pursuant to s. 16 of the Building Code Act, from a judgment of the General Division dismissing an appeal under s. 16 of the Act.

Karl D. Jaffary, Q.C., for appellant.

D.B. Leibson, for respondents.

THE COURT:

I. The issue

In 1931, the House of Lords was asked to decide: "Who, then, in law is my neighbour?" (Donoghue (or McAlister) v. Stevenson, [1932] A.C. 562, [1932] All E.R. Rep. 1 (H.L.), at p. 580 A.C., p. 11 All E.R.).

In this case, the court is asked to decide: In law, who is any "person who considers himself aggrieved" as that term is used in s. 15(1) of the Building Code Act, R.S.O. 1980, c. 51 (formerly s. 14 of the Building Code Act, 1974, enacted S.O. 1974, c. 74) (the Act)?

Section 15(1) of the Act states:

15.(1) Any person who considers himself aggrieved by an order given or decision made by an inspector or chief official under this Act or the regulations may, within twenty days after the order or decision is made, apply to the judge of the county or district court for a hearing and appeal.

II. Nature of the proceedings

Under s. 15(1) of the Act, the appellant purported to appeal to the Ontario Court of Justice from the issuance, on March 8, 1991, of a building permit to the corporation of the city of Toronto by the respondent Nixon, chief building official for the corporation of the city of Toronto.

On April 10, 1991, after hearing a preliminary motion as to the appellant's standing, Hoilett J. held that the appellant was not a person who felt himself aggrieved within s. 15(1) of the Act; the appeal was dismissed. The appellant then launched this appeal under s. 16 of the Act.

III. The parties and their status

The material placed before the court by the respondents shows that Eglinton Park, located approximately one km. west of Yonge Street, Toronto, is a large district park serving the entire North Toronto area. It is operated and maintained by the City of Toronto's Department of Parks and Recreation.

Eglinton Park is 22.7 acres in area; it accommodates local and regional uses which attract a large number of organized amateur sports leagues (baseball, football, soccer, cricket and hockey); the park also has many casual users.

Within Eglinton Park is located: (a) a 45,000 square foot arena; (b) a surface parking lot for 144 cars; (c) playing fields and baseball diamonds.

Until demolition in March 1991, Eglinton Park contained a 156 foot outdoor swimming pool and deck as well as a small building known as the Memorial Gardens, a community centre with 20 surface parking spaces accessory to it. It is proposed that these facilities will be replaced by the North Toronto Community Centre which, with its amenities (including the

outdoor ice rink over the underground parking facility) will take up approximately the same area.

When completed, the City of Toronto will operate the new facilities through the Department of Parks and Recreation; it proposes a minimum charge for parking for park users of approximately 50/65[cents] per hour in the underground parking facility.

The material placed before the court by the appellants shows that the appellant is a non-profit Ontario corporation with its head office in Toronto. It has 63 supporting members who each pay $25. It has four voting members.

Members of the appellant corporation reside at various addresses within the City of Toronto, some near the Eglinton Park; apparently, one resides in a high-rise which abuts the park. The appellant is not a ratepayer; it has no financial or legal interest in the lands known as Eglinton Park.

If the construction of the parking facility proceeds, members of the appellant allege that they will be affected, but concede that the appellant, a non-profit corporation, will suffer no direct financial loss.

The appellant has expressed concerns that the trees removed will not be replanted, that green space will be lost, that green space adjacent to the facility will be affected, and that the introduction of cars and a roadway to the underground garage will impair the enjoyment of the park; will render the park unsafe; and will require users of the park to exercise great care both for themselves and their animals.

IV. Chronology

From October 1984 to January 1990, Toronto City Council studied the proposed construction of the North Toronto Community Centre. Preliminary planning, public meetings and consultation with citizen groups and committees took place during those years; parking, traffic, access, size, uses and noise were studied and analyzed.

In January 1990, Toronto City Council authorized the construction of the facility.

Part of the proposed approval was the construction of a 150-space underground parking garage for the users of Eglinton Park and its amenities -- the underground garage was to be part of the new community centre. The planning process revealed that because of present inadequate on-site parking facilities, residential streets close to the park were being used as an overflow parking lot when the park was busy.

In March 1990, the City of Toronto applied to the Ontario Municipal Board (OMB) for approval of the design, construction and financing under s. 64 of the Ontario Municipal Board Act, R.S.O. 1980, c. 347. It was proposed that an $18 million debenture would finance the centre.

Under s. 64, the city also sought an order from the OMB to dispense with a public hearing. On April 5, 1990, OMB approved the proposal and dispensed with a public hearing. In its letter of April 5, 1990, granting exemption from a public hearing the board said, in part:

> The Board notes that the City's Commissioner of Planning and Development is of the opinion that the Centre is a permitted use under the zoning by-law and that it is in conformity with the Official Plan.

On April 12, 1990, the appellant was incorporated as a non-profit Ontario corporation under the Corporations Act, R.S.O. 1980, c. 95.

Members of the appellant requested that the OMB reconsider the matter and hold a public hearing.

One of the eight submissions put to the OMB at the time of seeking the rehearing was that the underground parking facility proposed in conjunction with the community centre was in violation of the city's zoning by-law.

The Ontario Municipal Board directed the city's solicitors to respond to the allegation. They did so. The OMB had available

some 20 studies, or excerpts from studies, that City Council had considered.

On May 9, 1990, the chairman of the OMB, in written reasons, refused to reconsider the matter. He had personally met with two directors and officers of the appellant.

The appellant then applied to the Divisional Court for a leave to appeal OMB's refusal to rehear the matter.

One of the grounds put forward was the same zoning issue: that the community centre is in a "G" zone, and By-law 438-86 is silent concerning a parking garage in a "G" zone; therefore, parking is prohibited. On the other hand, the city's position is: this is a "public park" and "accessory uses" are permitted under the by-law; those are uses "that are naturally and normally incidental subordinate and exclusively devoted to a principal use, building or structure". Therefore, the city's position is that the principal use is a "public park", which is permitted in a "G" zone, and one of the "accessory uses" is a parking facility to a public park; therefore, the proposed 150-space underground parking garage is permitted under the by-law.

On July 25, 1990, the Divisional Court refused leave to appeal. The handwritten endorsement of MacFarland J. states:

July 25, 1990

I am not satisfied that there was any error on the part of the OMB to consider matters required to be considered by that board by virtue of s. 62 of the Ontario Municipal Board Act. It is apparent to me on the evidence before me that the board did consider the issues it was required to consider. The original letter sent to the board by the city which is dated April 3, 1990, was considered by the board as can be seen from their letter of May 9, 1990, to counsel for the applicant. That letter clearly by its terms canvassed those matters required to be considered by the board under s. 62.

Insofar as the board's failure to hold a public hearing is concerned, I am of the view that s. 66 of the OMB Act is a complete answer and that I am bound in any event by the decision of the Divisional Court in the Provincial Sanitation Case. It was within the board's authority to decline a public hearing.

In the result I am not persuaded that there is here raised any question of law which should go to the Divisional Court and accordingly the application for leave to appeal is dismissed with costs.

J. MacFarland J.

By agreement of counsel costs of the respondent are hereby fixed in the sum of $1,000 and are payable within three months of this date.

J. MacFarland J.

The appellant then petitioned the Lieutenant Governor in Council to renew the OMB petition including the zoning question; the Lieutenant Governor in Council refused.

On March 8, 1991, Building Permit No. 304111 was issued by the respondent commissioner and chief building official to the corporation of the City of Toronto to build the "public park (community centre)". The permit allows construction of a community centre; an indoor and an outdoor swimming pool; and auxiliary basement parking for 150 cars. It is proposed that there will be tennis courts in summer and a winter skating rink at the site of the tennis courts on the roof of the basement parking structure.

The appellant then appealed the granting of the building permit to Hoilett J. under the provisions of s. 15 of the Building Code Act.

On April 19, 1991, Hoilett J. granted a preliminary motion brought by the city and held that the appellant had no status to launch the appeal because it was not a person who felt himself aggrieved within the provisions of s. 15(1) of the Act.

Hoilett J. held that the appellant corporation did not have any economic interest, did not have any direct interest that

was being infringed or threatened, any interest that the appellant did have was peripheral, and the appellant was an ad hoc corporation pursuing a role of public conscience.

The appellant then launched this appeal to the Divisional Court under the provisions of s. 16 of the Building Code Act.

On July 29, 1991, Somers J. heard a motion brought by the appellant to stay the order of Hoilett J. pending this appeal. Somers J. dismissed the motion and wrote the following endorsement:

> In my view having regard to the issue of hardship to the respective parties if this order were to be granted, this in my opinion substantially favours the city of Toronto. The applicants have taken extensive proceedings to try and block the project -- politically and in the courts and at the Ontario Municipal Board. The effect of granting this stay would be to close down the project at least until the hearing of the main motion, probably not before December 1991. The estimated extra cost is $1.5 million. There has been substantial public participation in the decision to go ahead with this project -- publicly elected officials who have had the benefit of several reports from various experts and consultants. One is left with the thought that the applicant is prepared to take whatever manoeuvre they can to thwart the public will. This application is dismissed -- costs reserved to be dealt with by the panel hearing the appeal.

We were advised by counsel for the city that as of November 6, 1991, the concrete form work was 85 per cent completed in the parking area; 10 per cent completed for the new centre; 95 per cent completed for the swimming pools.

V. What tests, or conditions, if any, must a person fulfill in order to obtain standing as any "person who considers himself aggrieved" under s. 15(1) of the Act?

The legislature seems to have posited a subjective test. But did the legislature intend that the subjective test was to be completely open-ended?

Counsel for the appellant conceded s. 15 of the Act should be read as though it stated "any person who reasonably considers himself aggrieved".

The question to be decided is whether words should be read into s. 15(1) of the Act or should the court, as master and guardian of its own process, be the gatekeeper? Should admission to the courtroom be limited or should the process be open to everyone with the court requiring the fulfilment of conditions before a person has the right to audience?

This case involves interpretation of a section of a provincial statute. This case does not involve constitutional law, nor does it fit into the category of "public interest intervention": Canada (Minister of Finance) v. Finlay, [1986] 2 S.C.R. 607, 33 D.L.R. (4th) 321.

A. Time of determination

At what stage of the proceedings should the issue of standing be determined? We adopt the position set forth by Le Dain J. for "public interest cases" in Canada (Minister of Finance v. Finlay, supra, at pp. 616-17 S.C.R., p. 328 D.L.R.:

> This question was also considered by the High Court of Australia in Australian Conservation Foundation Inc. v. Commonwealth of Australia (1980), 28 A.L.R. 257, where the opinion was expressed that it is a matter of judicial discretion, having regard to the particular circumstances of a case, whether to determine the question of standing with final effect as a preliminary matter or to reserve it for consideration on the merits. The Court held that for reasons of cost and convenience the judge had properly exercised that discretion in dealing with the question of standing as a preliminary matter and striking out the statement of claim. Assuming that the question whether an issue of standing to sue may be properly determined as a preliminary matter in a particular case is one which a court should consider, whether or not it has been raised by the parties, I agree with the

view expressed in the Australian Conservation Foundation case. It depends on the nature of the issues raised and whether the court has sufficient material before it, in the way of allegations of fact, considerations of law, and argument, for a proper understanding at a preliminary stage of the nature of the interest asserted. In my opinion the present case is one in which the question of standing can be properly determined on a motion to strike.

B. Who qualifies for s. 15 standing?

The critical words for consideration in this section, in our view, are "Any person who considers himself aggrieved" (emphasis added). In our view, the correct approach to this issue is that of Zalev D.C.J. in the decision Giglio Enterprises Ltd. v. Edward Link (as yet unreported other than (1989) O.J. No. 1652, Action No. DCM 4355/89). In that matter, Zalev D.C.J. was considering an application under s. 15 of the Act by a property owner who complained that an adjoining business had been constructed contrary to the applicable Windsor zoning by-law and there was insufficient parking provided for the new construction. The applicant's complaint was that as a result there would be a real risk of trespass to his adjoining parking area which would be a significant problem in conducting his grocery business.

Zalev D.C.J. held that the applicant's concern was a real risk and found that the applicant did have the right to bring an application under s. 15 (p. 18 of the reasons):

> It must be noted that s. 15(1) uses the words "any person who considers himself aggrieved". This must include a class of persons wider than "any person aggrieved". . . . In any event, it cannot include every person who, for whatever reason, has a personal axe to grind, whether real or fanciful, against the municipal authorities, Building Department, landowner, and those involved in the actual construction. At the very least there must be reasonable grounds for believing oneself aggrieved. If the reasonable grounds had to be a legal grievance in accordance with Halifax Atlantic v. City of Halifax, supra, the result would be the same. However, I need not attempt any all-inclusive determination.

Zalev D.C.J. concluded that the use of the words "who considers himself aggrieved" enlarged the rights from those in other statutes which referred only to "a person aggrieved" (p. 17 of the reasons):

> There are many statutes which give a right of appeal to "a person aggrieved". There are many judgments interpreting those words within the context of those statutes. The judgments are remarkable for their inconsistency. Many of them are collected and considered in the judgment of the Nova Scotia Supreme Court, Appeal Division, in Re Halifax Atlantic Investments Ltd. and City of Halifax (1979), 90 D.L.R. (3d) 633. The court held the appellant must have suffered a legal grievance in the sense of having been wrongfully deprived of something or having title to something wrongfully affected. It was further held that increased economic competition as a result of the decision appealed from did not make the appellant "a person aggrieved". In his decision, Hoilett J. made the following statement:
>
> The applicant, in my view, is not any person who might reasonably consider himself aggrieved within s. 15(1) of the Building Code as that term has been judicially construed.

It is to be noted that in effect, Hoilett J. has inserted the word "reasonably" into s. 15(1). This is essentially the approach taken in the interpretation of that section by Zalev D.C.J.

In our view, this is a reasonable and logical approach to this matter.

The appellant's counsel, in argument, conceded that there must be some reasonable grounds or some legitimate concern on the part of an applicant under s. 15(1). He did not take the position that any person who held some unfounded consideration of being aggrieved could successfully apply.

Approaching the question of status from that basis, and considering the information concerning the appellant's

membership as outlined above, we agree with the decision reached by Hoilett J. that the appellants have no status under s. 15 of the Building Code.

The words of s. 15 of the Building Code Act represent an express provision intended by the legislature to be dispositive of the question of standing under that statute. While the word "aggrieved" is not to be understood in some traditional sense relating to a person's legal interest, nevertheless, the legislature clearly intended that some threshold test be applied and it would be inappropriate to leave the whole matter either to the subjective whim of the appellant or solely to the discretion of the court. The word "aggrieved" is to be considered in its ordinary dictionary meaning and not as a legal term of art. It is used today only in the passive voice referring generally to distraught or agitated states of mind. Persons who consider themselves aggrieved are persons who consider themselves wronged by a decision of the Chief Official within the context of the Building Code Act. In our view, persons may be aggrieved within the meaning of that term in s. 15 though they have suffered no legal harm. It is the responsibility of the courts, when requested to do so, to determine if a particular administrative action is legitimately within the scope of the statutory power and an appeal is not to be barred simply because the appellant does not have a personal proprietary or pecuniary interest.

On the facts before us, it is clear that the appellants have a different approach to the appropriate use of parks and park lands. Their main objective was to prevent or obstruct the construction of the community centre project. This was a battle which they had fought and lost. Questioning the parking component of the building permit as constituting a violation of the by-law was a last effort to realize their goal. Considering the history of their involvement, it is doubtful that they considered themselves aggrieved by the underground facilities for parking permitted by the building permit. But even if they did, in our opinion, Hoilett J., exercising his discretion as he did, came to the proper decision. Every superior court has the inherent jurisdiction to protect the integrity of its own process.

Public interest litigation

A good deal of argument was presented on that point, particularly along the lines of that considered in Canada (Minister of Finance) v. Finlay, supra. The appellant's counsel conceded, however, that the application and this appeal were under a statute, s. 15(1) of the Building Code, with "some role in" the public interest decisions.

In our view, the application and this appeal are properly dealt with and considered as an application under a statute -- s. 15 of the Building Code Act. We do not believe it is necessary to consider the decisions dealing with public interest litigation which were referred to in argument.

Moreover, we are persuaded that the principle set out in McDonald's Restaurants of Canada Ltd. v. Etobicoke (Borough) (1977), 5 C.P.C. 55 (Ont. Div. Ct.), is applicable to an appeal of this nature. In that case, the court refused intervener status to the head of a local homeowner's association whose interest was identical with that of the municipality; it refused a building permit to McDonald's because the proposed use would contravene the building by-law (per Krever J. at p. 58 C.P.C.):

> I am sympathetic generally to the concept of public interest intervention in matters before the Courts, but I recognize that there must be some reasonable limits on the willingness of Courts to permit intervention. The borough has taken the position that the applicant McDonald's is not entitled to a building permit because the proposed building would be a drive-in restaurant and a drive-in restaurant is not a permitted use under the borough's zoning by-law. I accept, as a proper and reasonable test of the Court's willingness to permit intervention, the second last paragraph of Grange J.'s reasons for judgment in Re Starr and Puslinch (1976), 12 O.R. (2d) 40 at p. 46 (Div. Ct.). I read the part of the paragraph which seems to me to be appropriate:
>
> I can only conclude from these cases that there is no absolute rule that for a party to be added he must have a

> direct interest in the very issue to be determined. It is, I think, sufficient in the words of Lord Denning, supra, that the "determination of that dispute will directly affect a third person in his legal rights or in his pocket". I also believe that it is clear from the cases that even when the applicant satisfies that condition it is entirely discretionary in the Court whether he will be allowed to intervene or not, and the Court may always decline the application where it considers that the interest of the applicant is already adequately represented.
>
> I emphasize what Grange J. has said, that it is entirely discretionary in the Court whether he will be allowed to intervene or not and the Court may always decline the application where it considers that the interest of the applicant is already adequately represented.

VI. Conclusions

Hoilett J. was right to decide the matter as a preliminary motion because he had sufficient material before him to make the determination as to standing: Finlay, supra.

Hoilett J. was right when he said:

> The applicant has demonstrated, in my view, no economic or direct interest that has been at least infringed or threatened. At best, and even that is dubious, the applicant's interests are peripheral.
>
> The motives of the applicant may be high, indeed, but the record shows them to be no more than an ad hoc corporation formed to pursue their role as public conscience in some generalized kind of way. The group's interest has a broader focus than the issues raised in relation to the Eglinton Park in particular.
>
> In concluding, I find, therefore, the applicant has no status in these proceedings. The application is ordered dismissed.

The appellant is a non-share capital corporation incorporated on April 12, 1990. It is without, as far as the record discloses, any assets.

Section 327 of the Municipal Act, R.S.O. 1980, c. 302, states:

> 327. Where any by-law of a municipality or of a local board thereof, passed under the authority of this or any other general or special Act, is contravened, in addition to any other remedy and to any penalty imposed by the by-law, such contravention may be restrained by action at the instance of a ratepayer or the corporation or local board.

As stated earlier, the appellant does not qualify as a "ratepayer".

In view of the history of the appellant's involvement as an incorporated entity and prior to that the involvement of some of its members, we conclude that there were other reasonable and effective ways that this "issue could have been brought before the court" -- that is, by a ratepayer.

We are of the view that more than a little significance emerges from the fact that this project has been on the drawing board for more than ten years, it has been to the OMB on two occasions and to this court on an earlier occasion, yet no "ratepayer" has emerged to question the alleged infraction of By-law 438-86 of the City of Toronto.

The cumulative effect of the record demonstrates that the appellant does not qualify as an appellant under s. 15 of the Act; indeed, the appellant lacks bona fides.

In Finlay, supra, at p. 633 S.C.R., p. 341 D.L.R., Le Dain J. said:

> The judicial concern about the allocation of scarce judicial resources and the need to screen out the mere busybody is addressed by the requirements affirmed in Borowski that there be a serious issue raised and that a

citizen have a genuine interest in the issue.

On the record before us, we do not think that the appellant meets those requirements. The appellant has not been and will not be injuriously or deleteriously affected.

VII. Costs

In dismissing the appeal because the appellant had no standing, Hoilett J. said:

> The respondent shall have its costs of this application fixed in the amount of $7,500. I have fixed the costs having regard to counsel's submissions on the issue; mindful of the fact that such costs should not be so prohibitive as to inhibit reasonable initiative on the part of citizens; but by the same token citizens' groups ought thoughtfully to pursue such initiative in a realization that there is a cost attached. We have heard no reason why we should disturb that exercise of discretion.

The costs of the respondent before MacFarland J. were fixed at $1,000. Neither that award nor that quantum is before us.

The costs before Somers J. were reserved to this court.

Counsel for the "appellant" submits that the two appearances before Somers J. should not attract any costs. Counsel for the city asks for $2,000 costs on the "appellant's" motion to stay before Somers J.

The applicant is to pay to the respondent/city its costs before Somers J. set at $1,000.

Counsel for the respondent city, if successful on this appeal, asked for costs to be set at $3,000 payable to it by the appellant.

Counsel for the appellant submitted that the costs before Hoilett J. were excessive and if the appellant should be ordered to pay costs on the appeal, the costs should be ordered on the basis of $500 on the proceeding before Hoilett J., nothing before Somers J. and $3,000 on the appeal to the Divisional Court.

The costs before Hoilett J. and Somers J. have been decided above; we order that the appellant pay to the respondent city its costs of this appeal set at $3,000.

Appeal dismissed.

Gadutsis et al. v. Milne et al.

[1973] 2 O.R. 503

ONTARIO
HIGH COURT OF JUSTICE
PARKER, J.
20TH DECEMBER 1972

ACTION for damages for negligent misrepresentation and for negligence in the issuing of a building permit.

M. Teplitsky, for plaintiffs.

D.C. Lyons, for defendants.

PARKER, J.:-- The plaintiffs' claim is for damages for negligence. During the month of July, 1969, the plaintiffs who were partners sold the small restaurant they were operating and were looking for a location to build a larger restaurant. They entered into discussions with Mr. Leslie Kerenvi regarding property municipally known as 610 Markham St., Toronto. Mr. K erenvi was the lessee of this property and was prepared to make an assignment of his lease to the plaintiffs. Before signing the sublease Mr. Petropoulos attended with Mr. Kerenvi at the zoning department of the City of Toronto and inquired of Mr. Shimski, a civic employee, as to whether a restaurant could be built at 610 Markham St. Mr. Shimski advised him that the zoning by-law permitted a restaurant to be built at that address.

The plaintiffs then attended at the office of their solicitor, Mr. Leslie Vasilaros. The solicitor went over the terms of the lease with them, telephoned the zoning department and inquired whether a restaurant could be built on the west side of Markham St. He was informed that it could be. The solicitor did not read the zoning regulations, but relying on the information he was given over the telephone advised his clients that they could proceed with the lease. The plaintiffs then executed the lease and made their first payment of rent.

After plans were prepared for the alteration of the building, the plaintiffs attended at the building department of the City of Toronto and made application for a permit to build a restaurant at 610 Markham St. The application, dated August 20, 1969, was signed by Mr. Gadutsis. On September 19th, a building permit was issued to the owner of the property. The plaintiffs then entered into an agreement with Mr. Kerenvi to undertake the alterations and install restaurant equipment at a cost of $26,419 and work was commenced immediately.

On October 7, 1969, R.H. Milne, Commissioner of Buildings for the City of Toronto, sent a letter to the owner of 610 Markham St. with a copy to Mr. Gadutsis. The letter reads as follows:

> On September 19, 1969, permit No. 3204 was issued to you to make alterations and build addition to detached lodging house for restaurant and dwelling building at the above location.
>
> I advise that the provisions of Article 7(1)(c) of Building By-law No. 300-68 preclude me from issuing any permit which is in contravention of any by-law of the Corporation.
>
> It has been brought to my attention that By-law No. 22598 amended Zoning By-law No. 20623, Section 16(2)(jj)(3) as follows:
>
> "... no person shall, within the C.1.S. district on the west side of Markham Street between Bloor Street West and Lennox Street, use any lot or erect or use any building for the purposes of an eating establishment or a school for the performing arts."
>
> Therefore, I have no alternative but to inform you that permit No. 3204 issued to Mr. L. Racz dated September 19, 1969 is hereby revoked.

Construction work was stopped at once but by this time dividing walls had been removed, plaster had been stripped off the walls, windows had been sealed, new stairways had been installed and work had been done on the foundation of the building for the construction of an outside stairway. The plaintiffs questioned Mr. Shimski as to what the problem was and he replied: "Sorry, I made a mistake." There is no doubt that the information given to Mr. Petropoulos was incorrect and

that a building permit should not have been issued. The plaintiffs then consulted a solicitor who got in touch with the city officials and attempted to either have the premises rezoned or to negotiate a settlement. These attempts failed. The plaintiffs paid their rent to the end of January, 1970, but made no further payments after that time to Mr. Kerenvi either on the lease or the agreement to alter the building.

An action was commenced by Mr. Kerenvi against Mr. Gadutsis, Mr. Petropoulos, and the Corporation of the City of Toronto claiming damages for breach of agreement and negligence. The plaintiffs then commenced this action. Although pleadings were delivered, the Kerenvi action was not proceeded with for various reasons, probably the main one being that Mr. Kerenvi was able to mitigate his loss by surrendering the lease.

I find that the zoning examiner, Mr. Shimski, was negligent when he represented to Mr. Petropoulos that a restaurant could be built at 610 Markham St. contrary to s. 16(2)(jj)(3) of the zoning by-law and also that he was negligent when he gave the same information over the telephone to Mr. Vasilaros.

Mr. Milne admits that only the Building Commissioner is authorized to issue building permits. He has a staff of approximately 240 people and normally is not involved with an application for a permit unless a member of his staff consults him. Although all permits are issued in Mr. Milne's name the processing is done by his staff. This is quite understandable since in 1969 alone there were over 11,000 permits. The person who made the search and who signed the Building Commissioner's signature to the permit was authorized to do so. The employee who issued the permit to allow work to commence contrary to the zoning by-law was negligent.

Counsel for the plaintiffs makes a distinction between the period of time prior to the issuance of a building permit and the period afterwards and makes a separate claim for each period based on two different theories of liability. The first claim is based on the negligent misrepresentation made by Mr.

Shimski to Mr. Petropoulos when he attended at the City Hall and inquired as to whether a restaurant could be built at 610 Markham St. The second claim is based on the negligent act of the corporation in issuing the building permit.

Counsel for the plaintiffs referred to Windsor Motors Ltd. v. District of Powell River (1969), 4 D.L.R. (3d) 155, 68 W.W.R. 173, a decision of the British Columbia Court of Appeal which is somewhat similar on the facts. The Court there held that the municipality was negligent for incorrect information given out by a licence inspector which resulted in financial loss to the plaintiff. Although the Windosr Motors case treated the negligent giving of information and the subsequent issue of a permit as one act, counsel in the present case felt that only part of the plaintiffs' damages flowed from the original negligence and the balance from the negligent act of issuing a building permit.

Counsel for the defendants submitted that it made no difference whether the negligent statement was made directly over the telephone or whether a permit was issued erroneously. The action was based on economic loss resulting from misinformation.

Dealing with the first claim based on negligent misrepresentation, it is now settled law that where there is a duty to be careful negligent misrepresentation affords a cause of action: Hedley Byrne & Co. Ltd. v. Heller & Partners Ltd., [1964] A.C. 465. Lord Morris of Borth-y-Gest at pp. 502-3 in considering this question, said:

> My Lords, I consider that if follows and that it should now be regarded as settled that if someone possessed of a special skill undertakes, quite irrespective of contract, to apply that skill for the assistance of another person who relies upon such skill, a duty of care will arise. The fact that the service is to be given by means of or by the instrumentality of words can make no difference. Furthermore, if in a sphere in which a person is so placed that others could reasonably rely upon his judgment or his skill or upon his ability to make careful inquiry, a person takes it upon himself to give information or advice to, or allows his information or advice to be passed on to, another person who, as he knows or should know, will place reliance upon it, then a duty of care will arise.

Counsel for the defendants takes the position that whether or not they were careless and whether or not the plaintiffs suffered damage as a result, the defendants must succeed on the ground that no duty was owed by them, since the plaintiffs were not in their contemplation at the time the information was given. He referred to the case of Mutual Life & Citizens' Ass'ce Co. Ltd. v. Evatt, [1971] A.C. 793, an action against an insurance company for giving gratuitous information where it was held that since the company's business did not include giving advice on investments and it did not claim to have the necessary skill and competence to give such advice, its duty towards the plaintiff was merely the duty to give him an honest answer to his inquiry, and accordingly, the circumstances alleged did not disclose a cause of action. Although the decision of the majority would seem to restrict the application of Hedley Byrne & Co. Ltd. v. Heller & Partners Ltd., supra, one must look at the facts in each case to ascertain whether a duty exists. It was not the normal or usual duty of an insurance company to give out financial advice about other companies. In the present case, the employees in the zoning department of the municipality were there to give out information as to zoning. The city employees in the zoning department must have known that persons inquiring would place reliance upon what they said. Mr. Shimski gave out incorrect information in the course of his employment directly to the person seeking information. Under these circumstances, I find that the municipality owed a duty of care to Mr. Petropoulos, that it failed to discharge such duty and that as a consequence, the plaintiffs suffered loss.

Dealing with the second claim based on the commission of a negligent act, it would seem to be settled law that municipal corporations acting through their employees are liable for negligence in the performance of their duties. The principle is set out in Dixon v. City of Edmonton, [1924] S.C.R. 640 at p. 645, [1925] 1 D.L.R. 80 at p. 86, by Newcombe, J., quoting from Mersey Docks Trustees v. Gibbs (1866), L.R. 1 H.L. 93 at p. 110, as follows:

> "In the absence of something to shew a contrary intention, the legislature intends that the body, the creature of the statute, shall have the same duties, and that its funds shall be rendered subject to the same liabilities as the general law would impose on a private person doing the same things."

Under the Ontario Planning Act, R.S.O. 1970, c. 349, municipalities are given power to regulate building. The defendant municipality chose to exercise that power and passed a building by-law. It was in the performance of its duty under the by-law that this negligence occurred. The Building Commissioner should not have issued a permit in the circumstances of this case and the issuance of the building permit was a negligent act. When the Building Commissioner issued a building permit he, or his employees, must have known that the person to whom it was issued might rely on it and a duty of care was owed to such person. The plaintiffs were within the ambit of the risk and suffered damages as a result.

Counsel for the defendants submitted that Mr. Milne could only be personally liable for the negligence of Shimski if Mr. Milne were an employer or if he had been personally negligent. There was no evidence to indicate that Mr. Milne had been personally negligent. Municipal officers are not generally responsible in law for acts done on behalf of the municipality in the exercise of their powers: Rogers, Law of Canadian Municipal Corporations (1971), s. 61.2.

Counsel for the defendants submitted that the plaintiffs even though they were given incorrect information by a municipal employee did not rely on it but went to a solicitor before taking any steps. He submitted that a client is entitled to expect his solicitor will make a proper search and read any zoning by-laws before advising him thereon. Since the plaintiffs' solicitor is not a party to this action, I need not consider whether he was negligent in advising his client without having read the zoning by-law. At this time I am only concerned with whether there was such an opportunity of inspection as would excuse the defendants. A similar argument was raised in Marschler v. G. Masser's Garage, [1956] O.R. 328, 2 D.L.R. (2d) 484, a decision involving the liability of a repairer of motor vehicles to third parties. LeBel, J., at p. 337 O.R., p. 493 D.L.R., said: "... the kind of inspection intended is one that is practicable or is contemplated by the parties. A mere opportunity to inspect is not enough". I cannot find on the evidence that when the employees of the city were giving out information as to zoning it was contemplated

that an examination would be made in each case by a solicitor on behalf of the person inquiring.

The application for the building permit signed by Mr. Gadutsis contained a disclaimer of responsibility which reads as follows:

> The undersigned hereby applies for a permit to build according to the plans, specifications and block plan, herewith submitted, and agrees to comply with all By-laws and civic regulations, it being expressly understood that the issuing of a permit does not relieve the applicant from complying with all said By-laws and civic regulations, though not called for in the specifications or shown on plans submitted. The applicant further agrees that if a permit is revoked for any cause or irregularity or non-conformance of the said By-laws or regulations, that in consideration of the issuing of the permit all claims are waived arising therefrom against the Corporation of the City of Toronto.

There may be some question as to the power of a municipality to insert such a waiver but since Mr. Gadutsis signed the application for a building permit it may be inferred that he acquiesced in its inclusion and approbated the waiver.

Counsel for the defendants submitted that the disclaimer on the application was sufficient to warn the plaintiffs that the municipality was not accepting responsibility for the information given out by its employee and that where the only thing for which the defendant could be responsible is negligence that general words would exculpate. It is the last sentence of the waiver on which he relies. The sentence reads:

> The applicant further agrees that if a permit is revoked for any cause or irregularity or non-conformance of the said By-laws or regulations, that in consideration of the issuing of the permit all claims are waived arising therefrom against the Corporation of the City of Toronto.

The words become of importance in deciding whether liability for negligence was assumed by the defendant corporation. Counsel for the plaintiffs argues that the words are not sufficiently precise to exclude liability for negligence. The matter of disclaimer was dealt with in Hedley Byrne & Co. Ltd. v. Heller & Partners Ltd., supra, by Lord Morris of Borth-y-Gest at p. 504 as follows:

> There is much to be said, therefore, for the view that if a banker gives a reference in the form of a brief expression of opinion in regard to credit-worthiness he does not accept, and there is not expected from him, any higher duty than that of giving an honest answer. I need not, however, seek to
>
> deal further with this aspect of the matter, which perhaps cannot be covered by any statement of general application, because, in my judgment, the bank in the present case, by the words which they employed, effectively disclaimed any assumption of a duty of care. They stated that they only responded to the inquiry on the basis that their reply was without responsibility. If the inquirers chose to receive and act upon the reply they cannot disregard the definite terms upon which it was given. They cannot accept a reply given with a stipulation and then reject the stipulation. Furthermore, within accepted principles (as illustrated in Rutter v. Palmer, [1922] 2 K.B.) the words employed were apt to exclude any liability for negligence.

In Rutter v. Palmer, [1922] 2 K.B. 87 at p. 92, Scrutton, L.J., said:

> In construing an exemption clause certain general rules may be applied: First the defendant is not exempted from liability for the negligence of his servants unless adequate words are used; secondly, the liability of the defendant apart from the exempting words must be ascertained; then the particular clause in question must be considered; and if the only liability of the party pleading the exemption is a liability for negligence, the clause will more readily operate to exempt him ...

Three guiding principles were set out for interpreting such clauses in Canada Steamship Lines Ltd. v. The King, [1952] 2 D.L.R. 786 at pp. 793-4, [1952] A.C. 192, 5 W.W.R. (N.S.) 609:

> (1) If the clause contains language which expressly exempts the person in whose favour it is made (hereafter called "the

proferens") from the consequence of the negligence of his own servants, effect must be given to that provision. Any doubts which existed whether this was the law in the Province of Quebec were removed by the decision of the Supreme Court of Canada in Glengoil SS. Co. v. Pilkington (1897), 28 S.C.R. 146.

(2) If there is no express reference to negligence, the Court must consider whether the words used are wide enough, in their ordinary meaning, to cover negligence on the part of the servants of the proferens. If a doubt arises at this point, it must be resolved against the proferens in accordance with art. 1019 of the Civil Code: "In cases of doubt, the contract is interpreted against him who has stipulated and in favour of him who has contracted the obligation."

(3) If the words used are wide enough for the above purpose, the Court must then consider whether "the head of damage may be based on some ground other than that of negligence" to quote again Lord Greene in the Alderslade case [[1945] K.B. 189 at p. 192]. The "other ground" must not be so fanciful or remote that the proferens cannot be supposed to have desired protection against it; but subject to this qualification, which is no doubt to be implied from Lord Greene's words, the existence of a possible head of damage other than that of negligence is fatal to the proferens even if the words used are prima facie wide enough to cover negligence on the part of his servants.

Counsel for the defendants submitted that the plaintiffs' claim arose from the revocation and should be covered by the disclaimer. Counsel for the plaintiffs, however, submitted that no damages flowed from the revocation, they flowed from the negligent issue of a building permit. The plaintiffs make no claim based on revocation. The city was quite right to revoke under the circumstances of this case.

The disclaimer in the present case is not a general one, it is specific. It refers only to claims arising from revocation of the building permit. The plaintiffs make no claim because of the revocation. All the damages suffered were caused by the granting of the permit. Under the circumstances of this case, I do not think the disclaimer relieves the municipality of responsibility.

Counsel for the plaintiffs agreed that the only damage his clients could prove up until the building permit was issued was the rent paid during this period. The rent paid for August and September totalled $1,000. I therefore assess the damages for the first period in that amount.

The damages claimed for the second period are special damages for $14,293.18. The only real issue as to the special damages was as to the down payment of $6,000 under the contract with Mr. Kerenvi to make the alterations to the building. The plaintiffs had a claim against Mr. Kerenvi under another building contract which arose from a clause dealing with delay in completion. This claim was settled for $3,500 and the plaintiffs were allowed to set this off against the down payment. I am satisfied this was a legitimate set-off and that the other amounts covering work done were incurred or paid for by the plaintiffs. I assess the damages for this portion of the claim at $14,293.18. The plaintiffs originally claimed interest on the special damages, but this was abandoned at trial. The plaintiffs also abandoned in this action the claim for whatever they may have to pay to Kerenvi under the lease and agreement. They are prepared to leave that to be decided in third party proceedings over against the municipality, should that action be proceeded with.

There will, therefore, be judgment for the plaintiffs agaisnt the municipality both on the ground of negligent misrepresentation and on the ground of negligence in the issuing of a building permit for $15,293.18 with costs forthwith after taxation thereof. The action is dismissed as against R.H. Milne but without costs.

Judgment for plaintiffs.

Galway and Cavendish (United Townships) v. Windover

Between
The Corporation of the United Townships of Galway and Cavendish, plaintiff, and
Donald N. Windover, defendant

[1995] O.J. No. 3932
DRS 96-06004
File No. 5017/90

Ontario Court of Justice (General Division)
Murphy J.
Heard: May 2, 1995.
Judgment: August 31, 1995.
(25 pp.)

Counsel:
S.P. Kylie, for the plaintiff.
L.L. Wilcox-Whetung, for the defendant.

MURPHY J.--

[para1] The facts are as set out in an Agreed Statement of Facts:

1. The plaintiff is a municipal corporation in the County of Peterborough and Province of Ontario.

2. The Defendant resides in the Township of Cavendish and is the registered owner of Part of Lot One, Registered Plan Number 2, in the township of Cavendish which lands are more particularly described in Registered Instrument Number 110456, registered in the Land Registry Office for the County of Peterborough (No. 45) and which are shown as Parcel Seven on a Plan of Survey dated May 27, 1959 by G.W. Elliott, Ontario Land Surveyor (hereinafter called the "lands"). A copy of Instrument Number 1104565 is attached as Exhibit 1 and the survey showing the "lands" outlined in red is attached as Exhibit 2.

3. The said lands border on Mississauga Lake which is a "feeder lake" for the Trent Severn Waterway and as such the high and low water marks vary as much as six to eight feet during the year and as a result, the shoreline varies dramatically during the spring, summer and fall.

4. The Lake is navigable. The bed of the Lake is owned by Her Majesty the Queen in Right of Ontario. The waters of the lake are within the jurisdiction of the Plaintiff and in addition are either within the jurisdiction of Her Majesty the Queen in Right of Ontario (Ministry of Natural Resources) or Her Majesty the Queen in Right of Canada (Trent Severn Waterway).

5. Mississauga Lake is located within the boundaries of the Plaintiff.

6. On October 14, 1978, the Council of the Plaintiff passed By-law Number 78-43, being a comprehensive Zoning By-law for the United townships of Galway and Cavendish (herein called the Zoning By-law"), which By-law provides for overall land use controls in the said Townships. A certified copy of this By-law is attached as Exhibit 3.

7. Pursuant to Schedule "G" of the zoning By-law, the lands are zoned "Recreational Residential".

8. On February 25, 1984, the Council of the Plaintiff passed By-law Number 84-4, being a By-law to regulate the construction, alteration and repair of buildings (herein called the "Building By-law"). A copy of this By-law is attached as Exhibit 4.

9. In 1975, the Defendant constructed a "U-shaped" wooden dock (the "Dock"). Styrofoam was placed under the dock to make it float.

10. The Dock was anchored by a chain attached to stakes driven into the bed or the shore of the Lake. The

Dock floated and moved from time to time to accommodate the changing high water mark of Mississauga lake.

11. During the summer months from 1974 to 1986, the Defendant located his 16 foot aluminum fishing boat to this Dock.

12. In 1986, the defendant built a partial enclosure on top of the Dock, while the Dock remained floating in the water, to protect his fishing boat from the elements.

13. This partially enclosed Dock consisted of wooden stud walls, rafters, a sloping steel roof and fibreglass nailed to the outside of the walls and is approximately 18 feet long by 14 feet wide. One end of the enclosed Dock has a large opening of sufficient size to permit a boat to be freely moved in and out. The opposite end has a window. This "structure" is used to house the Defendant's 14 foot fishing boat and gas cans.

14. This partially enclosed Dock is anchored in the identical manner that the Dock was.

15. The Defendant has on occasion propelled this floating enclosed dock out into the main body of the Lake by either putting his boat inside or alongside the enclosed Dock and using the motor on the boat to propel the Dock and the enclosure.

16. At one time the Defendant applied for and obtained a vessel licence for this structure from the Federal Department of National Revenue (Customs & Excise) and he placed the vessel identification numbers on the sides of the structure, being licence No. 36E29606. A copy of the same is attached as Exhibit 5.

17. As a result of an inquiry from the Plaintiff, the said licence was revoked by the Federal Department of National Revenue (Customs & Excise) and a copy of the letter revoking the same is attached as Exhibit 6. This licence has never been returned to Customs & Excise Canada.

18. This partially enclosed Dock remains on the water and is pulled partially onshore during the winter months. During the spring thaw, it rises up as the water level rises.

19. On or about July 28th, 1987, the Plaintiff's Chief Building Official, James Pennington, served upon the Defendant an Order to Comply with Act or Code and a Stop Work Order issued on that same date. A copy of the Stop Work is attached as Exhibit 7 and a copy of the Order to Comply with Act or Code is attached as Exhibit 8. The Plaintiff continued to construct the enclosed Dock after July 28th, 1987.

20. At no time has the Defendant applied for a rezoning of By-law No. 78-43 or a minor variance with respect to the partially enclosed dock.

21. The Ministry of Natural Resources of Ontario requires that a permit or a license to maintain the partially enclosed dock on the surface of Mississauga Lake be obtained, however, at no time did the Defendant apply for such permit or license. The Federal Minister of Transport requires that a permit be issued under the Navigable Water Protection Act before any structure can be built or placed on any navigable water, however, at no time did the Defendant apply for such permit or licence.

22. The Defendant is illiterate and did not understand that he had been served with a Stop Work Order, although the Chief Building Official had told him verbally that he could not build the partially enclosed Dock without further elaboration. A few hours after being served the Defendant's spouse read the Orders to the Defendant.

23. Notwithstanding the recommendation of the Chief Building Official, it was and remains the

Defendant's belief that a building Permit was not required to construct the enclosure and therefore he did not apply for the same.

24. Photograph numbers 1 to 12, inclusive, attached as Exhibit 9 and Photograph numbers 13 to 15 inclusive, attached as Exhibit 10, all accurately depict the "structure" which is the subject of this Action.

The issues to be determined

[para2]

1. Does the Municipality have authority to pass a by-law concerning the waters of the Mississauga Lake?

2. If the Municipality does have authority to cover the waters of Mississauga Lake, has the field been occupied by the Province as a result of the passage of the Public Lands Act, in particular Regulation 975 passed under the act.

3. If the By-law does govern the waters of the Mississauga Lake, is the By-law so poorly drafted that it is not clear that it covers the waters of Mississauga Lake and can the By-law be strictly construed as it infringes on the individual's rights.

4. Is Mr. Windover's structure a vessel, boat, dock or boathouse and is it a structure within the meaning of the By-law.

5. Does the structure in question conform with the building By-law and the Building Code Act of Ontario.

[para3] Before I embark on a discussion on the issue of jurisdiction I should determine what Mr. Windover's structure is.

[para4] In my judgment the structure is not a boat or a vessel. It is a floating dock that has been converted to a boathouse. It started out as a floating dock to which walls and a roof have been added. That, in my judgment, makes it a boathouse. It is in effect a structure in which a boat is stored.

Jurisdiction

[para5] Municipalities have the power to pass by-laws to regulate matters on land covered by water provided they do not permit structures which would interfere with navigation. That is a federal jurisdiction. In Hamilton Harbour Commissioners v. City of Hamilton et al. (1978) 21 O.R. (2d) 459 the Harbour Commissioners brought an action against the Corporation of the City of Hamilton for a declaration that certain of the City's zoning by-laws and a by-law amending the Official Plan were ultra vires. The Commissioners sought a declaration that they had exclusive jurisdiction to regulate and develop the lands. she legislation had been established by the federal government. The court held at p. 483:

"The Courts have recognized "overlapping" or "concurrent" fields of jurisdiction in some instances with the result

that both authorities are permitted to legislate in a particular field."

At p. 484:

"In my opinion, land-use control within a harbour has both provincial and federal aspects. I conclude that the City pursuant to s. 35 of the Planning Act may validly pass a zoning by-law affecting land use within the harbour so long as it does not explicitly attempt to prohibit or regulate the use of land for purposes related to navigation and shipping. Similarly, the Commissioners, pursuant to s. 15 of the Commissioners' Act, 1912, may validly pass by-laws to regulate and control the use and development of land within the harbour for purposes related to navigation and shipping. Only if conflict arises with respect to the use of a parcel of land within the limits of the harbour, will the paramountcy of the federal power cause the operation of the by-law of the

City to be suspended."

[para6] The federal power, under the Navigable Waters Protection Act, R.S.C. 1970 may give permission to build a structure but that, in itself, does not prevent the Municipality acting under valid provincial legislation from regulating the use of that structure.

[para7] In Township of Moore v. Hamilton (1979) 23 O.R. (2d) 418 Mr. Hamilton obtained a permit to build a commercial gravel dock under the Navigable Waters Protection Act. The township's zoning by-law did not permit the use of a commercial gravel dock in that location. The trial judge held the By-law was an attempt to prevent the use related to navigation and shipping. The paramountcy of the federal power must prevail. The Court of Appeal allowed an appeal and held that the By-law was restricted to land use control and did not purport to regulate matters related to navigation and shipping. Municipalities do have jurisdiction to zone lands covered by water.

[para8] Corporation of the Township of Humphrey v. Robinette (1993) 16 M.P.L.R. (2d) 150 is a case involving the occupation of a boathouse as a residence. At p. 162 the Court held:

"It is clear that the Municipality has the jurisdiction

to zone land covered by water. This is by virtue of the fact that "land" within Section 1 of the Municipal Act, R.S.O. 1990, c. M.45, includes lands covered by water."

[para9] I am satisfied The Corporation of the United Townships of Galway and Cavendish does have jurisdiction to pass a by-law to regulate the use of land covered by water. That power is given to the Municipalities by the province under the Planning Act.

Does the Province occupy the field

[para10] If so, is there concurrent jurisdiction or does the paramountcy of the provincial power cause the operation of the bylaw of the Municipality to be suspended. The province has passed the Public Lands Act which provides for the administration of all Crown lands by the Ministry of Natural Resources. The land in question is public land as the ownership of the bed of lakes is vested in the Crown in the right of the Province.

[para11] Counsel for the Municipality concedes that the Ministry of Natural Resources on occasion will give permits for the construction of docks and boathouses. The Municipality recognizes the authority of the Ministry of Natural Resources to issue permits for a dock or a boathouse.

[para12] The plaintiff's position is that the defendant has not obtained a permit from the Ministry of Natural Resources. The authority of the Municipality to govern and control the waters has therefore not been displaced. It is the plaintiff's position that the jurisdiction over the waters is concurrent between the municipalities and the Ministry of Natural Resources. The defendant could have applied to obtain a permit from the Ministry of Natural Resources but has not done so. It was only when the Ministry of Natural Resources would issue a permit that there would be any conflict with the zoning by-law of the municipality.

[para13] The Public Lands Act recognizes the Municipalities' right to have some control of lands covered by water. Section 14 permits the Ministry of Natural Resources to issue work permits for work along the shore of lands. Section 2 (1) of the Regulation states:

"An officer shall issue a work permit to any person who

applies therefor unless the officer is of the opinion that the work for which a permit is required,

(b) is inconsistent with or does not conform to,

(i) an official plan as defined in the Planning Act"

[para14] A paramountcy, in my judgement, only arises if there is a conflict between two pieces of legislation. If there is a conflict then the legislation passed by the

superior authority, i.e. the Province, takes precedence over the inferior body, i.e. the Municipality.

[para15] In Regina v. Trabulsey et al. (1995) 97 C.C.C. (3d) 147, at p. 160 Justice Labrosse indicates:

> "The constitutional doctrine of paramountcy applies in cases where there is a conflict or inconsistency between federal and provincial legislation."

[para16] In Superior Propane Inc. et al. and Corporation of the City of York (1995) 23 O.R. (3d) 161 illustrates an application of the paramountcy doctrine. The Court of Appeal held that a bylaw of the City of York was invalid. The by-law conflicted with a provincial Act, The Energy Act R.S.O. 198 ch. 139. The Energy Act contained a comprehensive scheme to regulate propane dispensing, handling and storage and that these matters are not subject to the legislative authority by municipalities.

[para17] The Court of Appeal agreed with the conclusion of the dissent of Justice Hollingworth in the Divisional Court that the provincial law and the by-law were at cross purposes.

At p. 163:

> "We think that the by-law is at cross-purposes with the regulation because it negates the operating effect of the latter respecting tank size, height, setbacks, and protection."

[para18] The Court of Appeal disagreed with the majority of the Divisional Court that held that the by-law merely enhanced the statute. In my judgement there is no conflict or inconsistency between the municipal by-law and the Provincial

Public Lands Act. There has been no evidence advanced to show any conflict or inconsistency. The plaintiff has not shown it would be entitled to obtain a permit from the Ministry of Natural Resources. It is not shown there is any use that is permitted under the provincial Act that would be forbidden under the by-law.

[para19] I am satisfied the doctrine of paramountcy does not apply and the municipality has jurisdiction to pass a zoning by-law to govern the water lots.

Build Code Act violation

[para20] In this case the plaintiff alleges that the defendant has violated the Building Code Act in the building of his boathouse. Section 5(1) of Building Code Act states:

> "No person shall construct or demolish or cause to be constructed or demolished a building in a municipality unless a permit has been issued therefore by, the chief official."

[para21] Section 6 states:

> (1) "The chief official shall issue a permit except where,
>
> (a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law;"

[para22] The Act defines a structures as:

> "... occupying an area greater than 10 square metres consisting of a wall, roof and floor, or any one or more of them ..."

[para23] The defendant initially alleged the plaintiff has failed to comply with a limitation period. Section 24 (4) of the Building Code Act provides:

> "No proceeding under this section shall be commenced more than one year after the time when the subject-matter of the proceeding arose."

[para24] The defendant alleges the plaintiff should have charged the defendant under the Provincial Offences Act with a breach of the Building Code Act and got a conviction before

coming to this Court to obtain an injunction or relief.

[para25] The defendant's counsel has only recently taken over the matter on behalf of the defendant. It appears when the matter was being conducted by a previous solicitor the defendant was charged. The defendant's then counsel agreed to have the matter adjourned sine die several years ago pending resolution of this application. If the present counsel wishes to revoke that consent, she could have been done before the commencement of this hearing.

[para26] In my judgment the plaintiff is estopped from advancing that argument against the defendant. The defendant has acquiesced in the decision. The charge under the Building Code Act was adjourned until the hearing of this application.
Compliance with the plaintiff's zoning by-law

[para27] Does the by-law govern water lots? The township has the right to pass a zoning by-law to govern water lots.

[para28] Does this by-law cover the land in question? Section 1.7 of the "Comprehensive Zoning Bylaw, The Corporation of the United Townships of Galway and Cavendish" states:

> "For the purpose of this Bylaw, all land within the Corporation of the United townships of Galway & Cavendish is hereby divided into use zones as set out in Section 3 and on Schedules A to H and the zone boundaries are:
>
> 1.7.1 The centre line of any road, right-of-way or watercourse ..."

[para29] It is the plaintiff's position that a by-law governs all the lands in the township of Galway including the boundaries of a watercourse and Lake Mississauga is a watercourse. It is the plaintiff's position that the zoning designation of any land fronting on water is extended into the middle point of that watercourse. The defendant owns property on the shore which is in a zone RR, Recreation Residential. The township's position is that the zoning by-law extends and covers not only the defendant's landholding but extends to the water lot in the front of his lot to the middle of the lake.

I am satisfied the by-law applies to water lots before the court.

Compliance with zoning by-law

[para30] It is the plaintiff's position that the zoning bylaw does not permit a building on any water lot. The by-law does not say so directly. The plaintiff's submission is that by looking at the various requirements of the by-law it is clear no boathouse would be permitted on a water lot. The by-law has a set-back requirement of 70 feet from the high water mark. A boathouse is defined in the by-law. The by-law does not permit the building of a boathouse per se. It permits a boathouse as an accessory use to the main use. The defendant has not constructed any building on the lot that he owns on land. There is no main use and without a main use there can be no accessory use.

[para31] It is difficult to imagine why anyone would build a boathouse if it requires a 70 foot set-back. A boathouse in that location would be, of course, useless. There are boathouses on this lake that are not 70 feet from the shoreline. The by-law does permit the construction of a dock or a pumphouse up to the lot line, i.e., up to the high water mark.

[para32] The defendant's position is the by-law only governs building and structures that are on land. The by-law does not refer to structures that are on water lots.

[para33] The defendant also argues that the floating boathouse is not a building or structure within the meaning of the by-law. The by-law definition is not helpful.

[para34] Section 4.6 provides:

> "Building means any edifice used or intended to be used for shelter, accommodation or enclosure of persons, animals or chattels other than a lawful boundary wall or fence."

[para35] The defendant argues "edifice" is defined in various dictionaries as follows:

"An edifice is a building, especially one of large size

or imposing appearance."

[para36] The defendant argues that the building before us is hardly an "edifice", is hardly one of a large size or imposing appearance.

[para37] Counsel for the defendant concedes the dictionary definition of structure is a little more helpful. The by-law definition of structure is:

"Structure means anything that is erected, built or constructed of parts joined together, the use of which required location in or on the ground, or attached to something having location in or on the ground."

[para38] Counsel concedes that the first part of the definition "built or constructed or parts joined together" might well apply to the structure before us but it does not meet the second part which refers to the "the use of which required location in or on the ground, or attached to something having location in or on the ground." This structure is not attached to the ground, it floats and is tied up to shore. Counsel argues that if the court finds that this is a structure or a building, then what would a houseboat be? Would that also be a structure or a building under the definition. It has a roof and walls and all the things you need to fall within this by-law.

[para39] Structure has also been defined in Black's Law Dictionary:

"Any construction or any production or piece of work artificially built up or composed of parts joined together in some definite manner. That which is built or constructed. An edifice or building of any kind."

"A combination of materials to form a construction for occupancy use or ornamentation whether installed on, above or below the surface of a parcel of land."

[para40] I am satisfied that the floating boathouse is a structure within the meaning of the by-law as defined in Black's Law Dictionary. The lands in question are zoned RD, Residential Recreation. The explanatory note reveals that recreational dwelling requires a footage and lots with certain area, i.e. 100 foot frontage.

[para41] The defendant's position is that the by-law applies only to buildings and structures that are on a lot as opposed to the plaintiff's position that the by-law requires a building and structure to be on a lot. The plaintiff argues there is no authority in the by-law to authorize or allow a structure on a water lot within the municipality.

[para42] The defendant argues the definition of a houseboat in the by-law is unhelpful. Other than talking about it as an accessory use, it is not dealt with elsewhere. It is the defendant's position the by-law does not talk about whether you can or cannot construct things on water lots.

[para43] Whether I should accept the defendant's position or the plaintiff's position turns on how the by-law should be interpreted.

[para44] The interpretation of the By-law does cause me some concern. It is not well drafted. It does not specifically prevent structures on water lots. Defense counsel relies on the decision of L.D.C.M. Investments Ltd. et al. and Town of Newcastle et al. (1975) 8 O.R. (2d) 504 (Div. Ct.). The headnote states:

"Where a zoning by-law is poorly and carelessly drafted so that there is considerable doubt as to its scope or effect and thus gives rise to an issue between a landowner and the municipality as to the uses to which the land may be put, the by-law should not be construed liberally. If the expressions used in the by-law are doubtful, the doubt must be resolved in favour of the landowner."

[para45] The court referred to the decision of Bayshore Shopping Centre Ltd. v. Township of Nepean et al. [1972]

S.C.R. 755, 25 D.L.R. (3d) 443 where Spence J. found at p. 764 S.C.R., p. 449 D.L.R.:

> "I find little assistance from the decisions which purport to indicate the philosophic attitude which the Court should adopt in construing zoning by-laws. No authority need be cited for the proposition that a man's property is his own which he may utilize as he deems fit so long as in such utilization he does not commit nuisance, entrap the unwary or act in breach of statutory prohibitions, and therefore by-law restrictive of that right should be strictly construed."

[para46] In Woodglen & Co. v. North York (City) Chief Building Official (1994) 23 M.P.L.R. (2d) 219, Rosenberg J. acknowledged that there were two lines of authorities dealing with the interpretation of by-laws. He reviewed some of these decisions that are authority that a by-law should be given a strict interpretation including the L.C.D.M. Investments Ltd. v. Newcastle - (Town) (1975) 8 O.R. (2d) 504; Wilson v. Jones [1968] S.C.R. 554, 68 D.L.R. (2d) 273; Thunder Bay (City) v. Potts (1982), 39 O.R. (2d) 725. He also reviewed the authorities which suggest that the by-law should receive a liberal interpretation: Montreal (City) v. Morgan (1920) 60 S.C.R., 393; Bruce v. Toronto (City) [1971] 3 O.R. 62 where the Ontario Court of Appeal at p. 66 stated:

> "The recitals immediately preceding the operative sections of By-law 20623 set out that the by-law was passed for the purpose of implementing the official plan of the planning area of Toronto within the meaning of the Planning Act. An "official plan" is defined in the Planning Act, supra, and was similarly defined in the Planning Act in force at the time of the passing of the by-law as a programme or policy designed to secure the safety, convenience, and welfare of the inhabitants. The underlying purpose of the implementing by-law is, accordingly, to establish and maintain for each of the areas or zones into which the municipality is divided for the purposes of the plan, standards with respect to the use of land and the use and erection of buildings which will enhance and preserve the quality of life in the municipality and the amenities considered conducive to the health, safety, convenience and welfare of the inhabitants. On this account, I consider the by-law to be remedial and one to be accorded a liberal interpretation to the end that it may afford to the people of the community protection against departures from or encroachment upon the standards adopted by the municipality as expressive of these purposes.

And further:

> "Notwithstanding this, it is my belief that Ontario Courts now accept that the obligation imposed on the municipal council to plan for the growth and development of the community demands recognition of the necessity for means to compel the observance of the rights of the community to determine and enforce the direction in which the community should be shaped, and that in this regard the rights of the community are paramount to the rights of the owner."

[para47] In Harrison et al. v. City of Toronto (1982) 39 O.R. (2d) 721, Galligan J. at p. 724 indicates:

> "while by-laws may not be as benevolently interpreted now as they once were, it remains the duty of the court, if reasonably possible, to construe a by-law to give affect to the object intended by council."

[para48] In determining which of the two approaches should decide the case whether the zoning by-law should be given a strict or liberal interpretation, there is in the explanation note for By-law 78-43:

> "The purpose of this by-law is to provide overall land use controls for the United Townships of Galway and Cavendish. This by-law applies to all lands in the corporation of the United Townships of Galway and Cavendish."

[para49] The zoning approach given in the official plan is:

> "... existing developments and areas where resources

should be protected be zoned for their present uses. Areas where development may be permitted but where this must be checked according to policies in the Plan will be placed in rural or holding zones which may be amended to permit development when conformity to Official Plan policy is established. Where development is not permitted this Bylaw may not be amended and specific zones may exclude development where necessary."

[para50] In my judgement the by-law should be given a liberal interpretation. I am satisfied that it is a structure within the meaning of the by-law. I accept the plaintiff's position that the by-law requires a building structure to be on land.

Building By-law, Building Code Act

[para51] The defendant argued that a similar problem arises with the building by-law and the Building Code Act. Neither would apply to the floating boathouse. Both apply only to buildings on land. The building by-law talks about how a building is to be constructed. Section 3(b) of the By-law 84-4 requires a building to be on concrete footings, on piers, it has be adequately reinforced. The purpose of the building by-law is to ensure a building is properly constructed in regards to safety. A building must be properly secured to the ground so it will not fall down. It does not deal with structures like the one before us that floats. It would not, in the defendant's position, be an accessory building within the meaning of By-law 84-4. The by-law is silent as to the requirement of an accessory building except it has a minimum floor area. It does not talk about the structure of an accessory building. It is the defendant's submission that the building by-law does not apply to a structure that floats.

[para52] In the Building Code Act, Section 27 provides:

"The Act and the Building Code made under s.19 of the Building Code Act supersedes all municipal by-laws respecting the construction or demolition of buildings as defined in s. 1."

[para53] The defendant argues that even if I find it is a structure within the meaning of the township building by-law, the Building Code supersedes it. The defendant argues that it is difficult to determine what a building is within the meaning of the Building Code Act.

[para54] The Act does give some parameters to buildings. It has to be of a certain size, it has to have walls, a roof and a floor. A floating boathouse, which is the structure before us, is not a building within the meaning of the Building Code Act. It is the intent of the Building Code Act to apply to things out of water. I am satisfied that it is a structure according to the definition in Black's Law Dictionary. It is therefore a structure within the meaning of the Building By-law and the Building Code.

[para55] The township agrees that the dock which Mr. Windover built predated the passing of the By-law and he can continue to use his structure as a floating dock.

[para56] The plaintiff is entitled to the relief as set out in the statement of Claim in paragraph 1 (a), (b) and paragraph 1(c) to be amended with the words "to tear down and remove the said building or structure" to be replaced with the words "to tear down and remove the walls and roof of the said building or structure."

[para57] I have not heard submissions on the issue of costs. If the parties can not agree on costs, they may make submissions. It does appear that the matter was novel and perhaps there should be no order as to costs.

MURPHY J.

Greater Toronto Airports Authority v. Corporation of the City of Mississauga

Corporation of the City of Mississauga v. Greater Toronto Airports Authority et al.

Greater Toronto Airports Authority v. Corporation of the City of Mississauga et al.

[Indexed as: Greater Toronto Airports Authority v. Mississauga (City)]

43 O.R. (3d) 9
[1999] O.J. No. 36
Docket Nos. 98-CV-145928, 98-CV-145932 and 98-CV-146719

Ontario Court (General Division)
MacPherson J.
January 19, 1999

APPLICATIONS for declarations with respect to the applicability of a municipal building code regime to a development project at a federally owned airport.

Brian G. Morgan and Mahmud Jamal, for Greater Toronto Airports Authority.
Thomas G. Heintzman, Q.C., Joseph J. Colangelo and John P. Brown, for the Corporation of the City of Mississauga and Shane Hamilton.
Peter M. Southey and Shelley C. Quinn, for the Attorney General of Canada.

R. Kent Gillespie, for the Regional Municipality of Peel.
James A. Easto, for Peel District School Board.
Chris G. Paliare, Andrew K. Lokan and Jolanta Malicki, for Nav Canada.

MACPHERSON J.: --

INTRODUCTION

The largest airport in Canada and the seventh largest in North America is the Lester B. Pearson International Airport ("Pearson Airport"). It occupies approximately 4,400 acres and includes airside, terminal, ground side and aviation support facilities. It currently has four runways in operation; approximately 90 planes can take off from or land on these runways every hour. The airport has three large commercial passenger terminals, each of which handles domestic, transborder (Canada -- United States) and international passengers and cargo. Fifty-nine airlines currently provide regular air service at the airport. In 1997 the airport handled approximately 26.1 million passengers and approximately 379,000 tonnes of air cargo.

Pearson Airport is located in the City of Mississauga. Indeed, the airport constitutes about 10 per cent of the land mass of the city. There is a very close relationship between the city and the airport. Many of the residents of Mississauga work at the airport and the activities at the airport inject substantial revenues into Mississauga. On the other hand, the airport could not exist without the services provided to it by Mississauga. To cite but one example, the Mississauga fire department has primary responsibility to respond to fires in all of the buildings at the airport.

Pearson Airport is about to become much larger. The projected increases in demand for the airport are quite striking. Passenger demand is expected to grow to 28 million annually by 2000 and to 36 million by 2010. Separate aircraft movements are forecast to reach 399,000 annually by 2000 and 480,000 by 2010. Air cargo traffic will increase, it is forecast, by 3.8 per cent annually until 2005 and by 2.5 per cent after 2005.

In order to cope with these projected increases in demand, a massive redevelopment project is underway at Pearson Airport. On the airside of the operation, a new air traffic control tower has been constructed and is in use. Additionally, three new runways, and corresponding taxiways, are to be built. On the ground side of the operation, the anchor of the project is the demolition of existing Terminals 1 and 2 and construction

of a massive new terminal. When the entire redevelopment project is completed, Pearson Airport should be able to handle traffic volumes in the range of 40 to 50 million passengers per year and corresponding increases in other airport activities such as cargo deliveries.

Unfortunately, the redevelopment project has given rise to serious dispute. Mississauga asserts that its building code by-law applies to the construction of all buildings at the airport. It also contends that the companies involved in the redevelopment project, namely Greater Toronto Airports Authority and Nav Canada, must pay development charges to Mississauga. These companies, supported by the Attorney General of Canada, resist both of Mississauga's claims. They say that Mississauga does not have the constitutional jurisdiction to apply its building code and development charges regimes to the redevelopment project.

The disagreement between the Greater Toronto Airports Authority and Mississauga was the subject of discussions and negotiations in 1996, 1997 and early 1998. Unfortunately, the jurisdictional dispute was not resolved and both parties resorted to litigation on the same day, April 20, 1998. This litigation raises questions of property law and of statutory interpretation. However, fundamentally the case is about the "old" pre-Charter of Rights and Freedoms component of Canadian constitutional law, namely the distribution of legislative powers between federal and provincial/municipal governments. The core of this case is about, in a word, federalism. It pits federal jurisdiction over the subject matters of federal public property and aeronautics against provincial/municipal jurisdiction over property and civil rights.

I. FACTUAL BACKGROUND

I propose to divide this section of the judgment into three parts: first, a description of the parties; second, a brief summary of the redevelopment project at Pearson Airport; and third, an overview of the proceedings that are before me.

(1) The Parties

The Greater Toronto Airports Authority ("GTAA") is a private non-profit corporation. Its Board of Directors is comprised of nominees from the regional municipalities of Durham, Halton, Peel and York, the City of Toronto, the Province of Ontario and the federal government. The Board includes members chosen to reflect the interests of the business community, organized labour and consumers. In December 1996, the assets, operations and undertakings of Pearson Airport were transferred to the GTAA pursuant to a lease between it and Her Majesty the Queen in Right of Canada as represented by the Minister of Transport. The GTAA's mandate under this lease is, essentially, to manage, operate and develop the airport for an initial 60-year period (with the possibility of a 20-year extension).

Nav Canada is similar to the GTAA. It is also a private non-profit corporation. It was established pursuant to the Civil Air Navigation Services Commercialization Act, S.C. 1996, c. 20, in order to own, operate and develop Canada's civil air navigation system. This system includes air traffic control systems together with a variety of communication, navigation and information services provided to aircraft in Canadian-controlled airspace. These services are provided through a variety of facilities across Canada. One of those facilities is a new air traffic control tower at Pearson Airport. The development project for this tower began in February 1995. Construction is now complete; the tower went into service about a week before the court hearing in these proceedings.

The City of Mississauga ("Mississauga") is a municipality. Almost all of Pearson Airport is located within its boundaries. The airport forms about 10 per cent of the land mass of Mississauga.

The Regional Municipality of Peel ("Peel") is the regional municipality containing Mississauga. Its interest in these proceedings is derivative; it is a recipient of development charges paid to Mississauga. Hence Peel supports Mississauga's attempt to collect these charges from the GTAA and Nav Canada.

The Attorney General of Canada represents the Government of

Canada in these proceedings. The federal government is the owner of all the land at Pearson Airport. Moreover, it has purported to take important steps with the land through the 1996@2 lease it entered into with the GTAA. The Attorney General of Canada supports the position taken in these proceedings by the GTAA and Nav Canada.

The GTAA, Nav Canada, Mississauga, Peel and the Attorney General of Canada are the five principal parties in these proceedings. For completeness, I should mention the other parties named in the styles of cause. The Peel District School Board was represented by counsel at the commencement of the five-day hearing. Counsel sought to state his client's position, namely agreement with the position of Mississauga and Peel. Counsel was given permission to do this and to retire from the hearing. Three other parties named in the style of cause did not appear at the hearing. They are Her Majesty the Queen in Right of Ontario, the Dufferin-Peel Roman Catholic Separate School Board and Mississauga Hydro-Electric Commission.

(2) The Project

In the introductory section of these reasons I provided some background about the redevelopment project at Pearson Airport. That background related essentially to the reasons for the project, namely a great increase in the demand for the aviation services provided by the airport. In this section I want to provide a brief description of the project itself.

A redevelopment project designed to equip a modern international airport to receive up to 50 million passengers per year is obviously a massive project. The project at Pearson Airport is divided into four components; a brief description of them might include the following:

(a) The Airside Development Project: The principal objectives of this project are to increase airfield capacity and to improve operational efficiency at Pearson Airport. The project includes the building of three new runways and their associated taxiway systems, the construction of a new centralized six-bay de-icing facility and the installation of an advanced aircraft surface monitoring and guidance control system aimed at boosting the airport's capacity during poor weather conditions.

(b) The Terminal Development Project: The primary objective of this project is to replace the outdated and capacity constrained Terminals 1 and 2 with a single new terminal building to be constructed on the site where Terminals 1 and 2 are currently located. The new terminal will be a very large facility capable of handling domestic, transborder and international air traffic and all commercial aircraft types. Additionally, airline space, including business and frequent flyer lounges, will be constructed and retail concession space will be interspersed throughout the terminal. The new terminal will have a three-level roadway system (i.e., arrivals, departures and service vehicle levels) and a new integrated Ground Transportation Facility including a multi-level 12,500 space public parking garage. The project will also preserve rights of way for future mass transit access to the airport.

(c) The Infield Development Project: This project is designed to meet the demand for ancillary aviation facilities and to accommodate relocated tenants who will be displaced as a result of the Terminal Development Project. Air cargo and flight kitchen tenants will be relocated to a multi-tenant air cargo complex and separate flight kitchen facilities on the infield between the runways. A restricted vehicular access will be constructed to link the infield with the highway system to the west of the airport. A restricted airside vehicular access linking the infield with the passenger terminal apron will be provided via a 500-metre airside tunnel under one of the runways. A new hangar for 747 aircraft will be constructed, as will a ten-gate temporary holdroom designed to augment the capacity of the existing terminals during construction of the new terminal.

(d) The Utilities and Airport Support Project: This project will provide an expanded electrical network, heating and roofing systems, new sewage systems, improved telecommunications infrastructure, and firefighting and maintenance support facilities for Pearson Airport.

(3) The Proceedings

There are three formal legal proceedings before me. Two were initiated on April 20, 1998. The first is the GTAA's application brought against Mississauga. The second is Mississauga's application brought principally against the GTAA but also against Nav Canada and the Attorney General of Canada (as true respondents) and against several other entities, including Peel (as respondents only for the sake of completeness). With respect to Mississauga's application, Peel has brought a counter-application against Mississauga and the GTAA; this counter-application has a narrow, and probably unnecessary, purpose; namely to ensure that Peel receives its share of any development charges Mississauga collects from the GTAA and Nav Canada.

The third application was initiated by the GTAA on April 30, 1998. It is simply a companion to the GTAA's main application. It is an appeal against decisions made by Shane Hamilton, a building inspector employed by Mississauga. Mr. Hamilton made orders requiring the GTAA to comply with Mississauga's building code by-law; the GTAA contends that it need not comply with this by-law.

In important respects, the GTAA's main application and Mississauga's application are mirror images of each other. They both pose essentially the same basic question -- can Mississauga's building code and development charges regimes be applied to the operations of the GTAA at Pearson Airport? For the sake of clarity and completeness I set out the relief sought by the GTAA:

1. The Applicant makes application for:

(a) A declaration that the Development Charges Act . . . the Building Code Act . . . the Planning Act . . . and any municipal by-laws and regulations enacted thereunder are inapplicable to each of the components of the Airport Development Program at Lester B. Pearson International Airport . . . namely, the Airside Development Project, the Terminal Development Project, the Infield Development Project, and the Utilities and Airport Support Project, by virtue of the provisions of the Constitution Act, 1867, and consequently, that the Respondent has no constitutional authority:

(i) to require the Applicant to pay the Respondent any amounts for development charges in respect of the Airport Development Program;

(ii) to require the Applicant to obtain building permits from the Respondent or to pay the Respondent any amounts for such permits in respect of the Airport

Development program; or

(iii) to require the Applicant to comply with provincial or municipal building codes in respect of the Airport Development Program.

In an amendment to its application the GTAA sought the following additional relief:

1. (a-1) A declaration that the Topsoil Preservation Act . . . and any municipal by-laws and regulations enacted thereunder, are inapplicable to the Airport Development Program at Lester B. Pearson International Airport, by virtue of the provisions of the Constitution Act, 1867 and consequently:

(i) the Notice of Contravention of Erosion and Sediment By-Law No. 512-91 dated July 24, 1998 made pursuant to the Topsoil Preservation Act is a nullity.

Mississauga seeks relief in a more detailed fashion in its application. In essence, however, the relief it seeks in paras. 1(a)-(j) of its notice of application is a direct response to the relief sought by the GTAA. Essentially, Mississauga seeks declarations to the effect that its building code and development charges regimes apply to the GTAA and Nav Canada.

However, in addition to the relief sought on the jurisdictional issues, Mississauga also seeks different kinds of relief in its amended notice of application. I set out in

full these matters:

(j) A declaration that pursuant to Article 5 of the Ground Lease, the Minister of Transport may require the GTAA to pay development charges to the City of Mississauga and may do so notwithstanding the provisions of the Ground Lease and may require Nav Canada to pay development charges pursuant to Article 3.01.04 of a Lease for Land effective December 2, 1996 between the Minister of Transport and Nav Canada;

(k) In the alternative, if an Order is made that the City of Mississauga does not have jurisdiction over the. GTAA in respect of the Building Code Act, a declaration that Mississauga Fire and Emergency Services is not required to respond to fires and/or emergencies at the Airport;

(l) A declaration that pursuant to Section 14.02 of the Ground Lease, the Minister of Transport was entitled to require the GTAA to negotiate, and the GTAA was required to negotiate, with the City of Mississauga on the basis of the obligations set forth in Section 14.02.03(a) to (g); and in particular,

(i) on the basis that the planning processes and procedures of general application of the City of Mississauga, including the Building Code Act and the City of Mississauga's Building Permit By-law, apply to the Airport as if it is property other than a federal public property;

(ii) on the basis that any development of the Airport will be in harmony with the overall planning of the Applicant; and

(iii) on the basis that any development of the Airport will not be inconsistent with the Approved Land Use Plan as required by Section 14.02.01.

II. LEGAL ISSUES

The legal issues that must be addressed in these proceedings are:

(1) Constitutional Issues

(a) Is Mississauga's building code regime inapplicable to construction at Pearson Airport because Pearson Airport is federal public property and therefore within the exclusive jurisdiction of Parliament under s. 91(1A) of the Constitution Act, 1867?

(b) Is Mississauga's building code regime inapplicable to construction at Pearson Airport because matters relating to airports, and especially the physical structures at airports, are part of the subject matter of aeronautics which is within the exclusive jurisdiction of Parliament under the "peace, order and good government" words in the preamble to s. 91 of the Constitution Act, 1867?

(c) Is Mississauga's building code regime inapplicable to construction at Pearson Airport because the airport is a federal work or undertaking within the exclusive jurisdiction of Parliament under s. 92(10)(a) of the Constitution Act, 1867?

(2) Development Charges Issue

Can Mississauga apply its development charges regime to construction at Pearson Airport?

(3) Ground Lease Issues

(a) Does Mississauga have standing to seek any relief with respect to the ground lease between the federal government and the GTAA?

(b) If the answer to (a) is in the affirmative, should this court make the declarations sought against the Minister of Transport and the GTAA with respect to the payment of development charges and negotiations between the GTAA and Mississauga?

(4) Withdrawal of Services Issue

Is Mississauga entitled to a declaration that the Mississauga Fire and Emergency Services is not required to respond to fires and emergencies at Pearson Airport if Mississauga's building code regime is inapplicable to construction at the airport?

I will consider these legal issues in turn.

III. ANALYSIS

(1) Constitutional Issues

In its notices of application, notice of constitutional question, and orders made by city officials, Mississauga has asserted that it can apply four provincial statutes, and municipal by-laws enacted thereunder, to the GTAA and Nav Canada. The four statutes are the Building Code Act, S.O. 1992, c. 23; the Development Charges Act, R.S.O. 1990, c. D.9; the Planning Act, R.S.O. 1990, c. P.13 and the Topsoil Preservation Act, R.S.O. 1990, c. T.12.

At the hearing, Mississauga formally abandoned its request for a declaration that the GTAA and Nav Canada had to comply with the Planning Act. Moreover, Mississauga advanced no argument with respect to the application of the Topsoil Preservation Act to the GTAA and Nav Canada. Since that statute applies specifically to part of the land (i.e., the topsoil), I think it fair to conclude that Mississauga has also abandoned its claim under it.

Mississauga maintains its position with respect to the Building Code Act and the Development Charges Act and the Mississauga by-laws enacted pursuant to these statutes. There are constitutional issues with respect to the application of both of these statutes to construction at Pearson Airport. Hence there is a fair degree of overlap in the analysis. Nevertheless, I think it convenient to deal first, and separately, with the building code regime because it raises squarely the central constitutional issues that must be addressed.

(a) The federal public property issue

There is no question that the Building Code Act is valid provincial legislation under s. 92(13) of the Constitution Act, 1867 which gives to provincial legislatures the power to enact laws in relation to "property and civil rights in the province". Nor is there any dispute that Mississauga's building code by-law has been properly enacted under the Building Code Act.

However, the GTAA and Nav Canada take the position that Mississauga cannot apply its building code regime to the redevelopment project at Pearson Airport because to do so would interfere with federal jurisdiction over "the public debt and property" contained in s. 91(1A) of the Constitution Act, 1867.

It is common ground that the federal government is the owner of the land at Pearson Airport. However, Mississauga contends that the application of its building code regime to the construction of buildings at the airport would not intrude into federal jurisdiction under s. 91(1A). Mississauga takes this position for a variety of reasons, some relating to the nature of its building code regime and others grounded in the fact that the federal government has leased the airport land to the GTAA. In brief form, I would describe Mississauga's arguments as follows:

(1) The proper characterization of the building code regime is safety in buildings, not the physical construction of buildings; hence the subject matter of the regime is not "property" and there can be no question of improper intrusion into federal jurisdiction over "federal public property".

(2) Alternatively, the building code regime applies to persons, not property; hence, as in (1), there is no question of intrusion.

(3) The building code regime can apply to the activities of third parties, such as the GTAA and Nav Canada, on federal land.

(4) The GTAA's leasehold interest in the airport land is not protected by s. 91(1A).

I will consider these arguments in turn.

(i) Mississauga's building code regime -- what is its subject matter?

Mississauga contends that the subject matter of the provincial Building Code Act and of its building code by-law regime is not buildings per se, but rather safety in buildings. Laws dealing with safety, submits Mississauga, are not in relation to property and therefore cannot run afoul of s. 91(1A) of the Constitution Act, 1867.

In support of its position, Mississauga relies on the user's guide to the 1997 edition of the Ontario Building Code, especially this passage at p. 1:

> The Code is essentially a set of minimum provisions respecting the safety of buildings with reference to public health, fire protection and structural sufficiency. It is not intended to be a textbook on building design, advice on which should be sought from professional sources. Its primary purpose is the promotion of public safety through the application of appropriate uniform building standards.

The problem with this passage, aside from the fact that it is not contained in the legislation itself, is that it speaks of intention and purpose, not subject-matter. The subject-matter of the Building Code Act is, in my view, as its title suggests, buildings. The Act is a relatively short and general one. However, its essence is, per s. 34, "standards for the

construction and demolition of buildings". The Act provides municipalities with extensive powers to regulate property development, such as by specifying rules for the construction, demolition, use and occupation of buildings and requiring the submission of plans to a municipal building department for approval before construction may proceed. The Act provides municipal building officials with the power to remove buildings from land and to have them demolished. Those officials are also empowered to make assessments of the structural adequacy of buildings for the purpose for which they are to be used, and they have broad p owers to enter and search property and to make orders against both owners of buildings and many other persons who have dealings with buildings, thus affecting the property rights of anyone with an interest in the property. The Act also provides for a number of liens which may be visited on the land itself. In short, the subject-matter of the Act is buildings and the land on which they are placed.

I make one other observation about Mississauga's argument on this point. "Safety" is not a separate subject matter for constitutional law purposes. It is not found in either s. 91 or s. 92 of the Constitution Act, 1867. If the Building Code Act is to apply at Pearson Airport, it must first be found to be valid under some head of power in s. 92. The obvious, and long accepted, head is s. 92(13), specifically the "property" component of that head. Mississauga's "safety" argument has the potential to remove the anchor for all its other arguments.

(ii) Mississauga's building code regime applies to persons, not property

Mississauga contends that its building code regime applies to the GTAA and Nav Canada personally. As expressed at para. 187 of its factum:

> In any event, provincial and municipal building code regimes are directed to persons, other than the federal Crown itself, who are constructing buildings even if they are using federal Crown lands. Any immunity of the federal Crown to these laws does not extend to such users.

I must confess that I have some difficulty understanding this argument. All laws apply to persons; that truism does not identify the subject-matter of a law. The subject-matter of the provincial and municipal building code regime is buildings and land. If there was any doubt on this score it was resolved by the recent decision of the Supreme Court of Canada in Ontario Home Builders' Assn. v. York Regional Board of Education, [1996] 2 S.C.R. 929, 137 D.L.R. (4th) 449, wherein Iacobucci

J. said, at p. 987:

> As noted above, the [Development Charges Act] is one component of a comprehensive regulatory framework governing land development in Ontario, comprised of at least nine different statutes: the Building Code Act . . . .

(Emphasis added)

The fact that the statute and subject-matter identified by Iacobucci J. -- namely, the Building Code Act and land development in Ontario -- apply, as Mississauga asserts, to "persons" is obvious; constitutionally speaking, it is also irrelevant.

(iii) Mississauga's building code regime can apply to the activities of the GTAA and Nav Canada on federal land

Mississauga submits that it is now well accepted that provincial laws of general application can apply to federal Crown lands provided they do not nullify or destroy the Crown's use, or intended use, of the land or affect a federal real property interest. In support of its submission, Mississauga relies on Construction Montcalm Inc. v. Minimum Wage Commission, [1979] 1 S.C.R. 754, 93 D.L.R. (3d) 641. In that case the question was whether Quebec's minimum wage legislation applied to Construction Montcalm's employees while they constructed an airport runway on federal Crown lands. The company claimed that the provincial law was inapplicable on federal Crown lands. The Supreme Court of Canada rejected this submission. Beetz J. said, at pp. 777-78:

> In its second submission, Montcalm contends that provincial law does not apply on federal Crown lands. Again I disagree. The exclusive power of the Province to make laws in relation to property and civil rights under s. 92(13) of the Constitution is territorially limited only by the words "in the Province", and Mirabel is located in the Province. The enumeration of exclusive federal powers in s. 91 of the Constitution, including the power to make laws in relation to the public debt and property, operates as a limitation ratione materiae upon provincial jurisdiction, not as a territorial limitation. The impugned provisions relate neither to federal property nor to any other federal subject but to civil rights and, in my view, they govern the civil rights of Montcalm and its employees on federal property. Federal Crown lands do not constitute extra-territorial enclaves within provincial boundaries any more than indian reserves.

In my view, this passage from Construction Montcalm does not support Mississauga's position in these proceedings. There is no question that provincial laws of general application can apply to a wide range of activities which occur on federal property. Labour relations, occupational safety and many other matters coming under the "civil rights in the province" component of s. 92(13), or indeed matters coming under other heads of provincial jurisdiction, can be regulated on federal property by provincial laws of general application.

However, there is a fundamental distinction between the subject-matter of activities on federal Crown lands and the subject matter of the lands themselves. Beetz J. makes explicit this distinction in the passage set out above when he says:

> The enumeration of exclusive federal powers in s. 91 of the Constitution, including the power to make laws in relation to the public debt and property, operates as a limitation ratione materiae upon provincial jurisdiction . . . .

Black's Law Dictionary, 5th ed. (1979) defines ratione materiae as "[b]y reason of the matter involved; in consequence of, or in the nature of, the subject-matter." The "nature of the subject-matter" of the Building Code Act, and Mississauga's building code regime enacted thereunder, is not activities on federal Crown lands; rather it is, as Iacobucci J. said in Ontario Home Builders' Assn., supra, "land development in Ontario" (p. 987). Accordingly, Mississauga's building code regime intrudes directly into the very subject matter that is reserved to Parliament under s. 91(1A) of the Constitution Act, 1867.

Construction Montcalm was not a case relating to a provincial

building code. However, there have been many such cases. With the possible exception of one case, they have all held that provincial building code laws cannot apply to the construction of buildings on federal Crown lands. One important case in this category is Ottawa (City) v. Shore & Horwitz Construction Co. (1960), 22 D.L.R. (2d) 247 (Ont. H.C.J.) in which Donnelly J. held that a private construction company was not required to obtain a municipal building permit before constructing a barracks building at Rockcliffe Airport in Ottawa. Donnelly J. said, at p. 251:

> The barracks built by the accused firm and the land on which they were located were owned by the Crown in the Right of Canada and formed part of the Public Debt and Property over which s. 91(1A) of the B.N.A. Act excludes the Province from any legislative authority and over which the Government of Canada has the exclusive right to legislate.

Donnelly J.'s decision was explicitly acknowledged and agreed with in Construction Montcalm by both the majority judges (per Beetz J. at p. 771) and dissenting judges (per Laskin C.J.C., at p. 759). See also International Aviation Terminals (Vancouver) Ltd. v. Richmond (Township), [1992] 4 W.W.R. 550, 89 D.L.R. (4th) 1 (B.C.C.A.) and Delta v. Aztec Aviation Group (1985), 28 M.P.L.R. 215 (B.C.S.C.); contra Shuniah (Township) v. Richard (1982), 37 O.R. (2d) 471, 136 D.L.R. (3d) 638 (H.C.J.) which is, in my respectful view, inconsistent with the decisions of the Supreme Court of Canada in both Construction Montcalm (1979) and Ontario Home Builders' Assn. (1996).

(iv) The GTAA's leasehold interest in the land at Pearson Airport is not protected by s. 91(1A) of the Constitution Act, 1867

Mississauga contends that the GTAA's leasehold interest in Pearson airport is not federal public property. As expressed at para. 178 of its factum:

> In these applications, the Court is not required to determine whether the OBCA, the Building Code and Mississauga's building permit by-law would apply to LBPIA if it were still owned and operated by HMQ Canada. What is very clear is that the leasehold interest and the buildings owned by GTAA and Nav Canada are not federal Crown property and thus s. 91(1A) of the Constitution Act does not apply to them.

In my view, this position is not supported by the authorities. Section 91(1A) is an important federal power with respect to federal Crown land. In Reference re Employment & Social Insurance Act, [1936] S.C.R. 427, Duff C.J.C. (dissenting, but not on this point) said, at p. 431:

> The exclusive legislative authority of Parliament extends inter alia to the subject "The Public Debt and Property". It cannot be doubted, we think, that "property" here is used in its broadest sense, and includes every kind of asset.

In his leading text, Natural Resources and Public Property under the Canadian Constitution (Toronto: University of Toronto Press, 1969), Professor G.V. La Forest said, at p. 134:

> In a word, the term "property" in section 91(1A) is used in its broadest sense, and includes every kind of asset and partial interest.

It is also clear that the broad federal power over federal public property acts not only as a positive source of federal jurisdiction, but also operates defensively to shield such property from provincial laws in relation to it. According to Laskin's Canadian Constitutional Law, 3rd ed. (Toronto: Carswell, 1969) at p. 556:

> Federal legislative authority in relation to federal public property clearly operates defensively to preclude provincial legislation against such property: see Spooner Oils Ltd. v. Turner Valley Gas Conservation Board, [1933] S.C.R. 629.

The Spooner Oils case referred to in this passage is central to these proceedings relating to jurisdiction over construction at Pearson Airport. In that case an individual held a lease of public lands in the Turner Valley, granted by federal regulations under the Dominion Lands Act, giving him the right to work the lands for petroleum and natural gas. The province

of Alberta then passed a statute, the Turner Valley Gas Conservation Act, 1932, whose broad purpose was to reduce the loss of gas in the Turner Valley by burning it as waste.

The Supreme Court of Canada held that the provincial law could not apply to the leased federal public property. Speaking generally about the relationship between s. 91(1A) of the Constitution Act, 1867 and provincial laws affecting federal public property, Duff C.J.C. said, at p. 643:

> Indeed, the public lands of the Dominion are vested in Parliament, in the sense that only by virtue of Parliamentary authority can such lands be disposed of or dealt with. The right of the lessee, in each case, is to take from a specified tract of land, which is leased to him for that purpose alone, certain substances and to convert them to his own use. Until so taken, they remain, subject to his right to take them during the specified term, the property of the Dominion -- part of the public lands of the Dominion. To take away this right, or to prohibit the exercise of it, would be to nullify pro tanto the statutory enactment creating the right. It is obvious, of course, that the provincial legislature could not validly have passed the enactments of the Dominion Lands Act, or the Regulations of 1910 and 1911, under which the lessee became entitled to exercise his rights.

(Emphasis added)

Against the background of these general observations, Duff C.J.C. turned to consider whether the fact that the provincial law applied to federal public property that had been leased to a private party made any difference. He held that it did not, stating at pp. 643-44:

> Nor is it material that, by the lease, an interest in the tract has passed to the lessee. The Dominion Lands Act, and the Regulations enacted pursuant to it, give statutory effect to plans for dealing with Dominion public lands, including lands containing petroleum and natural gas, which, it must be assumed, were conceived by Parliament, and the authorities nominated by Parliament, as calculated to serve the general interest in the development and exploitation of such lands and the minerals in them. It is not competent to a provincial legislature pro tanto to nullify the regulations, to which Parliament has given the force of law in execution of such plans, by limiting and restricting the exercise of the rights in the public lands, created by such regulations in carrying the purpose of Parliament into effect. Indeed, an administrative order, which the legislature has professed to endow with the force of statute, directed against a tract of public land, the property of the Dominion, held by a lessee under the Regulations of 1910 and 1911, and which professed to regulate the exercise, by the lessee, of his right to take gas and petroleum from the demised lands, would truly be an attempt to legislate in relation to a subject reserved for the exclusive legislative jurisdiction of the Dominion by s. 91(1), "The Public . . . Property" of the Dominion.

In my view, all of this passage, but especially the last sentence, has direct application to the present case. The application of the Mississauga building code regime to Pearson Airport would be an application aimed at the land and buildings at the airport; it would be, in Duff C.J.C.'s words, "an attempt to legislate in relation to . . . 'The Public . . . Property' of the Dominion".

There is a second reason why Spooner Oils is conclusive against Mississauga's argument that the existence of a lease to a private party removes the leased federal Crown land from the protection of s. 91(1A). In the passages set out above Duff C.J.C. stated clearly that s. 91(1A) created a subject matter limitation against provincial laws -- they cannot apply to federal lands qua federal lands. Later in Spooner Oils, Duff C.J.C. stated, at p. 646:

> Where the regulations, under which Dominion lands are leased, or the stipulations of such leases, contain provisions dealing with the very subject matter of the provincial legislation, then it is quite obvious that such regulations and stipulations must prevail in case of conflict.

(Emphasis added)

The emphasized words are, in my view, important in the present case. They establish a second reason why Mississauga's argument must fail. The ground lease between the federal government and the GTAA is not silent on the topic of building codes; on the contrary, it deals with this subject matter explicitly in s. 14.03.04:

> Where the tenant and the municipality in which a part of the Airport is located have not entered into a Municipal-Authority Agreement, no new facility shall be constructed on such part of the Airport and no Existing Facility on such part of the Airport shall be altered in a way that is not in full compliance with the National Building Code and the National Fire Code of Canada which, in such circumstances, shall be deemed to be the applicable building and construction standards for purposes of this Lease.

The GTAA and Mississauga have not been able to conclude a Municipal-Authority Agreement. In that circumstance, the ground lease is perfectly clear -- all construction must comply with the National Building Code and the National Fire Code. This result flows from a stipulation in the lease which, according to Duff C.J.C. in Spooner Oils, is permissible. Moreover, the stipulation in the lease, in Duff C.J.C.'s words, "must prevail in case of conflict" with a provincial law dealing with the same subject matter. In my view, there is a clear conflict. The ground lease states that the National Building Code and National Fire Code must be applied; Mississauga says that the GTAA must comply with its own building code regime.

(v) Conclusion

The application of Mississauga's building code regime to the demolition, alteration and construction of buildings at Pearson Airport would intrude into exclusive federal jurisdiction over federal public property.

Strictly speaking, this conclusion is sufficient to dispose of the building code issue in these proceedings. However, in the interests of completeness, I will now consider the aeronautics and federal undertakings arguments advanced by the GTAA and Nav Canada.

(b) The aeronautics issue

As a second line of constitutional attack, the GTAA, Nav Canada and the Attorney General of Canada contend that Mississauga cannot apply its building code regime to the redevelopment project at Pearson Airport because to do so would interfere with federal jurisdiction over aeronautics.

Since 1932 the subject matter of aeronautics has been assigned to federal jurisdiction under what is known as the "national dimensions" component of the peace, order and good government power. As expressed by Lord Sankey L.C. in Re Regulation & Control of Aeronautics in Canada, [1932] A.C. 54 at p. 77, 101 L.J.P.C. 1:

> . . . substantially the whole field of legislation in regard to aerial navigation belongs to the Dominion. There may be a small portion of the field which is not by virtue of specific words in the British North America Act vested in the Dominion; but neither is it vested by specific words in the Provinces. As to that small portion it appears to the Board that it must necessarily belong to the Dominion under its power to make laws for the peace, order and good government of Canada. Further, their Lordships are influenced by the facts that the subject of aerial navigation and the fulfilment of Canadian obligations under s. 132 are matters of national interest and importance; and that aerial navigation is a class of subject which has attained such dimensions as to affect the body politic of the Dominion.

In this passage Lord Sankey twice used the expression "aerial navigation" to describe the "class of subject" being assigned to federal jurisdiction. In the first major decision of the Supreme Court of Canada dealing with aeronautics, Johannesson v. West St. Paul (Rural Municipality), [1952] 1 S.C.R. 292, [1951] 4 D.L.R. 609, this federal subject matter was described by several judges: "the whole field of aerial transportation" (Rinfret C.J.C., p. 303); "the subject of air navigation" (Kerwin J., p. 308); "aerial navigation as a whole" (Kellock J., p. 311); and "the operation of the aeroplane

from the moment it leaves the earth until it returns thereto" (Estey J., p. 319).

All of these early formulations might create the visual image of airplanes actually in the air as the core content of the federal aeronautics power. However, it is clear that federal jurisdiction is not just celestial; it is also terrestrial. It extends to those things in the air and on the ground that are essential for "aerial navigation" or "air transportation" to take place.

A long line of cases establishes that airports, or in the early cases "aerodromes", are integral to the subject matter of aeronautics. Johannesson itself dealt with the location of an aerodrome in Manitoba. The Supreme Court held that a municipal by-law could not affect this subject matter. Kellock J. said, at p. 311:

> It is no doubt true that legislation of the character involved in the provincial legislation regarded from the standpoint of the use of property is normally legislation as to civil rights, but use of property for the purposes of an aerodrome, or the prohibition of such use cannot, in my opinion, be divorced from the subject matter of aeronautics or aerial navigation as a whole.

Estey J. said, at p. 319:

> Legislation which in pith and substance is in relation to the aerodrome is legislation in relation to the larger subject of aeronautics and is, therefore, beyond the competence of the Provincial Legislatures.

The inclusion of airports within the federal aeronautics power has been confirmed recently by the Supreme Court of Canada. In Air Canada v. Ontario (Liquor Control Board), [1997] 2 S.C.R. 581, 148 D.L.R. (4th) 193, Iacobucci J. said, at p. 610:

> . . . the federal aeronautics jurisdiction encompasses not only the regulation of the operation of aircraft, but also the regulation of the operation of airports.

Anchored in Johannesson (1952) and Air Canada (1997), and in many similar cases between these two, another long line of cases has held that a variety of provincial and municipal property development laws are inapplicable to airports: see, for example, Orangeville Airport Ltd. and Caledon (Town) (1976), 11 O.R. (2d) 546 (C.A.); Delta v. Aztec Aviation Group, supra; International Aviation Terminals (Vancouver) Ltd. v. Richmond (Township) (1991), 54 B.C.L.R. (2d) 325, 4 M.P.L.R. (2d) 282 (S.C.), reversed but the appeal court agreed with the trial judge on this point, supra; Toronto (City) v. Canada (Minister of Transport) (1990), 35 F.T.R. 214; Walker v. Ontario (Minister of Housing) (1983), 41 O.R. (2d) 9, 144 D.L.R. (3d) 86 (C.A.); Venchiarutti v. Longhurst (1992), 8 O.R. (3d) 422 (C.A.); and Niagara Falls (City) v. Executive Helicopter Services Inc. (1994), 23 M.P.L.R. (2d) 296 (Ont. Prov. Div.).

Mississauga contends that several of these cases do not deal with the subject matter in issue in these proceedings, namely construction at an airport. Johannesson itself dealt with a zoning by-law, as did Orangeville, Walker and Venchiarutti. Mississauga concedes that four of the cases, Delta, International Aviation Terminals, Toronto v. Canada (Minister of Transport) and Executive Helicopter Services, dealt with the relationship between municipal building code by-laws and construction at airports; Mississauga submits that these decisions by, respectively, a judge of the British Columbia Supreme Court, the British Columbia Court of Appeal, a judge of the Federal Court, Trial Division, and a judge of the provincial division of this court, were wrongly decided, are not binding on me, and should not be followed.

Mississauga contends that not everything that takes place at an airport is integral to aeronautics. In support of this proposition, Mississauga relies on a line of cases which has held that certain activities that take place at an airport, or even inside an airplane, can be regulated by provincial and municipal laws: see, for example, Air Canada v. Ontario (Liquor Control Board), supra -- provincial tax permitted on sales of in-flight liquor; KLM Royal Dutch Airlines v. British Columbia (1998), 156 D.L.R. (4th) 203, 47 B.C.L.R. (3d) 207 (C.A.) --

provincial tax applied to airline fuel; United Assn. of Journeymen & Apprentices of the Plumbing & Pipefitting Industry of the United States and Canada, Local 496 v. Vipond Automatic Sprinklers Co. (1976), 67 D.L.R. (3d) 381 (Alta. S.C.) -- provincial labour law applied to employees constructing a building at an airport; Murray Hill Limousine Service Ltd. v. Batson, [1965] B.R. 778 (Que. C.A.) -- provincial labour law applied to an airport porter service; Service d'Entretien Avant-Garde Inc. v. Canada Labour Relations Board (1985), 26 D.L.R. (4th) 331 (Que. S.C.) -- provincial labour law applied to employees of a private company which had a contract to provide cleaning services at an airport; Toronto Auto Parks (Airport) Ltd. v. Canadian Union of Public Employees, [1978] O.J. No. 1187 (Div. Ct.) -- provincial labour law applied to a company operating a parking facility at an airport; and Colonial Coachlines Ltd. v. Ontario (Highway Transport Board), [1967] 2 O.R. 25, 62 D.L.R. (2d) 270 (H.C.J.) -- provincial licensing law applied to a limousine company transporting air crews and passengers to an airport.

Based on these cases, Mississauga advances the proposition that some activities which take place at or near an airport, and even inside a flying airplane, are not integral to aeronautics. The GTAA, Nav Canada and the Attorney General of Canada do not quarrel with that proposition.

Mississauga further submits that the construction of all buildings at an airport is a subject-matter that is not integral to aeronautics. It is this further submission that divides the parties in these proceedings. The GTAA, Nav Canada and the Attorney General of Canada draw a different line than Mississauga; they say that the construction of buildings at an airport is integral to aeronautics and is, therefore, beyond the reach of provincial and municipal laws.

As the preceding paragraphs make clear, all parties identified and considered a large number of cases in support of their positions. Interestingly, and in my view correctly, all counsel identified the same case as the most important one for resolving what I have labelled "the aeronautics issue". That case is the decision of the Supreme Court of Canada in Construction Montcalm Inc. v. Minimum Wage Commission, supra. In their facta, and especially in their oral submissions, counsel devoted a great deal of time to this decision. Such close attention was entirely appropriate because, in my view, Construction Montcalm does resolve the aeronautics issue in these proceedings.

Construction Montcalm was a case relating to construction work on the runways at Mirabel Airport. The legal issue was whether Quebec's Minimum Wage Act applied to the employees of a private company which, under contract with the federal Crown, was performing construction work on the runways. The Supreme Court of Canada held that the law could apply. In his judgment for a majority of the court, Beetz J. dealt very carefully with the relationship between provincial laws of general application and the federal subject matter of aeronautics. Moreover, he did this in the context of construction work at airports, precisely the central issue in these proceedings.

I begin my attempt to apply Construction Montcalm to the issues before me by setting out an extended passage from Beetz J.'s judgment, at pp. 769-74 [footnotes omitted]:

> The main submission made on behalf of Montcalm starts from the premise that aeronautics is a class of subjects which comes under exclusive federal authority; Johannesson v. The Rural Municipality of West St. Paul. It was contended that aeronautics comprises the matter of airports and that the construction of airports, including the conditions of employment of workers engaged in the construction of airports, whoever employs them, is an integral part of aeronautics.
>
> The issue was also discussed as if the Mirabel airport were a federal work or undertaking, and it could indeed be argued that an international airport is a work which forms part of an undertaking connecting a province with a foreign country or extending beyond the limits of a province. An obiter dictum of Lord Watson in Canadian Pacific Railway v. Notre-Dame de Bonsecours (the Notre-Dame de Bonsecours case) at p. 372 was quoted to us in support of Montcalm's main submission:

> . . . the Parliament of Canada has, in the opinion of their Lordships exclusive right to prescribe regulations for the construction, repair and alteration of the railway, and for its management, and to dictate the constitution of the company;

(Underlining is mine [i.e. Beetz J.'s])

The construction of an airport, it was argued, is as much a matter for exclusive federal control as the construction of a federal railway.

In my view, the main submission is not supported by the principles enunciated above: it does not meet the test set out in the Stevedoring case according to which Parliament has no authority over labour relations except in so far as such authority is an integral element of its primary jurisdiction over some other matter; furthermore, it implicitly but clearly ignores the requirement of the Agence Maritime & Letter Carriers' cases that an undertaking, service or business be not characterized as a federal or provincial one on account of casual factors.

The construction of an airport is not in every respect an integral part of aeronautics. Much depends on what is meant by the word "construction". To decide whether to build an airport and where to build it involves aspects of airport construction which undoubtedly constitute matters of exclusive federal concern: the Johannesson case. This is why decisions of this type are not subject to municipal regulation or permission: the Johannesson case; City of Toronto v. Bell Telephone Co.; the result in Ottawa v. Shore and Horwitz Construction Co. can also be justified on this ground. Similarly, the design of a future airport, its dimensions, the materials to be incorporated into the various buildings, runways and structures, and other similar specifications are, from a legislative point of view and apart from contract, matters of exclusive federal concern. The reason is that decisions made on these subjects will be permanently reflected in the structure of the finished produ ct and are such as to have a direct effect upon its operational qualities and, therefore, upon its suitability for the purposes of aeronautics. But the mode or manner of carrying out the same decisions in the act of constructing an airport stand on a different footing. Thus, the requirement that workers wear a protective helmet on all construction sites including the construction site of a new airport has everything to do with construction and with provincial safety regulations and nothing to do with aeronautics: see R. v. Beaver Foundations Ltd. and R. v. Concrete Column Clamps (1961) Ltd. See also Re United Association of Journeymen, etc. Local 496 and Vipond Automatic Sprinkler Co. Ltd., where Cavanagh J. of the Alberta Supreme Court held that "the fact of construction of a building called an air terminal does not . . . show that the construction is connected with aeronautics" and that, while an aerodrome is a federal work, employees constructing such a building are subject to provincial labour relations legislation. In my opinion what wages shall be paid by an independent contractor like Montcalm to his employees engaged in the construction of runways is a matter so far removed from aerial navigation or from the operation of an airport that it cannot be said that the power to regulate this matter forms an integral part of primary federal competence over aeronautics or is related to the operation of a federal work, undertaking, service or business. (For the purpose of the main submission, it is unnecessary to express any view as to whether Parliament could, in a provision of an ancillary nature, incidentally touch upon the conditions of employment of workers engaged in the construction of airports).

The Notre-Dame de Bonsecours case is relied on by Montcalm. The Judicial Committee held that provincial legislation prescribing the cleaning of ditches was intra vires of the provincial legislature and applicable to a federal railway since it did not affect the structure of the railway. Lord Watson's dictum, quoted above, is preceded by this statement: (at p. 372)

> The British North America Act, whilst it gives the legislative control of the appellants' railway quÔ railway to the Parliament of the Dominion, does not declare that the railway shall cease to be part of the provinces in which it is situated, or that it shall, in other respects,

be exempted from the jurisdiction of the provincial legislatures.

(Underlining is mine [i.e. Beetz J.'s])

Lord Watson's dictum is then followed by the following passage (at pp. 372 and 373):

It was obviously in the contemplation of the Act of 1867 that the "railway legislations", strictly so called, applicable to those lines which were placed under its charge should belong to the Dominion Parliament. It therefore appears to their Lordships that any attempt by the Legislature of Quebec to regulate by enactment, whether described as municipal or not, the structure of a ditch forming part of the appellant company's authorized works would be legislation in excess of its powers. If, on the other hand, the enactment had no reference to the structure of the ditch, but provided that, in the event of its becoming choked with silt or rubbish, so as to cause overflow and injury to other property in the parish, it should be thoroughly cleaned out by the appellant company, then the enactment would, in their Lordships' opinion, be a piece of municipal legislation competent to the Legislature of Quebec.

(Underlining is mine [i.e. Beetz J.'s])

The views of the Judicial Committee were further explained in Madden v. Nelson and Fort Sheppard Railway Company, where a provincial statute aimed at obliging federal railway companies to erect proper fences on their railways by imposing civil liability upon them for the killing or maiming of cattle, was found ultra vires (at pp. 628 and 629):

Their Lordships think it unnecessary to do more than to say that in this case the line seems to have been drawn with sufficient precision in the case of the Canadian Pacific Ry. Co. v. Corporation of the Parish of Notre-Dame de Bonsecours where it was decided that although any direction of the provincial legislature to create new works on the railway and make a new drain and to alter its construction would be beyond the jurisdiction of the provincial legislature, the railway company were not exempted from the municipal state of the law as it then existed -- that all landowners, including the railway company, should clean out their ditches so as to prevent a nuisance. It is not necessary to do more here than to say that this case raises no such question anywhere near the line, because in this case there is the actual provision that there shall be a liability on the railway company unless they create such and such works upon their roadway. This is manifestly and clearly beyond the jurisdiction of the provincial legislature.

(Underlining is mine [i.e. Beetz J.'s])

These passages make it clear that what the Judicial Committee had in mind in referring to the power of regulating the construction of a railway was those directions which result in the structural alteration of a federal work, or in the creation of new works, or, presumably and a fortiori, in the prohibition of new works. But, as is shown by the Notre-Dame de Bonsecours case, at p. 374, provincial law applies even if it affects "the physical condition" of a railway ditch, as long as the "structure of the ditch" remains intact.

In the case at bar, the impugned legislation does not purport to regulate the structure of runways. The application of its provisions to Montcalm and its employees has no effect on the structural design of the runways; it does not prevent the runways from being properly constructed in accordance with federal specifications; nor has it even been shown, assuming it could be, that "the physical condition" of the runways, as opposed to their structure, is affected by the wages and conditions of employment of the workers who build them.

Mississauga relies on this passage to support its submission that the activity of constructing buildings at an airport is different than the operation of those buildings after they are constructed. Provincial laws can apply to the former but not to the latter. Mississauga especially relies on Beetz J.'s

juxtaposition of subject-matters at pp. 770-71 of the judgment. On the federal jurisdiction side are decisions concerning whether and where to build an airport, the design of a future airport, its dimensions and the materials to be incorporated into the buildings. On the provincial jurisdiction side are "the mode or manner of carrying out decisions in the act of constructing the airport". Mississauga submits that its building code regime falls on "the act of constructing" side of the line.

With respect, I disagree. In my view, a careful reading of Beetz J.'s decision supports the GTAA's, Nav Canada's and the Attorney General of Canada's position that the actual physical structure of buildings at an airport is part of the protected federal subject matter of aeronautics. I reach this conclusion for several reasons.

First, as illustrations of the types of matters that relate to the mode or manner of carrying out decisions in the act of constructing the airport, Beetz J. cites three cases (at p. 771) -- R. v. Beaver Foundations Ltd. (1968), 69 D.L.R. (2d) 649 (Ont. Mag. Ct.); R. v. Concrete Column Clamps (1961) Ltd., [1972] 1 O.R. 42 (Prov. Ct.); and Vipond Automatic Sprinkler Co., supra.

Vipond Automatic Sprinkler Co. is one of the many decisions in which provincial labour laws have been held to apply to employees involved in construction work at an airport; it is an "activity" case. So is Concrete Column Clamps which held that a provincial construction safety law would apply to a company engaged in a construction work on a federal building. After reviewing some case law, Hutton Prov. Ct. J. said, at p. 56:

> These cases make it clear to me that a Province is not precluded from regulating activities of persons within the Province simply because the activities occur on properties owned by the Crown in Right of Canada.

(Emphasis added)

The third case, Beaver Foundation, is, in my view, a particularly instructive one. In a short three-page judgment in 1968, Magistrate Drukarsh of the County of Renfrew Magistrate's Court held that a provincial construction safety law could apply to workers on an interprovincial bridge. He said, at p. 651:

> [The Construction Safety Act, 1961-62] is a regulatory Act and strictly for the purpose of saving lives and workmen from harm and injury.

Importantly, Magistrate Drukarsh contrasted this permitted application of the law with something that would be impermissible. He said, at pp. 650-51:

> If the Construction Safety Act, 1961-62, in any way forbid the building of the bridge or in any way instructed or gave instructions as to how many bricks were to be placed in any portion of the bridge or how much steel was to be placed in any portion of the bridge or were it to try to enforce the thickness, width, length or breadth of the bridge, I would have no hesitation in ruling that this Act did not apply.

This passage contains a practical description of precisely the kind of matters that building codes address. Beetz J.'s decision to cite this case -- really quite an obscure and terse decision -- is, in my view, a clear signal that he agreed with the distinction made by the magistrate. Activities relating to the construction of buildings, such as labour relations or occupational safety, are different than the physical structure of buildings.

Second, the cases cited by Beetz J. as being on the federal jurisdiction side of the dividing line uniformly support the position of the parties opposing the application of Mississauga's building code regime to the redevelopment project at Pearson Airport. Toronto (City) v. Bell Telephone Co., [1905] A.C. 52, was a case in which it was held that the City of Toronto could not prevent the construction of telephone lines under the streets of the city. Ottawa v. Shore and Horwitz Construction Co., supra, another quite obscure case cited by Beetz J., and specifically stated by him to be supportable under the federal aeronautics power, was a case in

which the trial judge held that a municipal building code

regime could not apply to the construction of a military barracks at an airport. In Canadian Pacific Railway v. Notre-Dame de Bonsecours, [1899] A.C. 367, which Beetz J. discusses in detail, the Privy Council drew a distinction between a provincial law prescribing the cle aning of ditches (applicable to ditches alongside a federal railway) and one that would regulate "the structure of a ditch" forming part of the railway's works (inapplicable). And in Madden v. Nelson & Fort Sheppard Railway Co., [1899] A.C. 626, a provincial law compelling federal railway companies to erect fences on their railways was held to be ultra vires.

Third, Beetz J. states in a clear fashion the reason for the distinction between the physical structure of buildings and activities that take place during the construction process. He said, at p. 771:

> Similarly, the design of a future airport, its dimensions, the materials to be incorporated into the various buildings . . . are . . . matters of exclusive federal concern. The reason is that decisions made on these subjects will be permanently reflected in the structure of the finished product and are such as to have a direct effect upon its operational qualities and, therefore, upon its suitability for the purposes of aeronautics.

In my view, the practical on the ground decisions made by building inspectors have the potential to relate directly to "the structure of the finished product" and can have "a direct effect upon its operational qualities".

Fourth, it seems to me that in the final two paragraphs of the long passage from Beetz J.'s judgment set out above he makes it abundantly clear that provincial laws cannot apply to the physical structures associated with the operation of an airport. His choice of words in describing what is beyond provincial jurisdiction is telling -- "directions which result in the structural alteration", "the creation of new works", "the prohibition of new works", "the structure of", "the structural design of", "properly constructed".

For these reasons, I conclude that Construction Montcalm is decisive against Mississauga's claim. Mississauga cannot apply its building code regime to the redevelopment project at Pearson Airport.

Before leaving the aeronautics issue, it is necessary to deal with one final argument advanced by Mississauga. It is an alternative argument. Mississauga invites the court to examine in detail all of the buildings that will be demolished, altered and newly constructed as part of the redevelopment project at Pearson Airport and declare which are central or integral to the operation of an airport and which are not. Those buildings which are not central, Mississauga submits, could be subject to its building code regime.

I do not think it necessary to embark upon such an exercise. In argument, when Mississauga's counsel was asked to identify buildings which could fall on the provincial side of the line, he identified the parking garage and the electric generation plant. When it is recalled that Pearson Airport currently handles 26.1 million passengers annually and that the redevelopment project will increase potential capacity to 50 million passengers, a large parking garage attached to the terminals and a new electric generation plant strike me as entirely appropriate, and aeronautics-related, components. In cross-examination on their affidavits the two experts put forward by Mississauga agreed that Pearson Airport is a modern international airport and that all of the facilities the GTAA

proposes to build as part of the Airport Development Program are required for a modern international airport: see cross-examinations of Alexander Metcalf, October 9, 1998, transcripts, vol. 1, tab 1, pp. 31-34 and 37-52; and Jean-Marc Labelle, October 16, 1998, transcripts, vol., tab 7, pp. 8-9, 15-19 and 19-22.

I acknowledge that it might be possible to operate an international airport without an on-site parking garage. And I suppose that the electric generation plant could be placed in the quiet of the Caledon hills and hooked up to the airport. However, in my view, if these facilities are required for the

operation of an international airport, I see no reason for not locating them at the airport. There is nothing wrong with the GTAA's decision to integrate them into a massive project which also involves the construction of runways, terminal buildings and an air traffic control tower.

For these reasons, I conclude that the application of Mississauga's building code regime to the demolition, alteration and construction of buildings in the redevelopment project at Pearson Airport would intrude into exclusive federal jurisdiction over aeronautics.

(c) The federal works and undertakings issue

As a third line of constitutional attack, the GTAA, Nav Canada and the Attorney General of Canada contend that Mississauga cannot apply its building code regime to the redevelopment project at Pearson Airport because to do so would interfere with federal jurisdiction over a federal work or undertaking pursuant to s. 92(10)(a) of the Constitution Act, 1867.

All counsel proceeded on the basis that there was no real difference between the aeronautics and works and undertakings issues. In my view, this is correct. In Construction Montcalm, supra, Beetz J. said, at pp. 769-70:

> The main submission made on behalf of Montcalm starts from the premise that aeronautics is a class of subjects which comes under exclusive federal authority . . .
>
> The issue was also discussed as if the Mirabel airport were a federal work or undertaking, and it could indeed be argued that an international airport is a work which forms part of an undertaking connecting a province with a foreign country or extending beyond the limits of a province.

Beetz J. then proceeded to his analysis of the relevant legal principles and case law. In that analysis he did not separate aeronautics and federal works and undertakings.

My conclusion is, therefore, the same as it was on the aeronautics issue. The application of Mississauga's building code regime to the demolition, alteration and construction of buildings in the redevelopment project at Pearson Airport would intrude into exclusive federal jurisdiction over federal works and undertakings.

(2) The Development Charges Issue

Mississauga asserts that the GTAA and Nav Canada must pay municipal development charges in connection with the redevelopment project at Pearson Airport. In its notice of application, Mississauga makes this assertion on two bases, statutory and common law:

> 1. The Applicant makes application for:
>
> (a) A declaration that . . . the GTAA and . . . NAV CANADA . . . are required to pay development charges with respect to any development or redevelopment at the Lester B. Pearson International Airport in accordance with the provisions of the Development Charges Act . . . and By-law 532-91 (Development Charge By-law):
>
> (b) In addition or in the alternative a declaration that . . . the GTAA and . . . NAV CANADA . . . are required to pay any capital costs of the applicant referrable to any development of the Lester B. Pearson International Airport on a fair, reasonable and equitable basis.

I will deal with these two bases for Mississauga's claim in turn.

(a) Statutory basis

Mississauga concedes that the statutory anchor for its development charges claim against the GTAA and Nav Canada is inextricably linked to the application of its building code regime to construction at Pearson Airport. Since I have concluded that Mississauga's building code regime is inapplicable to construction at Pearson Airport, it follows

that, as a matter of both statutory interpretation and constitutional law, Mississauga's development charges regime is also inapplicable.

(b) Common law basis

Mississauga seeks a declaration that the GTAA and Nav Canada are required to pay Mississauga's capital costs associated with the redevelopment project at Pearson Airport on "a fair, reasonable and equitable basis". The principal authority relied on by Mississauga in support of this submission is the decision of the Privy Council in Canada (Minister of Justice) v. Levis (City), [1919] A.C. 505. In that case the court was asked to determine whether the municipality was entitled to payment from the Government of Canada, which was the owner of a building situate in the municipality, for the water supply being delivered to the building. The City conceded that the government was free from all liability to taxation, but claimed that the government was not entitled to a supply of water without payment. The Privy Council agreed with the City. Lord Parmoor said, at p. 511:

> Water supplied at the cost of the municipality from artificially constructed waterworks is in the nature of a merchantable commodity, and their Lordships are of opinion, that unless some statutory right is established, the Government of Canada cannot claim to have a supply of water for the Government building, unless it is prepared to pay and to continue to pay in respect thereof a fair and reasonable price.

In my view, City of Levis has no application to these proceedings. The Levis principle provides only that a fair and reasonable payment should be made for merchantable commodities, like water, provided by a municipality to a customer. The GTAA and Nav Canada, qua customers, do not quarrel with this principle. They have paid, and will continue to pay, for any commodities or services they purchase.

Development charges are very different from charges for commodities. They are in the nature of taxes on development: see Ontario Home Builders' Assn. v. York Region Board of Education, supra, and Ontario Cancer Treatment and Research Foundation v. Ottawa (City) (1998), 38 O.R. (3d) 224, 157 D.L.R. (4th) 38 (C.A.). The Province of Ontario and the municipality of Mississauga have together enacted a statutory development charges regime. Mississauga has asserted that this regime is applicable to all development projects in Mississauga, including the redevelopment project at Pearson Airport. That is how Mississauga says a "fair and reasonable" payment should be made. I have held that its attempt to apply this regime to Pearson Airport fails for constitutional reasons. In such a circumstance, Mississauga's attempt to achieve the same result through reliance on a common law principle relating to a different subject matter (commodities) is a fairly obvious attempt to do indirectly what it cannot do directly.

There is a further reason why the declaration sought by Mississauga should not be made. The provincial/municipal regime is not the only statutory regime dealing with potential payments to municipalities for services it provides to federal entities or to private entities located on federal property. The federal government has long recognized that strict reliance on its constitutional shield might give it an unfair advantage over other taxpayers and recipients of services in a community. Accordingly, Parliament has also enacted a statute in this domain. It is the Municipal Grants Act, R.S.C. 1985, c. M-13, which has established a "grant in lieu of taxes' regime" ("GILT") by which the federal government will contribute money to municipalities although it may not be obligated to do so as a matter of constitutional law. Section 3(1) of the Act authorizes the federal Government to make a grant to a municipality in lieu of several kinds of taxes, including a "frontage or area tax". In s. 2(1) this kind o f tax is defined as "any tax that is levied on the owners of real property that is in the nature of . . . a development tax". Thus Mississauga is eligible to apply for a GILT payment.

Finally, I note that the GTAA has contracted with the federal government to make GILT payments in lieu of development charges. Section 5.04 of the ground lease requires the GTAA to make payments to the federal government to enable it to make

grants in lieu of "Real Property Taxes" to municipalities. "Real Property Taxes" are defined in s. 5.01 of the ground lease as including "all taxes . . . and development charges, whether general or special, ordinary or extraordinary, foreseen or unforeseen, of every nature or kind whatsoever." These provisions in the ground lease are another indication that the federal government recognizes that, as a matter of morality albeit not constitutional law, it should pay its fair share of taxes and other charges in the municipalities in which it owns property.

I do not criticize Mississauga, as does the GTAA, for not applying for a GILT payment up to now. Mississauga was entitled to assert that its own statutory regime applied directly to Pearson Airport. However, that position is, in my view, constitutionally untenable. Mississauga can, and should, now resort to the federal statutory regime which is clearly available to it; that availability is a strong factor militating against granting a declaration, especially one as vague and artificial as the one Mississauga seeks.

(3) Ground Lease Issues

In paras. 1(j) and (l) of its notice of application Mississauga seeks declarations that the federal Minister of Transport may require the GTAA and Nav Canada to pay development charges to Mississauga and that the Minister of Transport was entitled to require the GTAA, and the GTAA was required, to negotiate with Mississauga on the basis of obligations set out in the ground lease.

At the hearing, the GTAA and Nav Canada challenged Mississauga's standing to seek these declarations. Following argument, I ruled that Mississauga lacked the requisite standing. I reached this conclusion for two reasons.

First, the ground lease is a private contract between the federal Crown and the GTAA. Mississauga is not a party to it. It is an elementary principle of contract law that an applicant cannot claim a private right under a contract to which the applicant is not a party: see Greenwood Shopping Plaza Ltd. v. Beattie, [1980] 2 S.C.R. 228 at pp. 236-37, 111 D.L.R. (3d) 257, and G.H.L. Fridman, The Law of Contract in Canada, 3rd ed. (Toronto: Carswell, 1994) at p. 582.

There are exceptions to the privity doctrine. A contract may confer enforceable rights upon a third party in three situations -- where a party to a contract has acted as an agent for the stranger in acquiring the contractual rights, where a party to the contract has constituted himself trustee of the contractual rights for the benefit of the stranger, and where

employees of a party to the contract were clearly intended to receive the benefit of an exclusion of liability relating to their employer in circumstances where the employees were acting in the course of their duties for that employer on matters under the contract: see Greenwood Shopping Plaza, supra, and London Drugs Ltd. v. Kuehne & Nagel International Ltd., [1992] 3 S.C.R. 299, 97 D.L.R. (4th) 261. Mississauga does not attempt to bring itself within any of these exceptions.

Second, I see no good reason for issuing declarations in the air that a Minister of the Crown "may" do something. The Minister involved with Pearson Airport is the Minister of Transport. He has duties as contracting party and landlord relating to the ground lease, and the federal government has duties as regulator in the field of aeronautics. The courts should assume that the Minister and government will fulfil those responsibilities in accordance with the law and the terms of the contract. If they do not, then parties to the contract, and perhaps other interested parties, could challenge particular decisions they make. However, at this juncture the relief sought by Mississauga is so nebulous that, in my view, it counts against granting Mississauga standing to seek it. On this point, I close by noting that the declaratory relief sought by Mississauga relating to the duties of the Minister of Transport were added to the notice of application on November 13, 1998, seven months after the original notice was pr epared and filed and just two weeks before the court hearing.

(4) Withdrawal of Services Issue

Mississauga seeks a declaration that the Mississauga Fire and Emergency Services is not required to respond to fires and

emergencies at Pearson Airport if Mississauga's building code regime does not apply to construction at the airport.

This relief was sought for the first time when Mississauga amended its notice of application on November 13, 1998. Unlike the respectable relief sought on constitutional and property law principles, this component of the relief has an air of school yard "I'm taking my marbles and going home" about it. There is nothing before me that would even permit me to consider such a far-fetched declaration. Does the Mississauga fire department refuse to attend fires at the homes of residents who have been slow about shovelling snow from their walkways in violation of a municipal by-law, or at a small corner grocery that is late paying its property taxes? Somehow I doubt it. And what happens in Mississauga now at a construction site where a Mississauga building inspector has found building code violations? If there is a fire, does the fire department refuse to attend? Again, I doubt it.

Without being unduly harsh, I would simply say that the declaration sought by Mississauga is, at a minimum, premature. There is a federal statutory regime that may provide Mississauga with every penny of the development charges it seeks with respect to Pearson Airport. Until Mississauga exhausts that route, raising the spectre of silent fire engines is premature.

IV. DISPOSITION

The Greater Toronto Airports Authority is entitled to the relief it seeks in its notice of application and in its appeals with respect to orders made against it under the Building Code Act and the Topsoil Preservation Act.

The application brought by the Corporation of the City of Mississauga is dismissed.

The counter-application brought by the Regional Municipality of Peel is dismissed.

Costs may be spoken to if necessary.

Order accordingly.

Green v. Dixon

Between
Daniel Philip Green and Susan May Green, Plaintiffs, and
Alex Dixon, Royal LePage Real Estate Services Ltd., Dale Bell,
The Corporation of the Township of Orillia, Simcoe County
District Health Unit and Ernest C.R. McGowan, defendants, and
Don Leatherdale, third party

[1995] O.J. No. 834
DRS 95-11548
Court File Nos. G8581, G8581A

Ontario Court of Justice (General Division)
Civil Non-Jury, Barrie, Ontario
Tobias J.
March 24, 1995.

Counsel:
Paul J. Daffern, for the plaintiffs.
Trevor Whiffen, for Royal LePage Real Estate Services Ltd.
Michael Miller, for the Corporation of the Township of Orillia.
K. William McKenzie, for Alex Dixon.
J. Daniel Dooley, for Earnest McGowan.
Trevor Whiffen, for Don Leatherdale.

[para1] TOBIAS J.:-- The plaintiffs purchased a single family residence from Mr. Alex Dixon, (Dixon), a home builder, on the 30th of June, 1986. Royal Lepage Real Estate Services Ltd. (Royal Lepage) was the listing broker and Mr. Don Leatherdale (Leatherdale) the listing real estate agent. Mr. Ernest McGowan (McGowan) acted as the solicitor for the plaintiffs as purchasers and subsequently as their counsel with respect to their claims for alleged defects in the subject premises and its private waste disposal system (System). The Corporation of the Township of Orillia (Township) issued a building permit to Dixon for the construction of the single family residence ultimately purchased by the plaintiffs. This action has been discontinued against the defendants Dale Bell (Bell) and Simcoe County District Health Unit (Health Unit).

[para2] The plaintiffs claim damages against the defendant Dixon on the grounds that he fraudulently misrepresented to them that the subject premises contained three useable bedrooms when he knew that the Health Unit had approved a system which permitted the lawful use of only two bedrooms. The plaintiffs also claim damages against Dixon for breach of the warranty contained in the agreement of purchase and sale covering the condition and operation of the System, and for breach of warranty of fitness relating to the garage floor and back yard drainage.

[para3] The plaintiffs claim against Royal Lepage for damages for negligent misstatements alleged to have been made to the plaintiffs in the listing agreement prepared by its agents respecting the number of bedrooms available, and the capacity of the System serving the dwelling.

[para4] The plaintiffs claim against the Township on the grounds that its building inspector was negligent in issuing a building permit to Dixon in the face of certain unsatisfied conditions contained in the Certificate of Approval issued by the Health Unit to Dixon.

[para5] The plaintiffs claim against McGowan on the grounds that he was negligent in failing to draw to the attention of the plaintiffs before closing, the provisions of the Certificate of Approval of the Health Unit which indicated that only two rooms of the dwelling could be used as bedrooms. In addition, the plaintiffs claim against McGowan for negligence for failing to institute an action within the six month limitation period established by the Public Authorities Protection Act, R.S.O. 1990, Chapter P.38, claiming damages

against the Health Unit for negligently issuing a use permit in the presence of patent defects in the System.

[para6] Dixon was an active home builder in the Orillia area in the 1980's. He purchased a number of building lots in the Maplewood Park Estate subdivision situated on the north shore of Lake Simcoe some few miles south-west of the city. On one of these lots, Lot 5 plan M-22, (Lot 5), Dixon made preparations in 1985 for the construction of a three bedroom, single family residence. He made application to the Health Unit on the 15th of May, 1985, for approval of a system to service a three bedroom home on that lot. Accompanying the application was a plan of the System which indicated it would be installed in the front yard comprised of an irregularly shaped parcel having a depth of 70 feet.

[para7] The System lay-out was recommended by Mr. V.J. Kepka, (Kepka), a director of the Health Unit, appointed under the Environmental Protection Act R.S.O. 1990, Chapter E19. Kepka prepared conditions of approval on the 28th of May, 1985, and attached these conditions to the Health Unit Approval dated the 29th of May, 1985. He forwarded a copy to Dixon. At the same time Kepka forwarded a copy of Dixon's application, the System plan and the conditions of approval to the building inspector of the Township. The building inspector had no authority to issue a building permit to Dixon for the construction of the home on Lot 5 without first having received the System approval from the Health Unit in accordance with Section 76 of The Environmental Protection Act, (supra).

[para8] The present building inspector of the Township admitted that he and his predecessors never looked at the Health Unit approval of a system for a new home, and never considered the system plan or any conditions attached to the approval before issuing a building permit. As a consequence, the building inspector issued a building permit to Dixon unaware that one of the conditions of approval of the Health Unit for the construction of the System on Lot 5 provided the following;

> 3) A 50 foot mantle of granular fill a minimum of one foot deep must be added downgrade on the road side of the tile bed. A two foot wide clay berm, keyed into the original soil and having the same finished grades as the tile bed and mantle must be placed along both sides of the bed and mantle. This will entail setting the building back an additional sixty two feet. (my emphasis)

[para9] On the 5th of November, 1985, Dixon requested and obtained an amendment to the Health Unit approval, and Kepka's note of that date made on his copy of the original Health Unit approval reads;

> note;
>
> Distribution pipe reduced to 428 feet as the number of bedrooms was reduced to two bedrooms from three. Eight hundred gallon septic tank permitted as dwelling size is not estate size.

[para10] A two bedroom system was installed by Dixon's subcontractor. When the house was almost completed Dixon's own home was destroyed by fire and so he and his family moved into the partially completed home on Lot 5.

[para11] Dixon customarily employed the services of Leatherdale, a real estate agent in the employ of Royal Lepage in Orillia. Leatherdale sold almost all of the homes built or acquired by Dixon. They had worked together very closely over a number of years, and together built and sold over forty homes in the Orillia area. When the home was sufficiently advanced to be sold, Dixon listed Lot 5 with Royal Lepage through Leatherdale. By chance, Bell had established contact

with the plaintiffs. As an agent with Royal Lepage, he encouraged the plaintiffs to view Dixon's house on Lot 5. When the plaintiffs inspected the premises with Bell, Dixon was present, either inside the home or immediately outside working on the front yard. Inside the house Bell and the plaintiffs found three completely furnished bedrooms, obviously being used by Dixon and his family.

[para12] The plaintiffs had earlier experienced difficulties with a septic tank system in the District of Muskoka. They were sensitive about that issue. Bell says the plaintiffs told him of their concerns and in the presence of the plaintiffs, Bell asked Dixon about the status of the System and its operation. Dixon denies this conversation. In any event, the following clause was inserted into the offer to purchase by Bell on behalf of the plaintiffs:

> THE VENDOR REPRESENTS and warrants that during his occupancy, the septic tank system has operated satisfactorily and will be in good and working order at the time of closing.

[para13] Before the offer was signed by the plaintiffs they delivered it to the office of McGowan in Bracebridge for his approval. There is nothing in the offer indicating the number of bedrooms contained in the home. McGowan advised the plaintiffs he saw no problems with the offer and that they were at liberty to sign it. The offer was signed and presented to Dixon who accepted it in substantially the same terms, but at a somewhat increased price. Upon receiving the executed agreement of purchase and sale, McGowan, or a member of his staff requested and received from the Kepka, at the Health Unit, the following written statement dated the 5th of June, 1986:

> This copy does not constitute any verification as to the efficiency of the operation of the sewage system nor does it necessarily indicate the structural dimensions of the system at this time, but indicates what was seen and inspected on the date indicated on the use permit. We have no outstanding work orders on file for this property.

When the plaintiffs delivered the executed agreement of purchase and sale to McGowan's office, they say they included a copy of the Royal Lepage listing agreement and a copy of the Plan of Subdivision M-22. McGowan met with the plaintiffs in his office before closing to review the documentation and the details of the transaction. He obtained their signatures on various documents. He did not show the plaintiffs the use permit forwarded to him by the Health Unit on the 5th of June, 1986.

[para14] The purchase transaction was completed on the 30th of June, 1986. McGowan provided the plaintiffs with his report on their purchase, but made no mention of the contents of the Health Unit's use permit which indicated that the System was approved for a two bedroom home. In the Spring of 1988, the plaintiffs became aware of large quantities of a malodorous liquid flowing from the low end of the tile bed in the front yard of their home. On the 4th of May, 1988, after a telephone request from the plaintiffs, Kepka, from the Health Unit, attended on the premises and inspected the tile bed. On the 14th of May, 1988, the sub-contractor who had installed the tile bed also attended on the premises and attempted to raise one end of the header pipe from which the fluid from the septic tank flowed into the tile bed distribution pipes.

[para15] Nothing further took place until the 18th of November, 1988, when the plaintiff met with Kepka, Dixon, and the System installer to discuss the problems and attempt to find a solution. The header and small sections of the distribution pipes in the tile bed were uncovered. They were found flooded in watery effluent. Dixon and his installer proposed to increase the amount of granular fill on the mantle

at a cost of $700.00 to the plaintiffs. Kepka would not give the plaintiffs written authority to carry out that work, and the plaintiffs, therefore, refused to proceed with that proposal. During this meeting it was somehow disclosed to the plaintiffs that the System for Lot 5 permitted the use of only two bedrooms in the home. The plaintiffs were understandably upset; they immediately contacted McGowan. On the 23rd of November, 1988, McGowan dictated a letter over the phone, which the plaintiffs wrote and dispatched immediately to the Health Unit. It stated:

> I/We hereby give you written notice that I, Susan Green and Daniel P. Green intend to make a claim against you for damages suffered by us as a result of you approving the installation of a septic system which is faulty on lot 5 plan M-22, Township of Orillia.

[para16] On the same day, the plaintiffs retained the services of Mr. Victor Wilcox, P.Eng., (Wilcox), of Trade Engineering Ltd., Orillia, to design a new three bedroom sewage system for the home and obtain the approval of the Health Unit. The Health Unit refused to accept the proposition subsequently advanced by Wilcox that a large body of granular material lay a short distance beneath the existing tile bed of the plaintiff's System, and that with proper excavation, that body of material would be available to absorb and carry away the liquids produced by the System. However, the Health Unit did give approval for a two bedroom system based on the plans and specifications of Wilcox, and agreed to inspect the site when the excavation for the new tile bed had been completed, with a view to establishing the presence of the body of granular material suggested by Wilcox. The plaintiffs were not prepared to proceed on this conditional approval, steadfastly maintaining their initial position that they would not be satisfied with a system which did not provide them with the authority to use the three bedrooms in their home.

[para17] The plaintiffs then turned for help to Orillia

Engineering Associates Ltd., (Orillia Engineering), consulting engineers, who prepared plans and received the approval of the Health Unit for a completely new three bedroom System to be placed in the back yard of the plaintiffs' lot. The plaintiffs did not proceed with that installation.

[para18] In March of 1992, the plaintiffs retained the services of Peto MacCallum Ltd., consulting engineers of Barrie. Mr. Turney Lee-Bun (Lee-Bun) is a civil engineer who is the manager of the geotechnical services provided by that firm. He is a civil engineer of considerable experience in soil technology. In particular he has been involved in the evaluation and preparation of geotechnical assessments involving foundations, shoring, slope stability, pavement systems and underground services. He was qualified as an expert witness.

[para19] Lee-Bun carried out a detailed inspection of the System in the front yard of the plaintiff's home on Lot 5. He concluded that it was impossible to construct an efficient sewage disposal system in that location. He considered that the area between the face of the plaintiffs' residence and the front yard boundary at the street line was so limited in area that a system placed there could not deal effectively with the sewage disposal requirements of the home. As well, the underlying substrata formation of hard packed glacial silts were of insufficient porosity to provide a supplemental means to dissipate the effluent generated by the residence of the plaintiffs.

[para20] Lee-Bun adopted the proposal of Orillia Engineering to install an entirely new System behind the home of the plaintiffs. He was satisfied that a new back yard system would provide more than adequate area for distribution pipes, tile bed and mantle, and would allow for the importation of sufficient granular fill to overcome the lack

of porosity in the native glacial silt sub-soil. In addition, Lee-Bun agreed with the proposed large-sized mantle of imported granular fill contiguous to the tile bed to provide additional percolation and sewage disposition facilities. Since the backyard sloped upwards from the plaintiffs home, he endorsed the proposed installation of an effluent pump to carry the fluids from the septic tank to the somewhat elevated tile bed and mantle.

[para21] The entire concrete floor in the two car garage of the plaintiffs' home cracked and settled nearly four inches. Their premises were covered by the HUDAC Warranty Program (HUDAC) of the Province of Ontario which insures purchasers of new homes against major structural defects. The plaintiffs complained to HUDAC about the condition of the garage floor. A HUDAC inspector attended at the premises to find that the plaintiffs had constructed a single flue chimney resting on the garage floor without installing a supplementary footing for it. In addition, the HUDAC inspector found a chord and a half of firewood piled on the garage floor. He attributed the overall cracking and settlement of the floor to the added weight of the chimney and the firewood. He failed to consider other possible causes. I find his opinions are not well-founded.

[para22] During Spring freshets and severe rain storms, water flowing from the rear yard would drain into a basement window-well at the rear of the premises of the plaintiffs, and run under a window, and through the basement wall at that point to fill the basement, on some occasions, with six inches of water. The plaintiffs are claiming damages not only for the problems with the System but also for the replacement of the garage floor and remedial exterior grading to the rear lot required to re-direct the drainage of surface water away from their house.

THE PARTIES TO THE ACTION:

[para23] The plaintiff Susan Green did not give evidence. The plaintiff Daniel Green is a 42 year old, six foot two, broad shouldered, red haired, angry crusader. One of his neighbours called as a witness for the plaintiffs gratuitously described him as overbearing and very forceful. I agree with that description. During the trial it became evident that Mr. Green would not permit the truth to interfere with his vendetta with the defendants. At one point prior to trial, Mr. Green told the manager of Royal Lepage, in Orillia, that he intended to ram his motor vehicle through the glass store-front of their office to ensure that he drove home his point. Mr. Green was charged immediately with extortion and threatening as a result of that rather assaultive approach to Royal Lepage. To resolve the matter, he entered into a bond, and promised to keep the peace and be of good behaviour. During cross-examination at trial, he brushed away the suggestion that he was being overly aggressive towards Royal Lepage with the simple retort that he had been misunderstood.

[para24] In the course of his examination for discovery, before the trial, Mr. Green made it clear that he would not abide by any restrictions of the Health Unit which might limit his family's use of all three bedrooms in his home. During the trial, however, he described with great animation how, upon learning of his illegal use of three bedrooms, he immediately removed all bedroom furniture from one bedroom and replaced it with his office furniture and equipment. He failed completely to explain the differences in his sworn testimony given on these two separate occasions. I concluded that some of his evidence was not credible.

[para25] Dixon is a hard-working creative individual, but he suffers from two serious weaknesses, greed and prevarication. In my respectful opinion, Dixon's dealings with the plaintiffs in this matter demonstrated that he lacked that degree of honesty which one is entitled to expect from a businessman in our community. Dixon told us that he has built over fifty homes in the Orillia area. He obviously became

very experienced in his work; in my opinion, however, he is a game player. He manipulates people for his own selfish ends. He was trapped on several occasions by the falsity of his testimony. His evidence was riddled with inconsistencies. He fabricated a story of a retired couple who purportedly intended to purchase the new house on Lot 5 so that he could justify changing his Health Unit application from a three bedroom System to a two bedroom System for that home. Throughout the history of the construction and sale of his home to the plaintiffs, Dixon withheld critical information from those to whom he owed an obligation of disclosure. Dixon's intentional misrepresentation of facts amounts to tortious conduct which caused damage to those who trusted him.

[para26] Leatherdale, the third party, gave evidence on his own behalf and for Royal Lepage. It is not surprising that Leatherdale's memory of events which occurred almost nine years ago did not permit him to give precise details of his business dealings with Dixon. I was impressed with Leatherdale's efforts to give a truthful explanation of his involvement with Dixon. I found him to be a credible witness whose testimony turned aside the criticisms and accusations of Dixon. I find nothing in the evidence adduced which might 'compromise the integrity of Royal Lepage in its dealings with Dixon.

[para27] Mr. Roy Booth (Booth) is the chief by-law enforcement officer and the building inspector of the Township. He did not hold that position in 1985 when the Township issued a building permit to Dixon for the construction of a single family residence on Lot 5. He gave evidence as to the past and present procedures followed by the Township building department when issuing a building permit. He indicated that the receipt by his office of the written approval of the Health Unit for the construction of a system was a condition precedent to the issuance of a building permit by the Township. Booth explained that the Township building department traditionally saw no need to review the terms and conditions of the Health Unit's approval before issuing a building permit. The approach of the Township in that regard is both antiquated and ill-advised, in my respectful opinion, and in the case at bar amounted to negligence.

[para28] The Township owed a duty of care to the Heath Unit in particular, and to the community in general, to ensure that the issuance of a building permit did not derogate from the provisions of the approval granted by the Health Unit. By failing reasonably to ensure that the building permit established set backs in accordance with the approval of the Health Unit, the Township was in breach of its duty to the Plaintiffs, and, without more, could be found liable to the Plaintiffs in damages for the harm caused to them when the foreseeable risk materialized.

[para29] McGowan has carried on the private practice of law in the Town of Bracebridge since his call to the Bar in 1980. Most of his practice involves acting for vendors or purchasers of summer cottages and residential premises. I found him an honest witness, but he had little recall for the details of his involvement with the plaintiffs in their purchase of Lot 5. Moreover, his file on this transaction was singularly silent with respect to the steps he took to represent the plaintiffs in their purchase. His final report of this transaction to the plaintiffs indicates little sophistication; although it treats each subject carefully, it is apparent, in my respectful opinion, that it is the product of his secretary; it does not bear the stamp of his personal attention.

FINDINGS OF FACT:

[para30] Although a further review of the evidence may be considered tedious, it is essential to a clear understanding of the respective liability of the defendants.

[para31] Dixon first made application to the Health Unit

for the approval of a three bedroom system. He changed his mind, returned later to the offices of the Health Unit, and arranged that his application be changed to a two bedroom system. Dixon said the change was as a result of an oral offer made by two middle-aged persons who were looking for a two bedroom home. Based upon this alleged offer, Dixon convinced the Health Unit to reduce the septic tank fluid capacity, the length of the distribution pipes in the tile field, and the surface area of the mantle to accord with the less onerous and less expensive requirements of a two bedroom home System. In my opinion, Dixon fabricated the story of the middle-aged couple to reduce his costs of construction of the System.

[para32] At the time that the Health Unit forwarded its initial approval to the building department of the Township, it was quite evident that the System was subject to three conditions of approval. The third and final condition of approval related to an increase of sixty-two feet in the setback of the front of the home from the street line. The setback described on the original plan of the System attached to the Health Unit approval was seventy feet, but it was not changed by Dixon or the Health Unit. It would have been obvious to anyone reading the conditions of approval that the total front yard setback of the house from the street line initially established by the plan, had been increased to 132 feet. Since it is not the custom of the Township building department to read the Health Unit approval or the conditions attached to it, the Township issued a building permit to Dixon which provided for a front yard setback of only about 87.5 feet. The area of the front yard of the house, therefore, was insufficient to satisfy the conditions of approval of the Health Unit. The whole sewage disposal unit was crammed into a much smaller area than that required by the Health Unit.

[para33] Dixon was well aware that he had not complied with the conditions of the approval of the Health Unit, but he proceeded nevertheless with the construction of the System in cramped quarters. Dixon alone must be held responsible for the construction of the undersized System because his sub-contractor followed his plans explicitly. From its inception, the construction of the System was sub-standard, failing to satisfy the requirements of the approval, providing less granular fill and fewer lineal feet of disposal pipe in the tile bed, and significantly overrunning the side yard allowances between Dixon and his neighbour to the west. As well, the tile bed and the mantle did not contain the quantity of imported granular fill required by the Health Unit approval. By some sort of subterfuge Dixon convinced the Health Unit official who inspected the site that the bed was, or would be constructed properly, and in accordance with the provisions of the conditions of approval.

[para34] It is true that some of the setbacks of the tile field, the amounts of granular fill imported to the site and the size of the mantle do not meet the requirements established by the Health Unit and its authorizing legislation. However, I have concluded after considering all of the evidence, that Dixon, a well known and respected builder, satisfied the Health Unit inspector that the System would be completed in a fashion which would satisfy the Health Unit's requirements. The exercise of the discretion of the Health Unit inspector to give relief to Dixon from strict compliance, under the circumstances was not negligence, but rather a reliance upon a builder who had met his past obligations, but on this occasion resorted to fraudulent misrepresentation to cloak the shortcomings of the System. Even if the Health Inspector breached his duty of care to inspect the System in a careful and prudent manner so as to ensure that the System was constructed in accordance with the regulations, the Health Unit cannot now be found liable in damages because this action was withdrawn against it before trial.

[para35] When Dixon signed the listing agreement with Royal Lepage for the sale of Lot 5, he did not advise

Leatherdale that the septic tank system was approved for only two bedrooms. Leatherdale had worked with Dixon for a number of years. Dixon insists that he warned Leatherdale that even though the listing agreement on Lot 5 showed a three bedroom home, it could only be used as a two bedroom home, but I have rejected his explanation as untrue. I am satisfied that Dixon once again misled a business associate, in this case Leatherdale, so as to maximize his financial gain on the sale of the home to the plaintiffs.

[para36] Soo Que Lem, a long time employee of Dixon, told us that he specifically recalled a certain conversation between Dixon and Leatherdale. Lem was very exact in his recollection of the details of that conversation in 1986, what he had been doing that day in the house on Lot 5, and almost the precise words that Dixon spoke to Leatherdale complaining about the inaccuracy of the listing agreement. I reject this evidence of Lem as untrue.

[para37] When Bell, another agent for Royal Lepage, showed the plaintiffs through the subject premises, Dixon was inside the house. Bell asked questions of Dixon relating to the System because the plaintiffs had earlier experienced trouble with such a system. Dixon said nothing about the two bedroom limitation on the System. It was a cogent opportunity for him to disclose that limitation. It is a perfect example of Dixon's dishonesty. I reject his allegation that Leatherdale and Royal Lepage prepared the listing agreement in a negligent fashion.

[para38] The plaintiffs liked Dixon's home; they requested Bell to prepare an offer. The offer was forwarded to McGowan before the plaintiffs signed it. He reviewed the offer, approved it, and told the plaintiffs they could sign it. The offer was then signed by the plaintiffs. After some negotiation as to price, that offer was accepted by Dixon. Green says he took a copy of the executed offer, a copy of the listing agreement, and a copy of the plan of subdivision M-22 to McGowan's office. It is clear that McGowan, or a member of his staff, immediately wrote to the Health Unit requesting a report on the status of the System. The form reply of the Health Unit received by McGowan shortly thereafter enclosed a copy of the Use Permit for that property. It stated that the Health Unit had no outstanding work orders on file for the property. The Use Permit to which the Health Unit's reply referred indicates approval had been granted for a two bedroom, newly constructed, single family dwelling. McGowan did not notice that reservation in the reply of the Health Unit; in due course he closed the transaction. In his testimony McGowan stated that he could not recollect receiving the listing agreement from the plaintiffs.

[para39] About a year and a half later, the environs of the tile bed and mantle became waterlogged and smelly. Neighbours complained about the stench of sewage. As earlier recounted, the Health Unit inspector appeared on the property on the 4th of May, 1988, and the subcontractor who installed the system on the 14th of May, 1988, to see what could be done. There was a long delay of six months to the 18th of November, 1988, when the plaintiffs arranged for a meeting with Mr. Dixon, his sub-contractor and the Health Unit inspector. At that time, some considerable digging took place in order to expose the header pipe, and some of the distribution pipes in the tile bed. In his evidence, the Health Unit inspector explained that the flooding of the entire system indicated that the granular material upon which the distribution pipes in the tile bed had been laid, had become plugged with a bio-mass which prevented the tile bed from absorbing the liquid effluent from the house.

[para40] It is clear that the whole system was flooded with liquid effluent. Dixon and his sub-contractor made a proposal to the plaintiffs to increase the granular material on the mantle but the plaintiffs would not proceed with that work without the written approval of the Health Unit inspector. The Health Unit inspector would not provide

written authority; the meeting ended inconclusively.

[para41] The plaintiffs immediately contacted McGowan and he dictated to them, over the telephone, a letter to the Health Unit putting the Health Unit on notice that they were claiming damages against it for negligently approving the sewage system on Lot 5. Concurrently with the delivery of the letter, the plaintiffs retained Trade Engineering Ltd. of Orillia to evaluate the system and to design a three bedroom system in the front yard of Lot 5. For reasons earlier referred to, (page 10, supra), the Health Unit refused to approve the proposed system as a three bedroom system, but did approve it as a two bedroom system on the understanding that upon further exploration of the subsoil, a three bedroom system might be approved.

[para42] The plaintiffs were dissatisfied with the efforts of Trade Engineering to obtain approval for a three bedroom system, so they turned to Orillia Engineering for further assistance. Orillia Engineering focused its efforts on the placement of a three bedroom system in the back yard of Lot 5. After submitting plans and specifications to the Health Unit in or about the November of 1992, Orillia Engineering subsequently obtained preliminary approval for a three bedroom system located in the backyard of the plaintiff's home. The plaintiffs did not proceed with the work necessary to install and construct this system.

[para43] Shortly after the plaintiffs had delivered their letter to the Health Unit giving notice of a claim against it, they requested advice from McGowan on how they might recover their damages suffered as a result of the misrepresentation of Dixon on the usable bedrooms, and with respect to the warranty on the System given by Dixon in the agreement of purchase and sale. McGowan attempted to negotiate with the solicitors for Dixon without success. On the 13th of October, 1989, he commenced a claim in this Court which included those defendants to which I have referred, and Leatherdale who was joined by Dixon as a third party.

[para44] The plaintiffs' claim against McGowan in negligence for failing to discover that the Use Permit issued by the Health Unit for Dixon's new home authorized only a two bedroom System must fail for the following reasons. Firstly, I do not accept the evidence of Daniel Green that he delivered to McGowan a copy of the listing agreement issued by Royal Lepage and Leatherdale with the agreement of purchase and sale.

[para45] I can see no good reason why the plaintiffs would leave a copy of the listing agreement with their solicitor unless they had a problem with it. If they did have a problem, there is no evidence that they attempted to discuss it with McGowan. I am not convinced by the opinion of a handwriting expert called on behalf of the plaintiffs, indicating a 51% probability that a small handwritten notation in blue ink on the face of a copy of the listing agreement produced at trial, was in McGowan's hand, was in fact McGowan's note. I am not prepared, therefore, to find that McGowan had the Royal Lepage listing agreement in his possession before the date of closing. Even if I were prepared to accept that allegation, I accept the opinion evidence of Mr. Donald Lamont, L.S.C., Mr. John Cockburn, and Mr. Michael Fitton, all sophisticated and experienced solicitors that unless the plaintiffs had warned McGowan of the potential problem generated by the Health Unit certificate which granted approval for only a two bedroom house, McGowan was under no professional obligation, or duty of care to the plaintiffs to review that certificate with them before closing. I find comfort for this determination in the reasons for decision in Victoria & Grey Trust Co. v. Apple, 25 M.P.L.R., 220 at p. 235, where Madam Justice McKinlay outlined the professional duty owed by a solicitor to his clients in a real estate transaction in the following general terms:

i.) To exercise the care and skill of a reasonably

competent solicitor in accordance with the standards of the professions.

ii.) When the matter for which he has been retained is the carrying out of a contract between his clients and another party, to see that the precise terms of that contract for which a solicitor would normally be responsible are carried out in accordance with the terms of the contract, unless he has received instructions to the contrary.

[para46] I reject the argument of the plaintiffs that the terms of the agreement of purchase and sale between the plaintiffs and Dixon triggered a duty in McGowan to enquire into the issue of the number of bedrooms which were permitted under the Health Unit's certificate of approval. I cannot, therefore, find that McGowan was in breach of his duty of care to the plaintiffs for failing to review with them the Certificate of Approval from the Health Unit.

[para47] With respect to the issue of McGowan's negligence for failing to commence an action against the Health Unit, in a timely fashion, Section 7 of the Public Authorities Protection Act R.S.O. 1980 chapter 406 reads:

7(1) No action, prosecution or other proceeding lies or shall be instituted against any person for an act done in pursuance or execution or intended execution of any statutory or other public duty or authority or in respect of any alleged neglect or default in the execution of any such duty or authority unless it is commenced within six months next after the cause of action arose, or, in case of continuance of injury or damage, within six months after the ceasing thereof.

[para48] The plaintiffs state that McGowan became aware of the plaintiffs claim against the Health Unit after he had discussed the issue with them and dictated a letter to the Health Unit giving notice of their claims for negligence. As earlier indicated, this letter is dated the 21st of November, 1988. There is little doubt in my mind that when McGowan instructed his clients to advise the Health Unit without delay of their claim for damages, he was concerned about the existence of some sort of statutory limitation period which might have protected the Health Unit from such a claim. Nevertheless, in the face of that concern, McGowan waited until the 13th of October, 1989, to commence an action against the Health Unit.

[para49] I cannot accept the arguments made on behalf of McGowan that the plaintiffs' only interest was the installation of a three bedroom system in the backyard of their home, and that the only party against whom such a claim could be made was Dixon. In my opinion, that argument overlooks the clear duty of a solicitor to take all steps necessary to protect the interests of his clients within the time prescribed by any applicable statutory limitation period. McGowan owed a duty to commence an action in time against all those parties who might in some way contribute to the payment of the damages claimed by the plaintiffs, among which was the Health Unit.

[para50] Although McGowan did join the Health Unit as a defendant in the claim, he was late. I find that he was in breach of his duty of care to the plaintiffs in that regard. Notwithstanding this finding of negligence on the part of McGowan, in view of my earlier finding of fact that the Health Unit was not negligent in the exercise of its statutory obligations to the plaintiffs, even if the Health Unit had been joined in time as a party to the action, the plaintiffs would not have recovered damages against it. In the result, no damages flow from McGowan's failure to join the Health Unit as a party to this action in a timely fashion, and the plaintiffs are not entitled to damages against him.

[para51] In my respectful opinion, the Township was

negligent in failing to review the terms and conditions of the approval of the Health Unit for the placement of the System on Lot 5. In this most complex of worlds, it is unrealistic to suggest that a municipal employee has any obligation to review a policy decision of a local health unit as to the parameters of installation of a sewage system serving a house to be built under a municipal building permit. I believe it reasonable to say that the building inspector of a municipality has no authority to interfere with the decisions made by a health unit as to the type and the placement of a system. On the other hand, if the terms and conditions of the approval of a health unit in any way change or impinge upon the prescribed placement of dwellings within the municipality in accordance with the building and zoning bylaws, it is obvious that a municipal building inspector must ensure that he issue a building permit which accords with the specifications established by the Health Unit for construction of the system.

[para52] A building inspector does not meet his obligations by simply saying, 6,the approval of the Health Unit is none of my affair", and then to proceed to issue a building permit without any reference to the terms and conditions of the approval of the Health Unit. In that regard the reasons for decision of the Supreme Court of Canada in City of Kamloops v. Nielsen et al 26 M.P.L.R. 81 at page 83 are helpful:

> ... the applicable legislation or the subordinate legislation enacted to it must impose a private law duty on the municipal or public official. Furthermore, the principle would not apply to purely policy decisions made in the bona fide exercise of discretion. However, public officials acting in the operational area i.e., in implementing this policy decision would be exposed to the same liability as other people if they failed in discharging their duty to take reasonable care to avoid injury to their neighbours.

There was no dispute raised in the evidence that from time immemorial the Township has never concerned itself with the terms and conditions of the approval of the Health Unit. But this is not a complete answer to that issue. As soon as Dixon obtained the building permit, he commenced the construction and placement of the System on Lot 5. At the same time, he commenced construction of the dwelling on that lot, ignoring the Health unit directives and, in due course, received a use permit for that System.

[para53] The Township takes the position that even if it was in breach of its duty to review the certificate of approval of the Health Unit, and to ensure that the front setback of the house was sufficient to satisfy the terms and conditions of that approval, once the Health Unit provided Dixon with a Use Permit, it accepted the placement and construction of the septic system in the limited area of the front yard, thereby effectively accepting and regularizing the existing setback of the house from the front lot line. The Township argues that it cannot now be held responsible for damages allegedly arising out of the misplacement of the house too close to the front lot line because the Health Unit has now adopted the setback of the building from the front lot line as acceptable; it has given its final approval of the System by issuing of a use permit. This argument has merit. The plaintiffs cannot now to say that the Township issued a building permit which conflicted with the requirements of the Health Unit when the Health Unit in fact ultimately accepted the system by issuing a use permit. I am satisfied, therefore, that the plaintiffs have failed to prove they suffered damages at the hands of the Township.

QUANTUM OF DAMAGES

[para54] The defendants argue that the plaintiffs have failed to take reasonable steps to mitigate their damages. Since November of 1988, the plaintiffs have known that the System required remedial work. The defendant Dixon offered to

provide the labour to increase the bulk of the mantle with additional imported granular fill but the plaintiffs refused this offer. The defendants further say that the Health Unit approved the installation of a new two bedroom system in the front yard of Lot 5 in 1992, coupled with the undertaking of the Health Unit to approve a three bedroom system provided that sufficient natural granular material was to be found under the front yard, but the plaintiffs refused this option. There was also a opportunity for the plaintiffs to mitigate their damages by installing a three bedroom system in the backyard as proposed by Orillia Engineering and approved by the Health Unit. The defendants say the continued delay by the plaintiffs in carrying out remedial action or in constructing a new system has amplified their damages. The defendants say that if the plaintiffs are entitled to damages those damages must be fixed as of the date when the plaintiffs could have rectified the existing system, or installed a new system on Lot 5.

[para55] I do not accept the testimony of Mr. Green that he was unable to repair or reconstruct the System because he did not have the funds to do so. It is obvious to me, from a consideration of all of the evidence, that the plaintiffs were individuals of substance and had the funds, or could have found the funds necessary to remedy the System or to reconstruct it. I do agree, however, with the position taken by the plaintiffs that they were under no obligation to mitigate their damages until after the determination of the issues raised in this action. I adopt the reasons for decision in Cormier Enterprises Ltd. v. Costello et al. a decision of the New Brunswick Supreme Court Appeal Division found in 108 D.L.R. (3d) 472 where the court held that where a builder erects a defective house in breach of warranty, and the owner delays repairs for three to four years pending the outcome of litigation, the builder is liable for the cost of repairs measured at the date of the trial, even though this is substantially greater than the cost of repairs measured at the date of the breach. It was reasonable in such circumstances for the owner to delay repairs until he has ascertained his legal position. In my respectful opinion, these reasons are equally applicable to the case at bar. It was not unreasonable for the plaintiffs to have awaited the determination of their legal rights before commencing a very substantial project for the reconstruction of a system in their backyard. The evidence does not persuade me that the costs attendant upon the reconstruction of a new system is now greater than those which would have been incurred three or four years ago; in my opinion, quite the opposite.

[para56] I accept the opinion of Lee-Bun that it would be impossible to install a good working system in the front yard of Lot 5. In accepting this opinion I am led to conclude that when the plaintiffs purchased Lot 5 from Dixon, the System could not have been working satisfactorily. Its very configuration as a two bedroom system breached the warranty given by Dixon to the plaintiffs in the agreement of purchase and sale. By reason of the deceit practised by Dixon on the Health Unit, he built a three bedroom home serviced by a two bedroom System. The intentional misrepresentations of Dixon resulted in the placement of a system which must be characterised as defective ab initio, and S find that upon the closing of the agreement of purchase and sale, Dixon was in breach of the warranty that the "system was operating satisfactorily and was in good and working order".

[para57] In addition, based on Lee-Bun's opinion, the System was operationally defective from the moment it was installed. These findings are important on the issue of merger; these findings are a complete answer to the argument that the warranty merges with the closing. In this case, the warranty survived the delivery and acceptance of the transfer.

[para58] In the result, the plaintiffs are entitled to recover damages from Dixon in the following amounts:

i) based upon the testimony of John Garfield Dunlop,

and taking into consideration a series of cost adjustments made a trial for sod, septic tank, plumbing and fill, I find that the construction, installation, and placement of the tank, distribution bed, and mantle, in the rear yard of Lot 5 requires the sum of $14,144.00, plus G.S.T. and P.S.T. where applicable;

ii) for the removal and replacement of the garage floor, and other incidental materials and labour attendant thereon, the sum of $1,447.50;

iii) for the grading to the rear yard of the premises on Lot 5 (already accomplished), the sum of $1,532.11;

iv) for engineering, services and advice,
i) To Trade Engineering, $2,273.93;
ii) To Orillia Engineering, $1,844.00;
iii) To Peter MacCallum, $2,487.64;

[para59] Judgment shall therefore go against Dixon for the total of these special damages of $23,729.18, together with G.S.T. and P.S.T. where applicable.

[para60] The misrepresentations of Dixon by which he induced the plaintiffs to purchase Lot 5 in 1987 were deceitful and reprehensible. Dixon's misstatements in my opinion, were motivated by greed. His hope was to make an unjustified profit from unsuspecting purchasers. I find he lied to the authorities concerning critical elements of the proposed home and its System, he misled his real estate agents, and he misrepresented to the plaintiffs that he was offering for sale a lawfully serviced three bedroom home. As a builder and merchant of new homes his conduct was unacceptable in the commercial or any other community.

[para61] Paragraph 31 of the plaintiff's claim reads as follows:

31. The plaintiffs state, and the fact is, that the actions of the defendant, Dixon, have been of such an unconscionable nature as to warrant the imposition of punitive damages.

In my opinion, this pleading opens the issue of a claim for punitive or exemplary damages. I am sensitive to the long development of the law of contracts which appears to deny almost completely, punitive or exemplary damages for breach of contract. See: Vorvis v. Insurance Group of B.C., (1989), 58 D.L.R., (4th), 193. A true reading of the majority opinion in this decision, I respectfully submit, reveals that in substance the Supreme Court of Canada has confined punitive damages almost exclusively to the realm of tort.

[para62] The pleading contained in paragraph 31, (supra), however, is sufficiently broad to include a claim against Dixon for exemplary damages in tort. At page 208, in the Vorvis Decision, Mr. Justice MacIntyre explains that there is an inherent distinction between the remedial objectives of tort and contract, the latter being more limited in application, precluding a punitive award in a pure contractual proceeding;

(In tort) the injured party is entitled to be made whole. The compensation he is entitled to receive depends upon the nature and extent of his injuries and not upon any private arrangement made with the tort feesor...

(In contract) the injured plaintiff is not entitled to be

made whole; he is entitled to have that which the contract provided for him or compensation for its loss.

[para63] By his deceit, Dixon forced the plaintiffs to bear the stress and unhappiness of residing in a home served

by a system both unlawful and totally inadequate. By his fraudulent misrepresentations, Dixon forced the plaintiffs to struggle with the problems of their illegal use of the third bedroom of the home which they had purchased to provide adequate sleeping facilities for themselves and their two children. By his refusal to remedy those obligations which he admitted at trial owing to the plaintiffs, he dragged them through six years of engineers and their reports, of Health Unit refusals, and of that cold unhappiness borne by the litigants in worrisome actions such as this. In my respectful opinion, this is a proper case for an award of exemplary damages. I have attempted to balance the impact of this affair upon the plaintiffs with the impact of an award of exemplary damages against Dixon. I have attempted to fix exemplary damages in a sum which equates the injury to the plaintiffs to the fraud of Dixon.

[para64] In the result, judgment shall go in favour of the plaintiffs against Dixon in the amount of $23,729.18 plus taxes for breach of contract, and in tort the sum of $10,000.00 by way of exemplary damages. The plaintiffs shall have pre-judgment interest at rate of 10% per annum on the sum of $23,729.18 from the date of the issuance of their claim, the 13th of October, 1989.

[para65] I shall expect the parties to speak to me further with respect to costs.

TOBIAS J.

H & D International Group v. Toronto (City)

Between
H & D International Group, appellant, and
Corporation of the City of Toronto and
Michael Nixon, Commissioner of Buildings and Inspections,
respondents

[1988] O.J. No. 2857
Doc. No. 88/3785

Ontario District Court
Corbertt D.C.J.
Oral judgment: March 25, 1988.

Counsel:
J. Anna Fraser, for the applicant.
A. Weretelnyk, for the respondent.

[para1] CORBETT D.C.J. (orally):-- This is an application for an order granting a hearing and appeal, pursuant to s. 15 of the Building Code Act, R.S.O. 1980, c. 51 as amended, and for an order rescinding the decision of the respondents, the Corporation of the City of Toronto, and Michael Nixon, the commissioner of buildings and inspections, delivered verbally on December 30, 1987, and confirmed in writing by a letter dated January 8, 1988, and for an order requiring the respondents to issue a building permit for the construction of a three-story structure linking two existing residential and commercial buildings of a development located at a property known municipally as 350 Queens Quay West in the City of Toronto.

[para2] The applicant is a lessee under a lease with Harbourfront Corporation, the registered owner of the property. The subject lands are located in the Harbourfront area along the City of Toronto lakefront, and in a sub-planning area as Maple Leaf Quay.

[para3] On September 10, 1987, the applicant submitted building application No. 259935 to construct a three-story commercial-retail building known as the Link Building between the other two buildings presently under construction by the applicant.

[para4] The applicant was informed in November 1987, by staff of the respondent, that the examination of plans was completed, and that zoning by-laws and building code requirements had been met. The building permit was not issued and on December 30, the director of planning and development for the applicant spoke with Michael Nixon, the commissioner of buildings and inspections, who advised the applicant that the building permit would not be issued until certain conditions imposed by council were satisfied.

[para5] The letter from the building commissioner dated January 8, 1988, refers to the refusal to grant the application on the grounds that a number of agreements remain outstanding as follows: an amending development agreement; an amending collateral agreement; an agreement relating to a proposed pedestrian bridge connection at the rear of the Link Building; the conveyance by the Federal Crown to the city of the fee simple interest and that portion of the water's-edge promenade surrounding the head of the Peter Street slip; an agreement whereby Harbourfront Corporation would agree to obtain a series of conveyances and agreements pertaining to developmentof the aforesaid portion of the water's-edge promenade; and an agreement to amend the rental housing agreement pertaining to the site.

[para6] Under s. 6 of the Building Code Act, subs. (1) provides that,

> "The chief official shall issue a permit except where,
>
> (a) the proposed building or the proposed construction or demolition will not comply with this Act or the Building Code or will contravene any other applicable law."

[para7] The City of Toronto opposes this application and submits that the proposed construction will not comply with the Building Code Act or the building code and will contravene

other applicable law.

[para8] The jurisdiction of the District Court Judge on this appeal is set out in s. 15(3) of the Building Code Act as follows:

> "Where an application is made to a judge for a hearing
>
> under subsection (1), the judge shall appoint a time for and hold the hearing and may rescind or affirm the order or decision of the inspector or chief official or take such action as the judge considers the inspector or chief official ought to take in accordance with this Act and the regulations, and for such purposes the judge may substitute his opinion for that of the inspector or chief official."

[para9] The city submits there are four chief reasons for not issuing the building permit in this case, which constitute non-compliance with cl. 6(1)(a) of the Building Code Act.

[para10] First, the city submits the application does not conform with By-law No. 209-88 being an Interim Control By-law passed by the city at its meeting on February 22, 1988, at which time city council also directed a review or study of land-use policies in the Harbourfront area, pursuant to s. 37 of the Planning Act, 1983, S.O. 1983, c. 1. It is clear that an Interim Control By-law is other applicable law within the meaning of cl. 6(1)(a) of the Building Code Act, and it, therefore, falls to be determined whether the rights of the applicant are determined at the date of the hearing before me, or at the date of the decision of the building inspector on December 30, 1987 or January 8, 1988.

[para11] The applicant submits that the rights of the applicant should be determined at the date of the decision of the chief official and relies upon the decision in Woodglen & Co. Ltd. v. North York (1984), 47 O.R. (2d) 614. In that case, it was held that the proposed use complied with the Building Code Act and did not contravene any other applicable law since an official plan was not applicable law and the permit ought to have issued.

[para12] Mr. Justice Southey discussed the jurisdiction of the District Court Judge at p. 619:

> "The duty of the judge under this subsection is to do what the judge considers the inspector or chief official ought to have done. The judge has no powers other than those that were possessed by the inspector or chief official, and has no discretion to act or defer action, if that discretion was not enjoyed by the inspector or chief official. As stated earlier, I agree with the decision of the learned county court judge, in this case, that the chief official of the municipality was under a duty to issue the permit to Woodglen, because the proposed construction would not contravene any law. That being so, the learned county court judge, in my view, was required by law to allow the appeal and order the issuance of the building permit."

[para13] Counsel for the city submits that the right of the applicant is to be determined as of the date of the Court hearing and relies upon the decision in Re Greengable Holdings and Toronto (City) (26 April 1984), Matthews D.C.J. In that case, an application for a building permit was completed on November 15, 1983, and on November 28, 1983, a by-law was passed designating the area an area of site-plan control.

[para14] The Judge referred to the powers on such an appeal in s. 15 of the Building Code Act and stated at p. 4:

> "The words quoted, employing the present tense, in my opinion, mean simply that the judge should have regard to what the Chief Official should do under section 6, having in mind the present state of legislation. The use of the present tense, in effect, incorporates the principle
>
> established by the Privy Council in the City of Toronto v. Trustees of the Roman Catholic Separate Schools in Toronto [1926] A.C. 81, that the right of the applicant is to be judged as of the date of the hearing."

[para15] The city also referred to other authorities with

respect to the proposition that the right of the applicant is to be judged as of the date of the Court hearing.

[para16] The Greengable decision was decided prior to the Woodglen decision, but counsel for the city submits that the statements made by Mr. Justice Southey were obiter dicta in the circumstances.

[para17] In my opinion, the rights of the applicant should be determined on the date of the decision of the chief building inspector. Applicants for building permits are entitled to a reasonable degree of finality respecting their entitlement to building permits, which is not afforded by determining those rights as of the date of the hearing.

[para18] I, therefore, adopt the approach taken by Mr. Justice Southey in the Woodglen case. I also agree with the remarks in that case made by Mr. Justice Southey at p. 620 that:

> "Municipalities no longer have the need to delay an application for a permit in order that new zoning by-laws may be made effective, because they have the power under s. 37 of the Planning Act, 1983, (Ont) c. 1, to pass interim control by-laws to be in effect, for one year, when land-use policies are being reviewed or studied in the municipality, or in a defined area. Such by-laws may be passed without prior notice or hearing."

[para19] In the result, I find that By-law No. 209-88, passed after the decision of the building commissioner, is not applicable law within the meaning of cl. 6(1)(a) of the Building Code Act.

[para20] Second, the city submits that the applicant contravenes s. 40 of the Planning Act, 1983.

[para21] Subsection 40(1) defines development to mean, among other things, the construction or erection of one or more buildings or structures on land, and subs. 40(2) provides that a by-law may be passed by municipalities designating an area to be a site-plan control area.

[para22] Under subs. 40(4), no person shall undertake any development in an area designated under subs. 2, unless the council of the municipality has approved one or both as council may determine of the following, and there are enumerated therein certain plans and drawings with respect to site-plan control.

[para23] By-law No. 239-86 was passed by the council of the City of Toronto designating the subject area as an area of site-plan control. The applicant submits that site-plan approval is not a necessary precondition to the issuance of a building permit and relies upon the case of Re Revenue Properties Co. and Toronto (1984), 26 M.P.L.R. 165 and in that case His Honour Judge Matlow held that the issuance of a building permit, prior to the granting of site-plan approval, would not result in any contravention of the Building Code Act. He states, and I quote:

> "In particular, I do not consider that the 'proposed construction', in the circumstances of this case, would 'contravene any other applicable law' as those words are used in s. 6(1)(a) of the Building Code Act merely because site plan approval has not yet been given. The actual construction, however, if it were to proceed without prior site plan approval would be in violation of the Planning Act. Accordingly, the issuance of a building permit would not be contrary to s. 6(1)(a) of the Building Code Act."

[para24] Counsel for the city submits that site-plan approval, pursuant to s. 40 of the Planning Act, 1983, is applicable law within the meaning of 6(1)(a) of the Building Code Act and relies on several cases, including 715113 Ont. Inc. v. Ottawa (1987), 63 O.R. (2d) 102, a decision of Mr. Justice Henry of the High Court.

[para25] In that case, an application was made to quash an Interim Control By-law and the resolution authorizing it.

[para26] The applicants had applied for a building permit for alterations on July 2, 1987, and the city then advised it would require site-plan approval prior to issuing the permit.

[para27] The applicants then instructed their agents to prepare an application for this approval by letter dated August 11, 1987. The city formally responded to the building permit application; a variety of objections and comments were made addressing site-plan approval and mechanical, electrical and structural requirements.

[para28] The applicants took steps to satisfy these requirements and also applied to the District Court for an order to compel the city to issue a building permit pursuant to s. 15 of the Building Code Act which application was dismissed on August 28, 1987, because of the matters raised by the city in its letter of August 11, 1987. At p. 105, Mr. Justice Henry stated:

> "The Court also stated that site plan approval was a prerequisite to the issuance of a building permit. An application for site plan approval was made on August 31, 1987."

[para29] At p. 108, Mr. Justice Henry stated,

> "Mr. Murdock, the president of the lessee, has also appealed to the Ontario Municipal Board from the refusal of the City to approve the site plan which by s. 40 of the Planning Act, 1983 is required before a permit can be issued. The city refused to approve the site plan as it failed to comply with the Building Code Act. Both appeals are pending."

[para30] In the result, in that case, the application to quash an interim control by-law was dismissed.

[para31] In my opinion, the proposed building does not contravene s. 40 of the Planning Act. The applicant has submitted plans for site-plan approval which plans comply with the Act and what is proposed complies with the Act. It may be that certain agreements have to be filed prior to getting the approval of the site plan and undertaking development but no contravention of s. 40 existed at the date of the decision of the building inspection.

[para32] The third ground advanced by the city for resisting the issuance of the permit is that the applicant does not comply with a master agreement which binds the applicant, and that such master agreement constitutes other applicable law within the meaning of cl. 6(1)(a) of the Building Code Act.

[para33] The Harbourfront lands of which the subject land forms a part, have been the subject of extensive planning and study. The history of which is extremely well set out in the factum of the city, and I will highlight just some of this planning:

> On June 23, 1980, council adopted a development control implementation strategy in connection with the Harbourfront City and this strategy included the adoption of official plan amendments, zoning by-law amendments, the employment of the city's development, and review and approval pursuant under s. 40 of the Planning Act, a master agreement between the city and Harbourfront Corporation respecting development control, which would require the Harbourfront Corporation to agree to comply with official plan amendments and so on, sub-area plans and requirements not to build otherwise than in accordance with them, agreements for Harbourfront Corporation to require purchasers or lessees from it to enter into a direct contract with the city to comply with the master agreement, and not to seek a mandamus order to compel the issuance of a building permit otherwise than in compliance with the master agreement, to define the content of sub-area plans, and to provide a process for the approval of sub-area plans.

[para34] On December 6, 1982, the city and the Harbourfront Corporation entered into the master agreement, which was filed on this application. Harbourfront Corporation was authorized to enter into the master agreement by Order-in-Council P.C. 1982-9/777, and the master agreement was registered against the title of the Harbourfront lands.

[para35] By a lease dated January 30, 1987, Harbourfront

Corporation leased to Peter Street Basin Properties Inc., the land which is the subject matter of this property.

[para36] By a sub-lease dated January 30, 1987, Peter Street Basin Properties subleased the land, being the subject of this application to the applicant herein.

[para37] Clause 24.21 of the sublease of the subject property provided that the tenant agrees to comply with, and be bound by, the provision of the master agreement, any sub-area plan approved pursuant to the master agreement, any conditions thereto, and agreements made pursuant to a condition to such approval insofar as and to the extent that they or any of them apply to any lands, buildings, or structures which are subject to the master agreement and which are on, or within, the land on the same basis as if it were a party to the master agreement.

[para38] Section 2.1(a) of the master agreement provides the corporation covenants.

> "(i) will not undertake or take any step itself or permit or suffer any other person to undertake or to take in step in respect of land, buildings or structures which are located in Harbourfront for the development of any land, building or structure unless either
>
> (i)(a), an approved sub-area plan, is in operation for the sub-area in which the land, building or structure in question is to be located, and the aforesaid development is in substantial conformity therewith;
>
> (b) The proposed development is permitted by the zoning by-law;
>
> (c) The plannings and drawings for the proposed development have been approved by council, if such approval is required by this Agreement and, in addition, necessary plans and drawings have been approved pursuant to Section 40 of the Planning Act R.S.O. 1980 c. 379, an amendment to or successor of such Section where approval under such Section is required by law; and
>
> (d) the development is in conformity with the provision of this Agreement as is required by this Agreement.

[para39] Approved sub-area plan is defined in the master agreement in s. 1.1(a).

[para40] In my opinion, if I were to have regard to the provisions of the master agreement, it would be because the master agreement constitutes other applicable law within the meaning of cl. 6(1)(a) of the Building Code Act.

[para41] In my opinion, the master agreement, which is binding on the applicant, insofar as it is applicable law within the meaning of cl. 6(1)(a) of the Building Code Act.

[para42] The fact that this agreement is an agreement by the Harbourfront Corporation and binds the Federal Crown does not make such an agreement "other applicable law," "and the fact that such agreement was passed pursuant to an order-in-council does not make the agreement "other applicable law".

[para43] It should be noted that the city council approved the sub-area plan for the two towers adjoining the subject lands, and approval for the sub-area plan, pertaining to this Link Building, was made conditional upon the approval of the Minister of Municipal Affairs and Housing of an official plan amendment, which was subsequently approved.

[para44] On September 21, 1987, the city council imposed a number of conditions to the approval of the sub-area plan amendment for the subject Link Building and on November 30, 1987, the city council amended its previous authority, respecting the sub-area plan amendment for 350 Queens Quay West and imposed a number of conditions, which were set out in evidence, such as, the conveyance in fee simple of this land in the water's-edge promenade surrounding the Peter Street Basin from Her Majesty the Queen in Right of Canada to the City of Toronto, the execution of an agreement between Harbourfront Corporation and the city with respect to certain

conveyances and so on.

[para45] Most of these conditions do not directly involve the applicant's land save for two matters, that the applicant may be involved such as the agreement between the City of Toronto and Harbourfront Corporation regarding Harbourfront Corporation's financial contribution toward the construction of a future bridge connection.

[para46] The final matter to be considered is whether the applicant has complied with the requirement to conform to the Building Code Act and the building code requirements.

[para47] Subsequent examination of the plans in question in February 1988, revealed six items of deficiency; namely, two exit doors swung in the wrong direction and five portions of structures did not have the required fire ratings. These items were promptly complied with by the applicant. The city submits that these items were sufficient for the inspector to refuse the permit.

[para48] In my opinion, if such items were outstanding, the chief building official could have given the applicant time to comply with these minor items, and I would make such a similar order.

[para49] However, in the circumstances, such an order is unnecessary since there has been compliance.

[para50] In the result, for the above reasons, I allow the appeal. I rescind the decision of the inspector, and I direct the respondents to issue a building permit pursuant to the application of the applicant as soon as practicable.

[para51] Costs to the application shall be paid by the respondent city to the plaintiff on a party-and-party basis to be assessed.

CORBETT D.C.J.

H.L. & M. SHOPPERS LTD. ET AL. v. TOWN OF BERWICK ET AL.,

CCH DRS 1978 P90-336, N.S.
(1978) 82 D.L.R. (3d) 23
NOVA SCOTIA
(S.C.)
1978

****

Negligence -- Duty of care -- Town building inspector negligently issuing building permit -- Plaintiff forced to demolish partially constructed building -- Plaintiff's action against inspector and town allowed.

****

The plaintiff company claimed damages arising as the result of the defendant S negligently issuing to them a building permit. S, who was the building inspector for the defendant town issued to the plaintiff a building permit allowing the plaintiff to construct a commercial building on lands owned by the plaintiff. After the building was partially completed it was discovered that the building contravened certain town by-laws and the plaintiff was forced to demolish it.

HELD: The plaintiff's action was allowed. There was a duty of care owed to the plaintiff by the defendant town and there was a breach of that duty. The defendant S was negligent in that he did not take adequate or proper steps to ascertain the meaning and effect of the relevant provisions of the by-laws of the town. S was acting in the course of his employment and the defendant town was liable for damages caused by the wrongful issue of the building permit. The plaintiff was entitled to special damages in the amount of $9,788.12. No general damages were allowed.

Regional Municipality of Haldimand-Norfolk v. Beres

27 O.R. (2d) 373
106 D.L.R. (3d) 760
ONTARIO
HIGH COURT OF JUSTICE
VAN CAMP, J.
4TH JANUARY 1980.

APPLICATION for an order compelling restoration of a building to conform with a zoning regulation.

T. A. Cline, Q.C., and R. J. Nightingale, for plaintiff.

J. J. Nadel, for defendant.

VAN CAMP, J.:-- The plaintiff municipality herein is asking for a mandatory order that the defendant restore the dwelling owned by her in the municipality to the condition it was in on May 13, 1973, and that she refrain from using the lands contrary to the order of the Minister of Economics and Intergovernmental Affairs made May 14, 1973, under s. 32 [am. 1972, c. 118, s. 4; 1973, c. 168, s. 8(1); 1976, c. 64, s. 4(1) and (2); 1978, c. 93, s. 3] of the Planning Act, R.S.O. 1970, c. 349.

The defendant was given title to the premises herein as a wedding present by a deed from her father, Geza Schmidt, dated December 9, 1977, and registered January 16, 1978. Mr. Schmidt, who has worked for the Ford Motor Company since about 1955, purchased Lot 41 and Lot 12 in September, 1976. The house on Lot 12 had burned down in the early 1970s. On Lot 41, there was an old dilapidated cottage without foundation, a well and an outhouse. The cottage was too dangerous to live in. The floor had broken through, the roof had broken and a beam had broken. Notwithstanding this, Mr. Schmidt applied for and obtained a permit for a 2,000-gallon sewage holding tank to be used with the cottage. He cut the weeds and brought in loads of topsoil and constructed a garden on Lot 12. He consulted some contractors but was advised that the house could not be rebuilt. He had the cottage torn down and he built a new two-bedroom cottage with living-room, kitchenette and washroom on a concrete foundation, which was some inches smaller than the former cottage. He obtained no building permit. It is this cottage that the plaintiff, in effect, asks to be removed. Mr. Schmidt spent $3,600 for the excavation and building of the basement, a further $9,000 for materials and he estimates that between $12,000 to $30,000 was spent in all, including the furnace, the hot-water tank, the toilet and sink, the underground hydro and furnishings.

Lot 41 and Lot 12 are approximately in the middle of a triangular peninsula of land in the former Township of Walpole in the County of Haldimand now in the City of Nanticoke in the Regional Municipality of Haldimand-Norfolk. The base of the triangle is the road allowance on the westerly side of the former Lot 19 in the first concession, the southerly side is the shore of Lake Erie, and the northerly side is the Sandusk Creek which runs into the lake at the point of the triangle at the easterly boundary of the concession lot approximately 2,000 ft. wide. Cottages began to be built on the land about 1900 on lots which ranged from small lots to large lots running from the lake back to the creek. Later in the years following 1940, more cottages were built towards the eastern end. A few have been converted into year-round use, but only one is used the year round. Over the years, the conveyancing had become chaotic and the road along the lake had been eroded. In 1955, a Judge's plan was registered whereby there was a 20-ft. public road which cut roughly across the middle of the peninsula from the

road allowance easterly. It was extended by another private road. The lots range in size from 25 ft. to 60 ft. in width. Over the years, the lots on the north side and on the south side have been divided between different owners although some of the lots still run from the lake to the creek with the road bisecting. The tendency is for the houses on the lots towards the west to be built on the north side of the road and the houses on the lots more easterly to be built on the south side of the road. Lots 43 to 46 are vacant.

In 1967, the township Zoning By-law 1421 was enacted. It defined this area as resort residential R.R. No. 2 on which the permitted uses were (1) one-family detached summer cottage on one lot and (2) uses, building and structure accessory thereto. For cottages with neither municipal water nor sanitary sewer, the minimum lot frontage was 80 ft. and the minimum lot area, 15,000 sq. ft. It did not prevent the use of any building which was in use on the day that the by-law came into force. Consequently, it did not prevent the use of the old cottage on Lot 41 which was there at that time, although the lot itself was roughly 60 ft. by 127 ft. with an area of 7,620 sq. ft.

In 1973, a series of Minister's orders made under s. 32 of the Planning Act, R.S.O. 1970, c. 349, in effect, froze all development along the lake front. The order applicable to these lands is O. Reg. 285/73. It permitted the use of the land for agricultural use only with one single-family dwelling used in connection with such agricultural use. The minimum lot area was to be 25 acres. Again, nothing in the order prevented the use of any land or building for a purpose prohibited by the order if it were lawfully used for such purpose on the day the order came into force. That order remained in effect until its revocation on August 8, 1978. During its term, it prevailed over the building by-law where there was any conflict; otherwise, the by-law remained in effect.

Under s. 5 [am. 1978, c. 40, s. 2(1) and (2)] of the Building Code Act, 1974 (Ont.), c. 74, no person was to construct or demolish a building unless a permit had been issued by the chief official of the municipality. The council of each municipality was responsible for the enforcement of the Act in the municipality. In 1974, the Regional Municipality of Haldimand-Norfolk was established by statute. It was to be a municipality and a planning area under the Planning Act and thereafter no area municipality was to exercise any powers under the Planning Act. Every by-law passed under the provisions of the Planning Act by the local municipality was to continue in force until amended or repealed by the Regional Council.

The owners of the old cottages on the different lots would have liked to follow the example of Mr. Schmidt but the Minister's order and the zoning by-law did not permit. Action has had to be taken by the municipality against some seven others. It is admitted that this new cottage with its landscaping is one of the finest in the area. It has encouraged neighbours to take an interest in improving their houses. Some three to four others have put in foundations and basements which are permitted; others have put on new siding. Mr. Schmidt has worked with his neighbours to put in breakwaters and rocks to prevent erosion of the land. The three problems to which the by-law and the Minister's order were directed, namely, the problem of erosion, the problem of potable water and the problem of waste, do not arise in the case of this cottage. It is agreed that it is an asset in the community, that it imposes no burden upon the community. The objection is that Mr. Schmidt has demolished the building and erected a new one without a permit and has not complied with the by-law or the Minister's order. This he has done while the other owners of lands in the neighbourhood have endeavoured to comply with the by-law and the order.

The order did permit certain work to be done. Section 8 of the order provided that single-family detached cottages existing on the date the order came into force might be extended or enlarged provided that, where municipal water and sanitary sewers were not provided, the minimum lot frontage would be 100 ft. and the minimum lot area, 15,000 sq. ft. Section 12 of the order provided that nothing in the order prevented reconstruction of any building or structure that was damaged or destroyed by causes beyond the control of the owner provided the dimensions of the original building or structure were not increased or its original use altered. Nothing in the order prevented strengthening or restoration to safe condition

of any building or structure or part of any such building or structure. Counsel for the defendant put forth a persuasive argument but I am unable to find that the building herein had been damaged or destroyed by causes beyond the control of the owner and I must find that the demolition and construction of the new cottage went beyond the strengthening or restoration to a safe condition of the original cottage. One of the problems in considering this action is that those provisions would seem to permit the putting in of a foundation and the gradual rebuilding step by step of an original cottage. Counsel for the plaintiff submits that the purpose of the sections which permit a legal nonconforming use is that such buildings will ultimately disappear through deterioration. However, the section which permits the strengthening or restoration to a safe condition of the old building might prevent such eventual deterioration.

In considering the equities, it is necessary to review in greater detail the action taken by Mr. Schmidt. Although it was obvious that he could not rebuild the old cottage, his application was made for a holding tank in connection therewith. An application for a holding tank for a new cottage on that land would not have been granted. After the excavation and the completion of the foundation in November, 1976, there was a stop order by the municipality. I should mention that there had been no work orders outstanding against the premises at the time of the purchase. The contractor who tore down the old cottage and built the basement advised him that no permit was necessary if the basement was not larger than the former building. After the stop work order, the subflooring was put on with the consent of the municipality in order to prevent accidents and the building material on the premises was covered with plastic during the winter months. No further work occurred until the following September.

After the stop work order, Mr. Schmidt went at once to apply for the permit. However, the application that he signed was an application to the Minister for an exemption from the order. The following April, he made a presentation to the planning and development committee of the region, which approved the new cottage as a replacement since there was no change of land use. On April 28, 1977, the Regional Council endorsed the sending of the application forward to the Minister. Mr. Schmidt was in almost daily touch to ascertain how the application was proceeding and he understood in late August that he would have his permit within a short time. However, no notice had been sent to the adjoining owners who heard of the application at almost the last minute and asked for a reference to the Ontario Municipal Board, which, in July, 1978, refused the exemption from the Minister's order. In the meantime, on the Labour Day week-end of 1977, Mr. Schmidt realized that if the work were to be done, it had to be done then. He arranged with a group of friends to help him construct the cottage and they began work on Friday night and worked quickly to put up the frame work that week-end. On Sunday, some of the neighbours called one of the Council for the region to advise that the work was proceeding. That Council member went to the premises that evening and received a non-committal answer as to whether there was a permit. The Councillor advised that he would be back on Monday with someone in authority. He returned with the chief building official. I did not believe Mr. Schmidt when he said that he planned the work and called for his assistants only after he had found the previous week that the work order was no longer on the premises and he assumed that permission had been granted; I find that he took deliberate steps to avoid meeting the chief building official that day, and I infer that the message that was given to his friends and assistants was conveyed to him. I accepted the evidence of Mr. Suprun, the chief building official, that he was not greeted with open arms, that he advised those present on the site that there was no permit and that he placed a new stop work order. The attitude of those who were working on the site was one of surprise that the chief building official would be working on the holiday.

Notwithstanding the advice that there was no permit, and although Mr. Schmidt was present at the hearings of the Ontario Municipal Board in the following February, he completed the work to make the shell which was in existence on the Labour Day week-end habitable. He had put in the furnace, the insulation, the dry-wall, the hot-water tank and the pressure system.

Charges were laid against Mr. Schmidt under the building code but were dismissed as they had not been brought within the six

months' time-limit. The writ herein was issued in December, 1978. Section 43 [rep. & sub. 1978, c. 93, s. 8] of the Planning Act states that in addition to any other remedy or penalty provided by law, any contravention of a by-law may be restrained by action by the municipality and any contravention of an order of the Minister made under s. 32 may be restrained by action at the instance of the municipality.

In Polai v. City of Toronto, [1973] S.C.R. 38, 28 D.L.R. (3d) 638, the Supreme Court of Canada considered an action for an injunction to restrain the appellant from breaching a zoning by-law where there had been persistent and defiant infringement by the use of the premises for the purposes of a multiple-family dwelling-home. It was pointed out that the city in that action was seeking to protect and enforce a public right and that lax enforcement of a zoning by-law could not afford any defence. Schroeder, J.A., in the Court of Appeal (reported under the name City of Toronto v. Polai, [1970] 1 O.R. 483, 8 D.L.R. (3d) 689) said [at pp. 491-2 O.R., pp. 697-8 D.L.R.]:

> In my opinion the city, acting in a more restricted sphere in the enforcement of its own by-laws, is likewise in a different position from the ordinary litigant. The inhabitants of the municipality are sufficiently interested in the dispute to warrant intervention by the corporation for the purpose of asserting public rights, and the dispute is not one between individuals ...
>
> . . . . .
>
> If, then, the Court has no power to control directly the exercise of Council's discretion in the manner of administration of the by-law under review, can it do so indirectly by refusing to grant injunctive relief to the city except upon the condition that it exercise its powers in a manner agreeable to the Court's view? To ask this question is to answer it ...

Jessup, J.A., said at p. 497 O.R., p. 703 D.L.R.:

> That consideration is that the public has a direct and substantial interest in the enforcement of the by-law and such public interest must prevail over the private interest of an admitted flagrant transgressor ...

It is submitted in the action before me that the plaintiff has been guilty of laches. I do not find that the plaintiff has delayed unreasonably after it knew of the activities of Mr. Schmidt, nor is the defendant in a substantially worse position than if the relief asked herein had been granted earlier. In any event, although there are some circumstances when a Court of Equity would be obliged to take into account matters of hardship or acquiescence, even when the plaintiff is a municipality, there has been no such hardship or acquiescence here.

The factors that I must weigh are that the building erected here, in contravention of the order and the by-law, is an asset to the community and is not injurious to the neighbours and, on the other hand, the interest that the municipality has in enforcing the by-law and the order. I considered the approval of these premises by the committee and by the Council, which was forwarded to the Minister in April, 1977. I also looked at the deliberate decision by Mr. Schmidt to proceed with the building notwithstanding the order, the by-law and the stop work order. The defendant herein is bound by her father's acts. In light of all the foregoing, there will be a restraining order. It will not be an order for the restoration of the dwelling to its prior condition, but it will be an order restraining the defendant, her heirs, assigns and agents from occupancy of the premises as long as the building on the premises remains in contravention of the municipal by-law. The defendant will pay the costs of the action.

Order accordingly.

Haldimand-Norfolk (Regional Municipality) v. Copland

Between
Regional Municipality of Haldimand-Norfolk,
appellant/plaintiff, and
Phyllis M. Copland, respondent/defendant

[1993] O.J. No. 4380
Doc. Hamilton D202/93

Ontario Court of Justice (General Division)
Divisional Court
O'Driscoll, O'Brien and Yates JJ.
Heard: September 8-9, 1993.
Judgment: November 25, 1993.

Counsel:
T.A. Cline, Q.C., for the appellant/plaintiff.
R.A. Grilli and R. Mahler, for the respondent/defendant.

The judgment of the court was delivered by

O'DRISCOLL J.:--

I. Nature of Proceedings

[para1] The appellant/plaintiff ("Municipality") appeals from the judgment of Forestell J. (1992), 96 D.L.R. (4th) 443, whereby the Municipality's action was dismissed, and it was ordered that upon a new application, a building permit for the deck constructed on the defendant's lands "be issued promptly, provided it complies with all other requirements."

[para2] In its action, the Municipality sought:

(a) a mandatory order requiring the removal of a structure (trailer) situate on the defendant's property, and

(b) an injunction restraining the defendant, her heirs, executors, assigns, servants, agents and employees from using the lands for any purpose in contravention of the Municipality's By-law 1-HA-86, being a by-law restricting land use.

[para3] The appeal succeeds.

II. The Agreed Facts

[para4]

1. The defendant/respondent Phyllis M. Copland, by instrument No. 75948, dated September 8, 1969, and registered October 3, 1969, became the owner of Part Lot 4, Concession 1, Town of Haldimand, Regional Municipality of Haldimand-Norfolk, Township of Rainham, County of Haldimand.

2. From 1969 to the summer of 1974, the defendant parked, year round, a 14 ft. x 7 ft. Rambler model trailer on her property.

3. In 1974, the Rambler trailer was replaced by a 20 ft. x 7 ft. Shasta model trailer. It was parked on the property during the summer months, and removed late each fall. This procedure of "placement" and "removal" continued from 1974 to the fall of 1988.

4. On June 9, 1986, the appellant/plaintiff passed By-law #1-HA-86. The By-law was approved by the Ontario Municipal Board on March 12, 1987. On the date of the passing of the by-law, the 20 ft. x 7 ft. Shasta model trailer was in place on the lands in question.

5. From the fall of 1988 until May of 1989, there was no trailer on the land.

6. In May 1989, the respondent/defendant acquired a 29 ft. x 8 ft. Prowler Park model trailer and placed it on her property, where it has been to this date. The trailer has a private sanitation sewage system for which

the respondent/defendant obtained approval in 1979 from the appellant's Health Unit.

7. It is agreed that since 1969, the sole use of each trailer was as a recreational trailer.

8. No building permit was issued for the placement on the lot of the Prowler Park model trailer.

9. There is no by-law in force under s. 34 of the Planning Act, R.S.O. 1990, c. P.13, nor is there an order of the Minister under s. 47(1)(a) of that Act, nor a permit issued under s. 13 of the Public Lands Act, R.S.O. 1990, c. P.43, authorizing a person to erect or locate or use, or cause to be erected, located, or used, a mobile home on the lands.

10. In 1989, the respondent/defendant sought a building permit from the Municipality to construct a deck around the trailer. The permit was denied, because the Building Committee of the Municipality was of the view that the trailer was illegally on the lands in contravention of By-law 1-HA-86 (supra).

III. Submissions of Counsel for the Appellant

[para5]

1. The general intention of planning legislation is eventually to eliminate non-conforming uses and replace them with permitted uses; thus the council may be said to zone out such uses. This is based on the premise that such a use is undesirable because it is incompatible with the existing permitted uses but is to be tolerated because it was a lawful use prior to its prohibition by by-law.

2. Section 34(9) of the Planning Act (supra) enables a building or structure not in conformity with a land use by-law to remain in place so long as the building or structure was lawfully used for such purpose on the date of the passing of the by-law, but only so long as the building continues to be used for that purpose.

3. In this case, in order to replace the trailer that was in place at the date of the passage of the land use by-law, the respondent would have had to comply with these conditions:

(a) apply for and obtain rezoning establishing a trailer as a permitted use on the subject lands;

(b) with the rezoning by-law passed and approved, apply for a building permit;

(c) proceed with the construction or placement of the replacement trailer in accordance with the Building Code Act, R.S.O. 1990, c. B.13;

(d) apply for a building permit relative to the deck. If it issued, proceed with the deck's construction.

4. The respondent/defendant Copland did not satisfy any of 3(a), (b), (c) or (d).

5. The replacement trailer is a "building" within the meaning of s. 1 of the Building Code Act (supra). Under s. 5 of the Building Code, a building permit is required for the replacement trailer. However, the building permit cannot issue if it will contravene any other applicable law (s. 6(1)(a)).

6. If a replacement trailer were permitted, a building permit could not issue because the structure does not comply with Reg. 413/90 passed pursuant to the Building Code Act.

IV. Submissions of Counsel for the Respondent Copland

[para6]

1. The intent of s. 34(9)(a) of the Planning Act ("saving legislation") is to preserve the right to use property in the same manner as it was used when the

restrictive by-law was enacted.

2. On the date that By-law #1-HA-86 was passed, the respondent used the land for a "trailer recreational home" for seasonal residential purposes. That same use continues.

3. Section 34(9)(a) of the Planning Act permits a property owner to intensify or enlarge the scope of the land's use so long as the property continues to be used in the manner it was used on the date the restrictive by-law was enacted.

4. Although the respondent moved out the 20 ft. x 7 ft. Shasta model trailer in the autumn of 1988 and moved in a 29 ft. x 8 ft. Prowler Park trailer in May 1989, the use of the property has not changed, and the "saving legislation" of s. 34(9)(a) of the Planning Act still prevails.

5. If the appellant succeeds, the effect will be Draconian, as the land would be rendered to be little, if any, use, as the respondent will not be able to use or erect any building or structure on the land.

V. The Issue

[para7] Is the respondent/defendant in contravention of the "Seasonal Residential Zone (R.S.)" provision of s. 15 of by-law 1-HA-86, or does the respondent/defendant qualify to be exempted under s. 34(9)(a) of the Planning Act?

[para8] The trial judge said:

... the use of the parcel of land in this case throughout by the defendant has been that of a trailer recreational home. By putting a larger trailer on the property, it does not in the least change the use of the property.

[para9] The trial judge, it appears, was of the view that the instant case fell to be decided by the decision of the Supreme Court of Canada in Central Jewish Institute v. Toronto (City), [1948] S.C.R. 101.

[para10] In that case, the City of Toronto sought to restrain the Central Jewish Institute from using the premises at 561 University Avenue, Toronto, as a school or as a summer school. Per Kerwin J.:

The trial judge and the Court of Appeal seem to have proceeded on the ground that the principal use of the premises on July 24, 1946, the date of the passing of the by-law, was as a residence and guest house and that, therefore, the appellant was not within the exception in subsection 2, s. 406, of The Municipal Act. ...

In my view this is not the determining factor. The extent of the user of premises as a school would vary from time to time and in the months of July and August it is well-known that the pupils in the ordinary classes are on vacation. It is true that the appellant had not conducted a summer school on University Avenue but there was nothing to prevent it commencing such a school as part of its curriculum. According to the evidence, a nursery school is part of the course provided by the appellant and the mere fact that no grade classes were held on the Avenue Road premises prior to the date of the passing of the by-law does not prevent the application of subsection 2 of section 406 of The Municipal Act.

...

The appellant took steps during the summer vacation, in an endeavour to bring itself within subsection 2 of section 406 of the Act and, in my opinion, has succeeded in so doing. It actually used the premises as a school and the mere fact that it was a nursery summer school does not prevent the appellant increasing the number of pupils or enlarging the scope of its activities so as to conduct classes not in operation at the relevant time. We are not concerned, in the present appeal, with any question of erecting new buildings.

[para11] During the course of argument, it was submitted

by counsel for the appellant that the Canadian Jewish Institute case involved a question of use within the "envelope" of a building. In my view, the case does not address the fact situation where the building has been removed from the property.

[para12] In my view, the Canadian Jewish Institute case does not govern this appeal, because that case speaks to a separate and distinct problem.

IV. Conclusions

[para13] 1. In my view, s. 34(9)(a) of the Planning Act grants protection to a prior existing non-conforming use "if such land, building or structure" was lawfully used for such purpose on the day the by-law was passed, and "so long as it continues to be used for that purpose." Here, in the autumn of 1988, after the by-law was passed, the defendant removed the 20 ft. x 7 ft. Shasta trailer from the land, and in May 1989 moved onto the land a 29 ft. x 8 ft. Prowler Park trailer - a totally different structure.

[para14] In my view, the protection of s. 34(9)(a) of the Planning Act does not extend to the 29 ft. x 8 ft. Prowler trailer, as it was moved onto the property some three (3) years after the by-law was passed.

[para15] In my view, the exemption of the non-conforming use ended when the defendant removed the Shasta trailer from the property in the Fall of 1988.

(a) Wilmot v. Kingston (City), [1946] O.R. 437, Laidlaw J.A.:

> Thus, if land is used on the day of the passing of a by-law for a purpose prohibited thereby, that use may continue, and such a by-law by express statutory provision is not applicable to that land so long as it continues to be used for that purpose. If the use for that purpose ceases, the by-law thereupon becomes applicable and the land cannot thereafter be used for a prohibited purpose. In the same manner, and to the same extent, the use of any building in existence at the time a by-law is passed for a purpose prohibited by the by-law may continue. But the right of a property owner or user at the date of the passing of such a by-law is fixed and limited in consequence thereof. It is thereafter subject to the provisions of any by-law enacted in the proper exercise of the legislative powers of the council of the municipality. The effect of such an enactment is to prohibit the erection of any building after the date of the passing of the by-law on premises which on that date were used for purposes prohibited thereby.

(b) Miller v. Bentinck (Township) (unreported) (Div. Ct.), September 20, 1990, per Southey J.:

> The by-law could not prevent use of the house as a dwelling despite such non-compliance because of s. 34(9)
>
> (a) of the Planning Act, but only so long as the house continued to be used as a dwelling. That use had ceased by July 3, 1984, and has never been resumed. Instead, the respondents' predecessor obtained a demolition permit on October 27, 1984, and has partially demolished the existing house.

In the circumstances, the remains of the existing house have lost the protection of s. 34(9)(a) of the Planning Act, because their use as a dwelling was discontinued. The application for a building permit contemplates their use as a garage. A new dwelling could not lawfully be constructed anywhere on the lot because of the separation provisions; the chief building officer was justified in refusing to issue a permit.

(c) "Non-Conforming Uses and Regulatory Standards," by J. Matera (1993) 2 D.M.P.L. 125 (July 1993):

> In Copland, Forestell J. held that where the use of certain lands for a trailer had not changed, the owner was entitled to continue to exchange her trailer for increasingly larger ones, even after the enactment of a zoning amendment which presumably prohibited trailers of any size and thereby rendered the use of legal non-conforming. The Court held that the change in size of trailer did not amount to a change in use.
>
> Based on this reasoning, an owner of a single family dwelling which happens to be a legal non-conforming use would be entitled to demolish and rebuild as of right a new single family dwelling of virtually any size. By extension, the owner of the legal non-conforming single dwelling would also be entitled to build an addition of any size without being required to apply for either approval to extend or enlarge pursuant to s. 45(2)(i) of the Planning Act or an amendment to the zoning by-law in accordance with s. 34(10). Meanwhile, an owner of a single family dwelling which conforms to the by-law must obtain at least a minor variance if not a rezoning to achieve the same addition or reconstruction, unless the proposed addition or reconstruction were to conform to current regulatory standards in the by-law. If the Copland case is correct, then there would be no need for ss. 45(2)(i) and 34(10) of the Planning Act.
>
> Furthermore, it makes no sense to interpret the various provisions of the Planning Act, which relate to legal non-conforming uses, in such a way that the owner of a legal non-conforming use gains a significant advantage over those whose properties happen to comply with the zoning by-law.
>
> In the Copland decision, Forestell J. fails to distinguish between use (for a trailer) and regulatory standards (the size of the trailer permitted). Forestell J. is quite right in saying the change in size of trailer did not amount to a change in use, but that is not the point. The question which the Court failed to ask is what controls exist to regulate the size and configuration of the structures and buildings serving a use which is rendered legal non-conforming.
>
> A careful reading of the Planning Act indicates that there is a reasonably consistent scheme for dealing with both existing uses which are rendered non-conforming by the enactment of a subsequent zoning amendment and regulatory or development standards which are altered by such enactment. An appropriately drafted zoning by-law can take advantage of this scheme to control legal non-conforming uses as strictly as it may control conforming uses.

V. Result

[para16] The appeal is allowed, and the formal judgment, dated September 11, 1992, is set aside, and in its place judgment will go as requested by the appellant/plaintiff in paragraphs 1(a) and 1(b) of its Statement of Claim.

VI. Costs

[para17] If within five (5) days of the date of these reasons, counsel cannot agree as to costs, within ten (10) days of the date of these reasons, counsel may file written submissions as to costs. Thereafter, costs will be fixed.

O'DRISCOLL J.

Court File No. 924/89

HENRY LEPAGE

Applicant

-and-

THE CORPORATION OF THE TOWNSHIP OF THE ARCHIPELAGO

Respondent

REASONS FOR JUDGMENT

Application before THE HONOURABLE E. LOUKIDELIS on June 6. 9, 13 and 14, 1989 at PARRY SOUND, Ontario.

APPEARANCES:

W.B. Cunningham, Esq. (Powell, Cunningham, Kennedy & Grandy) , Counsel for the applicant

D.A. Holmes. Esq., Counsel for the respondent

REASONS FOR JUDGMENT LOUKIDELIS, D.C.J. (Written):

This application comes before me by way of an appeal by Henry LePage from the decision of the chief building officer of the Township of the Archipelago refusing a building permit to construct and/or install three additional docks to the applicant's property.

The appeal is brought pursuant to section 15(1) of the Building Code Act, P.5.0. 1980. C. 51. Once I have heard the application. then under the provisions of section 15(3) of the Building Code Act, I may rescind or affirm the decision of the chief official. of "...take such action as the chief official ought to have taken...

Before dealing with the facts and arguments submitted by the parties to me, I would like firstly to deal with a preliminary point. I find that the proposed docks to be attached to the land come within the definition of :building" as set out in section 1. (1) (b) of the Building Code Act, which reads as follows:'

> "1.(1) (b) "building" means a structure occupying an area greater than 100 square feet consisting of a wall, roof and floor, or any one or more of them, or structural system serving the function thereof, including all the works, fixtures and service systems appurtenant thereto, and includes such other structures as are designated in the regulations, but does not include a structure used directly in the extraction of ore from a mine;"

Looking at the plain meaning of the words contained in this subsection, I find that a dock, provided it is greater 100 square feet, would come within that definition. This is the same conclusion reached by myself in the case of The Corporation of the Township of Humphrey v. Janet Findlay (unreported) referred to me by both counsel. The fact that the docks proposed by the applicant are floating, while in the Findlay case they were placed on a pier, does not alter my decision.

The annual installation of floating docks and removal of same, once they have been constructed, does not detract, in my view, from the fact that they are within the definition of a "building" as set out in the said Act.

Referring again to the said Act, it is obvious that there is a clear delegation of authority by the province to the chief building official. It is not a delegation from the province to or through the municipal council.

The municipal council appoints the chief building official pursuant to Section 3 of the said Act. Once this is done, however, pursuant to section 5(1), the issuing of a permit with respect to the construction or demolition of a building is up to the chief building official.

Section 6(1) imposes a mandatory duty upon the chief building official that he "shall issue a permit except where, (a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law;"

Briefly then, if an applicant complies with the requirements of the Building Code Act and the building code

"and does not ...contravene any other applicable law"

then the applicant is entitled as of right, to a building permit. There is no stipulation that he be of good behaviour or refrain from annoying council, refrain from disputes with his neighbour nor is the applicant required to obtain

the municipal council's opinion or approval.

Facts:

1. The applicant, Henry LePage, has been the owner of the property in question since about 1978. Located on the property is a restaurant which seats 150 people.

2. The property is accessible only by water.

3. When Mr. LePage took over the property, there was one main dock and he has since added a further four docks for a total of five. The docking facilities are for the use of the restaurant patrons. He has, however, rented and still rents overnight docking facilities to some of his patrons. Some of the users may stay more than one night.

4. The newly formed township passed a zoning by-law, number AlOO-83, in September of 1983.

5. It is acknowledged by both parties that the proposed additional docks are not in contravention of the township zoning by-law.

6. The applicant, in 1988, proceeded to install more dockage area. He was advised that he could not lengthen his existing docks past 120 feet as this was in contravention of a municipal by-law. He removed the add-on docks. He was also advised that the installation of three new docks by him required a building permit.

7. Application was then made for the three additional docks, which application was denied. It is from this decision that he now brings this application.

8. In 1988, the planning committee of the township recommended that charges be laid and action taken against Mr. LePage for proceeding with the additional dockage space without a building permit and deferred his application for a building permit at that time. This recommendation of the planning committee was adopted by the municipal council.

9. In 1989, the township planning committee passed the following resolution:

"whereas an application to expand docking has been filed for Henry's Fish Restaurant; And Whereas there are five existing docks to serve the restaurant;

And Whereas additional docks are deemed not to be necessary to reasonably facilitate the viability of the restaurant;

And Whereas additional docking would alter the character of the use of the property in contravention of the Official Plan; And Whereas there is outstanding litigation
in respect to property boundaries on the subject lands;

The planning committee recommends to Council that a building permit for additional docks at Henry's Fish Restaurant be denied."

The above resolution was adopted by council **as** its own on April 15, 1989.

10. By letter dated May 1, l989, Mrs. Tudhope, the planning administrator of the township, wrote to Mr. LePage indicating that his application had been denied and indicating in paragraph two:

"It was the opinion of council that the proposed additional docks are not necessary to reasonably facilitate the viability of the restaurant, that any additional docking would alter the character of the use of the property in contravention of the official plan of the township. The building permit for additional docking facilities will therefore be denied." It then went on to state that council was also of the opinion that the outstanding litigation with respect to property boundaries is a concern.

11. The present zoning is commercial accommodation (CA). A restaurant is a permitted use but a marina is not.

12. The chief building officer refused the application for a building permit after council had indicated its position.

13. While the official refusal letter was not signed by the chief building officer, Mr. Hachigian, it was apparently written with his consent and authority. Mr. Hachigian already had verbally denied the building permit.

Issues:

As I understand the submissions, the controversy boils down to a very few issues. They appear to be as follows:

1. Does the official plan of the Archipelago come within the definition of “other applicable law".

2. Does site plan approval come within the definition of “other applicable law”.

3. Does the proposed increase in the number of docks on the applicant’s property in fact alter the character or use of the property in that **it** would become a marina within the definition of zoning by-law.

The township zoning by-law is “other applicable law”. As mentioned earlier, however, there is no evidence that the applicant, Mr. LePage was in breach of the existing township zoning by-law. This is readily admitted by the respondent. I believe both counsel are also in agreement that the official plan of the township is a statement of purpose only whereas the zoning by-law is the applicable legislation or law.

Turning to the first issue, there appears to be some divergence of judicial opinion from the cases presented as to whether the official plan can be considered “other applicable law”. I am in agreement with the decision of Judge Haley in the case of Re Woodglen and Co. Ltd and City of North York, 43 O.R. (2d) p.289. Judge Haley, I think rightly bases her judgment on the decision of McLennan, J. in the case of Re Steven Polon Ltd and Metropolitan Licensing Com’n 1961 O.R. 810, wherein Mr. Justice McLennan states:

That the Official Plan adopted by the respondent municipality is a little more than a statement of intention of what, at the moment, the municipality plans to do in the future.” And the “municipality is not bound to carry out that intention...”

Mr. Justice McLennan is also quoted by Judge Haley as stating:

“the Official Plan is not therefore an
effective instrument restricting land user.” Judge Haley also refers with approval to the decision of Mr. Justice Henry in Re Cadillac Development Corp. Ltd. et al and City of Toronto (1973) O.R. (2d) 20 at p. 24, wherein he indicated:

“An official plan is a recommendation only and must be properly implemented by by-law.” Mr. Holmes referred the Court to several cases. The comments of Mr. Justice Reid, in the Collingwood case were, in my view, applicable to the facts in this case, as long as the prior charge against the applicant were outstanding. These charge however, were disposed of months before the written denial for a building permit was issued by the township.

The principle that a zoning by-law is “other applicable law” as set out in other cases that were referred to me by Mr. Holmes. is not in dispute. It is quite clear that the chief building official is indeed obliged to consider zoning matters.

The submission that the official plan was ignored by the different municipalities in the cases quoted. Because the applicable zoning by-laws were contradictory regarding intending use, does not detract from the clear principle relied upon by Judge Haley, and set out in the judgments of Justices McLennan and Henry.

Mr. Holmes also referred me to the Sandos case, which is apparently a District Court decision of Judge McDermid, holding the opposite position. I do not have the full text of this case as to how Judge McDermid came to the conclusion that an official plan was, in fact. “other applicable law.” The decision of Judge Haley on this point, in my view, is correct for the reasons given and particularly in yew of the fact that it was based on the decisions of the two Supreme Court cases.

Turning now to the second issue, and that :s the question of site plan control and whether this can be considered as “other applicable law.” Again I was referred to a District Court decision of Judge Matlow in the case of Re Revenue Properties Co. Ltd. and Corporation of the City of Toronto, (1984), 26 M.P.L.R. 165 dated March 5th, 1984. which reviews the question of requirement of prior site plan approval prior to the issuing of a building permit. This is set out at the bottom of page 169 and page 170. He reviews the history of the relevant section of the Planning Act relating to site plan approval and comes to the conclusion that such approval is not a prerequisite or precondition for the issuing of a building permit. I agree with that decision. I find, therefore, that neither the official plan or site plan requirements are with the definition of “other applicable law”,

Turning now to the third issue, it appears to me from the evidence of the various township officials, that the main concern of the township is that the addition of three more docks would create a fundamental change in use. This was expressed

by the planning committee's resolution adopted by township council. It was also the expressed opinion of the township planner and the chief building officer. It is obvious that the township is concerned that the property will be perceived as a marina rather than a restaurant.

I can well understand the concerns of the township. Since Mr. LePage has the legal right to rent dockage space or overnight docking and to charge the same where does one draw the line as to the number of docking spaces required to service his existing business. It is also clear from the evidence, and I am satisfied, that Mr. LePage provides no other marina type services such as selling-of gas or engine repairs, et cetera. The township planner expressed some concern, as did the chief building officer, that there would be a fundamental change in use. It is to be noted, however, that the township planner's opinion, that there are far too many boats docking at the existing facilities, was based on an erroneous guess as to the seating capacity of the applicant's restaurant (i.e. 100 rather than 150). One must also remember that there is always an overlap of patrons arriving and leaving.

I found exhibit 14, which was an aerial photograph of the property as being supportive of Mr. LePage's contention that visiting boats are now much larger and take up a great deal more docking room. When one considers a 150 seat restaurant, his contention that his existing five docks are not sufficient during meal hours is probably quite correct. I think that the concern of a changing character is based more on guess work than sound facts. The decision of the chief building officer or the municipality given through its employees shows some bias or arbitrariness not only in the guess work referred to, but it's reference to the ongoing boundary dispute between Mr. LePage and one of his neighbours.

To allow the chief building officer of a municipality or a council to place an interpretation of a zoning by-law based on some section of the official plan would, in my view, introduce an element into the decision which would not be proper. It would leave the door open to unequal treatment of property owners. While the township has concerns about the uncontrolled growth or the docking space, it must limit the same through by-laws which apply to all township residents equally. While additional docking space may give the premises an appearance of a marina, it is also necessary and directly connected to the continuing operation of the applicants restaurant.

In summary, therefore, I find that site plan approval and the official plan are not within the definition of "other applicable law". The zoning by-law has not been breached. I find further that the additional docking spaces are necessary in the operation of the applicant's restaurant. In addition, the township, through council. have shown some bias and have attempted to influence or interfere with the decision and function of the chief building officer. Under the circumstances, therefore, I would order the chief building officer of the respondent township to issue a building permit for the three additional docks as set out in the applicant's application.

As to costs, the parties may make their submissions to me on a regular motion day.

Dated at Parry Sound this 7th Day of July, 1989

"E. Loukidelis, D.C.J."

Heutinck v. Oakland (Township)

Between
John Heutinck, (applicant/appellant), and
The Corporation of the Township of Oakland,
(respondent/respondent)

[1997] O.J. No. 4796
DRS 98-07056
Docket No. C19812

Ontario Court of Appeal
Toronto, Ontario
Finlayson, Catzman and Austin JJ.A.
Heard: November 26, 1997.
Judgment: November 27, 1997.

Counsel:
Neil Gross, for the appellant.
Kevin Davis, for the respondent.

The following judgment was delivered by

[para1] THE COURT (endorsement):-- This appeal involves the interpretation of a zoning by-law enacted in 1985 by the respondent township. The appellant purchased his property in 1989. A barn on the property, believed to have been built before 1850, had been used for keeping livestock until the early 1950s and, from 1963 until 1987, for the storage of a neighbouring flour mill's products and equipment. Beginning in about 1993, the appellant sought to use the barn for raising emu. It is common ground that emu are livestock within the meaning of the by-law, that the appellant's property does not offend the by-law's provisions with respect to lot size and that the barn does not comply with the by-law's minimum set-back requirements.

[para2] The argument of this appeal centred on the proper interpretation of s. 5.13 of the by-law, which deals with non-complying uses. That section reads as follows:

5.13 Non-Complying Uses

Where a use, building or structure was legally established prior to the date of the passing of this by-law, and is permitted by the provisions of the zone in which such use, building or structure is located, but does not meet the zone provisions with respect to yards, lot area, frontage, parking, setback or any other provisions of this by-law applicable to that zone, the said building or structure shall be deemed to comply with the by-law and may be enlarged, extended, reconstructed, repaired or renovated provided that:

(a) the enlargement, extension, reconstruction, repair or renovation does not further reduce the compliance of that use, building or structure, with the provision(s) of the by-law to which it does not comply; and

(b) all other applicable provisions of this by-law are complied with.

[para3] In Mr. Gross' submission, this section imposes three conditions in respect of the appellant's property: (1) the barn must be a building or structure legally established prior to the date of the passing of the by-law; (2) the barn must be permitted by the provisions of the zone in which it is located; and (3) the barn must not meet the zone provisions with respect to setback.

[para4] With respect to the first of these conditions, Mr. Gross submitted that the establishment of the barn in the 1850s brought it within the description of a building or structure legally established prior to 1985, the date of the passing of the by-law, even though the barn was not being used for the raising of emu or, indeed, for any agricultural purpose at that time.

[para5] With respect, we do not agree. Mr. Gross' interpretation of s. 5.13 would sanction any agricultural use, building or structure that was ever established before 1985,

even if such use, building or structure had long ceased to exist before that time. In our view, s. 5.13 must be read in context as addressing a use, building or structure that was legally established at the time the by-law was enacted in 1985. Such an interpretation is consistent with the entitlement permitted by s. 5.13 to enlarge, extend, reconstruct, repair, or renovate such a building or structure. In this connection, it is not without significance that "non-complying" is defined in s. 2.83 of the by-law to mean "a permitted use, building or structure existing at the date of the passing of this by-law which does not comply with the zone requirement of the zone within which they are located."

[para6] Central to this analysis is our reliance upon the well established rule that the nature of a non-conforming use is not defined by reference to definitions in the by-law. Rather, it must be determined by reference to the use to which the property was put at the time the by-law was passed. In this case, the activity now engaged in by the appellant is fundamentally different from that which had occurred at the time of the passage of the by-law: Corporation of the Township of Glenelg v. Davis (1992), 10 M.P.L.R. (2d) 260 (Ont. C.A.) at p. 265. As the appellant's barn was not used for the purpose of raising emu at the time of the enactment of the by-law, it does not fall within the definition of a non-complying use, building or structure within the meaning of the by-law. The appellant's application for a declaration to the contrary was properly dismissed by the motions court judge.

[para7] Accordingly, the appeal is dismissed with costs.

FINLAYSON J.A.
CATZMAN J.A.
AUSTIN J.A.

Re **Hewitson and Hughes** et al.

31 O.R. (2d) 536
119 D.L.R. (3d) 117

ONTARIO
HIGH COURT OF JUSTICE
J. HOLLAND J.
19TH NOVEMBER 1980.

APPLICATION for a mandatory order directing the respondents to demolish certain buildings erected by them.

G. A. Grechulk, for applicant.

R. S. Vasan, for respondent.

J. HOLLAND J.:-- In this application William Hewitson, Chief Building Inspector of Burlington, asks for a mandatory order for the removal of certain buildings erected by the respondents on their lands at 1323 Snake Rd., Burlington. These lands are within the municipal boundaries of Burlington and in a rural portion of the municipality. They are located in that portion of Burlington within the Parkway Belt area. The ground upon which the order is sought is that the buildings were erected without the respondents first having obtained permits therefor contrary to the Building Code Act, 1974 (Ont.), c. 74.

For easy, but not exact, reference counsel have agreed that a sketch, being the first document in the record, shows the general location of the buildings. Only buildings numbered one to five inclusive are involved in this application. Within building No. 5 is contained a swimming pool, cabana and a concrete slab. The swimming pool was constructed after a permit was issued therefor and is not affected by this application.

These proceedings were commenced January 29, 1979. There had been a long history pre-dating this of difficulty between the respondents and the authority. Following commencement of this application there have been extensive proceedings including many cross-examinations and the prosecution of Mrs. Hughes. At the time of the hearing before me an appeal was pending by her from a conviction on a prosecution by the municipality. That fact I considered to be not relevant to the application before me.

It is an understatement to say that these many proceedings did not result in a narrowing of issues -- just the opposite appears to be the fact. Faced with this, one would have hoped that counsel would, at least, have prepared and filed statements of law and fact. This was not done. As a consequence this application took three days for argument and argument was not easy to follow. After oral argument counsel requested and obtained leave to file written argument and these have now been received. Again, both are lengthy and difficult to follow. The factual and legal issues could and should have been set out concisely, and effort, prior to the hearing, should have been made by counsel to agree on much of the factual background. This application was originally to be heard on June 4, 1980, but as the respondents, just before that date, had changed solicitors to the present one, Southey J. directed that it stand over to September 9, 1980, to proceed peremptorily on that date. Counsel for the respondents felt that delay in obtaining a legal aid certificate by his clients was a ground for a further adjournment. I directed that it proceed.

At my suggestion counsel met for a period at the outset and advised me that they had made the following agreements:

(1). Building number one was constructed pursuant to a building permit obtained from Burlington for the construction of a greenhouse. It has an an area in excess of 100 feet. While it was used as a greenhouse for a short period it was then occupied and used in the operation of an Adult Social Club. There is access from this building to most of the other buildings. There is an issue, however, whether the primary or main use was as an Adult Social Club or for farming or agricultural purposes.

(2). Building number two was constructed without a permit after one had been applied for and had been refused. A stop-work-order was issued September 16th, 1976 but was ignored by the respondents who proceeded to complete the building. It

has an area in excess of 100 square feet. It too has been occupied and used in connection with the social club but there is an issue as to its primary or main use. There is access from this building to most of the other buildings.

(3). Building number three was constructed without a permit and no application was made for a permit. It has been occupied and used as a part of the social club but there is an issue as to its primary or main use. It has an area over 100 square feet and has access to most of the other buildings.

(4). Building number 4 was constructed without a permit and none was applied for. It is a mini-barn and has an area in excess of 100 square feet. This building does not have access to the others.

(5). Building number 5 was constructed without a permit and without any application for one. It has an area in excess of 100 square feet. It has access to most of the other buildings. Within building number 5 is a canvas cabana, a pool and a concrete slab.

In addition to these it was agreed that the respondents did not at any time seek an amendment to the Parkway Belt Planning and Development Act, 1973 (Ont.), c. 53. The significance of this is that this statute, which is a land-use statute, provides:

2. The Ontario Planning and Development Act, 1973, except section 12, applies mutatis mutandis, to the Parkway Belt Planning Area, and the Parkway Belt Plan shall be deemed to be a development plan within the meaning of that Act.

. . . . .

6(1) On and after the day this Act comes into force, the Minister may, in respect of any land within the Parkway Belt Planning Area, make land use regulations and in any such regulations the Minister may exercise any of the powers conferred upon the Minister under clause a of subsection 1 of section 32 of The Planning Act, and notwithstanding subsection 4 of the said section 32, any such regulation may be made that does not conform to a local plan in effect in the area covered by the regulation.

(2) Any regulation made by the Minister under subsection 1

may be retroactive in its application and may provide that it comes into force and has effect on and after a day not earlier than the 4th day of June, 1973.

By O. Reg. 482/73 passed under the Parkway Belt Planning and Development Act, 1973, on August 4, 1973, and filed August 8, 1973, it was provided:

3. No land shall be used and no building or structure shall be erected or used except in accordance with the terms of the Regulation, but nothing in this Regulation prevents the use of any land, building or structure for a purpose prohibited by this Regulation if such land, building or structure was lawfully used for such purpose on the day this Regulation comes into force, or prevents the erection or use of any building or structure the plans for which have, prior to the day this Regulation comes into force, been approved by the municipal building inspector.

4. Every use of land and every erection or use of buildings or structures to which this Regulation applies within the Town of Burlington is prohibited, except agricultural uses, and buildings and structures accessory thereto, including one

single-family dwelling used in connection with each agricultural operation.

5. Requirements for agricultural uses and buildings and structures accessory thereto, including one single-family dwelling used in connection with the agricultural operation, are established as follows:

No more than one dwelling shall be erected on any lot

Minimum lot area
50 acres

Minimum lot frontage
900 feet

Minimum front, side and rear yards
50 feet

Minimum ground floor
one storey--1000 square area for dwellings
feet and one and one-
half storeys or more--

750 square feet

[Emphasis added.] Section 1(a) of O. Reg. 482/73 defines "accessory" as follows:

(a) "accessory", when used to describe a use, building or structure, means a use, building or structure normally incidental or subordinate to the principal use, building or structure located on the same lot;

The lands and buildings of the respondents, even if it could be said that they could qualify as "agricultural uses and buildings and structures accessory thereto, including one single-family dwelling used in connection with each agricultural operation" are only 7.9 acres in total -- far short of the 50-acre requirement. No amendment to this land-use requirement was ever sought by the respondents.

Counsel for the applicant then read in from the examination of the respondents answers to show that at all relevant times these premises were occupied and used as an adult social club.

Against this background counsel for the respondents advised that he accepted that the burden rested upon his clients to establish that permits for the construction of these buildings were not required and that as to building No. 1 the relief sought was not appropriate.

There can be no doubt that the respondents have occupied and used these lands for the purpose of operating an adult social club at all material times. Such commenced prior to the erection of any of the buildings. That club provides for the social needs of adult men and women and includes overnight facilities. The fees charged are interesting. They are:

For a couple
$50.00 annually

For a single man
$100.00 annually then
reduced to $50.00
annually

For a single woman
No charge.

I do not intend to comment further on the nature of the club operated by these respondents on these premises and in connection with which all these buildings were used. I have no doubt, however, that municipal authorities and neighbours have been disturbed by the operations of this club which appears to be directed to satisfying sexual needs or desires of consenting adults.

In addition to the club operation there is some evidence of an agricultural (market gardening) use carried on by the respondents. It is because of this that the issue of main or primary use arises.

The respondents contend that the provisions of the Building Code Act, 1974, were not applicable to the construction of the buildings. The stated reasons are taken from the respondents' written submissions:

(1). The lands and buildings are within the exclusive jurisdiction of the Parkway Belt Planning and Development authority pursuant to the Parkway Belt Planning and Development Act 1974 and that The Building Code Act does not apply to these lands and buildings.

(2). Assuming The Building Code Act applies, the buildings

are exempt from the provisions of The Building Code Act by reason of the provisions of section 2.9.2 and section 2.9.3 of the Regulations passed under The Building Code Act.

(3). In any event, the scope of an application brought by the Chief Building Official under section 25 of The Building Code Act is very limited and is confined to the purpose of enforcing compliance with the Act and does not extend to mandatory orders.

(4). On the facts, these lands and buildings fall within the provisions of either section 2.9.2 or section 2.9.3 of the Building Code regulations and are exempt. [This appears to be identical to number two.]

(5). The question of whether or not this is a building on a farm or whether the buildings were intended for farm purposes is a question of fact to be decided on the evidence and on this matter there is conflicting evidence led by both sides. The record is also voluminous. Under the circumstances the proper course for the Court is to order the trial of an issue.

(6). Alternatively, that the great volume of all testimony as well as affidavit evidence in this matter relating to the present use of the property is not relevant to an application under The Building Code Act when land use is governed in regard to the subject lands by The Parkway Belt Planning and Development Act. The proper person to complain about improper use of land in the Parkway Belt area is the authority under that statute and not the Chief Building Official under The Building Code Act.

(7). In any event the Court, in the exercise of its discretion, should not grant the drastic remedy of demolition as the buildings had been constructed at considerable cost and under a bona fide belief that The Building Code Act does not apply. It is urged that the evidence of the social club activities should not be allowed to colour the Court's discretion and judgment in making an order adverse to the respondents.

As I have previously stated counsel for the respondents, quite correctly in my view, accepted that the burden rested upon his clients to establish that in the circumstances the application should be dismissed. Except as to building No. 1, for which a permit was obtained, this has not been done. With respect to building No. 1 it was urged that as it became part of a single structural unit and as it was occupied and used as a part of the social club operation, this change in operation rendered this building part of a structural system and subject to being demolished. It was further suggested that the use or intended use for building No. 1 was shown to be as a greenhouse (as stated when the building permit was obtained) and that this was not true. In dismissing this application in so far as it relates to building No. 1, I content myself with saying that this building was constructed upon the issuance of a building permit under the Building Code Act, 1974 and for a short period at least was occupied and used for an inoffensive purpose. A change in use, by which it became part of a structural system, would not in itself be sufficient ground to order demolition.

At this point I direct my attention to the facts to be found on the evidence. There is a great deal of material before me and I do not intend to recite the evidence and the areas of conflict nor do I find it necessary to direct the trial of an issue as requested. It is clear to me that, notwithstanding some minor conflict, the evidence (except that of Hughes) leads to the irresistible conclusion that at all material times the primary and main occupation and use of these lands and buildings by the respondents was for the purposes of the adult social club. I accept that evidence in preference to that of the respondents. Any use which could be termed, in a broad sense, to be related to "farming or agriculture" was minor. The rent-a-plot scheme was a sideline. The respondents were, I am satisfied, business people who were in the business of operating the club and this club business pre-existed even the construction of building No. 1. All the buildings complained of in this application I find were built for the occupation and use by the respondents in the business operation of this club, excepting only building No. 1. They were not buildings on a farm, nor were the respondents occupying and using the lands and buildings for farm or agricultural purposes. They were built to be occupied and used in the operation of the social

club and this was the purpose for which the respondents were occupying these lands.

With respect to building No. 1, I am not to be taken as saying that I am satisfied that building No. 1 was built as a greenhouse and as a farm accessory building -- far from it -- there is some rather strong evidence to the contrary. Rather I say that a building permit for its construction having been obtained, it stands in a different position than the others. I have strong suspicions (adverse to the respondents) regarding the intended use by the respondents of this building when the permit was obtained, but suspicions are not enough. Building No. 1 has clearly been occupied and used as part of the club operation since shortly after it was constructed. It has a solid (not glass) roof -- quite inconsistent with a greenhouse roof.

I do not attribute bias, actual or any reasonable apprehension thereof to the applicant or his staff. The conclusion arrived at by the chief building official to bring this application was, I find, as a result of long and fair-minded investigation in pursuance of the duty cast upon him under this statute. I make this finding because of the lengthy argument presented to me by counsel for the respondents that the evidence of the applicant and his staff should be considered suspect for reasons of bias.

The following sections of the Building Code Act, 1974, have relevance:

1. In this Act,

. . . . .

(b) "building" means a structure occupying an area greater than 100 square feet consisting of a wall, roof and floor, or any one or more of them, or a structural system serving the function thereof, including all the works, fixtures and service systems appurtenant thereto, and includes such other structures as are designated in the regulations, but does not include a structure used directly in the extraction of ore from a mine;

. . . . .

(e) "construct" means to do anything in the erection, installation or extension or material alteration or repair of a building and includes the installation of a building unit fabricated or moved from elsewhere, and "construction" has a corresponding meaning;

. . . . .

3(1) The council of each municipality is responsible for the enforcement of this Act in the municipality.

(2) The council of each municipality shall appoint a chief building official and such inspectors as are necessary for the purposes of the enforcement of this Act in the areas in which the municipality has jurisdiction.

5(1) No person shall construct or demolish a building in a municipality unless a permit therefor has been issued by the chief official.

(2) The council of a municipality may pass by-laws and the Lieutenant Governor in Council may make regulations applicable in the area in which the municipality or Ontario, respectively, has jurisdiction for the enforcement of this Act,

(a) prescribing classes of permits for the purposes of subsection 1, including permits in respect of any stage of construction or demolition;

(b) providing for applications for permits and requiring the applications to be accompanied by such plans, specifications, documents and other information as is prescribed;

(c) requiring the payment of fees on applications for and issuance of permits and prescribing the amounts thereof;

(d) providing for the refunding of fees under such circumstances as are prescribed;

(e) prescribing the time within which notices required by the regulations must be given to the chief official or an inspector;

(f) prescribing forms respecting permits and applications for permits and providing for their use.

6(1) The chief official shall issue a permit except where,

(a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law; or

. . . . .

(3) An applicant for a permit shall inform the chief official of any change in any information contained in the application.

(4) Subject to section 14, the chief official may revoke a permit,

(a) where it was issued on mistaken or false information;

(b) where, after six months after its issuance, the construction or demolition in respect of which it was issued has not, in the opinion of the chief official, been seriously commenced; or

(c) where the construction or demolition of the building is, in the opinion of the chief official, substantially suspended or discontinued for a period of more than one year.

. . . . .

7. Subject to the regulations, no person shall occupy or use or permit to be occupied or used any building newly erected or installed until notice of the date of its completion is given to the chief official and,

(a) an inspection is made pursuant to such notice; or

(b) ten days have elapsed after service of the notice or after the date of completion whichever occurs last, and subject to compliance first being made with any order made by the inspector under section 8.

[Emphasis added.]

There is no dispute about the appointment of the applicant as Chief Building Inspector for Burlington or about the failure of the respondents to comply with the above provisions.

Reliance was placed by respondents upon s. 2.9.2 and s. 2.9.3 of the Building Code Regulations under the Building Code Act, 1974 as providing an exemption from the requirements of the Act. Ontario Regulation 925/75 made November 12, 1975, and filed November 24, 1975, provided:

2.9.2 A person who constructs a farm building for his own use is exempted from the requirements of the Act provided the building is not intended for residential occupancy.

2.9.3 All other farm buildings shall comply with the requirements for such buildings in Part 4.

"Residential occupancy" is defined as "the occupancy or use of a building or part thereof by persons for whom sleeping accommodation is provided but who are not harboured or detained to receive medical care or treatment or are not involuntarily detained".

In view of my previous findings, these sections cannot provide an exemption to the respondents from the requirement to obtain a building permit for any of the buildings Nos. 2 to 5 inclusive. Indeed, they attempted to get a permit for building No. 2 and when it was refused, proceeded in any event and in so doing ignored a stop-work order.

By O. Reg. 669/76, s. 1, made August 11, 1976, and filed August 17, 1976, the above sections of the Regulations were revoked and the following substituted:

> 2.9.2 A building intended for farming purposes and not intended for residential occupancy is exempt from compliance with the requirement of a permit for construction in a municipality where the council of the municipality has not passed a by-law prescribing a class of permits for the construction of such buildings.
>
> 2.9.3 Sentence 4.1.1.2.(1) applies to a building constructed on a farm for farming purposes and not intended for residential occupancy.

Again by reason of the prior findings, this amendment does not aid the respondents. Sentence 4.1.1.2.(1) provides for the design of farm buildings other than those used as a residence and requires that they conform to the Canadian Code for Farm Buildings, 1970 unless constructed by a person for his own use.

Burlington by by-law effective March 14, 1977, prescribed a class of permits for the construction of such buildings.

By O. Reg. 621/78, s. 4, made August 2, 1978, and filed August 10, 1978, the above s. 2.9.3 was repealed and the new s. 2.9.3 was inserted in its place. It reads:

> 2.9.3 A building to be constructed on a farm for farming purposes and not intended for residential purposes is exempt from the requirements of the building code except Sentence 4.1.1.2.(1).

Again by reason of the prior finding that at no time material to this application was the land a farm, or the buildings numbered two to five built for farming purposes, this does not aid the respondents.

Under the Building Code Act, 1974 and Regulations these respondents were required to obtain building permits for the construction of buildings numbered two, three, four and five and failed to do so unless saved from this requirement by the Parkway Belt Planning and Development Act, 1973.

The submission that the Parkway Belt Planning and Development Act, 1973 rendered the Building Code Act, 1974 inoperative in the area of the Parkway Belt, or provides for enforcement within that area, inconsistent with the continued authority of the Chief Building Official of Burlington, is not sound. Concurrent with the passage of the Parkway Belt Planning and Development Act, 1973 the Legislature passed the Niagara Escarpment Planning and Development Act, 1973 (Ont.), c. 52, and the Ontario Planning and Development Act, 1973 (Ont.), c. 51. The Building Code Act was passed in 1974. These are all land-use statutes. It is significant that Regulations [O. Reg. 453/75] under the Niagara Escarpment Planning and Development Act, 1973 expressly provide that:

> 3. ... zoning by-laws and Minister's Orders made under section 32 of The Planning Act, or any part thereof, set out in Schedule 1 cease to have effect in the area of development control.

By Sch. 1 that portion of Burlington within the Niagara Escarpment area is included. There is no such provision in the Parkway Belt Planning and Development Act, 1973.

The Parkway Belt Planning and Development Act, 1973 and the Building Code Act, 1974 are for different purposes. They may coexist each with the other. In the event any area of conflict arises between these two provincial statutes the Court would be required to attempt resolution of the conflict by determining legislative intention and paramountcy. No such conflict arises in the present application because the only area in which it could arise is relating to the use by the respondents of the land for "agricultural uses". These respondents never did use these lands for agricultural or farm purposes or uses in 1973 and thereafter but rather were occupying and using the land and buildings thereon for the business of operating the adult social club.

There is no provision in the Parkway Belt Planning and Development Act, 1973 that does away with the requirement for a building permit, nor do I find any support for the submission

that the Building Code Act, 1974 does not apply within the Parkway Belt area. Indeed, it is made clear that, absent conflict the municipal by-laws do coexist. See s. 5.1.3 of O.C. 2188/78 passed under Parkway Belt West Plan, and see ss. 9, 10 and 11 of the Ontario Planning and Development Act, 1973 which provides for a mechanism for resolving conflict between the plan and municipal by-laws relating to the defined area.

I am of the opinion that the Parkway Belt Planning and Development Act, 1973, does not have the effect of eliminating compliance with the Building Code Act, 1974 or of ousting the jurisdiction of the chief official to enforce compliance with the Building Code Act, 1974.

I find that the provisions of the Building Code Act, 1974 applied to the construction of each of these buildings and with respect to those numbered two, three, four and five were not complied with by the respondents.

I find the applicant is the proper person to bring this application arising out of such non-compliance. I have no hesitation in finding that the conduct of the respondents was deliberate and defiant, and lacking in any bona fide belief that a permit was not required. Their conduct cannot be regarded lightly.

The application is brought under s. 25 of the Building Code Act, 1974. It reads:

> 25(1) Where it appears to a chief official that any person does not comply with any provision of this Act, the regulations or an order made under this Act, notwithstanding the imposition of any penalty in respect of such non-compliance and in addition to any other rights he may have, the chief official may apply to a judge of the High Court for an order directing such person to comply with such provision, and upon the application, the judge may make such order or such other order as the judge thinks fit.
>
> (2) An appeal lies to the Supreme Court from an order made under subsection 1.

The jurisdiction of this Court to make the mandatory order requested re buildings numbered two, three, four and five is clear. It has been exercised on countless occasions. However, the respondents refer to the decision of my brother Southey in Hadley et al. v. Santos, heard September 20, 1977, but as yet unreported [summarized [1977] 2 A.C.W.S. 766], as supporting their position. In that case an application was brought by the Chief Building Official of Toronto and the corporation for an order requiring the repondent to cease alterations to premises without a permit and for the removal of all construction performed without a permit. Southey J. stated:

> Section 25(1) of the Building Code Act, 1974, does not expressly authorize me to make an order requiring a person who has proceeded with alterations without a permit to stop work on those alterations. Such an order would not, in my view, be an order directing such person to comply with a provision of the Act, the Regulations or an order made under the Act, although it might be the appropriate order to make in another case.

The respondents assert that this calls in question the right of the Court to make a demolition order since that would be a far more drastic order than a "stop-work-order". However, Southey J. goes on:

> As to the second relief claimed, namely, an order requiring the respondent to remove all construction performed without a permit and to restore the interior of the building to its original condition, there is no evidence before me that any of the alterations at 19 Tyndall Ave. were in breach of the Building Code Act, 1974, the Regulations or an order made under that Act, apart from the failure of the respondent to obtain a permit. If there were such evidence, then I could order that the respondent comply with the provisions of the Building Code Act, 1974, Regulations or an order made under the Act, by removing the work done in connection with the alterations or otherwise making the building comply with the Act and the Building Code.

These respondents did not comply with any of the provisions of the Building Code Act, 1974 regarding construction of

buildings numbered two, three, four and five.

In the present case I am satisfied that I am empowered to order demolition of buildings numbered two, three, four and five and this I now do. These buildings are to be demolished because the failure to obtain the required permits for their construction was deliberate and defiant and, I am satisfied, without any honest belief that such were not required. To permit these buildings to remain standing in these circumstances would be to reward the respondents' offensive conduct.

There will be an order directing that the respondents forthwith demolish buildings numbered two, three, four and five. To this end I direct that unless the respondents demolish and remove buildings numbered two, three, four and five from their lands at 1323 Snake Rd., Burlington, within 45 days or make arrangements satisfactory to the applicant and the municipality therefor, the applicant may then enter upon the lands and cause these buildings to be demolished at the expense of the respondents.

Costs of this application to be paid by the respondents to the applicant forthwith after taxation.

Application granted.

Hilton Canada Inc. v. Magil Construction Ltd.

Between
Hilton Canada Inc., plaintiff, and
Magil Construction Ltd., Magil Construction (Ontario) Ltd.,
Laurence L. Turner Consultants Inc., Laurence L. Turner,
George S. Burman and the Corporation of the City of
Mississauga, defendants, and
Hilton International and John Miolla, third parties

[1998] O.J. No. 3069
DRS 99-07657
Court File Nos. 91-CQ-7497 and 91-CQ-7497C

Ontario Court of Justice (General Division)
Toronto, Ontario
Chapnik J.
Heard: March 30-31 and April 2-3, 6-9, 14, 17, 20-21.
Judgment: July 28, 1998.

Counsel:
Leonard Ricchetti and Kathryn J. Manning, for the plaintiff and the third party, Hilton International.
J. Murray Davison, Q.C. and David G. Boghosian, for the defendant, the Corporation of the City of Mississauga.

CHAPNIK J.--

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[para1] What constitutes the duties and obligations of municipal building department officials in the issuance building permits and the inspection process in circumstances where the architectural drawings submitted bear the approval stamp and seal of a professional engineer? That forms the principal issue underlying this case.

[para2] In argument, Mr. Davison underlined the crucial importance of this issue to all municipalities in the operation of their building departments. Although I doubt it

is as major as he makes it out to be, the issue discussed may increasingly arise in the future due to the prevalence of more flexible and creative procedures in the building approval process.

[para3] The plaintiff, Hilton Canada Inc. (Hilton) is a subsidiary of Hilton International and carries on the business of operating hotels throughout Canada. As such, it owns and operates a hotel located on Dixon Road in the City of Mississauga (the City) known as the Toronto Airport Hilton hotel (the hotel).

[para4] In 1986, the City approved superstructure plans for the construction of a 154 unit, 9 storey addition to the hotel, based upon preliminary drawings which were structurally deficient. Indeed, the plans lacked items as essential as steel reinforcing bars to support the structure.

[para5] In the fall of 1990, serious structural deficiencies in the building became manifest. Investigators discovered shear stress at the interior columns measuring about 120% greater than that specified by the applicable building codes. Grave concerns of sudden shear failure causing instantaneous collapse of the building floor by floor "like a deck of cards" led to the closure of the addition in September, 1991 for repairs and remedial work.

[para6] The contractor, Magil Construction Ltd. and Magil Construction (Ontario) Ltd, declared bankruptcy. Laurence L. Turner (Turner), the engineer, resided in Quebec and was president of Laurence L. Consultants Inc. a company carrying on business in the province of Quebec and elsewhere, as structural engineers. George S. Burman (Burman) carried on business as an architect in the province of Ontario, at the relevant time. Both Turner and Burman were retained by Hilton in the construction of the building. Both have admitted negligence in its structural design and have settled the claims brought against them by the plaintiff. Accordingly, this case proceeded only against the Corporation of the City of Mississauga. An index to this decision is attached as Schedule "A".

THE ALLEGATIONS

[para7] It is alleged that the City contributed to the damage sustained by Hilton by reason of its actions in approving obviously deficient plans for construction and in confirming compliance of the final plans with applicable legislation. Damages are agreed to be in the sum of $5,531,142.71.

[para8] The specific allegations contained in the pleadings are as follows:

> 43. The concrete structural design deficiencies were caused or created by the defendants in breach of their contractual duties to Hilton and in breach of their duty of care to Hilton. Hilton states that the defendants Magil, Magil Ont. and Burman have breached their contractual obligations to Hilton and all defendants were negligent in the exercise of their duties and responsibilities on the Project, particulars of which are as follows:
>
> (D) as against the City of Mississauga:
>
> (i) it appointed a Chief Building Inspector who was incompetent to carry out the duties and
>
> responsibilities required of him by the Ontario Building Code Act and the Ontario Building Code;
>
> (ii) it employed incompetent servants and agents to carry out the duties of the building inspector and the department, as overseen by the Building Inspector or otherwise;
>
> (iii) the City, or its chief inspector, for whose actions the City is in law responsible, failed to review the architectural and concrete structural designs submitted by Magil, Magil Ont., Burman, Turner Consultants and Turner adequately or at all, to ensure that they

conformed with the provisions of the Ontario Building Code and the National Building Code and any other building legislation in effect at that time;

(iv) the City, or its Building Inspector, for whose actions the City is in law responsible, failed to ensure that the plans and designs submitted

by Magil, Magil Ont., Burman, Turner Consultants and Turner adequately conformed with the by-laws passed by the City or at all;

(v) the City or its Chief Inspector, for whose actions the City is in law responsible issued a permit for construction to Magil, Magil Ont., Burman, Turner Consultants and Turner, and approved the plans and designs submitted by Magil, Magil Ont., Burman, and Turner in total and wanton disregard of the provisions of the Ontario Building Code Act, the Ontario Building Code and National Building Code in effect from time to time and failed to advise Hilton of that fact;

(vi) The City breached its statutory duty to Hilton to ensure that the plans and designs submitted in respect of the Project conformed with the provisions of and the requirements of the Ontario Building Code and the National Building Code and the Ontario Building Code Act;

(vii) the City, or its Chief Inspector, or other inspectors, for whose actions the City is in law responsible, failed to make adequate or appropriate inspections or investigations of the progress of construction from time to time as required by statute, or at all, in breach of its statutory and other common law obligations to the plaintiff, to ensure that the work performed was satisfactory and met the provisions of the Ontario Building Code and the National Building Code in effect from time to time and failed to advise Hilton of that fact;

(viii) the City knew or should have known that its actions in approving the plans submitted by Magil, Magil Ont., Burman, Turner Consultants and Turner, in direct contravention of its duties to the plaintiff, both statutory and at common law, would result in significant loss and damage to Hilton and failed to advise Hilton of that fact.

[para9] In its statement of defence, the City denied any lack of duty or negligence on its part, stating:

4. This Defendant states that it did not owe a duty of care to the Plaintiff to review the plans and drawings which included the concrete structural design referred to in the Amended Statement of Claim as those plans and drawings had been prepared by and bore the approval stamp of an independent professional engineer.

5. This Defendant states that it carried out its duties and obligations in respect of issuing building permits for and inspecting the construction of the Second Tower referred to in the Amended Statement of Claim in a reasonable and proper manner, without any breach of duty, want of care or negligence on its part or on the part of anyone for whom it is in law responsible.

6. This Defendant states that if the Plaintiff sustained the damages and losses referred to in the Amended Statement of Claim, which is not admitted, such damages and losses were not caused or

contributed to by any negligence on the part of this Defendant or on the part of anyone for whom it is in law responsible.

7. This Defendant states that all proposed plans and

specifications for the construction of the Addition were reviewed in detail by professional engineers and architects in the Plaintiff's employ, or alternatively, in the employ of its sole owner and "directing mind", Hilton International Inc.

8. This Defendant states that if the Plaintiff sustained the damages referred to in the Amended Statement of Claim, which is not admitted, such damages were caused or contributed to by negligence on the part of professional engineers and architects in its employ or in the employ of Hilton International Inc. and the contractors and consultants retained by Hilton to design and construct the Addition, Magil Construction Ltd., Magil Construction (Ontario) Ltd., Laurence L. Turner Consultants, Laurence L. Turner, George Burman, William Hurst and John Miolla for all of whose negligence the Plaintiff is in law responsible.

THE RELEVANT LEGISLATION

[para10] The following statutory and regulatory schemes governed the construction of buildings in Ontario, at the relevant time:

1) the Building Code Act R.S.O. 1980, c. 51 (the Act);

2) the Ontario Building Code, revised O. Reg. 549/84 (the Code); and

3) Corporation of the City of Mississauga By-law 902-82 - The Building By-law, as amended (the By-law).

[para11] The relevant sections of those statutes are reproduced below:

The Building Code Act

3(1) The council of each municipality is responsible for the enforcement of this Act in the municipality.

(2) The council of each municipality shall appoint a chief building official and such inspectors as are necessary for the purposes of the enforcement of this Act in the areas in which the municipality has jurisdiction.

5(1) No person shall construct or demolish or cause to be constructed or demolished a building in a municipality unless a permit has been issued therefor by the chief official.

(2) The council of a municipality may pass by-laws and the Lieutenant Governor in Council may make regulations applicable in the area in which the municipality or Ontario, respectively, has jurisdiction for the enforcement of this Act,

(a) prescribing classes of permits for the purposes of subsection (1), including permits in respect of any stage of construction or demolition;

(b) providing for applications for permits and requiring the applications to be accompanied by such plans, specifications, documents and other information as is prescribed;

(c) requiring the payment of fees on applications for and issuance of permits and prescribing the amounts thereof;

(d) providing for the refunding of fees under such circumstances as are prescribed;

(e) prescribing the time within which notices required by the regulations must be given to the chief official or an inspector;

(f) prescribing forms respecting permits and applications for permits and providing for their use;

(g) requiring that a set of plans of buildings as constructed be filed with the chief official on

completion of the construction of buildings of such class as prescribed by the regulations.

6(1) The chief official shall issue a permit except where,

(a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law;

(c) the application therefor is incomplete or any fees due are unpaid.

(2) Drawings, plans and specifications accompanying applications for permits shall be made available to the Association of Professional Engineers of the Province of Ontario and the Ontario Association of Architects upon request for the purpose of determining whether the Professional Engineers Act or the Architects Act is being contravened.

(3) No person shall make a material change or cause a

material change to be made to a plan, specification, document or other information on the basis of which a permit was issued without notifying the chief official and filing details of such change with him for the purpose of obtaining his authorization.

(4) No person shall construct or cause to be constructed a building in a municipality except in accordance with the plans, specifications, documents and any other information on the basis of which a permit was issued or any changes thereto authorized by the chief official. 1978, c. 40, s. 3 (3).

8(1) Subject to section 11, an inspector may, for the purpose of inspecting a building or site in respect of which a permit is issued or an application for a permit is made, enter in or upon any land or premises at any time without a warrant.

(2) Where an inspector finds that any provision of this Act or the building code is being contravened, he may give to the person whom he believes to be the contravener an order in writing directing compliance

with such provision and may require the order to be carried out forthwith or within such time as he specifies.

11(1) For the purposes of an inspection under section 8 or 10, the inspector may,

(a) require the production of the drawings and specifications of a building or any part thereof, including any drawings prescribed by the regulations, for his inspection and may require information from any person concerning any matter related to a building or part thereof;

24(1) Every person who,

(c) contravenes any provision of this Act or the regulations or of any by-law passed under the authority of this Act,

... is guilty of an offence ...

The Building Code

PART 2 GENERAL REQUIREMENTS

SECTION 2.1 APPLICATION

Subsection 2.1.1. General

2.1.1.1. Parts 1 and 2 apply to all buildings

2.1.1.2.(1) Parts 3,4,5 and 6 apply to the design and construction of,

(b) all buildings exceeding 600 m2 in building area or exceeding 3 storeys in building height used for or intended for,

(I) Group C, residential occupancies,

2.1.1.3.(1) Part 9 applies to the design and construction of buildings of 3 storeys or less in building height, having a building area not exceeding 600 m2 and which are used or intended for

(a) Group C, residential occupancies;

SECTION 2.5 DESIGN GENERAL REVIEW

Subsection 2.5.1. Design

2.5.1.1.(1) Every building or part thereof shall be designed by an architect or professional engineer or a combination of both as described in Table 2.5.1.A. and this Article.

(2) Where a building or part thereof described in Table 2.5.1.A. is designed by an architect or a professional engineer or a combination of both as required by this Section, all plans, sketches, drawings, graphic representations, specifications and other documents that are prepared by an architect, professional engineer or both and that form the basis for the issuance of a building permit or any changes thereto authorized by the chief

official shall bear the signature and seal of the architect, professional engineer or both, as applicable.

TABLE 2.5.1.A. (4)
Forming Part of Sentence 2.5.1.1.(1)

Building Classification by Major Occupancy	Building Description	Design and General Review by:
Residential occupancy only	Every building that exceeds 3 storeys in building height	Architect and professional engineer (1)

Notes to Table 2.5.1.A.

(1) An architect shall provide services within the practice of architecture and a professional engineer shall provide services within the practice of professional engineering.

Subsection 2.5.2. General Review

2.5.2.1(1) Except as permitted in Sentence (2), a person who intends to construct or have constructed a building required to be designed by an Architect, Professional Engineer or both, shall ensure that an Architect, a Professional Engineer or both are retained to undertake the general review of the construction of the building in accordance with the performance standards of the Ontario Association of Architects or the Association of Professional Engineers of Ontario, as applicable, to determine whether the construction is in general conformity with the plans, sketches, drawings, graphic representations, specifications and other documents that are prepared by an Architect, Professional Engineer or both and that form the basis for the issuance of a building permit or any changes thereto authorized by the chief official.

2.5.2.2(1) Only an Architect may carry out or provide the general review of the construction of a building,

(a) that is constructed in accordance with a design prepared or provided by an Architect; or

Caselaw

(b) in relation to services that are provided by an Architect in connection with the design in accordance with which the building is constructed.

(2) Only a Professional Engineer may carry out or provide the general review of the construction of a building;

(a) that is constructed in accordance with a design prepared or provided by a professional engineer; or

(b) in relation to services that are provided by a professional engineer in connection with the design in accordance with which the building is constructed.

SECTION 2.9 NOTICE TO CHIEF OFFICIAL

2.9.1.1(1) Where the council of a municipality passes a by-law pursuant to Section 5.(2)(e) of the Act, the person to whom the permit has been issued shall notify the chief official,

(a) of the commencement of the construction of the building;

(b) of the readiness to construct the footings;

(c) of the substantial completion of the footings and foundations;

(e) where the building is within the scope of other parts of the code, of the substantial completion of,

(i) structural framing of each storey,

(ii) insulation and vapour barriers and,

(iii) roughing-in of heating, ventilation, air-conditioning and air-contaminant extraction equipment;

(f) of the substantial completion of all required fire separations and closures and all fire protection systems including standpipe, sprinkler, fire alarms and emergency lighting systems;

(g) of the substantial completion of interior finishes and heating, ventilating, air-conditioning and air-contaminant extraction equipment;

(h) of the substantial completion of exterior cladding, fire access routes and site grading; or

(i) of the completion and availability of drawings of the building as constructed.

Part 3 of the Code is the use and occupancy section which deals with such matters as size and occupancy requirements for fire safety, safety requirements within floor area, requirements for exits, service spaces, health requirements, signs and so on.

Part 4 of the Code is the structural design section which sets out structural loads and procedures, foundations, wood, masonry, concrete, steel and aluminium general and design requirements.

Part 9 of the Code outlines exterior and interior criteria for housing and small buildings.

By Law 902-82- The Building By-law

3. APPLICATION FOR PERMIT

(1) To obtain a permit the owner or his authorized agent shall file an application in writing by completing

the forms available at the offices of the Municipality.

(2) Except as otherwise permitted by the Chief Building Official, every application for construction and/or demolition shall:

(a) identify and describe in detail the work and occupancy to be covered by the permit for which application is made;

(c) be accompanied by plans and specifications as described in subsection 4;

(d) state the names, addressed and telephone numbers of the owner, architect, engineer or other designer and the prime contractor;

(e) be accompanied, where applicable, by a written acknowledgement of the owner, which shall be confirmed by the named architect or professional engineer, that the owner has retained the named architect or professional engineer to carry out the field review as described in Section 2.4 of the Building Code;

(f) be signed by the owner or his authorized agent, who shall certify the truth of the contents of the application.

(4) Sufficient detailed drawings, specifications, calculations, test reports and the documentation thereof shall be submitted with each application for a permit to enable the Chief Building Official to determine whether or not the proposed work will conform with the Building Code Act, the Building Code and other applicable law.

(9) The Chief Building Official may issue a permit to construct a portion or a component of a building.

8. CLASSES OF PERMITS

Permits to be issued by the Chief Building Official shall be divided into the following classes:

1. Complete Building
   For new building construction including additions and alterations to existing buildings (this permit includes associated drains, plumbing and mechanical works).
2. Foundation Component

3. Superstructure Component
7. Designated Structures
   Includes all structures designated under the Regulation set out in Section 2.1.2 of the Building Code Act

PERMIT FEE
CLASSES OF PERMITS

2. STRUCTURAL COMPONENT As per Number One above
   For the structural component of a building not including any plumbing, drains or mechanical work. (Includes structures as designated in the Regulations under the Building Code Act).

NOTE: The structural component of a large building may under certain circumstances be issued in two stages as follows:

(a) Foundation only As per Number One above
   For the structural components of a building at or below finished grade level, but not including any plumbing, drains, or mechanical work.

(b) Superstructure Only No Charge
   For the structural components of a building above finished grade level (for which a Foundation Permit was previously issued), but not including any plumbing, drains, or mechanical work.

THE EVIDENCE

(a) Personnel

[para12] The following chart outlines the organization of the Mississauga building department personnel as at January 1986:

[Ed. Note: See paper copy for personnel chart.]

(b) The Witnesses

[para13] Evidence was adduced on Hilton's behalf by William R. Webster and John Paul Stephenson. The plaintiff also relies upon evidence read into the record from the examinations for discovery of some of the defendants' witnesses. The City called evidence from the following witnesses: Lennox Dinzey, Manny Navabi, Gino Guatto, Tracey Preston and Robert Halsall. It also relies upon the evidence of Keith Cowan given de bene esse.

William R. Webster

[para14] Mr. Webster (Webster) holds an operating engineer's certificate and has taken several educational and specialist courses in technical services and administrative matters with respect to building construction. He joined Hilton International as assistant chief engineer in May 1971. From 1971 to 1985, he held various positions at Hilton in Vancouver, Montreal and New York. Working in the technical services department, he was responsible for ensuring that all proposed design development was suitable for Hilton's requirements in its layout, operating efficiency etc. Through the years, he has taught senior management officials at the Creative Development Institute run by Hilton International. Webster left the company in 1985 but was re-hired in August, 1988 as vice-president of technical services. Based in London, England, he has responsibility on a worldwide basis for the technical installation and refurbishment of 170 operating hotels located in 50 countries.

[para15] Although never directly employed by the plaintiff company, Webster became heavily involved with the project at hand in the fall of 1990. According to him, sometime prior to 1985, Hilton's guidelines for specifications, planning and details were provided to Burman. As a general rule, Hilton would normally rely upon both the technical consultants it employed for a particular construction project and the "local authority review". Although the latter aspect differed in various countries, his understanding of the scope of building review in Ontario was that the public authority would review the designs, provide comments, withhold or grant a permit and then conduct field inspections at specific stages of construction. His answers are, of course, binding on the plaintiff.

[para16] When asked to comment on a letter dated February 12, 1986 from Burman to M. Tadros, director of purchasing for the plaintiff, indicating the City's requirement to proceed "in a different way than if the building construction was fully defined when applying for the permit," Webster interpreted this as meaning

> ... there are permit level submission requirements which may precede what you would call full working drawing sets being completed, and certain full working drawing sets would not have been available at this point in time given the process that was being followed.

[para17] Minutes of site meeting #3 dated April 24, 1986 referred to lack of detail on drawings and the urgent need for drawings for the remainder of the structure. Webster viewed this as showing that the construction may not have been "keeping pace" with the progression of design development.

John Paul Stephenson

[para18] Mr. Stephenson obtained an engineering degree in Applied Science from the University of Toronto in 1963. After working with a consulting engineering firm, he established John Stephenson Consulting Ltd. in 1969 to provide structural engineering expertise in the structural design of buildings. As the principal partner in the firm, he has been responsible

over the years for the structural design of over 4000 construction projects including office, apartment and condominium buildings, industrial projects, schools, shopping centres, municipal buildings, nursing homes, hospitals and churches.

[para19] In the fall of 1990, Mr. Stephenson was contacted on Hilton's behalf, regarding a potential problem with the addition. At a number of locations in the hotel, non-bearing partitions had bowed laterally to the point of breaking. When he first visited the site on November 22, 1990 the initial 1986 architectural drawings were obtained. In an interim report dated December 13, 1990 Stephenson noted "numerous cracks of significant proportions" indicative of severe overstress and concluded that the amount of deflection calculated to occur was considerably in excess of that normally permitted or expected from "properly designed and built structures". On the basis of calculations and available information, it was found in January, 1991 that the entire structure above the third floor, did not meet building code requirements. The firm's preliminary conclusions were as follows:

> The slabs are grossly overstressed in shear and must be reinforced. We do not believe that the building is in
>
> imminent danger of collapse, but recommend that prompt action be taken to remedy the situation.
>
> The building appears to have adequate strength to resist wind loads but not earthquake loads as required by code.
>
> The columns do not satisfy the code with regard to fire rating.
>
> It is also our opinion that some of the structural components below the 3rd floor are of questionable strength and may not comply with the building codes.

[para20] A subsequent review of Turner's calculations disclosed several errors which confirmed the previous finding that the slabs did not meet code requirements for punching shear. Stephenson submitted further reports dated May 21, 1991, June 3, 1991, July 5, 1991 and February 27, 1992, detailing the structural design evaluation and the outline of potential remedial measures.

[para21] An additional investigation of the structural framing from foundation to and including the third floor found several elements to be overstressed but "no signs of extreme distress or of potential catastrophic failure." It was recommended that the overstressed elements be reinforced to satisfy the appropriate codes. The nature and extent of the remedial work undertaken is not in dispute.

[para22] In his testimony, Stephenson stated that the deflection and shear capacity problems were obvious to him from the outset upon a glance at the initial drawings filed as Exhibit 6. The deficiencies in the architectural drawings, including the final drawings (filed as Exhibit 7) became apparent upon a visual review of the drawings in a manner which he described as "virtually instantaneous".

Lennox Dinzey

[para23] Lennox Dinzey obtained a diploma in building technology at a College of Technology in London England; and has been employed in the field of architectural technology since 1956. From 1968-1969, he was senior architectural draftsman for the Toronto Transit Commission working on subway design and construction. In 1969, he was hired as senior plans examiner for the Borough of Etobicoke; and in 1972, he became the senior supervisor in the Structural Plan Examination department of the City. According to his curriculum vitae, his role as supervisor included the examination of plans submitted with applications pertaining to residential, commercial, industrial, public buildings and structures to ensure they were in conformity with the relevant building codes and committee of adjustments. He also consulted with architects, engineers and building contractors regarding the design of projects. Since 1987, he has been self-employed providing, in the main, supervision for construction projects.

[para24] It was Dinzey who reviewed the initial drawings submitted by Hilton and agreed to issue a superstructure permit on conditions and subject to final approval by Mr. Franks, the CBO. He also examined the final revised drawings in August 1986. When asked why he would approve drawings which were obviously deficient for construction purposes, he explained that:

1) Hilton's representatives were "pleading and begging" for a permit as they had deadlines to meet. They were permitted to start working in order to do them

   a favour and facilitate the construction.

2) although not unique this was a special situation - the engineer came in to certify he was in complete control, would be on site and monitor everything.

3) it was Dinzey's understanding that the drawings were in preparation at the time the permit was granted. They were working on them "day and night" and revised drawings for construction would be designed and kept on site.

4) immediately upon the granting of the initial permit, the City issued a withhold letter for non-compliance with the Code, requiring Hilton to submit several sets of final architectural and structural drawings prior to the issuance of a completion permit.

[para25] Dinzey also described the City's policy of conducting a cursory review of structural design aspects of construction. His markings on the initial drawings were consistent with this approach.

Manny Navabi

[para26] Manny Navabi obtained a Bachelor of Science degree in civil engineering from Queen's University in 1966; a Masters of Science degree in structural engineering from the University of Surrey, England in late 1970; and a doctorate in civil engineering from McMaster University in 1980.

[para27] He worked as a professional engineer in Ontario commencing in 1974; was employed by the City in 1976 and remained there until October, 1990. On June 23, 1986 he became the City's chief building official and director of the building department. Prior to that, he was director of inspections.

[para28] He described the departmental policy review in respect of proposed and ongoing construction projects. This entailed a detailed examination of architectural drawings for compliance under Part 3 of the Code and a cursory review of Part 4 structural requirements. He learned the parameters of this alleged "policy" on the job from the previous engineer; and they remained constant throughout his tenure.

[para29] Navabi described in detail the type of review undertaken for the different classes of building and the rationale for this. The department issues in the neighbourhood of 8000 - 9000 permits per year. The structural plans for large buildings are designed, stamped and signed by a professional engineer and detailed checking of the engineer's calculations fell outside the scope of what could have been achieved in the building and standards department. The nature of the cursory review of the structural drawings, therefore, consisted of a checking for the seal and signature of a professional engineer licensed to practice in Ontario, the correct loads (by means of a simple calculation in the Code) and a soil report, if indicated. Navabi denied ever having checked or redone a structural design calculation on drawings submitted by a professional engineer.

[para30] The Part 3 review consisted of a more detailed checking of use and occupancy matters directly affecting the safety of building occupants such as the sprinkler system, fire alarm, fire ratings and occupant loads. In doing so, the plans examiner would follow the descriptive and relatively simple calculations in the Code tables provided under Part 3. It was ascertained early on that both architects and engineers were often not entirely familiar with Code requirements whereas the municipal officials developed expertise in this

area.

[para31] With respect to Part 9 buildings less than 3 storeys in height and 6000 square feet, a more detailed plans examination was conducted in terms of an architectural and structural review since there was no requirement for design by an architect and engineer. It was therefore incumbent upon building officials to ensure design safety for purposes of public protection.

[para32] Regarding the Part 4 inspection review process, the City's mandate was to carry out inspections for compliance with the Code in accordance with the drawings which formed part of the permitted document. In the field, the inspector, as a practical matter, looks at the construction and monitors the progress of the work. If anything unusual is detected such as water in the footings, this is brought to the attention of the architect or engineer. The site drawings are reviewed to ensure general construction compatibility only.

[para33] In cross-examination, when specifically asked about the inadequate drawings, Navabi frankly indicated that due to their incompleteness, he would normally "get in touch" with the structural engineer or supervisor. He was unable to determine the correctness of the thickness of the slabs of cement etc. from the Exhibit 7 drawings without calculations and noted the column schedule showing the rebars on the completed set of structural drawings. In response to concerns raised by the plaintiff, it was his view that the notation of 10 instead of 9 storeys on the drawings was matter of degree leaving room for some confusion, and any problem with the footings and columns called for "on the job correction" by the superintendent as a matter of discretion.

[para34] In this case, the cursory review of the structural design matters would yield satisfactory results - the load requirements under the Code were proper, the soil report determined suitable bearing capacities and foundation arrangements, and the drawings bore the seal and signature of an Ontario architect and engineer. City officials marked use and occupancy requirements in red pencil on the drawings.

Gino Guatto

[para35] Mr. Guatto graduated from Ryerson Polytechnical Institute in architectural technology in 1968. He became a building inspector for the City in December, 1973. In the main, he inspected Part 9 buildings and took courses dealing with Part 3, the use and occupancy provisions of the Code. His stated responsibilities did not include the review of structural plans or the inspection of buildings for compliance with the Part 4 Code provisions. According to Guatto, the structural review aspects were left to the professional engineer. The City relied upon the engineer to make site visits and to certify that the construction was in conformity with the proposed design. At the same time, as building inspector, he would satisfy himself that the building was in general conformity with the architecturally permitted drawings.

[para36] Regarding this project, he first attended at the site on February 7, 1986, spoke to the contractor and requested progress reports on a floor to floor basis. Between February and May 27, 1987 when the final structural report was received from the engineer, he had completed 16 field inspection visits. The superintendent on site was cooperative, the concrete smoothly finished and the project was progressing in normal manner. Site review reports were prepared and certified by Turner during the course of construction. Guatto did not specifically review the structural drawings but took an active role in Part 3 matters such as inspecting fire separations for conformity with the drawings. When the interior partitions required a permit, he issued an order to comply with Act or Code on August 22, 1986. In November 1987, a like order was issued with respect to 3 deficient items.

[para37] Guatto's efforts were clearly concentrated on Part 3 use and occupancy matters and the structural review was left to the professional engineer in accordance with departmental policy which was unwritten but "learned on the job". He was unaware as to what other inspectors did in that regard.

Tracey Preston

[para38] Tracey Preston, executive director of the Ontario Building Officials Association, gave testimony regarding the criteria for the training and certification of building officials. The Association represents 2200 building officials in 700 municipalities throughout Ontario. It sets professional standards and provides courses on a voluntary basis, for base and advanced level of competency in the plans examiner and building inspection areas. The courses in 1986 concerned Part 9 and Part 3 buildings, a legal process and responsibilities course. There was no Part 4 component then, nor is there one now; that is, there are no courses for building officials regarding structural design matters.

Robert Halsall

[para39] Robert Halsall is president and chairman of the board of Robert Halsall and Associates Limited, Consulting Engineers, a company which he founded in 1956. He received a Bachelor of Science degree in civil engineering from the University of Glasgow, Scotland in 1947. His curriculum vitae displays an impressive array of professional activities and affiliations. As senior principal of the firm, he has been involved in the design and investigation of numerous projects under the categories: apartments, condominiums and non-profit housing; commercial and retail projects; communications and computer facilities; health care facilities; laboratories and research facilities; libraries; museums, galleries, pavilions; office buildings; parking facilities; recreation and sports facilities; schools; theatre-related projects; and university and college facilities.

[para40] Halsall has appeared as an expert witness in court and alternative dispute resolution matters; and has conducted historical building assessments and restorations. His firm was retained by the City in September 1991 to investigate this matter in conjunction with the owner's expert, John Stephenson Consultants Ltd. In a report dated September 20, 1991 Halsall found shear stresses in the typical floor slabs of the building which were far beyond those allowable by current or recent codes, and which appeared to be "dangerously close to the stresses which may be expected to cause sudden failure." At the same time he noted that:

> The analysis of shear stresses in concrete flat slabs is very complex, and there is only a limited amount of experimental data available. No absolute answers are available and there is quite a wide spread between the results of different researchers.

Due to the fact that "work on punching shear stress in slabs is a rather esoteric speciality," he suggested the retention of Dr. Sydney Simmonds, consulting structural engineer at the University of Edmonton, for a second opinion. Further calculations confirmed the finding that shear stresses far exceeded the allowable stresses defined by the Code. In a report dated September 30, 1991 Mr. Halsall stated:

> Knowing that the code has a safety factor of 2.0 to 2.2 against shear failure the deviation of 97 to 130%, is dangerous and very close to the expected punching shear failure of the flat plate. This type of failure is sudden and progressive.

Dr. Simmonds also concluded that "if failure occurred it would be likely a sudden shear failure, without the warning given by further extreme deflection." In a final report dated October 15, 1991 Halsall assessed several areas of construction, the main finding being that the floor slabs were "severely overstressed at the junction between the slabs and the typical interior columns" necessitating immediate remedial action.

[para41] When Halsall was retained in September 1991, he was provided with the final set of drawings (Exhibit 7). At trial, upon a review of the earlier plans (Exhibit 6), he found them to be patently incomplete and usable only for the commencement of excavation. At the same time, he consistently expressed the opinion that the building was constructed substantially in accordance with the final plans (Exhibit 7); moreover, in the configuration of concrete flat slabs, columns and beams, both plans were similar. Finally, the structural deficiencies were not apparent by a visual review of either

sets of plans or the work under construction. The uncovering of the structural design deficiencies required a complex set of calculations.

Keith Alexander Cowan

[para42] Mr. Cowan gave his evidence de bene esse on July 18, 1997. He was the City's chief building official from the 1970s to 1983, when Alex Franks now deceased, took over that position. Navabi later became the CBO in June, 1986.

[para43] Both parties rely upon Cowan's evidence, Mr. Ricchetti because he stated that it would be "impossible to

issue a permit for a concrete building that clearly requires reinforcing"; and Mr. Davison to confirm the City's policy not to review Part 4 buildings except for fire safety and other related matters. Cowan explained the underlying rationale for this in the following exchange:

> Q. And you would have considered this to be a fairly significant decision on your part and Mr. Franks part?
>
> A. Which, which decision?
>
> Q. The decision not to review the part four buildings except for fire matters?
>
> A. It was not a conscious decision to not to do that at the beginning. It was simply impractical to, to require this -- as I say -- the, the, the structural matters like this to review it over and over again would pretty well bring the department to a stand still.
>
> Q. Mhmhmm.
>
> A. And so that is the reason why, why these -- why there is such a thing as certification, why there is such a thing as a, as a, as a certified professional engineer. That's why we have professional engineers.
>
> Q. This ...
>
> A. And we don't very often have certified professional engineers reviewing the work of other certified professional engineers. It becomes, in my mind, a little bit ludicrous as you might, as you might hire a third certified engineer to check the one that was done before. There seems to be no end. If, if the person is, is, is qualified it has to stop somewhere.

His evidence in that regard was consistent with that of the other witnesses from the City who gave testimony at trial.

(c) Findings of Credibility

[para44] This is not a case that hinges upon the credibility of witnesses. Many of the facts are not in dispute; some of the evidence is subject to different interpretations. All of the witnesses called on behalf of both parties gave their testimony in a straightforward and genuine manner and with remarkable consistency given the depth of the cross-examinations.

[para45] One important point of contention alluded to above arises from the testimony of the experts, Stephenson and Halsall, and centres upon their respective ability to ascertain problems with the structural design upon a visual review of the plans. Stephenson stated that he and anyone with a trained eye would be able to foresee potential problems based upon the deflections in the slabs, their thickness and span, and the capacity of the concrete slabs to transfer load to the columns. This is independent of the undisputed fact that the initial plans lacked steel reinforcing bars and patently could not be utilized for the actual construction.

[para46] On the other hand, Halsall was adamant and consistent in his testimony, unshaken on cross-examination, that structural deficiencies were not apparent even to him,

upon a visual review of the drawings; and that they would not have been foreseen by any competent structural engineer reviewing either the exhibit 6 or exhibit 7 drawings.

[para47] Based upon the totality of the evidence, I find the assessment of Halsall more closely reflects the reality of the matter. Notwithstanding the provision of the initial drawings to Stephenson's firm in November 1990, no mention of obvious structural defects in the plans was made in the site meeting, field review or other reports. On the contrary, the minutes of the January 16, 1991 meeting under the heading "structural discrepancies" state that "no real conclusions could be made immediately". It was subsequently concluded that the structure was not in imminent danger of collapse. During site visits, the crack pattern on the top surface of the floor slabs was examined and photographed; tests were conducted on concrete floor slabs samples. It took approximately 250 hours and six months of work, consisting mainly of calculations made by Stephenson and four other engineers, prior to the submission of a "tentative" report. Independent experts were contacted to confirm results. The City was not notified of the problem until about 10 months after the Stephenson firm was retained to review the matter.

[para48] Even with the Stephenson report in hand, it took Halsall's firm about 175 hours to perform a structural design review. The "esoteric nature" and complexity of the calculations, evident from the testimony and documentation provided, speak for themselves.

[para49] In the result, I prefer the evidence of Halsall over that of Stephenson with respect to this aspect of the case; and find that the structural deficiencies in the plans were not capable of detection upon a visual review of either exhibit 6 or exhibit 7.

(d) History Of Project

[para50] The following provides a brief review of the stages and conditions under which the construction progressed, categorized under these headings:

(i) The January 1986 plans (Exhibit 6)
(ii) Inspections and General Review
(iii) The September 1986 plans (Exhibit 7)
(iv) Fast-Track method

(v) City policy
(vi) The Engineer's seal
(vii) Remedial work

(i) The January 1986 Plans (Exhibit 6)

[para51] Hilton began preparation for the design and construction of the addition in 1984. It retained the services of an architect, Burman, for this purpose. Commencing in September 1985, meetings were held and correspondence exchanged between the parties as to the City's requirements. For example, the City required the drawings to be stamped and sealed by an engineer licensed to practice in Ontario whereas Hilton's engineer, Turner, held a Quebec licence only. By letter dated November 1, 1985 an application for a building permit was submitted to the City. However, the City was not inclined to grant the permit without further information. Indeed, a meeting held in January 1986 with City officials was described as disastrous in an inter-office memorandum at Hilton which also warned:

> The City of Mississauga will not provide any type of building, excavation, construction or foundation permits
>
> based on preliminary drawings ... All drawings and calculations must bear the seal of a professional engineer.

Due to budgetary constraints, the building proposal was changed to a concrete building as opposed to a steel structure. In late January, Burman submitted six drawings prepared by Turner, each bearing the professional seal of John Miolla (Miolla), a professional engineer holding a licence to practice in Ontario. On January 21, 1986 Dinzey reviewed the drawings, making notations and listing requirements thereon. On February 4, 1986 the CBO issued building permit #68047 for

the construction of the building "to roof only". Knowing the plans were deficient for construction purposes, Dinzey required Hilton to submit a completion permit application at the same time the initial permit was issued. As noted above, the superstructure permit was issued on condition that Hilton's engineer monitor and take responsibility for the project; and on the understanding that revised drawings would be prepared, kept on site and the construction certified by the engineer as it progressed.

[para52] The total fee for the permit and the plan

examination review was $60,820.00.

(ii) Inspections and General Review

[para53] At least fifty on-site inspections were rendered by building department officials in respect of the project between February and August, 1986. About sixteen inspections took place during the period in which the superstructure shell was constructed. When Guatto, the inspector, first attended the site on February 7, 1986 he requested progress reports on a floor to floor basis. Nevertheless, structural review matters were left to the engineer. Turner submitted his final report on May 27, 1987 confirming that the structure had been built "in accordance with our plans and specifications"; and further, that the approved drawings and revisions conformed to "all applicable codes and requirements for this building type".

[para54] The final drawings were approved by the fire marshal on June 12, 1987. After minor deficiencies were rectified, Burman again provided written confirmation that the project was constructed in general conformity with the drawings, specifications and other applicable documents submitted to the City.

(iii) The September 1986 Plans (Exhibit 7)

[para55] Pursuant to the application for the completion of building permit first made on February 5 , 1986 Hilton submitted, on July 31, 1986 seventeen revised drawings prepared and sealed by Turner. The City's approval was delayed due to an order to comply with respect to the interior partitions. When this was rectified, the City approved Hilton's application for the completion of the addition and issued building permit #73564 on September 11, 1986.

(iv) Fast-Track Method

[para56] It was Dinzey's evidence that the procedure adopted whereby a building permit is issued on condition that revised drawings are prepared and kept on site, was somewhat unusual although not unheard of or improper. This was confirmed by both Stephenson and Halsall who described such a procedure as being not particularly unusual. The underlying rationale for proceeding in such a manner is found in the following description by Halsall:

> The concept is to allow construction to go more quickly than if you are following the old or traditional method of completing documents ... you appoint a contractor by whatever method ... you produce drawings to the contractors as much ahead of time as you can but including time to build without waiting for the drawings to be finally completed. It's a very common process these days.

When asked directly in cross-examination whether it surprised him that a structural engineer would be allowed to design the building on a level by level basis as it was going up, Halsall responded, "we have done that often".

(v) City Policy

[para57] The evidence demonstrated a long-standing policy of the City whereby city officials provided a cursory examination only with respect to Part 4 Code structural aspects of a proposed building; and concentrated their efforts and energy on Part 3 aspects, being the use and occupancy provisions. The plaintiff questioned the propriety and efficacy of this policy decision. The policy itself was not reduced to writing nor was it discussed in detail at meetings or through correspondence between the various departmental

officials.

[para58] According to Dinzey, the policy was in force when he was first hired by the City in 1972. It was "standard policy" passed on by the chief and other officials through the years.

[para59] The cursory review of structural aspects consisted of making sure the floor loads were considered, the drawings coincided with the architectural drawings in dimension, and they were stamped and sealed by a professional engineer. The inspection aspects involved noticing things "out of the ordinary" such as mud covering the reinforcing bars. The rationale underlying this approach was described in detail by Dinzey who explained that engineers would be "quite annoyed if changes were made to their drawings". Further, it would be uneconomical to hire a large staff to review calculations and have them sitting around in quiet years doing nothing. Cowan scoffed at the idea of having "certified professional engineers reviewing the work of other certified professional engineers".

[para60] On the other hand, the Part 3 analysis required the seal of an architect only and the authorities "noticed that architects made a lot of errors". Accordingly, to save embarrassment and loss of revenue for owner/builders, they checked Part 3 matters in a more comprehensive manner. A more detailed review was reserved for Part 9 small buildings, as well, since the services of an architect or engineer are not always available or required and the structural calculations, far less complex.

(vi) The Engineer's Seal

[para61] It is generally agreed that the stamp and seal of an engineer communicates to the building official and to the public that the contents of the document sealed reflect professional knowledge and care; and that applicable statutes, standards, codes and regulations have been followed. See article by Eric W. Smythe, manager of Discipline and Complaints, Association of Professional Engineers of Ontario, filed as Exhibit 23. McLachlin et al. in The Canadian Law of Architecture and Engineering (Butterworths, 2d ed. 1994)

further defines these expectations as follows, at p. 106:

> While the architect or engineer is expected to have general knowledge of relevant legislation, by-laws and regulations, in complex legal matters such as title and zoning legal advisers employed by the owner may lighten the responsibility of the architect or engineer. However, unless the contract between the architect or engineer and the owner expressly relieves the architect or engineer of this responsibility, his legal duty to take reasonable care that the structure complies with all relevant by-laws and regulations continues.

[para62] The following exchange in Stephenson's cross-examination, exemplifies the common meaning attached to the engineer's seal:

> Q. So that the seal of a member of your profession is something that is pretty sacred to you as professionals?
> A. Yes, it is.
> Q. And it isn't something that you use lightly, is it?
> A. That's correct.
>
> Q. And when you put it on something, the buck stops there, doesn't it? I mean you are accepting responsibility for whatever you've applied your seal and signature to?
> A. Yes.

According to the relevant codes and guidelines for engineers, preliminary documents, drawings, specifications and reports should not be signed or sealed but should be marked "preliminary" and/or "not for construction".

(vii) Remedial Work

[para63] As noted previously, in the fall of 1990, Hilton retained Stephenson to investigate and document any structural deficiencies in the building. Upon being advised of

Stephenson's conclusions in September 1991, the City asked Halsall to look into the matter.

[para64] As a result of the investigations, the City issued a building permit for the proposed remedial work; and pursuant to an order to remedy an unsafe building, the hotel addition was shut down from September 27, 1991 to January 13, 1992. There is no issue as to the type or sufficiency of the remedial work undertaken.

FINDINGS OF FACT

[para65] Based on the evidence, I make the following findings of fact:

1. It is undisputed that the architect's original drawings formed an inadequate basis for the superstructure permit issued by the City in February, 1986. The incomplete drawings lacked certain basic elements of construction such as steel reinforcing bars and proper footings. Those plans were admittedly deficient and inadequate for construction purposes.

2. The permit was granted on certain conditions, upon the pleadings of Hilton representatives and their undertaking to have an engineer monitor the situation on site, prepare updated drawings and make immediate application for a completion permit based on the revised drawings. Accordingly, a rather unusual or "different" procedure was agreed to by the City in which the building designs were to be prepared and certified as construction progressed.

3. Updated drawings were prepared by Turner, as indicated by the signed and dated revisions noted in Exhibit 7. The building was constructed structurally, substantially in accordance with the Exhibit 7 plans. Those plans, which contained the seal and signature of the architect and engineer, were approved by the City in September, 1986 after completion of the superstructure.

4. Both sets of plans were substantially similar in the configuration of a system of slabs, columns and beams.

5. The structural deficiencies which subsequently became manifest were not readily apparent upon the face of the drawings.

6. The general review undertaken by the engineer was accompanied by certificates rendered on a floor by floor basis. Although the building inspection department conducted a comprehensive inspection of the construction as it progressed, its review concentrated on Part 3 use and occupancy matters in accordance with departmental policy. The building inspector did not review the updated or other structural plans and drawings. The review process did not involve the more usual procedure of ensuring conformity with the plans which formed the basis for the issuance of the building permit.

7. In the fall of 1990 due to bowing and cracking of partitions, an investigation was conducted into the structural aspects of the building.

8. The hotel was closed by order of the City for remedial work for a period of time between September 1991 and January 1992 as a direct result of the conclusions reached by the investigators retained by Hilton and, independently, by the City.

LEGAL ANALYSIS

[para66] The first legal consideration is whether the City owed a duty of care to the plaintiff to ensure compliance of the structural plans with applicable legislation prior to the issuance of the permit. It is well settled law that public authorities are under a duty of care and can be liable for negligence in failing to use reasonable care in the examination and approval of building plans. The scope of the

duty was formulated by Lord Wilberforce in Anns v. Merton London Borough Council, [1978] A.C. 728 (H.L.) and adopted in Kamloops (City) v. Nielsen (1984), 10 D.L.R. (4th) 641 (S.C.C.). A public authority operating under statutory powers, owes a duty of care to all who it is reasonable to conclude might be injured by the negligent exercise of those powers. The question must be approached in two stages:

(1) is there a sufficiently close relationship between the parties (the local authority and the person who has suffered the damage) so that, in the reasonable contemplation of the authority, carelessness on its part may likely cause damage to that person? If so,

(2) are there any considerations which ought to negative, reduce or limit (a) the scope of the duty,

(b) the class of persons to whom it is owed or (c) the damages to which a breach of it may give rise?

[para67] The test of proximity is easily met in these circumstances. No construction can take place without the proper permits; and the approval procedure is accompanied by a rather elaborate fee and permit allocation scheme as well as a follow-up general review and inspection process. Certainly, a sufficiently close relationship existed between the parties so that in the reasonable contemplation of City officials, carelessness on their part might cause damage to the plaintiff. The functions carried out by the City are operational in nature and hence, capable of grounding a legal duty of care.

[para68] The second branch of the test demands an inquiry as to whether the circumstances lead to the reasonable conclusion that Hilton, by its actions, excluded itself from the scope of the municipality's duty of care. As noted in the Anns case, a public authority owes no duty of care to a negligent building owner who is the source of his own loss. Not only was Hilton a party to the atypical arrangement instituted at its instance, but the evidence clearly disclosed Hilton's complicity and knowledge of the rather unusual fast-track arrangement. Indeed, on February 12, 1986 Burman advised Hilton in writing that the plans would be re-submitted for the completion of building permit once the revisions were completed. Webster understood the arrangement to mean that work would continue on the design of working drawings during the period of construction. It is evident, therefore, that Hilton was well aware of the fact that wholly deficient plans for construction purposes underscored the issuance of the initial building permit. Does this remove Hilton from the scope of the City's duty of care?

[para69] It is undisputed that Burman had authority to bind the owners, his principals, to the agreement. See McLachlin et al., The Canadian Law of Architecture and Engineering, supra at pp. 91-92. That being said, the jurisprudence in this area is fact-driven and, in my view, inconclusive for our purposes. Hilton relies upon the holding of the Supreme Court of Canada in Rothfield v. Manolakos (1989), 63 D.L.R. (4th) 449. In that case, a permit was issued for the construction of a retaining wall in circumstances where, despite the by-law requirement for an inspection prior to the pouring of concrete, no such inspection had taken place. Under the by-law, it was the responsibility of the owner to request an inspection. The issue was, therefore, whether the failure to do so precluded the owner/builder from recovery against the city. The majority held that, notwithstanding the lack of notice, the owners could not be viewed as the source of their own loss and hence, liability was apportioned between the owners and the city.

[para70] A contrary conclusion was reached in the more recent cases of Ingles v. Tutkaluk Construction Ltd. and the City of Toronto (1998) 158 D.L.R. (4th) 147 and in Hospitality Investments Ltd. v. Lord (Everett) Building Construction Ltd., [1996] 3 S.C.R. 605 (S.C.C.).

[para71] The judge at first instance in Ingles made a finding of contributory negligence against the city which was reversed on appeal. The owner had allowed the contractor to proceed without a permit in order to save time, knowing that a building permit was required and that once the work was commenced, it would be difficult, if not impossible, to carry

out an inspection. In Hospitality Investments, the owner ignored advice to obtain professional assistance and misled the municipality regarding the retention of an architect's services. In both cases, the appeal courts held that the owner, by its conduct, had excluded himself from the municipality's duty of care.

[para72] Other cases have propelled a similar result. In Acrecrest Ltd. v. W.S. Hattrell & Partners, [1983] 1 All. E.R. 17 (C.A.), the owner flouted the applicable regulations and directives of the building inspector; and in McCrea v. White Rock, [1975] 2 W.W.R. 593, the owner unreasonably relied upon the city to take the initiative in inspecting the progress of construction. In those cases too, the courts refused compensation to plaintiffs due to a course of conduct which was incompatible with compensatory relief.

[para73] In the case at bar, there was no deception, misrepresentation or improper conduct on the part of Hilton and no statutory obligation placed upon it to do anything which it failed to do, such as occurred in Rothfield. In the latter decision, however, the city had failed to notify the owners of its intention to check on the design deficiencies as construction progressed. As reasoned by Wilson J. (dissenting in part on other grounds) at p. 451:

> Thus, it seems to me perfectly reasonable for the owners, knowing the permit to proceed had been issued on the basis of the design submitted by the contractors, to assume that the design had the city's approval and that they could rely on the contractors to give whatever notices were required to be given on their, the owners', behalf.

In the instant case, the owners were well aware of deficiencies in the plans. There was no issue of proper notification. The permit was granted upon the pleadings of the owner's representative, to its knowledge. Undoubtedly, Hilton was then, in large measure, the author of its own misfortune. Yet, the candle burns both ways. The City has (and had at the time) broad power to issue permits in stages, authorize construction as it progressed, revoke a permit, order the correction of improper work or indeed, the cessation of work. The fact that city officials felt sorry for Burman or were trying to accommodate and assist Hilton in saving time and money does not, in my view, absolve the City of its duty to take reasonable care to ensure the project was built in accordance with the applicable standards. In the circumstances of this case, I am unable to find that the owner's actions took them out of the scope of that duty or that they were the sole authors of their own loss. They were still entitled to rely upon the due exercise of care owed by the public authority in the construction of buildings.

[para74] Now that I have found a prima facie duty of care, I must determine whether its imposition is excluded either by statute or by reason of the fact that the decision taken was one of policy.

[para75] The proper approach to these issues was set out by Cory J. in Just v. British Columbia (1989), 64 D.L.R. (4th) 689 (S.C.C.), a case dealing with the maintenance of highways, at p. 702:

> Even with the duty of care established, it is necessary to explore two aspects in order to determine whether liability may be imposed upon the respondent. First, the applicable legislation must be reviewed to see if it imposes any obligation upon the respondent to maintain its highways or alternatively if it provides an exemption from liability for failure to so maintain them.
>
> Secondly, it must be determined whether the province is exempted from liability on the grounds that the system of inspections, including their quantity and quality, constituted a "policy" decision of a government agency and was thus exempt from liability.

With regard to the first aspect, the relevant statutory provisions do not exempt the City from its duty to act reasonably in the granting of permits or inspecting construction of buildings. Even considering the provisions which impose the requirement of an architect and engineer's seal on drawings, the City's obligations and responsibilities

under the relevant legislation, remain intact. The fee structure which in this case required a payment of over $60,000 to the City, underscores this.

[para76] It is the second branch of the test, the exemption from liability due to a policy decision of a governmental agency, which provides cause for reflection in the circumstances of this case. The jurisprudence consistently holds that a true policy decision undertaken by a public authority constitutes a valid basis for exclusion. The rationale for this is found in Fridman, The Law of Torts in Canada (1989), Vol. 1 pp. 241-245 where a review of the case law precipitated this conclusion at pp. 244-5:

> What emerges from such decisions is that the courts have accepted that it is not their function to sit in judgment upon the way in which public bodies carry out their statutory duties or fail to fulfil them unless there is (i) bad faith, i.e., malice, the deliberate intention to cause harm; or (ii) negligence in the way in which a duty has been exercised. ... If what is involved is the way in which the body in question has arrived at a policy or planning decision, the courts will not intervene on behalf of anyone who has incurred loss as a consequence. The only resort of such a party is the ballot box. The tort of negligence is not concerned with the making of policy in governmental or quasi-governmental contexts, only with the way in which, and methods by which such policy is enforced or carried out by the particular body in question.
>
> There is a valid reason for this. It would be invidious for courts to have to decide whether a particular policy settled upon by such a body was legitimate or reasonable.
>
> Nor are the courts suited to make such decisions, which do not turn on issues of fact relating to foresight of harm and causation but involve the balancing of various social and other interests. The function of courts is to adjudicate disputes about liability for conduct which has been declared unreasonable or improper, not to decide as between disputing contenders for various aims to be achieved by governmental or similar bodies or organizations which view should prevail. In a democratic society, it is for the public to make such decisions by the exercise of votes at appropriate elections, not for a band of appointed judges to make these decisions for the public. Only if the body in question exceeds its legitimate powers under statute or at common law, or is negligent in the way those powers are exercised, can and should the courts be invoked to provide redress for an injured party. (Emphasis added)

[para77] It was the testimony of the witnesses called on the City's behalf and particularly, Dinzey, Navabi, Guatto and Cowan that there has been a long-standing policy within the City's building department to issue building permits and conduct inspections with regard to structural design matters, in a cursory manner only. More specifically, in respect of Part 4 buildings, the City routinely and consistently conducts a generalized review of structural design matters along with a more detailed review of Part 3 use and occupancy aspects of construction. Does this constitute a true policy decision?

[para78] The cases define and summarize the criteria underlying the answer to that question as follows:

> True policy decisions involve social, political and economic factors. In such decisions, the authority attempts to strike a balance between efficiency and thrift, in the context of planning and predetermining the boundaries of its undertakings and of their actual performance. True policy decisions will usually be dictated by financial, economic, social and political factors or constraints.

See for example, Laurentide Motels Ltd. v. Beauport (City), [1989] 1 S.C.R. 705; Barratt v. North Vancouver (District), [1980] 2 S.C.R. 418; Brown v. British Columbia, (1994), 112 D.L.R. (4th) 1 (S.C.C.) and Just v. British Columbia, supra.

[para79] A review of the evidence in this case demonstrates that the decision to conduct a cursory review of structural plans was in place prior to 1972 and passed along

by example and word of mouth within the building department, since that time. Moreover, it was based upon a consideration of social, political and/or economic factors. This was evident from the testimony of experienced public officials called to give evidence on behalf of the City. City officials relied upon the stamp and seal of a certified professional engineer with respect to the structural design aspects of proposed building plans. To do otherwise would be extremely costly and time consuming and, as noted by Cowan, "would pretty well bring the department to a stand still." Navabi, in his evidence, explained the rationale underlying the cursory structural review and the concentration of departmental time and resources upon matters more directly related to public safety. Given that the building department processes approximately 8000-9000 permit applications per year, this does not appear to be unreasonable.

[para80] The plaintiff questions the enforceability of the policy on the basis of vagueness and alleged inconsistency with the applicable legislation. At first glance, such a policy may appear to be unclear or contradictory in its purpose or application. That is because it is unwritten and passed on in an informal manner. Indeed, Guatto was unsure of exactly what other building inspectors did with respect to it.

[para81] Taken as a whole, however, the evidence given with respect to the policy itself and its implementation was remarkably clear and inherently consistent. The rationale for the policy was described in crucial detail in different words and by using different examples by different witnesses who played different roles at different times in the process. Yet, they all told the same story. There was nothing unclear or undefinable about it. The policy emanated as a practical matter for cogent and compelling reasons involving a balancing of various interests. Factors related to personnel and finance, including the effect of delays, budgetary and staffing issues were duly considered. Once formulated, the policy was applied uniformly and it has not changed over time.

[para82] In any event, since the decision to conduct only a cursory review of structural design matters was one of true policy, it cannot be reviewed on a common law standard of reasonableness. Clearly, it was bona fide and not so irrational as to constitute an improper exercise of governmental discretion. It is, therefore, immune from the application of private law standards of tort liability.

[para83] Further, I can find no negligence in the carrying out of the policy. The detailed on site inspections by Guatto were carried out in a conscientious and comprehensive manner, in accordance with the City's mandate. City officials placed reasonable reliance on the engineer's seal and the performance certificates issued during construction. The numerous revisions marked on Exhibit 7 appeared, on their face, to comply with applicable code and legislative provisions. The specific provision in the By-law that

> ... except as otherwise permitted by the Chief Building Official, every application shall identify and describe in detail the work and occupancy to be covered by the permit. (Emphasis added)

inferentially gives the CBO permission to proceed as he did.

[para84] Undoubtedly, it would have been preferable for the City to have approved the drawings on a staged or incremental basis. In the circumstances, however, the premature approval of the initial plans did not in any way cause or contribute to the plaintiff's damages. The only practical consequence of the City proceeding as it did enured to the benefit of the plaintiff.

[para85] As the plaintiff relied heavily upon the findings in Rothfield, I will briefly refer to it. In discussing the import of the city's policy in that case, Mr. Justice La Forest articulated the applicable standard of care, as follows at p. 455:

> It must be borne in mind that a municipality, once it has made the policy decision to inspect construction, is not bound to discover every latent defect in a given project, nor every derogation from applicable standards. That would be to hold the municipality to an impossible

standard.

Rather a municipality is only called upon to show reasonable care in the exercise of its powers of inspection. Accordingly, a municipality, whether the duty of care is owed to an owner builder or a third party, will only incur liability for such defects as it could reasonably be expected to have detected and to have ordered remedied. This is implicit in the decision of this court in Kamloops (City) v. Nielsen.

The owner/builders and third parties were, nevertheless, held in that case to be entitled to place reasonable reliance on the municipality to ensure that construction did not pose a threat to their health and safety; and the court apportioned liability accordingly. My holding otherwise in these factual circumstances is not at all inconsistent with that finding. In this case, the departmental policy, the presence of the engineer's seal, the negotiated fast-track arrangement and the latent nature of the deficiencies constitute major distinguishing factors.

[para86] The court in Rothfield specifically found at p. 451 that had the owner sent the required notices to the city, the city would have made the necessary inspections, "seen the defects in construction," and ensured they were rectified. Moreover, when the inspector did attend at the site, he was confronted with a situation in which "it must have been at once clear to him that the retaining wall was potentially substandard." The court, therefore, found that due exercise by the inspector of the powers at his disposal could have avoided the danger. In the case at bar, the evidence demonstrated the opposite - essentially, that structural failures are rare and no prudent or reasonably competent person could have detected the structural defects hidden within the design of the superstructure. Hence, the problems which ultimately occurred were not reasonably foreseeable. The plaintiff's argument that the construction may have proceeded differently had the initial permit been refused (or limited) is based on pure speculation.

[para87] I am also cognizant of the overall argument posed by the plaintiff that the legislative wording mandates ensurance by city officials of "conformity with the permitted drawings". First, a reading of the relevant provisions leaves this open to other interpretations of the City's role; secondly, my view of the legislation is that Parliament intended to provide a mechanism to ensure compliance with the standards set out in the applicable legislation. No set rules mandate the manner for doing so, however, and it was left to the discretionary power of public authorities to establish guidelines and policies in this area. Thus, the fast-track procedure, or something similar, was clearly contemplated by the legislation itself. By reason of the City's policy, in situations where the services of both an architect and engineer are mandated by the Act, the review process may be somewhat limited but it is by no means, abrogated.

SUMMARY

[para88] Pursuant to section 6(4) of the Act, no person shall construct a building except in accordance with plans on the basis of which a permit was issued or any changes authorized by the chief official. Notwithstanding the preparation and sealing of the drawings by a professional engineer, the City owed a duty to the owner and to the public to use reasonable care in the examination and approval of the building plans and in the inspection process.

[para89] A relatively unusual procedure was adopted in this case which differed from the norm but was by no means, unique. A building permit was granted by the City despite obvious deficiencies in the drawings on the condition that updated drawings be prepared, kept on side and a final completion of building permit be subject to further approval by the City. I found that Hilton's knowledge and complicity in this arrangement did not remove them from the scope of the City's duty of care.

[para90] What is the scope of the duty in circumstances where architectural drawings bear the approval stamp and seal of a professional engineer? Does the cursory review devised by the City in respect of structural design matters satisfy the duty of care imposed upon City officials by the applicable

legislation? Even if it does not, does the nature and extent of the review constitute a true policy decision so as to exempt the City from tortious claims?

[para91] Section 2.5.1 of the Code mandates that the design and general review of buildings be undertaken by an architect and professional engineer. It is not unreasonable for the City to adopt a policy in reliance upon their expertise. The policy adopted, the cursory review, reflected a true policy decision based upon a consideration of economic factors, being the allocation of resources - both human and financial. The policy was implemented in a consistent and reasonable manner. If cannot, therefore, provide the basis for a negligence claim against the municipality.

[para92] In any event, the damages sustained by the plaintiff were in no way caused or contributed to by any want of care or negligence on the part of the City.

CONCLUSION

[para93] To answer the question posed at the outset - in circumstances where the applicable legislation mandates sealed approval of drawings by an architect and a professional engineer, city officials are entitled to rely upon their expertise in respect of structural design matters. The obligation of public authorities at the permit approval and inspection stages of construction does not extend beyond the cursory review adopted and implemented by the City in this case.

[para94] Accordingly, the action of the plaintiff against the City is dismissed. If unable to agree, the parties may make arrangements to see me on the issue of costs.

[para95] The third party claim by the City against Hilton International and the cross-claim between John Miolla and Hilton International are dismissed on consent without costs.

[para96] Once again may I reiterate my appreciation to all counsel in this matter.

CHAPNIK J.

Hirmann v. Nixon, Chief Building Official, City of Toronto et al.

13 O.R. (3d) 54
[1993] O.J. No. 841
Action No. RE 2518/93

Ontario Court (General Division),
Wilson J.
April 19, 1993

APPLICATION for declarations about the applicability of a zoning by-law and for a mandatory order that a building permit to install a fire alarm system be issued.

Timothy M. Kinnaird, for applicant.

Beverley A.B. Simpson, for respondents.

WILSON J.:--The applicant is a tenant of certain leased premises at 31 Commissioner Street in Toronto (the "premises"). He seeks, in this application, the following:

(a) A declaration that the presently applicable zoning to the premises is By-law 438-86.

(b) A declaration that zoning By-law 528-88 is of no force and effect until the appeals of the said by-law are finally disposed of by the Ontario Municipal Board; and

(c) A mandatory order that the City of Toronto issue a building permit to install a fire alarm system at the premises.

Facts

The lands in question are a warehouse. The applicant seeks to use the premises for public dances. An injunction was obtained by the city on March 12, 1993. Wright J. made an order preventing the event advertised as "March Madness" or any other assembly being held until such time as the applicant was in compliance with all fire safety regulations. The issue of the zoning was not raised in argument before Wright J.

The applicant is attempting to remedy the deficiencies. On March 16, 1993, he applied to the city for a building permit to install a fire alarm system at the premises. The application was rejected by the city as the proposed use of the premises is not permitted within the current 13 D2 zoning district designation.

The City of Toronto Council passed By-laws 527-88 and 528-88 on June 17, 1988. The effect of these zoning changes was an amendment to the Official Plan, Part I, and the zoning for the premises has been altered from C4 V2 to 13 D2.

It is acknowledged that a C4 V2 zoning permits the applicant's intended use of the premises. A 13 D2 zoning, which is primarily industrial and residential, would not permit such use.

By-laws 527-88 and 528-88 were passed by city council, but have not yet been approved by the Ontario Municipal Board and are the subject of 13 appeals by various land owners. The appeals have not yet been heard and I was advised by counsel for the city that there is some hold-up within the provincial Ministry. As well, the premises are part of the central waterfront lands which are being studied by the federal Crombie Commission appointed in 1988.

Are the by-laws passed by city council in effect? Regard must be had to s. 34(30) of the Planning Act, R.S.O. 1990, c. P.13, which provides as follows:

> 34(30) Where one or more appeals have been filed under subsection (19), the by-law does not come into force until all of such appeals have been finally disposed of whereupon the by-law, except for such parts thereof as are repealed or amended in accordance with the direction of the Municipal Board or by the Lieutenant Governor in Council as mentioned in subsections (26) and (29), shall be deemed to have come into force on the day it was passed.

Section 34(30) is clear that a new by-law does not come into

force until the appeals have been finally disposed of. It is further clear that, once a by-law is passed, its effect is retroactive. It is acknowledged by the applicant that, if the by-law is passed at a future date, the applicant's intended use will be prohibited.

There is discretion in this court to adjourn such a matter in appropriate circumstances, having regard to the balance of interest between the landowner, the tenant and the city. I questioned counsel for the city as to when the Ontario Municipal Board was likely to hear the appeals in question. At first, quite candidly, she acknowledged she had no idea. At my request, inquiries were made and she was advised that it would be "a matter of months and not years". No firm date was given.

Counsel for the city relies on the decision of Whealy D.C.J. in Quay West v. Toronto (City) (Ont. Dist. Ct.). Whealy D.C.J. states at p. 9 of that unreported decision:

> It would be, in my view, unjust that a developer should be able to insist on a strictly legal application of its rights, when it is the author of the legal vacuum in which the application is made and that is in defiance of a municipal council's attempt to apply proper zoning and planning procedures with regard to important public lands. If this application was to be granted on such strictly legal grounds, then the rewards of the law could be said to be the prize for the fastest runner. In my view, the 1983 amendments to the Planning Act were to prevent such a result and to provide an orderly timed planning process with due regard to the rights of land owners.

I am mindful of the principles enunciated by Whealy D.C.J. with the Crombie Waterfront Commission. The by-law in question in Quay West was passed in 1988 and was subject to an Ontario Municipal Board appeal in 1988. The Ontario Municipal Board had been heard by the Divisional Court by the time the matter came before Whealy J. in early 1990. Delay by the Ontario Municipal Board could not be an issue.

It is the policy of the Buildings and Inspections Department of the City of Toronto to apply the most restrictive provision of the by-laws when dealing with a situation when by-laws have been passed by city council, but have not yet been approved by the Ontario Municipal Board. This internal policy may be reasonable if the passage of the new by-law is imminent and if the Ontario Municipal Board proceeds with reasonable dispatch. It is fair to both the landowner/tenant, as well as the city, as the effect of s. 34(30) is to make laws retroactive.

Based on the facts of this case, however, I find that the policy of the Buildings and Inspections Department is not reasonable. Almost five years have passed since city council passed the new by-laws. There is no timetable in place as to when the Ontario Municipal Board appeals will be heard. In the circumstances, therefore, I decline to exercise my jurisdiction to adjourn this matter to a date after the Ontario Municipal Board will hear the appeals. Had a specific date been given in the reasonably near future, I would have adjourned this matter to be heard after the appeals proceeded.

It is not, in my view, fair to numerous landowners across the city affected by the new zoning to keep them in a perpetual state of limbo. I hasten to add that s. 34(30) is retroactive. From a financial perspective, it is not practical for landowners and tenants to invest significantly in the land subject to the zoning changes, until the status of the zoning is clarified. It would seem, therefore, that it is in the public's, landowners' and city's interest that the Ontario Municipal Board proceed with these appeals as it represented to this court in a matter of months, rather than years.

I, therefore, declare that the currently applicable zoning by-law to the premises is 438-86, providing the premises with a C4 V2 zoning district designation. The zoning By-law 528-88 and the zoning district designation 13 D2 does not come into force until the outstanding appeals to the Ontario Municipal Board are finalized.

The applicant seeks a mandatory order that a building permit for a fire alarm system be issued. It is not appropriate that such an order be made by this court. The applicant must comply with the city's requirements relating both to the Fire Code, R.R.O. 1990, Reg. 454 (Fire Marshal's Act, R.S.O. 1990, c.

F.17), and other applicable building requirements in the interest of public safety. I simply make it clear that the building permit cannot be denied now based on the zoning presently in effect. The building permit must be considered in

light of the zoning in effect at the time that the application is made.

Costs of this application fixed in the amount of $1,000 payable forthwith by the city to the applicant.

Order accordingly.

HODGINS v. TORONTO et al.

Ontario County Court [Judicial District of York I,

Matlow Co. Ct. J.

Judgment - February 3, 1983.

APPEAL from decision of the chief building inspector.

J.S. Stewart, Q.C., for appellant.
D. Liebson, for respondents.

(No. 08556)

February 3, 1983. MATLOW CO. CT. J.: - This application came before me by way of "a hearing and appeal" pursuant to s. 15(1) of the Building Code Act R.S.O. 1980, c. 51. That provision reads as follows:

"15.-(1) Any person who considers himself aggrieved by an order given or decision made by an inspector or chief official under this Act or the regulations may, within twenty days after the order or decision is made, apply to the judge of the county or district court for a hearing and appeal."

The decision under review on this application is that of the respondent, Michael L. Nixon, who is the chief building official of the respondent, the corporation of the City of Toronto, which was made on September 22, 1982. By that decision, Mr. Nixon decided to revoke two building permits that had been issued to the applicant on April 8, 1980, and August 17, 1981. By s. 1(1)(d) of the Building Code Act, Mr. Nixon holds the office of "chief official" for all purposes related to that statute.

The only material before me was the affidavit of the applicant and it set out the following history of the events leading to the decision in question.

By notice dated October 7, 1981, sent to the applicant by Mr. Nixon, the applicant was given notice that a hearing would be held on November 16, 1981, at which time Mr. Nixon would consider whether or not the building permits ought to be revoked. The notice advised the applicant that Mr. Nixon had been informed and did believe that the permits in question had been issued on information "which appears to be mistaken or false".

Following the hearing referred to in the notice, it was decided that the permits had not been issued on false or mistaken information and that they not be revoked.

By a further notice dated September 3, 1982, sent to the applicant by Mr. Nixon, the applicant was given notice that a furhter hearing would take place on September 22, 1982, for the same purpose as the first hearing. That notice too also advised the applicant that Mr. Nixon had been informed and did believe that the permits had

> been issued on information which appeared to be mistaken or false. As well, this notice again made reference to s. 6(4) of the Building Code Act as the statutory authority for the power of decision that Mr. Nixon proposed to exercise.

By letter dated September 10, 1982, sent to the applicant by Mr. Nixon, Mr. Nixon advised the applicant that the hearing scheduled for September 22, 1982 "is not to consider revocation of the Permits pursuant to the Building Code Act but pursuant to the inherent jurisdiction the Commissioner of Buildings and Inspections has to revoke a permit if it was issued contrary to law".

The second hearing proceeded on September 22, 1982, following which Mr. Nixon made the decision to revoke the subject permits. This is the decision under review.

The material indicates that the subject permits had authorized the applicant to "make interior alterations and build deck at rear of dwelling house comprised of two dwelling units" at 300 Riverside Drive, Toronto. It appears that one of the issues canvassed at both of the hearings was whether or not the subject property comprised a legal nonconforming use or whether its use as a dwelling house comprised of two dwelling units was in violation of the applicable zoning by-law.

In my view, the only authority which Mr. Nixon had which entitled him to revoke the subject permits was that conferred by Sec. 6(4) of the Building Code Act. That provision reads as follows:

"6.-(4) Subject to section 15, the chief official may revoke a permit,

(a) where it was issued on mistaken or false information;

(b) where, after six months after its issuance, the construction or demolition in respect of which it was issued has not, in the opinion of the chief official, been seriously commenced; or

(c) where the construction or demolition of the building is, in the opinion of the chief official, substantially suspended or discontinued for a period of more than one year."

As well, that provision sets out the only reasons why "the chief official may revoke a permit".

By purporting to exercise "the inherent jurisdiction the Commissioner of Buildings and Inspections has to revoke a permit if it was issued contrary to law", Mr. Nixon purported to exercise a jurisdiction which he did not have and on a basis not authorized by the statute. Accordingly, his decision cannot stand and must be rescinded.

Notwithstanding Mr. Nixon's professed exercise of some inherent jurisdiction, I still regard his decision under review to be one made by him, albeit in error, pursuant to the Building Code Act. As I have indicated, any decision by a chief official purporting to revoke a building permit must be a decision "under this Act" as those words are used in s. 15(1) of the Building Code Act. Accordingly, I consider that I have jurisdiction to entertain this application which is made pursuant to that provision.

I expressly refrain from deciding whether or not the chief official may hold successive hearings to determine whether or not the same building permit may be revoked pursuant to s. 6(4) of the statute. The evidence before me is not sufficient to enable me to determine whether or not the two hearings were based on the same or different facts. For that reason I leave this issue to be determined if necessary at a later time if Mr. Nixon should determine to proceed with a further hearing pursuant to s. 6(4) of the statute.

The applicant is entitled to recover his costs from the respondents after taxation.

Appeal allowed.

Ingles v. Tutkaluk Construction Ltd.

Between
James Ingles, Plaintiff, and
Tutkaluk Construction Limited and the Corporation of the City of Toronto, Defendants

[1994] O.J. No. 1714
DRS 94-14604
Action No. 61453/90Q

Ontario Court of Justice - General Division
Toronto, Ontario
Conant J.
Heard: May 9, 10, 11, 12, 1994.
Judgment: August 11, 1994.

Barbara J. Murchie, for the Plaintiff.
Diana Dimmer, for the Defendant, the Corporation of the City of Toronto.

[para1] CONANT J.:-- This is a claim by a home-owner against a construction company and against the City of Toronto. The claim against the construction company is that it breached its contract for renovations by failing to construct underpinnings in accordance with the agreement made with the Plaintiff and was negligent in its work. The claim against the City of Toronto is that an improper and negligent inspection of the renovations did not discover the deficiency. Although the Defendant construction company submitted a Statement of Defence, the only Defendant represented at the trial of the action was the City of Toronto and all of the legal argument at the trial concerned the question of the City's negligence.

THE FACTS

[para2] The Plaintiff, Dr. James Ingles, and his spouse, Dr. Valerie Watt, own an 80 year old, 3-story home at 123 MacPherson Avenue, in an area in Toronto known as "the Annex". The Plaintiff wished to lower the basement 18 inches and build a patio and deck at the back of the house. Lowering the basement would necessitate putting in underpinnings under the existing foundation of the house in order to keep the walls from cracking and the house from falling down. The Plaintiff and his spouse, both of whom are professionals with Ph. D.'s in science, engaged in research on what would have to be done; and the Plaintiff's spouse drew up plans for the renovation. The Plaintiff then engaged a construction company, the Defendant, Tutkaluk Construction Ltd., to do all the work. He testified that he had chosen Tutkaluk because others had recommended its work and because, on the basis of an advertising flyer distributed by Tutkaluk, he believed that Tutkaluk's work was "backed by $1,000,000 liability insurance covering all work". The Plaintiff stated he checked references and after discussion with the contractor signed a contract on June 9th, 1990 for the lowering of the basement floor, renovations and installing 20 to 24 inches wide underpinning under the footings. The contract was for a total of $46,000.00 plus extras.

[para3] According to the contract, the contractor was to apply for and obtain a building permit. Tutkaluk had told the Plaintiff that the work would be delayed if he had to obtain a building permit before he began, and the Plaintiff and his spouse agreed that the work should begin as soon as possible. The work began on June 14, 1990. The building permit was applied for on June 27 and issued on June 28.

[para4] The excavation plan submitted with the building permit has been stamped with a statement that "where required, underpinning is to be carried out to the satisfaction of the building inspector". In addition, inter alia, there are two notations handwritten on the permit:

> Notify building inspector before proceeding with underpinning [and] pouring concrete.
>
> Minimum width of underpinning -- same size as existing footing.

[para5] Underpinning is installed in the following way:

The earth under the old footings is excavated in three foot sections inside the basement. This step by step process is necessary to prevent the collapse of the house which would take place if too much of the foundation were weakened at one time by excavating under it. As each section is excavated, concrete forms are built flush with the inner edge of the existing footing, and concrete is poured to within 2 to 3 inches of the bottom of the old footing. When the concrete has had time to settle, non-shrink grout is rammed between the new concrete and the existing footing. This is done all around the perimeter of the basement. The underpinning should fully cover the area under the old footing, that is, it should be co-equal to the old footing in both width and depth. After all the existing footings have been underpinned, the basement floor can be laid.

[para6] On the morning after the building permit had been issued, June 29, 1990, Mr. Tecson, a building inspector temporarily assigned to the area, noticed that construction was under way at 123 MacPherson, although no building permit was posted. Upon his request, Tecson was shown the permit along with plans of the renovations. Despite the note on the permit to notify the building inspector before proceeding with the underpinning, the underpinning had already been installed. Therefore, it was impossible for the inspector to visually determine whether or not the underpinning continued for the full width of the footing as required by the building permit. The basement was dug up for the laying of drains; and, consequently, only a few inches of the depth of the underpinning were visible because of the piles of dirt from the excavation.

[para7] Tecson spent between twenty and thirty minutes carrying out an inspection of the visible portion of the underpinning. Specifically, he looked at the underpinning and noted that the colour of the concrete was different stages of grey, indicating that it had not all been poured the same day. From this, he concluded that the concrete had been poured in stages. He then borrowed a hammer from one of the workers and struck the concrete in various places to see if it had set. The ringing sound produced indicated that the concrete was at least two weeks old and had attained something close to its maximum desired strength. Had it not hardened, he would have been able to stick something into the still soft concrete to ascertain its depth. He also noted a different coloured hardened concrete about 2 inches in width above the underpinning which he took to be the grout that had been inserted at different times. With respect to the width of the underpinning, Tecson relied on an assurance from Tutkaluk that everything had been done in accordance with the drawings attached to the building plan. On the building card, he noted that "underpinning done prior my inspection".

[para8] On July 10th, upon his return to work, Mr. Grimaldi, the regular building inspector for the area, also visited the site. By this time, the basement floor had been laid and visual inspection of the underpinning as a whole was even less possible than it had been at the time of Tecson's inspection. Grimaldi carried out the same inspection as had Tecson, as well as looking to see that the concrete was smooth and without voids, an indication that it had been packed down adequately. On the job card he wrote that "underpinning appears to be complete".

[para9] Tutkaluk finished his work on August 16th, 1990, and received full payment for the renovations.

[para10] In early September there was a water-leak problem in two corners of the basement. The Plaintiff called in Drain Masters to fix the leaks since he was getting no response from Tutkaluk. In digging out around the outside of the basement wall in the two places, Drain Masters found that only about six inches of underpinning were dug out and installed under the footings, instead of the full 24 inch width. In addition, the underpinning under the party wall to the west had not been installed to the depth stated in the plans and the north wall underpinning under the patio was much less than the four feet contracted for.

[para11] The Plaintiff engaged a professional engineer, Mr. Brown, to review and comment on the recently completed underpinning work. In a letter dated September 13, 1990, Brown stated that both the drawing submitted with the building permit application and good construction practice

require that the underpinning be extended under the full width of the footing. He urged that the work be done as soon as possible, because the present condition might be dangerous.

[para12] The Plaintiff testified that he made no effort to get Tutkaluk to carry out this work because of Tutkaluk's previous lack of response with respect to the water-leak problem. Instead, he engaged Drain Masters to carry out these recommendations. Drain Masters excavated the earth from the outside and filled in the other 14 to 16 inches of underpinning, reconstructed the back wall, and deepened the underpinning of the party wall. At the same time, it carried out certain waterproofing work. The Plaintiff also contracted with Precision Renovations to perform additional renovation services made necessary by the tearing up of the basement to re-do the underpinning.

[para13] The Plaintiff claimed that the total cost incurred for the repairs was $56,925.00 without showing clearly how he had arrived at this figure. The bill from Drain Masters is for $47,000.00. The bill from Precision Renovations is for $9,330.00. Robert E. Brown and Associates Ltd. charged $11,900.00 for its reports. This comes to a total of $57,520.00.

[para14] At trial, there were three points at issue between the Plaintiff and the City:

> (1) Did the building inspectors, and in particular, Mr. Tecson, meet the appropriate standard of care
>
> when they discovered that they could not carry out a visual inspection of the underpinning?
>
> (2) Did the inspector have the statutory power to order measures that would determine whether or not the underpinning had been laid according to the plan?
>
> (3) If the City was negligent, was the Plaintiff contributorily negligent in not seeing to it that the building permit was obtained before the underpinning was installed?

THE POSITIONS OF THE PARTIES

[para15] The Plaintiff argued that he should be able to rely on the City's inspectors for approval of the basic structural requirements of the house. He pointed to an article in the Toronto Star on renovations that he and his spouse had clipped when doing research on lowering their basement. The article contained the following statements:

> Get building permits for both drain and
>
> building work. Your municipal inspectors work for you and their on-site inspection is protection for you.

More particularly, the Plaintiff contended that the fact that the underpinning was installed prior to the issuing of the building permit should have put the inspector on notice that the contractor did not play by the rules. In such circumstances, the inspector had a duty to carry out a thorough inspection of the underpinning and not to rely on the assurances of a contractor who was not known to him.

[para16] The Plaintiff argued that the inspector should have borrowed a shovel from the workers on the site and dug down to inspect the depth of the underpinning. This would have been a quick and simple way to establish whether the underpinning extended down as far as it should. Alternately, the Plaintiff submits that the inspector should have exercised the power given him by s. 11(1)(d) of the Building Code Act, R.S.O. 1990, c.B.13, (the "Act") (repealed and replaced by the Building Code Act, 1992, S.O. 1992, c.23) to require that the Plaintiff have an inspection done at his own expense. The Plaintiff denied any negligence in the matter.

[para17] The Defendant City responded with five arguments. First, it asserted that any deficiency in inspection was the fault of the Plaintiff for not applying

for the building permit in time, so notice could have been given and an inspection carried out while the underpinning was visible. Second, it argued that the inspection was reasonable given the circumstances: Tecson had no reason to doubt that the work had been done properly and therefore was under no obligation to do anything else. Third, it submitted that, given the conditions of the ground as a result of a heavy rain that day, it would not have been possible for Tecson to dig down and uncover the full depth of the underpinning. Fourth, it claimed that the Plaintiff was attributing to the inspector a duty which he did not have, the duty to certify that the work was done properly. Finally, it submitted that the inspector had no statutory power to uncover the work.

THE LAW

[para18] In two cases, Kamloops (City) v. Nielsen, [1984] 2 S.C.R. 2 and Rothfield v. Manolakos, [1989] 2 S.C.R. 1259, 46 M.P.L.R. 217 (S.C.C.) (sub nom. Vernon (City) v.Manolakos), the Supreme Court of Canada has found cities liable for negligent building inspection. In these cases, the Court found that the city had the statutory power, although not the obligation, to regulate construction by by-law. Once the city made the policy decision to inspect building plans and construction, it owed a duty of care to all who it is reasonable to conclude might be injured by the negligent exercise of those powers: Manolakos, supra, per LaForest J. at 223.

[para19] The case at bar turns on a provincial statute, the Building Code Act. In order to determine whether there has been negligence on the part of the City in this case, it is necessary to examine the Act to determine what policy decision was made by the Province binding its creature, the City of Toronto.

A. THE ACT

[para20] The basic structure of duties and responsibilities for the regulation of construction in Ontario is set out in ss. 3, 5, and 6.

[para21] Section 3(1) of the Act specifies that the council of each municipality is responsible for the enforcement of the Act in the municipality. Section 3(2) assigns to the council of each municipality the duty to appoint a chief building official and such inspectors as are necessary for the purposes of the enforcement of this Act in the areas in which the municipality has jurisdiction. Section 5(1) provides that no person shall construct a building in a municipality unless a permit has been issued therefor by the chief official having jurisdiction for the enforcement of the Act. According to the definitions in s.1, "construct" includes extension, material alteration or repair of a building.

[para22] Section 6(1) provides for the issuing of permits by the chief official.

> 6.--(1) The chief official shall issue a permit except where
>
> (a) the proposed building or the proposed construction or demolition
>
> will not comply with this Act or the building code or will contravene any other applicable law;
>
> ...

[para23] Section 6(3) prohibits making material changes to a plan on the basis of which a permit was issued without notifying the chief official and filing details of such change for the purpose of obtaining authorization. Section 6(5) prohibits construction of a building except in accordance with the plans on the basis of which a permit was issued or any changes authorized by the chief official.

[para24] Sections 8-11 deal with inspections, orders, and the powers of the inspector. Section 8(1) permits on-site inspections at any time of buildings. These inspections may be carried out at any time after the permit has been applied

for.

> 8.--(1) Subject to section 11, an inspector may, for the purpose of inspecting a building or site in
>
> respect of which a permit is issued or an application for a permit is made, enter in or upon any land or premises at any time without a warrant.

Section 8(2) empowers the inspector to issue an order directing compliance upon finding that any provision of the Act or the building code is being contravened. Section 8(5) permits the issues of a stop work order where an order of an inspector made under s. 8 is not complied with within the time specified therein.

[para25] Section 9 deals with orders not to cover pending inspection or to uncover when there is reason to believe that any part of a building has not been constructed in compliance with the Act and that part has been covered or enclosed contrary to an order made by an inspector or chief official.

[para26] Section 11 sets out the powers of an inspector carrying out an inspection under s.8. These powers include requiring the production of the drawings and specifications of a building, as well as information from any person regarding any matter related to a building or a part of a building: s. 11(1)(a); making examinations, tests, or inquiries or take such samples or photographs as are necessary for the purposes of the inspection: s. 11(1)(c); and ordering any person responsible for the construction to take and supply at that person's own expense such tests and samples as are specified in the order: s. 11(1)(d).

[para27] The Regulations under the Act consist of the provincial Building Code. This Code sets out the standards which must be met for building permits to be approved prior to construction and for occupancy certificates to be issued after the completion of construction.

[para28] The duty and purpose of building inspection is clear from these statutory provisions. Municipalities have a duty to appoint inspectors as are necessary to enforce this Act. Inspections before the permit is issued are intended to ensure that building permits are issued only for plans that will conform with the building code. Inspections after the issuing of the permit are to see that the construction is carried out in conformity with the plans on the basis of which the building permit was approved. The inspectors are given the powers necessary to enter lands or premises, to carry out a range of inspections, and to issue various orders. These powers enable them to determine whether construction has been carried out according to the permits and to halt it, if it has not been. The Act does not state that inspections are mandatory, but this is to allow inspectors the discretion to determine when and how often inspections are necessary. Obviously, in cases of minor renovations, an inspection may not be necessary. Although the Act nowhere mentions safety, it is clear that the standards set in the building code are not exercises in governmental arbitrariness, but are intended to ensure the safety of buildings constructed in the province.

[para29] Therefore, the province has made a policy decision that cities inspect building plans and construction; and, as a result, the cities owe a duty of care to all who it is reasonable to conclude might be injured by the negligent exercise of those powers.

B. STANDARD OF CARE -- WHAT CONSTITUTES A REASONABLE INSPECTION?

[para30] The appropriate standard of care for municipal building inspectors has been set out by LaForest J. in Manolakos, supra:

> [A] municipality, once it has made the policy decision to inspect construction, is not bound to discover every latent defect in a given project, nor every derogation

> from applicable standards. This would be to hold the municipality to an impossible standard. Rather a municipality is only called upon to show reasonable care in the exercise of its powers of inspection. Accordingly, a municipality ... will only incur liability for such defects as it could reasonably be expected to have detected and to have ordered remedied. This is implicit in the decision of this Court in Kamloops v. Nielsen. (at 224-5)

[para31] What constitutes a reasonable inspection is a factual determination that will differ from case to case.

[para32] In Nielsen, the builder carried on construction on a house for his father, a city alderman, despite stop work orders issued by the municipal building inspectors. The evidence in the case gave rise to a strong inference that the city, with full knowledge that the construction had been done in violation of a municipal by-law, did not pursue the matter because one of its aldermen was involved. After the house was sold and the subsequent owner learned that the foundations had subsided, he successfully sued the city for negligence.

[para33] In Manolakos, supra, a contractor, in applying for a building permit, submitted a rough sketch of the backyard retaining wall being constructed, rather than detailed plans. The chief building inspector exercised his discretion and granted a permit, despite the absence of plans, because the adequacy of the wall could be evaluated by on-site inspections. However, appropriate inspections were not carried out, even after cracks began to appear in the wall. The Court held that the city was liable for negligence,

but that the owners of the house were contributorily negligent for not giving the city notice of the need for inspection until after the concrete had been poured and a visual inspection could no longer be carried out.

[para34] In each of these cases, the city's breach of its duty of care was blatant. In Kamloops, supra, despite the knowledge that the house was probably unsafe, the municipality allowed it to be occupied, because of political considerations. In Manolakos, supra, there were no plans for the project and the city explicitly stated that it would rely on inspections. In such a situation, allowing the project to continue despite the impossibility of a visual inspection and even after there was a sign that the wall might not be stable constituted clear negligence.

[para35] There was a similar situation in a recent decision of the Court of Appeal, Mortimer v. Cameron (1994), 17 O.R. (3d) 1. In that case, the court upheld a finding of negligence against the City of London. On the facts of the case, the application for a building permit for an apartment building was not accompanied by drawings or specification, as required by the by-law. The permit was issued with insufficient evidence as to Building Code compliance. Moreover, the deficiencies in the construction of an enclosed exterior stairway were obvious and could readily have been detected had there been a proper inspection of either the plans or the work done pursuant to the plans.

[para36] The situation in the case at bar is very different. The building permit was issued on the basis of a plan which, if followed by the contractor, would have met safety standards. Both Tecson and Grimaldi carried out a number of inspections which indicated that the work had been done according to the plan. Furthermore, I accept Tecson's explanation that he could not have dug down to determine the depth of the underpinning because it was raining the day he inspected and, in the absence of drains in the basement, water would have immediately collected in any hole he dug.

[para37] Nevertheless, I find that the inspection fell short of meeting a reasonable standard, given the facts of the situation.

[para38] I have two grounds for so finding. First of all,

I accept the Plaintiff's submissions that the behaviour of the contractor should have made the inspector wary. In fact, as LaForest J. observed in Manolakos, supra, building inspections are carried out precisely because it is clear that contractors do not always do their jobs properly:

> It is to be expected that contractors, in the normal course of events, will fail to observe certain aspects of the building by-laws. That is why municipalities employ building inspectors. Their role is to detect such negligent omissions before they translate into dangers to health and safety. (at 226)

In this case, there were special reasons to suspect that the contractor might have acted negligently. He did not apply for the building permit until after the underpinning had been put in. Despite the fact that the permit stated that the building inspector was to be notified before proceeding with the underpinning, not only was no notice given as to the status of the underpinning, but the building permit was not even posted outside the Plaintiff's home. Furthermore, Tecson stated that he did not know Tutkaluk and his work and, thus, had no basis for relying on him. Given these circumstances, it would have been reasonable to inspect further.

[para39] A second reason why a more thorough inspection was reasonable is the nature of the work being carried out. The work consisted of the installation of a major structural element, a serious defect in which might lead to a collapse of the entire house. Tort law has long held that the greater the risk of harm, the higher is the requisite standard of care demanded. Although the various inspections and test carried out by Tecson were reasonable as far as they went, a reasonable standard for inspection of construction on which the safety of the entire building depends demands verification that the work has been done properly according to the plan.

[para40] This finding is in no way altered by the City's argument, which I accept, that it is not obligated to supply guarantee of work done by contractors. The purpose of building permit and inspection provisions in the Act is not to allow home owners to make the City an insurer for renovation work which they have done. If the municipal inspectors had an obligation to discover every defect, even those which had been covered up before the building permit was applied for, then house owners could, at their will, make the City an unpaid insurer of renovation work. Under those circumstances, an owner could contract to have work done cheaply and not apply for a building permit until after the point at which the work could be inspected. If the work was subsequently found to be defective, the owner could gain the cost of repairs by suing the City for negligent inspection. This is clearly not the purpose of the Act.

[para41] But one must distinguish between a guarantee of work done and a reasonable inspection of an important structural element. Because the City was not obligated to provide an absolute guarantee that the work was done properly in every respect did not absolve it of the responsibility of determining whether the full extent of the underpinning specified by the plan had been installed.

[para42] I also reject the argument of the City, based on expert testimony by James Cowie, a structural engineer, that the exterior foundation walls could have been considered safely supported by the underpinning installed by Tutkaluk. Even if this is the case, and I make no finding one way or the other, it does not affect the reasonableness or unreasonableness of the inspection at the time it was made.

[para43] Tecson was not in possession of Cowie's report or a report by any other engineer on how much underpinning was necessary to support the exterior foundation walls. What he had in front of him was the building permit and the plan on the basis of which the permit had been approved. I must assume that the plan was approved because it conformed to good construction practice and to the Building Code. It was on the basis of this plan that a court must determine whether or not Tecson's inspection was reasonable. And, on this basis, as I have already stated, the inspection was

insufficient.

[para44] I also reject the argument that there should be no finding of negligence because there was no cracking in the walls of the house or other damage that might have resulted from the underpinnings. The City is negligent if there is a foreseeable risk of damage. Since the purpose of the Building Code Act and the regulations under that Act are to ensure the safety of buildings in the province, a court must hold that construction work that is carried out in clear non-conformity with the legal requirements poses a foreseeable risk of damage, whether or not any actual damage has taken place.

C. POWERS OF INSPECTOR

[para45] The City argues that, even if the inspection was negligent, the inspector lacked the power to do anything further. It bases this argument on s. 9(2) of the Act, the provision dealing with an order to uncover. The subsection reads as follows:

> (2) Where a chief official has reason to believe that any part of a building has not been constructed in compliance with this Act and such part has been covered or enclosed, contrary to an order made by an inspector or chief official under subsection (1), the chief official may order any person responsible for the construction to uncover the part at the person's own expense for the purpose of an inspection.

The City submitted that the inspector had no reason to believe any part of the building has not been constructed in compliance with this Act. In addition, there had been no order made by an inspector or chief official not to cover or enclose the underpinning. Since these conditions were not present, the inspector had no power to issue an order to uncover the underpinning.

[para46] In response, the Plaintiff pointed to the provisions in the Act setting out the powers of the inspector. Specifically, it noted that s. 11(1)(d) gives the inspector the power to

> order any person responsible for the construction to take and supply at the person's own expense such tests and samples as specified in the order.

He submitted that Tecson could have ordered him to call in an engineer to saw through the underpinning in order to determine its width.

[para47] I reject the argument of the City that the building inspector lacked the power to act in the situation and accept the argument of the Plaintiff. The City is correct that the preconditions for issuing an order to uncover were absent. But this did not exhaust the possibilities available to the inspector. The general powers of the inspectors are set out in s.11, the section relied on by the Plaintiff. These powers include the power to order any person responsible for the construction to take and supply at that person's own expense such tests and samples as are specified in the inspector's order. The Act does not specify any preconditions for, or limitations on, the power of the inspector to issue such an order.

[para48] There were also other possibilities available to the inspector. Section 9(1) allows an inspector to issue an order prohibiting the covering or enclosing of any part of a building pending inspection. The inspector could have ordered that the concrete floor of the basement not be laid. He could then have returned after the drains had been installed on a day when there was no rain falling and dug down to determine the depth of the underpinning.

[para49] The City's argument that the inspector lacked the power to do anything further therefore fails.

D. THE PLAINTIFF'S NEGLIGENCE

[para50] The City argued that, even if the building inspector was negligent, the Plaintiff was contributorily negligent in not applying for, or seeing that the contractor applied for, a building permit before the work was started. It is the statutory duty of the owner to obtain a building permit, as prescribed by s. 5(1) of the Act:

> No person shall construct or demolish or cause to be constructed or demolished a building in a municipality unless a permit has been issued therefor by the chief official.

[para51] On the facts, the City noted the concurrence of Drs. Ingles and Watt to the delaying of the application for the building permit. If the Plaintiff was relying on the building inspector, it argued, then he would have made sure that the underpinning was inspected at the time it was being laid.

[para52] The City further pointed to one clause of the contract with Tutkaluk, dated June 7, 1990 and signed by both the Plaintiff and his spouse, which stated that completion of an "illegal" deck would be postponed until after the visit of the building inspector. The City submitted that this clause was clear evidence the Plaintiff did not place reliance on municipal building inspection.

[para53] In Manolakos, supra, the Supreme Court of Canada held that the owners' failure to give timely notice for the on-site building inspection did not disentitle them from recovering against the city which failed to discharge its responsibilities:

> Of course, the cause of the problem would have been evident if the inspector had been asked to come at the proper time. But this does not absolve the inspector of his duties. (at 229)

[para54] Nevertheless, the Court held that the owners should bear a degree of responsibility for the loss they incurred because of their failure to summon the inspector in good time.

> The damage could have been avoided if notice had been given at the proper time. The by-law, I repeat, places responsibility for giving notice squarely on the owner. It could not really function without this requirement ... These are not technical matters for which the average person must rely on an experienced contractor. People generally should know that a building permit is required and that inspections cannot be done when the work is covered up. Of course, owners generally rely on a contractor to give notice at the appropriate time, but the responsibility is ultimate the owner's, not the city's. (per LaForest J. at 230-231)

[para55] Counsel for the Plaintiff stated that neither the Plaintiff nor his spouse understood that a building permit must be applied for before construction began. I find this a totally incredible claim. The Plaintiff and his spouse both have Ph.D.'s. It strains credibility to think that these two highly educated individuals would have thought that a "permit" to build did not have to be obtained before the building work began. It is equally difficult to accept that the Plaintiff could have believed that the building inspector, on whom he claims he relied, could have carried out an inspection of the renovations after they had been covered up and were no longer visible or accessible. The Plaintiff knew or should have known what he was doing in agreeing to a delay in obtaining a building permit and must, therefore, bear partial responsibility for the late

inspection. As LaForest J. stated, the damage could have been avoided if notice had been given at the proper time.

[para56] I find the City's argument based on the "illegal" deck clause in the contract totally unconvincing. The fact that the Plaintiff and his spouse seemed willing to construct an illegal deck after the municipal inspection proves nothing about their reliance on the inspector to certify that the underpinnings conformed to the requirements and the plan. People are more likely to be cavalier about the requirements for a backyard deck than they are about underpinnings which, if inadequate, can lead to the collapse of their house. In her testimony, Dr. Watt was clearly highly upset at the thought that the house in which she and her husband lived and in which they planned to reside during their retirement might collapse because it was inadequately underpinned. Furthermore, she had spent much time and effort in researching and drawing up precise plans which contained provisions for proper underpinnings. Despite their foolishness in signing a contract that called for not only a contravention of a by-law, but a deliberate concealing of the contravention from the building inspector, I find it impossible to conclude from this action that they participated in a conscious effort to prevent the building inspector from examining the underpinnings of their home.

DAMAGES

[para57] Although the hearing of this claim was devoted essentially to the question of the City's liability, the principal fault was that of the Defendant Tutkaluk. There was uncontested evidence that it was Glen Tutkaluk, the owner of Tutkaluk Construction Ltd., who persuaded the Plaintiff that it was not necessary to apply for a building permit until after the underpinning had been poured and set. It was Tutkaluk who gave misinformation to the building inspectors, and it was Tutkaluk who negligently and in breach of his contract with the Plaintiff and his spouse put in underpinnings which fell short of what was called for by the building permit and good construction practice. I, therefore, find that the Defendant Tutkaluk is 80 per cent liable for the damage suffered by the Plaintiff. The City is 20 per cent liable for its negligent inspection. As I have explained above, the Plaintiff must bear part of the responsibility for the negligent inspection. I, therefore, reduce the City's liability by 30 per cent because of the contributory negligence of the Plaintiff.

[para58] On the basis of the documents submitted in the Joint Document Brief, I accept the figure of $57,520.00 as the amount paid by the Plaintiff for repair work. However, this figure must be reduced because $5,000.00 of it went for water protection and waterproofing. I accept the evidence of Mr. Cowie that the need for the waterproofing was not the result of the inadequate underpinning. Therefore, I reduce the amount of damages to $52,520 to be apportioned as I have indicated above. Tutkaluk is liable for $42,016.00, and judgment shall so issue. The City is liable for $10,504.00, but this sum is reduced by $3,151.20 because of the Plaintiff's contributory negligence, resulting in a liability on the part of the City for $7,352.80; and judgment shall issue for same.

COSTS

[para59] I may be spoken to as to costs and interest.

CONANT J.

Ingles v. Tutkaluk Construction Ltd.

ADDENDUM

Between
James Ingles, plaintiff, and
Tutkaluk Construction Limited and the Corporation of the City of Toronto, defendants

[1995] O.J. No. 231
DRS 95-10450
Court File No. 61453/90Q

Ontario Court of Justice - General Division

Toronto, Ontario
Conant J.
Heard: May 9, 10, 11, 12, 1994.
Judgment: February 7, 1995.

Barbara J. Murchie, for the plaintiff.
Dianna Dimmer, for the defendant Tutkaluk Construction Ltd.

CONANT J.:--

ADDENDUM

[para1] Subsequent to issuing reasons, counsel appeared by for me on an issue that was pleaded but not argued at trial.

[para2] The issue centres on the interpretation of the Ontario Negligence Act, R.S.O. 1990, c. N.1, ss. 1 and 3, in cases where several defendants are liable to the plaintiff who is himself contributorily negligent. The sections read as follows [emphasis added]:

> Extent of liability, remedy over
>
> 1. Where damages have been caused or contributed to by the fault or neglect of two or more persons, the court shall determine the degree in which each of such persons is at fault or negligent, and, where two or more persons are found at fault or negligent, they are jointly and severally liable to the person suffering loss or damage for such fault or negligence, but as between themselves, in the absence of any contract express or implied, each is liable to make contribution and indemnify each other in the degree in which they are respectively found to be at fault or negligent.
>
> Plaintiff guilty of contributory negligence
>
> 3. In any action for damages that is founded upon the fault or negligence of the defendant if fault or negligence is found on the part of the plaintiff that contributed to the damages, the court shall apportion the damages in proportion to the degree of fault or negligence found against the parties respectively.

[para3] The defendant submits that since I have found that the plaintiff was contributorily negligent, the City is no longer jointly liable for the whole of the remaining damages.

[para4] The defendant relies on two Court of Appeal cases from British Columbia: Cominco Ltd. v. Canadian General Electric Co. Ltd. et al. (No. 2) (1983), 4 D.L.R. (4th) 186 and Leischner v. West Kootenay Power & Light (1986), 24 D.L.R. (4th) 641.

[para5] In my view, those cases are inapplicable in Ontario as I read the B.C. Negligence Act, R.S.B.C. 1979, c. 298, ss. 1, 2(c). The latter reads [emphasis added]:

> (c) as between each person who has sustained damage or loss and each other person who is liable to make good the damage or loss, the person sustaining the damage or loss shall be entitled to recover from that other person the percentage of the damage or loss sustained as corresponds to the degree of fault of that other person.

[para6] The Ontario statute does not, however, distinguish between situations where the plaintiff is completely faultless and where the plaintiff is part of a group of tortfeasors. Instead, s. 1 of the Ontario Act clearly states that those at fault are "jointly and severally liable" to the person suffering the loss.

[para7] In the alternative, the defendant City suggested that above and beyond apportioning fault I should also itemize the specific damages incurred and decide for each head of damages whether the defendants are jointly or severally liable for it. But, having decided that the Negligence Act makes the defendants jointly liable, this last submission amounts to an attempt to revisit my apportionment of fault.

INGLES V TORONTO AND TUTKALUK

James Ingles *Appellant*

v.

The Corporation of the City of Toronto *Respondent*

Indexed as: Ingles *v.* Tutkaluk Construction Ltd.

Neutral citation: 2000 SCC 12. File No.: 26634.

1999: October 8; 2000: March 2.

Present: L'Heureux-Dubé, Gonthier, McLachlin, Iacobucci, Major, Bastarache and Binnie JJ.

ON APPEAL FROM THE COURT OF APPEAL FOR ONTARIO

APPEAL from a judgment of the Ontario Court of Appeal (1998), 38 O.R. (3d) 384, 158 D.L.R. (4th) 147, 107 O.A.C. 310, 37 C.L.R. (2d) 192, 46 M.P.L.R. (2d) 1, [1998] O.J. No. 1126 (QL), setting aside a judgment of the Ontario Court, General Division (1994), 18 C.L.R. (2d) 67 and 82, 24 M.P.L.R. (2d) 293 and 308, [1994] O.J. No. 1714 (QL) and [1995] O.J. No. 231 (QL), allowing in part the plaintiff's claim for damages for negligence. Appeal allowed.

Philip Anisman and *Barbara J. Murchie*, for the appellant.

Diana W. Dimmer and *Naomi Brown*, for the respondent.

The judgment of the Court was delivered by

BASTARACHE J. --

I. Introduction

1 The issue to be resolved in this appeal is the liability of a public authority for breach of its duty of care in the exercise of a function that it has undertaken pursuant to a policy decision to that effect.

II. Factual Background

2 The appellant Mr. Ingles and his wife own an 80-year-old home in Toronto. In 1990, they decided to renovate the basement of the home, lowering it by18 inches, and to build a patio at the rear of the house. Lowering the basement would necessitate installing underpinnings under the existing foundations of the house to keep the walls from cracking and the house from falling down. They hired a contractor, Tutkaluk Construction Limited ("Tutkaluk") to do the work. The contract specified that the contractor would apply for and obtain a building permit and offered him an extra $500 for doing so. Mr. Ingles knew that a building permit was required to ensure that an inspection of the renovations would take place. He wanted such an inspection to ensure that the construction was being done properly.

3 Tutkaluk informed Mr. Ingles and his wife that the work would be delayed if it had to obtain a building permit before starting the renovations. Mr. Ingles reluctantly agreed that the work should begin as soon as possible, without the permit. Both Mr. Ingles and his wife asked the contractor several times in the following weeks to apply for the permit. The respondent, City of Toronto, received and approved the application for the permit two weeks after construction had begun. At this point, the underpinning work had already been completed, but the concrete for the new basement floor had not yet been poured.

4 The respondent added the following conditions to the permit before approving the application: first, that the underpinning be carried out to the satisfaction of the building inspector; second, that the building inspector be notified before proceeding with the underpinning and pouring of the concrete; and third, that the underpinning be at least as wide as the existing footings.

5 The morning after the permit was issued, Mr. Tecson, a building inspector with the city, noticed that there was construction under way at the Ingles' residence, and that the permit was not posted. After asking to see the permit, Mr. Tecson began to inspect the construction. He conducted a 30-minute inspection of the visible portions of the work. Because the

underpinning had already been installed, it was not possible to determine visually whether the underpinning continued for the full width of the footing as required by the building permit. It was also not possible to determine visually the depth of the underpinning. Therefore, the inspector looked at the colour of the concrete and struck it with a hammer to see if it had set. It was raining the day of the inspection, and hence it was not possible to dig a hole next to the underpinning to determine its depth. With respect to the width of the underpinning, Mr. Tecson relied on Tutkaluk's assurances that everything was done in accordance with the drawings attached to the building plan. Mr. Tecson noted on his building card that the underpinning had been done prior to his inspection. This was contrary to the specifications on the permit, which required that an inspector be notified before starting the underpinning work.

6 Approximately two weeks later, Mr. Grimaldi, the regular building inspector for the area, also visited the site. By this time, the basement floor had been laid and visual inspection of the underpinning as a whole was even less possible than it had been at the time of Mr. Tecson's inspection. Mr. Grimaldi carried out the same inspection as had Mr. Tecson. In addition he noticed that the concrete was smooth and without voids, an indication that it had been packed down adequately. On the job card he wrote that the underpinning appeared to be complete.

7 Within weeks of the completion of the project, the appellant began to experience flooding in his basement. He hired another contracting company to remedy the drainage problems. In the course of their work, the contractors discovered that the initial underpinning construction was completely inadequate. The underpinning was only 6 inches wide, instead of the 24 inches specified in the permit. In several places, the underpinning had not been installed to the depth stated in the plans. In fact, neither the width, nor the depth of the underpinning was in accordance with the specifications, and neither met the requirements of the *Building Code Act*, R.S.O. 1980, c. 51.

III. Judicial History

8 Conant J. of the Ontario Court (General Division) examined the basic duties and responsibilities for the regulation and inspection of construction in Ontario as set out in the *Building Code Act* ((1994), 24 M.P.L.R. (2d) 293). He found that it was clear from the statutory provisions that municipalities have a duty to appoint inspectors as are necessary to enforce the Act. The purpose of conducting inspections before issuing building permits was to ensure that permits were issued only for those plans that would conform with the building code. The purpose of conducting inspections after the permits were issued was to ensure that all construction was carried out in conformity with the plans. Conant J. concluded that the province had made a policy decision that cities inspect building plans and construction, and, as a result, that cities owe a duty of care to all who it is reasonable to conclude might be injured by the negligent exercise of those powers.

9 Having found that the city owed a duty of care to Mr. Ingles, Conant J. proceeded to determine the appropriate standard of care for a municipal inspector. Following the decision of La Forest J. in >*Rothfield v. Manolakos*, [1989] 2 S.C.R. 1259, he found that the city must show reasonable care in the exercise of its powers of inspection. The standard would not hold the city to the standard of an insurer, bound to discover every latent defect in the project and every derogation from the building code requirements. Instead, the city would be liable for those defects which it could reasonably be expected to have detected and to have ordered remedied.

10 Conant J. found that the city failed to meet the standard of care in its inspection of the construction at Mr. Ingles' home for two reasons. First, he found that it was not reasonable for Mr. Tecson to rely on Tutkaluk's assurance that the construction met the specifications. Mr. Tecson should have been wary of the contractor's assurances for the following reasons: the contractor did not apply for the permit until after the underpinning had been put in; the contractor did not give notice as to the status of the project, despite the requirements on the building permit; the permit was not posted outside the home; and Mr. Tecson did not know the contractor or his work. Second, he found that a more thorough inspection was reasonable because the underpinning was a major structural element. A defect in that element could lead to a collapse of the entire house. Conant J. concluded that the inspector could have used his investigatory powers to determine the width and depth of the underpinnings and was negligent in failing to do so.

11 As for the appellant's negligence, Conant J. found that he knew, or should have known, what he was doing in agreeing to a delay in obtaining a building permit. As such, he was required to bear some of the responsibility for the damage. However, Conant J. also found that the appellant and his wife did not participate in a conscious effort to prevent the building inspector from examining the underpinnings. They were not disentitled from recovering against the city, which failed to discharge its obligations.

Tutkaluk was found 80 percent liable for the damage and the city was found to be 20 percent liable. The city's liability was reduced by a further 30 percent to account for the appellant's contributory negligence.

12 In a subsequent addendum to the original judgment ((1995), 24 M.P.L.R. (2d) 308), Conant J. clarified the apportionment of liability as between the co-defendants, and the effect of the reduction on the award against the respondent city. He found that the respondent and the contractor were jointly and severally liable for the damages. The net effect of this finding was that the $52,520 in damages was apportioned 6 percent to the appellant, 14 percent to the city and 80 percent to Tutkaluk, with a judgment against both the city and Tutkaluk for $49,368.80 representing 94 percent of the damages. In a second addendum, he also awarded prejudgment interest fixed at the statutory rate of 12.9 percent.

13 Sharpe J. (*ad hoc*), writing for the Ontario Court of Appeal, allowed the appeal, solely on the ground that the trial judge erred in failing to address whether the appellant had removed himself from the scope of the city's duty of care: (1998), 38 O.R. (3d) 384.

14 Sharpe J. applied the test set out in *Kamloops (City of) v. Nielsen*, [1984] 2 S.C.R. 2, and agreed with the trial judge that the city had made a policy decision to inspect building plans and construction, and thus that it owed a duty of care to any person reasonably within its contemplation as someone to be injured by a breach of its duty. Sharpe J. then proceeded to apply the two-step analysis of the duty of care as set out in *Kamloops v. Nielsen*. Namely, he asked whether the city was in a relationship of proximity with the appellant such that it could contemplate that carelessness in its inspection would harm the appellant. Second, he asked whether there were any policy considerations which would negate the duty in these circumstances.

15 Sharpe J. answered both questions in the affirmative. Although there was a relationship of proximity between the city and the appellant, the Court of Appeal also found that there were considerations that removed the appellant from the class of persons to whom the city owed a duty of care. Sharpe J. based this finding on the remarks of La Forest J. in *Rothfield v. Manolakos*, *supra*, followed in *Hospitality Investments Ltd. v. Lord (Everett) Building* Construction Ltd. (1993), 143 N.B.R. (2d) 258 (Q.B.), to the effect that an owner-builder could exclude himself from the municipality's duty of care when he knowingly flouted the applicable building regulations. In his view, the appellant "[went] along with Tutkaluk's scheme" to proceed with the underpinning work without a permit. The appellant knew that this would preclude inspections while the underpinning work was being done and that it would make the inspection much more difficult afterwards. In the opinion of the Court of Appeal, this course of action was simply incompatible with the appellant attempting to recover from the city.

IV. Analysis

A. *Duty of Care*

16 This Court recently affirmed in >*Ryan v. Victoria (City)*, [1999] 1 S.C.R. 201, that the test set in *Anns v. Merton London Borough Council*, [1977] 2 All E.R. 492 (H.L.), adopted by this Court in *Kamloops v. Nielsen* (the "*Anns/Kamloops*" test) is the appropriate test for determining whether a private or public actor owes a duty of care. These cases provide the basis for determining whether the law can impose on a public authority a private law duty towards individuals, enabling individuals to sue the authority in a civil suit, and for determining whether a duty of care is owed by a public authority in particular circumstances. To determine whether a private law duty of care exists, two questions must be asked. These questions are set out by Wilson J. at pp. 10-11 of the decision in *Kamloops v. Nielsen* as follows:

(1)is there a sufficiently close relationship between the parties (the local authority and the person who has suffered the damage) so that, in the reasonable contemplation of the authority, carelessness on its part might cause damage to that person? If so,

(2)are there any considerations which ought to negative or limit (a) the scope of the duty and (b) the class of persons to whom it is owed or (c) the damages to which a breach of it may give rise?

17 The first step of the *Anns/Kamloops* test presents a relatively low threshold. A *prima facie* duty of care will be established if it can be shown that a relationship of proximity existed between the parties such that it was reasonably foreseeable that carelessness on the part of the public actor would result in injury to the other party; see, for example, *Ryan v. Victoria*, *supra*, at para. 22. However, as Lord Wilberforce recognized in *Anns*, only in certain circumstances will a public authority owe a private law duty of care towards individuals. Thus, under the second step of the test, the court must examine the legislation which governs the public authority to

determine whether a private law duty should be imposed in the circumstances. Wilson J. summarized the types of legislation identified by Lord Wilberforce, at p. 11 of *Kamloops v. Nielsen*, *supra*, as follows:
(1) statutes conferring powers to interfere with the rights of individuals in which case an action in respect of damage caused by the exercise of such powers will generally not lie except in the case where the local authority has done what the legislature authorized but has done it negligently;

(2) statutes conferring powers but leaving the scale on which they are to be exercised to the discretion of the local authority. Here there will be an option to the local authority whether or not to do the thing authorized but, if it elects to do it and does it negligently, then the policy decision having been made, there is a duty at the operational level to use due care in giving effect to it.

18 Inspection schemes fall within the second type of legislation identified by Lord Wilberforce. To determine whether an inspection scheme by a local authority will be subject to a private law duty of care, the court must determine whether the scheme represents a policy decision on the part of the authority, or whether it represents the implementation of a policy decision, at the operational level. True policy decisions are exempt from civil liability to ensure that governments are not restricted in making decisions based upon political or economic factors. It is clear, however, that once a government agency makes a policy decision to inspect, in certain circumstances, it owes a duty of care to all who may be injured by the negligent implementation of that policy; see, for example, >*Just v. British Columbia*, [1989] 2 S.C.R. 1228, at p. 1243, *per* Cory J.; *Rothfield v. Manolakos*, *supra*, at p. 1266, *per* La Forest J.

19 While I have stated above that a government agency will not be liable for those decisions made at the policy level, I must emphasize that, where inspection is provided for by statute, a government agency cannot immunize itself from liability by simply making a policy decision never to inspect. The decisions in *Anns v. Merton London Borough Council*, *supra*, and *Kamloops v. Nielsen*, *supra*, establish that in reaching a policy decision pertaining to inspection, the government agency must act in a reasonable manner which constitutes a *bona fide* exercise of discretion. In the context of a municipal inspection scheme, we must bear in mind that municipalities are creatures of statute which have clear responsibilities for health and safety in their area. A policy decision as to whether or not to inspect must accord with this statutory purpose; see, for example, *Kamloops v. Nielsen*, at p. 10.

20 Once it is determined that an inspection has occurred at the operational level, and thus that the public actor owes a duty of care to all who might be injured by a negligent inspection, a traditional negligence analysis will be applied. To avoid liability, the government agency must exercise the standard of care in its inspection that would be expected of an ordinary, reasonable and prudent person in the same circumstances. Recently, in *Ryan v. Victoria*, *supra*, at para. 28, Major J. reaffirmed that the measure of what is reasonable in the circumstances will depend on a variety of factors, including the likelihood of a known or foreseeable harm, the gravity of that harm and the burden or cost which would be incurred to prevent the injury. The same standard of care applies to a municipality which conducts an inspection of a construction project. While the municipal inspector will not be expected to discover every latent defect in a project, or every derogation from the building code standards, it will be liable for those defects that it could reasonably be expected to have detected and to have ordered remedied; see, for example, *Rothfield v. Manolakos*, *supra*, at pp. 1268-69.

(1) Did the City Owe the Appellant a Duty of Care?

21 Both the trial judge and the Court of Appeal found that the city owed the appellant a *prima facie* duty of care in these circumstances. I agree with their finding in this respect. It is certainly foreseeable that a deficient inspection of the underpinnings of a home could result in damage to the property of the homeowners, or injury to the homeowners or others. As a result, I agree that there was a sufficient relationship of proximity between the appellant and the city such that the city owed the appellant a *prima facie* duty to conduct an inspection of the renovations of the appellant's home and to do so with reasonable care. The first stage of the *Anns/Kamloops* test has been met.

22 Having found that the city owed the appellant a *prima facie* duty of care, I now turn to the legislative scheme which governs municipal inspections in Ontario to determine whether there is any policy reason to limit the *prima facie* duty of care. The relevant provisions of the *Building Code Act*, R.S.O. 1990, c. B.13, are as follows:

3.--(1) The council of each municipality is responsible for the enforcement of this Act in the municipality.

(2) The council of each municipality shall appoint a chief building official and such inspectors as are necessary for the purposes of the enforcement of this Act in the areas in which the municipality has jurisdiction.

5.--(1) No person shall construct or demolish or cause to be constructed or demolished a building in a municipality unless a permit has been issued therefor by the chief official.

6.--(1) The chief official shall issue a permit except where,

(a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law;

. . .

(3) No person shall make a material change or cause a material change to be made to a plan, specification, document or other information on the basis of which a permit was issued without notifying the chief official and filing details of such change with him or her for the purpose of obtaining his or her authorization.

. . .

(5) No person shall construct or cause to be constructed a building in a municipality except in accordance with the plans, specifications, documents and any other information on the basis of which a permit was issued or any changes thereto authorized by the chief official.

8.--(1) Subject to section 11, an inspector may, for the purpose of inspecting a building or site in respect of which a permit is issued or an application for a permit is made, enter in or upon any land or premises at any time without a warrant.

(2) Where an inspector finds that any provision of this Act or the building code is being contravened, the inspector may give to the person whom he or she believes to be the contravener an order in writing directing compliance with such provision and may require the order to be carried out forthwith or within such time as he or she specifies.

(3) Where an inspector gives an order under this section, the order shall contain sufficient information to specify the nature of the contravention and its location.

. . .

(5) Where an order of an inspector made under this section is not complied with within the time specified therein, or where no time is specified, within a reasonable time in the circumstances, the chief official may order that all or any part of the construction or demolition respecting the building cease and such order shall be served on such persons affected thereby as the chief official specifies and a copy thereof shall be posted on the site of the construction or demolition and no person except an inspector or the chief official shall remove such copy unless authorized by an inspector or the chief official.

(6) Where an order to cease construction or demolition is made under subsection (5), no person shall perform any act in the construction or demolition of the building in respect of which the order is made other than such work as is necessary to carry out the order of the inspector made under subsection (2).

9.--(1) An inspector or chief official may issue an order prohibiting the covering or enclosing of any part of a building pending inspection and where such an order is issued, an inspection shall be made within a reasonable time after notice is given by the person to whom the order is issued that the person is ready for the inspection.

(2) Where a chief official has reason to believe that any part of a building has not been constructed in compliance with this Act and such part has been covered or enclosed, contrary to an order made by an inspector or chief official under subsection (1), the chief official may order any person responsible for the construction to uncover the part at the person's own expense for the purpose of an inspection.

10.--(1) Subject to section 11, an inspector may enter in or upon any land or premises at any time without a warrant for the purpose of inspecting any building to determine whether such building is unsafe.
(2) Where an inspector finds that a building is unsafe, he or she may serve upon the assessed owner and each person apparently in possession of the building an order in writing setting out the reasons why the building is

unsafe and the remedial steps that the inspector requires to be taken to render the building safe and may require the order to be carried out within such time as the inspector specifies in the order.

(3) Where an order of an inspector under subsection (2) is not complied with within the time specified therein, or where no time is specified, within a reasonable time in the circumstances, the chief official may by order prohibit the use or occupancy of the building and such order shall be served on the assessed owner and each person apparently in possession and such other persons affected thereby as the chief official specifies and a copy thereof shall be posted on the building, and no person except an inspector or the chief official shall remove such copy unless authorized by an inspector or the chief official.

(4) Where the chief official has made an order under subsection (2) and considers it necessary for the safety of the public, the chief official may cause the building to be renovated, repaired or demolished for the purpose of removing the unsafe condition or take such other action as he or she considers necessary for the protection of the public and, where the building is in a municipality, the cost of the renovation, repair, demolition or other action may be added by the clerk to the collector's roll and collected in like manner as municipal taxes.

11.--(1) For the purposes of an inspection under section 8 or 10, the inspector may,

(a) require the production of the drawings and specifications of a building or any part thereof, including any drawings prescribed by the regulations, for his or her inspection and may require information from any person concerning any matter related to a building or part thereof;

(b) be accompanied by any person who has special or expert knowledge of any matter in relation to a building or part thereof;

(c) alone or in conjunction with such other person or persons possessing special or expert knowledge, make such examinations, tests, inquiries, or, subject to subsections (2) and (3), take such samples or photographs as are necessary for the purposes of the inspection;

(d) order any person responsible for the construction to take and supply at the person's own expense such tests and samples as are specified in the order.

23 The legislative scheme is designed to ensure that uniform standards of construction safety are imposed and enforced by the municipalities. Sections 5 and 6 of the Act require that building plans and specifications be inspected before a permit is issued to ensure that they conform with the building code. Sections 8 to 11 set out the powers of the inspector to ensure that all work that is being completed conforms with the permit and, as a result, with the building code. Inspectors are given a broad range of powers to enforce the safety standards set out in the code, from ordering tests at the owners' expense, to ordering that all work cease in general. Section 9 grants inspectors the power to order builders not to cover work pending inspection, or to uncover work when there is reason to believe that any part of the building has not been constructed in compliance with the Act. The purpose of the building inspection scheme is clear from these provisions: to protect the health and safety of the public by enforcing safety standards for all construction projects. The province has made the policy decision that the municipalities appoint inspectors who will inspect construction projects and enforce the provisions of the Act. Therefore, municipalities owe a duty of care to all who it is reasonable to conclude might be injured by the negligent exercise of their inspection powers.

24 It would appear from the use of the word "may" in ss. 8 to 11 that municipalities have the discretion under the Act to decide whether to inspect and enforce the safety standards after construction has begun. Therefore, it may be open to the municipalities to make policy decisions as to whether to inspect in certain circumstances. Of course, all such policy decisions must be made in good faith and in a way that is consistent with the overall purpose of ensuring the health and safety of the public. Such decisions can only be immune from civil action when they accord with the overall purpose of the statutory scheme. Here, the evidence is that the city had made a policy decision to inspect construction, even if the permit was issued after the construction had begun. At trial, Fred Breeze, the city's Director of Inspections, testified as follows:

Q. Well, if the inspector is not in the position to do proper inspection because of the lateness of the building permit, can you tell me why the city doesn't simply refuse to do such inspections and insist that the owner get an inspection from an independent engineer, for instance?

A. Well, that's not our policy. Our policy is to inspect once a permit has been issued, and we will inspect to the best the inspector can do at the time on what they can see while they are there. [Emphasis added.]

This policy has since been codified in the *Building Code Act, 1992*, S.O. 1992, c. 23, s. 13(6), which grants powers to the chief building official to order work to be uncovered when notice to inspect is not given in a timely fashion. While the Act gave the city the discretion to decide when to inspect, the city made a policy decision to inspect even when a permit was received late. Once the city chose to implement this decision, and exercised its power to enter upon the premises to inspect the renovations at Mr. Ingles' home, it owed a duty of care to all who it is reasonable to conclude might be injured by the negligent exercise of that power.

25 Following the *Anns/Kamloops* test, the city owed Mr. Ingles a duty of care to conduct an inspection of the renovations on their home and to exercise reasonable care in doing so, despite the fact that the building permit was obtained late. Therefore, the city could be found negligent if it ignored its own scheme and chose not to inspect the renovations. It could also be found negligent for conducting an inspection of the renovations without adequate care.

(2) The Negligent Owner-Builder

26 The Ontario Court of Appeal found that, despite the fact that the inspection scheme was operational, there were considerations that removed the appellant from the class of persons to whom the city owed a duty of care. Relying on the decision of La Forest J. in *Rothfield v. Manolakos*, *supra*, the court found that owner-builders could be excluded from the ambit of a municipality's duty of care regarding building inspections if they are seen as the sole source of their loss. After reviewing the appellant's negligence, the Ontario Court of Appeal concluded that the appellant had knowingly flouted the building code by agreeing with Tutkaluk's scheme to apply for the permit late. In doing so, the court found, the appellant removed himself from the ordinary inspection scheme and from the scope of the city's duty of care.

27 With respect, the Ontario Court of Appeal erred in its interpretation of the meaning of the decision in *Rothfield v. Manolakos*. While there may be some ambiguity in the language of that decision, *Rothfield v. Manolakos* stands for the proposition that an owner's negligence may, in very rare circumstances, be considered as a complete defence to a finding of negligence on the part of municipal inspectors. The decision does not stand for the proposition that an owner's negligence can remove him or her from the scope of a municipality's duty of care.

28 The facts of the case of *Rothfield v. Manolakos* were quite similar to the facts of the case at bar. The plaintiffs were owners of a home who hired contractors to build a retaining wall in their backyard. The contractors applied for a building permit and presented the building inspector with a rough sketch of the project. The inspector exercised his discretion and granted a permit despite the fact that the plans had not been certified by an engineer. Neither the owners, nor the contractors, advised the city, as required by the by-law, that the project had come to a stage where inspection was required. When the inspector did come to inspect the construction, most of the wall had been put in place and it was not possible to conduct a standard inspection.

29 La Forest J., for the majority of the Court, began his analysis of facts by applying the *Anns/Kamloops* test. After examining the legislative scheme, he found that once the city had made a policy decision to inspect building plans and construction, it owed a duty of care to all who it is reasonable to conclude might be injured by the negligent exercise of those powers. He then proceeded to consider whether owner-builders, as a class, should be excluded from the scope of a municipality's duty of care under the second portion of the *Anns/Kamloops* test. He could see no reason why an owner-builder would not fall within the scope of the duty of care owed by a municipality. Owner-builders are no better versed in the technical aspects of building construction than other members of the public, and cannot see to it that their contractors comply with the building codes. Owner-builders thus rely on the disinterested expertise of building inspectors to ensure that construction work is safe. In addition, La Forest J. found that owner-builders are also ratepayers in the municipality, members of the public for whose benefit the by-law was passed. Therefore, it is clear that La Forest J. decided that owner-builders are a class of persons to whom a duty is owed by municipal inspectors.

30 Having decided that municipal inspectors owe a duty of care to owner-builders, La Forest J. proceeded to discuss the implications of the owner-builder's negligence. He considered the *dictum* of Lord Wilberforce in *Anns v. Merton London Borough Council*, *supra*, that no duty is owed "to a negligent building owner, the source of his own loss"; see *Rothfield v.*

Manolakos, *supra*, at p. 1271. La Forest J. found that this principle was applicable only in the narrowest of circumstances. At p. 1271, he states:

It is to be expected that contractors, in the normal course of events, will fail to observe certain aspects of the building by-laws. That is why municipalities employ building inspectors. Their role is to detect such negligent omissions before they translate into dangers to health and safety. If, as I believe, owner builders are within the ambit of the duty of care owed by the building inspector, it would simply make no sense to proceed on the assumption that every negligent act of an owner builder relieved the municipality of its duty to show reasonable care in approving building plans and inspecting construction.

Negligent owners would be viewed as the sole source of their own loss where they, for example, knowingly flouted the applicable building regulations or the directives of the municipality, or totally failed to acquit themselves of the responsibilities that properly rested on them, none of which apply in this appeal. La Forest J. concluded that the conduct of the plaintiffs in *Rothfield v. Manolakos*, *supra*, was not such as to make them the sole source of their own loss.

31 There is some ambiguity in the decision in *Rothfield v. Manolakos* as to where in the traditional tort law analysis the consideration of an owner-builder's negligence should take place, namely whether the analysis should take place in the determination of whether a municipality owes a duty of care to the negligent owner-builder, or whether the negligence of an owner-builder can serve as a defence to a finding of negligence on the part of a municipal inspector. This ambiguity stems from the fact that La Forest J. began his analysis of the consequences of the negligence of an owner-builder by quoting the *dictum* of Lord Wilberforce in *Anns v. Merton London Borough Council*, *supra*. At p. 504, Lord Wilberforce states:

To whom the duty is owed. There is, in my opinion, no difficulty about this. A reasonable man in the position of the inspector must realise that if the foundations are covered in without adequate depth or strength as required by the byelaws, injury to safety or health may be suffered by owners or occupiers of the house. The duty is owed to them, not of course to a negligent building owner, the source of his own loss.

Lord Wilberforce's *dictum* does imply that an examination of the negligence of an owner-builder will take place within the two-step analysis of whether a duty of care is owed by a municipality in conducting an inspection. As a result, the analysis of the consequences of the negligence of an owner-builder in *Rothfield v. Manolakos*, *supra*, also uses language which implies that the inquiry into whether a municipality is liable for its negligent inspection will end at the duty stage of the analysis if the plaintiff's conduct is found to be such as to make him or her the sole source of his or her own loss. Upon further examination, however, it is my view that the true intention of the decision in *Rothfield v. Manolakos* was to create a defence available to municipalities in a very limited set of circumstances.

32 There are several passages in the reasons of La Forest J. in *Rothfield v. Manolakos* which make it clear that the negligent conduct of an owner-builder should not absolve a municipality of its duty to take reasonable care in its inspection. For example, at p. 1273, he states:

It cannot be disputed that the owners were negligent in failing to give timely notice for the pre-pour inspection. The by-law places this obligation squarely on every property owner. But the fact remains that when the inspector did attend at the site he was confronted with a situation in which it must have been at once clear to him that the retaining wall was potentially substandard. As I have just pointed out, there is no mystery to the fact that uninspected foundations may give rise to hidden defects.

Again, at p. 1274, he states:

. . . when he attended at the site, [the inspector] was confronted with a situation which, if left unremedied, manifestly stood to pose a threat to the health and safety of the public, including the neighbours and the owner builder. Of course, the cause of the problem would have been evident if the inspector had been asked to come at the proper time. But this does not absolve the inspector of his duties. It must be remembered that the inspector was, at the time, armed with all the powers necessary to remedy the situation. As I see the matter, it was incumbent on the building inspector, in view of the responsibility that rested on him, to order the cessation of the work, and the taking of whatever corrective measures were necessary to enable him to ensure that the structure was up to standard.

In light of these two passages, it is apparent that an inspector who attends at a site owes a duty of care to the public, to third-party neighbours, and to owner-builders to ensure that all renovation and construction projects meet the standards set out in the by-laws. This duty arises regardless of the conduct or negligence of the owner-builder.

33 Having found that a municipality whose inspector conducts a site inspection owes a duty to conduct a reasonable inspection, despite the negligence of the owner-builder, La Forest J. proceeds to set out a defence that may be available to municipalities in limited circumstances. He underlines that it may be open to a municipality to argue in its defence that an owner-builder's conduct was such that it was impossible to fulfill the duty to take reasonable care in its inspection. He sets out the test as follows, at pp. 1273-74:

The key question, it seems to me, is whether it is reasonable to conclude that despite the negligence of the owners, the inspector was still in a position to acquit himself of the responsibility that the by-law placed on him, i.e., to take reasonable care to ensure that all building was done in accordance with the applicable standards of the by-law. In other words, is it reasonable, in the circumstances, to conclude that a due exercise by the inspector of his powers, even though he was summoned late, could have avoided the danger?

The test assumes that inspectors owe a duty to take reasonable care to ensure that all construction is done in accordance with the standards. A municipality will only be absolved completely of the liability which flows from an inspection which does not meet the standard of reasonable care when the conduct of the owner-builder is such as to make it impossible for the inspector to do anything to avoid the danger. In such circumstances, for example when an owner-builder determines to flout the building by-law, or is completely indifferent to the responsibilities that the by-law places on him or her, that owner-builder cannot reasonably allege that any damage suffered is the result of the failure of the building inspector to take reasonable care in conducting an inspection.

34 La Forest J.'s interpretation of Lord Wilberforce's *dictum* in *Anns v. Merton London Borough Council, supra*, is consistent with the interpretation provided by the English Court of Appeal. In *Acrecrest Ltd. v. Hattrell & Partners*, [1983] 1 All E.R. 17, Donaldson L.J. found that the principle does not exclude negligent builder-owners from the ambit of a municipality's duty of care, but rather that it serves as a defence. He interprets the Lord Wilberforce's *dictum* as follows, at p. 31:

. . . the local authority's duty of care extends to the building owner and the builder-owner to the same extent as to future owners and present and future occupiers. The difference in the position of the building owner or builder-owner is not in the ambit of the duty, but in the fact that they may have more difficulty in proving a causal connection between the damage and the building inspector's negligence and may also be faced with allegations of contributory negligence which may partially or even wholly defeat their claim. This, I think, is what Lord Wilberforce meant when in the *Anns* case . . . he said:

"The duty is owed to them [the owners or occupiers of the house], not of course to the negligent building owner, the source of his own loss."

If the building owner's negligence was the effective source of his loss, he would fail on the ground that there was a break in the chain of causation or on the ground that it was just and equitable that the damages recoverable should be reduced to nothing, having regard to the building owner's share in the responsibility for the damage. . . .

Clearly, the English Court of Appeal interpreted Lord Wilberforce's *dictum* as a defence to a claim of negligence on the part of an owner-builder who was the sole source of his or her own loss. Such a defence could be invoked, either to show that the negligence of an inspector could not in any way be the cause of the owner-builder's loss, or as a complete bar to recovery for the owner-builder's contributory negligence.

35 La Forest J.'s interpretation of Lord Wilberforce's *dictum* as a defence to a finding of negligence against a municipality, rather than as a principle which excludes a class of negligent builder-owners from the scope of a municipality's duty of care, is also consistent with this Court's approach to other defences in tort law which focus on the plaintiff's conduct. In the context of the defence of *ex turpi causa non oritur actio*, this Court has ruled that it is inappropriate to consider the effect of the conduct of a plaintiff within the duty of care analysis. In >*Hall v. Hebert*, [1993] 2 S.C.R. 159, McLachlin J., for the majority of the Court, found that it is inconsistent with the conceptual role of the duty of care within the traditional tort law analysis to consider the plaintiff's conduct as a consideration which can remove him or her from the scope of a duty which would otherwise be owed to him or her. She found that a duty of care should be grounded in considerations of proximity and foreseeability. The legality or morality of the plaintiff's conduct is an extrinsic consideration. As such, she found, in those cases where the conduct of the plaintiff does become an issue to be considered, it should be done by way of a defence, rather than by distorting the notion of the duty of care owed by the defendant to the plaintiff; see *Hall v. Hebert*, *supra*, at p. 182. It would be inconsistent with this Court's jurisprudence to develop an area of negligence

law where the conduct of the plaintiff is determinative of whether he or she is owed a duty of care when this Court has specifically pronounced that a plaintiff's conduct may not be considered in determining whether a duty of care is owed to him or her in other areas of negligence law.

36 The respondent city argues that to interpret the decision of La Forest J. in *Rothfield v. Manolakos*, *supra*, as setting out the parameters for a defence to a claim of negligence by a negligent owner-builder against a municipality would necessitate overruling this Court's decision in >*Hospitality Investments Ltd. v. Everett Lord Building Construction Ltd.*, [1996] 3 S.C.R. 605. This decision consists of one paragraph which restores the judgment of the New Brunswick Court of Queen's Bench at (1993), 143 N.B.R. (2d) 258, and is set out, at p. 606, as follows:

> We agree with the trial judge that no duty of care was owed to the respondent in the circumstances of this case. Accordingly, the appeal is allowed, the judgment of the Court of Appeal (1995), 166 N.B.R. (2d) 241, is reversed, and the trial judgment (1993), 143 N.B.R. (2d) 258, is restored, the whole with costs throughout.

This decision does appear to contradict the decision in *Rothfield v. Manolakos*, *supra*, as it seems to exempt the municipality from liability at the first stage of the negligence analysis. However, the Court did not adopt the reasons of the trial judge in the case and wrote only one sentence in disposing of the appeal. To the extent that the decision can be read as departing from the analysis of *Rothfield v. Manolakos*, it should not be followed.

37 The respondent city also relies on the decision of the British Columbia Court of Appeal in *McCrea v. White Rock*, [1975] 2 W.W.R. 593, to support its contention that a duty of care is not owed to the appellant in the case at bar. That case is also distinguishable from the case at bar. In that case, the plaintiffs had hired a contractor to renovate their grocery store. The contractor applied for and received a building permit on the basis of a plan which he submitted to the inspector. He did not, however, follow the plan when installing a beam into the renovations and eventually the building collapsed. The by-law which governed inspections in the City of White Rock provided for a scheme of inspections to occur at various stages of the construction. A duty was placed on the owners of the building to notify the inspector at various stages of the construction to receive inspections. The city had made a policy decision not to inspect until notified of the need for an inspection. The contractor called the inspector on behalf of the owners, and received three inspections pursuant to the by-law. There was evidence that the practice in White Rock was for the contractor to call for inspections on behalf of the owner. No further calls for inspection were made and as a result the inspector did not inspect the beam and did not conduct any further inspections of the site.

38 While three separate and concurring sets of reasons were delivered in that case, all three of the judges of the British Columbia Court of Appeal agreed that the by-law imposed a duty to inspect the construction only when the inspector was notified by the owners that the construction had reached one of the stages where inspection was required by by-law. A municipal inspector could not be expected to attend at a site continuously to ensure that the construction met the specifications in the permit. Since the owners had failed to notify the inspector of the need to inspect the work, the inspector owed no duty to them. Two of the sets of reasons were careful to distinguish the case from those cases where inspectors had attended at construction cites and been negligent in conducting their inspections. This case is distinguishable from the case at bar, where the owners did notify the inspector of a need to inspect, and the inspector did attend at the site to conduct the inspection.

39 To summarize, despite some ambiguity in the language used in his decision, it is clear that La Forest J. created a complete defence for municipalities that could be used to militate against a finding of negligence only in the rarest of circumstances, namely, when the owner-builder's conduct was such that a court could only conclude that he or she was the sole source of his or her own loss. This complete defence may encompass those situations where an owner-builder never applies for a building permit, or never notifies the inspector of the need for an inspection, or those situations where the inspector receives notification so late that it would be impossible, upon full exercise of the powers granted under the governing legislation, to discover any hidden defects. In other cases, such as *Rothfield v. Manolakos*, *supra*, itself, it will still be open to municipalities to show that a plaintiff was contributorily negligent, and to seek an apportionment of the damages accordingly. It is also clear that once a municipality chooses to implement a policy decision to inspect, it owes a duty to all who might be injured by the negligent exercise of those powers, including builder-owners, to take reasonable care in conducting that inspection. As a result, I must disagree with the findings of the Ontario Court of Appeal in this case. The city owed a duty to the appellant to conduct a reasonable inspection of the renovations to his home.

B. *Standard of Care*

40 As I have stated above, to avoid liability the city must show that its inspectors exercised the standard of care that would be expected of an ordinary, reasonable and prudent inspector in the same circumstances. The measure of what constitutes a reasonable inspection will vary depending on the facts of each case, including the likelihood of a known or foreseeable harm, the gravity of that harm, and the burden or cost which would be incurred to prevent the injury; see, for example, *Ryan v. Victoria*, *supra*, at para. 28. For example, a more thorough inspection may be required once an inspector is put on notice of the possibility that a construction project may be defective. In addition, a municipal inspector may be required to exercise greater care when the work being inspected is integral to the structure of the house and could result in serious harm if it is defective. While in some circumstances a more thorough inspection will be required to meet the standard of care, municipalities will not be held to a standard where they are required to act as insurers for the renovation work. The city was not required to discover every latent defect in the renovations at the appellant's home. It was, however, required to conduct a reasonable inspection in light of all of the circumstances; see, for example, *Rothfield v. Manolakos*, *supra*, at pp. 1268-69.

41 The inspection scheme set out in the 1990 *Building Code Act* delineates the powers that are available to municipal inspectors to discover defects in a construction project. The city can only be held liable for those defects which the municipal inspector could reasonably be expected to have detected and had the power to have remedied.

42 I turn now to the inspection that took place at the appellant's home. In examining whether the inspection was reasonable in the circumstances, we must bear in mind that the determination of whether a defendant has met the standard of care required in the circumstances is a question of fact. While it is open to an appeal court to find that a trial judge applied the wrong standard of care, once it is determined that he or she applied the correct standard, an appeal court can reverse a trial judge's findings with respect to whether that standard was met by the defendant only if it can be established that he or she made some palpable and overriding error which affected the assessment of the facts; see, for example, *Ryan v. Victoria*, *supra*, at para. 57; *Stein v. The Ship "Kathy K"*, [1976] 2 S.C.R. 802, at p. 808.

43 After conducting a thorough examination of the facts in this case, Conant J. concluded that the city's inspection fell short of meeting a reasonable standard in the circumstances. He accepted the appellant's submission that the behaviour of the contractor should have made the inspector wary. The contractor did not apply for the building permit until after the underpinning had been put in. The contractor had ignored the instructions in the permit, which specified that the inspector was to be notified before proceeding with the underpinning. The contractor had also failed to post the permit outside the appellant's home. Mr. Tecson testified that he did not know the contractor and had no basis for relying on him. The trial judge concluded that, given these circumstances, it would have been reasonable to inspect further. It was simply insufficient for the inspector to rely on the contractor's assurances that the work, which was not readily visible, had been completed according to the specifications. Indeed, it has been recognized by this Court that it is to be expected that contractors, in the normal course of events, will fail to observe certain aspects of the building by-laws. It is for this reason that municipalities employ building inspectors; see, for example, *Rothfield v. Manolakos*, *supra*, at p. 1271. It is, therefore, unreasonable for an inspector to conclude that a project has met the standards in the building code simply because the contractor has said so. Such a conclusion is especially unreasonable when the inspector has been put on notice of the contractor's willingness to contravene the instructions in the building permit.

44 Conant J. also found that a more thorough inspection was reasonable in this case because of the nature of the work that was being carried out. He found that the risk of harm was great, requiring a higher standard of care. The construction work consisted of the installation of underpinning, which was to bear the weight of the entire house. It was a major structural element, and a serious defect in its construction could have led to the collapse of the entire house. While the tests conducted by the inspector could help to ascertain the quality of the materials used, they could not help to ascertain whether the dimensions of the underpinning were in accordance with the plan. Given the importance of the underpinning to the safety of the entire house, verification that its construction met the specifications of the plan was necessary.

45 The city argued that the inspector lacked the power to do anything further than the inspection that he conducted. The underpinning had been laid before his arrival and it was impossible to determine visually whether it continued for the full width of the footing. The basement was dug up for the laying of the drains, and only a few inches of the depth of the underpinning were visible because of the piles of dirt from the excavation. The city argued that the powers of the building inspector to uncover work were

limited. Section 9(2) restricted those powers to situations where there was a reason to believe that a part of the building had not been constructed in compliance with the Act and there was a pre-existing order not to cover. At trial, Conant J. accepted that the preconditions to satisfy granting an order pursuant to s. 9(2) of the Act were absent in this case. However, he rejected the argument that this was the only power available to the municipality to remedy the defect.

46 The trial judge found that, pursuant to s. 11(1)(d) of the 1990 Act, the inspector had the power to order the appellant to call in an engineer to saw through the underpinning to determine its width. Furthermore, pursuant to s. 9(1) of the Act, the inspector could have ordered that the basement floor not be laid. He could then have returned after the drains had been installed, when it was not raining, and dug down to determine the depth of the underpinning. The city argues that this places too high a standard on the inspector. He had no reason to believe that the underpinning did not meet the specifications in the plan. His inspection indicated that the work had been done properly. I find no error in the findings of the trial judge in this respect. The inspector reached his conclusion that the depth and the width of the underpinning met the specifications in the plan on the assurance of a contractor who had already shown disregard for the requirements of the building permit, and tests which concluded that the other aspects of the underpinning had met the standard. Given the nature of the work, it was unreasonable to conclude that the width and the depth of the underpinning met the requirements of the building code without actually inspecting that aspect of the work.

47 The trial judge applied the correct principles in determining that the inspector failed to conduct a reasonable inspection in the circumstances. He recognized that in the circumstances, especially in light of the importance of the underpinning to the structural safety of the home, a more vigilant inspection was required. The Act granted the power to the inspector to conduct such an inspection. By failing to exercise those powers to ensure that the underpinning met the specifications in the plan, the inspector failed to meet the standard of care that would have been expected of an ordinary, reasonable and prudent inspector in the circumstances. I therefore agree with Conant J. that the municipality was negligent in conducting the inspection of the renovations on the appellant's home.

C. *The Negligent Owner-Builder*

48 Having found that the city owed a duty to the appellant to conduct a reasonable inspection, and that its inspector failed to conduct a reasonable inspection in the circumstances, I must now examine whether the conduct of the appellant in this case was negligent, absolving the city of some of its liability for its insufficient inspection. The appellant's conduct may even have been such as to justify absolving the city of all liability for its negligence.

49 Mr. Ingles had specified in his contract that Tutkaluk was to apply for a building permit. Tutkaluk told him that the work would be delayed if it had to obtain a building permit before it began. The trial judge found that the appellant knew or should have known what he was doing in agreeing to a delay in obtaining a building permit, and found that he was negligent in allowing the construction to begin without a permit. On the other hand, the trial judge also found that it was impossible to conclude that the appellant and his wife participated in a conscious effort to prevent the building inspector from examining the underpinnings of their home. The Court of Appeal found that the appellant and his wife were "sadly mistaken" in relying on Tutkaluk's advice that it was appropriate to proceed with the underpinning without a permit. It is clear that the appellant was negligent. That negligence may reduce, in part, the city's liability. However, for the city to avail itself of the complete defence described in *Rothfield v. Manolakos*, *supra*, it must show that the appellant's conduct was such as to make him the sole source of his own loss.

50 As I have discussed above, the defence described in *Rothfield v. Manolakos* applies only in the narrowest circumstances. To avail itself of the defence, the municipality must show that the owner-builders knowingly flouted the applicable building regulations or the directives of the building inspector, or that the owner-builders totally failed to acquit themselves of the responsibilities that rested on them, such that the inspector was no longer in a position to take reasonable measures to ensure that the construction was done in accordance with the applicable standards. In delineating the type of conduct which might be considered "flouting" of the building regulations, or a total failure to meet the requirements of the legislative scheme on the part of the owner, it is important to consider the fact that the defence absolves municipalities of all liability. As a result it serves as a complete bar to recovery for certain plaintiffs. The scope of the defence must be consistent with the purposes of a system of tort law, and with tort law principles themselves.

51 The contributory negligence bar, where a plaintiff was denied any means of recovery once he or she was seen to have contributed to his or her own loss, is no longer a part of our system of tort law. It has been replaced by statutory schemes which apportion liability between negligent defendants and contributorily negligent plaintiffs. This Court recently reaffirmed its disapproval of the bar in >*Bow Valley Husky (Bermuda) Ltd. v. Saint John Shipbuilding Ltd.*, [1997] 3 S.C.R. 1210. In the course of determining whether the contributory negligence bar could still apply in maritime law, McLachlin J. states (at para. 94):

The considerations on which the contributory negligence bar was based no longer comport with the modern view of fairness and justice. Tort law no longer accepts the traditional theory underpinning the contributory negligence bar -- that the injured party cannot prove that the tortfeasor "caused" the damage. The contributory negligence bar results in manifest unfairness, particularly where the negligence of the injured party is slight in comparison with the negligence of others. Nor does the contributory negligence bar further the goal of modern tort law of encouraging care and vigilance. So long as an injured party can be shown to be marginally at fault, a tortfeasor's conduct, no matter how egregious, goes unpunished.

In light of this Court's approach to the contributory negligence bar, a municipality cannot avail itself of the defence set out in *Rothfield v. Manolakos*, *supra*, simply because a plaintiff acted negligently. To allow the municipality to do so would amount to a reintroduction of the contributory negligence bar into the sphere of municipal inspection. It would be inconsistent with the modern goal of tort law of encouraging care and vigilance to absolve a municipality of all liability for a negligent inspection simply because its inspectors were contacted late. Municipalities, having made a policy decision to inspect even when a permit is obtained late, would be able to conduct unreasonable inspections, while being assured that there would be no financial sanction for doing so. As I have stated above, the contributory negligence of a plaintiff may still be relevant to the apportionment of liability. In *Bow Valley v. Saint John Shipbuilding*, *supra*, McLachlin J. reduced the plaintiff's recovery by 60 percent due to its negligence. In the case at bar, the liability will also be apportioned in accordance with the appellant's negligence. In the rarest of circumstances, such as those described in *Rothfield v. Manolakos*, a defendant may be absolved of all liability because it is shown that the owner-builder is entirely responsible for the damage and did not rely on the inspection.

52 The concept of "flouting", therefore, must denote conduct which extends far beyond mere negligence on the part of an owner-builder. The word suggests that the owner-builder in fact mocks the inspection scheme. Certainly, an owner-builder who submitted false plans and documents to receive a permit would be mocking the scheme. Similarly, an owner-builder who never contacted an inspector to conduct an inspection would show a lack of respect for the inspection scheme and certainly no reliance on it. However, in this case the appellant did not act in these ways. He certainly acted negligently. The trial judge, however, found that he did not participate in a conscious effort to undermine the building code regime. In my view, such conduct does not amount to a "flouting" of the building code. As a result, I find that the Court of Appeal erred in absolving the city of all liability.

D. *Damages*

53 The appellant contends that this Court does not have the jurisdiction to review the trial judge's award of damages in this case because the respondent city did not apply for leave to cross-appeal pursuant to Rule 29 of the *Rules of the Supreme Court of Canada*, SOR/83-74. The relevant provisions of Rule 29 provide as follows:

29. (1) A respondent who seeks to set aside or vary the whole or any part of the disposition of the judgment appealed from shall apply for leave to cross-appeal within 30 clear days after the service of the application for leave.

. . .

(3) A respondent who seeks to uphold the judgment on a ground or grounds not raised in the reasons for the judgment appealed from may do so in the respondent's factum without applying for leave to cross-appeal, and the appellant may serve and file a factum in reply in accordance with Rule 41.

The appellant argues that since the city's arguments with respect to apportionment, damages, and joint and several liability do not seek to uphold the Court of Appeal judgment on a ground not raised in the reasons for judgment, the city must apply for leave to cross-appeal pursuant to Rule 29(1).

54 The Court of Appeal did not find that the city was negligent in this case, and as such, did not comment upon the apportionment of the damages by the trial judge. In asking this Court to review the trial judge's apportionment of fault in this case, the city is not seeking to set aside or vary any part of the Court of Appeal judgment. In addition, the city is not seeking to uphold the judgment on a ground or grounds not raised in the reasons for judgment. The city is merely responding to the appellant's position that the appellant's negligence is properly considered in the apportionment of fault, and not in the determination of whether a duty of care was owed by the municipality. Therefore, I find that the city's arguments do not fall within Rule 29 and that this Court has the jurisdiction to review the apportionment of fault by the trial judge.

55 The trial judge found that Tutkaluk was 80 percent liable for the damage suffered by the appellant. The city was 20 percent liable for its negligent inspection. He then turned to the appellant's negligence. Having found that the appellant should bear some of the responsibility for his loss, the trial judge reduced the city's liability by 30 percent to account for the appellant's negligence. It appears that the trial judge took this approach to ensure that Tutkaluk would not benefit from the finding of negligence against the appellant, by having his damages reduced in proportion to the appellant's fault. With respect, this initial apportionment is not consistent with the *Negligence Act*, R.S.O. 1990, c. N.1. Sections 1 and 3 of that Act read as follows:

1. Where damages have been caused or contributed to by the fault or neglect of two or more persons, the court shall determine the degree in which each of such persons is at fault or negligent, and, where two or more persons are found at fault or negligent, they are jointly and severally liable to the person suffering loss or damage for such fault or negligence, but as between themselves, in the absence of any contract express or implied, each is liable to make contribution and indemnify each other in the degree in which they are respectively found to be at fault or negligent.

3. In any action for damages that is founded upon the fault or negligence of the defendant if fault or negligence is found on the part of the plaintiff that contributed to the damages, the court shall apportion the damages in proportion to the degree of fault or negligence found against the parties respectively.

When there are two or more tortfeasors, and a plaintiff has also been found negligent, the proper approach to apportionment is to first reduce the extent of the recoverable damages in proportion with the plaintiff's negligence, and then to apportion the remaining damages between the defendants, in accordance with their fault; see, for example, *Fitzgerald v. Lane*, [1988] 2 All E.R. 961 (H.L.); *Bow Valley v. Saint John Shipbuilding*, *supra*; *Colonial Coach Lines Ltd. v. Bennett*, [1968] 1 O.R. 333.

56 In his subsequent addendum, however, the trial judge clarified that his intention was to apportion fault so that the appellant would be 6 percent liable, the city would be 14 percent liable and Tutkaluk would be 80 percent liable. In assessing the damages, he corrected his previous error, and subtracted the portion of the damages that could be attributed to the plaintiff in accordance with his findings of fault.

57 The city has asked this Court to overturn the trial judge's apportionment of fault in this case. It argues that his apportionment is inconsistent with other apportionments in similar situations; see, for example, *Rothfield v. Manolakos*, *supra*, at p. 1278. The apportionment of liability is primarily a matter within the province of the trial judge. Appellate courts should not interfere with the trial judge's apportionment unless there is demonstrable error in the trial judge's appreciation of the facts or applicable legal principles; see *Bow Valley v. Saint John Shipbuilding*, *supra*, at para. 78. While the trial judge applied an unorthodox method of apportionment in his original judgment, his subsequent addendum clearly shows his intention to apportion fault between the plaintiff and the defendants as follows: 6 percent to the appellant; 14 percent to the city; and 80 percent to the contractor. The trial judge was well apprised of all of the facts in the case, and based his final apportionment on these facts. In my view, there is no demonstrable error in the trial judge's appreciation of the facts in this case to justify interfering with his apportionment.

58 The city also argues that it should not be held to be jointly and severally liable with the contractor and that it should be liable only for its portion of the fault. To support this contention, the city relies on authorities from British Columbia that have held that where the plaintiff is contributorily negligent, multiple tortfeasors will only be liable to the extent of their fault; see, for example, *Leischner v. West Kootenay Power & Light Co.* (1986), 24 D.L.R. (4th) 641 (B.C.C.A.). I do not find these authorities to be applicable in this case. The legislation in British Columbia differs significantly from the legislation in Ontario. Section 2(c) of the *Negligence Act*, R.S.B.C. 1979, c. 298, reads as follows:

. . . as between each person who has sustained damage or loss and each other person who is liable to make good the damage or loss, the person sustaining the damage or loss shall be entitled to recover from that other person the percentage of the damage or loss sustained as corresponds to the degree of fault of that other person. [Emphasis added.]

Therefore, it is possible to read the British Columbia legislation as allowing contributorily negligent plaintiffs to recover only the percentage of the damage sustained that corresponds to the degree of fault of each of the individual tortfeasors.

59 The Ontario legislation has been interpreted differently, and joint and several judgments have been awarded to contributorily negligent plaintiffs; see *Menow v. Honsberger Ltd.*, [1970] 1 O.R. 54 (H.C.), aff'd [1971] 1 O.R. 129 (C.A.), aff'd on other grounds, [1974] S.C.R. 239 (*sub nom. Jordan House Ltd. v. Menow*). Similarly, in *Bow Valley v. Saint John Shipbuilding, supra*, this Court ruled that defendants would be jointly and severally liable for a negligent plaintiff's damages in the context of the *Canada Shipping Act*, R.S.C., 1985, c. S-9. The purpose of a regime which imposes joint and several liability on multiple defendants is to ensure that plaintiffs receive actual compensation for their loss. Given the wording of the Ontario *Negligence Act*, I can see no reason to deny this benefit to a plaintiff who contributes to his or her loss. His or her responsibility for the loss is accounted for in the apportionment of fault. There is no reason to account for it again by denying him or her the benefit of a scheme of joint and several liability when the wording of the legislation does not intend it to be so.

60 In light of the foregoing analysis, I would allow the appeal and restore the apportionment of fault by the trial judge. As a result, the damages of $52,520 will be reduced by $3,151.20, representing 6 percent of the damages, to account for the appellant's negligence. I would thus restore the judgment of $49,368.80 against both the city and the contractor. The city is entitled to have judgment for indemnity against the contractor for $42,016.

61 I turn now to the prejudgment interest that was awarded by the trial judge. The trial judge awarded prejudgment interest at the rate of 12.9 percent. The city has asked this Court to review that award to account for the fluctuations in the market interest rates that occurred between the date that the action was commenced and the date of judgment. The *Courts of Justice Act*, R.S.O. 1990, c. C.43, s. 130, grants trial judges the discretion to award prejudgment interest at a different rate than the prescribed interest rate to account for changes in market interest rates. The trial judge did not find that this was an appropriate case to lower the prejudgment interest rate from the one prescribed. He did not find that he was prevented from adjusting the interest rate, but simply chose not to do so. I find no reason to interfere with the trial judge's exercise of his discretion on this matter.

62 I would accordingly allow the appeal, set aside the judgment of the Court of Appeal and restore the decision of the trial judge, with costs throughout.

Appeal allowed with costs.

Solicitor for the appellant: Philip Anisman, Toronto.

Solicitor for the respondent: City Solicitor, Toronto.

Innisfil (Township) v. Shakell

Between
The Corporation of the Township of Innisfil, plaintiff, respondent and appellant by cross-appeal, and
Alexander Shakell, Kenneth Russell Shakell and Glenn Alexander Shakell, defendants, appellants and respondents by cross-appeal

[1982] O.J. No. 100

Ontario Supreme Court - Court of Appeal
Toronto, Ontario
Howland C.J.O., Blair and Goodman JJ.A.
Heard: April 22 & 23, 1982.
Judgment: June 24, 1982.
(19 pp.)

Counsel:
Michael M. Miller, for the appellants, respondents by cross-appeal.

E. Marshall Green, for the respondent, appellant by cross-appeal.

The judgment of the Court was delivered by

[para1] GOODMAN J.A.:-- The appellants appeal from a judgment of Carruthers J., dated February 2, 1981, whereby a mandatory injunction was granted ordering each of the appellants to remove the mobile home which each of them occupied and which were situated on lands in the Township of Innisfil owned by the appellant Alexander Shakell. It further ordered that Alexander Shakell have removed from the lands all other mobile homes which had been moved onto them on or after August 14, 1978. It then provided that the removal of the mobile homes was to be effective "on or before the 15th day of May, 1981, unless on or before the 15th day of April, 1981, a permit as provided for by the provisions of the Building Code Act has been issued with respect to any such mobile home".

[para2] The appellants seek an order setting aside the mandatory injunction.

[para3] The respondent (herein referred to as the Township) cross-appealed requesting that the judgment be varied to order that the appellants be required to remove or cause to be removed all mobile homes now in place on the subject lands regardless of the date on which they have been placed thereon.

[para4] The admitted facts which gave rise to the action are as follows. In 1946, Alexander Shakell became the registered owner of 49 acres of land in the Township of Innisfil. From 1946 to 1960 gravel was removed from the property at various locations. From 1960 to 1971 the lands were used as a source of gravel, a wrecking yard, a repair garage, and a motor vehicle race track. No dispute arises from these uses of the land.

[para5] In 1972, Alexander Shakell began to use the lands as a "travel trailer park" for seasonal temporary use. This use was carried on in 1973. In 1972, Alexander Shakell, herein referred to as Shakell Sr., had moved onto the property a mobile home which was used by him as a year around permanent residence and for purposes accessory to the operation of the "seasonal trailer park".

[para6] Approximately one year later, his two sons, the appellants Kenneth Russell Shakell and Glenn Alexander Shakell, each moved onto the lands a mobile home used for his personal residence and purposes accessory to the operation of the trailer park. In 1974, Shakell Sr. permitted to be placed on the lands mobile homes for use as year around premises by the owners thereof who placed the homes there pursuant to land rental leases entered into by them with him.

[para7] In 1975, the Township, as a result of a letter received by it from the Ministry of Industry and Tourism requesting from it a "letter of compliance", first became aware of the fact that Shakell Sr. was operating a trailer park on his lands. Counsel for the Township at trial and on this appeal conceded that the appellants made use of their

individual mobile homes for purposes which were "accessory" to the operation of the trailer park. By letter dated October 24, 1975, the Township had advised Shakell Sr. that "their present use may continue as long as the trailer camp is in operation in accordance with existing By-laws".

[para8] In the year 1975, Shakell Sr. applied to the Township Planning Board and to Council to re-zone his lands to permit the placing of permanent mobile homes thereon. The applications were refused. It was as a result of these applications that the Township first became aware that Alexander Shakell had permitted the placement of permanent mobile homes on his lands. By the end of 1974, five such permanent mobile homes had been placed on the property in addition to the three permanent mobile homes placed there by the appellants for their personal use.

[para9] An agreement was reached in 1975 between the Township Planning Director and Shakell Sr. whereby a "letter of compliance" would be given to the Ministry of Industry and Tourism on condition that Shakell Sr. would phase out all of the permanent mobile homes except those being used by him and his two sons. The "letter of compliance" was forwarded to the Ministry and Shakell Sr. received from the Ministry of Industry and Tourism a licence to operate "the tourist establishment known as Lonesome Pine Trailer Court" in the year 1975. He received further licences in the years 1976, 1977 and 1978. No licence was required thereafter. Shakell Sr. continued to lease lands, generally on a month to month basis, to persons who brought on to his property mobile homes used by them as year around residences. At the date of trial of the action in December, 1980 there were 21 such mobile homes on the property. These homes are connected to water, hydro-electric and sewage services provided by Shakell Sr.

[para10] On September 13, 1977, the Township commenced this action against the appellants and twenty other named defendants who allegedly had brought on to the property mobile homes which they used as year around residences. At the outset of the trial and on the consent of all parties, the action was discontinued as against all defendants other than the appellants. The relief claimed by the Township was an order requiring the defendants to remove all mobile homes situated on the lands belonging to Shakell Sr.

[para11] As stated by the learned trial judge the Township's position was that use of mobile homes situated on the lands as permanent residences constituted an unlawful use of the lands.

[para12] Counsel for the appellant advised the Court that it had discontinued the action against the lessees-owners because of the numerous and continuing changes in occupancy and ownership of the various permanent mobile homes which were brought on to the lands prior to the commencement of the action and the removal of some and placement of others between the date of institution of the action and the trial thereof.

[para13] In order to determine the outcome of the appeal and cross-appeal, it is necessary to consider the provincial legislation and municipal by-laws relied upon by the Township in its pleadings and at trial.

[para14] The Township had adopted an Official Plan dated 1968 and approved, with modifications by the Minister of Municipal Affairs, in 1969. The Official Plan designated the subject lands as "rural".

[para15] Section V of the Official Plan entitled Detailed Development Policies contained a definition of "rural" as it pertained to use of lands so designated on the map schedule and the definition included use of such land for "recreational uses".

[para16] Counsel for the Township conceded that an automobile trailer camp constituted a recreational use and fell within the permissible uses contemplated under the definition of "rural" in the Official Plan.

[para17] At the time that the Official Plan was approved, there was in existence Township of Innisfil By-law A-30 which was passed on May 10, 1956 and approved by the Ontario Municipal Board in the month of August, 1956. The by-law was amended by By-law A-35 of the same year. That by-law was

entitled "A By-law to regulate the use of land and the Character, Location and Use of Buildings and Structures".

[para18] The approval of this by-law preceded the adoption of the Official Plan by approximately 12 years.

[para19] Although the Township of Innisfil relied upon this by-law as a zoning by-law, in my opinion it cannot be deemed to be such. Section 3 of the bylaw which is headed "Scope and Effect" reads as follows:

> The provisions of this by-law for purposes of interpretation and application shall be held to be the minimum requirements adopted for the protection of the health, convenience, safety and general welfare of the public. No land shall be used and no building shall be erected or used except in conformity with the provisions of this by-law.

[para20] Section 4 of the by-law purported to classify the use of lands and provide for erection and use of buildings within the area under use classifications as follows: (a) residential, (b) business, (c) industrial, (d) agricultural and (e) forestry and mining. Other sections defined the various uses and set forth numerous provisions governing the various uses such as lot frontages, side yard and set-back requirements, lot area coverage and sanitary accommodation. No provision, however, was made in the by-law setting forth, by metes and bounds or by reference to a map or otherwise, those particular areas which were to be restricted in use to any one or more of the classifications referred to above.

[para21] This Court had occasion to deal with this by-law in the case of The Corporation of the Township of Innisfil v. Pennell (unreported reasons, released June 2, 1980). At p. 3 of those reasons Blair J.A. said, "Essentially, by-law A-30, as amended, is a building by-law prescribing standards for construction and location on lots of different types of buildings". I agree with that statement with the addition that it may also be considered a land use by-law. It is not, however, a zoning by-law as it did not purport in any way to divide the Township into zones restricting the uses of the lands within such zones.

[para22] In the present case, I agree with the finding of the learned trial judge that a "mobile home" falls within the definition of an "automobile trailer" as defined in the by-law and accordingly that the occupation of a mobile home as a permanent residence constitutes a residential use as defined in section 6 of the by-law.

[para23] Section 8 of the by-law sets forth "Provisions governing tourist accommodation". It makes certain provisions for lot areas, side-yards, and distances from the highway of lands used in connection with automobile trailers inter alia, falling within the classification of tourist accommodation. Paragraph (iv) of sub-section (d) of Section 8 provides:

> No automobile trailer shall be used for human habitation in this municipality for a period of more than sixty days in any year; unless by special permit from Bldg. Inspector for a special purpose. (Emphasis is mine)

[para24] As of the date of the passing of By-law A-30 as amended by By-law A-35, the authority of a municipality to pass by-laws governing prohibition of the use of automobile trailers as living accommodation within a municipality are to be found in the Municipal Act, R.S.O. 1950, c. 243 s. 388(1) as amended by S.O. 1952, c. 63 s. 16(3) which amended s. 388(1) by adding thereto ss. 91a and further amended by 1955, c. 48 s. 39 by adding clause (d) so that the relevant parts of s. 388(1) 91a then read:

> 388(1) By-laws may be passed by the councils of local municipalities:
>
> ...
>
> 91a For prohibiting the use, and for prohibiting the owner or lessee of any trailer from permitting the use, of any trailer for the living, sleeping or eating accommodation of persons, within the municipality or one or more defined areas thereof, for more than such number of days, not less than sixty, as the by-law provides, in

any period of ten consecutive months.

(a) In this paragraph, "trailer" means any vehicle so constructed that it is suitable for being attached to a motor vehicle for the purpose of being drawn or propelled by the motor vehicle, and capable of being used for the living, sleeping or eating accommodation of persons, notwithstanding that such vehicle is jacked-up or that its running-gear is removed.

(b) A by-law passed under this paragraph may be made to apply to any trailer whether or not such trailer was used for the living, sleeping or eating accommodation of persons before the by-law was passed.

(d) For the purposes of this paragraph, a trailer shall be deemed to be in use on every day, it is located in the municipality or in the defined area or areas, as the case may be, but this clause does not apply where the trailer is located in the municipality or the defined area or areas only for the purpose of sale or storage. (Emphasis is mine)

[para25] It can readily be seen that By-law A-30 as amended by By-law A-35, in prohibiting the use of automobile trailers for use for human habitation for a period of more than 60 days in one year imposed a more severe limitation on such use than the prohibition of use for such purpose for a period of more than 60 days in any period of 10 consecutive months as provided in ss. 91a. It is clear that the Township did not have the power to enact s. 8(d)(iv). and that particular clause is clearly invalid. Taking the position of the Township at its highest, namely, that the remainder of the by-law has not been invalidated thereby, there is nothing in the remainder of the by-law, standing alone, to prevent the use of the automobile trailers or mobile homes for permanent residences. It should be noted that the above statutory provisions were carried forward in the Municipal Act, R.S.O. 1970, c. 284 as s. 354(1)86 and later repealed by S.O. 1976, c. 69 s. 10(6).

[para26] The Township argued, however, that the by-law should be read in conjunction with the Official Plan of the Township approved by the Minister of Municipal Affairs in 1969. It was the Township's position that By-law A-30, taken alone or when read in conjunction with the Official Plan had the effect of "freezing" the uses then in existence for the lands unless used in conformity with the development policies set forth in the Official Plan. In particular, the Township relied on Section 17 of By-law A-30 which contained certain provisions with respect to change in the purpose for which lots or buildings are used, severance of portions of lots and construction of new buildings or additions to existing buildings on lots.

[para27] For the reasons given by him, I agree with the learned trial judge that, "Try as I might, I cannot conclude from the wording of the by-law that it can be looked at as a zoning by-law of general application so as to freeze or hold the use being made of the lands in question at the time of the enactment of the by-law." He then concluded that since a mobile home fell within the definition of an "automobile trailer", the appellants' "occupation of the mobile homes as permanent residences is a residential use permitted by By-law A-30."

[para28] Nor can I find any ground upon which to hold that the Official Plan was intended to implement By-law A-30 or that By-law A-30 can be interpreted as implementing the development policies contained in the Official Plan. Section V of the Official Plan, under the heading Detailed Development Policies, reads as follows:

This Section should be read in conjunction with Map Schedule I which shows the land use proposals, in a semi-diagrammatic form. This method of presentation of Map Schedule I is used to illustrate the overall land use policy of the Township without defining the specific boundaries of the various land use classifications. A more detailed definition of boundaries will be

established by the implementing Zoning By-law.

1) Rural

Definition: "Rural" shall mean that the predominant use of the land so designated on Map Schedule I shall be for activities connected with agriculture, such as: forestry; reforestation; conservation of soil, water or wildlife; market or nursery gardening; apiaries; the raising of fur-bearing animals; kennels; stables or veterinary establishments. Churches, schools, hospitals, institutions, cemeteries, country clubs, parks, recreational uses or uses connected with government departments, airports, railways or public utilities shall be permitted. A dwelling as an accessory use to any of the above uses shall be permitted.

Establishments for the repair or sale of agricultural implements, including the sale of fuel and lubricants for agricultural equipment, shall be permitted. (Emphasis is mine)

[para29] It is clear that it was intended that the development policies were to be implemented by a by-law to be passed in the future not by one passed 12 years before. Indeed, the evidence indicates that the Official Plan contemplated a "Rural Zone" whereas By-law A-30 does not refer to a rural zone or a rural use.

[para30] The Planning Act, R.S.O. 1970, c. 349 provides by section 20 thereof:

A by-law that conforms with an official plan shall be deemed to implement the official plan whether the by-law is passed before or after the official plan is approved.

This section was in force at the time of the approval by the Minister of the 1969 official plan. In my view, By-law A-30 cannot be said to conform to the Official Plan and accordingly the provisions of s. 20 of the Act are of no assistance to the Township's position.

[para31] It is common ground that the Township did in fact pass a restricted area zoning By-law 74-5, at some time in the year 1975 and gave third reading to a new restricted area zoning By-law 13-78 on February 22, 1978. A new Official Plan was adopted by the Township in 1976. At the time of trial it had not received the approval of the Minister. Neither one of these by-laws have received the approval of the Ontario Municipal Board. It is clear that under these by-laws the lands of Shakell Sr. would be included in an agricultural zone and that a dwelling could only be erected thereon for purposes accessory to any permitted use. I accept, for the purpose of these reasons, that the provisions of these by-laws would not have permitted the erection of mobile homes on his lands for the purpose of permanent residences except as a use accessory to carrying on a tourist trailer park business. It was conceded by the Township that these by-laws were not in force at the time any of the permanent mobile homes were brought on to the lands of Shakell Sr. The Township submitted, however, that they expressed a clear intention of the municipality to re-zone and accordingly upon application of a person for a permit to erect a building which would contravene the provisions of the by-law, the municipality would have been justified in refusing such a permit. See Ottawa v. Boyd Builders Ltd. (1965), S.C.R. 408; Campeau Corporation v. Township of Gloucester et al. (1979), 22 O.R. (2d) 652.

[para32] It was the contention of the Township that a building permit was in fact required for the placing of the mobile homes on his property for use as permanent residences, and that if he had applied for such permits, the Township would have refused to grant them. In fact no such applications were made by any of the appellants or other persons who brought such homes onto the lands.

[para33] It should be noted that the Township, in its statement of claim, made no reference to the fact that the appellants had not applied for or received building permits for the mobile homes used as permanent residences. It was only at the trial that the Township made reference to the Building Code Act, 1974 S.O. c. 74. This Act was proclaimed in force on December 31, 1975. It provided by s. 5(1) thereof as follows:

> 5.-(1) No person shall construct or demolish a building in a municipality unless a permit therefor has been issued by the chief official.

[para34] It was held in Re Chief Building Official for the City of Toronto and Manolan Enterprises Ltd. et al. (1978), 22 O.R. (2d) 60 that the wording of the section was not sufficiently broad to make it an offence for an owner to permit the construction or alteration of a building by his tenant without a permit. Subsection (1) was repealed and the following substituted 1978, c. 40, s. 2(1) proclaimed in force August 14, 1978:

> (1) No person shall construct or demolish or cause to be constructed or demolished a building in a municipality unless a permit has been issued therefor by the chief official.

[para35] The Township, at trial and in its respondent's statement and statement as appellant by cross-appeal, relied solely on the Building Code Act, 1974 and amendments thereto for its position that the mobile homes in question had been unlawfully erected on the lands by reason of the failure of Shakell Sr. to obtain the necessary building permits.

[para36] Argument was addressed to the Court on the questions whether a "mobile home" is a building within the meaning of s. 5(1) of the Building Code Act, 1974 and whether the placing of the mobile homes on the lands in the manner described in the evidence and shown in the photographs filed as exhibits fall within the meaning of the word "construct" as used in that subsection. The trial judge found for the Township on both grounds, namely that the mobile homes were buildings constructed within the meaning of the subsection and accordingly building permits were required. He found, accordingly, that those persons who brought mobile homes onto the lands on or after December 31, 1975 were in breach of the Act and that with respect to those mobile homes brought onto the lands after August 14, 1978, Shakell Sr. was in breach of the Act for having caused the buildings to be constructed without having obtained building permits before allowing the homes to be placed on his property.

[para37] Taking the findings of the learned trial judge at their best in so far as the Township is concerned and thus assuming, without deciding, that he was correct in his interpretation of the words "building" and "construct", the Township is nevertheless in an untenable position. The Township concedes that the three mobile homes owned by the appellants and placed on the lands of Shakell Sr. in the years 1972 and 1973 were being used for purposes accessory to a lawful use and accordingly did not infringe any by-law of the Township. In my view, even without such concession, the use of such mobile homes for permanent residences was not prohibited by the valid provisions of any by-law of the Township and there was no evidence indicating that any building permit was required in those years to place them on the lands.

[para38] In granting a mandatory injunction ordering the removal of these three mobile homes by the appellant, the learned trial judge appeared to apply the provisions of s. 25(1) of the Building Code Act, 1974 (now R.S.O. 1980, c. 51

s. 26(1)) which reads as follows:

> 25.-(1) Where it appears to a chief official that any person does not comply with any provision of this Act, the regulations or an order made under this Act, notwithstanding the imposition of any penalty in respect of such non-compliance and in addition to any other rights he may have, the chief official may apply to a judge of the High Court for an order directing such person to comply with such provision, and upon the application, the judge may make such order or such other order as the judge thinks fit.

This Act was not in force at the time these three mobile homes were placed on the property. The appellants could not have been guilty of noncompliance with the provisions of the Act. Accordingly, no order could be made pursuant to s. 25(1) and, in my view, there were no other grounds upon which a mandatory injunction could be granted with respect to these mobile

homes.

[para39] In so far as permanent mobile homes placed on the lands in the years 1974 and 1975 are concerned, there is no evidence that any such homes were placed on the lands by the appellants. In any event, there is no evidence that a building permit was required for such homes. As previously noted, the Act was not proclaimed in force until December 31, 1975. No order was made with respect to these homes nor was there any grounds upon which an order for their removal could be made.

[para40] In so far as permanent mobile homes placed on the lands during the period December 31, 1975 to August 14, 1978, are concerned, once again there is no evidence that any such homes were placed there or were owned by Shakell Sr. Under the provisions of the Act as it read during this time period there was no obligation upon him as landlord to obtain a building permit and he could not therefore be found to have not complied with the provisions of the Act. No order was made therefore against him for the removal of these homes nor was there any grounds for the making of such an order. Although the Township Council had given third readings to by-laws which would have prevented the use of the lands in question for permanent mobile homes, if Municipal Board approval had been obtained of such by-laws, in the circumstances of the lack of such approval, they were ineffective for such purpose. The only persons who might be said to be in breach of the Building Code Act, 1974 during this time period were the tenant-owners who by the time of trial were no longer parties to the action. In my opinion, the Court should not and could not make an order directly affecting the rights of persons not parties to the action, based on alleged violations of the law on their part.

[para41] In so far as those mobile homes placed on the lands after August 14, 1978 are concerned, it need only be noted that the writ of summons in this action was issued on September 13, 1977. It is a well-established principle of law that a plaintiff cannot claim beyond what were his rights at the teste of the writ. The cause of action must be in existence at the date of the institution of the action. Subsequent events may be evidence of the state of affairs at the teste of the writ, but can themselves give no cause of action: Cornish v. Boles (1914), 19 D.L.R. 447; United Cigar Stores Ltd. v. Buller and Hughes, [1930-31] 66 O.L.R. 593; Blasco v. Blasco (1971), 2 R.F.L. 79. The Township, in its amended statement of claim, claimed "an order that the Defendants forthwith remove the mobile homes situated upon the subject lands". This claim can only relate to such homes as were on the lands on the date of the issue of the writ and not to homes placed thereon after that date. It might have been otherwise if the Township had claimed injunctive relief by way of a restraining order. The judgment below cannot be permitted to stand with respect to these mobile homes.

[para42] Accordingly, for the above reasons, the appeal is allowed with costs and the cross-appeal is dismissed with costs. The judgment below is set aside and the action is dismissed with costs.

HOWLAND C.J.O.
BLAIR J.A.
GOODMAN J.A.

Re **J. & R. Rite Holdings (Oshawa)**, Inc. and City of Oshawa

(Ont. H.C.J.)

64 O.R. (2d) 471

ONTARIO
Supreme Court of Ontario
Lovekin D.C.J. (L.J.S.C.).
May 18, 1988.

APPLICATION for an order directing the issuance of a building permit.

David Sims, for applicant.

Robert M. Holland, for respondent.

LOVEKIN D.C.J.:-- This is an application by J. & R. Rite Holdings (Oshawa), Inc. for a building permit to erect a rental storage unit. These units are small but separate units rented by persons living in apartments or such accommodation to store various items.

The chief building officer refused to issue the permit. Admittedly, if the City of Oshawa zoning by-law governed, the permit should issue.

The building official in refusing the permit cited s. 27(1) of the Planning Act, 1983, S.O. 1983, c. 1. That section reads as follows:

> 27(1) When the Minister has approved an official plan adopted by a county or by a regional, metropolitan or district municipality,
>
> (a) every official plan; and
>
> (b) every zoning by-law passed under section 34 of this Act or a predecessor thereof,
>
> that is then in effect in the area affected by the county, regional, metropolitan or district plan shall be amended to conform therewith.

If that section is read as the defendant chief building officer and the City of Oshawa read it, traditional planning nomenclature has been reversed. Historically an official plan was an over-all general guideline and the operative legislation was the applicable and specific zoning by-law. To older lawyers who remember the official plan as an idealistic over-all concept, this appears nonsensical and completely topsy-turvy. Historically the official plan was not cast in stone. Two documents were in existence in one municipality and the operative legislation was the zoning by-law. Regional government and the two-tier system of municipal government has apparently changed all that. The regional official plan is the definitive and directing document. To ensure uniformity the local zoning by-law that spells out particulars must conform to the superior document, the regional official plan. The scope of the local zoning by-law has been seriously limited. In this connection we refer to Campeau Corp. v. Town of Gloucester (1978), 21 O.R. (2d) 4, 89 D.L.R. (3d) 135, 2 M.P.L.R. 290 (H.C.J.); affirmed on this point, 22 O.R. (2d) 652, 96 D.L.R. (3d) 320, 8 M.P.L.R. 147 (C.A.). In this case, Mr. Justice R.E. Holland stated at p. 9 O.R., p. 140 D.L.R.:

> In my view, the distinguishing feature of this case is that the official plan in question is the official plan of the regional municipality, and the provisions of s. 68(7) of the Regional Municipality of Ottawa-Carlton Act, which requires the amendment forthwith of By-law 26 of 1960 of the township to conform with the official plan ... There is a statutory obligation imposed upon the municipality to amend its by-laws and in the interim the municipality should refuse any application for a building permit, even though such application complies with its by-law if the by-law does not conform to the official plan of the regional municipality.

A similar piece of legislation governs the Regional Municipality of Durham: refer Official Plan -- Region of Durham (effective March 17, 1978).

16.6.1 Where this Plan or any part thereof takes effect, every zoning by-law then in effect in the planning area affected thereby shall be amended forthwith by the area municipalities to conform with this Plan pursuant to The Regional Municipality of Durham Act.

There is no real theoretical or practical problem in the concept that there must be a harmonious and compatible relationship between the regional official plan and any and all local zoning by-laws. Many of the problems that have arisen and the specific problem raised here are problems arising from interim situations. It may well be that the ideal working situation would involve closer team-work between regional and local authorities so that all amendments to the regional official plan would be announced and come into force simultaneously with suitable amendments being made to the local zoning by-laws. The longer a conflict is allowed to remain between the local zoning by-laws and the regional official plan the more difficult it is for solicitors to properly advise their clients and for the public to enjoy that sense of finality and a known position that is so necessary in the conduct of municipal affairs generally and planning matters in particular. Unfortunately we do not live in a perfect world and practical problems intervene to frustrate such an idyllic situation.

The real question at issue then may be phrased as follows:

Where there is a conflict between the official plan and a local zoning by-law in the two-stage form of local government as set up in Ontario as regional government, does the alteration of the regional official plan totally invalidate a local zoning by-law automatically or does the change in the official plan simply put the public on notice that the local land uses set out in the local zoning by-law will soon be changed? During such an interim period is the chief building officer empowered by law to decline to issue building permits based on the existing land use as set out in the local zoning by-law and justify his position by relying on the regional official plan? Our answer is: he may.

Is there any reasonable or measurable time-limit set for the resolution of the problem or could a situation where the regional official plan and the local zoning by-law were totally incompatible continue unresolved indefinitely?

The following authorities are of some interest: (1) Campeau Corp. v. Township of Gloucester, supra; (2) Re Woodglen & Co. Ltd. and City of North York (1983), 43 O.R. (2d) 289, 23 M.P.L.R. 18; affirmed 47 O.R. (2d) 614, 12 D.L.R. (4th) 146, 26 M.P.L.R. 40 (Div. Ct.); (3) Csele v. Town of Pelham (1985), 29 M.P.L.R. 188 -- with respect we decline to follow this case.

We find the time element here is not critical. In consequence, the actions of the respondent herein, based on this aspect of the case, appear to be proper.

There is another aspect of this case that we regard as critical which has not been extensively argued before us. While we have found that vis-a-vis the official plan and the local zoning by-law conflict the official plan governs, does that mean the applicant is not entitled to a building permit? We think not.

The city and the chief building officer apparently take the position that this is a form of warehousing and it should be located in an industrial zone and not in a special commercial uses area where the applicant proposes to construct it.

We cannot agree.

Is the proposed building property described in "warehousing" terms? While we do not have all the specifics of the planned structure, the particular building proposed apparently supplies a small cinder block storage space with its own door permitting persons living in apartments and other limited housing units to store seasonal clothing, extra pictures and all such domestic articles in an area where they are readily accessible for limited use on various occasions. It is the kind of storage area that would have been found in the basement of every private home a few years ago. It is not in our mind properly described as a warehousing facility but rather as a storage facility. The locker that one has for one's own use at a health

club is not a "warehouse" facility. The locker space one has in a high school is not a "warehouse". The basement "locker" made available in a large apartment building to a tenant separate from his living quarters is a storage locker, not a "warehouse" and could quite easily be of the same total cubic content.

It is common to have various sized "lockers" available to the public at bus stations and airports. Would anyone seriously contend that the bus company or the airlines were operating a "warehouse"?

There are certain characteristics that we believe separate warehousing facilities and storage facilities:

(A) Warehousing facilities:

(1) are governed by statutory conditions;

(2) cater to large volume storage;

(3) are open in business hours only and goods must be "requisitioned" and picked up at certain times at a certain place and in a certain manner.

(B) Locker facilities:

(1) small storage areas for small amounts of currently used articles.

(2) access is gained through a single locked door by the renter himself at any hour;

(3) the articles stored are used with high frequency rate and their being available at all hours is perhaps the most singular characteristic.

There may well be other factors. It may well be the real issue is a matter of scale and design. The issue as to whether a permit should issue to the applicant on the basis that what he proposes to erect is a proper land use, bearing in mind the precise zoning requirements in the proposed location, was not the real issue before the court. The wider question as to whether the applicant should have a permit for such a building was.

While we are of the opinion that the applicant fails vis-a-vis his official plan zoning argument, it would appear there are other grounds the applicant might pursue.

We have answered the specific question; we have commented on the general question. Our remarks on the general question are of course obiter but in dealing with the general question, "may the applicant erect the proposed structure?" we hope we may have cast a light on the problem which may assist the parties in settling their problem without further protracted and costly litigation.

The application as cast is dismissed.

There will be no order as to costs.

Application dismissed.

Jessie's Centre Non-Profit Home Corp. v. Bottan

Between
Jessie's Centre Non-Profit Home Corporation, Plaintiff, and
John Bottan and Sandra May Bottan, Defendants

Ontario Judgments: [1991] O.J. No. 1699
Action No. 91-CQ-5134

Ontario Court of Justice - General Division
Toronto, Ontario
O'Driscoll J.
Heard: October 2, 1991
Judgment: October 4, 1991

Ronald D. Manes and Michael Silver, for the Plaintiff.
Douglas Johnson, for the Defendants.

O'DRISCOLL J.:--

I. Type of Proceedings

The plaintiff seeks:

"1. An order requiring the defendants to dismantle the scaffolding and all materials erected on the defendants' property which are preventing access to the unfinished wall of the plaintiff's building.

2. An order requiring the defendants to keep the access clear to the unfinished wall of the plaintiff's building during the period of its completion.

3. An order restraining the defendants from any contact, interaction or interference with the plaintiff or its representatives, or with workmen completing the building at the plaintiff's premises.

4. Costs of this motion."

The grounds set out in the Notice of Motion are:

"1. The plaintiff has relocated its Centre to 205 Parliament Street, Toronto, Ontario and has erected a new building on the premises. The southern wall of the new building requires approximately 10 working days (weather permitting) to complete the insulation and stucco. Only approximately two hours of time must actually be spent on the defendants' property to complete the wall. No occupancy permit can be issued for the building and the plaintiff is unable to move in its operations until this exterior wall is completed.

2. In order for the workman to have access to the wall, a swing stage (like a window washing platform) is lowered which overhangs the airspace above the defendants' property. The defendants have erected a scaffold from their premises which rises to a level below the swing stage thereby impeding the descent of the swing stage and making it impossible for the south wall to be completed.

3. The defendants, and in particular John Bottan, have exhibited potentially dangerous behaviour and have done everything in their power to thwart the completion of the plaintiff's new building.

4. The defendants are in violation of City of Toronto by-laws and the plaintiff has undertaken to take all protective measures towards the defendants' premises and to pay any damages arising from the completion of the south wall.

5. The plaintiff performs a valuable public service and is suffering mounting damages daily due its inability to move into its new building. The building in its unfinished state is a target for vandalism and a safety hazard to the community."

II. The Parties

1. Jessie's is a drop-in, multi purpose daytime resource centre for pregnant or parenting teenagers. Jessie's is a nonprofit without share capital corporation. 60% of Jessie's funding is provided by the Ministry of Community and Social Services, 10% comes from the United Way and 30% is raised from the private sector.

2. Because of expansion and its lease situation, Jessie's outgrew its original location at 154 Bathurst Street, Toronto. In 1986, property was purchased at 205 Parliament St., Toronto for a new residence.

3. Sandra May Bottan owns the property (191 Parliament St) immediately to the south of 205 Parliament St. John Bottan, her husband, operates the Rear View Mirror Restaurant and an auto body shop on the land at 191 Parliament St.

4. Ellis-Don Design Build Inc. (Ellis-Don) is the plaintiff's contractor; Ellis-Don is building on a non-profit basis; so too, the architect, A.J. Diamond, Donald Schmitt and Company.

5. It appears that John Bottan has been hostile to the plaintiff since "day one". That attitude was displayed by Mr. Bottan in the following ways:

(a) dumping garbage onto the plaintiff's vacant lot and necessitating the plaintiff hiring people to clean up the garbage left by Mr. Bottan.

(b) refusing to allow a pre-construction survey on his property so that the contractor and the plaintiff would have a "before and after record".

(c) aggressive behaviour towards Ellis-Don's employee, Vic Croutch.

(d) his letter of February 12, 1991 to Ellis-Don.

(e) his refusal to reply to Ellis-Don's offer of indemnification in a letter dated February 15, 1991.

(f) his threat in the spring of 1991 to erect a ham radio antenna on his rooftop to obstruct the swing of Ellis-Don's crane boom. In fact, sections of the antenna were assembled and later removed.

(g) On June 25, 1991, he turned two hoses onto 2 workmen on site who were employed by a sub-contractor; those employees were on a swing stage attempting to complete the external wall of the premises. The police were called and charges were laid against John Bottan by one of the sub-contractor's employees. The motion record has photographs that record the event with the hoses.

(h) On July 8, 1991, John Bottan pushed an Ellis-Don employee off a 14 foot ladder. The police were called and a charge was laid against John Bottan. Fortunately, there were no injuries.

The on site representative of Ellis-Don, James Stinson describes the events this way in his affidavit:

> Mr. Bottan first erected his scaffolding from his rooftop patio on June 18, 1991. This scaffolding was erected on the westerly half of the south wall of the building requiring completion. He also stuck metal poles vertically from the erected scaffolding in order to prevent any movement of the swing stage.
>
> On June 25, 1991 Ellis-Don brought another swing stage to complete the easterly half of the south wall of the building and dropped the swing stage down the south wall. Mr. Bottan turned on a water hose and sprayed workman completing the easterly half of the wall for over two hours. Mr. Bottan's son also participated by hosing the workers. Notwithstanding the hosing, the workmen remained at the site completing their task until the police arrived and stopped Mr. Bottan from hosing them. However, as the swing stage ascended the easterly side of the wall, Mr. Bottan built up scaffolding to prevent any further movement downward of the swing stage. I am advised by Lawrence Noocho, a worker on

> the swing stage during the hosing, and verily believe that he has charged Mr. Bottan with assault in respect of the hosing. I am advised by Lawrence Noocho and verily believe that on June 13, 1991 Mr. Bottan had threatened him with violence. I took pictures of Mr. Bottan and his son hosing the workers and have attached them as an exhibit hereto.

(i) On the weekend of August 17, 1991, John Bottan again turned a water hose on the south wall of the plaintiff's building.

(j) On August 22, 1991, John Bottan once again hosed the south wall of the plaintiff's building.

(k) On December 17, 1990, John Bottan threatened to use his shotgun on Ellis-Don personnel "if any more debris fell onto his patio".

III. The Problem Faced by the Plaintiff and its contractors and sub-contractors.

Nancy Elaine Dodington, an employee of the plaintiff since 1982, in her affidavit, sworn September 24, 1991, sums it up this way:

> 20. The construction of the building's exterior walls are very close to the lot lines. As a result, it has been necessary on occasion to have the contractor's swing stage hang over the side of the building to install the exterior insulation and stucco. The neighbours to the north, the Cammisa's, have agreed to allow the contractor to utilize their air space. Mr. Bottan has not. On the south side of Jessie's building the Defendants have a two story building. Mr. Bottan refuses to allow Jessie's to use the air space above his premises to complete the exterior of its building, and accordingly, on June 25, 1991 erected the scaffolding from his rooftop patio blocking access to this unfinished south wall.
>
> The scaffolding impedes the descending of the swing stage upon which the workmen place themselves in order to complete the insulation and siding of the building's south wall. The scaffolding erected is several sections high with lengthy bars attached at the top and directed upwards towards Jessie's building.
>
> 21. I verily believe that this scaffolding serves no other purpose than to obstruct access to Jessie's south wall and thereby to prevent the lowering of the swing stage and the wall's completion. Several pictures have been taken and illustrate the problem.

IV. Negotiations, requests and demands

1. On July 3, 1991, a formal demand was sent by the plaintiff's solicitor to the then solicitor for John Bottan requiring that the scaffolding be taken down. A copy of s. 13(1) of the City of Toronto by-law 300-68 was enclosed; that by-law allows entry upon adjoining land to the extent necessary for the purpose of improvements or repairs.

John Bottan's then solicitor replied on July 3, 1991 and denied that the scaffold was erected as an obstruction to workers and also alleged that the by-law was ultra vires/inoperative as it breached the Building Code Act, R.S.O. 1980, c. 51 and also alleged that the by-law did not apply to the construction of new buildings.

2. On July 8, 1991, the sub-contractor wrote to Ellis-Don and advised that they would not do the work on the south wall of 265 Parliament St. because of Bottan's scaffolding; it prevented access to the area requiring the work and it endangered the lives and safety of the workers. The sub-contractor refused to attempt to proceed in the absence of a court order.

3. Paragraph 27 of Ms. Dodington's affidavit states:

> Jessie's has engaged in a lengthy but unfruitful process and negotiation with Mr. Bottan. In the spring of 1991, Ellis-Don representatives, Paul

> Richer and Vic Croutch, met with Mr. Bottan and his lawyer to discuss the situation. I am advised by Mr. Richer and Mr. Croutch and verily believe that Mr. Bottan identified a settlement figure of $80,000.00. This amount was felt to be exorbitant by Jessie's. On September 10, 1991 I attended a meeting with Mr. Beaman, one of Mr. Bottan's solicitors, in which Mr. Beaman indicated that Mr. Bottan might be prepared to accept payment of $100,000.00 in exchange for removing the scaffolding.

4. James Stinson in his affidavit, sworn September 24, 1991, swears that:

> 6. On or about January 24, 1991 I am advised by Vic Croutch and verily believe that once again the possibility of an Air Rights Agreement was discussed in the context of dealing with Mr. Bottan's problem with the construction of Jessie's new site. I am advised by Mr. Croutch and verily believe that Mr. Bottan informed him that if Ellis-Don gave him approximately $500.00 per day (leading to a total of $50,000.00 to $60,000.00) that he would stop making a fuss. I am advised by Mr. Croutch and verily believe that Mr. Bottan was not interested in the specific Air Rights Agreement. I am further advised by Mr. Croutch and by Paul Richer of Ellis-Don that they had other meetings with Mr. Bottan with respect to an Air Rights Agreement, all to no avail.

V. Damages to the Plaintiff

1. Water Damage

Because the south side of the building is unfinished, water has infiltrated doing damage to hardwood floor and linoleum. Some of the water was from a heavy August 1991 rain; some was from the hosing incidents of John Bottan. The damages have been estimated at $60,000.

2. Costs to the Plaintiff of Alternate Accommodation

September 1, 1991 was the scheduled "move in date"; the plaintiff has had to rent other units and pay to store furniture.

3. Occupancy Permit

Because of the unfinished state of the south exterior of the building, the building cannot be occupied and an occupancy permit cannot be issued. Moreover, the architect cannot certify that the contract has been "substantially performed", under s. 2(1)(a) of the Construction Lien Act. The contractor and the sub-contractor are, therefore, prejudiced because the hold-back money cannot be released.

VI. The Premises Of John Bottan

On August 27, 1991, Eric Jones, a City of Toronto inspector for the Department of Buildings and Inspection, served John Bottan with a "repair order" under by-law 366-73. The inspector's order stated in part:

> You are ordered to repair or otherwise take the necessary action to correct the violations noted below in order to place the premises in conformity with the requirements of the said By-law within the time limit shown.
>
> The following items must be remedied within 48 hours.
>
> The roof is not kept free from objects and materials, which create accident hazards, namely:
>
> A. Scaffolding on the flat roof on the north side.

As of October 2, 1991, the scaffold on the roof of 191 Parliament St. had not been taken down.

VII. The Applicable Law

1. City of Toronto By-law 300-68:

> s. 3. This By-law applies to the excavation for, construction, erection, alteration, repair, removal, wrecking, and change of occupancy of any building or structure or part thereof.
>
> 13.(1) The owner or occupant of any building or the agent or employee of such owner or occupant may enter upon any adjoining land for the purpose of making repairs, alterations or improvements to such building but only to the extent necessary to effect such repairs, alterations or improvements.
>
> (2) Every person who enters upon any land under the authority of Section (1), of this Article and every owner or occupant of any building who causes the entry upon any land under the authority of Section (1) of this Article shall leave such land in the same condition that it was prior to such entry.

2. Section 327 of the Municipal Act, R.S.O. 1980, c. 302:

> Where any by-law of a municipality or of a local board thereof, passed under the authority of this or any other general or special Act, is contravened, in addition to any other remedy and to any penalty imposed by the by-law, such contravention may be restrained by action at the instance of a ratepayer or the corporation or local board.

3. Building Code Act, R.S.O. 1980, c. 51:

> s. 27. ...and the building code made under section 19 of this Act supersedes all municipal by-laws respecting the construction or demolition of buildings as defined in section 1.

VIII. Conclusions

1. On August 27, 1991, John Bottan was served with "an order of inspector" that the premises at 191 Parliament St., Toronto were contravening by-law 376-73 of the City of Toronto because of the "scaffolding on the flat roof on the south side"; the scaffolding was still there on September 26, 1991, although the order of inspector required the removal of the scaffolding within 48 hours of August 27, 1991.

In my view, the erection of the scaffolding was a demonstration of sheer "cussedness" (borrowing a phrase from Dean McLaren) on the part of John Bottan; the sole purpose of erecting the scaffold was to cause trouble for the plaintiff, its contractor and sub-contractor with the hope of "raising the stakes" and "upping the ante".

2. Section 3 and s. 13(1) and (2) of the City of Toronto By-law 300-68 apply to the situation in this case. In my view, the Toronto's City Solicitor has summed it up succinctly in his letter of August 26, 1991:

> In my opinion, this By-Law applies to the construction of new buildings as well as to repairs done to existing buildings.
>
> Section 13(1) of the By-Law, in my view, permits a neighbour to utilize a neighbour's property to complete work on a building. This of course is subject to the obligation to leave the neighbouring property in a similar state to that in which it was found.
>
> If a neighbour is preventing the construction of a building by preventing the owner or occupant of any building or the agent or employee of such owner or occupant from entering upon the adjoining lands, in my view that neighbour would be in breach of the bylaw.

3. In my view, s. 27 of the Building Code Act has nothing to do with the facts of this case.

4. It seems to me that s. 3 and s. 13 of the City of

Toronto By-law 300-68 were designed to prevent the "ransom" situation that the defendants seek to impose upon the plaintiff.

In his article "Case Comment: Attorney General of Manitoba v. Campbell et al. 26 C.C.L.T. 326, 321, Dean J.P.S. McLaren wrote:

> Indeed, what the defendant, Mr. Campbell, wanted to do was to impose his land use regime on the plaintiff. He endeavoured to achieve this, not by negotiation, not by pursuing his rights in court, but by conduct which had no utility to the operation of his land at all, which was merely done to force concessions from the plaintiff and which constituted a danger...

5. If the defendants remove the scaffolding, as they are required to do under the Inspector's order pursuant to by-law 376-73, then the cause of the plaintiff's present difficulty vanishes and Ellis-Don is able to have the contractor's swing stage hang over the side of the building; the workers will set foot on the defendant's property for a few hours in order to complete the bottom portion of the south wall.

XI. Result

An order will go that:

1. The defendants shall dismantle the scaffolding and any material(s) on the defendant's property which prevent access to the unfinished wall of the plaintiff's building and do so within 24 hours of the date of this order.

2. If the defendants fall to carry out paragraph 1 of this order, the plaintiff or its agents are entitled to do so after the 24 hour period has elapsed.

3. The defendants are to keep the access clear to the unfinished wall of the plaintiff's building during the period of its completion.

4. The defendants and anyone having knowledge of this order shall refrain from any contact, interaction or interference with the plaintiff or with its representatives or with any workmen completing the building at the plaintiff's premises.

5. The Sheriff of the Municipality of Metropolitan Toronto and, if required, the Metropolitan Toronto Police Force are hereby directed to assist the plaintiff in ensuring that the terms of this order are carried out.

X. Costs

Before reserving judgment, I asked counsel for their submissions as to costs.

Counsel for the defendants asked $500 for costs, if his clients were successful on the merits.

Counsel for the plaintiff asked for costs in the amount of $7,582.00, if successful on the merits; that figure is comprised of $782.00 disbursements and $6,800.00 for fees.

The defendants have deliberately given everyone associated with the plaintiff a difficult time - they denied service and, generally, were not amenable to common sense. One ounce of reasonableness on the part of the defendants would have rendered unnecessary all these proceedings.

In view of the circumstances, the defendants will pay to the plaintiff, forthwith, its costs of these proceedings set at $782.00 for disbursements and $4,000.00 for fees - a total of $4,782.00.

O'DRISCOLL J.

Just v. British Columbia

John Just, appellant;
v.
Her Majesty The Queen in right of the Province of British Columbia, respondent.

[1989] 2 S.C.R. 1228
[1989] S.C.J. No. 121
File No.: 20246.

Supreme Court of Canada
1989: February 24 / 1989: December 7.
Present: Dickson C.J. and Wilson, La Forest, L'Heureux-Dubé, Sopinka, Gonthier and Cory JJ.

ON APPEAL FROM THE COURT OF APPEAL FOR BRITISH COLUMBIA

APPEAL from a judgment of the British Columbia Court of Appeal (1986), 10 B.C.L.R. (2d) 223, [1987] 2 W.W.R. 231, 40 C.C.L.T. 160, 1 M.V.R. (2d) 357, dismissing an appeal from a judgment of McLachlin J. (1985), 64 B.C.L.R. 349, [1985] 5 W.W.R. 570, 33 C.C.L.T. 49, 34 M.V.R. 124. Appeal allowed, Sopinka J. dissenting.

T.R. Berger and J.N. Laxton, Q.C., for the appellant.
William A. Pearce and Harvey M. Groberman, for the respondent.

Solicitors for the appellant: Laxton, Pidgeon & Co., Vancouver.
Solicitor for the respondent: The Attorney General of British Columbia, Victoria.

The judgment of Dickson C.J. and Wilson, La Forest, L'Heureux-Dubé, Gonthier and Cory JJ. was delivered by

[para1] CORY J.:-- This appeal puts in issue the approach that should be taken by courts when considering the liability of government agencies in tort actions.

Factual Background

[para2] On the morning of January 16, 1982, the appellant and his daughter set out, undoubtedly with high hopes and great expectations, for a day of skiing at Whistler Mountain. As a result of a heavy snow fall they were forced to stop in the northbound line of traffic on Highway 99. While they were waiting for the traffic to move forward a great boulder weighing more than a ton somehow worked loose from the wooded slopes above the highway and came crashing down upon the appellant's car. The impact killed the appellant's daughter and caused him very serious injuries. He then brought this action against the respondent contending that it had negligently failed to maintain the highway properly.

[para3] Highway 99 is a major commuter road between Vancouver and the major ski resorts located at Whistler Mountain. The appellant alleged that there had been earlier rock falls near the scene of the tragedy. As well it was said that the climatic conditions of freezing and thawing, coupled with a heavy build-up of snow in the trees and resulting tree damage created a great risk of rock falls. Trees were said to be a well-known factor in levering rocks loose. It was contended that inadequate attention had been given to all these factors by the respondent and that a reasonable inspection would have demonstrated that the rock constituted a danger to users of the highway.

[para4] At the time of the accident the Department of Highways had set up a system for inspection and remedial work upon rock slopes particularly along Highway 99. At the apex of the organization was a Mr. Eastman, the regional geotechnical material engineer. He is a specialist in rock slope maintenance and together with another engineer was responsible for inspecting rock slopes and making recommendations regarding their stability.

[para5] The Department contained a rock work section which included Mr. Oliver, the rock work engineer responsible for rock stabilization and inspections on Highway 99. The section also included a rock [page1233] scaling crew which was formed in 1971 to perform remedial work on the slopes. This crew

serviced the entire province. The crew's function was to remove potentially dangerous rocks by prying them loose using a crowbar. As well, they removed trees that were considered a hazard to the safety of those using the highways. Mr. Oliver was required to inspect rock cut areas to assess the stability of the slope and to determine whether there was a risk that a rock might fall on the highway. His inspection duties extended to the entire slope from which such a danger might arise.

[para6] When the rock work engineer inspected the rock slopes on Highway 99 he would report his findings and recommendations to the district highways manager responsible for the area. The district manager in turn through the regional geotechnical material engineer submitted requests for the services of the rock scaling crew. The rock scaling crew itself had no discretion as to where and when it worked; its schedule was determined by the requests for remedial work made to the rock work section.

[para7] Prior to the accident the practice had been for the Department of Highways to make visual inspections of the rock cuts on Highway 99. These were carried out from the highway unless there was evidence or history of instability in an area in which case the rock engineer would climb the slope. In addition there were numerous informal inspections carried out by highway personnel as they drove along the road when they would look for signs of change in the rock cut and for rocks in the ditch.

Decisions at Trial and on Appeal

[para8] In the reasons of the trial judge (1985), 64 B.C.L.R. 354, the term "rock scaling crew" is used to refer to the rock work section. In any event it was found at p. 354 that:

> ... the rock scaling crew had virtually an absolute discretion as to when and where it would work. It created the standards and it determined their enforcement. Its discretion went far beyond the limited operational [page1234] discretion of how to go about enforcing policies set by others. In effect, the Department of Highways had conferred upon the rock scaling crew the responsibility of formulating policy with respect to the prevention of rock falls on highways.

The reasons continued with the finding that there were no standards to which the rock scaling crew was required to work or against which its conduct could be evaluated as that determined its own standards. It was found that the decision as to what inspection was to be undertaken on a particular site was a "policy" decision. The conclusion was set out at p. 355 in these words:

> The number and quality of inspections as well as the frequency of scaling and other remedial measures were matters of planning and policy involving the utilization of scarce resources and the balancing of needs and priorities throughout the province. Decisions of that nature are for the governmental authorities, not the courts.

[para9] No finding was made as to whether or not the system of inspection set forth by the Department of Highways was a reasonable one or whether the inspections themselves were properly carried out. Rather, as indicated, it was found that the entire system of inspection as well as the way in which it was carried out was a matter of planning and policy for which there was no liability.

[para10] The Court of Appeal (1986), 10 B.C.L.R. (2d) 223, determined that the trial judge had considered the proper indicia in determining that the number and quality of decisions as to the inspections and the decisions as to the work to be done on a particular site were matters of policy, as opposed to an operational decision. That court upheld the finding of the trial judge that the decisions involved in this case constituted a policy decision for which there was no liability rather than the implementation of policy. The appeal was dismissed without calling upon the respondent.

Test to be Applied

[para11] In cases such as this where allegations of negligence are brought against a government agency, it is appropriate for courts to consider and apply the test laid down by Lord Wilberforce in Anns v. Merton London Borough Council, [1978] A.C. 728. At pages 751-52 he set out his position in these words:

> Through the trilogy of cases in this House -- Donoghue v. Stevenson [1932] A.C. 562, Hedley Byrne & Co. Ltd. v. Heller & Partners Ltd. [1964] A.C. 465, and Dorset Yacht Co. Ltd. v. Home Office [1970] A.C. 1004, the position has now been reached that in order to establish that a duty of care arises in a particular situation, it is not necessary to bring the facts of that situation within those of previous situations in which a duty of care has been held to exist. Rather the question has to be approached in two stages. First one has to ask whether, as between the alleged wrongdoer and the person who has suffered damage there is a sufficient relationship of proximity or neighbourhood such that, in the reasonable contemplation of the former, carelessness on his part may be likely to cause damage to the latter -- in which case a prima facie duty of care arises. Secondly, if the first question is answered affirmatively, it is necessary to consider whether there are any considerations which ought to negative, or to reduce or limit the scope of the duty or the class of person to whom it is owed or the damages to which a breach of it may give rise: see Dorset Yacht case [1970] A.C. 1004, per Lord Reid at p.
>
> 1027. [Emphasis added.]

That test received the approval of the majority of this Court in City of Kamloops v. Nielsen, [1984] 2 S.C.R. 2. As well it was specifically referred to by both Beetz and L'Heureux-Dubé JJ. in Laurentide Motels Ltd. v. Beauport (City), [1989] 1 S.C.R. 705. It may be that the two-step approach as suggested by Lord Wilberforce should not always be slavishly followed. See Yuen Kun Yeu v. Attorney-General of Hong Kong, [1988] A.C. 175 (P.C.), at pp. 190, 191, 194. Nevertheless it is a sound approach to first determine if there is a duty of care owed by a defendant to the plaintiff in any case where negligent misconduct has been alleged against a government agency.

[para12] In the case at bar the accident occurred on a well used major highway in the Province of British Columbia. All the provinces across Canada extol their attributes and attractions in the fierce competition for tourist business. The skiing facilities at Whistler are undoubtedly just such a magnificent attraction. It would be hard to imagine a more open and welcoming invitation to use those facilities than that extended by the provincial highway leading to them. In light of that invitation to use both the facilities and the highway leading to them, it would appear that apart from some specific exemption, arising from a statutory provision or established common law principle, a duty of care was owed by the province to those that use its highways. That duty of care would extend ordinarily to reasonable maintenance of those roads. The appellant as a user of the highway was certainly in sufficient proximity to the respondent to come within the purview of that duty of care. In this case it can be said that it would be eminently reasonable for the appellant as a user of the highway to expect that it would be reasonably maintained. For the Department of Highways it would be a readily foreseeable risk that harm might befall users of a highway if it were not reasonably maintained. That maintenance could, on the basis of the evidence put forward by the appellant, be found to extend to the prevention of injury from falling rock.

[para13] Even with the duty of care established, it is necessary to explore two aspects in order to determine whether liability may be imposed upon the respondent. First, the applicable legislation must be reviewed to see if it imposes any obligation upon the respondent to maintain its highways or, alternatively, if it provides an exemption from liability for failure to so maintain them. Secondly, it must be determined whether the province is exempted from liability on the grounds that the system of inspections, including their quantity and quality, constituted a "policy" decision of a government agency and was thus exempt from liability.

The Applicable Legislation

[para14] The Highway Act, R.S.B.C. 1979, c. 167, s. 8, provides for construction and maintenance of highways in these words:

> 8. The minister may ... maintain a highway across any land taken under the powers conferred by this Act ....

and the Ministry of Transportation and Highways Act, R.S.B.C. 1979, c. 280, s. 14, as follows:

> 14. The minister has the management, charge and direction of all matters relating to the acquisition, construction, repair, maintenance, alteration, improvement and operation of ... highways ....

The liability of the respondent in respect of the exercise of these powers is limited by ss. 2 and 3 of the Crown Proceeding Act, R.S.B.C. 1979, c. 86, in this manner:

> 2. Subject to this Act,
>
> . . .
>
> (c) the Crown is subject to all those liabilities to which it would be liable if it were a person, ...
>
> 3. ...
>
> (2) Nothing in section 2
>
> . . .
>
> (f) subjects the Crown, in its capacity as a highway authority, to any greater liability than that to which a municipal corporation is subject in that capacity.

On their face these statutory provisions do not appear to absolve the respondent from its duty of care to maintain the highways reasonably. Rather, by inference they appear to place an obligation on the province to maintain its highways at least to the same extent that a municipality is obligated to repair its roads.

Was the Decision of the Rock Section as to the Quantity and Quality of Inspections a "Policy" Decision Exempting the Respondent from Liability?

[para15] The respondent placed great reliance on the decision of this Court in Barratt v. District of North Vancouver, [1980] 2 S.C.R. 418. In the Barratt case injury occurred as a result of a [page1238] pothole on the road. It was established that the City of North Vancouver had a policy of inspecting its roads for potholes every two weeks. Indeed it had inspected the road where the accident occurred one week earlier and found no pothole. It was found that the inspection policy established by the municipality was a reasonable and proper one. However, Justice Martland in giving the reasons for this Court went on to express an opinion that the municipality could not be held negligent for formulating one inspection policy rather than another. He put it this way at pp. 427-28:

> In essence, he [the trial judge] is finding that the Municipality should have instituted a system of continuous inspection to ensure that no possible damage could occur and holds that, in the absence of such a system, if damage occurs, the Municipality must be held liable.
>
> In my opinion, no such duty existed. The Municipality, a public authority, exercised its power to maintain Marine Drive. It was under no statutory duty to do so. Its method of exercising its power was a matter of policy to be determined by the Municipality itself. If, in the implementation of its policy its servants acted negligently, causing damage, liability could arise, but the Municipality cannot be held to be negligent because it formulated one policy of operation rather than another.

This statement was not necessary to the decision as it had

already been determined that the system of inspection established by the municipality was eminently reasonable. Neither was there any serious question raised that there had been any negligence in carrying out the system of inspection. The finding that a reasonable system of inspection had been established and carried out without negligence constituted the basis for the conclusion reached by the Court in that case. With the greatest respect, I am of the view that the portion of the reasons relied on by the respondent went farther than was necessary to the decision or appropriate as a statement of principle. For example, the Court would not have approved as "policy" a system that called for the inspection of the roads in a large urban municipality once every five years. Once a policy to inspect is established then it must be open to a litigant to attack the system as not having been adopted in a bona fide exercise of discretion [page1239] and to demonstrate that in all the circumstances, including budgetary restraints, it is appropriate for a court to make a finding on the issue.

[para16] The functions of government and government agencies have multiplied enormously in this century. Often government agencies were and continue to be the best suited entities and indeed the only organizations which could protect the public in the diverse and difficult situations arising in so many fields. They may encompass such matters as the manufacture and distribution of food and drug products, energy production, environmental protection, transportation and tourism, fire prevention and building developments. The increasing complexities of life involve agencies of government in almost every aspect of daily living. Over the passage of time the increased government activities gave rise to incidents that would have led to tortious liability if they had occurred between private citizens. The early governmental immunity from tortious liability became intolerable. This led to the enactment of legislation which in general imposed liability on the Crown for its acts as though it were a person. However, the Crown is not a person and must be free to govern and make true policy decisions without becoming subject to tort liability as a result of those decisions. On the other hand, complete Crown immunity should not be restored by having every government decision designated as one of "policy". Thus the dilemma giving rise to the continuing judicial struggle to differentiate between "policy" and "operation". Particularly difficult decisions will arise in situations where governmental inspections may be expected.

[para17] The dividing line between "policy" and "operation" is difficult to fix, yet it is essential that it be done. The need for drawing the line was expressed with great clarity by Becker J. of the United States District Court, in Blessing v. United States, 447 F.S. 1160. The case required him to deal with a claim under the Federal Tort Claims Act, 28 U.S.C. s. 2680 which provides:

[page1240]

> The provisions of this chapter and section 1346(b) of this title shall not apply to --
>
> (a) Any claim based upon an act or omission of an employee of the Government, exercising due care, in the execution of a statute or regulation, whether or not such statute or regulation be valid, or based upon the exercise or performance or the failure to exercise or perform a discretionary function or duty on the part of a federal agency or an employee of the Government, whether or not the discretion involved be abused.

He wrote at p. 1170:

> Read as a whole and with an eye to discerning a policy behind this provision, it seems to us only to articulate a policy of preventing tort actions from becoming a vehicle for judicial interference with decision-making that is properly exercised by other branches of the government and of protecting "the Government from liability that would seriously handicap efficient government operations," United States v. Muniz, 374 U.S. 150, 163, 83 S.Ct. 1850, 1858, 10 L.Ed.2d 805 (1963). Statutes, regulations, and discretionary functions, the subject matter of s. 2680(a), are, as a rule, manifestations of policy judgments made by the political branches. In our tripartite governmental

> structure, the courts generally have no substantive part to play in such decisions. Rather, the judiciary confines itself -- or, under laws such as the FTCA's discretionary function exception, is confined -- to adjudication of facts based on discernible objective standards of law. In the context of tort actions, with which we are here concerned, these objective standards are notably lacking when the question is not negligence but social wisdom, not due care but political practicability, not reasonableness but economic expediency. Tort law simply furnishes an inadequate crucible for testing the merits of social, political or economic decisions.

[para18] The need for distinguishing between a governmental policy decision and its operational implementation is thus clear. True policy decisions should be exempt from tortious claims so that governments are not restricted in making decisions based upon social, political or economic factors. However, the implementation of those decisions [page1241] may well be subject to claims in tort. What guidelines are there to assist courts in differentiating between policy and operation?

[para19] Mason J., speaking for himself and one other member of the Australian High Court in Sutherland Shire Council v. Heyman (1985), 60 A.L.R. 1, set out what I find to be most helpful guidelines. He wrote:

> Anns decided that a duty of care cannot arise in relation to acts and omissions which reflect the policy-making and discretionary elements involved in the exercise of statutory discretions. It has been said that it is for the authority to strike that balance between the claims of efficiency and thrift to which du Parcq LJ referred in Kent v. East Suffolk Rivers Catchment Board [1940] 1 KP 319 at 338 and that it is not for the court to substitute its decision for the authority's decision on those matters when they were committed by the legislature to the authority for decision (Dorset Yacht Co. v. Home Office, [1970] AC 1004 at 1031, 1067-8; Anns, at p. 754; Barratt v. District of North Vancouver (1980) 114 D.L.R. (3d) 577). Although these injunctions have compelling force in their application to policy-making decisions, their cogency is less obvious when applied to other discretionary matters. The standard of negligence applied by the courts in determining whether a duty of care has been breached cannot be applied to a policy decision, but it can be applied to operational decisions.
>
> Accordingly, it is possible that a duty of care may exist in relation to discretionary considerations which stand outside the policy category in the division between policy factors on the one hand and operational factors on the other. This classification has evolved in the judicial interpretation of the "discretionary function" exception in the United States Federal Tort Claims Act -- see Dalehite v. United States (1953) 346 US 15; ... United States v. Varig Airlines, supra. The object of the Federal Tort Claims Act in displacing government immunity and subjecting the United States Government to liability in tort in the same manner and to the same extent as a private individual under like circumstances, subject to the "discretionary function" exception, is similar to that of s. 64 of the Judiciary Act, 1903 (Cth).
>
> The distinction between policy and operational factors is not easy to formulate, but the dividing line between them will be observed if we recognize that a public authority is under no duty of care in relation to decisions which involve or are dictated by financial, economic, social or political factors or constraints. Thus budgetary allocations and the constraints which they entail in terms of allocation of resources cannot be made the subject of a duty of care. But it may be otherwise when the courts are called upon to apply a standard of care to action or inaction that is merely the product of administrative direction, expert or professional opinion, technical standards or general standards of reasonableness. [Emphasis added.]

[para20] The duty of care should apply to a public authority unless there is a valid basis for its exclusion. A

true policy decision undertaken by a government agency constitutes such a valid basis for exclusion. What constitutes a policy decision may vary infinitely and may be made at different levels although usually at a high level.

[para21] The decisions in Anns v. Merton London Borough Council and City of Kamloops v. Nielsen, supra, indicate that a government agency in reaching a decision pertaining to inspection must act in a reasonable manner which constitutes a bona fide exercise of discretion. To do so they must specifically consider whether to inspect and if so, the system of inspection must be a reasonable one in all the circumstances.

[para22] For example, at a high level there may be a policy decision made concerning the inspection of lighthouses. If the policy decision is made that there is such a pressing need to maintain air safety by the construction of additional airport facilities with the result that no funds can be made available for lighthouse inspection, then this would constitute a bona fide exercise of discretion that would be unassailable. Should then a lighthouse beacon be extinguished as a result of the lack of inspection and a shipwreck ensue no liability can be placed upon the government agency. The result would be the same if a policy decision were made to increase the funds for job retraining and reduce the funds for lighthouse inspection so that a [page1243] beacon could only be inspected every second year and as a result the light was extinguished. Once again this would constitute the bona fide exercise of discretion. Thus a decision either not to inspect at all or to reduce the number of inspections may be an unassailable policy decision. This is so provided it constitutes a reasonable exercise of bona fide discretion based, for example, upon the availability of funds.

[para23] On the other hand, if a decision is made to inspect lighthouse facilities the system of inspections must be reasonable and they must be made properly. See Indian Towing Co., 350 U.S. 61 (1955). Thus once the policy decision to inspect has been made, the Court may review the scheme of inspection to ensure it is reasonable and has been reasonably carried out in light of all the circumstances, including the availability of funds, to determine whether the government agency has met the requisite standard of care.

[para24] At a lower level, government aircraft inspectors checking on the quality of manufactured aircraft parts at a factory may make a policy decision to make a spot check of manufactured items throughout the day as opposed to checking every item manufactured in the course of one hour of the day. Such a choice as to how the inspection was to be undertaken could well be necessitated by the lack of both trained personnel and funds to provide such inspection personnel. In those circumstances the policy decision that a spot check inspection would be made could not be attacked. (See United States v. S.A. Empresa De Viacao Aerea Rio Grandense (Varig Airlines), 467 U.S. 797 (1984).)

[para25] Thus a true policy decision may be made at a lower level provided that the government agency establishes that it was a reasonable decision in light of the surrounding circumstances.

[para26] The consideration of the duty of care that may be owed must be kept separate and distinct from [page1244] the consideration of the standard of care that should be maintained by the government agency involved.

[para27] Let us assume a case where a duty of care is clearly owed by a governmental agency to an individual that is not exempted either by a statutory provision or because it was a true policy decision. In those circumstances the duty of care owed by the government agency would be the same as that owed by one person to another. Nevertheless the standard of care imposed upon the Crown may not be the same as that owed by an individual. An individual is expected to maintain his or her sidewalk or driveway reasonably, while a government agency such as the respondent may be responsible for the maintenance of hundreds of miles of highway. The frequency and the nature of inspection required of the individual may well be different from that required of the Crown. In each case the frequency and method must be reasonable in light of all the surrounding circumstances. The governmental agency should be entitled to demonstrate that balanced against the

nature and quantity of the risk involved, its system of inspection was reasonable in light of all the circumstances including budgetary limits, the personnel and equipment available to it and that it had met the standard duty of care imposed upon it.

[para28] It may be convenient at this stage to summarize what I consider to be the principles applicable and the manner of proceeding in cases of this kind. As a general rule, the traditional tort law duty of care will apply to a government agency in the same way that it will apply to an individual. In determining whether a duty of care exists the first question to be resolved is whether the parties are in a relationship of sufficient proximity to warrant the imposition of such a duty. In the case of a government agency, exemption from this imposition of duty may occur as a result of an explicit statutory exemption. Alternatively, the exemption may arise as a result of the nature of the decision made by the government agency. That is, a government agency will be exempt from the imposition of a [page1245] duty of care in situations which arise from its pure policy decisions.

[para29] In determining what constitutes such a policy decision, it should be borne in mind that such decisions are generally made by persons of a high level of authority in the agency, but may also properly be made by persons of a lower level of authority. The characterization of such a decision rests on the nature of the decision and not on the identity of the actors. As a general rule, decisions concerning budgetary allotments for departments or government agencies will be classified as policy decisions. Further, it must be recalled that a policy decision is open to challenge on the basis that it is not made in the bona fide exercise of discretion. If after due consideration it is found that a duty of care is owed by the government agency and no exemption by way of statute or policy decision-making is found to exist, a traditional torts analysis ensues and the issue of standard of care required of the government agency must next be considered.

[para30] The manner and quality of an inspection system is clearly part of the operational aspect of a governmental activity and falls to be assessed in the consideration of the standard of care issue. At this stage, the requisite standard of care to be applied to the particular operation must be assessed in light of all the surrounding circumstances including, for example, budgetary restraints and the availability of qualified personnel and equipment.

[para31] Turning to the case at bar it is now appropriate to apply the principles set forth by Mason J. in Sutherland Shire Council v. Heyman, supra, to determine whether the decision or decisions of the government agency were policy decisions exempting the province from liability. Here what was challenged was the manner in which the inspections were carried out, their frequency or infrequency and how and when trees above the rock cut should have been inspected, and the manner in which the cutting and scaling operations should have been carried out. In short, the public authority had settled on a plan which called upon it to [page1246] inspect all slopes visually and then conduct further inspections of those slopes where the taking of additional safety measures was warranted. Those matters are all part and parcel of what Mason J. described as "the product of administrative direction, expert or professional opinion, technical standards or general standards of care". They were not decisions that could be designated as policy decisions. Rather they were manifestations of the implementation of the policy decision to inspect and were operational in nature. As such, they were subject to review by the Court to determine whether the respondent had been negligent or had satisfied the appropriate standard of care.

[para32] At trial the conclusion was reached that the number and frequency of inspections, of scaling and other remedial measures were matters of policy; as a result no findings of fact were made on the issues bearing on the standard of care. Since the matter was one of operation the respondent was not immune from suit and the negligence issue had to be canvassed in its entirety. The appellant was therefore entitled to a finding of fact on these questions and a new trial should be directed to accomplish this.

[para33] It may well be that the respondent at the new

trial will satisfy the Court that it has met the requisite standard of care. It is apparent that although the Crown Proceeding Act imposes the liability of a person upon the Crown, it is not in the same position as an individual. To repeat, the respondent is responsible not for the maintenance of a single private road or driveway but for the maintenance of many hundreds of miles of highway running through difficult mountainous terrain, all of it to be undertaken within budgetary restraints. As noted earlier, decisions reached as to budgetary allotment for departments or government agencies will in the usual course of events be policy decisions that cannot be the basis for imposing liability in tort even though these political policy decisions will have an effect upon the frequency [page1247] of inspections and the manner in which they may be carried out. All of these factors should be taken into account in determining whether the system was adopted in bona fide exercise of discretion and whether within that system the frequency, quality and manner of inspection were reasonable.

[para34] To proceed in this way is fair to both the government agency and the litigant. Once a duty of care that is not exempted has been established the trial will determine whether the government agency has met the requisite standard of care. At that stage the system and manner of inspection may be reviewed. However, the review will be undertaken bearing in mind the budgetary restraints imposed and the availability of personnel and equipment to carry out such an inspection.

Disposition

[para35] In the result, a new trial must be held to determine whether the respondent had in all the circumstances met the standard of care that should reasonably be imposed upon it with regard to the frequency and manner of inspection of the rock cut and to the cutting and sealing operations carried out upon it.

[para36] The appellant is entitled to costs of the appeal to this Court and in the Court of Appeal of British Columbia. The issue of costs of the first trial is reserved to the judge presiding at the new trial.

The following are the reasons delivered by

[para37] SOPINKA J. (dissenting):-- This appeal raises the issue of the liability for negligence of a public body in the absence of the breach of a statutory duty of care. The facts are set out in the reasons of Justice Cory, which I have had the advantage of reading. Regrettably, I find that I cannot agree with his conclusion. In my opinion, the conclusion of the trial judge (1985), 64 B.C.L.R. 349, and a unanimous Court of Appeal (1986), 10 B.C.L.R. (2d) 223, was the correct one. This conclusion is expressed by Hinkson J.A., speaking for the court, [page1248] affirming the following passage from the reasons of McLachlin J. (as she then was):

> ... I conclude that the decisions here complained of fall within the area of policy and cannot be reviewed by this court. The number and quality of inspections as well as the frequency of scaling and other remedial measures were matters of planning and policy involving the utilization of scarce resources and the balancing of needs and priorities throughout the province. Decisions of that nature are for the governmental authorities, not the courts.

[para38] In comparatively recent years the law of torts has evolved by imposing on public authorities a common law duty of care based on the neighbourhood or proximity principle, frequently called the Anns principle. This has resulted in substantially increasing their liability in negligence for activity which they are authorized to carry on by statute but in respect of which the statute imposes no duty of care. This change in the law was not brought about by legislation but through the evolution of the common law which has traditionally taken account of the changing views and needs of society. The expansion of liability by reason of this and other developments in the law of torts has created a crisis in this area of the law leading to demands for the fundamental reappraisal of the tort system itself. The basic premise of adjusting losses on the basis of fault is being

subjected to intense criticism. In the United States there is a growing consensus that the tort system is responsible for the crisis in liability insurance. There is now substantial support for wholesale legislative reform of the tort system. These developments are discussed in the Final Report of the Ontario Task Force on Insurance (May 1986) to the Ministry of Financial Institutions, at p. 52. Reference is made to the study made by Professor Michael J. Trebilcock and entitled "The Insurance -- Deterrence Dilemma of Modern Tort Law: Trends in North American Tort Law and Their Implications for the Current Liability Crisis" (April 21, 1986). At pages [page1249] 53-54 of the Final Report of the Ontario Task Force on Insurance, it is stated that:

> A crucial finding in the Trebilcock study was that the current "explosion" in American tort law was not the result of judicial extensions of already-advanced American strict liability doctrines but rather the judicial extension of traditional negligence liability and its application to an ever-widening range of activities and injuries.

The Report goes on to state at p. 54:

> There is every indication that similar tendencies exist in Canadian negligence law and that similar developments will occur in the future in Canada as well. The reason for this inevitable expansion of liability, even within the bounds of traditional negligence doctrine, is a matter that is intractably and unavoidably rooted in what we will later describe as the "insurance-deterrence dilemma" in modern tort law.

[para39] The insurance-deterrence dilemma is described in a study paper prepared by Philip Osborne for the Task Force and cited at pp. 61-62 as follows:

> The massive transformation of the fault system ... is a change which is explicable only on the basis of liability insurance and judicial compassion for the victims of social progress. Judges who in their written judgments give no indication of the prevalence of liability insurance are in fact keenly aware that in almost all cases the defendant is not paying, and that they are in the last analysis deciding whether or not the plaintiff should be compensated from insurance monies .... The prevalence of liability insurance fundamentally altered the moralistic nature of the loss-shifting function of fault. The loss-shifting mechanism was converted into a loss-spreading mechanism and it became more realistic to speak of the fault system as a fault-insurance system. The punitive and deterrent aspects of fault were diminished and compensation became the predominant function of tort law.

[para40] Other commentators are generally in support of the above criticisms of the tort system: Holding, "The Relationship Between Recent Trends in Tort Litigation and the Current Insurance Crisis in [page1250] Canada" (1986), 54 Assurances 435; Stradiotto, "Canadian Perspectives on Tort Law: Personal Injury Damages" (1988), 46 The Advocate 737; Rea, "Economic Perspectives on the Liability Insurance Crisis," in Insurance Law, Special Lectures of the Law Society of Upper Canada, 1987; Klar, "Negligence -- Reactions Against Alleged Excessive Imposition of Liability -- A Turning Point?" (1987), 66 Can. Bar Rev. 159.

[para41] I draw attention to these developments in order to emphasize that while the law of torts must move with the times, this is not a time to move. Yet, I am of the opinion that the reasons of my colleague would considerably expand the liability for negligence of public authorities by subjecting to judicial review their policy decisions which were hitherto not reviewable.

[para42] The starting point for the application of the Anns principle is that there is no statutory duty in favour of the plaintiff to do the thing the lack of which is alleged to have caused the injury to the plaintiff. Many public bodies have the power to carry out a function but no duty to do so. In these circumstances, they have a discretion whether to do the thing or not. Conduct within the limits of that

discretion gives rise to no duty of care. Conduct outside of

these limits may attract a private law duty of care. In City of Kamloops v. Nielsen, [1984] 2 S.C.R. 2, Wilson J. speaking for the majority, summed up the Anns principle as follows, at p. 11:

> Lord Wilberforce found that the defendant in Anns was under a private law duty to the plaintiff. It had to exercise a bona fide discretion as to whether to inspect the foundations or not and, if it decided to inspect them, to exercise reasonable skill and care in doing so. He concluded that the allegations of negligence were consistent with the Council or its inspector having acted outside any delegated discretion either as to the making of an inspection or as to the manner in which the inspection was made.

[para43] If a statutory duty to the plaintiff is breached, the private duty based on the neighbourhood principle is unnecessary. In London Passenger Transport Board v. Upson, [1949] A.C. 155, at p. 168, Lord Wright stated:

> The statutory right has its origin in the statute, but the particular remedy of an action for damages is given by the common law in order to make effective, for the benefit of the injured plaintiff, his right to the performance by the defendant of the defendant's statutory duty.

My colleague, Cory J., states (at p. 1237) that the statutory provisions "place an obligation on the province to maintain its highways at least to the same extent that a municipality is obligated to repair its roads." Sections 2 and 3(2) of the Crown Proceeding Act, R.S.B.C. 1979, c. 86, referred to by him, make it clear that the respondent's liability cannot be greater than that of a municipality. The extent of the liability of a municipality in British Columbia was settled by Barratt v. District of North Vancouver, [1980] 2 S.C.R. 418. While a municipality has the authority to maintain highways, it has no duty to do so. What it does in this respect is within its statutory discretion. At page 426, Martland J. said:

> The Municipality, under the provisions of subs. 513(2), had authority to lay out, construct, maintain and improve highways. Unlike the provisions of some other similar statutes, no duty was imposed upon the Municipality to maintain its highways.

[para44] My colleague's reasons are based essentially on an attack on the policy of the respondent with respect to the extent and manner of the inspection program. In my opinion, absent evidence that a policy was adopted for some ulterior motive and not for a municipal purpose, it is not open to a litigant to attack it, nor is it appropriate for a court to pass upon it. As stated by Lord du Parcq in Kent v. East Suffolk Rivers Catchment Board, [1940] 1 K.B. 319, at p. 338:

> ... it must be remembered that when Parliament has left it to a public authority to decide which of its powers it shall exercise, and when and to what extent it shall exercise them, there would be some inconvenience in [page1252] submitting to the subsequent decision of a jury, or judge of fact, the question whether the authority had acted reasonably, a question involving the consideration of matters of policy and sometimes the striking of a just balance between the rival claims of efficiency and thrift.

This statement was approved by Lord Wilberforce in Anns v. Merton London Borough Council, [1978] A.C. 728, at p. 754.

[para45] If a court assumes the power to review a policy decision which is made in accordance with the statute, this amounts to a usurpation by the court of a power committed by statute to the designated body. As pointed out by Wilson J. in City of Kamloops v. Nielsen, supra, at pp. 9-10:

> It is for the local authority to decide what resources it should make available to carry out its role in supervising and controlling the activities of builders. For example, budgetary considerations may dictate how many inspectors should be hired for this purpose, what their qualifications should be, and how often inspections should be made. He approved the statement of du Parcq

> L.J. in Kent v. East Suffolk Rivers Catchment Board ... that public authorities have to strike a balance between the claims of efficiency and thrift and whether they get the right balance can only be decided through the ballot box and not in the courts.

[para46] In Anns v. Merton London Borough Council, supra, Lord Wilberforce was of the opinion that although the exercise by a public authority of discretionary power was not entirely immune from attack, it was open to challenge only if no consideration was given to whether to exercise the power which, there as here, was whether to inspect and the manner of the inspection, supra, at p. 755. He did not elaborate as to whether such a challenge could be by way of a claim for damages by a person injured by the failure to inspect. Lord Salmon, however, was of the view that an improper exercise of discretion could only be corrected by certiorari or mandamus, and did not give rise to an action for damages, supra, at p. 762.

[para47] In the following passage, at p. 755, Lord Wilberforce makes it clear that a decision to inspect, [page1253] and the time, manner and techniques of inspection, may all be within the discretionary power:

> There may be a discretionary element in its exercise -- discretionary as to the time and manner of inspection, and the techniques to be used. A plaintiff complaining of negligence must prove, the burden being on him, that action taken was not within the limits of a discretion bona fide exercised, before he can begin to rely upon a common law duty of care. But if he can do this, he should, in principle, be able to sue.

[para48] If, as here, the statute creates no duty to inspect at all, but simply confers a power to do so, it follows logically that a decision to inspect and the extent and manner thereof are all discretionary powers of the authority.

[para49] It is not suggested here that the respondent failed to consider whether to inspect or the manner of inspections. The trial judge and the Court of Appeal found that a policy decision [page1254] was made that inspections would be carried out by a crew of men called the Rockwork Section. In view of the fact that the crew had responsibility for the inspection of the slopes of all highways, the extent and manner of the inspection was delegated to the Rockwork Section. While it might be suggested that guidelines for inspection should have been laid down for the guidance of the crew, this would be second guessing the policy decision and not a matter for the Court. The appellant's attack on the conduct of the respondent and its employees is an attack on the manner in which they carried out the inspection and scaling of the mountain. The Rockwork Section had decided it could not closely monitor all slopes at all times. Some slopes would only be visually inspected from the highway. The appellant contended that the slopes above man-made cuts should have been closely inspected and that the trees should have been removed within ten feet of a cut slope. The trial judge made the following important findings concerning the decision of the respondent as to the extent and manner of the inspection program:

> The question in the case at bar is thus whether the failure of the Crown to take the steps which the plaintiff says it should have taken to prevent the rock fall was a matter of policy or operational. In order to answer it, it is necessary to consider the nature of the decisions here in question. The Crown had never established as a matter of policy that all slopes above highways must be inspected for potential rock fall. Nor had it laid out specific guidelines for dealing with problems if danger was perceived. What it had done was to establish a small crew of men (the rock scaling crew) to deal with problems arising on cliff faces throughout the Province. This crew responded to specific requests from various highway districts for inspection and scaling. For the most part, however, it developed and followed its own program. Given that it was responsible for inspection of slopes and appropriate remedial measures for all the highways in the Province, it could not closely monitor all slopes at all times. The slope

here in question was visually inspected from the highway on a number of occasions. However, there had never been scaling or close inspection of the area above the cut because the rock scaling crew did not deem that work to be a priority.

[para50] In stating that the authority "must specifically consider whether to inspect and if so the system must be a reasonable one in all the circumstances", my colleague is extending liability beyond what was decided in Anns v. Merton London Borough Council, Barratt v. District of North Vancouver, and City of Kamloops v. Nielsen, supra. The system would include the time, manner and technique of inspection. On this analysis it is difficult to determine what aspect of a policy decision would be immune from review. All that is left is the decision to inspect. It can hardly be suggested that all the learning that has been expended on the difference between policy and operational was expended to immunize the decision of a public body that something will be done but not the content of what will be done. It seems to me that a decision to inspect rather than not inspect hardly needs protection from review. The concern that has resulted in extending immunity from review in respect of policy decisions is that [page1255] those entrusted with the exercise of the statutory powers make the decision to expend public resources. It is not engaged by a decision simply to do something. It is the decision as to what is to be done that will entail the taxation of the public purse. Lord Wilberforce underscores this concern when he states, at p. 754:

> Let us examine the Public Health Act 1936 in the light of this. Undoubtedly it lays out a wide area of policy. It is for the local authority, a public and elected body, to decide upon the scale of resources which it can make available in order to carry out its functions under Part II of the Act -- how many inspectors, with what expert qualifications, it should recruit, how often inspections are to be made, what tests are to be carried out, must be for its decision. It is no accident that the Act is drafted in terms of functions and powers rather than in terms of positive duty. As was well said, public authorities have to strike a balance between the claims of efficiency and thrift (du Parcq L.J. in Kent v. East Suffolk Rivers Catchment Board [1940] 1 K.B. 319, 338): whether they get the balance right can only be decided through the ballot box, not in the courts.

[para51] In this case, the extent of the inspection program was delegated to the Rockwork Section. The respondent acted within its statutory discretion in making that decision. It was a decision that inspections should be done and the manner in which they should be done. In order for a private duty to arise, it would have to be shown that the Rockwork Section acted outside its delegated discretion to determine whether to inspect and the manner in which the inspection is to be made.

[para52] The principal authorities in this Court do not support my colleague's view that the manner and extent of inspections are operational. Indeed, they confirm that these are the very substance of policy. In Barratt v. District of North Vancouver, supra, the respondent municipality had authority under s. 513(2) of the Municipal Act, R.S.B.C. 1960, c. 255, to lay out, maintain and improve highways. It [page1256] was, however, under no statutory duty to maintain highways. The respondent adopted a system of road inspections which required an inspector to travel all roads once in each two-week period. An accident occurred when the plaintiff rode his bicycle into a pot-hole on Marine Drive which had been inspected a week before. There was no allegation that the inspection was made improperly or negligently. I do not agree with my colleague that the basis for this decision was a determination that the policy was reasonable. That finding does not appear in the reasons of Martland J. although he referred to the evidence that the system of road inspection was well organized. The basis for the decision was that the program of inspection was a matter of policy or planning which could not be the basis for an allegation of negligence. At page 428 Martland J. states:

> In my opinion, no such duty existed. The Municipality, a public authority, exercised its power to maintain Marine Drive. It was under no statutory duty to

> do so. Its method of exercising its power was a matter of policy to be determined by the Municipality itself. If, in the implementation of its policy its servants acted negligently, causing damage, liability could arise, but the Municipality cannot be held to be negligent because it formulated one policy of operation rather than another.

Then, after citing du Parcq L.J. in Kent v. East Suffolk Rivers Catchment Board, supra, he continued, at p. 428:

> My conclusion is that the trial judge sought to impose upon the Municipality too heavy a duty, that the determination of the method by which the Municipality decided to exercise its power to maintain the highway, including its inspection system, was a matter of policy or planning, and that, absent negligence in the actual operational performance of that plan, the appellant's claim fails.

[para53] In City of Kamloops v. Nielsen, supra, the City of Kamloops had a statutory power to regulate construction by by-law. It did not have to do so. It exercised this power in favour of regulating construction [page1257] in accordance with a by-law which, inter alia, provided for the depth of footings. The by-law also imposed a duty in the City's building inspector to enforce the by-law by inspection. The inspector failed to inspect as required in order to determine whether work was progressing in accordance with the by-law. Wilson J., speaking for the majority, held that the provisions of the by-law were policy whereas in carrying out the inspection required by the by-law, the inspector was bound to act with reasonable care. It is clear that the provisions of the by-law which "provided for a scheme of inspections at various stages of construction" (at p. 12) was considered policy. The failure to enforce a stop work order and to inspect in order to determine whether the by-laws were being complied with was conduct outside of the area of delegated discretion. It was a departure from the duty created by the by-law and therefore a common law duty of care based on the proximity principle arose. It is significant that in the course of her reasons Wilson J. dealt with the judgment in Barratt v. District of North Vancouver, supra. She makes clear in the following passage, at p. 20 of her reasons, that Barratt v. District of North Vancouver decided that a decision by the municipality as to the extent of inspections is a policy matter which cannot be the foundation for an action in negligence:

> The second is that it seems to be central to his judgment that no duty was imposed upon the municipality. It was in the discretion of the municipality whether or to what extent it exercised its maintenance power. The courts could not therefore interfere in the absence of negligence in the implementation of the policy it adopted with respect to inspection. This, it appears to me, is the ratio of the decision in Barratt. [Emphasis added.]

[para54] In order for a private duty to arise in this case, the plaintiff would have to establish that the Rockwork Section, having exercised its discretion as to the manner or frequency of inspection, carried out the inspection without reasonable care or at all. [page1258] There is no evidence or indeed allegation in this regard. In this respect, the decision in Barratt v. District of North Vancouver, supra, is on all fours and ought to be applied here. I would therefore dismiss the appeal.

Kally's Restaurant Inc. v. Scarborough, (City)

Ontario Court (General Division), Divisional Court; O'Driscoll, Hartt and Adams JJ.
February 23, 1993

APPEAL with leave from a decision of the Ontario Municipal Board refusing approval of a site plan under s. 40(12) of the *Planning Act 1983*

Irving Marks, for appellant.
Louis C. Mangoff, for respondent.

The judgment of the court was delivered by

ADAMS J.:—The issue in this case is whether the Ontario Municipal Board ("O.M.B.") erred in applying to a site plan application, a parking by-law in effect at the date of O.M.B. hearing and not the by-law in effect at the earlier date of the original application to the municipality.

Pursuant to leave granted by A. Campbell J. on February 10, 1992 under the provisions of s. 96 of the *Ontario Municipal Board Act*, R.S.O. 1990, c. 0.28, Kally's Restaurant Inc. ("Kally's") appeals from a decision of the Ontario Municipal Board dated November 8, 1991 dismissing an application for approval of a site plan referred to the O.M.B. pursuant to s. 40(12) of the *Planning Act 1983*, S.O. 1983, c. 1, as amended ("the Act"). The referral arose from a decision of the Corporation of the City of Scarborough ("the City") on May 16, 1988 refusing to approve Kally's site plan application on the basis of a planning committee report dated April 27, 1988 recommending that more parking spaces were needed than provided for on the west side of the site. This recommendation was made notwithstanding that the requirements of the City's parking by-law had been met by the site plan application. However, on August 22, 1988 the City passed a new zoning by-law creating a higher parking standard which, if applicable to Kally's application, increased the parking requirement for its restaurant from 144 spaces to 238 spaces, *i.e.* more than the 179 spaces provided for in Kally's site plan application. The O.M.B. held that the applicable parking standard was determined by the zoning by-law in force at the date of the O.M.B. hearing which was March 27, 1991. At this time, the August 22, 1988 parking by-law requiring 238 spaces for Kally's was in effect.

In issue is whether the O.M.B. erred in law in holding that the applicable parking by-law was the by-law in force at the date of the O.M.B. hearing instead of the by-law in force when the site plan application ought to have been approved by the City, i.e., on May 16, 1988 or on May 24, 1988 when Kally's referred the site plan application to the O.M.B. pursuant to s. 40(12) of the Act. We have come to the conclusion the appeal ought to be allowed. Kally's cannot be required to provide more than 144 parking spaces required by the by-law in effect at the time the application should have been approved.

On April 12, 1984, Kally's entered into a site plan agreement with the City. The site plan agreement provided for a restaurant with 259 parking spaces on the entire site. At that time the applicable zoning by-law required the provision of a total of 117 parking spaces for the restaurant use as then proposed. The parking spaces provided on the east side of the site were provided voluntarily by Kally's, pending future development. A site plan agreement was registered on title on June 5, 1984. In November 1986, Kally's made application to revise the site plan to provide for an addition to the restaurant, including a banquet hall, a mezzanine and basement storage. These revisions were approved by the City. In June of 1987 Kally's was issued a building permit based on the revised plan and construction of the restaurant was completed in accordance with the permit in April 1988. Kally's has operated a restaurant from this location on the west side of the site since that time. On July 29, 1987, in order to proceed with the severance and future development of the east side of the site, Kally's made a site plan application to the City to delete the parking from the east side of the site and to provide 179 parking spaces on the west side of the site. At that time, the applicable parking by-law required 144 parking spaces for the restaurant use as set out in the plans approved by the building permit. It is common ground that the City refused to approve the site plan application because it wanted more parking spaces than were either proposed or required by the existing by-law. However, by the time the matter came before the O.M.B. the new zoning by-law was in place which required 238 spaces.

We are of the view that *Dominion Stores Ltd. v. Etobicoke (Borough)* (1982), 37 O.R. (2d) 661, 135 D.L.R. (3d) 301 (Div. Ct.), at p. 662 O.R, p. 302 D.L.R., applies by analogy. In that case, a development control approval had been refused because the City did not want to permit access to the land from either of two local streets. While the City had no right to prevent such access, it also refused a building permit because of the absence of development control approval. In requiring the issuance of a building permit, Galligan J. (as he then was) dealt directly with the

propriety of refusing the development approval for a reason that was not authorized by law:

The respondent has refused to issue the building permit because it has not given development control approval under s. 40 of the *Planning Act*, R.S.O. 1980, c. 379. It is clear beyond peradventure that the only reason that the respondent has not given its approval is that it does not want to permit access on to the applicant's lands from either of the local streets. It has refused to approve any development plans or drawings or enter into any development agreement which in any way provide access to or from the proposed supermarket on to those local streets. The issue before this Court is whether the Municipality is legally entitled to refuse to give development approval on that ground. While a certain amount of discussion took place before us as to whether development approval under s. 40 of the *Planning Act* is or is not a condition precedent to the issue of a building permit, I do not think it is necessary for the purposes of this application to decide that issue. I am of the opinion assuming without deciding that development approval is a condition precedent to the issuance of the building permit, that a Municipality may not withhold such approval for a reason that is not authorized by law. If it were otherwise an applicant's legal right to a building permit could easily be frustrated.

As the O.M.B. itself found, the City was obligated to apply to Kally's application the parking requirements set out in its by-laws and was not entitled to demand a higher parking standard simply because of the existence of a site plan agreement. We also note that s. 34(9) of the Act prevents the application of a by-law to a building or structure for which a building permit has been issued prior to the day of passage of the by-law. This indicates a legislative purpose aimed at minimizing the impact of by-law changes on existing development. In this case, Kally's is being adversely affected by a by-law which was not in force at the time it built its restaurant and at the time it applied for site plan approval.

We also note the legislation provides for interim by-laws which can be passed expeditiously and without notice by municipalities pending a permanent revision of existing by-laws. Thus, it was open to the City, in the facts at hand, to pass an interim parking by-law pending the August 22, 1988 permanent revision. However, the City chose not to utilize its interim by-law making powers and, instead, simply refused the proposed amendment to Kally's site agreement because it wished more parking spaces than required by the existing parking by-law. In so doing, the City was acting in an unlawful manner and the situation falls squarely within the exception contemplated in *Quay West v. Toronto (City)* (1989), 47 M.RL.R. 109 (Ont. Div. Ct.), at p. 112.

Therefore, the appeal is allowed and a declaration will go that the appellant cannot be required to provide more than 144 parking spaces in respect of the subject site plan application insofar as it pertains to the western portion on which the restaurant is located. The site plan application is returned to the O.M.B. to be approved, settled and determined in accordance with this declaration.

Counsel agreed that costs should follow the event. Costs in the sum of $2,500. The respondent shall pay that amount to the appellant.

Appeal allowed.

Kamloops (City) v. Nielsen

City of Kamloops, Appellant; and
Jan Clemmensen Nielsen, Respondent; and
Wesley Joseph Hughes, and Gladys Annetta Hughes, Respondents.

[1984] 2 S.C.R. 2

Supreme Court of Canada
File No.: 16896.
1982: November 22 / 1984: July 26.
Present: Ritchie, Dickson, Estey, McIntyre and Wilson JJ.
ON APPEAL FROM THE COURT OF APPEAL FOR BRITISH COLUMBIA

APPEAL from a judgment of the British Columbia Court of Appeal (1981), 31 B.C.L.R. 311, dismissing an appeal from a judgment of Andrews J. Appeal dismissed, Estey and McIntyre JJ. dissenting.

Harry J. Grey, Q.C., for the appellant.
R.J. Gibbs, Q.C., and J.A. Horne, for the respondent Jan Clemmensen Nielsen.

Solicitors for the appellant: Harper, Grey, Easton & Company, Vancouver.
Solicitors for the respondent Jan Clemmensen Nielsen: Berna, Horne, Marr & Coates, Kamloops.
Solicitor for the respondents Wesley Joseph Hughes and Gladys Annetta Hughes: John Gnitt, Kamloops.

The judgment of Ritchie, Dickson and Wilson JJ. was delivered by

WILSON J.:-- This case raises the rather difficult question whether a municipality can be held liable for negligence in failing to prevent the construction of a house with defective foundations. It also raises a number of ancillary questions, such as whether such a liability, assuming it exists, extends to third party purchasers, what sort of damages are recoverable, and when the limitation period starts to run.

1. The Facts

Since the facts are of vital importance I set them out in some detail. Mr. Hughes, Jr. set out to build a house on a hillside for his father who was an Alderman in the City of Kamloops. To this end he submitted plans to the City's building inspector. The plans were approved, subject to the requirement that the footings were to be taken down to solid bearing, and a building permit was issued. Mr. Hughes did not take the footings down to solid bearing; instead he set the foundations on piles which were set into loose fill. He then requested an inspection of the foundations. When one of the City's building inspectors arrived to make his inspection on December 18, 1973 he realized that the foundations were not in accordance with the plans but he was unable to check whether they were adequate to support the building because the concrete had been poured. Accordingly, on his own initiative the building inspector followed up with two further inspections on December 23, 1973 and January 2, 1974 and sent a letter to Mr. Hughes on the latter date indicating that a stop work order had been placed on the site and would not be lifted until new plans had been submitted showing how the structural defects were going to be remedied. Mr. Hughes retained a firm of professional engineers to prepare the new plans and on receipt of their proposal the building inspector lifted the stop work order. Mr. Hughes, however, did not cooperate with the engineers on the required changes but continued with the construction of the house on the original plans. The engineers, disavowing all liability, notified the building inspector.

On February 27, 1974 two building inspectors attended at the site. This was followed next day by a registered letter from the building inspector to Mr. Hughes telling him that the stop work order would remain in effect until he submitted a report from a structural engineer. Mr. Hughes ignored this communication and carried on with the building. Various further inspections were made by building inspectors who

reported to their superior, the building inspector, that construction was continuing despite the stop work order.

On April 9, 1974 Mr. Hughes, Sr. and his wife purchased the property from their son. The City Solicitor wrote to them on April 22, 1974 advising them of the City's concern over the structural integrity of the building and that the stop work order which was currently in force would not be lifted until the City was provided with complete structural drawings from an engineer verifying the adequacy of the proposed construction. Mr. Backmeyer, Director of Planning for the City, became involved at this stage but no resolution to the problem was effected. The dialogue moved into the Council Chamber and Mr. Backmeyer testified that Mr. Hughes, Sr.'s plea to his fellow council members was that this was his retirement home and, since he was going to live in it, any problems that arose would be his and his alone. It was therefore no one's business but his and why was he being subjected to this kind of harassment?

At this point a strike of city employees broke out and the Director of Planning and the Building Division Administrator were left to run the Building Division by themselves until the strike ended sometime in July. No further inspections were made after the strike and no occupancy permit was ever issued. A plumbing permit was, however, issued in August 1974. The house was completed and the Hughes moved in February 1975. In December 1977 they sold the property to the present plaintiff who was told nothing of its chequered history. Before purchasing the house the plaintiff had taken a contractor with him to advise him on the cost of some renovations and also to make a general inspection of the house. The contractor did not see anything to alert him to a potential problem with the foundations but he did not crawl under the house to examine them. Accordingly, the first the plaintiff knew of the defective foundations was when they were drawn to his attention in November 1978 by a plumber called to attend to a burst pipe. The plumber discovered the situation when he went into the four-foot crawl space under part of the house and saw that the foundations had subsided.

The plaintiff issued his writ in January 1979 alleging against his vendor: (1) fraudulent misrepresentation; (2) breach of contract; and (3) negligence in the construction of the house. He alleged negligence also against the City of Kamloops for failing to enforce the stop work order or alternatively for failing to condemn the building as unfit for habitation.

Andrews J. found both defendants liable and apportioned fault between them, 75 per cent against the Hughes and 25 per cent against the City. No appeal was taken by the Hughes. The City's appeal to the Court of Appeal of British Columbia was dismissed.

But for the issue of limitations which I will deal with later, the City's grounds of appeal to this Court were substantially the same as those presented to the Court of Appeal and rejected by it. The first was that no duty of care was owed by the City to the plaintiff and, absent such a duty, no liability in negligence could be incurred.

2. The Duty of Care

The leading English authority favouring the existence of a duty of care owed by the City to the plaintiff is the decision of the House of Lords in Anns v. Merton London Borough Council, [1978] A.C. 728. The facts, in brief, were that the Borough Council in February 1962 approved plans for the creation of a two-storey block of flats. The plans called for the foundations to be "3'0" or deeper to the approval of local authority". In fact the foundations were only two feet six inches deep. By February 1970 cracks had appeared in the walls of the flats and the floors had begun to slope. Two of the plaintiffs were original lessees; the others were assignees from original lessees. All claimed against the Borough for the negligence of the council surveyor in approving foundations that were inadequate.

The relevant English legislation was the Public Health Act 1936, s. 61 of which empowered Council to make by-laws to regulate the construction of buildings. By-law 18(1)(b)

provided that the foundations of every building should be taken down to such depth or be so designed as to safeguard the building against damage caused by swelling and shrinking of the subsoil. The builder was under a statutory duty to notify the local authority before covering up the foundations and the local authority had at that stage the right to inspect and to insist on any correction necessary to bring the work into conformity with the by-laws.

Lord Wilberforce pointed out that the local authority is a public body whose powers and duties are definable in terms of public rather than private law. However, in some circumstances the law could impose over and above, or perhaps alongside, these public law powers and duties a private law duty towards individuals enabling them to sue the authority for damages in a civil suit. The difficulty was to determine when such a private law duty could be imposed. The first step, Lord Wilberforce said, is to analyse the powers and duties of the authority to determine whether they require the authority to make "policy" decisions or "operational" decisions. He said at p. 754:

> Most, indeed probably all, statutes relating to public authorities or public bodies, contain in them a large area of policy. The courts call this "discretion" meaning that the decision is one for the authority or body to make, and not for the courts. Many statutes also prescribe or at least presuppose the practical execution of policy decisions: a convenient description of this is to say that in addition to the area of policy or discretion, there is an operational area. Although this distinction between the policy area and the operational area is convenient, and illuminating, it is probably a distinction of degree; many "operational" powers or duties have in them some element of "discretion." It can safely be said that the more "operational" a power or duty may be, the easier it is to superimpose upon it a common law duty of care.

His Lordship then adverted to the fact that frequently policy decisions are affected by budgetary considerations. It is for the local authority to decide what resources it should make available to carry out its role in supervising and controlling the activities of builders. For example, budgetary considerations may dictate how many inspectors should be hired for this purpose, what their qualifications should be, and how often inspections should be made. He approved the statement of du Parcq L.J. in Kent v. East Suffolk Rivers Catchment Board, [1940] 1 K.B. 319, at p. 338, that public authorities have to strike a balance between the claims of efficiency and thrift and whether they get the right balance can only be decided through the ballot box and not in the courts. He then dealt with the argument that where the local authority is under no duty to inspect but merely has a power to inspect, it can avoid liability for negligent inspection by simply deciding not to inspect at all. He pointed out that this overlooks the fact that local authorities are public bodies operating under statute with a clear responsibility for public health in their area. They must, therefore, make their discretionary decisions responsibly and for reasons that accord with the statutory purpose. They must at the very least give due consideration to the question whether they should inspect or not and, having decided to inspect, they must then be under a duty to exercise reasonable care in conducting that inspection.

Lord Wilberforce rejected the notion that a distinction was to be made in this context between statutory duties and statutory powers, the former giving rise to possible liability and the latter not. Such a distinction, he says, overlooks the fact that parallel with public law duties owed by local authorities there may co-exist private law duties to avoid causing damage to other persons in proximity to them. The trilogy of House of Lords cases -- Donoghue v. Stevenson, [1932] A.C. 562, Hedley Byrne & Co. v. Heller & Partners Ltd., [1964] A.C. 465, and Home Office v. Dorset Yacht Co., [1970] A.C. 1004 -- clearly established that in order to decide whether or not a private law duty of care existed, two questions must be asked:

> (1) is there a sufficiently close relationship between the parties (the local authority and the person who has suffered the damage) so that, in the reasonable contemplation of the authority, carelessness on its

part might cause damage to that person? If so,

(2) are there any considerations which ought to negative or limit (a) the scope of the duty and (b) the class of persons to whom it is owed or (c) the damages to which a breach of it may give rise?

These questions, Lord Wilberforce said, must be answered by an examination of the governing legislation.

Lord Wilberforce categorized the various types of legislation as follows:

(1) statutes conferring powers to interfere with the rights of individuals in which case an action in respect of damage caused by the exercise of such powers will generally not lie except in the case where the local authority has done what the legislature authorized but has done it negligently;

(2) statutes conferring powers but leaving the scale on which they are to be exercised to the discretion of the local authority. Here there will be an option to the local authority whether or not to do the thing authorized but, if it elects to do it and does it negligently, then the policy decision having been made, there is a duty at the operational level to use due care in giving effect to it.

Lord Wilberforce found that the defendant in Anns was under a private law duty to the plaintiff. It had to exercise a bona fide discretion as to whether to inspect the foundations or not and, if it decided to inspect them, to exercise reasonable skill and care in doing so. He concluded that the allegations of negligence were consistent with the Council or its inspector having acted outside any delegated discretion either as to the making of an inspection or as to the manner in which the inspection was made.

Following the path charted by Lord Wilberforce and directing myself to the governing legislation, s. 714 of the Municipal Act of British Columbia, R.S.B.C. 1960, c. 255, as amended, now R.S.B.C. 1979, c. 290, provides in part as follows:

714. The Council may, for the health, safety, and protection of persons and property, and subject to the Health Act and the Fire Marshal Act and the regulations made thereunder, by by-law

(a) regulate the construction, alteration, repair, or demolition of buildings and structures;

. . .

(k) require that, prior to any occupancy of a building or part thereof after construction, wrecking, or alteration of that building or part thereof, or any change in class of occupancy of any building or part thereof, an occupancy permit be obtained from the Council or the proper authorized official, which permit may be withheld until the building or part thereof complies with the health and safety requirements of the by-laws of the municipality or of any Statute.

It would appear from the use of the word "may" in s. 714 that the Council has a discretion under the statute whether to regulate the construction of buildings by by-laws or not. However, in fact Council decided to exercise its regulatory power and passed By-law No. 11-1. The By-law prohibited construction without a building permit, provided for a scheme of inspections at various stages of construction, prohibited occupancy without an occupancy permit and, perhaps most important, imposed on the building inspector the duty to enforce its provisions. It should be noted, however, that the By-law also imposed a duty on the owner of the building or his agent to give notice to the building inspector when the building reached the various stages at which inspection was called for under the By-law.

It seems to me that, applying the principle in Anns, it is fair to say that the City of Kamloops had a statutory power

to regulate construction by by-law. It did not have to do so. It was in its discretion whether to do so or not. It was, in other words, a "policy" decision. However, not only did it make the policy decision in favour of regulating construction by by-law, it also imposed on the city's building inspector a duty to enforce the provisions of the By-law. This would be Lord Wilberforce's "operational" duty. Is the City not then in the position where in discharging its operational duty it must take care not to injure persons such as the plaintiff whose relationship to the City was sufficiently close that the City ought reasonably to have had him in contemplation?

3. The Argument on Causation

Counsel for the City puts forward two main propositions which it says should insulate it against liability to the plaintiff. The first is that even if this Court were to adopt the principle in Anns and find that the City owed the plaintiff a private law duty of care, the plaintiff's damage was not caused by any fault of the City. The plaintiff's damage, it submits, was caused solely by the wilful disregard by the Hughes of the building by-law and the structural safety requirements imposed on them by the building inspector and their deceit in concealing their knowledge of the structural defects from the plaintiff when he bought the house. Reliance was placed on the House of Lords' decision in East Suffolk Rivers Catchment Board v. Kent, [1941] A.C. 74. Alternatively, the City argued, the plaintiff's damage was caused or contributed to by the plaintiff's own negligence in failing to make a proper inspection at the time of purchase. Counsel for the City submits that surely a careful examination of the foundations of a house built on a hillside would be a primary consideration in the mind of any competent contractor retained by a prospective purchaser to opine on the structural integrity of the house.

It seems to me that the learned trial judge was right in the way he dealt with the liability of the Hughes. He agreed that they played a major role in causing the plaintiff's damage and imposed a 75 per cent liability on them. He did not deal in his brief reasons for judgment with the defence of contributory negligence on the part of the plaintiff put forward by the City but it is implicit in the result he reached that he found none. The Court of Appeal in dealing with this issue said there was no evidence to show that, at the time the plaintiff had his contractor check out the house, the subsidence of the foundations had taken place or would have been apparent even if his contractor had entered the four-foot crawl space. It seems to me that this may not be completely accurate. There was some evidence that efforts had been made to shore up the foundations prior to the plaintiff's acquisition of the house. I prefer therefore to adopt the inference to be drawn from the trial judge's finding of no contributory negligence that the plaintiff had no obligation in the circumstances to crawl under the house to inspect the foundations.

I do not think the House of Lords' decision in East Suffolk helps the City on the causation issue. In that case the Catchment Board exercised its statutory power to repair a breach in a retaining wall when the river broke through it as a result of a flood. But the Board carried out its work so inefficiently that the flooding continued over an extensive period of time and did serious damage to the plaintiff's pasture land. The evidence disclosed that the breach could with reasonable skill have been repaired in fourteen days. The trial judge found for the plaintiff. If the defendant Board had done nothing, he concluded, it would have been free of liability. But having injected itself into the action it owed a duty to the plaintiff to use reasonable care. The

Court of Appeal agreed with the trial judge that the defendant, having elected to exercise its powers, came under a duty to exercise them with a reasonable degree of skill and care. The House of Lords, however, (Lord Atkin dissenting) reversed the Court of Appeal, holding that the defendant Board was under no obligation to repair the wall or to complete the work after having started it. Viscount Simon and Lord Thankerton both found that the plaintiff's damage was caused by the flooding and not by the abortive efforts of the defendant to repair the gap in the wall. There was no evidence that any additional damage was caused as a result of its intervention.

Lord Wilberforce was not content to characterize East Suffolk simply as a case on causation. He thought rather that it revealed that in 1940 the concept of a general duty of care resting on public officials was not yet fully recognised and, indeed, that that recognition did not come until 1970 with the decision in Home Office v. Dorset Yacht Co., supra.

In my view, the East Suffolk case is clearly distinguishable from the present case. This is not the case of a power which the City decided to exercise but exercised in a negligent manner. This is the case of a duty owed by the City to the plaintiff, a person who met Lord Wilberforce's test of proximity in Anns. The City's responsibility as set out in the By-law was to vet the work of the builder and protect the plaintiff against the consequences of any negligence in the performance of it. In those circumstances it cannot, in my view, be argued that the City's breach of duty was not causative. The builder's negligence, it is true, was primary. He laid the defective foundations. But the City, whose duty it was to see that they were remedied, permitted the building to be constructed on top of them. The City's negligence in this case was its breach of duty in failing to protect the plaintiff against the builder's negligence.

In Anns Lord Wilberforce suggests that if East Suffolk were being decided today the Catchment Board, although free of liability if it decided to take no steps to stem the flood, might attract a liability if it decided to exercise its power and take steps but exercised its power negligently. It seems to me that this would follow from a finding that the Board had made a policy decision to exercise its power and acted negligently in carrying its policy decision into operation. A liability might then be incurred not only with respect to any fresh damage caused by its negligent interventions but also with respect to damage the flood would have caused regardless of its intervention provided that damage could and ought to have been mitigated by a non-negligent intervention.

I believe that if the courts below had found in this case that the City owed no private law duty of care to the plaintiff, they would have held the Hughes one hundred per cent liable. Their apportionment of liability therefore must stand or fall on the existence of such a duty.

4. Non-feasance and Misfeasance

The second proposition put forward on behalf of the City goes directly to the central issue in the case, namely what, if any, duty was owned by the City to the plaintiff. Counsel submits that even if this Court were to adopt the principle in Anns, it should not be applied in this case because at most the City was guilty of non-feasance rather than misfeasance. He submits that this distinction between non-feasance and misfeasance is well established in Canadian law and that non-feasance does not give rise to a liability in negligence. Accordingly, he submits, the principle in Anns, if adopted, should be confined in Canada to misfeasance cases. It is necessary to consider this submission in some detail.

A good starting point is the case most strongly relied upon by counsel, namely McCrea v. White Rock (City of) (1974), 56 D.L.R. (3d) 525. The circumstances giving rise to that litigation are not dissimilar to those arising here. An owner of a building sued the municipality for negligent inspection of the structure after it collapsed. Alterations had been made to the building to substitute a beam supported by two columns for a bearing wall. Three inspections were made at the call of the contractor, one at the time of the pouring of the cement floor, another in relation to a laminated fire wall and the third in connection with the floor repair. Maclean J.A. summarizes the crucial facts, at pp. 528-29, as follows:

> There was evidence that the practice in White Rock was for the contractor to call for inspections on behalf of the owner. No further calls for inspections were made and the inspector did not inspect the beam. In fact, the contractor did not follow the plan which he had submitted in support of the application for the building permit. However, the inspector had no reason to believe that an

inspection other than one called for by the owner or his agent was required.

Mr. Justice Berger found that the City had been negligent, applying the reasoning in Dutton v. Bognor Regis United Building Co., [1972] 1 All E.R. 462, [1972] 1 Q.B. 373, sub nom. Dutton v. Bognor Regis Urban District Council. The Court of Appeal of British Columbia reversed the decision of the trial judge. Maclean J.A. distinguished the Dutton case on the basis of the distinction between non-feasance and misfeasance. Quoting from his judgment at pp. 529-30:

> In my view, if it could be said that the building inspector was at fault at all, his fault was one of non-feasance at the worst, rather than misfeasance. The respondents relied on the case of Dutton v. Bognor Regis United Building Co. Ltd. et al., [1972] 1 All E.R. 462, [1972] 1 Q.B. 373 sub nom. Dutton v. Bognor Regis Urban District Council. In that case the builder erected the building on a rubbish tip, and upon discovering the nature of the ground, he enlarged the foundations and
>
> made other provisions in an attempt to ensure the safety of the building. These attempts were futile, however, and the building became an almost total loss because of settling of the foundations. The building inspector had passed the foundations following an inadequate inspection. There is no doubt that his inspection was inadequate and careless in the extreme. The negligent inspection by the building inspector was clearly an act of misfeasance as Lord Denning, M.R., said at p. 475 of the report of the Dutton case:
>
> > It was his job to examine the foundations to see if they would take the load of the house. He failed to do it properly. In the third place, the council should answer for his failure. They were entrusted by Parliament with the task of seeing that houses were properly built. They received public funds for the purpose. Yet, they failed to protect them. Their shoulders are broad enough to bear the loss.
> >
> > (Emphasis added.)
>
> It should be noted that the building inspector was also held liable for the loss, but, as previously noted, the Dutton case was clearly a case of misfeasance on the part of the servant, the building inspector. Liability was imposed upon him by the law of England, but in my view, the same result does not necessarily follow here. In any event, the Dutton case is distinguishable because that was a case of misfeasance whereas in my view this is a case of non-feasance if it is anything. [My emphasis.]

Robertson J.A. agreed with Maclean J.A. that the Dutton case was distinguishable on this basis. In the course of his reasons for judgment he made reference to the judgment of Schroeder J.A. in Schacht v. The Queen in right of the Province of Ontario, [1973] 1 O.R. 221, in which certain police officers failed to warn the plaintiff of an excavation on the highway and as a result he suffered personal injuries. Action was brought against the Crown. After reviewing a number of cases and statutory provisions Mr. Justice Schroeder, delivering the judgment of the Court, said at p. 231:

> Looked upon superficially the passivity of these two officers in the face of the manifest dangers inherent in the inadequately guarded depression across the highway may appear to be nothing more than non-feasance, but in the case of public servants subject not to a mere social obligation, but to what I feel bound to regard as a legal obligation, it was non-feasance amounting to misfeasance. [My emphasis.]

Seaton J.A. commented on Schacht at pp. 548-49 as follows:

> In Schacht there is reference to non-feasance amounting to misfeasance. I do not understand that statement. In Dutton Sachs, L.J., dealt with the borderline between non-feasance and misfeasance so as to much reduce the area termed non-feasance. The judgment under appeal adopts that reasoning and carries it

> further. I think that the result is not consistent with the decisions in England (for example, East Suffolk, supra), this jurisdiction (for example, Stevens & Willson v. Chatham, supra, Mainwaring v. Nanaimo, [1951] 4 D.L.R. 519, 3 W.W.R. (N.S.) 258, and Miller & Brown Ltd. v. City of Vancouver (1966), 59 D.L.R. (2d) 640, 58 W.W.R. 191), or elsewhere (for example, Gorringe v. Transport Com'n (Tas.) (1950), 80 C.L.R. 357, and Oamaru Borough v. McLeod, [1967] N.Z.L.R. 940). I think that this case must turn upon the presence or absence of a duty to inspect. If a duty is discovered the non-feasance/misfeasance dichotomy is not necessary. [My emphasis.]

Mr. Justice Seaton concluded that there was no duty on the appellant in the McCrea case to inspect and that was sufficient to dispose of the appeal. He was able to reach this conclusion because there was no obligation on the inspector to inspect until the owner had given notice and no notice had been given in respect of the beam.

The McCrea case, of course, predates Anns. Counsel relies also therefore on a number of Canadian decisions since Anns including a decision of this Court. In Barratt v. North Vancouver (Corporation of), [1980] 2 S.C.R. 418, a plaintiff was thrown from his bicycle and injured when he rode into a deep pothole in the road surface. The evidence indicated that the municipality had a once every two weeks inspection system, that the road was properly inspected one week before the accident and that the pothole developed between the time of that inspection and the date of the accident. It was held that the plaintiff could not recover in negligence from the municipality on the ground that it should have provided for more frequent inspections. It should be noted that s. 513(2) of the British Columbia Municipal Act gave the municipality authority to lay out, construct, maintain and improve highways but it imposed no duty on the municipality to maintain its highways. Mr. Justice Martland said at p. 428:

> In my opinion, no such duty existed. The Municipality, a public authority, exercised its power to maintain Marine Drive. It was under no statutory duty to do so. Its method of exercising its power was a matter of policy to be determined by the Municipality itself. If, in the implementation of its policy its servants acted negligently, causing damage, liability could arise, but the Municipality cannot be held to be negligent because it formulated one policy of operation rather than another.

The position of the Municipality is well stated in the judgment of du Parcq L.J. in the Court of Appeal in Kent v. East Suffolk Rivers Catchment Board, [1940] 1 K.B. 319, at p. 338:

> The law would perhaps be more satisfactory, or at any rate seem more satisfactory in some hard cases, if a body which chose to exercise its powers were regarded as being in exactly the same position as one upon which an Act of Parliament imposed a duty. On the other hand, it must be remembered that when Parliament has left it to a public authority to decide which of its powers it shall exercise, and when and to what extent it shall exercise them, there would be some inconvenience in submitting to the subsequent decision of a jury, or judge of fact, the question whether the authority had acted reasonably, a question involving the consideration of matters of policy and sometimes the striking of a just balance between the rival claims of efficiency and thrift.

Mr. Justice Martland then stated his conclusion as follows, at p. 428:

> My conclusion is that the trial judge sought to impose upon the Municipality too heavy a duty, that the determination of the method by which the Municipality decided to exercise its power to maintain the highway, including its inspection system, was a matter of policy or planning, and that, absent negligence in the actual operational performance of that plan, the appellant's claim fails.

Two things are of interest about Mr. Justice Martland's reasons for judgment in Barratt. The first is that he makes no reference to any distinction between non-feasance and misfeasance although presumably, if the distinction was significant, this would be categorized as a non-feasance case. The second is that it seems to be central to his judgment that no duty was imposed upon the municipality. It was in the discretion of the municipality whether or to what extent it exercised its maintenance power. The courts could not therefore interfere in the absence of negligence in the implementation of the policy it adopted with respect to inspection. This, it appears to me, is the ratio of the decision in Barratt.

This Court did, however, indicate some support for the non-feasance/misfeasance distinction in its earlier decision in Stevens and Willson v. Chatham (City of), [1934] S.C.R. 353. Indeed, that case may be viewed as the primary source of the distinction. The facts in brief were that the plaintiff's building burned while firemen stood by helplessly because they did not know how to turn off the electricity which was the source of the fire. The firemen telephoned the Public Utilities Commission to get them to turn off the electricity but by the time this was done the fire was out of control and the building could not be saved. Duff C.J. and Smith J. agreed with the trial judge and the majority of the Ontario Court of Appeal that the firemen were not in these circumstances negligent. Rinfret J. concurred but added at p. 363:

> The City is not legally responsible in damages, in this case, for mere inactivity on the part of its firemen.

Crocket J. dissented, expressing no opinion on whether the firemen were negligent in their "nonfeasance or misfeasance" in waiting for the Commission to shut off the power. He found that the Commission had been negligent in being slow to shut off the power. Only Lamont J. based his judgment primarily on the ground that the City was not liable "for mere inactivity on the part of its servants" (p. 364). The "mere inactivity" approach would appear to have formed the basis of the non-feasance/misfeasance distinction adopted and applied in cases such as Wing v. Moncton, [1940] 2 D.L.R. 740, Neabel v. Ingersol (Town of) (1967), 63 D.L.R. (2d) 484, and McCrea v. White Rock (City of), supra.

5. The Nature of the Alleged Breach

Two important questions that must be answered in the present case are: (1) What was it that the building inspector failed to do in this case that is alleged to have contributed to the plaintiff's damage? and (2) Was he under a duty to do that thing? If the building inspector was under a duty to do the thing he failed to do, then it seems to me that Seaton J.A. was right in McCrea when he stated that the non-feasance/misfeasance dichotomy becomes irrelevant. He is in breach of a duty and, if his breach caused the plaintiff's damage, liability must ensue. If, however, he is under no duty to do the thing he failed to do, there can be no liability. Again, the non-feasance/misfeasance dichotomy is irrelevant.

Lambert J.A., speaking for the Court of Appeal, [(1981), 31 B.C.L.R. 311], found that the building inspector was under a public law duty to prevent the continuation of the construction of the building on structurally unsound foundations once he became aware that the foundations were structurally unsound. He was also under a public law duty to prevent the occupancy of the building by the Hughes or the plaintiff. He failed to discharge either of those public law duties. Lambert J.A. then went on to discuss the nature of the private law duty he was under. He said at p. 319:

> I turn now to the private law duty. The conduct of the building inspector in response to the public law duties involved decisions on alternative courses of conduct which were, in my opinion, operational in character. The building was a danger to the occupant of the house and to adjoining property owners. It may have been a danger to anyone in the house. Policy decisions could have confronted the city as to whether to prosecute

> or to seek an injunction. There may have been other policy choices. But a decision not to act at all, or a failure to decide to act, cannot be supported by any reasonable policy choice. That decision or failure was not "within the limits of a discretion bona fide exercised", using again the words of Lord Wilberforce. It was certainly open to the trial judge to reach that conclusion. Indeed, having regard to the evidence of Mr. Backmeyer, it was open to the trial judge to conclude that the decision not to act or the failure to decide to act, was influenced by the pressure exerted by Mr. Hughes Sr. in his capacity as alderman.
>
> I would follow the reasons of Lord Wilberforce in Anns in concluding that a private law duty was owed to Mr. Nielsen as the owner and occupier of the house at the time when the defective foundations first became apparent by causing actual subsidence and damage. [My emphasis.]

It seems to me that Lambert J.A. was correct in concluding that the courses of conduct open to the a building inspector called for "operational" decisions. The essential question was what steps to take to enforce the provisions of the by-law in the circumstances that had arisen. He had a duty to enforce its provisions. He did not have a discretion whether to enforce them or not. He did, however, have a discretion as to how to go about it. This may, therefore, be the kind of situation envisaged by Lord Wilberforce when, after discussing the distinction between policy decisions and operational decisions, he added the rider [[1978] A.C. 728, at p. 754]:

> Although this distinction between the policy area and the operational area is convenient, and illuminating, it is probably a distinction of degree; many "operational" powers or duties have in them some element of "discretion". It can safely be said that the more "operational" a power or duty may be, the easier it is to superimpose upon it a common law duty of care.

It may be, for example, that although the building inspector had a duty to enforce the by-law, the lengths to which he should go in doing so involved policy considerations. The making of inspections, the issuance of stop orders and the withholding of occupancy permits may be one thing; resort to litigation, if this became necessary, may be quite another. Must the City enforce infractions by legal proceedings or does there come a point at which economic considerations, for example, enter in? And if so, how do you measure the "operational" against the "policy" content of the decision in order to decide whether it is more "operational" than "policy" or vice versa? Clearly this is a matter of very fine distinctions.

Mr. Justice Lambert resolves this problem, as I apprehend the passage already quoted from his reasons, by concluding that the City could have made a policy decision either to prosecute or to seek an injunction. If it had taken either of those steps, it could not be faulted. Moreover, if it had considered taking either of those steps and decided against them, it could likewise not be faulted. But not to consider taking them at all was not open to it. In other words, as I read his reasons, his view was that the City at the very least had to give serious consideration to taking the steps toward enforcement that were open to it. If it decided against taking them, say on economic grounds then that would be a legitimate policy decision within the operational context and the court should not interfere with it. It would be a decision made, as Lord Wilberforce put it, within the limits of a discretion bona fide exercised.

There is no evidence to support the proposition that the City gave serious consideration to legal proceedings and decided against them on policy grounds. Rather the evidence gives rise to a strong inference that the City, with full knowledge that the work was progressing in violation of the by-law and that the house was being occupied without a permit, dropped the matter because one of its aldermen was involved. Having regard to the fact that we are here concerned with a statutory duty and that the plaintiff was clearly a person who should have been in the contemplation of the City as someone who might be injured by any breach of that duty, I think this is an appropriate case for the application of the principle in Anns. I do not think the appellant can take any comfort from

the distinction between non-feasance and misfeasance where there is a duty to act or, at the very least, to make a conscious decision not to act on policy grounds. In my view, inaction for no reason or inaction for an improper reason cannot be a policy decision taken in the bona fide exercise of discretion. Where the question whether the requisite action should be taken has not even been considered by the public authority, or at least has not been considered in good faith, it seems clear that for that very reason the authority has not acted with reasonable care. I conclude therefore that the conditions for liability of the City to the plaintiff have been met.

It is of interest to note in this connection that other courses were open to the City. It could have posted warning notices on the building and it could have condemned it. In fact, it did neither even although it knew that work was continuing despite the stop work order and that the house was being occupied without an occupancy permit. Indeed, it issued a plumbing permit in August 1974 before the Hughes moved in.

6. The "Floodgates" Argument

Before leaving the issue of the liability of public officials and moving on to the equally vexatious issue of recovery for pure economic loss, I should like to say a word or two about what has come to be known as the "floodgates" argument. The floodgates argument would discourage a finding of private law duties owed by public officials on the ground that such a finding would open the floodgates and create an open season" on municipalities. No doubt a similar type of concern was expressed about the vulnerability of manufacturers following the decision in Donoghue v. Stevenson, supra. While I think this is an argument which cannot be dismissed lightly, I believe that the decision in Anns contains its own built-in barriers against the flood. For example, the applicable legislation or the subordinate legislation enacted pursuant to it must impose a private law duty on the municipality or public official before the principle in Anns applies. Further, the principle will not apply to purely policy decisions made in the bona fide exercise of discretion. This is, in my view, an extremely important feature of the Anns principle because it prevents the courts from usurping the proper authority of elected representatives and their officials. At the same time, however, the principle ensures that in the operational area, i.e. in implementing their policy decisions, public officials will be exposed to the same liability as other people if they fail in discharging their duty to take reasonable care to avoid injury to their neighbours. The only area, in my view, which leaves scope for honest concern is that difficult area identified by Lord Wilberforce where the operational subsumes what might be called secondary policy considerations, i.e. policy considerations at the secondary level. This, I believe, is the area into which this case falls. This case, however, is more easily disposed of by virtue of the complete failure of the municipality to deal with the policy considerations. On the assumption that by and large municipalities and their officials discharge their responsibilities in a conscientious fashion, I believe that such a failure will be the exception rather than the rule and that the scope for application of the principle in Anns will be relatively narrow. I do not see it, as do some commentators, as potentially ruinous financially to municipalities. I do see it as a useful protection to the citizen whose ever-increasing reliance on public officials seems to be a feature of our age: see Linden, "Tort Law's Role in the Regulation and Control of the Abuse of Power", Special Lectures of the Law Society of Upper Canada, 1979, p. 67.

7. Recovery for Pure Economic Loss

It was forcefully argued by the appellant that even if the Court were to find a breach by the City of a private law duty owed to the plaintiff, the plaintiff's action should be dismissed because his loss was purely economic. Reliance was placed on the decision of this Court in Rivtow Marine Ltd. v. Washington Iron Works, [1974] S.C.R. 1189.

It will be recalled that in Rivtow the plaintiff had purchased a crane manufactured by the defendant from a distributor. The crane had a latent defect which made it

dangerous to operate a fact which the defendant discovered when one of its cranes broke, killing the operator. The defendant knew that the plaintiff had purchased one of its cranes, but it took no steps to warn the plaintiff. The plaintiff discovered the defect when cracks appeared during the busy season and had to withdraw the crane from operation in order to have it repaired. The Supreme Court characterized the cost of the repairs as economic loss. The majority held that that cost was not recoverable but, since the defendant was in breach of its duty to warn the plaintiff of the defect in the crane, it was liable to the plaintiff for the difference between the loss of earnings it sustained during the busy season and the loss of earnings it would have sustained if its attention had been directed to the defect and it had had the crane repaired during the slack season. The minority would have allowed the cost of repair to the crane itself.

The learned trial judge identified the damages in the instant case as being the cost to the plaintiff of having his home restored to the condition it should have been in if properly constructed plus certain expenses he could incur while this was being done. He awarded general damages in the amount of $45,004.27 and attributed 25 per cent of that sum to the City.

The City submits that this is pure economic loss analogous to the cost of repairs to the crane which was expressly disallowed by the majority in Rivtow. Lambert J.A., after pointing out that recovery for economic loss was allowed in Anns, Lord Wilberforce expressing a preference for the dissenting judgment of Laskin J. (as he then was) in Rivtow over that of the majority, proceeded to distinguish Rivtow. The majority, he said, analyzed the breach in that case as a failure in the duty of the manufacturer and sales agent to warn the plaintiff of the defects in the crane. However, and this he thought was the key to Rivtow, even if that duty had been complied with the crane would still have been damaged and the plaintiff would have had to bear the cost of repair in the absence of any contractual warranty. Accordingly, the plaintiff could recover only for the economic loss occasioned by the breach of the duty to warn. The minority, on the other hand, would have allowed the cost of the repair to the crane, not as damage flowing from breach of a duty to warn but as the cost of avoiding damage to persons or property.

There is no doubt that the preclusion of recovery for economic loss in the absence of physical injury to person or property has a venerable history. The decision of Blackburn J. in Cattle v. Stockton Waterworks Co. (1875), L.R. 10 Q.B. 453, was still held to be good law by Widgery J. in Weller & Co. v. Foot and Mouth Disease Research Institute, [1966] 1 Q.B. 569, [1965] 3 All E.R. 560. The rationale for the economic loss rule was probably most articulately stated by Cardozo C.J. in Ultramares Corp. v. Touche, 255 N.Y. 170 (1931) who said at p. 179 that to allow such recovery would "expose [defendants] to a liability in an indeterminate amount for an indeterminate time to an indeterminate class".

It took the decision of the House of Lords in Hedley Byrne & Co. Ltd. v. Heller & Partners Ltd., supra, to spark a review and reassessment of the economic loss rule by legal scholars and judges, and this review has been going on now for almost two decades. How, it is asked, can one justify to injured plaintiffs the difference in treatment the law accords to physical and to economic loss caused by a defendant's negligent acts? In one you are compensated by the wrongdoer: in the other you have to bear the loss yourself. Does it make sense to permit the recovery of economic loss for negligent words but not for negligent acts? What is the significant difference between them? Why, if economic loss is reasonably foreseeable as a consequence of negligent acts, should it not be as recoverable as reasonably foreseeable physical injury to persons or to property? And should Chief Judge Cardozo's fear of indeterminate liability to an indeterminate class preclude recovery by a very specific plaintiff in a very specific amount? Can a policy consideration which leads to a manifest injustice in certain types of cases be a good policy consideration? Is there some rationale whereby injustice in specific cases can be avoided and Chief Judge Cardozo's fear guarded against at the same time?

In an edifying article Negligent Misstatements, Negligent Acts and Economic Loss, 92 L.Q.R. 213, Mr. Craig points out

that it is the reasonable foreseeability test of recovery in Donoghue v. Stevenson which could open up an exposure for economic loss of indeterminate scope. It is arguable that no such exposure arises under the Hedley Byrne principle because of the restricted class entitled to recovery under that principle. Quoting from Mr. Craig's article at p. 218:

> The very nature of the duty framed by the House of Lords in 1964 has within it certain limiting factors mentioned above which mean that these problems of indeterminate liability are far less likely to arise: the need for some form of relationship between the participants, reasonable reliance leading to loss, knowledge by the representor of some particular transaction for which the information is to be required. The nexus envisaged was far closer than reasonable foresight per se.

Mr. Craig is clearly not completely satisfied with this distinction since the full scope of the duty in Hedley Byrne has not yet been determined. There has been a tendency to expand it in subsequent cases (see, for example, Dutton v. Bognor Regis United Building Co., supra, and Ministry of Housing and Local Government v. Sharp, [1970] 2 Q.B. 223) and this is a trend which might well continue as the jurisprudence around Hedley Byrne develops.

The High Court of Australia has tried to find a solution to the economic loss problem by narrowing the test of reasonable foreseeability. In Caltex Oil (Australia) Pty. Ltd. v. The Dredge "Willemstad" (1976), 136 C.L.R. 529, the Willemstad, while conducting dredging operations in Botany Bay, damaged an oil pipeline belonging to a refinery which ran across the bed of the Bay to a terminal operated by Caltex. Caltex supplied crude oil to the refinery for processing and received the refined product back by way of the pipeline. By reason of the damage to the pipeline Caltex had to find other means of transportation either by road or ship, and this cost it $95,000. This amount was characterized as pure economic loss.

Gibbs J. affirmed that the general rule was that economic loss was not recoverable. The fact that it was reasonably foreseeable did not make it recoverable. However, he held (at p. 555) that an exception to this rule of non-recovery arises when the defendant "has knowledge or means of knowledge that the plaintiff individually, and not merely as a member of an unascertained class, will be likely to suffer economic loss as a consequence of his negligence". He found that the defendant had knowledge in this case and permitted recovery. The decision was unanimous. Stephen and Mason JJ. adopted Gibb J.'s exception to the general rule. Jacobs J. distinguished between physical injury to property and physical effect on property and said that physical effect on property was recoverable even if it took the form of economic loss resulting from the immobilization of the property. Murphy J. stated that there was no satisfactory general principle governing the recovery of economic loss and that the issue was really a policy one. Just as Donoghue v. Stevenson had brought the law into conformity with the then notions of social justice, so must the court do the same in permitting recovery for economic loss unless there are acceptable policy reasons for not doing so. He saw none in this case.

It is quite apparent that Gibbs and Jacobs JJ., and possibly Stephen J. also, were seeking some means of permitting recovery for pure economic loss while avoiding the undesirable consequences of applying the reasonable foreseeability rule, namely indeterminate liability to an indeterminate class. They saw the solution in limiting foreseeability to specific individuals rather than members of a class. I am not sure, however, that their exception solves the problem. It may make the class determinate but it gives no guarantee that it will be small.

The House of Lords took a fresh look at the issue in Junior Books Ltd. v. Veitchi Co., [1983] A.C. 520. In that case the defendants were hired to lay a floor in a factory which was being erected for the plaintiffs by a building company. The defendants were sub-contractors and had no contractual relationship with the plaintiffs. The plaintiffs claimed that the floor was defective owing to the defendants' negligence and that the defendants knew what products were required and were alone responsible for the composition and construction of the floor. They also knew that the plaintiffs

were relying on their skill and judgment. The plaintiffs brought an action for the estimated cost of relaying the floor and for various items of economic loss consequential on its replacement, such as the cost of removal of machinery and the loss of profits while the floor was being relaid.

It was held by the House of Lords (Lord Brandon of Oakbrook dissenting) that where the relationship between parties is sufficiently close the scope of the duty of care owed by a person doing work is not limited to a duty to avoid causing foreseeable harm to persons or property by negligent acts or omissions but extends also to a duty to avoid defects in the work itself which will involve the plaintiffs in the cost of having them remedied. There was a sufficient degree of proximity between the plaintiffs and the defendants in this case and the plaintiffs were entitled to recover the cost of repairing the floor.

Lord Roskill, who delivered the main judgment in the case, said the case must be approached as one in which there was no physical damage. He referred with approval to Lord Wilberforce's two propositions in Anns: (1) his test of proximity and (2) whether there were any considerations which would call for a limitation on recovery. He found the proximity test was met and that the only reason for negating recovery was the traditional attitude of the law to economic loss. He held that this was not good enough. He saw no reason why "damage to the pocket" simpliciter should be disallowed when "damage to the pocket" coupled with physical damage has always been allowed. It was time for the law to take the next step forward in its development and he saw no untoward consequences from doing so. He expressed the view that the fears raised by the floodgates argument had proved unfounded.

Lord Brandon, dissenting, agreed that Lord Wilberforce's two propositions in Anns were sound. He agreed also that the proximity test was met in Junior Books. However, he found that Donoghue v. Stevenson itself and all the cases in which it had been followed had one thing in common, namely the existence of danger or the threat of danger of physical damage to persons or their property excluding the property from the defective condition of which the danger or threat of danger arose. In the absence of a contractual relationship Lord Brandon thought it inappropriate to extend the duty in tort so as, in effect, to create a warranty. He was, I believe, expressing a concern not dissimilar to that troubling the majority of this Court in Rivtow.

It is noted that in the instant case there is present the danger or threat of danger referred to by Lord Brandon. However, that was so in Rivtow also. The majority in Junior Books do seem to have carried the law a significant step forward.

As I mentioned earlier, recovery for economic loss was permitted in Anns with an expression of preference for the minority rather than the majority judgment in Rivtow. It seems to me, however, that the minority judgment results from the application of the reasonable foreseeability test which, it would appear, gives rise to the concern over indeterminate liability. In any event, the majority judgment of this Court in Rivtow stands until such time as it may be reconsidered by a full panel of the Court.

It seems to me, however, that Rivtow is distinguishable from this case in several significant respects. Rivtow was a lawsuit between private litigants. The plaintiff's claim here is against a public authority for breach of a private law duty of care arising under a statute. (This should not be confused with breach of statutory duty per se: see The Queen in right of Canada v. Saskatchewan Wheat Pool, [1983] 1 S.C.R. 205. It is noted that in the Dutton case Sachs L.J. put great emphasis on the fact that the defendant was a public authority and stated that the type of loss recoverable was the type of loss the private law duty arising under the statute was designed to prevent. If economic loss was within the purview of the statute, then it should be recoverable for breach of the private law duty arising under the statute whether or not it is recoverable for breach of a duty at common law. In my view, the private law duty in this case was designed to prevent the expense incurred by the plaintiff in putting proper foundations under his house. It was imposed to ensure that proper foundations would be under his house from the

outset. I suppose it is arguable that the damage the duty was designed to prevent was injury to the occupants from the collapse of the house or damage caused by the house sliding down the hill. But it seems to me that this is too narrow an approach to the protection the statute was designed to provide. The purpose of the By-law in this case was to prevent the construction of houses on defective foundations. The duty of enforcement which the By-law imposed on the building inspector required him at the very least to determine the scope of the measures which were necessary to achieve that end and, if required, to attempt to obtain the approval of the City for them. If he failed in that duty and a house on defective foundations resulted, it was obviously going to have to be repaired since it represented a threat to the health and safety of the occupants. This is not a case, like Rivtow, of failure to warn of the defective foundations: this is a case of failure to give consideration to a course of action which would have prevented the defective foundations. What else was the plaintiff to do to rectify the situation resulting from the City's breach?

It is noted also that there are no contractual overtones to this case as there were in Rivtow. It seems to have been important to the majority in Rivtow that no contractual warranty had been given with respect to the crane. Accordingly, there was some concern that the tort door should not be opened so far as to permit a recovery in tort which would not have been available in contract. No such problem arises in this case.

I said earlier in commenting upon the floodgates argument in relation to the imposition of a private law duty of care that I was not troubled by the thought that public officials in discharging their duties should incur the same liability as ordinary citizens. It may be that in exposing public authorities to liability for economic loss when under our law as it presently stands a private litigant may not be so exposed, the Court would be extending the liability of public authority beyond that of private litigants. I am not, however, persuaded that this is so. Like Lambert J.A. I tend to think that the problem of concurrent liability in contract and tort played a major role in the restrictive approach taken by the majority in Rivtow and that, as in the case of Hedley Byrne, we will have to await the outcome of a developing jurisprudence around that decision also: see Gypsum Carrier Inc. v. The Queen, [1978] 1 F.C. 147; Agnew-Surpass Shoe Stores Ltd. v. Cummer-Yonge Investments Ltd., [1976] 2 S.C.R. 221; but cf. Bethlehem Steel Corp. v. St. Lawrence Seaway Authority (1977), 79 D.L.R. (3d) 522 (F.C.); Ital-Canadian Investments Ltd. v. North Shore Plumbing and Heating Co., [1978] 4 W.W.R. 289 (B.C.S.C.)

I do not believe that to permit recovery in this case is to expose public authorities to the indeterminate liability referred to in Ultramares. In order to obtain recovery for economic loss the statute has to create a private law duty to the plaintiff alongside the public law duty. The plaintiff has to belong to the limited class of owners or occupiers of the property at the time the damage manifests itself. Loss caused as a result of policy decisions made by the public authority in the bona fide exercise of discretion will not be compensable. Loss caused in the implementation of policy decisions will not be compensable if the operational decision includes a policy element. Loss caused in the implementation of policy decisions, i.e. operational negligence will be compensable. Loss will also be compensable if the implementation involves policy considerations and the discretion exercised by the public authority is not exercised in good faith. Finally, and perhaps this merits some emphasis, economic loss will only be recoverable if as a matter of statutory interpretation it is a type of loss the statute intended to guard against.

It seems to me that recovery for economic loss on the foregoing basis accomplishes a number of worthy objectives. It avoids undue interference by the courts in the affairs of public authorities. It gives a remedy where the legislature has impliedly sanctioned it and justice clearly requires it. It imposes enough of a burden on public authorities to act as a check on the arbitrary and negligent discharge of statutory duties. For these reasons I would permit recovery of the economic loss in this case.

8. Limitation of Actions

The City alleged in its pleadings that the plaintiff's action in this case was statute-barred by the Municipal Act, R.S.B.C. 1960, c. 255, ss. 738 and 739 or, alternatively, by the Limitations Act, 1975 (B.C.), 1975, c. 37, s. 3, as amended. The limitations issue was not raised on appeal to this Court but for reasons which I will refer to in a moment the Court subsequently invited counsel to address it on this subject.

Limitations was an issue before the Court of Appeal and, according to Mr. Justice Lambert, the City accepted the proposition that the limitation period starts to run from the date on which the plaintiff actually discovers the damage or should with reasonable diligence have discovered it. It accepted, in other words, that the law in Canada was as stated in Sparham-Souter v. Town and Country Developments (Essex) Ltd., [1976] Q.B. 858. It did not put forward any other date. Rather, it confined its case before the Court of Appeal to the proposition that the plaintiff ought reasonably to have discovered the damage before he purchased the house in December 1977.

Since the hearing of the appeal in this Court the law in England has been changed by the decision of the House of Lords in Pirelli General Cable Works Ltd. v. Oscar Faber & Partners (a firm), [1983] 1 All E.R. 65, and the Court now has the written submissions of counsel on the implications of the change for this appeal.

The limitation problem stems from the apparent conflict between the decision of the English Court of Appeal in Sparham-Souter and the earlier decision of the House of Lords in Cartledge v. E. Jopling & Sons Ltd., [1963] A.C. 758. In Sparham-Souter the date of discoverability of the damage was held to be the date from which the limitation period started to run. In Cartledge, however, the effective date was held as a matter of statutory interpretation to be the date on which the damage occurred. The statutory language in Cartledge precluded the bringing of an action after the expiration of six years "from the date on which the cause of action accrued...." The statute contained a separate provision that where fraud or mistake was involved time did not begin to run until the fraud had been or could with reasonable diligence have been discovered. The House of Lords held unanimously, although regretfully, that these provisions left no room for an argument that in the absence of fraud the limitation period started to run from the date of discovery. Accordingly, since the plaintiff had contracted an industrial disease several years prior to his becoming aware of it, and also it appears, prior to the ability of medical science to detect it, his cause of action was barred by the statute before he even knew he had one.

The members of the English Court of Appeal discussed Cartledge in Sparham-Souter. They distinguished it on a variety of different bases and I think it is fair to say that no clear basis of distinction emerges from the several sets of reasons. The House of Lords nevertheless in Anns approved the views of the Court of Appeal in Sparham-Souter. Lord Wilberforce stated at p. 760 that the cause of action can only arise when "the state of the building is such that there is present or imminent danger to the health or safety of persons occupying it". Lord Salmon expressed the view at p. 770 that the cause of action arose "when the building began to sink and the cracks appeared". He said also that the period started to run when "the building suffered damage ... which endangered the safety of its occupants or visitors".

In Pirelli the House of Lords overruled Sparham-Souter and applied Cartledge. The defendants in Pirelli were consulting engineers who in March 1969 were negligent in the design of a boiler flue chimney at the plaintiff's works. As a result cracks appeared in the chimney. The plaintiffs did not discover the cracks until November 1977 and issued the writ in October 1978. The trial judge found that the cracks could not have occurred later than April 1970. He also found that the plaintiffs could not with reasonable diligence have discovered the damage before October 1972. He concluded, applying Sparham-Souter, that the plaintiffs only suffered damage when they discovered or ought reasonably to have

discovered the damage. Accordingly, the cause of action accrued within the six year limitation period and the plaintiffs were entitled to judgment. The defendants appealed to the Court of Appeal on the basis that the action was statute-barred. The Court of Appeal dismissed the appeal but the defendants succeeded in the House of Lords.

Their Lordships held that the cause of action accrued when physical damage occurred to the building, i.e. when the cracks formed in the chimney, whether or not the plaintiffs were or should have been aware of the damage at that time. The cause of action therefore accrued in April 1970 and the action was statute-barred. Their Lordships repudiated any distinction between personal injury damage and property damage for purposes of the application of the principle in Cartledge

In addition to overruling Sparham-Souter on the date of discovery as the effective date, their Lordships also seized the opportunity to put to rest the problem of the limitation period applicable to successive owners. They rejected the idea that the period starts to run afresh with each new owner and instead found that the duty was owed to owners as a class so that if time ran against one owner it ran also against all his successors in title.

It seems to me that it is now settled, at least in England, that the defendant's negligence has to have manifested itself in the shape of physical damage to the property, e.g. cracks or subsidence, before time starts to run for limitation purposes. It is vital, therefore, that the trial judge make a finding as to when this occurred. Once the damage has manifested itself it is, according to Pirelli, immaterial when the plaintiff discovered or ought reasonably to have discovered it.

It seems to me that Pirelli casts a bit of a cloud on that part of Lord Wilberforce's judgement in Anns in which he adopts the reasoning of the Court of Appeal in Sparham-Souter. Lord Fraser of Tullybelton was clearly sensitive to this and attempted, in my view not too successfully, to analyze the extent to which Lord Wilberforce intended to approve Sparham-Souter.

Be that as it may, the question for this Court now is whether or not it should adopt the law in Pirelli. If it were to adopt it, it would face a problem in this particular case in that the trial judge made no findings as to when the defective construction caused cracks or subsidence to the building. Counsel for the City now submits that physical damage appeared as early as the spring of 1974 prior to the Hughes' purchase of the property from their son. Lambert J.A., however, stated in his reasons for judgment, (1981), 31 B.C.L.R. 311, at p. 322:

> There was no evidence that would show or would tend to show that anyone who entered the crawl space in December 1977 would have seen the same sight as that which greeted the plumber, Mr. Nielsen and Mr. Hank in November 1978. There was no evidence that the defect which was apparent in November 1978 must have been apparent in December 1977, or that the structural deterioration had been gradual rather than sudden. The trial judge made no relevant finding of fact.

There is no doubt that in the spring of 1974 and even earlier the building inspector was expressing concern about the inadequacy of the foundations. The defect which had the potential for damage was there, but was the damage? In Bagot v. Stevens Scanlan & Co., [1966] 1 Q.B. 197, Lord Justice Diplock (as he then was) expressed the view that latent defects in a structure give rise to damage for limitation purposes at the time construction is completed but this approach, although consistent with Cartledge, was rejected by Lord Salmon in Anns and by Lord Fraser in Pirelli. Damage accrued only when the latent defect manifested itself in the form of physical damage such as cracks.

There are obvious problems in applying Pirelli. To what extent does physical damage have to have manifested itself? Is a hair-line crack enough or does there have to be a more substantial manifestation? And what of an owner who discovers that his building is constructed of materials which will cause it to collapse in five years time? According to Pirelli he has no cause of action until it starts to crumble. But

perhaps the most serious concern is the injustice of a law which statute-bars a claim before the plaintiff is even aware of its existence. Lord Fraser and Lord Scarman were clearly concerned over this but considered themselves bound by Cartledge. The only solution in their eyes was the intervention of the legislature.

This Court is in the happy position of being free to adopt or reject Pirelli. I would reject it. This is not to say that Sparham-Souter presents no problem. As Lord Fraser pointed out in Pirelli the postponement of the accrual of the cause of action until the date of discoverability may involve the courts in the investigation of facts many years after their occurrence. Dennis v. Charnwood Borough Council, [1982] 3 All E.R. 486, is a classic illustration of this. It seems to me, however, to be much the lesser of two evils.

Applying Sparham-Souter then to s. 738(2) of the Municipal Act which bars an action on the expiration of one year from the date on which the cause of action arose, the plaintiff's cause of action would not have arisen until November 1978 when his plumber, called to fix a burst pipe, drew the damage to his attention. By this time, however, s. 738(2) had been repealed by the Limitations Act, 1975 (B.C.), c. 37, which came into force on July l, 1975.

As already mentioned, the City relied in the alternative on s. 3 of the Limitations Act as barring the plaintiff's action. Section 3, however, must be read in conjunction with s. 6. The relevant parts I of these sections read as follows:

> 3. (1) The following actions shall not be brought after the expiration of 2 years after the date on which the right to do so arose:
>
> (a) an action for damages in respect of injury to person or property, including economic loss arising therefrom, whether based on contract, tort, or statutory duty ....
>
> 6. ...
>
> (3) The running of time with respect to the limitation periods fixed by this Act for an action
>
> . . .
>
> (b) for damage to property, or
>
> . . .
>
> (e) in which material facts relating to the cause of action have been wilfully concealed
>
> . . .
>
> is postponed and time does not commence to run against a plaintiff until the identity of the defendant is known to him and those facts within his means of knowledge are such that a reasonable man, knowing those facts and having taken the appropriate advice a reasonable man would seek on those facts, would regard those facts as showing
>
> (j) that an action on the cause of action would, apart from the effect of the expiration of a limitation period, have a reasonable prospect
>
> of success, and
>
> (k) that the person whose means of knowledge is in question ought, in his own interests and taking his circumstances into account, to be able to bring an action.
>
> (4) For the purpose of subsection (3),
>
> . . .
>
> (b) "facts" include
>
> (i) the existence of a duty owed to the plaintiff by the defendant, and
>
> (ii) that a breach of a duty caused injury,

damage, or loss to the plaintiff;

(c) where any person claims through a predecessor in right, title, or interest, the knowledge or means of knowledge of the predecessor before the right, title, or interest passed is that of the first mentioned person;...

. . .

(5) The burden of proving that the running of time has been postponed under subsection (3) is on the person claiming the benefit of the postponement.

It seems to me that the purpose of ss. 3(1)(a) and 6(3) was to give legislative effect to the reasoning in Sparham-Souter by postponing the running of time until the acquisition of knowledge or means of knowledge of the facts giving rise to the cause of action. The Act has also resolved the problem of stale claims which was the major criticism of the principle. Section 8(1) reads in relevant part:

8. (1) Subject to section 3(3), but notwithstanding a confirmation made under section 5 or a postponement or suspension of the running of time under section 6, 7, or 12, no action to which this Act applies shall be brought after the expiration of 30 years from the date on which the right to do so arose....

However, the 1975 legislation seems also in s. 6(4)(c) to have given statutory effect to the reasoning in Pirelli concerning successive purchasers by attributing the knowledge or means of knowledge of a predecessor in title to a subsequent owner. It may be said therefore that the Hughes' knowledge for purposes of the application of s. 6(4)(c) is the plaintiff's knowledge and he is accordingly statute-barred under the section by the Hughes' failure to litigate.

With respect, I do not think it is open to the City to make that argument. I think it would be doing violence to the facts in this case to say that the plaintiff was a person "claiming through" the Hughes. The Hughes were well aware of the structural defects. They were advised of them and of the stop work order by the city's solicitor in April, 1974 and their response was to encourage the City to drop the matter. I cannot see how the Hughes in these circumstances could allege a cause of action against the City so as to start time running against the plaintiff. This being so, the Limitations Act, even if applicable to the plaintiff's cause of action, does not assist the City. I find that the plaintiff, when he issued his writ in January 1979, had a valid and subsisting cause of action against the City which was not foreclosed by either s. 738(2) of the Municipal Act or s. 3 of the Limitations Act.

I would dismiss the appeal with costs.

The reasons of Estey and McIntyre JJ. were delivered by

McINTYRE J. (dissenting):-- This case involves consideration of whether or not a municipal government is under a duty to enforce its building by-law by proceedings in court after inspection has revealed breaches of the by-law in the construction of a building. I have read the reasons for judgment prepared in this matter by my colleague, Wilson J. I am content to accept, generally, her statement of the facts of the case, but because of their importance I wish to stress certain elements.

The son of the respondents Hughes (herein after Hughes, Jr.) set about the construction, or the completion of the construction, of a house for his parents, the respondents Hughes. He procured a building permit from the appellant municipality (the City) and deposited construction plans which, according to the building by-law, he was required to follow. Hughes, Jr., as he was required to do under the by-law, called for the inspection of the foundations after some construction work had been done. Being the only inspection called for, it was, according to the by-law, the only one the City was required to make. Not satisfied with the foundations, the inspectors directed corrective steps to be taken, and recommended that professional engineering advice be sought. The inspectors were prepared to cooperate with the builder in the necessary corrective program which was prepared

by a qualified engineer, but Hughes, Jr. did not implement the scheme and, as a result, the engineers withdrew from the matter. The City made several further inspections wherein deficiencies in the foundations were noted and, on February 28, 1974, the administrative officer of the city inspection department wrote to Hughes, Jr., informing him that the design he was using for the foundations was unsafe and reimposing an earlier 'stop work' order. Hughes, Jr. continued to build in defiance of the order and, on April 22, 1974, the city solicitor wrote to him and affirmed that the 'stop work' order would remain in effect. The 'stop work' order was posted on the premises during the month of February, 1974. Further inspections revealed continuing violations of the 'stop work' order. A plumbing permit was issued on August 23, 1974. According to the evidence of one Duncan, one of the building inspectors, the permit was issued to enable the sub-contractor who had completed the plumbing work to be paid, and because it did not interfere with the structural integrity of the building. No occupancy permit for the premises, as required by the building by-law, was ever issued despite many requests by the respondents Hughes.

It was not said, nor could it be said, that there was any negligence on the part of the city inspectors in the inspections they carried out or in the actions they took thereafter. The only fault alleged against the City is a failure to enforce the 'stop work' order. Consideration of the City's duty to the respondent Nielsen must be upon that basis.

The trial judge in very short reasons found both defendants, that is, the City and the respondents Hughes, negligent and, applying the provisions of the Negligence Act, R.S.B.C., 1979, c. 298, he apportioned 75 per cent to the respondents Hughes and 25 per cent to the City. He awarded damages in the amount of $45,004.27, which included the costs of the necessary repairs to the building and certain additional expenses which would be borne by the plaintiffs, together with the pre-judgment interest at 10 per cent per annum from December, 1978. An appeal by the City was dismissed.

Lambert J.A. wrote the judgment of the court (Taggart, Lambert and Macdonald JJ.A.) After reciting the facts, he pointed out that the claim made by the plaintiff Nielsen against the City:

> ...was for negligence in failing to take steps to enforce the stop work order or to condemn the building as unfit for habitation.

He posed the question which confronted the court in these terms:

> Was there, in this case, a private law duty owed by the city to an as yet unrevealed Mr. Nielsen, "over and above, or perhaps alongside" the public law duty of inspection and the related public law duties under the Municipal Act, R.S.B.C. 1960, c. 255, and the Kamloops building by-law?

He adopted the terminology and reasoning of Lord Wilberforce in Anns v. Merton London Borough Council, [1978] A.C. 728, in deciding on the existence of a private law duty of care and then said:

> A private law duty of care may exist whether the corresponding public law imposes a duty or merely grants a power. Decisions as to the manner of performing the duty or as to whether to exercise the power, or, if it is exercised, as to the manner of performance, may raise alternative courses of action. If the decision as to the choice of alternatives should be classified as a policy or planning decision, that is, a decision involving allocation of scarce resources or balancing such factors as efficiency and thrift, then there is no liability in the realm of private law for making a choice which causes harm. If the decision as to the choice of alternatives should be classified as an operational decision then the particular choice, the particular decision, and the particular omission or commission must be examined to see whether the ordinary principles of the law of negligence operate to impose a private law liability. The relationship of proximity or lack of proximity between

the parties that determines whether a private law liability should be imposed arises, of course, from the behaviour of the public authorities in response to the public law duty or power.

Then, after referring to parts of the building by-law, he continued:

> In my opinion those provisions established a public law duty on the building inspector to prevent the continuation of the construction of the building on structurally unsound foundations after it came to his notice that the foundations were unsound and a public law duty on the building inspector to prevent the occupancy of the building by Mr. and Mrs. Hughes Sr. or by Mr. Nielsen. Those public law duties should, in the last resort, have been exercised by seeking an injunction under the powers given by ss. 734 and 735 (now ss. 750 and 751) of the Municipal Act, R.S.B.C. 1960, c. 255.
>
> I turn now to the private law duty. The conduct of the building inspector in response to the public law duties involved decisions on alternative courses of conduct which were, in my opinion, operational in character. The building was a danger to the occupant of the house and to adjoining property owners. It may have been a danger to anyone in the house. Policy decisions could have confronted the city as to whether to prosecute or to seek an injunction. There may have been other policy choices. But a decision not to act at all, or a failure to decide to act, cannot be supported by any reasonable policy choice. That decision or failure was not "within the limits of a discretion bona fide exercised", using again the words of Lord Wilberforce. It was certainly open to the trial judge to reach that conclusion. Indeed, having regard to the evidence of Mr. Backmeyer, it was open to the trial judge to conclude that the decision not to act or the failure to decide to act, was influenced by the pressure exerted by Mr. Hughes Sr. in his capacity as alderman.

I would interject here to say that, having read the entire record, I have been unable to find any evidence which would support any such inference of impropriety on the part of the Council. Later he said:

> The duty of the building inspector was not a duty to warn. It was a duty to prevent the construction of the house and a duty to prevent its occupation.

It will be seen that Lambert J.A. has applied the principles expressed by Lord Wilberforce in the Anns case to find a private duty upon the building inspector to prevent construction and occupation once the defective construction has been discovered by seeking an injunction under the powers conferred in ss. 734 and 735 of the Municipal Act, R.S.B.C. 1960, c. 255. I have difficulty with the application of the trilogy of cases much discussed in this and other recent cases: Dutton v. Bognor Regis United Building Co., [1972] 1 All E.R. 462; Home Office v. Dorset Yacht Co., [1970] A.C. 1004; and Anns, supra, to the facts of the case at bar. In each of those cases the courts considered the position of a public authority whose liability depended upon the negligent conduct of their employees. Dutton was a case of faulty inspection of building construction. The Dorset Yacht Co. case was one of negligent supervision of prisoners, and Anns dealt with faulty building inspection. In each case the liability of the public authority was vicarious and depended upon the underlying negligence of its employees. In Anns,

Lord Wilberforce held that a private law duty of care could arise in these circumstances, the breach of which would give to a person injured a cause of action for damages against the public authority. There is nothing novel in this proposition as far as Canadian law is concerned. Robertson J.A. pointed this out in McCrea v. White Rock (City of) (1974), 56 D.L.R. (3d) 525, [1975] 2 W.W.R. 593, at p. 541 and p. 610, respectively, where he said:

> I am of the opinion that, where there is a duty to inspect and the person on whom the duty rests enters on its performance and carries it out in a negligent way, a person who thereby suffers damage has a cause of action against him.

He cited in support Ostash v. Sonnenberg (1968), 63 W.W.R. 257, in the Appellate Division of the Supreme Court of Alberta, where liability was found against a gas inspector for negligent inspection of a gas appliance, as well as against his employer, the Crown.

This is not, however, the case before us. The building inspector had a duty to enforce the by-law. In pursuance of that duty the inspector and his associates by adequate inspection found the defects, directed correction and when correction was not made issued a 'stop work' order. They posted a notice of the 'stop work' order on the premises and declined to issue an occupancy permit, despite repeated requests by the Hughes. No complaint has been made of the manner of inspection and no allegation of negligence in that respect has been made. The building inspectors have fully and adequately performed their duties in the case at bar and no vicarious liability can be visited upon the City because of any failure on their part. The only complaint seriously advanced in this Court has been non-enforcement by proceedings in court.

This is a situation fundamentally different from that arising in Anns or in the other cases it referred to. If liability is to be found against the City in this case, it can have nothing to do with the conduct of the building inspectors. It can only be on the basis of its own conduct in not seeking to enforce the 'stop work' order and to prevent the occupation of the unsafe house by legal proceedings. Since the case sounds in negligence, it must be shown that the City was under a duty to enforce its by-law by proceeding in the courts and that that duty was one the non-performance of which could give a cause of action in damages to persons injured.

The City argued in this Court that it was under no duty to the Hughes or Nielsen to exercise its power to prosecute or sue the Hughes in order to procure compliance with the by-law. The power is permissive, lying within the discretion of the City and one in which, on the authorities, the Court would not interfere. To recognize a duty upon the City to enforce its by-law by legal proceedings would impose an impossible burden upon it, one exceeding any burden imposed by the governing statute, the Municipal Act.

The Municipal Act, supra, in force at the relevant time, deals with enforcement of municipal by-laws in ss. 734 and 735 in these terms:

> 734. (1) Any by-law adopted under this Act may be enforced, and the breach of any by-law, resolution, or regulation of the Council or any provision of this Act restrained by action, suit, or proceeding in the Supreme Court or a County Court whether or not any penalty has been imposed for such breach.
>
> (2) Any civil action, suit, or proceeding to enforce, or to prevent or restrain the breach of, any by-law, resolution, or regulation of the Council or any provision of this Act, or relating to any damage to or interference with any highway or any property of the municipality, may be brought or taken by and in the name of the municipality; and neither the Crown nor the Attorney-General, nor any officer of the Crown, is a necessary party plaintiff to any such action, suit, or proceeding; provided, however, that in all cases a municipality shall, before the expiration of the time limited by the writ for appearance by the defendant, or within such further time as may be added by the Court in which such action is brought, serve a copy of such writ on the Attorney-General.
>
> 735. Where a building is erected or used, or land is used, in contravention of a by-law adopted under the authority of this Act, in addition to any other remedy provided in this Act, and to any penalty imposed by the by-law, such contravention may be restricted by action at the instance of the municipality alone.

and see s. 715:

> 715. (1) The Council may by by-law authorize

(a) the demolition, removal, or the bringing up to a standard specified in the by-law of a building, structure, or thing, in whole or in part, that is

(i) in contravention of any by-law; or,

(ii) in the opinion of Council, in an unsafe condition; or

(b) the filling-in, covering-over, or alteration in whole or in part of an excavation that is

(i) in contravention of any by-law; or

(ii) in the opinion of Council, in an unsafe condition.

(2) A by-law adopted under subsection (1) shall provide for thirty days' notice of the contemplated action to be given the owner, tenant, or occupier of the real property affected.

(3) An appeal lies to a Judge of the County Court having jurisdiction against the contemplated action under any by-law aforesaid.

(4) Notice of an appeal under subsection (3) shall be given the municipality within ten days from the date of the notice given under the by-law to the owner, tenant, or occupier of the affected premises.

(5) The Judge shall hear and finally determine the matter, making such order as seems meet to him.

(6) At the expiration of the thirty-day period mentioned in subsection (2), it shall be competent for the proper authorized official to proceed in accordance with the by-law or the decision of the Judge, as the case may be. [Emphasis added.]

The provisions of the building by-law passed by the City, pursuant to the discretionary powers given in s. 714 of the Municipal Act, provide in s. 900:

900. The building inspector shall enforce the provisions of this by-law and administer the by-law.

This section imposes a duty on the building inspector with respect to enforcement matters within his competence, but in my view does not include authority to commence proceedings in court. The duty is satisfied when the building inspector, having made an adequate inspection and issued the 'stop work' order, reports fully to the Council. This duty was fully performed in the case at bar. Further steps towards enforcement are beyond the competence of the inspectors and solely within the powers of the Council to be exercised by by-law or resolution of the Council (see s. 165 of the Municipal Act). It will be observed that the sections give a statutory power to enforce its by-law by court proceedings or demolition without imposing a statutory duty to do so.

It has been held that a municipality has no duty to enforce by-laws passed under statutory powers which leave a discretion as to whether such powers may be exercised or not. The provisions of the Municipal Act of British Columbia which empower the passage of a building by-law are found in s. 714 of the Act and are clearly permissive. The provisions of ss. 734, 735 and 715, cited above, give a power to take legal steps towards enforcement but impose no duty.

In Brown v. Hamilton (City of) (1902), 4 O.L.R. 249, the City of Hamilton had passed a by-law which prohibited the setting off of fireworks in the city streets. The by-law had for many years been ignored by the public and, presumably, by the City. The plaintiff was injured by a Roman candle during a display of fireworks in the streets. He sued the City for damages arising from its failure to enforce its by-law. In the High Court, Chancellor Boyd said, at p. 251:

Having enacted such a by-law, there is no duty cast on the municipality to see to its enforcement,

and at p. 252 he added:

> The argument of the plaintiff was that a cause of action arose because the city had passed a by-law, and that the by-law was systematically disregarded to the knowledge of the officers of the city, and that no steps were ever taken to enforce it by the city.
>
> This is a novel proposition, which has its sole sanction in the decisions of the Maryland courts, but is opposed to all other American, English and Canadian authorities.

In another trial judgment in Bertrand v. Neilson and City of Vancouver, [1934] 3 W.W.R. 433, a case where the plaintiff sought damages against the City for injuries alleged to have been caused or contributed to by the non-enforcement of a traffic and parking by-law, passed under powers given in the Vancouver Incorporation Act, Robertson J. of the British Columbia Supreme Court considered a breach of a permissive by-law would not render a city liable to a third party injured by the breach. In so doing, he referred to Sheppard v. Glossop (Borough of), [1921] 3 K.B. 132; Stevens and Willson v. Chatham (City of), [1934] S.C.R. 353; and Sanitary Commissioners of Gibraltar v. Orfila (1890), 15 A.C. 400.

In Toronto (City of) v. Polai (1969), 8 D.L.R (3d) 689 (Ont. C.A.), the City brought proceedings for an injunction to restrain the use by the defendant of her house as a multiple family dwelling house in an area zoned against such use. For a number of years, the City had maintained a "deferred list" of known offenders of the zoning by-law against whom no prosecutions were to be brought during the current year. The list was subject to annual review. By this device, the City was exercising a discretion to prosecute some offenders and not others. The defendant, not being on the list, became the target of the City's action and resisted it on the ground that the action of the City was inequitable and discriminatory. The defendant succeeded at trial but an appeal was allowed (Schroeder, Jessup and Brooke JJ.A.) Three separate opinions were written. Schroeder J.A. said, at pp. 696-97:

> As members of the city corporation the inhabitants are entitled to look to the duly elected representatives who comprise the municipal council for enforcement of the provision of by-laws passed for their protection, and in enforcing those by-laws the corporation, whether by means of a prosecution or in a suit for injunctive relief, acts on behalf of all the inhabitants. The municipality, acting through its council and duly appointed officials, occupies in a more restricted sense the same position as does the Attorney-General who represents the Crown in its capacity as parens patriae charged with the responsibility of enforcing the rights of the public when they are violated. The decision whether or not the Attorney-General should prosecute or sue is a matter for him, and the Courts have no power to question his right to do so or to refrain from doing so as distinct from his right to relief.
>
> The Attorney-General is in a different position from the ordinary litigant, for he represents the public interest in the community at large; when he intervenes to ask for relief the Courts should pay great heed to his intervention and only refuse relief in the most exceptional circumstances: Atty-Gen'l v. Harris, [1961] 1 Q.B. 75.
>
> In my opinion the city, acting in a more restricted sphere in the enforcement of its own by-laws, is likewise in a different position from the ordinary litigant. The inhabitants and the municipality are sufficiently interested in the dispute to warrant intervention by the corporation for the purpose of asserting public rights, and the dispute is not one between individuals. Rather it is one between the public and a small section of the public refusing to comply with the by-law. In suits in which the Court's equitable jurisdiction is invoked and the clean hands doctrine is pleaded regard must be had to the nature of the relief sought and the character in which the plaintiff is suing. It would be a most extraordinary result if in a suit brought by an individual taxpayer, a course sanctioned by s. 486 of the Municipal Act, the relief were to be granted, but in a suit brought by the city, representing the general body

of ratepayers, the suit should fail. The result appears even more incongruous when it is considered that the mere passing of a by-law by a municipal corporation does not cast any legal duty on the municipality to see to its enforcement: Brown v. City of Hamilton (1902), 4 O.L.R. 249 (per Chancellor Boyd).

And later he said, at pp. 698-99, in reference to the deferred list:

> No doubt, to persons who are obliged to comply with the by-law this practice may present the appearance of political favouritism or it may smack of discrimination. It is one of the difficult problems of administration to decide what acts are harmless in themselves in particular circumstances or, in isolated instances, must be forbidden in the public interest, or what acts may be tolerated without doing injury to the public interest. Without embarking on a wide-ranging inquiry into all these other cases which are, in reality, res inter alios acta, the Court cannot determine whether the decision of the Committee was right or wrong, fair or unfair, in the particular circumstances. Be that as it may, that course is not open to us in these proceedings and the Court has neither the right nor the power to control the exercise of Council's discretion by either direct or indirect means, except, possibly, in a case where Council lays down a general policy not to enforce its restrictive zoning by-laws: Vide R. v. Commissioner of Police, Ex p. Blackburn, [1968] 2 W.L.R. 893.

Jessup J.A., while expressing a different view as to the findings of fact by the trial judge than that suggested by Schroeder J.A., supported the view that the Council's discretion in enforcing zoning by-laws was not, as a rule, reviewable by a court. He said, at p. 703:

> In his statement of law and fact, filed, counsel for the appellant concedes, "The 'deferred list' practice is admittedly open to abuse". However, it is to be emphasized that the learned trial Judge made no finding of corruption in the "deferred list" practice. There was absolutely no evidence of impropriety of that or like nature. In the absence of such evidence it is to be assumed that in placing properties on the "deferred list" the members of the Committee on Buildings and Development exercised bona fides the discretion they undoubtedly have in the enforcement of the city's zoning enactments: Brown v. City of Hamilton (1902), 4 O.L.R. 429.

Brooke J.A. reached his conclusion for different reasons, but recognized as well as the other judges the discretionary nature of municipal prosecution to enforce its by-laws. He said, at pp. 707-08:

> Municipal council has a discretion as to when it will prosecute for a breach of or sue to enforce the provisions of the zoning by-law. To deny the discretion in municipal council would be to place the most technical breach of the by-law beside the most blatant and to remove from consideration the harm done to the offender and the value to the community of the proposed proceedings when considering when they ought to be taken. The discretion when to prosecute or when to sue which rests with the municipal corporation or the comparable discretion which rests with public authorities charged with the responsibility of enforcing the rights of the public when they are violated, is one of the great strengths of our system of justice. It is true that the Court cannot interfere with that discretion and the remedy by way of injunction provided by s. 486 of the Municipal Act should not be used for this purpose. On the other hand, and equally important, the Court must see to it that its processes are never used to accomplish a wrong against any person and, of course, this is so irrespective of who applies for the remedy. There may well be circumstances where it would be in the public interest to refuse relief by way of injunction to a plaintiff whether a municipal corporation or otherwise in this type of action and some actions where wrongful discrimination could be shown would fall within the class of cases to which I refer.

An appeal of this decision to the Supreme Court of Canada was dismissed, [1973] S.C.R. 38, without any comment on the quoted passages.

Authority for this view may also be found in English cases, notably East Suffolk Rivers Catchment Board v. Kent, [1941] A.C. 74 (H.L.). It seems to me that in Canada and in England, at least up until 1941, a public authority which had a mere power to act, as distinct from a duty to do so, could not be made liable in damages only by reason of a failure to exercise that power. It has been suggested that the three well-known cases in England, Dutton v. Bognor Regis United Building Co.; Home Office v. Dorset Yacht Co. and Anns v. Merton London Borough Council, have had the effect of changing the law in that respect in England and that Canadian courts should follow the lead. Indeed, the Anns case has been followed in Canadian courts and its principles concerning the law of negligence at least viewed with approval in this Court in Barratt v. North Vancouver (Corporation of), [1980] 2 S.C.R. 418. My colleague, Wilson J., has dealt with the Anns case and it is not necessary for me to go into it at any great length. Lord Wilberforce, who wrote the principal judgment, suggests that the duty of care issue be approached in two steps. First, one should ask whether a relationship of proximity exists so as to give rise to a prima facie duty of care and then, if such a duty is found, it becomes necessary to consider whether there are considerations which ought to limit the scope of that duty. In respect of public authorities exercising statutory powers and duties, a distinction is drawn between policy and operational matters. There can be no liability in negligence, in respect of acts or omissions based on a bona fide policy consideration. In summary, it appears that the Anns case set aside the distinction between statutory powers and statutory duties as a source of a private law duty on a public authority. Anns placed the public authority on the same footing as the ordinary litigant with respect to liability for negligence, but recognizing the special nature of a public authority provided that it could be excused its want of care in respect of acts or omissions based on a bona fide policy choice which, but for the policy choice, would have led to liability. In my view, Anns, and the principles lays down, have no application in the case at bar.

Liability for negligence of a public authority, dealt with in Anns and the other cases considered with it, would arise out of the activities of the public authority in the conduct of its business. Public authorities, in addition to their administrative and regulatory functions, must perform many tasks. They enter into a wide variety of contracts covering business, commercial and industrial enterprises, and public works. They enter the market place and operate as do private corporations and private individuals. In these circumstances there would seem to be no reason why public authority should not be liable for its own acts of negligence and vicariously liable for the negligence of its servants in the performance of their duties of employment. The public authority, as has been noted in Anns, differs from the private citizen in that, while it must undertake much in accordance with its mandate, it has as a rule limited resources and frequently limited credit and relatively fixed revenues. The employment of those resources, frequently not sufficient to cover completely all responsibilities, will involve policy choices as to their application. The policy choice protective provision developed in Anns meets this problem. It will be observed, however, that in Anns and in the various other cases which preceded it (Dutton v. Bognor Regis United Building Co. and Home Office v. Dorset Yacht Co.) and in many later cases which have applied it, the policy choice required of the public authority was one which would protect it against negligence in carrying out the corporate functions and such negligence is ordinarily found in the conduct of its employees for which the authority may be vicariously liable.

No such negligence occurred in the case at bar. The building inspectors, as has been pointed out, fully and adequately carried out their duties and I am unable to agree with Lambert J.A. when he said:

> The conduct of the building inspector in response to the public law duties involved decisions on alternative courses of conduct which were, in my opinion, operational in character.

The building inspector in his response to the problems he discovered faced no alternative courses of action. His duty was to report, and he did so, and any alternative courses of conduct in response to public duties were for the Council, the City itself, and I am wholly unable to characterize them as operational in character.

The exercise of the discretion by the City regarding enforcement proceedings in court differs fundamentally from the 'policy choice' contemplated by Anns. In my opinion, it does not involve considerations of negligence because it is not properly subject to restriction by a private law duty of care. It involves, in my view, such considerations as those discussed by Laskin J. (as he then was) in Wellbridge Holdings Ltd. v. Greater Winnipeg (Metropolitan Corporation of), [1971] S.C.R. 957. In that case action was brought against the City of Winnipeg by an apartment company to recover damages suffered in acting in reliance on a city by-law declared ultra vires because of the procedural failure by the Council in its enactment. Laskin J. said, at pp. 965-66:

> The liability in negligence sought to be imposed upon the defendant is not a vicarious one, resting upon the fault of a servant or agent of the defendant, but rather an original, independent liability. As I took the argument, it was said to proceed from a duty of the defendant, in enacting a rezoning by-law enlarging the development possibilities of designated land, to exercise reasonable care to see that the procedures upon which valid enactment depended were followed; and this duty was owed specially to those persons having or obtaining an interest in the affected land which enabled them to exploit those possibilities. There was, in the circumstances, more than merely a duty at large to the residents of the municipality or to the smaller number residing in the affected area. If a duty such as is urged exists, I would not exclude the appellant from the class of those to whom it was owing, merely because the appellant did not come into existence until after the invalid by-law was passed and did not acquire an interest in the affected land until about sixteen months after its passage.

and later, at pp. 968-69:

> The defendant is a municipal corporation with a variety of functions, some legislative, some with also a quasi-judicial component (as the Wiswell case determined) and some administrative or ministerial, or perhaps better categorized as business powers. In exercising the latter, the defendant may undoubtedly (subject to statutory qualification) incur liabilities in contract and in tort, including liability in negligence. There may, therefore, be an individualization of responsibility for negligence in the exercise of business powers which does not exist when the defendant acts in a legislative capacity or performs a quasi-judicial duty.
>
> Its public character, involving its political and social; responsibility to all those who live and work within its territorial limits, distinguishes it, even as respects its exercise of any quasi-judicial function, from the position of a voluntary or statutory body such as a trade union or trade association which may have quasi-judicial and contractual obligations in dealing with its members: cf. Abbott v. Sullivan; Orchard v. Tunney. A municipality at what may be called the operating level is different in kind from the same municipality at the legislative or quasi-judicial level where it is exercising discretionary statutory authority. In exercising such authority, a municipality (no less than a provincial Legislature or the Parliament of Canada) may act beyond its powers in the ultimate view of a Court, albeit it acted on the advice of counsel. It would be incredible to say in such circumstances that it owed a duty of care giving rise to liability in damages for its breach. "Invalidity is not the test of fault and it should not be the test of liability": see Davis, 3 Administrative Law Treatise, 1958, at p. 487.

The facts in Wellbridge differ widely from the facts at bar, but the case emphasizes the different consequences that may flow from the exercise or non-exercise of quasi-judicial powers by a public authority. Laskin J. also pointed out the

difference between a public body vicariously liable in negligence for the conduct of its employees and a public body charged with "an original independent liability". This factor is of fundamental importance and goes far to distinguish the case at bar from the trilogy of cases culminating in Anns. Here we have a public body against whom it is said, you are negligent in that you failed to exercise what is essentially a quasi-judicial function, that is, you failed to enforce your by-law by proceeding in court. It is my view that a public body, vested with the discretion of by-law enforcement, may not be required by a court to exercise that power in a certain way and is not under a private law duty to do so. I draw support in reaching this conclusion from Wellbridge.

Finding that the City is not under a private law duty to enforce its building by-law by court proceedings or demolition does not mean that its discretion is completely unfettered. This becomes clear from a reference to Roncarelli v. Duplessis, [1959] S.C.R. 121, where Rand J., at p. 140, said:

> In public regulation of this sort there is no such thing as absolute and untrammelled "discretion", that is that action can be taken on any ground or for any reason that can be suggested to the mind of the administrator; no legislative Act can, without express language, be taken to contemplate an unlimited arbitrary power exercisable for any purpose, however capricious or irrelevant, regardless of the nature of purpose of the statute. Fraud and corruption in the Commission may not be mentioned in such statutes but they are always implied as exceptions. "Discretion" necessarily implies good faith in discharging public duty; there is always a perspective within which a statute is intended to operate; and any clear departure from its lines or objects is just as objectionable as fraud or corruption.

These words have the support of Martland J. in his reasons in the same Case, at p. 155-57, which was concurred in by Kerwin C.J. and Locke J. The plaintiff might have succeeded in this case on showing of corruption upon the part of the City officials and Council, or upon showing that the failure to prosecute resulted from consideration of extraneous or improper matters or from bad faith. But the scanty evidence in the perhaps inadequate record before this Court would allow no such conclusion to be drawn.

In the case at bar the record discloses little as to what, if any, steps were taken by the Council towards the enforcement of its by-law. It is clear that the defective foundations rendered the house unsafe. It is equally clear that the building inspectors, having found the defective work, reported the matter to the Council and took such steps as were open to them to correct matters including the refusal to lift the 'stop work' order or give an occupancy permit. It is also evident that the Council was aware of the infraction of the by-law and that the respondents Hughes were living in the house. There is no evidence of any positive step taken in the matter by the Council, save that at one time it consulted its City solicitor who shortly after returned the file with a covering letter which is not before us. From all this, the only conclusion that can be reached is that the Council took no further step toward enforcement and there is no evidence which would justify any inference of bad faith or impropriety.

I would conclude as follows:

1. This is not a case of underlying negligence by employees of a public authority which could visit liability upon the appellant City.

2. At common law, a municipality has no duty to enforce its by-laws by court proceedings. The matter is discretionary. Failure to exercise enforcement powers in court does not give rise to a private cause of action in negligence to those suffering harm from non-enforcement.

3. The concept of negligence as developed in Anns and its predecessors may apply to render a public authority liable for its own negligent acts or omissions or vicariously liable for the negligence of its employees, but municipal prosecutorial or enforcement powers by court proceedings, like municipal legislative functions, are different in kind and are not amenable to judicial constraint by the imposition of a private law duty of care.

4. The discretion regarding enforcement proceedings in court is not, however, unfettered and may be subject to judicial constraint in cases of corruption, bad faith, or in cases where extraneous or irrelevant considerations affect the exercise of the discretion. In the case at bar there was, however, no evidence of bad faith or reliance on irrelevant considerations arising from the mere failure to take legal proceedings, and no private cause of action can therefore arise.

For all of the above reasons I would allow the appeal, order the dismissal of the action against the City and attribute full liability to the respondents Hughes.

Appeal dismissed with costs, ESTEY and McINTYRE JJ. dissenting.

KIM V MISSISSAUGA (City)

Between
Ik-Soo Kim, applicant, and
The Corporation of the City of Mississauga and Argis Robezneiks, Chief Building Official, respondents

[1996] O.J. No. 2534
DRS 96-15867
Court File No. M13298/96

Ontario Court of Justice (General Division)
Milton, Ontario
Zelinski J.
July 3, 1996.

Counsel:
M. Virginia MacLean, Q.C. for the applicant.
Michal Minkowski for the respondents.

ZELINSKI J.:--

The Issues

[para1] The applicant seeks:

> ... an order declaring that the City of Mississauga Interim Control by-law 481-95 Interim Control By-law (the "ICB") does not prevent the construction or use of a car wash building on property owned by the applicant at 1455 Lakeshore Road East, Mississauga, (the "Property") because a building permit had been issued to the applicant prior to the passage of the ICB.
>
> In the alternative, the applicant seeks an order under s. 136 of the Municipal Act R.S.O. 1990, c. C.M.45, quashing the ICB for illegality by reason of bad faith and discrimination.

[para2] In addition to denying that there is merit in the application, the respondents take the position that it is out of time.

[para3] In simplest terms, the "bottom line" of this application is whether the ICB in question is enforceable against the applicant.

Statutes and By-laws

[para4] This application is brought pursuant to Rule 14.05(3)(d) which provides that a proceeding may be brought by application where the relief claimed is the determination of rights that depend upon the interpretation of a statute or municipal by-law.

[para5] Relevant statutory provisions are as follows:

> The Building Code Act S.O. 1992, c. 23 ("BCA").
>
> 1.(1) Definitions. In this Act, "building" means ...
>
> (c) plumbing not located in a structure, ...
>
> "plumbing" means a drainage system, a venting system and a water system or parts thereof;
>
> 3.(1) Enforcement. The council of each municipality is responsible for the enforcement of this Act in the municipality.
>
> (2) Chief Building Official, Inspectors. The council of each municipality shall appoint a chief building official and such inspectors as are necessary for the enforcement of this Act in the areas in which the municipality has

jurisdiction.

7. By-laws, Regulations. The council of a municipality ... may make regulations ...

> (a) prescribing classes of permits under this Act, including permits in respect of any stage of construction ...

8.(1) Building Permits. No person shall construct ... a building or cause a building to be constructed ... unless a permit has been issued therefor by the chief building official.

(2) Issue of Permits. The chief building official shall issue a permit under subsection (1) unless,

> a) the proposed building, [or] construction ... will contravene this Act or the building code of any other applicable law;

25.(1) Appeal. Any person who considers themself aggrieved by an order or decision made by an inspector or chief building official under this Act ... may, within 20 days after the order or decision is made, appeal the order or decision to a judge of the Ontario Court (General Division).

(2) Extension of Time. A judge to whom an appeal is made may, upon such conditions as the judge considers appropriate, extend the time for making the appeal before or after the time set out in subsection (1), if the judge is satisfied that there is reasonable grounds for the appeal and for applying for the extension.

(4) Powers of Judge. If an appeal is made under this section, the judge shall hold a hearing and may rescind or affirm the order or decision of the inspector or chief building official or take such action as the judge considers the inspector or chief building official ought to take in accordance with this Act and the regulations and, for such purpose, may substitute his or her opinion for that of the inspector or chief building official.

The Planning Act R.S.O. 1990, c. P.13, ("Planning Act")

34.(9) No by-law passed under this section applies,

> (b) to prevent the erection or use for a purpose prohibited by the by-law of any building or structure for which a permit has been issued under section 8 of the Building Code Act, prior to the day of the passing of the by-law, ...

38.(1) Where the council of a local municipality has, by by-law ... directed that a review or study be undertaken in respect of land use planning policies in the municipality ... the council of the municipality may pass a by-law, (hereinafter referred to as an Interim Control By-law) to be in effect for a period of time specified in the by-law, which period shall not exceed one year from the date of passing thereof ...

(4) Any person ... may, within 60 days from the date of the passing of the by-law, appeal to the Municipal Board ...

(8) Subsection 34 (9) applies with necessary modification to a by-law passed under subsection (1) ...

The Municipal Act R.S.O. 1990 c. M.45 ("Municipal Act")

136.(1) Proceedings to quash by-law. The Ontario Court (General Division) upon application of a resident of the municipality or of a person interested in a by-law of its council may quash the by-law in whole or in part for

illegality.

City of Mississauga By-law 428-93 The Building By-law issued under the BCA respecting permits and related matters) ("Building By-law")

2. Definitions

In this By-law;

(1)(g) "permit" means permission or authorization given in writing by the Chief Building Official to perform work regulated by the Act and Building Code, or to occupy a building or part thereof prior to its completion.

(h) "permit holder" means the person to whom the permit has been issued and who assumes the primary responsibility for complying with the Act and the Building Code.

3. Classes of Permits

Classes of permits for construction, demolition, change of use, or occupancy of a partially complete building are set forth in Schedule "A" appended to and forming part of this By-law.

SCHEDULE "A"

Permit Fees and Refunds

1. Fees

(1) Class of Permit

(a) Construct a building as defined by Section 1(b) of the Act, ... may be divided into the following classes of permits:

(i) Complete Building

(iv) Plumbing Component

(v) Drain Component

(b) For permits required in (a) when divided into part permits. [the permit fee is set out in Schedule "B" plus] $50.00 additional fee each for part permit ...

Agreed and/or Partially Admitted Facts

[para6] Facts relied upon by the applicant have been substantially admitted, or admitted with minor qualifications, as follows:

1. On October 2, 1995, the applicant, who had been looking to purchase real estate to be developed as a coin operated car wash, purchased the Property, a vacant parcel formerly used as an automobile service station and zoned AC (Automobile Commercial) which permitted the proposed development.

2. To develop the Property, the applicant required site plan approval and a building permit from the respondents.

3. A site plan application was submitted May 11, 1995 and revised on July 24, 1995; and, to make the proposed car wash building conform with setback and parking requirements of the zoning by-law, a variance application was made to the Committee of Adjustment on August 29, 1995.

4. A building permit application for a complete new building for a car wash was made on August 17, 1995 and, a building permit application for site servicing for the

construction of a private storm sewer, private sanitary sewer and water services on the Property (drain component class of permit) was made on September 27, 1995.

5. The September 28, 1995, Committee of Adjustment hearing on the variance application was adjourned to enable representatives of the nearby Peel Condominium Corporations 110, 170 and 415 (P.C.C. 110, 170 and 415) to meet with the applicant.

6. A Building Permit for drain component class of permit prescribed under the City's Building By-law, was issued to the applicant on October 12, 1995. Site servicing under the permit started October 15, 1995 and was completed October 17, 1995 at a construction cost of $55,175.00. [The respondents' admission is limited to the fact of the issuance of a permit for a drain component only.]

7. The applicant withdrew the variance application at the Committee of Adjustment meeting on October 20, 1995 because the site plan addressed the issues and to prevent delays to construction and, subsequently amended the site plan to comply with the zoning by-law. At the October 20, 1995 Committee of Adjustment meeting, representatives of P.C.C. 110, 170 and 415 requested the Committee to prohibit the car wash use on the Property which the Committee advised it could not do and suggested that the Condominium Corporations contact Councillor Corbasson, the Ward Councillor. [The respondents' admission is limited to the applicant's representative becoming informed of a proposed interim control by-law on November 15, 1995.]

8. On November 9, 1995, the said representative of the applicant Peter Chee, was advised by the respondent City's Planning and Building Department staff that the site plan was substantially acceptable and would be signed by a staff member authorized to do so, by by-law. Peter Chee re-attended on November 10, when he was advised that P.C.C. 110, 170 and 415 were opposed to the use and had contacted Councillor Corbasson and the site plan would be approved November 13, 1995. During the week of November 13, 1995, another representative of the applicant, Tony DiBella, was advised that the site plan would not be approved until the November 22, 1995 Council meeting and was advised by telephone that the application would be approved. On November 15, 1995, the applicant's representative Peter Chee, was advised that the respondent City intended to enact an interim control by-law to stop the applicant's car wash development and exempt some properties but not the applicant's. [The respondents' admission is limited to Chee's becoming informed of a proposed interim control by-law on November 15, 1995.]

9. The respondent City, at a meeting in Committee on November 13, 1995, of which the applicant had no notice, considered a planning report date October 30, 1995 that recommended that the Official Plan be amended to "allow car washes in Residential Districts subject to certain conditions", heard representatives of P.C.C. 110 and P.C.C. 170 opposed to the applicant's use, were advised that City staff supported the applicant's car wash use as appropriate, and requested City staff to report to the next Council meeting "with respect to an Interim Control By-law on all Automobile Service Stations with Car Washes in Residential Districts". [The respondents' admission is limited to the fact of a planning committee meeting being held on November 13, 1995 at which a staff report was received and a direction being given to staff, by the committee, to report to the next council meeting with

respect to an ICB.]

10. The respondents, at a meeting in Council on November 22, 1995, considered the requested staff report, passed a resolution that "a comprehensive planning study be undertaken to examine car washes within Residential Districts ... in terms of land use planning, zoning, locational attributes ..." and, passed an interim control by-law prohibiting for one year, car washes in all Residential Districts which had zoning to permit the use, while exempting four sites, two sites developed as gas bars [one of which was zoned AC-791], a vacant site in a Residential District not zoned to permit a car wash use, and a site for which a building permit for a car wash and gas bar was in process. Three of the four exempted sites were in response to a letter from Imperial Oil, and the latter was requested by the respondent City's staff.

11. The applicant appealed the ICB to the Ontario Municipal Board ("OMB") which has not scheduled a hearing.

12. The respondent City's Planning and Building Department prepared two Planning Reports in 1995 on the impact of car washes in Residential Districts. The first report was circulated for public input and reported to Council prior to the enactment of the ICB. The respondent City was made aware in the two Planning Reports that the Official Plan and the Zoning By-law were not consistent and, the February 13, 1995 Planning Report identified the impacts of car washes in residential zones. Neither report recommended the enactment of an ICB but recommended that the Official Plan be amended to permit the use which would not necessitate a zoning change. [The respondents' admission is limited to the fact of the consideration and circulation of planning reports prepared earlier in 1995 by the City's Planning and Building Department identifying inconsistencies in the City's hierarchy of official plan documents and between those documents the City's zoning by-law.]

13. The applicant paid $29,802.88 to the respondents for site plan approval and building permit issuance has posted securities and cash of $11,200.00 with the respondents to obtain the right to develop a car wash on the Property, and has paid $55,175.00 for site services which cannot be used for any use except a car wash. [The respondents' admission is limited to the fact of the payment of certain fees to the City.]

Additional Facts as Alleged by the applicant

[para7] The applicant also relies upon the following additional facts, which the respondents do not agree to:

1. On October 17, 1995 the applicant's representative met with representatives of P.C.C. 110, 170, and 415 and the respondent City's staff. The site plan was presented, it was explained that the car wash use was a lawful use and that the site plan incorporated the recommendations of noise expert and the city staff recommendations.

2. On November 21, 1995 the applicant's representative Tony DiBella, attempted to amend the building permit application to obtain a foundation to roof (superstructure) building permit, was advised not to amend the application by the respondents' staff because a building permit for the full building was close to issuance, and was advised that the applicant's file was marked "do not issue".

3. The applicant's representative requested an exemption

from the ICB for the Property on January 4, 1996 and was refused by the respondents' Council on February 14, 1995 because the only exemptions to be permitted would be for sites specifically zoned for a car wash and not sites zoned for automobile service stations and public garages.

4. As of February 27, 1996 the applicant had satisfied all Building Code requirements for the issuance of a building permit and on March 4, 1996 the respondents, Chief Building Official, refused to issue a building permit because of the ICB and because site plan approval had not been granted.

5. The sole purpose of the ICB is to prevent the applicant's development of a coin operated car wash on the Property.

Additional Facts Alleged By the Respondents

[para8] With respect to site plan approval issues, to the extent that approval is in issue, the respondents rely, in part, on applicant's delays in making the site plan applications. There were revisions presented and inconsistencies in approach. The respondents also cite changes in the applicant's representatives and similar as evidence of the applicant's responsibility for these delays. The respondents also rely upon the fact that the applicant was aware of the "risk of closing without site plan approval, having been informed of those risks".

[para9] The thrust of this approach by the respondents is that the applicant would have had the Building Permit for the entire building, had his application been pursued expeditiously and/or in a more sophisticated manner. This has
nothing to do with merit. Indeed, such an approach is consistent with entitlement in law altered only by the circumstances of the enactment of the ICB. The applicant's acceptance of the risk in such circumstances is, in my view, as consistent with recognition of the fact of his entitlement as it is with the applicant having assumed any risk, the consequences of which he must now bear.

[para10] With respect to the applicant's building permit application, the respondents also rely upon the following facts:

1. The applicant applied for a building permit on August 17, 1995 seeking the class of permit which would allow for "complete building" construction. The city's Building By-law specifically contemplates different classes of permits. Each class of permit is treated as an independent permit requiring a fresh application process.

2. While waiting for the "complete building" application to run its course, the applicant also applied on September 27, 1995 for a class of permit to allow for construction of the "drain component" only, the scope of work being defined as a "site servicing permit".

3. The applicant's agent who applied for the "site servicing permit", Peter Chee, admits he was told by City staff at the time of applying for this permit that its issuance was not a guarantee of the issuance of a building permit for construction of the car wash structure and that the issuance of the "site servicing permit" was at the applicant's own risk. Mr. Chee acknowledged that he also advised the applicant of this information.

4. The applicant further signed an acknowledgement in seeking the "site servicing permit" which expressly states:

That the granting of this permission in no way obliges the Chief Building Official to issue the building permit for the project.

5. When the respondents' CBO was asked on November 23, 1995 by the applicant's solicitor to render a decision on the building permit application, the CBO determined that they could not issue the building permit due to the enactment of the ICB and due to the long list of outstanding items still required to be completed by the applicant as a condition precedent to building permit approval. The applicant satisfied most (but not all) of the outstanding concerns only in late February of 1996, some three months after the ICB was enacted.

6. The applicant's agent admitted on cross-examination that the CBO was unable as of November 23, 1995 to issue a building permit, irrespective of the ICB, due to the list of outstanding matters still requiring compliance as a condition precedent to the issuance of a building permit.

7. The applicant is, to this date, not fully in compliance with the conditions precedent of the City to issuance of a building permit, not having secured clearance regarding a lot grading certificate and lot grading approval as well as site plan approval, the latter due to the applicant not having responded to requests for inter alia for an addendum to accompany a noise study and for the addendum to be certified by a professional engineer.

[para11] With respect to the ICB the respondents rely upon the following:

1. While zoning for the Property permits a car wash use, there was and is an inconsistency in the various primary and secondary official plan policies which govern development at this location. The [current] approved Official Plan does not permit car wash uses in highway commercial designations in residential districts, while the approved Secondary Official Plan (the Dixie Storefront Secondary Plan) does permit such uses, provided certain site development criteria can be satisfied. The City's new Official Plan, not as yet approved by the Minister, permits car washes, but the proposed new District Plan (the Lakeview District Plan) still awaiting Ministerial approval, does not permit such uses in the highway commercial policies for the District. [In oral submissions made, it was indicated that this ministerial approval has now been given.]

2. Council was and is also concerned with the absence of consistent development standards within the City's Zoning By-law for car wash uses within residential districts respecting matters such as issues of noise, ingress/egress, buffering and parking standards. These issues had not been studied in a comprehensive fashion in previous staff reports. The applicant's agent admitted on cross-examination that these matters constitute serious planning issues.

3. The only professional or expert planning evidence in this Application is that provided by the City through the affidavit of James Riddell. Mr. Riddell states that the ICB, under or in these circumstances, "is an approach in keeping with good planning principles."

4. The applicant through his agent Mr. Chee was aware approximately one week prior to November 22, 1995 that Council had requested City staff to prepare an ICB. The applicant, by admission of its agent on cross-examination, however, failed to take any substantive measures to track the progress of the ICB, or to take vigorous steps to represent the applicant's

interests, failed to seek a meeting with the Mayor or members of Council, and failed to appear before Council at a public meeting to make submissions.

5. In any event, the ICB does not target the applicant's property. It applies to numerous properties throughout the entire municipality of the City of Mississauga. The applicant's witnesses admitted on cross-examination that the ICB has City-wide application.

6. The applicant and several entities have filed appeals from the ICB to the OMB, including an entity represented by counsel for the applicant herein and an entity represented by Vince Serratore.

7. The enactment of the ICB was accompanied by a resolution requiring that a planning study be undertaken by staff to address Council's concerns, in accordance with the requirements of the Planning Act. This study with respect to car washes has now been completed and is to be presented to the Planning and Development Committee for direction.

8. While the applicant had the opportunity to submit an application for an exemption from the ICB, the applicant or his agents did not pursue this opportunity.

9. The applicant relies principally upon the affidavit of Vince Serratore to support the allegation that the ICB was targeted at 1459 Lakeshore Road East. Mr. Serratore swore his affidavit nearly four months after the November 13, 1995 Planning and Development Committee meeting.

10. Mr. Serratore admitted on cross-examination that:

a) he did not rely on any notes in preparing his affidavit;

b) the comments during the meeting of the Councillor for the Ward where the applicant's property is located were in the context of a concern over the inconsistency between the official plan policies and the zoning by-law applicable to the subject site;

c) the discussion among members of the Committee at the meeting mushroomed into a broader discussion on policy issues in general, without specific reference to any property, related to car wash uses in residential areas and closed automobile service station sites with respect to planning issues as identified above;

d) he conceded that it was simply his opinion that the ICB was targeted at 1459 Lakeshore Road East, but that he did not actually know if in fact is was so targeted; and

e) there is no reference anywhere in the Minutes from the Committee meeting of any Committee member specifically targeting or expressing an intent to target 1459 Lakeshore Road East to stop the construction of the car wash use at this site.

[para12] I find the respondent's concerns troubling. The position taken suggests that the applicant is not entitled to relief in these matters, in part, based upon his inattentiveness or lack of diligence.

[para13] It is the obligation of the municipality to assure that it uses its legislative powers in good faith in an objective, fair, impartial and unbiased manner.

[para14] The test is not whether the applicant was present, or represented, or even attentive, to assure that the municipality meets this standard. Even though the applicant

does not take steps to assure that the municipality behaves responsibly, he is entitled to rely upon the fact that the municipality will do so.

[para15] Indeed the municipality's approach is not supported by the case authorities which suggest that, while the initial onus is upon the applicant to establish that the ICB has a potentially adverse impact upon him, once this burden is met, the onus shifts to the respondents to justify the City's course of conduct (Gilbert v. Oakville, (1986) 31 M.P.L.R. 157 at 160). The latter onus is not lightly discharged. As stated by M. Rosenberg in Re City of Scarborough Interim By-law 22169-81 (1988) 22 O.M.B.R. 129 at 131:

> ICBs are extraordinary remedies given to cities and their application must be done with extreme caution. In this case, there was no rationale behind the passing (sic) this by-law other than to appease angry ratepayers and delay development of the site. There are no planning principles involved here that would justify the City of Scarborough's action.

Jurisdiction of the Court

[para16] The respondents have framed two challenges to the
Court's jurisdiction in these matters, as follows:

a) The application is not timely.

b) The OMB has complete jurisdiction to hear and determine the merits of appeals under the Planning Act as a consequence of the enactment of an ICB.

Timeliness

[para17] Section 25(1) of the BCA permits persons aggrieved by a decision made by a CBO to appeal the decision within 20 days after the decision is made.

[para18] On November 23rd, 1995, as a result of a telephone call from applicant's counsel, the CBO wrote to Ms. MacLean to advise of the enactment of the ICB the day previous. His "decision" in that letter was stated as follows:

> The by-law has the effect, as noted, of restricting the use of the property to those uses that existed on the date of passage of the by-law. As the property is not currently being used for the purpose of a car wash on November 22, 1995, the proposed use is not, at this time allowed. As a result, I am unable to issue the building permit applied for under the above noted application.
>
> Notwithstanding the ICB, I attach a copy of the current Application Status Report for the referenced application, detailing information outstanding and precedent to the issuance of a building permit or foundation to roof permit. (emphasis added)

[para19] The letter continued with an invitation to hold further discussions, including a discussion with Councillor Corbasson, to whom a copy of the letter was sent.

[para20] Notice of the passage of the ICB was published on December 13th, 1995, with the result that on December 20, 1995, the applicant appealed the passage of the ICB to the OMB.

[para21] Under the heading "Zoning Requirements" of the Application Status Report which accompanied the November 23, 1995 letter of the CBO, there were certain deficiencies listed as outstanding, including "Site Plan Approval, Payment of Development Charges, Lot Grading Certificate and Lot Grading Approval". Also outstanding under separate headings were a

number of Structural, Plumbing and HVAC requirements.

[para22] The applicant continued to resolve and remove the deficiencies referred to in that Application Status Report such that, on March 4, 1996, a further letter from the CBO was sent to applicant's counsel together with another Application Status Report. This latter letter, by the submissions of Ms. MacLean, constitutes the "decision" from which the 20 day appeal period referred to in s. 25(1) of the BCA begins to run. The March 4, 1996 letter stated:

> The above noted property is subject to an interim control by-law respecting the intended use of the property and Site Plan approval has not been granted for the proposed works.
>
> The Building Permit applied for under the noted code number can not be issued at this time.

[para23] In this letter the requirement of site plan approval was referred to. It had not been referred to in the earlier letter. Accompanying the March 4, 1996 letter was a more current Application Status Report which only noted, as outstanding deficiencies, certain zoning requirements. The previous requirement for "payment of development charges", was deleted. In the interim, payment had been made and accepted.

[para24] Counsel for the respondents, Mr. Minkowski, is of the view that time begins to run under s. 25(1) of the BCA when the decision was made, and reported, in the November 23,
1995 letter of the CBO to refuse the complete building permit.
In that letter, he advances, it is clear that the decision was final, "as a result" of the ICB. This situation did not change.

[para25] In the March 4, 1996 letter, the ICB was still the bar which resulted in the denial of the building permit although the requirement of the site plan approval was also noted. The effect of the ICB continues to the be bottom line at this time.

[para26] Mr. Minkowski contends that the passage of the ICB crystallized events. That was stated November 23, 1995. That same decision was simply restated on March 4, 1996. The restatement, based upon the same grounds, is not, by his submission, the commencement date of the 20 days within which to appeal notwithstanding that, in the interim, deficiencies had been resolved, and payments made.

[para27] This application was issued on March 14, 1996.

[para28] Counsel for the applicant disagrees. It is her position that, because of outstanding deficiencies which existed in November, the CBO could not have granted the building permit on November 23, 1995, even without the fact of the ICB. Those deficiencies, she states, have now all been resolved with the result that it is the March 4, 1996 letter which first addresses a decision which is based solely upon the enactment of the ICB.

[para29] Ms. MacLean distinguishes the still outstanding Zoning Requirements from other deficiencies on the basis that Site Plan, a Lot Grading Certificate and Lot Grading Approval are not proper requirements for the issue of a building permit. If they are, her position is lost because all requirements for the building permit are still not met, with the result that the court still cannot order the issue of the building permit.

[para30] It is not necessary to resolve the consequences of the presently outstanding Zoning Requirements as, in my view, the municipality's position is correct in that the decision not to issue the building permit was crystallized on

November 23, 1995.

[para31] Despite this, s. 25(2) BCA provides the discretion to extend the time for the appeal. Ms. MacLean has asked that I exercise this discretion if I do not adopt her primary argument.

[para32] Mr. Minkowski has argued that my discretion to extend time for making this appeal should only be exercised in exceptional and compelling circumstances, which are absent in the present application. I reject this.

[para33] I am required by s. 25(3) BCA to satisfy myself, that there are reasonable grounds both for the appeal and for applying for the extension. The reasonableness of the grounds for the appeal necessitates an assessment of the merit of the positions of the parties. That has necessitated a lengthy review of the facts on the basis that the motion to quash is not time limited, as well as hearing the arguments of the parties.

[para34] These reasons confirm that I have found that reasonable grounds exist for the appeal.

[para35] As to the reasonableness of the grounds for applying for the extension, I am of the opinion it would be unreasonable not to exercise my discretion.

[para36] As stated, the CBO was continuing to accept ongoing resolutions of deficiencies set out in his first Application Status Report and even accepted payment between the two letters in which he set out his reasons for denying the building permit.

[para37] There can be no prejudice to the respondents if time is extended, whereas the prejudice to the applicant, if relief is appropriate, is substantial. While not determining the issue at this stage, a plausible case has been made for political interference, inappropriate discriminatory treatment of the applicant and a lack of good faith by the municipality in its treatment of the applicant.

[para38] Similarly, while I recognize that I must assess the reasonableness of the grounds for the appeal separately from the grounds for applying for the extension, they are inextricably interwoven in this application in my view.

[para39] It would also be unreasonable that I determine that the grounds for appeal are reasonable and then go on to determine that the requisite extension is unreasonable, absent bad faith, misconduct or similar on the part of the applicant.

The OMB/Court Jurisdiction Issue

[para40] As I previously noted, it is the respondents' position that only the OMB has jurisdiction to determine questions of law on appeals under the Planning Act and from the enactment of an ICB. However, the appeal in question in this application is under s. 25(1) BCA, which specifically confers upon this Court the responsibility of determining appeals from orders or decisions of the CBO by persons who consider themselves aggrieved by those orders or decisions.

[para41] I am cognizant of the fact that the OMB is a specialized tribunal with particular knowledge and that the Court should exercise its discretion to intervene, when in competition with the OMB, sparingly and "only in the clearest of circumstances". Having regard to the fact that it is this Court which has the responsibility for appeals under s. 25 such considerations, have no relevance.

[para42] Pursuant to s. 25(4) BCA, I can:

(1) Rescind or affirm the decision of the CBO;

(2) Take such action as I consider the CBO ought to have

taken;

(3) Substitute my decision for that of the CBO.

[para43] I am aware that I also have the authority, in appropriate circumstances, to grant equitable relief, including mandamus. (Re Woodglen & Co. Ltd. and City of North
York (1984) 43 O.R. (2d) 289 at 300)

[para44] I repeat that the opinion of the CBO on November 23, 1995, confirmed on March 4, 1996, was that he was unable to issue the building permit in question because of the ICB, and other matters. His decision was unrelated to the validity of the ICB as it was necessarily based upon the presumption of the validity of that by-law. The CBO had no power to quash the ICB in question.

[para45] The issue, thus framed, is not whether the ICB is valid and enforceable but whether the CBO properly concluded that the ICB is enforceable against the applicant.

[para46] In my view, it is not so enforceable. This result is as a consequence of the interrelationship of the Planning Act in conjunction with the BCA and the Building

By-law of Mississauga.

Analysis

[para47] Under s. 8(1) of the BCA, no person shall construct a "building" without a "permit". A "building" by one definition, includes "plumbing not included in a structure". Plumbing is also defined. It includes a "drainage system".

[para48] Under s. 8(2) of the BCA, it is mandatory that the CBO issue a building permit unless the proposed building "will contravene this Act or the building code or other applicable law".

[para49] S. 7 of the BCA, permits municipalities to pass by-laws prescribing "classes" of permits including "permits in respect of any stage of construction". In its Building By-law, Mississauga has, in fact, prescribed classes of permits related to stages of construction. These are set out in Schedule "A", which provides for a "drain component" class of permit.

[para50] On October 12, 1995, a "drain component" class of building permit for "site servicing only" was issued to the applicant by the CBO.

[para51] The document which serves as the City's building permit is a composite document. It contains a heading "class of permit" under which are incorporated eight classes, including the "drain component" class. Boxes are available to be checked to distinguish the class of permit issued.

[para52] Also as noted, Mr. Chee, the applicant's agent in these matters, acknowledged that the issue of the "drain component" permit to the applicant did not guarantee that the applicant would be entitled to receive a different class of permit. The applicant was aware of this, and agreed. In the result, the municipality argues that the issue of the drain component permit was at the applicant's risk.

[para53] Under s. 8(2) BCA, the CBO is not entitled to withhold permits on such a basis. The permit in question is not, nor was it intended to be, a "conditional permit" pursuant to those provisions of the BCA which permit the issue of building permits in the discretion of the CBO when all of the requirements have not been met for its issue.

[para54] It is clear that the applicant was so anxious to

obtain the permit in question that he accepted it on the limited basis on which the CBO purported to issue it. Mr. Minkowski believes that, as such, his acceptance, without further guarantees, constitutes an agreement that is binding upon him, even if not statutorily authorized. He argues that it is imperative that CBO's have an inherent jurisdiction to place restrictions on permits which are issued. This necessity arises so as to enable a CBO to administer the BCA on a basis consistent with the needs of applicant, and the interests of the community.

[para55] It is not necessary that I resolve the appropriateness or the limits of that discretion if it exists. The applicant did not, in pursuit of the permit that was issued, waive any further entitlement consequent upon the fact of its issue. At the most he agreed that there was no guarantee, assuming the risk that he might not get the remaining permits for a complete building. He did not waive rights, statutory or otherwise, by this recognition of the lack of guarantee. His entitlement will therefore be determined in law, not on the basis of some notional contract that he was accepting the permit without further rights.

[para56] It is clear that the municipality considers a "class of permit" to be something less than a "building permit", on the basis that a "building permit" is the permit for a complete building. In the result, in Schedule "A" of its Building By-law, the basis of the fee it charges depends upon whether the permit is a "part permit".

[para57] S. 7 of the BCA does not authorize "part" permits. It authorizes "classes" of permits. It is axiomatic that a "part" of something is less than the whole of that thing, whereas a "class" of something is a category of that thing. "Classes" are distinguished by their differences, not by their completeness.

[para58] Funk and Wagnell's Standard Desk Dictionary includes, in the definition of "part", the following:

> N. (1) A portion of a whole; segment.

[para59] Included in its definition of "class" is the following:

> N. ... (3) A category of objects, persons, etc. based on quality or rank: of the first class
>
> (4) A number of things grouped together as having common properties; a category.

[para60] It is the submission of Mr. Minkowski that the legislative authority to identify different stages of construction contemplates that each class of permit will be treated as independent from other applications, each stage requiring its own application.

[para61] The issue of a class of permit will not, by this approach, be part of a continuum which binds the issuance of other classes of permit. It is irrelevant that the permit is in respect of something greater in the contemplation of the applicant (in this instance, a complete car wash building).

[para62] It is the position of the applicant that a class of permit having been issued in relation to part of the construction of the car wash, substantive rights become vested. Determinations based upon zoning have been favourably resolved and cannot thereafter be limited or encroached upon. It is only necessary for the applicant to meet the specific requirements which apply to each additional class of permit in order that the additional class of permit will issue.

[para63] Applicant's argument is that all necessary permits for the completion of the car wash must follow, provided that the applicant conforms to the "applicable law"

which, in terms of zoning, existed when the first permit was issued. An ICB cannot extinguish those vested rights. It is not only the fact that the drainage was properly designed, or similar, that was determined when the
drain component class of
permit was issued. The drainage component permit was related to a distinguishable building, a car wash. When issued there were no barriers to that facility, hence the vesting of the right to build that facility in its entirety.

[para64] S. 38 of the Planning Act authorizes the enactment of ICB's. S. 38(8) specifically provides that s. 34(9) of the Planning Act applies "with necessary modifications" to ICB's.

[para65] Section 34(9) provides that "no" such ICB "applies to prevent the erection ... of any building ... for which a permit has been issued" under s. 8 of the BCA, prior to the passage of the by-law "... so long as the building ... when erected is used for the purpose for which it was erected". (emphasis added)

[para66] Summarizing, the applicant's position is that a permit has been issued, albeit a permit for a limited purpose. Resolved in the issue of that permit is the entitlement of the applicant to operate a car wash on the site. Contrary to the position of the respondents (which is that only the Drain Component of the construction cannot be halted by the ICB), the ICB cannot prevent the erection of the building in respect of which the drain component is a part.

[para67] The real question then, is whether the car wash which was the greater building that was contemplated by the class of permit issued, can be prohibited by the ICB as a consequence of the fact of the issue of only a class of permit.

Statutory Interpretation

[para68] In 1121472 Ontario Inc. v. Corporation of the City of Toronto, (1995) 29 M.P.L.R. (2d) 221 at 228, Kiteley, J. conducted an "Analysis" of present practices applicable to the "plain and ordinary meaning" of words used in by-laws. Citing Wilson v. Jones, [1968] S.C.R. 554 (S.C.C.), she notes that the Supreme Court determined "any doubt as to the application of the by-law to prevent the erection of a specific building should be resolved in favour of such proposed use" whereas, without reference to that decision, in Bruce v. Toronto (1971) 19 D.L.R. (3d) 386 (O.C.A.) a liberal interpretation of a restrictive by-law was favoured with the result that, in matters related to the use of lands, "the rights of the community are paramount to the rights of the owner".

[para69] In Milton v. Smith, 32 M.P.L.R. 107 at 117, Clarke, J. states:

> I accept as a general principle that in the construction of a by-law words must be given their ordinary natural grammatical meaning unless there is an indication in the context to show that the particular words are being used in a special sense.

[para70] I adopt that statement as being equally applicable to the interpretation of statutes with the result that it has application both to the Building By-law of the respondent City and to the Planning Act.

[para71] Concluding, in the BCA and under the Building By-law, by definition, a building can be something considerably less than a complete building. Thus, by definition, "building" is "used in a special sense". Similarly "permit" can have different meanings.

[para72] Those special definitions or meanings are not set out, referred to, subsumed in or otherwise incorporated into

the Planning Act.

[para73] It is therefore possible to give the language of s. 34(9)(b) of the Planning Act an ordinary, natural grammatical meaning without reference to those special definitions contained in the BCA and Building By-law.

[para74] Indeed, it would offend ordinary grammar and natural meaning to import the special meaning of those words into the Planning Act.

[para75] A "building" which consists of "plumbing not located in a structure" (s. 1(1)(c) BCA) demonstrates the fact of that definition as "being used in a special sense".

[para76] Pursuant to s. 34(9) of the Planning Act, "no by-law", (which includes an ICB by virtue of s. 38(8)) can prevent the erection of "any building" for which "a permit has been issued under s. 8 of the Building Code Act", prior to the passage of the ICB.

[para77] The plain meaning and only reasonable conclusion
is that the building which cannot be prevented by the ICB is the car wash, not some lesser "building" as used in a special sense in another statute or by-law.

[para78] Concluding:

a) a permit was issued; albeit one of a class of permits;

b) it was issued under s. 8 of the BCA;

c) it was issued prior to the passage of the ICB.

[para79] In the result, the CBO was in error in refusing to issue the further building permit to complete the car wash which the applicant seeks to built at 1459 Lakeshore Road East, Mississauga, Ontario. That was the only building, using the ordinary natural grammatical meaning of a building, in respect of which "a" permit was issued. The declaration will therefore go that the ICB cannot be used to prevent the erection of that car wash building.

[para80] S. 8(2) BCA mandates that permits shall be issued provided that they do not contravene applicable law. By these reasons, the ICB does not constitute applicable law which prohibits such issue. Without determining the validity of the ICB, the applicant's lands are, by these reasons, exempt from the ICB.

[para81] Subject to payment of appropriate fees and the resolution of any outstanding Zoning Requirements or other deficiencies set out in the applicant's Application Status Report, I order the issue of those building permits, which, but for the ICB, the applicant requires for the construction and use of the car wash.

Section 136 of The Municipal Act

[para82] In view of the foregoing reasons, the question whether the ICB should be quashed by me, for illegality by reason of bad faith, becomes moot.

[para83] There is an appeal of the ICB to the OMB outstanding. That body has broad jurisdiction and is best able to deal with the validity of the ICB if the applicant wishes to proceed to resolve that issue.

[para84] I may be spoken to as to costs.

ZELINSKI J.

Hanson-Needler Corp. v. Kingsbridge Development Inc.

Between
The Hanson-Needler Corporation, Applicant, and
Kingsbridge Development Inc., Respondent

[1990] O.J. No. 2151
DRS 97-16376
Action No. RE 2818/89

Ontario Supreme Court - High Court of Justice
Toronto, Ontario
Saunders J.
Heard: January 3, 1990
Judgment: January 5, 1990

R. Barlow and D. McDuff, for the Applicant.
S. Block and L. Pan, for the Respondent.

SAUNDERS J. (endorsement):-- The applicant is the purchaser of lands from the respondent. The lands front on the south side of Eglinton Avenue. Following the conveyance to the applicant, the respondent retained the lands immediately to the east on which there is constructed a retail and commercial building.

The applicant is in the course of constructing a residential property on its lands which would include an underground garage. In order to excavate for the garage, the applicant obtained a subterranean easement from the respondent along part of the boundary between the two properties. It was believed by the parties that the easement was in the corridor where the electrical cable serving the respondent's property was located. Subsequently, but before closing, the possibility was raised that the cable might be partially located on the lands being sold. The applicant then took the position that if such were the case, the cable should relocated. The respondents undertook to do so. It turned out that part of the cable was, indeed, on the applicant's lands. This seems to have occurred because of a surveyor's error. Part of the cable was also in the respondent's lands that were subject to the easement. The respondent relocated the part of the cable on the applicant's lands on its own lands. Part of the relocated cable was placed in the lands subject to the easements.

The applicant takes the position that the relocation should have been carried out in such a way as to have no part of the cable on the easement lands. It asks for an order that the respondent carry out a further relocation at its own expense.

There are three documents that are relevant to the rights of the parties:

(1) Purchase agreement between the parties dated August, 1988 whereby the applicant as purchaser agreed to acquire the subject lands from the respondent as vendor. Paragraph 8(e) of that agreement provides in part:

> The Vendor agrees to permit the purchaser to encroach upon the vendor's subterranean title to the lands shown on Schedule "C" for the purpose of the Purchaser constructing an underground garage structure, which right includes the right of support easements, including easements for the purposes of the maintenance and repair, the total cost of which shall be borne by the Purchaser including any maintenance expense burden which shall be solely at the expense of the Purchaser.

(2) Easement agreement dated June 21, 1989. This document was exchanged and registered on closing, and under it the respondent transferred to the applicant an exclusive underground easement beneath certain lands of the respondent for the purpose of constructing and maintaining an underground garage. The agreement contained the following provision:

> The Transferee, during its construction, shall maintain and preserve and incorporate the Transferor's electrical cable and service in the Transferee's underground garage, or relocate same at the Transferee's expense, in the event that such electrical service is encountered in the said Parts 15 and 16 on Plan 43R - during the Transferee's construction.

(3) Undertaking dated June 21, 1989. The respondent gave an undertaking at closing with respect to the possibility that part of the cable might be on the lands to be sold to the applicant. It was given along with other unrelated undertakings at that time. The undertaking provided as follows:

> In the event it is determined that an underground hydro service for the benefit of Parcel 16-1, Section 43 Tor.
>
> Twp. 2 N.D.S. is located on Parcel 16-12 then, to the extent that it conflicts with construction by the Purchaser on Parcel 16-12, being located in parcel 16-12 being the two acre the Vendor shall relocate such underground hydro at its sole expense.

The obligation of the respondent under the undertaking was to relocate the cable to the extent that it conflicted with construction by the applicant on its lands. It is submitted that "construction" should extend to work on the easement lands as such work is part of the construction on the applicant's lands. I have difficulty with that submission. First, it requires a broad and generous interpretation of the language in favour of the applicant and second, it is inconsistent with the understanding of the parties. The words "conflicts with construction by the purchaser on parcel 16-12" were drafted by the applicant. The parties knew that part of the cable was on the easement lands when they entered the purchase agreement. Such was the case and that circumstance was dealt with by the easement agreement. The fact that part of it also turned out not to run through the entire south part of the easement lands was as the result of a surveying mistake. The undertaking was intended to deal with that possibility.

The respondent relocated the cable where it was supposed to be thereby restoring the situation to what the parties believed it to be when they entered the purchase agreement. The respondent says that relocating the cable further to the east would have interfered with the other services on the property and with the development plans for the respondent's lands. In my opinion, the respondent fulfilled the terms of the undertaking by moving the cable off the applicant's lands and that the terms of the undertaking did not preclude relocation on the easement lands.

The applicant now has several options in carrying out its construction. As has been said, the parties knew from the outset that part of the cable should be on the easement lands. In the easement agreement, they contemplated that the cable nevertheless might not be encountered during construction. If it was encountered, the applicant had the option of either maintaining, preserving and incorporating it in the garage, or relocating at the applicant's expense. The agreement does not specify where the relocation is to occur. Presumably, it could occur on the easement lands, the remaining lands of the respondent or the lands of the applicant.

What the applicant wants to do is relocate the cable to the east on the respondent's lands. The short answer is that it has no right to do so. I was directed to no agreement which provides such a right. The evidence is that such a relocation would be disruptive to the use and enjoyment by the respondent of its property and would interfere with its services and development plans. In my opinion, the easement agreement cannot be interpreted as giving an implied right to relocate on the respondent's property. If that had been intended a broader easement provision should have been drafted.

The applicant also wants to put construction hoarding to the east of the boundary line between the property and also east of the east limit of the easement lands. One effect of doing this is to reduce by one half the entrance way to the respondent's property from Eglinton Avenue. The applicant says it needs the hoarding for safety but the evidence is that hoarding along the edge of the excavation can be made safe. Again, the applicant cannot point to any agreement express or implied that would confer such a right and it would not be appropriate for the court on an application to provide him with such.

SAUNDERS J.

Kirby v. Coquitlam (City)

Between
Robert Michael Kirby and Karen Mary Kirby, plaintiffs, and
The City of Coquitlam, defendant

[1996] B.C.J. No. 600
DRS 96-08727
New Westminster Registry No. S0-8793

British Columbia Supreme Court
New Westminster, British Columbia
Sigurdson J.
Heard: November 8, 9, 10 & 16, 1995.
Judgment: filed March 21, 1996.

Counsel:
R. Keith Oliver, for the plaintiffs.
B. De Vita & E. Vanderburgh, for the defendant.

SIGURDSON J.:--

INTRODUCTION

[para1] The plaintiffs, Mr. and Mrs. Kirby, own a house which was constructed in 1966 and purchased by them in 1968. In early 1992 they noticed their home was sinking and cracks in the basement. This happened because the foundation was built on organic fill. The plaintiffs claim damages against the municipality for negligently inspecting the forms for the foundation, negligently issuing a building permit, and failing to ensure the foundations were placed on solid bearing ground. The defendant municipality denies that it had, or ought to have had, knowledge of possible unstable soil beneath the foundations and denies any liability.

FACTS

[para2] In 1992, the Kirbys noticed a large crack across their basement floor. From the lane at the back of their property, they could see a shift in the slope of the roof and a change in the line of the vertical and horizontal siding. To their dismay, their house was settling badly and the foundation had cracked. They retained a contractor who repaired the perimeter foundation by installing five piers, a steel reinforced beam, and a new floor slab. The repairs totalled $36,316.25 including Mr. Kirby's time. The parties agree on that amount for damages if the municipality is found liable.

[para3] The cause of the problem was explained in the expert report of Albert H. Losch, a professional engineer. A 1' layer of till-fill had been placed over a variable organic fill layer consisting of boulders, stumps, logs, topsoil, roots, etc., 10 to 12 feet deep which had been placed over the native dense sand till. The thickest amount of the variable organic fill was along the southern edge of the house and thinned out towards the northern portion of the house, which faced Lemax Avenue. The foundation cracked when the southern half of the house settled approximately six inches lower than the northern half.

[para4] The logs, boulders and stumps that made up the fill material was obviously unsuitable as foundation bearing material. This variable fill material, according to Mr. Losch, should have been removed to expose native dense sand fill prior to construction or, alternatively, after removal of the variable fill, the lot could have been raised with compacted granular structural fill.

[para5] The Kirby's home is located at 1960 Lemax Avenue in Coquitlam. The legal description is Lot 96, North half of Block 7, D.L. 358, Group 1, Plan 1729. Lot 96 was created by a subdivision plan of January 21, 1966. Immediately west of Lot 96, on Lemax Avenue, is Lot 2 where, in 1962, Ethel Dickie and her husband James Dickie lived. In 1962, there was no house on the subject property which later became Lot 96; it was undeveloped land.

[para6] According to Mr. Dickie, in 1962 the subject property was a gully with a creek that came halfway on and then ran off. Mrs. Dickie said this property sloped from front to back, dropping off in elevation over its length by 18

to 20 feet. She said that there was also a steep drop-off from their eastern property line to the subject property. Mrs. Dickie remembered that a creek ran through part of the subject property and came to within about 6 feet of the bank at the end of the lane along the back of their property.

[para7] One day Mrs. Dickie saw trucks arrive at the subject property and dump big boulders, old lumber, stumps, dirt, gravel, garbage and miscellaneous material. Mr. Dickie said that the owner of the properties to the east moved this fill around with a backhoe. Both Mr. and Mrs. Dickie agreed that, once the subject property was filled, it was covered with a layer of dirt and there was no evidence of the logs or the stumps; the organic fill, according to Mr. Dickie, was very well concealed.

[para8] After Lot 96 had been created by subdivision in January 1966, Van Dee Developments, in February 1966, applied for and received a building permit to construct a single family dwelling. The proposed house, about 44'6" wide by 44'8" in depth, was to be located on a lot approximately 115' x 64'. The Corporation of the District of Coquitlam, now the City of Coquitlam, issued the building permit. During the course of construction various inspections were carried out by the municipality. The records of the municipality indicate the forms for the foundation were inspected on February 1, 1966.

PLAINTIFFS' CLAIM

[para9] The homeowners contend that the defendant municipality is liable because:

a. The building inspector ought to have been aware at the time of his inspection of the presence of organic or variable fill on the property, and ought not to have approved the forms for the foundation.

b. The municipality was negligent in issuing a building permit when it knew that Lot 96 was located over the previous location of a creek and ought to have required a soil investigation before approving the forms.

c. The municipality was negligent in failing to comply with its own building by-law which required that the foundation be on solid bearing ground.

(a) Negligence of the Building Inspector:

[para10] The scope of the duty of a municipal building inspector was discussed in Rothfield v. Manolakos, [1990] 1 W.W.R. 408 (S.C.C.) at p. 415.

> The city adopted the relevant building by-law "for the health, safety and protection of persons and property" pursuant to s. 734 of the Municipal Act, R.S.B.C., c. 290, as amended. By application of the test formulated by Lord Wilberforce in Anns v. Merton London Borough Council, [1978] A.C. 728,...the city, once it made the policy decision to inspect building plans and construction, owed a duty of care to all who it is reasonable to conclude might be injured by the negligent exercise of those powers. This duty is, of course, subject to such limitations as may arise from statutes bearing on the powers of the building inspector.

[para11] In Petrie v. Groome (1991), 45 C.L.R. 132 at 144 (B.C.S.C.), Collver J. commented on the nature of the municipality's obligation to inspect and said:

> In Rothfield, Mr. Justice La Forest, in emphasizing that third parties are entitled to rely on the municipality to properly inspect construction to see that it conforms to the standards set out in the municipality's building by-laws, rejected the notion that the municipality becomes an insurer in respect of compliance. His Lordship stated, at pp. 1268-1269 [of S.C.R., pp. 224-225 of M.P.L.R.]:
>
> > It must be borne in mind that a municipality, once it has made the policy decision to inspect construction, is not bound to discover every latent defect in a given project, nor every derogation from

> applicable standards. That would be to hold the municipality to an impossible standard. Rather a municipality is only called upon to show reasonable care in the exercise of its powers of inspection.
>
> Accordingly, a municipality, whether the duty of care is owed to an owner builder or a third party, will only incur liability for such defects as it could reasonably be expected to have detected and to have ordered remedied. This is implicit in the decision of this Court in City of Kamloops v. Nielsen.

[para12] The defendant does not dispute that it owed the plaintiffs a duty of care to exercise its powers of inspection carefully. The central issue is whether, in the circumstances, a reasonably careful building inspector would have detected the presence of fill, or been put on his inquiry to make further investigations before approving the forms.

[para13] The plaintiffs' argument goes beyond negligent inspection. The plaintiffs assert that the building inspector, by the terms of the building bylaw, ought not to have approved the forms without ensuring that the ground was solid bearing. They also say that, because of general knowledge in the municipal offices that the lot was built over a creek, efforts ought to have been made to check the soil before the building permit was issued or, at least, before the forms were approved. I will deal with those claims later.

[para14] In 1966, the building inspection department consisted of Neil Wayneman, the chief building and plumbing inspector, and Melvin Robinson, the assistant building inspector who had started in 1961. Mr. Robinson did the inspection of the footings on February 1, 1966, but at trial he had no actual recollection of that inspection; that is not surprising as he did ten to fifteen a day. He described the general nature of the soil in the area of Lot 96 as sandy, good-bearing soil. He testified that if there was a known soil problem it would be indicated on the building permit, by the engineering department, that an engineer's design was required; in this case no such notation appeared.

[para15] There was no evidence of the usual practice of a reasonably prudent building inspector in 1966. Mr. Robinson described his standard practice this way. Prior to approving the forms for concrete, he walked and measured the side yards and found the surveyors posts on each corner to determine if the front and side yard setbacks were in compliance. He checked the height of the walls. He checked the thickness of the walls for compliance with the building code. He ascertained the grade when the house was finished, and determined if the house was high enough for proper drainage and that the forms were protected from water. He said he checked the soil for its bearing capacity as he walked around. The extent of his examination was only to see if there were roots, grass or anything like that visible. If there were, he would contact the contractor and have test holes dug to ascertain the true soil condition.

[para16] When Mr. Robinson was inspecting construction on a hilly site, or a deep excavation for a full basement (he said the house on Lot 96 had a small excavation), and he was suspicious about the soil, he would use a probe to check soil bearing capacity; he would not normally use a probe on a relatively level lot. Mr. Robinson described Lot 96 as relatively flat with a slight slope to the east. He said the existence of a creek on an adjacent lot would not raise his suspicions about the quality of the soil on the lot he was inspecting.

[para17] The municipality argued that the claim should be dismissed because there is no expert evidence that a reasonably prudent building inspector would have conducted himself differently than Mr. Robinson did in the circumstances. The municipality says the only evidence of a reasonable standard is that followed by Mr. Robinson. Although there is often expert evidence as to what a reasonably prudent building inspector would have done, or would have known of possible soil conditions of fill on a site, I do not think such evidence is always necessary. In appropriate cases such as this, I can use my own judgment and determine on the evidence whether a reasonably prudent building inspector ought to have been aware of the possible

presence of organic fill under the foundation.

[para18] Mr. Oliver, the plaintiffs' counsel, argues that the defendant's building inspector ought to have been alerted to the possibility of fill on the site and put on his inquiry to make further investigations of the soil conditions because:

(a) The depth of the excavation for the house itself should have alerted the building inspector to the presence of organic fill;

(b) A reasonable building inspector viewing the site from the street or the lane would have known of the likelihood of organic fill on the property.

[para19] The plaintiffs' argument really comes down to the contention that a reasonable building inspector on site, from the street and from the lane, and from the depth of the excavation for the house, ought to have seen conditions that put him on notice that there may be fill on the site and obligated him to make further inquiries before approving the forms. Mr. Oliver contends that this is found in the evidence of the defendant's building inspector.

[para20] Mr. Oliver points to the evidence of the inspector that the excavation to a depth of 5'8", the depth of the basement at the front of the house, means that, under expected soil conditions, you are certain to hit hardpan. Mr. Oliver suggests that an excavation of such a depth would indicate, over the length of the building site, when the hardpan disappeared; it would have indicated that the back half of the foundation was not on solid bearing ground. There appears to be some merit to this argument if a 5'8" excavation was required for the front of the basement. However, the house may, as the inspector believed, have only had a very small excavation at the front so that backfilling was done in order to raise the grade. Mr. Robinson did not know whether there was backfilling or not, and said the house had to be dug up to determine that now. There was no other evidence on that point at trial. I am unable to conclude, from the evidence, the depth of the excavation at the front. Therefore, on the evidence it is not apparent that the inspector would know the back of the foundation was on organic fill, or that the back of the house was not on hard pan.

[para21] The plaintiffs' counsel's other argument on the first issue is that the evidence of Mr. Robinson at trial demonstrates that it is as obvious now as it was in 1966 that there was fill on the property, and the building inspector ought to have made further inquiries to see if there was organic fill underneath the foundation.

[para22] Mr. Robinson said on cross-examination:

Q. Mr. Robinson, I take it that your present day observations of the lot would indicate to you that there is some fill on the lot -- just from siting down the property line and observing the difference between that one and the one immediately to the east?

A. The difference between the vacant lot and this one?

Q. Yes.

A. Yes.

Q. And if you had made those observations in 1966 you would have concluded that there was fill there?

MR. DeVITA:

My Lord, the question is deceiving, we are talking about two different types of Fill. And perhaps my friend might clarify the question. I am not sure where he is --

MR. OLIVER:

Well, my friend is trying to introduce a red herring, and I wished not to do so --

Q. Mr. Robinson, --

THE COURT:

I think the witness can answer the question. Ask the question again.

Q. The question was, if you made the same observation by siting down the property line in 1966, you would come to the same conclusion, wouldn't you?

A. Yes.

Q. And the conclusion is based only on topographical difference in the two lots. Not on any examination of material, correct?

A. Yes.

....

Q Okay. Now, I hate to belabour the point, but, in 1966 we know from the evidence of the neighbours, that we are dealing with a lot that had been filled.

We know as well, from the evidence of the neighbours that not only had it been filled, it had been smoothed out and there was no organic material shown. No roots, no stumps, no 2 x 4's sticking out of the dirt. All we've got is a nice, apparently flat sloping lot. Now that would be consistent with what you observed last week, correct? A nice flat sloping lot.

A I couldn't say it was like that with that difference in time. It's been all landscaped, so I don't know how the grades have been changed.

Q I'm not asking you to know how the grades have been changed. I'm just asking you to agree now it's a flat sloping lot. By flat I mean it doesn't go up and down, here there and everywhere, it's just in one plain or thereabouts. But it has a slope. It has a grade differential front to back and a slight grade differential in from side to side. And that's what we are dealing with, correct?

A Yes.

....

Q Mr. Robinson, you traversed the entire property?

A Yes.

Q You went right out to the corner. You went out to each corner, in fact? You did?

A Yes.

Q Okay. So you had to see that there was fill?

A Not necessarily. What I was determining was the location of the forms on the lot and if the bearing was suitable where they were built. And if there were slopes away from that, that didn't bother the foundation, I would make a judgment as to whether it was okay to pour or not.

....

[para23] On re-examination Mr. Robinson said:

Q. Mr. Robinson, you state that when you viewed the property last week, and when you viewed it, I believe from the east side of the property, there was something about the property that caused you to think that the lot had been filled. What was that, that caused you to believe the lot had been filled when you viewed the property last week?

A When I sited down the east property line I could see the natural grade of the lot next to it. And the lot in question had, I estimated, about oh, three foot rise, which was pretty well at right angles and

I assumed it was a retaining wall, up to the grade around the house.

Q. Was this three foot drop at right angles?

A. Yes.

Q. Is that what caused you to believe that the lot in question had been filled?

A. Yes. During landscaping probably.

Q. Why would you think it was during landscaping?

A. Because it wouldn't have been able to be maintained as a straight drop off.

Q. So that fill then, that you are referring to is, when you talk about the fill, the fill that is fill for the purpose of landscaping?

A. Yes.

....

[para24] The following rebuttal evidence was introduced by agreement. Douglas Oliver bought Lot 96 from Van Dee Developments. He did some landscaping but brought in no fill and did not erect a fence. Mr. Oliver did not know if landscaping or other fill was put in prior to his purchase by the previous owner or by the contractor. He sold Lot 96 to Mr. Kirby in 1968. It was also agreed that the lawn was in when Mr. Kirby purchased in 1968; Mr. Kirby put up some fences and did some incidental landscaping but brought in no fill. There is no retaining wall along the easterly boundary of Lot 96.

[para25] In addition to this evidence Mr. Oliver, counsel for the plaintiffs, argues that a view from the lane, if it was at the same height as Lot 96 at the back, would indicate that the lot was filled with organic fill. If Mr. Robinson, in 1966, had gone to the rear of the property, he would have seen that there was no hardpan but simply fill on the site. Mr. Oliver says that this can be deduced from the evidence as a matter of common sense.

[para26] Notwithstanding the fact that the site was relatively flat and any organic fill was well concealed, does the evidence of Mr. Robinson, set out above, and the agreed rebuttal evidence, indicate that a reasonable inspector should have been alerted, in 1966, to the possibility that the site was filled. Ought further inquiries to have been made before the forms for the foundations were approved?

[para27] The plaintiffs' argument, as I understand it, is that the building inspector, viewing in 1995 what he thought was landscaping fill and a retaining wall, ought to have realized at least that there was fill at the perimeter of the property and therefore that there might be fill on the lot. That, Mr. Oliver says, ought to have put him on his inquiry. To approve the forms, without doing tests, was negligent.

[para28] However, the building inspector, when he looked at the lot shortly before trial, mistakenly believed that there was landscaping fill supported by a retaining wall. The defendant says that such an incorrect observation shortly before trial cannot be substituted for quite a different observation in 1966 that might have alerted him to the possibility there was fill under the foundation. Mr. Robinson, for example, was not asked whether, if he saw landscaping fill and a retaining wall in 1966, he would have believed there might possibly be fill on the property.

[para29] I am unable to conclude from the observation of the building inspector, in 1996, that he should have been alerted to the possibility of fill being on site when he inspected the forms. In 1966, the presence of organic fill was very well disguised. The possibility of fill on site is not a logical, or necessary, inference from the mistaken observation of the inspector in 1996 that there was landscaping fill and a retaining wall to the east of the property.

[para30] I have reached the same conclusion with regard to Mr. Oliver's argument that a building inspector ought to have

known from standing at the lane that there was the possibility of fill on the property. I find Mr. Oliver's submissions on this point entirely speculative. They do not convince me, on a balance of probabilities, as a matter of common sense, or on the evidence, that a reasonable person, in the position of the building inspector in 1966, would have been alerted to the possibility that there was fill on the site at the location of the proposed building.

(b) Was the municipality aware that Lot 96 was over the earlier location of a creek and ought it to have made inquires either before approving a subdivision plan or issuing a building permit?

[para31] The underlying premise to this argument is that, prior to what became Lot 96 being filled, there was a creek that flowed through the subject property and this fact was known to the municipality. The Dickies' evidence was that there was a creek that came on to the subject property before it was filled. The plaintiffs argue that the records of the municipality confirm that it had knowledge of a creek on Lot 96 before it was filled. The plaintiffs argue that the defendant was negligent in issuing a building permit without at least noting on the permit that the soil conditions had to be investigated before actual construction on the property could be approved.

[para32] This argument rests entirely on the records of the municipality. The plaintiffs argue that the documents indicate the creek was relocated off the Kirbys' lot. The plaintiffs rely on a series of subdivision application documents filed with the municipality between May 1965 and January 21, 1966, when the plan for Lot 96 was ultimately deposited in the land registry office in New Westminster shortly before the building permit was issued.

[para33] A subdivision application dated May 14, 1965, requested subdivision in these terms: "of the most westerly lot. East property line to be the center line of the creek". A later letter dated June 25, 1965, from the engineering supervisor of the municipality to the owner, indicated preliminary subdivision approval in accordance with sketch B-1791A. That sketch was of a proposed five lot subdivision with a lot the size of the Kirby lot being the most westerly lot in the subdivision. Those documents, the plaintiffs suggest, indicate the municipality knew the creek either had to be relocated or that it was right at the boundary of what would become Lot 96.

[para34] Through 1965 there were other subdivision applications and a number of reports from the public works superintendent regarding work required for subdivision approval. Ultimately, however, in January 1966, final approval was not granted for a multiple lot subdivision because sewer connection was not available. Accordingly, only a one lot subdivision, Lot 96, was approved.

[para35] From my review of all of these documents it appears that at the outset the proposal was for a one lot subdivision with the creek as its easterly boundary. That evolved into an application for a five lot subdivision which ultimately, because sewer was not available, reverted to a one lot subdivision. The initial one lot subdivision with the creek as its border appears to have contemplated a lot that was perhaps 95.5 feet wide, whereas Lot 96 was ultimately only 64.5 feet wide.

[para36] These documents as a whole do not establish that the municipality was aware the creek was relocated from the subject property to create Lot 96. The contour maps and other maps filed in evidence also do not support the plaintiffs' contention. In fact, the only document in the file that indicates the location of the creek appears to indicate that the creek has been in the same position in 1965 as it was after Lot 96 was filled.

[para37] Accordingly, the plaintiffs have not demonstrated that the municipality was aware the lot was built over a creek and so ought to have required soil tests before a permit was issued.

(c) Obligation to find solid bearing ground.

[para38] The plaintiffs argue that the defendant breached

its obligation, apart from any question of negligence, by not following its building by-law and ensuring that "all foundations shall rest upon solid ground or piling". The plaintiffs argue that this is an absolute obligation on the part of the municipality. I think that argument misconceives the obligation of the municipality when it undertakes the regulation of home construction by inspection. To accede to the argument of the plaintiffs that there would be liability on the defendant in the absence of negligence would make the defendant an insurer, which is, in my view, contrary to the authorities. In the absence of negligence the municipality ought not to be liable.

RESULT

[para39] Accordingly, the plaintiffs' claim is dismissed. The defendant has liberty to speak to the question of costs if they are sought.

SIGURDSON J.

Leeds & Grenville County Board of Education v. Gerrard

Between
The Leeds & Grenville County Board of Education, Applicant,
and
Philip Gerrard and the Corporation of the Township of Oxford-on-Rideau, Respondents

Ontario Judgments: [1991] O.J. No. 1826
Action No. 1178/91

Ontario Court of Justice - General Division
Brockville, Ontario
Cosgrove J.
October 8, 1991

Application under The Building Code Act, R.S.O. 1980, c. 51, s. 15.

Paul A. Webber, for the Applicant.

William R. Hunter, for the Respondents.

COSGROVE J.:--

BACKGROUND:

By Notice of Application herein dated September 26, 1991, the following relief was sought:

(a) a hearing and appeal from a refusal by the Respondent Gerrard, the Chief Building Official of the Respondent Oxford-on-Rideau, to issue a complete and final building permit, including the proposed Heating, Ventilating and Air Conditioning system (HVAC) for the South Branch Elementary School being constructed by the applicant in the said Township;

(b) an order that the said refusal be rescinded and that such permit issue.

The application required two full days of hearing. In addition to the Records of both parties, each containing over one hundred and fifty pages of material, the court heard the viva voce evidence of two witnesses for each party before argument was made. This procedure was consented to by the parties to permit cross-examination without the delay of preparation of transcripts.

At the end of argument on October 4th, I gave my decision on the application in summary form and indicated I would prepare fuller written reasons.

FACTS:

The applicant, through its consulting engineer, applied for a building permit to construct a school (South Branch Elementary) in Kemptville in Oxford-on-Rideau Township.

Part of the heating, ventilating and air conditioning system (HVAC) for the school is proposed to be provided by a closed-loop geothermal heat pump system.

The closed-loop geothermal heat pump system is designed to remove natural heat from the earth and uses it to provide space and water heating in the school. The process is designed to reverse, so as to provide air conditioning in the summer. The system is comprised of two major components. The heat pumps, which are located inside the school, and a circuit of under ground piping adjacent to the building. In total, 104 Wells, 200 feet deep, were proposed within a few meters of the perimeter of the school, feeding various pumps in the school. The external underground piping is sealed, through which a heat transfer fluid passes to and returns from the various heat pumps. 80 gallons of a solution of Methanol was initially proposed for each of the 104 wells (a total, of 8,320 gallon's). This was reduced to 40 gallons per well or a total of 4,160 gallons of Methanol during the hearing of the application. The applicant also established that the number or depth of the wells (104 x 200 ft.) could vary, depending on ground conditions, but a total of 20,800 lineal feet of piping would be required. In the viva voce evidence of the

applicant's witnesses, the court was told that the toxic closed-loop solution of methyl-hydrate might be replaced by a solution of Potassium Carbonate, Potassium Chloride or Potassium Acetate.

The court learned that there are approximately 22,000 installations of heat pumps in Canada using methyl-hydrate anti-freeze, presumably in compliance with CAN/CSA C445-M89 Design and Installation of Ground and Water Source Heat Pump Standard. A revised standard M89 providing for the substitution for methyl-hydrate is being prepared.

The respondent expressed a number of concerns respecting the design of the heat pump system and the Ministry of the Environment was engaged as a consultant to the respondent Corporation.

As a result of some of the concerns expressed by the respondents, a number of changes to the heat pump design were proposed by the applicant, including a potential substitute for the methyl-hydrate and the general design for the construction of the 104 wells encasing the plastic pipe containing the exchange fluid.

In addition, two test bore-holes were drilled by a firm of consulting engineers and geologists retained by the contractor for the applicant. This work was unacceptable to answer the concerns of the respondents and the officials of the Ministry of the Environment with the result that an additional report by a hydro-geologist was commissioned by the applicant. This hydro-geological report had not been completed at the time of the hearing and was not introduced in evidence. (The respondents argued that such a report was necessary to evaluate the risk of contamination of drinking water in wells located adjacent to the school.)

While discussions continued between the parties respecting the proposed heat pump system (HVAC), the respondents issued a building permit for the foundation of the school (May 21, 1991) and a building permit for construction of the school's superstructure (July 12, 1991).

The parties attempted to resolve the respondents' concerns respecting the heat pump system by means of a collateral agreement. This attempted resolution failed and the present application was launched on an urgent basis.

ISSUES:

Counsel for the parties raised a number of legal and factual issues as follows:

1) Building Code Act R.S.O. 1980, c. 51, s. 1(b) ...

   Is the proposed heat pump system, including the under-ground piping included within the definition of "building" in the Building Code Act?

2) Building Code Act, R.S.O. 1980, c. 51, s. 6(a)

   Is the Environmental Protection Act, R.S.O. 1980, c. 141 "other applicable law" within the meaning of s. 6(a) of the Building Code Act, R.S.O. 1980, c. 51?

3) Environmental Protection Act, R.S.O. 1980, c. 141, s. 8(1) ...

   Is the applicant required to obtain a Certificate of Approval for the construction of the heat pump system, including the under-ground piping, pursuant to s. 8(1) of the Environmental Protection Act?

4) Does a Chief Building Official in the review process of an application for a building permit have a duty to take care not to injure persons (by the issuance of the permit) whose relationship with the respondents is

   sufficiently close that the respondents ought reasonably to have had such persons in their contemplation when reviewing the permit application?

5) Have the respondents acted reasonably in their refusal to issue the building permit for the heat pump system to the

applicant?

FINDINGS:

I intend to respond to the issues in order:

1) Building Code Act, R.S.O. 1980, c. 51, s. 1(b) ...

I am satisfied that the heat pump system herein is contained in the definition of "building" in the Code. S. 1(b) defines "building" as a structure ... "including all the works, fixtures and service systems appurtenant thereto, and includes such other structures as are designated in the regulations ..."

Witnesses for both parties agreed that the regulations in the Code do not presently include specifics for heat pump systems. It was agreed that such regulations would be valuable and are in the process of preparation. (If they were in the regulations, this dispute might have been avoided.)

In my view, the heat pump system, nonetheless, is included in the phrase "service systems appurtenant thereto" (whether or not there exist regulations respecting these). The language of the regulations clearly refers to heating systems as "service systems". The dictionary meaning of "appurtenant" (Oxford Universal Dictionary, 3rd Ed.) defines "appurtenant" as "that thing that belongs to another or an appendage". "Appendage" is defined as "that which" is attached to". It is patent from the evidence that the piping to the 104 wells is attached to the heat pumps within the building and are an important part of the system. These wells are all located a few feet from the perimeter of the walls of the school. In my view, it does not matter if the transfer pipes are on top of, within, under or beside the building; they are clearly "appurtenant" and, therefore, part of the building and, therefore, subject to a building permit.

2) Building Code Act, R.S.O. 1980, c. 51, s. 6(a) -- "other applicable law"

It is clear to the court that the Environmental Protection Act, R.S.O. 1980, c. 141, is "other applicable law" based on the rationale for inclusion of other similar legislation in the reported cases. It is not reasonable to disassociate the subject and purpose of the Environmental Protection Act from their logical and real nexus to the subject and purpose of the Building Code Act.

3) Environmental Protection Act, R.S.O. 1980, c. 141, s. 8(1)a ...

8(1) No person shall, except under and in accordance with a certificate of approval issued by the Director,

(a) construct, alter, extend or replace any plant, structure, equipment, apparatus, mechanism or thing that may discharge or from which may be discharged a contaminant into any part of the natural environment, other than water; or

It is patent from the applicant's material (Report, July 31, 1991, by Anrep Associates Ltd., Consulting Engineers) that the methyl-hydrate solution is highly toxic to humans, aquatic life and the environment generally. A leak or discharge from the system (whether by a fault in the system or by natural forces -- earthquake) could result in contamination of surface ground or rock through which the wells are sunk (potentially to a depth of 200 ft.). This discharge might eventually, by aquifers, reach wells, contaminating both the water content and surrounding rock formation. The "Ottawa Irrigation Ltd." analysis of the anti-freeze solution in the July 31, 1991, Anrep Report contains the following (p. 6) ...

ENVIRONMENT PROTECTION DATA

Steps to be Taken in the Event of a Spill or Leak:

Stop and contain discharge by constructing barriers (dykes, lagoons) or applying inert sorbent (e.g. sand, earth) for release to land or by damming and water diversion, if possible, for release to water. Collect product and contaminated soil and water for recovery or

disposal.

When the applicant itself contemplates remedial action for an accidental discharge of the contaminant, how can it (the applicant) or the Ministry argue that the clear description of s. 8(1)(a) ... "a contaminant into any part of the natural environment other than water ..." does not apply? In effect, the Ministry by its actions (and to its credit) in acting as a consultant to the respondent, recognized its essential role in this type of situation but without refusing a certificate. In my view, the heat pump system installation requires a certification by the Director and none has been issued.. Moreover, the witness employed by the Ministry echoed all the concerns which were relied upon by the respondent.

4) Does a Chief Building Official in reviewing an application for a building permit have a duty of care to others who may be affected by the issue (issuance) of the building permit?

I agree with counsel for the respondent that the role of a Chief Building Official performing his duties pursuant to s. 6(1) of the Building Code Act or pursuant to By-law 11-86 of the Corporation of the Township of Oxford-on-Rideau requires that the Chief Building Official act responsibly -- that is, professionally and reasonably. The Official is not a mere automaton, but is required to perform his duties in a reasonable and rational manner. I am persuaded that in performing the review function in response to building permit applications, the official has a duty of care to persons whose relationship was sufficiently close that they ought to have been reasonably within contemplation as like to be injured by a breach of that duty. (City of Kamloops v. Nielsen and Hughes, 1984, 2 S.C.R., 2)

In the present case, I believe the respondent, Philip Gerrard, Chief Building Official, has reasonably identified that future students of the school and residents of Kemptville are individuals who reasonably ought to be within his contemplation in the review process. My reasons dealing with issue number (5) should be considered in connection with this issue.

5) Have the respondents acted reasonably in their refusal to issue the building permit for the heat pump system to the applicant?

I believe the respondents' refusal to issue the requested permit is justified.

In his letter of September 3, 1991, addressed to Mr. P. Webber, Mr. Gerrard detailed his misgivings with the applicant's application for a permit. Mr. Gerrard's concerns were bolstered by the opinion of Myron Zurawsky, Hydrogeologist, Groundwater Unit with the Ministry of the Environment in his Review dated August 8, 1991. A Summary of Technical Concerns, October 1, 1991, prepared by Mr. Gerrard, was introduced as Exhibit Number Ten on the application herein.

Both Mr. Gerrard and Mr. Zurawsky in their viva voce evidence expanded upon the particulars set out in the above documents. Mr. Gerrard, for example, in examination-in-chief, was able to detail the contradictions in the applicant's material with the referenced Design Standards (ASHRE design manual, CSA C445 M89 and CEEA Installers Manual) set out in Paragraph 2 at Page 2 of his letter of September 3, 1991.

In my view, the validity of the concerns expressed by both these witnesses for the respondent were not diminished at all in cross-examination.

The concerns expressed by Mr. Gerrard and Mr. Zurawsky have to be seen in the context of the proximity of the under-ground wells in Kemptville to the school building. Exhibit No. 4 best details the location of the proposed 104 wells for the heat pumps adjacent to the building itself. This exhibit, in turn, is properly set in a context in Exhibit No. 7 which details the location of the school and three drinking wells located adjacent to the school: no scale is provided on the exhibit but it appears the well on the church property to the east of the school is approximately 30 meters from one of the wells in the heat pump system containing methyl-hydrate. The next drinking well adjacent to the

hospital is approximately 180 meters from the heat pump well and the large well in the Town of Kemptville which provides drinking water to the school is roughly 500 meters from the heat pump well installations proposed.

The Summary of Technical Concerns (Exhibit No. 9) raises questions respecting the construction and up-keep of the bore-holes, their location and depth and potential hydro-geological impact. After the hearing of the Application herein, I found the issues raised in the Summary (Exhibit No. 9) respecting the contractor's intentions concerning grouting were more confused than prior to the Application.

All of these concerns, in turn, must be considered in light of the aquifers identified in the Paterson & Associates Report to Anrep Associates Limited dated June 20, 1991. The applicant, through its counsel, agreed that a further hydrogeological report had been requested by the respondent and was being prepared. The applicant argued that this further report was unnecessary.

The potential for a spill of the toxic methyl-hydrate solution was referenced in the applicant's own evidence. I have already made reference to the Ottawa Irrigation Ltd. component of the Report prepared by Anrep Associates Ltd., July 31, 1991, under the heading ENVIRONMENT PROTECTION DATA
respecting steps to be taken in the event of a Spill or Leak. The Report under this heading provides further ...

> "Environmental Effects: Harmful to aquatic life at low concentration. No quantitative data are available. Deactivating Chemicals: None known. Waste Disposal Methods: Dispense of waste materials in an approved incinerator or waste treatment/disposal facility in
>
> accordance with applicable regulations. Do not dispose of wastes in local sewer or with normal refuse."

The evidence of the two witnesses on behalf of the applicant, rather than reducing the concerns raised by the respondents, served the opposite purpose to bolster the court's lack of confidence in the proposal for the heat pump wells.

Mr. Frank Anrep, the first witness, an engineer with an impressive curriculum vitae is the President of the consulting firm, Anrep Associates Ltd., Consulting Engineers. Unfortunately, by his own admission he was not the author of the main report prepared respecting the geothermal heat pump system of July 31, 1991, but had been consulted "to a degree" in its preparation. He stated his main role with the Anrep Corporation was as its Chief Administrative Officer and, as well, to provide general company policy. Mr. Anrep by his own admission was not familiar with the specifics of the C.S.A. C445 M89 standard; yet in examination-in-in-chief in answer to the applicant's counsel, he offered the view that the contradiction pointed out by Mr. Gerrard in the second paragraph at Page 2 of his letter of September 3, 1991 to Mr.

Webber was invalid.

The second witness for the applicant, Mr. Peter Scott-Smith is not licenced to practice engineering in Canada. He testified that he was the founding member of the Canadian Earth Energy Association and is its Executive Director. This association, he stated, provides management services to governments and to the industry dealing with earth-related energy technologies. The court was impressed with his wide knowledge of the history and world-wide practices of geothermal heat pump installations. On the other hand, when pressed respecting his knowledge of the details that would call for a concrete substitute or mix with bentonite in the bore-hole construction, he admitted he was not qualified to go into specific details.

In cross-examination, although he was of the opinion that toxic methyl-hydrate was, for him, a preferable solution in the heat pumps to newly recommended potassium salts, when pressed, if he would recommend the use of methyl-hydrate, he as quick to point out that the Association could not officially recommend any particular fluid.

In answer to the court, he testified that notwithstanding

the C.S.A. C445 M89 standard (and a revision numbered M91 soon
to be released) that no governmental approval (federal or provincial) exists for the use of methyl-hydrate or its proposed substitutes. The court was left with the distinct conclusion that a person who suffered harm from its improper use would have a difficult time in determining accountability and responsibility for the use of these fluids -- such a task would be equivalent to trying to catch wind in a burlap bag.

CONCLUSION:

For oral reasons given at the conclusion of argument and as a result of this decision, the Application is DISMISSED, with costs to the respondents.

COSGROVE J.

Littler v. Mission (District)

Between
Robert Littler, Kathy Littler and Val Kyrie Holdings Ltd. carrying on business under the name and style of Artisan Custom Log Construction, Plaintiffs, and
The Corporation of The District of Mission, Defendant

New Westminster Registry No. C861165

[1991] B.C.J. No. 2600

British Columbia Supreme Court
New Westminster, British Columbia
MacKinnon J.
Heard: October 10 - 12, 15 - 17, 1989, April 25 and 26 1991
Judgment: August 12, 1991

Counsel for the Plaintiffs: J.W. Conroy and A.D.P. MacAdams.

Counsel for the Defendant: V.R. Orchard and B.J. Freedman.

MacKINNON J.:-- This claim for damages arises out of an allegation the Corporation of the District of Mission (the Municipality) was negligent when, in 1981, it issued a business licence to the Plaintiffs permitting them to carry on the business of constructing custom log homes in a location, that unbeknown to the Plaintiffs, was contrary to the zoning by-law of the Municipality. The business licence was renewed each year until 1986, when the Municipality terminated it and thereafter refused to issue a business licence to the Plaintiffs.

The Municipality say they owed no duty to the Plaintiffs. If there was a duty, the Plaintiffs have not proven damages. Further, the Municipality submits the Plaintiffs were negligent in failing to ascertain the zoning restrictions.

BACKGROUND

In early 1977 Robert Littler and Kathy Littler moved their residence from Quesnel to Abbotsford, B.C. Robert Littler secured employment with the Fraser Valley College as an instructor in log building. At the time he was 22 years of age and had a Grade 12 education. He had previously built his own log home in Quesnel.

Fraser Valley College and the District of Mission Tree Farm came into an arrangement whereby a log building was constructed on the Municipal tree farm property by college students under Robert Littler's instruction and using tree farm logs.

The Littlers decided to go into the business of log house construction. It was their first business venture. They obtained a business licence in the name of "Custom Log Buildings" of 350 -2821 Tims Crescent, Clearbrook, B.C. (their residence at the time), to carry on the business of "log house building" on lands they had leased at the corner of Lougheed Highway and McMillan Road in the District of Mission.

The first business licence they obtained expired on December 31, 1977. About that time the Littlers received a notice that the licence fee was required for 1978 and to advise of any change in the nature of the business or the address from which the business was carried on.

The business licence notice form on file with the Municipality showed a change of address to 2921 McCallum Road in Abbotsford. The business licence provided that the business is licenced to carry on the business of "51 Contractor Building" located at the corner of the Lougheed Highway and McMillan.

In 1979 the business licence was renewed. Though the Littlers changed their address to 2921 McCallum Road, they continued to operate the business at their original site, Lougheed and McMillan in Mission.

The business licence issued for 1979 described the business as:

"DISTRICT OF MISSION
8645 STAVE LAKE . BOX 20, MISSION, B.C. V2V 4L9

826-6271
B U S I N E S S L I C E N C E

CUSTOM LOG BUILDINGS NO. CU842
2921 MCCALLUM RD.
ABBOTSFORD, B.C.
V2S 3R4

In 1980 the Business Licence was renewed and sent to the Plaintiffs at their new address (of which they gave notice). The licence was issued in the following form:

"DISTRICT OF MISSION
8645 STAVE LAKE . BOX 2O, MISSION, B.C. V2V 4L9
826-6271
B U S I N E S S L I C E N C E

NO. CU842
CUSTOM LOG BUILDINGS
2921 MCCALLUM RD
ABBOTSFORD B.C.
V2S 3R4
(my underlining)

For some reason unknown to the Littlers and unnoticed by them, the Municipality inserted on the face of the 1980 business licence, the words "As above Non-resident".

Such words could imply the Littlers were no longer at Lougheed and McMillan in Mission, but rather at McCallum Road in Abbotsford. That was not so. During 1980, the Littlers continued their custom log construction business from the original site of Lougheed and McMillan in Mission. They had merely moved their residence to McCallum Road in Abbotsford.

Because the owner required the lands used by the Littlers at Lougheed and McMillan, they found it necessary in 1980 to purchase other property. This was located at 10588 Shaw Road in the District of Mission. The Littlers obtained from the Municipality a building permit to erect a log house on the Shaw Road property. They continued their business, however, at the Lougheed and McMillan site.

When the Littlers received the business licence notice for 1981, Mrs. Littler deleted their former address, 2921 McCallum Road, Abbotsford, and inserted "10588 Shaw Road, Mission".

Copies of the business licence reflected the change of address and the remaining parts were as in the previous notices including "located at, as above, non resident". For some reason these words were not found in subsequent notices. Rather the space for location was left blank.

Once the 1981 business licence was issued, the Littlers commenced operation of the business at the Shaw Road site. licences were renewed each year from 1981 until 1986.

The Municipality received a complaint that the Littlers were operating a business contrary to its zoning by-law. As a consequence the Municipality refused to issue a business licence to the Defendants in 1986 and continued the refusal thereafter.

The Littlers appealed unsuccessfully and were unable to rezone the property or obtain permits to carry on with their business.

LIABILITY

There is no issue as to whether or not the business operated by the Littlers at the Shaw Road site was in breach of the zoning by-law of the Municipality. Indeed, there was a breach.

The claim arises from the act of the Municipality in issuing and renewing a business licence authorizing the Littlers to carry on a business contrary to the zoning by-law of the Municipality.

S. 20 of the Municipal By-Laws 18-1970 and 1116-1981, provides:

"20. Before any licence is granted in respect of any premises the Licence Inspector shall satisfy himself that the use for which the licence is sought shall not be in violation of the zoning by-law or of any by-law of the Municipality then in force in the Municipality, and no licence shall be issued if the carrying on of that business in the premises applied for would be contrary to any by-law of the Municipality."

The Littlers submit that the Municipality, in passing the business licence by-law, imposed an operational duty on the Licence Inspector to satisfy himself that the use for which the licence is sought, shall not be in breach of the zoning or any by-law of the Municipality.

Once there is imposed on the Licence Inspector the duty of satisfying himself there is no violation of the Municipal by-laws, he must act not to injure persons such as the Littlers. If the Licensing Inspector is negligent then liability arises.

The Licensing Inspector issued and renewed business licences over succeeding years and ostensibly permitted a business to be carried on in violation of the zoning by-law and it is submitted the Municipality should be held liable.

The Municipality argues there is no duty of care owed to the Littlers. It submits the methods and procedures used by the Municipality to enforce licensing and zoning requirements are policy matters. As such, there is no liability. If, however, there is a duty owed by the Municipality, it is argued, there was, in the circumstances no lack of care by the Municipality.

The Municipality submits that the Littlers had the responsibility of ensuring their business was to be carried on in compliance with the by-laws including the zoning by-law of the Municipality.

The Municipality relies upon s. 14(2) of By-Law 18-1970 which provides as follows:

"No person to whom a licence has been granted under the provisions of this by-law shall change the location of the premises in which he carries on the business without first having applied to the Licence Inspector in writing to have the licence altered in respect to the location of the premises set out therein and any person carrying on business at a premise other than the premise specified in the licence shall be guilty of an infraction of this bylaw. "

The Municipality says the Licence Inspector had no notice of the change in location of the business and consequently had no duty to determine whether or not there was compliance with the zoning or other by-laws on the Municipality.

It is argued that although the Littlers gave the Municipality a change in the address of the business, they did not give notice of the change in the location of the business.

The Municipality submits that it implemented a policy decision that the Licensing Department address compliance with the by-laws with respect of the initial application of a business licence or where there is a change in ownership or location of the business. Because of the large number of renewal application each year, the Municipality adopted a policy that it would not investigate renewals. This policy was adopted for fiscal considerations.

THE LAW

Kamloops v. Nielsen, Hughes and Hughes (1984) 5 W.W.R. 1 (S.C.C.) is the leading authority enunciating the principals that govern the issues raised in these proceedings.

DUTY OF CARE

In Nielsen (supra), Madam Justice Wilson considered Anns v. Merton London Borough Council [1978] A.C. 728, where Lord Wilberforce stated that the question of whether or not a private Law of duty of care exists, stated two questions that

must be asked:

"(1) Is there a sufficiently close relationship between the parties (the local authority and the person who has suffered the damage) so that in the reasonable contemplation of the authority, carelessness on its part might cause damage to that person? If so,

2) Are there any considerations which ought to negative or limit (a) the scope of the duty, and (b) the class of persons to whom it is owed, or (c) the damages to which a breach of it may give rise?

These questions, Lord Wilberforce said, must be answered by an examination of the governing legislation.

Lord Wilberforce categorized the various types of legislation as follows:

1) Statutes conferring powers to interfere with the rights of individuals in which case an action in respect of damage caused by the exercise of such powers will generally not lie except in the case where the local authority has done

what the legislature authorized but done it negligently;

2) Statutes conferring powers but leaving the scale on which they are to be exercised to the discretion of the local authority. Here there will be an option to the local authority whether or not to do the thing authorized but, if it elects to do it and does it negligently, then the policy decision having been made, there is a duty at the operational level to use due care in giving effect to it.

Lord Wilberforce found that the defendant in Anns was under a private law duty to the Plaintiff. It had to exercise a bona fide discretion as to whether to inspect the foundations or not and, if it decided to inspect them, to exercise reasonable skill and care in doing so. He concluded that the allegations of negligence were consistent with the council or its inspector having acted outside any delegated discretion either as to the making of an inspection or as to the manner in which the inspection was made."

Madam Justice Wilson then went on to examine the governing B.C. legislation and then stated:

> "It seems to me that, applying the principle in Anns, it is fair to say that the city of Kamloops had a statutory power to regulate construction by by-law. It did not have to do so. It was in its discretion whether to do so or not. It was, in other words, a 'policy' decision.
> However, not only did it make the policy decision in favour of regulating construction by by-law, it also imposed on the city's Building Inspector a duty to enforce the provisions of the by-law. This would be Lord Wilberforce's 'operational' duty. Is the city not then in the position where in discharging its operational duty it must take care not to injure persons such as the plaintiff whose relationship to the city was sufficiently close that the city ought reasonably to have had him in contemplation?"

By ss. 498 through 513 of the Municipal Act R.S.B.C. Ch. 290, the Municipality is given the discretion by by-law to regulate the licensing of businesses and to classify them according to type.
The Municipality chose to exercise its regulatory power when it passed by-laws 18-1970 and 1116-1981. In particular, s. 20 of by-law 18-1970, (supra) imposed upon the Licensing Inspector the duty of satisfying himself that the use for which the licence is sought shall not be in violation of the zoning by-law.

Thus, the Municipality like Kamloops (supra) had power to regulate the granting of business licences and did so through bylaws 18-1970 and 1116-1981.

I find that the Licensing Inspector (like the Building Inspector in Kamloops (supra), had an operational duty that he should take care not to grant licences to persons intending to use the premises in violation of a zoning by-law. I find that the relationship the Plaintiffs had with the Municipality was

sufficiently close that it ought reasonably to have had the Plaintiff's in their contemplation at the time of issuing the business licence and the renewals thereafter.

NOTICE

The Municipality submits that even though a duty may exist for the Licensing Inspector to take care that no licence is issued permitting a use contrary to the zoning by-law, that duty does not arise where the Municipality has not received notice from an applicant of the location of the business. Though the Plaintiff notified the Municipality of the location of the business when they took out the original business licence when operating at the site at Lougheed and McMillan, it is contended the Plaintiff contravened the Municipal by-laws when they failed to give notice of the change of the business to the Shaw Road property.

What the Municipality relies upon is the fact that the application for renewal of the business licence had printed on it the words "located at" and there was inserted the words "as above" and, "non resident". Thus, on the face of the licence it appeared as if the business was located at the same place as the address of the business. The Plaintiffs, however, were not responsible for inserting the words "as above" and "non resident".

The Licensing Inspector was aware in 1979 that the business was carried on at a site other than the address of the Plaintiffs.

In 1979 the Plaintiffs became aware of the fact they would have to relocate their business from Lougheed and McMillan property. Thus, they purchased the Shaw Road property when they received their renewal notice in 1981 and at that time they gave notice to the Defendants of their new address at Shaw Road in Mission. They did not direct their minds to the printed form other than giving notice of change of address. The form continued to have under the words "located at" the words (which they had not initially inserted) "as above" and "non resident".

Renewed licences were issued in the years thereafter until the refusal in 1985.

There was no concealment by the Plaintiffs of the fact the operation was carried on at Shaw Road. Their business cheques issued to the Municipality in payment of the business licence showed the business was "Artisan Custom Log Construction" of 10588 Shaw Road.

Secondly, the Plaintiffs applied to the Municipality for subdivision of the Shaw Road property requiring re-zoning. Inspections of the property by various authorities including the Municipality, was carried out during the time the business of the Plaintiffs was being carried on at the Shaw Road property.

Finally, in 1984, the Plaintiff erected at the front of the Shaw Road property a sign advertising "Artisan Custom Log Construction".

In all of these circumstances, the Municipality cannot be heard to excuse itself on the basis that the Plaintiffs failed to give notice to the Municipality of the fact they were carrying on business at the Shaw Road property.

Accordingly, I find the Municipality is not excluded from the duty it owed to the Plaintiffs. That duty springs from the obligation of seeing that a business licence should not have been issued to the Plaintiffs permitting them to carry on a business that was in violation of the zoning by-law.

I find the Plaintiffs relied upon the issuance of the business licence so as to believe they were operating in accordance with the by-laws of the Municipality.

The Municipality is therefore liable in damages.

DAMAGES

The Plaintiffs submit they are entitled to damages as follows:

1. Relocation expenses:$9,176

2. Loss of profits for the fiscal year 1985/86: $30,653
3. Loss of profits for the fiscal year 1986/87: $26,395

TOTAL: $66,224

4. Court Order Interest

RELOCATION EXPENSE - $9,176

I find such expenses were reasonable and that they were all incurred out of the necessity of having to move the business after having permission from the Municipality to operate in the five preceding years.

The Defendants, however, contend the Plaintiffs failed to litigate by not re-establishing sooner than they did. It is submitted that upon receiving notice they would not receive a renewal of the business licence, the Plaintiffs should have immediately taken steps to relocate. What they did, however, was to fight City Hall for a period of time in the hopes a solution could be found to remain where they were. That, in my view, was reasonable course of conduct and should not be considered as a failure to mitigate their damages.

As to the claim of contributory negligence of the Plaintiffs, I disallow this on the basis that I have already found that the Plaintiffs did not fail to give notice to the Municipality of the change of its location of their business operation.

Accordingly, the relocation expenses are allowed at $9,176.

LOSS OF PROFITS

As to the loss of profits, the claims made are on the basis the Plaintiffs would have been able to complete more houses had the Municipality left them undisturbed in a period between 1985 when notice was given and 1987 when the Plaintiffs had relocated.

In the fiscal year 1985/86, the Plaintiffs built 1.7 units. However, they had the capacity and the market to have built another 1.3 units. The reason the Plaintiffs did not produce the 1.3 units is that the Municipality had given its notice that the business could not operate. Based on the actual net profit they made in the work done during the fiscal 1985/86, evidence was led to show they suffered a loss of $30,653.

As to the fiscal year 1986/87, evidence was led to show the Plaintiffs lost income as a result of being unable to produce more sales at a total net loss of $26,395.

The Municipality contends that during a part of the fiscal year 1985/86, the Plaintiffs could have earned more income by entering into more contracts. They chose not to do so. It is further argued that if any damages are to be considered they should be based on the performance of the Plaintiffs in the period up to 1985, i.e. 1.9 log house contracts each year.

I find it is reasonable to base loss of profits based on the actual performance of the business operation during the fiscal years claimed rather than on the income earned in the years preceding 1985.

However, I am of the view some contingency reduction should be made as to the extent to which the Plaintiffs would be able to carry out contracts up to 3 each year.

In addition, there was some evidence put forth as to the availability of contracts that might have produced income if the Plaintiffs could continue their business. A Mr. Lob said he considered contracting with the Plaintiffs and decided against it because of the volatility of the relations between the Plaintiffs and the Municipality. He did not realize, however, there was nothing to prevent the Plaintiffs from building the log house on his property as distinct from illegally constructing it on the plaintiff's site and having it moved to Mr. Lob's property.

This and other circumstances may have affected the net income that might have been available from additional work. I deduct 15% for these contingencies.

Damages for loss of profits are therefore allowed for the fiscal year 1985/86 (85% of $30,653 $26,055.05) and for the fiscal year 1986/87 (85% of $26,395 1 $22,435.75).

Court Order Interest on the damages for fiscal year 1985/86 will be from March 1, 1986. Court Order Interest for the damages for the fiscal year 1986/87 will run from March 1, 1987. Court Order Interest on the relocation expenses of $9,176 will run from March 1, 1989. All Court Order Interest will be in accordance with the Registrar's schedule.

The Plaintiffs are entitled to costs.

MacKINNON J.

Loblaws Inc. v. Ancaster (Town) Chief Building Official

Between
Loblaws Inc. and Fortino's Supermarket Ltd., Applicants, and Mr. William G. Oliver, Chief Building Official for the Corporation of the Town of Ancaster, Price Club Canada Inc., and Price Club Canada Real Estate Inc., Respondents

[1992] O.J. No. 2290
Action No. 316/92
Ontario Court of Justice - General Division
Toronto, Ontario
Feldman J.
Heard: October 15, 16 and 19, 1992
Judgment: October 28, 1992

Application under Section 15 of the Building Code Act, R.S.O. 1990, c. B.13.

Richard R. Arblaster and D. Miller, for the Applicants.
Harry Radomski and T. Friedland, for Price Club Canada Inc. and Price Club Real Estate Inc.
Lee A. Pinelli, for the Corporation of the Town of Ancaster.

FELDMAN J.:-- The applicants seek an order of this court revoking a building permit issued by the Chief Building Official of the Town of Ancaster on June 2, 1992 to construct a building in which to operate a Price Club. By way of preliminary order made on September 10, 1992, the applicants were held to be persons with standing under s. 15(1) of the Building Code Act R.S.O. 1990 c. B.13. to appeal the decision of the Chief Building Official to issue the permit.

The issue before this court is whether the proposed Price Club operation is permitted by the Ancaster Zoning By-Law, and in particular, whether a Price Club operation qualifies as a "wholesale establishment" within the meaning of the by-law.

THE ZONING BY-LAW OF THE TOWN OF ANCASTER - BY-LAW NO. 87-57

Page 1 of the by-law sets out its function and effect as follows:

> Prohibiting the use of land for or except for such purposes as are set out in the By-law.
>
> Prohibiting the erection or use of buildings or structures for or except for such purposes as may be set out in the By-law.
>
> Regulating the type of construction and the height, bulk, location, size, floor area, spacing, character and use of buildings or structures, the minimum frontage and depth of the parcel of land and the proportion of its area that any building or structure may occupy.
>
> Requiring the provision and maintenance of loading and parking facilities for buildings or structures to be erected or used for a purpose named in the By-law.
>
> Prohibiting the making, establishment or operation of pits and quarries in defined areas.

Section 6.6 provides that in the by-law, "shall" is mandatory not directory, and "building" includes part of a building. Section 7.1 provides:

> No person shall within the town of Ancaster use any land or erect, alter or use any building or structure except in conformity with the provisions of this by-law.

Section 7.9 deals with multiple uses, and provides: "Where any land, building or structure is used for more than one purpose, all provisions of this by-law relating to each use shall be complied with..."

The by-law divides the municipality into zones, within each of which certain uses and types of buildings are permitted as set out. There are 6 listed commercial zones and 6 listed industrial zones.

Section 23 deals with the Prestige Industrial M2 Zone wherein the Price Club lands are located.

The section again provides:

> No person shall within any Prestige Industrial M2 Zone... use any land, or erect, alter or use any building or structure except for such purposes and in accordance with the following provisions:
>
> Permitted Uses
>
> Manufacturing uses
> Wholesale establishments
> Warehousing
> Transportation depots and truck terminals
> Other industrial uses
> Non-retail commercial uses
> Lumber and building materials yards
> Motor vehicle gasoline bars, including servicing of motor vehicles
> Restaurants
> Banks, Convenience Stores
> Public Uses and operations
> Communication Facilities
> Union Halls
> Recreation facilities
> Existing agricultural uses except poultry farms, mushroom farms, fur farms, piggeries and greenhouses
> Uses, buildings, and structures accessory to the foregoing

Section 3 is the Definition Section containing 137 definitions. The opening words of that section state:

> For the purpose of this by-law all words shall carry their customary meaning except those defined hereafter.

The definition section of the by-law defines the following two terms:

> warehouse: means a building used for the bulk storage of goods, merchandise or materials and shall include wholesale establishments.
>
> wholesale establishment: means a building used for the bulk storage and sale of quantities of goods, merchandise and materials.

The by-law does not define the term "bulk". Nor does it contain a definition of the word "wholesale" nor of the word "retail", although there is a definition of the phrase "retail store" as follows:

> "Retail Store" means a building where goods, wares, merchandise, substances, articles or things are offered or kept for sale directly to the consumer.

Along with the references to retail and non-retail uses in the "permitted uses" section of article 23, prestige industrial zones, section 23.10 deals with "showroom or retail sales" as follows:

> A maximum of 10% of the floor area of an industrial building may be used for showroom or retail sale of products manufactured or assembled on the premises.

(That percentage has been raised to 25% in the particular zone in which the subject lands are located.)

THE PRICE CLUB OPERATION

The building permit under appeal was issued for the construction of a warehouse in an M2 Prestige Industrial zone.

Although there were several affidavits, cross-examinations, and responding affidavits filed by both sides with respect to the true nature of the business carried on by the Price Club, I am satisfied that the relevant facts are not in dispute in any material way and can be briefly summarized.

The Price Club operates out of a very large warehouse-type structure containing few finishing amenities, and typically located in an industrial zone with major highway access. The business involves storage of large quantities of a limited selection of all types of goods including food, clothing, large and small appliances, electronics, automotive accessories and many other categories. In many cases, the goods are sold out of their original packing boxes; in other words, they are not unloaded for shelf display. The goods are stored on metal floor to ceiling shelving and are sold directly from that storage. The Price Club sells only to card carrying members, who include 1) owners of businesses, and other associates in the business as well as spouses of the business card holders; 2) privilege members who are individuals who work for the most part in the public sector as well as professionals.

The Price Club seeks to be a supplier of goods to small business either of inventory for resale, or of goods used or consumed in the business, but also sells goods for home use to its members. It is acknowledged by Price Club that a not insignificant portion of its sales are to end-users or consumers and are retail sales as out of a retail store. It is also acknowledged that this portion of the business is part of the overall marketing strategy and concept of the Price Club. In fact, in correspondence from the Town to the Price Club, the Director of Planning confirms that the Price Club will be operating a "warehouse retail establishment" and that it comes within the "wholesale establishment" designation in the by-law.

Price Club sells in "quantities" or in "bulk" in two ways: one is by selling by the pallet or in cases, or by selling a number of units which have been packaged together. For example, Price Club will sell 3 packages of macaroni and cheese dinner which have been shrink-wrapped together. This format is ostensibly useful for a variety or convenience store to purchase inventory, in which case the package will be unwrapped and the items resold separately; it is also convenient for a household purchaser. The second method of "quantity" selling is by selling extra large sizes of products, which can be used in businesses or at home. For example, a restaurant may purchase an oversize container of ketchup which it will serve to patrons in smaller refillable squeeze bottles. Of course a homemaker may also find such large sizes convenient and economical.

It is acknowledged by all sides that the Price Club stores goods in bulk in its buildings. It is also acknowledged by Price Club that it sells goods in bulk or in quantities, but it also sells individual, regular size items, and there is no breakdown in the evidence as to what portion of the business involves the sale of individual items. Some clear examples, however, are clothing, electronics and appliances. The evidence is that Price Club sells at the same price to all of its members.

A Price Club outlet also contains a photo center, an optical center, and a restaurant. The photo center is for small business as well as consumer use.

THE ISSUE

Simply put, the issue is whether the business operation just described qualifies as a "wholesale establishment" within the meaning of the by-law.

The applicant's position is that the definition of wholesale establishment is not to be read only literally, that is with only 2 qualifications, bulk storage and bulk sale. Rather, imported into it is the common meaning attributed to the term "wholesale" which it says is sales for resale only and not to end-users or consumers; that is not sales at retail. The applicant supports this argument with the references to retail uses allowed elsewhere throughout the by-law, and says that there would be no point confining

retail uses to certain commercial zones with the restrictions and requirements in those zones for roads, parking etc. if one can easily avoid those requirements by setting up a retail outlet in an industrial zone. Or, why does the by-law specifically allow the limited 25% retail showroom as part of a manufacturing business in the industrial zone if one may operate a wholesale establishment which sells in unlimited quantities at retail in the same zone.

The position of the Price Club, supported by the Town, is that the definition is all-inclusive; because it is silent on who the sales may be made to, there is no restriction. They point to the introductory words of the definition section as a mandatory guide to the meaning to be given to words used in the by-law.

However, from an example within the definition of "wholesale establishment" itself, it became clear during argument that there may be some inconsistencies or anomalies within the by-law. This was demonstrated by the definition of the word "storage" which refers to outdoor storage, whereas a warehouse is a building for indoor storage. The respondents rely on the principle of statutory interpretation that if the definition given creates an absurdity, then it should be modified enough to avoid that absurdity. They argue however, that no such absurdity is created by the lack of reference to whom the sales may be made, and therefore nothing need be read in to clarify the meaning. There is no ambiguity and consequently no need to look outside the definition for clarification.

Price Club also disputes the meaning of "wholesale" as articulated by the applicants. Price Club led expert evidence that wholesale sales include not only sales for resale, but also sales to business for use in the business. The expert's evidence is that all sales are either retail, which means to the consumer, or wholesale, which encompasses all other sales.

The applicant's expert's opinion is that there are three types of sales, wholesale, which means for resale only, retail which means to the ultimate user (and this would include sales to businesses which use the goods in their business), and distribution transactions which are sales from the producer to another producer who adds value to the product before it can be sold in its final form through the wholesale and retail stages.

Both experts supported their respective opinions with dictionary and textbook definitions.

Price Club says that although its business includes transactions for non-business use, its primary business is wholesale including sales to business for resale or for use in the business, and therefore even if the common meaning of "wholesale" is imported into the definition of "wholesale establishment", its operations still qualify.

THE CASE LAW

An examination of the case law discloses that the disagreement over the meaning of "wholesale" and of "retail" has been ongoing over many years in this Province as well as in others and also in the United States. From the point of view of this by-law, the disagreement has been particularly interesting because one of the meanings attributed is dependant on the quantity of goods in the sale, rather than on the use the buyer will make of the goods. This of course, is the qualification contained in the Ancaster by-law definition as it reads.

A useful starting point is the comment of Maclaren J.A. in Townsend v. Northern Crown Bk. (1913), 13 D.L.R. 300 at 302:

> It is common knowledge that in Canada, as in other new countries, the lines between wholesale and retail have been very loosely drawn and have not been at all rigid; the sales by reputed wholesalers have been far from being confined to those who bought to sell again; and even the practice of confining the word "wholesale" to its original idea of purchases or sales in bulk or in large

> quantities has not been at all generally adhered to. Many merchants are described as selling both wholesale and retail, and many so describe themselves and advertise as such.

It is interesting to note that Price Club is described throughout the materials as a new concept in merchandising, combining wholesale and retail sales with warehouse amenities in order to effect cost savings for all the members both from buying and selling in bulk and from cheaper operating costs.

But the concerns raised about whether Price Club qualifies as a pure wholesale operation, are reflected in 1913 usage and practice as well.

In the case of Imperial Oil Ltd. v. City of Ottawa, [1943] 3 D.L.R. 78 (O.C.A.) the issue was the business assessment of two Esso gas stations in Ottawa which sold 90% products manufactured elsewhere by Imperial, and 10% other products. The decision appealed from confirmed the assessment of the gas stations as a manufacturer at the 60% tax rate, rather than as a retail merchant at a lower rate. The judgment below seemed to rest on the distinction between one who resells someone else's products and one who resells products of its own manufacture. However, in discussing the issue and finding that the appellant was a retail merchant, the court had this to say on the definitions:

> As the expression is commonly used, selling by retail is selling in small quantities, as distinguished from selling by wholesale, or in gross. The word comes to us through the French, and signifies the sale of commodities in small quantities. There is nothing in its derivation to suggest that it means reselling, nor is that its proper meaning in modern use. (See Murray's Dictionary) (p. 80)

Re Buchman & Son Lumber Co. Ltd. and Regional Assessment Commissioner, Region No. 9 et al. (1982), 141 D.L.R. (3d) 95 (Ont. Div. Ct.) was also an assessment case. The taxpayer was a lumber merchant which sold a small proportion of its low-grade lumber to persons for resale, while 90% was sold to businesses to make crates in which to ship their goods. Most of the taxpayer's lumber was sold in bulk. The issue was whether it was to be assessed as a wholesale merchant. It was agreed that sale in quantity is one of the tests for a wholesaler; the issue was whether the sales also had to be to a retailer rather than to an end-user. Here the sales were to businesses for use in the business, but the court accepted that those business were end-users of the lumber by making it into crates.

At page 98, the court quotes various dictionary definitions of wholesale as follows:

> Some dictionary meanings of "wholesale" are as follows: the Shorter Oxford Dictionary, "in large quantities, in gross (opp. to 'by retail')"; Funk and Wagnalls' Standard College Dictionary, American version, "The sale of goods by the piece or in large bulk or quantity: opposed to 'retail'"; the Canadian version of Funk and Wagnalls is as follows, "The selling of goods in large bulk or quantity, especially for resale: distinguished from 'retail'"; The Canadian Living Webster Encyclopedic Dictionary of the English Language, "The sale of commodities in large quantities, and esp. for the purpose of resale, as to retailers or jobbers rather than to consumers directly: opposed to 'retail'", Stroud's Dictionary, vol. 3, p. 2237, "As a general rule, 'Wholesale' merchants deal only with persons who buy to sell again, whilst "Retail' merchants deal with consumers"; The Oxford English Dictionary, vol. XII, defines "wholesaler" as "one who sells goods wholesale (to retailers)".

The court distinguished the Imperial Oil decision on the basis that the sales in that case were being made to the end-user and were therefore retail on that basis regardless. The court followed the decision of the New Brunswick Court of Appeal in Donovan v. Saint John, [1950] 4 D.L.R. 561, where a ship's chandler which sold goods and supplies to ships for

use by the crew on the ship was a retailer and not a wholesaler even though the goods were sold in large quantities, on the basis that they were not for resale. The court quoted with approval the following from the decision of Richards C.J. at p. 565:

> It will be noted that in the above definitions of retail two distinguishing features appear, namely, sale in small quantities and sale to the consumer. Sale in small quantities may seem to appear more generally, but it must be remembered that dictionaries usually give alternative or varying definitions, and a conclusion cannot be made from a few selected definitions. Consideration must be given to actual business practice and judicial authority.

The Divisional Court concluded that "the proper test of what a wholesaler is and, to be one, the sale must not only be in large quantities, but it must be to a person other than the end-user." (p. 99). Therefore the sales to businesses of lumber for crates did not qualify.

However, the dissenting opinion of Craig J. demonstrates that the term "wholesale" is one which has more than one common meaning or understanding in the community. Craig J. held that the "ordinary meaning " of "business of a wholesale merchant" "is descriptive of selling goods or merchandise in large quantities (usually, but not necessarily for resale)." (p. 102) He also refers to the several dictionary definitions, and the case law including the Imperial Oil case, as well as Heath v. City of Victoria (1892), 2 B.C.R. 276, where Begbie C.J.B.C. stated at p. 277:

> There is no doubt that a merchant who sells as above in large quantities to another trader, in order that the second may distribute piece-meal to actual consumers, is a wholesale merchant. The fallacy is in assuming that this, which is only an example of a class, exhausts the whole class. In fact, a wholesale dealer may know nothing, and certainly cares nothing, about the way in which his immediate customer deals with the goods.

I note that the latter comment applies with even more force to a municipality. It is not concerned with the use that Price Club shoppers will make of their purchases, and whether they are for business, for resale, or for home use. The municipality's concerns in the context of the zoning by-law are land-use related.

In analyzing the end-user qualification, Craig J. considered the very types of distinctions which were debated in argument in this matter. For example, a hotel may purchase food in bulk which it resells in its restaurant, and therefore its supplier would be a wholesaler. But its bulk purchases of towels, bedding or paper products which are used in the business and not resold as such would categorize those suppliers as retailers. Craig J. concluded that "no distinction can be made between any of the transactions mentioned in these examples; that is all of the suppliers come within the ordinary meaning of "wholesale merchant"" (p. 105). And at p. 104:

> In my opinion it is apparent from these definitions and authorities that the essential characteristic of a wholesaler is one who sells in large quantities. It is usual that he sells to a retailer for the purpose of resale, but that is not an essential characteristic. It is not a case where the language of the Act is ambiguous.

There was also a dissenting opinion in the Donovan decision referred to above. Hughes J. was satisfied that the taxpayer was not making retail sales to the ships because the sales were not in small quantities, and according to some dictionary definitions he refers to, sale to the ultimate consumer is not a necessary aspect of retail. He said that Donovan may not be a wholesaler either, but rather a jobber, or someone selling in some other capacity. This observation reflects the view of the applicant's expert that not all sales must be either wholesale or retail.

The final Ontario case cited by the applicants is

Provincial Fruit Co. Ltd. v. H.J. Fine & Sons (1980), 30 O.R. (2d) 262 (O.H.C.). The issue in that case was whether a retail fruit market attached to the defendant's wholesale food business was an accessory use within the meaning of the relevant by-law. In the course of his reasons, Southey J. discussed the meaning of wholesale and retail in the following way at p. 269:

> The function of a wholesaler is to buy large quantities of goods, pay for them to be transported to the area which he services, store them there in a warehouse, which in the case of some foods would probably be a cold storage facility, and then sell and deliver them to retailers in bulk, but in smaller quantities than those in which the wholesaler has purchased them.
> The retailer then deals with the consuming public by selling small quantities in stores located conveniently throughout the communities in which the consumers live.

Although the decision was reversed on appeal, this formulation of the concept of wholesale and retail in the context of the facts of that case was not questioned, and was implicitly accepted.

The applicants also cite two American cases for the proposition that the difference between a wholesaler and a retailer is that the person buying from a wholesaler does so in order to sell the article again, whereas the retailer sells to the ultimate user: Zehring v. Brown Materials Limited 48 F.Supp. 740 (California District Court); Haynie v. Hogue Lumber & Supply Co. of Gulfport, Inc. 96 F. Supp.214 (U.S. District Court, Mississippi).

Although the weight of authority in Ontario favours the definition of wholesale as large quantity or bulk sales to a reseller and not to an end-user whether consumer or business, each case is decided in the context of a particular statute, such as the Assessment Act, or of a particular set of circumstances. The ongoing nature of the debate in these various contexts confirms that there is not only one common or ordinary meaning of the word "wholesale".

In construing a by-law, one must look to the entire by-law "and construe one part with another or other parts, so as if possible to give effect to the whole." See In re Cameron and the Municipality of East Nissouri (1855), Ont. Q.B., Easter Term, 19 Vic. 190 at 192. In the M2 zone, retail uses are strictly delineated and limited, while retail stores are allowed in commercial zones but not in the prestige industrial zone. However, there is no provision anywhere in the by-law for a warehouse retail establishment which combines sales to consumers with sales for resale (or to businesses for use in the business, if the definition of wholesale extends that far). As the Supreme Court of Canada concluded in Bayshore Shopping Centre Ltd. v. Nepean Tp. (1972), 25 D.L.R. (3d) 443 at 450, where it was dealing with the words "shopping centre", the omission of those words from the permitted use sections of the by-law may indicate that in the view of the Municipality in enacting the by-law, the term was already covered by other permitted uses including in that case, "retail store", "service shop" and "department store".

In the Ancaster by-law, the proper conclusion may be that the term "warehouse retail establishment" is already covered by "wholesale establishment" in that the definition does not exclude retail sales directly to the consumer, but qualifies itself by the "bulk" requirement for storage and sale of goods.

In enacting a special provision allowing a limited retail showroom as part of a manufacturing industrial building, the municipality must have considered that such use might not be considered accessory within the meaning of the by-law, or it wished to limit that accessory use to the directed percentage. No such limit is set out for a wholesale establishment. The applicant says that this means therefore, that no retail sales are allowed from a wholesale establishment. The contrary conclusion is that retail sales are not prohibited in a wholesale establishment, therefore special permission is not necessary, or that the numbers of retail customers will be self-limiting by the requirements for bulk sale.

In my view, looking at the by-law as a whole, one is not compelled to the view that a wholesale establishment cannot permit sales directly to the consumer, or that if it does, it becomes a retail store. In the final analysis, the definition of "wholesale establishment" contained in the by-law itself must govern, as the definition section of the by-law directs that it must. That definition is silent on the issue of who may be the purchasers of the goods sold there. The definition has meaning as it stands, and as well accords with one of the ordinary meanings of wholesale, which is storage and sale in bulk. There is no absurdity which requires that any limiting words be read in: Dale Estate Limited v. The Town of Brampton

[1953] O.R. 659 at 684.

In my view, the Court is also entitled to seek guidance from the words of the Town of Ancaster Official Plan which deals with the area which includes the subject land. The Plan provides the area is to be developed as an Industrial Park including the permitted use of "wholesale activities (including direct sales to the public) warehousing and storage and other similar industrial uses." It is argued that by leaving out the bracketed words in the by-law, the municipality has not carried forward the inclusion of direct sales to the public into the meaning of "wholesale establishment" as opposed to the "wholesale activities" contemplated in the Official Plan. However, in my view, where the by-law is silent on the issue of who may purchase at a wholesale establishment, and the official Plan indicates that the municipality does not consider the term wholesale to mean only sales to retailers, the court may take that information into account in deciding whether the intention of the by-law is to import into the meaning of wholesale the very restriction it signified does not apply to that term.

It was urged upon me by the respondents that if there are alternative meanings that may apply, the court must construe the by-law strictly and in favour of the landowner. Several authorities were cited for the proposition that people may use their property as they deem fit except for acts of nuisance, entrapment, or in breach of a statute "and therefore by-laws restrictive of that right should be strictly construed." Bayshore Shopping Centre Ltd v. Nepean Tp. (1972), 25 D.L.R. (3d) 443 at 449. See also City of Thunder Bay v. Potts (1982), 142 D.L.R. (3d) 253 at 259/260 and cases cited therein. However, there is a contrary proposition, which is that because a by-law is enacted to set standards for the entire community, it is in the interest of the community that the by-law be given a liberal interpretation in order to ensure that those standards are achieved and applied fairly to all who choose to live and do business in that community: Re Bruce and City of Toronto (1971), 19 D.L.R. (3d) 386 at 391 (O.C.A.). I note that in the Bayshore case, the Supreme Court of Canada declined to interpret the by-law either strictly or liberally in the face of these two conflicting values (p. 449). I respectfully adopt the approach of the Supreme Court on this issue. In construing the by-law in favour of the literal interpretation and application of the definition of "wholesale establishment", I have not applied the rule of strict construction in favour of the landowner, Price Club.

CONCLUSION

I have concluded that the phrase "wholesale establishment" in the by-law should be given its literal meaning, which is a building used for the bulk storage and sale of quantities of goods, merchandise and materials. Price Club obtained a building permit for a warehouse which includes a wholesale establishment, and it is common ground that Price Club's intention was to erect a building for the purpose of carrying on there the activities described earlier in this judgment. It is clear on the evidence that some of those activities, that is the bulk storage of goods, and the bulk sale of goods in the two ways I have described, are permitted by the by-law. It is also clear that some of those activities, including the sale of individual regular size items, for example, appliances, clothing and electronic equipment are not permitted uses.

Counsel for Price Club fairly conceded that the retail portion of its activities is not an accessory use as it forms

part of the entire marketing scheme of the Price Club concept. It was not argued, nor do I believe it could be, that the sale of individual items, as opposed to sale in bulk or in quantity, is an accessory use to the wholesale establishment use. The evidence did not break down either gross or percentage figures for this portion of the business, but there was no suggestion that it is insubstantial or de minimus.

THE REMEDY

1. The Town took the position that it is premature to consider any remedy for anticipated use of the building that may not conform to the by-law as long as the building permit was issued for a building which as a structure is capable of being used lawfully in the zone. In this case, the permit was for a warehouse which is permitted by the by-law; the Town says the permit should be considered as properly issued, and the future use should be monitored by the Town to ensure compliance with the by-law, relying on the cases of O'Connor v. Jackson et al., [1943] O.W.N. 587; Re Coleman and McCallum, [1913] O.W.N. 1449; City of Toronto v. King (1923), 54 O.L.R. 100 (O.C.A.); Mackenzie v. City of Toronto, [1915]

O.W.N. 820.

In my view the wording of the Building Code Act and of the by-law preclude the application of these cases. Section 6(1) of the Act provides:

> 6(1) The Chief Official shall issue a permit except where,
>
> (a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law.

Other applicable law includes a zoning by-law: Woodglen & Co. v. North York (1983), 23 M.P.L.R. 13 at 16; Axelrod v. Corporation of the City of Toronto (1981), 15 M.P.L.R. 143 at 149.

The zoning by-law prohibits the erection of a building for a purpose not permitted by the by-law, as well as prohibiting its use. In my view it is clear that a permit is not to be issued to erect a building for a purpose not permitted by the by-law. It was never Price Club's purpose or intention to use the building only for storage. The general purposes it intended were made known to the Town which determined that those purposes, as described herein, fell within the meaning of "wholesale establishment" as defined. It is now clear that part of the Price Club operation will comply and part will not. The erection of the building for the latter purposes will therefore contravene the by-law. It is inappropriate to ignore that contravention at the building permit stage.

A similar conclusion was reached by A.R. Campbell J. in John Walker v. Corporation of the City of Kingston (1991), 6 M.P.L.R. (2d) 316 at 320, where he held that to allow construction to proceed on additions to a duplex for an illegal occupation and then await prosecution for any future illegal use "would frustrate the intent and meaning of the by-law and cannot be sustained."

2. All parties took the position that the only remedy available under s. 15 of the Building Code Act R.S.O. 1990, c-B.13 is revocation or rescission of the permit, and that the court could also make a declaration as to the meaning of the by-law for the guidance of the parties. The applicant asks that the decision of the Chief Building Official to issue the permit be rescinded and that the permit be revoked, and that all construction cease while Price Club reapplies. The respondents say that if the court should find that the intended use of the premises contravenes the by-law in some way, then the court should not revoke the permit, but should make a declaration as to the permitted uses under the designation of "wholesale establishment" so that the Price Club will be able to govern itself accordingly.

Contrary to the submissions, I believe the court has the power to make other orders under the Building Code Act pursuant to s. 15(3) which provides:

> Where an application is made to a judge for a hearing under subsection (1), the judge shall appoint a time for and hold the hearing and may rescind or affirm the order or decision of the inspector or chief official or take such action as the judge considers the inspector or chief official ought to take in accordance with this Act and the regulations, and for such purposes the judge may substitute his or her opinion for that of the inspector or chief official. (Emphasis added).

Under s. 8(2), "Where an inspector finds that any provision of this Act...is being contravened, the inspector may give to the person whom he or she believes to be the contravenor an order in writing directing compliance with such provision, and may require the order to be carried out forthwith or within such time as he or she specifies." There is no section of the Act which says that a building must be erected in accordance with the building permit issued for it. However, subsection 6(5) provides that:

> No person shall construct or cause to be constructed a building in a municipality except in accordance with the plans, specifications, documents and any other information on the basis of which a permit was issued or any changes thereto authorized by the chief official.

And subsection 5(1) says:

> No person shall construct...or cause to be constructed...a building in a municipality unless a permit has been issued therefor by the chief official.

It is implicit in these two sections, and the Act as a whole, that once a permit is issued, the building must be constructed in accordance with the permit. Another way of looking at it is that if the building that is being constructed is not authorized by the permit, then that building is being constructed without a permit in contravention of subsection 5(1).

In this case the permit was issued for the erection of a building to be used as a warehouse, and the evidence is that this was in its included meaning of a wholesale establishment. The evidence has now disclosed that part of the business of the Price Club for which the building permit was sought and issued is sale of individual items, not in bulk, which is not permitted in a wholesale establishment. Therefore there is a breach of the Act, as the permit is for a permitted use, but the building being erected under it is not.

In such circumstances, an inspector is authorized to issue a compliance order under ss. 8(2), and a stop work order under ss. 8(5) which is precisely what happened in John Walker v. Corporation of the City of Kingston (1991), 6 M.P.L.R. (2d) 316, and which action was approved by the court in that case as a proper procedure in accordance with the Act. (p. 320). There the inspector required confirmation that the use of the building conformed with the by-law. It did not and ultimately the permit was revoked.

In my view, some action is required under the Act when a building permit has been issued by the municipality in error, based on a misunderstanding of the facts or a misinterpretation of the by-law, so that an appeal under s. 15(1) must be allowed. (In this case, it is not clear which of these circumstances caused the error.) However, the judge is authorized not only to rescind or revoke the permit, but also to take such action as the judge considers the inspector or chief official ought to take.

In this case, it was agreed between the parties and made part of an early order of the court in this proceeding that there would be no stay of the permit pending this appeal, so that the building is in some state of completion at this date and is apparently targeted to open for business on November 5, 1992. In those circumstances, and having regard for the fact that the Town was not misled by the Price Club (although it is unclear how much information the Town had as to the extent of bulk sales at Price Club), and that

the Town led the Price Club to believe that its operation fit within the applicable M2 zoning, Price Club should be given an opportunity to comply with the Act before the permit is rescinded.

ORDERS

1. It is declared that a portion of Price Club's intended use of the proposed building is contrary to Zoning By-Law 87-57 of the Town of Ancaster. The prohibited portion is any activity that is not bulk storage or sale of quantities of goods, merchandise and materials or any proper accessory use to those activities.

2. Price Club shall have until November 4, 1992 to comply with the building permit by providing evidence satisfactory to the Town that it will modify its operations at the Ancaster location in order to comply with the zoning by-law, as declared in this judgment and the Town shall respond in writing.

3. If Price Club has not complied within the time limit set out in No. 2 above, then the building permit No. 2992/92 shall be rescinded and all construction of the building shall cease.

4. The respondent Chief Building Official shall provide the applicant with any documents contemplated or generated in connection with paragraph No. 2 of this order upon its request therefor.

5. The parties shall make arrangements to reattend to make submissions with respect to the costs of this application.

FELDMAN J.

Manchester v. North York, Chief Building Official, Corporation of the City of North York et al.

[Indexed as: Manchester v. North York (City) Chief Building Official]

18 O.R. (3d) 540
[1994] O.J. No. 1136

Ontario Court (General Division)
Divisional Court
Then, Dunnet and Adams JJ.
May 30, 1994

The reasons for judgment of the court were as follows:

BY THE COURT: -- Of the several grounds for appeal raised in this matter, only one merits an extended analysis. In all other respects, we find O'Brien J.'s decision unassailable. His finding of the existence of "extraordinary circumstances" is essentially factual and one plausibly open to him on the state of the record. While bad faith or discrimination was not alleged, the categories of what might reasonably be characterized as extraordinary are not closed. We find no error in principle in O'Brien J. deciding as he did.

On the issue of whether or not the respondent's proposed use constitutes a caretaker's residence, we note the matter was not squarely raised before O'Brien J. In light of this failing and given that the proposed use bears at least a rational relationship to the allowed use, we are not willing to entertain the appeal on this basis.

This leaves what we see as the principal issue. Was the interim control by-law 31983, enacted April 21, 1993, "effective", within the meaning of s. 38(7) of the Planning Act, R.S.O. 1990, c. P.13, for the 30 days following its "passing" and did it only cease being effective immediately thereafter as a consequence of the municipality's failure to give notice of the passage of the by-law as required by s. 38(3) of that Act? O'Brien J. found that it was effective and, therefore, that the passage of a subsequent interim control by-law with proper notice aimed at responding to or curing the municipality's earlier failure to give the required notice offended the three-year "cooling off" period provided by s. 38(7).

Section 38(1) to (8) provides:

38(1) Where the council of a local municipality has, by by-law or resolution, directed that a review or study be undertaken in respect of land use planning policies in the municipality or in any defined area or areas thereof, the council of the municipality may pass a by-law (hereinafter referred to as an interim control by-law) to be in effect for a period of time specified in the by-law, which period shall not exceed one year from the date of the passing thereof, prohibiting the use of land, buildings or structures within the municipality or within the defined area or areas thereof for, or except for, such purposes as are set out in the by-law.

(2) The council of the municipality may amend an interim control by-law to extend the period of time during which it will be in effect, provided the total period of time does not exceed two years from the date of the passing of the interim control by-law.

(3) No notice or hearing is required prior to the passing of a by-law under subsection (1) or (2) but the clerk of the municipality shall, in the manner and to the persons and agencies and containing the information prescribed, give notice of a by-law passed under subsection (1) or (2) within thirty days of the passing thereof.

(4) Any person or agency to whom notice of a by-law was given under subsection (3) may, within sixty days from the date of the passing of the by-law, appeal to the Municipal Board by filing with the clerk of the municipality a notice of appeal setting out the objection to the by-law and the

reasons in support of the objection.

(5) Where a notice of appeal is filed under subsection (4), subsections 34(23) to (29) apply with necessary modifications.

(6) Where the period of time during which an interim control by-law is in effect has expired and the council has not passed a by-law under section 34 consequent on the completion of the review or study within the period of time specified in the interim control by-law, or where an interim control by-law is repealed or the extent of the area covered thereby is reduced, the provisions of any by-law passed under section 34 that applied immediately prior to the coming into force of the interim control by-law again come into force and have effect in respect of all lands, buildings or structures formerly subject to the interim control by-law.

(7) Where an interim control by-law ceases to be in effect, the council of the municipality may not for a period of three years pass a further interim control by-law that applies to any lands to which the original interim control by-law applied.

(8) Subsection 34(9) applies with necessary modifications to a by-law passed under subsection (1) or (2).

In deciding as he did, O'Brien J. followed a line of Ontario Municipal Board cases according a strict construction to s. 38 and, in particular, Re Niagara-on-the-Lake (Town), unreported decision of O.M.B. Chairman, J.R. Mills, February 28, 1990, at p. 5, a case almost identical to the one at bar. The following reasoning of Chairman Mills at p. 5 in that case reflects both the general approach to s. 38 and the specific interpretation accorded to s. 38(7) which O'Brien J. adopted.

By-law 2032-89 was passed by the Town on May 27, 1989 with an effective date of May 29, 1989 and was in full force and effect up to and including June 28, 1989. As notice of its passing was not carried out in compliance with s. 37(3) it should have no force or effect since then. The Board agreed with Mr. Crossingham that for good record-keeping purposes the Town should repeal it. This panel of the Board agrees not only with counsel for the appellants but also with the previous decisions of this Board that because s. 37 is a punitive section of the Planning Act, it is imperative that municipalities follow its directions to the letter. The Stornelli case which involves individuals' rights and behaviour vis-à-vis that of municipalities, which is something like comparing amateurs with professionals, cannot be applied here.

By-law 2049-89 is not an amendment to By-law 2032-89 in any way, shape or form. It is a free-standing by-law and cannot fall under s. 37(2). By-law 2049-89 flies in the face of s. 37(7) as there is no doubt in the Board's mind that By-law 2032-89 was in full force and effect for 30 days. Therefore no other interim control by-law can be passed by Council for these properties before May 29, 1992.

Finally, the Board also agrees with Mr. Muratori that any municipal council could play games forever if every time an interim control by-law was found to be deficient, whether it be by council itself, as was the case here, or through the appeal process, a new interim control by-law could be passed on the same lands each time.

Is the Niagara-on-the-Lake approach to the failure of a municipality to give the required notice under ss. 38(3) out of tune with both the purpose and the wording of s. 38 when read as a whole?

A by-law enacted under s. 38 is authorized for the purpose of protecting the public interest in suitable zoning of an area in question and takes precedence over the right of affected land-owners to use their lands freely: see 715113 Ontario Inc. v. Ottawa (City) (1987), 63 O.R. (2d) 102 at p. 106, 46 D.L.R. (4th) 552 (H.C.J.). An interim control by-law is generally passed "as a quick response to the emergence of a specific problem for the purposes of stopping the problem from getting

out of hand and as a means of providing breathing space during which study can be done to determine the appropriate planning policy and controls for dealing with the situation": see Re Stuniah (Township) Interim Control By-law 1601 (1990), 24 O.M.B.R. 377 at p. 379. Indeed, an anticipated urgency to act explains the exceptional right accorded to a municipality to pass a by-law before giving notice.

Against this important purpose of s. 38 is the equally important interest of property-owners to use their land as permitted by existing law. The enactment of a by-law without initial notice is clearly an exceptional power.

All the parties before us accepted that the by-law was invalid upon a municipality's failure to comply with a timely giving of the required notices. Where they parted company was in respect of the consequence of that failure to the validity of the by-law during the 30 days immediately following its passage. The appellant municipality argued that the ruling of O'Brien J. had the effect of wrongly depriving the public of the benefits of s. 38. The respondent argued that the result was fitting given the exceptional impact of the section on pre-existing property rights, an impact that has reasonably given rise to the requirement of strict compliance with the section's provisions.

During submissions, the court drew counsels' attention to s. 38(4) which provides a right of appeal only to those who have been properly notified. The court was advised that this provision had been brought to the attention of O'Brien J. Is it likely that the legislature would have intended an interim control by-law to be treated as "in effect" during the first 30 days of its passage without providing an accompanying right of appeal for that period? In answer, the appellants submitted that the absence of a right of appeal for the 30-day period was a clear indication of an intention that a by-law is to be treated as void ab initio upon the failure of a municipality to provide the required notices.

While the absence of a right of appeal may, at first glance, support this view, on reflection it is just as arguable that any such appeal would be moot given a party's right to reapply upon the expiration of the 30-day period and the failure of a municipality to give the required notice. Moreover, even if the absence of a right of appeal appears anomalous, the void ab initio approach creates its own inherent problems. To accept the municipality's argument in this regard, initially lawful actions of a municipality during the first 30 days might be rendered retroactively unlawful by the subsequent failure of that municipality to give the required notice. Is it likely the legislature intended that result?

In all the circumstances, we concur with O'Brien J. The Niagara-on-the- Lake approach is supportable on the words of the statute as O'Brien J. found. Indeed, we prefer it to the contrary position advocated before us. The giving of the required notice is solely within the control of a municipality. The enactment power accorded by the section is exceptional and must be construed from that perspective. We see no reason to adopt a statutory interpretation, with its adverse impact on the legitimate expectations of a property owner, primarily to relieve a municipality from the burdens caused by its own carelessness. The appeal is, therefore, dismissed. Written submissions may be made on the issue of costs.

Thomas R. Lederer and Rhonda Cohen, for appellant, E. Yaman Uzumeri.

Sidney H. Troister, for appellant, Toronto-Dominion Bank.

Ian James Lord and Barnet H. Kussner, for respondent.

McDONALD'S RESTAURANTS OF CAN. LTD. v. HUMM et al.

Ontario County Court (Judicial District of Halton],
Blair Co. Ct. J.

Heard - November 2, 3, 4, 7, 8
and 9, 1983.
Judgment - December 19, 1983.

December 19, 1983. BLAIR CO. CT. J.: - This is an appeal under the Building Code Act, R.S.O. 1980, c. 51, from the decision of the chief official of the Town of Oakville, David A. Humm, not to issue a building permit to the appellant.

Section 6(1) of the Act provides as follows:

"6.-(1) The chief official shall issue a permit except where,

(a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law;

(b) the applicant is a builder as defined in the Ontario New Home Warranties Plan Act and is not registered under that Act; or

(c) the application therefor is incomplete or any fees due are unpaid."

Section 15 of the Act is as follows:

"15.-(1) Any person who considers himself aggrieved by an order given or decision made by an inspector or chief official under this Act or the regulations may, within twenty days after the order or decision is made, apply to the judge of the county or district court for a hearing and appeal.

…….

(3) Where an application is made to a judge for a hearing under subsection (1), the judge shall appoint a time for and hold the hearing and may rescind or affirm the order or decision of the inspector or chief official or take such action as the judge considers the inspector or chief official ought to take in accordance with this Act and the regulations, and for such purposes the judge may substitute his opinion for that of the inspector or chief official."

The above section refers to a "hearing and appeal". It is obvious that the proceeding under s. 15 cannot be an appeal in the ordinary sense. Presumably it might take the form of a trial de novo with viva voce evidence falling within the term "hearing". However, counsel have agreed that the appeal should be disposed of on the basis of certain affidavits filed by both parties with the exhibits thereto, together with the transcripts of the cross-examination of the deponents, Mr. Humm and Mr. John David Baskerville, an officer of the appellant.

The facts are not in dispute substantially and may be set forth chronologically as follows:

The Town of Oakville, being the owner of certain lands, registered a subdivision plan thereof as No. M-14.

On October 24, 1959, by transfer, registered No. 6179, the town conveyed to Roy Irwin part of Lot 3, Plan M-14, designated as Pt. 4 on Reference Plan H.R. 79. Subsequently, a further reference plan, 20R 5017, was deposited, dividing part 4 into parts 1 and 2. Part 2 is the property in question here. The lands in question in these proceedings are known municipally as 407 Iroquois Shore Road. The conveyance to Irwin was subject to certain restrictions as to use which it was stipulated would run with the land for a period of 25 years from June 1, 1966, for the benefit of other lands of the municipality described therein. These restrictions are such as would prevent the use of the lands for a restaurant. In particular, Covenant 9 provided that no part of any lot shall be used except for an industrial purpose.

By transfer No. 9655 on November 25, 1970, Irwin reconveyed to the town all the lands transferred by 6179, supra

On October 20, 1971, by transfer 14285 the town transferred the same lands, namely, part of Lot 3, Plan M-14, designated as Pt. 4, Plan H.R. 79, together with other adjoining lands being parts of 5 and 6, Plan H.R. 79, to the Orlando Realty Corporation Limited. The conveyance of Lot 3, Plan M-14, was made "subject to the covenants as set out in Sched. 'A' hereto". Schedule "A" sets out substantially the same uses as were restricted by the covenants in 6179, including the provision that "no part of the said lands may be used except for industrial purposes". There is no provision that the covenant shall run with the lands nor is there any reference to or description of lands to be benefitted thereby. Furthermore, the transfer document was not executed by the transferee.

It appears by notice registered as No. 14286 that there was an agreement attached thereto dated October 22, 1971, between Orlando and the town but the contents of that agreement are not disclosed in the material before me. On December 29, 1971, Orlando transferred its lands as above to Blechman (1971) Ltd. The transfer was not made subject to restrictive covenants.

An application was made on August 5, 1977, by Blechman (1971) Ltd. to the land division committee to mortgage a portion of its lands, which include the subject property, to RoyNat. The application was assigned No. B802-77 by the land division committee and on September 13, 1977, at its meeting, the committee granted the application subject to the following conditions:

"1. The applicant enter into a site plan agreement with

the Town of Oakville on the parcel separated.

2. Payment of all outstanding taxes."

On September 28, 1977, Blechman agreed in writing with the town on behalf of itself, its successors and assigns, to be bound by the covenants contained in the transfer to Orlando, registered No. 14285. The agreement recited the decision of the land division committee, the transfer by the town to Orlando by instrument No. 14285, subject to certain conditions, one of which was that if the owner of it builds on the lands it will have its site plan first approved by the town and lastly it recited that Blechman had purchased the lands from Orlando subject to those conditions.

On November 1, 1977, Blechman mortgaged to RoyNat. The certificate of the land division committee showing its consent dated December 1977 is stamped thereon. The mortgage was registered on January 11, 1978.

On November 7, 1977, notice of the agreement between Blechman and the town, above-mentioned, was registered as No. 103138.

On February 19, 1980, the municipality enacted a by-law pursuant to s. 35a (en. 1973, c. 168, s. 10; re-en. 1979, c. 59, s. 1] of the Planning Act, R.S.O. 1970, c. 349, designating the whole of the Town of Oakville as a site control area.

Blechman (1971) Ltd. applied to the land division committee further to consent to a conveyance of pt. 2, Reference Plan 20R5017 and on June 17, 1980, this consent
was given.

On the same date, namely, June 17, 1980, Blechman (1971) Ltd. applied to the town for an amendment to the zoning by-law to permit the construction on the lands of a "quality family dining facility". The lands at that time were zoned for industrial use only.

On September 8, 1980, the appellant leased the lands from Blechman (1971) Ltd. The lease contains a report on title wherein the landlord represents that it has good title subject to certain building restrictions set out in Sched. "C", which appear to be the identical restrictions contained in the deed to Orlando, supra. By the terms of the lease the lessee accepts such restrictions. However, there is an express provision for the right to terminate on or before January 1, , if the lessee fails to obtain permits and further on 30 day's notice if the operation of the restaurant on the premises is presented by reason of matters beyond control of the tenant.

Some time after the execution of the above lease, the appellant took over and assumed responsibility for the application to re-zone the above-mentioned.

On April 16, 1981, Blechman (1971) Ltd. conveyed the lands to 433425 Ont. Inc. with the consent of the land division committee. The material before me shows that the president of Blechman (1971) Ltd. is president and sole officer and director of the numbered company and that the appellant continues to make rent payments to Blechman (1971) Ltd.

On October 5, 1981, the council of Oakville rejected the application to re-zone and on November 16, 1981, McDonald's appealed that decision to the Ontario Municipal Board. After a hearing occupying eight days in July 1982, the Ontario Municipal Board on October 29, 1982, allowed the appeal and ordered the town to enact an amendment to the zoning by-law to permit the location of a restaurant on the lands in question. In its reasons reported (1982), 14 O.M.B.R. 184, the Board found that the re-zoning application did in fact conform to the then existing and approved official plan although not with the existing zoning legislation. A new official plan with which use o f the lands for a restaurant would be inconsistent had been recommended to council in October, 1981, by the planning and development committee and adopted by resolution of council but not by-law. The Board found that this unapproved official plan did not have any status. The decision of the Board as reported shows that counsel for McDonald's argued that the Board's decision should not be fettered by the existence of certain restrictive covenants alleged "and that the matter of the covenants would be dealt with at the building permit stage". The Board concluded that it would have no regard to restrictive covenants and said at pp. 192-93 [O.M.B.R.]:

> "The board believes that the right of any person to approach the board through legislation should not be frustrated by private agreements. The board will decide the appeal on its merits and the action to [be] taken subsequently, if at all, in regard to covenants or

agreements is at the discretion of the appellant and shall not affect the board in its consideration of the evidence and argument supporting the matter before it."

Subsequent to the decision of the Board, the town petitioned the Lieutenant Governor in Council on November 23, 1982. On April 21, 1983, the Lieutenant Governor in Council confirmed the decision of the Ontario Municipal Board.

Thereafter the appellant applied for site plan approval pursuant to the by-law enacted by council under s. 35a of the Planning Act. There was an appearance before the site plan committee of council on June 16, 1983. In the month of June also McDonald's applied to the town council for a waiver or removal of restrictive covenants against the lands.

On July 4, 1983, a site plan agreement was entered into between McDonald's and the town, executed by both parties. It recites that McDonald's (referred to as the owner of a leasehold interest) had applied for an amendment to the zoning by-law to permit a restaurant and that the town "considers the owner's request to be in the public interest provided certain conditions as herein set out are complied with". On July 5, 1983, the council enacted By-Law 1983-95 amending the zoning legislation to permit the location of a restaurant on the site in question, pursuant to the order of the Ontario Municipal Board.

On that same day, presumably after passage of the above by-law as would appear from the numbering sequence, council enacted By-law 1983-114 adopting a proposed new official plan under which, if implemented, a restaurant location at the site in question would not be permitted.

On July 11, 1983, the site plan committee of council approved the site plan submitted by McDonald's.

On July 15, 1983, McDonald's applied for a building permit.

On August 2, 1983, the town council denied McDonald's request to remove or waive restrictive covenants. The minutes of council on that date showed that it had approved the report of the Committee of the Whole, which had recommended that:

> "1. The Director of Buildings be directed not to issue a building permit, subject to such legal advice as he may receive. And
> 2. That McDonald's be advised that the Town intends to resist the subject restaurant based upon the restrictive covenants."

Thereafter, a representative of the appellant spoke to the chief building official on a number of occasions asking that the building permit be issued and finally on August 30, 1983, their solicitor by letter demanded the issue of the permit. It appears that on September 7 and 8, 1983, there was further discussion between Mr. Humm and Mr. Baskerville.

On September 12, 1983, Mr. Humm wrote a letter to the appellant in answer to a letter of September 8 in which he said:

> "In response to your letter dated September 8th, 1983, and further to our recent telephone conversation in which I indicated that I would be refusing to issue your building permit, I wish to advise you that, having now received legal advice, I shall not be making a decision respecting your application at this time."

On October 5, 1983, counsel for the appellant requested the Minister of Municipal Affairs to refer the designation of lands known as 407 Iroquois Shore Road in the proposed official plan to the Ontario Municipal Board for a hearing pursuant to s. 15(1) of the Planning Act, R.S.O. 1980, c. 379.

The issues which arise in this matter may be summarized as follows:

1. Is the appellant, not being the owner of lands in the usual sense, entitled to apply for a building permit?

(1) I may dispose of this issue immediately. Section 5 of the Building Code Act provides that no person shall construct a building unless a permit has been issued by the chief building official. Section 6 then, as above noted, provides for the issuance of such a permit by the chief building official. The Act does not otherwise limit persons who may construct buildings or who may receive permits and it would seem that the person who wishes to obtain a permit need have no ownership in the lands whatever. In any event, the appellant is the owner of a leasehold interest in the lands under a long-term lease.

(2) Section 15(1) permits any person aggrieved by "an order given or decision made" by a chief official to apply for a hearing and appeal. An issue arises in this connection from the submission of counsel for the respondent that the Chief Official has not given any order or made a decision to give status to the appellant.

(3) Counsel are agreed that paras. (b) and (c) of s. 6(1) of the Building Code Act are not relevant and further that with respect to para. (a) the proposed building complies with the Act, the building code and regulations to the extent that the permit would issue except for other factors. The issue therefore under this heading is, will the proposed building contravene any other "applicable law"?

(4) The last issue is: Are the respondents entitled to have an adjournment sine die which they seek as an alternative to dismissal of the appeal?

The first issue has been dealt with. The other issues will be examined.

2. The issue as to "decision":

It is submitted by counsel for the respondent that the official position taken by the chief building official with respect to the application for a permit is contained in his letter of September 12, 1983, in which he states in part that he "will not be making a decision at this time".

The word "decision" is defined in the Shorter Oxford Dictionary as "the making up of one's mind".

On his cross-examination Mr. Humm said that he first took a role in the processing of the application when he became aware of some resistance of council to the application. He had received a memorandum from the clerk setting forth the minutes of council of August 2nd which conveyed to him the position council was taking. Although he did not say he was bound to follow the direction of council, it appears to me from his answers that it is customary for council to give instructions to chief building officials and that he was very considerably influenced by those instructions in refusing the permit. Although council said that their direction was subject to the advice of counsel, in the last part of the recommendation which was forwarded to Mr. Humm, council indicated their unqualified opposition to the desire of McDonald's to locate a restaurant at the site.

On September 7, Mr. Humm stated in cross-examination that he had been visited by Mr. Baskerville and at that time he had told Mr. Baskerville that he was going to refuse the permit and would put his refusal in writing. Mr. Baskerville then composed a letter to Mr. Humm which he read to him over the telephone, asking at that time if Mr. Humm's response was ready. Mr. Humm said he wanted to review the material. Mr. Baskerville then delivered the letter to him on September 8th, and on September 12th Mr. Humm replied as above set forth. The conversation of September 8th and the letter of September 12th together may suggest that, having made up his mind on September 7th, Mr. Humm was now reversing his decision or was in some doubt about the matter. However, the contents of his affidavit sworn on September 30, 1983, and his answers in cross-examination lead me to conclude that in fact he had no thought of changing his mind and that the letter of September 12th was an attempt to delay matters. In his affidavit, referred to, he said in para. 3:

> "A building permit was not issued at the time of the applicant's request because I considered the application to fall within section 6(1)(a) of the Building Code Act, R.S.O. 1980, c. 51 (hereinafter called the Act). I am of the same opinion today."

He did not say at any time in his cross-examination that he had changed his mind or had any doubt as to the original reasons which motivated him to state, as he did on September 7th, that he would not be issuing the permit. On p. 27 of his cross-examination, Q. 136 is as follows:

> "136 Q. Perhaps we had better discuss that. Is It not in fact the case that you have decided not to issue a permit and you simply won't say so because you have been advised not to say so by somebody?
>
> A. That would be correct."

There Is no requirement that the decision be in writing or in any special form. Obviously, of course, it cannot be subjective and must be communicated in some manner.

I conclude that a decision was made on September 7th and that it still remains unretracted and unchanged giving foundation to these proceedings.

The notice of appeal referred to the decision not to issue the permit as having been made on September 12th. That letter, as indicated, refers to the refusal in a previous conversation which in fact occurred on September 7th. The whole matter was covered in the cross-examination of both parties and it does not seem to me that the respondents have been misled or prejudiced by a failure on the part of the appellant to define the refusal more accurately in the notice of appeal.

There is no suggestion by counsel for the respondent that the appeal was not launched in time by an application to a Judge within the 20 days stipulated by s. 15 assuming that the decision had been communicated as above indicated on September 7th. The notice of appeal is dated September 22, 1983, and appears to have been filed on September 23rd.

3. The issue as to "applicable law":

This issue arises from the position taken by the respondent that there are building restrictions which run with the land or are otherwise applicable and prevent the use of the land for a restaurant.

In Axelrod v. Toronto (1981), 15 M.P.L.R. 143, it was held that the phrase "applicable law" encompasses zoning legislation and in Woodglen & Co. v. North York (1983), 42 O.R. (2d) 385, 23 M.P.L.R. 13, 149 D.L.R.

(3d) 186 (Ont. Div. Ct.), Eberle J., in the Divisional Court, said that "zoning matters" must be considered. He referred to the Axelrod case and in my interpretation intended by the phrase "zoning matters" to include zoning legislation only.

The council of the Town of Oakville having passed a zoning amendment by-law at the direction of the Ontario Municipal Board, as above noted, it is clear that at the present time there is no zoning legislation in existence which prevents the use of the lands as a restaurant. Mr. Humm referred to the unapproved official plan as one of the factors which he had taken into consideration but counsel for the respondent now agree that that plan although adopted by council, does not come within the phrase "applicable law".

With respect to the restrictive covenants contained in Registered Transfer No. 6179 and the conveyance to Orlando, even if they be valid and binding on the present owners and the appellant, they do not, in my opinion, constitute "law" within the meaning of s. 6(1)(a). Agreements bind the parties thereto with respect to defined conduct as between themselves, enforceable by law at their instance, but such rules of conduct flow from the consent and agreement of the parties and certain factors may vitiate the consent and render them unenforceable, or their enforcement may be precluded by waiver or estoppel. The meaning of "law" must be related to the purpose of the section and it could hardly have been intended that the chief building official should judge the validity and binding effects of private agreements even though the town may be a party thereto. Apart from that conclusion, it does not appear to me that the covenants in 6179 would now be effective since a merger has resulted from the reconveyance of the lands from Irwin to the town. Merger has
related to what would normally be thought of as site planning. This conclusion is reinforced by the circumstances surrounding the imposition of the condition by the land division committee. It appears that the committee was aware not only that the land was regulated as to use by a zoning by-law but also had been advised by the report submitted to it that there were building restrictions. In particular, the planner of the Town of Oakville referring to the zoning by-law which restricted the use of the land to industrial use, said in his report that any industrial development in the conveyed parcel should be subject to site plan control and recommended approval on that basis. It seems quite unreasonable to suppose that the land division committee in the light of that advice would have intended to stipulate as a condition the entering into an agreement which controlled use as well as site planning and especially without detailing particulars as to what uses were to be controlled.

The conclusion to be reached, therefore, is that, although some of the agreement falls within the scope of the condition imposed, the rest of it does not. It follows that s. 29, subs. 12a, can be effective, if at all, only to the extent of rendering the agreement binding on succeeding owners with respect to that portion of the agreement which complied with or satisfied the condition imposed. That portion of the agreement, however, is irrelevant to the building permit and in any event would seem to have been supplanted as far as McDonald's is concerned by a new site plan agreement which has been entered into with the town.

Before leaving the three agreements above considered, all of which contain restrictions which would prohibit a restaurant, it is necessary to consider by-laws enacted by the town pursuant to s. 5, subs. 2 of the Building Code Act.

That section provides as follows:

> "Section 5
>
> (2) The council of a municipality may pass by-laws and the Lieutenant Governor in Council may make regulations applicable in the area In which the municipality or Ontario, respectively, has jurisdiction for the enforcement of this Act,
>
> …….
>
> (b) providing for applications for permits and requiring the applications to be accompanied by such plans, specifications, documents and other information as is prescribed;
>
> ……
>
> (f) prescribing forms respecting permits and applications for permits and providing for their use."

Pursuant to the power given by that section, the town passed By-law 1976-178 which prescribed a form of application for a building permit. Subsequently, on December 12, 1977, the council passed By-law 1977-139 amending the form of application so that the second opening paragraph of the prescribed application form reads as follows:

> "The undersigned hereby applies for a permit to do the above-noted work in accordance with this application and approved materials submitted with it and agrees to comply with the Building Code Act, 1974, its regulations, Town of Oakville by-laws and any agreement with the Town applicable to the subject lands."

It is contended by the respondents that the building, if proceeded with, will contravene the agreement of the applicant as contained in the above quotation which, it is submitted, presumably encompasses all the agreements which have been referred to and are applicable to the subject lands. It is argued further that since the form of the application has the force of legislation, having been prescribed by the by-law which council had authority to pass, it becomes "applicable law" which must be considered. In my opinion, there are a number of reasons why that argument cannot succeed.

In my view, s. 5(2) of the Building Code Act which gives power to council to enact by-laws as to the application forms should not be construed to allow council to extend its authority in effect by compelling the applicant to agree to do anything. The term "application" does not encompass in its natural meaning, in my opinion, an agreement by the applicant. On that basis, to the extent the by-law requires an agreement by the applicant, it is ultra vires. But even if It be regarded as an attempt to bind the applicant by agreement, in my opinion, it fails on the ground of a vagueness or uncertainty as to its meaning and also for lack of consideration. In addition, if It is to be given any meaning, In my opinion, It would be limited in its application to any agreement, which had been entered into by the applicant with the town.

I conclude, therefore, that none of the agreements referred to, containing restrictions on the use of the lands, should be considered as "applicable law" within the meaning of s. 6(1)(a). It should be added that, in my opinion, the resolution of council directing Mr. Humm not to issue the building permit is of no significance other than it tends to corroborate that the chief building official had made a decision to refuse the permit and had no intention of departing therefrom. Reference has been made to Re David Gallo Bldg. Co. and Toronto, (1973] 3 O.R. 892, 38 D.L.R. (3d) 536 where at pp. 543-44 Wright J. said as follows:

> "I have already said in R. v. City of Toronto (1971] 1 O.R. 451 at 454, 15 D.L.R. (3d) 553 at 556, that once a City Council has passed a by-law 'its employees are bound to do the business of the city, when they have a discretion to exercise, in accordance with the by-law, even if the by-law has not passed the Municipal Board'. But this can be asserted more broadly and can be extended to the duty of civic employees to conform to the declared intention or policy of Council, and of course to the normal obedience to direction that every employee, in the course of his duties, owes to his employer. In this case, once Council had expressed its intention to enact the by-law and had set in motion the machinery to do this, civic officials were bound to act accordingly. In acting as they did, they only did their bounden duty, in the circumstances."

It must be noted that this decision preceded the enactment of the Building Code Act, prior to which the issuance of a building permit lay within the power of the municipal council to control by by-law. The situation is now considerably changed by reason of the imperative obligation placed on the chief building official by the Act itself to issue a building permit except in certain circumstances. Furthermore, it appears that the principle expressed by Wright J. as to the obligation of employees is qualified by his words: "when they have a discretion to exercise". The issuance of the building permit by the chief building official under s. 6 clearly is not discretionary.

4. The issue as to adjournment:

The respondent seeks adjournment sine die of this appeal for the purpose, one assumes, of providing an opportunity to the town to have the official plan approved and thereafter to implement it by by-law so as to prevent the building which the appellant proposes.

Prior to the enactment of the Building Code Act in 1974, a person refused a building permit had no remedy other than an application for a mandamus by way of a prerogative writ.

In Hammond v. Hamilton, [1954] O.R. 209, (19541 2 D.L.R. 604 (C.A.), which was an appeal from an order adjourning sine die an application for a mandamus, Roach J.A., said at p. 216 (O.R.]:

> "Since the decision in Cridland v. City of Toronto a practice has been developing, which unless confined to very definite and limited circumstances threatens to make the Courts the medium through which legal rights may be denied. The practice to which I refer is the practice of adjourning a motion for a mandamus, with the result that when the motion eventually comes on for hearing the applicant finds himself faced with a restrictive by-law which has been enacted in the interim."

Although Roach J.A. said at p. 221 that "the judge before whom an application is made for a mandamus such as was sought by the appellants unquestionably has a discretion to adjourn the application." Earlier in the judgment, at p. 215, he said:

> "It is fundamental that in any well-organized system of jurisprudence the law should be certain and every person subject to that system should be able at any time to determine what his legal rights are and

be entitled to them."

and further indicated a general concern with adjournment for these purposes in a discussion with counsel reported at p. 211, as follows:

> "(Roach, J.A.: Would it not be a legal scandal if a Court, asked to determine the rights of parties as of a particular date, merely adjourned the matter because those rights might be changed by a by-law not yet passed? If that were to be done frequently citizens would never know what their present rights were.]"

Roach J.A. stipulated certain minimum requirements for the exercise of the discretion to adjourn on a mandamus application and these were substantially approved in Ottawa v. Boyd Bldrs. Ltd. (1965] S.C.R. 408, 50 D.L.R. (2d) 704. That was an appeal from the judgment of the Court of Appeal of Ontario which had allowed an appeal from the order of Schatz J., adjourning the hearing of a mandamus application pending the hearing of an application for approval of a by-law by the Municipal Board. Spence J. said at p. 705 (D.L.R.]:

> "An owner has a prima facie right to utilize his own property in whatever manner he deems fit subject only to the rights of surrounding owners, e.g., nuisance, etc. This prima facie right may be defeated or superseded by rezoning if three prerequisites are established by the municipality, (a) a clear intent to restrict or zone existing before the application by the owner for a building permit, (b) that council has proceeded in good faith, and (c) that council has proceeded with dispatch."

If read alone, those words may appear to suggest that a mandamus application might be dismissed if the prerequisites of which Spence J. spoke, existed. But in the context the prerequisites are tests only as to the exercise on a mandamus application of the Court's discretion to adjourn. In Re Cambridge Leaseholds Ltd. and Toronto, [1973] 3 O.R. 378, 37 D.L.R. (3d) 43 (Div. Ct.) the headnote correctly summarizes the judgment of Wright J. in this respect as follows:

> "Considerations of good faith, dispatch and clear intent to rezone prior to the application for the permit were relevant to the question of whether mandamus proceedings should be adjourned and not to the question of the right to a permit".

Counsel for the respondent submits that this hearing and appeal may be adjourned sine die applying the tests established in the Boyd case and in support thereof cites the judgment in Woodglen & Co. v. North York [now reported (1983), 42 O.R. (2d) 385, 23 M.P.L.R. 13, 149 D.L.R. (3d) 186 (Div. Ct.)] where it was held on an appeal under s. 15 of the Building Code Act, similar to the present appeal, that the Court had jurisdiction to adjourn the appeal for the purpose of allowing the municipality to perfect legislation, applying the Boyd "tests", although in the circumstances, the Court concluded that the municipality had not discharged the onus of showing the existence of those prerequisites.

With the greatest respect, I am not able to reach the conclusion that there is any discretion in an appeal under s. 15 to adjourn the hearing in order that the town may have an opportunity to validate legislation which will prevent the construction desired, when as the legislation stands at present, as I have found, the appellant has a legal right to a building permit. The Court, of course, has the right to adjourn or postpone the hearing under s. 15 on the usual grounds of fairness but the adjournment sought by the respondent here cannot be justified on that basis and would amount to a denial of the appellant's existing and positive legal right to have a building permit pursuant to s. 6.

The practice referred to by Roach J.A., supra, which has developed with respect to motions for mandamus in similar circumstances, can be understood, it would seem, only as an aspect of the discretion which is inherent in the jurisdiction of the superior Courts on such a motion. The remedy of mandamus by way of prerogative writ from earliest times was discretionary and not as of right or ex debito justiciae. That discretion is expressly continued in the Judicial Review Procedure Act. In R. v. All Saints, Wigan (Churchwardens) (1876), 1 App. Cas. 611 at 620 (H.L.) Lord Chelmsford said:

> "A writ of mandamus is a prerogative writ and not a writ of right, and is in this sense in the discretion of the Court whether it shall be granted or not."

In Re Burgin and King, (1973 1 3 O.R. 174, 36 D.L.R. (3d) 198 (Div. Ct.), Fraser J.A. at p. 177 quoted from the judgment of the Supreme Court of Canada in Rodd v. Essex (1910), 44 **SOCOR.** 137 at 143, with respect to the remedy of mandamus as follows:

> "Moreover, notwithstanding that an applicant may have made out a case of strict legal right, in the exercise of its discretionary power the court will consider his motives, and if not convinced of their propriety, will withhold relief."

In Homex Realty & Dev, Co. v. Village of Wyoming, (1980] 2 S.C.R. 1011 13 M.P.L.R. 234 at 256, 116 D.L.R. (3d), 1, 33 N.R. 475, Estey J., dealing with prerogative writs generally quoted from Wade on Administrative Law (4th ed., 1977) where the author describes certorari and other prerogative writs (at p. 560) as:

" discretionary and the court may therefore withhold them if it thinks fit"

and further (p. 257 M.P.L.R.1:

> "The discretion to withhold remedies against unlawful action may make inroads upon the rule of law, and must therefore be exercised with the greatest care. In any normal case the remedy accompanies the right."

As explained by Roach J.A., in Hammond v. Hamilton, supra, the Privy Council held in Toronto v. Toronto R.C. Sep. Schools Trustees, [1926] A.C. 81, 3 D.L.R. 880 (P.C.), that the legal right of a person to use his property as he sees fit and to have a building permit is to be judged as of the date of the hearing and is not in effect stabilized as of the date of the application for the permit. It would seem that to hold otherwise would be to preclude the council from legislating with respect to the subject.

But no rationale is clearly set forth in any of the cases as to why the discretion of the Court on a mandamus application should be exercised in favour of an adjournment which has the effect, as Roach J.A. stated, of denying legal rights. Rose C.J.H.C. made some approach to a basis for the adjournment in Re Robertson and Toronto, [1934] O.W.N. 429 at 431 (H.C.) where he said:

> "I think it would be unseemly that when the matter is so soon in the ordinary course to be considered by council, the Court should do something which would prevent the exercise by the Council of the power that has been entrusted to it".

It seems to me important to note with respect to those words that when they were spoken municipal councils had the right to make provision by by-law as to the issue of building permits and as has been noted above the situation may now be regarded as having been substantially changed by the enactment of the Building Code Act and in particular s. 6 thereof.

In any event, the appeal under s. 15 of the Building Code Act is not an application for a mandamus by way of prerogative writ or a motion in the nature of such under the Judicial Review Procedure Act and in the absence of an y provision giving to the Judge a discretion to deny the legal right of the appellant or to exercise a discretion in that respect, as the Legislature saw fit to do expressly in the Judicial Review Procedure Act, no such power exists in my opinion. It would be somewhat incongruous considering the mandatory provisions of s. 6 that, on an appeal given by the me Act to a person aggrieved by a refusal under s. 6, the appellant would be met with an adjournment which would have the effect of defeating his legal right by allowing the criteria in s. 6 to be altered by subsequent legislation.

The powers of the Judge on this appeal pursuant to s. 15 are to rescind or affirm the order or decision of the chief building official or to take such action as the Judge considers the chief official "ought to take in accordance with the Act". The words quoted, employing the present tense, in my opinion mean simply that the Judge should have regard to what the chief official should do under s. 6 having in mind the present state of the legislation. The use of the present tense, in effect, incorporates the principle established by the Privy Council in Toronto v. Toronto R.C. Sep. School Trustees, supra, that the right of the applicant is to be judged as of the date of the hearing.

The last part of s. 15(3) giving the Judge the right to substitute his opinion for that of the chief official is qualified by the words "for such purposes" and in my opinion give no discretion to go beyond the specific powers detailed.

It is submitted by counsel for the respondent that the use of the word "may" in s. 15 confers a discretion. In my opinion that word is "enabling" and gives no right except to choose among the particular courses which the Judge may follow. A quotation from MacDougall v. Paterson (1851), 11 C.B. 755 at 773, 138 E.R. 672, appears to contain the principle which may be applied:

> When a statute confers an authority to do a judicial act in a certain case, it is imperative on those so authorized, to exercise the authority when the case arises, and its exercise is duly applied for by a party interested, and having the right to make the application.
>
> For these reasons, we are of opinion, that the word 'may' is not used to give a discretion, but to confer a power upon the court and judges; and that the exercise of such power depends, not upon the discretion of the court or judge but upon the proof of the particular case out of which such power arises."

It seemed to me during the course of the argument in this matter that

the need to confine the powers of the Judge to what is expressly given by s. 15 is strengthened by the fact that the appeal is to "the Judge" of the Court and not to the County Court, but counsel for the appellant has not so argued.

Reference is made by counsel for the respondent to s. 33 of the County Courts Act which reads as follows:

> "33. Where in any Act an appeal to the County Court is provided for, the county court has the same powers upon the hearing and disposition of the appeal as the Court of Appeal has under the Judicature Act in civil matters, subject to any express provision in the Act that provides for the appeal."

It is submitted that this gives the Court on this appeal a broader jurisdiction than is implied or stated in s. 15. In my opinion, however, the qualifying words "subject to any express provision in the Act that provides for the appeal" limits the powers on an appeal under s. 15 to those which are set out in s. 15.

Counsel for the respondents refers also to sections of the County Courts Act and the Judicature Act which provide that the Court shall give effect to all equitable defences and rights. It is not clear to me, however, what circumstances in this matter attract equitable jurisdiction. The appellant does not claim any equitable relief and cannot therefore be met with the maxim "that those who seek equity must do equity" or that "he who comes into equity must come with clean hands." With respect to the allegation of binding restricting covenants there may be some waiver or estoppel as between the appellant and Blechman (1971) Ltd. but the appellant's right in this matter cannot be affected thereby. Nor, in my opinion, is there an estoppel of McDonald's in this appeal resulting from their having applied to the council for a waiver of building restrictions.

It should be stated that mandamus in the sense in which it has been properly claimed in matters of this kind heretofore, it not an equitable remedy but as pointed out above is an extraordinary remedy by way of prerogative writ which issued out of the King's Bench. The confusion which exists with respect to the use of the term "mandamus" is explained in Rich v. Melancthon Bd. of Health (1912), 26 O.L.R. 48, 2 D.L.R. 866 (C.A.).

In Woodglen & Co. v. North York, supra, Eberle J. said in declining to exercise jurisdiction on an application for a mandamus at p. 17 [M.P.L.R.J:

> "It is, therefore, my conclusion that the applicant had a right of appeal under s. 15; a right of appeal which was probably more expeditious than proceeding by way of judicial review and a right of appeal which was broader in scope and on the whole, more effective, than proceeding by way of judicial review."

later at p. 17 he referred to the remedy under s. 15:

> "Which is equally, if not more convenient, expeditious, beneficial and effective".

In my opinion Eberle J. was referring to s. 15 as a remedy from the point of view of an appellant only and was not adverting in any sense to the matter of adjournment sine die for the purpose which the respondent has in mind.

It should be added that in some applications for a mandamus the Court has used the word "equities" and this has been referred to by counsel for the respondent. In my opinion, the use of that word refers to certain aspects of fairness and justice and has no relationship to equity as a body of law formerly in the jurisdiction of the Court of Chancery.

I conclude, therefore, that there is no principle of equity, as that term is used in the Judicature Act and the County Courts Act, which is applicable in the present circumstances.

For these reasons this appeal is allowed and I find that the chief building official ought to issue the building permit applied for. An order will go, therefore, to that effect.

In the circumstances the appellant will have its costs. It appears to me that it was not necessary to join the Town of Oakville as a party to these proceedings but that was done on the application of the respondent and I see no reason therefore why the costs should not be awarded against both respondents.

Appeal allowed.

Re **McLear and Mason** et al.

65 O.R. (2d) 228
[1988] O.J. No. 1057

ONTARIO
High Court of Justice
Sutherland J.
July 12, 1988.

APPLICATION for an order declaring that the use of certain lands was contrary to a zoning by-law and for ancillary relief.

Chris J. Tzekas, for applicant.

Peter J. Johnson, for respondent, Wayne D. Mason.

John C.L. Ritchie, for respondent, Township of Tecumseth.

SUTHERLAND J.:-- The applicant is the owner of a 10-acre parcel of land (the "McLear Lands") in the Township of Tecumseth, in the County of Simcoe, and he brings this application under rule 14.05(3)(d) and (g) of the Rules of Civil Procedure, and s. 327 of the Municipal Act, R.S.O. 1980, c. 320, in respect of the use by the respondent Mason of an adjacent 24-acre parcel (the "Mason Lands") as a used-automobile storage and salvage yard.

The applicant submits that that use of the Mason Lands contravenes restricted area (zoning) By-law No. 81-37 (the "Zoning By-Law") of the Township of Tecumseth (the "Township"), and that the Township has failed to enforce the Zoning By-law despite many requests by him that it do so.

The applicant seeks an order:

(a) declaring that the use of the Mason Lands as an automobile storage and salvage yard is contrary to the Zoning By-law;

(b) declaring that such use is not a permitted use or a prior non-conforming use under the Zoning By-law;

(c) restraining such use of the Mason Lands, and

(d) awarding costs to the applicant on a solicitor-and-client basis.

The right of the applicant to apply for a restraining order is conferred by s. 327 of the Municipal Act, which section states as follows:

> 327. Where any by-law of a municipality or of a local board thereof, passed under the authority of this or any other general or special Act, is contravened, in addition to any other remedy and to any penalty improved by the by-law, such contravention may be restrained by an action at the instance of a ratepayer or the corporation or local board.

(Emphasis added.)

The respondent Township was represented at the hearing and through its counsel expressed views on the substantive issues of the application, but appeared to be primarily concerned to avoid any liability for costs and to recover its own costs from the applicant. The Township contended that under s. 327 of the Municipal Act it was not a necessary party to the application and so should have its costs. It was also stated on behalf of the Township that if the Zoning By-law was interpreted to mean that the use of the Mason Lands contravenes its provisions, the Township would co-operate with the applicant if he wished to have it launch a prosecution under the Zoning By-law.

Jurisdiction of the court

As a preliminary matter it was submitted on behalf of the Township that, as the facts necessary to dispose of the application had not been agreed to, the court ought not to, or was not entitled to, take jurisdiction. The submission was that the application to be successful requires the court to find as a fact that the Mason automobile storage and salvaging operation was an unlawful use at the time the Zoning By-law was enacted because it was an unlawful use under a prior by-law,

i.e., By-law No. 73-7, in force when the Zoning By-law came into effect, and that, there being a dispute as to that "fact" the court ought not to entertain the question on an application under rule 14.05(3)(d) or (g). The Township cites in support of its position the decision of Scott D.C.J. in, Re Reitzel and Rej-Cap Manufacturing Ltd. (1985), 53 O.R. (2d) 116, 7 C.P.C. (2d) 77, 38 R.P.R. 254, on an application pursuant to rule 14.05(3)(d), where the court referred to the decision of Van Camp J. in Anglo Canadian Fire & General Ins. Co. v. Robert E. Cook Ltd., [1973] 2 O.R. (2d) 385, to the effect that on a motion under a predecessor of rule 14.05(3), the court would not render any decision upon the construction of a document where, because of disputed issues of fact between the parties, the decision on the construction issue would not effectively dispose of the litigation between the parties.

With respect, that is not this case. In this case, as was found to be the case in the Reitzel decision itself, there is substantial agreement as to the underlying facts. With respect, while an interpretation of the Zoning By-law, one way or the other, could later be described as a "fact", the question to be decided on the interpretation of the Zoning By-law is a question of law and not a question of fact. And there are on this application sufficient agreed or readily and properly to be found facts to serve as a basis and background for the interpretation or construction of the relevant Zoning By-law provision as a question of law.

Accordingly the questions of whether this court has jurisdiction to, and should exercise jurisdiction to, interpret the relevant provisions of the Zoning By-law are answered in the affirmative.

The question of whether the Township should have been made a defendant, and the related question of costs, will be dealt with below.

Issue

The issue on this application is whether the use of the Mason Lands as a used-automobile storage and wrecking yard is contrary to the provisions of the Zoning By-law. As the lands are zoned for general agricultural use, and as the operation of a used-automobile storage and salvage yard is not an agricultural use under the terms of the by-law, the issue resolves itself into the question of whether such a non-conforming use is a permitted use under the Zoning By-law.

The only relevant exceptions to the use restrictions under the Zoning By-law are those found (i) in para. 5.5(a) (non-conforming uses), and (ii) in para. 6.2(b) (uses existing at the date of the passing of the Zoning By-law).

The first category of exceptions reflects the familiar concept of a lawful prior non-conforming use found in s. 39(9)(a) of the Planning Act, 1983, S.O. 1983, c. 1, and in predecessors of that provision. Paragraph 5.5(a) of the Zoning By-law is as follows:

5.5 Non-Conforming Uses

a) Continuation of Existing Uses

The provisions of this By-law shall not apply to prevent the use of any lot, building or structure for any purpose prohibited by this By-law if such building or structure was lawfully used for such purpose on the day of passing this By-law, so long as it continues to be used for that purpose.

(Emphasis added.) Under that provision if the Mason Lands had been lawfully used as a used-automobile storage and salvage yard immediately prior to the enactment of the Zoning By-law in October, 1981, such use would have been "grandfathered" and allowed to continue. It is, however, common ground that para. 5.5(a) does not exempt the present use of the Mason Lands, because immediately prior to the enactment of the Zoning By-law that use was not a lawful use. It was contrary to By-law No. 73-7 of the Township, a by-law passed pursuant to the Municipal Act, R.S.O. 1970, c. 284, in 1973 that prohibited the use of any land or structures in the Township of Tecumseth, "for storing used motor vehicles for the purpose of wrecking or dismantling them or salvaging parts thereof for sale or other disposal". The by-law exempted any person who was operating such a yard under a licence previously issued to him.

By-law No. 73-7 was in effect on October 14, 1981, when the Zoning By-law was enacted. At that time a used-automobile storage and salvage yard was being operated by Mason on the Mason Lands but no licence to do so had been issued to Mason under By-law No. 73-7, or a predecessor thereof. It is clear, and it is common ground, that Mason's use of the Mason Lands is not a non-conforming use within the para. 5.5(a) exemption, because it was not a prior lawful non-conforming use but rather an unlawful use.

The remaining issue, and the real issue on this application, is whether the exemption in para. 6.2(b) of the Zoning By-law -- which exempts

6.2 (b) uses existing at the date of passing of this By-law; exempts the present use of the Mason Lands. As those lands were clearly being operated as a used-automobile storage and salvage yard on the date of the passing of the Zoning By-law, the issue becomes whether or not under para. 6.2(b) the existing use had to be a lawful use in order to be exempt.

I believe that it will be helpful if I summarize more of the background facts before I deal with the submissions made on that issue.

Background facts

The McLear Lands have been owned by McLear for 18 years and have long been used, although not intensively, for agricultural purposes, latterly the growing of hay for sale to others.

The Mason Lands have been owned by the respondent Mason since 1971 and the two-storey residence on the property has been occupied by him and his family as a residence since that time. Prior to 1979 Mason earned his living as a truck driver.

In January, 1981, when he was operating a repair garage and gas station on other lands, Mason began bringing used automobiles onto the Mason Lands for the purpose of operating on part of those lands a used-automobile storage and salvage yard.

Prior to October, 1981, the Township had no restricted area (zoning) by-law. However, automobile storage and salvage or wrecking yards were prohibited throughout the Township of Tecumseth by the above-mentioned By-law No. 73-7, except for such yards previously licensed. Mason, of course, was not previously licensed because he did not begin his impugned operations until years later. Yet Mason was never prosecuted for being in breach of By-law No. 73-7.

The Zoning By-law did not repeal By-law No. 73-7. It did, however, make provision for the location of automobile storage and salvage yards on lands zoned M5 (industrial storage zones). The Mason Lands were not so zoned.

By-law No. 73-7 remained in force until April 25, 1983, when it was repealed by By-law No. 83-20, a by-law that dealt not with zoning but with regulation of the fencing, lighting, hours of active operation, inspection, cleanliness, noise levels and like matters at salvage yards, including those within the definition of an "Automobile Wrecking Yard" in the by-law.

According to Mason, when he was operating a repair garage and service station on other lands starting in January, 1981, he used to store used motor vehicles on the Mason Lands for the purpose of salvaging parts from them for use in his repair garage and as a supply of used parts to sell to others. McLear stated on his cross-examination that Mason appeared to be storing cars prior to October 14, 1981, but not to be wrecking them. Mason's evidence is to be preferred on this point, because it is supported by considerable detail including an aerial photograph, and because McLear did not examine the scene closely but was relying upon a general impression. Not much turns on the difference between the evidence of McLear and Mason on this point, because even if Mason had not by October 14, 1981, actually stripped any vehicles, it is clear that the vehicles were brought on the Mason Lands for the purpose of being used as a supply of used parts.

It is also quite clear that Mason's automobile wrecking activities on the lands have increased greatly, since October 14, 1981. According to Mason's own evidence he was by October,

1981, storing an average of 80 used vehicles in a space approximately 200 ft. by 600 ft., whereas by October, 1987, he ws storing an average of 300 used vehicles in a space approximately 400 ft. by 600 ft.

In 1983, at a cost of approximately $15,000, Mason put up on the Mason lands a 28-ft. by 40-ft. metal-clad workshop for use in his automobile storage and salvage business. He stated that he had a building permit to construct the workshop, but I find, based on the evidence of Peter Robertson, who, among several jobs for the Township, functioned as Township's chief building official, that Mason began the building without a building permit but obtained one before the construction was completed.

It is not clear whether Mason had submitted an application for a building permit before he began construction but it would be quite consistent with his practices with regard to applicable zoning and building regulations if he had not.

The Township was fully aware that Mason was operating a used-vehicle storage yard. Peter Robinson, under cross-examination on his affidavit filed, stated that as early as October, 1981, he reported to the reeve of the Township as to Mason's operations. Moreover, when the salvage yard by-law (By-law No. 83-20) came into effect the Township sent Mason a letter, dated May 20, 1983, and forming part of the supplementary record on this application, forwarding a copy of that by-law and pointing out that his operation would soon be inspected to see if it was in compliance with that new regulatory by-law. The letter indicated that Mason would have six months to bring his yard into compliance with the new by-law and that when he did so a certificate of compliance would be issued to him with respect to the new by-law. There was no suggestion that the Township regarded Mason's operation as other than a permitted use of the Mason Lands.

Mason was later prosecuted for non-compliance with By-law No. 83-20. He pleaded guilty and was fined and, according to the Township official, Peter Robertson, has since corrected the deficiencies in respect of which he was charged.

Peter Robertson, who began to work for the Township in April, 1981, was at all material times not only the Township's chief building official but also its muncipal law enforcement officer, its zoning administrator (under the Zoning By-law) and even its plumbing inspector. On his cross-examination Mr. Robertson stated, and I have no reason to disbelieve him, that it was not the practice of the Township to enforce municipal by-laws, particularly the Zoning By-law, on its own initiative but to act only upon complaint by a ratepayer or other interested party.

It was Peter Robertson's evidence that he was unaware of By-law No. 73-7 in 1981 or until its repeal in 1983. He was not aware of, and had never had his attention drawn to, the fact that the use of the Mason Lands was contrary to the provisions of By-law No. 73-7. For what it is worth Robertson expressed the opinion that Mason could have been prosecuted under By-law No. 73-7 prior to its repeal, but that after its repeal there was no basis upon which Mason could be prosecuted for a zoning by-law infraction. The latter opinion is based on Robertson's belief, which reflects that of the Township, that with respect to lands zoned for agricultural use para. 6.2(b) of the Zoning By-law made every use in existence on October 14, 1981 (and not prohibited by another by-law) a permitted use, regardless of whether such use was unlawful immediately prior to the coming into force of the Zoning By-law.

Peter Robertson was aware of at least three other used-automobile storage and salvage or wrecking yards in the Township of Tecumseth, only one of which was in a geographical area zoned (M5) for such activity. It had been the belief of Peter Robertson that except for the one in the M5 zone all of the other yards were permitted on the same basis that he had believed the Mason yard to be a permitted use, namely that para. 6.2(b) of the Zoning By-law made all uses in existence on October 14, 1981 permitted uses. When it was asserted on behalf of the applicant that all of the other yards were licensed as such when By-law No. 73-7 came into effect, in 1973, and so were not unlawful under that or any other by-law when the Zoning By-law came into effect and so were prior lawful non-conforming uses under para. 5.5(b) of the Zoning By-law, Robertson was not in a position to state whether or not that

was the case.

I am aware of nothing in the record to suggest that the applicant made a complaint to the Township about the storage yard on the Mason Lands before 1986, even though a 28-ft. by 40-ft. workshop building was built on the Mason Lands in 1983. The first of several letters from the applicant to the Township on this subject is dated June 15, 1986. Late in October, 1986, the applicant retained his present solicitors with a view to having the Zoning By-law enforced.

For several years the operation of the storage and salvage yard on the Mason Lands has been the main if not sole source of income for Mason and his wife.

Submissions

On behalf of the Township Mr. Ritchie submits that, as a Township is not obliged to enforce its by-laws, it is not obliged to express an opinion or take a position on the meaning of its by-laws. Mr. Ritchie adds that the Township has not by resolution expressed any opinion as to the meaning of para. 6.2(b) of the Zoning By-law.

It is clear from a letter from previous solicitors for the Township that, at least since shortly after it received the first letter of complaint from the applicant, the Township has been operating on the basis outlined by Peter Robertson and referred to above, i.e., on the basis that para. (b) of s. 6.2 of the Zoning By-law operates to make any use in existence on October 14, 1981, a permitted use.

On behalf of the respondent Mason his counsel adopts and supports the Township's position. It is also submitted on behalf of Mason that the Township has known all along what he was doing on the Mason Lands and did not prosecute him for violating either By-law No. 73-7 or the Zoning By-law. On behalf of Mason it is further submitted that the Township in inspecting his operation in 1981, in granting him a building permit in 1983 and in requiring him to comply with By-law No. 83-20, showed that they regarded his operation as lawful in terms of the Zoning By-law. The latter is put forth not so much as the basis for a defence of estoppel or laches but, as I understood it, as proof of the meaning of para. 6.2(b) of the Zoning By-law. That is not the way such meaning is to be determined. Mason is on stronger ground when he argues the plain meaning of the words in para. 6.2(b), and when he argues delay and laches. On behalf of Mason it is also submitted that a review of the whole of the Zoning By-law does not support the applicant's position but shows that the draftsman was aware of the difference between a prior lawful non-conforming use and a use described simply as an existing use (i.e., without distinction as to whether it was lawful or unlawful).

Faced with a Township with a "hands off" policy to by-law enforcement, and faced with the language of para. 6.2(b) of the Zoning By-law which I repeat, as follows:

6.2 Permitted Uses

. . . . .

(b) uses existing at the date of passing of this By-law;

the submissions of the applicant were necessarily more complex.

Firstly, counsel for the applicant acknowledged that it was within the legislative power of a municipality to provide by by-law that all land uses, existing at a certain date, whether previously lawful or not, were to be regarded as permitted uses and therefore lawful so far as zoning regulation is concerned.

The main submission on behalf of the applicant is that when the Zoning By-law is properly construed that is not what the Township has in fact done. The applicant submits, correctly I believe, that regard must be had to the whole of the Zoning by-law. The applicant submits further that when that is done the reasonable construction of para. 6.2(b) is one by which that paragraph is interpreted as though the existing uses that are made permitted uses thereunder are only those that are lawfully existing at the date of the passing of the Zoning By-law.

I accept the submission that, as stated by the learned editors of 22 C.E.D. (Ont. 3rd.), at p. 98-245, para. 336: "The

rules which have been formulated for the construction of statutes are applicable to determine the meaning of municipal by-laws." Prominent among the general rules of, or factors in, statutory interpretation, as summarized and discussed in excerpts from E.A. Driedger, Construction of Statutes, 2nd. ed. (Toronto, Butterworths, 1983), pp. 33-7, and 89-92, and from Maxwell on the Interpretation of Statutes, 12 ed. (London,

Sweet & Maxwell, 1969), pp. 58-64 and 105-8, introduced by counsel for the applicant, were the following:

(a) the rule that regard should be had to the whole of the statute or by-law;

(b) the proposition that in making a choice between alternative meanings, the court should favour the meaning that is in harmony with the purpose and the other provisions of the enactment;

(c) the proposition that a construction that avoids absurdity, injustice, anomaly, hardship and inconvenience should be preferred;

(d) the proposition that regard must be had to the scheme of the legislation, and each provision construed in a way that will, where possible, place a consistent, rational, and probable meaning on all of the provisions when read together;

(e) the proposition that the legislature should not lightly be assumed to have repeated itself by including a second provision that in effect merely repeats an earlier provision;

(f) the proposition that, as stated by Lord Reid in Gartside v. Inland Revenue Com'rs, [1968] A.C. 553 at p. 612, that:

> It is always proper to construe an ambiguous word or phrase in the light of the mischief which the provision is obviously designed to prevent, and in the light of the reasonableness of the consequences which follow from giving it a particular construction.

(g) the proposition that if there are two reasonable meanings to the language of a provision, the interpretation that will avoid penalty is to be adopted.

There is in my view limited advantage to be obtained from such general rules in this case. The general proposition in (e) above tells against the applicant because, by requiring that existing uses in para. 6.2(b) be confined to lawful existing uses, one would be adding a word that had the effect of making para. 6.2(b) in effect a repetition of para. 5.5(a) dealing with prior lawful non-conforming uses. From the point of view of the applicant the most important of the above canons of construction are those to the effect that regard should be had to the enactment as a whole and to its objects and its framework. I turn now to the consideration of the provisions of the Zoning By-law to which my attention was particularly directed by counsel for the applicant.

Explanatory note

In the explanatory note which accompanied the Zoning By-law the following appears under the heading "Explanation":

> The effect of the by-law is to require that any use of land or any erection or use of any building or structure comply with the provisions of the by-law. However, the by-law does not prevent or hinder any existing use of land, building or structure which was legally established on the date of the passing of this by-law, so long as it continues for that purpose.

(Emphasis added.) The applicant submits that that explanation sets forth the policy and main object of the by-law, and that under such policy only legal prior uses are "grandfathered".

I have no quarrel with that proposition as to the general purpose and effect of the Zoning By-law. Yet the explanatory notes must be viewed in their historical context. The Zoning By-law was the first comprehensive restricted land use by-law in the history of the Township of Tecumseth. The explanatory notes explained to the residents and others that thenceforth the whole of the township was to be subject to a restricted use by-law under which new land uses could be embarked upon only in

areas designated or zoned for such uses. Reasonable disclosure (to say nothing of good politics) would dictate that possible fears of such a sweeping change be allayed by informing the residents and other interested people that the new enactment would not render illegal uses that were lawfully carried on at the time of the new enactment. The concept of an exemption for lawful prior non-conforming uses is basic to the way in which planning legislation has evolved in Ontario, and it is notorious that such an exemption was an important ingredient in developing public support for such legislation. It is entirely understandable that the explanatory notes would communicate the important fact of exemptions to allow the continuance of prior, lawful, non-conforming uses. But the explanatory notes do not purport to summarize or deal with all the provisions of the by-law. A copy of the whole Zoning By-law accompanied the explanatory notes. I agree with the applicant's submission that the explanatory note quoted above sets out an extremely important feature of the Zoning By-law, the exemption of prior lawful uses that do not conform with the provisions of the Zoning By-law. However, it should be noted that para. 6.2(b) does not detract from that proposition. It is not in gross conflict with the representation in the explanatory note, in that it does not deny any exemption promised in that note. If the plain meaning of its wording is given effect it would add, in respect only of lands zoned general agricultural (A1) (and disregarding for the moment the provisions of s. 23.1 to be discussed below), a further permitted use in the sense of a permitted use not referred to in the explanatory note or within generally applicable, and statutorily mandated, rules as to prior lawful non-conforming uses.

There are in the Zoning By-law 18 zoning classifications. Paragraph 6.2(b) applies to only one of those categories and it is therefore not surprising that it was not referred to in the one page of explanatory notes sent to the ratepayers with a copy of the proposed Zoning By-law.

In my opinion the explanatory note is for those reasons not of significant assistance or effect in the interpretation of para. 6.2(b) of the Zoning By-law.

Paragraph 5.3(c)

Paragraph 5.3(c) of the Zoning By-law states, under the heading "Prohibitions", that: "Not more than one permitted use shall be allowed on a lot unless specifically permitted in this By-law." The Mason Lands were being used for residential purposes when the operation of a used-automobile storage and salvage yard was commenced in 1981. The applicant submits that this is a further ground for holding that the said use as a storage yard contravenes the Zoning By-law. The respondents argue that both uses were in existence on October 14, 1981, and so both are permitted uses under para. 6.2(b) of the Zoning By-law. It was not argued but it would also appear that s. 5.19 of the Zoning By-law permits a one-family dwelling, complying with the regulations in that section, for use in connection with a permitted use in an area not zoned residential. In my opinion s. 5.19 deprives this submission by the applicant of persuasive force.

Section 5.12

Section 5.12 of the Zoning By-law states as follows:

> Nothing in this By-law shall be interpreted to relieve any person from the obligation to comply with the requirements of the Building By-law or any other By-law in force within the Township, or from obtaining any permit, licence, permission, authority or approval required by this or any other By-law of the Township or from any other law in force from time to time.

(Emphasis added.)

The applicant states that s. 5.12 makes it clear that para. 6.2(b) of the Zoning By-law was not intended to, and did not, override the provisions of By-law No. 73-7 which made it unlawful to operate a used-automobile storage and salvage yard on the Mason Lands, at the time such use was commenced down to and including October 14, 1981, and on into 1983. It is submitted that unless the word "lawfully" is read into para. 6.2(b) that paragraph is in conflict with s. 5.12.

Although, again, it was not argued on behalf of the

respondents, it may in my opinion be questioned whether s. 5.12 should be interpreted as a provision having to do with zoning in the sense of restricted uses of property. The section appears with, or under, the heading "Licences, Permits and Other By-laws" and, despite the words "or any other By-law in force within the Township" contained therein, its reasonable construction would require, in my opinion, that it be interpreted as a provision to the effect that the zoning of land for a use under the Zoning By-law does not mean that such use can be embarked upon or continued without compliance with all other applicable requirements particular to that use, such as the obtaining of a building permit before a building is put up or, for example, the obtaining of required licences and officer of health clearances before food is sold or served. To hold otherwise would be to go against at least two of the general rules of statutory interpretation urged by the applicant and summarized above. Firstly, it would be contrary to the general proposition that the legislature is not to be assumed to have repeated itself -- a proposition sometimes discussed in terms of the desirability of avoiding redundancy or tautology. In that regard the interpretation urged by the applicant would give to s. 5.12, at least with regard to other by-laws, an effect that would be essentially the same as the effect of s. 23.1 of the Zoning By-law, to be discussed below.

The second relevant canon of statutory interpretation is the one to the effect that regard should be had to the whole of the enactment and to the scheme of the enactment. When I consider the Zoning By-law as a whole it seems to me that s. 5.12 was not intended to override other provisions of the Zoning By-law relating to zoning proper (restricted and permitted uses in a given geographical area), but to make it clear that zoning permission did not carry with it the right to ignore other regulations and licensing requirements. In my opinion s. 5.12 when considered in the scheme of the Zoning By-law as a whole is properly seen as concerned not with what category of use is made of a particular property but with the manner in which the use is carried out, in terms of the obtaining of all required licences and authorizations, and in terms of compliance with all applicable statutes, by-laws and regulations. Accordingly, I am of the opinion that there is no conflict between s. 5.12 and the plain wording of para. 6.2(b).

Section 23.1

Section 23.1 of the Zoning By-law is also relied on by the applicant. It is entitled "Existing By-laws", and states as follows:

> Where there is a conflict with any other By-law within the Township of Tecumseth then the By-law having the more stringent provisions shall apply.

Clearly there was a conflict between para. 6.2(b) of the Zoning By-law, as written, and By-law No. 73-7, and clearly the latter was the more stringent, for under it the operation of a used-automobile storage and salvage yard on the Mason Lands was prohibited. It follows that on October 14, 1981, when the Zoning By-law was passed the use in question was not a use permitted by para. 6.2(b), but a prohibited use. That result can be obtained by virtue of the provisions of s. 23.1 alone, quite apart from the question of whether the word "lawful" or "lawfully" should be added by implication to para. 6.2(b), as urged by the applicant.

The repeal of By-law No. 73-7

By-law No. 73-7 was repealed by the above-mentioned salvage yard regulatory by-law, By-law No. 83-20, which came into effect as of April 25, 1983. The more stringent by-law with respect to used-automobile storage and salvage yards was from then on out of the picture. The next question is whether it was in force for long enough to take the case of the Mason Lands out of the permitted use provision in para. 6.2(b) (assuming for this purpose that the word "lawfully" is not to be added by implication to that paragraph). To put the question another way, should para. 6.2(b) be restricted to cases in which it was effective to make the use in question a permitted use on the very day that the Zoning By-law came into effect, i.e., on October 14, 1981? If it is so restricted it would never make the questioned use of the Mason Lands a permitted use. Is it reasonable to so restrict it?

The plain meaning of the words of para. 6.2(b) is against

such a restricted construction. The words speak of uses in existence at the date of passing of the Zoning By-law. The use in question was in existence on that date. And one of the canons of statutory interpretation is that the mandatory or prohibitory provisions of a statute are to be regarded as speaking in the present tense and to be speaking continuously. On that basis when By-law No. 73-7 was repealed and there was thus no longer any provision more stringent than para. 6.2(b), the latter would still be speaking in the present tense and would from that day forward make the impugned use a permitted use -- unless, of course, the word "lawfully" is to be added by implication to para. 6.2(b).

In my opinion there is no reason to adopt the restricted view of para. 6.2(b) that would require it to have effect, if at all, on the date when the Zoning By-law first came into effect. I realize that that interpretation means that the zoning status of the Mason Lands is being changed by the repeal of another by-law, and that the effect may be tantamount to the amendment of the Zoning By-law, without compliance with the notice provisions and Ontario Municipal Board approval requirements that would be applicable with respect to an amendment or proposed amendment of the Zoning By-law itself. That lacuna was, however, present in the structure of the Zoning By-law itself from its beginning and the Zoning By-law received the approval of the Ontario Municipal Board. In my opinion, the last mentioned effect is not a sufficient reason for adopting the restricted view that would require para. 6.2(b) be effective on October 14, 1981, or not at all.

And so the issue comes down to whether the word "lawfully" should be read into para. 6.2(b).

Paragraph 6.2(b) of the Zoning By-law

On the question of whether the word "lawfully" should be read into para. 6.2(b), it should be pointed out that this is not a case where the wording of the provision itself is equivocal. Nor does the wording produce an impossibility (in the sense that an impossibility would be produced if there simply were not the legislative power to make all existing uses permitted uses) or an absurdity. And, because of the overriding effect given by s. 23.1 of the Zoning By-law to more stringent by-laws, the plain meaning of para. 6.2(b) does not, and never did, conflict with any other by-law of the township.

The applicant thus has the heavy burden of establishing that the paragraph in question should not be given its plain meaning and should have a key word deemed to be added thereto because of the general approach to non-conforming uses under the Planning Act, 1983 and its predecessors, and because of the planning philosophy developed under those Acts and reflected in most zoning by-laws.

As stated, it is acknowledged that the Township has, subject to the requirement of Ontario Municipal Board approval (here obtained), the legislative power to enact para. 6.2(b) in its present form.

It is a truism that terms are not to be implied except for compelling reasons. Where the legislative body has spoken unequivocally, the cases will be rare indeed wherein the court will take it upon itself to add a term where impossibility, absurdity or gross conflict with other provisions or enactments is not shown.

Nor does the structure or scheme of the Zoning By-law help the applicant. As stated, there are 18 zoning categories provided for in the by-law. They are provided for, respectively, in ss. 6 through 22 and s. 13A. Each of those sections begins with a subsection stating that in a zone of the designation in question no person shall use any land or erect, alter, enlarge or maintain any building or structure "for any use other than as permitted in [the] section". In every one of those sections the next subsection lists the permitted uses, under a heading "Permitted Uses". Thus in the scheme of the by-law the term "permitted uses" is not employed to designate a permitted exception to a general rule. Rather, the list of permitted uses is the primary means of stating what uses are permitted in the category in question.

Thus in s. 8 -- Estate Residential (R1) -- s. 8.1 states that in an R1 zone there will be no uses or building not permitted in s. 8. And it is provided in s. 8.2 that the permitted uses

are:

(a) a single family detached dwelling;

(b) an accessory building or use to the above use;

(c) a park.

And that is it; those are the permitted uses, period. Permitted uses are thus not exceptions; they are the very definition of the content and meaning of R1 zoning.

The same structure is evident in the sections setting up the other zoning classifications provided for in the Zoning By-law.

The wording of para. 6.2(b) is used with respect to permitted uses in only one other zoning category, and that is in s. 22 -- Urban Fringe (UF) Zone, where para. 22.2(a) is in exactly the same wording as para. 6.2(b). I am not persuaded that the wording was not a deliberate choice in each case, reflecting the intention of the Township council and the informed approval of the Ontario Municipal Board.

Further support for that view is found in the evidence as to the background to the repeal of By-law No. 73-7. But first it should be noted that the repeal of By-law No. 73-7 which was effected by By-law No. 83-20, was not necessary for the accomplishment of the main purposes of the latter by-law. The repeal provision appears to have been tacked on. And it will be recalled that Peter Robertson, although he was the Township's by-law enforcement officer and from October 14, 1981 on, the zoning administrator under the Zoning By-law, was not even aware of the existence of By-law No. 73-7 until some time in 1983 when he was working on By-law No. 83-20. His evidence was that until that time he thought that Mason's storage and salvage operation had the same legal status as the other salvage yards not in the area zoned M5. As no one at the township appears to have told Peter Robertson anything about By-law No. 73-7, it is quite possible that they had forgotten it or believed that it had lapsed or had been repealed by the Zoning By-law. It appears that as soon after October 14, 1981, as By-law No. 73-7 came to the attention of the Township council they repealed it. That in my view adds further credence to the submissions that in using the words in para. 6.2(b) the Township intended, with respect to the Mason Lands, to do exactly what the paragraph says, i.e., to make the existing use a permitted use.

Accordingly, the application will be dismissed.

In the circumstances it is unnecessary to deal with the assertions as to delay or laches by the applicant or by the Township.

Township a proper party

In my opinion, although under s. 327 of the Municipal Act the appellant could, if successful, have obtained an order restraining the respondent Mason without making the Township a party, the applicant did not do wrong in making the Township a party. The Township is a proper party to an application for a declaration as to the meaning of its Zoning By-law. The Township should not in my view be encouraged to persist in the belief that when it has enacted a comprehensive zoning by-law it should try to act as some sort of middleman or neutral stakeholder, when the issue is whether there has been a contravention of that by-law.

Costs

In my opinion, although the applicant was unsuccessful, this is not a case in which the Township should recover its costs from him. The application was at least in part necessitated by the unresponsive behaviour of the Township council, by its apparent ignorance in 1981 of the existence of one of its own by-laws, and by its eagerness to adopt a "hands off" policy. Moreover, the Township lost its preliminary motion with respect to the jurisdiction of the court to deal with this application. I have resisted the temptation to charge the costs of all parties to the Township. But the Township shall have no costs.

As between the applicant and the respondent, Mason costs shall follow the event.

Application dismissed.

Town of Midland v. Fred D'Silva Enterprises Ltd.

16 O.R. (2d) 657
ONTARIO

ONTARIO
COURT OF APPEAL
BROOKE, LACOURCIERE
AND BLAIR, JJ.A.
17TH JUNE 1977.

APPEAL from a judgment dismissing an action arising out of alleged breaches of building by-laws.

John Sopinka, Q.C., and Ronald McInnes, for appellant.

C. L. Campbell, for respondents.

The judgment of the Court was delivered by

BROOKE, J.A.:-- The plaintiff appeals from the judgment of the Honourable Mr. Justice Callon dismissing its action arising out of alleged breaches of its building by-laws. The appellant claimed for an injunction restraining the defendants, their agents, representatives, servants and employees, and those acting under their direction and control, from proceeding or continuing with the construction of a septic tank system or a portion thereof on lands within the boundaries of the town of Midland.

The case involves consideration of the effect of the annexation of part of lands upon which construction of a shopping centre was proceeding pursuant to a building permit issued by the municipality from whom the lands were taken. There is the additional question as to whether the building by-laws of the annexing municipality are applicable to require a building permit when, after annexation, changes were made in the plans for a weeping tile bed which was the only part of the septic system and the only part of the shopping centre on the annexed land.

Zongos and another (Zongos) owned a 10-acre parcel of land in the Township of Tiny which they intended to develop as a shopping centre. There was no zoning restriction of the township which prohibited or limited this plan. After negotiations with the township, the preparation of some plans and specifications, Zongos obtained a building permit from the Township of Tiny to build the shopping centre. There was no water system or sewer system available and part of Zongos' plan was for a plumbing system which included a septic tank and weeping tile bed, the latter to be laid in the ground along the north-east border of the 10-acre parcel. The permit was obtained on June 10, 1972. At the end of that month the Ontario Municipal Board made an order annexing to the appellant a 1.951- acre strip of land along the north-east border of the 10-acre parcel in which strip the septic tank and weeping tile bed was to be laid. The annexation became effective on January 1, 1973. However, by that time Zongos had done preparatory work and, indeed, the trial Judge found that when in March, 1973, the respondents purchased the land, Zongos had completed grading, some excavation, including some at the site of the weeping tile bed and, in addition, there was evidence that some footings for the buildings had been installed.

The respondents prepared new plans for some of the buildings and to alter the plumbing system by relocating the septic tank site outside the 1.951-acre strip so that the weeping tile bed alone remained there. In addition, some changes were made in the plan for the weeping tile bed after consultation with the Medical Officer of Health of the County of Simcoe. The appellant and the Township of Tiny fell under the jurisdiction of that officer and the same statutory by-law is applicable to each of them. The respondent obtained a second building permit from the Township of Tiny. It relied upon correspondence with that Medical Officer of Health as establishing that its plan for the weeping tile bed had been approved in writing by that authority. The learned trial Judge found in favour of the respondent in this regard. The respondent did not obtain any permit from the appellant with respect to the installation of the weeping tile bed.

The appellant had annexed the land as a buffer between the commercial development in the Township of Tiny and the appellant's residential area. The appellant's intention was

known to Zongos when he obtained the permit and started building. It was known to the respondents when they bought the land. But the strip was never zoned residential, although in May of 1973, the appellant adopted such a change to its official plan, and later proceeded to pass a by-law zoning the annexed land as residential. At all material times neither the amendment nor the by-law had received approval required so that it might become law.

The action was commenced on October 30, 1973, after the appellant's building inspector observed the respondents installing the weeping tile bed in the face of a stop order which the inspector had issued. No claim was made in the action for interim injunction and so no relief was sought. The weeping tile bed was in its place some time before the action came on for trial. What was sought at trial was relief in the form of a mandatory injunction to remove the weeping tile bed or, alternatively, an injunction to stop the respondents from using it.

The appellant contended that, because of the annexation, in order that they might install the weeping tile bed in the ground, the respondents required a building permit pursuant to By-law 2333 of the Town of Midland. The appellant further contended that the learned trial Judge was wrong in finding that the weeping tile bed was not a part of the building or part of the plumbing system and, in any event, a part of the structure within the meaning of its By-law 2916.

What is the effect of the building permit issued to Zongos by the Township of Tiny prior to the annexation and the fact that Zongos had proceeded with the work here in question? The validity of the building permit issued to Zongos that was in force at the time he did the work referred to and sold the land to the respondents was not attacked. It was valid in the hands of Zongos to whom it had been issued as owner pursuant to the by-laws of the Township of Tiny. There was no suggestion in the argument that Zongos could not have proceeded to install the weeping tile bed as planned and, in my opinion, if Zongos could have proceeded in that fashion, so also could his successor as owner. In my respectful view the annexation could not stop the construction proceeding under the permit validly issued prior to the annexation. That permit was issued on the primary basis that the proposed land use complied with the zoning and secondly that it met the requirements as to building: reference to s. 18 of the Municipal Act, R.S.O. 1970, c. 284; the Planning Act, R.S.O. 1970, c. 349, s. 35(7)(b); Mapa et al. v. Township of North York et al., [1967] S.C.R. 172, 61 D.L.R. (2d) 1; Re Walmar Investments Ltd. and City of North Bay et al., [1970] 1 O.R. 109, 7 D.L.R. (3d) 581 [varied [1970] 3 O.R. 492n, 12 D.L.R. (3d) 664n]; R. v. City of Barrie et al., Ex p. Bernick, [1970] 1 O.R. 200, 8 D.L.R. (3d) 52; City of Ottawa et al. v. Boyd Builders Ltd., [1965] S.C.R. 408, 50 D.L.R. (2d) 704 (as to the rights of Zongos, see Spence, J., at p. 410 S.C.R., p. 705 D.L.R.).

The evidence before the learned trial Judge was that the respondents relied on the permit issued to Zongos. I think they were entitled to, and that any other conclusion would be an unrealistic interpretation of the effect of annexation. It would strait-jacket construction to suggest that upon annexation building permits that had issued would come to an end or would end if the land was subsequently conveyed to a new owner or was otherwise dealt with.

When the Township of Tiny issued the building permit, it signified that the whole of the proposed development was satisfactory and that the respondents had the privilege to proceed with it subject to the obligation to comply with the building by-laws. The annexation did not end the respondents' privilege or obligations and the Town of Midland stood in the position of the Township of Tiny so far as the strip of land was concerned. The owner had the right to have the weeping tile bed installed in the strip but it was obliged to obey the building by-laws, if any, in relation thereto. If the building permit issued by the Township of Tiny was for the completed shopping centre development, including the weeping tile bed, and it had proceeded without change, perhaps the owner would not have been required to deal with the building inspector officials of the appellant. That is not what happened in this case. In May of 1973, the respondent obtained a second building permit from the Township of Tiny when it filed further plans for the erection of the buildings and alterations to its plumbing system so that the septic tank and connecting pipes

were located wholly within the boundaries of the township rather than in the strip annexed by the appellant. The amended plan also showed a revision of the construction of the weeping tile bed although in the same location in the strip as previously provided. The changes in the weeping tile bed were made pursuant to the directions of the Medical Officer of Health.

In such circumstances, the building permit issued by the Township of Tiny, the work done and the use made of the land settled the issue of land use. However, the proposed construction was beyond that authorized by that building permit and so the question arises whether the building by-laws of the appellant must be complied with so far as the construction of the weeping tile bed is concerned. In my opinion, the building by-laws of the appellant were applicable and this is the effect of s. 18 of the Municipal Act.

The by-laws of the appellant which must be considered are No. 2333, being a by-law to regulate the erection and safety of buildings and structures, By-law 2523, being a by-law to regulate plumbing and heating installations and to provide for certain charges therefor, and By-law 2916, being a further by-law with respect to building permits in a designated area. For convenience the relevant provisions of its by-laws, including the statutory by-law pursuant to the Public Health Act, R.S.O. 1970, c. 377, are now set out:

By-law 2333

Section 2 -- Administration

2. Scope This By-law is applicable to all types of buildings and structures hereafter erected within, moved into or within the boundaries of this municipality.

. . . . .

6. General -- Construction (a) Building Permits A building permit shall be obtained from the building inspector by the owner or his authorized agent for the excavation, erection, alteration, reconstruction, removal or wrecking of, or repairs to any building or part of any building which it is proposed to construct, and for any addition or alteration to a building, or for any sign or advertising device to be attached to a building in the fire area. No such work shall be commenced until the building permit is prominently displayed on the site of the work.

. . . . .

(e) Granting of Building Permits The application, plans and specifications filed by an applicant for a building permit shall be examined by the building inspector and if it appears to him that such plans and specifications are in conformity with the requirements of this By-law and that the proposed building or structure will not create a contravention of any land use (Zoning) or other By-law of this Municipality, the building inspector shall issue the building permit upon receipt of the required permit fee.

Paragraph 116 of By-law 2333 as amended by By-law 2964

116. Municipal Water Supply or Sewers not available --

When municipal water supply is not available a plumbing system shall not be mandatory, but any new plumbing system that is installed in any building, and any to which alterations or additions are made shall comply with the requirements of this By-law. When no municipal sewer is available to be connected to, or when no plumbing system is to be installed, no person shall be entitled to apply for any building permit and no permit shall be issued for any building on any such lot until the lot has been inspected by an inspector for the Simcoe County District Health Unit and a certificate of approval from such Unit is filed with the application. When no plumbing system is installed, or when a municipal sewer system cannot be connected to there shall be provided sanitary privies, chemical closets, septic tanks or other means for the disposal of human excreta as approved by the County Health Unit.

. . . . .

118. Quality, Design and Installation The quality, design

and installations of any plumbing system, or part thereof and including outlet drains shall conform to the Regulations respecting Plumbing and Sewers, under The Public Health Act

(Ontario).

Section 1 -- Definitions

"Plumbing System" means, severally and individually: the water distribution system; all fixtures and fixture traps, the drainage system; the house sewer; any private sewage disposal system; all leaders, together with all their devices, appurtenances and connections.

By-law 2523

1. No plumbing system as defined in By-law Number 2333 for the said Corporation, nor any hot air, hot water, steam heating equipment of any kind, shall be installed or constructed on premises within the Corporation until plans of the plumbing or heating system to be constructed, repaired, renewed or altered, and the locations of drains, pipes, traps and other works or appliances to be part of or connected with the said plumbing or heating system, have been produced and filed with the plumbing and heating inspector of the said Corporation and a permit obtained.

By-law 2916

1. No applicant shall be entitled to receive, and no permit shall be issued by the Building Inspector of the Corporation, or any other officer or servant or employee of the Corporation for the building of any structure on any lot or parcel of land fronting on any street or part thereof set out in Schedule "A" attached hereto and forming part of this By-law, and being zoned for residential purposes within the Corporation unless an agreement for the development of such street has been entered into with the Corporation, and also unless such lot or parcel is satisfactorily serviced for Municipal water and Municipal sewer facilities.

The National Building Code of Canada, 1970, s-s. 2.1.1.2, provides as follows:

Building means any structure used or intended for supporting or sheltering any use or occupancy.

The statutory by-law annexed to the Public Health Act as Sch. "B", s. 14, provides as follows:

14. No privy-vault, cesspool, septic tank or reservoir into which a privy, water-closet, stable or sink is drained shall be established until the approval in writing of the medical officer of health has been obtained.

The learned trial Judge correctly proceeded on the basis that the by-laws of the appellant were applicable. However, I agree with his conclusion that the by-laws do not require the appellant to obtain a building permit before installing the weeping tile bed in the ground. I think it is regrettably apparent that these by-laws were not prepared anticipating such unusual circumstances as these.

Mr. Sopinka urged that the learned trial Judge was wrong in his interpretation of By-law 2333 and that he ought to have held that a sewage disposal system as a whole was an integral part of a building. He contends the definition of building should be determined in the context in which the word is used. He argues that in a building by-law the term should not be construed so as to deprive the municipality of control over construction within its boundaries because the powers to regulate construction are intended for the benefit of the community and so they should receive a fair and reasonable interpretation. I agree that the by-laws referred to should be construed in this fashion. However, applying these principles the by-law is so worded that it cannot be given the effect contended for. By-law 2333 is by its title a by-law to regulate the construction and provide for the safety of buildings and structures. By s. 2(2) its scope is determined. It is applicable to all types of buildings and structures erected within or moved into or within the boundaries of this municipality. Section 6 is set out above. It requires a building permit be obtained by the owner for the erection, alteration, etc., of any building or part of any building which

it is proposed to construct, or the addition to any building. Building is nowhere defined in the by-law; rather it adopts the National Building Code definition. A weeping tile bed is not a building or structure within the ordinary meaning of that word. Nor is it "a structure used or intended for supporting or sheltering any use or occupancy". A weeping tile bed is simply a place in the ground where sewage and drainage from the septic system is deposited for absorption. The by-law by its terms is limited in application to buildings within the municipality and unless the weeping tile bed is a building or part of a building, and comes within that definition, no further consideration need be given to it. The by-law's sections do not stand alone. The plumbing system is a part of the building and this by-law proceeds on that basis. However, a weeping tile bed is, at most, a part of one of the systems included within the definition of plumbing systems. No doubt, in determining if a building permit should issue for a building being erected in the municipality, the sewage disposal system or drainage system must be examined and the weeping tile bed considered, but this by-law simply does not provide that the converse is true. I think the learned trial Judge was right in his conclusion.

Similarly, I think the learned trial Judge was right in finding By-law 2916 did not affect the respondent. I agree with his reasons and add one more, and it is simply that by its terms the by-law is limited to land being zoned for residential purposes. This land was not so zoned and the section can have no prospective effect.

With the greatest deference, I do not agree with the reasons of the learned trial Judge as to the application of By-law 2523. The by-law is entitled in part a by-law to regulate plumbing and heating installation. The effect of the by-law is to prohibit the installation of plumbing systems (as defined in By-law 2333) on premises within the municipality unless a permit is issued by the plumbing and heating inspector with whom plans for the system have been produced and filed. In my view, this by-law has a wider application than By-law 2333 which is confined to buildings. In this by-law the term "premises" is used. This term is colloquially used to mean buildings, but it is frequently used in the broader sense to mean lands whereon buildings are erected and lands immediately surrounding them: see Maunsell v. Olins et al., [1975] 1 All E.R. 16 at p. 19; Martin v. Martin et al. (1904), 8 O.L.R. 462 at p. 470. Having regard to the subject-matter of the by-law, being permits for a system which by definition includes drainage systems, private sewage systems, which of necessity must leave the building and be installed in the earth, I think a reasonable and fair interpretation of the word is in this broader sense. In my opinion, a weeping tile bed is a part of such a system. It is, according to the evidence, where the pipes end and the tiles are installed in a rock bed in an excavation. The question remains then whether the by-law is applicable to only a weeping tile bed, as opposed to the plumbing system of which it is a part, is installed in premises within the corporation.

The question has troubled me because it is obvious that Council in enacting the by-law set out to control through the use of permits, systems which might terminate in the ground as this one does. However, after anxious consideration I have reached the conclusion that the learned trial Judge was right. The section refers to a plumbing system and this means a (complete) drainage system or private sewage disposal system and not an individual part thereof or its parts separately.

Section 14 of the statutory by-law is quite different from the by-law last referred to and applies in the case at bar. No reference is made to buildings or premises but simply that no septic tank shall be established until approved in writing by the Medical Officer of Health. While this section refers simply to a septic tank, in my opinion, it should be taken to include a weeping tile bed into which the tank drains. The object of the legislation is to protect the health of the community and so I think it is reasonable that the statutory by-law should be construed as I have indicated. The learned trial Judge dealt with the correspondence and the evidence in relation to the meeting between the respondents and the Medical Officer of Health and he concluded that the respondents had satisfied the requirement of the statutory by-law. He stated:

From these two letters, it is abundantly clear that the Defendants fully satisfied the requirements of the Medical Officer of Health and that the installation of the sewage

disposal system as such met all of the requirements of that office and received its approval. The Medical Officer of Health did attach to this approval a condition that some agreement be reached with the Town of Midland on matters that were of no concern to her office.

Paragraph 1 of the letter of December 5, 1973, is a final approval of the septic tank system as installed. In attempting to append a condition that the Defendants, notwithstanding such final approval, reach a satisfactory agreement with the Town of Midland to permit the installation of the septic system within the boundaries of the Municipality, she went beyond her area of concern and jurisdiction and such a condition is, in my view, of no consequence or effect -- see Re Tenenbaum et al and The Local Board of Health for the City of Toronto, [1955] O.R. 44 at p. 47. The Defendants were entitled to act on this final approval being the approval required under Section 14 of Schedule "B" of the Act and to proceed with the use of the septic system.

I think he was right in this conclusion.

The appeal fails on all grounds and must be dismissed. I should like to add that even if I am wrong with respect to the application of by-laws, I do not think this is a case in which the Court should exercise its discretion in favour of the appellant and grant either a mandatory injunction or simply an injunction to restrain the respondents from using the septic system.

The appellant seeks through its building by-laws to enforce residential zoning which was never in effect at any material time. The use of the land for a weeping tile bed was lawful when the building permit was issued and the work done by Zongos in relation thereto "before and after annexation". Its continued use for this purpose by the respondents was lawful. I do not think that it can be said there was any detriment to the community by the installation or continuation of the weeping tile bed in its location. There is no suggestion in the evidence or argument that this is so or that it has been a nuisance in any sense. Indeed, I think the weight of evidence is to the contrary as the Township of Tiny was satisfied with the land being used for this purpose and the plans for the system, including the weeping tile bed, and I think it a proper inference from the facts that it met with the approval of the Medical Officer of Health at the time that the original permit was issued. In addition, the revised plans for the weeping tile bed were approved by that authority.

The respondent is the owner of the surface soil. Its use of the lands for other than residential purposes is not permissible under the by-laws that are now applicable and its development for that purpose is subject to them. To a very great extent then, the stated object of the annexation, being the creation of a buffer zone, was satisfied. I do not think that proof of a technical breach of a by-law will, of necessity, result in injunction.

Finally, having regard to the material to which we have been referred, the case was a unique one which the draftsmen of the by-laws in question did not contemplate.

For these reasons, I would dismiss the appeal with costs.

Appeal
dismissed.

Mortimer v. Cameron

Between

Stephen George Mortimer, Donald Mortimer, Mary Mortimer, Richard Mortimer, Carol Hiltermann, Adrienne Dawson Selby andEugenie Dmytar, Plaintiffs,

and

John Cameron, Stingray Holdings Limited, Sandra Hunt and theCorporation of the City of London, Defendants,

and

Marijo Kale, Third Party

Ontario Judgments: [1992] O.J. No. 764
Action No. 7458/85

Ontario Court of Justice - General Division
London, Ontario
McDermid J.
Heard: April 8-12, 15-19, 22-26, 29-30, May 1-3, 6-7, 13-16, 21-23, 27-31, 1991
Judgment: April 13, 1992

J.R. Morse, J.C. Kennedy, Q.C. and P. Downs, for the Plaintiffs.
D. Williams, C.M.V. Pensa, Q.C. and J.A. Beckett, for the Defendant, Cameron.
N.C. Brown, Q.C. and W. Woodward, for the Defendant, Stingray Holdings Ltd.
B. McCall, for the Defendant, Hunt.
J. Caskey, Q.C. and P. Conlon, for the Defendant, the Corporation of the City of London.
S.M. McTaggart, for the Third Party.

McDERMID J.:--

1. THE ACTION:

After writing an intermediate accounting examination on the morning of July 17, 1987, Stephen Mortimer made the fateful decision to go to a party at the apartment of a classmate, Sandra Hunt. The apartment she shared with Marijo Kale was on the second floor of a home owned by Stingray investments Limited.

People there were drinking and relaxing. The mood was convivial but subdued. No one was boisterous or unruly. After a time, Mortimer engaged another classmate, John Cameron, in some friendly conversation and horseplay in the hall of the apartment. From the hall, they travelled down the interior stairs, pushing each other back and forth until they reached the interior landing. Both had been drinking but neither was angry nor hostile.

Mortimer, who was moving backwards, tripped over the raised threshold to the apartment. He fell back and pulled Cameron toward him. Together, they tumbled onto an exterior landing, through its exterior wall and plunged to the ground about 10 feet below.

Cameron picked himself up, but Mortimer could not move. As a result of the fall, he sustained a permanent spinal cord injury at the C4-5 level that rendered him a complete quadriplegic without any motor function or sensation below the site of the injury.

This tragic event has spawned complex issues of liability and damages.

Mortimer sues Cameron on the basis of assault, battery, trespass to the person and negligence. He claims that Cameron applied force to him without due care and attention for his safety and caused him to trip and fall through the exterior wall of the stairway.

He claims that Stingray permitted him to use an exterior stairway that it knew or ought to have known was unsafe. He alleges it did not comply with the National Building Code of Canada, 1970, (the "NBC" or the "Code"), and the City's building by-law: No. B.-56-269, enacted July 5, 1971. He also claims that Stingray failed to warn him of the dangerous condition of the stairway and that it rented an apartment with a raised step or threshold that was dangerous and not readily apparent or obvious to users of the entrance.

He claims that Hunt invited or permitted him to attend upon the premises while the stairway was in a dangerous condition and failed to warn him of the unusual danger created by the raised threshold and of the dangerous condition of the stairway.

He also claims that the defendants, Stingray and Hunt, were in breach of the provisions of the Occupiers' Liability Act, R.S.O. 1980, c. 322, as amended.

Mortimer sues the City because it failed to enforce its Building By-law, which required that the exterior stairway be built in accordance with the Code. He alleges it was negligent in issuing permits or licences to build the stairway and failed to inspect it to ensure that it complied with the Code and the Building By-law.

Both Mortimer's parents, his brother and 3 sisters advance claims under the Family Law Act, S.O. 1986, c. 4, as amended.

Each of the defendants cross-claims against all the other defendants. The defendant Hunt commenced a third party action against her co-tenant, Kale, who pleaded into the main action.

2. THE SCENE OF THE FALL:

A scale drawing of the floor plan of Hunt's apartment that showed its orientation to Central Avenue was filed as Exhibit 135. A copy is attached as Appendix A. [See paper copy for illustration of Appendix A.]

Central Avenue runs east and west. 587 Central Avenue is on the south side of the street and its front door faces north. In 1963, the then owner, a Mrs. Danyluk, had a wood staircase built outside the exterior brick wall on the east side of the building to permit access to the second storey of her home. A copy of the building permit she obtained for that purpose was filed as Exhibit 25, Tab 1. In 1971, she obtained a second building permit, filed as Exhibit 99, to allow her to cover the staircase with a roof, but she never acted on it. In 1972, she obtained a third building permit, filed as Exhibit 25, Tab 2, to let her enclose the staircase. This work was carried out and was inspected and approved by the City's building inspector. It is the subject of Mortimer's claim against the City.

The entrance to this enclosed exterior stairway is set back some distance from the north end of the building. One enters the stairway through a door at ground level that faces north. One then proceeds south up a few stairs to the first landing, which is about 4 feet above grade. One proceeds further, straight up the stairs, still heading south, to the top of the exterior stairway where there is another landing that is about 10 feet above grade. It is the one from which Mortimer fell. One then turns right 90 degrees to face west, where an exterior and an interior wooden door are separated by a raised threshold. Next, one proceeds west over the threshold onto an interior landing inside the apartment occupied by Hunt and Kale. One then continues west up 5 interior stairs to a hall. It runs north and south between a kitchen and bathroom at its south end and a living room and bedrooms at its north end.

The interior and exterior landings of the stairway and portions of the interior of the apartment were shown in a number of photographs filed as exhibits, including Exhibits 2 and 64.

3. THE FALL:

Cameron and another classmate, Julia Ann Mead, gave 2 quite different and irreconcilable versions of how the fall occurred. Mortimer had an incomplete recollection of his fall. Several others at the party testified about the interaction between Mortimer and Cameron immediately before the fall.

Mortimer was sitting on a chair in the hall at the top of the interior stairs, and north of them, talking to Kale, who was seated on a cedar chest in the hall to the north of him. The chest is shown in Exhibit 2, photo 2. Cameron was sitting on a couch along the south wall of the living room. After talking to Mortimer for about 15 minutes and after finishing her drink, Kale went to her bedroom to pack because she was going away for the weekend. She thought she left Mortimer about 4:30 p.m.

Shortly after this, Cameron left the living room to go down the hall past the top of the interior stairs toward the kitchen to get another beer. He met Mortimer, who by this time was standing in the hall at the south corner of the top of the stairs. When Cameron approached, they began to talk. At no time was there any animosity or hostility between them.

Craig McCall was sitting at the north end of a table in the kitchen facing south and playing cards. At about 5:15 p.m., his attention was drawn to Mortimer and Cameron who were in the hall "horsing around", as he described it. When he turned to his left to look east toward them, Mortimer had a beer in his left hand. He was standing in the hall at the top of the interior stairs with his back to the stairway. Cameron was also in the hall facing Mortimer and they were "wrestling back and forth". He saw some beer come from the container Mortimer had and it looked to him as if some of it went onto Cameron's back. He agreed that might have resulted from their jostling. He thought Cameron was trying to "ward it off". He saw Mortimer and Cameron engaged in this activity for about 20 or 30 seconds. Because their activity caused him no concern, he returned his attention to his card game. He saw no one else in the hall other than Mortimer and Cameron. When he last saw them, they were both at the top of the interior stairs. Mortimer had one foot on the first step down from the level of the hall and his back was facing east down the stairway. Cameron had both feet on the floor of the hall at the top of the stairs and was facing Mortimer. About 30 seconds later, he heard a crash and when he looked up, they were both gone.

Just before the fall occurred, Hunt was changing a tape in her tape deck, which was in the northwest corner of the living room. She looked toward Mortimer and Cameron when she heard laughter in the hall. She saw them standing in the hall between the kitchen and the living room. From where she was standing in the living room, she could not see their bodies below their waists because her view was obstructed by a couch that was between her and them. Nor could she see the area east of the refrigerator at the north corner of the kitchen entrance, where in fact Mead was standing.

She could not recall whether it was Mortimer or Cameron who was holding a beer, but whoever it was appeared to be threatening to pour it down the other's back. I conclude this was Mortimer. It did not seem to her that he really meant to do so. The other person also looked to be interpreting it that way, because he was laughing but resisting. Then, it appeared to her as if they were disengaging and that no one was going to be harmed, so she turned her attention back to the tape deck. She had watched them for no more than 30 seconds. Next, she heard a bang that sounded "like somebody falling downstairs", although it might also have been the sound of plywood breaking. When she looked back, they were both gone. She had last seen them both standing at the top of the stairs.

Mortimer had an incomplete recollection of the events surrounding his fall. He had driven to the party but after he started to feel the influence of the alcohol he had consumed, he went to telephone his girlfriend to come for him later, rather than drive himself. The telephone was in Kale's bedroom but he was unable to use it because the door was shut. He did not remember whether he went back into the living room or spent some time in the hall. He did recall standing in the hall at the top of the interior stairway. He was leaning against the corner of the south wall of the stairway where it met the east wall of the hall, near the humidifier and the bannister. He said he stood at the top of the stairway between 20 and 30 minutes, during which time he spoke to McCall and Hunt initially, and latterly to Cameron, who joined the group later. He said that McCall left and Hunt had just been passing through. Mortimer and Cameron were then alone in the hall.

He said he spoke with Cameron for about 15 or 20 minutes. Mortimer had a beer in his hand and believed it was in his right hand. He did not recall the topic of conversation but he thought he was teasing Cameron and joking with him about the fact that they were the oldest students in the class and that Cameron was even older than Mortimer.

Mortimer's back was facing east toward the top of the

stairway and Cameron was to the west of Mortimer directly in front of and facing him. In his direct examination, Mortimer described his recollection of the fall as follows:

> I just continued to talk with John, to joke with him. And I approached him in our conversation, fooling around. And I don't recall whether I reached for him or if I gestured somehow, but we just ... We were at the top of the stairs and we were just sort of fooling around, joking. And the next recall, the next recollection that I have was one of falling backwards, just is if I'd gone over something or just gone down backwards. And I didn't have any recollection of what was around me or John himself. My next recollection was a loud noise. Excuse me. A loud noise, followed by a visual recollection. I was sort of lying on my back and looking, just sort of turned to look over my left shoulder, and I could see, from that view, the ground below. And I realized that I had broken through the plywood panelling in the stair case. And all of a sudden landing on the ground. And then my next recollection as far as sensation is a feeling of pins and needles spreading over my body. And I was laying on my back at the underside of the stairwell, and I could see that the panelling had pulled away in the corner and there was a gap between the plywood and the bottom of the stairwell structure.

He did not recall how he went down the interior stairway or where he was when he experienced the sensation of falling or whether he tripped over the threshold. He did not remember any physical contact between himself and Cameron or any intention to engage in such contact. He had no recollection of what happened to Cameron from the time he last remembered seeing him at the top of the interior stairway until he saw Cameron on the ground near him after the fall. He was not aware that Cameron had fallen with him until he saw Cameron on the ground. He could recall no sensation of the plywood offering any resistance to him.

On cross-examination, he agreed that he had suffered no brain injury from his fall. He was unaware of any other physical condition arising from the fall that would account for his lack of recollection, except perhaps the passage of time. He also agreed that he had initiated the "horseplay" and had precipitated the fall. He did not recall attempting to pour beer on Cameron and admitted that if he had done so, Cameron would have had "every right" to stop him.

Cameron testified that just before the fall, Mortimer was standing in the hall at the top of the stairs and was looking into the living room. After Cameron left the living room to go to the kitchen, he had to pass Mortimer in the hall, which he estimated was 3 or 4 feet wide. As he walked toward Mortimer, they began to chat and laugh a bit. He did not recall the details of the conversation, but confirmed that it was good natured. He said Mortimer had a beer in his left hand and went to put that hand behind Cameron's back. He barely got it above Cameron's waist when Cameron grabbed Mortimer's left wrist with his right hand. Although he had no idea what Mortimer's real intention was, he assumed that Mortimer was going to pour beer on him. In fact, Mortimer never did pour any beer on him.

Cameron was standing at the top of the stairs facing southeast. Mortimer's back was partially toward the opening of the stairs and partially toward the wall. In other words, he was standing "on an angle" facing northwest. Cameron used his right hand to try to pull Mortimer's left arm from behind Cameron's back. Cameron's left arm was on Mortimer's shoulder. Mortimer's right arm was on Cameron's left hip or midsection. Cameron applied enough force to Mortimer's hand to pull it out from behind Cameron's back. On cross-examination, he agreed that in the course of doing so, he pushed Mortimer and that this was one cause but not the sole cause of their going down the stairs. Mortimer took a step back and lost his balance and began to fall backwards. He grabbed at Cameron. Cameron said, "Suddenly, we were falling downstairs."

They lost their balance and were a little out of control. They tried to take the stairs one at a time. He said, "My vision is we were going down the stairs pretty well at the same time holding onto each other and losing balance on the stairs." He never regained his balance and his feet "were

trying to keep up with him". He believed that Mortimer was also off balance all the way down the stairs. Although there was a handrail on the south wall of the interior stairway, he was unable to reach it because Mortimer was between him and it. As they travel led down the stairs, they began to go faster. It took only 4 or 5 seconds to traverse the stairs. When they reached the interior landing, they were still off balance and in motion. As they tried to regain their balance, their feet hit the raised threshold and they tripped over it and Cameron fell sideways. He thought that if they had not hit the threshold, they would have regained their balance. He recalled going through the plywood panel that formed the exterior wall of the exterior landing with his left shoulder. The panel "popped off" without any resistance at all. He was certain that he went through the plywood before Mortimer.

Julia Mead had an excellent view of what happened on the stairway. She was standing on the west side of the hall, immediately north of the entrance to the kitchen at the top of the stairway. Exhibit 2, photos 2 and 3, show where she was standing. From her vantage point, she had a direct view east down the stairway. Also, standing where she was, she would not be seen by either McCall, who was sitting in the kitchen, in the chair shown in Exhibit 2, photo 3, or by Hunt, who was in the northwest corner of the living room at the tape deck.

She had consumed 2 drinks of rye and ginger ale between noon or 12:30 p.m. and 2:00 or 2:30 p.m., followed by 2 bottles of beer between then and the time of the accident, which she placed at about 5:00 p.m. She was very firm that she had nothing more than this to drink. I am quite satisfied that her powers of observation and recollection were not adversely affected by the alcohol she had consumed.

When she first saw Mortimer and Cameron, Mortimer was facing her and standing on the first step down from the hall with his back toward the stairs and, therefore, facing west. Cameron was standing in the hall, with his back toward her, facing Mortimer and, therefore, facing east. Mead was standing in the hall to the south and west of both of them. She could not recall what they were saying to each other, but they were laughing and joking.

Each had both his hands on the shoulders of the other. They were pushing each other back and forth but not in a hostile or angry way. Cameron was pushing Mortimer east down the stairs and Mortimer was pushing Cameron west up the stairs. They walked down the stairs simultaneously, one at a time. They continued to push each other in this way all the way down to the interior landing. This took about 30 seconds.

When they reached the interior landing, they stood near its northeast corner, still pushing each other back and forth as they had done on the stairs and were "kibitzing and laughing". They stayed on this landing another 20 or 30 seconds. In direct examination, she said that Mortimer was moving backwards and Cameron gave him a push. Mortimer seemed to catch the back of his heel on the raised threshold in the doorway between the interior and exterior landings. This caused him to fall backwards to the east and, in doing so, he pulled Cameron toward him. She did not see the exterior landing and did not know which of them hit the exterior landing wall. Her last recollection was of Mortimer tripping. She heard a crash and then ran down the stairs to see what had happened. She never saw both of them standing in the hall at the top of the interior stairs before they began to go down them toward the interior landing.

The following are some of the excerpts from the transcript of her evidence that relate to her description of how the fall occurred and the actions of Mortimer and Cameron on the stairs and on the landing. First, from her direct examination:

Q. In the course of Cameron and Mortimer going down the five steps on the interior stairwell of the Hunt apartment, did you observe whether either of the gentlemen had their feet leave the ground, both feet leave the ground, as they went down those five interior steps?

A. No. They walked right down the stairs.

Q. As they went down the stairs, what was Stephen

Mortimer trying to do, from what you observed about his actions?

A. He was pushing John Cameron back. John was pushing him and he was pushing back.

Q. Was Stephen Mortimer successful in pushing John Cameron up the stairwell?

A. No.

Q. Was John Cameron successful in pushing Stephen

Mortimer down the steps of the interior stairwell?

A. Yes.

The following 2 excerpts are from the transcript of her cross-examination by Mr. Williams:

Q. Now, when they were going down the stairs, as you have described it, this took a number of seconds?

A. 30 seconds, uh-huh.

Q. And they appeared to be fully in control of themselves, the two of them?

A. Yes. They weren't staggering or ...

Q. You didn't have any concern for either of their safety at that point?

A. No.

Q. And it appeared to you that what Stephen Mortimer

was doing was walking down one stair and John Cameron would follow?

A. Yes, walking down, yes.

Q. Walking down the stairs together?

A. Right.

Q. One step at a time?

A. Oh-huh.

Q. Yes?

A. Yes.

Q. And there wasn't any pushing or shoving that was helping them down the stairs, they were going down in a controlled way?

A. They were pushing and shoving each other all the way down the stairs.

...

...

Q. And would you be able to discern whether Mr. Cameron pushed Mr. Mortimer or whether Mr. Mortimer pulled Mr. Cameron toward him? I am suggesting to you that that movement might appear to be exactly the same thing to you.

A. Steve fell backwards first, so.

Q. Steve fell backward first?

A. Yes.

Q. And what caused Steve to fall backward was that four-inch rise that you described?

A. Yes.

Q. And as a result of John Cameron being attached to

him?

A. He pulled him automatically.

Q. Cameron was pulled toward Mr. Mortimer?

A. Yes.

The following is an excerpt from Mr. Brown's cross-examination:

Q. And then you say Cameron pushed Mortimer to the doorway?

A. No.

Q. And Mortimer tripped?

A. Mortimer tripped, yes.

Q. Yes. And pulled Cameron with him?

A. John, yes.

On cross-examination, Mr. Caskey asked her:

Q. All right. Do you recall whether Cameron would take the first step down and then end up on the step with Mortimer, or Mortimer who would take the first step back and be two steps lower than Cameron?

Q. No. They walked simultaneously down the stairs. They walked together down the stairs.

Q. So that what you saw was as if one of them said to the other, "Okay, go. Left foot. Right foot." So they both went down at exactly the same time?

A. John was one stair up and they just kept moving down.

She also stated that there was only one step between them at all times. They were never both on the same step together. They went down the stairs, Cameron one step higher than Mortimer, all the way to the landing just holding onto each other. It took approximately 30 seconds for them to do so.

She agreed that she thought they were on the landing for another 30 seconds and were engaged in "the same sort of motion where they were each controlling each other's shoulders". And then Mr. Caskey asked:

Q. And that's when Cameron appeared to push, to you, Mortimer back, as a result of which he caught the stoop?

A. Yes.

Q. Now, at that point in time, they were still holding onto each other?

A. Yes.

On direct examination and in cross-examination by Mr. Caskey, Head testified that Cameron pushed Mortimer on the interior landing and that Mortimer then fell backwards, after tripping over the threshold. On cross-examination by Mr. Williams and Mr. Brown, she seemed to say that Cameron did not push Mortimer before he tripped on the threshold. Mortimer and Cameron had been pushing each other all the way down the stairs and were still holding onto each other on the landing.

The evidence which Mead gave first and last was to the effect that Cameron had pushed Mortimer before he tripped. I conclude that this is probably what happened.

Counsel for the City and Stingray urge me to accept Cameron's version of how he and Mortimer traversed the stairs. Their position is that Mortimer and Cameron came hurtling down the stairs gathering momentum and, therefore, hit the plywood panel with terrific force; a force that resulted from an activity that they submitted would not constitute an expected and usual use of the premises.

In support of this position, Mr. Caskey points to the evidence that the vertical batten along the south side of the plywood panel, which was referred to in evidence as P1, was fractured horizontally about a quarter of the distance down from the top of the window above the panel, as shown in Exhibit 2, photo 7. Also, the horizontal batten across the bottom of P1, was fractured horizontally. The horizontal batten under the window at the top of P1 was pulled off when P1 came loose. Some of the nails pulled through P1 and remained in the stud frame, while others were pulled from the frame and went with the plywood.

However, Mr. Blaney, a consulting engineer called on behalf of the plaintiffs, testified that it looked to him as if the stairway had been built from salvaged or used "two by fours". The battens appeared to be made from tongue and groove material, more suitable to flooring. On cross-examination by Mr. Caskey, Blaney said that he had been on the site and the materials appeared to him to be "old and weathered". He would not speculate "on how much strength was left in them or the plywood or the nails". He would not agree that it was more probable, given these conditions, that the panel was dislodged and the battens were broken as a result of an excessive force being applied to the plywood, caused by Mortimer and Cameron hurtling down the stairs. I conclude that it would not have taken a great deal of force to do the damage to the battens and other wooden members that occurred when the P1 was dislodged, given the age and weathered condition of those members.

Mr. Quaile, another engineer called on behalf of Mortimer, in cross-examination by Mr. Caskey, said that the size of the people and the speed with which they hit the panel would be important factors. Cameron weighed approximately 180 pounds and was approximately 6 feet tall on the date of the fall. Mortimer weighed approximately 185 pounds and was approximately 5 feet 9 inches tall.

In cross-examination by Mr. Caskey, Blaney said in effect that if two people were standing on the interior landing, as Mortimer and Cameron were, and one of them with his back To the threshold fell backwards and the other one fell forward toward and on top of the first one, the forces generated would be aimed down toward the landing and not outward against the exterior wall of the exterior stairway. The lateral force against the wall would be much less than their weight because a lot of the force would be consumed by the impact on the landing. The impact with the wall would be like a "secondary collision" and their bodies would also absorb some of the energy of that impact. In his opinion, whatever momentum they had left when they hit the panel would not be very large.

Mr. Jablonsky, a consulting engineer called on behalf of the City, agreed, in cross-examination by Mr. Morse, that in a similar situation, where someone was walking backwards and tripped over the threshold and fell back toward the plywood, the force of gravity would be acting vertically and the other forces would be acting horizontally.

I accept Cameron's evidence that he encountered no resistance when he hit P1 with his left shoulder and that he hit it before Mortimer did. He suffered no serious injury from the fall. He had pain in his left shoulder, neck and head but suffered no broken bones. He did not see a physician nor did he lose any time from work. On cross-examination by Mr. Morse, he agreed that the pain to his neck and head came from his contact with the ground and not from hitting P1. I conclude that he really did not hit P1 with very much force.

There is other evidence to support this conclusion. Exhibit 2, photos 6 and 13, show that there was grass immediately under the stairway and for a very short distance to the east of it. Then, further east and contiguous with the grass was the driveway. According to Hunt, Mortimer landed with his head on the grass and the rest of his body on the asphalt driveway. His head was pointing west toward the building and his feet were pointing east away from it.

Cameron testified that he landed on the grass facing the house. His feet were to the north and his head was to the south. Cameron also stated on cross-examination by Mr. Morse that after going through P1, he fell nearly straight down and landed almost directly under the stairwell, as opposed to some distance to the east of it. He agreed this was because he had

very little momentum from falling on the landing. In fact, he agreed there was barely enough momentum to carry him over the landing once P1 had "popped off". He also agreed that this occurred after he tripped over the threshold.

Obviously, Mortimer and Cameron did not travel very far east after they went through the wall of the landing. It offered almost no resistance to Cameron's shoulder and there was barely enough momentum after hitting the plywood to carry them over the landing. If they had come down the stairway out of control gathering speed as they did, one would have expected them to have hit P1 with greater force and landed further east than they did, given the fact that P1 offered such little resistance to their passage. The fact that they landed on the ground so close to the stairway is consistent with most of the force of the fall, which resulted only from tripping over the threshold, being absorbed by the floor of the landing and a "secondary impact" of much less force against P1. In my opinion, it is much more probable that they hit P1 after simply tripping over the threshold, than after hurtling down the interior stairs.

One might normally expect that a person involved in an activity, such as Cameron, would have a better recollection of an event, especially such a traumatic event, than a bystander, such as Mead. However, Cameron has an interest in the outcome of the litigation, whereas Mead does not. She knew neither Mortimer nor Cameron personally before July 17, 1987. She had not spoken with Mortimer before that date and has not spoken with him since. She impressed me as being very neutral and objective in giving her testimony. On the other hand, Cameron seemed quite defensive, especially under cross-examination, which perhaps is not unusual given the allegations of negligence against him. Also, Head had an excellent vantage point from which to view what she described.

I conclude that Mead's version of the fall is more consistent with the evidence as a whole and therefore is more probable than Cameron's version. Her rendition is not inconsistent with the evidence of McCall or Hunt. Mortimer admitted that he had an incomplete recollection of his fall. Therefore, I accept Head's evidence as an accurate description of what transpired from the time she first observed Mortimer and Cameron on the stairs until Mortimer tripped on the threshold and fell backwards toward P1.

I do not think there is any real disagreement among the witnesses about what happened before Mortimer moved from the hall back down onto the first step. I conclude that Mortimer approached Cameron at the top of the stairs and began talking to him in a friendly way. After some time, he extended his left arm toward Cameron. They were still joking with each other. At the time, Mortimer was holding a beer in his left hand. Cameron, quite reasonably, thought that Mortimer was going to pour beer on him and grabbed Mortimer's left forearm with his right hand. He also put his left hand on Mortimer's shoulder and pushed him. Mortimer did not actually pour any beer on Cameron. At this point, Mortimer was standing with 1 foot on the top of the stairs and the other foot on the first step down from the top. These were the actions that McCall and Hunt viewed.

Mortimer put his hands on Cameron's shoulders and they then began to go down the stairs in the manner described by Mead. When they got to the landing at the bottom of the interior stairs, Mortimer and Cameron were still engaged in good natured shoving back and forth. In the course of this "horseplay", Cameron again pushed Mortimer, who went backwards and hit his heel on the threshold. This caused Mortimer to fall backwards and as he did, he grabbed onto Cameron, pulling Cameron toward him. Mortimer hit the floor of the exterior landing, with Cameron, the taller, on top. The momentum of the fall carried them forward and Cameron's left shoulder hit P1. Even though he hit it with little force and encountered little resistance from it, P1 became dislodged. The slight forward momentum that remained was sufficient to cause them to fall from the landing onto the ground below.

4. HOW THE INJURY OCCURRED:

The issue here is whether Mortimer sustained his injury when he was on the landing or when he hit the ground. First, as already indicated, I accept Cameron's evidence that it was his left shoulder that hit P1 and caused it to "pop out" and that Mortimer did not hit P1 with his head or any other part

of his body while on the landing. Secondly, as I have already observed, the degree of force required to dislodge P1 was not very great and certainly not of sufficient magnitude to cause the injury Mortimer sustained.

Dr. Gurr is an orthopaedic surgeon, who specializes in spinal cord injuries and the forces and biomechanics associated with them. He testified that Stephen's spinal cord injury occurred between C4 and C5. The C4 body had been displaced anteriorly and the posterior process of C5 splayed or opened up. In his opinion, the injury was caused primarily by flexion of the neck that may have been accompanied by some rotation to the left or right. In assessing causation from a biomechanical point of view, he said that the 2 most important factors were the magnitude and rate of application of force and the position of the head, neck and upper chest region. The first factor was the most critical one.

Dr. Gurr's opinion was that Mortimer's injury probably occurred as a result of his hitting the ground and not when he fell on the upper landing. He based that opinion on several factors. First, Mortimer recalled no resistance going through P1. Secondly, he had a sense of falling and turned to see the ground below him. Dr. Gurr did not feel that Mortimer would be able to rotate to the degree necessary to see the ground if he had sustained the injury from hitting the wall. Finally, and very importantly, he found it significant that Mortimer experienced no loss of sensation or strength nor did he experience the feeling of "pins and needles" until after he hit the ground. He explained it was likely that the spinal cord injury occurred almost at the time of experiencing the "pins and needles" because the electrical activity transmitted through the spinal cord would be almost instantaneously interrupted and would be appreciated by Mortimer almost immediately.

Despite the alternate theories advanced to Dr. Gurr in cross-examination by Mr. Brown and Mr. Caskey, I have absolutely no doubt that the injury which rendered Mortimer a quadriplegic occurred when he hit the ground and not before.

5. THE STAIRWAY:

(1). BACKGROUND:

I turn now to consider whether the stairway in question was built in compliance with the Code and the City's building by-law then in effect, or, in accordance with then prevailing good building practice.

Before the third building permit referred to in this case was issued, the City adopted Parts 2 to 9 inclusive of the 1970 NBC, by its by-law No. B.-56.269, which is described in the preamble to be:

> A by-law to safeguard life or limb, health, property and public welfare with respect to the design, construction and alteration of buildings by the provision of appropriate minimum standards.

In this case, much technical evidence was led about the provisions of Part 9 and Part 4 of the Code. I conclude that Part 9 was enacted to give easily understood instructions of a nontechnical nature based upon empirical rules. It was designed to guide home owners or general contractors in the construction of simple structures such as the stairway in question. Part 4 provided the technical design criteria that engineers would use to design more complicated structures.

The plaintiffs' position is first, that the stairway failed to comply with Part 9 of the Code. Secondly, if it had complied, Mortimer would never have fallen from the landing and sustained the injury he received from hitting the ground. Finally, the plaintiffs allege that the City's failure to enforce compliance with Part 9 was a direct cause of Mortimer's injury.

The City's, position is that this stairway was not specifically covered by Part 9 of the Code. However, the City claims it met the design criteria contained in Part 4, as demonstrated by load tests conducted by Mr. Jablonsky on full scale models. The City's position is that if the structure satisfied the requirements of Part 4, it did not matter if it failed to meet Part 9 criteria. Moreover, the City claims

that even under Part 9, its Inspector could approve structures that did not fit into any recognizable category of the Code, based on the City's "past practice".

Mr. Turner has been with the City's Building Department since 1960. He testified as the City's representative and explained, among other things, the procedure that would be followed when the City received an application for a building permit, with specific reference to the 3 building permits in this case.

First, the counter clerk in the Building Department takes the application and then sends it for a zoning check and to the Plans Examiner. The Plans Examiner reviews the plans submitted with the application. If the Plans Examiner finds the structure to be satisfactory, he or she approves the application. Then, it is sent to the Chief Building Inspector, who signs the building permit and directs that it be issued. The applicant receives the original permit and a copy is given to the City's Building Inspector.

The Plans Examiner does not inspect the property. He or she inspects only the plans. When the Building Inspector goes to the site to do his inspection, he does not have access to the plans that were filed with the application. Rather, he is guided by whatever might be noted on the actual permit itself in the section entitled, "Remarks". After completing his inspection, he then makes a written report by noting his comments about compliance or non-compliance on the back of the permit.

The 1963 permit provided the following in the "Remarks" section:

> Erect an Outside - Open Stairway - 10' High with 2"X12" Stringers, 2"X10" Treads with 2-Pltforms (sic) 3'X4' -
>
> Cut in Doorway, PROVIDE - HANDRAILS Or Balustrade on ALL
> OPEN SIDES.

The 1963 permit appears to have contemplated cutting a door into the side of the building at the top of the stairway, where a window then existed. The Inspector's report on this work made no mention of the raised threshold.

The "Remarks" section of the 1972 building permit read:

> To construct roof over outside stairway of existing dwelling, and close in.

Turner agreed that in 1972 part of the existing stairway from 1963 must have been eliminated. Probably, the stairway itself remained and the handrail or balustrade was removed. Turner agreed that the notation in the 1972 permit failed to set out any dimensions that might be used by the Inspector to evaluate the work that was done. The application for the 1972 permit, filed as Exhibit 101, under the heading "Brief

Description of Work", stated:

> Construct roof over outside stairway & close in. 2'x4' const. & plywood.

The application contained no other dimensions, nor were any plans filed with it. Turner agreed that without knowing the size of the members; their spacing and the method of construction, it would be impossible for the Plans Examiner to know whether the proposed structure complied with the By-law and the Code. The Inspector would have no idea from looking at the building permit, or even at a copy of the application, what the Plans Examiner thought about the structure. From looking at the permit, he would not be able to determine, for example, the spacing of the studs, their orientation, their height, the thickness of the plywood to be used or the manner of its attachment. Turner agreed that the Plans Examiner had abdicated his function and had left it solely to the Building Inspector to determine if the structure met the Code requirements. This was not the City's normal procedure.

The Building Inspector's report on the work done in 1972 was filed as Exhibit 40. Although the handwriting is somewhat difficult to decipher, I believe it reads as follows:

> Nov. 21/72 Completed - Plywood Construction 2 windows - less than 4 ft from Property line - Downstairs (?) window in enclosure, second means of egress through interior

apartment kitchen - report.

There is nothing that indicates non-compliance and the work was approved.

There is no evidence that the City ever asked the applicant to comply with the requirements of Part 4. I conclude that the work done under the 1972 building permit was approved on the basis that the structure complied with Part 9 of the Code, unless the Inspector was relying upon the City's "past practice". The applicability of Part 4 arose only during the course of this lawsuit. The city resorted to it in an effort to demonstrate, after the fact, that the plywood panel that failed had the capacity to resist "expected" lateral loads against it. The City took no steps at the time the permit was issued or at the time the work was inspected to make that determination using Part 4 criteria.

(2). EXPERT WITNESSES:

Four engineers testified on the issue of Code compliance. Mr. Blaney, Mr. Quaile and Dr. Nawwar testified for the plaintiffs and Mr. Jablonsky testified for the City.

Mr. Blaney and Mr. Jablonsky were both engineers of wide experience but Mr. Quaile, a consulting engineer, was more experienced in matters dealing with wood construction and the properties of wood. He obtained both a B.Sc. and an M.Sc. in Forestry before going into engineering. In his undergraduate work, he specialized in wood science, which had to do with technical specifications relating to the structural uses of wood. His Masters thesis won first prize in an international competition sponsored by the Forest Products Research Society for developing a way to test the shear strength of Douglas Fir beams.

He has been a consulting engineer for over 16 years and either alone or in conjunction with others has authored a number of publications dealing with test procedures for wood and the properties of wood. Mr. Quaile's curriculum vitae was filed as Exhibit 45. It revealed that he has been a member of the Canadian Standards Association Technical Committee on Engineering Design in Wood. In his professional work as President of his consulting firm, he has been involved in the inspection and testing of timber structures, including residential and commercial buildings. He has investigated failures and has done remedial design work for deteriorated and unsafe buildings. He has also engaged in research and development relating to new wood building systems. He has taught Mechanical Properties of Wood and Design of Timber Structures at the University of Toronto. He also supervised the preparation of the technical content of the Canadian Wood Council's 1990 Wood Design Manual.

He displayed an extensive knowledge of the properties of wood in an engineering context. He impressed me as a fair witness who, on cross-examination, was unwilling to yield on certain points, not out of partisanship to the plaintiffs, but simply because his training and experience led him to certain firm conclusions. At other times, especially in his evidence in reply, he readily admitted that he had made a mistake in one measurement and that one aspect of a test biased the result in favour of the plaintiffs. When he disagreed with

Mr. Jablonsky, he had a sound, professional reason for doing so. He impressed me as having more knowledge of the provisions of the Code relating to wood structures than either Mr. Jablonsky or Mr. Blaney. As a result, I have given great weight to Mr. Quaile's evidence.

Mr. Blaney has been the Executive Vice-President of Kleinfeldt Consultants Limited since 1986. In that position, he is responsible for the company's consulting activities. His background is in civil engineering. He also has been designated a consulting engineer by the Association of Professional Engineers of Ontario. His family has been in the construction business for 13 generations. He said he had been "around construction projects" since he was 3 years old. He worked for his father in the construction business in the summers while he was going to school. Even at that stage, he acted as a foreman for the construction of a shopping mall and an apartment building.

He testified that all engineers must have knowledge of the Building Codes and by-laws governing construction. He supervises Kleinfeldt's design work and oversees a staff of 26 in the Toronto office. Everyone ultimately reports to him through the department managers. His primary activity in recent years has been to investigate buildings and report to their owners about whether they comply with the relevant Building Code and good building practice. His usual clients are financial institutions, banks and pension funds. His extensive and varied project experience is set forth in his curriculum vitae, which was filed as Exhibit 31. I conclude that he has a very good knowledge of building Code requirements as well as practical, first hand knowledge of proper construction techniques.

Mr. Jablonsky was older than either Mr. Quaile or Mr. Blaney and has practised as an engineer longer than either of them. He is also designated as a consulting engineer. He is the managing partner of Jablonsky, Ast and Partners. As such, he has overall responsibility for all the firm's activities, including "senior technical contribution to the structural design of high rise and low rise residential, commercial and industrial buildings." His firm is involved principally in the design of new buildings and works for and with architects. They work with many different materials including wood. Although not as many of his professional opinions relate to wood, he said that he had studied under one of the foremost wood engineers in Germany and he "did the wood structures" at the Fort Erie Race Track.

His curriculum vitae was filed as Exhibit 103. Mr. Jablonsky was listed in the 1970 National Building Code as a member of the Joint CSA/NBC Subcommittee on Reinforced Concrete Design. However, prior to the load tests he supervised in connection with this case, he had never before conducted load tests on wooden structures. He admitted that he and his partner, Mr. Garshon, followed their own procedures for conducting the load tests. The tests were based on their experience in conducting load tests on materials other than wood. In his opinion, "A load test is a load test." However, judging from different CSA standards that apply to different materials, I conclude that materials such as steel and concrete have different properties than wood. Therefore, the methods appropriate to conducting load tests on such other materials may not necessarily apply to wood. For example, although he did not agree that it applied, he was not aware of CSA S307-M1980 before he read about it in Quaile's first report. However, after reading it, he changed his test procedures.

(3). PART 9 COMPLIANCE:

Mr. Caskey submits that in 1972, the then existing exterior staircase, built in 1963, was enclosed simply to prevent its exposure to the elements. Also, the enclosure protected the users of the stairway from wind, snow and rain. He refers to the exterior plywood as "cladding" and submits that the area through which Mortimer and Cameron plunged was not a "wall", within the contemplation of the Code. He suggests that because it was never intended as a wall, it should not be treated as such for purposes of assessing its compliance with the Code requirements. It is his position that the "sill" under the window constituted a "guard". It, together with the plywood panel affixed to it, constituted a "balustrade" within the meaning of the Code. Therefore, he submits that the staircase complied with Part 9.

In my opinion, if this had been an open, exterior stairway, as it clearly was before it was enclosed pursuant to the 1972 building permit, the Code provided in s. 9.8.7.3. that an exterior landing more than 2 feet above grade "shall be protected by balustrades on all open sides". A handrail was also required. A "balustrade" was defined in the Code as:

> a protective barrier that acts as a guard around openings in floors or at the open sides of stairs, landings, balconies, mezzanines, galleries, raised walkways or other locations to prevent accidental falls from one level to another. Such barrier may or may not have openings through it. [Emphasis added].

The function of a balustrade is "to prevent accidental falls from one level to another". If the protective barrier were a wall, such as that of which P1 was a part, then it

should have been constructed in such a way as to perform the same function.

If this were an interior stairway with more than 2 risers, s. 9.8.7.1. of the Code provided that:

> ... the sides of the stair and the landing or floor level around the stair well shall be enclosed by walls or be protected by handrails or balustrades, except that a stair to an unfinished basement or cellar in a dwelling unit may have one unprotected side.

Whether this particular structure is construed as an interior or an exterior stairway, there should have been in place a protective barrier, a properly constructed balustrade, or a wall that "enclosed" the "landing", that would prevent accidental falls from the landing to the ground below. In my opinion, the Code demanded no less and certainly good building practice required it.

I shall deal first with whether a properly constructed guard or balustrade was in place. I accept Quaile's opinion that if the window "sill" were to be considered as a guard, it would have to be part of a construction that extended down to the landing and the guard as a whole would have to be capable of meeting the safety and serviceability requirements of the Code. The last sentence of the definition of "balustrade" specifies that it must act as a barrier that may or may not have openings through it. In my opinion, this clearly supports Quaile's position that it must extend down to the landing. Otherwise, it would not constitute a "protective barrier" for the benefit of persons on the landing, 10 feet above grade.

On cross-examination by Mr. Williams, Turner agreed that the definition of "balustrade" contained in s. 9.8.7.1. was a definition that depended upon function, i.e., what a balustrade is intended to do. He agreed that it anticipated accidental falls from one level to another and that its function was to prevent that from happening. I agree with this functional approach, which is in keeping with the purpose of the By-law, namely "to safeguard life or limb".

According to Mr. Caskey's submissions, P1 was attached To the studs merely as "cladding" to protect the stairs and the people using them from the elements. If this is the case, then I conclude there was no intention to have P1 function as a balustrade. It certainly failed to do so because it permitted Mortimer and Cameron to fall accidentally from the landing to the ground below. In making that observation, I have not lost sight of the fact that, as far as the City is concerned, I am bound to look at the condition of the structure as it existed at the time it was inspected in 1972 and not at the time it failed in 1987. I shall have more to say about its condition in 1987 later when I deal with Stingray's position.

Notwithstanding Mr. Caskey's cross-examination of Quaile on the sections in Part 3 dealing with exits, the evidence of Jablonsky and Turner, the submissions of counsel for the City and Stingray, I find, on the basis of Quaile's evidence, that the sill under the window did not constitute a guard or balustrade within the meaning of the section. Nor did P1, because it was not fastened properly to the wall studs.

I accept Quaile's evidence that in order to comply with the 1970 NBC, the upper landing had to be enclosed by walls or protected by handrails or balustrades. I turn then to look at the adequacy of the enclosure as a wall of which P1 was a part in terms of Code compliance.

The construction of that wall was deficient in many ways. I find the following to be some of the contraventions of the City's Building By-law, which incorporated Part 9 of the 1970 NBC.

As already noted, the application for the building permit was not accompanied by drawings or specifications of the work to be done as required by s. 1.5.4. of the by-law. That section provided that the drawings should include:

> All information necessary to ensure that the building or structure, if constructed, will conform to all by-laws of the Corporation.

That was not done. The Plans Examiner, therefore, had

insufficient information to assess Code compliance, yet the City issued a building permit.

The 3 vertical 2x4 studs forming part of the frame of the east side of the landing were referred to in evidence as S0, S1 and S2. S0 was the most southerly and S2 was the most northerly of these 3 studs. They were installed "on the flat", that is with the 4" dimension parallel to the wall face rather than at right angles to it as required by s. 9.23.10.2. of the Code. P1 was 4 feet wide. Its south edge was nailed from the outside into the east or outside face of S0 and into S2 at its north edge. I am satisfied from the evidence of Blaney and Quaile, notwithstanding Jablonsky's evidence to the contrary, that studs at right angles would have been less likely to deflect and would have given greater strength to the structure and increased the wall's ability to resist lateral forces projected against it.

It is true that Table 9.23. 10.A of the Code provides that studs may be placed on the flat when they are not supporting a load. However, in that case, they must be spaced at not more than 16 inches on centre and must be not more than 8 feet high. Otherwise, Table 9.23.10.A provides for a maximum stud spacing of 24 inches. Here, these studs were supporting the roof and the snow load that would be upon it in the winter. They were also subject to wind loads. The vertical studs should have been spaced at not more than 24 inches on centre. In fact, Quaile's evidence was that good building practice required that the studs be spaced at not more than 16 inches on centre.

The distance between S0 and S1 was about 37 inches on centre. The distance between S0 and S2 was about 44.5 inches on centre. Between S0 and S1 there was a window above P1. The lower edge of its sill was about 44.5 inches above the floor of the landing. Quaile's opinion was that Cameron probably hit P1 toward the most northerly half of the panel but to the south of S1 at a point about 16 to 18 inches above the floor of the landing. Mortimer and Cameron went through the wall between S0, S1, the lower plate that was "toenailed" to the landing and the lower edge of the window sill.

This stud wall did not have a bottom plate as required by s. 9.23.11.2. of the Code. If a bottom plate had been installed with its wider surface resting on the landing, the vertical studs could have been fastened to the plate by nailing through the plate from below, up into the studs, before it was fastened to the landing. Then, it could have been fastened to the landing with nails driven vertically from above through the plate into the landing. Here, the 2x4 that joined S0 and S1 was installed with its 4 inch face parallel to the wall surface, "on the flat", rather than having that face lying on the landing. It was "toenailed" from above at its junctures with S0 and S1. "Toenailing" involves joining 2 wood members by driving a nail at an angle through 1 into the other. It is a much weaker method of fastening than the proper method of fastening studs to a base plate, as described above.

I have no doubt that if the east wall of the landing had been properly built with vertical studs at right angles to the face of the plywood and spaced at 24 inches on centre as required by the Code or at 16 inches on centre as required by good building practice and properly nailed to a properly installed base plate and window sill, it would have restrained Mortimer and Cameron and would have prevented them from an accidental fall to the ground below.

I accept the evidence of both Blaney and Quaile to the effect that if this structure had been built in accordance with Part 9 of the Code, it would have withstood the force resulting from Mortimer and Cameron falling against it. I am convinced that a vertical 2x4 stud, properly installed under the window between S0 and S1, would have resisted the force generated by Mortimer and Cameron when they fell against the wall. In 1972, the cost of a 2x4 stud approximately 44.5 inches long would have been insignificant. Such a stud could have been incorporated easily in the east wall of the landing when it was being built.

(4). GOOD BUILDING PRACTICE:

I turn now to consider whether the stairway, and particularly the wall of which P1 was a part, was built in

accordance with "good building practice" or the City's "past practice".

Mr. Caskey's position is that the Building Inspector was entitled to rely upon the "past practice" of the City in approving structures which did not fall into any recognizable category of the Code and that he had a certain amount of discretion in this regard. He relies upon s. 9.3.1.4. of the Code which provided:

> Materials, systems and equipment not specifically described herein, or which vary from the specific requirements in the Part, or for which no recognized test procedure has been established, may be used if it can be shown that the material, system or equipment is suitable on the basis of past performance, or good engineering practice or on the basis of tests described in Article 9.3.1.5. [Emphasis added].

and s. 9.3.1.5:

> Where no published test method exists the test shall be designed to simulate or exceed anticipated service conditions or shall be designed to compare the performance of the material, system or equipment with similar material, system or equipment that is known to be acceptable. [Emphasis added].

Quaile testified that the staircase was built employing conventional wood frame construction. Such construction was "specifically described" in Part 9 of the Code, which, therefore, applied to the exclusion of any City "practice".

Turner agreed that any "past practice" of the City would have to comply with and not be contrary to "good building practice". He agreed that the City would not develop a practice that established criteria less stringent than the minimum requirements of the Code. Also, the City would only establish such a practice where the Code was silent. If the Code were silent as to the requirements for balustrades for interior or exterior stairs, the City would develop a practice in accordance with good building practice. Between 1960 and 1972, the City had no practice that would permit the spacing of balusters on exterior stairs in excess of 24 inches.

Based on his 30 years of experience, Turner believed he was qualified to assess good building practice. He and the Chief Building Inspector, Mr. Cerminara, inspected the stairway after the accident on June 14, 1988. On cross-examination by Mr. McCall, Turner testified he told Cerminara that maybe they should have had a 2x4 between S0 and S1. If he had been the inspector for the work done in 1972, which he was not, he would have required the owner to use studs spaced at 24 inches on centre or he would not have approved the work. Nor would he have approved the work unless there had been a vertical stud below the window between S0 and S2. He would have issued a compliance order and if the owner had not complied, he would have issued a stop work order.

If he had examined the stairwell, he would have referred to the section of the 1970 Code that dealt with walls and the spacing requirements for exterior walls. He said that the usual practice of the City was to require studs to be spaced at 24 inches on centre in exterior walls. Therefore, he would have required the studs to be spaced at 24 inches on centre, because that was the usual practice applied by the City. He agreed that this stairway, lacking a wall built with vertical studs spaced at 24 inches on centre, did not comply with that practice.

He also agreed that P1 was not designed to resist lateral forces from someone falling on the landing against it, but was there for wind resistance. If someone had suggested to him that P1 was sufficient to resist lateral forces, he would not have accepted the application because he knew that 3/8 inch plywood, the thickness of P1, was not going to resist the lateral forces in that configuration.

Another very important deficiency in the structure resulted from fastening P1 to S0 and S2 with nails in withdrawal rather than in shear. P1 was placed on the east or outside surfaces of the studs and the nails were driven into the plywood from east to west, i.e., from the outside in.

Therefore, if a lateral load were applied to P1 from inside the landing toward the east, as was the case when Mortimer and Cameron fell, the nails would be much less likely to hold than if the lateral force were travelling in the opposite direction.

Blaney referred to the 1955 Wood Handbook: Basic Information on Wood as a Material of Construction with Data for Its Use in Design and Specification, prepared by the U.S. Department of Agriculture. An extract from it was found at Tab 5 of exhibit 34 where, at p. 165, it states:

> The withdrawal resistance of nails is greatly affected by such factors as type of nail point, type of shank, time the nail remains in the wood, surface coatings, and moisture content changes in the wood...
>
> The resistance of a nail to direct withdrawal from a piece of wood is intimately related to the density or specific gravity of the wood, ... the diameter of the nail, and the depth of penetration.

Blaney said that due to moisture in the wood, the wood around a nail can rot and when the nail is in tension it can "work out". He said this principle is known to people familiar with good building practice.

Using nails in withdrawal was contrary to CSA Standard 086-1970, which was made applicable by s. 4.3.2.1. of the Code. From the evidence of both Blaney and Quaile, I conclude that the use of nails in withdrawal did not accord with good building practice and that this fact was widely known.

Not only was this method not in accordance with good building practice, it is probably the case that the nails used were of insufficient size. Blaney made certain observations when he attended at the scene on April 6, 1988. He said that the nails used to fasten the plywood to the frame appeared to be 2 or 2.5 inches long. He based this conclusion on the size of the nail heads because he did not pull any from the wood. On cross-examination by Mr. Caskey, he admitted that he never made an examination to see what length the nails were and agreed that he was engaging in speculation and conjecture. However, he said that judging from the size of the head of the nails, he would "be generous in saying they were 2-1/2 in. long". He said he could estimate the length of the nail by looking at the size of the hole and the location where it used to be. Based upon his experience in construction, I accept this statement.

Cameron testified that when he saw the plywood lying on the ground after his fall, the nails reminded him of one and a half inch finishing nails, but he could not be sure. He also noted that the nails were rusty. On cross-examination by Mr. Morse, he said he thought they were finishing nails because they were "skinny" and he thought they were approximately 1.5 inches long.

The day after the accident, Mortimer's father went to the scene and found a piece of plywood leaning against the wall of the building. The painted, exterior side of the plywood was against the wall and the interior side was facing him. A strip of the vertical 2x4 to which the plywood had been attached on the north side of the structure was still adhering to the plywood. There was a "hole" in the wall of the landing where the plywood had been. He inspected the plywood and testified that the wood was soft at the bottom and was rotten. He said that the nails had pulled through the bottom of the panel and that there were rusty nails on the bottom "of the hole" in the frame where "the weather had gone in". He said there were no nails in the vertical studs of the stairwell; they were in the plywood on the ground. He said a lot of them were quite bright but there were a few rusty ones at the bottom of the panel, i.e., on the north and south side of the panel and all along the bottom. The nails he found still in the stairwell and in the plywood were round nails. They had no screw, twist or spiral to them.

Turner agreed that if the nails initially used to fasten P1 to the frame were finishing nails, they would not be capable of fastening the plywood properly.

Based on this evidence, I conclude that it is more

probable than not that the nails used to attach P1 to S0, S2, the sill under the window and the plate at the bottom were of insufficient size. Even without this finding, I conclude that the construction fell far short of good building practice. Based upon Turner's statement that any past practice of the City would have to comply with and not be contrary to good building practice, it follows that this construction could not comply with the City's past practice. If it did, then the City's practice was unreasonable and unacceptable.

(5). PART 4 COMPLIANCE:

I turn to consider whether the stairway complied with Part 4 of the Code, as incorporated in the City's building by-law. The evidence in support of the applicability of Part 4 came principally from Jablonsky. While agreeing that Part 9 applied to small buildings such as the one at 587 Central Avenue, he said that Part 4 provided the design criteria that applied to all buildings and he found nothing in Part 4 that excluded small buildings.

Mr. Jablonsky relied upon s. 4.1.1.3.(1), which read:

> Buildings and their structural members shall be designed to have sufficient structural capacity to resist safely and effectively all effects and influences that may be expected, and shall in any case satisfy the requirements of this section.

Section 4.1.1.4 provided that "buildings and their structural members shall be designed by one of the following methods": the design procedures and practices provided by sections 4.2 to 4.8 inclusive, or, l of the following 3 bases of design: analysis based upon generally recognized theory; evaluation of a given fullscale structure or a prototype by a loading test, or, studies of model analogues, "provided the design is carried out to the satisfaction of the authority having jurisdiction by a person especially qualified in the specific method applied and provided the design ensures a level of safety and performance at least equivalent to that provided for or implicit in design carried out by the methods referred to in Clause 4.1.1.4(a)."

Jablonsky decided to conduct load tests because he felt if he could demonstrate that the structure had been "designed to have sufficient structural capacity to resist safely and effectively all effects and influences that may be expected", it would not matter if the requirements of Part 9 relating to a stud wall had not been met.

Blaney also considered Part 4 of the Code, but he did not perform load tests. Rather, he utilized one of the other 3 bases of design provided for in s. 4.1.1.4.(b) of the Code that involved certain mathematical calculations. As a result, he concluded that the plywood sheathing did not meet the minimum design loads required by Part 4. On cross-examination by Mr. Caskey, he agreed that the full scale model test was the more accurate method. He also agreed that in the engineering field actual tests were in many cases better than mathematical analysis.

However, he said it has been known for years that one should not nail in withdrawal. He also said that the Code was very specific in Part 9. Therefore, he felt it unlikely that anyone would do a load test because "a recognized test procedure has been established" within the meaning of s. 9.3.1.4.

When asked by Mr. Caskey to agree that the wall would not contravene the Code if it withstood the forces set out in part 4, it was Blaney's opinion that the wall did not meet part 9 for many reasons and that an engineer would be imprudent to ignore the Code and build it another way. In doing so, he or she would be taking a risk.

He also took s. 4.3.1.4. into account and concluded that it had been violated because the plywood, if it were considered a balustrade, had failed to prevent Mortimer's fall. Moreover, the plywood was nailed to the exterior of the frame by nails in withdrawal and had probably been attached using nails of insufficient length. In these circumstances, he concluded that the thin plywood sheathing could not have been expected to resist lateral loads from the inside of the

stairway. In his opinion, the stair lacked any form of fall protection.

Jablonsky did not take issue with the accuracy of Blaney's calculations. However, he said that Blaney used the design criteria of the 1975 Ontario Building Code rather than the 1970 NBC criteria. He also felt that one of the problems with testing by mathematical calculation was that one had to make a great number of assumptions. Therefore, he felt a better way to answer the question was to do load tests on a full-scale model.

Initially, he did 4 load tests, on February 21, 1991. He described them in a report dated February, 1991, that he sent to the City's solicitors. He based his prototype on the model described in Blaney's report. However, after receiving another report, he realized that his first prototype had been constructed using vertical studs at right angles to the surface of the plywood, rather than on the flat as in the "as built" structure. Therefore, the results were misleading because the structure tested was not the same as the "as built" structure.

In his second try, he did 6 more load tests, (Numbers 5 to 10 inclusive), on March 27, 1991. The results were incorporated in his second report dated March, 1991. Then, he received Quaile's first report and yet another sketch with a different configuration for the construction of the stair enclosure at the upper landing. Quaile had reviewed both the Blaney and Jablonsky reports and found mistakes in each that he referred to in his first report. Jablonsky accepted the fact that the Quaile sketch was "the correct one and the other sketches were incorrect." It showed S1, which had been missing from the other sketches, and had correct dimensions for the window sill, which was not shown on the flat.

Therefore, on April 8 and 9, 1991, Jablonsky conducted a third set of load tests, (Numbers 11 and 12), on a revised prototype, the results of which were incorporated in his third report, dated April, 1991.

Finally, he decided to do 2 more load tests because he did not like the fact that one of the studs had broken in the third set of tests and he wanted to repeat the tests to see if the stud might just have had a weak spot. Tests 13, 14 and 15, done on April 9 and 11, 1991, were the subject of the fourth report, also dated April, 1991.

In the first 4 tests, Jablonsky employed both the loads prescribed by the 1970 National Building code and the 1975 Ontario Building Code. The National Building Code provided for a line load of 150 pounds per lineal foot. The 1975 Ontario Building Code prescribed a line load of 100 pounds per lineal foot plus a uniformly distributed load of 20 pounds per square foot. Test 5 used the 1975 OBC criteria. In Test 6, he used the 1970 NBC criteria. In Test 7, the load was 110 pounds concentrated at the centre line of the panel. In Test 8, he used a line load of 55 pounds per lineal foot, plus a concentrated load of 220 pounds at the centre line of the panel. In Test 9, he used the load prescribed by the 1970 NBC. In Test 10, he tried to determine the ultimate capacity of the panel and loaded it at its centre line to a maximum load of 1,045 pounds. When the load was increased to 1,100 pounds, one of the studs failed in bending. In Test 11, he employed a uniformly distributed load of 50 pounds per square foot. In Tests 12 to 15 inclusive, a line load of 250 pounds per lineal foot was used.

On the basis of all these tests, Jablonsky concluded, in his reports and in his direct examination, that the original "as built" assembly was capable of sustaining the loads prescribed by Part 4 of the 1970 NBC. After a relatively brief cross-examination by Mr. Williams and Mr. Brown, Mr. Morse then began a detailed, lengthy and persistent cross-examination.

During the course of it, Mr. Jablonsky agreed to the following:

1. His thesis was that if P1 could withstand the load prescribed under Part 4, it did not matter that there was no stud under the window, as required by Part 9 of the Code.

2. The method he used to prove his hypothesis was to

evaluate the capacity of the "as built panel".

3. Initially, he intended to prove his hypothesis by building a prototype to simulate the "as built" condition described by Blaney.

4. He set out to test the prototype using the criteria in the 1975 OBC, as identified by Blaney, and the 1970 NBC criteria, which Blaney had not used, but which Jablonsky knew were relevant.

5. The first four load tests, described in his first report, did not confirm his hypothesis that the "as built" structure had the capacity to withstand the

lateral forces required by the 1970 NBC, because:

(1) the model employed studs at right angles to the surface of the plywood, rather than "on the flat", which was the configuration of the "as built";

(2) the dimensions for the height and width of the panel were understated;

(3) the face grain of the plywood on the model was placed on a different axis from the "as built";

(4) Ardox (spiral grooved) nails were used in the model, whereas smooth nails were used in the "as built".

6. P1 should have been capable of providing the structural capacity to resist the lateral load prescribed by Part 4 and prevent a fall to the ground below.

7. P1, S0, S1 and S2 are "structural members" and as such must all satisfy Part 4 of the 1970 NBC and conform to CSA Standard 086-1970, "Code of Recommended Practice for Engineering Design in Timber", as contained in NBC Supplement No. 4, Canadian Structural Design Manual, 1970 and as made applicable by s. 4.3.2.1.

8. When designing a structure, one should have regard to both the strength and performance or serviceability of a structural member. One of the features of performance is deflection and Part 4 of the Code provides for allowable deflection. If he were an engineer who was considering the use of his seal to confirm compliance with the 1970 NBC, he would conform to CSA 086-1970 and would ensure that the structure met all the requirements of that standard and specifically the deflection requirements. At first, he did not believe that this structure had to comply with the deflection requirements of CSA 086-1970, but agreed that if he were wrong, the structure clearly did not meet the deflection limitations prescribed by it. Later, he agreed that he would test the east wall of the landing for both strength and deflection, but said that the deflection requirement was secondary to the strength requirement.

9. If there were a lateral deflection of the studs due to wind loads, one might expect to see the tops of the studs, where they were fastened to the roof joists, become unfastened. If this occurred, the structure would not perform as expected by the Code. After viewing the lower photo in Exhibit 91 and Exhibit 125, which showed the separation of the roof stringer from the roof joist at S3, S4 and S5 and that S3 had been nailed to the stringer with nails in withdrawal, he agreed that the separation could have been caused by wind suction due to normal winds. If that were the case, the stairwell failed to comply with the 1970 NBC. He agreed that it was not good engineering or building practice to have the roof stringers and joists joined by nails in tension or withdrawal. It was then evident to him, contrary to his earlier belief, that the stairwell did not conform to the 1970 NBC.

10. When testing the capacity of P1 to satisfy the requirements of the Part 4 load criteria, he was concerned with the area of the plywood between S0 and S1 and between the lower and upper studs to which P1 was attached, i.e., the "sill" under the window and the lower plate. With respect to the tests reported upon in the third and fourth reports, part of the load was placed upon the panel and part of the load was placed upon the studs. This was referred to as "load sharing". Therefore, he could not say how much of the load was borne by the panel and how much was borne by the studs and was not reporting on the capacity of the plywood alone to meet the load requirements of the 1970 NBC.

11. He could "not exactly" point to any test in reports 1 to 4 to show that the plywood panel between S0 and S1 below the sill under the window and above the lower plate met the Part 4 requirement of 150 pounds per lineal foot.

12. Table 2 dealt with the first prototype built as per the information in the Blaney report with the studs at right angles to the face of the plywood. Table 12 dealt with the "Quaile panel", with the studs "on the flat". Under the 1970 NBC line load of 150 pounds per lineal foot, the deflection reading for the plywood panel on Table 2 was 14 mm, whereas on Table 12 it was about 32 mm. The CSA 086-1970 deflection limit was about 14.5 mm. When the studs were at right angles to the face of the plywood, as required by Part 9 of the Code, the deflection of the plywood panel was dramatically reduced and within the prescribed limit, whereas when the studs were "on the flat", the deflection was well in excess of twice the deflection limit. In addition, when the studs were "on the flat", some of them failed or broke at less than Part 4 design criteria, whereas when they were at right angles to the face of the plywood, they did not.

13. Employing limit states design, he used a safety factor of 1.5 times the 1970 NBC design load of 150 pounds per lineal foot and a resistance or "phi" factor of 0.9. He determined the test load as follows: 150 (pounds per lineal foot) x 1.5 (safety factor) / 0.9 (resistance factor) = 250 pounds per lineal foot x 4 (the width of the panel in feet) = 1,000 pounds. Limit states design was a relatively new method that "came out" in 1989, and was therefore not available in 1972 when the application for the building permit was made. Unless there were something wrong with the model tested, if members of the models that were tested failed when less than 1,000 pounds was applied, it could not be said that the "as built" structure met the Part 4 requirements. The outcome of the 1,000 pound test on the "as built" structure was reported in Table 12. The stud broke at 850 pounds before the load of 1,000 pounds was achieved and therefore did not meet the Part 4 requirements. Table 13 dealt with the second model tested in accordance with the limit states design formula. It failed after 4 hours. He discarded the results of this test because it was learned that the ends of the "sill" under the window were not nailed to the studs S0 and S1. Tables 14 and 15 showed deflections greatly exceeding the CSA 086-1970 deflection limit and, therefore, non-compliance with Part 4 of the Code.

14. The resistance or "phi" factor of 0.9 was not appropriate to measure the capacity of the plywood. A more appropriate "phi" factor would be 0.6. Using a factor of 0.9 biased the results in favour of the City. Applying a "phi" factor of 0.6, Jablonsky calculated the load would be 375 pounds per lineal foot. When applied to the 4 foot panel, the total load would be 1,500 pounds. The "phi" factor of 0.6 did not take into account the fact that the nails were in withdrawal and, therefore, would have even less resistance.

15. With reference to Table 14, he had no idea whether the "as built" model would have sustained a load of

1,500 pounds. More likely than not the "as built" model would have failed under a load of 1,500 pounds in tests 14 and 15.

16. If the plywood had been fastened into the studs with nails in withdrawal, as was the case in the tests reported in reports 3 and 4, the "as built" panel did not satisfy the requirements of Part 4 of the Code.

At the very least, Mr. Morse's cross-examination of Jablonsky greatly weakened the City's contention that the "as built" structure met the requirements of Part 4 of the 1970 NBC. Quaile's evidence dispelled any lingering doubt. He testified that in his opinion the structure clearly failed to comply with Part 4. Jablonsky recognized Quaile as a person who was authoritative in matters relating to wood design and an expert in fastenings in wood and agreed he would defer to Quaile's opinion in such matters.

Contrary to Jablonsky's position, Quaile stated that one cannot simply disregard the geometric requirements of Part 9 of the Code, particularly those relating to the spacing of the studs. Quaile's opinion was that one should first determine whether a structure meets the requirements of Part 9. If not, then calculations could be done to satisfy Part 4 and finally one would perform a load test, if necessary. He said that if the wall frame did not meet the requirements and one wanted the plywood to perform the function of providing protection, one would have to look at how it was fastened. Here, P1 was fastened on the outside of the frame with nails in withdrawal, which was contrary to good building practice as set out in such publications as the Timber Design Manual, which was in common use in 1972.

He concluded that the wall was intended to be a conventional stud wall but was not built to conform with the minimum standards of Part 9 of the 1970 Code and that analysis under Part 4 confirmed that the wall was inadequate.

When he testified in reply, Quaile dealt with the tests referred to in Jablonsky's last 3 reports, issues arising from Jablonsky's cross-examination and Quaile's interpretation of the test data obtained from the load tests he had instructed Morrison Hirshfield Limited to do.

He testified that of all the tests referred to in Jablonsky's last 3 reports, only numbers 5 and 6 appeared to correspond with the stated objective of the authors, in that line loads and/or uniform loads were applied to the panel. In tests 7 through 10, the authors used loading patterns that did not correspond with the stated objective. He agreed that tests 11 through 15 were done using the 1970 and/or the 1975 design loads. However, in tests 11 through 15, tee weights

used to apply the line load were allowed to rest on the stud framing rather than on the plywood panel alone. Therefore, it was not just the plywood that was being tested, but the entire assembly. The results would give a false impression of the capacity of the plywood to withstand the design loads prescribed by the Code. He was also of the opinion that the load configuration produced both an "arching effect" and a "wedging effect", which was not accounted for in the results and which biased the results in favour of the plywood and its fastenings.

Quaile had recommended in his first report that guidance about relevant test procedures be sought from CSA Standard S307-M1980, entitled, "Load Test Procedure for Wood Roof Trusses for Houses and Small Buildings." It was filed as Exhibit 126. Jablonsky had questioned its applicability because it dealt with roof trusses rather than stud walls and because it was not published until 1980 and was therefore not available in 1972.

Quaile testified that CSA Standard S307-M1980 dealt with both serviceability and strength requirements. He believed that it was useful in determining what test procedures should have been followed by Jablonsky when he was testing the prototypes.

In this regard, it is interesting to note that CSA 086-1970 provides in s. 6.4.2.1 that, "The deflection of plywood structural assemblies shall be calculated using

standard engineering formulae." It is also interesting to note that s. 9.1 of CSA 086-1970, which deals with the different types of timber fastenings, does not even mention nails as a recognized method of fastening.

The serviceability requirement of CSA S307-M1980 was that after 1 hour the deflection measurement was not to exceed acceptable limits under 1 1/3 times design load. The strength requirement was that the panel should support 2 2/3 times design load for 24 hours without collapse. With respect to the serviceability requirement, Quaile recognized the difference between roof trusses and the stud wall in question and said that 1 times design load should be used. However, with respect to the strength requirement, Quaile believed that 3 times design load was more appropriate because P1 had been nailed to the frame using nails in withdrawal.

In Jablonsky's Test 5, the deflection reported was 33 mm under a total load of 510 pounds. The load represented only 75% of the full design load and the deflection represented 2 1/2 times the permitted maximum deflection. In Quaile's opinion, this test demonstrated a clear failure of the serviceability requirement.

In Test 6, the strength test load of 770 pounds represented 1.28 times design load and in Quaile's opinion was inadequate for testing purposes.

In Tests 11 through 15, the strength load was only 1.66 times design load and, again, was inadequate. With respect to the serviceability requirements, the deflections recorded at 1 times design load for Tests 11 through 15 were as follows:

Test No. 11	23 mm
Test No. 12	35 mm
Test No. 13	20 mm
Test No. 14	30 mm
Test No. 15	26 mm

All these deflections exceeded the prescribed limitation by a substantial margin and therefore failed to meet the serviceability requirement.

Next, Quaile outlined the instructions he had sent to Morrison Hirshfield Limited with respect to the load tests he wished them to conduct. The sketch and instructions he sent them were filed as Exhibit 138. In his sketch, the "intermediate 2x4 stud", i.e., the stud to which P1 was nailed at the top, also referred to as the "sill" under the window, was placed 45 1/2 inches above the top of the landing. He admitted that this was an error and that the intermediate 2x4 should have been 44 1/2 inches above the top of the landing. He said that this would bias the test results against the City but only in the 1975 OBC design load tests and only by about 1%. He said there would be no bias in the 1970 NBC design load test. He also stated that the omission of the battens might bias the results by as much as 10% against the City. However, neither bias would alter the opinion he derived from the data from the Morrison Hirshfield load tests.

Also, the clear space between S0 and S1 was shown on the sketch to be 33.5 inches. Upon receipt of further information, Quaile instructed Morrison Hirshfield to adjust the load for an actual width of 34.5 inches.

He instructed them to use the following loads: first, the 1970 NBC design line load of 150 pounds per lineal foot and secondly, the 1975 OBC uniformly distributed load of 20 pounds per square foot and 100 pounds per lineal foot. He also instructed them to load only the area of the plywood between S0 and S1 and between the underside of the "window sill" and above the stud plate at the "landing". He directed Morrison Hirshfield to make the line load as narrow as practical and they were able to narrow it to 1 or 1 1/2 inches, compared to about 12 inches in the Jablonsky tests. The line load was centred at 42 inches above the top of the lower 2x4. He also asked for the deflections to be measured not only at the centre of the panel but also at the studs, S0 and S1, because he felt that the maximum deflection might be at a point other than the centre of the panel.

In the first test, he instructed them to apply the 1975 OBC design loads and to hold them for 1 hour and then to continue loading both types of loads in stages to 2.5 times

design criteria and to hold the loads for 24 hours without failure and measure the deflections at each stage. He thought that 3 times design load was more appropriate but used 2.5 times as a safety factor, which, in his mind, biased the results in favour of the City. For the second test, which applied only the 1970 NBC line load of 150 pounds per lineal foot, he instructed them to measure the deflections after 1 hour and then to increase the load in stages to 2.5 times design load, measuring the deflections at each stage.

The result of Test No. 1 was that at 1 times design load, the one hour deflection was 40 mm at the centre of the plywood panel, which was far in excess of the prescribed deflection limitation. In fact, the deflection limitation was exceeded at S1 and at the centre of the panel after 5 minutes and at S0 after about 22 minutes. At 585 pounds, or 1.16 times design load, the specimen failed. The mode of failure was nail withdrawal from the "window sill".

In Test No. 2, the specimen failed at 1 times design load. The total design load was applied within 20 minutes and at that point the prescribed deflection limitations were exceeded at all 3 points. He did not feel it would be significant whether the plywood was 5/16 of an inch thick or, as Turner measured it and as Blaney described it, 3/8 of an inch thick.

In his opinion, the load tests conducted by Jablonsky demonstrated that the prototype did not comply with the design criteria set out in Part 4 of the 1970 NBC and that the actual structure did not meet those criteria, either when it was built or when the plywood panel failed. In addition, it was his opinion that the tests conducted by Morrison Hirshfield showed that the 2 assemblies failed at loads considerably lower than those reported by Jablonsky and confirmed that the "as built" structure failed to meet the Part 4 requirements of the 1970 NBC, either when it was built or when it failed.

(6). CONCLUSION:

I have dealt with the "engineering evidence" in more detail than usual because much emphasis was placed upon it by counsel for Mortimer and the City. Although I have not referred to all the evidence, I have reviewed and considered the whole of it. The City did not spend much time trying to justify the stairway under Part 9, although Mr. Caskey certainly did not abandon that position. Most of the evidence adduced for the City on this issue sought to establish that the structure met the requirements of Part 4 and, therefore, it did not matter if it failed to meet the requirements of Part 9.

I accept Quaile's position that the logical method of dealing with an application to construct a "simple structure", such as that which was the subject of the 1972 building permit, would be to determine first whether it complied with Part 9. If the proposed structure did not meet Part 9 requirements, then the next and least expensive step would be to do calculations, using standard engineering formulae, to establish that the structure met the design criteria of Part 4 of the Code. Only as a final alternative would one resort to the more expensive load testing procedures.

As I mentioned earlier, this was not a case where the City required the applicant to resort to Part 4 in 1972. It gave approval on the basis either of compliance with Part 9 criteria or the City's "past practice". In fact, it did not comply with either. The City's resort to Part 4 in this action was an attempt to justify the structure "after the fact".

Also as mentioned earlier, I give a great deal of weight to Quaile's evidence. His approach was fair and logical. In my opinion, his testimony established quite clearly that Jablonsky's opinion that the structure complied with Part 4 design criteria, though honestly held, was wrong. While I do not believe that any of the models used in the load tests exactly duplicated the "as built" structure, I conclude that those used by Morrison Hirshfield Limited came closer to doing so than those used by Jablonsky.

I prefer the approach taken by Quaile, which in my opinion was reasonable and was based upon his superior knowledge of the properties of wood and of wood fasteners. I

also prefer and accept his evidence with respect to the stairway's failure to comply with Part 9. On the whole, Blaney's evidence gives support to the positions taken by Quaile, though sometimes their evidence was in conflict. Turner's evidence in cross-examination also lends weight to the plaintiffs' position.

Accordingly, I conclude that the stairway and particularly the east wall of the top landing, of which P1 was a part, did not comply with good building practice, Part 9 of the 1970 NBC, the City's building by-law, the City's "past practice" or Part 4 of the Code.

6. THE ISSUE OF THE CITY'S NEGLIGENCE:

Pursuant to a predecessor of s. 242 of the Municipal Act, R.S.O. 1980, c. 284, as amended, the City enacted Building By-law No. B.-56-269, dated July 6, 1971, "to safeguard life or limb, health, property and public welfare with respect to the design, construction and alteration of buildings by the provision of appropriate minimum standards". Having made the policy decision to pass the By-law and to inspect building plans and construction, the City's operational activities under the by-law were subject to the ordinary principles of tort law. That is, the City owed a common law duty of care to all who it was reasonable to conclude might be injured by the negligent exercise of its powers: Rothfield v. Manolakos, [1990] 1 W.W.R. 408 (S.C.C.) per Wilson J. at p. 415.

However, the City was not "bound to discover every latent defect in a given project, nor every derogation from applicable standards": Rothfield v. Manolakos, supra, per LaForest J. at p. 416. The duty on the City was to use reasonable care in the exercise of its powers of inspection. It should incur liability only for such defects as it could reasonably be expected to have detected and to have ordered remedied: Rothfield v. Manolakos, supra, per LaForest J. at p. 416.

While the City's Building Inspector might have had some discretion in the carrying out of his duties, such discretion was exercisable under the umbrella of the City's operational activities, which are actionable.

At the time the 1972 building permit was issued and at the time the work done under it was inspected, it was reasonably foreseeable that persons coming down the interior stairs of the upper apartment at 287 Central Avenue and out onto the top landing might trip over the raised threshold, or might fall independently of tripping over it, and tumble against P1. Such a fall might result from any number of causes, many of which might occur during normal and anticipated use of the stairway and landing. For example, if two persons were carrying a sofa or other large, heavy object down the stairs and the lower person, going backwards, tripped, it is reasonably foreseeable that he might fall against P1. It is quite conceivable that the force applied to P1 from such a fall might greatly exceed that applied when Mortimer and Cameron fell, as described above. Although it was not prudent for Mortimer and Cameron to be engaging in horseplay on the stairs and interior landing, I cannot conclude that their use of them was so unreasonable and rare or unexpected as to fall outside the reasonable contemplation of the City, especially given the manner in which the fall occurred and the rather minimal degree of force that was applied to P1 as a result of their fall.

It is not reasonable to expect the City to foresee every possible means by which force might be applied to P1. However, it should reasonably have foreseen that even in the most ordinary use of the stairway someone might readily trip and fall against P1 with a comparable degree of force to that which resulted from Mortimer and Cameron's fall. That rather minimal degree of force falls within the meaning of the words "all effects of loads and influences that may be expected" in s-ss. 4.1.1.3(1) and 4.3.1.4. of the Code.

The City owed a duty to persons in Mortimer's position to exercise reasonable care in the inspection of the plans for the proposed work to the stairway and in the inspection of the construction authorized by the 1972 building permit which the City issued. As a guest of the tenants, Mortimer would have to use the stairway to gain entrance to their apartment. As one of a class of persons who might reasonably be expected to

use the stairway, he was a person who it was reasonable to conclude might be injured by the negligent exercise of the City's powers of inspection under its Building By-law. Therefore, he was entitled to rely on the City to use reasonable care in issuing the 1972 building permit and in inspecting the construction done under it.

In the context of this case, the City owed a duty to persons in Mortimer's position to take reasonable care to see that the stairway was constructed so as to guard adequately against accidental falls from the landing to the ground that was 10 feet below. It had ample power to ensure compliance with its Building By-law. Under the By-law, the City had the power to revoke the building permit or to issue a stop work order or to remove the structure if the work was done contrary to its provisions.

The City failed to satisfy its duty. The Plans Examiner failed to exercise reasonable care in dealing with the application. Section 1.5.4. of the Building By-law required that the application be accompanied by specifications and drawings containing "All information necessary to ensure that the ... structure, if constructed, will conform to all by-laws of the Corporation". No plans were submitted. The application otherwise failed to provide sufficient detail to indicate whether the proposed structure would comply with the Building By-law. It was not reasonable to issue a permit on the basis of the information provided in the application.

Moreover, the Building Inspector failed to exercise reasonable care in inspecting the work. The deficiencies in the stairway, particularly in the east wall of the landing, of which P1 was a part, were obvious and major departures from the Code requirements and good building practice. If they truly were in accord with the City's "past practice", then that practice itself was unreasonable and unacceptable. The City's officials were negligent in several respects:

1. If, as Mr. Caskey urges, they viewed the work described in the 1972 application as merely providing shelter from the elements, then they were negligent in failing to foresee the hazards inherent in such construction and the potential danger to people using the stairway and the landing, particularly the danger of accidental falls from the landing caused by someone falling against P1.

2. The situation on the top, exterior landing represented a potential hazard "to life and limb". If the City's officials were in any doubt about whether the structure was an "interior" or an "exterior" stairway or about what criteria applied to it, they should have been guided by the purpose of the by-law, as expressed in its preamble. Accordingly, they should have required a mode of construction that complied with the 1970 NBC Part 9 or Part 4 criteria and good building practice and that guarded adequately against accidental falls from the landing to the ground below.

3. They acted unreasonably in issuing the permit on the basis of inadequate information and contrary to the City's standard procedures.

4. The Inspector failed to note glaring departures from Part 9 criteria and good building practice. In particular:

   (1) He allowed S0, S1 and S2 to be installed "on the flat";

   (2) He allowed the studs to be spaced much further apart than permitted;

   (3) He allowed P1 to be affixed to the outside of the stud frame by means of nails in withdrawal;

   (4) He allowed the frame of the east wall of the landing to be constructed without using a bottom plate and permitted that plate to be fastened to S0 and S1 by "toenailing".

As a result, the stairway was not built in accordance with the provisions of Parts 9 or 4 of the 1970 NBC or the

City's Building By-law. It did not conform to good building practice, nor was it justified on the basis of the City's "past practice". If the Building Inspector had made a proper inspection and had ordered these conspicuous deficiencies to be remedied, Mortimer would never have sustained the injury he did.

Following on the evidence of Blaney and Quaile, Turner's testimony is also most telling against the City. He said he would not have approved the work unless the studs had been spaced not more than 24 inches apart on centre. In particular, he would have required a vertical stud below the window between S0 and S1. The cost and difficulty of compliance were minimal, especially if the deficiencies had been ascertained at the time of the application when plans should have been submitted and before construction began.

On the balance of probabilities, I am well satisfied that the City was negligent in failing to take reasonable care to inspect the application for the 1972 building permit and the construction done pursuant to it. If the City had exercised such reasonable care, it could reasonably have been expected to have detected the obvious deficiencies in the construction and to have ordered them remedied. It was reasonably foreseeable that someone might fall against P1. Mortimer's injuries are the direct result of the City's negligence.

Accordingly, the plaintiffs should succeed in their claim against the City.

7. THE ISSUE OF CAMERON'S NEGLIGENCE:

Stairs in residential buildings are potentially dangerous. They connect two different levels, usually about 8 or more feet apart. Stair treads provide a relatively small surface area upon which to place one's foot. Unless one uses a handrail, one has to balance all one's weight first on 1 foot and then on the other when ascending or descending stairs. If one is not careful, one is liable to fall and sustain injury, which is sometimes serious. Therefore, generally, one ought not to engage in horseplay on a stairway because, in an already potentially dangerous situation, there is an increased risk of harm from falling.

In these potentially dangerous circumstances, Cameron was under a correspondingly high duty to act so as not to cause harm to Mortimer. With respect to the issue of Mortimer's contributory negligence, Mortimer was under a similar duty to act so as not to cause harm to himself. Mortimer and Cameron travelled down the stairway in a controlled manner. The force used by each against the other was measured and not excessive. Each had hold of the other. They managed to traverse the stairs without falling or losing their balance and reached the interior landing safely. At that point, the risk of harm from falling on the interior stairs had expired.

After they had traversed the interior stairs, the action that then set in motion the immediately ensuing chain of circumstances that resulted in Mortimer's injury was the push Cameron gave Mortimer that caused him to trip over the threshold. When he had entered the apartment, Cameron had noticed he had to step over the threshold and he was aware it was 3 or 4 inches high. When Cameron pushed Mortimer, he created the risk that Mortimer might trip over the threshold and fall through the open doorway onto the exterior landing or against the exterior wall of that landing and injure himself. A reasonable and prudent person would not have pushed Mortimer on the interior landing as Cameron did. Therefore, Cameron was in breach of his duty of care to Mortimer when he pushed him.

In Fridman, The Law of Torts in Canada (1989), Vol. 1 at pp. 320 to 329, the learned author deals with the issues of "causal connection" and "causation and remoteness". He observes that a plaintiff must establish a causal connection between his or her loss and the negligence of the defendant. He also notes that the "confused situation" in this area of the law in Canada "is a reflection of the uncertainty that prevails in England as a result of various contradictory decisions in the last thirty years."

In reviewing some of those decisions, he refers first to the "directness approach" to causation, as set forth in Re Polemis, (1921) 2 K.B. 560 (C.A.), which in effect held that a

defendant is liable for the direct consequences of his or her negligence, whether or not those consequences are foreseeable. He states this rule was subject to 2 exceptions: the "thin skull" situation, and a foreseeable intervening act, perhaps by a third party, an animal or a natural event such as a storm, that occurred in the form and manner that was foreseeable.

At p. 327, he states "... the directness approach to causation, as stipulated in Re Polemis, was rejected" in The Wagon Mound (No. 1), (1961) A.C. 388, which held that a defendant would only be liable for foreseeable consequences. Anything which could not be foreseen by the reasonable man in advance of his acts or omissions as being the probable outcome would be too remote and could not be attributed to his negligence.

The law in this area was further qualified by The Wagon Mound (No. 2), (1967) 1 A.C. 617, which held that, "... as long as what happened was within the realm of what was reasonably foreseeable, the defendant did not have to foresee the precise manner in which it came about."

At p. 328, Fridman observes:

> In view of these changes of policy, direction and theory that have been expressed in English case law, it is hardly surprising to find that Canadian courts have found it difficult to determine whether to adhere to the old directness test of causation as expressed in Re Polemis or to adopt the more modern, remoteness of damage orientation of The Wagon Mound (No. 1).

Bearing these principles in mind, I find first that Cameron's actions did not constitute the proximate or effective cause of Mortimer's injury. If exactly the same sequence of events had occurred except that P1 had not given way, Mortimer would not be a quadriplegic today.

Mortimer's injury was caused from hitting the ground. He would not have hit the ground if P1 had held or if a vertical 2x4 stud had been inserted properly under the window between S0 and S1. Even though Quaile said he would have expected someone to be hurt if P1 had remained in place, I am not prepared to infer from all the evidence that Mortimer would have been seriously injured from striking P1 if it had not given way. To the contrary, Cameron hit P1 with little force and suffered no serious injury from doing so, although admittedly it gave way. It would be unreasonable to infer that Mortimer would have sustained anything more than relatively superficial injuries from hitting P1 after Cameron, even if it had held. There is certainly no evidence from which to infer that he would have been rendered a quadriplegic.

Even though there was a failure on Cameron's part to exercise the care that the circumstances demanded, his failure of care was not the proximate cause of Mortimer's injury. The damage ensuing to Mortimer was too remote a consequence of Cameron's breach of his duty to render him liable for its occurrence.

That leads me to the issue of foreseeability. On cross-examination by Mr. Morse, Cameron agreed that when he ascended the exterior stairway on his way into Hunt's apartment he knew there was a drop from the landing. However, he assumed that the wood construction was there to prevent people from falling. If it had been obvious to him that it was possible to fall 10 feet, he would have protected himself against that possibility. Also, he would not have been engaged in pushing and shoving with Mortimer on the interior landing if he had appreciated that there was a 10 foot drop from the exterior landing only 3 feet away from them. That is eminently reasonable and I accept his evidence on the point.

As Quaile testified, the wall of the landing through which Mortimer and Cameron fell gave the appearance of a wall but not the protection that a reasonable person would expect from a wall. Blaney testified that P1 was a "trap" because it would not be obvious to Mortimer or Cameron that it failed to provide suitable fall protection. He said if it had been an open stairway with a guard, it would have been obvious that they would have had to be careful. However, when they saw the plywood, they would take comfort from that. In other words, the wall of which P1 was a part incorporated a hazardous condition that was not readily apparent to them. Its appearance lulled them into a false sense of security. This was confirmed by Cameron during his cross-examination by Mr. Morse, as noted above.

We are conditioned to believe that a wall, properly constructed, will prevent us from falling out of a residential building. In the circumstances, it was reasonable for persons using the stairway to regard P1 as part of a wall and to expect that it would offer fall protection. It was reasonable for them to rely on it as if it were a wall in terms of regulating their conduct and having regard for their own safety. They would not expect P1 to give way if someone fell against it with rather minimal force.

Therefore, it was not reasonably foreseeable when Cameron pushed Mortimer on the interior landing that P1 would give way and permit Mortimer to fall from the landing to the ground below. It was not reasonably foreseeable when Cameron pushed Mortimer that Mortimer would be rendered a quadriplegic or even that he would be seriously injured. The probability of the sequence of actual events occurring was extremely remote, though obviously possible. In other words, what actually happened was not within the realm of what was reasonably foreseeable.

Next, I turn to deal with Mortimer's claim against Cameron for damages for assault, battery and trespass to the person. Mortimer admitted he was the one who initiated the contact between them. He agreed that if he had been trying to pour beer on Cameron, the latter would have "every right" to resist the attempt. Neither was seeking to inflict injury on the other in the course of a violent confrontation. Cameron responded in a measured and proportionate way to the reasonably perceived threat that Mortimer was going to pour beer on him and never used excessive or unreasonable force to countermand that threat. Moreover, Mortimer implicitly consented to the force employed by Cameron during the friendly "horseplay", which included pushing and shoving by both participants all the way down the interior stairs and onto the interior landing, so long as Cameron's response was within reasonable bounds and was proportionate to Mortimer's own conduct. I find that was the case.

Accordingly, no liability should attach to Cameron's acts or omissions and the claim against him should be dismissed.

8. THE ISSUE OF MORTIMER'S NEGLIGENCE:

The position against Mortimer is as follows. He was the one who initially set in motion the entire chain of events that culminated in his injury. He agreed that he initiated the horseplay and precipitated the fall. He made a motion with the container of beer in his hand that Cameron reasonably interpreted as an attempt to pour beer on him. Cameron responded in a measured and proportionate way to prevent that from happening. The horseplay followed and carried on down the stairs and onto the interior landing. The allegation against Mortimer is that he failed to take reasonable care for himself and so contributed to his own injury.

Although volenti non fit injuria was pleaded it was not seriously advanced in argument. I find it has no application here. Mortimer had no knowledge of the risk of catastrophic injury presented by the condition of P1. Accordingly, he could not and did not accept the risk of serious injury resulting from participating in conduct that he could not reasonably foresee might cause him to fall into P1 and subsequently onto the ground, as in fact occurred. The real issue is whether he was contributorily negligent.

Mortimer was "modestly intoxicated" at the time of the horseplay and the fall. Two experts testified about the level of his intoxication: Dr. Hirst for the defence and Dr. LeBlanc for the plaintiffs. Dr Hirst has a Ph.D. in both chemistry and pharmacology. Dr. LeBlanc has a Ph.D. in pharmacology. Both were very knowledgeable about the effects of alcohol consumption by humans. Dr. LeBlanc has done extensive research through the Addiction Research Foundation on the behavioural effects of alcohol.

As Dr. Hirst explained, when one consumes alcohol, there are two opposing processes at work: absorption and elimination. Based upon assumptions that conformed closely to the evidence, he calculated Mortimer's blood alcohol level at 4 different rates of elimination, (70, 100, 120 and 150 milligrams of alcohol per kilogram of body weight per hour), assuming that consumption of 2 bottles and 6 cans of beer began at either 11:00 a.m., noon or 12:30 p.m. The resulting figures represented milligrams of alcohol in 100 millilitres of blood and were incorporated into a table. Dr. LeBlanc

provided corresponding figures assuming consumption began at 11:30 a.m.

The first issue was the time at which Mortimer began consuming beer. Cameron testified that Mortimer began to drink beer at about 12:15 p.m. or 12:30 p.m. at Spooner's Restaurant. Cameron had gone to another class after writing the examination that Mortimer also wrote. However, Mortimer did not go to a class after the examination. He went directly to Spooner's. He thought the examination was either 2 or 3 hours long and began at either 8:00 a.m. or 9:00 a.m. According to Hunt and McCall, the examination ended at 11:00 a.m. I accept their evidence and conclude that Mortimer began to drink beer at about 11:30 a.m.

Dr. Hirst concluded that Mortimer had experienced "a modest level of intoxication at or about 5:00 p.m." and Dr. LeBlanc concurred. On cross-examination by Mr. Morse, Dr. Hirst agreed that he would not describe Mortimer as being "severely" or even "moderately" intoxicated. Dr. Hirst also testified that Mortimer's actions, as described to him, were consistent with that conclusion. The fact that Mortimer did not exhibit any physical signs of intoxication was consistent with his findings, because while 2/3 of the population would show such signs, 1/3 would not.

Dr. Hirst said one would expect to see some change in the behaviour of a person who was modestly intoxicated. The person would likely be more relaxed and convivial. Effects on mood would be obvious as well. The person's judgment would very likely be impaired and one might see some changes in reaction times to various stimuli.

I find that the only visible change in Mortimer caused by his consumption of alcohol was that he became more relaxed and gregarious than normal, but not to the point of becoming rude or boisterous. Mortimer recognized the alcohol he had consumed was having an effect upon him and that it would be unwise for him to drive his automobile. He tried to telephone his girlfriend to have her come and get him rather than drive himself. Dr. Hirst testified this would indicate Mortimer was experiencing the effects from the alcohol and was making a proper judgment of those effects within him. He had earlier stated that one's ability to judge his or her own condition can itself be impaired by alcohol. Therefore, he concluded that Mortimer had greater than normal sensitivity to the effects of alcohol within him.

On cross-examination by Mr. McCall, Dr. Hirst agreed that if Mortimer displayed none of the usual signs of intoxication, no one at the party would be concerned about Mortimer's behaviour or his ability to care for himself.

On cross-examination by Mr. Morse, Dr. Hirst acknowledged, "in general terms", that, as a guest in someone's home, Mortimer was not putting himself at risk for physical harm by being in a modestly intoxicated state. He also agreed that Mortimer was conducting himself in accordance with norms for behaviour in society for people who consume alcohol. However, these questions were asked in the abstract and not in relation specifically to the "horseplay" on the stairs and interior landing.

Some evidence suggested that Mortimer had 1 or even 2 more containers of beer than the 2 bottles and 6 cans he first testified he consumed. He had 2 bottles of beer at Spooner's. He said after he finished the 6 cans he brought with him to the party, he asked Cameron for 1 of his cans and started to drink it before the fall. McCall also recalled Mortimer asking him for a beer. At first, he thought it might have been around 3:00 p.m. or 3:30 p.m., but he was not certain. He could not recall if the beer he brought to the party was in cans or bottles. On cross-examination by Mr. Morse, McCall was reminded of a statement he had given on September 1, 1987, when he said that he had given Mortimer one of his "bottles" of beer "just before the accident". He agreed that his recollection was better at the time he gave the statement than at trial. I accept what he said at that earlier time as being accurate.

Hunt was not sure if Mortimer was holding a can or a bottle of beer when she saw him and Mortimer together at the top of the stairs just before the fall. Mead could not recall if either Mortimer or Cameron had a beer in his hand when she saw them going down the stairs. Based on the evidence of Mortimer, Cameron and McCall, it is probable that between

about 11:30 a.m. and about 5:00 p.m. Mortimer had consumed 2 bottles and 7 cans of beer and had scarcely started another bottle at the time of the accident.

Based on the assumption that Mortimer initially began drinking beer at 12:15 p.m., rather than the actual time of 11:30 a.m., Dr. Hirst testified that if Mortimer had begun to drink a ninth beer at about 4:30 p.m. and had barely finished it at 5:00 p.m., then he would have absorbed only about 3 or 4 grams of additional alcohol. Therefore, very little of the alcohol from the ninth beer would be in his blood at the time of the fall.

When asked to assume that Mortimer had begun to consume a ninth beer shortly before 5:00 p.m., Dr. LeBlanc said that because there had been an even pattern of consumption, there would be some beer in Mortimer's system that would not have been absorbed. He did not feel there would be any significant absorption of the ninth beer. There would be only a modest effect on the figures contained in the table. In this, he and Dr. Hirst were in agreement.

According to the table, if Mortimer had an average tolerance for alcohol and an average rate of elimination, his blood alcohol level would be 93.5 milligrams of alcohol in 100 millilitres of blood at about 5:00 p.m. If he had an above average tolerance and rate of elimination, his blood alcohol level would be 69.5 milligrams of alcohol in 100 millilitres of blood. Those calculations were based upon Mortimer consuming 2 bottles and 6 cans of beer, starting at 11:30 a.m. and finishing at about 5:00 p.m., at rates of elimination of 120 and 150 milligrams of alcohol per kilogram of body weight per hour respectively. Based on Mortimer's peculiar circumstances, including the fact that he was a healthy, experienced drinker, Dr. LeBlanc concluded that his rate of elimination would fall between 120 and 150 milligrams of alcohol per kilogram of body weight per hour and would be closer to the latter rate. Based on the table, Dr. LeBlanc opined that Mortimer's blood alcohol level at the time of the accident would be about 80 milligrams of alcohol in 100 millilitres of blood. Based on the evidence of both Dr. Hirst and Dr. LeBlanc, the ninth beer and the very small portion of the tenth beer, would have some additional effect, but not a marked one.

Therefore, I conclude that the ninth and the very small portion of the tenth beer would cause Mortimer's blood alcohol level to rise somewhat above the figures Dr. LeBlanc gave for consumption of 2 bottles and 6 cans of beer, commencing at 11:30 a.m. I accept the fact that at the time of the accident Mortimer was indeed "modestly intoxicated". I also accept Dr. LeBlanc's opinion that based upon Mortimer's particular circumstances he would most likely be closer to the 150 than to the 120 milligrams of alcohol per kilogram of body weight per hour rate of elimination. It is difficult to be precise about Mortimer's blood alcohol level at the time of the accident because of the variables. However, it seems to me probable from all the evidence that it did not exceed 100 milligrams of alcohol in 100 millilitres of blood.

Dr. LeBlanc also described the "Melanby effect", namely that a certain blood alcohol level reached quickly is more impairing than one reached over a period of time. Here, Mortimer consumed the alcohol over a period of several hours. Therefore, the effects of Mortimer's blood alcohol level would be less than might be expected, given the time taken to reach it. He also said that the absence of any "classical signs of impairment" was consistent with a blood alcohol level in the range of 69 to 90 milligrams of alcohol in 100 millilitres of blood on the table prepared by Dr. Hirst. He testified that in the case of experienced drinkers, one will see marked departures from driving norms at the 110 level and visible symptoms become more pronounced at levels of 130 or 140.

He also stated that an effect was caused by circadian rhythms. If one consumes alcohol in that part of the rhythm when one would normally be asleep, the effect of alcohol is greater. Here, Mortimer consumed alcohol in the afternoon when the effects would be lower than if consumption occurred after midnight.

Alcohol is a depressant of the central nervous system. Generally, the severity of the effects of its consumption are dependent upon its concentration in the blood stream, and the greater the concentration, the more visible the effects. As noted, with the exception of Mortimer's more relaxed mood, he showed no outward signs of intoxication. Based on the

evidence of Dr. Hirst and Dr. LeBlanc, which I accept, it is probable that the amount of alcohol Mortimer consumed made him more prone than usual to engage in uncharacteristic activity and had an effect on his mood, judgment and motor skills, but not to a marked degree.

Even though Mortimer initiated the horseplay and was modestly intoxicated, his legal position is not substantially different from that of Cameron, who had also been drinking and whose level of intoxication, according to Dr. LeBlanc, was probably close to Mortimer's. The same reasoning applies in the case of Mortimer as in Cameron's case. If exactly the same sequence of events had occurred, including Mortimer's initiation of the horseplay and his level of intoxication, but P1 had not given way, Mortimer would not be a quadriplegic today, nor would he have been seriously injured. Given the raised threshold and the fact he was going backwards, Mortimer probably would have tripped over it and lost his balance whether he had been sober or intoxicated to the degree he was. Neither his action in initiating the horseplay nor his level of intoxication was the proximate cause of his injury, nor, as in Cameron's case, was what happened to him within the realm of what was reasonably foreseeable. If P1 had held, he and Cameron probably would have picked themselves up from the exterior landing and returned to the party. Accordingly, no liability should attach to Mortimer's acts or omissions.

9. THE ISSUE OF STINGRAY'S NEGLIGENCE:

Mr. Morse submits that Stingray was in breach of its affirmative duty under s-s. 3(1) of the Occupiers' Liability Act, R.S.O. 1980, c. 322, as amended:

> ...to take such care as in all the circumstances of the case is reasonable to see that persons entering the premises ... are reasonably safe while on the premises.

The plaintiffs' position on this issue is as follows. Stingray was under a positive duty to inspect the premises and more particularly the stairway. Bird, one of the principals of Stingray, lacked the expertise to conduct a reasonable inspection. If he had conducted a reasonable inspection, he would have discovered wood rot in P1. Also, there were several other obvious conditions affecting the safety of the stairway that a reasonable inspection would have revealed. Although none of them may have constituted an effective cause of Mortimer's fall, they should have put Bird on notice of structural problems that would move a reasonable owner to have an inspection made by a knowledgeable person capable of discovering the defects that in fact existed.

Moreover, Mr. Morse submits Bird had alterations made to the stairway in 1985 without obtaining a building permit when one was required. If the permit had been obtained, not only the work done under it but the entire stairway would have been inspected, thereby revealing the dangerous condition of P1. The Building Inspector would have ordered it corrected and Mortimer would never have fallen to the ground and been injured.

The plaintiffs submit that Stingray was also in breach of its duty under s-s. 96(1) of the Landlord and Tenant Act, R.S.O. 1980, c. 232, as amended. Section 96 reads:

> (1) A landlord is responsible for providing and maintaining the rented premises in a good state of repair and fit for habitation during the tenancy and for complying with health and safety standards, including any housing standards required by law, and notwithstanding that any state of non-repair existed to the knowledge of the tenant before the tenancy agreement was entered into.
>
> (2) The tenant is responsible for ordinary cleanliness of the rented premises and for the repair of damage caused by his wilful or negligent conduct or that of persons who are permitted on the premises by him.
>
> (3) The obligations imposed under this section may be enforced by summary application to a judge of the county or district in which the are situate and the judge may,
>
> (a) terminate the tenancy subject to such relief against forfeiture as the judge sees fit;

(b) authorize any repair that has been or is to be made and order the cost thereof to be paid by the person responsible to make the repair, such cost to be recovered by due process or by set-off;

(c) make such further or other order as the judge considers appropriate.

(4) This section applies to tenancies under tenancy agreements entered into or renewed on or after the 1st day of January, 1970 and to periodic tenancies on the first anniversary date of such tenancies on or after the 1st day of January, 1970 and in all other cases the law applies as it existed immediately before the 1st day of January, 1970.

The plaintiffs' position is that even though Mortimer was nota party to the lease between Hunt and Kale as tenants and Stingray as landlord, he has an independent cause of action against Stingray for breach of its statutory duty under s. 96. The plaintiffs allege that Stingray failed in its duty to keep the premises "in a good state of repair and fit for habitation" and to comply "with health and safety standards, including any housing standards required by law".

Regarding the latter, Mr. Morse submits that Stingray was in breach of several provisions of the City's Property Standards Bylaw C.P.-1079-35, enacted on February 29, 1984, before Mortimer's fall, and subsequently amended. A copy was filed as Exhibit 136. I find Stingray was an "owner" of the property at 587 Central Avenue within the meaning of the word as defined in s-s. 1(e) and was therefore liable to comply with the By-law. Section 2 of the by-law provided:

2. The standards for maintenance and occupancy of property set forth in Schedule "A" to this by-law are hereby prescribed and adopted as the minimum standards for the City of London and said Schedule "A" is hereby enacted and adopted as part of this by-law.

Subsection 1. i) defined "unsafe condition" to mean:

... any condition that could cause undue hazard to life, limb or health of any person authorized or expected to be on or about the property.

The plaintiffs submit that Stingray failed in its duty under sections 9 and 13, the relevant portions of which read:

9(1) Unsafe conditions on property shall be abated forthwith to the satisfaction of the Property Standards Officer.

9(2) Where there is a condition on the property which is unsafe, the Ontario Building Code shall apply to the extent necessary to abate the unsafe condition.

9(3) Without limiting the generality of subsections 9(1) and 9(2), abating an unsafe condition includes:

a) the provision or repair of stairs, balustrades,

railings, guards and screens so as to minimize the risk of accident; ...

13(1) Every ... stair, verandah ... balcony and every appurtenance attached thereto shall be maintained ... or repaired so as to be ... safe to use and capable of supporting the loads to which it may be subjected as specified in the Ontario Building Code.

13(2) Without restricting the generality of subsection 13(1), the maintenance ... or repairing includes:

a) repairing or replacing ... treads or risers that show excessive wear or are broken, warped, loose or otherwise defective;

b) repairing, renewing or supporting structural members that are rotted, deteriorated or loose;

c) providing, repairing or renewing balustrades, guardrails and railings; and

d) painting or the applying of other equivalent

preservative.

I find that Stingray contravened the by-law by allowing unsafe conditions to exist in the stairway and by failing to abate them forthwith, or, indeed within a reasonable time. I shall outline those conditions later when dealing with conditions of non-repair of the stairway that might have alerted Stingray to the need for an independent inspection. Those conditions of obvious non-repair were not in themselves causative of Mortimer's fall, apart from acting as a warning of the need for an inspection. However, their lingering existence indicates that Bird was either failing to exercise reasonable care in inspecting the stairway or was deliberately ignoring known and potentially unsafe conditions.

Stingray's position is as follows. There was no defect in P1 that was apparent or would have been apparent on reasonable inspection by Stingray or the tenants. Any defect that might have existed in P1 was not an effective or proximate cause of its failure. There was no circumstance that would have imposed on Stingray a duty to consult engineers or architects to assess the state of the structure. Mortimer's fall was caused not by any lack of repair on

Stingray's part, but because of the failure of the original construction to comply with the Building Code and good building practice. If the failure of P1 was the result of its lack of compliance with the safety requirements of the Building Code, Stingray acted reasonably in relying on the Building Department's approval of the structure.

Regarding the last point, in fact, Stingray did not question the City about whether a building permit had been issued for the stairway or whether the work had been inspected and approved. If Stingray had made such inquiries, no doubt the City would have replied affirmatively. However, it is wrong to say that Stingray relied upon the City's inspection. Bird's testimony on cross-examination by Mr. Morse on the issue of his knowledge of the existence and contents of Building Codes was contradictory, evasive and lacked conviction. I conclude Bird had no idea whether a permit was ever obtained for the construction of the stairway. At best, he assumed that was the case and in my opinion it is unlikely he even directed his mind to the question.

Mr. Brown submits that the work done to the stairway in 1985 constituted "repairs" and did not require a building permit. He also submits that Mortimer has no cause of action against Stingray solely under s. 96 of the Landlord and Tenant Act.

I shall deal first with the issue of Mortimer's right to sue Stingray under s. 96 of the Landlord and Tenant Act. In McDonald v. Town of Goderich, [1950] O.R. 619, the Ontario Court of Appeal considered whether a landlord's duty to repair under a lease could found a cause of action by a third party. In doing so, it quoted with approval at p. 629 from Salmond's Law of Torts, 10th ed. 1945, p. 500, as follows:

> ... Such a contract is res inter alios acta, and confers upon strangers no rights against the landlord which they would not have had without it.

This statement was made in relation to the landlord's duty at common law and before the enactment of s. 96. Section 96 creates a statutory duty of repair and the breach thereof by the landlord founds a cause of action in the tenant: Fleischmann v. Grossman Holdings Ltd. et al. (1976), 16 O.R. (2d) 746 (C.A.). at p. 747, referring to Cunningham et al. v. Moore, [1973] 1 O.R. 357.

However, there is a difference of judicial opinion as to whether a third party has a right of action against the landlord of residential premises for breach of his statutory duty to repair; e.g.: Lindstrom v. Basset Realty Ltd. (1979), 34 N.S.R. (2d) 361, aff'd, 103 D.L.R. (3d) 654 (N.S.C.A.) (family members of tenant living with tenant successfully sued landlord for failure to repair); Zavaglia v. Mag Holdings Ltd. 50 B.C.L.R. 204 (Lamperson, Co. Ct. J.), aff'd 6 B.C.L.R. (2d) 286 (B.C.C.A.) ("... a landlord who breaches his

statutory duty will be liable in tort to the tenant and perhaps immediate members of his family, but this right of action does not extend to visitors and friends of the tenant."); Alexander v. Candy 8 O.R. (2d) 270 (C.A.) (breach by a non-occupier landlord of a contractual or statutory duty to repair does not render him liable to a stranger/licensee who is not a party to the rental contract); Dav v. Chaleur Devs. Ltd. (1985), 63 N.B.R. (2d) 313 (N.B.Q.B.) (landlord's breach of obligation to maintain and repair founded a cause of action in favour of tenant's guest). Personally, z find attractive the view that a residential landlord's breach of his statutory duty under s. 96 should give rise to a cause of action in favour of a tenant's guests who have been injured as a result of that breach. In 1972, the Ontario Law Reform Commission issued its Report on Occupiers' Liability. In it, the Commission expressed the hope that the proposed draft Act, which was different in several respects from the one eventually enacted, would, among other goals:

> . . . restore the field of occupiers' liability to the area of the general law of negligence and . . . widen the areas of recovery, based on the "neighbour" concept of negligence, and not by the creation of legal fictions.

This appears to reflect a general trend in the law, including the law of landlord and tenant. At common law, apart from contract or fraud, a landlord of unfurnished premises was not responsible for injury to tenants or others caused by the dangerous state of the premises. From that position, the law has evolved in Ontario to the point of enacting s. 96, which has enlarged the rights of tenants.

In Donoghue v. Stevenson, [1932] A.C. 562, a "neighbour" was defined as a person so closely and directly affected by one's acts that one might reasonably be expected to have him or her in contemplation. Section 96 of the Landlord and Tenant Act creates a statutory duty that is imported into every residential tenancy agreement by virtue of s. 82 and cannot be ousted by waiver or agreement. Therefore, the duty arises not voluntarily from contract but from the imperative nature of the statute. In these circumstances, it seems reasonable that a landlord should be expected to have guests of a tenant in contemplation as persons who would be directly affected by his failure to comply with his mandatory statutory duty. It is reasonably foreseeable that such persons would suffer harm from the landlord's breach of his statutory duty to repair. However logical this seems to me, I feel bound by the decision of Goodman J.A. in Alexander v. Candy, supra to the contrary. It may be that Alexander is distinguishable on the ground that the duty of care owed by a non-occupier landlord to a third party licensee is different from the duty owed under s. 3 of the Occupiers' Liability Act. In any event, the same result, i.e., affixing liability to the landlord, may be achieved in this case by resorting to s. 8 of the Occupiers' Liability Act.

I turn then to consider that Act. I find that Stingray was not only a "landlord" but an "occupier" of the premises, or at least of the exterior stairway, at 587 Central Avenue within the meaning of the word as defined in s-s. 1(a)(ii) of the Occupiers' Liability Act. It is not necessary to resort to s. 96 of the Landlord and Tenant Act even to demonstrate that Stingray bore responsibility for the condition of the premises. Bird agreed that Stingray rather than the tenants was responsible for repairs to the building and the exterior stairway or structural problems. Therefore, in the words of the definition, Stingray was a person that had "responsibility for and control over the condition of the premises" and in particular of the exterior stairway and was therefore an "occupier" as defined by s-s. 1(a)(ii) of the Act.

Even if Stingray were not an "occupier" as so defined, as a "landlord" it would still owe a duty to Mortimer, apart from s. 96 of the Landlord and Tenant Act, under s-s. 8(1) of the Occupiers' Liability Act, notwithstanding the fact that Mortimer is not a "tenant". Section 8 reads:

> 8. (1) Where premises are occupied or used by virtue of a tenancy under which the landlord is responsible for the maintenance or repair of the premises, it is the duty of the landlord to show towards any person or the

property brought on the premises by those persons, the

same duty of care in respect of dangers arising from any failure on his part in carrying out his responsibility as is required by this Act to be shown by an occupier of the premises.

(2) For the purposes of this section, a landlord shall not be deemed to have made default in carrying out any obligation to a person unless his default is such as to be actionable at the suit of the person entitled to possession of the premises.

(3) For the purposes of this section, obligations imposed by any enactment by virtue of a tenancy shall be treated as imposed by the tenancy, and "tenancy" includes a statutory tenancy, an implied tenancy and any contract conferring the right of occupation, and "landlord" shall be construed accordingly.

(4) This section applies to all tenancies whether created before or after the commencement of this Act.

The duty owed by the landlord is "the same duty of care in respect of dangers arising from any failure on his part in carrying out his responsibility as is required by this Act to be shown by an occupier of the premises", which duty is defined in s-s. 3(1). Part of the "responsibility" a landlord must carry out is its duty under s. 96 of the Landlord and Tenant Act. In fact, that section states that in addition to being "responsible" for maintaining the premises in a good state of repair and fit for habitation, the landlord is also "responsible" for "complying with health and safety standards, including any housing standards required by law...". If this is the case, the terms of the City's Property Standards By-law become "pertinent to any inquiry as to whether the [landlord] did exercise reasonable care to ensure that the premises were in a proper state of repair": Gaul v. King and King (1979), 33 N.S.R. (2d) 60 (N.S.S.C.) at p. 75.

However, in deciding the issue of Stingray's liability, I need not go beyond considering the duty expressed in s. 3 of the 11 Occupiers' Liability Act, without reference to s. 96 of the Landlord and Tenant Act or the Property Standards By-law. The nature of that duty was canvassed in Waldick v. Malcolm, [1991] 2 S.C.R. 456, a judgment of the Supreme Court of Canada, released June 27, 1991. There, Iacobucci J. stated:

> . . . the statutory duty on occupiers is framed quite generally, as indeed it must be. That duty is to take reasonable care in the circumstances to make the premises safe. That duty does not change but the factors which are relevant to an assessment of what constitutes reasonable care will necessarily be very specific to each fact situation thus the proviso "such care as in all circumstances of the case is reasonable". . . . [The emphasis is Iacobucci J.'s.].
>
> The goals of the Act are to promote, and indeed, require where circumstances warrant, positive action on the part of occupiers to make their premises reasonably safe. [Emphasis added.].

In Sauve et al. v. Provost et al., 71 O.R. (2d) 774, (Ont. H.C.), Granger J. also held that s. 3(1) of the Occupiers' Liability Act imposed a positive duty upon the occupiers in that case to inspect their premises. There, the occupiers had made no inspection and shad no knowledge of the rotted condition of a wood railing that failed and caused injury to the plaintiff. Granger J. found that if the occupiers had inspected the premises periodically, the defect would have been discovered. At page 780, he stated:

> Absent any knowledge on the part of the purchaser of any defects, purchasers of new homes may be entitled to refrain from inspection for a reasonable time, relying on the expertise of the building contractor. However, a duty starts to arise to inspect as the premises age. Homeowners must be taken to know that wood rots.
>
> ... An occupier cannot escape liability by failing to inspect his premises and thereafter rely on his lack of

knowledge.

At the same time, the courts have recognized that, "The duty is not absolute and occupiers are not insurers liable for any damages suffered by persons entering their premises.": Waldick v. Malcolm, (1989), 70 O.R. (2d) 717, (C.A.), per Blair, J.A., at p. 723.

I turn then to consider the "circumstances of the case" and "the factors that are relevant to an assessment of what constitutes reasonable care" under s. 3 of the Occupiers' Liability Act in this particular situation.

David Bird and Angus Black are the principals of Stingray. About 1972, Stingray purchased an automobile body shop on the southwest corner of Adelaide St. and Central Avenue. From it, Stingray carried on an automobile body shop business for about years. As properties became available next to the body shop, Stingray purchased them. The properties had originally been single family residences but had been converted to duplexes or triplexes before Stingray acquired them. 587 Central Avenue was Stingray's fifth and last purchase, which it completed in 1979, from John Danyluk, who Turner said was a sewer construction inspector for the City of London.

When Stingray purchased 587 Central Avenue, it was already a triplex and the stairway in question was in place. Before the purchase, Stingray never assessed it for structural integrity nor did it order a survey or an engineering or architectural opinion about the soundness of the structure. Bird said "it never crossed [his] mind" that the stairway was in a state of disrepair or failed to comply with the Building Code. He was more concerned with the building's cosmetic aspects and whether it was the type of property that Stingray might let for rent at a profit.

The stairway was built of wood in 1963 and enclosed with wood at the end of 1972. Stingray had painted it in 1979 and 1985. The wooden enclosure of the stairway, including P1, was almost 15 years old at the time of Mortimer's fall on July 17, 1987.

After acquiring the building, Stingray installed a kitchen upstairs and some carpeting and did some interior and exterior painting. Bird said that in September or October, 1985, Stingray sandblasted the exterior, installed new eavestroughs, replaced a step and the lower door on the exterior stairway, reinforced a stringer from S7 to S10 at the bottom of the exterior stairway and installed a new pole, (WP1), under the south east corner of the top landing. The work was done by Hogan's Contracting, which was owned by Bird's brother. The pole, (WP2), under the north east corner of the upper landing was not in place at the time of Mortimer's fall. It was replaced later.

Bird said when the work was done to the stairway in 1985, he instructed his brother to inspect the staircase and to repair it as needed. After the work was completed, he was satisfied that the stairway was in good repair and fit for the purpose for which it was intended. I reject his testimony that he asked his brother to effect whatever repairs were necessary. His explanation for the difference in his evidence at trial and on his examination for discovery on this point was unconvincing.

Bird did not live in the building, which was divided into 3 apartments and rented to tenants. In particular, the upstairs apartment, which depended on the exterior stairway as the sole means of ingress and egress, was rented to Hunt and Kale, 2 young students with no knowledge of the requirements of the Building Code or good building practice. Bird said he "went through" the properties every 4 to 6 months to see what items of repair or maintenance might be required and effected them. Also, if a tenant called about, for example, a plumbing problem, he would look at the situation and have the repairs completed. Based on these "inspections", he said no repairs were required to the house or staircase from December, 1985, to July, 1987. As noted below when dealing with the deficiencies that existed in the stairway in addition to those serious departures from the requirements of the Code and good

building practice, I find this was not so.

When he made his periodic inspections of the building, he simply "looked at its general condition". He arranged eventually to have corrected any defect that was patently obvious or about which the tenants complained. He admitted he understood that wood deteriorates and does so more quickly if exposed to the elements. Yet, he never examined the exterior of the stairway to determine if there was any wear and tear from the weather or wood rot.

He agreed that repairs to the building and the exterior stairway or structural problems were Stingray's responsibility and not that of the tenants. He received no complaints about the stairway from any of the tenants but agreed that he was not relying upon Hunt or Kale to advise him of any structural inadequacy in the stairway.

While Stingray owned the 5 properties that included 587 Central Avenue, Bird maintained a full time job selling automobiles. He had no background in construction or property management. He was unfamiliar with the requirements of the National Building Code, the Ontario Building Code or the

City's relevant by-laws, but was the only person at Stingray who was involved directly in managing the properties. He did so in his spare time. He did not possess the knowledge or experience to make an adequate assessment of the stairway's structural integrity except for glaringly apparent deficiencies. Even then, as for example when WP2 went missing, he did not act quickly to correct the situation.

Bird did not learn of the fall until "a couple of days" after it happened. When he then went to Hunt's apartment, P1 was back in place, because Hunt and her boyfriend had replaced it, and he found no change in the structure of the stairway. After he talked to Hunt and learned that someone had fallen, he had his brother send a workman to drive some additional nails into P1 for security. The faulty stairway was removed after the accident and replaced with the existing one, which is shown in Exhibit 2, photograph 15, but not until October, 1988.

The grave structural defects involving P1 that resulted from failure to comply with the Building Code and good building practice were plainly visible to anyone with knowledge of those requirements. Although they were not readily apparent to someone like Bird who lacked such knowledge, they were not "hidden" from view in the way that a defect concealed within an enclosed wall would be. In addition to these structural defects, there were several other deficiencies in the stairway: WP2 was missing; there was a broken tread on the stairway; the outer exterior door at the top of the landing was rusted open; S1 was not fastened at its bottom; roof rafters had separated from the roof stringers of the stairway; there was wood rot along the bottom of P1.

The plaintiffs' position is as follows. These were manifest deficiencies in the stairway that should have alerted Bird to the fact that it was not in a proper state of repair. Bird either failed to conduct a reasonable inspection or ignored a situation of danger. If he had conducted a reasonable inspection, he would have discovered wood rot in P1, the absence of WP2, the separation of the roof rafters in the stairway and the dangerous condition represented by the raised threshold to Hunt and Kale's apartment.

Although none of these conditions might constitute the proximate cause of Mortimer's injury, nevertheless Stingray then should have retained someone with the requisite knowledge and experience to conduct a proper assessment of the stairway and to effect repairs or alterations. In doing so, the condition of P1 would have been discovered and corrected.

Similarly, Stingray had work done to the stairway in 1985 without obtaining the required building permit. If a permit had been obtained, the Building Inspector would have discovered the dangerous condition of P1 and ordered it rectified.

Stingray was in the business of renting residential properties for a profit. In addition, it also had some hope of making a profit from the development of the property for

other uses in the future. It should not be able to escape liability by relying upon an examination conducted by a principal of Stingray who lacked the knowledge and experience to conduct a meaningful inspection. Such an inspection would not be "reasonable".

Stingray's position is as follows. There was nothing about the appearance of the "wall" of which P1 was a part or its method of construction that would alert Bird to the potentially dangerous condition of P1. This submission is based on Quaile's evidence that he did not believe the easterly enclosure of the landing, of which P1 was a part, was really a wall. However, he acknowledged that a Building Inspector, Mrs. Danyluk and Bird would think of it as a wall. Therefore, he agreed one would not expect Bird to retain an engineer to conduct tests upon it.

Moreover, neither the existence of the threshold nor its disrepair was the proximate cause of Mortimer's injury. The same applies to the absence of WP2 and the separation of the woodrafters. The wood rot was not discoverable upon a reasonable inspection. The stairway had been used for 15 years without incident. The tenants had never complained about it. These circumstances and the other deficiencies in the stairway would not cause a reasonable person in Bird's position to question its structural integrity or to seek a professional opinion about it.

A building permit was not required for the work done in 1985 because it was in the nature of "repairs". The City's Building By-law did not require a permit to effect repairs.

I shall deal first with the issue of the threshold. Bird was familiar with the raised threshold at the entrance to Hunt's apartment. He said it was not difficult to see because it was white, a different colour from the surrounding surfaces. He agreed that it was in Poor condition and needed to be replaced but he did not expect the tenants to remove it. Bird agreed that a person moving backwards might trip on the threshold and fall against P1. He had not directed his mind to this possibility before the trial, but if he had, he would have thought P1 had the capacity to prevent that person from falling through it.

I find that persons using the stairway would have a reasonable expectation that P1 would prevent them from falling through it if they tripped and fell against it: There was nothing in the Building Code at the time that regulated the height of the threshold. Neither tenant regarded it as a hazard. No one had fallen on it or tripped over it during their tenancy. Even though it was in need of repair, its state of disrepair was not the proximate cause of Mortimer's injury. In the circumstances, Stingray's failure to repair or remove the threshold was not the proximate or effective cause of Mortimer's injury and should not attract liability.

I turn next to consider whether Stingray made adequate inspections and, if not, whether a reasonable inspection would have revealed the structural deficiencies that resulted from failure to comply with the Building Code and good building practice or the presence of wood rot. As I understand the law, an occupier is not required to protect the plaintiff against risks or dangers of which the occupier could not reasonably have been aware.

I am not impressed by the manner in which Stingray conducted its inspections or maintained the stairway. Unsafe conditions prevailed for unreasonable lengths of time. The failure to inspect the exterior of the stairway was certainly unreasonable. However, even if Bird had conducted a proper inspection, I conclude there was nothing about the appearance of the construction of the east wall of the landing per se that would have alerted him to the danger that existed there, because he lacked the expertise to recognize the departures from Code compliance and good building practice.

With respect to the wood rot, Mortimer's father said that when he examined P1 the day after the accident it was soft along the bottom. He stated, "It was rotten, actually." The nails had pulled through the bottom of the plywood and, at the bottom "where the weather had gone in", they were rusty.

Blaney attended at the scene on April 6, 1988, and took some photographs, 3 of which were entered as Exhibit 30. He

said they revealed some tearing around what would be the lower right corner of P1 when viewed from the exterior but that this might have happened when P1 came away from the frame. However, he also stated they disclosed water damage along the lower right edge of the panel, when viewed from the outside. The bottom of P1 was covered on the outside by a batten measuring about 3/4 inches thick and 3 3/4 inches high. Blaney testified that rain could collect under the batten and cause the bottom of P1 to rot. He also said that when the wood around a nail in withdrawal rots, the nail can "work out".

Quaile confirmed that nails in withdrawal lose up to 75 per cent of their tensile strength over time, even apart from weathering. Looking at Exhibit 46, Quaile said he suspected decay in the lower right corner of P1. However, Exhibit 46, reproduced in Exhibit 30 as photograph 2, was taken by Blaney in April, 1988, after P1 had been reinstalled and had been exposed to the weathering effect of the winter of 1987-1988. Exhibit 64, photograph 2, was taken about a week after Mortimer's fall and it is more representative of the condition of P1 at the time of Mortimer's fall. I have no doubt that the condition of wood rot existed along the bottom of P1. Nevertheless, having viewed Exhibit 64, photograph 2 very carefully, I cannot say it is more probable than not that wood rot would be visible to the naked eye. What is apparent in the photograph may very well be damage caused when P1 gave way.

In Sulmona v. Serraglio, a decision of the British Columbia Court of Appeal delivered May 16, 1986, the plaintiff, with another man, was carrying a stove down the upper tier of a two tier flight of wood stairs that was attached to a deck. The stairway collapsed and he was injured. The cause of the failure was dry rot at the point where the stair risers were attached to the deck. The Court of Appeal upheld the trial judge's conclusion that there was no reason for the defendant to examine the stairs closely. Even if he had, he might not have noticed the dry rot because it was under the top step and "not discernable without minute inspection". The defendant had noticed some water seeping through the unpainted deck and the fact that some of the plywood was weathered and worn. However, the Court found there was nothing to indicate the stairs would not hold the weight of two men and a stove. The Court held: "An occupier of premises is not an insurer. He cannot guard against every eventuality." The Court found the defendant was not in breach of his statutory duty under s-s. 3(1) of the Occupiers' Liability Act, R.S.B.C. 1979, Ch. 303.

That case was decided in 1986. The age of the stairway was not noted but the trial judge found the deck was unpainted and the plywood deck was weathered and worn. To the extent that it suggests the occupier was under no positive duty to inspect, the decision might be considered no longer of persuasive value in view of the more recent decision of the Supreme Court of Canada in Waldick v. Malcolm, supra. On the other hand, the proposition that an occupier will not be held liable for damage caused by a condition of disrepair that could not be discovered by reasonable inspection remains sound.

In the circumstances, it would be beyond the scope of a reasonable inspection to require Bird to remove the battens to search for evidence of wood rot, if none were otherwise visible or readily ascertainable. The fact that Bird failed to inspect the exterior of the stairway is thus immaterial because, in the circumstances, even if he had, it is not probable that he would have seen any evidence of wood rot.

"I turn next to consider the other "deficiencies" in the stairway, particularly the absence of WP2 and the separation of the roof rafters. On cross-examination by Mr. Morse, Bird agreed that he absence of WP2 created the potential for a problem regarding the support and stability of the upper landing, which might result in harm to persons using the stairway. Anyone who looked at the underside of the upper landing, which was easily seen, and saw the hole at its north east corner could not fail to appreciate that WP2 was missing. The hole is clearly visible in Exhibit 64, photograph. From looking at Exhibit 2, photograph 9, Bird agreed that the bottom of S1 appeared to be visible through the hole where WP2 had been. From the time Stingray purchased the property until Mortimer's fall, Bird would have "inspected" the premises

about 15 times, yet WP2 was not replaced before the fall. Again, the explanation he gave of his efforts to replace WP2 when he learned it was missing was most unconvincing.

However, Stingray's position is that the absence of WP2 had no effect on the stairway's structural integrity and certainly did not cause or contribute to Mortimer's fall. Turner testified that, during the trial, he measured the joists that supported the upper landing. In his opinion, although the stairs had been changed, the old floor joists had remained. He said they were 2x10s that had been inserted 6 feet into the building, 15 inches on centre. Because two-thirds of their length had been set into the building, there was a cantilever effect and the posts, WP1 and WP2, would be superfluous as far as the safety of the structure was concerned. As a result, he said the City would not require any posts under the upper landing. I accept this evidence. However, Turner later said on cross-examination by Mr. Morse that if he had seen the hole in the landing created by the absence of WP2 in September, 1985, he would have been concerned that the stairway was not in a proper state of repair. He stated that the hole was suggestive of changes that would cause him as a prudent inspector to investigate.

Upon Stingray lay the primary burden of repair and responsibility for maintaining the stairway in a reasonably safe condition. At the best of times, a stairway is a place of potential danger. Wood is subject to deterioration over time, caused by exposure to the elements and ordinary wear and tear. In the circumstances of this case, it is my opinion that a "reasonable inspection" of the wood stairway by Stingray should have included a periodic, thorough examination of interior and exterior areas that were exposed to view. The absence of WP2 was apparent on even a cursory examination. The separation of the roof rafters was conspicuous to anyone who took the trouble to shine a flashlight on them. These 2 conditions were also obvious, even to someone with Bird's limited knowledge and experience, as deficiencies that might relate to the structural integrity and safety of the stairway.

It is true that Mead said she found the stairway dark at midday. Also, Quaile testified it was not reasonable to anticipate that roof rafters would become separated because, if properly constructed, they should perform appropriately over long periods of time, sometimes up to 150 years. He thought home owners should not be expected to conduct inspections of the roof rafters to see if they were separating. He also confirmed the common sense proposition that the tendency on ascending or descending stairs is to look at the stairs ahead and not direct one's attention at the roof members.

Also, several formal inspections of the stairway were conducted following Mortimer's accident by engineers and building inspectors, all but one of whom failed to note the separation of the roof rafters. The persons making those inspections all knew that there had been a very serious accident and their specific purpose was to determine the structural soundness of the stairway. With one exception, none of these individuals, all of whom were familiar with good building practices and Code requirements, noticed the separation between the roof rafters and the roof stringer.

Unlike the situation of a home owner who would have to crawl into an attic to examine roof rafters, all Bird had to do was shine a flashlight upward to illuminate the roof rafters of the stairway that were then plainly visible. In this case, a cursory examination conducted by Bird while he was simply walking up or down the stairs would not be sufficient to constitute a reasonable inspection as I have defined it. The fact that even engineers did not discover the separated roof rafters is not surprising. They were there to examine the condition of the east wall through which Mortimer and Cameron fell, for the specific purpose of assessing its structural adequacy. On the other hand, the duty on an "occupier" in Bird's position is wider in scope. He had a duty "to take such care as in all the circumstances of the case is reasonable to see that persons entering the premises are reasonably safe while on the premises".

Bird did not have the experience or knowledge to appreciate that WP2 was not required due to the cantilevered landing joists. Turner, who had that knowledge, said the absence of WP2 still would have caused him to investigate. A

person without that knowledge or experience would conclude that the landing was supported by WP1 and WP2. Therefore, in that person's mind, the absence of WP2 would leave the landing in a potentially unsafe condition. In fact, Bird's view was indeed that the absence of WP2 created a situation that might result in harm to the tenants. The absence of WP2 and the separation of the roof rafters should have raised concern about the structural integrity of the stairway in the mind of a reasonable person in Bird's position. That concern, in turn, should have led such a reasonable person to retain a knowledgeable individual to assess and correct these problems.

It is probable that in evaluating the potential structural harm done by the breaking of WP2, such a knowledgeable individual would have discovered the dangerous condition on the landing that involved P1 and informed Stingray accordingly. Having been advised of the danger, a reasonable person in the position of Stingray could and should have foreseen that someone might trip on the landing, fall through P1, land on the ground and sustain extremely serious injuries. A person in that position would have been duty bound to correct the situation. If that had occurred, Mortimer would never have been injured. Therefore, in my opinion, this omission on Stingray's part constitutes an actionable breach of its duty under s. 3(1) of the Occupiers' Liability Act.

In the event that I am wrong in this conclusion, I turn to consider the final issue raised under s. 3. It arises from the work done in 1985. Bird said that in that year the stringer at the bottom of the staircase from S7 down to S10 was reinforced. An inspection was made of the remaining stringers at that time. He did not know whether the plywood sheets were removed when the stringer was removed and replaced.

Turner said that the vertical studs S8 to S10 inclusive were installed at right angles and that the upper ones had been installed on the flat. S8, S9 and S10 were installed 16 inches on centre, while those between S2 and S7 were 24 inches on centre. The space between S0 and S1 and between S1 and S2 was neither 16 nor 24 inches. He could not understand why S8, S9 and S10 were installed at right angles and the rest were on the flat. He assumed that one person would install them all one way or the other. I infer that they were originally on the flat and were changed when the work was done in 1985 to the stringer that ran from S7 to S10.

Turner testified that the vertical studs of the stairway are considered structural members because they support loads. Therefore, if Stingray were going to replace any of them or repair the stairway, it would have to obtain a building permit. Mr. Brown submits the City's by-law contained no such requirement.

Section 1.2.4.(d) of the City's Building By-law No. B.-56-269 provided:

> Where ... (d) a building is altered, this by-law applies to the whole building except that the by-law applies only to part if that part is completely self-contained with respect to the facilities and safety measures required by this by-law. [Emphasis added.]

It does not state specifically that a permit must be obtained for building "repairs". The by-law is silent about the meaning of the word "altered". To alter something is to make it different, modify it or change it. As previously noted, the stated purpose of the By-law is "to safeguard life or limb, health, property and public welfare with respect to the design, construction and alteration of buildings by the provision of minimum standards". The purpose of the by-law is consequently to regulate the design, construction and alteration of buildings with a view to making them safe for their occupants and other persons and property within them. Section 1.5.1. prohibits an owner from commencing any of the works described in s. 1.2., including "alterations", without first making application in the prescribed form and obtaining the required permit. In this way, the municipal authority has a means of knowing about and regulating construction that might have an impact on the degree of safety provided by a structure.

The evidence of Blaney and Quaile and the results of some of the load tests established that the orientation of the

vertical studs in the east wall of the landing changed their ability to withstand the loads imposed on them. They were more resistant to lateral loads when they were installed at right angles to P1 than on the flat. Also, the spacing of the vertical studs influenced the structural integrity of the stairway and the degree of safety it afforded persons using it. Both the orientation and spacing of the studs affected the safety of the structure. As it turned out, the alterations to S8, S9 and S10 were positive in terms of Code compliance. However, because they were structural members that were being changed, with a possible impact on the degree of safety provided by the structure, Stingray should have applied for building permit. A simple "repair" that did not require the modification of a structural member or that did not have a potential impact on safety would not require a building permit.

Turner testified that if an application had been made for a building permit when the stairway was altered in 1985, the work would have been inspected. He said if he had inspected that work, he would have observed the condition between S0 and S1. He would have ordered the owner to install a vertical 2x4 stud between S0 and S1, below the window. If the owner had refused, he would have pursued the enforcement remedies available to him under the Building By-law. Failing compliance by the owner, Turner would have "taken him to court". From Turner's evidence, I conclude it is probable that any Building Inspector would do the same thing.

Therefore, I find that if Bird had obtained a building permit for the work done in 1985, as he was required by the City's Building By-law to do, the dangerous condition of the upper landing would have been discovered and corrected and Mortimer would never have fallen or been injured as he was.

Owners in the position of Stingray must be taken to know that alterations that may affect the degree of safety provided by a structure require an application for a building permit. This is especially so in a case such as this where Bird was totally lacking in the knowledge or expertise necessary to assess the safety factors himself. The necessary expertise would be provided by the City's Building Inspector, assuming he was acting properly.

By virtue of s. 8 of the Occupiers' Liability Act, Stingray, in failing to apply for a building permit, thereby breached its duty under s. 3 to persons in the position of Mortimer "to take such care as in all the circumstances of the case is reasonable to see that persons entering the premises ... are reasonably safe while on the premises". Stingray's failure to comply with the requirements of the Building By-law and apply for the permit resulted in the continuation of the hazardous condition of the exterior landing that would have been discovered had the application been made.

The fact that Mortimer was not reasonably safe while on the stairway was at least partially a direct result of Stingray's breach of that duty, which in turn resulted in foreseeable harm to him. Therefore, even though the harm accruing to Mortimer was the result of the initial failure of the structure to comply with the Building Code and good building practice, which resulted from the City's negligence, some liability must also attach to Stingray due to its failure to meet its duty under s. 3. Had it done so, Mortimer would not be a quadriplegic today.

Before leaving this issue, I wish to deal with the effect of s-s. 8(2) of the Occupiers' Liability Act as it applies in this case. The reference in the subsection to the landlord's default being actionable at the suit of the tenant, has been held in some cases to import the common law requirement that a landlord must first be notified of the state of non-repair before he can be held liable for any injury caused by it. In this case, the tenants did not advise the landlord of the state of P1, because they did not know of it. Nor did they notify Bird about other deficiencies of which they may have been aware that could have led to the discovery of the condition of P1. Therefore, it might be argued that because this condition of notification was not fulfilled, Stingray cannot be held liable to the plaintiffs.

However, in this case, Bird testified specifically that Stingray was not relying upon the tenants to notify it of conditions of non-repair. He agreed that Stingray had assumed

responsibility for maintaining the stairway in a good state of repair and for correcting structural problems, independent of any communication from the tenants. In these circumstances, Stingray is deemed to have waived reliance upon s-s. 8(2). Therefore, that subsection does not constitute a bar to the plaintiffs' action against Stingray.

10. THE ISSUE OF THE NEGLIGENCE OF HUNT AND KALE:

In addition to Mortimer's claim against Hunt under the Occupiers' Liability Act arising from the condition of the premises, Stingray and Cameron crossclaimed against her in relation to the issues of alcohol and the conduct of her guests and thereby raise the issue of her liability as a social host. Both rely upon s-s. 3(2) of the Occupiers' Liability Act:

> (2) The duty of care provided for in subsection (1) applies whether the danger is caused by the condition of the premises or by an activity carried on on the premises. [Emphasis added.].

Hunt in turn commenced a third party action against Kale, her tenant.

The position of Stingray is as follows. Hunt supplied alcohol to Mortimer, permitted Mortimer and Cameron to become intoxicated and failed to restrain their conduct. She allowed them to remain on the premises when she knew or ought to have known that Mortimer's conduct might result in his injury and she failed to warn him of that fact. Cameron's position is similar. In addition, he alleges Hunt allowed Mortimer to remain near the stairway when she knew he was intoxicated and unable to care for himself.

The witnesses who testified about the party stated unanimously that it was a subdued affair. Some of the guests drank alcohol, some played cards or a board game, others copied school notes or sat and talked. The atmosphere was universally friendly. No one was visibly intoxicated, boisterous or unruly. There was no physical contact between any of the guests prior to the incident involving Mortimer and Cameron.

Hunt did not supply alcohol to Mortimer or Cameron. Each brought his own beer. The evidence of Drs. Hirst and LeBlanc established that Mortimer was modestly intoxicated, as probably was Cameron. Although Mortimer was somewhat more gregarious than usual, neither exhibited any overt signs of intoxication. Therefore, an objective observer would have no reason to be concerned about their behaviour or to suspect that either posed a danger to himself or others. Hunt herself consumed very little alcohol. Her judgment was not adversely affected by the amount she did consume.

Neither Mead nor McCall, both of whom saw Mortimer and Cameron at the top of the stairs, was sufficiently concerned about their behaviour to intervene. Mortimer and Cameron were engaged in friendly "horseplay" that did not appear to present a danger to either of them. Hunt said she heard laughter and turned to see them at the top of the stairs. One had his arm raised as if pretending to pour beer on the other. Then, they appeared to be "disengaging". Having no concern for their safety, she turned her attention back to the tape deck.

In these circumstances, I find there was no prior conduct that would alert a reasonable person to the likelihood of any dangerous activity taking place. Hunt could not reasonably have anticipated such an unexpected occurrence as Mortimer's fall through P1 or any other injury based on the general tone of the party and the preceding conduct of Mortimer and Cameron. Therefore, she had no reason to intervene between them.

In the circumstances, she is not liable as a social host either at common law or under the Occupiers' Liability Act for the consequences of supplying alcohol, because she did not supply it, or for permitting a dangerous activity to take place on her premises.

I turn then to consider the affirmative duty that Mr. Morse submits applies not only to Stingray but also to Hunt and Kale under s. 3(1) of the Occupiers' Liability Act. As tenants, Hunt and Kale were "in physical possession" of the

premises and also had responsibility for and control over the activities carried on and the persons allowed to enter there. Therefore, they were "occupiers" who owed to Mortimer the duty prescribed by s. 3 of the Act, as amplified by the Supreme Court of Canada in Waldick v. Malcolm, supra. In dealing with the issue of the tenants' liability under s. 3(1), as compared to that of the landlord, I am mindful of the words of Iacobucci J. in that case that the duty does not change. However, he also stated that "...what constitutes reasonable care will necessarily be very specific to each fact situation...". In other words, the duty to take reasonable care remains the same but what constitutes reasonable care may vary depending upon the "all the circumstances".

The position of the tenants is as follows. By virtue of ss. 82 and 96 of the Landlord and Tenant Act, the primary obligation for maintenance and repair and compliance with health and safety standards, including housing standards required by law such as the City's Property Standards By-law, fell upon Stingray as landlord. Even apart from s. 96, Bird confirmed that Stingray was responsible for repairs or structural problems and did not rely upon the tenants to advise him of any structural inadequacy in the stairway.

Hunt and Kale also understood that Stingray was responsible for maintenance and repairs. In these circumstances, it was the duty of the landlord and not of the tenants to inspect for the specific purpose of determining structural adequacy and identifying unsafe conditions. At its highest, the tenants' duty was to report to their landlord those conditions that obviously affected their safety and that of their guests and that related to structural or design features about which the landlord might otherwise be unaware.

The tenants submit this is logical and reasonable because one of the primary reasons, apart from economic considerations, for persons electing to rent residential premises rather than own them is to relieve themselves of the concern and expense associated with property maintenance and repair. In this regard, they point to the following passages from pp. 36 and 44 of the Interim Report of the Ontario Law Reform Commission on Landlord and Tenant Law Applicable to Residential Tenancies published by the Department of the Attorney General in 1968:

> It is an economic fact that the modern residential tenant is less likely to be able to bear the cost of undertaking repairs. In the typical urban apartment tenancy, which is usually of quite a short duration, the landlord is generally considered to be the person having the major interest in the condition of the leased premises. It is the landlord who receives not only the rent, but also the benefit which results from improvements to the property, including repairs. It is the landlord, therefore, who ought to bear the primary responsibility to repair. He should be required to provide premises which are fit for human habitation and are in a good state of repair and he should be primarily responsible for keeping them in that condition.
>
> At p. 44:
>
> If the obligation to repair is left on tenants then the tenant at the time when repairs are effected must immediately bear the entire cost of the repairs. This precludes the spreading of such costs over a reasonable period and among the subsequent tenants who would also benefit.

The tenants' position is that under s. 96(2) of the Landlord and Tenant Act they were responsible only for the ordinary cleanliness of the premises and for the repair of damage negligently or wilfully caused by themselves or their guests. It is their position that the Legislature incorporated the philosophy of the Ontario Law Reform Commission into s. 96 and imposed upon the landlord the primary obligation for "providing and maintaining the rented premises in a good state of repair and fit for habitation during the tenancy and for complying with health and safety standards, including any housing standards required by law". Accordingly, they, as tenants, were entitled to assume, in the absence of some clear evidence to the contrary, that the landlord had complied with his statutory duty and that the premises were safe and in a condition of good repair.

On the other hand, Mr. Morse submits that Hunt and Kale are prevented by s. 5(1) of the Occupiers' Liability Act from relying upon their status as tenants, and the corresponding obligation of the landlord to effect repairs, to shield themselves from performing the duty they owed under s. 3(1) of the Occupiers' Liability Act. Section 5 reads:

> 5.(1) The duty of an occupier under this Act, or his liability for breach thereof, shall not be restricted or excluded by the provisions of any contract to which the person to whom the duty is owed is not a party, whether or not the occupier is bound by the contract to permit such person to enter or use the premises.
>
> (2) A contract shall not by virtue of this Act have the effect, unless it expressly so provides, of making an occupier who has taken reasonable care, liable to any person not a party to the contract, for dangers due to the faulty execution of any work of construction, maintenance or repair, or other like operation by persons
>
> other than himself, his servants, and persons acting under his direction and control.
>
> (3) Where an occupier is free to restrict, modify or exclude his duty of care or his liability for breach thereof, he shall take reasonable steps to bring such restriction, modification or exclusion to the attention of the person to whom the duty is owed.

Mr. Morse also submits that when the landlord failed to make the repairs necessary to keep the premises safe, the tenants, in order to meet the duty imposed upon them by s. 3 of the Occupiers' Liability Act, were obliged to move in a summary way pursuant to s-s. 96(3)(b) of the Landlord and Tenant Act for an order authorizing the repairs at the landlord's expense. That subsection reads:

> (3) The obligations imposed under this section may be enforced by summary application to a judge of the county or district court of the county or district in which the premises are situate and the judge may,
>
> (a) terminate the tenancy subject to such relief
>
> against forfeiture as the judge sees fit;
>
> (b) authorize any repair that has been or is to be made and order the cost thereof to be paid by the person responsible to make the repair, such cost to be recovered by due process or by set-off;
>
> (c) make such further or other order as the judge considers appropriate.

While both Stingray and the tenants were "occupiers", and therefore subject to the duty prescribed by s. 3, the "circumstances" of Hunt and Kale were different from those of Stingray. This is important because what constituted reasonable care for Hunt and Kale depended upon "all the circumstances".

In addition to what has already been noted about their status as tenants and their relationship with Stingray, their other circumstances were as follows. Both had come from the small community of Seaforth where they had gone to high school together and were in their second year at Fanshawe Community College. Hunt moved into the apartment in September, 1985. Kale moved into it in September, 1986. They were 21 on the day of Mortimer's fall. They had limited financial resources. As students, they found attractive the monthly rent of $360.00, which was funded by their parents. They moved their furniture into the apartment with the help of friends. In the course of moving their furniture and their daily use of the stairs, they never experienced any problem with the staircase or threshold. There was never any indication of instability in the staircase and neither tenant saw anything that gave rise to concern for her safety. Neither had experience in construction, knowledge of good building practice, or of Building Code requirements. Hunt was an accounting student. Kale was in the medical laboratory technology programme. Hunt's understanding of her obligation in relation to the stairway was that she had only to keep it clean. She said if

she had seen something obviously wrong she would have informed the landlord about it.

As noted, the duty cast upon Hunt and Kale was to "take such care as in all the circumstances of the case is reasonable to see that persons entering the premises ... are reasonably safe while on the premises". What is "reasonable" must depend not only on the particular factual situation but also upon its legal context, which they are deemed to know. Clearly s. 96(1) of the Landlord and Tenant Act casts the primary but not exclusive duty to maintain the premises in a safe condition upon the landlord. Section 8 of the Occupiers' Liability Act extends the benefits flowing from the statutory duty on the landlord beyond tenants to embrace as well third persons to whom the landlord owes no contractual duty. The object of the Occupiers' Liability Act is to make premises reasonably safe for persons and objects entering them by casting a duty of reasonable care upon "occupiers" whether they be landlords or tenants.

With respect to the effect of s-s. 5(1) of the Occupiers' Liability Act, it applies to the situation where an occupier, in a contract to which a person in Mortimer's position is not a party, attempts to restrict or exclude his liability for breach of the Act. That is not the case here. There was no written tenancy agreement between Stingray and the tenants Hunt and Kale to limit the scope of their duty to Mortimer. They rely upon s. 96 of the Landlord and Tenant Act, to cast the primary responsibility for maintaining the premises in a good state of repair upon Stingray. By virtue of s. 82 of the Landlord and Tenant Act, s. 96 is imported into every tenancy agreement, whether oral or written. Therefore, it is not a situation where the tenants, as occupiers, have had some choice and have attempted by contract to limit their liability under the Occupiers' Liability Act toward persons in Mortimer's position. Their duty under that Act remains as stated in s. 3(1), but part of their "circumstances" is the fact that as tenants they are in a relationship with Stingray that casts on it the statutory duty of repair set forth in s. 96. Therefore, I conclude that s-s. 5(1) of the Occupiers' Liability Act does not prevent Hunt and Kale from relying upon s. 96 of the Landlord and Tenant Act to assist them.

In the circumstances of this case only, and I stress that the following is not meant to be taken as a principle of general application, I do not believe it is reasonable to expect the tenants to have conducted thorough, periodic inspections to determine the structural integrity of the stairway in the same way as Stingray. Stingray bore that statutory burden under the Landlord and Tenant Act, was not relying upon the tenants to fulfil it and had assumed that responsibility unto itself.

In my opinion, if an obvious and imminent condition of danger had been present, at the very least Hunt and Kale would have had a duty to advise Stingray immediately and to do what they could to protect their guests or others using the stairway from the condition, including warning them adequately of its existence. If Stingray failed to correct the condition within a reasonable time, then, depending upon the circumstances, it might even have been part of the tenants' duty either to make the repairs themselves, or, if the cost to them was prohibitive, to apply in a summary way for an order under s. 96(3) of the Landlord and Tenant Act to authorize the repairs and require the landlord to pay for them.

I do not believe that in the face of an obvious and imminent danger they would be entitled simply to rely upon the duty of repair cast upon the landlord under s. 96 to shield themselves from liability to a third party. On the other hand, it would be reasonable for them to assume, in the absence of evidence to the contrary, that the landlord was complying with his statutory duty to maintain the premises in a safe condition.

In all the circumstances as outlined above, I conclude that it is not reasonable to expect the tenants to have looked for and discovered the type of structural conditions that were implicated in Mortimer's fall. As far as they could tell from their ordinary use of the stairway, it was safe and there was no obvious condition of instability or danger. The condition of P1 would certainly not be evident to them. As noted, Quaile confirmed the common practice on ascending or descending stairs of looking at the stairs ahead and not

directing one's attention at the roof members. Accordingly, the state of the roof rafters was not one that Hunt and Kale, as tenants, would reasonably be expected to discover. Obviously, the same was not true for Stingray. As already noted, upon Stingray, as a landlord who had waived reliance upon the tenants for notice of conditions of non-repair, lay the primary obligation for maintaining the stairway in a good state of repair and in a safe condition. Although several engineers inspected the stairway after Mortimer's fall without discovering the separated roof rafters, they attended for the specific purpose of evaluating the east wall of the landing through which Mortimer and Cameron fell. They were not subject to the positive duty to inspect the entire stairway that was imposed on Stingray by s. 3(1) of the Occupiers' Liability Act.

Even if such conditions as a broken or splintered stair tread and the absence of WP2 constituted evidence to the contrary that required the tenants to report them to Stingray, I conclude, based on its demonstrated history of tardy repair, that Stingray probably would not have remedied such conditions before Mortimer's fall and that the reporting of such conditions by the tenants probably would not have led to the discovery of the dangerous condition of P1. With respect to the absence of WP2 in particular, I base that conclusion on my finding from the evidence that WP2 was likely missing at the time Stingray purchased the property and was not replaced until after Mortimer's fall. In addition, Bird testified that he had replaced WP1 before Mortimer's fall but the manner in which it was replaced obviously did not lead to the discovery and correction of the dangerous condition of P1. I conclude this was because Stingray was concerned to effect only absolutely essential repairs in the least expensive way possible.

I conclude further that in all the circumstances a reasonable person in the position of Hunt and Kale, even in the face of the conditions of non-repair referred to, could not have foreseen that P1 would give way as it did and result

in Mortimer being injured.

In "all these circumstances", I conclude the tenants should not be held liable to Mortimer; If I am wrong in this conclusion and it is decided elsewhere that the tenants are liable, then, in my opinion their liability should be apportioned at 5 per cent each and they should be entitled to succeed in their claim for complete indemnification from Stingray on the ground that Stingray had the primary burden of inspection and repair and was not relying in any way upon the tenants to discharge it. For the same reasons, Stingray must fail in its bid to be indemnified by the tenants. In any event, Stingray did not claim indemnity from Hunt for any negligence on her part related to the condition of the premises, but only on the ground of her liability as social host and her alleged failure to restrain dangerous activity on the premises. Accordingly, the action and all crossclaims against Hunt and the third party action against Kale are dismissed.

11. APPORTIONMENT OF LIABILITY:

On the one hand, if the City had complied with its duty, the fateful condition of the stairway would never have arisen. On the other hand, if Stingray had fulfilled its duty, the condition of P1 could have been discovered and the deficiency remedied before Mortimer was injured. While I find both parties at fault, I conclude that the City must bear a far larger proportion of liability for the following reasons.

The departures from Code requirements and good building practice were egregious and ought to have been noticed by the Building Inspector. In fact, based on the application, a building permit should never have been issued in the first place. This is especially so given the fact that the permit was issued in relation to a stairway, which is known to be a part of premises that is potentially more dangerous than others. Moreover, this was an exterior stairway where the potential for injury was greater still. The condition of P1 that resulted in its failure and that was the proximate cause of Mortimer's injury would not be apparent to the average lay person, who would regard it as part of a wall and would rely on it to provide the fall protection that a wall would afford. As described by Blaney, P1 represented a "trap" because it

would not be obvious that it failed to provide suitable fall protection. Therefore, the City permitted the creation of a particularly insidious condition, especially given its mandate to safeguard life and limb. In the circumstances, its failure represented a marked departure from the applicable standard of care.

Accordingly, I fix the City's liability at 80 per cent and Stingray's liability at 20 per cent.

12. SPECIAL DAMAGES:

Mortimer claims special damages in the sum of $514,542.01. The defendants do not dispute O.H.I.P's subrogated claim of $343,940.82 for past services as of March 14, 1991, nor the subrogated claim of the Ministry of Community and Social Services (COMSOC) for $57,364.20. Nor Do they dispute Mortimer's claim for out of pocket expenses totalling $14,086.99. The only amount in issue is his claim for loss of income to trial in the sum of $99,150.00, which Mr. Morse calculates as follows:

May 1/88 - Apr. 30/89	$27,500.00
May 1/89 - Apr. 30/90	$32,500.00
May 1/90 - Apr. 8/91	$35,336.54
4% Vacation pay based on $37,500.00	$ 3,813.46
TOTAL	$99,150.00

At the time of his injury, Mortimer was completing his second year of a 3 year business programme at Fanshawe Community College in London. Mr. Anthony Kelly is a placement officer at the employment centre at the College. He explained that Fanshawe offered 2 business courses: a 2 year Business/Accounting course and a 3 year Business Administration/Accounting course. Only those who attained a B average in second year could enrol in the third year. A person who completed the 2 year course successfully gained 9 of the 18 credits necessary to get the Certified Management Accountant (C.M.A.) designation. He said a person who completed the 3 year course would have 15 credits. Only students with a B average, such as Mortimer, were eligible for the co operative work programme. He described Mortimer's transcript of marks, (Exhibit 4, p. 10), as "better than average".

Despite a prior lacklustre scholastic record and peripatetic academic and work history, Mortimer had settled on a career as a C.M.A. His former modest academic achievements were not the result of lack of intelligence but were the consequence of lack of direction, interest and application. He did so poorly at the University of Western Ontario and at the University of Calgary that both institutions prevented him from continuing his studies. Besides being an extremely intelligent young man with an I.Q. of 130, he has an engaging personality and handsome appearance. As with many young people, it took Mortimer some time to find his niche. However, once enroled in the Business Programme, he began to garner grades that were consistently in the A and B range. I find that he had finally achieved some equilibrium in his life and that his goal of becoming a C.M.A. was realistic and one that he would have realized but for his injury.

During his first work term in the summer of 1986, Mortimer worked for the Royal Canadian Mounted Police in Ottawa at the rate of $245 a week. His second work term ran from January, 1987, to the end of April, 1987. During it, he worked for Mr. F.C. Hoffner, C.A. in Strathroy at the rate of $210 a week with some additional overtime pay in April. Mortimer's income tax returns reveal that he earned a total of $4,331.60 from the R.C.M.P. and $4,112.32 from Mr. Hoffner.

Although the R.C.M.P. did not provide an evaluation of his work, Hoffner furnished very positive comments and ranked Mortimer with his "previous winning students". His detailed evaluation sheet ranked Mortimer highly and he stated that if he needed an employee he would not hesitate to hire Mortimer.

Mr. Robert Dye is the Executive Director of the Society of Management Accountants of Ontario, which has 10,000 members and 8,000 student members. He explained the differences among 3 different classes of accountants: a C.G.A. (Certified General Accountant), a C.M.A. (Certified Management

Accountant) and a C.A. (Chartered Accountant). Dye stated that while the education, training and positions held by a C.M.A. and a C.G.A. were similar until about 3 years ago, the C.M.A. is now a higher level accounting designation than the C.G.A. As of 1989, only persons holding university degrees in business administration are eligible to apply for admission to the course. Because Mortimer was in the Fanshawe College programme, he would have been exempt from this requirement. Dye said persons holding the C.M.A. designation usually work in management accounting positions within an organization, business or government, although they also might be in private practice. In the latter case, they would do most of the functions of a C.A. except audits. A C.A. is "geared to audits and verification of the financial statements of corporate bodies as required by regulatory agencies". He believes that in 5 or 6 years the business community will assume that all persons with a C.M.A. have a university degree. A similar situation occurred when those entering the C.A. programme had to have a university degree.

He also testified that after Mortimer's third year at Fanshawe College he would require 4 more credits, as opposed to the 3 suggested by Kelly, and 1 year of work experience to qualify for his C.M.A. He added that Mortimer would have the option of completing the remaining 4 credits by taking 1 course per semester, twice a year, in the evenings at the University of Western Ontario, while he was working. He said it was likely that Mortimer would have obtained his C.M.A. designation 2 years after graduating. This pattern was consistent with the history of other college graduates he had seen.

If Mortimer had graduated from Fanshawe College with all his third year courses, he would have been classified as a Level 4 student. There were 5 levels, of which Level 5 was the highest. Dye said in 1988 the salary range for Level 4 students in Toronto and the "Golden Horseshoe" was between $30,000 and $35,000. It would be about 6 per cent less, ($28,200 to $32,900), in Southwestern Ontario. A Level 5 student would earn between $35,000 and $40,000 a year in 1988 and a C.M.A. graduate in that year would start at $45,000. Those rates probably would "have moved up $3,000 to $5,000" a year in 1990.

The Society offers a free employer referral service to its members. It encourages prospective employers to make use of the resumes it receives from C.M.As. or students looking for employment. The Society received the following number of requests in the respective years noted: 1987 - 1,585; 1988 - 2,017; 1989 -1,918; 1990 - 1,374. Dye based his salary figures on an analysis of the salaries that were on these requests. He agreed that one might expect a salary differential depending upon the type of business the employer operated. He also admitted that there was no "union scale" and that an individual's salary depended upon his or her arrangement with a particular employer. Further, a person might take a lower salary to stay in a particular area. I note that these salary figures pertain to few of the total 10,000 members and 8,000 student members of the Society. They may not represent a true cross-section of the profession in Ontario.

According to Kelly, 18 people graduated from the 3 year programme at Fanshawe College in 1988. Of the 17 responding to his questionnaire, all found employment. In 1988, the lowest starting salary of those reporting was $14,820, the highest salary was $25,260 and the average was $18,895. In 1989, the comparable figures were: $16,000, $29,000 and $21,000. In 1990, the low salary was $16,000, the high was $35,000 and the median (rather than the average) was $22,000. These figures also may be slightly misleading. For example, Hunt took a temporary job upon graduation in 1988 until she could secure permanent employment at $27,000 a year.

Mr. Peter Ross, of Associated Economic Consultants Ltd., is a labour market economist with a M.A. in economics. He completed his doctoral course studies in the late 1960s, but never obtained his Ph.D. He testified for the plaintiffs. For the period from September, 1988, to March 25, 1991, he calculated Mortimer's loss of income at $59,230, using income data for Certified General Accountants (C.G.A.) and at $44,090, using data for graduates of community colleges generally who were not accountants. He obtained these data from the 1985 Census. Neither category applied exactly to

Mortimer.

Mr. J.B. Patterson is an actuary and president of Actuarial Consultants of Canada Limited. For the purposes of his calculations, he "assumed" that Mortimer would have earned $36,500 a year in 1988 dollars or $41,779 in 1991 dollars, allowing for 3 years of inflation. It is not clear how he arrived at this salary level.

As for those of Mortimer's classmates who testified, Hunt, age 24, is an acting Senior Financial Officer for the Ministry of Community and Social Services. She earns "slightly over $50,000 a year" and a full range of benefits equal to 10 to 15 per cent of her salary. After graduating from the 3 year course at Fanshawe, she took temporary employment with a firm in Seaforth at $6 an hour. She stayed there until June, 1988, when she secured employment with the Ministry under a 2 year contract of internship leading to a position as a Financial Analyst. Her initial salary was $27,000 a year without benefits. After 53 weeks, she received a promotion as "underfill" to a Financial Analyst and her salary increased to approximately $35,000 a year with benefits. In April, 1990, she got another salary increase to $43,000 when her employer removed her "underfill" status and she became a Financial Analyst. In April, 1991, she became an Acting Senior Financial Officer and her salary increased again to "slightly over $50,000 a year".

With respect to further promotion, Hunt said that while the C.M.A. designation would be looked on favourably, it would not be the only thing considered. She said there are people at her level in the Ministry and higher who lack any type of accounting designation but have excellent management skills.

When Hunt graduated from the third year of the programme at Fanshawe, she had 12 of the 18 credits needed for her C.M.A. She has obtained some of the remaining 6 through night classes and others by correspondence, while she has been working. She expected to complete the last course by the Summer of 1991 and had 1 additional examination to write that she deferred from January, 1991. At the time of trial, she did not have her C.M.A. designation, nor did any of Mortimer's other classmates who testified.

McCall also began to work after graduating from the 3 year programme at Fanshawe. Initially, Ellis Don hired him at a salary of approximately $22,000. He was there for about 6 months and then worked at "odd jobs" until January, 1990. Then, Laidlaw Transport hired him at a salary of $27,000, which was increased to $32,000 a year. He receives medical and dental coverage, the value of which he does not know. Also, he participates in a plan that permits him to purchase shares in his employer's corporation at less than market value. He has 14 of the 18 credits he needs for his C.M.A. and is still hoping to obtain it. He recalled that Mortimer was one of the better students in the course. McCall had missed some courses but "made them up" and generally got a B grade.

After graduating from Fanshawe College, Cameron took a position as an intermediate accountant with Loeb. He is now 34 years old and works as a financial analyst for the Blackburn Group at a salary of $35,000. His employer pays 50 per cent of the cost of dental and medical coverage. He also benefits from an "insurance package". There was no evidence about the cost of these benefits. As of the date he testified, he was working on his eighteenth C.M.A. credit, which he expected to complete in the Summer of 1991. He also expected to receive his C.M.A. designation in 1991. Because of this, he anticipated earning more money, though apparently not from his present employer.

Mead, who is 24 years old, obtained her diploma from the 2 year course at Fanshawe College in 1987 and is now a Level 4 C.M.A. student. She obtained a position as an accounts receivable clerk with the Great Lakes Environment Group in October, 1988, at an annual salary of $18,000 and benefits. After a year, her employer promoted her to her present position as office manager and site accountant. Her current annual salary is $25,000 with full benefits, including dental and medical coverage and life insurance and as of the time she testified she had received a bonus of $1,500 for the year to date.

In assessing what Mortimer probably would have earned, I note his very positive evaluation by Hoffner, his better than average academic record, his winning personality and his high level of intelligence. According to Ross, while intelligence is strongly related to educational attainment, earnings are more directly related to education than intelligence. Yet, he also recognized that differences in employment earnings generally were dependent upon a variety of factors including age, sex, education, occupation, motivation and parents' socio-economic status.

As to the latter factor, Mortimer's parents have been hard working people all their lives. They were born in England and came to Canada in 1956. His father is 76 and his mother is 72. Each has the equivalent of a Grade 8 education. Mortimer's father was unable to continue his education and he began to work at an early age. He served in the Royal Air Force and rose to the rank of Acting Wing Commander. After coming to Canada and working at other jobs, he spent 16.5 years employed at General Motors Diesel Plant in London before his retirement 10 years ago. Mortimer's mother was also young when she began to work. Some of her jobs were heavy, including working in a munitions plant in England during World War II. Their first few years in Canada were hard. They had a total of 5 children, of which Stephen Mortimer was the youngest. Besides working in the home, Mrs. Mortimer took part time work outside the home from time to time. They showed the value of the work ethic to their children by their example. Their children seem to have maintained the pattern they established.

Mortimer's older brother, Richard, who was born September 17, 1943, has a Ph.D. in Organic Chemistry and works as a research chemist for Health and Welfare Canada in Ottawa. His sister, Adrienne Dawson Selby, born February 29, 1948, is a Registered Nurse, who works in the neonatal intensive care unit of St. Joseph's Health Centre in London. His sisters, Carol Hiltermann and Eugenie Dmytar, both live in Calgary. Eugenie, who is 36 years old, is also a nurse who is completing her B.Sc. in nursing at the University of Calgary. Carol is 49 years old. She did not complete her secondary school education but worked at a community college in Calgary for several years as a secretary and in other positions.

After considering all the factors enumerated by Ross, and Mortimer's earlier lack of direction, I conclude that as an intelligent, personable, young man from a hard working family, he probably would have enjoyed a successful and remunerative career as a C.M.A. As to his salary level, Mr. Morse submits that if Mortimer had not been injured, his earnings would have been close to those of Hunt and emphasizes that she still does not have her C.M.A. designation. However, compared with her other classmates who testified, Hunt's experience is atypical. Her success to date may result from her managerial skills and factors other than her C.M.A. training. As she stated, there are people at her level in the Ministry and higher who lack any type of accounting designation but have excellent management skills.

Based on Dye's evidence and my assessment of Mortimer's intelligence, personality and motivation, I accept Mr. Morse's submission that Mortimer probably would have attained his C.M.A. after 2 years. In coming to this conclusion, I have not overlooked the fact that none of Mortimer's classmates who testified fit Dye's pattern of obtaining the C.M.A. designation 2 years after graduating from the 3 year community college course.

According to Dye's figures, if Mortimer had remained in Southwestern Ontario, he could have expected a minimum salary of $45,120 upon obtaining his C.M.A. I base this figure on Dye's evidence that in 1988 a C.M.A. graduate would start at $45,000 and that his or her annual salary would increase at least $3,000 by 1990. Applying the 6 per cent discount for salaries in Southwestern Ontario, I arrive at the figure of $45,120 for 1990. According to Dye, if Mortimer had gone to Toronto or elsewhere in the Golden Horseshoe, he had the potential to increase his salary for that year to a maximum of $48,000. Dye also stated that a C.M.A. with 10 years of experience should be earning $75,000 a year and that some members of the profession who get very senior management positions earn substantially more.

Kelly bases his figures on somewhat small samples that comprised graduates of the 3 year course at Fanshawe College. They did not appear to cover persons who had subsequently earned the C.M.A. designation. Ross based some of his calculations on average salaries of community college graduates generally and of Certified General Accountants. Neither category represented Mortimer's anticipated position exactly. As Executive Director of the Society of Management Accountants of Ontario, Dye would have a better idea of the respective salary ranges for Level 4 and 5 students and C.M.A. graduates in the periods in question than either Kelly or Ross. As compared to Kelly, he was dealing with a larger sample. As compared to Ross, he was dealing specifically with C.M.A. students and graduates.

However, as noted, I believe that Dye's figures are not necessarily representative. They were not the result of a salary survey of the profession as a whole and do not necessarily represent average incomes. Except for Hunt, Mortimer's other classmates who testified earned substantially less than the ranges proposed by Dye. So, I conclude his figures may be somewhat optimistic.

Hunt testified that she began to work in June, 1988. Cameron said he finished his third year at Fanshawe in April, 1988. This is consistent with Mortimer's claim for loss of income commencing May 1, 1988. Also, Kelly testified that all the 1988 graduates of the 3 year course who responded to his questionnaire secured employment, although admittedly he did not say when they obtained it.

The amount claimed by Mortimer for loss of salary does not include the value of the contribution his employer probably would have made to benefits. Even so, I think it is slightly high. I believe it is reasonable to infer that he would have started working at a salary of $25,000 a year, that he would have earned $30,000 the next year and, following receipt of his C.M.A. designation, $37,500 in his third year. Apportioned for that part of the year from May 1, 1990, to April 8, 1991, this equals the amount claimed of $35,336.54. Since Cameron earned $35,000 in his third year without a C.M.A. designation, I do not feel Mortimer's claim for this amount is at all unreasonable. I also allow the claim for 4% Vacation pay based on $37,500.00 in the amount of $3,813.46, for a total of $94,150. Therefore, I allow Mortimer special damages in the sum of $509,542.01.

13. MORTIMER'S LIFE EXPECTANCY:

Mortimer was born March 6, 1960. At the time of his injury, he was 27 years old. At the date of trial, he was 31 years old. Dr. Allat and Dr. Geisler, who were called for the plaintiffs, and Dr. Frankel, who was called for the City, each gave an opinion about Mortimer's life expectancy. Both Dr. Geisler and Dr. Frankel are experts of international renown in the treatment of spinal cord injuries.

Mortimer entered Victoria Hospital in London on July 17, 1987, the day of his fall. He was transferred to Parkwood Hospital, London, on August 5, 1987, for rehabilitation, but was returned to Victoria Hospital on August 7, 1987 for acute haemoptysis. He was readmitted to Parkwood on August 27, 1987, and discharged to University Hospital, London, on January 31, 1988, for electroincision of the bladder neck. He was transferred from University Hospital back to Parkwood on February 11, 1988, and remained there for rehabilitation until September 22, 1988, when he was discharged to Lyndhurst Hospital in Toronto to obtain additional assessments. He was discharged from Lyndhurst to Parkwood on December 16, 1988, for assistance with community placement. On July 13, 1989, he was transferred to St. Joseph's Health Centre, London, to undergo a second electroincision of the bladder neck. He was readmitted to Parkwood on July 18, 1989, where he remained until his discharge in January, 1990.

Dr. Allat was Mortimer's attending physician at Parkwood Hospital. Therefore, he was able to observe and assess him over a considerably longer period than either Dr. Geisler or Dr. Frankel. In his report dated October 11, 1989, Dr. Allat expected Mortimer to live another 27.4 years, if he had excellent supervision and outpatient care. He based his opinion on "a recent epidemiological study reported in Spinal

Cord Injury: The Facts and Figures, published in 1985." At trial, he predicted Mortimer's life expectancy to be about 25 years or perhaps even longer.

The defence raises the possibility that Dr. Allat based his opinion about life expectancy on data for incomplete rather than complete quadriplegia. In his report dated October 11, 1989, he called Mortimer an "incomplete quadriplegic . . . injured in his early 20's". In fact, he was 27 years old when injured. However, Dr. Allat said in his oral testimony that Mortimer was a complete rather than an incomplete paraplegic. All the other medical evidence supports this conclusion. On page 2 of his report, he said that a C4 fracture on C5 subluxation was noted that was "associated with a C4 complete quadriparesis". In the summation section at page 6 of his report, under the heading "Disease Diagnosis", he states at item (ii), "Complete C4 quadriparesis with slight C5 motor sparing." Yet, in the Opinion section of his report, under the headings Survival Prognosis, Psychological, and Respiratory System, there are at least 4 references to "incomplete quadriplegics", including the one set out above.

If Dr. Allat made his calculations on the assumption that Mortimer was an incomplete quadriplegic, his resulting estimate of life expectancy would be invalid because according to the authoritative study conducted by Dr. Geisler, the relative mortality rate for complete quadriplegics was 7.67 times normal whereas for partial tetraplegics it was 2.09 times normal. Dr. Allat, a specialist in rehabilitative medicine, was Mortimer's treating physician. I have no doubt he was well aware that Mortimer was a complete quadriplegic and that he estimated Mortimer's life expectancy on that premise.

Dr. Allat said that he based his opinion of Mortimer's life expectancy on the study published in 1985, which was in turn based on retrospective data collected in the United States since 1972. Because of the advances in care and management of spinal cord victims since 1972, he said one might have an even more optimistic outlook about Mortimer's life expectancy now. He also stated that the statistics included people who died within the first year after their injury, which "shifts the curve to the shorter end". Because Mortimer had survived his critical first year, he had enhanced his chances for a longer life than the average figure.

Dr. Frankel acknowledged that Dr. Geisler had co-authored the authoritative paper on the subject, entitled Survival in Traumatic Spinal Cord Injury, which was filed as Exhibit 13B. Dr. Geisler in turn agreed that Dr. Frankel's reputation exceeded that of Dr. Allat as an expert in the field of spinal cord injuries.

Dr. Geisler based his opinion about Mortimer's life expectancy upon his examination of Mortimer on December 12 and 13, 1988, at Lyndhurst Hospital in Toronto, the medical reports that he read, the history he took from Mortimer over 3 or 4 hours and his paper. As Dr. Geisler stated very fairly, it is a difficult thing to predict life expectancy. From his study, which he conducted on patients in Ontario, he concluded that complete quadriplegics had a relative mortality rate 7.67 times normal. He applied that rate to 1975-77 Ontario Population Mortality tables to calculate theoretically derived life expectation. He said that the mortality tables showed the life expectancy of a 31 year old normal male to be 42.7 years. To that figure he applied the relative mortality rate for complete quadriplegics and arrived at a life expectancy of 23.1 years for Mortimer.

Dr. Frankel based his opinion upon his examination of Mortimer in Mortimer's home on February 16, 1991, the history he took from him, a review of the previous hospital records, Dr. Geisler's study and Dr. Geisler's report of December 18, 1988. He also had the results of an ultrasound examination of Mortimer's urinary tract and a magnetic resonance imaging report of his cervical spine, which he obtained after he examined Mortimer. He believed Mortimer has a life expectancy of approximately another 20 years from February 22, 1991.

The range of expert medical opinion about Mortimer's life expectancy as of the date of trial is therefore between about 20 and 25 years.

Although there was some divergence among them, I believe all 3 physicians took into account the major relevant risk factors that might tend to shorten Mortimer's life expectancy and the major positive factors that might tend to lengthen it. First, the negative factors include the height of the lesion at C4 and its adverse effect on Mortimer's ability to breathe and cough and to clear mucus if he suffers even a simple upper respiratory infection. Of the population of quadriplegics, Steven Mortimer is in the most significantly injured 5%. He has experienced past urinary tract infections, severe episodes of autonomic dysreflexia, pulmonary emboli and unexplained fevers. If his elderly parents and Stephanie are no longer available to help him, he may be forced to live in an institution where life expectancy is not as high. The positive factors include Mortimer's character and ability to cope. He enjoys a good psychological state, is cooperative, cheerful and has come to terms with his injury. He is intelligent, knowledgeable about his condition and can direct care givers that he might hire. His disposition is such that he is not likely to antagonize them, thus minimizing the likelihood that he would have to replace them frequently. He is living at home, which increases his survival potential. Since 1980, there has been an improvement in the life expectancy of the general population. Also, there have been medical advances in the last decade in the care of quadriplegics that are expected to improve their life expectancy.

The 3 physicians did not all consider every one of these factors and placed somewhat different emphasis even on the ones that were common to them all. Also, Dr. Allat used a different statistical base as a reference in reaching his opinion. Dr. Frankel had never heard of that study. It was based upon an American population, whereas Dr. Geisler's study was based upon an Ontario population, which would therefore not require any adjustment. I accept Dr. Geisler's study as the one currently considered authoritative in the field.

The defence submits that Dr. Geisler reached his conclusion by simply applying the relative mortality rate for complete quadriplegics to the mortality tables for normal males, which yields a life expectancy of 23.1 years, whereas Dr. Frankel also took into account specific positive and negative factors. However, as noted, Dr. Geisler also examined Mortimer and his medical records and took a history from him. When asked to compare the opinions of Dr. Allat and Dr. Frankel about Mortimer's life expectancy, Dr. Geisler stated that he believed "Dr. Allat's opinion was going to be a little closer in its optimism than Dr. Frankel's was in its down side". I conclude Dr. Geisler based that opinion on all the information he had about Mortimer.

In fact, Dr. Geisler believed his figure might underestimate Mortimer's life expectancy for the following reasons. His study did not consider the positive effect of intermittent catheterization. Mortimer can understand his condition and potential complications. The life expectancy of the general population has increased since he completed his study.

Dr. Frankel used Dr. Geisler's paper in arriving at his opinion. That study relied upon the 1975-77 Ontario Population Mortality rate tables. It gave the results of a study of 1510 persons in Ontario with spinal cord injuries that was conducted between December 1, 1973, and December 31, 1980. Dr. Frankel also considered the fact that only 5 percent of the group in Geisler's study of complete quadriplegics represented individuals with lesions as high as C-4 and that most were at the C-5,6 level. Dr. Frankel used Table XIV from Dr. Geisler's paper to compare the life expectancy for a person who had become a complete quadriplegic at 20 years of age in 1980, (30 years), and at 30 years of age, (23 years). He concluded that the rate of change was .7 per year. He then applied that factor to the life expectancies shown in Table XIV. He calculated that because Mortimer sustained his quadriplegia at age 27, he would have a life expectancy from that time of 25.1 years. From the date of trial, 4 years after the fall, it would therefore be about 22.3 years, (25. 1-[4x.7]). After next considering all the positive and negative factors that applied to Mortimer, Dr. Geisler discounted that figure by a further 10 per cent to arrive at his estimate of about 20 years. He admitted candidly that it was an estimate and the most accurate figure that he could reach in the circumstances.

I believe the actuary, Patterson, used the most accurate mathematical method of calculating Mortimer's life expectancy. I prefer it to Dr. Frankel's method. Patterson used more current Life Tables and calculated the normal life expectancy of a 31 year old Canadian male to be 44.107 years. Compared to the analogous figure from the 1975-77 Ontario Population Mortality tables of 42.7 years, this reflects the general trend to increased life expectancy. Applying Dr. Geisler's relative mortality rate for complete quadriplegics of 7.67 times normal mortality, he calculated Mortimer's life expectancy would be 23.723 years. Admittedly, this was a strict mathematical calculation, without consideration of Mortimer's particular circumstances.

It should be noted that the relative mortality rate of

7.67 is based on data that does not consider the experience of the last decade. During that time, the medical profession has made considerable advances in the treatment of spinal cord injured patients. These advances also can be expected to have a positive effect on life expectancy.

I have considered all the risk factors raised by the medical evidence that might tend to decrease life expectancy and the positive factors that might tend to prolong it. Mortimer is a very intelligent man who is extremely knowledgable about his problems and what he should do to manage them. Also, he is well able to direct his care givers in that regard. Since he began to live in his own home in January, 1990, he has avoided bed sores and other major episodes similar to those he experienced while in hospital. He has formed a relationship with Stephanie Brocklehurst that everyone hopes will blossom into marriage. Through her, and his parents and sister Adrienne, he presently has the advantage of "loving care", the lack of which Dr. Frankel described as a negative factor in life expectancy. Also, he is living in his own home rather than in an institution, which is a further positive factor in life expectancy. Because of this judgment, he will have adequate attendant care, which is another positive factor in life expectancy.

The figures contained in Dr. Geisler's last study covered the period between December 1, 1973, and December 31, 1980. All 3 physicians expected that the life expectancy of complete quadriplegics should continue to improve over those figures because of advances in their management and care in the last decade. In fairness, Dr. Frankel said this was a factor he considered in arriving at his opinion.

On balance, I conclude that a reasonable estimate of Mortimer's life expectancy is 24 years.

14. NON-PECUNIARY GENERAL DAMAGES:

In making an award under this head of damages, I follow the principles enunciated by the Supreme Court of Canada in Lindal v. Lindal, 129 D.L.R. (3d) 263. Those principles mandate a functional approach that "attempts to assess the compensation required to provide the injured person with reasonable solace for his misfortune" and awards money because it can be "used to substitute other enjoyments and pleasures for those that have been lost".

Here, Mortimer has suffered a catastrophic loss and is in need of proportionately abundant solace. Because of the height of his spinal cord lesion, he is totally paralysed below the neck. As shown by the videotape filed as Exhibit 5, he is completely dependent upon others for all the normal activities of daily living. He is unable to participate in the many athletic endeavours he formerly enjoyed or even such a simple activity as a pleasurable walk. He no longer has normal bowel, bladder or sexual function. Although he wants to father children of his own, he is unlikely to realize that wish. He has difficulty breathing and clearing mucus from his respiratory tract. He suffers from spasms. He has experienced the other conditions noted above in the section that deals with life expectancy. He has undergone several operations and extensive hospitalization and rehabilitation. Not only will he now have a considerably shorter life, but also its quality will be diminished immensely during his remaining years.

I conclude readily that in these circumstances Mortimer

should receive the maximum award. According to Patterson, the equivalent of the $100,000 limit on non-pecuniary damages mandated by the Supreme Court of Canada in the "trilogy": Andrews v. Grand & Toy Alberta Ltd., [1978] 2 S.C.R. 229, Arnold v. Teno, [1978] 2 S.C.R. 287, Thornton v. Board of School Trustees of School District No. 57 (Prince George), (1978) 2 S.C.R. 267, adjusted for inflation to the date of trial is $232,745. I have no hesitation in fixing Mortimer's non-pecuniary damages in this amount.

15. LOSS OF FUTURE INCOME:

(1). PRINCIPLES:

In assessing Mortimer's damages for future pecuniary loss, I have firmly in mind the principle that to recover compensation for such loss he need not establish his claim on a balance of probabilities but need show only a real and substantial risk of future pecuniary loss: Schrump v. Koot (1977), 18 O.R. (2d) 337 (C.A.); Giannone v. Weinberg (1989), 68 O.R. (2d) 767 (C.A.) [leave to appeal to S.C.C. refused (Wilson, LaForest and Cory JJ.)].

(2). LOSS OF SALARY:

As noted above, I believe that Mortimer would have earned his C.M.A. designation in 1990, 2 years after graduating from Fanshawe College in April, 1988. I have concluded that as a C.M.A. he would have been earning $37,500 a year at the date of trial. Then, he was 31 years old, having been born on March 6, 1960. According to Patterson, Mortimer's pre-accident life expectancy was 44 years.

In deciding what income Mortimer likely would have earned in the future, I have considered the evidence of Patterson, Ross, Dye, Kelly, the experience of Mortimer's classmates in the labour market and Mortimer's own unique characteristics.

With respect to Ross' evidence, I have given careful consideration to Exhibits 71 and 72, being his reports estimating Mortimer's future economic loss. On page 7 of Exhibit 72, Ross showed the maximum median income for a C.G.A., (as opposed to a C.M.A.), certified in 1977 and before, gained from the 1990 Salary Survey of the Certified General Accountants Association of Ontario, as $63,000. In fact, in his calculations, he capped Mortimer's income at $53,000, (expressed at current salary levels), attained 13 years after graduation from Fanshawe College. His projection is more conservative than Dye's evidence that a C.M.A. with 10 years of experience should be earning $75,000 a year. Ross agreed that the figures he used were for "the average - typical".

Ross also did a projection of future earnings for a Southern Ontario male with post-secondary, non-university education based on "accountant" earnings from the Census of Canada, (Exhibit 72, Appendix A, Table 3, Column 3b). The classification "accountant" is occupation No. 1171 of the Canadian Classification and Dictionary of Occupations. It incorporates accountants of all kinds, except those who might advance to become managers within a corporation, and includes chartered accountants who tend to earn more on average than other kinds of accountants. However, Ross testified that chartered accountants are such a small proportion of the category that their earnings would not significantly affect the average. The Census of Canada reports the average income of accountants at 5 year intervals. According to Ross, the figures include a "built in productivity factor". Because it is a projection based upon actual Census data for accountants, I give it some weight.

Having considered all these factors, I believe that, calculated in 1991 dollars and ignoring contingencies and benefits, Mortimer probably would have progressed steadily from his salary of $37,500 to $60,000 over a period of 15 years and that he would have maintained that level until his retirement at age 65.

Using these assumptions and a discount rate of 2.5 per cent, Patterson has calculated the present value of Mortimer's total loss of earnings over the course of his working life expectancy between the date of trial and age 65 to be $1,160,844.

According to Ross' calculations, the present value to Mortimer of $1,000 per year in lost income to age 65 is $22,104, as compared to Patterson's figure of $21,980. Patterson determined that Mortimer's average yearly income over the period in question would be $52,813.60. Using Ross' multiplier, the present value of Mortimer's loss of future income would be $1,167,391.80. Although the difference is small, I accept Patterson's calculations because in my view he has greater expertise in this area than does Ross.

(3). LOSS OF CANADA PENSION PLAN BENEFITS:

From Tables D and E and Section A II of Table H of Exhibit 82, I conclude that the present value of Mortimer's loss of Canada Pension Plan income, after retirement at age 65, is $22,280. The present value of the savings realized from not having to make annual C.P.P. contributions is $19,322, for a net loss of $3,498. Ross also testified that his calculation of Mortimer's loss of future earnings did not include the value of an employer's contributions to benefits. At page 9 of his report he wrote,

> In employment where contributions are restricted to programs required by statute, including Unemployment Insurance, Workers' Compensation and the Canada Pension Plan, contributions would add 5% to 8% to the value of compensation. In employment with a complete package of private plans including dental, health, welfare and private pension plans, contribution would add 12% to 18% to the value of compensation (see Appendix B).

As noted above, all Mortimer's classmates who testified receive benefits besides their salary. The extent of the benefits varies as does the proportion the employer pays. Except for Hunt, there is no evidence about the cost or value of these benefit packages. Hunt said her full range of benefits was worth 10 to 15 per cent of her salary. Hunt and Head described their plans as "full benefits". McCall's benefits comprised medical and dental coverage and participation in a share purchase plan. Cameron's plan included medical and dental coverage and life insurance. I took from the evidence that Hunt did not contribute to her benefits and that Cameron contributed equally with his employer. The situation was not clear with respect to the others.

I note that all these plans are provided to persons who do not yet have their C.M.A. designation. There is no evidence whether obtaining that designation will increase the scope of benefits provided or the amount contributed by the employer. It may be that persons in the position of Mortimer's classmates are in the same category as those who hold a C.M.A. for purposes of benefit plans provided by their corporate employers.

Mr. Caskey submits that Mortimer's future health needs will be covered through the subrogated claims of O.H.I.P. and COMSOC and that no award should be made for loss of benefits. In passing, I note that the parties accept O.H.I.P.'s estimate that Mortimer will require an average of 3 weeks hospitalization a year at an annual cost of $8,602.07. Patterson calculated the present value of that cost over Mortimer's remaining life expectancy of 24 years to be $149,408. I accept that figure.

This is not a case where Mortimer had a benefit package in place at the time he sustained his disabling injury, even though I think he probably would have had one comparable to those enjoyed by his classmates if he had been working at that time. In my opinion, Mortimer will not sustain any loss of medical, hospital, Unemployment Insurance benefits or programmes, Canada Pension Plan pension benefits, or Workers' Compensation benefits that will not be made good by the defendants as a result of the parts of this judgment that deal with loss of future income and the cost of future care.

It is true that if he had been employed he might have been able to participate in plans providing dental coverage, life insurance and the right to participate in profit sharing or share purchases. Whether he would have to contribute to these plans or how much is not at all clear. As far as these benefits are concerned, he may have suffered a loss, but there is insufficient evidence from which to make any intelligent

assessment of their cost or value.

In the circumstances, I allow nothing for loss of benefits.

(5). AMOUNT LIKELY TO BE EARNED BY MORTIMER IN THE FUTURE:

In calculating Mortimer's loss of future income, I must deduct any income he is likely to earn between the date of trial and his sixty-fifth birthday, given his present disability. His goal is to secure remunerative work in the future. After his final discharge from hospital, he abandoned the 3 year Business Administration Accounting course but enroled in the Business Finance programme at Fanshawe College. He hopes to finish it in May, 1992. With his 2 year diploma from the Accounting course and a financial background, he believes he will be more employable. Whether he will pursue further education depends upon his prospects for employment then. If the circumstances are right, he is prepared to move from London to secure employment.

One of the 4 courses he took was an investment course based on the Canadian Securities Course. He testified that he had never managed his own savings, had never invested in equities and had invested only in Canada Savings Bonds or Guaranteed Investment Certificates.

Darryl Horst was a rehabilitation consultant who testified for the defence. He stated he had completed the requirements for a B.A. and a B.S.W., but he holds no university degrees. His curriculum vitae was filed as Exhibit 85. Although he met personally with Mortimer, for the most part he did no independent assessments but simply commented upon the reports of other experts called by the plaintiffs. He felt very strongly that Mortimer was employable and that he could obtain full time employment of 35 or 37 hours a week within 4 to 6 years. In this regard, I take note of the fact that Mortimer attended in court all day every day of the trial. Yet, although Mortimer is intelligent and well motivated, the preponderance of the medical evidence leads me to conclude that he probably will not secure gainful employment in the future. I give much more weight to that evidence than to Horst's opinion on this issue.

(6). "PRODUCTIVITY FACTOR":

Dr. J.L. Carr holds a Ph.D. in Economics and is the Acting Chairperson of the Department of Economics at the University of Toronto. Based on his evidence, Mr. Morse submits that the discount rate of 2.5 per cent prescribed by r. 53.09 should be reduced by 1 per cent. He argues this is necessary to reflect the historical fact that wages have increased 1 per cent per annum more than the rate of inflation. The result would be to increase the amount awarded under this head.

Rule 53.09 reads as follows:

> The discount rate to be used in determining the amount of an award in respect of future pecuniary damages, to the extent that it reflects the difference between estimated investment and price inflation rates, is 2 1/2 per cent per year.

I believe Dr. Carr's position on this issue may be stated as follows. Rule 53.09 in effect establishes the real interest rate at 2.5 per cent. The "real interest rate" is the difference between the "nominal interest rate" and the "rate of inflation". However, with respect to a claim for loss of future income, one must recognize that wages increase for two reasons: inflation and normal productivity. Historically, wages have grown by 1.1 per cent over inflation. Therefore, the productivity factor is about 1 per cent per annum. To reflect this fact, the discount rate should be reduced by 1 per cent. The way to calculate a loss of future income is to keep the income constant and discount it by the market interest rate (the nominal interest rate) minus the future inflation rate and minus the rate of increase in productivity. Rule 53.09 addresses only the difference between the nominal interest rate and the rate of inflation. Therefore, if one applies the 2.5 per cent discount rate, one will fail to reflect the fact that wages exceed inflation by 1

per cent and Mortimer will not be compensated fully for his loss of future salary.

On cross-examination by Mr. Brown, Dr. Carr agreed that the productivity factor of 1.1 per cent represented an average from 1961 to 1988 across the entire country based on the average industrial wage. It was not specific to accountants. He conceded that statistics gained from looking at a particular occupation to determine the productivity gains for that occupation would be more relevant than his figure of 1.1 per cent. In particular, he agreed that a better approach here would be to analyze both "the lifetime earnings profile of Accountants" generally and the work record and salary history of the particular plaintiff in question before the accident, if such history existed. He conceded that information obtained from Census Canada for accountants would be a better guide to productivity than his evidence. That was the kind of information Ross used in his projections and to which I gave some weight in deciding what Mortimer probably would have earned.

On cross-examination by Mr. Caskey, Dr. Carr agreed that he had placed his present theory of productivity before the Morden Committee, which formulated Rule 53.09, and that the Committee had rejected it. He agreed that one reason for the Rule was to eliminate expert evidence on the issue of inflation rates and interest rates and to achieve some consistency of result. He emphasized, however, that Rule

53.09 addresses only the difference between the nominal or market interest rate and the rate of future inflation. It does not deal with productivity. He admitted that productivity considerations are different for different plaintiffs and that management or investment expense is another category or variable that is not included in Rule 53.09.

In principle, I accept the logic of Dr. Carr's position. In fact, the Court of Appeal appears to have given tacit acceptance to it: Giannone v. Weinberg, 68 O.R. (2d) 767 at p. 777:

> In so far as other factors may bear on the calculation (such as future wage increases over general price inflation, or the relevant individual's income from employment increasing at a faster rate than the general increase) and it is felt that they may reasonably be given effect to in the discount rate, then the 2 1/2 % starting point may be adjusted. ... the rule should not be departed from unless there is evidence one way or the other on the factors other than future investment and price inflation rates.

However, Carr gave no evidence about the productivity of Certified Management Accountants or even accountants in general. His evidence about productivity was based on the average industrial wage across Canada. There is no evidence about whether accountants are more or less productive than this standard. On the other hand, the projections Ross made were based upon Census data for accountants that incorporated productivity gains, which I have already taken into account in projecting Mortimer's probable future income. Therefore, I decline to make any further adjustment for productivity, especially given the fact that Carr's evidence on this issue was not specific to Mortimer's probable occupation.

(7). POSITIVE AND NEGATIVE CONTINGENCIES:

A useful review and exposition of the legal principles applicable to the issue of contingencies that might affect future employment may be found in the judgment of Doherty J.A. in Graham v. Rourke, 75 O.R. (2d) 622, commencing at p. 634.

In particular, I bear in mind the following passage at p. 634 of the same judgment:

> A plaintiff who establishes a real and substantial risk of future pecuniary loss is not necessarily entitled to the full measure of that potential loss. Compensation for future loss is not an all-or-nothing proposition. Entitlement to compensation will depend in part on the degree of risk established. The greater the risk of loss, the greater will be the compensation. The measure of compensation for future economic loss will also depend

> on the possibility, if any, that a plaintiff would have suffered some or all of those projected losses even if the wrong done to her had not occurred. The greater this possibility, the lower the award for future pecuniary loss: Personal Injury Damages in Canada, supra. at pp. 91-92.

Clearly, I must consider both positive and negative contingencies, which may be divided into 2 further categories: "general" contingencies, i.e., those that are common to everyone, which need not be supported by evidentiary proof, and "specific" contingencies, i.e., those that are peculiar to a particular plaintiff, which require evidence to support the conclusion that the contingency is a realistic as opposed to a speculative possibility: Graham v. Rourke, supra, at p. 636.

Here, Mr. Morse submits that the contingencies are all positive. First, with respect to specific contingencies he emphasizes Mortimer's intelligence and good prospects for advancement within his chosen profession. He also submits that Certified Management Accountants enjoy stability in their profession and that they are almost immune to economic cycles. In this regard, he points to the maximum unemployment rate of 3.8 per cent projected by Ross in Table 3 of Appendix A of his report. It was also his position that the nature and extent of the benefit package that Mortimer might reasonably have expected to receive as part of his compensation would "cushion him against adverse contingencies": Bresatz v. Przibilla (1962), C.L.R. 541 (Australian High Court).

In addition, before his fall Mortimer was in good health and active physically. There is no evidence that his parents, who are in their seventies, or his siblings suffer from any physical or mental condition that might be expected to hasten premature mortality or debilitating disease. This is a positive factor in terms of normal life expectancy and future earning capacity as far as hereditary diseases are concerned.

However, many fatal or crippling conditions can arise from the cumulative effects of the environment, "lifestyle" choices or job related stress. These can have an adverse effect on future earning capacity.

Mr. Morse also stressed that the work ethic of Mortimer's parents and siblings supports the conclusion that Mortimer himself is likely to work hard when he is motivated. As further evidence of this fact, he points to the grades Mortimer achieved at Fanshawe College after he had decided to become a C.M.A. compared to those he obtained at university when he lacked a specific goal.

Dealing with specific negative contingencies, Mr. Caskey submits that before Mortimer commenced his studies at Fanshawe College, he was an "under achiever" without much direction in his life. He described Mortimer's past as "unsettled" and "filled with failed starts". After completing secondary school, Mortimer enroled at the University of Western Ontario, but did not finish his year. He then moved to Calgary to live with his sister and brother-in-law and worked for a roofing company. When he was laid off, he enroled at the University of Calgary. However, he dropped some of his courses and obtained a job as a labourer. When he was laid off again, he enroled for another semester at the University of Calgary. His academic achievements were so poor that these 2 universities prohibited him from continuing his studies with them. He moved back to Ontario to live with his parents. He travelled in England for 4 weeks and met his father there. When he returned to Ontario, he got a job doing concrete work as a labourer. Then, he decided to enrol in Fanshawe College. Before doing so, he was considering employment with the Fire Department. Mr. Caskey's position is that because of this history, it is a realistic possibility that Mortimer might tire of working as a C.M.A. and change careers in mid path or become disenchanted and continue in the profession but function at a lower than average level. Also, he points to Ross' evidence that earnings are more directly related to education than to intelligence.

I also note that my assessment of what Mortimer was likely to earn in the future already reflects some productivity gains. It assumes a progressive, uninterrupted growth in real income over the first 15 years of his practice. The projection of his income does not take into account the decrease in the number of accountants who work full time

during their last 5 years before retirement, based on the Census data Ross used to prepare Table 3 of Appendix A of his report. Nor does it make an allowance for any negative labour market contingencies.

In fact, Ross believed it was appropriate to deduct 11 per cent for labour market contingencies such as periods of unemployment due to lack of available work, illness, injury or other disability and the fact, already referred to, that some persons may wish to work only on a part time basis, especially in the 5 years immediately preceding retirement. He felt that a factor of 11 per cent was perhaps too conservative and said he would not be uncomfortable with a factor of less than 8 per cent.

Mr. Brown reminds me of Dye's evidence that his Society received from prospective employers the following number of requests for employees in the respective years noted: 1987 - 1,585; 1988 - 2,017; 1989 - 1,918; 1990 - 1,374. Mr. Brown submits that these figures support the conclusion that there has been a significant reduction in job prospects for C.M.A.s. and that economic cycles do indeed affect employment in that profession.

He also submits that even if Mortimer cannot obtain full time employment, he might earn some income in the future and that the assessment for loss of future income should recognize this potential. As already noted, I do not think this is a realistic possibility.

As to general positive contingencies, there is the possibility that Mortimer might have wished and been able to work past age 65. This does not seem very likely if he worked for a corporate employer. There is also the possibility that he might have achieved a very senior management position that would pay him substantially more than the amount projected. He has shown his courage, perseverance and motivation in response to the tragedy that has befallen him and has coped with it while maintaining generally a positive and healthy state of mind. On the one hand, it is not unreasonable to conclude that he might have brought the same character traits to bear on the lesser adversities one might expect to arise from employment. On the other hand, given his previous cavalier attitude, it may be that these character traits would not have been so pronounced had Mortimer not been so seriously injured. It should also be noted that in the world of business even character traits such as Mortimer now exhibits are not always sufficient to ensure promotion to a senior management position.

With respect to general negative contingencies, there is also the possibility that Mortimer might have retired early. There is the possibility that rather than working for a corporate employer he might have been self-employed. In that case, he would have had to provide for his own pension income and benefits.

It might be argued that there should be some discount because of the possibility of premature death. Yet, as I understand the evidence, Patterson used the 1985-87 Male Canadian Life Table to calculate the present value of the loss of future income. That table is based on average Canadian male mortality experience. In other words, the tables already reflect deaths from all causes. In a particular case, a plaintiff might be at greater risk of early death because of, for example, a proven genetic predisposition to a particular disease or because of the dangerous nature of the occupation or recreation in which he regularly engages. Conversely, there might be some reason to conclude that a particular plaintiff is likely to live longer than average. As Dickson J. wrote at p. 714 of his decision in Lewis v. Todd, [1980] 2 S.C.R. 694:

> A trial judge should consider whether there is any evidence which takes the deceased's situation outside the "average"; whether there are any features of which no account was taken in the actuarial tables either because the factor is entirely personal to the individual or, because the "average" is not adapted for the category or class to which the person belongs. [The emphasis is Dickson J.'s].

The evidence before me does not support the conclusion that Mortimer's risk of death was greater or less than average before his injury. Accordingly, I make no adjustment for either possibility.

Mr. Caskey and Mr. Brown urge me to discount the award for loss of future income by 20 per cent. They cite as authority such cases as: Andrews v. Grand & Toy Alberta Ltd., supra, (20 per cent); Thornton v. Board of School Trustees of School District No. 57 (Prince George), supra, (10 per cent); Arnold v. Teno, supra, (20 per cent); Giannone v. Weinberg, supra, (20 per cent); Penso v. Solowan, 22 C.C.L.T. 161 (B.C. C.A.) (19 per cent); Meulemeesters v. Smith, 38 O.R. (2d) 735 (O.H.C.J.) (20 per cent); Whealy v. Torbar Ltd., a judgment of the Ontario High Court of Justice, per Hollingworth J., released August 30, 1983 (20 per cent). Yet, there are other cases where no deduction was made for contingencies: e.g., McErlean v. Sarel, 61 O.R. (2d) 396 (C.A.); Sked v. Henry, a judgment of the Ontario Court of Justice, per Campbell J., released March 12, 1991.

The issue is not addressed by employing a "traditional" or "customary" rate of discount but by applying to each case the principles set out in Lewis v. Todd, supra.

I respectfully adopt the following comment of Doherty J.A. in Graham v. Rourke, supra, at p. 634:

> A trial judge who is called upon to assess future pecuniary loss is of necessity engaged in a somewhat speculative exercise.

This is especially true when it comes to considering whether any adjustment, either positive or negative, should be made for contingencies. Many factors I have canvassed in relation to Mortimer are rather speculative. There are, however, some factors to which I give some weight.

Those militating in favour of a reduction are: the projected loss of future income is generous because it assumes a progressive, uninterrupted growth in real income over the first 15 years of practice, includes recognition of a productivity factor, makes no allowance for a diminution of income in the last 5 years before retirement or for loss of income due to periods of unemployment caused by periodic declines in the economy, illness, accident, injury or other disability.

Those militating in favour of an increase are: the fact that Mortimer, because of his newly acquired work ethic and combination of personality, intelligence, motivation and good health, might reach a senior management position where his income would be much higher.

The lack of any evidence that Mortimer would likely have enjoyed anything other than an "average" life expectancy weighs in favour of making no adjustment.

Mortimer strikes me as a man who would have led a balanced life and not one who would have devoted himself exclusively to his profession. I conclude it is much more likely that he would have suffered periodic loss of income for the many reasons stated than that he would have received a senior management position. In all contingencies is appropriate.

(8). ASSESSMENT:

Accordingly, I assess Mortimer's damages for loss of future income in the amount of $1,160,844, less 15 per cent for contingencies, making a total of $986,717. In addition, I assess the sum of $149,408.00 for O.H.I.P's subrogated claim and $3,498 for loss of Canada Pension Plan benefits.

16. FUTURE CARE COSTS:

I have attached as Appendix B a list of the initial care costs and the future care costs. I shall restrict my reasons to those items about which there was some controversy, or about which there is need to comment.

(1). ATTENDANT CARE:

Counsel for the defendants all recognize Mortimer's need

for attendant care. The issue is the extent to which it should be made available to him. Based upon the evidence of Drs. Geisler and Allat and Jane Staub, Mr. Morse submits that Mortimer requires such care 24 hours a day. Dr. Frankel's opinion was that Mortimer needed "people around him most of the day available to help, but not necessarily attending him".

The position of counsel for the defendants is as follows. Something less than 24 hour care is adequate, given the fact the Stephanie Brocklehurst lives with Mortimer. He has been left alone for short periods of time in the past and can continue in the future to manage without 24 hour care. Horst, himself confined to a wheel chair, testified that Mortimer could manage with something less than 24 hour care.

In deciding this issue, I must determine what type and standard of future care is reasonable in the circumstances in which Mortimer now finds himself. The medical evidence is clear that Mortimer is completely dependent upon others for all the normal activities of daily living. The videotape, filed as Exhibit 5, which showed part of his daily routine, illustrated this graphically.

Counsel for the defendants seem to agree that the provision of such care in a home environment rather than in an institution is likely to be a positive factor in prolonging Mortimer's life expectancy. Although his physical limitations are absolute, he is an intelligent man whose mental faculties are unimpaired. He is fully aware of his surroundings and wishes to live in his own home. Obviously, no amount of money can return Mortimer to the position he was in before his injury. To the extent that money can help prolong his now shortened life expectancy and supply a more enjoyable and private environment through home care, such care is entirely reasonable. I have no hesitation in finding that the provision of home care is reasonable and appropriate here.

Now, persons hired by the Cheshire Outreach Program visit Mortimer twice a day. These care givers provide all bowel and bladder care, wash and dress him in the morning and undress and prepare him for bed in the evening. As well, they feed him breakfast. They visit two to three hours, seven mornings a week, but only 1 to 1/2 hours, five evenings a week. In addition, he receives about 10 hours per week of housekeeping and home making services. To avoid pressure sores, he has to be turned in bed every four hours. On alternate mornings, someone has to initiate his bowel routine, which is necessary to stimulate elimination and to help augment the natural function that he has lost. Ms. Brocklehurst, who works full time as a physiotherapist, has been performing the evening care on weekends, rolling Mortimer in bed in the middle of the night and rising on alternate mornings to start his bowel routine at about 5 a.m.

Stingray's position is that Mortimer needs only some additional care to supplement what he is already receiving. According to Horst's analysis, if Mortimer receives an average of 10.5 hours a day of care and spends an average of 4.8 hours a day at school, there are only 8.7 hours when he receives no assistance and presumably he will sleep most of that time.

On cross-examination, even Horst agreed that Mortimer needed 24 hour care if his family and Ms. Brocklehurst are unable to provide it. All three physicians agreed that it would place additional strain on Mortimer's relationship with Ms. Brocklehurst to have her continue to provide the care she has given to date. It is only because she is living with him that he can reside outside an institution now. Otherwise, without other attendant care, he would likely be confined to a chronic care facility. Although, apart entirely from their emotional relationship, it is very important to his general well being that she should continue to live with him, there is no guarantee that she will.

I believe it is inappropriate for a variety of reasons that Mortimer be left alone. Although he is mobile while in his special motorized wheelchair, which he operates by movements of his head, he is subject to spasms. There have been times when they have caused his foot to become dislodged from its rest on the chair. He is then unable to move for fear that it might be caught in the chair and injured. He must simply sit and wait for someone to replace his foot. He employs a mouth stick to activate a computer keyboard. Once, while doing so, he suffered a spasm that caused his head to

move backwards in the chair. This movement caused the chair to accelerate forward and almost impaled him on the mouth stick. Fortunately, Ms. Brocklehurst was at home at the time and extricated him without serious harm. Should there be a fire or other emergency while Mortimer is in bed and alone, he is absolutely helpless. I am satisfied that an alarm system would not be an appropriate substitute for a human attendant in such a situation.

Mortimer's parents are somewhat elderly and may not be available to help in his care much longer. Although everyone is optimistic that Mortimer and Ms. Brocklehurst will marry, his condition creates unusual pressures. Dr. Frankel testified that a care giver must have periodic reprieves because patients like Mortimer become "emotionally depleting of the resources of the people around them". He felt this was especially so for a spouse. He observed that Mortimer's parents and his girl friend could not "keep up what they have been doing".

For these reasons, I conclude it is reasonable in all the circumstances that Mortimer should be provided with 24 hour attendant care.

The care givers need not be registered nurses or other professionals. Mortimer's needs can be met by any reasonably intelligent person. He understands his care requirements, can explain them to others and can train his care givers. His personality is such that he is not likely to alienate them, thereby creating a constant turnover of staff.

The cost of such care is also very much in issue. According to Staub, if Mortimer were to hire his own attendants, the cost in London would be approximately $12.68 per hour. If he secured his attendants through an agency, the cost would be $13.95 per hour, which translates into an annual cost of $118,434.24, including GST and surcharge for statutory holidays. She recommended that he use an agency because it has greater resources with which to provide uninterrupted care. On the other hand, Horst's evidence was that such care could be obtained in London for $12.50 an hour. There is no evidence that Mortimer has made any plans to leave London. Ms. Vivian Logan, the owner and manager of Q C Personnel, suggested that her company could provide a live-in attendant 24 hours a day at a cost of $100 a day if Mortimer were to assume all the payroll functions for the attendants, or, $110 a day, (about $4.58 an hour), if Q C Personnel accepted that function. Mr. Caskey submits that Mortimer has training as an accountant and could manage the payroll function himself.

A secure and reliable supply of care givers is necessary for Mortimer's well being. Therefore, I conclude that they should be provided through an agency.

Staub based her cost projection on the assumption that the Employment Standards Act prevents around the clock live-in care. Logan based her cost projection on the assumption that there was no such impediment. Mr. Caskey submits that the Act classifies the type of domestic employee proposed by Logan as "a companion for ill members of the household". His position is that they are exempt from the provisions of the Act dealing with hours of work, minimum wage, overtime, holidays, etc.

However, Logan admitted on cross-examination by Mr. Morse that she had not reviewed any of Mortimer's medical reports, as Staub had done. She could not comment on his need for attendant care, except for what she had been told. She did not appreciate the type of attendant care Mortimer needs and lacked expertise in assessing it. By way of contrast, Staub's curriculum vitae, filed as Exhibit 20, was most impressive. She has worked in the field of rehabilitation for 40 years. She has spent 27 of those years with The Hugh MacMillan Rehabilitation Centre and School. For the past 22 years, she has been its Director of Psychological Services. Her academic credentials include a Bachelor of Physical and Health Education, a M.A. in Counselling Psychology and certification as a Registered Psychologist. She has a post graduate diploma in Prosthetics and Orthotics for Rehabilitation Counsellors, 2 years of post graduate study in anatomy, physiology, neuroanatomy and neurophysiology. She belongs to many professional associations, has published several learned papers, engaged in research and has given a number of invited addresses over her years in the field. She interviewed Mortimer and reviewed his medical records. She based her

recommendations on her training, experience and knowledge of Mortimer's specific situation.

Logan has been employed by Q C Personnel since 1980 and has been the owner-manager since 1985. The firm has been in London since 1974. It is a fee for service agency that lacks employees. If a member of the public requires domestic or housekeeping services, child or "senior's" care or care for the disabled, he or she calls the agency. Logan defines the need and arranges for someone from a pool of workers to provide the service. She checks the background, qualifications and references of these workers. Her agency has provided care to quadriplegics in the past, including housekeeping, cooking, bathing, catheterization, bowel care and chauffeuring, "probably on and off since 1989, but more off than on". For persons who need 24 hour care, she provides a minimum of 2 workers on a 3 day rotation. For example, worker A begins Monday at 9:00 a.m. and leaves Thursday at 9:00 a.m. Worker B begins Thursday at 9:00 a.m. and works until Sunday at 9:00 a.m. Worker A then returns and the cycle is repeated. The workers are available 24 hours a day during their shifts.

Even if the Employment Standards Act allows the arrangement proposed by Logan, in my opinion, using Staub's words, "common sense precludes staff working this many hours a day". I accept Staub's opinion that "Mortimer would never be able to be looked after by one live-in staff as his care needs span the full twenty-four hours . . .". Even Horst, who was called by the defendants, stated in his report, (filed as Exhibit 86), that $12.50 per hour should be allotted for an attendant "in order to obtain good reliable staff". Therefore, I prefer Staub's opinion and conclude it is appropriate to allow such care at the rate of $12.68 per hour, being the rate quoted by Staub for London. With GST, the hourly rate is $13.57. Adopting Staub's costing based on 349 days a year and a 50% surcharge for 10 statutory holidays, the annual total is $115,171.92.

I also adopt Staub's rationale with respect to the need for a care giver to accompany Mortimer on vacation 2 weeks a year so that he might continue to travel as he did before his injury. This adds $2,605.44 to cover the cost of wages for 12 hours for 16 days and $1,000 to cover the cost of the care giver's transportation, food and accommodation over the 16 day period. The total cost of providing such attendant care for 1 year is therefore $118,777.36.

From this should be deducted the cost of providing care during the average period of 3 weeks each year when it is expected that Mortimer will be hospitalized, in the sum of $6,839.28 ($13.57 X 24 X 21). This results in a cost of $111,938.08 annually for attendant care.

(2) Other Personnel

(a). Physiotherapy and Occupational Therapy:

Besides attendant care, Mortimer, in Staub's words, "will need routine physiotherapy and occupational therapy advice from time to time". I believe the main use for such personnel will be to instruct Mortimer's care givers about specific techniques that he is unable to demonstrate or describe adequately himself, e.g., raising sputum when he develops an upper respiratory infection. She costs this at $516 annually, based on an average of 1 visit a month at $43 a visit.

Mortimer could receive this service without charge from Home Care, which the Ministry of Health administers, unless he moves to an area of the Province (or outside the Province) where it is not available. There is no evidence that Mortimer intends to leave London or to live where Home Care will not be available to him. Because Mortimer will not become gainfully employed, he will not have to move to secure employment. In his condition, it is to his advantage to live where the specialized medical care he requires is readily available. I am not satisfied there is a real and substantial possibility that Mortimer will be required to pay for this service. Therefore, I decline to make any award for it.

(b). Housekeeping:

Because Mortimer cannot do any housekeeping, Staub proposed that a sum should be awarded to provide this service.

I anticipate that his attendants will do light cleaning, look after his laundry, prepare light meals and help him with his shopping and banking. The sum recommended by Staub was to cover the cost of more major cleaning. She recommended 1 visit a week at a cost of $50 a visit. I conclude this is reasonable and allow the sum of $2,500 per year.

(c). Home Maintenance and Repair:

Similarly, Mortimer will be unable to complete those items of minor home maintenance and repair that most homeowners can do for themselves. Mr. Brian Twynstra testified that the average annual cost of maintaining the interior and exterior of the average home is $4,325. This includes such items as painting, lawn care and snow removal but not major repairs, e.g., to the electrical system or roof, which would be "subcontracted out". The sum of $4,325 does not include replacement materials or supplies. He based it on an hourly labour rate of $15. Because Mortimer does not presently own a specific home, it is difficult to assess the need for maintenance and repair. Obviously, a newer home requires less immediate attention than an older one. In addition, it is likely that Mortimer would have hired people to do some of these chores even if he had not been injured, especially as his income increased and his time became more valuable. Finally, the defendants ought not to bear the cost of repairs that a normal householder would retain skilled help to effect. Therefore, on balance, I allow the sum of $2,000 per year to cover these costs.

(d). Child care:

On the assumption that Mortimer will either father or adopt a child, Staub proposed an allowance for child care. It was meant to pay the cost of hiring someone to carry out the responsibilities that most fathers assume in this area. Also, if his spouse died or were disabled, he would be left to this task himself and would have to hire someone to act in his place. Staub felt that during the week, Mortimer's attendant would have some time to devote to child care with Mortimer present. Still, she thought it would be normal for a mate to provide a prolonged period of relief to the other spouse on at least 1 day of the weekend. She felt that someone should be hired for at least 4 hours each weekend to fill this role for Mortimer. In my view, there is no real and substantial possibility that Mortimer will father children and whether he will even adopt a child is highly speculative. Consequently, I believe it inappropriate to make any award for this item.

(e). Counselling:

Staub recommended that $2,000 be provided annually to cover the cost of counselling with a registered psychologist to help Mortimer and Ms. Brocklehurst deal with the psychological consequences of the trauma that has changed Mortimer's life so suddenly and so completely. One category recorded in Table XII of Dr. Geisler's study, (Exhibit 13B), was the number of deaths from suicide, which he noted was "alarmingly high when compared to the normal population". Understandably, total disability can lead to severe depression that in turn can lead to suicide. Fortunately, Mortimer now appears well adjusted psychologically, which is not to say that he or Ms. Brocklehurst will not have need for some counselling in the future. However, such counselling is readily available from a psychiatrist whose fee are covered by O.H.I.P. Therefore, it is inappropriate to award any sum for this item.

(3). TRANSPORTATION:

Mortimer is physically incapable of operating a motor vehicle himself. Indeed, he does not wish to do so, because he feels it would be unsafe. Now, he uses the Paratransit system within the City of London. Before his injury, he owned and operated his own motor vehicle and it is probable that as an accountant he would have continued to do so. Given his present circumstances, he needs a van, rather than a standard passenger sedan for transportation. However, the van must be converted or modified to accommodate his wheel chair.

In considering what would be reasonable and appropriate, I have weighed the expert evidence of Margaret Young, from the Hugh MacMillan Centre, Staub and Horst. I give considerable weight to the evidence of Young who has been certified to

prepare van prescriptions by the Association of Driver Educators for the Disabled. She graduated from the physiotherapy and occupational therapy course at the University of Toronto in 1963 and has specialized for many years in the needs and concerns of disabled drivers. Indeed, Horst deferred to her expertise in this area. Also, I prefer the general approach outlined at page 17 of Staub's report, (Exhibit 23), which I have modified somewhat, to that proposed by Horst.

The most suitable vehicle is an extended version of the Chrysler Minivan. It permits Mortimer to sit beside the driver, is more fuel efficient than the alternatives and fits into a regular garage and standard car wash. The alterations Young outlined are appropriate and cost $18,950.

Mortimer also should receive a sum to compensate him for the extra capital expense incurred in purchasing a van as opposed to the standard passenger type of vehicle he owned and operated before his injury. Based on Staub's evidence, I fix this item in the sum of $8,000. Also, I allow $500 as the initial cost of a cellular telephone. Mortimer's initial additional transportation cost is therefore $27,450.

Moreover, I think it is proper to allow the difference in annual operating costs, exclusive of depreciation, between a standard passenger sedan and the van he will now have to maintain. Again, based on Staub's evidence, I assess this item in the sum of $4,500 annually.

I also allow the sum of $498 for portable ramps, which are to be replaced at 10 year intervals.

To be fair to both Mortimer and the defendants who will be called upon to pay, I deem it reasonable that the van and cellular telephone should be replaced every 6 years. There is no need to deal with any depreciation differential because the additional capital costs incurred by Mortimer arising from his injury will be borne entirely by the paying defendants.

(4). ACCOMMODATION:

I conclude that if Mortimer had not been injured he probably would have purchased his own home. Counsel suggested other alternatives. These included continuing to live in the cooperative, geared to income, rented premises where he now resides, or in Cheshire Homes. The latter manages support service living units in the London area that the Ministry of Community and Social Services funds in conjunction with the Ministry of Housing. However, to force either of these alternatives on Mortimer would violate the principle of restitutio in integrum. As far as money can do so, he should be placed as nearly as possible in the position he would have been in had he not been injured. As a C.M.A., it is probable that he would have lived in his own home.

This, of course, he would have purchased himself. In my opinion, the defendants should not have to pay any part of the acquisition cost of a home, as suggested in the report of The Barrier-Free Design Centre, filed as Exhibit 60. Ms. Carol Kelly of the Centre testified that the size of home Mortimer could have afforded before his injury is too small to meet his present ergonomic requirements. She proposed that the defendants should be responsible for the "extraordinary cost of purchase". This represents the difference in cost between what he could have afforded before the injury and what he now requires because of it.

First, she based this position on the assumption that before his injury Mortimer could afford a home worth $87,000 and that he alone would be contributing to its purchase price. I do not think it probable that Mortimer would have purchased his own home immediately upon beginning work as a C.M.A. Also, given the relationship between Mortimer and Ms. Brocklehurst and because she works full time as a physiotherapist, it is not unreasonable to expect that she will contribute to the purchase of a home and that they might afford one of a size that Mortimer's ergonomic needs now dictate. However, there is always the possibility that Ms. Brocklehurst and Mortimer may not marry or continue to live together. I must then consider what likely would have happened if Mortimer had not been injured. It seems likely to me that he might have married someone who worked outside the home, as his mother did, who would have contributed

financially to acquiring their home. Also, I have projected a steady increase in his real income during the first 15 years of his practice, which would eventually have put him in a position to purchase the size of home he now needs to meet his ergonomic requirements. Finally, there is an element of "betterment" for which I feel the defendants should not be held responsible, notwithstanding Mortimer's present ergonomic needs. Accordingly, I decline to award anything for the "extraordinary cost of purchase".

Still, because of his injury, he must modify his new home to fit his special needs and he should be awarded the

reasonable cost of doing so. Ms. Young's report presented several possible options and outlined the cost of each. They represented a variety of possibilities to "identify the range of housing options that are available to Mr. Mortimer". She based the options on 3 actual homes in London and 2 in Calgary and included 2 single storey bungalows, a townhouse condominium and 2 apartment condominia. Because in my opinion it is unlikely that Mortimer will leave London, I have concentrated on the 3 London options. The proposed renovation costs were as follows: Bungalow: $61,897; Townhouse Condominium: $35,310; Apartment Condominium: $18,480. The average is $38,562.33, which Horst proposed as the amount that should be allowed.

Although the cost is not noted, the estimates for the London bungalow and townhouse include the cost of changing the garage door to accommodate a van. Yet, according to Ms. Young, the Chrysler Minivan will fit in a standard garage and therefore it will not be necessary to change the garage door. Also, among the housing criteria in the report she noted "some potential for separate living quarters for a live-in attendant". If the attendants are going to work 3 eight hour or 2 twelve hour shifts per day, as anticipated by Staub, I do not believe it is necessary to provide for their separate living quarters. Still, I believe it is reasonable to provide for an area where, in Staub's words, "they can have their breaks in relative privacy although in direct communication by an intercom type of apparatus". Each of the first 2 options in The Barrier-Free Design Centre report allows $10,000 for the cost of finishing a basement apartment for a live-in attendant. Something less would be required to provide the private area anticipated by Staub. The sum of $6,000 should be sufficient for this purpose.

Staub recommended that Mortimer should be allowed the cost of 2 home conversions. She assumed that he may move at least twice in his life and that it will be necessary for him to convert both his homes to meet his special needs. It is true that Mortimer lived both in Calgary and London before he was injured. Still, as noted above, I do not believe he can secure gainful employment. Therefore, he will not have to move to further a career or to pursue advanced education. In any event, the latter is available to him in London. Again, the specialized medical care he has needed has been and remains available to him in London. His parents and sister Adrienne live in London. I am not prepared to conclude on the evidence that there is a real and substantial possibility that Mortimer will move twice in his remaining years. As noted above, I anticipate that toward the end of his life expectancy there is a substantial possibility that he will return to live in an institution. Accordingly, I allow the cost of only one conversion.

In my opinion, among the options presented, the bungalow is the most widely available form of accommodation and the most adaptable to Mortimer's special needs, including his need for safety and as much independence as his condition permits. Therefore, it is reasonable to conclude that this is the style of home he probably will purchase. Based on these considerations, I allow the sum of $55,000 for one conversion of a standard home to Mortimer's special needs, including the cost of providing an area for his attendants.

(5). EQUIPMENT, SUPPLIES AND MEDICATION:

Beginning at page 12 of her report, Staub listed the equipment she felt Mortimer needed and the initial and annual cost of providing it. There is little disagreement with her position. She believes that he should have 2 electric wheel chairs. One would be maintained as a backup chair to be available when his regular chair is being serviced or

repaired. Therefore, she included the cost of a second chair in the sum of $11,000. There is a more expensive wheel chair available that Staub felt would be more suited to Mortimer's needs. However, she discussed it with him and he prefers the type he now has. I do not believe it is necessary for Mortimer to have 2 electric wheel chairs. I accept Horst's alternative of having a manual wheel chair as a backup at an initial cost of $1,300, amortized over 5 years at an annual cost of $260. I also accept Horst's evidence that the Ministry of Health, through its Assistive Devices Programme, will pay 75 per cent of the cost of the electric wheel chair, the ROHO cushion and seating insert without subrogation. Accordingly, only 25 per cent of the cost of these items should be allowed.

Based on the evidence of Dr. Frankel, I conclude it is not necessary to provide Mortimer with a hospital bed with safety sides.

Mortimer was active in several sports before his injury. It is probable that if he had not been injured he would have spent money on athletic and exercise equipment. Accordingly, I decline to allow any sum for exercise equipment.

Staub fixed the annual cost of bladder and bowel care at $3,600, based on the assumption that the condom drainage system Mortimer uses will require 3 condom changes a day. I accept Dr. Frankel's evidence that 1 change a day is sufficient. However, it is not appropriate simply to reduce the amount by two-thirds. The $3,600 also provides for 4 sets of drainage bags a month, clean gloves, lubricant, incontinent pads and 6 flip-top enema bags. To provide the items in this category, I allow the sum of $2,000 per year.

The other items included in Staub's list are reasonable and appropriate and I accept them. I also include under this heading the sum of $1,200 per year identified by Horst as an extraordinary clothing expense occasioned by Mortimer's injury.

(6). VOCATIONAL REHABILITATION, AND COMMUNICATIONS NEEDS:

Because of the extent of his disability, Mortimer must depend not only upon human care givers but upon technological devices to accomplish the tasks of ordinary living that he would have done for himself had he not been injured. I stress that providing the technology does not eliminate the need for an attendant or vice versa.

In Mortimer's circumstances, I conclude it is reasonable to provide him with a voice activated system for his computer. The DragonDictate System advocated by Ms. Monica Ackermann, a professional engineer and partner in Assistive Vocational Technology Associates, whose report was filed as Exhibit 67, is appropriate. Also, I accept the evidence of her partner, Ms. Inge Martin, with respect to the need for an environmental control system. Speaking generally, Ackermann's approach is reasonable. Still, there are some areas where the proposed costs should be reduced or disallowed.

Ackermann proposed that $12,000 be allowed to secure the computer hardware necessary to run the DragonDictate system. The price quoted was for an IBM computer using the Intel 80386 microprocessor operating at 20 mhs or faster. Fully compatible clones of equal power and configuration are available for less money. Mortimer already has a computer, although no one testified about its specifications. As an accountant, it is reasonable to infer that he would have maintained a computer at home for both personal and business use. Still, he would not have required one with 8 megabytes of RAM, (random access memory), such as he will need to run the DragonDictate System. I conclude that before his injury Mortimer could have provided himself with a hardware system suitable to all his needs for a maximum of $6,000, including taxes. I therefore allow the sum of $6,000, which represents the cost of providing the extraordinary configuration necessary to run the DragonDictate system.

I also allow $200 for a microphone, $300 for a modified trackball and $900 for a tape backup system. However, I am not satisfied that Mortimer would not have had a modem before his injury, so I allow nothing for this item. I allow $3,000 for an ergonomic workstation tailored to Mortimer's needs,

$3,000 for a Reference Carousel with motor and 3 carousels and $5,000 for an environmental control system.

The authors of the report recommended that $2,000 be awarded to purchase the software programmes Mortimer will require apart from the DragonDictate system. In my opinion, he would have purchased them if he had not been injured, as well as upgrades from time to time, and therefore I make no allowance for this item.

The proposed cost of $2,000 per year for professional assessment services is based on 24 or 25 hours a year, including travelling time and report writing. This seems excessive to me. I allow the sum of $800 per year. I allow the sum of $1,350 for the training costs of the DragonDictate System. An optical character recognition system might help Mortimer to "input information into the computer", and an internal fax card might permit him to "create and transmit written materials without the need to handle paper". Still, he will have an attendant to help him. I see these items more as luxuries than necessities and therefore make no allowance for them. I allow nothing for the cost of computer supplies because this is an expense that Mortimer would have incurred even if he had not been injured.

Exhibit 68 is a letter from Ackermann to Patterson outlining some additional information about the cost of Mortimer's technological needs. Ackermann estimates that after the expiry of the initial parts and labour warranty, which lasts for the first year, the annual cost of a computer hardware service contract is about 20 per cent of the initial purchase price. It does not seem likely to me that a microphone or trackball would be the subject of a service contract. Twenty per cent of the initial cost of the additional computer hardware expense and the tape backup system is $1,380. I conclude that $1,000 a year, after the first year, is a proper sum to allow for this item.

I accept Ackermann's statement that the computer hardware and peripherals should be replaced every 4 years. I make no allowance for upgrades to the DragonDictate System at 2 year intervals, as she suggests, but I accept her position that it be replaced every 4 years, at the same time as the hardware. The workstation itself should be replaced at 10 year intervals, but the moving parts should be replaced at a cost of $400 every 2 years. As to the reference carousels, I allow $100 a year for service and the cost of replacement every 4 years. The environmental control system should be replaced at 5 year intervals.

(7). ASSESSMENT:

In accordance with Appendix B, I assess the initial

future care costs in the sum of $120,996. According to Patterson's calculations, which I accept, the present value of the recurring items of future care specified in Appendix B is $2,462,156.

17. GROSS UP FOR INCOME TAX:

(1). GENERAL PRINCIPLES:

Should I "gross up" the lump sum award for the cost of future care to compensate for the income tax that will accrue on the income earned when Mortimer invests the future care fund? If I do not, the fund will be depleted before Mortimer has to return permanently to an institution, thereby under compensating him and defeating the purpose for which the award is intended.

The Supreme Court of Canada has stated recently that an allowance should be made for the impact of taxation on an award for the cost of future care where the evidence supports it: Watkins v. Olafson, [1989] 6 W.W.R. 481 at p. 495. Here, the evidence does support such an award.

As the Court of Appeal states in Nielsen v. Kaufmann, 54 O.R. 188 at p. 201:

> The calculation of a tax gross-up is a complex and difficult process. It involves not only assumptions with respect to the nature of the investments in the fund (e.g., bonds or corporate shares) and the amount of the

> other income of the recipient of the income of the fund . . . but also such matters as the present and future federal and provincial income tax rates, the range of taxable income to which the rates will apply, and the amount and applicability of exemptions and other deductions.

I turn then to deal with the assumptions underlying the calculation of the gross up for income tax.

(2). THE RATE OF FUTURE INFLATION:

The Income Tax Act taxes nominal rather than real income. As inflation increases, so does the real rate of taxation, because it is the higher nominal interest rather than real interest that attracts tax. So, a higher rate of inflation produces higher interest income and a higher rate of taxation. Our tax system is not inflation neutral, i.e., it taxes that part of income that is the result of inflation. Also, as Patterson noted, currently, tax credits increase by 4 per cent annually, while income is increasing by about 7 per cent annually. The predicted rate of future inflation, therefore, will have a marked impact on the amount awarded to compensate for the tax that the income from the future care fund will attract.

Dr. Carr testified that it is the monetary and fiscal policy of the Government of the day that causes inflation. Yet, there is a lag in time between the implementation of the policy and its effect upon the rate of inflation. Accordingly, economists believe they can forecast what the rate of inflation will be over the short term, e.g., 1 or 2 years, by observing current monetary and fiscal policies. To predict the rate of inflation over the long term, e.g., 25 or 30 years, economists would have to foresee the monetary and fiscal policies of the Government for that same period - an impossible task. How then does one go about predicting the rate of inflation over the long term?

Carr recommended looking to the long term capital market. The people in this market are not engaging in a detached, abstract, academic exercise, but are lending their money based on their expectations of the rate of future inflation. The market expectation of inflation can be determined by subtracting the real rate of interest, (2.5 per cent), from the nominal rate of interest. The Government Bond Index is the average of many different issues of bonds having a maturity date of 10 years or longer.

From the Bank of Canada statistical Summary, Carr determined that the rate of interest on long term Government of Canada bonds as of April 17, 1991, was 9.83 per cent. The difference between this rate and the real rate of interest is 7.33 per cent and represents the average rate of inflation over the long term. He also noted that rate is not out of line with the 7.3 per cent average rate of inflation in the Canadian economy over the last 15 years. To be on the conservative side, he recommended the adoption of 7 per cent as the rate of future inflation. He admitted that because it was an estimate, it might be slightly too high or correspondingly too low.

In making his calculations, Patterson assumed a rate of future inflation of 6.5 per cent, although it is not clear to me from the evidence upon what basis he did so. Both he and Carr agreed that it was very difficult to forecast rates of future inflation. The defendants adduced no evidence on this issue.

The Government recently announced policies designed to lower the rate of inflation to 2 or 3 per cent within the next year or two. Still, Carr said that economists and capital market participants have heard such pronouncements before and have become accustomed to their going unrealized. He said capital market analysts know that the Government has a large deficit. There is always the temptation to take the easy and more politically popular way out and to finance it by printing more money. This leads to increased inflation. Once inflation is built into the system, governments are generally unwilling to take the hard and unpopular action necessary to eliminate it. He said the market is influenced by action, not by policy statements. Investors are motivated by past experience with the rate of inflation as well as by future expectations.

When asked whether the G.S.T. might be a source of reducing some of the debt, he replied that he did not know. He added that the Government announced it was going to be a tax neutral measure and that the rate of inflation has increased since its introduction. He also stated that in the past when taxes have increased, the result has generally been elevated Government spending rather than debt reduction. In the short term, he foresaw an election, a time when the Government makes expensive promises. All these factors tended to reinforce his belief in a long term inflation rate of about 7 per cent.

Trial judges have been directed not to decide the gross-up figure arbitrarily but to base it upon the evidence adduced and the findings made: Davies v. Robertson, (1984), 5 O.A.C. 393 at p. 398 (C.A.). On the other hand, they have been criticized for accepting the evidence of experts and the results uncritically: McErlean v. Sarel, supra, at p. 435.

Bearing these principles in mind, I note Carr stated that the rate of inflation in the early 1960's was less than 2 per cent and then "creeped up" to about 4 per cent. In the 1970's, it got as high as 12.5 per cent and stayed there for a good part of the decade. In the 1980's, it began to fall to about 4 per cent 2 or 3 years ago. It slowly rose to about 5 per cent until the Government implemented the G.S.T. He said that as of the date of trial it was above 6 per cent. Carr agreed that the double digit inflation of the 1970's was atypical. This would tend to increase the average rate over the last 15 years. Since investors look to past experience, current market expectations of a 7 per cent rate of inflation over the long term might be influenced by those atypical rates. Also, if a longer period of past experience had been chosen, the lower rates of the 1960's would have lowered the average.

Bearing in mind all these factors, I conclude that a reasonable estimate of the annual rate of future inflation is 6.5 per cent.

(3). TYPE OF INVESTMENTS:

The rate of tax levied on income depends, in part, on the type of income. The Government taxes dividend income and capital gains at lower rates than interest income. The amount of the gross-up is therefore directly related to the type of investments made with the future care award.

As the Court of Appeal states in Nielsen v. Kaufmann, supra, at p. 205:

> There is no doubt that an assumption based on total investment in long-term bonds substantially increases the amount of the gross-up and, in effect, substantially imposes the relevant future risks on the defendant. On the other hand, while an assumption based on an investment in stocks ameliorates the position of the defendant, at the same time it also imposes well-known investment risks on the plaintiff who, of course, is not the wrong-doer. A reasonable balance has to be found on the facts of any given case.

Given the reason for the award, the primary investment goal of the future care fund should be safety of capital. The vehicles that come first to mind are fixed-interest securities such as the long term bonds mentioned in Nielsen that yield interest income, which the Government taxes at the highest rate. To pay for his care, Mortimer will have to liquidate some of his investments periodically until eventually he exhausts the fund. The probability of, for example, the Government defaulting on bonds is very low. Therefore, the return of capital with interest is most likely, if he holds the bond to maturity. However, if he has to sell the bond before maturity to pay for care, the return of his capital is not assured. It is common knowledge that when interest rates rise, bond prices fall and vice versa. Therefore, there is the potential for capital gains or losses, depending upon short term fluctuations in interest rates, especially for long term bonds. In other words, there also can be risk, and sometimes substantial risk, in owning long term bonds, if they have to be sold before maturity.

Maximization of after tax income with minimal risk is

another reasonable and complementary goal. This might be achieved by acquiring the shares of many "blue chip" corporations that pay regular dividends. They generate dividend tax credits and are therefore taxed at more favourable rates. They also have the potential for capital gains (and losses).

Portfolio diversification is advisable to avoid negative price fluctuations in certain segments of the market, particularly those that analysts recognize as cyclical in nature. This is a principle employed by mutual and pension fund managers.

It would be unreasonable here to expect Mortimer to participate in high risk investments in anticipation of large capital gains.

In assessing damages, I must be fair to the plaintiffs and to the defendants. In determining what mix of investments is appropriate for calculating the gross-up, the aim should be to strike a reasonable balance between minimizing Mortimer's risk of prematurely depleting the future care fund and taking advantage of safe investments that yield tax advantages. Given the above considerations, it seems to me that a reasonable and prudent investor of a large sum of money would choose a diversified portfolio. In this way, the investor spreads the risk over several different types of securities and market sectors. He or she should do so with an awareness of the risks involved in each and the net gain after tax.

I conclude that, with some initial help, Mortimer can maintain a safe, diversified investment portfolio comprising one-third equities, which attract the dividend tax credit and two-thirds fixed-income securities. The gross-up has been calculated on that basis.

(4). AFFECT OF OTHER INCOME ON TAX RATE:

Because of the progressive nature of our income tax system, as a person moves from one tax bracket to the next higher one, the rate of tax increases. The first dollar earned in the higher bracket attracts tax at a higher rate. If one adds more income to what has already been earned, it will be taxed at the "marginal" rate that applies to that bracket.

If the gross-up is calculated on the basis that Mortimer lacks other income, it will understate his tax liability, because it will be computed using lower tax rates. This is inconsistent with the purpose of the award because the fund will be exhausted before the need for care ceases.

Consequently, I assume that he will first earn other income from the investment of the amounts awarded for non-pecuniary general damages and loss of future income. I also assume that this investment fund will be divided as follows: one-third in equities and two-thirds in long term fixed income securities. I also assume for the purpose of the calculation that Mortimer will purchase a van and home from these funds immediately. He may now wish to spend more than the $87,000 the Barrier Free Design Centre felt was appropriate to his income before his injury. He would have spent $16,000 to purchase a motor vehicle before the accident. Therefore, the calculation should be made on the basis that $150,000 will be spent immediately and will not be available for investment. I have also assumed that the initial future care costs will be incurred immediately, including those attributable to accommodation and transportation and Mortimer's vocational rehabilitation and communications needs, and will not be available for investment. Those initial future care costs total $120,996.

(5). RATE OF USE OF FUNDS:

I assume that Mortimer will start now to spend the future care award and the amounts awarded for non-pecuniary general damages and loss of future income in equal real amounts (in 1991 dollars) annually over his life expectancy. The sole exceptions are the capital items under the head of future care that have to be replaced periodically, as noted above.

(6). REMAINING ASSUMPTIONS:

The remaining assumptions upon which the calculations

were made are contained in Table A-of Patterson's supplementary report, dated January 29, 1992, which is filed as part of Exhibit 145.

In Watkins v. Olafson, supra, at p. 498, the Court notes:

> In calculating loss of future earning capacity in cases where an award for future care is made, a deduction is made from the award for lost earning capacity for living expenses to avoid duplication between the two heads of damage.

Here, there is no such duplication because the award for future care comprises only extraordinary expenses made necessary because of Mortimer's injury.

(7). ASSESSMENT:

Based on these assumptions, Patterson calculated the gross up for income tax to be $713,804, which I accept. Therefore, I assess the total future care award, including gross up, in the sum of $3,175,960.

I am mindful of the admonition of the Court of Appeal in McErlean v. Sarel, supra, at p. 435, to the effect that the assessment of a proper amount for the gross up is not an exercise in mathematics and that there is great scope for error. The recognition of this fact requires that I determine whether the amount awarded is inordinately high or inordinately low and make the necessary compensating adjustment.

The gross up of $713,804 represents about 29 per cent of the $2,462,156 assessed for future care costs. In my opinion, the assumptions used to calculate the gross up are reasonable and realistic. While I have no better ability than anyone else to see into the future, I considered Mortimer's circumstances, weighed the expert evidence and attempted to make an assessment based upon the best information available at the present time. In the circumstances, I see no need to make any further adjustment, either by way of increase or decrease.

18. CONTINGENCIES:

Where there is evidence that a plaintiff may require intermittent or permanent hospitalization, which would avoid the expense of home care, the Court should consider reducing a future care award to cover this contingency: McErlean v. Sarel et al., supra, at p. 427 (C.A.); Thornton et al. v. Board of School Trustees of School District No. 57 (Prince George), supra, at p. 282.

I have already allowed for an average of 3 weeks a year in hospital. The period may be shorter at first and longer as Mortimer approaches the end of his life expectancy. If Mortimer's lesion were any higher, he would need the assistance of a machine to breathe. As it is, many of his bodily functions are adversely affected. He is subject to a variety of potentially dangerous conditions, to which I have referred in the section dealing with his life expectancy.

For the purpose of considering the issue of a reduction in the future care award because of hospitalization, I assume that he will live out his life expectancy, which I have projected at 24 years. However, he has been hospitalized in the past for problems with his urinary tract and has experienced pulmonary emboli and severe episodes of autonomic dysreflexia. Respiratory infections also pose a serious problem for him as do bed sores or ulcers. While he understands his condition well and can direct his care givers and has to date avoided such complications as bed sores while in his home, I conclude it is most probable that over the next 24 years he will be required to spend much longer in hospital than a total of 72 weeks.

Accordingly, I reduce the award for future care costs by 20 per cent to cover that additional contingency. I assess the amount for ongoing future care, including the gross up for income tax, less the discount for contingencies, in the sum of $2,540,768. Also, I assess the initial future care costs in the sum of $120,996.00 as per Appendix B.

19. MANAGEMENT FEE:

In Mandzuk v. Vieira and Insurance Corp. of B.C., 53 D.L.R. (4th) 606, (S.C.C.), Sopinka J., speaking for the Court, says at p. 606:

> ... a management fee or an investment counselling fee should be awarded if the plaintiff's level of intelligence is such that he is either unable to manage his affairs or lacks the acumen to invest funds awarded for future care so as to produce the requisite rate of return.

He continues at p. 607:

> A plaintiff seeking to recover either a management fee or an investment counselling fee should provide a factual basis to the trier of fact, including:
>
> (i) evidence that management assistance is in fact necessary;
>
> (ii) evidence that investment advice is in fact necessary in the circumstances;
>
> (iii) evidence about the cost of such services.

Mr. Morse submits that Mortimer lacks experience in investing such a large fund and therefore should be provided with professional investment, management and counselling services. Otherwise, there is the danger that, acting alone, he will deplete the fund before his need for care ends. Ms. Kathy McPhail, a trust officer with National Trust, explained the difference between two types of investment management accounts and the fees charged for the assorted services provided. Mr. Morse submits that an annual fee equal to 1/2 of 1 per cent of the fund invested would be an appropriate allowance for this service.

As noted above in the section which deals with loss of future income, Mortimer finished the two year diploma course in Business Accounting and then enroled in the Business Finance course after his fall. He hopes to complete the course by May, 1992. He also took an investment course based upon the Canadian Securities Course. It dealt in part with different investment vehicles and the principles of portfolio investment. He has also taken a course in the Mathematics of Finance and a computer programming course. To date, he has managed only his own savings. He has invested in Canada Savings Bonds and Guaranteed Investment Certificates, but never in equities.

Also as noted, Mortimer is quite intelligent. He has formal education in business, accounting and investment principles and an interest in financial matters. He will have a powerful computer system available to him. He can use it to get and analyze financial information, to record financial transactions and to generate the information needed for income tax purposes. The software and on-line services he needs to facilitate these tasks are of a kind he probably would have purchased in any event as an accountant. As noted, he will be unable to obtain employment and therefore will have the time to devote to identifying appropriate investments, of the types noted above, and to executing them and recording them properly.

I conclude it is most probable that with a minimum of assistance Mortimer can invest the award as suggested to provide the future care he needs for the entire period anticipated. Still, because of the large sum to be invested, he will no doubt need some professional advice at first. In the circumstances, I allow the sum of $25,000 for investment advice.

20. FAMILY LAW CLAIMS:

Subsection 61(1) of the Family Law Act, S.O. 1986, c. 4, as amended, provides that parents, brothers and sisters, among others, of a person injured because of the fault or negligence of another, under circumstances where the injured person can recover damages, can themselves recover their pecuniary loss

resulting from the injury. Subsection 61(2) lists the categories of damages that are recoverable under s-s. 61(1). Because I have attributed no contributory negligence to Mortimer, there will be no deduction from the awards made under this head.

(1) THE PARENTS

(a). Actual Expenses:

Donald Mortimer installed a lift in his home at a cost of $4,500 to accommodate his son's visits. This qualifies as an expense "reasonably incurred for the benefit of the person injured". I have no doubt that such visits foster in Stephen feelings of independence that are beneficial to him. I allow $4,500.

(b). Travel expenses and the value of services:

Stephen Mortimer stayed in hospital from July 17, 1987, until January 5, 1990. For about the first 9 months after his injury, his parents visited him at Victoria Hospital and Parkwood Hospital almost daily, and sometimes twice daily. Finally, he realized that the visits were becoming "too much for all of us" and asked them to "cut back". They came less often, but still regularly, including the 3 months when he was at Lyndhurst Hospital in Toronto. While he was there, they visited him about 8 times and remained overnight in a hotel 4 of those times. Many of their visits throughout these years lasted several hours and they often brought and fed him his dinner.

Since Stephen's move to his present town house, they have visited him there two or three times a week. Though Stephanie now lives with him, she works during the day, so they still help him with many of his personal care needs. On the days he goes to school after lunch, they prepare and feed it to him. They also comb his hair, wash his face, put on his coat and ensure that he gets on the Paratransit van. If no one else is available, they are at his home when he returns from school. Donald Mortimer has helped Stephen with some physical tasks associated with the latter's school work.

Mr. and Mrs. Mortimer can be compensated only for the time they devoted to Stephen's benefit beyond what they would ordinarily have expended for this purpose before his injury. Because they were retired at the time of his injury, they lost no income due to helping him. However, their retirement years have not been what they anticipated. They have had to spend an enormous amount of extra time with Stephen because of his inability to do anything for himself. In fact, they have spent so much time with him that their relationships with their other children and grandchildren have suffered.

Also, the nature of their relationship with Stephen has changed. There has been an almost complete role reversal. Not only have they provided untold hours of needed support and encouragement, they have engaged in physical acts usually associated with caring for a very young child. With the provision to Stephen of attendant care because of this judgment, they will no longer need to provide physical care. No doubt they will continue to give him extraordinary moral and psychological support.

No evidentiary basis was proffered for measuring damages under this head and therefore my assessment is somewhat arbitrary and no doubt conservative. Whatever sum I allow can never measure adequately the value of the attention and encouragement provided by caring and loving parents in such circumstances of potential despondency and despair.

I fix the total travel expenses at $3,500, which I allow to Mr. Mortimer. I fix the value of their services to Stephen at $20,000 each.

(c). Loss of care, guidance and companionship:

Mr. and Mrs. Mortimer are 76 and 72 years old, respectively. Both are retired from their former gainful employment. At the time of his injury, Stephen was living at home with them while attending school. Accordingly, they enjoyed more time with him than if he had been living away from their home. Yet, there is no evidence that he spent time

attending to their needs or helping them about the house in the period immediately before his injury.

He was on very good terms with both his parents. His father feels he had and still has a "splendid" relationship with Stephen. Mary Mortimer had a "very good and very loving" relationship with him. Stephen feels that his injury has changed his relationship with his parents "drastically". His mother does not see much difference except that he depends upon her much more now than he did before his injury.

Understandably, there have been times when Stephen has experienced bouts of anger and frustration. Although his parents were blameless, they were at hand and sometimes became the object of his ire. He said his father endured his outbursts "in quiet resignation" and he respected him for that. He felt these eruptions put a strain on his relationship with both parents. These are examples of what Dr. Frankel referred to when he said that patients like Mortimer become "emotionally depleting of the resources of the people around them". Nevertheless, they remained supportive and maintained a positive facade in his presence. Away from him, Mrs. Mortimer stated that she and her husband are "short with each other".

Stephen's injury placed an enormous physical and emotional burden upon his parents, which they willingly and selflessly assumed. They suffered through times of great anxiety on occasion when he experienced severe medical crises. At a time in their lives when they might reasonably expect or need some additional care and attention from their children, they feel compelled instead to offer it to Stephen.

However, under this head of damage, Mr. and Mrs. Mortimer cannot claim compensation for the love and care they have given Stephen. Instead, their claim is for the loss of the care, guidance and companionship he would have given them, to the extent that it has been and will in the future be diminished because of his injury.

It is reasonable to expect that Stephen would have married. Then, he would have devoted more time to his wife and the children he wanted to have and less to his mother and father. This is the natural course of events. Even if he marries now, I expect they will continue to have the benefit of his companionship, but they will be unable to engage in the type of activities they enjoyed together before his injury.

He will still be available to give them guidance, perhaps in financial matters because of his special training. Yet, they will not receive any physical care from him because his condition renders him incapable of providing it. Given his nature, I find he would have been compassionate toward them and would have helped them in times of need.

Fortunately for them, this is not a case where they are totally dependent upon Stephen for care, guidance and companionship. They have one other son and 3 daughters, one of whom lives in London. Had they been totally reliant upon Stephen, their loss would have been correspondingly greater. I must consider as well the probable period during which they will be deprived of his care, guidance and companionship. They are now both over 70 years of age, and therefore that period is much shorter than if, for example, they had been 50 years old when he was injured. On the other hand, I recognize that they will likely require more care in their later years.

For their past, present and future loss under this head, I fix their damages in the sum of $15,000 each.

(2). THE BROTHER:

(a). Actual Expenses:

So that Stephen might visit with him and his family last summer, Richard expanded and modified a small bathroom on the main floor of his home to make it accessible by wheel chair for Stephen. He set up beds in the living area and built ramps. Richard took a week's vacation and spent it with Stephen "being tourists" in Ottawa. No evidence was offered about the cost of these items and therefore I am unable to assess damages under this head.

(b). Travel Expenses and Value of Services:

The day after Stephen's fall, Richard flew to London from Ottawa and stayed a week. From time to time, he visited Stephen at Victoria Hospital, Parkwood Hospital and University Hospital, all in London. Sometimes he flew to London, at a return fare of about $400, and sometimes he drove. He tries to return to see Stephen about once every two months. Without any better evidence, I fix his travel expenses in the sum of $5,000. There is no evidence that Richard provided any specific services for which he can be compensated.

(c). Loss of care, guidance and companionship:

Richard Mortimer is now 47 years old, 16 years older than Stephen. He moved from the family home when Stephen was seven years old but still lived in London and continued to see Stephen "regularly". Before Stephen's injury, they communicated with each other by telephone. Richard tried to go to London twice a year: once in the summer and once at Christmas. I infer that at least part of the reason for his trips to London, if it was not the major reason, was to visit his parents. He and Stephen also exchanged the occasional letter. They still enjoy each other's company.

It might be argued that the difference in age and the distance between them would have militated against very frequent visits, even without Stephen's injury and that this situation would likely have intensified once Stephen married and had children. On the other hand, whereas Richard used to travel to London twice a year, he now tries to do so five or six times a year. Certainly, Stephen's physical condition will make it more difficult for him to visit Richard in Richard's home, although Stephen should still be able to talk with Richard by telephone.

I am unable to conclude from the evidence that Stephen's injury has deprived Richard of any care or guidance he might otherwise have expected to receive from Stephen. I do conclude that there has probably been a loss of companionship and that it will continue into the future. I fix this loss in the sum of $5,000.

(3). THE SISTERS:

(a). Adrienne Dawson Selby:

(i). Travel Expenses and Value of Services:

Adrienne went to the hospital the day of Stephen's injury. Then, she visited him at Victoria Hospital at least twice a day when he was first there, leaving her 14 year old daughter or a hired baby sitter to care for her younger children. After he went to Parkwood Hospital, she visited him about three times a week. She is a registered nurse and when she was with her brother, she tended to his needs. She stated candidly that another sister, Jeannie, came from Calgary for six weeks to provide what in effect constituted "private nursing duty" to Stephen, because the hospital staff could not attend to all his needs. When Stephen went home for Christmas in 1987, she helped her sister to position, lift or catheterize Stephen. I fix the value of the services she provided to Stephen at $2,500. In addition, I award her the sum of $878.20 to reimburse her for parking expenses and mileage incurred in her visits, as per Exhibit 9.

(ii). Loss of care, guidance and companionship:

Adrienne is a 43 year old neo-natal intensive care nurse and the mother of three children. She is 12 years older than Stephen. As she went through secondary school, she was very protective of Stephen. During the three years she trained to be a nurse, she lived in residence but returned home on weekends and would see him then. She continued to see him regularly even after she married. After he returned from Calgary, he became quite close to her children.

Unfortunately, she began to have marital problems and separated about a month before Stephen's injury. She found it difficult to discuss her situation with her parents because it upset them. Instead, she confided in Stephen.

She believes Stephen is lonely and depressed and "keeps a lot inside" and is "much more closed than before". Their visits are not as spontaneous now because he has to arrange in

advance for transportation by Paratransit. I feel she will now be more reluctant to seek his advice for her personal problems because of the greater ones with which she perceives he has to cope. I conclude that because of Stephen's injury, she has suffered a loss of guidance and companionship that I fix in the sum of $7,500.

(b). EUGENIE DMYTAR:

As noted, at the time of Stephen's injury, she came from Calgary and provided nursing care to him in the hospital for six weeks. She provided further nursing care when the family assembled at holiday gatherings. I fix the value of these services at $5,000.

There is little evidence about her relationship with Stephen. While he was in Calgary, he lived with her and her family during the summer of 1982.

It will be more difficult for Stephen to travel to her home now and I conclude that she has and will suffer some loss of companionship, which I assess in the sum of $5,000.

(c). Carol Hiltermann:

Carol is 48 years old and lives in Calgary. There was almost no evidence about her relationship with Stephen. While he was going to school and working in Calgary, he lived with her and her husband and their family part of the time. He also lived in residence at the university part of the time. I allow her $2,500 for loss of companionship.

21. CLAIM FOR SERVICES RENDERED BY STEPHANIE BROCKLEHURST:

Because Stephanie is not Stephen's spouse, she is not a person entitled to claim under s. 61 of the Family Law Act for the value of the services she has rendered to him.

Stephanie has lived with Stephen since he left hospital on January 5, 1990. He is unable to do anything for himself and her presence is an essential element in his ability to live outside an institution. As noted above, she works full time as a physiotherapist, a physically demanding occupation. She has to awaken and turn him about 3:00 a.m. every morning. She also has to rise early on alternate mornings to initiate his bowel routine at about 5:00 a.m. In addition, she has been providing evening care to him on weekends.

Compensation ought not to be granted for services that a person in Stephanie's position might be expected to render in the ordinary course of such a relationship. However, the services she supplied, as described above, were necessary, extraordinary and directly related to Stephen's need for care arising from his injury. Though she may have volunteered them without thought or promise of compensation, the defendants ought not to benefit from her generosity of spirit in doing so. Although she is not a party to the action, a spouse or a family member, it is proper to award to Stephen the value of the services she provided.

There is no evidence that she has lost any income while providing these services. Therefore, the amount to be awarded is a reasonable allowance for the value of her services. Difficulty in calculating the amount is not a bar to such an award. In fixing the amount, I note that the time she devoted to turning Mortimer and rising early to initiate his bowel routine was spent during periods when she would normally be asleep. Because the award for future care includes the cost of an attendant 24 hours a day, she will no longer have to render this care. Considering all the circumstance, I fix the value of her services in the sum of $25,000.

Sometimes, the amount awarded to satisfy such a claim has been impressed with a trust in favour of the provider of the services. The purpose is to prevent double compensation to the plaintiff and to ensure that the person who has given service is, in fact, compensated for doing so. Counsel did not address this issue in argument and it may not be a matter for concern. If it is, I will consider imposing a trust upon these funds in favour of Ms. Brocklehurst.

22. CONCLUSION:

Because of the findings I made about liability, all the cross claims will be dismissed as will the third party claim.

The plaintiffs will have judgment against Stingray Holdings Limited and the Corporation of the City of London as follows:

1. Stephen Mortimer:

(1). Special damages:	$ 509,542.01
(2). Non-pecuniary general damages	$ 232,745.00
(3). OHIP claim for future care	$ 149,408.00
(4). Loss of future income	$ 986,717.00
(5). Loss of C.P.P. benefits	$ 3,498.00
(6). Future care costs (ongoing)	$2,540,768.00
(7). Future care costs (initial)	$ 120,996.00
(8). Management and Investment fee	$ 25,000.00
(9). Services rendered by Ms. Brocklehurst	$ 25,000.00
TOTAL	$4,593,674.00

2. Donald Mortimer: $ 43,000.00
3. Mary Mortimer: $ 35,000.00
4. Richard Mortimer: $ 10,000.00
5. Adrienne Dawson Selby: $ 10,878.20
6. Eugenie Dmytar: $ 10,000.00

7. Carol Hiltermann: $ 2,500.00

I thank counsel for suggesting that I submit my findings of fact confidentially to Patterson so that he might do the necessary actuarial calculations. They agreed that when I received his reply, I should send it to The Alexander Consulting Group, which was retained by the defendants, to check the accuracy of the results. I had completed my judgment, except to insert the amounts dependent upon actuarial calculation, in early January, 1992, and accordingly sent my findings of fact to Mr. Patterson in a confidential letter dated January 8, 1992. When I received his final report, I sent a copy to The Alexander Consulting Group on February 3, 1992. When I received their report dated March 18, 1992, they had calculated a different amount for future care costs. I had further correspondence with the two actuarial firms, which resulted in a resolution of the difference at the end of March. I have filed all the correspondence and the actuarial reports, in bulk, as Exhibit 145, to complete the trial record.

Counsel may speak to interest and costs at a time to be fixed by the trial co-ordinator.

McDERMID J.

* * * * *

APPENDIX "B"

FUTURE CARE COSTS:

	Initial	Annual
1) ATTENDANT CARE (annual cost)		
(i) Attendant care		$111,938.08
(ii) Housekeeping		2,500.00
(iii) Home maintenance and repair		2,000.00
(2) TRANSPORTATION		
(a) Extraordinary expense of purchasing van	8,000.00	
(b) Van alterations	18,950.00	
(c) Cellular telephone	500.00	
(d) Difference in annual operating cost of van	4,500.00	
(e) Portable ramps	498.00	49.80
	27,948.00	4,549.80
(3) ACCOMMODATION		
Conversion cost	55,000.00	
(4) EQUIPMENT, SUPPLIES AND MEDICATION:		

Items	Unit Cost	Use/Life	Initial Cost	Annual Cost
Electric Wheelchair (25%)	$ 2,750.00	5 years	2,750.00	$ 550.00
Manual Wheelchair	$ 1,300.00	5 years	$ 1,300.00	260.00
Wheelchair Maintenance			300.00	
Battery				
Replacement	120.00	1 year	120.00	120.00
Tubes, Tires and Bearing Replacement			300.00	
Seating Insert	225.00	5 years	225.00	45.00
Roho Cushion(2) (25%)	93.75	3 years	187.50	62.50
Shower Commode Chair	250.00	7 years	35.71	35.71
			4,738.75	4,618.21	1,673.21
Brought Forward			4,738.75	4,618.21	1,673.21
Air Mattress & Pump	380.00	5 years	76.00	76.00
Mediman Lift & Sling	2,250.00	10 years	225.00	225.00
Extra Sling	250.00	5 years	250.00	50.00
Bowel & Bladder Needs			2,000.00	
Directal Telephone	588.00	10 years	58.80	58.80
Medications			1,320.00	
Washbasin	38.00	10 years	38.00	3.80
K Basin	16.50	10 years	16.50	1.65
Shampoo Set	81.00	10 years	81.00	8.10
Overbed Table	325.00	10 years	325.00	32.50
Bedpan	6.65	5 years	6.65	1.33
Drawsheets Vinyl (2)	15.00	3 years	30.00	10.00
Drawsheets: Cotton (5)	10.00	3 years	50.00	16.67
Bed Sore Treatment			50.00	
Sheepskin:				
booties	10.64	5 years	10.64	2.13
pads(2)	30.90	5 years	61.80	12.36
Extraordinary clothing expense			1,200.00	
TOTAL			$8,340.44	$5,847.60	$6,741.55

(5) VOCATIONAL REHABILITATION AND COMMUNICATIONS:

Items	Unit	Use/Life	Initial	Annual Cost

	Cost		Cost	
DragonDictate System	$12,000.	4 years	$12,000.	3,000.
Computer Hardware	6,000.	4 years	6,000.	1,500.
Service Contract	1,000.	1 year	1,000.	1,000.
Microphone	200.	4 years	200.	50.
Trackball	300.	4 years	300.	75.
Tape backup System	900.	4 years	900.	225.
Ergonomic Work station	3,000.	10 years	3,000.	300.
Replacement of moving parts (every 2 years)			200.	
Reference Carousels	3,000.	4 years	3,000.	750.
Service			100.	
Environmental Control system	5,000.	5 years	5,000.	1,000.
Professional Assessment	800.		800.	800.
Training for DragonDictate	1,350.			1,350.
	$33,550.		$32,200.	$10,350.

Mortimer v. Cameron (Ont. C.A.)

Between
Stephen George Mortimer, Donald Mortimer, Mary Mortimer, Richard Mortimer, Carol Hilterman, Adrienne Dawson and Eugenie Dmytar, Plaintiffs/Respondents, and
John Cameron, Stingray Holdings Limited, Sandra Hunt and the Corporation of the City of London, Defendants/Appellants, and
Marijo Kale, Third Party

[1994] O.J. No. 1356
DRS 94-12018
Action No. C12036

Ontario Court of Appeal
Toronto, Ontario
Robins, Galligan and Doherty JJ.A.
June 24, 1994.

The following judgment was delivered by

[para1] THE COURT:-- Further to our reasons for judgment dated February 16, 1994, we have now considered the written submissions filed by counsel with respect to costs and make the following order:

1. The main appeal was brought by the City of London and Stingray Holdings Limited against Stephen George Mortimer. But for a small reduction in the amount awarded to Mortimer by the trial judge, the appeal was unsuccessful. As between these parties, Mortimer is entitled to the costs of the appeal.

2. Mortimer's cross-appeal against the City and Stingray seeking to increase the amount of damages was also unsuccessful. The City and Stingray should have the costs of the cross-appeal.

3. The City's appeal against the trial judge's order as to the apportionment of liability was substantially successful. The City is accordingly entitled to the costs of its appeal against Stingray.

4. John Cameron was joined as a defendant at trial but was held not to be liable for any of the damages suffered by Mortimer. The City and Stingray both unsuccessfully appealed this decision. Cameron is entitled to his costs of the appeal as against these parties.

5. Sandra Hunt was found by the trial judge not to have been liable to Mortimer. The City, but not Stingray, appealed this holding. The appeal was dismissed. Hunt's costs should be paid by the City.

6. Hunt contingently cross-appealed against the third party, Marijo Kale. If the City had been successful in its appeal with regard to Hunt's liability, Hunt would have cross-appealed against Kale on the issue of Kale's liability. As noted above, the City's appeal was dismissed. It was this appeal that made Hunt's contingent cross-appeal necessary. The City should therefore bear Kale's costs.

7. Mortimer contingently cross-appealed against Hunt and Cameron in the event that the appeals brought against Mortimer by the City and Stingray were successful. This contingency did not transpire. We would make no order as to the costs of this contingent cross-appeal.

8. Following the trial, Mortimer brought a motion before Mr. Justice Carthy for a partial lifting on the automatic stay of the judgment while the appeal was pending. Mortimer was substantially successful. His costs on this motion should be paid by the City and Stingray.

9. All costs awarded jointly against the City and Stingray shall be apportioned 60% against Stingray and 40% against the City.

10. The costs herein ordered shall be assessed on a party and party scale.

ROBINS J.A.
GALLIGAN J.A.

DOHERTY J.A.

Toronto (City, Chief Official) v. Greymac .

IN THE MATTER OF The Building Code Act, R.S.O. 1980, c. 51;
AND IN THE MATTER OF an application thereunder by the chief official for the territorial region of Toronto;
AND IN THE MATTER OF the property known as 5 St. Joseph Street

Between
Michael L. Nixon, Chief Official, Toronto, Applicant, and
Greymac Mortgage Corporation, Catalex Realty Management Limited, Michael Gallow, carrying on business as The Voodoo Club

[1984] O.J. No. 533
Action No. 252/84

Ontario Supreme Court - High Court of Justice
Toronto Motions Court
Van Camp J.
Heard: October 16, 1984.
Oral judgment: October 16, 1984.

Released: November 7, 1984.

P. Gordon, for the Applicant.
L.A. Banack, for the Respondents.

[para1] VAN CAMP J. (Orally):-- This was an application under section 26 of The Building Code Act for an order that certain premises be vacated for non-compliance by the respondent, Michael Gallow, carrying on business as the Voodoo Club, the tenant of the second floor of the premises. The proceedings against the other two respondents, the owner and the property manager had been withdrawn.

[para2] The section provides for an application for an order directing compliance with any provision of the Act, the regulations or an order made under the Act. Upon such application, the judge may make such order or such other order as the judge thinks fit.

[para3] Certain interior alterations to the tenant's premises had been made without a building permit. Subsequently, on July 8, 1983, application for a permit was made by an architect who purported to act as the authorized agent of the owner, although the respondent deposes that the application was made on his behalf. No permit has yet been granted. In September, the owner was advised that the application did not comply with the Zoning requirements re parking. Application was made in September to the Committee of Adjustment for a variance which was refused by the decision dated October 27, 1983. On October 4, orders to comply under section 8(2) of the Act had been given to the owner listing the failure to obtain the permit and three specific contraventions in the construction, and setting two days to contact the examiner to expedite the issue of a permit for the illegal construction. On November 21, an order pursuant to section 10(3) of the Act was made that use or occupancy was prohibited. The order was served upon the owner.

[para4] The order under section 10(3) may be made when under section 10(2) an inspector has found the building unsafe, and has served upon the owner and each person in possession, an order setting out reasons why it was unsafe and the remedial steps required to render it safe and a reasonable time has elapsed. No such order under section 10(2) was made or served.

[para5] The tenant had no notice of the orders to comply dated October 4, 1983 until November 24, 1983. The time for appeal therefrom is 20 days but it may be extended. No appeal was taken as this application was made shortly thereafter, originally returnable in February, 1984. It was adjourned to May, 1984 when it was again adjourned to permit the permit application to be amended to specify the use and to provide "as is" plans. By August 22, 1984 fifty feet of new drywall and wood stud partitions had been added. Any order herein must be made without reference to the order prohibiting use or occupancy made under section 10(3) which was never served upon the tenant who had no opportunity to make representations thereto.

[para6] Although the three specific contraventions in

construction have been remedied, the application for the building permit has never been completed since May, 1984 as required for the issue of the permit, and alterations have continued notwithstanding the order to comply. The tenant has shown diligence in attempting to show compliance with the Zoning requirements but not otherwise, although he has been represented by an architect and a solicitor.

[para7] I was referred to the decision in the Hadley et al. and Santos 18 O.R. (2d) 221, but the circumstances herein show that an order under the Act has not been and is not being complied with.

[para8] Consequently an order will issue that he comply with the requirements for the application for the permit. An order will issue prohibiting use or occupancy of the premises by him or anyone claiming under him, if "as is" plans and a statement of the particular use of the premises are not filed with the chief official herein within 30 days. Such an order will also issue upon evidence of any further alterations without a building permit subject to any further order of this court.

[para9] Costs to the applicant herein if demanded.

VAN CAMP J.

Noddle v. City of Toronto et al.

(1982), 37 O.R. (2d) 421

ONTARIO
HIGH COURT OF JUSTICE
GRAY J.
JUNE 25, 1982

APPLICATION for a judicial review of a decision to issue a building permit.

R. G. Slaght, and D. R. Langer, for applicant.

M. J. Winer, and S. L. Ungar, for respondent, City of Toronto.

Stephen Diamond, for respondent, Greyhound Lines of Canada Limited.

GRAY J.:-- The applicant sought leave to have this application for judicial review heard by me as a judge of the High Court pursuant to the provisions of s. 6(2) of the Judicial Review Procedure Act, R.S.O. 1980, c. 224. Leave may be granted where it is made to appear that the case is one of urgency and that the delay required for an application to the Divisional Court is likely to involve a failure of justice.

In the application, the applicant sought judicial review of a decision of the chief building officer of the City of Toronto to issue building permit no. 161915. The applicant asked that orders be made:

(a) quashing building permit no. 161915; and

(b) declaring that the proposed rest areas are not an accessory use to the principal use proposed by the respondent, Greyhound.

This, in effect, would require me to declare that on 685 Lakeshore Boulevard East, Toronto, sleeping accommodation is not a permitted use or an accessory use to a private or public garage.

After hearing submissions from counsel and considering the decisions in Re Bennett and City of Belleville (1979), 24 O.R. (2d) 121 and Re Chapples Ltd. and City of Thunder Bay et al. (1979), 27 O.R. (2d) 444, 106 D.L.R. (3d) 707 [revd 29 O.R. (2d) 522, 114 D.L.R. (3d) 684] I dictated oral reasons for judgment in court on April 19, 1982, granting leave under s. 6(2) of the Judicial Review Procedure Act. I reserved judgment on the two remaining issues in the application; namely, the status of the applicant and the merits of the application.

With respect to the first issue -- does Mr. Noddle have an interest in the decision that has been made? His counsel brought to my attention that this is a certiorari application and that Mr. Noddle, who is a Greyhound employee, and is also president of Local 1415 of the Amalgamated Transit Workers Union, has taken an interest in this matter for quite some time. When the building permit application was pending, Mr. Noddle, through his solicitors, gave notice to Greyhound and the city that he opposed the issuance of a permit to Greyhound on the grounds that the proposed "rest areas" were not a permitted use within By-law 20623. He also gave notice that in court he would challenge any issuance of a permit by the city.

On September 29, 1981, he appealed the decision of the chief building official of the city to issue a permit. This was heard by a County Court judge pursuant to ss. 6 and 15 of the Building Code Act, R.S.O. 1980, c. 51 and, on December 3, 1981, His Honour Judge Matthews issued an order quashing Mr. Noddle's appeal, hence the application for judicial review.

Counsel for Mr. Noddle takes the position that a person aggrieved is a person with an interest in the decision attacked.

The following is a quotation from Strayer, Judicial Review of Legislation in Canada at p. 107:

(iii) Certiorari: There appears to be no requirement of "interest" on the part of an applicant for certiorari.

The general rule in England is that even a "stranger" may apply for certiorari though the court would have a discretion to refuse the application. A "person aggrieved" (who may be anyone affected, however slightly) is entitled to the issue of the writ, but even he may be barred by his own conduct from obtaining certiorari if the court so decides. This probably means that in each case the court has a discretion to permit anyone to seek certiorari.

Authority in the same vein is to be found in de Smith, Judicial Review of Administrative Action, 4th ed. (1980), pp. 419-20.

The Ontario decisions which are of assistance are: Re Doctors Hospital and Minister of Health et al. (1976), 12 O.R. (2d) 164 at 176, 68 D.L.R. (3d) 220, 1 C.P.C. 232, and Re Town of Durham et al. and A.-G. Ont. et al. (1978), 23 O.R. (2d) 279 at 289, 95 D.L.R. (3d) 327. In the first of these decisions, it was held by the Divisional Court that certain medical doctors had status to be heard in a separate application to that of their own hospital which had sought a declaratory order that the decision of the Lieutenant-Governor in Council to close the hospital was void.

In the second of these decisions, it was held by Van Camp J., on applications for judicial review involving the closing of the Registry Office in the Town of Durham, that some of the municipalities in the Registry Division and certain individuals who were property owners in the said division had standing. It had been argued that the applicants had no vested interests and no proprietary interests since their livelihood was not affected. Van Camp J. said at p. 289 O.R.:

> It seems to me that the applicants herein had an interest that was more special, more intense than that of the general public.

Counsel for Greyhound on this first issue, after informing me of Mr. Noddle's occupation with Greyhound and his position in the collective bargaining relationship, made a submission to the effect that the building permit gives Greyhound the right to build a building in accordance with the plans of the city on land which Greyhound owns. In other words, his submission was that the interest involved was between the property owner and the municipal corporation and that Mr. Noddle had no direct interest in legal rights between these last two mentioned corporate entities.

In summary form, it was said that Mr. Noddle must have a legal interest, that the responsibility in issues of this type must rest with the municipal corporation, that Mr. Noddle does not have the right to interfere with Greyhound's plans and that, in any event, if, as an employee, he wishes not to be lodged in the premises being built, his employee rights are governed by the existing collective bargaining agreement or by the Canada Labour Code, R.S.C. 1970, c. L-1.

It is said that the interest giving rise to status has been reserved by the courts to persons with a pecuniary or proprietary interest in the proceedings. The authorities for this proposition are said to be: Re Corp. of District of Surrey, Municipal By-law, 1954, No. 1291 (1956), 6 D.L.R. (2d) 768; R. v. Ontario Labour Relations Board; Ex p. Northern Electric Co. Ltd., [1971] 1 O.R. 121, 14 D.L.R. (3d) 537, and Rosenberg et al. v. Grand River Conservation Authority et al. (1976), 12 O.R. (2d) 496, 69 D.L.R. (3d) 384, 1 C.P.C. 1.

In the Rosenberg case, two dissenting members of the conservation authority brought a lawsuit to enjoin the authority from conveying certain lands for highway purposes to a municipality. Speaking for the court in dismissing the appeal from the trial judgment on the first finding, i.e., that dealing with the status of the plaintiffs, Arnup J.A. put it thus at p. 505 O.R.:

> It would be tempting to say that a member of a conservation authority has a "special interest ... or sufficient interest" to give him the necessary status, but a very long line of cases, binding on this Court, have held that the "interest" referred to must be pecuniary or proprietary in nature (including, of course, actual physical injury or the risk thereof).

That decision, it is to be noted, involved an action and it was held that only the Attorney-General has the status to commence

proceedings against the public body.

In my view, the present application under s. 2 of the Judicial Review Procedure Act involves Mr. Noddle's status to deal with an alleged employee right and I do not consider that the decision in the Rosenberg case affects the present question of status in this application. My decision in the light of the foregoing is that Mr. Noddle has status in this application and I now turn to the second issue. The second issue involves the so-called merits of the application. In reality, this issue is whether the chief building official of the City of Toronto erred in issuing building permit no. 161915?

To again mention the material facts, one should note that Greyhound proposed to develop its property at 685 Lakeshore Boulevard East, Toronto by building a bus maintenance and service depot with a rest area for drivers. A building permit was issued authorizing a two-storey bus maintenance and service depot with a rest area consisting of individual rooms with beds, lounge, lunch room and change room. Currently the Greyhound drivers are accommodated in hotels when on stopovers in Toronto. The plans were approved and the permit was issued on the basis that a rest area is an accessory use to that of a private commercial garage. I was told that approximately ten per cent of the floor space will be devoted to the rest area.

The material parts of the City of Toronto zoning By-law no. 20623 so far as the submissions made to me on this application are concerned are as follows:

SECTION 2 -- DEFINITIONS

In this by-law, unless a contrary intention appears:

(1) "accessory" when used to describe a use, building or structure, means a use, or a building or structure, "not exceeding 4 metres in height" that is naturally and normally incidental, subordinate and exclusively

devoted to a principal use, building or structure and located on the same lot therewith;

. . . . .

(57a) "hostel" means a building or part of a building that contains dwelling accommodation consisting of rooms without culinary facilities, but does not include a boarding or lodging house;

SECTION 15 -- C.4 DISTRICTS

(1) No person shall, within any C.4 district, use any lot or erect or use any building or structure for any purpose except for any C.1 use (other than Y.M.C.A., Y.W.C.A., Y.M.H.A. or Y.W.H.A., one or more dwelling units in the upper portion of a C.1 building a converted dwelling house, a boarding or lodging house, a converted dwelling and lodging house), any C.2 or C.3 use or one or more of the following C.4 uses, namely:

. . . . .

(e) any use that is not permitted in any other class of district but which may be lawfully established in the City of Toronto, except a hotel, an apartment-hotel, or one or more dwelling units in the upper portion of a C.1 building exceeding three storeys in height;

(f) any use which is accessory to any of the foregoing uses;

. . . . .

(2) None of the provisions of subsection (1) of this Section shall apply to prevent the erection or use of a dwelling unit as accommodation for a caretaker or watchman as an accessory use to uses permitted by this Section.

On the second issue, the submission by counsel for the applicant is that the use of these premises as a sleeping accommodation is not an accessory use of premises as a repair depot and storage area. It is said that one cannot do

indirectly what one cannot do directly and that the use itself (i.e., sleeping accommodation) is a defined use that is not permitted in the zone in question. The premises in question are in a C.4 zone and in the C.4 zone or district anything is permitted that is permitted in a C.1 to C.3 use plus the C.4 uses set forth, except one or more dwelling units.

I am reminded that it is "uses" that is dealt with and not the building itself. I am also reminded that the application, according to counsel for the applicant on this application, was for two uses independent of each other:

(a) a public or private garage; and

(b) sleeping accommodation.

It is argued that sleeping is a use permitted in another district so therefore, because of (e) aforesaid, it is not permitted in a C.4 district. It is further argued that when considering the language of (f) aforesaid and the definition of "accessory" found in s. 2(1), sleeping accommodation cannot be said to be naturally and normally incidental, subordinate and exclusively devoted to a bus repair garage.

The submission is further to the effect that Greyhound contemplates two uses of the structure; rest areas on the one hand and a bus repair depot on the other. The public garage use is permitted in a C.4 zone or district but a hostel is not permitted in a C.4 zone or district. It is a permitted use in a Q.R. district. The applicant's submissions conclude on the note that, if you cannot bring the situation in under a specific use, you cannot bring it in as an accessory use. Is a hostel naturally and normally devoted to a bus repair garage?

Counsel for Greyhound sought to convince me that this application could not succeed because of the applicant's delay in bringing these proceedings. I was provided with a litany of all the matters which were brought to the applicant's attention and the time factors involved with this case. My attention was particularly directed to R. v. Board of Broadcast Governors and the Minister of Transport; Ex p. Swift Current Telecasting Co. Ltd., [1962] O.R. 657, 33 D.L.R. (2d) 449 at 462, 463 which is authority for the proposition that certiorari is a discretionary remedy and delay is a relevant consideration in the exercise of the discretion of the court. I accept, of course, this principle but I cannot find that the applicant was guilty of undue delay in all the circumstances and in any event my task is really to decide whether or not the use in this case is or is not illegal. That task does not involve the exercise of judicial discretion. I therefore reject the submission with respect to delay.

I have come to the conclusion that the rest area does not fall within the definition of "hostel" and, although there may have been some looseness in the application originally as between a public garage and a private commercial garage for Greyhound buses, I have reached the conclusion that the chief building official did not err in issuing building permit no. 161915. Subsection (2) makes it clear there can be accessory uses to the uses permitted in the by-law and that there is no prohibition per se to persons living in the C.4 zone or district.

Where buses start and stop their routes, it is not unnatural or abnormal to have rest areas and, of course, mandatory rest requirements exist for the bus drivers themselves by law. The most cogent point is that the rest areas would not be in the location in question if it were not for the principal use of the premises as a garage.

In the result, therefore, this application is dismissed with costs payable by the applicant to the respondents.

Application dismissed.

Re **Olympia & York Developments Ltd. and City of Toronto**

29 O.R. (2d) 353
113 D.L.R. (3d) 695

ONTARIO
HIGH COURT OF JUSTICE
DIVISIONAL COURT
PENNELL, ROBINS AND STEELE, JJ.
19TH AUGUST 1980.

APPLICATION for judicial review of decisions of the respondent municipality requiring the fee simple owner to be added as a party to certain site plan agreements and for an order directing the surrender of a performance bond.

J.J. Carthy, Q.C., for applicant.

M.J. Winer, for respondent.

The judgment of the Court was delivered by

STEELE, J.:-- This application is for judicial review of the exercise, or purported exercise, of a statutory power by the respondent (hereinafter referred to as the "City") and seeks:

(a) a declaration that the word "owner" in Section 35a(6) of The Planning Act is not intended to include Roywood Investments Limited as a necessary party to the development agreements required by the Respondent relating to Phase II of the project known as First Canadian Place:

(b) a declaration that the Respondent may not in the exercise of its statutory powers under Section 35a of The Planning Act require that Roywood Investments Limited be a party to development agreements relating to Phase II of the project known as First Canadian Place;

(c) an order directing the surrender to the Applicant of a performance bond in the amount of $1,000,000.00 dated January 30, 1980;

The relevant provisions of the Planning Act, R.S.O. 1970, c. 349, as amended, are as follows:

35a(2) Where there is an official plan in effect in a municipality, the council of the municipality may, by by-law, designate the whole or any part of the area covered by the official plan as a site plan control area, but nothing herein authorizes the council to designate an area that is not within the limits of the municipality of which it is the council.

. . . . .

(4) No person shall undertake any development in an area designated under subsection 2 unless the council of the municipality or, where a referral has been made under subsection 10, the Municipal Board has approved one or both, as the council may determine, of the following:

1. Plans showing the location of all buildings and structures to be erected and showing the location of all facilities and works to be provided in conjunction therewith and of all facilities and works required under clause a of subsection 6.

2. Drawings showing plan, elevation and cross-section views for each industrial and commercial building to be erected and for each residential building containing twenty-five or more dwelling units to be erected which are sufficient to display,

(a) the massing and conceptual design of the proposed building;

(b) the relationship of the proposed building to adjacent buildings, streets, and exterior areas to which members of the public have access; and

(c) the provision of interior walkways, stairs and escalators to which members of the public have access from streets, open spaces and interior walkways in adjacent

buildings,

but which exclude the layout of interior areas, other than the interior walkways, stairs and escalators referred to in clause c, the colour, texture and type of materials, window detail, construction details, architectural detail and interior design.

. . . . .

(6) As a condition to the approval of the plans and drawings referred to in subsection 4, a municipality may require the owner of the land to,

(a) provide to the satisfaction of and at no expense to the municipality any or all of the following:

. . . . .

4. Walkways, including the surfacing thereof, and all other means of pedestrian access.

. . . . .

8. Easements conveyed to the municipality for the construction, maintenance or improvement of watercourses, ditches, land drainage works and sanitary sewerage facilities on the land.

. . . . .

(b) maintain to the satisfaction of the municipality and at the sole risk and expense of the owner any or all of the facilities or works mentioned in paragraphs 2, 3, 4, 5, 6, 7, 8 and 9 of clause a, including the removal of snow from access ramps and driveways, parking and loading areas and walkways;

(c) enter into one or more agreements with the municipality dealing with any or all of the facilities, works or matters mentioned in clause a or with the provision and approval of the plans and drawings referred to in subsection 4.

(7) Any agreement entered into under clause c of subsection 6 may be registered against the land to which it applies and the municipality is entitled to enforce the provisions thereof against the owner and, subject to the provisions of The Registry Act and The Land Titles Act, any and all subsequent owners of the land.

(8) Section 469 of The Municipal Act applies to any requirements made under clauses a and b of subsection 6 and to any requirements made under an agreement entered into under clause c of subsection 6.

(9) Where the municipality fails to approve the plans or drawings referred to in subsection 4 within thirty days after they are submitted to the municipality for approval or where the owner of the land is not satisfied with any of the requirements made by the municipality under subsection 6 or with any part thereof, including the terms of any agreement required, the owner of the land may require the plans or drawings or the unsatisfactory requirements or parts thereof or the agreement, as the case may be, to be referred to the Municipal Board by written notice to the secretary of the Board and to the clerk of the municipality, and the Board shall then hear and determine the matter in issue and settle and determine the details of the plans or drawings and approve the same and settle and determine the requirements, including the provisions of any agreement required, and the decision of the Board is final. [enacted 1973, c. 168, s. 10; rep. & sub. 1979, c. 59, s.1]

The applicant (hereinafter referred to as "Olympia") is the lessee of the lands in question under a lease from the registered owner, in fee simple, Roywood Investments Limited (hereinafter referred to as "Roywood"), which lease has approximately 966 years to run. It is also the owner in fee simple of other abutting lands. Olympia, together with other landowners, is engaged in the construction and development of First Canadian Place and this application relates to additional buildings on abutting lands.

The City has designated the area as a site plan control area

under s. 35a of the Planning Act and has required the owner of the land to enter into an agreement which provides in part for a walkway in perpetuity and other works to be provided and maintained. The details of the agreement were agreed upon between Olympia and the City but the City took the position that Roywood was a required party to the agreement and refused to enter into the agreement and permit the development to proceed. Olympia contended that the City was in error and that Roywood was not a necessary party. It proposed a compromise to the effect that the agreement be entered into by Olympia only but that it would post a bond with the City to ensure performance of the agreement. As a result, the City passed the following resolution, which was adopted by by-law:

> That at this time Roywood not be considered a necessary party to a development agreement within the interpretation of the word "owner" under the Planning Act and that subject to a Court ruling under the carriage of Olympia & York on such interpretation that Council allow and approve work to proceed on First Canadian Place provided that a performance bond satisfactory to the City Solicitor in the amount of $1,000,000. be deposited with the City by Olympia & York.

The agreement was executed, the permit has been issued and work is proceeding. Olympia has posted the bond in question. This application arises as a result of the resolution.

The first question is whether or not the application is properly brought by way of judicial review or whether the applicant should have proceeded in some other manner such as an action for a declaration or an application on an agreed statement of facts under Rule 612. Without determining whether or not the applicant has the right to proceed in any other manner, it is my opinion that the application is properly before this Court.

The applicable provisions of the Judicial Review Procedure Act, 1971 (Ont.), c. 48, as amended, are:

Section 1

1. In this Act,

. . . . .

(f) "statutory power of decision" means a power or right conferred by or under a statute to make a decision deciding or prescribing,

(i) the legal rights, powers, privileges, immunities, duties or liabilities of any person or party, or

(ii) the eligibility of any person or party to receive, or to the continuation of, a benefit or licence, whether he is legally entitled thereto or not, and includes the powers of an inferior court;

(g) "statutory power" means a power or right conferred by or under a statute,

(i) to make any regulation, rule, by-law or order, or to

give any other direction having force as subordinate legislation;

(ii) to exercise a statutory power of decision,

(iii) to require any person or party to do or to refrain from doing any act or thing that, but for such requirement, such person or party would not be required by law to do or to refrain from doing,

(iv) to do any act or thing that would, but for such power or right, be a breach of the legal rights of any person or party.

Section 2

2(1) On an application by way of originating notice, which may be styled "Notice of Application for Judicial Review", the court may, notwithstanding any right of appeal, by order grant any relief that the applicant would be entitled to in any one or more of the following:

1. Proceedings by way of application for an order in the nature of mandamus, prohibition or certiorari.

2. Proceedings by way of an action for a declaration or for an injunction, or both, in relation to the exercise, refusal to exercise or proposed or purported exercise of a statutory power.

The intent of the Judicial Review Procedure Act, 1971 is to provide an expeditious manner in which proceedings might be disposed of without differentiating between the old remedies of mandamus, prohibition, certiorari or declaration. I am of the opinion that the interpretation of the statute could have been disposed of in an application by way of mandamus and therefore the Court has jurisdiction to consider an application for a declaration. This is predicated upon the resolution of the City Council being the exercise of a statutory power of decision. The resolution was only part of the broader application for development approval by the City, and the City's position that it would not allow the development to proceed without Roywood entering into the agreement as the owner. In effect, the City was refusing to approve the development and enter into an agreement without Roywood. The issue as to who was the proper owner to sign the agreement was an integral part of that decision. I am of the opinion that the application was part of the exercise by the City of a statutory power of decision and is properly before this Court.

The real issue in dispute is what is the meaning of the word "owner" in s. 35a of the Act? Does it exclude the owner in fee simple of the lands where such owner is not the person undertaking the development? The term "owner" has been considered judicially in many different contexts and referred to by legal authors. In Wynne v. Dalby (1913), 30 O.L.R. 67, 6 D.L.R. 710, reference was made at p. 72 O.L.R., p. 714 D.L.R., as follows:

> The word "owner" is an elastic term, and the meaning which must be given to it in a statutory enactment depends very much upon the object the enactment is designed to serve.

As was said by Lord Herschell in Baumwoll Manufactur von Carl Scheibler v. Furness, [1893] A.C. 8, 17: "There may be two persons at the same time in different senses not improperly spoken of as the owner of a ship. The person who has the absolute right to the ship, who is the registered owner, the owner (to borrow an expression from real property law) in fee simple, may be properly spoken of, no doubt, as the owner; but at the same time he may have so dealt with the vessel as to have given all the rights of ownership for a limited time to some other person, who, during that time, may equally properly be spoken of as the owner."

In York et al v. Township of Osgoode et al. (1894), 21 O.A.R. 168 [affirmed 24 S.C.R. 282], reference was made at p. 173 as follows:

> The Act, as I have said, contains no definition of the word "owner"; the meaning must, therefore, depend upon the subject matter and the context. Here, I think, when it is considered that proceedings taken under the Act may result in what has been described as the grant of an easement over the land, the word is intended to mean, at the lowest, a person who has a real and substantial interest in the land, possibly something less than the fee simple, but certainly more than that of a mere occupier or tenant at will. The owner may be bound by notices served upon the occupant as the 19th section provides, but there is nothing in the 6th section which enables the latter to confer jurisdiction upon the engineer by the initiatory requisition and assent. In such cases as Lewis v. Arnold, L.R. 10 Q.B. 245; Woodward v. Billericay Highway Board, 11 Ch.D. 214, we have illustrations of the extension of the term to embrace smaller interests in property, where the context and subject matter require it, as where the proceedings to be effective at all must be of a prompt and summary character, and would be useless if not applied at once, and to the person in possession. Here the proceedings to be taken are intended to affect the freehold, and in a permanent manner, and may even result in its being officially sold for non-payment of charges. Where that is the case and where ample means are provided by the Act for notice to parties affected it would be strange if the interest of

the owner of the fee could be bound by the action of a person who may have no greater interest than that of a mere possessor or yearly tenant or tenant for a short term of years. So on the other hand it would be inequitable that such a person should be liable to have his name placed on the collector's roll and compelled to pay charges incurred for making what may be a permanent benefit to the property of his landlord.

In Harrison v. Toronto Motor Car Ltd. et al., [1945] O.R. 1 at pp. 11-2, [1945] 1 D.L.R. 286 at p. 292, reference was made with approval to Maxwell on the Interpretation of Statutes, 8th ed. (1936), pp. 73-4, as follows:

"It is not infrequently necessary, therefore, to limit the effect of the words contained in an enactment (especially general words), and sometimes to depart, not only from their primary and literal meaning, but also from the rules of grammatical construction in cases where it seems highly improbable that the words in their wide primary or grammatical meaning actually express the real intention of the Legislature ...

"It is in the last degree improbable that the Legislature would overthrow fundamental principles, infringe rights, or depart from the general system of law, without expressing its intention with irresistible clearness, and to give any such effect to general words, simply because they have a meaning that would lead thereto when used in either their widest, their usual, or their natural sense, would be to give them a meaning other than that which was actually intended. General words and phrases, therefore, however wide and comprehensive they may be in their literal sense, must, usually, be construed as being limited to the actual objects of the Act.

The general words of the Act are not to be so construed as to alter the previous policy of the law."

Black's Law Dictionary, 4th ed., defines owner, in part, as follows:

OWNER. The person in whom is vested the ownership, dominion, or title of property; proprietor.

. . . . .

The term is, however, a nomen generalissimum, and its meaning is to be gathered from the connection in which it is used, and from the subject-matter to which it is applied. ... The primary meaning of the word as applied to land is one who owns the fee and who has the right to dispose of the property, but the term also includes one having a possessory right to land or the person occupying or cultivating it.

It is obvious that the word must be interpreted in the context of the meaning of the Planning Act and, in particular, s. 35a, because it may include more than one owner or one person.

In Re AAF-LTD. and Committee of Adjustment of Borough of Etobicoke (1976), 13 O.R. (2d) 666, Estey, C.J.H.C., considered the word "owner" in relation to s. 42(3) of the Planning Act as follows, at p. 667:

Under the Planning Act, s. 42(3), provision is made for the Committee of Adjustment "upon the application of the owner of any land or any person authorized in writing by such owner," to make application for approval of a severance or a transaction leading to a severance.

and at p. 668:

The narrow question arising today in dealing with the application made by AAF-LTD. is whether the applicant has the status to make the application of August 13, 1976, which I have mentioned above. The section of the Planning Act which I have quoted in excerpt above, uses the undefined term, "owner". There is no contextual assistance in the Act as to what is meant by "owner" and the only case brought to the attention of the Court dealing with this issue is Re Edgely Farms Ltd. and Uniyork Investments Ltd., [1970] 3 O.R. 131, 12 D.L.R. (3d) 459, where Chief Justice Gale, at p. 133 stated:

"Assuming that at the time the application for approval of the sale was made to the committee of adjustment there was a valid and subsisting agreement of purchase and sale between Uniyork Investments Limited and Edgely Farms Limited, it is our opinion that the former had a sufficient interest in the property to come within the meaning of the word 'owner' in s. 32b(2a) ..."

The nature of the interest there in question was the equitable interest arising in a purchaser upon the execution of an agreement of purchase and sale. The equitable interest there arising was found by the Court of Appeal to be sufficient to qualify the holder thereof within the term "owner" as that word is employed in the Planning Act, s. 42(3). An optionee, or a person holding an interest in option, is in an analogous position in my view.

Every attempt should be made to give the same meaning to a word where it occurs in the same statute. However, if the context of individual sections does not permit this, then different interpretations must follow.

In line with the reasoning of the above decisions and in particular AAF-LTD. and the dictionary definition, the word "owner", in s. 35a(6), may well be broad enough to include more than one owner and more particularly broad enough to include the applicant in the circumstances of this case. However, the primary meaning of the word is "one who owns the fee in the land". There is nothing in the Act or in the AAF-LTD. decision that detracts from this primary meaning.

In the exercise of its statutory power, the City had the right under s. 35a(6) to require Roywood to enter in a development agreement. Whether it acted reasonably or not in so doing is not a matter for the Court to decide. Accordingly, the declaration on the narrow issues raised by the applicant should not be granted.

While the argument presented to us ranged to a consideration of a definition of all those who might be deemed owners within the meaning of the section and what results might flow if other than the owner of the fee were required to enter into the agreement, those issues are not raised in the application before the Court and I would decline to express opinions thereon.

For the above reasons the application should be dismissed. In view of the City having agreed to a Court ruling, there should be no costs.

Application dismissed.

Ottawa (City) v. Shore & Horwitz Construction Co.

IN THE MATTER OF a conviction under the City of Ottawa Building Bylaw No. 8752, Section 102.1

Between
The Corporation of the City of Ottawa, and
Shore & Horwitz Construction Company Limited

[1960] O.J. No. 32

Ontario Supreme Court - High Court of Justice
Donnelly J.
January 25, 1960.

Counsel:
M.M. Kertzer, for Shore & Horwitz Construction Company Limited.
D.S. Maxwell, for the Attorney General of Canada.
D.B. Hambling and John Cassells, for the City of Ottawa.
E.J. Houston, for the Attorney General for Ontario.

[para1] DONNELLY J.:-- This is an appeal by way of stated case from the decision of Joachim Sauve, Q.C., Police Magistrate for the City of Ottawa, whereby he convicted Shore & Horwitz Construction Company Limited on the 17th day of March, 1959 that they "at the City of Ottawa in the County of Carleton did unlawfully erect a three-storey barracks building at Rockcliffe Airport, in the City of Ottawa, without obtaining a building permit from the Corporation of the City of Ottawa, contrary to City of Ottawa Building Bylaw No. 8752, Section 102.1."

[para2] A preliminary objection was taken by counsel for the Attorney General for Ontario that the appellant had not at the time the application was made and before the case was stated, entered into a recognizance as required by Section 735(1) of the Criminal Code. No recognizance is included in the documents filed on the appeal. Counsel for the appellant informed the Court that judgment was delivered on March 17, 1959. A recognizance was filed with the Clerk of the Police Magistrate's Court on March 19th, 1959, and the application for the stated case made on the same day. Counsel for the appellant further informed the Court that although the Clerk of the Police Magistrate's Court had searched his office, he was unable to locate the recognizance which had been filed. Counsel for the Attorney General for Ontario also questioned the sufficiency of the recognizance. The appellant should not be penalized by the failure of the Clerk to produce the recognizance and permission is given to the appellant to substitute a new and sufficient recognizance, the same to be entered into before this Court within 15 days from the date hereof.

[para3] At the trial, City of Ottawa Building Bylaw No. 8752 and a contract dated the 17th day of December, 1956, between Defence Construction (1951) Limited and Shore & Horwitz Construction Company Limited were filed as Exhibits 1 and 3 respectively. The learned Magistrate incorporated the whole of these documents as part of the stated case.

[para4] The following admissions were made by the parties at the trial:

1. The whole of the City of Ottawa Building Bylaw No. 8752 which also includes the form set out to cover issuing of building permits.

2. That the three-storey barracks block built by Shore & Horwitz Construction Company Limited on the R.C.A.F Station at Rockcliffe Airport, in the City of Ottawa on or between January 10, 1957 and April 25, 1958 was in fact built by the construction company and in fact exists.

3. That the land on which the said barracks building was erected and the said barracks building itself are both owned by the Crown in the Right of Canada.

4. That the said Shore & Horwitz Construction Company Limited did not take out a building permit under

City of Ottawa Building Bylaw No. 8752 before commencing construction of the building or at any time thereafter.

The relevant parts of Exhibit 1 are as follows:

" Section 102.1(a) GENERAL

IT shall be unlawful for any person to commence or proceed with any operation included under or regulated by the provisions of this Bylaw, without first obtaining a permit from the Building Inspector; and paying the fee hereinafter prescribed for the same.

Section 102.2(a) APPLICATIONS

Applications shall be made by the owner of the building or structure involved, or his authorized agent, and applications shall indicate the total cost to the owner of the works contemplated.

Section 233

Owner shall mean any person, firm, corporation or agent controlling the property under consideration."

Section 34 of the Construction Conditions, forming part of Exhibit 3, provides as follows:

" The Contractor shall comply with, and the work shall be carried on subject to all regulations and orders made by any Municipal, Provincial, Dominion or other governmental authority and applicable to the said work, and shall, at his own expense, obtain all necessary permits (if any) therefore."

The learned Magistrate found that Defence Construction (1951) Limited was an agent of the Crown in the Right of Canada and that by Section 34 of the Contract (Exhibit 3) it had abandoned or released, in so far as the Bylaw in question was concerned, the immunities adherent to the Crown in the Right of Canada and that by virtue of the said section Defence Construction (1951) Limited required Shore & Horwitz Construction Co. Ltd. to comply with the provisions of the said Bylaw.

[para5] The accused questioned the proceedings on the grounds that the Magistrate erred in point of law in holding

(a) that the Defendant Company, for the purpose of application for a permit, was, by implication or in express terms of the Contract, an authorized agent of Defence Construction (1951) Limited, a Crown corporation acting in Right of Canada;

(b) that the Grown in the Right of Canada, although generally not subjected to the Provincial or the Municipal legislation, by the said Contract had released or abandoned its immunities for a particular purpose.

[para6] The question submitted to the Court is whether the Magistrate was correct in convicting the Defendant Company for failure to comply with the said Bylaw. On the appeal, counsel for the accused relied upon the above grounds.

[para7] Counsel for the Attorney General of Canada relied on section 91(a) of the B.N.A. Act and contended that the Crown in the Right of Canada cannot abandon its immunities.

[para8] Counsel for the City of Ottawa based his argument on four grounds:

(a) that Shore & Horwitz Construction Co. Ltd. controlled the property under consideration and was the "owner" within the meaning of Section 233 of the bylaw;

(b) that Section 34 of Exhibit 3 made Shore & Horwitz Construction Co. Ltd. an authorized agent of the Defence Construction (1951) Limited and required it to take out a permit as required by Section 102.1 of the Bylaw;

(c) that Shore & Horwitz Construction Co. Ltd. was an independent contractor and bound by the Bylaw;

(d) that the field covered by the Bylaw was not within the exclusive jurisdiction of the Government of Canada and the Province of Ontario had a right to authorize the City of Ottawa to compel the accused to comply with the Bylaw.

[para9] Counsel for the Attorney General for Ontario also, contended that the accused, in so far as the Bylaw is concerned, was the owner of the property under consideration. He further argued that as the Bylaw provided for the charging of fees that it was a matter of taxation and the principles laid down in G. Neal Philips v. The Corporation of Sault Ste. Marie, 1954, S.C.R. 404 and City of Vancouver v. The Attorney General of Canada et al, 1944, S.C.R. 23 should be applied.

[para10] The Bylaw was passed pursuant to Section 388(7) of The Municipal Act, R.S.O. 1950, Chapter 243, which in part is as follows:

"For regulating the size and strength of frame, wooden, brick, stone, cement and concrete walls, and of the foundations and foundation walls, beams, joists, rafters, roofs and their supports of all buildings to be erected, altered or repaired, and for requiring the production of the plans of all buildings, and for charging fees for the inspection and approval of such plans, and fixing the amount of the fees and for the issuing of a permit certifying to such approval without which permit no building or structure may be erected, altered or repaired."

[para11] The incorporation of Defence Construction (1951) Limited was authorized by Section 7(1) of The Defence Production Act, 1951, 15 Geo. VI, c. 4. By Section 7(4) the Corporation was constituted an agent of His Majesty and its powers could be exercised only as an agent of His Majesty.

[para12] Paragraph 11 of the Construction Conditions in Exhibit 3 provides that the work shall, in every particular be under and subject to the control and supervision of the Engineer; and all orders, directions or instructions at any time given by the engineer with respect thereto shall promptly and efficiently be obeyed, performed and complied with by the contractor to the satisfaction of the Engineer. By Clause 1 of the Contract it is provided that 'ENGINEER' shall mean any person designated or appointed as such by the Minister for the purpose of this Contract.

[para13] Paragraph 12 of the Construction Conditions is as follows:

"The work, shall, in every particular be subject to the supervision of the Minister and/or any other person thereunto authorized by him, each of whom shall have access at all times to any part of the work."

[para14] By Paragraph 16 of the Construction Conditions it is provided that all machinery, tools, plant, materials, equipment, articles and things whatsoever provided by the Contractor in connection with the work from the time of their being so provided until the final completion of the work, shall be the property of Her Majesty for the purpose of the said work and shall not be taken away or used except for the purpose of the work without the consent in writing of the Engineer. These sections clearly show that the Minister of Defence Production controlled the property under consideration and the accused was not the owner as defined by Section 233 of the Bylaw.

[para15] Section 34 required the Contractor to comply with all regulations and orders applicable to the said work and to obtain all necessary permits (if any). The barracks built by the accused firm and the land on which they were located were owned by the Crown in the Right of Canada and formed part of the Public Debt and Property over which Section 91(1) of the B.N.A. Act excludes the Province from any legislative authority and over which the Government of Canada has the exclusive right to legislate. The Bylaw requires not only that a permit be obtained and a fee paid, but also that all

applications for building permits be accompanied by two sets of specifications and plans drawn to scale together with certain other information. The Bylaw also lists many requirements in regard to the structure to be erected, with which the applicant must be prepared to comply. In addition Section 388(7) of The Municipal Act provides for the issuing of a permit certifying to the approval of the plans submitted. The building in question is a three-storey barracks block built on the R.C.A.F. Station at Rockcliffe Airport for Her Majesty in the Right of Canada, represented by the Minister of Defence Production, acting through Defence Construction (1951) Limited. Having in mind the purpose for which this building was constructed I find that the Crown in the Right of Canada did not agree to submit to a Bylaw which required that the Municipal authorities approve of the plans and specifications before issuing a permit authorizing the construction of the barracks and waive its immunity so that it would be bound by the requirements of the Bylaw in question. As the Province was excluded from legislating in regard to the Public Debt and Property of the Government of Canada the agent of the Crown would not be required to apply for a permit under the Bylaw.

[para16] Section 16 of The Interpretation Act, R.S.C. 1952, Chap. 158 provides:

> "No provision or enactment in any act affects, in any manner whatsoever, the rights of Her Majesty, her heirs or successors, unless it is expressly stated therein that Her Majesty is bound thereby."

[para17] The Municipal Act makes no provision for Her Majesty being bound by it.

[para18] If the Crown in the Right of Canada and its agent Defence Construction (1951) Limited were not required to apply for and obtain a permit neither would the accused be required to make application. C.B.C. v. Attorney-General for Ontario (1959) S.C.R. 188 at 199, Rand J.A. said:-

> "If the Sovereign is free to broadcast on Sunday, those who do the acts necessary to that service are immune from prosecution because the act they do is the lawful act of the Sovereign, attributable to him and untainted with criminal character."

[para19] In Campbell-Bennett Limited v. Comstock Midwestern Limited et al (1954) S.G.R. 207 at 216, Rand J.A. held:-

> "The mutilation by a province of a federal undertaking is obviously not to be tolerated in our scheme of federalism, and this from the beginning has been the view taken of provincial legislation of the nature of that before us."

[para20] In Rex v. Rhodes, (1934) O.R. 44, it was held that the whole field of legislation in relation to aerial navigation in Canada belonged to the Government of Canada and the Ontario Highway Traffic Act which provided that "no person other than one holding a chauffeur's license shall operate or drive a motor vehicle on a highway unless he holds an operator's license issued to him under this section", did not apply to a member of the R.C.A.F. while driving a motor vehicle, the property of His Majesty in the Right of Canada, while on military or public duty and in obedience to a superior officer.

[para21] It was contended that the accused was the authorized agent of Defence Construction (1951) Limited. In Tamlin v. Hannaford (1950) 1 K.B. 18, the Court of Appeal held that the British Transportation Commission, a statutory corporation created to own and operate the transport services in England, was not an agent of the Crown because the act setting it up did not expressly say so. Denning L.J. at p. 25 said:

> "When Parliament intends that a new corporation should act on behalf of the Crown, it as a rule says so expressly."

The Defence Protection Act, Sec. 8(2) provides:

> "The Minister may, with the approval of the Governor in Council, enter into a contract with a person authorizing

> that person to act, under the control and direction of the Minister, as an agent of His Majesty, for any of the purposes for which the Minister is authorized to act on behalf of His Majesty under this Act."

From this it is clear that the Minister has no right to authorize a person to act as an agent of His Majesty except with the approval of the Governor in Council. It follows that Defence Construction (1951) Limited could not appoint anyone to act as agent of the Crown and the Magistrate erred in finding that the accused for the purpose of application for a permit, was, by implication or in express terms of the Contract an authorized agent of Defence Construction (1951) Limited, a Crown Corporation acting in Right of Canada.

[para22] With respect to the contention that the money payable under the Bylaw was in the nature of a tax it is clear from Section 388 and the Bylaw itself that the purpose of the Bylaw is to regulate and control buildings to be erected, altered or repaired in the City of Ottawa and that the fees payable are for the inspection and approval of the plans of the proposed buildings and the principles laid down in the cases quoted do not apply.

[para23] The answer to the question submitted on the stated case is in the negative. The appeal is allowed, the conviction quashed, any money paid for fine or costs to be repaid and any security deposited returned.

[para24] There will be the usual order for the protection of the Magistrate.

Smith v. Paris (Town)

Between
William Jack Smith and Paul Knight Smith, applicant, and
The Corporation of the Town of Paris, respondent, and
The Corporation of the Town of Paris, applicant, and
William Jack Smith and Paul Knight Smith, respondent

[1995] O.J. No. 3176
DRS 96-02255
Court File Nos. 561/95 and 942/95

Ontario Court of Justice (General Division)
Kitchener, Ontario
Sills J.
September 29, 1995.

Counsel:
G. Miller, for the applicant.
D.K. Davis, for the respondent.

[para1] SILLS J.:-- In Court File No. 561/95, the applicants, Smith seek:

a. a declaration that a site plan agreement dated June 5, 1990 registered against the lands and premises known as 88 Dundas Street East, Paris Ontario, or alternatively that certain paragraphs in the said site plan agreement, are null and void and are of no force or effect;

b. a declaration that the said lands and premises permit:

i) the use of a service garage by the owner and/or his tenant;

ii) the use of the said lands for the maintenance, repair, storage and parking of motor vehicles including tractors and trailers,

iii) the offloading and onloading of equipment from trailers associated with the repair and

maintenance of trailers; and

c. a declaration that the use of the lands for repair, maintenance and storage of tractor trailers of the applicants or their lessee is not in contravention of By-law C-3.2 (highway commercial) and the said

site plan agreement dated June 5, 1990.

[para2] In Court File No. 942/95, the applicant municipality seeks:

a. an injunction prohibiting the use of the subject lands other than in accordance with a site plan agreement dated June 5, 1990; and

b. an injunction prohibiting truck traffic on lands zoned Rural Agricultural (A), the storing or parking of tractors or trailers.

BACKGROUND

[para3] Prior to September, 1987 the lands in question had been zoned rural agriculture (A). In or about September, 1987 the zoning for the front portion of the subject property was changed by By-law amendment to highway commercial (C3) under which the use was restricted to the following:

(a) a service garage;
(b) detached dwelling;

(c) accessory building.

[para4] That zoning amendment was incorporated into comprehensive zoning By-law no. 2974 for the Town of Paris on January 19, 1988 and that specific special C3 zone is found at section 14.3.2 of that comprehensive by-law.

[para5] The then owner wished to construct a service garage building and in August of 1989, applied to the Committee of Adjustment for the Town of Paris for relief from the required lot frontage of 30.5 metres (or 100 feet) which frontage applied to non-residential uses in the C3 zone. The property in question had a lot frontage of 73.22 feet. The Committee of Adjustment approved the variance sought, subject to the then owners entering into a site plan control agreement with the Town of Paris:

a. restricting vehicular ingress and egress to and from the site to an area described as a mutual right of way shown on a schedule to the agreement;

b. restricting the use of the lands to the repair and maintenance of tractors owned by the owner;

c. containing other provisions essentially not in question in these proceedings.

[para6] The said site plan agreement was entered into by the then owners and the town of Paris under date June 5, 1990 and registered against the title to the said lands.

[para7] On September 4, 1992 the applicants, Smith, herein, purchased the property in question from a mortgagee under its power of sale. They used the part of the property zoned C3 as a service garage for their vehicles and rented out the residential home situate on the property and permitted by the special C3 zoning applicable to the property.

[para8] In July 1994, the applicants, Smith leased part of the specially zoned C3-2 property to one Mike Hicks. Mr. Hicks operates a truck haulage business which includes hauling construction equipment for a Quebec manufacturer from the manufacturing plant for delivery to purchasers of the equipment, and a "load and go" business whereby his haulage units pick up and deliver directly without using the property which is the subject of this application. Hicks operates his business from his office in Burford, Ontario at which he receives orders, dispatches vehicles and transmits instructions for delivery orders to his drivers. He presently owns four truck tractors and four trailers, the trailers being designed to transport construction equipment. His primary use of the property at 88 Dundas Street, Paris Ontario is for service and maintenance of his tractors and trailers and for

parking and storage of them at that site. In addition, he uses the site for loading, unloading and storage of construction equipment (front end loaders) being delivered from the Quebec manufacturer to purchasers of that equipment. This use of the property in question accommodates the transfer of the front end loaders from a short haul unit bringing the equipment from Quebec, to long haul units for transport to the purchaser of that equipment. This usually involves two or three such front end loaders which may be kept at 88 Dundas Street for up to one week. The aforementioned uses of the property continued without incident until January 1995 when the applicant Smith applied for rezoning of a part of the agriculturally zoned lands to the rear of the subject property for use as a "towing compound". This application was refused by the Town of Paris and at the same time the planning committee and council advised the said applicants that their tenant, Hicks, was in contravention of the use specified in the site plan agreement applicable to the lands zoned C3-2, and required adherence to the site plan agreement and the cessation of parking of trailers or equipment by Hicks at 88 Dundas Street.

[para9] At issue, in this application are:

1. are the uses of the C3-2 part of the lands at 88 Dundas Street by the tenant of the applicants in compliance with the zoning by-law section C3-2 and the site plan agreement dated June 5, 1990; and

2. 15 paragraph 35 of the site plan agreement ultra vires and null and void?

ZONING BY-LAW PROVISIONS AFFECTING 88 DUNDAS STREET, PARIS
ONTARIO

[para10] The special C3 zone applicable to 88 Dundas Street East premises is as follows:

14.3.2 - "Notwithstanding the uses permitted by section

14.1 in this by-law the permitted uses in the C3-2 zone shall be limited to the following:

i. A service garage;
ii. a detached dwelling;
iii. an accessory building."

[para11] "Service garage" is defined in section 2.0 of by-law 2794 as 'garage, service' shall mean a building or structure which is used for the maintenance and repair of motor vehicles, or where motor vehicles are parked or stored for compensation, hire or sale, but does not include the installation of outside gasoline pumps for retail sale or an autobody repair shop."

[para12] "Accessory buildings and uses" are dealt with in section 6 of the by-law. In section 6.1.1 "accessory uses permitted in all zones" sets out "where this by-law provides that a lot may be used or a building or structure may be erected, altered or used for a purpose, that purpose shall include any building structure or use accessory to such purpose, ..."

[para13] Under section 2.0, of the By-law, "accessory" is defined as follows: "accessory when used to describe a use building or structure shall mean a use, building or structure that is normally incidental, subordinate and exclusively devoted to a main use, building or structure and located on the same lot as the main use, building or structure."

[para14] It is the position of the respondent municipality that the applicant's tenant, Hicks, is using the subject property for storage or parking of his tractors and trailers and for loading and unloading his trailers and for temporarily storing construction equipment pending further shipment thereof and for dispatching trucks or transports from the subject property. The respondent takes the position that the use being made of the subject premises by Hicks is not within the "service garage" use permitted by the by-law but rather the use is as a "cartage, express or truck terminal or yard" which is not permitted in the C3-2 zoning category. "Cartage, express or truck terminal or yard" is defined in the by-law as meaning "a building or place where trucks or transports are

rented, leased, loaded and unloaded, kept for hire or stored or parked for remuneration or from which trucks or transports are dispatched, or where goods are stored temporarily for

further shipment."

[para15] The applicants Smith take the position that the zoning category C3-2 permits:

a. the repair and maintenance of motor vehicles (including tractors and trailers);
b. the parking and storing of motor vehicles (including tractors and trailers);
c. unloading and reloading of construction equipment in the course of delivery or trans shipment, as a permitted accessory use.

DECISION

[para16] When the respondent municipality approved the rezoning of the subject property in 1987 and then incorporated that zoning amendment into the comprehensive zoning by-law on January 19, 1988, it was obviously intended that the permitted commercial uses be restricted to "a service garage" and "an accessory building" (2 of some 27 permitted non-residential uses in the C3 category), coupled with the residential use of a detached dwelling which would otherwise have been excluded from the C3 zone.

[para17] The definition of "garage, service" contemplates two uses namely:

a. a building or structure which is used for the maintenance and repair of motor vehicles, or
b. where motor vehicles are parked or stored for compensation, hire or sale.

The definition precludes the installation of outside gasoline pumps for retail sale or the use of an autobody repair shop. There is no restriction on the use of a "service garage" confining the use maintenance and repair of motor vehicles either for compensation, or without compensation, and consequently, the committee of adjustment exceeded its authority in imposing a term of a site plan control agreement restricting usage to servicing the owners own vehicles. Section 44 of the Planning Act permits the committee of adjustment to authorize such "minor variance from the provisions of the by-law in respect of the land, building or structure or the use thereof, as in its opinion is desirable for the appropriate development or use of the land, building or structure, provided that in the opinion of the committee, the general intent and purpose of the by-law and of the official plan, if any, are maintained." It is not a "minor variance" within the authority of the committee of adjustment to detract from a permitted use authorized by council of a municipality nor is it within the authority of the committee of adjustment to require such a restriction as a term of a site plan control agreement. Section 41 of the Planning Act (section 40 at the time that the impugned site plan agreement was entered into), does not contemplate or authorize a clause such as clause 35 of the site plan control agreement herein dated June 5, 1990 and it is therefore beyond the power of the committee or the municipality to require such a clause. In accordance with clause 30 of the said site plan control agreement it is severable from the said agreement. That finding makes it unnecessary for me to rule whether or not the tenant, Hicks, is an "owner" authorized to use the subject property for the maintenance and repair of tractors owned by him but, under the Planning Act definitions, "lessee" can be an "owner".

[para18] With respect to the parking or storage by Hicks of his trucks and trailers at the subject property, the definition of "service garage" refers to "a building or structure where motor vehicles are parked or stored for compensation, hire or sale". The definition of "cartage, express or truck terminal or yard" refers to "a building or place where trucks or transports are ... stored or parked for remuneration .....". The wording of both these definitions appears to be such that the storage or parking for purposes other than for remuneration are precluded. However, the definition of "accessory" is clearly available to both uses and it follows that for the "service garage" use, motor vehicles may be parked or stored in conjunction with their

maintenance and repair but not for a use which is accessory to "cartage, express or truck terminal or yard."

[para19] "Motor Vehicle" is not defined in the zoning By-law. "Vehicle" is defined as meaning, inter alia, "motor vehicle" and includes "trailer" which is not further defined. This definition is almost in the precise terms of the definition of "vehicle" in the Highway Traffic Act.

[para20] "Motor Vehicle" is defined in the Highway Traffic Act as including "an automobile, motorcycle, motor assisted bicycle, unless otherwise indicated in this Act, and any other vehicle propelled or driven otherwise than my muscular power, but does not include a street car, or other motor vehicles running only upon rails, or a motorized snow vehicle, traction engine, farm tractor, self-propelled implement of husbandry or road-building machine within the meaning of this Act."

[para21] "Trailer" is defined in the Highway Traffic Act to mean "a vehicle that is drawn upon a highway by a motor vehicle except an implement of husbandry, a mobile home, another motor vehicle or any device or apparatus not designed to transport persons or property, temporarily drawn, propelled or moved upon such highway, and except a side car attached to a motorcycle, and shall be considered a separate vehicle and not part of the motor vehicle by which it is drawn."

[para22] The standard dictionary definition of "motor vehicle" (Webster's New World Dictionary Third Edition) is "a vehicle on wheels, having its own motor and not running on rails or tracks, for use on streets or highways." The same dictionary reference refers to "trailer" as "a cart, wagon or large van, designed to be pulled by an automobile, truck or tractor."

[para23] I conclude from the foregoing that "trailers" used by Hicks, in respect of the applications before me, are not motor vehicles and my use of the words "motor vehicle" in this decision excludes "trailer" by definition.

[para24] The use of the subject premises for the purpose of loading, unloading and storage of construction equipment, however temporary, is not contemplated within the permitted use of "service garage". It is obvious that such use is contemplated by, and appropriate to, the uses permitted in "cartage, express or truck terminal or yard". Consequently, the use by Hicks of the premises at 88 Dundas Street East, Paris Ontario for loading, unloading and storage of construction equipment or front end loaders is not permitted under the C3-2 zoning applicable to that property.

[para25] Apparently, Mr. Hicks has deviated from the provisions of paragraph three of the site plan agreement dated June 5, 1990, by accessing the lands zoned C3-2 across the lands to the rear zoned Rural Agricultural A for purposes within the permitted uses of the lands zoned C3-2. In doing so he is in breach of paragraph three of the site plan agreement and schedule A thereto. The said schedule A properly shows means of vehicular ingress and egress to the lands zoned C3-2 and binds the applicants Smith and their tenant Hicks. In addition, it is not a lawful use of the lands zoned Rural Agricultural A by the applicant Smith or their tenant to access the lands zoned C3-2 over the lands zoned Rural Agricultural A and, in doing so, they will be in breach of the zoning by-law.

[para26] The said site plan agreement provides in paragraph four thereof, for vehicular parking and storage of vehicles on the lands zoned C3-2. Those provisions are binding on the applicant Smith and their tenant and the respondent municipality is entitled to enforce those provisions of the site plan agreement.

[para27] Accordingly, the applicants Smith shall have judgment for declarations that:

a. paragraph 35 of site plan agreement dated June 5, 1990, and registered against the subject lands as A-387359 is null and void and of no force or effect;

b. that the lands and premises at 88 Dundas Street East, in the Town of Paris zoned C3-2 permit:

i. the use of a service garage by the owner and/or the tenant of the said lands and premises;

ii. the use of the said lands and premises for the maintenance and repair of motor vehicles and the parking or storing thereof accessory to such maintenance and repair.

[para28] The Corporation of the Town of Paris shall have the permanent injunction prohibiting the owners and/or tenants of the premises at 88 Dundas Street East, in the Town of Paris, from:

a. using the subject lands for any purpose other than repair and maintenance of motor vehicles;

b. parking or storing of motor vehicles on the subject lands other than as accessory to the repair and maintenance thereof and other than in accordance with paragraph four and schedule A of the site plan agreement dated June 5, 1990 and registered as

instrument number A-387359 for the Land Registry division of Brant;

c. from accessing the lands zoned C3-2 across the adjacent land zoned Rural Agricultural A; and

d. from loading, unloading and/or storing goods in the course of trans shipment in or on the subject lands.

[para29] Success on these applications being divided, there will no costs of either application.

SILLS J.

Pedwell v. Pelham (Town)

Between
Robert Pedwell, Keith Pedwell, Mary Pedwell, Linda McLean and
LandPark Homes Inc., plaintiffs, and
The Corporation of the Town of Pelham and Robert Judge, defendants

[1998] O.J. No. 3461
DRS 99-00649
Court File No. 5650.5/95

Ontario Court of Justice (General Division)
Welland, Ontario
Fleury J.
Heard: October 14-17, 20-24, 27, 28, and November 7, 1997.
Judgment: August 25, 1998.

Counsel:
Ann Dinnert and Jonathan Wigley, for the plaintiffs.
Thomas Bielby, Michael Mollison and Peter Haney, for the defendants.

[para1] FLEURY J.:-- In this case, I have to determine, pursuant to section 15 of the Building Code Act, whether a building permit should have been issued to the plaintiffs. This case also raises the issue of the good faith of a municipal administration in passing a certain zoning by-law. It also addresses other issues which are secondary and pale in significance to the central issue as to whether or not the officials acted in good faith in passing the by-law in question.

[para2] The facts can be summarized as follows:

[para3] One Lulu Peacock, the widow of a man who had grown grapes on lands owned by him for over 50 years, sold these lands to one Tim Pedwell, a local solicitor. This transaction was completed on October 31, 1988. As part of the deal, it was understood that a one acre parcel of land would be severed and returned to her. An application was eventually granted by the Niagara Land Division Committee for this purpose. This process came to a successful conclusion on or about February 1, 1989 when the OMB denied an appeal from a neighbour. Because of the nature of the application, it was essential that the property be returned to Mrs. Peacock by way of deed and that she reconvey all but 1 acre back to Mr. Pedwell.

[para4] As he was about to arrange for these transfers, Mr. Pedwell became aware that Mrs. Peacock was not well and that she was suffering from terminal cancer. He then explained to her the concept of "testamentary devises" as a means of subdividing lands. After a short discussion with her and other members of her family, it was agreed that they would proceed in this fashion. In effect, Mr. Pedwell was renouncing the right to have reconveyed to him some 5 one acre parcels of land which by will Mrs. Peacock proposed to transfer to her own children. He prepared a deed reconveying the lands to Mrs. Peacock and delivered it to her. He also took instructions for a will which he arranged to have executed on March 8, 1989.

[para5] Mrs. Peacock, quite unexpectedly died on March 10, 1989, a mere two days after executing her will, and before the actual deed reconveying the lands to her had been registered. There is some uncontroverted evidence, however, that the deed had been returned to Mr. Pedwell for him to register it on behalf of Mrs. Peacock. This he did on March 13, 1989. As part of the transaction, Mrs. Peacock also devised some 19 other parcels to Mr. Pedwell's nominees in a typical "checker boarding" package.

[para6] In the summer of 1989, Mr. Breitkreuz, an officer of LandPark Homes became interested in the lots in question. He tendered an offer to purchase for 15 of the lots at a cost of $72,000 per lot. This offer was subject to a host of conditions, one of which was that building permits be obtainable for the lots in question. In November, he made an informal call on the Chief Building Official, Mr. Robert Judge, to enquire about the Town's requirements concerning building permits. Mr. Judge expressed surprise at the request, as he was not aware of any subdivision in that area of the Town and asked Mr. Breitkreuz to bring in his plans. Mr. Breitkreuz complied. Unbeknownst to Mr. Breitkreuz, Mr. Judge took the plans to Mr. Bernardi, the Town Planning

Administrator and to Mr. Barker, the Town Planner. The planning officials became alarmed at this type of development and contacted the city solicitor for advice. The waters become somewhat murkier at this point.

[para7] It is unclear when Mr. Judge advised Mr. Breitkreuz as to the requirement of a septic tank approval from the Health Department. In any event, what is clear is that when he approached the Health Unit, Mr. Breitkreuz was told unequivocally that he would not be getting an approval since the lots were considered illegal by the Town and he was referred back to the Town. Mr. Breitkreuz therefore did not consider taking additional steps towards securing the septic tank permits in light of the attitude taken by the Health Unit officials. In early December 1989, Mr. Pedwell contacted Mr. Judge, advising him of the creation of the lots by testamentary devise and seeking clarifications as to what would be required by way of pre-requisites for the granting of building permits. The next contact was with Mr. Brooks, Town solicitor. He called Mr. Pedwell and asked for details concerning the testamentary devises. On December 6, 1989, Mr. Pedwell wrote to Mr. Brooks, giving him all of the details and asking that he instruct the building officials to issue building permits. When he heard nothing for close to a month, Mr. Pedwell became concerned over the delays and instructed Mr. Breitkreuz to attend and formally apply for the building permits. On January 3, 1990, Mr. Breitkreuz presented formal applications to Mr. Judge for all of the lots in issue.

[para8] There apparently had already been a number of meetings between various officials in the Town planning department and a decision had been made to stop this development in any possible way. Mr. Judge was initially told by Mr. Bernardi and by the Town solicitor to delay or "hold off" the issuance of any building permits. I have no hesitation in concluding that, had these applications been treated normally, approval would have been granted well prior to the end of January subject to the issue of the Hazard Zoning by-law and subject also to the availability of septic tank permits.

[para9] There is no doubt that the planning staff determined in early January that their priority was to preclude the granting of building permits to this project. This is clear from the time records kept by Mr. Barker as well as from the viva voce evidence of a number of the witnesses called by the defense. I have no doubt that these Town officials saw their actions in this respect as being in the public interest. However, their own subjective assessment of the righteous character of their conduct does not resolve the problem of whether they acted in good faith in so doing. I will return to this issue later in this decision.

[para10] What transpired after that is a classic case of "stonewalling". No one came right out and told the applicant that his application would not be granted. Instead a letter was sent to him on January 24, 1990 under the signature of Mr. Judge, telling him that:

> "A decision with respect to your applications has been deferred pending an evaluation of the impact on Local Regional and Provincial Planning Policies and legislation by our Town Solicitors and Consulting Planners.
>
> Unless special circumstances arise of which we are presently not aware, you can expect a decision on or before February 9th next."

[para11] In the meantime, Town officials had been busy drafting an interim control by-law ("ICBL") whereby all development would be frozen with respect to agricultural lands except for lots created prior to November 11, 1974, or lots created by consent to sever. In effect, in light of the restrictions imposed, this particular legislation was targeting only testamentary devise lots and in particular, at the time in question, the municipality only knew of the Pedwell lands as having been subdivided by testamentary devise. It was contemplated that the "ICBL" would be discussed at a special council meeting on January 29, 1990 and would be considered for adoption on February 5, 1990. No notice whatsoever of either of these Council meetings nor of the proposed ICBL was delivered to the Pedwells directly or to Mr. Breitkreuz.

[para12] Then on February 6, 1990, Mr. Judge sent a letter

to all the plaintiffs telling them of the passage of the ICBL and that pursuant thereto no building permit could issue. The plaintiff immediately launched an appeal to the OMB of the interim control by-law and also commenced appeal proceedings pursuant to section 15 of the Building Code Act to compel the chief building official to issue the disputed building permits.

[para13] Unbeknownst to the plaintiffs, there appears to have been correspondence between the Town solicitor and the OMB dated June 27, 1990 recommending that the matter of the appeal be put in abeyance pending a decision in the matter already launched before the civil courts by the plaintiffs. The OMB was apparently content to allow such a procedure and did so, in this case, without even notifying the appellants. Further, in complete disregard of the rules of a fair hearing, the OMB notified the Town that it had concerns with respect to the appeal period as contained in the by-law under appeal and went further to recommend a course of action to remedy the situation which was to re-enact the by-law, thus raising a significant question as to the very validity of the by-law under appeal. All of this without in any way communicating with the plaintiffs. Even though the Town cannot be blamed for the lack of fairness of the process embarked upon by the OMB, there is no doubt that viewed objectively by an outsider, such action would have been sufficient to convince an observer that the OMB was in "cahoots" with the Town and that it was trying to help one of the parties appearing before it without even notifying the other party who was entitled to a full and fair defense of his interests as well. I surmise that the matter of the appeal was never rescheduled since I proceeded to hear the plaintiff's application for relief under section 15 some 7.5 years after it was launched. Needless to say that if this matter had been before me in a friendly atmosphere on a request for an adjournment to an indefinite date, I would have felt compelled to enquire as to the plaintiffs views on this. I am shocked that the OMB did not do this.

[para14] Subsequently, and while attending another hearing of the OMB concerning a matter not connected to this application, Mr. Keith Pedwell, the father of Tim Pedwell who had also been a solicitor in this area learned from Mr. Brooks that notwithstanding that the municipality was aware of the legitimacy of the severances created by testamentary devise, that they were determined to resist their applications for building permits, that "they would give (them) a real hard time" and that their development plans would be held up until the lots were not worth anything. Mr. Brooks denied saying those exact words. However he did not deny the conversation generally. Since he did not have any notes concerning this conversation, he was going by memory alone trying to recall events that took place some 5 or 6 years ago. Mr. Pedwell, on the other hand, had taken notes at the time and was adamant as to the attitude put forward by Mr. Brooks. I have no difficulty preferring the evidence of Mr. Pedwell over that of Mr. Brooks for the simple reason that the kind of attitude demonstrated throughout this application by the Town and its officials was quite illustrative of the mind set shown by Mr. Brooks at the time. Furthermore, and in deference to Mr. Brooks, he was trying to recall a conversation held many years before and had no independent means of checking what may have been said. We are all aware of the frailty of memories, especially when one has to reach back some years, to what may have been an uneventful exchange, not even worthy of being jotted down. I find as a fact that the conversation that took place was generally in the words testified to by Mr. Pedwell. The action for damages was commenced shortly thereafter.

[para15] The legislation calls for notice to be given to interested parties. Oddly enough, notwithstanding that the Town's entire planning staff were concentrating on defeating this particular development, nobody thought it necessary to serve the plaintiffs personally or directly with any of the notices required. Instead, the Town opted for the publication in newspapers having a general circulation in the area. Notwithstanding the fact that the Town knew of three separate legal interventions on behalf of the Pedwells they failed to give them any direct notice of any of their meetings. Thus, one year after the initial passing of the interim control by-law a further meeting was held during which Council passed a motion extending the interim control by-law for another year while waiting for the report. Again without notice to the plaintiffs.

[para16] Near the end of 1991, the report was finally tabled by Mr. Barker. Again the municipality did not forward

a copy of the report directly to the Pedwells or their solicitors of record. A public hearing was held on January 28, 1992, unattended by the Pedwells since they had not been made aware of this meeting.

[para17] On February 3, 1992, again without notice being given to either their counsel or the Pedwells themselves, Council during a regular session passed a by-law, increasing from one acre to one and a half acres, the size of the lots where building could be allowed on lands zoned for agricultural purposes. This would in effect defeat the various applications contemplated by the Pedwells.

[para18] A further application was then launched to quash this zoning by-law on account of the fact that it was passed in bad faith.

[para19] It is trite to say that city officials do not need to agree with every development that crosses their desk. However, they are duty bound to honour any request for services if it complies with the law in every respect. Their likes and dislikes must then be set aside. What we have here, is a request for building permits being submitted to the Chief Building Official. What we heard him say in evidence is that he would have granted building permits after examining the applications had it not been for the interventions of Mr. Bernardi and of the Town solicitor who had told him to "hold off" on processing the applications and had health unit permits been available. Section 6 of the Building Code Act is quite explicit as to the requirements to be met by an applicant for a building permit. It provides that:

> "(6) The chief official shall issue a permit except where,
>
> (a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law;
>
> (b) ...
>
> (c) the application therefore is incomplete or any fees due are unpaid."

[para20] Surely, it is imperative that other Town officials not interfere with the Chief Official in the performance of the duties imposed upon him pursuant to section 6 of the Act. Once he has been appointed he should be left alone to perform the functions entrusted to him. If the Chief Building Official is to deal fairly with each application, it is imperative that any such decision making be done impartially. The true measure of impartiality is the ability of the judge or other official to take some distance from his own preconceived notions and prejudices to arrive at a fair decision, looking only at the issues in question. Mr. Judge therefore should have reached his decision without consulting all other planners and officials and the decision should have been made on the basis of the requirements outlined in section 6 of the Act and not on the basis of extraneous concepts and policies.

[para21] And even though it might be argued that Mr. Brooks was only giving advice in response to a request for same, the kind of instructions given smack of interference rather than advice. Firstly, we have Mr. Judge admitting quite candidly that the January 24 letter bearing his name was not drafted by him but rather by Mr. Brooks. We have Mr. Judge indicating unequivocally that it is not his function as a building official to assess "the impact on Local, Regional and Provincial Planning Policies and legislation", exhibit No. 1, tab 18. It became very clear to me that Mr. Judge felt that the matter had been taken out of his hands and that that was the main reason why these building permit applications were not processed in due course. There was no evidence that Mr. Judge was swamped by work and that he could not access those applications. Nor was there any evidence that Mr. Breitkreuz had failed to dot any of the "i"s or cross any of the "t"s. I find as a fact that had Health Unit permits been issued, there would have been no reason whatsoever to refuse the requested building permits.

[para22] I bring the parties attention to the clear prohibition appearing in section 22(1) of the Act and to the penalty section appearing in section 24 of the Act. One would have thought that Mr. Brooks and Mr. Bernardi would have known better than to interfere in the performance of the Chief

Building Official's functions.

[para23] I take it that no building permit will be issued with respect to unserviced lands without a septic tank permit being first issued by the Niagara Regional Health Unit. It is, in effect, a condition precedent to the granting of a building permit. It was argued at trial that because the plaintiffs failed to secure a septic tank permit prior to February 5, 1990 that their action is doomed. Let us therefore examine the circumstances of this failure to comply with the condition precedent. The only evidence that we have concerning the failure to apply to the Health Unit for a permit is in Mr. Breitkreuz' own testimony. He states that some time in January of 1990, he contacted the Health Unit to find out their requirements. He was told, right off the bat, that since his lots were considered illegal by the Town, that there would be no permits issued and that he had better talk to the Town to remedy the situation. We all know what good talking to the Town did.

[para24] The question to be answered by me is whether or not the failure on the part of Mr. Breitkreuz to secure a septic tank permit beforehand should be fatal to his application for judicial review of the Chief Building Official's decision. It would be a travesty of justice if it proved to be fatal. Where, as here, the Town has taken steps to notify the Health Unit of their legal concerns with respect to the creation of the lots and where the Health Unit's response is contingent on what the Town might have to say concerning the legality of the uses, the Town should be estopped from raising the absence of septic tank permits as an obstacle in the process of this appeal. After all, even though the Health Unit is technically completely separate from the Town administration, there comes a point when as a result of the collusion of employees between themselves any such distinctions tend to disappear.

[para25] In the case at bar, there seems to be no question that all planning forces joined to attempt to thwart what they saw as a flagrant attempt to circumvent the Planning Act. Unfortunately for every one, at that time, the Legislature in its wisdom had chosen to exempt testamentary devises from Planning Act controls. So there was nothing wrong with an individual working around the Planning Act in this fashion. There simply was no obligation to comply with the Planning Act and the Town knew this. Yet, two of its officials instructed the Chief Building Official to delay the processing of the applications for building permits. There is no authority for such delaying tactics.

[para26] It is for that reason that I feel completely confident in ruling in favour of the applicants in their appeal of the decision of the Chief Building Official. There will therefore be an order that the Chief Building Official issue a building permit to each of the applicants in this case subject to the plans complying with the building code and also subject to the securing by the applicant of a septic tank permit providing as well that the lands on which construction is being sought to be completed do not fall inside the "Hazard Zone". I am satisfied based on H&D International Group v. Toronto (City) (1988), 24 M.P.L.R. 187 that the effective time for me to consider is the time when the building official should have made his decision. In this case a decision should have been available clearly by the end of January of 1990. At that time there was no other applicable law which might have prevented the granting of the building permits sought by the plaintiffs. Any changes in the applicable law since that time should not affect the issuance of the building permits.

The Septic Tank Permits

[para27] Much of the time spent by the experts during this trial had to do with the vexing issue as to what should be required by way of septic tank beds to accommodate the number of lots being developed in this case. Mr. Gray testified for the defendants and attempted to establish the need for larger parcels of land (that is larger than 1 acre or .4 hectares) to deal with nitrates. His evidence was not very impressive. He appeared confused at times and did not have the expertise to back up many of his conclusions. He was also relying on an unissued report that was only considered as a draft policy. On the other hand, Mr. McGlone, the expert retained by the defendants, was a very good witness who explained every thing in clear and unambiguous terms. He took issue with the conclusions reached by the Niagara Health Unit and by Mr. Gray. He explained in clear language why he took exception to

their conclusions and I agree with him. Wherever there is a discrepancy between the evidence of Mr. Gray and Mr. McGlone, I much prefer the evidence of Mr. McGlone. Mr. McGlone was quite convincing in his testimony to the effect that he could easily design a septic tank system that would deal with all of the requirements of the Niagara Regional Health Unit and that it could be positioned on these one acre lots without any difficulty. Based on Mr. McGlone's evidence which I accept in its entirety, there should be no difficulties for any of the applicants in obtaining septic tank permits.

[para28] Why this issue became such a heated issue is not well explained by anyone. What seems, indeed, very strange is the fact that a lady by the name of Delaney was able to obtain a septic tank approval from the Town, barely a month before Mr. Breitkreuz applied and was told about the illegality of his lots. What seems strange is that Mrs. Delaney was one of Lulu Peacock's daughters and one of the beneficiaries under her mother's will of lands which in every other respect were identical to the lands bequeathed to Mr. Breitkreuz and in fact were part of the same so-called scheme to defeat the Planning Act.

[para29] I am aware of the fact that the Chief Official in the Health Unit has a lot of discretion in approving or not a particular septic tank proposal. I would hope that this official would consider these applications as any other application and that he would not insist on treating them as part of a larger development. Based on my finding that these lots are exempt from planning control under the Planning Act, I have no hesitation in declaring that each lot should be considered as a single application and not as part of a whole series of lots in a plan of subdivision.

[para30] In light of the established facts and the evidence given by Mr. McGlone, I am satisfied that the following findings of fact can be made:

a) The establishment of septic systems of Class VI on the lots will not create a nuisance.

b) The establishment of septic systems of Class VI will not be or likely to be contrary to the public interest.

c) The establishment of septic systems of Class VI on the lots will not create or be likely to create a hazard to the health or safety of any person or result in the impairment of the quality of the natural environment for any use that can be made of them.

[para31] The next issue and the most important one for me to determine is whether or not the municipality acted in bad faith in enacting its amending zoning by-law 1455.

Bad Faith

[para32] How does one determine whether a body politic acted in bad faith? It surely does not call for a minute examination of all of the actions of the members of the body to see if one acted in malice. It calls rather for an examination of the general attitude of the body politic to the task being approached. Two of the most important indicia of good faith identified by the Supreme Court of Canada were "frankness and impartiality". (City of Ottawa v. Boyd Builders (1965), S.C.R. 408 at 415) Can it be said that the Town officials in this case were frank and impartial? It seems to me that from the first contact between Mr. Judge and Mr. Breitkreuz there was a conspiracy of sorts between the various Town planning officials to defeat the development project being put forward by The Pedwells.

[para33] Further, in my opinion, the Town acted unlawfully in directing its Chief Building Official to "hold off" in processing these applications. This was a clear interference by officials with an officer who was by statute bound to process all applications submitted to him. There is to be no tolerance for this kind of interference with a person who is given a clear mandate by statute.

[para34] There was simply no hearing during which each party could expose its plans and its objections. Furthermore, I have no doubt that the Town administration set out to frustrate the Pedwell proposal by any means at its disposal.

Where could anyone see frankness in the Town's attitude? Where did it show impartiality?

[para35] There is no doubt in my mind that the Town officials thought that they were acting in the best interests of the municipality in so doing. Unfortunately, that kind of motivation is not enough. In City of Ottawa v. Boyd Builders (supra) the Supreme Court of Canada adopted the wording of Mr. Justice Roach J.A. in describing what constituted bad faith in that case. It said:

> "In passing By-law 311/63 the Council was not acting in good faith. It passed that by-law for the express purpose of defeating appellant's prima facie right to the permit. It yielded to the protests of some of the other owners in the immediate neighbourhood for whom the Planning Board was "sympathetic". It passed that by-law without any opportunity having been given to the appellant, which was so vitally interested, to make any representations concerning it. Every thing that was done to defeat the appellant's prima facie right was done behind its back for the obvious purpose of avoiding embarrassment that the appellant's protestations on its own behalf might cause. It is difficult to think of any stronger evidence of bad faith."

It is difficult to find more appropriate language to describe what actually took place in the case at bar.

[para36] To recap: after Mr. Breitkreuz showed Mr. Judge the plans, a number of meetings took place between various Town officials all with a view to stopping the proposed development. These meetings were conducted in secret, in the sense that no notice was given to the applicants herein and no report of such meetings was ever made available to them. As a result of these meetings, a decision was made to pass an interim control by-law to freeze this development. The Chief Building Official was told to "hold off" granting the building permits. A letter, not incorporating the Chief Building Official's concerns was sent out to the applicants setting out phony concerns and non-applicable considerations. A special meeting of Council was called for January 29, 1990 at which time the proposed development was discussed in camera. The plaintiffs did not receive any notice whatsoever concerning this meeting. On February 5, the Town passed its special control by-law. Again without notice being given to the plaintiffs. On February 6, notice was received by the plaintiffs of the passage of the ICBL and they were then notified that no building permits would issue during such period. On February 23, notice of appeal of the Chief Building Official's decision concerning the building permits was served on the defendants. On February 28, notice of appeal to the OMB concerning the ICBL was served by the plaintiffs. On April 6, 1990 in a letter sent by Mr. Brooks to the plaintiffs' solicitor, he suggested that the appeal of the Chief Building Official's decision be stayed pending the OMB decision on the ICBL. And yet in a letter to the OMB dated June 27, 1990, the Town solicitor, without copying the other solicitor, suggested that the appeal proceedings be adjourned until after the appeal of the Chief Building Official's decision had been heard, thus creating a completely vicious circle of delays. Which suggestion was agreed upon by the OMB on July 10, 1990 without notice to appellant's solicitor (see letter at exhibit No. 1 tab No. 27). On August 1, 1990 a statement of claim asking for damages against the defendants was issued. Notwithstanding the multiplicity of proceedings commenced by these plaintiffs against the defendants, the defendants did not see fit to notify the plaintiffs of the request for an extension of the ICBL, nor of the receipt of the Barker report nor did they notify them directly or indirectly of the public hearing convened to discuss this report nor were they notified of the intended wording of by-law 1455 nor were they given notice of the Council meeting when it was scheduled to be passed.

[para37] Although Council did not technically offend any requirements contained in the legislation with respect to the giving of notice, it is clearly an indication of Council's lack of openness and candour with the plaintiffs. It is crystal clear and I find as a fact that the only purpose being pursued by the ICBL was the frustration of the Pedwell development project. I find it offensive that no special effort was made to notify the plaintiffs of the various steps taken by the municipality in order to thwart their building projects and I find that this lack of notification was a further example of the bad faith demonstrated by the Town in

passing the ICBL and by-law 1455.

[para38] The Town approach was a far cry from the approach taken by Municipality of Taché in the case of James Kuchma v. The Rural Municipality of Taché [1945] S.C.R. 234. In that case Mr. Justice Estey speaking for a unanimous court had this to say at page 243:

> "It is not contended that the council acted hastily or without giving all parties an opportunity to be heard. In fact all parties were heard upon many occasions; even upon the date of the passing of the by-law on August 11th, 1941, those opposing the closing of the road were heard. On September 6th, the Secretary-Treasurer of the municipality advised the applicant that further protests must be made to the Municipal Commissioner. Further the correspondence between the council and the Municipal Commissioner indicates good faith when, as late as March 14, 1942, the Secretary-Treasurer of the municipality wrote to the Deputy Municipal Commissioner in part as follows:
>
> > `There are two sides to this question, one favours the closing of the road, the other wants it to be left open. At nearly every council meeting one side or the other comes up and wants and wants that.'"

[para39] As can be seen from the excerpts quoted, what seems to be paramount to the Supreme Court of Canada in determining whether Council acted in good faith is the hearing they gave to the opponents of the by-law. In this case, it might be argued that by virtue of section 38(3) of the Planning Act, there is no need for notice to the persons affected before an Interim Control By-Law is passed. It might therefore be argued that these cases on bad faith quoted above have no bearing on the issues before me. I agree that I am dealing, in this case, with legislation that is different than the legislation in effect at the time of these decisions. However, it seems to me that the earmarks of fairness or good faith can still be applied. In the first instance, as I understand plaintiffs' argument, they are not attacking the ICBL since they have long passed into oblivion. What they are attacking is by-law 1455 which they allege was passed in bad faith. There is no question that there was no hearing to which the plaintiffs were summonsed wherein they could have voiced their objections. Publication in the Pelham Herald was, in my opinion, a sure way of avoiding the plaintiffs. By reason of the fact that the plaintiffs, to the knowledge of the defendants, did not live in the Town of Pelham, it was a foregone conclusion that they would not receive the paper in question. And by restricting their notices to the Pelham Herald, the Town was in effect only paying lip service to the obligations imposed upon it by the legislation. Since I have found as a fact that this entire effort was aimed at defeating this very proposal it should have been obvious to anyone wishing to ensure a proper hearing that a letter addressed to counsel of record would have communicated all of the essential ingredients necessary to ensure a proper hearing. In failing to do so, I find that the Town deliberately avoided the prospect of a public hearing where the Pedwells might have called them to task on some of the more dubious aspects of their proposed remedies.

[para40] By-law 1455 had as its main purpose the defeating of the Pedwell applications for building permits. In order to achieve this objective the Town enacted a by-law that goes against the Regional Official Plan which states quite explicitly that "maximum lot size in the case of a lot ... shall not exceed an area of 0.4 hectares (1 acre) except ...". The Town has an obligation under the Planning Act to make its by-laws conform to the Regional Official Plan. Section 24 of the Act specifically states:

> (24) (1) " ... where an official plan is in effect, ... no by-law shall be passed for any purpose that does not conform therewith."

[para41] It does not require much by way of scepticism to assume that the real purpose behind this by-law was to frustrate the Pedwell plan. This, in my opinion, also stands as a further indication of the bad faith of the Town in passing this by-law.

[para42] It is clear in law that "a by-law which has not been passed by a municipal corporation in good faith and in the public interest, when passed is a nullity, and cannot be

changed or made otherwise by lapse of time, approval, registration or promulgation" Kuchma v. Rural Municipality of Taché (supra at p. 239).

[para43] The test as enunciated by the Supreme Court of Canada appears to be a dual test. Are there circumstances where a corporation might have acted in bad faith but in the public interest? And would this suffice to save the by-law? In Kuchma (supra) it would appear, at least from the treatment of the case by Mr. Justice Estey that he was not satisfied that the simple fact that the matter was handled with due regard to the interest of the public was sufficient to dispose of the issue. His discussion of the principles of good faith follow a determination by him that the municipality had indeed acted in the public interest. I take it from this approach that he is satisfied that a municipality cannot cloak itself in the public interest veil and hope to escape scrutiny on the issue of the good faith brought to bear on the resolution of the issues. In these days of increasing accountability of governments to the citizens who have voted them into office, I have no doubt that it would be considered only normal to insist that a municipal corporation act in the public interest but as well that in doing so it demonstrate good faith to the parties affected by its decision.

[para44] Thus I see no other avenue open to me but to declare that by-law 1455 is a nullity since I am of the opinion that it was passed in bad faith.

Delivery

[para45] Some considerable effort was made by the defendant to attack the delivery of the deed, the argument being that if there was no valid delivery, there was no valid title on the part of Mrs. Peacock to devise by way of will. I am satisfied, however, on the authority of the case of Zwicker v. Zwicker (1899), 29 S.C.R. 527 that there is simply no basis in law to doubt the validity of this transaction on this argument. The evidence to the contrary is quite compelling. Mr. Pedwell testified as to his delivering the deed to Mrs. Peacock on March 3, 1990. From that point on, therefore there can be no challenge of the delivery. The fact that the deed was returned to him for registration in the registry office does not operate as a reconveyance to him, by any stretch of the imagination. It is one thing to challenge and it is entirely a different thing to establish on a preponderance of evidence. There is simply no evidence whatsoever to contradict the delivery of the title deeds in question. In the absence of any evidence to the contrary, therefore, I have no other choice but to find that the deed had been delivered to the deceased some 7 days before her death.

[para46] Some attempt was made during the trial to cast aspersions on the good faith and the competence of Mr. Tim Pedwell. Firstly, let me say that it should not come as a surprise to a solicitor that the opponents may attempt to defend themselves by clawing at their attacker. Secondly, let me add that although there is no question that Mr. Pedwell did not keep records as complete as I am sure he would have kept had he anticipated this litigation, I am satisfied that he did in fact act as he says he did. And that he need not worry about the innuendos and comments concerning his practice in so far as his credibility is concerned.

The Claim For Damages

[para47] Extensive damages were claimed in this case. It cannot be said that the claim for damages came as a surprise to Council since very early in these proceedings Council was advised that damages as high as 1.5 million dollars would be claimed by the plaintiffs. The damages allegedly stem from the losses suffered by the plaintiffs as a result of the wrongful conduct of the defendants in refusing to issue building permits as requested.

[para48] On the evidence before me, there is no doubt as to the fair market value on the date of January 30, 1990. That is the sum of $72,000 per building lot as agreed upon between the Pedwells and LandPark Homes. The first issue to be determined is the number of building lots available to each owner. It was argued by the defendants that Parts 20 to 25 are situated within the Hazard Zone and that therefore these could never become building lots. The plaintiffs are willing to concede that lots 21 to 25 are within the Hazard Zone but dispute this allegation concerning lot 20. It was up to the plaintiffs to establish the full measure of their damages. In

so far as lot 20 is concerned, I am left with a significant doubt as to its availability for development. If a further study is required by the Niagara Escarpment Commission to determine if any part of lot 20 can be built on, then surely no satisfactory proof has been put forward for me to make any finding on this issue. I will therefore agree with the defendants in this respect. Lots 20 to 25 will not be considered as part of the lots which the plaintiffs can claim damages about.

Keith Pedwell

[para49] That leaves Mr. Keith Pedwell with six building lots. He should have received the sum of $432,000 by December 31, 1990. He now has six lots which, at present market values, could be sold at $50,000 for a total of $300,000. I prefer the valuation prepared by Mr. Wyrcimaga over that of the defendant's expert because Mr. Penwarden did not take an active enough role in this process. He was content to let a junior in his office do all the legwork. I was not much impressed by this junior who struck me as somewhat naive. Mr. Wyrcimaga, on the other hand, while not harbouring as many distinguished certificates as Mr. Penwarden, has a lot of experience in this field and his thirty years or more of selling in the area in question give him a better handle on the situation than any certificate ever could. Long experience in this field is often preferable to diplomas and other academic qualifications.

[para50] As additional costs, there would be the taxes paid by them on the lots in question since the date on which closing should have taken place. These would represent a total of $779.87 as shown in exhibit No. 8. As I understand the situation, an appeal was launched concerning the assessment of these lands in 1995 and a favourable ruling was obtained. This would explain the substantially lower rates of taxes for 1996-1997. This would bring the total amount for taxes paid per lot to $779.87 by the end of 1997 or $4,739.22.

[para51] The plaintiffs also sought to claim the amount of $1,809 per lot as representing additional costs which they would not have faced had the transaction closed in 1990. As the agreement calls for the purchasers to "be responsible for all costs of every nature and kind in relation to the property including the obtaining of building permits and servicing of the lots", there is no reason to add these charges to the plaintiff's claim.

[para52] The plaintiff Keith Pedwell has therefore lost the sum of $136,739.22 as a result of the Town's failure to issue building permits.

Mary Pedwell

[para53] The plaintiff, Mary Pedwell, has 5 building lots plus an "access lot". Her gross loss, with respect to the five building lots, is therefore $360,000 less the present value of these lots or $250,000 for a net loss from the sale of $110,000 to which should be added the taxes paid in the interim which amount to $834.02 for lot 8, $779.87 for each of lots 11, 13 & 17 for a total of $2,339.61 and $2,171.33 for lot 19 for a grand total of $5,344.96. Mrs. Pedwell's total loss would therefore be in the sum of $115,344.76.

[para54] As to the "access lot", it is comprised of one acre of land but was bundled separately in order to provide access to the lot owned by Robert Pedwell comprising some 60 acres. Now that some of the lots are said to be non-building lots, it is conceivable that this lot might be resurrected as a building lot and Mrs. Pedwell might try to designate lot 23 as an access lot. Who knows? I am however limited in my findings to conclusions based on the evidence before me. As things stand presently, therefore, I must address the plaintiff's claim in terms of a lot designated as an access lot which had a limited value of $3,000 when it was sold to a third party in early 1990. As I understand the facts, prices have been further reduced and this lot might only be worth $1,235 as of this date. I accept these figures and find that her gross loss with respect to the access lot is limited to $1,765 plus the costs of taxes paid on the lands in question during the relevant period. A review of exhibit No. 8 reveals these sums to be $779.87. This would bring the total loss of Mrs. Mary Pedwell to the sum of $2,544.87 for the access lot and her grand total to be $117,889.63.

Linda McLean

[para55] The plaintiff, Linda McLean, has one building lot. Her net loss is therefore the difference between the sale price of $72,000 and the residual value of $50,000 plus taxes paid by her of $779.89 for a net loss of $22,779.89.

Robert Pedwell

[para56] The plaintiff, Robert Pedwell, through this testamentary devise, inherited some 60 acres of land being parts 27, 28 and 30. These he sold to a third party in early 1990 for the price of $167,000. This offer having been made conditional to the granting of a building permit, it is obvious that same was refused in light of the interim control by-law passed by the municipality. During argument, counsel for the defense suggested that if I ruled that the interim control by-law had been legitimate, then I should not award damages to Robert Pedwell in light of the fact that the officials had acted legitimately in refusing the building permit since they would have then simply been obeying the law. The defense also argued that I should not grant damages for losses occurring after the expiration of the interim control by-law, since the plaintiff should have been seeking to mitigate his damages. There is very little merit to this latter argument since I would doubt the success the plaintiff would have had in seeking a building permit on a piece of land that the Town insisted until the very end was not created legally.

[para57] As to the argument raised concerning the legitimacy or lack of same of the interim control by-law, I am satisfied that it was never legitimate for the reasons outlined above. If I had been asked for a ruling on it, I would not have hesitated to declare it void for the following reasons: there was not, at the time of the applicant's approach to the Town, any concern with respect to testamentary devises. Nor was there any thought being given to commencing a study of non-farm development in agricultural areas. This last idea was the result of a conspiracy by the planners in order to put an end to the Pedwell project. They took every avenue they could, both in sending misleading letters to the applicants and in arranging their affairs to ensure that the Pedwells would never have an opportunity of getting their views heard, all with a view to defeating their application for building permits. As such this by-law was not passed in good faith and should never have seen the day. Furthermore, the illegal acts of Mr. Bernardi and of the Town solicitor who both interfered with the Chief Building Official and, in effect, prevented him from performing his statutory duties, shed such an unflattering light on this entire issue, that I doubt very much that any interim control by-law passed in these circumstances would have survived judicial scrutiny. I hasten to add that there was no evidence before me that the bad faith extended to the elected representatives who voted on the project. They may have been kept in the dark as to the real motives behind the planners' actions.

[para58] Harking back to the issue of damages caused to Robert Pedwell, therefore, I find that these damages were directly related to the invalid interim control by-law. Had there never been an application by the Pedwells for a building permit, I am satisfied that no interim control by-law would have been passed. The direct result for the loss of the deal is attributable to the inability of the vendor to deliver on an undertaking that a building permit would be available. The price agreed upon was $167,000 and the present value of such lands is $75,000. Expenses include the taxes paid and the spraying of the grapes which I find were reasonable in the circumstances. My review of the tax bills included in exhibit No. 8 show total taxes paid of $4,730.29 and the cost of spraying at $749. His total loss would therefore be $97,479.29. I am satisfied that in the circumstances, there is nothing that he could have done to mitigate his damages. Because of the mind set of the Town, he had to await the outcome of these proceedings in order to lift the heavy cloud weighing over this entire development.

LandPark Homes Inc.

[para59] The last item for me to determine is the quantum of damages, if any to be paid to the construction company, LandPark Homes Inc. The defendants argue that since there was no privity of contract between the company and the Town that there should be no liability whatsoever. Further they argue that there was no duty of care owed to the builder. This argument does not take into account the whole line of cases

decided after Hedley-Byrne & Co. Ltd. v. Heller and Partners Ltd., [1964] A.C. 465. There is no question in this case that the Town owed a duty to the owners and to whomever they may have reasonably foreseen the damages could extend to. They were explicitly notified by Mr. Pedwell of the existence of a contract for purchase and sale of the lands in question. They were in fact approached by Mr. Breitkreuz, the principal agent for the construction company, and they ought to have known that his company would likewise suffer damages. As such, I find that the Town knew of the builder's involvement and that they could foresee the damages to be suffered by the builder were they to continue to frustrate the Pedwell plan.

[para60] As to the exact amount of their damages, however, there is no agreement whatsoever between experts. Mr. Dunstan gave evidence from Deloitte, Touche on behalf of the defendants. His evidence was most impressive. I was generally unimpressed by the evidence of the plaintiff's witness, Mr. Berard. I accept that it is unlikely that Mr. Breitkreuz would have been able to construct all 13 homes over a period of time of two years without drastically changing the operation of his company. I am satisfied that he would not have been able to carry on in a "Ma and Pa" style of operation but that he would have had to hire some additional employees and that his profit margin would have been seriously affected. I also accept that a more realistic profit margin would have been in the range of 15% as opposed to 23% and 17%. As well, notwithstanding Mr. Wyrcimaga's optimism, I am satisfied that commissions would have had to have been paid on most of these sales. I accept Mr. Dunstan's revised figures as reasonably representative of the net profit picture that the construction company could have envisaged had the development been allowed to proceed. However, because of my specific findings concerning lot 20 and its unavailability for building purposes, I am left with only 12 sales. This would amount to gross sales of $4,260,000 and net profits of $283,373.60. The lost net profits are therefore the measure of LandPark Homes Inc.'s damages.

Costs

[para61] The issue of costs should not be difficult to resolve. It seems quite clear to me that costs should follow the event. Unless there are offers to settle in existence which are more favourable than my judgment, I would trust that the parties are able to resolve this issue between themselves. I will make myself available, however, should either party wish to make submissions on costs.

[para62] All of the amounts of damages which I have ordered to be paid should be paid by the Town and not by Robert Judge personally, who I am satisfied was not responsible for the actions taken by him or his associates at the Town.

[para63] I have made a number of findings concerning specific amounts of money in this judgment and I must admit to some malaise in concluding these reasons. My malaise stems from the fact that my review of the facts as pleaded in evidence leads me to conclude that calculations by both counsel would have been off significantly, hence my fresh numbers. If I have made some errors in calculating these figures, I trust that counsel can agree between themselves and can consent to an amendment to this judgment should these errors prove to be material.

FLEURY J.

Pedwell v. Pelham (Town)

Between
Robert Pedwell, Keith Pedwell, Mary Pedwell, Linda McLean and
Landpark Homes Inc., plaintiffs, and
The Corporation of the Town of Pelham and Robert Judge, defendants

[1999] O.J. No. 585
Court File No. 5650.5/95

Ontario Court of Justice (General Division)
Welland, Ontario
Fleury J.
Heard: January 21, 1999.
Judgment: February 26, 1999.
(7 pp.)

Counsel:
Thomas Richardson and Ann Dinnert, for the plaintiffs.
Thomas Bielby and Peter Haney, for the defendants.

[para1] FLEURY J.:-- This, hopefully, is the final act in the saga of the Pedwells versus the Town of Pelham. The issues which I have to decide are those of costs and of fixing pre-judgment interest. I have had the opportunity of hearing excellent submissions from both parties regarding the various principles involved in considering how to go about fixing costs and awarding pre-judgment interest.

[para2] Firstly, however, I would like to put to rest an argument put forward by one of the plaintiffs and that was the right of the said plaintiff to claim a higher interest rate in light of the losses in income suffered by him consequent upon his inability to reinvest the moneys which should have been generated by this transaction. As I understand the argument, it would be the plaintiff"s contention that they are entitled to interest on the non-pecuniary loss suffered by the plaintiffs in being stuck with lands which have diminished in value and which they have not been able to bring to market. I agree with counsel for the Town of Pelham that such a claim should have been outlined in the statement of claim and should have been pursued through that route. It is too late to make such a claim after the trial. That aspect of the plaintiff's

argument is therefore of no assistance to this court.

[para3] In so far as the rate of interest is concerned, I was invited to abandon the fixed rate provided for in the Courts of Justice Act in favour of a blending of rates, more in keeping with economic reality. It was suggested that if I were to accede to the request by the plaintiffs I would then be giving them a windfall in that interests rates have dipped so significantly since then, that they would have difficulty investing similar sums of money at half the rate provided in the legislation.

[para4] Interestingly enough, the act does not provide a mechanism for blending the rates as recommended. Section 128 is quite explicit; it reads:

> "(1) A person who is entitled to an order for the payment of money is entitled to claim and have included in the order an award of interest thereon at the prejudgment interest rate, calculated from the date the cause of action arose to the date of the order".

Granted section 130 gives judges a wide discretion in awarding

interest and I am sure that some of my brother judges who have blended the interest rates as I was invited to do, have used their discretion pursuant to section 130 in doing so. However, as I consider section 130, I don't have an unfettered discretion to dispense with the wording of section 128. I am mandated by the statute to take into account certain factors, the first one of which is the fluctuations in market interest rates. Now had the legislature been principally preoccupied by the market interest rate fluctuations, it could have easily provided for a blending of interest rates. The fact that it did not and that it has allowed this section to remain in its present state notwithstanding the very significant fluctuations of the past fifteen years speaks volumes about

its intentions. It seems to me that before I can deprive the plaintiffs of what is rightfully theirs, there has to be more than a simple fluctuations in the rates. Unfortunately for the defendants, I can find nothing in the remaining factors that would trigger my discretion to award less than the full amount of interest owing in this case. It seems to me that there is a certain wisdom in the Act in that it contemplates that a claimant should be entitled to claim a certain amount of interest from the date the cause of action arose based on prevailing market conditions at that time. Obviously, in our

case, if the deal had been allowed to go through as I found that it should have, then the Pedwells, Ms. McLean and Landpark Homes would have had the opportunity of investing the moneys generated by the sales in whatever form they might have chosen. It would be pure guesswork on my part to try to say that they would have only invested for a short period of time.

[para5] I am satisfied, in all the circumstances that the applicable rate of interest is the one prevailing during the second quarter of 1990 or 13.5%. It was conceded that the cause of action arose around that time and if it were necessary for me to make a finding to that effect, then I so find.

[para6] The second aspect of this decision has to be a determination of the issue of costs. I was invited by counsel for the plaintiffs to allow them their solicitor-client costs throughout the proceedings whereas the solicitors for the defendants opposed this conceding only that based on a specific offer to settle made by Landpark Homes, the corporate defendant should have its solicitor- client costs from the date of the offer.

[para7] Because of the length of the trial and because of the number of counsel involved and the time spent preparing for this trial, costs will unquestionably be a significant portion of whatever judgment I may pronounce. The obvious displeasure that I manifested at the municipality's conduct in this case was used by the plaintiff as fuel for its argument that I should grant costs on a solicitor-client basis as a means of visiting on the municipality a measure of my indignation.

[para8] There is no doubt in my mind, and I so found, that the employees of the municipality discovered in due course the full validity of the testamentary devises effected in this case. Nevertheless, they stuck to their guns and continued to deny building permits on the spurious ground that they were not sure of the legal status of the lots in question. They then, surreptitiously, passed an interim control by-law to specifically prevent this development from going ahead. Further, after a two year freeze of the lands, they amended their zoning by-law to increase the land requirements for such developments. I found that by-law to be a nullity as having been passed in bad faith.

[para9] Why in the world should these plaintiffs have had to be put through the hoops as they were in this case? Why should they have to dig into their own pockets to pay a portion of what must be sizeable legal bills simply for insisting that a right of theirs be respected by town officials who had a duty to them as well as to other citizens to abide by the law of the land? I can't think of any reason why they should and on the basis of the manifested bad faith with which these town officials dealt with the plaintiffs, I see no choice but to order that the Town be responsible for all of the costs triggered by the illegal acts of its officials. The only reason for the action was the arrogance of the city officials. The Town should therefore have to pick up the entire tab for its employees' wrongful conduct.

[para10] My order will therefore be that all legal costs incurred by the plaintiffs be paid by the defendant the corporation of the Town of Pelham on a solicitor-client basis.

[para11] Much argument was heard during submissions concerning the so-called insufficiency of the plaintiff's offer to settle. I was invited to conclude that it was not an offer that could be accepted in light of the many

imponderables left in it. I am satisfied that notwithstanding the imponderables it was an offer that was not quite as favourable to the plaintiffs as my ultimate decision and therefore, I would have no difficulty in concluding that solicitor-client costs should go to the plaintiffs at least

from the date of the offer.

FLEURY J.

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PENSION FUND REALTY LTD. v. CITY OF OTTAWA

122 D.L.R. (3d) 308
Affirmed 139 D.L.R. (3d) 576

Ontario High Court of Justice
Krever J.
April 23, 1981

ACTION to recover moneys paid under protest for a park levy imposed by the defendant municipality as a condition of issuing a building permit.

R.M. Nelson and G.N. Addy, for plaintiff.

F.C. Askwith and P.R. Lavigne, for defendant.

KREVER J.:-- This is an action for the return of a portion of money paid under protest by the plaintiff at the insistence of the defendant as the park levy demanded by the defendant as a condition of issuing a building permit for an addition to the Inn of the Provinces complex in Ottawa. The case turns on the correct interpretation of the defendant's park levy by-law. The issue is whether the park levy was payable on the lands comprising the entire complex, as enlarged by the addition, or only on the lands on which the addition was built. The defendant conceded that if the levy should have been imposed only on the lands on which the addition was constructed, it is not entitled to retain the money charged with respect to the balance of the lands.

On December 31, 1976, the plaintiff purchased two separate but adjacent parcels of land, the easterly and larger parcel from Urbanetics Ltd., and the westerly and smaller parcel from the trustees of the estate of Melvin Lawrence Brown. For convenience I shall refer to these parcels as the Urbanetics lands and the Brown lands. Together these two parcels formed a city block, the limits of which are Sparks St. on the north, Lyon St. on the east, Queen St. on the south and Bay St. on the west. The Urbanetics lands consist of 67,130 square feet and the Brown lands contain 10,750 square feet. In August, 1973, that is, prior to the effective date of the park levy by-law in question, the Urbanetics lands had been improved and developed by the construction of the Inn of the Provinces complex consisting of a 17-storey apartment-hotel tower and a 12-storey office tower, both resting on a common base. On the Brown lands there were located a number of older buildings housing a monument company, a restaurant and apartment buildings. In 1977, the plaintiff demolished the buildings on the Brown lands in contemplation of the erection on these lands of an addition to the apartment hotel on the Urbanetics lands. The addition was to be a 10-storey building resting entirely on the Brown lands and a one-storey elevator or service tower linking the addition to the existing hotel and which was to be built on the Urbanetics lands. To give a better idea of the dimensions of the proposed parts of the addition it may be pointed out that the parties agree that the gross floor area, calculated for floor space index purposes, of the [page310] addition is 59,286 square feet (on the Brown lands) and 2,449 square feet for the service tower for a total of 61,685 square feet.

In June, 1978, the plaintiff applied for a building permit to construct a 10-storey "addition" to the "17 sty off/hotel". The description of the proposed work in the application was "10-storey reinforced concrete and brick veneer; one underground level; 17-storey service tower to existing apartment hotel". It is common ground that the use of land under the relevant City of Ottawa zoning by-laws for the purpose of an apartment hotel is classified as residential and this classification made the park levy by-law applicable. It is important to bear in mind that, as I have already indicated, the original construction on the Urbanetics lands of the Inn of the Provinces complex occurred before the park levy by-law, and indeed the enabling amendment to the Planning Act, R.S.O. 1970, c. 349, had come into force. No park levy, then, was paid, or was payable, in respect of the original development.

When the plaintiff sought to pay the park levy at the time of the application for the building permit in June, 1978, it calculated the amount required on the basis only of the value of the Brown lands. The defendant refused to issue the permit until a park levy equivalent to 5% of the value of both the Brown

lands and the Urbanetics lands was paid. Rather than delay the commencement of the construction of the addition the plaintiff paid an additional amount reflecting the value of the Urbanetics lands. It did so, as I have said, under protest and the question for determination is its entitlement to be repaid this portion of the levy.

The resolution of this issue depends on the true interpretation to be given to certain provisions of the Planning Act, as amended, and the defendant's By-law 40-74, as amended by By-law 194-75. The relevant provisions of the Planning Act, as enacted by 1973, c. 168, s. 10, are the following:

> 35a(1) In this section and in section 35b, "redevelopment" means the removal of buildings or structures from land and the construction or erection of other buildings or structures thereon.
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> . . . . .
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> 35b(1) As a condition of development or redevelopment of land for residential purposes, the council of a municipality may, by by-law applicable to the whole municipality or to any defined area or areas thereof, require that land in an amount not exceeding 5 per cent of
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> the land proposed for development or redevelopment be conveyed to the municipality for park purposes.
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> . . . . .
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> (6) The council of a municipality may accept money to the value of any land required to be conveyed under this section in lieu of such conveyance and the provisions of subsection 11 of section 33 apply mutatis mutandis to all moneys so accepted. [page311]

Pursuant to this enabling legislation the Council of the defendant passed By-law 40-74, the park levy by-law, which became effective on February 18, 1974. The following portions of this by-law are pertinent:

> 1. "Redevelopment" means the removal of buildings or structures from land and the construction or erection of other buildings or structures thereon.
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> 2. Subject to Section 3, no person shall develop or redevelop land for residential purposes unless and until the owner of the land has:
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> . . . . .
>
> (b) paid to the Corporation money to the value of five (5) per cent of the land proposed for development or redevelopment for park purposes or other purposes.
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> . . . . .
>
> 5. The owner shall convey or agree to convey the land or pay the money referred to in Section 2 to the Corporation prior to the issuance of the building permit for the said development or redevelopment.

I have already pointed out that, because of the effective date of By-law 40-74, the defendant could not have required the payment of a park levy at the time of the construction, in 1973, of the original complex on the Urbanetics lands. The defendant's position was that the construction of the addition on the Brown lands and the linking service tower on the Urbanetics lands amounted to the developing of the combined lands and that, therefore, the park levy had to be paid against the entire site.

I have come to the conclusion that because the demolition of the older buildings on the Brown lands in 1977 was undertaken under the authority, not of the building permit in question, but rather of an earlier demolition permit and at the time of the application for the building permit the Brown lands had already been cleared, we are concerned, in this case, with "land proposed for development" and not "redevelopment". The question to be answered, then, is whether, when the building permit was applied for in June, 1978, what were proposed for development were the combined Brown lands and Urbanetics lands or only the

Brown lands. Does the fact that both parcels come under common ownership and, in effect, become one lot determine the matter? On the other hand, is the fact that the Urbanetics lands had already been developed by the construction, in 1973, of the original Inn of the Provinces complex, at a time, that is, when no park levy was payable significant? To put it another way, can vacant land be developed more than once for the purposes of the by-law? Does the fact that part of the addition, the connecting 17-storey service tower, was to be and was, in fact, constructed on the Urbanetics lands affect the matter, whatever the size of the land on which it was to be built [page312] as a proportion of the whole of the Urbanetics lands? These are some of the questions that arise on the facts of this case.

It is not in controversy that the Brown lands fall within the phrase "land proposed for development" and the plaintiff's liability to the park levy in respect of these lands is admitted. The building to be erected on the Brown lands took its character as an apartment hotel, a residential use, from its association or connection with the previously erected apartment hotel on the Urbanetics lands. But for this connection, it would have been a hotel and would have constituted a use that is commercial and, therefore, not subject to the park levy by-law at all. On the other hand, but for its association with the existing complex, it would have had to meet different set-back and parking requirements. If the plaintiff's total land holdings are to be considered as one lot it is arguable that the entirety is "land proposed for development".

The evidence is clear that the linking 17-storey service tower was to be built entirely on the Urbanetics lands. As part of the connecting operation, the plaintiff did work on the ground floor of the existing apartment hotel, at the janitor's closet and the service elevator. The rear portion of the existing building, for the width of the service tower, had to be removed. The meeting-room arcade on the ground floor became the main corridor to the addition. According to other evidence, a loading bar was converted to a storage area, meeting-rooms were rearranged to some extent, and some wash-rooms were enlarged. It was agreed that the plaintiff was entitled to carry out this alteration work under the terms of the building permit for the new wing and service tower.

There are other factors that support the defendant's position. The floor area of the new hotel wing was tied to the floor area of the existing apartment hotel. The Brown lands were zoned ROx(3.0) which permitted a floor space index of 3 for commercial use and 5 for residential use. As I have indicated, although the new wing, standing by itself, would have been characterized as a commercial use, it was permitted a floor space index of 5 because the existing hotel on the Urbanetics lands fell within the zoning by-law's definition of residential use by reason of its apartment-hotel nature. Moreover, the new hotel wing was credited with surplus gross floor area left over from the construction of the complex on the Urbanetics lands. Again, as previously pointed out, parking was not required in connection with the building constructed on the Brown lands. The plaintiff was permitted to provide parking on the Urbanetics lands and off-site at two locations. It is agreed that if anyone, other than the plaintiff, as [page313] owner of the existing Inn of the Provinces complex, had owned the Brown lands, on-site parking would have been required in connection with the new building. Finally, access from every part of the new wing to every part of the rest of the complex can be had without going outdoors.

The plaintiff's position that the Urbanetics lands should not be considered in determining the extent of the "land proposed for development" is supported by other aspects of the case. Some of them have already been mentioned. At the time of the application for the building permit the Urbanetics lands had already been developed by the construction of the existing Inn of the Provinces complex in August, 1973, prior, that is, to the passing of the park levy by-law. Both parcels of land, the Brown lands and the Urbanetics lands, were purchased separately from different vendors and had separate legal descriptions and, therefore, identities. The Urbanetics lands were purchased with the existing Inn of the Provinces on them. The Brown lands contained residential premises, a restaurant and a monument-maker's establishment, all of which had to be, and were, demolished. The plaintiff's application for the building permit in June, 1978, related only to the new hotel wing and service tower. The new service tower itself consisted of less than 1% of the gross floor area. Mr. Lawrence Paquette, the manager of the

zoning regulations division of the defendant, called on behalf of the defendant, expressed the opinion that the minor alterations to the existing complex, necessitated by the construction of the link, taken by themselves, would not constitute development or redevelopment. All of these factors support the argument that the two parcels of land retained their separate identities up to and including the time of the construction which made no significant change to the Urbanetics lands and the building on them. The Brown lands, by contrast, were converted from vacant lands to lands on which a new 10-storey hotel wing was erected. Given the separate identities of the two parcels, the insignificant change to the existing structure on the Urbanetics lands and the extensive transformation of the Brown lands, the construction on the latter did not amount to the development of the former with the result that the former ought not to be considered when determining what was the "land proposed for development".

The case-law is of limited assistance in the resolution of the problem. To decide whether land is being developed or redeveloped, the more relevant of the cases have looked to the magnitude of the project involved. Thus, for the purpose of determining [page314] whether the city could require an owner to enter into a development agreement under the provisions of the Planning Act, Steele J. for the Divisional Court, in Re Slau Ltd. and City of Ottawa et al. (1976), 14 O.R. (2d) 514, 74 D.L.R. (3d) 181, 1 M.P.L.R. 234, said at p. 519 O.R., p. 186 D.L.R.:

> I am of the opinion that the term "development" has a meaning analogous to "redevelopment" within s. 35a of the Planning Act and that neither relate to minor construction such as a small portion of a building or structure.

The magnitude of the proposed undertaking was again underlined by the Divisional Court in Re Thomas C. Assaly Corp. Ltd. in Trust and City of Ottawa (1977), 18 O.R. (2d) 198, 82 D.L.R. (3d) 124, 4 M.P.L.R. 213. At p. 201 O.R., p. 128 D.L.R., Craig J. had this to say:

> Having in mind the object and intent of ss. 35a and 35b is to place conditions on the development or redevelopment of land or buildings, it is my view that the emphasis is not whether such development or redevelopment
>
> constitutes one or more buildings but the emphasis is upon the magnitude of the project which may require the imposition of conditions in order to establish orderly development or redevelopment.

If, then, magnitude is the correct criterion by which to judge whether what is involved is the development of land, it can be said that the extent of the construction that was to take place and that did take place on the Urbanetics lands was so slight, when compared to the size of the existing structure, that this property was not "land proposed for development" and ought not to have been taken into consideration in the calculation of the park levy payable by the plaintiff. It is my opinion that this, indeed, is the fair and correct result, but not solely because of the magnitude criterion. It seems to me that, given the plain and ordinary meaning of the governing language of By-law 40-74, the lands on which the existing Inn of the Provinces stood on the date of the application for the building permit had been developed when that complex was constructed in 1973. In the light of the special definition of "redevelopment" in s. 1 of the by-law (and in s. 35a(1) of the Planning Act), it cannot be said that the Urbanetics lands were proposed for redevelopment when the permit was sought, since no removal of buildings or structures from these lands was involved. Moreover, having previously been developed, it cannot be said that, at the date of the application, they were proposed for development.

There is to my mind an even more cogent reason for reaching this result. If the defendant's argument is correct a development in respect of which a park levy was paid would be assessable again for park levy whenever it was sought to add an extension to it. [page315]

Thus, for example, if the original Inn of the Provinces had been constructed on the Urbanetics lands after the effective date of the park levy by-law, it would have been subject to the levy of 5% of the value of the Urbanetics lands. The later addition of the new wing on the Brown lands and the service tower, constituting, according to the defendant's submission, the

development of the entire city block, would have rendered the Urbanetics lands again subject to the levy of 5% of the value of these lands. That cannot be what was intended by the Legislature and by the Council. The park levy must relate only to the proposed development of the Brown lands.

For these reasons the plaintiff is entitled to the return of that portion of the levy paid by it that related to the Urbanetics lands. The parties agree that the property should be valued at $42 a square foot. The total amount paid by the plaintiff was $194,700, which was the defendant's estimate of 5% of the value of the entire city block. The lands which should have been used as the basis of the levy contain, it is agreed, only 10,750 square feet the value of which, for present purposes, must therefore be taken to be $451,500. Five per cent of this amount is $22,575, the amount properly payable by the plaintiff to the defendant as a condition of the issue of the building permit. The difference between the amount paid by the plaintiff and the amount which it should have paid was $172,125. The plaintiff will, therefore, have judgment for the sum of $172,125, together with the pre-judgment interest pursuant to the provisions of s. 38 of the Judicature Act, R.S.O. 1970, as amended by 1977, c. 51, s. 3(1), and the costs of this action. If the parties do not agree with my mathematical calculation, I may be spoken to.

Judgment for plaintiff.

Pettinato v. Oakville (Town)

Between
Edward and Marisa Pettinato, Dale and Annie Wishnousky, Mark and Jennifer Dockstator, David and Sharon Beattie, David and Regina Hargreaves, Terrence and Catherine O'Grady and David and Dawn Barnes, applicants, and
The Corporation of the Town of Oakville, respondent

[1996] O.J. No. 2526
DRS 96-15860
Court File No. M13367/96

Ontario Court of Justice (General Division)
Zelinski J.
June 25, 1996.

Counsel:
R.S. Sleightholm for the plaintiff.
H.R. Watson for the defendant.

ZELINSKI J.:--

The Issue

[para1] Life has been kind to Mr. and Mrs. Pettinato, who live at 2279 Shipwright Road, Oakville, Ontario, as well as to their neighbours. They are the applicants in this matter. I presume that their good fortune is as a result of their diligence, skill, training, attention to duty and whatever else is encompassed in the work ethic.

[para2] Being a resident of the Town of Oakville, I take notice that their good fortune includes living in one of the finest communities in this province. Oakville benefits from the preservation of mature trees, lush ravines, and many amenities. It also has easy access to Toronto. The applicants, moreover, live within one of the finest newer subdivisions in the "Town". Houses on Shipwright Road, and in the adjacent neighbourhood, are in the luxury category. Floor areas are commonly in excess of 3,000 square feet. When built in 1989, these homes were sold for prices in the range of $325,000.00 - $400,000.00. Shipwright Road is within, and services, a residential area, zoned R5.

[para3] Since construction and until recently, all of the homes on Shipwright Road have been used exclusively as single family residences. That was what was intended when the subdivision was built. However, the Town's zoning by-law authorizes certain "permitted uses" within residential areas provided that they conform to, and maintain, requirements intended to preserve the relevant lifestyle. This and includes adequate and appropriate parking.

[para4] A day nursery is such a permitted use in the R5 zone, despite the commercial objective of privately run nurseries.

[para5] Consistent with the planned use of the neighbourhood, 2275 Shipwright Road, the ("Kinder Site") which abuts the Pettinato home, has until recently, also been used as a residence. A certificate of occupancy has, however, now been granted to permit Enriched Kinder Kare Inc. ("Kinder Kare") to use that site as a day nursery operated by Mrs. Janice Lee, who does not, and does not intend to, reside on the premises. Up to 48 children and six staff will be accommodated. It operates from 7:00 a.m. to 7:00 p.m.

[para6] The building permit to permit the conversion of the residence to a day nursery was issued to Kinder Kare without notice to the Pettinatos, the other applicants, or any adjoining owners. The conversion is now complete and, as converted, the Kinder site premises are not suitable to be used as a residence. Despite the objections of the applicants, when they learned of the intended use, the conversion has proceeded to its present stage. This was on the basis of a determination by the Chief Building Official ("CBO") of the Town that the zoning was appropriate and that there was no other choice except to issue the permit. Clearly if the building permit had been denied, and Kinder Kare persisted, the CBO would face an application in this Court to enforce its entitlement to the building permit.

[para7] In my view the manner of use of the day nursery has exacerbated the applicants' concerns about its presence, this is as a result of the Town administration's interpretation of the parking requirements set out in its zoning by-law. Wishing to minimize "on-street" parking, within the Town, it is a requirement, of day nurseries, that there must be "1 off-street surfaced parking space for each required staff member, which may be in tandem ... ". Six parking spaces are required at the Kinder Kare day nursery.

[para8] The CBO is satisfied that this requirement has been met by Kinder Kare by the parking arrangement which it has implemented. Simply, the former lawn on the Kinder site has become the surfaced parking space for two vehicles. In the result, two parking spaces are obtained by use of the existing double garage. Two more parking spaces are provided by using the driveway to the garage. The paved lawn meets the remaining parking space requirement.

[para9] Although the houses on Shipwright Road achieve luxury status, the side yards between adjoining houses are modest. Mr. Pettinato estimates that vehicles parked on the former lawn of the Kinder site are located "slightly more than five feet from the lot line of [his] property".

[para10] I am of the view that fair minded persons, including persons unable to enjoy the luxurious life-style of the applicants, would agree that this is not desirable or consistent with neighbourhood parking standards intended to improve lifestyles within the community. The mandatory parking requirements have been satisfied in a fashion sure to be a daily source of aggravation.

[para11] Even recognizing the need for daycare which is readily accessible to the community, this should not be achieved by substantial diminution of a neighbourhood lifestyle. The daycare undoubtedly affects the enjoyment, and possibly the value, of the properties of the applicants.

[para12] This undesirable result has been recognized by the Town. It has now passed an interim control by-law which will only permit day nurseries in limited locations for one year, while a review of day nurseries throughout the Town is conducted. Counsel for the Town acknowledged that this interim control by-law was as a consequence of the concerns of the applicants.

The Positions of the Parties

[para13] The applicants' position is simply stated. They contend that the relevant provisions of the zoning by-law of the Town, related to parking, prohibit front yards of residential homes from becoming parking lots. These requirements, in their view, continue, and prohibit the mandatory parking spaces of a day nursery being located in front yards. In the result, in this instance, as the back yard of the Kinder site is now a playground, and as side and rear access to the rear yard for parking is not available in any event, the application must succeed. Their analysis of the by-law requirements may be summarized as follows: (references are to sections in the zoning by-law)

a) Six parking spaces are required for six staff members (s. 30(2)(k));

b) The location of parking spaces for residential uses" is determined by s. 30(1)(b);

c) Use of a "front yard" for parking is prohibited by s. 30(1)(b)(v);

d) A "front yard" is defined as "a yard extending across the full width of the lot between the front lot line and the nearest part of any building on the lot" (s. 2(63)(a))

[para14] The reply of the Town is equally simple. Upon conversion the Kinder site ceases to be the site of a "residential use". In the result, neither s. 30(1)(a) nor s. 30(1)(b) have application. Only s. 30(2)(k) applies. That section, as previously noted, deals with numbers of parking spaces and not the locations of those spaces.

Analysis

[para15] The applicants have not argued the effects of s. 30(1)(a) relying solely upon s. 30(1)(b). That section, as noted, refers to "residential uses". It is framed within the zoning by-law in the following manner:

> 30. Parking
>
> (1) Parking Regulations Applying to All Residential Zones
>
> (b) Where parking facilities are required or permitted for residential uses other than detached dwellings ...
>
> (v) ... no area may be constructed fix or
>
> used for parking or storage within a front yard.

[para16] Section 31 is the section of the by-law which permits the use of day nurseries in residential zones. It is framed, within the zoning by-law, as follows:

> 31. Provisions for detached dwellings - ... R5 ... Zones ...
>
> (1) Permitted Uses
>
> In the ... R5 ... Zones the following uses shall be permitted.
>
> (a) a detached dwelling,
>
> (g) churches and ... day nurseries.

[para17] The significance of the word "dwelling" is important. It is found in s. 30(1)(b) and is also incorporated in the heading and body of s. 31. The definitions of "dwelling" and "residential" in the by-law are, in part, as follows:

> 2.(19) "dwelling" means a place of residence ...
>
> (48) "residential" means designed, adapted or used as a home or residence for a family or household, ...

[para18] As a sub-class within the definition of "dwelling", there is also a definition of a "detached dwelling". It is found in s. 2(19)(f) and reads as follows:

> (f) "detached dwelling" means a separate building occupied or designed to be occupied by one or more persons as a single non-profit housekeeping dwelling unit, including domestic servants and non-paying guests;

[para19] Mr. Sleightholm, for the applicants, advances that, as the Kinder site was originally designed and was used as a residence, it remains residential by definition and continues to be governed by residential requirements for purposes of parking, regardless of its converted use. In essence, he suggests "once a residence, always a residence".

[para20] Mr. Watson, for the Town, suggests that by such standards, "permitted uses" could never take place. Indeed no development would ever be possible. Farms would always remain farms. It is, he advances, those requirements which apply to the converted use, and not the original use, that must govern. Specifically in this instance, the parking requirements are only those parking requirements which are applicable to the converted use. Once a building is designed for, altered to or used as a lawful "permitted use" in a residential zone, it ceases, he submits, to be designed or used as a home or residence, hence it is not "residential", nor is its use a "residential use".

[para21] The seminal determination is whether the requirement for parking at a day nursery is governed exclusively by s. 30(2)(k) or whether that section must be read in conjunction with s. 30(1)(b).

[para22] Clearly the prohibition against parking within a

front yard is only applicable where the subject property is a "residential use". The question then becomes whether a day nursery, which is a "permitted use" in a residential area continues to be governed by standards applicable to "residential use".

[para23] As noted, a "dwelling" is, by definition, a "place of residence". Any use of a "dwelling" is, thereby, the use of a "residence" with the result that, arguably, such use is a "residential use". The specific definition of a "detached dwelling", being one "designed to be occupied ... as a single non-profit housekeeping dwelling" supports that position, incorporating, as it does, the concept of the initial purpose or design and its intended/actual use as a "dwelling".

[para24] "Residential" is also, by definition, something which is "designed, adapted or used as a home or residence". The use, of something which was "designed, adapted or used", as a home or residence is again, arguably, a "residential use", regardless of what the building may be converted to.

[para25] Assuming (without determining the point at this stage), that such arguments are valid, the next question is whether the fact that a home used and/or designed for residential use is no longer subject to relevant and (until then) applicable parking location requirements simply because it is converted to a "permitted use" under s. 31. Does its redesign and/or adaptation and/or use as a day nursery put an end to the existing parking requirements?

[para26] Of course these arguments, if valid, apply only to conversions of "homes" to "permitted uses".

Interpretation of the By-law

[para27] With respect to the interpretation of the Zoning By-law, counsel for the applicants relies upon the broad principles stated in Re. Bruce and The City of Toronto, et al, [1971] 3 O.R. 62 (O.C.A.) wherein Kelly, J.A. states, at p. 67:

> The underlying purpose of the implementing by-law is, accordingly, to establish and maintain for each of the areas or zones into which the municipality is divided for the purposes of the plan, standards with respect to the use of land and the use and erection of buildings which will enhance and preserve the quality of life in the municipality and the amenities considered conducive to the health, safety, convenience and welfare of the inhabitants.
>
> * * *
>
> Such an approach is, I believe, compatible with the proven necessity for the employment of external controls for the preservation of a fair standard of housing and land use and the expressed will of the people for a universal application of orderly planning to that end.
>
> * * *
>
> Notwithstanding this, it is my belief that Ontario Courts now accept that the obligation imposed on the municipal council to plan for growth and development of the community demands recognition of the necessity or means to compel the observance of the rights of the community to determine and enforce the direction in which the community should be shaped, and that in this regard the rights of the community are paramount to the rights of the owner.

[para28] Consistent with this interpretation, I am of the view that, absent clear language to support the respondent's position, there is no basis for an interpretation of the Zoning By-law which does not, reasonably impose the additional parking requirements which have reference to "permitted uses" in "residential zones", on top of those already existing. There is no such clear language. On the other hand, there is, as stated, an arguable basis upon which the requisite "residential use" requirement of s. 30(1)(b) is consistent with a combination of parking requirements.

[para29] Further, when a residential zone permits uses which are commercial, and the homes in that area are strictly regulated to assure adequate off-street parking without the use of front yards for that purpose, there is no justification or reason to ignore those standards for converted uses, or to presume they no longer have application. This is, of course, absent a legislated requirement, in clear language, that requires another an interpretation. The quality of life of the relevant community (being that of the applicants) should be preserved as much as is reasonably possible, by the permitted non-residential uses, not diminished.

[para30] Support for this is also available in an analysis of the relevance and significance of the words "Provisions for detached dwellings" in the heading of s. 31 of the Zoning By-law.

[para31] In Driedger on the Construction of Statutes, Ruth Sullivan, 3rd ed., 1994, p. 268, the learned author states:

> General. In Parliamentary procedure headings are not considered an integral part of a bill as it goes through the legislative process. This peculiarity is reflected in the majority of Canadian Interpretation Acts, which state that headings do not form part of the enactment in which they are found. In the other Acts, headings are not mentioned. This treatment is unsatisfactory. To any person reading legislation, headings appear to be as much a part of the enactment as any other descriptive component. They form an obvious part of the context in which the provisions of an Act are read.
>
> * * *
>
> The view favoured in recent judgments from the Supreme Court of Canada is that for purposes of interpretation headings should be considered part of the legislation and should be read and relied on like any other contextual feature. In Law Society of Upper Canada v. Joel Skapinker, speaking of headings in the Charter, Estey J. wrote:
>
> > The Charter, from its first introduction into the constitutional process, included many headings including the heading now in question ... It is clear that these headings were systematically and deliberately included as an integral part of the Charter for whatever purpose. At the very minimum, the Court must take them into consideration when engaged in the process of discerning the meaning and application of the provisions of the Charter.
> >
> > This approach to headings in the Charter has been applied to ordinary federal legislation and, despite the Interpretation Acts, to provincial legislation as well. These cases make it clear that headings are a valid indicator of legislative meaning and should be taken into account in interpretation.

[para32] I am prepared to accept that, in the zoning by-law, the significance of the use of the word "dwelling" in the heading of s. 31 must be considered by me.

[para33] I am of the view that, consistent with the approach expressed in Re. Bruce, the municipal council of the Town, in enacting the zoning by-law, had in mind the "... recognition of the necessity ... to determine and enforce the direction in which the community should be shaped". That community was a residential community. Its rights are "... are paramount to the rights of the owner".

[para34] As stated previously, the foregoing is subject to clear language to the contrary. The by-law is not clear. In the result, "residential use" as contained in s. 30(1)(b) must be considered in conjunction with s. 31. Because "dwelling" means a "place of residence" by definition, s. 31 of the by-law can be reconstructed as follows:

> 31. Provisions for detached places of residence - ... R5 ... Zones
>
> 1. Permitted Uses in the R5 ... Zone ... the
>
> following uses shall be permitted:

a) a detached place of residence

g) churches ... and day nurseries ... [and other uses].

[para35] In the result, a building which is a home can become other things, including a day nursery. The permission to use such a "place of residence" as a "day nursery" does not detract from the fact it continues to be governed by parking concepts which are applicable to uses permitted in "places of residence".

[para36] In the result, s. 30(1)(b) which is dependent upon there being a "residential use", must be considered in conjunction with s. 31. "Permitted uses" under s. 31, invite their own parking requirements. In the case of day nurseries, the s. 30(2)(K) requirement specifies the numbers of spaces. In addition, with respect to day nurseries in converted homes, the location of those spaces must comply with s. 30(1)(b).

[para37] Succinctly the number of spaces required must be read as supplementary to, and not as replacing, existing parking requirements.

Conclusion

[para38] s. 8(2) of the Building Code Act R.S.O. 1990, c. B.13 requires that the CBO issue a building permit unless " ... the proposed building ... will contravene ... any other applicable law". Its issuance in this instance contravened the Zoning By-law. It should not have been issued.

[para39] The applicants are entitled to the Declaration that they seek. The Town will also take all necessary steps to enforce its Zoning By-law with respect to the Kinder site.

[para40] Interim relief sought by the applicants has become irrelevant.

[para41] Judgment accordingly.

[para42] I may be spoken to as costs if they cannot be agreed upon.

ZELINSKI J.

Petruzzi v. Coveny

Between
Caesar Petruzzi and Elizabeth Jane Petruzzi, Plaintiffs, and
Colin Paul Coveny and Cheryl Ann Coveny and the Township of Beckwith and Harold Betts, Defendants

Ontario Judgments: [1991] O.J. No. 1678
Action No. 280/87

Ontario Court of Justice - General Division
Ottawa, Ontario
Doyle J.
September 27, 1991

J. Patrick Watson, for the Plaintiffs.
Lee Ward, for the Defendants, Colin Paul Coveny and Cheryl Ann Coveny.
Susan E. Hodgson, for the Defendants, Township of Beckwith and Harold Betts.

DOYLE J.:--

ISSUES

In this action, the plaintiffs, purchasers of a residence from the defendants, Colin Paul Coveny (Coveny) and Cheryl Ann Coveny (Cheryl Ann), claim damages for defects in its construction. The residence is a three-bedroom bungalow built on a lot owned jointly by the Covenys and which is described as part of the south-west half of Lot 10, Concession 10, in the Township of Beckwith, in the County of Lanark and designated Part 2 on plan 27R1680. In addition, a claim is made for damages for emotional stress and trauma caused by the condition of the premises and the resulting problems. The plaintiffs further claim damages from the remaining defendants for failure to properly inspect the premises during its construction, thereby failing to enforce the Ontario Building Code, township by-laws and good construction practice.

FACTS

The Covenys sold the property to the plaintiffs on September 26, 1986. They had obtained a building permit from the Township of Beckwith, pursuant to an application for same dated July 9, 1984 (Exhibit 61). The application was accompanied by a set of plans but these could not be located. The application described a single family dwelling and garage with a crawl space instead of a basement and one bathroom in the bungalow.

Coveny, a brickmason, was building his first house and he purchased the plans for $200 from an architect who had placed an advertisement in a local newspaper. Coveny had poured the footings himself, his first experience in that kind of work, and he said he must have observed that operation at some time prior to the construction of this house. He also installed the drainage system although he had not done it before, and it was here that problems were serious. He had not read the Ontario Building Code before the commencement of work, and said he put up the building as if it contained only a crawl space instead of a full-size basement, as the permit issued to him was for that type of dwelling. He stated that he had connected a drainage pipe to the sump pit even though he had never done it before and had never seen it done. Despite raising the height of the basement ceiling to reach some 7' 2 1/2", he never made a change or alteration to the plans he had filed, relying on what he said was a statement made by the defendant Betts that he would look after the change on the plans.

Betts was hired in 1982, as Chief Building Officer and By-law Enforcement Officer for the Township of Beckwith, although he had no previous experience in inspections. He was 58 years of age at the time of the construction, and he had been a carpenter until 1970, at which time he became a general contractor.

There was no township engineer. Betts had no knowledge of the existence of a township building permit by-law until

litigation began. It came into effect in 1976. Betts had said at the examinations for discovery, he never made a note on his inspections, but at trial said he would have made notes on the back of a photocopy of the application for a building permit but was unable to find the copy for the subject property nor the plans submitted with the building permit. He could not specifically recall any of the minimum six inspections that should be made on the construction of any residence but felt he had fulfilled his obligations in this respect. His practice was to accept the word of the builder if he found a particular area of work had been covered up by the time he arrived for inspection. In the several years he worked as a building inspector, he had never issued a stop order nor asked that work be uncovered so he could do a proper inspection.

The Covenys had commenced the building of their residence in the fall of 1984, and had completed the basement and the ground floor as a cover by December of that year. The basement had been changed to a full height of 7' 2 1/2" by then and a bathroom had been installed in it. Both Covenys insisted that Betts was aware that they had moved in before the full first floor of the bungalow was built and that there was a bathroom in the basement. They alleged that Betts had used the facilities.

Construction then continued in the spring and the Covenys moved into the upper part in May 1985. They denied that water came into the basement at any time prior to the sale of the property to the plaintiffs. The electrical work, some of the plumbing and other special areas had been turned over to sub-trades. There was an interim approval of the rough electrical work but no final inspection and there were a number of dangerous conditions existing in that system when the Covenys sold.

An interim occupancy permit was issued by the Township but the time of its issue was disputed. Coveny said they received that approval in October 1984, when they moved into the basement. Betts said that it had to be in May 1985, as he could not and never would issue an interim occupancy permit if only the basement was constructed. No permit and no record of its issue were produced at trial.

No application was ever made for the final occupancy permit, and it is apparent it would never have been successful.

In October 1986, after the purchase, the plaintiffs said that approximately two inches of water had come into the basement through the joint formed by the footings and the walls. When Caesar Petruzzi (Petruzzi) saw this, he attempted to make holes in the basement floor to allow the water to escape but more water came in through the holes. Since then every spring and fall water has come into the basement. It would remain for a few days to a week.

Counsel for the Covenys argues that there was no evidence of water in the basement as the experts who viewed the premises for different parties saw only a dry basement and one in particular saw no water marks that would indicate consistent entry. This is the first issue to be decided. Gerald Coleman, the real estate agent who had negotiated the sale, had described a visit he had made to the premises in October 1986; to pick up his firm's sign and he and another agent had assisted in pumping the water out through a basement window. A neighbour, Joseph Doucett, had also testified that he saw water in the basement as well as a number of other deficiencies. He had noticed it coming through at the point of the footings on the south wall and most recently in the spring of 1990, just before he testified. I find that the plaintiffs' allegations on this point are to be accepted.

There were a number of other deficiencies complained of, some in the garage, at the front steps, at the cedar deck at the back, others with respect to kitchen cupboards, the kitchen flooring, the lack of a gas-proof wall separating the garage from the rest of the house, the fireplace hearth, roof trusses, and the inadequacy of support beams for the property.

THE LAW

At this point, it is necessary to determine whether any liability attaches to the Covenys as owner-builders, to Betts

and the Township as enforcers of the Ontario Building Code, the by-laws of the Township and good construction practice, to the plaintiffs with respect to contributory negligence and finally whether the principle of caveat emptor applies.

The plaintiffs have based their claims on a finding of negligence against all defendants and they say that the damages they have sustained by virtue of defects, of which they were unaware prior to their occupation of the home, are directly attributable to the poor workmanship on the part of the Covenys which in turn constitutes negligence on their part and they allege negligence on the part of the remaining defendants whom they say failed to ensure that the dwelling was constructed in compliance with building standards, thereby resulting in defects and causing the damages incurred by the plaintiffs.

In the case of a completed house, if a purchaser wishes to protect himself from a defect in quality when he buys a newly built home, he must do so by covenants in the conveyance (Redican v. Nesbitt 1924, 1 D.L.R. 536, 1924, S.C.R. 135). In Thomas v. Whitehouse 1979, 95 D.L.R. (3d) 762, 24 N.B.R. (2d) 485 (N.B.C.A.), it was said that caveat emptor will give way to a fraudulent representation. Based on negligence, however, a purchaser may recover if a new house is constructed in a negligent manner (Smith v. Melancon 1976, 4 W.W.R. 9).

In Anns v. London Borough of Merton 1977, 2 All E.R. 492, the Council of the municipality under its by-laws, was under a duty to inspect the foundations of buildings, particularly those parts which would be covered up as construction proceeded. Any weakness or defect in the foundations would be hidden and anyone who subsequently acquired the building would have no means of intermediate inspection. If the municipality was required to inspect, it must use reasonable care and that care must be related to the duty to ensure compliance with building by-laws and codes. Failure to do this would amount to negligence. In Anns, the inspections were inadequate and the Municipality, in addition, had approved defective plans. The duty of care extended to occupiers of the dwelling. Lord Wilberforce said at p. 504:

> To whom the duty is owed. There is, in my opinion, no difficulty about this. A reasonable man in the position of the inspector must realise that if the foundations are covered in without adequate depth or strength as required by the byelaws, injury to safety or health may be suffered by owners or occupiers of the house. The duty is owed to them, not of course to a negligent building owner, the source of his own loss.

Reference to Anns was made in Fraser-Reid v. Droumtsekas 1980, 1 S.C.R. 720 (S.C.C.), where the builder was found negligent in the construction of a dwelling and the court said at p. 726:

> The House of Lords has held that an action will lie, apart from any contractual warranty, against a builder for breach of statutory duty imposed by a building by-law, by any person for whose benefit or protection the by-law was passed. Anns v. London
>
> Borough of Merton (1977) 2 All E.R. 492. The English Court of Appeal has held that a duty of care is owed by a builder to prospective buyers, and the issue of whether or not there has been breach of the duty will depend on all relevant considerations going to the question: "Did the builder act as a competent and careful builder would have acted in what he did or did not do?" Barry v. Metropolitan Property Realizations Ltd. [1978] 2 All E.R. 445 (C.A.). See also button v. Bognor Regis United Building Co. Ltd. [1972] 1 All E.R. 462 (C.A.).

In City of Vernon and Phillips v. Manolakos et al. (indexed as Rothfield v. Manolakos) 1990, 1 W.W.R. 408; 63 D.L.R. (4th) 449 (S.C.C.), the court held that a municipal authority acting under statute owes a common law duty of care to neighbours and to subsequent owners in occupation of a subject property, who have not had an opportunity to inspect it, to ensure that the structure is safe and sound and that the applicable building regulations are complied with. The City of Vernon had issued a building permit despite the

manifest inadequacy of the plan which accompanied the application, relying on on-site inspections to ensure that the requisite standards were met. The court said that once the municipality had made a policy decision to inspect building plans, it owed a duty of care to all who might be injured by the negligent exercise of that power. It was required to show reasonable care in its powers of inspection and would incur liability only for these defects which it could reasonably be expected to detect and order remedied.

In Kamloops v. Nielsen 1984, 2 S.C.R. 2, 1984, 5 W.W.R. 1, 10 D.L.R. (4th) 641, the Supreme Court of Canada held the defendant municipality owed a duty of care to a subsequent owner-occupier of premises when it undertook inspections to enforce conformity with building by-laws and failed to see defects during construction which it should have been able to observe. It was held jointly liable with the owner-builder.

In Just v. British Columbia, 64 D.L.R. (4th) 689, the plaintiff was injured when a rock fell on his car on a highway maintained by the defendant. By s. 8 of the Highway Act, R.S.B.C. 1979, c. 167: "The Minister may . . . . maintain a highway". A crew established to deal with problems on cliff faces developed its own programme of inspection. The Supreme Court of Canada, in ordering a new trial after the plaintiff's claim was dismissed at trial and an appeal disallowed by the British Columbia Court of Appeal, held that the manner and frequency of inspections were not policy decisions but operational in nature and as such were subject to review by the court to determine whether the defendant has exercised due care. The court said at p. 691:

> In comparatively recent years the law of torts has evolved by imposing on public authorities a common law duty of care based on the neighbourhood or proximity principle, frequently called the Anns principle [infra]. This has resulted in substantially increasing their liability in negligence for activity which they are authorized to carry on by statute but in respect of which the statute imposes no duty of care. This change in the law was not brought about by legislation but through the evolution of the common law which has traditionally taken account of the changing views and needs of society.

and at p. 706:

> The decisions in Anns v. Merton London Borough Council and Kamloops v. Nielsen indicate that a government agency in reaching a decision pertaining to inspection must act in a reasonable manner which constitutes a bona fide exercise of discretion. To do so they must specifically consider whether to inspect and if so, the system of inspection must be a reasonable one in all the circumstances.

Caveat emptor must also be considered. A purchaser will not recover if he does not exercise reasonable diligence and fails to observe defects which he ought to see in the dwelling he purchases.

The following cases have been considered: Dutton v. Bognor Regis Building Co. [1972] 1 All E.R. 462; Gurdial Dha et al. v. Steven Ozdoba et al. dated April 2, 1990 S.C.B.C. (unreported); Batty et al. v. Metropolitan Property Realizations Ltd. et al., [1978] 2 All E.R. 445 Hansen v. Twin City Construction Company Ltd. and Stefanik [1982] 4 W.W.R. 261; Ordog v. District of Mission et al., 110 D.L.R. (3d) 718; 638733 Ontario Inc. et al. v. Ward 9 R.P.R. (2d) 278; McCallum v. Dean and Dean, [1990] O.W.N. 873; Brunswick Construction

Ltee v. Bernard E. Nowlan et al. [1975] 2 S.C.R. 523.

In Hansen and Ordog, recovery was allowed against the builders despite the absence of warranties as the plaintiffs had sued in negligence.

I conclude that the defendants owed a duty of care to see that subsequent occupiers of the property did not suffer damages through their negligence.

DAMAGES

An initial question to be answered is whether the area under the ground floor is a crawl space or a basement. The provisions of the Ontario Building Code contain different floor slab and drainage requirements for each type. In my view, there is no question that it is a basement. Coveny insisted it was only a crawl space but he also had relied on Betts to make the necessary changes on the plans filed with the Township when he "decided to go with a full basement after footings were poured". Coveny told Betts he would be increasing the height by adding rows of cement blocks to the foundation walls. He kept referring to it as a basement, and I find it incredible that he still insisted it was a crawl space. Even his expert witness, George T. McCaffrey, a professional engineer, described it as a basement, as clearance in the basement is more then 1.8 meters (5' 11").

The most important item of damages is that of the water coming into the basement. Petruzzi had dug two holes outside the foundation after water was found in the basement. In the first, he located weeping tile at the same elevation as the top of the footing, unheard of in construction. The second hole was dug in line with the sump pit, and he could not find a Y pipe or a T pipe attached to the 4" weeping tile which would be required to bring the water back into the house into the sump pit in order to pump it out. A requirement of the Ontario Building Code states that drainage tile must be installed completely underneath the footings (s. 9.14.3.3 of the Regulations), and it must have a depth of not less than 6" of crushed stone over it (S. 9.14.4.2).

Petruzzi could not locate crushed stone under the floor slab, and Coveny said he had placed mixed sand and gravel as a base for the basement floor and if there was crushed stone, it would have been part of that mixture. His brother said crushed stone was present. I conclude it was not. Bedrock was close to the surface of the earth and Coveny said he had run the drainage tile into the house under the footing and under the bedrock at a point where a cavity existed, and he insisted the water ran into the sump pit from under the sludge tank which formed the fourth wall of the pit, the other walls being poured concrete.

McCaffrey, the professional engineer retained by the Covenys, who had visited the site with John H. McCalla, a professional engineer retained by the plaintiffs, with a view to the preparation of a joint report on the steps to be taken to rectify the problem of water in the basement, had written a report on April 30, 1990 (Exhibit 34), in which he said:

> It would appear that the water infiltration results from the natural rise in the groundwater table above the level of slab-on-grade floor, there being no functioning mechanism in place to locally depress it. It was previously reported (Oliver Mangione McCalla, April 30, 1987) that the drainage tile is installed above the level of the floor at certain locations. The tile may or may not be adequately
>
> sloped, but regardless, it is not connected to an interior pumped sump pit.
>
> The installation of a properly installed perimeter drainage tile system should rectify the water infiltration problem. The tile should be set at all locations below the level of floor slab, with adequate positive slope to an interior sump pit.

McCalla's report dated April 30, 1987 (Exhibit 29) made it clear that there were three defects in the drainage system as follows:

1. The drainage pipe should be below the level of the basement floor as stipulated in paragraph 9.14.3.3 of the Ontario Building Code.

2. The top and sides of the drainage pipe should be covered with not less than 6" of crushed stone as stipulated in paragraph 9.14.3.5 of the Ontario Building Code.

3. The drainage pipe is not connected to the sump

   pit as stipulated in paragraph 9.14.5.2 of the Ontario Building Code.

In a later report (Exhibit 30) dated April 29, 1990, McCalla said the following:

> 3. By far the most important single factor is the lack of an effective perimeter drainage system. Because the floor is some 5 1/2" below the top of the footing under the south foundation wall, it may be difficult, if not impossible, to install the new perimeter drainage tile at a sufficient depth below the floor to effectively control high seasonal ground water levels.
>
> 6. Mr. McCaffrey and I agreed that an effective perimeter drainage system must be installed which would discharge into a new sump pit to be installed at a low point along the north foundation wall. A pump would discharge the collected water from the sump to the low ground to the west of Mr. Petruzzi's property.
>
> 7. We agreed that the critical factor was to ensure that the new perimeter drainage piping was placed along the south wall at a level several inches below the level of the basement floor in the periodic seasonal high ground water levels. If, when the ground was dug out along the south wall to install the new perimeter drainage system, it were to be found that the level of the bedrock was too close (say, 4" or less) to the level of the basement floor, it would be necessary to consider raising the level of the basement floor. The present headroom in the basement is 7' 2 1/2" so that raising the floor level by, say, the 8" necessary to cover the exposed footing along the south wall, would reduce the headroom in the basement to 6' 6".
>
> 8. In summary, the two principal factor causing the periodic water entry are the lack of an adequate perimeter drainage and disposal system together with the fact that the elevation of the basement floor is some 6" to 8" too low
>
> considering the lay of the land and other relative factors. It may well be possible to control and thereby prevent the periodic water entry by the installation of an effective perimeter drainage and disposal system alone but one should be prepared to consider raising the level of the basement floor if that is found to be impracticable.

McCalla's evidence confirmed his findings in the two written reports and he particularly found that the top of the drainage tile was 10 1/2" above the level of the floor in the basement on the south side of the house. The ground water was entering the basement area via the south foundation wall at the joint between the footing and the basement floor.

Both engineers confirmed there was no connection to the sump pit. McCaffrey noted in his April 30, 1990, report (Exhibit 34): "There was no evidence of any inlet into the sump from the exterior drainage tiles", and McCalla said by direct observation, he was satisfied that the drainage pipe was not connected to the sump pit.

McCaffrey's solution to the water infiltration problem was the installation of a proper perimeter drainage tile system, to be set at all locations below the level of the floor slab with adequate positive slope to an interior sump pit. He estimated the cost at between $5,000 and $6,000 including the cost of some tunnelling under the front steps to allow the drainage system to pass through. This sum also included the enlargement of the sump pit if necessary.

McCalla also felt the drainage system was essential and it would have to be sloped from the south side to the lower north side of the house. It would then enter the house on the north side to be collected in a new sump pit to be then pumped outside. McCalla felt there would be problems with the bedrock. If it was close to the surface, a trench would have to be dug through it to allow a proper slope throughout, and

this was an unknown quantity. If it became too expensive to cut through the bedrock to allow the tiles to run completely below the basement floor slab, consideration would then have to be given to raising the basement floor some 6" to 8" to save on the rock excavation. The new slab would in itself cost $7,000 to $12,000, particularly if the present slab had to be demolished. McCalla had estimated, as well, a cost of $6,000 for the drainage system, $1,500 to $2,000 to raise the cedar deck at the back or hand excavate under it after removing some of the boards of the deck in order to allow the tile system to be installed under the deck, and another similar sum to raise the front steps, first, to allow tunnelling through and secondly, to correct the problem of the settlement of those steps since the plaintiffs moved in. McCaffrey would have left the steps in their present position. Evidence had been given that settlement of some two to three inches had taken place and further foundation work was required to bring it back up to its proper position and prevent further settling. It should be raised to prevent the last step from being too high. McCalla would allow a further figure of $1,500 to $2,000 for the trench in the bedrock. The total for the drainage system and the repair of the front steps would run from $10,500 to $12,000 in his estimation.

There were two written submissions made which were supported by the viva voce evidence of their authors. The first, from Donald Laporte of CR Associates, showed an estimated cost of $12,400 for the correction of the drainage system and it included $2,500 for the replacement of the cedar deck which Laporte said would be damaged during its removal to allow excavation for the drainage tile system. Laporte had also estimated $10,601 as the cost of a new slab in the basement. The evidence of both McCaffrey and McCalla supported the view that this would be unnecessary if the drainage tile system was installed below the level of the floor slab in a proper slope. It is all the more important to dig through the bedrock to achieve a proper system, as it would not only save the expense of a new slab but would allow the additional 6" to 8" of headroom in the basement if the floor level did not need to be raised.

A second submission, by L.B.L. Construction; for $3,590 was too low and contained too many exclusions of responsibility to be taken seriously. It was severely criticized by McCalla during his evidence.

Generally, the evidence called for annual increases of about 5% in the cost of construction. Laporte's estimate was made four years ago, and I would assess the cost of repairing the drainage system and the front steps at $14,000. I find that the raising of the basement slab is unnecessary, or speculative at best.

There was a suggestion that the plaintiffs, who saw exposed footings in the basement should have been suspicious but Petruzzi said he was told by Coveny it was to sit on to enjoy the fireplace in the basement. That statement would have allayed any suspicions.

The area was very swampy and the Covenys suggested that excessive water was directed towards the plaintiffs' house by the fact that the neighbour to the east had raised the height of his land to a level several feet higher and water was not being directed to the front ditch. That construction took place after the plaintiffs' house was built. Theodore Smith, a second expert used by the plaintiffs and one who has considerable experience as a general contractor and as an expert frequently called into court and whom Betts recognized as a very knowledgeable person in his field, testified that any excess water would not have caused the basement to flood as it is directed to the dividing line between the two properties and then to the ditch.

The plaintiffs' were not restricted in their examination of the premises on two occasions prior to signing an agreement of purchase and sale and it is argued that they had an opportunity to bring an expert to the premises to look for defects. In my view, this is not the normal practice and purchasers have the right to expect that there exists compliance with township bylaws, building codes and construction practice.

With respect to this item of damages, I find the Covenys negligent in the installation of a weeping tile system higher

than the basement floor slab at least in the south side and I find Betts negligent in his inspection of the system. If he did inspect after backfilling took place, he failed to order the area uncovered and if his inspection took place before the tile system disappeared from sight, he failed to see that its height would have allowed water to get into the basement. The responsibility of each will be determined later.

Counsel for the defendants strongly urged a discount as no estimates had been obtained from local contractors. Word, however, that the Township of Beckwith was a party to this action had already spread. Evidence was given that requests had been made to obtain prices from local contractors and none were provided.

Electrical repairs had been carried out at a cost of $1,253.93, pursuant to directives received from Ontario Hydro, and this will be added to the plaintiffs' recovery, to be paid solely by the Covenys. Betts had nothing to do with the electrical inspections. If this has already been paid by the covenys, it can be deducted from the final summary.

The plaintiffs also claim $3,500 for the installation of vents for the shower, basin, laundry tub and toilet as required by the Ontario Building code. Coveny said that the interior plumbing inspection which passed the rough plumbing would have included vents for these fixtures but it is clear that there are no vents. Petruzzi has been a plumber since 1963 and he should have raised questions in this regard. Part of the piping, however, was hidden behind drywall and the lack of venting in this area was not evident to Petruzzi prior to purchase. No witness was called to substantiate an estimate of $3,500 from Glebe Mechanical Inc. and Petruzzi felt the remedies would cost $5,000 although he was not familiar with the cost of residential plumbing. I must allow only a minimum amount and I set the cost at $2,000 of which Petruzzi will be responsible for one-half to cover the portion which was not hidden. Caveat emptor will apply to this extent. The remainder will be assessed against all defendants.

The garage has a number of deficiencies. The evidence leads me to the conclusion that the concrete floor slopes inward despite Covenys' allegation that it was level when he left the premises and water accumulates at the back of the garage and gets into the basement at the stairs which are located at that point. Three solutions were suggested. The first was to place a thin layer of concrete over the entire floor slab, and having it slope to the front to allow water to run out but this has to be discarded as that layer would be too thin and brittle and it is doubtful that there would be an effective bonding. The second solution would be to take up the entire slab and replace it with a properly sloped new one. A third alternative would be to cut out a section extending 12" or 18" into the garage along its entire width and replace it with a new section which would reverse the slope. This latter solution appears to be reasonable. The only estimated cost thereof was suggested by Coveny at $800 and by Smith at $1,000. Although the garage floor was in plain view, the purchasers said they were not aware of its inward slope and it is a defect which McCalla felt would have been apparent even to a lay person. Caveat emptor applies and this item is disallowed.

The plaintiffs claim $132.20 being the cost of installing angle irons to support the tracks for the garage overhead doors. The tracks had been supported by twine. This was a condition which was clearly visible even though the open garage doors might have temporarily hidden it. This item will be disallowed.

The plaintiffs claim that the wall between the garage and dwelling is not continuous and does not provide the gas and fire separation they say was required by the Ontario Building Code. The garage is large enough for a storage area and the Code requires only a gas-proof separation and not protection against fire although it would be most reasonable to have that added protection.

Smith had estimated a cost of $1,500 to install fire-code gyproc in the complete wall in question but acknowledged that the code was silent in this regard. He estimated a reduced cost of $500 for making the wall gas-proof. This was an important defect and in my view, was not discoverable by the plaintiffs. They will recover against all defendants. The

defect should have been seen by Betts even though the garage wasn't built until September, 1985, as Smith was able to see through the dividing wall when he looked from the attic inside the dwelling portion of the building. Betts knew there was to be a garage and hence a gas-proof wall on the east of the dwelling portion of the building was required. That wall was up when the Covenys moved in May 1986 to live in the upper part. For the same reasons two self-closing doors are required and the cost of their installation of $100 will be added to the amount recoverable.

Smith had also found what he said was a serious def lection in the roof trusses installed to support the roof and he said it would increase with time. The garage was 30 feet wide. He warned of the possibility of collapse of the roof under a heavy load of snow and said the deflection "can be minimized and left structurally sound by installing a secondary steel beam extending from the post between the overhead doors to the opposite location on the wall of the main dwelling". (Exhibit 43, p. 6) There was no evidence of an engineer's approval on the roof trusses although they appear to be within the code requirements with respect to their lengths. However, the deflection has already appeared and some danger is associated with it. The installation itself may be at fault rather than the make-up of the trusses. The Covenys will be solely responsible. There was no evidence that Betts had anything to do with the inspection of the garage premises and in any event, there was no indication of problems with the trusses during the course of construction at that tinge. Smith's estimate of $1,200 is accepted as reasonable.

A similar problem dealing with support of the main floor in the dwelling has arisen. A deflection exists under the dining room and living room floors and at the main entrance. There is no danger of the collapse of the floor even though the deflection is present. A bulge has appeared in the kitchen. It is apparent from Smith's evidence that the requirements are barely met with 2" x 4" joists and a centre beam of laminated wood supported on teleposts. The minimum standard is stretched to the limit. Smith agreed that Betts could not have issued a stop order as conformity to the code is present, but he does say that there is a considerable amount of instability, excessive movement and vibration in those areas. The dishes in the dining room rattle, the television antenna in the living room waves, and the floor sags when someone walks by. The floor has what was called a rubber effect. Smith says that the floor is made of plasterboard or chipboard but there were imperfections and it was not possible to patch. An underlay is required. Damage is certainly present and it may have been caused during the several months the floor was exposed to the winter elements. McCaffrey, for the defendants, blamed the waves in the floor on the use of aspenite despite the Code allowing it and on moisture during construction. Compliance with the Code does not always absolve a builder's responsibility. The floor needs stability and I conclude that it is defective and that it is the responsibility of the defendants, the Covenys as builders and the remaining defendants for failing to see that the floor was on a firm basis particularly after exposure. Smith has suggested additional steel beams on teleposts and estimates the cost at $2,000. The figure is reasonable.

The same kind of flooring supported vinyl overlay in the kitchen, the breakfast room and the dining area and the joints began to raise two or three months after the plaintiffs moved in. The photographic evidence amply supports the problems in the vinyl and Smith said debris could be found under it. He laid the blame on the installers and said that a minimum of 10 years of use should have been anticipated before any problem arose. An underlay was now required. This is another defect for which only the covenys would be responsible. The installation was done negligently. Evidence was given that the floor looked in good condition at the time of sale and Betts said he would not have been required to inspect vinyl as it is not a concern under the Code and not part of his function. The cost is allowed at $1,000.

The evidence disclosed that kitchen cupboards, counter tops including a splashback were not securely fastened to the floor or walls and this is a defect created by the negligence of the Covenys in failing to do it properly. Smith estimates the cost at $200 and again the sum is reasonable. Betts was

responsible to see that it was done correctly before the final permit could be issued and he will share in the responsibility.

Marble was installed at the front of the back to back fireplaces in the living room and the dining room but they were not wide enough at 12" to provide the necessary fire protection. The code requires 16" from the outer surface of the brickwork. Again the covenys are responsible for failing to adhere to the code requirements. Betts and the Township are also responsible for Betts' deficient inspection. He should have found a breach of the Code.

A claim was made for the estimated cost of repairs to the deck at the rear for a sum of $500. The agreement of purchase and sale (Exhibit 2) required the Covenys as vendors to complete the deck railing and to paint it. The deck was made of cedar but the railing was built in spruce, a less valuable type of lumber. A 9-year old boy was sent to paint it and the painting was incomplete. Petruzzi said there were no representations made that cedar would be used for the railing and there is no evidence of a complaint raised at the time of closing. This item will be disallowed.

A final claim centres around "the inconvenience, the mental distress and the trauma" caused by the defects. Mrs. Petruzzi said that the condition of the basement was a nightmare and it could only be used for storage and for laundry. A damp and musty smell was present continually but the use of a dehumidifier would have eliminated that. Mrs. Petruzzi described the work she had to do each time water came into the basement. She had trouble keeping up with the flow of water. The plaintiffs had expected to use the basement as a recreation room but didn't. Other defects such as the condition of the floor, the electric wiring, exposed switches, kitchen cupboards coming off the walls, etc., contributed to the plaintiffs' distress. The plaintiffs have claimed $5,000 and I assess damages for the emotional upheaval they must have gone through at $4,000. All defendants will share in this responsibility.

GENERAL COMMENTS

When credibility was in issue, it was resolved in favour of the plaintiffs and that of the expert witnesses. Coveny said too many things which were contradicted by other evidence. He and his brother differed on the use of crushed stone under the basement floor slab. He maintained the garage slab was level when it was not. Coveny said the trusses were stamped by an engineer and then later said he didn't know. He said the existence of plumbing vents would have been established by the interim plumbing inspection when clearly there were none. There was too much insistence on the weeping tile system being laid lower than the footings when clearly it was higher on the south side as well as on parts of the east and west sides of the building.

With respect to Betts, it is hard to imagine the existence of a system of inspections, literally hundreds, which kept so few records of what the inspections revealed. Probably the greatest omission on his part was his failure to recognize coveny for what he was, an inexperienced builder. What would have been required was a great deal more surveillance on this project. The tile problem occurred at the beginning of the work and it failed to alert Betts to what was ahead. I find both sets of defendants equally at fault in these areas where both were found to be involved.

SUMMARY

The following repairs and damages apply to all defendants:

Tile system	$13,000.
Plumbing vents	1,000.
Gas-proof wall	500.
Self-closing doors	100.
Additional support	2,000.
Mental distress	4.000.
TOTAL	$20,600.

Smith has said that 20% should be added for supervision

of the work by a general contractor or someone with similar ability. This will add $3,320 with the mental distress figure of $4,000 excluded for a total of $23,920. The Covenys and the Township will be jointly responsible to the plaintiffs for this amount but as between themselves each will be liable for one-half. I have deleted $1,000 on the repair of the tile system, for the raising of the front steps, a defect which Betts said he was not required to inspect. It is added to the following summary.

The following are amounts for which only the Covenys will be liable:

Front steps	$1,000.00
Electrical	1,253.93
Roof trusses	1,200.00
Vinyl floor	1,000.00
Hearth	300.00
Supervision (all items except electrical)	700.00
TOTAL	$5,453.93

The Goods and Services Tax must finally be considered but the repairs could have been carried out before that tax came into being on January 1, 1991. It will not be allowed as part of the claim.

Issues of interest and costs remain to be determined and the trial co-ordinator will be in touch with you to arrange a date. At that time counsel may bring up any matter which may have been omitted.

DOYLE J.

Phi Delta Beta of London Inc. v. London (City) Chief Building Official

Between
Phi Delta Beta of London Inc., applicant, and
Rocco Cerminara, Chief Building Official for the Corporation of the City of London and the Corporation of the City of London, respondents

[1995] O.J. No. 477
DRS 95-10854
Court File No. 14218/94

Ontario Court of Justice (General Division)
Leitch J.
Heard: November 9, 1994.
Judgment: January 24, 1995.

Counsel:
A.R. Patton, for the applicant.
J.P. Barber, for the respondents.

[para1] LEITCH J.:-- The applicant applies pursuant to s. 25(3) of the Building Code Act, S.O. 1992, c. 23 (the "Act") for an order rescinding the decision of the respondent Rocco Cerminara not to process the applicant's application for a building permit and for an order directing the respondent Rocco Cerminara in his capacity as chief building official for the City of London to process and then to issue a building permit to the applicant.

Background Facts

[para2] The applicant owns a building municipally known as 719 Waterloo Street, London, Ontario (the "Property"). The Property is zoned residential R2-2 under the City of London Zoning By-law No. Z-1 (the "Zoning By-law") which permits, amongst other things, a single detached dwelling.

[para3] The proposed renovations to the Property would modernize the existing five bedrooms, add a new dormer section on the third floor to increase head room and to create five new bedrooms, provide new plumbing and fixtures in three existing washrooms and enlarge one washroom, install a new bathroom in the finished basement, install new kitchen cabinets and appliances, redesign the layout to include an eating area in the kitchen and add an exterior and interior stairway and a fire alarm system.

[para4] The defendant Rocco Cerminara reviewed the plans and drawings furnished in conjunction with the building permit application and noted 11 bedrooms, four washrooms with multiple showers and multiple water closets, a substantial kitchen and food preparation and serving area, additional exterior stairs from the second to the third storey, and a fire alarm system. Based on his knowledge of the identity of the owner and his review of the plans and drawings filed, he believed that the intended use of the property is as a fraternity residence which is defined in the Zoning By-law as a Lodging House.

[para5] Mr. Cerminara concluded that a residential building with 11 bedrooms, four washrooms, multiple exit stairs, and a fire alarm system is uncharacteristic of a single detached dwelling and is characteristic of a lodging house. It was his belief that the renovations proposed were inconsistent with the use of the building as a single and independent housing establishment when operated by a fraternity.

[para6] Accordingly, the respondent Rocco Cerminara refused to process the applicant's application for a building permit.

Relevant Provisions of the City of London Zoning By-law Z-1

[para7] Section 6.2 of the Zoning By-law sets forth the permitted uses of buildings in a residential R2 zone. Specifically, s. 6.2 provides as follows:

> No person shall erect or use any building or structure or use any land or cause or permit any building or structure

to be erected or used or cause or permit any land to be in any Residential R2 Zone for any use other than the following uses:

a) Single detached dwellings;

b) Semi-detached dwellings;

c) Duplex dwellings;

d) Converted dwellings (maximum 2).

[para8] Section 2(121) of the Zoning By-law provides the following definitions:

(e) "CONVERTED DWELLING" means an existing dwelling constructed as a single or semi-detached unit on an existing lot in which the number of dwelling units has been increased without significant alteration to the exterior of the building except for the required fire escapes, extra windows and entrances to a maximum of 10 percent (10%) of the dwelling or 30.0 square metres, whichever is the lesser, and provided that the building, when converted, complies with the provisions of the building by-law and the parking provisions of this By-Law.

(f) "DUPLEX DWELLING" means the whole of a dwelling other than a converted dwelling that is divided horizontally into two separate dwelling units each of which has an independent entrance either directly from the outside or through a common vestibule.

(k) "SEMI-DETACHED DWELLING" means one of a pair of two

attached single dwellings with a common wall, dividing the pair of single dwellings vertically, each of which has an independent entrance either directly from the outside or through a common vestibule.

(l) "SINGLE DETACHED DWELLING" means a single dwelling which is freestanding, separate and detached from other main buildings or main structures, including a split level dwelling, but does not include a mobile home.

(m) "SINGLE DWELLING" means a dwelling containing not more than one dwelling unit as the sole main use thereof, with or without uses accessory thereto.

[para9] Section 2(122) provides the following definition of dwelling unit:

"DWELLING UNIT" means a single room or a series of rooms of complementary use which is located in a building, in which food preparation, eating, living, sleeping and sanitary facilities are provided for the exclusive use of the occupants thereof, which has a private entrance directly from outside the building or from a common hallway inside the building, in which all occupants have access to all of the habitable areas and facilities of the unit, and which is occupied and used or capable of being occupied and used as a single and independent housekeeping establishment.

[para10] Section 2(140) provides the following definition of fraternity house:

"FRATERNITY HOUSE" - see "LODGING HOUSE".

[para111] Sections 2(186) and (187) provide the following definitions of lodging houses:

"LODGING HOUSE, CLASS 1" means a residential building which is used to provide lodging units for hire or gain directly or indirectly to three or fewer persons with or without meals. A lodging house, class 1, shall not include a nursing home, hotel, motel, hostel, group home, bed and breakfast establishment, emergency care establishment, or a residence of an educational institution.

> "LODGING HOUSE, CLASS 2" means a residential building which is used to provide lodging units for hire or gain directly or indirectly to more than three persons, with or without meals. A lodging house, class 2, shall not include a nursing home, hotel, motel, hostel, group home, bed and breakfast establishment, emergency care establishment, or a residence of an educational institution.

[para12] Section 2(188) provides the following definition of lodging unit:

> "LODGING UNIT" means a room with sleeping facilities, either alone or in conjunction with another room or rooms.

[para13] Pursuant to s. 4.22, Class 1 Lodging Houses with a maximum of three lodging units are permitted in any dwelling unit in a detached or semi-detached dwelling, duplex, triplex, fourplex, townhouse or apartment dwelling.

[para14] Pursuant to ss. 12.2, 13.2, 14.2, 15.2, and 16.2 of the Zoning By-law, Class 2 Lodging Houses are a permitted use within the residential zones R8, R9, R10 and R11 and within office residential zones.

Relevant Provisions of the Building Code Act

[para15] Section 8(1) of the Act prohibits the construction or demolition of any building unless a permit has been issued by the chief building official. Section 8(2) of the Act provides that the chief building official shall issue a permit under ss. (1) unless, amongst other things, the proposed building, construction or demolition will contravene the Act or the building code or any other applicable law.

[para16] There is no issue on this application that the Zoning By-law is any other applicable law within the meaning of Section 8(2) of the Act. This was established in Axelrod et al. v. Corporation of the City of Toronto et al. (1981), 15 M.P.L.R. 143 (Div. Ct.) p. 148.

[para17] Section 25 of the Act permits an appeal of the decision of the chief building official under the Act to this court.

Relevant Provisions of the Planning Act

[para18] Section 35(2) and (3) of the Planning Act, R.S.O. 1990, c. P.13 (the "Planning Act") provides as follows:

> (2) The authority to pass a by-law under section 34, subsection 38(1) or section 41 does not include the authority to pass a by-law that has the effect of distinguishing between persons who are related and persons who are unrelated in respect of the occupancy or use of a building or structure or a part of a building or structure, including the occupancy or use as a single housekeeping unit.
>
> (3) A provision in a by-law passed under section 34, subsection 38(1) or section 41 or in an order made under subsection 47(1) is of no effect to the extent that it contravenes the restrictions described in clause (1)(a) or subsection (2).

History of Section 35(2) of the Planning Act

[para19] The Supreme Court of Canada in R. v. Bell, [1979] 2 S.C.R. 212; 98 D.L.R. (3d) 255 held that a by-law which provided that an individual or one "family" were the only permitted occupants of a self-contained dwelling unit was ultra vires of the municipality under the provisions of the Planning Act. Specifically, at p. 263, Spence J. held that,

> The device of zoning by reference to the relationship of occupants rather than the use of the building is one which is ultra vires of the municipality under the provisions of the Planning Act.

[para20] In Smith et al. v. Township of Tiny (1980), 27 O.R. 690 (Div. Ct.); affd. 29 O.R. (2d) 661 (C.A.); leave to Supreme Court of Canada refused 29 O.R. (2d) 661, a zoning bylaw in which a permitted use was a single family seasonal

dwelling unit and family was defined to include a male and female living together as a family without the sanctity of marriage was considered. In that case, the wording of that by-law was distinguished from the wording of the by-law under consideration in Bell. Robins J. noted in Smith et al v. Township of Tiny at p. 695, (1980) 27 O.R.:

> Land use restricted to a particular type or group of persons may be unreasonable or discriminatory and hence ultra vires. However, in my view, a restriction based upon a definition of "family" which incorporates most types of arrangement usual for people living together as a simple housekeeping unit in premises commonly described as "single family" dwellings cannot be said to be either unreasonable or discriminatory or to constitute zoning based on the relationship of the occupants. In invoking the definition of "family" used in the by law, it appears to me the township employed a valid zoning device to regulate the "use" and "character" of residential premises.

[para21] The effect of s. 35 of the Planning Act is to codify the law set forth in the decision in Smith v. Township of Tiny.

Applicant's Position

[para22] Mr. Chuck Frosst in an affidavit filed on behalf of the applicant deposes that the Property is intended and is capable of being used and occupied as a single and independent housekeeping establishment. The tenants of the applicant will rent the entire Property and have the right to use the entire Property. This leasing arrangement will be distinct from an arrangement where one resident rents one room exclusively and shares other defined areas of the Property.

[para23] The first position of the applicant is that there is no evidence available to the respondent Rocco Cerminara which entitles him to conclude that the intended use of the Property by the applicant is different than what the applicant states its use will be. The applicant points out that the applicant's use of the Property had not commenced when the respondent Rocco Cerminara refused to process the applicant's application for a building permit. The applicant submits that the Act was not intended as a tool for the exercise of land use control measures such as zoning by-laws prior to the commencement of use.

[para24] The applicant's second position is that if the chief building official is entitled to make a determination as to conformity of use with the Zoning By-law prior to the commencement of that use, the applicant's intended use is a permitted use under the Zoning By-law, and specifically the residents of the Property are operating as a single and independent housekeeping unit inasmuch as the entire dwelling is available to all residents, the residents are responsible for the care and maintenance of the Property inside and outside, the residents are responsible for all housekeeping functions and the activities of the residents are established through the norms of the residents.

[para25] The applicant submits that the Property is not a lodging house because the rooms are not available to the public for rent, only members of the applicant may reside in the Property, the residents may use the entire Property and the rent will be based on the expenses to maintain and operate the Property.

Respondents' Position

[para26] The respondents' position is that the respondent Rocco Cerminara as the chief building official can consider the intended use of the Property in making a determination pursuant to s. 8 of the Act. The respondents further note that pursuant to s. 25(4) of the Act this court may also consider the intended use of the Property and the submissions made on this application to determine whether or not a building permit should issue.

[para27] Secondly, the respondents' position is that the proposed use of the Property is consistent with the definition of "lodging house, class 2" in the Zoning By-law and is inconsistent with the use of the Property as a single and independent housekeeping establishment when operated by a

fraternity. The respondents submit that a dwelling occupied by members of a fraternity does not constitute an independent household, and the housekeeping establishment proposed by the applicant is not independent of the fraternity corporation and fraternity membership.

Disposition

Issue #1 - Can the chief building official exercising his statutory duty pursuant to the Building Code Act determine non-conformity of use with a zoning by-law prior to commencement of that use?

[para28] In my view, the respondent Rocco Cerminara, the chief building official, was entitled to consider the intended use of the property in exercising his statutory authority under s. 8(2) of the Act.

[para29] Saunders J. in Axelrod v. City of Toronto supra came to the same conclusion when he noted on page 149:

> It would be irrational to hold that [the chief building official is precluded from considering zoning by-law compliance on a building permit application]. Such a holding would mean that he could not refuse to issue a permit for a factory in a residential zone if the Building Code and all other applicable laws were complied with.

In Axelrod, as on this application, there is no issue as to how the applicant intends to use the property. The contentious issue is whether the intended use is in compliance with the zoning by-law.

[para30] Similarly, in Kochendorfer v. Brantford (Twp.) (1986), 38 M.P.L.R. 138 (Dist. Ct.), the issue was whether the chief building official's rejection of an application for a building permit on the grounds that the proposed use was not that of a group home was valid. The contentious issue on the appeal before Leach J. in that case was whether or not the proposed use by the applicant was as a group home within the definition of the relevant by-law.

[para31] In my view, the identical process is being undertaken on this application with exactly the same type of contentious issue as was before the court in Axelrod and Kochendorfer.

[para32] It is necessary, therefore, to consider the second issue raised by the applicant.

Issue #2 - Is the Applicant's intended use of the Property a permitted use under the Zoning By-law?

[para33] The issue on this application is whether the Property is a dwelling unit within the definition set forth in the Zoning By-law -- that is, is the Property intended to be used and capable of being used as a single and independent housing establishment. There is no definition of those terms in the Zoning By-law and they must be given their ordinary, grammatical meaning.

[para34] According to the evidence from Mr. Frosst's cross-examination on September 8, 1994, the housekeeping establishment which would use and occupy the Property has the following characteristics:

- Members of the fraternity first determine who may be admitted to membership in the fraternity.

- Certain people admitted to membership will reside in the Property -- normally it is just a matter of saying who needs and who wants to join in this group ... it is usually a situation of who needs accommodation and residence.

- No one other than members of the fraternity will reside in the Property.

- The Property will be rented to a group of up to 11 members of the fraternity.

- The break-even point to cover the operating costs is

nine residents based on each resident paying $350 per month.

- If one person discontinues his residence in the Property before the lease expires, he remains responsible for paying $350 per month for the balance of the term of the lease.

- The residents are responsible for maintaining the Property.

- The applicant as the lessor of the Property does not have any rules that apply to the conduct of the occupants of the Property other than the terms of the lease.

- There are no activities that the members of the fraternity engage in jointly that characterizes them as a fraternity.

- An occupant may choose not to associate with other members of the fraternity and still reside in the Property -- they need not conform to certain

  standards or certain behaviours in order to reside in the Property.

[para35] The Court of Appeal in R. v. Brown Camps Ltd., [1969] 2 O.R. 461 (C.A.) considered a by-law in which "family" was defined to include persons who do not have any consanguineous or marital or other relationship save that they reside "as a housekeeping unit". The specific definition under consideration was as follows:

> "family" shall mean one or more persons living as a single housekeeping unit in a dwelling, and they include domestic servants and not more than two roomers or boarders.

[para36] In my view, a by-law with this definition would not offend s. 35 of the Planning Act. Therefore, the conclusions of the court in the Brown Camps decision are helpful to the interpretation of this Zoning By-law. The court held in Brown Camps at p. 467 that:

> ... in order to create a housekeeping unit, otherwise than from persons related by consanguinity or marriage,
>
> the element of personal election to enter into the unit is obviously an essential.

[para37] In Brown Camps four children or adolescents were residing in the premises and would be cared for by staff members of the respondent. The court concluded that the occupancy of the children of the premises only by the will and at the whim of the respondent corporation lacked the necessary element of active personal election to form a housekeeping unit and was therefore not a permissible use of property pursuant to the by-law in issue.

[para38] Under the Zoning By-law, in this case the requirement of personal election or independence is clearer than in the by-law considered in Brown Camps. In my view, the intended use of the Property by the applicant will not constitute an independent household. To be a tenant of the Property a person must be admitted to membership in the fraternity. Therefore, the housekeeping establishment created by the lease to a group of individuals is not independent from the fraternity. Members of the fraternity make the decision as to whether someone may join the fraternity. The fraternity then decides those individuals who may reside in the Property. Even though those individuals who reside in the Property are responsible for maintaining the Property, the housekeeping arrangements are not independent from the fraternity. The most fundamental aspect of the dependence is the fact that the fraternity has determined what the operating expenses for the housekeeping establishment will be, what each occupant's share of those expenses will be, regardless of the number of occupants, and if the contributions from the occupants are not sufficient to meet the operating expenses, then the occupants will not necessarily assume the responsibility of making up the deficiency. The applicant would look for ways of trying to make up the deficiency.

[para39] In addition, the use of the Property by the applicant does not involve the element of singleness. Mr. Frosst indicated in his cross-examination on his affidavit that the members of the fraternity family would do certain activities in common. However, the occupants of the Property do not have to conform to certain standards or certain behaviours or associate with members of the fraternity in order to continue to reside in the Property. With these arrangements there will not be a single housekeeping establishment.

[para40] Because the living arrangements of the occupants of the Property will be neither a single housekeeping establishment nor an independent housekeeping establishment for the reasons noted, the living arrangements will not have the characteristics of a housekeeping unit permitted within the definition of dwelling unit set out in the Zoning By-law.

[para41] This interpretation of the Zoning By-law is clearly not based on whether the residents of the property are related. Therefore the By-law is clearly not ultra vires and contrary to s. 35 of the Planning Act.

Order Granted

[para42] The decision of the respondent Rocco Cerminara not to process the applicant's application for a building permit is affirmed. The application is therefore dismissed with costs to the respondents in an amount to be assessed on a party and party basis.

LEITCH J.

Phi Delta Beta of London Inc. v. London (City) Chief Building Official

Between
Phi Delta Beta of London Incorporated, appellant/applicant,
and
Rocco Cerminara as Chief Building Official for the City of London and the Corporation of the City of London, respondents/respondents

[1996] O.J. No. 5119
Doc. London 523/95

Ontario Court of Justice (General Division)
Divisional Court
Smith A.C.J.O.C., Haines and Rosenberg JJ.
April 17, 1996.

Counsel:
Alan R. Patton, for the applicant.
No counsel mentioned for the respondents.

The judgment of the court was delivered by

[para1] SMITH A.C.J.O.C.:-- The appellant argued that the whole house is occupied as a "single and independent housekeeping establishment." The appellant's evidence establishes that "each occupant - will be a tenant to Phi Delta." As a tenant if he fails to pay his rent he will be subject to eviction by the landlord. Accordingly, the whole house is not occupied or used as a "single and independent housekeeping establishment". The appeal is dismissed. Costs to the Respondent (Respondents in appeal) fixed at $2,000.

SMITH A.C.J.O.C.

Quay West v. Toronto (City)

Between
Quay West, applicant, and
Corporation of the City of Toronto, respondent

[1989] O.J. No. 3072
Doc. No. 260/89

Ontario Supreme Court - High Court of Justice
Divisional Court
Southey, Saunders and Gray JJ.
Heard: April 19-20, 1989.
Judgment: May 3, 1989.

Counsel:
J. McQuaid, Q.C. and K.E. Gillese, for the applicant.
R.E. Shibley, Q.C. and P.P. Healey, for the respondent.

Reasons for judgment were delivered by Southey J., concurred in by Gray J. Separate reasons were delivered by

Saunders J.

[para1] SOUTHEY J.:-- The by-law was passed by a newly-elected council. The proper development of the lands to which it applies is of great public importance because it affects the public enjoyment of Toronto's waterfront.

[para2] I am not satisfied that Council acted in bad faith or for an improper purpose in enacting the by-law, or that it was discriminatory or unreasonable such that it ought to be quashed by this Court. Nor can I see any merit in the 3rd or 4th issues raised by Mr. McQuaid in his factum. Issue 3 is:

> "Whether the Planning Act, 1983 permits more than one interim control by-law to be enacted at the same time governing the same land but for different purposes?"

[para3] Issue 4 is:

> "Whether the Planning Act, 1983 permits the area governed by an interim control by-law to be increased?"

[para4] The effective period for an interim control by-law cannot be extended beyond 2 years from the date of its original enactment, but I am unable to interpret s. 37 as restricting in other respects the extent to which an interim control by-law may be amended.

[para5] The final issue is whether this Court should order mandamus requiring issuance of a building permit. An application for such permit was made on August 4, 1988. The permit was refused in a letter dated January 30, 1989. We were informed that, by application dated February 9, 1989, the developer appealed to the District Court under s. 15 of the Building Code Act, R.S.O. 1980, c. 51 and asked for an order directing the issuance of a building permit. The same relief is now sought in this Court. Originally that relief was sought here only in the event that the interim control by-law was quashed. By an amendment to the notice of application made on April 12, 1989, the relief was requested, even if the by-law was not quashed.

[para6] In my judgment, we should not now direct the issuance of a building permit, because the developer's proposed condominium project is not a use permitted under the interim control by-law.

[para7] Mr. McQuaid argued that the developer's right to a permit crystallized on the date of his application for a permit. If the permit should have been issued in August 1988, the subsequent passage of the interim control by-law, he argued, is not a valid ground for now refusing the permit. He relied on s. 37(8) of the Planning Act, S.O. 1983, c. 1 which makes s. 34(9) applicable to an interim control by-law with necessary modifications. The relevant portion of s. 34(9) provides as follows:

> "(9) No by-law passed under this section applies,
>
> ...

(b) to prevent the erection or use for a purpose prohibited by the by-law of any building or structure for which a permit has been issued under section 5 of the Building Code Act, prior to the day of the passing of the by-law, so long as the building or structure when erected is used and continues to be used for the purpose for which it was erected and provided the permit has not been revoked under section 6 of the Building Code Act."

[para8] The subsection does not exempt the erection of buildings for which a permit ought to have been issued before the effective date of the zoning by-law, but only buildings for which a permit has in fact been issued. I do not consider the addition of the words "or ought to have been issued" to be a modification necessary in applying s. 34(9) to an interim control by-law.

[para9] In any event, I am not satisfied that the chief official was under a duty to issue the permit as matters stood in August 1988, because there had been no site plan approval at that time. As a general rule, a building permit should not be issued for a development in a site plan control area to which s. 40 of the Planning Act applies until site plan approval for the development has been obtained from council or the Municipal Board. Without such approval, the proposed building would contravene s. 40(4) of the Planning Act, and the permit should not be issued because of s. 6(1)(a) of the Building Code Act. This was the view of the District Court Judge referred to by Henry J. in 715113 Ontario Inc. v. Ottawa (City) (1987), 63 O.R. (2d) 102.

[para10] There are two decisions in which it was held that a building permit should have been issued, despite the lack of site plan approval: Re Dominion Stores Ltd. and Etobicoke (1982), 37 O.R. (2d) 661 and Re Revenue Properties Co. and Toronto (City) (1984), 26 M.P.L.R. 165. Both arose from extraordinary circumstances in which the municipality was not acting in good faith or was refusing developmental approval for an obviously unlawful reason. Having refused to quash the interim control by-law in this case as one improperly enacted, I am not prepared to hold that this is one of those extraordinary cases in which the building permit should have been issued despite the absence of site plan approval.

[para11] As announced at the conclusion of argument, the application by Quay West is dismissed. As success has been divided in the matters heard together by this Court, there will be no order as to costs.

SOUTHEY J.
GRAY J. -- I agree.

[para12] SAUNDERS J. (concurring):-- I agree with the result. I also agree with the reasons given except on the issue of whether there should be a mandamus order requiring the issuance of a building permit. In my opinion, such an order ought not to issue because of the existence of the interim control by-law and the provisions of s. 34(9)(b) of the Planning Act. I do not consider it necessary to decide whether the chief official was under a duty in August, 1988 to issue the permit despite the absence of a site plan agreement. It may be that such duty did exist on the basis of the reasoning in the Dominion Stores case.

SAUNDERS J.

R. v. King Insulation Services Ltd.

Between
Her Majesty the Queen, on the Information of Howard MacMillan, respondent, and
King Insulation Services Ltd., appellant

[1981] O.J. No. 401

Ontario Supreme Court - High Court of Justice
Divisional Court
O'Leary, Montgomery, Eberle JJ.
Oral judgment: January 14, 1981.
Reasons: February 5, 1981.
(3 pp.)

Counsel:
J.L. McDougall, for the appellant.
D.R. Vickers, for the respondent.

The judgment of the Court was delivered by

[para1] O'LEARY J. (orally):-- This is an application for leave to appeal and, if leave be granted, an appeal from the decision of His Honour Judge Warrender of the County Court of the County of Wentworth made on April 22, 1980 wherein he allowed an appeal from the decision of Justice of the Peace Patterson acquitting the appellant, and entered a conviction against the appellant on a charge against it that "being the constructor at premises municipally known as 372 Charlton Avenue West in the City of Hamilton, did unlawfully carry out the work of construction without a permit therefore having been issued by the Chief Official contrary to s. 5(1) of the Ontario Building Code Act, 1974, as amended.

[para2] While an argument has been presented to us that the proper course that Judge Warrender should have adopted was to send the matter back to the learned Justice of the Peace or to another Justice of the Peace for a new trial because the appellant had not adduced evidence before the Justice of the Peace because the matter before the Justice of the Peace had in effect been disposed of by a dismissal at the end of the Crown's case,we feel that we do not have to send the matter back for a new trial. We are prepared to deal with the appeal on the basis that the evidence would disclose that the installation of insulation by the appellant would not have caused any material structural alteration to the building, in this case, the home, that was involved. If we proceed on that basis we do not see how the appellant can be prejudiced by having failed to adduce evidence. By adopting that course we will at least have assisted the parties by determining the main issue that is before us and that is whether or not the installation of insulation into the four walls of a home constitutes construction within the meaning of that word as it is defined in the Ontario Building Code Act, 1974. Section 1(e) of the Ontario Building Code Act, 1974 defines "construction" as including a "material alteration of a building". In our view, the installation of insulation to the extent involved in the case before us constitutes a material alteration to a building. While we proceed on the basis that it would not have constituted any structural change to the building, any more than would have the installation of electric wiring into a building previously without electric wiring, yet like the installation of electric wiring, we believe that the installation of insulation creates a material alteration in a building. It is our view that a building that has been insulated, has material advantages over one that has not had such insulation installed just as a building that has been wired for electricity has material advantages over one that has not been wired.

[para3] We therefore agree with the decision of Judge Warrender that the installation of insulation into the four walls of a home does constitute a material alteration to that building and falls therefore within the meaning of "construction" as defined in s. 1(3) of The Ontario Building Code Act, 1974 and accordingly, that the failure to have obtained the permit required by s. 5 of the Act is a violation of that section and that it was proper for him to have registered a conviction. So far as leave to appeal is concerned, we think it proper that leave be granted and it is granted but for the reasons given the appeal is dismissed.

O'LEARY J.
MONTGOMERY J.
EBERLE J.

R. v. Springman

Philip Springman, Appellant; and
Her Majesty the Queen, Respondent.

[1964] S.C.R. 267

Supreme Court of Canada
1964: January 31 / 1964: March 23.
Present: Taschereau C.J. and Fauteux, Ritchie, Hall and Spence JJ.
ON APPEAL FROM THE COURT OF APPEAL FOR SASKATCHEWAN

APPEAL from a judgment of the Court of Appeal for Saskatchewan [(1963-64), 45 W.W.R. 501.], affirming the conviction of the appellant for arson. Appeal allowed.

George J.D. Taylor, Q.C., and Calvin F. Tallis, for the appellant.
S. Kujawa, for the respondent.

Solicitors for the appellant: Goldenberg, Taylor, Tallis & Goldenberg, Saskatoon.
Solicitor for the respondent: S. Kujawa, Regina.

THE CHIEF JUSTICE:-- The appellant Philip Springman, formerly of Nipawin, Saskatchewan, now of Vancouver, B.C., was on April 2, 1963, convicted by His Honour Judge Forbes at Regina on the following charge:

> That he, the said Philip Springman, did on or about the 16th day of September, 1961, in the Davin District, Saskatchewan, without legal justification or excuse and without colour of right, unlawfully and willfully set fire to the Nipawin Construction Company Limited camp, and did thereby commit arson, contrary to section 374(1)(a) of the Criminal Code.

The appellant was sentenced to imprisonment for a term of two years. The appellant appealed to the Court of Appeal against both the conviction and the sentence. Both appeals were dismissed.

The charge was laid under s. 374(1)(a) of the Criminal Code which says that every one who wilfully sets fire to a building or structure, whether completed or not, is guilty of an indictable offence and is liable to imprisonment for 14 years.

The evidence reveals that the Nipawin Construction Company Limited, owned by the appellant and his wife, had a substantial amount of equipment and that, during the summer of 1961, this equipment was situated near Davin. The company was engaged in supplying sand, gravel and crushed rock, and the equipment that was burnt was being made use of in this operation. It consisted of a crusher, loaders, trucks, bunkhouses and work-shops. It is the contention of the respondent that all this equipment was within the meaning of s. 374(1)(a) a by power units. It is therefore contended on behalf of the appellant that if he did set fire to this equipment, he should have been prosecuted under s. 374(2) of the Criminal Code which is in the following terms:

> (2) Every one who wilfully and for a fraudulent purpose sets fire to personal property not mentioned in subsection (1) is guilty of an indictable offence and is liable to imprisonment for five years.

The maximum punishment if the appellant is found guilty under s. 374(1)(a) is 14 years, and 5 years if convicted under s. 374(2).

Parliament has carefully divided s. 374 in two groups, and I am satisfied that subs. (a) of s. 374 "a building or structure" covers immovable property and that the balance of subs. (1) also covers property which has a more considerable value than all that is contained in the residuary clause s. 374(2) (the whole subject to s. 375).

In the present case, as previously stated, the equipment to which the fire was set could be easily moved from one place

to another. I think that fundamentally this equipment was

movable property.

This I believe is the law in the common law provinces and in the province of Quebec. In the province of Quebec it has been decided by this Court in Dulac v. Nadeau [[1953] 1 S.C.R. 164 at 204.]:

> Mais il y a plus. En effet, et quant au bâtiment de Nadeau,--et on pourrait ajouter, celui de Morin,--il s'agit clairement d'immeubles par nature suivant les dispositions de l'article 376 C.C. Sans doute, on peut bien, ainsi qu'on le fait remarquer dans Colin et Capitant, Cours Élémentaire de Droit Civil français, XIè Édition, tome 1, No 922, ou dans les termes de Planiol et Ripert, Traité Pratique de Droit Civil Français (1926) tome 3, 75, rappeler que "les constructions volantes établies à la surface du sol pour quelques jours et réédifiées ailleurs, de place en place, telles que les baraques de foire, ne sont pas des immeubles parce que ces édifices légers n'ont pas de place fixe." Mais les deux auteurs reconnaissent, aux mêmes pages, le principe que "pour qu'une construction soit immeuble, il n'est pas nécessaire qu'elle soit élevée à perpétuité, que les bâtiments construits pour une exposition sont immeubles quoiqu'ils soient destinés à être démolis."

It will be easily realized by the reading of the opinions of these authors that the French law is quite similar to the English law, and that an immovable is something that is not to be forced from its place. It has the characteristics of things real or land, although constructions built on the surface of the soil for some length of time, and later rebuilt somewhere else, from place to place, are not immovables because these buildings have no fixed or permanent foundations.

I therefore agree with the reasons of my colleague Mr. Justice Hall, and I would allow the appeal and quash the conviction.

The judgment of Fauteux, Ritchie, Hall and Spence JJ. was delivered by

HALL J.:-- The facts in connection with this appeal are set out fully in the judgment of Culliton C.J.S. and shortly are as follows: The accused was charged that he, the said Philip Springman, did on or about the 16th day of September, 1961, in the Davin District, Saskatchewan, without legal justification or excuse, and without colour of right, unlawfully and wilfully set fire to the Nipawin Construction Company Limited camp and did thereby commit arson contrary to s. 374(1)(a) of the Criminal Code. The accused was first tried by a judge and jury at which trial the jury were unable to agree upon a verdict. He then elected to be tried by a judge without a jury and was tried by His Honour Judge Forbes who found him guilty and sentenced him to a term of two years in a penitentiary.

The Nipawin Construction Company was a limited company, all of the shares of which had been held by the appellant Springman and his wife. The company owned a large amount of equipment, and, immediately prior to the fire on September 16, 1961, had been engaged in the production of crushed rock under a contract with Concrete Rock Products Limited of Regina. The operation was being carried out near Davin, Saskatchewan, and as production was too slow at that point, the appellant had given instructions to his foreman, Charles Wingert, to line up the camp for a move. The camp was lined up for movement so that everything could be moved quickly, and, while stationary, could be served by the central propane unit which supplied heat to the bunkhouses and electricity from the portable light plant. The machinery and equipment consisted of a propane truck, welding truck, a number of other trucks and power units, a house trailer with a half-ton truck, a rock crusher, a front end loader, a light plant, a cook car, two bunkhouses and a combined bunkhouse and office. It was admitted that the bunkhouses, cook car and house trailer were all mounted on wheels for the purpose of ready movement from place to place wherever rock crushing operations were to be carried on.

The fire which destroyed this machinery and equipment was set by Charles Wingert, the foreman, and Peter Mihailuk, an

employee. The case for the Crown was that the appellant counselled Mihailuk to set the fire. Mihailuk gave evidence that he had been induced by the appellant to set the fire and he was to receive a new truck or car and $4,000 or $5,000 for so doing.

Following his conviction by His Honour Judge Forbes, the appellant appealed to the Court of Appeal [(1963-64), 45 W.W.R. 501.)] for Saskatchewan from both conviction and sentence. The grounds of appeal were as follows:

> (1) That on the facts, including the facts as to source and credibility of the evidence of the commission of the crime and the connection of the accused therewith, the verdict is unreasonable, or cannot be supported, and therefore ought to be quashed;
>
> (2) That as a matter of law there is no evidence of any offence against Section 374(1)(a) of the Criminal Code, since the "camp" referred to in the charge (being mobile or portable equipment consisting of a gravel crusher, trucks, trailers, bunkhouses, etc. . . . is not within the meaning of the words "a building or structure" appearing in the said Section 374(1)(a).

The Court of Appeal for Saskatchewan unanimously rejected the appeal under ground 1, holding that the learned trial judge's findings on the evidence should not be disturbed.

The Court, however, (Maguire J.A. dissenting) while accepting the argument that the trucks and power units, the rock crusher, the front end loader and the light plant were not buildings or structures within the meaning of s. 374(1)(a) of the Criminal Code, held that the two bunkhouses and the combined bunkhouse and office were buildings or structures within the meaning of the said section.

Maguire J.A. in his dissenting judgment held that, in addition to the items which the majority found were not "buildings or structures whether completed or not", the two bunkhouses and the combined bunkhouse and office were also not "buildings or structures whether completed or not" within the meaning of the said section on the grounds that:

> . . . being designed and constructed upon a wheeled chassis, for the purpose of ready movement from place to place, and the temporary use in each side place, do not fall within "a building or structure".

The appeal to this Court is limited to the question as to whether the two bunkhouses and the combined bunkhouse and office were "buildings or structures" within the meaning of s. 374(1)(a) of the Criminal Code.

With respect, I think that Maguire J.A. was right in holding that the two bunkhouses and the combined bunkhouse and office were not buildings or structures within the meaning of the section in question.

I accept that the term "structure" is not be construed ejusdem generis with the term "building": London County Council v. Tann [[1954] 1 All E.R. 389 at 390.]. However, both "buildings" and "structures" do possess certain essential characteristics, some of which are common to both.

The case of London County Council v. Pearce [[1892] 2 Q.B. 109.] appears to be in point. There the question whether a builders' office constructed of wood and roofed with zinc, and placed upon iron wheels for the purpose of enabling it to be wheeled about to any place where building operations were being carried on, was, when not required at any such place, kept in the builder's own yard and used as a pay-office for his men was a "wooden structure or erection of a moveable or temporary character" within the meaning of s. 13 of the Metropolis Management and Building Acts Amendment Act, 1882. Pollock B. said at p. 111:

> No special meaning can be given to the word
>
> "structure" or the word "erection" as something distinct from a building; and it cannot be supposed that the legislature intended that everything which could in any sense be called a wooden building of a tem

erections, but could not possibly be held to come within the section, such as a dog-kennel or a van for removing furniture, which would be a much larger and heavier thing than such a pay-office as that in question. There are, therefore, many considerations which ought legitimately to influence the magistrate in coming to his decision. I think that in the present case the learned magistrate was perfectly right in holding that this pay-office was a part of a builder's plant; it is a thing which is moved from one set of buildings to another as occasion requires, and when not in use in the ordinary way it is at rest upon the builder's premises, and is used for the convenience of paying his men, which seems a very reasonable proceeding.

and Vaughn Williams J. said at pp. 112-3:

The magistrate was of opinion that prim+a facie a carriage on wheels was not a wooden structure or erection within the meaning of the section. I do not mean to say that a man is to be allowed to evade the Act of Parliament by building on wheels what he intends to be a wooden structure, and then saying that it is not within the Act because it is on wheels. In all cases we must be guided by what I may call the intentions of the structure, and must inquire with what intention it was made. This seems clear from the case of Hall v. Smallpiece, 59 L.J. (M.C.) 97, where it was held that a steam roundabout was not a wooden structure or erection within the meaning of the Act. Why was that held? Not because a thing on wheels cannot be within the section, but because when one looks into the intention with which the thing was made, it becomes plain that it was made for the purpose of locomotion and for erection in any place where it might be required.

In Cardiff Rating Authority v. Guest Keen, Limited [[1949] 1 All E.R. 27 at 31, 1 K.B. 385.], Denning L.J. (as he then was), in discussing what is a "building or structure or in the nature of a structure" said at p. 31:

A structure is something which is constructed, but not everything which is constructed is a structure. A ship, for instance, is constructed, but it is not a structure. A structure is something of substantial size which is built up from component parts and intended to remain permanently on a permanent foundation, but it is still a structure even though some of its parts may be moveable, as, for instance, about a pivot. Thus, a windmill or a turntable is a structure. A thing which is not permanently in one place is not a structure, but it may be "in the nature of a structure" if it has a permanent site and has all the qualities of a structure, save that it is on occasion moved on or from its site.

We are not concerned here with anything "that is in the nature of a structure". We have to deal with items that are either "buildings" or "structures".

My view that the items in question in this appeal are neither "buildings" nor "structures" is strengthened by the judgment of the Manitoba Court of Appeal in Rex v. Arpin [[1939] 1 W.W.R. 564, 47 Man. R. 40, 72 C.C.C. 49, 50 C.R.T.C. 116, 2 D.L.R. 584.], in which it was held that a railway freight car was not a "building" within the meaning of s. 461 of the Criminal Code of Canada, and by the judgment of the Supreme Court of Nova Scotia en banc in The King v. Levy and Gray [(1919), 53 N.S.R. 229 at 232, 31 C.C.C. 19.], in which it was held that the buffet of a parlour car on a railway was not a "building" within s. 461 of the Code. In this latter case Chisholm J. (as he then was) said at p. 232:

I have come to the conclusion that the buffet of a parlour car is not a building within the meaning of section 461 of the Criminal Code. A building is defined by Bouvier (p. 400) as "an edifice", erected by art and fixed upon or over the soil, composed of brick, marble, wood or other proper substance, connected together, and designed for use in the position in which it is so fixed.

The appeal should, therefore, be allowed and the conviction quashed.

Appeal allowed and conviction quashed.

Revenue Properties Co. v. Toronto (City)

Between
Revenue Properties Co. Ltd., applicant, and
Corporation of the City of Toronto and Michael Nixon, Chief Building Official, respondent

[1984] O.J. No. 2378
Suit No. M91946/84

Ontario County Court - Judicial District of York
Matlow Co. Ct. J.
March 5, 1984

Counsel:
J. Keefe, for the applicant.
A. Weretelnyk, for the respondents.

[para1] MATLOW CO. CT. J.:-- This case arises because of the conflict between the asserted right of the applicant to proceed with its proposed conversion of part of The Colonnade, a commercial and residential property located on Bloor Street in Toronto, to a hotel and the perception, at the municipal political level, that the proposed conversion is undesirable because it will result in the elimination of desirable residential rental units.

[para2] It comes before me as a "hearing and appeal" pursuant to s. 15 of the Building Code Act, R.S.O. 1980, c. 51 by which the applicant seeks an order for the issuance of a building permit for the proposed conversion which the "chief official" of the municipality has effectively, if not literally, refused to issue.

[para3] The authority that I have to grant relief is found in s. 15(3) of the Building Code Act which reads as follows:

> "15.(3) Where an application is made to a judge for a hearing under subsection (1), the judge shall appoint a time for and hold the hearing and may rescind or affirm the order or decision of the inspector or chief official or take such action as the judge considers the inspector or chief official ought to take in accordance with this Act and the regulations, and for such purposes the judge may substitute his opinion for that of the inspector or chief official."

[para4] In my view, the evidence establishes that the municipality, notwithstanding its motivation, has treated the applicant unfairly and with total disregard for its legal rights. It is obvious that the municipality has recognized that it is powerless, in law, to block the proposed conversion. As a result, it has engaged the applicant in a war of attrition and has placed one obstacle after another in its way. Because many of the tenants in the Colonnade have already vacated their apartments, the applicant's rental income must have diminished in recent months and it may be that the municipality feels that the applicant is vulnerable to the tactics it has engaged in.

[para5] For example, the municipality has refused to consider the applicant's application for site plan approval; it has refused even to examine the applicant's application for a building permit to determine whether it complies with the Building Code Act; it has enacted, after the applicant applied for a building permit, a zoning by-law amendment purporting to prohibit the proposed conversion. That by-law amendment has been quashed by an order made in the Supreme Court of Ontario and an appeal by the municipality from that order is now pending. The municipality now takes the position that the applicant is not entitled to a building permit until site plan approval has been given. Yet the municipality refused even to consider the application for site plan approval until the appeal from the order quashing the zoning by-law amendment is finally determined.

[para6] In the submission of counsel for the municipality, if the applicant wishes to contest the decision of the municipality to defer consideration of the application for site plan approval, it should apply for relief to the Ontario Municipal Board pursuant to the provisions of the Planning Act, R.S.O. 1980, c. 379.

[para7] I am satisfied that there are prima facie grounds

for granting relief to the applicant and that the delay in making this application is reasonably explained by the conduct of the municipality.

[para8] I am satisfied that this application was commenced within only a few days after the municipality, on December 7, 1983, instituted an appeal from the order quashing the zoning by-law amendment, thereby making it clear that it did not intend to deal fairly and in good faith with the applicant. Accordingly, the time for making this application is extended to and including the time when it was commenced.

[para9] In my view, By-law 627-83, the by-law amendment referred to above, should not bar the applicant's entitlement to relief. Although I cannot predict with certainty the outcome of the municipality's appeal from the order quashing the by-law, I consider the reasons for judgment of Callaghan J. for quashing the by-law so convincingly correct that I must compare the slim likelihood of success on the appeal and the consequences of success against the damage that the applicant would undoubtedly suffer if it is delayed now in taking one more step towards the achievement of the proposed conversion in determining the equities in this case: see R. v. Barrie; Ex parte Bernick, [1970] 1 O.R. 200 especially at p. 206 and Re Woodglen & Co. and North York, (1983), 43 O.R. (2d) 289.

[para10] As well, I cannot imagine that the by-law, even if the appeal is allowed, would ever be approved by the Ontario Municipal Board: see Ottawa v. Boyd Bldrs. Ltd., [1965] S.C.R. 408.

[para11] I recognize that, if a building permit is issued and if the applicant obtains site plan approval and proceeds with the proposed conversion and then the by-law is ultimately resurrected and approved, the applicant will still be prohibited from using the subject property as a hotel by virtue of the prohibition contained in the Planning Act. However, that is a risk that the applicant must assume if it chooses to proceed with the proposed conversion. For the reasons expressed above, I consider this risk to be minute.

[para12] As well, I am aware of the amendment to the Planning Act now found in s. 34(9)(b), enacted by S.O. 1983, c. 1, requiring the actual issuance of a building permit as opposed to only the approval of plans to preserve the right to construct a building for a non-conforming use. However, because of my view about the legality of By-law 627-83, I choose, nevertheless, to grant the relief described below.

[para13] I also refuse to adjourn this proceeding pending the final determination of the legality of By-law 627-83, because the municipality has failed to meet the test set out in the Boyd Builders case. At the time when the applicant made its application for a building permit, the municipality clearly had not yet created a clear plan for the rezoning of the subject property.

[para14] I have also come to the conclusion that site plan approval by the municipal council is not an absolute precondition for the issuance of a building permit. Neither counsel was able to refer me to any decided case in which this issue was determined. This interpretation of the legislation is in accordance with the plain meaning of the words used in the statutes and there is nothing in the legislation that leads me to a contrary view regardless of what the prevailing practice may be.

[para15] Nor, in my opinion, would the issuance of a building permit prior to the granting of site plan approval result in any contravention of the Building Code Act. In particular, I do not consider that the "proposed construction", in the circumstances of this case, would "contravene any other applicable law" as those words are used in s. 6(1)(a) of the Building Code Act merely because site plan approval has not yet been given. The actual construction, however, if it were to proceed without prior site plan approval would be in violation of the Planning Act. Accordingly, the issuance of a building permit would not be contrary to s. 6(1)(a) of the Building Code Act.

[para16] I find support for my interpretation of the legislation in the repeal of the original predecessor of the present s. 40 of the Planning Act, which was originally s. 35a of the Planning Act, enacted by S.O. 1973, c. 168. That

provision, in s. 35a(4)(c) authorized the inclusion, in a development review by-law, of a provision prohibiting the issuance of a building permit until site plan approval is given.

[para17] In subsequent revisions to the legislation, this provision was repealed and replaced by a new provision merely prohibiting the undertaking of any development in a designated area without prior site plan approval: see S.O. 1979, c. 59, s. 1; R.S.O. 1980, c. 379, s. 40(4); and S.O. 1983, c. 1, s. 40(4). It would appear, therefore, that the Legislature expressly eliminated the authority for prohibiting the issuance of a building permit without prior site plan approval.

[para18] As well, because of s. 34(9)(b) of the Planning Act referred to above, certain rights now crystallize only when a building permit is actually issued. This increased significance of the actual issuance of a building permit lends weight to my interpretation of the legislation. In other words, the words of the legislation should not be strained to lead to an interpretation resulting in unauthorized delays in the issuance of building permits.

[para19] Although it may be desirable and more expeditious that site plan approval be obtained before the issuance of a building permit in order to eliminate the need for further amendments to the building permit that might become necessary to satisfy the conditions of the granting of site plan approval, this potential difficulty does not persuade me that the legislation requires site plan approval as a pre-condition for the issuance of a building permit.

[para20] In Dominion Stores Ltd. v. Etobicoke (1982), 37 O.R. (2d) 661, this same issue was raised but expressly not decided by the Divisional Court. Yet, in the result reached, an order was made requiring the issuance of a building permit before site plan approval was granted because of the circumstances of that case. There is no reason why the same type of discretion used in that case should not be used in this one.

[para21] For all of these reasons, an order is to go as follows:

(1) extending the time for the bringing of this application as specified above;

(2) requiring the respondent, Nixon, upon the presentation by the applicant of a complete and proper application for a building permit for the proposed conversion, to accept and review the application and, within thirty (30) days thereafter, to issue a building permit unless the refusal can be justified under s. 6 of the Building Code Act and in accordance with these reasons. If this thirty (30) day limit is too short, an application may be made before me for an order extending the time;

(3) awarding the cost of this application to the applicant.

[para22] If the respondent, Nixon, refuses to issue a building permit within the time allowed and if the grounds for the refusal are disputed by the applicant, the applicant may renew this application for the specific relief claimed in the notice of motion upon notice to the respondents and upon further material. For that purpose this application is adjourned before me sine die.

MATLOW CO. CT. J.

Roman Catholic Episcopal Corporation for the Diocese of Peterborough, in Ontario, Canada v. Corporation of the Town of Cobourg et al.

[Indexed as: Roman Catholic Episcopal Corp. for the Diocese of Peterborough v. Cobourg (Town)]

40 O.R. (3d) 187
[1998] O.J. No. 1883
Court File No. 000401/98

Ontario Court (General Division)
Swinton J.
May 7, 1998

APPEAL pursuant to s. 25(1) of the Building Code Act, S.O. 1992, c. 23.

William G. MacDonald, for appellant.
David W. DeMille, for respondents.

SWINTON J.: -- The Roman Catholic Episcopal Corporation for the Diocese of Peterborough appeals pursuant to s. 25(1) of the Building Code Act, 1992, S.O. 1992, c. 23 from a decision of the Chief Building Official for the Town of Cobourg, Frank Lukes, dated March 25, 1998. On that day, Mr. Lukes revoked a demolition permit issued to the appellant on December 29, 1997 for the demolition of the Rectory of St. Michael's Church in Cobourg. Mr. Lukes stated in a letter that the permit had been issued in error because he had subsequently learned that the demolition was contrary to a Heritage Easement Agreement registered on the property, which had recently been brought to his attention. The Diocese claims that the Chief Building Official had no authority to revoke the permit for a number of reasons, including the form of the notice of revocation, the inapplicability of the Heritage Easement Agreement, and estoppel.

The Legal Context

Section 8(1) of the Building Code Act prohibits a person from constructing or demolishing a building in a municipality unless a permit has been issued therefor by the chief building official. Section 8(2) provides:

> 8(2) The chief building official shall issue a permit under subsection (1) unless,
>
> (a) the proposed building, construction or demolition will contravene this Act or the building code or any other applicable law . . .

"Applicable law" has been defined by O. Reg. 403/97 as follows:

> Applicable law means, for the purposes of Section 8 of the Act, any general or special Act, and all regulations and by-laws enacted thereunder, which prohibit the proposed construction or demolition of the building unless the Act, regulation or by-law is complied with.

A permit may be revoked by the chief building official, pursuant to s. 8(10) of the Act:

> (a) if it was issued on mistaken, false or incorrect information;
>
> . . . . .
>
> (d) if it was issued in error . . .

The Chief Building Official here initially relied on s. 8(10)(d) and later added s. 8(10)(a).

To understand the issues here, it is necessary to begin with the Ontario Heritage Act, R.S.O. 1990, c. O. 18. The purpose of that Act was described by the Supreme Court of Canada in St. Peter's Evangelical Lutheran Church (Trustees of) v. Ottawa (City), [1982] 2 S.C.R. 616 at pp. 623-24, 140 D.L.R.(3d) 577 at p. 591:

> The Ontario Heritage Act was enacted to provide for the conservation, protection and preservation of the heritage of

> Ontario. There is no doubt that the Act provides for and the Legislature intended that municipalities, acting under the provisions of the Act, should have wide powers to interfere with individual property rights. It is equally evident, however, that the Legislature recognized that the preservation of Ontario's heritage should be accomplished at the cost of the community at large, not at the cost of the individual property owner, and certainly not in total disregard of the property owner's rights. It provided a procedure to govern the exercise of the municipal powers, but at the same time to protect the property owner within the scope of the Act and in accordance with its terms.

As noted, as well, by the Ontario Court of Appeal in Toronto College Street Centre Ltd. v. Toronto (City) (1986), 56 O.R. (2d) 522, 31 D.L.R. (4th) 402, the Act contains numerous procedural safeguards to protect the property owner (at p. 532).

Part IV deals with "conservation of buildings of historic or architectural value". Section 29 sets out a process for a municipality to follow when it wishes to designate a property as having historic or architectural value or interest. If objection is made to the designation, a hearing must be held by the Conservation Review Board, followed by a report, with recommendations. The municipal council may then choose to pass a by-law designating the property.

Once designation occurs, ss. 33 and 34 of the Act constrain the owner's rights to alter and demolish buildings on the property. Only s. 34 is of importance for purposes of this appeal. It provides that the owner of a designated property cannot demolish any building thereon without the consent of the municipality. The municipality has 90 days to come to a decision whether to give consent, and if it does not do so within that period, it is deemed to have consented to the demolition (s. 34(3)). If the municipality refuses consent, the demolition can be prohibited for up to 180 days (s. 34(2)(b)), and that period can be extended on consent (s. 34(3)). Once these time periods have elapsed, the owner can proceed with demolition in accordance with applicable laws, as set out in s. 34(4):

> 34(4) Despite subsection (1), where the period of 180 days prohibiting any work to demolish or remove any building or structure on a property under clause (2)(b) has expired and the owner has not agreed to an extension of such period, or where the extension of time agreed upon by the owner and the council under subsection (3) has expired, the owner may proceed to demolish or remove the building or structure on the property subject to any other Act or regulation thereunder.

Aside from the designation process in s. 29, s. 37 of the Act also provides for historical easement and covenant agreements. Because of its importance in this case, the terms of s. 37 are set out in full below.

> 37(1) Despite subsection 36(1), the council of a municipality after consultation with its local advisory committee, where one is established, may pass by-laws providing for the entering into of easements or covenants with owners of real property, or interests therein, for the conservation of buildings of historic or architectural value or interest.
>
> (2) Any easement or covenant entered into by a council of a municipality may be registered, against the real property affected, in the proper land registry office.
>
> (3) Where an easement or covenant is registered against real property under subsection (2), such easement or covenant shall run with the real property and the council of the municipality may enforce such easement or covenant, whether positive or negative in nature, against the owner or any subsequent owners of the real property, and the council of the municipality may enforce such easement or covenant even where it owns no other land which would be accommodated or benefited by such easement or covenant.
>
> (4) Any easement or covenant entered into by the council of the municipality under subsection (2) may be assigned to any person and such easement or covenant shall continue to run with the real property and the assignee may enforce the

easement or covenant as if it were the council of the municipality and it owned no other land which would be accommodated or benefited by such easement or covenant.

(5) Where there is a conflict between an easement or covenant entered into by a council of a municipality under subsection (1) and section 33 or 34, the easement or covenant shall prevail.

The Factual Background

The Rectory of St. Michael's Church is located on the appellant's property at 379 Division Street in Cobourg. Also found on the same property is the Church building. By-law 144-90 of the Corporation of the Town of Cobourg, passed December 10, 1990, designated the Church building as heritage property pursuant to s. 29 of the Ontario Heritage Act. The designation process requires that the by-law contain a statement of reasons for the proposed designation. Those set out in this by-law make reference only to the significance of the Church building.

Subsequent to that by-law, the Corporation of the Town of Cobourg and St. Michael's Roman Catholic Church entered into a Heritage Easement Agreement, as contemplated by s. 37 of the Ontario Heritage Act. The agreement, dated June 5, 1992, is an eight-page document, plus attachments. It is registered against the property and specifies a number of restrictions on the owner with respect to the repair, insurance, and demolition of the Church building. A careful reading of both the recitals of the agreement and its terms makes it clear that the main concern of the parties was the protection and preservation of the Church building. However, in Articles 1.7 and 1.8, the agreement also imposes restrictions on the owner with respect to the broader use of the property on which the Church building is located. Article 1.7, for example, prevents erection of signs, aerials and certain other items on the Church building or property without the approval of the municipality, while Article 1.8 forbids the owner to commit any act of waste. That article also forbids the owner to do a number of things, including granting easements or changing the topography or landscaping in certain ways, without the prior written approval of the municipality. Most importantly, for purposes of this appeal, Article 1.8(b) states that the owner must not "erect or remove or permit the erection or removal of any building, sign, fence or other structure of any type whatsoever" without prior written approval. According to Article 2.1, the municipality's approval, unless otherwise stated, shall not be unreasonably withheld:

Where any request for approval required under this Agreement is made, the determination of the Municipality may be based upon choice of materials, architectural design, historical authenticity, or any other grounds, not limited to purely aesthetic or historical grounds, but the Municipality's approval shall not be unreasonably withheld, unless otherwise stated.

In the years following the signing of this agreement, the Diocese purchased and renovated the Convent of the Sisters of St. Joseph for various uses. A debate then ensued about the future of the Rectory building -- specifically whether it should be moved, demolished or converted to other uses. In April 1996, the Town advised that it had received a recommendation from its Local Architectural Conservation Advisory Committee (LACAC) that St. Michael's Rectory should be designated as property of historical and architectural significance under the Ontario Heritage Act. The Diocese immediately expressed its opposition, but the Town Council proceeded to pass a motion directing that the property be designated. This led to a hearing by the Conservation and Review Board, which issued a decision dated September 19, 1996, recommending that the Rectory be designated.

On December 2, 1996, the Town Council passed By-law 58-96, which designated the Rectory under the Ontario Heritage Act. The Diocese then applied for a demolition permit on December 16, 1996, which the Town Council referred to the Local Architectural Conservation Advisory Committee for comment. Subsequently, on March 10, 1997, the Council denied its consent to the demolition, in accordance with s. 34(2) of the Act. This delayed demolition for 180 days, and during the following months, discussions were held about alternative uses for the Rectory building. On September 11, 1997, the Diocese agreed to

extend the time for obtaining a demolition permit for an additional 90 days to allow the Town further time to try to arrange for the preservation of the building.

The Diocese attempted to obtain a demolition permit on December 17, 1997, but was able to do so only after furnishing a legal opinion to the Town on the Bishop's authority to apply for the permit, and confirmation of the authority of the person seeking to pick up the permit. The permit was issued December 29, 1997. Mr. Lukes, the Chief Building Official, stated in an affidavit that he was not aware of the Heritage Easement Agreement at the time that the permit was granted. It was not until March 1998 that he became aware of the agreement and the requirement for municipal approval of the demolition.

After obtaining the permit, the Diocese entered into contracts for the demolition of the Rectory and work began. Interior fixtures, plaster walls, and asbestos had been removed, as well as mantelpieces, floor boards and base boards, before the demolition permit was revoked on March 25, 1998. This appeal then resulted.

Conclusions

The nature of the appeal

Section 25 of the Building Code Act grants a right of appeal to the Ontario Court (General Division) to a person aggrieved by a decision to revoke a building or demolition permit. The powers of the judge on an appeal are set out in s. 25(4) of the Act:

> 25(4) If an appeal is made under this section, the judge shall hold a hearing and may rescind or affirm the order or decision of the inspector or chief building official or take such action as the judge considers the inspector or chief building official ought to take in accordance with this Act and the regulations and, for such purpose, may substitute his or her opinion for that of the inspector or chief building official.

Southey J., speaking for the Divisional Court in Woodglen & Co. v. North York (City) (1984), 47 O.R. (2d) 614, 12 D.L.R. (4th) 146 (Div. Ct.), held that the judge's role in an appeal of this type is to determine whether the building official acted correctly (at p. 619):

> The duty of the judge under this subsection is to do what the judge considers the inspector or chief official ought to have done. The judge has no powers other than those which were possessed by the inspector or chief official, and has no discretion to act or defer action, if that discretion was not enjoyed by the inspector or chief official.

Whether the notice of revocation was a nullity

The appellant argued that the notice of the Chief Building Official revoking the demolition permit was a nullity because it failed to cite proper reasons for the revocation. Mr. Lukes' letter of March 25, 1998 stated that in light of the Heritage Easement Agreement of which he had become aware, the permit was revoked under "Sec. 10.(d) of the Building Code Act." In a letter dated March 30, 1998, he corrected that reference to s. 8(10)(d) of the Act, the provision allowing for revocation in the case of a permit issued in error. In a further letter of April 3, 1998, he invokes para. 1.8(b) of the Heritage Easement Agreement, the provision requiring the approval of the municipality for the removal of any building on the property. He also noted that there had not been any such written approval.

The Building Code Act does not set out a precise form for the revocation of a permit. In the interests of fairness, it is important that the affected party know the reason for the revocation, so that a response or challenge can be made to the decision. While the Chief Building Official made an error in the reference in his first letter, he quickly clarified the reasons for the revocation, and the appellant was well aware of the reasons for his decision, through his subsequent letters and verbal communications, within a short time after the decision was taken. In the circumstances, there is no unfairness or prejudice arising from the initial error, and the decision to revoke is not a nullity.

The significance of the Heritage Easement Agreement

The appellant complied with s. 34 of the Ontario Heritage Act and, absent the Heritage Easement Agreement, would have been entitled to proceed to seek a demolition permit when it did pursuant to s. 34(4) -- that is, by complying with any applicable law or any regulation thereunder. Pursuant to s. 8(2) of the Building Code Act, the Chief Building Official was required to issue a demolition permit, unless the demolition would contravene that Act, the building code, or "any other applicable law". Therefore, the central issue in this appeal is whether the Heritage Easement Agreement was applicable in these circumstances, so as to permit the Chief Building Official to revoke the permit on the grounds that he had erred in issuing it. In other words, was the Heritage Easement Agreement an "applicable law" under s. 8(2) of the Building Code Act?

Counsel for the appellant argued that the Heritage Easement Agreement does not apply to the Rectory at all, given that only the Church building had been designated at the time of the agreement and the emphasis on the Church building and its facade in the document. However, a close reading of the agreement leads me to a different conclusion. While there can be no doubt that the dominant purpose of the agreement was the protection and preservation of the Church building, the parties also agreed to terms that dealt with the property on which the Church is located. For example, one of the recitals to the agreement states that the parties wish "to conserve the aesthetic and scenic character and condition of the Property and the present historical, architectural, aesthetic and scenic character and condition of the exterior of the building on the Property . . ." (emphasis added). Most importantly for purposes of this appeal, Article 1.8(b) requires the written approval of the municipality for the erect ion, alteration and demolition of other buildings and structures on the property. The inclusion of such a provision is readily understandable, for the condition of surrounding grounds and adjacent structures may well affect the aesthetic, historic or architectural significance of the building which is the main concern of an agreement such as this.

The appellant argued that the Heritage Easement Agreement could not apply to the Rectory, because s. 37(1) limits such agreements to buildings designated as having historical or architectural significance -- that is, those dealt with under s. 29 of the Act. On its face, s. 37(1) is not so restricted, as it states that agreements can be made "for the conservation of buildings of historic or architectural interest". Moreover, even if an agreement were made with respect to a designated building, s. 37 does not preclude the inclusion of terms in such an agreement related to the grounds on which the building stands or adjacent buildings on the property. As noted above, both may be integrally related to the preservation of the historic and architectural character of the designated building.

Therefore, the agreement can and does apply to the Rectory. Pursuant to its terms, the municipality's written approval for the demolition of the Rectory should have been sought. While the Diocese had sought permission under the process set out in s. 34 of the Ontario Heritage Act, municipal permission for demolition was never granted. Therefore, the demolition seems to contravene the agreement. The important question, then, is whether the agreement comes within the term "applicable law", given that the Chief Building Official has the authority to refuse a demolition permit under the Building Code Act if the demolition would contravene an applicable law.

Easements are often the result of an exercise in private ordering, since they are granted by one landowner to another person, either to give that person a right to do something on the grantor's land or to restrict the uses the owner can make of the land. In this case, the easement was created as part of a statutory scheme to protect heritage buildings in Ontario. Under s. 37(1) of the Act, the municipality must have the authority of a by-law to enter into such an agreement. It can then enforce the easement agreement, whether or not it is the owner of land which could be benefited or accommodated by the agreement. Most importantly, pursuant to s. 37(5), the agreement prevails when there is a conflict with the provisions of the Act relating to alteration and demolition found in ss. 33 and 34. That subsection is, in effect, a statutory incorporation, by reference, of the easement agreement. It gives priority to the easement agreement in the event of a

conflict with other parts of the legislation, and thus it a llows landowners and municipalities to expand the protection for historic buildings beyond that provided elsewhere in the statute. Given the terms of s. 37(5) of the Act, I conclude that the Heritage Easement Agreement is applicable law here.

Estoppel

The appellant argued that the Town should nevertheless be estopped from relying on the agreement, for a number of reasons. First, it was argued that the Chief Building Official is estopped from revoking the permit, as he should be deemed to have known of the agreement through its registration, and he ignored its force when he granted the permit. Alternatively, his grant of the permit should constitute municipal consent to the demolition, in accordance with the agreement. Thirdly, the Town's failure to invoke the agreement at an earlier stage of the proceeding should now estop it from invoking the agreement.

Alternatively, the Chief Building Official was said to have been correct in granting the permit, and therefore without grounds to revoke it, because there is no reasonable basis for the Town to withhold consent under the agreement, and it was acting in bad faith.

Registration of the Heritage Easement Agreement did not constitute notice to the Chief Building Official. Section 74(1) of the Registry Act, R.S.O. 1990, c. R.20, provides that registration of an instrument constitutes notice thereof to any person claiming an interest in land subsequent to the registration. We are not dealing with competing claims to an interest in land here, so s. 74 does not apply.

But even if the Chief Building Official were deemed to have notice by that section, this would not determine whether he should have granted the permit or could revoke it. Under the Heritage Easement Agreement, only the municipality could grant the necessary approval, and the issuance of the permit by the Chief Building Official could not constitute that approval. Pursuant to s. 9 of the Municipal Act, R.S.O. 1990, c. M.45, the powers of a municipal corporation shall be exercised by its council, and no consent to the demolition has been given by council.

Nor could the Chief Building Official be estopped from revoking a permit issued in error and contrary to an applicable law. Numerous cases have acknowledged the authority of municipal officials to revoke or refuse building and demolition permits for projects that are contrary to zoning laws, even when the official could have determined the content of the law before issuing the permit (for example, Colchester (County) v. Mr. C. Restaurants Inc., [1994] N.S.J. No. 527, 24 M.P.L.R. (2d) 82 (S.C.); Markham (Town) v. Eastown Plaza Ltd. (1992), 11 M.P.L.R. (2d) 134 (Ont. Gen. Div.); Heifer Group Ltd. v. Listowel (Town) Chief Building Official (1996), 38 M.P.L.R. (2d) 76 (Ont. Gen. Div.). Therefore, the Chief Building Official correctly determined that he had erred in issuing the demolition permit because there had been a failure to comply with the agreement, and he had the authority, pursuant to s. 8(10)(d) of the Building Code Act, to revoke the permit in these c ircumstances.

The appellant also argued that estoppel should operate to prevent municipal reliance on the Heritage Easement Agreement, given that the municipality had had a period of many months in which to invoke the agreement, and it did not do so. Instead, it allowed the Diocese to obtain a building permit, enter into a demolition contract, and proceed some way with the demolition.

Whether the Town's conduct can indeed give rise to a claim for estoppel or waiver because of its treatment of the agreement is not for me to determine in this case, as this is an appeal from a decision of the Chief Building Official under s. 25(4) of the Building Code Act. My task is to determine whether he erred. In accordance with s. 8(2) of that Act, it was his responsibility to determine whether or not applicable law, including the Heritage Easement Agreement, had been observed. In determining whether there had been compliance with the agreement, he had to determine whether municipal consent to the demolition had been given. Beyond that determination, the Chief Building Official had neither the authority, nor the legal competence, to determine whether the municipality's

refusal of permission would be unreasonable within Article 2.01 of the Agreement, or whether the doctrine of estoppel or waiver should apply in the circumstances. Sitting on an appeal from his decision, it would be equally impr oper for me to make such determinations. Whether the municipality should be ordered to give its permission, or prevented from asserting the need for approval, must be determined in another proceeding, seeking a different form of relief. Similarly, arguments with respect to bad faith by the municipality are not within the competence of the Chief Building Official, and I have no jurisdiction to deal with them here.

The Chief Building Official determined that the demolition permit had been granted in error, once he realized that the Heritage Easement Agreement applied and had not been complied with. Counsel for the appellant urged me to give due consideration to the rights of property owners in a case such as this, and to construe the Ontario Heritage Act narrowly because of its constraints on property rights. I am not here, however, construing only the Act. I must also give effect to the Heritage Easement Agreement entered into voluntarily between the appellant and the town, for whatever reasons they may have had. Section 37(5) gives priority to the terms of Heritage Easement Agreements which a property owner and a municipality enter, when those terms conflict with other provisions of the Act. In other words, that section gives priority to agreements made by property owners voluntarily to restrict their own property rights. In the circumstances, given the priority given to Heritage Easement Agreements by s. 37(5), the Chief Building Official of Cobourg did err in issuing the demolition permit for the Rectory, and thus he had the authority to revoke the permit pursuant to s. 8(10)(d) of the Building Code Act. Therefore, the appeal from his decision is dismissed.

If the parties are unable to agree with respect to costs, they may make written submissions within 30 days of the release of this decision.

Order accordingly.

Rothfield v. Manolakos

The Corporation of The City of Vernon and William Phillips,
appellants;
v.
Peter Manolakos and Voula Manolakos, respondents;
and
Ralph Gohmann and Barry Barber, respondents;
and
B & L Landscaping & Maintenance Ltd. and Morris Reade, a.k.a.
William Morris, defendants;
and
Woodcraft Ventures Ltd., third party;
And between
The Corporation of The City of Vernon and William Phillips,
appellants;
v.
Peter Manolakos and Voula Manolakos, respondents;
and
Ralph Gohmann and Barry Barber, respondents;
and

William Rothfield and Charles Burtch, plaintiffs;
and
B & L Landscaping & Maintenance Ltd. and Morris Reade, a.k.a.
William Morris, third parties.

[1989] 2 S.C.R. 1259
[1989] S.C.J. No. 120
File No.: 20740.

Supreme Court of Canada
1989: March 21 / 1989: December 7.
Present: Dickson C.J. and Lamer, Wilson, La Forest,
L'Heureux-Dubé, Gonthier and Cory JJ.

[page1260]

ON APPEAL FROM THE COURT OF APPEAL FOR BRITISH COLUMBIA

APPEAL from judgments of the British Columbia Court of Appeal, Rothfield v. Manolakos (1987), 20 B.C.L.R. (2d) 85, dismissing appeals from judgments of Arkell Co. Ct. J., [1986] B.C.W.L.D. 425. Appeal allowed, Lamer and Cory JJ. dissenting in part; Wilson and L'Heureux-Dubé JJ. dissenting in part.

R.B.T. Goepel, for the appellants.
Greg Reif, for the respondents.

Solicitors for the appellants: Watson Goepel Maledy, Vancouver.
Solicitor for the respondents: DuMont & Company, Armstrong.

The judgment of Dickson C.J. and La Forest and Gonthier JJ. was delivered by

[para1] LA FOREST J.:-- I have had the advantage of reading the judgment of my colleague, Justice Cory, but I am respectfully unable to agree with his proposed disposition of this case for the reasons that follow.

Factual Background

[para2] The facts of this appeal are generally sufficiently set out in the reasons of Cory J., and I need not repeat them. I think it important, however, to stress some matters concerning the specifications and the rudimentary sketch submitted by the subcontractors when they attended at the municipal offices to obtain a permit for the retaining wall they had been hired to construct for the respondent owners. The trial judge found as a fact that [page1266] Phillips, the chief building inspector, had seen the specifications and the sketch, but it seems fair to assume in the light of Phillips' testimony that he had not examined them with the care necessary to permit him to ascertain whether they could reasonably serve in the construction of the project. It is undisputed that the sketch was only a rough and ready drawing, and that the project, if built in accordance with the specifications, would be seriously deficient. The building inspector himself testified that the proposed steel reinforcement was wholly inadequate to support the structure, and that if he had seen the sketch, he would

not have issued the permit. The footings described on the sketch were also inadequate. Despite the manifest inadequacy of the plan, however, the city issued a permit for the construction of the retaining wall. This was in accord with its usual practice. In construction projects of this kind, the city relied on on-site inspections to ensure that the requisite standards had been met.

[para3] The city by-law placed responsibility on the owner to summon the building inspector for this on-site inspection. Here, of course, the owner failed to give notice in good time, and it is the significance to be accorded to this failure that is at the heart of this appeal.

The Scope of the Duty Owed by the City

[para4] The city adopted the relevant building by-law "for the health, safety and protection of persons and property" pursuant to s. 734 of the Municipal Act, R.S.B.C., c. 290, as amended. By application of the test formulated by Lord Wilberforce in Anns v. Merton London Borough Council, [1978] A.C. 728, and adopted by this Court in City of Kamloops v. Nielsen, [1984] 2 S.C.R. 2, the city, once it made the policy decision to inspect building plans and construction, owed a duty of care to all who it is reasonable to conclude might be injured by the negligent exercise of those powers. This duty is, of course, subject to such [page1267] limitations as may arise from statutes bearing on the powers of the building inspector.

[para5] In City of Kamloops v. Nielsen, this Court did not deal with an owner builder, but I see no reason why such a person would not fall within the scope of the duty of care owed by a municipality. There is, admittedly, an important distinction between the reliance of third parties on a municipal building inspector and the reliance of an owner builder. Third parties, such as neighbours and subsequent purchasers or occupiers of a building, obviously have no say in the actual construction of a building that proves defective. It is therefore reasonable that they should be entitled to rely on the municipality to show reasonable care in inspecting the progress of the construction. Owner builders, by contrast, are in a position to ensure that the building is built in accordance with the relevant building regulations, and from this it may be argued that they are not entitled to rely on the municipality. This would appear to be the view of Cory J. who states that it is the owner who should ensure through his contractors that the building is safe and structurally sound, and complies with the municipal by-law.

[para6] I am unable to accept this position. As a preliminary matter, it is not clear to me how owner builders, unless possessed of a high degree of technical knowledge, are supposed to see to it that their contractors comply with the technical aspects of building by-laws. Doubtless owner builders can choose their contractors, and it is incumbent on them to hire reputable tradesmen. But I fail to see how, having done that, they are in a position to ensure that construction actually proceeds according to standard. Owner builders can hardly be expected to serve as their own inspectors. It can, I think, safely be assumed that the great majority of those who engage building contractors to undertake a project must rely on the disinterested expertise of a building inspector to ensure that it is [page1268] properly done. In that respect, owner builders are in a position similar to third parties who may be affected by the construction. Like them, they are, in my respectful opinion, entitled to rely on the municipality to properly inspect construction to see that it conforms to the standards set out in the municipality's building by-laws.

[para7] Moreover, in my view, the distinction sought to be made between owner builders and third parties overlooks the fact that both are ratepayers for whose safety the by-law was passed. The inspection of plans and the supervision of construction increases the costs of construction for everyone. But I think that most ratepayers, were they to give the matter any thought, would justify the increased expense as an investment in peace of mind: faulty construction, after all, is a danger to life and limb and may result in future expense and liability. This applies equally to owner builders and third parties. Both are justified in saying: "I pay for the provision of an inspection service, and so long as I act in good faith, I should be entitled to rely on the city to

exercise reasonable care to ensure that all construction is built according to the standards set out in the by-laws."

[para8] Finally, I do not share the view that applying the law to owner builders in this way would make the municipality an insurer in respect of compliance by the owner with applicable building standards. It must be borne in mind that a municipality, once it has made the policy decision to inspect construction, is not bound to discover every latent defect in a given project, nor every derogation from applicable standards. That would be to hold the municipality to an impossible standard. Rather a municipality is only called upon to show reasonable care in the exercise of its powers of inspection. Accordingly, a municipality, whether the duty of care is owed to an owner builder or a third party, [page1269] will only incur liability for such defects as it could reasonably be expected to have detected and to have ordered remedied. This is implicit in the decision of this Court in City of Kamloops v. Nielsen.

[para9] In summary, I cannot subscribe to the view that considerations of policy militate against viewing both owner builders and third parties as entitled to place reasonable reliance on the city to ensure that construction does not pose a threat to their health or safety.

The City's Duty Respecting the Specifications

[para10] As Cory J. has noted, the building inspector exercised his discretion in this case not to require plans by a professional engineer, and in such cases it was the practice to rely on on-site inspections to ensure compliance with the standards of the by-law. I am prepared to accept that as a general proposition this is not an unreasonable thing to do. The many small projects that come to the city must be processed with a reasonable measure of flexibility and efficiency, and undoubtedly many of the rudimentary specifications and sketches that are submitted to the inspector do not contain all the information necessary to enable the city to fully assess whether a project is up to standard. It would be unrealistic for the city to insist that owners submit fully adequate plans for such projects. By the same token, however, it would be unreasonable to impose on the city the burden of perfecting all such plans.

[para11] It seems to me, however, that it is incumbent on the city to at least examine the specifications and sketches. If an examination of these reveals that they may reasonably serve in the construction of a project, it would appear sensible to issue a permit. The inspector is functioning within the parameters of a legislative scheme in which it is normal to ensure that a project fully meets the standards of the by-law at the on-site inspection stage. It would [page1270] tend to defeat the discretion not to require professional plans if a more exacting standard were imposed on the city inspector. The city's duty, after all, is only to exercise reasonable care.

[para12] Inadequacy in the sense of insufficiency is one thing, however; inadequacy in the sense of an obvious departure from the standards required by the by-law is another. In the present case, it was clear from the specifications that the project was inadequately designed. The building inspector's testimony itself draws attention to the fact that the retaining wall would not hold if built with the amount of steel reinforcement described in the specifications.

[para13] Under these circumstances, I have no difficulty in holding that the appellants were negligent in this case, and barring other considerations, that they are liable for the loss resulting from that negligence. The appellants' negligence must, however, be assessed in the context described above and, in particular, of the legislative scheme in which they were operating. That scheme provides for on-site inspections at which time inadequacies can be corrected during the course of construction. These inspections are under the scheme triggered by notification from the owner. The by-law squarely imposes this duty on the owner at particular stages of construction. I should perhaps advert to the fact that the by-law includes a contractor in the definition of owner, but I emphasize that it is an inclusive provision; it can scarcely be read as excluding the owner upon whom the duty is originally imposed. Relying on these provisions, the

appellants argued that the failure of the owners in the present case to give timely notice to permit the appellants to conduct an on-site inspection absolved the latter from liability.

The Negligent Owner Builder

[para14] I turn then to a consideration of the consequences to be ascribed to the failure of the owners and their contractors to give timely notice for the [page1271] on-site building inspection. I agree with Cory J. that this failure constituted negligence, but I do not share his view that this failure must completely absolve the municipality from liability. In my respectful view, Lord Wilberforce's dictum that no duty is owed "to a negligent building owner, the source of his own loss" does not apply to the facts of this case.

[para15] I do not think Lord Wilberforce's pronouncement was meant to extend to every failure by an owner builder, or his contractors, to comply with the applicable building regulations. It is to be expected that contractors, in the normal course of events, will fail to observe certain aspects of the building by-laws. That is why municipalities employ building inspectors. Their role is to detect such negligent omissions before they translate into dangers to health and safety. If, as I believe, owner builders are within the ambit of the duty of care owed by the building inspector, it would simply make no sense to proceed on the assumption that every negligent act of an owner builder relieved the municipality of its duty to show reasonable care in approving building plans and inspecting construction.

[para16] These considerations suggest that it is only in the narrowest of circumstances that Lord Wilberforce's dictum will find application. By way of example, I think that the negligent owner would be viewed as the sole source of his own loss where he knowingly flouted the applicable building regulations or the directives of the building inspector; see the observations of Stephenson L.J., Donaldson L.J., and Sir David Cairns in Acrecrest Ltd. v. W. S. Hattrell & Partners (a firm), [1983] 1 All E.R. 17 (C.A.), at pp. 25, 30 and 33, respectively. Again owner builders may totally fail to acquit themselves of responsibilities that properly rest on them; see the decision of the British Columbia Court of Appeal in McCrea v. White Rock, [1975] 2 W.W.R. 593, where a builder unreasonably [page1272] relied on the city to take the initiative in inspecting the progress of construction.

[para17] The common thread in the examples cited above is that they involve circumstances in which it is reasonable to conclude that an owner builder had, by his actions, excluded himself from the scope of the municipality's duty of care. Sir David Cairns puts the matter well when he observes in Acrecrest Ltd. v. W. S. Hattrell & Partners (a firm), supra, at p. 33, that the "local authority's function ... is not that of restraining a wrongdoer from persisting in his wrongdoing". In my view, however, on the facts of this case it is not open to the city to advance a similar argument and say that the action of the owners was such that they were no longer owed a duty of care. And I say this, even apart from the initial negligence of the appellants to which I shall refer later.

[para18] As I noted above, the city issued the building permit on the assumption that an on-site pre-pour inspection would enable it to determine whether the design met applicable standards. The pre-pour inspection is a key part of the inspection process because it permits the inspector to determine if the foundations of a project are up to standard. Lord Wilberforce touches upon this very point in Anns v. Merton London Borough Council, supra, at p. 753:

> One of the particular matters within the area of local authority supervision is the foundations of buildings -- clearly a matter of vital importance, particularly because this part of the building comes to be covered up as building proceeds. Thus any weakness or inadequacy will create a hidden defect which whoever acquires the building has no means of discovering: in legal parlance there is no opportunity for intermediate inspection.

[para19] Inasmuch as inadequately inspected foundations will always pose a threat to the health and safety of the public, building by-laws contain measures aimed at preventing

the occurrence of such "hidden defects". Thus, the City of Vernon building [page1273] by-law sets out definite standards for foundation work and, as my colleague Cory J. points out, Division 700 of the by-law confers on the building inspector a broad spectrum of powers designed to enable him to ensure that these standards are respected. The building inspector is empowered to order the correction of any work which has been improperly done, and similarly may order the cessation of any work that is proceeding in contravention of the by-law. As I will go on to explain, these powers of the inspector to insist on any correction necessary to bring the work up to standard take on a particular importance in this case.

[para20] It cannot be disputed that the owners were negligent in failing to give timely notice for the pre-pour inspection. The by-law places this obligation squarely on every property owner. But the fact remains that when the inspector did attend at the site he was confronted with a situation in which it must have been at once clear to him that the retaining wall was potentially substandard. As I have just pointed out, there is no mystery to the fact that uninspected foundations may give rise to hidden defects. This will always be the case, and here two additional facts heightened this possibility. First, it must be remembered that the city had issued the permit on the basis of inadequate plans which themselves afforded no basis for a preliminary evaluation of the soundness of the foundations. In this case, moreover, an assessment of the plans would have revealed that the steel reinforcements and the footings were inadequate. Secondly, there was the telling fact that a crack had already appeared in the wall.

[para21] My colleague takes the view that the failure of the owners to give timely notice made it "impossible for the city to fulfill its duty to inspect". In my respectful view, however, it is necessary to take a broader view of the question and not simply focus on the fact that the negligence of the owners made it difficult to conduct one particular inspection. The key question, it seems to me, is whether it is reasonable to conclude that despite the negligence [page1274] of the owners, the inspector was still in a position to acquit himself of the responsibility that the by-law placed on him, i.e., to take reasonable care to ensure that all building was done in accordance with the applicable standards of the by-law. In other words, is it reasonable, in the circumstances to conclude that a due exercise by the inspector of his powers, even though he was summoned late, could have avoided the danger? See the formulation of Lord Bridge of Harwich in Curran v. Northern Ireland Co-Ownership Housing Association Ltd., [1987] A.C. 718, at pp. 727-28.

[para22] When the question is framed in this way, I think that the answer must be in the affirmative. The inspector could not and did not rely on the plan submitted to him; it was inadequate. He chose instead to rely solely on the on-site inspection. And when he attended at the site, he was confronted with a situation which, if left unremedied, manifestly stood to pose a threat to the health and safety of the public, including the neighbours and the owner builder. Of course, the cause of the problem would have been evident if the inspector had been asked to come at the proper time. But this does not absolve the inspector of his duties. It must be remembered that the inspector was, at the time, armed with all the powers necessary to remedy the situation. As I see the matter, it was incumbent on the building inspector, in view of the responsibility that rested on him, to order the cessation of the work, and the taking of whatever corrective measures were necessary to enable him to ensure that the structure was up to standard.

[para23] Instead, the inspector stipulated that the situation be monitored for a certain time and that construction proceed if no further damage occurred. In my view, this was negligence. When a building inspector authorizes a given project to proceed this must be taken as an indication that the inspector has satisfied himself that the project conforms to applicable standards. On what other basis could the building inspector, acting prudently, authorize construction to proceed? Here, on the [page1275] facts, I do not see how the building inspector, using reasonable care, could have satisfied himself that this was the case. Even leaving aside the fact that the project was already showing signs of damage, the inspector, never having inspected the structure, simply did not have at his disposal any information

on which to base a conclusion that the project was up to standard. Indeed, had the inspector simply turned to the city's records or enquired about the manner in which the structure was built or about the materials used in the construction, he would have discovered from the specifications what he ought to be taken to know in any event, that the structure was deficient in a number of important aspects.

[para24] To return, then, to my initial proposition that it would be unreasonable to hold the owners to be the "sole authors of their loss", I see a vital distinction between this case and instances where an owner builder determines to flout the building by-law, or is completely indifferent to the responsibilities that the by-law places on him. In such circumstances, owner builders cannot reasonably allege that any damage they suffer is a result of the failure of the building inspector to take reasonable care to ensure that a given construction project is built in conformity with the by-laws. They have, by their actions, placed themselves outside the scope of the duty owed by the public authority. In effect, their breach of the regulations is such as to justify the conclusion that they can have no reasonable expectation that they are entitled to rely on the due exercise of the inspection power to forestall dangers to their health and safety. In summary, the duty of building inspectors should not be taken to extend to requiring them to ferret out those who are aware or indifferent as to whether work is being done illegally, and who persist in that course of action.

[para25] Here, the situation is entirely different. Admittedly, the owners had breached the applicable [page1276] by-laws. One could indeed characterize the breach as serious, even though they had instructed the contractors to obtain the requisite permits. But the key point, as I view the matter, is that nothing in the nature of the breach would support the view that the owners should not be entitled to rely on the building inspector to acquit themselves of their responsibility to ensure that the project was up to standard. The very by-law contemplated that breaches of the sort committed here would occur. That is the reason the powers of the building inspector extend to allowing him to halt construction, and to order the correction of work improperly done when such breaches come to his attention.

[para26] In short, I am unable to share the view of Cory J. that the negligent breach of the by-laws by the owners was such as make them the sole authors of their own loss. To return to the formulation of Lord Bridge, supra, I remain of the view that in the circumstances of this case the due exercise by the building inspector of the powers at his disposal would have avoided the danger caused by the negligent behaviour of the owners. In failing to exercise these powers the building inspector was again in breach of his duty to take reasonable care to see that the by-laws were complied with.

[para27] But if I cannot agree with my colleague that the responsibility of the building inspector to discover and correct breaches of the building by-law was completely negated by the respondents' oversight, I am of the view that they should bear some responsibility for any loss they incurred because of their failure to summon the inspector in good time. The damage could have been avoided if notice had been given at the proper time. The by-law, I repeat, places responsibility for giving notice to the inspector squarely on the owner. It could not really function without this requirement and, in the case of small projects, we saw, there are additional reasons making on-site inspection critical if the by-law is to function with reasonable flexibility [page1277] and efficiency. These are not technical matters for which the average person must rely on an experienced contractor. People generally should know that a building permit is required and that inspections cannot be done when the work is covered up. Of course, owners generally rely on a contractor to give notice at the appropriate time, but the responsibility is ultimately the owner's, not the city's. Failure to give timely notice places an unenviable burden on the inspector to decide whether the expensive task of digging up the area should be undertaken. All concrete cracks, and his failure to act, though negligent, may in some measure reasonably be attributed to the negligence of the owner in placing him in that position.

[para28] Nonetheless, it is clear that the lion's share of

responsibility in the present case lies upon the appellants. I would, therefore, find the appellants (the city and its inspectors) and the respondent owners contributorily negligent and would accordingly apportion liability between them. In my view, a just apportionment would be in the order of 70% for the appellants and 30% for the owners, for which, pursuant to the trial judge's orders, the appellants are jointly and severally liable. As between the owners and the contractors, it must be remembered that the latter had contracted to construct the project and were thus under an obligation to do so with reasonable care and skill. Indeed, not only did they construct the work in an improper manner, it was really their fault, rather than the owners', that the building inspector was not notified at the appropriate time. Accordingly, the owners, pursuant to the trial judge's orders, are entitled to recover jointly and severally against the contractors for all the loss sustained by them. The trial judge also ordered (and the appellants did not dispute this) an apportionment of liability as between the contractors and the appellants of 60% [page1278] and 40% respectively. These orders were not contested and I have not disturbed them.

Disposition

[para29] Accordingly, I would allow the appeal and set aside the judgment of the Court of Appeal. The judgments of the trial judge should be varied as follows. In Action 241/81 Vernon, the plaintiffs are held to be contributorily negligent to the extent of 30% and judgment against the appellants is reduced accordingly. In Action 228/82 Kelowna, the defendants, Peter and Voula Manolakos, are held contributorily negligent to the extent of 30% and damages against the appellants are reduced accordingly. In all other respects, the judgments of the trial judge are confirmed.

[para30] I would apportion costs between the appellants and respondent owners in this Court and in the Court of Appeal on the basis of 30% to the appellants and 70% to the respondent owners. The owners and the appellants are entitled to recover these costs against the contractors, the former fully, the latter on the basis of the contribution to the liability apportioned between the contractors and the appellants by the trial judge.

The reasons of Lamer and Cory JJ. were delivered by

[para31] CORY J. (dissenting in part):-- The issue to be resolved on this appeal is what if any duty was owed by the municipal authorities of the City of Vernon to the respondents who were having a retaining wall built on their land.

Factual Background

[para32] The respondents, Peter and Voula Manolakos owned a house situated on a steeply sloping lot in the municipality of Vernon. Before they could have and enjoy a backyard, a retaining wall had to be built. They entered into a contract with Ralph Gohmann to build one, to erect a fence on top of it and to do some landscaping. Mr. Gohmann in turn [page1279] subcontracted with Barry Barber for the construction of the retaining wall. Mr. Barber prepared a brief written proposal together with a rough sketch of the wall which was to be 74 feet long, 8 feet high and 8 inches wide. Although neither Mr. Gohmann nor Mr. Barber were engineers they professed to having considerable experience in construction work of this type.

[para33] The respondents, in their desire to avoid any problems with the wall, telephoned the City of Vernon to make enquiries about a building permit. In response to the call, William Morris-Reade, a city building inspector, visited the site on May 26, 1980. By that time the excavation had been completed and the footing forms were already in place. Mr. Morris-Reade did not conduct an inspection but he advised the respondents that a building permit was required. Later that afternoon Messrs. Gohmann and Barber attended the building department offices to apply for the permit. They met with William Phillips, a professional engineer and the city's chief building inspector.

[para34] Mr. Phillips was presented with the rough sketch of the wall and the proposal Mr. Barber had drafted. Mr. Phillips carefully enquired of the contractor and subcontractor about their experience with building retaining

walls and he was assured by them that they had been involved in a number of similar projects. Based upon their experience and the relatively low cost ($5,000) of the wall, Mr. Phillips exercised the discretion which he possessed under the city by-law and decided that he would not insist upon a professional engineer's plan for the wall. He concluded that detailed specifications would be unnecessary because the adequacy of the wall's foundation, siting, reinforcing and drainage could be evaluated during the on-site inspections which were specifically required by the city's by-law. He therefore [page1280] gave instructions to issue the building permit for the retaining wall.

[para35] The City of Vernon's building by-law (like most such by-laws) places an obligation upon the owner to inform the city when a building has reached certain stages of completion in order that inspections can be carried out by the city's building inspectors. The concrete had been poured and backfilling had been commenced without any notification to the city. As a result, it was impossible for the city inspector to carry out the requisite inspection which, if reasonably performed, would have revealed the flaws in design and construction.

[para36] On June 12, 1980, Mr. Manolakos called Mr. Morris-Reade, the city building inspector, to advise him that a crack had appeared in the wall. The inspector went to check the wall but found that a large part of the backfilling had already been done. He was able to see a crack but was unable to evaluate the wall's foundations, siting, reinforcing or drainage, for the obvious reason that everything had been covered over.

[para37] Mr. Morris-Reade in turn told Mr. Phillips about the crack and he visited the site himself on June 16 and 19. He suggested to Messrs Gohmann and Barber that they monitor the situation carefully to see if there was any movement of the wall and that they check the drainage from the house. The contractor found no further movement during the next 20 days. He then finished the backfilling, landscaping and sodding and put up a fence on the wall.

[para38] On February 19 the respondents found that the retaining wall was moving. Mr. Manolakos called the general contractor to have the wall stabilized and, as well, notified the city of the problem. The police arrived and took immediate steps to protect the lives and property of others by barricading and securing the area. The respondents were ordered to remove the wall. Fortunately, any physical danger to the neighbours living below the wall was averted, although they did sustain some damage to their property. Mr. Manolakos retained a professional engineer who found that the reinforcing for the [page1281] wall had been inadequate. Mr. Phillips inspected the site and came to a similar conclusion. He testified that if an on-site inspection had been conducted when it should have been, before the concrete was poured, the project would not have been allowed to continue.

[para39] The respondents brought an action against the contractor, the subcontractor, the city inspectors and the city. The neighbouring owners, Mr. Rothfield and Mr. Burtch, brought an action against the respondents who in turn took third party proceedings against the parties they had sued.

Decisions of the Courts Below

[para40] The trial judge found that the subcontractor's original proposal and rudimentary sketch was an inadequate basis for issuing a building permit and that the city, through its building inspectors, was negligent in issuing one. In both the actions (one brought by the Manolakoses and one by their neighbours) he attributed 60% of the fault to the contractor and subcontractor, and 40% to the city and its inspectors. He ordered the defendants to pay $12,416.68 in damages to the Manolakoses and $2,600 to the neighbouring owners.

[para41] Although divided on other issues, the Court of Appeal was unanimous in deciding that the inspector Mr. Morris-Reade could not be held liable. That finding was not challenged before this Court. The majority of the Court of Appeal agreed with the trial judge that chief building inspector Phillips and the city were liable. This conclusion

was based upon findings that Mr. Phillips had been negligent in two respects: firstly, in failing to warn the respondents that the original proposal was inadequate; and secondly, in failing to conduct an on-site inspection. The majority went so far as to conclude that the city had assumed the burden of conducting a pre-pour on-site inspection and thereby relieved the respondents of their obligation of [page1282] notification as to when such an inspection could be conducted.

[para42] Lambert J.A., in dissent, found that while the chief building inspector may have been careless in granting the building permit, it was not reasonable for the respondent owners to rely upon the municipality to guarantee the adequacy of their own proposed design for the wall. He determined that the owners had not discharged their obligation to inform the city as to when inspections could be carried out. He thought this obligation was of fundamental importance as it would be impossible for the city to keep track of all the projects carried out within its limits in order to know when to inspect. He found that there was a significant difference in the owners' attempt to rely on the city to ensure the adequacy of their wall and that of the neighbouring land owners. The neighbours who, unlike the owners, had no control over the design or construction of the wall could reasonably assume the city's by-law would be complied with and that the city would ensure that there was such compliance. In his view, it was reasonable and appropriate for the neighbouring owners to rely upon the chief building inspector to ensure that the designs submitted were adequate.

The Applicable Legislation and By-law

[para43] Division (5) of the Municipal Act, R.S.B.C. 1979, c. 290, as amended, provided for the promulgation and implementation of building regulations by City Councils in British Columbia. In particular, s. 734 reads:

> 734. The council may, for the health, safety and protection of persons and property, and subject to this Act, the Health Act and the Fire Services Act and their regulations, by bylaw
>
> . . .
>
> (f) prescribe conditions generally governing the issue and validity of permits, inspection of works, buildings and structures, and provide for the levying and collecting of fees and inspection charges;

[para44] Section 740 of Division (5) and the regulations thereunder provide that the British Columbia Plumbing Code and certain parts of the National Building Code of Canada apply to cities in British Columbia, including the City of Vernon. In order to fulfill its responsibilities under the Plumbing Code and Building Code, and pursuant to s. 734 of the Municipal Act, the city passed By-law Number 2450 in 1976. The by-law states its purpose in these words:

> 101. Purpose:
>
> To provide for the administration and enforcement of the Plumbing and Building Code and to provide regulations for the erection, construction, maintenance, moving and safety of buildings with the corporate limits of The City of Vernon, but are not related to land quality.

[para45] Division 300 specifies the scope of the by-law's application:

> This Bylaw shall apply:
>
> 300. To the erection, construction, maintenance, moving, demolition and safety of all buildings subject to the limitations set out in the
>
> Building Code.

[para46] The by-law applied to the Manolakoses' retaining wall because of the definition of the term "building":

> "Building":

Shall mean a structure located on the ground which is designed, erected or intended for the support, enclosure or protection of persons or property.

[para47] Division 600 sets out the duties of the building inspector:

600. The Building Inspector, under the supervision and direction of the Director of Community Development shall:

(i) Administer this Bylaw;

(ii) Keep records of all applications received, permits and orders issued, inspections and tests made, and shall

retain copies of all papers and documents connected with the administration of his duties;

(iii) Establish whether any method or type of construction or materials used in the construction of any building conforms with the requirements and provisions of this Bylaw.

[para48] Division 700 specifies the powers that are granted to inspectors in order to fulfill these duties, including the powers to enter premises at any reasonable time, to revoke or refuse to issue a permit in situations where the construction method is not satisfactory in the opinion of the inspector, to order the correction of work improperly done and to order the cessation of work proceeding in contravention of the by-law.

[para49] Two other divisions of the by-law are of particular relevance to this appeal: Division 800 which deals

with building permits and Division 1000 which deals with the duties of the owner.

[para50] Subsection 800(4) indicates that there is discretion which rests with the chief building inspector to decide whether a proposed project requires that engineering plans should be submitted as a condition to the granting of a building permit:

800. ...

(4) Notwithstanding any other provision of this bylaw, whenever, in the opinion of the authority having jurisdiction, the proposed work requires specialized technical knowledge, it may be required as a condition of the issuance of any permit, that all drawings, specifications and plot plans, or any part thereof, be prepared and signed by, and the construction carried out under the supervision of, an architect or professional engineer.

[para51] Section 1001 makes it clear that the owner, (which by definition includes the contractor and subcontractor) is responsible for giving at least 24 hours notice and having pre-pour and pre-backfill inspections carried out:

1001. Every owner of property shall:

. . .

(e) Give at least twenty-four (24) hours notice to the authority having jurisdiction and obtain his inspection and approval of the work:

(i) after the forms for footings and foundations are complete, but prior to placing any concrete therein;

(ii) after removal of formwork from a concrete foundation and installation of perimeter drain tiles and damp-roofing but prior to backfilling against foundation;

[para52] Under the terms of subs. 1000(1), the granting of a permit does not relieve the owner "from full responsibility for carrying out the work or having the work carried out in accordance with the requirements of this bylaw or the Building Code."

Was a Duty of Care Owed by the Municipality to the Respondents?

[para53] The duty of care which may be owed by a municipality to its residents was reviewed by this Court in the City of Kamloops v. Nielsen, [1984] 2 S.C.R. 2. In that case Wilson J., writing on behalf of the majority, adopted the criteria for determining this question which was set forth by Lord Wilberforce in Anns v. Merton London Borough Council, [1978] A.C. 728. She restated in the following way the two questions which must be asked in order to determine whether a private law duty of care exists (at pp. 10-11):

> (1) is there a sufficiently close relationship between the parties (the local authority and the person who has suffered the damage) so that, in the reasonable contemplation of the authority, carelessness on its
>
> part might cause damage to that person? If so,
>
> (2) are there any considerations which ought to negative or limit (a) the scope of the duty and (b) the class of persons to whom it is owed or (c) the damages to which a breach of it may give rise?

[para54] I recognize that some critical comments have been made with regards to the Anns case. See, for instance, Governors of the Peabody Donation Fund v. Sir Lindsay Parkinson & Co., [1985] A.C. 210 (H.L.); Sutherland Shire Council v. Heyman (1985), 60 A.L.R. 5 (H.C.A.); and Yuen Kun Yeu v. Attorney-General of Hong Kong, [1988] A.C. 175 (P.C.). Nevertheless, the approach set forward in the Anns case which has been confirmed and approved by this Court in the City of Kamloops v. Nielsen, supra, is sound. It can be applied effectively and should be applied in [page1286] any case where negligence or misconduct has been alleged against a government agency. According to the criteria set forth in the Kamloops case, the proximity or neighbourhood test familiar to all since Donoghue v. Stevenson, [1932] A.C. 562, may well establish a prima facie duty of care on the part of a public authority. Nevertheless, the statutory provisions pursuant to which the public authority must act may well restrict the scope of that duty or enact specific conditions for its exercise. I would note that to say a statute restricts the scope of the duty of a government agency may mean that the standard of care owed by a government agency is reduced by the provisions of the statute which authorizes that agency to act.

[para55] The two criteria as set forward in City of Kamloops v. Nielsen, supra, separate the two sets of conditions for imposing liability on a public authority; first, the finding of a close relationship between the authority and the claimant and second, defining the scope of the duty or standard of care owed by the authority to the claimant and defining the class of persons to whom that duty is owed. In that case, it was recognized and emphasized that the extent to which any duty is owed by a public authority is dependent upon the statute under which it operates. There a municipal by-law similar to the one enacted by the City of Vernon was reviewed. It was noted that there existed a duty on the building inspector to enforce the provisions of the by-law. At the same time, it was expressly observed that there was a duty imposed upon the owner to advise the building inspector when various stages of construction had been reached in order that appropriate inspections could be carried out by the municipality. Thus it was recognized that the extent of the duty owed by a public authority will be dependent upon and may be limited by the statute under which the public authority acts.

[para56] Let us turn now to the application of the Anns test as set forth by Wilson J. in the Kamloops case. It will be recalled that the first criterion is as follows:

> (1) is there a sufficiently close relationship between the parties (the local authority and the person who has suffered the damage) so that, in the reasonable contemplation of the authority, carelessness on its

part might cause damage to that person?

[para57] It was held by this Court in B.D.C. Ltd. v. Hofstrand Farms Ltd., [1986] 1 S.C.R. 228, at p. 238, that "proximity" requires a "special relationship" which "would arise in circumstances where the defendant, being so placed that others would reasonably rely on his judgment or skill, knows that the plaintiff will rely on his statements." (See also Sutherland Shire Council v. Heyman, supra, per Brennan J. and Yuen Kun Yeu v. Attorney-General of Hong Kong, supra.) If this were a case in which William Phillips, as a professional engineer in private practice was consulted by the respondents as homeowners seeking advice respecting a small construction project, then the relationship between Mr. Phillips and the respondents would seem to be indistinguishable from that relationship which is described in Hedley Byrne & Co. v. Heller & Partners Ltd., [1964] A.C. 465 (H.L.). In those circumstances the respondents might well have been in a position to rely on Mr. Phillips' judgment or skill provided he would have reason to know that the respondents would act on his advice. In such a situation the special relationship or proximity would be clearly established.

[para58] However, Mr. Phillips was not acting in a private capacity but as an official of the appellant municipality. Nonetheless there was still such a close relationship that in the reasonable contemplation of Mr. Phillips, carelessness on his part might cause damage to the Manolakoses. It is necessary therefore to consider the second criterion for establishing liability, which is in this form:

> (2) are there any considerations which ought to negative or limit (a) the scope of the duty and (b) the class of persons to whom it is owed or (c) the damages to which a breach of it may give rise?

[para59] In applying this criterion it can be seen that there are considerations which, in this case, "negative or limit" (a) the scope of the duty, and (b) the [page1288] persons to whom it is owed. It must be remembered that Mr. Phillips, although a professional engineer, was a senior employee fulfilling certain specific duties on behalf of the city. He was neither dispensing advice to the respondents nor was he guaranteeing that the respondents' home improvement project (the retaining wall) would be a success. The respondents had hired a contractor to take care of their interests in this regard. Further, the granting of a building permit did not and could not relieve the respondent owners of their responsibility to have the work on the retaining wall carried out in accordance with the city's by-laws. Nor did Mr. Phillips' willingness to allow this relatively small and inexpensive project to proceed without requiring the respondents to incur the cost of obtaining drawings completed by a professional engineer relieve the respondents of that responsibility.

[para60] By means of its by-law, the city had put into place a system of inspections designed to ensure that at the crucial stages in the project and before the next step in construction was undertaken which would conceal earlier errors, the progress of the work could be reviewed. As noted earlier, it is impossible for a municipality to constantly monitor all the building projects proceeding within its limits at any given time. It is properly incumbent upon owners to inform the city when the time for inspection has arrived. Where the owner has given timely notice, the city must reasonably and properly inspect the work in progress. That is the obligation which the municipality imposed upon itself pursuant to its by-law. The concomitant responsibility cast upon the owners was to advise the city as to when the inspection could be made. Since neither the Manolakoses nor their contractors gave the requisite timely notice to the city as to when the critical inspections could be made, they were in breach of their obligation to the city and their failure to give notice rendered it impossible for the city to fulfill its duty to inspect. As a result of their failure to notify the city, the Manolakoses absolved the municipality from any liability and [page1289] their claim must be dismissed on that ground alone.

[para61] There may be cases in which the city would be liable to a negligent building owner. For example, if the city received due notice of inspection but negligently carried out the inspection and as a result missed a fatal flaw in the

construction, the city could be held liable. Nevertheless, where a by-law places upon a building owner a duty to inform the city when an inspection should be conducted and where the inspection would have revealed the very problem that ultimately manifests itself, then the owner's negligent failure to inform the city precludes the owner from recovering against the municipality. Such owners are the source of their own loss. The owners not the municipality must be responsible for and bear any losses occasioned to the owners as a result of the failure to comply with the building by-laws due to a failure to give timely notice to the municipality to inspect the work in progress.

[para62] Further, it was not reasonable for the respondents to rely upon Mr. Phillips' agreement to issue a permit as an indication that the wall was sound. That responsibility remained, as it should, with the owners who engaged contractors of their choosing to undertake and be responsible for the design and construction of the project on their behalf.

[para63] If tort law is, as it is said to be, a matter of policy, then it is fitting that owners remain primarily responsible for the work which they carry out on their property. It is the owners who should ensure through their contractors and subcontractors that the building is safe, structurally sound and complies with the municipal by-law. As well it is the owner who must ensure that due and proper notice of inspections is given to the municipality. If the policy were otherwise it would place an unreasonable and unfair burden upon all the other ratepayers of a municipality as it would require a municipality to be an insurer of the owner as to the compliance with its by-laws and in [page1290] that way an insurer of the proper design and workmanship of projects undertaken by an owner.

[para64] In Anns v. Merton London Borough Council, supra, Lord Wilberforce indicated that a public authority owed no duty to a negligent building owner who was the source of his or her own loss. He put it in this way at p. 758:

> To whom the duty is owed. There is, in my opinion, no difficulty about this. A reasonable man in the position of the inspector must realize that if foundations are covered without adequate depth or strength as required by the bylaws, injury to safety or health may be suffered by owners or occupiers of the house. The duty is owed to them -- not of course to a negligent building owner, the source of his own loss. [Emphasis added.]

A negligent building owner certainly is the source of his or her loss where, as here, the owner's negligent failure to inform the city that an inspection must be conducted precludes the city from taking steps which would have averted the loss. Nor can it be said that the city contributed to the loss suffered by the owners by its failure to insist upon engineers' drawings of the project. On this small project the city was entitled to rely upon the owners' complying with the by-law and giving timely notice that the inspection of the work could take place. If that had been done the inspection would have revealed the deficiencies and ensured that they were rectified, thus avoiding any loss to the owners. Although the city engineer waived the requirement of engineers' drawings as a favour to the owners, he did so in the very reasonable and proper expectation that the by-law inspection requirement would be complied with and in the knowledge that the inspection would reveal any deficiencies. It was the subsequent intervening breach of duty of the owners (and their contractor) which is in these circumstances the sole cause of their loss.

[para65] I would therefore agree with the conclusion of Lambert J.A. that the respondents cannot succeed in their claim against Mr. Phillips or the City of Vernon.

Liability of the Municipality to the Neighbours

[para66] That conclusion, however, does not constitute an answer to the claims against Vernon brought by the neighbours of the respondents. For the reasons set out earlier it was unreasonable for the respondents the Manolakoses to rely upon the city to ensure that their property improvement (the retaining wall) would be successful. Nonetheless it was

clearly reasonable for the neighbours who were completely blameless, who did not choose the contractors and who could not ensure that the required notice of inspection be given to the city, to rely upon the municipality to ensure that the construction carried out by the Manolakoses would not threaten the health or the safety of those residing below them on the hillside. Pursuant to s. 734 of the Municipal Act, city councils may pass by-laws, such as the one that presents itself in this case, for the protection of the health and safety of persons and the protection of property. The damage sustained by the neighbours is precisely that type of damage which the by-law was designed to avoid. It is therefore appropriate, with regard to the neighbours' claims to accept the trial judge's finding that Mr. Phillips was negligent in granting a building permit based on the inadequate information submitted to him by the contractor and subcontractor.

[para67] I would accept the apportionment of damages suggested by Lambert J.A. namely, 30% to the respondents the Manolakoses, 42% to the contractor and subcontractor on an individual allocation of 21% each, and 28% allocated to the chief building inspector for whom the city is vicariously liable. Further, the damages suffered by the neighbours are properly recoverable on the facts of this case. The retaining wall collapsed and it was the movement of the material from the wall down the slope that damaged the neighbours' property. It is [page1292] not therefore necessary to consider the problem of recovery for economic loss on the facts of this case.

Disposition

[para68] In the result, I would allow the appeal of Mr. Phillips and the City of Vernon in the action brought by the respondents the Manolakoses. I would also allow their appeal in the third party proceedings to the extent of the findings of contributory negligence on the part of Mr. and Mrs. Manolakos.

[para69] In the result, the appeal of the municipality will be allowed, the order of the Court of Appeal and the judgment at trial set aside and the actions of the Manolakoses dismissed with costs.

[para70] In action 22882-82, Kelowna, that is the action of the neighbours of the Manolakoses, I would allow the appeal and vary the Order of the Court of Appeal and the judgment at trial in that the defendants Peter and Voula Manolakos will be held contributorily negligent to the extent of 30%, Ralph Gohmann and Harry Barber 42% (apportioned 21% each) and the City of Vernon 28%. There should be no costs on that appeal.

The reasons of Wilson and L'Heureux-Dubé JJ. were delivered by

[para71] WILSON J. (dissenting in part):-- As my colleagues Justices La Forest and Cory point out, this case is to be distinguished from City of Kamloops v. Nielsen, [1984] 2 S.C.R. 2, on the basis that in this case it is the owners of the property and not a subsequent third party purchaser who are suing the City for negligence. The question is whether the fact that the owners failed to discharge their responsibilities under the by-law should disentitle them from recovering against the City who failed to discharge its responsibilities. My colleague Cory J. says yes and my colleague La Forest J. says no. On this aspect I agree with La Forest J.

[para72] I believe that the test of proximity set out by Lord Wilberforce in Anns v. Merton London Borough Council, [1978] A.C. 728, is met in this case. It must have been obvious to the City that any breach of duty on its part could cause damage to the plaintiffs just as it must have been obvious that it would cause damage to third party purchasers. The key issue is whether there is any reason then to exclude the owners from the class of persons to whom the City's private law duty of care is owed. Cory J. and Lambert J.A. (dissenting in the Court of Appeal) rely on Lord Wilberforce's statement in Anns v. Merton London Borough Council that a public authority owes no duty of care "to a negligent building owner (who is) the source of his own loss". Cory J. says that is the case here. If the owner had sent the notices which they were required under the by-law to send, the City would have made the necessary inspections, seen the defects in

construction, and ensured that they were rectified. But this, in my view, overlooks one very important aspect of the case, namely that the City issued a permit to the contractors to proceed with the construction despite obvious deficiencies in the design of the wall. The City assumed the risk that it could check on the design deficiencies as construction progressed. Yet it did not notify the plaintiffs to this effect. Thus, it seems to me perfectly reasonable for the owners, knowing that the permit to proceed had been issued on the basis of the design submitted by the contractors, to assume that the design had the City's approval and that they could rely on the contractors to give whatever notices were required to be given on their, the owners', behalf. This, after all, is what normally happens. The contractors are, in the normal course, the owner's agent for this purpose. They are included in the definition of "owner" in the statute. They are primarily responsible for the proper construction of the wall and know when the crucial stages for inspection by the City have been reached. Moreover, they knew how important it was, in light of the deficiencies in their design, that the notices be given in a timely fashion so that the City could conduct its inspection. The owners, on the other hand, had no way of knowing that they were taking any special risk in relying on the contractors to give the notices. Had the City [page1294] informed the owners that the plan was deficient and that it was therefore vital for the safety of the owners as well as for the safety of their neighbours that the requisite notices be given, I have no doubt that the plaintiffs would have attended to this matter personally or at the very least checked with their contractors to ensure that it was being done. But because of this omission on the part of the City which led the plaintiffs to rely on the contractors in the normal way, I do not believe that the plaintiffs can be viewed as "negligent", less still as "the source of their own loss".

[para73] I believe that negligence in the circumstances of this case must mean something more than a failure on the part of the owner to personally give the notices required by the by-law and I find support for this view in the decision of the English Court of Appeal in Dennis v. Charnwood Borough Council, [1982] 3 All E.R. 486, where, despite the fact that the plaintiffs had failed to meet all the requirements of the by-law, Templeman L.J. stated at p. 489:

> In my judgment, if local authorities are liable within the limits prescribed in the Anns case for negligence in connection with the discretionary inspection of building works, they must similarly be liable for negligence in failing to use reasonable care in considering and approving plans.
>
> There is no suggestion that Mr. and Mrs. Dennis, the building owners, were negligent or the source of their own loss. They were entitled to trust the builder and the council. They were entitled to claim damages against the builder if he was negligent. They were entitled to claim damages against the council if the council were negligently in breach of their duty to take reasonable care in the consideration of the plan of the house or in the exercise of their supervisory and discretionary power of inspection.

[para74] The decision in Dennis v. Charnwood Borough Council was explained by the House of Lords in Governors of the Peabody Donation Fund v. Sir Lindsay Parkinson & Co., [1985] A.C. 210, where Lord Keith stated at pp. 244-45:

> The decision is in my opinion to be justified on the basis that the plaintiffs, as owners who were the intended occupiers of the house, were within the ambit of the duty of care laid down in Anns. They were persons injury to whose safety or health might necessarily be expected to occur if the foundations of the house were inadequate. There can be no doubt that, under the ratio decidendi of Anns, a remedy against the local authority would have been available to any subsequent occupier who had purchased the house. The plaintiffs were in breach of certain material provisions of the relevant by-laws dealing with the adequacy of foundations, but the fact remains that plans showing the intended foundations had been submitted with their authority and had been approved. This approval might reasonably be taken as an indication that the foundations were satisfactory, and considering that the plaintiffs themselves had no

> technical knowledge nor understanding of the position and that their own safety and health were in issue, it would be unreasonable and unjust to hold that the local authority owed them no duty.

[para75] I think the present case parallels the Dennis case and I would apply to it the last sentence of the above quotation from Lord Keith's judgment. We are dealing here with inexperienced owners seeking to have a retaining wall built on their property and relying on the expertise of their contractors and on the watchdog function of the City. Both let them down. I think it was perfectly reasonable for the plaintiffs to rely on the City in that capacity particularly since it had issued a permit for the work to go ahead without any advice to the plaintiffs that it, the City, was taking a calculated risk in doing so and that subsequent on-site inspections were therefore absolutely vital.

[para76] I would dismiss the appeal with costs.

Rotstein v. North York (City) Chief Building Official

Between
Maxwell L. Rotstein, Nancy Gay Rotstein and Giuseppe Greco, appellants, and
Chief Building Official of the City of North York and Lorna Tamari Ulmer, respondents

[1995] O.J. No. 4575
Doc. RE 5239/95

Ontario Court of Justice (General Division)
Moldaver J.
Oral judgment: June 30, 1995. Written reasons: July 27, 1995.

Counsel:
Malcolm Mercer, for the appellants.
Thomas Lederer and Rhonda Cohen, for the respondent, City of North York.
Peter Wardle and Matthew Gotlieb, for the respondent,

Lorna Tamari Ulmer.

[para1] MOLDAVER J. (orally):-- This is an appeal from the decision of the Chief Building Official of the City of North York to issue Building Permit B 95 00662 in respect of Lots 3 and 4 on Plan 66M2281 in the City of North York.

[para2] The building permit in question authorized the construction of a very large home which the Ulmers wished to build on Lots 3 and 4 of a new four-lot subdivision located on Prue Avenue in the City of North York. Initially, the Ulmers had only purchased Lot 3. They had then sought approval from the Committee of Adjustment for a number of significant variances, which, if granted, would have enabled them to build a large home on Lot 3. Their application before the Committee was opposed, and the hearing was adjourned to allow the Ulmers to file a revised plan which would meet concerns raised by various members of the community and the Planning Department of the City of North York. Rather than proceeding in this fashion, the Ulmers purchased Lot 4, which adjoined Lot 3. They then retained an architect and instructed him to design their proposed home in such a way as to avoid Committee of Adjustment approval. Before doing so, however, the Ulmers consulted with counsel and the City. The architect complied, and the Ulmers applied for a building permit. The permit which was granted is the subject matter of this appeal.

[para3] The appeal itself is brought by Mr. and Mrs. Rotstein and Mr. Greco, who are neighbours living immediately north and south of the subdivision encompassing the Ulmer lots. They oppose the construction of the Ulmer home because, in their opinion, it constitutes a "monster" home, and, as such, it is incompatible with the vast majority of homes in the surrounding area.

[para4] The appeal raises a number of issues. The first concerns the proper interpretation of the word "lot," which has been defined in s. 2.52 of the City of North York's Zoning By-law to mean "a single parcel or tract of land which may be lawfully transferred or conveyed in accordance with the provisions of the Planning Act, as amended, from time to time."

[para5] There are a number of restrictions contained in the Zoning By-law which could apply to the proposed Ulmer residence, depending upon the interpretation of the word

"lot."

[para6] If, as the appellants contend, Lots 3 and 4 are to be considered as separate lots within the meaning of s. 2.52 of the Zoning By-law, then the Ulmer home would contravene several provisions of the zoning by-law as follows:

(a) the permitted coverage of lot 3 would exceed the permitted coverage of 35% and,

(b) the proposed building would intrude into the side yards of lots 3 and 4 and into the rear yard of lot 4.

This, in turn, would mean that the building permit should not

have been issued. (See s. 8(2) of the Building Code Act, 1992, S.O. 1992, c. 23, and s. 2(2) of Regulation 160/93.)

[para7] On the other hand, if, as the respondents contend, the word "lot" is meant to include any number of adjoining registered lots on a plan of subdivision under single ownership, then the proposed Ulmer residence would comply with the various provisions of the Zoning By-law, subject to the possible exception of the proposed terrace.

[para8] The appellants submitted that in the context of a registered plan of subdivision, a "single" parcel or tract of land could only mean a single registered lot. They further contended that two registered lots, even though adjacent and under single ownership, would not constitute a "single" parcel or tract of land. Such an interpretation, the appellants suggested, would run counter to the whole concept of severance under the Planning Act, R.S.O. 1990, c. P.13, which makes it clear that one parcel or tract of land ceases to be a single parcel or tract of land after severance. Furthermore, the appellants submitted that if the word "lot" was to be interpreted as the respondents suggest, then there would have been no need to modify the words "parcel or tract of land" with the word "single." The appellants also submitted that the wording of s. 6(10) of the zoning by-law lent support to their proposed interpretation of the word "lot." Section 6(10) reads:

> Yards Reserved For Open Space
>
> Any part of a lot that is required by this By Law to be reserved as a yard or other open space shall continue to
>
> be so used and shall be deemed not to form part of any adjacent lot for any purpose regardless of any change in ownership of the lot or any part thereof.

[para9] According to the appellants, the conclusion that a registered lot is a "lot," and two registered lots are two "lots," is consistent with s. 6(10), because that provision makes it apparent that the Zoning By-law contemplates adjacent "lots" which are commonly owned. Conversely, the appellants submitted that the proposed interpretation of the respondents in the context of s. 6(10) would mean that a property owner would be entitled to treat adjacent registered lots as one lot, and thereby avoid s. 6(10) entirely.

[para10] Finally, the appellants urged that their interpretation of s. 2.52 was in keeping with proper planning principles, reflecting, as it did, both the spirit and letter of the Subdivision Agreement (four single dwellings on the four registered lots), and ss. 4.1 and 4.2.1 of the official plan (new housing to be compatible in scale and physical character with the existing residential neighbourhood).

[para11] With respect, I cannot accept the appellants' suggested interpretation of the word "lot." Instead, I agree with the submissions of the respondents that there is nothing in the definition of that word which would restrict the combining of whole registered lots to create a parcel or tract of land across which a single-family dwelling could be erected, provided that the zoning designation permitted that particular use.

[para12] As the respondents have correctly pointed out, the method by which the City regulates the size of buildings is through the setback, length, height, and coverage requirements of the Zoning By-law. That By-law zones all land in the City according to a series of classes, zones, and symbols. In each of those categories, the By-law regulates the use of land and the erection, use, bulk, height, and location of buildings. As the affidavit evidence of William Ross (Senior Residential Plans Examiner in the North York Building Department) indicates, although the issue of "monster" homes has, in recent years, become a planning issue of concern, "the method by which the City regulates the size of homes is through the set-back, length, height and coverage requirements in the By-Law." His evidence is confirmed by the report of Elaine Hitchman, Commissioner of Planning, dated January 22, 1990. (See Fresh Application Record, Tab 4H.)

[para13] To my mind, it was never the purpose or intent of the City that the s. 2.52 definition of "lot" be used as the means of controlling the construction of "monster" homes on

adjacent lots. Indeed, if this had been the City's intention, the definition of the word "lot" could have been precisely framed to accomplish this.

[para14] One need only look to the definitions of the word "lot" which existed prior to the 1994 amendments of the Zoning By-law to realize this. Prior to 1994, the By-law contained three definitions of the word lot. One of those was "Lot, Registered," which was defined to mean "a lot described in accordance with land within a registered plan of subdivision." Had this definition been maintained in the 1994 amendments, I would have had no hesitation in accepting the position advanced by the appellants. However, that definition was not maintained. Instead, a general provision defining the word "lot" was enacted to replace the three definitions of that word (Lot (in general), Lot, Residential, and Lot, Registered) which had formed part of the pre-existing by-law.

[para15] The Report prepared by the Commissioner of Planning of the City to Council dated July 13, 1994, which preceded the 1994 amendments, is of some limited assistance in understanding the City's purpose in enacting the amended definition of the word "lot," and more particularly the mischief at which it was aimed. (See R. v. Heywood (1994), 94 C.C.C. (3d) 481.)

[para16] After referring to the three definitions of the word "lot" contained in the pre-1994 By-law, the Report continued as follows:

> The first definition implies that a lot can be any piece of land providing it fronts or abuts a street. In practise, the Building Department and Legal Department interpret "lot" as being land under a single ownership. The definition of "Residential Lot" is written like a zone regulation and not a definition. Staff propose to amend the definition of lot to read as follows:
>
> > "Lot means a single parcel or tract of land which may be lawfully transferred or conveyed in accordance with the provisions of the Planning Act, as amended, from time to time."
>
> This definition change should be seen as more of a clarification to the existing definition rather than a substantive change given that the proposed definition is similar to the existing interpretation used by the Building Department. Given that many of the General Provision regulations make reference to "lot", it is desirable to clarify as part of this by-law the definition of "lot". From this excerpt, it would appear that the mischief, if one could call it that, which the amended version sought to cure, related to the unnecessary confusion created by the pre-existing trio of definitions. One thing is certain. It was clearly not aimed at the mischief of "monster" homes. Otherwise, I would have expected this concern to have been specifically addressed, particularly since it was the pre-1994 definition of Lot (general) that had been previously used to deal with such matters as setback, coverage, and other like restrictions.

[para17] As well, this excerpt shows that the ensuing amendment tracked the proposed wording of the Planning Commissioner. By employing the words "parcel and tract of land," as opposed to the word "lot," I am satisfied that the City did not intend to restrict the word "lot" to the earlier definition of "Registered Lot," but, instead, to leave it wide enough to encompass a number of adjacent registered lots. I am further of the view that the word "single" was inserted to ensure that the definition went only so far as to include adjacent lots under single ownership. While the drafting could have been better, I am satisfied that the intent of the City was as I have described it.

[para18] I find further support for this conclusion from the definition of "parcel" found in Black's Law Dictionary, 5th edition (St. Paul, Minn.: West Publishing Company, 1979), p. 1002. There, the word "parcel" is defined as follows:

> "Parcel" as used with reference to land generally means a contiguous quantity of land in the possession of an owner. ... A contiguous quantity of land in possession

> of, owned by, or recorded as property of the same claimant person or company.

[para19] While it is true that the final portion of the definition reads: "Term may be synonymous with 'lot,' "I am not prepared to conclude that if the City had in mind the definition proposed by the appellants for the purpose of dealing with "monster" homes, it would have left the matter to chance by using the word "parcel," as opposed to "Registered Lot."

[para20] The same reasoning holds true for the definition of "tract of land," which, for the sake of completeness, is also defined in Black's Law Dictionary to mean:

> A lot, piece or parcel of land, of greater or less size, the term not importing in itself any precise dimension though "term" generally refers to a large piece of land. ... Term is synonymous with parcel of land and does not have reference to size but to contiguous quantity of land.

[para21] Finally, I accept the respondents' submission that the 1994 amended definition of the word "lot" was intended to be one of general application, referable to commercial, industrial, residential and other zones. That being so, surely it cannot be said that in defining the word "lot," knowing that it would have such wide and general application, the City was nonetheless purporting to deal with the specific problem of "monster" homes being constructed on adjacent registered lots. Any such suggestion is, in my opinion, untenable.

[para22] As for the s. 6(10) argument, I accept the respondents' position that this provision was intended to address the situation where an owner of two adjacent lots, each containing a building, seeks to satisfy a side yard requirement for each of the two buildings by "sharing" a single side yard between the two buildings. Section 6(10) simply mandates that the required side yard of one building cannot be applied to form the side yard or part thereof of an adjacent required side yard. In this regard, I also accept the respondents' contention that the word "yard" has meaning only in relation to a "building," not a "lot."

[para23] The second issue relates to the implication, if any, arising from the Subdivision Agreement. Sections c.4 and c.4.1 of that Agreement read:

> c. 4 - One building per registered lot;
>
> c. 4.1 - No division, redivision, or subdivision of any lot or lots on the Plan as originally registered shall be made so as to either increase or decrease the total number of building lots upon the Plan without the approval of Council or Committee of Adjustment, pursuant to the applicable legislation.

[para24] The appellants contend that the Subdivision Agreement should be treated as if it had the force of law, equivalent to a regulation or by-law, thereby bringing it within the purview of the words "applicable law" defined in s. 2(2) of Regulation 160/93. In support of this, reliance was placed on s. 51(6) of the Planning Act.

[para25] That being so, it was submitted that the proposed use of Lots 3 and 4 by the owners amounted to a breach of the Agreement, since the Agreement clearly envisioned the erection of four single-family dwellings on the four separate lots. In this regard, the proposed construction of the Ulmer home on Lots 3 and 4 contravenes c.4.1 of the Agreement, since it amounted to a "redivision of the lots on the Plan."

[para26] Again, with respect, I must disagree. In my opinion, the Subdivision Agreement did not take on the force of law, and therefore it did not come within the purview of the words "applicable law." It was nothing more than a contract between the City and the developer. The fact that it could be registered on title and enforced by the City under s. 51(6) of the Planning Act did not have the effect of converting it into a regulation or by-law, or something akin to either.

[para27] But even if I am wrong in this, I have not been persuaded that the proposed construction of the Ulmer home on Lots 3 and 4 amounted to a redivision of the lots on the Plan in contravention of c. 4.1. Instead, it amounted to an amalgamation of two registered lots, something which c. 4.1 neither contemplated nor prohibited.

[para28] Furthermore, I do not accept the suggestion that the Agreement allowed only for the erection of four single-family dwellings on the four registered lots. While the Agreement clearly restricted the number of dwellings to four, it did not preclude the construction of less than four dwellings. For these reasons, the Subdivision Agreement argument must also fail.

[para29] That then leaves the matter of the terrace. Although a great deal of intricate and technical argument was advanced by both sides on this issue, I am satisfied that if the terrace is a structure or building, only the retaining wall portion of it could be so classified. That being so, I accept the evidence of Mr. Ross that it amounted to a conforming "accessory building," and therefore it did not contravene the provisions of the Zoning By-law or the Building Code.

[para30] For all of these reasons, the appeal is dismissed.

MOLDAVER J.

Seel Enterprises Ltd. v. Toronto (City)

IN THE MATTER OF an application for an Order of Mandamus to
the Corporation of the City of Toronto;
AND IN THE MATTER OF 1361 and 1363 King Street West, in the
City of Toronto.

Between
Seel Enterprises Limited, applicant, and
The Corporation of the City of Toronto, and Michael L. Nixon, Commissioner and Chief Building Official for the Corporation of The City of Toronto, respondents

[1981] O.J. No. 1095

Ontario Supreme Court - High Court of Justice
Divisional Court - Toronto, Ontario
Osler, Southey and Smith JJ.
Heard: December 10, 1981.
Oral judgment: December 10, 1981.
Released: January 12, 1982.

Counsel:
A.C. Finkelstein, for the applicant.
M.J. Winer, for the respondents.

The judgment of the Court was delivered by

[para1] SOUTHEY J. (orally):-- This is an application for Judicial review in which the applicant seeks a order in the nature of mandamus requiring the respondent City ad the Chief Building Official to issue a building permit for certain improvements which the applicant seeks to make to premises at 1361-1363 King Street West. Those premises have been used for a lodging house at all material times and the proposed renovations would upgrade the lodging house by reducing the number of living units in it and increasing the space and amenities in each unit.

[para2] The permit has been refused because it falls within the exception contained in s. 6(1)(a) of The Building Code Act, at least that is the position taken by the respondents. Section 6(1)(a) reads as follows:

> 6.-(1) The chief official shall issue a permit except where,
>
> (a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law;

The two premises are located in the Parkdale area of Toronto as to which the zoning by-law of the City was amended on 30th day of January, 1978 to provide that no person should erect or use any building for the purpose of a boarding or lodging house in that area. The amendment to the zoning by-law went on to provide that the amendment did not apply to any dwelling house provided that such dwelling house was legally used as a boarding or lodging house on the 30th day of January, 1978.

[para3] The position taken by the respondent is that the permit should not be issued because the construction will contravene the amendments to the zoning by-law to which I have referred in that they relate to a "lodging house" in an area in which lodging houses are prohibited. There is, no doubt, in our minds that the municipality is justified in refusing to issue a building permit for the construction or renovation of a house where such construction or renovation will result in a contravention of the zoning by-law.

[para4] The applicant's submission is that there is no breach of the zoning by-law because the houses in question were legally used as "lodging houses" on the 30th day of January, 1978. It is acknowledged by the applicant that neither of these houses were licensed as "lodging houses" under By-law 412-74 passed on November 22, 1974. That by-law provided, generally speaking, that no person should keep a lodging house without first obtaining from the Corporation a licence authorizing him so to do. In the case of the building

at 1361 King Street West, the occupant had obtained a lodging house licence prior to 1977, but her application for renewal in 1977 was refused because of twelve outstanding items of repair and the lack of a second means of egress from the third floor. Such repairs and other means of egress were required under the applicable building code. In the case of 1361 King Street West, the occupant from time to time of that building had never obtained a lodging house licence and it is common ground between counsel that an application for such licence was made in 1976, but was refused again because of alleged violations of the building code. In the result, in our view, the user of these two properties as lodging houses on the 30th day of January, 1978 was not a legal use because of the violations not only of the licensing by-law, but also because of the building code.

[para5] Accordingly, in our view, the use as a lodging house did not fall within the exception to the 1978 amendment to the zoning by-law and the use of the properties for lodging houses was prohibited under the zoning by-law.

[para6] In these circumstances in our view, the respondent was justified in refusing to issue a building permit. It is unfortunate and unsatisfactory that certain officials of the respondent City were sending deficiency notices to the owner of the premises in question after the 30th of January, 1978 when ultimately any attempt to comply with those deficiency notices apparently was going to be rejected because of non-compliance with the zoning by-law. The owner in my view, has been treated in an unsatisfactory manner by the City in this respect, but we cannot find that the refusal to issue a building permit in the circumstances that I have outlined above was not justified.

[para7] Accordingly, the application will be dismissed.

[para8] In all circumstances the dismissal of the application will be without costs.

SOUTHEY J.
OSLER J.
SMITH J.

Shell Canada Products Ltd. v. Barrie (City) Chief Building Official

Between
Shell Canada Products Limited, Applicant, and
Gordon Allison, Chief Building Official and the Corporation of the City of Barrie, Respondents

[1992] O.J. No. 1572
DRS 93-03696
Action No. 1120/92

Also reported at:
11 M.P.L.R. (2d) 43

Ontario Court of Justice - General Division
Toronto, Ontario
Davidson J.
July 24, 1992

Ian J. Lord, for the Applicant.
John D. Burgar, for the Respondents.

DAVIDSON J.:-- This is an application under the Building Code Act, R.S.O. 1990, Chapter B13 for an order granting the applicant a building permit to permit constructions of a self-serve gas bar kiosk, office, washrooms and storage space.

The application is by way of appeal from the refusal of the Chief Building Official of the City of Barrie to issue a building permit.

The facts are not materially in dispute.

The applicant purchased the property, 204 Grove Street in April 1991 and subsequently demolished the building on the property which had been a one-storey school board office.

The applicant's intention had always been to construct a gas bar service station and prior to its acquisition of the property, the respondent had advised the applicant that the property was zoned General, Commercial C4 which permitted such uses.

On May 16, 1991, the applicant applied to the City for site plan approval for the property as required under the Planning Act. A modification was made to the site plan and the Planning Committee recommended to City council that the site plan approval be granted. There was a referral back to Planning Committee in regard to a watercourse issue. Further consideration was had and the Planning Committee considered a staff report which had recommended approval of the site plan application but as at that date January 27, 1992, the Planning Committee recommended to City Council that site plan approval be refused and that a public meeting be scheduled to consider rezoning for residential. As at February 3, 1992, City Council approved and directed the City Clerk and the Director of Planning and Development to prepare a report to consider a zoning change from commercial C4 to residential.

On March 31, 1992, the applicant applied to the City for a building permit to construct the service station. On April

21, 1992, the Chief Building Official for the City wrote the applicant confirming that the Building Permit Application and plans complied with the zoning by-law and the building code but that it might contravene the Site Plan Control By-law and the Planning Act due to "the lack of a site plan that has been approved by the Council of the Corporation of the City of Barrie." The Chief Building Official took the position in the letter that whereas the application for building permit might contravene the Site plan Control By-law, he was not able to issue a permit at that time.

In response thereto, the applicant wrote the Chief Building Official May 5, 1992 stating inter alia -

> "In our view a Site Plan Control By-law and the absence of site plan approval are not applicable under the Building Code Act. We concur that actual development can not occur until the City or the Ontario Municipal Board grants site plan approval ..."

On May 6, 1992, the Chief Building official advised the applicant by letter, inter alia -

> "Whereas the proposed site plan has not been approved by the Council of the Corporation of the City of Barrie, you are hereby advised that permit application B920310 for a proposed self-serve gas bar and a mini convenience store has been denied

On June 15, 1992 the Planning Committee recommended to City Council that no public meeting be held to consider rezoning the property but that the staff be directed to draft an interim control by-law affecting the property.

On June 22, 1992, City Council adopted the Planning Committee recommendation and authorized a study with respect to the lands in regard to planning controls and approved the resolution including the feature "That no further action be taken until the results of the court action are known". The court action was this application.

On July 6, 1992, without notice to the applicant and without any planning report, City Council enacted an interim control by-law with respect to the applicant's lands at 204 Grove Street and provided that none of the lands "... shall be used for the purposes of an automotive service station." The interim control by-law would be in effect for a period of one year from July 6, 1992.

The relevant provisions of the Building Code Act, R.S.O. 1990, Chapter B13, are -

Section 6(1) -

> "The chief official shall issue a permit except where, (a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable ..."

Section 15(1) -

> "Any person who wishes to appeal an order given or decision made by an inspector or chief official under this Act or the regulations may, within twenty days after the order or decision is made, apply to the judge of the Ontario Court (General Division) for a hearing and appeal.

Section 15(3) -

> "Where an application is made to a judge for a hearing under sub-section (1) the judge shall appoint a time for and hold the hearing and may rescind or affirm the order or decision of the Inspector or chief official or take such action as the judge considers the inspector or chief official ought to take in accordance with this Act and the regulations, and for such purposes the judge may substitute his or her opinion for that of the inspector or chief official."

In Woodglen & Co. Ltd. v. The City of North York, et al. (1984) 47 O.R. (2d), p. 614, Divisional Court at p. 619, -

> "The powers of the county court judge hearing an application under s. 15 are limited by s-s. (3). The judge may rescind or affirm the order or decision of the inspector or chief official or take such action as the judge considers the inspector or chief official ought to take in accordance with this Act and the regulations". The duty of the judge under this subsection is to do what the judge considers the inspector or chief official ought to have done. The judge has no powers other than those which were possessed by the inspector or chief official, and has no discretion to act or defer action, if that discretion was not enjoyed by the inspector or chief official. As stated earlier, I agree with the decision of the learned county court judge in this case that the chief official of the municipality was under a duty to issue the permit to Woodglen because the proposed construction would not contravene any

> law. That being so, the learned county court judge, in my view, was required by law to allow t,he appeal and order the issuance of the building permit.

In my opinion, under the Building Code Act, neither the chief official nor the judge on appeal has a discretion. If no law is contravened then the permit must issue.

It has been held that the time for considering what decision the Chief Building Official should have made is the date on which the rights of the applicant had crystallized. In this case that would have been on April 21, 1992 or, at the latest, on May 6, 1992 when the building permit was ultimately refused. Reference Wolfond, et al. v. The North York City Building Commissioner (1990), 1 M.P.L.R. (2d) p. 190, Haley, D.C.J. and H. and D. International Group v. Toronto, et al. (1988), 44 M.P.L.R. 187, Corbett, D.C.J.

The question then arises whether the absence of the site plan approval under the Planning Act is "other applicable law" within the meaning of Section 6(1)(a) of the Building Code Act.

The issue arose in re Revenue Properties Co. Ltd. v. The Corporation of the City of Toronto (1984) 26 M.P.L.R. 165, Matlow, C.C.J. In that case, the municipality took the position that the applicant was not entitled to a building permit until site plan approval had been given. The court concluded that site plan approval was not an absolute precondition for the issuance of the building permit and that it did not come within the area of "other applicable law". At p. 170, Matlow, C.C.J. stated -

> "Although it may be desirable and more expeditious
>
> that site plan approval be obtained before the issuance of a building permit in order to eliminate the need for further amendments to the building permit that might become necessary to satisfy the conditions of the granting of site plan approval, this potential difficulty does not persuade me that the legislation requires site plan approval as a precondition for the issuance of a building permit."

In H. & D. International, supra, Corbett, D.C.J. approved Revenue Properties and came to the same conclusion.

This was also the view of Hogg, D.C.J. in Summit Glen Developments Corporation v. Corporation of the City of Toronto (1989) 44 M.P.L.R. 50 at page 54, and I quote -

> "The next issue before me is whether a site plan approval pursuant to Section 40 (now Section 41) of the Planning Act is prerequisite to the issuing of a building permit.
>
> Under Section 40 of the Planning Act 1983: 'Construction, erection or placing of one or more
>
> buildings' cannot take place without approved site plan drawings.
>
> In my view, site plan approval is not a prerequisite to the issuance of a building permit but no construction may take place without it.

These were all Building Code Act cases.

In Revenue Properties, supra, Matlow, J. made reference at p. 170 as follows -

> "In Dominion Stores Limited v. Etobicoke (1982), 37 O.R. (2d) 661 ... Divisional Court, this same issue was raised but expressly not decided by the Divisional Court. Yet, in the result reached, an order was made requiring the issuance of a building permit before site plan approval, was granted because of the circumstances of that case.

The Dominion Stores case was not referred to in H. & D. International or Summit Glen Developments Corporation, supra.

In Dominion Stores Limited, Gallaghan, J., in giving the judgment of the Divisional Court, stated at p. 662 -

"The respondent has refused to issue the building permit because it has not given development control approval under Section 40 of the Planning Act, R.S.O. 1980, C. 379. It is clear beyond peradventure that the only reason that the respondent has not given its approval is that it does not want to permit access on to the applicant's lands from either of the local streets. It has refused to approve any development plans or drawings or enter into any development agreement which in any way provide access to or from the proposed supermarket on to the those local streets.

The issue before this court is whether the municipality is legally entitled to refuse to give development approval on that ground. While a certain amount of discussion took place before us as to whether development approval under Section 40 of the Planning Act is or is not a condition precedent to the issue of a building permit, I do not think it is necessary for the purposes of this application to decide that issue. I am of the opinion, assuming without deciding, that development approval is a condition precedent to the issuance of the building permit, that a municipality may not withhold such approval for a reason that is not authorized by law. If it were otherwise an applicant's legal right to a building permit could easily be frustrated."

In Quay West v. Corporation of the City of Toronto (1989), 47 M.P.L.R. 109, the Divisional Court per Southey, J. (Gray, J. concurring) in considering an application to quash an interim control by-law permitted an enlargement to request an order for mandamus to compel issuing of a building permit. The court refused to quash the interim control by-law. At page 111 Southey, J. states -

"In my judgment, we should not now direct the issuance of a building permit because the developers proposed condomium project is not a use permitted under the interim control by-law."

The court referred to Dominion Stores, supra, and re Revenue Properties, supra, describing them as decisions in which it was held a building permit should have been issued despite the lack of site plan approval. The court, per Southey, J. stated at p. 112 -

"Both arose from extraordinary circumstances in which the municipality was not acting in the good faith or was refusing developmental approval for an obviously unlawful reason. Having refused to quash interim control by-law in this case as one improperly enacted, I am not prepared to hold that this is one of those extraordinary cases in which the building permit should have been issued despite the absence of site plan approval."

In Quay West the court indicated that it was not satisfied that the chief official was under a duty to issue the permit because there had been no site plan approval at the time. Thereafter, the interim control by-law was passed which the court refused to set aside and then refused to issue a mandamus for the building permit. Saunders, J., concurring in the result stated at p. 112 -

"In my opinion, such an order (for issuing a building permit) ought not to issue because of the existence of the interim control by-law and the provisions of Section 34(9)(b) of the Planning Act. I do not consider it necessary to decide whether the chief official was under a duty in August 1988 to issue the permit despite the absence of a site plan agreement. It may be that such duty did exist on the basis of the reasoning in the Dominion Stores case.'"

In Wolfond, supra, the court considered Quay West and distinguished it. There, it was apparent on an agreed state of facts, that the proposed building of the applicants, referred to in their application for the building permit, complied with all applicable laws save and except the subsequently passed by-law which was one of general application prohibiting the

proposed building and not an interim control by-law.

In the case at bar, site plan approval had not been forthcoming. This was given as the reason for refusing the building permit and in that regard I can see no real distinction between the facts in this case and the facts in Quay West unless it was either that the interim control by-law related specifically to these lands and might be said to be discriminatory or enacted in bad faith, which is not really argued before me or, that City Council had resolved to take no further action but for a study of planning controls affecting the property until the result of this court hearing and thereafter changed their mind and passed the interim control by-law without notice. Notice, of course, is not necessary.

Quay West was decided after Revenue Properties and distinguished it and after H. & D. International. Although Summit Glen was decided after Quay West, the latter decision was not referred to, which is understandable as there was only three weeks between the two decisions.

I am not able to distinguish the facts in the case before me from the facts in Quay West. I am bound by that majority decision, it being from the Divisional Court and leave to appeal to the Ontario Court of Appeal having been dismissed by the Court of Appeal.

In the result, the application is dismissed with costs to the respondents fixed in the sum of $1,000.00

DAVIDSON J.

* * * * *

Supplementary Reasons

Released November 4, 1992

DAVIDSON J.:-- In my Reasons for Decision dated July 24, 1992, I indicated that I could see no real distinction between the facts in the case before me and the facts in Quay West v. Corporation of the City of Toronto (1989), 47 M.P.L.R. 109 and being bound by that majority decision in the Divisional Court, I dismissed the application for a building permit:

Subsequently, the applicant moved before me under Rule 59.06(2) alleging facts discovered after the date of my order.

In the application as originally argued before me, reference was had by both parties to an interim control by-law passed by the City Council of the City of Barrie on July 6, 1992. The existence of that interim control by-law was one of the factors which persuaded me that I was bound by the Quay West decision.

On the material filed before me on this motion to vary my order, it is apparent that on July 27, 1992, applicant's counsel requested from the City of Barrie copies of all interim control by-laws and amendments since the enactment of the city's comprehensive Zoning by-law 85-95 in 1985. It further appears that by letter dated July 31, 1992, the applicant's counsel obtained the history of interim control by-laws and amendments. Thereafter, it was learned that an interim control by-law applying to all lands in the City of Barrie, including the subject lands, was enacted December 14, 1987. That by-law was originally to expire December 14, 1988. Thereafter, By-law 88-353 amended that aforesaid interim control by-law by extending its effect until December 14, 1989, at which time it expired having not been earlier repealed or amended in respect of the subject lands.

Section 38(7) of the Planning Act, R.S.O. 1990, Chapter P13, provides -

> "Where an interim control by-law ceases to be in effect the council of the municipality may not, for a period of three years, pass a further interim control by-law that applies to any lands to which the original interim control by-law applied."

The interim control by-law which I gave effect to in my Reasons of July 24, 1992, was passed within that three year period of prohibition.

Had these facts been before me at the time of my original decision, I would have ruled that this case could have been distinguished from Quay West and that accordingly Quay West would not have been binding upon me. Additionally, I would have found this case to be in the category of "extraordinary" cases as stated by Southey, J. in distinguishing prior decisions at page 112.

Counsel for the respondents makes the point that the applicant has appealed to the Ontario Municipal Board to have the interim control by-law quashed and it is his position that that is where the consideration for its validity should be had and not before me. I agree that I am not being asked to quash the interim control by-law but I am being asked to consider its relevance to whether a building permit should be ordered or not.

Counsel made reference to three decisions of the Ontario Municipal Board on the affect of present Section 38(7) of the Planning Act.

Re Burlington Interim Control By-law 4000-589 (1988), 22 O.M.B.R. 233.

Re Etobicoke Interim Control By-law 1900-87 (1991), 25 O.M.B.R. 289, and

Re Newmarket Interim Control By-law 1991-136 (1992), unreported, January 30, 1992 O.M.B.

In the City of Burlington, the former interim control by-law was one that affected essentially all of the city and prohibited adult entertainment establishments. The second interim control by-law related to permitted uses being only agricultural and existing residential uses. The Board held that the purposes of the two interim control by-laws were widely different. The landowners appeal against the interim control by-law was dismissed.

In the City of Etobicoke, the Board expressed the view that the City of Burlington was wrongly decided. In doing so the Board stated, at page 293 -

> "The power conferred on the municipality pursuant to Section 37 of the Planning Act, 1983 (now Section 38) is an extraordinary one, which can only be exercised sparingly, gingerly, with the greatest care and circumspection. The clear intent of Section 37(7) (now Section 38(7)), is to provide a 'cooling off' period within which a municipality is prohibited from using the heavy armoury against property owners. Any fair reading of the sub-section leads one to the inevitable result that no interim control by-law, regardless its purport or intent, can be enacted within the prohibition period if it applies to the lands to which the earlier by-law had application."

In re Newmarket, the Board made reference to both re the City of Burlington and re the City of Etobicoke and preferred the latter view, and the landowners' appeal against the interim control by-law was allowed.

I prefer the reasoning in re The City of Etobicoke and re Newmarket to that of the reasoning in re The City of Burlington.

In the final analysis, it is my view that the only bar to the applicant's right to have a building permit issued was because of the decision in Quay West and, accordingly, for the reasons given originally and in these supplementary reasons, there will be an order varying my order of July 24, 1992 and providing that the respondents shall grant to the applicant a building permit to permit the construction of a two island self-serve gas bar with canopy and a 126 square meter building for a kiosk and office, washrooms and storage space.

The order for costs will also be varied and provide that the applicant shall have the costs of the original application and of this application fixed in the sum of $3,500.

DAVIDSON J.

Sixteenth Warden Ltd. et al. v. Wright, Chief Building Official, Corporation of the Town of Markham et al.; Loblaws Supermarkets Ltd. et al., Interveners

12 O.R. (3d) 653
[1993] O.J. No. 692
Action No. RE 1173/92

Ontario Court (General Division),
Day J.
March 26, 1993

APPEAL pursuant to s. 15(1) of the Building Code Act, R.S.O. 1990, c. B.13, from a decision of a chief building official refusing to issue a building permit.

Richard Storrey and Tom Friedland, for applicants.

Robert Robinson, for respondents.

N. Jane Pepino, Q.C., and Timothy J. Hill, for interveners, Loblaws and Loblaws Supermarkets Inc.

Hugh A. Christie, for intervener, The Oshawa Group.

Robert Macaulay, Q.C., for intervener, 648669 Ontario Ltd.

DAY J.:--

THE APPLICATION

This application is an appeal pursuant to s. 15(1) of the Building Code Act, R.S.O. 1990, c. B.13, from the refusal of the chief building official for the Town of Markham to issue a building permit.

THE INTERVENERS

The interveners, Loblaws Supermarkets Limited, 648669 Ontario Limited and Loblaws Inc., were granted leave to intervene as parties to this proceeding.

THE FACTS

1. Background

The applicant, Price Club Canada Inc. ("Price Club"), through a subsidiary company, is the purchaser under an agreement of purchase and sale dated February 6, 1992, of a site at the north-east corner of Woodbine Avenue and 16th Avenue, in the Town of Markham. The applicant, Sixteenth Warden Limited ("Sixteenth Warden"), is the owner of the said lands. Price Club proposes to construct a shopping centre, including a Price Club warehouse membership club, on the site.

2. Site plan approval and zoning

The proposed use of the site requires site plan approval under s. 41 of the Planning Act, R.S.O. 1990, c. P.13. Council is given the power to approve drawings which show such matters as the location of proposed buildings, their massing and conceptual design, and the relationship of the proposed buildings to adjacent buildings, streets and publicly accessible areas.

Site plan approval applications in the Town of Markham are approved by council as a whole, which comprises the planning committee for the town. Applications, with accompanying drawings and plans, are reviewed by the planning staff of the town, and circulated to interested departments in the town and Regional Municipality of York. After this review process, planning staff submits comments to the applicant and prepares a report for the town's planning committee. The application is then submitted to council.

On March 9, 1992, Price Club filed an application with the Town of Markham for site plan approval. The site plan proposed the construction of a shopping centre including a Price Club warehouse membership club and a separate multiple unit retail building. The separate multi-unit building will include a range of retail and personal service uses. The application was circulated by the planning department to the various departments for comments. Representatives of Price Club subsequently met on several occasions with the planning staff

for the Town of Markham and several revisions were made to the site plan as originally filed to reflect the comments of the planning staff and the departments to whom the application had been circulated.

The planning department for the town ultimately prepared a report dated April 21, 1992, in which it recommended approval of the site plan application subject only to two conditions. Both of those conditions are acceptable to the applicants. Most of the revisions to the site plan suggested in the report have already been made.

The report of the planning department considered the relevant zoning by-law and commented as follows:

> . . . the property is zoned Community Commercial (CC) by-law 118-79, as amended. The Legal Services Department has confirmed that the proposed development is permitted by the Zoning By-law.

The report of the planning department was put before the planning committee for the Town of Markham comprised of all members of Markham council, at a meeting on April 21, 1992.

Prior to the meeting on April 21, the planning committee held an in camera session at which the majority of the councillors were in favour of turning down the application.

The planning committee then elected to defer consideration of the report and directed that a public meeting be held on May 4, 1992, even though the Planning Act does not contemplate such a process. On May 4, 1992, a public meeting was held.

On May 12, 1992, the Council for the Corporation of the Town of Markham, acting as the planning committee, met to consider the site plan application. Council passed a resolution to "not approve" the site plan.

3. Building permit application

On April 24, 1992, Sixteenth Warden filed an application for a building permit. Initially, partial plans were submitted for the foundation of the buildings.

On May 13, 1992, the Chief Building Official for the Town of Markham refused to issue a building permit for the construction of the foundation.

On May 25, 1992, the applicant filed complete building plans for the buildings to be constructed on the site.

On May 27, 1992, the chief building official refused to issue a permit, notwithstanding his view that the application appeared to be substantially complete and in compliance with the Ontario Building Code, R.R.O. 1990, Reg. 61 (under the Building Code Act), and the relevant zoning by-law on the basis that site plan approval was not granted.

4. Interim control by-law

The within application was filed June 2, 1992. On June 23, 1992, two days prior to the original return date of this application, the respondent Town of Markham, without any notice to the applicants, enacted interim control by-law 115-92, the apparent intent of which was to frustrate the applicants' plans to construct a Price Club membership warehouse club on their site and to influence the result of this application which was already underway.

To tighten its grip, on September 29, 1992, the respondent Town of Markham, again without any notice to the applicants, enacted interim control by-law 183-92, to amend interim control by-law 115-92. The amendment adds a definition of "Commercial Club" to the interim control by-law and purports to prevent a "Commercial Club" from being built on the applicants' site.

Although the interim control by-law, as amended, ostensibly relates to sites other than the applicants' site, the facts are uncontested that the applicants' site is the only undeveloped site and thus the only site actually impacted by the interim control by-law.

The above-mentioned facts are further expanded herein.

THE LAW AND FINDINGS

1. The role of the judge hearing s. 15(1) appeal

The powers of a judge hearing an appeal pursuant to s. 15(1) of the Building Code Act are outlined in s. 15(3). Section 15(3) provides as follows:

> 15(3) Where an application is made to a judge for a hearing under subsection (1), the judge shall appoint a time for and hold the hearing and may rescind or affirm the order or decision of the inspector or chief official or take such action as the judge considers the inspector or chief official ought to take in accordance with this Act and the regulations, and for such purposes the judge may substitute his or her opinion for that of the inspector or chief official.

(Emphasis added)

The powers of the chief building official are stipulated in s. 6(1) of the Building Code Act, which provides:

> 6(1) The chief official shall issue a permit except where,
>
> (a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law.

Where the criteria are met, the mandate of the chief building official is without discretion.

It has been suggested that the question as to the date upon which the applicants' right to a building permit "crystallizes" for the purposes of the appeal is of critical importance. The applicants argue that the rights of a building permit applicant to a building permit for the purposes of an appeal under s. 15(3) must be determined as of the date of the application and not the date of the hearing. It is their view that if their application did not infringe s. 6(1) at the date of the application they are entitled to a permit, which right cannot be affected by any subsequent action on the part of the respondents. They rely upon Woodglen & Co. v. North York (City) (No. 2) (1984), 47 O.R. (2d) 614, 26 M.P.L.R. 40 (Div. Ct.); H & D International Group v. Toronto (City) (1988), 44 M.P.L.R. 187 (Ont. Dist. Ct.); and Summit Glen Development Corp. v. Toronto (City) (1989), 44 M.P.L.R. 50 (Ont. Dist. Ct.).

In Woodglen & Co. v. North York (City) (No. 1) (1983), 42 O.R. (2d) 385, 23 M.P.L.R. 13 (Div. Ct.), a development was proposed for land zoned for single family residences. An old official plan designated the lands for open space and greenbelt. The respondent municipality failed to bring forward a by-law implementing the official plan prior to the application for building permits. The chief building official of North York refused to issue the permits based on the intent of the municipality to rezone. The Divisional Court heard the matter by way of a mandamus application. Eberle J. held that in the absence of exceptional circumstances, where there is a specific remedy for the harm alleged under s. 15 of the Building Code Act, R.S.O. 1980, c. 51, the court's discretion ought not to be exercized in favour of mandamus.

The matter then proceeded before Haley Co. Ct. J. in Woodglen & Co. v. North York (City) (1983), 43 O.R. (2d) 289, 23 M.P.L.R. 18 (Co. Ct.). The court found that as the official plan was not "applicable law" as stipulated in s. 6 of the Building Code Act, R.S.O. 1980, c. 51, the chief building official could not have regard to it in refusing the application. The court ordered the issuance of the permits. The matter was appealed to the Divisional Court.

In Woodglen (No. 2), supra, North York's appeal was dismissed. Mr. Justice Southey, agreeing with Haley Co. Ct. J. on the issue of applicable law, dealt specifically with the interpretation that a court should place on s. 15. He stated,

at p. 619:

> The duty of the judge under this subsection is to do what the judge considers the inspector or chief official ought to have done.

(Emphasis added)

The applicants refer also to the decision of then District Court Judge Corbett in H & D International Group v. Toronto (City), supra. Adopting the decision of Southey J. in Woodglen (No. 2), the court held that an interim control by-law passed after the decision of the building commissioner to deny an application for a building permit was not "other applicable law" within the meaning of s. 6(1) of the Building Code Act, R.S.O. 1980, c. 51. The court states at p. 191:

> In my opinion, the rights of the applicant should be determined on the date of the decision of the chief building inspector. Applicants for building permits are entitled to a reasonable degree of finality respecting their entitlement to building permits, which is not afforded by determining those rights as of the date of the hearing.

Reference is also made to the decision of Hogg D.C.J. in Summit Glen Development Corp. v. Toronto (City), supra, wherein he writes at p. 53:

> In my view, the leading case in Ontario is Woodglen & Co. Ltd. v. North York (1984), 47 O.R. (2d) 614, 26 M.P.L.R. 40, 9 C.L.R. 232, 12 D.L.R. (4th) 146, 5 O.A.C. 313 (Div. Ct.). In that case Mr. Justice Southey dealt specifically with the interpretation that a Court should place on s. 15 and at p. 619 he held: "The duty of the judge under this subsection is to do what the judge considers the inspector or chief official ought to have done."
>
> In other words, the Judge hearing the appeal was to place himself in the shoes of the official at the time the decision was made.

(Emphasis in original)

And further at p. 53:

> With respect, in my view, Mr. Justice Southey in the Woodglen case, and Judge Marie Corbett in the H & D International case set forth the law that I should follow.

The respondents and interveners argued that the court should determine an applicant's right to a building permit as of the date of the hearing. If they are correct, the subsequent passage of the interim control by-law constitute "applicable law" thereby preventing the issuance of the permit. They cite the following decisions in support of this proposition: McDonald's Restaurants of Canada Ltd. v. Humm (1983), 24 M.P.L.R. 103 (Ont. Co. Ct.); Greengable Holdings Inc. v. Scarborough (City), Ontario County Court, Matthews Co. Ct. J., April 26, 1984 (unreported), and Quay West v. Toronto (City) (1989), 47 M.P.L.R. 109 (Ont. Div. Ct.), leave to appeal to the Court of Appeal refused (1987), 47 M.P.L.R. 109n.

In McDonald's Restaurants, the appellant had applied for a building permit for the construction of a restaurant after a decision of the Ontario Municipal Board which permitted the location of the restaurant on the lands in question. The town council, in an attempt to prevent the building of the restaurant, adopted a proposed new official plan under which, if implemented, a restaurant location at the site in question would not be permitted. Despite numerous inquiries the chief building official refused to come to a decision respecting the issuance of a building permit. The appellant requested a hearing pursuant to s. 15(1) of the Building Code Act, R.S.O. 1980, c. 51.

The court allowed the appeal. In his decision, Blair J. had this to say, at pp. 127-28, regarding the date at which the appellant's right to a permit crystallizes:

> As explained by Roach J.A., in Hammond v. Hamilton, supra, the Privy Council held in Toronto v. Toronto R.C. Sep. Schools Trustees, [1926] A.C. 81, 3 D.L.R. 880 (P.C.), that the legal right of a person to use his property as he sees fit and to have a building permit is to be judged as of the date of the hearing and is not in effect stabilized as of the date of the application for the permit. It would seem that to hold otherwise would be to preclude the council from legislating with respect to the subject.

The respondent and intervenors also rely upon Greengables

Holdings Inc. In that decision the court was asked to determine whether an interim control by-law, passed two weeks after the application for a building permit was submitted, justified the denial of the permit by the chief building official. Matthews D.C.J. referred to the powers of a judge on an appeal pursuant to s. 15 of the Building Code Act, R.S.O. 1980, c. 51, at p. 4:

> The words quoted, employing the present tense, in my opinion, mean simply that the judge should have regard to what the chief official should do under s. 6, having in mind the present state of legislation. The use of the present tense, in effect, incorporates the principle established by the Privy council in Toronto (City) v. Toronto Roman Catholic Separate Schools Trustees, [1926] A.C. 81 (P.C.), that the right of the applicant is to be judged as of the date of the hearing.

Finally, in Quay West, the Divisional Court was asked to determine whether the applicant, a developer, was entitled to an order for mandamus to compel the issuance of a building permit. Southey J., speaking for the court, held that as the developer's proposed condominium project was not a permitted use at the time of the appeal, while the interim control by-law was in effect, the court could not direct the issuance of a permit. He states at p. 111:

> In my judgment, we should not now direct the issuance of a building permit, because the developer's proposed condominium project is not a use permitted under the interim control by-law.

Mr. McQuaid argued that the developer's right to a permit crystallized on the date of his application for a permit. If the permit should have been issued in August 1988, the subsequent passage of the interim control by-law, he argued, is not a valid ground for now refusing the permit. He relied on s. 37(8) of the Planning Act, S.O. 1983, c. 1 which makes s. 34(9) applicable to an interim control by-law with necessary modifications. The relevant portion of s. 34(9) provides as follows:

> (9) No by-law under this section applies,
>
> . . . . .
>
> (b) to prevent the erection. . . for which a permit has been issued. . .
>
> The subsection does not exempt the erection of buildings for which a permit ought to have been issued before the effective date of the zoning by-law, but only buildings for which a permit has in fact been issued. I do not consider the addition of the words "or ought to have been issued" to be a modification necessary in applying s. 34(9) to an interim control by-law.

(Emphasis in original)

The difficulty herein appears to arise in reconciling ss. 6 and 15(3) of the Building Code Act, and s. 34(9) of the Planning Act with case law originating before and after the 1983 amendments to the Planning Act, R.S.O. 1980, c. 379. I see the Woodglen decision as being outside the context of an interim control by-law passed subsequent to a permit application and refusal. The case did not deal with the effect of interim control by-laws. This view is affirmed by the words of Southey J. in Woodglen (No. 2) (at p. 620):

> Municipalities no longer have the need to delay an application for a permit in order that new zoning by-laws may be made effective, because they have the power under s. 37 of the Planning Act, 1983 (Ont.), c. 1, to pass interim control by-laws, to be in effect for one year, when land-use policies are being reviewed or studied in the municipality or in a defined area.

Consequently, I do not consider myself bound by any decision which relies upon Woodglen as authority for the proposition that an interim control by-law passed subsequent to a permit application or refusal cannot serve to bar development.

The application herein does not revolve primarily around when the applicant's right crystallized for the purposes of s. 15(3) of the Building Code Act. Rather, it revolves around the proper interpretation of s. 34(9) of the Planning Act. The

municipality's authority to pass interim control by-laws is set forth in s. 38(1) of the Planning Act. Section 38(8) of the Planning Act makes s. 34(9) applicable to an interim control by-law with necessary modifications. The applicable portion of s. 34(9) provides as follows:

> 34(9) No by-law passed under this section applies,
>
> . . . . .
>
> (b) to prevent the erection or use for a purpose prohibited
>
> by the by-law of any building or structure for which a pemit has been issued under section 5 [now s. 6] of the Building Code Act, prior to the day of the passing of the by-law, so long as the building or structure when erected is used and continues to be used for the purpose for which it was erected and provides the permit has not been revoked under section 6 [now s. 6(4)] of the Building Code Act.

(Emphasis added)

This court must therefore decide whether the phrase "for which a permit has been issued" in s. 34(9) can be interpreted to mean "ought to have been issued". The only precedent cited which deals specifically with this issue in the context of an interim control by-law is Quay West. The respondents and interveners are correct in stating that the Divisional Court viewed the addition of the words "or ought to have been issued" as a modification that is not "necessary" in applying s. 34(9) to an interim control by-law. The respondents and interveners go on to argue that, notwithstanding any alleged injustice imposed upon the applicant by the refusal of the permit, I am precluded from issuing the permit; the Divisional Court's refusal to read in the modification, "or ought to have been issued" in Quay West, precludes me from doing so. I do not interpret the findings of the Divisional Court, in holding that such modification is "not necessary" in the circumstances of that case as intending to foreclose such an interpretation in every instance. Moreover, it would be preposterous for this court to slavishly adhere to the findings that the words, "or ought to have been issued", were not "necessary" as applied in the circumstances of a precedent case, if the end result in this case would amount to a travesty of justice.

At the core of this issue is the historic tension between the competing interests of property owners and municipalities. For many years in Ontario, a balance was maintained through the application of equitable principles, specifically the test enunciated by the Supreme Court of Canada in Ottawa (City) v. Boyd Builders Ltd., [1965] S.C.R. 408, 50 D.L.R. (2d) 704. The Boyd principles were abolished by the Divisional Court in Woodglen (No. 2) because it was felt that s. 6(1) of the Building Code Act, R.S.O. 1980, c. 51, codified the balance previously maintained through the application of equitable principles. Those charged with the review of the Planning Act also understood the need for legislation which was sensitive to the needs of all parties. The Report of the Planning Act Review Committee (April 1977) at paras. 11.12 and 11.13 is reflective of this concern:

> A municipal council should be able to control development on an interim basis when it decides to review or change the existing land use and development policies in a given area. The council may want to do so because it feels it was elected to institute a change in policy, or because it believes circumstances have changed since the zoning was enacted.. . .
>
> The Planning Act should allow the use of interim development control in a systematic and responsible manner that protects the rights of the affected parties.. . .

(Emphasis added)

In light of the spirit of the Planning Act, as evidenced by the Planning Review Committee Report, it is worth asking whether the respondents used their authority over interim development control in a systematic and responsible manner that protected the rights of the affected parties. The following events which led up to the passage of the interim control by-law, as amended, are uncontroverted:

(1) The planning department for the town recommended approval of the site plan application in a report dated

April 21, 1992, subject only to two conditions. Both of those conditions were acceptable to the applicants, and most of the suggested revisions to the site plan were made.

(2) This report was to be put before the planning committee (council members) at a meeting on April 21, 1992. Prior to that meeting, the planning committee held an in camera session at which the majority of the councillors were in favour of turning down the application before even hearing from the applicant and its architect and landscape architect with respect to the site plan.

(3) The planning committee then elected to defer consideration of the report and directed that a public meeting be held on May 4, 1992, even though the Planning Act does not contemplate such a process. At this meeting, various members of the public, including

local residents and eight members of council voiced their opposition to the location of a Price Club, without even giving lip service to site plan approval considerations. All of the members of council present at the meeting assured the community that the application would be refused, although presentations were made by the applicants' architect and landscape architect and no questions were directed to them about the features of the site plan.

(4) One of the councillors in attendance at the meeting of May 4, 1992, agreed that the location chosen by the Price Club was not correct, but pointed out that the town's solicitor had informed her that the application could only be turned down successfully on certain planning grounds related to the site plan. She advised that she intended to raise certain planning issues relating to the site plan when the matter came before council for approval. However, when the matter came before council, she raised no such issues. In fact, she had previously raised various issues with the planning department regarding the site plan, all of which had been responded to by the planning department.

(5) On May 12, 1992, the council passed a resolution to "not approve" the site plan. They did not give any reasons for not approving the site plan, nor did they comment as to which parts of the site plan they considered objectionable. Nor did council provide the applicant an opportunity to respond to any concerns of council by effecting changes to the site plan drawings.

(6) On May 27, 1992, the chief building official confirmed his refusal to issue the building permit, notwithstanding his view that the application appeared to be substantially complete and in compliance with the Ontario Building Code and the relevant zoning by-law.

(7) On June 23, 1992, being after the within application was launched and two days prior to the original return date the respondent, Town of Markham, without any notice to the applicants, enacted interim control by-law 115-92, limiting development of a "Community Commercial" site in the Town of Markham such that a "retail warehouse" was not permitted.

(8) On September 29, 1992, the respondent, Town of Markham, some three months after the original return date, again without any notice to the applicants, amended interim control by-law 115-92, adding a definition of "Commercial Club", thereby preventing a "Commercial Club" from being built on the applicants' site. As the uncontested position of the applicants is that the applicants' site is the only one which is presently undeveloped it is the only site actually impacted by the interim control by-law.

Not only was every step of the way conducted improperly, but the only reasonable inference I can draw from the timing of the interim control by-law and its amendment was that they were intended to sabotage these proceedings already under way and tie the hands of this court.

Based on the above, I can only conclude that the respondent Town of Markham did not use the interim control by-law and its amendment in a systematic and responsible way with a view to protecting the rights of affected parties. The sequence of events above noted demonstrates that the respondent Town of Markham, represented by its council, was mainly concerned with rather machiavellian political imperatives of a municipal government to which the applicants have fallen victim. Moreover, the competing private interests of the interveners are riding the coat-tails of such reprehensible municipal behaviour.

In the circumstances of this case, I find that the only fitting and proper conclusion for me to reach is that the building permit ought to have been issued; and I do so, all criteria having been met for the reasons following.

2. Should the chief building official have issued the building permit?

I must now deal with the question of whether the chief building official made the correct decision in refusing to issue the building permit at issue. In accordance with s. 15(3) of the Building Code Act, the judge must place him- or herself in the shoes of the chief building official as of the date of the receipt of the application, and decide whether the issuance of a building permit would contravene any applicable law.

In the application, the sole ground upon which the chief building official refused to issue a building permit to the applicants was the fact that the applicants did not yet have site plan approval for their development pursuant to s. 41 of the Planning Act.

(a) Site plan approval

Pursuant to the provisions of s. 41 of the Planning Act, the proposed use of the site in question requires site plan approval. Section 41(4) of the Planning Act provides as follows:

> 41(4) No person shall undertake any development in an area designated under subsection (2) unless the council of the municipality or, where a referral has been made under subsection (12), the Municipal Board has approved one or both, as the council may determine, of the following:
>
> 1. Plans showing the location of all buildings and structures to be erected and showing the location of all facilities and works to be provided in conjunction therewith and of all facilities and works required under clause (7)(a).

The scope of s. 41 of the Planning Act is narrow and restricted to the matters specifically enumerated in the section. In general, a municipality may only impose conditions relating to the internal arrangement of buildings and facilities and the provision of services and access to the specific development in considering site plan approval. In the words of the Ontario Municipal Board in First City Shopping Centre Group v. Gloucester (City) (1990), 25 O.M.B.R. 91 at pp. 101-02

> It is clear to the board that s. 40(7) of the Planning Act, 1983 only authorizes conditions to be imposed that relate to the internal arrangements of buildings and facilities and provisions of services and access to the specific development. The board cannot find in the words or intent any broader interpretation.

And further on p. 102:

> Section 40 [now s. 41], unlike s. 50 [now s. 51] of the Planning Act, 1983 limits consideration to the site and its development. Section 50 [now s. 51] allows much more scope in its considerations of land use impacts, compatibility with other uses, the provision of services and issues of prematurity.

The issue herein was addressed by the court in Revenue Properties Co. v. Toronto (City) (1984), 26 M.P.L.R. 165 (Ont. Co. Ct.). Matlow Co. Ct. J. said on pp. 169-70:

> Nor, in my opinion, would the issuance of a building permit

prior to the granting of site plan approval result in any contravention of the Building Code Act. In particular, I do not consider that the "proposed construction", in the circumstances of this case, would "contravene any other applicable law" as those words are used in s. 6(1)(a) of the Building Code Act merely because site plan approval has not yet been given. The actual construction, however, if it were to proceed without prior site plan approval would be in violation of the Planning Act. Accordingly, the issuance of a building permit would not be contrary to s. 6(1)(a) of the Building Code Act.

. . . . .

Although it may be desirable and more expeditious that site plan approval be obtained before the issuance of a building permit in order to eliminate the need for further amendments to the building permit that might become necessary to satisfy the conditions of the granting of site plan approval, this potential difficulty does not persuade me that the legislation requires site plan approval as a pre-condition for the issuance of a building permit.

It has been argued that this decision should be limited in application to extraordinary circumstances in which the municipality was not acting in good faith or was refusing developmental approval for an obviously unlawful reason. This issue is one of statutory interpretation and construction and I see no reason to limit its application to extraordinary circumstances. I therefore find that the proposed construction in the circumstances of this case would not contravene "any other applicable law" as those words are used in s. 6(1)(a) of the Building Code Act solely because site plan approval had not yet been given.

(b) Zoning By-Laws 118-79, 207-89 and 225-9

The interveners in the within application have raised a second ground on which the chief building official ought to have refused to issue the building permit, namely, that the proposed Price Club membership warehouse club is not a permitted use.

The position of the applicants is that the proposed Price Club membership warehouse club is a permitted use according to the provisions of the relevant Town of Markham zoning by-laws; more particularly, that the proposed Price Club membership warehouse club is a permitted use as a "commercial club" within the meaning of the applicable zoning by-law.

The applicants' site is zoned "Community Commercial (CC)" by Town of Markham by-law 225-91, which amends Town of Markham by-law 118-89, as amended by by-law 207-89. The Town of Markham by-law 207-89, s. 1.5.3, states that a "Shopping Centre" may be erected in a "Community Commercial (CC)" zone. Section 1.5.3 of by-law 207-89 further states that a "Shopping Centre" may contain a "Commercial Club". "Commercial Club" is defined in s. 2 of By-law 118-79 to mean "any club operated for profit or gain, excepting a private club or health club as defined".

The intervener, Loblaws, cites professional planner Michael Goldberg to the effect that a commercial club was intended to mean a social recreational entertainment, or a cultural facility which is operated for profit or gain. He cites as examples facilities such as a nightclub, which contains a nightly entertainment or a social club that may contain a mix of billiards, ice cream bar, meeting or similar such facilities. He opines that the Commercial Club designation does not include a shopping facility such as a Price Club warehouse as it is a new concept in the Ontario marketplace, not contemplated by the Act. No authority is cited for these propositions beyond Michael Goldberg's thesis. It is further argued that if the Price Club is found to be a permitted use, the "barbarians will be at the gate", if you will, setting up all manner of shop under the guise of a Commercial Club, including, but not limited to, such enterprises as a livestock auctioning yard. With all due respect to the able arguments of the intervener Loblaws, a livestock auctioning yard may be many things; a shopping centre it is not.

There can be no doubt that the Price Club is a club because it does have strictures of admittance for membership. It operates for profit or gain. It is also a centre in which people shop for goods. Put simply, to classify the Price Club

as a shopping centre-commercial club does not strain the wording of the Act. The fact that commercial clubs as a permitted use had been a part of the zoning by-laws since at least 1979, many years before Price Clubs or similar uses were contemplated in Canada, does not preclude a natural interpretation of the language as it stands.

CONCLUSION

For the reasons above stated, the criteria for the issuance of the building permit have been met. Accordingly I order that the building permit issue.

The parties may address me as to costs.

Order accordingly.

Stacey v. Oxford-on-Rideau (Township)

Between
Paul Stacey and Susan Darlene Robertson-Stacey and Ralph Robertson and Lois Robertson, Applicants, and
The Corporation of the Township of Oxford-on-Rideau and Philip Gerrard, Chief Building Official and the Rideau Valley Conservation Authority, Respondents

Ontario Judgments: [1989] O.J. No. 1365
Action No. 678/89

Ontario District Court - Leeds & Grenville Counties
Brockville, Ontario
Cosgrove D.C.J.
August 9, 1989

Timothy Pinos, for the Applicants.
Paul A. Jansen, for the Respondents.
Helmut Brodmann, for the Rideau Valley Conservation Authority.

COSGROVE D.C.J. (orally):-- This is an application under s. 15 of the Building Code Act, R.S.O. 1980, s. 51, as amended, in which the applicants seek a hearing and appeal for an order ...

(1) rescinding the respondent Philip Gerrard's refusal to issue a demolition permit and a building permit;

(2) directing that a demolition permit be issued to demolish the foundation of a fire-damaged building; and

(3) directing that a building permit be issued to "reconstruct" a building on the foundation remaining following demolition of a fire-damaged building ...

with respect to property known municipally as R.R. No. 1, River Road, Kemptville, Ontario, being Part Lot 30, Concession 1, Oxford-on-Rideau Township.

At the commencement of the application, counsel for the applicants agreed that the Rideau Valley Conservation Authority, who are significantly involved in this matter, should be added as a party respondent. That was with the agreement of the applicants' counsel and, as well, counsel representing the Corporation of the Township of Oxford-on-Rideau.

In addition, all counsel agreed that there should be added to the applicants the parents of the applicant Susan Darlene Robertson-Stacey, being Ralph Robertson and Lois Robertson. The court recommended this course of action as there appeared to be some possible technical problem with continuity in ownership of the property in issue. This, of course, would have some bearing on the status of the applicants to make the application under the section of the Statute in issue before the court. Accordingly, it was agreed by all that adding the parents by consent (who had, in fact, at one time owned the property and subsequently transferred it to Paul Stacey and Susan Darlene Robertson-Stacey) the matter of jurisdiction would be cured.

The facts which form the basis of the application are not complicated nor difficult. The facts are agreed upon by counsel for all parties. I should add that the solicitor for the respondent Township of Oxford-on-Rideau did not make submissions, but rather accepted that the major objection and opposition was that of the Rideau Valley Conservation Authority and that the issue was fairly presented to the court for a decision.

The essential facts placed before the court by way of the facta with supporting affidavits were summarized in point form by counsel for the applicants as follows:

(1) Prior to February 4, 1989, the applicants resided in a home owned by her father, i.e. by Susan Robertson-Stacey's father. It is the property referred to in the environs of Kemptville;

(2) The property was transferred to the applicants (as I've indicated, the parents of the applicants were added just to ensure that whatever the technical status of ownership at the time of application, it was one or the other). On February 4, 1989, fire occasioned significant damage to

this single-family residence. As a result of the fire, the house was uninhabitable. The application is to demolish what appears to be the remaining infrastructure which is charred but standing above an unharmed foundation;

(3) The applicants applied to the Township of Oxford-on-

Rideau for a demolition permit and building permit to raze and restore or "reconstruct" the single-family residence. It was agreed by the parties that what, in effect, was intended was that the structure that had been there initially and destroyed by fire would be replaced. From the material, the court noted that there was some waterproofing intended and that the height of the basement foundation would be raised approximately three feet. What was intended and sought was a replacement of the original building. The applicants were told by the Corporation that before their application could be processed, the approval of the Rideau Valley Conservation Authority was required;

(4) The applicants thus proceeded to make application to the Conservation Authority through its regular committees and procedures;

(5) On April 14th, the applicants were advised that their application for "reconstruction" was turned down by the Conservation Authority. The Authority did this by way of letter and in the letter set out the reasons why the Authority believed that it was, according to its mandate, required to reject the application for "reconstruction";

(6) The applicants subsequently applied for a demolition permit and a building permit from the Corporation by application dated June 23, 1989. They were informed by the respondents that the application would not be accepted or processed because of the turn-down by the Conservation Authority;

(7) The applicants had, as well, been told that they could appeal the decision of the Conservation Authority to the Mining and Lands Commissioner. That appeal is still pending;

(8) It was agreed by counsel that material filed in the respondent's factum by way of affidavit of Donald MacIver was similarly common and that the facts therein were jointly accepted by counsel. The pertinent sections of the exhibit to the affidavit relied upon deal with the policies of the Province of Ontario and the principles of Conservation Authorities. The principles relied upon in argument by counsel for the applicants appear at Page 11 of the respondent's application record, under the heading, "Principles" ...

> "(4) new development susceptible to flood damages or which will cause or increase flood related damages to existing uses and land must not be permitted to occur; however, some communities have historically located in the flood plain and, as a result, special consideration may be required to provide for their continued viability;"

Counsel also referred to the first heading under the caption "Policies" ...

> "(1.) General
>
> It is the policy of the Province of Ontario that:
>
> 1.1 ... All land use planning and resource management bodies within the Province have regard to the implications of their actions respecting the creation of new or the aggravation of existing flood plain management problems."

The issues before the court similarly are not extensive and were only two. The issues, in effect, are the interpretation of the legislation under which the Authority purported to act in response to the application for the demolition and "reconstruction", and the interpretation of the authority under which the respondent Corporation and its official purported to respond to the application for a building permit.

Counsel for the applicant characterized the two issues as follows:

The first issue was whether the Conservation Authorities Act and Regulations thereunder are-- and these words are in quotes --"any other applicable law" within the meaning of s. 6.1 of the Building Code Act, R.S.O. 1980, c. 51.

The second issue argued before the court was whether the "reconstruction" of a fire-damaged building constitutes "construction" within the meaning of s. 28.1.e of the Conservation Authorities Act and Regulation 175 thereunder.

On the first issue, both counsel referred to a decision of Judge Haley in Re: Woodglen & Co. Ltd. v. The City of North York et al., 43 O.R. (2d) 289. The headnote of the decision indicates that the issue before the court there concerned an application for a building permit and a refusal and an appeal, as is the case before the court.

The issue of what is meant by applicable law under s. 6.1 of the Building Code Act is dealt with at Page 295. The judge states, and this is at the top of the page ...

> "Section 6(1) of the Building Code Act provides that the chief official shall issue a permit except where the proposed building will not comply with the Building Code Act or the building code or will contravene any other applicable law.
>
> There is no issue here as to any failure to comply with the Building Code Act or the building code. The only question is what is comprised under the words "any other applicable law".
>
> Applicable law will include relevant statute law, e.g. the Planning Act, R.S.O. 1980, c. 379, and also the zoning by-laws of the municipality, as settled in Axelrod et al. v. City of Toronto et al. (1981), 15 M.P.L.R., 143. The respondent argues that the chief official must also consider as applicable law the Official Plan Amendment 259 adopted by by-law of the council on December 14, 1981. It argues that on that basis he was right in denying a building permit for a single-family dwelling which would be contrary to the official plan amendment and the District Plan 4-5, both of which intended the lands as open space."

It is the next paragraph that I underline, which I find useful and instructive to the court ...

> "In my opinion, the official plan and any amendments to it are not effective to regulate land use and are not, therefore, part of the applicable law the chief officer is to obey. Especially is this so in the case of Official Plan Amendment 259 which has not yet been approved by the Minister of Housing and is, therefore, subject to modification."

Both counsel relied upon this decision and attempted to extrapolate so as to assist the court in their respective positions as regards whether or not "applicable law" in this case includes the Conservation Authorities Act and the

Regulations thereunder.

On the second issue, counsel for both parties again made reference to a very recent decision, again of the District Court of Ontario, where it was agreed that, in effect, the law and the issue before the court involved the very interpretation of the very words which are before the court today. This is the decision of Re: Upper Thames River Conservation Authority v. The City of London et al., 67 O.R. (2d) 784. It is a decision of Judge Killeen, District Court Judge, dated February 20, 1989. I have been advised that this decision is under appeal at the present time. The decision, as I have indicated, is particularly germane inasmuch as the law to be interpreted-- the issue involves the same law as that before the court. The case is instructive because Judge Killeen, in addition to dealing with the law, goes through the history of the development of the background of the Conservation Authorities Act and Regulations from their inception in the Province of Ontario up to the present time and to the present governing law and regulations which, of course, are before the court for interpretation.

The facts, however, in the Thames decision are not the same as those before the court. Looking at Page 785, the facts briefly are as follows ...

> "In mid-April, 1988, Mrs. Soufan decided to start major renovations on the interiors of both buildings aimed at converting 1 High Street from a duplex into a fourplex and 6 Front Street into a sixplex. This work would have meant that the living units in the two buildings would increase from six units to 10 units and, as well, there would have been upward adjustments in space to be utilized for commercial purposes: see Mrs. Soufan's record, tabs D and R. It would seem that Mrs. Soufan planned to spend at least $75,000 on such renovation work based on later information filed with the city official in July."

The significance of those facts is to distinguish them from the facts which are at issue before the court. In the Thames decision, the work to be done was work that would be done within the existing four walls (or however many exterior walls there were) of the buildings owned by the private individual. That is distinguishable from the present case where the application is not only for "reconstruction" but is for the demolition of the fire-damaged building down to the existing basement walls or block foundation.

Counsel for the respondent Conservation Authority in addition relied upon a number of decisions to assist the court in its approach to methods of interpretation, one being the decision of Murray v. District of West Vancouver (1937), W.W.R. 269. The headnote is as follows ...

> "Since the cardinal principle of both the British and Canadian constitutions is the supremacy of Parliament or of a Legislature acting within the ambit of its powers, therefore where a statute admits of but one interpretation effect must be given to whatever its consequences."

In addition to that, counsel for the respondents drew the court's attention to the decision of The Canadian Pacific Railway Company v. The Department of Public Works of the Province of Ontario, 19 S.C.R. 189. This was a decision that, in effect, reminds judges that when they interpret legislation they must deal with legislation at hand, i.e. the legislation in effect at the time that the matter became an issue.

In argument, counsel for the applicants urged the court that the plain meaning of the word "construction" is inherently and significantly different than what his clients seek to do as regards the damaged premises. In other words, he argued that the "reconstruction" (first of all, they have applied for a demolition of the charred portions of the building) that is, its replacement, is not clearly the same as "construction".

Counsel for the applicants urged that if the court was to give effect to the argument by counsel for the Authority that "construction" means "reconstruction", that his clients who have been refused an application to rebuild their home will have been expropriated, and expropriated without compensation.

The material indicates that the insurance proceeds available for purposes of replacement of the damaged premises in the event that the applicants are not able to "reconstruct" on the very site where the building was damaged will be significantly less than those that will be available to them if they were required to look for a home somewhere else. Clearly, the court accepts that that is the effect of the denial of a permit for "reconstruction" of the premises, i.e. that it will be tantamount to expropriation and a significant economic loss to the applicants.

On the other hand, counsel for the Authority on the basis of the Thames decision has urged the court that the plain meaning of "construction" (he has referred to the Oxford Dictionary definition of construction viz: erecting walls, building, etc.) means the physical acts of building; that the definition of "construction" is wide enough to encompass the notion and word of "reconstruction" and, therefore, on the plain meaning of the word "construction", the court ought to include "reconstruction" and support the Authority's refusal to grant a permit and to support the Township's refusal as well, through its building official, to process the building application.

Counsel for the Authority urged the court as well that if the court finds that the word construction does not include the word "reconstruction", that not only will the Authority be limited in carrying out its mandate because of this application before the court but that, indeed, it will set a precedent and will have significant repercussions as regards the ability of

the Authority to carry out its mandate.

Counsel for the Authority, though, did concede that the Authority has no funds, or very limited funds, for either acquisition of properties by purchase or for expropriation purposes.

In effect, counsel for the respondent Authority says that his client, the Authority, had no choice but to refuse the applications on the basis of its interpretation of s. 28.1.e of the Conservation Authorities Act and Regulation 175. In addition to that, of course, he argued that the Township, the initial respondents, because this was "other applicable law" within the meaning of s. 61 of the Act, were justified in refusing as well to deal with an application for a building permit pending the final appeal by the applicants from the decision of the Authority to refuse approval for "reconstruction" of the project.

The court, after considering the authorities to which I have made reference and various other authorities by counsel, together with capable and extensive argument, has concluded that the applicants today will be successful; in other words, the relief sought will be granted for the following reasons.

I am satisfied on the basis of the Woodglen decision of Judge Haley and the test of relevancy that "any other applicable law" includes s. 28 and the Regulations under the Conservation Authorities Act (which was also assumed by Judge Killeen in the Thames decision).

The court is also satisfied that the plain meaning of the word "construction" within s. 28.1.e and Regulation 175 under the Conservation Authorities Act means just what it says, namely, initial construction, construction at the outset, the first building of a building, but not "reconstruction".

The court is convinced by reference to the Standard Oxford Dictionary that the word "reconstruction" is a separate, distinct and totally different word than the word "construction" (as almost any other concept with the same prefix-- creation and recreation; apply and reapply; furbish and refurbish). These are in language two different meanings --they are two different words-- they are defined differently. Therefore, when the court is urged by both counsel to follow the first approach to interpretation referred to by Judge Killeen in the Thames decision to which I have made reference, in the court's interpretation of the plain meaning of the words in issue I have come to the conclusion that the word "construction" does not include the word "reconstruction".

At Page 795 of the Thames decision, Judge Killeen states ...

> "As it seems to me, this enabling language must be given its plain and ordinary grammatical meaning. I have examined the context of the C.A.A. ..."

which is the Conservation Authorities Act,

> "... as a whole and the provisions of prior versions of the statute back to 1946 and can find no hint that any other approach is justifiable. Professor Driedger, in his seminal study, Construction of Statutes, 2nd ed. (1983), has described the modern general principle of statutory construction this way at p. 87:
>
> Today there is only one principle or approach, namely, the words of an Act are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament."

Judge Killeen then goes on ...

> "An example of this great principle in the modern cases may be found in the following passage from the judgment of Lord Atkinson in City of Victoria v. Bishop of Vancouver Island (1921), 59 D.L.R. 399 at p. 387:
>
> In the construction of statutes their words must be interpreted in their ordinary grammatical sense, unless there by something in the context or in the object of the statute in which they occur, or in the circumstances with reference to which they are used, to show that they were used in a special sense different from their ordinary grammatical sense."

I am cognizant of the thrust of the argument by counsel for the Authority that the interpretation of "construction" to exclude "reconstruction" has implications from a policy point of view as regards the Authority. I have also taken into account his argument that not to include "reconstruction" in "construction" may impinge on the effectiveness of the authority in carrying out its mandate to control flood plain lands. I appreciate those arguments, but at the same time I feel that I can find no support for the interpretation of "construction" including "re-construction" as did Judge Killeen in the ordinary grammatical use of the word "construction" nor in its context used in the statute or previous editions of the statute.

I am mindful as well that Judge Killeen in the Thames decision refers to s. 10 of the Interpretation Act and deals with it in his further analysis of the issue before him. At Page 797, he sets out s. 10 of the Act as follows ...

> "Every Act shall be deemed to be remedial, whether its immediate purport is to direct the doing of anything that the Legislature deems to be for the public good or to prevent or punish the doing of anything that it deems to be contrary to the public good, and shall accordingly receive such fair, large and liberal construction and interpretation as will best ensure the attainment of the object of the Act according to its true intent, meaning and spirit."

Judge Killeen at Page 798 adopts the caveat of Justice MacIntyre of the Supreme Court of Canada where Justice MacIntyre, for the majority, said ...

> "The Ontario courts have adopted the approach dictated by s. 10 of the Interpretation Act and they have construed the statute in the purposive manner. In this they have given effect fully to the avowed purpose of The Ontario Heritage Act, 1974. Accepting the approach so taken, I am not of the view, however, that in an effort to give effect to what is taken to be the purpose of the statute it is open to the court of construction to disregard certain provisions of the Act. The whole Act must be construed. It must be construed to give effect to the purpose above described but also to have regard for many provisions of the Act, particularly ss. 34 and 67, the purpose of which is to protect the interests of the landowner concerned. To ignore these provisions, or to read them down to where they are deprived of any real significance is not to construe the statute but to decline to assign any meaning to certain of the words that were used by the Legislature."

As I have indicated, the court feels that it recognizes the mandate, objectives and purpose underlying the Conservation Act; but that purpose has to be administered through the use of the English language, through statute and through words, and words in their plain and ordinary meaning; the court can't blink at the plain meaning of the words or word in the statute.

The comments of Justice MacIntyre as regards weighing the interest of the landlord in context of The Ontario Heritage Act takes me to the last point which is a further point made by counsel for the applicants, that is that the court in this case is also required to go through a balancing process. The court is required to do that because that is what the Ontario Government itself has adopted as a general policy promulgated for the various bodies and authorities acting under mandate from the province. That general policy is set out at Page 11 of the affidavit of the respondent under General Policies, viz ...

> "1.1 ... All land use planning and resource management bodies within the Province have regard to the implications of their actions respecting the creation of new or the aggravation of existing flood plain management problems."

This is an exhortation that in the general administration of the Act that the effect of the Act must also be considered by those administering it.

I accept the argument in conjunction with the further point or related argument (parallel argument) made by counsel for the respondent in his factum which was that where a statute confers a power, particularly one which may be used to deprive the subject of proprietary rights, the courts will confine those exercising that power to the strict letter of the statute. Counsel referred to the decision of Hinder v. Metropolitan

Toronto and Region Conservation Authority (1984), 16 O.M.B.R. 401. This is a decision of G. H. Ferguson, Q.C., Mining and Lands Commissioner. (He exercises the same power as the official to whom the applicants have forwarded an appeal from the decision of the authority in the present case.) In any event, in the Hinder decision at Page 433, the Commissioner states the following ...

> "While it is relevant to apply a broad interpretation to the administrative powers of a conservation authority, as was done in the Rosenberg case, this tribunal is of the opinion that where the act of a conservation authority is a legislative one and one that affects the rights of landowners generally, it may be more appropriate to apply the exception to the broad interpretation rule outlined on p. 258 of Maxwell on the Interpretation of Statutes, 12th ed. (1969), where it is noted,
>
> > "Where a statute confers a power, and particularly one which may be used to deprive the subject of proprietary rights, the courts will confine those exercising the power to the strict letter of the statute."

The court in this case has indicated that it is not applying the so-called strict interpretation but the plain interpretation of the words to the issue before the court. However, when the court analyzes and balances the effects, the objectives of the authority versus consequences to the landowners (applicants in this case), there are some important differences between this and the Thames decision by Judge Killeen. What I mean by that is in the Thames decision, the result of the refusal of the application to renovate presumably would have been a loss of profits to the applicants in that case. In the case at bar, obviously the effect, as I have indicated, to the applicants is expropriation without compensation. The applicants as a result of the decision rejecting their application to rebuild their home would be deprived of the use of their home and property.

As regards the stated objectives and the impact of the decision on the stated objectives of the Authority on the other hand in the Thames decision, because more units were being added (both commercial and residential) more people were being invited to live and shop in the building to be renovated, it seems to me there would be a greater risk of harm to a greater number of people and hence a potentially greater difficulty to the Authority than in the present case. In the present case, the applicants simply will be putting themselves back in the same position in which they were prior to the fire of February 4th. In other words, the risk of harm to persons in the flood plain lands would not be increased, but would remain the same. Considering that Judge Killeen came to the decision using this balancing procedure as well in the Thames decision that "renovation" was not caught by the word "construction", the court is confirmed in its analysis that, in fact, "construction" ought not in the present case be permitted to act as a bar to "reconstruction".

Finally, if as is urged by counsel for the respondent that the word "construction" is intended to mean "reconstruction", I believe that it should be so specified either in the governing Act or the Regulations or the by-law passed by the authority. It would appear from the Thames case and this case and from evidence given by counsel for the respondent that these types of applications are fairly frequent. I am convinced that the Authority or the Legislature in looking at the implications of including "reconstruct" under the word "construct" probably would agree that there would have to be at the same time other amendments to the Act or by-law to take into account the effect of such a meaning and a mechanism would have to be introduced to ensure adequate compensation to persons adversely affected by such action.

Accordingly, the application is ALLOWED.

Summit Glen Development Corp. v. Toronto
(City)

Between
Summit Glen Development Corporation, Applicant, and
The Corporation of the City of Toronto and Michael Nixon the Commissioner of Buildings and Inspections, Respondent

Ontario Judgments: [1989] O.J. No. 1195
Action No. 177429/89

Ontario District Court - Muskoka Judicial District
Bracebridge, Ontario
Hogg D.C.J.
May 23, 1989

James W. Harbell, for the Applicant.
A.A. Weretelnyk, for the Respondents.

HOGG D.C.J.:-- This is an application made pursuant to Section 15 of the Building Code Act, R.S.O. 1980, c. 51 as amended and for an order requiring the Respondent to issue a building permit for a structure at 81-87 Mutual Street, ("the Lands"). In addition the Applicant is requesting an order for the issuing of demolition permits.

The City of Toronto passed By-Law 169-79 on February 19th, 1979 respecting a height limit on an area which included the Lands. This By-Law was not approved by the Ontario Municipal Board.

On March 21st, 1988, Toronto City Council granted site plan approval for a structure to be erected on the Lands.

On May 5th, 1988 the Committee of Adjustments granted two variances to By-Law 169-79 and noted that the By-Law had never been approved by the Ontario Municipal Board.

A neighbour appealed the City's decision to the Ontario Municipal Board who held that By-Law 169-79 was not in effect and therefore variances from that By-law were not required.

A former owner of the Lands applied for a demolition permit on September 9th, 1988. It has not been granted.

On October 18th, 1988, the applicant requested a repeal of By-Law 169-79 from the City.

On October 20th, 1988, the City of Toronto Legal Department proposed to City Council a draft by-law and the following day Council referred the proposed repeal of By-law 169-79 to the City Land Use Committee for a public hearing.

On December 7th, 1988, the applicant applied for an am endment to the site plan which had previously been approved by Toronto City Council.

On January 24th, 1989 the applicant applied for a building permit for the proposed development. The applicant was advised the following day that the application would not be accepted because the proposed structure was too high and not in compliance with zoning By-Law 169-79. By letter dated February 6th, 1989 the respondents confirmed their position in denying the building permit.

On February 23rd, 1989 Toronto City Council revoked the Section 40 site plan approval which had been granted on March 21st, 1988. The applicant has appealed such refusal.

On February 23rd, 1989, Toronto City Council passed By-Law 187-89, an interim control bylaw pursuant to Section 37 of the Planning Act 1983. If approved by the Ontario Municipal Board this would prohibit the use of the Lands for an apartment building for a period of one year. This decision has been appealed.

Two buildings are on the Lands which have been vacant since November 5th, 1987 and were barricaded in 1988.

Section 15(1) of The Building Code Act provides for an application to a Judge of the District Court for a hearing an appeal.

Section 15(3) states:

> "Where an application is made to a judge for a hearing under subsection (1), the judge .....may rescind or affirm the order or decision of the inspector or chief official or take such action as the judge considers the inspector or chief official ought to take in accordance with this Act and the regulations, and for such purposes the judge may substitute his opinion for that of the inspector or chief official." (my emphasis)

I am of the opinion that By-law 169-79 does not apply to prevent the issuance of a permit because this by-law had not been approved by the Ontario Municipal Board and such approval is necessary before the by-law becomes effective.

On February 23rd, 1989 Toronto City Council passed interim control By-law 187-89 pursuant to Section 37 of The Planning Act 1983. This by-law would prohibit the use of the Lands for a period of one year.

In my view the issue is whether By-law 187-89 applies and that depends on the interpretation of the words in Section 15(3) of The Building Code "ought to take in accordance with this Act". Does the Judge place himself in the shoes of the official at the time the application for the permit was made and denied or at the time the application for hearing was filed? There have been a number of cases dealing with the interpretation and meaning of Section 15. In my view the leading case in Ontario is Re Woodglen & Co. Ltd. and City of North York et al. (1984), 47 O.R. (2d) 614 (Div. Ct). In that case Mr. Justice Southey dealt specifically with the interpretation that a Court should place on Section 15 and at page 619 he held:

> "The duty of the judge under this subsection is to do what the judge considers the inspector or chief official ought to have done." (My emphasis)

In other words, the judge hearing the appeal was to place himself in the shoes of the official at the time the decision was made.

Mr. Justice Southey went on to state:

> In respect of zoning, if the proposed construction complies with the zoning by-laws in force at the date of the application for the permit, then the intention of the municipality to rezone on prohibit such construction is not a valid reason for refusing or postponing the issuance of a permit."

This decision was followed last year in a decision of the District Court H. & D. International Group v. The Corporation of the City of Toronto, a decision of my sister Corbett. At page 9 of her Reasons for Judgment Judge Corbett stated:

> "...In my opinion, the rights of the applicant should be determined on the date of the decision of the chief building inspector. Applicants for building permits are entitled to a reasonable degree of finality respecting their entitlement to building permits, which is not afford by determining those rights as of the date of the hearing.
>
> I, therefore, adopt the approach taken by Mr. Justice Southey in the Woodglen case.....
>
> ...I find that By-law No. 209-88, (an interim control bylaw), passed after the decision of the building commissioner, is not applicable law within the meaning of Clause 6(1)(a) of Building Code Act."

With respect, in my view Mr. Justice Southey in Rosenberg in Re Federation of Metropolitan Toronto Tenant's Associations and city of York et al. (1988) 65 O.R. (2d) 245 (H.C.J.). At page 253 in giving judgment as a member of the Divisional Court, Mr. Justice Rosenberg stated:

> "I accept the interpretation urged by the respondents for the reasons argued by the respondents. The Act does not apply to vacant buildings."

Since the buildings in question are obviously vacant, the Act does not apply.

Therefore an Order will go as follows:

(a) granting a hearing of appeal pursuant to section 15 of The Building Code Act R.S.O. 1980, c. 51;

(b) requiring the respondents to issue a building permit for the construction of an eleven storey apartment building on Lands known as 81-87 Mutual Street, in the City of Toronto;

(c) requiring the respondents to issue a demolition permit as applied for in this case, and

(d) Costs of this motion to the applicants.

Re Superior Propane Inc. et al. and Corporation of the City of York *

23 O.R. (3d) 161
[1995] O.J. No. 1210
No. 12236

Court of Appeal for Ontario,
Morden A.C.J.O., Griffiths and Abella JJ.A.
May 3, 1995

Appeal from an order of the Divisional Court (1991), 6 O.R. (3d) 117, 86 D.L.R. (4th) 60, 9 M.P.L.R. (2d) 165, dismissing an application for a declaration that a zoning by-law was invalid.

Stanley B. Stein, for appellants.

Stanley M. Makuch and Catherine Bray, for respondent.

Linda McCaffrey, QC, for intervenor, Attorney General of Ontario.

The judgment of the court was delivered orally by

MORDEN A.C.J.O.: -- This is an appeal by the applicants, Superior Propane Inc. and Propane Gas Association of Canada Inc., from an order of the Divisional Court dismissing their application for a declaration that By-law 1116-87, passed by the respondent, City of York, is invalid.

The facts and legislation which are relevant on this appeal are set forth in the two sets of reasons given in the Divisional Court, those of Mr. Justice O'Brien for the majority and those of Mr. Justice Hollingworth in dissent, reported in 6 O.R. (3d) 117, 86 D.L.R. (4th) 60.

There were motions for fresh evidence put before us on behalf of the intervenor, the Attorney General of Ontario. Their admissibility was not fully argued and little reliance was placed on the evidence. We are not satisfied that this evidence, which was submitted to support the view that the by-law is in conflict with the provincial legislation, meets the requirements for the admission of fresh evidence or that all of it is, in any event, relevant. These motions are dismissed.

On the appeal itself, we are in substantial agreement with the reasons of Mr. Justice Hollingworth. In our view, the Energy Act, R.S.O. 1980, c. 139, and the regulation enacted under it contain a comprehensive scheme to regulate propane dispensing, installation, handling and storage and that these matters are not subject to legislative authority by municipalities. In this regard we note that s. 29 of the Energy Act is worded more broadly than the similar provision in the Environmental Protection Act, 1971, S.O. 1971, c. 86, which was considered by this court in Ontario (Attorney General) v. Mississauga (City) (1981), 33 O.R. (2d) 395, 124 D.L.R. (3d) 385. This latter provision expressly required "a conflict" as a condition of the Environmental Protection Act, 1971 and the regulations under it prevailing over other legislation. We refer in this regard to Union Gas Ltd. v. Dawn (Township) (1977), 15 O.R. (2d) 722, 76 D.L.R. (3d) 613 (Div. Ct.), where a provision virtually identical to s. 29 (s. 57(2) of the Ontario Energy Board Act, R.S.O. 1970, c. 312) was applied.

In any event, if the requirement of conflict is implicit in s. 29 of the Energy Act, we are satisfied that there is a conflict of such a nature as to nullify the by-law. In Ontario (Attorney General) v. Mississauga (City), the majority of this court said at p. 410:

> [I]f the competing pieces of legislation are intended to advance the same policy and the provision in the statute covers the same ground as the by-law in a way to give rise to the interpretation that the statutory provision is intended ". . . completely, exhaustively, or exclusively [to express] what [shall be] the law governing the particular conduct . . . to which its attention is directed . . .", then there is a case of conflict. . . . If, in covering the same ground the subordinate legislation works at cross purposes to the provincial statute, then the case for conflict is reinforced.

At pp. 413, 414 and 415 this principle was applied to the facts of that case as follows:

> I gather from the argument on behalf of the city that the certificate of approval aspect of s. 8 [of the Environmental Protection Act, 1971] is a factor which strongly favours a conclusion that there is no conflict because, if a certificate is granted, this reduces the otherwise absolute prohibition and leaves room for the operation of the then more stringent provisions of the by-law. With respect, I take a different view of the effect of the certificate of approval feature. In a case where no certificate of approval is issued the two laws practically duplicate each other and there is no room for municipal regulation. Where a certificate has been issued then, it appears to me, the absolute prohibition in the by-law clashes with the legislative scheme embodied in the statute and the proper implementation of this scheme. The two pieces of legislation, in this regard, are at cross purposes. They are repugnant to each other.
>
> . . . . .
>
> I think that it is reasonable to conclude that the statutory provision in this relatively narrow field is of such a detailed and comprehensive nature that it leaves no practical room for the operation of the by-law.
>
> . . . . .
>
> The basic issue does not turn on a conflict between a policy of a Minister of the Crown and the by-law, although such a conflict may be involved, but rather on a conflict between the policy of the Legislature as to the way matters covered by s. 8 should be dealt with and that reflected in the by-law. As I have said, these two policies are at cross purposes and, accordingly, the by-law should be declared to be inoperative.

These statements are applicable to the case before us. We agree with the conclusion of Mr. Justice Hollingworth that the provincial law and the by-law are at cross-purposes. We think that the by-law is at cross-purposes with the regulation because it negates the operating effect of the latter respecting tank size, height, setbacks, and protection.

We also agree with Hollingworth J. that the basic and predominant purpose of the by-law is one of advancing safety concerns respecting the handling, etc., of propane and not land use planning. While the legislative history of the by-law may indicate recognition on the part of the municipality that safety was a matter for the province, it is clear that the genesis of the by-law was a concern to enact safeguards to protect the inhabitants with respect to the installation of propane tanks in the City of York. We refer to the minutes of the Legislation and Planning Committee held on September 5, 1984. The terms of the by-law are consistent with the intention to give effect to safety concerns.

We do not share the view of the majority of the Divisional Court that this is properly a case of the "by-law merely enhanc[ing] the statute". First, there is the operative conflict to which we have referred. Second, the authority of the municipality relates, generally, to land use planning and not safety respecting propane handling. This may be compared to the situation in Mississauga where the municipal power authorized by-laws relating to nuisances "of any kind", thereby putting municipalities into the field covered by the statute: see pp. 408-09. Third, even if one were to assume that the by-law in this proceeding properly relates to land use planning, there then would be no reasonable basis for regarding it as enhancing a law enacted for a different purpose.

For these reasons the appeal is allowed, the order of the Divisional Court is set aside, and an order is made granting the relief sought by the applicants. There will be no order respecting the costs of the application in the Divisional Court. The costs of the appeal, including those of the motion for leave to appeal, will be payable by the respondent to the appellants. The costs of the motions respecting fresh evidence will be payable by the Attorney General to the respondent.

Appeal allowed.

SCHEDULE A

Section 3 of York (City) By-law 1-83, as amended by Zoning By-law 1116-87

2. THAT Section 3 of City of York By-law Number 1-83, as amended, be and the same is hereby further amended as follows:

a) by inserting in Subsection (28) a new paragraph (16a), as follows:

"(16a) All propane or compressed natural gas storage and dispensing equipment shall comply with the regulations contained in Subsection (35) of this Section."

b) by inserting, after the word "for", in the heading appearing after paragraph (16), in Subsection (28), the following:

"Motor Vehicle Fuelling Systems Conversion and Repair Shops,".

c) by deleting the word "gasoline" in Paragraph (18) of

Subsection (28), and inserting in its place, the word "fuel".

d) by adding, as a new Subsection (35) the following:

"(35) PROPANE AND COMPRESSED NATURAL GAS STORAGE
TANK(S) OR DISPENSING EQUIPMENT

Notwithstanding any other provisions of this By-law, no propane or compressed natural gas storage or dispensing equipment shall be erected or used on any lands unless and until the following regulations are complied with:

i) The aggregate size of any propane storage tank or tanks shall not exceed 10,000 litres;

ii) The aggregate size of any compressed natural gas storage tank or tanks shall not exceed 2,500 litres;

iii) The maximum height of any propane and compressed natural gas storage tank and dispensing equipment shall not exceed the average roof line of the tallest

building on the lot or 3.7 metres whichever is less;

iv) No propane storage tank or compressed natural gas compressor unit and tank shall be erected or used in any front yard, or in any side yard directly abutting a public highway or lane, or closer than 15 metres to a railway right-of-way, or closer than 30 metres to any of the following:

a) a building or structure on the property or on any adjacent property;

b) the street line of a public highway or lane;

c) an R-District;

d) the lot line of any property containing a residential use;

v) Screening in the form of landscaping or fencing and protection in the form of bollards or barriers shall be provided immediately adjacent to any above grade portion of any propane storage tank or natural gas

compressor unit and tank(s)

Section 13 of York (City) By-law 1-83, as amended by Zoning By-Law 1116-87

3. THAT Section 13, Subsection (2), of City of York By-law Number 1-83, as amended, be and the same is hereby further amended as follows:

Caselaw

a) by renumbering paragraph (r) as paragraph (s);

b) by adding a new paragraph (r) as follows:

"(r) Motor Vehicle Fuelling System Conversion Repair Shop;"

4. THAT Section 13, Subsection (4), of City of York By-law Number 1-83, as amended, be and the same is hereby further amended as follows:

a) by adding a new paragraph (k) as follows:

"(k) No Motor Vehicle Fuelling System Conversion and Repair Shop shall be erected or used closer than 90 metres to:

i) any use District other than an M or T District;

ii) any property in an M District lawfully used for the purpose of a residential use, including a nursing home, lodge, and home for the aged, or a mixed residential and commercial use; or

iii) any property in an M District lawfully used for the purpose of a library, school, day nursery, church, synagogue, parish hall, hospital, health clinic, private club, fraternal society, place of assembly, place of amusement, public hall, or any similar institutional or recreational use."

SUBJECT to the provisions of Subsection (31) of Section 34 of the Planning Act, 1983, this By-law shall come into force on the date of its passing.

ENACTED and PASSED this 15th day of June A.D. 1987.

SCHEDULE B

Planning Act, 1983, S.O. 1983, c. 1, s. 3

3.(1) The Minister, or the Minister together with any other minister of the Crown, may from time to time issue policy statements that have been approved by the Lieutenant Governor in Council on matters relating to municipal planning that in the opinion of the Minister are of provincial interest.

(2) Before issuing a policy statement, the Minister shall confer with such municipal, provincial, federal or other officials and bodies or persons as the Minister considers have an interest in the proposed statement.

(3) Where a policy statement is issued under subsection

(1), the Minister shall cause it to be published in The Ontario Gazette and he shall give or cause to be given such further notice thereof, in such manner as he considers appropriate, to all members of the Assembly, to all municipalities and to such other agencies, organizations or persons as he considers have an interest in the statement.

(4) Each municipality that receives notice of a policy statement under subsection (3) shall in turn give notice of the statement to each local board of the municipality that it considers has an interest in the statement.

(5) In exercising any authority that affects any planning matter, the council of every municipality, every local board, every minister of the Crown and every ministry, board, commission or agency of the government, including the Municipal Board and Ontario Hydro, shall have regard to policy statements issued under subsection (1).

(6) Except as provided in subsection (5), nothing in this

section affects nor restricts the Minister in the carrying out of the Minister's duties and responsibilities under any other section of this Act including the determining or declaring of any matter to be a matter of provincial interest and the procedure followed in so determining or declaring.

T.H. CRITELLI LTD. v. LINCOLN TRUST AND SAVINGS CO. et al.

86 D.L.R. (3d) 724
Affirmed 111 D.L.R. (3d) 179

Ontario High Court of Justice
Grange, J.
January 23, 1978

ACTION for damages for nuisance arising out of the construction of a building adjacent to the plaintiff's building. [page725]

T. H. Rachlin, Q.C., for plaintiffs.

J. Broderick, Q.C., for defendant, Lincoln Trust and Savings Company.

H. J. Daniel, Q.C., for defendant, City of St. Catharines.

GRANGE, J.:-- This is an action by the owner and the occupier of a building against the owner and occupier of a neighbouring building arising out of the construction of that latter building, and against the City of St. Catharines for issuing the necessary building permit. The construction resulted in increased snow loads to the plaintiffs' building and the claim is for the cost of reinforcement to the roof to guard against the risk of collapse and to comply with the relevant municipal by-law. Damages are agreed upon and the sole question is liability.

The facts are simple enough. The plaintiffs' building which is on the south side of King St. in the City of St. Catharines ("the City"), and is a two-storey building, was erected in two stages; the first or rear portion was erected in 1947, and had its roof rebuilt after a fire in 1955; and the second being the front or King St. section was built in 1962. Both sections were built to the edge of the lot to the west. At the time of construction that lot was occupied by a hotel, most of which was four storeys high but any part of that hotel which was adjacent to the plaintiffs' land did not project above the plaintiffs' building.

Prior to 1975 the National Building Code which was incorporated into a by-law of the City set out snow-load requirements and according to that Code the roof of the plaintiffs' building prior to the erection of the building by the defendant Lincoln Trust and Savings Company ("Lincoln Trust") needed to withstand a snow load of 30.4 lbs. per square foot. The evidence is that the Code requirement is, if anything, conservative but is almost universally accepted as the standard in construction circles. Actually the roof was built beyond the minimum standard to withstand a load of 50 lbs. per square foot.

The Lincoln Trust building was erected in 1973 to a height of nine storeys and the east wall thereof was built throughout its length flush with the lot line and west wall of the plaintiffs' building. The result of this, of course, was to create a considerable projection by the Lincoln Trust building on its east edge above the roof of the plaintiffs' building. This in turn had a very marked effect on the snow-load requirements of the plaintiffs' roof because the lee created caused and will continue to cause the accumulation of snow on the roof of the lower building adjacent to the higher. The evidence is that the snow drift reaches its maximum when the higher building exceeds the lower by eight feet and any height increase above that is of little consequence, but once that differential [page726] exists between adjacent buildings in St. Catharines the snow-load requirement is increased to 114 lbs. per square foot. To bring the plaintiffs' roof up to that requirement will cost $14,433 and the plaintiffs sue for that amount.

I should only add that at the time of construction by the plaintiffs the zoning by-law permitted construction of buildings to a height of six storeys and both the plaintiffs and Lincoln Trust were at all times entitled to build right to the edge of their lot lines. The National Building Code has now been replaced by the Ontario Building Code but the same snow-load requirements are imposed and accepted by the municipality.

When Lincoln Trust representatives first approached the City for a building permit they were met with reluctance because of fear of the very problem that gave rise to this action, but a permit

was issued after Lincoln Trust gave the City an indemnity. It is agreed between all the parties that if I should find liability on the part of Lincoln Trust I need not consider the position of the City which is apparently entitled by the agreement to its costs from Lincoln Trust on a solicitor-and-client basis.

The problem raises many interesting issues. There is no evidence of negligence in the construction on the part of Lincoln Trust or its contractors, the construction to the lot line was in accordance with law and there was no action that could have been taken (short of building away from the lot line) in the actual construction that would prevent the harm that befell the plaintiffs. Moreover the plaintiffs, in constructing the roof on their premises, knew or should have known that it was lawful and possible (although most unlikely) for their westerly neighbour to construct a building up to six storeys in height immediately adjacent to the west wall and a six-storey building would have caused as much injury as the nine-storey building actually built. In short the defendant Lincoln Trust made a lawful and non-negligent user of its property and upon that basis denies liability.

One would think this problem must often arise in this wintry clime, but I have been referred to and can find no cases directly on point. Perhaps the dearth arises from reluctance such as that originally exhibited by the defendant City to grant building permits for proposed buildings adjacent to and higher than their neighbours. There are cases -- see Meredith v. Peer (1917), 39 O.L.R. 271, 35 D.L.R. 592 -- dealing with the fall of snow and ice from a roof onto a neighbour's property and imposing an obligation to take reasonable steps to prevent it, and there are cases dealing with the escape of snow and ice and water from one's property imposing liability if one does not take steps to prevent that escape: see Taylor et al. v. Robinson et al., [1933] O.R. 535, [1933] 3 D.L.R. 73, and Berry v. Trinidad Leaseholds (Canada) Ltd., [1953] O.W.N. 623, [1953] 4 [page727] D.L.R. 504. But all the cases seem to deal with some manner of construction which could have been altered or added to to avoid the potential damage. Here the damage was inevitable once the defendant's building rose eight feet higher than the plaintiffs' and the damage was caused not by the escape of snow from the defendant's land but the entrapment of snow on the plaintiffs'.

It seems the question falls to be decided on general principles of negligence and nuisance and the user of land. These subjects were recently reviewed by the Court of Appeal in Pugliese et al. v. National Capital Com'n et al.; Beaver Underground Structures Ltd. et al. Third Parties, released August 8, 1977, 17 O.R. (2d) 129, 79 D.L.R. (3d) 592. The action was for damages for the lowering of the ground water table below the plaintiffs' lands by the construction of a sewer by or for the defendant on its neighbouring lands. The matter came before the Court of Appeal on a motion to dismiss as disclosing no reasonable cause of action, the defendants relying, inter alia, on Mayor, Aldermen & Burgesses of Borough of Bradford v. Pickles, [1895] A.C. 587, which asserted the right of a landowner to appropriate percolating water and deprive his neighbour thereof even if it be done maliciously. Howland, J.A. (as he then was), reviewed the English, American and Australian cases and found that in the latter two jurisdictions the harsh English rule was not accepted. After considering the Canadian cases he refused to apply the English rule and denied to the defendants an "unlimited licence to wreak havoc on their neighbours". He held there could be liability in negligence or nuisance. In considering the latter cause of action he stated, at p. 45 [pp. 153-4 O.R., p. 617 D.L.R.]:

> In determining whether a nuisance exists, it is not sufficient to ask whether an occupier has made a reasonable use of his own property. One must ask whether his conduct is reasonable considering the fact that he has a neighbour. As Lord Wright pointed out in Sedleigh-Denfield v. O'Callaghan et al., [1940] A.C. 880 at p. 903:
>
> > "A balance has to be maintained between the right of the occupier to do what he likes with his own, and the right of his neighbour not to be interfered with. It is impossible to give any precise or universal formula, but it may broadly be said that a useful test is perhaps what is reasonable according to the ordinary usages of mankind living in society, or more
> >
> > correctly in a particular society."

After conceding that minor nuisances arising out of a normal and reasonable user of land are not actionable, he went on to say, at pp. 46-7 [p. 154 O.R., p. 618 D.L.R.]:

> Beyond this point it is necessary to ask if the conduct of an occupier of land has been reasonable vis-à-vis his neighbour. The taking of all reasonable care is not a defence to an action for nuisance. If an operation cannot by the exercise of reasonable care and skill be prevented from causing a nuisance, then it cannot lawfully be undertaken, unless there is either a statutory authorization, or the consent of those injured: [page728]

In my view this principal is very much applicable to the case at bar. The two legal maxims cujus est solum ejus usque ad coelum et ad inferos (freely, he who owns the soil owns it from the centre of the earth to the sky) and sic utere tuo ut alienum non laedas (freely, one must use one's own land so as not to injure another's) are as put by Rigby, L.J., in Jordeson v. Sutton, Southcoates & Drypool Gas Co., [1899] 2 Ch. 217 at p. 243, "driven to their logical extreme ... irreconcilable. Some practical limitation of one by the other has to be arrived at."

There is, in my view, in cases such as this, a good deal of legal advantage in being there first. In the case at bar the plaintiffs constructed their building taking reasonable precautions and reasonably not expecting a building such as the defendant's as its immediate and adjacent neighbour. The defendant Lincoln Trust on the other hand knew before construction of the existence of the plaintiffs' building and that the planned construction would inevitably cause damage. Surely it was incumbent upon Lincoln Trust to take steps to prevent that damage.

The fact that those steps could only be taken upon the plaintiffs' land, i.e., the reinforcement of the plaintiffs' roof, does not, in my view, affect the matter. Lincoln Trust obviously could not enter upon the plaintiffs' lands without their consent but that consent was not sought. The defendant's building was an exceptionally high building for St. Catharines and before constructing it Lincoln Trust should have sought ways to avoid the damage that would otherwise inevitably ensue.

We are not here concerned with the situation before the construction of the new building. It might be, of course, that the plaintiffs would have refused entry. In such event the defendant's position might have been very strong when a claim against it was advanced after the construction. It might also be that the plaintiffs might have sought an injunction to prevent the construction. Perhaps that relief would have been refused upon the ground of the adequacy of the damage remedy. We are here concerned only with the relief available to the plaintiffs when the damage has already been done. The plaintiffs' claim is in damages and in my opinion they are entitled to recover.

There will, therefore, be judgment for the plaintiffs against the defendant Lincoln Trust for $14,433 and costs. In accordance with this finding and the agreement of counsel the action against the City will be dismissed without costs, leaving it to the City to recover its costs from Lincoln Trust in accordance with the agree- [page729] ment between them. If I have misunderstood these agreements or if any further order is required I may, of course, be spoken to.

Judgment for plaintiff against defendant Lincoln

Trust and Savings Company; action against City

of St. Catharines dismissed.

Re **Re Teperman & Sons Ltd. and Toronto** et al.

(1975), 7 O.R. (2d) 533

ONTARIO
COURT OF APPEAL
KELLY, JESSUP
and HOULDEN, JJ.A.
18TH FEBRUARY 1975

APPEAL from the judgment of the Divisional Court, 5 O.R. (2d) 507, 50 D.L.R. (3d) 675, dismissing an application for mandamus directing the issuance of demolition permits and for declaratory relief.

J.E. Eberle, Q.C., and Julia Ryan, for applicant, appellant.

D.C. Lyons, Q.C., for respondents.

The judgment of the Court was delivered orally by

JESSUP, J.A.:-- On May 7, 1974, the applicant applied to the Building Commissioner of the City of Toronto pursuant to the building by-law (No. 300-68) for permits for the demolition of some 36 dwelling-houses on Quebec and Gothic Aves. in the City of Toronto on which the owners intended to construct apartment buildings in accordance with the zoning of the lands on which the buildings are located. The application complied in all respects with the by-law and was supported with all the requisite material. The Commissioner has withheld the issuance of permits on the grounds that some few of the dwelling-houses were still occupied.

Meanwhile, on June 28, 1974, the Planning Amendment Act, 1974 (Ont.), c. 53, came into force; it added [by s. 6] s. 37a to the Planning Act, R.S.O. 1970, c. 349. That section provides that a council of a municipality may declare an area of demolition control and that thereafter there shall not be demolition of any residential property in the area without the issuance of a permit by council. The City of Toronto promptly declared the entire area of Toronto as an area of demolition control.

The Divisional Court, for reasons with which I agree, held that under the terms of the by-law, the circumstance that certain of the residential dwelling-houses were still occupied did not justify the refusal to issue demolition permits applied for. In the result, the Court held that the applicant had a right on May 7, 1974, to the demolition permits it applied for. However, with respect to that right, the Divisional Court in a careful judgment, the reasons of which were given by Mr.

Justice Henry, said [5 O.R. (2d) 507 at pp. 516-7, 50 D.L.R. (3d) 675 at pp. 684-5:

> In the case at bar, Teperman had a right to the issue of the demolition permits on May 7, 1974. That right crystallized by its making the application. But the right to demolish the house was not created by the permit or the right to it; nor was it a property right. As we have said, the permit merely removes the restraint on the general right of an owner to dispose of a building on his land. (We here assume Teperman to be in the same position as the owner.) Thus, Teperman did not then acquire a particular right in the sense of the authorities and no particular right has been taken away by the enactment of section 37a and its implementing by-law. Teperman is in the same position as any other person who may be at liberty to demolish subject to any law that has been or may be enacted affecting that activity.

In my respectful opinion, there is no precedent in law for the principle which the Divisional Court there followed. In my view, the right which Teperman acquired on May 7, 1974, was an acquired or crystallized right, within the meaning of the authorities and one which accordingly survived subsequent legislation, in the absence in that legislation of express words or necessary implication for a retrospective effect.

With respect to the retrospective effect of s. 37a of the Planning Act, Mr. Justice Henry said in his reasons [at p. 518 O.R., p. 686 D.L.R.]:

> On this approach, the question is whether the Legislature

intended to leave intact, and to allow to take effect any proceeding put in motion under the former provisions, namely, s. 7 of the building by-law. Again a distinction has been made as to the right to obtain the permit and the right to demolish the buildings.

Legislature has put its mind to the possible interaction of s. 37a and prior provisions in municipal by-laws. For example, by s-s. (6) it is provided that subject to certain matters, the council shall on application issue a demolition permit where a building permit has been issued to erect a new building on the site of the residential property sought to be demolished. In that circumstance, there is an absolute right to obtain a permit from the council. Nothing is said about what is to happen if a demolition permit has previously been issued and we conclude that the Legislature did not intend to entrench it.

Furthermore, s-s. (16) provides that where a permit to demolish residential properties is obtained under the new provision it is not necessary for the holder to obtain a permit from the Commissioner under the building by-law (which is a by-law under s. 38(1), para. 7). Here again, the interaction of the new section with the building by-law has been considered by the Legislature and the obtaining of a licence under the building by-law is made unnecessary.

In my respectful opinion, neither s-s. (6) nor s-s. (16) of s. 37a lead to the conclusion that a retrospective effect to the legislation is to be inferred. Indeed, at least with respect to s-s. (16), it is very arguable that exactly the opposite inference is to be drawn.

In my respectful submission, there is nothing in the legislation under consideration which by express words or necessary implication abrogates the right acquired by the applicant on May 7, 1974.

In the result, the appeal must be allowed with costs. I would set aside the judgment of the Divisional Court and in its place order and adjudge that the applicant receive the relief set out in the notice of motion dated August 25, 1974, and further declaring that the provisions of s. 37a of the Planning Act are not applicable to the demolitions to be carried out pursuant to the permits ordered to be issued. The applicant will also have its costs below.

Appeal allowed.

Re **Thomas C. Assaly Corp.** Ltd. in Trust and City of Ottawa

18 O.R. (2d) 198
ONTARIO

ONTARIO
HIGH COURT OF JUSTICE
DIVISIONAL COURT
LERNER, GOODMAN AND CRAIG, JJ.
16TH DECEMBER 1977.

APPLICATION for judicial review of a decision of a municipal council.

J. P. Nelligan, Q.C., for applicant.

F. C. Askwith, for respondent, City of Ottawa.

Blenus Wright, for Attorney-General for Ontario.

The judgment of the Court was delivered by

CRAIG, J.:-- This is an application for judicial review of a decision of the council of the respondent municipality. The issue in this case is whether in the circumstances hereafter mentioned the respondent can require the applicant to enter into a development control agreement pursuant to a by-law authorized by s. 35a(2) of the Planning Act, R.S.O. 1970, c. 349, as amended [1973, c. 168, s. 10]; and also whether the applicant can be required to pay to the respondent the sum of $73,700 required to be paid as a condition of the development or redevelopment pursuant to a by-law authorized by s. 35b(1) and (6) of the Planning Act.

The facts are as follows. The applicant is the owner of certain lands situate in the City of Ottawa in the Judicial District of Ottawa-Carleton known as Lots 1 to 5, South Gloucester St., Lots 1 to 5, North Nepean St. and Lot C, Bronson Ave. E., as shown on registered plan No. 2996. Prior to December, 1973, a number of single-family residences and converted single-family residences existed on the subject lands. During the month of December, 1973, the appropriate building permits were duly granted by the building inspector for the City of Ottawa to the applicant herein, for the purpose of demolition of these structures; and thereafter they were demolished and removed from the subject lands so that the said lands are now vacant. The lands in question occupied an area of 59,500 sq. ft., being an entire city block. In the month of February, 1977, the applicant applied for a building permit to construct what is said to be a single building but which may be described as an apartment complex consisting of two towers of 21 and 23 storeys respectively containing 292,343.45 sq. ft. of floor space and 464 dwelling units. The two towers will stand upon a common foundation; and will have a garage and amenity area.

The Planning Act provides as follows:

35a(1) In this section and in section 35b, "redevelopment" means the removal of buildings or structures from land and the construction or erection or other buildings or structures thereon.

(2) Where there is an official plan in effect in a municipality, the council of the municipality in a by-law passed under section 35 may, as a condition of development or redevelopment of land or buildings in the municipality or in any defined area or areas thereof, prohibit or require the provision, maintenance and use of the following facilities and matters or any of them and may regulate the maintenance and use of such facilities and matters:

1. Widenings of highways that abut on the land that is being developed or redeveloped.

2. Subject to The Public Transportation and Highway Improvement Act, facilities to provide access to and from the land such as access ramps and curbings including the number, location and size of such facilities and the direction of traffic thereon.

3. Off-street vehicular parking and loading areas and

access driveways including the surfacing of such areas and driveways.

4. Walkways and all other means of pedestrian access.

5. Removal of snow from access ramps, driveways, parking areas and walkways.

6. Grading or change in elevation or contour of the land and the disposal of storm, surface and waste water from the land and from any buildings or structures thereon.

7. Conveyance to the municipality, without cost, of easements required for the construction, maintenance or improvement of any existing or newly required watercourses, ditches, land drainage works and sanitary sewerage facilities on the land.

8. Floodlighting of the land or of any buildings or structures thereon.

9. Walls, fences, hedges, trees, shrubs or other suitable groundcover to provide adequate landscaping of the land or protection to adjoining lands.

10. Vaults, central storage and collection areas and other facilities and enclosures as may be required for the storage of garbage and other waste material.

11. Plans showing the location of all buildings and structures to be erected on the land and the location of the other facilities required by the by-law.

12. Perspective drawings and plans showing building elevations and cross sections of industrial and commercial buildings and residential buildings containing twenty-five or more dwelling units.

. . . . .

(4) A by-law that includes provisions authorized by subsection 2 may,

. . . . .

(b) require that the owner of the land enter into one or more agreements with the municipality dealing with the facilities and matters referred to in subsection 2; and

(c) prohibit the issuance of building permits until the plans referred to in paragraphs 11 and 12 of subsection 2 have been approved by the municipality and until the agreements referred to in clause b have been entered into.

. . . . .

35b(1) As a condition of development or redevelopment of land for residential purposes, the council of a municipality may, by by-law applicable to the whole municipality or to any defined area or areas thereof, require that land in an amount not exceeding 5 per cent of the land proposed for development or redevelopment be conveyed to the municipality for park purposes.

. . . . .

(6) The council of a municipality may accept money to the value of any land required to be conveyed under this section in lieu of such conveyance and the provisions of subsection 11 of section 33 apply mutatis mutandis to all moneys so accepted.

Purporting to act pursuant to the authority contained in s. 35a of the Planning Act, the respondent enacted By-law 43-77 on February 21, 1977, being a by-law to amend its general zoning by-law. By-law 43-77 provides, in part, as follows:

17a.(1) Notwithstanding any of the other provisions of this by-law, the Chief Building Inspector of the Corporation shall not issue a building permit or any combination thereof for the development or redevelopment of any lands or building or structure or any part thereof in the City of Ottawa until:

. . . . .

(B) agreements have been entered into with the owner of the land for which the permit or permits have been applied for dealing with the prohibition or the provision, maintenance and use of the following facilities and matters, and the regulation of the maintenance and use of such facilities and matters;

Then follows the same 12 enumerated facilities and matters named in s. 35a(2) of the Planning Act, quoted above.

When the applicant applied for a building permit to erect this apartment complex the respondent refused to permit its chief building inspector to issue a building permit therefor until two conditions were met. Firstly, requiring that the applicant enter into a development control agreement with the respondent in accordance with s. 17a.(1) of the said by-law, and, secondly, that the applicant pay the sum of $73,700 to the municipality in lieu of the dedication of 5% of the lands for public purposes pursuant to a by-law of the city upon the authority of s. 35b(1) and (6) of the Planning Act.

If what is contemplated by the applicant herein is a "development or redevelopment" within the meaning of s. 35a of the Planning Act, and s. 17a.(1) of By-law 43-77, then the municipality is entitled to impose both conditions. If it is not such a "development or redevelopment" then it is not entitled to impose either one of the conditions.

The word "redevelopment" is defined by s. 35a(1) but nowhere is the word "development" defined in that section or in s. 35b. Counsel for the applicant submits that this project is not a "redevelopment" within the meaning of the definition for two reasons. Firstly, considering the definition in s. 35a(1) quoted above, the demolition and removal of buildings took place some four years ago at a time when the city did not have a by-law requiring a development control agreement. It may be questionable whether a by-law enacted after the removal of buildings but before the erection of other buildings can or should be enforced under ss. 35a and 35b even though it is now a redevelopment of the land. Without deciding that point I am prepared to hold for the purpose of this judgment that it is not a "redevelopment". His second reason for stating that this is not a "redevelopment" is that it is beyond the scope or power of the council of a municipality to require an applicant for a building permit who wishes to erect a single building to enter into a development control agreement pursuant to s. 17a. (1) of the by-law because of the wording in s. 35a(1) and (2) of the Act referring to buildings or structures in the plural. This submission is also raised by counsel for the applicant in connection with the issue as to whether this project is a "development". Section 17a.(1) of the by-law does not follow the exact wording of s. 35a(2) but refers to "lands or building or structure". The Interpretation Act, R.S.O. 1970, c. 225, s. 27(j) provides as follows:

27. In every Act, unless the contrary intention appears,

. . . . .

(j) words importing the singular number or the masculine gender only include more persons, parties or things of the same kind than one, and females as well as males and the converse;

Having in mind that the object and intent of ss. 35a and 35b is to place conditions on the development or redevelopment of land or buildings, it is my view that the emphasis is not whether such development or redevelopment constitutes one or more buildings but the emphasis is upon the magnitude of the project which may require the imposition of conditions in order to establish orderly development or redevelopment. It is my view that in the interpretation of the meaning of the words "land", "buildings" or "structures", where those words appear in ss. 35a and 35b the plural includes the singular and the converse.

Since I have adopted the submission of counsel for the applicant (for the purpose of this decision) that this project is not a "redevelopment", then obviously it must be taken to be an application with respect to the use of vacant land; and the question is whether it is a development of vacant land within the meaning of the Act and the by-law. Section 35a(2) preserves the distinction between the development of "land or buildings".

If the erection of a building or buildings is not development of vacant land, then what is it? That is normally the way in which land is developed, but perhaps not exclusively. A parking lot would be an example to the contrary. I have alluded to the absence of any definition of the word "development" in ss. 35a and 35b; and counsel for the applicant submits that the Act should be construed strictly as being restrictive of common law rights of user of land. However, on the facts before us this proposed apartment complex is one of considerable magnitude, and a project which would obviously concern the respondent municipality in connection with the "provision, maintenance and use of the ... facilities and matters" enumerated in the 12 sub-paragraphs of s. 35a(2) of the Planning Act; being matters dealing with the orderly growth and development of the community. It is my view that the legislation is remedial in nature and should be given such liberal interpretation as may be necessary to achieve the purpose and object of the legislation. The Interpretation Act provides as follows:

> 10. Every Act shall be deemed to be remedial, whether its immediate purport is to direct the doing of anything that the
>
> Legislature deems to be for the public good or to prevent or punish the doing of any thing that it deems to be contrary to the public good, and shall accordingly receive such fair, large and liberal construction and interpretation as will best ensure the attainment of the object of the Act according to its true intent, meaning and spirit.

It is my opinion that the case Re Bruce and City of Toronto et al., [1971] 3 O.R. 62, 19 D.L.R. (3d) 386 (C.A.), dealing with the general zoning by-law of the City of Toronto, is applicable and particularly the language of Kelly, J.A., at p. 67 O.R., p. 391 D.L.R., as follows:

> The underlying purpose of the implementing by-law is, accordingly, to establish and maintain for each of the areas or zones into which the municipality is divided for the purposes of the plan, standards with respect to the use of land and the use and erection of buildings which will enhance and preserve the quality of life in the municipality and the amenities considered conducive to the health, safety, convenience and welfare of the inhabitants. On this account, I consider the by-law to be remedial and one to be accorded a liberal interpretation to the end that it may afford to the people of the community protection against departures from or encroachment upon the standards adopted by the municipality as expressive of these purposes.

Such an approach is, I believe, compatible with the proven necessity for the employment of external controls for the preservation of a fair standard of housing and land use and the expressed will of the people for a universal application of orderly planning to that end. I am not unmindful that it has not been uncommon for by-laws dealing with the use of lands and the use and erection of buildings to be referred to as restrictive by-laws and to be accorded a strict interpretation due to the fact that they have been approached as infringements on the freedom of choice of the owner and the use to which he may put his land.

Notwithstanding this, it is my belief that Ontario Courts now accept that the obligation imposed on the municipal council to plan for the growth and development of the community demands recognition of the necessity for means to compel the observance of the rights of the community to determine and enforce the direction in which the community should be shaped, and that in this regard the rights of the community are paramount to the rights of the owner.

Counsel for the applicant relied upon Re Slau Ltd. and City of Ottawa et al. (1977), 14 O.R. 514, 74 D.L.R. (3d) 181, a decision of the Divisional Court; as authority for the proposition that single or individual buildings are not "developments" within the meaning of ss. 35a and 35b of the Planning Act. In Slau the owner sought an order of mandamus directing the issue of a building permit that had been refused because the owner had declined to enter into a development control agreement. The application was with respect to construction of new foundations and exterior wall to square out the corner of an existing building consisting of an area some 7.44 ft. in width by 24 ft. in length. Steele, J., stated at p. 519 O.R., pp. 185-6 D.L.R.:

Redevelopment is defined for the purpose of that section and has a very broad general meaning with respect to major redevelopment projects within a municipality. It does not deal with individual buildings or parts thereof.

I am of the opinion that the term "development" has a meaning analogous to "redevelopment" within s. 35a of the Planning Act and that neither relate to minor construction such as a small portion of a building or structure. It follows that the city's by-law has no application to this building.

I agree fully with the result of that decision. In my view, the ratio of the case is that the words "redevelopment" and "development" have a broad general meaning with respect to major development "and that neither relate to minor construction such as a small portion of a building or structure". It is distinguishable from the instant case on that ground and also because in this case it is a major project dealing with the development of vacant land.

There will, therefore, be an order dismissing the application, with costs.

Application dismissed.

Re **Thorman et al. and City of Cambridge**

18 O.R. (2d) 142
ONTARIO

ONTARIO
HIGH COURT OF JUSTICE
CRAIG, J.
8TH NOVEMBER 1977.

APPLICATION for an order directing the issuance of a building permit.

G. Y. Martiniuk, for applicants.

John V. Cosman, for respondent.

CRAIG, J.:-- This is an application for an order in the nature of mandamus directed to the Corporation of the City of Cambridge and to its building inspector to issue a building permit to the applicants to allow for the construction of a washroom in a part of a building owned by the plaintiffs; which part is to be used either as a variety store or as a self-contained apartment unit.

There was also an application to me pursuant to the Judicial Review Procedure Act, 1971 (Ont.), c. 48, s. 6(2). It was submitted that part of the building in question has been vacant for a period in excess of a year and that there is likelihood of damage if vacancy continues to exist; and that the application was one of urgency within the meaning of the aforesaid s. 6(2). While counsel for the respondent did not admit that the application came within s. 6(2), he stated expressly that he did not oppose the submission that the matter was one of some urgency. On that basis I did grant leave to make the application for judicial review to me as a Judge of the High Court, rather than to the Divisional Court.

The applicants are the executors of the estate of Karl Thorman, deceased, who was at the time of his death in March, 1977, the owner of lands and building known municipally as 1366 Thorman Place, in the City of Cambridge, in the Regional Municipality of Waterloo. The building situate thereon consists of a 100-year-old two-storey part and a one-storey addition constructed in the year 1945 approximately. It is all one building; and presently zoned "detached single family residential" pursuant to By-law 2750 for the City of Cambridge. This by-law was passed in the year 1971 and subsequently approved by the Ontario Municipal Board. It is admitted that the original two-storey part operates as a legal non-conforming use consisting of two separate self-contained apartment units constructed and used prior to the passing of By-law 2750. The one-storey addition was used and operated as a "butcher shop" from and after 1945 until the month of January, 1976. It is admitted too that the operation of this butcher shop was a legal non-conforming use -- at least until the month of January, 1976. The butcher shop was operated by lessees (husband and wife) subsequent to 1969. Upon the death of the husband lessee in January, 1976, the surviving lessee posted a notice on the premises and also in the local newspaper as follows:

> Closing -- Thorman Meat Market is closing due to the death of the proprietor Ivan Thorman. The family wishes to thank all their former customers throughout the years.

The surviving lessee attempted to sell the butcher shop as a "going concern" by approaching three individuals but the business was not listed for sale with any real estate broker or advertised in any newspaper. The butcher shop remained vacant from January, 1976, until the present time and has not been used for any purpose in the meantime. On February 26, 1976, the surviving lessee advised the City of Cambridge Tax Department in writing that the butcher shop was closing and that the business was discontinued because of the death of her husband. She further requested that the city not levy any business tax after January 31, 1976. The city complied with this request. On November 26, 1976, the owner of the building (which included the butcher shop) applied in writing to the city to change the commercial rate affecting the property to a residential rate; and the rate was so changed by the city effective January 31, 1976. This application also indicated that "Refrigeration and Meat Equipment Removed".

As a result of discussions with the City of Cambridge planning staff, on May 9, 1977, the applicants submitted building permit applications to the City of Cambridge Building Department requesting building permits to install a washroom in the butcher shop addition portion of the premises to be used alternatively in connection with a variety store or a separate new self-contained apartment unit. On June 3, 1977, the building department of the City of Cambridge refused to issue either building permit on advice of the planning department that the proposed use would contravene the zoning By-law 2750.

The questions for decision on this motion are, firstly, whether the legal non-conforming use of part of the building as a butcher shop has been lost by reason of discontinuance; and if not, whether the butcher shop status permits that portion of the premises to be used for what is claimed to be a similar use (i.e., a variety store). If the non-conforming use of part of the building as a butcher shop has been lost by reason of discontinuance, then are the applicants entitled to use that part of the building formerly used as a butcher shop as a self-contained apartment unit?

The Planning Act, R.S.O. 1970, c. 349, s. 35(7)(a), provides as follows:

> 35(7) No by-law passed under this section applies,
>
> (a) to prevent the use of any land, building or structure for any purpose prohibited by the by-law if such land, building or structure was lawfully used for such purpose on the day of the passing of the by-law, so long as it continues to be used for that purpose ...

Counsel for the respondent concedes that the onus is upon the municipality to prove discontinuance of the non-conforming use. On the facts of this case there has not been a mere temporary interruption of the use. It has been for a period in excess of 20 months; and the application to the municipality for a change from a commercial to a residential assessment indicates an intentional discontinuance of the use. What constitutes a discontinuance is a question of fact. In the case of Gayford v. Kolodziej, [1959] O.W.N. 341, 19 D.L.R. (2d) 777, the Court of Appeal held that the discontinuance of a tourist home catering to the public during the summer season and its use as a private summer residence was tantamount to a discontinuance for the whole year; and to remove it from the exemption. It is, therefore, my view that the use exemption with respect to the butcher shop has been lost by reason of discontinuance.

Having found that the "butcher shop" non-conforming use has been lost by reason of discontinuance of the use, it is not necessary to decide the interesting question as to whether this particular exemption would extend to a variety store; or whether a butcher shop is essentially the same as a variety store use.

The remaining issue is whether the applicants are entitled to a building permit for a use of that part of the building formerly used as a butcher shop, as a self-contained apartment unit. The building permit in this case is for a washroom which does not involve the erection of a building or the enlargement or extension of an existing building. This issue also involves a consideration of s. 35(7)(a) of the Planning Act as quoted above. The zoning by-law in question was enacted pursuant to the Planning Act, s. 35(1), paras. 1 and 2, as follows:

> 35(1) By-laws may be passed by the councils of municipalities:
>
> 1. For prohibiting the use of land, for or except for such purposes as may be set out in the by-law within the municipality or within any defined area or areas or abutting on any defined highway or part of a highway.
>
> 2. For prohibiting the erection or use of buildings or structures for or except for such purposes as may be set out in the by-law within the municipality or within any defined area or areas or upon land abutting on any defined highway or part of a highway.

In Central Jewish Institute v. City of Toronto, [1948] S.C.R. 101, [1948] 2 D.L.R. 1, the Supreme Court of Canada dealt with

a city by-law prohibiting the use in a certain area of the city of any land for any purpose except a one-family dwelling-house (with some extensions which are not relevant for the purpose of this case). The question was whether such by-law applied to the property owned by Central Jewish Institute when the by-law was passed; and in which it purported to carry on a school. The finding of fact in that case was that the building owned by the applicant was used to a very limited extent for school purposes on the date of the passing of the by-law; and that the principal use of the building was on that date that of a rooming- or guest-house. The use of a building as a school and as a rooming- or guest-house were both uses prohibited by the zoning by-law. On the date of the passing of the by-law it was the intention of the Central Jewish Institute to expand the school operations to the entire building. It was held that if on the date of the passing of the by-law a part of the building is used for a purpose prohibited by the by-law, the building as a whole is exempt.

With reference to the exemption provided for in the legislation (which did not differ in substance from what is now s. 35(7) of the Planning Act), Rand, J., stated at p. 109

S.C.R., p. 8 D.L.R.:

> It will be seen that the exemption is not to the existing use but to the building; and there is no implication that it is the whole of the building that must be so used or that the use must be the sole use. The language would be satisfied by a partial use as if, for instance, an owner was carrying on a grocery store on the ground floor and using the second storey for his home: could it seriously be questioned that the use of the lower floor in such a case would be protected by the exemption? If that same business were extended to the upper storey, could it be said that the exemption did not continue or was lost? The building would still be used on the ground floor for the prohibited purpose; the building as a whole would be exempt; and I think it would necessarily follow that no such extension could bring about a forfeiture of the exemption. In any case the question is whether a real use, in good faith, is being made of the building, a use not merely incidental to some other use, but possessing an individuality of its own.

[Emphasis added.]

Counsel for the respondent sought to distinguish the Central Jewish Institute decision upon two grounds, firstly, that at the time of the passing of the by-law there was an intention to use all of the building for school purposes; and, secondly, that the entire building would be used as one school (rather than as in the instant case, an additional separate self-contained apartment to be used separately from the other two apartment units). It is true to say that the intention to use the "butcher shop" area as a residential unit was not considered by the owners at the time of the enactment of the zoning by-law; and that is a distinction from the Central Jewish Institute case. However, it is my view that the facts of the instant case bring it within the reasoning stated by Rand, J., in the Central Jewish Institute decision and also the decision of the Divisional Court in the case of R. v. Barry Humphrey Enterprises Ltd. et al. (1977), 15 O.R. (2d) 548, 76 D.L.R. (3d) 550. I refer also to the language of Middleton, J., the trial Judge in a similar type of case involving the interpretation of legislation providing for restricted area by-laws, Re Hartley and City of Toronto (1924), 55 O.L.R. 275 at p. 278 [affirmed 56 O.L.R. 433], as follows:

> The provision of the Municipal Act [now the Planning Act] may work very harshly. It should, I think, be strictly construed and should not be held to apply to any case that does not fall clearly within its provisions.

This decision was approved by the Supreme Court of Canada in the Central Jewish Institute case and was also applied by McRuer, C.J.H.C., in R. ex rel. Courneyea v. Girvin, [1956] O.W.N. 73 at p. 76. See also R. v. Heit, [1963] 2 O.R. 471 at p. 474, 40 D.L.R. (2d) 133 at p. 136, [1963] 3 C.C.C. 1 (C.A.).

Again referring to s. 35(7)(a) of the Planning Act, the exemption therein contained does not refer to part or parts of a building. There is only one building which at the material time was legally used for more than one self-contained residential apartment unit. It is apparent that this was the

principal or substantial use of the building and the butcher shop area was a minor or collateral use. On the basis of Central Jewish Institute the entire building enjoys the exemption from the provisions of the zoning by-law. Stated another way, the exemption is for a use that can fairly be described as one for self-contained residential apartment units or as a multiple dwelling. It is my view that since the building is not being extended beyond its existing limits, one more such apartment is not outside of the exemption. Counsel for the respondent conceded that the principle stated in the Central Jewish Institute case would permit the enlargement of the two existing apartments, or one of them, into the area formerly used as a butcher shop, so that such area could be used for residential purposes; but he opposed the creation of a separate residential unit. This distinction drawn by counsel for the respondent is one that I am not prepared to adopt. My decision is not only supported by authority, but it appears to be a sensible result. The proposed use of the "butcher shop" area as a separate residential apartment unit is one that is considered to be a higher and more desirable use than that of a butcher shop in an area zoned for "detached single family residential" use. The material and photographs before me in the application indicate that the entire building is solidly constructed with a presentable appearance. It is not made to appear that any tenant (present or future) in either one of the two existing apartment units would want to expand into the "butcher shop" area; or assume any additional rental or other costs involved in such an expansion.

Counsel for the respondent submitted that the applicants should have applied to the Committee of Adjustment (with a further right of appeal to the Ontario Municipal Board) for a "minor variance" pursuant to s. 42(1) and (2) of the Planning Act. In answer thereto counsel for the applicants submits, firstly, that great delay and uncertainty are involved in such an application; but more importantly that he has a legal right to the relief claimed.

There will, therefore, be an order requiring the issuance of a building permit as requested herein; and a declaration that the one-storey addition referred to herein shall be used only as a self-contained residential apartment unit. The applicants are entitled to their costs, to be taxed.

Order accordingly.

Re Corporation of the **City of Thunder Bay and Estate of Mary Kasstan** et al.

43 O.R. (3d) 703
[1999] O.J. No. 667
Docket Nos. 97-1161, 97-1163 and 97-1164

Ontario Court (General Division),
Stach J.
March 1, 1999

APPLICATION for confirmation of an emergency order under s. 31(24) of the Planning Act, R.S.O. 1990, c. P.13.

David G. Nattress, for applicant.
Francis J. Thatcher, for respondent, Micalda Kasstan.
Mary D. Bird, for respondent, Clara Kasstan.
Randall V. Johns, for Public Guardian and Trustee (as guardian of the property of Clara Kasstan).

STACH J.: -- In one of its provisions, the Planning Act, R.S.O. 1990, c. P.13, s. 31(24) and (25) ("the Act"), permits municipalities to make repair orders and to carry out immediate remedial work on property that poses an immediate danger to the health or safety of any person. The applicant here, the Corporation of the City of Thunder Bay ("the city") seeks an order from this court confirming an emergency order previously issued by the city under s. 31(24) of the Act for immediate remedial and other work to residential premises 1101 Frederica Street West ("the residence") in the City of Thunder Bay. The city seeks to recover from the respondents $14,995.48, the amount expended under the emergency order for the "clean-up". This amount includes work charges for the property on which the residence was situate, and on four adjacent lots.

The respondents in this application are related to one another. They have an interest in the residential premises, or one or more of the adjacent lots. At the time in question, however, only the respondents Clara Kasstan and Micalda Kasstan were actual occupants of the residence. They are the persons most directly affected by the emergency order, and it is they who challenge the city's application for confirmation. In doing so, Micalda and Clara Kasstan raise serious Charter issues regarding the manner in which the city exercised its powers under the Act.

In order to highlight the issues raised in this application, some understanding of the relevant factual background is required.

Factual Background

From the material filed one gleans that Clara Kasstan, a former music teacher, is a proud and fiercely independent woman in her mid-70s. She is part of a large family but, with one important exception, is distanced from them. The exception is her sister Micalda. After living in southern Ontario, Clara Kasstan returned to Thunder Bay some years ago and lived in the family residence at 1101 Frederica Street with another family member. That family member passed away in 1991 Thereafter, Clara Kasstan remained alone in the residence until her sister Micalda moved in with her in 1996. Clara Kasstan has an income of approximately $980 per month.

Micalda Kasstan receives income monthly from her Canada Pension and Old Age Pension. There is no significant difference in age between Micalda and her sister Clara and it is probably fair to say that Micalda Kasstan is as proud and fiercely independent as Clara. Despite the death of their mother many years ago, paper title to the family residence remains in the name of their late mother's estate. Because their late mother died without a will, several next of kin also have an interest in the residence.

The residence at 1101 Frederica Street first came to the attention of the city officials in 1996 as a result of a complaint respecting the condition of its yard. Ultimately (under a different process from that at issue here), the city engaged contractors to clean up the yard. Officials of the city attended at the premises on September 2 and 3, 1997 to monitor the yard clean-up. Clara and Micalda Kasstan objected strongly to the presence of city personnel and city agents on their premises. They say that such persons were unlawfully on

their premises, a position vigorously contested by the city. For purposes of this application, I am prepared to assume (without deciding) that city officials and agents were lawfully present in the yard (but only the yard) on September 2 and 3, 1997.

On September 2 and 3, Donna Mahoney, a licensing and enforcement officer with the city, allegedly made observations about the condition of the yard and the circumstances of Clara and Micalda Kasstan. In her affidavit sworn January 13, 1998, Mahoney deposes that on September 3 she acquired information that:

(a) the furnace of the residence was not in use;

(b) the house was heated in winter by electric heaters;

(c) in her perception Clara and Micalda Kasstan were unkempt, dirty and emitted a horrible odour;

(d) the smell emanating from the house was horrible;

(e) (from Clara Kasstan) there was no running water in the residence;

(f) there was evidence in the yard of rotten apples and worm and bug-infested potatoes and onions which Clara Kasstan allegedly claimed to be her food.

During the clean up of September 2 and 3, Clara Kasstan and Micalda Kasstan had vehemently objected to the presence of city officials on their property as unlawful and the police were called to the site as a consequence. Also on September 3, 1997, Donna Mahoney contacted representatives of the city's fire and the health departments and requested that they check the residence to identify potential safety and health hazards. When representatives of the fire and health departments arrived, Clara and Micalda Kasstan refused them entry.

The conditions catalogued by Donna Mahoney on September 2 and 3 allegedly raised concerns in her over the health and safety of the occupants of the residence, Clara and Micalda Kasstan.

Some time later, also on September 3, 1997, the police, presumably with the knowledge of Donna Mahoney (and, one suspects, at her instance), made application to a justice of the peace under s. 16 of the Mental Health Act, R.S.O. 1990, c. M.7 for a warrant to apprehend Clara and Micalda Kasstan and to take them to a psychiatric facility in Thunder Bay for psychiatric assessment.

There is no material before this court regarding the information the police actually presented to a justice of the peace on September 3, but it is common ground that a warrant of apprehension was issued under s. 16 of the Mental Health Act against both Clara Kasstan and Micalda Kasstan on September 3 and executed on September 4. In my opinion, it is significant that the city made no concurrent application to the justice of the peace on September 3, 1997 for a search warrant to permit inspection of the residence on September 4, 1997.

On September 4, 1997 Donna Mahoney and Murray Haywood, also a licensing and enforcement officer, attended at the residence with the police officers when the police executed the warrant of committal against Clara and Micalda Kasstan. Neither Mahoney nor Haywood had a search warrant. According to paras. 16 and 17 of the affidavit of Donna Mahoney:

> The Police removed the two ladies from the house at approximately 2:00 p.m. on the afternoon of September 4, 1997. It was at that time that I could see through the open front door the horrible conditions inside the house. I attach as Exhibit "D" hereto a series of pictures taken by Murray Haywood, also a Licensing and Enforcement Officer with the City of Thunder Bay. The picture identified as number 1 is a view of the rear door of the house, number 2 is a view through the front door into the living room, number 3 is a view of the rear porch from the door and number 4 is a view through the clothesline door.
>
> In consultation with Murray Haywood, we determined that a situation dangerous to safety and health existed and an emergency order was issued pursuant to s. 31(24) of the Planning Act . . .

What emerges clearly from this deposition is that the decision by city officials to issue an emergency order was not made until after the on-site "inspection" in the afternoon of September 4, 1997. While present at the scene on September 4, Murray Haywood took a series of polaroid photographs which were filed as exhibits on this application. I infer from the affidavit of Donna Mahoney and certain of the photographs taken by Murray Haywood that both Mahoney and Haywood were within the property lines and very near the front and rear doors of the Frederica Street residence during the afternoon of September 4.

Indeed, the photographs in question focus on the interior of the residence seen through its opened doors. Whether Donna Mahoney and Murray Haywood had a right to be present there and to conduct themselves as they did, without a search warrant, is very much in issue: see, for example, R. v. Evans, [1996] 1 S.C.R. 8, 104 C.C.C. (3d) 23.

When the committal order was executed on September 4, 1997, Clara and Micalda Kasstan were apprehended by police and removed from the residence against their will. According to Clara, she was handcuffed and dragged out of the house. Both were taken to the Lakehead Psychiatric Hospital. They remained hospitalized as involuntary patients for 14 days. Micalda Kasstan was ultimately found to be competent to care for herself and to manage her property. She was discharged.

Clara Kasstan may suffer from a mental disorder. She was found to be incompetent to manage her personal affairs and, in September 1997, the Public Guardian and Trustee assumed guardianship over her property, a situation which continues to the date of this hearing. Ultimately, Clara discharged herself from hospital and took up residence in rented accommodation with her sister, Micalda. The remedial work performed to their residence at 1101 Frederica Street was carried out by or at the instance of the city while Micalda and Clara were involuntary patients at the Lakehead Psychiatric Hospital.

The Planning Act

The sections of the Planning Act which come into play in this application are contained in Part IV of the Act which deals with COMMUNITY IMPROVEMENT. Principally we are concerned with a number of subsections under s. 31 of the Act. The subsections are reproduced, in part, below:

31(4) Subject to subsection (5), when a by-law under this section is in effect, an officer and any person acting under his or her instructions may, at all reasonable times and upon producing proper identification, enter and inspect any property.

(5) Except under the authority of a search warrant issued under section 158 of the Provincial Offences Act, an officer or any person acting under his or her instructions shall not enter any room or place actually used as a dwelling without requesting and obtaining the consent of the occupier, first

having informed the occupier that the right of entry may be refused and entry made only under the authority of a search warrant.

(6) If, after inspection, the officer is satisfied that in some respect the property does not conform with the standards prescribed in the by-law, he or she shall serve or cause to be served by personal service upon, or send by prepaid registered mail to, the owner of the property and all persons shown by the records of the land registry office and the sheriff's office to have any interest therein a notice containing particulars of the nonconformity and may, at the same time, provide all occupants with a copy of such notice.

(7) After affording any person served with a notice provided for by subsection (6) an opportunity to appear before the officer and to make representations in connection therewith, the officer may make and serve or cause to be served upon or send by prepaid registered mail to such person an order . . .

. . . . .

(16) When the owner or occupant upon whom an order has been served in accordance with this section is not satisfied with the terms or conditions of the order, the owner or occupant

may appeal to the committee by sending notice of appeal by registered mail to the secretary of the committee within fourteen days after service of the order, and, in the event that no appeal is taken, the order shall be deemed to have been confirmed.

(18) The municipality in which the property is situate or any owner or occupant or person affected by a decision under subsection (17) may appeal to a judge of the Ontario Court (General Division) by so notifying the clerk of the corporation in writing and by applying for an appointment within fourteen days after the sending of a copy of the decision . . .

. . . . .

(24) Despite any other provisions of this section, if upon inspection of a property the officer is satisfied there is nonconformity with the standards prescribed in the by-law to such extent as to pose an immediate danger to the health or safety of any person the officer may make an order containing particulars of the nonconformity and requiring remedial repairs or other work to be carried out forthwith to terminate the danger.

(25) After making an order under subsection (24), the officer may, either before or after the order is served, take or cause to be taken any measures he or she considers necessary to terminate the danger, and for this purpose the municipality has the right, through its employees and agents, to enter in and upon the property from time to time.

(26) The officer, the municipality or anyone acting on behalf of the municipality is not liable to compensate the owner, occupant or any other person by reason of anything done by or on behalf of the municipality in the reasonable exercise of its powers under subsection (25).

(27) Where the order was not served before measures were taken by the officer to terminate the danger, as mentioned in subsection (25), the officer shall forthwith after the measures have been taken, serve or send copies of the order, in accordance with subsections (7), (8) and (9), on or to the owner of the property and all persons mentioned in subsection (6) and each copy of the order shall have attached thereto a statement by the officer describing the measures taken by the municipality and providing details of the amount expended in taking the measures.

(28) Forthwith after the requirements of subsection (27) or (28) have been complied with the officer shall apply to a judge of the Ontario Court (General Division) for an order confirming the order made under subsection (24), and . . .

. . . . .

(c) the judge in disposing of the application may confirm the order or may modify or quash it and shall make a determination as to whether the amount expended by the municipality in taking the measures to terminate the danger may be recovered by the municipality in whole, in part or not at all.

(Empahsis added)

Discussion

Counsel for the respondents Micalda and Clara Kasstan take the position that, although the committal warrant did authorize the police officers to attend at the residence for purposes of executing the committal order under the Mental Health Act, the by-law enforcement officers, Mahoney and Haywood, could not lawfully enter upon the premises at the same time for purposes of their inspection under s-s. (24) except with a search warrant. They argue, in short, that the activities of Mahoney and Haywood on September 4, 1997 constituted a warrantless search of the premises. This argument assumes some significance in view of the inspection requirement of s-s. (24) and the factual background previously recited.

If by-law enforcement officer Donna Mahoney had been persuaded of "an immediate danger to health or safety" on September 2 or September 3, 1997, one infers that she would have issued an emergency order under s. 31(24) at that time,

and similarly, that she would not have considered it necessary to solicit further opinion from the fire and health departments of the city. Indeed, her own affidavit makes it clear that the decision to issue the s. 31(24) order was a direct consequence of the late afternoon inspection of September 4.

Counsel for the respondents argued that an application for a search warrant under s. 31(5) of the Act should have been made to the justice of the peace on September 3, 1997 at the same time the police made their application for a committal order. I find merit in that position

From the reaction she and other city officials received on September 3, Donna Mahoney must certainly have known that her further presence and that of other by-law enforcement officers was unwelcome anywhere on the subject property and that a search warrant was necessary to carry out the inspection of the residence contemplated by s. 31(24). Indeed, Mahoney knew that Micalda and Clara Kasstan had categorically refused entry to officials of the city's Fire Department and Department of Health on September 3.

The Law

The material portion of s. 31(24) reads as follows:

> 31(24) Despite any other provisions of this section, if upon inspection of a property the officer is satisfied that there is nonconformity with the standards prescribed in the by-law to such extent as to pose an immediate danger to the health or safety of any person the officer may make an [emergency] order . . . .

(Emphasis added)

In this segment of the argument, much attention was focused on the meaning to be accorded to "inspection". It is not defined in the Act. Accordingly, I attribute to the term inspection what I perceive to be its plain and ordinary meaning in this context, namely, "an official examination". [See Note 1 at end of document] In my opinion, this kind of official examination cannot be effected in circumstances like those present here without actual entry onto the premises.

Inspections are specifically referred to in s-s. (4) of the Act. The statutory, procedure governing entry into a place actually used as a dwelling is specified in s-s. (5) and clearly mandates a request for and the consent of the occupier, "having informed the occupier that the right of entry may be refused and entry made only under the authority of a search warrant." Failing such consent, entry can be effected only under the authority of a search warrant.

The meaning to be accorded "inspection" in s. 31(24) of the Act and its concomitant requirements must be informed by s-ss. (4), and (5) of the Act. Subsection (24) does not, in precise terms or by necessary implication, diminish the requirements for entry from those specifically outlined in s-ss.(4) and (5) and, in my opinion, if it attempted to do so, it could not pass constitutional muster under the Canadian Charter of Rights and Freedoms. [See Note 2 at end of document] Neither, in my opinion, is there any basis for the argument that the by-law enforcement officers possessed common-law authority to trespass upon the private property of the respondents to conduct the inspection.

The opening words of s-s. 24, viz, "despite any other provisions of this section", are, indeed, words of qualification but, in my opinion, are intended to contradistinguish the more cumbersome and time-consuming procedures of s-ss. (6) through (18) of s. 31 which are clearly inconsistent with and unworkable in the more emergent situations contemplated by s-s. (24): see para. 15 above [p. 709 ante]. The opening words do not, however, eliminate the requirement clearly spelled out in s-s. (24) for an inspection to take place; nor do they, for purposes of such inspection, eliminate the constitutional safeguards that govern entry comprised in s-s. (5).

I do not suggest that there may never be circumstances which so patently constitute immediate and serious danger to human health or safety that constitutional safeguards may have to be sacrificed. I do suggest that, in reference to the Planning Act, such circumstances must certainly be rare.

In s-ss. 31 (24) and (25), the legislature has delegated to municipal authorities extraordinary power to interfere with "property" [See Note 3 at end of document] where verified nonconformity poses an immediate danger to the health or safety of any person. The exercise of such power is not, however, without some restraint. As Sopinka J. observed in R. v. Kokesch, [1990] 3 S.C.R. 3 at p. 17, 61 C.C.C. (3d) 207 at p. 218:

> This Court consistently has held that the common law rights of the property holder to be free of [state] intrusion can be restricted only by powers granted in clear statutory language.

And at p. 29-30 S.C.R., p. 228 C.C.C.:

> Even before the enactment of the Charter, individuals were entitled to expect that their environs would be free of prowling government officials unless and until the conditions for the exercise of legal authority are met: see Eccles v. Bourque [1975] 2 S.C.R. 739; and Colet v. the Queen, [1981] 1 S.C.R. 2. The elevation of that protection to the constitutional level signifies its deep roots in our legal culture. La forest J. put it in this way in Dyment, supra, in words that commend themselves to me (pp. 427-28):
>
> > Grounded in man's physical and moral autonomy, privacy is essential for the well-being of the individual. For this reason alone, it is worthy of constitutional protection, but it also has profound significance for the public order. The restraints imposed on government to pry into the lives of the citizen go to the essence of a democratic state.

The yard clean-up performed by the city and its agents on September 2 and 3 was by its nature less intrusive than the subsequent search of the dwelling. Yet, on September 2 and 3 the city appears to have followed the statutory procedure precisely, with due observance of its safeguards to the citizen. This raises the question why city officials, on September 4, 1997 opted for a shortcut in pursuing a more serious intrusion into the privacy of Clara and Micalda Kasstan. Given the factual background I have already outlined, Mahoney and Haywood knew or ought to have known that they were trespassing on the premises when they performed their inspection of the residence on September 4. These by-law enforcement officers were effectively piggy-backing their inspection of the residence onto the quite separate, and distinct committal warrant being executed by police under the Mental Health Act.

I have little doubt that the conduct of Donna Mahoney was carried out with the best of intentions and executed in good faith. I observe also that the results of a further inspection of the residence reasonably called for intervention by way of remedial work. It is nevertheless clear that an "ex post facto justification of searches by their results is precisely what the Hunter standards were designed to prevent" (R. v. Kokesch, per Sopinka J., at p. 29 S.C.R., p. 227 C.C.C.). Also as noted by Sopinka J. (at p. 33 S.C.R., p. 231 C.C.C.): "Any doubt they may have had about their ability to trespass in the absence of specific statutory authority to do so was manifestly unreasonable, and cannot, as a matter of law, be relied upon as good faith for the purposes of s. 24(2) [of the Charter]".

Also as noted by the authorities, the absence of prior authorization raises a presumption of unreasonableness: see Hunter v Southam Inc., [1984] 2 S.C.R. 145 at pp. 162-63, 14 C.C.C. (3d) 97 at pp. 109-10, per Dickson J. (as he then was). In the hearing before me, the city presented no evidence to rebut the presumption. It seems apparent, moreover, that no protocol existed in the city's planning department regarding the procedure employees should follow in exercising the extraordinary powers delegated to its by-law enforcement officers under s. 31(24) of the Planning Act. The result in my opinion is an infringement of the Charter rights of Clara and Micalda Kasstan to be secure against unreasonable search.

Section 24(1) of the Charter permits the court to grant such remedy as it considers appropriate and just in the circumstances. Where municipalities are granted extraordinary powers to interfere with the property of a resident, the municipality must, in exercising such power, be scrupulously

careful not to overstep and, at the very least, must ensure

that the statutory conditions for the exercise of that power are lawfully satisfied. Although I find that the remedial work ultimately performed by the city was reasonably necessary, was reasonable in scope and was performed at a reasonable cost, nevertheless, I hold that the just and appropriate remedy here is to withhold confirmation of the city's emergency order and to direct that the amount expended in clean-up by the city may not be recovered. In view of the wide dispositional latitude given to the court in s. 31(28) of the Planning Act (see para. 15 above [p. 710 ante]) it may be unnecessary to resort to s. 24(1) of the C harter in reaching this conclusion. For reasons previously outlined, however, I prefer to rest my decision upon both grounds.

The city's application is dismissed. Costs may be spoken to by appointment to be arranged through the trial co-ordinator or by teleconference

Order accordingly.

Notes

Note 1: See also The Concise Oxford Dictionary of Current English, 8th ed. (Oxford: Clarendon Press, 1990 and Black's Law Dictionary, revised 4th ed. (St. Paul: West Publishing, 1968).

Note 2: James A. Fontana, Law of Search and Seizure in Canada, 4th ed. (Markham, Ont.: Butterworths, 1997), p. 331 et seq. See also Peter Hogg, Constitutional Law of Canada, 3rd ed., supplemented, (Toronto: Carswell, 1992), at pp. 37-12.3 and 12.4.

Note 3: According to its definition in s. 31(1), "property" means a building or structure of part of a building or structure, and includes the lands and premises appurtenant to and all mobile homes, mobile buildings, mobile structures, outbuildings, fences and erections thereon whether heretofore or hereafter erected, and includes vacant property.

Toronto Area Transit Operating Authority v. Mississauga (City)

Between
Toronto Area Transit Operating Authority, and
The Corporation of the City of Mississauga and Frank Spagnolo, Chief Building Official for the Corporation of the City of Mississauga

[1996] O.J. No. 843
Court File No. RE5539/95

Ontario Court of Justice (General Division)
Milton, Ontario
Morrison J.
February 6, 1996.

Counsel:
Edith Dover for the applicant.
Brian Duxbury for the respondents.

[para1] MORRISON J. (orally):-- I would like to thank counsel for their very thorough presentations in this matter. I would like to file a list of the authorities provided to me, and if there is a transcript of this decision prepared, a copy of the authorities should be attached to it.

[para2] The applicant, Go Transit, has brought two applications before the Court. The first application for relief was brought in 1992 against the City of Mississauga, and again by way of a new application in 1995, the applicant again seeks relief against the City of Mississauga.

[para3] The two applications concern two different Go construction sites, but involve essentially the same issues. The first application brought by the applicant in 1992, sought relief in respect to a building addition that was being constructed at the West Plant Management Facility located at 3500 Wolfedale Road in Mississauga.

[para4] After the application was filed in 1992, the parties entered into interim minutes of settlement which resulted in the facility eventually being completed. Certain sums of money were paid into Court by the applicant, and the application from 1992 is still before the Court to be decided and the monies are still in Court.

[para5] The 1995 application was brought by the applicant in connection with a 14 million dollar expansion of the Streetsville Go Station located in the City of Mississauga. Go Transit is seeking recision of an Order to Comply, and a Stop Work Order issued against Go Transit by the respondent City. Go Transit also seeks declarations that Go Transit is not required to obtain a building permit, nor is it required to file a site plan. In addition, Go Transit seeks a declaration that it is not required to make a parkland dedication payment, nor payment of development charges to the City.

[para6] When the 1995 application was brought before the Court, the parties again entered into interim minutes of settlement on July 21st, 1995, without prejudice to their positions. An interim Order was issued pursuant to the minutes. The construction work has continued, and the City has agreed not to prosecute upon its Stop Work Orders. A similar approach was taken in 1992 to complete the Wolfedale project.

[para7] The legal concern is whether the City of Mississauga, as a municipality, has the jurisdiction under the Building Code Act, the Planning Act, and the Development Charges Act, to require a Crown agent to comply with their requirements. Go Transit argues the City has no jurisdiction, and also that the City hasn't met the threshold requirement of the Development Charges Act in any event.

[para8] The main issues raised by these applications are as follows:

(1) Is Go Transit a Crown agency and therefore, not affected by the operation of the Planning Act, the Ontario Building Code, or the Developmental Charges Act, because those Acts do not specifically state that they

are to be "binding upon the Crown"

[para9] The key issue here is whether Go transit is a Crown agency. If it is, does it receive the same immunity as the Crown? If the Crown receives the benefit of the Ontario Interpretation Act to give it immunity, does the Crown agency get the same benefit?

(2) If Go is a Crown agency, is it required to obtain a building permit in order to construct the Streetsville Go Station expansion?

[para10] As a part of this issue, it must be decided whether the City of Mississauga has jurisdiction or authority under the Building Code Act, Statutes of Ontario, 1992, chapter 23, to require Go Transit to obtain a building permit.

(3) If Go Transit is a Crown agent, is it required to file and obtain municipal approval of a site plan? Also, is Go transit required to make a parkland dedication payment before it can construct the Streetsville Go Station?

[para11] As a part of that issue, it must be determined whether the respondents have the authority or jurisdiction under the Planning Act, R.S.O. 1990, chapter (P - 13), to require Go Transit to obtain municipal approvals of the site plan and whether it can demand a monetary contribution in lieu of a parkland dedication.

(4) If Go Transit is a Crown Agency, is it required under the Development Charges Act, R.S.O. 1990, chapter (D-9) to pay development charges in respect of the Streetsville Go Station expansion?

[para12] As a part of this issue, it must be determined whether the respondent has the jurisdiction or authority under the Development Charges Act, to require charges to be paid by Go Transit.

(5) A fifth issue is whether a Stop Work Order issued by the City of Mississauga, ought to be rescinded in order to permit the completion of the construction of the Streetsville Go Station.

[para13] The Provincial Legislation known as Toronto Area Transit Operating Authority Act, 1990 R.S.O. T-13, s. 2(9), specifically states that the authority (namely Go Transit) is an agency of the Crown. Go Transit means Toronto Area Transit Operating Authority.

[para14] The Crown Agency Act, 1990, R.S.O. volume 3 c. C48, sets out the meaning of "Crown Agency" and the definition would include the Toronto Area Transit Operating Authority.

[para15] Under s. 2 of the Crown Agency Act, it states specifically:

A Crown Agency is for all its purposes an agent of Her Majesty and its powers may be exercised only as an agent of Her Majesty.

[para16] The applicant argues that the Interpretation Act of Ontario, R.S.O. 1990, c. 1.11, s. 11, states:

No Act affects the rights of Her Majesty, her heirs or successors unless it is expressly stated therein that Her Majesty is bound thereby.

[para17] Go Transit argues that no Act can affect a Crown Agent unless the Act expressly states that it does. It argues that the reference to Her Majesty or the Crown, includes agents of the Crown or Her Majesty.

[para18] The Planning Act, Building Code Act and Development Charges Act, are all silent on whether they are to be binding on Her Majesty. Therefore, the applicant argues that it is not bound by any of the Provincial Acts upon which the respondent relies for jurisdiction to demand a building permit from Go, to require a filing of a site plan by Go, and for Go Transit to make monetary contributions to the City.

[para19] The City stresses that the Federal Interpretation Act is different in its wording, and because of that

difference, a broader test should be applied using a "mentions or refers to" test, even if dealing with Provincial Legislation. The City argues that a contextual approach must be taken. It argues there is a judicial narrowing of Crown immunity. The City argues that the Development Charges Act expressly states that it applies to all lands, and thus must bind the Crown. The City also argues that Go has waived any immunity by voluntarily applying for a building permit.

[para20] The City of Mississauga's position is that the applicant, Go Transit, must comply with the Building Code Act, more particularly described as an Act to revise the Building Code Act. It is under that Act that the City of Mississauga claims that the applicant must obtain a building permit. The City argues that Go Transit is bound by the Building Code Act like everyone else and must obtain a building permit. As part of its own procedure, before a building permit will be issued, the City takes the position that an applicant for a building permit must pay developmental charges and must file a site plan and have it approved, and in addition must pay a parks levy or contribution.

[para21] In this case the City made the demands for payment but never did set out the amounts. The City states that failure to do so is not important for this issue.

[para22] The applicant refuses to make any payment to the City of Mississauga by way of developmental charges. It refuses to file a site plan for the City's approval under the Planning Act, and it refuses to pay a parks levy under the authority of that same Act. The applicant argues that it is not bound by the requirements of the Building Code Act, Planning Act, or the Development Charges Act, because no where in those Provincial Acts is there any statement that such legislation is to be expressly binding on Her Majesty, heirs or successors. Under the Crown Agency Act, the applicant argues that a Crown Agency would include Go Transit, and therefore for all purposes, is an agent of Her Majesty and has immunity from these Acts, and any by-laws made under them. The applicant hastens to set out that, in fact, it does comply with all of the building codes in Ontario, and safety regulations, and is very conscious of the need for safety. It also has stated that it is prepared to assume complete responsibility for any negligence in the construction of its stations. However, Go Transit is concerned that if it is bound by section 8 of the Building Code Act requiring it to obtain a building permit, this would permit the municipality to go on and demand a payment of developmental charges and to require a site plan to be approved before any building permit would be given.

[para23] The respondent stresses there is a need for safety enforcement. The applicant argues it complies with all building code requirements and co-operates in every way with safety regulations.

[para24] In summary, the applicant argues that the Ontario Building Code is not binding upon it because it is a Crown agent by the Act that created it, and under the Crown Agency Act. The applicant then points to the Ontario Interpretation Act which states that before any legislation is binding on the Crown, it must state that fact.

[para25] Those Acts which I have named before do not contain such statements.

[para26] The applicant states that the City is simply demanding, under the Planning Act, a payment of money in lieu of a conveyance of land before any building permit will be given. The applicant's opinion is that the City of Mississauga is not refusing to issue a building permit because of concerns over safety issues connected to the construction of the expansion, but rather, the applicant contends that the real issue here is money, and it is an attempt by the City to make Go Transit pay developmental fees and a payment of money in lieu of parks simply because it intends to expand the Streetsville Go Station. The applicant points out that it should be clear to the respondent City, that there is no legislation to permit it to take the stand that it does against Go.

[para27] In essence, the applicant argues that the respondent's position is strictly one based on an attempt to make Go Transit pay money, knowing that as a Crown Agency it

is not required to do so.

[para28] The land in question consists of some 17 acres of land. The expansion will lead to a Go Station several times the size of the present station, and will require such things as a new building platform and parking lots. Go Transit is paying 100 percent of the 14 million dollar cost and argues the City will not incur any capital costs but will receive the benefit of the improvements. Go argues that as a Crown Agency, it maintains its own extensive engineering and design standards and these all comply with the Ontario Building Code. The expansion is for the general welfare of the area and will benefit the community as a whole without the respondent's making any capital investments whatsoever.

[para29] I agree with the concern of Go, that because its facilities cross different municipal boundaries, such facilities cannot be subject to various municipal requirements. These requirements may differ, and it is important that Go have consistency for operational efficiency.

[para30] Ultimately, the operating costs are borne by the public.

[para31] The City agreed that if there were three municipalities on the rail line, one after the other, each municipality could and perhaps should demand that Go Transit meet the individual demands of each municipality under the three Provincial Acts before development could proceed.

[para32] I disagree with such a position. The laws simply do not permit this because of the special status that Go has. If the Ontario Legislature intended Crown Agencies to be bound by the Planning Act, the Building Code Of Ontario, and the Developmental Charges Act, it would have specifically stated that fact in those Acts as it has in other Provincial Legislation. The Ontario Interpretation Act requires this to be done if that is the intent of the legislature. Go sets out that other municipalities have recognized and accepted the need for consistency, and Go attempts to co-operate with them. Go argues this is the very reason why it voluntarily applied for a building permit on January 20th, 1995, namely, to inform the City of Mississauga of its intention. Its position at Court is that it was not required to have a building permit because it is a Crown Agency, and there was no waiver by applying.

[para33] The building permit fee was paid by Go Transit, but the City of Mississauga responded, advising the building permit would not be provided until Go Transit filed a site plan, obtained site plan approvals, paid developmental charges and made a parkland dedication payment. Go Transit had already entered into an agreement with a contractor to commence construction and time was of the essence. Construction commenced on February 27th of 1995. The City repeated its demands on June 22nd, 1995. On July 5th, 1995, the City issued an Order to Comply, and a Stop Work Order, which halted the expansion of the Streetsville Go Station. The applicant then applied to the Court by way of a Notice of Application dated July 11th, 1995. The matter was adjourned sine die, but not later than December 22nd with minutes of settlement being filed. These minutes of settlement provided that construction work could be continued and the Order to Comply and Work Stop Order issued by the City were stayed pending return of the matter before the courts.

[para34] I believe that my judgment should set out that after the application commenced on December 20th, 1995, the parties were encouraged by the Court, because they represented two public bodies, to try once again to reach an agreement. The parties accepted the invitation of the Court and on consent the matter was adjourned to permit further consultation before another Justice, who held a mid-trial conference. However, the parties obviously could not resolve their differences and they returned to the Court. The matter has now been fully argued and the parties desire a Ruling by the Court.

[para35] It is my understanding of the law that under the Interpretation Act, no Act can affect a Crown Agent unless the Act expressly states that it does, and it is to be noted that none of the Acts that I have mentioned earlier expressly state that they do. It is under those Acts the City of Mississauga seeks to have jurisdiction over the applicant.

[para36] I find that the applicant is a Crown Agency and for all purposes is an agent of Her Majesty, and its powers may be exercised as an agent of Her Majesty.

[para37] The City has failed to produce any authority to the contrary. The Interpretation Act clearly states that no Act affects the rights of Her Majesty unless it is expressly stated therein that Her Majesty is bound. The Acts in question in this application do not state that they are binding on Her Majesty or Crown Agency. It is clear that the legislature could have stated the Acts were binding upon the Crown, but they do not. The Legislature did state in other Acts that the Crown was specifically bound by legislation in those cases. Examples of this are found in The Environmental Assessment Act, R.S.O. chapter E. 18 s. 4, which states: "This Act binds the Crown". Similarly, in the Expropriations Act, R.S.O. 1990, chapter E.26, the Legislature stated: "This Act binds the Crown", in section 3.

[para38] The City has argued that "Crown does not include a Crown Agent". I reject the City's argument in that regard. In Professor Hogg's book on Liability of the Crown, 2nd ed. 1989, c. 11, page 248, it is observed that such a question is usually resolved by asking whether the corporation is "an agent of the Crown", and if the answer is yes, the corporation is an agent of the Crown.

[para39] In addition, in the case before me, there is expressed statutory designation of Go Transit as a Crown Agent. The Courts should respect such designation. A general rule, explains Professor Hogg, page 253, if a Statute expressly provides that a public corporation is to be "an agent of the Crown", then the corporation will be an agent. In addition, the Supreme Court of Canada in the case of R. v. Eldorado Nuclear, (1983) 4 D.L.R. (4th) 193, page 205, the Court confirmed that a reference to the Crown in a Statute, extends to Crown Agents. Mr. Justice Dixon said that if this were not the interpretation to be given to section 16 of the Federal Interpretation Act, the section would have no meaning since the Crown only acts through servants and agents. The same principle of law applies to the provinces and their Interpretation Acts.

[para40] I reject the City's argument that a contextual approach must be taken. The City argues that there is a judicial narrowing of Crown immunity, and it argues that the Developmental Charges Act expressly states that it applies to all lands, therefore, the City argues this must bind the Crown. I also reject the argument that the various Acts in question apply to the Crown by necessary implication. Such an argument by the City fails, in my view, because it has not shown that the purpose of the legislation would be "wholly frustrated", or a logical implication arises that the Crown is bound.

[para41] The Ontario Legislature could easily have stated in all of the Acts in question concerning this matter, that the Acts bind the Crown. This has not occurred and hence the application of the Interpretation Act applies. The Interpretation Act is very clear and precise in its wording. The Crown and its agent is not bound by any legislation, unless it specifically states the Crown is bound.

[para42] In this regard, I'm following the principle stated in the case of Re Doxtator (1984), a High Court decision by Mr. Justice Osborne. In that case, it was stated that where a Provincial Act does not contain an express provision that the Crown is bound, the Act does not bind the Crown. His Lordship stated that it was not difficult to legislate a change, because all that is required to make the Crown subject are the words of express application. I also agree with the reasons and the result in the case of College d'arts and the City of Ottawa (1994), 20 O.R. (3d) 541, where Mr. Justice Cunningham found that the Development Charges Act does not bind the Crown or its agents. I further agree with the argument put forth by the applicant that unless there is shown an increased need for services, the threshold test has not been met under the Development Charges Act. This Act provides that development charges can be imposed if development increases the need for services.

[para43] There is no evidence in the material before me that would support such a conclusion. In any event, that Act

still does not specifically state that it is to be binding on the Crown.

[para44] I agree with the argument of Go Transit, that because it voluntarily applied for a building permit, this does not mean that it has waived its immunity. I again adopt the reasoning on the same issue of waiver, as set forth by Mr. Justice Cunningham in the College d'arts v. City of Ottawa decision. Such a voluntary act should not create a waiver of any Crown immunity that might otherwise apply. In the result, after combining the reading of the Interpretation Act, the Crown Agency Act, and the case law, I find that the Toronto Area Transit Operating Authority is not bound by the Building Code Act, the Planning Act or the Development Charges Act. Therefore, the City has no right to refuse to issue a building permit to the Authority for the expansion of the Streetsville Go Station. My decision also applies to both applications and, therefore, that would also apply to the expansion of the Wolfedale Road facility.

[para45] I find that Go was acting as an agent of the Crown, and as such has immunity as described in the Act. It is not required to be subject to the authority of the City under the Provincial Acts set out in this application. It did not waive the immunity it has by applying for a building permit, and as a result, a declaration will go that Go Transit as a Crown Agent is not required to apply for a building permit in order to construct the addition at the Wolfedale Road facility, and the City has no jurisdiction or authority under the Building Code to demand that Go Transit obtain a building permit prior to constructing the addition.

[para46] Further, concerning the Wolfedale facility, a declaration will go that Go Transit as a Crown Agent, is not required to apply for site plan approval in order to construct the addition, and that the City has no jurisdiction or authority under the Planning Act to demand that Go Transit obtain site plan approval or enter into a site plan agreement or undertaking prior to constructing the Wolfedale Road facility.

[para47] A declaration will also go that Go Transit as a Crown Agent is not required to pay development charges in the amount of $15,167.57, or any other amount, in order to construct the addition. These monies will be returned to the Authority.

[para48] In relation to the 1995 application, a declaration will go that Go Transit as a Crown Agent is not required to applying for a building permit in order to construct the Streetsville Go Station expansion, and the City has no jurisdiction or authority under the Building Code Act to demand that Go Transit obtain a building permit in order to construct the Streetsville Go Station expansion.

[para49] Further, a declaration will go that Go Transit is a Crown Agent and is not required to apply for municipal approvals such as site plan approval, or to make a parkland dedication payment in order to construct the Streetsville Go Station expansion, and further, that the respondents have no jurisdiction or authority under the Planning Act to demand that Go Transit obtain municipal approvals, such as site plan approval or make a parkland dedication payment as a condition of constructing the Streetsville Go Station expansion.

[para50] A further declaration will go that Go Transit as a Crown Agent, is not required to pay development charges in order to construct the Streetsville Go Station expansion, and the respondents have no jurisdiction or authority under the Development Charges Act to require Go Transit to pay a development charge with respect to the Streetsville Go Station explanation.

[para51] The Court: Anything else?

[para52] Ms. Dover: Your Honour, with respect to the '95 application, just because construction is still continuing, could we also have an Order as set out in sub paragraph 1A, of the Notice of Application Order, rescinding the Order to Comply and Stop Work Order found on page three of the application record?

[para53] The Court: Yes, I should have said that. There will be an Order to go rescinding the Order to Comply in the

Stop Work Order dated July 5th, 1995.

[para54] Ms. Dover: With respect to the '92 application, I think you stated that monies were paid in to court and those monies will be returned? I just want to make sure that the Order is specific that the monies will be paid out of court to

the credit of Go Transit. That makes it smoother.

[para55] The Court: Well what I could do is ask you to draw up the Order --

[para56] Ms. Dover: Okay.

[para57] The Court: And have it approved and I can sign it if you wish and then it will be filed.

[para58] Ms. Dover: Thank you.

[para59] The Court: If that's the way you wish to do it?

[para60] Ms. Dover: And I guess the last point to address is the issue of costs. We would ask that costs follow your decision and be granted in favour of Go Transit.

[para61] The Court: Yes, you are requesting me to fix the costs?

[para62] Ms. Dover: Unfortunately I don't know if my friend is prepared to make argument on the amount of costs or not. Unfortunately I don't have the exact figures with me today. I don't know if that's something that my friend would prefer us to discuss and then speak to you if need be.

[para63] The Court: Well I would ordinarily fix them today, otherwise I would make an order that the costs can be assessed.

[para64] Mr. Duxbury: Sir, I would like to speak to the issue of costs.

[para65] The Court: Yes, go ahead.

Mr. Duxbury - Submissions as to Costs.
Ms. Dover - Submissions as to Costs.

[para66] The Court: The general rule in connection with costs is that costs should follow the event and I see no reason why that should not be the case. The applicant shall be entitled to its costs on a party and party basis to be assessed.

[para67] Ms. Dover: Thank you, Your Honour.

* * * * *

APPENDIX A

[para68]

Authorities:

1. Re Doxtator (1984), 44 O.R. (2d) 581 (S.C. in Bank.)
2. Re Gay (1959), 20 D.L.R. (2d) 170 (Ont. C.A.)
3. R. v. Ross, [1926] 4 D.L.R. 894 (N.B.C.A.)
4. Alberta Government Telephones v. C.R.T.C. (1989), 61 D.L.R. (4th) 193 (S.C.C.)
5. Friends of the Oldman River Society v. Canada (Minister of Transport and Minister of Fisheries and Oceans) (1992), 88 D.L.R. (4th) 1 (S.C.C.)
6. Re Caisse de Dépôt et Placement du Quebec and Ontario Securities Commission (1983), 42 O.R. (2d) 561 (Div. Ct.)
7. Province of Bombay v. Municipal Corporation of Bombay, [1947] A.C. 58 (P.C.)
8. College d'arts appliques et de technologie La Cite collegiale v. Ottawa (City) (1994), 20 O.R.

   (3d) 541 (Gen. Div.)
9. Sparling v. Caissee de Depot et Placement du Quebec (1988), 55 D.L.R. (4th) 63 (S.C.C.)
10. Kirshin v. City of London (1992), 28 O.M.B.R. 376
11. P. Hogg, Liability of the Crown, 2nd ed. (Toronto: Carswell, 1989), chapter 11
12. R. v. Eldorado Nuclear - Eldorado Nucleaire Ltee

[1983] 2 S.C.R. 551
13. Hogg, Government Liability: Assimilating Crown and Subject, (1994), The Advocates' Quarterly, Volume 16, Number 3, August
14. Sutherland v. Clarke (1989), 70 O.R. (2d) 453
15. Sparling v. Caissee de Depot et Placement du Quebec (1988), 55 D.L.R. (4th) 63
16. Quebec v. Ontario (Securities Commission) (1992), 97 D.L.R. (4th) 144
17. International Aviation Terminals Inc. v. Township of Richmond (1992), 89 D.L.R. (4th) 1
18. Bropho v. State of Western Australia (1990), 171 C.L.R. 1
19. Syndicat professionnel des ingenieurs d'Hydro-Quebec v. Hydro-Quebec (1995), 126 D.L.R. (4th) 333
20. Manolakos v. Gohmann (1989), 1 C.C.L.T. (2d) 233

Toronto (City) Chief Building Official v. Vaghela Holdings Inc.

Between
Michael L. Nixon, Chief Building Official, for the Corporation of the City of Toronto, Applicant, and
Vaghela Holdings Inc., Respondent

[1993] O.J. No. 2054
DRS 94-03073
Action No. RE 2848/93

Ontario Court of Justice - General Division
Toronto Weekly Court
Wilkins J.
Heard: September 9, 1993.
Oral Judgment: September 9, 1993.
Released: September 14, 1993.

T.H. Wall, for the Applicant.
Mauro Marchianni, for the Respondent.

[para1] WILKINS J. (orally):-- In the matter of Michael L. Nixon, Chief Building Official for the Corporation of the City of Toronto, and Vaghela Holdings Inc., this is an application brought to enforce the provisions of the City of Toronto Interim Control By-law 129-93, passed February 5, 1993, against the respondent who was the owner of 1460 Gerrard Street East, Toronto.

[para2] Prior to the passage of this Interim Control By-law, the respondent had made application for a building permit and this process was under way at the time the new Interim Control By-law came into force and effect. The wording of the Interim Control By-law and the provisions of s. 34(9) of the Planning Act make it clear that unless the erection or use prohibited by the Interim Control By-law is already in place, or the building permit has already been issued, as at the date of the by-law's passage or prior to that date, then the erection or use or both are caught by the Interim Control By-law, notwithstanding an application for a building permit may be pending. The exception to this rule, as contained in the cases referred to me, is in the event of a gross or undue delay by the municipal authority or in extraordinary circumstances which would demonstrate that the municipality has not been acting in good faith, or that the permit has been refused for unlawful reasons. A review of the evidence in this case makes it clear that no undue delay or bad faith has been exhibited and there has been no unlawful refusal to issue the permit by the applicant. The respondent is, unfortunately, one of those persons whose application for a permit has been caught in mid-stream by the enactment of the Interim Control By-law.

[para3] After the Interim Control By-law came into effect, the respondent proceeded with certain renovations to the property without a building permit and entered into commercial activity prohibited by the Interim Control By-law, as well as placing unauthorized signage on the premises.

[para4] The evidence before me does not demonstrate when the commercial activity had been carried on and whether or not it had existed before February 5, 1993. The onus to demonstrate that the commercial activity had existed prior to the enactment of the by-law rests upon the respondent and not upon the applicant.

[para5] The order of Somers J., dated July 12, 1993, required all of the material in this matter that was to be relied on by the respondent to be filed before cross-examinations. On this basis, I have refused to accept a late affidavit which the respondent sought leave to file after the completion of the cross-examinations. It was further put to me by counsel that the situation was one where a building permit ought to have issued. I find that there are no facts to support that proposition.

[para6] The application that has been put before this court has been brought by a chief official, as contemplated by s. 26(1) of the Building Code Act, R.S.O. 1990, c.13 and not by the Corporation of the City of Toronto, a rate payer or a local board as contemplated by s.328 of the Municipal

Act, R.S.O. 1990, c.45. On that basis, the relief sought, pursuant to the terms and provisions of the Municipal Act, and more particularly s. 328 of that Act, is not before the court and, as such, the Corporation will not be barred or prevented from bringing any subsequent application as it may see fit to enforce its rights under the provisions and terms of the Municipal Act.

[para7] In this matter, I will only deal with the application as it relates to the Building Code Act and, as I have pointed out, that is without prejudice to any additional rights the Corporation may have for subsequent enforcement under the other statutes.

[para8] I, therefore, find for the applicant and direct the respondent to comply forthwith with all of the terms and provisions of the City of Toronto Interim Control By-law 129-93. The respondent shall further make any and all applications necessary to obtain any such permits as may be advised or any such permits which the applicant may require if so advised. But, until further order of this court, or expiration of the Interim Control By-law, or determination of the validity of the Interim Control By-law by the Ontario Municipal Board, the respondent shall comply with each and every term of Interim Control By-law 129-93.

[para9] Having regard to the circumstances of this case and the parties that were before the court and the party left out and having regard to the mixed success, there will be no order as to costs.

WILKINS J.

Re **Toronto College Street Centre Ltd**. and City of Toronto et al. *

56 O.R. (2d) 522
61 O.R. (2d) 669 *
Also reported at 31 D.L.R. (4th) 402
[1986] O.J. No. 962
ONTARIO

COURT OF APPEAL
ZUBER, BLAIR AND CORY JJ.A.
30TH SEPTEMBER 1986

APPEAL from a judgment of the Divisional Court, 47 O.R. (2d) 734, 12 D.L.R. (4th) 396, 27 M.P.L.R. 89, dismissing an application for judicial review of the refusal of the respondent building inspector to issue a building permit.

B.H. Kellock, Q.C., and J.D. Murphy, for appellant.
M.J. Winer, Q.C., for respondents.

The judgment of the court was delivered by

CORY J.A.:-- On this appeal, primary consideration must be given to the scope and application of the Ontario Heritage Act, R.S.O. 1980, c. 337, together with a City of Toronto by-law passed pursuant to that Act. In addition, a determination must be made as to whether the provisions of the Planning Act, R.S.O. 1970, c. 349, s. 35a, enacted by 1973, c. 168, s. 10, are pertinent to the amendment proposed by the appellant to the plans for the seventh floor of the Eaton's College St. building. Lastly, there is an issue as to whether a representation made by the appellant to restore the seventh floor which was relied upon by the municipality is binding and whether, on the facts of this case, the doctrine of estoppel can and should be applied so as to prevent the appellant from resiling from that representation.

Factual background

The pertinent facts of this case are set out with great clarity in the reasons of Henry J., given on behalf of the Divisional Court, reported in 47 O.R. (2d) 734, 12 D.L.R. (4th) 396, 27 M.P.L.R. 89. It is nevertheless necessary for these reasons to make reference to the facts, and perhaps it is convenient to set them out at this point.

In 1973, the appellant (T.C.S.C.L.) took title to the block of lands in downtown Toronto contained within the rectangle formed by Yonge St., College St., Hayter St. and Gerrard St. This was the site of the Eaton's College St. store.

In December, 1974, the council of the respondent municipality the City of Toronto (the City) passed By-law 419-74 which purported to implement s. 35a of the Planning Act, as amended in 1973. The aim of the by-law was to require, as a condition of development within the City, that all developers enter into a development agreement with the municipality with respect to all the facilities and matters set out in s. 35a of the Planning Act as it then stood.

In November, 1975, the City council passed By-law 510-75 pursuant to the provisions of s. 29(6)(a) of the Ontario Heritage Act. The by-law designated the old Eaton's building which was on the site to be of architectural or historical value. The result was that pursuant to s. 33 of the Act any alterations "likely to affect the reason for the designation" were prohibited without the consent of the City's council. The City's decision to "designate" the building as one of architectural or historical value was based upon a recommendation and report made by the Toronto Historical Board (the Board). These reasons are attached to the by-law as sch. "B" and, in effect, are a repetition of the Board's report and recommendation. The schedule reads as follows:

SCHEDULE "B"

Reasons for the designation of the T. Eaton Co. Limited, Eaton's College Street building at No. 412-448 Yonge Street

The T. Eaton Co. Limited, Eaton's College Street building, 412-448 Yonge Street at Hayter Street, through to 49 College Street (1917) 1928-33 by Ross & Macdonald; Sproatt & Rolph,

Associates, is designated to be of architectural value as a notable example (though unfinished) of the type of large scale building using simplified classified forms that typifies commercial design in the 1920s and 1930s. The building coordinates the finest materials and workmanship with a scale rarely seen in Canada or in the work of Canadian architects. The building is also important because it effectively defines the intersection of Yonge and College streets setting the tone and scale for many of the buildings in the area.

As a result of the designation of the building, T.C.S.C.L., in order to proceed with its plans, made a presentation to the Board in 1976. The ensuing discussions were described by the managing director of the Board as "both cordial and productive". They were certainly extensive and detailed and dealt with both the interior and exterior of the Eaton's College St. store.

During the course of its written presentation to the Board, T.C.S.C.L. stated that "the 7th floor which contains the Round Room (a restaurant) and the Auditorium will be maintained and restored ...".

The discussions culminated in the submission of two reports of the Board to City council made in July and August of 1976. The first report contained the following:

The Board was most favourably impressed with the proposal involving the retention and restoration of the main store building and the Yonge Street wing to the south of the main building, and with the expressed intention to maintain and restore all the key spaces on the 7th floor, including the Round Room and the Auditorium.

The Board then recommended:

That Council commend Toronto College Street Centre Limited for their proposal to retain and restore the main store building and the Yonge Street wing to the south of the main building, and for their intention to maintain and restore all the key spaces on the 7th floor, including the Round Room and the Auditorium; and that the appropriate officials be encouraged to provide all possible assistance in endeavouring to find an acceptable solution which would enable the preservation of the 7th floor.

. . . . .

That Council refuse the application under Section 34 [of the Ontario Heritage Act] to demolish the College Street wing, and that the applicants be requested to meet further with representatives of the Toronto Historical Board and of other appropriate City departments to discuss methods of retaining the College Street facade both for its value in the streetscape and for its functional importance as a sheltered arcade to Bay Street.

The second report of the Board contained the following:

While the Board's concern for the retention of the College Street wing has not been met, the intent of Toronto College Street Centre Limited to finish the west facade of the main seven-storey block in a manner compatible with its College Street facade is noted and the incorporation of major matching elements from the wing would make a substantial contribution toward the restoration of this architecturally important structure.

One of the three recommendations contained in this second report was:

That Council consent to the application under Section 33 to alter the designated property in accordance with the revised proposals contained in the August 11, 1976 letter to the Toronto Historical Board from Toronto College Street Centre Limited and stated in discussions between the Board and Toronto College Street Centre Limited, with the condition that, since the detailed plans for the alterations are incomplete, the applicants be requested to continue discussions with the Board and other appropriate City officials as these plans evolve and prior to their implementation.

It is evident that the restoration and maintenance of the seventh floor was of very considerable importance in the discussions that took place between T.C.S.C.L. and the Board.

On August 28th, City council had before it the recommendations of the Board together with a letter of August 12, 1976, written by Gordon C. Bacque, vice-president and general manager of T.C.S.C.L. The letter from Mr. Bacque contained the following statement:

> Our willingness to undertake the restoration of this building, the construction of rental residential accommodation and preservation of the 7th floor, we believe is a very beneficial proposal for the City.

On August 28th, council adopted the following recommendation:

> 1. That Council consent to the application, under Section 33 of the Ontario Heritage Act, to alter the main Eaton's College Street Building and the Yonge Street Wing in accordance with the applicant's proposal dated July 22, 1976, as revised in a letter to the Toronto Historical Board, dated August 11, 1976.

The proposal referred to included the restoration and maintenance of the seventh floor.

On September 10, 1976, solicitors for T.C.S.C.L. wrote to the City of Toronto taking the position that since they had undertaken to restore a designated building they should receive the density bonus as of right rather than by the exercise of the City's discretion. This submission was accepted in October, 1978, when the City's council passed a by-law granting the density bonus in accordance with the request of the developer.

In November, 1976, T.C.S.C.L. presented a "development review application" which was required by By-law 419-74. In the description of the project submitted in support of this application, T.C.S.C.L. made specific reference to its intention to "restore floor 7 of the existing 7-storey building". The covering letter noted that "an additional copy of the information (contained in the application) has been made available to the Toronto Historical Board for their review to ensure that our proposal is in conformity with the City's approval". In passing, it should be observed that the "approval" can only refer to the consent to alter the building given by the City under the Ontario Heritage Act in August, 1976. Detailed plans were submitted with the development application. The plans relating to the seventh floor clearly depicted the intention to maintain and restore the existing auditorium and restaurant.

On November 29, 1976, the Board commented favourably on the plans submitted and, once again, made reference to the proposed restoration of the seventh floor auditorium, restaurant and foyer as being "particularly satisfying".

On February 28, 1977, City council considered a report submitted by the commissioner of planning with regard to the proposed development agreement. This report included the recommendations not only of the planning department but of public works, building, parks and recreation, development and the Toronto Historical Board. Solicitors for T.C.S.C.L. attended the meeting and reviewed the recommendations of the commissioner of planning and accepted them with minor reservations which are not relevant to this case. Council then adopted the recommendations by resolution and authorized the City solicitor to enter into a development agreement with T.C.S.C.L. The agreement was to carry out the recommendations of the commissioner of planning as approved by T.C.S.C.L.'s solicitors. The recommendations included the following:

> (a) That the development shall be constructed substantially in accordance with the applicant's sketch drawings D1-D11 ...
>
> . . . . .
>
> (e) That the applicant shall have submitted detailed drawings of the proposed renovations to the Designated Buildings to the Toronto Historical Board for review prior to the commencement of such work.

The drawings referred to included the plans for the

restoration of the seventh floor.

The development agreement was executed on April 20, 1977. Subsequent to the signing of this agreement, construction work commenced. It continued throughout the years 1977, 1978 and into 1979. During this time, the College St. wing of the old Eaton's store was demolished pursuant to the agreement between T.C.S.C.L. and the City. In the course of this construction, some $500,000 was spent on the restoration of the seventh floor.

While the construction work was proceeding, T.C.S.C.L. promoted its project to potential tenants in a brochure which contained the following statement:

> Stage 7 -- the new name for this seventh floor complex -- will continue to provide entertainment and dining pleasures reminiscent of its elegant past.
>
> The Auditorium is completely refurbished to incorporate the latest technical equipment. ... The famous Round Room will reopen and continue to operate in the classic tradition in an art deco atmosphere. It is totally restored and will once again be a dining landmark.

In 1979, several plaques were affixed at various locations throughout the interior of the building. They commemorated its importance as an element of Ontario's heritage.

On January 23, 1979, the Supreme Court of Canada delivered its judgment in Canadian Institute of Public Real Estate Companies et al. v. City of Toronto et al. (1979), 103 D.L.R. (3d) 226, 8 O.M.B.R. 385, [1979] 2 S.C.R. 2. The result of that decision was that Toronto City By-law 419-74 was struck down. In the result, the development agreement which had been entered into by the City pursuant to that by-law was invalid. However, on June 22, 1979, the Planning Amendment Act, 1979 (Ont.), c. 59, was passed. By s. 3 of that Act, all development agreements which had been entered into pursuant to s. 35a of the Planning Act, R.S.O. 1970, c. 349, as amended, were retroactively validated in so far as they dealt with "facilities and matters" enumerated in s. 35a.

On January 17, 1980, after more than two years of work on the exterior and interior of the building, T.C.S.C.L. advised the City that it now found that the restoration would impose an unacceptable financial burden and that it now intended to convert the seventh floor to office accommodation. It requested that Plan D-7, which pertained to the restoration of the seventh floor and which was a part of its agreement with the City, be deleted and replaced by a plan designating the space for office purposes.

City council considered the request in detail. It requested and received extensive reports from the land committee of council, the commissioner of planning and development, other interested parties including the Toronto Historical Board, and the developer. On May 26, 1980, T.C.S.C.L., for the first time, set forth its position that the designation of the College St. building under the Ontario Heritage Act was not wide enough to include the restoration of the seventh floor. In support of this position, T.C.S.C.L. put forward the reasons for designation of other buildings under the Ontario Heritage Act in 16 other by-laws. It was argued that those reasons made it clear when the interior of the buildings was included in the designation. I cannot accept this argument. I agree with the conclusion of Henry J. [pp. 741-2 O.R., p. 403 D.L.R.] that the references to internal or external features as a reason for designation are haphazard and disclose no pattern.

Following some months of discussion and review of reports, the City council unanimously determined that it would not consent to the proposed changes to the seventh floor.

The battle lines were then drawn. In June, 1982, T.C.S.C.L. applied for a building permit to proceed with the proposed conversion of the seventh floor to office space. The building permit application was refused a week later. The chief building officer took the position that he was bound by s. 6(1)(a) of the Building Code Act, R.S.O. 1980, c. 51. This section prohibited him from granting an application if it was in contravention of any applicable law. He considered the application to be in contravention of the "designation" of the building made pursuant to s. 33 of the Ontario Heritage Act and

therefore that it was contrary to applicable law. T.C.S.C.L. then launched this application to the Divisional Court.

In considering this summary of the facts, it should be remembered that T.C.S.C.L. is a large company experienced in land development. It at all times had access to and received excellent legal advice. There was no imbalance in the bargaining positions of T.C.S.C.L. and the City.

Further, both T.C.S.C.L. and the City accepted or clearly appeared to accept the proposition that the municipality could designate the building as a historical site and that such a designation could include all, or portions, of the interior of the building.

T.C.S.C.L. and the City agreed that there should be a restoration and maintenance of the seventh floor of the interior of the building. This was a vitally important factor throughout the negotiations between the City and T.C.S.C.L.

The City of Toronto relied strongly upon the undertaking and commitment of T.C.S.C.L. to restore and maintain the seventh floor. T.C.S.C.L. benefited from this undertaking and commitment both in the form of the permission granted to demolish the College St. wing of the former Eaton's store and in the unreserved confirmation of the increased density awarded to T.C.S.C.L.

Decision of the Divisional Court

The Divisional Court held that the application for a building permit to convert the seventh floor to office space contravened applicable laws. It determined that the application contravened s. 33(1) of the Ontario Heritage Act, which prohibits alterations to a building if they are "likely to affect the reason for the designation" unless such alterations are specifically approved by the municipal council. It found that the reasons for designating the building as one of architectural value were broad enough to include its internal features as well as the external. As a result, the prohibition set out in s. 33(1) of the Ontario Heritage Act applied and the building permit application was thus contrary to that Act. The chief building officer was therefore justified in refusing to issue the building permit.

It was further determined that T.C.S.C.L. was estopped from seeking to convert the seventh floor to office space in light of the assurance it had given to the City that this floor would be preserved and maintained.

Lastly, it was found that the undertaking to preserve and maintain the seventh floor was properly included in the development agreement as "facilities or matters" provided for under s. 35a(2), paras. 11 and 12, of the Planning Act, R.S.O. 1970, c. 349, as amended by 1973, c. 168, s. 10. Although the original by-law authorizing development agreements had been held to be invalid, it was determined that this agreement was reinstated by the Planning Amendment Act, 1979 which, once again, gave it the effect of law. It was also found that the proposed conversion of the seventh floor to office space constituted a development or a redevelopment within the meaning of s. 35a. It was therefore decided that on this basis as well the chief building officer was justified in refusing to issue the building permit in light of its contravention of applicable laws.

The Ontario Heritage Act, its scope and application in light of the facts of this case

Guidance and direction for the interpretation of the Ontario Heritage Act has been provided in the reasons of McIntyre J., speaking for the majority of the Supreme Court of Canada, in Re Trustees of St. Peter's Evangelical Lutheran Church and City of Ottawa (1982), 140 D.L.R. (3d) 577, 14 O.M.B.R. 257, 45 N.R. 271 (S.C.C.). At p. 591 D.L.R., p. 278 N.R., he stated:

> The Ontario Heritage Act, 1974 was enacted to provide for the conservation, protection and preservation of the heritage of Ontario. There is no doubt that the Act provides for and the Legislature intended that municipalities acting under the provisions of the Act, should have wide powers to interfere with individual property rights. It is equally evident, however, that the Legislature recognized that the preservation of Ontario's heritage should be accomplished at

> the cost of the community at large, not at the cost of the individual property owner, and certainly not in total disregard of the property owner's rights.

Further, at p. 593 D.L.R., pp. 280-1 N.R., he put forward the position that the Act was to be interpreted pursuant to the direction of s. 10 of the Ontario Interpretation Act. He wrote:

> The Ontario Courts have adopted the approach dictated by s. 10 of the Interpretation Act and they have construed the statute in the purposive manner. In this they have given effect fully to the avowed purpose of the Ontario Heritage Act, 1974. Accepting the approach so taken, I am not of the view, however, that in an effort to give effect to what is taken to be the purpose of this statute it is open to the court of construction to disregard certain provisions of the Act. The whole Act must be construed.

In that case, the Supreme Court of Canada accepted the position that the provisions of the Ontario Heritage Act, 1974 allowing municipal interference with private property rights should be construed purposively and liberally in order to allow municipalities to effectively preserve Ontario's heritage. On the other hand, the court recognized that there was a counterbalancing need to give equally liberal construction to those provisions of the Ontario Heritage Act, 1974 that were designed to protect the landowner's rights.

It is worth noting that in the case at bar, T.C.S.C.L. has chosen not to take advantage of the provisions of the Ontario Heritage Act designed for the protection of its rights as a landowner. As a result, the interpretation of those provisions of the Ontario Heritage Act is not in issue.

Pursuant to the directions set out in the St. Peter's case, it is appropriate to consider the specific purpose of the Act and its provisions as a whole.

The aim of the Ontario Heritage Act is to conserve, protect and preserve the heritage of Ontario. These aims are to be achieved by the Minister of Culture and Recreation, acting either through the Ontario Heritage Foundation or the advisory committees of municipalities. To achieve its aims the Act must interfere with private property rights. To counterbalance such interference numerous procedural safeguards are enacted for the benefit of the property owner.

Pursuant to the Act, a building may be designated by a municipality to be of historic or architectural value or interest. The designating by-law is then registered against the property. When that is done, the designated property is not to be altered if the alteration is "likely to affect the reason for the designation". By s. 1 of the Act, "alter" is defined as:

> (a) ... to change in any manner and includes to restore, renovate, repair or disturb and "alteration" has a corresponding meaning.

In this case, the property had been designated by by-law as having historical or architectural significance in 1975. It was then essential that the procedures outlined in the Act to either contest the designation or obtain consent to the alterations be followed. No attack was ever made on the designation. Nor did T.C.S.C.L. undertake the review procedure before the conservation review board provided for in Part III of the Act. It was therefore incumbent upon the owner (T.C.S.C.L.) to comply with s. 33 of the Ontario Heritage Act and obtain permission to alter the building. This was done by the owner in 1976.

It is the position of T.C.S.C.L. that the reasons for the designation make it apparent that the by-law refers only to the external features of the building and not to the internal features of the seventh floor. I cannot accept this contention. It is contrary to the wording of the reasons itself and to the very intent and purpose of the Ontario Heritage Act.

In the brief reasons for designation the following sentence appears:

> The building coordinates the finest materials and workmanship

with a scale rarely seen in Canada or in the work of Canadian architects.

Those words are, in my opinion, sufficient to indicate that the interior of the building was affected just as much as the exterior. This conclusion is based upon the wording of the reasons, the manner in which they are drawn and the provisions

of the Ontario Heritage Act pertaining to the reasons for designation.

By s. 27(1), the Act requires that the by-law contain:

(a) a legal description of the designated property;

(b) the name and address of the owner; and

(c) a short statement of the reason for designation of the property.

These reasons will often be drawn by members of the Ontario Heritage Foundation or by the municipality's local advisory committee. Members of these bodies cannot be expected to have either legal training or experience in drafting municipal by-laws. In order to comply with the objects of the Act it is appropriate to give these reasons the same broad interpretation that must be applied to the Act itself.

Section 33(1) of the Ontario Heritage Act reads as follows:

33(1) No owner of property designated under this Part shall

alter the property or permit the alteration of the property where the alteration is likely to affect the reason for the designation as set out in subsection 29(6) or (14), as the case may be, unless he applies to the council and receives consent in writing to make such alteration.

It was earlier indicated that the definition of "alter" and "alteration" is very wide. In addition, the use of the word "likely" in s. 33 requires that the section be given a broad and liberal interpretation. It is a word that denies a narrow approach to the scope of the reasons for the designation.

There are other provisions of the Ontario Heritage Act which indicate that a broad meaning must be attributed to s. 33 and to any "reason for the designation" given pursuant to that section.

For example, s. 30 provides that where a notice of intention to pass a by-law designating a property is served and published under s. 29(3), the provisions of ss. 33 and 34 apply as if the building had already been designated. This section would appear to provide a means of maintaining the status quo so that a building can be preserved until all the requisite investigations and hearings have been completed. If s. 33 were not to be given a wide meaning then the owner of a building served with a s. 30 notice would none the less be at liberty to alter the building and so destroy the architectural or historical features that the municipality was attempting to preserve.

Section 38 of the Act provides for the inspection of designated properties. Subsection (2) reads:

38(2) No person shall obstruct a person authorized to make an investigation under this section or conceal or destroy anything relevant to the subject-matter of the investigation.

This provision would have little significance unless the Act were vitally concerned with the interiors of buildings as well as their exteriors.

Where the Act wishes to restrict its provisions to the exterior of a building, that is made very clear. Section 42 provides:

42. Where a by-law has been passed under section 41, no person shall in the area defined in the by-law erect, demolish or remove any building or structure, or alter the external portions thereof, without a permit therefor issued by the council of the municipality unless,

(a) the by-law has been deemed to be repealed under

subsection 41(8);

(b) the Board has issued an order refusing approval of the by-law; or

(c) in the case of demolition or removal, 180 days have elapsed as provided for in subsection 44(2).

(Emphasis added.)

A reading of the Ontario Heritage Act as a whole makes it clear that s. 33 must be given a wide and liberal interpretation. To do otherwise would frustrate the very purpose and intent of the Act. The property designation can and undoubtedly will often refer to both the interior and the exterior of the designated building. To give such a broad interpretation of the section conforms with the directions given in the St. Peter's case, supra. Nor can such a wide interpretation in any way diminish the rights of the property owner to either contest the "designation" of the building or to pursue the procedures which can be undertaken by an owner as a result of such a designation. Those rights of the property owner are simply not in issue in this case.

Not only should s. 33 of the Ontario Heritage Act be given a wide and liberal interpretation, but so too should the reasons for designation attached to a by-law passed pursuant to that section. It would be illogical to give the statute a wide and purposive interpretation and yet narrowly construe the brief reasons required by the Act for the designation of a building as one of historical or architectural importance.

I therefore agree with the conclusion of the Divisional Court that the reasons attached to the by-law designating the Eaton's College St. building as one of historical and architectural importance are wide enough to include the interior of the building and in fact do include the seventh floor of the interior. It follows that the chief building officer was correct to refuse the application by T.C.S.C.L. for a building permit as the application contravened applicable laws (the Ontario Heritage Act) as provided by s. 6(1) of the Building Code Act, R.S.O. 1980, c. 51. This finding, in itself, is sufficient to require that the appeal be dismissed. However, there are two other matters to which reference should be made. Was the development agreement between T.C.S.C.L. and the City of Toronto within the provisions of s. 35a of the Planning Act as it existed at that time?

It will be remembered that By-law 419-74, which was purportedly enacted by the City of Toronto pursuant to s. 35a of the Planning Act as it then stood, was struck down by the Supreme Court of Canada in the case of Canadian Institute of Public Real Estate Companies et al. v. City of Toronto et al. (1979), 103 D.L.R. (3d) 226, 8 O.M.B.R. 385, [1979] 2 S.C.R. 2. Section 3 of the Planning Amendment Act, 1979, was enacted subsequent to that decision. It provided:

3. Every agreement entered into by a municipality after the 16th day of December, 1973 and before the day that section 35a of The Planning Act, as re-enacted by section 1 of this Act, comes into force, to the extent that the agreement deals with facilities and matters mentioned in subsection 2 of section 35a of The Planning Act as it exists on the day before this Act comes into force, is hereby declared to be valid and binding.

This legislation reinstated only those portions of a development agreement between a developer and municipality that related to the "facilities and matters" mentioned in s-s. (2) of s. 35a of the Planning Act. What are those facilities and matters? They are set out in s. 35a(2) of the Planning Act which read:

35a(2) Where there is an official plan in effect in a municipality, the council of the municipality in a by-law passed under section 35 may, as a condition of development or redevelopment of land or buildings in the municipality or in any defined area or areas thereof, prohibit or require the provision, maintenance and use of the following facilities and matters or any of them and may regulate the maintenance and use of such facilities and matters:

1. Widenings of highways that abut on the land that is being developed or redeveloped.

2. Subject to The Public Transportation and Highway Improvement Act, facilities to provide access to and from the land such as access ramps and curbings including the number, location and size of such facilities and the direction of traffic thereon.

3. Off-street vehicular parking and loading areas and access driveways including the surfacing of such areas and driveways.

4. Walkways and all other means of pedestrian access.

5. Removal of snow from access ramps, driveways, parking areas and walkways.

6. Grading or change in elevation or contour of the land and the disposal of storm, surface and waste water from the land and from any buildings or structures thereon.

7. Conveyance to the municipality, without cost, of easements required for the construction, maintenance or improvement of any existing or newly required watercourses, ditches, land drainage works and sanitary sewerage facilities

on the land.

8. Floodlighting of the land or of any buildings or structures thereon.

9. Walls, fences, hedges, trees, shrubs or other suitable groundcover to provide adequate landscaping of the land or protection to adjoining lands.

10. Vaults, central storage and collection areas and other facilities and enclosures as may be required for the storage of garbage and other waste material.

11. Plans showing the location of all buildings and structures to be erected on the land and the location of the other facilities required by the by-law.

12. Perspective drawings and plans showing building elevations and cross sections of industrial and commercial buildings and residential buildings containing twenty-five or more dwelling units.

The Divisional Court found that the term "facilities and matters" set out in s. 3 of the Planning Amendment Act was sufficiently broad to include the plans of the restoration of the seventh floor of the Eaton's College St. building.

With the greatest respect, I differ from that conclusion. Paragraphs 11 and 12 must refer back to the other 10 items set out in s. 35a(2). None of these items can by any means be extended to encompass the restoration of the seventh floor. In my view, this section of the Planning Amendment Act did not require the developer to even file the plans pertaining to the restoration of the seventh floor.

Nor do I think that the restoration of the seventh floor can be termed either a development or a redevelopment as those words are used in s. 35a(2) of the Planning Act as it then existed. Redevelopment was defined for the purpose of the section as meaning the removal of buildings or structures from land and the construction or erection of other buildings or structures thereon. Development must mean the erection of buildings or structures on land and not a renovation of a particular floor of a building. However, this conclusion does not eliminate the development agreement from all consideration in this case.

In light of the undertaking of T.C.S.C.L. to restore the seventh floor, should the doctrine of estoppel be applied to prevent the developer from resiling from that commitment?

A consideration of this issue must be based on the assumption that, contrary to the conclusion reached earlier, the reasons for the designation are not wide enough to include the interior of the building. I am in complete agreement with the factual conclusions of the Divisional Court that T.C.S.C.L. unequivocally undertook and committed itself to restore the Round Room and Auditorium on the seventh floor of the Eaton's College St. building. There can be no doubt that this

undertaking was important to the City. The City, in reliance upon that undertaking, gave a consent to T.C.S.C.L. to demolish portions of the building on the site; to make exterior alterations to the building and to increase the density on the site. This unequivocal undertaking and assurance given by T.C.S.C.L. was intended to affect and did in fact affect the legal relations between the parties. The assurance was acted upon by the City as the basis for bestowing benefits upon T.C.S.C.L. Ordinarily, an individual to whom such representations had been made and who acted upon them in the manner set out above would be entitled to raise the defence of estoppel.

The principles of estoppel have been most recently considered by the Supreme Court of Canada in Engineered Homes Ltd. v. Mason et al. (1983), 146 D.L.R. (3d) 577, [1983] 1 S.C.R. 641, 47 N.R. 379. McIntyre J., speaking for the court, said at pp. 580-1:

> The requirements of a successful defence based on promissory estoppel are conveniently set out in Halsbury's Laws of England, 4th ed., vol. 16, para. 1514, p. 1017, in these words:
>
> "1514. Promissory estoppel. When one party has, by his words or conduct, made to the other a clear and unequivocal promise of assurance which was intended to affect the legal relations between them and to be acted on accordingly, then, once the other party has taken him at his word and acted on it, the one who gave the promise or assurance cannot afterwards be allowed to revert to their previous legal relations as if no such promise or assurance had been made by him, but he must accept their legal relations subject to the qualification which he himself has so introduced. This doctrine, which is derived from a principle of equity enunciated in 1877, has been the subject of considerable recent development and is still expanding. It differs from estoppel in pais in that the representation relied upon need not be one of present fact."

In Town of Fort Frances v. Boise Cascade Canada Ltd. et al. (1983), 143 D.L.R. (3d) 193 at p. 217, [1983] 1 S.C.R. 171, 46 N.R. 108 at pp. 136-7, Estey J. set out the principle in this way:

> The conditions in which the doctrine of promissory estoppel operates to prevent a party from insisting upon strict legal performance of a contract remain, in some respect, uncertain. It seems clear, however, that the principle which allows a party to raise a promise or representation that was made to him as a defence, is based upon the inequity of allowing the other party to resile from his statement where it has been relied upon to the detriment of the person to whom it was directed ...

The foregoing principles are applicable to individuals. Nevertheless, there remains a question whether the doctrine of estoppel can be invoked by a municipality. To state the obvious, a municipality is a creature of legislature and derives all its powers from statute. Further, it appears that the doctrine of estoppel may not be relied upon if its effect is to allow a municipality to perform an act which would otherwise be ultra vires. Having made that statement, it must be noted that the authorities appear to be conflicting on this issue: see, for example, County of Wentworth v. Hamilton Radial Electric R. Co. et al. (1916), 33 D.L.R. 439, 54 S.C.R. 178, and Rur. Mun. of Portage La Prairie v. Rur. Mun. of Cartier, [1925] 4 D.L.R. 1035, [1925] S.C.R. 691, and, to the contrary, London Street R. W. Co. v. City of London (1904), 3 O.W.R. 123 (C.A.), and St. Michael's College v. City of Toronto, [1926] 2 D.L.R. 244, [1926] S.C.R. 318.

In the case at bar, T.C.S.C.L. seeks to resile from its undertaking set out in the development agreement. Can the City then rely upon the defence of estoppel as against an individual and insist upon T.C.S.C.L. making good on its representations? I think it would be proper for the municipality to do so on the facts of this case.

There is no question that the municipality had the requisite authority pursuant to the provisions of the Ontario Heritage Act to pass a by-law which would designate both the exterior and the interior of a building as having architectural or historical importance. Both parties assumed that the City had

such authority and that it could pass the required by-law. There was no objection raised against the by-law. Indeed, perhaps as a result of the representations, assurances and undertakings of T.C.S.C.L., the City took no further steps to pass an amended by-law or expand the reasons for the designation. In short, T.C.S.C.L. undertook to restore the seventh floor. The City relied upon that undertaking and acted upon it by granting benefits to T.C.S.C.L.

The authorities indicate that in a situation such as is presented in this case a municipality can set up a defence of estoppel against an individual. In Toronto City v. Russell, [1908] A.C. 493, 78 L.J.P.C. 1 (P.C.), the issue was whether or not Russell could attack the sale of his land by the City of Toronto for arrears of taxes on the grounds that proper and requisite notice of the sale had not been given to him. The Privy Council found for the municipality and Lord Atkinson stated as follows at p. 501 (A.C.):

> There is no evidence to shew that the plaintiff up to a short time before bringing this action, ever complained that he had not received the notice which his counsel now insist was a condition precedent to a valid sale, or that the sale was invalid for any reason. On the contrary, he treated the sale as valid, but mistook the effect of it on his right to redeem. Their Lordships think that, in the absence of all explanation by the plaintiff other than that given in his evidence on discovery, the legitimate inference to be drawn is that he consented to dispense with this notice--that is, he waived it.

Although the term "waived" was used, it was synonymous with the concept of "estoppel". For example, in Estoppel by Representation by Spencer Bower and Turner at pp. 319-20 the following appears:

> The truth is, perhaps, that whereas a fairly successful attempt may be made to state with precision what is meant by "estoppel" and by "election", the term "waiver" when used in a similar connotation is not capable of exact definition in the light of the authorities. Possibly it may be regarded as usefully describing an end result; but its application to the process by which that result is brought about is almost invariably attended with ambiguity as to the essential nature of that process. The term when so employed is used sometimes in one significance and sometimes in another, and the result is that its use has dangers which may be avoided only by foregoing it as a useful term when considering either estoppel or election.

That the concepts of estoppel and waiver may sometimes be synonymous is also illustrated by Ex parte Lewin (1885), 11 S.C.R. 484 at pp. 492-3.

In Municipality of Delta v. Wilson (1911), 17 W.L.R. 680 (B.C.C.A.); affirmed 22 W.L.R. 931 (P.C.), an action was brought by the Municipality of Delta to recover dyking dues. The defendant counterclaimed alleging that the by-law under which the dyke was constructed was illegal and claimed damages for trespass. Macdonald C.J.A. made reference to the doctrine of estoppel in these circumstances at pp. 684-5 where he stated:

> Under these circumstances, I do not think it is now open to the appellant to complain either of trespass or damages resulting from the construction of the works. It is not necessary to hold that he acquiesced in the want of formality in the passage of the by-law, though, I think, by his laches he has disentitled himself to attack it. It is sufficient if he can properly be held to have consented to or acquiesced in the carrying out of the undertaking in the manner in which it was carried out. Such acquiescence I regard as an answer to any claim for trespass or damages resulting naturally from the construction or the mode of construction of the dyke and ditch. The appellant's complaint, when sifted down, comes to this, that he does not receive as great a benefit from the ditch, with dams, boxes, and flood-gates in it, as he would have received had it been a continuous ditch; that he is not able to drain his lands as effectually as if the ditch had been a continuous one.

It was argued that the doctrine of estoppel is inapplicable to cases where statutory requirements have not been complied with, and the dictum of Chief Justice Strong in Township of

McKillop v. Township of Logan, 29 S.C.R. 702, is relied upon for this proposition. I think that contention cannot be given effect to, in view of the decision of the Privy Council in Toronto City v. Russell ...

The Privy Council dismissed the appeal brought by Wilson and commented upon "the disastrous consequences which would ensue if the validity of a by-law of this type could be challenged long after action had been taken upon it" (p. 936). That statement could appropriately be made with regard to the attack brought by T.C.S.C.L. upon the by-law in this case.

In summary, it was at all times within the general competence of the City to adopt reasons for the designation of the building that would make it clear that the interior was affected as well as the exterior. T.C.S.C.L. gave an undertaking to restore the seventh floor. The City relied and acted upon the undertaking. In those circumstances, T.C.S.C.L. can and should be estopped from attacking the validity of the City's by-law even if in its present form it should be considered to be inadequate to pertain to the interior of the College St. building.

In the result, I would dismiss the appeal with costs.

Appeal dismissed.

(1986) 33 M.P.L.R. 177 (OMB)

Re: **Toronto OPA 333** - Excerpt from Page 230:

D. ENVIRONMENTAL ISSUES

Early in the hearing, after hearing the evidence of only one witness, the Board heard a motion from STOP requesting the Board to find that it did not have jurisdiction to approve OPA 333. STOP contended that no approvals could be given by the Board until an environmental assessment had been carried out, and the rights of interested parties in respect of such an assessment had been exhausted. After hearing submissions from the various parties at the hearing, the Board dismissed the motion for the reasons given in its oral decision attached to this decision as App. "D". STOP's counsel then informed the Board that STOP was seeking a judicial review of the Board decision, and asked to be excused from the Board hearing, explaining that STOP did not have adequate funds to be represented in two places at one time and that STOP had decided to use its funds for legal counsel in connection with the Court proceedings rather than at the Board. Some five weeks later the Court upheld the Board's decision, and counsel for STOP once again took an active part in the hearing.

[An Application for Judicial Review of the decision set out below was dismissed with costs to the City and Stadium Corp. Callahan, ACJHC, Reid, J., and Boland, J.'s judgment stated "We see no error in the reasons of the Ontario Municipal Board… The Court File in the matter was #698/86.]

33 M.P.L.R. 177 Re: Toronto OPA 333 Excerpt from Page 305 et seq::

APPENDIX D

MEMORANDUM OF ORAL DECISION delivered by H.E. STEWART, P.G. WILKES and P.H. HOWDEN on June 13, 1986

The Board has before it a motion brought on behalf of Save Toronto's Official Plan Inc. (hereinafter referred to as STOP) during the course of a hearing resulting from the referral by the Minister of Municipal Affairs to this Board of OPA 333 and appeals from the City's enactment of certain bylaws which purport to implement the official plan amendment. These by-laws and OPA 333 were adopted by the City of Toronto in respect of lands comprising a p proximately 200 acres south of Front Street, referred to as the Railway Lands.

The motion requests the Board to find that it does not have jurisdiction to approve OPA 333. It further requests the Board to allow the appeals with respect to By-laws 611-85, 612-85 and 204-86.

Mr. Makuch, counsel for STOP, submitted that by s. 5(1) of the Environmental Assessment Act, R.S.O. 1980, c. 140, an environmental assessment as defined in this Act is required respecting the provision of infrastructure required for the development of the Railway Lands, including roads, parks, sewer services and bridges. He further submitted that, by operation of s. 6 of the Environmental Assessment Act, no approval can be given by this Board to the matters before it until an environmental assessment has been provided as required by the Act and the rights of interested parties in respect of such environmental assessment under that Act have been exhausted.

He concluded that the hearing should not proceed until the process under the Environmental Assessment Act has been completed, or in the alternative until the Board's jurisdiction is determined by way of a stated case to a court of competent jurisdiction.

Mr. Makuch stated that in order for the motion to succeed it must meet three tests:

(1) that there is before the Board a plan or program in respect of an enterprise or activity by a municipality;

(2) that there are serious environmental concerns and serious

concerns over the process to be followed to deal with environmental issues, and

(3) that the undertaking is not exempted by the regulations issued under the Environmental Assessment Act.

In respect of his first test, he referred the Board to the following sections of the Environmental Assessment Act: Ss. 1(kJ, 1 (o), 3 and 5. Section 1(o) defines an "undertaking" to include an enterprise or activity or a proposal, plan or program in respect of an enterprise or activity by a municipality". Section 1(k) defines a "proponent" as one who "(i) carries out or proposes to carry out an undertaking, or (ii) is the owner or person having charge, management or control of an undertaking

The relevant portion of s. 3 provides that the Environmental Assessment Act applies to "(a) .... proposals, plans or programs in respect of enterprises or activities by a municipality or municipalities ...

As the Board understands Mr. Makuch's argument, it follows then by operation of s. 5 that if the municipality is the proponent of a plan in respect of an enterprise or activity to provide developmental infrastructure such as parks, roads, and services to which the Act applies, it must submit an environmental assessment to the Minister of the Environment before the undertaking (which includes a plan for same) is proceeded with.

The Board has considered all of the submissions of counsel on this point. It further has considered the purpose of the Environmental Assessment Act as expressed in s. 2, and is fully cognizant of the importance of the issues to which that Act addresses itself. The Board, in view of the statement of purpose in s. 2, agrees that its provisions should be given a liberal interpretation bearing in mind the purposes which it seeks to achieve. However, it must be determined on the facts before us whether this plan for provision of infrastructure falls within the purview of the Act.

To demonstrate that the City is the proponent of a p lan to provide infrastructure, Mr. Makuch referred to three documents:

(i) OPA 333, Section 11 of which, sets out the requirements to be met when the City considers the removal of the holding provision of the proposed zoning by-law for the various areas of the Railway Lands (referred to as "precincts");

(ii) the Memorandum of Conditions agreed to by principal holders of title interests in the Railway Lands, being Canadian National Railway Company and Marathon Realty Co. Ltd. and,
(iii) the Precinct Agreement entered into in respect of Precinct A (known as the Stadium Precinct) by the City and CN.

The latter precinct is said to be the only one of the 13 precincts of the Railway Lands for which a precinct agreement as defined and provided for in s. 11 of OPA 333 has been executed as of this date. The statutory authority relied upon by the City for this mode of development control is the City of Toronto Act 1971, s. 16, as amended.

The Board has considered all of the provisions of these documents referred to by counsel on the issue of whether they indicate that the City is the proponent as defined in s. 1(k). Without exception, these provisions indicate that the land owner or principal tenant (in the case of Precinct A that party being CN) is responsible for, owns, manages and controls the works during their design and construction until, if ever, such works are assumed by the City. For Precinct A, CN is responsible for the design and construction of all infrastructure including any decisions as to when it is to be designed and constructed. If CN chooses not to proceed with such designated construction and does nothing, then no infrastructure would be provided.

The documents indicate that the City's role is to set the quality standards which the infrastructure is to meet, and in some instances to determine the order in which work is carried out in order to avoid, for instance, the serious repercussions which could arise if services are not ready when required. By s. 3.01 of the Precinct A agreement, the City and CN agree that .... CN shall have the overall responsibility for the design and construction of all infrastructure provide d that all such

design and construction shall be carried out in accordance with the provisions hereof", and that any approval by the City does not release CN of its responsibility for ensuring that the design and construction conforms to certain approved standards. Mr. Makuch referred to s. 3.03 which sets out the standards of construction. The only provision referred to the Board which mentions a timing control for the provision of infrastructure relates to those elements which should be ready to serve the proposed Stadium on opening day, and that provision expressly states that the parties are not bound to meet a set deadline. Failure to provide the elements set out in s. 5.01 by opening day affects whether the Stadium will open and whether other portions of the precinct would proceed. However, if CN for some reason decides not to provide the required infrastructure, there is nothing in the agreement that would allow the City to force CN to bring it about. CN is to construct the streets and parks, and s. 3.11(5) of the Precinct A agreement states that until the City assumes them, CN is not obliged to allow them to be used by the public. Similar provisions apply to the sewer services, sidewalks, intersections and plantings. As all other precinct plans are to follow the procedures set out in s. 11 of OPA 333, it appears that other precinct agreements are to follow the same form in respect of provision of infrastructure. From all of the above, the Board finds that the City's role in these matters is to assure that the work is of a certain quality and uniformity and in some cases to direct the sequencing of events but not to pre-empt the management and control responsibilities of the precinct developer.

As a consequence of the above finding, the Board concludes that the City is not a proponent of the provision of infrastructure as defined in s. 1(k) of the Environmental Assessment Act. We further find that the proposed provision of infrastructure cannot be said to be an enterprise or activity by a municipality to which the Act applies, and therefore the obligation to submit an environmental assessment as required by s. 5 of the Environmental Assessment Act does not arise. Accordingly, the Board finds that in regard to s. 6, the Board is not precluded from approving OPA 333 or dealing with the by-law appeals.

Further, it should be noted that s. 6 forbids the issuance of an approval that is required "in order to proceed with the undertaking". If the undertaking is, as Mr. Makuch has defined it, a plan for the provision of infrastructure, there appears to be no answer to Mr. Leibel's submission that approval of the official plan amendment is not required in order to proceed with such infrastructure.

In view of its findings, the Board does not deem it necessary to deal with the submissions respecting Mr. Makuch's third test, whether the undertaking is exempted from the provisions of the Environmental Assessment Act by the regulation made thereunder.

Mr. Makuch also dealt with certain issues which do not have a direct bearing on the question of jurisdiction. These issues fall under the general heading of the second of his three tests, and are set out below.

First, he feels that it is important to emphasize the fact that there are several significant environmental issues that have already been identified and that must be resolved before any development takes place.

Secondly, he is concerned about the process set out in the documents for resolving environmental issues, particularly as such a process relates to the lack of opportunity for public participation over time.

Finally, he feels that the recent proposed modification to OPA 333 which would permit Metro to bring disputed matters before the Municipal Board is an improper delegation of power, and of questionable value in resolving environmental issues.

While none of these submissions of Mr. Makuch bears directly on the question of jurisdiction, such submissions having been heard at this stage of the hearing, the Board makes the following comments with regard to them.

There seems to be implicit in Mr. Makuch's remarks a concern that the Municipal Board will be unable to carry out its responsibilities in dealing with environmental issues, and issues relating to process.

At this stage in the proceedings the Board has no reason to share this concern.

As Mr. McQuaid points out, we have heard no expert evidence in connection with environmental issues; nor submissions from the City or others in this regard. We have not heard submissions from the Cit y or Metro as to the merits of any proposed modification to OPA 333. Asa consequence, we are unable to give consideration of any substance to these matters at this time.

We would like to assure all parties that this Board intends to give full consideration to all matters of environmental concern and process in accordance with the Board statutory obligations, including those set out in s. 2 of the Planning Act.

As a final point, the Board notes that nothing in this decision regarding jurisdiction will preclude the carrying out of an environmental assessment under the Environmental Assessment Act should such be required of a proponent of a future undertaking on the Railway Lands. in saying this the Board notes, for example, that Metro could be such a proponent in instances where it is not otherwise exempt under the provisions of Reg. 293 of the Act.

As to Mr. Makuch's suggestion that the Board should state a case to the Courts, the Board has concluded from the submissions of all counsel that such action would not be appropriate or necessary in this instance.

F or the foregoing reasons, the motion brought on behalf of STOP will be dismissed.

RE CORPORATION OF THE CITY OF **TORONTO**
and P & M CONSTRUCTION LIMITED et al.
Ontario Supreme Court (High Court of Justice],
Robins J.

Judgment—February 2, 1981.
(1981) 16 M.P.L.R. 85

ACTION for an order requiring removal of kitchenette facilities installed in contravention of by-law and Building Code.

D. Leibson, for plaintiff.
H.M Pomerantz, for defendant P & M Construction Limited.

February 2, 1981. ROBINS J.:—This action is brought by the corporation of the City of Toronto against P & M Construction Limited, the owner of premises municipally known as 17 Edgewood Avenue, Toronto. This dispute involves the use of these premises in such a way as to permit culinary facilities therein.

17 Edgewood Avenue is a three story and basement detached building of brick construction. In the basement, there is a superintendent's suite composed of a bedroom, livingroom, kitchen and three piece bathroom. The basement also has four bed-sitting rooms, each equipped with a kitchenette facility consisting of a hot plate, sink and refrigerator, and each having a three piece bathroom.

On the first floor, there are eight bed-sitting rooms, each equipped with a kitchenette facility of a hot plate, sink and refrigerator, with a sitting area and a three piece bathroom. On the second floor there are eight similar bed-sitting rooms and on the third floor there are eight more such bed-sitting rooms, each equipped with the same kitchenette facilities.

These dwelling units are occupied by monthly or bi-monthly tenants. To the rear of the premises there is a vacant area with an unimproved surface measuring *54'* by *105'*. That area is accessible by a ravine to the north of the premises but there is no access from the street over which the defendant has ownership or control.

It appears that the defendant was confronted with a problem in building on the lands upon which the building in question is located in that they were partially in a R4Z3 Zone and partially in a R2Z2 Zone. To permit construction of a "detached lodging house" the defendant in 1975 brought application before the Committee of Adjustment for a variance of the zoning by-law to permit construction of premises described as a "detached lodging house" and more particularly as shown on plans and specifications filed with the committee.

The committee decided that in the circumstances the request of the applicant was reasonable and should succeed. It found that it was within its jurisdiction to allow the proposed lodging house to be constructed, but imposed as a condition that an area of not less than 45 sq. feet be occupied by a bona fide owner or a superintendent of the building.

Pursuant to the decision of the Committee of Adjustment, the defendant in the normal course made application to the City of Toronto for a building permit and filed detailed plans indicating the specifications of the proposed lodging house to be constructed. Those plans have been submitted to me as Ex. 5. It is clear that there is nothing in them indicating any kitchenette facilities in the rooms of the building other, of course, than in the area to be occupied by the superintendent or owner in accordance with the Committee of Adjustment's decision.

The premises were commenced in 1975 and completed in the spring of 1976. As part of the original construction, and contrary to the plans and specifications it had submitted, the defendant installed such piping as necessary for the installation of kitchen sinks and roughed-in waste pipes and vents. An inspector from the building department of the city inspected the premises and according to his evidence, recognized that that portion of the work was not in accordance with the permit and so reported to his superiors.

I am satisfied that the defendant knew that that work was not in compliance with the plans and specifications and undoubtedly proceeded in the hope that the changes would either be ignored by the city or subsequent approval would be obtained. In any event, the building was completed. A plumbing permit, subsequently applied for, did not include the piping necessary for kitchen sinks in the bed-sitting rooms.

After completion, the owner, according to the evidence given by him, encountered some difficulty in renting the rooms without any kitchenette facilities. In order to make them more rentable a unit containing a kitchen sink, a refrigerator and two hot plate elements was installed. This is a compact type of unit often used in small apartment facilities. The city takes objection to those units and has brought this action to compel their removal. Subsequently, that is after completion of the premises when the problem had become manifest, the defendant made application to both the city and to the Committee of Adjustment for relief but without success.

I should note that the premises also do not conform to the city

zoning by-law which requires one parking space for each dwelling unit where the defendant is obviously unable to provide.

An application to permit the kitchenette facilities after they had been installed, as I have said, was made to the city in October 1977. No response was received from the city save such as can readily be implied by the city's issuance of the writ in this action on January 2 1st, l978.

In sum, the defendant is operating a building with kitchenette facilities in each and every room when such facilities were not provided for in the plans submitted to and approved by the city. The defendant is also operating these premises without the necessary parking facilities.

In my view there can be no question on the evidence but that there has been a breach of the pertinent civic by-law and a breach of The Building Code Act, 1974 (Ont.), c. 74.1 make reference to s. 5 [re-en. 1978, c. 40, s. 2(1)] of that Act which provides that no person shall construct a building unless a permit has been issued therefore by the chief official and subs. 5 [en. 1978, c. 40, s. 3] of s. 6, whereby no person shall construct or cause to be constructed a building in a municipality except in accordance with the plans, specifications, documents and other information on the basis on which a permit was issued and any changes thereto authorized by the chief official. The changes to the plans here were not authorized to the knowledge of the defendant and accordingly the defendant is in breach of that legislation.

There is similar provision in the city by-law. Clearly a builder is obliged to build in accordance with the plans submitted. That is not the case here. I am satisfied also that these living facilities constitute "dwelling units" within the meaning of the city by-law. A "dwelling unit" is intended to include a room designed or intended for the use of one or more persons as living accommodations in which "culinary and sanitary conveniences are provided" for the exclusive use of such person or persons. The sanitary conveniences are clearly provided for here and there is no objection to them, they were included in the original plans. Culinary conveniences, giving the term culinary its ordinary dictionary meaning, are conveniences pertaining to the kitchen or cooking and involving the processes of cooking. The facilities which were to be erected under the plans filed and pursuant to the decision of the Committee of Adjustment made no provision for that type of convenience. By adding that the defendant acted in violation of the legislation and having regard to its obligation to comply with the building permit has also operated premises in a manner contrary to the relevant bylaws. The installation of those facilities required the defendant to provide parking space which he cannot and has not done.

The city does not take the position that if the culinary facilities are removed there is any obligation on the defendant to provide parking. Evidently there have been some changes in the by-law since the original application to the Committee of Adjustment and the issuance of the permit, and the city does not contend that there would be any breach of the by-law if the cooking facilities were removed.

In these circumstances I see no alternative but to require the defendant to bring its building into conformity with the plans which it submitted and in sum and substance to thereby make it the building contemplated by the plans and specifications. To do that it is necessary to require the removal of all kitchenette facilities, that is, the hot plates, kitchen sinks and refrigerators, and also the connections and installations related thereto, from all bed-sitting rooms at No. 17 Edgewood Avenue.

In the course of argument, Mr. Pomerantz indicated to me that he wishes to make a further attempt to have the city agree to some proposal which would be mutually satisfactory to both parties and which would eliminate the necessity of ripping out all of the kitchen units in issue which in his submission would result in unnecessary waste. Obviously, counsel for the city is not in a position to deal with that request. It is a matter which would have to be dealt with by the appropriate city authorities. It appears to me that in all of the circumstances in this matter, and particularly having regard to the time which has elapsed that no one will be prejudiced and no harm will befall the city if an appropriate period is granted to the defendant to make whatever further representations it wishes to eliminate the necessity of enforcing the order which I am obliged to make in these proceedings.

As I have already said, I am satisfied that there has been a breach of the law and the defendant must remove the kitchenette facilities. My order will be stayed until September 1, 1981.

In the result an order will go requiring the defendants, their servants, agents, successors and assigns to remove all kitchenette facilities composed of a hot plate, kitchen sink and refrigerator and all facilities, connections and installations related thereto from all bed-sitting rooms at No. 17 Edgewood Avenue, save and except the one apartment in which such facilities are permitted and included in the plans and specifications.

I see no reason why costs should not follow the event here.

Order accordingly.

Re **Trivest Developments Ltd**. et al. and City of Toronto

(1986), 57 O.R. (2d) 799
[1986] O.J. No. 1040

Ontario
Court of Appeal
Dubin, Blair and Thorson JJ.A.
October 20, 1986

NOTE: An appeal from the judgment of Smith J. of the High Court of Justice, reported at (1986), 54 O.R. (2d) 728 (H.C.J.) was dismissed with costs, the result of the appeal being reflected in the catchlines. The decision of the court endorsed on the appeal record was as follows:

The narrow issue before Mr. Justice Smith was whether, on the agreed facts, the work proposed to be performed by the respondents within the residential property required a demolition permit. We find no error in the approach taken by Mr. Justice Smith to the resolution of this issue. In our opinion, the Building Code Act, R.S.O. 1980, c. 51, and the Planning Act, 1983 (Ont.), c. 1, are not statutes in pari materia in so far as the meaning to be given to the word "demolition" is concerned, and the judge below did not err in looking to the different purposes served by the legislative provisions here in question. We therefore agree with his conclusion that the proposed work, if proceeded with, would not constitute a demolition of the residential property or any part thereof, so as to require a demolition permit.

It is further to be observed that the council of the City of Toronto acted beyond the scope of the authority given to it by the City of Toronto Act, 1984 (Ont.), c. Pr6, when it refused a demolition permit for a period of 365 days. The discretion given to it in this regard was limited to situations where a new building is to be erected in place of the building to be demolished, which was not this case. Because, however, we have concluded that what the respondent proposed would not, in any event, amount to a "demolition", this is not an appropriate case for remitting the matter to the council for its reconsideration.

The appeal is therefore dismissed with costs against both the appellant city and the intervenors. However, the costs will be as of one appeal since we do not consider that a hearing of a cross-appeal in support of the main appeal was necessary on the grounds advanced.

M.J. Winer, Q.C., and T. Yao, for appellant.
Y.J. Hamlin, for respondent.
J. De Klerk and S. Bennett, for intervenors.

Trucena Properties Ltd. v. Toronto(City) Chief Building Official

IN THE MATTER OF The Building Code Act, R.S.O. 1980, c. 51

Between
Trucena Properties Limited, Applicant, and
Michael L. Nixon, Chief Building Official for the City of Toronto, Respondent

Ontario Judgments: [1989] O.J. No. 474
Action No. M165501/88

Ontario District Court - York Judicial District
Toronto, Ontario
Sheard D.C.J.
Heard: December 12, 13 and 15, 1988
Judgment: March 9, 1989

Michael S. Steinberg, for the Applicant.
Andrew Weretelnyk, for the Respondent.

SHEARD D.C.J.:-- This is an application under subsections 15(1) and 15(3) of the Building Code Act, R.S.O. 1980, c. 51, made in consequence of the refusal of an official of the Toronto Buildings Department to accept an application for a building permit.

The applicant Trucena is the owner of a parcel of land in the City of Toronto, municipally known as 2 Small Street, which it bought in July, 1987. In October, 1987, Trucena retained a land-use planning firm and architects to proceed with plans to construct an eight-storey mixed industrial use building on the Small Street site. In November, 1987, an interim control by-law, No. 780-87, was enacted by the City of Toronto, which limited the uses permitted for the area that included Small Street. Trucena's proposed use was planned to comply with this by-law.

On February 11, 1988, Trucena's architects submitted a Preliminary Review Application to the Toronto Department of Buildings and Inspections. This showed the use and size of the proposed building and included preliminary design drawings. This material was examined by David Finbow, a plan examiner employed in the office of the chief building official, Mr. Nixon.

In light of his perusal of the Preliminary Review material, Mr. Finbow completed a form which set out items of non-compliance with zoning requirements. This form was delivered by Mr. Finbow to representatives of Trucena's architects and planners at a meeting on March 22, 1988. At that meeting Mr. Finbow also said that a building permit application would be premature until the proposed site plan had been approved by the Land Use Committee and that no building permit would be issued until a site plan agreement had been registered on title.

Notwithstanding Mr. Finbow's discouraging statement of what he describes as the policy of the buildings department, Trucena's architects, on April 15, 1988, attended at the buildings department with architectural and other drawings to submit an application for a building permit. This material was refused, for the aforementioned reason that land use (site plan) approval was required before applying for a building permit.

The following day, April 16, a notice appeared in the Globe and Mail of a public meeting pursuant to the Planning Act to consider amendments to the Official Plan and Zoning By-law, to be held May 18.

The proposed amendments included a substantial downzoning of density: from 7 times to 3 times lot area. The effect of this reduction, if applicable, would be the abandonment of Trucena's proposed project. Trucena decided that the most prudent course of action it could take was to attend at the meeting to ask for exemption from the revised by-law if it were adopted. At the meeting the new proposals were approved without change and sent on to City Council for its meeting June 13. Trucena's request for exemption was heard at the May 18 meeting but Trucena decided afterwards to launch this application (which was issued

on May 27) without waiting for Council's response. On June 17, 1988, the Toronto City Council passed By-law 527-88, being Official Plan Amendment No. 463, and By-law 528-88, being a zoning by-law, which by-laws, among other things, implemented the reduction in density proposal. An appeal by Trucena has been taken to the Ontario Municipal Board as to both by-laws.

On April 15, although the building department refused to accept the application for a building permit, it did accept an application for approval by City Council of plans and drawings to be submitted within an area of site control. On May 9 a report was prepared setting out six reasons why the proposed development did not comply with the zoning by-law.

The most conspicuous of the several issues involved in this application is the question of whether the respondent properly refused to accept and process Trucena's application for a building permit.

The Building Code Act provides:

5(1) No person shall construct or demolish or cause to be constructed or demolished a building in a Municipality unless a permit has been issued therefor by the Chief Official.

6(1) The chief official shall issue a permit except where,

(a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law.

(b) [NOT RELEVANT]

(c) the application therefor is incomplete or any fees due are unpaid.

As has been mentioned the reason the building permit application was not accepted was that it was premature; that it was necessary first for site plan approval to be obtained. Site plan approval has its statutory authority in Section 40 of the Planning Act, S.0. 1983.

It is argued for the respondent that site plan approval is "other applicable law" within the meaning of s. 6(1) of the Building Code Act. The extension of that argument is that prior site plan approval was a necessary precondition for issuance of a building permit.

That very point was considered by my brother Matlow in Re Revenue Properties Co. Ltd. and Corporation of the City of Toronto et al (1984), 26 M.P.L.R. 165. He expressed the view (p. 170) that "Although it may be desirable and more expeditious that site plan approval be obtained before the issuance of a building permit in order to eliminate the need for further amendments to the building permit that might become necessary to satisfy the conditions of the granting of site plan approval, this potential difficulty does not persuade me that the legislation requires site plan approval as a precondition for the issuance of a building permit."

I appreciate that there are different views expressed on the subject by other judges and that there is no judgment that is binding upon the court of which I am a member. In my opinion, and in accordance with the views expressed by Judge Matlow, site plan approval pursuant to s. 40 of the Planning Act, 1983, is not "other applicable law" within the meaning of s. 6(1) of the Building Code Act.

It accordingly follows that I find that the chief building official (acting through his appropriate representatives) should not have refused to accept for perusal the application for a building permit, and the material tendered in support, on April 15, 1988.

It is argued by the respondent that in any event the material supplied by the applicant for the building permit was deficient.

Reference has been made to six items mentioned in Mr. Finbow's letter of May 9, 1988. These items of concern to Mr. Finbow were all complied with, according to the evidence Mr. Finbow gave on his cross-examination on his affidavit sworn September 30 (transcript page 22, Q. 94).

Further issues were raised by Stephen Matusek, a professional engineer and manager of the east team in the plan examination division in the office of the chief building official. These are referred to in Mr. Matusek's affidavit (at pages 65 and 66 of the supplementary record) and responded to in the affidavit of Richard Francis Taylor (at pages 73 to 76, the supplementary record).

Mr. Steinberg puts reliance on the "substantial compliance" principle that is to be found in such cases as Re 261532 Development Corp. Ltd. et al. and City of Toronto et al. (1974), 4 0.R. (2d) 614 and Re Triforce Construction Ltd. et al. and City of Toronto et al. (1974), 4 0.R. (2d) 729, judgments of the Divisional Court.

In the latter case Pennell, J. puts it this way (at p. 734):

> As a first principle, the applicants must establish a prima facie right to a permit based upon compliance with the building by-laws that have been approved by the municipal board. Time was when the Court confined the prima facie right to strict compliance. Immersed in the progress of the law, the rule to that effect yielded to "substantial compliance" : Re David Gallo Building Co. Ltd. and City of Toronto et al, [1973] 3 0.R. 892, 38 D.L.R. (3d) 536, Re Bismark Holdings Ltd. et al and City of Toronto et al. [1973] 3 0.R. 887, 38 D.L.R. (3d) 531; Re Cogan et al. and City of Toronto (1974), 3 0.R. (2d) 661, 46 D.L.R. (3d) 481.

On the material that is before me it would appear that the application is substantially in order. Ultimate compliance with applicable by-laws and related requirements must be achieved, but the relief asked for in the application to this Court should not be refused, for reasons of insufficiency, since it appears that Trucena has substantially complied with the requirements for a building permit.

In the argument that was presented so ably by both counsel, a major issue involved the intepretation to be placed on subsection 15(3) of the Building Code Act:

> 15(3) Where an application is made to a judge for a hearing under subsection (1), the judge shall appoint a time for and hold the hearing and may rescind or affirm the order or decision of the inspector or chief official or take such action as the judge considers the inspector or chief official ought to take in accordance with this Act and the regulations, and for such purposes the judge may substitute his opinion for that of the inspector or chief official.

The question is, on an appeal to a judge from a decision of the chief inspector, should the judge look at the matter as it stands at the date of the appeal hearing, or as it was when the decision was made by the chief official.

Here, the downzoning By-law 528-88 has been enacted, about two months after the refusal of the chief official which is the subject of this application. If that by-law is applicable to the decision, the applicant must fail since the by-law drastically reduces the ground coverage from 7 times to 3 times, and the applicant's drawings and other material would be grossly inappropriate.

The judgment of the Divisional Court in Woodglen & Co. Ltd. v. Corporation of the City of North York et al. (1984), 26 M.P.L.R. 40 is the highest authority, thus far, on the point. There, Southey, J. says (at p. 46):

> The powers of the County Court Judge hearing an application under s. 15 are limited by subs. (3). The Judge "may rescind or affirm the order or decision of the inspector or chief official or take such action as the Judge considers the inspector or chief official ought to take in accordance with this Act and the regulations." The duty of the Judge under this subsection is to do what the Judge considers the inspector or chief official ought to have done. (My emphasis.)

Mr. Weretelnyk notes that s. 15(3) speaks in the present tense, compared to the past tense used in the extract from Woodglen quoted above, and argues that that statement by Southey, J. in any case is obiter.

With due respect to Mr. Weretelnyk's submissions I consider that I am bound by the judgment in the Woodglen case on this point. In my opinion it was essential to the decision reached and the apparent difference in tense is simply interpretive of the subsection.

Accordingly the subsequent enactment of By-law 528-88 must be ignored since it did not exist when the Chief Official made the decision which gave rise to this application.

As to extending the time for making this application, I am satisfied that there are prima facie grounds for granting relief to the applicant and that there are reasonable grounds for applying for an extension. To have complied with subsection 15(1) this application should have been made within twenty days from April 15, that is by May 5, 1988. It was not in fact made until May 27. No prejudice to the respondent has resulted.

Pursuant to subsection 15(5) the time for making the application is extended to the date when it was in fact made.

Mr. Steinberg indicated that he would be content with an order in similar form to the order made by Judge Matlow and in the Revenue Properties case. I think that form of order is appropriate here, with some variation.

There shall accordingly be an order as follows:

(1) extending the time for bringing the application to May 27, 1988.

(2) requiring the chief official of the City of Toronto to accept the application of the applicant for a building permit on the lands municipally known as 2 Small Street, Toronto, and within thirty days thereafter to issue a building permit unless the refusal can be justified under s. 6 of the Building Code Act and in accordance with these reasons. The application for the building permit shall be dealt with as though it had been received on April 15, 1988.

(3) awarding the costs of this application to the applicant.

If further time is required, beyond the aforementioned thirty days, or if the building permit is refused on grounds that are disputed by the applicant, the parties shall be at liberty to make further application to this Court in the context of the present application.

SHEARD D.C.J.

Re **Turnbull and Village of Bayfield** et al.

47 O.R. (2d) 694

ONTARIO
HURON COUNTY COURT
CARTER CO. CT. J.
29TH AUGUST 1984.

APPLICATION for an order directing the issuance of a building permit.

Ian C. Wallace, for applicant.

Douglas G. Dawson, for respondents.

CARTER CO. CT. J.:-- This is an application for a hearing and appeal brought pursuant to s. 15 of the Building Code Act, R.S.O. 1980, c. 51.

On June 10, 1983, the applicant, through his agent, applied to the respondent municipality for a building permit to erect a single-family residence on the lands more particularly described in the style of cause herein.

On June 21, 1983, the clerk-treasurer of the respondent municipality returned the application to the applicant's agent with a letter reading as follows:

> We return herewith the application submitted on behalf of A. Turnbull as it was deferred by the Council of the Village of Bayfield pending their legal advice on the ownership of the proposed site. The matters raised by the Bayfield Ausable Conservation authority will have to be addressed as well.

The "matter raised" by the Bayfield Ausable Conservation Authority refers to certain concerns that authority had communicated to the applicant and respondent on June 20, 1983, indicating that, if such concerns were overcome by the applicant, it would approve a fill and construction application submitted to it by the applicant.

The applicant originally launched this application on January 10, 1984, before the presiding judge of the County of Middlesex, and on March 1, 1984, The Honourable Judge Flinn transferred the application to this county -- the lands in question being located in this county. On June 5, 1984, the applicant obtained an order from this court (on consent of the respondent) extending the time within which this application should be brought, as required by s. 15(1) and (5) of the Building Code Act.

At the outset of the hearing before me the applicant launched a preliminary motion that the objection of the respondent be confined to those set out in the letter of June 21, 1983, to which I have referred, and not include other objections raised by the respondent after this application had been commenced, that is to say, on the basis of alleged breaches of the land-use by-law, contravention of existing zoning as to access and set-back requirements, and contemplated expropriation proceedings.

I reserved on that preliminary motion and heard evidence and argument on all aspects of the matter.

Notwithstanding the British Columbia case Re Homfray and Building Inspector of City of Kamloops (1933), 46 B.C.R. 475, wherein Fisher J. held the municipality was limited to the grounds of refusal set out by the building inspector and not other grounds, I am of the opinion that the preliminary motion should fail, as I consider the clerk-treasurer's letter in the instant case not a refusal of the building permit but a deferral of its consideration by the village council pending resolution of two specific issues. That being so, I can see no reason why, when the matter came on for consideration by the village council, other grounds of objection may not be raised.

In Re Ormerod et al. and Township of Ancaster et al., [1971] 3 O.R. 729, 21 D.L.R. (3d) 541, and in R. v. Toronto; Ex p. 94 Crescent Rd. Ltd., [1961] O.W.N. 129, subsequent objections by the municipalities concerned were given effect to by the court.

I may add that unlike Gale J. (as he then was) in Re Skyway

Drive-In Theatres Ltd. and Township of London, [1947] O.W.N. 489, I am not convinced that the deferral of consideration of the application for a building permit, pending clarification of two specified matters, amounted to a refusal. In the Skyway case, the learned justice accepted the formal statement of counsel that the township clerk had advised him the permit would not be issued. I merely raise this point to buttress my opinion that the municipality, in the absence of a refusal, has the right to raise further objections at this hearing.

The first matter I would deal with is whether the question of the ownership of the proposed site constitutes good grounds for deferring the consideration of the application by the village council.

Section 6 of the Building Code Act provides, in part, as follows:

> 6(1) The chief official shall issue a permit except where,
>
> (a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law;

By-law 131-1978 of the Village of Bayfield provides in s. 2.2.1 thereof:

> To obtain a permit the owner or his authorized agent shall file an application with the chief official in writing by completing the prescribed forms available at the Office of the Municipality, and in a form, manner and content satisfactory to the Chief Official.

I consider that part of the village by-law to which I have referred "other applicable law" within the meaning of s. 6(1)(a) of the Building Code Act and, accordingly, if the application was not filed by "an owner or his authorized agent" it would contravene such applicable law.

I have noted the judgment of the Divisional Court in Re Solmor Builders Ltd. and Town of Mississauga et al.; Re Lornal Construction Ltd. and Town of Mississauga et al., [1973] 3 O.R. 521, 37 D.L.R. (3d) 349, to the general effect that the terms "owner" and "agent" are not to be so defined so as to exclude bona fide applicants for a permit.

The matter before me is distinguishable from that case, however, in so far as the ownership of the applicant to parts of the land has been questioned by not only the respondent municipality, but also the Attorney-General of Canada on behalf of Her Majesty the Queen in right of Canada and by persons by the names of Thomas and Elizabeth Constable in proceedings under the Certification of Titles Act, R.S.O. 1980, c. 61. It would seem to me, as a matter of common sense, that those matters should be dealt with before issuing a permit to the applicant. I cannot subscribe to the applicant's contention that the civil courts are the appropriate forum to determine damages due to a person suffering loss from another party building on land in which he has an interest. That contention, while true, must be read in the context that unnecessary litigation should not be encouraged by an already overburdened court system, when the factual issues can be determined by proceedings already under way.

I would therefore affirm the decision to defer made by the village authorities on this ground.

Although my finding on the above ground is sufficient to dispose of this matter, I shall deal briefly with the other grounds given by the respondent, in the event that this matter goes to a higher court.

(a) Clarification of conservation authority

In my view the applicant had satisfied the conservation authority's requirements for the permit immediately required, that is to say, the fill permit; the applicant had a geotechnical investigation made by Peto MacCallum Limited, a firm of consulting engineers, and this was submitted to the conservation authority. On December 12, 1983, an official of the authority notified the applicant's agent that if the recommendations of the consulting engineers were adhered to "it is my opinion that the Executive Committee of the Conservation

Authority would approve an application under the Fill, Construction and Alteration to Waterways Regulations for the construction of a cottage at this location".

It would seem to me that although concerns may have existed when the matter was deferred by the respondent on June 10, 1983, when the matter came on before me on June 14, 1984, the situation appeared to be that the authority would grant the application conditional on the consulting engineer's recommendations being adhered to. Within this context, I do not consider the concerns on this point a valid reason for deferring consideration of the building permit application.

(b) Section 4.7 of land-use by-law, and question of access

The respondent did not argue that s. 4.7 of the land-use by-law had been contravened nor did it argue the question of access to the property. The evidence of Donald F. May, a qualified planning and land-use consultant, was that the proposed construction did not offend s. 4.7, and I accept that. I also accept the evidence of Mr. May, and on the basis of the plans filed, that there is access to the property.

I therefore do not accept these objections as legitimate reasons for refusing a permit.

(c) Set-back requirements

The only evidence in relation to set-back requirements was tendered by the applicant's witness, and that was to the effect that the location of the proposed construction did not violate the set-back requirements set out in the land-use by-law. However, if the proceedings under the Certification of Titles Act delineates the boundaries of the lands the applicant alleges to be his in a manner other than what he claims them to be, this may well have a bearing on the question of whether the proposed construction complies with the set-back requirements, and is another reason, in my opinion, that the results of the Certification of Titles Act proceedings should be awarded before a definitive ruling is given on the application for a building permit.

(d) Expropriation proceedings

This matter is further complicated by reason of the respondent commencing expropriation proceedings. In the light of North American Life Ass'ce Co. v. City of Chatham (1979), 10 R.P.R. 144, and Re Brownlow Mount Pleasant Developments and City of Toronto et al. (1973), 2 O.R. (2d) 390, 43 D.L.R. (3d) 57, and it appearing to me that at the time the applicant's application for a building permit there was some evidence of the village's intention to expropriate, that being indicated in a letter to its solicitor, dated March 23, 1983, from the village clerk, this leads to the question whether that was sufficient evidence of an intention to expropriate so as to overcome the applicant's prima facie right to a building permit if he meets all other requisites of building codes and by-laws. In Poppett's (Caterers) Ltd. v. Maidenhead Borough Council, [1970] 3 All E.R. 289, Winn L.J. said at p. 294:

> As I said in the course of the very interesting submission of counsel for the applicants, he unfurled a standard (which he was not prepared to nail to his mast) when he said that the only competent, effective and adequate form of evidence to establish the intention of an authority was a formal resolution passed by that authority and produced to the court. If he made that submission with any serious intent I am bound to say that I reject it.

and at p. 293, Sir Gordon Wilmer said:

> I further think that evidence to support the judge's conclusion is to be found in the minutes of the committee meetings, which were confirmed by the local authority, and in some of the letters passing between various officials, all going to show that there was in fact an intention to demolish the premises.

I have reluctantly come to the conclusion that the evidence before me to show an intention to expropriate falls short of that relied on by the learned judges in appeal in the Poppett's (Caterer's) Ltd. case, supra.

I therefore do not accede to the motion brought by the

respondent's counsel that these proceedings be stayed or adjourned until such time as the expropriation proceedings have been completed.

Upon all the evidence I have heard, I have come to the conclusion that the proper order I should make (within the powers granted by s. 15(3) of the Building Code Act) is that the respondent issue a building permit to the applicant upon his ownership of the lands in question, or sufficient thereof to enable him to conform to the land-use by-law of the respondent municipality being upheld in the Certification of Titles Act proceedings, and that such permit, when issued, be conditional on his adhering to the recommendations made by Peto MacCallum Limited, consulting engineers, and I do so order.

I would have allowed costs of these proceedings to the successful applicant, except that at the conclusion of the evidence I directed the applicant to submit written argument by June 24, 1984, that is to say, 10 days after the conclusion of the hearing. No request was made to have that time extended, and the applicant did not in fact submit written argument until August 3, 1984. There will therefore be no order as to costs.

Order accordingly.

Union Gas Ltd. v. Township of Dawn

Tecumseh Gas Storage Ltd. v. Township of Dawn

15 O.R. (2d) 722

ONTARIO
HIGH COURT OF JUSTICE
DIVISIONAL COURT
KEITH, MALONEY AND DONOHUE, JJ.
22ND FEBRUARY 1977.

APPEAL from a decision of the Ontario Municipal Board approving two municipal zoning by-laws.

J. J. Robinette, Q.C., and L. G. O'Connor, Q.C., for appellant, Union Gas Limited.

P. Y. Atkinson, for appellant, Tecumseh Gas Storage Limited.

W. B. Williston, Q.C., and J. A. Campion, for respondent, Township of Dawn.

T. H. Wickett, for Ontario Energy Board.

The judgment of the Court was delivered by

KEITH, J.:-- Pursuant to leave granted by this Court on November 24, 1975, upon application made in accordance with s. 95(1) of the Ontario Municipal Board Act, R.S.O. 1970, c. 323, the following questions are submitted to this Court for its opinion:

(a) Is section 4.2.3. of By-law 40 of the Township of Dawn as amended, ultra vires of the respondent municipality

(b) Is the Ontario Municipal Board therefore without jurisdiction to approve the respondent's By-law 40 as amended including section 4.2.3. thereof

The Township of Dawn in the County of Lambton, a rural agricultural township in south western Ontario, passed its first comprehensive zoning by-law on June 18, 1973 (By-law 40), and amending By-law 52 on September 3, 1974.

These two by-laws came before the Ontario Municipal Board on April 16 and 24, 1975, for approval. In addition to the parties appearing in this Court, two other parties interested in the effect of these by-laws were represented at the Municipal Board hearings, but the Ontario Energy Board, one of the most vitally interested parties, inexplicably was not.

The relevant sections of the by-law, as amended, read as follows:

1.1 Section 1 -- Introduction

Whereas the Council has authority to regulate the use and nature of land, buildings and structures in the Township of Dawn by by-law subject to the approval of the Ontario Municipal Board and deems it advisable to do so.

1.2 Now therefore the Council of the Corporation of the Township of Dawn enacts as follows:

Title

2.1 This by-law shall be known as the "Zoning By-law" of the Township of Dawn.

Penalty

3.3.1. Every person who contravenes by-law is guilty of an offence and liable upon conviction to fine of not more than three hundred (300) dollars for each offence, exclusive of costs. Every such fine is recoverable under the Summary Convictions Act, all the provisions of which apply except that the imprisonment may be for a term of not more than twenty-one (21) days.

3.3.2. Where a person, guilty of an offence under this by-law has been directed to remedy any violation and is in default of doing such matter or thing required, then such matter or thing may be done at his expense, by the Corporation of the Township of Dawn and the Corporation may recover the expense incurred in doing it by action or the

same may be recovered in like manner as municipal taxes.

Section 4 -- General Use and Zone Regulations

4.1 Uses Permitted.

4.1.1. No land, building or structure shall be used or occupied and no building or structure or part thereof shall be erected or altered except as permitted by the provisions of this by-law.

4.2.3 Except as limited herein nothing in this by-law shall prevent the use of any land as a right-of-way, easement or corridor for any oil, gas, brine or other liquid product pipeline and appurtenances thereto, but no appurtenances in the form of a metering, booster, dryer, stipper or pumping station, shall be constructed closer than 500 feet to any adjacent residential or commercial zone or rural residence, except as otherwise provided. All transmission pipelines to be installed from or to a production, treatment or storage site shall be constructed from or to such site to and along, in or upon a right-of-way, easement or corridor located as follows:

(a) running northerly or southerly within 100 feet perpendicular distance from the centre line dividing the east and west halves of a concession lot;

(b) running easterly and westerly within 100 feet perpendicular distance from a concession lot line not being a township, county or provincial road or highway;

(c) across, but not along a township, county or provincial road or highway.

Nothing herein shall prevent the location of a local distribution gas service line upon any street, road or highway.

On May 20, 1975, the Ontario Municipal Board released its decision approving of By-law 40 as amended. The reasons are devoted almost exclusively to s. 4.2.3 as amended and the objections of the appellants thereto. To fully understand the approach taken by the Municipal Board, the following extracts from these reasons are quoted [4 O.M.B.R. 462 at pp. 463-6]:

The Township consists of flat agricultural land with soil rated in the Canada Land Survey as A2. The Board was advised by the representative of the Ministry of Agriculture and Food that the soil is of the Brookstone clay type which requires particular attention to drainage because the land is so flat and that this was the reason it was rated A2 rather than A1. The soil is very productive if properly drained and worked. As drainage is installed the soil responds to cash crops such as corn and soya beans. Drainage is accomplished generally by a grid system of tile drainage lines approximately 40 ft. apart throughout the whole of the Township. These feed into municipal drains which generally follow lot and concession lines and eventually drain to the south-west into the Sydenham River. An example of this method of drainage in the Township is shown on ex. 9, filed. This also indicates the position of the Union Gas Company pipeline which runs in a diagonal direction across the tile drains referred to above. Because the pipeline runs across the drains, a header line is required to direct the flow of the water into the municipal drain.

The evidence indicates that in respect of the pipeline installation on a right of way that may be 60 ft. wide or more, and the header line parallel to it, the farmer in using his equipment must gear down each time before crossing these installations rather than continuing in the usual sweep of the farm land. This time-consuming and inconvenient operation is necessary every time the farmer crosses the pipeline easement area. In addition, the evidence clearly indicated that upon excavation for the pipeline, the soil composition is disturbed and impacted so that growth is hampered for several years until the soil is returned to its normal state. The company indicated in evidence that a new method for laying lines and conserving the topsoil for future development had been devised. This may alleviate the problems, but only time will tell.

. . . . .

The Union Gas Limited (hereinafter to be referred to as

"the Company") operates in the south-west part of the Province and has important connections with Consumers Gas Company of Toronto and other systems for whom it stores gas in the summer months for delivery in the winter. The relationship of the Union Gas Limited operation to other systems in the Province are well illustrated on ex. 33, filed. The hub of their system is in Dawn Township from which all the distribution and transmission lines radiate. The importance of the Company to the municipality is illustrated by ex. 26 filed, which shows that for the years 1970 to 1974 inclusive, the Company paid taxes which formed a significant portion of the total Township levy varying from 24.3% to 30.6% in those years.

The by-law provides that transmission lines are to be laid in corridors 200 ft. wide running along the half lot lines in a north-south direction and along concession lines in an east-west direction, "across but not along a township, county or provincial road or highway", s. 4.2.3.

This corridor concept was the chief source of objection registered by the Company which in evidence indicated that the corridor method of laying their lines would be very costly. This was particularly so when some of the existing lines are now laid in a diagonal direction. When new looping lines are required they are now planned to run generally parallel to the existing lines. If they were to follow the corridors the length of line would be increased, in some cases the diameter of the pipe would have to be greater, and perhaps they might also require additional compression facilities. The additional costs were shown to be large and would result in increased costs to the public.

The Board must weigh the possibility of incurring these increased costs against the need for protecting the farm industry against unnecessary and unplanned disturbance in future years. There was ample evidence to indicate that the need for pipeline installations would increase in the future. There was also evidence to indicate that about 50% of the existing lines are already built in a north-south and east-west direction and that the corridor concept has therefore in fact found practical use in the past (exs. 7 and 27). It was the argument of counsel for the applicant that once the corridors were established the extra cost for looping will not be as significant.

Argument of counsel for the Tecumseh Gas Storage Limited was that the use of land for pipelines was not in fact a use of land as envisaged under s. 35(1)1 of the Planning Act, R.S.O. 1970, c. 349. To bolster this argument counsel referred the Board to the case of Pickering Twp. v. Godfrey, [1958] O.R. 429, 14 D.L.R. (2d) 520, [1958] O.W.N. 230. The Board finds that the instant case can be distinguished from the quoted case which dealt specifically with the making of a quarry or gravel pit as a "land use". In addition, the Board finds that the use of land for installation of a pipeline fits the definition arrived at in the case above quoted [at p. 437] as meaning: "the employment of the property for enjoyment, revenue or profit without in any way otherwise diminishing or impairing the property itself."

The second major argument of counsel was that the municipality has no jurisdiction to deal with pipeline installation because of the existence of the Ontario Energy Board Act, R.S.O. 1970, c. 312, which creates the Ontario Energy Board and gives it jurisdiction to determine the route for a transmission line, production line, distribution line or a station (s. 40(1)). The Board was also referred to s. 57 of the Ontario Energy Board Act which reads as follows:

"57(1) In the event of conflict between this Act and any other general or special Act, this Act prevails.

(2) This Act and the regulations prevail over any by-law passed by a municipality."

In the opinion of the Board the above section provides only for the event of a conflict between the Ontario Energy Board Act and any other Act. It does not, nor can it be interpreted to mean that no other Act can be effective. It does not in the opinion of the Board prohibit the municipality from dealing with those matters referred to in s. 35 of the Planning Act.

The major considerations of the Ontario Energy Board are not directed towards planning. It is the responsibility and

duty of Council to plan for the proper and orderly development of the municipality having regard to the health, safety, convenience and welfare of the present and future inhabitants of the municipality all within the framework of the Planning Act.

The Board is of the opinion that zoning by-laws must provide for all ratepayers a degree of certainty for reasonable stability. This can be accomplished by passing restricted area by-laws for land use on a planning basis with proper and responsible study and public input. The evidence indicates that the municipality has indeed acted in a reasonable and responsible manner to achieve this end. The consideration for the farming community which forms a large proportion of the municipality is a proper and reasonable one. There is no certainty as to where the Ontario Energy Board may finally decide to place the pipelines required by the criteria they have and will develop. They will, however, have the legislative document before them giving the corporate expression of the municipality to indicate where, on the basis of planning considerations, the pipelines should go. The Ontario Energy Board will then, on the basis of its criteria and the evidence heard, be in a position to give its decision on the ultimate route chosen.

In the meantime, the municipality will by legislation inform all its ratepayers where the pipelines should be laid. The farmer will be able to proceed with the least amount of interference both during construction of pipelines on or near his lands and indeed in his everyday work. The pipeline companies will benefit from this as well. With less interference to the farmer there should be fewer difficulties experienced both in the installation of the pipelines and the servicing and maintenance of the pipelines and the tile drain systems.

By-law 40 as amended was enacted by the Council of the respondent in accordance with the powers given to municipal councils by s. 35 of the Planning Act, R.S.O. 1970, c. 349. The relevant portions of that section read as follows:

35(1) By-laws may be passed by the councils of municipalities:

1. For prohibiting the use of land, for or except for such purposes as may be set out in the by-law within the municipality or within any defined area or areas or abutting on any defined highway or part of a highway.

2. For prohibiting the erection or use of buildings or structures for or except for such purposes as may be set out in the by-law within the municipality or within any defined area or areas or upon land abutting on any defined highway or part of a highway.

Section 46 of the Planning Act is identical with s. 57(1) of the Ontario Energy Board Act, R.S.O. 1970, c. 312, quoted in the reasons of the Ontario Municipal Board. Fortunately, s. 46 of the Planning Act has no equivalent to s. 57(2) of the Ontario Energy Board Act or the Court might well have been forced to assert that its views prevailed over one or other or both of the statutes.

The appellant Union Gas operates an extensive network of natural gas transmission lines throughout south-western Ontario delivering this energy to customers, both wholesale and retail, extending from Windsor on the south-west, to Hamilton and Trafalgar on the east and Goderich and Owen Sound on the north.

It supplies scores of city, town and village municipalities in this extensive and heavily-populated area and its lines traverse 16 counties which contain upwards of 140 township municipalities. The municipal councils of each of these has the same power under the Planning Act to pass zoning by-laws.

The principal source of the supply of natural gas to Union Gas is the Trans-Canada pipeline which enters the southern part of Ontario in Lambton County just south of Sarnia and connects with a major compressor station of Union Gas in the Township of Dawn. There are four other major compressor stations operated by this appellant, one just west of London, another at Trafalgar between Hamilton and Toronto, one near Simcoe and the fourth south of Chatham. These stations are essential to maintain pressure throughout the pipeline network.

In addition, Union Gas lines serve as feeders for companies

like the Consumers' Gas Company serving Metropolitan Toronto and another extensive area of Ontario.

In addition, a significant portion of the source of natural gas transmitted by Union Gas, comes from local wells found in south-western Ontario, a number of which are located in the Township of Dawn.

The company also maintains reserves of gas in natural underground storage fields, some but by no means all of which are also located in the Township of Dawn.

The local wells and the storage fields must all be connected to the distribution lines and the compressor stations.

The second appellant, Tecumseh Gas Storage Limited, is equally affected by the impugned by-law, but no detailed description of its operations was presented to the Court.

I have stressed these points to illustrate firstly how insignificant are the local problems of the Township of Dawn when viewed in the perspective of the need for energy to be supplied to those millions of residents of Ontario beyond the township borders, and to call to mind the potential not only for chaos but the total frustration of any plan to serve this need if by reason of powers vested in each and every municipality by the Planning Act, each municipality were able to enact by-laws controlling gas transmission lines to suit what might be conceived to be local wishes. We were informed that other township councils have only delayed enacting their own by-laws pending the outcome of this appeal.

At the conclusion of the argument of this appeal I informed counsel, on behalf of the Court, that the Appeal Book had been endorsed as follows:

> The appeal will be allowed with costs. In view of the importance of the issue, which is raised in this appeal insofar as it relates specifically to the Energy Board's jurisdiction as challenged by a municipal council, and in deference to the lengthy reasons delivered by the Ontario Municipal Board, the Court will in due course, deliver considered reasons which will be the basis of the formal order of the Court.

It is not necessary for my purpose to trace the history and origins of the present Ontario Energy Board Act as amended. Reference to s. 58 of the present Act will suffice to show that this industry has developed over many years under provincial legislation. Section 58 reads as follows:

> 58. Every order and decision made under,
>
> (a) The Fuel Supply Act, being chapter 152 of the Revised Statutes of Ontario, 1950;
>
> (b) The Natural Gas Conservation Act, being chapter 251 of the Revised Statutes of Ontario, 1950;
>
> (c) The Well Drillers Act, being chapter 423 of the Revised Statutes of Ontario, 1950;
>
> (d) The Ontario Fuel Board Act, 1954;
>
> (e) The Ontario Energy Board Act, 1960;
>
> (f) The Ontario Energy Act, being chapter 271 of the Revised Statutes of Ontario, 1960; or
>
> (g) The Ontario Energy Board Act, 1964.
>
> that were in force on the day the Revised Statutes of Ontario, 1970 is proclaimed in force shall be deemed to have been made by the Board under this Act.

Pursuant to s. 2 [am. 1973, c. 55, s. 2] of the Act, the Ontario Energy Board is composed of not less than five members appointed by the Lieutenant-Governor in Council. It has an official seal, and its orders which must be judicially noticed are not subject to the Regulations Act, R.S.O. 1970, c. 410.

By s. 14, many of the powers of the Supreme Court of Ontario are vested in this Board "for the due exercise of its jurisdiction".

Section 18 is important having regard to the penalty

provisions of the township by-law quoted above. That section reads as follows:

> 18. An order of the Board is a good and sufficient defence to any action or other proceeding brought or taken against any person in so far as the act or omission that is the subject of such action or other proceeding is in accordance with the order.

Section 19 [am. 1973, c. 55, s. 5(1)] vests power in the Board to fix rates and other charges for the sale, transmission, distribution and storage of natural gas.

Under s. 23 [am. ibid., s. 8] the Board is charged with responsibility to issue permits to drill gas wells.

Section 25 prohibits any company in the business of transmitting, distributing or storing gas from disposing of its plant by sale or otherwise without leave, and such leave cannot be granted without, inter alia, a public hearing.

Section 30 provides that any order of the Board may be filed with the Registrar of the Supreme Court and is enforceable in the same way as a judgment or order of the Court.

Part II of the Act deals specifically with pipe lines and I quote s. 38(1), s. 39, s. 40(1), (2), (3), (8), (9) and (10), s. 41(1) and (3), and s. 43(1) and (3):

> 38(1) No person shall construct a transmission line without first obtaining from the Board an order granting leave to construct the transmission line.
>
> . . . . .
>
> 39. Any person may, before he constructs a production line, distribution line or station, apply to the Board for an order granting leave to construct the production line, distribution line or station.
>
> 40(1) An applicant for an order granting leave to construct a transmission line, production line, distribution line or a station shall file with his application a map showing the general location of the proposed line or station and the municipalities, highways, railways, utility lines and navigable waters through, under, over, upon or across which the proposed line is to pass.
>
> (2) Notice of the application shall be given by the applicant in such manner as the Board directs and shall be given to the Department of Agriculture and Food, the Department of Municipal Affairs, the Department of Highways and such persons as the Board may direct.
>
> (3) Where an interested person desires to make objection to the application, such objection shall be given in writing to the applicant and filed with the Board within fourteen days after the giving of notice of the application and shall set forth the grounds upon which such objection is based.
>
> . . . . .
>
> (8) Where after the hearing the Board is of the opinion that the construction of the proposed line or station is in the public interest, it may make an order granting leave to construct the line or station.
>
> (9) Leave to construct the line or station shall not be granted until the applicant satisfies the Board that it has offered or will offer to each landowner an agreement in a form approved by the Board.
>
> (10) Any person to whom the Board has granted leave to construct a line or station, his officers, employees and agents, may enter into or upon any land at the intended location of any part of the line or station and may make such surveys and examinations as are necessary for fixing the site of the line or station, and, failing agreement, any damages resulting therefrom shall be determined in the manner provided in section 42.
>
> 41(1) Any person who has leave to construct a line or station under this Part or a predecessor of this Part may apply to the Board for authority to expropriate land for the purposes of the line or station, and the Board shall

thereupon set a date for the hearing of such application, and such date shall be not fewer than fourteen days after the date of the application, and upon such application the applicant shall file with the Board a plan and description of the land required, together with the names of all persons having an apparent interest in the land.

. . . . .

(3) Where after the hearing the Board is of the opinion that the expropriation of the land is in the public interest, it may make an order authorizing the applicant to expropriate the land.

. . . . .

43(1) Any person who has leave to construct a line may apply to the Board for authority to construct it upon, under

or over a highway, utility line or ditch.

. . . . .

(3) Without any other leave and notwithstanding any other Act, where after the hearing the Board is of the opinion that the construction of the line upon, under or over a highway, utility line or ditch, as the case may be, is in the public interest, it may make an order authorizing the applicant so to do upon such terms and conditions as it considers proper.

Finally, with respect to the statute itself, it may not be amiss to again quote s. 57:

57(1) In the event of conflict between this Act and any other general or special Act, this Act prevails.

(2) This Act and the regulations prevail over any by-law passed by a municipality.

In my view this statute makes it crystal clear that all matters relating to or incidental to the production, distribution, transmission or storage of natural gas, including the setting of rates, location of lines and appurtenances, expropriation of necessary lands and easements, are under the exclusive jurisdiction of the Ontario Energy Board and are not subject to legislative authority by municipal councils under the Planning Act.

These are all matters that are to be considered in the light of the general public interest and not local or parochial interests. The words "in the public interest" which appear, for example, in s. 40(8), s. 41(3) and s. 43(3), which I have quoted, would seem to leave no room for doubt that it is the broad public interest that must be served. In this connection it will be recalled that s. 40(1) speaks of the requirement for filing a general location of proposed lines or stations showing "the municipalities, highways, railways, utility lines and navigable waters through, under, over, upon or across which the proposed line is to pass".

Persons affected must be given notice of any application for an order of the Energy Board and full provision is made for objections to be considered and public hearings held.

In the final analysis, however, it is the Energy Board that is charged with the responsibility of making a decision and issuing an order "in the public interest".

While the result in the case of Campbell-Bennett Ltd. v. Comstock Midwestern Ltd. and Trans Mountain Oil Pipe Line Co., [1954] S.C.R. 207, [1954] 3 D.L.R. 481, 71 C.R.T.C. 291, might perhaps be different today, having regard to the facts of that case and subsequent federal legislation, the principles enunciated are valid and applicable to the case before this Court.

In the Campbell-Bennett case, the defendant Trans Mountain Pipe Line was incorporated by a special Act of the Parliament of Canada to construct interprovincial pipe lines. During the course of construction of a pipe line from Acheson, Alberta to Burnaby, British Columbia, some work was done in British Columbia by the plaintiff for which it claimed to be entitled to a mechanics' lien on the works in British Columbia, and to enforce that lien under the British Columbia Mechanics' Lien Act by seizing and selling a portion of the pipe line.

At p. 212 S.C.R., p. 486 D.L.R., Kerwin, J. (as he then was), on behalf of himself and Fauteux, J. (as he then was), said:

> The result of an order for the sale of that part of Trans Mountain's oil pipe line in the County of Yale would be to break up and sell the pipe line piecemeal, and a provincial legislature may not legally authorize such a result.

Then at pp. 213-5 S.C.R., pp. 487-9 D.L.R., Rand, J., on behalf of himself and the other three members of the Court, said:

> The respondent, Trans Mountain Oil Pipe Line Company, was incorporated by Dominion statute, 15 Geo. VI, c. 93. It was invested with all the "powers, privileges and immunities conferred by" and, except as to provisions contained in the statute which conflicted with them, was made subject to all the "limitations, liabilities and provisions of any general legislation relating to pipe lines for the transportation of oil" enacted by Parliament. Within that framework, it was empowered to construct or otherwise acquire, operate and maintain interprovincial and international pipe lines with all their appurtenances and accessories for the transportation of oil.
>
> The Pipe Lines Act, R.S.C. 1952, c. 211, enacted originally in 1949, is general legislation regulating oil and gas pipe lines and is applicable to the company. By its provisions the company may take land or other property necessary for the construction, operation or maintenance of its pipe lines, may transport oil and may fix tools therefor. The location of its lines must be approved by the Board of Transport Commissioners and its powers of expropriation are those provided by the Railway Act. By s. 38 the Board may declare a company to be a common carrier of oil and all matters relating to traffic, tools or tariffs become subject to its regulation. S. 10 provides that a company shall not sell or otherwise dispose of any part of its company pipe line, that is, its line held subject to the authority of Parliament, nor purchase any pipe line for oil transportation purposes, nor enter into any agreement for amalgamation, nor abandon the operation of a company line, without leave of the Board; and generally the undertaking is placed under the Board's regulatory control.
>
> Is such a company pipe line so far amenable to provincial law as to subject it to statutory mechanics' liens The line here extends from a point in Alberta to Burnaby in British Columbia. That it is a work and undertaking within the exclusive jurisdiction of Parliament is now past controversy: Winner v. S.M.T. (Eastern) Limited, [1951] S.C.R. 887, affirmed, with a modification not material to this question, by the Judicial Committee but as yet unreported. The lien claimed is confined to that portion of the line within the County of Yale, British Columbia. What is proposed is that a lien attaches to that portion of the right of way on which the work is done, however small it may be, or wherever it may be situated, and that the land may be sold to realize the claim. In other words, an interprovincial or international work of this nature can be disposed of by piecemeal sale to different persons and its undertaking thus effectually dismembered.
>
> In the light of the statutory provisions creating and governing the company and its undertaking, it would seem to be sufficient to state such consequences to answer the proposition. The undertaking is one and entire and only with the approval of the Board can the whole or, I should say, a severable unit, be transferred or the operation abandoned. Apart from any question of Dominion or Provincial powers and in the absence of clear statutory authority, there could be no such destruction by means of any mode of execution or its equivalent. From the earliest appearance of such questions it has been pointed out that the creation of a public service corporation commits a public franchise only to those named and that a sale under execution of property to which the franchise is annexed, since it cannot carry with it the franchise, is incompatible with the purpose of the statute and incompetent under the general law. Statutory provisions, such as s. 152 of the Railway Act, R.S.C. (1952) c. 234, have modified the application of the rule, but the sale contemplated by s. 10 of the Pipe Lines Act is sale by the company, not one arising under the provisions of law and in a proceeding in invitum. The general principle was stated by Sir Hugh M. Cairns, L.J. in Gardner v. London, Chatham and

Dover Railway (1867), L.R. 2 Ch. 201 at p. 212:--

"When Parliament, acting for the public interest, authorizes the construction and maintenance of a railway, both as a highway for the public, and as a road on which the company may themselves become carriers of passengers and goods, it confers powers and imposes duties and responsibilities of the largest and most important kind, and it confers and imposes them upon the company which Parliament has before it, and upon no other body of persons. These powers must be executed and these duties discharged by the company. They cannot be delegated or transferred."

In the same judgment and speaking of the effect of an authorized mortgage of the "undertaking" he said:--

"The living and going concern thus created by the Legislature must not, under a contract pledging it as security, be destroyed, broken up, or annihilated. The tolls and sums of money ejusdem generis--that is to say, the earnings of the undertaking--must be made available to satisfy the mortgage; but, in my opinion, the mortgagees cannot; under their mortgages, or as mortgagees--by seizing, or calling on this Court to seize, the capital, or the lands, or the proceeds of sales of land, or the stock of the undertaking--either prevent its completion, or reduce it into its original elements when it has been completed."

Several further and compelling submissions were made to the Court on behalf of the appellants, but having regard to the first submission which is irresistible and of fundamental importance, I do not think it necessary to deal with all of the arguments advanced.

Reference should be made, however, to two of them. First, attention should be directed to "An Act to regulate the Exploration and Drilling for, and the Production and Storage of Oil and Gas", 1971 (Ont.), c. 94, commonly referred to as the Petroleum Resources Act.

The objects of this legislation can be readily understood by reference to s. 17(1) of the statute, which reads as follows:

17(1) The Lieutenant Governor in Council may make regulations,

(a) for the conservation of oil or gas;

(b) prescribing areas where drilling for oil or gas is prohibited;

(c) prescribing the terms and conditions of oil and gas production leases and gas storage leases or any part thereof, excluding those relating to Crown lands, and providing for the making of statements or reports thereon;

(d) regulating the location and spacing of wells;

(e) providing for the establishment and designation of spacing units and regulating the location of wells in spacing units and requiring the joining of the various interests within a spacing unit or pool;

(f) prescribing the methods, equipment and materials to be used in boring, drilling, completing, servicing, plugging or operating wells;

(g) requiring operators to preserve and furnish to the Department drilling and production samples and cores;

(h) requiring operators to furnish to the Department reports, returns and other information;

(i) requiring dry or unplugged wells to be plugged or replugged, and prescribing the methods, equipment and materials to be used in plugging or replugging wells;

(j) regulating the use of wells and the use of the

subsurface for the disposal of brine produced in association with oil and gas drilling and production operations.

The importance of this Act is reflected in s. 18 which reads as follows:

18(1) In the event of conflict between this Act and any

other general or special Act, this Act, subject only to The Ontario Energy Board Act [1964], prevails.

(2) This Act and the regulations prevail over any municipal by-law.

Similarly, although it was not referred to in argument, the Energy Act, R.S.O. 1970, c. 148 [since repealed by 1971, Vol. 2, c. 44, s. 32, and superseded by the Energy Act, 1971, and the Petroleum Resources Act, 1971], deals with other aspects of the natural gas and oil industry. The objects of the legislation are set out in s. 12(1) which I need not quote, but again s. 13 of this Act is identical in its wording to s. 18 of the Petroleum Resources Act, 1971, quoted above.

The second of the additional submissions to which reference should be made is based on a cardinal rule for the interpretation of statutes and expressed in the maxim generalia specialibus non derogant. For a discussion of the effect of this rule I will only refer to the case of City of Ottawa v. Town of Eastview et al., [1941] S.C.R. 448 commencing at p. 461 [1941] 4 D.L.R. 65 at p. 75, 53 C.R.T.C. 193, and to the Dictionary of English Law (Earl Jowitt), at p. 862.

In the case before this Court, it is clear that the Legislature intended to vest in the Ontario Energy Board the widest powers to control the supply and distribution of natural gas to the people of Ontario "in the public interest" and hence must be classified as special legislation.

The Planning Act, on the other hand, is of a general nature and the powers granted to municipalities to legislate with respect to land use under s. 35 of that Act must always be read as being subject to special legislation such as in contained, for example, in the Ontario Energy Board Act, the Energy Act and the Petroleum Resources Act, 1971.

In the result, therefore, and in response to the questions with respect to which leave to appeal was granted, this Court

certifies to the Ontario Municipal Board:

(a) Section 4.2.3. of By-law 40 as amended, of the Township of Dawn is ultra vires the said municipality, and

(b) The Ontario Municipal Board therefore is without jurisdiction to approve the said by-law as amended in its present form by reason of section 4.2.3. thereof.

This Court further certifies that should the Ontario Municipal Board see fit to exercise the powers vested in it by s. 87 of the Ontario Municipal Board Act, the said By-law 40, as amended, may be approved after deleting from s. 4.2.3. the words "Except as limited herein" at the commencement of the said section and all the words after the word "thereto" in the fourth line of the said by-law as printed down to and including the words "road or highway" in subcl. (c) of the said s. 4.2.3., so that s. 4.2.3. as so approved would read:

Nothing in this by-law shall prevent the use of any land as a right-of-way, easement or corridor for any oil, gas, brine or other liquid product pipeline and appurtenances thereto.

Nothing herein shall prevent the location of a local distribution gas service line upon any street, road or highway.

The appellants and the Ontario Energy Board are entitled to their costs of this appeal.

Appeal allowed.

Re **Upper Thames River Conservation Authority** and City of London et al.

67 O.R. (2d) 784
[1989] O.J. No. 393
Action No. 6917/88
ONTARIO

District Court of Ontario
Killeen D.C.J.
February 20, 1989.

APPLICATION for an order rescinding a building permit.

R.G. Inglis, for applicant.

J. Hoffer, for respondent, Nella Soufan.

J. Barber, for respondents, City of London and Rocky Cerminara, Chief Building Official for City of London.

KILLEEN D.C.J.:-- The applicant, Upper Thames River Conservation Authority (hereinafter called the Authority), brings this application to obtain an order under s. 15 of the Building Code Act, R.S.O. 1980, c. 51, rescinding a building permit issued by one Rocky Cerminara, the chief building officer for the City of London.

The respondent, Nella Soufan, is the owner of properties at 1 High St. and 6 Front St. in London. On January 19, 1987, she purchased these properties for a total price of $200,000. At the time of purchase, 1 High St. was a "duplex" and 6 Front St. a "fourplex" and they were used for both residential and office purposes.

In mid-April, 1988, Mrs. Soufan decided to start major renovations on the interiors of both buildings aimed at converting 1 High St. from a duplex into a fourplex and 6 Front St. into a sixplex. This work would have meant that the living units in the two buildings would increase from six units to 10 units and, as well, there would have been upward adjustments in space to be utilized for commercial purposes: see Mrs. Soufan's record, tabs D. and R. It would seem that Mrs. Soufan planned to spend at least $75,000 on such renovation work based on later information filed with the city official in July.

Unfortunately, Mrs. Soufan embarked on this renovation work without obtaining building permits from the city, as she clearly should have, and her problems were accentuated by reason of the unusual location of her properties.

Both of her properties are located near the Thames River and unquestionably fall within an area over which the Authority has environmental control powers by virtue of the Conservation Authorities Act, R.S.O. 1980, c. 85 (hereinafter called C.A.A.), and, more especially, O. Reg. 171/88 under which the Authority has regulatory powers over the floodplain within the Authority's defined geographic area of jurisdiction. Section 3 of O. Reg. 171/88 reads, in part, as follows:

> 3. No person shall,
>
> (a) construct any building or permit any building to be constructed in or on a pond or swamp or in any area susceptible to flooding during a regional storm;
>
> . . . . .
>
> except in accordance with a permission issued under section 4.

It is conceded that the subject properties are both within an area susceptible to flooding during a regional storm; as such, construction -- whatever that term may mean -- is prohibited without the permission of the Authority.

In late April, members of the Authority's staff became aware of the fact that Mrs. Soufan was proceeding apace with her renovations and a letter was written to her advising of the requirements and strictures contained in O. Reg. 171/88. At about the same time, the London building department seems to have been galvanized into action as well. As early as April 26, 1988, a building inspector had attended at the site and issued

orders for each property requiring Mrs. Soufan to obtain building permits forthwith. Mrs. Soufan seems to have been determined, at this early stage at least, to stonewall both the Authority and the city building inspectors because she continued with her work without making any hint of compliance with O. Reg. 171/88 or the local building by-law. Finally, on May 3rd, the building department issued stop-work orders against both properties and this step appears to have halted work on site.

On June 7th, Mrs. Soufan filed a formal application with the Authority seeking a "Consent to Construct" under the C.A.A. and O. Reg. 171/88. Shortly after, on July 4th, Mrs. Soufan finally got around to making formal application to the City of London for the issuance of building permits for the renovation work at both properties.

These various applications follow tortuous paths over the next several months and it is necessary to describe them. The "Consent to Construct" application of Mrs. Soufan went, first, to a body within the Authority known as the Water Management Advisory Board. This body conducted a hearing on June 23rd and quickly recommended that Mrs. Soufan's application be granted. This favourable recommendation did not, however, end Mrs. Soufan's problems with the Authority. The application then went, as it was required to do, to the executive committee of the Authority and the executive committee decided to overturn the recommendation and direct a full-dress hearing on the consent question under s. 28(3) of the C.A.A. This latter hearing went forward on August 11th with Mrs. Soufan appearing as a party to the proceeding. By letter to Mrs. Soufan, dated August 15th, the executive committee confirmed its overturning of the recommendation of the lower body in the Authority hierarchy and refused approval of the application. Paragraph 2 of this letter sets out the reasons for the refusal in the following language:

> The Committee resolved to deny the Application as submitted. In the opinion of the Authority, the reconstruction and renovation of the two existing structures would substantially increase the potential for property damage due to flooding. The area proposed for development is within the Floodway (defined as the area below the 1:100 Year Flood Elevation) of the Thames River where Provincial and Conservation Authority floodplain management policies generally prohibit building or filling.

Following this adverse decision, Mrs. Soufan elected to appeal the decision of the executive committee, under s. 28(5) of the C.A.A., to the Minister of Natural Resources. This appeal which, by practice is heard by the Mining and Lands Commissioner, is now pending.

Mrs. Soufan's roughly contemporaneous attempt to obtain relief at the city level -- through her building permit applications -- met with different results. She had learned as far back as May 3rd that the renovation work would have led to results in contravention of the applicable zoning by-law. Accordingly, she made an application to the local committee of adjustment for a minor variance permitting the planned changes in the interior of her properties. On June 13th, following a hearing on June 6th, the committee of adjustment released its decision in which it granted the minor variance, thereby permitting her to do the renovations she had already, in fact, embarked upon in April, subject to the issuance of building permits.

While the record before me is not clear on everything that Mrs. Soufan did after the favourable committee of adjustment decision, it is clear that she, or someone on her behalf, brought her difficulties with the Authority to the attention of the London municipal council. She had applied for building permits to Mr. Cerminara on July 4th. At its meeting of September 19th the council decided to pass a resolution, after an apparently spirited debate, directing Mr. Cerminara to issue the required building permits to Mrs. Soufan on condition that she save harmless the city from any claims arising from their issuance. This step was taken in the teeth of a joint memorandum signed by the city administrator and city solicitor, advising against the issuance of permits because of Mrs. Soufan's possible violation of the O. Reg. 171/88. This memorandum says, in part:

> Mayor and Members
> City Council

Re: Deferred Matter No. 1 --
September 19, 1988 Council Meeting
1 and 3 High Street -- Soufan and UTRCA

This letter is being submitted as a result of numerous inquiries regarding the position of the Civic Administration on the above matter.

The Civic Administration is of the opinion that, having regard to the circumstances, there is greater justification for not issuing a building permit than there is for issuing one, for the following reasons:

1. In the absence of the Authority's permission, the construction in question allegedly contravenes the floodway regulations, a situation which technically prevents the Chief Building Official from issuing a permit. This is not a case of oversight by the owner in failing to get the Authority's permission; the owner actually sought but was refused permission ...

The upshot was that Mr. Cerminara issued building permits on October 14th. Then followed this application by the Authority under the Building Code Act seeking an order setting aside the issuance of such permits. As I have said, the Authority seeks its relief under s. 15 of the Building Code Act. The relevant provisions of s. 15 are s-ss. (1) and (3):

15(1) Any person who considers himself aggrieved by an order given or decision made by an inspector or chief official under this Act or the regulations may, within twenty days after the order or decision is made, apply to the judge of the county or district court for a hearing and appeal.

. . . . .

(3) Where an application is made to a judge for a hearing under subsection (1), the judge shall appoint a time for and hold the hearing and may rescind or affirm the order or decision of the inspector or chief official or take such action as the judge considers the inspector or chief official ought to take in accordance with this Act and the regulations, and for such purposes the judge may substitute his opinion for that of the inspector or chief official.

All counsel acknowledge that the Authority falls into the category of an "aggrieved" person within s. 15(1) of the Act. Of course, this concession of responding counsel -- Mr. Hoffer for Mrs. Soufan and Mr. Barber for the city -- is subject to their common position that, on the facts of this case, the issuance of the building permits was perfectly proper and lawful.

Put in a nutshell, Mr. Inglis' argument for the applicant Authority is grounded on an interpretation of the language of s. 28(1)(e) of the C.A.A. which reads this way:

28(1) Subject to the approval of the Lieutenant Governor in Council, an authority may make regulations applicable in the area under its jurisdiction,

. . . . .

(e) prohibiting or regulating or requiring the permission of the authority for the construction of any building or structure in or on a pond or swamp or in any area susceptible to flooding during a regional storm, and defining regional storms for the purposes of such regulations;

His position may, I think, be fairly summarized as flowing from a set of propositions:

(1) First, he submits that the renovation work carried on and to be carried on by Mrs. Soufan falls within the plain meaning of the term "construction" as employed in this section.

(2) Because Mrs. Soufan's work is caught by this section, she was required to obtain the Authority's consent for it under O. Reg. 171/88.

(3) Her failure to obtain such consent means that her work to date and in the future would be unlawful activity, as being contrary to the combined effect of the C.A.A. and O. Reg. 171/88.

(4) Her work also falls within the meaning of the term

"construct" as used in s. 5(1) of the Building Code Act.

(5) Finally, as a consequence of all of the above, the London council should not have ordered, and Mr. Cerminara should not have issued, building permits for Mrs. Soufan because s. 6(1)(a) of the Building Code Act requires a chief building officer not to issue a building permit if the proposed work will contravene any other applicable law.

This syllogistic-like argument of Mr. Inglis is challenged vigorously by counsel for Mrs. Soufan and the City of London. They argue, essentially, that the position of the Authority must fail because internal renovations of the kind contemplated by Mrs. Soufan do not fall within the reach of the terms "construction", "construct" and "building", as used in the C.A.A. and O. Reg. 171/88. If they do not, then, of course, the chief building officer issued his building permits lawfully and it cannot be said that the permits "... contravene any other applicable law ..." within s. 6(1)(a) of the Building Code Act.

Counsel for the respondents provide four supporting propositions for their central argument:

(1) Permission is only required from the Authority where a fresh building or, perhaps, an addition to an existing building is to be constructed.

(2) O. Reg. 171/88, read contextually, clearly cannot apply to internal renovations.

(3) The term "construction" as used in the C.A.A. must be interpreted within the context of that Act and not by reference to the definition section of the Building Code Act, an Act with different purposes.

(4) The terms "construction", "construct" and "building", as used variously in the C.A.A. and its subsidiary regulation, O. Reg. 171/88, should be strictly construed where their application could deprive an owner of proprietary rights or, alternatively, where they might have penal consequences.

In approaching the somewhat complex questions raised by counsel in this case, one must, I think, start with an analysis of the key provisions of the relevant statutes and regulation. The C.A.A. was first enacted by S.O. 1946, c. 11. It is a relatively early example, in Ontario, of an attempt at environmental protection legislation. The full title of the original C.A.A. gives some idea of what it was attempting to achieve:

> An Act to provide for the Establishment of Conservation Authorities for the purposes of the Conservation, Restoration and Development of Natural Resources, other than Gas, Oil, Coal and Minerals and for the Prevention of Floods and of Water Pollution.

Generally speaking, the C.A.A. called for procedures whereby its objects would be implemented by local entities known as "conservation authorities". These local authorities would be responsible, within a designated region embracing two or more municipalities, for the development of a "scheme" aimed, broadly, at protecting the natural resources of the watershed within the defined territorial jurisdiction of the various local authorities set up across Ontario. The present applicant Authority was, of course, one of the authorities so created under the C.A.A.

While the original C.A.A., in s. 13, defined the powers of the local authorities -- ranging from the power to study and investigate the watershed to the power to purchase, lease or even expropriate lands -- it did not address the power to oversee the construction of buildings on the watershed. Indeed, s. 16, which was the precursor of the present s. 28 of the C.A.A., restricted an authority's power to pass regulations to largely internal matters such as the conduct of meetings, the powers of officers and so on.

Inevitably, the 1946 Act underwent many changes down through the years. The Conservation Authorities Act, R.S.O. 1960, c. 62 replaced old s. 16 with an enlarged s. 20. By s. 20 the authorities were given greatly increased powers to pass regulations aimed at the broader objects of their existence. However, while s. 20(1)(d) enabled an authority to pass regulations prohibiting or regulating the placing or dumping of fill, it did not mention any regulatory power over construction projects on floodplain lands. Section 20(2)(b) went on to

provide that such regulations "... shall not interfere with any rights or powers conferred upon a municipality ...".

By the Conservation Authorities Amendment Act, S.O. 1961-62, c. 16, the regulation of "construction", in addition to fill, was first introduced into the C.A.A. The relevant provision reads as follows:

> 9. Clause d of subsection 1 of section 20 of The Conservation Authorities Act is repealed and the following substituted therefor:
>
> (d) prohibiting or regulating the construction of any building or structure, or the placing or dumping of fill of any kind, in or on a pond or swamp or in any area below the high-water mark of a lake, river, creek or stream.

Then, in the following year, another amendment was introduced which had the effect of providing separate clauses for the subjects of fill and construction regulation (S.O. 1962-63, c. 20):

> 4(1) Clause d of subsection 1 of section 20 of The Conservation Authorities Act, as re-enacted by section 9 of The Conservation Authorities Amendment Act, 1961-62, is repealed and the following substituted therefor:
>
> (d) prohibiting or regulating the construction of any building or structure in or on a pond or swamp or in any area below the high-water mark of a lake, river, creek or stream;
>
> (e) prohibiting or regulating the placing or dumping of fill of any kind in any defined part of the area over which the authority has jurisdiction in which in the opinion of the authority the control of flooding or pollution or the conservation of land may be affected by the placing or dumping of fill.

The first regulation of significance under the Act was O. Reg. 139/61, effective on July 1, 1961. This regulation gave the Authority the power to control the placing or dumping of fill on floodplain lands and called for a special application procedure if someone wished to obtain permission to place or dump fill. After the passage of the two amendments to the C.A.A. which gave the Authority powers of approval over construction work, O. Reg. 322/64 was passed as a replacement for O. Reg. 139/61. New O. Reg. 322/64 followed the principle of the statutory amendments and set up a regulatory scheme for construction work and the placing or dumping of fill on the floodplain: s. 3 purported to prohibit such work but the following sections -- ss. 4 to 7 -- then went on to set up an "application" procedure under which an interested person could apply to the Authority for permission to carry out construction or fill work. This application procedure is substantially the same as the procedure outlined in present O. Reg. 171/88, although later amendments to the predecessor to present s. 28 of the C.A.A. fleshed out this procedure by making it mandatory that the Authority hold hearings in certain cases and also allowing an applicant to appeal to the Minister if an application were refused by the executive committee of the Authority.

Two final points should be made about the course of the changes to the C.A.A. through the years. First, while old s. 20(2)(b) expressly stated that regulations passed under the C.A.A. could not interfere with any rights or powers conferred upon a municipality, present s. 28(2)(b) substantially narrowed the earlier provision by providing that such regulations could not "... interfere with any rights or powers conferred upon a municipality in respect of the use of water for municipal purposes, ...". Second, it is to be noted that no version of the C.A.A. including the present one, has ever attempted to define such critically important terms of present s. 28 as "construction", "building" and "structure". Equally, present O. Reg. 171/88 and its predecessors, do not define the terms, "construction", or "construct" although s. 1 of the Regulation defines "building" as meaning "... a building or structure of any kind; ...".

As I have said, the C.A.A. has undergone many changes through the years to make it a more effective and comprehensive piece of environmental legislation. Section 28 is an example of one of the changed provisions and was obviously aimed at permitting the enactment, by Authorities, of regulations which would enable them to implement their powers in a manner consistent with the objectives of the statute itself.

For the purposes of this case, the relevant provision of s. 28 is s. 28(1)(e), already quoted above. This rather sparse provision is the only one which purports to give a local Authority any sort of control over construction projects, of whatever kind, on floodplain lands. The critical enabling language in the paragraph is that which empowers the enactment of regulations "... prohibiting or regulating or requiring the permission of the authority for the construction of any building or structure ...". Rather remarkably, nowhere in this section, or elsewhere in the C.A.A., is there a special definition section or other provision, which attempts to define the intended scope or sweep of this paragraph. Was it intended, for example, to permit regulations only dealing with the construction of new buildings or structures or, alternatively, would it also permit regulations controlling both additions to existing buildings and internal construction work, of whatever kind, in existing buildings?

By contrast, the Building Code Act enacted to permit municipalities to exercise control over construction projects within their boundaries, contains much more specific guidance. Section 5(1) contains a broad controlling provision phrased this way:

> 5(1) No person shall construct or demolish or cause to be constructed or demolished a building in a municipality unless a permit has been issued therefor by the chief official.

But s. 1(1), a definition section, adds flesh and blood to s. 5 by providing the following important definitional content for the words "construct" and "construction":

> (e) "construct" means to do anything in the erection, installation or extension or material alteration or repair of a building and includes the installation of a building unit fabricated or moved from elsewhere, and "construction" has a corresponding meaning;

This definition makes it abundantly clear that building permits are called for not only in the case of construction of new buildings but, also, for internal repairs and renovations of a material character.

Leaving aside the difficulties with s. 28(1)(e) of the C.A.A. itself, one is also faced with the compounding factor of O. Reg. 171/88, enacted under the enabling powers of s. 28(1)(e). Regardless of the reach, or lack of reach, of s. 28(1)(e), one must decide, as an almost discrete problem, how far O. Reg. 171/88 has gone with the regulatory powers contemplated by s. 28(1)(e) of the parent C.A.A.

The relevant portions of O. Reg. 171/88 are these:

> 3. No person shall,
>
> (a) construct any building or permit any building to be constructed in or on a pond or swamp or in any area susceptible to flooding during a regional storm;
>
> . . . . .
>
> 4. Subject to the Ontario Water Resources Act or to any private interest, the Authority may permit, in writing, the construction of any building or the placing or dumping of fill or the straightening, changing, diverting or interfering with the existing channel of a river, creek, stream or watercourse to which section 3 applies, if, in the opinion of the Authority, the site of the building or the placing or dumping and the method of construction or placing or dumping or the straightening, changing, diverting or interfering with the existing channel will not affect the control of flooding or pollution or the conservation of land.
>
> 5(1) A signed application for permission to construct a building must be filed with the Authority and include,
>
> (a) four copies of a plan of the property showing the proposed location of the building, its elevation and the proposed final grade plan;
>
> (b) four copies of a complete description of the type of building to be constructed, including drainage details;
>
> (c) four copies of a statement of the dates between which the construction will be carried out; and

> (d) four copies of a statement of the proposed use of the building following completion of the construction.

Similarly to the C.A.A., the Regulation fails to define the critical term "construct" although s. 1 does define the terms "building or structure" as meaning "... building or structure of any kind ...".

I turn now to the meaning to be given to the terms "construction" and "building" as those terms are used in s. 28(1)(e) of the C.A.A. If, of course, this provision does not encompass internal renovations within an existing building, most clearly and, a fortiori, subordinate O. Reg. 171/88 cannot reach internal renovations because the regulation would be ultra vires to that extent: after all, a subordinate regulation cannot override and over-reach its parent statute.

Section 28(1)(e) of the C.A.A. purports to regulate "... the construction of any building or structure ..." on floodplain lands. The critical terms, "construction", "building" and "structure" are, as I have said, left undefined.

As it seems to me, this enabling language must be given its plain and ordinary grammatical meaning. I have examined the context of the C.A.A. as a whole and the provisions of prior versions of the statute back to 1946 and can find no hint that any other approach is justifiable. Professor Driedger, in his seminal study, Construction of Statutes, 2nd ed. (1983), has described the modern general principle of statutory construction this way at p. 87:

> Today there is only one principle or approach, namely, the words of an Act are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament.

An example of this great principle in the modern cases may be found in the following passage from the judgment of Lord Atkinson in City of Victoria v. Bishop of Vancouver Island (1921), 59 D.L.R. 399 at p. 402, [1921] 3 W.W.R. 214, [1921] A.C. 384 at p. 387:

> In the construction of statutes their words must be interpreted in their ordinary grammatical sense, unless there be something in the context, or in the object of the statute in which they occur, or in the circumstances with reference to which they are used, to show that they were used in a special sense different from their ordinary grammatical sense.

Considered in the light of this principle, can, then, the language of s. 28(1)(e) support an interpretation which allows the Authority to control internal renovations in an existing building? The Shorter Oxford English Dictionary, 3rd ed. (1973), p. 408, provides, inter alia, the following definitions of "construction":

> 1. The action of framing, devising, or forming, by the putting together of parts; erection, building; ... 2. The manner in which a thing is constructed or formed; structure ... 3. A thing constructed ...

The verb "construct" is similarly defined: "1. To make or form by fitting the parts together; to frame, build, erect ...". At p. 249, "building" is defined this way: "2. That which is built; a structure, edifice ...". Finally, "structure" is defined at p. 2156:

> 1. The action, practice or process of building or construction ... 2. Manner of building or construction; the way in which an edifice, machine, etc. is made or put together ... 3. The mutual relation of the constituent parts or elements of a whole as determining its peculiar nature or character ... 4. That which is built or constructed; a building or edifice of any kind, esp. one of considerable size and imposing appearance ... 6. An organized body or combination of mutually connected and dependent parts or elements ...

To me these definitions, and similar ones in other dictionaries, state expressly or, by implication, that, in ordinary parlance, the terms in question embrace work aimed at the erection of some complete structure or edifice, of whatever kind, and not work aimed at the mere renovation of such an

existing structure.

Section 28(1)(e) talks of regulations "... for the construction of a building ...". I do not see how this simple, unambiguous language can be tortured or stretched to include internal repair and renovation work within an existing building.

It is not, I think, uninstructive to consider here what the legislature did, in defining the term "construct", in the Building Code Act. There, the legislative draftsman obviously felt that it would be foolhardy to leave the term undefined as it was used in s. 5(1) of the Act. Hence, the definition section of that Act, s. 1, broadly defined "construct" to make it clear that building permits were required not only for the construction of new buildings but, also, the "... material alteration or repair of a building ...".

Mr. Inglis raised essentially two major points in aid of his central submission that O. Reg. 171/88 should catch Mrs. Soufan's work, namely, (1) that it would be illogical and inappropriate to give the terms "construction" and "construct", as used in the C.A.A. and O. Reg. 171/88, different and narrower meanings from those set forth in the Building Code Act and (2) that, in any event, they were broad enough to embrace renovations work. As to his first point, as I have said, the language of the Building Code Act will not support him. Plainly, there, the legislature chose to particularize the definitional content of these terms and, in effect, enlarge upon their ordinary meanings by reference to the special definition contained in s. 1. In support of his second point Mr. Inglis relied upon the case of Dawson Creek v. Lougheed, [1959] 19 D.L.R. (2d) 249 (B.C.C.A.). There, the question was whether s. 711(c) of the British Columbia Municipal Act, R.S.B.C. 1979, c. 290, which purported to regulate the "... construction of buildings ..." for fire-protection purposes, was restricted to the construction of new buildings only or included the power to regulate additions and alterations to existing buildings. The court held that the language was, in fact, broad enough to include the proposed additions and alterations. However, it is plain that the court gave this broad interpretation to the subsection by examining the context within which it was included. Coady J.A, at pp. 251-2, carefully tied his holding to introductory language of the section and an immediately preceding subsection:

Section 711 of the Municipal Act, 1957 (B.C.), c. 42, reads as follows:

"711. The Council may, for the health, safety, and protection of persons and property, and subject to the 'Health Act' and the 'Fire Marshal Act' and the regulations made thereunder, by by-law [am. 1958, c. 32, s. 314(a)]:

"(a) Regulate the construction, alteration, repair or demolition of buildings and structures:

"(c) Establish areas to be known as 'fire limit' and regulate the construction of buildings in each of such areas in respect of precautions against the danger of fire, and discriminate and differentiate between the areas as to the character of the buildings permitted in each of them."

. . . . .

The opening words of s. 711 seem to me to indicate a clear intention of the Legislature to authorize municipalities to enact by-laws for the health, safety and protection of persons and property. The authority therefore to fix fire limits and provide for Regulations with respect to the construction of buildings within a fire area or fire areas must be read and interpreted having reference to the opening words of s. 711. It would seem strange indeed that the Legislature intended to restrict municipalities, when fire areas are established, to the regulation of construction of buildings only, and not to the regulation of additions to present buildings or alterations thereto. It is clear that building by-laws adopted by municipalities pursuant to s. 711 may regulate additions to or alterations of present buildings, and I see no particular reason why the phrase "construction of buildings" as appears in s. 711(c), should be restricted only to what in effect would be the construction of new buildings. The meaning to be assigned to the word "construction", s. 711(c), must be related to the context. When read with the context, and more particularly

> the opening words of s. 711, it seems clear to me that the word "construction" in s. 711(c) should be taken to include reconstruction, addition and alteration, and should not be interpreted so as to confine it to the construction of a new building only: see Craies on Statute Law, 5th ed., pp. 93-4.

Obviously, in that case, Coady J.A., concluded that the interpretation urged by the landowner appellant would have led to an absurd result and one which was inconsistent with the contextual setting of the subsection.

> That case is not this case. I find nothing in s. 28 of the C.A.A. -- or for that matter anywhere else in the Act -- to indicate that the legislature intended the Authority to exercise powers over renovations within an existing building on the floodplain.

> In coming to this conclusion, I am deeply conscious, as well, of the direction to judges embarking upon statutory construction contained in s. 10 of the Interpretation Act, R.S.O. 1980, c. 219:

> 10. Every Act shall be deemed to be remedial, whether its immediate purport is to direct the doing of any thing that the Legislature deems to be for the public good or to prevent or punish the doing of any thing that it deems to be contrary to the public good, and shall accordingly receive such fair, large and liberal construction and interpretation as will best ensure the attainment of the object of the Act according to its true intent, meaning and spirit.

This statutory commandment, which seems first to have been enacted in 1849 (S.C. 1849 (12 Vict.), c. 10) has long been ignored or explained away by generations of lawyers and judges in Ontario and, indeed, elsewhere in Canada. The record of studied indifference is well diagrammed in Professor Eric Tucker's brilliant essay, "The Gospel of Statutory Rules Requiring Liberal Interpretation According to St. Peter's" (1985), 35 U.T.L.J. 113.

> Recently, the Ontario Court of Appeal attempted to resuscitate s. 10 in the case of Re Trustees of St. Peter's Evangelical Lutheran Church and City of Ottawa (1980), 30 O.R. (2d) 740, 118 D.L.R. (3d) 528, 14 M.P.L.R. 51 (Ont.C.A.). MacKinnon A.C.J.O., for the court, said this about the court's approach to the interpretation of the Ontario Heritage Act, S.O. 1974, c. 122, at p. 741:

> We are of the view that the matter really comes to a narrow compass on the particular and peculiar facts of this case. It should be said at the opening that the object and purpose of the Ontario Heritage Act, 1974 (Ont.), c. 122, is clear. It is to preserve and conserve for the citizens of this country, inter alia, properties of historical and architectural importance. The Act is a remedial one and should be given a fair and liberal interpretation to achieve those public purposes which I have recited.

While MacKinnon A.C.J.O. does not say he is applying s. 10 in express terms, it seems clear that his words are a paraphrase of it and that he must have intended to apply it.

> The actual decision of the trial and appellate courts in the St. Peter's case was reversed by the Supreme Court of Canada but, as I read the judgment of the Supreme Court, it does not disavow the view of MacKinnon A.C.J.O. that a judge must take a liberal and purposive approach to a statute if, at least, it is obviously remedial. What the Supreme Court added, however, as a sort of cautionary footnote to s. 10, was that it cannot be used to eviscerate the plain and obvious meaning of a statutory provision which does no violence or mischief to the complete statutory edifice and objects. McIntyre J., for the majority, said this (140 D.L.R. (3d) 577 at p. 593, [1982] 2 S.C.R. 616 at pp. 623-4, 20 M.P.L.R. 121):

> The Ontario courts have adopted the approach dictated by s. 10 of the Interpretation Act and they have construed the statute in the purposive manner. In this they have given effect fully to the avowed purpose of The Ontario Heritage Act, 1974. Accepting the approach so taken, I am not of the view, however, that in an effort to give effect to what is taken to be the purpose of the statute it is open to the court of construction to disregard certain provisions of the Act. The whole Act must be construed. It must be construed to give effect to the purpose above described but also to have regard for many provisions of the Act, particularly ss. 34

and 67, the purpose of which is to protect the interests of the landowner concerned. To ignore these provisions, or to read them down to where they are deprived of any real significance, is not to construe the statute but to decline to assign any meaning to certain of the words that were used by the Legislature.

I have approached my interpretation of s. 28(1)(e) in the spirit of s. 10 of the Interpretation Act but I cannot conclude that it assists the Authority. The term "construction", as used in the statutory language, cannot bear the burden of the enlarged meaning ascribed to it by counsel for the Authority whether considered alone, contextually or within the objects of the Act. There is simply no evidence in a dictionary, common parlance, or the broad framework of the Act leading to the conclusion that the environmental objects of the Act will be defeated if the Authority does not have control over internal renovations of an existing building.

In the event I might be wrong in my interpretation of s. 28(1)(e), I feel I should also move on to consider the effect of O . Reg. 171/88. Here, of course, I am assuming -- against my own holding -- that s. 28(1)(e) of the C.A.A. does empower the Authority to enact a regulation under which it could regulate not only fresh construction but, also, renovations.

The inherent fragility of the Authority's position is, I think, accentuated by an examination of O. Reg. 171/88. The combined effect of ss. 3 and 4 of the Regulation, quoted above, is to prevent the construction of any kind of building in a floodplain without the permission of the Authority and the permission is to be granted only if the Authority is satisfied the site of the building and method of construction "... will not affect the control of flooding or pollution or the conservation of land ...".

The difficulty with this language is that it is narrower than the language of s. 28(1)(e) of the C.A.A. Note that s. 4 of the Regulation speaks of "the construction of any building" (emphasis added), and later mentions "the site of the building". This phraseology surely seems directed to the fresh construction of some kind of complete discrete entity and not internal renovations, however sized.

Section 5(1) continues this theme by reference to the procedure contemplated for an application for permission to construct a building. This subsection tells the applicant about the written materials he must supply to support his request for a permit from the Authority. Section 5(1)(a) requires "... four copies of a plan of the property showing the proposed location of the building, ..."; s. 5(1)(b) calls for "... four copies of a complete description of the type of building to be constructed ..."; s. 4(d) calls for "... four copies of a statement of the proposed use of the building ...". If this Regulation were intended to cover renovations of any kind, I would have thought that the provisions of s. 1, containing a definition of "building", s. 3 describing the scope of construction work covered and, more especially, s. 5, specifying the materials to be filed in support of a permit, would have been phrased far differently then they are.

In short, assuming the Authority could have enacted a regulation under C.A.A. to control internal renovations or repairs to any existing building, I do not consider that this regulation was crafted to achieve that result. What it does do is control the actual construction of any building, that is, any type of structure from, perhaps, a pup tent to a skyscraper but it does not control renovations within an existing structure at all.

I consider that all the points taken by counsel are subsumed in my interpretative conclusions on the meaning of the relevant provision of the C.A.A. and O. Reg. 171/88. In the result, the application must be dismissed because the issuance of building permits to Mrs. Soufan did not contravene the C.A.A. or its subordinate Regulation, O. Reg. 171/88.

Unless I hear from any counsel within 10 days indicating a desire to argue the question of costs, I feel the applicant Authority should pay the party-and-party costs of the City of London and Mrs. Soufan forthwith after assessment.

Application dismissed.

Re **Vanderschot et al. and Township of North Easthope** et al.

24 O.R. (3d) 286
[1995] O.J. No. 4820

Ontario Court (General Division), Divisional Court
White, Moldaver and McDermid JJ.
June 20, 1995

STATED CASE pursuant to s. 94 of the Ontario Municipal Board Act, R.S.O. 1990, c. O.28.

Raymond G. Colautti and Paul J. Courey, for applicants.

Michael E. Mitchell and Michael A. Jaeger, for respondents.

C.D. Johnston, for Attorney General of Canada.

No one appearing for Attorney General of Ontario.

BY THE COURT: -- This stated case arises from a proceeding before the Ontario Municipal Board and is referred to this court under s. 94 of the Ontario Municipal Board Act, R.S.O. 1990, c. O.28. The stated question is as follows:

> Are the following by-laws constitutionally valid and within the authority of the Township of North Easthope and the Township of Ellice; namely By-laws 2-94 and/or 26-94 of the Township of Ellice, By-laws 3-94 as amended by by-law 7-94 and/or 16-94 of the Township of North Easthope?

The applicants own land in the vicinity of the Stratford Airport. The by-laws in question seek to impose height restrictions on any new building or structure erected on land in a specified area surrounding the Airport. The applicants challenge the constitutional validity of the by-laws.

The history of the by-laws and the agreements between the townships and the Minister of Transport pursuant to s. 5.81 of the Aeronautics Act, R.S.C. 1985, c. A-2, are reviewed in the factums before us.

The pith and substance of these by-laws is the regulation of airspace by the imposition of height restrictions in respect of lands adjacent to airports, which is a subject-matter that falls within the exclusive legislative jurisdiction of the Parliament of Canada. Therefore, Interim Control By-law 2-94 of the Township of Ellice and Interim Control By-law 3-94 of the Township of North Easthope (as amended by By-law 7-94), being passed pursuant to s. 38 of the Planning Act, R.S.O. 1990, c. P.13, a provincial statute, are ultra vires each township to the extent that they attempt to regulate airspace.

The second set of by-laws was passed by the townships pursuant to agreements entered into with the Minister of Transport under s. 5.81 of the Aeronautics Act and both have been registered in accordance with the provisions of the Statutory Instruments Act, R.S.C. 1985, c. S-22, s. 5. The applicants submit with respect to these by-laws that:

1. interim control by-laws made pursuant to s. 38 of the Planning Act cannot validly impose height restrictions because they deal with a subject matter that falls within the exclusive legislative jurisdiction of Parliament; and

2. because Article 2.01 of each agreement with the Minister of Transport permits the Townships to pass interim control by-laws only "in the same manner and to the same extent as it may pass an interim control by-law respecting the use of land", it follows that interim control by-laws passed by the Townships pursuant to their agreements with the Minister of Transport cannot impose height restrictions.

Section 5.81(1) of the Aeronautics Act, R.S.C. 1985, c. A-2, reads as follows:

> 5.81(1) The Minister may enter into an agreement with a provincial authority to authorize the provincial authority to regulate, in the same manner and to the same extent as it may

> regulate the use of lands within its jurisdiction, the use of lands adjacent to or in the vicinity of an airport or airport site that are not the subject of regulations made pursuant to subsection 5.4(2), for the purpose of ensuring that the use is not incompatible with the safe operation of an airport or aircraft.

The "conditional authorization" contained in para. 2.01 of the agreement between Her Majesty the Queen in Right of Canada, represented by the Minister of Transport, and the respective municipalities reads as follows:

> 2.01 The Minister authorizes the Township to pass an interim control by-law, in the same manner and to the same extent as it may pass an interim control by-law respecting the use of lands within its jurisdiction, respecting the use of lands adjacent to or in the vicinity of the Stratford Municipal Airport for the purpose of ensuring that that use is not incompatible
>
> with the safe operation of an airport or aircraft, on condition that such by-law is carried out in compliance with the terms of this agreement.

In our opinion, s. 5.81 of the Aeronautics Act does not purport to enlarge the powers granted by the provincial legislature to municipalities in s. 38 of the Planning Act, but rather purports to allow a provincial authority (in this case a municipality), to exercise a power in relation to a subject-matter that falls within the exclusive legislative jurisdiction of the Parliament of Canada. Paragraph 2.01 of the agreement simply gives the municipality the authority to exercise that federal power in accordance with the procedural requirements and temporal restrictions contained in s. 38 of the Planning Act. In passing the interim control by-laws in question, the municipalities were not exercising provincial powers under s. 38 of the Planning Act, but rather the delegated federal power under the Aeronautics Act. However, they were required to exercise the delegated federal power as if they were passing an interim control by-law under s. 38.

The words "in the same manner" refer to the procedural requirements of s. 38. The words "to the same extent" refer to the temporal restrictions of s. 38, i.e., under s. 38(1) of the Planning Act an interim control by-law shall not be in effect for a period exceeding one year from the date of its passage, but pursuant to s. 38(2) of the Act it may be extended provided that the total period during which it is in effect does not exceed two years from the date it was passed.

Accordingly, we are unable to accept the applicants' position on this issue.

The applicants also submit that Parliament cannot delegate powers to a municipality and that a municipality lacks the capacity to receive delegated powers to legislate with respect to a matter within the exclusive legislative jurisdiction of Parliament.

The position of the respondents and the Attorney General for Canada is that although Parliament cannot delegate its powers to a provincial legislature (because it would alter the division of powers set out in ss. 91 and 92 of the Constitution Act, 1867), it may delegate its powers to a municipality. They rely in part on the following portion of the judgment of Stevenson J. in R. v. Furtney, [1991] 3 S.C.R. 89 at p. 104, 8 C.R.R. (2d) 160:

> I agree with Driedger in "The Interaction of Federal and Provincial Laws" (1976), 54 Can. Bar Rev. 695, when he concludes that inter-delegation is constitutionally impermissible because there is a constitutional prohibition founded upon the granting of exclusive powers to the Parliament on the one hand, and the provincial legislatures on the other.
>
> The prohibition is against delegation to a legislature. There is no prohibition against delegating to any other body . . .

Therefore, we conclude that there is no impediment to Parliament delegating to the townships the power to pass by-laws that impose height regulations in order to regulate airspace around an airport and we agree that Parliament has the

power to delegate that power to the townships in the instant case.

The next question is whether the townships had the capacity to receive the delegated power to legislate with respect to a matter within the exclusive legislative jurisdiction of Parliament.

The applicants' position on this issue is that:

1. a municipality is a creature of the provincial legislature and can exercise only those powers conferred upon it by that legislature; and

2. a municipality cannot stand in a higher position than the body that confers powers upon it (the provincial legislature), when it comes to receiving delegated powers from Parliament that purport to give it the power to legislate in relation to a subject-matter within the exclusive legislative jurisdiction of Parliament; and

3. the provincial legislature has not bestowed upon the townships expressly or impliedly the power to receive the delegated federal power to regulate height under the Aeronautics Act.

Anomalous as it may seem, it is our opinion that, following the above-quoted principle in Furtney, once a municipal corporation is created, there is no bar to its receiving and exercising the powers delegated by Parliament in the circumstances before us. In Furtney, the Lieutenant Governor does not appear to have been authorized to receive the delegated federal power but was found to have the capacity to receive it. Also, we adopt the following passage from E.A. Driedger, Q.C., "The Interaction of Federal and Interprovincial Laws" (1976), 54 Can. Bar Rev. 695, at pp. 700-01:

> If Parliament cannot delegate to a legislature, it does not follow that Parliament cannot delegate to a provincial board. The provincial board is not the legislature or an agent of the legislature. The corporation of the city of Ottawa is not the legislature of Ontario or an agent of the legislature, and there is no reason why Parliament could not, for example, delegate power to the city of Ottawa to regulate navigation on the Rideau Canal within city limits; that the legislatures have exclusive jurisdiction and control over municipal institutions is irrelevant. The legislature could not control or direct the exercise of this federal power. Legislatures can speak only by statutes and if in the example cited the legislature were to attempt by statute to regulate the exercise of this legislative power received from Parliament, that statute would be ultra vires as being in relation to federal property or navigation or shipping.

The proposition was also advanced that even if Parliament can delegate federal power to a municipality, before the municipality can exercise the delegated power, it must have been authorized by the provincial legislature that created it to do so. The question then becomes, "Did the Ontario Legislature, either expressly or by necessary implication, bestow upon the Townships the right to enter into the agreements in question with the Minister of Transport and to accept and exercise these delegated powers?"

We believe that s. 2 of the Airports Act, R.S.O. 1990, c. A.15, provides a complete answer to that question. It reads as follows:

> 2(1) The Crown in right of Ontario, represented by the Minister, may enter into agreements with the Government of Canada, any municipality, corporation or individual, or any one or more of them, with respect to any matter in relation
>
> to the acquisition, establishment, extension, improvement, construction, operation, or maintenance of airports to serve any one or more areas in Ontario, and the Minister may provide funds to the municipality, corporation or individual for such purposes.
>
> (2) Any municipality may enter into agreements under subsection (1).

The section specifically gives a municipality the power to enter into an agreement with the Government of Canada "with

respect to any matter in relation to the acquisition, establishment, extension, improvement, construction, operation, or maintenance of airports to serve any one or more areas in Ontario". The enumerated matters are broad enough to encompass the agreements in question. The express powers granted to municipalities by s. 2 of the Airports Act, must fairly be implied to carry with them the ancillary power to accept and exercise delegated federal powers and to pass such by-laws as are necessary to give full effect to agreements between the municipalities and the Government of Canada relating to the enumerated matters.

Therefore, in passing the second set of by-laws, the townships were not exercising powers within the exclusive legislative jurisdiction of the provincial legislature. Rather, they were exercising federal powers validly delegated by Parliament that they were impliedly authorized by the Province of Ontario to receive.

The fact that the agreements between the Minister of Transport and the townships were not signed by the Minister is not fatal in light of s. 4.3(1) of the Aeronautics Act, which permits the Minister to authorize any person to exercise or perform any of his or her powers or duties. We are satisfied from paras. 15 and 16 and ex. "G" to the affidavit of Dean Broadfoot, sworn April 21, 1995, that the person who executed the agreements held the necessary authority and that they were validly executed on behalf of the Minister.

Accordingly, the answer to the stated case is that:

1. Interim Control By-law 2-94 of the Township of Ellice and Interim Control By-law 3-94 of the Township of North Easthope (as amended by By-law 7- 94), being passed pursuant to s. 38 of the Planning Act, R.S.O.

   1990, c. P.13, a provincial statute, are ultra vires each Township to the extent that they attempt to regulate airspace.

2. Interim control By-law 26-94 of the Township of Ellice, and Interim control by-law 16-94 of the Township of Easthope are constitutionally valid and intra vires said Townships.

The applicants shall pay the costs of this stated case to the respondents fixed in the amount of $4,500.

Order accordingly.

Walker v. Kingston (City)

Between
John Walker, Applicant, and
Corporation of the City of Kingston, Respondent

[1991] O.J. No. 1193
DRS 93-02730
Action No. M2217/90

Also reported at:
6 M.P.L.R. (2d) 316

Ontario Court of Justice - General Division
Kingston, Ontario
Campbell J.
Heard: May 24, 1991
Judgment: July 5, 1991

Harvey M. Rosen, for the Applicant.
Norman C. Jackson, for the Respondent.

CAMPBELL J.:-- This is an application by one John Walker for the reinstating of a building permit issued by the City of Kingston on June 7th, 1990. The permit was revoked by the Chief Building Official on August 13th, 1990. The permit had been issued on plans submitted by the applicant and in particular on the strength of his earlier filed letter of February 23rd, 1990, reading as follows:

> "This letter is my confirmation that the existing building at 1 Couper Street is being used as a two- family dwelling and that there are only two dwelling units in the building."

The subject premises comprise what has been described as a duplex at premises municipally known as 1 and 1A Couper Street on the north side of that street. Following the issue of the permit the applicant commenced construction by excavating and installing all or part of the foundation materials but by the time of the revocation of the permit that work had not proceeded above ground level. Since the revocation no further work has been performed on the property.

The City of Kingston zoning by-law 8499 was passed in the year 1975 and approved by the Ontario Municipal Board on September 7th, 1977. It has undergone sundry amendments since that time which have no bearing on the matter in issue on this application. The proposed construction consists of a substantial westerly addition adjoining the previously existing three storey six bedroom building. The addition is part two storey and part three storey. The plans for the addition involve some eight additional bedrooms, so labelled on the plans, with one bathroom and access to an existing kitchen in the original building. The third storey of the proposed addition involves a vacant area with eight foot ceilings and is merely described on the plans as "third floor area to be finished to living space in the future". This area measures between 1200 and 1300 square feet.

On July 16th, 1990, an Order to Comply was issued to the applicant requiring confirmation of "the use of the existing premises at 1 Couper Street to conform with zoning by-law 8499" and requiring plans "to show the purposes of the unfinished area on the third floor of the proposed addition". No satisfactory reply to these requirements was forthcoming from the applicant although through his solicitors the applicant stated that the existing premises were residential premises "currently rented to and occupied by six tenants" and stating that "there could be no plans prepared to show the purposes of the unfinished area on the third floor of the proposed addition". It is to be noted that amongst other things the plans show no provision for access to the third floor area. The Chief Building Official wrote to the applicant under date of August 8th, 1990, indicating and explaining continued concern for satisfactory information and warning of early revocation of the permit in supplement to the stop work order contained in the July 16th document. The revocation of the permit was communicated to the applicant by letter of the city's senior building inspector.

The Planning Act, 1983, statutes Ontario, 1983, chapter 1, by

its section 34(1) indicates that zoning by-laws may be passed by councils of local municipalities for prohibiting use of land other than for such specific purposes as may be set out in the by-law and prohibiting erecting, locating or using any buildings or structures for any other than such purposes. Provision is made for the designation of zones referable to such by-laws. The by-law designates the subject property as Zone A. The relevant provisions in by-law 8499 include certain definitions to which I shall briefly refer.

Section 1.2 provides for the prohibitions authorized by the Planning Act other than for uses as specified in the by-law.

By section 4.25 "dwelling unit means one or more rooms together with private lavatory accommodation and one kitchen and designed and/or used for exclusive residential occupancy by one family as defined in this by-law".

Section 4.27, "dwelling, two family: a building having independent exterior wall and containing only two dwelling units".

Section 4.36 defines "family" to mean

(a) one person occupying a dwelling unit, or

(b) this option (b) is of doubtful continuing force or effect since its prohibitions refer to relationships now barred by new section 34a of the Planning Act. The amendment to the Planning Act creating section 34a revokes any authority that may previously have existed to pass by-laws that distinguish between persons who are related and persons who are unrelated in respect of the occupancy of a building or structure and provides that a provision in any by-law that distinguishes between persons who are related and persons who are unrelated in respect of the occupancy of a building or structure ceases to have effect on the date this section goes into force, namely February 2nd, 1989.

Option (c) in the definition of "family" reads: "A group of not more than five unrelated persons occupying a dwelling unit."

In light of the statutory amendment in 1989 to which I have just referred I am reading down this provision in (c) by deleting the word "unrelated" so that (c) will now in effect read "a group of not more than five persons occupying a dwelling unit".

I cannot agree with counsel for the applicant that the effect of the 1989 amendment should result in the complete revocation of section 4.36 of the by-law.

Subsequent to the issue of the building permit it became known to the city building department and acknowledged by the applicant that the existing building was being occupied by six and sometimes more persons. this of course is in breach of the permissable use under (c) above quoted from the by-law.

This application has come to the court pursuant to section 15 of the Building Code Act, R.S.O. 1980, chapter 51, giving the court authority to rescind or affirm the order or decision of the inspector or chief official to take such action the court considers that the inspector or chief official ought to take in accordance with the Act and the regulations "and for such purposes the judge may substitute his opinion for that of the inspector or chief official". Section 6 of the Building Code Act requires that the chief official shall issue a permit except where the application is incomplete or where proposed building or construction will not comply with the Building Code Act "or will contravene any other applicable law". Subsection 4 of section 6 provides for revocation of a permit "where it was issued on mistaken or false information".

Section 8 of the Act provides that where an inspector finds that any provision of the Act is being contravened he may make an order in writing, as was done by the order of July 16th, directing compliance forthwith or within a reasonable time to rectify the perceived contravention.

Section 11 permits an inspector whether before or after the issue of the permit to require the production of drawings and specifications and to require relevant information relating to a building or part thereof.

Clearly on the evidence the assurance by the applicant in his letter of February 23rd, 1990, to which I have referred, that the original part of the building "is being used as a two family dwelling", in the light of the subsequently discovered breach by occupation by more than five persons, known to the applicant, must be regarded as "mistaken or false information" and constituted full authority for the making of the order to comply in that the continuation of the project would be noncompliance by reason of contravention of an applicable law, in this case the law as stated in the zoning by-law. The requirement for detailed plans of the unfinished large area in the third storey of the addition was and continues to be an authorized and necessary requirement. If the future plans for the third storey area were to involve the creation of a third self-contained dwelling unit this would of course be a prohibited use under the definition of "one-family dwelling" and "two-family dwelling" as permitted in the by-law. If on the other hand the space is to be used for a substantial number of individual rooms or say a common room this requirement would have to be viewed in the light of the existing plans for the proposed construction. The Chief Building Official and the inspectors in his department had full authority to make both requirements which formed the basis for the revocation of the permit. I find that the order to comply and the subsequent order of revocation of the permit were proper procedures in accordance with the Building Code Act. I confirm both orders and find no ground for substituting any opinion by me to the contrary.

The fact of the expenditures by the applicant for the preliminary subsurface work is irrelevant to this application.

The argument of counsel for the applicant that the matter should proceed without more in accordance with the filed plans and that prosecution and penalty for any future illegal use should be awaited would frustrate the intent and meaning of the by-law and cannot be sustained.

The application for reinstating the permit is dismissed.

The respondent will have its costs when assessed.

CAMPBELL J.

Walton v. Lincoln (Town)

Between
Denise Walton and Harold Walton, applicants, and
The Corporation of the Town of Lincoln, respondents

[1997] O.J. No. 3363
Court File No. 37,949/96

Ontario Court of Justice (General Division)
St. Catharines, Ontario
J.W. Quinn J.
Heard: May 5 and 6, 1997.
Written reasons: May 30, 1997. Judgment: August 11, 1997.

Counsel:
J.H. Cunningham, for the applicants.
P. Janzen, for the respondent.

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J.W. QUINN J.:--

A. INTRODUCTION

[para1] This case involves guinea pigs, by-laws and a building permit. For approximately six years the applicants bred guinea pigs in a small, barn-like structure on their property. In 1996 the structure was destroyed by fire. The applicants were desirous of rebuilding. They unsuccessfully applied for a building permit from the respondent and now appeal to this court pursuant to s. 25(1) of the Building Code Act, 1992. [See Note 1 below]

Note 1: S. O. 1992, c. 23.

B. OVERVIEW

[para2] The applicants are husband and wife. They own real property ("Property") located in the Town of Lincoln. The Property, purchased in 1991, is in an area zoned for residential use. At the time of purchase, the Property contained a residence and one dilapidated outbuilding ("barn"). Although there is some dispute as to precisely when the respondent became aware that the applicants were breeding large numbers of guinea pigs on the Property, it is clear that this fact was known to municipal officials at least as early as August, 1992. At that time, the respondent received complaints from neighbours regarding various animals, including the guinea pigs, being kept on the Property but nothing was done to require the applicants to either cease or reduce their guinea pig breeding operation.

[para3] The applicant, Denise Walton ("Mrs. Walton") is a dedicated guinea pig fancier and bred these animals for show purposes. Customarily she would breed the guinea pigs in such a fashion as to produce approximately 125 each year. From that number she would keep thirty of the best specimens for herself and give away the rest. This scenario was repeated annually.

[para4] Subsequent to the purchase of the Property, the applicants renovated and enlarged the barn. They installed heat, insulation and air conditioning to facilitate their breeding operation. In 1996 the barn was destroyed by fire and 123 guinea pigs perished.

[para5] Mrs. Walton [See Note 2 below] applied to the respondent for a permit to rebuild the barn. She completed the usual application form, paid the required fee and was assigned a permit number. There is some dispute as to whether a permit was issued and subsequently revoked or whether the application was refused. Be that as it may, she was informed by the respondent that to reconstruct the barn for the purpose of its previous use contravened the governing zoning by-law.

Note 2: It appears that Mr. Walton did not, at any time, have contact with the respondent and is an applicant in these proceedings only because he is a joint owner of the Property.

C. THE ISSUES

[para6] Although the ultimate issue to be determined, of course, is whether the decision of the chief building official of the respondent was correct, there are four preliminary issues to be addressed:

1. Credibility.

2. When did the respondent first learn that the applicants were breeding large numbers of guinea pigs on the Property?

3. Did the chief building official of the respondent refuse to issue a building permit or did he issue, and then revoke, the permit?

4. What was the basis for the decision of the chief building official?

D. CHRONOLOGY OF EVENTS

[para7] I will summarize, by way of a chronology, the key events leading to these proceedings:

September, 1990 - Mrs. Walton, in the company of a friend, Kenneth Shank, attended at the offices of the respondent to inquire whether it would be permissible to raise guinea pigs on the Property which the applicants,

at that point, were contemplating purchasing. [See Note 3 below] Ernie Allan ("Allan"), a By-Law Enforcement Officer with the respondent, advised that such use was not contrary to any by-law. According to Mrs. Walton, Allan was aware that the applicants had in mind housing at least 100 guinea pigs. Allan maintains that he assumed the inquiry was as to keeping a small number of guinea pigs as pets. He denies any knowledge that the operation would reach the numbers attained. This conflict in the evidence will be

dealt with later in these Reasons.

Note 3: The property was zoned R3 under By-Law 78-85, which had been in force since 1978. The surrounding lands were zoned for existing residential use and future residential development.

1990 - The applicants made an offer to purchase the Property but apparently it was not accepted by the owner.

1991 - In preparation for making another offer to purchase the Property, Mrs. Walton maintains that she repeated the earlier inquiry of Allan and received the same favourable response.

September, 1991 - The purchase of the Property was completed and the applicants took possession. Guinea pigs immediately were housed in the existing barn and this continued up to the date of the fire.

November, 1991 - The respondent received its first complaint in respect of the Property. The complaint related to the keeping of ducks and geese. Allan attended at the Property and was advised by Mrs. Walton that she had two ducks (as pets for her terminally ill son) and since they were both male, "there would be no more." She also advised Allan that she kept a number of guinea pigs on the premises. As I understand the evidence, the number was not specified at that time.

August, 1992 - Allan received a further complaint that the number of animals on the property had increased to six ducks, twelve rabbits, two dogs and approximately 100 guinea pigs. He orally informed Mrs. Walton that she may have to get rid of the animals since their presence was contrary to the zoning by-law.

February 15th, 1993 - The respondent passed Town of Lincoln Comprehensive Zoning By-Law No. 93-14-Z1 ("new by-law"). It was not approved by the Ontario Municipal Board until 1995 when it replaced By-Law No. 78-85 ("old by-law").

March, 24th 1993 - The respondent received another complaint in respect of the number of animals kept on the Property. [See Note 4 below]

Note 4: Although the written records of the respondent do not reveal this fact, Allan alleges that the complaint included an objection to a foul odour emanating from a pile of manure stacked on the Property.

March 25th, 1993 - The respondent issued an Order to Comply in respect of the old by-law. The order read, in part:

> ... I have received further complaints about you having animals on your property.
>
> As I have stated in the past, this is contrary to the Zoning By-Law 78-85, as amended, Section 3.4(a)(xvii) [See Note 5 below] and I have enclosed a copy for your information.
>
> While I have been involved with this investigation for some time, at the beginning there were two ducks to deal with, but now information has
>
> come to my attention that there are other animals on the property at present.
>
> There is also a pile of manure on the property which adds to the problem.
>
> I have no alternative than to issue an order that the fowl and animals be removed from the property by Friday, April 30, 1993 ...
>
> The applicants requested the opportunity to address the respondent on the issue.

Note 5: This section reads:

> 3.4 Uses Prohibited
>
> (a) Notwithstanding anything contained herein, the following uses are prohibited in any zone:
>
> ...
>
> (xvii) keeping or raising of any bull, ox, cow, horse, sheep, goat, pig or other cattle, or any poultry, or any reptile or any wild animal including any tamed or domesticated wild animal, on any residential lot or in any building or structure on such lot, or on any lot or in any building or structure in an Urban Residential Zone.

April 7th, 1993 - Bram Radix ("Radix"), the chief building official [See Note 6 below] for the respondent, attended at the
>
> Property and noted the presence of the following animals: three ducks and a number of ducklings to be sold; nineteen miniature rabbits; five goats (two of which were scheduled to be sold); and 125 guinea pigs.

Note 6: The chief building official is so designated under

the Building Code Act, 1992.

April 19th, 1993 - The applicants attended a Council meeting of the respondent. The minutes of the meeting include the following passages:

> Mrs. Walton distributed packages to members of Council containing several letters of support for her keeping of the animals in question ... She agreed that she is in fact breaking the by-law as she has the noted number of animals ... She stated that her reason for having the ducks ... is that her son is dying of Kawasaki disease ... and the ducks were purchased as pets in order to help give him a goal to help him in his rehabilitation ... She advised that ... her son developed a severe allergy to cow's milk and now can only have goats milk ... [and] if forced to get rid of the goats, she would have no choice but to apply for welfare ... She advised that the cost of purchasing goat's milk from stores would be upwards of $10.00 per day which she cannot afford ... [She] then proposed to Council that if she can keep her 3 goats and the original 2 ducks, she would arrange to have the manure hauled away every week ...
>
> Mr. Radix ... confirmed the number of animals which were counted by him on the property on April 7th, 1993, being as follows: 3 ducks plus a number of ducklings to be sold; 19 rabbits; 5 goats, 2 of which are to be sold; and 125 guinea pigs.
>
> Mrs. Walton responded to the information noting that in October of 1990, she was given permission by the Town's By-law Enforcement Officer for the 2 ducks and guinea pigs. She referred to the guinea pigs [and] ... expressed the opinion that this is not a prohibited use in the by-law.
>
> The Chief Building Official ... noted that the By-law Enforcement Officer was asked if they could have some guinea pigs but that he did not envision a number such as 125. Members of Council questioned whether the guinea pigs would be a legal use. The Chief Building Official noted the definition in the zoning by-law and advised that staff are seeking a legal opinion with respect to the guinea pigs. There was a general discussion of the restrictions on animals in both By-law No. 78-85 and the new Zoning By-law No. 93-14-Z1 ...
>
> Members of Council then raised questions regarding the rabbits and guinea pigs. Mrs. Walton advised that she would go to court over the guinea pigs ...
>
> Opinion was then expressed by some members of Council that even if the owner got rid of the goats, over 100 animals would remain and this may not solve the problem ...
>
> Mrs. Edith Miller was granted leave to speak ... she is a neighbour ...

approximately 11 persons in the audience identified themselves as neighbours in agreement with Mrs. Miller ... Mrs. Miller stated that there has [sic] been problems with odours and flies in the spring and summer ... there were never problems prior to the Walton's animals ... Mrs. Miller advised that the neighbours did accept a compromise last year for 2 ducks and the goats only, but that the number of animals escalated to the current number anyway ...

There was discussion as to whether the by-law may even apply to the guinea pigs and the rabbits. There was discussion ... and opinion expressed that the number not the type is the issue ... Opinion was expressed that having one or two animals is different than this situation. It was noted that staff have been very compassionate and tried to resolve the issue ... but the issue has now expanded out of control ...

In the result, no decision was made to reduce the number, or restrict the keeping, of guinea pigs. Council upheld the Order to Comply.

May 6th, 1993 - The following letter was forwarded to the respondent by Reverend D. B. Brubacher: [See Note 7 below]

At the request of Mrs. Walton, I inspected [the Property] on ... May 5, 1993. I found no goats, ducks or any other animals prohibited by By-Law 78-85 [no.] xvii on the [P]roperty. The manure pile also has been removed. Three rabbits and the guinea pigs remained.

Note 7: Mrs. Walton, apparently, at this point, had refused to allow employees of the respondent to attend at the Property. Rev. Brubacher was enlisted as a "go-between" of sorts.

September, 1993 - The applicants were advised by the respondent of a complaint received from a neighbour regarding flies and an odour of manure. The complainant alleged that the applicants' barn contained 150 guinea pigs.

September 7th, 1993 - The Council of the respondent met. One of the topics discussed was whether the applicants' guinea pigs constituted a health problem. [See

Note 8 below]

Note 8: This court was never presented with evidence to support a finding that there was a health problem.

September 17th, 1993 - Radix prepared a memorandum for the mayor and members of council regarding the meeting of September 7th, 1993. It read, in part:

The minutes of this meeting reflect Council's request for a report from

the Chief Building Official to deal with the Town's legal ability to restrict guinea pigs ...

Presently certain types of animals including domesticated wild animals [See Note 9 below] are prohibited in residential zones. At the Council meeting of April 19, 1993, no decision was made to reduce the number or restrict the keeping of guinea pigs ...

Staff will ... investigate with the Solicitor the cost and viability of preparing an Animal Control By-Law.

Note 9: Guinea pigs are not considered to be wildlife.

September 17th, 1993 - Dr. June Mergl, a veterinarian practicing in Niagara Falls, provided a "To Whom It May Concern" letter which spoke favourably of Mrs. Walton and her guinea pig operation. This letter was attached as an exhibit to the affidavit of Mrs. Walton filed as part of the application record. However, it is hearsay evidence and, in the absence of an acknowledgement of the truth of its contents by the respondent, it is not admissible in this proceeding.

September 22nd, 1993 - The Office of The Medical Officer of Health for Regional Niagara, provided a letter to the applicants which, as well, was favourable to their cause. However, it suffers from the same evidentiary flaw as the letter from Dr. Mergl.

March 29th, 1994 - Allan prepared a memorandum to Radix. It included the following:

... on March 29, 1994, two neighbours attended at this office regarding the [applicants] and the activity at [their] residence and barn.

I have been advised that there are as many as ninety bags of manure placed between the house and barn over a time period of about two weeks ... before it is removed ...

I have been advised that there have been as many as five dogs on the property at one time.

In view of the above, I am asking that Council be made knowledgeable of this and also has there been an interpretation of pets?

Finally I am requesting that Reverend David Brubacher be made aware of this and request that he attend at the [applicants'] residence, as he was the person that made the final inspection on May 5, 1993.

October 30th, 1995 - The Ontario Municipal Board approved the new by-law.

March 8th, 1996 - A fire destroyed the barn. It was approximately thirty-five years old at the time. All that remained was the concrete foundation and half of one wall. It is common ground that the extent of the damage is such that

the structure cannot be restored but must be rebuilt.

March 11th, 1996 - The applicants applied for a building permit. The description of the work, as set out in the Permit Application, read, "replace fire damaged building" and the zoning was shown as R1.

March 18th, 1996 - According to the applicants, Radix advised them that a building permit would issue if they provided a letter indicating that the use of the barn would not involve any commercial activity. Radix was concerned that, although a home occupation [See Note 10 below] was permitted within a R1 zone, it must be carried on solely within the dwelling. Subsequently, Radix concluded that the use of the barn for a guinea pig breeding operation, on the scale that had been practised in the past, did not qualify as an "accessory use" within the meaning of the new by-law and would, indeed, be an illegal use. Radix requested from the applicants a written undertaking not to use the barn for the raising of guinea pigs on the previous scale.

Note 10: Pursuant to section 4.143 of the new by-law, Home Occupation is defined as:

> ... an occupation, trade, business, profession or craft carried on as a secondary and incidental use within a single detached dwelling, which use is carried on solely by the residents of the dwelling in which the home occupation is located, and is carried on entirely within a single detached dwelling.

March 19th, 1996 - The applicants provided the letter as requested by Radix but not the written undertaking. As well, they paid the required fee for the building permit ($105.00). The respondent issued a receipt. The letter from the applicants stated:

> The building to replace the existing building at 2843 Red Maple is not going to be used in any way for gain or profit. This building is only for previous existing use.

March 20th, 1996 - Radix prepared a memorandum for the mayor and members of Council which contained these references:

> Recently a small barn which was located in a residential zone, and which housed a large number of guinea pigs, was destroyed by fire. Mrs. Walton applied for a building permit to construct a new accessory building of similar size. The proposed size of the structure and its location would comply with the zoning by-law. Mrs. Walton was clear that the purpose for constructing the accessory building was to raise guinea pigs ...
>
> Many Council Members will recall the large number of complaints that were received three years ago regarding the guinea pigs and the subsequent Council Meeting which dealt with the subject. The conflict has created a

tremendous amount of tension in the neighbourhood.

Upon examining the application and in consultation with the Town Solicitor, Mr. Janzen, I have decided not to grant a permit ... for the following reason:

> It is my interpretation that the raising of a large number of guinea pigs in an accessory building, on land which is zoned Residential, does not conform with the following definitions in Zoning By-law No. 93-14-Z1 ... [See Note 11 below]

Note 11: The memorandum went on to set out the definitions for "accessory use" and "accessory building or structure."

March 22nd, 1996 - Radix wrote to the applicants and stated, in part:

> On March 8th, 1996 your barn type accessory building was destroyed by fire. According to the Fire Department report, 150 to 200 guinea pigs housed in the structure were also destroyed by the fire.
>
> ... you applied for a building permit to reconstruct the accessory building located in a Residential Zone (R.1), for the purpose of raising guinea pigs.
>
> Upon examining the application and in consultation with the Town Solicitor, and after informing Members of Council, I have decided not to grant a permit to construct the accessory building for the following reason:
>
> It is my interpretation that the raising of guinea pigs in an accessory building, on land which is zoned Residential, does not conform with the following definitions in Zoning By-law No. 93-14-Z1 ...
>
> > 4.1 Accessory Use: means a use customarily incidental, subordinate and exclusively devoted to a principal use, located on the same lot therewith.
> >
> > 4.2 Accessory Building or Structure: means a detached building or structure not used for human habitation, but used to house an accessory use and includes a private garage.
> >
> > ...
> >
> > Please also find attached a cheque which covers the full refund of the building permit application fee.

E. LEGISLATION

1. The Building Code Act, 1992

[para8] The pertinent portions of the applicable sections of the Building Code Act, 1992 are as follows:

1. In this Act,

...

'construct' means to do anything in the erection, installation or extension or material alteration or repair of a building ... and 'construction' has a corresponding meaning;

...

8(1) No person shall construct ... a building ... in a municipality unless a permit has been issued therefor by the chief building official.

(2) The chief building official shall issue a permit under subsection (1) unless,

(a) the proposed building, construction ... will contravene this Act or the building code or any other applicable law;

...

(10) Subject to section 25, the chief building official may revoke a permit issued under this act,

(a) if it was issued on mistaken, false or incorrect information;

...

(d) if it was issued in error;

...

10(1) Even though no construction is proposed, no person shall change the use of a building or part of a building ... unless a permit has been issued ...

(2) The chief building official shall issue a permit under subsection (1), unless,

(a) the building if used as proposed would result in a contravention of this Act or the building code or any other applicable law ...

...

25(1) Any person who considers themselves aggrieved by an order or decision made by [a] ... chief building official under this Act or the regulations ... may, within twenty days after the order or decision is made, appeal the order or decision to a judge of the Ontario Court (General Division).

...

(4) ... the judge shall hold a hearing and may rescind or affirm the order or decision of the ... chief building official or take such action as the judge considers the ... chief building official ought to take in accordance with this Act ... and, for such purpose, may substitute his or her opinion for that of the ... chief building official.

[para9] It should be noted that prior to April 7th, 1993, the term "applicable law", as found in s. 8(2)(a) and s. 10(2)(a), was not defined in the Act. However, on that date the regulations to the Act were amended to provide for the following definitions: [See Note 12 below]

Note 12: Ontario Regulation 160/93, made under the Building Code Act, amending Reg. 61 of R.R.O. 1990.

Applicable law means, for the purpose of section 8 of the Act, any general or special Act, and all regulations and by-laws enacted thereunder, which prohibit the proposed construction or demolition of the building unless the Act, regulation or by-law is complied with.

Applicable law means, for the purposes of clause 10(2)(a) of the Act, any general or special Act, and all regulations and by-laws enacted thereunder, which prohibit the proposed use of the building unless the Act, regulation or by-law is complied with.

2. The New By-law

[para10] The applicable provisions are these:

SECTION 1: TITLE, DEFINED AREA AND INTERPRETATION

...

1.3 INTERPRETATION

1.3.1 For the purpose of this By-law, the definitions and interpretations given herein shall govern.

In their interpretation and application, the provisions of this By-law shall be held to be the minimum requirements, except when expressly stated otherwise, adopted for the promotion of public health, safety, convenience or general welfare.

Every use, building and structure in the defined area shall conform to the relevant zone provisions and any other relevant applicable provision or requirement contained therein.

Whenever two or more provisions or requirements of this By-law are at variance, one to the other, the more restrictive shall apply except where specifically stated otherwise.

1.3.2 For the purpose of this By-law:

(a) words used in the present tense shall be deemed to include the future tense:

...

(c) the words "use", "used" or "occupy" shall be deemed to include the words "intended, arranged or designed for use or occupancy" or "intended, arranged or designed to be used or occupied" or "intend, arrange or design for use or occupancy";

...

SECTION 2: SCOPE AND EFFECT OF THIS BY-LAW

2.1 Within the defined area no person shall, or cause, any land to be used or any building or structure to be located, used, altered or erected, in whole or in part, except in conformity with the provisions contained herein.

...

SECTION 4: DEFINITIONS

All words and phrases contained herein shall carry their customary meaning, with the exception that the following words and phrases shall be defined as indicated:

4.1 Accessory Use means a use customarily incidental, subordinate and exclusively devoted to a principal use, located on the same lot therewith.

4.2 Accessory Building or Structure means a detached building or structure not used for human habitation, but used to house an accessory use and includes a private garage.

...

SECTION 6: GENERAL PROVISIONS

The regulations of this Section shall apply to all zones.

...

6.2 ACCESSORY USES, BUILDINGS AND STRUCTURES

In accordance with subsection 6.39(i) and except as provided otherwise within a specific zone, accessory buildings and structures not attached to the main building shall:

(a) not be established until or unless the main building or use to which it is accessory is established;

(b) not be used for human habitation;

(c) not be used for gain or profit ...

...

6.5 BUILDING RESTORATION

(a) ...

(b) Nothing in this By-Law shall prevent the replacement of a dwelling ... which has been partially or completely destroyed by fire ... on all or part of the existing foundation.

...

6.39 USES PERMITTED IN ALL ZONES

Nothing in this By-Law shall prevent the use of land for the following uses:

...

(i) Building or structure accessory to any permitted use, except where specifically precluded, and subject to the provisions of subsection 6.2 and any other requirement contained herein.

...

SECTION 11: RESIDENTIAL 1 ZONE (R1)

In an R1 Zone, no land shall be used and no building or structure shall be used, altered or erected except in accordance with the following provisions:

11.1 PERMITTED USES

(a) single detached dwelling

(b) group home

(c) home occupation.

3. The Planning Act [See Note 13 below]

[para11] Section 34 (1) of the Planning Act is germane to this application. It provides, in part:

Note 13: R.S.O. 1990, c. P. 13.

34(1) Zoning By-laws may be passed by the councils of local municipalities:

1. For prohibiting the use of land, for or except for such purposes as may be set out in the by-law ...

2. For prohibiting the erecting, locating or using of buildings or structures for or except for such purposes as may be set out in the by-law ...

...

4. For regulating the type of construction and the ... character and use of buildings or structures to be

erected ...

...

(9) No by-law passed under this section applies,

(a) to prevent the use of any land, building or structure for any purpose prohibited by the by-law if such land, building or structure was lawfully used for such purpose on the day of the passing of the by-law, so long as it continues to be used for that purpose;

F. DISCUSSION OF THE ISSUES

1. Credibility

[para12] I state the obvious when I say that the ability to observe a witness in the box is an important component of assessing credibility. Nonetheless, it is certainly possible to make findings of credibility based upon transcripts of out-of-court examinations. The evidence in this proceeding consists of affidavits from Mrs. Walton, Kenneth Shank, Allan and Radix together with transcripts of the cross-examinations conducted in respect of those affidavits. With this in mind, I now look at the issue of credibility, in particular, the credibility of Mrs. Walton.

[para13] To gauge the credibility of Mrs. Walton, one must understand the degree of her involvement with guinea pigs. The following facts arise from her evidence:

(a) She is a member of the Ontario Cavy Club. [See Note 14 below]

Note 14: The term "cavy" is the official appellation for "guinea pig."

(b) For the past 20 years she has been listed with the Ontario Cavy Club as a breeder.

(c) The Ontario Cavy Club hosts shows on a monthly basis which Mrs. Walton attends.

(d) She also appears at shows held by the Dominion Rabbit and Cavy Breeders Association, "three or four times a year."

(e) She is a member "of various [cavy] clubs all over the United States."

(f) "There are shows all through the United States" which the applicants take in "maybe once a month."

(g) It was her estimate that, in total, she attends from 12 to 16 shows each year.

(h) Mrs. Walton is a former director of the Ontario Cavy Club and "was the show chair person for years." She "ran the shows [and she] would make sure all the paperwork got to the show secretaries ..."

(i) In her evidence she described the seven breeds of guinea pigs that she raised, including Textels. She stated, "I was instrumental in bringing Textels into the country and recognizing that breed. ... I was on the standards committee with the Ontario Cavy Club and we got that as a recognized breed."

[para14] Mrs. Walton gave detailed evidence regarding her breeding methods all of which were designed to produce the best possible "show quality babies." In her words, "Anything that I keep for ... breeding has to be able to go on the show table and win at least the best of breed. I'm very fussy." Customarily she would count on approximately 125 guinea pig births annually. From this number she would keep 30 each year. The rest she gave away.

[para15] With this background, I shall now move on and

deal with specific examples of Mrs. Walton's credibility.

[para16] Since the fire, she has been raising guinea pigs in the library of her home. [See Note 15 below] When cross-examined she testified that she was unsure whether she actually would move the guinea pigs into the barn should it be rebuilt: (Transcript, p. 78, Q. 464)

Note 15: This was an addition to the applicants' residence and was constructed in 1995.

Q. And with respect to the building that burned down, you described to me in essence that the building had been partitioned or had three separate areas. [See Note 16 below]

Note 16: One area contained the guinea pigs and the other areas were used for miscellaneous storage purposes.

A. Yes.

Q. Would it be your intention to replace those areas similar to the way they were pre fire?

A. Yes.

Q. And with respect to the area that was devoted for guinea pig use before the fire, would it be your intention to continue to raise guinea pigs in that section?

A. Right now I don't know if I'm even going to put guinea pigs back in there if I get the building. They're very convenient where they are ...

Q. So right now you're saying you don't know if you'd move them out of your house?

A. No, I don't know. They are convenient where they are ...

...

Q. Where's your library, basement, main floor?

A. The library is the turret on the main floor.

Q. That was built as a library?

A. Yes.

Q. You don't use it as a library now?

A. No, I don't. We haven't really finished it completely. It does have nice bevelled glass windows and bevelled glass doors though.

...

Q. ... but you're not sure, you might move your guinea pigs into the structure?

[Counsel]

Don't answer the question.

Q. Is that a refusal?

[Counsel]

That's a refusal. And you're asking her to speculate.

Q. So you find it's very convenient to have 100 odd guinea pigs in your library. Is that correct?

[Counsel]

That was her answer.

[para17] Kenneth Shank ("Shank"), who was mentioned earlier, is a close friend of the applicants. His evidence contradicts that of Mrs. Walton: (Transcript, p. 34, Q. 247)

Q. Did you discuss with Mrs. Walton the building permit application?

A. Only the fact that she went down to get one.

Q. Did you discuss with her the type of building she intended to build and what she intended to use it for?

A. I guess she wanted to put the same kind of a building back that was there before [the fire]. And for the guinea pigs, the tools, the bikes, the pool equipment, lawn chairs.

Q. Okay. Now you said 'you guess.' Did you ever discuss with her the type of building she was going to build or what she was going to use it for?

A. Yes.

Q. Okay. And you said -- would it be fair to say that she -- your impression would be that she intended to rebuild the guinea pig facility that she had?

A. Oh, yes.

[para18] I observe, as well, that, in the last line of her letter to the respondent, dated March 19th, 1996, she wrote, "This building is only for previous existing use." The previous use, of course, included housing guinea pigs.

[para19] I easily reach the conclusion that Mrs. Walton's refusal to concede that she intends to house her guinea pigs in any new barn that might be constructed is, at best, disingenuous. Frankly, I do not find her to be credible when she suggests that she will seriously consider keeping 125 guinea pigs in her turreted library, with the bevelled glass windows and doors, even after the new facility is erected.

[para20] Moving on to another example, Mrs. Walton was asked about the value of her guinea pigs: (Transcript, p. 56, Q. 343)

Q. Any commercial value to the pigs you have?

A. No.

Q. So if I didn't know anyone and had to go and buy a guinea pig, breeding quality, what's the worth?

Q. I don't know ...

...

Q. Do you have any information as to what people seem to be willing to pay?

A. I don't sell guinea pigs.

Q. I didn't say you did. I asked you if you have any information as to sort of what they might commonly trade for if they trade?

A. I don't have any information ...

...

Q. This is a fairly large undertaking for you then ...

A. No.

Q. ... it's about $90.00 a week in feed and bedding?

[See Note 17 below]

Note 17: It was her evidence that she spent $75.00 - $80.00 each week on food for the guinea pigs and $16.00 each week for wood shavings (which are used as bedding).

A. It's a hobby.

Q. And then there'd be the money that you spend on travelling to shows and so on?

A. Yes.

Q. Any idea what -- how much money you have to set aside to cover those in a month or a year, sort of average it out?

A. No, I have no idea.

Q. Well, how many guinea pigs would you enter in a show, for instance? Let's say it's a local show?

A. Possibly 30.

Q. Entry fee?

A. Anywhere from a dollar twenty-five to two-fifty.

Q. Okay. Any other costs ... associated with the show? There's the entry fee and that'd be about it, you travel down. Or if there's more tell me, I don't know.

A. I guess that's, that's it.

Q. Okay. So if you entered 30 per show and if we figure two dollars roughly on average, that's $60.00 a show ...

A. Yes.

Q. ... for entry. Would that be a fair average?

A. Yes.

Q. And you do that 16 times a year?

A. Yes.

[para21] And at p. 59:

Q. How many guinea pigs do you have now? [See Note 18 below]

A. Approximately 125 ...

Q. You've gotten those all in the last year?

A. Yes.

Q. Where did you get them, buy them?

A. Most of them were given to me from people I've given pigs to.

Q. Did you buy any?

A. Yes, I did.

Q. How many did you buy?

A. I have no idea.

Q. No idea?

A. I have no idea.

Q. What did you pay for them?

A. Approximately five to seven dollars each.

Q. Before when I asked you if you had any idea what they traded for, you said you had no idea. [See Note 19 below] But you paid five to seven dollars.

A. Well there's people at conventions that could sell them for $20.00 or $30.00 and I certainly wouldn't pay that and I have no interest in paying that ...

Note 18: She was cross-examined on her affidavit January 24th, 1997.

Note 19: Each year Mrs. Walton gave many of her guinea pigs to Shank. Both she and Shank insisted that no money changed hands. Shank was asked, "Would Mrs. Walton, to your knowledge, have known what guinea pigs sort of commonly sold for if they were sold?" Counsel for Mrs. Walton instructed Shank not to answer the question.

[para22] It is transparently clear to me that Mrs. Walton was being evasive when counsel sought to have her place a value on her guinea pigs. It was only persistence on the part of counsel that finally produced an answer. A court should always be wary of a witness who feigns ignorance of the obvious. It would not have been believable for Mrs. Walton, immersed as she is in the milieu of guinea pigs, to be unable to place an approximate value on those animals.

[para23] All of the above evidence, in respect of Mrs. Walton's involvement with the breeding and showing of guinea pigs, was elicited after this question and answer: (Transcript, p. 35, Q. 187)

Q. Okay. So you've always been heavily involved in guinea pig raising and breeding. Would that be a fair [comment]?

A. Just a regular guinea pig breeder.

In the absence of evidence regarding the activities of other breeders, I am unable to conclude whether Mrs. Walton is, in fact, merely a "regular guinea pig breeder." However, if she is, then those who pursue this avocation must, indeed, be a dedicated lot.

[para24] There is yet another example to review on the issue of her credibility. In her appearance before Council on April 19th, 1993, Mrs. Walton stated that if she were required to purchase goat's milk for her son (rather than obtain it from goats she raised herself) she would have no choice but to apply for welfare. In determining the truth of that statement, the following information is helpful:

(a) On her evidence, the cost of the goat's milk would have been $70.00 each week. She was spending considerably more than that on her guinea pigs;

(b) The applicants purchased the Property in 1991 for $160,000.00 and took out a $76,000.00 mortgage. This placed their equity at a healthy $84,000.00;

(c) In 1993 an above-ground pool was installed on the Property with a construction value of $1,500.00;

(d) In 1994 a deck was built. It had a construction value of $3,000.00;

(e) In 1995 the turret (library) was added to the residence. It had a construction value of $10,000.00.

[para25] It is not sufficient to dismiss her statement to Council as an empty threat. She was intentionally misleading Council. At best, it shows that Mrs. Walton is capable of a casual allegiance to the truth.

[para26] The result of all of this is, I regret to say, that I am leery of Mrs. Walton's evidence. Her affidavit and the transcript of her cross-examination do not instill confidence in the reader. Thus, where there is a conflict between her evidence and that tendered on behalf of the respondent, and to the extent that documentary verification of either is unavailable, I accept the evidence of the respondent and reject the evidence of Mrs. Walton.

2. When did the respondent first learn that the applicants were breeding large numbers of guinea pigs on the Property?

[para27] It is the contention of Mrs. Walton that, even before the purchase of the Property, Allan knew that she would be breeding approximately 125 guinea pigs. The respondent, on the other hand, maintains that not until sometime after the purchase of the Property was it learned that the applicants were raising more than several guinea pigs.

[para28] Mrs. Walton says that her first contact with the respondent was in the fall of 1990 when she telephoned Allan. In her cross-examination, she testified: (Transcript, p. 7, Q. 40)

Q. Okay. Now tell me about this discussion with Mr. Allan as best you recall it.

A. I called [him] and I gave him the address of the house ... And I told him that my husband and I were interested in buying this house and that I raised and showed guinea pigs for 18 years at that point. And that we would like to buy the house and put the guinea pigs in the building. And could he check the by-laws and get back to me whether or not I could have the guinea pigs there, if there would be a problem. And, and he called me back and said that there was no by-laws against guinea pigs, they were not restricted and that I could have them there.

Q. Was there any discussion of the numbers of guinea pigs?

A. I told him I had approximately 100 to 125. I explained that I had been breeding for years and I had won numerous awards with them.

Q. Anyone present when you made that phone call?

A. Yes, Ken Shank, a friend of the family.

[para29] Shank gave the following evidence: (Transcript, p. 4, Q. 19)

Q. ...

A. No, she had called before I guess and was talking to somebody. I don't know for sure, but I imagine she was talking to somebody ...

Q. Do you know that she called ... or was that just your assumption?

A. She called in the year ...

Q. Is that something she told you or were you present when she called?

A. No, I wasn't present when she called.

Shank's evidence, therefore, contradicts that of Mrs. Walton in respect of the telephone call.

[para30] As I indicated previously, Mrs. Walton alleges that Allan was aware, from the outset, of the number of guinea pigs that would be bred on the property. Shank gave this evidence regarding an attendance at the respondent's offices in September 1990: (Transcript, p. 6, Q. 29)

A. I went in to see [Allan], the by-law officer.

Q. Why did you go?

A. Because she had her children in the car, in the van.

Q. What questions did you ask [Allan]?

A. I just asked [Allan] if there was any by-law against the guinea pigs being in the Town of Lincoln ...

Q. What did he say?

A. He went and looked it up in the book and said no, there's nothing in, in the by-law against guinea pigs.

Q. That was it?

A. More or less.

Mention was not made of the number of guinea pigs involved.

[para31] In the result, I do not accept the evidence of Mrs. Walton on this point. I find that, previous to the purchase of the Property by the applicants, the respondent was unaware of the number of guinea pigs to be housed in the barn. I accept the evidence of Allan that when he was contacted in 1990 and 1991 he was not told the number being bred and he assumed that Mrs. Walton was "talking about one, two or three, like as a household pet." [See Note 20 below]

Note 20: It was his evidence that there "was no mention made of any number."

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3. Did the chief building official of the respondent refuse to issue a building permit or did he issue, and then revoke, the permit?

[para32] It is the position of the applicants that the building permit was issued and then revoked. The respondent argues that the permit was never issued.

[para33] Mrs. Walton completed a Town of Lincoln Building Department Permit Application ("Permit Application"). The bottom half of the Permit Application is designated "For Office Use Only". Radix stated, when cross-examined on his affidavit: (Transcript, p. 18, Q. 94)

Q. Alright. Now for office use only. So this would be -- this box where it says 'for office use only' would be filled in by one of your staff?

A. Yes.

Q. Alright. And would that be done at the time the application is made or subsequent to that?

A. Subsequent to it.

[para34] The "For Office Use Only" portion of the Permit Application contains several sections that require completion, including spaces or boxes for a fee and permit number to be inserted, in respect of which Radix testified as follows: (Transcript, p. 18, Q. 100)

Q. Okay. And the hundred and five dollars ($105.00) would be the cost of the building permit?

A. Correct.

Q. And would one know that at the time of the application or would that be a figure that would be put in later?

A. ... That's, that can be put in later and sometimes when you know it you can put it in right away ...

Q. Do you know when it happened in this case? Was that your writing?

A. No, I think -- no, that's not my writing either.

Q. Alright. And then underneath that there is a --

what is a permit number 39/96 I believe.

A. That could be the number assigned to it, yes.

...

Q. And when would the permit number 39/96, when would it be placed on the application? Would it be at the

time of the application or subsequent thereto?

A. It depends on the amount of time that we have. Sometimes right away and sometimes afterwards.

Q. Alright. So do you give a building a permit number?

I suppose a permit number, and this is my question, is given when the permit is approved. Is that a fair statement?

A. Well sometimes we do as, as they are received and sometimes as they ...

Q. If you give a permit number and it was subsequently refused, does the number just become ...

A. Well that's ...

Q. ... deleted?

A. ... that's when we -- that's what I mean, more or less we do it actually after, after the examination

because otherwise you have to shove all the numbers around.

...

Q. Alright. So you accept the application ... you would inspect the documents that were presented to you, alright. So that you looked at the drawings and you looked at the by-laws or whatever you looked at and then you would conclude whether or not this building permit should or should not be issued. Is that correct?

A. Yeah ...

Q. Alright.

A. ... as a rule.

...

A. When we talk about issuing a permit, that's when a person actually gets it.

Q. Alright.

A. And actually the permit was not in that context, it was not issued.

Q. In other words, it hadn't been handed to the individual?

A. Correct.

Q. Alright.

A. It was held back.

Q. It was held back. But my question is at one point you had decided that it was appropriate that the permit was valid, the request was valid ... and then subsequently determined that the use that you thought might be made of the building was inappropriate and held back the permit.

A. When, when we examined the zoning by-law.

Q. Yes.

A. The second stage.

Q. Alright. So in the chronological history, the application was made. Then you inspect the documents and whatever you were looking at and then ... [t]here's probably an intervening step of a request for a letter I think happened on or about the 19th, the 18th. You had requested of the Waltons that they provide you a letter indicating that there would be no gain or profit from this operation. Is that correct?

A. That's correct.

Q. Yes. And that letter was given to you?

A. Correct.

...

Q. ... Then the next step would be to ask for payment, would it be?

A. It, it can be done. Sometimes people leave money with the -- the payment should be with the, with the application and sometimes people pay when they pick up the permit.

Q. Right.

A. It's -- both are standard practices ...

...

Q. Alright. And I ask you to look at ... an official receipt from the Corporation of the Town of Lincoln dated March 19th, 1996. And it says 'Payment Account' and under it it says 'BPT', what does that ...

A. Building permits account ...

Q. ... and it has a specific number of 39/96?

A. Correct.

Q. So at that time, you had assigned a number or your staff had assigned a number to this building permit?

A. Correct.

Q. Would that not indicate that it was in fact approved and was issued?

A. No, it's -- not necessarily.

Q. Well tell me the circumstances when it wouldn't be ...

A. That is only when it's -- when we say issued when it's handed over to the person.

Q. Well ...

A. If we can find something that's -- during that time that there is something wrong with either the construction part of it or the zoning, even after it's issued, we can revoke it if we see ...

[para35] And at p. 28, Q. 164:

Q. ... you issued it, you hadn't handed it to them, but you subsequently found that there was something wrong and you revoked it?

A. No it -- I would -- state that I would not say that it was revoked, it was just not issued to them at all.

[para36] And further at p. 30, Q. 174:

Q. Alright. So you take the position that since it hadn't been handed over, it wasn't officially issued?

A. In my mind.

Q. May I ask you then, I mean why would you ask for the money if there was still some concern that you were

not going to issue it?

A. Sometimes people offer to pay right away. It's not always the case.

...

Q. Okay. So on the date of payment, there had been no indication on the file or to any of your staff that the permit was being either rejected or revoked or the application was being rejected or the permit was being revoked?

A. During the time I was scrutinizing the, the zoning by-law.

Q. Alright. And as a result of the scrutiny, what did you decide?

A. A reason for refusing the permit. And I spell that out in that letter.

[para37] It is clear that a building permit was issued:

[See Note 21 below] a permit number had been assigned; a permit fee (not an application fee) was paid by the applicants; and the fee was placed into the respondent's building permit account. I believe that the contradictions apparent on the face of the testimony of Radix are capable of reconciliation if one simply makes a distinction between "issued" and "effective." The permit was issued, however, the respondent did not regard it as effective since it had not been placed in the hands of the applicants.

Note 21: Although the permit never physically surfaced in this proceeding.

[para38] In the view I take, the chief building official issued, and then revoked, the building permit. Despite this finding, however, I am not at all convinced that the outcome of this application would be different had I reached the alternate conclusion. The permit was issued pursuant to s. 8(2) of the Building Code Act, 1992. Revocation is permitted under s. 8(10)(a) if the permit was issued "on mistaken, false or incorrect information" or under s. 8(10)(d) if "it was issued in error." I confess that the distinction between these two sets of grounds does not easily come to mind. If a permit is issued on the basis of "mistaken, false or incorrect information," could it not be said that the permit "was issued in error"? In any event, s. 8(10)(d) certainly would cover the situation where a permit was issued and then revoked, after further investigation showed the proposed building to be in violation of a by-law. That is what I find occurred here.

4. What was the basis for the decision of the chief building official?

[para39] Structurally, the proposed barn conforms to all existing legislation. On that there is agreement. So, why was the permit revoked?

[para40] On March 18th, 1996, Radix was concerned with whether the breeding of the guinea pigs was to be carried on for "gain or profit." That concern is obvious from the nature of the letter he requested from the applicants. At that point it was not the number of guinea pigs being bred that was the problem but, instead, the commercial nature of the operation. [See Note 22 below] He then asked for the applicants to provide an undertaking in writing that they would not use the barn for breeding on the scale previously practiced. In his memorandum to Council dated March 20th, 1996, Radix wrote that "the raising of a large number of guinea pigs in an accessory building" contravened the new by-law. In his letter to the applicants two days later, on March 22nd, there is no mention of the number of guinea pigs being the point of concern: he

simply states that "the raising of guinea pigs in an accessory building" is unlawful. Although the decision to revoke the building permit was expressed, in the letter of March 22nd, as the failure of the barn and breeding operation to meet the definitions of "accessory building or structure" and "accessory use", it seems to me that the true reason for the revocation of the permit was the number of guinea pigs which Mrs. Walton intended to raise in the barn. After all, it was conceded by the respondent, beginning in 1991, that the keeping of a small number of guinea pigs on the Property as pets was not prohibited. [See Note 23 below] It was not the breeding aspect of the applicants' operation with which the respondent took exception: it was the magnitude of the operation.

Note 22: Presumably Radix saw a possible violation of s. 6.2(c) of the new by-law which prohibited the use of accessory buildings "for gain or profit."

Note 23: And the memorandum of March 20th, 1996 speaks of raising "a large number of guinea pigs" as contravening the new by-law.

[para41] I move now to the principal issue raised by this application.

5. Was the decision of the chief building official correct?

[para42] It will be convenient to divide this issue into five sub-issues.

(a) Estoppel

[para43] It is apparent from the documentary evidence that, for a number of years and up to the revocation of the building permit, the respondent did not know what to do with the applicants and their menagerie. It was as if the respondent felt that something was wrong, and that something should be done, but was unable to articulate the "something." The quandary of the municipal officials is evident in the minutes of the Council meeting of April 19th, 1993. Until that meeting, the primary concern of the respondent seems to have been directed towards the ducks, goats, and rabbits being kept on the Property. After April, 1993, the focus appears to have narrowed to the guinea pigs. In the Council meeting held September 7th, 1993, one of the topics discussed was whether the guinea pigs presented a health problem. [See Note 24 below] In the memo of September 17th, 1993, Radix wrote, "Staff will ... investigate with the [Town's] Solicitor the cost and viability of preparing an Animal Control By-Law." Such a by-law was never passed. The uncertainty continued. As late as March 18th, 1996, the position ultimately adopted by the respondent still had not crystallized.

Note 24: As I mentioned earlier, this court did not hear evidence that public health was an issue in respect of the guinea pigs.

[para44] It was on March 20th, 1996 that the respondent finally arrived at the position eventually espoused in this court (that is, that raising a large number of guinea pigs in an accessory building, on land which is zoned residential, violated the new by-law because the definitions of "accessory use" and "accessory building or structure" were not met).

[para45] With the respondent having allowed the guinea pig operation to exist for so long, I was concerned, initially, as to whether a status quo had arisen against which the respondent ought not now be permitted to object. In other words, had an estoppel been created which would operate to preclude the respondent from denying the applicants the right to continue to breed and raise guinea pigs as they had before the fire. However, all forms of estoppel have, as a common element, the requirement of detrimental reliance. Without deciding whether estoppel may lie against a municipality in a

case of this nature, I am unable to find any evidence that the applicants relied, to their detriment, on the status quo ante.

(b) Which by-law applies, the old or the new?

[para46] It will be remembered that when the applicants began their breeding operation the old by-law governed. When the permit was revoked the new by-law was in force. The respondent is alleging that the guinea pig operation of the applicants fails to conform with the definitions of the terms "accessory use" and "accessory building or structure" as found in the new by-law. It is evident, from a comparison of the definitions found in the two by-laws, that there is no material distinction to be found:

OLD BY-LAW	NEW BY-LAW
S.2 Accessory Use means a use customarily incidental to, subordinate to or exclusively devoted to a principal use and located on the same lot therewith.	4.1 Accessory Use means a use customarily incidental, subordinate and exclusively devoted to a principal use, located on the same lot therewith.
Accessory Building or Structure means a detached building or structure that is not used for human habitation, but the use of which is naturally and normally incidental to, subordinate to or exclusively devoted to a principal use or building and located on the same lot therewith, and shall also mean and include a detached private garage or a detached carport ... [but] shall not include a building or structure used as a livestock operation.	4.2 Accessory Building or Structure means a detached building or structure not used for human habitation, but used to house an accessory use and includes a private garage.

[para47] This is not a case where the applicants are able to establish that the new by-law is more restrictive than the old by-law such that they are now prejudiced. In any event, even if the applicants were disadvantaged because of material differences between the by-laws, that is a matter that would be subsumed in the issue of legal non-conforming use, to be discussed next.

(c) Did the applicants' breeding operation constitute a legal non-conforming use?

[para48] I requested additional submissions from counsel, in writing, on whether the issue of a legal non-conforming use was present in this case. I was concerned that the applicants had been engaged in a legal non-conforming use and that it would survive the fire. The Planning Act deals with such a use. Section 34(9)(a), set out earlier, states:

(9) No by-law passed under this section applies,

(a) to prevent the use of any land, building or structure for any purpose prohibited by the by-law if such land, building or structure was lawfully used for such purpose on the day of the passing of the by-law, so long as it continues to be used for that purpose;

The key feature of s. 34(9)(a) is that the non-conforming use must be a continuing use if it is to survive a subsequent, prohibitory by-law. In Re Wilmot et al. and The City of Kingston [See Note 25 below] Laidlaw J.A. analyzed s. 406(2) of the Municipal Act. [See Note 26 below] That section was an early predecessor to s. 34(9)(a) of the Planning Act. [See Note 27 below] At p. 446, Laidlaw J.A. said:

Thus, if land is used on the day of the passing of a by-law for a purpose prohibited thereby, that use may continue, and such a by-law by express statutory provision is not applicable to that land so long as it continues to be used for that purpose. If the use for that purpose ceases, the by-law thereupon becomes applicable and the land cannot thereafter be used for a prohibited purpose. In the same manner, and to the same extent, the use of any building in existence at the time

> a by-law is passed for a purpose prohibited by the by-law may continue. But the right of a property owner or user at the date of the passing of such a by-law is fixed and limited in consequence thereof. It is thereafter subject to the provisions of any by-law enacted in the proper exercise of the legislative powers of the council of the municipality. The effect of such an enactment is to prohibit the erection of any building after the date of the passing of the by-law on premises which on that date were used for the purposes prohibited thereby ...

I see no reason why s. 34(9)(a) should not be interpreted literally. When that section speaks of a prohibited use being permitted "if it continues to be used for that purpose," I take it to be the case that a disruption in the prohibited or non-conforming use removes the use from the protection of s. 34(9)(a). Here, the fire of March 8th, 1996 ended the continuity of use. Therefore, the reconstruction of the barn required compliance with the new by-law. If there was a legal non-conforming use, it ended with the fire. [See Note 28 below]

Note 25: [1946] O.R. 437 (C.A.).

Note 26: R.S.O. 1937, c. 266, as re-enacted by the Municipal Amendment Act, 1941, c. 36, s. 13.

Note 27: Section 406(2) provided, in part, as follows:

> (2) No by-law passed under this section shall apply
>
> to any land or building which, on the day of the passing of the by-law, is used or erected for any purpose prohibited by the by-law, so long as it continues to be used for that purpose ...

Note 28: As a practical matter, this finding may be of no consequence since it is not apparent to me that there is a material distinction to be made between the two by-laws as they pertain to this case. In other words, if the breeding operation of the applicants is permitted under the new by-law it was probably permitted under the old by-law; conversely, if it is prohibited under the new by-law it was probably prohibited under the old by-law.

> (d) Is the new by-law "applicable law" which the chief building official is required to consider when deciding whether to issue (or revoke) a building permit?

[para49] The term "applicable law" is contained in s. 8(2)(a) of the Building Code Act, 1992. It provides:

> 8(1) No person shall construct ... a building ... in a municipality unless a permit has been issued therefor by the chief building official.
>
> (2) The chief building official shall issue a permit under subsection (1) unless,
>
> (a) the proposed building, construction ... will contravene this Act or the building code or any other applicable law;

[para50] It is submitted by the applicants that since the Permit Application describes the purpose for the permit as, "replace fire damaged building," and since the proposed building itself conforms structurally with the by-law, the permit must be issued. In other words, it is argued that s. 8(2)(a) relates to structural matters only and does not entitle the chief building official to consider the anticipated use of the building. The respondent contends that, when considering the "applicable law," the chief building official is entitled to have regard to by-laws restricting use.

[para51] In support of their position the applicants rely upon Re Bridgman and The City of Toronto et al. [See Note 29 below] I confess that had this issue been put before me as

one of first impression, I would have been quick to reject the position of the applicants. But the Bridgman case is a decision of McRuer C.J.H.C. It deserves a close look.

Note 29: [1951] O.R. 489.

[para52] In Re Bridgman the Chief Justice was faced with a chambers application in which the applicant sought an order requiring the respondents, the Building Commissioner and the City of Toronto, to issue a building permit. His Lordship described the facts as "quite unusual" [See Note 30 below] and I find that they do not lend themselves to an easy summary. I believe it will be sufficient to say that the applicant there desired a permit to construct an addition to a building in which a dry-cleaning business was to be conducted. The applicant also wished to install a boiler in the basement of the proposed addition. At the time, there was a municipal requirement for a boiler permit but there was no Ontario Municipal Board-approved by-law in place preventing the operation of a dry-cleaning plant. It was held that the respondents had denied the application for a boiler permit as a means of preventing the dry-cleaning plant from being established. At p. 501, McRuer C.J.H.C stated:

> ... then the Property Committee is put in a position that they can control the use to be made of property by refusing a permit for the machinery to be later installed.

Note 30: Ibid.

[para53] The passage in the decision upon which reliance is placed by the applicants at bar is found at pp. 502-503. I set it out in part:

> The words [in the unapproved building by-law] are, 'No person shall establish, set up, carry on or continue a dry cleaning plant or business'. The erection of a building for the purpose of housing a dry-cleaning unit ... which may never be there because there may never be a permit issued ... is one thing, and establishing, setting up, carrying on, and continuing a dry-cleaning plant or business is another. I do not think the erection of a building with the objective of housing a dry-cleaning plant is 'establishing, setting up, carrying on or continuing' a dry-cleaning plant. That is what follows after the building is put up, and that is a matter with which I do not have to concern myself on this motion, nor is it a matter that concerns [the respondents] when considering the application for a building permit.

On its face, the above passage does seem to make a distinction between erecting a building for a particular use and the use of a building already erected. However, I am attracted to the submission by counsel for the respondent that it would serve no social utility to grant a building permit for the construction of a building whose use is prohibited by law. I was not pointed to any decision in which the Bridgman case was followed. The explanation may lie in its "quite unusual" facts. [See Note 31 below]

Note 31: A further explanation could be that McRuer C.J.H.C. made it clear that the by-law he was considering, being restrictive of the use to which an owner may make of his or her property, must be strictly construed. That approach may be incorrect in light of the decision of the Supreme Court in Bayshore Shopping Centre Ltd. v. Nepean (Township) (1972), 25 D.L.R. (3d) 443 at p. 449.

[para54] The respondent submits that "applicable law" in s. 8(2)(a) includes zoning by-laws restricting the use of the building for which the permit is sought. Reliance is placed

in Loblaws Inc. v. Ancaster (Town) Chief Building Official [See Note 32 below] where it was held that "other applicable law" does include a zoning by-law. In that case, a respondent wished to construct a warehouse. Part of the intended use of the warehouse complied with a municipal by-law and part did not. At p. 87, Feldman J. stated:

> The zoning by-law prohibits the erection of a building for a purpose not permitted by the by-law, as well as prohibiting its use. In my view it is clear that a permit is not to be issued to erect a building for a purpose not permitted by the by-law ... It is inappropriate to ignore [an impermissible use] at the building permit stage.
>
> [Emphasis in the original]

Unfortunately, the matter does not end there. Prior to April 8th, 1993, [See Note 33 below] the Building Code Act did not contain a definition of "applicable law." On that date the following definitions were enacted:

> Applicable law means, for the purpose of section 8 of the Act, any general or special Act, and all regulations and by-laws enacted thereunder, which prohibit the proposed construction or demolition of the building unless the Act, regulation or by-law is complied with.
>
> Applicable law means, for the purposes of clause 10(2)(a) of the Act, any general or special Act, and all regulations and by-laws enacted thereunder, which prohibit the proposed use of the building unless the Act, regulation or by-law is complied with.

Note 32: (1992), 13 M.P.L.R. (2d) 73 (Ont. Gen. Div.).

Note 33: The Loblaws case was decided in 1992.

[para55] It is common ground that the within application involves s. 8 and not clause 10(2)(a). Consequently, we are dealing with the s. 8 definition rather than the clause 10(2)(a) definition. On behalf of the applicants it is submitted that the s. 8 definition is concerned only with "construction or demolition" of a building and not "use". Clause 10(2)(a), by its wording, is concerned with "use" and if "use" had been intended to be part of the s. 8 definition the legislators would have so indicated. Therefore, the submission goes, the chief building official, when considering the "applicable law" before issuing a building permit, is restricted to law pertaining to "construction" and not "use" and, since it is agreed by the parties that the proposed barn structurally conforms with the new by-law, there has been compliance with the "applicable law." The "use" to which the building will be put is irrelevant.

[para56] A decision that is more timely, and one which I favour, is Phi Delta Beta v. London (City) Chief Building Official. [See Note 34 below] In that case the applicant was a fraternity. The fraternity owned a residential building which it proposed to renovate. The chief building official refused to process the fraternity's application for a permit on the grounds that the intended use of the property (for a fraternity house) violated the zoning by-law (which permitted only single detached dwellings). In reviewing the actions of the chief building official, Leitch J. said, at p. 144:

> There is no issue on this application that the Zoning By-law is any other applicable law within the meaning of section 8(2) [of the Building Code Act, 1992]

Leitch J. referred to Axelrod v. Toronto (City) [See Note 35 below] where Saunders J. stated, at p. 149:

> It would be irrational to hold that [the chief building official is precluded from considering zoning by-law compliance on a building permit application.] Such a holding would mean that he could not refuse to issue a permit for a factory in a residential zone if the Building Code and all other applicable laws were complied

with.

Note 34: (1994), 25 M.P.L.R. (2d) 140 (Ont. Gen. Div.).

Note 35: (1981), 15 M.P.L.R. 143 (Ont. Div. Ct.).

[para57] Mention is not made in the Phi Delta Beta case to the 1993 amendments to the Act by which "applicable law" was statutorily defined. The case was heard in November 1994 and the judgment was released in January 1995 and so the amendments were certainly the law of the land at the time.

[para58] Counsel for the applicants points to the definition of "applicable law" (as it applies to s. 8) and submits that it speaks of "construction or demolition." The term "construction" is defined in the Building Code Act, as follows:

> 1. In this Act,
>
> ...
>
> 'construct' means to do anything in the erection, installation or extension or material alteration or repair of a building ... and 'construction' has a corresponding meaning;

Thus, counsel concludes, by applying the definition of "construction" to that term as it is found in the definition of "applicable law," considerations of "use" are precluded. I disagree. The matter is more than one of bricks and mortar. The definition of "applicable law" allows a chief building official, when assessing a Permit Application, to consider "by-laws ... which prohibit the proposed construction ... of the building." This definition does not exclude "use" as a consideration. By way of example, can it not be said that a residential zoning by-law would, effectively, prohibit the proposed construction of a factory?

[para59] The new by-law is intended to restrict the use to which buildings might be put. This is apparent in such provisions as ss. 1.3.1, 1.3.2, 2.1 and 11.1. It would not make sense to interpret the Building Code Act in such a way as to defeat the expressed intention of the new by-law (and the many by-laws throughout the province whose purpose it is to restrict use).

[para60] Accordingly, in the case at bar, I hold that the chief building official, in the course of issuing the building permit, was entitled (indeed, required) to consider whether the intended use of the barn would violate the provisions of the new by-law. It would have been wrong for him to have restricted his review of the Permit Application to a consideration of whether the building itself structurally complied with the by-law.

(e) Is the applicants' guinea pig breeding operation a legal "accessory use" as defined in the new by-law?

[para61] This issue is the nub of the entire application.

[para62] Section 11 of the new by-law prohibits any use not specifically permitted. [See Note 36 below] This applies to both principal buildings and outbuildings. An outbuilding must satisfy the definitions of "accessory building or structure" and "accessory use" as set out in sections 4.1 and 4.2. For convenience, I will repeat those provisions again:

> 4.1 Accessory Use means a use customarily incidental, subordinate and exclusively devoted to a principal use, located on the same lot therewith.
>
> 4.2 Accessory Building or Structure means a detached building or structure not used for human habitation, but used to house an accessory use and includes a private garage.

Note 36: It is beyond question that the respondent is

empowered to control the use of land within its boundaries through restrictive by-laws. The respondent submits, and I agree, that the Planning Act provides a municipality with two separate "zoning" powers with respect to "use": firstly, the power to pass by-laws restricting the use of land, as found in paragraph one of s. 34(1); and, secondly, the power to prohibit the erecting of buildings except for such purposes as are permitted in the by-laws, as found in paragraphs 2 and 4 of s. 34(1).

[para63] The respondent concedes that keeping a small number of guinea pigs on the Property would be a lawful accessory use: It would be a use that was "incidental" to the "principal use" (the principal use being residential). Therefore, if the applicants, by way of example, were to breed and maintain three guinea pigs in their barn the respondent would regard this as a lawful accessory use (and the barn a lawful "accessory building or structure"). Why are 125 guinea pigs an unlawful accessory use? Where does one draw the line? If a line is to be drawn, it is the function of the respondent to do so. It would be quite arbitrary for this court to conclude that breeding 125 guinea pigs is an unlawful accessory use. [See Note 37 below] Although arbitrariness is acceptable in matters of this nature, it is the purview of legislators not adjudicators.

Note 37: If this court were to find that housing 125 guinea pigs on the Property constituted an unlawful accessory use, what would happen if the applicants thereafter reduced the number to 100? or 75? or 30? or 10? Would the accessory use still be unlawful?

[para64] The respondent does have a municipal by-law prohibiting the keeping or raising of various kinds of animals on residential property. [See Note 38 below] Guinea pigs are not included. As desirous as it may be to restrict the number of guinea pigs permitted to be kept on residential property, the new by-law (and specifically ss. 4.1 and 4.2) is inadequate for the task.

Note 38: Such as bulls, sheep, goats and reptiles.

G. SUMMARY OF FINDINGS

[para65] For convenience I will summarize the material findings I have made:

1. Where there is a conflict between the evidence of Mrs. Walton and that tendered on behalf of the respondent, and to the extent that documentary verification of either is unavailable, I accept the evidence of the respondent and reject the evidence of Mrs. Walton.

2. It was not until after the applicants purchased the Property that the respondent learned of large

   numbers of guinea pigs being housed in the barn.

3. The chief building official ("CBO") of the respondent issued, and then revoked, the building permit.

4. The true reason for the revocation of the permit was the number of guinea pigs which the applicants intended to keep in the barn. It was not the breeding aspect of the applicants' operation with which the respondent took exception: it was the magnitude of the operation.

5. In deciding whether to issue a building permit, the "applicable law" which the CBO is asked to consider pursuant to s. 8(2)(a) of the Building Code Act, 1992 includes zoning by-laws. The definition of

"applicable law" allows a chief building official, when assessing a Permit Application, to consider "by-laws ... which prohibit the proposed construction ... of the building." This definition does not exclude "use" as a consideration. In this case, the CBO was not only entitled but required to consider whether the intended use of the barn would violate the provisions of the new by-law. It would have been wrong for him to have restricted his review of the Permit Application to a consideration of whether the building structurally complied with the by-law.

6. The definition of "accessory use" in the new by-law is inadequate to block the use intended by the applicants. If the respondent wishes to restrict its citizens from keeping a particular number of guinea pigs on residential property then it should pass an appropriate by-law. Remembering that the respondent does not object to a small number of those animals being housed on residential property, it is not the function of this court to arbitrarily determine when that "small" number becomes too large. As desirous as it may be to restrict the number of guinea pigs permitted to be kept on residential property, the new by-law (and specifically ss. 4.1 and 4.2) is ineffective for that task.

7. The applicants' breeding operation was lawful under both the old and the new by-law. It was a conforming use at all material times.

H. CONCLUSION

[para66] It is at least ironic, if not unfortunate, that, having ruled in favour of the respondent on all but one issue and having found the credibility of Mrs. Walton to be lacking, I must allow the application. The applicants have succeeded on the central issue and are entitled to the relief requested. The respondent, through its chief building official, shall issue a building permit to the applicants as sought in the Permit Application. If the parties are unable to agree as to costs, arrangements should be made with the trial coordinator for written submissions in that regard. However, my preliminary view is that to award costs to a successful but untruthful litigant might tend to bring the administration of justice into disrepute.

J.W. QUINN J.

Whistler Service Park Ltd. v. Whistler (Resort Municipality)

Between
Whistler Service Park Ltd., Sabre Holdings Ltd., Sabre Transport Ltd., Sabre Bulldozing Ltd. and Art Den Duyf,
Plaintiffs, and
Resort Municipality of Whistler, Douglas Wylie, Lindsay Wilson, Wayne Dickinson and Geoffrey Pearce, Defendants

[1990] B.C.J. No. 1546
DRS 91-01447
Vancouver Registry No. C874399
50 M.P.L.R. 233 41 C.L.R. 132
Also reported at: 41 C.L.R. 132 50 M.P.L.R. 233

British Columbia Supreme Court
Vancouver, British Columbia
Harvey J.
Heard: January 2 - 5, 8 - 12, 15 - 18 and 22 - 26,

February 6 - 8, 15 and April 2 - 5 and 17, 1990
Judgment: June 29, 1990

Counsel for the Plaintiffs: Robert Wicks.
Counsel for the Defendants: F. Timothy Williamson and S. Lloyd.

HARVEY J.:--

Introduction

(a) The Parties

The plaintiffs in this action are Art Den Duyf, a businessman, and a number of British Columbia companies owned and operated by him (hereinafter referred to as "Sabre"). The defendants are a municipal corporation, the Resort Municipality of Whistler (hereinafter referred to as the "municipality"), and its employees, Dougles Wylie, Lindsay Wilson, Wayne Dickinson, and Geoffrey Pearce. Wylie was Director of Public Works from May 1981 to September 1987. Wilson was Chief Building Inspector from February 1970 to December 1981 to the end of 1988. Pearce was Clerk Treasurer then Administrator form March 1976 to September 14, 1985.

At the time the action was commenced in September 1987, the plaintiffs' claims against the defendants included:

(a) allegations of breach of contract,

(b) allegations of negligence by reason of unlawful acts on the part of the defendants, including breaches of their public duty,

(c) allegations that the defendants acted unfairly and thus in bad faith in their dealings with the plaintiffs,

and

(d) allegations that the personal defendants acted, inter alia, in a high-handed, oppressive, and vindictive manner, with intent to injure the plaintiffs.

At that time the plaintiffs also alleged the following:

"21. The Plaintiffs say and the fact is that by reason of the facts as set out herein and such other facts which the Plaintiffs cannot specify until after discovery, the Defendant WYLIE, the Defendant Wilson, and the Defendant DICKINSON and the Defendant PEARCE have conspired to injure the Plaintiffs and each of them and by their conspiracy have, in fact, injured the Plaintiffs and each of them and as a result, the Plaintiffs and each of them have suffered loss and damage."

At the commencement of the trial on January 2, 1990, the conspiracy allegation was withdrawn. On January 4, 1990, I allowed the plaintiffs' motion to amend further the Amended Statement of Claim to allow the amendments now contained in paragraphs No. 25 to No. 28 inclusive.

(b) Background

The plaintiff Den Duyf came to the Whistler area in 1978, at which time he established a base for his business operation at Mons, which is approximately one mile north of the present town centre. By 1982-1983, he was the largest local contractor in the sand and gravel business with extensive involvement in excavating and site development work. As time progressed, Den Duyf became involved in snow removal, both for the municipality and privately. In 1982, his company Sabre obtained its first snow removal contract with the municipality. Sabre obtained successive snow removal contracts with the municipality to the end of the 1989-1990 season.

In 1985, Den Duyf acquired by purchase the property the Sabre companies had occupied at Mons since 1978. Den Duyf then proceeded to plan and subsequently to build a building on this property. In the course of the ensuing four years, he experienced and continues to experience problems with regard to zoning, use and road access related to the property at Mons.

In spite of the fact that as of this year he remains one of the, if not the largest, local contractor, with contracts having a value of $3.5 million dollars in 1988, and contracts expected to exceed this amount in 1989, $1 million dollars of which is contract work with the municipality, Den Duyf says that since 1978 to the present day, from time to time, representatives of the municipality developed a state of mind towards him --"an attitude to treat him unfairly -- to bring him down to size". As examples of such an attitude, her refers to the manner in which the municipality has enforced its zoning and soil removal and deposit by-laws. In relation to such by-laws he says he is treated differently than his competitors. Furthermore, he maintains the applicable by-laws were not enforced upon complaints being made with regard to potential breaches thereof.

In this perspective, he repeatedly asked himself, "am I being treated fairly?" When Sabre either was not the successful bidder, or when Sabre was not asked to bid in relation to work done privately for the municipality, he asked himself, "whether this was work I did not obtain which I whould have obtained."

In the period following commencement of this action in September 1987, Den Duyf says the position of the defendants, meaning thereby the attitude of the defendants, became more evident to him when he attempted to obtain work from the municipality, whether by tender or otherwise, and with regard to zoning and the road access problems related to the Mons property.

The position of the plaintiffs that the defendants developed and manifested an attitude to treat them unfairly requires further clarification before dealing with the issues. In this regard, I quote the following passage from the cross-examination of Den Duyf at trial.

"Q. And you're saying it hasn't occurred to you as to whether the council, itself, is biased against you?

A. I haven't spent any time thinking on this item.

Q. All right. What about the previous council, which would be between '86 and '88? '86 and '88. Who was the Mayor between 86 and '88? Mr. Meredith correct?

A. Mr. Meredith, yes.

Q. He's the current Mayor as well?

A. Yes, he is.

Q. Were they discriminating -- that is, the previous council. Were they discriminating against you, biased and unprofessional or have you not thought about that?

A. I have not thought about it.

Q. All right. What about the council previous to it? Who was the Major then? I believe that was Mayor Rodgers.

A. Rodgers.

Q. And he and his council, during their tenure, were they

discriminating against you and biased and unprofessional?

A. It's an area all the way through I haven't dwelled on.

Q. So the politicians, you haven't considered whether they were discriminating against you, biased and unprofessional? Does it go back to your tenure at Whistler?

A. Right to day 1.

Q. So we can leave the politicians out of this, is that correct?

A. Yes."

The importance of this evidence is that the thrust of the plaintiffs" claims is against the personal defendants as employees of the municipality. The plaintiffs do not assert that the mayors and the members of the Municipal Councils from 1978 to date have any liability, apart from the vicarious liability of a municipal corporation for the torts committed by its employees.

The evidence at trial was adduced in relation to a List of Issues encompassing, inter alia, the following:

(a) breach of contract,

(b) zoning,

(c) tenders,

(d) permits, re Soil Removal and Deposit By-Law No. 131,

(e) Mons property re-zoning and road access,

(f) Expenditures Procedure By-Law No. 645,

(g) snow removal contracts and tender, and

(h) bad faith - negligence.

I will refer to those issues requiring consideration of the evidence and authorities referred to in argument.

Zoning and Permits

At trial, the plaintiffs made reference to twelve instances over the years wherein it is alleged that the defendants enforced by-laws in a discriminatory manner. In no instance do the plaintiffs attempt to quantify or calculate a loss supporting a claim for damages. As I understand the thrust of the plaintiffs' position it is that these instances should be taken into consideration in the entirety of the evidence confirming the discriminatory attitude of the defendants towards the plaintiffs.

In one instance, the complaint is that another contractor, a competitor of the plaintiffs, stored vehicles and equipment on property not zoned for such use. In other instances, Den Duyf, after making personal investigations, made complaints to the municipality that materials, usually sand or gravel, were being removed from or screened on sites, or both, where no soil removal permit had been obtained, or where such a permit had expired.

In cross-examination, it was put to Den Duyf that on two occasions he and his companies were themselves in breach of the Soil Removal and Deposit By-Law in relation to screening aggregate and removal of materials from sites where a soil removal permit was no longer valid or had not existed. Den Duyf made no further explanation other than to say that these were matters of great embarrassment to him. The plaintiffs were not the subject of prosecutions for these apparent violations of the by-law.

In a similar vein, when Den Duyf and Sabre commenced the construction of a new building at Mons, they started the foundation work and had this work substantially completed before a building permit was issued by the municipality. In this regard, the defendant Wylie stated that he turned a blind eye to this work to allow the plaintiffs to get on with construction, having regard to the seasonal aspect of when such

work could be done in this area.

The Municipality denies that it enforced its bylaws in a discriminatory manner. Its policy was to enforce bylaws on a "complaint driven" basis. Such a system was required given the needs and resources of this extremely fast developing resort community, particularly during the 1980's.

In any event, the Municipality submits that the plaintiffs have no cause of action regarding non-enforcement of municipal bylaws and, collaterally, that enforcing or not enforcing bylaws is entirely within the discretion of the municipal council.

I comment at the outset that there is no statutory obligation upon the Municipality to enforce its bylaws. Nothing in the municipality's bylaws directs that enforcement is mandatory. Moreover, the relevant sections of the Municipal Act contain no mandatory wording. Sections 750(1) and 751 of the Act provide examples of the discretion afforded municipalities in enforcing their bylaws:

" 750(1) A bylaw adopted under this Act may be enforced, and the breach of this Act or a bylaw resolution or regulation of the council restrained by a proceeding in the Supreme Court or the County Court whether or not a penalty has been imposed for the breach.

(2) .....

751 Where a building is erected or used, or land is used, in contravention of a bylaw adopted under this Act, in addition to any other remedy provided in this Act, and to any penalty imposed by the bylaw, the contravention may be restrained by a court proceeding at the instance of the municipality alone."

(my emphasis)

It is understandable that persons may feel aggrieved when bylaws are enforced against themselves, but not against others that they perceive to be similarly situated. Such governmental action no doubt appears to them to violate that most basic tenant of our law; that all persons are equal in the eyes of the law. Such notions of fundamental fairness underly recent courts' willingness to examine municipal decision-making and action taking.

However, in my view, the courts have also been mindful of the practical hazards of interfering with municipal discretion. As Duff, J. discussed in Orpen v. Roberts [1952] S.C.R. 364, we simply cannot allow every person who spots a bylaw infraction to commence an action against either or both the violator and the municipality which, perhaps for good reason, has condoned the bylaw infraction.

Keeping the tension between these two concepts in mind, I now propose to review the cases referred to in argument.

Tchaperoff v. City of Victoria and Memorial Airpark Association of Greater Vancouver, [1948] 2 W.W.R. 722 (B.C.S.C.) and Caldwell v. City of Saskatoon and Sisters of the Presentation (1969), 71 W.W.R. 152 (Sask. Q.B.) are good examples of the court's concern that private citizens not be given carte blanche to interfere with a municipality's enforcement practices.

In Tchaperoff, the City of Victoria signed an agreement with Memorial Airpark to construct an airport adjacent to the plaintiff's property. This clearly contravened the zoning bylaw for the area. In Caldwell, the plaintiff asked the court to quash a permit issued by the City of Saskatoon to the Sisters of the Presentation authorizing additions to their exising building which were also in violation of the bylaws. In both cases the court held that bylaws create no rights personal to citizens of the municipality and that they therefore have no cause of action. Both decisions rely heavily upon the court's reasoning in Orpen v. Roberts (supra).

The reasoning in Dusevic v. Columbia Shuswap Regional District, [1989] B.C.J. No. 668 (April 17, 1989) (B.C.S.C.), exemplifies, to my mind, the relatively recent willingness of the courts to examine municipal actions in the area of bylaw enforcement and to correct those actions when they have been

done in bad faith.

An earlier case, City of Toronto v. Polai (1969), 8 D.L.R. (3d) 689 (Ont. C.A.), is a transitional case. While the public interest in not interfering with municipal discretion was the basis upon which the City's request for an injunction against a bylaw violator was granted, all three judges saw fit to enquire into the basic fairness of the situation. Schroeder, J.A., in particular, examined at least three "bad faith" type factors: firstly, whether non-enforcement amounted to a grant of perpetual immunity to violators, secondly, whether the council carefully considered each situation of non-enforcement; and thirdly, was there any evidence of improper motive?

In Dusevic, the plaintiff sought an order of mandamus compelling the defendant district to enforce its zoning bylaw against Purcell Helicopters whose use of their land clearly contravened the bylaw.

The plaintiff sought to have the court apply a negligence standard to the municipality's actions as set out in Kamloops v. Nielson [1989] 5 W.W.R. 1 (S.C.C.). Mr. Justice Maczko, properly in my view, refused to do so on the basis that the municipal action under attack in the case before him was a policy decision, not an operational decision. He instead examined whether there was any evidence of bad faith on the part of the municipality and concluded that there was not.

One aspect of his reasons is problematic. It is clear that he agrees with the court in Toronto v. Polai ((supra), at page 699, quoted at p. 14 of Kamloops v. Nielson), that the court will interfere when a municipality adopts a general policy of non-enforcement. This is so because such a policy amounts to an unauthorized amendment of the legislative scheme. What is not clear is whether such a policy of non-enforcement is one aspect of bad faith or whether it stands on its own as a reason justifying a depatrue from the general rule that municipal discretion is not to be interfered with.

Whether or not "perpetual immunity" is an aspect of bad faith, in this case the municipality's decision to enforce bylaws on a complaint driven basis cannot possibly be characterized as a general policy of non-enforcement. Nor can it be considered an operational decision which would leave it open to review pursuant to the standard in Kamloops v. Nielson.

With respect to bad faith in relation to the issues presently under consideration, the plaintiffs have failed to demonstrate any improper motive for the municipality's enforcement actions. The conduct of the personal defendants relied upon by the plaintiffs to demonstrate bad faith on their part in this perspective not only falls far short of establishing such conduct but, in certain instances, supports a finding to the contrary.

In relation to the defendant Pearce, for example, it is submitted by Mr. Wicks that when Pearce recommended to his employer, the municipality, that a certain decision of the Board of Variance related to zoning at Mons be challenged, he was acting unreasonably -- in bad faith -- with regard to the plaintiffs. I consider such a recommendation to be consistent with the position of his department throughout and was in the course of discharge of his duty as he saw it at that time. In the end result it was the Municipal Council which made the decision to take the matter further.

Den Duyf experienced numerous problems in the course of development of his property at Mons, requiring him to engage in litigation, including litigation with the municipality. In the result, he has been largely successful to the extent that he was permitted to construct a new building on his property at Mons on the basis of the property and building hereon being a pre-existing, non-conforming use. However, the fact that the plaintiffs were successful in court regarding the Mons dispute in no way proves that the municipality acted in bad faith in litigating the matter.

The question of road access to the property also proved particularly difficult for Den Duyf. In the litigation which became necessary for him to obtain such access, the municipality is not a party -- the opposition to Den Duyf being that of a private owner of property in the area. In my view, the evidence confirms that the municipality has supported the position of Den Duyf with regard to this question. Den Duyf's

allegation that because he has had to bear the considerable expense of this litigation personally the municipality is discriminating against him is totally without merit.

In my view, the fact that on occasion bylaws were not enforced against the plaintiffs' competitors falls far short of establishing the factors necessary to find liability. I find the plaintiffs' claims concerning non-enforcement of bylaws related to zoning and permits must fail.

Tenders

At trial, the plaintiffs made reference to nine instances over the years wherein they allege, inter alia, that in relation to them, the tender process of the municipality was unfair.

The plaintiffs allege additionally that in two specific instances, described as the Whistler Road tender, and the Rainbow Beach Park tender, there were breaches of contract on the part of the municipality in the tendering procedure.

I will consider first the plaintiffs' allegations in relation to the nine instances in which they allege the tender processs of the municipality is unfair.

As I understand Den Duyf with regard to this issue, he says he wanted and should have been afforded the opportunity "to tender on any and all work" of the municipality performed by private contractors. In this regard, he appears to question the right of the municipality to tender work other than on a public tender basis. The practice of the municipality during the material times was to tender work on a public and a select tender basis, as well as by direct purchase in relation to smaller jobs usually pursuant to the Expenditures Procedure By-Law No. 645.

For example, in relation to three instances described as "hard pan for sludge pond", "21 Mile Creek Water Project" and "Parking Lots 1, 2 and 3", Den Duyf's complaint is that Sabre was not invited to submit bids on the work offered by the select tender process. In another instance he says specifications were altered, affording another contractor an opportunity to submit a bid late with corresponding advantage. In relation to certain direct purchases, he seemed to convey that either the work should not have been given in this manner to the contractors in question, or it should have been given to Sabre.

In no instance was a claim quantified or calculated and advanced as damages.

In cross-examination, Den Duyf agreed that when the select tender procedure was used by the municipality, there were numerous instances when Sabre was one of the contractors invited to bid, and other contractors in competiton were not so invited to bid. He also agreed that over the years Sabre had received work on numerous occasions by way of direct purchase.

In the course of argument, Mr. Williamson on behalf of the defendants submitted that it was apparent that, apart from the snow removal contracts, Sabre had probably received more than its fair share of the municipality's work, as reflected by the amount of contracts obtained by Sabre over the years, including its present volume of work in excess of $1 million. I consider there to be considerable merit in this submission. In any event, the evidence does not demonstrate in the instances referred to, the unfairness alleged or any unfairness in the tender procedure of the municipality such to support claims for damages either as alleged or at all. The plaintiffs' claims in relation to the tendering procedure generally, as reflected in the nine instances referred to above, are without any foundation insofar as providing a basis for claims for damages against the defendants and therefore must fail.

I return to the Whistler Road and Rainbow Beach Park tenders.

These are both situations in which Sabre was not awarded the contract. In both situations, Sabre was permitted to submit what was described as a late bid.

The defendants raise a preliminary objection regarding whether a claim for damages for breach of contract is proper in

the circumstances of these tenders. They submit on the facts of these tenders that an action for damages is not the proper remedy for parties aggrieved by and alleging an unfair tender process. I propose to deal with this objection and the authorities submitted in support thereof.

The usual remedy for breach of contract is damages. On that basis the plaintiffs claim the lost profit that they would have realized had they been awarded both the Whistler Road and Rainbow Beach contracts.

The defendants, however, assert that the plaintiffs are not entitled to any damages even if either or both tenders were improperly let. The defendants contend that the plaintiffs should have pursued a remedy under the Judicial Review Procedure Act which may have provided relief of an injunctive or mandative nature as opposed to now asking for damages after the work has been done. The defendants rely on three American cases: Sutter Brothers Construction Co., Inc. v. City of Leavensworth (1985) 65 A.L.R. 4th 81 (Kansas Supreme Court); M.A. Stephen Construction Co. Inc. v. Borough of Rumson (1973)
308 a. 2d 280 (New Jersey Supreme Court); and Owen of Georgia,
Inc. v. Shelby County (1981) 648 F. 2d 1084 (U.S. Court of Appeal).

All three cases concern actions by low bidders who were not awarded public works contracts that they bid for. In both M.A. Stephen and Sutter Brothers, the courts held that while low bidders had the right to challenge the improper awarding of public works contracts, that right is limited to injunctive or mandamus type relief. It does not include a right to damages suffered as a result of not being awarded the contract.

The court in M.A. Stephen relied on a number of what might be called policy reasons in denying damages; firstly, unsuccessful bidders' status to compel, by injunction or mandamus, a public authority to properly award a public works contract is not founded upon the private bidders' rights, but on the public's interest in the integrity of the bidding process.

Second, awarding damages for lost profit to an unsuccessful bidder, after the work has already been done by another bidder and paid for, forces the public to pay twice for the work. Third, allowing bidders on public works to collect damages when the work is improperly let to someone else places those bidders in an advantageous position compared to bidders on private projects, who have no such right.

I find these policy reasons very persuasive. However, I am not prepared to hold that the plaintiffs in this case are not entitled to bring an action for damages for the following reasons: firstly, the defendants could not provide the court with any Canadian case authority stating that unsuccessful bidders are limited to injunctive relief and prohibited from seeking damages. Although it is true that no damages for lost profit following the improper letting of a contract were awarded in any of the Canadian cases relied upon, it was not on the grounds that an action for damages is inappropriate. Moreover, in Chinook Aggregates Ltd. v. The District of Abbotsford (1989) 40 B.C.L.R. (2d) 345 (C.A.), the Court of Appeal specifically upheld the trial court's award of damages in the amount of an unsuccessful bidder's expenses for preparing the bid.

Secondly, it appears that the American cases differ from the Canadian cases in one major way; they do not determine tendering claims according to contractual principles and rules. In this regard, the American courts have not been faced with what appears to me to be a conflict; how can I hold that an unsuccessful bidder has no right to contractual relief (damages) when Canadian courts, including the Supreme Court of Canada, have defined a tenderer's rights in contractual terms?

It is obvious that "preventative" relief in the form of an injunction or order for mandamus is the preferred method for dealing with situations in which a tender contract has been improperly let. However, at least in Canada, the law as it stands does not prohibit the plaintiff in this case from bringing an action for damages instead.

In order to find a breach of contract in this case I must

first find that a contractual realtionship existed between the plaintiffs and the municipality. Secondly, I must find that the municipality breached its obligations under that contract.

Actions by parties who have not been awarded a contract after tendering are not based upon breach of the actual contract which they were competing for. Rather, they are based upon breach of the contract which is said to arise upon submission of tender in accordance with the terms set out in the tender documents. Authority for this approach to tendering related actions can be found in The Queen v. Ron Engineering and Construction Ltd. [1981] 1 S.C.R. 111. In his judgment for the court, Mr. Justice Estey distinguishes between contract "B", the actual service contract, and contract "A", which, he says, "... comes into being forthwith and without further formality upon the submission of the tender.' (p. 274). In strict contractual terms, therefore, the call for tenders is the "offer" and the tender submitted constitutes the "acceptance".

it is important to note that submission of a tender bid only creates a contract "A" if that bid complies with the terms and conditions of the call for tenders.

The defendants strenuously argue that irrevocability of the tender is a necessary prerequisite before tender submission can create a contract, contract "A". There is no irrevocability term in any of the tender documents involving the disputed tenders in this case.

Upon consideration of the Ron Engineering case as a whole, my conclusion is that irrevocability is not a prerequisite for the creation of a contract "A". Rather, contract "A" comes into being upon the submission of the tender and irrevocability, if present, is merely a term of the tender documents which must be examined, as do all the terms, to determine the nature of contract "A", not the existence of it.

In support of this view, I refer to Mr. Justice Estey's words at p. 275 of the judgment:

> " There is not disagreement between the parties here about the form and procedure in which the tender was submitted by the respondent and that it complied with the terms and conditions of the call for tenders. Conse quently, contract A came into being. The principal term of contract A. is the irrevocability of the bid, and the corollary term is the obligation in both parties to enter into a contract (contract B) upon the acceptance of the tender. Other terms include the qualified obligations of the owner to accept the lowest tender, and the degree of this obligation is controlled by the terms and conditions established in the call for tendes."

The defendants' position regarding the necessity of irrevocability is understandable given the emphasis placed upon this term in Ron Engineering. That emphasis, however, is explained by the fact that the key issue in the case was revocability of a bid and forfeiture of a deposit.

Subsequent cases which have applied the "Contract A- Contract B" notion of tender relationships enunciated in Ron Engineering include: Best Cleaners and Contractors Ltd. v. The Queen in Right of Canada [1985] 2 C.F. 293 (C.A.); Chinook Aggregates Ltd. v. The District of Abbotsford (1989) 40 B.C.L.R. (2d) 345 (C.A.); and Ben Bruinsma & Sons Ltd. v. The Corporation of the City of Chatham et al (1984), 11 C.L.R. 37 (Ont. S.C.). In none of these cases has it been specifically held that irrevocability is a prerequisite for contract "A".

If a court accepts that submission of a bid which complies with the terms and conditions of the call for tenders brings into existence a "contract A", then the court must then determine what obligations the defendant had under "contract A" and whether they were breached.

While the case law is somewhat unclear, in my view two kinds of obligations arise from the formation of contract "A". These are "express" obligations, as determined by the terms of the tender documents, and "implied" obligations, those terms and obligations that are understood by the parties to accompany the relationship that arises upon submission of the tender and formation of the contract.

Most of the cases deal with express obligations and as a result the focus is on the terms contained in the tender documents. For example, in the Ron Engineering case, the Supreme Court of Canada had to interpret terms in the tender documents relating to revocability of the bid and forfeiture of a $150,000 deposit in order to decide whether contract "A" had been breached.

In M.S.K. Financial Services Ltd. v. The Queen in Right of Alberta (1987) 23 C.L.R. 172 (Alta. Q.B.), the court also looked to the terms of the tender documents to decide whether a breach of contract "A" had occurred. In this case the contract was awarded to a firm that was not low bidder and did not have the qualifications required by the terms of the tender documents. Nevertheless, the defendant was not held liable given another term of the documents which stated that the lowest or any tende would not necessarily be accepted and that the defendant reserved the right to reject any and all tenders.

In Ben Bruinsma, the plaintiff was low bidder on a tender call involving sodding and seeding work. After submission but prior to acceptance, the defendant municipality's alteration of the terms was "... a breach of contract or a breach of duty on the part of Chatham within the contractual relationship with the plaintiff and all the tenderers." (p. 51).

Similarly, in Best Cleaners, the court specifically held that there is an implied obligation not to award contract "B" except in accordance with the terms of the tender documents:

> " The respondent's obligation under contract A was not to award the contract except in accordance with the terms of the tender call. The stipulation that the lowest or any tender need not be accepted does not alter that. The respondent might award no contract at all or it might award contract B to Tower, but it was under a contractual obligation to the appellant not to award Tower something other than contract B." (p. 306-7).

With respect to the Whistler Road tender, the following occurred. After the municipality sent out a call for tenders, Sabre submitted a bid which was accepted despite its lateness. Both tenders submitted exceeded the project budget. The project was then increased both in budget and amount of work to be done and after calculations were made based on the unit prices submitted by both tenderers, the contract was awarded to a bidder other than Sabre.

The plaintiff's position in a general sense is that the work should have been re-tendered and Sabre given an opportunity to re-bid.

The defendants rely upon two sets of arguments; those relating to the deficiencies in Sabre's tender bid and those concerning the terms set out in the tender documents. With respect to the first, the defendants assert that the bid did not contain the required detailed listing of experience. Nor did the tender bid include the required Consent of Surety form.

With respect to the terms set out in the tender documents, the defendants rely on the following passages:

> "(1) a description of the work as comprising 'reconstruction of approximately 500 metres of Whistler Road including replacement of drainage culverts' and that 'the limit of Corporation funding for this project will be confirmed prior to acceptance of the tender and the amount of road to be reconstructed to be decided at that time'; "

(emphasis added)

> (2) a further reference for the tenderer that 'The lowest or any tender will not necessarily be accepted' and 'The Corporation reserves the right to reject any or all tenders and the lowest bid will not necessarily be accepted.'"

In accordance with the method of analysis set out earlier, I first must enquire as to whether a "contract A" came into existence upon Sabre's submission of its bid. If it did then I must determine whether the municipality breached its express or implied obligations under that contract.

A contract "A" was not created when Sabre submitted its bid

on the Whistler Road project because that bid did not comply with two of the terms and conditions of the call for tenders. Such compliance is, as I have pointed out, a prerequisite for the creation of contract "A" upon submission fo a tender bid. (See p. 275 of Ron Engineering, as quoted previously). As the defendants stressed, the bid did not detail Sabre's experience, nor did it attach the required Consent of Surety form.

There being no contract "A" with respect to the Whistler Road tender, I need not consider the terms of the tender documents to determine whether Whistler breached its obligations under that contract "A".

With respect to the Rainbow Beach Park tender, Sabre was not the low bidder by a considerable amount. As I understand the plaintiffs' complaint in relation to this tender, it is that subsequent to the awarding of the work to the successful bidder, the municipality made a decision to change the specifications from washed sand to another form of sand. The plaintiffs argue, in essence, that had the tender been let without the requirement of washed sand in the first place, that he may have been the lower bidder. I am asked to draw the inference that the decision subsequently made to remove the requirement of supply of washed sand must have been known to the municipality or alternatively that the municipality did not put its mind to the matter at that time.

The defendants submit that all tenderers were treated fairly and equally in the bidding process and rely on a clause of the Preparation Agreement which allows them, after accepting a tender, to make changes in the work based on the site conditions and requirements.

Again, applying the analysis set out earlier, is there a contract "A"? The defendants raise no issue with the form and content of Sabre's bid so I must assume that is complied with the call for tenders. Therefore, a contract "A" came into existence when Sabre's bid was submitted.

Did the municipality's action in changing the sand requirement breach its obligations under contract "A"? This is not a case of the municipality changing a specification set out in the tender call documents with the result that a bidder other than Sabre received the job. This is a case of the municipality changing a term of contract "B" after it had properly accepted the low bid of the successful contractor.

There is no express term in the tender call document which obligates the municipality as part of its contract "A" with all tenderers, not to change the job specifications after selecting the low bidder. The municipality may have an implied obligation not to "rig" the bid by designing tender specifications and requirements so as to discriminatorily exclude all but its preferred contractor or just one disapproved of contractor. However, the plaintiffs did not put forward evidence of such manipulation.

Sabre submitted a bid on equal footing with the successful bidder and was outbid. Whatever alterations were subsequently made concerned only the parties to contract "B"; Whistler and the successful bidder. Those alterations in no way breached any obligation owed by Whistler to Sabre or any of the other bidders pursuant to contract "A".

The plaintiffs' claims based on breach of contract regarding the Whistler Road and Rainbow Beach Park tenders therefore fail.

Snow Removal Contracts and Tender

The plaintiffs claim damages for breach of its contract with the municipality for snow removal for the years 1986 to 1989, the first three-year contract issued in relation to this work.

As I understand the position of Sabre, it says the municipality is in breach of this contract because:

(a) the municipality leased two additional pieces of equipment during the 1988-1989 season, and

(b) the municipality allowed another contractor to remove snow from the Blackcomb Bench Lands, north of the Town Centre -- an area reserved to Sabre.

With regard to (a) above, Sabre says the effect of the leasing of this equipment and its potential use was to reduce the use of Sabre's equipment, evidence by the fact that, on occasion, Sabre's crews had to be sent home. With regard to (b) above, Sabre says Whistler encouraged Sabre's major competitor, one Demidoff, to become actively involved in this work. Sabre says this was done because the municipality considered Sabre was too big, and in need of competition.

In relation to the 1986-1989 Snow Removal Contract, the plaintiffs claim the sum of $50,000.00 for breach of contract.

Pursuant to the terms of this contract, the equipment to be provided by the parties is described as well as stand-by equipment. There is also provided a description of the work areas. Most importantly are the provisions of Section 2.03 which reads as follows:

"2.03 Roads Included

The roads to be plowed are the public roads within the Municipality and selected parking lots at the discretion of the Municipal Engineer, with the exception of Highway 99. Plowing will be directed by Municipal staff. It is the Municipality's intention to use its own snowplow, a 4 x 4 dump truck with plow, wing blade, and snowblower attachments to plow and sand some streets in conjunciton with the Contractor. The Municipality will be free to assign its own equipment or the Contractor's equipment as it seems fit. The Municipality will also have a second 4 x 4 dump with plow for standby. It is the Municipality's intent to use the first truck as its primary vehicle. The other 4 x 4 dump truck with plow for standby. It is the Municipality's intent to use the first truck as its primary vehicle. The other 4 x 4 dump truck will be used as a back up truck to be used if the Municipal or contractor equipment is broken down, or, in the event of a severe or extended storm as an additional vehicle on any road in the Municipality at the sole discretion of the Municipal Engineer."

The position of the municipality is that the provisions of Section 2.03 clearly confer upon the employees of the municipality a discretion in the assignment of work to be done and where it is to be done by the contractor. It says that at all material time during the term of the contract there was no abuse of this discretion, and that such was the case including those occasions when there was equipment breakdown on the part of Sabre, and when Sabre's operators were not available when called. Insofar as the use of any additional equipment, including that referred to by Sabre in its complaints, such equipment if and when used was within the terms of the contract, including those provisions related to the use of replacement vehicles. The municipality also denies that there was within the terms of the contract a geographical division of the area insofar as assignment of the work such as to require it to have assigned the work in the Blackcomb Bench Lands to Sabre as opposed to another private contractor.

I do not consider it necessary to determine whether the contract was breached by Sabre in the terms of equipment breakdown and operator availability. In any event, the municipality did not take such a position and move to terminate the contract on this basis.

I find the submissions of the defendants to be supported by the evidence. I find further that the scope of the discretion conferred by the provision of 2.03 should not be limited or restricted as claimed by the plaintiffs based upon previous experience in snow removal work. For these reasons I find that breach of the contract has not been proven.

It is not necessary to consider whether any damages related to breach of contract have been proven.

The plaintiffs advance a claim in relation to the tender for snow removal work put forward by the municipality for the post1989 seasons. As I understand the plaintiffs' position in this regard it is that the specification related to equipment of the municipality is not fair because some of Sabre's existing equipment is now over-sized, and in order for it to bid in relation to this work it would have had to replace such equipment. Furthermore, the plaintiffs say the specification was put forward to allow the municipality to do more of such

work itself. Finally, the plaintiffs say that such change in the specification had the result of leaving Sabre with equipment it could not effectively utilize in tis operations.

The plaintiffs' position in relation to the most recent snow removal tenders reflects, in part, its resistance to competition in this area of the municipality's work, and its apparent objection to the intrusion of the municipality into more of such work.

It is useful to consider the history of performance of this work. From the 1981-1982 season to the end of the 1988-1989 season, Sabre was awarded the snow removal contracts for the work to be performed by a private contractor. During the entirety of this time, it was never the low bidder in the public tendering process. On two occasions, the defendant Wylie, the Director of Public Works, recommended to the District Council that Sabre be awarded the contracts including the most recent three-year contract for the 1986-1989 season. In spite of such recommendations on the part of Wylie, Den Duyf stated in his evidence at trial that Wylie did everything he could to encourage competition and to enlarge the role of the municipality in the work to the disadvantage of Sabre.

I conclude from this evidence that with regard to snow removal contracts at the present time and in the future, Den Duyf is not prepared to accept two factors -- one, being competition among private contractors for the work; the other, being the legitimate desire of the municipality to become more involved in the work.

I conclude there can be no claim for the equipment which remains in the hands of the plaintiffs because of the present specification of the municipality for equipment it considers appropriate in relation to performance of the work by a private contractor. There is no evidence upon which the plaintiffs can rely to support a claim of this nature. The plaintiffs were not assured that Sabre would be awarded the snow removal contract upon expiration of the 1989 season.

Bad Faith - Negligence

The plaintiffs submit that when the acts of the personal defendants, in their entirety, are examined between 1981 and 1987, and thereafter, that what is revealed is a pattern of conduct designed to disadvantage the plaintiffs. The allegations of conspiracy made were abandoned at the commencement of the trial. The plaintiffs then began framing their cause in terms of an "attitude' on the part of the personal defendants.

One cannot maintain an action for "bad attitude". The plaintiffs have therefore, attempted to demonstrate that the action and attitudes of the personal defendants constitute bad faith, an abuse of power, unreasonableness, or at the very least, negligence. On the basis of vicarious liability, the plaintiffs also seek to recover from the municipality.

Before examining the basis upon which in law, municipal officers and municipal corporations can be held liable, it is important to note that certain sections of the Municipal Act severely limit liability in these cases. Section 755.1 provides:

" 755.1(1) No action for damages lies or shall be instituted against a municipal public officer or former municipal officer for anything said or done or omitted to be said or done by him in the performance or intended performance of his duty or the exercise of his power or for any alleged neglect or default in the performance or intended performance of his duty or exercise of his power.

(2) In this section 'municipal public officer' means

(i) an officer or employee of a municipality, regional district....

(3) Subsection (1) does not provide a defence where

(a) the municipal public officer has, in relation to the conduct that is the subject matter of the action, been guilty of dishonesty, gross negligence or malicious or wilful misconduct, or

(b) the cause of action is libel or slander."

The only conduct which any of the personal defendants may be held liable for is conduct amounting to dishonesty, gross negligence or malicious or wilful misconduct.

The municipality, on the other hand, pursuant to s. 755.1(4), may be held vicariously liable for any tort committed by a municipal officer that the municipality would have been liable for prior to the passing of s. 755.1(1). Section 755.1(4) reads:

" 755.1(4) Subsection (1) does not absolve any of the corporations ... from vicarious liability arising out of a tort committed by any of the individuals referred to in subsection (2) which the corporation or body would have been liable for had this section not been in force."

Inclusion of the words, "... which the corporation or body would have been liable for had this section not been in force", means that liability of the municipal corporation must be determined according to the common law as it stood before Section 755.1 was enacted. I will now review that law.

(a) Bad Faith

Upon consideration of the Authorities submitted by both parties, it is apparent that cases addressing the liability of municipalities for the bad faith or unreasonableness of, or the abuse of power of discrimination by, municipal officers, are exceedingly rare. The only case submitted which has any comparative value on its facts is Serendipity Ventures Ltd. et al v. Corporation of the City of White Rock (1988) 39 M.P.L.R. 1, a decision of Taylor, J., then of the Supreme Court of British Columbia. In that case the plaintiff land developers alleged that, over a five-year period, the municipal council unlawfully used its powers to frustrate the plaintiff's attempts to rezone and develop a parcel of land which the council wanted to designate as park land. The plaintiffs sought damages for negligence and bad faith. Taylor, J. found for the City but unfortunately did not discuss the nature of the action and whether, and in what circumstances, a municipality will be liable.

Although the cases submitted by both parties provide some indication as to what constitutes bad faith, unreasonableness, discrimination and abuse of power, I am reluctant to apply the approaches taken in these cases for two reasons.

First, almost all of the cases provided discuss such concepts as they relate to one of the oly two situations; the actions of municipal councils or administrative boards. For example, the plaintiffs rely upon Re: Nicholsen et al (1978), 18 D.L.R. (2d) 671 (S.C.C.) which stands for the proposition that administrative tribunals have a general duty to act fairly. In the absence of any authority dealing directly with the factual situation before me, in the context of bad faith allegations, am I merely to adopt, without question, the law as it relates to the standard of conduct required of municipal councils and administrative tribunals?

Secondly, invariably these cases regarding municipal and administrative tribunal action came before the court in a judicial review type manner, not by way of an a action for damages. My earlier comments regarding whether an action in damages is the appropriate way to compel a municipality to enforce its bylaws, are equally apt here. Counsel provided no authority regarding whether an action for damages can be sustained in the circumstances before me.

What is most evident about the law in this area is that it is unclear. Concepts of abuse of power, discrimination, bad faith and unreasonableness seem to be used somewhat interchangeably. Perhaps this is because some (for example "unreasonableness"), may merely be proof of another (bad faith), or because all may be merely different words for the same concept; the notion of unjustified, ill-motived, unfairness. Bad faith, in all its incarnations, is much like obscenity in the following respect; none know how to define it but all of us claim to know it when we see it.

When it is demonstrated, the courts will interfere with the discretion of a municipal council or administrative tribuanl.

Presumably then, the courts should also interfere when a municipal officer acts in bad faith. However, the burden on the plaintiffs is an onerous one, as exemplified by the plaintiff's failure in Serendipity (supra), a case which appeared to have been, on the evidence, a stronger one than the case at bar.

What most distinguishes bad faith concepts from negligence appears to be the intent element of the claim. This is revealed in the fact that the courts often look to whether a municipal or administrative action was improperly motivated to determine whether it was done in bad faith. This is also true of other "bad faith" type concepts. In Lees et al v. Corporation of the District of West Vancouver (1979) 15 B.C.L.R. 233, the British Columbia Court of Appeal stated that "wrongful discrimination" involves two elements; discrimination in fact, and improper motive. Improper motive, in the form of malice, may also be a crucial part of a finding of abuse of power; Bourgoin SA and others v. Ministry of Agriculture Fisheries and Food (1985) 3 ALL E.R. 585 (Court of Appeal, Civil Division) and Dunlop v. Woollahra Municipal Council [1981] 1 ALL E.R. 1202 (P.C.). Even unreasonableness, which would appear on its face to be something more likely than "discrimination" and "abuse of power", to occure without imporper motive, may also involve similar inquiries into motive; Beltz v. Law Society of British Columbia et al [1987] 1 W.W.R. 427 (B.C.S.C.).

(b) Negligence

Unlike the law concerning bad faith, it is clear from the results in Anns and others v. London Borough of Merton, [1977] 2 ALL E.R. 493 (H.L.) and city of Vernon v. Manolakos et al, sub nom. Rothfield v. Manolakos (1989), [1990] 1 W.W.R. 408 (S.C.C.), that municipalities can be held liable for the negligence of their municipal officers.

Both cases concerned the negligent actions or inactions of municipal building inspectors which ultimately caused property damage. In Anns, (at p. 498), the House of Lords set out the familiar test for negligence in these circumstances:

> " First one has to ask whether, as between the alleged wrongdoer and the person who has suffered damage there is a sufficient relationship of proximity or neighbourhood such former, carelessness on his part may be likely to cause damage to the latter, in which case a prima facie duty of care arises.
>
> Secondly, if the first question is answered affirmatively, it is necessary to consider whether there are any considerations which ought to negative, or the reduce or limit the scope of the duty or the class of person to whom it is owed or the damages to which a breach of it may give rise."

Entirely apart from the lack of evidence in this case of any negligent acts, there are two factors about this case that make it different from Anns and Vernon v. Manolakos. Firstly, in Anns and Manolakos the courts looked to the statutory duties and powers of the inspectors and municipalities to determine whether and what type of duty of care existed. The power and duty to inspect easily imputed a duty to do so, and do so with reasonable care. In this case, what specific statutory duty or power provides the foundation for a general duty of care existed. The power and duty to inspect easily imputed a duty to do so, and do so with reasonable care. in this case, what specific statutory duty or power provides the foundation for a general duty of care? If the plaintiffs' rather vague claims of "attitude" and discrimination are to constitute negligence, (and, in my opinion, they cannot since both terms imply "intent" not "neglect"), there must be neglect of some duty.

Secondly, in both Anns and Vernon v. Manolakos, the proximity element of the duty of care was easily satisfied; building inspectors owe a duty of care only to people who live in the building. In this case, even if there is a duty of care to not discriminate, to whom is it owed? If it is owed to everyone, then everyone affected adversely by a municipal officer's action or inaction, would conceivably have an action. The duty must be specifically owed to the plaintiffs and that is not the case here.

For these reasons, I have grave reservations, apart from the evidence, regarding the availability of a negligence action in this case.

In the course of these reasons, I have reviewed the evidence, including the conduct of the personal defendants in relation to a number of the issues requiring consideration. I have referred to the evidence adduced by the plaintiffs of an alleged attitude reflected by conduct related to their position that the personal defendants were engaged in conduct constituting bad faith or to be discriminatory. I do not find such allegations to be supportable upon consideration of the evidence as a whole. I have referred to instances over the years where, in my view, the actions of the personal defendants were supportive of the plaintiffs. These instances are inconsistent with the plaintiffs' position that an attitude of discrimination developed or ever existed. I find the personal defendants, acting within their powers, were not discriminatory, their conduct in no way constituted bad faith, or unreasonableness, or an abuse of power, and that, on the contrary, they were discharging their duties and obligations in good faith in the best interests of the public. I further find the personal defendants were not negligent, and furthermore that the plaintiffs have in no way met the test in Anns, (supra).

Conclusion

As is apparent from my reasons, the plaintiffs' claims are dismissed as against all defendants. In view of this conclusion, it is not necessary for me to consider the defendant's argument that the plaintiffs' claim is barred by effluxion of time pursuant to the Limitation Act.

Costs

With respect to costs, the defendants submitted that, should they prevail, costs should be awarded to them on a solicitorclient basis. As authority they cite: JWJ Developments Ltd. v. Village of Chase et al (1988) 32 B.C.L.R. (2d) 145 (C.A.) (affirming the unreported oral decision of Mr. Justice Lander). In that case Mr. Justice Lander was faced with a plaintiff alleging conspiracy, negligence, malicious and fraudulent conduct on the part of municipal councillors and a city clerk. Given the seriousness of such allegations and the total lack of any evidence supporting them, he awarded costs on a solicitor-client basis.

Upon consideration, I do not consider it appropriate to award costs on a solicitor-client basis. Firstly, although the evidence was lacking, this case was not patently and obviously without merit as Mr. Justice Lander appeared to conclude in JWJ Developments. The plaintiffs' pursuit of this litigation was not, in my view, malicious. Secondly, allegations of discrimination and bad faith on behalf of municipal officials, even when they are true, are difficult to prove. Thirdly, the defendants made no attempt to utilize the summary procedures available under the Rules of Court, possibly shortening this litigation. Costs will therefore be awarded to the defendants on a party-party basis.

HARVEY J.

Whitchurch-Stouffville (Town) Chief Building v. Official v St. Marys Cement Ltd.

Between
Robert Bennett, Chief Building Official of the Corporation of the Town of Whitchurch-Stouffville, appellant/applicant, and 893472 Ontario Limited and St. Mary's Cement Corporation, respondent/respondent

[1994] O.J. No. 4211

Ontario Court of Justice (General Division)
Divisional Court
O'Driscoll, O'Brien and Howden JJ.
Oral judgment: September 21, 1994.

Counsel:
Stanley M. Makuch, for the appellant.
Jonathan H. Wigley, for the respondents.

The judgment of the Court was delivered by

[para1] O'BRIEN J. (orally):-- This appeal is from the order of MacKinnon J., dismissing the Town's application for an order requiring the respondent to cease use of, and to remove, a concrete mixing plant and septic system located in the Town of Whitchurch-Stouffville.

[para2] The plant was assembled without a building permit, and contrary to stop-work orders issued by the respondent.

[para3] MacKinnon J. held no work permits were required, and the stop-work orders were invalid.

[para4] The issue was whether the plant and septic system were "buildings" within the meaning of the Building Code Act, R.S.O. 1990, c. B.13. The relevant sections of that Act are ss. 5(1), and the definition of "building" is contained in s. 1. Those sections are as follows:

> 1. "building" means a structure occupying an area greater than 10 square metres consisting of a wall, roof and floor, or any one or more of them, or a structural system serving the function thereof, including all the works, fixtures and service systems appurtenant thereto, and includes such other structures as are designated in the regulations, but does not include a structure used directly in the extraction of ore from a mine; ("batiment").
>
> 5(1) No person shall construct or demolish or cause to be constructed or demolished a building in a municipality unless a permit has been issued therefor by the chief official.

[para5] The material filed on the application includes pictures and a plan drawing of the plant. The plan drawing is shown at page 226 of the Appeal Book II.

[para6] There are three sections to the plant which may be described as follows:

> (i) a transcreter, which is an elevated storage tank supported by steel legs affixed to a reinforced concrete subgrade foundation;
>
> (ii) a concrete foundation pad with an area of 40.5 square metres which supports an aggregate bin, used to store the aggregate used in the process, two admix tanks, a power generator, and batchers' control room, which shelters the operator and computerized controls;
>
> (iii) concrete block retaining walls which separate and enclose aggregate stock piles.

[para7] It is conceded by the respondent that the plant exceeds 10 square metres stipulated in s. 1 of the Act. The respondent relies on the conclusions of MacKinnon J. that the plant did not constitute a building within the meaning of the Act, but were discrete portions of equipment designed to deliver a product and were a collection of machinery performing an individual process.

[para8] As it relates to the concrete foundation and pad, the decision of MacKinnon J. appears to conflict with that in Algoma Steel Corporation v. Sault Ste. Marie (City) (unreported, District Court, Algoma, Vannini, D.C.J. - October 27, 1978 - affirmed, without reasons and by endorsement, in Divisional Court, May 21, 1980).

[para9] In the Algoma decision, Vannini D.C.J. was dealing with an appeal from an order made under the Ontario Building Code, and dealt with section 5(1) of that Act in connection with an order to comply. The decision dealt with a concrete slab on which machinery was to be installed, and a concrete slab to be laid outside a building, on which dust control machinery was to be placed. Counsel advise the Algoma decision was not brought to the attention of MacKinnon J.

[para10] In my view, the factual situation in Algoma cannot be distinguished from this case as it applies to the concrete pads.

[para11] In his decision, Vannini D.C.J. made the following observations at page 5, dealing with the purpose of the Act:

> Clearly, the main object and intent of the statute and the regulations passed thereunder is the establishment of a building code for the province governing standards for the construction of all buildings within the meaning of s. 1(b) to ensure that they will be of sound construction and safe for the purpose for which the building is intended to be used.

[para12] Because s. 1(b) makes reference to "structure" more than any other of the other significant words therein, I proceed, firstly, to a consideration of the meaning of that word.

[para13] It is said that the word "structure" has a wide connotation. In its ordinary, common and popular meaning, it includes that which is built or constructed, a building or edifice of any kind; a fabric or framework of material parts put together. It is something which is constructed, and it involves the notion of something which is put together, consisting of a number of different things which are so put together or built together, constructed as to make one whole, which then is called a structure. However, not everything which is constructed is a structure. It is something of a substantial size which is built up from component parts and intended to remain in one place. See R. v. Bedard (1976), 31 C.C.C. (2d) 559.

[para14] It follows from these definitions that what is now proposed to be constructed by the applicant for the use to which they are intended to be put would, upon their construction, each constitute a structure.

[para15] Vannini D.C.J. then, at page 6, dealt with the meaning of the word "floor":

> What is a floor? Whatever meaning attaches to "floor" within the context of s. 1(b), it is, having regard to the requirement of s. 5(1) and to the definition of "construct" and "construction" in s. 1(e), clearly limited to something that is errected or installed or to anything that is done to it in the extension, material alteration or repair thereof.

[para16] It follows, then, that within the meaning of ss. 1(b) and 1(e), a "floor" is at least a structure.

[para17] The Shorter Oxford English Dictionary defines floor as "The layer of boards, brick, stone, etc. in an apartment, on which people tread, the under surface of the interior of a room. Hence, any analogous surface," and as "An artificial platform or levelled space, for the carrying on of some industry, especially threshing." In Webster's International Dictionary, it is defined as "the bottom or lower part of any room; the part of a room upon which one stands; the surface or the platform of a structure on which to walk, work or travel."

[para18] In considering the meaning to be given the word "floor," Vannini D.C.J., at page 7, made the following

statements:

> A floor can be construed in the open air, but it will depend upon the whole circumstances whether floor is an apt word to describe a constructed surface in the open air, e.g., in its ordinary meaning, the unmade earthen surface of an open yard cannot be a floor; per Lord Kissen in Sullivan v. Hall Russell, [1964] S.L.T. 192, at p. 193.
>
> Inasmuch as a building can be a structure within the meaning of s. 1(b) if it consists of a floor alone, a structure can be a floor within the meaning of s. 1(b) though it be constructed in the open air, and I do so hold.
>
> To the extent, then, that a structure is used to stand or to place machinery or equipment thereon, it could be described as a floor, and to the extent that a structure is used for the installation or affixing thereon of machinery or equipment, it may also be described as a base or foundation.

[para19] Vannini D.C.J. then considered the use and meaning of the word "structure," at page 8, as follows:

> While the proposed structures could, in the ordinary, common, or popular meaning thereof, be defined as a base or a foundation, this is not to say that they cannot be susceptible to being described as floors as well. If a structure upon which machinery or equipment is placed is a floor, e.g., in the display room of a manufacturer or a retailer, it should matter not that it is a structure in or on which machinery or equipment is installed or affixed. It, too, can be said to be a floor, having regard to the ordinary common and popular meaning of the word in the context of and the subject matter in regard to which they are used in s. 1(b), and I do so hold. As floors, the proposed structures are buildings, and for their construction a permit is required pursuant to s. 5(1) of the Act.

[para20] Vannini D.C.J. then, in the alternative, dealt with the issue of "a structural function," and the meaning of "works." I do not find it necessary to consider that portion of the judgment in this instance.

[para21] For the reasons given by Vannini D.C.J., I conclude the concrete pads under the two pieces of equipment referred to in paragraphs (i) and (ii) above are "floors" within the definition in s. 1 of the Act, and the plant was therefore a "building" within that section and section 5(1).

[para22] The mere fact that one of the pads is below grade does not prevent it being a "floor" within the meaning of the Act and as considered by Vannini D.C.J.

[para23] The transcreter and the piers affixing it to the concrete underpad fall within the words "fixtures and service systems appurtenant" to the "floor." As such, all are included in the definition of "building."

[para24] In addition, I conclude the cement block walls enclosing the piled aggregate are "walls" within the definition section, and are also included in the definition of the word "building." A building permit was therefore required, and the stop-work orders issued should have been complied with.

[para25] For these reasons, the appeal is allowed in connection with the order requiring the respondents to cease the use of, and remove, the concrete ready-mix plant described as part of Lots 9 and 10, Concession 8, in the Township of Whitchurch-Stouffville.

[para26] The appellant concedes that the septic system was not a work requiring a work permit under the Act, and no order is made in connection with that system on this appeal.

[para27] The respondent requests a stay until an O.M.B. hearing dealing with the appeal of interim control zoning By-law 92-111 is disposed of. The request for the stay is refused. A number of other parties involved in this appeal from the by-law to the O.M.B. did not proceed with the

construction, as this respondent did. A stay in effect would be to reward the respondent for ignoring the requirements leading to a building permit, and to ignore the interim by-law which was passed by the appellant. For these reasons, the stay will not be granted. The appeal is therefore allowed in part, as indicated above.

O'DRISCOLL J.
O'BRIEN J.
HOWDEN J.

White v. Vaughan

IN THE MATTER OF an appeal under s. 31(18) of The Planning
Act, R.S.O. 1960, c. P.13 from a decision of the Property Standards Committee of the City of Vaughan rendered January
20, 1997, which dismissed an appeal against the Property Standards Order, dated November 18, 1996, directed to Stanley
George White, junior, Beverly Rose Trottier and Stanley White,
senior

Between
Stanley George White, junior, Beverly Rose Trottier, and Stanley White, senior, appellants, and
The City of Vaughan, respondent

[1998] O.J. No. 2821
File No. 43418/97

Ontario Court of Justice (General Division)
Newmarket, Ontario
Howden J.

June 24, 1998.

Counsel:
E. Winemaker, for the appellants.
O. Fatigati, for the respondent.

[para1] HOWDEN J. (endorsement):-- In answer to my invitation to further submissions regarding s. 326 of the Municipal Act, counsel for the appellants submitted that as the City has expended no money for removal of the debris as yet, the right of the City to recover under s. 326 of the Municipal Act has not crystallized. The order before me on appeal is simply one compelling the parties to remove the described debris within a time limit or the municipality is to remove it thereafter. If the order were to be broadened to include an order for recovery of expense by the municipality from the appellants, counsel for the appellants submitted that s. 31(29) would allow me to modify the order and in so doing, provide that recovery of expense not be sought against the two appellants who are the title-holders but who do not occupy the land.

[para2] Counsel for the municipality submitted that the ability of the municipality to recover expenses under s. 326 of the Municipality Act is predicated on the order applying to the owner of the legal title to the land; otherwise a municipality could not recover its expenses by way of municipal taxes. There is no statutory authority to limit municipal powers of recovery under s. 31(31) of the Planning Act and s. 326 of the Municipal Act. He further submitted that s. 31 of the Planning Act is so structured that the order referred to must apply to the registered owner of the property.

[para3] I am not persuaded that s. 31(29) gives authority to a judge on appeal or to the Property Standards Committee to limit the municipality's power of recovery of its expenses save and except recovery of expense to terminate an immediate danger which was not incurred in this case. Section 31(31) of the Planning Act gives the authority to a municipality to recover expense by any or all of the methods in s. 326 of the Municipality Act. Section 31(29)(c) of the Planning Act, in authorizing a judge to modify, confirm or quash the Property Standards Order, does not extend beyond the clearance order referred to in s. 31(7) to limit municipal powers to recover expense granted, in quite broad terms, by s. 31(31).

[para4] In this case the problems among the appellants stem from family issues of long standing and affect only themselves. They are not properly used to limit the municipality's ability to recover expenses if it incurs them. The appellants have the legal means to solve their issues among themselves if they wish to avail themselves of them.

[para5] The order appealed from is in Exhibit 8. After considering the evidence and submissions, the appeal is denied and the order earlier confirmed by the Property Standards Committee of the City of Vaughan is confirmed by me.

HOWDEN J.

Wirth v. City of Vancouver

Between
Gordon Wirth, Plaintiff, (Appellant), and
City of Vancouver, Defendant, (Respondent)

[1990] B.C.J. No. 1616
DRS 91-00439
47 B.C.L.R. (2d) 340
71 D.L.R. (4th) 745
50 M.P.L.R. 105
[1990] 6 W.W.R. 225

British Columbia Court of Appeal
Toy, Taylor and Hollinrake JJ.A.
Heard: June 15, 1990
Judgment: July 9, 1990

Counsel for the Appellant: L.W. Goulet.
Counsel for the Respondent: B. Williamson.

Reasons for judgment delivered by Hollinrake J.A., dismissing the appeal; concurred in by Toy J.A. Separate and concurring reasons for judgment delivered by Taylor J.A.

TAYLOR J.A.:-- I agree with Mr. Justice Hollinrake, whose

reasons for judgment I have had the privilege of reading in draft.

In order to avoid any possibility of misunderstanding with respect to the scope of the issues before us I wish to add that no argument was addressed to us that on the present facts a claim might lie for damages for "pure economic loss" based on cases such as Hedley Byrne & Co. Ltd. v. Heller & Partners Ltd., [1964] A.C. 465 (H.L.) Tracy v. Atkins (1979), 16 B.C.L.R. 223 (C.A.) and Junior Books Ltd. v. Veitchi Co. Ltd., [1983] l A.C. 520 (H.L.). While appellant's counsel said in argument that the appellant was entitled to rely on the City in certain respects, there is no allegation in the appellant's pleadings that he in fact relied on the City to use reasonable care to protect him from the loss alleged, nor that the City was informed, or ought to have been aware, of such reliance, nor that reliance was reasonable in the circumstances. The affidavit material filed for the appellant makes no statement that the appellant relied on the City authorities in this or any other respect, or that he advised the City personnel of such reliance, nor is there any suggestion he received any representations or assurances from the City.

I wish also to emphasize that in characterizing the loss alleged in the present case as "pure economic loss" that imprecise expression refers only to loss suffered in circumstances in which there is no danger of injury to the person or of physical damage to property, and is not used in the sense in which it has sometimes been employed in cases where risk of injury to the person or physical damage to property exists but no such injury or damage has yet occurred, that is to say cases in which the claim is for the cost of remedying a negligently-created defect, so as to prevent such damage occurring, as were Anns v. Merton London Borough Council, [1978] A.C. 728 (H.L.) and City of Kamloops v. Nielsen, [1984] 2 S.C.R. 2.

I would not wish to be taken to suggest that a claim for damages for "pure economic loss" based on reliance or any other factor, had it been properly alleged and proved, could in the present circumstance have succeeded. I have grave doubt that such a claim would lie. But that is a question on which I would not wish to express a firm opinion without the benefit of full argument and consideration.

TAYLOR J.A.

HOLLINRAKE J.A.:-- This is an appeal by the plaintiff appellant from an order dismissing his action against the defendant respondent following an application made by the defendant under Rules 18A and 19(24) of the Rules of Court.

The decision in the court below is reported at [1988] 4 W.W.R. 72, 43 C.C.L.T. 209, 24 B.C.L.R. (2d) 117, 49 D.L.R. (4th) 153.

The plaintiff is the registered owner of real property in the City of Vancouver. In 1986 the City issued a permit for construction of buildings on a lot immediately adjacent to that owned by the plaintiff. A City employee miscalculated the square footage permitted by the Zoning and Development Bylaw which resulted in an accessory building being 802 square feet rather than the maximum 679 square feet permitted under the bylaw.

The defendant City concedes its negligence.

The plaintiff concedes that the only possible damage resulting from this negligence would be a diminution of value of his property and not the type of damage present in Anns v. London Borough of Merton, [1978] A.C. 728, 2 All E.R. 492, Kamloops v. Nielsen et al, [1984] 2 S.C.R. 2, 5 W.W.R. 1, 66 B.C.L.R. 273 and City of Vernon et al v. Manolakos (1989) 41 B.C.L.R. (2d) 374 (S.C.C.).

The learned chambers judge, after reference to Anns and Kamloops, concluded that the question for her was "one of policy and the drawing of lines" and she drew "this line in favour of the City for these reasons":

> (1) A landowner does have a remedy under s. 571(2) even though the section does not itself exclude a private law duty of care.
>
> (2) The owner of the neighbouring land at the time of construction was himself obliged to observe the by-law. It ought to be, although I do not decide the point, that the landowner can sue the offender for damages. I know of no authority for the proposition that the negligent issuance of a permit relieves an owner of his duty to obey s. 6.1 of the by-law. Whether an action will also lie against the present owner (who was not I understand the owner at the time of construction) raises another question.
>
> (3) In truth, the City is not some big bad stranger. it is all who live within its gates and it is they who must pay, either directly as ratepayers or indirectly as tenants, if such a duty of care exists. l do not see why the residents of a municipality should pay for the kind of economic loss asserted here.

I should note here that the case was decided on Rule 18A and Rule 19(24) was not addressed by the chambers judge.

The judgment below was handed down before the judgment of the Supreme Court of Canada in Manolakos.

The plaintiff before this Court rested his case on Anns, Kamloops and Manolakos, and on that basis only, saying that he was entitled to rely on the City to see to it that construction of this building on the lot next to his met the requirements of the bylaw and if it failed in this then the City must answer to him in damages. He says the City has a private law duty of care to him and others in a like position. I note here that reliance is not pleaded nor is it referred to in the affidavits of the plaintiff.

To go back to what I will call first principles I refer to the judgment of Taylor, J.A. in Kamahap Enterprises Ltd. v. Chu's Central Market Ltd., [1989] B.C.J. No. 2108, CAO10058 Vancouver Registry, November 22, 1989. The facts of that case are of no significance to the case at bar. Those portions of the judgment I refer to deal with "pure economic loss" generally. At p. 5 of the reasons, Taylor, J.A. said:

> Foreseeability of damage to the person or physical property of others is normally thought to be sufficient in itself to create the essential relationship of proximity between a person who causes damage and the person to whom it is caused.

And again at pp. 6 and 7:

> But where the only damage foreseeable is damage to another's pocket or estate -- where there is no foreseeable risk of personal injury or physical property damage -- foreseeability of such economic loss, while essential to the existence of a duty of care, cannot, it now seems clear, generally be regarded as sufficient to create proximity and thus impose such a duty.

In such cases reliance cannot, of course, be assumed, for it is not normally to be expected that a person will care gratuitously for the purely economic interests of others.

An impression that the requirements for creation of a duty of care might be the same in respect of all cases of loss, whether personal, physical or purely economic -- that mere foreseeability of damage will in all cases prima facie be sufficient for this purpose -- can, it seems, be gained from a broad interpretation of certain dicta found in the decisions of the House of Lords in Home Office v. Dorset Yacht Co. Ltd., [1970] A.C. 1004 (H.L.), and Anns v. Merton London Borough Council, [1978] A.C. 728 (H.L.). That those cases do not stand for such a proposition has, however, been made clear in more recent decisions of the House of Lords and Privy Council, such as Curran v. Northern Ireland Co-Ownership Housing Association Ltd., [1987] A.C. 718 (H.L.), Yuen Kun Yeu v. A.G. Hong Kong, [1988] A.C. 175 (P.C.) and Rowling v. Takaro Properties Ltd., [1988] A.C. 473 (P.C.).

Out of the period of uncertainty and re-thinking through which the law of negligence has passed in recent years, there has, I think, emerged a realization that the infliction of foreseeable pure economic loss must necessarily result from very many acts and omissions which take place routinely in the course of everyday business activities under our economic system, and that any law imposing a general duty of care to avoid the infliction of such loss would greatly hamper the conduct of commercial and private business, and would probably interfere fundamentally with the operation of that economic system.

It has also become apparent that to exempt business activity from a general rule imposing a duty of care in the economic field would not only be to exempt most cases falling within the rule, but to excuse deliberate infliction of economic loss for personal gain while imposing liability when such loss is caused by accident, and without selfish motive.

The issue before this Court is, do the principles enunciated by the Supreme Court of Canada in Kamloops and Manolakos extend to permit recovery on these facts.

I think not.

In Anns the legislation in question was the Public Health Act, 1936 which imposed a range of duties and powers on local authorities for the purpose of safeguarding and promoting the health of the public at large.

In Kamloops and Manolakos it was a building bylaw. Those bylaws are referred to as being "for the health, safety and protection of persons and property.".

In Manolakos, La Forest J. said at pp. 381-382:

> Moreover, in my view, the distinction sought to be made between owner builders and third parties overlooks the fact that both are ratepayers for whose safety the by-law was passed. The inspection of plans and the supervision of construction increases the costs of construction for everyone. But I think that most ratepayers, were they to give the matter any thought, would justify the increased expense as an investment in danger to life and limb and may
>
> result in future expense and liability. This applies equally to owner builders and third parties. Both are justified in saying: 'I pay for the provision of an inspection service, and so long as I act in good faith, l should be entitled to rely on the city to exercise reasonable care to ensure that all construction is built according to the standards set out in the by-laws.'

And at p. 385:

> Inasmuch as inadequately inspected foundations will public, building by-laws contain measures aimed at preventing the occurrence of such 'hidden defects'.

And, lastly, at p. 386:

> When the question is framed in this way, I think that the answer must be in the affirmative. The inspector could not and did not rely on the plan submitted to him; it was inadequate. He chose instead to rely solely on the onsite inspection. And when he attended at the site, he was confronted with a situation which, if left unremedied, manifestly stood to pose a threat to the health and safety of the public, including the neighbours and the owner builder.

Along the same lines, Wilson, J. said in the Kamloops case at pp. 43-44 of [1984] 5 W.W.R.:

> If economic loss was within the purview of the statute, then it should be recoverable for breach of the private law duty arising under the statute, whether or not it is recoverable for breach of a duty at common law. In my view, the private law duty in this case was designed to prevent the expense incurred by the plaintiff in putting proper foundations under his house. It was imposed to ensure that proper foundations would be under his house from the outset. I suppose it is arguable that the damage the duty was designed to prevent was injury to the occupants from the collapse of the house or damage caused by the house sliding down the hill. But it seems to me that this is too narrow an approach to the protection the statute was designed to provide. The purpose of the by-law in this case was to prevent the construction of which the by-law imposed on the Building Inspector required him at the very least to determine the scope of the measures which were necessary to achieve that end and, if required, to attempt to obtain the approval of the city for them. If he failed in that duty and a house on defective foundations resulted, it was obviously going the health and safety of the occupants.

It can be seen these three cases all dealt with bylaws passed for the safety of persons and property. The bylaw in the case at bar is a zoning bylaw and does not have this component of safety of persons and property. As I have said before in these reasons it is conceded by the plaintiff that the only possible damage here is diminution in value of his land. There is no suggestion here of danger or threat of danger of physical damage to persons or their property as was the case in Anns, Kamloops and Manolakos.

I am not aware of any theory of tort liability that would permit a property owner to sue an adjoining property owner because of something built on that adjoining land absent any safety component, nuisance or escape. That is, to sue an adjoining property owner because of how something looks in the eye of the beholder, that beholder being the adjoining property owner. I have some difficulty with the concept of foreseeability of harm in a case such as this. Is there such a thing as the reasonable man when it comes to the aesthetics of building construction? There is no duty of care that I am aware of to maintain the aesthetic appeal of one's property so as to support the property value of one's neighbour's property.

I have no hesitation in concluding that the principles enunciated in Anns, Kamloops and Manolakos do not extend and apply to the facts of this case.

I do not think there is any private law duty of care on the City in this case to protect the plaintiff from the economic loss resulting from the breach of this zoning bylaw by the neighbouring 'property owner and the negligence of the City. I say this assuming such loss can be said to be foreseeable, a proposition which I find is at best tenuous. In my opinion, this case is governed by the well established principle that where the only damage foreseeable is damage to another's pocket or estate and there is no foreseeable risk of personal injury or property damage there is no duty of care owed and no redress for that damage.

I would dismiss the appeal.

HOLLINRAKE J.A.

TOY J.A.:-- I agree.

Wolfond v North York Building Official

74 O.R. (2d) 466
[1990] O.J. No. 1370
Action No. 362/90

ONTARIO
District Court of Ontario
Haley D.C.J.
July 20, 1990.

Alan B. Dryer, for applicants.

Catherine Conrad, for respondent.

HALEY D.C.J.:-- This is an appeal brought under s. 15 of the Building Code Act, R.S.O. 1980, c. 51, from the refusal of the Building Commissioner of the City of North York to issue a building permit for the demolition of a one and a half storey dwelling-house and replacement by a two storey building of greater floor area. The detailed facts are not in dispute between the parties. It is useful, therefore, to outline the pertinent chronology:

Early in 1989: Plans were submitted to the North York Building Department and an application for a building permit made. The applicants were advised a minor variance was needed.

April 20, 1989: The applicants obtained minor variance from the Committee of Adjustment.

The city appealed the decision of the Committee of Adjustment.

March 20, 1990: Ontario Municipal Board ruling dismissing the appeal.

The applicants requested the issuance of a building permit and were advised by the Department it had not received a copy of the OMB ruling.

April 2, 1990: The applicants delivered a copy of the ruling to the Building Department and were advised the building permit would be issued "in a couple of days".

April 4, 1990: The city passed By-law 31182 which has the effect of prohibiting the building proposed by the applicants. This was a by-law of general application and not an interim control by-law.

May 16, 1990: The applicants appealed By-law 31182 to the Ontario Municipal Board. No decision has yet been made by the Board.

May 17, 1990: Letter from the Building Commissioner to the applicants refusing the building permit.

By a request to admit two additional facts were agreed between the parties.

1. That the proposed building of the applicants referred to in

the notice of application complies with all applicable laws save and except for City of North York By-law 31182.

2. That as of March 21, 1990, the said proposed building complied with all applicable laws.

Section 15 of the Building Code Act provides for an appeal from the refusal of the Chief Official, in this case the Building Commissioner for the City of North York, to issue a building permit.

Section 6(1) of that Act as applicable to this case provides:

6.(1) The chief official shall issue a permit except where,

(a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law ...

In this application the issue is whether there is "any other

applicable law" which prevents the Building Commissioner from issuing the permit.

The powers given to the judge on appeal under s. 15(3) permit the judge to rescind or affirm the decision of the Chief Official or to take such action as the judge considers the Chief Official ought to take and for that purpose to substitute his opinion for that of the Chief Official.

In Woodglen & Co. v. North York (City) (1984), 47 O.R. (2d) 614, 12 D.L.R. (4th) 146, 26 M.P.L.R. 40, 5 O.A.C. 313, the Divisional Court, at p. 46 M.P.L.R., Southey J. speaking for the court, stated the duty of the judge under s. 15 to be:

> ... to do what the Judge considers the inspector or chief official ought to have done. The judge has no powers other than those which were possessed by the inspector or chief official, and has no discretion to act or defer action, if that discretion was not enjoyed by the inspector or chief official.

On March 20, 1990, the date of the decision of the Ontario Municipal Board, the applicants had fulfilled the requirements for the issuing of the building permit. The applicants requested the permit at that time and were advised by the officials of the Building Department that the permit would be forthcoming. It is the practice of the Ontario Municipal Board to advise all parties, of which the city was one, of its decisions, but even if that practice was not followed in this case, the Building Department had a copy of the decision by April 2, 1990, two days before the passing of the by-law 31182. Counsel for the city argues that administratively it was not then possible for the city to issue the permit and that the city is entitled to a reasonable time for the issuance of the permit. In those circumstances she acknowledges it was unfortunate for the applicants but the passing of the by-law intervened and the Chief Official could not thereafter act contrary to the law by which he was bound.

She refers to R. v. Toronto; Ex parte Lawson, [1971] 1 O.R. 451, 15 D.L.R. (3d) 553 (H.C.J.), a decision of Wright J. who said at p. 454 O.R.:

> It seems to me that it is reasonable to say that, once a City Council has passed a by-law, its employees are bound to do the business of the city, when they have a discretion to exercise, in accordance with the by-law, even if the by-law has not passed the Municipal Board.

At that time it was necessary for the Ontario Municipal Board to approve all municipal by-laws, not just those from which an appeal was taken.

In considering the force of this decision, one has to take into account the peculiar facts of the case and, in particular, that the applicants sought a mandamus for the renewal of an expired building permit which had itself been issued contrary to the zoning by-law passed by the city. There the by-law was passed three days before the application for the original building permit had been submitted. The permit was issued before the Ontario Municipal Board approval of the by-law. This is much different from the position in this case where the city admits that prior to the passing of By-law 31182 the proposed building complied with all applicable laws. Here the intervention of the by-law, which the respondent says was binding on the city officials, came in a period before the issuing of a building permit could be accomplished because of the time required for the paper work to be done.

Leaving that aspect for a moment, it is also necessary to consider the changes in the Planning Act between the Ex parte Lawson case and this case.

In 1971 the applicable part of the Planning Act saved the right to a building permit where plans for the project had been approved by the municipality prior to the passing of a contrary by-law. [The Planning Act referred to in Ex parte Lawson was R.S.O. 1960, c. 296, s. 30(7)(b). It was superseded in turn by the Planning Act, R.S.O. 1970, c. 349, s. 35(7)(b), the Planning Act, R.S.O. 1980, c. 379, s. 39(8)(b) and the Planning Act, 1983, S.O. 1983, c. 1, s. 34(9)(b).] Section 30(7)(b) of the then Planning Act reads:

> 30(7) No by-law under this section applies,

. . . . .

(b) to prevent the erection or use for a purpose prohibited by the by-law of any building or structure the plans for which have, prior to the day of the passing of the by-law, been approved by the municipal architect or building inspector, so long as the building or structure when erected is used and continues to be used for the purpose for which it was erected and provided the erection of such building or structure is commenced within two years after the day of the passing of the by-law and such building or structure is completed within a reasonable time after the erection thereof is commenced.

(Emphasis added)

That section of the Planning Act was amended in 1983. The old s. 30(7) now appears as s. 34(9) in the following form:

34(9) No by-law passed under this section applies,

. . . . .

(b) to prevent the erection or use for a purpose prohibited by the by-law of any building or structure for which a permit has been issued under section 5 of the Building Code Act, prior to the day of the passing of the by-law, so long as the building or structure when erected is used and continues to be used for the purpose for which it was erected and provided the permit has not been revoked under section 6 of the Building Code Act.

(Emphasis added)

The respondent argues that the prerequisite for protection under the Planning Act now requires the building permit to have been issued prior to the day the by-law was passed. Here, no permit having been issued at the latest on April 3, 1990, the applicants, she argues, are not saved by the Planning Act, and the Chief Official acted properly, being bound by By-law 31182 on May 17, 1990 when he refused to issue the permit (and on any day prior to May 17, 1990 and after April 3, 1990).

In Quay West v. Toronto (City) (1989), 47 M.P.L.R. 109 [leave to appeal to Ont. C.A. refused (1989), 47 M.P.L.R. 109n], the Divisional Court considered the now s. 34(9)(b) of the Planning Act. Southey J. said at p. 111 M.P.L.R.:

The subsection does not exempt the erection of buildings for which a permit ought to have been issued before the effective date of the zoning by-law, but only buildings for which a permit has in fact been issued. I do not consider the addition of the words "or ought to have been issued" to be a modification necessary in applying s. 34(9) to an interim control by-law.

The developer sought to relate the relevant date back to the date the building permit was applied for, which antedated the passing of the interim control by-law.

In the Quay West case the municipality was relying on an interim control by-law. As well no site plan approval had yet been given. In those circumstances Southey J., with whom Gray J. concurred, held at pp. 111-12 M.P.L.R.:

As a general rule, a building permit should not be issued for a development in a site plan control area to which s. 40 of the Planning Act applies until site plan approval for the development has been obtained from council or the Municipal Board. Without such approval, the proposed building would contravene s. 40(4) of the Planning Act, and the permit should not be issued because of s. 6(1)(a) of the Building Code Act.

Saunders J., while agreeing with the outcome, preferred to refuse the mandamus on the basis only of the existence of the interim control by-law and s. 34(9) of the Planning Act.

Southey J. also acknowledged there may be extraordinary circumstances in which a building permit should issue where the municipality did not act "in good faith or was refusing developmental approval for an obviously unlawful reason", as was the case in Re Revenue Properties Ltd. and Toronto (City)

(1984), 26 M.P.L.R. 165 (Ont. Co. Ct., Matlow Co. Ct. J.). In that case the municipality refused to examine the developer's application for a building permit or to consider its application for site plan approval, even after the by-law amending the zoning by-law to prohibit the proposed development was quashed, the city having appealed that judgment. Judge Matlow reviewed the changes to the Planning Act and noted in discussing the repeal of provisions in the Planning Act requiring a site plan prior to issuance of a building permit at p. 170 M.P.L.R.:

> As well, because of s. 34(9)(b) of the Planning Act referred to above, certain rights now crystallize only when a building permit is actually issued. This increased significance of the actual issuance of a building permit lends weight to my interpretation of the legislation. In other words, the words of the legislation should not be strained to lead to an interpretation resulting in unauthorized delays in the issuance of building permits.

While it might be possible to draw an inference of lack of bona fides in the municipality in view of the change in the position of the building department from at least April 2, 1990 when it advised the applicants the permit would be forthcoming in a couple of days and May 17, 1990, the date of the letter refusing the permit, which was one day after the applicants appealed By-law 31182, I am not prepared to draw that inference. Rather, I find this is an extraordinary case of another kind which falls outside the purview of s. 34(9)(b) of the Planning Act. I consider the comments in the Quay West case on the interpretation to be given s. 34(9)(b) are not binding on me as the circumstances of that case were quite different. Here the applicants, as admitted by the city, up to the date of the passing of the by-law complied with all applicable laws. Had the Chief Official chosen to act on April 3, 1990 or any day after the decision of the Ontario Municipal Board on March 20, 1990 upholding the Committee of Adjustment, up to and including April 3, 1990 there was no reason to refuse the building permit and in fact the Chief Official was under an obligation to issue it under s. 6 of the Building Code Act.

Had he done so the applicants would then have been entitled to the protection of s. 34(9)(b) of the Planning Act against the effect of By-law 38112. In my view it is incorrect to apply s. 34(9) to deprive the applicants of their rights which had clearly accrued under s. 6 of the Building Code Act before the by-law was passed.

On looking at the position of the Chief Official under s. 15 of the Building Code Act I consider I am to look at the time when the rights of the applicants had crystallized. The administrative delay in acting on those rights should not be permitted to deprive the applicants of their rights. To decide otherwise or to accede to the argument of the respondent that a reasonable time should be allowed to do administrative acts would in my view open the system to unprofitable attempts to determine when and if administrative delay was reasonable and to potential abuse if administrative delay could be deliberately engineered for nefarious purposes.

In H & D International Group v. Toronto (City) (1988), 44 M.P.L.R. 187 (Ont. Dist. Ct.), Corbett D.C.J. considered the time when the right of the applicants is to be determined for purposes of s. 6 of the Building Code Act. She followed the direction of Southey J. in the Woodglen case and held the rights of the applicants should be determined on the date of the decision of the Chief Building Inspector and not as of the date of the court hearing. I agree with Judge Corbett and do not consider myself bound by any contrary holding in Re Greengable Holdings and Toronto (City) a decision of the County Court, April 26, 1984.

In the case before me there was no formal refusal of the Chief Official until May 17, 1990. I find, however, there was an informal decision to grant the permit at least by April 3, 1990 by the officials of the Building Department on behalf of the Building Commissioner, and that is the time I hold the applicants' rights should be determined in this case. The date of the letter of the later refusal is not relevant as it is only the date of reducing to writing a decision that had to have been made after the passing of the by-law on April 4, 1990.

If the holding that the determinative date was between March

20, 1990 and April 3, 1990 puts the applicants out of time for bringing an application under s. 15(1) of the Building Code Act then I make the order necessary to extend the time pursuant to s. 15(5).

The applicants were entitled to the issuance of a building permit before April 4, 1990. The Chief Official who finds himself in those circumstances ought to issue a building permit forthwith. I phrase this conclusion in the present tense since the respondent takes issue with the comment of Southey J. in the Woodglen case to do what the judge considers the inspector or chief official ought to have done". I think there is no significance in the use of the present tense by the Legislature in s. 15(3) of the Building Code Act. If one considers the judge places himself or herself in the shoes of the Chief Official when the applicant's rights are crystallized then the present tense is the correct one. If one considers the judge is determining by way of later review what was the correct act of the Chief Official at the time the applicants' rights crystallized then the past tense is correct.

Either way the applicants are entitled to a building permit and I direct the Chief Building Commission to issue the necessary building permit to the applicants forthwith.

As agreed by the parties there will be costs of this application to the applicants on a party-and-party basis.

Order accordingly.

Re Woodglen & Co. Ltd. v. North York et al.

47 O.R. (2d) 614

ONTARIO
HIGH COURT OF JUSTICE
DIVISIONAL COURT
SOUTHEY, SAUNDERS AND SMITH JJ.
25TH SEPTEMBER 1984.

APPEAL from a judgment of Haley Co. Ct. J., 43 O.R. (2d) 289, 23 M.P.L.R. 18, allowing an appeal from a decision of the chief building inspector of the appellant municipality refusing a building permit.

Nadia Koltun, for appellants.
Michael J. McQuaid, Q.C., for respondent

The judgment of the court was delivered by

SOUTHEY J.:-- The municipality and its building inspector appeal from an order of The Honourable Judge Haley of the County Court of the Judicial District of York, dated September 23, 1983 (43 O.R. (2d) 289, 23 M.P.L.R. 18), allowing the appeal of Woodglen & Co. Ltd. under s. 15(5) of the Building Code Act, R.S.O. 1980, c. 51, from a decision of the chief building official of the municipality refusing a building permit to Woodglen for the erection of a single-family dwelling on part of a seven and a half-acre parcel of land fronting on Toba Dr. in the City of North York. The learned county court judge ordered that the permit be issued. The appeal to her was brought following the refusal by the Divisional Court on July 6, 1983 (42 O.R. (2d) 385), to hear an application by Woodglen for mandamus. The Divisional Court refused to hear the application on the ground that the right of appeal to the county court judge under the Building Code Act provided a specific alternative remedy to mandamus, which is equally, if not more, convenient, expeditious, beneficial and effective.

It is common ground that the use for which the permit was requested was permitted under the applicable zoning by-laws, and that Woodglen had, by September 8, 1982, satisfied all the requirements for the issuance of the building permit for which it had applied. The permit was refused on the ground that the proposed construction was contrary to the official plan.

The issues before the court are:

(1) whether the learned county court judge was right in holding that non-compliance with the official plan was not a contravention of applicable law which would disentitle Woodglen to the permit, and

(2) whether the learned county court judge was right in refusing to adjourn the appeal to give the municipality the opportunity of implementing its intent to rezone the lands to prohibit the proposed construction, it having been shown that such intent existed before Woodglen made its application for a permit.

Effect of official plan

The duty of the chief building officer was to deal with the application for a building permit in accordance with s. 6(1) of the Building Code Act, the relevant portion of which reads as follows:

6(1) The chief official shall issue a permit except where,

(a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law;

Since 1974, the lands in question had been subject to an official plan which designated them for uses which did not permit single-family dwellings. The only applicable zoning, however, was that contained in the general zoning by-law of the Township of North York, approved by the Ontario Municipal Board in 1953, and it permitted single-family dwellings on the lands. The municipality had never amended its zoning by-laws to conform with the official plan by prohibiting the construction of single-family dwellings on the lands.

Counsel for the appellants argued that the official plan was part of the "applicable law" within the meaning of s. 6(1)(a) of the Building Code Act, and that the chief building officer was not obliged to issue a permit to cover construction that would not be in conformance with the official plan. In my judgment, the learned county court judge was right in rejecting that submission, on the ground that an official plan and amendments thereto are not effective in themselves to regulate land use and are not part of the applicable law which the chief official is to obey. As appears from the authorities to which the learned judge referred, an official plan is a recommendation, or statement of intention only, which may or may not be implemented by the municipality by the enactment of appropriate zoning by-laws: see Re Steven Polon Ltd. and Metropolitan Licensing Com'n, [1961] O.R. 810, 29 D.L.R. (2d) 620; Re Township of Southwold and Caplice et al. (1978), 22 O.R. (2d) 804, 94 D.L.R. (3d) 134, 8 M.P.L.R. 1; Re Cadillac Development Corp. Ltd. et al. and City of Toronto (1973), 1 O.R. (2d) 20, 39 D.L.R. (3d) 188.

Was the municipality entitled to an adjournment?

The appeal to the learned county court judge was brought under s. 15 of the Building Code Act, which reads, in part, as follows:

> 15(1) Any person who considers himself aggrieved by an order given or decision made by an inspector or chief official under this Act or the regulations may, within twenty days after the order or decision is made, apply to the judge of the county or district court for a hearing and appeal.
>
> . . . . .
>
> (3) Where an application is made to a judge for a hearing under subsection (1), the judge shall appoint a time for and hold the hearing and may rescind or affirm the order or decision of the inspector or chief official or take such action as the judge considers the inspector or chief official ought to take in accordance with this Act and the regulations, and for such purposes the judge may substitute his opinion for that of the inspector or chief official.

Before the enactment of the provision for an appeal, the only remedy available to a person who considered that he had been wrongfully refused a building permit was an application for an order in the nature of mandamus, or, latterly, an application for judicial review. The power of the court to grant mandamus or judicial review is discretionary. Because of the delays involved in bringing into force zoning by-laws and amendments thereto, the practice developed of adjourning applications for mandamus to permit a municipality opposing the issuance of a permit to complete the enactment or amendment of zoning by-laws which would render unlawful a use for which a permit had been applied and was a permitted use at the date of the application.

The circumstances in which such an adjournment would be permitted were set out by Spence J. in delivering the judgment of the Supreme Court of Canada in City of Ottawa et al. v. Boyd Builders Ltd., [1965] S.C.R. 408 at p. 410, 50 D.L.R. (2d) 704 at p. 705:

> An owner has a prima facie right to utilize his own property in whatever manner he deems fit subject only to the rights of surrounding owners, e.g., nuisance, etc. This prima facie right may be defeated or superseded by rezoning if three prerequisites are established by the municipality, (a) a clear intent to restrict or zone existing before the application by the owner for a building permit, (b) that counsel has proceeded in good faith, and (c) that council has proceeded with dispatch.

The learned county court judge concluded, and correctly so in my view, that the chief official acting under s. 5 of the Building Code Act has no jurisdiction to give effect to the Boyd principles. She held that a permit ought to have been issued to Woodglen, because the application complied with the zoning by-law at the date of the application, and there were no contraventions of any kind under s. 6(1) of the Building Code Act. She then went on to consider her own powers on the appeal under s. 15 of the Building Code Act, and concluded they were broader than those of the chief official under s. 6(1). She decided that she had the power to grant a mandamus application

on the appeal, and that this carried with it jurisdiction to apply the established principles respecting mandamus applications, which she characterized as equitable principles, including those relating to adjournments as enunciated in the Boyd Builders case. Applying those principles to the case at bar, she held that the municipality had had the intent to rezone since 1974, long before Woodglen's application for a permit, and that it had acted in good faith, but that it had failed to comply with the third requirement contained in Boyd Builders in that it had not proceeded with dispatch.

If the Boyd Builders principles applied to the hearing before the learned county court judge, then I agree entirely with her view that the municipality did not proceed with dispatch, and that no adjournment should be granted under Boyd Builders, for the reasons expressed so clearly by her. With much deference to the learned county court judge, however, I am unable to agree with her conclusion that the Boyd Builders principles apply to an appeal under s. 15 of the Building Code Act. The powers of the county court judge hearing an application under s. 15 are limited by s-s. (3). The judge "may rescind or affirm the order or decision of the inspector or chief official or take such action as the judge considers the inspector or chief official ought to take in accordance with this Act and the regulations". The duty of the judge under this subsection is to do what the judge considers the inspector or chief official ought to have done. The judge has no powers other than those which were possessed by the inspector or chief official, and has no discretion to act or defer action, if that discretion was not enjoyed by the inspector or chief official. As stated earlier, I agree with the decision of the learned county court judge in this case that the chief official of the municipality was under a duty to issue the permit to Woodglen because the proposed construction would not contravene any law. That being so, the learned county court judge, in my view, was required by law to allow the appeal and order the issuance of the building permit.

Because of the mandatory duty imposed by s. 6(1) of the Building Code Act, there is no room now for application by the inspector or chief official of the Boyd Builders principles, and the county court judge is in the same position on an appeal under s. 15 of the Building Code Act. Mr. McQuaid referred to a decision of Blair Co. Ct. J., in McDonald's Restaurants of Canada Ltd. v. Humm et al. (unreported, December 19, 1983 [since reported 24 M.P.L.R. 103]) who reached the same conclusion as I have done as to the applicability of Boyd Builders to an appeal under s. 15. I agree with the reasons expressed by Blair Co. Ct. J., regarding the discretion to adjourn, and note particularly his statements that an appeal under s. 15 of the Building Code Act is not an application for or in the nature of mandamus, and that equitable principles are not applicable on such appeals.

In my judgment, the Legislature did away with the Boyd Builders principles by enacting s. 6(1) of the Building Code Act, which directs that a permit be issued except where the proposed building will not comply with the Act or the building code or will contravene any other applicable law. In respect of zoning, if the proposed construction complies with the zoning by-laws in force at the date of the application for the permit, then the intention of the municipality to rezone to prohibit such construction is not a valid reason for refusing or postponing the issuance of a permit.

Municipalities no longer have the need to delay an application for a permit in order that new zoning by-laws may be made effective, because they have the power under s. 37 of the Planning Act, 1983 (Ont.), c. 1, to pass interim control by-laws, to be in effect for one year, when land-use policies are being reviewed or studied in the municipality or in a defined area. Such by-laws may be passed without prior notice or hearing.

For the foregoing reasons, the appeal is dismissed with costs, and the order of the learned county court judge is affirmed.

Appeal dismissed.

Re Woodglen & Co. Ltd. v. North York (City) et al.

42 O.R. (2d) 385
149 D.L.R. (3d) 186

ONTARIO
HIGH COURT OF JUSTICE
DIVISIONAL COURT
HENRY, EBERLE AND
CALLAGHAN JJ.
6TH JULY 1983.

APPLICATION for an order directing the issuance of a building permit.

M. J. McQuaid, Q.C., for appellant.

N. Koltun, for respondent.

The judgment of the court was delivered orally by

EBERLE J.:-- This is an application for judicial review seeking an order in the nature of mandamus directed to the Corporation of the City of North York and to Mr. Uzumeri, its building commissioner, to issue a building permit, which would enable the applicant to build a single-family two-storey residence on lands owned by it in the City of North York.

The building permit was refused on the ground of Official Plan Amendment No. 259 enacted by a by-law of the city, several months before the applicant filed its application for a building permit. That official plan amendment was duly forwarded to the Minister of Municipal Affairs and Housing, and requests have been filed with the Minister asking that the matter be referred to the Ontario Municipal Board for a public hearing.

While this court has jurisdiction to hear an application for a mandamus with respect to a building permit under the Judicial Review Procedure Act, R.S.O. 1980, c. 224, whether that jurisdiction should or should not be exercised in a particular case involves a consideration of any alternative remedies open to the applicant. In this case, we must consider whether s. 15 of the Building Code Act, R.S.O. 1980, c. 51, enacted in 1974 [as s. 14, c. 74], is such a remedy. That section reads as follows:

> 15(1) Any person who considers himself aggrieved by an order given or decision made by an inspector or chief official under this Act or the regulations may, within twenty days after the order or decision is made, apply to the judge of the county or district court for a hearing and appeal.

The section goes on in further subsections to give to the judge on the hearing broad powers of decision. It enables him to extend the time for hearing and there are other provisions dealing with the hearing.

In the present case, the authority to issue a building permit depends upon s. 6 and, particularly, s. 6(1)(a) which reads as follows:

> 6(1) The chief official shall issue a permit except where,
>
> (a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law;

In my view, it is clear that s. 6 requires the chief official to consider zoning matters. This was decided by the Divisional Court in Axelrod et al. v. City of Toronto et al. (1981), 15 M.P.L.R. 143, and particularly at pp. 148-9; as well, the applicant quite properly conceded that in dealing with an application for a building permit, the chief official must consider zoning matters as well as matters which might be considered as more directly related to construction details, fire safety, etc. Further the applicant conceded that s. 6 contains the statutory duty on which he relies in his application for mandamus.

The argument is, however, that no appeal lies under s. 15 to the county or district court where the refusal of a building permit is based on zoning matters. Zoning matters are, in my view, clearly included within the concluding words of s. 6(1)

(a), namely, "any other applicable law". In other words, the argument is that an appeal under s. 15 is limited to matters of bricks and mortar including matters of fire safety as spelled out in great detail in the Building Code itself. I can find in s. 15 nothing which supports this distinction. I can find nothing to narrow its scope depending on the particular ground for refusing a building permit and I come to this conclusion even although the balance of the Building Code Act deals with matters of construction and fire safety, rather than with zoning matters. Any other conclusion would mean that a rejected applicant for a building permit would have to decide on the basis of the particular grounds for refusal, whether his remedy lay under s. 15 by way of appeal to the county or district court, or whether it was a matter that must be taken to the Divisional Court by way of judicial review. Such a situation would lead to uncertainty as to where the proper remedy ought to be sought, especially where a building permit was refused on both types of grounds; in such a situation, two different avenues of relief might have to be sought.

I think it is important to consider also that by s. 16 of the Building Code Act an appeal to the Divisional Court is provided for from a decision made under s. 15. It is, therefore, my conclusion that the applicant had a right of appeal under s. 15; a right of appeal which was probably more expeditious than proceeding by way of judicial review and a right of appeal which was broader in scope and on the whole, more effective, than proceeding by way of judicial review.

As to the exercise of the court's discretion, the only ground suggested is that the applicant would, in a sense, have to start all over again at the beginning in making application to the county court judge and, the time-limit having expired, that he would have to make application for an extension under s-s. (5) of s. 15.

In my view these are not grounds for exercising the court's discretion in this case. In the absence of exceptional circumstances, the court's discretion ought not to be exercised in favour of the extraordinary remedy of mandamus where there is a specific alternative remedy under s. 15 which is equally, if not more convenient, expeditious, beneficial and effective and accordingly, in my view, this application must be dismissed.

Since this seems to be rather a new point, I do not think it is a case for costs.

Application dismissed.

Woolridge v. Stack

Between
Elaine Woolridge and James Woolridge, Plaintiffs, and
Frederick Stack, Dawn Stack, Steven L. Butler, Mel Mahon Realty (1988) Ltd., Gary Peddle and Town of Logy Bay, Middle Cove and Outer Cove, Defendants
[1993] N.J. No. 28
DRS 12272
1989 St. J. No. 3087

Newfoundland Supreme Court - Trial Division
O'Regan J.
Heard: January 12 - 14 and 25, 1993.
Judgment: filed February 3, 1993.

Brian Casey, for the Plaintiffs.
Gregory M. Smith, for Frederick and Dawn Stack.
Donald H. Burrage, for the Town of Logy Bay.
Wayne Spracklin, for Gary Peddle.

O'REGAN J.:-- Some four years ago, the Woolridges bought a house from the Stacks. They now claim the house is substandard and seek damages from all defendants. The plaintiff's history of the events is best put forward by Elaine Woolridge. It was Elaine, rather than her husband James who was involved in the purchase of the house.

In early March of 1989 she and her husband were contemplating buying a larger home for their family. They saw the subject house advertised and then contacted the defendant Steve Butler, a real estate agent with Mel Mahon Realty. They went with Mr. Butler to the home and there met Fred and Dawn Stack the owners. They viewed the house on several occasions and subsequently made an offer which was accepted by Mr. Fred Stack. According to Elaine Woolridge it was her understanding that this was a "business" transaction by Mr. Stack and that it was not necessary for his wife to sign the offer of purchase and sale. During one of the early visits to the house Elaine Woolridge noted numerous things which she felt remained to be completed or repaired. Among these items which are listed in the Statement of Claim were such things as:

1. Several shingles to be replaced;

2. Linoleum in some areas to be repaired;
3. Some heaters were not working;
4. Mouldings were incomplete in some areas;
5. A closet bar in one of the closets was missing;
6. Damaged carpet;
7. In some areas nails were protruding from the plaster and cracks were showing in the gyproc;
8. Throughout the house there needed to be some plastering and painting.

Mrs. Woolridge was left with the impression that all her concerns regarding deficiencies would be alleviated before they took possession. She discussed with Mr. Stack the possibility of changing some of the colours in the house and he agreed. She supplied him with a list of colours for the various rooms and agreed to pay up to $600 towards the purchase of paint. Elaine Woolridge stated that as the painting was to be done as part of the purchase price she felt satisfied that all other work such as plastering and minor repairs would be carried out by Mr. Stack before the date of possession. Among other conditions the agreement of purchase and sale stated that:

1. The vendors complete all cosmetic work upon completion of sale;
2. Purchasers are willing to share cost of paint only with vendor on a 50/50 basis up to $600 maximum; and,
3. Vendor to install air exchanger.

The Woolridges agreed to use the vendors lawyer and in this regard they engaged Mr. Gary Peddle as their solicitor.

The sale was meant to close on the 17th of May, 1989 but by mutual agreement the Stacks and the Woolridges agreed to extend the closing date to June 2nd, 1989. In order to ensure that the conditions of purchase and sale were complied with and that all the work was carried out, the Woolridges requested their lawyer keep a holdback of $4,000.

When the purchasers took possession of the house they were not satisfied that the work as contemplated in the agreement of purchase and sale had been carried out. According to Elaine Woolridge they found themselves "boxed-in" as they had sold their own house and now found it necessary to move into their new home without the repairs and completion of work done by the Stacks. They discovered that Gary Peddle, their lawyer had advanced all but $1500 of the purchase price to the Stacks. Subsequent negotiations between the parties and their lawyer led to the Woolridges accepting the $1500 as final settlement for the work outstanding. Although Elaine Woolridge felt that the $1500 was inadequate compensation for the outstanding work she did agree, that she accepted this amount as a final settlement.

A short while after possession date the Woolridges discovered, to their dismay, that the foundation and structure of the property was inadequate and did not meet the standards of the National Building Code. As a result of the work which they feel was not completed, the representations made by the Real Estate Agent and his company, the services provided by their solicitor and the failure of the building to meet the standards of the National Building Code they took this action against the defendants.

The evidence of the Stacks is basically as follows:

The Stacks lived in a bungalow adjoining the property in question. Not unlike the Woolridges they decided that they needed a larger home for an ever increasing family. Fred Stack acted as his own contractor and employed various sub-trades. As well he obtained the necessary permits from the Town of Logy Bay. In late October the Stacks and their five children began to live in the house.

During this period of time (October - March) relationships between the Stacks became strained and a decision to separate was made. Mr. Stack wished to sell the house but his wife didn't share the same enthusiasm. Therefore when the Woolridges visited the home most of the viewing was done with Mr. Stack rather than Mrs. Stack. Mr. Stack gave the Woolridges a full tour of the house and undertook to carry out the work requested by them prior to the date of closing. However, in his opinion the house was

complete and fit for habitation apart from minor deficiencies which had to be rectified. He also stated that he showed them the crawl space beneath the house and gave them an opportunity to view the foundation.

Mr. Stack agreed that although he had undertaken to carry out the repairs and complete all work which was not finished he never really obtained the services of someone to carry out this work. He did, however, manage to have some minor painting done by his wife prior to the date of possession but this only constituted a small portion of the undertaking.

As for the house not complying with the National Building Code, Mr. Stack says that he relied on his contractor, a Mr. Codner to comply with all the regulations regarding building and that he was only present on the site for a short period of time.

Barbara Power is the Town Clerk and Manager of the defendant municipality. She confirmed that the Town under the Municipalities Act adopted the National Building Code and The Administrative Regulations in November of 1988. The Council, however, decided that having adopted the Code and Regulations their policy would be that they would play a passive role and inspections would not be carried out on building projects. The Town's position was that it did not have the resources or manpower to perform this function. The town merely stipulates on all building permits that the building must conform to the Code. The burden to conform to the Code being on the builder the Town only becomes involved if they are made aware of problems. The Town's policy was that it only required the following from builders:

1. Location plan showing the house and boundary;
2. Plan of the home;
3. Location of septic tank and approval from the Department of Health;
4. Building must meet the standards of The National Building Code.

The Town's position then is quite clear. The responsibility for building according to the Code is clearly on the applicant and the Town will not become involved unless alerted or requested to do so.

ESTIMATES FOR REPAIRS:

To support their claim for structural damage the plaintiffs called an expert in structural engineering. His evidence was not seriously challenged. In his opinion the structural foundation was not well constructed nor in accordance with the National Building Code. He stated that a qualified contractor could easily rectify the problem and the corrective measures would have no adverse effect on the existing structure.

Roy Penney, Vice-President of construction for Trident Construction Ltd., gave estimates for repairs to both the structural and interior repairs. His estimates are as follows:

1. To repair structural beams, supply new structural columns, pour new column footings, install new perimeter sill, nail brace and anchor floor joists, including temporary access to crawl space all as recommended by Structural Consultants Ltd. and as per our discussions.

Our quote for this portion of the work ...

$5,636.00 plus GST

2. To complete remaining trim, patch & paint all walls, repair living room ceiling and paint remaining ceilings, replace window lock, finish and patch sheet flooring, caulk living room window and patio door, trim bath tub enclosure second floor, replace damaged shingles on roof, repair bath overflow on second floor and flush box on main floor toilet all as per discussions.

Our quote for this portion of the work ...

$8,411.00 plus GST

LIABILITY OF THE DEFENDANTS STEVE BUTLER, MEL MAHON REALTY,
DAWN STACK AND GARY PEDDLE:

At trial, the plaintiffs did not pursue their claim against Steve Butler and Mel Mahon Realty (1988) Ltd. They also abandoned their claim against Dawn Stack as she was not party to the sale agreement. The abandonment of the claim against Dawn Stack did not occur, however, until the final argument and in that regard costs will have to be dealt with. The action against Gary Peddle was discontinued prior to trial and like the defendants Steve Butler and Mel Mahon Realty no costs were incurred.

LIABILITY OF THE DEFENDANT FRED STACK:

(a) Cost of completing cosmetic work

The plaintiffs allege that Fred Stack agreed to complete

certain "cosmetic work" in the agreement. I am satisfied on the evidence and more particularly on the admissions by Elaine Woolridge that this has been settled between the parties. The settlement for $1,500 was made and accepted by the Woolridges for outstanding work and this was done with legal advice. The Woolridges also settled with their lawyer for any outstanding claims that they may have had against him for what they felt was poor representation.

(b) The claim for structural deficiencies:

The plaintiff's claim is based on an implied warranty whereas the defendant says "caveat emptor" applies. A statement in Chitty's Law Journal, Vol. 22 No. 8, 1974 best sets out the law in Canada as supported by the authorities. The article states at p. 273:

> In Canada the protection now afforded by contract law for defects of quality can be briefly summarized. The buyer of a newly constructed house which is fully completed is in the same position as the purchaser of an old house, or the lessee of unfurnished premises. He must take the premises as they stand, although they might have some quality defects of which he is unaware, unless he is able to extract an express warranty as part of the agreement of purchase. The purchaser of a newly constructed house which was not fully completed at the date of the agreement is protected against physical defects to the extent that he can hold the builder-vendor to an implied warranty that the house has been built in a good and workmanlike manner with good materials and that it is fit for human habitation. That warranty extends to all parts of the house, whether constructed or not at the date when the agreement is entered into.

The courts finding on the distinction between complete - incomplete is of the utmost importance. In making that determination a "common sense" approach must be taken so one is not caught straining to find incompleteness in order to assist a purchaser who has failed to protect himself or herself.

The distinction between complete - non-complete and its rationality was dealt with by Dickson J. (as he then was) in

Fraser - Reid and v. Droumtsekos [1980] 1 S.C.R. 720. There Dickson J. saw the irrational distinction but refused to move to an extended implied warranty for a complete house. He stated at p. 731:

> The only real question for debate in the present case is whether removal of the irrational distinction between completed and incomplete houses is better left to legislative intervention. One can argue that caveat emptor was a judicial creation and what the courts created, the courts can delimit. But the complexities of the problem,

> the difficulties of spelling out the ambit of a court-imposed warranty, the major cost impact upon the construction industry and, in due course, upon consumers through increased house prices, all counsel judicial restraint.
>
> I would be inclined to reject the proposition advanced on behalf of the appellants for an extended implied warranty. It appears to me at this time that if the sale of a completed house by a vendor-builder is to carry a non-contractual
>
> warranty, it should be of statutory origin, and spelled out in detail.

I find, considering all the circumstances and evidence, that this house was complete when the sale agreement was signed. Historically, courts have sometimes strained to find incompleteness to favour an aggrieved purchaser. Harsh as it may be, however, common sense in this case dictates otherwise. The house had been lived in for over four months by the Stacks. Outstanding items such as painting, plastering, closet rods and other minor items were referred to as "cosmetic" in the agreement. Placement of the air exchanger, in the agreement, was a separate item not involved with the construction.

I find that the house was complete in the legal sense. It was habitable and the items agreed upon between the parties in the sale agreement were really separate requests and undertakings between the parties. These agreed items are not evidence of incompleteness but better classified as "extras" or "cosmetic" work requested by the plaintiff and consented to by the defendant, Fred Stack.

There can be no doubt that the Woolridges had ample opportunity to inspect and did inspect the house before purchase and the matters to be completed were resolved between the parties and looked after by the holdback.

Finding the house to be complete the common law doctrine of "caveat emptor" applies.

(c) Liability of the Town:

The Town was required to adopt by-laws by the Municipalities Act and in this regard adopted the National Building Code and Administrative Requirements. However, other than requiring the builder to conform to the Code and request the items outlined on p.6 of this judgment, the Town took a passive role. Agreed the Code and Administrative Regulations gave the Town power to regulate, inspect and control but the Town, for "economic reasons", adopted a policy of minimum action.

In City of Kamloops v. Nielson et al. 26 M.P.L.R. 81, Wilson J. stated on p. 94:

> It seems to me that, applying the principle in Anns [Anns v. Morton London Borough Counsel [1978] A.C. 728 (H.L.)], it is fair to say that the City of Kamloops had a statutory power to regulate construction by by-law. It did not have to do so. It was in its discretion whether to do so or not. It was, in other words, a "policy" decision. However, not only did it make the policy decision in favour of regulating construction by by-law, it also imposed on the city's building inspector a duty to enforce the provisions of the by-law. This would be Lord Wilberforce's "operational" duty. Is the city not then in the position where in discharging its operational duty it must take care not to injure persons such as the plaintiff whose relationship to the city was sufficiently close that the city ought reasonably to have had him in contemplation?

Having found a duty of care and rejecting the argument on misfeasance and malfeasance as a factor for finding a duty Wilson J. then went on to comment on Mr. Justice Lambert's decision at the appellate level. She stated at p. 103:

> As I read his reasons, his view was that the city at the very least had to give serious consideration

> to taking the steps toward enforcement that were open to it. If it decided against taking them, say on economic grounds,then that would be a legitimate policy decision within the operational context and the Courts should not interfere with it. It would be a decision made, as Lord Wilberforce put it, within the limits of a discretion bona fide exercised.

This clearly recognizes a policy aspect at the operational level provided that the policy decision is taken bona fide.

The evidence in this case shows that the Council debated and indeed struggled with the role it should take on enforcement. As a small municipality with only a few employees it didn't have the resources or manpower to enforce and administer the by-laws. They, therefore, made a conscious and reasonable policy decision to play a passive role. This was not as Wilson J. in Kamloops, supra, envisaged when she stated at p. 104:

> In my view, inaction for no reason or inaction for an improper reason cannot be a policy decision taken in the bona fide exercise of discretion. Where the question whether the requisite action should be taken has not even been considered by the public authority, or at least has not been considered in good faith, it seems clear that for that very reason the authority has not acted with reasonable care.

I conclude the policy decision here was bona fide and the Town acting with reasonable care cannot be held liable.

The plaintiff's claim is unsuccessful against all defendants and I now turn to the matter of costs.

Counsel have asked to leave the matter of costs for further argument. Based on my decision the matter of costs appears obvious, however, either party may make application for a determination.

O'REGAN J.

Re 382671 Ontario Ltd. v. London (City) Chief Building Official for the City of London et al.

382671 Ontario Ltd. v. London (City) Chief Building Official]

28 O.R. (3d) 718
[1996] O.J. No. 1352
Court File No. 20060/96

Ontario Court (General Division),
Killeen J.
April 4, 1996

Barry R. Card, for applicant.
James P. Barber, for respondent, City of London.

KILLEEN J.: -- This is yet another in the seemingly endless and inexhaustible series of cases dealing with the zoning principle of legal non-conforming use. Here, the applicant 382671 Ontario Limited ("382671") brings an application under s. 25(1) of the Building Code Act, 1992, S.O. 1992, c. 23, seeking orders, (1) rescinding the decision of Rocco Cerminara, the London Director of Building Controls, to reject the applicant's application for a building permit, and (2) directing that Mr. Cerminara issue a building permit for the conversion of certain unused space in an apartment building into an apartment dwelling unit as requested in building permit application No. 9501104.

The Background Facts

There is not a shred of dispute about the facts of this case.

382671 is the owner of a 16-unit apartment building located at 100 Barton Street in London. The apartment building has three floors with the lower floor being partially below ground level.

The building was constructed in 1952 and, at that time, complied with the applicable zoning by-law.

In 1949, By-law C.P. 65-233 provided for multi-family residence zones permitting a "multiple dwelling" which, under the by-law, was defined as "a building containing three or more dwelling units" and an "apartment house". The building at 100 Barton Street has contained 16 apartment units from the date of its construction to the date of the application for the building permit on April 10, 1995.

The definition of multiple dwelling was changed in 1958 and the use described as an "apartment house" was deleted and the term "apartment building" was substituted in its place.

There were several consolidations of By-law C.P. 65-233 throughout the 1960s and 1970s, but it would seem that each maintained a multi-family residence zone in which apartment buildings were permitted and regulated based upon the number of dwelling units in the given building.

By-law C.P. 1000.-21 was passed on December 7, 1981, and received Ontario Municipal Board approval on November 29, 1982, such approval to be effective from January 1, 1982.

This by-law rezoned the lands at 100 Barton Street as an R4/R7 composite zone. Neither the R4 nor the R7 zones permitted an apartment building. The by-law defined apartment buildings based on the number of dwelling units in the building, as had its predecessor by-laws in the 1960-1980 period.

The number of dwelling units in 100 Barton Street exceeded the permitted number under the permitted uses in the R4 or R7 zones of By-law C.P. 1000.-21 so that it may be said that, when this by-law was passed, 100 Barton Street acquired the status of a legal non-conforming use.

By-law Z.-1 was enacted by the city on May 21, 1991, and came into force with respect to the subject property on July 1, 1993, under an order of the Ontario Municipal Board. This comprehensive general zoning by-law rezoned the area where 100 Barton Street was located as an R3-1/0C2 zone. Neither the R3-1 nor the 0C2 zone permits apartment buildings.

The permitted uses in the Barton Street area are set out at

s. 7 of the by-law. They are all essentially residential uses:

7.2 PERMITTED USES

No person shall erect or use any building or structure, or use any land or cause or permit any building or structure to be erected or used, or cause or permit any land to be used in any Residential R3 Zone for any use other than the

following uses:

a) Single detached dwellings;

b) Semi-detached dwellings;

c) Duplex dwellings;

d) Triplex dwellings;

e) Converted dwellings;

f) Fourplex dwellings.

Each of these permitted uses is carefully defined in s. 2, the definitions section of the by-law. In s. 2(122) we find the drafter undertaking the Herculean task of providing multiple subdefinitions of the many kinds of "dwellings" which are referred to throughout the by-law. For example, in s. 2(122)(a) we find this definition for apartment building:

a) "APARTMENT BUILDING" means a residential building containing four or more dwelling units to each of which

access is obtained through a common entrance or entrances from the outside and through a corridor or hallway from the inside.

A somewhat unique feature of By-law Z.-1 is that it contains a special proviso which attempts to "deem" certain legal non-conforming uses to be lawful on and after July 1, 1993, the effective date of the by-law. Section 1.3 says this:

1.3 DEEMED CONFORMITY OF USES AND COMPLIANCE WITH REGULATIONS

(1) Where any land, building or structure was lawfully used on the 30th day of June, 1993 for a purpose that, were it not for this provision, is prohibited by this By-law, that use is hereby deemed to be permitted by and in conformity with this By-law, despite anything in this By-law to the contrary, so long as the land, building or structure is used and continues to be used for that purpose.

(2)(a) Where any land, building or structure has been continuously used from the 1st day of July, 1973 until the 30th day of June, 1993 for a purpose that is prohibited by this By-law, that use is hereby deemed to be a lawful use on the 30th day of June, 1993.

As I have already noted, 382671 filed its application for a building permit on April 10, 1995. It was seeking to convert an unused and empty storage room area on the lower floor of the building into a one-bedroom apartment. The application and its attachments clearly show that the conversion would be done without any changes to the exterior of the building. Not even the windows in the proposed area were to be changed; all that was going to happen was that an unused or under-utilized area was going to be converted into one more apartment unit for the building.

The response to the building permit application was negative and came some months later in the form of Mr. Cerminara's letter of January 2, 1996, reading as follows:

Dear Sir:

Re: 100 Barton Street, London ON Application No. 9501104

Further to your discussions with Brace Henry this letter will

confirm that the Chief Building Official can not issue the permit for an additional dwelling unit because the issuance would be contrary to applicable law namely the Zoning By-law.

The existing apartment building with 17 apartments has been in existence for a number of years. Our understanding is that the use of the building for 17 apartments has been continuous between July 1, 1973 and July 1, 1993 and by virtue of Section 1.3.(2)(a) of the Zoning By-law (see copy attached), the use of the building is deemed to be a lawful use. It is our opinion that if the owner is to extend this use by adding an additional dwelling unit, then a minor variance to the Zoning By-law is required.

As can be seen, Mr. Cerminara relies on the new deeming provision of the by-law -- s. 1.3.(2)(a) -- to defeat the applicant's attempt to rely on its legal non-conforming use rights.

The Issues and their Resolution

The nerve centre of the argument presented by Mr. Card for the applicant may be found in s. 34(9) of the Planning Act,

R.S.O. 1990, c. P.13:

34(9) No by-law passed under this section applies,

(a) to prevent the use of any land, building or structure for any purpose prohibited by the by-law if such land, building or structure was lawfully used for such purpose on the day of the passing of the by-law, so long as it continues to be used for that purpose . . .

The history of s. 34(9) and its statutory predecessors have been well and thoroughly reviewed in Rogers' Canadian Law of Planning and Zoning, (1973) at pp. 210.20-.56 and needs no repetition here in detail. Suffice it to say that the legal non-conforming use principle was given statutory form in Ontario and elsewhere to provide a limited form of protection to vested property rights in the teeth of the necessary zoning powers of local governments to control the orderly development of municipal lands in the light of ongoing and constantly changing circumstances.

Without this protective principle, the local landowner would be at the mercy of the passing whims and fancies, as well as the reasoned planning and zoning judgments, of local officials and could face indirect expropriation or forfeiture without compensation. Thus, the non-conforming use principle has been statutorily embedded in the zoning process to prevent retroactive injustice from being wreaked upon the landowner.

In Ontario, then, lands and buildings are excepted from the operation of a zoning by-law if they were lawfully used for a purpose prohibited by the by-law on the date of its passing. Section 34(9)(a) says simply that no by-law is to apply to prevent the use of any such land or building.

Reduced to its basic points, Mr. Card's argument on behalf of the applicant may be summarized as follows. First, he submits that his client's original use of its land for an apartment building from 1952 onward to 1980 or so was a lawful use. Second, that use became a legal non-conforming use within the predecessor proviso to s. 34(9) and fell within the protective features of that statutory principle. Finally, he argues that the deeming proviso of s. 1.3 of By-law Z.-1, under which the city has attempted to convert certain legal non-conforming uses into lawful uses, is ultra vires the city because it derogates from the statutory rights of the applicant and other similarly situated landowners under s. 34(9) of the Planning Act. Clearly, he argues here, a municipality cannot, by by-law, amend and eviscerate the important non-conforming use principle which is, after all, embedded in the parent legislation under which the municipality's zoning power is created.

Mr. Barber, for the city, developed two basic arguments in response to the applicant's position.

First, he argued that new s. 1.3 of By-law Z.-1 was essentially a benevolent extension or adjustment of the legal non-conforming use principle and was not inconsistent with it. Thus, it could be held to be intra vires the municipality as a legitimate attempt to smooth out the local zoning field and provide a more level and consistent playing field for city planners and landowners alike. Second, he argued that, in any event, the relevant decisional law under s. 34(9) of the Act

does not, on close analysis, permit the applicant to add an apartment unit to the apartment building without recourse to the "minor variance" process provided for in s. 45(2) of the Act.

A. The vires of s. 1.3 of By-law Z.-1

In my view, s. 1.3 of By-law Z.-1 is nothing more nor less than a clever attempt by the municipality to trench upon and even disembowel s. 34(9) of the Act.

It must be remembered that s. 34 of the Act provides the basic life support system for the enactment of all zoning by-laws across Ontario. Section 34(1) starts out by saying that "[z]oning by-laws may be passed by the councils of local municipalities . . .". Following upon that opening language, s. 34(1) then includes six broad paragraphs which outline the general parameters of the zoning powers granted to municipalities. As I have already noted, s. 34(9) is a central element in the zoning-power structure and has been included to protect property owners against inevitable retroactive zoning changes down through the years which could otherwise put a given property or building at risk of disastrous economic dislocation.

To me, there is a substantial measure of operational disunity and inconsistency between the by-law proviso of the subordinate instrument and the protective proviso of the parent statute such that the by-law proviso must fall. If the municipality wishes to obtain the power set out in the by-law, it must seek out an amendment to s. 34(9) itself and not take it upon itself to amend the statute through the subtle but illegal sleight-of-hand device set out in s. 1.3.

The leading Ontario case on the question of repugnancy or inconsistency between a statutory proviso and a municipal by-law is Ontario (Attorney General) v. Mississauga (City) (1981), 33 O.R. (2d) 395, 124 D.L.R. (3d) 385 (C.A.). There, the court had to deal with an alleged repugnancy between a municipal by-law prohibiting the storage or burning of chlorinated carbons and certain provisions of the Environmental Protection Act, R.S.O. 1980, c. 141. The judgment of the court was written by Morden J.A. He said this about the issue at hand at pp. 409-10:

> Is there a conflict between By-law 731-79 and the Environmental Protection Act, 1971 of the kind which would render the By-law 431-79 inoperative? I do not intend to review the extensive jurisprudence in which various tests have been formulated and applied in resolving the issues of conflict, or of inconsistency, repugnancy or incompatibility. In my view, if the competing pieces of legislation are intended to advance the same policy and the provision in the statute covers the same ground as the by-law in a way to give rise to the interpretation that the statutory provision is intended ". . . completely, exhaustively, or exclusively [to express] what [shall be] the law governing the particular conduct . . . to which its attention is directed . . .", then there is a case of conflict. I quote from Ex parte McLean (1930), 43 C.L.R. 472 at p. 483, which was adopted in O'Sullivan v. Noarlunga Meat Ltd., [1957] A.C. 1 at p. 24, and quoted in R. v. Morin (1965), 52 D.L.R. (2d) 644 at pp. 646-7, [1966] 1 C.C.C. 265, 53 W.W.R. 234. If, in covering the same ground the subordinate legislation works at cross purposes to the provincial statute, then the case for conflict is reinforced. This is not intended to be an exhaustive definition of a conflict which will result in the rendering inoperative of the subordinate legislation but merely as one instance thereof and one which, in my view, is applicable to the case.

Morden J.A. was, of course, dealing with a conflict problem between a separate statute -- the Environmental Protection Act -- and a by-law enacted under the Municipal Act. In the case at bar, on the other hand, I am faced with an alleged clash between a provision in the parent statute -- the Planning Act -- and a zoning by-law enacted under the very section -- s. 34 -- which enables the municipality to pass zoning regulations. Nevertheless, the principle which he propounds of "operative conflict" (see passage at p. 407) strikes me as being peculiarly applicable to the case at bar.

As I read the two provisos, they cannot live side by side because, incontestably, the by-law proviso strikes at the heart

of the statutory right. This, the municipality cannot do with subordinate legislation.

B. The scope of the non-conforming use

Mr. Barber has argued that, even if By-law Z.-1 is inoperative, the applicant cannot convert the unused space into a 17th apartment under the non-conforming use principle, as the principle has been explicated in the case-law. Essentially, he was saying here that the non-conforming use which was created under the 1981 by-law was a "16-unit apartment building" and that the applicant cannot, as of right, construct or add a 17th unit in virtue of s. 34(9).

The well-spring of the case-law explicating the doctrine of legal non-conforming use is found in the well-known case of Central Jewish Institute v. Toronto (City), [1948] S.C.R. 101, [1948] 2 D.L.R. 1.

In this case, the institute entered an agreement on June 27, 1946, to buy a large residence on Avenue Rd. in the City of Toronto for use as a progressive school for young children. The closing and possession date for the transaction was originally fixed for September 1. The vendor had been using the property as a rooming-house with several lodgers.

The city council, in response to lobbying efforts from local residents who were opposed to a school, quickly passed a zoning by-law restricting the use of area lands to single-family residences and related uses.

However, before the actual passing of the by-law, the vendor and institute had, on July 12, amended their agreement to allow the institute into possession on July 15, but reserving the right to the vendor and his lodgers to stay in occupation on a phase-out basis over the summer.

On July 15 three teachers and a number of young students went on the property and, for the balance of the summer, a modest part of the premises was operated as a summer nursery school of sorts. There is no doubt that the institute occupied the premises on this partial basis in an attempt to establish a legal non-conforming use.

In 1946, the non-conforming use proviso was set out in s. 406(2) of the Municipal Act, R.S.O. 1937, c. 266, as amended, and read as follows:

> 406(2) No by-law passed under this section shall apply to any land or building which, on the day of the passing of the by-law, is used or erected for any purpose prohibited by the by-law, so long as it continues to be used for that purpose . . .

While this language is a little different from the language of current s. 34(9) of the Planning Act, there is no difference in substance or effect. This fact is conceded by Mr. Barber.

The judgment of the court was written by Kerwin J. Rand and Kellock JJ. wrote concurrences but, if anything, their concurrences are stronger, in effect, than the judgment of Kerwin J.

The Supreme Court reversed the concurrent holdings of the trial court and Ontario Court of Appeal and concluded that the institute had established a legal non-conforming use through its partial and limited use of the residence in the short period between July 12, the changed date of possession, and the passing of the zoning by-law on July 24, a matter of 12 days later.

As Kerwin J. said at pp. 105-06 of the judgment:

> It is not necessary that the entire premises, that is every room in the building, be used. While a bona fide intention to use is not sufficient, as has been decided by the Judicial Committee in Toronto Corporation v. Roman Catholic Separate Schools Trustees [[1926] A.C. 81], it is an important element in considering the evidence as to actual user. There is no doubt, in the present case, as to the purpose of the appellant in purchasing the premises nor, I think, is there any real doubt on the evidence as to what it did. This is not a case of disturbing concurrent findings but of accepting the

facts as found and of drawing the proper legal conclusions therefrom. The appellant took steps during the summer vacation, in an endeavour to bring itself within subsection 2 of section 406 of the Act and, in my opinion, has succeeded in so doing. It actually used the premises as a school and the mere fact that it was a nursery summer school does not prevent the appellant increasing the number of pupils or enlarging the scope of its activities so as to conduct classes not in operation at the relevant time. We are not concerned, in the present appeal, with any question of erecting new buildings.

(Emphasis added)

Mr. Justice Rand, in his concurrence, goes into more detail than Kerwin J. in describing the effect of old s. 406(2). At p. 109 he describes the effect of the subsection as creating an "exemption" from the new by-law:

It will be seen that the exemption is not to the existing use but to the building; and there is no implication that it is the whole of the building that must be so used or that the use must be the sole use. The language would be satisfied by

a partial use as if, for instance, an owner was carrying on a grocery store on the ground floor and using the second storey for his home: could it seriously be questioned that the use of the lower floor in such a case would be protected by the exemption? If that same business were extended to the upper storey, could it be said that the exemption did not continue or was lost? The building would still be used on the ground floor for the prohibited purpose; the building as a whole would be exempt; and I think it would necessarily follow that no such extension could bring about a forfeiture of the exemption. In any case the question is whether a real use, in good faith, is being made of the building, a use not merely incidental to some other use, but possessing an individuality of its own.

Mr. Justice Kellock reinforces what was said by his colleagues in the following passage at p. 113:

I agree with the view of the statute taken by my brother Rand that the use being made of the building here in question on the day of the passing of the by-law was sufficient to bring it within the very words of section 406(2) and as the building and the lands appurtenant were being used by the appellant for a purpose not permitted by the by-law, the by-law does not apply to them.

As I read the three strong judgments in Central Jewish Institute, nothing could be clearer than what they have said about the effect of a new zoning by-law on the use or uses of a legal non-conforming building: It is not necessary that the entire premises be used. This is because the statutory exemption from the new by-law was not to the existing use per se, but to the building itself. In effect, the whole of the existing building was thereby exempt from the zoning by-law.

There are at least four judgments in Ontario (and many elsewhere across Canada) which usefully address the full ramifications of the holding in Central Jewish Institute. They are O'Sullivan Funeral Home Ltd. v. Sault Ste. Marie (City), [1961] O.R. 413, 28 D.L.R. (2d) 1 (H.C.J.); Thorman v. Cambridge (City) (1977), 18 O.R. (2d) 142, 4 M.P.L.R. 220 (H.C.J.); Haldimand-Norfolk (Regional Municipality) v. Copland (1992), 12 M.P.L.R. (2d) 85, 96 D.L.R. (4th) 443 (Ont. Gen. Div.) and Magdalena's Rest Home Ltd. v. Etobicoke (City) (1992), 12 M.P.L.R. (2d) 316 (Ont. Gen. Div.).

It is unnecessary to review the factual circumstances of all of these cases. They all dealt with situations where, essentially, an owner attempted to enlarge or expand a legal non-conforming use. After careful analysis of Central Jewish Institute, each court held that the owner could expand the non-conforming use within the confines of the entire building without the necessity of conforming with the dictates of the new zoning by-law.

Magdalena's Rest Home gives the flavour of all these cases. There, the owner operated a rest home in a residential zone. Before the passage of the first zoning by-law for the area, the lands were used as a 15-bed rest home. The municipality later passed a zoning by-law which allowed specified residential uses

only, and a rest home was not within the list of permitted uses. The applicant sought to expand the number of beds to the maximum permitted under certain health and licensing regulations. The proposed expansion could be accomplished internally without any extension of the building.

The municipality argued that the legal non-conforming use protected only the exact status quo ante of 15 beds and submitted that any expansion called for relief from the zoning by-law either through an application to the Committee of Adjustment for a minor variance or to council for an amendment to the zoning by-law itself.

The argument presented by the municipality in this case is paradigmatic of the arguments of many municipalities across Ontario since Central Jewish Institute was decided in 1948. The argument was made that a narrow view should be taken of the term "use", ignoring the fact that the phrase employed in s. 34(9) and its predecessors is "use . . . for any purpose prohibited by the by-law . . .".

In this case, the municipality attempted to seize upon the phrase "15-bed rest home" as a mantra and thereby freeze the building in a strait-jacket.

On the other hand, the owner argued -- and successfully -- that the number of beds was merely a reflection of the intensity of the use and did not represent a different use.

Mr. Barber, during his argument for the city, relied heavily on a decision of the Ontario Court of Appeal in R. v. Grant (1983), 23 M.P.L.R. 89.

Grant was a case where the building had been used for two self-contained dwelling units before a zoning by-law was passed which only permitted a private detached dwelling-house or a converted dwelling-house. Later, the owner quietly increased the number of dwelling units from two to four without making any changes to the exterior aspect of the building. As a result, the city prosecuted the owner for breach of the zoning by-law. The trial judge acquitted, purporting to follow Thorman v. Cambridge, supra, but, in the Court of Appeal, this decision was overturned and a conviction entered.

Mr. Justice Cory, for the Court of Appeal, said this about the scope of the legal non-conforming issue at hand at p. 92:

> What was the nature of the non-conforming use in January, 1960? It was the existence of the two self-contained dwelling units in 12 Playter Blvd. It was no more than that. The existence of the non-conformity did not give rise to a right to increase significantly the extent of that non-conformity. The R. 1 zoning delineated by the by-law was designed to control the density of population in the area. To permit the doubling of the number of self-contained units within the dwelling house flies in the face of the intent and purpose of the by-law. If this increase were permitted, there would be no basis for restricting or controlling by means of the by-law an increase to 10 or 12 units within the exterior walls of the dwelling. The unauthorized use permitted by the Planning Act was to maintain two self-contained dwelling units within the premises. It should not be extended beyond that limit. To do so would make a mockery of zoning by-laws and unduly extend non-conforming uses.

It is interesting to note that Cory J.A. did not, in so ruling, purport to reject the Thorman decision but only distinguished it on its facts. In referring to a passage in the Thorman decision he said this at pp. 92-93:

> That statement cannot be taken as a blanket authority for multiplying the number of self-contained dwelling units without restraint so long as the external walls are not altered. Rather, the decision was based upon planning concepts for it was pointed out that a separate apartment was a higher and more desirable use than a butcher shop in an area zoned for detached single family residential use. The decision permitted a reasonable use of space in a portion of a building that had become vacant as a result of the abandonment of the butcher shop.

There are two difficulties with Mr. Barber's heavy reliance on the judgment of Cory J.A. in Grant.

First, it may be fairly said, I think, that Cory J.A. is not saying that a building use can never be expanded or enhanced beyond its precise non-conforming status at the date of the passing of the zoning by-law which creates the non-conformity. Rather, he appears to be saying that any such enhancement must be done reasonably, with restraint, and consistently with fair generic range of the established non-conformity.

I must conclude, on the facts before me, that that is precisely what the applicant was attempting to do in utilizing unused space for an additional apartment unit.

Second, it must also be said that nowhere in his reasons does Cory J.A. mention the all-important judgment of the Supreme Court in Central Jewish Institute. I am bound to say there is language in Grant which seems to be at odds with the Central Jewish Institute decision. While the conflict may be more a

matter of appearance than reality, I must, of course, follow Central Jewish Institute and conclude that the applicant's building is exempt from the constraints of the city's zoning by-laws and may proceed with the construction of an additional apartment as requested.

Accordingly, orders will go declaring that, (a) the decision of the chief building official should be rescinded, and (b) a building permit should forthwith issue.

It would seem to me that the applicant should have its party-and-party costs but, if counsel wish to argue this question, I may be spoken to.

Before concluding this judgment, I would be remiss if I did not express my gratitude to counsel for their most helpful and candid arguments. Also, I would like to pay homage to a brilliant, scholarly article on the broad subject of legal non-conforming uses written by Ira Kagan under the title of "But I Do Not Want To Be Legal", published at (1993), 13 M.P.L.R. (2d) 252. This article should quickly become an essential research source for any practitioner, judge or legal scholar interested in the subject at hand.

Appeal allowed.

861168 Ontario Inc. v. Foreshew, Chief Building Official
of the Town of Lindsay and the Town of Lindsay*
3 O.R. (3d) 721

ONTARIO
Ontario Court (General Division)
Taliano J.
May 17, 1991

APPEAL from a decision of the Chief Building Official of the Town of Lindsay, which refused to grant a building permit pursuant to the Building Code Act.

Stanley B. Stein and Bonnie Freedman, for applicant.

A. Ronald Cork and D. La Mantia, for respondents.

TALIANO J.:-- In this proceeding, the applicant is appealing the decision of the Chief Building Official of the Corporation of the Town of Lindsay who refused a building permit for renovations to 40 Lindsay St. in Lindsay. The appeal is governed by the provisions of s. 15 of the Building Code Act, R.S.O. 1980, c. 51, and particularly subs. (3) which permits the judge hearing the appeal to substitute his opinion for that of the official.

The facts are that the applicant, an experienced developer, purchased the "Moose Hall" in Lindsay on October 31, 1990 with the intention of converting the building, which contains approximately 9400 square feet, into office space. Both before and after the purchase, the building was lawfully used as a meeting place, banquet hall, and licensed eating and drinking establishment. Fire and other regulations permitted as many as 500 people on the premises at any one time.

After the building was acquired, the applicant prepared and submitted detailed plans for the conversion of the building to office use, and even though the plan ultimately satisfied all building code requirements, the Chief Building Official refused to issue the building permit because the applicant had not entered into a site plan agreement with the municipality as required by By-Law 9-88 passed pursuant to s. 40 of the Planning Act, 1983, S.O. 1983, c. 1.

Section 40 of the Planning Act, 1983 permits municipalities to control the development of land through the vehicle of a site plan agreement where:

-- a new building is being erected (which is not the case here);

-- a commercial parking lot is being established (which once again does not apply); or

-- where an addition or alteration to a building is being proposed, that has the effect of "substantially increasing the size or usability" of the building.

Counsel agree that if a site plan agreement is required prior to the applicant proceeding with its development, it is because it is substantially increasing the usability of the building in question since it is conceded that the applicant's proposal does not seek to increase the size of the building.

The applicant argues that the prior use of the building as a place of assembly attracted much higher or stringent requirements for public safety and convenience than are required for an office building and from that point of view, the usability of the building had diminished rather than increased. It was also argued that the meeting hall use permitted as many as 500 people on the premises at the same time where, as an office building, there will only be between 35 and 50 people coming to the building on a daily basis; from that point of view, there is a downgrading to the building's usability.

On the other hand, counsel for the municipality submitted that the original purchase price for the building was $450,000; the proposed renovations will cost an additional $180,000, or

approximately 40 per cent of the original purchase price. That sum, it is argued, has not been spent to make the building less usable. In addition, when the building was used as an assembly hall, there was only one office in the building; now the applicant proposes to increase the number of offices by 28, which is a substantial increase in the usability of the building for offices. Finally, it was urged upon me that the applicant is spending large sums of money on this property, and it must therefore be assumed that the property will be generating, if not more income, at least more benefit to the applicant and consequently its use of the building has been upgraded thus triggering the requirement for site plan control.

Although the municipality's arguments are persuasive, I have concluded that they are not valid for these brief reasons.

Firstly, although knowing the extent of the costs involved in making the renovations is of some assistance in resolving the issue, costs are not determinative. The costs of upgrading an existing building are normally substantial; the cost to convert a building from one use to another can also be substantial, but if that was the intended criterion for deciding whether a site plan agreement was necessary, surely the legislation would have used words that would easily have imported that meaning. Since the legislature did not use such words, in my view the cost and fact of renovating has little bearing on the meaning of the word "usability". The applicant admits that the renovating costs are extensive but he says that they relate solely to upgrading the electrical, mechanical and cosmetic aspects of the building, including interior partitions. Notwithstanding, I have concluded that the conversion in use is not likely to increase the usability of the building and by that I mean that there will be fewer people coming to the building after the changes are made than before. That is, fewer people will be using the building and therefore the usability of the building by the public will be diminished, not increased, as a result of the changes.

Secondly, the enlargement of the number of offices in the building in and of itself does not necessarily suggest an increase in "usability", unless the principal use prior to the enlargement was also for offices. That, however, is not the case. The principal use before was as a banquet hall and the one office in the building at the time was ancillary to or incidental to that principal use. Now, that principal use is to be changed to office use, a trade-off which will net a much reduced traffic flow through the building. Accordingly, it is not accurate to suggest that the office use has expanded substantially. It is accurate to say that the prior banquet hall use will be transformed to a use which will generate less traffic and, therefore, substantially reduced demands and, consequently, reduced usability.

Finally I must deal with the argument that the renovations and change in the building's revenue suggest that the applicant is deriving some benefit from the change in use, and that it is therefore incumbent on the applicant and not the municipality to demonstrate that a possible change in revenue negates an increase in usability. As I understand the respondent's submission, the building was generating income as a banquet hall and since the use is changing, it must be assumed that the new use will increase the existing revenues, thus increasing the building's usability. In my view such a conclusion does not necessarily follow.

The change in use does not necessarily suggest an increase in revenue, but assuming for the purposes of argument that it does, I do not think that is decisive either. Premises can often be used for highly profitable purposes, some legal, some not, but I cannot agree that increased revenues necessarily mean increased usability. The two must be related, but it has not been demonstrated in this case by the municipality that changed or even potentially larger revenues necessarily mean increased usability, particularly when all of the building was being used before and there is no increase in the size of the space to be used in the future.

In my view the term "usability" must be interpreted in a fashion consistent with the objects of the legislation which are demonstrated by s. 40(7)(a) of the Planning Act, 1983. That

section provides that a municipality may impose conditions upon a development by way of a site agreement. The conditions that a municipality may address are specifically enumerated and they relate to such matters as highways, traffic access, pedestrian access, easements, lighting, landscaping and garbage facilities. All of these concerns have already been satisfied by the existing building and are of such marginal relevance now that their applicability to this development would have to be seriously questioned.

In my view, usability as that term is used in this legislation can relate either to the public's use of the land in question or the owner's use of the land.

The owner is not using any more of the land than was previously used. The use is changing, but the extent of the use is not, in the sense that the same square footage that was being used before is still being used. That does not trigger the need for site plan control.

Nor is the public's use of the land increasing; the facts are that less people will be using the building than before and, bearing in mind the types of concerns that the municipality may regulate by s. 40(7), usability must surely relate to those conditions. Since those matters have already been addressed, I am satisfied that the objects of the legislation have been satisfied and that the expanded definition of the term "usability" as suggested by counsel for the municipality is not warranted by an analysis of the legislation itself.

For these brief reasons, I have concluded that the proposed renovations do not constitute a "development" within the meaning of s. 40 of the Planning Act, 1983, and that the applicant is not required to enter into a site plan agreement with the Corporation of the Town of Lindsay for the site in question.

The issue of costs was not addressed and I am prepared to entertain submissions (to be arranged through the regional trial co-ordinator) if for some reason it is inappropriate to follow the usual rule of costs following the event.

Order accordingly.

Re 1121472 Ontario Inc. v. Toronto (City)

39 O.R. (3d) 535
[1998] O.J. No. 1851
Docket No. C22872

Court of Appeal for Ontario
Morden A.C.J.O., Robins and Charron JJ.A.
May 1, 1998

APPEAL from an order of Kiteley J. (1995), 26 O.R. (3d) 25, 29 M.P.L.R. (2d) 221 (Gen. Div.), declaring a proposed use of premises a "restaurant" as defined under City of Toronto By-law 438-86.

Thomas H. Wall, for appellant.
Lawrence H. Zucker and Ira T. Kagan, for respondent.

The judgment of the court was delivered by

ROBINS J.A.: -- This is an appeal by the City of Toronto from an order [reported (1995), 26 O.R. (3d) 25, 29 M.P.L.R. (2d) 221] declaring that "the restaurant as described in Exhibit B to the Affidavit of Paul Stagl sworn August 31, 1995, (II by IV Design Associates Inc.'s furnishing plan dated May, 1995) is a use permitted by By-law 438-86 as amended". Exhibit B is a construction floor plan for the second floor of 794 Bathurst Street, Toronto, showing an 8,000-square-foot dining facility with an oval-shaped bar, a dance floor and a stage.

A building permit was issued for the construction of the premises on June 30, 1995, but not on the basis of ex. B. The city was unaware of the use proposed by this floor plan until after the permit was issued. In fact, the permit was issued on the basis of a set of architectural construction drawings of the same space which included the floor plan shown in ex. C to the affidavit of Paul Stagl. This plan showed the dining facility with an oval-shaped bar as having a seating capacity of 370 people with tables and chairs located throughout the premises. Neither the floor plan nor the architectural drawings indicated that any part of the premises were to be used for the purposes of a dance floor or stage. Had this intention been disclosed, the evidence is that the permit would not have been issued.

It is undisputed that the use reflected in ex. C is a permissible use under Zoning By-law 438-86 as amended. The dining facility provided for therein is clearly a "restaurant", as defined in the by-law, and has been operated as such since the construction was completed. The respondent, however, seeks to extend the use by presenting Spanish-style entertainment in conjunction with the restaurant, and by providing a dance floor in front of the stage for the enjoyment of its patrons. The entertainment is to range from flamenco dancers to Spanish singers and bands "from around the world"; the dance floor area is to have a capacity of 195 people. The judge of first instance held that the use of the premises for these purposes would not affect their status as a restaurant.

The city contends that the judge erred in so ruling. In its submission, the addition of a stage and dance floor would effectively alter the character of the restaurant use contemplated when the building permit was issued and render the establishment an "entertainment facility" as that term is defined in the by-law. An "entertainment facility" is not a permissible use in this area of the city.

Thus, the question to be decided in this appeal is whether the respondent's proposed premises can correctly be described as a "restaurant" or an "entertainment facility".

Before addressing this question, there are two preliminary matters to be considered. The first matter relates to the city's contention that the respondent's application for declaratory relief ought not to be heard while an appeal to the Ontario Municipal Board involving the same property remains pending. The appeal in question apparently arose out of a decision of the Committee of Adjustment granting the respondent a minor variance in the parking standards set by the zoning by-law with respect to an application the respondent had made to operate the premises as a restaurant and "place of amusement" or billiard hall. Counsel for the respondent has

made it clear that it no longer seeks to use any part of the premises as a place of amusement. No variance in the by-law was required to operate a restaurant. For all practical purposes, the application giving rise to the OMB appeal has now been abandoned. While the appeal may remain technically outstanding, it is effectively moot and cannot affect these proceedings.

The second matter relates to an interim control by-law which was passed by the city on September 18, 1995, a few days before this application was to be heard in Weekly Court. This by-law prohibited a variety of uses, including a dance floor, stage, live entertainment and recorded music, in connection with the preparation and sale of food to the public for a period of one year in the area of the city in which the respondent's premises are located. In the view of the judge, the only inference that could be drawn from the timing of this by-law was that "the City is not prepared to risk an unfavourable result in the courts and passed an interim control by-law to prevent that occurrence". This action by the city, she said, constituted "an affront to the judicial system" requiring that the by-law be ignored and warranting the imposition of costs on a solicitor and client basis against the city.

In my respectful opinion, there is no proper evidentiary foundation for impugning the city's conduct or motives in this matter. The interim control by-law is not referred to in the record before this court and there is no evidence of any circumstances surrounding its enactment. Moreover, there is no material relating to the report of the Commissioner of Planning and Development, which is cited in the by-law, and which presumably provides the basis for the recommendation that a study be undertaken in respect to land use policies related to restaurants and similar establishments in the area of the city in question. Nor is there any evidence as to when the matter first became the subject of municipal consideration or of the problems giving rise to the consideration. While the timing of a by-law may be a relevant factor going to a municipality's good faith, it must be seen in context, and no context is provided here. In short, there is no justification for finding that the city had been guilty of the kind of bad faith that can warrant setting aside a by-law of this nature: see Equity Waste Management of Canada Corp. v. Halton Hills (Town) (1997), 35 O.R. (3d) 321, 40 M.P.L.R. (2d) 107 (C.A.); H.G. Winton Ltd. v. North York (Borough) (1978), 20 O.R. (2d) 737, 88 D.L.R. (3d) 733 (Div. Ct.).

In any event, the validity of the interim control by-law is of no moment in this case. It was passed after the city had already issued the respondent a building permit, the validity of which is not in issue. Whatever rights the respondent may have acquired by virtue of the permit cannot be adversely affected by the subsequent by-law. Under s. 34(9)(b) of the Planning Act, R.S.O. 1990, c. P.13, no by-law shall prevent a building from being used for a purpose prohibited by the by-law if a building permit was issued prior to the passing of the prohibiting by-law.

That being the case, I turn to the question of whether the use intended by the addition of a dance floor and stage constitutes the respondent's establishment an "entertainment facility" or whether it nonetheless remains a "restaurant".

The expression "restaurant" is defined in By-law 438-86 to mean:

> . . . a building or portion of a building used primarily for the cooking, preparation and sale of meals and food to the public, for service and consumption on the premises and may include an incidental take-out service.

The by-law permits uses "accessory" to a restaurant. That term, where used to describe a use, building or structure, means, in part, that the use, building or structure is:

> (i) naturally and normally incidental, subordinate in purpose or floor area, or both, and exclusively devoted to a principal use, building or structure . . .

"Entertainment facility" is defined in By-law 438-86, as amended in 1993 by By-law 425-93, to mean:

> . . . an establishment engaged in providing entertainment to the public in conjunction with the serving and sale of food and beverages and includes a dance hall or a dance floor, a

discotheque, a dinner theatre, a supper club, a night club, a cabaret or an entertainment lounge . . .

The judge described the respondent's proposed business operation as being that of "a restaurant with an accessory entertainment use". In reaching this conclusion she laid stress on the word "primarily" in the definition of restaurant and on the permitted uses "accessory" to a restaurant. In her view [p. 38]:

> The difference between an entertainment facility and a restaurant appears to be one of emphasis. In an entertainment facility, the primary function is entertainment and the secondary function is dining. In a restaurant, the primary function is dining and the secondary function is entertainment. I have no hesitation in this case that the proposed use falls into the latter category of a restaurant with an accessory entertainment use.

I am respectfully unable to accept that the determination of whether an establishment is a "restaurant" or an "entertainment facility" depends simply on which use constitutes the primary function of the business. Where a by-law creates a separate category of use specifically covering a proposed use, the proposed use must be subject to the restrictions imposed on that category. Put another way, if the by-law contains a provision governing establishments providing a particular kind or class of entertainment in conjunction with the sale of food, the use of the premises for the specified entertainment puts what may otherwise be a restaurant in the defined entertainment category. In the absence of any provision in the definition of the entertainment category permitting a use accessory to the entertainment use, this is so regardless of whether the entertainment use is primary to the dining use or vice versa.

In the present case, we have a by-law that defines "entertainment facility". This relatively new category was not in existence when any of the cases referred to in the court below were decided. It was enacted to deal with the problems created by large combined dining and entertainment facilities. As this category is defined, an establishment that provides entertainment including any of the types of entertainment specified therein, as for instance, a dance floor, a discotheque or a supper club, in conjunction with the sale of food, is an "entertainment facility". It is the combination of these uses that brings an establishment into this category. Unlike the definition of restaurant, no provision is made in the definition of "entertainment facility" for accessory or secondary uses.

The entertainment area here has a standing capacity of 195 people and includes a stage and dance floor. The presentation of entertainment featuring international singers, dancers and bands with a dance floor for patrons, can hardly be treated as something "naturally and normally" incidental or subordinate to the preparation and sale of food. The main attraction may well be the entertainment rather than the food. However, even if the entertainment can be said to be an accessory use, the establishment would nonetheless be an "entertainment facility".

The provision of a "dance floor" and the proposed entertainment in combination with the sale of food, by definition, renders the premises such a facility, as would a discotheque, a night club, a supper club or any other of the forms of entertainment enumerated in the definition. The respondent's proposed use of the premises is the kind of use intended to be covered by the definition and to which the zoning restrictions are directed.

In reaching this conclusion, I would not wish to be taken as agreeing with the view apparently expressed by certain municipal officials to the effect that any live entertainment of any kind in any restaurant of whatever size necessarily converts the restaurant into an entertainment facility. The by-law must be applied in a common sense way on a case-by-case basis and regard must be had to the reasons underlying the introduction of the "entertainment facility" category and the zoning restrictions pertinent thereto.

For these reasons, I would allow the appeal, set aside the order under appeal, and in place thereof order that the respondent's application be dismissed. I would make no order as to costs of the application or of this appeal.

Appeal allowed.

Chapeskie v. Lake (Township)

Between
Karen Chapeskie and Jeffrey Chapeskie, plaintiffs, and
The Corporation of the Township of Lake of Bays, Robert Gregory Larosee and Correne Jacqueline Larosee, defendants

[1999] O.J. No. 2773
File No. G13082/94

Ontario Superior Court of Justice
Newmarket, Ontario
Howden J.
Heard: April 14-16, 19-23 and 26-28, 1999.
Judgment: July 9, 1999.

Counsel:
D. Morin, for the plaintiffs.
P. O'Hagan, for the Township of Lake of Bays.
N. Roche, for Robert and Correne Larosee.

[para1] HOWDEN J.:-- This action arose out of the ignorance and errors of novice owner-builders from whom inexperienced first-time buyers purchased a home and the extent to which they may look to the local municipality for recovery or contribution. The defendants Correne and Robert Larosee apparently built the home for their own occupancy in 1990 on a lot they purchased in the mostly rural Township of Lake of Bays. By 1992, employment circumstances for Mr. Larosee had altered. They decided to sell the home and move south with their children to the Toronto area where he had obtained a job. The plaintiffs Karen and Jeffrey Chapeskie saw it and allege conversations with the Larosees regarding water quality and quantity. The nature and extent of these conversations are in dispute. The Chapeskies purchased the premises after an occupancy permit was obtained from the Township listing only a few of several building permit deficiencies.

[para2] The Plaintiffs allege that, on obtaining possession in October 1992, they found that they had a completely inadequate supply of water and what they had was seriously discoloured. They say they were led to believe the water supply and quality was quite suitable and adequate for a household. There was a dug well on site. They later found that no weeping tile had been installed, and they allege lack of required basement insulation and defects in the fill over the septic tank and in the footings and foundation. They claim damages to remedy these problems from the Larosees for negligent misrepresentation and negligence in the building of the house and from the Township for negligent inspection of the home and negligent misrepresentation in issuing the occupancy permit.

[para3] The defendants Robert and Correne Larosee had never built a home before this. Their position is that they relied on the Township's Building Inspector and his directions, oral and written, with which they allege compliance in building the home. They deny making any misrepresentation or that there were serious deficiencies respecting the water supply. They allege that a filtration system installed by Mr. Larosee had corrected any odour or bacterial issues with the water. They sold the property, containing a house with some trim and flooring in a visibly incomplete condition, on an 'as is' basis, without an express term to that effect in the agreement; they allege that the plaintiffs bought what they agreed to as a matter of contract and were contributorily negligent respecting the claims in tort. To the extent the Larosees are found liable to the plaintiffs, they look to the Township for contribution and indemnity.

[para4] The defendant Township alleges misrepresentation by Mr. and Mrs. Larosee in showing a local contractor as the builder on the application for permit as well as failure by them to request all necessary inspections before occupying and selling the property without the correct inspection permits. The Township denies any negligence on its part. It alleges that the plaintiffs themselves, in buying a home whose quality of work is poor and in obtaining inadequate real-estate and legal advice, as well as the builder-vendors are to blame for any damage that may be proven to have been caused to the

plaintiffs.

[para5] It was agreed at the outset that the Township is not responsible for any defect regarding the well and water supply or the adequacy of the septic systems. In regard to any damages sought by the plaintiffs for those items, they are sought only against Mr. and Mrs. Larosee. And in respect of the septic system, the plaintiffs seek only damages sufficient to provide some fill which is said to be required over the septic area.

[para6] At the end of argument, counsel for the plaintiff set out the subjects for which damages are sought. With the amounts claimed through their witnesses, they are:

A(i) Repair of footings and foundation (by replacement of footings directly on bedrock and installation of weeping tile)

$18,800.00

(ii) Plaintiffs' claimed expenses and disbursements re footings, foundation and weeping tile.

$5,747.35

B. Installation of insulation - basement walls or ceiling.

$1,680.00

C. Drilled well and plaintiffs' claimed expenses and disbursements on account of water deficiencies.

$12,203.87

D. Fill and grading over septic system.

$3,694.00

E. General damages claimed for hardship due to lack of water October 1992 to August 1993.

$100,000.00 [See Note 1 below]

Note 1: Amount is taken from the statement of claim.

[para7] The separation of the plaintiffs' expenses lists into the above items A(ii), C, and D was submitted to me by counsel for the plaintiffs following the trial, with the concurrence of counsel for the defendants. I thank counsel for their assistance in classifying these expenses. The quantum of damages in all categories remains in dispute

[para8] Mr. and Mrs. Larosee bought the lot in question in June 1990. Both testified that they intended it for residential development. Neither had lived in Muskoka or a rural area in their adult lives (though Mrs. Larosee had relatives nearby) and neither had any experience in home construction. The lot is on a township-maintained road, Heney Lake Road, near the hamlet of Baysville. They testified that they originally thought of erecting a prefabricated dwelling; after discussion with Mrs. Larosee's uncle, a local building contractor named Barry Walsh, they decided to build their own home.

[para9] Their testimony parted for the first time on the subject of the identity of the actual building contractor on this job. When Mrs. Larosee applied for the building permit, she named the contractor as her uncle, 'Barry Walsh', on the application filed with the Township (Exhibit 19). She signed certifying that this item and the rest of the application were true. Under Mr. Morin's cross-examination, she testified later that he actually was the contractor, that he directed the work and arranged the sub-trades. This is clearly contradicted by Mr. Larosee who admitted that he acted as his

own building contractor and by a letter signed by Barry Walsh himself (Exhibit 36) which Mr. Larosee identified. The letter dated April 11, 1994, and written to the building inspector shortly after another Township official had sent a letter requiring remedial work to comply with the Ontario Building Code, states:

"Attn: Mr. Don Huggett

Dear Sir:

I am writing to you in regards to the letter I received Dated March 29/94.
File no - PSP-313.
Stating that I was the building contractor for R. LaRosee.
I was not the contractor for this house.
Yours Sincerely.
Barry Walsh"

He was not called as a witness by Mr. and Mrs. Larosee despite being described as an advisor to them and a person upon whose judgment Mr. Larosee relied.

[para10] Mrs. Larosee admittedly had little to do with the construction and was not often at the site. I find that it was Mr. Larosee who acted as the builder from the start. He drew the plans himself and directed the work on site throughout.

[para11] By August 2, 1990, the Township's Building Inspector, Donald Huggett, made his first inspection. The footings and foundation were already in place by then. No one had requested an inspection of the excavation and footings before the concrete was poured, despite the requirement of such an inspection (By-law 90-29 and Exhibit 37 - Permit Notice). Mr. and Mrs. Larosee say they did not know such an inspection was required. Darby Walsh, who was hired by Mr. Larosee to do the footings and foundation with him, testified that he knew the Township was to be notified of the phases of construction - he held himself out as experienced for years in various sectors of construction in Muskoka. But when he was cross-examined on this point, he merely said that he told someone unnamed about inspections and it was left to Mrs. Larosee to call for them, the person least informed or involved in the actual construction.

[para12] On August 2, 1990, Mr. Huggett noted on his report "weeping tile should be installed around outside of footing to carry ground water to low point on lot". Despite not knowing the named contractor nor the owner and despite not having been called for the pre-pour inspection and despite not being able to see if all of the footings were on rock due to dirt over them and despite the absence of weeping tile normally placed at this stage at the base of the footings, Mr. Huggett testified that he just left his report without checking further. He merely took the word of a backhoe operator (whom he did not know) that it was all on bedrock.

[para13] Building continued and Mr. Huggett's last inspection report on construction phases occurred on August 31, 1990. By then, the house was enclosed. He had viewed the framing, plumbing rough-in, vapour barrier and first-floor insulation on his 3 inspection since August 2nd. He made no note on his August 31st report concerning lack of insulation in the basement; he stated that the vapour barrier was also not sealed round the windows. He also had no note of ever checking to see if the weeping tile had been installed. He said he gives persons building for themselves leeway as most do not sell for 10 years and they would normally fix something which was not correct. Regarding lack of basement insulation, he stated that he told someone it would be checked later.

[para14] Mr. Larosee continued to work on the bungalow until late October 1990 when they moved in with their two children. They requested no final inspection for compliance with the Ontario Building Code (O.B.C.) generally or its occupancy permit requirement. Again, they testified they were not told of this requirement in the Township by-law or the Ontario Building Code Act, section 7. Mr. Huggett said that in the normal course Mrs. Larosee would have received, on her attendance to apply, the permit and the Building Permit Notice in pink plastic wrap for posting at the site (Exhibit 37). This notice sets out all of the required inspections as set

out in the Township's by-law and the obligation of the builder to request them. Mrs. Larosee said she received only the building permit on July 5th. Mr. Larosee testified first he did not recall seeing Exhibit 37, though he said he posted a notice of building permit. Later he stated all he saw was a pink slip wrapped in plastic. Finally, in answering Mr. O'Hagan's cross-examination, he said he had never seen Exhibit 37. Mr. Huggett said he would have noted it if the notice was not posted at the building site. He said it was posted at the site. No occupancy permit was sought or obtained in 1990 by Mr. and Mrs. Larosee before they occupied the home.

[para15] By this time the well had been dug on the lot with the help of Tim Walsh (son of Barry Walsh) who also installed the septic system. As for the well, in July 1993, following complaints by Mr. and Mrs. Chapeskie, the Ministry of Environment listed the following problems (Exhibit 5, letter from S. Sisson, Regional Water Well Inspector):

a) water leaked through the concrete tiles indicating poor tile construction;

b) pipe connection to the well was not properly sealed and was stained;

c) sand and crushed rock had been used to grout the "annular space" - they are "inappropriate" for this purpose;

d) the well was too close to the creek, a source of pollution, and surface water could enter the well;

e) neither Tim Walsh nor Robert Larosee are licensed to construct water wells.

The Ministry letter concluded:

> "The murky and dark water is consistent with problems related to improper material placed around the well tiles or leachate from rotting materials moving through to annular space materials to the well bore
>
> It appears that this water supply was not obtained with the intention of being a potable water source.
>
> It is recommended that this well be properly abandoned ...."

[para16] Mr. Larosee does not dispute these conclusions; he attempted to explain them away by relating that a flood had occurred in this area in the spring of 1993 according to his mother-in-law. No evidence was called to substantiate this explanation. Mr. Larosee also denied that the water had been dark while they lived in the house.

[para17] Regarding the septic installation, Mr. Larosee said that he was there when the inspector came and he passed it. Exhibit 26 contains the Septic Permit dated August 3, 1990, issued by the Ministry of the Environment. It lists several items of work to be completed: backfill, stabilize slope surfaces, finish grading, top soil, sod and seed. Mr. Larosee said he had done these things. He had not advised the Ministry of their completion, and it had not been inspected. He added that the Ministry did not tell him to call back, and the tank was buried, none of it was visible, indicating apparently that that was all he understood there was to it.

[para18] Shortly after occupying the home, Mr. Larosee installed a "Rainfresh" water filter system. He filed a brochure (Exhibit 33). The systems he identified as installed are Nos. 1 and 2, called "1. Dirty Water Solution", and "2. Taste, Odour and Chlorine Solution". No. 3 - the "Bacterial and Cyst Solution" - was never installed. He said that as long as he installed a new filter each time the system became plugged - about every month - the water was clear. This system was installed after Mr. Larosee had a sample of water tested and the result was positive for "total coliform". Both Mr. and Mrs. Larosee mentioned after some questioning, that the water supply would be exhausted sometimes, so they kept the children's baths to every two days and never would do more than 1 load of laundry. Mr. Larosee indicated that this exhaustion of the water supply occurred only three times; to avoid this they not only limited washing and showers but did not flush the toilet every time.

[para19] By the winter of 1991-92, Mrs. Larosee described a situation that was desperate for her. Mr. Larosee had not been able to work regularly. They had to resort to welfare for food assistance, a situation she described as "humiliating". By early 1992, Mr. Larosee was working in Toronto, leaving her alone with the children each week. They decided to list the home in March 1992. By the summer of 1992, they had re-listed it, reducing its price from $119,000 to $90,000. It was then that the only prospective purchasers to respond to the listing since March came to see the property, the plaintiffs.

[para20] Karen Chapeskie and Jeffrey Chapeskie had not purchased a home before this. This was the third property they had looked at and they felt it had sufficient promise to return and look at it a second time with a real-estate agent, Marilyn Walters who had introduced them to this property. They had made some effort to prepare themselves by reading a book on home buying. On this first visit, Mrs. Chapeskie said she asked about the water supply and its adequacy for a household. She said she was told by Mrs. Larosee that there was sufficient water for household purposes and that it was drinkable. On cross-examination by Mr. Roche, she said that she recalled asking Mrs. Larosee if they had ever run out of water and she said no. She could not recall a discussion of water on the second visit though she recalled that water was one of the principal matters they went back to check. Mr. Chapeskie agreed with his wife and the Larosees that there were two visits to inspect the property. He and Mrs. Chapeskie placed them in early August 1992. He recalled on the first visit discussing the well and the quantity and quality of the water with both Larosees and the agent. The Larosees told him that the water was sufficient for household purposes and potable. On the second visit, he recalled, Mr. Larosee answered his question regarding water, saying it was drinkable and sufficient. Mr. Chapeskie said he asked again about water because he was very concerned about the location of the well due to the swampy conditions of part of the property.

[para21] Mrs. Walters confirmed that questions were asked about water of Mrs. Larosee on the first visit and perhaps of Mr. Larosee and that they were probably asked on both visits. She recalled that Mr. Larosee was asked about the water once. She said Mrs. Larosee stated they had lots of water to do laundry and either or both said its quality was not a problem. She recalled that the Larosees' answers were consistently positive and they maintained there were no water problems of any kind.

[para22] Mrs. Chapeskie signed an offer on August 14th it was signed back and the parties agreed to the sale on August 15, 1992. Mrs. Chapeskie retained a lawyer for her and Mr. Chapeskie, as did the Larosees. The Chapeskies said they were aware the house was recently built, that it had been lived in, and that there was some finishing work to be done. They were told that a water sample taken before closing tested acceptably. Prior to closing, Mrs. Chapeskie was told by their lawyer that no occupancy permit had been obtained by the owners. She told the lawyer they wanted one. As a result, on September 15th, Mrs. Larosee wrote to the Township requesting "an inspection" on our home so that I may receive an occupancy permit" and enclosed a $100 cheque for the Township charge. On October 2, 1992, following an inspection by Mr. Huggett, an occupancy permit was issued. (Due to a clerical error it was replaced by a new permit on October 5, 1992, though the date of issue remained October 2, 1992. Exhibit 19 and 45). Mrs. Chapeskie testified that the occupancy permit was conditional and that, as she understood after talking to her lawyer, it meant the house was "okay to occupy" subject to the items listed being done.

[para23] The occupancy permit sets out the address and roll number of the property and then states:

> "Portion of Building Approval for use: complete building ok to occupy - Outstanding work: hanging and trimming of interior doors, exterior siding. Rear door must be kept locked until landing and stairs complete."

Mr. Huggett had filled in this information by hand. Under that, there is a four-line clause stating that use and occupation are permitted of the building "which the applicant

has stated has been constructed in full compliance with all the provisions of the Building Code Act and regulations and orders made thereunder" and the Township laws. At the bottom, there are three boxes, the top labeled "fully complete" and the other two indicating "partially completed" for non-residential and residential occupancy. The bottom box is checked. Beside it are the words:

> "Partially completed and ready for residential occupancy in accordance with Article 2.4.3.2(1) of the Code."

Article 2.4.3.2(1) of the Code of the O.B.C. states:

> "A person may occupy or permit to be occupied a building intended for residential occupancy that has not been fully completed at the date of occupation provided that
>
> (a) the building
>
> (i) is not more than 3 storeys in building height,
>
> (ii) has not more than 1 dwelling unit above another dwelling unit,
>
> (iii) has not more than 2 dwelling units sharing a common means of egress, and
>
> (iv) has no accommodation for tourists,
>
> (b) the following building components and systems are complete and operational:
>
> (i) required exists, handrails and guards, fire alarm and detection systems, and fire separations, and
>
> (ii) water supply, sewage disposal, lighting and heating systems, and
>
> (c) where applicable, the building conforms to Article 2.1.1.8.

[para24] The Chapeskies' lawyer on the purchase, Mr. Huycke, testified that, although he thinks he told them this permit was not an "all-clear" type of document, he was told by a Township Official prior to closing that no work orders or deficiencies were noted as outstanding on this property. He understood the permit to mean that the building inspector had inspected the property and found it fit for occupancy subject to the list of items on it shown as not done. He did not read the article of the Code or explain the final clause to Mrs. Chapeskie. He agreed that a longer list of unfinished items were contained in a letter from him to the vendors' lawyer prior to closing (Exhibit 18 - no siding, no carpeting, 2 interior doors unfinished, no window trim, deck incomplete) and that they were assumed by the purchasers as to be completed by them.

[para25] Mr. and Mrs. Chapeskie completed the purchase and moved into the property on October 16, 1992. At about 4 p.m. that day, Mrs. Chapeskie said she turned on a tap and got a bucket and a half of murky brown water. She said she heard banging, and her husband found the water pump was sucking air. There was virtually no water in the tank. They telephoned their lawyer to report the problem and started to contact well drillers in order to install a drilled well. Several tests showed the water to be problematic or not acceptable as a potable source (Ex.1). They testified that they could not get a new well drilled until August 1993 due to lack of funds and the drillers' refusal to come and work on credit. In the meantime, they purchased water off-site, and though Mr. Chapeskie made efforts to revive the existing well, he ended up having to dismantle the filter system and drilling a well.

[para26] In attempting to connect the new well to the house in 1993, Mr. Chapeskie found that there was no weeping tile to drain the footings. As a result of complaints by the Chapeskies, the building inspector re-attended to inspect the house on December 16, 1993. Mr. Huggett's report of that date notes the lack of weeping tile at the footings level - it had been shown specifically on the Larosees' house plans filed with the Township and no change had ever been sought to the plans as filed. Mr. Huggett listed several other deficiencies

including some interior and exterior work which was assumed by the Chapeskies or that they now accept as their responsibility as listed on the occupancy permit and in the buyer's letter prior to closing. However, Mr. Huggett also found a sump pump installed in a rock pocket in the crawl space of the basement which drained into the sewage line. This confirmed Mr. Larosee's testimony that this was what he and Darby Walsh had done without any consultation with the building inspector in place of the missing weeping tile. Mr. Larosee testified that he had told the inspector of the failure to install it and that he agreed to that. Mr. Huggett said he did not recall such a conversation nor did he authorize the failure to install weeping tile. The foundation drainage was noted as another violation of the Code. Mr. Huggett also noted that "a final inspection would allow the inspector to pick up any further deficiencies". Yet at no time had he told Mr. or Mrs. Larosee at the time of the inspection before granting the occupancy permit in early October 1992 that another inspection was required, nor did the Township tell Mr. Huycke when he inquired regarding deficiencies under the Building Code prior to closing. The Township did not even give a written response to such requests nor apparently had it ever been noted in the Township Building Records when Mr. Huycke inquired in the Fall of 1992 that a final inspection under the Building Code regarding a house built and occupied since 1990 (to the building inspector's knowledge after October 2, 1992) had never been done.

[para27] In any event, on March 29, 1994, the Township sent a letter to Mrs. Chapeskie and to other interested parties including Mr. and Mrs. Larosee. This letter appears to be in the nature of an order to comply, yet it patently is not - an order to comply with the Building Code was issued by Mr. Huggett on March 28, 1994, directed to both Mr. and Mrs. Larosee (as former owners) and to Mr. and Mrs. Chapeskie. The letter directed completion by the contractor Barry Walsh who had been listed on the building permit on the representation of Mrs. Larosee in July 1990. The order directed both the Larosees and Chapeskies as well as Walsh to comply. Both the letter and order listed the following as deficiencies found by Mr. Huggett under the Code.

Insulate foundation walls

Install foundation drainage

Repair joist bridging

Install exterior decks railings

Finish exterior grading covering septic

Sump pump discharge to be installed

[para28] Mr. and Mrs. Larosee replied through their solicitor, denying any liability for the above items or any others not finished on the property. Barry Walsh denied any responsibility as contractor (Exhibit 35). On July 11, 1995, after much trenching work by Mr. Chapeskie around the house to attempt to deal with installation of the missing foundation drainage (weeping tile), Victor Wilcox, an experienced geotechnical engineer was retained for advice. He found that subsidence of part of the house had begun due to lack of a firm base for the easterly part of the dwelling. He located a crack through the outer wall of the foundation, 1" in width at the top and closed at the bottom. He found that about 40' of the south, east and north perimeter of the house rests on unquestionably deficient soil (approximately one-third of the building which is a rectangle i.e. 24' x 48'). Mr. Wilcox said it possessed only one-third of the bearing capability of 75 k Pa soil compression required in the Code. He was able to reach into the sub-soil under the footings to the length of his fingers and palm and found that it was organic soil. He said there was no need to test it with any implements as he could take it out in handfuls. He said he tested under the footings along the entire easterly end of the building. He stated that over one-half of the house rested on rock but the remainder is on organic soil or soil with bearing capacity below the Code's requirement. The crack is located exactly where the rock ends and the soil-base begins and its shape indicated that part of the house was beginning to lean away.

[para29] I will deal with the damages sought for remedial work in more detail later. However, I should refer briefly

now to the evidence of the expert witness called by the plaintiff dealing with Code enforcement and mitigation. In Mr. Mathon's opinion and using Mr. Wilcox's findings, the following are deficiencies under the Building Code which can be mitigated in the following manner.

Deficiency	Remedial Work Required
(a) Lack of insulation in basement	Either install insulation on interior of all foundation walls (if heated) or between ceiling joists (if unheated).
(b) Lack of weeping tile, and interior base for footings and foundation	Removal of footings and replacement with footings resting on bedrock and weeping tile.

[para30] I will now turn to my findings of fact and to the legal principles applicable to the claims regarding first water, and second, footings and foundation drainage and basement insulation and fill over the septic system.

1. Liability in respect of water.

[para31] It is accepted by the parties that the Township owes no duty to the plaintiffs in respect of the well installed by Larosee, or the water quality or in adequacy of water supply to the house. The plaintiffs base their claim for dirty and inadequate water against the owner-builders, Mr. and Mrs. Larosee, in negligence. They allege that they installed the well in a negligent manner and then, in order to induce the plaintiffs to buy the property, they breached their duty of care by carelessly misrepresenting the situation as having been good and problem-free for both quality and quantity of water for normal household needs.

[para32] Mr. and Mrs. Larosees' counsel counters that argument by raising the 'entire contract' clause in the agreement: York Condominium Corp. No. 76 v. Rose Park Wellesley Investments Ltd. 48 O.R. (2d) 455 (O.H.O.). The clause reads: He also argued that the plaintiffs were contributorily negligent in not preparing themselves to purchase in a rural area, and in particular, for failing to insert protective clauses in the agreement to warrant water quality and adequacy. He emphasized Mr. Larosee's evidence that they were warned to exercise care in using the water.

[para33] The law has moved in recent years in recognizing that a duty of care may arise between parties to a contract. In several cases owner-builders have been held liable to purchasers in negligence or breach of statutory duty. Petruzzi v. Coreny, Betts and Township of Beckwith (1991), 7 M.P.L.R. (2d) 183 (Ont. Gen. Div.) Goodwin v. Jakubovskis, July 20, 1995, [1995] O.J. No. 2338. In such actions, where the parties entered a contract but a negligent misrepresentation is made in the pre-contractual setting, it has been held that the injured party may maintain an action based on a duty independent of the contract. Queen v. Coguos, [1993] 1 S.C.R. 87 (S.C.C.), B.C. Hydro and Power Authority v. B.G. Checo International Ltd., [1993] 1 S.C.R. 12 (S.C.C.). In fact, in Checo the contract contained the very representation on which Checo relied in its tort claim. In both cases, recovery in tort was allowed by the Supreme Court of Canada for negligent misrepresentation as the contract failed to expressly exclude liability in tort for the wrong in question.

[para34] The plaintiffs' claim respecting the water issue in this case is now advanced solely on the basis of tort. The 'entire contract' clause does not exclude a claim in tort for negligent misrepresentation. The argument by Mr. Roche based in contract therefore does not assist his clients.

[para35] On the evidence before me, I find that Mr. and Mrs. Larosee had been having significant difficulties with the well and the water supply to this home since its construction. The findings of the Ministry of the Environment (Exhibit 5) as to faulty construction of the well, its location near a source of pollution, the poor water quality, and the need to abandon it as a water source were not seriously disputed by Mr. Larosee. Both Mr. and Mrs. Larosee finally admitted to times

of complete failure of supply and that most of the time they had to keep their water demand abnormally low in order to have at least some left for their daily needs.

[para36] Furthermore, I find that Mr. Larosee's evidence at times was simply not credible on this issue. He refused to admit that the water was ever badly discoloured (as in the photo, Exhibit 20). Yet, at his examination for discovery, he accepted this was so. At one point, he would not agree with his own answer on discovery as to using a mud hen twice to try to increase the water supply. Only when he was told that the reporter could be called to testify as to the transcript's accuracy, he accepted his answer. Additionally, I do not accept his assertion that the 5 gallon jug stored under the sink throughout the Larosees' occupation of the house had only been used to bring in off-site water before the house was built or simply as a mobile water source for him during tree clearance. It appeared to me that it was kept in a convenient place for use in bringing water to the home at times where the on-site supply failed.

[para37] As to the alleged conversations with the plaintiffs, I accept the plaintiffs' evidence and that of the agent, Ms. Walters, that Mr. and Mrs. Larosee clearly misrepresented water adequacy and quality. At one time, Mr. Larosee admitted that one water analysis he had obtained showed a positive result for coliform. They never disclosed this or any of their other water problems to their own agent or to the Chapeskies. The elaborate filtration system never acted to filter out bacteria and was installed for problems the Larosees themselves at times would not admit; yet they made no effort to tell the plaintiffs of their use of this system. I accept that the plaintiffs relied on the Larosees' statements in entering the agreement.

[para38] In making the impugned statements, I find that Mr. and Mrs. Larosee were at least lacking in due care and were reckless as to their truth, given the problems which were part of the history of their occupancy. They had a duty to the plaintiffs to use due care in representing honestly and accurately the on-site water situation and its adequacy in their statements to them and they failed to do so. Moreover I find that they engaged in a recklessness born of a real and heartfelt need to sell this house to the only people in 5 months to look at it, at a time when finances and time together were difficult for this couple. I further find that the plaintiffs relied on the Larosees' blithe statements about the water on both visits to their detriment; they purchased the property having been led to believe the water supply was acceptable for household needs and found on the first day of their occupation of the home that no real and dependable water source existed on this property without the expenditure of a large sum of money to drill a well.

[para39] The required elements of a claim for negligent misrepresentation are:

i) a duty of care existed;

ii) the representation was untrue or misleading;

iii) the representor acted negligently;

iv) the representee relied in a reasonable manner on the representation; and

v) it was relied on to the detriment of the representee. Lakefield (Village) v. Black (1999), 41 O.R. (3d) 741 (Ont. C.A.)

I have found in the plaintiffs' favour on each of these elements. In doing so, wherever the evidence of the plaintiffs and the defendants Mr. and Mrs. Larosee conflicted, I find that the plaintiffs' evidence is to be preferred. I do not find that the plaintiffs contributed to their own loss; they acted reasonably in that Mrs. Chapeskie obtained and read about house-purchasing and they used a local real estate agent to assist in their inspections and purchase. They retained a solicitor to complete the transaction. Even if they obtained express warranties in the agreement, they still had to trust in the credibility of the warrantor which, in this case, for human reasons of need, was a weak reed.

2. Liability for other defects.

[para40] The plaintiffs had raised throughout this law-suit a number of claims beyond those put to me at the end of the evidence. In Mr. Mathon's evidence, the following were raised as defects and were cross-examined on by Mr. Morin:

Ventilation - lack of range fan and bathroom fan

Vapour barrier - not sealed

Framing - poor quality studs

Bridging

Footings and foundation - on organic soil and no drainage

Basement insulation

Well and water inadequacy

Fill over septic - more required

In the statement of claim, a claim was also made for a malady and surgery undergone by Mrs. Chapeskie. This claim was not proceeded with at trial. No argument was advanced on the ventilation, vapour barrier, framing and joist bridging claims, nor were they listed by Mr. Morin as still being claimed, in answer to my questions regarding what items were alleged as the defendants' responsibility. I therefore make no findings in those respects.

[para41] As to the remaining matters claimed as defects under the Ontario Building Code, I make the following findings as to whether they are proven to be defects under the Ontario Building Code and Act.

[para42] The lack of insulation in the basement was discussed by the plaintiffs' expert witness Mr. Mathon as well as by Delir Dehlen, the witness called by the Township who was also qualified to express expert opinions on the Code. Mr. Dehlen said that this was not a traditional basement; rather, it was a work space without interior access to the upper floor. In fact, this level has one area high enough for an adult to stand and work where the furnace and work bench are. The rest is crawl space over a large rock. The 'work area' was installed illegally as the filed plans call for only a crawl space under the bungalow. Mr. Mathon pointed out that the Code requires insulation between heated and unheated spaces (section 9.26.2.3), and as the basement is unheated, insulation is required between the ceiling joists. Mr. Dehlen spoke of another Code section 9.26.4.13(11) which I agree, taken alone, may not require it in the walls. However, I accept Mr. Mathon's conclusion, with which Mr. Huggett agreed in his order to comply, that the lack of insulation in the basement ceiling fails to comply with the Code. Both Mr. Larosee and the plaintiffs indicate it is not a heated space and the floor above is.

[para43] The lack of weeping tile does not comply with the Code, all agree (section 9.14.2.1(1)). Despite the evidence of Mr. Larosee and Darby Walsh regarding the makeshift drainage system which they installed as a substitute, weeping tile was never shown to the building inspector to be unnecessary as section 9.14.2.1(1) requires in order to dispense with it. I accept the findings of Mr. Wilcox that the footings rest partly on rock and partly on soil of less than 75 k PA bearing pressure. Mr. Dehlen stated that if this is the case, the inspector should then deal with it under section 9.4.4 of the Code which requires a specially designed footing according to a table in that subsection and involvement of an engineer. There is no doubt that no such design specifications were ever consulted in this case, because the building inspector was not aware of this condition. I find that the footings were installed without regard for and do not comply with the Ontario Building Code section 9.15.1 and 9.4.4.

[para44] As for fill and grading over the septic system, Mr. Mathon did not express any opinion in that regard concerning the Code. Mr. Dehlen stated merely that the Code requires grading only to slope away from the house and septic bed and that the contractor is to notify the inspector of its completion section 2.4.5.1 and 9.14.6. He said the notification was not done apparently. Mr. Huggett listed

exterior grading on the order to comply. He merely testified that the grading was probably all right but top soil was not put in. The only other mention of fill or grading was a generalized requirement of the Ministry of Environment inspector on the Sewage Permit. Mr. Larosee said he complied with it. No one was called from the Ministry to explain any further fill or grading requirement. Mr. Chapeskie could not say what fill was required and no evidence is before me of its cost. I am unable to find a fill and grading deficiency on this evidence or to assess any remedial work, if any is required. I will therefore go no further on this claim.

[para45] I find that the plaintiffs purchased a house from its builders and owners, containing several conditions not in compliance with the law. It was built subject to a building permit issued by the Township of Lake of Bays, the application and the plans for which were not followed and a key inspection, the first one prior to pouring of the footings to ascertain the base on which they would sit, was not requested by the owner/builders. No recognized contractor was in charge of the work despite the representation in the application to the contrary. It has since been found that the house is structurally in jeopardy due to the instability of soil under part of it. This and the other deficiencies which I have found can be remedied but are the plaintiffs entitled to claim relief?

[para46] I take them at their word that, when Mr. and Mrs. Larosee built the house in 1990, they intended it only for themselves. That does not excuse their failure to even attempt to know the building requirements under the Township's By-law and the Ontario Building Code, because in time the faults would haunt them or anyone to whom they sold eventually. There is no evidence before me to indicate that their defaults, including the naming of her uncle as contractor on the application for permit, stemmed from anything but ignorance. I see no evidence of a plan or scheme to deliberately flout the law.

[para47] The building by-law, Building Code Act and system of inspections place the initial obligation on the builder, in this case the owner/builder, to comply in the construction of the home with their provisions and regulations. Prospective buyers form part of the class of persons to be benefited or assisted by this statutory scheme. It is reasonable that if the law is not complied with, through negligence or otherwise, prospective buyers may be injured. The mere fact that the owner/builder may suppose at the time of building that he or she will live in the house for the foreseeable future alters nothing in regard to the existence of a duty of care. Just as municipalities owe a duty of care when they decide to adopt a system of building inspections to others including owner/builders and prospective buyers, so the owner/builder himself also owes a duty of care to prospective buyers during the construction. Kamloops v. Neilson (1984), 29 C.C.L.T. 97 (S.C.C.); Rothfield v. Manolakos (1989), 63 D.L.R (4th) 449 at 454; Petruzzi v. Coveny (1991), 7 M.P.L.R. (2d) 183 (Ont.G.D.)

[para48] In this case, I find that Mr. and Mrs. Larosee failed to exercise reasonable care in the construction of their home. Mrs. Larosee misled the Township by a careless statement in the application for building permit as to a named contractor actually building the dwelling. They failed to see that the building rested wholly on rock or on soil sufficiently compressed to bear it as required by the Code. In this regard, I note Mr. Larosee's conflicting evidence. He first said the home was built wholly on rock and the footings were on rock. Later he admitted he knew part of it did not rest on rock. He then said he relied on the tradesman he hired, Darby Walsh, for installing the footings. Darby Walsh said one corner of it was built on what he called hard pan. (Hard pan was described by Mr. Wilcox as very hard glacial till, but it softens as the moisture content rises). And Mr. Walsh also said that Mr. Larosee knew perfectly well at the time that a portion of the footings were on soil.

[para49] In failing to indicate this change on the plans filed, or to request the first inspection before the footings were poured (which would have brought this condition to the attention of the inspector as the plans showed it entirely on rock), in failing to obtain engineering advice as to the bearing capacity of the soil or the appropriate design of the footings, and in failing to install the weeping tile to permit proper drainage and prevent moisture content to increase in

the supporting soil, I find that Mr. and Mrs. Larosee breached their duty of care to the plaintiffs. As well, I accept Mr. Huggett's evidence that he did not orally approve the failure the failure to install the weeping tile, as Mr. Larosee claims. I reject Mr. Larosee's evidence on this point. It was Mr. Larosee, after all, who admitted to burning the pipe which he had purchased to act as weeping tile before the plaintiffs came to inspect the property. It is no excuse for a builder, even one who is a novice builder and owner, to say they did not know of the pre-pour inspection or that a final inspection was necessary. I find that they had the building permit notice (Exhibit 37) which they received and posted during the construction. It sets out all of the inspection phases and the obligation on the builder, in this case, Mr. and Mrs. Larosee, to request them at the times indicated. I have noted Mr. Larosee's conflicting evidence again on the point of his knowledge of Exhibit 37, and I simply reject his and his wife's evidence that they did not know of their obligation to request certain inspections. How did they know of the other inspections regarding the completed foundation, framing, plumbing and insulation? In each case, Mr. Larosee called for the inspection as required by the by-law and as shown on Exhibit 37. As to the first and final inspection, it reads:

Stage of Construction	Notice
1. Excavation and footings: Prior to concrete pour	48 hours
6. Final Inspection for Occupancy Permit	48 hours

[para50] I also find that Mr. and Mrs. Larosee were negligent in not installing the basement insulation. I find that Mr. Huggett, in one of the few instances that he tried to impart some helpful information, did tell them that his passing of the insulation referred only to the upper floor and that he would check it later. The fact that a basement existed, even a partial one, was again a deviation by the Larosees from the plans they filed with the Township. It was embarked on by them without any notice or attempt to file new plans which could indicate the further implications of the existence of a basement where persons would occasionally occupy or work instead of the crawl-space which was clearly not intended for human activity.

[para51] In the case of the Township, it is now trite law that once it adopted a system of building inspections, it owed a duty of care to perform those inspections with reasonable care as required by law. Kamloops v. Neilson, Rothfield v. Manolakos, supra. As to the standard of care required, I note the statement of LaForest J. for the majority of the Court in Rothfield, at p. 455:

> "Finally, I do not share the view that applying the law to owner builders in this way would make the municipality an insurer in respect of compliance by the owner with applicable building standards. It must be borne in mind that a municipality, once it has made the policy decision to inspect construction, is not bound to discover every latent defect in a given project, nor every derogation from applicable standards. That would be to hold the municipality to an impossible standard. Rather a municipality is only called upon to show reasonable care in the exercise of its powers of inspection. Accordingly, a municipality, whether the duty of care is owed to an owner builder or a third party, will only incur liability for such defects as it could reasonably be expected to have detected and to have ordered remedied."

The Township's building inspector is to use reasonable care in carrying out his duties of inspection and will only be liable for defects he could reasonably be expected to have detected and to have ordered remedied.

[para52] Mr. Dehlen is a witness who has had considerable experience in Toronto in enforcing the Code. He was also a member of the Building Officials Association which assists in the training of such officials and, until last year, of the Building Code Commission which adjudicates disputes under the Code. He was presented with the hypothetical situation of an inspector who was not notified of the first (excavation and

pre-pour) inspection, who cannot tell visually if the building is on rock, who knows of the contractor named on the application as a recognized builder, who is aware that the plans place the building totally on bedrock, and who first comes to the scene after the site is covered and takes the word of a workman that it is on bedrock. Mr. Dehlen gave his opinion that a reasonable building inspector would consider a number of factors: area topography (most buildings in Muskoka are on rock), the building plans filed, visual ability to see 2/3 of the building seeming to rest on bedrock, the statement of the unknown workman, and the fact of a recognized builder being in charge. He concluded that it was reasonable for the inspector in that situation to assume the remainder of the building was on bedrock. Even if his suspicions were aroused, Mr. Dehlen stated that the Act did not then permit an inspector to issue an 'uncover' order unless he had first made an order prohibiting the cover of part of a building before it had been covered section S.9(1) & (2); and he could not issue an order to comply because he must first find that the Code had been contravened.

[para53] Mr. Mathon, showed familiarity with the Code as an engineering assessor and investigator in the private sector. He is employed now as an assistant building official for the Town of Mattawa. He took a different view from that of Mr. Dehlen. Mr. Mathon stated that the most important inspection is the one prior to installation of footings. The material on which the footings are to be placed is important because a failure under them can lead to an undermining of the foundation. Lack of weeping tile to drain the subsoil can lead to damage to the footings and to the stability of the building as a whole as well as leakage. During cross-examination, he said that the inspector should make clear to a builder the importance of his inspecting the work at the required stages. In inspecting the conditions under the footings, the inspector should carry out a close inspection to ascertain the capability of the sub-grade soil or rock and in doing so, he should inspect closely the entire area under the footings. If the inspector is not satisfied that the sub-grade is suitable, he should not pass it and he should issue an order to comply identifying the problem, and where there is a doubt about the bearing capacity, he should require an engineering report on the soil capacity and quality. Under cross-examination, Mr. Mathon agreed that the issue of bearing pressure of the sub-grade material is a judgment to be made by the building inspector but he should know what to look for. He noted that the Code provisions in this regard and the practice of building inspectors in avoiding organic soil under footings result from years of failures of such sub-standard soil.

[para54] Mr. Huggett's evidence has been summarized earlier. As noted no pre-pour inspection had been called for by the Larosees. He knew that when he came the first time, he got down into the trench, but he admittedly could not see all of the footings/sub-grade interface due to the dirt he described on site. He did not put his hand into the subsoil or do any kind of compression test. He looked only at the north side. Under cross-examination, he said the failure of the owner/builders to notify him in order to make the pre-pour inspection raised no concern. He took it that they simply forgot to call. He admitted that he did not see, let alone closely inspect, all of the subsurface. He said that he could have done a spot-check of the underlying conditions but as he suspected no flaw, he did none. He kept no notes whatsoever of what he did in regard to inspection. He gave no order not to cover the weeping tile when it was installed. And on the next inspection, he made no effort to see if the weeping tile or 'O' pipe had been installed as he directed. He seemed to put store on the fact that the house was being built by or for the intended inhabitants who would automatically see that standards were met.

[para55] The building inspector's duty is to use reasonable care in inspecting and does not extend beyond defects which the inspector could reasonably be expected to have detected and ordered to be remedied. Rothfield v. Manolakos, supra. In that case, Mr. Justice Laforest (for the majority of the Court) noted that most owners must rely on the "disinterested expertise" of a building inspector and are entitled to rely on proper level of care to see that the building conforms to the building standards as set by the local by-laws and the Building Code Act. He stated that while failure to notify the inspector of an on-site inspection

constitutes negligence by the owner/builder, that does not absolve the municipality from liability. When he came to a discussion of the pre-pour inspection, Laforest J. wrote the following (at p. 458):

> "As I noted above, the city issued the building permit on the assumption that an on-site pre-pour inspection would enable it to determine whether the design met applicable standards. The pre-pour inspection is a key part of the inspection process because it permits the inspector to determine if the foundations of a project are up to standard. Lord Wilberforce touches upon this very point in Anns v. Merton London Borough Council, supra, at p. 753:
>
> > 'One of the particular matters within the area of local authority supervision is the foundations of buildings - clearly a matter of vital importance, particularly because this part of the building comes to be covered up as building proceeds. Thus any weakness or inadequacy will create a hidden defect which whoever acquires the building has no means of discovering.'
>
> "Inasmuch as inadequately inspected foundations will always pose a threat to the health or safety of the public, building by-laws contain measures aimed at preventing the occurrence of such 'hidden defects'." (emphasis added)

In this case, the local by-law incorporates the requirements of the Building Code for among other things, bearing capacity of the subsoil. Based on Mr. Wilcox's observations and corroborated by the inspection of Mr. Mathon as to the existence of interior cracks and subsidence, I have found that the subsoil under the easterly portion of the building was organic and deficient.

[para56] On the evidence before me, I find that Mr. Huggett fell below the standard of care required of building inspectors in view of the special importance of the pre-pour inspection. First, he made no attempt to stress to the applicant, Mrs. Larosee, the importance of the inspections. I understand that he was told there was a contractor involved, but he did not know that person or his work and Mrs. Larosee herself exhibited no evidence of knowing building procedures or of her duty as an applicant to see that proper standards were met. Secondly, knowing on his first attendance that the plans were deviated from by the added small basement and that no pre-pour inspection had been called for or done as required and knowing the importance to the integrity of the entire building of the subsurface condition, he failed to inspect or test (with his hand or an implement) all of the footings' bed and merely took the word of a stranger on-site that it was entirely on bed-rock. He failed therefore to note that approximately one-third of it was on substandard soil, and to issue an order to comply or revoke the permit until he received satisfactory evidence of its sufficiency or of remedial measures. He also failed to issue an order not to cover the weeping tile or 'O' pipe so that he could inspect its installation on his next inspection. I appreciate Mr. Dehlen's opinion and experience but I do not think that in the end his evidence is seriously at variance with this finding. For he admitted on cross-examination that his opinion on the hypothetical question of what a reasonable inspector would do would be different in the milieu in which he actually worked, the City of Toronto. He in effect attempted to supply a different level of care for inspectors who work in less developed areas though they all operate under a provincial enforcement system. I have taken into account the circumstances in Lake of Bays in making my findings. While one can appreciate the difficulties of an inspector working alone in this part of Muskoka, I do not find any ground for applying a different standard of care.

[para57] Finally, I accept Mr. Morin's submissions that in the circumstances present in this case, the occupancy permit issued by Mr. Huggett on October 2, 1992 amounted to a representation that all Code requirements were met save and except those listed. It is true that the plaintiffs could see that some other items were unfinished. However, in listing some but not all Code defects, combined with his failure to indicate to anyone that he had not even done a final inspection despite the contents of the Township's own notice

(Exhibit 37), the permit negligently and mistakenly misrepresented its true more limited effect. The last inspection noted is "6. Final inspection for occupancy permit 48 hours" and the notice contains a statement indicating "full compliance with all the provisions of the Building Code Act". Mr. Huggett said he did not list more deficiencies simply because he ran out of space on the form. It was relied on by the plaintiffs to their detriment, and I find that their reliance on it was reasonable in the circumstances. The mere fact that the box 'partially completed' was ticked indicates nothing more to the reader than that the items listed were not complete and should be. Nowhere does the permit make clear that the inspector never checked and therefore could not verify the subsoil condition or weeping tile or the lack of insulation in a basement which had been added to the inspector's knowledge without any provision for it in the filed plans. Lack of basement insulation would have been visible on an inspection by the plaintiffs but not the significance of it, i.e. that it was a deficiency under the Building Code and the Township's by-law.

[para58] As to apportionment of liability in this case, the ignorance of building standards by the Mr. and Mrs. Larosee and their failures are complemented equally by the inadequacy exhibited by the Township's inspections and the ambiguous or simply untrue and certainly misleading occupancy permit. I would assess the liability of the defendants Mr. and Mrs. Larosee at 50% and of the Township at 50% in respect of the footings and basement insulation. Damages attributable to the failure of the water supply are the responsibility solely of Mr. and Mrs. Larosee.

Damages

[para59] The cost of drilling the new well is $4,472.60. It is clear that the dug well was improperly installed and could not be saved merely by a filter system. I see nothing unreasonable in the plaintiffs' action to replace what they were told was an adequate water supply by a drilled well. In addition, the plaintiffs seek $7,731.27 for various allegedly related expenditures. These consist of some 29 entries. I have reviewed the evidence on these claims. The following are allowed as damages for attempting to salvage the original well, alternate supply and regarding retainer of driller, drilling and connection to the new well:

Telephone Calls	$ 34.41
Bottled Water	$ 249.50
Preparation re well rear yard	$ 200.00
Preparation for water line - time	$ 418.00
Backhoe rental to dig trench for water line	$ 350.00
Fill for well	$ 375.00
Gravel re well rig to rear yard	$ 240.00
Top soil re trench and replacement well	$ 300.00
Pipe couplets for original well	$ 162.07
Sand point	$ 64.99
Hammer rental	$ 20.70
Plastic pipe to encase water line	$ 15.00
Cold water tank and pump	$ 2,772.71
Drilling well	$ 4,472.60
Clothing damage	$ 60.00
TOTAL	$ 9,734.98

[para60] I do not allow the remainder of the claims because they are unproven by receipts or other satisfactory evidence.

[para61] Mr. Mathon estimated the remedial work required to correct the subsidence and lack of weeping tile issues at $16,300.00

plus engineering design and certification	$ 2,500.00
TOTAL	$ 18,800.00

While the lack of base figures supplied to Mr. Mathon by a building contractor is troubling, there is no evidence to impugn the overall estimate which Mr. Mathon stands by. Given the difficulty of the work, I have no doubt the figures above are conservative. Mr. O'Hagan's criticism of the need for engineering services is noted but I accept Mr. Mathon's evidence of the need for them. He classed the work of Mr. Chapeskie to date as emergency-type, not lessening his estimate.

[para62] The expenses claimed by the plaintiffs for inspection and meeting with Mr. Wilcox are properly dealt with as part of the plaintiffs' costs. As to excavation and weeping tile work claimed by Mr. Chapeskie, I am not satisfied that it should be allowed in addition to the Mathon estimate. To do otherwise would in effect charge the defendants twice for the same work. Mr. Mathon stated that none of this work altered what he said was required and that includes weeping tile installation and all work required to repair the footings and foundation. Mr. Chapeskie plunged ahead with much of his labour without expert advice. I will leave it to the plaintiffs and their contractor to deal with any work not required due to Mr. Chapeskie's work and the portion due him, if any, for it.

[para63] As I stated earlier, I have found no evidence on which to place liability for fill and grading over the septic tank on the defendants.

[para64] The plaintiffs also claim general damages for hardship due to their lack of an adequate water supply from October 1992 until August or September 1993 when the new well was drilled and connected. I do not doubt that this was an inconvenience and a nuisance for them. The delay was caused because the plaintiffs lacked funds with which to pay. The only authority given to me to support an assessment on this account was Petruzzi v. Coveny, supra, which included a claim, not for lack of a potable water supply, but for mental distress caused by "distress and trauma" on account of many defects to a home. Damages for emotional upheaval were assessed at $4,000.00 in that case.

[para65] No similar remedy was granted in the various other cases cited to me. In this case, there was no medical or psychological evidence filed regarding any particular physical or mental problem caused to the plaintiffs. There is no doubt that this has been a most difficult experience for the plaintiffs. They are young and are now separated. No doubt the pressures and inconvenience caused by this situation contributed but, as in any human relationship, it is difficult to say that other factors of which I am unaware may not have caused a similar result in any event. Any happening of this nature is stressful as is the ensuing litigation. Without some evidence beyond the inconvenience suffered by the plaintiffs, which endured for a long time due to their own financial situation, and which I do not doubt was difficult, this claim for general damages is not assessable.

[para66] In summary, the plaintiffs shall have judgment as follows:

i) against Mr. and Mrs. Larosse alone	$ 9,734.98
ii) against the defendants Larosee (50%) and the Township (50%)	$ 18,800.00
TOTAL	$ 28,534.98

[para67] The defendants' cross-claims for contribution are dismissed.

[para68] Counsel may send written submissions on pre-judgment interest and costs, to me within 30 days, the plaintiffs' request to be within 2 weeks.
HOWDEN J.

Eramosa (Township) Chief Building Official v. Hilts

Between
David Sherratt, Chief Building Official for the Township of Eramosa, plaintiff, and
Louie Victor Hilts, defendant

[1997] O.J. No. 3693
DRS 98-04297
File No. 630/94

Ontario Court of Justice (General Division)
Guelph, Ontario
Langdon J.
September 8, 1997.

Counsel:
Elizabeth A. Waywell, for the plaintiff.
Hayes Murphy, for the defendant.

[para1] LANGDON J.:-- The Township applies for an injunction requiring Mr. Hilts to tear down a garage which he erected on his lot in the downtown area of the Village of Rockwood. For ease of reference I shall refer to the applicant as "The Township."

[para2] The buildings which were on the lot when Mr. Hilts acquired it before the 1987 fire had been used for commercial purposes for at least 60 years. In 1987 they were destroyed by fire. He rebuilt the buildings in two stages, the first more or less on the footprint of the former building, the second substantially different from the original.

[para3] In 1989, without securing the required building permit, he rebuilt a portion of the original structure which he used for light car repairs. The Township discovered that he had done so only some time after the building was complete and decided not to pursue the mater of the absence of a the permit. Mr. Hilts was made aware of the displeasure of the Township. The by laws in effect at the time would have permitted reconstruction of replacement buildings in the footprint of the old if the permit for reconstruction had been secured within one year of the fire.

[para4] In 1993, again without securing the required permit, he rebuilt the portion of the building he now uses for storage of cars and warehousing. The Township discovered that Mr. Hilts was building the 1993 portion before he had completed it.

[para5] He was served with orders to comply with the Building Code Act and twice with a stop work order. Despite the posting of these orders on site, Mr. Hilts completed construction. He reasoned that as the building was three quarters complete when the stop work order was served, he may as well finish it off.

[para6] Following a plea of not guilty and a trial, Mr. Hilts was convicted in Provincial Offences Court of building without a permit and disobeying a stop work order. Substantial fines were imposed on him. He did not appeal his convictions. Mr. Hilts still did nothing to secure a permit. In May 1994, the Township wrote him advising that he needed to apply for an amendment of the zoning by-law and a building permit in order to regularize the buildings. He ignored the letter. In September 1994, the Township commenced these proceedings. They were almost immediately adjourned to permit Mr. Hilts to apply for the requisite amendment and permit. In November 1994 Mr. Hilts filed his applications through one Logan, the planner he retained. The rezoning application requested that a full range of commercial uses be permitted although the property was an almost landlocked lot located behind other commercial buildings fronting on the street. Access to Mr. Hilts property was furnished only along a shared and narrow right-of-way. Logan and the Township's planner and engineer became involved in a dispute whether the survey which Mr. Hilts filed with his material was sufficient or whether, as Township personnel maintained, a much more detailed and expensive site plan was required. Mr. Logan declined to furnish the additional material which Township personnel demanded. A stalemate developed over that issue.

[para7] On June 6th 1995, the Township wrote Mr. Hilts and told him to complete his application in time for a council meeting to be held on June 19th. The Township specifically requested the disputed site plan, proof of Hilt's right of access along the right-of-way, information as to how municipal services might be supplied to the site, a list of what uses Hilts claimed to be legal non-conforming uses, and topographical and grading surveys. Logan refused to provide the additional material claiming that the information already supplied by Mr. Hilts to that date was sufficient for the Township to make its decision.

[para8] At its meeting, Township Council decided the application was premature and dismissed it. Hilts appealed the dismissal to the Ontario Municipal Board which held a full hearing in January 1996. At the time of the O.M.B. hearing, Hilts had proved his entitlement to access over the right-of-way but had not met any of the other disputed requirements. A further complication arose en route to the O.M.B. hearing. Because the right-of-way gave access to Provincial Highway 7 and the zoning involved a change of use, the Ministry of Transportation had to be consulted about the application. In the autumn of 1995 it stated its requirement for a traffic study. Mr. Hilts did not provide one.

[para9] Most of the facts involved in this application were fully litigated before the O.M.B. Although no argument was addressed to this issue before me, beyond suggestions in paragraphs 29 and 58 of the applicant's factum, it seems appropriate that the doctrine of issue estoppel should apply. I consider that where the Board decided factual matters, I ought to adopt those facts.

[para10] The existing zoning by-law divided Mr. Hilts site' into "hazard" and "residential" uses. The Township's new Official Plan, passed since the zoning by-law, converts the "hazard" designation to a "Natural Environment" designation, the two designations being reasonably consistent in substance. The New Official Plan converts the "residential" designation to "Commercial Core", a designation which would seem to be far better aligned with the actual characteristics of the property. The disputed buildings are situated on the residential/commercial core portion of the property. Before the O.M.B. Mr. Hilts made no claim for a legal non-conforming use. He agreed with the Township that he required a zoning by-law amendment in order to secure a valid building permit and that the new Official Plan should govern in considering the amendment to the zoning by-law; Mr. Hilts application to amend had been framed in that manner.

[para11] The Board noted that the reason given to amend the zoning was to legalize the existing use of the property but that the application sought an amendment which would not only permit the storage and light repair of cars - the present use - but would also permit the "full range of Zone 3 Commercial uses."

[para12] The Board dismissed Mr. Hilt's appeal from the Township's dismissal of his application to amend on 3 bases:

1. The uses proposed for the site by Mr. Hilts required the provision of full municipal services. The site enjoyed only well water. It had no septic system. The application did not adequately address the issue of the provision of services.

2. No information had been supplied by Mr. Hilts to satisfy the concerns of M.T.C. about vehicular access to Highway 7.

3. Mr. Hilts had not addressed valid concerns about either a site plan or storm water management. On the issue of the site plan, the Board decided that while a site plan is not usually required at the stage of applying for a zoning amendment, it would be required for issuance of a building permit. Because this building had already been erected without a permit, to grant the amendment without the site plan would be to "reward scoff laws by relieving them of ... analyses and site improvements that are required of the applicant who proceeds in a lawful manner."

The logic of this proposition is beyond dispute.

[para13] Mr. Hilts legal position on these facts is not a strong one to say the least. However, the issuance of an injunction is an equitable and discretionary matter. During the hearing certain issues arose which bore on the exercise of that discretion.

1. A former Township reeve, no longer in office at the relevant times, had written to council opposing Mr. Hilts' application. Unsolicited by either party he came forward to testify before the O.M.B.

2. The Township appeared to be placing obstacles, in the form of requests for additional information, in Mr. Hilts' path as his application proceeded.

3. Was the Township changing its position as to the provision of services as the matter progressed?

4. Was there possible discriminatory treatment of Mr. Hilts in the fact that a draft zoning by-law proposed by council after the new Official Plan designated a portion of the property in question as agricultural when the Official Plan designated it as commercial core?

5. Just before the O.M.B. hearing, counsel for Hilts arranged a settlement meeting with Township counsel. Just before it occurred the Township instructed its counsel not to participate in such a meeting.

[para14] Taken as a whole, these concerns if decided against the Township might well have supported a finding that the Township's actions here were being taken out of an oblique motive or in personam. It must be remembered that the area in question is rural and the village of Rockwood small.

[para15] I have concluded that there is no substance to the notion that the Township has acted out of improper motives.

1. The residence of the former reeve who displayed such an interest in the proceedings is situated within the area whose owners and occupants are entitled to notice of the zoning application. There is no direct evidence that the Township in any way encouraged or promoted his interest in the application. Thus the former reeve was within the class of persons whose interest in the application was recognized as legitimate. It appears to have been merely a coincidence that he was the former holder of political office in the applicant corporation.

2. The issue of additional obstacles was dealt with by the O.M.B. as noted above. There was a perfectly good reason for the Township to insist on a site plan and other related information that would not normally be required for a rezoning application, viz., that the building sought to be regularized had been already constructed without a permit.

3. The Township always recognized that there was no physical barrier to provision of municipal services. However, the Township did become concerned as to the location of those services. Considering that the right-of-way which alone provided access to a property for which the full range of commercial uses was being sought was but 20 feet wide, not to mention the potential legal difficulties of adding to the burden on an easement already in existence for many years, I must conclude that the Township's concerns were appropriate.

4. I have been persuaded that the draft by-law, (which was dropped like a bomb completely by surprise by Mr. Murphy on Ms. Waywell), which is still subject to public meetings and passage, properly places the property into a "holding" category. Counsel has pointed out that properties other than Mr. Hilts' are treated in the same way as his. These properties all share common characteristics in that they back on to a steep slope which is part of a Natural Environment zone and have highway access

only by right-of way. Moreover, Mr. Hilts and his planner were both aware of the proposed by-law and have chosen so far not to attend any meeting or submit any document of opposition to it.

5. As the O.M.B. hearing drew near, Mr. Hilts and the Township had been around the merry-go-round several times concerning their impasse over whether Mr. Hilts ought or ought not to provide site plan data to the Township as part of his rezoning application. Neither party had budged. In this context it is not surprising that the Township may have come to the conclusion that further negotiations in the absence of that material would be fruitless and thus a needless expense. Historically Mr. Hilts, despite having acted in an obviously illegal manner, to put it charitably, had never shown the least willingness to accede to Township requests except when under the gun because of litigation. In this context, I can not find anything improper in the Township's decision to proceed to the hearing without a last minute settlement meeting. Settlement negotiations did occur as the hearing proceeded.

[para16] Mr. Hilts' arguments against the injunction, not already disposed of are as follows.

[para17] Part of the agreement to adjourn the injunction proceedings at their inception was that the Township would cooperate with Mr. Hilts in the application which he agreed to prosecute for a rezoning and building permit. He says they have not done so. To cooperate does not mean to capitulate. On a broad overview of the circumstances it occurs to me that Mr Hilts' complaint of non-cooperation resembles the pot calling the kettle black.

[para18] The Township gave very short notice of its final meeting to consider Mr. Hilts' application. The council had waited over two years for movement on Mr. Hilts' part on the site plan issue. It was not forthcoming. The O.M.B. appeal was based in part on the shortness of this notice and was unsuccessful.

[para19] The Township ignored the recommendation of its own planner to recognize existing uses as least. However, Mr. Hilts application was not restricted to existing uses. Council was required to deal with an application to permit the full range of core commercial uses. As well, the O.M.B. did not give effect to this ground of appeal. That issue is another not to be relitigated.

[para20] The present use of the property complies with the new Official Plan even though the existing zoning by-law and the proposed by-law do not. A building which complies with the Official Plan ought not to be torn down. If this line of reasoning were correct then it would effectively emasculate s. 8 of the Building Code Act which prohibits construction of a building "unless a permit has been issued therefor by the chief building official." The would-be builder would only have to be certain that existing zoning by-laws permitted the use for which he intended his building and he could proceed. Such an interpretation would lead to chaos.

[para21] Even if I accept that Mr. Hilts reconstructed the first portion of the present garage in good faith and in ignorance of the requirement for a permit, a proposition which I would be most reluctant to accept, it is clear that he became aware of the requirement for a permit and that he ought to have got one. He was fortunate that the Township chose to let that sleeping dog lie. However, his decision, in the light of that history, to proceed with the extension without troubling himself to get a permit, and well outside the time frame of the by law which permitted reconstruction "in the footprint" can only be described as defiant. His later decision to finish the construction after a stop work order had twice been posted on site was downright contumacious. There is little, if anything, in what later occurred which suggests any change of attitude. He completed construction of the building after service of the stop work orders on May 18th and 20th 1993. One year later the Township wrote and advised him of what he needed to do to regularize the situation. In July 1994 he was convicted of the offences and fined $1,500.00. Still he did nothing. He was prompted to act only when this application was served. Only then did he begin the

process which had been outlined to him six months earlier in the letter of May 1994. Fully two years later the Township was forced to bring this matter to a head by fixing a date for the hearing of the rezoning application, the first stage of the process of regularizing the building.

[para22] After a careful examination of the facts I have found no proof of any sort of bad faith on the part of the Township. Certainly Mr. Hilts has not discharged the onus of proof, which lies on him, (Re Hewitson and Hughes, 31 O.R. (2d) 536 at 541), to demonstrate why this application should be dismissed. The court is always reluctant to make a mandatory order of so destructive a character. However, I see no alternative but to follow the words of Holland J. In Re Hewitson and Hughes, (supra):

> "These buildings are to be demolished because the failure to obtain a permit was deliberate and defiant and ... without any honest belief that such were not required." I add that their completion was proceeded with in the face of two stop work orders properly served. "To permit these buildings to remain standing in these circumstances would be to reward [Mr. Hilts'] offensive conduct."

[para23] Indeed, to permit this building to remain would encourage disobedience of and promote disrespect for the law. An order will issue for the demolition of that portion of the garage which was constructed in 1993.

[para24] Unless there are considerations of which I am unaware, in which case I may be spoken to, the applicant will have its costs of these proceedings throughout.

LANGDON J.

Forster v. Waterloo (City)

Between
John Forster, Appellant, and
The Corporation of the City of Waterloo and Gunther Trinkaus,
Respondents

[1993] O.J. No. 415
DRS 93-06223
Action No. 3415/92

Ontario Court of Justice - General Division
Kitchener, Ontario
Sills J.
February 12, 1993

John S. Doherty, for the Appellant.
Kimberly L. Evans, for the Respondents.

SILLS J.:-- This matter is an appeal from a decision of the Chief Building Official of the City of Waterloo by way of an application pursuant to Section 15 of the Building Code Act, R.S.O 1990, Chapter B-13. Section 15(3) of the said Act provides,

> "Where an application is made to a judge for a hearing under Subsection (1), the judge shall appoint a time for and hold the hearing and may rescind or affirm the order or decision of the Inspector or Chief Official or take such action as the judge considers the Inspector or Chief Official ought to take in accordance with this Act and the

Regulations, and for such purposes the judge may substitute his or her opinion for that of the Inspector or Section 6(1) of the said Building Code Act provides,

"The Chief Official shall issue a permit except where,

(a) the proposed building or the proposed construction or

demolition will not comply with this act or the building code or will contravene any other applicable law;"

The basic chronology of events leading up to this hearing are not in dispute, as follows:

May 11, 1992: Applicant submits proposed site plan to the Planning and Development Department of the Respondent corporation pursuant to Section 41 of the Planning Act;

May and June, 1992: Last extensive review of site plan by staff of the Planning and Development Department and submission of the site plan to the Site Plan Review Committee on May 25, 1992 and June 22, 1992;

July 15, 1992: Waterloo City Council received a report, PD92-40, prepared by Scott Amos of the Planning and Development Department recommending approval of the site,

landscape, and elevation plans and City Council deferred acceptance of the Report to its next regularly scheduled meeting on August 17, 1992. At the meeting on July 15, 1992, members of council requested legal advice as to whether they could defer consideration of the said Report and site plan until completion of a Neighbourhood Density Task Force Report;

July 27, 1992: Building plans were submitted by the applicant to the building department of the City of Waterloo seeking a building permit;

July 29, 1992: Council decided not to defer consideration of Report PD92-40 and consideration of the applicant's site plan until the completion of the Neighbourhood Density Task Force Report;

August 17, 1992: City Council considered reports PD92-40 and PD92-49 which latter report responded to previous inquiries from

members of council, both reports recommending approval of the site plan and confirming the full compliance with applicable zoning and site plan requirements. Council unanimously passed a Resolution refusing to approve the site plan and directing City staff not to issue a building permit. Subsequently, the Chief Building Official refused to issue the requested building permit citing the direction of council.

September 4, 1992: Notice of Application issued seeking "an Order directing the respondents to issue a building permit...". This application was made returnable on October 22, 1992.

October 21, 1993: Letter from counsel for respondents to counsel for applicant (applicant's supplementary record, Tab 5) advising, further to a recent telephone

attendance between the parties, "that a building permit with respect to the above-captioned property will be available once your client can satisfy

the three outstanding issues:

(a) The interior structure must confirm (sic) (conform) to the definition of apartment building. In this connection, Mr. Trinkaus has met with your client's draftsmen and expects this issue to be resolved this week.

(b) Engineering approval of storm water management, site servicing and outstanding connection changes. We understand that this within the control of your client and should be able to be satisfied this week.

(c) Site plan approval. In this connection, we understand that there have been discussions with Rob Deyman regarding the provision of additional parking facilities. It is our understanding that your client is amenable to addressing Mr. Deyman's concerns.

Once these issues have been addressed then Mr. Trinkaus will be in a position to issue the building permit requested.

We would be pleased to discuss the foregoing with you at your earliest convenience. Further, it would also be appropriate to discuss the disposition of your upcoming motion as soon as possible."

October 27, 1992: Revised building plans for building permit purposes submitted complete and in compliance with requirements of the Building Department;

November 16, 1992: Revised storm water management report approved by City Engineering Department;

November 18, 1992: Informal public meeting of City Council (pursuant to Notice dated November 5, 1992) with respect to re-zoning of applicant's land deleting "apartment swellings as a permitted used" in the zoning by-law. On November 16, 1992, City of Waterloo Planning Department released a report, PD92-74, regarding down-zoning of the applicant's property (among others) following upon the recommendations of the Neighbourhood Density Task Force which had reported to Council in Report PD92-59, dated October 2, 1992;

November 20, 1992: Request by Waterloo Planning and Development Department that applicant execute Site Plan Agreement which was done on that date. The Agreement was never executed by the City of Waterloo.

November 23, 1992: Letter from counsel for applicant to Ontario Municipal Board and City of Waterloo referring to the Ontario Municipal Board the refusal of Waterloo City Council to approve the site plan by its Resolution of August 17, 1992. This letter was received by

the City of Kitchener on November 24, 1992. Same date counsel for the respondent City had advised by letter of that date to counsel for the applicant of "the imminence of the issuance of a building permit";

November 24, 1992: Letter from counsel for respondents to counsel for the applicant (supplementary application record, Tab 22) noted that issuance of building permit is imminent. A sentence in the letter stated, "Perhaps it would be appropriate to discuss the disposition of your client's motion, now scheduled for December 21, 1992 in order that it may be resolved without argument".

November 30, 1992: Rob Deyman, Commissioner of Planning and Development for the City of Waterloo meets with neighbours with respect to the applicant's proposal;

December 7, 1992: Resolution of Waterloo City Council instructing its solicitors to oppose the application by the applicant for a building permit;

December 16, 1992: Formal public meeting of Waterloo City Council with respect to enactment of by-law down-zoning the applicants property to delete the uses required for the project which was the subject matter of the building permit application. The enactment of this by-law has been appealed by the applicant to the Ontario Municipal Board. Further, there is outstanding an application by the applicant for judicial review to quash the enactment of the down-zoning by-law.

The issue to be determined is whether the proposed building project, the subject matter of the building permit application, contravenes the Building Code Act, the Building Code or any other applicable law.

It is clear from the evidence in this case that the subject matter of the application for a building permit complies with the Building Code Act and the Building Code.

The position of the applicant is that Site Plan approval by Waterloo City Council is not an absolute pre-condition for issuance of a building permit and that the enactment of the down-zoning by-law subsequent to the building permit application is not a bar to the issuance of the permit sought. Further, the applicant contends that there was a settlement of this litigation, evidenced by letter dated October 21, 1992 from the solicitor for the respondent to the solicitor for the applicant which settlement was allegedly accepted through telephone communications between the solicitors on October 23, 1992 and October 27, 1992.

The position of the respondent is that Section 41(2) of the Planning Act and City of Waterloo By-Law 91-58 (Site Plan Control Area By-Law) constitute "other applicable law" which has not been complied with and that the absence of site plan approval constitutes an exception to the mandatory requirements of Section 6 of the Building Code Act justifying refusal to issue a building permit. Further, the respondent takes the position that there was no settlement of this application as alleged by the applicant.

Insofar as the legal principles to be applied are concerned, the applicant relies essentially on:

Re: Revenue Properties Co. Ltd. and the Corporation of the City of Toronto (1984), 26. M.P.L.R. 165, and,

Dominion Stores Ltd. v Borough of Etobicoke, (1982), 37 O.R. (2d) 661.

In Revenue Properties, the Municipality refused to consider applicant's application for site plan approval, refused to even examine the application for building permit and after the applicant applied for the building permit, council enacted a zoning by-law amendment that would prohibit the proposed construction by the applicant. The Municipality took the position that the applicant was not entitled to a building permit until site plan approval had been given. Matlow, J., at page 169, concluded that site plan approval by the municipal council is not an absolute pre-condition for the issuance of a building permit. He also concluded that issuance of a building permit prior to the granting of site plan approval would not result in any contravention of the Building Code Act and, in particular, in the circumstances of that case, that the proposed construction would not contravene any other applicable law merely because site plan approval has not been given. He

found that actual construction, If it were to proceed prior to site plan approval would be in violation of the Planning Act.

In Dominion Stores, the proposed use was, in all respects, in compliance with municipal zoning by-laws and the applicant had complied with all the requirements for issuance of a building permit and was prima facie entitled to it. The Municipality refused to issue the permit because it had not given developmental control approval under Section 40 of the Planning Act. The applicant applied, in that case, to the Division Court for judicial review. Galligan, J., at page 662, said:

> "The issue before this court is whether the Municipality is legally entitled to refuse to give developmental approval that ground. While a certain amount of discussion took place before us as to whether developmental approval
>
> under Section 40 of the Planning Act is or is not a condition precedent to the issue of a building permit, I do not think it is necessary for the purpose of this application to decide that issue. I am of the opinion, assuming without deciding that developmental approval is a condition precedent to the issuance of the building permit, that a municipality may not withhold such approval for a reason that is not authorized by law. If it were otherwise, an applicant's legal right to a building permit could easily be frustrated."

Then at page 665, Galligan said:

> "I do not think that a municipality is entitled to refuse developmental approval for an unlawful reason and thereby effectively frustrate a landowner's prima facie right to issue of the building permit. The Municipality withheld this building permit for a reason that is not authorized by law. It follows, therefore, that it must now issue it. In my opinion, therefore, the applicant is entitled to its building permit and the Municipality is ordered to issue it."

In dealing with the question of the exclusive jurisdiction of the Ontario Municipal Board to deal with matters of site plan approval, Galligan said, again at page 665,

> "If this case involved a legitimate dispute about details or terms (of site plan approval) there would be great force in that argument (that there is an alternative remedy and that therefore this court should refuse to exercise its discretion in favour of the applicant). But in this case I think that there is no legitimate dispute. There is what seems to me to be nothing more nor less than unlawful obstinacy. Therefore, I do not think that the applicant is required to go to the Ontario Municipal Board before coming to this court."

The respondent, with respect to the legal principles involved, relies essentially on:

(a) Quay West v Toronto, (1989), 47 M.P.L.R., 103, and,

(b) 861168 Ontario Inc. v Foreshew, (1991), 3 O.R. (3d) 721 and,

(c) 715113 Ontario Inc. v Ottawa, (1978) 63 O.R. (2d) 102

In Quay West, the applicant applied for a building permit and subsequently the Municipality passed an Interim Control By-Law under which a proposed condominium development was not a permitted use. The applicant sought mandamus compelling the issuance of a building permit and his application was dismissed. The Divisional Court in this case found that Section 34(9) of the Planning Act does not exempt the erection of the buildings for which a permit ought to have been issued before the effective date of the zoning by-law, but only buildings for which a permit has in fact been issued. The court further found that the Municipality was not under a duty to issue the permit when the application was originally made because at that time there had been no site plan approval. Further, the Divisional Court found that this was not a case where a permit should be issued despite the lack of such approval as the respondent Municipality acted in good faith and for a proper purpose in enacting the interim control by-law. At page 110, the Divisional Court found that the Municipal

Council had not acted in bad faith or for an improper purpose in enacting the Interim Control By-Law or that it was discriminatory or unreasonable such that the by-law ought to be

quashed. The court stated that the effective period for an Interim Control By-Law could not be extended beyond two years from the date of its original enactment. At page 111, Southey, J. said,

> "As a general rule, a building permit should not be issued for a development in a site plan control area to which Section 40 of the Planning Act applies until site plan approval for the development has been obtained from council or the Municipal Board.

At page 112, Southey, J. goes to deal with the Dominion Stores case the Revenue Properties case, as follows:

> "There are two decisions in which it was held that a building permit should have been issued, despite the lack of site plan approval (Re: Dominion Stores Ltd. and Re: Revenue Properties Co.). Both arose from extraordinary circumstances in which the Municipality was not acting in good faith or was refusing developmental approval for an obviously unlawfully reason. Having refused to quash the Interim Control By-Law in this case as one improperly enacted, I am not prepared to hold that this is one of
>
> those extraordinary cases in which the building permit should have been issued despite the absence of site plan approval."

Also in the Quay West case, Saunders, J., concurring in the result, said at page 112,

> "In my opinion such an order (mandamus) ought not to issue because of the existence of the Interim Control ByLaw and the provisions of Section 34(9)(b) of the Planning Act. I do not consider it necessary to decide whether the chief official was under a duty in August, 1988 to issue the permit despite the absence of a site plan agreement. It may be that such duty did exist on the basis of the reasoning in the Dominion Stores case."

861168 Ontario Inc. v Foreshew, was a decision of Taliano, J. of this court. The decision in that case was based on the finding that Section 40 of the Planning Act had no application in the particular circumstances of that case and that no site plan agreement or approval was required for that particular project. Accordingly, I find that decision to be of little assistance in this case.

715113 Ontario Inc. v Ottawa was a case which was referred to in Quay West (supra). This case too involved enactment of an interim control by-law which froze the use of the land in the area for a year while a review of land use policies for the area was undertaken. Henry, J. found that the interim control by-law was adopted for a valid public purpose, was non-discriminatory and that council acted in the public interest within the statutory authority for enacting interim control by-laws.

With respect to the issue of whether or not a settlement of this application had been reached between the respective solicitors, I find that the correspondence of October 21, 1992 and subsequent telephone discussions of October 26 and 27, 1992, did not constitute a settlement agreement. There is no written confirmation of what transpired in the oral discussions of October 26 and 27 and the letter of October 21, far from constituting an agreement, simply recited a series of outstanding issues of that time.

The important question in this case is whether site plan approval is a pre-condition to issuance of a building permit.

Southey, J., speaking for the Divisional Court in the Quay West case, expressed the view that "as a general rule" a building permit should not be issued until site plan approval has been obtained from council or the Municipal Board. However, in distinguishing the Quay West case from the Dominion Stores and Revenue Properties situations, he acknowledges that in extraordinary circumstances, where a municipality is not

acting in good faith or was refusing developmental approval for an obviously unlawful reason, it may be appropriate that a building permit should be issued despite the absence of site plan approval.

Accordingly, I find that site plan approval does not constitute an absolute pre-condition for the issuance of a building permit.

In Quay West and in 715113 Ontario Inc. (both supra), it was clearly established that the procedure followed by the municipalities in enacting interim control by-laws, was a non-discriminatory, valid exercise of a statutory authority in which there was neither bad faith or an improper purpose. From the material before me, it is obvious that the applicant herein

went to extraordinary lengths through his consultants to satisfy all of the requirements of the City of Waterloo and had every reason to expect that a building permit would issue. The matter of site plan approval had proceeded to a point where the applicant had signed a site plan agreement and returned it to the City for execution when council formerly approved the site plan and authorized execution of the agreement on the part of the City of Waterloo. The applicant had every reason to expect that that agreement would be executed. It is also obvious that the city council had authorized a neighbourhood density review and was awaiting receipt of the Neighbourhood Density Task Force report. In my view, the action of City Council in enacting a down-zoning by-law hard on the heels of the receipt of that report, having delayed its consideration of the applicant's site plan while at the same time instructing engineering and planning staff to continue negotiations with the applicant with respect to engineering and planning issues, constitutes bad faith and brings this applicant's situation into the category of extraordinary circumstances as referred to by Southey, J. in the Quay West case in his reference to the Dominion Stores and Revenue Properties cases.

Although the matter of site plan approval remains

outstanding and subject to the process provided for in the Planning Act and the site plan control area by-law of the City of Waterloo, that matter can and must be resolved before construction begins.

In the result, an order will go directing the issue of the building permit.

Costs of the application may be spoken to, arrangements to be made through the Trial Co-Ordinator at Kitchener.

SILLS J.

Re Friends of McNichol Park and Corporation of the City of Burlington et al.

31 O.R. (3d) 405
[1996] O.J. No. 4143
Court File No. 512/96

Ontario Court (General Division), Divisional Court,
Steele, McRae and Corbett JJ.
November 27, 1996

APPEAL under s. 26 of the Building Code Act, 1992, S.O. 1992, c. 23, from a judgment of Carnwath J. (1996), 33 M.P.L.R. (2d) 198 (Ont. Gen. Div.).

Rodney V. Northey and Richard J. King, for appellant.
Christopher J. Tzekas and Mike G. Kovacevic, for respondents, Corporation of the City of Burlington and Daniel B. Mousseau, Chief Building Official for the City of Burlington.
Kirk R. McPherson, for respondent, Joseph Brant Memorial Hospital.

The judgment of the court was delivered by

STEELE J.: -- This is an appeal under s. 26 of the Building Code Act, 1992, S.O. 1992, c. 23 (the "Act"), from the decision of Carnwath J. [(1996), 33 M.P.L.R. (2d) 198] made on an appeal under s. 25 of the Act from the decision of the Chief Building Official of the Corporation of the City of Burlington (the "City") to issue a building permit to Joseph Brant Memorial Hospital (the "Hospital") for the construction of a rehabilitation day clinic referred to as the Wellness House on lands owned by the City in an area referred to as McNichol Park (the "park").

The City purchased the park with the intention that a portion of the purchase price would be recovered from external sources on the sale of a portion of the lands to recover a minimum of 50 per cent of the acquisition costs. The easterly area of the park is designated as "Park" in the City's official plan. The westerly area is designated "low density Residential". The entire property is zoned "R1" residential. Notwithstanding submissions by the appellant I am satisfied that the building permit in issue applies only to a proposed structure in a portion of the westerly area of the park, which I will refer to as the site.

The City conducted a feasibility study as to how the park ought to be developed to meet the City's financial requirements while still providing a unique waterfront park. Notwithstanding recommendations against it by one of council's committee, in 1991 the City approved a strategic plan to retain most of the park as parklands and the promotion of partnerships between the City and private developers for the development and ongoing operations of the westerly area.

In 1992, 1993 and 1994 the City sought proposals for the development of the property and had extensive consultations with the public and public agencies. Council rejected the idea of retaining the whole of the park for parklands. In 1994 council approved a strategic waterfront plan calling for the maintenance and enhancement of the easterly area and partnership agreements for the development of the northwest quadrant in which the proposed Wellness House would be located and authorized Shoreacres Park (Burlington) Community Corporation ("SPCC") to submit a site plan application for the Wellness House. On April 3, 1995, SPCC submitted a formal application for the site plan approval as "applicant/agent". There was no reference as to SPCC actually intending to construct the Wellness House. The staff of the City reported to council that the park be used for a variety of uses in various areas including the Wellness House. It was acknowledged that some of the uses proposed for multiple residential use would require amendments to the City's official plan and zoning by-law.

A public meeting was held on June 21, 1995, to consider the site plan for Wellness House. It is the position of the City that this public meeting was not required by the Planning Act, R.S.O. 1990, c. P.13 (the "Planning Act"). On July 18, 1995, the City's Planning Department reported to a committee of council recommending that site plan approval be given subject to the condition that the Wellness House be operated and funded

by the Hospital and stated that the Hospital was a "Public Authority" within the meaning of the zoning by-law and its use was therefore not restricted. The report noted that 33 trees would have to be removed but that the City's "Tree By-law" required replacement tree planting to compensate for their removal. I should note that in an earlier report to council the Wellness House had been referred to as an institution.

Friends of McNichol Park ("FMP") was incorporated on August 4, 1995, and its objects relate exclusively to McNichol Park and include the beautification and preservation of the park as public parkland. Counsel advised the court that its membership consists of over 200 persons throughout the City of Burlington and that it is not composed of a group immediately adjacent to the park. Persons who subsequently became members of FMP on numerous occasions had objected to the development of any of the park including the construction of Wellness House. The overall objection was that it wished to preserve the lands for a park. It raised the issue of the need to rezone the northwest corner for multiple residential uses and its objection to them. It did not expressly raise the issue of the need of rezoning for the Wellness Centre until after the site plan was approved some months prior to the issuance of the building permit.

On August 14, 1995, the City's development committee and council considered the planning report. FMP appeared on three occasions including August 14, 1995, opposing the approval of the site plan application. Notwithstanding this council approved the application of the site plan for Wellness House. On August 17, 1995, counsel for FMP wrote to the City that it was FMP's position that the proposed use of the property for the purpose contemplated by the site Plan contravened the City's comprehensive by-law. On September 11, 1995, a formal site plan agreement was entered into between the City and the Hospital. In January 1996, the City and the Hospital entered into a 50-year lease for the site. On January 8, 1996, the hospital submitted an application for a building permit for site services and foundations for Wellness House. The Chief Building Official concluded that the application met all requirements of the Act, the Planning Act and the zoning and other by-laws of the city and the site plan and issued a building permit on February 8, 1996. On February 26, 1996, counsel for Friends of McNichol Park served a notice of appeal on the City and the hospital.

Carnwath J. heard and dismissed the appeal. After hearing argument on both the issue of standing and whether or not the building permit contravened applicable law, he concluded that FMP had no legal standing to bring the appeal. Having done so he did not find it necessary to consider the issue of the legality of the issuance of the building permit. He relied on the decision in Friends of Toronto Parkland v. Toronto (City) (1991), 6 O.R. (3d) 196, 8 M.P.L.R. (2d) 127 (Div. Ct.) (the "Parkland case"), and found that the facts were strikingly similar to the present facts. Quoting from the Parkland case he found this is "a battle which has been fought and lost" and he concluded that while FMP members considered themselves aggrieved, he did not believe that it was "reasonable" on their part to do so. He therefore exercised his discretion and found that FMP had no standing in this matter.

The relevant sections of the Act are as follows:

8(1) No person shall construct or demolish a building or cause a building to be constructed or demolished in a municipality unless a permit has been issued therefor by the chief building official.

(2) The chief building official shall issue a permit under subsection (1) unless,

(a) the proposed building, construction or demolition will contravene this Act or the building code or any other applicable law;

. . . . .

(3) Even though all requirements have not been met to obtain a permit under subsection (2), the chief building official may issue a conditional permit for any stage of construction if,

(a) compliance with by-laws passed under sections 34 and 38 of the Planning Act and with such other applicable law

as may be set out in the building code has been achieved in respect of the proposed building or construction;

. . . . .

25(1) Any person who considers themself aggrieved by an order or decision made by an inspector or chief building official under this Act or the regulations, except a decision not to issue a conditional permit under subsection 8(3), may, within twenty days after the order or decision is made, appeal the order or decision to a judge of the Ontario Court (General Division).

. . . . .

(4) If an appeal is made under this section, the judge shall hold a hearing and may rescind or affirm the order or decision of the inspector or chief building official or take such action as the judge considers the inspector or chief building official ought to take in accordance with this Act and the regulations and, for such purpose, may substitute his or her opinion for that of the inspector or chief building official.

. . . . .

26(1) A party to the hearing before the judge of the Ontario Court (General Division) under section 25 may appeal from the decision to the Divisional Court.

. . . . .

(3) An appeal under this section may be made on any question that is not a question of fact alone and the court may,

(a) confirm or alter the decision of the judge;

(b) direct the inspector or chief building official to do any act he or she is authorized to do under this Act;

(c) refer the matter back to the judge for reconsideration; or

(d) substitute its opinion for that of the inspector or chief building official or the judge.

With respect I disagree with the conclusion of Carnwath J. on the basis that he misunderstood the application of the Parklands case to the present and that he did not decide on the issue of whether or not the building permit was issued contrary to the Act. In my opinion the appeal from Carnwath J. is not on a question of fact alone. This court may therefore substitute its opinion for that of Carnwath J.

Under s. 8(1) of the Act no permit shall be issued where it will contravene "any other applicable law". It was conceded by counsel for the City that a prohibition of the use of land under the provisions of the zoning by-law is an applicable law. This is made abundantly clear by the provisions of s. 8(3) of the Act.

The zoning by-law of the City prohibits the use of land for all purposes except those permitted by the by-law. There are certain specific exceptions to this. The land in question is zoned R1 which does not expressly permit the use in question. One argument of counsel for the City was that the Wellness House was an institution. I can find no provision in the by-law permitting institutions in an R1 zone. They are permitted in at least one other defined zone.

The City relies on the provisions of the zoning by-law to say that the Wellness House is a "public authority".

The applicable provisions of the zoning by-law are as follows:

Public Authority

Means Federal, Provincial, or Municipal bodies and includes any commission, board, authority or department established by or for any of them.

. . . . .

2.19 USES NOT RESTRICTED

EXCEPT with respect to requirements for parking, and EXCEPT AS
otherwise specifically provided or limited, the provision of this By-law shall not apply to: --

Public Authority in any zone EXCEPT with respect to requirements for parking and EXCEPT AS otherwise specifically provided or limited, the provisions of this By-law shall not apply except in the case of an 03 zone to:

(1) Schools --

. . . . .

(2) Hospitals, Public

Subject to the following:

Lot Area -- 4 ha.

Set-back from any lot line -- 15.2 m

In addition, under s. 2.19 various specific uses such as places of worship, agricultural or farming use, nursing home or home for the aged, front yards and miscellaneous are specifically set out. Some regulations are applicable to each category.

In my opinion the Hospital is not a public authority within the terms of the zoning by-law. Public authority as defined does not specifically include a public hospital. It was argued that under s. 2.19 that use for a public hospital is not restricted in any zone. It is not desirable or necessary to decide this point on this poorly drafted by-law because the hospital concedes that even if such use is permitted that on the evidence it is clear that this site does not have sufficient lot area to comply with the exception.

It was argued that the hospital is a public authority because it is administered by a board and that it was established under provincial government authority and that most of its funding is provided by the provincial government. In other words, that it is a "board . . . established by or for" a provincial body.

In my opinion, this interpretation is fallacious. There is nothing in the provisions of the Public Hospitals Act, R.S.O. 1990, c. P.40 (the "Hospitals Act"), that incorporates a hospital. Section 4 of the Hospitals Act provides that no hospital may be incorporated under the Corporations Act, R.S.O. 1990, c. C.38, or under a private Act without the prior approval of the Minister of Health. Also, no institution, building or other premises may be operated or used for the purposes of a hospital unless it has received the approval of the Lieutenant Governor in Council.

The Hospitals Act defines a hospital as an institution. A hospital has a "board" that is the board of directors of a hospital. This does not make the hospital itself a board within the meaning of the zoning by-law. Even if it were a board within the meaning of the zoning by-law it is not one established by provincial body. A hospital is no more an establishment created by or for a provincial body any more than any private or public corporation incorporated under the Corporations Act or Business Corporations Act, R.S.O. 1990, c. B.16. The decisions in Schnurr v. Royal Ottawa Hospital (1986), 56 O.R. (2d) 589 at p. 593, 31 D.L.R. (4th) 429 (C.A.), and in Stoffman v. Vancouver General Hospital, [1990] 3 S.C.R. 483 at p. 513, 76 D.L.R. (4th) 700 at p. 739 are consistent with my view that a public hospital is not a public authority. For these reasons an amendment to the zoning by-law is required if the Wellness Centre is to be constructed on this site. Therefore the building permit was improperly issued in contravention of an applicable law.

The next question is whether the FMP has standing to launch the appeal from the issuance of the building permit.

Section 34 of the Planning Act sets out a procedure whereby a municipal council may pass zoning by-laws or amendments thereto. This procedure requires information to be made public

as to its intent and that notice and, at least one public meeting be held. After the by-law is passed the clerk must give notice thereof. Any person who has been given notice may appeal to the Ontario Municipal Board (the "OMB"). The OMB shall hold a public hearing and has the power to approve or repeal the by-law. There is no reference to a "person who considers themselves aggrieved" by the decision of council to pass the zoning by-law. The persons who may appeal to the OMB would include any member of FMP and in my opinion this includes FMP itself: see Energy Probe v. Canada (Attorney General) (1989), 68 O.R. (2d) 449, 3 C.E.L.R. (N.S.) 262 at p. 282. There is no provision in the Planning Act and/or the Act that an objector must be a ratepayer. Reference is made only to a "person". By virtue of s. 29 of the Interpretation Act, R.S.O. 1990, c. I.11, a person includes a corporation. In Loblaws Inc. v. Ancaster (Town) Chief Building Official (1992), 12 M.P.L.R. (2d) 94, 95 D.L.R. (4th) 695 (Ont. Gen. Div.), a corporation was allowed standing in a matter involving the Act. I do not read the Parklands case as refusing standing merely because the applicant was a corporation.

The real issue of standing is whether or not FMP is "a person who considers themselves reasonably aggrieved": see Parklands, supra, at p. 204. The test is set out in Parklands at p. 205 as follows:

> The words of s. 15 of the Building Code Act represent an express provision intended by the legislature to be dispositive of the question of standing under that statute. While the word "aggrieved" is not to be understood in some traditional sense relating to a person's legal interest, nevertheless, the legislature clearly intended that some threshold test be applied and it would be inappropriate to leave the whole matter either to the subjective whim of the appellant or solely to the discretion of the court. The word "aggrieved" is to be considered in its ordinary dictionary meaning and not as a legal term of art. It is used today only in the passive voice referring generally to distraught or agitated states of mind. Persons who consider themselves aggrieved are persons who consider themselves wronged by a decision of the Chief Official within the context of the Building Code Act. In our view, persons may be aggrieved within the meaning of that term in s. 15 though they have suffered no legal harm. It is the responsibility of the courts, when requested to do so, to determine if a particular administrative action is legitimately within the scope of the statutory power and an appeal is not to be barred simply because the appellant does not have a personal proprietary or pecuniary interest.

On the facts before us, it is clear that the appellants have a different approach to the appropriate use of parks and park lands. Their main objective was to prevent or obstruct the construction of the community centre project. This was a battle which they had fought and lost. Questioning the parking component of the building permit as constituting a violation of the by-law was a last effort to realize their goal. Considering the history of their involvement, it is doubtful that they considered themselves aggrieved by the underground facilities for parking permitted by the building permit. But even if they did, in our opinion, Hoilett J., exercising his discretion as he did, came to the proper decision. Every superior court has the inherent jurisdiction to protect the integrity of its own process.

It should be noted that in Parklands the matter before the OMB was the approval of a capital expenditure. The general objections to infractions of the zoning by-law were referred to before the OMB but it was not the issue before the OMB.

I agree with the analysis of Parklands with respect to standing set out by Feldman J. in Loblaws Inc., supra, at p. 99 as follows:

> The best source of analysis for the scope of standing under the section is the Friends case itself. In that case, the court allows for the broadest of nexus between the interests of the applicant and the decision to issue the building permit. In that case, the appellant public interest group had no proprietary or pecuniary interest in the decision, but rather felt that the development in question was not in the public interest for various reasons. The court would not have denied them standing on that basis, but because they had already tried to stop the development through several other

routes within the planning process, with no success, the court was of the view that the applicant was now trying to use an appeal regarding the alleged non-compliance of the parking component of the permit as another route to accomplish their original purpose, and questioned the bona fides of their subjective feelings of being aggrieved by the decision to issue the permit.

In the present case the Town has been aware that zoning has always been in issue. The town incorrectly believed that the Wellness House complied with its by-law. The appellants have always said that it did not. Reference is made in Parklands that no ratepayer had come forward to resolve the issue in court. This obviously was a reference to s. 327 of the then Municipal Act, R.S.O. 1980, c. 302. It was in a context of a 10-year process. In my opinion, this does not preclude a reasonably aggrieved person from immediately pursuing its rights under the Act where a by-law is contravened.

Counsel for the City argued that FMP should have brought an application under rule 14.05(3)(d) of the Rules of Civil Procedure to determine rights on the interpretation of the zoning by-law and therefore should not be allowed standing. In my opinion, it was equally open to the City itself to bring such an application after it was advised that any issuance of a building permit would be challenged. I do not believe that this should preclude FMP in the present case. It is clear that in Parklands the court felt that the questioning of the parking area was a last effort attempt to obtain success in a "battle which they had fought and lost".

In the present case Carnwath J. considered the issues and concluded that the case was strikingly similar to Parklands and exercised his discretion not to grant standing to FMP and found it unnecessary to consider the issue of the contravention of the zoning by-law.

While this court should not readily substitute its discretion for that of a judge of first instance, s. 26(3) of the Act clearly contemplates that this court can substitute its opinion for that of the judge. In the present case I believe that this court should so substitute its opinion.

In my opinion, the issuance of the building permit was a clear violation of the zoning by-law. The objection by FMP was not in "a battle that they had fought and lost" in the same sense as in Parklands. In the present case FMP has lost a decision made by the City but one that has not been considered by any outside body. The objection to the building permit is in the same battle.

FMP has a legitimate interest not only in preserving the parkland but is reasonably aggrieved by the issuance of the building permit because it is deprived of its right to oppose any rezoning by-law before the OMB. Their objection is not a last minute, last ditch fight made without good faith as was the case in Parklands.

For these reasons the appeal should be allowed, the order of Carnwath J. should be set aside and the decision of the Chief Building Official to issue Building Permit No. D17086 should be rescinded.

The appellant should have its costs fixed at $4,000 payable by the City and $1,000 payable by the hospital.

Appeal allowed.

Lofaro v. North York (City) Chief Building Official

Between
Joseph Lofaro, Applicant, and
E. Yaman Uzumeri, Chief Building Official and Building Commissioner of The City of North York, Respondent

[1992] O.J. No. 1493
DRS 93-00587
Action No. 17/91 and 439/91

Also reported at:
11 M.P.L.R. (2d) 278

Ontario Court of Justice - General Division
Toronto, Ontario
Sheard J.
July 14, 1992

K.D. Jaffary, Q.C., for the Applicant.
I.M. Shachter, for the Respondent.

SHEARD J.:-- These two applications were presented together. I will deal with them in the order in which they were originally filed. The parties are the same in both applications and both involve the same property.

In his application numbered 17/91, filed January 10, 1991, Mr. Lofaro seeks an order rescinding the revocation by Mr. Uzumeri, the Chief Building Official of the City of North York, of a building permit issued to Mr. Lofaro on January 25, 1990. This permit was revoked on July 6, 1990.

The notice of application cites the relevant sections of the Ontario Building Code Act, R.S.O. 1980, c. 51, those being sections 6(4) and 15:

s. 6(4) Subject to section 15, the chief official may revoke a permit,

(a) where it was issued on mistaken or false information;

(b) where, after six months after its issuance, the construction or demolition in respect of which it was issued has not, in the opinion of the chief official, been seriously commenced; or

(c) where the construction or demolition of the building is, in the opinion of the chief official, substantially suspended or discontinued for a period of more than one year.

s. 15 (1) Any person who considers himself aggrieved by an order given or a decision made by an inspector or chief official under this Act or the regulations may, within twenty days after the order of decision is made apply to the judge of the county or district court for a hearing and appeal.

(2) [Not applicable here.]

(3) Where an application is made to a judge for a hearing under subsection (1), the judge shall appoint a time for and hold the hearing and may rescind or affirm the order or decision of the inspector or chief official or take such action as the judge considers the inspector or chief official ought to take in accordance with this Act and the regulations, and for such purposes the judge may substitute his opinion for that of the inspector or chief official.

(4) [Not applicable here.]

(5) A judge to whom application is made for a hearing under subsection (1) may extend the time for making the application either before or after expiration of the time fixed therein where he is satisfied that there are prima

facie grounds for granting relief to the applicant pursuant to a hearing and that there are reasonable grounds for applying for the extension and may give such directions as he considers proper consequent upon the extension.

The subject property is municipally known as 752 Glengrove Avenue, on the north side of the street. The existing house in 1989 was a bungalow. Mr. Lofaro wished to renovate this house extensively, for the use of him and his family. In April, 1989, he obtained approval from the Committee of Adjustment for three minor variances, to add an extension at the rear and to change the house from a bungalow to a two-storey dwelling. These variances all involved setbacks, as follows:

1. Front yard setback of 5.44m (whereas the bylaw required 5.75m.)

2. West side yard setback of 1.03m (whereas the by-law required 1.8m.)

3 East side yard setback of 1.25m (whereas the by-law required 1.8m.)

Mr. Lofaro is a building contractor and intended to oversee the construction work himself. In the course of the summer of 1989 he decided to revise the plans, to make the house larger. He applied again to the Committee of Adjustment, requesting four further variances for the proposed additions:

1. Length of dwelling approximately 20.14m (whereas 16.8m is permitted.)

2. Lot coverage of approximately 41.98%

3. Front yard balcony area of approximately 18.76m2 (whereas a maximum balcony area of 3.8m2 is permitted.)

4. Rear yard balcony area of approximately 23.2m2 (whereas a maximum balcony area of 3.8m2 is permitted.)

The Committee of Adjustment refused this application, upon the grounds that the variance was not minor, was not within the general intent of the zoning by-law and was not an appropriate development of the property.

Mr. Lofaro revised his plans to accord with the variances that had been granted to him on his earlier application and he was issued a building permit in January, 1990.

Work began in May, 1990; the demolition and excavation part of the work began on June 26. The next day the east and west walls were demolished. On July 3 Mr. Lofaro had a meeting with Mr. Uzumeri in which he explained that the demolition of these walls had been done by mistake by an employee of Walter's Demolition, the demolition and excavating contractor hired by Mr. Lofaro.

Mr. Uzumeri accepted Mr. Lofaro's explanation of how these walls had been demolished and authorized the continuation of the excavation and construction under the building permit.

The next day, July 4, the west foundation wall was removed and replaced by a new wall eight inches further back from the lot line to give extra clearance to the gas line. Mr. Lofaro explains in his affidavit that he authorized this to be done because the excavating had disclosed that the western wall was structurally unsound. In his affidavit he says that he telephoned the building inspector to discuss the problem of this wall but that he was told the inspector was out on inspections and could not be reached and that he gave the instructions to remove this wall because the contractor was moving on to another site the next day and Lofaro could not afford the delay or the expense of hiring a new contractor.

In his affidavit, the building inspector, Michael Liao, says that when he attended the site on June 27 he found that a major portion of the foundations and footings and basement

slab had been removed, and all of the floor joists of the house, as well as the east and west walls. The building permit plans show that the foundations, footings, basement slab floor joists and east and west first floor walls were to remain. Mr. Uzumeri, in his affidavit, says that when Mr. Lofaro met him on July 3 regarding the demolition of walls, Mr. Lofaro did not mention the removal of the portions of the foundation, nor of the footings, basement slab, and floor joists.

In his affidavit Mr. Liao says that he attended the site on July 4 at approximately 10:00 a.m. and saw that the foundation and footings had been demolished, leaving only a short length of foundation on the east side of the project; that the interior of the project had all been removed. Attached as Exhibit B to Mr. Liao's affidavit are two photographs which he says he took at approximately 10:00 a.m. July 4, 1990, showing what appears to be a below-grade excavation with a section of block foundation wall showing.

Further photographs, which Mr. Liao says he took on August 16, are attached to his affidavit as Exhibit C, showing newly constructed foundation walls built in the excavation, which photographs, Mr. Liao attests, accurately represent the state of the project as at July 6, the date on which Mr. Uzumeri revoked the building permit and work ceased.

It is common ground that the section of the east foundation wall, approximately 23 to 24 feet long, was all that remained of the original building after the completion of the demolition stage of the project, at which point reconstruction began, continuing briefly until the Notice of Revocation of the building permit was delivered to Mr. Lofaro July 6.

Mr. Uzumeri's decision to revoke the building permit was made (according to his affidavit) on the basis of information given to him by Bill Ross, the senior residential plan examiner, "that virtually all of the foundation, footings, basement slab and floor joists for the house were gone, the debris had been cleared away and workmen appeared to be in the process of building a new foundation in non-compliance with the Building Permit Plans."

Mr. Ross, in his affidavit, refers to his having attended at the site on July 4 at approximately 12:30 p.m. in consequence of a report to him from Mr. Liao. Mr. Ross's description of the site as he found it on July 4 is the same as in Mr. Liao's affidavit and he confirms the accuracy of Mr. Liao's two July 4 photographs except that at the time of his attendance workmen appeared to be laying blocks on tap of the footings at the rear of the project.

Mr. Uzumeri in his affidavit says "...it is my opinion that Mr. Lofaro is not adding an addition to his house but, in fact, is building a new house under the guise of constructing an addition to the existing house."

Mr. Schacter submits that the extent of the demolition was so extensive that an inference can be drawn that it was intended by Mr. Lofaro at the outset to simply demolish the existing house and build a new one.

As indicated, there are areas in which the affidavits filed on each side are in conflict as to the facts. The notable example is Mr. Lofaro's account (in his affidavit sworn January 3, 1991) of the circumstances attending the demolition of the western foundation wall on July 4, 1990. He attests that on that day he was on site and observed the foundation wall beginning to crack and fall inwards; that after consultation with his contractor, Terry Walters, he decided the wall was structurally unsound and would have to be replaced; that he telephoned the building inspector (whom on cross-examination he said was Michael Liao) but could not reach him, so he decided the demolition and reconstruction of the foundation wall had to go ahead.

By contrast, Mr. Liao attests that at 10:00 a.m. of that day, July 4, he took two photographs, one of which shows the western foundation wall gone. Mr. Ross confirms those photographs, from his attendance on the site which he attests was at approximately 12:30 p.m. the same day.

This conflict between the affidavit of Mr. Lofaro and

those of Mr. Liao and Mr. Ross is but one example of areas in which factual issues are apparent.

What is the fundamental issue is whether or not Mr. Lofaro provided false information as to his construction plans at the time that he applied for the building permit that was issued to him. Mr. Uzumeri, on the basis of the sequence of subsequent events recounted to him by the building inspector, Mr. Liao, and by the senior residential plan examiner, Mr. Ross, has concluded that Mr. Lofaro did provide false information; that his intention was to build a new house "under the guise of constructing an addition to the existing house."

It is clear that there was evidence presented to Mr. Uzumeri that can justify the conclusion he reached, and accordingly justify his revocation of the building permit.

It is not possible for me, on the basis of affidavits, even including transcripts of cross-examination on those affidavits, to reach factual conclusions as to matters that remain in factual conflict.

The decision reached by Mr. Uzumeri appears to me to have been made responsibly in the discharge of his duty as chief building official, and on the basis of evidence which reasonably led to his conclusion.

The facts here are similar to the facts in Re Budman and Corporation of the Town of Gravenhurst, et al. (1983), 24 M.P.L.R. 195 (Divisional Court) where a builder's permit was issued to permit an addition to an existing cabin (pursuant to a minor variance granted by the Committee of Adjustment) and the building permit was revoked when the former building was demolished except for some building blocks lying on the ground that had formed its foundation. The basis of the revocation there, as here, was s. 6(4)(a) of the Building Code. The Divisional Court dismissed the appeal from the decision of the District Court judge who refused to restore the permit.

The application for an order rescinding the revocation of the building permit is dismissed. It is not necessary to address the issue of the request for an order extending the time for making the application.

Mr. Lofaro's second application, file numbered 439/91, is an appeal from the refusal to issue either one of two further building permits sought by Mr. Lofaro.

The first of these was a permit applied for by Mr. Lofaro May 15, 1991, to reconstruct demolished walls and foundations (the "reconstruction permit"). This branch of the appeal need not be considered further, as a result of my dismissal of Mr. Lofaro's application seeking rescission of the revocation of the original building permit (issued January 25, 1990). The reconstruction permit, if issued, would have been supplementary to the original building permit; it could not function standing alone.

The second branch of appeal numbered 439/91 arises from Mr. Lofaro's application, dated June 18, 1991, for a permit to construct a complete house (the "house permit"). This application was refused July 10, 1991.

The sequence of events and decisions that led up to this appeal includes the following:

In August, 1990, the month following the revocation of the original building permit, Mr. Lofaro applied to the Committee of Adjustment for minor variances to permit the foundation walls to remain as constructed as well as reconstruction of first floor walls. This application referred to the previously approved second storey addition and a twostorey addition to the rear. The variances requested were to permit side yard setbacks (both east and west sides) and front yard setback less than required by the applicable by-law.

It should be noted that in April, 1990, a new by-law, number 31181 (and related by-laws 31182 and 31183), were passed by the City of North York. This by-law, among other provisions, increased the front yard setback from 5.75m to 7.5m. It did not alter the sideyard setbacks.

Mr. Lofaro's fresh application for minor variances was

adjourned by the Committee of Adjustment from time to time, in the course of which new elements were added (dwelling height and driveway slope) which Mr. Lofaro asserts were injected by committee members, not requested by him.

On October 4, 1990, the Committee of Adjustment refused the application, stating as its reasons that "the variance is not minor, is not within the general intent of the Zoning By-law and Official Plan and is not an appropriate development of the property."

The variances shown in the decision as having been requested are the following:

1. Front yard setback of approximately 5.44m to proposed additions WHEREAS 7.5m is required;

2. West side yard setback of approximately 1.2m to proposed additions WHEREAS 1.8m is required;

3. East side yard setback of approximately 1.25m to proposed additions WHEREAS 1.8m is required; and

4. Dwelling height of approximately 10.14m WHEREAS 8.0m is required.

As has been mentioned the new by-law 31181 increased the front yard setback to 7.5m. Requested variance number 1 reflects this change; the variance previously granted by the Committee of Adjustment on April 20 1989 was the same 5.44m from 5. 75m. The requested variance number 2, of 1.2m on the west side appears to reflect the slightly relocated west wall which Mr. Lofaro had built 8 inches or so farther in from the lot line than the wall he had removed. The April 20, 1989 variance had permitted a west side yard setback of 1.03m.

The requested variance number 3 (east side yard setback of 1.25m versus 1.8m required) was identical to the variance granted in April, 1989. It is not altogether clear why Mr. Lofaro applied a second time for this variance, in view of his submission that the original variances continued in force. The words "to proposed additions" indicate the basis on which the application was made, although that phrase would appear to be inappropriate considering the virtually total demolition of the original building by July, 1990.

The inclusion of a requested height variance is disavowed by Mr. Lofaro, as has been mentioned.

Mr. Lofaro appealed the October 4, 1990 refusal of the Comments of Adjustment to the Ontario Municipal Board. In addition, he also joined other landowners in a multi-faceted appeal to the O.M.B. of the new By-laws 31181, 31182 and 31183.

The Board that decided the last mentioned appeal was composed of Messrs. P.H. Howden and C.A. Harrow The lengthy decision of the Board, dealing with the numerous appeals before it, was delivered by Mr. Howden on March 27, 1991. This decision exempted the Lofaro property from By-law 31181, subject to certain conditions.

The Board that decided Mr. Lofaro's appeal from the refusal of the Committee of Adjustment to grant him variances gave its decision the following week, on April 2, 1991, per Mr. M.A. Rosenberg, one of the members who sat on that appeal. Although Mr. Rosenberg refers to Mr. Howden's decision, he dismisses Mr. Lofaro's appeal from the Committee of Adjustment's refusal to grant the variance from the previous By-law 7625, for the same reasons as given by the Committee of Adjustment.

Mr. Howden ordered that Mr. Lofaro's property be exempted from the By-law 31181 changes, provided that (i) the building permit application and permit are to be strictly in compliance with the plans submitted for the original building permit, and (ii) the house is in the same location on the lot as in those plans.

Mr. Howden's reasons for the Board's decision are as follows:

It is settled beyond all doubt that the building plans, with which the Lofaros wish to proceed (Exhibit 11) are

exactly the same plans which were before the Committee of Adjustment when their variance application was approved and which were reviewed in full by the City and approved in all respects. The building permit issued well before the by-laws now before the Board were passed. The only reason for this house not being completed is the accidental slippage of one wall from the former house. As a result the permit was revoked and the City refused to issue another due to the intervening passage of By-law 31181, which alters the former law on substantial demolition.

The Board finds that this matter falls within the fairness principles used by the City to grant the three exemptions in By-law 31183. The plans and application went through a full public process prior to By-law 31181 and were fully approved before enactment of that bylaw. The only difference will be that one wall will not be the pre-existing wall from the former house on the site; its replacement is to be in exactly the same location.

The understanding of the facts on which that Board's decision was based is clearly incorrect as to the extent of the demolition. Whether that Board would have reached the same conclusion on a more accurate understanding of the facts can only be speculated on. By comparison, the summary contained in the decision of the differently constituted Board on April 2 appears to be based on an accurate understanding of the facts.

While this application cannot involve a review of either of the Board decisions, they are each referred to and relied upon by the parties in this application and I do not think it is inappropriate for me to make the foregoing comments as to these disparate decisions.

The essential issue here is whether the original variances granted by the Committee of Adjustment, on which the now revoked building permit was granted, can still be relied on by Mr. Lofaro.

The March 27, 1991 Ontario Municipal Board order exempts the projected building from By-law 31181, provided it complies with the plans approved on January 24, 3990, and the house is located on the lot as those plans and the Committee of Adjustment decision of April, 1989, contemplates.

Notwithstanding, it is still necessary to comply with Zoning By-law 7625. The position of Mr. Uzumeri in effect is that the 1989 variances are now defunct, because of the virtually total demolition of the building. Mr. Lofaro's answer is that the variances were not granted subject to any conditions and that the house he wishes to build is the same house as he originally sought to build.

It is significant that the original variances were each described in the decision of the Committee of Adjustment as setbacks "to the existing dwelling," with the word "existing" in the decision emphasized by underlining. The variances were sought for an existing dwelling; they were granted for an existing dwelling. While, as Mr. Jaffary says, the variances were not made subject to explicit conditions, the references to an "existing dwelling" virtually amount to making it a condition that the variances be implemented, not at large, but in reference to the existing dwelling. That dwelling ceased to exist, except for a fragment of foundation wall, as a result of the demolition during the last week of June and the first week of July, 1990. After that it would seem to me to be of dubious relevance to seek to determine what part of the demolition was by accident and what part by intention. It is clear from the evidence presented by Mr. Lofaro d that he intended the major demolition as being at least an implicit requirement of his submitted plans, notwithstanding that those plans showed parts of the house which were to remain which he said on cross-examination were so shown in error and that he would have deleted such references if he had noticed them in the plans.

Whatever the reasons, the dwelling no longer exists.

In his submission Mr. Jaffary referred to the judgment of Judge Gibson (as he then was) in Molyneux v. Nixon (unreported, reasons delivered orally July 2nd, 1986.) In that case the owner applied for an order authorizing changes in the

construction of substantial alterations to a dwelling which was being converted from a bungalow to a larger two-storey house. The respondent chief building official asked Judge Gibson to revoke the building permit as having been issued on the basis of mistaken or false information. Judge Gibson declined to revoke the building permit and granted the authorizing order requested by the owner.

There are important factual differences between Molyneux v. Nixon and the case before me, including that the demolition in Molyneux was envisaged under the permit and that the building had been substantially completed and was being lived in before the case came before Judge Gibson. There are no principles stated by Judge Gibson which come into play in the application before me and despite a superficial factual similarity there are factual differences which lead me to a different conclusion.

In my opinion the refusal to grant the building permit applied for June 18, 1991 (the "house permit") was justified. This application accordingly must be dismissed.

The costs of both applications should follow the event and be to the respondent, subject to submissions of counsel if requested, including submissions directed to having me fix the costs rather than having the costs otherwise assessed. If so, arrangements can be made through my secretary for me to hear submissions.

SHEARD J.

Mississauga (City) v. Vandenbergh

Between
The Corporation of the City of Mississauga and Agris Robeznieks, Chief Building Official for the Corporation of the City of Mississauga, applicants, and
Barbara Vandenbergh, Barbara Ross and Barbara Ross also known as Barbara Ross Vandenbergh, respondent

[1998] O.J. No. 15
DRS 98-03280
Court File No. A4740/96

Ontario Court of Justice (General Division)
Brampton, Ontario
MacKenzie J.
January 7, 1998.

Counsel:
B. Duxbury, for the applicants.
R.T. Beaman, for the respondent.

MACKENZIE J.:--

NATURE OF THE PROCEEDINGS

[para1] The Corporation of the City of Mississauga (the City) and Agris Robeznieks, the chief building official for the City (the C.B.O.), bring an application pursuant to s. 38(1) of the Building Code Act, S.O. 1992, Ch. 23; s. 328 of the Municipal Act, R.S.O. 1990, Ch. M.45, as amended, and Rule 14 of the Rules of Civil Procedure. In the application, the City and the C.B.O. seek various heads of relief by way of restraining and mandatory orders pertaining to the use and occupation of certain premises in the City of Mississauga owned by the respondent. The grounds for the relief are centred essentially upon the alleged non-compliance by the respondent with the Building Code and land use control by-laws of the City of Mississauga, all in relation to two parcels of real property owned by the respondent in Mississauga.

[para2] By agreement, counsel for the applicants and the respondent have limited the scope of matters for determination at this stage in the proceedings as to whether or not at the material times there were more than two dwelling units in one of the subject parcels; namely, 1168 Stavebank Road, Mississauga (the premises) and as to the effect on the premises of the Building Code Act, the land use control/zoning by-laws of the City and Ontario Regulation 384/94 under the Planning Act.

FACTUAL BACKGROUND

[para3] There are several undisputed facts in the evidence elicited on this application:

1. The building on the premises has from its inception been used for residential purposes and was used as a single family residence immediately following its construction.

2. The designated land use for the premises and the building is contained in the City's zoning provisions designated as R1-section 1821 of Mississauga By-law 247 of '94, enacted May 25, 1994 (The By-law).

3. The respondent and her late husband acquired title to the premises on or about the 3rd of July, 1987.

4. At the time of acquisition of the premises, two self-contained dwelling units, i.e. with no access by either of them to the other, were within the building on the premises.

5. At some time following their acquisition of the property, the respondent and her late husband (who died in December of 1994) arranged for two additional self-contained units to be created so that prior to 1990, there existed four self-contained dwelling units within the subject building, two at the front of the building on an upper level and two at the rear of the building on a

lower level.

6. Following a complaint in 1995 from a neighbour of the respondent's premises, the City's building department became involved and determined that renovation construction to the building on the premises was being undertaken by the respondent without a building permit.

7. In July of 1995, the respondent applied for and obtained a building permit for the premises dated July 19, 1995. In the application for the building permit, the following particulars apply:

> "Class of permit - structural component
> Permit type - detached dwelling
> Scope - additions and alterations
> Comments - rear addition."

The type of permit, scope of permit and comments in the issued permit, were identical to those items as set out in the application.

ISSUES

[para4] As indicated in the introductory paragraph of these reasons, the court will only make factual findings relating to the number of dwelling units in the building on the premises at the material time and the construction of the applicable laws to such findings of fact.

[para5] In the result, the only issue for determination and ruling at this time is the number of residential dwelling units permitted to continue in the building on the premises.

ANALYSIS

[para6] In order to make such determination and ruling, it is first necessary to determine,

1. the number of residential dwelling units in the subject building on the premises prior to the respondent's acquisition of title to the premises in July of 1987; and

2. the number of residential dwelling units in the subject building prior to November, 1990 and prior to the coming into force of Ontario Regulation 389/94 and the construction without permit by the respondent of the alterations to the subject building in the late spring and early summer of 1995.

[para7] As previously indicated, the evidence is uncontroverted that the subject dwelling, although designed as a single family dwelling, had "at some point in time, an apartment added in the lower south portion of the house." (Affidavit of Irwin Aubert, a neighbour of the respondent who has been living across the street from the premises within sight of the subject building since 1943.) In addition, Mr. Aubert in his affidavit states that after the respondent's late husband purchased the premises, he did renovations to the premises and that there were "two separate units in the lower rear portion of the house facing the Credit River." In addition, there is an affidavit by another neighbour, Mr. Robert Hurley whose residence is located three doors to the north of the subject property, and who moved into his residence about 1985. Mr. Hurley states in paragraph 2 of his affidavit, the following:

> "A year or two after I moved into the area, the house at 1168 Stavebank Road [the subject building] was renovated and used by many different tenants. I became aware of four units in the building, two located in the upper level at the front and two located in the lower level facing the rear."

[para8] I turn to the first question; namely, what were the number of residential dwelling units in place in the subject building prior to November 12, 1990 and the late spring or early summer of 1995.

[para9] The evidence contained in the affidavits of Mr. Aubert and Mr. Hurley has not been challenged or contradicted

in any respect. The affidavits of one Janette Banks, a neighbour of the respondent, and Joyce LeChasseur, a current tenant of one of the dwelling units in the subject dwelling, are less clear as to the number of dwelling units that existed in fact prior to November of 1990. I am nonetheless satisfied on all the evidence that the subject building, at some point following its construction and prior to 1953, was converted from a single dwelling unit building to a double dwelling unit building and that, at some time between July of 1987 and November of 1990, there were an additional two units added to the subject building. I further find as a fact that a fifth dwelling (or so-called "loft") unit was added sometime during the summer of 1995.

[para10] I turn now to the second question, viz, the effect of the governing law on these findings of fact.

[para11] The governing law is as follows.

1. The City's by-law provides for permitted uses in R1 zones as follows:

   S. 39 "R1 ...: 1. Any person may:

   (a) erect or use a one-family detached dwelling on a lot."

S. 1821 provides as follows:

"Notwithstanding their 'R1' zoning, the lands delineated as 'R1-Section 1821' on Schedule 'B' of this by-law shall only be used in compliance with the R1 zone provisions contained in this by-law except that:

1. [specifications for minimum total width of side yards]

2. [specifications for maximum dwelling unit heights]

3. [maximum distance between established grade and lower edge of the eaves of any dwelling unit]

4. [maximum gross floor area of dwelling units on each lot]

5. [definition of gross floor area for purposes of section 1821]

6. Notwithstanding any provision of this by-law to the contrary, any dwelling unit in existence on or before the day this section comes into force (1990 November 12), any dwelling unit for which a building permit has been issued on or before the day this section comes into force, or any dwelling unit for which a site development plan has been improved and for which a building permit application has been made on or before the day this section comes into force are considered to be in compliance with the zone provisions contained in this section. [my emphasis]

[para12] The Land Use Planning and Protection Act, S.O. 1996, c. 4, by section 42 thereof amended the Planning Act by adding to the Planning Act the following section:

S.76(1) If on November 16, 1995 a detached house, semi-detached house or row house was used or occupied as two residential units, section 1, subsection 16(2), (3) and (4), 31(3.1) and (3.2), 35(1), (3) and (4) and 51(28), (29) and (30) of the Act and Ontario Regulation 384/94, as they read on November 15, 1995, continue to apply to that house. [my emphasis]

[para13] In June of 1994, Ontario Regulation 384/94 made under the Planning Act dealing with apartments in houses came into force. The pertinent parts of the Regulation provided for "Classes of Houses" in s.2(1), as follows:

S.2(1) Subject to subsection (2), clause 16(2)(a), section 31(3.1) and clause 35(1)(a) of the Act apply to the following classes of houses:

1. A detached house if it occupies the whole of a building;

2. A semi-detached house if,

(i) it occupies part of a building, where the remainder of the building is occupied by another semi-detached house and the two houses are divided on the vertical plane in such a manner that there is no internal access from one semi-detached house to the other, and

(ii) it has not been created through the alteration of a detached house.

[para14] In applying the applicable law to the present fact situation, the applicant contends that the language of the by-laws which operate in restraint of individual property rights should be given a liberal interpretation to the end that the by-law furthers the purpose of protecting the community against departures by individuals in that community from the standards which the municipal council of the community has adopted. In support of this broad proposition, the applicant refers to the case of Woodglen and Co. Ltd. v. City of North York (1994) M.P.L.R. (2d) 219 (Ont. Ct. (Gen. Div.)) at pp. 226 and 227. The respondent submits that in applying and interpreting municipal zoning by-laws, the rule of interpretation should be strict construction against the municipal council that enacted the by-law and that if a municipal authority seeks to interfere with a property owner's rights, then any doubt in the construction of such an enactment should be resolved in favour of the property owner. In support of these propositions, the respondent cites R. v. Height (1963) 2 O.R. 471 (O.C.A) and Erith Corporation v. Holder, [1949] 1 All E.R. 389 (English Court of Appeal).

[para15] In approaching this task, I draw a distinction between interpretation and construction of legislative instruments. "Interpretation" deals with the meaning to be afforded to the words used in the enactment. "Construction" deals with the effect to be given to the words in the legislative enactment when the interpretation of such words is applied to the factual situation as found by the court. In the present circumstances, I encounter no problems of ambiguity or imprecision in the words utilized in the applicable enactments. It must also be kept in mind that the zoning by-law is not being impugned by the respondent; it is the proper construction of the zoning by-law, and of the Planning Act regulations, that is at issue in this motion.

[para16] The gist of the applicants' position, as I have understood the oral submissions, is that the relief afforded by subsection 6 of section 1821 of the zoning by-law relates only to the rigour of the by-law standards referrable to building and siting criteria but nothing to do with the number of units or the uses to which those units are put in any building to which the section applies.

[para17] The gist of the respondent's position, as I have understood from the oral submissions, is that the relief is afforded to any dwelling unit which [among other criteria] was in existence before November 12, 1990 if such dwelling unit was used for residential purposes. The respondent contends that if a dwelling unit or units are within these parameters of the subsection, then such unit or units are permitted by the by-law with respect to their residential use and the regulation of such residential use.

[para18] I have not been referred by counsel as to the definition "dwelling unit" for purposes of section 1821 or, indeed, for the rest of the provisions of the by-law dealing with R1 uses. In the result, I find that the words "dwelling unit" as used in subsection 6 of 1821 cannot be construed so as to encompass a "one-family detached dwelling on a lot" as referred to in section 39(1)(a) of the By-law. I further find that the four dwelling units in the subject dwelling unit were in situ as of the operative date, being the 12th of November, 1990, and, having been used for residential purposes at the material time, they are in compliance with the zoning provisions contained in section 1821.

[para19] I turn now to the fifth or "loft" unit. As previously indicated, it is not in dispute that this dwelling unit did not come into existence before the summer of 1995 and, thus, it does not have the protection afforded to the other four units. It is, however, the contention of the

respondent that Ontario Regulation 384/94 is protected by such Regulation. The respondent's position is that the regulations under the Planning Act, by virtue of the operation of section 31(3.1) and (3.2), have primacy in the event of any conflict between the land-use control by-law of a municipality and the Regulation. The gist of the position in this regard is that there is no definition of "house" contained in the Regulation but there is contained in subsection 2, which defines "classes of houses," a definition of semi-detached house. The respondent's submission is that the four units in the subject house meet the definition of "semi-detached house" on the basis that the four units, comprising two in the upper level and two in the bottom level, are divided by a vertical plane and that the semi-detached house is not being created through the alteration of a detached house. The applicant, in reply to this submission, contends that the facts respecting the creation of the four units do not meet the description of a semi-detached house in that each one of the dwelling units in the subject dwelling was created through the alteration of a detached house, i.e. the original building was initially designed and used as a single or one-family dwelling occupying the whole of a building. In addition, the applicant contends that to give effect to the construction sought by the respondent would enable an owner in the position of the respondent to artificially create new "semi-detached houses" so as to thereby provide a basis to bootstrap "second units" within the same building.

[para20] Notwithstanding the ingenious submission of counsel on behalf of the respondent in this matter, I am persuaded that a purposive interpretation and construction of the definitions of classes of houses, particularly as it relates to semi-detached houses, is in favour of the City's position. In my opinion, the scheme of the other sections in Regulation 384/94 and the references in such sectors to "second units" militates against any construction that would give effect to what might be construed as an arithmetic progression by an owner seeking to bootstrap "second units" within the footprint of a single building. I find that the creation of the fifth unit did not arise through the alteration of a detached house which occupied the whole of a building.

Disposition

[para21] In the result, the Court declares that the four dwelling units in the subject building, other than the loft unit, are the maximum number of permitted uses and that the loft unit in the subject building is not a permitted use.

[para22] It should be noted that the foregoing declaration shall be without prejudice to the positions of the parties respecting the prosecution of the Respondent by the City under the Building Code Act and the Municipal Act.

[para23] As there have been novel issues raised as to the construction of Reg. 384/94, in this motion, there will no order as to costs.

MacKENZIE J.

Mississauga (City) v. Britannia North Holdings Inc.

IN THE MATTER OF Section 96 of the Ontario Municipal Board
Act, R.S.O. 1990, c. O.28
AND IN THE MATTER of appeals of the Ontario Municipal Board
pursuant to section 51 of the Planning Act, R.S.O., c. P.13, concerning a condition of subdivision approval imposed by the Corporation of the City of Mississauga with respect to draft plan of subdivision numbers 21T-M97007, 21T-M940034, 21T-M95995 and 21T-M95043

Between
The Corporation of The City of Mississauga, Peel District Public School Board and Dufferin-Peel Catholic District School Board, applicants (appellants), and
Britannia North Holdings Inc., Britannia Central Holdings Inc., Britannia South Holdings Inc., Britannia Meadows Development Corporation, The Erin Mills Development Corporation and Macmeadow Developments Inc., respondents

[1999] O.J. No. 4672

Court File Nos. Div Ct. 317/99 and 322/99

Ontario Superior Court of Justice
Divisional Court
MacFarland, Dunnet and McCartney JJ.
Heard: November 29 and 30, 1999.
Judgment: December 3, 1999.

Counsel:
Paul J. Pape and Michael Minkoswki for The Corporation of the City of Mississauga.
James A. Easto, for Peel District Public School Board.
Brad Teichman, for Dufferin-Peel Catholic District School Board.
Jeffrey Davies, for Britannia North Holdings Inc., Britannia Central Holdings Inc. and Britannia South Holdings Inc.
Ronald K. Webb, for Britannia Meadows Development Corporation.
Richard Storrey and Julia Ryan, for The Erin Mills Development Corporation.
Gerald S. Swinkin, for Macmeadow Developments Inc.

The following judgment was delivered by

[para1] THE COURT:-- The issue in this appeal is whether the Ontario Municipal Board (hereafter OMB) erred in law in finding that there was no jurisdiction under the Planning Act for the approval authority (the City of Mississauga) to impose the condition, which is the subject of this appeal, on developers.

[para2] The condition which the City sought to impose on each of the respondent developers' four draft plans of subdivision reads:

> "Prior to final approval, the City [of Mississauga] shall be advised by the School Boards that satisfactory arrangements regarding the adequate provision and distribution of educational facilities have been made between the developer/applicant and the School Boards for this plan."

[para3] The OMB required the School Boards to file written explanations outlining the method by which the condition was to be fulfilled and counsel on their behalf responded as follows:

> "What Your Clients Must Do
>
> Further to the explanation given last week at the Ontario Municipal Board, the School Boards require that the building of dwelling units on the lands which are the subject of the four plans of subdivision now before the Ontario Municipal Board be staged over a period of at least eight years. Therefore, the School Boards will require that each of your clients agree, as part of a

subdivision agreement with the City of Mississauga, that building permits for no more than 423 dwelling units in the aggregate shall be issued with respect to all the subject lands in any year following registration of any of the subject plans of subdivision. If building permits for fewer than 423 dwelling units are issued in a year, the difference can be carried forward to subsequent years.

Upon the execution of a subdivision agreement between the City of Mississauga and a landowner incorporating these terms, the School Boards will advise that the condition has been satisfied with respect to that landowner."

[para4] The necessary first step in determining whether or not jurisdiction exists is a consideration of the language of the statute itself. It is trite to say that a statute is to be interpreted in accordance with its stated purpose and in the normal course and where it is possible to do so, the language used is to be given its usual and commonly understood meaning. The stated purposes of the Planning Act are set out in section 1.1 of the Act and include:

"(e) to encourage co-operation and co-ordination among various interests;"

[para5] It is submitted by the appellant that what this condition purports to accomplish is the co-ordination of the development of residential lands with the provision of adequate school facilities for students living in the subdivisions. The developments in the result will be "staged" or "phased".

[para6] Section 2 of the Act requires that various approval authorities, in carrying out their responsibilities under the Act, shall have regard for matters of provincial interest such as:

"(i) the adequate provision and distribution of educational, health, social, cultural and recreational facilities;

(m) the co-ordination of planning activities of public bodies;

(n) the resolution of planning conflicts involving public and private interests;"

[para7] Section 51 of the Act deals with plan of subdivision approvals and subsection (16) thereof provides that an owner of land may apply to the approval authority for approval of a plan of subdivision of the land or part of it. This section goes on to provide in subsection (20) thereof that an approval authority, before making any decision to approve or refuse to approve a draft plan of subdivision, shall ensure that notice of the application is given to such persons and public bodies as is required by regulation and

school boards are among those required to receive such notice. The following subsections of section 51 are also relevant to the issues raised:

(23) The approval authority may confer with the persons or public bodies that the approval authority considers may have an interest in the approval of the proposed subdivision.

(24) In considering a draft plan of subdivision, regard shall be had, among other matters, to the health, safety, convenience and welfare of the present and future inhabitants of the municipality and to,

(a) the effect of development of the proposed subdivision on matters of provincial interest as referred to in section 2;

(j) the adequacy of school sites;

(25) The approval authority, may impose such conditions to the approval of a plan of subdivision as in the opinion of the approval authority are reasonable, having regard to the nature of the development proposed for the subdivision, including a requirement, ...

(d) that the owner of the land proposed to be subdivided enter into one or more agreements with a municipality ... dealing with such matters as the approval authority may consider necessary, including the provision of municipal or other services.

(26) A municipal or approval authority, or both, may enter into agreements imposed as a condition to the approval of a plan of subdivision ...

(31) The approval authority may give or refuse to give approval to a draft plan of subdivision.

[para8] The obvious purpose for providing public bodies with notice of applications for approval of proposed draft plans of subdivision as well as the provision of authority for the approval authority to confer with public bodies is to obtain the input of such bodies in relation to those draft plans. To suggest that the municipality can do nothing with any such information received from affected school boards would be to render the language of the statute meaningless and without purpose. That cannot have been the intention. Subsection (24) mandates that regard be had not only for the present but also for the future inhabitants of the municipality. Additionally this subsection requires that again in relation to the proposed draft plan, those matters of provincial concern enumerated in section 2 of the Act be considered. This of course includes ... "the adequate provision and distribution of educational ... facilities" in addition to the "adequacy of school sites" specifically enumerated in paragraph (j) of that same subsection. The obvious difference in the choice of language used by the legislature cannot be ignored and in our view "the adequacy of school sites" and "the adequate provision and distribution of educational facilities" cannot and do not mean the same thing.

[para9] The respondents argue that when adequate school sites are reserved in a plan of subdivision that is sufficient to meet the approval authority's mandate to have regard for matters of provincial interest as set out in section 2 of the Act. They suggest the adequacy of sites together with the legislated funding formula provided under the Education Act for the construction of new schools where necessary is a complete answer. We do not agree. In our view the phrase "the adequate provision and distribution of educational facilities" must mean something more than or different from the phrase "the adequacy of school sites".

[para10] The funding formula for the construction of new schools has changed dramatically in recent times. School Boards no longer have the powers they once enjoyed to raise capital for the construction of new schools. Funding is now provided on the basis of the shortfall of permanent student places in any given year. That is to say, if a particular school district has, for example, 100 more students attending school than it has permanent (bricks & mortar) places for those students in a given year, funding will be provided for the construction of new permanent places on the basis of those 100 students. In other words, until the students are in actual attendance, no funding is available to accommodate them on a permanent basis.

[para11] As a practical matter, if all four plans of subdivision were to proceed at the same time, this would result in some 3,300 residential units, many of which would have living in them students who would attend local schools. The School Boards have indicated to the City that they have little or no room to accommodate more students in existing schools in the area. There will not be funding available to build schools until the students are in actual attendance and until such schools are built those students would have to be accommodated temporarily either in portables or some other temporary accommodation. It is self-evident that it would be a far easier task to accommodate a smaller rather than a larger number of students in any given year; some measure of order rather than complete chaos.

[para12] There is nothing in Condition 8 that relates to the funding formula set out in other legislation and in relation to which the appellants conceded the City has no jurisdiction. All this condition does is phase the proposed developments over time; it does not say there will be no development, it says only development will take place gradually.

[para13] In our view, the provisions of the Planning Act clearly give the City the jurisdiction to impose the condition.

[para14] Further, the OMB erred in law when it failed to ask itself the proper question, which is whether the legislation allows the approval authority to impose the subject condition on developers.

[para15] It is, we think, clear from their reasons (see page 58 through page 65 of the Appeal Book) that the OMB concerned itself with the effect of the condition, which in our view goes to the question of reasonableness, rather than whether the Planning Act provides the necessary jurisdiction to impose this condition in the first place. In the result, the appeal must succeed and the decision set aside.

[para16] The OMB bifurcated the process and purported to consider the jurisdictional issue separately from the reasonableness issue and in view of their conclusion reached on jurisdiction found it unnecessary to deal with reasonableness. Because the reasonableness (or lack thereof) has not been considered as yet, in view of our decision this matter must be remitted to the OMB. Counsel for the appellants ask that it go back to a board differently constituted whereas the respondents ask that, if it must be remitted, it go back to the same board to finish the task. The respondents say that this board has already heard evidence which would necessarily be repeated in proceedings dealing with reasonableness and that time investment should be considered by this court. While we agree that there could likely be a saving in time were the matter remitted to the same board, we are concerned that this particular board has already "tipped its hand", to borrow Mr. Pape's term, in relation to the reasonableness of the condition. Consequently, we think in all the circumstances that it is preferable to remit the matter to a differently constituted board and so order.

[para17] In conclusion, the appeal is allowed, the decision of the OMB set aside and this matter is remitted to a differently-constituted panel of the OMB for consideration of the reasonableness of the subject condition. Costs of this appeal and the leave application to the appellants fixed in the sum of $15,000.00.

MacFARLAND J.
DUNNET J.
McCARTNEY J.

Mississauga (City) v. Greater Toronto Airports Authority

Between
The Corporation of the City of Mississauga, applicant (appellant), and
Greater Toronto Airports Authority, Greater Toronto Airports Authority Associates Inc., Her Majesty the Queen in Right of Canada, Her Majesty the Queen in Right of Ontario, The Regional Municipality of Peel, Peel District School Board, The Dufferin-Peel Roman Catholic Separate School Board, Mississauga Hydro-Electric Commission and Nav Canada, respondents (respondents in appeal)

[2000] O.J. No. 4086
Docket Nos. C31539 and C31557

Ontario Court of Appeal
Toronto, Ontario
McMurtry C.J.O., Laskin and Charron JJ.A.
Heard: November 8-10, 1999.
Judgment: November 3, 2000.

On appeal from the judgment of Justice James C. MacPherson dated January 19, 1999.

Counsel:

Thomas G. Heintzman, Q.C., John P. Brown, Joseph J. Colangelo and Michael G. Kyne, for the appellant.

Brian Morgan and Mahmud Jamal, for the respondent Greater Toronto Airport Authority.

Chris G. Paliare and Andrew Lokan, for the respondent Nav Canada.

Peter Southey and Shelley Quinn, for the respondent Her Majesty in Right of Canada.

The judgment of the Court was delivered by

LASKIN J.A.:--

A. Introduction

[para1] The central question on this appeal is whether Parliament's exclusive legislative authority over aeronautics or federal undertakings or over federal Crown property precludes the City of Mississauga from regulating the construction of new buildings at Lester B. Pearson International Airport.

[para2] Pearson Airport is on federal Crown land, most of which is in Mississauga. Under separate leases with the federal Crown, the Greater Toronto Airports Authority ("GTAA") and Nav Canada operate the airport and the civil air navigation system.

[para3] Pearson Airport is already Canada's largest airport. Over the next two decades, however, the number of passengers and the amount of air cargo coming into and going out of the airport is expected to increase dramatically. To meet these increases, the GTAA and Nav Canada have begun a massive redevelopment project. The redevelopment includes the construction of a large new passenger terminal to replace Terminals 1 and 2, three new runways and a new air traffic control tower.

[para4] Mississauga contends that the Building Code Act, S.O. 1992 c. 23 and the regulation passed under it, the Ontario Building Code, apply to all new buildings constructed at Pearson Airport. It also claims that the GTAA and Nav Canada must pay development charges levied by Mississauga under the Development Charges Act, R.S.O. 1990 c. D-9 and the City's development charges by-law. Thus, the main issue in this litigation is whether Parliament's exclusive legislative authority in relation to aeronautics, federal undertakings or public property under the Constitution Act 1867 requires that the Ontario building code regime, which includes Mississauga's development charges, be read down not to apply to the construction of new buildings at Pearson Airport.

[para5] If Mississauga fails on these constitutional issues, it asks for a declaration that the GTAA is not entitled to rely on the National Building Code, a declaration that the GTAA and Nav Canada have a common law obligation to compensate the city in an amount equivalent to its development charges, and that failing payment, a declaration that the city

can refuse to provide fire and emergency services at the airport.

[para6] In thorough and well-written reasons reported at (1999), 43 O.R. (3d) 9, the applications judge, MacPherson J., decided all issues against Mississauga. Mississauga now appeals to this court and is supported by the Regional Municipality of Peel. The Attorney General of Canada supports the position of the respondents, the GTAA and Nav Canada.

[para7] Mississauga's appeal raises the following six issues:

1. Did the applications judge err in holding that Ontario's building code regime does not apply to the redevelopment of Pearson Airport because it would intrude into Parliament's exclusive jurisdiction over aeronautics?

2. Did the applications judge err in holding that Ontario's building code regime does not apply to the redevelopment of Pearson Airport because it would intrude into Parliament's exclusive jurisdiction over a federal undertaking?

3. Did the applications judge err in holding that Ontario's building code regime does not apply to the redevelopment of Pearson Airport because it would intrude into Parliament's exclusive jurisdiction over federal Crown property?

4. Did the applications judge err in holding that Mississauga had no standing to claim that the GTAA was not entitled to apply the National Building Code under s.14.03 of the Ground Lease between the federal Crown and the GTAA?

5. Did the applications judge err in refusing to grant a declaration that Mississauga is entitled to "fair, reasonable and equitable compensation" for its capital costs connected with the redevelopment of Pearson Airport?

6. Did the applications judge err in refusing to grant Mississauga a declaration that it is not required to provide fire and emergency services at Pearson Airport unless the GTAA and Nav Canada are required to pay the development charges levied by Mississauga?

[para8] For the reasons that follow, I conclude that MacPherson J. did not err on any of these issues. I would therefore dismiss Mississauga's appeal.

B. Background Facts

[para9] Pearson Airport is the largest airport in Canada and the seventh largest in North America. It occupies about 4,400 acres of land. But for a small portion in Toronto, all the airport land is in Mississauga. Indeed, the airport covers ten per cent of all the land in Mississauga. As MacPherson J. observed, the city and the airport enjoy a close relationship: residents of Mississauga work at the airport; in turn, the airport generates substantial revenues for the city.

[para10] Until about the mid-1990s, Pearson Airport was owned and operated by the federal Crown. In 1994, the federal Crown went from being an owner and operator of airports to an owner and landlord. That year, the Government of Canada published the National Airports Policy, which called for the commercialization both of Canadian air navigation and Canadian airport services. Under this policy, the federal Crown retains its control over aeronautics and maintains its role as regulator of air safety and security. But it now leases airports to private operators called Canadian airport authorities, which are "free to operate airports on a commercial basis".

[para11] The National Airports Policy led to the creation of the GTAA and Nav Canada. The GTAA is a private non-profit corporation. Its Board of Directors consists of nominees from the regional municipalities of Durham, Halton, Peel and York, the City of Toronto, the Province of Ontario and the federal government. GTAA Board members reflect the interests of business, organized labour and consumers. In December 1996, the federal Crown leased Pearson Airport to the GTAA under a

60-year Ground Lease. As the local airport authority, the GTAA's mandate is to manage, operate and develop the airport for the term of the lease.

[para12] Nav Canada is also a private non-profit corporation. Established under the Civil Air Navigation Service Commercialization Act, S.C. 1996 c. 20, the corporation has the exclusive right and obligation to own, operate and develop Canada's civil air navigation system. This system includes air traffic control systems and a variety of communication, navigation and information services provided to aircraft in Canadian-controlled airspace. These services are provided through numerous facilities across Canada, including seven air control centres, 81 flight service stations, one stand-alone terminal control unit and 44 air traffic control towers. At and around Pearson Airport is an extensive network of air navigation facilities including buildings, aeronautical radio antenna towers, and other radar systems and navigational aids, which are functionally integrated with other installations across the country to form a national system.

[para13] One of the facilities at Pearson Airport is the new air traffic control tower, the most technically advanced control tower in Canada. Development of the tower began in February 1995. The tower was built and operating by 1998. The federal Crown has leased the site for the control tower to Nav Canada under a sixty-year lease.

[para14] In 1997, Pearson Airport handled about 26.1 million passengers and approximately 379,000 tonnes of air cargo. Huge increases in these numbers are forecast. Passenger use is expected to rise to 28 million annually by this year, to 36 million by 2010 and 50 million by 2020. Air cargo traffic is expected to grow by 3.8 per cent annually until 2005 and by 2.5 per cent after 2005. To meet this growth, the GTAA and Nav Canada have begun the redevelopment project that is the subject of this litigation. The redevelopment has four parts:

(i) The airside development project: The purpose of this project is to increase airfield capacity and operational efficiency at Pearson Airport. In addition to the new air traffic control tower constructed by Nav Canada, this project includes three new runways and associated taxiways at an estimated cost of $362 million, a new six-bay de-icing facility, and an advanced aircraft surface monitoring and guidance control system to increase airport capacity during poor weather.

(ii) The terminal development project: Under this project, Terminals 1 and 2 will be replaced with a single terminal on the same site, five times the size of the two existing terminals. The new terminal will include a three-level road system, a new integrated ground transportation facility and a multi-level 12,500-space public parking garage. It is estimated to cost $2.55 billion.

(iii) The infield development project: This project is designed to meet the demand for ancillary aviation facilities and to accommodate tenants who will be relocated because of the terminal development project. Air cargo and flight kitchen tenants will be relocated to a multi-tenant air cargo complex and separate flight kitchen facilities on the infield between the runways. A new hangar will be built for 747 aircraft. New access routes will link the infield with the passenger terminal apron and with the highway system to the west of the airport.

(iv) The utilities and airport support system: This project will provide an expanded electrical network, new heating, roofing and sewage systems, improved telecommunications, and fire-fighting facilities for the airport.

[para15] When completed, this massive redevelopment will equip Pearson Airport to handle up to 50 million passengers annually.

[para16] Mississauga contends that the GTAA and Nav Canada require building permits to construct these new facilities. Under the city's development charges by-law, to obtain building permits the GTAA and Nav Canada must first pay the

city's development charges. Mississauga says the redevelopment of the airport will impose a greater burden on the city's municipal services, especially road, storm, water, fire and emergency services. Before the litigation began, Mississauga claimed development charges of $14.5 million; during the litigation, Mississauga revised its claim to approximately $47.3 million. Mississauga is also responsible for collecting development charges levied by the Regional Municipality of Peel.

[para17] The federal Crown disputes Mississauga's constitutional jurisdiction to impose the Ontario Building Code and its development charges by-law on the redevelopment of Pearson Airport. Nonetheless, the federal government's standard practice is to require all contractors building aviation facilities on federally-owned land to apply for a municipal building permit or to at least tender an amount equivalent to the building fee to the appropriate municipality. The federal government refers to this policy of voluntary compliance as its "good neighbour policy". It has adopted this policy as a courtesy to municipalities so they may be consulted about any aviation-related construction. Thus, for example, in 1996, Transport Canada applied to Mississauga for a building permit for the new air traffic control tower and tendered the permit fee of approximately $36,000. Mississauga, however, demanded payment of development charges of approximately $150,000 before issuing a permit. Transport Canada refused to pay these charges and a permit was never issued. The impasse over whether Mississauga can impose development charges on the redevelopment of Pearson Airport precipitated this litigation.

C. The Statutory Scheme

1. The Provincial Regime

[para18] This litigation challenges the application to Pearson Airport of two Ontario statutes, the Building Code Act and the Development Charges Act.

[para19] Every municipality in Ontario must comply with the Building Code Act and the regulation passed under it, the Ontario Building Code. The Act and its Code prescribe standards for the construction and demolition of buildings. Among these standards are those that govern "the manner of construction and types and quality of material used" (s. 34(1)(3)); "the design of buildings and the use to which they may be put" (s. 34(1)(5)); and the "conditions under which the use of material, systems and building designs that are not authorized in the code may be allowed under section 9" of the Act (s. 34(1)(6)). Section 9 is an equivalency provision permitting the chief building official of a municipality to approve these materials, systems and building designs if they "will provide the level of performance required by the building code".

[para20] Section 8 of the Act prohibits any person from constructing or demolishing a building without a building permit. And a municipal building official cannot issue a permit for any construction or demolition that contravenes the Act or the Ontario Building Code, or "any other applicable law", such as planning or zoning by-laws.

[para21] Municipalities and their building inspectors have wide powers under the Act to enforce compliance with the statute and the Ontario Building Code. Mississauga has supplemented this statutory and regulatory regime by passing a building (permits) by-law establishing classes of permits, and the procedures and fees for obtaining a permit.

[para22] The Development Charges Act authorizes municipalities to pass by-laws that would impose development charges against land whose development would increase the need for municipal services. A development charge is defined in the statute as "a charge imposed with respect to growth-related net capital costs against land" and thus is a form of tax on land. Under the Act, Mississauga Council passed by-law 532/91, which establishes development charges in the City of Mississauga.

[para23] Importantly, under s. 9(1) of the statute a development charge is payable on the date a building permit is issued, and under s. 9(2), a municipality is not required to issue a building permit unless the development charge has been paid. Therefore, if the GTAA and Nav Canada are required to comply with the Building Code Act and the Ontario Building

Code, to obtain building permits for the redevelopment of Pearson Airport, they must first pay the development charges imposed by Mississauga.

[para24] In these reasons, I refer to the Building Code Act, the Ontario Building Code and Mississauga's building permits and development charges by-laws, collectively, as the Ontario building code regime.

2. The Federal Regime

[para25] The Government of Canada has its own regime for the design and construction of airports. Under the Aeronautics Act, R.S.C. 1985, c. A-2, the Minister of Transport is responsible for constructing, maintaining and operating "aerodromes", or airports. Because federal employees work in airports, regulations under the Canada Labour Code require their design and construction to meet the standards in the National Building Code and the National Fire Code. As I will discuss, under the Ground Lease between the Government of Canada and the GTAA, these national codes apply to the construction of new buildings at Pearson Airport unless the GTAA and Mississauga can conclude an agreement on the applicability of the Ontario Building Code. So far, they have failed to do so.

[para26] In constructing the new air traffic control tower at Pearson Airport, Nav Canada must also comply with these national codes, as well as with Transport Canada's control tower site and design standards, and with a variety of other federal and international standards for a civil air navigation system.

[para27] This then is the legislative and regulatory framework for the constitutional issues raised in this litigation.

D. The Litigation

[para28] MacPherson J. heard three applications together, two brought by the GTAA and one brought by Mississauga. The GTAA's applications and Mississauga's application mirror each other. In one of its applications, the GTAA sought a declaration that Ontario's building code regime, which includes the development charges levied by Mississauga, does not apply to it or to Pearson Airport. In the other, the GTAA appealed decisions by a Mississauga building inspector that ordered compliance with the Ontario building code regime in the demolition of the administration building and the construction of a new fire hall at the airport.

[para29] In its application, Mississauga sought various heads of declaratory relief against the GTAA and Nav Canada for their refusal to comply with the Ontario building code regime and to pay development charges. MacPherson J. allowed both applications brought by the GTAA and dismissed the application brought by Mississauga. I have concluded that MacPherson J. was correct in his disposition of all three applications.

E. The Issues

1. Did the applications judge err in holding that Ontario's building code regime does not apply to the redevelopment of Pearson Airport because it would intrude into Parliament's exclusive jurisdiction over aeronautics?

[para30] The central question on this appeal is whether the Building Code Act should be read down not to apply to the redevelopment of Pearson Airport because that redevelopment lies within Parliament's exclusive jurisdiction over aeronautics or a federal undertaking, or because Pearson Airport is on property owned by the federal Crown. I will deal first with whether MacPherson J. erred in concluding that Ontario's building code regime would intrude into the exclusive federal legislative authority over aeronautics.

[para31] A long line of Supreme Court of Canada decisions has held that Parliament's general power to make laws for the peace, order and good government of Canada gives it exclusive legislative authority over aeronautics. See Re Regulation and Control of Aeronautics in Canada, [1932] A.C. 54 (P.C.); and Johannesson v. West St. Paul, [1952] 1 S.C.R. 292. As MacPherson J. observed at p. 27, aeronautics falls under the "national dimensions" component of the peace, order and good

government power.

[para32] Mississauga submits, however, that the Ontario Building Code applies to the redevelopment at Pearson Airport. It says that both Nav Canada and the GTAA must obtain building permits. Under the Ontario building code regime, to obtain these permits Nav Canada and the GTAA must first pay the development charges levied by the city.

[para33] Mississauga makes four arguments in support of its submission. First, it contends that the federal power over aeronautics is limited to "those matters which are required for the flight of the aircraft". Second, it maintains that even if the federal aeronautics power is not limited in this way, Ontario's building code regime would not impair or interfere with aeronautical operations at Pearson. Third, it argues that building codes differ from zoning by-laws, and therefore the case law holding that provincial planning and zoning legislation does not apply to airports has no relevance to this case. Mississauga's fourth and alternative argument is that some of the buildings to be constructed at Pearson Airport do not fall within the aeronautics power and that the applications judge therefore erred by not examining the buildings individually.

[para34] Mississauga's first argument addresses the scope of the federal power over aeronautics. Mississauga submits that aeronautics is limited to aerial navigation. It includes airside facilities but not groundside facilities. On this submission, federal jurisdiction over aeronautics includes runways, air traffic controls and taxiways, but not passenger terminal buildings, cargo facilities and parking lots. Even if Mississauga is correct, the new air traffic control tower built and operated by Nav Canada comes squarely within the federal aeronautics power. However, Mississauga is not correct.

[para35] The case law has rendered the distinction between airside and ground-side facilities argued for by Mississauga untenable. The Supreme Court of Canada has held that the federal jurisdiction over aeronautics includes much more than aerial navigation in the strict sense. It includes the construction of airport buildings and the operation of airports. Iacobucci J. concisely stated the scope of the federal aeronautics power in Air Canada v. Ontario (Liquor Control Board) (1997), 148 D.L.R. (4th) 193 at 212 (S.C.C.): "... the federal aeronautics jurisdiction encompasses not only the regulation of the operation of aircraft, but also the regulation of the operation of airports". I therefore agree with MacPherson J.'s conclusion on this point, at p. 28:

> However, it is clear that federal jurisdiction is not just celestial; it is also terrestrial. It extends to those things in the air and on the ground that are essential for "aerial navigation" or "air transportation" to take place.
>
> A long line of cases establishes that airports, or in the early cases "aerodromes", are integral to the subject matter of aeronautics. Johannesson itself dealt with the location of an aerodrome in Manitoba.

[para36] Thus, the entire redevelopment of Pearson airport - not just the airside development project, but also the terminal development project, the infield development project and the utilities and airport support project - comes under the aeronautics power.

[para37] Mississauga's second argument is that the Ontario building code regime still applies because that regime does not impair or interfere with the redevelopment of Pearson Airport. This argument goes to the heart of this appeal because it raises the application of the interjurisdictional immunity principle in Canadian constitutional law.

[para38] The Building Code Act is valid provincial legislation under s. 92(13) of the Constitution Act 1867, which gives each provincial legislature exclusive jurisdiction to make laws in relation to "property and civil rights in the province". The Ontario Building Code has been validly passed under the Building Code Act. Normally, a valid provincial law of general application, such as the Building Code Act, may validly affect a federal matter. But the courts have carved out an important exception to this general rule. This exception is the interjurisdictional immunity principle, or as Beetz J. termed it in Bell Canada v. Québec (Commission de la Santé et de la

Sécurité du Travail), [1988] 1 S.C.R. 749 at 859, "the inapplicability of provincial legislation rule". See also P.W. Hogg, Constitutional Law of Canada, Loose-leaf ed. (Toronto: Carswell) Vol. 1 at pp. 15-25 to 15-33; Ordon Estate v. Grail, [1998] 3 S.C.R. 437.

[para39] The interjurisdictional immunity principle holds that "a basic minimum and unassailable content" must be assigned to each head of federal legislative power. Because federal legislative power is exclusive, provincial laws cannot affect that essential core. A provincial law, valid in most of its applications, must be read down not to apply to the core of the exclusive federal power. The application of this principle differs from the paramountcy doctrine in that it does not require conflicting or inconsistent federal legislation, or even the existence of federal legislation.

[para40] The interjurisdictional immunity principle has its roots in a Privy Council case decided a century ago: Canadian Pacific Railway v. Corporation of the Parish of Notre Dame de Bonsecours, [1899] A.C. 367 (P.C.). In that case, the Privy Council held that the Province of Québec could not regulate the construction of a ditch alongside a federal railway because Parliament had the "exclusive right to prescribe regulations for the construction, repair and alteration of the railway and for its management". Bonsecours has never been doubted and has been approved of many times by the Supreme Court of Canada, most recently in Ontario v. Canadian Pacific Railway Ltd., [1995] 2 S.C.R. 1028.

[para41] What then is the test for interjurisdictional immunity? Mississauga says that the test is whether the provincial legislation impairs or interferes with a federally regulated enterprise or undertaking, and it points out that the applications judge made no finding of impairment or interference. But that is the wrong test. The Supreme Court of Canada no longer uses the language of "impairs" or "interferes" or "paralyzes" or "sterilizes". Instead, the Supreme Court has posited a much broader test of immunity or exclusivity. If a provincial law affects a vital or essential or integral part of a federally regulated enterprise, then the otherwise valid provincial law does not apply to that enterprise. The Supreme Court of Canada approved of this broader test of interjurisdictional immunity in the Québec Minimum Wage case, Québec (Commission du Salaire Minimum) v. Bell Telephone Co. of Canada, [1966] S.C.R. 767. Because Bell was an inter-provincial undertaking and the provincial minimum wage law would affect a vital part of its operation, the Court held that the law did not apply. Writing for the Court, Martland J. said at p. 774:

> On the other hand, a statute which deals with a matter which, apart from regulatory legislation, would have been the subject matter of contract between employer and employee, e.g., rates of pay or hours of work, affects a vital part of the management and operation of the undertaking to which it relates. This being so, if such regulation relates to an undertaking which is within s. 92(10) (a), (b) or (c), in my opinion it can only be enacted by the federal parliament.

[para42] In a trilogy of cases in 1988, the Supreme Court reaffirmed that whether a provincial law affects a vital part of a federal enterprise is the test for interjurisdictional immunity: Alltrans Express Ltd. v. British Columbia (Workers' Compensation Board), [1988] 1 S.C.R. 897; Canadian National Railway Co. v. Courtois, [1988] 1 S.C.R. 868; and Bell Canada v. Québec (CSST), supra. In Bell Canada (1988), the Court held that an order made under provincial health and safety legislation assigning a pregnant worker away from a video display terminal could not apply to a federal undertaking. Although an order concerning a single employee could hardly "impair" Bell Canada's operations, the Supreme Court said that impairment was not required. The provincial law could not apply because by depriving Bell Canada of part of its workforce, the law affected a vital or essential part of Bell Canada's undertaking. Beetz J. made this clear at pp. 856-57:

> Appellants and the Attorney General of Quebec argued in the case at bar that the re-assignment of a pregnant worker would not impair the undertaking, especially as the pregnant worker would eventually have to leave her work in any case, at least temporarily. I am quite prepared to admit that the exercise of this right by a pregnant worker would not go so far as to impair or paralyze the undertaking. However, given that it

> deprives the undertaking of part of its work force in the long distance communication sector requiring the aid of an operator, I would not be ready to concede that such a right of re-assignment does not by its very nature affect a vital or essential part of the Bell Canada undertaking.

[para43] Beetz J. did discuss how a provincial law could "impair the operations and functioning of federal undertakings" because, as he put it "if the application of a provincial statute to a federal undertaking has the effect of impairing or paralyzing it, that a fortiori is an almost certain sign that such application bears upon the specifically federal nature of the undertaking and constitutes an encroachment on the exclusive legislative authority of Parliament". Nevertheless, to find that a provincial law does not apply to a federal undertaking "it is sufficient that the provincial statute ... affects a vital or essential part of that undertaking, without necessarily going as far as impairing or paralyzing it" (at pp. 859-60).

[para44] The Supreme Court of Canada has qualified this broad test in one important way and that qualification does require impairment. The qualification does not, however, apply in this case. In Attorney General of Québec v. Irwin Toy Ltd., [1989] 1 S.C.R. 927, the Supreme Court drew a distinction between the direct and indirect effect of a provincial law on a federal undertaking. If a province seeks to apply its law directly to a federal undertaking - the usual case - the provincial law will not apply if it affects a vital part of that undertaking. If, however, a provincial law only indirectly or incidentally affects a federal undertaking, it will apply unless it impairs, paralyzes or sterilizes the undertaking.

[para45] Thus, in Irwin Toy, the Supreme Court held that a Québec law prohibiting advertising directed at children could apply to television advertising even though television broadcasting is a federally-regulated undertaking and advertising is a vital part of the operation of that undertaking. The Supreme Court reasoned that because the prohibition on advertising did not apply directly to the broadcasters who were operating the federal undertaking - indeed, that it could not do - but only to advertisers in Québec, the effect on the federal undertaking was indirect or incidental. In Air Canada v. Ontario, supra, at p. 212, Iacobucci J. summarized this qualification: "The federal power to make laws touching on a vital part of a federal undertaking is exclusive ... However, a provincial law that does not purport to control an undertaking directly will be invalid only if it impairs, sterilizes or paralyzes that undertaking".

[para46] The qualification discussed in Irwin Toy does not apply in this case. Here, Ontario's building code regime would not merely affect Pearson Airport indirectly or incidentally. Mississauga is attempting to control an aeronautics undertaking directly by applying the Ontario building code regime to the redevelopment of the airport.

[para47] Thus, Mississauga's first submission turns on whether Ontario's building code regime would affect a vital part of the redevelopment at Pearson Airport. In my view, it undeniably would, and for that reason the Ontario regime is constitutionally inapplicable to the redevelopment.

[para48] Provincial or municipal laws that seek to regulate the physical structure of airports and airport buildings will affect a vital or integral part of an aeronautics undertaking. The Supreme Court of Canada emphasized this point in Construction Montcalm Inc. v. The Minimum Wage Commission, [1979] 1 S.C.R. 754, a case heavily relied on by MacPherson J. In Construction Montcalm, the majority of the court held that Québec's Minimum Wage Act applied to the employees of a private company, which was building the runways at Mirabel Airport under a contract with the federal Crown. Writing for the majority, Beetz J. held that although provincial laws that concern "the mode or manner of carrying out decisions in the act of constructing the airport" can apply to airports, those that concern whether and where to build an airport, its design, its dimensions and the material to be used in its buildings cannot (at p. 771). Beetz J. wrote at pp. 770-71:

> The construction of an airport is not in every respect an integral part of aeronautics. Much depends on what is meant by the word "construction". To decide whether to

> build an airport and where to build it involves aspects of airport construction which undoubtedly constitute matters of exclusive federal concern: the Johannesson case. This is why decisions of this type are not subject to municipal regulation or permission: the Johannesson case; City of Toronto v. Bell Telephone Co., [[1905] A.C. 52]; the result in Ottawa v. Shore and Horwitz Construction Co. [(1960), 22 D.L.R. (2d) 247] can also be justified on this ground. Similarly, the design of a future airport, its dimensions, the materials to be incorporated into the various buildings, runways and structures, and other similar specifications are, from a legislative point of view and apart from contract, matters of exclusive federal concern. The reason is that decisions made on these subjects will be permanently reflected in the structure of the finished product and are such as to have a direct effect upon its operational qualities, and therefore, upon its suitability for the purposes of aeronautics.

[para49] The Building Code Act and the Ontario Building Code prescribe the design of buildings, the manner of their construction, the types and quality of materials to be used and when buildings may be altered or demolished. According to Construction Montcalm, these are the very matters, that for an aeronautics undertaking, lie within Parliament's exclusive jurisdiction and are immune from provincial regulation. As Beetz J. said, decisions on these matters "will be permanently reflected in the structure of the finished product" and will "have a direct effect upon its operational qualities, and, therefore, upon its suitability for the purpose of aeronautics" (at p. 771).

[para50] If, as Bonsecours held, a province cannot regulate the construction of a ditch alongside a federal railway because to do so would affect a vital part of a railway undertaking, then a municipality cannot regulate the physical construction of airport buildings because to do so would affect a vital part of an aeronautics undertaking. Thus, MacPherson J. correctly concluded at p. 33 that "the actual physical structure of buildings of an airport is part of the protected federal subject matter of aeronautics."

[para51] Mississauga's third argument tries to distinguish building code legislation from planning and zoning legislation. A long line of cases, including several decision of this court, has held uniformly that provincial and municipal planning and zoning legislation does not apply to airports. See Johannesson v. West St. Paul, supra; Re Orangeville Airport Ltd. v. Town of Caledon (1976), 11 O.R. (2d) 546 (C.A.); Re Walker v. Ontario (Minister of Housing) (1983), 41 O.R. (2d) 9 (C.A.); Venchiarutti v. Longhurst (1992), 8 O.R. (3d) 422 (C.A.). Mississauga argues that the Building Code Act differs from planning and zoning legislation because its subject matter is the safety of buildings, not land or property development. MacPherson J. rejected this argument and so do I. As he said at p. 21: "... the subject matter of the Act is buildings and the land on which they are placed".

[para52] The recent Home Builders' case in the Supreme Court of Canada confirms that the subject matter of the Building Code Act and the Development Charges Act is land development: Ontario Home Builders' Association v. York Region Board of Education, [1996] 2 S.C.R. 929. Iacobucci J. wrote at p. 966 that the Planning Act, including the scheme of education development charges imposed under the Development Charges Act, "is one component of a comprehensive regulatory scheme governing land development in Ontario, comprised of at least nine difference statutes". One of those statutes is the Building Code Act. Therefore, the Building Code Act and the Development Charges Act stand on the same constitutional footing as provincial planning and zoning legislation. None of this legislation applies to the construction of airport buildings.

[para53] If any confirmation of this proposition were needed, it comes from Construction Montcalm. In the passage quoted above, Beetz J. approved of an Ontario trial decision, Ottawa v. Shore and Horwitz Construction Co. (1960), 22 D.L.R. (2d) 247 (Ont. H.C.). In that case, Donnelly J. held that a construction company building barracks at Rockcliffe Airport in Ottawa was not required to obtain a municipal building permit because the barracks were to be built on federal Crown land. In Construction Montcalm, Beetz J. commented that the result in Horwitz Construction was also justified on the

ground that the building of barracks "involves aspects of airport construction which undoubtedly constitute matters of exclusive federal concern ... not subject to municipal regulation or permission" (at p. 770). In short, requiring a municipal building permit for the construction of an airport building affects a vital or integral part of an aeronautics undertaking.

[para54] Mississauga's last and alternative argument is that not all of the new buildings at Pearson Airport are integral to an aeronautics undertaking; those buildings that are not are subject to Ontario's building code regime. Mississauga contends that MacPherson J. erred in not examining each building separately. This contention has no merit. MacPherson J. found that the entire redevelopment was required for the operation of a modern international airport. The new air traffic control tower - the "brains" of the civil air navigation system - is so obviously essential to the operation of Pearson Airport, that I have trouble understanding why Mississauga sued Nav Canada in this litigation. But the rest of the redevelopment project, including the new passenger terminal to replace Terminals 1 and 2, is also a vital or integral part of the operation of the airport. Indeed, Mississauga did not suggest one building in the redevelopment that was not essential for an international airport with the expected passenger and cargo volume of Pearson Airport.

[para55] Therefore, MacPherson J.'s finding that the entire redevelopment was essential for the operation of the airport and his refusal to embark on a building-by-building analysis of whether the Ontario building code regime applied were entirely reasonable and are entitled to deference in this court.

[para56] For all of these reasons, I conclude that MacPherson J. did not err in holding that "the application of Mississauga's building code regime to the demolition, alteration and construction of buildings in the redevelopment project at Pearson Airport would intrude into the exclusive federal jurisdiction over aeronautics" (at p. 36). This conclusion is sufficient to dispose of the constitutional question raised in this appeal. However, because MacPherson J. discussed the federal undertaking and Crown property issues and all the parties addressed them in this court, I will deal with them as well.

> 2. Did the applications judge err in holding that Ontario's building code regime does not apply to the redevelopment of Pearson Airport because it would intrude into Parliament's exclusive jurisdiction over a federal undertaking?

[para57] MacPherson J. concluded that Ontario's building code regime could not apply to the redevelopment of Pearson Airport for a second reason: it would intrude into Parliament's exclusive jurisdiction over federal works and undertakings. Mississauga submits that he erred in so concluding.

[para58] In Johannesson v. West St. Paul, the Supreme Court of Canada concluded that the peace, order and good government clause gives the federal government exclusive legislative authority over aeronautics. However, the federal government can also assert jurisdiction because of Parliament's exclusive legislative authority to make laws in relation to a federal work or undertaking under s. 92(10)(a) of the Constitution Act 1867. Section 92(10)(a) is the usual basis for Parliament's assertion of exclusive jurisdiction over our various modes of national transportation and communication. It provides:

> 92. In each Province the Legislature may exclusively ...
>
> 10. Local Works and Undertakings other than such as are of the following Classes:-
>
> > (a) Lines of Steam or other Ships, Railways, Canals, Telegraphs, and other Works and Undertakings connecting the Province with any other or others of the Provinces, or extending beyond the Limits of the Province. ...

[para59] In Construction Montcalm, Beetz J. at p. 770 observed that Mirabel Airport formed part of a federal undertaking:

> The issue was also discussed as if the Mirabel airport were a federal work or undertaking, and it could indeed be argued that an international airport is a work which forms part of an undertaking connecting a province with a foreign country or extending beyond the limits of a province.

[para60] Unquestionably, Pearson Airport, which is an international airport, also forms part of a federal work or undertaking under s. 92(10)(a). It matters not that the airport is located in one province: its air navigation system is integrated with facilities, services and staff across Canada and internationally. The airport plays a crucial role in Canada's national aviation system. Indeed, if it were removed from our national aviation system, air travel both within Canada and to and from other countries would be fundamentally altered. See Alberta Government Telephones v. C.R.T.C. (1989), 61 D.L.R. (4th) 193 (S.C.C.). Pearson Airport, including its air navigation system and air traffic control tower therefore forms part of "a work or undertaking connecting the province with any other province or extending beyond the limits of the province" under s. 92(10)(a).

[para61] It makes no difference whether Parliament's exclusive jurisdiction over airports and airport buildings lies under its power to make laws for the peace, order and good government of Canada, or under its power over federal undertakings. The principles governing the applicability of Ontario's building code regime are the same. The regime does not apply because it would affect a vital or integral part of a federal enterprise. Therefore, I agree with MacPherson J.'s conclusion at p. 37:

> My conclusion is, therefore, the same as it was on the aeronautics issue. The application of Mississauga's building code regime to the demolition, alteration and construction of buildings in the redevelopment project at Pearson Airport would intrude into exclusive federal jurisdiction over federal works and undertakings.

> 3. Did the applications judge err in holding that Ontario's building code regime does not apply to the redevelopment of Pearson Airport because it would intrude into Parliament's exclusive jurisdiction over federal Crown property?

[para62] Section 91(1A) of the Constitution Act 1867 gives Parliament exclusive legislative authority over the public debt and property. The federal Crown owns all the land at Pearson Airport. Therefore, MacPherson J. concluded at p. 27 that "the application of Mississauga's building code regime to the demolition, alteration and construction of buildings at Pearson Airport would intrude into exclusive federal jurisdiction over federal public property."

[para63] I agree with this conclusion. The governing principle is that s. 91(1A) is a subject matter limitation on provincial legislative power. As Beetz J. said in Construction Montcalm at p. 777:

> The enumeration of exclusive federal powers in s. 91 of the Constitution, including the power to make law in relation to the public debt and property, operates as a limitation ratione materiae upon provincial jurisdiction, not as a territorial limitation.

Provincial laws, such as building code statutes, whose very subject matter is land or property development, cannot apply to federal Crown property. Constitutionally, a municipality cannot require that buildings constructed on federal property, such as Pearson Airport, be built to municipal standards.

[para64] Mississauga put forward four arguments why the Building Code Act - and therefore the City's development charges by-law - applies to the redevelopment of Pearson Airport. First, land leased from the federal Crown is no longer federal public property; second, the Ground Lease between the Government of Canada and the GTAA deems the new buildings at Pearson Airport to be the property of the GTAA; third, the GTAA and Nav Canada are not a federal enclave immune from provincial laws; and fourth, Ontario's building code regime can apply because it will not "sterilize or affect a Crown real property interest". I will deal briefly with each of these arguments.

[para65] Under the Ground Lease between the federal Crown

and the GTAA, the GTAA has leased the land at Pearson Airport for sixty years. Similarly, under the Pearson Control Tower Lease, Nav Canada has leased the land for the control tower for sixty years. Mississauga submits that land leased from the federal Crown is no longer federal public property under s. 91(1A). This submission clashes with both principle and authority.

[para66] Property under s. 91(1A) means property in its broadest sense. It includes partial interests such as the federal Crown's reversionary interest in the land at Pearson Airport. Federal property ceases to be within the exclusive jurisdiction of Parliament under s. 91(1A) only when it is transferred to another person by the conveyance of a fee simple. This has not happened here. See G.V. LaForest, Natural Resources and Public Property under the Canadian Constitution (1969), pp. 134-35. In this case, the federal Crown still holds title to the land. It has a continuing property interest in the land. Mississauga seeks to prescribe standards for the construction of new buildings on this land. Its inspectors have the power to order the alteration or even demolition of a building. Thus, the federal Crown's property interest is necessarily affected by Ontario's building code regime.

[para67] The decision of the Supreme Court of Canada in Spooner Oils Ltd. v. Turner Valley Gas Conservation Board, [1933] S.C.R. 629 stands directly against Mississauga's position. Spooner Oils holds that provincial legislation cannot restrict the rights of lessees of federal property, any more than if the federal Crown itself occupied the property. In that case, Spooner Oils leased land in Alberta from the Government of Canada under a lease that gave it the right to mine petroleum and natural gas. In 1932, Alberta passed a statute that subjected Spooner Oils' operations to the control of a provincial board, whose duty was to limit the production of natural gas from the land. The Supreme Court of Canada relied on s. 91(1A) to hold that the provincial statute could not apply to the lessee Spooner Oils. Duff C.J. wrote that it mattered not "that, by the lease, an interest in the tract has passed to the lessee" (at p. 643). The provincial legislation still encroached on the exclusive jurisdiction of Parliament under s. 91(1A):

> Nor is it material that, by the lease, an interest in the tract has passed to the lessee. The Dominion Lands Act, and the Regulations enacted pursuant to it, give statutory effect to plans for dealing with Dominion public lands, including lands containing petroleum and natural gas, which, it must be assumed, were conceived by Parliament, and the authorities nominated by Parliament, as calculated to serve the general interest in the development and exploitation of such lands and the minerals in them. It is not competent to a provincial legislature pro tanto to nullify the regulations, to which Parliament has given the force of law in execution of such plans, by limiting and restricting the exercise of the rights in the public lands, created by such regulations in carrying the purpose of Parliament into effect. Indeed, an administrative order, which the legislature has professed to endow with the force of statute, directed against a tract of public land, the property of the Dominion, held by a lessee under the Regulations of 1910 and 1911, and which professed to regulate the exercise, by the lessee, of his right to take gas and petroleum from the demised lands, would truly be an attempt to legislate in relation to a subject reserved for the exclusive legislative jurisdiction of the Dominion by s. 91 (1), "The Public * * * Property" of the Dominion (at pp. 643-44).

[para68] Admittedly, the provincial legislation in question in Spooner Oils was aimed at the lessee, while the Building Code Act is not aimed at the GTAA or Nav Canada, but is a provincial law of general application. However, this distinction makes no constitutional difference. In both cases, the provincial law would affect and thus cannot apply to federal property.

[para69] Many cases, including several dealing with airport buildings located on federal property, have applied the principle in Spooner Oils. Almost without exception, these cases have held that provincial and municipal land use and property development laws do not apply to federal property, whether the Crown has leased the property or not. Whether the building is to be erected by a private contractor

or by a lessee, a municipal building permit is not required. See City of Ottawa v. Shore and Horwitz Construction Co. Ltd., supra; Delta v. Aztec Aviation Group (1985), 28 M.P.L.R. 215 (B.C.S.C.); International Aviation Terminals v. Township of Richmond (1992), 89 D.L.R. (4th) 1 (B.C.C.A.).

[para70] In support of its submission that Ontario's building code regime should apply to Pearson Airport, Mississauga relies on the case law under s. 125 of the Constitution Act 1867. Section 125 states that "No lands or property belonging to Canada or any province shall be liable to taxation". This section confers immunity from a tax charged on Crown property or on the Crown itself in respect of its property but not on private persons who have some interest in Crown land. Thus, the case law has held that s. 125 does not prevent the province from taxing a lessee of federal property or the lessee's leasehold interest.

[para71] This case law does not assist Mississauga. In determining whether provincial tax legislation offends s. 125, the overriding question is whether the legislation affects the federal Crown's property interest. If the province taxes only the lessee's interest and not the federal Crown's interest, then the federal property interest is likely not affected and the provincial law will not offend s. 125. See B. Laskin, Canadian Constitutional Law (3rd rev. ed.) (Toronto, Carswell, 1969), pp. 767-68. By contrast, s. 91(1A) does apply to leased federal Crown land. The Crown has a continuing property interest in the leased land, which would be affected by provincial property development legislation.

[para72] Mississauga's second reason why Ontario's building code regime applies is that the Ground Lease deems any new building at Pearson Airport to be the GTAA's property during the term of the lease. Section 3.10.01(a) of the Ground Lease sets out this deeming provision:

> 3.10.01 The Landlord and the Tenant agree that
>
> (a) any New Facility and any addition to, improvement to, alteration of or replacement of any Existing Facility which may be constructed upon the Lands from time to time are and shall be fixtures to the Lands and are intended to be and shall become the absolute property of the Landlord upon the expiry or early termination of this Lease without any payment being made therefor, free and clear of all mortgages, charges and encumbrances, but shall be deemed, as between the Landlord and the Tenant to be the separate property of the Tenant and not of the Landlord, during this Lease.

[para73] The deeming provision between the landlord (the federal Crown) and the tenant (the GTAA) affects certain rights of the parties between themselves. However, this provision cannot affect the rights of third parties; nor, more importantly, can it affect the legal status of new buildings as federal property for constitutional purposes. Buildings constructed on leased land become part of the property of the landlord leased to the tenant. The parties cannot by agreement change this result by law, this result occurs automatically. See Anger and Honsberger, Law of Real Property, (2d ed.) (1985) Vol. 2 at pp. 1011-12; and Melluish (Inspector of Taxes) v. B.M.I. (No. 3) Ltd., [1996] 1 A.C. 454 (H.L.).

[para74] Moreover, several provisions of the Ground Lease confirm that the GTAA has only a leasehold interest in new buildings at Pearson Airport. For example, s. 3.01.01 provides that "... the Landlord hereby leases to the Tenant the Demised Premises ...". "Demised Premises" is defined in s. 1.01.01 of the Ground Lease to include "collectively the Lands, any Existing Facility, any New Facility, any other building, improvement or structure now or hereafter located on the Lands ...". The federal Crown has simply leased Pearson Airport to the GTAA. The lease includes any new buildings constructed during the lease term. Thus the deeming provision in s. 3.10.01(a) of the Ground Lease does not support Mississauga's position.

[para75] The terms of the Ground Lease provide an additional reason why Ontario's building code regime does not apply to Pearson Airport. Section 14.02(e) of the Ground Lease obligates the GTAA to negotiate in good faith a Municipal-Authority Agreement with Mississauga covering "such agreed upon provincial and municipal construction and other

codes, regulations and by-laws of general application ...". Failing agreement, however, under s. 14.03.04 of the Ground Lease, any new facilities constructed or any existing facilities altered at Pearson Airport must comply with the National Building Code and the National Fire Code. Under s. 14.03.10, the GTAA must obtain an independent architect or engineer to certify that all construction substantially accords with these national codes. The GTAA has not concluded an agreement with Mississauga. Therefore, the national codes and the independent review by an architect or engineer, not the provincial building code regime, govern construction of the new airport buildings.

[para76] In Spooner Oils, the Supreme Court said that if a provision of a lease from the federal Crown conflicts with provincial legislation, the provision in the federal Crown's lease prevails. Here, a conflict does exist between the Ground Lease and the Building Code Act. Even if the equivalency provision in s. 9 of the Ontario statute could eliminate any conflict between Ontario's Building Code and the national codes, the enforcement regimes conflict. Enforcement under Ontario's Building Code Act and Building Code is inconsistent with the independent review mechanism in s. 14.03.10 of the Ground Lease.

[para77] Mississauga's third argument is that the GTAA and Nav Canada are not a federal enclave immune from provincial legislation. This proposition is undeniably correct. The majority decision in Construction Montcalm demonstrates that some provincial laws apply on federal property. In that case, provincial labour legislation was held to apply to employees of a private company doing construction work on federal property under a contract with the federal Crown. However, the provincial legislation did not affect the Crown's property rights. Here, Ontario's building code regime does affect the Crown's property rights at Pearson Airport. The provincial regime seeks to regulate the very use and development of the property. For this reason, it invades Parliament's exclusive jurisdiction under s. 91(1A). See D. Gibson, The Federal Enclave Fallacy in Canadian Constitutional Law (1976) 14 Alta. L.R. 167 at 173.

[para78] Mississauga's fourth argument is that the Ontario building code regime applies to the redevelopment because it does not "sterilize or affect a Crown real property interest". This argument has no merit. As I have already said, the federal Crown has a continuing property interest in Pearson Airport, which would be directly affected by Ontario's building code regime. Again, Spooner Oils is binding authority against Mississauga's argument.

[para79] For these reasons, I would not give effect to this ground of appeal.

4. Did the applications judge err in holding that Mississauga had no standing to claim that the GTAA was not entitled to apply the National Building Code under s. 14.03 of the Ground Lease between the federal Crown and the GTAA?

[para80] As I discussed earlier, s. 14.02 of the Ground Lease obligates the GTAA to negotiate in good faith a Municipal-Authority Agreement with Mississauga. Such an agreement could provide for the application of the Ontario Building Code. But if Mississauga and the GTAA cannot reach an agreement, then under s. 14.03.04 of the Ground Lease the National Building Code and the National Fire Code apply to construction at Pearson Airport.

[para81] Because the GTAA has not concluded an Municipal-Authority Agreement with Mississauga, it has relied on the national codes. Mississauga contends that the GTAA is not entitled to do so because it has breached its obligation to negotiate in good faith. Whether the GTAA has negotiated in good faith is disputed. The GTAA says it has. So too does the federal Crown. Mississauga says it has not. However, the Ground Lease is a contract between the federal Crown and the GTAA. Mississauga is not a party to it. MacPherson J. therefore held that Mississauga did not have standing to claim that the GTAA had breached its covenant to negotiate in good faith. I agree with him.

[para82] The ordinary rule is that a stranger to a contract cannot claim a right under that contract. This privity rule has exceptions but Mississauga has not relied on any of them. I can do no better than quote the words of

MacPherson J. at p. 40:

> There are exceptions to the privity doctrine. A contract may confer enforceable rights upon a third party in three situations - where a party to a contract has acted as an agent for the stranger in acquiring the contractual rights, where a party to the contract has constituted himself trustee of the contractual rights for the benefit of the stranger, and where employees of a party to the contract were clearly intended to receive the benefit of an exclusion of liability relating to their employer in circumstances where the employees were acting in the course of their duties for that employer on matters under the contract: see Greenwood Shopping Plaza [Ltd. v. Beattie, [1980] 2 S.C.R. 228, 111 D.L.R. (3d) 257] and London Drugs Ltd. v. Kuehne & Nagel International Ltd., [1992] 3 S.C.R. 299, 97 D.L.R. (4th) 261. Mississauga does not attempt to bring itself within any of these exceptions.

[para83] I would not give effect to this ground of appeal.

> 5. Did the applications judge err in refusing to grant a declaration that Mississauga is entitled to "fair, reasonable and equitable compensation" for its capital costs connected with the redevelopment of Pearson Airport?

[para84] Mississauga advanced an alternative argument for the recovery of the capital costs it claims to have incurred in providing municipal services to Pearson Airport. If it cannot recover development charges under its by-law, it contends that it is entitled to recover its capital costs at common law. It seeks a declaration that it is entitled to "fair, reasonable and equitable compensation" for the capital costs associated with the redevelopment of Pearson Airport.

[para85] MacPherson J. refused this declaration for two reasons. He found no common law obligation to pay; and he held that Mississauga had another remedy, an application for a grant in lieu of taxes ("GILT") under the federal Municipal Grants Act, R.S.C. 1985 c. M-13. I agree with both of his reasons for refusing Mississauga declaratory relief.

[para86] The common law obligation to pay fair compensation for services provided has its roots in Dominion of Canada v. City of Levis, [1919] A.C. 505 (P.C.). In that case, the Privy Council held that though a federal government building could not be taxed by a municipality, the federal government was nonetheless required to pay a "fair and reasonable price" for water supplied to the building by the City Council (at p. 510). Recently, the British Columbia Court of Appeal applied Levis to impose a common law duty on municipalities to supply available, essential public services to two Indian bands in exchange for a reasonable fee: Tsawassen Indian Band v. Corporation of Delta (1997), 149 D.L.R. (4th) 672.

[para87] The obligation imposed on the Crown in Levis to pay a fair and reasonable fee applies to "merchantable commodities" such as water, or to services. MacPherson J. found as a fact that as customers of Mississauga the GTAA and Nav Canada "have paid, and will continue to pay, for any commodities or services they purchase" (at p. 38). In this case, however, Mississauga wants to extend Levis by imposing an obligation on the federal Crown to pay the capital costs of providing municipal services. In substance, it seeks an amount for capital costs equivalent to the development charges it has levied on the GTAA and Nav Canada.

[para88] The principle underlying Levis does not apply to this kind of charge. A development charge is a form of tax or a regulatory charge on land development. It is not a payment for specific services or for merchantable commodities. Indeed, this court has held that a development charge is not even collected to defray the capital costs attributable to a particular development. A development charge bears no relationship to the value to the developer of the capital expenditure it is intended to offset. I therefore see no justification for extending Levis to require payment of capital costs and, in effect, to permit Mississauga to recover its development charges at common law. See Ontario Home Builders' Association v. York Regional Board of Education, supra, at pp. 977-78; Ontario Cancer Treatment and Research Foundation v. Ottawa (City) (1998), 157 D.L.R. (4th) 38 (Ont. C.A.); Westbank First Nation v. British Columbia Hydro and

Power Authority (2000), 176 D.L.R. (4th) 276 (S.C.C.).

[para89] The second reason why the declaratory relief sought by Mississauga should be refused is that Mississauga has an alternative remedy under the Municipal Grants Act. The Government of Canada has recognized that where it is immune from provincial or municipal legislation, it may still benefit from provincial and municipal services, and therefore should bear its fair share of the cost of those services. Parliament's enactment of the Municipal Grants Act is a measure of cooperative federalism. Under s. 3(1) of the Act, Mississauga may apply to the Minister of Public Works and Government Services for a grant in lieu of a "real property tax" or a "frontage area tax in respect of federal property" within its boundaries. Pearson Airport is a federal property within Mississauga's boundaries. Real property taxes and frontage area taxes are defined in s. 2(1) of the statute to include any tax "in the nature of a development tax". Undoubtedly, a development tax includes development charges under the Development Charges Act. Thus, Mississauga can apply for a GILT to cover its development charges for the redevelopment of Pearson Airport.

[para90] Indeed, the federal statutory scheme contemplates GILT payments instead of development charges for Pearson Airport. Section 3(1)(l) of the Municipal Grants Regulations, 1980 S.O.R. 81-29, designates any real property owned by the federal Crown and leased to a "designated airport authority", such as the GTAA, to be "federal property" for the purpose of the Municipal Grants Act. Further, s. 5.04.01(a) of the Ground Lease requires the GTAA to make payments to the federal government to allow the government to make grants in lieu of "real property taxes" to municipalities. Real property taxes are defined in s. 5.01.01 of the Ground Lease to include "all taxes ... and development charges, whether general or special, ordinary or extraordinary, foreseen or unforeseen, of every nature or kind whatsoever ...". Obviously, GILT payments under the Municipal Grants Act were intended to replace the development charges Mississauga now seeks to extract.

[para91] Mississauga argues that GILT payments are discretionary. Therefore, it has no guarantee of receiving a grant, let alone the full amount of its development charges. These arguments ring hollow. Even as late as the oral argument before this court, Mississauga still had not applied for a GILT. At the very least, Mississauga must resort to the statutory regime that specifically addresses its claim before seeking discretionary relief from the court. I therefore see no merit in this ground of appeal.

> 6. Did the applications judge err in refusing to grant Mississauga a declaration that it is not required to provide fire and emergency services at Pearson Airport unless the GTAA and Nav Canada are required to pay the development charges levied by Mississauga?

[para92] The GTAA has designated Mississauga's fire and emergency service the primary response agency for fires and emergencies at Pearson Airport, and a support agency for fires and emergencies in airplanes. Mississauga submits that the GTAA can only claim the benefits of these services if it is willing to accept the burden of Ontario's building code regime, which includes the payment of development charges. Although the GTAA now pays for the operating costs of these services, Mississauga contends that the redevelopment of Pearson Airport will add to the capital costs of providing the services. These increased capital costs, Mississauga contends, should be borne by the GTAA and funded by the payment of development charges.

[para93] In making this submission, Mississauga relies on the benefit/burden exception to Crown immunity. This exception provides that where the Crown invokes the benefits of a law, it may also be subject to the burdens of that law. Thus, when the federal Crown seeks to benefit from provincial legislation, it may find itself subject to that legislation. See Sparling v. Québec, [1988] 2 S.C.R. 1015.

[para94] There are two answers to Mississauga's submission. First, I doubt that the benefit/burden exception applies in this case; and even if it does, Mississauga's claim does not come within it. The benefit/burden principle is an exception to the ordinary rule that the Crown is not bound by a statute unless the statute says so. See Interpretation Act, R.S.C. 1985, c. I-21, s. 17. By accepting the benefits of a statute, the Crown impliedly waives its statutory immunity.

But interjurisdictional immunity is not a statutory principle; it is a constitutional principle. It cannot be waived.

[para95] However, even if the benefit/burden exception does apply, Mississauga cannot bring itself within it. Mississauga provides fire services under the Fire Protection and Prevention Act, 1997, S.O. 1997 c. 4. Mississauga argues that the GTAA cannot accept the benefits of these fire services unless it incurs the burdens of the building code regime. But to invoke the benefit/burden exception, there must be a "... relationship or nexus between the benefit sought to be taken from a statutory or regulatory provision and the burdens attendant upon that benefit". See Sparling at pp. 1027-28. Although the benefit and the burden need not arise under the same statute, the "crucial question is whether the two elements are sufficiently related so that the benefit must have been intended to be conditional upon compliance with the restriction". See Sparling at p. 1025. Nothing in the Fire Protection and Prevention Act, 1997 suggests that the delivery of fire services was intended to be conditional on compliance with the Ontario building code regime. As MacPherson J. aptly observed in rejecting Mississauga's submission at p. 41:

> Does the Mississauga fire department refuse to attend fires at the homes of residents who have been slow about shovelling snow from their walkways in violation of a municipal by-law, or at a small corner grocery that is late paying its property taxes? Somehow I doubt it. And what happens in Mississauga now at a construction site where a Mississauga building inspector has found building code violations? If there is a fire, does the fire department refuse to attend? Again, I doubt it.

[para96] The second answer to Mississauga's submission comes back to the GILT provisions under the Municipal Grants Act. As MacPherson J. concluded, instead of trying to collect development charges, Mississauga must first apply for a GILT under that Act. Parliament enacted a statutory regime that is meant to ensure the federal Crown pays its fair share of the costs of provincial and municipal services from which it benefits, even though it may be immune from the authorizing provincial legislation. In my view, Mississauga must resort to this statutory regime. I would therefore refuse the declaration concerning fire and emergency services sought by Mississauga.

F. Conclusion

[para97] For these reasons, I would dismiss the appeal. I would order Mississauga to pay the GTAA and Nav Canada their costs of the appeal.

LASKIN J.A.
McMURTRY C.J.O. -- I agree.
CHARRON J.A. -- I agree.

Nicholls v. Merrickville-Wolford (Village)

Between
Dr. Robert V.V. Nicholls and Don Lockhart, applicants, and
Corporation of the Village of Merrickville-Wolford and
Merrickville District Community Health and Services Centre,
respondents

[1998] O.J. No. 5364
DRS 99-02300
Court File No. 98-CV-98097

Ontario Court of Justice (General Division)
Ottawa, Ontario
Panet J.
December 22, 1998.

Counsel:
William R. Hunter, for the applicants.
Michael Johnston and Richard Knott, for the respondents.

[para1] PANET J.:-- This is an appeal pursuant to Section 25(1) of the Building Code Act S.O. 1992, c. 23, as amended, (the "Act") from the decision in which a Conditional Building Permit, dated November 3, 1998, was issued to Merrickville Community Health Centre (the "Health Centre").

[para2] As a preliminary matter, the Applicants brought a Motion for an Order granting leave to amend the Notice of Application in this matter to add the Chief Building Official, Randy E. Wilkinson, as a Respondent to this application and for an Order extending the time to bring an application against Mr. Wilkinson as prescribed by the Act. On the

consent of all parties, the two requested orders are hereby made.

[para3] The appeal relates to a Conditional Building Permit which was issued to the Health Centre on November 3, 1998 by the Chief Building Official of the Village of Merrickville-Wolford ("the Village") for the construction of a foundation and below grade services at the building site located on the fair grounds of the Village. The Health Centre is a corporation without share capital incorporated in the province of Ontario by Letters Patent dated August 27, 1974. The Health Centre currently owns and operates a building for the delivery of services in the health care field. For some time, it has been considered desirable to construct a new health care centre and in this regard funding was obtained to enable the construction of the new health care facility. It was desired to proceed as quickly as possible with the construction of the new facility. With this objective in mind, the Conditional Building Permit was issued on November 3, 1998.

[para4] The Applicants object to the issuance of the Conditional Building Permit on the basis that the zoning designation for the parcel of land on which the Health Centre proposes to erect the health care facility is "Open Space" and that zoning does not permit a medical centre. The Applicants also contend that the building site is located partially on a road allowance which has not been closed and for this reason also submit that the Conditional Building Permit should not have been issued. The Applicants submit that they are aggrieved by the decision to issue a Conditional Building Permit as they have been deprived of their right to oppose any re-zoning by-law before the Ontario Municipal Board.

[para5] The Respondents argue that the Conditional Building Permit was issued in compliance with Zoning By-law No. 23-94 of the Village in that it comes within the exception found in Section 3.24(i) of the Zoning By-law. The Respondents submit that the road allowance has in fact been closed pursuant to the order of Cosgrove J. dated December 15, 1998. The Respondents also argue that the Applicants have not been aggrieved because the construction of the new health care facility will be a significant benefit to all those persons living in the Village of Merrickville.

[para6] The issuance of a Conditional Building Permit is authorised under section 8(3) of the Act which provides in part as follows:

> "Even though all requirements have not been met to obtain a permit under subsection (2), the chief building official may issue a conditional permit for any stage of construction if,
>
> a) compliance with by-laws passed under sections 34 and 38 of the Planning Act and with such other applicable law as may be set out in the building code has been achieved in respect of the proposed building or construction;"

[para7] Section 34 (1) of the Planning Act provides for the passing of zoning by-laws by councils of local municipalities and Zoning By-law No. 23-94 of the Village was enacted in conformity with the Official Plan pursuant to section 34 of the Planning Act.

[para8] Section 6.6.1 of the Official Plan of the Village provides as follows:

> "No buildings or structures shall be permitted in the Open Space areas unless erected for purposes incidental and accessory to recreation uses or those erected for indoor recreational use such as community centres or arenas."

It is agreed between all parties that the parcel of land on which the Health Centre proposes to erect the health care facility is zoned as "Open Space". Zoning By-law No. 23-94 of the Village does not permit a medical centre or health care facility to be erected in the "Open Space" zone.

[para9] The first issue between the parties is whether the new facility comes within the exception to the provision related to zoning as "Open Space" as found in section 3.24(i). Because of this importance to this appeal, it is reproduced in full as follows:

> "Notwithstanding any other provisions of this By-law, the Corporation of the Village of Merrickville, Ontario Hydro, any local Board, any Commission, any telephone or telegraph company, any transportation system owned or operated by or for the Village of Merrickville, or any local board of the Corporation as defined by the Municipal Act and any Department or Ministry of the Federal or Provincial Government, may, for the purpose of public service, use any land, or erect any building or structure in any zone notwithstanding that such building or structure or proposed use does not conform to the provisions of this by-law for such zone."

[para10] The Respondents argue first that the land is owned by the Village and that it is the Corporation of the Village of Merrickville which is using the land or erecting the building. Because there is a lease agreement between the Village and the Health Centre which provides that the lands are to be used by the Health Centre "for the purpose of a non-profit publicly-funded community health centre under the direction of a volunteer board of directors" the Village contends that the construction of the health facility comes within the exception in section 3.24(i). However, the wording of this exception contemplates that the Village itself would use the land for the purpose of a public service or would erect a building or structure in that zone. Reading this exception as found in section 3.24(i), it appears that the intention is to allow for an exception to the zoning by-law where the Village itself is to use the land for the purpose of a public service and a reasonable interpretation of the by-law does not extend, in my view, to allow the Village to lease the land to third parties to accomplish the same purpose. The exception in this by-law enumerates a number of entities which are allowed to use this land for the purpose of public service. The types of entities have obviously been carefully considered and described in section 3.24(i). To conclude that the exception would extend to allow not only these entities, but any other person, firm or body to use these lands, by way of lease, from one of these enumerated bodies would in my view be an unreasonable interpretation of this by-law.

[para11] The Respondents also contend, in the alternative, that the Health Centre is an entity within the meaning of "any local Board" as found in section 3.24(i). The term "local board" is not defined in the Act however it is defined in section 1 of the Municipal Affairs Act, R.S.O. 1990, c. M.46, s. 1 as follows:

> "Local Board" means a school board, public utility commission, transportation commission, public library board, board of park management, board of health, police services board, planning board, or any other board, commission, committee, body or local authority established or exercising any power or authority under any general or special Act with respect to any of the affairs or purposes, of a municipality or of two or more municipalities or parts thereof."

[para12] The terms "Local Board" is also defined in section 1 of the Municipal Conflict of Interest Act, R.S.O. 1990, c. M.50. It would appear that a local board is intended to mean a body, commission or authority, in some sense a public authority, operating in the public interest and exercising some power with respect to any of the affairs or purposes of a municipality.

[para13] In the present case, the Health Centre does not operate under the authority of the municipality and does not operate with respect to the affairs or purposes of a municipality but rather its objects, as stated in its Letters Patent, relate to the establishment and maintenance of premises and facilities for the provision of health services in its broader sense. In a similar situation, it was argued in Friends of McNichol Park v. Burlington (1997) 31 O.R. (3d) 405 that a hospital was a "public authority". The court found in that case that even though a hospital has a "board" which is the board of directors of the hospital, this did not make the hospital itself a board within the meaning of the zoning by-law considered in that case. It was also concluded that a hospital is no more an establishment created by or for a provincial body any more than any private or public corporation incorporated under the relevant corporation legislation and concluded that a public hospital is not a public authority. I conclude therefore that neither the Health Centre nor the board of directors of the Health Centre

comes within the meaning of the words "any local Board" in section 3.24(i) of Zoning By-law of no. 23-94. For the same reasons, I find that it does come within the words "or any local board of the Corporation as defined in the Municipal Act". I would note that it was agreed by counsel for all parties that the reference in section 3.24(i) to the Municipal Act is actually to the "Municipal Affairs Act".

[para14] The next issue raised by the Applicants is that the building site is, in part, on a road allowance, designated as "Brock St.", and that road allowance has not been closed. As indicated, the position of the Respondents is that Brock St. has been closed by virtue of the Order of Cosgrove J. dated December 15, 1998. The Applicants state that this Order was obtained on an ex-parte basis without notice to the Applicants and the Applicants have filed a Notice of Appeal to the Divisional Court from this judgment. In my view, the relevant date for the determination as to whether the Conditional Building Permit was issued in compliance with by-laws and with other applicable law, as provided in section 8(3)(a) of the Act must be the date on which the permit itself was issued which in this case was November 3, 1998. As of that date, the road allowance was not closed and, as a result, as of that date the Conditional Building Permit was issued which allowed construction on a road allowance which was not closed.

[para15] In summary, I find that the Conditional Building Permit authorized construction of a "new medical, community health centre" on lands designated under Zoning By-law no. 23-94 as "Open Space" and that such construction would be in breach of that zoning by-law and further that such construction would take place, in part, on a road allowance which was not closed. Accordingly, the Conditional Building Permit was issued in breach of the requirements found in section 8(3)(a) of the Act.

[para16] A final question is whether the Applicants come within the provision in section 25(1) of the Act, as to parties who may appeal, which includes: "any person who considers themself aggrieved by an order or decision made by an inspector or chief building official under this Act". The Respondents argue that the Applicants have not been aggrieved in any way and rather, in the event that the construction of the Health Centre does not proceed, it is the residents of the Village and the surrounding district who will be deprived of essential services.

[para17] In this regard, it is established that a person need not have a personal, proprietary or pecuniary interest to be aggrieved by an act of the Chief Building Official (see Friends of Toronto Parkland, (1992) 6 O.R. (3d) 196).

[para18] In the present case, the Applicants argue they have a legitimate interest in preserving the lands designated as "Open Space" and, further, are aggrieved by the issuance of the building permit which is in breach of the zoning by-law because they are deprived of their right to oppose any re-zoning by-law before the Ontario Municipal Board. I have concluded that the issuance of the building permit was a violation of the zoning by-law. The objection by the Applicants is not in any way "a battle that had been fought and lost" as was the case in Friends of Toronto Parkland (supra) but rather a legitimate position that they have been deprived of their rights to object to the re-zoning before the Ontario Municipal Board. I conclude therefore that the Applicants are persons who consider themselves aggrieved and accordingly have status to bring this appeal under section 25(1) of the Building Code Act.

[para19] It therefore ordered that the Conditional Building Permit bearing Permit no. B60-98, issued on November 3, 1998, to the Merrickville Community Health Centre Inc. shall be rescinded.

[para20] I would allow costs to the Applicants on a party and party basis. If counsel cannot agree on costs written submission may be made to me within 30 days of this order.

PANET J.

Re **Ontario Cancer Treatment and Research Foundation and Ottawa** et al.

[Indexed as: Ontario Cancer Treatment & Research Foundation v. Ottawa (City)]

38 O.R. (3d) 224
[1998] O.J. No. 552
Docket No. C22850

Court of Appeal for Ontario
Finlayson, Osborne and Labrosse JJ.A.
February 12, 1998

APPEAL from an order of Binks J. (1996), 29 M.P.L.R. (2d) 112 (Gen. Div.), declaring that the Ontario Cancer Treatment and Research Foundation was exempt from payment of a development charge under the Development Charges Act, R.S.O. 1990, c. D.9.

Guy J. Pratte, for appellant, Hydro-Electric Commission of the City of Ottawa.
Charles T. Hackland and Wayne J. Brynaert, for respondent.

FINLAYSON J.A. (dissenting): -- This is an appeal by the Hydro-Electric Commission of the City of Ottawa ("Ottawa Hydro")
from the judgment of the Honourable Mr. Justice Binks of the Ontario Court (General Division). By that judgment, reported (1996), 29 M.P.L.R. (2d) 112, Binks J. granted to the Ontario Cancer Treatment and Research Foundation (the "Foundation") a declaration exempting it from the obligation to pay, in relation to a development at 501 Smyth Road in the City of Ottawa, the Ottawa Hydro portion of development charges in the amount of $174,056 exacted pursuant to the Development Charges Act, R.S.O. 1990, c. D.9 (the "Act"), and Ottawa's By-law 279-91 (the "Development Charges By-Law").

The development charge became payable upon the Foundation obtaining a building permit in the summer of 1993 for the expansion of a cancer treatment facility located at 501 Smyth Road, Ottawa. Neither the land nor the buildings located on the land are owned by the Foundation; rather, their registered owner is the Ottawa Health Sciences Centre Inc. The Foundation occupies the land as a tenant of the Health Sciences Centre.

On or about October 7, 1993, the Foundation and the City of Ottawa entered into a deferral agreement in relation to the development charge at issue. Pursuant to the terms of the agreement, the parties agreed that the development charge would not be payable until such time as its applicability to the Foundation (including the Ottawa Hydro component whose collection is the City's responsibility) had been lawfully determined.

Subsequently, the City of Ottawa provided to the Foundation a grant equivalent to the City's component of the development charge, thus avoiding the need for litigation. However, Ottawa Hydro decided to proceed with the contemplated litigation in respect of its separate and distinct component of the development charge.

Binks J. held that the development charge in question was, in essence, a tax and that the Foundation was exempted from the payment of the charge by reason of s. 16 of the Cancer Act, R.S.O. 1990, c. C.1, which provides, inter alia, that the Foundation is not subject to taxation in relation to its real and personal property.

The position of the appellant as set out in its factum is that:

(a) the Hydro component of the development charge is a regulatory charge, and not a tax;

(b) in any event, the Development Charges Act expressly overrides any tax exemption contained in the Cancer Act; and, in the further alternative,

(c) the Foundation, as tenant, cannot avail itself of the tax exemption provided in the Cancer Act.

Facts

Ottawa Hydro is a Hydro Electric Commission established under a by-law of the City of Ottawa in 1916. In accordance with the provisions of the then Public Utilities Act and the Power Commission Act, the City of Ottawa delegated to Ottawa Hydro all responsibility for the control and management of the construction, operation and maintenance of all works undertaken by the City for the distribution and supply of electrical power or energy.

Ontario Hydro is responsible for the generation and transmission of electricity to terminal stations jointly operated by Ottawa Hydro and Ontario Hydro. At this point, Ottawa Hydro purchases the electricity from Ontario Hydro at wholesale cost, and distributes it to local consumers of electricity.

Ottawa Hydro is responsible for establishing the rates (as opposed to "taxes", which Ottawa Hydro has no power to impose) charged to consumers for the supply of electricity and for making all decisions relating to expansions or improvements in its distribution network. The rates charged to its customers are Ottawa Hydro's primary source of revenue.

Prior to the enactment of the Development Charges By-Law, Ottawa Hydro prepared annual budgets based on its anticipated revenues and expenses, both operational and capital. With respect to the capital requirements related to its statutory obligation to supply its utility service, Ottawa Hydro was required to anticipate future land development and take the necessary steps to ensure that these areas were adequately serviced when they were ultimately developed. Thus Ottawa Hydro estimated the costs of the infrastructure required to service future developments and incorporated these costs into its annual budget.

Based on the data contained in its annual budget, and the province-wide rate-setting criteria established by Ontario Hydro, Ottawa Hydro calculated the rates it should charge to consumers of electricity in order to offset its expenses. Accordingly, that portion of Ottawa Hydro's incremental capital costs occasioned by new developments was, prior to the Development Charges By-Law in 1991, borne by all consumers of electricity in the form of a rate increase established by Ottawa Hydro.

The Foundation confirmed that it had always paid Ottawa Hydro's rates relating to its consumption of electricity which, prior to 1991, included the same type of capital costs now sought to be recovered through development charges.

While it remains within its power to defray growth-related capital costs by increasing the rates charged to all consumers, Ottawa Hydro's stated position is that it is more equitable to recover these costs, as nearly as possible, from those causing them to be incurred. Therefore, Ottawa Hydro elected to recover its growth-related capital costs by way of development charges, in lieu of assessing these costs against all of its consumers by way of general rate increases. The mechanism afforded by the Act was selected for this purpose.

Under the authority of the Act, the City of Ottawa enacted the Development Charges By-Law in 1991, which imposes a charge against land if the development of the land would increase the need for various services. The Development Charges By-Law distinguishes between two separate components of the development charge, the City of Ottawa component and the Ottawa Hydro component. The charges are set out as Schedules A and B respectively to the Development Charges By-Law.

The evidence before Binks J. was that Ottawa Hydro was exclusively responsible for the calculation of the hydro component of the development charge in Schedule B. Carl Kropp, the General Manager and Chief Engineer of Ottawa Hydro, asserted in affidavit testimony that in order to ensure that the Ottawa Hydro component of the development charges reflected accurately the capital costs which would be incurred by Ottawa Hydro in servicing new developments, it engaged in extensive in-house analysis and relied heavily on the services of C.N. Watson and Associates Limited, a well-respected consulting firm on the subject of development charges.

In calculating the development charge, Ottawa Hydro used only the capital costs occasioned by new development. The operating

costs of servicing customers once the infrastructure is installed are specifically excluded and are charged through Ottawa Hydro's general rates, as approved by Ontario Hydro. The rationale is that on a system-wide basis, the operating costs remain more or less constant, regardless of whether they are related to old or new infrastructure. Incremental capital costs, on the other hand, can be more readily attributed to the class of consumer who caused them. It submits that the inclusion of the Ottawa Hydro component in the development charges permits a fairer allocation of costs among Ottawa Hydro's customers on the basis of the rate-making principle known as "cost-causality".

No issue was taken in this court or below as to the propriety of Ottawa creating a separate schedule limited to development charges for Ottawa Hydro nor with the charges themselves as being anything other than what is authorized by the Act. What the Foundation took exception to was the description given by Carl Kropp as to how the charges were arrived at. However, there is nothing to contradict his description and I am satisfied that there can be no argument that the charges embraced the following considerations:

(a) the new development's distance from the transformer station, measured in metres;

(b) the unit costs of the electrical distribution plant given in dollars/megawatt/metre; and,

(c)the magnitude of the new load, measured in kilowatts.

Ultimately, these calculations produced a comprehensive set of charges in relation to the capital costs to be incurred by Ottawa Hydro as a result of a new development. They were adopted by the City of Ottawa and incorporated into the Development Charges By-Law as Schedule B.

With regard to the development at issue, the Foundation has a service consisting of two main switches sized 1,600 A, 347/600V. Consequently, pursuant to Schedule B of the Development Charges By-Law, the development charges due and payable to Ottawa Hydro total $174,056.

Since the implementation of the Development Charges By-Law, Ottawa Hydro's capital expenditure budget has reflected anticipated revenues received from the development charges set out in Schedule B. Growth-related capital expenditures are offset by anticipated receipts from development charges such that the budget submitted to Ontario Hydro shows a lower capital requirement, thus reducing the level of the rates which would otherwise be charged to Ottawa Hydro's customers.

Although the City Treasurer is responsible for the collection of the Ottawa Hydro component of the development charge, the funds collected are maintained, on behalf of Ottawa Hydro, in a separate reserve fund (the "Development Charges Reserve Fund -- Ottawa Hydro"), which was established under By-law 281/91. Pursuant to s. 18 of the Development Charges By-Law, the City Treasurer must release to Ottawa Hydro, when demanded by Ottawa Hydro, that portion of the reserve fund required to fund growth-related capital costs. However, only those funds specifically required to fund a growth-related project are released to Ottawa Hydro. Consequently, it is submitted, there is no danger that the funds collected on behalf of Ottawa Hydro will be used for any purpose other than to defray the costs of growth-related capital expenditures necessary for the provision of hydro-electricity for completed projects.

Issue

Although, as indicated above, Ottawa Hydro raised three issues on appeal in its factum, the third ground was abandoned at the opening of argument. I have some difficulty with the proposition advanced by the second ground of appeal, namely, that the general language of the Act can override the express exemption of the Foundation from taxation on real and personal property contained in s. 16 of the Cancer Act. However, if the trial judge was in error in treating the Ottawa Hydro component of the development charges as a tax rather than a rate or charge, this second issue becomes academic. The sole issue then becomes:

Did the learned trial judge err in holding that the Ottawa Hydro component of the development charge is properly

characterized as "taxation" within the meaning of the Ontario Cancer Act?

Analysis

I have set out in some detail the facts relating to the manner in which the Ottawa Hydro development charges were determined because it is apparent to me, with great respect to the learned trial judge, that he misapprehended the evidence of Carl Kropp on this issue. While Kropp was cross-examined on his affidavit, I have not been shown where he altered his evidence in any material way. On its face, his testimony is no more than it purports to be, a straightforward description as to how the capital component of the electrical utility charges was determined for this specific new customer. The calculation of the capital cost of the installation of additional plant and equipment to provide this utility service is traditional to accepted methods of rate determination. On the face of this evidence, one can only conclude that the Ottawa Hydro component of the development charges to the Foundation was the incremental capital cost component of the electricity rate to the Foundation. As such, it is an addition to the rate base of Ontario Hydro and has no relation in law to a tax.

A feature of public utility regulation is the principle that utilities may not operate at a profit. Rather, one of the tenets of ratemaking is the provision of services at cost, a measurement which includes a reasonable rate of return reflecting the net capital requirements of the public utility. Public utility rates must be sufficient to meet current operating costs as well as costs to replace and acquire capital necessary for the service of the utility to consumers: see J. Bonbright et al., Principles of Public Utility Rates (Arlington: Public Utilities Reports, Inc., 1988) generally and particularly at pp. 6 and 22.

The starting point for an analysis of the mechanics of ratemaking begins with the notion that public utilities, given their special status, must function within a standard of reasonableness in rate setting: see Bonbright, supra, at ch. 10. The presumption which surfaces in the context of adjudication at rate hearings is that rates should reflect attempts at utility cost recovery. Public utilities strive not to operate beyond cost recovery, and rates to consumers are calculated in light of a public utility's rate base and specific return with respect to that rate base.

The rate base, simply stated, is the "amount of investment on which a regulated utility is entitled to a fair rate of return": see Canadian Institute of Resources Law, S.J. Bleckman, ed., Canada Energy Law Service, vol. 1 (Toronto: Carswell, August 1997) at pp. 4-9. The amount of investment reflects the value of the utility's assets that are used to provide services. Scholarly attention has focused on the various components of a utility's assets which are included or excluded from the assets of the utility for the purposes of rate base calculation. The determination of rate base is guided by formulae present in the legislation that governs particular utilities, as in s. 19(3) of the Ontario Energy Board Act, R.S.O. 1990, c. O.13, as amended, which provides that rate base includes a reasonable allowance for the cost of the property that is used or useful in serving the public less certain amounts, plus a reasonable allowance for working capital: see also Northwestern Utilities Ltd. v. Edmonton (City), [1929] S.C.R. 186, [1929] 2 D.L.R. 4, for a similar definition of rate base. It should be noted that the Ontario Energy Board has advisory powers with respect to Ontario Hydro, and the Board of Directors of Ontario Hydro establish electricity rates after considering the suggestions of the Ontario Energy Board, among other factors influencing their decision-making process. As a result the determination of rate base, within the meaning of the Ontario Energy Board Act, is applicable for Ontario Hydro for purposes of rate setting.

From the above perhaps oversimplified account of rate-making principles, it follows that these hydro charges are utility rates and not taxes. A public utility is only entitled to recover its costs in its rates, those costs including a reasonable rate of return on the utility's capital investments, and as such these rates are charges and not taxes. Taxes are of more general application and are intended to raise revenues: see Peter Hogg, Constitutional Law of Canada, 3rd ed. (Toronto: Carswell, 1994) p. 30-16.1 and infra. Indeed, it has long been recognized that electrical utility rates cannot constitute

taxes since they flow from the provinces' regulatory power over local works and undertakings set out in s. 92(10) of the Constitution Act, 1867: see Hogg at p. 29-17. This is so notwithstanding that utility rates may be added to the municipal tax roll and collected as "taxes": see Victoria & Grey Trust Co. v. North Bay (City) (1984), 44 O.R. (2d) 795 at pp. 799-800 (H.C.J.), and Guaranty Trust Co. of Canada v. Quality Steels (Canada) Ltd., [1953] O.R. 434 at pp. 444-45, [1953] 3 D.L.R. 296 (H.C.J.).

Unfortunately, the trial judge did not appreciate this legal background in his analysis. In his reasons he stated at p. 114:

> There was evidence by affidavit that the quantum of development charges was reached by a complicated formula. The development charges applicable to a new development are not based on the capital cost incurred in providing electricity to that development, but instead by another method entirely, and this calculation may not be the same as those utilized by other municipalities which have enacted development charge by-laws.
>
> The development charges paid by subscribers pursuant to the by-law are placed in a general fund, and held in trust for Ottawa Hydro by the Municipality. Furthermore, there is no direct correlation between the development charges rendered on a project and the recovery of those specific charges by Ottawa Hydro.

The trial judge then canvassed the case-law defining a "tax", and concluded that the Ottawa Hydro component of the development charges was a tax, and then summarily concluded that the Foundation was exempt from the development charges.

With great respect to the trial judge, the above-quoted reasons do not reflect an analysis of the evidence as to how Schedule B was arrived at by Ottawa Hydro. The reasons reflect the generality of development charges authorized by the Act. Very clearly, the development charges determined by Ottawa Hydro in Schedule B are the incremental capital costs incurred by Ottawa Hydro in providing electricity to the Foundation. These charges are attributed directly to the Foundation as the incremental capital component of the utility rate for the delivery of electricity to it as a customer. In the result, the Foundation is billed when service commences at the blended rate of capital and commodity charges billed to equivalent users prior to the construction of its new facility. These incremental capital costs may be calculations based on historical costs but, as with all such rate-making calculations, they become current and very real when they are collected from the Foundation through the mechanism provided by the Development Charges By-Law after the installation of the specific equipment that enables Ottawa Hydro to effect delivery to the Foundation of its utility service, namely electricity. To the extent that the above-quoted reasons of the trial judge constitute a finding of fact as to how the development charges in issue were determined, they constitute palpable and overriding error.

With respect to the legal categorization of these charges as taxes, the trial judge relied, in part, on the judicial reasoning from Ontario Home Builders' Assn. v. York Region Board of Education in the Divisional Court (1993), 13 O.R. (3d) 493, 103 D.L.R. (4th) 55, and in the Court of Appeal for Ontario (1994), 17 O.R. (3d) 103, 109 D.L.R. (4th) 289. This case was later heard and decided by the Supreme Court of Canada ([1996] 2 S.C.R. 929, 137 D.L.R. (4th) 449). In this court, Foundation relies on the Divisional Court judgment ((1993), 13 O.R. (3d) 493) which concluded that the education development charge passed under a by-law enacted pursuant to Part III of the Act is a tax and falls squarely within the exemption provided to the foundation by s. 16 of the Cancer Act. The Divisional Court's characterization of these charges as a tax was undisturbed, indeed it was not discussed, in the later decisions of this court and the Supreme Court of Canada.

It is important to recognize that by the time Home Builders' reached the level of the Supreme Court of Canada, the parties had accepted the initial classification of the Divisional Court below that the education development charges were taxes. The Divisional Court concluded that they were indirect taxes and therefore ultra vires the province as contrary to s. 92(2) of the Constitution Act, 1867. The Court of Appeal agreed that they were indirect taxes but reversed the Divisional Court

because the taxes were ancillary or adhesive to a regulatory scheme falling within provincial responsibility under one or more of s. 92(9), (13) and (16) of the Constitution Act, 1867.

By the time the matter reached the Supreme Court of Canada, the issue appeared to be framed as a constitutional argument as to whether they were indirect taxes (and thus ultra vires the legislative competence of the province) or direct taxes (and thus intra vires). The majority judgment was delivered by Iacobucci J. on behalf of himself and four members of the court. He held that the education development charges were indirect taxes and thus ultra vires provincial competence under s. 92(2) of the Constitution Act, 1867. However, the education development charges scheme, composed of a related group of statutes governing land development in Ontario, were ultimately intra vires the province as ancillary to a valid regulatory scheme for the provision of educational facilities as a component of land use planning, pursuant to s. 92(9) (licences to raise money), (13) (property and civil rights) and (16) (matters of a local nature) of the Constitution Act, 1867. In so holding, he made it clear that the justification for the imposition of these indirect taxes was that the educational development charges scheme is limited in scope and operates solely so as to defray the costs of regulation.

La Forest J., for the minority consisting of himself and three other judges, concurred in the result but held that the taxes were intra vires the province because they were taxes on land and therefore direct taxes.

The only reported discussion in Home Builders' respecting the threshold issue whether educational development charges imposed pursuant to Part III of the Act were taxes at all, took place in the Divisional Court before a panel consisting of O'Driscoll, White and McKeown JJ. That court was faced with an application, brought by the Ontario Home Builders' Association and others, to quash by-laws passed by the respondents, certain school boards, which imposed educational development charges. The case considered the constitutional validity of the impugned by-laws. To that extent, the case is not relevant. However, the Divisional Court's consideration of the scheme of imposing and calculating educational development charges is relevant because both the Court of Appeal and Supreme Court did not consider whether they were taxes per se, implicitly accepting the Divisional Court's conclusion on that point.

The majority reasons as to the characterization of the educational development charges were delivered by McKeown J. He made the following analysis of these charges at pp. 497-99:

> Part III of the Development Charges Act gives school boards the authority to pass by-laws that impose education development charges. Section 30 is the operative section and provides that an education development charge is imposed "against land undergoing residential and commercial development" (emphasis added) where that development will give rise to the need for new schools directly attributable to it. Section 29 of the Development Charges Act defines an education development charge as:
>
> > "education development charge" means a development charge imposed under a by-law passed under section 30 respecting growth-related net education capital costs incurred or proposed to be incurred by a board;
>
> Where residential and commercial development gives rise to a need for new schools directly attributable to land development, this is known in s. 29, Part III of the Development Charges Act as a "growth-related net education capital cost". "Growth-related net education capital cost" is calculated pursuant to a statutory and regulatory formula whereby the public or separate school board that wishes to impose an education development charge shall:
>
> (1) estimate what new school facilities will be needed as a consequence of the development and the cost of these facilities;
>
> (2) calculate the amount chargeable to each new home so that it can be expressed and levied on a per-unit basis at the time each building permit is issued; and
>
> (3) submit a proposal for anticipated capital needs and an estimate of the education development charge to the

Minister of Education for review and approval.

Once the education development charge is approved by the Minister of Education, the board may pass the by-law pursuant to Part III of the Act. The municipality then becomes the collector of the charge pursuant to the Development Charges Act and the charge is payable on a per-unit basis when a building permit is issued (s. 35(3)). If two or more boards in the same area pass by-laws, then both charges must be paid when the permit is issued. An account is then established, or a joint account if two or more boards levied the charges and the money is deposited into that account. No money can be withdrawn from this account unless the actual project (as opposed to the estimate made in contemplation of the by-laws described above) is given final approval by the Minister of Education.

Ontario Regulation 722/89 sets out the methodology that school boards must follow to ascertain their eligibility for education development charges and to calculate them. When a school board calculates a proposed education development charge, it cannot include the capital costs associated with renovating schools for existing pupils, or building schools for existing pupils currently accommodated in portables or bussed to distant schools. The projected capital costs must be based on the board's projection of the number of new pupils that it anticipates will be entitled to education within its jurisdiction as a result of the new development.

McKeown J. further considered the nature of levies imposed by a province generally and held as follows at p. 505:

> It is well understood that not every levy imposed by a province is "taxation" within the meaning of s. 92(2). The distinction between "taxation" and "charge" is that the latter is money collected to defray the cost of specific services rather than to raise revenue for general purposes. As Peter Hogg concluded, in his book, Constitutional Law of Canada, 2nd ed. (Toronto: Carswell, 1985), at p. 613:
>
> > These charges are not necessarily taxes, and if they are not they need not be direct. They are not taxes if they can be supported as regulatory charges imposed under one of the province's regulatory powers . . . These can be supported as regulatory charges if they are taken in payment for a specific governmental service, and if they bear a reasonable relation to the cost of providing the service, -- whether it be the issue of a licence . . . the provision of a bridge, or the supply of water. These charges are not taxes because their purpose is to defray expenses, not to raise revenue.

The definition of "development charge" in Part I of the Act is virtually the same as that of "educational development charge" in Part III except that it is not restricted to education and refers to net capital costs that are incurred by the municipality or a local board thereof. The definitions are identical in that they permit the recovery as charges of "costs incurred or proposed to be incurred". Accordingly there appears to be no objection to having the municipality determine what actual costs are to be charged where such a determination is feasible. When the latter is done, it would appear from comments made as obiter by McKeown J. that the characterization of the charge may well be different. He stated at p. 506:

> However, we should point out that, while everyone taking up residence in the new land development will use sewers and side-walks, not everyone will use the schools. It is not enough to say that every homeowner benefits indirectly through potential capital appreciation: Howay v. Caradoc (Township) (1991), 6 M.P.L.R. (2d) 70 (Ont. Gen. Div.) at p. 73. Furthermore, a review of Parts I and II of the Development Charges Act shows that the municipality is regulating the development industry, whereas in Part III of the Act, the municipality through its local school boards is levying a charge or tax and is making no attempt to regulate the schools. There is nothing in Part III, or the regulations passed pursuant thereto, regulating schools. The Act and regulations set out how to levy and calculate a charge, when the charge expires, and how to collect it.

McKeown J. further held that at p. 507:

> While schools are an integral part of community life, they are no more services akin to sewers and waterlines than are

> courts and post offices. It is not useful to compare the construction of schools to the provision of direct municipal services that the community requires in order to function on a daily basis. Schools are not like street lights that perform one function, a physical function. We no more view our schools in such a way than we do our criminal courts, hospitals or the town hall . . . While this charge may not be imposed to "raise revenue for general purposes" as conventionally understood, it is much closer in nature to a tax for raising revenue than it is to a charge to defray costs.

These comments can be taken to suggest that McKeown J. would not have made the same finding had he been faced with a levy for "direct municipal services". McKeown J. appeared prepared to accept that certain levies for municipal services may be properly characterized as charges. With this in mind, it appears that McKeown J. did not wish that the scope of his reasoning should extend to development charges generally. Rather, it suggests that the scope of his reasoning should not extend to the hydro component in the case in appeal because it is very much like those municipal services that are used by the community on a daily basis. In our case, the hydro component of the development charge comprises the cost to the development of two switches which are required for the operation of the Foundation; this is not an anticipated cost based on usual municipal requirements, but is as a determination of the actual needs of the development.

Moreover, McKeown J. concluded that the cases which held that a levy is a charge in the context of non-constitutional cases are not dispositive in constitutional cases. The present appeal is not as a constitutional case. As a result, the cases which concluded that a levy is as a charge, such as Cariboo College v. Kamloops (City) (1982), 18 M.P.L.R. 85, 133 D.L.R. (3d) 24 (B.C.S.C.), are still instructive.

In essence, the decision in this case will depend on the characterizations of the administration of the development charges regime in the City of Ottawa. The Foundation argues that this is an improper inquiry. It submits that the question of whether development charges constitute taxation must be answered by reviewing the legislative scheme that authorizes the passage of the operative by-law, not by considering the by-law itself. According to the Foundation, the appeal involves, in part, the characterization of the province-wide enabling statute which authorizes the imposition of a scheme of taxation to raise revenue for capital construction of public works and facilities. If this is correct, the submission is that it is irrelevant how Ottawa calculates and administers its development charges program.

I think that the Foundation is wrong on this point. The question on appeal seeks to determine whether the Ottawa Hydro component is a charge or a tax. To do so, it is necessary to consider how the charge is measured and collected. This must be specific to the Development Charges By-Law of the City of Ottawa. The implication of this is that future litigation would arise whereby municipalities and hydro authorities are tested as to their particular administrative mechanisms in place. This may be so, but there are no constitutional impediments to what the City of Ottawa has done and the Foundation has not raised any objections to the decision of the City to isolate the hydro charges from the other development charges and set them out as Schedule B. Certainly the concept that Ottawa Hydro's ratepayers should be spared the incremental capital costs of providing service to new developments is fully within the spirit of the Act.

While I do not think that the fact that the Development Charges By-Law was passed under Part I of the Act as opposed to Part III has any significance to the outcome of this appeal, it is clear that the courts in Home Builders' were not dealing with electrical rates per se. It is also clear that, historically, utility rates have not been considered as taxes by the courts and we have not been referred to any authority which suggests that there is movement away from this traditional approach. I include in this observation, the Home Builders' case. In my opinion, the error in the judgment under appeal is that instead of analyzing the evidence of Kropp as to how the Ottawa Hydro charges in Schedule B were arrived at, the trial judge looked at the scheme of the Act and the broad parameters therein set forth for the determination of development charges in general, without recognizing that within

those parameters there could be levies or charges that were not taxes.

Disposition

For the reasons set out above, I would allow the appeal, set aside the judgment below and in its place substitute a judgment dismissing with costs the application by the Foundation for a declaration that it is not subject to the development charges set out in Schedule B to the Development Charges By-Law. Ottawa Hydro is entitled to its costs of this appeal.

OSBORNE J.A. (LABROSSE J.A. concurring): -- I have had the advantage of reading the reasons for judgment of my colleague Finlayson J.A. He has concluded the hydro component of the City of Ottawa's development charge is not a tax and that the exemption from taxation claimed by the respondent ("Cancer Foundation") provided by s. 16 of the Cancer Act, R.S.O. 1990, c. C.1, is thus not engaged. I have reached a different conclusion. In my view, Part I, Development Charges ("DC"), imposed under the Development Charges Act, R.S.O. 1990, c. D.9 (the "DCA"), are taxes that come within the ambit of s. 16 of the Cancer Act, with the result that the Cancer Foundation is exempt from this form of taxation. Thus, I think that the appeal should be dismissed. What follows are my reasons for reaching that conclusion.

Overview

I think that the central question is whether DCs imposed under Part I of the DCA constitute taxation. In my view, the answer to that question is, yes. I reach that conclusion on the basis of my analysis of the structure of the DCA and the City of Ottawa by-law passed under the authority of that Act. I am supported in my conclusion by the Supreme Court of Canada's judgments in New Mount Sinai Hospital v. Toronto (City), [1973] S.C.R. 541, 34 D.L.R. (3d) 438, and Ontario Home Builders' Assn. v. York Region Board of Education, [1996] 2 S.C.R. 929, 137 D.L.R. (4th) 449. I will refer in more detail to both cases later. For now, I note that in Ontario Home Builders' the Supreme Court of Canada unanimously agreed that education development charges ("EDC") (dealt with in Part III of the DCA) are taxes. The only difference of opinion within the Supreme Court of Canada was on the issue whether the EDC was a direct or indirect tax. I see no difference in substance, or principle, between EDCs and DCs for purposes of determining whether DCs are taxes.

In my opinion, it is the DCA scheme, not what the City of Ottawa, or Ottawa Hydro, does with the relevant DCs, or what the DCs replace, that is significant in the required analysis. The DCA contemplates a DC payment to cover all service areas listed in the municipal corporation's development charge by-law ("DCB"). The service area (electrical) provided by Ottawa Hydro is but one of the service areas listed in that by-law. The payment of a DC is triggered by a list of statutory development-related events, one of which is the issuance of a building permit. It is the payment of the DC, made under the authority of the DCA and in this case the City of Ottawa DCB, that I think must be considered to answer the question whether that payment is the payment of a tax for purposes of s. 16 of the Cancer Act.

My colleague has referred to some of the evidence that was before the motions judge, Binks J., and I will thus limit my references to the evidence to aspects of it that I think are important to give some reasonable factual context to my analysis. That analysis must begin with a consideration of the DCA.

The Development Charges Act

The applicable version of the DCA was given third reading on November 22, 1989 and proclaimed into force on November 23, 1989. It was intended to bring uniformity and order into development -- growth-related municipal costs. The DCA replaced, among other things, the existing lot levy system. By late 1989 lot levies had increased substantially, as municipal corporations grappled with reduced grants and increased growth-related costs and it was thought, at a political level, that a new system had to be devised to permit municipalities to recover growth-related capital costs. The new system is set out in the DCA. The underlying economic philosophy of the DCA is that growth (development) should pay for the infrastructure

costs that it generates. Such costs, generally speaking, should not be borne by existing residents. The purpose of DCs was described in this way by the Ontario Municipal Board in Sudbury (Regional Municipality) Development Charges By-law 91-150 (Re) (1993), 30 O.M.B.R. 210 at p. 223:

> If the Board looks at the purposes of development charges, it is to provide a pool of funds which allows the capital expenditures required by development to be borne by those people who will benefit from the services and not to impose the capital costs for developments on the whole of the municipality. The method by which the municipality has determined to collect these fees is that they are payable when a building permit is obtained. It is the building permit which triggers the collection of the taxes or charge. In most circumstances, this provides for an equitable collection of the development charge on the property.

The DCA is divided into four parts. Part I concerns the municipal DCs, which are of concern in this case, Part II front-end payments, Part III education development charges, and Part IV general provisions.

I set out below sections of the DCA that I think are relevant for the purposes of this appeal:

1. In this Act,

"capital cost" means costs incurred or proposed to be incurred by a municipality or a local board thereof directly or under an agreement,

(a) to acquire land or an interest in land,

(b) to improve land,

(c) to acquire, construct or improve buildings and structures,

(d) to acquire, construct or improve facilities including,

(i) rolling stock, furniture and equipment, and

(ii) materials acquired for circulation, reference or information purposes by a library board as defined in the Public Libraries Act, and

(e) to undertake studies in connection with any of the matters in clauses (a) to (d)

required for the provision of services designated in a development charge by-law within or outside the municipality, including interest on borrowing for those expenditures under clauses (a), (b), (c) and (d) that are growth-related;

"development charge" means a charge imposed with respect to growth-related net capital costs against land under a by-law passed under section 3;

"development charge by-law" means a by-law passed under section 3;

"growth-related net capital cost" means the portion of the net capital cost of services that is reasonably attributable to the need for such net capital cost that results or will result from development in all or a defined part of the municipality;

"local board" means a local board as defined in the Municipal Affairs Act, other than a board defined in subsection 30(b);

"net capital cost" means the capital cost less capital grants, subsidies and other contributions made to a municipality or that the council of the municipality anticipates will be made, including conveyances or payments under sections 42, 51 and 53 of the Planning Act, in respect of the capital cost;

"services" means services designated in a development charge by-law or in an agreement under section 21, as applicable;

3(1) The council of a municipality may pass by-laws for the imposition of development charges against land if the development of the land would increase the need for services

and the development requires,

(a) the passing of a zoning by-law or of an amendment thereto under section 34 of the Planning Act;

(b) the approval of a minor variance under section 45 of the Planning Act;

(c) a conveyance of land to which a by-law passed under subsection 50(7) of the Planning Act applies;

(d) the approval of a plan of subdivision under section 51 of the Planning Act;

(e) a consent under section 53 of the Planning Act;

(f) the approval of a description under section 50 of the Condominium Act; or

(g) the issuing of a permit under the Building Code Act in relation to a building or structure.

. . . . .

(3) A by-law passed under subsection (1) shall,

(a) designate those uses of land, buildings or structures upon which a development charge shall be imposed;

(b) designate the areas within which a development charge shall be imposed;

(c) establish the development charge, or the schedule of development charges, to be imposed in respect of the designated uses of land, buildings or structures; and

(d) designate services for which a development charge may be imposed.

. . . . .

(6) No land, except land owned by and used for the purposes of a board as defined in subsection 30(6) or a municipality, is exempt from a development charge under a by-law passed under subsection (1) by reason only that it is exempt from taxation under section 3 of the Assessment Act.

. . . . .

9(1) A development charge is payable on the date a building permit is issued in relation to a building or structure on land to which a development charge applies.

(2) Despite any other Act, a municipality is not required to issue a building permit in relation to a building or structure on land to which a development charge applies unless the development charge has been paid.

. . . . .

11. A municipality that has passed a development charge by-law may register the by-law or a certified copy of it on the land to which it applies.

12(1) If the development charge or any part thereof imposed by a municipality, other than an upper tier municipality, remains unpaid after the due date, the amount unpaid shall be added to the tax roll and shall be collected as taxes.

(2) If the development charge or any part thereof imposed by an upper tier municipalities remains unpaid after the due date, the treasurer of the upper tier municipality shall certify to the treasurer of the area municipality in which the land is located that the amount is unpaid and the amount unpaid shall be added to the tax roll of the area municipality and shall be collected as taxes.

. . . . .

16(1) Payments received by a municipality under this Part shall be maintained in a separate reserve fund or funds and shall be used only to meet growth-related net capital costs for which the development charge was imposed.

. . . . .

17. The treasurer of the municipality shall, in each year, on or before such date as council may direct, furnish to the council a statement in respect of each reserve fund established under section 16 containing the information prescribed.

. . . . .

19. The Lieutenant Governor in Council may make regulations,

(a) prescribing, for the purposes of section 3, the manner in which development charges shall be calculated;

. . . . .

(c) prescribing, for the purposes of section 3, those services for which development charges shall not be imposed;

. . . . .

49. In the event of a conflict between this Act and any other general or specific Act, this Act prevails.

A DC is a charge imposed with respect to growth-related net capital costs under a municipal by-law passed under the authority of s. 3(1) of the DCA. Growth-related net capital costs is that part of "the net capital cost of services that result or will result from development". "Services" is not defined in the DCA or the regulations. I will return to the matter of municipal "services" when I consider the City of Ottawa's DCB. For now, I note that it is the growth-related capital cost of "services" identified in the municipality's DCB that attract DCs.

Under the authority provided in s. 3(1) of the DCA, the council of a municipality may pass by-laws providing for the imposition of DCs against land if the development of the land would increase the need for services, and if the development requires any one of the seven development-related steps set out in s. 3(1)(a) to (g). One development-related triggering event is the issuance of a building permit.

The collection of DCs is governed by ss. 9, 10 and 12 of the DCA. All that needs to be said about this subject is that a DC is payable when a building permit is issued for a development (such as the Cancer Foundation extension) on land to which the DC applies (s. 9(1)). The municipality is not required to issue a building permit until the applicable DC has been paid (s. 9(2)). A municipality that has passed a DCB may register it on the land to which it applies and if the DC, or any part of it, remains unpaid the unpaid DC is added to the tax roll and may be collected as taxes (ss. 11, 12(1) and (2)).

The municipal treasurer is responsible for collecting DCs and must annually provide the municipal council with a statement in respect of every DC reserve fund established under the DCA and the municipality's DCB.

Neither Part I of the DCA nor its Regulation 267, R.R.O. 1990 ("Regulation"), set out in any detailed way how DCs are to be calculated. Instead, the Regulation prescribes somewhat broad principles which must be followed in calculating DCs. Section 3(1) of the Regulation requires the municipality to base its calculation of DCs on the provision of services at standards no higher than the standards at which those services were provided at the time the by-law is passed or have been provided at any time in the preceding 10 years.

Section 4(1) of the Regulation requires that the calculation of DCs be based on growth-related net capital costs for a period not exceeding ten years from the date that the DCB comes into force. Section 4(2) of the Regulation provides that DCs for water supply services, sanitary sewer services, storm drainage surfaces, transportation services, and waste disposal services may be based on estimated growth-related net capital costs for a period exceeding ten years.

Under s. 16 of the DCA, DCs received by the municipality must be maintained in a separate reserve fund or funds. Section 16 provides that DCs can be used only to meet growth-related net

capital costs for which the DC was imposed. Section 12 of the Regulation requires the municipal treasurer to include in the information contained in his annual statement the amount of DCs that were refunded or "allocated to other services" (s. 12, para. 4). This suggests that a municipality may spend DCs, deposited as required in a reserved fund, in other service areas set out in the DCB. The municipality's flexibility depends upon the by-law. I will return to this subject shortly.

In summary, DCs are collected for the general public purpose of regulating and providing for the growth-related net capital costs assumed to be created by development. They are not collected to defray the specific capital costs attributable to a particular development. The hydro component of the City of Ottawa's DC, if paid by the Cancer Foundation, would not necessarily be spent on paying capital costs attributable to the Cancer Foundation's expansion. The DCA allows for DCs to be imposed through the municipality's DCB on the basis of a prediction of growth-related net capital costs of future development. The prediction is based on a calculation not prescribed in the Act or its regulations, however, it will necessarily be somewhat imprecise and not directly site specific.

The City of Ottawa Development Charges Act By-Law

On November 6, 1991, the City of Ottawa passed By-law 279-91, the City's DCB, under the authority of s. 3(1) of the DCA. The preamble in the by-law contained five recitals, two of which I think go to make clear the underlying assumption in the by-law is that "development" will increase the need for services:

> Whereas the Development Charges Act, 1989, S.O. 1989, c. 58 authorizes municipalities to pass by-laws for the imposition of charges against land or the development of the land would increase the need for services.
>
> . . . . .
>
> And whereas development will increase the need for municipal services.
>
> (Emphasis added)

This approach is consistent with the philosophy of the DCA -- growth will increase municipal infrastructure costs and growth should pay for the capital costs that it generates. The Ottawa DCB follows the structure suggested by the DCA and its regulations. The by-law applies to all land in the City of Ottawa, apart from that land that is exempted by s. 11 of the by-law. It prohibits the development of land except in accordance with the by-law and provides that DCs collected under the by-law shall be used for 11 specified municipal and hydro-electric services. The services are:

(a) fire stations, vehicles and equipment;

(b) police facilities and equipment;

(c) storm sewer systems;

(d) sanitary sewer systems;

(e) highways, including sidewalks;

(f) parkland development;

(g) community activity and sports and recreation facilities;

(h) library facilities;

(i) cultural facilities;

(j) services provided by Ottawa Hydro;

(k) administrative services in the corporation and Ottawa Hydro relating to the services referred to in subsections (a) to (j) above.

As is evident, "services provided by Ottawa Hydro" is but one of the listed service areas. The City of Ottawa's DCB provided that the method of calculation of the DC be in accordance with the "rates" set out in Schs. A and B annexed to the by-law (see By-law 279/91, ss. 3, 5 and 6). The by-law makes it clear that

the DC payable is the total of the City of Ottawa's component of the DC, which includes all identified services, except hydro, plus the hydro component. Schedules A and B of the by-law set out how the applicable DC is to be calculated (Sch. A for the City of Ottawa services component, and Sch. B for the Ottawa Hydro service component).

The calculation of the City of Ottawa DC component for a residential development, set out in Sch. A, is based on habitable floor area. For example, construction of a single detached dwelling containing 102 square metres, or more, of habitable floor area required a DC payment of $2,242 in the April 1, 1992 to March 31, 1993 period. Schedule A ratchets the DC upward in each year of the five-year life span of the by-law with the result that construction of the same single-family detached dwelling required a DC payment of $3,417 in 1995. For a single or two-unit residential dwelling, the Ottawa Hydro component of the DC, set out in Sch. B, is a flat rate of $479 per unit. For a row dwelling, the Ottawa Hydro DC component is $335 per unit.

For a non-residential development, such as the Cancer Foundation building, Sch. A provides that the DC, referable to all services but Ottawa Hydro, is $16.15 per square metre of gross floor area. This part of the DC is not in issue because the City of Ottawa gave the Cancer Foundation a grant in an amount equal to the non-hydro component of the DC.

The hydro component of the DC for a development such as that undertaken by the Cancer Foundation is calculated on the basis of three identified criteria: the distance of the development from the transformer station, the unit cost of the electrical distribution plant, and the magnitude of the new load. Mr. Kropp, who gave evidence in this matter for Ottawa Hydro, stated that Ottawa Hydro resorted to averaging and predicting, consistent with the principles of rate making, in its calculation of all of the component elements of the Ottawa Hydro DC. Thus, two identical facilities, like the Cancer Foundation building, built with identical switches, would attract the same DC, even though one of them was much further from the transformer station than the other. As Finlayson J.A. has correctly noted, no issue is taken with the calculation, or the method of calculation of the Ottawa Hydro component of the DC attracted by the Cancer Foundation's application for a building permit for its expansion. I refer to the calculation of DCs under the City of Ottawa's DCB only to note the capital cost assumptions that underlie the calculation of DCs and to explain that the growth-related capital costs are not truly site specific. As I have said, the DCA scheme assumes and predicts that development will give rise to growth-related municipal infrastructure costs in all of the service areas (including Ottawa Hydro) set out in the by-law.

Section 21(2) of the Ottawa DCB provides that DCs collected pursuant to the by-law shall be allocated in accordance with Sch. C, which is a part of the by-law. That schedule provides a percentage allocation of DCs paid under the by-law. For example, under Sch. C for a building such as the Cancer Foundation building, 31.59 cents of each DC dollar would be allocated to transportation, 11.60 cents to administration and 2.62 cents to libraries. Each of the ten service areas is given a prescribed share of the DC dollar. This allocation will occur whether or not a particular development increases the need for transportation facilities, administration or libraries (or any of the other identified service areas).

The Ottawa Hydro service component is set apart in Sch. C of the by-law. The percentage allocation of all services except Ottawa Hydro totals 100 per cent and is referred to in the schedule as "City subtotal". "Electrical", that is Ottawa Hydro, is separately allocated as 100 per cent.

Section 17 of the Ottawa DCB requires the municipal treasurer to maintain a separate reserve fund for that part of the DC attributable to hydro-electric services as set out in Sch. B. The by-law makes no reference to a separate reserve fund or funds for the non-hydro part of the DC; however, Ottawa's municipal council passed two further by-laws on November 6, 1991, By-laws 280/91 and 281/91. By-law 281/91 is in the material. By-law 280/91 is not. By-law 281/91 provided that DCs deposited in the Ottawa Hydro reserve fund shall be used to pay DCs "for the growth-related portion of net capital costs for which the development charges were imposed to the extent there exists a positive balance in the fund intended for that

purpose".

By-law 280/91 (which I have reviewed since it is a public document) completes the DCA circle by creating a reserve fund for all other, that is non-hydro, services set out in Ottawa's main DCB, "segregated according to Schedule A attached hereto". Schedule A attached to By-law 280/91 contains the same breakdown of service elements that are in the City of Ottawa's main DCB.

In the final analysis, through its three November 6, 1991 by-laws, the City of Ottawa established two reserve funds, one for DCs related to all of the identified services elements except hydro, and the other for hydro.

Analysis

The appellant submits that the central issue is whether the hydro component of the DC imposed on the Cancer Foundation is properly characterized as taxation for purposes of s. 16 of the Cancer Act.

The appellant contends that the hydro component of the DC is a regulatory charge, not a tax. In support of its position, it points to the existence of the separate reserve fund for the hydro component of the DC and restrictions imposed by the by-law on the use of DCs in that reserve fund.

The appellant notes that the hydro component of the DCs can only be used for future growth and hydro-related net capital costs, not for a general public purpose. The appellant also looks to the manner in which Ottawa Hydro defrayed its capital costs before November 1991, when the City of Ottawa opted into the DCA scheme. The appellant submits that Ottawa Hydro has done no more than to choose to recoup its growth-related infrastructure costs by DCs, instead of by hydro rates. Since the capital component of the pre-DCA hydro rates (paid by all ratepayers) was not a tax, the appellant submits that the substitute -- the hydro component of the DC -- is not a tax. The appellant contends that these features of the DCA and the City of Ottawa DCB support its submission that the hydro component of the DC is a regulatory charge, not a tax.

I agree with the appellant that not every charge or levy imposed by the province constitutes taxation. I do not, however, agree that the question to be answered is whether payment of the hydro component of the DC constitutes payment of a tax. Moreover, I do not think that the limited use that can be made of the hydro component of the DC is determinative. This approach ignores the other service areas in the by-law and focuses the analysis entirely on the hydro component of the DC. As I have said, I think that the issue should be cast more broadly. I do not agree that since the hydro component of the DC became the substitute for the capital component of the pre-November 6, 1991 hydro rates, it follows that the hydro part of the DC is a rate, not a tax. Indeed, because I frame the issue differently, I think that if there is to be a before and after comparison, it should focus on lot levies and DCs. DCs replaced lot levies; lot levies were a form of taxation: see Palisade Properties (1985) Ltd. v. Surrey (District) (1991), 5 M.P.L.R. (2d) 206 at p. 208 (B.C.S.C.), and Sorokolit v. Peel (Regional Municipality) (1977), 16 O.R. (2d) 607 at p. 612, 78 D.L.R. (3d) 715 (Div. Ct.). I do not, however, think that this analysis is productive. In my view, the DC scheme should be assessed for what it is, not on the basis of an assessment of what it replaced.

I turn first to consider the approach that I think should be taken to determine if the Cancer Foundation is entitled to the taxation exemption in s. 16 of the Cancer Act. In my opinion, it is the DCA in its entirety and all of Ottawa's DCB that must be assessed. The hydro component of the Ottawa DCB should not be excised from the DCA scheme to determine whether it alone is a tax. I find support for this analytical approach in the judgments of this court and the Supreme Court of Canada in Ontario Home Builders', supra. In this court ((1994), 17 O.R. (3d) 103) Carthy J.A. concluded that EDCs were an element of the planning process and that they replaced lot levies imposed as a condition of subdivision approval under the Planning Act, R.S.O. 1990, c. P.13. In his analysis, he did not accept Ontario Home Builders' argument that he thought tended to isolate the construction of schools as the responsibility of the school boards from the municipality's responsibility to regulate land development. At p. 112, he said that this

argument:

> . . . overlooks the fact that we are testing provincial powers, not the powers of the school board. The constitutionality of the charges must be the same whether imposed directly by the province, by delegation to the municipality to exercise in tandem with land use control, or by a combined delegation, as here, to the school boards to impose the charges, and to the municipality to collect them. Throughout, the ultimate control is retained by the Minister of Education.

(Emphasis added)

Carthy J.A.'s observations have application here. Like EDCs, the hydro component of the City of Ottawa DC is, nonetheless, a DC. It is, as Carthy J.A. put it, "the provincial powers" that must be tested, not the powers of Ottawa Hydro.

In the Supreme Court of Canada, writing for the majority Iacobucci J. accepted that EDCs are part of a comprehensive integrated scheme "namely, the entirety of planning, zoning, subdivision and development of land in the province". His analysis of the DCA supports my view that the entire DC scheme should be looked at to determine if the Cancer Foundation is entitled to the Cancer Act taxation exemption.

The DCA scheme manifestly was intended to apply throughout the province, in respect of those municipalities that chose to participate by passing a DCB. To narrow the focus of the review to one part of one municipality's DCB would lead to unacceptable fragmentation and instability since a component of one municipality's DC would be a tax in that municipality and not a tax in another depending upon the form of the municipality's by-law. More particularly, the precise construction undertaken by the Cancer Foundation would attract payment of the hydro component of the applicable DC in one municipality, but not in another, since the DC payment would be characterized as payment of a tax in one municipality, but not in another. My colleague accepts the prospect of this distortion. I do not. In my opinion, DCs are part of a comprehensive provincial scheme designed to permit participating municipalities to defray growth-related net capital costs. The payer of the DC makes one payment that covers the total DC for all service areas set out in the by-law.

It was the City of Ottawa, not Ottawa Hydro, that determined to pass a DCB and to include Ottawa Hydro as one of its 11 identified service areas. As a practical matter, Ottawa Hydro would not have been included as a service area had it not agreed. Nonetheless, it was the City of Ottawa's decision to pass a DCB and the City had the final say in what services would be listed in its by-law. Indeed, I question what standing Ottawa Hydro has on this appeal. It seems to me that it is the City of Ottawa that should be the appellant. However, since this issue has not been raised, I will proceed on the basis that Ottawa Hydro is the proper appellant.

Virtually all that distinguishes Ottawa Hydro from the ten other service areas listed in the by-law is the provision requiring the hydro component of the DC to be deposited in a separate reserve fund that is not mingled with the DCs allocated to the other ten selected service areas. But the fact remains that hydro is but one among 11 service areas set out in the by-law. I do not think that Ottawa Hydro can properly be isolated from the broader scheme (the DCA), or from the other service areas set out in the by-law. Either the whole DC (including its hydro component) is a tax, or it is not. The components are part of the whole and should not be divided for purposes of this analysis.

Is a DC a Charge or a Tax?

A tax is a compulsory levy imposed by law for a public purpose by a public body: see Lawson v. Interior Tree Fruit & Vegetable Committee of Direction, [1931] S.C.R. 357. DCs fit within that definition, in my opinion. Nonetheless, it has been recognized that many charges also fit within the broad definition of a tax. In result, a further examination of the difference between a charge and a tax is required in the context of DCs imposed under the DCA.

The distinction between a charge and a tax was considered in

Reference re Powers of Municipalities to Levy Rates on Foreign Legations & High Commissioners' Residences, [1943] S.C.R. 208, [1943] 2 D.L.R. 481. In that case the Supreme Court of Canada had to consider whether the City of Ottawa could levy rates on real property used by foreign states as legations. Duff C.J.C. expressed the view that real property taxes could not be extracted from diplomatic representatives or the sovereign states that they represented. At p. 222, he distinguished real property taxes from charges such as licence fees, bridge tolls, stamp duties, water rates and electric rates that he accepted were charges which "are taken in payment for specific services rendered directly to the particular individual who pays for them". In La Forest, The Allocation of Taxing Power Under the Canadian Constitution (1967), at p. 58, the author endorsed Duff C.J.C.'s analysis of the distinction between a charge and a tax.

A DC is paid by the developer/owner in a lump sum. The DC is not paid for particular services of which the owner/developer is the direct beneficiary. That is to say the DC imposed bears no relationship to the value to the developer of the capital expenditure that the DC is intended to defray. Whether the burden of the DC will be passed on to others will be dependent upon economic circumstances and is an issue which need not be discussed here. It is an issue which is relevant to the question whether a DC, if a tax, is an indirect tax or a direct tax.

The significance of restrictions on the use of special levy funds as a factor in determining whether a special levy was a tax was considered by the Supreme Court of Canada in Mount Sinai, supra. In that case, the City of Toronto, acting under the authority of the City of Toronto Act, 1961-62, S.O. 1961-62, c. 171 ("City of Toronto Act") levied a special sewer charge against the hospital. The hospital applied for a declaration that it was exempt from this special sewer charge because public hospitals were exempt from taxation.

Section 1 of the City of Toronto Act gave the municipal council the authority to pass by-laws imposing a special levy on certain buildings where a building permit was issued for the erection or enlargement of a building after March 6, 1962. The levy was imposed to defray the capital costs of additional sanitary or storm sewer or water supply capacity "which, in the opinion of the Council, would not otherwise be required". The special levy was over and above all other rates and charges and was intended "to pay for all or part of the cost of providing the additional capacity". Section 1(2) of the City of Toronto Act provided that the proceeds of the charges authorized by s. 1(1) could be used only for the purpose of paying for the identified increased capital costs. Section 1(3) gave the municipality authority to collect special levy as taxes if it remained unpaid.

The City of Toronto's by-law passed under the authority of the City of Toronto Act imposed a 20 cent per square foot of gross floor area special levy on the erection or enlargement of structures to which the special levy was applicable. The by-law provided a 3,300-square-foot deductible for purposes of calculating the applicable gross floor area. Mount Sinai, a public hospital, claimed to be exempt from the special levy on the basis of s. 3(7) of the Assessment Act, R.S.O. 1970, c. 32 ("Assessment Act"), which the hospital contended exempted it from taxation.

There were two issues in Mount Sinai. Was the special levy a tax and if it was did the Assessment Act taxation exemption apply to the hospital? A Weekly Court judge accepted that the special sewer levy was taxation, but did not accept the hospital's submission that it was entitled to the benefit of the Assessment Act exemption from taxation. Thus, he dismissed the application. The hospital's appeal to this court was dismissed. However, on the hospital's appeal to the Supreme Court of Canada, the appeal was allowed. The majority concluded that the special levy was a tax and that the hospital was entitled to the benefit of the Assessment Act exemption from taxation. Hall J. put it this way at p. 546:

> Section 3(7) of The Assessment Act is clear and unambiguous. Under it the hospital is exempt from taxation. The special sewer tax or levy here is a tax.

(Emphasis added)

In my view, although Mount Sinai had nothing to do with what we now know as a DC, the special sewer levy in issue in that case can be equated to DCs by analogy. The sewer levy was imposed on the assumption that certain kinds of development (the erection or enlargement of buildings) would necessitate sewer and water-related growth-related capital costs. The payment of the levy, like DCs, was triggered by the issuance of a building permit. The levy had to be paid in a lump sum and if not paid could be collected as taxes. Similar provisions appear in the DCA. The relevant statute and by-law required the special levy funds to be used for the purpose for which they were collected. There are stark similarities throughout to what we now know as a DC. Thus, it is my view that Mount Sinai supports my conclusion that DCs are taxes.

The appellant's argument that DCs are not taxes because the funds collected are used to offset specified growth-related net capital costs was also considered by the Privy Council in British Columbia (Attorney General) v. Esquimalt & Nanaimo Railway Co., [1950] A.C. 87. The Privy Council stated, at pp. 121-22:

> The legislature has thus thought it proper to divide the expense of what is a public service of the greatest importance to the province as a whole between the general body of taxpayers and those individuals who have a special interest in having their property protected. The levy has what are, undoubtedly, characteristics of taxation, in that it is imposed compulsorily by the State and is recoverable at the suit of the Crown. It is suggested, however, that there are two circumstances which are sufficient to turn the levy into what is called a "service charge". They are, first, that the levy is on a defined class of interested individuals and, secondly, that the fund raised does not fall into the general mass of the proceeds of taxation but is applicable for a special and limited purpose. Neither of these considerations appears to their Lordships to have the weight which it is desired to attach to them. The fund is made up partly of the levy and partly by contributions from the taxes paid by the general body of taxpayers. This is no doubt a reasonable apportionment of the burden, for to impose the cost of services which are of general interest to the community as well as a particular interest to a class of individual exclusively on one or the other might well have seemed oppressive. The fact that in the circumstances the persons particularly interested are singled out and charged with a special contribution appears to their Lordships to be a natural arrangement. Nor is the fact that the levy is applicable for a special purpose of any real significance. Imposts of that character are common methods of taxation -- taxation for the road fund in this country was a well-known example. The objects of the legislature in adopting such a form of tax may be various. But if it finds it convenient to do so the impost, if in other respects it has the character of a tax, does not thereby change its character.

(Emphasis added)

In my opinion, the fact that DCs generally, or the hydro component of the DC, must be used for a particular specified purpose does not support the conclusion that the Ottawa DC, or its hydro component, is not a tax.

This brings me to the Supreme Court of Canada's decision in Ontario Home Builders', supra. EDCs, provided for in Part III of the DCA, were in issue in that case. Whether EDCs were, or were not, taxes was clearly in issue before the Divisional Court, this court, and the Supreme Court of Canada. Throughout, Ontario Home Builders' contended that EDCs were indirect taxes and thus unconstitutional. The competing position was that EDCs were regulatory charges, not taxes and alternatively, if EDCs were taxes, they were direct taxes and, therefore, constitutional.

In Ontario Home Builders', the Supreme Court of Canada determined that EDCs were taxes. The court was divided on the issue whether the EDC was a direct (per La Forest J.) or an indirect tax (per Iacobucci J.). The majority concluded that EDCs were indirect taxes, but nonetheless constitutionally justified because they were a novel form of taxation ancillary to a valid provincial regulatory scheme; the minority concluded that the EDCs were direct taxes and thus constitutional.

In his annotation to the Supreme Court of Canada's decision in Ontario Home Builders' (reported (1996), 35 M.P.L.R. (2d) 1)), John Mascarin commented on the majority and minority judgments in Ontario Home Builders' and concluded [at p. 5]:

> The decision, which was anxiously awaited by the municipal sector, also means that municipal development charges, which are authorized under Part I of the Development Charges Act, cannot be constitutionally challenged. It appears clear that the reasoning of both the majority and minority decisions of the court with respect to the issues of direct/indirect taxation, and whether the charges are imposed pursuant to a provincial regulatory scheme, would be equally applicable, if not more so, to municipal development charges.

(Emphasis added)

In my opinion, EDCs are similar to DCs in a very substantial way. EDCs are taxes imposed to defray growth-related net capital costs of development in respect of schools. DCs are imposed to defray the growth-related net capital costs with respect to the particular service areas set out in the municipality's DCB. There is a distinct parallel between EDCs and DCs in the definition, the triggering development events, the process of implementing, the calculation, the collection, the identification of who pays, and the statutory controls on the spending of funds. In particular, EDCs must be deposited in a separate reserve fund and used only for growth-related capital costs in respect of schools. The hydro component of the City of Ottawa DC and the City's component must also be deposited in separate reserve funds. I can find no rational basis upon which to conclude that EDCs are taxes, as unanimously held by the Supreme Court of Canada in Ontario Home
Builders', but DCs are not. The fact that the analysis in Ontario Home Builders' was undertaken in a constitutional context does not, in my view, dilute the force of the Supreme Court of Canada's conclusion that EDCs are taxes.

For these reasons, I think that the City of Ottawa DC, including that part of it allocated to Ottawa Hydro, is a tax. Although I do not think that the Ottawa Hydro component of the DC should be separately analyzed, if that approach is required, I think that it too is a tax. In my opinion, the DC is a tax on development. [See Note 1 at end of document.]

I will now consider whether the Cancer Act taxation exemption applies.

Does s. 16 of the Cancer Act Exempt the Cancer Foundation from Paying the City of Ottawa Development Charge?

Section 16 of the Cancer Act provides that:

> 16. The real and personal property, business and income of the Foundation is not subject to taxation for municipal or provincial purposes.

Section 3(6) of the DCA provides:

> 3(6) No land, except land owned by and used for the purposes of a board as defined in subsection 30(6) or municipality, is exempt from a development charge under a by-law passed under subsection (1) by reason only that it is exempt from taxation under section 3 of the Assessment Act.

Section 49 of the DCA provides:

> 49. In the event of a conflict between this Act and any other general or specific Act, this Act prevails.

The Cancer Foundation argues, and I agree, that s. 3(6) of the DCA and s. 16 of the Cancer Act are not inconsistent. Section 3(6) contemplates exemptions from development charges other than under the Assessment Act. The words "by reason only" in s. 3(6) of the DCA support this conclusion. Thus, s. 3 of the Assessment Act does not on its own exempt land from a development charge. The Cancer Foundation does not claim its exemption from taxation through s. 3 of the Assessment Act. Section 3(6) of the DCA leaves it open to find an exemption on some other basis. The other basis in the circumstances of this case is the specific exemption established in s. 16 of the Cancer Act. As Cunningham J. put it in Collège d'arts appliqués et de technologie La Cité collégiale v. Ottawa (City) (1994),

20 O.R. (3d) 541 at p. 546, 119 D.L.R. (4th) 566 (Gen. Div.), "[h]owever, by the wording of s. 3(6) it is left open to find an exemption for other reasons and of course that other reason in the present case is s. 11 of the Interpretation Act." I agree. I would thus not give effect to this ground of appeal. In my view, s. 16 of the Cancer Act exempts the Cancer Foundation from paying the City of Ottawa DC, including its hydro component.

For these reasons, I would dismiss the appeal with costs.

Appeal dismissed.

Notes

Re **Russell and Banbury** et al

[1955] O.R. 653-667

ONTARIO
WILSON J.
8th JUNE 1955.

AN APPLICATION for an order that requisitions on title had been satisfactorily answered.

21st April 1955. The application was heard by WILSON J. in chambers at Toronto.

H.F. Parkinson, Q.C., and W.J. Anderson, for the vendor, applicant.

H.E. Harris, Q.C., for the purchasers.

R.B. Robinson, for the Minister of Highways.

8th June 1955. WILSON J.:-- This is an application by a vendor for an order declaring that the purchaser's requisitions upon title have been satisfactorily answered. It was returnable on 1st April 1955, at the same time as another motion in the same matter for an order under Rule 602 requiring notice of the application herein to be given to Her Majesty the Queen in the right of the Province of Ontario, as represented by the Minister of Highways. On that date Mr. Justice Danis made an order requiring that notice of the application be served as asked on the latter motion. Such service was made and the main motion was heard on 22nd April 1955 in the presence of counsel for the Crown, the vendor and the purchasers. Owing to the complicated nature of the requisitions and answers, it will be more convenient to refer first to the facts.

The requisitions are made in respect of a property known as no. 350 Martindale Road in the township of Grantham, in the county of Lincoln. It is residential and substantial in size, 187 feet frontage on the east side of, but not abutting, Martindale Road, and an average depth of 500 feet to the old Welland Canal where the Canadian Henley Regatta is held each year. Along the south boundary lies a rectangular parcel of land owned by the Crown for the Department of Highways but not part of a highway. South of and abutting this latter parcel is the Queen Elizabeth Way, a controlled access highway. Roughly, therefore, the land in question is situated at the north-east corner of the intersection of Martindale Road and the Queen Elizabeth Way. The former crosses the latter by means of a bridge.

By a written contract dated 13th December 1954 the purchasers have agreed to buy the property in question "provided the title is good and free from encumbrance". There are other exceptions which are not material.

Upon it stand a substantial house and separate garage erected in 1949 without the permission of The Minister of Highways required by the combined provisions of The Highway Improvement Act, R.S.O. 1937, c. 56, s. 79a(2) (as enacted by 1945, c.9, s.8) and the Regulations made thereunder. The portions relevant to the requisitions then read:

"The Lieutenant-Governor in Council may make regulations relating to controlled access highways,--

"(c) prohibiting or regulating the erection and alteration of buildings or other structures upon or adjacent to highways intersecting or running into controlled access highways for a distance of six hundred feet from the limit of any controlled access highways."

The Regulations, published as O. Reg. 40/45, provided.

"12. No person shall erect a building or other structure upon or adjacent to a highway intersecting or running into a controlled access highway for a distance of 600 feet from the limit of any controlled access highway without a building permit therefor.

"13. -- (1) The Minister may in his discretion issue building permits in such form as he may prescribe, provided the nature and purpose of the building or other structure thereby permitted is stated therein ...

"14. A building or other structure in respect of which a building permit has been issued shall not be altered in its nature or purpose without a building permit in respect of such alteration."

Between May and September 1949 one Percy A. Gilligan, the then owner, erected a substantial house and garage upon the property in question without obtaining the necessary permit under the statute or regulations.

On 24th March 1950, s. 79a(2) of The Highway Improvement Act was repealed by The Highway Improvement Amendment Act, c. 24,
s. 7, and a new s. 79b was enacted, which is now replaced by s. 93 of R.S.O. 1950, c. 166. This section, as amended by 1951, c. 33, s. 5, and 1954, c. 34, s. 3, provides in subs. 1:

"Notwithstanding any general or special Act, regulation, by-law or other authority, no person shall, except under a permit therefor from the Minister,

"(a) place, erect or alter any building, structure or fence, or any part thereof, or place any tree, shrub or hedge, or any part thereof, upon or within 150 feet of any limit of a controlled-access highway, or upon or within 600 feet of any limit of a highway that intersects or runs into a controlled-access highway for a distance of 600 feet from any limit of the controlled-access highway ..."

By subs. 3 the Minister of Highways, in his discretion, may give notice to the owner or occupant of any land requiring him "to remove or alter any building, structure, fence, tree, shrub, hedge ... erected or maintained after the 24th day of March, 1950, or to close up any private road, entrance-way or gate constructed or maintained after that date that does not comply with subsection 1 or with any permit issued under this section with respect thereto."

Subsection 4 reads: "The Minister, in his discretion, may give notice to the owner or occupant of any land requiring him to remove or alter any building, structure, fence, tree, shrub, hedge ... placed or erected before the 24th day of March, 1950, or to close up any private road, entrance-way or gate constructed before that date that would not comply with subsection 1 if it had been so placed, erected or constructed after that date." Subsection 6 empowers the Minister to enter upon lands and to remove the buildings, etc., upon default for 30 days in complying with the Minister's direction.

Subsection 7 authorizes him, in his discretion, to issue permits under this section in such form for such term and upon payment of such fee as he may deem proper, and in his discretion he may cancel any permit.

Subsection 9 provides penalties for failure to comply with the provisions of subs. 1; the continuance of the condition constituting an offence for each week after conviction therefor constitutes a new offence.

Subsection 9a provides for the determination by arbitration under The Public Works Act, R.S.O. 1950, c. 323, of compensation to be paid for lands expropriated or injuriously affected by the exercise of powers under subs. 4.

Subsection 9c reads: "No compensation shall be allowed under subsection 9a if that which was removed, altered or closed up did not comply with The Highway Improvement Act and the regulations thereunder on the 23rd day of March, 1950."

In December 1952 the present entrance-way to the house and garage was built, also without a permit, and it has been used as such since that date. It crosses a 20-foot wide "highway", hereinafter referred to, and the right-of-way of the Niagara, St. Catharines and Toronto Railway which lie between the lands in question and Martindale Road.

By deed dated 14th December 1954 and registered on 5th January 1955 Percy A. Gilligan conveyed the lands in question to James Russell, the vendor herein. On 13th December 1954 Russell agreed to sell the lands to the purchasers. On 12th January 1955 in response to a letter from the vendor's solicitor, the contents of which were not disclosed on the application, H. Barry, Supervisor of the Department of Highways, Signs and Building Permits Branch, wrote to that solicitor enclosing two building-permits also dated 12th

January 1955, and each bearing the words "Permit No. 1599", one "Issued in pursuance of The Highway Improvement Act, R.S.O. 1937, Chapter 56" -- which had been repealed -- and the other simply called "Building Permit" without reference to statutory or other authority. They appear to be inaccurately made out in a number of respects but the main inaccuracy is that they state that this property is on the north side of the Queen Elizabeth Way, which it is not. It is clear, however, that they are intended to refer to the house referred to above. There is no mention of a separate garage. No permit of any kind has ever been issued for it.

The first requisition and answers are as follows:

"1. We understand that the existing house and garage were erected upon the lands in question during the summer of 1949, that the house is within 150 feet of the northerly limit of the Queen Elizabeth Way, a controlled-access highway, and that the garage is within 600 feet of the said northerly limit and within 600 feet of the easterly limit of Martindale Road, and that the then owner of the said lands did not obtain a permit from the Minister of Highways of Ontario for the erection of the said buildings as required by The Highway Improvement Act, R.S.O. 1937, Chapter 56, and regulations thereunder.

"(a) Required, production of an irrevocable permit from the Minister or Deputy Minister of Highways of Ontario authorizing the owner or owners from time to time of the said lands to maintain the said buildings on the said lands, and proof that the said Minister or Deputy Minister is authorized by The Highway Improvement Act, R.S.O. 1950, Chapter 166, and the regulations thereunder to issue such a permit.

"(b) Required, proof that in the event of the production of the permit mentioned in the above requisition, the Minister of Highways cannot require the said buildings to be removed from the said lands under the authority of The Highway Improvement Act, Section 93, subsections 4 and 6.

"(c) Required, proof that The Highway Improvement Act, section 93, subsections 9a and 9c does not prevent the payment of compensation to the owner of the said lands in the event that the removal of the said buildings is required under the provisions of The Highway Improvement Act, section 93 subsections 4 and 6."

ANSWERS:

"1. (a) (b) and (c)

"(i) The sketch of survey dated 2nd March 1955 prepared by Douglas G. Ure, O.L.S. filed, shows that the residence and garage are not within 150 feet of the Controlled Access Highway, known as the Queen Elizabeth Way, as laid down in Regulation 134, 1 C.R.O. Page 609. The survey indicates a distance of approximately 233' from the line of pavement to the South Limit of the lands sold and a distance of 45'6" from there to the nearest point of the residence. The Controlled Access Highway at the location is declared to be 140' wide with centre line described and laid down on plans filed at Toronto. The Highway Department plans indicate a width between North and South Limits of the pavement of about 70'. There would seem to be approximately 240' between the residence and the nearest limit of the Controlled Access Highway.

"(ii) The material filed upon the Motion shows that there were issued in favour of Percy A. Gilligan, the vendor's predecessor in title, two documents, apparently building permits, each dated 12th January 1955. One document purports to be pursuant to The Highway Improvement Act (1937) Chapter 56 and amendments thereto and Regulations thereunder and the other purports to be pursuant to The Highway Improvement Act (1950) Chapter 166 and amendments. The residence and garage were erected and completed during the months of May to September in the year 1949, prior to the enactment of the 1950 Statute which came into effect as of the 24th March 1950. It is submitted that such permits cover the erection of the garage which is appurtenant to the residence. In consequence the buildings in question do not conflict with the provisions of Section 93(1) (a) of the present Statute. It is submitted that the issue of the two permits by the Minister has the same effect as if the residence and garage were built after the new Act and with a permit therefor and that it is inconceivable that the Minister would purport to give notice in respect thereof under Section 93(4). It is to be observed that any building, erected with or without a permit, prior to the new Act would be subject

to the right of the Minister to give the notice set out in Section 93(4).

"(iii) It is to be noted that the former Statute gave power to make regulations 'prohibiting or regulating the erection and alteration of buildings' and that Regulation 12 merely dealt with the erection of buildings without permits. No part of the old Statute or Regulations has anything to say concerning maintenance of any building after erection. It is submitted therefore that Section 93(9c) would not apply to the building in question because the residence and garage were completed and in occupation on the 23rd day of March 1950.

"(iv) It is also submitted that Martindale Road crossing the Controlled Access Highway by a bridge, is not a highway intersecting or running into the Queen Elizabeth Way within the meaning of Section 12 of the Regulations under the former Statute."

Upon these statements the purchasers required the production of a permit to build as required by the statute and Regulations first above referred to and proof that the Minister or Deputy Minister of Highways had power to issue such permit. It was agreed upon the hearing of the motion that neither the statute nor the Regulations relating to the Queen Elizabeth Way applied in this instance because the lands do not adjoin the Queen Elizabeth Way. They are separated from it by the lands owned by the Crown, as already stated. The answer to this portion of the requisition is therefore satisfactory.

The motion was also argued with respect to the application of the statute and Regulations to "structures upon or adjacent to highways intersecting or running into controlled access highways". In respect of this branch of the requisition as argued and the answers, I find that the requisition was not satisfactorily answered because neither the Minister nor the Deputy Minister nor any official of the Department of Highways had power to issue the permits and they are null and void for reasons which I shall now state. I find that there was a clear breach by the then owner and builder of the statute and Regulations in force at the time the house and garage were erected in 1949 in failing to obtain a permit from the Minister. The statute, in s. 79a, referred, not to a residence but to "buildings" which might comprise a house and garage. The Regulations (nos. 12, 13, 14) refer to buildings. The singular word "building" cannot be construed to mean more than a single building. No reason and no extenuating circumstances have been given for this breach, and it will be noted that both the statute and the Regulations had been in force and published since 1945 and must be taken to have been well known. It was not until after the purchasers had agreed to buy the lands in question that the matter of the necessity for a permit was raised, probably by the requisitions on title. Then the two permits referred to were issued on 12th January 1955, more than five years after the provisions of the statute and Regulations had been broken.

The general principle governing the issue of permits ex post facto is laid down in Howell v. Falmouth Boat Construction Co. Ld., [1951] A.C. 837 at 847, [1951] 2 All E.R. 278, where Lord Normand said: "The next question is whether a licence under the Order can be retrospective. This, again, is a question of construction. Counsel for the respondents naturally took the point that retrospective authority is a familiar conception in our law. That is true and not unimportant for this case. But it needs more than this to justify the construing of a licence to carry on an activity otherwise prohibited by statutory order as including a licence with retrospective effect. It would be a dangerous power to place in the hands of Ministers and their subordinate officials to allow them, whenever they had power to license, to grant the licence ex post facto; and a statutory power to license should not be construed as a power to authorize or ratify what has been done unless the special terms of the statutory provisions clearly warrant the construction."

The Highway Improvement Act, both former and present, must now be considered as required by the principle just quoted. I find the statutes contemplated prohibition against the very acts which were done here.

The former statute, by s. 79a(2)(c), gave the Lieutenant-Governor in Council power to make regulations "prohibiting or regulating the erection and alteration of buildings or other structures ..." and by subs. 3 of the same section provided penalties for violation of "any of the provisions ... made under the authority of this section". The present statute not

only provides in s. 93(9c) that no compensation shall be awarded for buildings removed by the exercise of powers under s. 93(4) or (6) above quoted, but also provides penalties for the violation of any of the provisions of the Regulations made under the authority of s. 79a, the penalty section being s. 79a(3), as enacted by 1945, 9 Geo. VI, C.9, s.8.

But there is still another reason for holding the permits issued to be null and void, namely, the express provisions of s. 93(9c) of the present statute, namely: "No compensation shall be allowed under subsection 9a if that which was removed, altered or closed up did not comply with The Highway Improvement Act and the regulations thereunder on the 23rd day of March, 1950." This language seems to me to be very clear.

Moreover, I doubt the power to issue, in 1955, the permit purporting to have been issued under the statute in force in 1949, because the section authorizing Regulations requiring permits had been repealed. The 1950 statute was a consolidating statute, generally speaking, but some sections of the 1937 statute as amended and in force until 24th March 1950 were repealed. Such was s. 79a, and so also, of course, were the Regulations founded upon it: see The Statutes Consolidation Act, 1949, c. 96, s. 6(2), to be found in R.S.O. 1950, vol. 5, p.257, and schedule A, showing the extent of the repeal, in the same volume at p. 96, and the relevant section as amended by 1945, c. 9, in schedule B, p. 183. The revised statutes of 1950 came into force on 31st December 1950.

However, in the peculiar circumstances of this individual case no permit was required. I return to the requisition. In respect of Martindale Road, it was stated as a fact that the garage was within 600 feet of that highway, a highway intersecting the Queen Elizabeth Way -- a controlled access highway. I note that there is no requisition in respect of the house, which was erected even closer. The motion, however, was argued as if it had been included, and I so treat it. The reference to 600 feet is perhaps inaccurate. The wording of the statute at the date of the erection of both buildings was "adjacent to highways intersecting or running into controlled access highways". It was not until the 1950 statute came into force that the words "upon or within 600 feet" were substituted for the word "adjacent" in a new section, as already stated.

The question then was -- were these lands "adjacent" to the intersecting highway so as to require a permit for the erection of each building, i.e., the house and the garage?

Before answering it, a further statement of fact is necessary. The property did not abut on Martindale Road, a county highway, the property of the Corporation of the County of Lincoln. It was separated from it by the railway right-of-way of the Niagara, St. Catharines and Toronto Railway and by a strip of land 20 feet, more or less, in width across the whole frontage of 187 feet, the southerly end of which strip abutted on the lands owned by the Crown immediately south of the land in question, to which reference has already been made. This long, narrow strip was said upon the argument to be owned by the Crown but not to be a highway. Further research by Crown counsel has disclosed, however, that it is highway land which was acquired to assist in the separation of the grades of Martindale Road and the railway, on the one hand, and the Queen Elizabeth Way, as it is now known, on the other. It is utilized to provide space upon which the embankment to the east of, but adjoining, the railway right-of-way was placed. Although owned by the Crown as a "King's Highway" and therefore a public way, it is not legally part of the Queen Elizabeth Way, a controlled access highway. This statement need not be enlarged upon. It is sufficient to say that it is the result of unusual wording of the orders-in-council leading to the creation of the Queen Elizabeth Way. It was not suggested that it forms part of the railway right-of-way and it can hardly be said, legally, to be part of Martindale Road or to "intersect" the Queen Elizabeth Way.

In my opinion, in these unusual circumstances the word "adjacent" is not sufficiently clear to justify holding that the lands in question were "adjacent" to an intersecting highway so that a permit was required for the erection of the house and garage. The word has been abandoned by outright repeal, as already stated, and in place of it a definite distance of 600 feet has been fixed in the present statute.

Moreover, "adjacent" does not necessarily mean adjoining, but may do so. Its meaning, therefore, is indefinite. It is

impossible to say when lands cease to be adjacent. I am quite well aware that most decisions hold that the word may apply to distances much greater than those which existed here, and generally regard must be had for the purposes of the statute. It may be noted that it is difficult in this case to define the purpose of the statute. On occasion a narrower meaning has been given to the word as indicated in a collection of American cases to be found in 2 Words and Phrases, perm. ed. 1940, under the heading-word "Adjacent" and the sub-headings "adjoining" and "lying near". They only serve this purpose, namely, to indicate that generally speaking the broader meaning is given to the word "adjacent"; the more restricted one is not unknown.

For these reasons, I have come to the conclusion that in these unusual circumstances the lands did not come within the provisions of s. 79a and the Regulations passed thereunder. Consequently, no building-permits were required for the house and for the garage.

As to requisition 1(b), asking for proof that the Minister cannot require buildings to be removed under s. 93(4) and (6) of The Highway Improvement Act, quoted above, if a permit is produced, in so far as this relates to any building, structure, fence, etc., placed or erected before the 24th March 1950, it is my opinion that no limitation can be placed upon the future use of this power. I think he may use it at any time in his discretion, as the statute provides. In my opinion there has been no answer to this requisition.

Requisition 1(c) asks for proof that subss. 9a and 9c of s. 93 of The Highway Improvement Act do not prevent the payment of
compensation if the Minister exercises his powers under subss. 4 and 6. I do not think this requisition is answered in the answers given in (i), (ii) and (iii). Since no permit was required in this unusual case, this requisition need not be answered.

Requisition 2 and the answers thereto are as follows:

"The only means of access to the said lands is a driveway leading from the Martindale Road across lands owned by the Niagara, St. Catharines and Toronto Railway Company and across lands owned by Her Majesty the Queen in the right of the Minister of Highways of Ontario, which said driveway enters the said lands through an entrance at the northwest corner thereof 187 feet northerly from the northerly limit of the Queen Elizabeth Way. We understand that this driveway and entrance has been in use since the summer of 1949 without a permit from the Minister of Highways as required by The Highway Improvement Act, R.S.O. 1937, Chapter 56, and regulations thereunder, or that if there was such a permit it authorized the maintenance of an entrance not less than 300 feet northerly from the said northerly limit of the Queen Elizabeth Way. In order to provide adequate and permanent means of access to the said lands we require:

"(a) An irrevocable permit from the Minister or Deputy Minister of Highways authorizing the owner or owners from time to time of the said lands to maintain the said entrance in its present location, and proof that the said Minister or Deputy Minister is authorized by The Highway Improvement Act, R.S.O. 1950, Chapter 166, and regulations thereunder to issue such a permit.

"(b) A permanent right-of-way from Her Majesty the Queen represented by the Minister of Highways of Ontario to the owner or owners from time to time of the said lands across the lands of the Department of Highways as shown on Highway Plans 167 and 192 at the present location of the said driveway.

"(c) A permanent right-of-way from the Niagara, St. Catharines and Toronto Railway Company to the owner or owners from time to time of the said lands across the lands of the Niagara, St. Catharines and Toronto Railway Company at the present location of the said driveway."

ANSWERS:

"2. (a) and (b)

"The lands on Highway Plans 167 and 192 are lands acquired by the Minister for highway purposes and no right of way in respect thereof is needed. The letter dated 12th January 1955 from the Department of Highways to the vendor's solicitor states that no entrance permit in respect of the entrance shown

upon the survey is required and it is submitted that this letter constitutes the assent of the Minister to the use of the driveway for all purposes. The letter of the Department of Highways to the vendor's predecessor in title dated 10th May 1949 refers to an entranceway to the north of the property sold and this entrance was used as an entrance for the residence and garage from the time it was opened in the month of May, 1949 until the entranceway shown on the survey was opened and placed in use in the month of December, 1952. The present entranceway having been established and placed in use since the new Act, no permit is necessary and the Minister may not give notice in respect thereof under Section 93(4) of the new Act. It is also submitted that the land sold does not adjoin the Controlled Access Highway within the meaning of sections 7 and 8 of the old Regulations.

"2. (c)

"(i) The contract does not purport to include a permanent right of way across the lands of the Niagara, St. Catharines and Toronto Railway Company. The vendor did not agree to convey any such permanent right of way. Such right of way was not part of that which was sold and the requisition is not a matter of title within the meaning of the contract.

"(ii) It was patent upon an inspection of the property that the railway existed between Martindale Road and the lands sold and that the crossing was a 'Private Crossing' and that 'persons using this crossing do so at their own risk' and no stipulation in respect of such crossing was contained in the offer.

"(iii) The physical crossings over the railway land are pursuant to licenses granted by the Railway Company from time to time to owners of adjoining property. It is the policy of the Railway Company to renew such licences from year to year and it is submitted that the Railway Company will grant such license to the purchaser and will renew such license for the purchaser and his successors for such length of time as may be required.

"(iv) The property sold does not abut the railway land but adjoins Highway land both to the West and to the South."

In my opinion the answers to (a) and (b) answer requisition (a) in so far as a permit to maintain an entrance is concerned, and are subject to what I shall have to say in commenting upon requisition (b) which follows:

Requisition (b) -- The two strips of land which, together, have an approximate width of 20 feet and lie between the lands in question and the easterly boundary of the railway right-of-way were acquired by the Crown by the deposit of Plans D167 and D192. They comprise a highway and for purposes of this motion all I need say is that as such the owner of an abutting property has the right to use them for the highway purpose of crossing them to gain access eventually to Martindale Road. No permission is required from the Crown. Upon argument and upon the then assumption that they were Crown lands, but not a highway, and that permission would be required to cross them, Crown counsel, on behalf of the Crown, consented that the present "crossing" of its property should continue to be used as such as long as the property in question is used for farm and/or residential pruposes.

He pointed out that s. 93(9c), supra, only relates to the exercise of powers under s. 93(4), supra. If, in future, the Crown expropriates the lands in question for future development of a highway, these sections will not apply.

The answer to requisition 2(b) is, therefore, nihil ad rem, but this is of no consequence because the Crown says these lands are part of "The King's Highway".

The crossing of the lands of the Niagara, St. Catharines and Toronto Railway, while also a part of the access to the lands in question, is not, in my opinion, here a matter of title. The railway is declared to be for the general advantage of Canada: 50-51 Vict. (Can.), c. 60, and as such comes within the ambit of The Railway Act, R.S.C. 1952, c. 234. The Board of Transport Commissioners has power, under ss. 260 and 276, to make orders giving rights to cross railways and, no doubt, would make such an order in this case if it became necessary to do so. In practice the railway grants an annual licence to the registered owner of the lands and has done so in this instance to Gilligan for a nominal fee. By their express terms these

licences are not assignable.

I think the purchasers were put upon notice to inquire when they saw, as they must have seen, that the railway lands were fenced, as I take it from the wording of the licence they were, at least on the east side of the right-of-way, with a gate in that fence at the site of the crossing.

The answer to this portion of the requisition is satisfactory.

Requisition 3 and the answers thereto are as follows:

"If any of the permits required in the foregoing requisitions have been issued to the vendor or his predecessors in title, required:--

"(a) Production on closing of all assignments necessary to vest such permits and the rights arising thereunder in the name of the purchaser.

"(b) Production on closing of all necessary consents of the Minister of Highways to all the foregoing assignments.

"(c) Proof that such permits are valid and subsisting, irrevocable permits, enuring to the benefit of the purchaser and his successors on title, and in accordance with the requirements of the foregoing requisitions."

ANSWERS:

"3. (a) (b) and (c)

"In so far as the 'building permit' purports to be operative under the old Act and Regulations, no assignment is necessary because the Regulations clearly require the building permit only in connection with the erection of the building. The erection of the building was completed in 1949 and the buildings themselves have been in occupation ever since. The old Act and Regulations did not deal in any way with the maintenance of buildings after erection. The same interpretation is applicable to the new Statute which provides that the 'permit' is in respect of the placing, erection or alteration of the building and not in respect of the maintenance thereof."

The comments I have made upon the earlier requisitions and answers make unnecessary a comment upon those numbered 3.

An order will therefore go declaring

(a) that the answer to requisition 1(a) is satisfactory in so far as it relates to the Queen Elizabeth Way, but is unsatisfactory in so far as it relates to Martindale Road; (b) that the answers to requisitions 1(b) and 1(c) are unsatisfactory;

(c) that the answers to requisitions 2(a) and 2(b) are unsatisfactory;

(d) that the answer to requisition 2(c) if satisfactory.

(e) No ruling is made in the circumstances with respect to requisition 3 and answer 3.

(f) No building-permit was necessary under s. 79a and the Regulations passed thereunder.

The vendor and purchasers will each pay their own costs. The vendor will pay the costs of the Crown.

Order accordingly.

Solicitor for the vendor, applicant: T.R. BeGora, St. Catharines.

Solicitors for the purchasers: Fleming, Harris, Kerwin & Barr, St. Catharines.

Toronto (City) Chief Building Official v. Andriano

Between
Pamela Coburn, Chief Building Official for the City of Toronto and The Corporation of the City of Toronto, applicants, and Jacques Andriano, respondent

[1998] O.J. No. 3933
DRS 98-16623
Court File No. 97-CV-128925

Ontario Court of Justice (General Division)
Pitt J.
Heard: August 27, 1998.
Judgment: September 30, 1998.

Counsel:
Andrew Weretelnyk, for the applicants.
Patrick Clement, for the respondent.

[para1] The applicant seeks the following relief:

a) an Order abridging the time for service of this Application, for substituted service or dispensing with service as the case may be, upon the Respondents;

b) an Order requiring the Respondent, his successors and assigns to remove a three storey and basement addition measuring approximately 23 feet 9 3/4 inches in length and 17 feet 9 1/2 inches in width to the rear of the building, together with an uncovered platform and basement entrance, at premises in the City of Toronto municipally known as 130 Springhurst Avenue, constructed pursuant to Permit No. 378-912 issued on April 29, 1996 and revoked on June 27, 1997 within 30 days of the date of the Order;

c) an Order requiring the Respondent, his successors and assigns to remove all interior alterations including plumbing and widened part of the third floor dormer at the front of the building at 130 Springhurst Avenue, constructed pursuant to Permit No. 378-912 issued on April 29, 1996 and revoked on June 27, 1997, and to restore the building to a single family dwelling within 30 days of the date of the Order;

d) an Order restraining the Respondent, his servants, agents, successors and assigns from using or permitting the use of the premises municipally known as 130 Springhurst Avenue as other than a single family dwelling;

e) an Order requiring the Respondent, his successors and assigns to complete all the repair work as set out in the Order of the Inspector dated April 4, 1997, to bring the premises municipally known as 130 Springhurst Avenue into compliance with Chapter 210 of the Toronto Municipal Code within 30 days of the date of the Order;

f) an Order permitting the Applicants, their servants or agents to remove the three storey and basement rear addition, together with uncovered platform and basement entrance, interior alterations and widened part of the third floor dormer at the front, constructed pursuant to revoke building Permit No. 378-912 at premises in the City of Toronto municipally known as 130 Springhurst Avenue including plumbing work, and to restore the premises to a single family dwelling, and to carry out all work listed in the Inspector's order dated April 4, 1997 to bring the premises into compliance with Chapter 210 of the Toronto Municipal Code in the event that the Respondent, his successors or assigns fail to comply with the relief requested in subparagraphs (b) and (c);

g) an Order requiring the Sheriff for Metropolitan Toronto and the Metropolitan Toronto Police to assist the Applicants in carrying out the provisions of the Order sought in subparagraph (f) above;

h) an Order permitting the Clerk for The Corporation of the City of Toronto to add to the Collector's Roll and to collect the same manner and with the same priorities as municipal realty taxes, the costs of removing the unauthorized construction and restoring the building at premises in the City of Toronto municipally known as 130 Springhurst Avenue to a single family dwelling, and completing the repair work to bring the premises into compliance with Chapter 210 of the Toronto Municipal Code and the Sheriff's fees;

i) the costs o this Application fixed at $1,500.00;

j) such further and other relief as this Honourable Court deems just.

[para2] The grounds for the relief sought are:

a) The respondent is the owner of premises in the City of Toronto municipally known as 130 Springhurst Avenue.

b) On April 29, 1996, a building permit was issued to the Respondent for a rear three storey and basement addition, together with uncovered platform and basement entrance, for interior alternations, and the widening of a third floor dormer at the front, to covert the existing dwelling to two dwelling units.

c) Inspections in March, 1997, disclosed that the building at 130 Springhurst Avenue was being occupied as a rooming house with four roomers renting separate rooms and sharing the sanitary and culinary facilities.

d) On June 27, 1997, the building permit was revoked by the Chief building Official on the basis that it had been obtained as a result of false information being provided to the Chief building Official at the time of the application.

e) 130 Springhurst Avenue is located in an area within which use of the building for the purpose of a rooming house is prohibited by the City of Toronto Zoning by-law. To date, the Respondent has not discontinued the use of the building at 130 Springhurst Avenue as a rooming house, nor has he reduced the occupancy to a single family dwelling.

f) Inspection of 130 Springhurst Avenue on March 10, 1997 disclosed that it did not conform to the housing standards set out in Chapter 210 of the Toronto Municipal Code. An Order was issued to the Respondent on April 4, 1997, requiring 63 repairs to be completed within 30 days of the date of receipt of the Order. The Order was received by the Respondent on or about April 14, 1997. To date, the Respondent has not completed the repairs required by the Order.

g) Section 38 of the Building Code Act, 1992, c. 33.

i) Rules 3.02(1) and 16 and 14.05(2) of the Rules of Civil Procedure.

[para3] The respondent does not deny any of the facts as set out in the application. He however seeks a dismissal of the application and "an order requiring the applicant to reissue a building permit in order to permit the respondent to finish the conversion into a two dwelling unit - on the grounds that":

> It is the respondent's intention to reacquire the requisite Work permit in order to finish converting the premises into a two dwelling unit.

[para4] The legal basis of the respondent's claim for relief is, in the language of his counsel's factum:

> The Chief Building Official must issue a permit under subsection (1) unless certain conditions apply.
>
> As long as the respondent occupies these premises as a single family dwelling he is entitled to a reissue of the building permit which was revoked due to the use of these premises as a rooming house.

[para5] Notwithstanding his written submissions, respondent's counsel has argued, as I understand it, that the real issue in the application is whether or not he is entitled to use the premises as a rooming house with four roomers renting separate rooms and perhaps sharing sanitary and cooking facilities. Presumably if the court were to make a finding in his favour such a finding would render inoperable the revocation of the permit.

[para6] I am not called upon to adjudicate on an appeal of the applicant's decision to revoke the permit. Such an appeal has never been taken by the respondent, who evidently feels entitled to invoke his own procedures for dealing with those problems.

[para7] The alterations having been done pursuant to a permit could not have been per se dangerous, and accordingly there is no justification for the applicant's request to have them removed within 30 days. A period of 90 days from the release of these reasons would be a reasonable time for the removal of those alterations referred to in paragraph "b and c" of the relief headings.

[para8] The right sought in paragraph "h" permitting the applicant to add the costs of removing unauthorized construction to the Collector's Roll is to be exercised only if the respondent fails to comply with the court's order.

[para9] In all other respects the application is granted.

Costs

[para10] The parties may make written submission on costs within 20 days of the release of this judgment.

PITT J.

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Toronto (City) Official Plan Residential Development Amendment (Re) [Minto]

Minto BYG Incorporated has appealed to the Ontario Municipal Board under subsection 22(7) of the Planning Act, R.S.O. 1990, c. P.13, as amended, from Council's refusal or neglect to enact a proposed amendment to the Official Plan for the City of Toronto (Toronto) to redesignate lands municipally known as 1252-1260 Bay Street and 61-63 Yorkville Avenue to permit greater residential development with commercial at grade
O.M.B. File No. O000062 and

Minto BYG Incorporated has appealed to the Ontario Municipal Board under subsection 34(11) of the Planning Act, R.S.O. 1990, c. P.13, as amended, from Council's refusal or neglect to enact a proposed amendment to Zoning By-law 438-86, as amended, of the City of Toronto (Toronto) to rezone the lands municipally known as 1252 -1260 Bay Street and 61 - 63 Yorkville Avenue, to permit the development of an 18 storey building containing 171 residential dwelling units and approximately 700 square metres of retail at grade for a total density of 9.9 times the area of the lot
O.M.B. File No. Z000049 and

Minto BYG Incorporated has referred to the Ontario Municipal Board under subsection 41(12) of the Planning Act, R.S.O. 1990, c. P.13, as amended, determination and settlement of details of a site plan for lands municipally known as 1252-1260 Bay Street and 61-63 Yorkville Avenue in the City of Toronto (Toronto)
O.M.B. File No. M000053

[2000] O.M.B.D. No. 1102
File Nos. PL000351, O000062, Z000049, M000053

Ontario Municipal Board
W.R.F. Watty and J. Seaborn
October 27, 2000

COUNSEL:
P. Devine and S. Longo, for Minto BYG Inc.
J. Paton, G. Leonard, for City of Toronto.
A. Brown, for Provo Developments Ltd.

DECISION DELIVERED BY W.R.F. WATTY AND J. deP SEABORN AND ORDER OF THE BOARD:--

[para1] Minto BYG Inc. ("Minto") owns two properties at the southwest corner of Bay Street and Yorkville Avenue. These two properties are municipally described as 1252-1260 Bay Street and 61-63 Yorkville Avenue, which together constitute a combined landholding of .186 hectares or 0.459 acres. The properties have a frontage of 55m (180 ft.) along Bay Street and 34m (111 ft.) along Yorkville Avenue, with a westerly flankage along Genoa Street, a short cul-de-sac'd lane leading from Yorkville Avenue southwards to a proposed development at the corner of Bay Street and Cumberland Street identified municipally as 1250 Bay Street. The two subject properties are developed with a seven-storey commercial office building in the one case, and a recently demolished low-rise two-storey commercial building in the other.

[para2] Minto has applied to the City of Toronto ("City") for approvals to permit the redevelopment of both of the subject properties for an integrated eighteen (18) storey, 171 residential condominium building, with street level commercial uses and 110 below grade parking spaces. The applications include an amendment of the City's Official Plan to re-designate the Yorkville Avenue portion of the site from a low density mixed commercial - residential area ("LCR") to high density mixed commercial - residential area "A" "(HCR "A")" on the Bay Street portion of the site, which constitutes approximately two-thirds of the combined area. The Official Plan places a maximum density (developable floor area) of three times site area and the height range of three to five stories on the Yorkville Avenue portion. The Official Plan in the HCR "A" designation establishes a maximum developable floor area at six times the applicable site area. The Official Plan Amendment proposes an overall density for development at 9.9 times site area and 18 storeys.

[para3] In addition, Minto has applied for an amendment to the City's Zoning By-law 438-86 to implement the proposed

Official Plan Amendment. The portion of the amendment area, described as 1252-1260 Bay Street, is presently zoned by way of a mixing formula for maximum development density applicable to commercial (C), residential (R) and both uses in combination (T). For this property, the zoning is commercial - residential (CR), T6.0 C4.5 R6.0 indicating the maximum floor area permissible as a factor applied to site area. In the case of 61-63 Yorkville Road, the applicable zoning (use and density of use) is CR T3.0 C2.5 R3.0. In the two zones, development is subject to height constraints of 46m and 18m respectively. The zoning by-law amendment would permit a combined development density at 9.9 times lot area to a height of 60.45m.

[para4] The Board also has before it a proposed site plan appealed by the applicant for determination of details and for settlement of required provisions of any site plan agreement. At the conclusion of the hearing of the evidence and submissions, both parties invited the Board not to address the site plan matters at this time, but that should the Board allow the appeals, the parties be instructed to enter into discussions for finalization of the Section 41 appeals with the Board seizing itself of this matter in the event of failure to agree.

[para5] The appeals come forward as a result of the refusal of the municipal council to enact the requested by-laws and to approve the necessary plans or drawings. Both parties through their various witnesses and by way of submissions are agreed that the proposed development, its location, orientation, design, servicing and environmental and traffic/parking impacts present no unacceptable or adverse implications, but rather in terms of its physical and structural characteristics the project is acceptable. Provo Developments Ltd. did not call any evidence, examine any witnesses or make any submissions to the Board.

[para6] The only issues that remain outstanding are whether bonusing provisions should form part of the amendments that are before the Board, and if so, in what amount. It is the position of the City that the Board should require Minto to provide appropriate public benefits pursuant to Section 37 of the Planning Act in exchange for the increased height and density sought. Without such a requirement, the application fails to meet the complete test of good planning in so far as it does not comply with the Official Plan. Minto argues that the application of Section 37 provisions to the subject development should not result in any further amenities other than those which have been proposed or which are valid conditions of site plan approval. The applicability of Section 37 of the Planning Act to the subject development proposal is the sole issue in contention at this hearing.

[para7] The Board recognizes that Section 37 is an important tool for the City as it allows significant funds to be provided by a developer in return for approvals which exceed existing zoning and by-law requirements. The City appears in opposition to the application on the basis that Minto ought to be required to make financial contributions to significant and important City initiatives. Section 37 provides a mechanism to supplement social programs, among others, that are needed. The City's efforts in this regard are commendable given that all of the contributions made to date have been the product of negotiation, without appeal to the Board, making this application novel.

Location and Context

[para8] The development proposal is located in an area of the City undergoing redevelopment through intensification. As described in the evidence of Mr. Peter Walker, the planning witness called by Minto, the development is located one block north of Bloor Street, a major shopping and business artery in the City which at its intersection with Bay Street, defines a major high-intensity road complimented by two major road systems. The project is close to both east-west and north-south surface and subway and transit lines and other community and city facilities and amenities. Bay Street is the eastern limit of the Yorkville district, a high-end commercial and retail area focussed on Yorkville Avenue which extends west to Avenue Road, its western extremity. While along Yorkville Avenue itself redevelopment and improvements have been essentially modifications and modernizations within the framework of the predominantly two to four storey

converted residences, at the east and west extremities and along the Bloor Street frontage development which abuts the district to the south, redevelopment has tended to maximize high density possibilities.

[para9] Mr. Walker described a number of high rise commercial offices with ground floor retail developments located on the east side of Bay Street and identified a proposal for a twenty-two storey (82m) mixed use retail residential building also along the east side of Bay Street, one block further south. Immediately to the south a recently approved construction-in-progress for an eighteen storey commercial/residential project enjoys the same density permissions as that sought by Minto. This development, at 1250 Bay Street, would share access to and the use of Genoa Street with Minto's project, if approved. The proponent of 1250 Bay Street, Shui Pong Developments Ltd., relies on the widening and upgrading of Genoa Street to accommodate two-way traffic. The improvements to Genoa Street are offered to the City by Minto, however they maintain the option for subsurface parking below part of the dedicated right of way. Another thirteen storey retail office use is located to the southwest of the proposal, and a number of redevelopment projects of office-cum-retail uses are underway along Bay Street, south of Cumberland Street.

[para10] Minto originally submitted a development proposal under Section 45 of the Planning Act. It was observed that this was the course followed by the neighbouring development at 1250 Bay Street in achieving similar relief as is sought by Minto. However, planning staff at the City advised that a zoning by-law amendment was preferable. A revised application for an official plan amendment and re-zoning was therefore made and was eventually endorsed by staff. However, staff advised Minto that a final report would not be submitted to Council for approval until the amount of payment under Section 37 of the Planning Act was resolved. Minto's project is now before the Board without opposition from any quarter as to the physical merits of the proposal. On the contrary, the Board is advised that the neighbourhood and business interests have supported and promoted the development proposal. At the pre-hearing conference, the City estimated the value of the required contribution under existing policies to be between $2.4 to $2.6 million (50% of the increase in land value attributable to the excess in density sought). However, at the hearing, the City requested a contribution of $1,286,076, which represents 30% of the increase in land value (based on $55 per square foot) attributable to the excess in density sought. The re-calculation was based on a staff report respecting Section 37, released in July, 2000.

Bonusing and the City of Toronto

[para11] In order to determine whether Minto's applications should be approved, and if so should the by-law include a requirement to provide public benefits pursuant to Section 37 of the Planning Act, it is necessary to review the history of how bonusing payments have been addressed in the former City of Toronto and since amalgamation, on a city-wide basis. The City contends that bonusing arrangements have been

in place for many years and public benefits must be a requirement of Minto's approval given it seeks increases in height and density. Minto's position is that the history of bonusing arrangements reveals an inconsistent approach by the City and it is impossible for a developer to predict on what basis contributions under Section 37 may be requested or with respect to Minto's project, the rationale for a contribution amounting to $1.2 million.

[para12] The Planning Act clearly authorizes bonusing arrangements in Section 37 (formerly Section 36) which provides as follows:

> (1) The council of a local municipality may, in a by-law passed under Section 34, authorize increases in the height and density of development otherwise permitted by the by-law that will be permitted in return for the provision of such facilities, services, or matters as are set out in the by-law.
>
> (2) A by-law shall not contain the provision mentioned in subsection (1) unless there is an official plan in effect in the local municipality that contains

provisions relating to the authorization of increases in height and density of development.

(3) Where the owner of land elects to provide facilities, services, or matters in return for an increase in height or density of development, the municipality may require the owner to enter into one or more agreements with the municipality dealing with the facilities, services, or matters.

(4) Any agreement entered into under subsection (3) may be registered against the land to which it applies and the municipality is entitled to enforce the provisions thereof against the owner and, subject to the provisions of the Registry Act and the Land Titles Act, and any and all subsequent owners of the land.

[para13] Mr. Langdon, the City's main planning witness, provided comprehensive evidence in respect of the history behind the development of bonusing policies in the City. There was no dispute between the parties that bonusing agreements have been successfully negotiated and employed since the 1980's to provide a wide range of public benefits in return for increases in height and density. Mr. Langdon testified that the City has relied on Section 37 since its enactment in 1983 to secure public benefits in connection with approximately 70 projects. However, in all of the examples provided to the Board, Section 37 agreements had been the subject of negotiation. In its appeal, the Board has been requested by Minto to exercise the discretion normally afforded to Council and to decide whether public benefits ought to be required and if so, at what level.

[para14] Prior to 1993, Section 37 was employed by way of site specific Official Plan amendments as there were no general policies available in the City's Part 1 Official Plan relating to bonusing. The Part 1 policies introduced in 1993 and approved by the Province in 1994, remain in effect today.

[para15] The significant events in connection with bonusing arrangements in the City as presented in the evidence of Mr. Langdon are as follows:

1983: The Planning Act was amended to include Section 36 (now Section 37)

1987-1993: The City undertook a special study to provide the basis for general bonusing policies in its Official Plan. During that same time period Section 37 agreements were negotiated and entered into for a variety of projects on a site specific basis. Site specific plan amendments, as opposed to general policies in the Part 1 Official Plan, are relied upon to give effect to these agreements.

1993: The City adopted general provisions relating to bonusing in section 16.21 of its new Official Plan and that plan was approved by the Province in 1994. As a result of the recession and general slowdown of economic activity, bonusing arrangements were not pursued for all development projects even though official plan and zoning amendments authorizing increases in density and height were approved by City Council.

Late 1998 to May 1999:

The principles contained in section 37 relating to bonusing were pursed by staff in some minor variance applications where significant increases in height and density were sought. On May 11th and 12th, 1999, as a result of reports prepared in response to the Mayor's Task Force on Homelessness, Council formally directed staff by resolution to pursue Section 37 type agreements as conditions

of approval in connection with minor variance applications. Specifically, staff were directed to request the Committee of Adjustment to impose conditions requiring contributions to the Capital Revolving Fund for Affordable Housing. Council also directed staff by resolution dated May 11th, 1999 to immediately pursue contributions toward the provision of affordable housing pursuant to Section 37 on a city-wide basis. Concurrently, Council adopted a Development Charges By-law for the amalgamated City.

July, 1999 to August, 2000:

Council directed staff to review the future use of section 37 on a City-wide basis. Following a year of study and public consultation with stakeholders, a staff report entitled "Section 37 of the Planning Act, Respecting Exchange of Increased Density or Height for Public Benefits Proposed City Wide Implementation Framework" (the "Implementation Framework") was prepared and presented the City's Planning and Transportation Committee in July, 2000. The Implementation Framework report directed staff to require contributions under Section 37 equivalent to 30 percent of residual increase of the land value

resulting from the increase in density. A mechanism for implementation was provided as well as direction to staff that existing Section 37 agreements were to remain in place, regardless of the terms of the Implementation Framework.

[para16] Prior to the introduction of general policies in the Part 1 Official Plan, Section 36 (now Section 37) agreements were secured on a project by project basis. Mr. Langdon provided the Board with examples of projects where increases in height and density were authorized in exchange for public benefits. The Board was directed to projects such as the Eaton Centre, Scotia Plaza, Water Park Place and the World Trade Centre. In each instance the agreements were the product of negotiation resulting in the developer electing to enter into an agreement pursuant to Section 37(3) of the Planning Act.

[para17] Similarly, prior to the adoption of the general bonusing policies in the City's Part 1 Official Plan there were appeals to the Board that involved bonusing arrangements. However in each case agreements had been negotiated by the municipality and the developer, and objectors had appealed the proposed amendments. While the cases presented to the Board by Counsel were decided prior to the inclusion of general bonusing policies in the Part 1 Official Plan, there are some broad principles surrounding bonusing that are relevant to this appeal:

* a by-law incorporating a Section 36 agreement should be a by-law passed pursuant to section 34. The election by the developer under subsection 37(3) must come before the by-law and be incorporated therein (Re Copthorne Holdings Ltd. (1987), 36 M.P.L.R 122 (OMB).

* a Section 36 agreement is appropriate in circumstances where negotiations have led to an agreement and the City's interest and the public interest are seemingly well protected. However, in the absence of consent it might not be correct to force such an agreement on the parties (Re Copthorne Holdings Ltd. supra).

* a Section 36 agreement relating to bonusing cannot form part of a by-law amendment in the absence of comprehensive policies for bonusing in the Official Plan. To do otherwise would lead to uncertainty as to where, when and how any increases in height and

density of development might occur. Height and density are issues that should not be left to ad hoc planning (Re: City of York Official Plan Amendment 105 and Zoning By-law 2171-91 (No. 1) (1991), 27 O.M.B.R. 41 ((OMB); Arsandco Investment Ltd. v. Toronto (City), [1991] O.M.B.D. No. 2128 (OMB).

* the appropriateness of a site specific official plan amendment and a bonus provision by-law should be determined on the merits of an individual application. In the absence of general policies in the plan, a site specific amendment can be passed immediately prior to the zoning by-law (Tye v. Borough of East York Committee of Adjustment (1992), 27 O.M.B.R. 479 (OMB); Re Toronto (City) Bay Street Official Plan Amendment, [1992] O.M.B.D. No. 2075 (OMB); Re Ernst & Young (1993), 14 M.P.L.R. (2nd) 196 (OMB).

[para18] Following the introduction of the general bonusing policies in 1993, the evidence was that while Section 37 agreements were executed, each had been negotiated by the parties. Clearly a wide range of public benefits have been secured by the City over the years, however, each agreement has been the subject of negotiation between the parties. To the extent these agreements were before the Board, they had been presented with Official Plan and zoning amendments on the consent of the parties (see for example Toronto (City) World Trade Centre Official Plan Amendment (Re), [1994] O.M.B.D. No. 521 (OMB) and 40 Bay Street Holdings Inc. v. Toronto (City), [1994] O.M.B.D. No. 1738 (OMB). In those instances, the terms of the agreements were not the subject of the appeals to the Board.

[para19] In late 1998 staff began to pursue Section 37 type agreements through the minor variance process. Thereafter, Council passed a resolution in 1999 directing that contributions to affordable housing be secured. While it is not necessary for the Board to deal with the merits of this approach, suffice to say that in regard to minor variance applications, public benefits have been secured, particularly in the area of affordable housing, as a condition pursuant to subsection 45(9) of the Planning Act. In examples cited to the Board by both Mr. Walker and Mr. Langdon with respect to this approach it was clear that these arrangements were on consent and made outside the bonusing policies set out in the Part 1 Official Plan and were not agreements made pursuant to Section 37. Indeed, the project at 1250 Bay was one example provided to the Board in this regard. It was demonstrated in the evidence of Mr. Walker, and not contradicted by Mr. Langdon, that many of the recently approved developments for densities and/or heights in excess of the by-law provisions have proceeded by way of approvals by the City's Committee of Adjustment with concurrence of (or at least without objections by) City Council, in spite of the language of Section 37 provisions.

[para20] Concurrent with Council's resolution and direction to staff in respect of minor variance applications, staff was further directed to commence a review of the future use of Section 37, in consultation with key stakeholders. Mr. Langdon was a key member of the study team. The resulting Implementation Framework (Exhibit No. 23) is intended to provide "direction regarding where, when and how section 37 is to be used and establishes a consistent relationship between the cost to the developer of providing public benefits and the value to the developer of the increased density and height. Clarification of what public benefits are to be secured, including the achievement of an appropriate balance between local and city-wide benefits, is also part of the framework" (at p. 4).

[para21] It is against this background that the Board must determine the merits of the proposed official plan and zoning by-law amendments.

Official Plan Policies Addressing Section 37

[para22] There was no dispute among Counsel that the Board has the original jurisdiction to determine the matters before it and the Board may make any decision Council could have made in dealing with the application (Re Esplen and Lakespray Developments Inc. (1986), 54 O.R. (2nd) 498 (Div'l Ct.). In making its decision, the Board is required to exercise its

independent judgement on the merits of the application (Re Hopedale Developments Ltd. and the Town of Oakville (1964), O.R. 1965 Vol. 1 259 (C.A.). It is well settled law that pursuant to Section 24 of the Planning Act the Board cannot approve any by-law unless it conforms with the official plan and in doing so it must give the official plan a broad liberal interpretation with a view to furthering policy objectives (Bele Himmell Investments v. Mississauga (City) (1983), 13 O.M.B.R. 17 (Div. Ct.).

[para23] Whether Minto's proposed increases in height and density without the contribution of further public benefits are appropriate and whether public benefits ought to be a requirement of any approval are issues that must be addressed together. It is the position of the City that while the general planning merits of the Official Plan and zoning by-law amendments are not in dispute, a condition of any approval must include a requirement that Minto provide a package of public benefits by way of an agreement pursuant to Section 37.

[para24] Both Mr. Walker and Mr. Langdon agree that a necessary prerequisite to the exercise of the authority for requiring the provision of "facilities, services or matters" under Section 37 is the inclusion of "provisions relating to the authorization of increases in height and density of development" in the municipal Official Plan. On that basis, the Board finds that a Section 34 by-law should be tested as

to the appropriateness and conformity of any such "development otherwise permitted", together with the conformity of the appropriateness of "such facilities, services or matters" required as a result of the excess height and density in relation to established official plan policies. The Board finds these to be two related but severable and sequential tests:

(1) the increases in height and density must be defensible on good planning grounds; and

(2) the contributions requested must be within the clear limits of established policy.

[para25] That is, the contribution of facilities, services and matters pursuant to Section 37 cannot be a means of making a bad application good, but might validly make a good application better.

[para26] It is clearly the municipality's prerogative whether or not in individual cases it will require contributions in return for increases in height and density. Under what circumstances and in what locations it may exempt an application, is in the absolute discretion of the municipality. Notwithstanding, the municipality may choose to incorporate the framework for requiring contributions when, where, or how much and for what purposes in its' Official Plan. Only where such a framework is provided in the Official Plan policies, can Council require a contribution, and staff are bound to implement those policies.

[para27] In determining the applicability of Section 37 to this application, the Board has to look at the wording of the general policies respecting bonusing as contained in the Official Plan. The evidence was clear that there are no site specific Part II bonusing policies in effect for the area in which the development proposal is located. Section 16.21 of the Official Plan addresses General Policies Respecting Section 37:

(a) When passing by-laws which include increases in the height and/or density of development respecting a site-specific development proposal, council will ensure that the density and/or height increase is consistent with the objectives of this plan regarding building form and the physical environment, and, in such instances, may also authorize the use of Section 37 of the Planning Act, 1990, and enter into legal agreements under that section in order to secure the positive features of the development proposal including, as appropriate, but not limited to, the realization of the objectives of this plan respecting social housing, non-profit community, cultural and institutional facilities, heritage preservation and parks.

(b) In addition to policies of Section 16.21(a), 13.16 and 13.17, in utilizing its powers under Section 37, Council may develop bonusing policies applicable to specific areas of the city and under circumstances of a more general application. In such instances, it is the policy of Council to proceed generally in accordance with the following guidelines:

...

[para28] Both planners concur that the above policy Section 16.21(a) most directly applies to the present proposal. Section 16.21(a) addresses site specific development proposals, and by that fact it is distinguished from Section 16.2(b) applicable to "specific areas of the city" and for general policy situations "where guidelines are set out for the implementation of bonusing policies".

[para29] It is also agreed that the application before the Board falls neither within the scope of a "specific area of the City" nor does it prescribe policies "of a more general application". Notwithstanding this, Mr. Langdon testified that it has been the practice of his department when it finds it necessary, to apply the provisions of Section 16.21(b) to Section 16.21(a) "type" cases as a guideline. Even so, staff's practice is that for good and sufficient reason, they may deviate from these very "guidelines". Mr. Langdon defends this practice as follows:

(1) (There are no explicit guidelines applicable to determining the appropriate contributions in Section 16.21(a) cases;

(2) (As guidelines, staff are well within their authority to modify the incidence of the contributions within the spirit of the plan; and

(3) (This practice has never been contested previously by developers and over the years considerable contributions have been paid to the City in return for bonusing, which contributions have been applied to designated projects under the plan.

[para30] Consequently, an additional matter for determination by the Board is whether or not the provisions of Section 16.21(b) are "indirectly" relevant to the provisions of Section 16.21(a). If "indirectly" relevant, how can they be appropriately applied to the case before the Board. If not relevant in any way, what is the appropriate application of Section 16.21(a) of the Official Plan?

Section 16.21(a) Provisions

[para31] In accordance with the Planning Act, the municipality intends to exercise its discretion when applications for site specific developments come forward under Section 34 of the Act to authorize or not authorize, as the case may be, increases in the height and density of development in return for "a provision of such facility, services, or other matters as are set out in the by-law". In such cases, the development must be "otherwise permitted by the by-law", the density and/or height increases must conform to the plan objectives regarding building form and the physical environment. The authorization of height and density increases is to be secured by a legal agreement and serve to "secure the positive features of the development", which among other things pertain to the Official Plan objectives "social housing", non-profit community cultural and institutional facilities, heritage preservation and "parks".

[para32] Once again it must be emphasized that the common evidence is that the building form and function is not in dispute and the Board finds that, but for the excess height and density, the development would be otherwise permitted by the by-law and that there is no offence to the Plan objectives regarding structure and impact of the proposal. This is a "site specific development" unlike a redevelopment proposal for an area of the City containing Section 37 provisions, for example, the Bathurst/Strachan Area Plan (Exhibit 22). Neither is this a by-law amendment to address an issue relating to more contributions for daycare centres, senior citizen housing, libraries, etc.

Contributions Under Section 16.21

[para33] Minto argues that having regard to the matters required to secure the positive features of the development, no contributions have been shown by the City to be necessary, and certainly the requested contribution of $1.2 million is in no way justifiable under existing policies. On the contrary, the appellant argues that the development will be creating and adding public benefits of improvements (widening, paving, lighting and street side decorations) to Genoa Street; improvements in street furniture and facilities to Bay Street and Yorkville Avenue, which should be counted as contributions. The City responds that these amenities are all voluntarily tendered by the proponent, and are even more beneficial to the presentation and marketing of the project than contributing to a public or social benefit. In particular, Mr. David testified that the improvements to the Genoa Street laneway are required in any event for the project to proceed, regardless of any further contribution pursuant to Section 37.

[para34] Mr. Langdon contends that neither in the Act nor in the Official Plan is there any suggestion that benefits contributed be "on site", that is within the development area. Mr. Walker, on the contrary, looks to the Official Plan and on the basis of its wording, draws the inference that if the policies in section 16.21(a) are specific to the development and the contributions are "to secure the positive features of the development proposal", then unless these positive features relevant to beneficial aspects of the development proposal are identified and the nature of the contributions determined, then they are not appropriate. In that respect, the Plan continues to describe examples of the type of positive features which might be applicable to the proposal: "social housing" policies of the Official Plan; non-profit community, cultural and institutional facilities policies of the Plan; heritage preservation policies of the Plan; and "park" policies. The Board finds from the wording of the Official Plan, supported by a fair expectation that it lies within the authority of Council to clarify what such contributions might be, that they be identified somewhere in the Plan so that the appropriate requirements of the development proposal can be ascertained.

[para35] Mr. Langdon addressed the evolution of this policy as practised in the City to indicate the planning objectives of the Official Plan for a range of capital facilities and amenities pursued via Section 37 agreements and other legislation, for example, the City of Toronto Act. He stated that these contributions have traditionally been secured on site and off site, and cash payments have been applied anywhere in the discretion of council, including social housing, daycare, art works, heritage preservation, cultural facilities, parkland and park improvements (beyond Section 42 provisions), district heating and cooling facilities, streetscape and infrastructure, walkways, etc. As indicated previously, the benefits of such contributions are well documented in acquisitions under Section 37 (or Section 37 type) agreements between 1980 and 1990. These include: land for 6,000 units of social housing; $19 million in lieu of land for social housing; six daycare centres contributing some 330 spaces with another 630 spaces pending. He alluded to the fact that since municipal amalgamation in January 1998, within the former City of Toronto, some twenty projects have been approved with Section 37 contributions and another seven made Section 37 type contributions under Section 45 (minor variance) applications. He observed that for the rest of the amalgamation areas there have been at least ten similar approvals within the principle of exchange in benefits for height or density increases.

[para36] In reviewing this evidence, the Board cannot diminish the persuasive submissions of Mr. Langdon that the vehicle of Section 37 provides a very significant mechanism to supplement urgent (particularly social) programs needed within the City which might otherwise remain underfunded, perhaps at some human cost. The efforts of the municipality are commendable and the fact that all of the contributors to this date have been the result of negotiated terms of agreements, is also commendable whatever the circumstances under which contributions were made. Mr. Langdon has itemized a number of successes demonstrating the nature of such benefits:

* 395 rental units replaced and relocation of tenants;

* $900,000 lodged in a Capital Revolving Fund for affordable housing;

* preservation of existing rental housing;

* two daycare centres for 52 and 26 spaces operated as non-profit turnkey facilities;

* parkland plus $1.2 million payments in lieu over and above Section 42 requirements;

* parkland improvements;

* $1 million to offset costs of Dundas Square;

* heritage preservation and restoration projects;

* $400,000 cash contributions to heritage restoration/preservation.

[para37] It is against this solid record of accomplishment that the City is endeavouring to maintain the opportunity of benefits under Section 37. Mr. Langdon states that since 1998 his department has regularly requested benefits as part of conditions attachable to authorizations of variances for excess density and height. He states that these efforts have been accentuated by The Report of the Mayor's Task Force on Homelessness and recommendations emanating from it that cash contributions received as conditions to variance authorizations and contributions be deposited in a Capital Revolving Fund for affordable housing.

[para38] The Board need not address any further issues of what was described in evidence as Section 37 type contributions as conditions of variance applications except to note that Mr. Sherriff-Scott, an official with Minto, testified that his company initially sought identical treatment and approvals as 1250 Bay Street, but was advised to proceed by way of an Official Plan Amendment and site re-zoning instead, which triggered the Section 37 provisions.

Section 16.21(b) Provisions

[para39] Should a Section 37 contribution be applicable to the site, Mr. Langdon looks to Section 16.2.1(b) of the Plan for guidance as to the scope and quantum of the benefits receivable. He advised the Board that the relevant policy guidelines are subsections (b) i), ii), vi), vii), and viii).

(b) i) In determining the size of any increase in height and/or density which may be authorized in accordance with this section, Council shall be satisfied that any development resulting from a by-law authorizing an increase in density and/or height is consistent with and does not adversely impact on the objectives and policies of this Plan, particularly those respecting built form and the physical environment. Council also will ensure that:

...

3. the relationship between the value of the density increase and the cost of the provision of the facility service or matter has been determined through special study and is applied in a consistent and equitable manner by means of a formula which equates an increment of floor area to a specific benefit, in accordance with vi) and vii), below.

...

vi) With regard to any increases which may be authorized in order to promote the provision of social housing Council shall ensure that the estimated value of any increases in height and/or density should generally not exceed approximately two times the estimated cost of

providing the social housing contribution.

vii) With respect to any increases in height and/or density which Council may authorize in exchange for benefits other than social housing, Council recognizes that certain benefits also enhance the value of private development, and that in such instances a smaller incentive than that provided for social housing would be appropriate.

[para40] Mr. Langdon has confirmed that no study such as anticipated by subsection 16.21(b)i)3. was ever done to establish the value of the density increase and the cost of the provision of the facility, service or matter required by the municipality. Without such a study, "the relationship" between value and cost cannot be determined. The parties have agreed on an appraised value of the increased height and density of $55 per square foot. Mr. Langdon testified that the City is entitled under Section 16.21(b)vii) to require contributions for "social housing" at one half that total value. This interpretation, in the Board's view, reverses "the relationship" alluded to in subsection 16.21(b)i)3. Clearly, the estimated cost of the "social housing" benefit is one to be derived independently of the excess height and/or density requested.

[para41] Neither that approach or even the very process advocated by Mr. Langdon, has been followed in this instance. On the basis of a 50% contribution of the value of the bonus, the City initially requested a contribution of $2.4 to $2.6 million. Subsequently, the estimate of benefits was recalculated based on 30% of the increase in land value. Mr. Langdon testified that the estimate has been modified by City staff at its discretion. Minto therefore questions the imposition of Section 16.21(b) on its application and whether in applying it the City is doing so in accordance with the Official Plan, "in a consistent and equitable manner," when it does so arbitrarily. Lastly, Minto submits that under subsection (b) vii), were it to be found applicable, certain benefits have been created by the development which enhances the value of surrounding property and the Yorkville district in general and ought to be discounted on that account. On the basis of the above, the Board finds that Section 16.21(b) does not apply to the application. The Board is further persuaded that even if Section 16.21(b) did apply, there is no special study and the proper relationship between cost and value cannot be determined.

Benefits Under 16.21(a)

[para42] Mr. Walker argues that for this site specific development, the City has not demonstrated any positive features of the proposal which require developer contributions in conformity with the policies of the Plan. Four particular subject areas are identified in Section 16.21(a) and the proponent has assessed its project against each area.

(1) Social Housing

Contributions for social housing is specifically mentioned as a potential benefit in the Official Plan under Section 37. Mr. Walker suggests that within the definition of the subject project inclusion of social

housing units would not be realistic nor feasible. That is not disputed by Mr. Langdon who argues that in this case the proponent might make a cash contribution into the City's Capital Revolving Fund for affordable housing.

That suggestion is not acceptable to Mr. Walker by his interpretation of the policy that contributions should "secure the positive features of the development proposal". In his view, if it is not needed it should not be given. Secondly, he questions the authority of the municipality to apply any contributions to "affordable housing". He notes that the policy suggests use for social housing which is a defined term.

Social housing is a defined term in the Official Plan and is not interchangeable with affordable housing, as suggested by the City. The evidence of the City was that since the federal government cancelled its subsidized programs, the term "social housing" as it appears in the

Plan has been understood to mean affordable housing. The Board finds that in this case, the City should have amended its plan to make that clear. While official plans are to be given a wide interpretation, social housing is a defined term and as such, those reading the plan, should be able to rely on the definition contained therein. The Board finds that by the precision of a definition, it is clear that Council intended to exercise some control in the funding of such programs. It may well be argued that Council prescribed a process which without the participation of other levels of government, Council would find it disadvantageous to be funded entirely out of Section 37 contributions. The Board therefore agrees with Minto that a contribution for "social housing" is not justified.

(2) Non-Profit Community, Cultural and Institutional Facilities

As in the case of social housing, the Board finds that the necessity for non-profit community, cultural or institutional facilities must be identified within the context of "the development proposal". The City has not demonstrated what facilities of this nature might be necessary "to secure the positive features" of the application. Minto is similarly unable to identify needed facilities of this kind. The project is a high end residential condominium with conventional recreational amenities on site and there exist a satisfactory endowment of cultural and institutional facilities in the surrounding district.

(3) Heritage Preservation

Both parties concur that there are no heritage features on site which require or deserve preservation.

(4) Parks

Like social housing, parks is a defined term in the Plan which refers to a definition of park requirements. The Board finds on the evidence of Mr. Walker with reference to inventories by the City, that there is no deficiency of park space within and surrounding the subject location and accordingly provision for a park contribution cannot add to the positive features of the development proposal.

[para43] While Section 16.21(a) anticipates that there may be other matters which could validly be included for contribution, these need to be firmly couched within a persuasive benefit to the development project. The City has not provided identification or support for any such "matters" and additional contributions may thereby be disregarded.

[para44] The Board finds that when seeking increases in height or density any applicant should be able to ascertain with some certainty what it will be required to provide in terms of a package of public benefits pursuant to Section 37. Within the City in those instances where requests for benefits have been made, a negotiated agreement has been the result. In this case, the Board finds that the application meets the intent of the Part 1 Official Plan policies, including section 16.21(a), without the requirement for any further contribution pursuant to Section 37. Section 16.21(a) is a discretionary, not mandatory, policy and prior to requiring any contribution under Section 37 the City should be able to demonstrate that such contriution falls within the scope of the criteria contained in the policy.

The Implementation Framework

[para45] By the City's own admission, the Implementation Framework is intended to bring predictability, clarity and consistency to the use of the Section 37. In The Omni at the City Centre Inc. v. City of Toronto (OMB, PL000368, dated August 31, 2000), the Board excluded Council's resolution adopting the Implementation Framework from future proceedings for that application and the ruling was adopted by Counsel at the outset of this hearing. Mr. Langdon testified that the relevance of the Implementation Framework is that it is evidence of staff's efforts to establish criteria in respect of the application of Section 37, especially as it relates to the appropriate level of public benefits to be secured.

[para46] The evidence of Mr. Langdon was clear that through the Implementation Framework, the City has embarked on a new process designed to correct deficiencies it acknowledges exists with the existing general policies. Given the Implementation Framework was prepared after Minto's appeal to the Board and it is not, in any event, a policy contained in the City's Official Plan, the criteria contained within the Implementation Framework cannot form the basis for determining, in this instance, whether public benefits should be required or a level of public benefits. While the level of public benefits calculated on the basis of 30 percent of the net increase in land value is consistent with the criteria set out in the Implementation Framework, there is nothing in the existing Plan policies that refers to a contribution of 30 percent as an appropriate level of benefits.

[para47] The Implementation Framework candidly states that there is a need for clarity and consistency on the City's part regarding the continued use of section 37 (at p.2) and the City has embarked upon a process to correct the deficiencies acknowledged by the City in respect of the use of Section 37. The Implementation Framework constitutes recommendations from staff on the future use of Section 37 and it cannot form the basis for this application in either determining or requiring an appropriate level of public benefits. That determination must be made within existing policies as set out in the City's Official Plan. The Implementation Framework does however represent considerable effort on the part of City staff to develop a revised approach to the use of Section 37 that has the potential to bring predictability and clarity to the process. It is now for the City to determine what status it wishes to give the Implementation Framework.

Conclusions and Findings

[para48] Based on the foregoing, the following findings are relevant to the decision that the Board must make:

1) A requirement for a contribution pursuant to Section 37 must fall within the scope of a Section 34 by-law amendment.

2) Council has the discretion on a case by case basis whether or not to require contributions pursuant to Section 37 as long as there exist applicable Official Plan policies to support those contributions.

3) Where contributions are required and the proponent elects not to make the required contribution, an appeal lies to this Board, on the basis first, that the application meets all the applicable tests under Section 34 of the Planning Act; and second, that the request for contributions under Section 37 is not in conformity with the Official Plan.

4) With regard to the subject application, the City has approved Official Plan policies in Section 16.21 which respond to Section 37(2) of the Planning Act and provide a basis for assessing the conformity of this appeal to those policies.

5) The policies relevant to this application are contained in Section 16.21(a), which is specific to a single development proposal for a re-zoning to accommodate excess height and/or density. Given the agreement of the parties that the particulars of building form and the physical environment are not in contention, it is appropriate for the City to consider contributions pursuant to Section 37.

6) Whether or not contributions should be authorized must be judged on the beneficial effects of such contributions to the development proposal and it lies with the municipality to demonstrate the connection between the proposal and the benefits.

7) In the absence of a clear demonstration by the City of the basis for the benefits to be provided and the contributions requested, it remains the obligation of the applicant to meet the criteria set out in the Official Plan. In this instance, Minto fully

addressed the criteria contained in Section 16.21 (a).

8) The Board finds that there is no proven need to require contributions from Minto because there are no benefits to the development project, as prescribed under the City's Official Plan policies in Section 16.21(a). Section 16.21(b) is not applicable to Minto's project.

9) Given the significance and the potential impact of the authority granted to municipalities under Section 37 of the Planning Act, and the objective of the legislation to require municipalities to spell out the exercise of that authority for clear, equal and consistent application without arbitrariness, including where and when contributions are required, the Board finds that the latitude exercised by staff to require contributions beyond what is obvious from policy is not supportable. Neither will the Board, in this instance, interpret the policy and exercise this latitude.

10) Given that the Board finds the proposed amendments are appropriate without the contribution of further public benefits it is not necessary to determine a level of benefits.

11) The Board finds that the Official Plan and Zoning amendments and the proposed Site Plan application are appropriate and constitute good land use planning pursuant to the provisions of the Planning Act.

[para49] The Board orders as follows:

1) That the appeals are allowed;

2) That approval is granted in principle to the proposed site plan as representing an acceptable form and tolerable impacts on the surrounding environment;

3) That approval is given to the Official Plan

Amendment as included in Attachment "1" to this decision;

4) That the City's zoning by-law is hereby amended in the manner included in Attachment "2" to this decision; and

5) That the parties proceed to finalize details of site plan approval, and to conclude a site plan agreement for submission to the Board within ninety (90) days of this decision for its disposition, failing which the Board may be invited to reconvene this hearing for eventual determination. In this respect, this Board continues to be seized.

[para50] The appellant has indicated its intention to approach the Board on the matter of costs and in that event, should it be necessary, this Board remains seized.

W.R.F. WATTY, Member
J. deP. SEABORN, Vice-Chair

* * * * *

ATTACHMENT "1"

EXPLANATORY NOTE TO PROPOSED OFFICIAL PLAN AMENDMENT

The purpose of this Official Plan Amendment is to amend the City of Toronto Official Plan by adding site specific policies respecting 1252-1260 Bay Street and 61-63 Yorkville Avenue. The Amendment would allow the redevelopment of the approximately 0.2 hectare (0.5 acre) site located at the south west corner of Bay Street and Yorkville Avenue.

The subject lands are presently developed with a seven storey building with a variety of commercial uses and a two storey house form building which is used for retail purposes.

The current designation in the Official Plan of 1252-1260 Bay Street is "High Density Mixed Commercial-Residential A" which permits a range of commercial and residential uses at a maximum density of 6 times the lot area. The current designation of 61-63 Yorkville Avenue is "Low Density Mixed Commercial-Residential" which permits a range of commercial and residential uses at a maximum density of 3 times the lot area.

The Amendment would permit development densities on the site beyond those currently permitted in the Official Plan and would facilitate the development of 171 residential dwelling units and approximately 700 square metres of grade related retail uses within an 18 storey building. The total density of the development would be 9.9 times the area of the lot

Through the amending zoning by-law, the proposed redevelopment of the parcel would be sensitive to the adjacent uses through the appropriate transition of built form.

CITY OF TORONTO
BY-LAW No. -2000

To adopt an amendment to the Official Plan
in respect of
Nos. 1252-1260 Bay Street and Nos. 61-63 Yorkville Avenue.

WHEREAS pursuant to Section 17 of the Planning Act, the Council of a municipality may in a by-law approve an amendment to the Official Plan respecting the mixed use development of Nos. 1252-1260 Bay Street and Nos. 61-63 Yorkville Avenue.

THEREFORE the Council of the municipality enacts as follows:

1. The text and map annexed hereto as Schedule "A" are hereby adopted as an amendment to the Official Plan for the City of Toronto.

2. This is Official Plan Amendment No.

(1) The Official Plan for the former City of Toronto,be amended to add a new Section 18 provision as set out below:

"18. Lands known as Nos. 1252-1250 Bay Street and Nos. 61-63 Yorkville Avenue.

See Map 18. _____ at the end of this section.

Notwithstanding any of the provisions of this Plan, Council may pass by-laws applicable to the lands delineated by heavy lines on Map 18. ____, to permit the erection of a mixed-use building, provided that:

The total gross floor area does not exceed 18,382 square metres of which;

(1) The maximum residential gross floor area of the building does not exceed 17,800 square metres;

(2) The maximum non-residential gross floor area of the building does not exceed 800 square metres and is located at grade;

[Quicklaw note: Schedule "A", Map 18, could not be reproduced online. Please see paper copy.]

ATTACHMENT "2"

EXPLANATORY NOTE FOR PROPOSED ZONING BY-LAW AMENDMENT

The purpose of By-law ____ is to amend the City of Toronto Zoning By-law 438-86. as amended, respecting 1252-1260 Bay Street and 61-63 Yorkville Avenue. The by-law would allow the redevelopment of the approximately 0.2 hectare (0.5 acre) site located at the south west comer of Bay Street and Yorkville Avenue. The subject lands are presently developed with a seven

storey building with a variety of commercial uses and a two storey house form building which is used for retail purposes.

The current zoning on the parcel at 1252-1260 Bay Street is CR T6.0 C4.5 R6.0 and the parcel at 61-63 Yorkville Avenue is zoned CR T3.0 C2.5 R3.0. These zones permit a mix of commercial and residential uses to a total density of 6.0 times the lot area in the T 6.0 zone and 3.0 times the lot area in the T3.0 zone. The zoning permits residential uses to 6.0 times the area of the lot at 1252-1260 Bay Street and 3.0 times the area of the lot at 61-63 Yorkville Avenue. Commercial uses are permitted at a density of 4.5 times the area of the lot at 1252-1260 Say Street and at 2.5 times the area of the lot at 61-63 Yorkville Avenue. The maximum permitted height at 1252-1260 Bay Street is 46 metres and 18 metres for 61-63 Yorkville.

The zoning amendment would allow an increase in height and density beyond that permitted in the Zoning By-law and would facilitate the development of 171 residential dwelling units and approximately 640 square metres of grade-related retail uses within an 18 storey building. The total density of the development would be 9.9 times the area of the lot. The attached Zoning By-law establishes the restrictions and building envelope to facilitate this development.

The proposed redevelopment of the parcel would be sensitive to the adjacent uses through the appropriate transition of built form.

BY-LAW No. -2000

To amend By-law No. 438-86 of the former City of Toronto, as amended, respecting 1252-1260 Bay Street and Nos. 61-63 Yorkville Avenue.

WHEREAS pursuant to Section 34 of the Planning Act,

Council of a municipality may pass a by-law governing the height, mass, density and location of a use;

NOW THEREFORE the Council of the City of Toronto enacts as follows:

1. None of the provisions of sections 4(2), 4(12), 8(2)5, 8(3) Part I 1, 8(3) Part I 2, 8(3) Part I 3, 8 Part II, 8(3) Part XI (2)(ii),12(2) 259, 12(2)260(ii), of By-law No. 436-86, being "A By-law to regulate the use of land and the erection, use, bulk, height, spacing of and other matters relating to buildings and structures and to prohibit certain uses of lands and the erection and use of certain buildings and structures in various areas of the City of Toronto", as amended, shall apply to prevent the erection of a mixed use building, provided:

   (1) The lot on which the proposed building is to be located comprises those lands delineated by heavy lines an Plan 1 attached to and forming part of this By-law;

   (2) No pardon of any building located above grade is

   located otherwise than wholly within the areas delineated by heavy lines and within the height limitations shown on Plan 2 attached to and forming part of this By-law with the exception of cornices, canopies, ornamental elements, parapets, and railings which may extend beyond the building envelope shown on Plan 2.

   (3) The total floor area does not exceed 18,382 square metres;

   (4) The residential gross floor area does not exceed 17,800 square metres;

   (5) The non-residential gross floor area does not exceed 800 square metres and is to be located at grade;

   (6) There are not more than 171 dwelling units within the building;

   (7) At least 110 parking spaces and 1 Type G loading space are provided on the lands shown on Plan 1

attached to and forming part of this By-law;

(8) At least 129 bicycle parking spaces, 103 allocated for use by residents of the development and 26 allocated for use by visitors to the development are provided on the lands shown on Plan 1 attached to and forming part of this By-law;

(9) 342 square meters of indoor residential amenity space is provided and 210 square metres of outdoor residential amenity space, accessible from the indoor residential amenity space, is provided;

(10) 28.8 square metres of common outdoor space is provided;

(11) The grade level retail use is not less than 7.0 metres from the Bay Street property line, measured from the main wall of the building;

(12) The grade level retail use is a width of a least 60 percent of the street frontage of the building along Bay Street and 38 percent of the street frontage of the building along Yorkville Avenue;

2. In cases where there is a conflict between this By-law and the provisions of By-law 438-86, as amended, this By-law shall apply.

3. For the purposes of this By-law each word or expression which is italicized herein shall have the same meaning as each ward or expression as defined in the aforesaid By-law No. 438-86, as amended.

Weinberg v. Saunders

Between
Gerald Weinberg and Lore Weinberg, Applicants, and
Rodney Saunders, Township of Euphrasia and Rod Leuty,
Respondents

Ontario Judgments: [1989] O.J. No. 2228
Action No. 1238/89

Ontario District Court - Grey County
Owen Sound, Ontario
Zelinski D.C.J.
December 12, 1989

M. Granat and I. Rogers, for G. Weinberg and L. Weinberg.
D. Greenfield, for R. Saunders.
N. Kopperud, for the Township of Euphrasia.

ZELINSKI D.C.J.:--

THE ISSUE

Mr. & Mrs. Gerald Weinberg (the "Weinbergs") have made an application to me for the revocation of a building permit (the "Building Permit") issued by the Respondents, the Township of Euphrasia, (the "Township") and its Chief Building Official, Rod Leuty (the "CBO"), to the Respondent Saunders ("Saunders"), who is, co-incidentally, the reeve of the Township. The Weinbergs also seek an Order, to extend the time for making their application.

By way of preliminary objection, Saunders argues that I have no jurisdiction in this matter, firstly, on the grounds that the Weinbergs have no status to make their application and secondly, because they are late in doing so in circumstances where I should not exercise my discretion to extend the time for so doing. He also alleges, on the merits, that the Weinbergs' position is now moot.

The Township and CBO support Saunders in his position.

I declined to hear argument on the merits of this application pending my determination of my jurisdiction. I accepted Saunders' argument that the application is not timely and that I ought not exercise my discretion to extend time. I also reserved my decision on the status of the Weinbergs to make their application. I have promised to deliver written reasons upon these matters and am taking this opportunity to carry out my undertaking.

RELEVANT PROVISIONS TO THE BUILDING CODE ACT (the "Act")

6. (1) The chief official shall issue a permit except where,

(a) the proposed building or the proposed construction or demolition will not comply with this Act or the building code or will contravene any other applicable law; ....

(c) the application therefore is incomplete or any fees due are unpaid.

(4) Subject to S. 15, the chief official may revoke a permit,

(a) where it was issued on mistaken or false informaion;

15. (1) Any person who considers himself aggrieved by an order given or decision made by an inspector or chief official under this Act or the regulations may, within twenty days after the order or decision is made, apply to the judge of the county or district court for a hearing and appeal.

(5) A judge to whom application is made for a hearing under subsection (1) may extend the time for making the application either before or after expiration of the time fixed therein, where he is satisfied that there are prima facie grounds for granting relief to the applicant pursuant to a hearing and that there are reasonable grounds for applying for the extension and may give such directions as he considers proper consequent upon the extension.

THE FACTS

The Weinbergs are landowners and rate-payers residing in the Township. They consider themselves aggrieved within the meaning
of S. 15(1) of the Act because planning in the Township "is being done in a haphazard manner and not in accordance with sound planning principles, ... the Planning Act, and the zoning and building by-laws", as well as the fact that the Building Permit was issued despite their appeal of the zoning amendment by-law which was a condition precedent to the Building Permit being issued. They contend that their appeal had the effect of staying by-law No. 10-1989 (the "Zoning Amendment By-law,") with the consequential effect that the authority of the CBO to issue the permit thereunder was stayed. Finally they argue that the lands in question in this application (the "Subject Lands") were not separately registered, that the application for the Building Permit was incomplete when made, and that it was based on mistaken or false information.

A brief history of prior events is required.

On January 5, 1989, the Grey County Planning Committee granted three severances including that of the Subject Lands to Saunders. The reason for its decision relative to the Subject Lands was that "the Committee is satisfied that this will create a suitable estate residential lot on land that is of minimal agricultural value".

The Committee's decision was conditional upon the Township passing an amendment to its By-law No. 15-1971 (the "Comprehensive Zoning By-law") so as to ensure appropriate zoning. The necessary amendment was effected on April 6, 1989 by the Zoning Amendment By-law which purported to rezone the Subject Lands from Rural A2, to Rural Residential RUR designation. Shortly thereafter (on either April 30, 1989 or May 8, 1989), the Weinbergs appealed the Zoning Amendment By-
law.

On June 12, 1989, Saunders applied for the Building Permit in relation the whole of the lands which he owned, including the Subject Lands. He was aware of the Weinbergs' appeal when he did so. The Weinbergs note the following deficiencies relative to the application:

a) it did not specify:

(i) the part of the whole of the lands which was affected;

(ii) the front, rear and side yard setbacks;

b) it specified an effective RUR zoning (when in fact that zoning was under appeal and therefore not in effect).

The Comprehensive Zoning By-law requires a more substantial frontage (450' v 370'), and a greater minimum area (25 acres v 2.80 acres) than are contained in the Subject Lands.

The Weinbergs also note that By-law No. 18-1988, by which the CBO was hired, indicates he only is to issue building permits when certain requirements are met including proof of lot registration, proper zoning and the ability to meet front and side yard requirements.

Upon learning of the issuance of the Building Permit on or about June 20, 1989, Gerald Weinberg spoke to the CBO, who was apparently not aware of the Weinbergs' appeal. This is not unreasonable. The Township Clerk (the "Clerk"), had failed to file notice of the appeal with the OMB until August 4, 1989 despite the requirement of S. 34(21) of the Planning Act requiring her to do so "upon receipt". When the Clerk was being cross-examined on her affidavit herein, the Township solicitor refused to permit her to explain the reason for the delay of almost three months.

The CBO is stated to have indicated to Mr. Weinberg that he would not have issued the Building Permit if he had been aware of the fact of the appeal but he has done nothing since learning of the appeal to revoke the Building Permit or to issue a stop work order.

The CBO has responded in his affidavit herein that the material filed with the application for the Building Permit and the state of its completion was sufficient to satisfy him that it was in order to issue the permit. He states he had personal knowledge of Saunders' ownership of and title to the lands to which the permit applied. Moreover, he indicates that he was subsequently advised by Mr. Weinberg that one of the reasons given for the appeal was that the Comprehensive Zoning By-law was without any force and effect and could not be amended, a position which the Clerk reported "..... may well be correct". It seems that the Comprehensive Zoning By-law had never received approval from the Ministry of Municipal Affairs or the Ontario Municipal Board. The CBO says that he concluded that because the Comprehensive Zoning By-law was unenforceable, Saunders ".... had the right to apply for a Building Permit on his property without any amendment to the [Comprehensive Zoning
By-law]", which dictates zoning conditions, lot areas, and setbacks.

The Weinbergs brought their concern about the issue of the Building Permit to the attention of the Township, by telephoning and finally writing to the Clerk on June 30, 1989, setting out their complaints. In that letter, Mr. Weinberg noted the intention of the Clerk and the CBO ".... to leave it up to [the Township's solicitor] to make the necessary recommendations when Council meets". He requested that his complaints be dealt with on June 6, 1989, at a meeting earlier than the originally scheduled date of July 13, 1989.

In mid-June, Mr. Weinberg noticed construction of a home on the Subject Lands which led to the disclosure of the existence of the Building Permit resulting in the complaint to the CBO. The CBO's inspection notes indicate that on June 12, 1989, he was called to inspect the footing forms, suggesting that the excavation was complete on that date. On July 4, 1989, the house was at the framing stage, and construction was continuing. It is now complete and is occupied by Mr. & Mrs. James Whitton and their three children. in his affidavit herein Saunders states that he entered into an agreement in December 1988, to build a new home and to sell it and the Subject Lands to the Whittons. In argument on this application, however, it was indicated that Mr. Whitton himself purchased the materials needed to build the home which were then paid for by Saunders. Mr. Whitton is also said to have contributed much of his own "sweat labour", suggesting that it was Mr. Whitton who was the principal builder of that home (the "Whitton Home"), and not Saunders.

It is stated by Saunders that the Whittons were under considerable pressure to acquire their new home as they had been given notice to vacate the premises which they were renting.

The Clerk indicates that Notice of a Public Meeting to consider approval of the severances requested by Saunders had been circulated to property owners within 120 meters of the Subject Lands, and served upon all relevant agencies. The Weinbergs did not meet these criteria. No objection was received at that Public Meeting. Saunders, sitting as reeve, declared a conflict of interest and left the Council table before the Zoning Amendment By-law was passed. Notice of passage was circulated to the same persons as were originally notified. These notices apparently satisfy the requirements of the Planning Act. As previously stated, the Weinbergs appealed the Zoning Amendment By-law no later than May 8, 1989.

The Clerk states that the Township's solicitor reported, on June 14, 1989, that the Comprehensive Zoning By-law was "invalid and unenforceable", with the result that in his view, there was no zoning by-law in force in the Township. On July 31, 1989, the Township passed By-law No. 30-1989, (the "Interim Control By-law"), freezing essentially all of the lands in the Township which are not controlled by the Niagara Escarpment Commission.

The Clerk states in her affidavit herein that the Township Council concluded that, because the Comprehensive Zoning By-law was not in force, the Building Permit already issued to Saunders was non-offending. As a consequence, Council concluded it would not revoke it. This decision was communicated to the Weinbergs on or about July 22, 1989. On July 31, 1989, this application was launched.

On September 7, 1989, By-laws Nos. 44-1989 and 45-1989 of the Township were passed. The first of these By-laws exempted the Saunders' properties for which severances had been granted, including the Subject Lands, from the effects of the Interim Control By-law. The second of these By-laws enabled single family residences to be constructed on each of the lots so severed. The Whitton Home was by then completed to a stage suitable for occupancy.

The Weinbergs have now appealed both of the most recent By-laws.

Counsel for the Weinbergs acknowledges that the Weinbergs' concerns about haphazard planning and undue severance activity, the subject matter which prompted their original appeal against the Zoning Amendment By-law, will be addressed in their newest appeals, however, the status of the original appeal is uncertain. Counsel for the reeve is of the opinion that since the Comprehensive Zoning By-law now ceases to exist, matters arising thereunder are now also moot and the OMB will not proceed with the original appeal. Counsel for the Weinbergs has contacted a representative of the OMB who has advised him that it is likely, but not certain, that the original appeal will not proceed. With candour, Mr. Rogers, representing the Weinbergs, has acknowledged that the Weinbergs' present position in the appeal process might be re-inforced by the fact of the two additional appeals. But he points to the fact that the Whitton Home continues to stand and will likely become a lawful non-conforming use in the event that I do not grant the relief now being sought and the Weinbergs' appeal of the Zoning Amendment By-law is not proceeded with or is resolved in some manner not favourable to his clients. Implicit in this is the wish of the Weinbergs that they will control, or be able to require the Township to control, the continued existence of the Whitton Home, (at least within the boundaries of the Subject Lands).

Saunders is of the opinion, stated in his affidavit, that Mr. Weinberg ".... is interested only in embarrassing me as Reeve of the Township of Euphrasia and there is no valid reason for this application other than his feelings of bitterness towards me." He cites a number of reasons and much correspondence in support of his belief of bias.

S. 15 OF THE ACT

Under S. 15(1) of the Act, in order to be successful in this application the Weinbergs must satisfy me that they are properly persons who can consider themselves aggrieved in law. Having failed to make their application within twenty days of the issue of the Building Permit they are precluded from advancing their appeal unless I exercise my discretion to extend the time within which they can proceed. I can only do this, if I am satisfied that there are prima facie grounds to grant the relief they are seeking and that there are reasonable grounds for applying for the extension.

PRIMA FACIE GROUNDS

The existence of prima facie grounds was not vigorously argued by any of the Respondents and I find that they exist. The Building Permit was issued on incomplete and mistaken or false information. Registration of the Subject Lands had not taken place at the time of its issue. The Comprehensive Zoning By-law ostensibly governed the CBO's deliberations, whether or not it was approved by the OMB or the Ministry, until it was revoked or declared unenforceable. Appropriate zoning, intended to be effected by the Zoning Amendment By-law, was stayed by the Weinbergs' appeal. Proper zoning was still unresolved when the Building Permit was issued.

TIMELINESS

This application was filed on July 31, 1989 under S. 15(1) of the Act. It must ordinarily be launched within twenty days of the decision of the CBO (June 12, 1989), to issue the Building Permit. As stated, under S. 15(5), leave to extend can only be granted when there are reasonable grounds for the extension. I consider that such grounds must address the reasons for, and length of, the delay and its consequences upon all parties affected.

Mr. Weinberg, although now engaged in some form of farming, is a retired lawyer. It was conceded that he is a sophisticated

person, and that he was aware of the provisions of S. 15 of the Act. He had engaged eminent counsel to represent him in these various matters. In his letter of June 30, 1989, to the Clerk, Mr. Weinberg referred to his expectation that the Clerk and the Township solicitor would communicate with his lawyer relative to his request that the Township rescind the Building Permit. He was aware, or should have been aware that, since the Act was passed, it became the function of the CBO and not that of the Township Council to control building permits: (McDonald's Restaurant of Can. Ltd. vs. Humm et al. [1984] 24 M.P.L.R. 103 at 124).

While I believe that Mr. Weinberg's decision to do business with the Clerk, the Township solicitor, and Council was reasonable and even appropriate to his assessment of what it might take to cause the CBO to act in the manner Mr. Weinberg was insisting upon, he cannot ignore the fact that time was running against him, calculated from the time of the CBO's decision, and not that of the decision of Council, or of its solicitor.

To the extent that the Weinbergs argue that they are aggrieved by reason of the fact that they have lost their appeal of the Zoning Amendment By-law by reason of the rescission of the Comprehensive Zoning By-law, this application is premature because of the possibility that their appeal may still be heard.

It is the Weinbergs who stated, as their first grounds in that appeal:

> 1. By-law No. 15-1971 enacted by the Council of the Township as a general zoning by-law applying to the entire Township, has never been approved by the Ontario Municipal Board as was required by the Planning Act, RSO 1970, C. 349, S. 35(9) and is therefore without any force and effect and cannot be amended.

It was accepted by all of the parties hereto, and their counsel, that this is an accurate conclusion. Saunders, by reason of his office, is an important person in the Township. A reasonable person might perceive that the manner and haste with which the Township responded to Saunders' problems suggests that his influence, intended or otherwise, did not end when he declared his conflict and left the Council table prior to the enactment of the Zoning Amendment By-law. Notwithstanding this, the logical extension of the reasoning flowing from the invalidity and unenforcibility of the Comprehensive Zoning By-law is that Saunders was entitled to demand the issue of the Building Permit upon completion of the necessary documentation incidental thereto, with or without rezoning.

In City of Ottawa v. Boyd Builders Ltd., [1965] S.C.R. 408 at 410, Spence, J. stated:

> An owner has a prima facie right to utilize his own property in whatever manner he deems fit subject only to the rights of surrounding owners, e.g. nuisance, etc. This prima facie right may be defeated or superseded by rezoning if three prerequisites are established by the Municipality;
>
> (a) a clear intent to restrict or zone existing before the application by the owner for a building permit,
>
> (b) that council has proceeded in good faith, and
>
> (c) that council has proceeded with dispatch.

Many of the principles enunciated in the Boyd decision have no application since the enactment of S. 15 of the Act, however, I am of the opinion that it was not intended that an owner's enjoyment of his own property should be governed by persons who have no higher interest than planning and severance activity within the Township. Certainly I do not perceive that it is reasonable that I should extend the time within which to appeal to persons upon whom the issue of the Building Permit has little or no direct or personal affect.

The evidence is that the Weinbergs:

a) live approximately five miles from the Subject Lands;

b) have no interest in any closer lands;

c) have no structural objection to the Whitton Home;

d) have never been on the Subject Lands, inside the Whitton Home and are not required to pass it in the ordinary conduct of their lives;

e) have no evidence that the Whitton Home is unsafe;

f) do not find it unattractive, being similar to many new residences in the Township;

g) base their application on personal concerns about the planning in the Township, the possible loss of their appeal of the Zoning Amendment By-law, and the continued existence of the Whitton Home in that event.

As previously stated, I am of the opinion that it is necessary for me to consider the effect that an extension of time will have on all parties affected. I am concerned that the Whittons are not before the Court despite the fact that they are the parties most likely to be affected adversely, at least initially, by any order to extend time. There is nothing before me which suggests that the Whittons did not, at all times, conduct themselves in good faith, relying on the Zoning Amendment By-law, the Building Permit, and their confidence in Saunders prior to commencing construction.

It is interesting that Saunders applied for the Building Permit at the home of the CBO. He may have received preferential treatment from the CBO and the Township. It is a fact that he completed his application for the Building Permit when he was aware of the Weinbergs' appeal of the Zoning Amendment By-law, and therefore he mis-stated the zoning in force when he applied for the Building Permit. Nevertheless, Saunders was ultimately acting on the assumption he was entitled to the permit. This was reasonable, and there is no suggestion that there was any bad faith on his part when he acted on that belief.

In Giglio Enterprises Ltd. vs. Edward Link et al. (unreported; released September 8, 1989), Zalev, D.C.J. stated as follows:

It would be intolerable to interpret S. 6(4)(a) of the Act to allow building permits to be revoked where buildings are in good faith constructed pursuant to such permits.

The fact of the completion of the construction of the Whitton Home makes it unreasonable, although not necessarily intolerable, that I should extend the time within which to proceed with this application. The test I must address is reasonableness.

Construction was ongoing from at least June 20, 1989, to the knowledge of the Weinbergs. Construction in the first twenty days following the issue of the Building Permit on June 12, 1989, was carried out with the risk of an appeal, however, thereafter and until July 31, 1989, the consequences of delay were at the risk of the Weinbergs.

Having regard to the fact of this ongoing construction, I am of the opinion that the Weinbergs did not act expeditiously, effectively, or appropriately when they withheld the initiation of their appeal under S. 15(1) of the Act in order to deal with the Township, its Clerk, and its solicitors.

PERSONS WHO CONSIDER THEMSELVES AGGRIEVED

If I had not denied the extension of time I would nevertheless have found against the Weinbergs on the requirement that, in order to proceed with their appeal, they must qualify as persons entitled to consider themselves aggrieved, in law. While this broad language suggests relief will be extended to persons based upon a subjective assessment of the existence of a grievance, this threshold entrance requirement has been more strictly construed. I adopt the test relative thereto as stated by Zalev, D.C.J. in Giglio vs. Link (supra) as follows:

There are many statutes which give a right of appeal to "a person aggrieved". There are many judgments interpreting those words within the context of those statutes. The judgments are remarkable for their inconsistency. Many of them are collected and considered in the judgment of the

Nova Scotia Supreme Court, Appeal Division, in Re Halifax Investments Ltd. and City of Halifax, 90 D.L.R. (3d) 633. The Court held the appellant must have suffered a legal grievance in the sense of having been wrongfully deprived of something or having title to something wrongfully affected.

* * * *

It must be noted that Section 15(1) uses the words "any person who considers himself aggrieved". This must include a class of persons wider than "and person aggrieved", ... it cannot include every person who, for whatever reason, has a personal axe to grind, whether real or fanciful, against the municipal authorities, Building Department, landowner, and those involved in the actual construction. At the very least there must be reasonable grounds for believing oneself aggrieved.

Counsel for the Weinbergs argues both that the Weinbergs have reasonable grounds for believing themselves aggrieved and that they have suffered a legal grievance by the loss of something. He cites the perceived inadequacies in planning, the possibility of the creation of a lawful non-conforming use and the loss of appeal. However, as previously noted, the fact that there will be no hearing of the appeal of the Zoning Amendment By-law is not established, and the planning grievances of the Weinbergs are preserved in, and possibly reinforced by their most recent appeals against By-laws 44-1989 and 45-1989.

In Riverview Heights Ratepayers Menu Foods Ltd. [1980] 14 M.P.L.R. 61 at 67, Shapiro, D.C.J. stated as follows:

There is a further matter for consideration and that is, do the applicants in this case fall within the category of a "person who considers himself aggrieved". Even assuming an individual identity to the ratepayers' association or reading "person" to include "persons" I do not consider that those with some peripheral interest such as the present applicants were in the Legislature's contemplation of aggrieved persons. Within the context of this Act, I think it would refer to people such as builders, architects, engineers, and such who would be directly affected by the issuing or non-issuing of the permit. It would conceivably also include adjoining landowners whose property was threatened with physical damage by say the threatened collapse of an unsafe wall.

As previously stated, it is trite that any statute which fetters or impairs a person's right to enjoy his own property must be strictly construed. This is the case even when the enabling legislation adopts language which is as broad as that contained in S. 15(1) of the Act. The Weinbergs are not directly affected by the Building Permit. As noted, relative to the issue of timeliness, the consequences of the existence of the Whitton Home upon the Weinbergs is remote. As such, the Weinbergs are not persons entitled to consider themselves aggrieved, in law.

COSTS

I have previously dealt with the question of costs in my endorsement in this matter in which I have stated as follows:

Although not prepared to abandon any claim for costs, the Respondent Township and its servant Leuty are not aggressively pursuing costs. I am satisfied that the matters now before me would not be here if the Building Permit Application had disclosed that the zoning amendment was under appeal, and hence the By-law creating the amendment stayed. The onus, in my view was upon the Respondent Saunders to assure the accuracy of that application. In the circumstances, no order as to costs.

ZELINSKI D.C.J.

Re **382671 Ontario Limited and Cerminara**, in his Capacity as Chief Building Official for the City of London et al.

28 O.R. (3d) 718
[1996] O.J. No. 1352
Court File No. 20060/96

Ontario Court (General Division),
Killeen J.
April 4, 1996

Municipal law -- By-laws -- Validity -- Zoning -- Non-conforming use -- Apartment qualifying as legal non-conforming use -- New zoning by-law containing provision purporting to deem legal non-conforming uses to be conforming uses -- Subordinate legislation conflicting with statute -- Deeming provision in by-law ultra vires as interference with statutory protection of legal non-conforming uses -- Planning Act, R.S.O. 1990, c. P.13, s. 34(9).

Planning -- Zoning -- By-law -- Validity -- Non-conforming use -- Apartment qualifying as legal non-conforming use -- New zoning by-law containing provision purporting to deem legal non-conforming uses to be conforming uses -- Subordinate legislation conflicting with statute -- Deeming provision in by-law ultra vires as interference with statutory protection of legal non-conforming uses -- Planning Act, R.S.O. 1990, c. P.13, s. 34(9).

Planning -- Zoning -- Non-conforming use -- Scope -- 16-unit apartment building qualifying as legal non-conforming use -- Owner applying for building permit to convert empty space into additional unit -- Addition of unit within scope of legal non-conforming use -- Planning Act, R.S.O. 1990, c. P.13, s. 34(9).

The applicant owned a 16-unit apartment building in the City of London that was constructed in 1952 in conformity with the then applicable zoning by-law. In 1982, the lands upon which the apartment was located were rezoned, and the apartment became a legal non-conforming use. In 1993, pursuant to By-law Z.-1, the lands were rezoned again, and the new zoning did not list the applicant's apartment use within its permitted uses for the applicant's lands. However, By-law Z.-1 contained a provision that deemed certain legal non-conforming uses to be permitted by and in conformity with the by-law and to be lawful uses; the applicant's apartment was in deemed compliance with the by-law under this provision. In April 1995, the applicant applied for a building permit to convert an empty storage area in the apartment into a one-bedroom unit. This conversion did not require any changes to the exterior of the building, but the Chief Building Official for the City of London refused to issue the permit on the ground that the apartment use was deemed to be a lawful use and to extend this use a minor variance to the zoning by-law was required. The applicant appealed the decision of the Chief Building Official and relied upon s. 34(9) of the Planning Act, which provides that a zoning by-law passed under s. 34 does not prevent the use of land if such land was lawfully used for such purpose on the day of the passing of the by-law, so long as it continues to be used for that purpose.

Held, the appeal should be allowed.

The legal non-conforming use principle, which is given statutory form by s. 34(9) of the Planning Act, provides a limited form of protection to vested property rights. Section 34(9) exempts lands lawfully used from the operation of a new zoning by-law. The deeming provision in By-law Z.-1 was ultra vires the authority of the City because it derogated from the applicant's statutory rights under s. 34(9) of the Act and because there was a substantial operational disunity and inconsistency between the by-law, which is a subordinate instrument, and the Planning Act, which was its parent statute. The deeming provision of the municipal by-law was repugnant and inconsistent with the statutory provision with which it could not stand side by side.

The deeming provision in By-law Z.-1 not being operative, the applicant's rights to convert the empty storage area into an additional unit depended upon the scope of its non-conforming use, which the City characterized as a "16-unit apartment

building". This, however, was not a correct characterization. It is not necessary that the entire building be used for the legal non-conforming uses. The statutory exemption from the new by-law is not to the existing use as such but to the building itself. In this case, the addition of one more unit to the applicant's apartment building was within the range of the established non-conformity, and the building permit should be issued.

Cases referred to

Central Jewish Institute v. Toronto (City), [1948] S.C.R. 101, [1948] 2 D.L.R. 1; Haldimand-Norfolk (Regional Municipality) v. Copland (1992), 12 M.P.L.R. (2d) 85, 96 D.L.R. (4th) 443 (Ont. Gen. Div.) [revd (1993), 28 M.P.L.R. (2d) 308, 131 D.L.R. (4th) 114 (Div. Ct.)]; Magdalena's Rest Home Ltd. v. Etobicoke (City) (1992), 12 M.P.L.R. (2d) 316 (Ont. Gen. Div.); Ontario (Attorney General) v. Mississauga (City) (1981), 33 O.R. (2d) 395, 124 D.L.R. (3d) 385, 15 M.P.L.R. 212 (C.A.); O'Sullivan Funeral Home Ltd. v. Sault Ste. Marie (City), [1961] O.R. 413, 28 D.L.R. (2d) 1 (H.C.J.); R. v. Grant (1983), 23 M.P.L.R. 89 (Ont. C.A.); Thorman v. Cambridge (City) (1977), 18 O.R. (2d) 142, 4 M.P.L.R. 220 (H.C.J.)

Statutes referred to

Building Code Act, 1992, S.O. 1992, c. 23, s. 25(1)
Environmental Act, R.S.O. 1980, c. 141 -- now R.S.O. 1990, c. E.19
Municipal Act, R.S.O. 1937, c. 266, s. 406(2)
Municipal Act, R.S.O. 1980, c. 302 -- now R.S.O. 1990, c. M.45
Planning Act, R.S.O. 1990, c. P.13, ss. 34(1) [am. 1994, c. 23, s. 21], (9), 45(2)

Authorities referred to

Kagon, I.T., "But I Do Not Want To Be Legal", (1993), 13 M.P.L.R. (2d) 252 Rogers, Canadian Law of Planning and Zoning (1973), pp. 210.20-56

APPLICATION under s. 25(1) of the Building Code Act, 1992, S.O. 1992, c. 23, seeking an order directing the issuance of a building permit.

Barry R. Card, for applicant.
James P. Barber, for respondent, City of London.

KILLEEN J.: -- This is yet another in the seemingly endless and inexhaustible series of cases dealing with the zoning principle of legal non-conforming use. Here, the applicant 382671 Ontario Limited ("382671") brings an application under s. 25(1) of the Building Code Act, 1992, S.O. 1992, c. 23, seeking orders, (1) rescinding the decision of Rocco Cerminara, the London Director of Building Controls, to reject the applicant's application for a building permit, and (2) directing that Mr. Cerminara issue a building permit for the conversion of certain unused space in an apartment building into an apartment dwelling unit as requested in building permit application No. 9501104.

The Background Facts

There is not a shred of dispute about the facts of this case.

382671 is the owner of a 16-unit apartment building located at 100 Barton Street in London. The apartment building has three floors with the lower floor being partially below ground level.

The building was constructed in 1952 and, at that time, complied with the applicable zoning by-law.

In 1949, By-law C.P. 65-233 provided for multi-family residence zones permitting a "multiple dwelling" which, under the by-law, was defined as "a building containing three or more dwelling units" and an "apartment house". The building at 100 Barton Street has contained 16 apartment units from the date of its construction to the date of the application for the building permit on April 10, 1995.

The definition of multiple dwelling was changed in 1958 and the use described as an "apartment house" was deleted and the term "apartment building" was substituted in its place.

There were several consolidations of By-law C.P. 65-233 throughout the 1960s and 1970s, but it would seem that each maintained a multi-family residence zone in which apartment buildings were permitted and regulated based upon the number of dwelling units in the given building.

By-law C.P. 1000.-21 was passed on December 7, 1981, and received Ontario Municipal Board approval on November 29, 1982,
such approval to be effective from January 1, 1982.

This by-law rezoned the lands at 100 Barton Street as an R4/ R7 composite zone. Neither the R4 nor the R7 zones permitted an apartment building. The by-law defined apartment buildings based on the number of dwelling units in the building, as had its predecessor by-laws in the 1960-1980 period.

The number of dwelling units in 100 Barton Street exceeded the permitted number under the permitted uses in the R4 or R7 zones of By-law C.P. 1000.-21 so that it may be said that, when this by-law was passed, 100 Barton Street acquired the status of a legal non-conforming use.

By-law Z.-1 was enacted by the city on May 21, 1991, and came into force with respect to the subject property on July 1, 1993, under an order of the Ontario Municipal Board. This comprehensive general zoning by-law rezoned the area where 100 Barton Street was located as an R3-1/0C2 zone. Neither the R3-1 nor the 0C2 zone permits apartment buildings.

The permitted uses in the Barton Street area are set out at s. 7 of the by-law. They are all essentially residential uses:

7.2 PERMITTED USES

No person shall erect or use any building or structure, or use any land or cause or permit any building or structure to be erected or used, or cause or permit any land to be used in any Residential R3 Zone for any use other than the following uses:

a) Single detached dwellings;

b) Semi-detached dwellings;

c) Duplex dwellings;

d) Triplex dwellings;

e) Converted dwellings;

f) Fourplex dwellings.

Each of these permitted uses is carefully defined in s. 2, the definitions section of the by-law. In s. 2(122) we find the drafter undertaking the Herculean task of providing multiple subdefinitions of the many kinds of "dwellings" which are referred to throughout the by-law. For example, in s. 2(122)(a) we find this definition for apartment building:

a) "APARTMENT BUILDING" means a residential building containing four or more dwelling units to each of which access is obtained through a common entrance or entrances from the outside and through a corridor or hallway from the inside.

A somewhat unique feature of By-law Z.-1 is that it contains a special proviso which attempts to "deem" certain legal non-conforming uses to be lawful on and after July 1, 1993, the effective date of the by-law. Section 1.3 says this:

1.3 DEEMED CONFORMITY OF USES AND COMPLIANCE WITH REGULATIONS

(1) Where any land, building or structure was lawfully used on the 30th day of June, 1993 for a purpose that, were it not for this provision, is prohibited by this By-law, that use is hereby deemed to be permitted by and in conformity with this By-law, despite anything in this By-law to the contrary, so long as the land, building or structure is used and continues to be used for that purpose.

(2)(a) Where any land, building or structure has been

> continuously used from the 1st day of July, 1973 until the 30th day of June, 1993 for a purpose that is prohibited by this By-law, that use is hereby deemed to be a lawful use on the 30th day of June, 1993.

As I have already noted, 382671 filed its application for a building permit on April 10, 1995. It was seeking to convert an unused and empty storage room area on the lower floor of the building into a one-bedroom apartment. The application and its attachments clearly show that the conversion would be done without any changes to the exterior of the building. Not even the windows in the proposed area were to be changed; all that was going to happen was that an unused or under-utilized area was going to be converted into one more apartment unit for the building.

The response to the building permit application was negative and came some months later in the form of Mr. Cerminara's letter of January 2, 1996, reading as follows:

> Dear Sir:
>
> Re: 100 Barton Street, London ON Application No. 9501104
>
> Further to your discussions with Brace Henry this letter will confirm that the Chief Building Official can not issue the permit for an additional dwelling unit because the issuance would be contrary to applicable law namely the Zoning By-law.
>
> The existing apartment building with 17 apartments has been in existence for a number of years. Our understanding is that the use of the building for 17 apartments has been continuous between July 1, 1973 and July 1, 1993 and by virtue of Section 1.3.(2)(a) of the Zoning By-law (see copy attached), the use of the building is deemed to be a lawful use. It is our opinion that if the owner is to extend this use by adding an additional dwelling unit, then a minor variance to the Zoning By-law is required.

As can be seen, Mr. Cerminara relies on the new deeming provision of the by-law -- s. 1.3.(2)(a) -- to defeat the applicant's attempt to rely on its legal non-conforming use rights.

The Issues and their Resolution

The nerve centre of the argument presented by Mr. Card for the applicant may be found in s. 34(9) of the Planning Act, R.S.O. 1990, c. P.13:

> 34(9) No by-law passed under this section applies,
>
> (a) to prevent the use of any land, building or structure for any purpose prohibited by the by-law if such land, building or structure was lawfully used for such purpose on the day of the passing of the by-law, so long as it continues to be used for that purpose . . .

The history of s. 34(9) and its statutory predecessors have been well and thoroughly reviewed in Rogers' Canadian Law of Planning and Zoning, (1973) at pp. 210.20-.56 and needs no repetition here in detail. Suffice it to say that the legal non-conforming use principle was given statutory form in Ontario and elsewhere to provide a limited form of protection to vested property rights in the teeth of the necessary zoning powers of local governments to control the orderly development of municipal lands in the light of ongoing and constantly changing circumstances.

Without this protective principle, the local landowner would be at the mercy of the passing whims and fancies, as well as the reasoned planning and zoning judgments, of local officials and could face indirect expropriation or forfeiture without compensation. Thus, the non-conforming use principle has been statutorily embedded in the zoning process to prevent retroactive injustice from being wreaked upon the landowner.

In Ontario, then, lands and buildings are excepted from the operation of a zoning by-law if they were lawfully used for a purpose prohibited by the by-law on the date of its passing. Section 34(9)(a) says simply that no by-law is to apply to prevent the use of any such land or building.

Reduced to its basic points, Mr. Card's argument on behalf of

the applicant may be summarized as follows. First, he submits that his client's original use of its land for an apartment building from 1952 onward to 1980 or so was a lawful use. Second, that use became a legal non-conforming use within the predecessor proviso to s. 34(9) and fell within the protective features of that statutory principle. Finally, he argues that the deeming proviso of s. 1.3 of By-law Z.-1, under which the city has attempted to convert certain legal non-conforming uses into lawful uses, is ultra vires the city because it derogates from the statutory rights of the applicant and other similarly situated landowners under s. 34(9) of the Planning Act. Clearly, he argues here, a municipality cannot, by by-law, amend and eviscerate the important non-conforming use principle which is, after all, embedded in the parent legislation under which the municipality's zoning power is created.

Mr. Barber, for the city, developed two basic arguments in response to the applicant's position.

First, he argued that new s. 1.3 of By-law Z.-1 was essentially a benevolent extension or adjustment of the legal non-conforming use principle and was not inconsistent with it. Thus, it could be held to be intra vires the municipality as a legitimate attempt to smooth out the local zoning field and provide a more level and consistent playing field for city planners and landowners alike. Second, he argued that, in any event, the relevant decisional law under s. 34(9) of the Act does not, on close analysis, permit the applicant to add an apartment unit to the apartment building without recourse to the "minor variance" process provided for in s. 45(2) of the Act.

A. The vires of s. 1.3 of By-law Z.-1

In my view, s. 1.3 of By-law Z.-1 is nothing more nor less than a clever attempt by the municipality to trench upon and even disembowel s. 34(9) of the Act.

It must be remembered that s. 34 of the Act provides the basic life support system for the enactment of all zoning by-laws across Ontario. Section 34(1) starts out by saying that "[z]oning by-laws may be passed by the councils of local municipalities . . .". Following upon that opening language, s. 34(1) then includes six broad paragraphs which outline the general parameters of the zoning powers granted to municipalities. As I have already noted, s. 34(9) is a central element in the zoning-power structure and has been included to protect property owners against inevitable retroactive zoning changes down through the years which could otherwise put a given property or building at risk of disastrous economic dislocation.

To me, there is a substantial measure of operational disunity and inconsistency between the by-law proviso of the subordinate instrument and the protective proviso of the parent statute such that the by-law proviso must fall. If the municipality wishes to obtain the power set out in the by-law, it must seek out an amendment to s. 34(9) itself and not take it upon itself to amend the statute through the subtle but illegal sleight-of-hand device set out in s. 1.3.

The leading Ontario case on the question of repugnancy or inconsistency between a statutory proviso and a municipal by-law is Ontario (Attorney General) v. Mississauga (City) (1981), 33 O.R. (2d) 395, 124 D.L.R. (3d) 385 (C.A.). There, the court had to deal with an alleged repugnancy between a municipal by-law prohibiting the storage or burning of chlorinated carbons and certain provisions of the Environmental Protection Act, R.S.O. 1980, c. 141. The judgment of the court was written by Morden J.A. He said this about the issue at hand at pp. 409-10:

> Is there a conflict between By-law 731-79 and the Environmental Protection Act, 1971 of the kind which would render the By-law 431-79 inoperative? I do not intend to review the extensive jurisprudence in which various tests have been formulated and applied in resolving the issues of conflict, or of inconsistency, repugnancy or incompatibility. In my view, if the competing pieces of legislation are intended to advance the same policy and the provision in the statute covers the same ground as the by-law in a way to give rise to the interpretation that the statutory provision is intended ". . . completely, exhaustively, or exclusively [to express] what [shall be] the law governing the particular

conduct . . . to which its attention is directed . . .", then there is a case of conflict. I quote from Ex parte McLean (1930), 43 C.L.R. 472 at p. 483, which was adopted in O'Sullivan v. Noarlunga Meat Ltd., [1957] A.C. 1 at p. 24, and quoted in R. v. Morin (1965), 52 D.L.R. (2d) 644 at pp. 646-7, [1966] 1 C.C.C. 265, 53 W.W.R. 234. If, in covering the same ground the subordinate legislation works at cross purposes to the provincial statute, then the case for conflict is reinforced. This is not intended to be an exhaustive definition of a conflict which will result in the rendering inoperative of the subordinate legislation but merely as one instance thereof and one which, in my view, is applicable to the case.

Morden J.A. was, of course, dealing with a conflict problem between a separate statute -- the Environmental Protection Act -- and a by-law enacted under the Municipal Act. In the case at bar, on the other hand, I am faced with an alleged clash between a provision in the parent statute -- the Planning Act -- and a zoning by-law enacted under the very section -- s. 34 -- which enables the municipality to pass zoning regulations. Nevertheless, the principle which he propounds of "operative conflict" (see passage at p. 407) strikes me as being peculiarly applicable to the case at bar.

As I read the two provisos, they cannot live side by side because, incontestably, the by-law proviso strikes at the heart of the statutory right. This, the municipality cannot do with subordinate legislation.

B. The scope of the non-conforming use

Mr. Barber has argued that, even if By-law Z.-1 is inoperative, the applicant cannot convert the unused space into a 17th apartment under the non-conforming use principle, as the principle has been explicated in the case-law. Essentially, he was saying here that the non-conforming use which was created under the 1981 by-law was a "16-unit apartment building" and that the applicant cannot, as of right, construct or add a 17th unit in virtue of s. 34(9).

The well-spring of the case-law explicating the doctrine of legal non-conforming use is found in the well-known case of Central Jewish Institute v. Toronto (City), [1948] S.C.R. 101, [1948] 2 D.L.R. 1.

In this case, the institute entered an agreement on June 27, 1946, to buy a large residence on Avenue Rd. in the City of Toronto for use as a progressive school for young children. The closing and possession date for the transaction was originally fixed for September 1. The vendor had been using the property as a rooming-house with several lodgers.

The city council, in response to lobbying efforts from local residents who were opposed to a school, quickly passed a zoning by-law restricting the use of area lands to single-family residences and related uses.

However, before the actual passing of the by-law, the vendor and institute had, on July 12, amended their agreement to allow the institute into possession on July 15, but reserving the right to the vendor and his lodgers to stay in occupation on a phase-out basis over the summer.

On July 15 three teachers and a number of young students went on the property and, for the balance of the summer, a modest part of the premises was operated as a summer nursery school of sorts. There is no doubt that the institute occupied the premises on this partial basis in an attempt to establish a legal non-conforming use.

In 1946, the non-conforming use proviso was set out in s. 406(2) of the Municipal Act, R.S.O. 1937, c. 266, as amended, and read as follows:

406(2) No by-law passed under this section shall apply to any land or building which, on the day of the passing of the by-law, is used or erected for any purpose prohibited by the by-law, so long as it continues to be used for that purpose . . .

While this language is a little different from the language of current s. 34(9) of the Planning Act, there is no difference in substance or effect. This fact is conceded by Mr. Barber.

The judgment of the court was written by Kerwin J. Rand and Kellock JJ. wrote concurrences but, if anything, their concurrences are stronger, in effect, than the judgment of Kerwin J.

The Supreme Court reversed the concurrent holdings of the trial court and Ontario Court of Appeal and concluded that the institute had established a legal non-conforming use through its partial and limited use of the residence in the short period between July 12, the changed date of possession, and the passing of the zoning by-law on July 24, a matter of 12 days later.

As Kerwin J. said at pp. 105-06 of the judgment:

> It is not necessary that the entire premises, that is every room in the building, be used. While a bona fide intention to use is not sufficient, as has been decided by the Judicial Committee in Toronto Corporation v. Roman Catholic Separate Schools Trustees [[1926] A.C. 81], it is an important element in considering the evidence as to actual user. There is no doubt, in the present case, as to the purpose of the appellant in purchasing the premises nor, I think, is there any real doubt on the evidence as to what it did. This is not a case of disturbing concurrent findings but of accepting the facts as found and of drawing the proper legal conclusions therefrom. The appellant took steps during the summer vacation, in an endeavour to bring itself within subsection 2 of section 406 of the Act and, in my opinion, has succeeded in so doing. It actually used the premises as a school and the mere fact that it was a nursery summer school does not prevent the appellant increasing the number of pupils or enlarging the scope of its activities so as to conduct classes not in operation at the relevant time. We are not concerned, in the present appeal, with any question of erecting new buildings.

(Emphasis added)

Mr. Justice Rand, in his concurrence, goes into more detail than Kerwin J. in describing the effect of old s. 406(2). At p. 109 he describes the effect of the subsection as creating an "exemption" from the new by-law:

> It will be seen that the exemption is not to the existing use but to the building; and there is no implication that it is the whole of the building that must be so used or that the use must be the sole use. The language would be satisfied by a partial use as if, for instance, an owner was carrying on a grocery store on the ground floor and using the second storey for his home: could it seriously be questioned that the use of the lower floor in such a case would be protected by the exemption? If that same business were extended to the upper storey, could it be said that the exemption did not continue or was lost? The building would still be used on the ground floor for the prohibited purpose; the building as a whole would be exempt; and I think it would necessarily follow that no such extension could bring about a forfeiture of the exemption. In any case the question is whether a real use, in good faith, is being made of the building, a use not merely incidental to some other use, but possessing an individuality of its own.

Mr. Justice Kellock reinforces what was said by his colleagues in the following passage at p. 113:

> I agree with the view of the statute taken by my brother Rand that the use being made of the building here in question on the day of the passing of the by-law was sufficient to bring it within the very words of section 406(2) and as the building and the lands appurtenant were being used by the appellant for a purpose not permitted by the by-law, the by-law does not apply to them.

As I read the three strong judgments in Central Jewish Institute, nothing could be clearer than what they have said about the effect of a new zoning by-law on the use or uses of a legal non-conforming building: It is not necessary that the entire premises be used. This is because the statutory exemption from the new by-law was not to the existing use per se, but to the building itself. In effect, the whole of the existing building was thereby exempt from the zoning by-law.

There are at least four judgments in Ontario (and many elsewhere across Canada) which usefully address the full ramifications of the holding in Central Jewish Institute. They are O'Sullivan Funeral Home Ltd. v. Sault Ste. Marie (City), [1961] O.R. 413, 28 D.L.R. (2d) 1 (H.C.J.); Thorman v. Cambridge (City) (1977), 18 O.R. (2d) 142, 4 M.P.L.R. 220 (H.C.J.); Haldimand-Norfolk (Regional Municipality) v. Copland (1992), 12 M.P.L.R. (2d) 85, 96 D.L.R. (4th) 443 (Ont. Gen. Div.) and Magdalena's Rest Home Ltd. v. Etobicoke (City) (1992), 12 M.P.L.R. (2d) 316 (Ont. Gen. Div.).

It is unnecessary to review the factual circumstances of all of these cases. They all dealt with situations where, essentially, an owner attempted to enlarge or expand a legal non-conforming use. After careful analysis of Central Jewish Institute, each court held that the owner could expand the non-conforming use within the confines of the entire building without the necessity of conforming with the dictates of the new zoning by-law.

Magdalena's Rest Home gives the flavour of all these cases. There, the owner operated a rest home in a residential zone. Before the passage of the first zoning by-law for the area, the lands were used as a 15-bed rest home. The municipality later passed a zoning by-law which allowed specified residential uses only, and a rest home was not within the list of permitted uses. The applicant sought to expand the number of beds to the maximum permitted under certain health and licensing regulations. The proposed expansion could be accomplished internally without any extension of the building.

The municipality argued that the legal non-conforming use protected only the exact status quo ante of 15 beds and submitted that any expansion called for relief from the zoning by-law either through an application to the Committee of Adjustment for a minor variance or to council for an amendment to the zoning by-law itself.

The argument presented by the municipality in this case is paradigmatic of the arguments of many municipalities across Ontario since Central Jewish Institute was decided in 1948. The argument was made that a narrow view should be taken of the term "use", ignoring the fact that the phrase employed in s. 34(9) and its predecessors is "use . . . for any purpose prohibited by the by-law . . .".

In this case, the municipality attempted to seize upon the phrase "15-bed rest home" as a mantra and thereby freeze the building in a strait-jacket.

On the other hand, the owner argued -- and successfully -- that the number of beds was merely a reflection of the intensity of the use and did not represent a different use.

Mr. Barber, during his argument for the city, relied heavily on a decision of the Ontario Court of Appeal in R. v. Grant (1983), 23 M.P.L.R. 89.

Grant was a case where the building had been used for two self-contained dwelling units before a zoning by-law was passed which only permitted a private detached dwelling-house or a converted dwelling-house. Later, the owner quietly increased the number of dwelling units from two to four without making any changes to the exterior aspect of the building. As a result, the city prosecuted the owner for breach of the zoning by-law. The trial judge acquitted, purporting to follow Thorman v. Cambridge, supra, but, in the Court of Appeal, this decision was overturned and a conviction entered.

Mr. Justice Cory, for the Court of Appeal, said this about the scope of the legal non-conforming issue at hand at p. 92:

> What was the nature of the non-conforming use in January, 1960? It was the existence of the two self-contained dwelling units in 12 Playter Blvd. It was no more than that. The existence of the non-conformity did not give rise to a right to increase significantly the extent of that non-conformity. The R. 1 zoning delineated by the by-law was designed to control the density of population in the area. To permit the doubling of the number of self-contained units within the dwelling house flies in the face of the intent and purpose of the by-law. If this increase were permitted, there would be no basis for restricting or controlling by means of the by-law an increase to 10 or 12 units within the exterior

walls of the dwelling. The unauthorized use permitted by the Planning Act was to maintain two self-contained dwelling units within the premises. It should not be extended beyond that limit. To do so would make a mockery of zoning by-laws and unduly extend non-conforming uses.

It is interesting to note that Cory J.A. did not, in so ruling, purport to reject the Thorman decision but only distinguished it on its facts. In referring to a passage in the Thorman decision he said this at pp. 92-93:

> That statement cannot be taken as a blanket authority for multiplying the number of self-contained dwelling units without restraint so long as the external walls are not altered. Rather, the decision was based upon planning concepts for it was pointed out that a separate apartment was a higher and more desirable use than a butcher shop in an area zoned for detached single family residential use. The decision permitted a reasonable use of space in a portion of a building that had become vacant as a result of the abandonment of the butcher shop.

There are two difficulties with Mr. Barber's heavy reliance on the judgment of Cory J.A. in Grant.

First, it may be fairly said, I think, that Cory J.A. is not saying that a building use can never be expanded or enhanced beyond its precise non-conforming status at the date of the passing of the zoning by-law which creates the non-conformity. Rather, he appears to be saying that any such enhancement must be done reasonably, with restraint, and consistently with fair generic range of the established non-conformity.

I must conclude, on the facts before me, that that is precisely what the applicant was attempting to do in utilizing unused space for an additional apartment unit.

Second, it must also be said that nowhere in his reasons does Cory J.A. mention the all-important judgment of the Supreme Court in Central Jewish Institute. I am bound to say there is language in Grant which seems to be at odds with the Central Jewish Institute decision. While the conflict may be more a matter of appearance than reality, I must, of course, follow Central Jewish Institute and conclude that the applicant's building is exempt from the constraints of the city's zoning by-laws and may proceed with the construction of an additional apartment as requested.

Accordingly, orders will go declaring that, (a) the decision of the chief building official should be rescinded, and (b) a building permit should forthwith issue.

It would seem to me that the applicant should have its party-and-party costs but, if counsel wish to argue this question, I may be spoken to.

Before concluding this judgment, I would be remiss if I did not express my gratitude to counsel for their most helpful and candid arguments. Also, I would like to pay homage to a brilliant, scholarly article on the broad subject of legal non-conforming uses written by Ira Kagan under the title of "But I Do Not Want To Be Legal", published at (1993), 13 M.P.L.R. (2d) 252. This article should quickly become an essential research source for any practitioner, judge or legal scholar interested in the subject at hand.

Appeal allowed.

R. v. 593288 Ontario Ltd.

Between
Her Majesty the Queen, respondent, and
593288 Ontario Limited and Riccardo Di Giuseppe, appellants

[1998] O.J. No. 5670
DRS 99-07931

Ontario Court of Justice (Provincial Division)
Newmarket, Ontario
Lampkin Prov. J.
Oral judgment: December 18, 1998.

Counsel:
R. Duncan, for the Crown.
B. Olmstead, for 5943288 Ontario Limited.
N. Gerry, for Riccardo Di Giuseppe.

[para1] LAMPKIN PROV. J. (orally):-- The appellants 593288
Ontario Limited and Riccardo Di Giuseppe appeal against findings of guilt in respect of the following charges:

1. that on the 12th day of September, 1995, at 10097 to 10101 Yonge Street, being lots 22 to 23 of Plan 7032, in the Town of Richmond Hill, they committed the offence of constructing or causing to be constructed a building in a municipality without first obtaining a permit issued therefor by the chief building official for the Town of Richmond Hill, contrary to the Ontario Building Code Act, s. 8(1); and

2. that on the said date at the said place, they committed the offence of failing to comply with an order to comply issued on the 22nd day of June, 1995, by Morris Luchetta, a building inspector for the Town of Richmond Hill, contrary to the Ontario Building Code Act, s. 12(2).

FACTUAL BACKGROUND

[para2] Riccardo Di Giuseppe is the president of 593288 Ontario Limited which has its registered office at 10097 Yonge Street, Richmond Hill. The corporation is the owner of lots 22 and 23 of Plan 7032, Town of Richmond Hill, municipally known as 10097 to 10101 Yonge Street, Richmond Hill.

[para3] On June 21, 1995, there was a fire in the basement of the Major Mack Hotel which forms part of the premises comprising 10097 to 10101 Yonge Street. In the aftermath of the fire Paul Schuster, the fire prevention captain of the Richmond Hill Fire Department, inspected the premises in his official capacity.

[para4] Mr. Schuster is also a building code inspector under the Building Code Act for the Town of Richmond Hill. In the course of his inspection he entered into that part of the premises municipally known as 10099 Yonge Street. The Major Mack Hotel is immediately south of 10099 Yonge Street.

[para5] Immediately inside the entrance of 10099 Yonge Street, Mr. Schuster observed much drywall work partially completed. He said the work was obviously in progress. He observed further that much electrical wiring had been strung out from boxes behind a bar which he believed had been newly constructed and appeared to be blocking one of the exits. Progressing further into the building, Mr. Schuster observed stairs leading up to a mezzanine area and the whole area appeared to be partially completed. He saw no one working in the premises.

[para6] The last time Mr. Schuster had been in those premises, 10099 Yonge Street was a retail outlet called Tent City. That was some six or seven years prior to June, 1995. He knew not when Tent City had moved out of the premises. He had no records or drawings to show what Tent City looked like when it was there but he saw changes from what he had seen six or seven years before. He therefore reported his observations to Mike Leonard, a supervisor of the inspection branch of the Town of Richmond Hill.

[para7] Morris Luchetta, a senior building inspector for the Town of Richmond Hill, had visited 10099 Yonge Street on June 13, 1995. He found no one present and was unable to gain access to the premises. The front of the premises had been glazed over and he was unable to ascertain whether construction had taken place, which was the purpose of his visit. He left his business card in the door.

[para8] He returned to the premises on June 22, 1995, but found them locked and was unable to gain access. He had received instructions from his manager that construction was taking place and he therefore posted an "Order To Comply" by taping it to the front door. Copies of the said order were also forwarded by registered mail to the registered office of 593288 Ontario Limited and to Riccardo Di Giuseppe at their respective addresses shown on the corporate documents of the said corporation. The relevant part of the Order To Comply is as follows:

> To:
> Contravenor: Riccardo Digiuseppe (sic)
>
> and to:
> Owner: 593288 Ontario Limited
>
> Project Location:
> Address 10097-10101 Yonge Street,
> Lot 22/23 Plan 7032
>
> An inspection of the property/building at the above location has disclosed the following contravention(s) of the Building Code Act.
>
> You are hereby ordered to correct the contravention(s) set out below immediately/or by: forthwith
>
> Failure to comply with this Order within the prescribed time may result in further action being taken under the Building Code Act and the Provincial Offences Act.
>
> Building Code Reference: Building Code Act Sect. 8(1)
>
> Nature and Location of Contravention: Construction has proceeded at the above premises prior to obtaining a Building Permit.

[para9] On July 4, 1995, Mr. Luchetta, accompanied by Mr. Dave Potter, the chief building official, and Mr. Noel Gerry, who appeared as counsel for the corporation at trial but as counsel for Mr. Di Giuseppe on the appeal, attended the premises and was able to gain access thereto. (I note in passing that Mr. Olmstead appeared as counsel for Mr. Di Giuseppe at trial but as counsel for the corporation on the appeal). Mr. Luchetta saw two or three workmen doing work with drywall compound which may have been patching a wall and which does not require a building permit.

[para10] Mr. Luchetta had last been in those premises in 1988 or 1989 when it was Tent City. He went as a customer to make a purchase. He observed vast changes from when he had been there. Most of the interior partitions had been removed. Stairways, which were not there before, had been installed leading to a mezzanine or a second floor. The Building Code requires a permit to install new stairways as well as to demolish walls in premises. Electrical work appeared to be in progress. Cables were hanging out of boxes. None of the plugs and switches were installed.

[para11] Mr. Luchetta returned to the premises on the 19th and 20th days July, the 15th day of August and on the 11th day of September. There was no one present on any of those occasions and he was unable to gain access. No one had been in touch with him in an attempt to obtain a Building Permit in respect of the premises. There was no compliance with the Order. Proceedings were launched on September 21, 1995.

[para12] Following the dismissal of a non-suit motion at the completion of the Crown's case, the defence called Mr. Franco Vatalaro, the public relations officer of the defendant corporation. He also oversees the general cleaning of the premises. He has been in that part of the premises formerly known as Tent City several times. He testified that since he started working for the corporation in September, 1994, there has not been any construction done to the premises. No

stairways have been built, bars added or rooms or walls demolished. The premises are in the same condition as when he started to work there and look like a giant empty warehouse. The only work done in the premises was some cleaning and painting.

SUBMISSIONS AND LEGAL ISSUES

[para13] The appellants appeal against the findings of guilt on the following grounds:

1. The Justice of the Peace erred in determining that the construction which was the subject of the Order to Comply did require a building permit pursuant to the Building Code Act;

2. The Justice of the Peace erred in not applying Section 36(8) of the Building Code Act;

3. The Justice of the Peace erred in finding that construction as defined under the Building Code Act had occurred within 1 year of the laying of the charge;

4. The Justice of the Peace erred in misapplying Section 36(1(a,b)) of the Building Code Act in finding that the Landlord caused the construction which contravened the Act;

5. The Justice of the Peace erred in finding that the appellants were obligated to comply with an Order to Comply when the appellants were not responsible for the construction alleged.

[para14] On behalf of the corporation, Mr. Olmstead submitted that the only time frame that is of relevance in these proceedings is between June 22, 1995, the date of the posting of the order to Comply, and September 12, 1995, when it is alleged that the defendants effected the construction without a building permit. He concedes that there was construction but submits that there is no evidence to prove that there was construction during the relevant time frame referred to above. Mr. Olmstead submitted further that there is no evidence when the construction commenced and the most the prosecution can say is that there was some construction between 1988 or 1989, when the premises were occupied by Tent City and Messrs. Schuster and Luchetta were both last in the premises, and 1995 when they returned. There is at least a veiled suggestion that the premises were left in that condition when Tent City vacated them and the owner has done nothing to them since that time except perhaps to clean same and patch walls. He submits that there is a one year window within which proceedings must be bought and on the evidence the proceedings are statute barred. Mr. Olmstead further submits that the Justice of the Peace failed to address the evidence of Mr. Vatalaro and that she put the onus on the defence to bring forward a title search to prove that Tent City was the owner, presumably when the construction was done and left by them.

[para15] On behalf of Mr. Di Giuseppe, Mr. Gerry submits that the Building Code fixes liability on a director only where it is proved that the director knowingly fails to comply with an order or otherwise contravenes the Act. He submits that mens rea is required and there is no evidence that Mr. Di Giuseppe had a guilty mind.

[para16] On behalf of the Crown, Mr. Duncan submits that the proceedings were brought within the one year limitation period. He submits that the subject matter of the proceedings arose when the Municipality first learned of the construction without a building permit, that is, on or about June 21, 1995, and not some time before when the walls were demolished and the stairs built. He submits that while a Municipality would be aware of the construction of a new building, it would not necessarily be aware of any interior construction in an existing building as is the case at bar and it is only when that knowledge comes to the notice of the Municipality that the subject matter of the proceeding arises. He relies on Peixeiro v. Haberman, [1997] 3 S.C.R. 549, and Agounie v. Galion Solid Waste Material Inc. et al., (1998), 38 O.R. (3d) 161. He submits that there is nothing in s. 8 of the Act which suggests that the proceedings must be brought within a year of the actual construction taking place. He submits

further that since the appellants have now conceded that there was construction of the premises, the owner is required to obtain a permit to carry out such construction. He submits that the director of a corporate owner, having been served with an Order to Comply and having taken no steps to do so, must be deemed to know that construction is under way in the building of which he is a director and is therefore liable.

[para17] In reply Mr. Olmstead submits that the information charging his client refers to an allegation that his client constructed or caused to be constructed a building on September 12, 1995, and there is no evidence to that effect.

RELEVANT LEGISLATION

[para18] The sections of the Building Code Act which have a bearing on this case are as follows:

> 8. (1) No person shall construct or demolish a building or cause a building to be constructed or demolished unless a permit has been issued therefor by the chief building official.
>
> 12. (2) An inspector who finds a contravention of the Act or the building code may make an order directing compliance with this Act or the building code and may require the order to be carried out immediately or within such time as is specified in the order.
>
> (3) The order shall be served on the person whom the inspector believes is contravening this Act or the building code.
>
> (4) The order shall contain sufficient information to specify the nature of the contravention and its location.
>
> (5) The inspector may post a copy of the order on the site of the construction or demolition.
>
> 27. (1) A notice or order required by this Act to be served may be served personally or by registered mail to the last known address of the person to whom notice is to be given or to that person's agent for service.
>
> (2) If a notice or order is served by registered mail, the service shall be deemed to have been made on the fifth day after the day of mailing unless the person to whom the notice or order is given or that person's agent for service establishes that, acting in good faith, through absence, accident, illness or other unintentional cause, the notice was not received until a later date.
>
> 36. (1) A person is guilty of an offence if the person,
>
> (b) fails to comply with an order, direction or other requirement under this Act; or
>
> (c) contravenes this Act, the regulations, a by-law passed under section 7 or a condition imposed under section 9.
>
> (2) Every director or officer of a corporation who knowingly concurs in the furnishing of false information, the failure to comply or the contravention under subsection (1) is guilty of an offence.
>
> (8) No proceeding under this section shall be commenced more than one year after the time when the subject-matter of the proceeding arose.

[para19] Whether these proceedings are statute barred or not depends on what has come to be known as the "discoverability rule". The rule seems to have been first articulated by Lord Reid in Cartledge v. E. Jopling & Sons Ltd. [1963] A.C. 758 when he said at p. 772:

> It appears to me to be unreasonable and unjustifiable in principle that a cause of action should be held to accrue before it is possible to discover any injury, and

therefore before it is possible to raise any action.

The rule is now firmly part of Canadian law: see Peixeiro, and Agounie, supra. In the latter case the Ontario Court of Appeal held that the rule is a rule of general application and applies to all cases in which a limitation period applies. It was held that there is no principled reason why the rule does not apply to s. 61(4) of The Family Law Act which enacts as follows:

> No action shall be brought under subsection (1) after the expiration of two years from the time the cause of action arose.

The language of the subsection is remarkably similar to that of s. 36(8) of the Building Code Act. I can see no reason why the rule should not apply to regulatory offences. I am bolstered in my opinion by the judgment in Sparham-Souter v. Town and Country Developments (Essex) Ltd. [1976] 1 Q.B. 858,
in which the rule was relied on. The facts are as follows:

> In 1964 a council, in the exercise of their duty to control building in their area under the Public Health Act 1936, passed plans prepared by builders developing a new housing estate. Work started in December 1964, and was completed in September 1965. Before and during the work the council carried out inspections as required by the by-laws made under the Act, and on December 15, 1965, the council issued certificates stating that the plots had been inspected and they had found no reason to question the legality of the work.
>
> On October 25 and November 29, 1965, the plaintiffs contracted with the builders to buy two adjoining houses which were conveyed to them on November 12, 1965, and January 26, 1966, respectively. Some time after they had moved in, faults developed in the houses and cracks appeared in the brickwork. On October 22, 1971, the plaintiffs issued a writ alleging negligence by the builders and also by the council, as a result of which they claimed that they had sustained damage by the diminution in the value of their houses and/or the cost of repairing the defects. Against the council they alleged negligence and breaches of duty in failing to ensure that the plans and the foundations complied with the relevant by-laws; in failing to inspect properly during the work; and in issuing the certificates of December 15, 1965. By their defence the council claimed inter alia, that the action was barred under section 2(1) of the Limitation Act 1939.
>
> On a reference for trial of the preliminary issue whether the action had been brought within six years from the date on which the cause of action had accrued, the judge held that the action was not statute-barred, first, because the last pleaded act of negligence, namely the certificate of December 15, 1965, was within the six year limitation period; and secondly, that in any event no cause of action accrued until the date when there was for the first time a potential plaintiff, and that in the instant case that date was the date of the respective conveyances, November 12, 1965, and January 26, 1966, both of which were within the limitation period.
>
> On appeal by the council, it was held, dismissing the appeal, that, on the assumption which had to be made on the trial of a preliminary issue that the facts were as pleaded, the judge had rightly held that the plaintiffs' action was not time barred, for the latest act of negligence pleaded was the certification on December 15, 1965, so that the action begun on October 22, 1971, was begun within the six year limitation period; and on the judge's second conclusion both the conveyances to the plaintiffs were also within that period.
>
> The court held that the cause of action for negligence accrues, not at the date of the negligent act or omission, but at the date when the damage is first sustained by the plaintiff. Where therefore a council negligently and in breach of their by-laws passes plans or approves insufficient foundations and other work in progress, and the work is then covered up, the cause of

> action for negligence against the local authority accrues only when the damage manifests itself and the person who then has an interest in the house first discovers it or should with reasonable diligence have discovered it and is in a position to sue the council.

[para20] The rule however only gives a foot in the door and ordains that time shall commence to run when the damage manifests itself. The claim still has to be proved. By the same analogy the Municipality under the Building Code Act has a year after it has had a reasonable opportunity to discover a contravention of the Act to institute proceedings. The delict however must still be proved.

[para21] In this case the Municipality first discovered the construction on June 21, 1995, which is the date when the subject matter of the proceedings arose. The one year limitation to commence proceedings began on that date. The offence of constructing without a permit is of a continuing nature. I do not therefore accept Mr. Olmstead's submission that the charges against the defendants must be dismissed because there was no construction proved to have occurred on September 12, 1995, or between June 22, 1995, and September 12, 1995.

[para22] I do not accept Mr. Duncan's submission that the director of the corporate owner is in effect deemed to have knowledge of the contravention. If that were so, there would have been no necessity for the legislation to provide that liability can only attach to a director if he knowingly contravenes the order. The word knowingly is inserted in the section for a reason and knowledge on the part of the director must be proved. While there may be a strong inference of such knowledge if the corporation is the alter ego of the director, that is not the case here. Mr. Di Giuseppe is not the sole director of 593288 Ontario Limited. There is a second director who is also the treasurer of the corporation. In my opinion merely doing nothing after having received the Order to Comply did not fix Mr. Di Giuseppe with the necessary guilty mind. The appeals against findings of guilt with respect to him will be allowed and acquittals entered.

[para23] With regard to the appeals by 593288 Ontario Limited there is a complete absence of the assessment of the evidence of Mr. Vatalaro, the only defence witness. Mr. Vatalaro's evidence is to the effect that he was employed by 593288 Ontario Limited in September, 1994, and there was no construction in the premises from that time. But there was evidence from Messrs. Schuster and Luchetta that the construction was recent. While there is no definition of the term "recent" in this context, the learned Justice of the Peace was entitled to find that the construction occurred sometime between September 1994, and June, 1995, during which time the owner would have been responsible for obtaining a permit. Throughout that time, on Mr. Vatalaro's evidence, 593288 Ontario Limited was the owner of the subject premises.

[para24] The Justice of the Peace did not expressly reject Mr. Vatalaro's evidence. However her failure to do so did not cause her to fall into reversible error because her findings of guilt can be supported by the evidence. R. v. Burns, (1994), 89 C.C.C. (3d) 193.

[para25] In the circumstances, the appeals by 593288 Ontario Limited are dismissed.

LAMPKIN J.

Bondy v. Lessard

Between
Thomas Bondy and Marie Bondy, applicants, and
L.A. Lessard and The Municipal Corporation of the Town of Tecumseh, respondents

[1996] O.J. No. 3108
DRS 97-04913
Court File No. 96-GD-35852

Ontario Court of Justice (General Division)
Windsor, Ontario
McMahon J.
August 29, 1996.

Counsel:
Leon Paroian, for the applicants.
Arthur M. Barat, for the respondents.

[para1] McMAHON J.:-- This is an application to this court appealing a decision of the Chief Building Official of the Municipal Corporation of the Town of Tecumseh, dated March 14,
1996 wherein Mr. Lessard the said Chief Building Official revoked Building Permit #6472, dated November 8, 1995.

[para2] The said Building Permit provided for the construction of a sunroom which would attach the house and the garage located on the property of the applicants.

[para3] In order to clearly understand the issues before the court, it is necessary to provide a short history of what has occurred relating to these premises.

History:

[para4] The applicants reside at 12330 Riverside Drive, East in the Town of Tecumseh.

[para5] In the year 1989, the applicants applied to the Municipality for a permit to construct a four car garage on the premises. This garage was to include a second storey which the applicants advised the authorities was to be used for storage. This application was initially opposed by the Town Council. The property was at that time zoned as R1 and it was the view of the council that a garage of this size would impede the view of the Detroit River.

[para6] The application subject to amendments was however approved by the Committee of Adjustment and the garage was completed. It is to be noted, that on this original application in 1989, it was endorsed by Mr. Tino the Building Inspector, that the garage was for residential purposes only as an accessory building, and was not to be used for commercial or rental purposes.

[para7] It is admitted, that after the construction of the garage, the applicants did without obtaining further permits and without the approval of the Municipality conduct certain construction on the second storey of the proposed garage. This construction included the creation of rooms, drywalling, insulation, installation of a vapour barrier, certain plumbing, electrical wiring, installation of a heating system and installation of a sanitary sewer. This as it is admitted was all done without acquiring the proper permits. However, at no time was the second storey ever used for commercial or rental purposes, but was used for storage.

[para8] In June of 1995, the applicant states, that their taxes increased by 50 percent under the new Market Assessment procedure. In order to help offset this increase, the applicants decided to take advantage of Bill 120, which allowed for the creation of apartments in residential buildings, and applied to the Municipality for a permit with that purpose in mind. In essence, the creation of a rental unit.

[para9] The applicants were then advised by the Building Inspector that it could not be granted because of the previously mentioned agreement in the initial construction about non-rental use at the time the garage was constructed.

It was the view of the applicants that Bill 120 had voided any such agreement and gave them the right to create an apartment in the house.

[para10] It was then explained to the applicants, that in order to properly apply for such use it would be necessary to physically connect the garage to the residence. This would then be in compliance with the provisions of Bill 120.

[para11] On October 3, 1995, the applicants submitted an application for a Building Permit which is now under dispute. This Building Permit is numbered 6472, and the application was for the construction of a sunroom to connect the house and the garage, and clearly on the face of that application, was noted so that it applies to Bill C-120. Therefore at the time of this application, the Town was fully cognizant of the intention to convert the garage at a later date to an upper storey rental unit. This was clearly the purpose of constructing the sunroom in question.

[para12] Prior to obtaining approval for the Permit 6472, the garage was fully inspected. At that time, it was discovered by the Municipal Inspectors, both from the Fire and the Building Departments, the work that had already been done on the second storey. In a letter dated November 15, 1995, were a list of items that would have to be completed for the proposed apartment over the attached garage under Bill 120.

[para13] Based on that letter from Mr. Penney of the Building Department, it is noted that the council reviewed the application on the 14th day of November, 1995, and concurred in the application on the 27th day of November 1995.

[para14] It was clearly the intention of the applicants Mr. and Mrs. Bondy and fully understood by the respondents at the time of the issue of the Permit in question for the construction of the sunroom, that upon the completion of that sunroom, a further application would be made for the completion of an apartment above the garage.

[para15] The actual inspection of the existing buildings which was required to take place prior to the issuance of any Building Permit occurred on October 18, 1995. The inspection was done by Randy Cecile, the Town's Fire Chief and Don Penney, a Building Inspector for the Town. Subsequent to that inspection, Mr. Lessard and Mr Tino advised the applicants that they had broken the law by drywalling the second floor of the garage and installing a bathroom without proper permits. The applicants admit, that they neglected to get the permit for the bathroom, but did not know that they were required to have a permit for the drywalling. In the supporting affidavit material, Mrs. Bondy states, that they advised Mr. Lessard and Mr. Tino, that if the bathroom was illegal by the Town Rules, they would remove it from the garage prior to the construction of the sunroom. Mr. Lessard at that point informed them that he would have to take the matter before the Town Council and they would decide whether a permit should be issued, or whether they would be prosecuted for having the illegal bathroom. It was subsequent to that, that the Town Council approved the application and the Permit was issued.

[para16] Because of the weather conditions, constructions was not commenced immediately. In February of 1995, the applicants learned of the pending Bill 20 which would amend Bill 120 and return to the Municipality the sole power of regulating rental units in residences.

[para17] On February 1, 1996, Mrs. Bondy contacted Mr. Tino concerning the pending repeal of Bill 120 by means of Bill 20. She was informed by Mr. Tino that the Municipality was not sure how they were going to handle the matter when 120 was repealed. It was suggested that she await an answer from the Town solicitor before starting construction.

[para18] They again had contact with Municipal authorities concerning this matter. They attended before the Town Council on March 5, 1996 to request that their particular application be grandfathered under Bill 120. In the alternative, requested a 5 week extension of time prior to construction. He advised the council at that time that the Ministry of Housing had issued a Memorandum to Chief Building officials that Bill 120 was law until Bill 20 was proclaimed in force.

[para19] On March 18, 1996, Mr. Lessard forwarded a letter

to the applicants revoking a Building Permit which had been issued for the sunroom. In that letter Mr. Lessard stated as follows:

> "The Permit is revoked by reason of having been issued on false information in respect of the proposed use of the space above the garage as storage space."

[para20] Presumably, this letter of revocation was issued pursuant to s. 8(10) of the Building Code Act which states as follows:

> s. 8(10) - Subject to s. 25, the Chief Building official may revoke a Permit issued under this Act,
>
> (a) if it was issued on mistaken, false, or incorrect information.

[para21] There is no question in the mind of the court that the original Building Permit #4404 for the construction of the garage in 1989 was breached by the actions of the applicants by the work done on the second storey of the garage, particularly the plumbing work and the provision of the bathroom without the proper permit. The applicants could have been prosecuted for that breach and certainly if the work had come to the attention of the authorities, that Building Permit could have been cancelled. That however, is not the issue that is before this court.

[para22] The issue before the court is the revocation of Permit #6472 for the construction of the sunroom to attach the garage to the main building. It is quite clear, that on the very face of that application, the intention to create a rental unit within the meaning of Bill 120 is clearly set out.

[para23] It is quite clear that before the issuance of this permit, the Fire Chief and Building Inspector had attended and were fully aware of the work that had already been done with reference to the second storey. This work was outlined in the letter of the Building Inspector. All of this knowledge was within the control of the Municipality prior to the issuance of the Building Permit in issue.

[para24] It is therefore clear in the view of the court that Building Permit 6472 was not issued based on false information provided by the applicants.

[para25] Accordingly, an order shall issue directing the respondents to reinstate the applicant's Building Permit 6472 for the construction of the sunroom in question.

[para26] The question of the issuance of a future Permit for the completion of the renovation to the second storey is not before this court and this court has no comment to make upon the issuance of such a permit.

[para27] The costs of this application are awarded to the applicants on a party and party basis.

McMAHON J.

Hastings Corp. Ltd. v. Borooah

2004-06-22

Docket:*145/04;03-CV-255048CM1;03-CV-257685CM1*

Date: 2004/06/22
(Divisional Court)
HASTINGS CORPORATION LTD.
Applicant
(Appellant in Appeal)
- and -
ANN BOROOAH, in her capacity as Chief Building Official of the City of Toronto; THE CITY OF TORONTO; and MUC SHELTER CORPORATION
Respondents
(Respondents in Appeal)

MacFARLAND, HOWDEN & LINHARES de SOUSA JJ.
Christopher J. Williams and *J. Mascarin*, for the applicant/appellant
Diana W. Dimmer and *Thomas Wall*, for the Chief Building Official & The City of Toronto
William C. McDowell and *W. Grant Worden*, for MUC Shelter Corporation
HEARD: June 2, 2004

E N D O R S E M E N T

HOWDEN J.

[1] Hastings Corporation Ltd. owns a property on Richmond Street East containing a three-storey commercial building. Across the street and a short distance along Ontario Street, the site of a proposed building is owned by the respondent, MUC Shelter Corporation. In August and October, 2003, the respondent Chief Building Official of the City of Toronto issued two building permits to allow construction on the MUC property of a nine-storey building providing temporary accommodation, transitional housing and support services for refugees and those with refugee-experience. MUC's current lease is nearing its end and it wants to replace its current fifty emergency shelter beds and provide, in addition, fifty-two transitional housing units.

[2] The project is to be funded under the federal Supporting Communities Partnership Initiative ("SCPI") program which is administered by the respondent city, and by a mortgage taken out by Sojourn House, the name of the operating group which relies on funds raised from the community. The transitional housing component is housing for refugees, their families, and refugee-claimants who are homeless and require support to maintain their housing for short or longer periods of time.

[3] This appeal is from a decision by Cameron J. released February 11, 2004. Cameron J. dismissed the appellant's application under the *Building Code Act* to declare invalid and set aside the two building permits issued by the CBO. Those permits resulted from applications filed by the respondent, MUC, on June 6, 2003, following a preliminary project review initiated in April, 2002.

[4] The appellant submits that the application judge erred in the following ways:

· in holding that the proposed use was permitted by the City's zoning by-law and that the CBO had properly classified the proposed use as a "hostel" and "dwelling rooms/units", uses permitted as of right in the RA zone governing the property;
· in holding that the residential amenity space requirement of the by-law was met despite its not being exclusive to the dwelling unit occupants;
· in holding that the Municipal Shelter By-law, passed in February 2003 and not yet fully through the Ontario Municipal Board appeal process, did not prevent issuance of the building permits; and
· in determining that the permits should not be revoked pending the OMB decision.

[5] In addition, the appellant requests leave to appeal from the application judge's determination that the respondents' costs be recovered from the appellant, and for review of the quantum of the costs order.

Zoning Compliance

[6] The zoning classification issue brings into play the standard of review used by Cameron J. in addressing the duty and the decision of the CBO. The CBO had decided that the proposed use in zoning terms came

within those permitted in the AR zone as a "hostel" with "dwelling units", rather than a "crisis care facility". In the zoning by-law, those terms are mutually exclusive. .If the proposed use was properly a crisis care facility, it could not be a hostel and it could not meet the minimum distance separation required from another similar facility. As well, because a crisis care facility by definition provides shelter for persons requiring immediate shelter and assistance for a short period, the proposal would probably not satisfy the additional requirement for a crisis care facility that it occupy the whole of the residential portion of the building. Here, Sojourn House would include several floors of dwelling units for lengthier stays as well as administrative and service offices for support staff, in addition to the shelter beds.

[7] Cameron J. characterized the zoning compliance issue as one of mixed fact and law and found the appropriate standard of review of the Chief Building Official's decision to be reasonableness. In his words:

The issue is more than just a matter of law; it is a mixed issue of fact and law. The court should be reluctant to re-examine such decisions*: Southam* (referring to *Canada* v. *Southam Inc.*, [1997] 1 S.C.R. 748) at para. 35.

The CBO is the designated decision maker under the Code. The CBO regularly classifies proposed uses under the zoning by-law in issuing building permits and so has an expertise in the area.

Accordingly, the decision of the CBO should be accorded some respect. In such circumstances the standard of review is the reasonableness, rather than the correctness, of the CBO's decision: *Runnymede Development Corporation Limited* v. *1201262 Ontario Inc.* (2000), 47 O.R. (3d) 374 at 387 (S.C.J.); *Thomas Furniture Ltd.* v. *Toronto (City) Chief Building Official* (2002), 33 M.P.L.R. (3d) 208 (Div. Ct.), at para. 16. The test is whether the decision is clearly wrong: *Southam*, p. 778, para. 60.

[8] The appellant submitted that Cameron J. erred in using a "reasonableness" standard. The appellant submitted that the CBO's decision should be held to a "correctness" standard in this case because (i) the CBO's principal official responsible for reviewing the proposed project lacked specialized knowledge regarding certain crisis care facilities in the city, (ii) the CBO failed in her duty to make an independent and impartial judgment in issuing the permits before the Ontario Municipal Board's appeal process dealing with the municipal shelter by-law was completed; and (iii) the live issues regarding zoning compliance in this case centred more on issues of law, including the meaning of the zoning definitions, the application to this case of a Divisional Court decision regarding issuance of a building permit for a residence for homeless persons known as Dixon House, and the added twist that the competing use definitions were mutually exclusionary.

[9] Counsel for the respondents stressed the major issues of zoning compliance as heavily fact-driven. They submitted that Cameron J. did not err in adopting a somewhat deferential standard in this case.

[10] There is no doubt that, because of the large range and types of issues which can confront a CBO, the place on the continuum between patently unreasonable and correct varies with the nature of the issue before the court. The closer a CBO's decision is to a determination of law, the closer the standard will be to correctness. *Runnymede Development Corporation, supra*, at p. 215; *Ottawa (City)* v. *Ottawa (City) Chief Building Official* (2003), 2003 Carswell Ont. 5280 (Div. Ct.); *Lock* v. *Middlesex Centre (Township) Chief Building Official* (2001), 22 M.P.L.R. (3d) 66 (Ont. S.C.J.); *Welwood* v. *Huron-Kinloss (Township) Chief Building Official* (2002), 29 M.P.L.R. (3d) 1 (S.C.J.); *Rotstein* v. *Oro-Medonte(Township)* (2002), 34 M.P.L.R. (3d) 266 (S.C.J.).

[11] In our view, the CBO, in determining zoning compliance in this case, faced issues of mixed fact and law, as in most cases of zoning classification. Her officials had to review many documents, consider a variety of professional submissions, examine the site and the area in order to reach factual conclusions about the use and its proposed location. However, when the reviews were completed, the factual component became pretty clear. The CBO was faced at the time of the decision to issue the permits or not with zoning issues relating more to the meaning of the zoning terms and consistency of interpretation of the by-law. As well, the CBO had to deal with "applicable law" in the *Building Code Act* in regard to the effect, if any, of the Municipal Shelter By-law, the appeals from which were not as yet dealt with under the *Planning Act* process.

[12] It is easy to conclude that the middle standard of reasonableness is a suitable compromise for all issues of mixed fact and law, whereas the categorization in this mixed area itself opens up a continuum of review standards dependent on the particular weight of law vs. fact. Iacobucci and Major, JJ. (for the majority) in *Housen* v. *Nikolaisen* (2002), 211 D.L.R. (4th) 577 at paras. 27 and 28:

Once it has been determined that a matter being reviewed involves the application of a legal standard to a set of facts, and is thus a question of mixed fact and law, then the appropriate standard of review must be determined and applied. Given the different standards of review applicable to questions of law and questions of fact, it is often difficult to determine what the applicable standard of review is. In *Southam, supra*, at para. 39, this Court illustrated how an error on a question of mixed fact and law can amount to a pure error of law subject to the correctness standard:

...if a decision-maker says that the correct test requires him or her to consider A, B, C, and D, but in fact the decision-maker considers only A, B, and C, then the outcome is as if he or she had applied a law that required consideration of only A, B, and C. If the correct test requires him or her to consider D as well, then the decision-maker has in effect applied the wrong law, and so has made an error law.

Therefore, what appears to be a question of mixed fact and law, upon further reflection, can actually be an error of pure law.

However, where the error does not amount to an error of law, a higher standard is mandated. Where the trier of fact has considered all the evidence that the law requires him or her to consider and still comes to the wrong conclusion, then this amounts to an error of mixed law and fact and is subject to a more stringent standard of review: *Southam, supra*, at paras. 41 and 45. While easy to state, this distinction can be difficult in practice because matters of mixed law and fact fall along a spectrum of particularity.

[13] With respect, we find that Cameron J. erred in applying the more deferential standard of reasonableness simpliciter to the zoning compliance component. While the CBO was entitled to limited deference in this case, we find that the standard of review required is closer to that of correctness.

[14] In so finding, we place no weight on the appellant counsel's submissions regarding the alleged lack of knowledge of the official in the CBO's office who was cross-examined. The only basis for that submission cited by counsel was that he was not familiar with the details of certain sites zoned as crisis care facilities which appellant's counsel chose to put to the witness during cross-examination; it had nothing to do with his level of knowledge of building and planning issues or his expertise and building code judgment. Likewise, we see no basis for the statement in the appellant's factum, not stressed in oral argument, that the CBO and her officials failed to meet the statutory duty to act independently and impartially. This was clearly not a case like *Peter Kiewet Sons* v. *Tillsonburg (Town)* (2003), 28 M.P.L.R. (3d) 277 (S.C.J.) where the CBO failed completely to consider highly relevant information and was held to have pre-determined that the permit would issue without considering required planning input.

[15] In this case, the CBO took a position initially to await completion of the Municipal Shelter By-law appeals though that by-law was clearly not in effect, nor would it be in effect in the near future as of the date of the permit application. The CBO took into account what was before her, including legal submissions made on the appellant's behalf as to the appellant's position of compliance with all relevant law and with the Municipal Shelter By-law as passed by council. There is no evidence to suggest that the CBO fettered her discretion or failed to exercise her statutory duty to make an independent and impartial determination.

[16] Even using a standard close to correctness, we find that Cameron J.'s acceptance of the CBO's determination of zoning compliance was consistent with the principles and findings in *Thomas Furniture, supra,* a decision of the Divisional Court regarding a similar shelter accommodation for homeless persons called Dixon House. In that case, the Divisional Court faced a submission like that of the appellant in this case, that the proponent's plans properly constituted a crisis care facility and, as that definition excluded "hostel" uses, the proponent failed to comply with the zoning by-law and the building permit should not issue. The Divisional Court as then constituted held, in *Thomas Furniture*:

4. The By-law definition of "crisis care facility" and "hostel" are, in our view, unfortunately drafted in that each definition is qualified by the other. "Hostel" does not include a "crisis care facility"; "hostel" is a defined use in the By-law; "crisis care facility" does not include a use otherwise classified or defined in the By-law. Thus there is an element of circularity in the definitions. It appears that this unfortunate drafting led Jennings J. into error as he appears to have asked himself the wrong question and indeed the problem appears to have arisen by the wrong approach to determining the question. Rather than dealing with both definitions in tandem, with an eye on the companion definition in trying to see which of the two definitions more accurately described the proposed use by DH of the Property, Jennings J. approached the definition of "crisis care facility" in isolation. Then, having concluded that the proposed use fitted the definition of a "crisis care facility", he did not analyze whether the proposed use could be as a "hostel". Jennings J. simply concluded:

11. As the facility is a "crisis care facility" as defined, it cannot be a hostel...

5. Thus he gave no consideration to the exclusionary words in the definition of "crisis care facility" that that use "does not include a use otherwise classified or defined in this by-law."

6. DH in its application for the Building Permit described the proposed use as that of a "hostel". The CBO in granting the Building Permit accepted that proposed use as being appropriate in the circumstances.

14. As indicated in the affidavits advanced by the City as noted above, shelters for abused woman and young children and for run away youth or young prostitutes or detox (alcohol or drug) centres would fit within this definition [of crisis care facility]. However, as we move along the spectrum away from the residence and the assistance requirements of those in acute crisis to the residence needs of the chronic homeless where the shelter aspects may not be linked with any assistance; or the assistance provided may not necessarily be linked to the shelter aspect; and where the dwelling accommodation is not of any limited duration but may in fact be of a long term (months or years) duration as envisaged here in DH's application; then it appears to us that these needs would fall within the "hostel" definition.

17. We would therefore allow the appeal and restore the decision of the CBO which allowed the issuance of the Building Permit to DH to renovate the Property for use as a hostel.

[17] We do not see the fact that the MUC proposal provides housing and support services for a more defined group of homeless people than Dixon Hall, i.e., refugees and refugee-claimants and their families, as a reason to distinguish this case from *Thomas Furniture* in principle. It appears to us that, in asserting (as the plaintiff does in its factum at para. 53) that if the proposed use could be classified as a crisis care facility, then it could not be a hostel, that line of analysis is the very error found by the Divisional Court in *Thomas Furniture*.

[18] In conclusion, we do not see any error in Cameron J.'s acceptance of the CBO's finding on zoning compliance, even when it is reviewed on a standard close to correctness.

Residential Amenity Space

[19] The appellant objected that Cameron J. misinterpreted the by-law's requirement for residential amenity space in the project. This term refers to space in the proposed building on the main, part-second, eighth and ninth floors for such common areas as dining room, kitchen facilities, storage, lounge/TV room, and laundry. It was submitted that the zoning by-law required such amenity areas to be for the exclusive use of residents of the dwelling units, not of the temporary shelter area. As so interpreted, the appellant submits that the proponent's plans do not comply with the applicable law.

[20] Cameron J. held that this argument was without merit because the by-law simply does not limit the residential amenity space only to the non-hostel portion. When this was put to appellant's counsel, he responded that the appellant was interpreting this term in a purposive manner by reading into the by-law a limitation that was not there. We find no basis for the appellant's submission and we find no error in Cameron J.'s disposition on this issue.

The Municipal Shelter By-Law

[21] This by-law was passed by City Council on February 11, 2003. As of June 6, 2003, when the building permit for the MUC project was applied for, it was not in force because of appeals taken to the Ontario Municipal Board, including one by this appellant. But for the appeals, it would have been in full effect as of the permit application-filing date. As passed, the Municipal Shelter By-law permits the proposed refugee hostel/housing project by a site specific exemption from separation distances between similar facilities across the city. The definition of "municipal shelter" in the new by-law includes this project.

[22] The appellant argues that Cameron J. erred in holding that, if parts of the by-law are repealed or amended by the Board such as by removal of the site specific permission granted this project, those amendments or parts repealed are not given retroactive effect to the date of passing of the by-law by the *Planning Act*. Counsel for the appellant submitted that s. 34(30) either clearly has the opposite effect when read in context, or it is ambiguous on its face and the more reasonable interpretation is that the parts repealed or amended by the Board are to have retroactive effect with the rest of the by-law. Otherwise, counsel argues, it would lead to absurd results. Finally, counsel submitted that, if amendments or part-repeals by the Board do not come into effect retroactively, s. 34(30) of the *Planning Act* provides no trigger to put them into legal effect.

[23] Section 34 of the *Planning Act* provides the authority and process for enactment and appeal of municipal zoning by-laws, as well as their effect in law. When a zoning by-law is passed by council, interested parties are given a period within which to appeal to the Ontario Municipal Board (s. 34(19)). If no appeal is filed, the by-law is deemed to come into effect on the day it was passed (unless it accompanied an amendment to the Official Plan, which the by-law in question did not). The Board is given authority to dismiss appeals, or to allow appeals and repeal or amend the by-law, or direct council to repeal or amend the by-law as the Board may order (s. 34(26)).

[24] Section 34(30) reads:

If one or more appeals have been filed under subsection (19), the by-law does not come into force until all of such appeals have been withdrawn or finally disposed of, whereupon the by-law, except those parts of it repealed or amended under subsection (26), shall be deemed to have come into force on the day it was passed.

[25] In this case, the chronology involving the shelter by-law and the building code process is necessary to understand.

· The shelter by-law was passed on February 3, 2003, and was appealed within the proper time to the Board;

· The MUC proposal had passed through the building department preliminary review by June 2002;

· The building permit application was filed on June 6, 2003;

· The permits for foundation and above-grade building issued, with concurrent notice to the appellant, on August 19 and October 6, 2003;

· Cameron J. heard the application on January 21 and 22, 2004 and his decision issued on February 4, 2004.

· The hearing before the Board was bifurcated into two parts: the first part was to deal with the general provisions of the shelter by-law - it continued from the end of September, 2003 for two-and-a-half months and the Board's decision issued March 15, 2004;

· The Board issued an order dated April 29, 2004 purporting to "approve" the by-law as amended by the Board, allow an appeal in part, and, because appeals from the by-law have not all yet been dealt with, ordered that the by-law as amended by the Board does not yet apply to 101 Ontario Street;

[26] We are informed that the second phase of the Board's hearing was adjourned on consent in March of this year until this appeal is finally determined.

[27] Cameron J. noted that the shelter by-law was not in force at the time that the CBO was required to make her decision on the MUC building permits. He held that whatever the Board may decide, there would be no impact in law on the status of the building permits because:

i. either the shelter by-law permission for the MUC project would come into effect unamended and that would have retroactive effect back to its date of passage without adverse effect in law on the hostel/transitional housing proposal for 101 Ontario St.; or

ii. were the Board to amend the by-law by repealing the site specific exemption, such an amendment or repeal would not have retrospective effect and also would not impact in law on the proposed use.

He stated:

I conclude this discussion by declaring that the shelter by-law did not prevent the CBO from issuing the permits.

[28] In our view, Cameron J. did not err in this regard. Read in context and applying to the words used their ordinary meaning, s. 34(30) clearly gives express retroactive effect to the by-law as passed by council to the date of passage by that council. It was that by-law or, if amended later, the unamended unrepealed parts, which went through the public process required under s. 34 of the *Planning Act*, became the expression of council's will on the date of passage, and later became law. Amendments by the Board emanate from the Board's public process and may or may not express the will of council when the by-law was originally passed. We see no reason or useful result in adopting the reading suggested by the appellant by which, on any zoning appeal including appeals from general and area zoning by-laws, all property owners' plans for re-investment or development would be hostage for the length of the appeal process to the uncertainties of amendments which could have retroactive effect back to the start of the process, in this case now some seventeen months from the filing of appeals.

[29] Furthermore, there was no need to include, in subsection 34(30), provision for the coming into effect of amendments by the Board. The power to give effect to all matters exclusively within the Board's jurisdiction under any general or special Act is provided to the Board by its constitutive statute, the *Ontario Municipal Board Act*, in sections 30-37 and clause 109 of its rules, the authority for which is in the same statute.

[30] Under the *Building Code Act*, the CBO is required to issue a building permit unless the proposed building would contravene this *Act*, the building code, or any other applicable law (s. 8(2)(a)). There is no issue arising from the other pre-conditions in s. 8(2). Where an appeal is taken from the decision of the CBO, the judge is required to hold a hearing and is empowered to substitute his or her opinion for that of the CBO in reaching a decision to affirm, rescind or otherwise deal with the decision of the CBO and the permits, including their revocation. To qualify as "applicable law" under s. 8(2), the law must be one which prohibits the proposed construction unless that law is complied with. (O. Reg. 403/97, section 1.1.2.3)

[31] In holding that the shelter by-law was not applicable law for purposes of the *Building Code Act*, we see no error in the judgment of Cameron J. The by-law expressly permits the project, and any amendment which could possibly change the relevant part of the by-law would not affect the CBO's decision in August and October, 2003 when, by s. 8, she was required to make a decision. It is only where the applicable law prevents issuance that the CBO can refuse to issue the permit applied for.

[32] The Municipal Shelter By-law purports to change the existing rules and provide a more uniform approach to shelters/hostels across this recently-amalgamated city. It provides general locational criteria in relation to similar facilities with which the proposed hostel/housing project would not comply. However, the city examined it specifically and concluded that a specific permission for it should be provided. Nothing in the shelter by-law changes the status of the construction applied for as of the time of the permit application.

[33] In conclusion, Cameron J. considered the issue of "applicable law" correctly. We find no error in his conclusion that some future possible change to the Municipal Shelter By-law did not alter the correctness of the CBO's decision to issue the permits pursuant to her duty to do so under s. 8(2) of the *Building Code Act.*

Revocation of Permits Pending OMB's Final Disposition

[34] Cameron J. refused the appellant's request to revoke the building permits and order the CBO not to issue further permits for the MUC hostel/housing project until final disposition by the Ontario Municipal Board of the shelter by-law.

[35] We find that Cameron J. took into account the necessary interests of the parties, his jurisdiction, and all relevant factors. He did not err in law in refusing the appellant's request.

[36] For the reasons given, the appeal is dismissed.

[37] As for the request for leave to appeal from the costs order and the request for review of the quantum of that order, no ground for interfering with Cameron J.'s exercise of his discretion in fixing costs was advanced. Leave to appeal the cost order is refused.

[38] Counsel may make brief written submission in relation to the costs of this appeal, by the respondents by July 9, 2004 and by the appellants in reply, by July 16, 2004.

_____
MacFARLAND J.

_____
HOWDEN J.

_____
LINHARES de SOUSA J.

DATE: June 22, 2004

Kally's Restaurant Inc. v. Scarborough (City)

IN THE MATTER OF the construction of the Islamic Centre of Scarborough by the Islamic Foundation of Toronto and The Canadian Islamic Trust Foundation at Markham Road and Nugget
Avenue in the City of Scarborough
AND IN THE MATTER OF an application for a hearing and appeal
under Section 15 of the Building Code Act, R.S.O. 1980, c. 51

Between
Kally's Restaurant Inc., Applicant, and
The Corporation of the City of Scarborough, George Flemming, The Commissioner of Buildings for the City of Scarborough, Islamic Foundation of Toronto, The Canadian Islamic Trust Foundation, Respondents

Ontario Judgments: [1989] O.J. No. 1994
Action No. M186156/89

Ontario District Court - York Judicial District
Toronto, Ontario

Haley D.C.J.
November 22, 1989

Irving Marks, for the Applicant.
Lou Mangoff, for the City of Scarborough, Respondent.
Leo F. Longo, for Islamic Foundation of Toronto, Respondent.

HALEY D.C.J.:-- This application is brought by Kally's Restaurant Inc. under section 15 of the Building Code Act, R.S.O. 1980, c. 51. The application calls into question the issuing of a building permit to Islamic Foundation of Toronto for the erection of a building comprising a mosque, a day-care centre and a private elementary school. The building is to be erected on a 2.35 acre parcel of land at the southwest corner of Markham Road and Nugget Avenue in the City of Scarborough.

The Applicant is the owner of a 4.11 acre parcel of land at the northwest corner of that intersection. There it carries on a licensed restaurant with banquet facilities.

Because the City of Scarborough's Official Plan and Zoning By-law did not permit construction of the building for the uses proposed by the Islamic Foundation, the City Council adopted amendments to the Official Plan and Zoning By-law in December 1984 to encompass the Foundation's proposed uses. Specifically, the Official Plan was amended to add "Community Facilities" in addition to other uses for the area and a site-specific by-law was passed to provide new permitted uses in the following terms:

13. Community Facilities (CF)

Permitted Uses

- Churches and other uses related thereto

- Day Care Facilities

- Private Schools

The by-law also added a parking standard in the following terms:

113. Minimum of 7.7 parking spaces per 100 square metres or part thereof of gross floor area for churches and other uses related thereto.

This by-law, No. 20954, was passed by the City Council December 11, 1984 and then underwent a series of court applications and hearings before the Ontario Municipal Board. On August 6, 1987 a decision of the Ontario Municipality Board was rendered approving the amendment to the Official Plan and implementing the by-law.

On July 27, 1989 a building permit was issued by the City for the construction of Phase I of the Foundation's project. This phase comprised the building of a two-storey mosque with a prayer hall and rooms and facilities designed for use in

conjunction with it for religious activities and a corridor providing access to and from these facilities and the prayer hall. In the basement under the prayer hall was a cafetorium, a kitchen, washrooms, rooms specifically for religious purposes and a one-bedroom apartment for the caretaker. This building permit was issued on the basis that 148 parking spaces would be required under the by-law for Phase I. There is no evidence before me as to how the wording of the by-law had been applied by the Chief Zoning Plan Examiner for the City, J. Alan Brown, to arrive at 148 parking spaces but presumably there was no difficulty in the application of the by-law because all uses under Phase I were church and church related uses.

On July 28, 1989 a building permit was issued for Phase II of the project for the construction of day-care facilities and a private school and including the Phase I building. No parking standard applies to day-care and school uses under by-law 20954. Mr. Brown examined the plans for Phase II and having made Certain decisions by way of allocating use of the space as between church and church related use functions and day-care and private school functions, made a calculation under the parking standard as follows:

Parking required for Church Uses:

$$\frac{7.7 \times 1508.71}{100} = 116.17\ (117)\ \text{spaces}$$

Plus one space for basement apartment

Total Requirement: 118 spaces.

The drawings submitted by the Foundation in applying for the permit provided for 124 parking spaces. Accordingly Mr. Brown was satisfied that the by-law 20954 parking standard had been complied with and that all other matters also having been complied with, the building permit would issue.

It is the issuing of this building permit which the Applicant seeks to have me set aside under section 15 of the Building Code Act on the basis that Mr. Brown in making his allocation and his calculations wrongly interpreted by-law 20954.

Under section 15(3) I am given the power to rescind or affirm the order or decision of the inspector or chief official or take such action as I consider the inspector or chief official ought to take in accordance with the Act and the regulations, and for such purposes I may substitute my opinion for that of the inspector or chief official.

While Counsel for the Respondent agrees that I have such powers under the Act, he argues that in the circumstances of this case, having regard to the Decision of the Ontario Municipal Board dated August 6, 1987 it would be wrong and perverse for me to make a finding other than that of the Ontario Municipal Board which he says decided that the 124 spaces proposed by the Foundation were sufficient for the combined Phase I and Phase II project of the Foundation. On the other hand, Counsel for the Applicant argues that the approval of the by-law by the Ontario Municipal Board is in the nature of a legislative act and that being so, by analogy to principles for construction of a statute, no reference should be had to any intention or background of the Ontario Municipal Board preceding the making of the legislative act.

While the applicant's argument is a novel and interesting one, in my view of the circumstances of this application, it is not necessary for me to make that determination. I cannot agree with the position of Counsel for the Respondent that a Decision of the Ontario Municipal Board is binding on me acting under section 15 of the Building Code Act nor, in particular, that its hearings are relevant to the issue before me, i.e., did the Chief zoning Plan Examiner correctly interpret the by-law when he determined the number of parking spaces necessary to support the issuing of the building permit.

In making my determination I have considered carefully the Decisions of the Board given July 26, 1985, December 12, 1986 and August 6, 1987. As well there is the Judgment of the Divisional Court following an Appeal from the Board's July 26,

1985 Decision. From the reasons for its decisions it is clear

that the Ontario Municipal Board was not considering the correctness of the Chief Zoning Plan Examiner's interpretation of the parking standard in the by-law as a matter specifically before it. Indeed, the basic issue which the Divisional Court found necessary to direct the Ontario Municipal Board to consider was "the compatibility between the proposed use of the Foundation lands and the extended use of the lands by Kally's for a restaurant licensed to sell liquor".

In making its determination as directed the Ontario Municipal Board, as appears from the various Reasons for Decision, considered several matters including the project's effect on Kally's chances of obtaining further liquor licence permissions and the adequacy of parking facilities with regard to not only parking demands but also to on-site traffic circulation for school buses and parents' cars when picking up and delivering children to the school. In its July 1985 Decision, the Board considered the parking facilities but, in my opinion, made no finding as to the adequacy of 118 spaces. In fact, their discussion of the parking facilities is based on hypothetical statements rather than facts. Examples are:

> "possibly up to 26 spaces may be taken up by teachers and school administration staff"; "the preliminary site plan, filed as exhibit 14, apparently generates a requirement for a total of 118 parking spaces"; "If experience at other similar facilities is any indication of parking demand, perhaps 50 to 70 automobiles additional to school-related automobiles may reasonably be expected, if the current indication of usage is any indication of future usage".

The Board, however, did make a conclusion with regard to the applicability of the parking standards. It said at page 8 of the July 1985 decision:

> "The Board sees no reason why the mosque should be subjected to greater or different parking standards than those generally applicable to churches in the municipality and in this connection calculated on the area of the prayer space and associated areas such as shoe-rooms, washrooms, social areas related to the mosque and caretaker's quarters. Also, having regard for the mixed use nature of the development and the differing hours of operation of each component thereof, these parking standards should be appropriate for the total development."

In its Reasons of December 12, 1986 the Board is clearly concerned with traffic circulation and any suggestion that parking spaces would not be available at all times in order to assist in vehicular circulation. Again the Board supported the parking standard so that it would be consistent with that for other churches in the area but made no determination as to the interpretation of the parking spaces under the by-law.

In its Decision of August 6, 1987 upon which the Respondent particularly relies, the Board heard evidence from Mr. Brown as to his calculation of parking spaces and from a Mr. Middlebro' described as a qualified consultant in transportation planning and engineering. The Board concluded at page 12 as follows:

> "The Board accepts Mr. Middlebro's analysis of the parking requirements for the Foundation's development, including the utilization of temporary spaces. The Board finds that the number of parking spaces calculated by Mr. Brown and substantiated through the evidence of Messrs. Middlebro' and McPhaill, should be adequate to meet the needs of the facility and at the same time, not be so insufficient as to present the possibility of impacting Kally's parking
>
> facilities nor the integrity of Nugget Avenue as a public thoroughfare."

From its discussion of Mr. Middlebro's evidence it is clear that he included in his assessment of adequacy the use of certain spaces mentioned on page 10 of the Decision, namely,

> "another 25 spaces are available in a paved play area separating the grassed school yard from the permanent parking area and 8 tandem parking spaces in the school bus storage lane adjacent to the westerly wall of the proposed building, raising the number of possible spaces to 158".

From page 12 of the Decision it is clear that Mr. Middlebro's

opinion reflected the use of temporary spaces:

> "when Mr. Middlebro' estimated that demand might exceed capacity, he concluded that the 124 permanent parking spaces plus the temporary use of the other portions of the site referred to by Mr. McPhaill, would satisfy his upper-end peak week-day design period (Friday mid-day prayer), demand of about 140 vehicles."

It is clear to me, therefore, that the statement of the Board that the parking facilities were adequate, which I quoted above and which followed the analysis of the parking spaces, was based not on any application of the parking standard under the by-law, i.e., 7.7 parking spaces per 100 square metres of gross floor area but on all available spaces whether available temporarily or at all times. I am satisfied therefore that the parking issue was only one of the matters considered by the Board in making its determination of the issue as directed by the Divisional Court, i.e., as to the compatibility of the proposed use of the Foundation lands with the Kally's lands.

My responsibility under section 15 of the Code is not to assess the adequacy of any parking arrangements but rather to consider whether the Chief Zoning Plan Examiner properly applied the criteria of the by-law in the application of the parking standard set out in the by-law. Accordingly, I do not consider myself bound by the Ontario Municipal Board findings. Nor, if I were to find the plan examiner incorrect in his application of the parking standard do I consider I would be making a perverse finding.

I now turn to an examination of the meaning of the by-law to determine whether the chief official made the correct decision pursuant to the by-law in issuing the building permit and, in particular, whether he applied the performance parking standard correctly on a proper interpretation of the by-law.

For ease in reference, I quote again the permitted uses allowed by by-law 20954 namely:

Permitted Uses

- Churches and other uses related thereto

- Day Care Facilities

- Private Schools

It may be noted at this juncture that only churches have an extended meaning by "other uses related thereto." Day-care facilities and private schools are not so extended in the by-law. Clearly the City acknowledges that church buildings are often used for other than the holding of religious services. There are no problems with the meanings of the uses as they stand alone but only where there is an attempt to combine those uses as we have in this instance.

Attached to the church use only is a performance standard requiring a minimum number of parking spaces. The standard provides:

> Minimum of 7.7 parking spaces per 100 sq. metres or part thereof of gross floor area for churches and other uses related thereto.

The Islamic Centre proposed by the Foundation is a single building covering Phase I and Phase II which contains common areas which might be used for the purposes of one or other or all of the permitted uses under the by-law. For example, on all three floors there is a corridor which gives access not only to the prayer hall and its related activity rooms but also to classrooms and other school related rooms and in the case of the basement to rooms for day-care and kindergarten. As well it is the intention of the Foundation to have the cafetorium on the basement level used by both the members of the religious community and by the school children.

Mr. Brown was candid in his testimony that when he was faced with the problem of determining the gross floor area for the church and other uses related thereto he felt obliged to allocate areas of mixed uses based on a primary use approach. However, in doing this he decided he should treat the cafetorium entirely as a church related use and the corridors, by way of a trade-off, entirely as school use. When pressed in

his cross-examination he also indicated that he considered as well in determining primary use the number of days particular groups used the facility, the number of people using them and the number of times within that day that each group of users would use the facility. In addition he also considered the function of a facility to determine primary use in relation to the permitted uses. For example, the room marked "bookstore" which it would be possible to have used exclusively for religious purposes or exclusively for school purposes he determined would be used primarily by the school with the possibility of some religious books being available for sale.

It is instructive that Mr. Brown in making his allocation had regard to the plans which designated names for various rooms such as home economics classroom, administration office, health room, etc. and to these labels he applied his experience and common sense in assessing the use of the labelled facilities.

On only one or two small matters did he obtain any information from the Applicant themselves. He also says that he looked through a book which his wife had on the Islamic religion.

I find this evidence instructive when it is taken with the evidence of Mr. Posliff who was called by the Applicant as an architect with considerable experience in dealing with projects with religious uses. Using basically the same material on which Mr. Brown relied, Mr. Posliff's assessment of what was meant by church and other related uses was considerably different from Mr. Brown's. For example, Mr. Brown considered that the gymnasium, which included a stage, was a common facility in the public school system in Scarborough for elementary schools. Then judging from its proximity to the school area in the Foundation's building and its separation by the school and the corridor from the mosque section he decided that the gym formed part of the school premises and had nothing to do with the church use. Mr. Posliff on the other hand, from his experience in building churches, thought that churches included gymnasiums to attract youth through sporting activities with the hope that they would become associated with the church. He also thought the provision of meeting space through a gymnasium was part of the church's outreach to the community.

Mr. Nasir, the President of the Islamic Foundation testified that it was not the policy of the Islamic religion to use gym facilities to attract members as other religious organizations might do. I accept Mr. Nasir's evidence on this point. Mr. Posliff's conclusions point up the fallacy of trying to assess the principles and approaches of one religious group by analogy to another. Generally for this reason I put very little weight on Mr. Posliff's testimony as to customary church uses and in particular to the uses of the Pentecostal Church in Agincourt to decide what uses the Islamic Foundation intends for its Centre.

In any case, I am satisfied that there was no basis on a proper interpretation of the by-law for Mr. Brown to apply any use allocation whatever. I note the remark of the Ontario Municipal Board on page 11 of the Decision of August 6, 1987 "it was apparent from Mr. Brown's evidence that he was called upon to exercise considerable discretion under the terms of by-law 20954." I am satisfied that to adopt a method of allocation without any direction in the by-law is to assume a discretion which goes beyond the administrative framework which it is incumbent upon the city to provide in its by-laws for its officials.

I am of the opinion that there is another method for determining gross floor area which can be read from the face of the by-law. The parking standard makes no reference whatever to mixed uses or any reference to any other permitted uses under the by-law. It states clearly that there shall be a minimum of 7.7 for 100 sq. metres or part thereof of gross floor area for churches and other uses related thereto. A plain interpretation of that would allow Mr. Brown to calculate the gross floor area used for the church and all other uses related thereto without reference to the fact that any of these areas are also used under some other permitted use. Particularly is this so where other permitted uses have no parking standards attached to them. The approach therefore is to take gross floor area of the entire building and deduct from it that portion of the building which relates only to the day-care facility and the private school. This avoids the obvious absurdity which has occurred by applying Mr. Brown's allocation method where for Phase I when

there were only church and related uses the number of parking spaces was 148 while for Phase II where there was an addition of uses which did not attract a parking standard, the number of parking spaces was reduced to 118.

In my opinion, my reading of the by-law permits am easy application of the parking standard and the only discretion which must be exercised by the zoning examiner is in determining the gross floor areas of those uses which are not in any way related to "church or other uses". This discretion is well within the limits of any administrative act for the purposes of applying the by-law.

The only issue to be determined on the evidence before me is whether the gym is solely for school use or is combined with church use. I am satisfied on all the evidence that the gym is intended by the Foundation to be used only for school purposes and in support of that I agree with Mr. Brown's observation that it is separate from the religious side of the building and is in close association with the rest of the school rooms.

On my interpretation of the by-law the following areas should be excluded in the calculation of gross floor area for the parking standard.

Basement

Gymnasium
Home Economics Classroom
Day Care with storage area and washroom
Kindergarten with coats and shoes room
Girls' Change Room
Boys' Change Room
Stage

First Floor

Two classrooms
Health room
Teachers' Lounge and Meeting room
Library
Book Store
Guidance room
Administration office

Second Floor

Six Classrooms
Two Workrooms
Science and Art room

I also find that Mr. Brown erred in making the actual parking space calculation. First, the decided that if the calculation of the gross floor area resulted in any portion of area less than 100 square metres that such part required only one additional parking space. I am satisfied that the proper interpretation of this is that every square metre require .077 of a parking space and that for amounts of under 100 square metres the proportionate number of spaces should be determined. For example, if there were 50 square metres, this would attract 3.85 parking spaces and rounding it up to the nearest figure would mean 4 parking spaces.

Because I am not in a position to calculate the gross floor area to apply my interpretation of the by-law, I instruct the Chief Zoning Plan Examiner to rescind the outstanding building permit and make the necessary calculations in accordance with the principles of interpretation I have set out above. If the number of parking spaces required by the new calculation exceeds 124 the new building permit shall not issue on the basis of the proposed parking provisions. Should however the calculation produce parking requirements of 124 spaces or less, a new building permit shall be issued.

Unless the parties wish to speak to me within thirty days of the date of my decision, costs shall follow the event and shall be borne fully by the City of Scarborough and the Islamic Foundation.

HALEY D.C.J.

Lock v. Middlesex Centre (Township) Chief Building Official

Between
Michael Lock and Ian Goudy, applicants, and
Jim McConnell, in his capacity as Chief Building Official for
The Corporation of The Township of Middlesex Centre, The
Corporation of the Township of Middlesex Centre, Rick Howald
and Helga Howald, respondents

[2001] O.J. No. 3588 , Court File No. 30955, **Ontario Superior Court of Justice , Leitch** June 29, 2001.

Counsel:

Paul Vogel and Dawn Kershaw, for the applicants.
David Thompson, for the respondents, Jim McConnell and the Corporation of the Township of Middlesex Centre.
P. Morrissey, for Rick and Helga Howald.

¶ 1 **LEITCH J.**:— The Applicants seek an order rescinding Building Permit No. 0-195 of the Township of Middlesex Centre (the "Township") dated August 21, 2000 relating to the construction of a 1,500 feeder hog barn facility by the respondents, Rick and Helga Howald. Additionally, the applicants seek a declaration that the proposed construction fails to comply with the minimum distance separation formula set by the Ministry of Agriculture, Food and Rural Affairs ("OMAFRA") and contravenes the provisions of the Nutrient Management By-Law 98-051 and Comprehensive Zoning By-law 6550/96 of the Township.

RELEVANT PROVISIONS OF THE BUILDING CODE ACT

¶ 2 This is an appeal pursuant to s. 25(1) of the Building Code Act, S.O. 1992, c. 23, as amended. That section provides a right of appeal of a decision of a chief building official under the Act to any person who considers themselves aggrieved by such decision.

¶ 3 Mr. Jim McConnell, the Chief Building Official for the Township, issued the permit that is the subject of the appeal. Section 8(2) of the Act provides that a chief building official shall issue a permit for construction of a building unless, amongst other things, "the proposed building, construction or demolition will contravene this act or the building code or any other applicable law". In the regulations to the Act, the term "applicable law" is defined as "any general or special Act, and all regulations and by-law enacted thereunder, which prohibit the proposed construction or demolition of the building unless the Act, regulation or by-law is complied with".

BACKGROUND FACTS

¶ 4 The Howald's property is located with an Agricultural (A1) zone. The property owned by Mr. Lock is zoned Agricultural - Residential (AR). According to Mr. Lock's calculations, his property is 650 metres from the site of the proposed barn. According to the Township's calculations his property is 700 metres from the site of the proposed barn.

¶ 5 Section 3 of the Planning Act R.S.O. c. P.13 provides that in exercising any authority that affects planning matters, planning authorities "shall have regard to policy statements issued under the Act". Such a policy statement came into effect on May 22, 1996 and was amended effective February 1, 1997. As noted in its preamble, this statement provides policy direction on matters of provincial interest related to land use planning and development. In terms of agricultural policies, the statement generally provides that prime agricultural areas will be protected and in such areas agricultural uses and normal farm practices will be promoted and protected. As a further matter of policy the statement provides that new land uses and new or expanding livestock facilities will comply with minimum distance formulae.

¶ 6 Mr. Harry Huffman, an Agricultural Engineer with OMAFRA for 29 years, testified that separation is the best solution for incompatible uses and that agricultural engineers believed that an objective mathematical means should be applied uniformly across the province to determine the distance between incompatible uses. Ultimately, OMAFRA created the MDS formulae and according to the OMAFRA's implementation guidelines, these formulae and criteria are to be referenced in municipalities' official plans and included in by-laws and are to be applied in designations and zones where livestock facilities are permitted. As required by the Policy Statement and OMAFRA's implementation guidelines, the Township's Nutrient Management By-law and Comprehensive Zoning By-law incorporate the requirements of the minimum distance formulae.

¶ 7 The preamble to the Township's Nutrient Management By-law indicates that the by-law was enacted "for the purpose of reducing conflicts between normal farm practices in connection with livestock operations and non-agricultural uses on adjacent lands and for the purpose of protecting neighbouring lands from the effects of poor manure management practices". In addition to requiring that applicants for a building permit comply with the requirements of the Building Code Act and all other applicable law, the Nutrient Management By-law provides that a building permit for a livestock barn will not be issued unless the applicant submits a Nutrient Management Plan for the livestock barn and establishes to the satisfaction of the chief building official that the barn will be located in accordance with OMAFRA's Minimum Distance Separation Formulae II ("MDS II"). The Township's Comprehensive Zoning By-law similarly incorporates the MDS II requirements.

¶ 8 According to the background published by OMAFRA, the objective of minimum distance separation is "to prevent land use conflicts and minimize nuisance complaints from odour". This background also contains the following general policy statements:

> A principle of land use planning is the grouping together of compatible land uses and the separating of incompatible land uses.
>
> The agricultural community generally acknowledges that even with the best management, noise and dust cannot be eliminated from certain agricultural operations and that odours are associated with livestock production. Not all rural residents, including some farmers, can accept these conditions, particularly when the nuisance is perceived to exceed acceptable levels.
>
> In rural areas, this principle of separating different and incompatible land uses has not always been applied. Where there has been sufficient separation distance between differing rural uses, however, there have been few complaints. The distance separation will vary with the source of the potential complaint and the sensitivity of the neighbouring land use.
>
> The primary purpose and use of prime agricultural area should be for agriculture. Non-farm residents who seek the advantages of country life must be aware of the noise, odour and dust associated with normal farm practices.

¶ 9 MDS I provides minimum distance separation for new development from existing livestock facilities. MDS II provides minimum distance separation for new or expanding livestock facilities from existing or approved development. MDS II sets out distance factors between the proposed site and various categories of abutting land. A small factor is required for the distance to the nearest road allowance (side or front lot line), nearest side or rear lot line. A factor of one is required for the nearest neighbour's dwelling. The most onerous requirement relates to areas zoned or designated residential, institutional, active recreational or commercial urban areas and a factor of two is required for those areas. The implementation guidelines provide that a completed MDS II data sheet is to be submitted to the OMAFRA agricultural engineer or, in some municipalities, directly to the municipal office for determination of separation distances.

¶ 10 The Howalds have been interested in expanding their hog operation since at least the summer of 1999. At that time, they investigated the building of an addition to their existing barn. They applied for a minor variance to be relieved from complying with the required set back from the

lot line and the MDS II separation distance. In July 1999 the Township's planning department was of the opinion that Mr. Lock's property being a parcel with an Agricultural Residential zone ought to be considered as an area zoned residential within the meaning of MDS II. Subsequently the planning department obtained the opinion of Mr. Johnson, an agricultural engineer with OMAFRA, that the MDS II set back from areas zoned residential was intended only to apply to a cluster of four or more non-farm residential parcels and not intended to apply to a single non-farm residential parcel in an agricultural area. The first minor variance application was deferred at the Howald's request. The proposed addition was reconfigured to alleviate the issue of compliance with the MDS II requirements save and except for the Howald's own property. A second minor variance application was completed in August 1999. The Township's planning department reviewed that application. Mr. Huffman checked the MDS II calculation and provided his comments for and against the application. He proposed two solutions so that the MDS II requirements could be complied with. The Township's planning department did not support the amended application and advised the Howalds they had two viable options (as suggested by Mr. Huffman) - the barn could be located to the north or the northwest or the capacity of the proposed barn could be reduced.

¶ 11 Further to those recommendations, the Howalds made the application that is in issue on this appeal. As required by the Nutrient Management By-Law, they submitted a Nutrient Management Plan that was reviewed by Mr. Harry Huffman on behalf of OMAFRA. He provided the requirement opinion that the plan met OMAFRA's review criteria. Mr. Jim McConnell, as the Chief Building Official for the Township deposed in his affidavit that he considered whether the proposed construction met the requirements of the Building Code Act, The Building Code and any other applicable law as required by clause 8(2)(a) of the Act. He further deposed that, in particular he considered whether the proposed construction contravened the Environmental Protection Act, the Township's Comprehensive Zoning By-law and its Nutrient Management By-law.

¶ 12 With respect to his consideration of the compliance with MDS II, Mr. McConnell set out in his affidavit his calculations of the separation distances required for the proposed new barn compared to actual distances as follows:

Neighbouring land use or boundary	Required Distance	Actual Distance
Nearest Neighbour's Dwelling	475 m	545 m
Areas zoned or designated Residential, Institutional, Active Recreation or Commercial, Urban Areas	950 m	
Nearest Side or Rear Lot Line	95 m	152 m
Nearest Road Allowance (Side or Front Lot Line)	119 m	+/- 380 m

¶ 13 As Mr. McConnell further deposes, the nearest neighbour's dwelling is the McNaughton farmhouse, 545 meters from the proposed barn. The residence of Mr. Lock is to the east of the McNaughton residence and is between 650 and 700 meters from the proposed barn. Mr. McConnell considered whether the Lock residence should, for the purposes of the MDS II calculations, be regarded as being within an area zoned or designated residential. If so, then the required separation distance would be 950 meters, considerably more than the separation distance of between 650 and 700 meters. In para. 29 of his affidavit, Mr. McConnell concluded "That a few scattered non-farm residences within agricultural residential (AR) zoning did not convert this agriculturally designated and zoned area into a residentially zoned area for the purposes of the MDS II calculations" a conclusion which he indicated was consistent with OMAFRA's stated background to the MDS II guidelines and also in accordance with OMAFRA's interpretation of MDS II.

¶ 14 Mr. McConnell concluded that there was compliance with all applicable law and he was therefore obliged by clause 8(2)(a) of the Building Code Act to issue the building permit.

DISPOSITION

¶ 15 As noted previously, an "aggrieved" person may appeal a Chief Building Official's decision to issue a building permit. There was no issue taken with Mr. Lock's or Mr. Goudy's status to appeal Mr. McConnell's decision to issue the building permit. There was no issue that with respect to Mr. Goudy's property, the building permit application complied with the Comprehensive Zoning By-law and the Nutrient Management By-law in every respect. There was also no issue that the MDS II formula had no applicability to Mr. Goudy's property. In Mr. Goudy's affidavit sworn in support of the appeal, he expressed concern with the intensification of livestock operations across the province and questioned the adequacy of the MDS II formula and the Nutrient Management By-law. However, it was acknowledged by Mr. Hugh Handy, an expert in land use planning, nutrient management by-laws and the application of MDS II formula that such issues were not ones that Mr. McConnell could address in his review of building permit applications. Therefore the issue at this hearing was limited to whether the requirements of MDS II were complied with with respect to the Lock property. Specifically, the issue at the hearing was whether Mr. Lock's property located within an agricultural residential (AR) zone is an area zoned or designated residential within the meaning of the MDS II. Accordingly, these reasons deal with the issue relating to Mr. Lock's property.

¶ 16 With respect to the standard of review of the decision of a chief building official, I think it is necessary to refer only to the decision of Malloy J. in Runnymede Development Corp. v. 1201262 Ontario Inc. (2000), 47 O.R. (3d) 374 (S.C.J.) and her conclusion that a standard of correctness will generally be applied to decisions based on law or jurisdiction and a standard of reasonableness will be applied to questions of fact. With respect to questions of mixed fact and law, the more the decision of the chief building official is a determination of law, the closer the standard will be to correctness whereas if the decision is dependent upon factual determinations within the special expertise of the chief building official the more deferential will be the standard. In my view the issue on this appeal relates to Mr. McConnell's conclusion on a question of law and therefore the appropriate standard of review is one of correctness.

¶ 17 The Township's official plan indicates that one of its specific purposes is to emphasize the importance of agriculture in the Township and establish a policy framework which is aimed at protecting and preserving the agricultural resource base for future generations. The plan states that it has been formulated and coordinated to complement, support, and reinforce the continued existence of agricultural activities in the Township. The Official Plan specifically provides authority to the Council to consult with OMAFRA when addressing the flexibility and viability of farm parcels. Mr. Handy acknowledged on cross-examination that agriculture is by far the dominant land use in the Township and that in the Official Plan Council has stated a strong municipal commitment to agriculture. However, in his affidavit Mr. McConnell did not indicate that he made reference to the Official Plan in considering whether the building permit ought to be issued. Indeed, it has been held that official plans do not constitute "other applicable law" within the meaning of s. 8 of the Building Code Act and it is only zoning by-laws which implement official plans which constitute such law (see re: Woodglen and Co. Ltd. v. City of North York et al. 1984, 47 O.R. (2d) 614 (Div. Ct.) and 2847906 Canada Inc. (C.O.B.) Doug Millard Farms v. South-West Oxford (Township), [1998] O.J. No. 2710 (Gen. Div.)) Accordingly, Mr. McConnell was correct in not considering the Official Plan in his review of the building permit application.

¶ 18 As noted the issue on this appeal is whether Mr. McConnell was correct in his interpretation of the term "area zoned or designated residential" within MDS II. MDS II does not contain a definition of that term. Similarly, there is no definition of that term in the Nutrient Management By-law or in the Zoning By-law. MDS I contains a definition of "rural residential cluster" and defines this term as being four or more abutting lots. Mr. Johnson of OMAFRA applied this definition when asked for his opinion with respect to MDS II compliance on the first minor variance application. Mr. Handy considered such an approach erroneous. It

was Mr. Handy's opinion that Mr. Lock's property is an area zoned residential within the meaning of MDS II. He noted that there was nothing in MDS II that suggested that property would not be considered a residential area unless there was more than one lot zoned as residential. As a result, it was Mr. Handy's opinion that the location of the proposed livestock barn did not comply with the MDS II formula and therefore did not comply with the Nutrient Management By-law and the Zoning By-law. The applicants rely on Mr. Handy's opinion and further assert that on a plain reading of the term "residential area" Mr. Lock's property fits within that category of property which should be twice the minimum distance from the proposed barn and Mr. McConnell has made an error in law.

¶ 19 Mr. Huffman's opinion contrasted with Mr. Handy's. Mr. Huffman testified that according to the implementation guidelines to the MDS II OMAFRA reviews calculations to ensure proposed construction meets MDS II requirements but does not determine compliance with municipal by-laws. OMAFRA also reviews applications for minor variance and offers positive and negative comments on such applications particularly in relation to whether the MDS II requirements are met. In fact the Township's Planning Department, while reviewing the minor variance applications made in 1999 changed its interpretation of the requirements of MDS II in relation to Mr. Lock's property after consulting with OMAFRA. Mr. Huffman's opinion is that a distance factor of two is not required for a single family dwelling in an agricultural residential zone. It was his opinion that such a residence ought to be treated in the same manner as the nearest neighbour. He indicated that twice the normal separation distance is only required for areas where the primary use is other than agriculture and that type of priority use rather than agriculture will expand and should be protected.

The province by its policy statement has required municipalities to incorporate a province wide standard into its by-laws. Clearly Mr. McConnell adopted OMAFRA's interpretation of MDS II requirements in determining whether the Howald's application complied with applicable law. While Mr. Handy disagreed with that interpretation he acknowledged there was nothing wrong with Mr. McConnell consulting OMAFRA. Is OMAFRA's interpretation that a single lot zoned for residential use is not an area zoned or designated residential correct? I disagree with the applicant's assertion that such an interpretation is inconsistent with the plain reading of MDS II. Further I find that such an interpretation is consistent with the provincial policy statement and the published background to MDS II by promoting and protecting agricultural use and such an interpretation allows MDS I and II to be read in harmony which Mr. Handy acknowledged was appropriate. Therefore I conclude that Mr. McConnell was not incorrect in his conclusion that on the building permit application complied with MDS II and did not contravene the provisions of the Township's Nutrient Management By-law and Comprehensive Zoning By-law.

¶ 20 For the foregoing reasons this application is dismissed. If necessary counsel may make brief written submissions on costs within 30 days.

LEITCH J.

MARIANI v. TOWNSHIP OF PUSLINCH

DATE: 20040512
DOCKET: C39746

COURT OF APPEAL FOR ONTARIO

CATZMAN, GOUDGE and SHARPE JJ.A.

BETWEEN:

SHARON ANN MARIANI ***Plaintiff (Respondent)***

- and -

JOHN ADRIAN LEMSTRA, ANNE LEMSTRA, ALPINE HOMES LTD., MARINUS VAN ENGEN, THE CORPORATION OF THE TOWNSHIP OF PUSLINCH ***Defendants (Appellants)***

Timothy P. Bates and M. Christine Fotopoulos for the appellants, John Adrian Lemstra and Anne Lemstra
Anna Towlson for the respondent, Sharon Ann Mariani
Peter Haney for the respondents, Alpine Homes Ltd. and Marinus Van Engen

HEARD: April 8, 2004

On appeal from the judgment of Justice Thomas M. Dunn of the Superior Court of Justice dated February 14, 2003.

SHARPE J.A.:

[1] Sharon Ann Mariani purchased a home from the appellants, John and Anne Lemstra, pursuant to a standard agreement of purchase and sale. Some time after the transaction closed, Mariani discovered structural defects in the construction of the home. The issue on this appeal is whether the Lemstras are liable to Mariani for any of the cost of repairing or demolishing and rebuilding the home.

[2] The Lemstras built the home on a piece of vacant land approximately four years before they sold it to Mariani. John Lemstra acted as his own general contractor and did some of the work himself. Anne Lemstra assisted in the design of the home. It was to be the Lemstras' "dream home". However, due to a change in John Lemstra's employment, they had to move. They vacated the property and put it up for sale. The listing agreement described the home as "well-built". Ten months later, Mariani inspected the home with her own real estate agent and again with her father-in-law who had experience in construction. He advised her that the home was well-built and she entered the agreement of purchase and sale. The standard form agreement of purchase and sale contained an "entire agreement clause" at clause 22, which provided:

> There is no representation, warranty, collateral agreement or condition, whether direct or collateral or expressed or implied, which induced any party herein to enter into this Agreement or on which reliance is placed by any such party, or which affects this Agreement or the property or supported hereby, other than as expressed herein.

[3] The transaction closed approximately one month later on May 30, 1991. Some time after the closing, Mariani discovered a number of problems with the house. The most serious were cracking along a high centre bearing wall and excessive dampness in the basement. Mariani commenced this action in 1993. In addition to the Lemstras, Mariani sued the Corporation of the Township of Puslinch ("Township") alleging negligent inspection. She also sued Alpine Homes Ltd. and Marinus Van Engen, who had constructed the centre load-bearing wall. Over the next several years Mariani retained various experts to advise her how to remedy the structural defects of the centre wall and the building envelope. She did not carry out any significant repairs and, after the home became infected with toxic mould, she concluded that it was necessary to demolish the house and rebuild. By the date of trial, she had commenced the construction of a new home on the same property, but she had not demolished the house that is the subject of this litigation.

[4] Prior to the trial, Mariani entered into a "Mary Carter"-type settlement agreement with the Township. The Township paid Mariani $150,000. Mariani agreed that if all crossclaims against the Township were not dismissed on consent, Mariani would not enforce any judgment against the other defendants for more than their apportioned share of liability, which would avoid any claim for contribution against the Township. The Township also reached a settlement with Van Engen and Alpine Homes, whereby the latter agreed to dismissal of their crossclaim against the Township. The Lemstras and the

Township reached a partial settlement. The Township abandoned its crossclaim against the Lemstras, but the Lemstras were at liberty to advance their crossclaim against the Township. The Township agreed not to defend the crossclaim and the Lemstras undertook not to pursue any award of costs that might be made in their favour against the Township.

[5] In the action, Mariani alleged a long list of defects in the home. The two most significant were that the centre load-bearing wall was structurally unsound and that the building envelope was defective, resulting in water penetration. The trial judge found that these two defects were proved, but rejected all of Mariani's other complaints and claims, including her claims for damage to personal property, mental distress and the loss of rental of a basement apartment.

[6] The trial judge found liability on the part of both the Lemstras and the Township apportioned at seventy-five per cent and twenty-five per cent, respectively. The trial judge dismissed the claim against Alpine Homes and Van Engen.

[7] The trial judge found that the Lemstras were liable to Mariani for the cost of demolition and reconstruction. He assessed damages in the amount of $299,610. The primary basis for liability was the trial judge's finding that the Lemstras had "fraudulently (or negligently) misrepresented" the house as being "well-built". The trial judge also found that the Lemstras were liable on the ground that they knew or should have known of defects in the house and failed to disclose them, and that they were liable for the negligent construction of the home and the economic loss suffered by Mariani. The trial judge rejected the Lemstras' submission that Mariani had failed to mitigate her damages by acting more quickly to remedy the defects in the house. The trial judge found that the Township was liable for its negligence in failing to supervise or inspect the building and apportioned its liability at twenty-five per cent. Finally, the trial judge ordered prejudgment interest on the damages awarded from November 19, 1993, the date the statement of claim was issued.

[8] The Lemstras appeal the trial judge's findings of liability and, in the alternative, his assessment of the damages and his awards of prejudgment interest and costs. Although the Notice of Appeal is silent on the point, in their factum, the Lemstras ask this court to find liability on the part of Van Engen and increase the apportionment of liability as against the Township.

ANALYSIS

[9] The transaction between Mariani and the Lemstras was governed by a standard form agreement of purchase and sale. The agreement provided no warranties or guarantees as to the fitness of the property or construction of the house. Mariani had the opportunity to inspect the house and satisfy herself as to its fitness. She is bound by the venerable but enduring principle of caveat emptor - buyer beware. As a result, she does not seek remedy in contract. Mariani can only succeed if she can demonstrate fraud or the breach of some non-contractual duty owed to her by the Lemstras.

1. Fraudulent Misrepresentation

[10] In the listing agreement between the Lemstras and their real estate agent, the house is described as "well-built". The trial judge found that although the statement that the house was well-built was not part of the agreement of purchase and sale, "the plaintiff was aware of it and relied upon it to her detriment". The trial judge further found that as John Lemstra acted as his own contractor and did much of the work himself, "he either knew or must be taken to have known of the defects." The trial judge also found that, "[t]he statement made in the listing agreement that the house was 'well-built' and which the plaintiff says came to her attention prior to making the offer, I find to be a fraudulent (or negligent) misrepresentation".

[11] The Lemstras submit that the trial judge erred both in fact and in law with respect to this finding. I agree with that submission.

[12] It is common ground before this court that the elements of fraudulent misrepresentation are: (1) that the defendant made a false representation of fact; (2) that the defendant knew the statement was false or was reckless as to its truth; (3) that the defendant made the representation with the intention that it would be acted upon by the plaintiff; (4) that the plaintiff relied upon the statement; and (5) that the plaintiff suffered damage as a result.

[13] While it certainly could be inferred that the Lemstras represented to their own real estate agent that their home was well-built, in my view, there is no evidence in the record capable of supporting a finding of fraudulent misrepresentation in Marani's favour on elements (2), (4) or (5).

[14] With respect to element (2) and the knowledge or recklessness of the Lemstras, I cannot agree that because of his involvement in building the home, John Lemstra must be taken to know of the serious defects in construction. We were pointed to no evidence that would indicate that Lemstra had any knowledge that the house was defective. There is no legal

principle to support the finding that as the builder he is in law deemed or presumed to know of defects in the structure. In addition, this finding appears to be contradicted by the trial judge's other finding that the Lemstras "observed no significant problems with the construction or with the finished home" and that the structural problems only became known after the closing of the transaction. Finally, with respect to Anne Lemstra, there is no finding of knowledge or recklessness on her part to support liability against her in fraud.

[15] I have also concluded that there is no evidence in the record capable of supporting the trial judge's finding that Mariani relied to her detriment on any representation from the Lemstras that the home was "well-built". Mariani was asked to identify the documents she saw prior to entering the agreement of purchase and sale. Mariani specifically testified that she did not see the listing agreement and another document derived from the listing agreement that included the crucial words "well-built" home. None of the documents she saw before signing the agreement included the representation that the home was "well-built". While at one point Mariani testified that, prior to entering the contract, she believed the home to be a "custom home, energy efficient, well-built", there is nothing in the trial record that links that impression to anything said or done by the Lemstras. I would add here that the words "custom home, energy efficient, well-built" do not appear in the listing agreement. Finally, before deciding to make an offer, Mariani inspected the home twice, once with her own agent and once with her father-in-law who was involved in the construction industry and advised her that it "appeared to be a well-built home."

[16] Another significant problem with the trial judge's finding is that Mariani did not plead fraudulent misrepresentation. His finding that such a pleading is contained in paragraphs 16-21 of the statement of claim is plainly wrong in law. In these paragraphs, Mariani pleads that the Lemstras knew or ought to have known of the deficiencies and latent defects in the house, and that they had a duty to inform the plaintiff of such problems. This pleading is simply not capable of supporting an allegation of fraudulent misrepresentation, as the essential elements of the tort are not alleged.

[17] Accordingly, I would set aside the finding of liability for fraudulent misrepresentation.

2. Negligent Misstatement

[18] The trial judge appears to have also found liability for negligent misstatement although he did not consider the case in terms of the requisite elements of that tort.

[19] The elements of negligent misstatement set out in Hedley Byrne & Co. v. Heller & Partners Ltd., [1964] A.C. 465 are: (1) a duty of care based upon a special relationship between the plaintiff and the defendant; (2) a false statement by the defendant; (3) negligence on the part of the defendant as to the truth of the statement; (4) reasonable reliance by the plaintiff in the truth of the statement; and (5) the plaintiff suffering damages as a result.

[20] There is no finding with respect to the issue of duty of care. The relationship between the Lemstras and Mariani was governed by a standard agreement of purchase and sale for real estate that explicitly excluded reliance upon any representations. Consequently, it is difficult to see why a separate Hedley Byrne duty of care in tort would not be excluded as well. In any event, as I have already found, there is no evidence capable of supporting a finding of reliance by Mariani on any statement by the Lemstras that the house was "well-built" and that is sufficient to dispose of the tort of negligent misstatement.

[21] Accordingly, I would set aside the finding of liability for negligent misstatement.

3. Failure to disclose defects

[22] The trial judge also found that the Lemstras were liable for failure to disclose the defects in the construction of the house. The trial made the following finding:

> [S]ince John Lemstra himself acted as his own contractor and did much of the work on the construction of the premises, he either knew or must be taken to have known of the defects. The Lemstras' failure to advise the purchaser Mrs. Mariani of these defects, in my opinion, is actionable and sufficient to allow Mrs. Mariani recovery.

[23] A vendor may be required to disclose known latent defects: see P.M. Perell & B.H. Engell, Remedies and the sale of land, 2d ed. (Toronto: Butterworths, 1998) at 102. However, as I have already stated, the trial judge erred by imputing such knowledge to the Lemstras. I have already dealt with

negligent misstatement. Another possible head of liability would be innocent misrepresentation inducing the contract. However, if made out, that claim would support rescission of the contract, not liability for damages in tort for the cost of demolition and construction: see S.M. Waddams, The Law of Damages, looseleaf (Toronto: Canada Law Book) at 5.640-5.650. No claim for rescission has been advanced. Accordingly, if the trial judge intended to impose liability for some form of misrepresentation other than negligent or fraudulent misstatement, it is my view that he erred in law.

4. Negligent Construction

[24] While his reasons are not as clear as they might be, the trial judge also appears to have found that the Lemstras were liable for the economic loss flowing from the negligent construction of the home. He mentioned the leading case Winnipeg Condominium Corporation No. 36 v. Bird Construction Co., [1995] 1 S.C.R. 85, and he found that there were two latent defects that rendered the house dangerous. The first defect was the centre structural wall and the second defect was the problem with the building envelope and resulting moisture and eventual mould that made the house uninhabitable.

[25] Winnipeg Condominium establishes that a builder owes a duty of care to subsequent purchasers. As La Forest J. stated at para. 35:

> [I]t is reasonably foreseeable to contractors that, if they design or construct a building negligently and if that building contains latent defects as a result of that negligence, subsequent purchasers of the building may suffer personal injury or damage to other property when those defects manifest themselves. A lack of contractual privity between the contractor and the inhabitants at the time the defect becomes manifest does not make the potential for injury any less foreseeable. Buildings are permanent structures that are commonly inhabited by many different persons over their useful life. By constructing the building negligently, contractors (or any other person responsible for the design and construction of a building) create a foreseeable danger that will threaten not only the original owner, but every inhabitant during the useful life of the building [emphasis added].

[26] However, a claim for defective construction is a claim for purely economic loss, and recovery under the Winnipeg Condominium is subject to an important caveat. The structure must be dangerous, not merely shoddy, and it is only the cost of repairing the structure and restoring it to a non-dangerous state that is recoverable: see Winnipeg Condominium at para. 12.

> [T]he degree of danger to persons and other property created by the negligent construction of a building is a cornerstone of the policy analysis that must take place in determining whether the cost of repair of the building is recoverable in tort. As I will attempt to show, a distinction can be drawn on a policy level between "dangerous" defects in buildings and merely "shoddy" construction in buildings and that, at least with respect to dangerous defects, compelling policy reasons exist for the imposition upon contractors of tortious liability for the cost of repair of these defects.

[27] The Lemstras submit that the trial judge erred in three ways. First, they submit that the Lemstras owed no duty of care to Mariani sufficient to sustain liability for negligent construction. The Lemstras were not commercial builders. Unlike the commercial builder in Winnipeg Condominium, they were not building the house with the intention to sell it. The Lemstras built the home as their "dream home" with the intention to live it in indefinitely. It was only when their economic situation took a turn for the worst that they decided to sell.

[28] I do not agree with this submission. Anyone who builds a home for their own use must be taken to know that that their circumstances may change and that, someday, they may have to sell it. As the passage I have quoted above indicates, the duty is imposed not only upon building contractors, but also upon "any other person responsible for the design and construction of a building". See also Perell, supra at 143: "…[A] vendor who is also a builder assumes the same responsibilities as a third party builder."

[29] The Lemstras' second ground relates to the question of dangerousness. They submit that while the centre wall was unstable, the house was not dangerous in the sense that there was any risk to personal safety or of

imminent collapse. The trial judge found that the defective centre wall "rendered the premises dangerous" but then added:

> The various experts apparently did not conclude that it was unsafe in the sense that the house was likely to collapse but it is clear from that same evidence that the centre wall deficiencies made the house susceptible to movement or shifting in any significant wind, or as the case may be, snow load.

[30] The trial judge also found that "the proliferation of mould … presents a danger to the occupants of the house." The Lemstras argue that the toxic mould only developed after Mariani failed to take meaningful remedial steps to prevent the penetration of water into the house despite the advice of her own experts. The Lemstras say that even if the building envelope was defective, the defects could have been remedied at a much lower cost if the problems had been tackled in a timely fashion. The trial judge rejected the contention "that the proliferation of mould was simply a lack of maintenance by the plaintiff or indeed one that even now can be remedied". When it came to considering whether Mariani had acted reasonably to mitigate her damages, he found that, "[c]ertainly in the best of all worlds, in 1993 she could have spent substantial money to correct the problem but I cannot say that by acting as she did that she failed to mitigate the damages as a reasonable person might".

[31] I would not interfere with the trial judge's findings with respect to dangerousness. There was expert evidence that the centre wall was unstable and dangerous within the meaning of the Ontario Building Code, R.R.O. 1990. While those same experts agreed that there was no danger of imminent collapse, there was evidence that the defect made the building unstable and that, if not repaired, it might collapse under a heavy snow load and that if not repaired, "a catastrophic condition may prevail". Similarly, with regard to the problem with the building envelope, it is evident from what has actually happened that if not remedied, the entry of water into the structure can lead to a condition hazardous to health and to property in the home.

[32] In my view, the evidence on both defects is capable of bringing the case within the Winnipeg Condominium principle. That case does not require the level of immediate danger suggested by the argument advanced by the Lemstras. The operative principle is explicitly preventative. Recovery for the economic loss of repair is allowed to avoid the greater cost of recovery for personal injury should the danger materialize and this must mean that the plaintiff is entitled to claim for the cost of repairs required to avoid the danger and to prevent it from occurring. La Forest J. stated at paras. 36-37:

> If a contractor can be held liable in tort where he or she constructs a building negligently and, as a result of that negligence, the building causes damage to persons or property, it follows that the contractor should also be held liable in cases where the dangerous defect is discovered and the owner of the building wishes to mitigate the danger by fixing the defect and putting the building back into a non-dangerous state. …
>
> Apart from the logical force of holding contractors liable for the cost of repair of dangerous defects, there is also a strong underlying policy justification for imposing liability in these cases. …[T]he plaintiff who moves quickly and responsibly to fix a defect before it causes injury to persons or damage to property must do so at his or her own expense. By contrast, the plaintiff who, either intentionally or through neglect, allows a defect to develop into an accident may benefit at law from the costly and potentially tragic consequences. In my view, this legal doctrine is difficult to justify because it serves to encourage, rather than discourage, reckless and hazardous behaviour. Maintaining a bar against recoverability for the cost of repair of dangerous defects provides no incentive for plaintiffs to mitigate potential losses and tends to encourage economically inefficient behaviour.

[33] However, I do agree with the Lemstras' third ground, namely, that the quantum of damages awarded by the trial judge cannot be sustained as damages for negligent construction. The trial judge found that by the time of trial, the building had no value and that Mariani was entitled to the lesser of the cost of replacement ($300,000) and the difference between the price she paid for the property ($375,000) and the value of the land at the time ($100,000), namely $275,000, plus the cost of demolition ($23,000) for a total of $298,000. Under Winnipeg Condominium, at para. 42, Mariani is entitled only "to the reasonable cost of putting the building into a non-dangerous

state". As I have rejected the other grounds for liability, it follows that the damages must be assessed based on liability for negligent construction, and reduced accordingly.

[34] It is admittedly difficult to measure those damages on the basis of the findings of the trial judge, but in view of the extremely protracted course this litigation has followed, it is in the interest of all parties for this court to do the best it can in order to bring this matter to completion.

[35] The Lemstras say that at best, Mariani should be limited to the cost of the recommended repairs to deal with the two defects. In 1993-4, Mariani received estimates for $13,624 to deal with the problems with the building envelope and $6,000 to deal with the centre wall problem. However, Mariani considered this to be a "band-aid" solution, and the trial judge found that she acted reasonably in getting further estimates. The trial judge's factual findings are entitled to deference in this court, and I would not interfere. In 1998, there were two repair estimates, one for $100,657 and the other for $131,125. In my view, it is appropriate to award Mariani damages in the amount of $100,657 for negligent construction on the basis that the structure could have been restored to a non-dangerous condition for that amount.

[36] Mariani is entitled to prejudgment interest on that award at the rate prescribed by the Courts of Justice Act, R.S.O. 1990, c. C.43, but having insisted on postponing the repairs, she should not be awarded prejudgment interest from the date of the statement of claim, but only from the date the cost would have been incurred. I would take that to be the date of the estimate upon which the award is based, namely October 29, 1998.

[37] In my view, there is sufficient evidence of Anne Lemstra's involvement in the design and construction of the house to render her liable for negligent construction and, accordingly, for these damages.

5. Liability of Alpine Homes and Van Engen

[38] I see no basis to interfere with the trial judge's finding that Alpine Homes and Van Engen are not liable for any portion of the damages awarded to Mariani and I would dismiss the appeal against them.

CONCLUSION

[39] Accordingly, I would allow the appeal in part and vary the judgment at trial by

1. Substituting in paragraph 1 damages assessed at $100,657.

2. Amending paragraph 2 to reflect the reduction in the damages payable by the Lemstras to $75,493 in view of the apportionment of liability with the Township.

3. Amending paragraph 3 to provide for prejudgment interest at the rate prescribed by the Courts of Justice Act from October 29, 1998.

[40] In their submissions, the parties did not address the effect or impact of the settlement reached between Mariani and the Township upon Mariani's entitlement to enforce the judgment against the Lemstras. Accordingly, these reasons do not touch upon that issue.

[41] I would not interfere with the trial judge's costs assessment of quantum of the trial costs. However, the appellant shall have ten days from the release of these reasons to make written submissions as to the effect, if any, of this judgment upon the trial costs, and the respondent shall make any reply within ten days thereafter.

[42] The appellants have achieved substantial success on appeal and I would fix their costs of this appeal at $30,000 inclusive of GST and disbursements. Alpine Homes and Van Engen are entitled to their costs of the appeal against the appellants fixed at $3,500 inclusive of GST and disbursements.

Released: "MAY 12 2004" "MAC"

"Robert J. Sharpe J.A."
"I agree: M.A. Catzman J.A."
"I agree S.T. Goudge J.A."

THE DISCLOSURE DISPUTES

Affidavits	**Hearing**			
Ryan's requests	**Carroll's response**	**Respondents**	**City**	**Order**
1. Sworn copies of informations	Respondents told they could obtain sworn copies from the court	Has disclosure		
2. Affidavits of service for each summons	Respondents told they could obtain sworn copies from the court	Has disclosure		
3. Copy of unsafe work order on count 6	Already provided	Has disclosure		
4. Certificates of appointment for all inspectors who attended the property	Already provided	Has disclosure		
5. *C.v.*s and qualifications for each inspector attending the property	Not relevant		Does not have this material	No order: the City does not have the material
6. Balance of *Building Code* in Mr. Carroll's possession	Available at library and on Internet			Irrelevant or unnecessary: defence has access to the legislation
7. Notes and documents showing demolition has taken place	Already provided			No order: accepts City's position that it has nothing else to provide
8. City's policies, by-laws and regulations that the by-law officer was authorized to enforce	Not relevant: matter for argument			Ordered disclosure
9. Documents and evidence to establish use of the property	Not relevant: matter for argument			No order: not relevant
10. Building permits for each property	Municipal *Freedom of Information Act* requires respondents to provide consents from previous owners			No order: not relevant
11. Documents showing building unsafe at relevant time, which portions are unsafe and why	Already specified in unsafe order: remainder of request not relevant		Has no other material to	No order: accepts City's position

			disclose	
12. City's maintenance and occupancy by-law	Irrelevant because respondents not charged under this provision			Ordered disclosure
13. Building and demolition permits that would authorize an inspection under s. 12 of the *Building Code Act*	Matter for argument		Ryan did not apply for permits	No order: accepts City's position
14. Evidence of construction taking place	Disclosure given			No order: accepts City's position
15. Evidence that respondents failed to comply with unsafe orders between June 21, 2002, and July 15, 2002	City has given disclosure and particulars of the unsafe order in count 6			No order: accepts City's position
Evidence of when on July 5, 2002, the various orders were obstructed	Evidence of obstruction already provided			No order: accepts City's position
17. Evidence of relevant duties to be carried out by city inspectors and when they were prevented from carrying out their duties	Disclosure already given, and particulars given in Carroll's letter			No order: accepts City's position
18. Particulars of all site visits	Affidavit notes of relevant site visits already produced: affidavit gives additional disclosure of index and notes of site visits between June 18, 2001, and August 16, 2002			Order for additional disclosure for site visit on July 16, 2001

Peacock v. CBO of Norfolk County

COURT FILE NO.: 0002/02

DATE: 2003/07/03

ONTARIO

SUPERIOR COURT OF JUSTICE

B E T W E E N:

MARILYN PEACOCK and REGINALD PEACOCK

Appellants

and -

WAYNE CAMPBELL, CHIEF BUILDING OFFICIAL OF THE CORPORATION OF NORFOLK COUNTY

Respondent

Thomas A. Cline, Q.C., for the Appellants

Keith M. Jones, for the Respondent

THE HONOURABLE MR. JUSTICE D.J. TALIANO

[1] This is an appeal by Marilyn and Reginald Peacock ("the appellants") from the decision of Wayne Campbell, Chief Building Official for the Corporation of Norfolk County (the "County") denying a building permit for construction of an addition to the appellants' hog barn on their 50-acre parcel of land located on part of lot 5, concession 13. The decision to refuse the building permit was based on the passage of an interim control by-law (the "By-law") that froze intensive hog developments for a period of one year in the County, pending a study of their environmental impact. The development freeze and the environmental study, form the backdrop for this clash between individual rights and the public health concerns triggered by the lessons of Walkerton.

[2] The appellants take the position that:

(a) their rights to a building permit crystallized before passage of the By-law and alternatively, that the county manager interfered in the performance by the Chief Building Official of his legislative duties and this constitutes an extraordinary circumstance that requires the intervention of this court;

(b) the By-law only regulates the use of land and/or structures, but does not preclude the erection of a structure on the land;

(c) the 50-acre parcel had the status of a prior non-conforming use for the purpose of an intensive hog operation and was therefore exempt from the By-law;

[3] Counsel on behalf of the Building Official takes the position that:

(a) the building permit was properly refused because of the prohibiting By-law which had been passed by the time the Building Official considered the application;

(b) the application was dealt with expeditiously and within normal time parameters free from any bad faith or unreasonable delay;

(c) although the appellants may have satisfied the requirements of a prior non-conforming use, that does not entitle them to expand their use, particularly when the use and/or its expansion may endanger the community;

(d) the Corporation of the Town of Norfolk, although not a party to these proceedings, moves for a stay of proceedings or in the alternative for a stay of the issuance of a building permit, on the grounds that an extension or addition to the existing operation, may irreparably harm the source of water supply for the Town of Simcoe. Counsel for the Town relies on section 106 of the *Courts of Justice Act*, which empowers the court to grant a motion by any person, whether or not a party, to stay any proceedings on such terms as are considered just.

BACKGROUND

[4] The appellants and their three sons farm approximately 1200 acres in the County, including a 50-acre parcel which they selected for an intensive hog operation. Their business plan was to build a barn in two phases to house 2,000 hogs. The first phase would see the construction of a barn to house 1000 hogs and the second phase, which was to be an addition to the first building, would house the remaining 1000 hogs. The reason for phasing was that the appellants could then satisfy the minimum distance separation formula. Without phasing, they could not meet the formula. However, following the Walkerton tragedy, intensive farming operations became the epi-centre of fear and controversy and in October 2000, elected officials in the County, by a close vote, debated and then defeated a resolution calling for the passage of an interim control by-law freezing intensive hog operations in the region. Shortly thereafter, (November 7th to be exact) the appellants presented an application for a building permit for their first phase of production. A building permit was issued on November 29, 2000.

[5] Armed with the building permit, the appellants entered into contracts with commercial interests. They arranged financing predicated on a 2000 hog operation and started construction of a driveway. They installed hydro and gas lines. They started work on a well capable of delivering 20 gallons of water per minute, a volume which is necessary to the operation of a 2000 head hog farm.

[6] The appellants' activities generated public alarm because the development was located less than 1,000 metres up-stream from municipal water wells used to supply water to the Town of Simcoe. In addition, the waste that would be produced by the appellants' hogs was to be spread in the form of manure on other lands owned by the appellants. All of the target lands were located within the Davis Creek sub-water shed which connects to other municipal wells. Accordingly, the location of the proposed barn site, the manure spreading sites and their proximity to the municipal water supply raised justifiable fears in the community. The public furor prompted the General Manager for the Planning and Economic Development Services of the County to memo the Chief Building Official requesting him to "detain any building permit applications for hog operations until further notice".

[7] Section 38(1) of *The Planning Act of Ontario* permits a municipality to pass a By-law to be in effect for a period of one year, which may be extended for a further one year, to prohibit the use of land, buildings or structures, within the Municipality, for purposes as set out in the By-law. As a pre-requisite to passing this interim control by-law, the Municipality must, by by-law or resolution, have directed a review or study to be undertaken in respect of land use planning policies within the Municipality. No notice is required although the Town did give such notice in this case.

[8] On December 4, 2001, in response to the public outcry, the Council passed Resolution 15 authorizing staff to proceed with a Norfolk groundwater study in accordance with Provincial funding arrangements, as a precursor to the subsequent passage of the Interim Control By-law.

[9] Notwithstanding the controversy that surrounded their proposed development and notwithstanding the Walkerton tragedy and the identification of agricultural waste as the source of contamination of Walkerton's water, the appellants not only proceeded with the construction of the first phase, but also submitted their plans for the second phase add-on building, on December 17, 2001, apparently indifferent to the risks that their plans might pose to their neighbours.

[10] It is not disputed, that the appellants' application complied with all of the County's regulations on the date that the application was filed. Nor is it disputed that the County accepted the application and placed it in the normal rotation behind other applications previously received.

[11] However, pursuant to the earlier resolution authorizing the ground water study, on December 19, 2001, the County passed the By-law temporarily prohibiting the use of land, buildings or structures within the County for intensive hog operations. This prohibition was subsequently extended to December 18, 2003.

The purpose of the study was to obtain the information necessary to implement land use planning policies for the protection of the Town's water supply. The study specifically authorized an assessment of the impact on water tables of the Peacock application.

[12] After inviting proposals, on May 14, 2002, Waterloo Hydro Geologic Inc. was awarded the contract for this assessment. It was expected to have a draft report available in March 2003 and a final report by May 1, 2003.

[13] The passage of the motion directing a study of the issue and the Interim Control By-law which froze intensive hog operations for a period of one year, prompted the deputy Chief Building Official to deny the permit on December 28, 2001. The appellants were so informed on January 2, 2002.

[14] The appellants continued working on the first phase of their operation which became operational in March, 2002.

[15] It is not disputed that the turn-around period for dealing with applications such as the appellants' was 11 working days. The appellants' application was dealt with in 8 working days.

[16] The appellants subsequently submitted a fresh application on March 21, 2001, this time for a stand-alone barn with capacity to house 1,000 hogs for their 50-acre parcel. This application was also rejected by reason of the By-law. The merits of the application were not assessed for compliance with other applicable requirements.

[17] The appellants concede that they did not undertake any surface or groundwater study to determine if their operation would have an adverse affect on the environment. Equally troubling is the fact that the appellants chose the site for their hog operation based solely on economic considerations. Their proposed development raises serious concerns the specifics of which are detailed in affidavits filed on behalf of the County by Stan Miazga, General Manager for the Planning and Economic Developments Services of the County of Norfolk.

[18] Mr. Miazga states that the County is concerned with the potential leakage from the manure pits but that technology exists for the provision of early warning systems which can detect the leakage of manure from manure pits. The appellants however did not incorporate such a system in their plans. In addition, the use of a non-permeable membrane such as that used by some hog producers, is not proposed in the appellants' operation. Nor does the appellants' proposal include any protection for a catastrophic spill. Finally, the Nutrient Management Plan which was filed by the appellants and approved by the Provincial Agency in charge of such matters, may not have taken into account the proximity of the Town wells since there is traditionally little consultation between the Town and the agency regarding Nutrient Management Plans.

[19] Mr. Miazga goes on to state that the Ministry of the Environment requires Municipalities to undertake engineering reports for the protection of ground-water resources that serve municipal water supplies. Such a report was commissioned by the Town and was performed by MacViron Engineering and Environmental Science. It is dated June 20, 2002. The report identifies the wells serving the Town of Simcoe as the "North-West Well Field" and confirms that they are under the direct influence of surface water. Article 3.10.2 of that report deals with the potential risk to municipal wells of the Peacock operation and states:

...the farm is adjacent to a tributary of Patterson Creek, which flows through the well field. Contaminants generated at the hog farm, if migrating to the creek, could readily be transported to the well field and into the municipal supply.

[20] Figure 21 of the Report shows the two year capture zone affecting the North-West Well field, which includes the Peacock property, barn site and fields for the spreading of manure pursuant to the Nutrient Management Plan.

[21] In an affidavit dated April 24, 2003, Mr. Miazga, indicated that part 3 of the draft report of the Groundwater Study deals with an analysis of susceptibility of a water aquifer to contamination and defines "susceptibility" as the "tendency or likelihood for contaminants to reach a specific position in the groundwater system after introduction as some location above the uppermost aquifer". A susceptibility index defines the risk as being "low, medium, or high" based on the depth and type of soil above the water table. The report points out that once the groundwater is contaminated, it is impractical to consider groundwater remediation as a solution. The key, is prevention. The area where the municipal wells is located, is in the Norfolk Sand Plain, which is identified as an area of high susceptibility for impacts to groundwater. The Peacock barn site is located in an area of medium susceptibility.

[22] The Town has over 14,000 residents relying on groundwater with over 8,000 cubic metres of groundwater being used per day and the Peacock farm is identified as a potential contaminant source. The report confirms that intensive livestock operations can degrade groundwater sources if waste products are not adequately stored and properly applied. Areas that have shallow depth to the aquifer are more susceptible to potential livestock impacts.

[23] Given that the Peacock operation is in the Wellhead Protection Area and is also located in an area of high to medium susceptibility to the wells in question and given that the overburden aquifer has been assigned medium to high susceptibility, the consultant stated that it was essential to monitor activities within the wellhead protection areas to determine if there is a risk of contamination under current conditions. For this reason, if a permit is to issue, the County seeks a stay of the proceedings or a stay of the issuance of a building permit for a 90 day period to permit the County to examine the appellants' existing manure pit to determine if it is safe, to examine the building for compliance with safety requirements and to install measuring devices to monitor the effectiveness of the pit. The County also proposes to investigate the appellants' Nutrient Management Plan to determine whether the County's wells were taken into account in establishing the requirements of the Plan. All of these enquiries are proposed by counsel for the County to be conducted at the County's expense.

[24] Counsel for the appellants submitted that the leading case on the stay issue is ***Varnam v. Canada (Minister of National Health and Welfare)[1]***, which holds that to justify a stay the moving party must satisfy the court that (a) continuance of the action would work an injustice because it would be oppressive or vexatious to the moving party or would be an abuse of the process of the court in some other way; and (b) the stay must not cause an injustice to the responding party.

[25] With respect, this decision and the others cited by counsel for the appellants, refer to a stay that would have some final impact upon an action. However, the test for an interlocutory stay is quite different and was set out in ***RJR-MacDonald Inc. v. Canada (Attorney General)[2]***, where the court states that an interim stay may be granted when (a) there is a serious issue to be tried; (b) the moving party will suffer irreparable harm if the order is not granted; and (c) the balance of convenience favours granting the stay because the harm to the moving party outweighs the potential harm of the responding party.

[26] In ***Ottawa(City) v. Ottawa(City) Chief Building Official[3]***, the Divisional Court also dealt with a hog farm case, holding that the risk of environmental damage should be categorized as irreparable harm because of the "permanent loss of natural resources" and the public interest and public safety issues. On the balance of convenience, the court held that public health is of far greater importance than the harm to private economic interests. It should be noted that in ***Ottawa,*** as here, the applicant continued with construction in spite of the pending court action and with knowledge of the public health risks involved. Those factors led the court to grant the interim stay.

[27] ***Ottawa***is very similar to the case at bar, because the appellants have not only not considered the consequences of their actions on the Towns' drinking water, but even when the possible consequences were clearly defined, they continued to vigorously assert their rights without accommodating the public concerns that have been raised. In my view, even if the appellants are entitled to a building permit, this is a case for the exercise of the discretion in favour of granting a stay of the issuance of a building permit for a period of 90 days upon the terms proposed by the County.

CRYSTALLIZATION ISSUE

[28] The appellants argue that the Chief Building Official had no discretion to refuse to issue the permit because all of the statutory requirements had been fulfilled by the appellants at the time of the filing of their application on December 17th, two days prior to the passage of the By-law. Counsel for the appellants argues that the appellants' rights to a building permit crystallized on December 17th when they filed their application, at which time all of the requirements necessary for the issuance of the building permit had been satisfied.

[29] The respondent takes the position that by the time the Peacock application was considered in the normal course of business and within appropriate time parameters, the County had passed the By-law which amounted to "other applicable law", which prohibited him from issuing the Building Permit, in accordance with s. 8(2)(a) of *The Building Code Act*, 1992. That section provides:

s.8(1) No person shall construct or demolish a building in a municipality... unless a permit has been issued therefore by the chief building official

(2) The chief building official shall issue a permit under subsection (1) unless,

(a) the proposed building, construction or demolition will contravene this Act or the building code or any other applicable law;

[30] The court's jurisdiction in this matter comes from s. 15(3) of the *Building Code Act* which provides:

Where an application is made to a judge for a hearing under ss (1), the judge shall appoint a time for and hold the hearing and may rescind or affirm the order or decision of the inspector or chief official or take such action as the judge considers the inspector or chief official ought to take in accordance with this *Act* and the regulations, and for such purposes the judge may substitute his or her opinion for that of the inspector or chief official.

[31] Counsel for the appellants relies on the Ontario Court of Appeal's decision in ***Re Teperman and Sons Ltd. and City of Torontoet al[4]***. In this case, the applicant had applied to the Building Commissioner of Toronto for a demolition permit on May 7, 1974. At the time, the application complied in all respects with governing by-laws and was supported by the requisite material. However, the commissioner withheld the issuance of the permits on the grounds that some of the dwellings were still occupied. On June 28, 1974, legislation empowering a municipality to declare an area of demolition control was enacted and the City immediately declared the entire area of Toronto an area of demolition control. The commissioner denied the permit on the ground that the application was governed by the subsequent legislation. The Court of Appeal held that ***Teperman's*** right to a permit crystallized on May 7, and survived subsequent legislation in the absence of express or implicit language in the legislation for a retrospective effect. If **Teperman** was followed literally, the appellants may very well have been entitled to a building permit. However, there are aspects of **Teperman** that are distinguishable from the case at bar.

[32] In ***Teperman*** that there was significant administrative delay, or what subsequent cases have identified as bad faith dealings on the part of the municipality, which distinguishes the case from the case at bar. In addition, the disposition in ***Teperman*** involved an interpretation of legislative provisions quite unlike the legislative provisions governing the case at bar. For instance, s. 38(1) of the *Planning Act* gives a municipality extraordinary powers to plan appropriate planning strategies. It would not serve the spirit and purpose of the legislation if the courts were to either undermine the actions of municipal government in matters that are uniquely within their legislative competence or to place unnecessary obstacles in the way of their effective implementation.

[33] Finally, it should be observed that subsequent cases have not interpreted ***Teperman*** literally. Perhaps that is why it is difficult, if not impossible to reconcile the results in some of the crystallization cases referred to by counsel.

[34] For instance in ***Woodglen and Company Ltd and City of North York et al[5]***, an application for a building permit was refused even though the application complied with applicable zoning by-laws, on the ground that the proposed single family dwelling did not conform to a dated Official plan which had never been adopted by the municipality. On an appeal from the building official's decision, Haley CCJ. concluded that the official plan was not part of the "applicable law" and the chief building officer was therefore obliged to issue the permit. On appeal to the Divisional Court, 26 M.P.L.R. 40 at 45, Southey J. held that the trial judge was right to conclude that the permit should have been issued because "at the date of the application" the applicant complied with all relevant and applicable laws. The stated intention of the municipality to rezone to prohibit such construction at a future date was not a valid reason for refusing or postponing the issuance of a permit. The court went on to state that a judge sitting in review of the chief building official's decision is to do what the judge considers the inspector or chief official "ought to have done". In discussing the practice of permitting a municipality to adjourn a hearing in order to pass restricting legislation to affect the application in question, Southey J. added this further observation at p. 47:

Municipalities no longer have the need to delay an application for a permit in order that new zoning by-laws may be made effective, because they have the power under s. 37 of the *Planning Act*, S.O. 1983, c. l, to pass interim control by-laws, to be in effect for one year, when land use policies are being reviewed or studied in the municipality or in a defined area. Such by-laws may be passed without prior notice or hearing.

[35] I interpret that passage to mean that it was the view of the court, albeit in obiter, that passage of an interim control by-law subsequent to an application for a building permit could prevent the issuance of the permit.

[36] In ***H and D International Group v. Toronto[6]***, Corbett CCJ. held that an interim control by-law passed *after* the decision of the building commissioner to deny an application for a building permit was not "other applicable" within the meaning of s. 6(1) of the *Building Code Act*. However Madam Justice Corbett went on to hold that the rights of the applicant should be determined on the date of the decision of the Chief Building Inspector.

[37] Hogg CCJ. made a similar finding in ***Summit Glen Development Corp. v. Toronto (City)[7]***, concluding that the judge hearing the appeal was to place himself in the shoes of the official at the time the decision was made. In doing so he stated that he was following the law as stated by Southey J. in ***Woodglen*** and Corbett CCJ. in ***H and D***.

[38] In ***Quay West v. Toronto[8]*** the applicant developer sought an order for mandamus to compel the issuance of a building permit. The applicant had sought a building permit in August 1988, following which the respondent passed an interim control by-law which prohibited the proposed use. It was argued that the developer's right to a permit crystallized on the date of his application for a permit. If the permit should have been issued in August 1988, the subsequent passage of the Interim Control By-law, he argued, was not a valid ground for the subsequent refusal to issue the permit. However, the Divisional Court held that s. 34(9) of the *Planning Act* did not exempt the erection of buildings for which a permit ought to have been issued before the effective date of the zoning by-law but only buildings for which a permit has in fact been issued which was not the case here. Further the town had not been under a duty to issue the permit when the application was originally made because at that time there had been no site plan approval. Nor was there any lack of good faith or an improper purpose for enacting the interim control by law. In separate but concurring reasons, Saunders J. held that a mandamus order should not issue even where there might have been a prior duty to issue a permit, where an interim control by-law prohibited it. Leave to appeal this decision to the Ontario Court of Appeal was refused (1989), 47 M.P.L.R. 109n.

[39] Finally, in ***Sixteenth Warden Ltd. v. Markham (Town) Chief Building Official[9]***, the appellants sought to construct a warehouse membership club store and submitted a site plan to the town. Council convened a public information meeting on the site plan and subsequently did not approve the application. The chief building official subsequently refused to issue a building permit, citing the lack of a site plan agreement with the town. Council then passed an interim control by law prohibiting a retail warehouse in the Town. Day J. held that the town had failed to control development in a systematic and responsible way and acted improperly by trying to sabotage the applicant's application. In addition, the site plan agreement was not "any other applicable law" within the meaning of s. 6(1)(a) of the *Building Code Act*.

[40] In arriving at his decision, Day J. considered the decision of Blair, CCJ. in ***McDonald's Restaurants of Canada Ltd. v. Humm[10]***, which held that the legal right of a person to use his property as he sees fit and to have a building permit is to be judged as of the date of the hearing and is not in effect stabilized as of the date of

the application for the permit. Blair, CCJ. held that to hold otherwise, would preclude the council from legislating with respect to the subject.

[41] Day J. also considered the decision of Matthews CCJ in ***Greengables Holdings Inc. v. Scarborough[11]*** where he stated that the right of the applicant is to be judged as of the date of the hearing.

[42] In arriving at his conclusion, Day J. observed that the ***Woodglen*** decision was outside of the context of an interim control by-law passed subsequent to a permit application and refusal, and he went on to state:

Consequently, I do not consider myself bound by any decision which relies upon Woodglen as authority for the proposition that an interim control by-law passed subsequent to a permit application or refusal cannot serve to bar development.

[43] Day J. determined that the application before him did not revolve around when the applicant's rights crystallized but rather around the proper interpretation of s. 34(9) of the *Planning Act* which he found had been passed as a response to "the historic tensions between the competing interests of property owners and municipalities". In his analysis he relied on the Report of the Planning Act Review Committee (1977) which identified the object of the legislation as promoting the use of interim development control in a systematic and responsible manner that protects the rights of the affected parties. He then went on to consider the respondent municipality's actions and concluded that the municipality did not use the Interim Control By-law in a systematic and responsible way with a view to protecting the rights of affected parties and he ordered the permit to issue.

[44] In ***County Pork Ltd. v. Ashfield (Township)[12]***, the trial judge determined that the applicant's right to a building permit was to be determined as of the date of the filing of their application for a building permit and since an interim control by-law had been passed prior thereto, the appellants were not entitled to a building permit.

[45] The foregoing review illustrates that the ***Teperman*** principle has not been literally applied. Although some cases have followed it literally, those cases usually involved bad faith dealings on the part of municipal government. Where bad faith has not been a factor, the time frame for crystallization of rights has been expanded to the time when the building official makes his decision and in other cases the time frame has been extended even to the time of appellate review. The public health objectives that prompted the passage of the By-law mandates the adoption of the expanded time frame and I say that for several reasons. In ***Ottawa (City) v. Boyd Builders[13]***, the Supreme Court of Canada held that an applicant has a prima facie right to a permit, which may only be defeated if, prior to filing that application the municipality acted expeditiously and in good faith to express an intention to change the law. Although s. 8(2) of the Building Code Act has since been enacted to replace the **Boyd** principle, nevertheless the case is still useful in providing guidance as to the nature of the right that the filing of the application triggers. In my view, it is a technical right which in the circumstances of this case, must be subordinated to the greater public interest served by the Interim Control By-law. Walkerton was a wake-up-call, particularly to rural communities. The County, in good faith, and in a systematic and responsible way, has tried to respond to it by commissioning a study of the ground water issue and by freezing development until such time as the appropriate safeguards could be implemented to avoid the same tragedy occurring in the County. The courts must interpret such legislation in an expansive manner to give effect to its purpose and objectives. In the circumstances of this case, a technical application of the ***Teperman*** principle would not only undermine the county's legislative objectives but might endanger the lives and well-being of an entire community. Protection of the community is an overriding interest that trumps any lesser interests.

[46] Further, the appellants knew that when the County passed the resolution to authorize a ground water study, that the future of their intensive hog operation would be affected by the results of that study. Rather than waiting for the results of that study, they pressed ahead with their development hoping to secure the authorization to proceed before more stringent laws were enacted. However, reasonable people would agree that instant approval for complicated and controversial developments is neither expected by the public nor mandated by legislation. Common sense dictates that there will be a reasonable turn-around period for the proper evaluation of applications such as this, and only when that assessment has been made and the decision is made by the Building Official based on the law which pertains at that time, can it be said that the appellant's rights have crystallized.

[47] Finally, it seems reasonable to conclude that at the time the Building Official made his decision on this application, he was required to take into account all of the "applicable law" that pertained to the situation. That body of applicable law included not only the By-law properly enacted pursuant to s. 38(1) of the *Planning Act*, but as well, all other applicable statutory provisions and even common law principles. If he had not done so, he would have failed to discharge his duties under s. 8(2) of the *Building Code Act*.

[48] It is true that if a building official delays making a decision in order to thwart the rights of an applicant, different issues arise, but in the absence of bad

faith or unreasonable behaviour on the part of the building official, the law he is to apply to the application is the law that exists at the time of the making of his decision particularly where matters of public safety are raised. That being the case, the only way that the appellants' rights could be said to have crystallized would be at that point in time that the Building Official examined the application and concluded that it complied with all applicable regulations and requirements. At that point, the appellants would have been entitled to their building permit. However, the Building Official was not able to conclude that the Peacock application met all of the appropriate requirements and I cannot disagree or interfere with the Building Official's decision on the ground that the appellants' rights had crystallized before passage of the By-law.

I simply do not accept the submission that his decision, made 9 days after passage of the By-law gave retrospective effect to the By-law.

[49] However, the decision of the Building Official can be upheld on another ground. Section 30(1) of the *Ontario Water Resources Act*, R.S.O. 1990, c. O-40 ("OWRA") prohibits the discharge into water of contaminants that may impair the quality of water. The *Act* does not provide any exemption for agricultural operations, unlike the *Environmental Protection Act*, R.S.O. 1990, c. E-19 ("EPA") and the *Farming and Food Production Protection Act*, S.O. 1998, c. 1 ("FFPPA"). In ***R. v. Inco[14]***, the Ontario Court of Appeal held that the parties need not show actual impairment, but merely a capacity to impair. ***R. v. Sault Ste. Marie[15]***, defined the terms "discharge", "cause" and "permit". The discharging aspect relates to direct acts of pollution; the causing requirement is associated with activity by the defendant which is capable of control and which results in pollution; and permitting involves a passive lack of interference by the defendant, that is, failure to prevent an incident which it should have foreseen.

[50] Not surprisingly, the common law also supports the Building Official's decision. The appellants are using their farm in a manner that is potentially harmful to the entire Town of Simcoe. The law of nuisance holds that a landowner is permitted to use what belongs to him in a way that does not harm what belongs to someone else. In determining whether an activity constitutes a nuisance, the courts weigh the costs and benefits to society and emphasize the paramouncy of public over private interests. (see ***Miller v. Jackson[16]***). A public nuisance has been defined as any activity which unreasonably interferes with the public's interest in questions of health, safety, morality, comfort or convenience.[17] The celebrated English case of ***Rylands v. Fletcher[18]*** states that there is virtually absolute liability on owners who bring on their land anything likely to do mischief if it escapes and causes damage to a neighbour.

[51] The report commissioned by the Town shows how the appellants' operation could harm the Town's water supply if proper precautions are not taken. The Town has also demonstrated that known precautions available to the appellants have not been incorporated into either their present or future operation. That being the case, issuance of a building permit poses a legitimate expectation of actual harm to the community, in which case, the appellants' rights must succumb to the public interest. This is all the more true when there is no statutory obstacle to bringing a claim in nuisance against an agricultural operator for contamination of drinking water. Under the FFPPA, "normal farming practices" are protected. But contamination of the water supply of a community is not included in the statute's definition of a nuisance and certainly does not protect a farmer from nuisances actions arising from the contamination of the water supply of an entire community.

[52] Given the proximity of the appellants' intended hog operation to the Town's municipal water supply, and given the specific dangers identified by the Town's consultants and given the provisions of the common law and the OWRA, the Building Official was correct in rejecting the appellants' application.

THE BAD FAITH ISSUE:

[53] ***Quay West*** holds that a building permit may be issued in the absence of site plan approval if it is found that "the municipality was not acting in good faith or was refusing developmental approval for an obviously unlawful reason". The rule extracted from Sills J.'s decision in ***Forster v. Waterloo(City)[19]*** and***Quay*** is that although as a general rule, a building permit should not be issued until site plan approval has been obtained, the general rule may be displaced where extraordinary circumstances exist. Extraordinary circumstances have been held to include bad faith dealings by the municipality but according to ***Manchester v. North York (City) Chief Building Official[20]***, the category is not closed and it is argued that extraordinary circumstances here should apply to circumvent the application of the By law.

[54] In this case, the appellants argue that on October 23, 2001, the council considered and defeated a motion to impose an interim control by-law on intensive hog operations. However, because of continuing public pressure, and at the request of the County Manager, Paul Berry, the deputy Chief Building official, wrote a memo to other building department staff dated November 29, 2001 as follows:

We have been asked to detain any building permit applications for hog operations until further notice. If any new applications have been taken in recently, or do come in, in the next month or so, please contact myself or Wayne for instruction.

[55] On December 5, 2001 the General Manager of the County wrote to the mayor and members of council as follows:

Please be advised that County staff have been advised not to issue any building permits for intensive livestock operations until after Council deals with a report from this department in January, 2002. Appellants will be so advised.

Further, County staff are reviewing the building permits which have already been issued for intensive livestock operations. Specifically, staff will revoke those building permits where no construction has started and no nutrient management program is in place. This action is permitted by way of the Ontario Building Code Act. If you have any questions please call me.

[56] When the manager was questioned about these memos, he acknowledged that he was trying to slow things down on the issue of livestock operations until Council had an opportunity to deal with the issue. He further acknowledged that Council did nothing at their meetings in the month of December to counteract his actions.

[57] Counsel for the appellants also relies on a letter dated December 18, 2001 authored by him which was directed to the Chief Building official reminding him of his duties as the person designated to implement provincial legislation and urging him to consider the merits of the appellants' application as of December 17th, without regard to extraneous consideration. Counsel complains that a copy of the letter was not given to Council before the adoption that evening of the By-law.

[58] Counsel for the appellants suggests that the foregoing evidence constitutes proof that the appellant was not treated fairly by the building department of the county and that the aforesaid conduct is proof that the Building Official did not perform his duties as he is required to do, independent of any direction from the municipality.

[59] Clearly, County officials made building officials aware of their concerns over the risk of contamination of the Town's water and the potential for future curbs on development. I see nothing sinister in that. As a matter of fact, given the tragedy of Walkerton, vigilance in such matters is to be commended, not criticized. It would be indefensible to be critical of the type of communication that is necessary between various municipal departments to ensure competent management when the issues being discussed are public safety. I also agree that appearances are compromised to some extent when the Building Official, whose duty it is to act judicially and fairly in the discharge of his responsibility to implement provincial legislation is answerable to and supervised by a higher county official. However, it takes more than appearances to prove bad faith on the part of the municipality or that the Building Official was motivated by improper objectives. The Building Official in question was asked to what extent he was influenced by county officials regarding the Peacock application and the answer was not at all. The facts bear that out, because if the manager's intention was to delay the Peacock application, that did not happen. The decision was made in 8 working days in the busy month of December. The actual decision was made in compliance with the Interim Control By-law that had been passed just days earlier and it was so acknowledged. It may not have been the result that the appellants sought, but the decision was prompt and the reason explained. Accordingly, the bad faith argument is not supported by the evidence.

[60] However, since the category of extraordinary circumstances is not closed, there is another circumstances in the context of this case that would warrant consideration. At present, a Nutrient Management Plan does not affect the appellant's operations. That means any amount of manure can be spread onto the appellants' lands without regulation. If on the other hand, a building permit had been approved by the Building Official, a Nutrient Management Plan that had been supplied by the appellants with their application would have been triggered and controls would have been put into place.

[61] As tempting as that argument might be, it must be noted that counsel spent little time in argument explaining the technical aspects of hog farming. For this court to determine that a Nutrient Management Plan would better protect the Town's water than installation of the various devices urged by the Town that are available but were not included in the appellants' proposal requires a leap of faith that is unwarranted by the submissions. It is unfortunate that the appellants' operation at present is unregulated, but that is an issue which this court is ill-equipped to deal with and for that reason, I cannot conclude that this court would be justified in reversing the Building Official's decision on this ground.

NON-CONFORMING USE ARGUMENT

[62] Section 34(1) of the *Planning Act* authorizes local municipalities to pass laws prohibiting the use of land for or except for such purposes as may be set out in the by-law. However s.34(9) of the *Act* provides that:

(9) No by-law passed under this section applies,

(a) to prevent the use of any land, building or structure for any purpose prohibited by the by-law if such land, building or structure was lawfully used for such purpose

on the day of the passing of the by-law, so long as it continues to be used for that purpose: or

(b) to prevent the erection or use for a purpose prohibited by the by-law of any building or structure for which a permit has been issued under section 5 of the Building Code Act, prior to the day of the passing of the by-law, so long as the building or structure when erected is used and continues to be used for the purpose for which it was erected and provided the permit has not been revoked under section 6 of the Building Code Act.

[63] Municipalities are authorized to pass interim control by-laws under s. 38(1) of the *Act*, which provides:

38.(1) Where the council of a local municipality has, by by-law or resolution, directed that a review or study be undertaken in respect of land use planning policies in the municipality or in any defined area or areas thereof, the council of the municipality may pass a by-law (hereinafter referred to as an interim control by-law) to be in effect for a period of time specified in the by-law, which period shall not exceed one year from the date of the passing thereof, prohibiting the use of land, buildings or structures within the municipality or within the defined area or areas thereof for, or except for, such purposes as are set out in the by-law.

[64] Subsection (2) authorizes the municipality to extend the period of time for an additional year. Section 45.(1) of the *Act*, permits the committee of adjustments to authorize such minor variance from the provisions of a by-law passed under sections 34 or 38 of the *Act*, as in its opinion is desirable for the appropriate development or use of the land, building or structure, if in the opinion of the committee, the general intent and purpose of the By-law is maintained.

[65] Counsel for the appellants argues that s. 38.(1) only speaks of prohibiting the use of land, buildings or structures but does not preclude the erection of a structure or building. That being the case, it is argued that once the appellants had established the prior use of their 50 acre parcel for a hog operation, the Interim Control By-law could not be used to prohibit the appellants from proceeding with phase two, whether in the form of an addition to the existing building (if indeed the building existed at the time of the December 17 application) or in the form of a separate structure, as was contemplated by their second application. I cannot accept this submission.

[66] Section 38(1) is sweeping in its terminology and it empowers a municipality to prohibit the use of land, buildings or structures. In order to build a building, land must be used and that is what is prohibited by the Interim Control By-law. The way an intensive hog operation works as I understood counsel's submissions, is that waste produced by the hogs is stored in the ground under the barn to be erected. It is clear that in conducting the intensive hog operation contemplated by the appellants, the land must be used not only to support the proposed building but to contain the pit that will hold the waste. That use is precisely what the Interim Control By-law prohibits.

[67] In addition, it is clear that the purpose of s. 38(1) was to give municipalities the right to freeze development for a short period of time in order to study the impact of certain land uses with a view to developing future planning policies that would reflect the results of the study. This municipality passed the Interim Control By-law in order to study the impact of intensive hog operations on the drinking water of the community, and to the extent that this court can do so, the intention of the By-law should be upheld subject to the protection of prior non-conforming rights as specified by s. 39(8).

[68] Before proceeding to an analysis of the applicability of the Interim Control By-law to the appellants' property, I will deal with one preliminary matter - that of commitment to use. I do not think that anything turns on the fact that the first phase was not built and that technically speaking, the appellants had not actually used the property for a hog operation at the time of their second application. It has been held that commitment to a use is equivalent to a use for the purpose of the lawful non-conforming use provisions of the *Planning Act*. Similarly, any doubt as to the prior use should be resolved in favour of the owner. (see ***Cowichan Valley(Regional District) v. Yole[21]***).

[69] The appellants argue that once a non-conforming use has been established, an expansion of the use or an increase in intensity of the use, does not alter the non-conforming character of the use and therefore is still permissible. In support of that contention, counsel for the appellants relied on ***Re Hartley and the City of Toronto[22]***, ***Kiss v. Phil Dennis Enterprises[23]***, ***Regina v. Barry Humphrey Enterprises Ltd. et al[24]***, ***Cedarhurst Quarries & Crushing Ltd. v. Somerville (Township)[25]***, and ***Haldimand-Norfolk (Regional Municipality) v. Fagundes[26]***.

[70] In ***R. v. Barry Humphrey Enterprises Ltd.*** the court held that where use of a substantial part of vacant land constitutes a non-conforming use, it is sufficient to exempt the whole portion of the land. In reaching this conclusion, the Divisional Court followed the reasoning in ***Central Jewish Institute v. Toronto(City)[27]***, where it was held that the non-conforming use of only a portion of a building was sufficient to exempt the whole building. However, it should be noted that in ***Jewish***

Institute, the exempting section provided that no restrictive by-law passed under the *Act* should apply to any *building* that was used or erected prior to the By-law for any purpose prohibited by the By-law. What was protected was the building, not the use.

[71] In ***Humphrey***, the court applied the principle that the exemption applied to the whole building, not just the portion of the building actually being used for the prohibited purpose but observed at p. 552 that in the case of vacant land, it will be more difficult to determine the extent of the exempted use and the circumstances would have to be examined. In addition, the exemption was extended to the whole parcel for several other reasons. They were that the Town itself had confirmed that the whole parcel had been used for the prohibited use, there was a bone fide intention on the part of the owner to use the whole parcel and there was no separation between the portion actually being used from the remainder of the parcel.

[72] In ***Cedarhurst Quarries and Crushing Ltd.*** the appellants held two abutting properties, only one of which was actively being used for quarrying purposes. It was held that since the properties were abutting and the owner had acquired the abutting lot with the bona fide intention of using both lots for quarrying operations, which he could have done prior to the passage of the controlling by-law, there was no reason to confine the non-conforming use only to the parts of the land that were actively being quarried at the time the restricting by-law was passed. All of the land was exempt.

[73] In ***Duke v. Nanaimo(Regional District)[28]*** the issue was whether the owner had demonstrated an intention to use the land to raise 2,500 head of hogs and had begun implementation of the use prior to the passage of the restricting legislation. In holding that he had not Downs J. observed at p.15 that "..... partial use can be sufficient to establish an enlarged use when certain conditions are met".

[74] Counsel for the appellants also rely heavily on the ***Hartley*** where the court held that where a house and land was bought to be used for the purpose of a home, and had always been used for that purpose, whether it was occupied by three girls or thirty would not change the use or affect the exemption.

[75] In relying on ***Hartley***, it was argued that since the appellants were already using the land for a hog operation, increasing the number of hogs from 1000 to 2000 would not change the use. Counsel for the appellants further contends that the whole 50-acre parcel is exempt from the application of the By-law and that they are therefore free to build an addition or a separate structure on the 50-acre parcel.

[76] I cannot accept these submissions. Just because the appellants formulated a plan to use the 50-acre parcel for intensive hog operations and the municipality approved the first phase, does not mean that the municipality must necessarily approve the second. It seems to me that if the appellants do have a prior non-conforming use, then their exemption protects the status quo, it does not necessarily protect an addition or an enlargement to the status quo or a doubling of the structures on the property, particularly where to do so would involve a use of the land which may threaten the welfare of a community of 14,000 people. Put another way, the doctrine of legal non-conforming use cannot be used to protect expansion that necessarily entails such grave environmental and public safety dangers. I am fortified in this view by the decision of the Supreme Court of Canada in ***Saint-Romuald (Ville) v. Olivier[29]***:

In general, merely continuing the precise pre-existing activity, even at an intensified level, is clearly protected, but the intensification may be of such a degree as to create a difference in kind. A family farm which has a few pigs on the fringe of a town may continue as a legal non-conforming use, but the result may be otherwise if it is sought to expand its pork operation, into "factory in the country" type intensive pig farming. While in one sense the "use" has continued, in another sense its *character* has been so altered as to become, in terms of its impact on the community, an altogether different use.

[77] Mr. Justice Binnie observed that a non-conforming business in a residential neighbourhood should not be penalized for its success by losing its "acquired right" to operate, even if a by-product of that success is some increased traffic and noise. However, he went on to approve the following statement from *McQuillin, The Law of Municipal Corporations* (3d ed. 1976), vol. 8A, at p. 126:

The distinction is between an increase in the amount of business, even a great increase, which does not work a change in use, and an enlargement of a non-conforming business so as to be different in kind in its effect on the neighbourhood

[78] Certainly, the expansion of the appellants' use of their 50-acre parcel would double the risk to the community's supply of water. Such an intensification of the threat to the health and welfare of so many people, cannot possibly be justified. Now that the studies that were commissioned have fully demonstrated the health risk, now that the potential for violating statutory environmental provisions and common law rights is exposed, the potential illegality of the appellants' actions becomes a bar to such an extension of the use.

[79] Mr. Miazga's affidavit states that at the time of the Peacocks' first application, municipalities had little protection from intensive farming operations. This sad fact is confirmed by the Walkerton Report. The Honourable Mr. Justice O'Connor states under article 4.4.5.1 the following:

....at present in Ontario there is very little in the way of regulation directed to the protection of drinking water sources from the potential impacts of agriculture. For instance, there is no legally binding requirement concerning manure storage or management, nor is there an inspection program concerning manure management. There is considerably less environmental and water protection regulation of agriculture in Ontario than there is in many other Western jurisdictions.

[80] However, now that the full implications of the appellants' proposed development are understood, the Town is entitled to impose restrictions on any expansion of the use. Quoting once again from the Walkerton Report, Mr. Justice O'Connor states at p. 128:

A great deal of attention in Part 2 of the Inquiry focused on regulating the potential impacts of agriculture on Ontario's drinking water sources. My main recommendation is that every large or intensive farm, and every smaller farm located in an area designated as sensitive or high-risk, be required to develop a water protection plan that is consistent with the local watershed-based source protection plan (once the latter becomes available) and is binding on the farm's activities.

[81] In my view, the Walkerton tragedy requires a reassessment of commonly accepted principles and should be reason enough to cause a shift in emphasis when weighing private rights against public interest concerns. Although the appellants may very well have a prior non-conforming use, now that the risks of their existing use are clearly understood, they cannot reasonably expect to be able to expand the use without the imposition of appropriate safeguards. The resolution of this issue is mandated by the principle approved by the Ontario Court of Appeal in ***Ottawa (City) v. Capital Parking Inc.[30]*** that the doctrine of legal non-conforming is a shield against interference with acquired rights but cannot create new rights. Just as the applicant in ***Capital*** was required to comply with future regulations governing the use of its property, so too, must the appellants be expected to abide by future requirements of the county with respect to any expansion of its a potentially dangerous and lethal use of land.

[82] For all of these reasons, this appeal must be dismissed. I will entertain submissions as to costs if necessary on a date to be set by the local trial coordinator.

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Taliano J.

Released: July 3, 2003

COURT FILE NO.: 0002/02

DATE: 2003/07/03

ONTARIO

SUPERIOR COURT OF JUSTICE

B E T W E E N:

MARILYN PEACOCK and

REGINALD PEACOCK

Appellants

- **and -**

WAYNE CAMPBELL, CHIEF BUILDING OFFICIAL OF THE COPRORATION OF NORFOLK COUNTY

Respondent

REASONS FOR JUDGMENT

The Honourable Mr. Justice D.J. Taliano

Released: July 3, 2003

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[1] [1987] F.C.J. No. 511

[2] [1994] 1 S.C.R. 311

[3] [2002] O.J. No. 4936

[4] (1975), 7 O.R. (2d) 533

[5] (1984), 26 M.P.L.R. 40 at 47

[6] (1988), 44 M.P.L.R. 187

[7] (1989), 44 M.P.L.R. 50

[8] (1989), 47 M.P.L.R. 109

[9] (1993), 18 M.P.L.R. (2d) 70

[10] (1983), 24 M.P.L.R. 103

[11] Unreported decision dated April 26, 1984, leave to appeal to C.A. refused

[12] (2001), 18 M.P.L.R. (3d) 1 at 6

[13] [1965] S.C.R. 408, 50 D.L.R. (2d) 704

[14] (2001), 54 O.R. (3d) 495

[15] [1978] 2 S.C.R. 1299

[16] (1977), 2 All E.R. 338

[17] (see L.N. Klar, Tort Law 2nd ed. (Toronto: Carswell, 1996), at 526)

[18] (1868), L.R. 3 H.L. 330

[19] (1993), 14 M.P.L.R. (2d) 164

[20] (1994), 20 M.P.L.R. (2d) 213

[21] (1988), 41 M.P.L.R. 78

[22] (1924), 55 O.L.R. 275

[23] (1974), 3 O.R. (2d) 576

[24] (1977), 15 O.R. (2d) 548

[25] (1995), 28 M.P.L.R. (2d) 257

[26] (2000), 11 M.P.L.R. (3d) 1

[27] [1948] S.C.R. 101

[28] (1998), 50 M.P.L.R. (2d) at 116

[29] (2001), 22 M.P.L.R. (3d) 1 at 18

[30] (2002), 21 M.P.L.R. (3d) 87

DATE: 20060628
DOCKET: C42944

COURT OF APPEAL FOR ONTARIO

WEILER, BLAIR and ROULEAU JJ.A.

B E T W E E N :

MARILYN PEACOCK and REGINALD PEACOCK Applicants(Respondents)	**Keith M. Jones for the appellant**
- and -	
THE CORPORATION OF NORFOLK COUNTY Respondent (Appellant)	**Thomas A. Cline, Q.C. for the respondents**
- and -	
THE ONTARIO PORK PRODUCERS' MARKETING BOARD Intervener	**John M. Buhlman for the intervener**

Heard: December 13, 2005

On appeal from the judgment of Justice Eugene B. Fedak of the Superior Court of Justice dated November 19, 2004.

ROULEAU J.A.:

OVERVIEW

[1] The respondents, the Peacocks, operate a 1,000 head intensive hog operation and wish to double the capacity of their hog raising facility to 2,000 hogs. The facility will contain a large reservoir for nutrient storage. The Peacocks received approval of their Nutrient Management Plan, as required under the *Nutrient Management Act, 2002*, S.O. 2002, c. 4 (the Act), and corresponding Regulation 267/03 (the Regulation). Among the requirements of the Regulation is that the new nutrient storage facility must be at least 100 metres from a municipal well.

[2] The appellant municipality, Norfolk County, passed By-law 64-Z-2003 (the By-law) that prohibits siting intensive livestock operations and associated nutrient facilities within Sensitivity Areas 1 and 2. The appellant submits that the Peacocks' proposed expansion is located within Sensitivity Area 2, also referred to as the two-year capture zone. The two-year capture zone refers to an area from which it would take two years or less for contamination introduced at that point to reach the municipal well.

[3] Norfolk County takes the position that the Peacocks must comply with both the Regulation and the By-law and, that the By-law prohibits the proposed expansion. The Peacocks and the intervener, the Ontario Pork Producers' Marketing Board, take the position that the Regulation supersedes the By-law, pursuant to s. 61 of

the Act and only compliance with the Regulation is necessary.

[4] Section 61(1) of the *Nutrient Management Act* provides: "A regulation supersedes a by-law of a municipality or a provision in that by-law if the by-law or provision addresses the same subject-matter as the regulation." There are two main issues on appeal. The first is whether s. 61 specifies that, for conflicts between the Regulation and a municipal by-law, a test different from the impossibility of dual compliance test set out in *11957 Canada Ltée (Spraytech Société d'arrosage) v. Hudson (Town)*, [2001] 2 S.C.R. 241 is to be used. Second, whether the Regulation and the relevant provision of the By-law address the same "subject-matter".

[5] The application judge ruled in favour of the respondents having found that the Regulation addressed the same subject-matter as the By-law, and as such, superseded the By-law.

[6] For the reasons that follow, I would dismiss the appeal. Section 3.31.4(c) of the By-law does address the same subject-matter as the Regulation. As a result the Regulation renders that portion of the By-law inoperative.

SUMMARY OF RELEVANT FACTS

1) Background

[7] In response to public concern regarding the potential for groundwater contamination resulting from intensive livestock operations, Norfolk County initiated a groundwater study on December 4, 2001. An interim control by-law was passed on December 19, 2001 that temporarily prohibited the use of land, buildings and structures within Norfolk County for intensive livestock operations. The results of the groundwater study prompted the passing of By-law 64-Z-2003, which amended Norfolk County's Zoning By-law 1-1999. The By-law seeks to protect the municipal water wells by restricting land use in designated areas, which pose an unacceptable risk to the water source. It establishes Sensitivity Areas, ranked one through four where Sensitivity Area one represents the highest potential risk area. Land within each Sensitivity Area is subject to various land-use restrictions. The By-law lists three categories of land use (A, B and C) and each category lists various activities and their corresponding risk to municipal water supplies, category A posing the highest risk. Intensive livestock operations and associated nutrient facilities are not listed under any of these three categories. They are addressed by a separate provision, s. 3.32.4(c), which specifically prohibits such operations and facilities within Sensitivity Areas 1 and 2. The appellant submits the Peacocks' proposed expansion is located in Sensitivity Area 2, and is thus prohibited by the By-law.

[8] The province enacted the *Nutrient Management Act* in response to the Walkerton tragedy as part of an overall plan to protect Ontario's drinking water.[1] The Act provides province-wide standards governing the distribution, storage, spreading, record keeping of nutrients and the construction of their associated facilities. Under the Act, all farmers expanding or building new intensive livestock operations must obtain provincial approval of a Nutrient Management Strategy and Plan to ensure that their nutrient management meets the provincial standards.

The Peacocks have obtained this approval for their expansion.

2) Position of the Parties

[9] The specific area of concern between the Regulation and the By-law is the minimum distance separation required from a municipal well. Section 63(1)(b) of the Regulation prohibits the construction or expansion of a permanent nutrient storage facility, if the facility is located within 100 metres of a municipal well. The By-law prohibits nutrient storage facilities within Sensitivity Areas one and two. On the facts of this case, this has the effect of increasing the distance that the Peacocks expansion must be from the municipal well to more than 100 metres.

[10] The appellant submits that the By-law is necessary to protect the quality of water found in the municipal well and that while the Regulation prohibits construction within 100 metres it is silent on construction located in excess of 100 metres from a municipal well. Using the principle of enhancement, the appellant submits that the By-law enhances the environmental protections found in the Regulation and, thus both can co-exist. Any overlap between the Regulation and By-law can be resolved by use of the principle of accommodation. The appellant also submitted such principles should be invoked because of the precautionary principle, to prevent environmental degradation where there is a threat of serious or irreversible damage demonstrated by the groundwater study.

[11] The respondents submit that construction is permitted as long as the requirements delineated in the Act and its Regulations have been met and that it is irrelevant whether or not the By-law enhances the protection of a municipal water source. They submit that the proper test to be applied is not the impossibility of dual compliance test but rather the test stipulated in s. 61 of the Act.

[12] The intervener submits that the main issue is whether the By-law and the Regulation address the same subject-matter, as provided in s. 61 of the Act. It submits that the Regulation does address the same subject-matter as the By-law as both the substance and purpose are the same.

RELEVANT LEGISLATIVE PROVISIONS

1) The *Nutrient Management Act*

i) <u>Purpose of the Act</u>

[13] The purpose of the *Nutrient Management Act* is set out in s. 1 as follows:

1. The purpose of this Act is to provide for the management of materials containing nutrients in ways that will enhance protection of the natural environment and provide a sustainable future for agricultural operations and rural development. 2002, c. 4, s. 1.	1. La présente loi a pour objet de prévoir des façons de gérer les matières contenant des éléments nutritifs qui protégeront davantage l'environnement naturel et assureront le développement durable des exploitations agricoles et des collectivités rurales. 2002, chap. 4, art. 1.

[14] The *Nutrient Management Act* and the regulatory scheme enacted by Ontario Regulation 267/03 constitute a

comprehensive regulatory framework for the distribution, storage, spreading, record keeping of nutrients and their associated facilities.

[15] By enacting the *Nutrient Management Act* and Regulation, the province sought to balance environmental protection and sustainable agriculture. Intensive hog production generates large amounts of nutrients, and as such environmental concerns and risks cannot be avoided. These risks are managed through the *Nutrient Management Act* and Regulation.

[16] The nutrients generated by the hogs are accumulated in storage tanks and, periodically, are taken from the tanks and spread over agricultural land. A significant part of the Act and Regulation deals with the management of environmental concerns surrounding the storage and spreading of these nutrients. A focus of the environmental concern is the potential for the nutrients to contaminate both surface and ground water.

[17] Given the two competing interests, hog production and protection of the environment, the Regulation was prepared as a joint effort between the Ministry of the Environment and the Ministry of Agriculture and Food.

ii) Structure of the Act

[18] The environmental concerns relating to the storage of nutrients are addressed by the *Nutrient Management Act* and Regulation through a combination of

a) zones of prohibition;

b) construction and other safeguards with respect to storage tanks; and

c) the requirement that those generating and storing nutrients receive approvals which involve the filing and compliance with management plans and management strategies.

[19] These safeguards reduce the risk of tanks leaking into the environment and their contents making their way into surface or ground water.

[20] The *Nutrient Management Act* and Regulation deal specifically with the setback requirements from a municipal well. Section 63(1)(b) of the Regulation prohibits the construction or expansion of a permanent nutrient storage facility within 100 metres of a municipal well.

[21] In addition to compliance with the minimum setback provisions, all nutrients storage facilities must meet various construction standards. These construction standards, depending on the type of facility, take into account the hydrogeologic or geotechnical characteristics of the site and soil.

2) The Corporation of Norfolk County's By-law

[22] By-law 64-Z-2003 amended the municipality's Zoning By-law 1-1999 so as to prohibit placing nutrient storage facilities within a "two-year capture zone" or Sensitivity Area 2 as defined in the By-law. The two-year capture zone was determined as a result of an expert groundwater study which studied the tendency or likelihood of contamination reaching a specified position in the groundwater system after introduction at some

location above the uppermost aquifer. The limit of the two-year capture zone is the point from which it would take two years for contamination introduced at that point to reach the municipal wells.

[23] The By-law seeks to protect the municipal water wells by prohibiting certain land uses within the Sensitivity Areas established by the By-law. Any facilities built outside of the prohibited areas are not addressed by the By-law. Unlike the *Nutrient Management Act* and Regulation, the By-law does not impose specific construction standards nor does it provide for any record keeping. The By-law's zones of prohibition also apply to land uses other than intensive livestock operations such as petroleum products refining and various industrial uses. Because the proposed expansion of the respondents' hog operation involved the expansion of a barn and nutrient storage facility within the two-year recapture zone or Sensitivity Area 2 the municipality takes the position that such an expansion would contravene the By-law.

[24] The respondents take the position that they had applied for and obtained approval of their Nutrient Management Plan under the *Nutrient Management Act* and Regulation. Having complied with all of the statutory requirements set by the province, they maintain that they need not comply with the municipal By-law and can proceed with the expansion without municipal approval.

ISSUE

[25] The issue to be determined is whether the By-law, by prohibiting the establishment of an intensive livestock operation within the two-year capture zone, addresses "the same subject-matter as the Regulation" and is thereby rendered inoperative by s. 61 of the *Nutrient Management Act*.

ANALYSIS

1) Law

[26] The leading authority on reconciling overlapping provincial statutes and municipal by-laws is the Supreme Court of Canada's decision in *Spraytech*, *supra*. In that case, the court upheld the Town of Hudson's by-law regulating the use of pesticides despite the existence of provincial legislation in that field. After recognizing that in environmental matters the precautionary principle should apply, the majority of the court applied the impossibility of dual compliance test, taken from the federal-provincial context, to the provincial-municipal context. The court commented that there was a fine line between laws that legitimately complement each other and those that invade another government's protected legislative sphere. At para. 38, the court held the impossibility of dual compliance test requires first, that the municipal by-law deal with a similar subject as the provincial statute, and then that "obeying one necessarily means disobeying the other". Only then can the court find that a municipal by-law is inconsistent with a provincial statute. The court held that as a general principle, "the mere existence of provincial or federal legislation in a given field does not oust municipal prerogatives to regulate the subject-matter" (para. 39). However, the court also stipulated that the impossibility of dual compliance test would not apply when, as in the present case, the relevant provincial legislation specifies a different test (para. 36).

[27] In my view, this logically flows, in part, from the fact that municipalities are creations of the province and do not have constitutionally protected areas of operation as in the case of provinces and the federal government. As a result, the province can dictate how overlap in provincial and municipal regulation is to be resolved.

[28] In the present case, the test to resolve overlap between the *Nutrient Management Act* and Regulation and municipal by-laws is established by s. 61. Section 61 reads as follows:

61. (1) A regulation supersedes a by-law of a municipality or a provision in that by-law if the by-law or provision addresses the same subject-matter as the regulation. 2002, c. 4, s. 61(1).	61. (1) Les règlements remplacent les règlements municipaux d'une municipalité ou leurs dispositions qui traitent de la même question. 2002, chap. 4, par. 61(1)
(2) A by-law or a provision of a by-law that is superseded under subsection (1) is inoperative while the regulation is in force. 2002, c. 4, s. 61 (2)	(2) Le règlement municipal ou sa disposition qui est remplacé en application du paragraphe (1) est inopérant tant que le règlement reste en vigueur. 2002, chap. 4, par. 61 (2).

As a result, a by-law of a municipality or a provision of that by-law that "addresses the same subject-matter as the regulation," is rendered inoperative. Only if the by-law or a provision thereof does not address the same subject-matter will the impossibility of dual compliance test established in *Multiple Access Ltd. v. McCutcheon*, [1982] 2 S.C.R. 161 and applied in a provincial-municipal context in *Spraytech*, would apply.

2) Application to the Case at Bar

[29] The appellant argues that the application judge was in error and makes two principal submissions. The first is that, because the *Nutrient Management Act* and Regulation prohibit the construction of a nutrient storage facility within a 100 metres of a municipal well, their silence allows construction of a storage facility beyond the 100 metre zone. The municipality's By-law does not conflict with the Act and Regulation because it expands on the prohibition and enhances the protection of its municipal wells. As set out in *Spraytech*, it is legitimate for municipalities, as trustees of the environment, to enhance the protection provided by another sphere of government; they are at the level of government closest to the citizens affected and should thus be responsive to their needs. The impossibility of dual compliance test should be applied to this case. Since the municipal and provincial provisions are not in conflict, the by-law must be complied with. See *Spraytech*, *supra* at paras. 3, 27, 31-38.

[30] Secondly, in oral submissions, the appellant argued that the expression "addresses the same subject-matter" should be interpreted as meaning "addresses the same purpose." Since the purpose of the *Nutrient Management Act* and Regulation is nutrient management and protection of the environment is only an ancillary purpose, and the purpose of the By-law is the protection of the environment and the municipality's source of water, they address different purposes or "subject-matter" and s. 61 does not apply.

[31] I will address each of these submissions in turn.

a) Does the Impossibility of Dual Compliance Test Apply?

[32] As set out in *Spraytech*, the impossibility of dual compliance test only applies in the event that the relevant provincial legislation does not specify a different test. Section 61 of the *Nutrient Management Act*, in my view, specifies the test to be applied in the event that the Regulation and a local by-law or provision of a by-law address the same subject-matter. If they address the same subject-matter, s. 61(2) specifies that the by-law or provision of the by-law is "inoperative while the regulation is in force." Section 61 therefore clearly displaces the impossibility of dual compliance test.

[33] In terms of policy, this result is consistent with the intent of the Act. The Act sought to achieve a balance between environmental protection and sustainable agriculture. If municipalities were free to become involved and deal with the same subject-matter as is dealt with by the Act and Regulation and impose a higher environmental standard, then the balance created by the Act as intended by the province would be interfered with.

[34] This reading of s. 61 is reinforced when reference is made to the legislative debates. The Standing Committee on General Government discussions on June 3, 2002 made it clear that the drafters of the legislation did not intend to allow for municipal by-laws to enhance the environmental protection provided by regulation under the *Nutrient Management Act*. The proposal to amend s. 61 to allow the municipality to provide higher standards for the protection of the public or the environment than are provided in the Regulation was defeated.[2]

[35] Additionally, the debates make reference to Recommendation 14 from the Walkerton Report[3] as the basis for the government's insistence on s. 61. Recommendation 14 reads as follows:

Once a farm has in place an individual water protection plan that is consistent with the applicable source protection plan, municipalities should not have the authority to require that farm to meet a higher standard of protection of drinking water sources than that which is laid out in the farm's water protection plan.

[36] I conclude, therefore, that the impossibility of dual compliance test does not apply as it has been displaced by a specific provision in the legislation. To the extent that the by-law or provision thereof "addresses the same subject-matter" as the Regulation, the By-law or provision thereof will be inoperative.

[37] My conclusion is further reinforced by s. 8 of the Regulation. Section 8 reads as follows:

8. Subject to the Act, the requirements of this Regulation are in addition to and independent of the requirements in an approval, order or instrument issued under any other Act, other than a municipal by-law, and in the event of conflict, shall prevail. O. Reg. 267/03, s. 8.	8. Sous réserve de la Loi, les exigences du présent règlement s'ajoutent aux exigences d'une approbation, d'une autorisation, d'un arrêté, d'un ordre ou d'un acte délivré, pris, rendu ou passé en vertu de toute autre loi, sauf un règlement municipal, sont indépendantes de celles-ci et, en cas d'incompatibilité, l'emportent sur elles. Règl. de l'Ont. 154/04, art. 1.

The section provides that the Regulation under the *Nutrient Management Act* is in addition to and independent of the requirements under any other act but then goes on to specify that, in the event of conflict with other provincial requirements, the Regulation under the *Nutrient Management Act* prevails. Arguably, the section in effect says that the impossibility of dual compliance test is to apply in those situations. The section, however, specifically excludes municipal by-laws from the application of s. 8. This serves as confirmation that a test other than the impossibility of dual compliance test is to apply where the regulation and municipal by-laws overlap. This other test is the one set out in s. 61.

b) Do the Regulation and the By-law address "the same subject-matter"?

[38] In its oral submissions on this point, the appellant acknowledged that if the court were to define the "subject-matter" as the siting of the storage facilities, it would have to conclude that the Regulation and By-law address the same subject-matter. Its position, however, was that "subject-matter" as used in s. 61 in fact means purpose. When approached in that way, the court should conclude that the purpose of the By-law and the purpose of the Regulation are quite different. The purpose of the By-law is the protection of the municipal water source and the purpose of the Regulation is nutrient management.

[39] I agree with the appellant's submission that, in determining whether the Regulation and By-law deal with the same subject-matter, one should look beyond the direct legal effect of the two provisions and consider their object or purpose, that is, what are they dealing with and what are they seeking to achieve.

[40] The purpose of the statute is the goal pursued by Parliament in enacting it and can be identified either by looking at the broad context of the statute or by considering the problem that Parliament was seeking to remedy. Evidence of this purpose is normally found in the purpose statement of the statute. The effect of the statute is also relevant and considered by examining its practical or legal consequences. See *Samur v. City of Quebec*, [1953] 2 S.C.R. 299.

[41] In the present case, the Regulation and the By-law have similar underlying purposes and objects: to protect against water contamination of municipal wells. Each attempts to achieve this goal in different ways and each has its own unique focus and stated purpose.

[42] The Regulation attempts to achieve this goal by focusing on nutrient management of livestock operations. Depending on whether the livestock operation commenced before the legislation was enacted and the level of nutrients generated, the *Nutrient Management Act* and the Regulation provide a comprehensive scheme dealing with all aspects of the storage and spreading of nutrient materials. The Regulation therefore primarily deals with nutrients and how they should be managed in an agricultural operation. It balances the protection of ground water and the natural environment with the objectives of sustainable agricultural operations and rural development.

[43] The By-law attempts to make appropriate use of land planning by categorizing both the land in the municipality and its sensitivity to potential contamination.

It does so by controlling the land use activities that can be performed on such land. Specifically, it prohibits certain combinations of location and activity that were shown by the ground water study to pose a threat to the municipality's source of water. The By-law aims to protect the municipality's water supply and does so by prohibiting land uses within certain areas where those uses pose an unacceptable level of risk to groundwater quality. In doing so, however, the By-law includes a specific provision that regulates intensive livestock operations and associated nutrient storage facilities.[4]

[44] In oral submissions, the appellant argued that, because the dominant purpose of the *Nutrient Management Act* and Regulation is the management of nutrient materials in agricultural operations and the dominant purpose of the By-law is the protection of groundwater through land use planning, the purposes of the Regulation and the By-law are different. They should, therefore, be taken to address a different "subject-matter" and s. 61 should not apply.

[45] This interpretation, however, ignores the fact that s. 61 requires a comparison between the whole of the Regulation and the various provisions within the By-law. As set out above, the By-law contains a specific provision that regulates intensive livestock operations and associated nutrient storage facilities. This provision addresses the same subject-matter and has the same purpose as the Regulation. Section 3.31.4(c) of the By-law specifically prohibits the locating of "intensive livestock operations and associated manure facilities" on lands within the two-year capture zone or Sensitivity Area 2. The dominant feature of this provision of the By-law is the same as the purpose of the Regulation, that is, the management of intensive livestock operations and their associated manure storage facilities, and even has one of the same underlying goals, to prevent groundwater contamination.

[46] My conclusion that this section of the By-law and the Regulation address the same subject-matter, the regulation of livestock operations and, in particular the nutrients generated, is supported by the actions of the appellant. The record indicates that, after identifying the respondents' farm as a potential source of contamination, the appellant sent a letter to the respondents requesting that they cooperate with the appellant in retaining a qualified engineer to report on the structural integrity of the storage facility (barn and manure pits) and to identify any remedial work; install monitoring wells to evaluate the quality of the groundwater and prepare a specific plan for the spreading of manure which would include the potential for runoff, how runoff might affect the water quality of nearby creeks, and the extent of manure loading that the land can assimilate without adversely affecting the quality of surface water and ground water. These are precisely the types of activities that the Regulation addresses.

[47] Before concluding, I would like to comment on the approach taken by my colleague, Justice Blair. In essence he finds that the subject matter of the Regulation is "overall management of nutrient materials in relation to farming operations" and that the subject matter of the portion of the By-law in issue is "the prohibition of the use of land for intensive livestock operations and associated manure storage facilities in the two-year capture zone". In other words, he finds that the Regulation manages while the By-law prohibits. He then concludes that the

Regulation and By-law do not address the same subject matter and therefore, s. 61 does not apply.

[48] With respect, I do not agree with his conclusion. I say this for six reasons.

[49] First, as I have explained, the legislative debates make it clear that one of the reasons for including section 61 in the *Nutrient Management Act* was to give effect to Recommendation 14 contained in the Walkerton Report. As set out earlier, that Recommendation was that municipalities should not have the authority to require farms to meet a higher standard of protection of drinking water sources than that which is provided for in the plan approved under the provincial scheme. The interpretation of s. 61 made by Justice Blair thwarts this intention of Parliament.[5]

[50] Second, I disagree with the use of the pith and substance test in this case. The pith and substance analysis is used to characterize a law for the purposes of determining which head of power it falls within. See *Kitkatla Band v. British Columbia* (*Minister of Small Business, Tourism and Culture*), [2002] 2 S.C.R. 146 at para. 52. As such, it is an exercise in categorizing laws into existing and known heads of power. The pith and substance analysis attempts to determine the true purpose and effect of the law and then is used to ascertain whether the enacting legislature possesses the jurisdiction to enact. That is not an issue in this case. The municipality clearly has the authority to enact the impugned by-law. It is also appropriate, as set out in *Spraytech*, *supra*, that a broad approach to the interpretation of municipal powers be taken.

[51] The issue in this case, however, is not whether the municipality had the authority to enact it but rather, whether the properly enacted by law "addresses the same subject matter" as the Regulation. This demands a comparison of all of the similarities between the two laws and is a much different interpretive exercise than attempting to characterize the dominant feature of a law. By focusing only on the dominant feature of each law, the pith and substance analysis essentially ignores the subsidiary features of each law. This is acceptable in a division of powers exercise as each head of power is relatively broad and the analysis seeks only to slot the impugned law into one category or another. In this case, such an analysis is inappropriate as the test under s. 61 is much broader, and demands a comparison of the similarities of the law.

[52] Additionally, the most common and frequent legislative uses of the phrase "subject matter" indicate that the interpretation of "subject matter" should be content-driven. For example, the term is frequently used to describe the content of dispute, such as a hearing, inquiry, complaint, application, motion or arbitration and the content of a physical item such as a contract, program, lobbying effort or permit.

[53] In my view, these past legislative uses, although not determinative, suggest that "subject matter" is more than just the dominant feature, and must include an examination of the content, *i.e.* what is included in the By-law and the Regulation.

[54] Third, by limiting the application of s. 61 to situations where the dominant feature of the municipal by-law is the same as the dominant feature of the Regulation

the "overall management of nutrient materials in relation to farm operations", s. 61 is rendered to be virtually meaningless. Assuming that municipalities have the authority to enact by-laws that provide for the "overall management of nutrient materials in relation to farm operations", I doubt that a municipality would set out to do so in the comprehensive manner done by the *Nutrient Management Act* and Regulation. This means that, in practice, s. 61 would never apply. Municipalities would be free to manage each element of a farm's operation provided only that they did not do so by way of a by-law whose dominant feature was "the overall management of nutrient materials in relation to farm operations."

[55] Fourth, my colleague restricts the expression "subject matter" to the dominant feature of the Regulation, the overall management of nutrient materials. Although I agree that the broad purpose of the Act has to be taken into account in the interpretation of the expression "subject matter", I do not believe that it ought to be limited in the manner suggested. The expression "subject matter" is to be interpreted in its context. Section 61 applies where a by-law "addresses the same subject matter" [underlining added]. The English Oxford Dictionary defines the verb "address" as follows:

(a) write the name and address of the intended recipient on …

(b) direct in speech of writing (remarks, a protest, etc.);

(c) speak or write to, esp. formally;

(d) direct ones' attention to (address their concerns).

[56] The verb "addresses" is quite broad. In light of the differences in the nature of their authority and jurisdiction, municipalities and the Province can choose to "address the same subject matter" in very different ways. It follows that a by-law prohibiting the siting of nutrient storage facilities within a given distance of a municipal well is addressing the same subject matter as a regulation containing the same prohibition, albeit for a different distance. It is irrelevant, in my view, that the Regulation provides for an overall management scheme and that the zones of prohibitions are only one aspect of the numerous requirements.

[57] Fifth, if Part VII of the Regulation "siting and construction standards" had been adopted as a separate regulation rather than as a part of the comprehensive Regulation, the "subject matter" of that Regulation would be siting and construction standards of nutrient storage facilities. The dominant feature of this smaller regulation would be the same as that of the By-law's. Such a narrow interpretation of s. 61 is, in my view, at odds with the modern approach to statutory interpretation which requires that statutes be read "in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of parliament." see Rizzo & Rizzo Shoes Ltd. (Re), [1998] 1 S.C.R. 27 at para. 21 citing E.A. Driedger, *Construction of Statutes* 2d ed. (Toronto Butterworths, 1983) at 87.

[58] Sixth, assuming that the pith and substance test is the correct approach, my colleague has concluded that the dominant feature of the Regulation is management while the dominant feature of the By-law is prohibition. Because the prohibition provisions in the Regulation are an incidental feature of the Regulation, they are not to be considered in the analysis. Even on a pith and substance

analysis, I do not reach the same conclusion. In a pith and substance analysis, the Supreme Court has held that "the effect of the law cannot be disregarded" See *Reference re Employment Insurance Act (Can.) ss. 22 and 23*, [2005] 2 S.C.R. 669 at para. 27. The analysis must look at both the purpose and the effect of the impugned law. *Kitkatla Band v. British Columbia* (*Minister of Small Business, Tourism and Culture*), *supra,* at paras. 53-54. The effect of the legislation includes both its legal effect and its practical effect. The court must look at the effects that flow from the impugned provisions themselves and then the "side effect" that flow from the application of the impugned provisions. The Regulation sets out a comprehensive scheme that manages all aspects of nutrients in an agricultural operation. The Regulation includes provisions about set backs from municipal wells, and where and when nutrient storage facilities can be located. The relevant portion of the By-law does exactly the same thing; it tells an agricultural operation where and when nutrient storage facilities can be located. The legal and practical effect of the By-law is to add supplementary requirements to the approval of the province under the *Nutrient Management Act*. As indicated, the Province's intent was not to allow municipalities to have this role.

[59] Before turning to my conclusion, I will address two additional matters. As indicated, s. 61 provides that we are to consider the By-law or a provision of the By-law and then determine whether this By-law or provision thereof addresses the same subject matter as the Regulation. Justice Blair is of the opinion that s. 61 does not provide that you compare the By-law or provision thereof with a provision of the Regulation. In my view, the structure of s. 61 is not indicative of an intention to limit the comparison of the By-law or provision thereof to the dominant feature of the whole of the Regulation. The section is structured in this way so as to minimally impair any by-law adopted by a municipality. Taken together, s. 61(1) and s. 61(2) provide that it is only the portion of the By-law that addresses the same subject matter as the Regulation that is rendered inoperative, not the whole of the By-law. Applied to the present case, this means that those portions of the municipality's By-law prohibiting other uses, such as foundries, petroleum product and refining remain in force. Only that portion of the By-law which addresses the same subject matter as the Regulation is rendered inoperative.

[60] Finally, in his concluding section, my colleague states that an interpretation of s. 61 that would render a municipality powerless to prevent the construction of a manure storage facility serving 2000 hogs beyond the 100-metre prohibition zone established pursuant to the *Nutrient Management Act* is absurd. I understand him to be saying that the result is absurd. To the extent that he is expressing concern that municipalities should not be powerless when faced with potentially dangerous threats to their sources of drinking water, I share the concern. In reaching my conclusion, I should not be taken as saying that municipalities should not have input when a nutrient management plan is put forward nor am I suggesting that the respondents and the Province or body charged with making a decision as to whether to approve the plan ought not to consult with the municipality and consider its legitimate concerns. I am simply saying that the *Nutrient Management Act* cannot be interpreted so as to lead to the result sought by the municipality.

CONCLUSION

[61] I conclude, therefore, that the portion of the By-law that prohibits the siting of an intensive livestock operation and associated manure storage facilities within the defined capture zone addresses "the same subject-matter" as the Regulation adopted under the *Nutrient Management Act* and is therefore inoperative. I would, therefore, dismiss the appeal.

[62] I would award the respondents their costs against the appellant fixed at $6,500 plus G.S.T. and disbursements. I would award no cost for or against the intervener.

"Paul S. Rouleau J.A."

"I agree K.M. Weiler J.A."

R.A. BLAIR J.A. (Dissenting)

OVERVIEW

[63] The issues in this appeal arise in the wake of the Walkerton water contamination tragedy.

[64] The Province of Ontario responded by enacting the *Nutrient Management Act, 2002* ("the NMA")[6] and corresponding Regulation 267/03 ("the Regulation").[7] The NMA and the Regulation contain an elaborate and comprehensive regulatory scheme for the management of manure and other "nutrient" materials associated with farming operations in an effort to prevent further water contamination problems in the Province.

[65] Public concern was local too. Reacting to those concerns in 2001, the County of Norfolk initiated a wide-ranging study regarding potential ground water contamination in 2001. The results of the study led the Municipality to enact By-law 64-Z-2003, which amends By-law 1-1999 of the former Town of Simcoe. By-Law 64-Z-2003 ("the By-Law") is designed to protect the Town's water supplies from contamination associated with a variety of land uses – including intensive livestock operations and the manure storage facilities associated with them – and to secure the long-term protection of the Town's potable water supply.

[66] Overlapping governmental requirements generated by these provincial and municipal initiatives are the source of the conundrum in which the respondents, Marilyn and Reginald Peacock, now find themselves.

[67] Mr. and Mrs. Peacock operate a large farming enterprise on the outskirts of Simcoe. Part of their enterprise consists of an intensive hog facility – presently housing one thousand hogs – on a fifty-acre parcel of land that is located a little north west of one of the Town's water well sites. Those wells supply a substantial amount of drinking water to the inhabitants of Simcoe.

[68] The Peacocks wish to expand their existing hog operation by doubling its size to one that will house two thousand hogs. To do so, they need to build an addition to their barn and to the manure storage facility associated with the operation.

[69] The proposed expansion brings into play the provisions of both the Regulation and the By-law. Under the NMA and the Regulation, the Peacocks must obtain provincial approval of a nutrient management plan, which they have done. They were able to obtain this approval partly because their facility is located eight hundred and twenty-three metres from the Town's well site and therefore does not run afoul of the requirement in s. 63 of the Regulation that a manure storage facility may not be constructed within one hundred metres of such a site.

[70] The proposed expanded facility does run afoul of the By-law, however. The By-law prohibits many land uses that are considered potential water contaminants within certain designated sensitivity areas. One of the prohibited land uses consists of "intensive livestock operations and associated storage facilities" (section 3.31.4 (c)). The Peacock's hog undertaking clearly falls within that category and it is located in what is known in the By-law as a Sensitivity 2 Wellhead Protected Area ("WHPA"). Such an area is defined, not by distance from

the wellhead, but by the time it is estimated a water contaminant will take to flow to the well from its source. A Sensitivity Area 2 is a two-year capture zone, that is, an area from which it would take two years or less for contamination introduced at the source to reach the municipal well.

[71] There is thus a tension between the operation of the Regulation (which does not prohibit the proposed expansion and pursuant to which it has been approved) and the operation of the By-law (which prohibits the expansion). The broad question raised on appeal, therefore, is whether the By-law is inoperative because the Province has occupied the legislative field in a manner that ousts the ability of the Municipality to enact a setback by-law, based on local conditions, and designed to protect the health and safety of its inhabitants from potential groundwater contamination.

[72] The Peacocks and the Intervener, the Pork Producers Marketing Board, argue that the By-law is not operative because it has been superseded by the NMA and the Regulation. In this respect, they rely on the provisions of s. 61 of the NMA, which state:

61(1) A regulation supersedes a by-law of a municipality or a provision in that by-law if the by-law or provision addresses the same subject matter as the regulation.

(2) A by-law or a provision of a by-law that is superseded under subsection (1) is inoperative while the regulation is in force.

[73] The primary issue on this appeal involves the meaning of the words "addresses the same subject matter as the regulation" in subsection 61(1). Justice Fedak accepted the Peacocks' arguments on the application and granted judgment declaring the By-law to be superseded by the Regulation. My colleague, Rouleau J.A., has also concluded that the By-law, and the provision of the By-law in question, address the same subject matter as the Regulation. Accordingly, he holds that the By-law is inoperative as it has been superseded by the Regulation, and he would dismiss the appeal.

[74] Respectfully, my reading of section 61 of the NMA, together with the applicable legislative framework and jurisprudence, lead me to the opposite conclusion. I would allow the appeal and set aside the order of the application judge for the reasons that follow.

FACTS

[75] The pertinent facts are reviewed clearly in the reasons of my colleague. Apart from the foregoing overview and whatever brief references may be necessary in the course of developing my conclusions, it is not necessary for me to recite them further.

ANALYSIS

The *Spraytech* Test

[76] I begin with a brief reference to the first issue dealt with by Justice Rouleau. That issue is whether the "impossibility of dual compliance" test enunciated in *Multiple Access Ltd. v. McCutcheon* [1982] 2 S.C.R. 161, and adopted in the provincial/municipal law context by the Supreme Court of Canada in *11957 Canada Ltée (Spraytech Société d'arrosage) v. Hudson (Town)*, [2001]

2 S.C.R. 241 ("*Spraytech*"), applies to resolve the tension between the provisions of the Regulation and those of the By-law.

[77] In this respect, I agree with the conclusion of my colleague, for the reasons he states. The *Spraytech* test only applies where the relevant provincial legislation does not specify a different test. Section 61(1) of the NMA does that. The test is whether the By-law or a provision of the By-law addresses the same subject matter as the Regulation. Only if the answer to that question is "No" is it necessary to consider the impossibility of dual compliance yardstick. If the answer is "Yes", the Regulation trumps the By-law, or its provision, which are superseded and rendered inoperative by virtue of s. 61(2).

[78] In my view, as I shall explain, the answer to the question whether the By-law – or, more accurately, section 3.31.4(c) of the By-law – addresses the same subject matter as the Regulation *is* "No". I turn to that question now.

The Approach to Determining Whether the Regulation and the By-law Address the Same Subject Matter

[79] The modern approach to statutory interpretation has been reiterated recently by the Supreme Court of Canada in *Bell ExpressVu Limited Partnership v. Rex*, [2002] 2 S.C.R. 559, at para. 26:

Today there is only one principle or approach, namely, the words of an Act are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament.

See also, *Rizzo & Rizzo Shoes Ltd. (Re)*, [1998] 1 S.C.R. 27 at para. 21, citing from E.A. Driedger, Construction of Statutes 2d ed. (Toronto Butterworths, 1983) at 87.

[80] When what is at stake in the interpretation is whether the legislative direction of one level of government (here, the Province) will prevail over that of another level of government (the Municipality), it is appropriate in my view to consider, as part of the "entire context", the legislative framework in which the subordinate government's powers have been exercised, as well as the principles relating to the exercise of those powers. In this case, the respondent's By-law is specifically enacted in accordance with the power to pass zoning by-laws under s. 34(1) of the *Planning Act*,[8] but it also brings into play the broader power of municipalities to enact by-laws for the general welfare of its inhabitants pursuant to the *Municipal Act, 2001*.[9]

[81] Courts have commented several times recently on the need to take a broad approach to the interpretation of municipal powers, one that recognizes the importance of permitting municipalities to attend to the welfare of their citizens. In *Spraytech*, *supra*, para. 3, L'Heureux-Dubé J. commented that matters of governance are now examined through what she called "the principle of subsidiarity", that is, the proposition that law making and implementation are often best achieved at a level of government that is closest to the citizens affected and thus most responsive to their needs. This court expressed a similar view in *Croplife Canada v. City of Toronto* (2005), 75 O.R. (3d) 357 (C.A.). At para. 37, Feldman J.A. said:

I conclude that absent an express direction to the contrary in the *Municipal Act, 2001*, which is not there, the jurisprudence from the Supreme Court is clear that municipal powers, including general welfare powers, are to be interpreted broadly and generously within their context and statutory limits, to achieve the legitimate interests of the municipality and its inhabitants.

[82] As noted above, the By-law is specifically enacted pursuant to the Municipality's powers to enact zoning by-laws under the *Planning Act*. Section 71 of the *Planning Act* provides that in the event of conflict between its provisions and those of any other general or special Act, the provisions of the *Planning Act* prevail.[10] While I do not think that s. 71 of the *Planning Act* is dispositive of the question whether the Regulation (promulgated under the NMA) prevails over the By-law (enacted pursuant to the *Planning Act*), because the conflict is not between the provisions of the two Acts, the existence of the s. 71 override is supportive of the view that care should be exercised before the municipal legislative initiative – otherwise properly enacted – is declared inoperative. For a similar approach, see the "principles of accommodation" view expressed by Morden J.A. in *Attorney General for Ontario v. City of Mississauga* (1981), 33 O.R. (3d) 395 at 410-411 (C.A.).

[83] In considering the meaning of the term "subject matter" in s. 61(1) of the NMA – with the foregoing interpretive framework in mind – I take the view that "subject matter" in relation to a by-law, or a provision in a by-law, or a regulation, is not the equivalent of "any individual matter" that may be addressed or dealt with in the by-law, its provision or the regulation. "Subject matter" is broader than "an individual matter". It may be that the "subject matter" addressed by a by-law, or a provision of a by-law, is the same as an individual matter dealt with within a regulation – in this case, a minimum distance separation from the municipal well site. It does not follow, however, that the "subject matter" of the By-law or its provisions is necessarily the same as the "subject matter" of the Regulation. The "subject matter" of a by-law, or a provision of a by-law, or a regulation, in my view, has to do with its main thrust, or – to adopt the constitutional language used to resolve conflicts between levels of government – its pith and substance or dominant feature.

[84] That is the analytical approach I propose to adopt in considering the meaning of the phrase "addresses the same subject matter as the Regulation" in s. 61(1) of the NMA. In *Spraytech* the Supreme Court of Canada acknowledged that analytical tools used in division of powers jurisprudence can be useful in sorting out similar tensions between provincial (or federal) and municipal legislation: see para. 36. The constitutional "pith and substance" approach does not fit perfectly, of course, because, as Rouleau J.A. notes, what is at issue here is not an exercise "in categorizing laws into existing known heads of power . . . to ascertain whether the enacting legislature possesses jurisdiction to enact". However, what *is* at play here is the analogous exercise of determining what is the dominant feature (or "pith and substance") of the By-law, its provision, and the Regulation – the very exercise that underlies a division of powers debate.

[85] "Subject matter" is a term that is employed in a variety of ways by judges and in legislation. It has been used, for example, to describe a matter under dispute (the subject matter of a hearing, a complaint, a prosecution or a

proceeding), or to explain the overall content of a thing (a contract, a program, an order or judgment, policy or conveyance), or to illustrate the grant of jurisdiction over a general area. The application that is most apt to the present circumstances, however, is the use of "subject matter" to resolve constitutional conflicts between federal and provincial legislation on the basis of the pith and substance analysis.

[86] "Subject matter" has been variously defined in legal dictionaries. For instance, Black's Law Dictionary refers to it as "the issue presented for consideration."[11] Burton's Legal Thesaurus equates the term with the "tenor" of what is under consideration.[12] Weiler J.A. of this court has described the "matter" of a law, for purposes of constitutional analysis, as "its dominant or most important characteristic": *Adler v. Ontario* (1994), 19 O.R. (3d) 1 at 41 (C.A.), per Weiler J.A., dissenting. Other authorities have defined the "matter" of a law as its leading feature, its true meaning or character, its pith and substance: see *Union Colliery Co. of British Columbia v. Bryden*, [1899] A.C. 580 at 587 (P.C.); *Whitbread v. Walley*, [1990] 3 S.C.R. 1273 at 1286, cited in *R. v. Morgantaler*, [1993] 3 S.C.R. 463 at 481; *Consortium Developments (Clearwater) Ltd. v. Sarnia (City)* (1996), 30 O.R. (3d) 1 at 24 (C.A.); *Maple Ridge (District) v. Meyer* (2000), 77 B.C.L.R. (3d) 171 at para. 29 (S.C.); *Rothmans, Benson & Hedges Inc. v. Saskatchewan*, [2002] 10 W.W.R. 733 at para. 66 (Sask. Q.B.), rev'd on other grounds, [2005] 1 S.C.R. 188.

[87] When comparing the By-law, or its relevant provision, and the Regulation in this case, then, it is necessary to assess their "tenor", their "dominant or most important characteristic", their leading feature, their true character or pith and substance. First, though, it is necessary to consider precisely what the comparators are under s. 61(1).

[88] To repeat, s. 61(1) provides that a regulation supersedes a municipal by-law, or a provision of that by-law "if the by-law or provision addresses the same subject-matter as the regulation". The structure of the language is not parallel. It does not say: ". . .if the by-law or provision addresses the same subject-matter as the regulation or a provision of the regulation". Thus the relevant comparators here are the By-law, or the provision of the By-law in question (section 31.3.4(c)), on the one hand, and the Regulation as a whole, on the other hand. This supports the view, expressed above, that the comparison is not to be made between the subject matter of the By-law or its provision and an individual matter that may be dealt with within the Regulation, but rather between the "subject matter" of the By-law or its provision and the more extensive "subject matter" of the Regulation.

[89] This approach to the interpretation of s. 61(1) of the NMA using the "pith and substance" of the By-law, it provision, and the Regulation as an analytical framework is appropriate in the context of this case, in my view. It is a principled approach, comparing as it does the most important or dominant features of the provincial and municipal laws under consideration, and permitting various types of environmental protection initiatives to co-exist and achieve their intended purposes without frustrating the intentions of either the Legislature or the municipality. It also permits the competing approaches that are in play to be balanced in a fitting way. These competing approaches include the underlying provincial design, expressed in the NMA and Regulation, for protecting the environment by

developing a province-wide regulatory scheme to control and minimize the potentially poisonous effects of manure and other "nutrients" associated with intensive farming operations on drinking water supplies, while at the same time preserving agricultural development. But they also include the need for municipalities to be able to respond to the health, safety and general well being of their inhabitants, based on local needs and conditions – a part of the contextual analysis for the interpretation of s. 61(1) referred to above.

[90] Both these approaches have their merits. There is no doubt that the Province has the legislative authority to impose its will on the municipalities, should it choose to do so, and to impose a scheme that leaves no room whatever for local response. The question, however, is whether it has done so in this case.

[91] As noted above, courts have recently emphasized the need to take a flexible approach to the interpretation of municipal powers, recognizing the importance of the need for local governments to respond to local concerns. At the same time, I recognize that during the debates in Committee and in the Legislature prior to the enactment of the NMA, the importance of a consistent province-wide system of regulation was emphasized. Indeed, an attempt by the Opposition to amend what is now s. 61 to add a provision that a regulation would not supersede or render inoperative a by-law imposing higher standards for environmental protection, was defeated: Ontario, Legislative Assembly, Standing Committee on General Government, Official Reports of Debates (Hansard), G-3 (3 June 2002). This is evidence of legislative intention that the provincial scheme is to prevail when the competing provincial and municipal provisions address the same subject matter; in those circumstances, the municipality is not permitted to "top up" the provincial mechanism with a by-law imposing higher standards. However, the pre-enactment debates do not assist in resolving the "addresses the same subject matter" discussion, in my view.

[92] Moreover, the interpretation I have placed on the By-law and the Regulation does not frustrate the intention of the Legislature. The issue is not what members may have said in the course of parliamentary debates – although, as indicated, that may provide some evidence of what they intended – but rather the issue is what the Legislature's intention was as expressed in the enactment. Here, it does not appear that in the context of the setback provisions of the NMA and the Regulation, the Legislature gave effect to a "no enhancement by municipalities" intention. I make this observation because the NMA itself gives the Lieutenant Governor in Council the power to make regulations only respecting minimum distance separation requirements (s. 6(2)(u)). This suggests that other distance separation requirements that are not less than the minimums imposed by the Regulation may exist elsewhere. But where? "Minimum" in relation to what? The only other logical source of such requirements would be land use zoning by-laws passed by municipalities pursuant to the *Planning Act* R.S.O. 1990, c. P.13. It is implicit from this that municipalities may pass distance separation or setback provisions that will enhance or "top up" the minimums provided for in the NMA and Regulation where local conditions and the protection of the health and safety of the local citizens so require. I shall return to the issue of enhancement at the conclusion of

these reasons when I deal further with whether the *Spraytech* test has been met on the facts of this case.

Do the Regulation and the By-law Address the Same Subject Matter?

[93] In the meantime, and with the foregoing analysis in mind, I turn to a specific consideration of whether the By-law or its provision (section 31.3.4(c)) addresses the same subject matter as the Regulation. In my opinion, they do not.

[94] In this regard, I begin with the observation that the "purpose" of legislation is not the equivalent of its "subject matter". A pith and substance analysis looks at both the purpose of the legislation as well as its effect: *Kitkatla Band v. British Columbia (Minister of Small Business, Tourism and Culture)*, [2002] 2 S.C.R. 146 at 171. Here, it may be said that the By-law and the Regulation have similar purposes. However, they seek to achieve those purposes by different means, and therefore their effect and their "subject matter" are not necessarily the same.

[95] In broad terms, the purpose of both the Regulation and the By-law is to promote the protection of the environment and to preserve the health and well being of the members of society. Both do this in the context of preventing or minimizing the contamination of the water supply. This purpose is reflected in the purpose statement in both the NMA and the By-law:

NMA, s. 1

The purpose of this Act is to provide for the management of materials containing nutrients in ways that will enhance protection of the natural environment and provide a sustainable future for agricultural operations and rural development.

By-law – "Explanation of Purpose and Effect"

This by-law amendment [is] for the protection of municipal water supplies from contamination associated with certain land uses and to secure the long-term protection of a potable water supply for existing residents and businesses and to prohibit land uses from establishing in Wellhead Protection Areas or to ensure that certain uses can be established within Wellhead Protection Areas and have an acceptable level of risk to groundwater quality.

[96] Although the purpose of a statute, regulation or by-law sheds light on its subject matter, it does not itself define the subject matter. The subject matter of a statute, regulation or by-law is its dominant feature, or pith and substance.

[97] Here, the dominant feature, or "subject matter" of the Regulation is the management of farm operations involving manure and other materials containing nutrients, in accordance with the dictates of the NMA. Those dictates are accomplished through the complex and comprehensive provisions of the Regulation that include, amongst other things – as aspects of the nutrient management scheme – regulations respecting the use, application, holding and storage of nutrient materials, and the construction and location of holding and storage sites. The dominant feature of the Regulation is not the provision for a one hundred metre setback from municipal wells

(although that is admittedly an incidental feature). The dominant feature is the overall management of nutrient materials in relation to farming operations.

[98] The subject matter of the By-law (its dominant feature), on the other hand, is the prohibition of a lengthy list of land uses deemed to be potentially harmful to groundwater quality, in certain defined sensitivity zones relative to municipal wells. The subject matter of the particular provision of the By-law in question (section 3.31.4(c)) is similar in nature but more specific in its target; it prohibits the use of land for intensive livestock operations and associated manure storage facilities in the two-year capture zone.

[99] In short, the dominant feature or pith and substance of the By-law and its provision in question (set-back from wells for spreading manure and for the construction of manure storage facilities) compares to an incidental feature of the Regulation, but not to the subject matter of the Regulation, which is the overall management of nutrient materials. I do not see this as rendering s. 61 of the NMA meaningless. The Municipality cannot institute a regime of regulating or managing the nutrient material aspects of farm operations. It does not follow, in my opinion, that the Municipality may not utilize its zoning powers under the *Planning Act* to prohibit an activity that may be incidentally touched upon in a provincial regulatory scheme – as long as the "subject matter" of the by-law and the regulation in question are not the same.

[100] My colleague highlights the actions of the Municipality in sending a letter to the Peacocks after their farm had been identified as a potential source of contamination in the consultants' report, as support for the proposition that the By-law and the Regulation address the same subject matter. In that letter the Municipality requests the respondents to cooperate in retaining an engineer to report on the structural integrity of their manure storage facility and identify necessary remedial work, to install monitoring equipment with respect to groundwater quality, and to prepare a protective plan for spreading manure. My colleague concludes that this demonstrates the By-law is directed to the management and regulation of the nutrient material aspects of the respondents' farming operations.

[101] I do not interpret the letter in the same fashion. First, I note by its contents that it is directed at the Peacocks' *existing* hog operations – something over which the By-law could have no sway. Secondly, I read the letter as simply an attempt by the Municipality to work out a resolution of the specific groundwater contamination problem identified by the consultants report, with the respondents. The respondents are, after all, citizens of the Municipality with a substantial farming enterprise, and a resolution of the problem was in everyone's interest. I do not take the fact that the Municipality attempted to extract concessions it may not have been able to impose legislatively as any indication of the subject matter of the By-law the County of Norfolk subsequently enacted within its powers.

[102] As indicated above, what is to be compared for the purposes of s. 61(1) of the NMA is the "subject matter" addressed by the By-Law or its provision, on the one hand, and the "subject matter" addressed by the Regulation as a whole (not the subject matter of some particular provision in the Regulation), on the other hand. When that

comparison is done here, it is apparent that the dominant feature of the By-law and its provision (i.e., land use prohibition by means of a set back from wells in relation to intensive livestock operations and their associated manure storage facilities) compares to an incidental feature of the Regulation. However, it does not address the same subject matter as the Regulation (i.e., the management of nutrient materials).

[103] I conclude, therefore, that the Regulation does not supersede the By-law or its provision, and, accordingly, that the latter remain operative.

***Spraytech* Revisited**

[104] That is not the end of the matter for purposes of the appeal, however. Although the provisions of the By-law are not rendered inoperative by s. 61(1) of the NMA, it remains to be considered whether they are rendered inoperative by virtue of the "impossibility of dual compliance" test set out in the *Spraytech* decision, *supra*. In my view, they are not.

[105] The By-law, and its provision in s. 3.31.4(c), prohibiting the Peacock's proposed expansion facility survive the *Spraytech* analysis because there is no conflict between the municipal legislation and the Regulation in the "impossibility of dual compliance" sense; one does not prohibit what the other permits, or compel what the other forbids. The By-law does not say that a manure storage facility may be constructed within one hundred metres of a municipal well site, which the Regulation precludes. The Regulation does not say that such a facility may be constructed within the larger Sensitivity Area 2 provided for in the By-law; it merely says the facility cannot be constructed within the one hundred metre set-back from the well. As noted above, the setbacks provided for in the Regulation are only minimum setbacks. Once the "same subject matter" hurdle has been successfully overcome, there is nothing to prevent the respondent from enacting a by-law that provides for more stringent or enhanced requirements in terms of distance separation, based on local exigencies.

[106] Respectfully, the application judge erred in concluding there was an actual conflict in this case.

DISPOSITION

[107] It must not be forgotten that we are talking about "nutrients" here only in the euphemistic sense that legislators like to use in framing their enactments. What we are talking about is manure and its contaminating effects on surface and ground water. On the facts of this case, the Peacocks' new manure storage facility is to be constructed some eight hundred and twenty-three metres from the Town's municipal well site – significantly beyond the on hundred metre set-back called for in the Regulation. However, the logical extension of the argument made by the appellants and the intervener is that the Province has implemented the Walkerton Inquiry Recommendations by providing that a farmer can construct a manure storage facility to collect the waste from two thousand hogs – *three quarters of a million gallons* per year – within the length of a football field from a municipal well that provides drinking water to the community. And the local municipality is powerless to deal with the situation, even though they have a thorough and well-founded study demonstrating that, given local geological and soil conditions, contamination seeping into the soil from a

greater distance than one hundred metres will endanger the municipality's supply of drinking water. In my view, such an interpretive result is absurd and could not have been intended by the Legislature. For the reasons set out above, I do not believe that it was.

[108] I would accordingly allow the appeal, set aside the judgment of Fedak J., and dismiss the Peacocks' application.

"R.A. Blair J.A."

RELEASED: June 28, 2006

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[1] See Ministry of the Environment, "Status of Part Two Recommendations Report of the Walkerton Inquiry" *Ministry of the Environment* (May 2005), online: <http://www.ene.gov.on.ca/envision/water/sdwa/status_part2.htm> The government has indicated that recommendations 10 through 15 have been implemented by the *Nutrient Management Act*.

[2] Ontario, Legislative Assembly, Standing Committee on General Government, *Hansard*, (3 June 2003) at G-48-G-51. The current s. 61 was referred to then as s. 60, but is substantively exactly the same.

[3] Ontario, Walkerton Commission of Inquiry, *Report of the Walkerton Inquiry*, part 2 (Toronto: Queen's Printer for Ontario, 2002) at 139, online: Ministry of the Environment <http://www.attorneygeneral.jus.gov.on.ca/english/about/pubs/walkerton/part2/>

[4] See Norfolk County, By-law, 64-Z-2003, *Wellhead Protection* Areas, (16 December 2003), s. 3.31.4(c):

Intensive livestock operations and associated manure storage facilities shall be prohibited on lands with Sensitivity 1 and 2 WHPAs. For the purpose of this Section, Intensive Livestock is defined as including 150 livestock units or 50 or more livestock units on a land base, which exceeds 2 livestock units per tillable acre available to the farm operation for application of nutrients.

[5] Justice Blair also referred to s. 6(2)(u) in stating that his interpretation of s. 61 is not contrary to the legislative intent. In my view, the existence of s. 6(2)(u) does not negate the clear legislative intent to create a system exclusively managed by the provincial government. Section 6(1) provides the Lieutenant Governor with a broad power to make regulations (a) establishing standards respecting the management of nutrients used by and on agricultural operations and (b) establishing standards respecting farm practices. Section 6(2) is a list of examples of areas in which the Lieutenant Governor *may* make regulations and specifically says, "without limiting the generality of subsection (1)." By providing in s. 6(2)(u) that the Lieutenant Governor can pass a regulation setting minimum distance separation between a manure storage facility and a place or feature such as a municipal well and then stating in s. 61 that a regulation supercedes a by-law addressing the same subject matter, the legislative intent revealed in the debates is reinforced rather than weakened. Those debates demonstrate an intent that when a municipal by-law imposes higher environmental standards for nutrient management, s. 61 is meant to make the Regulation supercede the By-law.

[6] S.O. 2002, c. 4.

[7] Ontario Regulation 267/03, as amended by O. Reg. 294/04.

[8] R.S.O. 1990, c. P.13.

[9] S.O. 2001, c. 25.

[10] In 2002, and again in 2005, the Provincial Government introduced a proposed amendment to s. 61 of the NMA by adding a subsection (3) that would provide "This section prevails over section 71 of the *Planning Act*". Bill 190, the *Good Government Act, 2005* received first reading on April 27, 2005. It has not yet been enacted.

[11] Bryan A. Garner, *Black's Law Dictionary* 8th ed. (St. Paul, NN: Thomson West, 2004).

[12] William c. Burton, *Burton's Legal Thesaurus*, 3d ed. (New York: Macmillan Library Reference, 1999).

Peterson v. Ajax (Town) Fire Marshal

APPLICATION UNDER subsection 15 of section 18 of the Fire Marshals Act, R.S.O. 1990, c. F-17 as amended

Between
Hans Walter Peterson and Repla Limited, appellants, and
G. Gettins, as assistant to the Fire Marshal with the Town of Ajax, respondent

[1998] O.J. No. 3303
DRS 98-16383
Court File No. 750-97

Ontario Court of Justice (General Division)
Divisional Court
B. Wright J.
Heard: August 7, 1998.
Oral judgment: August 18, 1998.

Counsel:
Charles Wagman, for the applicant (appellants).
N. Cameron Murkar, for the respondent.

[para1] B. WRIGHT J. (orally):-- This is an appeal from a decision of the Fire Code Commission dated September 5, 1997, which confirmed in part a Fire Marshal's order dated March 14, 1997. The Fire Marshal's order was based on an inspection on February 24, 1997, of an industrial building located at 160 Dowty Road in Ajax. The order states:

> It was found that the Industrial building of combustible construction lacks fire separations required to contain the spread of fire, and in consequence

There are a number of boxes which can be x'd out and the two that are x'd out read:

> the building or structure is especially liable to fire.

And the next one is:

> the building or structure is so occupied that fire would endanger persons or property therein.

The order concludes:

> Therefore, pursuant to Clause (a) & (c) of Subsection 2 of Section 18 of the Fire Marshals Act, R.S.O. 1990, c. F.17 as amended, it is ordered that
>
> A dry sprinkler system be designed and installed throughout the building in accordance with N.F.P.A. 13 "Standard for the Installation of Sprinkler Systems", or subdivide the building into fire compartments not exceeding 1000 m2 by fire walls having not less than a four (4) hour fire resistance-rating. Prior to taking any corrective measures, a Building Permit must be applied for and obtained.

The inspection report of February 24, 1997 was not produced. There is no information at the time the order was issued, which provides particulars of the basis upon which the order in question was made. The building in question contains approximately 46,000 square feet of space, divided into three sections. The building was constructed in 1941 of all wood framing with metal clad exterior. It was used initially by the Federal Government making ammunition for the war. It was subsequently purchased by Cashway Lumber and used for the manufacture of windows and doors. The appellant, Repla Limited, purchased the building and used it for manufacturing windows until it moved its operations to another plant. The building currently has two tenants. The east section is used solely for the storage of mattresses and textile material. The only personnel on site are those delivering or taking out the stored items. The central section is occupied by a plastics extruding operation with six employees. The west section is vacant. The decision of the Fire Code Commission is brief and does not review the evidence upon which it makes its decision. The main parts of the decision state:

> The Tribunal accepts the evidence of the Ajax Fire

Department and Mr. Caskanette as to the present state of the subject property and the lack of fire separations. The evidence of Mr. Harpur, based on his inspection and subsequent report, confirmed the occupancy and combustible construction.

Based on the evidence presented, the Tribunal concluded that the combination of the construction and the existing occupancy present a fire hazard, unreasonably endangering life and property.

Although challenged by the owner, the Tribunal accepted the evidence of the Ajax Fire Department that the existing plywood partitions cannot be considered as fire separations whether they have breaches or not. However, when questioned by the Tribunal, the Ajax Fire Department stated that providing fire walls in the subject property would require extensive work and therefore is not the most practical solution. The Tribunal believes that the fire walls may provide a loss limitation but that the protection provided by the fire walls would not be sufficient to combat a fire within the divided sections.

Mr. Caskanette gave an inventory of the fire safety features of the building including means of egress, fire extinguishers and hydrants. The Tribunal did not consider these to be compensatory items and believes that the sprinkler protection ordered is the only viable fire safety solution for the subject property.

...

Accordingly, it is the decision of the Tribunal that the Order be modified as follows:

A sprinkler system shall be provided throughout the building, designed and installed in accordance with NFPA 13 standard, and approved by the Ajax Fire Department. All the required drawings must be submitted and the required building permits obtained prior to installation.

The work shall be completed and the installation operational by March 16, 1998.

[para2] As a first impression of a building constructed in 1941 with complete wood framing, a conclusion can be reached that such a building is more susceptible to fire than more modern buildings and therefore a sprinkler system should be installed. However, this building has never had a fire and therefore it is necessary to examine the basis upon which the Fire Marshal's Order was issued.

[para3] I have read the transcript of the proceeding before the Commission, along with the reports of the two professional engineers. I have difficulty finding the evidence upon which the Fire Marshall's Order and the decision of the Commission were made. Robert Harpur, P.Eng. prepared a report dated July 3, 1997, and testified for the respondent. His report is general in content and describes the building and its occupancy, but makes no comment on any existing fire hazard. In his oral evidence, Mr. Harpur's main concern appears to be that the owner does not have complete care and control of the building, since it is now occupied by two tenants. However, he presents no evidence that the presence of either tenant makes the building more liable to have a fire than when previously, totally occupied by the owner. I refer to Mr. Harpur's testimony from p. 37 of the transcript:

> ... As I was indicating earlier, I can assure you when Mr. Petersen operated under Repla Limited it was a single tenancy building, he ran a very clean shop, housekeeping was never a problem. As I was alluding to earlier and may have to offer into evidence, the spray booth that was in there did not use flammable liquids, therefore Section 5.12 of the Fire Code did not apply. Once again, instilling of the fact that he ran a very clean shop, a model type citizen, so to speak, ran a good operation.
>
> However, a big change came when he started renting the building out to more than one occupant. For example, ChemPlast, located in the middle, is a plastics type

factory. As you can see, in a recent fire in the City of Hamilton - although this facility is of a lot smaller scale, the hazards involved when a plastics factory of that nature or storage or whatever catches on fire what the results are, I don't think I have to go into much further explanation than that.

Also, the east end of the building is used for storage, as Mr. Petersen indicated, for mattresses, various types of fabrics or whatever. So you've got a mixed occupancy there with truly no fire separation with an adequate rating in between them.

[para4] It was unfair for Mr. Harpur to refer to another fire without evidence to show that because of the occupancy by a plastics company, the premises is more liable to have a fire.

[para5] The respondent Mr. Gettins gave similar evidence at p. 45 of the transcript:

Q. Anyways, Mr. Gettins, you stated in your evidence that the building was acceptable when it was occupied by one tenant, is that correct?

A. Essentially, what I was saying is that the occupant at that time, Repla Limited, complied with the Fire Code.

Again at p. 46 of Mr. Gettins' evidence:

Q. And because he changed the occupancy from a manufacturing point to one of dead storage and one of no storage and one of manufacturing of extruded plastic parts, you feel that this increased the hazard of the use of the building?

A. Because the building then became a multiple unit occupancy with not as much control and care. In other words, Mr. Petersen, when he ran it, showed a lot of control and care over his own building.

When he began renting it out to other occupants, there certainly wasn't the control and care as noted in inspection reports and violation served against them.

[para6] No inspection reports were introduced as evidence to support any increased hazard of fire because of the present occupancy of the building. Natural justice requires that all evidence which forms the basis of an order, such as made in this case, must be produced to persons affected by the order so that they will know the case they have to meet in their defence. The respondent has failed to comply with the rules of natural justice.

[para7] Returning to the transcript of Mr. Gettins' evidence at p. 64:

Q. What type of construction is that?

A. Combustible construction. With a storage warehouse on the east side of the building and a plastics factory located in the middle and miscellaneous storage by the owner in the west end of the building. Based on that criteria I felt it was especially liable to fire.

[para8] I raise the question, why because of those occupancies, is the building especially liable to fire? Mr. Gettins gives no reason for coming to that conclusion and his conclusion is not based on any evidence except the general statement that he puts forward.

[para9] At p. 75 of the transcript, returning to Mr. Harpur, and he is referring to Mr. Caskanette's evidence:

His description of the occupancy that is currently in the building, I would say, fairly represents what is there. The only problem is that with the building, subject to being rented on sort of a monthly basis, you don't know who the next occupants will be or what their conditions will be like. Lack of control or even knowledge of what

the tenants are doing is one of the problems here.

The building itself is also part of the problem, just because of the fact that it's combustible and of such a size. I agree with his comment, though, that it is not in a dilapidated condition, it has been well maintained. And certainly, to get into the building, you would have to either pry locks off doors or break windows or something of that nature. It's not what I would call an invitation to vagrants at this time.

[para10] Walters Forensic Engineering report dated September 2, 1997, prepared by Rene G. Caskanette, P.Eng., is more comprehensive than Mr. Harpur's report. His report in part states:

In my opinion, this building is not "so occupied that a fire would endanger persons therein", as stated in the Fire Marshal's order. In fact, the design of this building, and occupancy of this building, would allow for easy and safe egress of any building occupants in the event of a fire on the premises.

The warehouse section at the east end of the building contains normal combustible materials, and normal combustible construction. Appendix D defines combustible construction, as found in the Ontario Fire Code. There are no ignition sources in this section of the building, besides the normal building electrical and heating systems. The potential for a fire developing in this warehouse is very limited. In the event that a fire did occur in this warehouse, the entire east end of the building would likely be destroyed. The Fire Department would have ample water, and good access to the north and south sides of the building, to stop the fire from spreading.

The plastics grinding and extrusion operation in the centre of the plant does not contain any high hazard occupancies, which would create a higher than normal fire expectancy. In the event that a fire developed in this section of the building during production, the employees have access to manual fire extinguishing equipment to suppress the fire. In the event that the fire grew beyond their control, the Fire Department would have ample water and access, in order to control the fire before it spread beyond the centre section of the building.

The west end of the building which is unoccupied is not heated. There are no unusual fire hazards in this section of the building. The only potential ignition source is the building electrical system. The probability of a fire in this area is very low.

The doors are locked, and the building is equipped with alarm contacts on the doors, to detect vandal entry. This would reduce the chance of a vandal arson.

In the event that a fire occurred in the west end of the building, the Fire Department would have ample water and access to suppress the fire before it spread into the centre section of the building.

In my opinion, this building is not "so occupied that a fire would endanger property therein", in any unusual manner.

Similarly in my opinion, the building or structure is not "especially liable to fire".

This building was erected in 1942, and contained some very hazardous occupancies since its original date of construction. It was originally occupied as an ammunition factory, for shell filling operations for the war effort. It was later converted to wood working, with all the wood dust hazards associated with that occupancy. It also contained paint booths, and all the hazards associated with flammable liquid usage in such occupancies.

The occupancies today are very mundane in comparison to

> what the building has experienced in the past. In light of this history of the building, one would wonder why sprinklers were required in 1995, when they weren't required earlier to protect the much more severe fire hazards in the building at that time.

[para11] In summary, the evidence discloses that the Fire Marshal's office had no concern about this building being liable to a fire while it was totally occupied by the owner. The concern of the Fire Marshal's office, and the basis upon which the order was made, is the presence of two tenants in the building. However, there is no specific evidence that the occupation of the building by the two tenants has made the building more liable to have a fire. There is not sufficient evidence to support the Commission's broad general statement that:

> Based on the evidence presented, the Tribunal concluded that the combination of the construction and the existing occupancy present a fire hazard, unreasonably endangering life and property.

[para12] Where is the evidence that the occupancy of the building by the two tenants and the activities carried on by them, present a fire hazard. Some of the evidence presented was slanted toward the circumstances in the event of a fire occurring, and the effect of a fire on other persons or property. However, the order is based solely on the building being especially liable to fire, or, a fire would endanger persons or property therein. The consequences of a fire affecting others are not part of the order. For example, there are three other consequences, which are not part of the order, which deal with some of the evidence which was presented, which in my view, is irrelevant to the order issued by the Fire Marshal. Those consequences are:

> The building or structure is so situated as to endanger other buildings or property.
>
> There are in or upon the building or premises, combustible or explosive materials, or conditions dangerous to the safety of the buildings or premises or to enjoining property.
>
> A fire, once started, would seriously endanger the health or safety of any person or the quality of the natural environment for any use that can be made of it.

Those three consequences were not part of the Fire Marshal's order, although some evidence was adduced to support those consequences.

[para13] Since the evidence does not support the order of the Fire Marshall, nor the decision of the Commission, the appeal is allowed and the order of the Fire Marshal and the decision of the Commission are set aside. My decision does not preclude the Fire Marshal issuing another order based on proper evidence. Since the main concern of the Fire Marshal, as disclosed by the evidence, is the question of what type of tenants may use this building, with respect to possible hazards, I order that the respondent/owner shall advise the Fire Marshal's office of any change of occupancy of the building.

[para14] I have endorsed the Appeal book:

> For oral reasons given the appeal is allowed. The order of the Fire Marshall dated March 14, 1997 and the decision of the Commission dated Sept. 5, 1997 are set aside.
>
> Order to go that the appellants shall advise the respondent of any change in occupancy of the building.
>
> Costs fixed at $5,000 payable forthwith by the respondent to the appellants.

B. WRIGHT J.

Polla v. Toronto (City) Chief Building Official

Between
Marisa Polla, applicant, and
Yaman Uzumeri, Chief Building Official, Corporation of the City of Toronto and The Corporation of the City of Toronto, respondent

[2000] O.J. No. 4399
Court File No. 00-CV-194025

Ontario Superior Court of Justice
Molloy J.
Heard: August 18, 2000.
Judgment: November 21, 2000.

Counsel:
Kenneth C. Vaughan and Colin Vaughan, for the applicant.
Diana Dimmer and Naomi Brown, for the respondent.

MOLLOY J.:--

A. INTRODUCTION

[para1] The applicant owns residential property backing onto a ravine in Etobicoke. There is an existing house on the property in which she and her husband reside. However, they wish to build a new house on the lot and tear down the existing one. They began discussing their plans with City officials as early as 1997 and submitted their initial plans in 1999. In June 1999, in preparation for the anticipated construction, the Pollas built a retaining wall at the back of the property which had the effect of extending the usable land at the rear of the lot. The Pollas encountered numerous problems getting their plans approved. The Chief Building Official has refused to issue a building permit until site plan approval has been obtained. City Council has imposed conditions to site plan approval to which the applicant objects. In particular, the City has required that the retaining wall constructed in 1999 be removed, that the land adjacent to the setting wall be then restored to its natural pre-development state, and that the proposed dwelling be set back a minimum of 10 meters from the restored valley edge (which would require the building to be removed 2 meters north of its current proposed site). The applicant now seeks from this Court an order directing the issuance of a building permit and a declaration that the City Council had no jurisdiction to impose the conditions it did.

B. ENTITLEMENT TO BUILDING PERMIT

(i) The Test

[para2] Notwithstanding the many difficulties the applicant has experienced with various municipal officials and bodies, it is now clear that the proposed building complies with all zoning requirements and the Ontario Building Code. Under s. 8(2) of the Building Code Act, S.O. 1992, c. 23, the applicant is entitled to have a building permit issued unless the proposed building will contravene "any other applicable law". The City takes the position that "any other applicable law" includes site plan approval.

[para3] The Divisional Court held in Quay West v. Corporation of Toronto (1989), 47 M.P.L.R. 109 (Ont. Div. Ct.) at 111 that "as a general rule, a building permit should not be issued for a development in a site plan control area to which s. 40 of the Planning Act applies until site plan approval for the development has been obtained". The Court held that without such approval, the proposed building would contravene s. 40(4) of the Planning Act and the building permit could therefore not be issued. The Court further held (at p. 112) that a building permit could only be issued without such approval if there were "extraordinary circumstances" in which the municipal authority was acting in bad faith or for an obviously unlawful reason. I agree with the decision of Davidson J. in Shell Canada Products Ltd. v. Barrie (City) Building Official (1992), 11 M.P.L.R. (2d) 43 (Ont. Gen. Div.) that the Divisional Court decision in Quay West, leave to appeal from which was refused by the Court of Appeal, is binding upon me. Therefore, I can only direct the issuance of a building permit in this case if the City did not

act in good faith or if it acted for a "clearly unlawful purpose".

[para4] The City argues that it has not refused site plan approval and that these cases with respect to extraordinary circumstances therefore do not apply to it. I do not agree. The City has imposed onerous conditions to site plan approval. If those conditions have been imposed in bad faith or are unlawful, then the effect on the landowner is the same as if site plan approval had been withheld altogether. Therefore, if the City imposed the conditions in bad faith or if they are unlawful conditions, then the test identified in Quay West has been met and the building permit should issue.

(ii) Did the City Act in Bad Faith?

[para5] A finding that a municipal authority failed to act in good faith is a serious matter. The applicant alleges bad faith and has filed extensive affidavit evidence to support her position. The respondent denies bad faith and has filed extensive affidavit evidence supporting its position. I am not in a position on an application such as this to resolve the conflicts in the affidavit evidence. I am therefore not able to conclude that the City acted in bad faith in imposing the conditions it did on the site plan approval. I decline to make any finding on this point.

(iii) Are the Site Plan Approval Conditions "Clearly Unlawful"?

(a) Jurisdiction

[para6] A dispute as to conditions imposed upon site plan approval would normally fall within the jurisdiction of the Ontario Municipal Board ("OMB"). Site plan approval is governed by the Planning Act, R.S.O. 1990, c. P.13, s. 41(12) of which provides that where an owner of the land is not satisfied with any conditions imposed on site plan approval, he or she may require that the matter be referred to the OMB. The respondent submits that the core of this Court application is the landowner's dissatisfaction with the conditions imposed on site plan approval and that the landowner's only proper recourse is an appeal to the OMB. Alternatively, the respondent argues that even if this Court has jurisdiction to consider the matter, it ought not to do so, but rather should defer to the OMB's expertise in planning matters which better suits it to address these issues.

[para7] It is common ground that the landowner in this case is entitled to appeal to the OMB with respect to the conditions imposed on site plan approval. The question is whether the availability of that remedy ousts the jurisdiction of this Court, or should prompt this Court to exercise its discretion to refuse to hear the application.

[para8] The applicant has brought this application under s. 25 of the Building Code Act, which provides a right of appeal to this Court from a decision of a chief building official refusing to issue a building permit. The Chief Building Official in this case has refused to issue a building permit. This Court clearly has jurisdiction to decide that appeal. A landowner has a prima facie right to use her property as she sees fit. The issuance of a building permit is not a discretionary matter. If the legal conditions have been met, the owner is entitled to the permit. In Ottawa (City) v. Boyd Builders Ltd., [1965] S.C.R. No. 408, the Supreme Court of Canada held that, in light of this common law property right, the Courts have the power to grant a remedy notwithstanding the existence of alternative remedies before the OMB. There have been numerous cases in which Courts have dealt with whether a building permit should be issued, in the course of which issues with respect to site plan approval were also involved: Quay West v. Toronto, supra; Dominion Stores Ltd. v. Borough of Etobicoke (1982), 37 O.R. (2d) 661 (Ont. Div. Ct.); Revenue Properties Co. v. Toronto (City) (1984), 26 M.P.L.R. 165 (Ont. Co. Ct.); Re Luxor Entertainment Corporation v. North York (City) (1996), 27 O.R. (3d) 259 (Gen. Div.); Sixteenth Warden Ltd. v. Markham (Town) (1993), 12 O.R. (3d) 653 (Gen. Div.). In my opinion, the authorities are clear that this Court has jurisdiction to hear this application, notwithstanding the availability of an alternative remedy before the OMB.

[para9] The fact that I have jurisdiction to hear the application is not the end of the matter, however. It is open to me, as an exercise of discretion, to decline to hear the application if I am of the view that it is more appropriately dealt with by the OMB. This issue was raised before the Divisional Court in Dominion Stores Ltd. v. Borough of Etobicoke, supra, a case strikingly similar to the one before me. In Dominion Stores, a building permit was refused because the municipality had not given development control approval under s. 40 of the Planning Act. The municipality had refused to approve the development because it did not want to permit access to the supermarket from the two municipal roads at its boundaries. The landowner argued, successfully, that it was entitled by law to access its property from these roads and that the municipality was therefore withholding its approval for an unlawful reason. The respondent argued that the Court should refuse to hear the matter because the landowner had an alternative remedy in the form of an appeal under s. 40 of the Planning Act to the OMB, precisely the issue raised before me. The Divisional Court held (at p. 665):

> That section provides a means to arbitrate a dispute about the details of plans or drawings or the terms of an agreement. If this case involved a legitimate dispute about details or terms there would be great force to that argument. But in this case I think that there is no legitimate dispute. There is what seems to me to be nothing more nor less than unlawful obstinacy. Therefore, I do not think that the applicant is required to go to the Ontario Municipal Board before coming to this Court.

[para10] In the case before me, the applicant argues that the City has acted unlawfully in that it had no lawful basis for the conditions it imposed on site plan approval. There are no issues of zoning or planning policy. This is not a matter as to the details of plans or drawings. This is strictly a legal issue: i.e. whether as a matter of law, the City had legal authority to impose these conditions on site plan approval. Accordingly, it seems to me that the Court is in as good a position as the OMB to decide the issue. Further, since the decision whether I should proceed is an exercise of discretion, it is appropriate to consider all of the surrounding circumstances. The applicant has been through a long and sorry history with this property. There has been considerable delay and confusion at significant cost to the applicant. It is not necessary for me to find bad faith on the part of municipal officials to have considerable sympathy for the position in which the applicant was placed. She has waited long enough for the matter to be resolved. All technical requirements have been met. All that is left is a straight legal question which I have jurisdiction to deal with. In my view, it is in the interest of justice that I deal with the matter rather than deferring it.

(b) Analysis

[para11] It is absolutely clear on the evidence that Ms. Polla was legally entitled to erect the retaining wall at the rear of her property. Neither site plan approval nor a building permit was required, and none was sought. It is true that building the retaining wall resulted in the removal of some of the original vegetation in the ravine and no doubt that destruction, as well as the presence of the wall itself, has an environmental impact. However, the Polla property does not fall within the regulatory control of the Toronto Regional Conservation Authority ("TRCA") and is not subject to zoning by-laws restricting activity on the property that might adversely affect the ecological balance in the ravine. There was nothing the City or the TRCA could have lawfully done to prevent Ms. Polla from erecting the retaining wall. The question is whether they can now require her to tear it down as a condition of granting site plan approval.

[para12] Any authority of the City to impose conditions on site plan approval can only flow from the express provisions of s. 41 of the Act. That provision has been held by this Court and by the OMB to be restrictive, rather than discretionary, and to be concerned with conditions relating to the internal arrangements of buildings and facilities and provision of services and access to the specific development

under consideration: Sixteenth Warden Ltd. v. Markham (Town), supra, at p. 666; First City Shopping Centre Group v. Gloucester (City) (1990), 25 O.M.B.R. 91 at 101-102; Ontasian Investments Inc. v. Vaughan (City), [1996] O.M.B.D. No. 1125 at paras. 17-19. Further, there is no authority to withhold site plan approval based solely on aesthetic considerations: Barnet Investments Ltd. v. Toronto (City) (1985), 18 O.M.B.R. 343.

[para13] The respondent relies for its authority on ss. 41(7)(a)6 and 9. Those provisions state that the City may, as a condition of approval, require the owner of the land to

> (a) provide to the satisfaction of and at no expense to the municipality any or all of the following:
>
> 6. Walls, fences, hedges, trees, shrubs or groundcover or facilities for the landscaping of the lands or the protection of adjoining lands.
>
> 9. Grading or alteration in elevation or contour of the land and provision for the disposal of storm, surface and waste water from the land and from any buildings or structures thereon.

[para14] At this point it is relevant to consider the genesis of the conditions imposed upon site approval. At the early stages, there was some confusion as to whether the Polla property came within the control of the TRCA. Ultimately it was established that the TRCA had no jurisdiction as the property was outside its geographic area of protection. The TRCA is on record as saying that if the property had been under its control, its approval of the retaining wall would have been required and it would not have permitted it. At one point, the City's Planning Department staff had advised Mr. Polla that a full environmental impact study would be required as part of site plan approval. Staff later backed down from this requirement, but did negotiate a compromise solution with Mr. Polla that involved reconfiguration of the retaining wall and appropriate landscaping. The Planning Department prepared a Report dated May 9, 2000. The Report stated that the Official Plan for Etobicoke supported environmental protections for ravine and valley lands and that the expectation was that the Polla property would in the future be placed under the protection of the TRCA. However, at this point, the TRCA was without jurisdiction and there were no zoning by-laws in place to restrict the work undertaken by the Pollas at the back of their property, in particular the retaining wall. Also, the as-built works met the requirements of Works and Emergency Services Department for on-site drainage and storm water run-off. The Report noted the concerns of area residents as well as concerns of staff that the work done by the Pollas was not consistent with Etobicoke planning policy. It then referred to the compromise that had been worked out with the landowner and recommended that site plan approval be conditional on an agreement to that effect.

[para15] In the meantime, some of the area residents had been actively lobbying the City and municipal politicians seeking to prevent the development proposed by the Pollas and [to demand] the removal of the retaining wall. The Etobicoke Community Planning Council was to have considered the application for site plan approval at its meeting on May 24, 2000. On that date, however, it adjourned the matter to July 19, 2000 and requested, among other things, that staff obtain the comments of the TRCA for consideration of Council on July 19, 2000. At its next meeting, Council considered a letter from a representative of the TRCA which advocated remediation of the ravine to its state prior to the retaining wall, removal of the retaining wall, re-siting the proposed building 10 meters back from the restored valley edge (3 meters north of the proposed location) and revegetation of the area with native species. The City imposed all of these recommendations as conditions of site plan approval.

[para16] It is abundantly clear that the conditions imposed by the City are directed towards maintaining the natural environment of the ravine. This objective may well be, and indeed probably is, consistent with the policy expressed in the Official Plan. However, an Official Plan is not law. It is merely a statement of intention, which may or

may not be implemented by the municipality by the enactment of appropriate by-laws. Until such by-laws are passed, the Official Plan cannot be used by the municipality to regulate land use: Re Woodglen & Co. Ltd. v. City of North York (1984), 47 O.R. (2d) 614 at 617 (Div. Ct.); Re Steven Polon Ltd. v. Metropolitan Licensing Commission, [1961] O.R. No. 810 (H.C.J.). Therefore, the mere fact that protecting the natural state of the ravine is consistent with the Official Plan does not create jurisdiction in the City to protect the ravine through the site plan approval process. There must be explicit legal authority (through statute or by-laws) creating a right in the City to restrict the landowner's use of its property in the manner it has.

[para17] In my opinion, the City misused its site plan approval power for an extraneous purpose. There were no legitimate landscaping concerns other than as might be required if the retaining wall were torn down. The clear underlying purpose of the conditions imposed is to require the Pollas to remove a structure that violates no by-law or regulation, that required no approval to erect, that they were entitled by law to build on their property and which the City had no power to prohibit. Thus, the City has used power given to it for one purpose to achieve a result that it has no legitimate legal authority to compel. In Metropolitan Separate School Board v. Scarborough (City) (1996), 30 O.R. (3d) 186, the applicant school board had received site plan approval for the construction of portable classrooms. Later, the school board had signed a site plan agreement that provided for the removal of the classrooms. The classrooms were not removed and the City took steps to compel their demolition. One of the issues before the Court was whether the City had any authority to require the removal of the buildings as part of its authority to approve site plans under s. 41 of the Planning Act. Sharpe J. (as he then was) noted, "There is a long line of authority from the Ontario Municipal Board and from the courts rejecting attempts by municipal councils to expand the range of items which they can approve or require through the use of site plan control and site plan agreements." He then went on to hold that there was no authority under the guise of site plan control to order the removal of a building legally constructed. He held at p. 192:

> I cannot find in s. 41 any authority for the proposition that a site plan agreement can be used to limit the duration of approval accorded to plans for development. Subsections (4) and (5) deal with approval of plans and drawings. Section 41(7) lists a number of enumerated conditions that may be attached to approval for plans. These deal with matters such as widening of highways, access, walkways, lighting, fencing, grading, and elevations, while ss. (8) deals with widening of highways. It is apparent that the matters contemplated as the proper subject of a site plan agreement relate to approval of drawings and plans and amenities of this kind. The City is entitled to scrutinize the plans and attach conditions of the kind enumerated, but cannot use the power conferred by the section to exact terms not therein contemplated. There is no reference in s. 41 to limiting the duration of plan approval. By contrast, other provisions in the Planning Act expressly contemplate such temporal limitations: see, e.g., ss. 39(4) and 45(9). The assertion of the power to require a property owner to remove a structure which otherwise complies with applicable planning restrictions, building codes and standards must be firmly grounded in legislation. A requirement that a property owner remove an approved structure after a specified period differs significantly from the conditions contemplated by s. 41. Accordingly, I find that the term of the site plan agreement is not authorized by the Act. (Emphasis added.)

[para18] In Dominion Stores Ltd. v. Borough of Etobicoke (1982), 37 O.R. (2d) 661 (Div. Ct.), the Court held that the City had withheld site plan approval because it did not want to permit access onto the Dominion Store property from the two side streets abutting it. This was found to be unlawful. The landowner was entitled at common law to access the public roads touching its property and the City could not prohibit this without express statutory authority. Further, the landowner's legal right to a building permit could not be

thwarted by the City withholding site plan approval "for a reason not authorized by law". Galligan J. held at pp. 664-665:

> The record in this case is extensive. A close perusal of it leads me to the inescapable conclusion that the sole reason for the refusal to approve the development plans is that they provide for access to those local streets. It is my opinion that that reason is not one authorized by law. I do not think that a municipality is entitled to refuse developmental approval for an unlawful reason and thereby frustrate a land owner's prima facie right to issue of the building permit. The municipality withheld this permit for a reason that is not authorized by law. It follows therefore, that it must now issue it.

[para19] The situation in the case before me closely parallels the situation before the Court in Dominion Stores. Here, the Pollas were entitled by law to erect the retaining wall, just as Dominion Stores was entitled by law to access its property from the public road. Here, the City has attempted to interfere with the Polla's lawful construction of a retaining wall by refusing site plan approval, even though it had no statutory authority to prohibit the construction of the retaining wall in the first place. In Dominion Stores, the municipality attempted to interfere with the landowner's Store's lawful use of the public road to access its property by refusing site plan approval, even though the municipality had no statutory authority to prohibit access from the public road in the first place. In both situations, the municipality has used its power in respect of site plan approval to interfere with lawful use of the property it has no direct statutory authority to prohibit. The conduct of the municipality in Dominion Stores was found to be clearly unlawful. Likewise, in my view, the condition requiring the Pollas to tear down the retaining wall is clearly unlawful.

[para20] The requirement that the proposed home be moved further back from the ravine is also unauthorized. The proposed location does not violate zoning requirements. Site plan approval cannot be used to effect matters controlled by means of a zoning by-law: Martins v. Ottawa (City) (1996), 33 O.M.B.R. 372. In any event, if the retaining wall remains in place, the proposed location will be set-back more than 10 meters from the edge.

(c) Conclusion

[para21] I therefore conclude that the City exceeded its jurisdiction in ordering the removal of the retaining wall and the additional set-back of the proposed building. The conditions it imposed on site plan approval were clearly unlawful.

C. JUDGMENT

[para22] The conditions imposed by the City on site plan approval are unlawful and are therefore of no force and effect. The applicant is entitled to a declaration to that effect. The site plan approval conditions were the only remaining impediment to the issuance of a building permit. The chief building official has no discretion to refuse a building permit if all legal requirements for its issuance have been met. Under s. 25(4) of the Building Code Act the powers of a Judge on appeal from the refusal of a chief building official to issue a building permit include the power to substitute her own opinion for that of the chief building official and to take such action as the Judge considers the chief building official ought to take. I have already stated that it is my opinion that the proposed building does not contravene any applicable law. Accordingly, it is appropriate in this case to order that the building permit be issued, subject only to any normal administrative requirements.

[para23] The applicant is entitled to her costs. If counsel are of the view that for any reason the usual order for "costs on a party and party basis as assessed" would not be an appropriate disposition in this case, I can be spoken to in order to arrange an appointment for argument of the matter.

MOLLOY J.

Putnam v. Stirling-Rawdon (Township)

Between
Kirk Putnam, applicant (respondent by counter-application),
and
The Corporation of the Township of Stirling-Rawdon, respondent
(applicant by counter-application)

[2000] O.J. No. 734
Belleville Court File No. 1880/99

Ontario Superior Court of Justice
Belch J.
Heard: February 23, 2000.
Judgment: March 6, 2000.

Counsel:
Robert Reynolds, for the applicant.
David W. Demille, for the respondent.

[para1] BELCH J.:-- Is the required rear yard setback eight metres or only one metre in length? Can a garage be both attached and detached at the same time for purposes of use and setbacks? Mr. Kirk Putnam, the applicant, contends his garage is detached for setback purposes, and, as it is constructed one metre from the rear lot line, the location of the garage complies with the zoning by-law. The respondent municipality contends for this home office use within his garage to be valid, the garage must be a dwelling and its rear wall can be no closer than eight metres from the rear lot line, but if the office is shifted to the "house" then the zoning by-law is complied with as the rear wall of the "house" is more than eight metres from the rear lot line. The garage would now be considered a detached garage and its present rear wall, constructed one metre from the rear lot line, conforms to the zoning by-law.

[para2] However, the plot deepens. Mr. Putnam argues that because his "detached garage" with office is attached to his house by a tunnel beneath the surface and as the garage, house, and tunnel share a common foundation, they should be considered as one structure, "a dwelling". Therefore, his home office is a valid conforming use. Further, because the zoning by-law does not take a subsurface structure into account for setback purposes, his garage with the appearance of being "detached" satisfies the required distance of one metre to the rear lot limit.

[para3] It is my decision there is only one building on this lot, and Mr. Putnam's home office occupation is permitted in that building/dwelling. Further, the rear yard setback of eight metres is not complied with, however, having knowingly granted the building permit the municipality is now estopped from insisting upon the eight metre rear yard requirement.

Background

[para4] The subject property was purchased as a vacant lot in 1993 and a building permit applied for. The application proposed a residential house and detached garage, however, the application was accompanied and supported by building plans showing the two structures were to be attached by a below-grade concrete hallway joining the two basements. The structures were built in 1993 and the respondent's building inspector monitored the construction, including the location on the lot of the structures in relation to the lot boundaries.

[para5] Since November 1993, the two structures have been continuously connected by the hallway which has been used for daily passage back and forth. The hallway is approximately six and a half feet high and four feet wide. It has vinyl flooring and fluorescent lighting.

[para6] The applicant has used the first floor of the garage as a home office for his construction contracting business.

[para7] The zoning by-law is number 988/84. It permits a home occupation in a "dwelling" but not in a detached accessory building. If the house and garage are considered

for the purposes of the home occupation provisions in the by-law to be one connected structure, then the home office in the garage is permitted. If the garage is considered for the purpose of these provisions to be a detached accessory building as the municipality argues, then the home occupation would not be permitted.

[para8] Ms. Kathy Reid, the Clerk-Treasurer of the Township of Stirling-Rawdon in the County of Hastings, indicates that she received the application for the building permit for the dwelling and the detached garage and at the time of the application admits that the applicant did have rough plans indicating that the house and the detached garage would be joined by an underground tunnel. She states that after some consideration the Township was prepared to regard the building as a detached garage because it was only connected to the main dwelling by an underground tunnel. The advantage to Mr. Putnam was that he could then construct the detached garage within one metre of the rear lot line and it would remain in compliance with the zoning by-law. She further states that the applicant did not indicate in any way, either at the time he made the initial application or at the time he submitted the engineered drawings and received the building permit that he intended to use the garage for anything other than a garage. She states that it was her decision that if the garage looked like a detached garage, she would be prepared to treat it as a detached garage because the tunnel would not have any impact on the setback or lot coverage requirements of the zoning by-law.

[para9] The property is zoned second density residential (R2) which permits as uses a single family dwelling, a home occupation and an accessory building or use to a single family dwelling. Home occupation is defined to mean a use which is clearly incidental or secondary to the residential use of the dwelling and is conducted entirely within such a dwelling by an inhabitant thereof. Home occupation must be located within a dwelling which is defined as meaning a separate residential building containing one or more dwelling units.

[para10] In March of 1997 and in response to complaints from neighbours, the chief building official for the respondent attended at the property at a time when the garage was being renovated. That official says that in discussions with the applicant, he pointed out that home occupations were to be conducted within dwellings and accordingly the applicant changed his application to an application to permit interior renovations to the detached garage including insulation, wiring, strapping and doors for the purposes of a workshop in the lower level. In the view of the official, a workshop in the garage could be termed an accessory use and therefore a building permit could issue.

[para11] Later it came to the official's attention that the applicant was using the main level of the garage as an office. When he spoke to the applicant about this, the applicant provided him with a letter to the effect that:

> Without prejudice against us, we are willing to work with you and agree to comply with the by-law as you interpret it.
>
> In stride with your request that the office for our business be in the house, we have removed the sign from the shop area and have attached it to the front of the house. We have also set up a temporary office in the house. We are contemplating several different designs to create a permanent office space in the house and this may take some time.
>
> We know you will be understanding and give us an appropriate amount of time to have this work finalized ...

[para12] Apparently, the applicant and respondent have been involved in a running feud since 1997.

The Litigation

[para13] The applicant caused to be issued a Notice of Application under Rule 14.05(3)(d), (g) and (h) of the Rules of Civil Procedure. He has made application for:

(a) a declaration that the home office use being carried on by the applicant in the garage on his property at 189 Church Street, in the Village of Stirling is a home occupation permitted under the respondent's Comprehensive Zoning By-Law 988/84;

(b) a declaration that the rear yard setback for the said garage complies with the setback requirements of the aforementioned By-Law;

(c) costs.

[para14] The grounds for the application are that the R2 zoning permits a home occupation in the property. The applicant carries on a home office occupation in his former garage. The applicant and the respondent disagree as to whether the zoning by-law permits the home occupation to be carried on in the garage. The applicant seeks this court's assistance in the form of a determination of this issue and a declaration further to that determination. In addition, and depending on the ruling on the foregoing, there may be a dispute between the parties as to whether the garage complies with the rear yard setback requirements imposed by the zoning by-law. The applicant therefore seeks a determination of that issue from the court as well and a declaration further to that determination.

[para15] The respondent has countered with an application of its own, pursuant to Rule 14.05(3)(d) and (h) of the Rules of Civil Procedure.

[para16] The respondent's application requests an order restraining the applicant or anyone else using the garage located at 189 Church Street, Stirling, Ontario for a home occupation contrary to the Comprehensive Zoning By-Law No. 988/84.

[para17] The grounds for this counter-application are that

(a) the by-law permits a home occupation in the R2 zone, provided the home occupation is located entirely within a dwelling;

(b) the applicant, it states, is operating a business out of an office located on the main floor of an accessory building which is not permitted by By-Law No. 988/84;

(c) in the alternative, if the building is attached to and part of the dwelling unit, the building is too close to the rear lot line and cannot be used for a home occupation.

[para18] The applicant states that cross-examination of the representatives of the respondent municipality produced a number of admissions supporting the applicant's position as to the proper interpretation of the by-law. For example, the respondent's planner agreed that the question of whether or not a home occupation is permitted comes down to the issue of whether it is located within a dwelling and that the determination of whether a particular structure is a dwelling depends on the definitions of such terms as "building" and "dwelling" contained in the by-law. Further, the chief building official/by-law enforcement officer agreed that the garage, house and sub-surface corridor constitute one structure and accordingly that structure falls within the definition of "building" in the by-law, and since the structure contained a dwelling unit it follows that it falls within the definition of a "dwelling" in the by-law. The applicant argues that if the applicant's office is contained within a dwelling then it is a permitted home occupation since it is located within a dwelling.

[para19] As to the second issue, it is the applicant's position that the garage is subject to the rear yard setback requirement of one metre applicable to detached buildings because, for the purposes of the setback provisions of the by-law, it should be regarded as a detached accessory building. He argues that the respondent's Clerk-Treasurer confirmed that it was and is the respondent's position that it is appropriate to regard the garage as detached for the

purposes of the yard provisions of the by-law, even though it is actually part of one structure, because the sub-surface connecting corridor has no impact on the coverage and setback concerns addressed by the yard provisions of the by-law, and it follows then that the garage's one-metre setback complies with the by-law's rear yard requirement.

[para20] Finally, the applicant argues there is no inconsistency between the position that the existence of the sub-surface corridor connecting the house and garage into one structure should be taken into account for the purposes of the use provisions of the by-law, including the home occupation provisions, but not taken into account for the purposes of the yard provisions of the by-law. He points to the fact that the respondent's Clerk-Treasurer and Planner agreed that the existence of sub-surface structures such as the corridor joining the house and the garage is properly taken into account by the use provisions of the by-law, but is properly not taken into account by the yard provisions.

[para21] The respondent argues as follows:

(a) Firstly, a dwelling must comply with the regulations for dwellings in the R2 zone. In this case, a single family dwelling must have a minimum rear yard of eight metres. The garage in this case is only one metre away from the rear lot line. Consequently, because a home occupation can only be conducted in a dwelling and a dwelling can only have a minimum rear yard of eight metres, a home occupation can only be conducted in a dwelling that is at least eight metres from the rear lot line.

(b) Secondly, an accessory building is a subordinate building or structure located on the same lot as a principal building and includes a private garage. Accessory buildings are permitted in the R2 zone and the minimum rear yard for an accessory building that is not attached to the principal building is one metre. However, a home occupation cannot be conducted in an accessory building that is not attached to the principal building because a home occupation can only be located within a dwelling.

(c) Thirdly, if an accessory building is attached to the main building, the front yard, side yard, and rear yard and area requirements of the by-law are to be complied with as if the accessory building was part of the main building. In other words, if the accessory building, ie garage, is considered to be attached to the main building it has to comply with the yard requirements for the main building, ie dwelling. As a result, if the garage is considered as an accessory building attached to the dwelling, it has to comply with the rear yard requirements for the dwelling which in the R2 zone is a minimum of eight metres.

The Authorities

[para22] The applicant relies firstly on Wilson v. Jones (1968), 68 D.L.R. (2d) 273, a decision of the Supreme Court of Canada. In that case, Mr. Justice Spence remarks:

> I have come to this conclusion realizing that a by-law restricting the use of land must be strictly construed and that any doubt as to the application of the by-law to prevent the erection of a specific building should be resolved in favour of such proposed use. No authority need be cited for each of these propositions. These principles, however, need only to be applied when upon the reading of the whole by-law there is an ambiguity or difficulty of construction.

[para23] Secondly, in the Supreme Court of Canada decision Bayshore Shopping Centre v. Nepean (1972), 25 D.L.R. (3d) 443, again Mr. Justice Spence speaking for the Court, states:

> I find little assistance from decisions which purport to indicate the philosophic attitude which the Court should adopt in construing zoning by-laws. No authority need be cited for the proposition that a man's property is his

> own which he may utilize as he deems fit so long as in such utilization he does not commit nuisance, entrap the unwary, or act in breach of statutory prohibitions, and therefore, by-laws restrictive of that right should be strictly construed. Yet it has been said that modern zoning provisions have been enacted to protect the whole community and should be construed liberally, having in certain the public interest: R. v. Brown Camps Ltd. (1969), 8 D.L.R. (3d) 502, [1970] 1 O.R. 388 [1970] 2 C.C.C. 363; Re Bruce and City of Toronto et al., (1971), 19 D.L.R. (3d) 386 at page 391 [1971] 3 O.R. 62.
>
> But such statements usually were made when the court was considering an application to permit the encroachment into a residential zone of some building which it was alleged would seriously affect the amenities of the life of the residents thereof ...

[para24] The thrust of the applicant's argument is that if there is an ambiguity within the by-law then the by-law must be strictly construed against the municipality.

[para25] The respondent argues there is no ambiguity in the by-law. Simply stated, a home occupation takes place in a dwelling, the rear wall of which cannot be closer than eight metres to the rear lot line. The respondent relies upon the reported decision Haldimand-Norfolk (Regional Municipality) v. Painter [1997] O.J. No. 3814, a decision of the General Division of the Ontario Court of Justice (now the Superior Court of Justice). Referring to paragraph 19 of that reported case, the respondent argues that reading the present by-law as the applicant requests would lead to absurd results. As the learned Justice stated in that case:

> This would lead to absurd results. And this is one of the golden rules of statutory interpretation: where one of two interpretations might lead to absurd results, one is to prefer the one that does not produce such absurdities.

Analysis

[para26] Mr. Reynolds for the property owner invites the court to make a two-stage analysis - use and setback. In his cross-examination of the municipality's Clerk he elicits that:

(a) the municipality approved a structure consisting of a house, garage and sub-surface corridor;

(b) a structure is a building under the by-law s. 3.13;

(c) this building contains a dwelling unit;

(d) the entire "structure" contains a dwelling;

(e) a home occupation is allowed in a dwelling; and

(f) therefore, a home occupation use in the "garage" is permitted because it takes place in the structure.

[para27] The second stage, the yard provision setback stage, begins again with a cross-examination of the Clerk. Ms. Reid confirms:

(a) section 3.51 of the by-law in defining gross floor area, excludes basement or cellar;

(b) section 3.74 states that in determining lot coverage you exclude any part of a building or structure which is constructed entirely below grade;

(c) a yard in s. 3.149 is open and uncovered space; and

(d) in determining yard encroachments, s. 5.15.1 provides a yard shall be open and unobstructed by any building or structure from the ground to the sky;

therefore, if the garage was a detached accessory building, the municipality can ignore the sub-surface corridor for setback purposes and the detached garage built one metre from the rear lot line conforms with by-law requirements.

[para28] Mr. Barnes, the municipality's Planner, in his cross-examination agreed the by-law has regard to sub-surface structures for the purposes of its use provisions but does not take sub-surface structures into account for the purposes of the yard setback and coverage provisions.

[para29] However, this two-stage approach ignores that in stage one, in having to convince the court there is only one structure or building containing a dwelling with a home occupation, the result is there no longer exists a detached garage or accessory building. Under s. 3.56 of the by-law a private garage can mean "a separate building or a part of the principal building used for the parking or storage of vehicles." As of the date of the permit application, this garage use was permitted because the garage was part of the principal or only building on this lot.

[para30] Section 3.15.1 in defining a rear yard provides it "shall mean the yard extending across the full width of the lot between the rear lot line of the lot and the nearest part of any principal building or structure on the lot." Under the stage one approach there is only one structure. Even if the garage could be considered an accessory building, it is attached to the main building and s. 5.27.3 provides in that

case, that yard requirements shall be complied with as if the accessory building was part of the main building. In s. 7.3.1.4, the minimum rear yard requirement is eight metres for a single family dwelling, rather than the one metre found in s. 7.3.3.1 for accessory buildings not attached to the principal building.

Decision

[para31] I find that there is only one structure or building on this lot, and declare that Mr. Putnam's office space in the former garage is a conforming use, being a home occupation in a dwelling. Further, the by-law is not ambiguous.

[para32] Under normal conditions, the court would find the building, being a dwelling whose rear wall is located one metre from the rear lot line, does not satisfy the rear lot eight metre setback requirement of the by-law.

[para33] However, the municipality reviewed the application for the building permit and the construction plans and determined there were two structures, a dwelling house and a detached garage. It granted the building permit. The municipality now argues that Mr. Putnam never disclosed it was his intention to use the garage space as a home office. With respect, that use is not the issue here. The problem was granting the permit when the plans disclose only one building, the rear limit of which was to be built one metre, not eight metres, from the rear lot lines, contrary to the by-law.

[para34] The municipality initially interpreted the zoning by-law while in possession of plans showing the location of the structure on the lot. It is now estopped from enforcing the eight metre rear setback against the applicant.

[para35] The relief requested in the respondent's application is dismissed.

[para36] In the event the parties cannot agree on costs, I am prepared to hear submissions for that purpose on a date to be established by the trial co-ordinator.

BELCH J.

R. Pickles

COURT OF APPEAL FOR ONTARIO

DOHERTY, MACPHERSON and SIMMONS JJ.A.

BETWEEN:

HER MAJESTY THE QUEEN ***Appellant***

- and -

DARCY PICKLES ***Respondent***

Michael M. Miller for the appellant
Eric O. Gionet for the respondent

HEARD: January 8, 2004

On appeal from the judgment of Justice Joseph B. Wilson of the Ontario Court of Justice dated April 23, 2003.

MACPHERSON J.A.:

A. INTRODUCTION

[1] The respondent, Darcy Pickles, constructed a dock for the Ravalli family in the township of Seguin. He did not obtain a building permit from the township and was charged with the offence of building without a permit contrary to s. 8(1) of the Building Code Act, 1992, S.O. 1992, c. 23 ("the BCA"). Section 36(8) of the BCA establishes a one year limitation period for certain offences, including violations of s. 8(1). The information charging Pickles was sworn thirteen months after the completion of the dock.

[2] His Worship Justice of the Peace Michael G. Kitlar dismissed the charge on the basis of the limitation period. His decision was upheld on appeal by Justice Joseph B. Wilson of the Ontario Court of Justice. Morden J.A. of this court granted the Crown leave to appeal Wilson J.'s decision and framed the legal questions as follows: "Does the doctrine of discoverability apply to the offence of constructing without a permit and is this offence a continuing offence?"

B. FACTS

(1) The parties and the events

[3] Darcy Pickles was a building contractor. Sab Ravalli owned a cottage in the township of Seguin. He retained Pickles to build a boathouse. Pickles went to the township's building department and was told that he would need to obtain approval from the Department of Fisheries and Oceans ("DFO") in order to build a boathouse on the Ravalli property.

[4] Pickles and Ravalli met Andrea Doherty, a DFO representative, at the cottage. She told them that it would be difficult to obtain approval for a boathouse. However, Doherty told them that they could build a floating dock instead and advised them where they could build it. Ravalli testified that Doherty told them that she would send them a confirming letter within a week. She did not send such a letter. Pickles and Ravalli constructed the dock in July 2000. Pickles did not return to the township's building department to seek a building permit because he thought that DFO's verbal approval through Doherty was sufficient.

[5] In August 2001, the municipal authorities became aware of the Ravallis' floating dock. Pickles was charged with building without a permit contrary to s. 8(1) of the BCA:

> 8(1) No person shall construct…a building…unless a permit has been issued therefor by a building official.

(2) The court proceedings

[6] The trial took place before His Worship Justice of the Peace Kitlar.

[7] The BCA creates three types of offences:

> 36(1) A person is guilty of an offence if the person,
>
> (a) knowingly furnishes false information in any application under this Act or in any statement or return required to be furnished under this Act or the regulations;

> (b) fails to comply with an order, direction or other requirement made under this Act; or
>
> (c) contravenes this Act, the regulations, a bylaw passed under section 7 or a condition imposed under section 9.

The offence of building without a permit contrary to s. 8(1) comes within s. 36(1)(c) of the BCA.

[8] The BCA also contains a limitation period for s. 36 offences:

> 36(8) No proceeding under this section shall be commenced more than one year after the time when the subject?matter of the proceeding arose.

[9] The trial judge held that this limitation period compelled the acquittal of Pickles since the Crown had laid the charge against him thirteen months after the dock had been constructed. The appeal to Justice Wilson was dismissed. The Crown sought and obtained leave to appeal to this court.

C. ISSUES

[10] The issues on appeal are the two set out in Justice Morden's order granting leave to appeal: Does the doctrine of discoverability apply to the offence of constructing without a permit and is this offence a continuing offence?

D. ANALYSIS

[11] The Crown contends that the courts below made two errors: (1) they did not apply the discoverability principle to the limitation period set out in s. 36(8) of the BCA and (2) they did not hold that the offence of building without a permit contrary to s. 8(1) of the BCA is a continuing offence which becomes complete only when a permit is obtained. I will deal with these two submissions in turn.

(1) Discoverability

[12] Pickles completed construction of the dock in July 2000. The township first became aware of the dock in August 2001. Pickles was charged with building without a permit the same month. The Crown contends that it was the township's 'discovery' that Pickles had built a dock without a permit that triggered the commencement of the s. 36(8) limitation clock. Accordingly, the charge was laid mere days - not thirteen months - after the clock started to run.

[13] The discoverability rule is merely a rule of construction. It will apply to some limitation periods, but not to all. This fundamental point, as well as the test for distinguishing between application and non?application scenarios, were explained by Major J. in the leading case Peixeiro v. Haberman, [1997] 3 S.C.R. 549 at 564:

> In this regard, I adopt Twaddle J.A.'s statement in Fehr v. Jacob (1993), 14 C.C.L.T. (2d) 200 (Man. C.A.), at p. 206, that the discoverability rule is an interpretive tool for the construing of limitation statutes which ought to be considered each time a limitations provision is in issue:
>
> > In my opinion, the judge?made discoverability rule is nothing more than a rule of construction. Whenever a statute requires an action to be commenced within a specified time from the happening of a specific event, the statutory language must be construed. When time runs from "the accrual of the cause of action" or from some other event which can be construed as occurring only when the injured party has knowledge of the injury sustained, the judge?made discoverability rule applies. But, when time runs from an event which clearly occurs without regard to the injured party's knowledge, the judge?made discoverability rule may not extend the period the legislature has prescribed.

See also: Waschkowski v. Hopkinson Estate (2000), 47 O.R. (3d) 370 (C.A.).

[14] In his text Guide to Ontario Building Legislation (Carswell: Scarborough, 1996), Richard Arblaster discusses the limitation period set out in s. 36(8) of the BCA. He said, at p. 1-56:

> The offence of breaching the Building Code Act or its regulations or by-laws occurs when the offence is committed, as opposed to when discovered, and is also concluded on the day that the activity is question is completed. For example, the offence of building without a permit would be concluded on the last day that work without a permit occurred; building not in conformance with the Building Code would be concluded on the day that the building or construction in question was completed or work ceased. The one-year limitation period would begin to run from that day.

[15] I agree with this analysis and conclusion. The event which led to the charge against Pickles (or, in the language of s. 36(8) of the BCA, "the subject matter of the proceeding") was building the dock without a permit. This specific act was completed in July 2000. It was, therefore, the completion of this act that triggered the commencement of the limitation period. There is nothing in the nature of this specific act or in the wording of s. 36(8) of the BCA to suggest that the limitation period commenced at the moment the township 'discovered' Pickles' act. Accordingly, the laying of the charge against him thirteen months after he had completed construction of the dock was outside the one year period set out in s. 36(8).

[16] Moreover, I note that, in the context of regulatory statutes like the BCA, it is open to the legislature to specifically build the discoverability principle into the wording of a limitation period. An example is s. 129(1) of the Securities Act, R.S.O. 1990, c. S.5:

> 129(1) No proceeding under this Part shall be commenced in a court more than one year after the facts upon which the proceeding is based first came to the knowledge of the Commission.

In the absence of clear legislative language importing the discoverability principle into a statute, I see no reason why the court should expand the reach of the regulatory prohibition by resort to the discoverability principle.

(2) Continuing offence

[17] The Crown's second submission is that the offence of building without a permit is a continuing offence until a permit is obtained. Since Pickles never obtained a permit, the limitation period did not begin to run before he was charged. In support of this submission, the appellant relies on the decision of Justice Hawke in R. v. Aregers (1997), 38 C.L.R. (2d) 95 (O.C.J.) ("Aregers"), wherein she held that the offence of building without a permit in s. 8(1) of the BCA was not complete until a permit had been issued.

[18] I do not agree with the decision in Aregers. I note that leave was sought to appeal it to this court: Shanks v. Aregers (1997), 38 C.L.R. (2d) 101. Charron J.A. refused to grant leave because it was not essential in the public interest or for the due administration of justice that leave be granted: see Provincial Offences Act, R.S.O. 1990, c. P.33, s. 131(2). However, Charron J.A. observed, at para. 7, that she found "much merit in the position advanced by the applicant, particularly with respect to the interpretation given by the appeal court judge [Justice Hawke] to s. 8(1)."

[19] In the present case, Wilson J. also declined to follow Aregers. He said:

> With respect, I am not of the same view as Justice Hawke in the Aregers case where she stated that the subject matter "is the presence of construction and the issuance of a permit."….In my opinion, the illegality of Mr. Pickles' actions ended when he finished the project before the end of July 2000 and did not continue thereafter. There was nothing further for him to do [emphasis in original].

[20] In reaching this conclusion, Wilson J. relied on the decision of this court in R. v. Rutherford (1990), 38 O.A.C. 41 ("Rutherford"). In that case, an electrical contractor was charged with faulty installation of electrical equipment contrary to s. 93(11)(b) of the Power Corporation Act, R.S.O. 1980, c. 384. The charge was laid more than six months after the installation work had been completed. By virtue of s. 76(1) of the Provincial Offences Act, R.S.O. 1980, c. 400, a six month limitation period applied to the offence.

[21] The Crown took the position that because the faulty installation had never been repaired, the offence was a continuing one and the limitation period did not apply. A majority of the court (Morden and Grange JJ.A.) rejected this submission. Grange J.A. stated, at pp. 43 and 44:

> It is important that we appreciate just exactly what it was that the appellant did that brought about the charges. He installed an improper panelboard and provided improper grounding on the service switch at premises located at Lot 35, Concession 5, Darlington Township. All of the work was performed and completed by August 23, 1985.
>
> . . . . .
>
> It is contended by the prosecution that so long as the defect continues, these offences continue and time does not therefore run.
>
> I cannot accept that contention. The act complained of, in my view, was faulty installation under s. 93(11)(b) of the Power Corporation Act and all of that work was completed on August 23, 1985. The appellant's neglect to comply with the regulation was complete on that date and time under the limitation section of the Provincial Offences Act then started to run.

[22] In my view, Wilson J. was correct to rely on Rutherford in the present case. The nature of the offences in the two cases is similar. In both cases, there was a specific act - faulty installation of electrical equipment and construction of a dock without a building permit. In both cases, the consequences of the specific act 'continued' in a sense - the electrical equipment was not repaired and a building permit was never obtained. However, in Rutherford this court held that the completion of the specific act triggered the commencement of the limitation period. As Wilson J. correctly recognized, the same interpretation, and result, should follow in the present case.

[23] There is a second feature of Rutherford that, in my view, is telling in this appeal. In his discussion about so-called 'continuing offences', Grange J.A. observed, at p. 45:

> It is considerably easier to find a continuing offence where the statute provides for a penalty for every day that the corrective work is not done or the offending activity continues to be done. Such a provision is found in s. 93(11)(c) of the Act, which relates to continued disobedience of an order made under s. 93(5). The juxtaposition of this provision in s. 93(11)(c) to the absence of such a provision in s. 93(11)(b) is significant.

[24] There is a similar juxtaposition of provisions in the BCA. Indeed, under the specific heading Continuing offence, s. 36(6) of the BCA provides:

> 36(6) Every person who fails to comply with an order made by a chief building official under subsection 14(1) or clause 15(5)(a) is guilty of an offence and on conviction, in addition to the penalties mentioned in subsections (3) and (4), is liable to a fine of not more than $10,000 per day for every day the offence continues after the time given for complying with the order has expired.

[25] In my view, it is clear and noteworthy that the legislature specifically addressed the subject of continuing offences in the BCA, and did not include violations of s. 8(1) in its list of such offences.

E. DISPOSITION

[26] I would dismiss the appeal.

RELEASED: February 24, 2004 ("DHD")

"J. C. MacPherson J.A."
"I agree Doherty J.A."
"I agree Janet M. Simmons J.A."

Ross v. Muskoka Lakes (Township)

COURT FILE NO.: 257-02
Bracebridge

ONTARIO
SUPERIOR COURT OF JUSTICE

B E T W E E N:	)	
Lloyd Ross	)	Leo F. Longo and Eileen P.K. Costello, for the Applicant
Applicant	)	
- and -	)	
The Corporation of the Township of Muskoka Lakes, Neil Donald in his capacity as Chief Building Official and the Sharon Social Fishing Club	)	Michael E. Fitton, Q.C., for the Township of Muskoka Lakes and Neil Donald,
	)	Nicholas B. Roche, for the Sharon Social Fishing Club
Respondents	)	
	)	**HEARD:** December 16, 2003

Weekes J.,

Background

[1] For approximately one hundred and twelve years the Sharon Social Fishing Club (the Club) has owned and used land on Tondern Island in Lake Muskoka. At present, there is a residential building which has twenty-six beds situated on the property.

[2] Lloyd Ross owns a neighbouring property. Pursuant to s. 25 (1) of the *Building Code Act*[1] he appeals the decision of the Chief Building Official for the Township of Muskoka Lakes (Mr. Donald) to issue a building permit to the Club for a proposed addition to the building in question. At the same time, he seeks an Order quashing the issuance of the building permit on the basis that it was issued before the execution and registration of a Site Plan Agreement, with the result, it is contended, that the issuance was contrary to "other applicable law" and in violation of s. 8 (2) of the *Building Code Act*. Finally, Mr. Ross seeks an Order quashing two resolutions of the Municipal Council (Council) on the basis that the process adopted by Council that lead to the passing of the resolutions was contrary to the *Municipal Act*[2], the procedural by-law of the Township and the principles of natural justice.

[3] Before considering the substantive issues raised by counsel for Mr. Ross it is necessary to address the standard of review to be employed in reviewing the decision of Mr. Donald to issue the building permit.

Standard of Review

[4] The issue of the appropriate standard of review of the decision of a Chief Building Official was considered by Justice Howden in *Rotstein v. Oro-Medonte (Township)* 34 M.P.L.R. (3d) 266 (Ont. S.C.J.). I accept Justice Howden's decision on the issue to be an accurate summation of the law. In his decision he made reference, with approval, to the decision in *Runnymede Development Corp. v. 1201262 Ontario Inc.* (2000), 47 O.R. (3d) 374 (Ont. S.C.J.) where, at para. 29, Justice Molloy wrote:

It is not possible to say where on the continuum between patently unreasonable and correct the appropriate standard will fall for all cases involving a Chief Building Official, as the level of deference to be accorded will vary depending on the nature of the issue before the tribunal. Indeed, the apparent differences applied by the various decisions of this court to date can largely be explained by the differences in the nature of the question being determined. The more the Chief Building Official's decision is a determination of law, the closer the standard will be to correctness. The more the initial decisions depended upon factual determinations within the special expertise of the Chief Building Official, the more deferential will be the standard.

[5] In *Rotstein*, Justice Howden spoke of the varying standard of review. He observed, at para. 16:

This variable standard of review in the case of the Chief Building Official is probably unavoidable in view of the statutory parameters within which that

official is bound to act in making a permit decision under section 8. Those include: his observations of structures and condition at the lot under review, the provisions of the *Building Code Act* and the highly technical Code itself, and "any other applicable law". As to the *Building Code Act*, CBO's receive training and use it to a limited extent but they are far from being trained in law or statutory interpretation. On the other hand, in dealing with the Building Code, they are acting close to the core of their specialized knowledge and experience. As to "other applicable law", that term may encompass the local zoning by-law or a law external to the work and training of the CBO. In the latter case, the CBO may seek advice from other municipal officials such as the municipal planner or the municipality's lawyer. In the case of the zoning by-law, depending on the nature of the particular issue, the CBO may well bring valuable experience particularly where the issue focuses on the structural observations and conclusions.

[6] The evidence before me in this case is that Mr. Donald has limited personal knowledge of the use made of the property by the Club. He has been on the property only once in the twenty years that he has been employed by the Township, although, in fairness, he also said that he had been on the abutting Ross property several times within the last three or four years and had observed the Club's property from that vantage point.

[7] Mr. Donald was cross-examined on his affidavit in which he stated that he had recommended the particular zoning, OS3, for this property when the Township was developing its comprehensive zoning by-law. The following exchange occurred on this issue at questions 84 and 85:

84 Q. All right. What then - At the time you made the recommendation, what was the basis upon which you had any understanding of the uses that were being made of that property?

A. Historical conversation with Kaye Brothers, abutting owners, my own person observations driving by, knowing the charter boat driver. Various things like that as to what went on on the property.

85 Q. To be clear though, you never spoke to any club officials or club members?

A. No.

[8] In my view, the critical issue in this case is whether the use made by the Club of its building is accessory to the principal use of the property. In making that assessment I am as well positioned as Mr. Donald, given his limited knowledge of the property. In these circumstances the appropriate standard of review is correctness.

The Applicable Zoning

[9] Much of the argument before me was devoted to the issue of whether the lands had been appropriately zoned by by-law 87-87. There is insufficient evidence upon which to conclude that the lands were wrongly zoned sixteen years ago. Obviously, the use might have changed in the intervening years. That possibility is raised by comments in a letter dated October 8, 2002 from William E. Casey, President of the Club, to the Planning Committee. If the use has not changed, for reasons that will become apparent, the wrong zoning was imposed. The determination of the use to which the property was put sixteen years ago will have to wait until another day. The issue for today is whether, at the time of the issuance of the building permit, the use of the building was an accessory use to the main use of the property.

[10] By-law 87-87 zones the property commercial open space (OS3). A private club is permitted in that zone. "Private club" is defined in the by-law as follows:

PRIVATE CLUB: means a golf, tennis, sailing, or other athletic, social or recreational club located on private lands.

[11] The OS3 zone specifically permits a residential use accessory to the other permitted uses of the property. Counsel for Mr. Ross submitted that such a use should be limited to bedrooms for the staff of the Club. I do not think there is any reason to limit the interpretation of the by-law in that fashion. However, the real question is whether the residential use is indeed accessory to the other permitted uses.

[12] "Accessory" is defined in the by-law as follows:

ACCESSORY: when used to describe a USE, BUILDING or STRUCTURE means a USE, BUILDING or STRUCTURE subordinate,

incidental and exclusively devoted to the main USE, BUILDING or STRUCTURE located on the same LOT.

[13] To answer the question of whether the use of the building is accessory to the main use, it is necessary to determine the main use. In that regard, there is no information directly on point from the Club. Mr. Donald characterized the use of the property as being that of a private club with members who fished and engaged in recreational activities on the water. It was Mr. Donald's evidence that the main building on the property, which is the subject of the proposed addition, contains cooking, dining and sleeping facilities and an area he described as being a "recreating area" which I take to be a space for people to congregate and socialize. Mr. Fahner, the Township Planner, also characterized the use of the property as being that of a club with accommodation, the members engaging in fishing and boating.

[14] Mr. Donald was asked how it was that he determined that the use of the building was accessory to the use of the property at Q. 132 and 133:

132 Q. All right. Yet you've made a determination that the use of the lodge is an accessory dwelling unit to the use of the building - to the use of the property, excuse me?

A. Yes, to the use of the property.

133 Q. And again, I ask you to advise me how that is considered subordinate to and incidental to the uses that are being put on that property?

A. Basically, the whole property is - is permitting the use of a club. Its ordinary dwelling units, their lot coverage is ten percent and Mr. Ross' property - the abutting property, this here zoning permits five percent lot coverage, which we're well under, and it's devoted to the main use of the property and that's how I interpreted it.

[15] It would appear from this answer that Mr. Donald determined the residential building to be an accessory use because the lot coverage was well under the five percent limit set by the by-law. That approach has nothing to do with an assessment of the main use of the property and a determination as to whether the residential use of the building is subordinate, incidental and exclusively devoted to the main use.

[16] In October 1999 the Club retained an architect to prepare drawings for the proposed addition which is now the subject of this dispute. In the letter by which the Club retained the architect Charles G. Cricks, president of the Club at the time, wrote, in part, as follows:

Our addition plans conform to all existing zoning regulations and all sewage system requirements have been addressed and met. As regard to the National Building Code and Use Group Classifications, please understand that this is a residential facility owned by the Sharon Social Fishing Club of Sharon, Pennsylvania. This club conducts all its business and holds all its meetings in Sharon, Penna, in accordance with its by-laws. No business is conducted at its Canadian cottage, nor are there any meetings held there. The purpose of the facility on Tondern Island is simply for the enjoyment of the members, their families and guests as a vacation cottage for activities such as fishing, swimming, boating, etc. Again, all activities conducted at this facility are of a residential nature and (sic) is a privately owned co-operative existing for the aforementioned purpose.

[17] The approach taken by the Township as to the use of the property confuses use with ownership. The property is owned by the Club. Its use is as a communally owned cottage, not a club. That was made clear by Mr. Cricks in his letter to the architect which I consider to be the best evidence of the use of the property at October 31, 2002, being the date the building permit was issued.

[18] In the absence of evidence to the contrary, I conclude that, as is common with the vast majority of vacation cottages, the use of the property, while important, is incidental to the use of the building itself. At least it would ordinarily be no more important than the use of the residential building. In my view, the main use of the property is as a vacation cottage. The fact that activities, such as swimming, take place on the property does not make the use of the residential building subordinate and incidental.

[19] I conclude that the decision of Mr. Donald to issue the building permit on the basis that the dwelling unit was an accessory use was an error. The building permit should not have issued because the uses associated with

the occupation of the residential building (as a cottage) are, in fact, the main use of the property.

Site Plan Approval as Other Applicable Law

[20] The Township is subject to site plan control. The proposed development requires a Site Plan Agreement. In broad terms section 41 (4) of the *Planning Act*[3]provides that no development shall occur until Council of the municipality or the Ontario Municipal Board approves the Site Plan Application in connection with the development.

[21] The Club submitted its application for a building permit on September 9th. On the same day the Township Planner wrote to advise that Site Plan Approval was required. Mr. Donald advised the Club's contractor that a building permit would not be issued while the Site Plan Application was being considered by the municipality. Mr. Donald's evidence is that he took this position because, until the site plan approval was granted or refused, he considered himself bound by s. 8 (2) of the *Building Code Act* which provides as follows:

8 (2) The chief building official shall issue a permit under subsection 1 unless,

(a) the proposed building, construction or demolition will contravene this Act or the building code or any other applicable law;

Mr. Donald testified that his understanding of this section was that site plan approval fell into the category of "other applicable law".

[22] It was also Mr. Donald's understanding that if Council refused to approve the Site Plan Application the requirement for site plan approval prior to the issuance of the building permit ceased and the proposed construction no longer contravened any other applicable law.

[23] Mr. Donald made this position known to Council on October 30th. On that date Council gave conditional approval to the Site Plan Application. The building permit was issued the next day. The Site Plan Agreement was registered approximately three months later.

[24] It is contended on behalf of Mr. Ross that the building permit ought to be rescinded because it was issued prior to execution and registration of the Site Plan Agreement. Thus, it is argued, at the time of issuance of the building permit the construction would contravene "any other applicable law".

[25] In *Quay West v. Toronto (City)*[4] Southey J., writing for the court on this issue, stated at p. 111-112:

In any event, I am not satisfied that the chief building official was under a duty to issue the permit as matters stood in August 1988, because there had been no site plan approval at that time. As a general rule, a building permit should not be issued for a development in a site plan control area to which s. 40 of the *Planning Act* applies until site plan approval for the development has been obtained from council or the Municipal Board. Without such approval, the proposed building would contravene s. 40 (4) of the *Planning Act*, and the permit should not be issued because of s. 6 (1)(a) of the *Building Code Act*. ...

[26] Justice Southey went on to point out that in two cases it was held that a building permit should issue despite the lack of site plan approval[5]. He observed that "both arose from extraordinary circumstances in which the municipality was not acting in good faith or was refusing developmental approval for an obviously unlawful reason. He did not consider the case before him to be "one of those extraordinary cases in which the building permit should have been issued despite the absence of site plan approval".

[27] To the cases referred to by Justice Southey can be added the decision of Rosenberg J. in *Luxor Entertainment v. North York (City)*[6]. *Luxor* is another example of a court ordering the issuance of a building permit without site plan approval because of the existence of extraordinary circumstances.

[28] In *Sixteenth Warden Ltd. v. Markham (Town) Chief Building Official**[7]*** Justice Day ordered the issuance of a building permit in the face of bad faith on the part of the Town of Markham. After referring to *Revenue Properties* he made the following observation at para. 48:

It has been argued that this decision should be limited in application to extraordinary circumstances in which the municipality was not acting in good faith or was refusing developmental approval for an obviously unlawful reason. The issue is one of statutory interpretation and construction, and I see no reason to limit its application to extraordinary circumstances. I therefore find that the proposed construction in the circumstances of this case would not contravene "any other applicable law," as those words are used in s. 6(1)(a) of the *Building Code Act*, solely because site plan approval had not yet been given.

On the strength of this passage the Township argues that there is a rule of law that a building permit can be issued before site plan approval and that it is not necessary for extraordinary circumstances to exist before that occurs.

[29] I do not share the view of Justice Day. I consider the decision in *Quay West* to be binding. The general rule is that site plan approval is required before the building permit is to be issued because site plan approval is "other applicable law". It does not cease to be "other applicable law" because Council refuses to approve it. S. 41 (12) of the *Planning Act* contains a provision for appeal to the Municipal Board. In the absence of bad faith or other unlawful conduct on the part of the municipality, there should be no reason for departing from the general rule. Where a municipal council refuses site plan approval the issuance of the building permit should await the decision of the Municipal Board. This gives effect to the statutory regime established by the Legislature. Only where there is bad faith or other unlawful conduct should the court exercise the jurisdiction given to it under the *Building Code Act* to rectify an injustice by granting a building permit in the absence of site plan approval.

[30] In the present case there is no evidence of bad faith or unlawful conduct on the part of the Council. The refusal to approve the site plan following the delegations is equally consistent with a concern that the proposed addition was contrary to the zoning. Absent bad faith or other unlawful conduct, Mr. Donald should have refused to issue the building permit and awaited the decision of the Municipal Board.

[31] Assuming (but without deciding) that site plan approval means execution of a Site Plan Agreement and registration of it, I would not rescind the building permit on the basis that it was issued prior to site plan approval. This would result in a triumph of form over substance which is in no one's interest. All that would occur in such event is that the Club would apply for a fresh building permit.

Reconsideration by Council

[32] The Planning Committee heard deputations on behalf of Mr. Ross and the Club on October 9th. The Planning Committee then refused the application for the site plan approval.

[33] The matter was considered by Council on October 28th. Deputations on behalf of Mr. Ross and the Club were entertained at that meeting following which Council upheld the decision to refuse site plan approval.

[34] On October 29th Mr. Roche, counsel for the Club, wrote to the building department to inquire as to whether it would issue a building permit, demanding a reply by November 1st.

[35] On October 30th Council reconvened as Planning Council in a closed session to discuss the matter. Council then reconvened as Council in an open session, rescinded the decision of the Planning Committee of October 9th, as approved on October 28th, and conditionally approved the Site Plan Application submitted by the Club.

[36] On behalf of Mr. Ross two complaints are raised regarding this procedure. First, it is said that Council, sitting as Planning Council, had no right to discuss the matter in a closed session. Second, it is contended that before making a decision Council was obliged to give Mr. Ross the opportunity to make further submissions on the issue.

[37] It is conceded by counsel for Mr. Ross that the Planning Act does not require the holding of a formal public meeting as part of the processing and consideration of a Site Plan Application. It is contended that, however, that once Council extended, as a courtesy, an offer to Mr. Ross to comment on the Site Plan Application, Council was obliged to continue the process of site plan approval as if Mr. Ross had a legal right to comment. It is contended that this was required as a matter of fairness.

[38] The resolution indicated Council was reconvening in a closed session to discuss a legal matter. Pursuant to s. 55 (5)(e) of the *Municipal Act*, Council was entitled to go into a closed session to discuss potential litigation. Given the deputations that had been entertained, it was entirely reasonable for Council to believe that the issue before it could potentially be litigious. It is too narrow an interpretation of s. 55 (5)(e) to say that because no legal or privileged advice was received in the closed session Council had no right to go into a closed session. There will be occasions when Council will want to take stock of an issue which could blossom into a lawsuit without the municipal lawyer being present or having given legal advice. In this instance there was a very real prospect that the Chief Building Official would be sued. Although he has an independent function he is, nonetheless, an employee of the Township for which Council is ultimately accountable. Moreover, his position was at odds with that taken by Council on the issue of whether the proposed development should proceed. To consider these issues, Council was justified in closing the meeting in which it reconsidered its decision of October 28th.

[39] It is not necessary to determine whether, by extending a courtesy to comment, Council was obliged to continue the process as if there were a legal right to comment and to a fair hearing. The letter written by Mr. Roche did nothing more than request the issuance of the building permit and an answer by November 1st. The letter did not raise new arguments that, in fairness, might have justified Council offering a further opportunity to Mr. Ross to make comment. In the present situation, all that could have happened was a reiteration of the position already taken on behalf of Mr. Ross. That would be a time wasting exercise. Council committed no error in not offering Mr. Ross a further opportunity to address it on the merit of reversing its earlier decision. Nothing in the procedural by-law compels a contrary conclusion.

Conclusion

[40] It is clear from the evidence of Mr. Donald that the only reason that Council approved the Site Plan Application was because Mr. Donald indicated to Council that he was going to issue the building permit despite Council's refusal to approve the Site Plan Application. As the building permit should not have been issued the Site Plan Approval should be rescinded.

[41] For the reasons given there will be an Order as follows:

i) Rescinding the building permit issued to the Club on October 31, 2002.

ii) Rescinding the site plan approval granted on October 30, 2002.

[42] If the parties are unable to agree on the issue of costs, counsel may speak to the matter by way of a conference call to be arranged through the Trial Co-ordinator in Barrie.

_____

Weekes J.

Released: January 5, 2004

723 Rymal Inc. v. Hamilton (City) Chief Building Official

Between
723 Rymal Inc., applicant, and
Peter Lampman, in his capacity as Chief Building Official of The Corporation of the City of Hamilton, and The Corporation of the City of Hamilton, respondent

[2001] O.J. No. 832
Court File No. 00-2262

Ontario Superior Court of Justice
Lofchik J.

Heard: January 4, 2001.
Judgment: January 9, 2001.

Counsel:

Russell D. Cheeseman, for the applicant.
Nancy L. Smith, for the respondent.

¶ 1 **LOFCHIK J.**:— The applicant is the owner of premises known municipally as 723 Rymal Road, in the City of Hamilton and seeks an order requiring the respondent, Peter Lampman, in his capacity as Chief Building Official of The Corporation of the City of Hamilton, to issue a demolition permit in respect of a vacant brick house located on the said lands. The vacant brick house in question is known as "Gage House" and at the time of application for demolition permit was approximately 150 years old and included on the City's inventory list as being of heritage/historical interest to the city.

¶ 2 In May of 1998 the applicant applied to the City of Hamilton for an Official Plan Amendment and a Zoning By-law Amendment in relation to the lands located at 723 Rymal Road. The applicant's original proposed development was for a "community & residential care access centre" and the proposed development did not include the vacant brick house on the property known as "Gage House" which, because of its age may be referred to as a "heritage property".

¶ 3 In October of 1998 the applicant changed its proposed development to include the community and residential access care centre and Gage House.

¶ 4 As a result of application made by the applicant, The Corporation of the City of Hamilton adopted Official Plan Amendment No. 158, which provided for a proposed development including the community and residential care access centre and a restaurant within Gage House.

¶ 5 The amendment to the City of Hamilton Official Plan stated that the purpose of the amendment was as follows:

> The purpose of this amendment is to establish a `special policy area' within the `residential' designation to permit a community and residential care access centre, including limited associated commercial uses, on the subject property.

¶ 6 The basis for the amendment was set out as follows:

> The basis for permitting the community and residential access care centre, including limited associated commercial uses, within the `residential' area are as follows:
>
> 1. The subject lands are located on a major arterial road, at the periphery of the neighbourhood.
> 2. The community and residential care access centre would provide residential short term care facilities and medical services including patient care, assessment and uptake, to the communities of the Hamilton West Mountain, Ancaster, and Glanbrook.
> 3. The proposal includes the adaptive reuse of a heritage dwelling upon the subject lands as a component of the development.

¶ 7 The amendment to the Official Plan of the City of Hamilton provided as follows:

> Notwithstanding the permitted uses set out in Subsection A.2.1

- Residential Uses, for the front portion of the lands known municipally as 723 Rymal Road West, shown on Schedule "B" as SPECIAL POLICY AREA 81, a community residential care access centre including limited associated commercial uses will also be permitted provided that:

i) The commercial uses will be restricted to:

a) A restaurant within the existing heritage dwelling only. There will be no drive through component and the restaurant will not consist entirely of a take out.
b) Medical related commercial and Medical offices, within the community and residential care access centre, having a maximum floor area of 1350m2.

ii) The external appearance and character of the existing heritage dwelling will be maintained.

¶ 8 On April 27th, 1999, the City of Hamilton passed Zoning By-law 99-058 being a site-specific zoning by-law applicable to the lands in question, hereinafter referred to as "the rezoning by-law". The provision of the Re-zoning By-law relevant to the proceedings before me are as follows:

(a) notwithstanding Section 10C.(1) of Zoning By-law No. 6593, only the following uses shall be permitted:

(i) a "Community and Residential Care Access Centre"; and,
(ii) a restaurant provided that,

1. it is located within the dwelling or any portion existing on the day of the passing of the by-law; and,
2. the external appearance and character of the dwelling shall be preserved and maintained; and,
3. a drive-thru or take-out shall not be permitted; and,
4. it is only accessory to and used in conjunction with the "Community and Residential Care Access Centre"; and,

¶ 9 The lands which are the subject matter of this application are designated by City of Hamilton By-law No. 79-275 as an area of site plan control. On May 4th, 1999 an application was received from the applicant for site plan approval in relation to the lands. The City approved the site plan application on December 7th, 1999. The proposed development contained in the site plan submitted and approved by the City of Hamilton includes the Community and Residential Care Centre and the Gage House Restaurant. One of the conditions in the site plan approval required the applicant to undertake certain measures related to the preservation and maintenance of the Gage House building.

¶ 10 Subsequently the applicant entered into a site plan agreement with the City of Hamilton which was registered on title to the property.

¶ 11 On March 6th, 2000, the Building Commissioner for the City of Hamilton issued a building permit for the Community and Residential Care Access portion of the development on the lands and that applicant has proceeded with construction of the said community and residential care access centre which is in the final stages of completion.

¶ 12 On August 29th, 2000, the applicant applied to the City of Hamilton for a demolition permit for Gage House. To date no demolition permit has issued and the applicant has therefore brought this application to compel issuance of a demolition permit.

¶ 13 On November 3rd, 2000, the applicant applied for an amendment to its site plan approval. The proposed development for the lands is the same as that already approved except that the new proposal eliminates the Gage House restaurant.

¶ 14 As approval to the revised plans and drawings was not forthcoming, the applicant has appealed the City of Hamilton's failure to approve such plans and drawings to the Ontario Municipal Board. This appeal is still outstanding.

THE LAW

¶ 15 A chief building official must issue a demolition permit under the Building Code Act unless the demolition will contravene, among other things, "applicable law". "Applicable law" is defined as "any general or special Act and all regulations and by-laws enacted thereunder which

prohibit the proposed construction or demolition of the building unless the Act, Regulation, or by-law is complied with." (see Building Code Act)(1992), S.A. 1992, C-23 as amended, s. 8(2) and Ontario Regulation 403/97, s. 1.1.3.2(1).

¶ 16 Accordingly the issue to be determined is whether the demolition of "Gage House" would contravene "applicable law" in the circumstances of this case.

¶ 17 Counsel on behalf of the City of Hamilton has argued that the relevant "applicable law" is section 41 of The Planning Act and Zoning By-law 99-058.

¶ 18 In interpreting planning statutes and by-laws, the courts have generally adopted a liberal approach. In the case of Bruce v. Toronto (City), [1971] 3 O.R. 62, the Ontario Court of Appeal at p. 66 stated as follows:

> ..... I consider the [zoning] by-law to be remedial and one to be accorded a liberal interpretation to the end that it may afford to the people of the community, protection against departures from or encroachment upon standards adopted by the municipality as expressive of those purposes ..... Ontario Courts now accept that the obligation imposed on the municipal council to plan for the growth and development of the community demands recognition of the necessity for means to compel the observance of the rights of the community to determine and enforce the direction in which the community should be shaped, and that in this regard the rights of the community are paramount to the rights of the owner.

(see also Galway & Cavendish (United Townships) v. Windover (1995) 30 M.P.L.R. (2d) 109 @ 122 and Woodglen & Co. v. North York (City) Chief Building Official (1994) 23 M.P.L.R. (2d) 219 at pp. 226-27)

¶ 19 As the applicant has obtained site plan approval for the development pursuant to s. 41 of the Planning Act, it is subject to s. 41(4) of that Act, which provides as follows:

> No person shall undertake any development in an area designated under subsection (2) unless the council of the municipality or (where a referral has been made under subsection 12), the Municipal Board has approved one or both, as the council may determine of the following:
>
> 1. plans showing the location of all buildings and structures to be erected and showing the location of all facilities and works to be provided in conjunction therewith and of all facilities and works required under clause 7(a) .....

¶ 20 The Planning Act is "applicable law". The applicant has undertaken development of the site in accordance with approved plans submitted pursuant to s. 41(4) of the Planning Act. Part of the approved development is near completion but the other part of the approved development, namely the restoration of Gage House, is not. The demolition of Gage House will prevent the applicant from completing its development in accordance with the site plan which has been approved and the site plan agreement entered into with the City of Hamilton and put the applicant in contravention of section 41 of the Planning Act.

¶ 21 Zoning By-laws are "applicable law". For the purposes of determining compliance with the applicable law, zoning by-laws must be interpreted in the context of the applicable Official Plan provisions. (see Loblaws Inc. v. Ancaster (Town) Chief Building Official (1992) 13 M.P.L.R. (2d) 73 @ 85 and Doublerink Arenas Ltd. v. North York (City) Chief Building Official, (1996) 33 M.P.L.R. (2d) 158 at 162; Campeau Corporation v. Township of Gloucester et al. (1998) 6 M.P.L.R. 290 and on appeal (1979) 22 O.R. (2d) 652.

¶ 22 I am satisfied that upon a reading of the relevant provision of the Official Plan referred to above, that the said provision creates a combined use only designation for the site in question. That is the use of the word "including" following reference to the words "a community residential care access centre" indicates that the policy set out in the Official Plan contemplates that the restaurant in the Gage House should be included as part of the residential care access centre to the end that the community and residential care access centre use is only permitted if Gage House is maintained. A reading of the introductory provisions of the Official Plan Amendment confirms this.

¶ 23 Zoning By-law No. 99-058 was passed to implement the policy set out in the Official Plan above and the by-law should be interpreted accordingly. In my view the use of the word "and" after the words "a

community and residential access care centre;" in the relevant provision of the by-law provides for a permitted combined use, that is, the use as a community and residential access care centre is only permitted together with the restaurant use as accessory to and in conjunction with the community and residential access care centre. Thus the use of the almost completed building as a residential access care centre would be rendered illegal upon the demolition of the Gage House resulting in a contravention of Zoning By-law 99-058 if the building is used as a residential care access centre as is clearly intended by the applicant.

¶ 24 For the reasons set out above the application is dismissed with costs. Counsel have indicated to me that they have an agreement between them that the quantum of costs on this application be fixed at $5,000.00 and I so order.

LOFCHIK J.

Tridan Developments v Shell Canada Products

DATE: 20020103
DOCKET:C34404

COURT OF APPEAL FOR ONTARIO
CARTHY, ABELLA AND MOLDAVER JJ.A.

B E T W E E N:	)	
	)	
TRIDAN DEVELOPMENTS LIMITED and OTTAWA MOTOR SALES (1987) LIMITED	)	**Robert P. Armstrong, Q.C. and Laurence A. Pattillo For the appellant**
	)	
Plaintiffs (Respondents)	)	
	)	
- and -	)	
	)	
	)	
SHELL CANADA PRODUCTS LIMITED and SHELL CANADA LIMITED	)	**Michael S. Hebert and R. Paul Marshall For the respondents**
	)	
Defendant (Appellant)	)	
	)	
	)	**Heard: November 13, 2001**

On appeal from the judgment of Justice Kenneth C. Binks dated May 17, 2000, reasons reported at (2000), 35 R.P.R. (3d) 141.

CARTHY J.A.:

[1] This is an appeal from an assessment of damages.

[2] This appeal concerns the measure of damages arising from the contamination of the respondents' property by a gasoline spill from the appellant's neighbouring gas station. For reasons reported at (2000), 35 R.P.R. (3d) 141, Binks J. assessed the damages and granted judgment against Shell Canada Products Limited as follows:

(a) $550,000 for costs of remediation,

(b) $350,000 for loss of property value due to stigma associated with the contamination,

(c) $25,000 plus prejudgment interest for mortgage financing costs,

(d) $20,000 for business interruption loss,

(e) a direction that the appellant remediate its own property or in default pay the respondents $85,000 as the cost of a barrier between the properties to prevent further leakage,

(f) dismissing a counterclaim asking that the recovery be paid into court and used only for reparation of respondents' property,

(g) prejudgment interest on (a) and (b) in the amount of $442,012.81, and

(h) the costs of the proceeding.

[3] The appeal is against items (a), (b), (e), (f) and (g). In descriptive terms, the appellant says that the trial judge set too high a standard for remediating the soil, should not have found any residual loss in property value after remediation, should not have made a mandatory order against the appellant, should have protected the appellant against the respondents' potential failure to use the damages award for reparation, and should not have awarded prejudgment interest.

The Facts

[4] I will refer to the appellant as Shell and the respondents as Tridan. Shell has for some years operated a service station on Bank Street in Ottawa adjacent to a car dealership operated by Tridan. In September 1990, 9,000 liters of gasoline leaked from an underground fuel line on Shell's property. At first it was not known that fuel had in part escaped into the soil under Tridan's property. Shell undertook a remediation on its own property in accordance with government standards applicable at the time. Shell did not remove all of the contaminated soil and the evidence indicates that about 3,000 liters of fuel were unaccounted for. In 1991, Tridan discovered

that some of the gasoline had migrated into its soil, forming a plume about 14 feet below grade. Shell accepts responsibility for the required cleanup.

[5] For reasons that have no bearing upon the issues on appeal, the dispute over the extent of cleanup that was appropriate and the consequent costs and damages did not come to trial until October 1999, nine years after the spill. In the meantime, the car dealership carried on profitability but its mortgage financing was threatened by the decreased mortgage value occasioned by the pollution. Tridan faced increased interest charges and Shell, in an effort to minimize its exposure to a claim for damages on that account, executed an indemnity agreement with the mortgagee undertaking to pay for any necessary cleanup on demand by the mortgagee. The interest rate was consequently reduced to the normal rate and that element of potential loss was avoided.

[6] While the parties were wending their way to trial there were changes occurring in oversight by the Ministry of Environment (MOE).

[7] Several sets of MOE guidelines were in place during the period between the spill and trial, but the two sets that are most commonly referred to by the witnesses are the "Interim Guideline for the Remediation of Petroleum Contamination at Operating Retail and Private Fuel Outlets in Ontario", dated 1992 ("1992 MOE guideline"), and the "Guideline for Use at Contaminated Sites in Ontario", revised February 1997 ("1997 MOE guideline").

[8] The 1997 MOE guideline currently applies. Its stated purpose is to provide,

… advice and information to property owners and consultants to use when assessing the environmental condition of a property, when determining whether or not restoration is required, and in determining the kind of restoration needed to allow continued use or reuse of the site. The ministry has provided the guideline, along with the supporting documentation, to assist landowners in making decisions on soil and/or groundwater quality for proposed or existing property uses.

[9] Under the 1997 MOE guideline, the level of permissible pollutants varies depending on whether the property is used for agricultural, residential or commercial purposes. The relevant criteria for land used for commercial purposes is set out in Table B. Within Table B, permissible concentration levels vary depending on whether the groundwater is used for drinking purposes and on whether the soil at the contaminated site is fine, medium or coarse. Lower concentration levels of pollutants are permitted for coarse grain soil, since pollutants can travel more easily through coarse soil than fine soil.

[10] No one suggests that the guidelines supplant the common law standard of compensation for injury to land. However, Shell asserts that the MOE guideline represents a reasonable standard to apply to commercial lands that are contaminated but unaffected for the purpose being served. The difference in cost between meeting the 1997 MOE guideline and achieving a site which is clean of all contaminants, referred to in the evidence as a pristine site, is approximately $250,000, mostly referable to the amount of soil that must be removed and replaced.

Damages for Reparation of the Tridan Property

[11] The trial judge found that the plaintiffs were entitled to have their property remediated to pristine condition and assessed the cost of doing so at $550,000. Normally the assessment would be as of the date of the injury, but in the circumstances of this case the trial judge chose to assess damages as of the date of trial. No one contested that approach because no work toward reparation had taken place, the business of Tridan had continued throughout and current MOE guidelines were being asserted as the standard. Thus, it made sense for the trial judge to look to current costing information to arrive at an assessment.

[12] The trial judge might have relied upon those expert witnesses supporting the MOE guidelines as a reasonable measure of reparation and thus the damages suffered. This is a commercial property on a busy thoroughfare and unlikely to ever be a site for residential use. It might be concluded that in a practical sense Tridan is not likely to need or want to clean its soil at depth of every particle of pollutant. However, in the circumstances of this case I cannot say the trial judge erred in deciding that Tridan was entitled to reparation to a pristine state. Where a product that may cause mischief escapes to a neighbour's property there is responsibility "for all the damage which is the natural consequence of its escape." See *Rylands v. Fletcher*, [1861-73] All E.R. 1 at 7 (Ex. Ch.), cited with approval at p. 13 (H.L.). Of course, they must be reasonable. On all the evidence it is fair to conclude that the damages would not be eliminated by reparations to the point of the MOE guidelines. There would be residual loss of value,

referred to as stigma, which would be reduced, as the trial judge found, or eliminated, as I am about to find, by remediation to the pristine level.

Stigma

[13] An analysis of all the evidence brings me to the conclusion that there is no support for the trial judge's conclusion that there is a residual reduction of value in a pristine site caused by the knowledge that it was once polluted. It would appear that the trial judge simply misapprehended the evidence of the two principal witnesses for Tridan.

[14] Mr. Gordon Taylor from Royal LePage was qualified as an expert in commercial real estate by the plaintiffs. He testified as to stigma attaching to previously polluted sites and estimated a reduction of 17% to 18% of fair market value for this site if cleaned up to MOE guideline standards. His testimony was that there would be no impact if in pristine condition. He is consistent throughout but the point is emphasized in cross-examination [Emphasis added]:

Q. … [M]y understanding, sir, is that your opinion with respect to the stigma that would attach to the property is based on the fact that the property would be cleaned up to what you call Level II [under the relevant MOE guideline]

A. That's correct.

Q. But your view is that even if you cleaned it up, beyond that, if there was any hydrocarbons on the property, it would still affect the value; correct?

A. As opposed to being in pristine condition, you mean?

Q. Right?

A. Yes, it could.

Q. But here you are just looking at it from the purposes of cleaning it up to the Level II?

A. Yes, I was asked to report what is the impact market value [*sic*] between the Level II and pristine condition.

Q. So, if it is pristine, no impact?

A. That would be correct.

[15] The trial judge also relied upon another Tridan witness, Mr. Peter Boddy, a qualified appraiser, who testified that even after a cleanup there would be a 17% to 18% reduction in market value of the property. However, his report and oral evidence makes it clear that he was assessing a cleanup to MOE standards. In evidence he stated [Emphasis added]:

Q. And then having said that, you then proceed to express an opinion of what you think the stigma will be to the Donnelly site even after it is cleaned up?

A. Yes.

Q. And your opinion is based on the fact that it will be cleaned up to the applicable guidelines; is that correct?

A. Yes.

Q. And by that, we are talking about the Ministry of the Environment guidelines?

A. Yes.

[16] The references by the trial judge at pp. 158 and 159 of his reasons to the evidence of Shell's expert, Mr. Steven Granleese and the concessions he made in cross-examination, do not suggest that stigma would attach to a site cleaned to pristine condition. Indeed, they make no mention of a pristine site and make equal sense if it is assumed that the witness is referring to a cleanup to MOE standards. Granleese was called to refute Tridan's evidence that stigma attaches when the cleanup is to the MOE guideline level. He was not dealing with this specific property and whatever concession he may have made against his original position, it cannot supplant the Tridan witnessses' primary assertion that there would

be no impact on the value of this property if it was cleaned to the pristine level.

[17] In sum, the evidence compels me to conclude that there is no stigma loss at the pristine cleanup level. This conclusion also makes sense of the trial judge's holding that cleanup to the pristine standard was justified in this case. If the trial judge's assessment of stigma damage at $350,000 is taken as the diminution in value at cleanup to the guideline standard, then the more economical route is to proceed to the pristine level at an additional cleanup cost of $250,000 with no stigma damage.

[18] In my view, the only reasonable conclusion from the totality of the evidence is that a pristine site has no residual loss of value and that paragraph 1 of the judgment should be amended to reduce the amount awarded by $350,000.

Shell to remediate its own property

[19] There was evidence that if Tridan excavated and replaced the soil on its site, a barrier would be required to prevent further migration of the gasoline that remains on the Shell site. If both sites were cleaned at the same time, the barrier would not be needed. This led the trial judge to direct Shell to remediate at the same time as Tridan or pay a further sum of $85,000, being the estimated cost of a barrier. There is no basis for a mandatory injunction against Shell and no reason to complicate Tridan's remediation by joining it with that on the Shell site. It must be kept in mind that these damage recoveries may never be invested on remediation. They are based on costs but are the equivalent of a diminution in property value. A purchaser of the Tridan property in its present form would probably reduce the offering price by, among other things, $85,000 for a barrier when remediation is undertaken.

[20] Paragraph 6 of the judgment should be amended so that it reads as a simple obligation to pay $85,000 and paragraph 7, providing for the notice of intention to effect remediation, should be deleted.

Counterclaim for payment into court

[21] In order to avoid a substantial and ongoing claim for increased mortgage interest charges occasioned by the pollution, Shell signed an indemnity in favour of Tridan's mortgagee undertaking to effect reparation on demand. Its present concern is that if the judgment award is paid to Tridan it may not be used for remediation and Shell may have to pay twice should the mortgagee issue a demand. To protect its position Shell asks that the reparation costs be paid into court and released only as reparation is undertaken. Shell certainly has a problem, but it is with a non-party to this litigation and a contract that is not before the court for adjudication. An order for payment into court would not only abridge Tridan's right to deal with its damages as it sees fit, but would also place the court in the position of overseeing the reparations and the satisfaction of the requirements of the indemnity.

[22] Shell's obligations to the mortgagee will have to be resolved in other proceedings. I would dismiss the appeal from this aspect of the trial judgment.

Prejudgment Interest

[23] The trial judge allowed prejudgment interest for the 10 years prior to judgment in the total amount of $442,012.81. Prejudgment interest is compensation for being deprived of damages from the date they are suffered. If damages are paid on that date, the plaintiff receives the benefit of the money and its investment value. If not paid, as is the normal circumstance, an interest award is made. Here, if Tridan had undertaken immediate reparation, that model would fit. If the loss had been assessed on property values and costs in 1990, it would fit. If the respondents had not been able to run a successful business in the interim, a claim for prejudgment interest might be justified. Yet on the actual facts there would be a clear double recovery if prejudgment interest were awarded: the assessment is in dollars current to the trial, Tridan has not suffered since the spill, and the dollars are to be spent in the future. If the costs of reparation increase, postjudgment interest and investment income will cover the difference. Section 128(4)(d) of the *Courts of Justice Act*, R.S.O. 1990 c. C.43 excludes prejudgment interest on "pecuniary loss arising after the date of the order and that is identified by a finding of the court." The damages for remediation of the Tridan property came within this exclusion and prejudgment interest should not have been awarded on that amount.

[24] I would allow the appeal against that award and delete the item from the judgment.

Conclusion

[25] The appeal should be allowed in the respects identified in these reasons with costs to Shell.

Signature:___ "J.J. Carthy J.A."

_____ "I agree R.S. Abella J.A."

_____ "I agree M.J. Moldaver J.A."

Released: "JJC" JANUARY 3, 2002

1423107 Ontario Inc. v. Woodstock (City)

Between
1423107 Ontario Inc., applicant, and
The Corporation of the City of Woodstock and David Creery, in his capacity as Chief Building Official for The Corporation of the City of Woodstock, respondents

[2001] O.J. No. 1330
Court File No. 462/00

Ontario Superior Court of Justice
Woodstock, Ontario
Heeney J.

Heard: March 5, 2001.
Judgment: April 2, 2001.
Counsel:

Elizabeth K. Cormier, for the applicant.
Murray L. Coulter, for the respondents.

¶ 1 **HEENEY J.**:— The applicant applied for a building permit to convert leased premises in the City of Woodstock for the proposed use of the premises as a "health club". One of the principle activities that was proposed to take place on the premises, and indeed the only activity that has taken place on the premises since the applicant opened for business in September 2000, is the provision of full nudity non-therapeutic body massages. The Chief Building Official refused to issue a building permit, on the basis that such a use was not a "health club", and was not otherwise a permitted use within the Restricted Industrial Type 1 Zone (M1) in which the premises are situated.

¶ 2 The applicant appeals the decision of the Chief Building Official. An appeal lies to this Court pursuant to s. 25(1) of The Building Code Act, S.O. 1992, c. C.23. The powers of the Court on such an appeal are set out in subsection (4):

> (4) If an appeal is made under this section, the judge shall hold a hearing and may rescind or affirm the order or decision of the inspector or chief building official or take such action as the judge considers the inspector or chief building official ought to take in accordance with this Act and the regulations and, for such purpose, may substitute his or her opinion for that of the inspector or chief building official.

¶ 3 I am, therefore, standing in the shoes of the Chief Building Official, and if I determine that his decision was incorrect I may make any order that he ought to have made in the circumstances. The applicant seeks an order that the requested building permit be issued.

¶ 4 The relevant law that defines the obligation of the Chief Building Official to issue a building permit is found in s. 8(2) of the Building Code Act:

> (2) The chief building official shall issue a permit under subsection (1) unless,
>
> (a) the proposed building, construction or demolition will contravene this Act or the building code or any other applicable law;

¶ 5 Simply put, the applicant argues that the Chief Building Official refused to issue the building permit based on a review of the floor plan, his attendances on the premises and discussions with the persons involved in the business, and on his personal opinion of what constituted a "health club". The applicant submits that this is not "other applicable law" and that the Chief Building Official acted outside his authority in refusing to issue the building permit.

¶ 6 I do not accept this argument. One of the main authorities relied on by the applicant was Axelrod et al. v. Corporation of The City of Toronto (1981), 15 M.P.L.R. 143 (Ont. Div. Ct.). That case held that it would be "irrational" to suggest that the Chief Building Official is precluded from considering zoning by-law compliance on a building permit application. The zoning by-laws constitute "other applicable law" within the meaning of this section.

¶ 7 In the case at bar, the Chief Building Official did nothing more than review the permitted uses provided by Woodstock Zoning By-law No. 5899-81 for an M1 zone, interpret the meaning of the phrase "health club", examine the evidence as to the use that was proposed to be made of the premises, and arrive at the conclusion that the proposed use did not comply with the zoning by-law. All of this he was, in my view, quite entitled to do.

¶ 8 Ms. Cormier, for the applicant, makes much of the fact that "health club" is not defined in the zoning by-law. Of the 26 uses permitted in an M1 zone, only 8 are defined, and the balance are undefined. Ms. Cormier suggests that the Chief Building Official had no authority to interpret the phrase "health club" and draw his own conclusions as to whether the proposed use was or was not a health club. She suggests that the Chief Building Official essentially had no choice but to issue a building permit, because the applicant labeled their proposed operation as a health club in their application.

¶ 9 Again, I find no merit to this submission. Statutes and by-laws are filled with undefined terms, and it is incumbent upon those charged with applying those laws to interpret them. If their interpretation is not correct, the error can be rectified by the Courts. That is precisely what happened in another case upon which the applicant relies, 789617 Ontario Inc. c.o.b. as The Spa on Maitland v. Toronto (City) and Nixon, Commissioner and Chief Building Official for Toronto (City) (1990), 75 O.R. (2d) 475 (Dist. Ct.). That case dealt with whether a proposed use constituted a "commercial bath", which term was not defined in the zoning by-law. The Chief Building Official interpreted that term and denied a building permit, but his decision was appealed to the District Court. Herold D.C.J., standing in the shoes of the Chief Building Official, proceeded to arrive at his own interpretation, and determined that the proposed use fit within the meaning of the phrase.

¶ 10 It is also important to recognize that the Chief Building Official was not compelled to issue a building permit simply because the applicant labeled its proposed operation as a "health club". A facility or a business is not defined by what it chooses to call itself, but rather by the activity that it actually engages in. A label can be entirely misleading as to the true nature of the use to which the premises are being put. For example, an owner constructs an asphalt skateboard park. He may choose to call it a parking lot, but that does not make it one. If the actual and proposed use of the premises is skateboarding, then it is a skateboard park no matter what the owner chooses to call it.

¶ 11 The proposed use of the premises is, therefore, a question of fact to be determined not by the label used in the application for a building permit, but by an examination of the activities that are proposed to be carried out on the premises.

¶ 12 Before examining those activities, it is appropriate to first consider the zoning by-law itself. Like most zoning by-laws, it is written in prohibitory terms: all uses are prohibited except those specifically permitted. Section 19.1 of the by-law reads as follows:

> No person shall within any M1 Zone use any lot or erect, alter or use any building or structure for any purpose except one or more of the following M1 uses.

¶ 13 Section 19.1.2 of the by-law goes on to list 26 permitted non-residential uses. Among those uses is "a health club". It is common ground that the use proposed by the applicant cannot fit within any of the other 25 permitted uses. The question to be determined, therefore, is whether the use proposed by the applicant is a "health club". If it is, it is a permitted use, and the building permit should issue. If it is not, it is a prohibited use and the building permit should not issue.

¶ 14 As to the rules that should be brought to bear in interpreting the by-law in question, Ms. Cormier relies on the following principle of law stated in I.M. Rogers, The Law of Canadian Municipal Corporations (2d), Carswell 2000, at s. 135.2:

> On the other hand, the courts have more frequently applied the rule of strict construction: common law rights cannot be held to have been taken away or affected by a statute or by-law passed under its authority unless it is so expressed in clear language. ... So if there is any uncertainty or doubt whether a restriction applies to a particular property the matter will be resolved in favour of the owner. ... If expressions used in a by-law are of doubtful meaning in their application that doubt must also be resolved in favour of the owner. So as a general rule, any ambiguity or uncertainty with respect to its construction should be resolved in favour of the owner.

¶ 15 Ms. Cormier has cited a number of cases as well that support the same proposition.

¶ 16 I agree completely with this statement of the law. If I find the meaning of the phrase "health club" to be ambiguous, or if there is any uncertainty as to whether the applicant's proposed use fits within that phrase or not, such doubt or ambiguity should be resolved in favour of the applicant.

¶ 17 So what does the phrase "health club" mean? The New Lexicon Webster's Dictionary of the English Language defines "health" as "the state of fitness of the body or of the mind". The word "club" is defined as "an association of people with some common interest who meet periodically" or "an association of people enjoying premises which provide them with reading and recreation rooms, meals, occasional residence, etc."

¶ 18 These dictionary definitions accord with the ordinary meaning of the phrase in everyday parlance, of which I take judicial notice. A health club is generally understood to mean a facility where people sign up as members for a fee, giving them access to the facilities for a defined period of time, usually measured in months or all or part of a year. The facilities include, as a predominant feature, weight machines, exercise machines and other apparatus and facilities designed for the development of physical fitness. It is customary to have change and shower facilities on the premises. A health club could also include features such as a steam room, a sauna, a spa and perhaps even swimming facilities. Therapeutic massage would normally be considered as an appropriate component of a health club.

¶ 19 The activities that the applicant proposes to carry on at the premises in question are as follows: full nudity non-therapeutic massage; tanning; hot tub spas; an exercise room with a Universal weight machine, a treadmill and a stationary bicycle; showers and washrooms; and a lounge area offering juice and water.

¶ 20 I will deal first with the massage aspect of the applicant's operation. As noted above, massage is currently the only service being offered by the applicant. The explanation given is that they are awaiting the building permit to complete the renovations before installing the exercise equipment.

¶ 21 Charles Wilson, a representative of the applicant, was cross-examined as to the nature of the massage services being offered. The following points emerged:

* When a customer attends the premises, he or she would see a price list for various massage services being offered. No membership fees nor membership requirements of any kind are applicable to determine who is entitled to make use of the premises;
* The customer would determine if he or she wanted a male or a female attendant;
* The customer would then "get naked", although the customer could choose to leave his or her underwear on;
* The attendant would proceed to "get naked";
* The attendant would then administer massage for an hour or a half-hour depending on the service ordered;
* When asked whether anything else would happen during this time, his response was "not that I know of";
* If the customer chose the hot tub option, the attendant and the customer would spend the first half-hour in the hot tub together, naked, which would be followed by a half-hour massage;
* No qualifications of any kind are required for the attendants administering the massages. It is not necessary that they be registered massage therapists or have any other designation, nor even that they have ever done massages before.

¶ 22 Section 224 of the Municipal Act, R.S.O. 1990 c. M.45 provides for the regulation, by the municipality, of "body-rub parlours". Subsection (9) sets out the following definitions:

> "body-rub" includes the kneading, manipulating, rubbing, massaging, touching, or stimulating, by any means, of a person's body or part thereof but does not include medical or therapeutic treatment given by a person otherwise duly qualified, licensed or registered so to do under the laws of the Province of Ontario; ("massage")
> "body-rub parlour" includes any premises or part thereof where a body-rub is performed, offered or solicited in pursuance of a trade, calling, business or occupation, but does not include any premises or part thereof where the body-rubs performed are for the purpose of medical or therapeutic treatment and are performed or offered by persons otherwise duly qualified, licensed or registered so to do under the laws of the Province of Ontario. ("salon de massage") R.S.O. 1990, c. M.45, s. 224(4-

9).

¶ 23 Ms. Cormier concedes that the definition of "body-rub" set out above accurately describes the massage services provided by the applicant. It follows that the part of the subject premises where such services are to be performed could be accurately labeled as a "body-rub parlour".

¶ 24 We have, therefore, one label that accurately describes this activity that the applicant proposes to carry on at the subject premises, and has, in fact, carried on there since September of 2000. The question remains whether the label "health club" also fits.

¶ 25 It is conceded by Ms. Cormier that the massage services offered by the applicant are non-therapeutic. Thus, they are not offered with a view toward the health or fitness of the customer. Rather, they are offered for the entertainment or recreation of the customer.

¶ 26 This point is graphically illustrated by the fact that the attendant is required to "get naked". Clearly, no "health" objective is advanced by having the attendant disrobe. The only rational reason for doing so is to enhance the entertainment value of the experience to the customer.

¶ 27 The fact that the attendants are not required to be trained masseurs, to have any designation whatsoever, or even to have ever performed massages before, also sheds considerable light on the nature of the service being provided by the applicant. If the service had fitness of the body or mind as its objective, one would expect that the persons administering this service would be required to have some training in the field of fitness. The lack of any such requirement leads one to conclude that a person is qualified to be an attendant simply by virtue of being willing to completely disrobe and rub the body of a customer.

¶ 28 There is also no evidence that the proposed use will constitute a "club". There is no evidence of a membership requirement for use of the facilities. Services are simply offered to any customer who enters the premises, based on the fee schedule posted.

¶ 29 I conclude, therefore, that the massage aspect of the applicant's proposed use of the premises does not fit within a fair interpretation of the phrase "health club". I find no ambiguity in that phrase, nor is it uncertain whether the applicant's massage operation falls within that phrase. Accordingly, such a use is not permitted within an M1 zone.

¶ 30 The next aspect of the applicant's proposed use of the premises is tanning. The applicant proposes to install one or more tanning beds, but has not done so to date. No evidence was led one way or the other as to the nature of such an activity. Specifically, there is nothing to suggest that tanning promotes fitness of mind or body. Indeed, it is well recognized that excessive tanning poses a risk of skin cancer and other skin problems. Generally, tanning can be characterized as a cosmetic activity, engaged in by those who are of the view that a tanned skin enhances their attractiveness. Because of this, it is not surprising to find that tanning facilities are frequently associated with beauty salons. In the absence of any evidence that tanning promotes health, I am unable to conclude that the tanning aspect of the applicant's proposed use of the premises fits within the phrase "health club".

¶ 31 The next proposed use of the premises involves hot tub spas. While the use of spas in connection with naked non-therapeutic massage has no obvious connection to the promotion of fitness of mind or body, hot tub spas are generally accepted to be of therapeutic benefit, particularly with respect to the relaxation of muscles and treatment of musculo-skeletal ailments. While I am not satisfied that the hot tub spas in question here are to be installed for that purpose, I am left with some uncertainty as to whether this aspect of the applicant's proposed use of the premises fits within the definition of "health club", and that uncertainty will be resolved in favour of the applicant. I pause to note that the concerns as to whether this operation can be considered as a "club" remain, but those concerns are, in view of the rules of interpretation that I must apply here, sufficiently overridden if the applicant can fit within the "health" aspect of the phrase.

¶ 32 Next, the applicant proposes to install a weight machine, treadmill and stationary bicycle. There is no question that such activities fall squarely within a reasonable interpretation of the phrase "health club" (bearing in mind my comments as to the "club" aspect of the phrase). Thus, such a use is a permitted use.

¶ 33 Finally, the applicant proposes to have showers and washrooms, and a lounge area with a juice bar. These facilities would normally form part and parcel of a health club. Given that the exercise rooms and spas are permitted activities, the showers, washrooms and lounge can properly be

considered as being an integral part of that use, and would similarly be permitted.

¶ 34 The conclusion that I arrive at, then, is that the use of the premises for full nudity non-therapeutic body massage is not permitted by the applicable zoning by-laws, nor is the operation of a tanning bed facility. The applicant would, however, be permitted to use the premises for the proposed use involving exercise equipment, spas, and the shower/change rooms and lounge that support and form part of such activities.

¶ 35 Having determined that part of the applicant's proposed use of the premises fits within the zoning by-law, can the massage aspect of the operation be legitimized as an "accessory" to the permitted uses? Section 6.1.1.1 of the zoning by-law provides as follows:

> An accessory use which is normally, naturally and customarily subordinate and clearly incidental to a permitted use is permitted if:
>
> (a) it is on the same lot as the use to which it is accessory;
> (b) it is not a use which is capable of having an independent existence on its own;
> (c) it must not be used for human habitation except as permitted in Section 62.3 to this By-law; and
> (d) it must comply with the provisions set out in Table 1 below.

¶ 36 In order to satisfy the requirement that the accessory use is "customarily incidental" to the permitted use, there must be evidence that such accessory services are frequently and normally offered in Ontario in conjunction with the permitted services: Re Convenience Services Ltd. and City of Sault Ste. Marie et al. (1980), 30 O.R. (2d) 660 (Div. Ct.). There is no evidence that this is the case. Indeed, the contrary conclusion is obvious. The average citizen would be shocked to find that the local Y.M.C.A. was offering full nudity non-therapeutic body massages as part of its health club menu of services.

¶ 37 It must also be proven that the accessory use is "subordinate" to the permitted use. Again, the evidence points to the opposite conclusion. The only services provided to date are massage services. However, the applicant has yet to install its exercise equipment. Mr. Wilson was cross-examined as to his projections as to how the income from massage services would match up to the income from the exercise equipment and other services to be offered. His response was "Hopefully I hope it would weigh all out even".

¶ 38 I infer that massage services will, at the very least, be one of the main services being offered at the proposed facility. Thus, it cannot be said that massage services will be "subordinate" to the provision of exercise machines and spas. My conclusion is that massage services do not meet the definition of an "accessory use", and cannot be permitted on that basis.

¶ 39 I should not leave this area of enquiry without dealing further with the Spa on Maitland case, supra, upon which the applicant heavily relies. It dealt with a proposal to establish a commercial bath catering to men only. The zoning by-law permitted a "commercial bath". The Chief Building Official observed that the area to be used for bathing comprised only around 15% of the total floor space, and that the balance was to be used to provide 62 change or rest cubicles that were to be rented out for six-hour periods, steam baths, a lounge area, locker rooms and offices. On that basis, he denied the application for a building permit.

¶ 40 Herold D.C.J. allowed the appeal and ordered the building permit to issue. At first blush, this might be considered as authority for the proposition that, so long as 15% of the premises was to be used for a use permitted by the by-law, that would be sufficient. However, Herold D.C.J. did not say that. Instead, he said the following (at p. 478-9):

> A fair interpretation of commercial bath, in my view, would include the recreational, social, steam, shower and rest facilities proposed by the applicant. Accordingly, absent a clear legislative intent to restrict, or prohibit, the type of operation proposed by the applicant, the proposed use does not contravene the zoning by-law ...
> [emphasis added]

¶ 41 In other words, all of the facilities proposed by the applicant were part and parcel of what one would expect to find in a commercial bath, so that the facilities as a whole complied with the zoning by-law. Since the facilities complied with the by-law, and since there was no other legislation

to restrict or prohibit all-male bath houses, the building permit should have been issued.

¶ 42 By contrast, the full nudity non-therapeutic massage services offered by the applicant are not part and parcel of what one would expect to find in a health club. The provision of those services is a separate and distinct use, which is not permitted by the zoning by-law.

¶ 43 If the applicant submits a revised application that restricts the use of the premises to the permitted uses outlined above, and deletes the prohibited uses, it would be entitled to a building permit. However, the application that was before the Chief Building Official, and which is now before this Court, includes both permitted and prohibited uses, and the Chief Building Official was correct in refusing to issue a building permit.

¶ 44 I conclude my reasons by observing that there is not, in this case, the "alternative lifestyle" subtext that was present in the Spa on Maitland bathhouse case. Body rub parlours, arguably, have a place in our liberalized society. Operating a body-rub parlour is a legal activity, albeit optionally subject to regulation by the municipality under s. 224 of the Municipal Act. Mr. Coulter concedes that, if they have to go somewhere, an M1 zone is probably the best place for them to be, since they would be away from schools and residential areas.

¶ 45 However, I must decide this case based on the zoning by-laws as they presently exist, not as they may be amended in the future. And as those by-laws stand at this moment, the applicant's proposed use does not comply.

¶ 46 The decision of the Chief Building Official is affirmed, and the appeal is dismissed. If the parties cannot agree on costs, I will entertain brief written submissions within twenty days.

HEENEY J.

Bakhtiari v. Axes Investments Inc.

Between
Zari K. Bakhtiari, Pedrum Sodouri and Pejman Sodouri, plaintiffs, and
Axes Investments Inc., Alfredo de Gasperis, Tandem Group International Inc., Tandem Group Management Inc., Tandem International Inc., Tandem International Investment Co., Tandem Investments Ltd., Paul Reid, Van Forbell, Merv Doctorow, John Broderick, Robert Macht, John Haughton, Intertec Security & Investigation Limited and City of Toronto, defendants

[2001] O.J. No. 4720
Court File No. 95-CQ-61731CM

Ontario Superior Court of Justice
Lane J.

Heard: January 8-11, 15-17, 19, 22-24, 26, 29, 30, 31, February 1, 2, 12-16, 19, 20, 23, 26-28, March 1, 2, 5, 6, 8, 13-16, 26 and 27, 2001.
Judgment: November 30, 2001.

Counsel:

Ian W. Outerbridge, Q.C. and Cynthia R.C. Sefton, for the plaintiffs.
Stuart Forbes, Q.C. and Jacqueline M. Weber, for the City of Toronto.
Barry A. Percival, Q.C., for the remaining defendants (except Haughton and Intertec).
No one appearing for the defendant, Merv Doctorow.

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¶ 1 **LANE J.**:— In the early morning of January 6, 1995, a fire broke out in suite 509 of 2 Forest Laneway, a high-rise residential building in what was then the City of North York. No one burned to death, but six tenants died in the stairwells from smoke inhalation while trying to escape the smoke that spread throughout the building. Numerous others were injured, including the plaintiffs Zari Bakhtiari and her son Pedrum

Sodouri. Nine actions were brought and were ordered tried together. In the end only one injury action and one property damage action were heard by me, all others having agreed to abide the result as to liability. The actions against John Haughton and Intertec Security & Investigation Limited were dismissed on consent before trial.

Synopsis of the Facts:

¶ 2 The fire began in apartment 509, evidently as a result of careless handling of a cigarette which set a couch on fire. The polyurethane content of the couch created thick, black smoke. The tenant, the defendant Doctorow, opened the balcony door, presumably in an effort to clear the smoke, but then fled the apartment, without closing either the balcony door or the suite door behind him. As it was not equipped with a self-closing device (SCD), the suite door remained open. Fed by the fresh air, the fire grew and the smoke and flame escaped into the hall on the east side of the 5th floor.

¶ 3 The building contains two stairwells for use in case of emergency. They are of a "scissors" design such that each stair crosses the width of the building between each floor and so alternates in serving the east and west sides. On the 5th floor stair S1 opens into the east hall, more or less opposite the door to suite 507 and near to 509, and stair S2 opens into the west hall. The doors between the hall and the stairwell are required to be equipped with SCDs and the 5th floor exit from the east hall was so equipped. However the firefighters found it open and there is reason to think that it malfunctioned. When, a little more than 15 minutes after the first alarm, the firefighters attempted to move up the stairs from the 4th floor level on stair S1, they found flames and thick, black smoke coming into the stairwell through the open exit door from the 5th floor blocking their way.

¶ 4 The result of the open exit door on S1 at the 5th floor was to create a "stack effect", a well-known phenomenon, in which the stairwell became a chimney venting the smoke from the 5th floor upwards. At the top of S1 was a hatch leading to the roof, designed to open in case of fire. It did not open and the smoke could not vent to the open air, but accumulated in the stairwell.

¶ 5 Zari Bakhtiari and her twenty-year-old son Pedrum Sodouri lived in apartment 1702, located in the southwest quadrant of the building. With their consent, they were referred to as Zari and Pedrum throughout the trial and I will continue the practice. Pedrum was awakened shortly after 5 a.m. by the sound of the building fire alarm and a few minutes later heard noises in the hall. Opening the suite door, he found that other tenants were in the hall, leaving their suites. There was a light layer of whitish smoke near the hall ceiling. He concluded that it was a real fire and awakened his mother. They dressed and walked to the stair exit on the west side. At the 17th floor, that exit led them into stair S1. (There is no 13th floor, so that S1 serves the east corridor on 5 and the west corridor on 17.) In the stairwell they joined a group of about five persons who were descending. About five floors down they met another group ascending, who said the smoke was too thick below. The entire group began to ascend. As they did so, they checked the floors they were passing, but found heavy black smoke on each, apparently coming from the ventilation system outlets high on the wall of the hallways.

¶ 6 The group continued to ascend, hoping to escape to the roof. At the top of S1 there was a door at the landing and a hatch in the roof. The door led to the mechanical room which had an exit to the roof, but the door was locked and did not respond to any of the keys carried by the tenants. The hatch had not released automatically and they could not get it to release manually. Trapped, the group turned to descend, but the thick black smoke came up the stairwell and they passed out. Pedrum and Zari were rescued by fire fighters wearing air masks. Pedrum was found in S1 at the mechanical room level and Zari in S1 one floor below, the 30th floor. Pedrum's last memory was of them being together and there was an issue as to whether she had fallen down the stairs from the mechanical level to the 30th floor.

¶ 7 Zari was in a coma for 11 days. She suffered brain damage due to hypoxia, carbon monoxide and smoke inhalation. She has essentially no memory of the fire. Near the end of the trial, the defendants admitted that she would not work again as a result of her injuries. Pedrum was unconscious when found, recovered consciousness in the lobby briefly and again at the hospital. He has returned to school. He also suffered from hypoxia, carbon monoxide and smoke inhalation and it is submitted that he too suffered brain damage which will impact upon his future. The plaintiff Pejman Sodouri, son of Zari and brother of Pedrum, claims under the Family Law Act for loss of care, guidance and companionship. These matters will be dealt with in detail later.

The Defendants:

¶ 8 At the north-east corner of Yonge Street and Sheppard Avenue in the former City of North York, now Toronto, there is a large apartment and commercial complex which includes three apartment buildings, numbers 2, 4 and 6 Forest Laneway. Number 2 Forest Laneway is a 30-storey apartment building with approximately 300 tenants and 700 other residents, in all some 1,000 inhabitants. The plans for construction were approved by North York in 1974. A Building Permit was issued in 1974 and the building was constructed in 1975. In about 1986 the Tandem group acquired the entire complex of commercial and residential buildings.

¶ 9 The defendant, Axes Investments Inc. ("Axes") was, at the time of the fire, the registered owner of the apartment buildings at 2, 4 and 6 Forest Laneway. Axes acquired the residential portion of the complex by transfer November 29, 1988 for $71,000,000. Axes is not a beneficial owner of the residential property, but a nominee and trustee which holds title for three co-tenants, Con Drain Company Limited, Hydralfield Building Inc. (In Trust) and 607507 Ontario Limited. Tandem Group Management Inc. were the property managers for Axes of these buildings and others, (at the time of the fire Tandem managed approximately 50 to 100 properties). 607507 Ontario Limited was itself a nominee corporation that held a 1/6 interest for various members of the Tandem Group.

¶ 10 Tandem handled the day to day management of financial affairs as the property managers and from time to time would meet with the officers of the co-tenancy on "macro" issues, including when and how to fund the Fire Code retrofit program identified in 1994 by the report of the engineering firm SPG, of which more later.

¶ 11 The defendant, De Gasperis, was the president and a director of Axes. He swore the affidavit of value when Axes acquired the three apartment buildings in 1988. He did not testify at the trial.

¶ 12 The defendant, Forbell was at the time of the fire the president and a director of the Tandem Group. He was in charge of the company administration, financial affairs and staff policies. Ultimately, he had responsibility for the property management. Part of his examination for discovery was read in and gave the details of the ownership changes. He did not testify at the trial.

¶ 13 The defendant, Paul Reid ("Reid") was at the time of the fire the on-site property manager for the Tandem Group. He did not testify at the trial.

¶ 14 The defendants Robert Macht ("Macht") and John Broderick ("Broderick") were at the time of the fire employed by Axes or Tandem Group as the superintendents of, respectively, 2 and 4 Forest Laneway. On the morning of the fire, Broderick was on night duty responsible for the whole complex and Macht was off-duty. Both were physically present on site at the fire scene. Broderick testified at the trial under subpoena from the plaintiffs pursuant to Rule 53. Macht did not testify at the trial. He was said to have disappeared.

¶ 15 The defendant Merv Doctorow was the tenant of suite 509 at 2 Forest Laneway at the time of the fire. Although he filed a Defence, he did not appear at the trial. His careless handling of a cigarette caused the fire and so contributed to the injuries and deaths which ensued. The plaintiffs are entitled to judgment against him.

¶ 16 The defendant City of Toronto is sued as successor to the former City of North York pursuant to the amalgamation of the municipalities of the former Metropolitan Toronto. As it was North York at the relevant times, I will refer to it, for the most part, by that name. It is sued for acts or omissions alleged in respect of the original approval of the plans in 1974, in respect of the retrofit program in 1994 and in respect of the fighting of the fire.

The Fire: Origin, Spread and Cause: Evidence from the Fire Marshal:

¶ 17 Ontario Fire Marshal (OFM) lead Investigator William Hiscott testified at length at the trial. He had led the investigation by the OFM in 1995. He became a police officer in 1972 and moved to the OFM in 1990 as an investigator. At the time of trial he had investigated nearly 600 fires, of which more than 30 were high-rise fires. Of the latter group, all but 2 had been confined to the suite of origin. In 1995 he already had investigated over 330 fires. He was unquestionably qualified to give expert evidence in the field. He arrived at 2 Forest Laneway while the fire was still burning and conducted his investigation continuously thereafter. His report dated August 31, 1995, was put in on consent as part of Exhibit 13, being Volume I, Tab 2, pp. 35 to 155. The conclusions he drew then and to which he testified, are largely uncontradicted and I accept them.

¶ 18 It is convenient at this point to note that Exhibit 13 just referred to, consists of six volumes and 1574 pages. When these volumes were tendered on January 11, 2001, it was apparent that there were many documents whose authors would not be called. Counsel for the defendants asked for time to consider if there were any objectionable documents. On January 15th they advised there were no objections and all documents could be considered as properly part of the exhibit. Some of the reports of the OFM witnesses contained and relied on hearsay statements, including some from tenants in the form of statements taken at the time and included in Exhibit 13. These have been regarded as fully reliable as to the facts in them.

¶ 19 Mr. Hiscott said that the evidence in suite 509 and information received from the tenant, Doctorow, were consistent with the fire starting with the dropping of a hot cigarette butt into the cushion of the couch in the living room. A large quantity of thick, black smoke developed due to the polyurethane foam content in the couch. The report noted (at page 74): "Due to the actions of the occupant opening the patio door and leaving the suite door open, the fire burned freely consuming most of the combustibles contained in the couch." Ultimately, the entire contents of the living room were consumed so that physical examination could not independently confirm an exact cause for the fire. Other possible sources, such as appliances, were examined and ruled out.

¶ 20 The fire spread through most of the suite and at least the living/dining area went to the point of flashover. Mr. Hiscott explained that each combustible material has an auto-ignition point: a temperature at which it will burst into flame. When the heat of a fire gets very intense, the temperature reaches and surpasses the auto-ignition points of most materials and flashover is the moment when essentially all combustible materials self-ignite, resulting in a sudden increase in the intensity of the fire. The open balcony door provided the fire with ample oxygen and Mr. Hiscott said that flashover would have occurred relatively early in the fire. His colleague, Mr. Harpur, said flashover occurred at about the time the first firefighters arrived, that is at about 5:14 a.m., based on evidence from the tenants in 511 and 809.

¶ 21 Mr. Hiscott noted that none of the suite doors in 2 Forest Laneway were equipped with SCD's and thus the door to 509 remained open, allowing the fire to escape to the hallway where it ignited the corridor carpet and wallpaper, and allowing smoke to escape into the rest of the building. His examination of the physical remains of the door, the bottom 2" to 3", in place after the fire, confirmed that it had remained in the open position. He expressed the opinion that had there been an SCD on the suite door the fire would have been confined to 509. The heat and smoke would have been forced to vent out the windows and open balcony door, rather than into the building. He pointed out that the wooden hollow-core door to the north-west bedroom in 509, not as fire resistant as the solid wood suite door, had sufficed to keep the fire out of that room.

¶ 22 Mr. Robert Harpur P. Eng., also from the OFM, holds a degree in engineering and has been in fire protection work since 1978. He has studied smoke movement and smoke control design and has investigated many fires. He was qualified as an expert. His evidence was also essentially uncontradicted and I accept it. He performed fire resistance tests on a typical suite door from 2 Forest Laneway and found that, although it burned through to the extent of a 60 mm. hole in 13 minutes, less time than permitted under 1995 standards to be rated for fire resistance, it nevertheless: "remained essentially intact and in place and would have presented a useful barrier against the spread of fire and smoke in an actual fire." (Report, Ex. 13, vol. 1, p. 212). Of course, it would have had to have been closed to perform such a function.

¶ 23 Mr. Harpur also did tests on the carpet in the corridors at 2 Forest Laneway and reported that during combustion it produced quantities of dense black smoke. This probably contributed to the density of the smoke throughout the building.

¶ 24 Bernard Silvestri, also of the OFM, was called by the City and was conceded by the plaintiffs to be qualified as an expert. Again, his evidence was not contradicted by any other expert and I accept it. He said that most high rise fires are confined to the suite of origin, but that the escape of smoke from that suite into the rest of the building poses a major risk to all other occupants due to the poisonous nature of smoke, particularly smoke from the combustion of household furnishings. High-rise fires were not that frequent, but the problem was the enormity of the risk involved in each one. SCDs and smoke alarms were two inexpensive and common precautions which saved lives. Had there been an SCD on the suite door at apartment 509, the smoke would probably not have escaped from the suite.

¶ 25 On January 30, 1995, approximately 3 weeks after the fire, Axes/Tandem had self-closing devices installed on the suite doors to the

units at 2 Forest Laneway at a cost of $12,473.39 for supply and installation. It was not suggested that this was any sort of admission, but it serves to demonstrate the modest scale of the cost involved.

¶ 26 Not only was the 509 suite door open during the fire, but the evidence discloses that the fire exit door on the 5th floor leading to stair S1 was also open for a significant period of time, perhaps for the whole of the duration of the fire. Mr. Harpur said that the main mechanism of smoke movement into the stairwell and so through the building was through this open stairwell door. Such a door is intended to remain closed in order to prevent smoke contamination of the stairways, which are the primary means of escape for the tenants in a fire situation. He concluded that this fire was under the influence of a significant draft which allowed it to develop very rapidly and to spread to the corridor through the open suite door. It was a fire of unusual intensity and duration and generated "tremendous quantities of dense black smoke". Mr. Harpur concluded that both stairs were sufficiently contaminated with smoke as to be unusable from the 4th floor to the 30th floor as were most of the corridors above the 4th floor. The speed with which this happened was of significance. The 5th floor hall was smoke-filled within one-half to 2 minutes after the first alarm sounded. The lower levels of the stairs were probably contaminated within 4 or 5 minutes of the alarm sounding and the upper levels to the 30th within 15 and possibly within 10 minutes after the alarm. Smoke was thick in the 28th floor hallway between 5:15 and 5:20 a.m.

¶ 27 It is clear that the deaths and injuries were caused or contributed to by the rapid spread of smoke and fire escaping from the open suite door of 509 and then through the open fire exit door on the 5th floor S1 stairwell, which contaminated the stairwell and prevented the use of the stairway as a means of escape for the deceased and injured tenants. When and why was this fire exit door open?

¶ 28 Despite full inquiries, no one was found who had opened the 5th floor exit into stair S1. Such doors were required to be, and were, equipped with SCDs, so that, even if opened, they should close behind the person using them. This did not occur. If someone unknown opened the door in order to exit into the S1 stairwell, the door did not close behind that person. If no one opened it, then it must have opened under the pressure of the fire and accompanying drafts. Mr. Hiscott said in his report that the fire doors at 5 east and west were closed but not necessarily latched when seen by fleeing tenants. At some point they became open. The door on 5 west leading to S2 was opened by the firefighters to bring up a hose, but no conclusive answer could be found by the investigators as to why or when the S1 door on the east side came open.

¶ 29 The tenant of suite 2108, escaping down the S1 stairwell, passed by the 5th floor door during the first minutes of the fire, and observed that there was smoke streaming in, apparently from cracks around the door. This observation is consistent with Mr. Hiscott's conclusion that this door was closed but not necessarily latched. He continued down the stairs and arrived at the lobby as the first fire trucks arrived. That would have been at 5:14 a.m. He therefore passed the 5th floor door before the flashover which occurred at the time of the arrival of the Fire Department. He was not called and further detail of what he saw is not available.

¶ 30 The tenant of 1607, Mr. Harris, left his suite between 5:13 and 5:16 and went down S1. He encountered smoke at the 12th floor and by the 8th was forced to turn back. He returned to 16 and reported that the smoke was coming up the stairs as fast as he could walk. In the 16th floor hallway the smoke was very thick, coming in via the stairwell door and the vents in the hallway walls. He went back into his apartment and called 911. He estimated the time from hearing the alarm at 5:10 am until this call to be about 10 minutes. It is clear from comparing this experience with that of the tenant of 2108 that the change in conditions in S1 took place very rapidly after flashover.

¶ 31 The speed with which the smoke spread into the S1 stairwell and reached the upper parts of it leads to the inference that the main mechanism of that spread, the S1 5th floor east fire exit door, was open from very early on.

¶ 32 The 5th floor east fire exit door on the S1 stairwell was observed by firefighters Tony Comella and Sean Pearce to be wide open with flames coming out into the stairwell, minutes after their arrival at the scene at 5:24 a.m. They had been directed to the 4th floor where the decision was made to attack up the stairs from the west side, which would take them to the east corridor on the 5th. They were the first firefighters to arrive at the 5th floor via stair S1. As they ascended, they met great heat and there were flames shooting out from the hall through the exit door and up the stairwell, accompanied by large amounts of smoke. Firefighter Comella described this door as being "wide open", and warped at the top. He stated that there was a column of flame at the open door burning upwards approximately two-

thirds of the way up the door frame. The main force of the fire was venting through that door and up the stairwell like a chimney. The door was waving back and forth in the draft of the fire.

¶ 33 Comella's partner, firefighter Pearce, also saw the S1 stairwell door open at 5 East. He saw "lots of smoke and fire" venting up the stairway towards the 6th floor. Pearce testified that even before the firefighters applied water to this door, he saw that it was warped. Pearce also stated that he saw "hot spots" on the suite doors on the fifth floor, indicating that there was heat present sufficient to ignite those doors. This last evidence was corroborated by the post-fire inspection when Mr. Hiscott reported that the fire damage to the hall side of the doors to 507 and 511 was very deep and both were on the point of collapse. Pearce also testified that the heat in the stairwell was so intense that he and Comella took turns being at the nozzle, the most forward position, at 30-second intervals.

¶ 34 The fire exit door on the 5th floor S1 staircase was too badly damaged to be tested after the fire. Six SCDs were selected from various stair well doors to be tested for compliance with the U.L.C. standard for closing force of at least 36 Newtons. Three of those selected failed to generate the minimum closing force on at least one of the tests. Two averaged below the minimum force required.

¶ 35 In addition, Mr. Harpur conducted a series of on-site tests to measure the closing force of SCDs on certain stairwell exit doors under a variety of ventilation conditions, including an attempt to recreate the weather conditions of the morning of the fire. March 3, 1995, was a day with weather conditions reasonably comparable to the day of the fire. Of course, the added pressures generated by the fire itself could not be duplicated. In the first test, under normal operating conditions, all SCDs tested generated enough closing force to close the stairwell exit doors to the latched position. Normal conditions include closed suite doors and a slight positive air pressure in the hallways from the action of the ventilation system which delivers air to vents high in the wall. The air moves under the suite doors into the suites.

¶ 36 For the second test, suite 609 was selected as the test site and its balcony and suite doors were opened. When the fire alarm is activated, the ventilation system shuts down, so the test was conducted with it turned off. Mr. Harpur noted that this test created conditions that were similar to the initial stage of the fire, apart from the existence of the fire itself. It demonstrated that if the 6th floor fire exit doors were not properly latched, the east door would open and stay open some 11 inches and the west door would open 2.25 inches. The doors on the other floors tested would close even though the 609 doors were open. When, in the third test, the conditions were varied by opening the hatches at the top of each stairwell, the closing force exerted by the SCDs that were tested diminished, but was sufficient to close all but the two 6th floor doors.

¶ 37 Mr. Harpur concluded that, even under the conservative conditions of the test, the 6th floor fire doors, if not properly latched, could be opened and held open by the pressure differential created by the opening of the suite and balcony doors of suite 609. He conceded to Mr. Percival that, being unable to test the 5th floor door itself, he could not know if the SCD on that door would have latched it under the prevailing pressures.

¶ 38 Mr. Harpur also testified that if the 5th floor east exit door was properly latched at the time, it would not be forced open by a flashover from suite 509.

¶ 39 As noted above, with the 5th floor fire exit door open the S1 stairway acted as chimney (or "stack") for the heat, smoke and fire to move to the top of the building. This stack effect was a well-known phenomenon. It is recognized in the defendant City's Fire Department Training Information materials and Deputy Chief Stewart and Captain Cooper both acknowledged it in their evidence. Deputy Chief Stewart agreed at the end of his cross-examination that the stack effect played a significant role in this fire. The stack effect was the main way in which smoke migrated through the building, making the stairs impassable.

¶ 40 The smoke followed other routes as well to the upper parts of the building. Ventilation air was provided under normal conditions through vents in the hallway walls. There was a gap deliberately left under the suite doors to allow the air to enter the suites. The slight positive pressure was useful in keeping cooking smells out of the halls. The ventilation fans shut down automatically when the fire alarm was activated, presumably to avoid feeding the fire with oxygen. The system was protected against smoke migration by equipping each vent with a fire damper operated by a fusible link intended to melt and allow the damper to close in the presence of heat such as is generated by a fire. The damper in the 5th floor east hallway failed to close completely because the aluminum grille over the vent melted before the fusible link did and the melted metal prevented full closure,

although it did reduce the size of the opening. Throughout the fire this vent was an opening into the air system which permitted the migration of smoke from the 5th floor upwards into other hallways. This almost certainly accounts for the smoke sightings in hallways reported to 911 at a very early stage of the fire.

¶ 41 There was also some migration of smoke through the kitchen and sanitary exhaust ducts (limited by the closure of dampers activated by heat) and minor migration via elevator shafts and service shafts containing electrical and plumbing services. Nevertheless, the evidence supports the opinion of the Fire Marshall witnesses that the stairs were the main avenue of smoke migration.

The Allegations against the Axes Defendants

¶ 42 The plaintiffs claim in negligence against the defendant Doctorow; the defendants Axes/Tandem and their individual officers, directors and employees; and the defendant City (formerly the City of North York). They say that the liability of the defendants is joint and several under the Negligence Act, R.S.O. 1990, c. N.1, s. 1. They take no position on how liability ought to be apportioned by the Court as amongst the three separate groups of defendants. I will deal first with the allegations against the owners and the manager, "the Axes defendants" leaving North York until later.

¶ 43 The defendant Doctorow was responsible for the fire and fled his suite when he discovered it. He did not defend at trial and the plaintiffs have received judgment against him earlier in these reasons.

¶ 44 The plaintiffs say that defendants Axes / Tandem and their individual officers, directors and employees failed to take reasonable care in all of the circumstances from the time of Tandem's acquisition of the property in 1986/87 and Axes' acquisition of the residential complex in 1988 right up to and including the January 6, 1995 fire, to see that the tenants were reasonably safe with respect to the condition of the premises and the activities carried on at the premises: Landlord and Tenant Act, R.S.O. 1990, c. L.7; Occupier's Liability Act, R.S.O. 1990, c. O.2. The plaintiffs pleaded that judgment be granted against these defendants. The plaintiffs specifically requested that judgment be granted as against the defendant Macht by virtue of his failure to appear to give evidence in response to a subpoena properly served on his counsel under Rule 53. I will deal with the allegations against the officers and employees after reviewing the allegations against the corporations.

¶ 45 The particulars of the alleged lack of reasonable care of these defendants may be summarised:

(a) The suite doors did not have self closing devices which, when the doors were opened, would return the doors to the closed position;
(b) The Axes defendants ignored warnings, in the SPG report of January, 1994 in particular, that the absence of SCDs on suite doors was a Code violation;
(c) The SCD controlling the fire exit door on the 5th floor S1 stairwell did not function as it was intended to, due to lack of maintenance and inspection;
(d) The Axes defendants ignored warnings, in the SPG report, that many doors that were equipped with SCDs did not close properly;
(e) The Axes defendants did not follow their own Fire Plan, as approved by the Fire Department in 1990, requiring monthly inspections of all doors in fire separations and periodic checks of all such doors to ensure that they are closed; nor did they ensure that their employees understood that their duties included responsibility for keeping the doors to stairways closed at all times;
(f) The Axes defendants did not follow their Fire Plan or the Fire Code by conducting fire drills or providing tenants with instruction on fire situations.

¶ 46 The plaintiffs further allege that these defendants were under a positive obligation to make an inquiry into the safety of the building at the time that each acquired its interest, including the safety of suite doors. They were told in 1994 by the SPG report that the suite doors did not have such devices and that their absence was a Code violation. Although they received an extension of time to comply with the statutory requirement to install SCDs, that extension did not relieve these defendants from their obligation to the plaintiffs under the two relevant Acts noted above. The owners still had the obligation to take reasonable care for the safety of their tenants, and they did not.

The Response of the Axes Defendants:

¶ 47 In response to the allegations regarding SCDs on suite doors, the Axes defendants adopted at trial the submissions of North York that suite door closers were not required at the time of construction of the building in 1975, pursuant to By-law 22000 which was then in force. This submission is best dealt with in conjunction with the submissions of North York. They further submitted that if they were so required (as the plaintiffs argued at trial) Axes/Tandem, as subsequent purchasers, were unaware of this fact and were entitled to rely on the City having enforced its own By-law in 1975. This submission is part of the analysis of the duty to take reasonable care for the safety of the occupants.

¶ 48 The Axes defendants further submitted that after receiving the SPG report in 1994 advising that SCDs would be required on suite doors as part of the new Fire Code, they acted reasonably in obtaining, as the statute allowed, a two-year extension of the time for compliance. This also is part of the reasonable care point.

¶ 49 In response to the allegations relating to the 5th floor east fire safety door, the Axes defendants admitted that the door had become unlatched during the fire, allowing smoke and flames to enter the stairwell, but submitted that there was no evidence that the SCD had not complied with the Building By-law or the Fire Code. Further, there was no evidence as to how the door became unlatched; there were many tenants on the 5th floor who might have unlatched it while escaping from the fire. Accordingly, the Court should find no negligence on the owners or managers relating to that door.

¶ 50 As to the allegations relating to their alleged failure to follow their own Fire Plan or to conduct fire drills, the Axes defendants submitted that any such failure did not contribute to the injuries or deaths of the plaintiffs. They relied on the presence of instructional signs on each floor. They further submitted that the Webber Report (Report of the Public Inquiry into Fire Safety in High-rise Buildings, December, 1983) accurately reported the dilemma faced by occupants of high-rise buildings during a fire: stay or leave? In the 2 Forest Laneway fire, those who stayed in their apartments did not suffer injury; only those seeking to escape via the stairwells did.

Reasonable Care:

¶ 51 The obligation of the landlord as occupier was to "take such care as in all the circumstances of the case is reasonable to see that persons entering on the premises ... are reasonably safe while on the premises.": Occupiers' Liability Act, R.S.O. 1990 c. O.2, s. 3(1).

¶ 52 The duty to take reasonable care includes the duty to keep the premises in reasonable repair and is further spelled out in the Landlord and Tenant Act, R.S.O. 1990 c. L.7 s. 94(1) requiring that rented premises be "maintained in a good state of repair and fit for habitation during the tenancy ...", and in compliance with applicable health and safety standards.

Some Conclusions about the 5th Floor East Fire Door:

¶ 53 One of the central issues raised by the Axes defendants was that the opening of this door occurred without any negligence on their part. Although the Fire Marshall witnesses could not provide a "conclusive" answer to how and when the 5th floor east fire door came open, the evidence allows me to reach conclusions on the standard of the balance of probabilities.

¶ 54 The 1968 Building By-law under which this building was constructed, By-law 22000, required that such a fire exit door be provided with an approved self closing mechanism (s. 2.3.12.5 entitled Doors to Be Kept Closed, Exhibit 13, Volume II, Tab 13, p. 296). The 5th floor east door was so equipped. Both door and SCD were destroyed and could not be tested.

¶ 55 Mr. Harpur's testing of other doors from 2 Forest Laneway equipped with the same model of SCD showed a substantial proportion of those tested did not always close the fire door with the minimum force required by U.L.C. standards. The testing of the 6th floor fire exit doors showed that they would not close under the pressures created by the open balcony and suite doors at 609, even without the forces generated by the fire itself.

¶ 56 That the SCDs were not in uniformly good condition is shown by the report of the engineering firm SPG which reported to the building owners in its February, 1994 "Fire and Life Safety Study" at page 9: "We note that many doors that do have self-closing devices do not close properly." Additional evidence came from Mr. Yaman Uzumeri, now the

Chief Building Official and formerly, in 1995, the Building Commissioner of North York. He visited the site a few days after the fire to see how it had behaved under fire conditions. He specifically wanted to check the SCDs on suite and fire stair doors. He went up and down the stair wells checking SCDs. There were none on suite doors, which surprised him very much. As to the fire doors, he observed that many SCDs on stair well doors were not functional. Instead of closing the doors, they were permitting the doors to stand open. He said that a properly maintained SCD would keep the door closed.

¶ 57 No evidence was called by the owners to rebut Mr. Harpur's tests, the SPG report or the observations of Mr. Uzumeri. There was thus no evidence of any maintenance or inspection of these devices. The building Fire Safety Plan contained specific details of the periodic tests, inspections and checks required of the safety features of the building, derived from the Fire Code. It required monthly inspections of all doors in fire separations, which includes the stairwell doors. The Plan defines inspection as a physical examination to determine that the device will apparently perform in accordance with its intended function. Unfortunately, the evidence discloses it was not followed.

¶ 58 Mr. John Broderick, the superintendent of 6 Forest Laneway at the time of the fire, was called by the plaintiffs pursuant to Rule 53. He had been superintendent of another high-rise for another employer. On being hired for Tandem, he received no training and had never seen a copy of the Fire Safety Plan. He was completely unaware of the schedule for inspections and received no instructions to do any. He said the maintenance manager, Mr. Alex Popovic, was responsible for maintenance and testing. The Axes defendants did not call Mr. Popovic or anyone else to testify as to the maintenance practices in the buildings. I draw the inference that any such evidence would not have assisted their case.

¶ 59 Shortly before flashover, the 5th floor east fire exit door was closed though not necessarily latched, and a tenant passed by without great difficulty, although there was some smoke streaming into the stairwell through spaces around the door. He reached the ground just at the estimated time of flashover. It would not take long for a man in a hurry to go down to the ground floor. Shortly after flashover, a tenant was driven back up S1 from the 8th floor by thick black smoke which was ascending the stair as fast as he could. There was thus a radical change in the smoke conditions in a very short time. It seems highly probable that something occurred at flashover: either someone unknown opened the door and it would not close and latch behind that person, or the force of flashover blew open the door which was not properly latched because the closing force was not enough to close it to the latch point. In either case, the door did not operate as it was designed to do: close to the fully latched position. It seems unlikely that someone opened that door. The investigation did not find such a person. The nearby tenants from 507 went down the elevator; the tenant in 511 was still in the apartment at flashover; after flashover, the conditions in the hallway near the stair would discourage efforts to use it.

¶ 60 The most probable explanation for the open door at 5th floor east, and the finding that I make, is that it was not in the fully latched position and was blown open at flashover by the wave of air pressure generated at that time. A properly maintained SCD would have been closed to the fully latched position and would not have been blown open by flashover. Mr. Harpur testified that the force of the flashover would not have caused a closed, latched door to open, particularly when the open balcony door provided an alternative vent for the force of the fire.

¶ 61 The opening of the 5th floor east fire door was essentially due to lack of maintenance of the SCD. In my view, failing to regularly maintain the fire exit doors so that they could do their job is not taking reasonable care for the safety of the tenants: in short, it is negligence. There was a program in place on paper only; my conclusion on the evidence is that it was not carried out. Further, the Axes defendants received actual notice that their maintenance program was not effective in the SPG report in February, 1994, warning at page 9 and again at page 15, that many doors with SCDs in the building did not close properly. The evidence of Mr. Cleary, the Fire Protection Engineer whom North York put in charge of considering extensions of time for completion of retrofit, made it clear that proper maintenance of existing SCDs was not a retrofit issue, but a current maintenance requirement. Failure to attend to the problem when warned of it cannot be excused by reliance on the extended period in which to accomplish the retrofit. SPG estimated the cost of this maintenance as part of a package which included many maintenance items other than SCDs: the total cost was $15,000.

¶ 62 The negligence of the Axes defendants in failing to maintain the SCD left the door vulnerable to remaining open during a fire, as it did, and thus opened up the stairwell to the quantities of smoke which caused the injuries of the present plaintiffs. The evidence does not support the view

that smoke in such significant quantities would have been there in any event. That negligence caused or contributed to the injuries of the plaintiffs, indeed I think it was the single greatest contributor to the whole disaster.

Suite Door Closers:

¶ 63 The plaintiffs assert that even if SCDs were not originally required on suite doors, Axes/Tandem were negligent in not observing that there were none and taking action to remedy their absence. They submit that Axes/Tandem had an obligation to know their own business and to understand what had become public knowledge: suite doors without SCDs were dangerous.

¶ 64 Axes is a nominee, but it holds between 50 and 100 properties which Tandem managed for it at the time of the fire. The complex of which 2 Forest Laneway is a part is alone worth some $70 million. Axes/Tandem are a sophisticated combination with the resources to be aware of significant developments in their business, which included the managing of high-rise dwellings. A significant feature of the period around 1970 was the growing awareness of the dangers of smoke migration in high-rise fires. In the 1970 edition of the National Building Code the following appears as the Introductory Note to new Subsection 3.2.6 under the heading "Additional Requirements for High Buildings":

> Experience with high buildings has shown that the time required for complete evacuation can exceed that which is considered necessary for the safe egress of all occupants. Studies of the "chimney effect" and observations of smoke movement in actual fires have shown that present measures for containing a fire on any one storey will not usually prevent the movement of smoke through vertical shafts to the upper floors of a high building. This situation may make the operation of elevators unsafe in a fire emergency. Occupants of high buildings, and particularly those on upper storeys, may therefore be faced with severe smoke conditions from fires occurring in storeys below them, before their own evacuation is possible.
>
> The Associate Committee is aware of this serious problem. It has drafted new provisions for the National Building Code to increase the safety of high buildings. This Subsection now indicates essential requirements for this purpose.

¶ 65 The Note continued by stating that additional important provisions that relate to the control of smoke movement would be issued separately in the form of a special paper as they represented a departure from existing design practice, and by inviting comments on the paper. The important point for our purposes is that the Note states that the new Subsection "now indicates essential requirements" for high-rise safety. One of these essential requirements, found in Sec. 3.3.4.2(4) called for SCDs on doors between suites and corridors in apartment buildings.

¶ 66 One of the most significant events in the business of operating high-rise apartment buildings in the dozen years before this fire was the publication of the Webber Report, referred to in the Axes defendants' submissions as noted above, and in evidence as part of Exhibit 13. It was a comprehensive examination of fire safety in high-rises. Judge Webber reviewed a number of fires in various kinds of high-rise buildings, including hotels, office and apartment buildings. He heard many expert witnesses, including senior officers of several of the biggest high-rise developer/managers in the country: Olympia and York, Oxford Group and Maysfield Property Management. He had the assistance of counsel from the major associations including the Urban Development Institute, Apartment Group; the Housing and Urban Development Association of Canada; the Metropolitan Toronto Apartment Builders Association and others. His report made clear the importance of the prevention of smoke movement throughout the remainder of the building from the room of origin. At page 165 he wrote:

> An open entrance door to the room or suite of fire origin provides an avenue for the spread of fire and smoke throughout the building. A door closer, if properly installed and maintained, ensures that the door will be closed after the occupants leave the room or suite.
>
> The disastrous results that can occur when doors are left open were evident in the fire at 88 Bloor Street East, described in Chapter 3, and in the Westchase Hilton Hotel in Houston, Texas, described in Chapter 4.
>
> The Ontario Housing Corporation statistics reinforce the need to have self-closing devices on these doors. In 1981, OHC statistics indicated that 72 of 93 people leaving suites of fire

origin in high-rise apartment buildings left the door open.

¶ 67 Judge Webber's Recommendation 10.1 was that each suite entrance door in a high-rise apartment should be equipped with a self-closing device. This was so important that it was recommended not only for future buildings, but for compulsory retrofit in existing buildings.

¶ 68 This important Report ought to have been in the stock of knowledge of every informed Ontario high-rise owner. It would certainly have been known to Olympia and York, whose Senior Vice-President, Property Administration of Office Buildings, Mr. Gringorten, gave evidence to Judge Webber on April 6 and 12, 1983. In 1986 Olympia and York became a partner in the purchase of the complex of which 2 Forest Laneway was a part. It is not clear to what extent it remained in the ownership group by 1995. Regardless of any role of Olympia and York, it is not conceivable that the senior managers engaged by Axes/Tandem would not have been aware of the risks disclosed by the Webber report. Indeed, as persons in the business, it was surely part of their job to know about the proposals that emanated from the Webber Report and led to the Retrofit legislation that came into force in stages in 1990-94. As counsel for the plaintiffs put it in opening, "the knowledge necessary to protect the occupants was public knowledge".

¶ 69 The issue raised by the plaintiffs is this: against this background, was it taking reasonable care for the safety of their tenants for Axes/Tandem to do nothing from 1986 to 1995 to rectify the danger created by the absence of SCDs on the suite doors until they were forced to do so by legislation, and even then to seek an extension of time for this work?

Reasonable Care is a Proactive Duty:

¶ 70 In their written submissions, the Axes defendants wrote:

> - page 6: Axes/Tandem purchased the property in 1988, and were not aware that door closures on suite doors may have been required in 1974 when the building was constructed.
> - page 7: Axes/Tandem, who were not the original owners that constructed the building in 1974, should not be criticized for failing to know that door closures had been required by Bylaw 22000 if that be the decision of this Court at the
> - page 14: It is respectfully submitted that at 2 Forest Laneway, the suite door of Apartment 509 complied with Bylaw 22000, the Building Code and the new Fire Code, with the sole exception of the absence of a door closure, should this Court find that Bylaw 22000 required their presence.

¶ 71 These submissions, although pertinent to the dispute between the City and Axes/Tandem over liability if Bylaw 22000 did require suite door SCDs in 1974, are not germane to an examination of Axes/Tandem's liability under the theory advanced by the plaintiffs in this part of their submissions. That theory proceeds upon the basis that Axes/Tandem owed its tenants a duty whether or not Bylaw 22000 required such SCDs. The issue is what ought Axes/Tandem, as reasonable high-rise owner/operators, to have known about the risk of not having SCDs and what ought they to have done when they learned of those dangers. Their position was stated as follows:

> There should be no obligation on the part of Axes/Tandem to make inquiries as to the absence of door closures on suite doors when a building permit had been issued in 1974, evidencing compliance with the Building Bylaws which plans and specifications showed no door closures being installed on the suite doors.
> (page 15) The retrofit procedure proposed in 1994 re-affirmed the state of mind of Axes/Tandem that individual suite door closers had not been necessary under Bylaw 22000.

¶ 72 Axes/Tandem thus claim the right to ignore all developments in building safety since 1974 on the strength of the original Building Permit. They had, they say, no obligation to consider whether such developments indicated that what had been an acceptable situation in 1974 was no longer acceptable, but actually created a situation of danger to their tenants which could be rectified easily and with little expense. Even when the new Fire Code was enacted and their own engineers, SPG, told them they had to provide door closers for the suites, they postponed the work as long as the Code allowed by obtaining an extension of time to comply.

¶ 73 There was no evidence called of the state of mind of Axes/Tandem in 1994 or at any other time. There was no evidence brought to explain

what their thinking was about the Webber Report and its emphasis on the importance of preventing the spread of smoke as a life protection matter. The plaintiff's position on the public nature of the information needed to protect the occupants was known to Axes/Tandem and was reiterated by plaintiffs' counsel in opening the trial. There was no surprise; the Axes/Tandem defendants deliberately chose to call no evidence to explain their inaction. No one testified that they were unaware of the facts, or that they considered the matter and bona fide concluded there was no danger, or that their finances could not afford the $13,000 per building to install suite door SCDs. No one even testified that they ever considered By-Law 22000, never mind relied on it. They cannot complain if the Court draws the inference, as it does, that the available testimony would not have assisted their case because they would have had to admit that they knew of the danger and chose to ignore it as long as they could.

¶ 74 In Waldick v. Malcolm (1991), 83 D.L.R. (4th) 114 (S.C.C.) the defendant occupier of a farm house had salted the steps and the approach to the door on a wintry February day in rural Ontario. She had not, however, salted the driveway and parking area which was, as she knew, icy from a recent storm. The plaintiff was knowledgeable about the condition of the area, having traversed it carefully earlier, on arrival to visit the Malcolms. He went out to his car for some cigarettes and, while returning, slipped on the icy parking area, fell and fractured his skull. The defendant Roberta Malcolm testified that she had not considered it necessary or reasonable to salt or sand this area, and that few of the residents of the area, including the plaintiff himself, did so.

¶ 75 At trial, (61 O.R. (2d) 624), Austin J. followed the similar case of Preston v. Canadian Legion, Kingsway Branch No. 175 (1981), 123 D.L.R. (3d) 645 (Alta. C.A.). There the Court held that the Alberta statute, similar to our own, imposed an affirmative duty upon occupiers to take reasonable care for the safety of persons coming onto the premises, in place of the former common law position of liability for unusual dangers of which the occupier was aware. Austin J. held that the icy condition of the Malcolm's driveway was not unexpected but they did nothing to render it less dangerous. He rejected a lesser standard of care for rural areas and concluded:

> The question is, by doing nothing under these conditions, do the [Malcolms] meet the standard of care required of them under the Act? In my opinion they do not.

¶ 76 On appeal, the trial judgment was upheld: 70 O.R. (2d) 717. Blair J.A. approved of the decision in Preston, supra, rejected the lower standard for rural areas and the alleged local custom of not sanding driveways, and agreed that, by doing nothing, the Malcolms had breached the standard required by the Act.

¶ 77 In the Supreme Court the Malcolm's appeal was dismissed. Iacobucci J., for the Court considered the appellants' submission that the lower courts had wrongly failed to take into account the local custom of not sanding driveways. He found that the lower courts had in fact considered this local custom among the many factors that were relevant to what constituted reasonable care in all the circumstances. The burden of proof of such a custom was on the one asserting it, the Malcolms, and the evidence was such that the lower courts could reasonably conclude that the onus had not been met. He then pointed out that even with adequate evidence, such a local custom would not necessarily have prevailed. He referred to Prof. A. Linden's article Custom in Negligence Law (1968) 11 Can. Bar J. 151, where, at 154, the author notes that "tort courts have not abdicated their responsibility to evaluate customs, for negligent conduct cannot be countenanced, even when a large group is continually guilty of it." Iacobucci J. continued, at page 125: "In short, no amount of general community compliance will render negligent conduct 'reasonable in all the circumstances'." Farther on he added, after noting some authorities, "If, as the lower courts found, it is unreasonable to do absolutely nothing to one's driveway in the face of clearly treacherous conditions, it matters little that one's neighbours also act unreasonably. Presumably it is exactly this type of generalized negligence that the Act is meant to discourage."

¶ 78 Finally, at page 128, Iacobucci J. said:

> The goals of the Act are to promote, and indeed, require where circumstances warrant, positive action on the part of occupiers to make their premises reasonably safe.

¶ 79 This case is strong authority for the view that the Act requires a landlord/owner/occupier to be proactive in making its premises reasonably safe for those who use them. It is not enough to do nothing in the face of a known risk, even though it may well be that other owners in the same position may also be doing nothing until they are forced into action by legislation.

¶ 80 In Mortimer v. Cameron (1994), 111 D.L.R. (4th) 428 (Ont. C.A.) two party-goers engaged in some 'good-natured horseplay' during which they fell down some stairs striking the exterior wall of the stairwell with minimal force. Due to sub-standard construction, it gave way and the plaintiff broke his neck in the ensuing fall to the ground. The City of London had issued a Building Permit without due care and had failed in its duty to inspect the work for compliance. It was found liable. Of more interest to us at the moment, the landlord, whose predecessor had built the structure, was also found liable as an occupier under s. 3(1) of the Occupiers Liability Act.

¶ 81 The occupier, 'Stingray', acquired the building in 1979, seven years after the faulty wall was built. It submitted, paralleling the Axes submissions here, that it should have no liability for failing to correct defects which were not apparent to it and which would not have been apparent on a reasonable inspection. The court found no reason to interfere with the trial Judge's finding of liability on Stingray. At page 438, Robins J.A., for the Court, said:

> The trial judge correctly held that this company, as owner and occupier of the premises, was under an ongoing duty to inspect the enclosed stairway irrespective of any notification from its tenants of any problem relating thereto.

¶ 82 In my view, the law required Axes/Tandem to take positive action to make their premises reasonably safe in the circumstances which prevailed between 1986, when they first bought the premises, and 1995, when the fire occurred, notwithstanding the fact that they did not create the danger. During that period the publicly available information on the vital role played by suite door SCDs in preventing the spread of smoke throughout the whole building was so compelling that any reasonable landlord/occupier ought to have realized that their absence created a situation of danger to all the tenants in the entire building in the event of a fire in a suite. They had an ongoing obligation to review the safety of their building in the light of developments in fire safety. Given the great danger and the simple and inexpensive solution, reasonable care required prompt action; it was not 'reasonable care' in such circumstances for them to wait until legislation forced them to remove the danger.

Allegations relating to the Fire Plan and Tenant Education:

¶ 83 The Fire Plan for the building was submitted to and approved by the North York Fire Department in 1990. It called for inspections monthly of doors such as those leading to the stairwells. I have already noted the failure of Axes/Tandem to instruct the building Superintendents to do these and the absence of evidence that anyone else did them. Various tenants gave evidence that they received no training or information about what to do in case of fire as required in the Fire Plan. There were no fire drills even though called for every three months in the Fire Plan and the Fire Code.

¶ 84 As set out earlier in these reasons (Response of the Axes Defendants, supra) Axes/Tandem submitted that there was no evidence that failing to distribute the Fire Plan to tenants and to conduct regular fire drills caused or contributed to the injuries. So far as educating the tenants is concerned, the failure to conduct fire drills may be irrelevant as their participation was optional: Fire Plan, section 8, page 9. Nevertheless, the failure to hold drills and to distribute the information as to fire safety procedures indicates a lack of attention to fire safety procedures which seems to have extended to the training of the staff also as seen in the testimony of Mr. Broderick.

¶ 85 Axes/Tandem submitted that they had complied with the Fire plan in part by posting a sign as required by section 3, page 4 and shown in the photograph in evidence at Exhibit 1, tab 4. It instructed, in suitably large print, that on discovery of fire tenants should:

> Leave fire area immediately and close doors
>
> Pull fire alarm located by stairwell exit
>
> Dial 911. Ask for North York Fire Dept.
>
> Leave building via nearest exit
>
> DO NOT USE ELEVATORS
>
> Upon Hearing Fire Alarm
>
> Leave Building via nearest exit
>
> Take Apartment Key

CAUTION

If smoke is heavy in the corridor, it may be safer to stay in your apartment
Close door behind you, and place wet towel at base of door
Listen for instructions over P.A. system
If you encounter smoke in stairway use alternate exit REMAIN CALM

¶ 86 This sign was approved in the Fire Plan and Axes/Tandem cannot be criticized for its use. It neatly illustrates the dilemma referred to in the Webber Report as facing all occupants in a high-rise fire: Stay or Leave? In their submissions, Axes/Tandem refer to this dilemma and point out that only tenants who left their apartments were killed or injured. They further say that the plaintiffs were well aware of these instructions. This is all true, but it does not mean that the plaintiffs were somehow wrong to leave their apartment. The instructions twice state that one should leave the building by the nearest exit, which is exactly what the plaintiffs tried to do. The caution warns that if smoke is heavy in the corridor, it may be safer to stay. There remains a dependence upon the individual judgment of occupants facing stressful conditions they did not create. No legal comfort can be taken by Axes/Tandem if the plaintiffs chose an apparently reasonable, but ultimately disastrous course, as they did. Nevertheless, in my view, the evidence does not establish that better education of the tenants would have prevented the deaths and injuries that occurred.

¶ 87 It is evident from the Fire Plan that one of its major objectives is to see that the owner's staff are educated in their duties in case of fire. This is the main point of fire drills, for example. This educational duty was not carried out by Axes/Tandem. It was said that this lack of training led to the failure of the staff, on the morning of the fire, to communicate with the tenants via the voice communication system. Mr. Broderick arrived at the lobby of 2 Forest Laneway after the Fire Department was already there. On arrival he said he observed the annunciator panel in the open position and Mr. Macht already at work bringing the elevators to the ground floor. Mr. Broderick did not attempt to use the annunciator to communicate with the tenants because the firefighters were already there and they were trained to take over. Various tenants indicated they heard nothing that morning over the voice system, so it is fair to conclude that Mr. Macht also did not use it. However, it is not clear when he arrived, the firefighters may well have been there. In any event, it would be speculative to think that Mr. Macht would have advised people to remain in their suites when the instructions in the Fire plan were as has been outlined earlier, to leave the building by the nearest exit, but if there is smoke, it may be safer to stay in the suite. At the outset of the fire there was no reason for someone in the lobby to suspect that the smoke would spread as it did. I do not think that the failure of Axes/Tandem to train their personnel to use the annunciator was a causal factor in the deaths and injuries that took place.

Defective Roof Hatches:

¶ 88 There was evidence that the roof hatches above both stairwells were defective and failed to open automatically, as they were meant to do in the presence of smoke. Mr. Harpur's report at Exhibit 13, page 198 comments that opening the hatch would have increased the flow of smoke coming into the stair. The plaintiffs did not rely on these defects in their final argument.

Conclusion as to Axes/Tandem:

¶ 89 The negligence of Axes/Tandem, both in failing to maintain the 5th floor fire stair SCD and in failing to install suite door SCDs caused or contributed significantly to the injuries and deaths that occurred in the fire. The plaintiffs are entitled to judgment against the corporate Axes defendants.

Liability of the Officers, Directors and Employees of Axes/Tandem:

¶ 90 Although the plaintiffs pleaded that the defendants Alfredo DeGasperis, Paul Reid, Van Forbell, John Broderick and Robert Macht ought to be personally liable for the failures of Axes/Tandem, the issue was not pressed at trial. No submissions were made to establish the factual or legal basis upon which such a finding could be made. Mr. Macht failed to appear to be examined as a witness under Rule 53.07 and judgment was sought against him on that basis. Rule 53.07(7) provides that where a person required to testify under the Rule does not attend, the Court may grant judgment or make such other order as is just against the person. The issues upon which Mr. Macht could have given evidence would have been those on which Mr. Broderick did testify and have essentially been found against Axes/Tandem. There is no indication that the lack of Mr. Macht's evidence hampered the plaintiffs' case in any significant way. There is no indication that he acted deliberately; he is said to have disappeared, but it

was not shown that he did so to avoid testifying. In my view, Mr. Macht should not be treated differently from the other superintendent, Mr. Broderick, against whom the plaintiffs did not press for judgment. The action will be dismissed as against Messrs. De Gasperis, Reid, Van Forbell, Broderick and Macht. As they all appear to have been defended by Axes/Tandem, the dismissal will be without costs.

Liability of North York, Part 1: Alleged Failure to Enforce By-Law 22000:

¶ 91 The plaintiffs say that North York was negligent in three different ways, each of which caused or contributed to their injuries: the city failed to enforce its own Building Bylaw; acted negligently in dealing with Axes application to extend the time for compliance with the retrofit; and, at the fire scene, failed to warn the tenants to stay in their suites. This section of my reasons deals with the first of these allegations.

¶ 92 Bylaw 22000 was enacted in May 1968 and, as amended to March, 1971, governed the issuance of building permits and the approval of building plans in 1974 when the application for 2 Forest Laneway was processed by North York. The plans were approved without any provision for SCDs on suite doors. The plaintiffs say and the defendants deny that SCDs were required on those doors.

¶ 93 Specifically, the plaintiffs say, the building as approved for construction in 1974 and as constructed in 1975, failed to comply with s. 3.1.3.6(15) of By-Law 22000 which required that there be self-closing devices on the suite doors. The plans examiner failed in his duty of care to require compliance with the By-law prior to approving the plans. The building inspector failed in his duty of care to require that such self closing devices be installed in the building;

¶ 94 Certain extracts from By-Law 22000 are pertinent:

> Section 1.2(a): When a building is built, ... this By-law shall apply to the ... construction of the building ...
> Section 1.5 RESPONSIBILITY OF THE OWNER: S. 1.5.1: Neither the granting of a permit, nor the approval of drawings and specifications, nor the inspections made by the Building Commissioner ... during the erection of a building shall in any way relieve the owner ... from full responsibility of carrying out the work in strict accordance with the provisions of this by-law ...
>
> Section 1.6: The Building Commissioner shall:
>
> 1.6.1 Examine all applications for permission to do work in connection with building;
> 1.6.3 If the matters mentioned in any application for a permit or if the drawings, specifications or block plan or survey submitted with the application indicate to the Building Commissioner that the work proposed to be done will not comply in all respects with the provisions of this By-law and all applicable governmental regulations, refuse to issue a permit therefore and no permit shall be issued until the application, drawings, specifications and the block plan are made to conform to the requirements of this By-law and all applicable governmental regulations; ...
>
> 1.6.5 Enforce this By-law;
>
> Section 1.11: No person shall occupy or permit to be occupied any building ... which has been erected ... until a Certificate of Compliance has been obtained from the Building Commissioner, certifying that the work has been completed in accordance with this By-law ... and the approved plans in respect of which the permit was issued."

¶ 95 Part 1A of the By-law is the Definition Section. The following are relevant:

> APARTMENT HOUSE shall mean a building used for the purpose of providing three or more separate dwelling units other than a triplex.
> APPROVED shall mean approved of by the Building Commissioner, unless specifically mentioned otherwise.
> MEANS OF EGRESS shall mean a doorway, hallway, corridor, lobby, stair, ramp or other facility or combination thereof, provided for the escape of persons from a building, floor area, or room to a public thoroughfare or other approved open space. Means of egress include exits and access to exits.

NON-COMBUSTIBLE, as applied to a building material shall mean that the material is classed as non-combustible when tested by a standard method of fire test as prescribed herein. (Section 3.1.3.1.)
OCCUPANCY shall mean the use or intended use of a building or structure or part thereof for the shelter or support of persons, animals or property.

¶ 96 Part 2 is entitled MEANS OF EGRESS.

Section 2.3.12.5: Doors to Be Kept Closed:

Every exit door that is normally required to be kept closed shall be provided with an approved [by the Building Commissioner] self closing mechanism, and shall not at any time be secured in an open position.

¶ 97 Part 3 of the By-law is titled "USE AND OCCUPANCY". The Introduction to this Part states:

This part shall apply to all buildings other than houses hereafter erected, enlarged or altered and sets forth minimum requirements for safety for such buildings, taking into consideration the occupancy, the type of construction, the exterior exposure and the accessibility of the building to fire fighting facilities and equipment.
The design and location of means of egress shall be in accordance with Part 2 of this By-law.

¶ 98 By s. 3.1.2.4, apartment buildings such as 2 Forest Laneway were classified as Group C, Division 2, buildings used or intended for use for Residential Occupancy.

¶ 99 Section 3.1.3.6 is entitled Fire Separations. A Fire Separation is a barrier to the spread of fire and smoke in the form of construction, i.e. a wall, having a fire rating and fire rated closures (doors) or complying with ss. 3. 1.3.6(2) to 3.1.3.6(16). Section 3.1.3.6(15) states:

Except as provided in Section 3.1.3.6(16)* all doors in interior fire separations shall have approved self closing devices which, when the door is opened, will return the door to the closed position. Such devices on exit doors shall not reduce the headroom below that required for exit doors in Part 2 of this By-law.

* Section 3.1.3.6(16) has no application to this case.

¶ 100 Section 3.3 is entitled REQUIREMENTS FOR FIRE SAFETY WITHIN FLOOR AREAS. Section 3.3.4 sets out Special Occupancy Requirements for Floor Areas Intended for Residential Occupancy:

Section 3.3.4.1: Separation of Rooms or Suites, states:
1 ... suites in ... apartment houses ... shall be separated from adjacent corridors and suites by not less than

(a) a one hour fire separation in buildings required by this By-law to be of fire resistive construction [which this Building was by virtue of s. 3.2.1.27] and (b) a 3/4 hour fire separation in all other buildings.

Section 3.3.4.1(2): Doors from rooms or suites to corridors may be solid core wood doors not less than 1 3/4 inch thick.

¶ 101 The plaintiffs submit that SCDs are required under Bylaw 22000 because: suites must be separated from adjacent corridors by a one-hour fire separation (3.3.4.1); which may have a door of solid core wood not less than 1 3/4 inch thick (3.3.4.1(2)); and any door in such an interior fire separation must have an approved SCD (3.1.3.6(15)). I agree with this analysis.

¶ 102 The defendant North York, whose submissions the Axes/Tandem defendants adopt, submitted that the Bylaw did not require SCDs on the suite doors. In support of its submissions, it called two witnesses, Mr. Rick Mori and Mr. Yaman Uzumeri. Mr. Uzumeri was not involved in the review of the 2 Forest Laneway plans in 1974, and Mr. Mori was involved only in the structural aspects, although each was experienced in the field of plans examination and with Bylaw 22000. The actual plans examiner, if still living, would have been some 93 years old and could not be called to explain what he had done. Mr. Forbes sought to call these men, not as experts, but as lay witnesses to testify as to the background facts so as to explain why the examiner might not have overruled the architect and called

for closers on the suite doors. Objection was taken to the relevance of any of this. Neither man was involved in the approval of the relevant part of the plans and their evidence would at best be speculation. In the end, I heard the evidence although I felt that the plaintiffs had the better side of the argument, because it seemed more practical to put it on the record and argue about its relevance and weight afterwards.

¶ 103 Mr. Uzumeri testified that after the fire he asked Mr. Mori to research why there were no SCDs on the suite doors, partly for his own information and also because a request came from the OFM for the same information. Mr. Mori's explanation dated February 7, 1995, became Ex. 56. He agreed with counsel that when he wrote it he was aware that the OFM believed that SCDs could have confined the fire to the suite of origin. Mr. Mori's evidence in large measure turned out to be speculation as to how the examiner might have reached the conclusion that SCDs were not required. I thought the explanation self-serving and contrived.

¶ 104 Mr. Mori testified that the National Building Code, 1965, was used as an aid to interpret the Building Bylaw where there was doubt because, in general, the NBC 1965 had been used as a model for Bylaw 22000. The NBC 1965 expressly provided that suite doors in apartment buildings did not require closers. He said that therefore, those who wrote Bylaw 22000 would 'obviously' have had the same intent. In my view, this is a stunning non sequitur. Section 3.1.3.6(15) demonstrates clearly the opposite intent: all doors in interior fire separations are to have SCDs. Just because NBC 1965 was the model is not a reason to ignore clear language. Indeed, in cross-examination Mr. Mori admitted that the absence in the Bylaw of the phrase 'and closers need not be provided' found in NBC 1965 could fairly lead to the conclusion that the Bylaw drafters intended closers to be installed.

¶ 105 Mr. Mori sought to demonstrate a latent ambiguity in Bylaw 22000 by referring to the permission for suite doors to be solid wood core at least 1 3/4 inches thick. Such doors, he said, had no fire rating and it was not logical to require such doors to have closers. Again, this turns logic on its head. The two requirements address different risks. The fire rating of the door relates to how long it and its latch will stand up to flame; the closers refer to the risk that the door will be open and flame and smoke will spread uninhibited by any door at all. Even the highest fire rated door will not prevent the spread of smoke and flame if it is standing open. As well, because a door is unrated does not mean it offers no resistance to the spread of fire and smoke. Evidence from Mr. Harpur of the OFM showed that the unrated door on suite 509 would have represented a 'useful barrier against the spread of fire and smoke' if it had been closed, and the unrated door within the suite kept the fire out of the adjacent room. The test conducted by U.L.C. for Mr. Harpur after the fire on a typical suite door showed that it took 8 minutes for an 11 mm. (0.433 inches) gap to appear and 13 minutes for a burn through hole of some 60 mm (2.36 inches) in height along the lock side of the door to develop. At 18 minutes it was noted that the hole had increased in size, but the new dimensions were not given. At 20 minutes the fire test was ended with Mr. Harpur noting that the door remained essentially intact and in place and a useful barrier to the spread of the fire and smoke.

¶ 106 Mr. Mori's theory that the requirement for SCDs could not logically apply where the door in question had no fire rating was further undermined by the fact, pointed out in cross-examination, that NBC 1965 contained a provision that up to a one-hour fire separation requirement could be waived if a door opening was closed by a solid wood core door 1 3/4 inches thick. Such a door, at the time, was an unrated door, but this provision recognized that such a door had fire resistance value.

¶ 107 Mr. Mori's theory of ambiguity was based on the view that there was no point in requiring SCDs on a door with no fire rating. For the reasons noted, I reject that theory as not in accordance with logic or the evidence before me.

¶ 108 Mr. Mori's memorandum also refers to the OFM 1971 Fire Safety Design Standard. It stated that all fire doors required SCDs, but Mr. Mori referred to an exemption for school classroom doors which he speculated was based on those doors not having a fire rating. Therefore the same situation in apartments would not require SCDs. This is pure speculation; he did not know the basis for the OFM exemption for classrooms.

¶ 109 On its face Bylaw 22000 requires SCDs on suite doors and any other conclusion can only be reached by going back to NBC 1965 and concluding that the drafters of the bylaw did not mean what they said and really intended to follow NBC 1965. Mr. Mori himself admitted at the end of his cross-examination, that this was so. When it was put to him that the drafters of the Bylaw could have included the phrase that closers 'need not be provided', but did not, Mr. Mori suggested that they might have taken it for granted, a blatant piece of self-serving speculation. Only when pressed

did he admit that it would be a fair reading that the drafters intended closers to be provided.

¶ 110 In 1970 a new edition of the NBC was issued. The copy in the material before me is from the second printing with corrections to April 1, 1971 and was received at the Great Library at Osgoode Hall in February, 1972, and so the first printing of the new edition would have been in circulation well before that time. Section 3.3.1 contains requirements applying to all floor areas and by 3.3.3.5.(1) requires that doors acting as closures in fire separations be equipped with SCDs. Section 3.3.4 applies specifically to areas intended for use for residential occupancy and by 3.3.4.2(4) requires that doors between corridors and suites in Group C buildings, which includes apartment buildings, be provided with SCDs. Mr. Mori at first speculated that perhaps this change was not known by 1974, but conceded that he would have expected it to be published and available by 1974. As I have noted, the dates indicate it was available long before that.

¶ 111 Once the NBC 1970 came out, it seems to me that any temptation on the part of plans examiners applying the Bylaw to think that the drafters of Bylaw 22000 did not mean what they wrote must have disappeared, if it ever existed. Indeed, there was no actual evidence that anyone in the department held any such view at the time.

¶ 112 A series of letters was put to Mr. Mori in cross-examination relating to an opinion he gave to Mr. Holden, an investigator employed by counsel for the plaintiffs, as to the issue of door closers and Bylaw 22000. The first was a letter dated August 9, 2000, summarizing the conversation earlier that day between Messrs. Holden and Mori. The letter states, and Mr. Mori agreed, that during that conversation Mr. Mori got out Bylaw 22000 and reviewed it. The letter states that Mr. Mori advised Mr. Holden that it required SCDs on all suite doors and that, although some buildings had exemptions from this requirement, apartments did not. Mr. Mori agreed that he 'probably' so advised Mr. Holden. Mr. Mori said that he received Mr. Holden's confirming letter and looked at it and filed it away. He did not contact Mr. Holden to correct any of it. On November 29, 2000 Mr. Mori was subpoenaed for this trial.

¶ 113 Early in January, 2001, Mr. Mori met with counsel for North York, went over Mr. Holden's letter and 'realized the conclusion that someone could reach' based on it. On January 4, 2001, he wrote to Mr. Holden to 'clarify' some issues referred to in the latter's letter by introducing some of the arguments mentioned in the 1995 memorandum. Mr. Holden responded on January 6, 2001 reiterating some of the key points discussed as he recalled them from his notes, particularly that Mr. Mori had confirmed that 2 Forest Laneway was not exempt from the SCD requirement, and had confirmed that he had enough information to give Mr. Holden that opinion. Mr. Mori was far from impressive when testifying about these letters.

¶ 114 Mr. Holden gave evidence supporting the accuracy of his description of the interview and Mr. Mori's statement that SCDs were called for. He denied that there was any discussion of fire rated doors or of dwelling unit doors being exempted. He denied the suggestion in Mr. Mori's letter that his opinion as to the requirement for SCDs had been based on to-day's standards rather than those prevailing at the time of construction. He was a careful and impressive witness and I prefer his evidence as to the conversation to Mr. Mori's. I find that Mr. Mori did indeed tell Mr. Holden in the summer of 2000, that Bylaw 22000 called for SCDs at 2 Forest Laneway in 1974.

¶ 115 Mr. Uzumeri's evidence as to the background of Bylaw 22000 was similar to Mr. Mori's. He had been the secretary of the Toronto Area Building Code Committee which had prepared a model bylaw based on NBC 1965 for adoption by Toronto area municipalities. He had not been able to locate any minutes of the Committee. He had no personal knowledge of how the Bylaw was interpreted in 1974 with reference to SCDs on apartment suite doors. He generally supported Mr. Mori's theory of how the Bylaw might have been interpreted to allow construction of 2 Forest Laneway without SCDs on suite doors. Like Mr. Mori, his evidence on this point was speculation.

¶ 116 I do not accept Mr. Mori's reasoning, nor Mr. Uzumeri's support of it. There is no ambiguity in the relevant sections of Bylaw 22000 and no need to go to NBC 1965 or other external aids to interpret the plain words. I find that Bylaw 22000 required that 2 Forest Laneway be equipped with SCDs on all suite doors. In approving the plans and issuing the permit without such SCDs, North York failed to correctly interpret and enforce its own Bylaw.

¶ 117 By not enforcing this part of Bylaw 22000, North York caused or contributed significantly to the deaths and injuries, including the injuries of

the plaintiffs, which occurred in the fire of January 6, 1995. If the suite door to 509 had been closed, it would have at least been a useful barrier against the spread of the fire and smoke; indeed, Mr. Hiscott and Mr. Silvestri felt that they would have been confined to 509 itself. Had that been the case, there would likely have been no injuries or fatalities from smoke. The tests done for Mr. Harpur do not, of course, precisely duplicate the actual conditions, but the results suggest that the smoke would have been entirely confined to suite 509 for at least 8 to 10 minutes and very significantly restrained thereafter. Given the speed with which the smoke spread through the open door and into the halls, and the relatively short time the tenants had to evacuate, even that time would have been significant. Again, confining the fire to 509 would have meant that there would have been no thick black smoke from the hall carpeting adding to the dangers to the tenants.

¶ 118 Was the failure to correctly interpret and enforce its Bylaw an act of negligence on the part of North York? It was not argued that the decision not to require SCDs either in the Bylaw, as the City interprets it, or in the case of 2 Forest Laneway itself, was in any sense a policy decision attracting special legal considerations. The case was argued by North York on the basis that it owed a duty of care in the administration of the Bylaw to those likely to be affected, including the plaintiffs.

¶ 119 A municipality is not required to interpret the applicable building code to perfection and the mere misinterpretation of the applicable code is not, in and of itself, negligence. In Manolakos v. Vernon (City), [1989] 2 S.C.R. 1259, the Supreme Court held that a municipality "is only called upon to show reasonable care in the exercise of its powers of inspection." and at page 1268 that an owner "... should be entitled to rely on the City to exercise reasonable care to ensure that all construction is built according to the standards set out in the bylaws."

¶ 120 In Beutel Goodman Real Estate Group Inc. v. Halifax (City) (1998), 169 N.S.R. (2d) 248 (S.C.), the Court held that the plaintiff had the onus of showing that the City did not act with reasonable care when erroneously interpreting the NBC. In that case the plans examiner had not even read the Code and agreed that if he had, he would have known his interpretation was incorrect. The City claimed to have relied upon an interpretation bulletin and the City's interpretation was in direct contradiction of the plain meaning. The Court rejected the submission that only if the City had been made aware that its interpretation was being seriously questioned could it be argued that its interpretation showed a lack of reasonable care on its part. The evidence amounted to lack of reasonable care.

¶ 121 In Beutel the Court had the benefit of the evidence of the actual examiners who described what they had done. In the present case, the Court does not have any direct evidence as to what care was taken to ensure that the Bylaw was correctly interpreted. The evidence of Messrs. Mori and Uzumeri was not about what the examiner had done. Rather it was speculation created after the fire, directed to trying to explain how he might have reached a conclusion directly contrary to the plain language of the Bylaw. Neither of them testified that their interpretation was in fact held by anyone in the Building Department when this work was done.

¶ 122 Messrs. Mori and Uzumeri testified there was an interpretation book in which the department recorded interpretations of difficult sections of the Bylaw. There was no evidence that this issue and interpretation was in the book. Further, Mr. Mori testified he helped the examiner with the structural plans. Thus, he was active in the department at the time, but gave no testimony that this matter was raised. If the examiner had any doubts about the interpretation and had acted reasonably, he would have raised it in the department and an interpretation would have resulted. No reasonable examiner would follow the path outlined by Mr. Mori without checking it out with his superiors, given that it was a life safety matter and the result was to reverse a plain language requirement. The evidence simply does not support the speculation that the examiner went through the process of reasoning theorized by Mr. Mori.

¶ 123 In discharging their onus, the plaintiffs cannot be expected to delve into the City's bureaucracy; they fulfill their obligation by demonstrating the unreasonableness of the interpretation. In the speculative and illogical analysis of Mr. Mori and Mr. Uzumeri, North York has not produced a reasonable explanation for the failure of its examiner to require what the by-law required.

¶ 124 It was submitted that, in assessing the reasonableness of the City's interpretation of Bylaw 22000, regard ought to be had for the principles set out in the decision of the B.C. Court of Appeal in Virdi v. Inland Feeders Ltd., [1982] 1 W.W.R 555, (B.C.C.A). In that case the Director of Planning gave incorrect information as to permitted uses, resulting in damage to the plaintiff. The trial judge held while the Director of Planning misinterpreted

the bylaw, he had acted in good faith and not carelessly or imprudently. He did not reach a conclusion which would be unacceptable to any skilled professional person. The Court held that the opinion he expressed, while incorrect, was one which could well have been made by the most competent of lawyers or judges. He was mistaken, but the conclusion which he reached was open to any skilled person in his field of endeavour.

¶ 125 Notwithstanding these findings, the trial judge found the municipality liable, [1980] 5 W.W.R. 346, but the Court of Appeal reversed the decision, holding that although municipal officers are required to be careful, skillful and reasonably competent, they will not be held liable to compensate anyone merely because they are wrong in their representations. The Court of Appeal refused to impose a standard of liability on municipal officers that would not be imposed on lawyers, accountants or bankers or even doctors, whose opinions may be the basis for life or death decisions.

¶ 126 It was further submitted that where there are two bodies of professional opinion, equally competent, one of which supports a decision as being reasonable, a defendant is justified in relying on that one. Although a Court may prefer one body of opinion to the other this is not the basis for a conclusion that there had been negligence on the part of the defendant: Maynard v. West Midlands Regional Health Authority, [1985] 1 All E.R. 635 (H.L.).

¶ 127 I have no difficulty in accepting the principles of these two cases, but the facts of this case are very different. Here there are no contending bodies of professional opinion, one of which supports the decision reached by the plans examiner. The evidence of Messrs. Mori and Uzumeri does not demonstrate that anyone in the department held that opinion in 1974 or at any other time. The examiner cannot be exculpated on the theory that he chose between two bodies of competent opinion when there is no evidence that he did so and no evidence of the existence of any such bodies. Similarly, I cannot say, as the Trial Judge did in Virdi, that the decision was one which could have been made by the most highly skilled persons in the profession. On its face, that is not so in this case.

¶ 128 The essence of this aspect of the case is that Bylaw 22000 called for SCDs on all interior fire separation doors in plain language. The plans examiner failed to require them in this building. If he had a problem with the requirement, he acted unreasonably in failing to take it up with his superiors and obtain an interpretation. That is enough for liability. By way of defence, North York produced no reasonable explanation for how this could have happened if their employee had exercised reasonable care. This was a life safety matter whose importance was well known in the industry; the National Building Code had been changed four years earlier to require these safety devices and the Bylaw itself had required them since it was enacted in 1968. It was utterly foreseeable that failure to require these devices would, in the case of fire, place the health and lives of the occupants at risk.

¶ 129 Failure to require the SCDs was an act of negligence for which North York is liable.

Liability of North York, Part 2: Granting the Retrofit Extension:

¶ 130 In the 1980s Ontario had a program of compulsory up-grading or "retro-fitting" of older buildings to bring them into compliance with more modern Building Codes. Types of buildings were brought under this program over a period of years, with the types most vulnerable to disastrous fires such as places of assembly and rooming houses, for example, being covered first. High-rise buildings were brought into the program by legislation enacted in 1992. There was a two year period for compliance and a possible extension for two additional years. The Axes/Tandem defendants, as owners of 2 Forest Laneway applied for that extension in 1994 and received it. The plaintiffs say that the defendants were not entitled to the extension and were granted it only because Mr. Cleary, North York's official in charge of deciding on applications for the extension, was unsuited to the job and acted negligently.

¶ 131 The statutory framework for the application for an extension in 1994 starts with Regulation 454/90 (the "1990 Fire Code"), enacted under the Fire Marshal's Act, s. 19. It contains Part 9, the "Retrofit", requiring mandatory upgrading of existing buildings not already in compliance. Section 9.1 gave an owner 2 years to comply, but permitted an application to the Chief Fire Official for an extension of up to 2 more years. The legislation did not set out any criteria upon which the extension application was to be judged.

¶ 132 The Chief Fire Official of North York delegated the responsibility for review of extension applications to Mr. Cleary who had been a Fire Protection Engineer with North York since 1990. He had spent most of his time in 1991 administering the retrofit program for rooming houses, and in

late 1992, after an interval studying "911" response times, he was assigned to administering the retrofit program for residential uses. He was solely responsible for dealing with extension requests in 1993-6. He was aware that the purpose of the retrofit legislation was to achieve minimum life safety standards. He handled some 670 extension applications of which 240 were for high-rise buildings. Of the 240, he granted about 100. It is clear that, despite the pressure of numbers, he did not merely 'rubber stamp' these applications.

¶ 133 Mr. Cleary was a chemical engineer and had no training or experience in reading or analyzing financial statements apart from a memory of possibly taking an introductory course in accounting at University. He said that in assessing applications he relied on the October, 1992 OFM Commentary on Changes to the Ontario Fire Code which included this passage:

> The owner may apply for up to two additional years to October, 1996. The request for an extension must be based on sound financial or logistical reasons and be accompanied by a schedule for completion of the required work.

¶ 134 In assessing the expectations of the Legislature as to the degree of investigation required in support of an extension application, it is important to note section 9.1.3.2.(3) which requires the Chief Fire Official to grant or refuse the extension within 10 days of receipt of the application. While that timetable was not met in the present instance, the shortness of the period indicates that a close and critical examination of the financial situation of applicants cannot have been expected. Mr. Cleary testified that he did not consider or evaluate the relative life safety impact of work items listed in extension requests. His rule was if the owner was losing money, any expense was a hardship. He did not believe at the time that he had any discretion to grant an extension less than two years, if two years was sought by the owner.

¶ 135 Later, in the fall of 1994, a more detailed and updated document was sent out by the OFM for the guidance of Chief Fire officials in evaluating requests for extensions. Mr. Cleary thought that it was radically different from the Commentary and changed the criteria. He did not alter his approach as he felt he had evaluated many requests on the Commentary approach and it would be unfair to alter the approach. He had not received this document when he granted the extension for 2 Forest Laneway. The entire Commentary was not in evidence, so comparison is not possible, but he said the new document laid some emphasis on considering the life safety implications and weighing them against the capacity of the owner to undertake the work. It seems likely that the emphasis on weighing the life safety aspects was at least one of the ways in which the new document seemed to Mr. Cleary to be radically different from the Commentary.

¶ 136 The plaintiffs say that the appointment of Cleary, a chemical engineer, unqualified and untrained in analyzing financial statements; the manner in which he conducted the task assigned to him; and his use of the criteria he himself set and relied upon, constituted negligence. To assess this allegation, I turn to the facts relating to the granting of the extension for 2 Forest Laneway itself.

¶ 137 In February 1994 SPG prepared a document entitled Fire and Life Safety Study for 2 Forest Laneway. This study was forwarded to Mr. Cleary under cover letter dated March 7, 1994, which stated that the study was prepared for the "owners Axes Investments Inc.". The letter stated:

> We request you to grant the owners a two year extension in time for compliance with Ontario Regulation 627/92 under the Fire Marshal's Act.

¶ 138 This Report was one of a number of applications submitted by SPG covering approximately 20 buildings. Mr. Cleary examined two reports in detail and concluded that the SPG reports were more than was needed for an extension application, and should have been differently formatted. He wrote back to SPG on July 8, 1994 regarding buildings at 10 and 20 Sunrise. He said he may have glanced at the Report for 2 Forest Laneway, but did not read it in detail. He wrote:

> "Based on the number of deficiencies in this report [the Sunrise Report] and in conjunction with cursory reviews of some of the other reports submitted by your company that show that they appear to be similar, we are returning the reports [numbering 20] for the following locations [including 2 Forest Laneway]".

¶ 139 Mr. Cleary went on to advise SPG what information was to be included in the application in order for him to grant the extension. He

developed this list of information, set out below, on his own and did not review it with any more senior people in the Fire Department.

a) The number of storeys in the building (so he could know if there were more than or less than 6 storeys);
b) The approximate cost of the retrofit upgrades;
c) Basic income and expense information for the building that show the retrofit costs are a hardship;
d) The specific length of the extension being requested;
e) The proposed order in which the retrofit upgrades will be performed.

¶ 140 SPG replied on July 29, 1994 and submitted "... the following information for the building ... which will show that the retrofit costs are a hardship to the Corporation." SPG requested an extension of time of two years, the maximum permitted. The total cost of the upgrades was $146,000. SPG requested an extension until October, 1995 to, inter alia:

> "restore damaged doors, frames, hardware, including door closers, garbage chute intakes, etc".

and an extension until October, 1996, inter alia, to

> "... supply and install ULC list door self closure [sic] devices for suites".

¶ 141 By letter dated September 29, 1994, Mr. Cleary granted the request by SPG to extend the deadline of compliance with the retrofit for two years to October 9, 1996. Identical extensions were granted for 4 and 6 Forest Laneway. Prior to doing so, he examined the financial and other information sent by SPG in support of the request.

¶ 142 The financial statements for the Forest Laneway Co-Tenancy for the year ending December 31, 1993, with comparative figures for 1992, which were before Mr. Cleary, are likewise in evidence. He concluded that they showed that the buildings had lost millions of dollars on their operations and qualified for the extension on financial hardship grounds. On cross-examination, it was put to him that the total cost of the retrofit was $146,000 and the Co-Tenancy had some $487,000 in the Bank at year-end 1993, up almost $21,000 from 1992. In response, he observed that this was money in the bank and he would not have assumed it was available as it might have been earmarked; he had looked at the operational bottom line. In the course of this answer, he said that he did not know how the finances of apartment buildings worked. This answer was stressed by the plaintiffs in their submissions as demonstrating the unsuitability of Mr. Cleary for the job. While he may not have been the best qualified person, further consideration of the financial statements shows that he was not far off the mark. They do show serious losses on operations, even after excluding non-cash items.

¶ 143 For the year ending December 31, 1993, the three buildings showed a loss on operations of $3.73 million (1992 $3.47 million). Removing the non-cash items, there was a loss of $1.94 million (1992 $2.28 million). The members' capital dropped from $2.8 million to $.47 million despite the injection of $1.3 million by two of the partners. With expenses to meet of just under $15 million and revenues of $11.2 million, one can see that the float of some $480,000 in the bank would be required for operational purposes. I also observe that the notes to the financial statement reveal that some of the mortgage interest was being deferred under an agreement with the mortgagee and was being added to the principal. There are thus several important indicators that these buildings were not in good health financially.

¶ 144 Mr. Cleary was also cross-examined about the fact that the financial statement was for an entity identified as Forest Laneway Co-Tenancy and he did not know what a co-tenancy was, nor did he ask anyone; that he did not make any inquiry as to the capability of the members of the co-tenancy to make advances to fund the retrofit programme, indeed he did not know who the members were. As noted, the financial statement reveals that the members had already injected substantial capital into the project in 1993 to cover the losses. Mr. Cleary also testified on cross-examination that he made no attempt to evaluate the reasonableness of the costs estimated for the upgrades by SPG. He stated there were three reasons for this: he was not a contractor, conversations with contractors led him to understand that market prices were variable and that there were time limitations, although these last were not the major problem. Here again, it seems to me that the scope of inquiry being pressed for by the plaintiffs in asking these questions exceeds the scope contemplated by a legislative scheme that gives the decision maker 10 days to make the decision.

¶ 145 In my view, the evidence reveals a sufficient basis for Mr. Cleary's decision that there were financial reasons supporting the granting of the extension.

¶ 146 Mr. Cleary was closely cross-examined on the dangers of leaving these buildings without SCDs for up to another two years. He acknowledged that he knew that heat and smoke are two products of combustion; that in high-rise fires, smoke is the primary cause of injuries and death; that he was aware that a feature of fires in high-rise buildings is the stack effect, and the consequent migration of smoke; that in 1994 he knew what a self closing device was, that its purpose was to return the door to the closed position and that keeping a door to a suite in the closed position was "an important part of fire safety." Mr. Cleary also testified that he knew that the information from SPG that many doors that had self closing devices did not close properly was an important matter of fire safety. This was not a matter of retrofit but of building maintenance, and on its face a breach of the Fire Code. Mr. Cleary said he did not refer these Fire Code breaches to the Fire Prevention Division of the Fire Department, the branch responsible for the enforcement of the Fire Code, because he assumed the owners would already have addressed them. No evidence was brought as to what would have happened if he had done so, such as the practices of the branch, the likely time lapse before they took action, etc. There is no basis in the evidence for a finding that this omission contributed to the tragedy that occurred some three months later.

¶ 147 Mr. Cleary granted Axes an extension until October, 1996 to complete the retrofit. The extension letter did not in any way authorize a continuation of the maintenance deficiencies identified by SPG. They were not part of the retrofit. The failure of the owners to take action on these deficiencies speaks to their negligence, not to any on the part of Mr. Cleary.

¶ 148 The plaintiffs submitted that the City was required by the Fire Code to appoint an individual to make statutorily mandated discretionary decisions regarding fire and life safety affecting the occupants of high-rise buildings. That individual made those decisions based on an assessment of a claim of financial hardship. The City had a duty to the occupants of high-rise buildings to be satisfied that the decision-maker knew and understood how the finances of apartment buildings worked sufficiently to make a reasonable decision or reasonable exercise of the discretion considering all the relevant factors, including safety. Notwithstanding that his job was to assess claims by owners of apartments, of financial hardship (he never saw an application for extension based on logistical reasons), Cleary's evidence on cross-examination was astonishing: that he himself did not know "... how the finances of apartment buildings work".

¶ 149 Certainly Mr. Cleary's evidence was surprising, but the issue is whether the negligence, if it was negligence, of the City in appointing him, or any careless conduct by him relating to 2 Forest Laneway, caused or contributed to the damages of the plaintiffs. In my opinion they did not. Despite his frailties, Mr. Cleary reached a decision which is supportable upon the financial criteria recommended by the Fire Marshall's October, 1992, circular. It was entirely reasonable for Mr. Cleary to have relied upon the criteria recommended by the OFM in that circular. The amended circular dated September 1, 1994, did not reach him until after the decision in question had been made. The decision reached was not unreasonable and could have been reached by a person familiar with financial statements. The plaintiffs' case against North York on this point fails.

Liability of North York, Part 3: Fighting the Fire:

¶ 150 The heart of the plaintiffs' case as to negligence in the manner in which the fire was fought is set out in their written submissions beginning with paragraph 50 c)(i) as follows:

> Inexplicably, on the morning of the fire, the Incident Commander Chief Hudson failed to take any steps whatsoever to alert or warn the occupants of 2 Forest Laneway to stay in their apartments or exit the stairwells from the time of his arrival at 5:14:44 a.m. By the time Deputy Chief Stewart made that attempt at approximately 5:50 a.m. to 6:00 a.m., after the plaintiff victims were located by firefighters in the stairwells, it was too late. From 5:14:25 a.m. on, those occupants who telephoned the Fire Department Communications Centre, or 911, were being told to "just stay in your apartment". Between 5:14:25 a.m. and 5:30 a.m. there were approximately 29 callers to the Fire Department Communications Centre from 2 Forest Laneway. All were told to stay in their apartments and all survived the fire without injury.

c)(ii) The Fire Department Communications Centre received a call at 5:11:30 a.m. from apartment 514 that they had just woken up to their fire alarm, "... and there is smoke, lots

of smoke in our hallway", which was "... coming from next door", namely apartment 509. This information was apparently communicated over track 18 (one on which Chief Hudson was communicating) at 5:12:41 a.m., that there was "... smoke on the 5th floor, believed to be coming from apartment 509". Inexplicably, Chief Hudson failed to attempt to communicate this information to the tenants and provide them with advice to stay in their apartments;

c)(iii) Commencing at 5:19:12 a.m. the Fire Department Communications Centre received a significant number of calls from occupants regarding smoke conditions in the halls and stairways. For example, at 5:19:12 a.m. occupants called to say they were "trapped on the 10th floor" and reported that "the stairwell is full of smoke". Inexplicably, it appears the Communications Centre did not provide this information to Chief Hudson or if they did, he failed to attempt to communicate this information to the tenants and to provide them with advice to stay in their apartments.
The defendant City did not lead any evidence from anyone in the Fire Department Communications Centre at the time of the fire. Most significantly, the defendant City did not call Chief Hudson to explain his apparent failure to take into account what he knew to be the existence of "lots of smoke" in the 5th floor hallway or to even attempt to communicate with the building occupants until after Deputy Chief Stewart's arrival at 5:45 a.m. and after the discovery of the bodies of the victims.

¶ 151 In summary, this aspect of the plaintiffs' case is that if Chief Hudson had used the building's Emergency Voice Communication System (EVAC) upon arrival or shortly thereafter, to notify the tenants to remain in their apartments, the plaintiffs would have done so and their injuries would have been avoided.

¶ 152 North York had a protocol which called for the use of such a system by emergency crews, recognizing that various circumstances would dictate when the system would be activated. One circumstance was, upon arrival, to notify the occupants that the crew was on the site and investigating the situation. Thereafter, the system could be used to keep occupants informed, to instruct occupants on evacuation procedures and for communication between fire fighters. Chief Hudson did not use the system on arrival and later it was found to have become inoperative due to fire damage.

¶ 153 Earlier in these reasons, I noted that the Webber Report (Report of the Public Inquiry into Fire Safety in High-rise Buildings, December, 1983) accurately reported the dilemma faced by occupants of high-rise buildings during a fire: stay or leave? On balance, Judge Webber thought that evacuation was a preferred option. In hindsight we know that in the 2 Forest Laneway fire, those who stayed in their apartments did not suffer injury; only those seeking to escape via the stairwells did. Nevertheless, the dilemma was real at the time. Uniformly, those who phoned 911 were advised to remain in their apartments. Others, including the plaintiffs, chose to evacuate. Significantly, the protocol did not call for the chief, upon arrival, to advise the occupants to remain in their apartments; it was left to his judgement after evaluating the situation to give whatever instructions were appropriate.

¶ 154 The plaintiffs submitted that Chief Hudson had enough information on arrival to advise the occupants to remain in their apartments. He had heard (there is no evidence he had not) the call on track 18 at 5:12:41 that there was smoke on the fire floor. It was inexplicable that he did not at once pass this information to the occupants. He did not give evidence and the Court should infer that he has no reasonable explanation for this conduct.

¶ 155 It is true that the Chief did not give evidence and that this casts a shadow over his conduct and means that some matters, such as whether he heard the transmission at 5:12:41, may properly be assumed against him. However, despite his failure to testify, the Chief deserves the benefit of an analysis of the evidence we do have from the perspective of the lobby of 2 Forest Laneway and not from the quiet of our offices years later.

¶ 156 On arrival, at 5:14:44, the fire fighters knew that there was a working fire in progress, probably on the 5th floor, venting to some extent out onto the balcony; that there was smoke on the fire floor; and very little else. The Chief put in a second alarm and despatched his available forces to the fire floor; forces arriving in the next wave were sent to perform search and rescue.

¶ 157 While the Chief might have speculated, because of the smoke on the fire floor, that the fire suite door was open, he had no way of knowing that the fire suite balcony door was also open; that the 5th floor fire door to the S1 stair was open; that the fire had gone to flash-over even as he was arriving; and that as a result, the scope of the fire had enlarged into the hall and heavy smoke was pouring into the stairwell. In short, he did not know the facts that made evacuation an impossibility. The first information that there was smoke above the fire floor began to come in from tenants' calls to 911 at 5:19:12 when 10th floor occupants reported the stairwell was full of smoke. Several other calls followed indicating that the entire building was full of smoke. There is no record of this information being passed to the Chief until 5:24:08 when North York Fire reported to Chief Hudson that there was a person on the 17th floor in front of the elevator who could not find her way back to her apartment. While nothing is said about smoke, the inference is clear and Chief Stewart testified that this was the first information to Chief Hudson about the reports of smoke on the upper floors.

¶ 158 The intensity of the fire and smoke at the fire floor became apparent when fire fighters James and Dosant, commanded by Captain Struthers, left the 4th floor staging area at 5:20 to enter the 5th floor. The colour and density of the smoke was severe and most unusual for an apartment fire. Visibility on the 5th floor was zero; they had to feel their way along the wall. Mr. Dosant suffered an injury and he and Mr. James returned to the staging area, which was now on the third floor due to heavy smoke on the 4th. There they met Captain Struthers who recorded them as leaving the floor at 5:35 en route to get treatment for the injury. He said he assumed that Mr. James would inform Chief Hudson of the situation, but Mr. James did not mention doing so in his evidence.

¶ 159 In my view, Chief Hudson was required to size up the situation before taking a step such as instructing the occupants to evacuate or to remain in their apartments. It must be said that the Chief had no reason to suspect that the stairwell was open to the smoke. Chief Stewart testified that in 23 years he had never seen a stair well door compromised. Evacuation was a live option on the facts known to the fire fighters on arrival. Only when it became apparent that there was heavy smoke on the upper floors and in the stairwells would it have been reasonable to conclude that remaining in the apartment was the only option available. That did not become apparent at the fire scene until 5:24 at the earliest and perhaps not until the first wave of fire fighters returned from the fire floor.

¶ 160 It is true, however, that at no time did Chief Hudson attempt to use the EVAC to warn the occupants to remain in their apartments. As he gave no evidence, it is fair to assume that he became aware that evacuation was not possible when he heard the transmission at 5:24. Once the facts became known to him, failure to communicate to the occupants was a breach of proper procedures. No doubt the Chief was very busy indeed at this time with other necessary duties. Perhaps he weighed the various demands on his time and concluded that communication was lower in priority than other duties. Had he so testified, much might have been forgiven him. In the absence of his evidence, I accept the plaintiffs' submission that breach of the requirement to communicate the information as to smoke in the upper floors and to instruct the occupants to remain in their apartments amounted to negligence. I do not accept that this duty arose upon arrival, but only after the transmission of 5:24. The question then remains: did this failure cause or contribute to the injuries of the plaintiffs?

¶ 161 Before addressing that question, it is convenient to consider the further submission by the plaintiffs that North York is responsible for the failure of North York Fire operators who received the calls at and after 5:19:12 to pass on the information that there was smoke in the upper floors and stairways to Chief Hudson in a more timely and direct fashion. The 5:24 call was confined to the person on the 17th floor and did not mention that several other calls had been received indicating that there was smoke throughout the building. No doubt the operators were flooded with incoming calls, but the information was of great importance and ought to have been communicated to Chief Hudson clearly and rapidly. In the absence of evidence from the persons involved, there is no explanation for this failure. It is possible that the Chief would have taken action to advise the occupants had these calls been drawn to his attention, although the call he did receive should have, but did not, lead to any attempt to communicate to the occupants.

¶ 162 Did these failures cause or contribute to the injuries of the plaintiffs? The answer to this question depends upon two factors: whether the EVAC system, which we know had failed by about 5:45 when Chief Stewart tried to use it, was still functioning at the critical time; and whether such an announcement would have come in time to deter the plaintiffs from leaving their apartment, or to cause them to return before getting into trouble in the stairwell.

¶ 163 Sharon Moynes, a 29th floor tenant, testified that she was awakened by the sound of the fire alarms. She recalled that her clock, which read 5:10, ran a bit fast and she thought that the time was actually 5:08 or 5:09. She went to the intercom near the door to listen for announcements. This system was shared by the EVAC system and the intercom for visitors. Hearing no announcements, she pushed the "Listen" button which she knew enabled her to hear any sounds from the lobby, and heard voices and other sounds. She went to get dressed and after a couple of minutes returned to the intercom. There were no announcements, so she again pressed the "Listen" and heard no sound at all, the intercom was dead.

¶ 164 The statement of David Harris, a 16th floor tenant, was put in on consent. He was awakened at 5:10 by the fire alarm which, however, ceased to ring in less than 10 minutes. He attempted to flee, encountered smoke at the 12th and heavy smoke at the 8th floor and returned to his apartment. The heavy smoke was rising up the stairwell as fast as he could walk. He took time to wet a towel and place it at his door and then called 911. His call was recorded at 5:20:55. Likewise, Susan Edwards (suite 2309) and the Hachmers (1807) were driven back to their respective suites by heavy smoke and made 911 calls. The Hachmer call was at 5:17 per Exhibit 72.

¶ 165 Earlier in these reasons, I reviewed the evidence of Mr. Harpur of the OFM as to the speed with which the smoke spread throughout the building. For convenience, I note here that Mr. Harpur concluded that both stairs were sufficiently contaminated with smoke as to be unusable from the 4th floor to the 30th floor as were most of the corridors above the 4th floor. The speed with which this happened was of significance. The 5th floor hall was smoke-filled within one-half to 2 minutes after the first alarm sounded at 5:09 am. (Exhibit 66). The lower levels of the stairs were probably contaminated within 4 or 5 minutes of the alarm sounding and the upper levels to the 30th within 15 and possibly within 10 minutes after the alarm. That would place the smoke at the 30th floor between 5:19 and 5:24. Smoke was thick in the 28th floor hallway between 5:15 and 5:20 a.m.

¶ 166 This smoke and the smoke encountered by Mr. Harris, Ms. Edwards and the Hachmers was the same heavy black smoke described by the plaintiff as overtaking them in the stairwell. He and his mother awoke shortly after 5 am and dressed and fled into the stairwell. Their travels have been described earlier. Pedrum testified that the fire alarm awoke him and was still sounding when he passed out. The evidence of Mr. Harris was that the alarm ceased after less than 10 minutes and the fire fighters said it was not sounding in the lobby when they arrived at 5:14. The heavy black smoke was rising rapidly in the stairwells between 5:10 and 5:20. This evidence is not all totally consistent, but it is probable that the smoke overcame the plaintiffs at the 30th floor between 5:20 and 5:25. At that time, they had already been in the stairwell for many minutes in order to have time to take the route that Pedrum described. Beginning at the 17th they descended several floors and then climbed to the 30th, a total of perhaps 20 floors all together, 4 or 5 down and the rest climbing in a smoky atmosphere. It seems very probable that they had left their apartment before the fire department arrived at 5:14. No conceivable announcement by Chief Hudson could have prevented their leaving the apartment. By the time that he could have grasped the scale of the smoke problem, even with perfect communication of the calls from tenants to 911 which began to mention smoke away from the fire floor at 5:19, it is most improbable that an announcement would have assisted them. They were trapped on the 30th floor, 13 smoke-filled floors away from their apartment.

¶ 167 David Goodyear of the OFM testified as to the fire alarm and EVAC systems. He had been a Fire protection Technologist with the OFM since 1983 with a particular specialty in electrical systems and alarms. He has a background in the design of alarm circuits for safety systems and has been active on ULC committees establishing standards for such systems. He was assigned to investigate the electrical and alarm systems at the fire site and arrived about 9:30 am on January 6, 1995.

¶ 168 He found the fire alarm system in the 'alarm state.' Fire alarm bells were ringing below ground but not in the lobby or in the tower. He investigated why the tower bells were silent. The fire alarm manual pull station at the 5th floor east stair exit had been destroyed in the fire. Three cables for the alarm circuits for the upper floors passed through the junction box at this pull station and two were visibly fire damaged. When these cables were replaced, the circuits from the ground floor to the top of the tower became operational. There were also certain incorrect bells installed in three of the circuits. Tests showed that these bells would fail within 7 to 14 minutes of activation of the alarm. He testified that the silence of the bells noted by the firemen on arrival at 5:14 indicated that the fire damage had been done by that time.

¶ 169 The 5th floor east side EVAC speaker was located high on the west wall of the corridor some 10' south of the fire stair door. There were three multi-conductor cables passing through the speaker box carrying the circuits that provided the signal to all speakers in the building. These cables were separated from the fire by a perforated metal grill and the paper cone of the speaker. This did not provide much protection and the cables were badly damaged in the fire, short-circuiting the system and rendering the EVAC unusable. Testing showed that announcements from the lobby microphone produced virtually no sound on any of the floor loudspeakers. Replacement of the damaged cables restored the functionality of the EVAC.

¶ 170 Mr. Goodyear was asked to consider how long it would have taken for the fire to destroy the EVAC circuits and short out the system. He pointed out that flashover is a change of state in a fire and there would have been a tremendous amount of heat generated and at those temperatures electrical wiring would not last more than five minutes. In cross-examination, it was put to him that he had not given such an estimate during his evidence at the Inquest. There he had noted that it was difficult to estimate when the EVAC would have ceased to work; the best indication would be looking at the alarm bells which were closer to the fire but were better protected, so the time frame for failure would probably be "not too far different". It was possible that the EVAC, like the fire alarm, was out when the fire fighters arrived. Before me, he explained that he had been asked about the time for the first time at the Inquest. Since then he had given further thought to it and reached his conclusion. Since the conclusion is not very different from his Inquest evidence and is in accord with the evidence of Ms. Moynes, I think it reasonable to conclude that the EVAC was, in all probability, not available to Chief Hudson after 5:20 am.

¶ 171 It follows from these findings that the failures of the North York Communications Centre and of the Chief did not cause or contribute to the injuries of the plaintiffs.

Summary as to Liability:

¶ 172 The defendant Merv Doctorow negligently allowed the fire to start. The Axes/Tandem defendants were the occupiers and failed in their duty in the manner described above. The City failed to properly interpret and enforce its own by-law. Each of these acts or omissions contributed to the plaintiffs' injuries. In considering the issue of the comparative negligence of each, I am struck by the central role played by the absence of SCDs on the suite doors, and the failure of the 5th floor fire stair door closer, aspects in which Mr. Doctorow played no part; and by the open fire stair door in which neither Doctorow nor North York played a role. The City's operative negligence occurred once, in the process of approval of the plans over 20 years before the fire. The negligence of Axes/Tandem went on for years as they failed to remove the risk which they knew or ought to have known was created by the absence of these essential safety devices, and failed to maintain the fire stair doors. They must bear the greater part of the loss. I assess the respective degrees of fault as follows:

Doctorow: 10%
North York: 20%
Axes/Tandem:70%

The Injuries I: Zari:

¶ 173 Prior to January 6, 1995, Zari Bakhtiari, age 41, was employed as a Customer Service Representative by the CIBC. She lived independently at 2 Forest Laneway with her dependent son Pedrum. She had been educated in Iran where she obtained a degree from the University of Tehran. She had come to Canada from Iran by way of Turkey with her husband and two small sons in 1986. The parents separated and were divorced in 1991 and she became self-supporting. She was respected by her sons who looked to her for guidance and in Pedrum's case care. She was respected by her employer and was doing well in her job. Her income was modest but sufficient. She had opportunities for advancement with the Bank. She had friends, took a course to improve her education and lived a quiet but pleasant life.

¶ 174 Six years after the fire she is unemployable and isolated due to severe cognitive deficits from hypoxia, CO poisoning and smoke inhalation. She still has upper back and neck pain, is prone to headaches when she pushes herself, or gets cramps in her hand from writing.

¶ 175 The plaintiffs submit that Zari's injuries are permanent and that she will require extensive future care to provide her any sort of quality of life. She has not been able to work since the fire and the evidence supports that she is permanently unemployable. Her attempt to return to work was a dismal failure. Zari suffers from and will continue to suffer from post-traumatic stress disorder that will affect and impair the quality of her life for

the foreseeable future. No improvement in this condition is reasonably foreseeable.

¶ 176 The defendants' position through most of the trial was that Zari would be able to return to work, but ultimately this was abandoned and it was conceded that she would never work again. As a result, much of the evidence as to her condition need not be reviewed in detail. However, some of the evidence also throws light on her quality of life issues.

¶ 177 The plaintiffs say that the real issues remaining in dispute regarding the assessment of Zari's damages are:

(1) Zari should be entitled to an amount equivalent to the value or the benefit of some or all of the future care items identified by Ruth Whitham, the future care consultant, as being those required to restore to her a reasonable quality of life, including transitional and assisted housing.
(2) There is a risk that Zari will suffer from early onset dementia and that this risk should be reflected in her award of general damages.

¶ 178 These two points are inter-related since the prospect of a premature onset of dementia would greatly influence the future care plan and so the costs predicted by Ms. Whitham in her evidence. The first point largely depends on the reliability of the evidence of Ms. Whitham, as the defendants did not call a future care consultant. The second point involves my assessment of the conflicting evidence of Dr. Upton for the plaintiffs and Dr. Stewart for the defendants as to whether the hypoxic insult to her brain introduces a probability that Zari will suffer an earlier than normal onset of dementia.

¶ 179 One of the issues relevant to that medical controversy is whether Zari suffered a physical trauma to the head as well as the hypoxic trauma. This requires a review of the evidence of her son Pedrum. Zari has no memory of the incident. Zari and Pedrum attempted to escape first through the stairwell at 2 Forest Laneway and then attempted to go to the roof but the exit door was locked and the roof hatch would not open. They then went down a floor and just above the landing the heavy black smoke reached them and it was impossible to see or breathe. They were holding hands on the stairs when this happened and when the smoke came, Pedrum tried to pull his Mother down low to the floor and himself knelt down and passed out. Pedrum was found on the stairway to the mechanical room floor, just above the landing at the 30th floor. Zari was found by the fire fighters on the 29th floor. Since they were together when the smoke came, and the effects were very swift, she would have had no chance to walk down that flight of stairs. The inference is that she fell down one flight of stairs.

¶ 180 It was submitted, correctly, that the hospital records did not refer to cuts, scrapes or bruises such as might accompany such a fall. Dr. Upton reviewed the Toronto Hospital records and testified that he did not find any bruises or injuries recorded in the early days, and that subsequent recorded complaints about neck and hand and arm pain may have been related to other factors. On the other hand, the medical attendants could get no complaints from her in the early days as she was unconscious and they had much more serious issues to contend with. The records show that a CT Brain Scan performed on January 9th revealed a normal brain with no infarcts or haemorrhages. When she regained consciousness Zari felt pain "everywhere"; her right hand could not be moved and she had severe right shoulder and upper back pain. This upper back and neck pain continues to the present.

¶ 181 In August 1995, Dr. Skaredoff saw Zari for assessment of her pain. He observed pain ranging from tenderness to 'exquisite' in her shoulders and neck. He wrote that her possible fall down the stairs might account for some of her neurologic deficit along with the CO 'but also the stretching and possible tearing of the various ligamentous attachments of the neck muscles resulting in microscopic hemorrhaging and fibrosis with resultant low grade inflammation of the tendinous structures of the neck musculature.' Dr. Skaredoff concluded that an absolute diagnosis of head injury had not been confirmed, but it could 'be well inferred'.

¶ 182 Zari was free of such pain before the fire and there does not seem to be anything in the evidence to account for it unless she did fall down the stairs. As Pedrum was trying to pull her down to the floor, there is a very good chance that Zari was off balance already when she passed out. I think it very probable that she had that fall and got banged around a bit in the process. There was a reference to smoke smudges on her face. The results of the scan seem to be evidence against any serious physical blow to the head. I am satisfied that the pain she experienced in her neck and shoulders was a direct result of a fall down those stairs. A blow to the head cannot be

ruled out on the basis of the available evidence as to the events in the stairwell and on admission to the Emergency.

¶ 183 The admission note on Zari's arrival at the Toronto Hospital, as Jane Doe, indicates that she had a Glasgow Coma Scale of 3 at the fire site and was intubated by the paramedics. Three is the lowest scale on the GCS and is essentially 'vital signs absent'. Notations were made as to carbon monoxide poisoning, respiratory and cardiac arrest, second degree hypoxia and brain ischemia, and a carboxyhaemoglobin level of 10%. As a result of the clinical findings she was taken to the hyperbaric chamber. She was unconscious for 9 days in the ICU, breathing at first with the aid of a ventilator. She was weaned off the ventilator on January 13, 1995. She was able to whisper on the 14th. Her total stay at the Toronto Hospital was 48 days. Zari had extensive post traumatic amnesia time indicating a severe brain injury. A diagnosis of hypoxic encephalopathy and respiratory failure was made. This diagnosis is not disputed by the defendants.

¶ 184 As early as the 10th a consultation note observed that Zari was "... at risk for some cognitive impairment". Prior to leaving the Toronto Hospital she showed signs of posterior left cerebral dysfunction, right hand impairment/weakness, intellectual deficits, anxiety and panic attacks, headaches, and chronic pain. Zari was discharged to St. John's Hospital on February 21, 1995 where she underwent some neurological rehabilitation. She was discharged on March 31, 1995 and was admitted to the Day Treatment Program at West Park Hospital on July 26, 1995 and discharged in December 1995 back to the community. She received psychotherapy from Dr. Tahbaz in 1995. She was treated at Columbia Health Centre for her memory problems from February 1997 to April 1998. She saw Ms. Whitham for therapy in 1995-97. Thereafter, due to lack of rehabilitational funding, only minimal cognitive/behavioural therapy and chronic pain treatment were provided despite the strong recommendations for intensive therapy from Dr. Skaredoff, Dr. Cancelliere, Dr. Tahbaz and others.

¶ 185 The most comprehensive medical evidence for the plaintiffs was given by Dr. Adrian Upton (Head, Division of Neurology, McMaster University). He was not a treating physician for either plaintiff, but is a neurologist of great learning and experience. Among other attributes, he is a reviewer for ten medical journals, has patents, including a 'pacemaker for the brain', lectures regularly to students, sees 65 patients a week and has published as author or co-author over 300 publications. Zari's condition and prognosis were summarized in his report dated April 25, 1997. In his report and in his extensive oral evidence, Dr. Upton reviewed the numerous medical and psychological reports relating to Zari's condition and drew the following conclusions:

(1) As a result of the fire Ms. Bakhtiari suffered hypoxia, acidosis, and a general reduction of availability of oxygen to the tissues, particularly the brain.
(2) Correction of the hypoxia was attempted using intubation and oxygen. However, it is probable that reduced breathing, swelling of the throat and smoke inhalation produced reduced absorption of oxygen. Pre-accident anemia and 10% carboxyhaemoglobin (carbon monoxide inhalation) were additional adverse factors.
(3) The hospital record and history are consistent with the effects of a hypoxic brain injury.
(4) The plaintiff had some spasticity (increased reflexes, reduction in motor control) and tremulousness (shaking - a common hypoxic symptom) in the upper limbs.
(5) The effects of such hypoxic brain injuries overlap with the effects of closed head injuries, including:

* headache
* memory loss
* reduced concentration
* altered mood with irritability, easy frustration depression and anger
* fatigue
* sleep disturbance
* dizziness

(6) Ms. Bakhtiari has had extensive neuropsychological testing showing a broad impairment of function in comparison with her pre-accident levels of function, gauged by her academic and life performance. After the fire she functioned at the impaired to the lower levels of the normal range, for example, 16th to 25th percentile:

* full scale IQ - 16th percentile
* verbal IQ - 25th percentile
* performance IQ - 9th - 16th percentile

A performance at the 16th percentile indicates that about 84% of the population will do better than she does. There was little improvement over time from the tests of Dr. A. Cancelliere (July 1995) to March 1997 (Neurovocational Assessment, Sharyn Butt, Allison Roberts and Dr. Robert Gates).

(7) She suffered some general muscle aches and pains. These were probably due to:

* her probable* fall down the stairs on January 6, 1995
* multiple myofascial injuries
* inability to cope with the symptoms due to the hypoxic brain damage, mood change, depression and irritability. (*corrected to 'possible' during oral testimony).

(8) Zari did not receive intensive cognitive, behavioural and physical rehabilitation after the events of January 6, 1995. This reduced her opportunity to reach her maximal potential level of recovery.

¶ 186 Although Dr. Upton referred to Zari as having probably/possibly had a fall down the stairs, he made it clear in cross-examination that his opinion did not depend on her having had an external head injury.

¶ 187 Dr. Upton concluded that Zari's symptoms were organic and related to the events of January 6, 1995. The apparent psychological and psychiatric problems were a consequence of the brain damage and hypoxia of January 6, 1995. Most recovery from brain injury occurs in the first six months to two years after injury. Recovery is slow and limited after this time. It is probable that the combination of physical, emotional, cognitive and behavioural problems will render Zari unemployable in any competitive work area. The potential for retraining is severely limited and the main window of opportunity for recovery has been lost. She will probably suffer from an early onset of dementia.

¶ 188 Importantly for our purposes, given the concession that Zari will not work again, Dr. Upton stated that she will need supportive care, counselling and measures to improve her quality of life in the absence of a return to work.

¶ 189 There is no real disagreement from the defence psychologist, Dr. Travis and neurologist Dr. Stewart as to Zari's diagnosis and ongoing symptoms as described by Dr. Upton and the physicians upon whose reports he relies. There is, however, a disagreement with respect to prognosis. That disagreement centres around the last paragraph of Dr. Upton's report of April 25, 1997 in which he opines that the severity of the brain injury to Zari will lead to an early onset of dementia and inability to function, probably manifesting itself around age 55 and leading to an ongoing requirement for supportive or custodial care for her life expectancy. This disagreement will be dealt with later.

¶ 190 Dr. A. Cancelliere did a neuropsychological assessment of Zari on two days in July 1995, some 6 months post-fire. Dr. Cancelliere is an eminently qualified psychologist accepted by the Court as an expert in the areas of psychology, neuropsychology (the study of the brain with respect to behavioural relationships) and clinical psychology. He has in his resume considerable experience in dealing with the head-injured patient including responsibility at Toronto Western Hospital for, inter alia, developing a head injury rehabilitation program. His practice involves working with brain injured patients, doing neuro-psychological assessments (60-70%) and working with such patients to rehabilitate them (30%). He also does work assessing the competence of persons to manage their affairs or their personal care. That work would bring him into contact with persons at or about the early manifestations of dementia. Two of his reports were filed and he gave evidence.

¶ 191 He found low average verbal and non-verbal intellectual abilities with impairments in many areas. Some important impairments for our purpose in assessing Zari's life skills outside of the work environment included vocabulary, attention, immediate memory, social judgment, abstract concept formation and mental flexibility, all of which may impact upon her life quite apart from work. There was evidence of frontal lobe dysfunction which would impair her executive functions. Dr. Cancelliere concluded that Zari's condition likely represented acquired declines from her premorbid status and was compatible with brain damage sustained on January 6, 1995. Further, she fulfilled the DSM-4 criteria for Post-Traumatic Stress Disorder (PTSD) which was directly related to the fire. Objective psychometric assessment was compatible with PTSD. Her depression was rooted in her physical and cognitive limitations; she was anxious, fearful and possibly tending towards withdrawal and isolation. These results suggested a serious disability. Further limited

spontaneous recovery was likely; with active rehabilitation and treatment meaningful but limited gains were likely.

¶ 192 In March, 1997, Zari was seen by Dr. Robert Gates and his associates at Columbia Neuro-Rehabilitation Services for a neuro-vocational assessment. Dr. Gates had the report of Dr. Cancelliere and reported that Zari's: "... performances have not changed in a substantive way. She appears to exhibit the same degree and pattern of intellectual impairment ... ". His estimate of her premorbid intellectual ability, based on her educational and employment history was that she functioned at the average or 50th percentile range. Her performance suggested that she had suffered a loss of general intellectual function. He thought that she did not have the impairments in social judgment that often accompany brain damage and so should be able to maintain pleasant and socially appropriate interpersonal relationships. I have difficulty with this last opinion given the evidence of Zari's tendency to withdrawal and isolation reported on by Dr. Cancelliere.

¶ 193 Defence psychologist Dr. Keith Travis saw Zari in March, 1998. His behavioural observations during testing were largely consistent with the plaintiffs' expert reports. His conclusions were marginally more optimistic than Dr. Cancelliere's and he felt that she had not done as well as she might have on the tests. Although she had been co-operative and not malingering, there was a slowness and lack of drive apparent. He accepted that this was the result of depression. He thought that the changes in her personality were not all organic; that some were a result of psychological trauma and could be improved by treatment. Nevertheless, he wrote:

> "Without question, Ms. Bakhtiari is clinically depressed and shows features of subjective depression, psychomotor retardation, extremely low energy and activity levels, as well as general malaise. Ms. Bakhtiari's levels of self-esteem and confidence are low and diminished from pre-morbid levels. She has lost much of her former sense of self-efficacy. There was evidence of anxiety-related components to her continuing psychophysiological and cognitive complaints. There was evidence of discomfort in social situations, as well as social alienation/avoidance."

¶ 194 Dr. Travis concluded that: "The circumstances of the fire, including the failed attempts to escape, and other psychologically problematic events taking place in the aftermath would ordinarily be expected to generate intense emotional reactions, if not the symptoms of psychological trauma." He also wrote: "... there is copious documentation of psychophysiological, cognitive and emotional/affective symptoms, including significant disturbances of sleep, anxiety, and depression. The onset of such symptoms was relatively immediate and dates back to shortly after she regained consciousness and an initial appreciation of the consequences of her injuries and functional limitations." He thought it unlikely that Zari would ever be capable of returning to her pre-accident employment as a customer service representative. Nor was there much to be gained by urging her to return to school for further academic or technical skills training.

¶ 195 Dr. Travis conceded in cross-examination that there was a medical consensus that Zari's complaints were consistent with organic brain injury. Organic brain damage can result in complaints of depression and anxiety. There can be secondary factors involved. He agreed that it is difficult to separate organic symptoms from psychological symptoms. Clearly one cannot restore damaged brain cells and in treating organic brain damage one must try to optimise what capacity the patient has left. With non-organic depression and anxiety, one may also not be able to restore a patient to the pre-morbid state, so rehabilitation may be more a question of maximising the patient's quality of life.

¶ 196 Prior to Dr. Travis testifying, Ruth Whitham had given evidence about Zari's future care needs and a number of issues had arisen during her cross-examination as to her views of Zari's condition. Dr. Travis was cross-examined on a number of these issues and some of his answers supported the evidence of Ms. Whitham. He said that organic brain injury can increase the patient's anxiety, cause sleep difficulties and depression, and affect the patient's quality of life in general. It can cause fatigue and it is not unusual for brain injured persons to be reporting fatigue five or six years after the injury. Fatigue in turn can exacerbate cognitive deficits, fuel anxiety, provoke erratic sleep patterns, deepen depression, decrease pain tolerance, reduce the ability to control anger and decrease the patient's coping abilities. Zari suffers from fatigue which could be seen during the taking of the tests he had administered.

¶ 197 Ms. Whitham had spoken in her evidence of a "downward spiral" experienced by some brain injured patients. Dr. Travis was asked if it was fair to say that brain injured persons' complaints can interact so as to

produce a downward spiral in their condition. He agreed that the interaction of problems caused by the injury can result in such an effect: social isolation, helplessness, hopelessness, high tuned anxiety, suicidal ideation, depression, all can be caused by organic brain injury. He diagnosed Zari as being clinically depressed.

¶ 198 Defence neurosurgeon, Dr. Horsey, saw Zari on March 10, 1998. He was not available to testify at trial due to illness. In his March 17, 1998 report which was filed, he accepts the diagnosis of hypoxic encepalopothy. Over the objections of Mr. Outerbridge, I allowed Dr. Bruce Stewart to testify in his place and no reference was made to Dr. Horsey's report in the submissions of the defence.

¶ 199 Dr. Cancelliere re-examined Zari in December 2000. She came from British Columbia by overnight plane which could have affected her performance. His assessments of Zari in 1995 and December 2000 were essentially consistent with that of Dr. Travis in 1998. He disagreed with Dr. Travis that there was anything unusual about Zari's low scores on some tests. Dr. Cancelliere found that Zari's overall profile across all the assessments was consistent with what one would expect given Zari's brain injury. He stated that her deficits are permanent as would be expected given the extent of her injuries. He had seen the report of Dr. Gates and had reviewed Zari's educational background to get a base of comparison in order to estimate the degree of deficit from her pre-morbid condition. It was put to him that her C- in her accounting course at Ryerson in the fall of 1994 was an indication of only average intelligence. He did not agree. Based on all the information that he had, there was a very good possibility that she had been of above average intelligence and one C- did not change that opinion.

¶ 200 In his evidence, Dr. Cancelliere said that Zari presented well 'superficially'. Expanding on the point, he said that for the first few minutes of contact she is pleasant to interact with, but spending more time with her you begin to see her significant problems. This is why she feels isolated, she cannot form social alliances of any depth. She will probably not be able to establish a social network and is likely to remain, as she has been since 1995, a relatively isolated unemployable person.

¶ 201 Her isolation has an effect on her prognosis. Dr. Cancelliere testified that it is well known that brain injured persons are more susceptible to earlier loss of cognitive functioning as they age. This may be because they have lost brain cells due to their injury which are then not available as they age to replace cells dying in the normal course. But as well, the maintenance of cognitive function as one ages is in part a function of use: 'use it or lose it', so that a person such as Zari, isolated socially and not in the work force, does not have the protective factor of use that others less isolated have which would lessen the likelihood of premature onset of dementia.

¶ 202 Dr. Cancellierre's December 14, 2000 report concludes:

> "Functionally, while Ms. Bakhtiari has some strengths, she would be unable to utilize these strengths based in her significant impairments and weaknesses as well as her executive dysfunction. My own earlier assessment found significant evidence for frontal lobe dysfunction. Damage to the frontal lobes is particularly vexing from a vocational perspective because of executive dysfunction. Executive function refers to a number of cognitive processes necessary for adaptive functioning in the real world. These include initiation, planning, hypothesis generation and evaluation, mental flexibility, self-monitoring and awareness, self-regulation, judgment and feedback utilization. An additional obstacle to functional utilization of her strengths is her lack of insight into her difficulties. She is unable to recognize her own impairments and weaknesses and would likely have great difficulties using feedback to alter her performance in any employment setting. Her manner of presentation leads others to over-estimate her abilities.
> Ms. Bakhtiari is not and will not ever be employable in her premorbid capacity. She would be unable to take on any full-time position within the CIBC or with any other organization. While it is possible that she may come to participate in some part-time employment, this is unlikely on a competitive basis. What would be required here is a position which allowed her to utilize her pleasant (but superficial) verbal manner and presentation in isolation. Her intact abilities on intelligence testing involved only basic auditory verbal echoing (e.g. digit span) and her fund of information. Any such position should not involve any responsibilities which are dependent upon her impairments or weaknesses. Thus, attention to visual detail, understanding of English (e.g. vocabulary), a regular

pace of movement, basic arithmetic capacities, and any degree of social judgment should not be necessary. She should not be required to read, remember information, or undertake fine motor tasks. No unusual circumstances should present themselves. No degree of problem solving, independent judgment or dealing with changes independently should be encountered. Finally, she would likely be unable to utilize feedback from an employer. Change in her behaviour should not be expected. These restrictions are all based upon her neurocognitive profile as documented by myself and Dr. Travis. I believe that these exclusion criteria would exclude any competitive vocational position - even on a part-time basis. In my opinion, part-time competitive employment either currently or in future is unlikely. To add to the analysis above, the likelihood that she will show accelerated neurocognitive declines as she ages will further compromise her status over time."

¶ 203 In their submissions, defence counsel pointed out that Dr. Stewart disagreed with the last sentence of the above, as in his view brain injury does not accelerate the onset of dementia except in cases of dementia pugilistica. While Dr. Cancelliere is a psychologist and not a neurologist, his opinion is, in my view, entitled to weight in the light of his experience as detailed supra. As well, he was not cross-examined on this statement although counsel knew Dr. Stewart's views.

¶ 204 Dr. Pieter Butler was called by the plaintiffs and was accepted by the Court as an expert in psychiatry. He has been in practice for many years and was the only psychiatrist to testify. The defendants did not have the plaintiffs examined by a psychiatrist. Dr. Butler examined both Zari and Pedrum and wrote reports on each. He described the condition of post-traumatic stress disorder as one suffered after a serious harm, where helplessness was a primary condition. The victim experiences shock, helplessness, a sense of unavoidable serious harm, and a sense of defeat. There are a whole cluster of symptoms, which include:

* Avoidance
* Sympathetic nervous system arousal, i.e. a siren could start which would remind the victim of the sound associated with the accident, namely the fire alarm.
* A shortness of breath and sweating, tremors and

¶ 205 Dr. Butler stated that PTSD can be totally disabling and makes one feel as if one is constantly living an unsafe existence. It can also be partially disabling. Literature showed that after 2 years there was an equal chance of recovery and non-recovery, and that the longer the disorder lasts the greater the chance is that there will be no recovery. After 7 years the chance of recovery is down to 20 - 30% or less. PTSD can exist in the presence or absence of organic brain damage. The presence of organic brain damage makes the treatment of PTSD more difficult, because the patient would be unable to utilize new information received in treatment. The emotional instability associated with brain injury causes its victims to be more impatient, to act impulsively and sometimes to dismiss their caregivers.

¶ 206 Dr. Butler found signs of frontal lobe damage. He testified that damage to the frontal lobe areas can cause patients such as Zari to believe they are actually quite well and need no treatment. This injury causes an impairment of judgment and a lack of awareness which is exceedingly difficult to treat. The patient is unaware of her lack of insight and judgment. In her evidence Zari said she did not believe that she was as badly off as the doctors claimed. She just wanted to get something to do and get on with her life. The frontal lobe is where executive decisions are made, translating a concept into a series of steps. Zari cannot carry out simple executive functions such as plan the making of a chicken dish or the week's shopping, two of the problems she was asked to solve. When asked to do the latter, her reaction was: "I'll get Pedrum". This condition is not likely to improve.

¶ 207 Zari's work life would be adversely affected by her condition. Although she presents well, she would convey her uneasiness to her prospective employer. Zari has trouble with calculating which would come to the attention of any employer early on. She tires easily. She has grandiose ideas of what she can accomplish which are contrary to her performance capabilities. At work her relationships would be impaired, as she is closed off, constricted, and unreachable. Zari's personal life would also suffer in the same way. She is emotionally dependent, but is unable to give back. She is impatient, and has trouble organizing. This was supported by the evidence of her sons. Zari has done her best to maintain the impression of a dignified, immaculate person, but she has been disabled

since the fire. The prognosis for improvement is poor; she will stay as she is. Her PTSD is chronic.

¶ 208 It was put to Dr. Butler that, as Zari had no memory of the fire, she did not meet the criteria for PTSD. He disagreed, stating that as Zari had experienced the fire, she could re-experience the fear without recalling the event. He thought that she did have some recall of grey spaces. Literature showed that PTSD could occur in the absence of memory of the event. It was also put to him that some literature showed that loss of consciousness during the event may protect patients from PTSD. Exhibit 28 is an article from the British Journal of Psychology by two psychiatrists at the University of Bristol suggesting that loss of consciousness may protect patients from developing PTSD by preventing the activation of further brain circuits. The same Exhibit contains a letter from a psychologist at the University of Surrey and a psychiatrist at St. George's Hospital Medical School about this article, disagreeing with it and stating that several ways in which PTSD can develop despite loss of consciousness and post-traumatic amnesia have been reported. These include distressing 'windows' in memory and isolated memories during post-traumatic amnesia. The correspondents conclude that available studies show that unconsciousness may not protect an individual from [PTSD] but not that this never occurs. One of the authors replied to the correspondents thanking them for drawing attention to articles of which the authors had been unaware, and raising questions as to why intrusive traumatic images could occur despite unconsciousness. On re-examination further instances of the development of psychogenic symptoms despite loss of consciousness were discussed, including data from Exhibit 28 itself. Dr. Butler stated at the end of his testimony that his opinion remained that Zari suffered from PTSD. I accept Dr. Butler's evidence.

¶ 209 Dr. Marvin Weber gave evidence for the plaintiffs. He is a qualified neurologist whose expertise was conceded by the defence. He has a special interest in migraine headaches. He examined Zari on November 24, 1995 with respect to her headaches. In his report he explained that there were some similarities between migraine and brain injury sequelae; in fact, migraine was the leading symptom of post-concussion syndrome. He concluded that Dr. Cancelliere's testing was the most sensitive objective measure of Zari's neurologic deficit and that the greater part of her deficit was due to the hypoxic damage done to the brain. He postulated a fall down the stairs as the way to account for her complaints of neck, shoulder, thoracic and scapular pain, dizziness, headaches with associated paresthesia and weakness and attention deficits, all of which are symptoms of post-traumatic or post-concussion syndrome. In 1996 he saw an improvement in her condition which made him optimistic that she could return to work, but at a lesser level than before. In November 2000 he saw the report of Dr. Butler and its contents persuaded him that his 1996 optimism was not well founded and that Zari was permanently unemployable. He wrote in his November 29, 2000, report: "The patient's current disability will be her lifelong disability and I would agree with Dr. Upton when he suggests that this patient is prone to the development of early dementia (Alzheimer's Disease).

¶ 210 In his evidence he noted that Zari had some risk of developing epilepsy, although 80% of patients who develop epilepsy after brain trauma do so within two years. As she was not yet 10 years after the injury, she must still be regarded as at risk. Her December, 1995 EEG showed mild diffuse slow features and not the waves and spikes characteristic of a propensity to epilepsy. He thought it much more probable that she would not develop epilepsy, than that she would. He was cross-examined on the difference between himself and Dr. Upton on the possibility of epilepsy, which Dr. Upton had discounted. He stuck to his opinion, noting literature references to support his view. He also noted that where there were several disciplines reviewing one case, it was common for them to see things differently. The bottom line was that the patient suffered hypoxic encephalopathy and developed severe and frequent headaches after the event. The headaches had the features of migraine. He had thought they were post-traumatic, but if there was no fall, then the migraines were induced by something in the fire. It was asking too much of coincidence to suggest that these headaches, which came 'thick and fast' for a year after the fire had nothing to do with it Migraine was his contribution, hypoxia was the diagnosis of ten persons who have seen her and the post-traumatic stress disorder was the finding of those qualified to diagnose it. Dr. Weber was not cross-examined upon the basis for his agreement with Dr. Upton that Zari was prone to the development of early dementia.

¶ 211 Dr. Bruce Stewart testified for the defence. He is an experienced neurologist who was an Assistant Professor of Neurology at the University of Toronto for 20 years and is now in private practice. He is in the Canadian Boxing Hall of Fame for his achievements as a university boxer. He has a special interest in dementia pugilistica, the progressive end-stage of the chronic traumatic encephalopathy of boxers. He challenged the 'Upton Theory' saying that Dr. Upton's evidence had not proved it and it

was not consistent with the current opinion of neurologists. It was his view that there are but two types of progressive dementia, Alzheimer's Disease and vascular dementia which arises from events such as cerebral stroke. The only form of late appearing dementia caused by brain trauma was dementia pugilistica, a condition essentially confined to boxers and arising from repeated blows to the head. For some reason which is not understood the consequences of this particular form of trauma are often delayed for years before appearing. In his practice he had not seen a patient with hypoxic encephalopathy from smoke/CO go on to develop a progressive dementia. Dementia pugilistica was a specific and rare phenomenon and could not be used to infer that other forms of brain trauma produce a progressive dementia of the Alzheimer-like type.

¶ 212 Dr. Stewart had prepared an unpublished paper in February, 1999 reviewing the literature on the subject of a possible connection between head trauma and the later development of Alzheimer's disease. The papers reviewed were not consistent. Some found no statistical relationship; others found possible relationships; one referred to a 'putative' relationship. Dr. Stewart concluded that: "... there has not been a clear association established between Alzheimer's disease and head injury."

¶ 213 In his report of January 15, 2001, after reviewing the reports on Zari, he concluded that she did have cognitive impairment resulting, in all probability, from the hypoxia associated with her CO poisoning. It was permanent and appeared to have limited her employability. However, Zari was not at risk of a gradual deterioration in intellectual function at an earlier age than normal.

¶ 214 By way of contrast, I quote the final paragraph of Dr. Upton's report of April 25, 1997:

> There is increasing evidence that brain injury is associated with an increased probability of subsequent dementia. Recovery often involves gradual improvement for about two years, a plateau of recovery and maintained function and then gradual deterioration in intellectual function at an earlier age than normal. In my opinion the severity of the brain injury in Zari ... will lead to an early onset of dementia and inability to function. In my opinion it is probable that this deterioration will occur around the age of 55. Her life expectancy will probably be normal and therefore there is a probability that she will require supportive or custodial care for many years.

¶ 215 During cross-examination he explained this passage and summarized his view as follows:

> Your Honour, I'm dealing with an opinion based upon probabilities and you're quite correct that not every one of us is going to show significant decline with age to the point where we are unable to continue with our work but a proportion of us, a percentage of us will develop a decline which is more rapid than that. Some of those patients will have Alzheimer's disease according to the criteria for Alzheimer's.
> In my opinion, Mrs. Bakhtiari's future is that her probability of developing that decline, which we all have, is increased by the effects of the hypoxia that she suffered, so it is not inevitable that she will decline, it is an increased probability that she will decline. In other words, she has increased the probability that she will suffer an Alzheimer-like process earlier in life than would have been the case in the absence of the fire.

¶ 216 Also in cross-examination, Dr. Upton clarified the time frame for persons who have not suffered brain injury. The incidence of age-related dementia increases in our society after the age of sixty and often after the age of fifty-five. In this lady, there will be an earlier onset of what can be seen in the population and his best estimate was that it would become apparent around the age of fifty-five. The probability was of a five to ten year acceleration of the inevitable decline.

¶ 217 Early in the cross-examination, Mr. Forbes asked for a summary of Dr. Upton's view on hypoxia and dementia and got this, which he then dubbed the 'Upton Theory':

> Various degrees of hypoxia or head injury lead to an increased probability of earlier onset of dementia.
> Later, Dr. Upton elaborated:
> Yes, that the various complex factors involved in a fire can lead to hypoxia; that is a reduction in the available oxygen to the tissues of the body, particularly the brain, as a result of which there is brain damage, as a result of which there's an increased probability of long-term effects, including premature dementia.

¶ 218 Dr. Upton did not accept Mr. Forbes' characterization of his opinion as the "Upton Theory", but stated that it was the accepted theory in the literature. He produced a number of articles from learned journals on various aspects of hypoxia to illustrate the principles involved. He was extensively cross-examined on these articles and Dr. Stewart also reviewed them critically in his evidence, maintaining that they did not really support Dr. Upton or were flawed as studies. I do not intend to rehearse this controversy, which occupied at least two court days, in a blow-by-blow fashion. A few examples will suffice.

¶ 219 An article abstracted at Exhibit 37 page 36 referred to 'age-dependent neurodegeneration in Alzheimer Disease (AD)' as a 'complex interaction' among several factors - genetic, age-dependent bodily changes and determinants such as head injury, stroke or hypoxia, and continued: "A matrix involving each of these complex factors may influence the age of onset of AD in a particular individual". Dr. Upton said the article supported the view that hypoxia could be involved in long-term effects; the point was the inter-action of the factors. Dr. Stewart agreed that a matrix of these factors could influence the age of onset of AD but said that it did not demonstrate that progressive dementia results from hypoxia.

¶ 220 Dr. Upton referred to page 25a. of Exhibit 37, a recent article on dementia pugilistica itself. The article referred to it as the effect of repeated sub-concussive blows. It stated that even very mild degrees of brain trauma can produce neuropathological changes similar to severe trauma. Dr. Upton contended that hypoxia was trauma to the brain and these statements applied to it. The article also noted similarities between the brains of dementia pugilistica and Alzheimer's patients: the presence of a protein E epsilon4; the presence of neuropathology in Meinert's nucleus; compromise of the acetylcholine system and so on. The brains of patients with the two problems showed neurofibrillary tangles, although located in different parts of the brain. All of this showed a potential connection between these conditions in Dr. Upton's view. When he was taken to this article, Dr. Stewart agreed that the author thought that there were very definite similarities between Alzheimer's Disease and dementia pugilistica, but pointed out that the author also showed that there were many aspects that were not similar.

¶ 221 Exhibit 88 includes four abstracts, all concluding that moderate to severe head injuries in young men may be associated with increased risk of AD and other dementias in later life. Significantly, patients who reported loss of consciousness exceeding five minutes were at significantly increased risk compared to those with lesser periods of lost consciousness.

¶ 222 One article concluded that the risk associated with head injury with loss of consciousness was approximately double that where there was no loss of consciousness. Dr. Stewart said that the article did tend to support the hypothesis, although it raised other issues. He did not dispute the conclusion set out as to head injury, but he distinguished head injury from hypoxic injury to the brain.

¶ 223 Towards the close of the cross-examination of Dr. Stewart I sought a further explanation of the distinction being made between traumatic brain injury, i.e. caused by a blow, and hypoxic brain injury. Dr. Stewart confirmed that the evidence had shown that both types of injury killed cells and the death of cells caused the dysfunction. As to why it made any difference how the cells died, since it was their death that led to the dysfunction, he described the slow strangling of cells in AD versus the acute loss of cells in the period of hypoxia. The cells in hypoxia all died at the beginning and their death was not progressive. As to why, if cells can keep dying after the boxer's blows have stopped, they cannot equally keep dying after the hypoxic insult, the answer was that there was no explanation of why that happened, but it did happen. On the other hand the same evidence was not available for hypoxia.

¶ 224 At the end of the cross-examination of Dr. Stewart this took place:

Q. You say that there is no connection between brain trauma and progressive dementia of the Alzheimer type?
A. There are some articles which you have brought out and I have brought out which show that there is a possible relationship. It is not proven.
Q. And that the articles show that other persons, other than Dr. Upton, have extrapolated to infer that there are a number of other forms of brain trauma that produce progressive dementia of the Alzheimer's type?
A. We've heard a great deal about possible relationships which are not true - which are not proven.
Q. Which are not proven?
A. Yes.
Q. And it's your position that until they are proven with a certain degree of scientific certainty that the court

shouldn't accept them? Is that your evidence?

A. I have a very strong opinion on that. If the court makes a decision on a statement that you've suggested here that you say is wrong, it will be a travesty. [Court reporter's version. My note is: If the court makes a decision on such a statement it's a travesty.]

¶ 225 It is clear that Dr. Upton is not alone in postulating the possibility of brain trauma leading to the later development of AD or AD-like processes. In the end Dr. Stewart conceded that there were articles suggesting that, although it was not proven. Whether hypoxia has an effect similar to blows is as yet more problematic, but even on this Dr. Upton is not alone. Both Dr. Weber and Dr. Cancelliere agree with his prognosis for Zari. Neither was cross-examined on this aspect of their evidence. Knowledge of the mechanisms of AD, dementia pugilistica, blows to the brain and hypoxia has many unanswered questions and it seems to me unsound to assume that the possible link between trauma and AD-like dementias shown by the research in evidence is confined to trauma, and the consequent death of cells, by blows on the one hand and excludes trauma, and the consequent death of cells, by hypoxia. Further, it is clear that Dr. Stewart demands proof to a degree of scientific certainty before accepting the possibility. I do not criticize him for that, but it is not the test that I must apply.

¶ 226 There is an area of medical controversy at issue here and I am obviously not going to solve it for the physicians. For the purposes of this case, I am to take into account the possibility of early onset of dementia in Zari if I find it to be a real and substantial possibility - not probability - that it may occur in the future: see Schrump v. Koot (1977), 18 O.R. (2d) 337 (C.A.).

¶ 227 Weighing all of the evidence, I am so persuaded. I accept the evidence of Dr. Upton. I accept that there is a reasonable possibility that Zari will develop a degree of dementia by age 55 to 60 which most of the population will not experience at that age or for some years after. Such dementias, Dr. Upton testified, move at variable speeds and may be dormant until some life event - the death of a spouse, moving from a familiar house, etc. - triggers awareness of the decline. Given her present limitations, the onset of such dementia is likely to have greater and earlier effects upon her than would be the case with most of the population. Dr. Upton estimated the increased probability of dementia as in the order of 10 - 20%. This is a real and substantial possibility.

Damages I:Zari:

¶ 228 Having determined that there is a real and substantial possibility of earlier than normal dementia in Zari's prognosis, it is now possible to address the issue of her future care needs. Ruth Whitham was called by the plaintiffs. No evidence on the subject was called by the defendants. As a convenient introduction to her, I reproduce the descriptive portion of my ruling of February 12, 2001, omitting the legal analysis which led me to accept her as an expert:

> "Neurorehabilitation is a term coined by Miss Whitham to describe one who analyses the life situation of a person who has suffered a major injury to the brain and is having difficulty recovering. She analyses why the person is not apparently succeeding in rehabilitation and suggests strategies for the patient to follow in adapting to the new situation. Forensic rehabilitation is simply performing the task just described when legal proceedings are proceeding currently.
>
> Miss Whitham qualified as a registered nurse in 1969 and is licenced in Ontario. She practiced her profession at the Toronto Western Hospital, McMaster University Medical Centre, Parry Sound Hospital and as nursing crisis manager at Pearson Airport. At McMaster, she worked in the psychiatric crisis unit. In 1987, she sustained a brain injury in a motor vehicle accident, leaving her with post-traumatic headaches and pain. She returned to work in 1990, beginning a consulting practice devoted to the problems of brain injured persons, including medical case management, future care cost analysis, life care planning and educational training for patients and their families. She also practiced therapy specific to chronic pain and brain injury deficits.
>
> In 1993, she suffered a further brain injury in another motor vehicle accident. She has described these injuries as her greatest teacher as to the needs of the brain injured. However, she has also built upon her nursing training by taking numerous courses relevant to rehabilitation, pain management, neuropsychological evaluation of the brain injured and has attended various conferences on neurological subjects.

> In determining the needs of patients, she reviews all medical records, discusses the patient with the treating physicians and convenes meetings of insurers, treating practitioners, patient and family to make her rehabilitation plan. ... She has developed a two hundred and forty question diagnostic questionnaire to identify the patient's deficits as they are understood by the patient. She has made presentations to conferences on this and other subjects related to her practice.
>
> She conceded that her practice is rather unique. She is unaware of others who have exactly her mix of experience in the treating of others, personal knowledge from her injuries and the studies which she has done. She sat for and passed written examinations for entry into the U.S. organization the American Academy of Pain Management. She testified that physicians, including neurologists and anesthesiologists, made up much of the membership of this organization and they sat the same examinations to enter.

¶ 229 Although she had expertise of potential assistance to the Court, there were certain difficulties with the position of Ms. Whitham. She was dismissed by Zari, (although not by Zari's counsel), and had not seen her for three and a half years at the time of trial. She was not present during Zari's testimony and had no direct experience of Zari's current living arrangements or Zari's handling of the activities of daily living. Some of her recommendations seem to be based on the reports of persons (such as Dr. Skaredoff who suggested cryotherapy in 1995, if other treatment modalities failed) who likewise have not seen Zari for years. She could not make the home assessment which she testified was a critical component of a study such as hers. Certainly these factors weaken the force of her recommendations, but they do not make her evidence speculation. She has reviewed the same medical reports which have formed the basis for the testimony in the trial, which is as much familiarity with Zari as was possessed by some other witnesses.

¶ 230 It was submitted, both when she was tendered as an expert, and in the final argument, that she was really an advocate for the disabled and not an impartial witness. She wrote a book which admittedly was designed to alert the disabled and their advisors to opportunities to improve their lot. She is brain-injured herself and this gives her a point of view, but also a valuable insight. I did not find her testimony to be advocacy, certainly not any more than the evidence of most experts I have heard. Sometimes she strayed beyond her medical expertise, but mainly the statements she made as to Zari's medical condition were found in the reports. She did urge that Zari would benefit hugely from going into assisted transitional housing at once rather than at 55. That was said to go beyond even Dr. Upton whose testimony was that she might begin to suffer early dementia by 55 or so. But Ms. Whitham's recommendation was not based on early dementia, but on her experience with Zari and with the brain-injured. Nor did Dr. Upton confine his recommendation to dementia: he stated that Zari would need supportive care, counselling and measures to improve her quality of life if she could not return to work, as she cannot.

¶ 231 In my view, the evidence as to Zari's present condition from herself, her doctors and her sons, is such that she would clearly benefit today from the services available in a setting which left her free to come and go, but assisted her with activation programs and had therapeutic modalities as well. There is no need to wait for the possible onset of early dementia or the normal problems of aging after perhaps the age of 55 or 60. Her present condition, derived from the fire, suffices to make this kind of care reasonable now, as Ms. Whitham suggested. She is unemployable for reasons which also severely impact upon her likelihood of having a happy social life or of remarrying. Her executive functions are severely impaired, leading to difficulties in decision-making and planning in ordinary aspects of life. She does not accept her disabilities, but has unreasonable expectations for herself which she cannot meet. Her level of frustration and anger is high. She requires a high level of attention, emotional investment and care from those around her, but is unable to give much back. She is concerned about the load her injuries have put on her sons, to the point where she worries that they will grow tired of her. She lives with Pedrum, but he has been away and in reality she is alone much of the time, for months on end. This does not mean that she is independent, however. She said that she rarely drives her car, she goes for walks with Pedrum but not often if he is not there. She does not feel comfortable walking alone. She is clinically depressed and has chronic PTSD. She is isolated and likely to remain so. Her very isolation is likely to exacerbate her cognitive problems through lack of challenging use of her remaining faculties. In my view her quality of life would be greatly enhanced by the social activation and rehabilitative opportunities available in the proper setting. Indeed, this is the only way to compensate her for the loss of her former life. The debate in the trial over the specific sites referred to by Ms. Whitham and by the defence surely did not cover all the possibilities. If Zari has to move to obtain the right setting, she should do so, but that is beyond my task. To

help her in these and other decisions, the services of a case manager are properly chargeable.

¶ 232 Although Ms. Whitham's report of April 20, 1997 contains tables of costs relating to overcoming the various barriers Zari faces in rehabilitating herself and living with her disabilities, a revision (Exhibit 51) was put in during the evidence of the accountant Jim Muccilli to capture some of the changes necessary as a result of Ms. Whitham's actual evidence. It was also agreed that these figures would need to be re-done after my findings were available. No doubt Ms. Whitham would be of assistance in that process as well. At this point, I will deal with the principles involved rather than the figures.

¶ 233 As noted, a case manager to help Zari with medico-economic decisions is justified although, if she moves into a care-oriented facility, I would think the role would be less costly than forecast. Similarly, the homemaking support and many of the 'Initial Outlay Costs' would not be necessary if she were in a facility, nor would such costs be chargeable separately if Zari were awarded the funds necessary to live in a facility starting at once. Financial planning advice is desirable, but its relationship to the 5% management fee proposed by Mr. Muccilli is not clear. There appears to be overlap here. To the extent that this covers income tax reporting, the need to file does not arise from the fire. I do not see the evidentiary basis for the pharmaceutical costs of more than $75,000 present value. No physician gave evidence that such drugs would be needed currently or in the future so far as I can discover. Ms. Whitham's report included psychotherapy costs for Pedrum and Pejman in the total for Zari. If allowable at all, such costs must be assessed as part of their damages. The taxi costs are problematic for a person who leases a car currently even if she does not choose to drive it. Work hardening, job coach and on-site job coach are problematic for a person who will not work again, and in any event seem to overlap with the already overlapping life skills training, stress management, and functional restoration programs. The fitness club, the footrest and the day-timer are de minimis and I don't know why the defendants should provide Zari with pocket money when she has a claim for replacement of her lost income. The transitional housing cost estimate stops at age 70 and Mr. Muccilli commented that there was no prediction thereafter. The evidence is that Zari's life expectancy has not been shortened by the fire and the average age achieved by females in Canada was put in as 82. A contingency may well be that development of dementia would lead to a situation where the benefits of such a facility would cease to be meaningful at some point, but I do not know of any evidentiary basis for the choice of a cut-off age at 70.

¶ 234 I recognize that Zari may resist the semi-institutional setting. That is certainly one of the contingencies to be taken into account in fixing the final award. I should reiterate that I do not regard the process which will now take place as mathematical. There are contingencies to be applied to any cost figure.

¶ 235 I turn now to the issue of income loss. Jim Muccilli C.A. of Arthur Andersen prepared schedules for past loss, future loss and pension consequences. He has been preparing such reports for 12 years and was accepted by all parties as an expert. His report is based upon certain assumptions as to Zari's progress at CIBC which he accepted as given.

¶ 236 Zari had been with the CIBC since November, 1991 as a Customer Service representative which is classed as a Level 2 position. She was a permanent part-time employee with a 30 hour work week (full time being 37.5) earning $11.57/hr. which increased to $11.87/hr. on February 26, 1995. Her supervisor from May 1994, Ms. Suzanne Mottram, gave evidence. She regarded Zari as one of the top employees, confident, ambitious, determined to do a good job and competent. She was polite with the customers, immaculately groomed and good at recognizing opportunities for clients.

¶ 237 Zari's October, 1994 performance review covering the year since November, 1993 is in evidence. She met all customers' expectations, had all the skills necessary and needed to work on her own development plan. She had enrolled in a course to better herself and Ms. Mottram testified that this sort of initiative was very rare among her peers. Ms. Mottram also said that she and Zari had discussed that Zari would be taking a securities course offered by the bank the next year. In her opinion that step, which was not common, would be a real plus for her future and would have great significance when Zari sought other positions. The course description in evidence indicates that the course identified by Ms. Mottram as the one that Zari would take would qualify her to sell mutual funds. She remarked in the review that Zari was 'a great asset' and the manager wrote: "Keep up the good work, Zari." Other, earlier, reviews were also looked at and it appears that Zari pretty consistently got a rating of 3: a consistent contributor who achieved performance targets. Most employees

would receive such a rating; a few would get 4 and Ms. Mottram had not seen a 5. Some would get 2 which required improvement.

¶ 238 The next job above the CSR is Personal Banking Representative I (PBR I) which is a level 3 position. PBR I's respond to walk-in customers needs by selling a limited range of bank products including investment, mutual fund and other products. Ms. Mottram said that Zari had the ability to move to level 3 and she would have supported such a promotion when, as Zari's supervisor, she would have been asked. Ms. Mottram felt strongly that Zari had the ability and motivation to move even higher, up to a level 7; there was, she said, room in the CIBC for anyone with ambition.

¶ 239 Since about 1994 all CIBC job opportunities have been posted internally on the computer system and employees can apply at will. Ms. Mottram had done some historical searches and there were numerous jobs available in the appropriate levels. Beyond level 3 was PBR II, similar to PBR I but with a wider range of products to sell and with a base of regular customers in addition to walk-in traffic and classed as a level 4 position. An Account Manager Personal Banking I manages the portfolios of regular clients and does not see walk-in customers and is a level 5 position. Account Manager I manages, under direction, a portfolio of mid-market business relationships in diversified business sectors delivering a wide range of bank services and seeking to build long-term business relationships; it may be seen as a chance to gain the necessary knowledge contacts and experience to manage a portfolio of corporate loan and deposit accounts. It is a level 6 position. Finally, Account Manager II, a level 7 position, manages a portfolio of customers emphasizing delivery of advice to clients on all of their financial needs, a variety of complex accounts, more challenging asset quality issues and customizing services for clients.

¶ 240 Mr. Muccilli estimated Zari's loss of income based on two alternatives regarding her career path had she not been injured as a result of the fire. Alternative A assumes that Zari would have continued working at the CIBC and would have progressed from level 3 to level 5, earning the midpoint salary at each level commencing July 1, 1995 at level 3 at a rate of $31,800, moving on July 1, 2000 to level 4 at $37,800 and on July 1, 2005 to level 5 at $45,000. Alternative B assumes Zari would have continued working with the CIBC and would have progressed from level 3 through level 7, earning the midpoint salary range (for the entire period she holds that job) commencing July 1, 1995 at level 3, $31,800.00, January 1, 1998, level 4, $37,800.00, July 1, 2000, level 5, $45,000.00, January 1, 2003 at level 6 for $53,600.00 and July 1, 2005 at level 7 for $63,800.00. All of these salary figures are for full-time employment.

¶ 241 In my opinion the progress assumed in B is unrealistic. Ms. Mottram said she knew of seven people who had moved from level 2 to level 5 and that it was not unusual, but to move from level 2 to level 7 in 10 years would be very hard unless one was very, very motivated. Certainly in the higher levels the nature of the experience needed to move upwards would appear to require much more time to accumulate. While there is some evidence that the pre-fire Zari may have been of above average intelligence despite relatively poor marks in the course in evidence, there is no evidence that she would be regarded as a superstar to be pushed along rapidly. I also doubt if it is realistic in either A or B to use the mid-point of the salary range, since on these hypotheses she would not spend enough time in each position to make the mid-point represent an average given the modest annual advances within the ranges - 2 to 3% per annum - discussed in evidence by Ms. Mottram.

¶ 242 Alternative A also has its problems. The element that Ms. Mottram thought would be of great help to Zari in securing advancement was her taking courses. In early 1995 she had not completed the first course and not even applied for the second. Although some people had moved to level 4 without it, in Ms. Mottram's opinion the key to level 4 was the securities course. Nor had Zari applied for either full-time work or for promotion. To assume that she would have applied and been accepted as soon as July, 1995 seems unreasonably optimistic. I have no doubt that she could do the level 3 job and with her supervisor's support she had a good chance of getting it, but I think July, 1996 a more reasonable working hypothesis after she had finished a year of the second course (Securities). Level 4 in another 5 years - 2001 - is not unreasonable, but at level 5 we reach a change in emphasis toward managing the relationship and the inclusion of some small business customers. Typically the higher up one goes in a business, the fewer jobs and more applicants per job. There is no evidence about the situation at CIBC in this regard, but I assume that if it were not so, the plaintiffs' counsel would have told us. It would be reasonable to assume that promotion to level 5 would take longer and might not have been available even to an ambitious person. As compensation for the loss of the chance to compete for a level 5 job, I would notionally award Zari from 1 January, 2007 an increase in salary equal to one-half of the difference between the level 4 mid-point and the level 5 mid-point.

¶ 243 There is included in Zari's claim an amount for loss of the benefit of the Employee Share Purchase Plan. She had not made this investment, but it is assumed that it was such a good deal (CIBC contributed 50 cents for every dollar the employee contributed) that she was bound to do it. That is an unlikely assumption for Zari in 1995 with a dependent son and an income under $20,000. Perhaps by 2000, with Pedrum established and her income better, there would have been money for investment and I will allow this claim from Jan. 1, 2001 only.

¶ 244 A management fee is part of the claim. Mr. Muccilli said that 5% was a usual fee. It is submitted that there must be specific evidence that one is needed. I agree, but there is the evidence of Zari's condition which makes it plain to me that she will need help to manage the sums awarded to her so that they will in fact support her as they are intended to do. Indeed, in my opinion counsel should be considering whether these funds should not be paid into court or otherwise protected. I will fix the amount after Mr. Muccilli has done his work.

¶ 245 At the end of the trial it was agreed that Mr. Muccilli would be available to perform calculations based on the facts as I would find them and finalization of the amount of an award of lost income must await this work. At that time, I must consider whether the resulting sum ought to be adjusted for the impact of contingencies.

¶ 246 I turn to general damages. The trilogy 'rough upper limit' is now approaching $300,000, having passed through $260,000 in 1999 according to the plaintiffs; and is $275,000 today, according to the defendants. The defendants submit that Zari has the life skills to live alone, do her banking and shopping and possibly drive her car. She takes a course. She is a far cry from the trilogy plaintiffs. Her generals should not exceed $150,000 at the most.

¶ 247 In my view, the quality of Zari's life has been destroyed. She has been reduced from an independent, respected, confident, self-supporting, employed mother of two sons who looked to her for guidance, to an unemployable, unsociable, dependent person, no longer able to be the mother, rather now dependent upon her sons for her emotional support. Once she has done her banking and her shopping, she has no activities to stimulate her socially or cognitively. She does not travel for pleasure. Her course is a correspondence course, lacking in the give and take of a classroom. Her short-term memory is so bad she often has to re-play movies to pick up the plot. She has a similar problem when reading. She has reasonable health, except for her shoulder and neck pain (for which she goes to the gym occasionally) and a normal life expectancy, but she has severe cognitive deficits. It is true that she is in a better situation as to health than any of the trilogy plaintiffs. Nevertheless, the result of her injuries has devastated her former life. She has a reasonable possibility of coming to dementia earlier than she would have. Such a plaintiff is a candidate for an award towards the upper end of the scale: MacMillan v Ontario, [1998] O.J. No. 2763 (O.C.J.).

¶ 248 I assess Zari's general damages at $225,000

¶ 249 Zari's special damages are claimed at:

a) 82 hours of psychotherapy with Dr. E. Tahbaz at a cost of $8,200; I allow this;
b) Neuro-rehabilitation expenses at Columbia Neurorehab are allowed in the amount of $31,200, less any interest contained in that amount;
c) Treatment costs for cognitive therapy at Whitham Neuro Inc. are allowed in the amount of $20,848, less any interest contained in that amount;
d) Physiotherapy treatments at Line Troster are allowed at a cost of $119;
e) Various expenses consequent on attending on medical treatments were claimed in the amount of $6,722.76. Some were objected to - a parking fine and some pizza orders - and one was prior to the fire; Zari was in hospital for a long time and gas and parking in that period are clearly allowable, as are payments to various treating agencies. Rather than deal with each deduction separately, my review of the list leads me to allow this at $5,500;
f) a subrogated claim for special damages on behalf of the Ontario Health Insurance Plan in the amount of $46,281.06 for medical expenses incurred as a result of the injuries caused by the fire. Although the index to the joint books of Exhibits indicates the payment summary is included, it is not in my copy. This should be filed for my consideration.
g) a subrogated claim for special damages on behalf of the

Medical Services Plan of British Columbia in the amount of $423.85 for medical expenses incurred as a result of the injuries caused by the fire. I cannot find evidence that these expenses are related to the fire and I do not allow them.

¶ 250 In my view these costs are reasonable and incurred as a result of the fire. It was said that expenses incurred outside of Toronto were suspect, but I cannot think why they should stand on a different footing from Toronto expenses. The therapy treatments were an effort to mitigate and there are any number of medical recommendations for therapy. I do not accept that Ms. Whitham's fees for therapy should be disallowed, her experience with the brain-injured may well have been of help to Zari.

Injuries II: Pedrum:

¶ 251 The real issues in dispute regarding the assessment of Pedrum's damages as seen by the plaintiffs are:

(1) The plaintiffs assert that Pedrum's learning and his earning capacity have been impaired by his mild but permanent injury.

(2) The plaintiffs assert that there is a probable risk that Pedrum will suffer early onset dementia and or epilepsy and that this risk should be reflected in his award of general damages.

¶ 252 Pedrum was a 20 year old Grade 13 student at Northern Secondary School at the time of the fire. His intention was to attend Clarkson University in the United States to pursue Aerospace Engineering. There is considerable evidence that pre-fire Pedrum was of above average intelligence. When the family left Iran they went first to Turkey. Zari said that Pedrum, then 9, swiftly learned Turkish and could translate for the family. He then did the same thing in English in a few months when they moved to Canada.

¶ 253 He began his Canadian education in Grade 4. He did well. When they moved to 2 Forest Laneway he enrolled at Northern Secondary School. His secondary school marks are in evidence. His English marks were consistently between 67-75%; his mathematics marks were better, ranging from 70-90%. He took a number of courses in subjects related to engineering - electronics, computer technology, automotive mechanics, applied electricity - and scored mainly above 75% and up to 94% in this type of course. In Grade 13 in the fall of 1994 he was enrolled in two co-op courses where he worked at Downsview Canadian Forces Base with pilots. He received marks of 94% on these courses. His reports are peppered with descriptions of him as a sincere, serious student who worked hard and was a pleasure to have in class. His June 1994 report shows marks as follows:

Keyboarding	88	(course average 69)
English	67	(course average 67)
Mathematics	78	(course average 68)
Chemistry	75	(course average 66)
Auto Mechanics	94	(course average 57)
Electronics	77	(course average 69)
Photography	83	(course average 71)
Personal Average	80	66.7

While this is not an outstanding record, it is clearly an above average one by a good margin.

¶ 254 Pedrum's fall 1994 Grade 13 marks show the 2 co-op courses at 94% each, well above the course median. His other marks were less impressive than his Grade 12 results which he told Dr. Cancelliere he thought was related to having more 'on his plate'. He is shown as absent 21 days in the fall term which could also be a factor. Dr. Travis described this fall 1994 record as mediocre and not indicative that Pedrum would likely gain entrance to graduate work in Engineering. In cross-examination, he conceded he did not know that Pedrum was out of the school 2 days a week doing the co-op courses; or that his overall average in the fall of 1994 was 77%; or that he was taking Physics at night. He was aware that Pedrum had a part-time job. He said it was important in assessing Pedrum to focus on the 'core' courses. If one accepts that invitation and focuses on English (except Co-op which was called "English 4A5" on the report), Mathematics, Science, Physics and Chemistry, one finds that Pedrum averaged 75.9% in these subjects from Grade 9 to Grade 12. This puts his marks in the fall of 1994 in a larger perspective. Pedrum was injured at a time when his maturation was not complete. His marks were variable but he showed that

when his interest was engaged he was capable of superior work. I conclude that pre-fire Pedrum was an above average student capable of attending university and that it was a reasonable possibility but not certain that he might be able to do graduate work.

¶ 255 When the dense black smoke caught up with Pedrum and his mother, he lost consciousness on the 30th floor. He was found unconscious there by the fire fighters and taken to the lobby and revived, but lost consciousness again, at least to some extent, as he remembers only part of the trip in the ambulance to the hospital. He received oxygen through a nasal tube. He testified he was at the hospital emergency for 9 hours and spent a couple of hours in the hyperbaric chamber. He felt as if he had awakened from a 10-year sleep. His eyes had been chemically burned and he was treated and bandaged for three days during which he could not see. There has been no permanent damage to his eyes. He went to his father's home to be cared for and there he learned that his mother was still alive. He did not learn that she was in a coma until several days later when, the eye patches having been removed, he was able to go to see her. When he saw her, he was shocked, numbed and emotionless; he stayed with her every day as long as he could and some nights he spent on the floor of her room.

¶ 256 In the days immediately after the fire, Pedrum made diary entries which are summarized in the report of Dr. Travis of 8 March 1999. Pedrum wrote of being trapped and of his mother's panic in the stairwell, of his fears that she was dead, his pain - agony - at the time of losing consciousness, nightmares about choking to death in the stair, self-blame over failing to protect his mother, his distress about his blindness and his extreme fatigue. The note dated January 8 indicates he learned that his eyes would recover and that Zari was in a coma and reflects his anxiety over her recovery.

¶ 257 In his trial evidence, Pedrum described his injuries. He had recovered from the burns to his eyes. He had on-going emotional and psychological problems in dealing with the fire events and occasional self-destructive thoughts. He had short-term memory problems including difficulties with mental arithmetic and recall of names, things he could do with ease previously. He learned to cope by making lists, a technique that he still has to follow and had not had to do before the fire. From 1995 through 1997 he had many sleepless nights, flashbacks, nightmares and headaches and he still is not completely free of these problems. Flashbacks in class destroy his concentration. He had some psychotherapy but could not complete the program for lack of money. For some four years he was emotionless and in a kind of fog from which he has now emerged, perhaps because of the move to Victoria, B.C. He described himself as very angry about the fire. His previous relationship with his mother was reversed. He had gone to her for advice and help; now she comes to him instead and he finds himself making decisions for her. The mother he knew is gone.

¶ 258 The neurologist, Dr. Weber, also testified about Pedrum whom he first saw on November 24, 1995. He felt that Pedrum had shown early symptoms of neurocognitive deficit including reduced facility with numbers and with word-finding and easy fatigability precipitated by mental tasks. Such fatigability often accompanies migraine headaches and Pedrum had four severe headaches since the fire which had migraine characteristics. The stress of the fire may have aggravated minor pre-existing migraine.

¶ 259 An EEG was done and Dr. Weber summarized the results in his report of December 19, 1995. Pedrum's results were borderline abnormal record with mild diffuse slow features that could reflect the effect of drowsiness not detected by the EEG technician (the technician observed the patient to be awake). Such diffuse slowing can also reflect a toxic or metabolic cerebral disturbance.

¶ 260 In January 1995, Pedrum was seen by Dr. Leigh Solomon, a psychiatrist, who diagnosed Post-Traumatic Stress Disorder and in June 1995 by Dr. Tahbaz who diagnosed severe depression and projection of blame, anger and hostility as well as PTSD.

¶ 261 Not long after the fire, Pedrum wrote an examination in a course he had taken before the fire and did well. However, he left school that winter finding he could not cope with the demands of his course work and family upheaval. He returned to Northern Secondary School in the fall of 1995 and completed grade 13.

¶ 262 He attended Carleton University in Ottawa from September 1996 until December 1997, working towards an engineering degree. His marks were not good. He obtained only 5 credits out of 10 required. He testified that he had a lot of emotional difficulties there. His contacts with his mother, who was at first still in Toronto, were very discouraging; she was lonely and depressed. In class he would have flashbacks of the fire which

destroyed his concentration. He decided to shift to Mechanical Engineering and to move to western Canada. He applied to the University of Victoria but was required to upgrade his academics. He therefore enrolled at Camosun College. In August 1999 he and Zari moved to Victoria, B.C. At Camosun he did well, taking 6 courses and achieving 2 A+, A, A-, B+ and B marks. He was admitted in the fall of 2000 into the second year of Mechanical Engineering at the University of Victoria. At the time of the trial he was in the co-op portion of the year, working in industry. He said his marks had been B+ to B-.

¶ 263 As with Zari, Dr. Upton gave the most comprehensive medical evidence about Pedrum whom he examined and interviewed on August 26, 1998. Pedrum was then still at Carleton and described himself as passing but not up to his standard. In his report of August 26, 1998, Dr. Upton wrote:

> "Pedrum Sodouri has a history of a significant head injury in Turkey when he was 11 years old".
> head hit sidewalk
> Basal skull fracture
> Period of unconsciousness
> Subsequent dizziness
> This predisposed him to develop increased problems from any further head injury or hypoxia.
> He tried to save his mother who suffered significant smoke inhalation, hypoxia and probable carbon monoxide poisoning with permanent residual effects.
> Pedrum Sodouri was unconscious when he was found. He was unresponsive with a Glasgow Coma Scale Score of 3. (NB: The Glasgow Coma Scale score is 3 to 15 where 3 is near death and 15 is normal).
> It is probable that he suffered a combination of:
>
> (a) Smoke inhalation:
>
> - Nose
> - Throat
> - Brachia
> - Lungs
> - Burns of his corneal surfaces in his eyes.
>
> (b) Hypoxia:
>
> - a reduction in the total oxygen saturation of his blood.
>
> (c) Carbon monoxide poisoning:
>
> - His carboxyhaemoglobin was 10%. Carbon monoxide has about a 230 times affinity for haemoglobin in comparison with oxygen. The bond between carbon monoxide and haemoglobin is essentially irreversible and the haemoglobin is broken down and remanufactured by the body.
>
> In my opinion, it is improbable that he was unconscious due to 10% carboxyhaemoglobin. It is the combination of smoke inhalation, hypoxia and carbon monoxide poisoning that rendered him unconscious.
> It is improbable that the carboxyhaemoglobin levels changed significantly on the way to the hospital.
> It is probable that there was a delay in putting him in a hyperbaric oxygen chamber. This increased the probability of brain damage from the smoke inhalation, hypoxia and carbon monoxide levels.
> He suffered a number of typical post-hypoxia (and post carbon monoxide poisoning changes which produce hypoxia) effects including: Headache, Depression and anxiety, Reduced concentration, Reduced memory, Fatigue and Dizziness
> The effect of the hypoxia acted on the residual effects of his head injury.
> He developed psychosocial, financial and stress problems resulting from the fire. He had to look after his mother. He required multiple psychotherapy sessions to reduce his anxiety and to increase his self-confidence.
> He has done everything to mitigate his losses and the effects of the fire.
> He has returned to school.
> In my opinion, he is a bright and intelligent young man. However, it is probable that he has suffered some long-term (permanent) effects of the hypoxic episode acting on his residual effects of his head injury at the age of 11. He describes reduced memory, reduced concentration and some word finding problems.

I believe that these problems are real.
He continues with his courses. It is very difficult to estimate a percentage loss of cognitive function related to the fire because of his excellent residual intelligence and cognitive skills.
* * * *
In my opinion he is at risk of developing an earlier dementia than would have been in comparison with the probability before his hypoxia episode. (underlined in original)

¶ 264 Dr. Upton returned to the subject of future impairment in his report of October 7, 1998 at page 1480:

In my opinion the degree of future impairment will probably be between 10 to 20%. Since he has chosen to be a consulting aerospace engineer, this is a significant disability."
"A major problem is that there is evidence that brain damage due to trauma or hypoxia increases the probability of earlier onset of a decline in mental abilities or dementia."

¶ 265 Dr. Upton expanded on this opinion in his report of November 23, 2000 at page 1482:

"He returned to school and he seems to have made maximal efforts to mitigate his losses. However, he had continuing symptoms when he saw Dr. Travis. Dr. Travis accepts that Mr. Sodouri made good efforts in the tests and it is my opinion that it is probable that his previously superior abilities have been significantly reduced and this has had an important and continuing effect with residual sequelae of the accident of January 6, 1995. These effects will reduce his potential to start and maintain his own aerospace company and it is probable that the negative effects on employment, earning potential and enjoyment of life will be permanent."

¶ 266 As with Zari, Dr. Stewart testified for the defence. His opinion on the prospect of Pedrum's developing an early onset dementia in comparison with the probability that existed before his hypoxic episode, was naturally the same: t he literature did not support the possibility to the necessary degree of scientific certainty. There is no need to repeat the analysis already undertaken. On this point, I accept the opinion of Dr. Upton in preference to that of Dr. Stewart.

¶ 267 Pedrum was also seen by Dr. Butler on June 25 and September 14, 1998 and on November 25, 2000. Dr. Butler described him in September 1998 as presenting himself in a distant way preventing emotional engagement with the observer. He was doing his best to accept what had happened, while having difficulty doing so. Dr. Butler continued:

He is a bright man who hopes to become an Aeronautical engineer. In January, he will be moving to California where he is to attend a University in San Jose. He tells me that he is not doing awfully well, he has failed some subjects and is far too preoccupied to be able to concentrate properly.
Mental State. He is neatly dressed, his appearance is immaculate, he is precise and correct in his manner. He displays no emotion but responds courteously, if slowly. There are often times when I had to wait for several seconds before he replied to a simple comment or question. He speaks from a realistic frame of reference.
There is some psychomotor retardation. The content of his thinking is largely of worry about his mother and his own future, about his losses and about the inability to bring closure to this unpleasant part of his life because of the litigation process. His fund of knowledge was above average and his vocabulary in keeping with that, but his ability to use this to abstract principles or to do simple calculations was surprisingly inadequate. He is vaguely aware that he is emotionally constricted. He is aware that his judgment is somewhat affected by denial and avoidance."
* * * *
He suffers from a chronic post-traumatic stress disorder which at this stage has an 80% chance of continuing indefinitely. This will significantly affect the quality of his life. It could also affect his ability to study significantly. His relationships will tend to be shallow or protective but not healthy or enhanced by mutual sharing. He will be nervous, highly strung person who will be preoccupied, unable to devote his full attention to whatever he does. This state of affairs is the result of the fire as well as the subsequent carbon monoxide poisoning."

¶ 268 Pedrum was seen again on November 29, 2000 by Dr. Butler who wrote:

Mr. Sodouri is mainly preoccupied with the need to take care of his mother who has changed from being his protector and caregiver to needing the same service from himself. He has described how she is unable to organize her life adequately, is remote, afraid and disabled. Nevertheless, he had hoped to continue his studies in Aeronautical engineering and had described high ambitions. He has moved to Victoria with his family and is now enrolled in the University of Victoria.
He has, in fact, not done nearly as well as he had believed he would. He had to go back to a Community College since his marks from Carleton were below the standards for Victoria. He says he is doing quite well in his laboratories but not too well in the written work now. He continues to emanate feelings of success and distinction.
While the acute symptoms of the Post-Traumatic Stress Disorder have largely been displaced by the mechanism of denial, avoidance and other psychological defences, he continues to be a somewhat remote figure with chronic underlying anxiety and emotional constriction as the principal residues of the experience of the fire which is documented at the Toronto General Hospital and other reports including my own of September 1998. Having to supervise the activities of his mother's daily life, is an added handicap.
Mr. Sodouri's condition is chronic. There will be no substantial change now. He will continue to be handicapped by the consequences of the fire of January the 6th, 1995.

¶ 269 Dr. Keith Travis, consulting psychologist, examined Pedrum for the defence in March 1999 in Ottawa, while Pedrum was attending Carleton. He did extensive testing of Pedrum and observed that his test findings were, in most respects, similar to those reported by Dr. Tahbaz (who had treated Pedrum for a number of months until he could no longer afford it). Dr. Travis noted in his report Pedrum's complaints of psychosocial problems, financial stress, of feeling like a parent to his mother, reduced memory, problems with his concentration, and problems with word finding. Like Dr. Butler, he observed that Pedrum's mother's problems appeared to be of more concern to him than his own problems. Zari was no longer the parent figure.

¶ 270 Dr. Travis concluded that Pedrum was not over-reporting his complaints. He also noted Pedrum's complaint of fatigue. He stated in his evidence that this complaint could be as a result of asphyxiation, hypoglycaemia, anxiety, psychological trauma, or even trauma to the brain. He agreed that the fire likely caused the symptom of fatigue in Pedrum. He acknowledged that many victims of such events have complaints of fatigue.

¶ 271 Dr. Travis made special note of Pedrum's report of diminished concentration and inefficiency of memory which he found equivocal, as they could be explained by other factors. In chief he elaborated on this, stating that because of Pedrum's general adequacy on the tests, he had difficulty relating to the concept of a 10 to 20% slippage in cognition due to neurological factors. He did however concede that he would defer to the neurologists on the point. This was explored with him in cross-examination where it was established that his own observations supported Pedrum's report of word-finding problems. There were several reasons why Pedrum might have these symptoms, including post-traumatic stress disorder, the accident in Turkey at age 11, (this was more remote) and organic brain injury. He acknowledged that Pedrum's symptoms could be a result of an accumulation of all the potential causes, possibly including, as a neurological matter, the long-term effects of hypoxia acting on the results of the incident in Turkey. He agreed that there is a medical consensus that Pedrum's Turkish episode predisposed him to greater injury from subsequent brain insults.

¶ 272 Dr. Travis said in cross-examination that Pedrum's anxiety context scale was moderately elevated. This demonstrated that he had some residual anxiety and loss of self-esteem. The Trauma Symptom Inventory showed evidence of residual psychological trauma, defensive avoidance of facing his problems; avoidance of social contact; and mild but significant anxiety. He demonstrated autonomic hyper-arousal, and other symptoms of anxiety. All of Pedrum's complaints were consistent with an impairment of a permanent nature of a mild degree, with continuing evidence of post-traumatic stress disorder and of other emotional sequelae as a result of the fire. Some cognitive rehabilitation could still be useful.

¶ 273 Dr. Cancelliere also testified about Pedrum whom he first met in 1995 in the course of his investigation of Zari's condition. He interviewed Pedrum to assess him only in December, 2000. At that time he reviewed the report of Dr. Travis. In his report he was mildly critical of some of the tests that Dr. Travis had used. The WAIS-R intelligence assessment test was outdated and use of the modern one would have produced lower scores for Pedrum. He also noted that the Rey Auditory Verbal Learning Test

results were not within normal limits, as per Dr. Travis, but were at the lowest end of the low average range. (Dr. Travis conceded in his cross-examination that this score revealed "relative weakness" in memory.)

¶ 274 Dr. Cancelliere stated in his report and his evidence that Pedrum's continuing symptoms will continue to compromise his functional ability to some extent. Considering his CO poisoning and significant period of anoxia, one would expect a limited or subtle influence upon neurocognitive capacities. His report illustrated these impairments and he concluded that, while it was possible that Pedrum had recovered, the current information was more consistent with long-term or permanent effect to a mild degree.

¶ 275 Returning to the evidence of Dr. Stewart for the defence, on the question of the extent of Pedrum's injuries (apart from future early onset dementia), he based his opinion on reviewing the available reports, but seems to have been primarily influenced by those of Dr. Travis and Dr. Sitwell (who did not testify). He said that he disputed that there was any impairment of intellectual capacity, but when shown the findings of Dr. Cancelliere, he conceded that it was much worse than what was described by Dr. Travis, and that, although Dr. Cancelliere described the impairment as "mild", his findings showed significant impairment. He sparred with counsel over the influence of fatigue on these tests but said again that the results were worse than "mild"; they were significant results for what he regarded as a low degree of CO poisoning - 10% carboxyhaemoglobin.

Damages Pedrum:
II:

¶ 276 In my opinion the weight of the medical evidence - Drs. Butler, Cancelliere, Upton and Weber and to some extent Dr. Travis and also Dr. Stewart in cross-examination - supports the view that Pedrum has suffered permanent, although mild, cognitive deficits as a result of the fire in which he experienced 10% CO poisoning, a significant period of hypoxia and smoke inhalation, all of which contributed to his impairment. There is a possibility, which I regard as a real possibility, in the order of 10%, that at some future time he may experience some degree of dementia perhaps five years earlier than would have been the case absent the fire. He almost certainly retains sufficient intellectual capacity to achieve an engineering degree, but his career may suffer. He will actually never know. I deal elsewhere with the economic consequences of that, but this is the place to consider the frustrations engendered by it. Apart from intellectual function, the emotional/psychological consequences of the fire for him have been severe, altering his personality, restricting his ability to engage in a full social life and burdening him with chronic anxiety and emotional constriction. In considering the quantum of general damages, I also must recall the experiences of the day itself, apart from the sequelae: the terror, the pain and suffering of the hospital stay and the immediate as well as long term disruption of his life. I assess his general damages at $100,000.

¶ 277 The plaintiffs submitted that, as Dr. Upton had estimated Pedrum's impairment at 10-20%, the challenge was to translate that into dollars and they made some estimates of Pedrum's pre-morbid IQ and its reduction and the dollar consequences of such a percentage reduction in income. I think that the effort to translate such a prediction into lost future income in a mathematical way is unsound. It is not a mathematical problem; there are innumerable contingencies, good and bad, that might affect him in the future and might or might not have affected him absent the fire. As a general statement, it may well be true that higher intelligence generates additional income, but there is no evidence that the relationship is linear or that relatively small differences are economically significant. Motivation, willingness to work, sufficient good health to enable maximization of one's abilities and the good luck to be in the right place at the right time all play a role in most of our lives and may be expected to play a role in Pedrum's future.

¶ 278 That is not to say that no assistance can be derived by examining the sort of figures presented by the plaintiffs. Jim Muccilli, M.B.A., C.A., is a Principal in the Business Valuation and Litigation Advisory practice of Arthur Andersen and is well qualified to assist the Court on the mathematical aspects of this problem. He prepared his report largely upon assumptions given to him by plaintiffs' counsel. Some key assumptions were that Pedrum would have entered University in the fall of 1995 and this was deferred for a year by the fire; that he was unable to carry a full load and would graduate four years later than he would have; that he would have earned 10-20% above the average engineer's income during his career but for the impairment; and that the average engineer's income was, and would remain $70,000 per year in 2000 dollars.

¶ 279 Based on these assumptions, Mr. Muccilli estimated Pedrum's future loss of income on three bases. Alternative A assumes that he would have earned 10% above the average but for the fire; B that he would have earned 20% above average; and C that he would have become an

aeronautical engineer whose average income would have been $80,000 per year.

	A	B	C
Income without the fire		(millions)	
January 1, 2001 - May 31, 2040			
Present value	1.82	1.99	1.89
Less: Income post fire including $38,000 earned during the engineering co-ops			
Present Value	1.47	1.47	1.47
Present Value of Future Loss	.348	.514	.419

¶ 280 I don't accept the assumption on which C is based as Pedrum decided to switch to Mechanical Engineering for the wider opportunities it offered. The plaintiffs urge B on me as the fairest. It presupposes that the pre-fire Pedrum would have likely earned well above the average engineer. We are dealing with a person injured at the age of not quite 20 and in high school, his maturation by no means complete. He was, as I have found, an above average student. His pre-fire marks are not consistently so high as to give the impression that he was then a truly superior student, although some were very high indeed, apparently when his interest was engaged as in the aeronautical co-op. Since the fire, his Carleton marks are not a reliable guide to his possible impairment. He was distracted by the then recent events of the fire and by worry over Zari and he was, as he said, in a fog that only lifted when they moved to Victoria. There is strong reason in the evidence to think that the pre-morbid Pedrum would have continued to do better than average, but I don't accept the 20% impairment assumption as fair. The 10% impairment assumption underlying A is probably closer to the mark, but, as noted above, I do not accept that there is a linear relationship at work here. Once a person has achieved a university education, he has passed through the most significant income-differentiating factor. A somewhat better degree and a marginally better ability to concentrate, etc. may or may not become a factor in a long-term career. There is certainly a real possibility that Pedrum's career may be significantly affected and I should attempt to make a fair assessment of that possibility, given that we cannot wait and see. All things considered, I assess the present value of his future loss of income due to the fire at $250,000.

¶ 281 Pedrum's past loss of income as calculated by Mr. Muccilli is problematic because he has assumed that Pedrum would start his working life as an engineer at the average salary for all engineers. The better choice would have been the median starting salary at which level it appears that there would be no loss.

¶ 282 Pedrum's FLA claim for loss of the care, guidance and companionship of Zari is not included in the assessment of his general damages. It is clear that he and Zari had a very close relationship which has been reversed by the fire. Pedrum has become the one who gives care, guidance and companionship. Zari can now give very little back. I assess this loss at $40,000.

¶ 283 Pedrum's special damages were shown as $3559 for the courses at Camosun and treatment by Dr. Tahbaz, none of which would have been incurred absent the fire. OHIP's subrogated claim of $2176.67 is also allowed. Objection was taken to services rendered in B.C. at a cost of $310.47 as "suspect", but I do not see why they stand on any different footing than expenses incurred in Ontario. His eyes were injured in the fire; he saw an optometrist in B.C.

Damages III: Pejman

¶ 284 Pejman Sidouri has an FLA claim for the loss of care, guidance and companionship of both Zari and Pedrum. He was born in 1969 and has lived with his father since the parents separated in 1991. This was evidently a question of the father needing him; he remained close to his mother. He suffered emotionally through the long period of Zari's hospitalization. The fire caused him to postpone a planned move to the U.S. for career purposes and to return from that move prematurely. After Pedrum moved to Ottawa, Zari was alone for a while and then came to California in November 1996 to visit Pejman and her sister. Pejman was surprised at Zari's personality

changes. When she returned to Toronto after a quarrel with her sister, he moved back to be with her in early 1997. Like Pedrum, he has reversed roles with Zari and is now an advisor and comforter to her. Since Zari and Pedrum moved to Victoria, Pejman has visited them four times for periods from two to four weeks each time. This relationship was also a close one and I do not propose to compare it minutely with Pedrum's. The two sons have similar losses in relation to their mother and I assess Pejman's FLA claim in respect of Zari at $40,000. Pejman also has an FLA claim relating to his relationship with Pedrum. On the whole, at present there does not seem to be any adverse impact upon the relationship that can be traced to the fire. That life has carried them to different cities with reduced opportunity for contact is normal. However, at the time of the fire and for some years after, Pejman certainly suffered the loss of the brother he had known while Pedrum lived through his time "in the fog". I assess Pejman's loss in respect of Pedrum at $10,000.

¶ 285 It was submitted that Zari should receive an FLA award although counsel recognized that, if anything, her degree of companionship and care from Pedrum had increased and he had become one of her guides in life. It was said that Zari should be compensated for the reversal of roles. I agree and I have already included that factor in assessing her general damages.

¶ 286 There will be judgment in accordance with these reasons. The matters on which further information and submissions are to be made, as noted above, will be dealt with either in writing or at a hearing to be arranged. Counsel should contact my assistant, Ms. Polly Diamante, in due course to arrange a conference to discuss the arrangements. Costs and interest can be dealt with after all outstanding matters are completed.

¶ 287 It would be wrong to part with this case without expressing my gratitude to all counsel for the professional skill and welcome courtesy with which this long trial was conducted.

LANE J.

Calicloth Textiles Inc. v. Smith Falls (Town)

Between
Calicloth Textiles Inc., Spidertex Inc. and Arko Textiles Inc., plaintiffs, and
The Corporation of the Town of Smith Falls and B. Poole Structures Limited, defendants

[2001] O.J. No. 4946
Court File No. 96-CV-100668

Ontario Superior Court of Justice
Manton J.

Heard: September 4-7 and 11-13, 2001.
Judgment: December 12, 2001.

Counsel:

Brian Parnega, for the plaintiffs.
David R. Neill, for the defendant The Corporation of the Town of Smith Falls.
Steven Stieber, for the defendant B. Poole Structures Limited.

¶ 1 **MANTON J.**:— This action was heard by me on the above dates and my decision reserved until today.

¶ 2 The Plaintiffs resolved all the issues with the Defendants and agreed to pay them the sum of $2,175,000.00 including interest and costs after taking into consideration the contributory negligence of the Plaintiffs. I am to apportion liability for the payment of this amount between the two Defendants.

¶ 3 The facts as stated in an agreed statement of facts filed as Exhibit 1 are as follows:

1. The Plaintiffs are all textile companies, whose principal is Balu Kuriya and as of March 14th, 1993 all of the Plaintiff companies were housed in a building located at 9 Hershey Drive in Smith Falls, Ontario.
2. In 1993, the building was owned by the Plaintiff Calicloth Industries (Calicloth) and the two other Plaintiff corporations were tenants in the same building.
3. On March 14th, 1993 at approximately 4:00 a.m. the roof of the building collapsed under a build-up of snow and this claim is for resulting damages sustained by the Plaintiffs.
4. The building was originally constructed in 1973. The Town has not been able to find the original plans. The Building Inspector in 1973 was Charles Yellen and he remains as the Building Inspector to this day.
5. The Town acquired the building for unpaid property taxes in 1981 and Town passed a by-law that authorized their acquisition of the property. The Town's own documents at that time indicate in interdepartmental memos that the Town was concerned about the roof support system.
6. The Town considered that it ought not to acquire the property without either a Ministry of Labour Safety Certificate or demolishing the building altogether, but did neither.
7. The Town set aside approximately $66,000 for repairs and retained a firm of professional engineers, Adjeleian and Associates to inspect the building who prepared a report dated September 14, 1981.
8. Remedial work was done by the Town in 1981 prior to its first tenant taking occupancy. The Town does not have copies of any written contract with the contractor who did this work or the plans for it. Nor do the Building Inspector and the Town Engineer who was in charge of the project have any files, notes, records or inspection reports.
9. Once the work was done, the Town Engineer and Director of Economic Development delivered a report which stated that:

   (a) Structural repairs carried out in portion of the building only.
   (b) The other areas (office areas, and the unleased areas) have not had any structural reinforcement and are also deficient.
   (c) There were concerns about the structural capacity of the outside walls.

(d) Much of the work during original construction was done in a slipshod manner using the cheapest materials. Deterioration due to weathering and ageing will mean high maintenance costs. It will be important to keep the building from totally deteriorating.

10. The Town subsequently budgeted $60,000 for further repairs to this building but that money was never used for such repairs.
11. In early 1985 the Town listed the building for sale.
12. The Town obtained an opinion from Rivington Associates, a Real Estate Appraiser as to the property's fair market value, which opinion was dated June 11th, 1985.
13. The building was empty at the time the Town had it for sale in 1985.
14. At that time in 1985, the building had an area of approximately 20,000 square feet and was 120 feet by 160 feet with the latter dimension being the frontage.
15. In 1985, Mr. Kuriya called the Town to confirm that the building was for sale.
16. Calicloth purchased the building on September 13th, 1985 for $85,000.
17. In 1987, the Plaintiffs added to the building which addition had approximately the same dimensions as the building, (120 by 180 feet) and was designed to run along the north side of the building. (north side)
18. The Plaintiffs entered into a contract with the Defendant B. Poole Structures Limited (the Defendant Poole) for the construction of the 1987 addition.
19. This structure had a height of 14 feet and a peaked roof that had a pitch, unlike the original roof which was flat. The total cost of this addition was $425,200.
20. The Plaintiffs contracted with the defendant Poole to construct a second Butler building addition in 1990 at a cost of $500,700. (14' had a pitch by 120 x 180) i.e. (same dimension as para. 17 west side).
21. Mr. Poole is the President and sole Shareholder of the Defendant Poole. He resides at R.R. #5, Perth with his wife who is the Secretary of the Company.
22. Mr. Poole has been in the construction business for approximately 40 years and has been operating the Defendant Poole for the last 25 to 30 years.
23. The Town was not provided with any engineering opinion as to the integrity of the roof, vis a vis an increased snowload.
24. "Engineering costs" were included in his Poole's contract prices.
25. With respect to the second addition, an engineer had been retained by Poole, but not to provide any inspection services and did not provide any "as built" drawings.
26. Poole understood his contract documents for the erection of this building to mean that it was up to him to insure that there was no excessive snow load on the original building.
27. Poole was on the roof of the original building on one occasion, between the second addition in 1990 and the collapse in 1993 at which time there was nothing about the roof that gave him any concern.
28. The two Butler building additions were placed adjacent to the unreinforced partitions of the roof.
29. Poole and McLean, his engineer with respect to the first addtion (sic), had noticed the reinforcing in the original building but had not been concerned about the fact that the entire roof had not been reinforced.
30. The unreinforced portions of the roof collapsed.

¶ 4 The position of the Defendant, The Corporation of the Town of Smith Falls (the "Town") is that the roof of the original building collapsed on March 14th, 1993 after a heavy snow fall because of the negligence of the other defendant which negligence consisted of not reinforcing part of the roof on the existing building at the time the two additions to the existing building were constructed. The position of the Defendant B. Poole Structures Limited ("Poole") is that the roof of the original building collapsed after a heavy snow fall because of the negligence of the Town which negligence consisted of reinforcing only part of the roof on the existing building when they knew that the whole roof was deficient and selling the said land and building to one of the plaintiffs without disclosing to the purchaser the fact that only part of the roof was reinforced and issuing a building permit for each of the two additions to the building notwithstanding the fact that the snow load capacity on the existing building as a result of these constructions was not indicated on the plans prepared by the professional engineers.

¶ 5 The original building was constructed in 1973. The municipality cannot find the plans filed in order to obtain a building permit for this construction although Charles Yellen ("Yellen"), the deputy building inspector at the time for the Town, said that a building permit was issued on October 17, 1973, and that one Masika was the engineer who drew the plans for the building. Yellen said he visited the building while it was being constructed in his capacity as deputy building inspector.

¶ 6 After the Town became the owner of the property in 1981, they requested J. Adjeleian, a professional engineer, to assess the structural integrity and safety of the building. An engineer by the name of Juan J. Salinas ("Salinas") made an inspection and prepared a report making the following recommendations.

1. Present roof membrane and joist system should be reinforced or replaced by an adequate system consisting of parallel chord wood roof trusses and insulated roof.
2. Upper four-foot part of south wall should be reinforced by installing 1" x 4" diagonals.
3. Knee bracing to be provided between joists and plywood beams. Cross-bracing to be provided between roof joists.
4. Lateral bracing to be provided by interior walls.

¶ 7 Salinas proposed the following remedial work:

1. Present roof to be reinforced by a system of secondary beams (MK 2) spanning 20 feet in the direction perpendicular to existing Queen Post Joists. These secondary beams, spaced at 8 ft. on centres are nailed to and support the top chord of the Queen Post Joists. These beams consist of 12" open web steel joists supporting a load of 350 p.l.f.
2. Secondary beams are supported at each end by main trusses (T1) with a span of 24 ft. These main trusses (steel) consist of 26" overall depth with specially designed supports at the plywood beam or at the wall.
3. Main truss column support (MK 3) consists of an especially designed assembly of two standard 8" channels attached to the existing columns by two 1/2" plates. This assembly also incorporates two 2" x 8" pieces of lumber on each side of the plywood beams and running down along the column in order to provide lateral restraint.
4. Main truss wall supports (MK 4) consist of two 2" x 8" attached to the 2" x 4" stud in the stud wall and three 2" x 6" nailed on each side of the 2" x 8" and the whole assembly being boxed by 1/2" plywood and capped by a 2" x 6". These supports, integral with the existing wall, will also contribute to its stiffness.
5. Special secondary beam wall supports (MK 5) are provided along the East wall.
6. In order to provide overall lateral stability to the structure, interior walls must be constructed. These will consist of 2" x 4" stud walls with 1/2" plywood sheathing (wall W1) in the North-South direction.

   These walls must be at least one bay (24 ft.) long, but preferably two (48 ft.). Their position would be along column line, 40 ft. and 80 ft. from the East wall. Alternate location or size of interior walls must be discussed and approved by a professional engineer.

7. Top portion of South wall must be reinforced by 1" x 4" diagonals spanning over 4 studs.

¶ 8 It is unknown what remedial work was done. All that is known is that some remedial work was done, including the reinforcement of the roof on part only of the existing building. Other than the preparation of the report, Salinas was never called upon to do anything else and was not aware that the roof was reinforced until a short time before the trial of this action. Although a building permit was required to do work to reinforce part of the roof of the existing building none was ever obtained by the Town, and no plan signed by an engineer was ever filed with the municipality to do this work.

¶ 9 Lucien Lalonde ("Lalonde"), the Director of Economic Development for the Town, said that he had concerns regarding the building. When asked why only part of the roof was reinforced, he said it was because only part of the building was rented by the Town to prospective tenants and if the business expanded then the Town would look at reinforcing the other part of the building. After the Town had made the repairs to the building, Lalonde sent a memorandum to the mayor, councillors, the clerk administrator, and the director of engineering, reporting the following:

a) structural repairs carried out in a portion of the building only. The other areas (office areas, and the unleased areas) have not had any structural reinforcement and are also deficient.
b) the roof membrane will likely need replacement in the very near future, consideration could be given to adding insulation at that time.
c) there are concerns about the structural capacity of the outside walls. One section of wall was observed to buckle when load was transferred to it from a temporary ceiling support. These walls should be reinforced with cross bracing or plywood sheeting were (sic) possible.
d) much of the work during original construction was done in a slip-shod manner using the cheapest materials. Deterioration due to weathering and aging will mean high maintenance costs. It will be important to keep the building from totally deteriorating.

¶ 10 In 1985, the Town sold the property to one of the Plaintiffs, Calicloth Textiles Inc. without informing the purchaser of the existence of the investigation and report made by Salinas and the concerns of Lalonde. In 1987, an addition was constructed on the north side of the existing building by the Defendant Poole. In 1990, a second addition was built on the west side of the building by the same Defendant.

¶ 11 Before the construction of each addition, plans were prepared by a professional engineer and these plans were reviewed by the Ministry of Labour for the Province of Ontario. The contract for the construction of each addition provided for payment by the Plaintiff owner to Poole for the service of a professional engineer, including engineering site work. A building permit was issued by the Town for each of the additions notwithstanding the fact that the snow load capacity for the existing building was not indicated on the said plans.

¶ 12 Several engineers were called as expert witnesses by the Defendants. Anatola Kornachuk is a professional engineer specializing in structural design. He attended the site on March 15, 1993, the day after the roof collapsed. His evidence is that the inspection of the damaged roof immediately revealed that the roof supporting system contravened the basic principles of elementary structural engineering. He also said that the two locations where the roof most recently failed were found in the part of the existing building where the roof was not reinforced. He concluded that the three factors that played a part in the roof collapsing were:

1. The recent plant additions in 1987 and 1990.
2. The roof structure in the original building contained fundamental design flaws.
3. The building deterioration.

¶ 13 With respect to the first factor, he said that it was not the most serious and, although his testimony is that because of the difference in the roof elevation between the addition and the existing building this would increase the snow load on the existing building and the engineers should have provided for that by reinforcing the part of the roof of the existing building that had not been reinforced.

¶ 14 With respect to the third factor, this witness said that the building was deteriorating because of flawed construction and the stripping for the roof was bad. It is also his opinion that the Defendant Poole failed to be concerned with respect to the weight on the existing roof and that this Defendant should have dealt with this problem. The roof on the original building was visible for inspection in 1987 and 1990, and it should have been reinforced. He concluded by saying that the primary responsibility rests with the existing roof not being strong enough to carry the snow load.

¶ 15 Salinas is a structural engineer specializing in wood engineering and has been a professor in engineering at Carleton University for the past 26 years. He was asked by a colleague engineer and professor by the name of Adjeleian as a favour to the late mayor of the Town to assess the structural integrity and safety of the existing building. He inspected the building before part of the roof was reinforced and he made the recommendations and proposed remedial work as stated earlier in this judgment.

¶ 16 It would seem that the Town took it upon themselves to do remedial work without further consultation with Salinas. In fact, Salinas did not even know that the work was carried out because he says he never went back to the site after his report was completed although Lalonde says he saw him there two or three times when the existing roof was reinforced.

¶ 17 Salinas tells us that his report was not intended for construction purposes and to use his report for that purpose would have required drawings sealed and signed by him or another professional engineer. He was never told that his report would be used to effect the reinforcement of the roof on part of the existing building. He made no report on the condition of the roof on the southwest side of the building because that part of the building was locked when he inspected the building and he could not gain access to it. In fact, the Town was not interested in reinforcing that part of the roof of the existing building because the space beneath it was to remain vacant for the time being.

¶ 18 John Leggett, another structural engineer was called by the Town. He was retained by insurance adjusters to prepare an engineering report on the localized roof failure which occurred on March 14, 1993. In his report, he states:

> Drawings as submitted for building permit for the 1987 and 1990 building additions were viewed in the Town office. Both sets of drawings indicated the design loading for the roofs of the new buildings but made no reference to the increased snow loading (as per the Ontario Building Code) acting on the adjacent, existing, lower roof structure of the original building. Both sets of drawings were stamped by registered professional engineers.

He concludes:

> ... The fact that the roof failure occurred shortly after the heavy snowfall of March 12, 1993, in the area adjacent to the ridge (the highest point) of the 1990 building addition, would suggest that the probable cause of the roof failure was overstress of the trusses as a result of drifting snow ...

¶ 19 He found that the building was not particularly well maintained and had several deficiencies. He said that the additions to the building, which were higher than the existing building by some 14 feet, could induce snow drifting on the existing building and that at one point the snow load would be 104 pounds per square foot where the roof collapsed.

¶ 20 It is his opinion that the calculation of the snow load on the existing building would be the responsibility of the Defendant Poole and that the structural engineer should have assessed the snow load on the existing building due to the construction of the additions.

¶ 21 Robert Halsall is a professional engineer who graduated as a civil engineer in Glasgow, Scotland in 1947. Amongst his many other professional affiliations, he is a fellow of the institute of professional engineers. He was asked the following questions and gave the following answers:

> Question A:
> Is it the responsibility of a building department to determine or be alerted to the effect of a new addition to an existing building in terms of snow load and specifically when the Town approved the drawings for 1987 and 1990 additions, did they have a responsibility to check as to the implications of increased snow load acting on the adjacent and existing roof structure of the original building?
> Response A:
>
> A.2 In my opinion, one of the primary functions of a municipal building department is to ensure that buildings within the municipality comply with the Codes and Building Standards which have been adopted by that municipality, for purpose of avoiding risk to public safety. Some building departments have on staff structural engineers who are competent to assess the information provided on drawings submitted for building permits. Such departments from time to time undertake detailed design checks, which would include assessing the loadings on new buildings and also their effect on existing adjacent buildings.
> A.3 Many building departments do not have structural engineers on staff. In those cases I believe the municipality should be entitled to rely on the technical expertise of the professional engineers and/or architects who have sealed drawings submitted for building permits.
> A.4 However, I believe the municipality does have an obligation to ensure that documents submitted with building permit applications do contain the information

required by the appropriate by-laws. This is more an administrative issue than a matter of design expertise.

A.5 It is common practice for building departments to review drawings to ensure among other items that structural safety issues such as roof and floor loadings are properly indicated on drawings.

A.6 Smith Falls By-Law 3844-71 which would have applied when the original building was constructed in 1973, adopted the 1970 National Building Code (NBC), but added Sub-Section 1.8.1 which gave the building department the authority "when deemed advisable, to require the certificate of a qualified architect or Registered Professional Engineer, qualified in building construction certifying that plans and specifications submitted by an applicant comply with the provisions of this by-law".

A.7 Although I have not seen permit drawings for the original construction, reference in the available material indicates that structural drawings were stamped by N. Masika, P.Eng. Thus the procedure may well have complied with the then applicable by-law and the municipality could rely on certification by Mr. Masika.

A.8 The 1970 NBC did require that "Review of the construction of any building or part thereof shall be carried out by the designer or by another suitably qualified person to determine whether or not the construction conforms to the design". Such a review, if carried out, could have given the Municipality additional assurance about the adequacy of the structure.

A.9 The report on the original building by Adjeleian and Associates (Adjeleian) in 1981 clearly indicates that the original structural construction was deficient, but, as noted in A7, it seems probable that the municipality could have properly relied on the professional competence of Mr. Masika.

A.10 When application was made for a permit for the first addition in 1987, the applicable building code appears to have been the Ontario Building Code (OBC) 1983. I have not seen any supplementary by-laws that may have been added to the municipality concerning the processing of applications.

Smith Falls By-Law 4234-76 may have still been in effect. It states in Sub-Section 2.3.1 "Sufficient information shall be submitted with each application for a permit to enable the chief official to determine whether or not the proposed work will conform with the Act, the Regulations thereunder and any other applicable law".

A.11 The three drawings relating to the 1987 addition which have been provided to me do not provide clear details of the relationship between the new work and the building that then existed. Drawing M2686 gives the eaves height of the proposed addition as 14'-0", and the slope of the roof as 1/4 in 12, to a peak on the centreline of the new building. On a slope length of 90ft this would result in a peak height of 14'-0" plus 90x1/4"=15'-101/2". The height of the existing roof is not given, but "Front Elevation" on drawing M2686 does show that the roof the existing building is lower than the eaves of the proposed addition.

The Adjeleian report of 1981 gave the roof height of the existing building as 12'-0".
There was thus sufficient difference in height between the two roofs to result in snow drifting and a requirement for an increased design load as set out in the then current OBC.
In my opinion it was the responsibility of the building department under those circumstances to recognize that there was a difference in roof levels that would affect the snow loading on the existing roof. The building department should have ensured that the drawings submitted for building permit application contained sufficient information to allow determination of the effect of increases snow loading on the existing roof. I would not expect the building department to be responsible for checking the effect on the existing roof, but they had a responsibility to ensure that enough information was provided, and that the issue had been addressed by a professional engineer.

A.12 In this particular case, as there had been a partial collapse of the existing roof as investigated and reported by

Adjeleian in 1981, before application was made for the 1987 addition, I would expect the building department to be aware of the sensitivity of the existing building and to be particularly aware of and concerned about the implications of building a higher building adjacent to the existing one.

Question B:
Did the Town act reasonably in carrying out repairs to part of the roof of the existing building as opposed to reinforcing the entire roof?
Response B:

B.1 In my opinion it was not reasonable to leave a portion of this roof unreinforced after being notified of the deficiencies described in the Adjeleian 1981 report. It had to be assumed that the balance of the building probably failed to meet the design requirements of the Ontario Building Code, both at the time of original construction, and in 1981 and 1987.

¶ 22 He stated that the 1987 addition had nothing to do with the roof collapse.

¶ 23 It is his opinion that the building officer is entitled to rely upon the seal of the engineer and the Town does not have to redo the calculation for snow drift. The building officer saw the stamp of the engineer on the 1987 and 1990 drawings and made assumptions and in his opinion he could rely on the drawings.

¶ 24 After hearing all the evidence, I have come to the conclusion that the negligence of both defendants was responsible for this roof to collapse.

¶ 25 These damages could have been avoided if the Defendant Poole had calculated the possible snow load on the original building because of the construction of the two additions constructed to a height of 14 feet higher than the existing building.

¶ 26 These damages could have been avoided if the Town had warned the Plaintiff who purchased the building that only part of the roof was reinforced, and if the Town had required, as does the OBC that a calculation be made showing the snow load on the existing building due to the construction of the additions when they knew or should have known that the additions were taller than the existing building.

¶ 27 I cannot find whose negligence is greater in the circumstance and I, therefore, conclude that the defendants are equally at fault and each will pay one half of the agreed sum of $2,175,000.00. For obvious reasons, the cross-claim of each defendant is dismissed. If necessary, I am to be spoken to with respect to costs.

MANTON J.

La Sucrerie Casselman Inc. v. Cambridge (Township)

Between
La Sucrerie Casselman Inc., plaintiff, and
The Corporation of the Township of Cambridge, Jacques Whitford Limited and John D. Paterson and Associates Ltd., defendants

[2000] O.J. No. 4650
Court File No. 97-CV-002942-CM

Ontario Superior Court of Justice
Morin J.

December 5, 2000.

Counsel:

Paull N. Leamen, for the plaintiff.
Ben Marcus, for the Corporation of the Township of Cambridge.
P. Donald Rasmussen, for Jacques Whitford Limited and John D. Paterson and Associates Ltd.

¶ 1 **MORIN J.**:— In 1990 the plaintiff constructed a combination theatre and restaurant on its land at a location which put the building at risk of being consumed by a retrogressive landslide into the South Nation River. The chance of such a landslide occurring is slight but the result could be so catastrophic that the risk is unacceptable, absent appropriate remedial work being carried out.

¶ 2 The plaintiff now seeks damages from the defendant geotechnical engineers who provided it with some support in an application for a building permit and from the defendant municipality that issued the building permit.

¶ 3 Attached to these Reasons as Schedule "A" is a summary of the evidence which I have prepared from my bench notes. I have reviewed and considered all of this evidence in arriving at my conclusions.

¶ 4 The plaintiff's property is bounded on the north by the South Nation River. The property is located on the seventeen kilometer stretch of the South Nation River between Casselman, five kilometers to the east of the plaintiff's property and Lemieux, twelve kilometers downstream from the plaintiff's property.

¶ 5 Over the centuries several retrogressive landslides have occurred along that stretch of the South Nation River. In 1971 a retrogressive landslide occurred toward the Lemieux end of the stretch of river which saw approximately seventy-five acres of land slide into the river. In the Summer of 1993 the biggest retrogressive landslide of recorded history occurred at the Lemieux end of the river stretch. That landslide retrogressed for a distance of several hundred meters and the extent of its devastation can be seen in the photographs tendered as Exhibit 19 in this action. In the immediate area of the plaintiff's lands there are scars left by three significant retrogressive landslides which appear to have occurred sometime during the nineteenth century. Two of these landslides occurred almost directly across the river from the plaintiff's lands. The third occurred on the same side of the river as the plaintiff's land, a few hundred meters to the east of the plaintiff's land.

¶ 6 Following the 1971 landslide the Provincial Government, through its Ministry of Natural Resources (MNR), became actively concerned about this stretch of the river and the potential for devastating retrogressive landslides. Since that time there have been many studies conducted and significant government involvement both at the provincial and municipal level. As well, beginning in the early 1980's the South Nation River Conservation Authority (the Authority) whose responsibility it is to manage natural resources within the watershed, became involved in identifying and protecting areas susceptible to retrogressive landslides.

¶ 7 Beginning in 1985 Golder Associates, consulting geotechnical and mining engineers, in the person of Clifford Morey (Morey), began to perform slope analysis on the river particularly at an area known as the Sequinburg Development downstream of Casselman.

¶ 8 Morey is a registered professional engineer, a member of the Canadian Geotechnical Society and a designated consulting engineer. He received his B.SC. Geological Engineering from Queens University in 1973 and his M.Sc. (Eng), Civil Engineering, from the same university in 1977. He took further graduate courses in Civil and Geotechnical Engineering at the Universities of Windsor and Carleton in 1980 and 1982. He was employed as a geotechnical engineer by Golder Associates from 1980 to

1994 during which time he performed subsurface investigative work and slope stability analysis in the area of the South Nation River. He has performed a half dozen geotechnical investigations on the South Nation River along its length from Casselman to Lemieux and beyond those limits has conducted approximately another dozen geotechnical investigations on the river. Morey left Golder Associates in 1994 and since that time to the present has been president of his own engineering firm carrying out geotechnical and hydro geological investigations and environment site assessments. He continues to this date to do work in connection with the South Nation River. On the evidence there is no one in the profession who has done as much work as he in connection with the South Nation River.

¶ 9 At Tab 13 of Exhibit 4 is a letter from Golder Associates in the person of Morey to the Authority dated July 15, 1988 confirming Golder Associates' interest in continuing to provide geotechnical services to the Authority relating to slope stability along the South Nation River and outlining a proposed methodology for investigating the stability of the slopes along the river between Casselman and Lemieux. Golder Associates was in fact retained by the Authority for that purpose and Morey was project engineer. The retainer was prompted primarily by MNR. That particular stretch of the river was of particular interest because of the retrogressive landslide of 1971 and the growing wish to develop along the river in the face of safety concerns.

¶ 10 The letter of July 15, 1988 outlined a three phase plan, phase 1 of which was already in progress at the time that the letter was sent and which included the drilling, at some fifteen individual sites, some twenty-two bore holes, analysis of the bore hole results and a determination, following the drilling and site recognizance work, of the stability of the slopes at each site by way of computer methods and the evaluation of retrogressive landslide activity for each site. Phase 2 was intended to consist of detailed contour mapping of the site to provide cross sections of the riverbank at any specific location throughout the site to permit decisions to be made in view of present and possible future land use as to areas of the site where it would be appropriate and beneficial to carry out further specific detailed investigations to determine the remedial works required to stabilize the riverbank. Phase 3 would consist of specific site investigations in high risk areas.

¶ 11 At Tab 15 of Exhibit 4 is the Golder Associates report dated September 1988 submitted by Morey to the Authority and relating to Phase 1 of the work. The report notes that a review of air photos of the South Nation River between Casselman and Lemieux indicates that at least fifteen retrogressive type slope failures have occurred historically along this twenty kilometer section of the riverbanks. The river is approximately one hundred meters wide.

¶ 12 Marked as Exhibit 5 was FIGURE 2 from the report which shows fifteen or sixteen retrogressive landslide areas. As Morey testified, the number of such retrogressive slide areas is significant in that it shows the activity along the river shores and the tendency for retroactive landslides along that stretch of the river. The landslide designated as M occurred in 1895 and retrogressed some six hundred and fifty meters from the river's edge. The landslide designated as H occurred in 1910 and retrogressed some three hundred and fifty meters from the river's edge. Exhibit 5 shows that apart from the three significant landslides in the immediate area of the plaintiff's property, the bulk of the landslides occurred at the Lemieux end or the downstream end of the stretch.

¶ 13 The landslide sites shown on Exhibit 5 were plotted on Table II appended to the report. The width and distance of retrogression from the river's edge of each of the landslides is indicated in Table II. The distance of retrogression from river edge varied from fifty meters to six hundred and fifty meters. As Morey put it, these slides are an indication of what happened in the past and what might happen in the future.

¶ 14 I may say that of all the geotechnical engineers that I heard from during the course of this trial, none has as much practical experience as Morey with respect to the stretch of the river under consideration and none is as qualified to address the question of initial slope failure at any given site and the retrogressive distance in the event of an initial failure. Where his evidence is at odds with any of the other technical evidence that I have heard during the course of this trial, I much prefer his.

¶ 15 For the purpose of this report, MNR selected fifteen sites for bore holes and Morey put down twenty-two bore holes at the fifteen sites with some bore holes being placed both at the crest and at the toe of the slope at a given site. Following completion of drilling, piezometers were placed at different levels in the hole to measure ground water in the slope and to provide a profile of ground water in the slope. In addition, profiles in the slopes in terms of steepness and height were developed. The bore holes generally disclosed an upper sand layer over silty clay that became stiffer the deeper it went. Test results indicated generally that the toes of the slopes were very unstable and that some of the steeper slopes had safety factors of less than 1.5. The safety factor is the ratio of forces that resist failure over forces that tend to cause failure and is determined by a

computer analysis. A safety factor of 1.5 is considered safe in the industry. Anything below 1.5 is considered questionable and as the ratio approaches 1 the risk of failure increases. If the safety factor is below 1 then the slope has, in fact, failed. Theoretically, a slope with a factor of safety of less than 1 will fail and a slope with a factor of safety greater than 1 will not fail. However, for the purpose of this study, a computed factor of safety of 1.0 to 1.3 was considered to indicate an unstable slope condition while a factor of safety of 1.3 to 1.5 was considered to indicate a slope which is less likely to fail in the long term and provides a degree of confidence against failure ranging from marginal to adequate should actual conditions vary from the assumed conditions. A factor of safety of 1.5 or greater is considered to indicate long term stability provided the slope profile is not steepened by toe erosion or by other means.

¶ 16 The report makes reference to the ground water conditions as ascertained by the piezometers in each of the bore holes. The results indicated that the riverbank is generally saturated below a depth of 1 to 2 meters where the sand cap is relatively thin and where the sand cap is significantly thicker, the slopes are saturated below a depth of about 4 to 5 meters. It was noted that at all sites the ground water measurements indicate that a downward flow of the ground water is occurring within the slopes.

¶ 17 The report beginning at page 11 thereof, discusses the theory of landslide retrogression. It would be worthwhile to quote from that portion of the report:

> It is considered that retrogressive landslides and earth flows are initiated by a simple rotational failure of a slope in a "drained" strength condition (no negative pore water pressures). This initial slope failure may encompass the entire slope or only a portion of the overall slope face. Retrogression occurs when the slide debris from this initial simple rotational slip flows out of the failure area and leaves an unstable backscarp which in turn fails. Continued reoccurrence of this phenomena results in retrogression of the landslide as long as the slide debris flows out of the failure area and the slope material continues to fail in a drained state. However as the slide continues to regress, negative pore water pressures develop due to lateral stress relief causing an undrained strength condition to exist in the backscarp materials. This has the effect of increasing the strength of the soil comprising the slope and will terminate the landslide retrogression unless the conditions of the backscarp allows the criteria for undrained failure to be satisfied.
> The criteria for undrained failure of a slope backscarp can be related to the slope stability number. The stability number, Ns, of a slope is defined as the ratio of the height of the slope and the unit weight of the slope material to the undrained sheer strength of the slope material. If the stability number of a backscarp is calculated to be greater than 4, it is considered that the backscarp has satisfied the condition for undrained failure and is likely to fail and allow retrogression of the landslide to continue in an undrained condition. Retrogressive flow slides will terminate when retrogression produces a condition such that the undrained failure criteria is not satisfied. This could occur if the undrained sheer strength of the backscarp material increases as the slide progresses into the table land, the height of the backscarp decreases as the failure area becomes shallower, or the slide debris fails to flow from the failure area. The more devastating landslides, however, develop into earth flows due to what is considered to be the phenomena of plastic extrusion of softer cohesive materials which exist at depth in the slope due to the weight of the overlying materials. It is considered that for steep backscarps in sensitive clays a continuous plastic flow phenomena can develop if the stability number is greater than 6.

¶ 18 Exhibit 5A is a portion of the report analyzing various slope profiles. It was Morey's evidence that the slope profile drawn at FIGURE 6 of Exhibit 5A is the closest slope profile to the plaintiff's lands. FIGURE 6 describes it as Slope Profile - Site 1/2. If one refers to Exhibit 5 one will see that bore holes 1 and 2 are in the vicinity of the plaintiff's lands with number 1 bore hole being near the top of the slope and number 2 bore hole near the toe of the slope. Morey's analysis of Site 1/2 was that it was a sensitive clay site with a minimum safety factor of 1.0 in the toe and an overall safety factor of 1.4.

¶ 19 Generally, the results of the computer stability analysis indicated that all sites investigated, except for designated sites which did not include Site 1/2, had the potential for either slope toe or overall simple rotational instability either of which could initiate a retrogressive landslide. (See INTERPRETATION OF RESULTS, page 18 of the report)

¶ 20 Conrad Lamadeleine (Lamadeleine) is the sole shareholder of the plaintiff company. He has lived most all his life in Casselman. He has carried on business there as an investment and insurance broker since 1961

and indeed he was the reeve of Casselman for some thirteen years until approximately two years ago.

¶ 21 The subject property was first acquired as a twenty-eight acre lot in 1982 for the sum of $45,000.00. Lamadeleine eventually transferred approximately twenty acres of the property to the plaintiff company and kept about eight acres for himself. The property contains a sugar maple bush and upon purchase Lamadeleine started up the maple syrup business which had been carried on there years before.

¶ 22 For all intents and purposes, except for a short period of time in 1996, the plaintiff's lands were included in set back zones established by the MNR and the defendant municipality. These zones were variously referred to as hazard zones or study zones in which potential retrogressive land slides were of concern. Mr. Lamadeleine at all material times was fully aware of that fact and was very much aware of the concerns that the authorities and others in the municipality had with respect to the stability of lands bordering the South Nation River between Casselman and Lemieux.

¶ 23 In late 1987 or early 1988 Lamadeleine was considering expanding the company's business to include a bilingual summer theatre. The existing building on the property was not adequate for a theatre and Lamadeleine was considering constructing a new building which would be a combination theatre and restaurant, perhaps sixty feet wide by eighty feet long, designed to accommodate approximately three hundred people. Initially his plans were to construct this new building to the south of a large deep ravine that ran across the more southerly portion of the lands in an east west direction.

¶ 24 In a letter from MNR to Lamadeleine dated November 10, 1987, the Ministry responded to concerns that Lamadeleine had expressed about the hazard area. The letter reads in part as follows:

> The concerns you describe are unfortunate. These concerns are shared by other property owners along the South Nation River. Our Ministry's role is to determine how serious the landslide problem is and to recommend appropriate building set backs or other solutions for consideration by the Township. As this Ministry has no direct control on permitted land use, we respectfully request that you direct your concerns to the Township.

See Exhibit 4, Tab 8.

At Tab 9 of Exhibit 4 is a letter from the Ministry to Lamadeleine dated December 14, 1987 which reads in part as follows:

> Enclosed is a map outlining the known earth flow failures near your property. These failures have been identified as occurring in the 1800's. In the earth flow zone, between Lemieux and Casselman, 18 large failures have been identified and 3 have occurred in the last 95 years.

¶ 25 At Tab 14 of Exhibit 4 is a letter from the Ministry to Lamadeleine dated August 31, 1988. It reads in part as follows:

> Subsequent to our visit to your summer theatre/sugar bush we requested clarification of where the line identifying the set back traversed your property. You will note on the attached map that it includes most of your bush and the site of the proposed new theatre.
> The slopes in the "earth flow" area in which you are located are presently being evaluated. Our regional engineer is expecting results this fall of tests based on bore holes already completed. The South Nation River Conservation Authority has requested funding to continue this study into 1989.
> A reduction or modification to the earth flow area can only be determined after the completion of this study. Based on the best available information on slopes in your area, we cannot recommend a reduction at this time.

¶ 26 While the site that Lamadeleine had chosen for the construction of the new theatre restaurant was located to the south of the east west ravine, there was an existing building located to the north of the ravine which, with appropriate modification and extension, could accommodate upwards of two hundred people. It was suggested to Lamadeleine by an associate that he renovate the existing building and operate the theatre restaurant in the renovated building for a few years in order to determine whether the business was viable. He decided to do so. The existing building was located to the north of the east west ravine at a distance of approximately one hundred and eighty meters from the river's edge measured perpendicular to the river. That is, the shortest distance from the building to the river's edge was approximately one hundred and eighty meters.

¶ 27 Before issuing a building permit for the renovations, the defendant Municipality required a site specific geotechnical inspection and analysis to

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determine whether the renovated building would be a safe distance from the river having regard to the concerns relating to retrogressive landslides.

¶ 28 After delivery of the September 1988 report to the Authority by Golder Associates, Lamadeleine attended at Morey's office and asked him to carry out an investigation of his site. Initially Morey suggested that Lamadeleine go to other consulting engineers because he was concerned that there might be a conflict of interest having regard to the fact that Golder Associates were retained by the Authority. Lamadeleine persisted. Morey conferred with the Authority and his own people and it was decided that Golder Associates in the person of Morey could be retained by Lamadeleine directly to investigate his site.

¶ 29 Morey had been told by Lamadeleine that he wanted to build a new theatre building on his property which was in a hazard zone and as a result he needed a site specific study to hopefully show that he was not in danger of a retrogressive landslide. The hazard zone established by MNR of some 800 meters from the riverbank and which had been established for approximately 10 years at the time encompassed the plaintiff's lands.

¶ 30 After being retained, Morey placed a bore hole on the Lamadeleine site, performed lab work, did an analysis of the slope, and eventually came up with a report.

¶ 31 By letter dated October 20, 1988 Morey provided Lamadeleine with a preliminary report. See Tab 20, Exhibit 4.

The preliminary report stipulates the following:

(a) The purpose of the evaluation was to determine the potential for retrogressive flow slide or earth flow to occur at the subject site and to determine a safe set back distance from the South Nation River for the construction of a proposed theatre building;
(b) Remedial measures to reduce or eliminate a required construction set back distance were also to be presented if considered necessary;
(c) Based on the results of the in situ and laboratory testing and imperical relationship which can be used to relate to soil parameters with the potential for flow slide or earth flow phenomena, it was considered that the general site area is susceptible to retrogressive flow sliding but probably not susceptible to the more devasting earth flow form of landslide.
(d) Based on the analysis a safe set back distance from the river edge for the building construction was calculated to be 400 meters;
(e) The set back distance of 400 meters might be substantially reduced by ensuring that initial failure of the river bank did not occur. Although detailed stability analysis had not at that time been carried out to determine exactly the appropriate remedial measures required to stabilize the riverbank, based on previous slope stability analysis carried out within the general area of the site, it was considered that flattening of the slope toe area at the river edge to an inclination of three horizontal to one vertical, and providing erosion protection using rip rap and geotextile in the lower portion and mulch and seeding for the upper portion would be sufficient. The length of riverbank along which the remedial work would need be carried out depended on the actual location of the proposed building and the distance between the proposed building and the riverbank. Once the desired location for the proposed building had been chosen the extent of riverbank remedial works could be determined.
(f) There are two major ravines located in the south east quarter of the lands. Major ravines act as a barrier against flow slide or earth flow retrogression. Accordingly, a portion of the lands is naturally protected from retrogressive landslides. The area of the site which is considered safe from landslide retrogression due to the presence of the ravines comprises an area bounded on the north by the east west running ravine located immediately south of the existing building.
(g) If the desired location of the proposed building is somewhat outside of the area described as being naturally protected by the ravine, the ravine could be extended and/or deepened to provide suitable protection.

¶ 32 In due course, Morey produced to Lamadeleine his final report which is dated November 1988 and is located at Tab 23 of Exhibit 4.

¶ 33 The final report confirms in greater detail the information and opinions contained in Morey's initial report. The final report details the procedures used, the existing conditions at the site, the theory of landslide retrogression and sets out the formula used by Morey in determining

retrogressive distance. Beginning at page 7 of the report, the following is said:

> The distance a landslide may retrogress has been studied by others to formulate imperical relationships between slope retrogression distance and easily determined slope parameters. Co-relations have been imperically developed based on documented landslides in eastern Canada which relate distances of retrogression with the stability number, the stability number and liquidity index or sensitivity and with the liquid limit and plasticity index of the slope materials. Based on co-relations relating these parameters to retrogressive distance and the results of the previous investigation carried out to assess the retrogressive landslide potential of the South Nation riverbank slope from Casselman to Lemieux, it is considered that the following equation provides an acceptable method for estimating retrogressive landslide distances in this reach of the South Nation River. R=(Ns-4) 180 where R = estimated retrogression distance in meters for Ns greater than 4.5. Ns = maximum stability number calculated for a specific slope.

¶ 34 Evidence during the trial would indicate that this is the most conservative formula for determining retrogressive distance. Having regard to the use to which the building was intended to be put and the number of people that might occupy it at any given time, it was reasonable for Morey to take the more conservative approach. In any event, the evidence disclosed that using this formula with respect to sites where retrogressive landslides had already occurred, resulted in the calculation of a retrogressive distance very similar to the actual extent of retrogression.

¶ 35 Under the heading RESULT, the final report at page 9 thereof states the following:

> The results of the site recognizance indicate that the riverbank toe slope at this site is in an active state of erosion and evidence of previous slope toe area failures and surficial sloughing is extensive.

and further at page 9:

> The stability numbers for the slope at this site have been calculated based on the results of the in situ vane sheer testing carried out in the bore hole. The calculated stability numbers range from about 1.0 to 5.9. All calculated stability numbers based on the in situ vane sheer strength obtained below a depth of 7 meters are greater than 4. Accordingly a steep failure backscarp at this site would be considered unstable in an undrained state thus satisfying the criteria for retrogressive undrained failure.

¶ 36 At page 10 of the report the following is said:

> The above results indicate that an initial slope toe area failure is possible at this site. A backscarp left from an initial slope failure is likely to continue to retrogress and the material remolded from the initial and subsequent slips is likely to flow out of the failure area resulting in a retrogressive flow side. Based on the retrogression distance equation previously discussed, a retrogressive flow slide at this site could be expected to regress some 340 meters behind the river shoreline.

¶ 37 Under the heading REMEDIAL WORKS in his final report, Morey points out that the results of his investigation indicate that a retrogressive landslide encompassing table land to some 340 meters back of the river's shoreline, is possible at the subject site and that a safe set back distance from the river's shoreline for building construction at the site is considered to be 400 meters. The final report goes on to point out that the set back distance may be substantially reduced by ensuring that initial failure of the riverbank does not occur. Morey points out that detailed stability analyses have not been carried out to determine exactly the appropriate remedial measures required to stabilize the riverbank but notes at page 11:

> ... however based on previous slope stability analyses carried out within the general area of the site, it is considered that flattening of the slope toe area at the river edge to an inclination of 3 horizontal to 1 vertical, together with some upper slope flattening and providing erosion protection using armour stone rip rap and geo-textile in the lower portion and mulch and seeding for the upper portion should be sufficient. The length of riverbank along which the remedial work would be carried out depends on the actual location of the proposed building and the distance between the proposed building and the riverbank. Once the desired location for the proposed building has been chosen, the extent and details of the riverbank remedial work can be determined.

Later in the report in discussing any required extension to the east west ravine, Morey points out that to prevent erosion of the extended ravine channel, a layer of protective rip rap should be provided within the channel and says the following:

> The rip rap should consist of a 450 millimeter thickness of 300 millimeter nominal size blast rock underlain by a suitable geo-textile filter fabric such as Mirafi P140.

¶ 38 The final report goes on to say the following at page 11:

> A recognizance of the site indicates the presence of 2 major ravines in the south east quarter of this site. It is known, based on observations of previous flow slides and earth flows, that major ravines act as a barrier or limit beyond which flow slide or earth flow retrogression does not extend. Accordingly it is considered that a portion of this site is naturally protected from retrogressive landslides. The area of the site which is considered safe from landslide retrogression due to the presence of the ravines encompasses an area bounded on the north by the east west running ravine located immediately south of the existing dance hall building and on the west by a line drawn southward from the south east corner of the dance hall building to the north west corner of the existing house at this site. This area is indicated in the attached site air photo, Figure 4. In planning the location of a building in this area a set back distance of between 10 and 20 meters from the crest of the ravine slope should be established. The actual set back distance within the above range depends on the height and inclination of the ravine slope adjacent to the proposed building location and should be determined in the field by the geotechnical engineer once the site for a proposed building has been chosen. In addition the chosen site of any proposed building which will rely on the presence of the ravines as the safeguard against landslide retrogression must be approved in the field by the geotechnical engineer.

¶ 39 It should be noted that the east west ravine was itself within the retrogressive distance computed by Morey.

¶ 40 Morey's two reports to Lamadeleine clearly indicate that if he wished to construct the building to the north of the east west ravine, it would be necessary for him to do extensive remedial work to the riverbank. Details as to the actual work to be done and the length of riverbank along which the remedial work would be carried out would have to be determined by further geotechnical analysis once the actual proposed location of the building was determined. The reports clearly told Lamadeleine that the building could be constructed to the south of the east west ravine which ravine would safeguard against a retrogressive landslide. Construction to the south of the ravine would obviate the necessity of doing remedial work at the riverbank.

¶ 41 Clearly, Morey in his reports told Lamadeleine to either do the remedial work at the riverbank or construct the building to the south of the east west ravine, extended if necessary. It was Morey's evidence that Lamadeleine had a perfect understanding of the advice being given to him and the alternatives being presented to him to safeguard against a retrogressive landslide and I find that to be the fact. As it turned out, Lamadeleine did not do the remedial work and constructed the building on the north side of the ravine.

¶ 42 Eventually Lamadeleine requested Morey to visit the site on two further occasions, October 19, 1988 and November 23, 1988. The purpose of the October 19th visit was to discuss the location at the site where construction of the proposed theatre building would require no remedial work. The site visit on November 23rd was to inspect and approve completed remedial work to the east west ravine performed in order to accommodate the location of the proposed building to the south of the ravine with a portion of it slightly to the west of the natural west end of the ravine. In other words, the east west ravine was extended a distance to the west in order to accommodate the construction of the building on the south side of the ravine further to the west.

¶ 43 In a letter to Lamadeleine dated December 28, 1988 located at Tab 25 of Exhibit 4, after referencing the two site visits Morey says the following:

> With regard to the remedial works carried out at this site, the results of the inspection on November 23, 1988 indicated that the existing ravine had been sufficiently extended and deepened to provide adequate protection against the possibility of a landslide for a building located on the south side of the ravine and east of the west extent of the ravine.

¶ 44 On the occasion of the site visit on November 23, 1988, Lamadeleine indicated to Morey that the building would be located south of the gully.

¶ 45 At Tab 34 is a letter from Morey to Lamadeleine dated April 21, 1989. The letter purports to provide clarification of the inspection of the work carried out at the site to protect the proposed theatre restaurant building from possible landslide retrogression. Morey in his evidence was unable to offer any explanation as to why Lamadeleine required clarification of the letter of December 28, 1988. In any event, the letter of April 21, 1989 notes that:

> The remedial work alternative chosen and carried out consisted of deepening the existing east/west running ravine at the site and extending the ravine westward beyond the proposed building location.

¶ 46 In the face of all of the documentation from Morey to Lamadeleine, which I find as a fact was at all material times in the hands of the Municipality, Lamadeleine applied for and obtained a building permit dated May 12, 1989 from the Municipality permitting him to construct an extension to the existing building north of the east west ravine thus turning the building into a combination theatre and restaurant which would accommodate some 200 persons. It remains to this day a mystery how the Municipality could have issued such a permit in the face of the Morey reports and letters without first satisfying itself that the required remedial work to the riverbank as determined by Morey had been satisfactorily completed. It should be noted that no knowledgeable person was called to give evidence during the course of this trial to explain the defendant Municipality's involvement in the issuance of the building permits. The only witness called on behalf of the Municipality was Steven Gauthier, an employee of the Nation Municipality into which the defendant Municipality of Cambridge has amalgamated. Gauthier began his employment with Nation Municipality in 1998 and had no involvement in this case before that. He was able to confirm that Brunette, the Municipality's Clerk at all material times, would know all about these matters as would Brisson, the building inspector at the material times. He confirmed that these individuals are still in the locality and available to come to trial to testify. He confirmed as well that there are members of the sitting council at the material times that are still in the area and available to testify.

¶ 47 In his evidence Lamadeleine testified that he did not understand the two alternatives being presented to him by Morey. Indeed those two alternatives are again set out by Morey in a letter to Lamadeleine dated May 2, 1989 at Tab 38 of Exhibit 4 which letter I find was in the hands of the Municipality at all material times. I totally reject Lamadeleine's evidence. I find as a fact that when he applied for and obtained a building permit to extend the existing building located to the north of the east west ravine. He knew full well that what little work he had done on the riverbank was not the remedial work referred to by Morey in his reports and had never been inspected or approved by Morey. Indeed, Lamadeleine knew full well from the reports that the extent of the riverbank remedial work, assuming he wished to construct to the north of the ravine, could only be determined by Morey once the actual building location to the north of the ravine had been determined. Prior to construction of the extension to the existing building located to the north of the ravine, Lamadeleine consistently advised Morey of his intention to construct to the south of the ravine. In my view, Lamadeleine purposely withheld from Morey the fact that he intended to extend the building located to the north of the ravine understanding full well the contents of Morey's reports to him and knowing full well that Morey would not have approved.

¶ 48 It is clear on the evidence that prior to the construction of the extension to the existing building north of the ravine, no meaningful remedial work had been performed by Lamadeleine at the river's edge.

¶ 49 Morey testified as to a meeting on the subject lands with a number of people including the Mayor of Cambridge, a representative of MNR, a representative of the Authority, members of council, the plaintiff and Lamadeleine. He does not recall whether the meeting was before or after the burning down of the first theatre restaurant. The purpose of that meeting was to determine whether the remedial work carried out by Lamadeleine on the riverbank was satisfactory. I accept Morey's evidence and find as a fact that it was at the time of that meeting obvious to everybody that what Lamadeleine had done on the slope was not remedial work and was totally inadequate. It did nothing to stabilize the riverbank. The work was not in any way in conformity with Morey's recommendations as contained in his two reports. It is likely that that meeting took place sometime after the extended building was destroyed by fire.

¶ 50 Shortly after issuance of the building permit dated May 12, 1989, the renovation work to the existing building north of the ravine began. The Township building inspector inspected the work to completion.

¶ 51 The renovation to the existing building on the north side of the ravine was completed in the Spring of 1989 and business was carried on

there in 1989 and 1990. In August of 1990 a fire occurred in an adjacent trailer being used by a theatre group. The fire spread to the building which burned to the ground.

¶ 52 It would appear that after the fire occurred Lamadeleine initially intended to rebuild on the south side of the ravine. He already had architectural designs for the site on the south side of the ravine. Indeed the application for a building permit received by the defendant Municipality on September 26, 1990 is stipulated as being for the construction of a theatre restaurant on the south side of the ravine. Although we have no first hand evidence on the point, we do have Lamadeleine's evidence that the health unit in Cornwall would not allow the existing holding tanks located on the north side of the gully to be moved to the south side of the gully. According to Lamadeleine's evidence the health unit was requiring that a new well and new septic system be established on the south side of the ravine if the new building was to be located there.

¶ 53 In any event, sometime subsequent to the destruction by fire of the renovated building located on the north side of the ravine, Lamadeleine became bound and determined to construct his new combination theatre restaurant on the same site, that is, to the north of the ravine without doing any of the remedial work at the river's edge as required by Morey. It is likely that in making this decision Lamadeleine was motivated by financial considerations.

¶ 54 By this point in time Lamadeleine was quite aware that the Authority objected to his building on the north side of the ravine without the remedial shore work being done. Lamadeleine confirmed Morey's evidence that after the fire on August 4, 1990, there was a meeting on the site with the Municipality, the Authority and Morey and it was made clear to Lamadeleine at that time that in Morey's opinion, the little work that Lamadeleine had done on the river's slope was not in any way sufficient nor did it constitute the remedial work set out in Morey's reports for a building to be located to the north of the ravine. It appears that at that point in time Lamadeleine was advised by the defendant Municipality that if he proposed to construct the new building to the north of the ravine, then he would have to get geotechnical engineers that would say that the new building on the north side of the ravine would be safe from retrogressive landslides.

¶ 55 In his quest to obtain from the Municipality a building permit allowing construction of a new building to the north of the ravine, Lamadeleine first retained the services of the defendant Jacques Whitford Limited. The report eventually prepared by that defendant in the persons of engineers Charles Kwok and Raymond Hache is dated October 31, 1990 and is located at Tab 72 of Exhibit 4. Mr. Kwok gave evidence on behalf of the defendant Jacques Whitford. He is 41 years of age, obtained his Bachelor of Civil Engineering in 1982 and his Masters in Geotechnical Engineering in 1984. He has been associated with Jacques Whitford since 1988. After receiving the initial call from Lamadeleine, Kwok and Lamadeleine attended at the site. He and Lamadeleine either drove or walked the forest road on the west side of the property to the crest of the slope which is about twenty meters from the river's edge. They then went to the building site where the previous building had burned down and Lamadeleine asked Kwok to do a geotechnical investigation with respect to that location. At page 3 of the report it is noted that the scope of work for the investigation described is as follows:

> (a) to investigate the soil conditions at the proposed site;
> (b) to survey the gully immediately adjacent to the proposed site in order to determine slope stability; and
> (c) to provide geotechnical recommendations for the design and construction of the proposed structure.

Kwok at trial testified that the scope of work did not include an assessment of the slope stability at the banks of the river. Notwithstanding that evidence, Kwok included in Section 6.1 of his report under the heading Geotechnical Assessment, the following opinion:

> ... The stability condition of the Nation River located approximately 350 meters north of the proposed restaurant is not of concern. It is not expected that instability of the riverbank will jeopardize the proposed building at the location investigated. Presently, the slope shows no signs of erosion, however should erosion occur in the future control measures should be implemented in order to maintain a safe slope stability.

¶ 56 As it turns out at some point prior to the delivery of the report Kwok had a telephone discussion with Lamadeleine in which he told Lamadeleine that the report was pretty close to being ready. At that point Lamadeleine told him that he, Kwok, had to address the stability conditions of the South Nation River because this was very important to Lamadeleine. Kwok at that point in time appreciated that this was not part of the original mandate. He had looked at the riverbank at that one location on the Forest Road that runs along the west boundary of the lands but he was not looking at retrogressive failure as part of his mandate at the

time. He gave his opinion with respect to slope stability in paragraph 6.1 of his report without having examined the shore line and without having made any slope stability assessment. The 350 meter distance referred to in paragraph 6.1 had been obtained by Kwok from a drawing that had been provided to him by Lamadeleine and he felt that this distance would put the building far enough away from the river and that there would be no problem. In fact the actual shortest distance from the proposed building site to the river's edge was 170 meters.

¶ 57 At Tab 73 of Exhibit 4 is the letter of transmittal to Lamadeleine which accompanied the Jacques Whitford report. After delivery of the report Lamadeleine came into the Jacques Whitford offices with the letter of transmittal and with another page attached thereto which contained a suggested paragraph to be included in the Jacques Whitford report. Lamadeleine explained that the suggested paragraph had been authored by one Dr. Lagarec, a geo-manphologist, who was doing some work for the Municipality and who had seen the subject property and whose opinion it was that it was safe to build north of the ravine. All of the handwriting on the two pages at Tab 73 is Lamadeleine's and it advises Kwok that he must include in his report that he is aware of a possible landslide such as indicated in the Golder Report but maintain that the building should not be jeopardized by the Nation River. On page 2 of Tab 73 Lamadeleine notes:

> This note would permit me to obtain a building permit and at the same time allowing you plenty of room in your report.

¶ 58 In his discussions with Lamadeleine on that date, Kwok told him that he had not looked at the river from the point of view of retrogression. Lamadeleine in turn indicated to Kwok that he would have to put in the "Dr. Lagarec paragraph" because he had already advised with respect to the slope stability at the river and it would look silly if he didn't include it in his report. Kwok in his response told Lamadeleine that he was not going to change his report but at the same time he was concerned about retrogression and he told Lamadeleine that he would look at the Golder Report and write an addendum. To that point in time Kwok had no material from Golder Associates nor had Lamadeleine ever told him about the site specific Morey report nor did Kwok know that Golder Associates had been doing studies on the river for years. On that day Kwok requested a copy of the Golder Report referred to in the "Dr. Lagarec paragraph" and in response Lamadeleine provided him with the Golder Report dated September 1988 to the Authority. It was in a subsequent telephone discussion with Grant Decale from the Authority that Kwok learned of the site specific report of Morey prepared for Lamadeleine.

¶ 59 Kwok and his associate Hache had both Golder Reports within a week or so and read them.

¶ 60 At Tab 66 of Exhibit 4 is a letter from Lamadeleine to Kwok received at Jacques Whitford probably before Hache and Kwok went onto the site again. In the letter Lamadeleine says:

> I want you to tell me in a letter that you still believe that the set back which is about 350 meters is still adequate and should not jeopardize in your opinion the construction of my theatre restaurant which is one story high.

Lamadeleine closes this letter by saying:

> I think it is reasonable what I am asking and once I receive this amendment and the reports I left with you then I will mail a cheque immediately.

¶ 61 Kwok in his evidence explained that he wanted to address the slope stability portion of his report dated October 31, 1990 because he was not prepared to leave it the way it was in that it was "wide open" and he hadn't looked at it from the point of view of retrogressive landslide and therefore felt his report should be qualified.

¶ 62 About a week before November 22, 1990 he and his associate Hache went to the site. They accessed the property from the Forest Road on the west side of the property and walked from there east along the bank looking at the terrace and the slope angle and tree cover. He believes that they walked not very far past the east property line of the subject property.

¶ 63 At Tab 76 of Exhibit 4 is the letter sent by Kwok to Lamadeleine dated November 20, 1990. In this letter Kwok locates the South Nation River as "some 200 meters north (shortest distance rather than measured parallel to the property line) of the building site" which is still twenty or thirty meters more than the actual shortest distance. While the letter recognizes that one cannot completely rule out the possibility of a future landslide similar to the 1971 and 1910 slides, "anywhere along this stretch of the river", Kwok opines that:

> Provided that the existing site conditions are unaltered the risk of a retrogressive failure jeopardizing the proposed restaurant is very low. Restrogressive failure at this site would likely be confined within the mid slope terrace.

In the letter he identifies the site as having a mid slope terrace some eight meters or less above the river level. He describes the width of the terrace as being narrowest at the east end of the property where it is about thirty five meters wide and increases toward the west. He expresses the opinion that the terrace is considered important when considering potential retrogressive failures and provides an explanation for his opinion.

¶ 64 The letter of November 20th notes "The presence of vegetation along the riverbank and throughout the entire lot ..." which Kwok considers to be an important contributing factor towards stability of the site.

¶ 65 Kwok in the letter notes that the riverbank conditions immediately east of the site are rather different and that the possibility of a retrogressive failure at that site has not been investigated. He acknowledges that a failure upstream could possibly jeopardize a portion of the present site but goes on to say as follows:

> However it is also noted that a ravine is present between the proposed restaurant and the east property line. A ravine such as the existing one may act as a potential barrier of retrogressive failure.

¶ 66 It should be pointed out that in his evidence geotechnical engineer Dr. Lefebvre, called by the defence, confirmed that there is no such ravine which would provide protection to the building in its present site and I find that to be a fact.

¶ 67 The letter of November 20, 1990 closes with the caveat that:

> As a condition of constructing the restaurant at the proposed location, we recommend an annual inspection be carried out to assess the stability conditions of the lower slope. Such inspection should be conducted in the spring and should consist of detailed photographic records of conditions such as erosion and other signs of distress. Should the inspections reveal adverse conditions, remedial measures may be required. Removal of vegetation should not be carried out anywhere within the property.

¶ 68 Lamadeleine brought the letter of November 20th back to Kwok with revisions as marked on the copy at Tab 6 of Exhibit 25. What Lamadeleine had done was to completely erase the third paragraph on page 2 of the letter wherein Kwok references the conditions immediately east of the site as being rather different and advising that the possibility of a retrogressive failure at that site had not been investigated and that failure upstream could possibly jeopardize a portion of the present site. As well, Lamadeleine had struck out the last paragraph of the letter which had indicated that as a condition of constructing the restaurant at the proposed location there be annual inspections carried out to assess the stability conditions of the lower slope.

¶ 69 At Tab 80 is the letter dated November 22nd from Kwok which represents the last communication with Lamadeleine. The letter of November 22nd changed the letter of November 20th by substituting the concluding paragraph with the following. In the November 22nd letter the last paragraph read as follows:

> Should the conditions of the riverbank (such as erosion, etc.) change in the future the overall stability of the site should be assessed at that time. Remedial measures may be required accordingly. Presently removal of vegetation should not be carried out anywhere within the property.

So it is apparent that Kwok co-operated with Lamadeleine to a certain extent by removing from the letter of November 20th the condition that there be an annual inspection carried out to assess the stability conditions of the lower slope.

¶ 70 On cross-examination Kwok conceded that he knew his retainer was with respect to the construction of the building on the burn out site north of the ravine and knew also that the purpose of the report was to obtain a building permit. In cross-examination Kwok testified that at the time he was of the opinion that "it would be a gamble" to construct the building on the proposed site north of the ravine and that was the thought he was trying to convey in his letter of November 22nd.

¶ 71 In cross-examination Kwok conceded that the November 22nd letter was intended to address the slope stability at the river but that he had done no testing in that respect. I do not accept his subsequent evidence that he did a retrogressive distance calculation using the Mitchell formula with the result that he calculated the retrogressive distance to be about a hundred

meters from the shoreline. Kwok was unable to produce any such calculations.

¶ 72 Having received the Jacques Whitford report dated October 31, 1990 which for his purposes was not satisfactory, Lamadeleine went ahead and retained the defendant John D. Paterson and Associates Ltd. The retaining letter is dated November 8, 1990 and is at Tab 74 of Exhibit 4. It reads in part as follows:

> Testing my land to put a building to know if it is safe also to check the river's slope because there is a lot of discussion going on about it the Nation River. To make a long story short find out if it is safe to put a building, tell me what would be the total cost before you come down.

¶ 73 Steven Walker gave evidence on behalf of this defendant. He is the President of John D. Paterson and Associates Ltd. He graduated in 1978 from Queens University in Geological Engineering. He has been employed by Paterson since then. His work is primarily geotechnical engineering and Paterson specializes in geotechnical engineering. Before 1990 the company had done work along the river and was aware of the situation with respect to landslides. It was aware in 1990 that Golder Associates had been retained by the Authority with respect to a study along the river but had never seen any of Golder's published reports.

¶ 74 Exhibit 43 is a note made by Walker's associate Stewart on November 6, 1990 recording a telephone call with Lamadeleine. The understanding was that Lamadeleine was putting up a new building some distance from the South Nation River, wanted a bore hole sunk, and wanted to determine soil conditions under the building and if it was a safe distance from the slope of the river. In this memo it is noted that the building is 1250 feet from the river.

¶ 75 Walker undertook the project and dispatched forces to the site. Walker did not go to the site itself but rather sent a technologist, one Mulcher, who was to put down a bore hole and examine the condition of the slope and take some survey cross sections of the slope. As Walker explained in his evidence, in order to properly assess the slope, one must know the geometrics of the slope including height and angle.

¶ 76 Lamadeleine provided the technologists with a copy of the site specific Golder Report. The report was incomplete in that it did not contain a copy of the actual site plan which is located at page 156 of Tab 23, Exhibit 4. The site plan provided by Lamadeleine did not show the location of the bore hole as does the site plan in the Golder Report and as well the site plan provided by Lamadeleine does not have the title "Golder Associates" imprinted thereon.

¶ 77 It was Walker's task to review the information received from Mulcher together with the bore hole information. It was Walker's evidence that his analysis using conservative assumptions and high pore water pressure produced a factor of safety of 1.4 which he considered quite satisfactory.

¶ 78 At Tab 75 of Exhibit 4 is Walker's initial letter to Lamadeleine dated November 19, 1990 reporting his preliminary findings. In the opening paragraph of that letter Walker identifies the proposed building site as being located "greater than 340 meters from the crest of the South Nation River". It was Walker's evidence that he got to this distance from the drawing given to him by Lamadeleine which shows the distance from the east west ravine to the river to be approximately 1200 feet. He was aware at the time that that distance was parallel to the property line. He did not compute the shortest distance from the proposed building site to the river.

¶ 79 Walker in the letter acknowledges that he has reviewed the site specific Golder Report and has used the factual data to assist in his analysis. He then advises Lamadeleine as follows:

> After reviewing the data in that report, and on the basis of our findings, it is our opinion that the proposed development complies with the concerns that have been expressed regarding development along the South Nation River.
> At this time our final report on the matter has not been completed; however our calculations indicate that the proposed structure is set back a distance that is more than adequate to buffer the structure against a possible slope failure, should it occur. As such, it is the opinion of this firm that you should proceed with the proposed Sucrerie Theatre. Our formal report on the matter will be issued later this week.

¶ 80 In his evidence Walker explained that the concerns being referred to in his letter were that there was a study area that did not allow development unless there was confirmation of safety by way of a site specific study. As well, he was aware that there had been preliminary information from the Authority setting out set backs.

¶ 81 Walker in his evidence explained that in arriving at a factor of safety of 1.4 against rotational failure, he assumed full hydrostatic saturation with horizontal flow or, in other words, high pore water pressure which was unlikely to develop. He explained that if the pore water pressure drops then the factor of safety goes up. In other words, he assumed the worst pore water pressure of .6 for the purpose of his calculations. He testified that it was more likely that the pore water pressure would be significantly lower, perhaps .4 which would have the effect of raising the factor of safety significantly from 1.4 to perhaps 1.7 or more.

¶ 82 At Tab 77 of Exhibit 4 is the typewritten paragraph authored by Dr. Lagarec with Lamadeleine's handwritten note "This is important in order to obtain my building permit but it gives you plenty of room". The Lagarec paragraph reads as follows:

> The recommendations made on this report are in accordance with our present understanding of the project and a soil investigation is a limited sampling of a site, and after reading the Golder Report, we agree that there is always the possibilities of landslide along the Nation River, however, after viewing the site such as the gullies, natural berm at the river, the land being forested and drained, and adding the distance from the river, we still believe that the type of the building proposed at the site is secure.

¶ 83 The paper at Tab 77 was brought to Walker by Lamadeleine sometime between the letter of November 19, 1990 and the delivery of Walker's formal report. Lamadeleine advised Walker that he needed that paragraph in the conclusion of the formal report.

¶ 84 At Tab 79 of Exhibit 4 is Walker's final report dated November 22, 1990. In its introduction Walker continues to locate the proposed building site as being 340 + or - meters from the crest of the slope when in fact the shortest distance from the site to the river taken perpendicular to the river was 170 meters. As well in the introduction Walker acknowledges Golder's site specific report and says the following:

> ... The site had been identified as being potentially susceptible to retrogressive slope failures in that report, and a set back distance of 400 meters was recommended. The purpose of this study was to provide a further delineation of the subsurface conditions, and to conduct the appropriate stability analysis to provide for a refinement of the previously established set back.

¶ 85 After detailing the work that had been done by the technologists on site and in the lab, Walker, on the last page of his three page report, states the following:

> The Golder Report addresses the theory behind retrogressive slope failures which is of particular concern between Casselman and Lemieux. However for a retrogressive type failure to occur, an initial slope failure is required. Our calculations indicate that the factor of safety against an initial rotational failure occurring is of the order of 1.4 which is considered to represent a marginally stable slope condition. This analysis was conducted using excessively high pore water pressure conditions that are likely never to develop in the slope.

¶ 86 Under the heading CONCLUSION the report states the following:

> Based on the results of this study, it is the opinion of this firm that the slopes bordering the South Nation River at this particular site are not, in their present condition, considered to be unstable. It is also our opinion that should a failure of the banks occur, it would not retrogress back to the location of the proposed building.

[It should be noted that notwithstanding this expression of opinion at no time during the course of his investigation did Walker do a retrogression distance calculation]

¶ 87 The final paragraph of the report states the following:

> The conclusions contained herein are provided in accordance with our present understanding of the project and are based on our delineation of the subsurface conditions at the building location. We have reviewed the Golder Associates Report #881-2486 and agree that there is always the possibility of landslides occurring along the South Nation River; however, after examining the site conditions (i.e. gullies, slopes, etc.) and the lands being forested and well drained, it is our opinion that the proposed building is sufficiently set back from the river so that should a failure occur, the building would not be adversely affected.

[Obviously this was an attempt by Walker to accommodate Lamadeleine's request that the "Lagarec paragraph" be incorporated into his final report]

¶ 88 Walker, never having attended the site prior to his final report, explained that he would have gotten from the technician the information that the lands were forested and well drained. As well, the reference to the property being well drained would have come from the information from both Golder's bore hole and Paterson's bore hole.

¶ 89 The following was disclosed by Walker in cross-examination.

¶ 90 He knew that the purpose of his report was to enable Lamadeleine to get a building permit for a restaurant theatre which would see high use in the springtime. He instructed his technologist, Mulcher, to confine his investigation to the plaintiff's property. He does not like to trespass on other property without permission. He never asked permission from adjoining land owners to go onto their property and indeed he had no interest in seeing the adjoining property unless it could be seen from Lamadeleine's property. Although he and his technologist knew that the land which was closest to the river was not on the plaintiff's property, in their opinion retrogression was not a problem and therefore they restricted their investigation to the plaintiff's property. He conceded that the risk of initial slope failure has nothing to do with property lines. He conceded that one of the parameters in dealing with initial failure of the slope is the steepness of that slope and that it was accordingly relevant to know whether the plaintiff's slope was steeper or not when compared to the neighbour's slope. He conceded that if the slope to the east of the plaintiff's property is steeper than the plaintiff's slope that might change the calculation of the factor of safety. The factor of safety of 1.4 was arrived at using very conservative assumptions. He was of the view that in reality the factor of safety would be higher. As a result he felt no need to do a calculation of retrogressive distance. He does not know whether he would have done a calculation of retrogressive distance if the factor of safety had been 1.3. He did concede that if the factor of safety had been 1.2 he would have done a calculation of retrogressive distance. He conceded that his associate Tovell, in assessing for the National Bank of Canada a slope in connection with a house located in the south east corner of the plaintiff's property in a report dated October 11, 1991, found a minimum factor of safety in the order of 1.06 based on the slopes becoming fully saturated and using excessively high pore water pressure conditions (i.e. horizontal ground water flow) that are likely never to develop in the slope. (See Exhibit 45). He conceded that at the time of his report he was unaware of the retrogressive slide that had occurred just west of the plaintiff's property sometime during the 1800's. It was his evidence that had he known of that slide, it would have been of interest to him but would probably not have resulted in any different conclusions. He conceded that if, through his calculations, he arrived at an overall slope factor of safety at the riverbank at 1.06, then he would likely have done a retrogressive distance analysis.

¶ 91 All of the Paterson and Jacques Whitford reports and letters were provided to the Municipality. The Municipality, by way of a letter to Lamadeleine dated December 5, 1990 (see Tab 83, Exhibit 4), advised Lamadeleine that a resolution had been passed to the effect that based on the reports of Jacques Whitford, Paterson and Lagarec, the reconstruction north of the ravine appeared to be secure and that a building permit would be issued for that location. It should be noted that while Dr. Lagarec did not testify at this trial, his report dated November 15, 1990 is at Tab 3 of Exhibit 25 and reads in part as follows:

> In summary, in the present case, the actual geo-morphemic and hydrological conditions are not favourable to landslide occurrence and the material properties indicate a limited potential retrogression. It would need a very important change in river dynamics to create such conditions. So I think that you can build where you planned to do it as long as the load is not excessive and well distributed.

¶ 92 Interestingly by the time Lamadeleine received the Municipality's letter dated December 5th he had already started construction on the north side of the ravine. At Tab 81 is the building inspector Brisson's report dated November 27, 1990 relating to the inspection of the footings and at Tab 82 is the building inspector's report with respect to the tile drains dated November 29th. In any event, in due course Lamadeleine's application for a building permit to construct the combination theatre restaurant on the south side of the ravine was amended to replace the word "south" with the word "north", the amendment being initialed by the building inspector Brisson and the building permit at Tab 70 of Exhibit 4 given to Lamadeleine.

¶ 93 Construction of the restaurant theatre was completed in January of 1991 and the business operated in the normal course beginning at that time.

¶ 94 It should be pointed out that when Lamadeleine took it upon himself to construct the new theatre restaurant on the north side of the ravine, he was quite aware that the Authority objected to that course of conduct. Lamadeleine acknowledged to Mr. Rasmussen, counsel for the defendant engineers, under cross-examination that his property has been in

a hazard zone since 1982 except for the short period of time when it was taken out of the zone in 1996 after he convinced the Municipality's planner to redraw the line. Lamadeleine acknowledged to Mr. Rasmussen that even after the new building was constructed to the north of the ravine he continued to inform the Municipality of his concern that his lands were included in the hazard zone.

¶ 95 Lamadeleine continued to press the Municipality to have his property excluded from the hazard zone.

¶ 96 At Tab 95 of Exhibit 4 is the Municipality's Notice of the Passing of an Official Plan Amendment. The notice advises that council passed by-law 24-95 on the 10th of October 1995 adopting proposed official plan amendment #51 and further advising that the implementing zoning by-law would zone the lands contained within the landslide potential area as hazard lands. At Tab 98 is the by-law 25-95 which, by Schedule A thereto, indicated the hazard lands, effectively removed the plaintiff's land from the hazard zone. As a matter of interest at Tab 103 is a resolution of the Township that in by-law 25-95 the term "hazard" be deleted and the word "study" be inserted in its place.

¶ 97 When the draft of by-law 24-95 was presented to the Authority in July of 1995, the map schedule attached to it indicating the hazard zone included the plaintiff's lands. In the Spring of 1996 the Authority was made aware that the amendment actually passed by the Municipality was different from what had been approved by the Authority and served to exclude the plaintiff's lands from the hazard zone. At Tab 112 of Exhibit 4 is a letter from the Authority to the OMB outlining the Authority's position which letter was copied to the Municipality.

¶ 98 The zoning by-law had been appealed to the Ontario Municipal Board and the Authority had sought and obtained status as a party at the hearing which was scheduled to be held in February of 1997.

¶ 99 Eventually solicitor Alan Cohen was retained by Lamadeleine to support the Municipality in the appeal to the OMB by the Authority against the line as it was then drawn and which at that time excluded the plaintiff's land. Lamadeleine retained Gordon C. McRostie, professional engineer of the firm McRostie Genest St. Louis to make a geotechnical study and to reply to two questions posed by solicitor Cohen. The two questions were:

1. Is the present theatre building on the property safe?
2. If the building is not safe, what remedial work is required to make it safe?

¶ 100 McRostie's report is at Tab 129 of Exhibit 4. In his report dated January 9, 1997 McRostie essentially agrees with the Morey on-site study. McRostie, after investigation, was of the view that the building in its location north of the east west ravine was not safe at certain times of certain years. He was also of the view that the remedial work required to make it safe would cost in excess of a half million dollars.

¶ 101 In the face of the McRostie report and the Morey site specific report, Cohen decided that it would not be wise to go to the OMB to defend the present location of the hazard line which excluded the plaintiff's property. The OMB had from the Authority a detached expert who would testify with respect to a model that the Authority was treating as accurate and Cohen did not think that the OMB would reject that model and accept the Paterson and Whitford models. McRostie had declared the building unsafe and Cohen felt that even if he could convince the OMB that the new line was the correct one, that would still leave the plaintiff's building in what Cohen knew from all of the evidence to be a hazard zone. Cohen, in his view would in fact be responsible for the lives of hundreds of people and he refused to accept that responsibility.

¶ 102 Cohen advised Lamadeleine to consult with his insurer and further advised his against using the property for any reason.

¶ 103 Cohen in his evidence pointed out that Lamadeleine had agreed with him that there was no point in fighting the issue before the OMB however it had been agreed that the Township would call Paterson and Jacques Whitford at the OMB hearing to defend the new line which excluded the plaintiff's property. Cohen and the plaintiff attended the OMB hearing but did not seek party status which would have given them the right to cross examine, call evidence, argue, and render themselves susceptible to costs. They did have status as a participant who could come and go and, with the board's permission, ask questions.

¶ 104 The OMB hearing was, from Cohen's point of view, very unusual. Initially the Board had an in-camera meeting with the solicitors for the Authority and the Township. The Board then re-opened and land use planning evidence was called. There was then another in-camera meeting with council for the Authority and the Township. The Board then re-opened and said that it did not need to hear geotechnical evidence, that this was a planning problem only, that the hazard line was not correct, and

that the Authority had the power to relocate the hazard line. The line was accordingly relocated.

¶ 105 In its reasons at Tab 140 of Exhibit 4 the Board points out the following. Sometime between mid-August and mid-September 1996 the plaintiff came to see the Township's consultant planner, Mr. Miguelez, and asked him to make the hazard line on his property less restrictive or closer to the river. Mr. Lamadeleine had based his request on two studies that had been done for him; the Paterson Report and the Jacques Whitford Report. It was Mr. Miguelez's evidence before the Board that Mr. Lamadeleine assured him that the Authority had reviewed those reports and was in agreement with them. Miguelez reviewed the reports, concluded that they were geotechnical investigations as foreseen in the OPA 51 policy and redrew the line on the Lamadeleine property based on his interpretation of the reports. He did not contact the Authority but rather relied on Lamadeleine's statement that the Authority was satisfied. It was the less restrictive line that formed part of OPA 51 and by-law 25-95 when adopted by council. The Authority became aware of the change when they were approached for a clearance certificate on the property. The Authority then became a party to the OMB hearing because it took the position that the less restrictive line did not adequately reflect the landslide potential on the plaintiff's property. Mr. Miguelez was very clear that had he known the Authority was not satisfied with the Paterson and Jacques Whitford Reports, he would not have moved the line.

¶ 106 In his evidence Mr. Cohen agreed that the whole concept of the hazard line was to identify the area that had potential for retrogressive landslides. He acknowledged that even if a particular site was in the hazard zone, under the provisions of the official plan and by-law, the site could be developed and built on in the face of a site specific report finding it to be safe. Indeed, at page 4 of its decision, the OMB states the following:

> The intent of the landslide potential area is to require appropriate studies not to prohibit development out right. There is, therefore, no policy need to change the demarcation of the area on an ongoing basis. As well, I am not satisfied that a study area policy line should be moved based on site specific geotechnical studies. Such studies are generally designed to test whether a particular structure or other development can be built without risk. They are by their nature specific to time, place and structure. They are not designed to show that no other development ever would be at risk and that no study is needed for a future unknown development and time.

¶ 107 It was Lamadeleine's evidence that following the decision of the OMB, putting his property back in the hazard zone, he believed that he would have a hard time operating the business and that he had to consider closing in view of the fact that there would be no insurance for a landslide. He added that prior to the OMB meeting he believed that the property was safe but now he is not satisfied with the safety of his land and feels that he cannot operate the business again because of the danger to the people. It should be noted that it is clear on the evidence that notwithstanding Lamadeleine's advice to his insurer following the OMB hearing, advising the insurer that his land was in a hazard zone, the only coverage that was deleted from the policy by the insurer was property damage due to landslide. All other coverage remains in place including liability coverage. It should also be noted that at no time prior to the OMB hearing in February of 1997 did Lamadeleine advise his insurer that he was in a landslide hazard zone although he knew that to be the case from the beginning.

¶ 108 Lamadeleine finally terminated his business activities on the property in August of 1997 and the building has not been used since that time.

¶ 109 I will deal now with the liability of the Municipality.

¶ 110 It is clear from the evidence of Denis O'Grady, General Manager of the South Nation River Conservation Authority since 1987 and the documents, that the Township was, at all material times, aware of the Authority's position that there should be no construction on the plaintiff's lands to the north of the ravine. The Township was repeatedly advised by the Authority of that position.

¶ 111 At Tab 24 of Exhibit 4 is O'Grady's letter to Roger Brunette, Clerk of the Township of Cambridge, dated November 18, 1988. That letter is of particular interest in that it clearly brings home to the Municipality the Authority's concern about new construction or additions to existing buildings in the set back area. The letter reads in part as follows:

> Concerning the above the South Nation River Conservation Authority is of the opinion that based on present available information any further construction in the earth flow zone i.e. that area designated as sensitive slope protection with set backs of 600 and 800 meters in your comprehensive zoning by-law 144-88 is not advisable.

¶ 112 The letter then refers to the Golder study which is ongoing and says:

> Until such time as this study is completed all new construction or additions to existing buildings should be put off.

¶ 113 The letter goes on to say that one of the most critical factors affecting the stability of slopes is the amount of weight added to the top of the slope which in turn increases the stress on the bank thus increasing the possibility of an earth flow or landslide. The letter closes with the following:

> The South Nation River Conservation Authority hopes that the Township of Cambridge seriously considers the above comments.

¶ 114 In his evidence O'Grady explained that the Authority had no authority to prohibit construction as such.

¶ 115 At Tab 29 of Exhibit 4 is an internal memo of the Authority dated March 15, 1989. The memo is from Graham Decow, Project Co-ordinator, to the Executive Committee Directors. The memo notes that on Monday, March 13, 1989 Authority staff met with members of Cambridge Township Council to discuss a number of requests the Township had received from residents living within the designated earth flow zone for building permits. The recommendation coming out of that meeting was that until Fill and Construction Regulations were in place for Cambridge Township and a policy statement prepared to control development, the Authority strongly recommended that building permits for any structure within the designated earth flow zone not be allowed. It is of particular interest to note that that resolution was moved at the meeting by Robert Gratton who was, at the time, a council member of the Township of Cambridge. A copy of this memo was sent to Roger Brunette, Clerk of the Township of Cambridge, within the week.

¶ 116 At Tab 45 of Exhibit 4 is a letter from the Authority to the Clerk of the Township of Cambridge, dated June 2, 1989 referring to the Casselman to Lemieux study and the updated set back line. The letter notes that further to a discussion between Brunette and the author, Lynn Preston, Lands Co-ordinator, the day before, it was the opinion of the Authority that the set backs for the earth flow or landslide potential zone as covered by the study are those as delineated as the study area on the map prepared by Golder Associates and enclosed in the letter sent to the Township and dated May 25, 1989. The letter of June 2 goes on to point out that this line represents not only the maximum potential retrogressive landslide area but for the Authority's purposes will also be used as and be sufficient for a set back for all new development. The letter goes on to read as follows:

> In other words the South Nation River Conservation Authority will discourage any and all new development within this setback area. This setback may be amended pending further studies such as the presently ongoing environmental study report. Until the time that these studies are completed, the South Nation River Conservation Authority will use the study area line as the setback.

¶ 117 O'Grady, in his evidence, testified that there was no doubt that the Golder line encompassed all of the plaintiff's property including the building to the north of the ravine. As well, O'Grady explained in his evidence that by this point in time there was great deal of acrimony between the Municipality and the Authority.

¶ 118 At Tab 64 of Exhibit 4 is a letter from the Authority to the Clerk of the Township, Brunette dated September 20, 1990. The letter is with specific reference to a "Building Permit on the Property of Conrad Lamadeleine, Lot 17, Concession 5." The letter refers to Mr. Brunette's concern with respect to redevelopment at the site of the summer theatre, refers to Golder's site specific report which identifies the area of the site which is considered safe from landslide retrogression due to the presence of the ravines, and closes with this paragraph:

> Redevelopment is possible here as long as the conditions outlined in the Golder Report are observed i.e. construction in that area deemed safe by the presence of ravines.

¶ 119 At Tab 78 is a letter from the Ministry of Natural Resources to the Township dated November 21, 1990. This letter would have been written after the delivery of the first Jacques Whitford Report but before delivery of the Jacques Whitford letter dated November 22. The subject of this letter is "Township of Cambridge, Lot 17, Concession 5, Geotechnical Investigation R. Conrad Lamadeleine" and reads as follows:

> We have the following concerns regarding the above report by Jacques Whitford Limited based on review of its contents, a review of the previous Golder Report for the same site and a site visit on November 9, 1990.

Caselaw

> It is apparent that no regrading or protection of the river's shoreline, as previously advocated in the Golder Report, had been carried out leaving the banks susceptible to an initial failure. This could lead to a retrogressive failure effecting this property.
> Since proposed construction is north of the ravine it is considered that the ravine cannot be considered to protect the proposed structure. The statement in section 6.1 of the Whitford Report that instability of the (South Nation) riverbank is not expected to jeopardize the proposed building does not appear to be relevant when it is apparent the firm was not provided with available information concerning the retrogressive slides in the area.
> The area should be still considered within the earth flow designation and new development should be discouraged.

¶ 120 At Tab 57 is a letter from the Authority to the Township dated September 28, 1989. The letter reads as follows:

> Further to the discussion during the council meeting of September 25, 1989 research into our files indicates that the geotechnical firm Golder Associates was hired by Mr. Lamadeleine to evaluate and provide an assessment of the stability of the bank of the South Nation River.
> The study determined that the area in question was underlain by sensitive silty clays that were susceptible to flow sliding and that active erosion is presently occurring along the banks of the South Nation River. Golder's study also revealed that a portion of the property is naturally protected by the presence of two ravines which act as a barrier and would retard or terminate any local flow slides. The location of this naturally protected area is south of the existing dance hall and south of the ravine which extends east to west there. The report continues to state that if the proposed building were to be located in this naturally protected area the actual site should be approved by the geotechnical engineer.
> At no point in this report did it state that the dance hall was considered a protected area, naturally or otherwise, nor did it state that the remedial works proposed i.e. the extension and deepening of the ravine running to the south of the dance hall would protect this building.
> It appears that Mr. Lamadeleine has improved and expanded his dance hall which is in the landslide potential zone. This may have serious implications should a landslide occur.
>
> The South Nation River Conservation Authority would hope that all efforts are made in the future to ensure no further development occurs in this potentially hazardous area.

¶ 121 It seems almost unbelievable that in all of the circumstances the Township would go against the advice of the Authority and MNR and issue a building permit allowing the plaintiff to construct the new theatre restaurant to the north of the ravine. On the evidence there is no explanation as to why they did so. The building inspector, Brisson, was not called to give evidence at trial. Nor was the Town Clerk Brunette. Nor was any member of council. Nor was Dr. Lagarec who it appears was advising council on this matter.

¶ 122 Why the Township would ignore the Authority's recommendations with respect to the plaintiff's property becomes an even greater mystery when one notes that it sought specific recommendations from the Authority with respect to its own properties. At Tab 61 of Exhibit 4 is a letter from the Township to the Authority dated November 30, 1989 referencing the Casselman to Lemieux environment assessment study which letter reads in part as follows:

> 3. Members of council would appreciate a specific study to determine early in 1990 the level of risk along our municipal road that are in the hazardous zone because the municipality would have the intention to improve and reshape the hills on the road allowance between Concessions 1 and 2.

The letter closes with the following:

> Hoping to receive an early reply, please accept our best regards.

¶ 123 It should also be noted that in issuing the building permit in defiance of the recommendations of the Authority and the MNR the Township acted with complete disregard for and in direct contravention of its own resolution passed September 6, 1989 at a council meeting. The resolution can be found at Tab 55 of Exhibit 4 and reads in part as follows:

> For all such site specific studies, the terms of reference shall be approved by the Ministry of Natural Resources and the South Nation River Conservation Authority. The study shall be conducted to the satisfaction and approval of the Ministry of Natural Resources and the South Nation River Conservation

Authority.

¶ 124 While we will never know in this case why the Township issued the building permit for construction of the new theatre restaurant to the north of the ravine, none of the available witnesses having been called, I am left to infer that if Brisson, Brunette or members of the Township council had been called to testify, they would have exposed facts unfavourable to the Township.

¶ 125 In all of the circumstances I am satisfied that in issuing the building permit to the plaintiff for construction of the restaurant theatre to the north of the ravine, the Township acted negligently.

¶ 126 In Kamloops v. Neilson et al (1984) 10 D.L.R. (4th) 641 (S.C.C.) Wilson J., Ritchie and Dickson J.J. concurring pointed out that in order to decide whether or not a private law duty of care was owed by a local authority, two questions must be asked:

(1) Is there a sufficiently close relationship between the parties (the local authority and the person who has suffered the damage) so that, in the reasonable contemplation of the authority, carelessness on its part might cause damage to that person; and
(2) If so, are there any considerations which ought to negative or limit the scope of the duty, the class of persons to whom it is owed or the damages to which a breach of it may give rise.

¶ 127 Referring to the House of Lords Decision in Anns v. Merton Londonborough Council [1978] A.C. 728, Wilson J. pointed out that in Anns Lord Wilburforce said that questions 1 and 2 above must be answered by an examination of the governing legislation and categorized the various types of legislation as follows:

(a) statutes conferring powers to interfere with the rights of individuals in which case an action in respect of damage caused by the exercise of such powers will generally not lie except in the case where the local authority has done what the legislature authorized but done it negligently;
(b) statutes conferring powers but leaving the scale in which they are to be exercised to the discretion of the local authority. Here there will be an option to the local authority whether or not to do the thing authorized but, if

¶ 128 Section 210, paragraph 164 of the Municipal Act provides that by-laws may be passed by the councils of local municipalities "... for the issuing of a permit certifying to such approval without which permit no building or structure may be erected, altered or repaired, and for authorizing the refusal of a permit for any building or structure that if constructed would be contrary to any by-law of the municipality or of any other municipality, including a county and a metropolitan municipality, or the laws of Ontario or Canada in force in the municipality."

¶ 129 Section 5(1) of the Building Code Act provides that no person shall construct a building in a municipality unless a permit has been issued therefore by the chief official. Section 10(1) of the Building Code Act provides that an inspector may enter in or upon any land at any time without a warrant for the purpose of inspecting any building to determine whether such a building is unsafe.

¶ 130 Clearly then, municipalities have wide powers over the issuing and revoking of building permits and the law recognizes that municipalities have a clear responsibility for the health and safety of their citizens. On the facts of this case the defendant Township took that duty seriously when contemplating construction in the hazard zone and imposed upon themselves a requirement to consult and obtain the approval of the Authority and MNR when they received an application for a building permit to construct in the hazard zone. See Resolution 473 previously referred to.

¶ 131 In my view the test in Kamloops is satisfied in this case. There was a sufficiently close relationship between the defendant Municipality and the plaintiff so that in the reasonable contemplation of the Municipality, carelessness on its part might cause damage to that person and there are no considerations which ought to limit the scope of the duty, the class of persons to whom it is owed, or the damages to which a breach of it may give rise.

¶ 132 The defendant Township elected to exercise the power conferred upon it by the Municipal Act and the Building Code and required that site specific geotechnical studies be conducted to the satisfaction of the Authority and the MNR prior to the issuance of a building permit.

¶ 133 There was imposed on the defendant Municipality a private law duty of care towards individuals including the plaintiff seeking to construct in the hazard zone. As such, the defendant Township had a duty to exercise the standard of care of an ordinary, reasonable and prudent person in like circumstances. The defendant Township was aware of the potential risk and the consequences of such a risk coming to pass. The defendant Township was aware of the position of the Authority and the MNR and their opposition to the theatre restaurant being constructed north of the ravine. The Township was fully aware of Golder Associates general concern with respect to retrogressive landslides on the South Nation River and Golder Associates' specific concern with respect to the plaintiff's lands. The defendant Municipality was negligent in issuing to the plaintiff the building permit in the face of all these circumstances. As well the defendant Municipality was negligent in failing to ensure that the studies conducted by Paterson and Jacques Whitford had been conducted with the approval of and to the satisfaction of MNR and the Authority prior to issuing the building permit. As it turns out, had the Municipality made appropriate inquiries, it would have been made clear to them that neither authority approved those reports.

¶ 134 I will now deal with the liability of the defendant geotechnical engineers.

¶ 135 With respect to this issue I heard evidence from geotechnical engineer Gordon McRostie on behalf of the plaintiff an Dr. Guy Lefebvre called on behalf of the defendants Jacques Whitford Limited and John D. Paterson and Associates Ltd.

¶ 136 Mr. McRostie received his engineering degree from the University of Toronto (Honours) in 1944 and has practised actively as an engineer since that time. His field of expertise has been in geotechnical engineering and he has had a particular interest in retrogressive landslides during the entire course of his career.

¶ 137 In all, Mr. McRostie has visited the plaintiff's property on three occasions. He was initially retained by the plaintiff's solicitors to make a geotechnical study and determine firstly whether the present theatre restaurant building on the property was safe and secondly if not safe, to determine what remedial work was required to make it safe.

¶ 138 Both in his viva voce evidence and in his report dated January 9, 1997 at Tab 129 of Exhibit 4, Mr. McRostie indicated the following.

¶ 139 In preparing his report he reviewed the Golder Report of November 1988, the Paterson Report of November 22, 1990 and the Jacques Whitford Report of October 31, 1990. He reviewed the published papers on the South Nation River, retrogressive landslides and several other technical papers as listed on pages 4 and 5 of his report. He spoke with Morey and reviewed with him his reports to the Authority. As well he spoke with Professor R. Mitchell at Queens University who is the originator of the model of estimating retrogression distance.

¶ 140 With that background, McRostie visited the site on January 6, 1997 and conducted a detailed site inspection through a distance .8 kilometers upstream and downstream of the site. He made the following observations:

(a) the most critical slope for the theatre restaurant building is on the adjacent neighbour's land to the east. This was the most critical slope because it is the part of the riverbank closest to the building and because it has a steeper slope than that located on the plaintiff's property;
(b) a small landslide scar exists on the west bank of the first gully east of the plaintiff's property indicating continuing instability of the lower riverbank slopes; and
(c) there is evidence of continuing creep type movements in the lower third of the river slopes consisting of bends in the trunks of trees near the ground indicating movements first tilting the trees then the trees returning to vertical as they continue to grow.

¶ 141 After discussions with his associates, McRostie arrived at the following conclusions.

(a) There is a fairly broad based group of opinions in the geotechnical field that the risk of an initial landslide continuing as a retrogressive slide can be estimated. The method of estimation needs to recognize at least four factors namely, stability number, liquidity index, sensitivity and undrained sheer strength.
(b) the Golder/Morey 1988 Report on the plaintiff's site outlines a method which includes a recognition of the above-factors and McRostie is in agreement with that report's conclusion that the site is at risk of having a retrogressive landslide if an initial slide begins.
(c) There is a less general agreement among the experts with

respect to the ability to predict the distance to which an initial slide will continue to retrogress. In this respect McRostie referred to cautions expressed by both Dr. Mitchell and Dr. Lefebvre.

(d) Morey was of the view (as expressed in his viva voce evidence here at trial) that his studies over the past ten years are definitive and that the 1993 Lemieux slide confirmed his model and his calculation methods.

(e) While the distance of retrogression is not capable of a highly accurate prediction, McRostie is of the opinion that Morey's recommendation in his 1988 report of a retrogression distance of 340 meters is a reasonable set back distance to be used at this site.

¶ 142 McRostie in his evidence noted that Morey's retrogression distance of 340 meters was measured from the river edge whereas Mitchell's retrogressive distances are measured from the crest. In McRostie's opinion the two methods are based on different assumptions and result in measurements that may differ by 50 to 100 meters. McRostie noted that Morey's distance of 340 meters was measured perpendicular to the river which results in the shortest distance. It appears that the building was located 170 meters from the river and therefore was within the retrogressive distance. It should be noted that I heard competing evidence with respect to whether Mitchell's retrogressive distances are measured from the river edge or from the crest. I am satisfied on all of the evidence that Mitchell's distance was measured from the crest.

¶ 143 McRostie reached the following conclusions and made the following recommendations.

1. In his opinion the theatre building is not safe at certain times of certain years. An initial landslide which could trigger a retrogressive landslide involving the building is most likely to occur only during the Spring months when rapid snow melt and early rains cause exceptionally high ground water conditions in the slope. Some years are more critical than others when all unfavourable weather factors occur at the same time.
2. There are four possible remedial work programs which could be considered to prevent retrogression of an initial slide back to the building:

(a) excavate a new deep cut off gully between the building and the river on the owner's land and on the neighbour's

(b) To prevent any initial slides at the riverbank construct a large rock filled toe berm on the bottom third of the slope. This would be even more costly than a new cut off gully and would create new environmental problems.

(c) Again, to prevent any initial slides at the riverbank, flatten the entire slope. This would involve even more cost and would result in the loss of the entire sugar bush and is not, in McRostie's view, a reasonable alternative to consider.

(d) Increase the existing slope stability and thus prevent an initial slide by installing a large number of vertical pore pressure lowering drains. This is an experimental method which has been tried at a few locations in eastern Canada and has not had reliable success and therefore cannot be recommended.

¶ 144 McRostie was retained by the plaintiff's solicitors to prepare a further report. His second report is dated December 14, 1998 and is located at Tab 142 of Exhibit 4. The terms of reference for this report were to continue the geotechnical studies reported on January 9, 1997 which continued studies were to include a review of the statements made during the examinations for discovery of Stephen J. Walker (John D. Paterson and Associates Ltd.) and Raymond Hatch (Jacques Whitford Limited) on August 12, 1998. The study was to identify the most critical riverbank slope which could cause an initial landslide, to analyze the stability of this most critical slope, to provide an opinion with respect to the risk of retrogression, to give an opinion on the geotechnical professions' standard of investigation in 1990, and to comment on whether the two 1990 reports by the two geotechnical engineers met those standards.

¶ 145 In preparing this second report McRostie reviewed the Jacques Whitford Report of October 31, 1990 (Tab 72, Exhibit 4), the Jacques Whitford letter to the plaintiff dated November 22, 1990 (Tab 80), the preliminary report of John D. Paterson and Associates Ltd. dated November 19, 1990 (Tab 75) and the full John D. Paterson Report dated November 22, 1990 (Tab 79).

¶ 146 In preparing his second report McRostie was of the view that one of the most important factors to consider in this case was public safety. In my view, it is not possible to disagree with that proposition. McRostie

pointed out that statistics disclosed that there have been about 545 deaths due to landslides in the years between 1840 and 1996 and 98 of these deaths have been due to landslides in the sensitive clays of Eastern Canada. McRostie, in his evidence, expressed the view that in matters such as these the conservative approach is required. I agree with that proposition. Further McRostie expressed the view that acceptance of any safety factor less than 1.5 is not a conservative approach. On all of the evidence I find that to be the case.

¶ 147 In McRostie's view there were two reasons why the plaintiff's property and building posed a special public safety risk. Firstly, the theatre restaurant is a place of public assembly. Secondly, it is attractive to groups of people at the time of the Spring snow melt conditions which is the period of highest landslide risk since ground water levels are often at their highest points of the entire year during the early Spring months.

¶ 148 To identify the most critical riverbank slope in connection with the theatre building, McRostie examined the riverbank slopes across the full width of the plaintiff's property and also for about 1,000 meters both upstream and downstream. In his view, the most critical slope that could effect the plaintiff's property is almost directly opposite the theatre building on a line drawn at right angles to the riverbank and extending through the neighbour's property to the east. The shortest distance from the riverbank to the theatre building is approximately 170 meters. McRostie, in his evidence, noted that the Paterson Report in section 1.0 states that "The site is located approximately 340 meters from the crest of the slope" and that the Jacques Whitford Report states in section 6.1 that "The stability condition of the Nation River located approximately 350 meters north of the proposed restaurant is not of concern". In McRostie's view it appeared that both these reports misunderstood the principles involved in identifying the most critical slope. McRostie further noted that in this case the closest spot to the river and the critical slope happened to coincide and that if a retrogressive landslide occurred at this point it would certainly involve the plaintiff's building.

¶ 149 At pages 6 and 7 of McRostie's report dated December 14, 1998 there is analysis of the most critical slope which indicates the following.

¶ 150 In analyzing the stability of riverbank slopes to consider whether an initial slide is likely, which in turn could retrogress and effect a site considerably further from the river, there are two groups of assumptions that must be made. The first is the soil strength parameters and the second is the ground water levels and ground water flow conditions. Soil strength parameters recommended in a broadly based study by Poschmann et al published in 1983 have been consistently used in all of the studies made to date including McRostie's studies.

¶ 151 Assumptions of the applicable ground water conditions are more variable and more complex since they vary with the season and the years. The Paterson studies of 1990 made the conservative assumption of a fully saturated slope with horizontal flow of water (RU = 0.6). Using those assumptions, Paterson calculated a factor of safety of about 1.4 for the slope on the plaintiff's property which is the slope that Paterson chose to analyze. McRostie notes that if Paterson had identified the slope which McRostie feels is the most critical, and used those same assumptions, Paterson would have calculated a factor of safety of 1.09 which would have been, in McRostie's opinion, a totally unacceptable factor of safety.

¶ 152 In calculating his factor of safety McRostie assumed a situation where maximum flood levels had been caused on the South Nation River by the combination of ice jams in the river, Spring snow melt, and Spring rain. McRostie explained that in these circumstances when the ice jam breaks the flood level drops dramatically in a few hours creating a "rapid draw down" condition in the lower portion of the critical slope. To recognize this phenomenon McRostie was of the view that one should assume a horizontal ground water flow in the lowest 8 meters of the slope. With these assumptions, McRostie's calculated factor of safety for the critical slope is 1.19 which again is unacceptable.

¶ 153 As McRostie points out in his report, an even less conservative assumption would be to neglect the ice jam and rapid draw down scenario and assume ground water flow parallel to the slope for its full height. According to McRostie's calculations the resulting factor of safety using these assumptions is 1.24 which is still unacceptable.

¶ 154 With respect to the question whether or not the initial riverbank failure would retrogress, McRostie is of the view that this is best answered by air photos which, in his view, any competent engineer would review in studies such as these. McRostie, in his evidence, pointed to Exhibit 2, the site air photo, which was contained in Morey's site specific report to the plaintiff dated November 1988. McRostie identified in the immediate vicinity of the plaintiff's property three landslide scars which in his view present a very serious warning with respect to the potential for a retrogressive landslide. Two of the landslide scars are on the far side of the river across from the plaintiff's property. A third scar is on the plaintiff's side of the river located a short distance to the west of the plaintiff's

property. Morey, in his evidence, also identified these retrogressive landslide scars. McRostie pointed out that the biggest scar of the three, that is the one directly across the river from the plaintiff's property, is large enough that it would, if it occurred on the plaintiff's side of the river, take in all of the plaintiff's property north of the gully.

¶ 155 Based on information available from the Authority it appears that at least one of the three retrogressive landslides occurred within human memory (a few hundred years). In McRostie's view, if there is no evidence to the contrary, then for the purposes of studies such as these, one should assume that the slides occurred in recent times. I agree with that proposition.

¶ 156 From all of the foregoing McRostie concluded that there was in 1990 an unacceptable risk of the occurrence of an initial slide at the riverbank below the plaintiff's property and that an initial riverbank slide at that location should be expected to retrogress some hundreds of meters back from the original slope crest which would endanger the plaintiff's property.

¶ 157 It should be noted that while he did not give evidence at this trial, there was reference during the course of other evidence to a theory proposed by Dr. Daniel Lagarec that initial slope failures would not retrogress into parts of the flat upper lands that are covered by trees. McRostie commented that Dr. Lagarec's theory is not generally accepted by geotechnical engineers. McRostie explained that he has studied air photos of several retrogressive landslides and observed masses of trees in the slide debris indicating that treed zones had been included in the failed areas. Interestingly, there is a record in the Quebec Gazette, April 6, 1840, reporting a landslide on the Maskinonge River where workers in a sugar bush had to flee to escape a retrogressive landslide which advanced through the sugar bush despite the presence of many trees. It is of interest to note as well that Professor Lefebvre has, independent of this particular case, expressed the opinion that even dense tree growth has not been and could not be expected to retard or stop the progression of a retrogressive landslide into adjacent upper levels.

¶ 158 With respect to the distance of retrogression, McRostie maintains the opinion expressed in his initial report and that is that while the distance of retrogression is not capable of highly accurate prediction, the Morey recommendation in his November 1988 report to the plaintiff of a retrogression distance of 340 meters, is a reasonable set back distance to be used at this site. There is no doubt in McRostie's mind that the retrogression distance at the site would be greatly in excess of the 170 meter distance which separates the theatre building from the riverbank. He concludes, therefore, that at certain times of certain years the restaurant theatre building is at risk of being destroyed by a retrogressive landslide.

¶ 159 In addressing the standards of the profession in 1990, McRostie in his report and in his viva voce evidence expresses the view that a geotechnical investigation into the possibility of a landslide affecting a building site adjacent to a riverbank slope would have, in 1990, contained the following activities.

1. Review of existing air photos for one or more kilometers upstream and downstream from the site to determine past landslide areas.
2. Review of any published reports on landslides in the area.
3. Review of any site specific landslide risk reports for the site being studied or for sites less than a kilometer away on the riverbank.
4. Personal inspection of the site and the adjacent riverbank slopes for a least 500 meters upstream and downstream to establish the most critical slope location with particular attention to be paid to the slope at the zone closest to the subject site measured at right angles to the riverbank.
5. A review of the possible consequences of a landslide failure, a consideration of whether the landslide would effect buildings or just occupy land and a consideration of whether the building might have special uses making the building more critical to the safety of occupants.
6. Items 4 and 5 would be made by a geotechnical engineer with experience in landslide studies since judgment of the critical slope, its most likely inclinations, possible seasonal ground water fluctuations, the consequences of an initial slope failure and the risk of a retrogressive failure, are all aspects requiring engineering judgment and could not be expected from a technician.
7. The risk of an initial or trigger slide developing into a retrogressive landslide would require special study.
8. That study would include a visual estimate of the steepness of all slopes close to the site, any slopes with an inclination steeper than about 15 degrees and a height more than 10 meters would be surveyed using a clinometer and tape or survey level and tape. Evidence of Spring flood levels would be examined and recorded. The calculated factor of safety for the most critical slopes would then be obtained for a range of possible ground

water flow assumptions and a set of reasonable soil property assumptions. A desirable factor of safety resulting from these calculations would then be judged with a suitable margin of safety included which would recognize the limitations of the analysis methods and assumptions plus the consequence of a failure.

9. If the critical riverbank slopes were judged not to have an adequate margin of safety, then the next two considerations to be studied would be the risk of retrogression and possible retrogression distance. The main evidence to be considered here would be evidence of past landslides shown by past failure scars on air photos.
10. After reaching a conclusion that a critical initial riverbank slide is possible and also that retrogression is possible, then a study of retrogression distance is required.

¶ 160 Having regard to what he saw to be a reasonable standard of care to be expected of a geotechnical engineer in circumstances such as these, McRostie in critiquing the Paterson Report, made the following observations.

1. The Paterson Report does not appear to recognize or consider the evidence of past retrogressive slides in the areas which slides can be seen in the available air photos. It was his understanding that the Morey site specific report dated November 1988 was made available to Walker and it contains an air photo clearly showing past retrogressive landslide scars in the immediate area of the plaintiff's property.
2. The Paterson Report does not appear to recognize and consider the site specific information in the same Morey Report which shows in Figure 3 an existing riverbank slope with an estimated factor of safety below 1.5 and likely close to 1.0.
3. The Paterson Report was not based on site inspections by an experienced geotechnical engineer.
4. The Paterson Report does not appear to have considered the public safety risks having regard to the use to which the plaintiff's building was being put.
5. The Paterson Report does not appear to have selected the appropriate most critical riverbank slope.
6. The Paterson Report concluded that the restaurant theatre site was not at risk from a retrogressive slide chiefly due to the fact that it failed to select the appropriate most

¶ 161 In critiquing the Jacques Whitford Report, McRostie in his evidence expresses the following views.

1. The Jacques Whitford Report does not appear to recognize or consider the evidence of past retrogressive landslides as seen in the air photos.
2. The Jacques Whitford Report does not appear to have considered the public safety risks.
3. The Jacques Whitford Report and later studies do not appear to have been based on an adequate on site examination of the possible most critical slopes. Examination of riverbank slopes only along the riverfront of the plaintiff's property together with visual examination "as far as the eye could see" through a wooded zone does not meet these standards outlined in McRostie's evidence.
4. The Jacques Whitford Report does not appear to have been based on a thorough study of whether an initial slide could retrogress. There appears to have been an unquestioning reliance on the theory presented by Dr. Lagarec that because the subject land was heavily wooded, retrogression of an initial slide would not occur.
5. The Jacques Whitford Report does not appear to have determined a retrogression distance however the report does state that the theatre restaurant site is located approximately 340 meters north of the Nation River. McRostie notes that in Jacques Whitford's letter to the plaintiff dated November 22, 1990, this distance is corrected to some 200 meters north of the river. The letter also comments that the possibility of a retrogressive failure at the critical slope east of the plaintiff's property has not been investigated. McRostie expresses the view that the end result of the November 22, 1990 letter would be to give moderate encouragement to proceed with building at the site. In McRostie's view Jacques Whitford presented the risks as being indefinite and low when in fact the risks were and still are, very real and possibly catastrophic.

¶ 162 McRostie's examination-in-chief was followed by a detailed cross-examination by the defendant engineers' counsel, Mr. Rasmussen. During the course of this cross-examination it was clear that there can be a significant variation in factor of safety calculations depending on the assumptions upon which the calculations are made and perhaps more particularly depending on the Ns number being incorporated in the formula. As well, it was conceded during the course of cross-examination that the factor of safety calculation will depend on the soil strength parameters assumed and on the assumed ground water conditions. While McRostie conceded in cross-examination that in all of the calculations that he did, he did not take into account any underflow drainage. McRostie explained that underflow drainage was not taken into account because there was a possibility that during Spring floods under drainage would be overcome by temporary higher ground water. He conceded to Mr. Rasmussen that it was the pore pressure in the lower areas of the slope that was most critical and that if in fact there was continuous underflow drainage, then the factor of safety calculation would reveal a higher number.

¶ 163 As well during the course of cross-examination Mr. Rasmussen and McRostie discussed the fact that vane sheer strength measurements which go into the formula for determining the factor of safety can be determined both by instrument in the field and also by calculations in the laboratory with samples that have been taken in shelby tubes. McRostie did not agree that one could get two totally different results in this type of soil material depending on which method was used.

¶ 164 McRostie readily conceded to Mr. Rasmussen that in his view for there to be a real risk of a retrogressive landslide engulfing the subject building three factors were needed.

1. Spring snow melt.
2. Spring rain.
3. Rapid draw down in the river level as a result of an ice dam breaking.

He conceded as well that if one could eliminate the effects of these factors then in his view the building site is not at risk provided preventative works were undertaken at the riverbank to make sure that the riverbank did not change. McRostie conceded to Mr. Rasmussen that over the last 10,000 years since the withdrawal of the glaciers it is likely that the three critical factors have occurred simultaneously and that there has not been a retrogressive landslide that has engulfed this particular site but certainly one that has engulfed the site across the river. In answer to the question why the plaintiff's site did not fail at the same time as the site across the river if those conditions existed simultaneously, McRostie explained that the nature of the snow accumulation on each site can be different and as well the nature of the vegetation can be different thus affecting the infiltration rate.

¶ 165 During the course of cross-examination there was filed as Exhibit 15 a page of notes from McRostie's file in his own handwriting. His note is to the effect that Whitford's letter of November 22nd constitutes a retraction of their approval of the building location north of the gully and that Paull Leamen (counsel for the plaintiff) will have to settle the question whether this lets the defendant Jacques Whitford off their responsibility for their opposite opinion in their October 31, 1990 report. McRostie would not concede that he in fact felt that the November 22nd letter was a retraction of Jacques Whitford's approval but rather only a weakening of their opinion in that respect.

¶ 166 Throughout all of the cross-examination McRostie remained an impressive and credible witness and was not significantly shaken on his evidence given in examination-in-chief.

¶ 167 Dr. Lefebvre who was called on behalf of the defendant engineers received his Civil Engineering Degree in 1965 at the University of Laval and his Masters Degree in Geotechnical Engineering at the same University in 1968. He received his PhD in Geotechnical Engineering at the University of Laval in 1970. He has done field work in the field of geotechnical engineering on a consulting basis. He has, however, been primarily a professor doing teaching and research at the University of Sherbrooke, Civil Engineering Department, since 1972. He candidly admitted that he, unlike McRostie, Paterson or Jacques Whitford, does not deal on a usual basis with everyday problems in the field of geotechnical engineering.

¶ 168 With respect to the qualifications of Dr. Lefebvre to give evidence as to whether or not Paterson or Jacques Whitford met the standards of the profession in preparing their reports, Mr. Leamen for the plaintiff argued that Dr. Lefebvre did not have enough practical experience to render such an opinion. I ruled that the doctor was qualified to give me his opinions with respect to the adequacy of the defendants' reports and thereafter it would be a question of what weight I might give to Dr. Lefebvre's evidence in that respect.

¶ 169 Dr. Lefebvre was retained by Mr. Rasmussen on behalf of the defendant engineers in 1999 to assess the situation. In preparation Dr.

Lefebvre reviewed the documentation and visited the site in November of 1999 for approximately three hours. He looked at the ravine adjacent to the building. He walked to the river from the top of the property through the terrace and to the bottom of the slope observing some erosion at the toe of the slope.

¶ 170 At Tab 9 of Exhibit 25 is Dr. Lefebvre's report dated February 2000. It is of interest to note that beginning at page 17 of his report Dr. Lefebvre acknowledges that the purpose of the report is not to fill the role of another geotechnical engineer who would conclude on the risk of landslide and the necessary set back at the Lamadeleine property. Rather he states in his report that the purpose is to examine if the work, conclusions and opinions delivered by Jacques Whitford Limited and John D. Paterson in response to their respective mandates were adequate and were as expected from a reasonably competent engineer. Notwithstanding the stated purpose of his report, it seems clear on a reading of his report and considering his viva voce evidence that Dr. Lefebvre is supportive of the proposition that the subject property is not at risk for a retrogressive landslide.

¶ 171 In his report, under the heading Evaluation of a Safe Set Back Distance, the doctor notes that a slope or riverbank must first be effected by a landslide before this first landslide could retrogress inland at a certain distance from the riverbank. He points out that two aspects thus need to be examined to evaluate if a site could be affected by landslide retrogression; first the state of stability of the riverbank and second the possibility of retrogression if the riverbank is effected by a landslide.

¶ 172 The doctor, in his evidence, pointed out that the factor of safety of a particular slope depends on a number of parameters including the pore pressure of the water in the clay. The doctor explained the factor of under drainage. When the river valley reaches equilibrium and reaches the glacial till then the clay above drains into the till and the pore water pressure becomes much less and conversely the slope much more stable. The doctor pointed out that Morey in his September 1988 regional study installed piezometers on the west side of the plaintiff's property which indicated strong under drainage. According to Dr. Lefebvre, the measurements indicated no water pressure at the bottom and if there was almost no pore water pressure then the slope would be much more stable. He went on to explain that in calculating the factor of safety if one does not take into account underflow drainage, then the factor of safety calculation is too low. As well the doctor noted that at the plaintiff's site there was a terrace which protects the slope. He observed some erosion at the toe of the slope but explained that the terrace tended to protect the toe of the slope in that there is room for erosion to occur. He observed that the terrace gets wider as it extends to the west of the property. It should be pointed out that counsel for the plaintiff quite properly complained that none of this evidence was in the doctor's report and that as a result the Rules were not being complied with. I decided to hear the evidence and to provide Mr. Leamen with any additional time he required to consider it.

¶ 173 Dr. Lefebvre went on in his evidence to express the opinion that the important under drainage identified at the riverbank on the plaintiff's property has a significant impact in the evaluation of slope stability and was critical of both McRostie and Morey in that they had completely neglected the under drainage in their slope stability analysis.

¶ 174 In his report the doctor notes that for a retrogression to develop, the soil involved in a first slope failure must be sensitive so that its strength after failure would be low enough for the slide debris to flow out of the crater instead of acting as a stabilizing berm at the toe of the backscarp (the wall of soil left at the back after a slide). In his report he goes on to explain that once the backscarp is left exposed its stability is controlled by the stability number Ns which is the ratio of the weight of soil column in the backscarp over the undrained sheer strength of the soil at the base of the soil column. According to Dr. Lefebvre, Mitchell has demonstrated that the stability number needs to be at least six for the development of plasticity and earth flow whereas failure of the vertical backscarp may develop when the stability number exceeds four but the height of the backscarp rapidly decreases with this type of phenomena leading to a limited retrogression distance. Dr. Lefebvre pointed out that one observes a general increase in the stability numbers as one goes downstream from the subject property with the increased stability numbers reflecting a greater chance for a retrogressive slide.

¶ 175 Dr. Lefebvre in his evidence was again critical of Morey and McRostie in that as far as he was concerned they had assumed critical pore water pressure in doing their calculations and had not taken into consideration the under drainage. As well the doctor was critical of what he referred to as McRostie's "theory" relating to an ice dam, a sudden rising of the river level, and a failure of the ice dam and a quick draw down. It was the doctor's view that a rapid draw down can be critical if the water has been dammed up for three or four months because by that time the slope will have obtained equilibrium. However, in the doctor's view if the situation lasts for only a few days, perhaps five or six, then the slope has not

reached equilibrium with the river and when the dam breaks, it has very little effect.

¶ 176 Beginning at page 25 of his report Dr. Lefebvre addressed the Paterson Report. The doctor noted that in its slope stability analysis Paterson used a very conservative condition for the ground water with a water table at surface and horizontal flow (ru = 0.6). Paterson evaluated a factor of safety of 1.4 which the doctor noted was identical to the overall factor of safety of 1.4 evaluated by Morey in his November 1988 report. Dr. Lefebvre comments, however, that the Paterson Report added an important statement to the effect "This analysis was conducted using excessively high pore water pressure conditions that are likely never to develop in the slope". Dr. Lefebvre in his report comments that this statement is correct and more so considering the strong under drainage of the riverbanks existing at this site.

¶ 177 Dr. Lefebvre in his report points out that the Paterson Report concluded that should a failure of the riverbank occur, it would not retrogress back to the location of the proposed building. Dr. Lefebvre quite correctly points out that the Paterson Report does not contain any details to support that conclusion and notes further that the Ns values evaluated in the 1988 borings would yield a maximum distance of retrogression of at the most 180 meters which corresponds with the true distance of the Lamadeleine building from the river.

¶ 178 Finally in his report Dr. Lefebvre expresses the opinion, based on all of the available information, that the conclusions of the Paterson Report conform to the state of the art and was as would be expected from a reasonably competent engineer faced with the same mandate.

¶ 179 Beginning at page 26 of his report Dr. Lefebvre deals with the Jacques Whitford Report. He begins by stating that in his view the November 22, 1990 letter from Jacques Whitford constitutes a very strong reserve about the stability of the site. He does concede, however, that while it is clear from the declaration of scope of work described in its October 31st report, that Jacques Whitford had understood its mandate as concerning essentially the bearing capacity at the proposed building site and the slope stability at the adjacent ravine, nonetheless the Jacques Whitford Report did state that "It is not expected that instability of the riverbank will jeopardize the proposed building at the location investigated". Again the report does not detail the basis for that comment.

¶ 180 In the final analysis Dr. Lefebvre was of the view that the Jacques Whitford comments on slope stability and distance of retrogression were correct and conform to state of the art analysis. In his view the careful wording and the strong reservation reflected the fact that Jacques Whitford's work to fulfill its mandate had not been directed toward the stability assessment of the South Nation riverbank and that "This is what any reasonably competent engineer would have done if put in the same position".

¶ 181 During the course of cross-examination there were, what I consider to be, some telling exchanges between counsel for the plaintiff Mr. Leamen and Dr. Lefebvre.

¶ 182 Dr. Lefebvre initially agreed with Mr. Leamen that walking to the east and west of the actual site as he did was at least useful if not necessary. When asked to agree whether any reasonably competent engineer retained to do a slope analysis would do the same thing, the doctor waffled somewhat and said yes and no, explaining that if the building was far enough from the river there was no necessity to walk the site.

¶ 183 The doctor agreed that at the time Paterson and Jacques Whitford did their reports, it was unclear how far the building was from the river and that the information that they had from the Lamadeleine drawing in the Golder Report was not accurate. Dr. Lefebvre initially indicated to Mr. Leamen that if it was in his mandate to do so, then a reasonably competent engineer would be expected to determine for himself the distance from the building to the river for the purpose of analyzing the slope. The doctor then backtracked to some extent. He declined to admit that it was not clear what the distance was when the defendant engineers did their reports. He said that they felt they had the correct distance from the Lamadeleine drawing in the Golder Report and in fact the distance was not correct. He added that the defendant engineer should not be expected to determine the distance if its already set out in a pre-existing report.

¶ 184 When asked whether he agreed that the South Nation River between Casselman and Lemieux was an area prone to retroactive landslides, Dr. Lefebvre responded that in his view only the downstream portion was prone to retroactive landslides. He gave this evidence notwithstanding the knowledge that there exist the scars of three retrogressive landslides in close proximity to the plaintiff's property which is in the upstream portion.

¶ 185 Dr. Lefebvre conceded to Mr. Leamen that the most critical time for a retrogressive landslide to develop on the river is in the springtime which would be at the same time that the theatre restaurant was getting maximum use. Dr. Lefebvre initially conceded that a reasonably competent engineer would be expected to exercise more care in those circumstances and he conceded that when human life is at stake, then a reasonably competent engineer would be expected to take more care. The doctor then retreated from that proposition and testified that if he had known the use of the building, he would expect the engineer to use only normal care.

¶ 186 Dr. Lefebvre conceded that the steepness of the slope is a factor in determining the possibility of failure.

¶ 187 Dr. Lefebvre conceded that Jacques Whitford did no slope stability analysis at all. He was asked whether a reasonably competent engineer asked to comment on slope stability would be expected to do some analysis and he responded that Jacques Whitford did not consider it part of its mandate. Mr. Leamen pointed out to Dr. Lefebvre the following comment in the Jacques Whitford Report.

> The stability condition of the Nation River located approximately 350 meters north of the proposed restaurant is not of concern. It is not expected that instability of the riverbank will jeopardize the proposed building at the location investigated.

Mr. Leamen asked Dr. Lefebvre whether a reasonably competent engineer in saying that would be expected to first do a slope analysis. In my view, Dr. Lefebvre avoided the question by responding that Jacques Whitford was saying that the building was far enough away from the river that the stability of the slope did not matter although he conceded to Mr. Leamen that the building was not 350 meters away as stated in the report but rather half that distance, 180 meters. The doctor was asked whether considering the true distance of the building from the river Jacques Whitford should have done a slope analysis. Dr. Lefebvre responded in the negative saying that that would not be necessary if Jacques Whitford was convinced on the wrong evidence. The doctor did concede that if Jacques Whitford knew that the information that it had from the Lamadeleine map was wrong, then Jacques Whitford would be at fault. Mr. Leamen referred Dr. Lefebvre to the Jacques Whitford letter of November 22nd, the first paragraph of which refers to the South Nation River being located some 200 meters north of the building site. The doctor agreed that it is apparent that at this point Jacques Whitford knew that the 350 meter distance was wrong. Mr. Leamen suggested to Dr. Lefebvre that the real distance being 180 meters, Jacques Whitford got it wrong for the second time and asked Dr. Lefebvre whether that would be consistent with the responsibilities of a reasonably competent engineer. Dr. Lefebvre essentially provided the same stock answer, that is, that the Lamadeleine drawing in the Morey Report was at fault. The doctor did concede, however, that the 1156 foot distance indicated on the Lamadeleine map was obviously not the shortest distance to the river and anyone looking at the map would realize that fact. The doctor conceded that this was not the way to express the distance to the river (through the length of the lot parallel to the lot line) and that any reasonably competent engineer would know that.

¶ 188 Mr. Leamen referred Dr. Lefebvre to Jacques Whitford's letter of November 22, 1990 and particularly the third paragraph thereof which reads in part as follows:

> We noted that the riverbank conditions immediately east (upstream) of the site is rather different. The possibility of a retrogressive failure at that site has not been investigated. A failure upstream could possibly jeopardize a portion of the present site. However it is also noted that a ravine is present between the proposed restaurant and the east property line. A ravine such as the existing one may act as a potential barrier of retrogressive failure. (underlining mine)

Dr. Lefebvre conceded to Mr. Leamen that he observed no gully that would protect the building from a retrogressive slide and in particular there was no ravine on the plaintiff's property or near by that would protect the building from a retrogressive landslide, contrary to the suggestion in the Jacques Whitford letter.

¶ 189 With respect to Paterson's involvement, Dr. Lefebvre really had no explanation as to why Paterson drilled its bore hole at the building location as opposed to a point closer to the slope. Nor could the doctor explain what the purpose of the bore hole was if there was no analysis of the bore hole results. Dr. Lefebvre conceded that he could not tell from the Paterson Report how Paterson had evaluated the retrogressive distance however he did not agree with Mr. Leamen's suggestion, as supported by the evidence of McRostie that if Paterson had done the same analysis that McRostie did, the retrogressive distance would have been calculated at 380 meters.

¶ 190 With respect to the three retrogressive landslide scars in the immediate vicinity of the plaintiff's land, Dr. Lefebvre in discussing with

Mr. Leamen the Mitchell Formula, conceded that the existence of those slides could be relevant information because they could lead one to the conclusion that the clay there is susceptible to failure and accordingly the retrogressive distance would have to be determined.

¶ 191 Mr. Leamen closed his cross-examination by putting this question to Lefebvre:

> If the land is unsafe could one or two reasonably competent engineers have done their work competently by saying that it is safe?

Dr. Lefebvre answered that if the land is clearly unsafe and the engineer unequivocally says that it is safe, then he is incompetent. In re-examination Mr. Rasmussen asked Dr. Lefebvre whether two competent engineers could arrive at different conclusions. His response was in the affirmative. He pointed out that if the study had been done downstream then probably all three consultants, Morey, Paterson and Jacques Whitford, would reach the same conclusion. However, if the risk is very small, there may be a degree of conservatism resulting in different opinions.

¶ 192 In his evidence McRostie critiqued Dr. Lefebvre's written report and made the following comments.

1. Dr. Lefebvre in his report refers to the distance from the building to the river given by the client of 1128 feet. McRostie notes that as a general principle engineers do not accept anyone else's measurements of location.
2. While Dr. Lefebvre is an eminently qualified engineer he makes no mention of certain facts such as

   (a) neither Paterson or Jacques Whitford made use of air photos which was a glaring omission;
   (b) he states that the Paterson Report contains no plan and that Paterson had no evidence as to where the building was to be. This was not so. If one looks at the Paterson Report at Tab 79, Exhibit 4, on the last page there is a plot plan setting out the location of the proposed building. The plan itself is erroneous. It notes the scale to be 1 to 1000 whereas it should be 1 to 3000. It appears that Paterson took the plan and redrew it and in doing so made an error with respect to the scale. As well it appears that the gully was drawn in an incorrect location on the plan.

3. Dr. Lefebvre's comments with respect to the difference in retrogressive distances was made with the lack of awareness that Mitchell's distances were from the crest and Morey's from the shore.
4. Dr. Lefebvre made no comment on Paterson's and Jacques Whitford's lack of concern for public safety.
5. McRostie explained that as, over the course of the centuries, the river erodes its course through the clay, it eventually gets to a level such that the pore pressure in the river bank runs down, rather than out, leaving the slope more stable. Acknowledging Dr. Lefebvre's outstanding work in the field of downward pore pressure, McRostie was of the view that this is not a factor in this case when one looks at past recent slides which occurred when the riverbed was at the same depth as it is now. McRostie was of the view that with respect to these most recent slides the run off must have over powered the downward flow.

¶ 193 To the extent that McRostie and Lefebvre differ in their views as to whether the subject building is "safe" from a retrogressive landslide, I have no hesitation in accepting the evidence of McRostie. It would appear that McRostie is the dean of geotechnical engineers in the Ottawa area. He has been practicing in the field since 1944 and has been involved in projects relating to retrogressive landslides since at least 1955. In my view he was impartial in formulating his opinions on sound engineering principles. Indeed it would have been in his client's Lamadeleine's best interest at the time of his first report dated January 9, 1997 prior to the OMB hearing, if McRostie had not found that in his opinion the subject building was not safe at certain times of certain years bearing in mind that Lamadeleine at the OMB hearing was opposing the appeal of the Authority relating to the by-law which, by that time, had excluded the subject property from the hazard zone. I found McRostie's evidence to be even-handed. His approach was sufficiently conservative to take into account the possibly catastrophic results of a retrogressive landslide engulfing the theatre restaurant building during the Spring of the year. From a realistic and practical point of view I find it difficult to understand, notwithstanding the different technical results that might be obtained by using different assumptions in the calculations, how anyone can seriously argue with the opinions of Morey and McRostie that absent appropriate remedial work it was not safe to construct the building to the north of the east west ravine and that in doing so, it was placed at risk of being engulfed by a retrogressive landslide. Although such a retrogressive landslide would only occur in the very peculiar

circumstances and indeed might never occur, the result would be so catastrophic that the risk is unacceptable.

¶ 194 With respect to the competing evidence on the question whether the defendant engineers met the standard of care expected of them in conducting their investigations and preparing their reports, McRostie is very much a "field man" with vast experience as a geotechnical engineer in the field since 1944. He continues in active practice to this date. Dr. Lefebvre candidly admitted that unlike McRostie, he does not deal on a usual basis with every day problems. In my view, McRostie is in a much better position than Dr. Lefebvre to offer guidance to the court as to what would have been expected of a consulting geotechnical engineer in 1990 in the circumstances of this case and as to the applicable standard of care expected of a geotechnical engineer at that time. I am comfortable in accepting McRostie's evidence with respect to that standard of care and I am equally comfortable in accepting his evidence as to the manner in which the defendant geotechnical engineers failed to meet that standard.

¶ 195 As is pointed out in Linden, Canadian Tort Law, (Third Edition) at page 130:

> ... An accurate explanation of the standard of care expected of a professional person has been articulated as follows:
>
> > "[The] degree of skill consistent with the function discharged, that is, consistent with the measure of skill displayed by others reasonably competent in that profession touching matters of like kind. Perfection is not expected; the world of work, not the ideal of the debating area, is the standard." (See Trident Construction v. W.L. Wardrop and Associates Limited [1979] 6 W.W.R. 481 at page 533 (Man.Q.B.) (per Wilson J.) speaking of an engineer.)

¶ 196 As well, if an engineer holds himself out to be an expert or a specialist in a specific area, there is a requirement on his part to exercise the degree of skill expected of a specialist, rather than the degree of skill of an ordinary engineer. As was said by Abbott J. in Wilson v. Swanson (1956) 5 D.L.R. (2d) 113 (S.C.C.) at page 7 in a case involving medical malpractice:

> The test of reasonable care applies in medical malpractice cases as in other cases of alleged negligence. As has been said in the United States, the medical man must possess and use, that reasonable degree of learning and skill ordinarily possessed by practitioners in similar communities in similar cases, and it is the duty of a specialist such as appellant, who holds himself out as possessing special skill and knowledge, to have and exercise the degree of skill of an average specialist in his field.

¶ 197 While recognizing that there may be a legitimate difference in approach taken by different geotechnical engineers and a legitimate difference in opinion among them as to the safety of any given site without there necessarily being negligence on the part of one or more of those geotechnical engineers, I am satisfied on the evidence in this case that there was negligence on the part of each of the defendants Jacques Whitford Limited and John D. Paterson and Associates Ltd. in that, in the circumstances of this case, they failed to live up to the ordinary and reasonable standard of care to be expected of a geotechnical engineer.

¶ 198 With respect to the negligence of the defendant Paterson, I find the following.

¶ 199 In its letter dated November 19, 1990 to Lamadeleine, Paterson was negligent in stating that "The structure is located greater than 340 meters from the crest of the South Nation River". In fact the shortest distance from the building to the river was 170 meters. Paterson was negligent in relying on the distance indicated on the Lamadeleine map particularly in view of the fact that this distance was taken parallel to the east and west boundary lines of the property, a distance which had no geotechnical significance. Paterson was negligent in failing to satisfy itself as to the shortest distance from the building to the river. It follows that Paterson was negligent in stating in its preliminary report that "however, our calculations indicate that the proposed structure is set back a distance that is more than adequate to buffer the structure against a possible slope failure, should it occur." In assuming a set back distance of 340 meters Paterson was overstating the actual set back distance by 100%.

¶ 200 In its report dated November 22, 1990 signed by geotechnical engineer Walker, Paterson said the following "We have reviewed the Golder Associates Report #881-2486 and agree that there is always the possibility of landslides occurring along the South Nation River; however, after examining the site conditions (i.e. gullies, slopes, etc.) and the lands being forested and well drained, it is our opinion that the proposed building is sufficiently set back from the river so that should a failure occur, the building would not be adversely affected". The inclusion of this comment was obviously an attempt by Paterson to accommodate Lamadeleine's

request that the "Lagare paragraph" (Tab 77, Exhibit 4) be incorporated in its report.

¶ 201 Paterson was negligent in representing to Lamadeleine that a qualified geotechnical engineer had examined the site conditions when in fact no such examination had been done by a geotechnical engineer. Paterson was negligent in all of the circumstances of this case in not having a qualified geotechnical engineer examine the site prior to delivery of its report.

¶ 202 Paterson was negligent in failing to identify the most critical slope running to the east of the subject property and in failing to calculate the factor of safety for the most critical slope.

¶ 203 Having calculated a factor of safety of 1.4 for the slope that it did analyze and having conceded in its report that this factor of safety represented only a marginally stable slope condition, Paterson was negligent in expressing the opinion that should a failure of the bank occur, it would not retrogress back to the location of the proposed building without having first calculated a retrogression distance.

¶ 204 Paterson was negligent in failing to inspect the riverbank a reasonable distance in both directions from the plaintiff's property. Such an inspection might well have brought to Paterson's attention the most critical slope located to the east of the property.

¶ 205 Paterson was negligent in failing to consider aerial photographs of the subject area which showed the three distinct retrogressive landslide scars in the immediate area of the plaintiff's property.

¶ 206 Paterson was negligent in failing to take into consideration those historic retrogressive landslides when assessing the potential for initial failure and retrogressive distance.

¶ 207 On all of the evidence Paterson was negligent in failing to give sufficient consideration to the risk to human life before expressing its opinion that "The proposed building is sufficiently set back from the river so that should a failure occur, the building would not be adversely affected".

¶ 208 I may say that in the circumstances of this case while the risk of a retrogressive landslide extending to the subject building was a slight risk only, putting the building in danger at certain times of certain years when the combination of Spring rains, melting snow run off and a sudden dam breaking might all occur at the same time, the result of the risk materializing could be so catastrophic that a conservative approach is required in determining the safety of the building from a geotechnical engineering point of view. Thus, the approach of Morey and McRostie was a reasonable and appropriate one in the circumstances including the assumption of high pore water pressures. Having used those conservative assumptions and having arrived at a factor of safety which is less than the MNR's base line factor of 1.5, then in my view it is negligent of the geotechnical engineer to forego (as did Paterson having found a factor of safety of 1.4) a calculation of retrogressive distance on the basis that the marginal factor of safety was calculated "using excessively high pore water pressure conditions that are likely never to develop in the slope".

¶ 209 I turn now to the negligence of the defendant Jacques Whitford.

¶ 210 In its report to Lamadeleine dated October 31, 1990 Jacques Whitford stated the following in section 6.1 of the report:

> The stability condition of the Nation River located approximately 350 meters north of the proposed restaurant is not of concern. It is not expected that instability of the riverbank will jeopardize the proposed building at the location investigated.

¶ 211 Jacques Whitford was negligent in locating the building at a distance of 350 meters from the river when in fact the shortest distance to the river was 170 meters. Jacques Whitford was negligent in failing to determine on its own the shortest distance from the building to the river and in relying on the 350 meter distance marked on a map which had been given to Kwok at the time of his retainer.

¶ 212 Jacques Whitford was negligent in advising that the stability condition of the Nation River was not of concern and that it was not expected that instability of the riverbank would jeopardize the proposed building when at the time of release of that report Jacques Whitford had made no examination of the riverbank other than to drive or walk the forest road that boundaried the west of the property to the crest of the slope. It is of significance that in the report of October 31, 1990 Jacques Whitford acknowledged that the scope of work for the investigation described in the report did not include a survey of the river slope in order to determine that slope stability conditions.

¶ 213 Jacques Whitford was negligent in providing the opinion as to stability without having made any slope stability assessment at all. As the evidence disclosed, at some point prior to the delivery of the report, Kwok had a telephone discussion with Lamadeleine in which he told Lamadeleine that the report was close to being ready. It was at that point Lamadeleine told him that Kwok had to address the stability conditions of the South Nation River because this was very important to Lamadeleine. It would appear that it was for this reason that Kwok in the report gratuitously commented on the stability of the riverbank.

¶ 214 As well Jacques Whitford was negligent in gratuitously providing an opinion with respect to riverbank stability in its report dated October 31, 1990 without being aware of and without considering the contents of the Golder Report to the Authority and Golder's site specific report to Lamadeleine. Kwok and Hache first became aware of these reports after Lamadeleine received the report of October 31, 1990 and requested Jacques Whitford to include in its report the "Lagarec paragraph", the inclusion of which paragraph Lamadeleine said would "... permit me to obtain a building permit and at the same time allow you plenty of room in your report." According to the evidence of Kwok, he told Lamadeleine that he was not going to change his report but at the same time he was now concerned about retrogression and he advised Lamadeleine that he would look at the Golder Report and write an addendum.

¶ 215 In the Summary of Evidence, Schedule A, I have detailed Kwok's and Hache's further involvement with the subject property and the manner in which their supplementary report dated November 22, 1990 came into existence after the first draft dated November 20, 1990. Kwok, in his evidence, explained that he wanted to address the slope stability portion of his report dated October 31, 1990 because he was not prepared to leave it the way it was in that it was "wide open" and he had not looked at the situation from the point of view of a retrogressive landslide and therefore felt that his report should be qualified.

¶ 216 About a week before November 22, 1990 Kwok and his associate Hache returned to the site. They accessed the property from the forest road on the west side of the property and walked from there east along the bank looking at the terrace and the slope angle and tree cover. It was Kwok's evidence that he believes they walked not very far past the east property line of the subject property. Hache gave no evidence in that respect. In my view, they did not walk a reasonable difference to the east of the subject property and were negligent in failing to do so.

¶ 217 They did not determine the most critical slope in terms of a retrogressive landslide engulfing the subject building, as was determined by McRostie and they were negligent in failing to do so.

¶ 218 Jacques Whitford's letter dated November 22, 1990 reads in part as follows:

> 4. Provided that the existing site conditions are unaltered the risk of a retrogressive failure jeopardizing the proposed restaurant is very low. Retrogressive failure at this site would likely be confined within the mid slope terrace.

Jacques Whitford was negligent in addressing the risk of a retrogressive failure engulfing the building without doing an appropriate slope analysis, without doing a factor of safety calculation, and without doing any calculation of retrogressive distance. I find as a fact that none of these things were done by anyone on behalf of Jacques Whitford.

¶ 219 Further Jacques Whitford was negligent in addressing the risk of a retrogressive failure engulfing the subject building without identifying and analyzing the most critical slope to the east of the plaintiff's property.

¶ 220 In its report dated November 22nd Jacques Whitford was negligent in locating the subject building some 200 meters from the river whereas in actual fact the shortest distance from the building to the river was 170 meters.

¶ 221 While Jacques Whitford in its letter dated November 22nd did acknowledge that a failure of the slope to the east of the subject property "could possibly jeopardize a portion of the present site" and that "the possibility of a retrogressive failure at that site has not been investigated". The letter went on to dilute that caution with the following comment:

> However it is also noted that a ravine is present between the proposed restaurant and the east property line. A ravine such as the existing one may act as a potential barrier of retrogressive failure.

I find as a fact that there is no ravine present between the subject building and the east property line. Dr. Lefebvre testified to that effect and indeed Kwok, in cross-examination, conceded that no such ravine existed. In the

circumstances, Jacques Whitford was negligent in incorporating that caveat in its letter of November 22nd.

¶ 222 Jacques Whitford was negligent in purporting to assess the potential for initial slope failure and retrogressive distance without considering the aerial photographs which clearly showed historic retrogressive landslides in the vicinity of the plaintiff's property.

¶ 223 In his evidence in cross-examination, Kwok took the position that his letter of November 22nd was saying with a strong reservation that it was safe to build on the site. When pressed by Mr. Leamen, Kwok conceded that his opinion at the time and today was and is that to build on the site "is a gamble". On all of the evidence I agree with that opinion. To locate the building to the north of the east west ravine without doing the remedial work recommended by Morey, was to gamble with the lives of the patrons of the restaurant theatre. It was a gamble that was completely unacceptable. In my view, the Jacques Whitford letter of November 22, 1990 does not convey to the reader the fact that construction of the new building on the proposed site would constitute a gamble in terms of the risk of the building being engulfed by a retrogressive landslide. Jacques Whitford was negligent in failing to convey its true opinion that in locating the building on the proposed site, one was gambling with the safety of the building and thus with the safety of the patrons.

¶ 224 In my view it is not practicable to determine the respective degree of negligence as among the defendants. Accordingly, pursuant to section 4 of the Negligence Act, the defendants are deemed to be equally negligent.

¶ 225 I turn now to the question of damages. Negligence, technically, consists of the breach by the defendant of a legal duty owed to the plaintiff to take care, which breach results in damage to the plaintiff.

¶ 226 While I have found the defendants negligent in the sense that their conduct, in my view, falls below the ordinary and reasonable standard of care to be expected of them in the circumstances of this case, there is a very real issue as to whether the plaintiff has suffered any compensable damage as a result of that conduct.

¶ 227 The plaintiff, in its statement of claim, claims damages in the amount of $800,000.00. In paragraph 26 of the statement of claim the plaintiff claims that it has been unable to earn any revenue from the subject building as it would otherwise have done. With respect to this head of damage, it should be noted that the renovation to the existing building on the north side of the ravine was completed in the Spring of 1989 and business was carried on there in 1989 and in 1990. Following the fire in August of 1990 construction of the new restaurant theatre building was completed in January of 1991 and the business operated in the normal course beginning at that time. The plaintiff finally terminated its business activities on the property in August of 1997 and the building has not been used since that time.

¶ 228 At Exhibit 25, Tab 10A, is a document entitled Unaudited Budgeted Financial Statements for the period March 1, 1987 to February 28, 1990 relating to La Sucrerie Casselman Inc. This is a financial record supplied by Lamadeleine at the request of the defendants. The document shows a net loss for each of the three fiscal year ends for a total net loss over the three year period of some $54,000.00.

¶ 229 Beginning at Tab 10B are the financial statements of the business for the fiscal year ends 1991 through to 1997 inclusive. I do not accept Lamadeleine's evidence that the statements do not properly reflect the business operations during those years. I find as a fact that each of the financial statements accurately reflect the operation of the business except for the fact that the expenses shown do not include anything for the time that Lamadeleine would have put into the business. By adding back in depreciation in each of the statements, one can arrive at the real net income or net loss of each of the years of operation as follows:

(a) for the 12 month period ending February 28, 1991, the net income was approximately $7,700.00;
(b) for the year ending February 29, 1992, the net loss was approximately $17,000.00;
(c) for the year ending February 28, 1993, the income was approximately $25,000.00;
(d) for the year ending February 28, 1994, the income was approximately $10,000.00;
(e) for the year ending February 28, 1995, the net loss was $13,000.00;
(f) for the year ending February 28, 1996, the net income was $24,000.00;
(g) for the year ending February 28, 1997, the net loss was approximately $7,600.00;

¶ 230 In 1995 and 1996 the plaintiff leased the restaurant to Rita Benson who had been an employee of the plaintiff in 1992, 1993 and 1994, preparing the restaurant meals in the months of March and April. In 1995

and 1996 Mrs. Benson carried on the same restaurant business but paid rent to the plaintiff and kept the revenues from the meals.

¶ 231 On all of the evidence, I am satisfied that this was not a viable business operation and it is not likely that it would have turned a profit on a regular basis sufficient to reasonably justify the plaintiff continuing with the business. Lamadeleine testified that it was the kind of business that took time to establish. In my view, if after ten years of operation the business was not sufficiently established to turn a regular and significant profit, then it likely would never be so established.

¶ 232 In any event, as will be discussed in some further detail, the plaintiff is not now and has never been prohibited in law from carrying on the theatre restaurant business at the building site.

¶ 233 On all of the evidence, it is not demonstrated that the plaintiff has lost or will lose in the future, any income as a result of the defendants' negligence.

¶ 234 In paragraph 25 of the statement of claim the plaintiff alleges that as a result of the unsafe status of its lands and as a further result of the redesignation of the hazard lands, the restaurant and theatre building have no value and are, in fact, a liability to the extent of the cost of demolition of $25,000.00.

¶ 235 During the course of the trial I heard evidence with respect to the cost to demolish the building, the cost to replace the subject building, the cost of depreciated replacement, the replacement cost of the equipment other than the theatre equipment, and the cost to replace the building as of December 5, 1999. In that respect, the evidence of Ubald Boileau, Norman Lemay, Roland Landry, Sylvain Desjardins and Peter Donnolly, is reviewed in Schedule A. Their evidence is essentially opinion evidence.

¶ 236 On the other hand, there is the direct evidence of Jim Nault as to the cost of constructing and equipping the theatre restaurant building following the fire in the Summer of 1990. Mr. Nault is a property specialist with Cooperators Insurance. In 1990 he was an independent claims adjuster with Renaud Senecal and as such dealt with the plaintiff's fire. The insurance policy on the original building had been issued through Reed Stenhouse and Reed Stenhouse had retained Nault to investigate, assess and settle the fire loss.

¶ 237 The extent of the insurance coverage was $400,000.00 on building, equipment and stock and there was a replacement cost endorsement on the policy if the plaintiff decided to rebuild. The initial payment made by the insurers was for actual cash value and as the plaintiff proceeded to reconstruct the building, it presented invoices to Nault which Nault reviewed and then gave to the insurer with a recommendation for payment. According to the evidence of Nault which I accept in its entirety, the entire limits of the $400,000.00 coverage were eventually paid out. Mr. Nault confirmed in his evidence that everything, including the building and the equipment contained therein, was destroyed by the fire. Even the original concrete slab was condemned and replaced.

¶ 238 Nault was very clear in his evidence that the $400,000.00 policy limits were sufficient to construct the new building and to replace all of the equipment. I find that to be the fact notwithstanding Lamadeleine's evidence, which I do not accept, that additional funds were expended by the plaintiff in the reconstruction.

¶ 239 That being the case, the plaintiff had in 1990, after reconstruction, a building that cost $400,000.00 to construct and to equip. By 1997 when the plaintiff chose to cease business activities, the building and equipment had depreciated significantly.

¶ 240 Except for a few months in late 1996 and early 1997 after the hazard line was redrawn to exclude the plaintiff's property and before the property was put back into the hazard zone by the OMB, the plaintiff's property had been in the hazard zone since its acquisition in 1982.

¶ 241 Lamadeleine, on behalf of the plaintiff company, made the personal choice to discontinue carrying on the business in the face of McRostie's report, in the face of the OMB decision placing the property back in the hazard zone, and, indeed, in the face of the advice being given to him by his solicitor. However, McRostie in his report was not telling Lamadeleine anything that he had not been told by Morey in 1988. The Morey site specific report clearly put Lamadeleine on notice that the existing building on the north side of the east west ravine would not be safe from a retrogressive landslide unless very extensive work was performed along the shoreline. I have found as a fact that Lamadeleine fully understood Morey's caution that the site north of the east west ravine was not safe from a retrogressive landslide unless the remedial work, the extent of which was yet to be determined, was in fact determined and performed. Lamadeleine in the face of Morey's opinion, persevered and managed to get from the Township a building permit to renovate and extend

the existing building to the north of the ravine. Lamadeleine, in doing so, knowingly flew in the face of not only the best expert opinion that he had but indeed the only expert opinion that he had and, that, from a geotechnical engineer that was intimately familiar with the retrogressive landslide problem along the South Nation River.

¶ 242 When the existing building burned down in 1990 Lamadeleine, in order to safe a relatively few dollars on a new septic system, again committed himself to one way or another obtaining a building permit to construct the new building on the north side of the east west ravine without doing the remedial shoreline work required by the Morey Report. Lamadeleine actively encouraged Paterson and Jacques Whitford to write reports which would "get around" Morey's opinion. He even went so far as to suggest the actual language that should be incorporated in their reports.

¶ 243 Lamadeleine suggested in his evidence that prior to the McRostie Report he felt that the building was safe but that now he was not satisfied with the safety of his land and feels that he cannot operate the business again because of the danger to the people. He obviously had no such concerns when he renovated the existing building and started up his business in it in the face of Morey's very clear statement to him of the danger in doing so or when he constructed the new building on the same site.

¶ 244 As well, the plaintiff's property, to the knowledge of Lamadeleine, had always been in a hazard zone since the property was purchased, except for the relatively short time in late 1996 and early 1997 when he had convinced the Township to exclude his property from the hazard zone. The OMB decision then, to redraw the line in early 1997 to put the property back into the hazard zone, was of no real significance to Lamadeleine.

¶ 245 Again it should be noted that it is clear, on the evidence, that notwithstanding Lamadeleine's advice to his insurer following the OMB hearing, advising the insurer that his land was in a hazard zone, the only coverage that was deleted from the policy by the insurer was property damage due to landslide. All other coverage remains in place including liability coverage. It should also be noted that at no time prior to the OMB hearing in February of 1997 did Lamadeleine advise his insurer that he was in a landslide hazard zone although he knew that to be the case.

¶ 246 Lamadeleine, on behalf of the plaintiff, has made a personal decision not to carry on in the building the business of a theatre restaurant notwithstanding that the plaintiff is perfectly entitled in law to do so.

¶ 247 In paragraphs 19 and 20 of the statement of claim it is alleged that in 1996 the plaintiff intended to sell the restaurant and theatre building and had obtained appraisals establishing the value of the buildings and property at $650,000.00. The plaintiff further alleges that the proposed purchaser, pursuant to due diligence obligations, contacted the South Nation River Conservation Authority and was advised that the plaintiff's land was in an area susceptible to retrogressive landslides and that as a result the proposed purchaser did not complete the purchase of the plaintiff's land.

¶ 248 On the evidence, the only person who ever expressed the slightest interest in possibly purchasing the plaintiff's property was Rita Benson who was involved in the restaurant end of the plaintiff's business from 1992 to 1996. It was her evidence, which I accept, that it was Lamadeleine who first approached her to tell her that he was interested in selling the property. No price was ever discussed nor was any appraisal ever shown to her. It was around the end of 1996 or the beginning of 1997 that Lamadeleine told her that he could not sell his property to her because it was in a danger zone.

¶ 249 At Tab 105 of Exhibit 4 is solicitor Laviolette's letter to the Township of Cambridge dated May 13, 1996 advising that her client is interested in purchasing the subject property and asking confirmation that the property is not "within the sensitive slope protection". Ms. Benson knows Ms. Laviolette and confirmed to Mr. Rasmussen on cross-examination that she never hired Ms. Laviolette to do anything for her with respect to a possible purchase of the property nor did she ever see the responses from the Township and the Authority to Ms. Laviolette which are located at Tabs 106 and 107. Nor did Ms. Laviolette ever communicate with her about the plaintiff's property. It would seem clear that Ms. Laviolette's inquiries were being made at the instance of Lamadeleine. While Lamadeleine suggested in his evidence that he had made inquiries of the Caisse Populaire on behalf of Ms. Benson to determine whether or not financing of the purchase of the property would be available, Ms. Benson in her evidence, which I accept, testified that she never asked Lamadeleine to make any inquiries with any financial institution to determine if there was money available to assist in the purchase of the property.

¶ 250 On the evidence there was never any likelihood that Ms. Benson would have, in any circumstances, purchased the plaintiff's property at

anywhere close to the witness Lemay's 1993 appraised depreciated value of $640,000.00. Ms. Benson, while operating the restaurant for the plaintiff, also operated her own catering business out of her home. She was lacking space and wanted to buy a larger place and because of that thought of purchasing the plaintiff's business. She eventually bought a property in May of 1999 in Casselman in the industrial park and paid $130,000.00 for it.

¶ 251 In all of the circumstances I am satisfied that although the defendants' conduct fell below the standard of care to be expected of them as outlined in these reasons, the plaintiff did not suffer any damages as a result of that conduct. He is essentially in no worse position than he was in 1989 when he was operating a restaurant theatre business on a site that his own expert, Morey, had told him was not safe from retrogressive landslides unless very significant remedial work was performed. He has known all along what the risk was in building to the north of the east west ravine without doing the remedial work and he has now decided not to operate the business in the face of that risk.

¶ 252 In all of the circumstances, the plaintiff has not suffered any damages as a result of the defendants' conduct. The plaintiff's action is therefore dismissed.

¶ 253 With respect to the matter of costs, in the absence of any Rule 49 offers to settle, my inclination would be to have each of the parties bear its own costs in this action. I will, however, reserve on the matter of costs pending written submissions from the parties.

MORIN J.

* * * * *

SCHEDULE `A'

LA SUCRERIE CASSELMAN INC.

and

THE CORPORATION OF THE TOWNSHIP OF CAMBRIDGE, JACQUES WHITFORD LIMITED and JOHN D. PATERSON AND ASSOCIATES LTD.

SUMMARY OF EVIDENCE

This is an interesting case in which the plaintiff claims to recover from the defendants, damages in the amount of $800,000.00. The claim against the consulting engineers is framed in negligence having regard to the advice that they gave to the plaintiff with respect to the location of the plaintiff's building along the banks of the South Nation River. The claim against the municipal defendant is also framed in negligence on account of their issuing a building permit for the building.

Counsel for the plaintiff, Mr. Leamen, opened by outlining the evidence that he anticipated that would be put before me. The subject property owned by the plaintiff is located along a 17 kilometer stretch of the South Nation River which has been subjected to retrogressive landslides for over 100 years. The latest slides occurred in 1971 and 1993. The Ontario Government became concerned about the problem in 1971 at a time when Highway 417 was planned to cross the South Nation River.

On August 4, 1990 the plaintiff's building, a combination sugar shack and summer theatre located on the subject lands, was destroyed by fire. The building had been built less than two years before. The principal of the plaintiff company, Conrad Lemadelaine, obtained insurance proceeds and wished to rebuild the building on the same site.

The plaintiff applied for a building permit. The defendant municipality required the plaintiff to obtain an opinion from a geodetic engineer that the site was suitable for reconstruction having regard to the possibility of a retrogressive landslide into the South Nation River. The plaintiff retained the defendant engineering firms to provide the opinion. They said, essentially, that it was safe to rebuild on the same location and the municipality accordingly issued a building certificate and the plaintiff reconstructed the building.

A significant retrogressive landslide occurred on June 20, 1993. The South Nation Conservation Authority (SNCA) had, a few months before that landslide, issued a report with respect to the area in which the slide had occurred. The slide in June of 1993 retrogressed 700 meters from the shoreline, that is, the stability of the land collapsed for a distance of 700 meters from the shoreline. The 1971 landslide had retrogressed some 450 meters. The plaintiff's building, as reconstructed, is located 170 meters from the shoreline.

It is the plaintiff's position that the building is now useless. Subsequent to the 1993 landslide an employee of the plaintiff had expressed an interest in buying the business. The prospective purchaser's solicitor made due

diligence inquiries of the defendant municipality and the SNCA. The SNCA advised that the building was not in a safe location. A study of the problem had resulted in official plan amendment #51 which proposed set back lines that would have included the plaintiff's building site as "hazard lands". The plaintiff complained to the planner and, as a result, the set back lines were drawn to exclude the plaintiff's building. The SNCA became concerned and opposed the redefining of the set back lines and eventually the OMB restored the original set back lines.

The plaintiff alleges that the defendant municipality throughout was aware of reports which indicated that the site was unsafe. The last report received was from professional engineer McCrosty. The plaintiff's building sits empty today.

THE EVIDENCE

At the opening of trial a plot plan was filed as Exhibit 1 which shows the plaintiff's lands along the South Nation River. At the site the river flows in a westerly direction. I was told that I would hear evidence that if one were to run a straight line from the present building site to the south shore of the river, parallel to the west and east boundaries of the subject property, the distance would be approximately 450 meters. On the other hand, if one were to draw a line from the building site to the closest point of the river, the distance is something in the order of 200 meters. I was told as well that the building is situated north of a gully shown on the plot plan and that if the building had been located to the south of the gully it would have been protected from retrogressive landslides.

Filed as Exhibit 2 is a site air photo showing the location of the plaintiff's lands and its position adjacent the South River Nation as the river flows west, curves north and then flows east. I was told that subsequent evidence would disclose that areas of earlier landslides would be pointed out on Exhibit #2.

Filed as Exhibit A numbers 1 to 5 subject to further identification were photos of the 1993 retrogress of landslide taken by the Ottawa Citizen. These photos were received subject to a qualified witness testifying as to what they depicted and the location of the depiction on the South Nation River. I was told that this particular slide was not in the area of the subject property.

Put before me as well at the opening of trial was a chronology of events prepared by plaintiff's counsel. It was received with the consent of all counsel on the understanding that the chronology did not constitute evidence but would assist me in understanding the sequence of events as established by appropriate evidence.

THE CASE FOR THE PLAINTIFF

First Witness: Clifford Morey

Examination-in-Chief

Filed as Exhibit 3 was Mr. Morey's CV. He is a registered professional engineer, a member of the Canadian Geo-technical Society and a designated consulting engineer. He received his geological engineering degree from Queens University in 1973 and his MSC (ENG) Civil Engineering from Queens in 1977. He took graduate courses in civil and geo-technical engineering at the Universities of Windsor and Carleton in 1980 and 1982. He was employed as a geo-technical engineer by Golder Associates Limited from 1980 to 1994 during which time he did subsurface investigative work and slope stability evaluation analysis in the area of the South Nation River. He has performed a half dozen geo-technical investigations on the South Nation River along its length between Casselman and Lemieux and beyond those limits has conducted another 10 or 12 geo-technical investigations on the river. Mr. Morey left Golder Associates Limited in 1994 and since that time to the present has been president of his own engineering firm carrying out geo-technical and hydro-geological investigations and environmental site assessments. He continues to this date to do work in connection with the South Nation River. He testified that he was not aware of anyone who has done as much work as he in connection with the South Nation River.

Filed as Exhibit 4 were four volumes of documents consisting of the plaintiff's productions and some of the productions of the defendants. The four volumes were received in evidence on the understanding that other than those of the plaintiff's documents admitted by the defendants in answer to the plaintiff's notice to admit, the documents would be proven in the normal course during the course of the evidence being adduced.

In 1985 Golder Associates had been asked to do a slope analysis downstream of Casselman at an area known as the Sequinbourg Development. It was a residential development with a mix of older and newer homes located close to the South Nation River. At that time Golder Associates put down three bore holes and did a slope stability evaluation by computer analysis. Based on the results, it appears that the stability of the

slopes of the South Nation River in that area was less than adequate for development close to the crest of the slope. It recommended that remedial work be done including a large rock filled berm at the bottom of the slope some 20 to 30 feet wide and extending 5 meters above the water level. It was also recommended that one particularly steep slope be flattened. This berm work was done over a distance of approximately 1 kilometer along the river and resulted in a safety factor of 1.3.

At Tab 13, Exhibit 4, is a letter from Golder Associates addressed to the South Nation River Conservation Authority dated July 15, 1988 confirming Golder Associates' interest in continuing to provide geo-technical services to the authority relating to slope stability along the South Nation River and to outline a proposed methodology for investigating the stability of the slopes along the river between Casselman and Lemieux, Ontario. Golder Associates was in fact retained by the Conservation Authority for that purpose and Morey was project engineer. The retainer was prompted by the Ministry of Natural Resources. That particular stretch of the river was of particular interest because of the retrogressive landslide along that stretch of the river in 1971 and the growing wish to develop along the river in the face of safety concerns.

The letter of July 15, 1988 outlined a three-phase plan.

At Tab 15 of Exhibit 4 is the Golder Associates report dated September 1988 relating to Phase 1. Morey was responsible for producing this report. At page 2 of the report it is noted that the study area consists of some 20 kilometers of the banks of the South Nation River from about 1 kilometer northwest of the Town of Casselman to about 2 kilometers north of the Village of Lemieux. The report notes at page 2 that a review of air photos of the South Nation River between Casselman and Lemieux indicates that at least 15 retrogressive type slope failures have occurred historically along this 20 kilometer section of the riverbanks. If one looks at Exhibit 2, the site air photo, one can see two readily visible slide areas across the river from the plaintiff's property.

Marked as Exhibit 5 was figure 2 from the Golder Associates report at Tab 15, Exhibit 4, which shows the two retrogressive landslide areas across the river from the plaintiff's property and two other such landslide areas immediately to the west, and on the same side of the river as the plaintiff's property. The river is approximately 100 meters wide.

Exhibit 5 also shows ten other retrogressive slide areas. The number of such retrogressive slide areas is significant in that it shows the activity along the shores and the tendency for retroactive landslides along the river. It should be noted that the landslide site marked as "M" on Exhibit 5 dates back to 1895. The landslide site "H" dates back to 1910 and the landslide site marked as "I" on Exhibit 5 dates to 1971.

The slide sites shown on Exhibit 5 were plotted on Table II appended to the report of September 1988 (Tab 15). The width and distance of retrogression from the river edge of each of the landslides is indicated in Table II. The distance of retrogression from river edge varied from 50 meters to 650 meters. As Morey put it, these slides are an indication of what happened in the past and what might happen in the future.

For the purpose of this report, MNR selected 15 sites for bore holes and Golder Associates put down 22 bore holes at the 15 sites. At some sites bore holes were placed both at the crest and at the toe of the slope. Following completion of drilling, piezometers were placed at different levels in the hole to measure ground water in the slope and to provide a profile of ground water in the slope. Further, profiles in the slopes in terms of steepness and height were developed. The bore holes generally disclosed an upper sand layer over silty clay that became stiffer the deeper it went. Essentially what was seen was clay slopes with sand caps. Test results indicated that the toes of the slopes were very unstable and some of the steeper slopes had safety factors of less than 1.5 while some had safety factors of more than 1.5. The safety factor of 1.5 is the ratio of forces that resist failure over forces that tend to cause failure and is determined by a computer analysis. A 1.5 safety factor ratio is considered safe in the industry. Anything below 1.5 is considered questionable and as the ratio approaches 1 the risk of failure increases. If the factor is below 1 then the slope has in fact failed. Generally the conclusion drawn from all of the analysis by Golder Associates was that there was potential along the river for retrogressive landslides.

At page 9 of the report there is reference to the ground water conditions as ascertained by the piezometers in each of the bore holes. The results indicated that the riverbank is generally saturated below a depth of 1 to 2 meters where the sand cap is relatively thin and where the sand cap is significantly thicker the slopes are saturated below a depth of about 4 to 5 meters. It is noted that at all sites the ground water measurements indicate that downward flow of the ground water is occurring within the slopes.

At page 11 of the report at Tab 15 the theory of landslide retrogression is set out. In a nutshell there are three steps to the occurrence. Initially, the earth flows are initiated by a simple rotational failure of the slope either

near the toe or possibly up to the crest of the slope close to the riverbank. Upon this occurrence the landslide debris may either stay intact or may flow and almost liquefy. If it stays intact it simply slumps and stabilizes the material behind it. It if flows, it leaves the area and leaves a steep backscarp. If the backscarp has a safety factor of 1.0 or less, it will then fail and slice off and liquefy and flow out into the river. That phenomenon continues until the backscarp becomes stable either because it is lower in height or because it consists of more stable material. All this can happen very quickly, perhaps in one or two hours.

At page 14 of the report is a formula which is used to calculate the estimated retrogression distance in meters. The formula is R=(Ns-4)100. R is the estimated retrogression distances in meters and Ns is the maximum stability number calculated for a specific slope.

At page 14 of the report under the heading "RESULTS" it is noted that computer analysis has been carried out to determine the factor of safety of the slopes against initial failure. As earlier pointed out, the factor of safety of a slope is a ratio of the magnitude of the forces which tend to cause a slope to fail to the magnitude of the forces which tend to resist failure. Theoretically, a slope with a factor of safety of less than 1 will fail and a slope with a factor of safety of greater than 1 will not fail. It is noted that for the purpose of the study a computed factor of safety of 1.0 to 1.3 is considered to indicate an unstable slope condition while a factor of safety of 1.3 to 1.5 is considered to indicate a slope which is less likely to fail in the long term and provides a degree of confidence against failure ranging from marginal to adequate should actual conditions vary from the assumed conditions. A factor of safety of 1.5 or greater is considered to indicate long term stability provided the slope profile is not steepened by toe erosion or by other means.

Morey's analysis showed slopes with safety factors of 1 to greater than 1.5. Overall then, there was generally a potential for retrogressive landslides.

Exhibit 5A is a portion of the report of September 1988 at Tab 15. Referring to Exhibit 5 the site plan which has indicated on it the bore hole numbers, Morey explained that in Exhibit 5A the slope profile drawn at figure 6 is the closest slope profile to the plaintiff's lands. In figure 6 it is described as Slope Profile - site 1 / 2. Those numbers refer to bore holes number 1 and 2 as shown on site plan Exhibit 5. Number 1 bore hole is near the top of the slope and number 2 bore hole is near the toe of the slope. Morey's analysis of site 1 / 2 is that it was a sensitive clay site with a minimum safety factor of 1.0 in the toe and an overall safety factor of 1.4. Compared to other sites, it was Morey's evidence that site 1 / 2 had a higher factor of safety than other sites analyzed at the time.

Referring still to figure 6 in Exhibit 5A, Morey explained that the slope designated as slope A on figure 6 is a profile of the original slope that failed in 1971 engulfing slope A2. He pointed out that existing slope site 1 / 2 is quite similar to slope A2 but very different from the profile of the original slope A.

At page 18 of the report of September 1988 under the heading INTERPRETATION OF RESULTS it is noted that the results of the computer stability analysis indicate that all sites investigated except for designated sites which do not include site 1 / 2, have the potential for either slope toe or overall simple rotational instability either of which could initiate a retrogressive landslide.

Referring to page 20 of the report under the heading ADDITIONAL INVESTIGATIONS Morey explained that this report dated September 1988 addressed phase 1 and he on behalf of Golder Associates requested permission to proceed with phase 2 to better delineate the area as more or less prone to retrogressive landslides and to determine more or less the costing for the remedial work required. The report of September 1988 was delivered to the Conservation Authority at that time. It was the result of investigative work performed from January to March of that year.

After delivery of the September 1988 report Lemadeleine, owner of the plaintiff company, came to Morey's office and asked Golder Associates to carry out an investigation of his site. Initially Morey suggested that Lemadeleine go to other consulting engineers because he was concerned that there might be a conflict, Golder Associates being retained by the Authority. Lemadeleine persisted. Morey conferred with the Authority and his own people and it was decided that Golder Associates could be retained by Lemadeleine directly to investigate his site. At Tab 17 there is a letter from the South Nation River Conservation Authority to Morey which reads in part as follows:

> I have recently received a letter from Conrad Lamadeleine. The property in question appears to be located within the designated earth flow zone and a 125 meter set back established from the road. The area in question in included in the current Casselman to Lemieux study undertaken by your firm for the Authority. Would it be possible with the existing available

information to advise Mr. Lamadeleine about his proposed development.

At Tab 23, Exhibit 4, is the report prepared by Morey for Lamadeleine and dated November 1988 and at Tab 20 is a brief interim report of the results of slope stability evaluation carried out at Lamadeleine site. That interim report is dated October 20, 1988.

Morey had been told by Lamadeleine that he wanted to build a new theatre building on his property which was in a hazard zone and as a result he needed a site specific study to hopefully show that he was not in danger of a retrogressive landslide. After being retained, Morey placed a bore hole on the Lamadeleine site, did lab work, did analysis of the slope and eventually came up with a report. The hazard zone established by MNR of some 800 meters from the riverbank, and which had been established for approximately 10 years at the time, encompassed the plaintiff's lands.

Referring to his report at Tab 23 Morey confirmed that the bore hole put down on the plaintiff's land indicated that the ground material was material common to the area, sensitive, silty clay with high liquidity content. It was essentially the same material as determined at other sites. Morey explained the purpose of the analysis at the plaintiff's site was to determine if it was potentially a site for a retrogressive landslide.

The interim report provided to Lamadeleine by Golder was to determine if his slope was prone to retrogress of landsliding. The interim report found that the general site area was susceptible to retrogressive flowsliding but "probably not susceptible to the more devastating earth flow form of landslide". See Tab 20. That having been determined, Morey then had to determine whether the plaintiff's site would retrogress and, if so, how far.

At page 9 of the report of November 1998, Tab 23, the following is noted:

> The stability numbers for the slope at this site have been calculated based on the results of the in situ, vane shear testing carried out in the bore hole. The calculated stability numbers range from about 1.0 to 5.9. All calculated stability numbers based on the in situ vane shear strength obtained below a depth of 7 meters are greater than 4. Accordingly a steep failure backscarp at this site would be considered unstable in an undrained state thus satisfying the criteria for retrogressive undrained failure.

Using the highest stability number Morey came up with the formula at page 8 of the report namely R=(Ns-4)180 as previously referred to. The following is noted at page 8 of the report under the heading RESULTS.

> The above discussion outlines a theory of landslide retrogression. In brief, this theory considers that if a slope or a portion of a slope has a factor of safety against failure of 1.5 or less and the calculated stability number, Ns, within any portion of the slope is less than 4 and the slope consists of sensitive clay material a portion of which has a liquidity index of greater than 1.2, then there is a relatively high potential for the slope to experience landslide retrogression. For the particular site in question, landslide retrogression distance can be estimated using the previously explained formula R=(Ns-4)180.

At page 10 of the report under the heading REMEDIAL WORKS, it is noted that the results of the investigation indicate that a retrogression landslide encompassing table land to some 340 meters back of the river shoreline is possible at the site. It is recommended that prior to construction of the proposed theatre building, steps be taken to ensure that the proposed theatre site will not be endangered from a retrogressive landslide. It is further recommended that a safe set back distance from the river shoreline for building construction at this site is considered to be 400 meters and that that set back distance may be substantially reduced by ensuring that initial failure of the riverbank does not occur. It is recommended that flattening of the slope toe area at the river edge to an inclination of 3 horizontal to 1 vertical be performed together with some upper slope flattening and providing erosion protection using armour stone rip rap and geo-textile in the lower portion and mulch and seeding for the upper portion. At page 11 of the report it is noted that the length of riverbank along which the remedial work should be carried out depends on the actual location of the proposed building and the distance between the proposed building and the riverbank. It is noted that once the desired location for the proposed building has been chosen, the extent and details of the riverbank remedial works can be determined.

Morey explained that if the building was located 400 feet back from the shoreline, then no remedial work at all would be required. If the building was to be located closer than 400 feet, then the remedial work was required.

Referring to Exhibit 2, Morey pointed to the gully which runs generally in an east west direction across the southern portion of the plaintiff's lands. Morey explained that all of the area to the south of the gully which is

marked with hatch marks is safe from retrogressive landslide. This fact was clearly pointed out in Morey's report of November 1988. Morey further explained that Lamadeleine could then have chosen a site for his theatre fully protected by the gully but that Lamadeleine wanted to put his building somewhat further to the west of the west end of the gully. Morey recommended that if that was the case, then Lamadeleine would have to widen, deepen and extend the gully. Morey explained that major ravines or a gully such as on the plaintiff's property act as a barrier or limit beyond which flow side or earth flow retrogression does not extend. This is discussed at page 11 of this report.

After delivery of the report, Morey was called to the site by Lamadeleine to see the remedial measures being executed on the gully. At that time Lamadeleine was clearing an area on the south side of the gully for the new building. At Tab 25 is Morey's letter to Lamadeleine dated December 28, 1988 which reads in part as follows:

> With regard to the remedial works carried out at this site the results of the inspection on November 23, 1988 indicated that the existing ravine had been sufficiently extended and deepened to provide adequate protection against the possibility of a landslide for a building located on the south side of the ravine and east of the west extent of the ravine.

At Tab 31 is an internal memo from the Ministry of Natural Resources referring to revised set back lines and related concerns that had been discussed with Mr. Morey. Morey confirmed in his evidence that he continued to remain involved with this issue.

At Tab 34, Exhibit 4, is a letter from Morey to Lamadeleine dated April 21, 1989 clarifying his earlier letter regarding the inspection of the remedial work on the gully and confirming that the remedial work alternative chosen and carried out consisted of deepening the existing east/west running ravine at the site and extending the ravine westward beyond the proposed building location.

At Tab 37 is a letter from Morey to Gore & Story dated May 1, 1989 referencing a "new set back hazardous zone" which originated within a proposal dated January 23, 1989 submitted by Gore & Story to the Conservation Authority. Morey was concerned about Gore & Story using Golder's broad term report (phase 1) to designate the old 20 kilometer area as a hazard zone when there could very well be exceptions along the riverbank. It should be noted that Gore & Story were the environmental engineers retained by the Authority to prepare an environmental assessment.

At Tab 41 is a letter from Golder Associates to Gore & Story dated May 18, 1989 which again expressed concern about the whole area being defined as a hazard area and which also expresses concern about drawing the line of the hazard area at the municipal boundary.

At Tab 44 there is a letter from Morey to Gold & Story dated May 31, 1989 which references inter alia the work done by Morey for Lamadeleine. The letter confirms the following:

> The bore hole at Mr. Lamadeleine's property was put down to augment the subsurface information already available from bore holes previously put down on either side of his property during the phase 1 portion of the Casselman to Lemieux study carried out by Golder Associates Limited. The information from this bore hole and the previous adjacent bore holes was used to determine and appropriate set back from the South Nation River for building construction at this site as well as to provide sufficient information to assess the feasibility and enable design of remedial measures.

At Tab 53 is the letter from Morey to Lamadeleine dated July 27, 1989 with respect to an area to the east of the subject lands also owned by Lamadeleine and marked with an "X" on Exhibit 2.

At Tab 54 is Golder Associates report dated August 1989 which relates to phase 2 of the work undertaken by Golder Associates for the Conservation Authority. This report related to the same area, that is the South Nation River running from Casselman to Lemieux excluding the Sequinburg Development. Again, it was part of the environmental site assessment to put a dollar value on the engineering solutions required to avoid retrogressive landsliding. Morey explained that Gore & Story provided cross sections. Morey looked at the slopes on the cross sections and compared this to his own data to come up with preliminary remedial measures and thus to give Gore & Story a preliminary indication of what was required by way of remedial measures so that Gore & Story could come up with a general cost figure. Beginning at page 4 of the report the following is noted:

> The above-noted reference report on the 1971 retrogressive landslide southeast of Lemieux included the results of stability

analysis of the slope which is considered to have initiated that landslide as well as other slopes believed to have been engulfed in the landslide retrogression. Profiles of these slopes were provided in the report. In addition, as part of our previous overview of the riverbank's slopes within the study area, the results of detailed slope stability analysis are available for some additional 15 existing riverbank slope profiles. As a result of both of these previous studies factors of safety are available for a relatively wide range of slope profiles throughout the study area having calculated factors of safety ranging from about 1.0 to greater than 1.5.

Morey explained that for the purpose of this report using available data, he eventually assigned factors of safety to each of the Gore & Story slopes ranging from 1.0 to 1.5. He believes that the slope analysis set out in Section 2A1 appended to the report is close to that of the plaintiffs but was unable to confirm without referencing a map. He explained that the plaintiff's property would be on what is marked as the left bank in Section 2A1. Referencing Section 2A1 Morey explained that there were three available remedial measures depending on the site:

(a) if the site was not unstable then simply place rip rap at the toe of the slope;
(b) if the area was medium unstable then place a berm at the toe of the slope; and
(c) for the most unstable areas regrade at 4 or 5 to 1 and provide rip rap at the toe.

If Section 2A1 does represent the plaintiff's slope then the work required as indicated on that slope, that is rip rap at the bottom and regrade 4 to 1, would show it to be one of the most unstable areas.

At this point in his evidence Morey was taken back to his November 1988 report to Lamadeleine at Tab 23 and there was marked as Exhibit 6 a slope profile schedule which would have been attached as a schedule to the original report.

Referencing Exhibit 6, Morey explained that the slope profile labelled as Existing Slope Surface At Bore Hole 1 is the slope at the plaintiff's site. The slope profile designated as 1971 Slope A is the slope before the 1971 slide. The slope profile designated as Existing Slope Surface At Site 1 / 2 is again the slope at the plaintiff's property and the slope marked 1971 Slope A2 is the slope engulfed by the 1971 slide. On my own copy of Exhibit 6 I have these slopes marked 2, 1, 3 and 4 respectively. Morey explained that he used the slope profiles to determine if the plaintiff's land had a factor of safety of less than 1.5. He had previously computed a factor of safety of 1.4 at site 1 / 2. He knew that the 1971 slope had a safety factor of 1. He pointed out then that it could be seen from the slope profiles that the existing slope surface at bore hole 1 is between the 1971 slope and the slope surface at site 1 / 2 and is therefore between a safety factor of 1 and 1.4 and therefore unstable. Again he confirmed that they had previously evaluated site 1 / 2 and determined that there was an overall safety factor from the toe to the crest of 1.4. The specific safety factor at the toe was 1 and was therefore on the verge of failure. Indeed it actually failed a couple of years later engulfing bore hole #2 which had been placed there thus confirming for Mr. Morey the accuracy of his analysis. In other words, on his analysis the safety factor at the toe was 1 and that was confirmed by the fact that it did, a couple of years later, actually fail.

By the same token with respect to Lemieux, Morey calculated a safety factor of 1 for a particular slope and soon after that calculation it failed.

This leads Morey to be confident in the accuracy of his analysis and that what happens after the computer analysis eg failures, confirms the accuracy of the analysis itself where the analysis has been a safety factor of 1.

Morey was asked whether or not there was any determination as to whether the landslide sites across the river from the plaintiff's property had slopes similar to the plaintiff's slopes prior to the slide. Morey testified that he could not tell exactly although there were still remnants of what the slope was like before beside the present slide site and he felt that it was comparable to the slope at the plaintiff's site in terms of inclination and height.

Morey had a recollection of meeting at the plaintiff's site with a number of people including the Mayor of Cambridge, a representative of the MNR, Conservation Authority and council and the plaintiff. He does not recall whether the meeting was before or after the burning down of the first theatre. The plaintiff had called the meeting so that everyone could see the remedial work performed to the riverbank.

As well Morey recalls visiting the site on another occasion and observed a drill rig in the location of the theatre. This was probably after the fire and the plaintiff advised him that he had retained the two defendant consulting engineering firms to do work for him. Subsequently Morey spoke to a representative of the defendant Jacques Whitford Limited and offered his

experience along the river and the information that he had. It appears that the offer was declined.

After this the witness continued doing work for the Conservation Authority. At Volume 3, Tab 89, is Golder Associates report to the Conservation Authority dated April 13, 1993. This report involved looking at specific positions on the river to provide an estimation of potential landslide distances. The plaintiff's site was not among those looked at. Prior to the report Golder Associates had been asked by the authority to look at the river and determine if there were any areas that were not subject to retrogressive landslides because of the shape of the slope based on the analysis to date. Golder Associates proposed several potential sites where there might not be remedial work required. Out of those potential sites the authority chose several. The plaintiff's site was not one that was offered by Golder Associates as a candidate for no remedial work.

The major landslide at Lemieux in June of 1993 was right in the area that Morey had investigated and again it verified his analysis and his formula. By his analysis as determined by the formula, the retrogressive distance had been calculated to be 774 meters and the actual retrogressive distance was 650 to 700 meters. No repair work had been done at the Lemieux landslide site although Morey had advised that it was a potential site for a retrogressive landslide and had recommended certain remedial procedures.

Finally, at Tab 92 is the draft amendment to the official plan. The Conservation Authority had provided Morey with the draft plan to see if it reflected his views. It was his evidence that it did mostly but not completely.

Cross-Examination of Morey
by Mr. Rasmussen

Morey confirmed that with respect to Phase 1 of his report the Authority had concluded that the river was susceptible to retrogressive landslides and wanted more work performed to determine the degree of susceptibility. In furtherance of the work involving a study over the 20 kilometer length of the river, bore holes were put down on 15 sites and on each of these sites profiles of the slope were taken. As well piezometers were put down the bore holes in order to determine water levels and after the piezometers were installed the Authority took the readings on a weekly basis.

As a result of the data collected and the analysis Morey was able to say that most of the 20 kilometers could be susceptible to retrogressive slides. Indeed, there were along the 20 kilometers, scars of some 15 retrogressive slides that had already occurred. Some of the sites chosen for bore holes were right beside the scars. Morey explained that there was no point in putting a bore hole in the scar itself. As it turned out, one of the bore holes put down was exactly at the site of the 1993 landslide at Lemieux. Morey explained as well that there is bore hole material available from the 71 slide and indeed it provides the theory on which to determine formulas. The actual 71 bore hole material is not in the report.

Morey explained that once there is a failure at the shoreline the land keeps giving away or retrogressing until one of three things occur:

(a) the retrogression gets close to a ravine;
(b) the backscarp is not as high; or
(c) the river fills up and more material is unable to move into it.

His theory was developed on the basis of observations in the South Nation River. Morey saw many retrogressive landslides that were confined by ravines. Indeed that observation was made with respect to the 1971 and 1993 retrogressive landslides. Referencing Exhibit 5, the site plan of the river, Morey testified that this "ravine phenomena" could be seen at landslide site #I and landslide site #C. Landslide site #1 was the site of the 1971 slide. The 1993 slide occurred between bore hole numbers 22 and 18 shown at the top of Exhibit 5.

Morey confirmed to Mr. Rasmussen that all of the soil along both sides of the river was deposited at the same time. He confirmed that for the purpose of the phase 1 report no bore holes had been taken in the actual retrogressive slide areas but again stipulated that some bore holes were placed right beside the slide areas, eg bore hole 19.

In answer to my question as to why they would place several bore holes if all of the soil along both sides of the river was the same and was deposited at the same time, Morey answered that the several bore holes were done "just to be sure".

When Rasmussen suggested that most of the retrogressive landslides had occurred close to Lemieux, Morey pointed out that 4 had occurred in the immediate area of the plaintiff's property. They are marked as A, B, C and D on Exhibit 5. In any event, Morey confirmed that based on the data

collected and his analysis of it, he concluded that retroactive landslides were possible all along the river.

Morey explained that the factor of safety previously referred to in his evidence has to do only with the initial failure at the shoreline and many factors come into play to impact on the factor of safety in any particular location, namely height, cohesion, unit weight, amount of moisture in the soil.

In determining the factor of safety, Morey used the water levels as recorded by the piezometers as a starting point but eventually for the purpose of analysis used numbers that were greater than the water pressure actually recorded. At page 6 of the report dated September 1988, Tab 15, the following is said:

> The ground water conditions used for the stability analysis were based on the ground water levels measured in the bore hole piezometers at each site. The highest measured ground water levels were used and in general increased somewhat to simulate the most severe spring ground water conditions. As well, ground water levels in the slope toe area were varied to simulate the high spring flood conditions followed by rapid river water level drop. It is understood that this condition has been observed in some portions of the river when ice jams suddenly collapse.

Morey went on to explain that for the purpose of Phase 1, having collected the data they then looked at previous known data, eg data arising out of the 1971 slide, and then tuned their analysis by reference to known factors of safety in known slopes, eg it was known that the slope in the area of the 1971 slide had a factor of safety of 1. As well, for the purpose of the Phase 1 analysis Morey looked at the Sequinburg Development where a slope had failed and analyzed that. He explained that the porewater pressures at the site of the 1971 slide and the Sequinburg slide were known.

Rasmussen suggested to Morey that in using the data in the phase 1 analysis, he made certain assumptions with respect to porewater pressure. Morey declined to characterize it as an assumption. He said rather that he adjusted the collected data based on information available from the field and "made it fit with what we knew occurred". He went on to explain that he had for the purpose of his calculations, increased the measured porewater pressure somewhat based on the fact that he felt that they had not measured the highest porewater pressure. He then co-related that "assumption" to what he saw happening in the field to make sure that he was not being extreme in the increase.

Again Morey pointed out that he had data from bore holes in the areas where slides eventually actually occurred and he was therefore confident in his calculations. He explained further that all good engineers develop a model to massage raw data so that they can be confident in the final analysis. The model that he uses is to input measured data and then make sure that it reflects what he sees happening in the field, eg in known slide areas. In that respect the only thing that he adjusts is the porewater pressure. By way of example, if the "unadjusted" data results in an analysis of a safety factor of 2 and he knows as a fact that immediately beside the site there is a safety factor of 1, he must conclude that the result of 2 is not correct and it must be adjusted to correspond to reality.

He explained further that in order to make the model work and to correspond with what he sees in the field, he adjusts the porewater readings based on the porewater readings previously taken from known landslide areas.

Morey believes that the raw data from the 1971 slide was available in the literature. He believes he saw all that data including soil information, slope profile and piezometer readings. It was all available because the 1971 slide occurred at a bridge site where bore holes had been put down as a precautionary measure prior to the slide.

Again he explained that Phase 1 work related to factor of safety computations only. He analyzed the results from the 15 bore hole sites, incorporated the data available from the 1971 site and came up with a result. He explained that if one were to apply the methodology to a particular slope and get a safety factor of 1.2 and then apply the same methodology to the data available from the 1971 landslide area (prior to the landslide) and get a 1.2 safety factor, then one knows that something is wrong with the methodology because it should yield a safety factor of 1 for the 1971 site.

Mr. Morey started the day (June 7th cross) by confirming that he had at the time of his investigation, the bore hole material from the 1971 retrogressive landslide obtained prior to the landslide. He explained that several bore holes had been put down by MNR prior to the slide and he had that data. He also had the Mitchell report. Mitchell had written a great deal on the phenomena as had Professor Guy Lefebvre who was present in court at the time of Mr. Morey's evidence.

Mr. Morey confirmed for Mr. Rasmussen that the theory of the retroactive landslide involves the following criteria:

(a) there must be a failure in the toe area;
(b) then the material behind that failure is not stable enough to stand alone and collapses.

A factor known as a factor of safety is used in analyzing the possibility of the initial failure of the toe and a stability number (Ns) is used to determine the extent that it will retrogress once there has been an initial failure. In determining the factor of safety the porewater pressure at the toe is important and Morey, in doing his calculations, considered that the actual porewater pressure might be greater than that being measured. This is particularly so at the toe because of, among other things, ice dams causing a rise in the water and then a sudden break and a sudden draw down. It was factors such as these that Morey thought might effect porewater pressure. Porewater pressure by the way is more commonly known as ground water pressure. It is measured by taking the weight of water over the height of water.

Morey conceded to Mr. Rasmussen that in using slope profiles up and down the river to predict factors of safety if one uses different porewater pressures then the predictions may not be as accurate. Most accurate factors of safety can be obtained comparing profiles if all the other factors are constant including porewater pressure but even if all other factors are not constant, one can obtain at least a general idea of the factor of safety.

At Exhibit 4, Tab 15, is Morey's September 1988 report to the Conservation Authority. Morey conceded that the report discloses a very definite trend starting from bore hole 21 moving downstream and that trend is that the stability number (Ns) increases as one goes downstream. See page 16 and 17 of the report and Exhibit 5. In the report beginning at page 16 the following is stated:

> ... Previous landslide activity along the river is shown as linear meter of retrogressive landslide per kilometer of river. As well, scaled retrogression distances of major landslides are plotted. It is evident from figure 24 and figure 2 that landslide activity increases significantly downstream of bore hole #10 where in general the Ns is greater than 7. The largest retrogressive landslides have also occurred in this downstream portion of the study area. It is note worthy that no major retrogressive landslides have occurred close to bore hole sites near the upstream end of the study area where the stability numbers for the slopes are less than 6.

The area being referred to at pages 16 and 17 of the report is halfway through the study area. One can better understand this evidence if one looks at Exhibit 5, the first bore hole number upstream is number 20 yet as one goes downstream the numbers are 20, 21, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and bore hole 10 is indeed approximately half way down the study area.

Entered as Exhibit 7 is a map of the South Nation River in our area showing the location of the Lemieux landslide and what are termed historical sensitive clay flows (landslides).

In the face of all this, Morey conceded the following:

1. the incidents of landslides are greater as one goes downstream;
2. the largest landslides have occurred downstream;
3. no landslides have occurred upstream of bore holes 1 and 2.

Mr. Morey conceded that the stability number (Ns) is related to the height of the slope and the slope gets higher as one goes downstream.

Figure 24 at the back of the report, Tab 15, is a graph of stability numbers, bore hole locations and historical data. Along the bottom of the graph the bore holes are numbered from 20 to 18. The vertical line measures the retrogression distance potential. The black dots on the graft are the maximum stability numbers (Ns) obtained at the particular bore hole site. For example, at bore hole 3 the Ns is above 6 putting that particular slope into a potential flow situation. It should be noted that the distinction that accompanies a particular Ns number is that at the lower number the potential is simple, rotational. In the medium number the potential is retrogression and in the upper level from 6 up the potential is retrogression and earth flow. So that for simple rotational potential you need a Ns of between 3 and 4. For potential retrogression you need an Ns between 4 and 6 and for a retrogression and earth flow potential you need an Ns above 6.

Morey confirmed that the photos, Exhibit A, probably depicted a retrogression and earth flow situation.

Mr. Morey conceded that the entire 20 kilometer study area is subject to retrogression landslides and therefore dangerous but pointed out that the study area can be broken into areas where the area is more subject to retrogressive landslides than other areas.

Morey mentioned that one of the 4 slides in the vicinity of the subject property occurred in about 1850. He believes he was told this by the Conservation Authority.

Returning to figure 24 of his report, Tab 15, Morey explained that the dotted lines show the linear meters of landslide per kilometer of riverbank and the solid lines show the retrogressive distance up the slope in meters. On the right hand side of the graph the distance in meters for both measurements is given in thousands of meters. The graph indicates that no landslides occurred between bore hole 20 to a point between bore holes 1 and 3. The landslides become quite concentrated beginning just before bore hole 12. The subject property is bracketed by bore hole 21 and bore hole 1 where the stability numbers (Ns) are approximately 3.3 and 5.2 respectively.

Morey explained that one can take Ns numbers throughout the bore hole as one goes down with the bore and can then average them out. However, in his calculations he has used the highest stability number (Ns) recorded for his analysis. He did not agree with Mr. Rasmussen that there was a professional school of thought that it was appropriate to use the average as opposed to the highest. He explained further that he uses the highest stability number (Ns) obtained between the ground level and the underside of the slope to river level. If the highest Ns occurs below water level then he must use his judgment to determine whether it should be used.

At Tab 23, Exhibit 4, Golder's November 1988 report page 148, is the bore hole log for bore hole 88-1. Morey confirmed that this is the log for the bore hole placed on the plaintiff's property in September of 1988.

Rasmussen then referred Morey to his report of September 1988 at Tab 15, page 17, and particularly the last paragraph which reads as follows:

> The possible landslide retrogression distances for each site investigated was estimated based on several empirical methods which are illustrated graphically in figures 20, 21, 22, and 23 (methods A, B and C) and a fourth represented by the equation R=(Ns-4)100 (method D) which has been previously discussed. (R=(Ns-4)100 is the Mitchell formula.) The estimated retrogression distances based on these methods are shown in table 5. Also provided in table 5 are the distances of some of the previous landslide retrogressions measured from the air photos of the study area.
> It is evident from table 5 that the estimated retrogression distance based on the four methods vary by up to a factor of almost four ...

Morey conceded that depending on the choice of method, one can obtain dramatically different results. He conceded as well that nothing in geo-tech engineering is precise and that different engineers use different methods.

It should be noted that the report at page 18 goes on to say the following:

> ... In comparison of the estimated retrogressive distance at each site with the historical data, method A consistently provides a safe estimate of retrogressive landslide distances. Method B is inconsistent with the historical data and method D gives estimated retrogression distances which generally underestimates the historical information. Method C provides only a general indication of retrogression distances or retrogressive tendency.

At Table V of Morey's report of September 1988 retrogressive distances are estimated at each of the bore hole sites using each of the four methods. The table then compares those results with the historical data. One can co-relate Table V to Exhibit 5 which is the site plan of the river. It should be noted that at bore hole sites 20 and 21 there had been no landslide and therefore no historical data. Therefore under the heading HISTORICAL DATA for those two bore hole sites the term NA is used. Table V indicates that the historical data is based on the greatest retrogressive distance of a major landslide within 1 kilometer of the bore hole and NA indicates that there was no major retrogressive landslide within 1 kilometer of a bore hole. Morey explained that with respect to bore hole 1 / 2 in determining historical data he would not have had the stability number Ns at slide site A so would have used the stability number at bore hole 1 or 3.

Table V would indicate that the use of Mitchell's formula underestimated the retrogressive distances he would have expected to find. He conceded that this conclusion is based on an assumed value of Ns used at the landslide sites.

Filed as Exhibit B was the report of R.J. Mitchell with respect to flow sliding and sensitive soils. Table 1 of the report identifies a number of earth flows. Numbers 34 and 35 are the 1910 and 1971 slides on the South Nation River respectively. If one goes through Exhibit 5, the site plan of the river, those slides are H and I respectively. Table 3 in the Mitchell report gives the stability number (Ns) for each of the slides and the retrogression distances. Mitchell uses an Ns number of 9.0 for the 1910 slide and computes a retrogression distance of 1,000 feet. Mitchell uses a Ns number of 10.0 for the 1971 slide and computes a retrogression distance of 1,600 feet. Rasmussen was trying to make the point that it all depends on the Ns number used when one says that the Mitchell formula understated the historical data.

Rasmussen pointed out that in looking at Table V it is apparent that in some instances the Mitchell formula actually overstates the historical data and sometimes, eg at bore hole 3, is right on in terms of compatibility of the estimated retrogressive distance by his formula and the actual retrogressive distance measured by historical data.

Morey pointed out that in all cases, in estimating the retrogressive distance with method D, he used his own Ns.

At Tab 23 is Morey's report to the plaintiff dated November 1988. The bore hole on the property had been sunk in September and Morey was on the site October 18 and 19. Exhibit 6 is figure 3 to that report which at page 5 states the following:

> ... The toe area slope is in an active state of erosion and evidence of previous slope toe area failure and superficial sloughing is extensive. Based on the general undulating ground surface within the mid slope terrace it is expected that this portion of the riverbank has experienced previous retrogressive slope failing.

Morey in his evidence confirmed that that was his opinion. He felt that there had been retrogressive landslide there to a small extent. In his view the retrogression had ended at the beginning of the terrace as shown on Exhibit 6. It should be noted as I have recorded on Exhibit 6 that the length of the toe on the subject land is approximately 18 meters from river's edge to the beginning of the terrace, as I have marked it on Exhibit 6. The terrace runs from a point approximately 18 meters from the river's edge to a point 45 meters from the river where the slope begins.

Having regard to what he thought to be previous retrogressive slope failure on the subject land, Morey confirmed that for retrogression one needs initial toe failure at which time the backscarp fails and keeps failing until (1) it reaches a gully (2) the strength of the backscarp is able to support itself or (3) the river can't take any more of the back scarp. Morey conceded to Rasmussen that in this case the slide only went back to the beginning of the terrace and stopped at that point but slides can stop at a point and then later continue on. It was his evidence that that was exactly what happened in the 1993 slide at Lemieux where it had stopped at one time in the past and then in 1993 continued on. In other words and by way of example, continuing erosion could cause further retrogression after it had stopped in the past without the stability number Ns changing. In his view that is what happened at Lemieux.

It was Morey's evidence that the highest stability number determined above the river level on the subject property in the bore hole was 5.9 at a depth of about 1 foot. He felt that this would be representative of the entire site for a reasonable distance into adjoining property.

Morey explained that in applying the Mitchell formula and using the highest stability number above the river level at 5.9, one gets a retrogressive distance of 190 meters from the edge of the riverbank. Morey explained that the Mitchell equation is R=(Ns-4)100. Morey used the formula R=(Ns-4)180. Rasmussen put it to him that he wanted to overestimate rather than underestimate the retrogressive distance. Morey responded that he took all of the data and came up with a formula to make sure that he would determine the maximum retrogressive distance one might expect in the event that there was a failure.

Morey confirmed that he took no physical measurements of distance from the river to the gully on the plaintiff's property. At Tab 23 his report to the plaintiff of November 1988 at page 156 is a site plan which was given to him by the plaintiff which has certain measurements on it, one of which is 1156 feet from the back of the propose new theatre down to the crest of the river slope.

At page 143 of the report beginning at the top, the following is noted:

> Detailed stability analyses have not been carried out to determine exactly the appropriate remedial measures required to stabilize the riverbank, however, based on previous slope stability analysis carried out within the general area of the site, it is considered that flattening of the slope toe area at the river

> edge to an inclination of 3 horizontal to 1 vertical, together with some upper slope flattening and providing erosion protection using armour stone rip rap and geotextile in the lower portion and mulch and seeding for the upper portion should be sufficient. The length of riverbank along which the remedial work should be carried out depends on the actual location of the proposed building and the distance between the proposed building and the riverbank. Once the desired location for the proposed building has been chosen, the extent and details of the riverbank remedial works can be determined.

Morey did not agree with Mr. Rasmussen that it was absolutely necessary to put a bore hole into the toe to know the factor of safety of the toe. He was satisfied that notwithstanding that detailed stability analysis had not been carried out to determine exactly the appropriate remedial measures required to stabilize the riverbank, he was satisfied that if one carried out the remedial work referred to at page 143 of his report across the face of the property, that would protect the property from retrogressive landslides, subject to a determination as to how far one would have to go on either side of the property with the remedial work.

Morey then brought to light that his report to the plaintiff was made in anticipation of the building being located 300 meters from the shoreline. See page 134 of Tab 23. All of Morey's recommendations were made in the face of that anticipation. The alternative was to place the building south of the gully. He explained further that the work suggested was to prevent initial failure of the riverbank so that one would not have to worry about the retrogressive distance. He explained that if the site is outside the potential retrogressive distance then one does not have to be concerned about whether or not there is an initial failure. Further, if there is no assurance of no initial failure and one is inside the retrogressive distance, then one can rely on the gully. Again he explained that the gully was within the computed retrogressive distance.

Morey confirmed to Mr. Rasmussen that in effect what he had said to the plaintiff was to either do the remedial work or put the building to the south of the extended gully. Morey had no doubt that Lamadeleine had a perfect understanding of the advice being given to him. As it turned out, Lamadeleine did not do the remedial work and put the building on the north side of the gully.

Referencing Tab 25, a letter from Morey to Lamadeleine dated December 28, 1988, Morey confirmed that he visited the site on October 19, 1988 and again on November 23, 1988. The second paragraph of the letter reads as follows:

> With regard to the remedial works carried out at this site, the results of the inspection on November 23, 1988 indicated that the existing ravine had been sufficiently extended and deepened to provide adequate protection against the possibility of a landslide for a building located on the south side of the ravine and east of the west extent of the ravine.

Morey confirmed that the remedial work referred to in this letter was the extension of the gully in a westerly direction. Lamadeleine had asked him to return to the site on November 23, 1988 to ensure that the extension of the gully was okay, which it was. Lamadeleine indicated to Morey that the building would be located south of the gully. Morey is unable to say whether or not he discussed with Lamadeleine the dangers of retrogressive landslides.

At Tab 34 is a letter from Morey to Lamadeleine dated April 21, 1989 which is strikingly similar to the letter dated December 28, 1988 at Tab 25. The letter purports to provide clarification of the inspection of the work carried out at the site to protect the proposed Sucrerie theatre building from possible landslide retrogression. Morey was unable to offer any explanation as to why Lamadeleine required clarification of the letter of December 28, 1988. It is interesting to note that the letter of December 28, 1988 refers specifically to the building being located on the south side of the ravine while the letter of April 21, 1989 does not specifically locate the building on the south side of the ravine. In any event, Morey confirmed that he would never have suggested to Lamadeleine that he put the building on the north side of the gully without the other remedial work being done.

Referring to the meeting on site with several other people earlier referred to by Morey in his evidence, Morey confirmed that the purpose of that meeting was to take a look at the river and to see whether the remedial work carried out by Lamadeleine was satisfactory. It was obvious to everybody that what Lamadeleine had done on the slope was not remedial work and was totally inadequate. It is likely that Morey mentioned that to somebody during the course of the meeting. Certainly at that meeting no one suggested that because of the work Lamadeleine had done on the slope the building could be sited north of the ravine. Again he confirmed that the work that he observed done by Lamadeleine on that day did noting to stabilize the bank. The work had been done on the terrace and was not in conformity with Morey's recommendations as previously discussed. Morey

has no recollection whether he discussed the remedial work with Lamadeleine, that is the remedial work set out at the Tab 23 report, page 11. He does recall that he discussed liquidity index with him and the susceptibility of the slope to flowing.

Apparently the building burned in 1990. Rasmussen indicated to Morey on cross that we would hear that before the new permit was issued to rebuild the municipality required Lamadeleine to get a geo-tech opinion that it was safe to build north of the gully. Rasmussen asked Morey if Lamadeleine had ever come to him asking for an opinion that it was safe to build north of the gully. Morey testified that he had not and if he had he would not have given such an opinion without the remedial work set out at page 11 of his November 1988 report being done.

Cross-Examination by Mr. Marcus

Mr. Marcus inquired of Morey whether he had assumed that the distance from the river to the proposed building site as indicated on figure 2 at page 156 of Tab 23 was correct. Morey replied that he had air photos with which he could have determined distance to the proposed site and he is unable to say whether or not he did make that determination. The distance marked on the site plan at page 156 of Tab 23 is 1156 feet from the crest of the slope to the front of the proposed site for the new theatre. On this site plan during the course of his cross-examination by Mr. Marcus, Morey marked the location of the ravine such that it placed the proposed site for the new theatre to the south of the ravine. Morey also confirmed that the site plan at page 156 of Tab 23 is the very plan given to him by Lamadeleine except for the printed notation at the bottom "Golder Associates" which was placed there by him. It perhaps should be noted that 1156 feet equals 352 metres.

Morey again confirmed that he was absolutely positive that Lamadeleine understood that in order for the building to be protected after the remedial work on the ravine, it had to be located south of the ravine.

Re-Examination by Mr. Leamen

Morey confirmed for Mr. Leamen that the distance of 1156 feet indicated on the site plan, page 156 of Tab 23, is not relevant because it runs parallel to the lot line rather than to the closest point on the river.

Referring to Exhibit B, the Mitchell Report, Morey pointed out that in his formula for retrogressive distance, the distance is taken from the shoreline whereas Mitchell at page 17, figure 3 of his report, measures retrogressive distance from the crest of the slope back to the extent of the retrogression.

At any point on the river the approximate distance from shoreline to crest is 180 to 300 feet. The result of all this is, as Morey put it, that one would have to add to the retrogressive distances computed by Mitchell to align them with Morey's results. He explained that from his knowledge of actual slides, the retrogressive distances of these slides went beyond Mitchell's calculation. That is why it is important to include all the data with respect to previous retrogressive slides in the formula as Morey did.

Finally, Morey explained that all slides begin the same. There is the initial failure and then slices or a series of slices fall off. If the slide goes further, then it gets into earth flow with extrusions occurring and slices falling into the extrusion. The stability number (Ns) of 4 to 6 produces slices. A stability number of 6 or more brings on the extrusion process.

Next Witness: Gordon McRostie

Examination-in-Chief

Filed as Exhibit 8 was Mr. McRostie's CV. He received his Engineering Degree from the University of Toronto (Honours) in 1944 and has practiced actively as an engineer since that time. His field of expertise has been in geo-technical engineering and he has had a particular interest in retrogressive landslides during the entire course of his career. His involvement with retrogressive landslides from 1955 to present is set out in his CV.

Mr. McRostie has visited the plaintiff's property on three occasions. His report dated January 9, 1997 is at Tab 129 of Exhibit 4. He was initially retained by the plaintiff's solicitors to made a geo-technical study and to reply to two questions:

1. Is the present theatre building on the property safe; and
2. If the building is not safe, what remedial work is required to make it safe?

In preparing his report he reviewed the Golder report of November 1988, the Patterson report of November 22, 1990, the Whitford report of October 31, 1990. As well, he reviewed a report prepared for Golder

Associates by Doctors Bozozuke and Law of the National Research Council dated February 11, 1992. McRostie also reviewed the published papers on the South Nation River retrogressive slides and several other technical papers as listed on pages 4 and 5 of his report. He spoke with Morey and reviewed with him his reports to the Conservation Authority. He spoke with Professor R. Mitchel at Queens University who was the originator of the model of estimating retrogression distance.

With that background, McRostie visited the site on January 6, 1997 and conducted a detailed site inspection .8 kilometers upstream and downstream of the site. He made the following observations:

(a) the most critical slope for the theatre building is actually on the adjacent neighbour's land to the east. McRostie located his most critical slope on Exhibit 2 with a red arrow. In his view, this was the most critical slope for the theatre building because it is the part of the riverbank closest to the building and because it has a steeper slope than that located on the plaintiff's property;

(b) a small landslide scar exists on the west bank of the first gully east of the plaintiff's property indicating continuing instability of the lower riverbank slopes;

(c) evidence exists of continuing creep type movements in the lower third of the river slopes examined. This evidence is from bends in the trunks of trees near the ground indicating movements first tilting the trees, then trees returning to vertical as they continued to grow.

As a result of his site inspection, McRostie after meeting with his partner St. Louis and his senior associate Morrissette who are both experienced in landslide study, reached the following conclusions:

1. There is a fairly broad-based group of opinions among the experts in the specialty of geo-technical engineering that the risk of an initial landslide continuing as a retrogressive slide can be estimated. The methods for estimation need to recognize at least 4 factors; namely, stability number, liquidity index, sensitivity and undrained sheer strength.
2. The Golder/Morey report dated November 1988 on the plaintiff's site outlined their method which included a recognition of the above-noted 4 factors and McRostie is in agreement with Morey's conclusion that the site is at risk of having a retrogressive landslide if an initial slide begins.
3. There is less general agreement among the experts regarding the ability to predict the distance to which an initial slide will continue to retrogress. It is noted that Professor Mitchell offers the caution that engineers should not expect too high an accuracy in their predictions given the fundamental uncertainties in the natural soil deposits and their analysis. Professor Lefebvre (who will be testifying at this trial) in his 1996 state of the art chapter, warned that "The potential distance of retrogression is difficult to evaluate".
4. It was Morey's opinion that his studies over the past 10 years are very definitive and that the 1993 Lemieux slide confirmed Morey's model and his calculation methods.
5. The distance of retrogression is still not capable of highly accurate prediction however McRostie is of the opinion that Morey's recommendation in their 1988 report of a retrogression distance of 340 meters is a reasonable set back distance to be used at this site.

McRostie, in his evidence, noted that Morey's retrogression distance of 340 meters was measured from the river edge whereas Mitchell's retrogressive distances are measured from the crest. In McRostie's opinion the two methods (Morey v. Mitchell) are based on different assumptions and result in measurements that may differ by 50 to 100 meters. McRostie noted that Morey's distance of 340 meters was measured perpendicular to the river which results in the shortest distance. It appears that the building was located 170 meters from the river and therefore was within the retrogressive distance.

McRostie reached the following conclusions and made the following recommendations:

1. With respect to question 1, it is his opinion that the theatre building is not safe at certain times of certain years. An initial landslide which could trigger a retrogressive landslide involving the building is most likely to occur only during the Spring or early Summer months when rapid snow melt and early rains cause exceptionally high ground water conditions in the slope. Some years are more critical than others when all the unfavourable weather factors happen to occur together.
2. With respect to question 2 an adequate remedial work

program to prevent retrogression of an initial slide back to the building is possible by excavating a new deep cut off gully between the building and the river on the owner's land and on neighbours land. The cut off gully would, however, be costly, at least $500,000., would destroy the existing mature sugar bush, and would have environmental problems in disposing of the excavated soil. Another possible remedial work program would be aimed at preventing any initial slides at the riverbank. This would require the construction of a large rock fill toe berm on the bottom third of the slope. The rock fill berm would likely be even more costly than a new cut off gully and would create new environmental problems plus possibly some obstruction of the river channel. A third possible remedial work would be to flatten the entire slope and hence prevent an initial slide. This would involve even more costs plus loss of the entire sugar bush and is not a reasonable alternative to consider. Finally, an experimental method of increasing the existing slope stability and hence preventing an initial slide has been attempted at a few sights by installing a large number of vertical pore pressure lowering drains. This is an attractive solution since no disruption of existing conditions would result however the method has been tried at a few locations in east Canada and has not had reliable success and cannot be recommended at this time.

At Tab 132 is a letter to McRostie from the plaintiff's solicitor confirming certain discussions. At Tab 134 is McRostie's letter in return acknowledging that the solicitor's record of their discussions is accurate. In effect, then, McRostie confirmed the following:

1. There is a combination of weather elements (heavy thaw and heavy precipitation in late Winter and early Spring) which could lead to a slide;
2. The property immediately adjacent to Mr. Lamadeleines is one where such a slide could well occur;
3. If such a slide were to occur, it would almost certainly retrogress;
4. Although there is no precise modelling that can be done to determine the extent of retrogression, McRostie is comfortable with the 340 meter set back limit suggested by Morey on the understanding that the gully immediately
5. If asked specifically whether the theatre building would be safe in the face of such a retrogressive slide, McRostie indicated that it would not be.

Subsequently, McRostie was retained to prepare a further report which report is at Tab 142 and is dated December 14, 1998. The terms of reference for this report were as follows. McRostie was requested to continue the geo-technical studies reported on January 9, 1997. The continued studies were to include a review of the statements made during the examinations for discovery of Stephen J. Walker (John D. Paterson and Associates Ltd.) and Raymond Hache (Jacques Whitford Limited), on August 12, 1998. The study was to identify the most critical riverbank slope which could cause an initial landslide effecting the theatre building, to analyze the stability of this most critical slope, to give an opinion on the risk of retrogression, to give an opinion on the geo-technical professions standards of investigation in 1990 and to comment on whether the two 1990 reports by the two firms mentioned above met those standards.

In preparing this second report, McRostie reviewed the Jacques Whitford report of October 31, 1990 (Tab 72), the preliminary report of John D. Paterson and Associates Ltd. dated November 19, 1990 (Tab 75) and the full John D. Paterson report dated November 22, 1990 (Tab 79). As well, McRostie reviewed the Jacques Whitford letter to the plaintiff dated November 22, 1990 at Tab 80.

In preparing this second report McRostie felt that one of the most important factors to consider was public safety. There have been about 545 deaths due to landslides in the years between 1840 and 1996 and 98 of these deaths have been due to landslides in the sensitive clays of Eastern Canada. Landslides can kill and that fact effects McRostie's judgment. He is of the view that in matters such as these a conservative approach is required. To tolerate any safety factor less than 1.5 is not a conservative approach.

In McRostie's view there were two reasons why the plaintiff's property and building posed a special public safety risk. The theatre is a place of public assembly and the sucrerie is attractive to groups of people at the time of Spring snow melt conditions which is the period of highest landslide risk since ground water levels are often at their highest points of the entire year during early Spring months.

To identify the most critical riverbank slope in connection with the theatre building, McRostie examined the riverbank slopes across the full width of the plaintiff's property and also for about 1,000 meters both upstream and downstream. The most critical slope that could effect the plaintiff's property is almost directly opposite the theatre building on a line drawn at right angles to the riverbank through the theatre building.

The shortest distance from the riverbank to the theatre building is approximately 170 meters. That distance takes in the building itself. There appears to have been some confusion in the 1990 reports by the defendants regarding how this critical distance should be measured. The Paterson report in section 1.0 on page 2 states that "the site is located approximately 340 meters from the crest of the slope". The Jacques Whitford report states in section 6.1 on page 7 that "the stability condition of the Nation River located approximately 350 meters north of the proposed restaurant is not of concern". In McRostie's view then, it would appear that both these reports misunderstood the principles involved in identifying the most critical slope.

Here the closest spot to the river and the critical slope happened to coincide and if a retrogressive landslide occurred at this point it would certainly involve the plaintiff's building. The plaintiff's property shoreline is not relevant because it is not the closest and steepest.

It would also appear that the Paterson studies were mistaken in estimating the steepness of the slopes since the answer given by Walker to question 368 in his examination for discovery was "in this particular case the highest and steepest slopes were on Mr. Lamadeleine's property.

At pages 6 and 7 of McRostie's report dated December 14, 1998 there is an analysis of the most critical slope which indicates the following.

In analyzing the stability of riverbank slopes to consider whether an initial slide is likely, which in turn could retrogress and effect a site considerably further from the river, there are two groups of assumptions that must be made. The first is the soil strength parameters and the second is the ground water levels and ground water flow conditions. Soil strength parameters recommended in a broadly based study by Poschmann et al published in 1983 have been consistently used in all of the studies made to date including McRostie's studies.

Assumptions of the applicable ground water conditions are more variable and more complex since they vary with the season and the years. The Paterson studies of 1990 made the conservative assumption of a fully saturated slope with horizontal flow of ground water (Ru=0.6). Using the above assumptions they calculated a factor of safety of about 1.4 for the slope on the plaintiff's property which they chose to analyze. If they had identified the slope which McRostie felt was the most critical, and used those same assumptions, they would have calculated a factor of safety of 1.09 which would have been, in McRostie's opinion, a totally unacceptable margin of safety.

In calculating his factor of safety, McRostie assumed a situation where maximum flood levels had been caused on the South Nation River by ice jams in the river and that when the ice jam breaks, the flood level drops dramatically in a few hours. This would create a "rapid draw down" condition in the lower portion of the critical slope and to recognize this McRostie felt that a horizontal ground water flow in the lowest 8 meters of the slope is required. With these assumptions, McRostie's calculated factor of safety for the critical slope is 1.19 which again is unacceptable.

Even using a less conservative assumption, neglecting the ice jam and rapid draw down scenario, and assuming ground water flow parallel to the slope for its full height, the calculated factor of safety is 1.24 which is still unacceptable.

In McRostie's view, when the results using all 3 ground water assumptions outlined above are reviewed ranging from 1.09 to 1.24, none of the assumptions gives calculated factors of safety near the value of 1.5 which, in McRostie's view, is a reasonable requirement in assessing the risk of an initial or "trigger" slide at the riverbank. In his opinion, there is therefore an unacceptable risk of the occurrence of the initial slide at the riverbank opposite the Lamadeleine theatre building.

With respect to the question whether or not the initial riverbank failure would retrogress, in McRostie's view, this is best answered by air photos which any competent engineer would review in studies such as these. McRostie pointed to Exhibit 2, the site air photo, which was contained in Golder's report to the plaintiff at Tab 23. McRostie identified in the immediate vicinity of the plaintiff's property, three landslide scars which, as he puts it, presents a very serious warning with respect to the potential for a retrogressive landslide. The three identified include the two on the far side of the river previously identified by Morey and a third on the plaintiff's side of the river located to the west of his property which I have marked on my Exhibit 2. McRostie pointed out that the biggest scar of the three is the one directly across the river from the plaintiff's property and is large enough that it would, if it occurred on the plaintiff's side of the river,

take in all of the plaintiff's property north of the gully. It should be noted that McRostie marked on Exhibit 2 the third scar located on the plaintiff's side of the river to the west of the property. As well, see figure 4 to McRostie's report at Tab 142 which again identifies the three past retrogressive landslides in the fairly immediate area.

Based on some information available from the Conservation Authority, it appears that at least one of the three slides occurred within human memory (a few hundred years). In McRostie's view, if there is no evidence to the contrary, then for the purposes of studies such as these one should assume that the slides occurred in recent times.

McRostie noted that there were several other Golder studies made over the period 1988/1989 mostly for the South Nation River Valley Conservation Authority. These studies documented and analyzed many other retrogressive slides in the area of similar geological background.

From all of the foregoing, it is McRostie's opinion that in 1990 there was clear evidence that an initial riverbank slide at or near the subject property should be expected to retrogress some hundreds of meters back from the original slope crest.

It should be noted that there is a theory proposed by Dr. Daniel Lagarec that initial slope failures would not retrogress into parts of the flat upper lands that are covered by trees. Dr. Lagarec's theory is not generally accepted by geo-technical engineers. McRostie has studied air photos of several retrogressive landslides and observed masses of trees in the slide debris indicating that treed zones had been included in the failed areas. Interestingly there is a record in the Quebec Gazette, April 6, 1840, reporting a landslide on the Maskinonge River where workers in a sugar bush had to flee to escape a retrogressive landslide which advanced through the sugar bush despite the presence of many trees. Again, interestingly enough, Professor Lefebvre whom I understand will testify for the defence, has expressed the opinion that even dense tree growth has not been and could not be expected to retard or stop the progression of a retrogressive landslide into adjacent upper level lands. Professor Mitchell has expressed the same opinion.

It is therefore McRostie's opinion that retrogression would almost certainly follow an initial landslide at the riverbank at the critical slope opposite the plaintiff's theatre site.

With respect to the distance of retrogression, McRostie maintains the opinion expressed in his initial report and that is that the distance of retrogression is not capable of highly accurate prediction but that the Golder/Morey recommendation in their 1988 report to the plaintiff of a retrogression distance of 340 meters is a reasonable set back distance to be used at this site. There is no doubt in his mind that the retrogression distance at the site would be greatly in excess of the 170 meter distance which separates the theatre building from the riverbank. He concludes, therefore, that at certain times of years the theatre building is at risk of being destroyed by retrogressive landslide.

At page 14 of his report McRostie, in discussing the standards of the profession in 1990, expresses the view that a geo-technical investigation of the possibility of landslide effecting a building site adjacent to a riverbank slope would have, in 1990, contained the following activities:

1. Review of existing air photos for one or more kilometers up and downstream from the site to look for past landslide areas;
2. Review of any published reports on landslides in the area;
3. Review of any site specific landslide risk reports for the site being studied or sites less than a kilometer distance on the riverbank;
4. Personal inspection of the site and the adjacent riverbank slopes for at least 500 meters upstream and downstream to establish the most critical slope location with particular attention to be paid to the slope at the zone closest to the subject site measured at right angles to the riverbank;
5. A review of the possible consequences of a landslide failure;
6. Items 4 and 5 would be made by a geo-technical engineer with experience in landslide studies since judgment of the critical slope, the most likely critical slope inclinations, the possible seasonable ground water fluctuations, the consequences of an initial slope failure and the risk of a retrogressive failure developing to threaten the site at some distance back from the river, are all aspects requiring engineering judgment rather than a technician;
7. The risk of an initial or trigger slide developing into a retrogressive landslide would require special study;
8. That study would include a visual estimate of the steepness of all slopes close to the site. Any slopes with an inclination steeper than about 15 degrees and a height more than 10 meters would be surveyed using a

clinometer and tape or survey level and tape. Evidence of Spring flood levels would be examined and recorded. The calculated factor of safety for the most critical slopes would then be obtained for a range of possible ground water flow assumptions and a set of reasonable soil property assumptions. A desirable factor of safety resulting from these calculations would then be judged with a suitable margin of safety included which would recognize the limitations of the analysis methods and assumptions plus the consequence of a failure;

9. If the critical riverbank slopes were judged not to have an adequate margin of safety, then the next two aspects would be studied namely the risk of retrogression and possible retrogression distance. The main evidence to be considered here would be evidence of past landslide shown by past failure scars on air photos;
10. After reaching a conclusion that a critical initial riverbank slide is possible and also that retrogression is possible, then a study of retrogression distance is needed. Under this heading McRostie expressed the view that the landmark publication giving a method of calculating retrogression distance by R.J. Mitchell in 1978 is still applicable but he points out that the Mitchell method and the Morey method are not actually that far apart when one considers the different points of measurement, eg, shoreline v. crest.

In critiquing the Paterson report McRostie made the following observations:

1. The Paterson report does not appear to recognize the evidence of past retrogressive slides which can be seen in air photos. He understands that the Golder report dated November 1988 to the plaintiff was made available to Paterson and it contains an air photo clearly showing past retrogressive landslide scars.
2. The Paterson report does not appear to recognize the site specific information in the same Golder report which showed in figure 3 an existing riverbank slope with an estimated factor of safety below 1.5 and likely close to 1.0;
3. The Paterson report was not based on site inspections by an experienced geo-technical engineer;
4. The Paterson report does not appear to have considered
5. The Paterson report does not appear to have selected the appropriate most critical riverbank slope which could cause an initial landslide;
6. The Paterson report did not consider the theatre site to be at risk from a retrogressive slide chiefly due to the fact that it failed to select the appropriate most critical riverbank slope. McRostie points out as well that the Paterson report also states that the theatre site is approximately 340 meters from the riverbank. This distance is incorrectly measured parallel to the property center line rather than at the closest distance perpendicular to the riverbank which is 170 meters.

In his critique of the Jacques Whitford report (J/W) McRostie makes the following comments:

1. The J/W report does not appear to recognize the evidence of past retrogressive landslides as seen in the air photos;
2. The J/W report does not appear to have considered the public safety risks;
3. The J/W report and later studies do not appear to have been based on an adequate on site examination of the possible most critical slopes. Examination of riverbank slopes only along the river front of the plaintiff's parcel together with a visual examination "as far as the eye could see" through a wooded zone does not meet the standards outlined in his report;
4. The J/W report does not appear to have been based on thorough study of whether an initial slide could retrogress. There appears to have been an unquestioning reliance on the theory presented by Dr. Lagarec as part of their reassurance that retrogression of an initial slide would not occur;
5. The J/W report does not appear to have considered the possible distance to which retrogression might have extended however the report does state that the theatre site is located approximately 340 meters north of the Nation River. McRostie points out that in a letter to the plaintiff dated November 22, 1990 the distance is corrected to "some 200 meters north". There was also the statement that "the possibility of a retrogressive failure at that site (the critical slope east of Lamadeleine's property) has not been investigated". The end result of the November 22,

1990 letter in McRostie's opinion would be to give moderate encouragement to proceed with building at the site. The risks were presented as being indefinite and low when in fact in McRostie's opinion the risks were and still are very real and possibly catastrophic.

McRostie was aware that the Paterson people had sunk a bore hole. McRostie applied the Mitchell formula to Paterson's bore hole data which included a maximum Ns of 7.8 at a depth of 11 meters. Using the Mitchell formula with that Ns resulted in a retrogressive distance of 380 meters from the crest which is the result Paterson should have obtained. That distance of course includes all the land north of the gully.

In critiquing Dr. Lefebvre's report, which we will see in due course, McRostie made the following comments:

1. Lefebvre refers to the distance given by the client of 1128 feet. McRostie notes that as a general principle, engineers do not accept anyone else's measurements of location. This is typical of the professions standard of care;
2. While Lefebvre is an eminently qualified engineer, he makes no mention of certain facts such as:

   (a) neither Paterson or Jacques Whitford made use of air photos which was a glaring omission;
   (b) he was misled. He states that the Paterson report contains no plan and that Paterson had no evidence as to where the building was to be. This was not so. If one looks at the Paterson report at Tab 79, the last page, there is a plot plan setting out the location of the proposed building. The plan itself is erroneous. It notes the scale to be 1 to 1000 whereas it should be 1 to 3000. It appears that Paterson took the plan and redrew it and, in doing so, made an error with respect to the scale. As well it appears he drew the gully in an incorrect location on the plan;
   (c) Dr. Lefebvre's comment with respect to the difference in retrogressive distances was made with the lack of awareness that Mitchell's distances were from the crest and Morey's from the shore;
   (d) he made no comment on Patersons and Jacques Whitford's lack of concern for public safety;
   (e) Dr. Lefebvre has done outstanding work in the field of downward pore pressure. McRostie explained that as over the course of the centuries the river erodes its course through the clay, it eventually gets down to more impervious clay so that the pore pressure then runs down rather than out, leaving the slope more stable. That is not a factor in this case when one looks at past recent slides which occurred when the riverbed was at the same depth as it is now. McRostie is of the view that with respect to these most recent slides the run off must have overpowered the downward flow.
   (f) Dr. Lefebvre made no comment about the fact that both Paterson and Jacques Whitford incorrectly measured the distance from the building to the riverbank.

McRostie concluded his evidence on the afternoon of June 7th by suggesting in answer to a question that I put to him that the Morey report did not find a critical slope because the nature of the report was not detailed enough to require it. He suggested that Paterson and Jacques Whitford simply did not look. The next day, June 8th, in concluding his examination-in-chief, McRostie was asked to look at figures 2 and 4 of Morey's report at Tab 54. That is the report to Gore & Story dated August 1989. They are not actually contained at Tab 54 and accordingly figure 2 is entered as Exhibit 9 and figure 4 was entered as Exhibit 10. He was asked once again by Mr. Leamen as to whether or not Morey had, in his report, identified the critical slope. He replied that Morey had reviewed the available air photographs as required to do so. He also examined the published information with respect to slides in the area to establish that slides do occur in the area. He understood the concept of shortest distance. Perhaps most importantly the bore hole that was sunk by Morey was on the line of the shortest distance to the river. See Tab 23, page 156 of Morey's report to Lamadeleine which is the site plan of the plaintiff's property showing the location of the bore hole. Finally, Exhibit 6 is Morey's slope profile of the critical slope so that in the final analysis he did identify what he saw to be the most critical slope which is marked on Exhibit 6 as the existing slope surface at bore hole #1. Finally, Morey carried on to calculate the retro distance.

Cross-Examination of McRostie
by Rasmussen

McRostie was first engaged by Allan Cohen on behalf of the plaintiff during the first week of January 1997 and McRostie made his first visit to the site during that week. He was retained by Cohen to answer two questions.

1. Was the site safe; and
2. If not, what remedial work was required?

He was asked by Rasmussen as to what had prompted the retainer and the questions. McRostie replied that he must have, at the time, heard about the OMB hearing which was coming up but he cannot recall whether there was a discussion concerning whether his work would be used at the OMB hearing. He does not recall understanding what the OMB hearing was to be about.

Rasmussen suggested to him that the hearing before the municipal Board was with respect to a dispute as to where the line should be drawn to define the hazard zone. McRostie had no recollection of that. He did recall that the plaintiff was unhappy with the two studies prepared by Paterson and Jacques Whitford. The plaintiff wanted to know whether the conclusions of those studies were correct and, if not, whether the plaintiff might lose his building. McRostie was aware that the plaintiff had gotten a building permit on the basis of at least those two studies.

McRostie denied that his study was performed in order to support the hazard line being re-drawn. He conceded, however, that his study could probably be used for that purpose.

McRostie's first report to Mr. Cohen was dated January 9, 1997 and is located at Tab 129. He conceded to Mr. Rasmussen that since at least the mid 1980's any geo-tech engineer from Ottawa would know that the stretch of the river from Lemieux to Cardinal was subjected to landslides. McRostie testified that the three most significant slides are the two across the river from the plaintiff and one on the same side of the river as the plaintiff but to the east of his property. McRostie testified that if Paterson and Jacques Whitford had looked at the three landslides they should have acted on their observations. It would have been reasonable for them to state that they had looked at these landslides. They did not, in their reports, say that they had and even if they had looked, they failed to use the information available to them from these landslides.

McRostie confirmed that in preparing his study he would have had all of the Golder reports prepared by Morey and he would have used them for a site specific investigation at the plaintiff's site. He knew Morey had been working in that area and actually telephoned Morey.

At the bottom of page 5 of McRostie's report dated January 9, 1997 at Tab 129 the following is said:

> The detailed method of calculating retrogression distance was examined and checked and found to contain no errors, but a minor difference of opinion existed on whether maximum values of Ns or average values of Ns were more logical. The Golder method of using maximum Ns values was, however, consistent and was calibrated by comparison at about 20 past slides.

Rasmussen suggested to McRostie that he had used average Ns values. McRostie denied this. He conceded that he knew other engineers that used average Ns values in doing the computations but most engineers he testified used maximum values as does Mitchell.

At page 6 of the report McRostie, in reviewing his discussions with Mitchell at Queens University who was the originator of the model or method of estimating retrogression distance, says the following of Mitchell:

> He cautioned that the close agreement of the Golder Morey method at the 1993 Lemieux slide was possibly fortuitous and that engineers should not expect too high an accuracy in their predictions, given the fundamental uncertainties in the natural soil deposits and their analysis.

McRostie conceded that Professor Mitchell was aware of the possibility of inaccuracy.

Again referring to page 6 of the report, when McRostie identifies the most critical slope as being on the adjacent neighbour's land to the east, he testified that he identified that slope because it was the steepest and not the highest.

At Section 3.5.3 McRostie identifies evidence of continuing creep type movements in the lower third of the river slopes examined. He testified that it was difficult to identify the extent of the creep by the reference to Exhibit 6. He was unable to say whether it extended to the terrace area that I have marked on Exhibit 6. He was unable to recall whether he saw evidence of

creep all along the bank or only at the steepest slope. He explained that his practice is to walk the area to find the steepest slope and then examine that steepest slope in detail.

Rasmussen referred McRostie to his conclusions 3.6.1, 3.6.2 and 3.6.3 where he is in agreement with the Golder conclusion that the site is at risk of having a retrogressive landslide if an initial slide begins. Rasmussen suggested to McRostie that he had not done any factor of safety calculations for any of these particular slopes at the time that he expressed his opinion. McRostie replied that he had examined the reports of the site but conceded that he did not do any bore holes or specific calculations at that time. He did, however, do such calculations later in 1999 in his second report.

Rasmussen asked McRostie what there was in any of the reports that he had seen that related to this critical slope which showed a calculation of a factor of safety. McRostie replied that the Morey Golder report of 1988 to Gore & Story, Tab 54, had made the comparison that he had referred to in his evidence this day showing a factor of safety less than the one of 1.4.

Referring to Exhibit 10 which is figure 4 to the Golder report at Tab 54, McRostie identified slope 2A1 as the most critical slope. There are 2 slopes shown adjacent to the plaintiff's property; 2A1-1 on the plaintiff's property and 2A1 further to the east. Rasmussen then entered Exhibit 11 which are some calculations that he found in McRostie's file and McRostie identified these calculations as being an assessment of the slope at 2A1. McRostie "thought" that Exhibit 11 was an assessment of the slope at 2A1. The designation at the top of his calculations is "re slope 2A-1" but in fact there is no slope shown with that designation on Exhibit 10.

McRostie's second report dated December 14, 1998 is at Tab 142. Rasmussen pointed out that approximately 4 pages from the back was marked plate #1 which appears to be a portion of Exhibit 10 which shows the location of lines 2A1 and 2A1-1 and the location of McRostie's surveyed cross section which is located between 2A1-1 and 2A1. The approximate location of the surveyed cross section is designated by a thick dark line located between 2A1-1 and 2A1 and McRostie confirmed that that was the location of the survey and that was where he identified the most critical slope, which evidence tends to clear up his previous evidence.

Admitted as Exhibit 12 then was plate #2 to McRostie's second report dated December 14, 1998 which is a cross section surveyed by him on October 28, 1998. It shows the information that came from the survey performed at the point indicated on plate #1.

Returning to Exhibit 11 McRostie identified his associate, one Luc Morrissette, as the person whose handwriting was on the first page. The writing says in part "Using Paterson's parameters we obtained a factor of safety of a minimum of 1.12". McRostie confirmed that on the second page is the actual calculation that was used to get the factor of safety of 1.2.

With this in mind Rasmussen indicated to McRostie that he wished to discuss the matter further because McRostie had mentioned two different factors of safety that were calculated and neither one of the them was 1.12. He directed McRostie to Tab 142, his report to Soloway, Wright, dated December 14, 1998, the second report. At page 7 there is one calculation of a factor of safety for the critical slope at 1.19 assuming ice jams, creating flood levels, the ice jam breaking, and resulting in a "rapid draw down" condition in the lower portion of the critical slope and assuming, in order to recognize this contingency, a horizontal ground water flow in the lowest 8 meters of the slope. In the last paragraph of page 7 it is noted that an even less conservative assumption neglecting the ice jam and rapid draw down scenario and assuming ground water flow parallel to the slope for its full height, the factor of safety at the critical slope using this unconservative assumption which McRostie would not consider reasonable, would result in a factor of safety of 1.24. At page 6 of the report McRostie notes in the penultimate paragraph that if Paterson had identified the most critical slope and used certain assumptions they would have calculated a factor of safety of 1.09 which would have been, in his opinion, a totally unacceptable margin of safety. Rasmussen asked McRostie where the calculations were that were used to get to these numbers of 1.09, 1.19 and 1.024. McRostie replied that he would expect they were in the file. Rasmussen indicated that he had not found them. He also advised McRostie that why he wanted the calculations was to see what assumptions were being made to arrive at those numbers.

McRostie replied that the soil strength parameter assumptions were all the same. They were restricted in the amount of laboratory study that they could do and the parameters set out on Exhibit 12 would be the soil strength parameters used. The only variable would be the ground water flow assumptions. If one compares the calculations in Exhibit 11 to Exhibit 12, the cross section surveyed on October 28, 1998, the soil strength parameters are indeed identical. When one looks at the ground water conditions assumed in Exhibit 12 with an Ru=0.6 (Ru is the pore pressure assumption) one sees that the factor of safety varies from 1.09 through to 1.19 to 1.24

depending on whether one assumes a horizontal flow of water throughout the entire height of the slope, a flow parallel to the slope in the upper part and horizontal flow in the lower 8 meters or a flow parallel to the slope for its full height.

McRostie confirmed to Rasmussen that in all of the calculations that he did, no one took into account any underflow drainage. McRostie explained that underflow drainage was not taken into account because there was a possibility during the Spring floods that the long term downgrade would be overcome by temporary higher ground water which means more severe ground water conditions in the Spring flood. Rasmussen invited McRostie to agree that if he could be convinced that underflow drainage would not be effected by a sudden rise in the river and an equally sudden draw down in the river, the assumption would make the calculation of the factor of safety change. McRostie responded that it was not only river flood it was also the Spring snow melt which causes saturation in the upper parts of the slope that must be considered. McRostie did concede that it was the pore pressure in the lower areas of the slope that is most critical and that if in fact there was continuous underflow drainage the factor of safety calculation would reveal a higher number. He explained that the factor of safety is a comparison of calculated resistance compared with calculated strength.

Rasmussen suggested that once the factor of safety value is determined, then observations in the field should have some effect on the ultimate opinion that the engineer comes to as to whether or not one is going to get a toe failure. He suggested that observations with respect to movement in the slope, whether it's the point of the river where the current strikes so as to have heavy erosion, and the nature of the material that is on the slope itself would all factor into it. McRostie expressed the opinion that those observations would have very little to do with it.

McRostie agreed that the river has existed in more or less its current form for thousands of years since the glacier retreated and that what we are concerned about here is the likelihood of the toe of the slope failing and the land sliding into the river. Rasmussen asked the question what could happen that would change the stability of this toe of this slope to make it act differently that it has for the last ten thousand years. McRostie replied that weather factors are one of the changes that might effect it and during the last ten thousand years the river has eroded the banks. He conceded that there is a theory, to which he subscribes, that in these types of clays as the riverbank deepens through erosion it can have the effect of making them more stable because you get to the point where you do have underflow drainage and it reduces the pore pressure in the banks. He conceded that for this stretch of river as a result of the passage of time, it has probably increased the stability of these banks as opposed to decreasing it except to the extent that there's been active erosion by the flow of the water.

Rasmussen then had a discussion with McRostie about stability numbers, Ns, the factor that gets calculated based upon the properties in the soil. Rasmussen reminded McRostie that the day before he gave evidence that the raw data from the Paterson bore hole led to a stability number of 7.8 which in turn would result in a retrogressive distance using the Mitchell formula of 380 meters. McRostie agreed that he had so testified. McRostie agreed that there was something known as a "field vane sheer strength" which can be determined by taking an implement that is perhaps a foot long, pushing it into the soil and then rotating it. McRostie agreed that there were also vane sheer measurements that could be calculated in the laboratory with samples that have been taken in shelby tubes. McRostie did not agree that one would get two totally different results in this type of soil material depending on which method was used. When that suggestion was put to him he said, "We hope not". Rasmussen suggested that there was a difference in doing sheer strength results in disturbed soil and undisturbed soil to which McRostie responded that it is hoped that the samples are relatively undisturbed.

McRostie confirmed that three bore holes had been put down on the site; one by Golder, one by Whitford and one by Paterson and that the Paterson and Jacques Whitford bore holes were very close together. Part of the work which McRostie's forces did in the preparation of his report was to review the Golder information in respect of their bore hole data. Filed as Exhibit 13 was a sheet of calculations that came out of McRostie's file. It is titled Example - Check on Ns Profile in BH88.1. It is dated January 6, 1997. Below the heading it notes "Average Basis (not what Morey used)". McRostie conceded that that was his handwriting and that he probably did these calculations after he went to see Mr. Morey. He indicated that the calculations in the upper part of the page would appear to be average calculations and those below would be maximum calculations. Rasmussen suggested to the witness that what he has done here is take the data that is recorded on the bore holes for 10 meters, 15 meters, 20 meters and 22 meters and having taken that data, calculated the Ns number. McRostie agreed that it appeared that way. Rasmussen suggested that he hadn't done any averaging at all when he came to those numbers because there's only one piece of data recorded for each level. At Tab 23 Golder's report to Lamadeleine dated November 1988, page 148 is the bore hole record for bore hole 88-1. McRostie confirmed from Exhibit 13 that he has recorded that at 14 meters with a CU of 42 kilopascals, the Ns is 5.2. Rasmussen suggested to McRostie that he was drawing a differentiation between 14 and

15 meters which McRostie responded that he thought he was averaging the CU values.

Continuing with the discussion, McRostie confirmed that he did a calculation of maximum Ns at 4.7. Then down at the bottom of the right hand corner there is a notation maximum Ns as used by Morey 5.2.

Rasmussen pointed out to McRostie that Morey had indicated a maximum Ns of 5.9. McRostie could not, by looking at the data out of the Golder report, determine how Golder got to 5.9. McRostie confirmed that in his calculation, Exhibit 13, on the lower left hand side he notes that if one uses an Ns of 4.7 and the Morey formula, one gets a retro distance of 126 meters and if one uses an Ns of 5.2 and the Mitchell formula, one gets 120 meters. McRostie confirmed in his evidence that his conclusion at that time was that on the basis of that bore hole information using either Morey or Mitchell formula, the most one comes up with is a retro distance of 126 meters. Rasmussen asked McRostie whether he had redone the calculation since that time and McRostie said he thought he had. Rasmussen pointed out to him that he had not seen any further calculation in the file.

Rasmussen confirmed with McRostie that he also had information from the report of Jacques Whitford. He put the following question to McRostie:

> The information from the Golder bore hole and the Jacques Whitford bore hole is totally different from what you drew from the Paterson report because on Golder it's 4.7, 5.2, or maximum 5.9 and on your review of it the highest was 5.2. I'll give you a chance to confirm this but on the Jacques Whitford information the maximum there could be is 5.3 and yet you people concluded that the stability number from a bore hole taken very close to the Jacques Whitford one was 7.8. Doesn't something seen wrong?

McRostie replied that his conclusion was that the Paterson report using its own information would have come to the 7.8 number. Rasmussen suggested to McRostie that if the Paterson report specifically says that the sheer strengths were laboratory determined vane strengths that should immediately indicate to him that they can't be compared to the field vane sheer strength that were determined. McRostie did not agree. He persisted in his view that if Paterson had looked at his own results he should have recognized that this was a warning.

Rasmussen suggested to McRostie that with all the information he had available no one could have concluded an Ns as high as he had and nor could anyone conclude that there would be a retrogressive distance of 380 meters. McRostie replied that if one looked at the air photos one can easily get that information. Rasmussen persisted and suggested that there was no Ns information on the site that anyone could rely upon that would lead to McRostie's conclusions. McRostie responded that the air photo is much more important. He said "All these formulas are imaginations to attempt to analyze the real situation. If you look at the landslide scar directly across from this property and you look at its distance, it would .. and you put it on the other side of the river, take all the way back to the gully and that's a very serious warning." [what McRostie did during this evidence was demonstrate with the length of his thumb that if you measure the extent to which the slide extended on the other side of the river from the plaintiff, if there was a retrogressive landslide on the plaintiff's side of the river, that same distance would engulf all his land right back to the gully.] McRostie persisted in his view that had Paterson used his own data he would have gotten a retro distance of 380 meters.

Rasmussen referred McRostie to page 13 of his report under the heading "Is the Theatre Building at Risk" and particularly the last two lines on that page which read as follows:

> Therefore I must still conclude that at certain times of certain years the theatre building is at risk of being destroyed by a retrogressive landslide.

He conceded to Rasmussen that he arrived at that conclusion because of the Spring run off and the potential high water in the river. He conceded that if one could eliminate the effects of those two, his opinion would be that this theatre site is not at risk provided preventative works were undertaken at the riverbank to make sure that the riverbank did not change. He conceded that the preventative works at the riverbank would prevent erosion and also the rock berm adds to the stability of the slope or at least the weight of the rock berm does.

McRostie conceded that there are some times during other years when the building would not be at risk and that its at risk at certain years at certain times because of the Spring run off and the formation of ice dams plus the snow melt in the upper areas of the slope. In an answer to my question he explained that the risk occurs when the Spring run off and the snow melting and flowing down the slope occur simultaneously or within a very short period of time. When you get an unfortunate combination, say

once every several decades, of a maximum snow melt condition where you've had a heavy snow and a late Spring and the weather turns warm and there's a rapid melting of the snow, this saturates the upper part of the slope and at the same time if the river has been suffering an ice jam and the ice jam breaks and the water flows away suddenly, it is these random circumstances occurring at the same time that would cause a landslide to most likely occur. McRostie conceded to Rasmussen that in the absence of those conditions his opinion is that the site is not at risk of a retrogressive landslide. He said in answer to that suggestion "Yes. At this moment, for example, I don't think the risk is great."

Again, in answer to my question, McRostie explained that for there to be a real risk of a landslide one needed three factors to occur together:

1. snow melt;
2. Spring rain; and
3. rapid draw down in the river level as a result of an ice dam breaking.

He conceded to Rasmussen that over the last ten thousand years since the withdrawal of the glaciers we have had those conditions, if indeed they are ever going to exist, and that there has not been a retrogressive landslide that has engulfed this site but certainly one that has engulfed the site across the river. Rasmussen asked why our subject site did not fail at the same time as the site across the river if those conditions existed. McRostie explained that the snow accumulation can be different, the vegetation can be different thus affecting the infiltration rate.

McRostie was referred to Tab 72, the Jacques Whitford report to the plaintiff dated October 31, 1990. McRostie confirmed that it was one of the reports that he reviewed. Paragraph 3 of the report sets out the scope of the work as follows:

(a) to investigate the soil conditions at the proposed site by carrying out a field and laboratory study;
(b) to survey the gully immediately adjacent to the proposed site in order to determine slope stability conditions; and
(c) to provide geo-technical recommendations for the design and construction of the proposed structure.

At Tab 80 is Jacques Whitford's letter to the plaintiff dated November 22, 1990 and introduced as Exhibit 14 is a copy of the first page of that letter that was extracted from McRostie's file. In McRostie's handwriting at the top of Exhibit 14 is the notation "Conrad claims he did not receive this "warning" letter". A further notation is that "It was sent (copy) to the Township of Cambridge".

Filed as Exhibit 15 is a page of notes from McRostie's file in his handwriting. His note is to the effect that Whitford's letter of November 22nd constitutes a retraction of their approval of the building location north of the gully and that Paul Leamen will have to settle the question whether this lets the defendant Jacques Whitford off their responsibility for their opposite opinion in their October 31, 1990 report. In his exchange with Rasmussen, McRostie would not concede that he felt this was a retraction of their approval, but rather only a weakening of their opinion.

Filed as Exhibit 16 was another copy of the November 20, 1990 letter to Lamadeleine from Jacques Whitford. It has a note on it "Sent out but revised after".

Exhibit 17 is a page of the November 20th letter. McRostie has no recollection of having seen it and it was his evidence that Lamadeleine never told him that he had made changes to it.

Rasmussen suggested to McRostie that given his opinion that there was a retraction or watering down of Whitford's opinion by reason of the letter of November 22, 1990 (Exhibit 14) it would be very unlikely that the Township would issue the building permit. McRostie responded that the letter was ambivalent. He pointed by way of example to paragraph 3 at page 2 which notes that the riverbank conditions immediately east of the site are rather different, that a possibility of a retrogressive failure at that site has not been investigated and that a failure at this site could possibly jeopardize a portion of the present site. The letter goes on to point out, however, that it is also noted that a ravine is present between the proposed restaurant and the east property line and that a ravine such as the existing one may act as a potential barrier of retrogressive failure. The letter then goes on to say that provided that the existing site conditions are unaltered, the risk of a retrogressive failure jeopardizing the proposed restaurant is very low. McRostie persisted in his position that he did not feel that this was a retraction of any endorsement that had been made previously of that site.

Rasmussen, referring to the words in the letter of retraction "Provided that the existing site conditions are unaltered" suggested that that really was saying that so long as nothing changes on this site, there's no erosion, no one starts to construct something new on it other than this theatre at that

site, so long as the existing conditions are unaltered, the risk of retrogressive failure jeopardizing the proposed restaurant is very low and he suggested to McRostie that if one disregards the three factors discussed with him and His Honour a short while ago, Spring melt, heavy rain and the ice dam phenomena, Jacques Whitford was saying exactly the same thing as he, McRostie, was saying, that is, so long as the site remains unaltered, there shouldn't be any risk of a retrogressive landslide engulfing the site. McRostie, I thought quite craftily replied that was exactly the risk. His words were "Yes, but that's exactly the risk. We know that those combinations of circumstances have occurred and will occur again and that's when the risk is there".

McRostie agreed with the penultimate paragraph on page 3 of the letter of November 22 "Should the conditions of the riverbank (such as erosion etc.) change in the future the overall stability of the site should be assessed at that time. Remedial measures may be required accordingly. Presently removal of vegetation should not be carried out anywhere within the property."

At Tab 79 is the Paterson report. At page 2 it is noted that samples of clay recovered in shelby tubes were sealed air tight, protected from disturbance and subsequently transported to their laboratory for test purposes. At page 2 it is noted that the laboratory vane sheer strength was determined from the samples of clay recovered in the shelby tubes processed in their laboratory. At the bottom of page 2 under the heading "Stability Analysis" it is noted that prior to Paterson undertaking their numerical analysis of the stability of the clay slopes a complete review of the available information was conducted by the firm. It is noted that in addition to the site specific works conducted by Golder Associates, a regional study had been conducted by the Ministry and their findings were reported in Ontario Geological Survey Miscellaneous Paper 112 entitled "Slope Stability Study of the South Nation River and Portions of the Ottawa River." In that report the particular section of slope is identified as having a factor of safety to the order of 1.2 to 1.5 which would indicate that the slopes have marginal stability. Paterson notes that a specific slope cross section was analyzed using the SB slope computer program and the cross sections attached to the report. Paterson's calculations at page 3 indicate that the factor of safety against an initial rotational failure occurring is in the order of 1.4 which is considered to represent a marginally stable slope condition and notes that this analysis was conducted using excessively high pore water pressure conditions that are likely never to develop in the slope. Finally, Paterson expresses the conclusion that the slopes bordering the South Nation River at this particular site are not in their present condition, considered to be unstable. They also express the opinion that should a failure of the banks occur, it would not retrogress back to the location of the proposed building. McRostie agreed that using excessively high pore water pressure conditions which is essentially assuming a horizontal flow for the whole slope is a very conservative approach but the analysis does not relate to the most critical slope. Rasmussen tried to point out that the site plan attached to the Paterson report at the end of that report of which McRostie is so critical is identical to the plan attached to the Golder report but McRostie would not agree. Rasmussen suggested that if Paterson was given the Golder report at Tab 23 that had the site plan that appears at page 156 of that Tab, it was reasonable for him to feel that he could rely upon that information. McRostie responded that in critical areas such as the determination of the distance to the river he would want to do his own measurements and not rely on others.

Cross-Examination by Marcus

It was brought out that in the Ottawa area there are only about 7 firms that do this kind of work.

Next Witness: Allan Cohen

Examination-in-Chief

Mr. Cohen is a partner in the law firm of Soloway, Wright and has been for the last 25 years. His practice has specialized in municipal, planning, development and environmental law. He was consulted by the plaintiff toward the end of 1996. He learned that the plaintiff had acquired property adjacent to the South Nation River and was concerned about designation and zoning placing the land in a hazard area notwithstanding the plaintiff's belief that its location was not dangerous. The plaintiff wanted Mr. Cohen to put it right. Mr. Cohen was aware of the pending official plan amendment 51 and the zoning by-law 25/95.

At Tab 92 is the draft amendment 51 to the official plan of the Corporation of the Township of Cambridge. At Tab 98 is by-law 25-95.

The plaintiff retained Mr. Cohen to make representations at the upcoming OMB hearing to support a line drawn such that it excluded the plaintiff's land from the hazard area. To that end Mr. Cohen went about gathering information and making an assessment of the situation.

By the time Mr. Cohen was retained, a pre-hearing conference had already been conducted by the OMB. That is standard practice in cases that will take two weeks or more and which are complicated.

At Tab 114 is Mr. Cohen's letter to the OMB asking for a copy of the Board's order arising out of the pre-hearing conference. In the letter Mr. Cohen points out that his client operates a theatre on lands within the Township which are the subject of the "Complaint" by the South Nation River Conservation Authority which, although not an appellant, has apparently sought party status to seek an amendment or a modification to the map sheet attached to by-law 25-95. At Tab 113 is the memorandum of pre-hearing conference and order of the Board.

The plaintiff advised Mr. Cohen that there had been a fire on his property in 1990 and that he had retained consultants to assist in obtaining a building permit to reconstruct. Mr. Cohen wrote letters to the South Nation River Conservation Authority, the Municipality and the two Consultants seeking information. His letter to the Authority is at Tab 115. In writing to the Authority he appreciated that the Authority was responsible under the legislation for reviewing activity around the river and assumed that the Authority would be involved in the issuance of building permits. He noted in his letter that the Authority has asked to be designated by the OMB as a party to the hearing which at that point was scheduled for sometime in February. The letter is dated October 22, 1996. Again in the letter Mr. Cohen points out to the Authority that he understands the previous studies were performed on his client's site by Jacques Whitford, Paterson and Lagerec and that their reports were apparently not satisfactory to the Authority.

At Tab 116 is a letter from the Municipality to Mr. Lamadeleine dated October 23, 1996 which points out to Mr. Lamadeleine that it is important for him to engage a hydro-geologist to find out about the status of his land. Mr. Cohen was aware that the question was whether the plaintiff's building was safe having regard to the possibility of a retrogressive slide. More particularly the question was might such a slide occur and, if so, what distance would it travel. Mr. Cohen's retainer was to support the Township in the appeal by the Authority against the line as it was then drawn. (Which at that time excluded the plaintiff's land)

At Tab 117 is a letter from Ault and Ault, solicitors for the Authority. The letter points out in reply to Mr. Cohen's previous letter that there were four site specific geo-technical evaluations conducted for the plaintiff's land as opposed to the three mentioned in Mr. Cohen's letter, the fourth one being the study conducted by Golder Associates in 1988 which Ault and Ault points out gave recommendations for remedial work that the Authority would have found acceptable had those recommendations been followed. Ault's letter also points out that the Paterson report states that the theatre building is located 340 meters from the water course and it is suggested that this is an adequate set back if a retrogressive potential exists. Ault points out that 340 meters may or may not be an adequate set back but that is academic because in fact the theatre building is located 170 meters from the South Nation River when measured perpendicular to the water course and that there is no indication that 170 meters is an adequate set back. The letter points out that Dr. Lagarec is not a qualified geo-tech engineer and in any event did not examine adjacent properties. Ault points out that clearly Mother Nature does not recognize property boundaries and according to the Golder report the retrogressive problem for the theatre building rests primarily with the property immediately upstream of the theatre property (to the east). The letter then sets out criteria that would be acceptable to the Authority when investigating unstable slopes with retrogressive potential.

Mr. Cohen pointed out that the hazard line had been altered between the time the Authority saw the by-law for the first time and the date of the hearing before the OMB. That is why the Authority had applied for status as a party. The line originally included the plaintiff's property when the Authority first saw the by-law but by this point in time the line had been changed, placed in front of the property and thus excluded the property from the hazard area.

At Tab 119 is Cohen's letter to Jacques Whitford. He wrote a similar letter to Paterson. At Tab 122 is Paterson's letter to Mr. Cohen in reply dated December 20, 1996. In this letter Paterson stands by its original report in accordance with the terms of reference at that time. He points out that at the time they had determined that the factor of safety against initial rotational failure was in the order of 1.4 which is considered to represent a marginally stable slope condition. The letter points out that Paterson has been advised by the authority that there has been an initial slide on the banks and points out that the fact that it has not retrogressed back to the building is confirmation of Paterson's analysis. The letter states, however, that it is the plaintiff's responsibility to prevent further erosion of the toe to prevent further slippage. The letter points out that at no time was Paterson asked to provide input into the location of a set back line for the site. Its report was used by the plaintiff to get a building permit for his building and the Township gave their blessing by issuing a building permit. The letter points out that the issue at hand is the fact that there is an official plan amendment being proposed which shows the set back line at the crest of the

slope which is completely anomalous to the surrounding lands. With the line situated at the crest it gives the land owner unlimited freedom for future development and the letter points out that in Paterson's discussion with the Authority it was inferred that the problem is not so much with the location of the building but rather the location of the set back line. The letter points out that if the line had been situated a reasonable distance back from the crest, the issue would probably never would have come to light. Finally, the letter takes the position that the problem that the plaintiff is left with is a planning issue.

At Tab 123 is a letter from Mr. Rasmussen to Mr. Cohen on behalf of Jacques Whitford Limited. Mr. Rasmussen suggests in his letter that the prudent thing for the plaintiff to do would be to develop expert evidence necessary to establish that the position held by the Authority cannot succeed and suggests that should the plaintiff elect not to contest the OMB hearing vigorously Jacques Whitford Limited would take the position that the plaintiff has failed to properly protect his position or to mitigate any potential loss.

Cohen decided then to retain an expert to review the Morey, Paterson and Whitford reports.

At Tab 125 is Cohen's letter to Paterson putting the simple question, is the building safe and inquiring whether or not they had reviewed the Morey report which called for a set back of 340 meters from the river.

At Tab 126 is Cohen's letter to Rasmussen dated January 3, 1997 which points out that Whitford does not appear to be prepared to state that it stands behind its study.

At Tab 127 is a letter from the Authority to Mr. Cohen which points out that based on the geo-technical evidence available to the Authority, it is the position of the Authority that the study area line adopted by the Township of Cambridge Council does not accurately reflect the potential hazard. The study area line is set out in map schedules provided with the official plan amendment and zoning changes. The Authority points out that the official plan is written in such a way that one can build within the hazard zone if a geo-technical expert says that with respect to a specific site there either is no problem or if there is a problem, remedial work will solve the problem.

At Tab 128 is a letter from the Authority to the OMB, a copy of which was received by Mr. Cohen.

At Tab 129 is the McRostie report received by Cohen. The report told Cohen that:

1. the plaintiff's property was in an area where a slide could occur. The slide would occur more likely to the immediate east;
2. the slide would retrogress to the plaintiff's building; and
3. the plaintiff's building was not safe.

In the face of this report and in the face of the Golder report, Cohen decided that it would not be wise to go to the OMB to defend the present location of the hazard line which excluded the plaintiff's property in that all he had to oppose McRostie and Golder were the reports of the other two consultants. Cohen advised the plaintiff to consult with his insurer and further advised him against using the property for any reason. He saw no point in fighting the relocation of the hazard line by the OMB for the following reasons.

1. The OMB had from the Authority a detached expert who would testify with respect to a model that the Authority was treating as accurate and Cohen did not think that the OMB would reject that model and accept the Paterson and Whitford models.
2. McRostie, in his report, had declared the building unsafe.
3. Cohen felt that even if he could convince the OMB that the new line was the correct one, then that would put the plaintiff's building in what Cohen knew from all of the evidence to be a hazard zone and Cohen would, in fact, be responsible for the lives of as many as 2500 people and he refused to do that.

[It is obvious that Cohen had to judge this matter for himself and in the face of conflicting evidence and conflicting opinions, had come to the conclusion that contrary to Paterson and Jacques Whitford's position, the building was not in a safe location.]

At Tab 132 is a letter from Cohen to McRostie that we have already seen confirming that the building was not safe. At Tab 134 is McRostie's reply which we have already seen. At

Tab 135 are Cohen's letters to both Paterson and Whitford.

At Tab 140 is a copy of the OMB's decision. Cohen pointed out that the plaintiff agreed with him that there was no point in fighting the issue before the OMB however it had been agreed that the Township would call Paterson and Whitford at the OMB hearing to defend the new line which excluded the plaintiff's property. Cohen and the plaintiff attended the OMB hearing but did not seek party status which would have given them the right to cross-examine, call evidence, argue and render themselves susceptible to costs. They did have status as a participant who could come and go and with the Board's permission, ask questions. However, they had no right to argue. Cohen and the plaintiff did not want to be before the Board for two weeks as would be required of a party and did not want to argue or be responsible for costs.

The OMB hearing was, from Cohen's point of view, very unusual. Initially the Board had an in-camera meeting with the solicitors for the Authority and the Township. The Board then reopened and land use planning evidence was called. There was then another in-camera meeting with counsel for the Authority and the Township. The Board then reopened and said that it did not need to hear geo-technical evidence and that this was a planning problem only, that the hazard line was not correct and the Authority had the power to relocate the line and the line was relocated. In its Reasons the Board points out the following. Sometime between mid August and mid September 1996 the plaintiff came to see the municipality's consultant planner, Mr. Miguelez, and asked him to make the line on his property less restrictive or closer to the river. The plaintiff based the request on two studies that had been done for him; the Paterson report and the Jacques-Whitford report. It was Mr. Miguelez's evidence that the plaintiff assured him that the Authority had reviewed the reports and was in agreement with them. Miguelez reviewed the reports, concluded that they were geo-technical investigations as foreseen in the OPA51 policy and redrew the line on the Lamadeleine property based on his interpretation of the reports. He did not contact the Authority but rather relied on the plaintiff's statement that the Authority was satisfied. It was this less restrictive line that formed part of OPA51 and by-law 25-95 when adopted by council. In May or June 1996 the Authority became aware of the change when they were approached for a clearance certificate on the property. The Authority became a party to this hearing because it took the position that the less restrictive line did not adequately reflect the landslide potential on the plaintiff's property. Mr. Miguelez was very clear that had he known the Authority was not satisfied with the Paterson and Jacques-Whitford reports he would not have moved the line.

Cross-Examination by Rasmussen

Mr. Cohen had been provided by the plaintiff with a copy of the Golder report which he reviewed. Cohen had been left with the impression by the plaintiff that the plaintiff had done the remedial work suggested by Morey and that Morey thought the site was safe after that remedial work was completed. The plaintiff thought that he had done the remedial work in accordance with Morey's recommendations however after speaking to Morey, Mr. Cohen understood that the remedial work had not been done as required by Morey and to the extent required by Morey and then was not satisfied that the building was safe. McRostie then confirmed that the building was not safe.

At Tab 110 is a letter from Janet Bradley to the municipality dated June 18, 1996 written on behalf of the plaintiff and expressing the same concerns.

Mr. Cohen confirmed for Mr. Rasmussen his understanding of the fact that set backs were established as early as 1982. The first set backs established were 600 meters from the shoreline on the left shore as one goes down stream and 800 feet on the right shore. Cohen understood that the fact that the plaintiff was in a hazard zone had been established for some time before the plaintiff retained Mr. Cohen. Then the Golder report proposed a set back that was adopted by the Township and which gave rise to the OPA and the by-law approved by the Township. Cohen agreed that the plaintiff then went to the Township planner, showed him the Paterson and Jacques-Whitford reports and the planner moved the line with respect to the plaintiff's property although Cohen indicated in his evidence that it is not the planner that relocates the line, it was the Township that relocated the line relying on the advice of its planner. Cohen pointed out as well that the plaintiff obviously was upset that the line was initially drawn so as to include his land after he had gotten two consultant's reports and after having obtained the building permit.

Cohen agreed that the whole concept of the hazard line was to identify the area that had potential for retrogressive landslides. He also recognized that even if a particular site was in the hazard zone, the site could be developed and built on in the face of a site specific report.

Rasmussen suggested to Cohen that it was Paterson's position that it had not been asked to determine an appropriate study zone but rather had been asked whether it was appropriate to put a specific building on a specific site. Cohen, I think quite properly, replied that he did not know how one could

do one without the other. Cohen was of the view that the third paragraph in Paterson's letter of reply to Cohen dated December 20, 1996 which points out that at no time was Paterson asked to provide input into the location of a set back line for the site, completely avoided the questions which were:

(a) was a retrogressive slide likely to occur? and
(b) if so, how far would it travel?

As far as Cohen was concerned, only when those questions are answered can one say the building is safe.

With respect to Tab 140, the OMB report at page 10, paragraph 3, the Board says it is satisfied that the municipality was fully prepared to defend its by-law including the less restrictive line on the plaintiff's property. The Board finds, however, that the information from Mr. Lamadeleine was the central reason the line was moved and therefore the main reason for any issue between the municipality and the Authority. The Board notes that Mr. Lamadeleine had every opportunity to present his views and that to hear the geo-technical evidence would be an unnecessary and costly diversion and that the planning framework established by OBA51 and by-law 25-95 represent good planning and that the more restrictive line on the Lamadeleine property represents good planning in the absence of adequate site specific reports. Cohen testified that the Board misunderstood its function. The Township was entitled to defend the appeal brought by the Authority and the Board was wrong in not calling the geo-technical evidence and in redrawing the line without hearing that evidence.

Rasmussen pointed out to Cohen the first paragraph on page 4 of the Decision of the OMB which reads as follows:

> The intent of the landslide potential area is to require appropriate studies not to prohibit development outright. There is, therefore, no policy need to change the demarcation of the area on an on-going basis. As well, I am not satisfied that a study area policy line should be moved based on site specific geo-technical studies. Such studies are generally designed to test whether a particular structure or other development can be built without risk. They are by their nature specific to time, place and structure. They are not designed to show that no other development ever would be at risk and that no study is needed for a future unknown development and time.

Cross-Examination by Marcus

Cohen was not aware exactly what Lamadeleine had told Miguelez with respect to approval from the Authority. Cohen did know that Lamadeleine went to Miguelez with the Paterson and Jacques-Whitford reports and that he thought the Authority had approved the reports otherwise he would not have received a building permit to reconstruct in 1990. Cohen pointed out that the Authority was only a phone call away and Miguelez should have called the Authority to confirm that they approved the two reports. As a result, the line was relocated by counsel because the planner represented to council the relocation of the line without calling the Authority to confirm that the Authority was satisfied.

Evidence of Conrad Lamadeleine

Examination-in-Chief

Mr. Lamadeleine is the owner of the plaintiff numbered company which in turn owns the subject lands which were purchased in 1982. Mr. Lamadeleine has been in the business of investment and insurance brokerage since 1961. He was the reeve of Casselman for some 13 years until approximately 2 years ago. He also served on the Conservation Authority from 1992 to 1994.

The property purchased in 1982 consisted of 28 acres adjacent to the South Nation River containing a sugar bush. Upon purchase he repaired the maple syrup shed in the bush and started up the sugar bush operation which became a success as there were no other sugar bushes within 60 miles. It was his evidence that on some Sundays they served as many as 1100 meals and during the week a total of 700 to 800 meals beginning at the end of February, early March and lasting until the end of April or beginning of May. Some 2400 mature maple trees were being tapped.

In 1988 the local economic development director suggested that the plaintiff consider establishing a summer theatre in English and French. The existing buildings were not adequate for a theatre. The plaintiff considered constructing a new building which would be a combination theatre and restaurant, perhaps 60 feet wide by 80 feet long with a 12 foot ceiling designed to accommodate 300 people. After discussions with the Township of Cambridge, it was suggested that perhaps to begin with the plaintiff should make modifications to an existing building and try the theatre operation for a year. If a new building was to be constructed the plaintiff intended to place it south of he ravine next to the parking lot, primarily to place it closer to the parking lot to assist disabled persons to access the theatre. The existing building which the plaintiff decided to renovate was

located on the north side of the ravine. The plan was to extend the width of that building by some 20 feet along its entire length and adjust its interior height to accommodate 200 patrons.

Mr. Lamadeleine showed the location of the proposed new theatre on Exhibit 1 with a circled X located to the south of the ravine and confirmed that the building that they planned to renovate for a theatre use on a temporary basis was located to the north of the ravine.

At Tab 8 is a letter from MNR dated November 10, 1987 addressed to Mr. Lamadeleine and referring to certain concerns that Mr. Lamadeleine had. Mr. Lamadeleine explained in his evidence that the concerns that he had expressed were that between Casselman and Lemieux there were always landslides or rumours of landslides. The MNR in this letter simply directed Mr. Lamadeleine to the Township. He did discuss the concerns with the Township who said that certain studies were underway.

At Tab 9 is a letter from the MNR to Mr. Lamadeleine dated December 14, 1987 again in response to his concerns. The MNR, with this letter, encloses a map outlining the known earth flow failures near the plaintiff's property and those are the 2 across the river and the 1 on the same side of the river which we have seen several times now. MNR indicates that these failures have been identified as occurring in the 1800s, that there have been some 18 large failures in all and 3 of them have occurred in the last 95 years.

At Tab 11 is a letter from the Ministry to the Township dated January 4, 1988 referencing the plaintiff's land. The plaintiff received a copy of that letter. The letter pointed out that the plaintiff's property was partially within the earth flow zone and should be subject to the earth flow restrictions outlined in Section 6.26 of the draft comprehensive by-law. It was Mr. Lamadeleine's evidence that he understood that the portion of his property that was within the earth flow zone was the northwest portion, north of the dotted line on the map attached to the Ministry's letter dated December 14, 1987 at Tab 9.

At Tab 14 is a letter from the Ministry dated August 31, 1988 confirming a visit by the Ministry to the summer theatre/sugar bush. The letter notes that most of the sugar bush and the site of the proposed new theatre was inside the set back line. It was Mr. Lamadeleine's evidence that the proposed site at that time was south of the ravine.

Around this time the plaintiff knew of Golder. The Authority had told the plaintiff that Morey was doing studies in the area with respect to landslides. Lamadeleine did not become aware of the Golder report to the Authority dated September 1988 until about 1992.

At Tab 18 is a letter from the Ministry to Lamadeleine dated September 19, 1988 confirming that Lamadeleine is retaining Morey at his own expense to conduct geo-technical testing and assessment of the landslide hazard for the stretch of river slope likely to have an effect on his property at lot 17. Lamadeleine in his evidence explained that the municipality had said there was danger along the river and that he was partially in the earth flow zone and should get a geo-technical survey and in particular get Morey to do the survey. As a result, Lamadeleine agreed to do so. In effect the municipality was requiring that before he put up any building he had to have soil tests conducted and so he had no choice. As well, he agreed to do it because he had a concern for the safety of the patrons coming to the site as he did for his own family. As I understood Lamadeleine's evidence most of these discussions with the municipality about geo-technical surveys were with respect to his proposal to build a new building.

At Tab 19 is documentation with respect to the minor variance application that was required to permit the plaintiff to add 20 feet to the existing building north of the ravine to be used as a sugar bush camp and summer theatre. The application was approved.

At Tab 20 is Morey's letter of October 20, 1988 to Mr. Lamadeleine. Lamadeleine testified that he had retained Morey to find out if the land was safe to put up a new building for a theatre to be located south of the gully. He told Morey that he wanted to extend the parking and put up a new building to the south of the gully. The parking would be on the north side of the gully. Morey had advised Lamadeleine that even if the building was to be on the south side of the gully then the gully would have to be extended quite a distance and in fact that was done. In the face of the October 20, 1988 letter Lamadeleine hired a bulldozer and extended the gully.

It was Lamadeleine's evidence that Mr. Morey suggested that he remove some material at the riverbank and according to his evidence the bulldozer worked there for approximately a week changing the inclination of the slope and everything was seeded including the gully. It should be noted, however, if one looks at the report of October 20, Morey first comments that a safe set back distance from the river edge for building construction

has been calculated to be 400 meters but that that set back distance might be substantially reduced by ensuring that initial failure of the riverbank does not occur. He then goes on to reference flattening of the slope toe area at the river edge to an inclination of 3 horizontal to 1 vertical and providing erosion protection using rip rap and geo-textile in the lower portion and mulch and seeding for the upper portion. He does, however, comment that the length of riverbank along which the remedial work should be carried out depends on the actual location of the proposed building and the distance between the proposed building and the riverbank. He points out in his initial report that once the desired location for the proposed building has been chosen, the extent of riverbank remedial work can be determined. That can't be the remedial work that Morey is talking about in his evidence.

At no time during this exchange between Morey and Lamadeleine, did Lamadeleine ever tell Morey that he was not going to build on the south side of the ravine.

At Tab 22 is a decision of the Committee of Adjustment relating to the 20 foot extension of the building presently being used as a sugar bush and theatre. The decision notes that construction will be allowed conditional to a report of and supervision by a geo-technical engineer.

At Tab 23 is Golder's report to Lamadeleine dated November 1988 which the plaintiff received and gave to the Township of Cambridge. It was Mr. Lamadeleine's evidence that that report told him what his land was all about, what work had to be done and where the dangers are. He understood that the report told him to build the theatre south of the gully as shown with the circled X on Exhibit 1. If he was to build a new building it was definitely to be on the south side of the gully. At that time he took no steps to advance the location on the south side of the gully and did not plan to put a new building there until he had the experience of the renovated theatre on the north side of the gully. It was his understanding that in order to build on the south side of the gully he had to extend the ravine and also reduce the height of the hill at the shoreline. After receiving the report Mr. Lamadeleine called Mr. Langlois, the architect in Hull, to get the plans for the south side theatre and decided to go ahead with the expansion of the building on the north side of the ravine so that they would have 1 or 2 years of experience behind them before building the new building.

At Tab 25 is a letter from Golder Associates dated December 28, 1988 confirming that the existing ravine has been sufficiently extended and deepened to provide adequate protection against the possibility of a landslide for a building located on the south side of the ravine and east of the west extent of the ravine. Lamadeleine gave this letter to the municipality.

At Tab 34 is another letter received by the plaintiff from Golder Associates dated April 21, 1989 confirming that the report had provided several alternatives for remedial work and that the remedial work alternative chosen and carried out consisted of deepening the existing east west running ravine at the site and extending the ravine westward beyond the proposed building location. Mr. Lamadeleine in his evidence explained that when he went to the building inspector for the Township, Mr. Brisson, for a building permit, Brisson wanted to know what work had been done on the land and, accordingly, Lamadeleine asked Morey for a supplementary letter for that purpose. The building permit being sought was for the expansion of the building on the north side of the ravine. [In my view Lamadeleine knew exactly what was going on here and he was taking advantage of Morey by asking for a letter on the assumption that they were talking about the building site on the south side of the ravine and then presenting the resulting letter to the Township in support of a building permit for a site on the north side of the ravine.]

At Tab 35 is an application for a building permit prepared by Lamadeleine with respect to the expansion of the building on the north side of the ravine. The attached plan shows the proposed extension with a dotted line.

At Tab 38 is a letter from Golder to Lamadeleine dated May 2, 1989 again pointing out the alternatives, one of which (deepening and extending the existing east west ravine) had been carried out. This letter again points out that a second alternative was to flatten the existing riverbank slope toe area and provide protective rip rap and an underlining geo-textile filter to high water level and mulch and seeding. Again it is pointed out that the linear extent of the slope flattening required and further details of the required riverbank work would have to be determined once the location of any proposed building was known. In his evidence Lamadeleine testified that he did not understand the two alternatives. [I do not accept that evidence. It seems clear enough that what Morey was saying throughout all of the documents was simple and straightforward.

1. If you put the new theatre to the south of the ravine all you will have to do is deepen and extend the ravine to safeguard against retrogressive slides.
2. If you propose to put the new theatre to the north of the

> ravine then you will have to do extensive work to the riverbank, the extent of which cannot be finally determined until the location of any proposed building is known.

Lamadeleine, in his evidence, pleading innocence, says he didn't know what rip rap was, and that he thought it was the tree chips and seeding. I do not accept that evidence.]

At Tab 40 is the building permit dated May 12, 1989 issued with respect to the renovation work to the existing building north of the ravine. The Township building inspector inspected the work to completion.

Once it was up and running the combination sucrerie and theatre saw attendance of about 20,000 persons per year and about 12,000 meals per year were being served in the dining room, 7,000 alone in July and August.

At Tab 52 is a letter from the Authority to Lamadeleine dated July 20, 1989 acknowledging his request to participate in the Casselman to Lemieux environmental assessment. Lamadeleine testified that he wanted to know about the entire study and its results.

At Tab 54 is the Golder report to Gore & Story dated August 1989. It is not a report that Lamadeleine received at the time. He may have seen it in 1994 when he was with the Authority or perhaps for the first time in Exhibit 4.

The renovation to the existing building on the north side of the ravine was completed in the Spring of 1989 and business was carried on there in 1989 and 1990. In August of 1990 a fire occurred in an adjacent trailer being used by a theatre group. The fire spread to the building which burned to the ground.

After the fire occurred Lamadeleine intended to rebuild on the south side of the gully because he already had architectural designs for the site on the south side of the gully. It turns out that he could not build on the south side of the gully. The health unit from Cornwall would not allow the existing holding tanks located on the north side of the gully to be moved to the south side of the gully, rather the health unit was requiring that a new well and new septic system be established in the south side of the gully for the new building there. Accordingly, Lamadeleine decided to ask if the plaintiff could build on the same site as the fire destroyed building, that is, on the north side of the gully.

As a result of the prohibitive costs involved in rebuilding to the south of the ravine, the plaintiff decided to ask the municipality if it could build on the same site as the burned down theatre, that is, to the north of the gully. In response the municipality told the plaintiff that it would need soil tests conducted now because of the danger. The municipality gave the plaintiff several names including Paterson and Jacques Whitford. The plaintiff eventually retained both Paterson and Jacques Whitford. To Jacques Whitford he gave the Golder site specific report. At some point about this time, Morey came to the site with the Conservation Authority and told the plaintiff that it could not build north of the gully. Lamadeleine inquired as to why that was so and Morey replied that it was dangerous. Lamadeleine was angry. He had done the work extending the ravine and bringing down the bank and now he was being told that he could not build north of the ravine. If he had extended the building 1 1/2 years before north of the ravine, why could he not build the new building on the same site. [It is difficult to understand how Lamadeleine managed to get a building permit to extend the existing building on the north side of the gully in 1989 in the face of the Golder report which very clearly said that if he wanted to build on the north side of the ravine, he had to do significant remedial work to the toe and slope including levelling, rip rap and geo-textile film and that the extent to which such work would have to extend along the riverbank could only be determined once he located the exact site of the proposed new building on the north side of the ravine.] In any event, according to the evidence of Lamadeleine, Morey told Lamadeleine during the course of this argument that he had given Lamadeleine his opinion and he was free to get another opinion to say either that he was right or wrong.

As it turned out the Jacques Whitford bore hole and the Paterson bore hole were only 8 feet apart and Lamadeleine was surprised at that fact.

Lamadeleine discussed the matter with Dr. Lagarec who disagreed with Morey.

At Tab 63 is a letter from the Eastern Ontario Health Unit dated September 10, 1990. The letter states that the Health Unit had no objection to the plaintiff rebuilding on the same site and using the same facilities for the disposal of waste subject to the condition that he maintain the same seating capacity, namely 210 people.

As a result of all this the plaintiff applied to the municipality to rebuild on the same site, namely the north side of the ravine. At Tab 65 is a request for a building permit apparently received September 26, 1990 by the municipality. That application was originally for a permit to build on the

south side of the ravine but because of the lack of cooperation from the Health Unit, the plaintiff changed the application to apply to the north side of the ravine. At the bottom of the first page of the application is handwriting in building inspector Brisson's writing which reads "Construction de theatre sucrerie au sud de ravine" with "nord" written above the word "sud" and initialed by Brisson.

At Tab 67 is a letter that Lamadeleine wrote to the Authority on October 1, 1990. It is an angry letter, a synopsis of which follows:

> I was informed by the building officer of Cambridge that you have sent a letter including a drawing as to where my theatre restaurant should be built in the future.
> Since the past three years I have spent a great deal of money to improve my land against a possible landslide. Having all this done and discovering now that I may have spent $17,000 for something that may not have been necessary is frustrating. In 1988 there was a plan to build a new theatre and at the request of the municipal council of Cambridge we had to do a geo-technical test for our land. During these tests which I was present the engineers on site mentioned that it was safe and that our land was the same as the land in Ottawa where they were building the new aviation museum. When the report was sent to us it mentioned two alternatives should be considered before building and I must admit that it was a surprise that we had to do that after being told it was safe. [According to Morey he never indicated to Lamadeleine that the area was safe]
> After talking with Randy Morey I was told it was to be on the safe side. Therefore we did the work such as extend the present gully east west and also flattened the existing riverbank slope too.
> The proposed new building was never built because of the cost involved. Incidentally the present buildings that are there are protected also by the three existing gullies which have been determined by your engineer as being a natural barrier against retrogressive landslides.
> In 1989 we applied for a building permit for the expansion of the present building and we were told in early April to obtain a letter that the work had been done. After giving the letter of April 21, 1990 from Golder we did obtain a building permit and did build. [The correct date of that letter is April 21, 1989]
> The engineer Randy Morey who had done the work on our land happens to be also your engineer and this creates a serious conflict of interest.
> It has also be found that all the tests that Golder ever did in this area are questionable and need to be re-evaluated seriously.
> Since the official plan has not been amended and since I have been existing before any changes or any new rulings have ever been decided by anyone, I don't believe anyone can stop the municipality from issuing a building permit as long as it does conform to the zoning by-law.
> The municipality of Cambridge issued a building permit in 1989 because it conformed to their regulations which indicated that every request by Sucrerie Casselman had been met.
> Today the building has been destroyed on August 4 by an accidental fire. The Health Unit has given permission to rebuild providing it be on the same site. To move the future building would represent another additional cost of $75,000 because it would need a new well and septic bed and new pavement.
> If you delay this project you will be brought to court.

In his viva voce evidence explaining the letter of October 1, 1990, Lamadeleine explained that in 1990 things were not good between the Authority and the municipality. There was no agreement between them as to where the line was to go or where the setbacks were to be. Lamadeleine felt that he was in between the two of them and felt frustrated. He did know that to build south of the ravine would be very expensive because of the Health Unit's requirements.

At Tab 69 is the building permit received from the municipality on October 2, 1990 for construction on the south side of the ravine. Lamadeleine let the municipality know that there would be no building on the south side of the ravine because of the expense.

At Tab 70 is the building permit with respect to the site on the north side of the ravine which was received by Lamadeleine on November 26 from the municipality.

At Tab 72 is the Jacques-Whitford report to Lamadeleine dated October 31, 1990. Lamadeleine gave the report to the municipal council so Dr. Lagarec who was their consultant could have a look at it. The Jacques-Whitford report was with respect to the site on the north side of the ravine. Lamadeleine had given Jacques Whitford the Golder report at Tab 23 which contains the map. Jacques Whitford was to test the site where the building had burned on the north side of the ravine. Marked as Exhibit 18 is the survey given by Lamadeleine to Jacques Whitford. At the second last

page of Tab 72 is a part of the survey on which Jacques Whitford identifies the bore hole location, septic tank and other information. The distance of 1156 feet from the proposed site to the riverbank marked "1156 (352.3M)" is in Lamadeleine's writing. He measured parallel to the west boundary line of the lot.

Lamadeleine had told Jacques Whitford of Morey's position and the Authority's position and asked Jacques Whitford to look and see if notwithstanding those positions the plaintiff could put a building on the same site as the burned building.

Some time in November the municipality indicated that the Jacques-Whitford report was not clear, that they were in doubt and that they needed clarification. The plaintiff told Jacques Whitford that they had to indicate that the area was safe but that there was a possibility of a landslide. Dr. Lagarec gave Lamadeleine the wording required. Lamadeleine sent the wording to Jacques Whitford and Jacques Whitford sent the additional report saying that the area was safe but there was the possibility of a landslide. At Tab 73 is the covering letter of transmittal from Jacques Whitford with respect to the report. Having taken the report to the municipality, Dr. Lagarec wrote on page 2 of Tab 73 the suggested wording which says as follows:

> The recommendations made in this report are in accordance with our present understanding of the project and a soil investigation is a limited sampling of a site and after reading the Golder report we agree that there is always the possibilities of landslide along the Nation River. However, after viewing the site such as the gullies, natural berm at the river, the land being forested and drained and adding the distance from the river, we still believe that he type of the building proposed at the site is secure.

That is all in typewriting. The handwriting on page 2 is that of Lamadeleine. It says as follows:

> This note would permit me to obtain a building permit and at the same time allowing you plenty of room in your report. The municipality of Cambridge share the same opinion since Dr. Lagarec did view the site and said there is a very good set back. A years set back along the Nation River will be at 200 meters since Dr. Lagarec has proved that the average landslide that ever occur along the Nation River is average 200 meters. In my case the elements of safety are in my favour.

Lamadeleine's handwriting also appears on the front page of Tab 73. It reads as follows:

> Must indicate in report that "they are aware of possible landslide such as indicated in Golder report but maintain that this building should not be jeopardized by the Nation River".

Tab 73 with Dr. Lagarec's typewritten portion and Lamadeleine's handwritten portion was then faxed to Jacques Whitford.

Of interest is Tab 66 which is a letter that Lamadeleine says that he sent to Jacques Whitford at some later date. In the letter Lamadeleine says:

> I want you to tell me in a letter that you still believe (in the face of the Golder report) that the set back which is about 350 meters is still adequate and should not jeopardize in your opinion the construction of my theatre restaurant. Understand that I already have two letters like that from Dr. Lagarec, geo-morphologist and the firm of John D. Paterson. If their opinion is the same why would it be that you be different.
> I think it is reasonable what I am asking and once I receive this amendment and the reports I left with you then I will mail a cheque immediately.

It was Lamadeleine's evidence that Tab 73 was sent to Jacques Whitford within a week of Lamadeleine obtaining it on or about November 1, 1990.

In view of the Whitford report not being clear, Lamadeleine sent a letter to Paterson confirming the price that he quoted with respect to the study and telling him to go ahead. That letter is at Tab 74 and is dated November 8, 1990. In the letter Lamadeleine indicates that he wants "testing my land to put a building to know if it is safe, also to check the river slope because there is lots of discussion going on about the Nation River. To make a long story short, find out if it is safe to put a building ..."

As a result Paterson came to the site north of the gully and sunk a bore hole 6 to 8 feet away from the Jacques Whitford hole. Lamadeleine told Paterson that Jacques Whitford had worked on his land and that if he wanted information he could also call either the municipality or the Authority.

At Tab 75 is the letter received by the plaintiff from Paterson November 19, 1990. It is a preliminary report confirming that a deep bore hole to bedrock had been put down at the location of the proposed theatre. Lamadeleine commented in his evidence that he was surprised that the Paterson bore hole was in the same area as the Jacques Whitford and that he would have expected the holes to be 600 to 700 feet apart. The preliminary letter from Paterson indicates that the structure is located greater than 340 meters from the crest of the South Nation River, that they have reviewed the Golder report and have used the factual data to assist them in their analysis and that after reviewing the data in that report (Golder report number 8812486 - Tab 23) and on the basis of their findings, it was their opinion that the proposed development complies with the concerns that have been expressed regarding development along the South Nation River. They indicate that their calculations in turn indicate that the proposed structure is set back a distance that is more than adequate to buffer the structure against a possible slope failure should it occur. It is their opinion that the plaintiff should proceed with the proposed theatre. This letter was given by the plaintiff to the municipality. Lamadeleine confirmed in his viva voce evidence that the site that Paterson was discussing was to the north of the gully.

At Tab 76 is a subsequent report from Jacques Whitford dated November 20, 1990 received by Lamadeleine perhaps on November 25. Lamadeleine took this additional report to the municipality and is 99% sure that the municipality already had a copy of it. A review of this report shows that Jacques Whitford has incorporated the wording suggested by Dr. Lagarec to the plaintiff about not completely ruling out the possibility of future landslide. When Lamadeleine presented this report the Township indicated that it was expecting news for him. In turn, Lamadeleine threatened to forget the whole thing because it was getting too late to build. The municipality in the person of Mr. Brunet said that the municipality would make the decision very soon. There was a council meeting Monday evening and Lamadeleine received a phone call on Tuesday telling him to pick up his permit.

Interestingly when Lamadeleine gave this evidence he then referred once again to Tab 76, the report of Jacques Whitford dated November 20, 1990, and indicated that he received that report on the same date.

At Tab 79 is the report from Paterson dated November 22, 1990 which according to Lamadeleine's evidence he received the same day he got his building permit. Again he took the Paterson report to the municipality and gave Brunet a copy. He believes that Brunet had already received the Paterson report.

At Tab 80 is another letter from Jacques Whitford to Lamadeleine dated November 22, 1990. It appears to be quite similar to Tab 76. Tab 76 has the notation on it "sent out but revised after". The difference between the two is as follows. They are the same to the end of paragraph 3 on page 2 of each report. After that point Tab 80 reads as follows:

> Should the conditions of the riverbank (such as erosion etc.) change in the future the overall stability of the site should be assessed at that time. Remedial measures may be required accordingly. Presently removal of vegetation should not be carried out anywhere within the property.

As opposed to that, Tab 76 reads as follows after the end of paragraph 3:

> As a condition of constructing the restaurant at the proposed location we recommend an annual inspection be carried out to assess the stability conditions of the lower slope. Such inspection should be conducted in the spring and should consist of detailed photographic record of conditions such as erosion and other signs of distress. Should the inspections reveal adverse conditions remedial measures may be required. Removal of vegetation should not be carried out anywhere within this property.

[It appears that Jacques Whitford was prepared to accommodate Lamadeleine by rewriting its opinion to some extent.]

Tab 83 is a letter from the municipality to Lamadeleine dated December 5, 1990 which advises that a resolution has been passed to the effect that based on the report of Jacques Whitford, Paterson and Lagarec the reconstruction north of the ravine seems to be secure and a permit be issued for that location. Interestingly Lamadeleine already had his permit by this time and he says that is the usual practice. Indeed he had already started construction by that time. Brisson had done his first site inspection on November 29 with respect to the slab. By the end of 1990 the building was up. It was finished in January of 1991 and the theatre was ready by February of 1991. The theatre had 292 seats and operated through the summertime. The restaurant operated during sugaring time and all was well, the business being operated in the normal course.

In the Summer of 1992 the plaintiff happened to meet the whole Board of directors of the Authority in a Casselman restaurant. He had some discussions with them following which he was determined to find out the status of his land and accordingly wrote to the municipality in that regard. It appears that he wrote on September 10, 1992 although that letter is not available. In response to that letter the Clerk of the Township, Brunet, wrote the letter at Tab 88 dated September 15, 1992. The letter, in effect, says that by-law 155-90 stipulates that any given property is out of the danger zone when a site specific study recognized by the Ministry, proves it to be so and that while there has been such a study with respect to the plaintiff's land notwithstanding that study the land continues to be in the danger zone.

The letter of September 10 was eventually found and filed as Exhibit 22. In it the plaintiff informs the municipality that he has met with the Authority and the zone in which his building is located is still dangerous. He expresses the belief that based on the reports, his property should not be within the zone.

The letter at Tab 88 gave the plaintiff some comfort.

At Tab 89 is the report of Golder Associates dated April 13, 1993 to the Authority. Lamadeleine first saw this during the course of a large public meeting of people who wanted to know if there were possibilities of landslides on their land. Lamadeleine had joined the Authority in 1992 and had learned a lot as a result of his involvement. The hazard line was discussed at every meeting. The people in the area wanted to know what the risk was.

At one of these meetings Lamadeleine stood and said that he had spent all of this money and that the line should be moved so that his property was excluded. The planner at the meeting retained by the Township indicated that there was no problem and that Lamadeleine should come to speak to him. Lamadeleine subsequently met with planner and brought his reports along. Again Lamadeleine asked them to move the line and the planner said that he would look into it. His general concern at the time and the concern of the other land owners was that the banks were hesitant to refinance mortgages on properties within the line and therefore they wanted it changed.

Sometime after his meeting with the planner Lamadeleine received a map and was invited to a meeting with the Township where the map was discussed. As it turned out, on the map Lamadeleine's property had been removed from the hazard area. At Tab 93 is probably the memo and map that was received by Lamadeleine. It is dated 1995.08.30 or August 30, 1995. The attached memo explains that the reason for the new map is that updates have been made to the line to properly reflect all geo-technical studies which have been conducted along the South Nation.

At Tab 95 is the notice of the passing of an official plan amendment by the Township of Cambridge. The notice points out that the Township has passed by-law 24-95 on the 10th of October, 1995 adopting proposed official plan amendment #51 which will introduce a new overlay designation on the official plan to be known as the landslide potential area. The notice indicates that the implementing zoning by-law will zone the lands contained within the landslide potential as hazard lands and that a zoning amendment will be required to remove a property from the zone. The effect of the by-law passed by the municipality was to remove the plaintiff's land and other lands from the hazard zone. At Tab 98 is the by-law 25-95 which had the effect of excluding the plaintiff's land from the hazard zone.

As a matter of interest at Tab 103 is a resolution of the Township that in by-law 25-95 the term hazard be deleted and the word study be inserted in its place.

At Tab 105 is a letter from solicitor Laviolette dated May 13, 1996 addressed to the municipality advising that her client is interested in purchasing the property and inquiring whether or not the plaintiff's property is within the sensitive protection area. Lamadeleine explained in his evidence that Mrs. Rita Benson who worked at the sugar bush for him was interested in buying his place. After expressing that interest he told her to find out if she could buy it. At Tab 106 is a letter from the Municipality advising that "the geologist study of 1993 confirms that the property is outside the potential of land slide zone". The letter is dated May 15, 1996 and goes on to suggest that Ms. Laviolette obtain the same confirmation from the Authority. At Tab 107 is the letter from the Authority in response to Ms. Laviolette dated June 12, 1996 explaining that the property is in fact within the hazard area and explaining that the municipality's response to Ms. Laviolette dated May 15, 1996 is in error in suggesting that a study in 1993 confirmed that the property was outside of the potential landslide zone and that the only issue before the OMB was whether to name the zone the "study line zone" as opposed to the "hazardous landslide zone".

At Tab 108 is the plaintiff's letter to Caisse Populaire inquiring as to what financing might be available in the event that the buyer wanted to

finance. At Tab 109 the Caisse's reply dated June 25, 1996 indicates that commercial property may be financed to the extent of 60 to 70 per cent of its market value but no financing would be available for anything in the study zone.

At Tab 110 is the letter from Janet Bradley to the municipality on behalf of the plaintiff dated July 18, 1996. The letter is in error to some extent in that paragraph 9 is incorrect in saying that in 1996 the theatre was listed for sale. Mr. Lamadeleine confirmed in his evidence that the property was never listed for sale and Mrs. Benson was the only one who expressed any interest at buying it.

At Tab 111 is the letter from the municipality to Janet Bradley dated September 13, 1996 enclosing an explanatory note which goes through the history that we have already seen.

The pre-hearing before the Ontario Municipal Board was held on October 9, 1996 and Lamadeleine has no recollection of whether he was there. Following the pre-hearing, however, he did retain Allan Cohen.

At Tab 116 is a letter from the municipality to Lamadeleine dated October 23, 1996 advising him that it would be necessary for him to get another geo-tech engineer to look at the property. Lamadeleine thought that the Township no longer considered the property safe and wanted verification from another engineer. Lamadeleine asked who was the best and the Township referred him to McRostie.

At Tab 118 is a letter from the municipality to the plaintiff dated November 27, 1996 advising that the Authority wanted the municipality to vary the by-law to change the hazard line to include the plaintiff's property and the municipality was waiting for information as to whether the plaintiff had a new consultant. The plaintiff responded to the municipality's inquiry by letter dated December 5, 1996 saying that the new consultant's report would be in by December 18.

When the OMB hearing was held Lamadeleine attended. He heard Miguelez telling the Board hearing that he, the plaintiff, had assured him that the Authority had approved the reports of Jacques Whitford and Paterson. Lamadeleine stood up and said that was not true. He was told by the Board to sit down. He was told that he would have a chance to speak at the end. At Tab 131 is a statement by the plaintiff Lamadeleine as to what he said at the OMB hearing on February 7, 1997 at the end of the hearing.

At Tab 136 is the plaintiff's insurance policy for the period April 5, 1997 to April 5, 1998. At Tab 135 is Mr. Leamen's letter to Paterson and Associates dated March 20, 1997 and Mr. Leamen's letter to Whitford bearing the same date. Both these letters were sent on the direction of Lamadeleine. At Tab 137 is Rasmussen's reply to Mr. Leamen advising that Whitford has not changed its opinion and that assuming conditions have not changed at the site since the time of the initial report, there was no reason to believe that the property is in danger of a retrogressive slide.

At Tab 138 is the plaintiff's letter to its insurance broker, Reid Stenhouse, dated June 27, 1997, advising the broker that the Authority has asked the OMB to put his property back into the study zone and inquiring as to what the effect and coverage will be. The broker's response is at Tab 139 advising that the policy as presently written does not exclude landslide risk but the insurer has advised that in order for them to remain on the risk, Reid Stenhouse must add a landslide exclusion to the policy immediately.

Tab 140 is the report and Decision of the OMB dated February 7, 1997. From this report Lamadeleine understood that his property was back in the study zone. At this point Lamadeleine understood that he would have a hard time operating the theatre and he had to consider closing in view of the fact that there would be no insurance for a landslide.

Lamadeleine testified that before this happened he trusted the Township. The Township said the property was safe and he believed them. Since sitting on the Conservation Authority, he now recognizes that there is a danger.

Lamadeleine again declared that now he is not satisfied with the safety of his land and feels he can't operate the business again because of the danger to the people. All this after having invested over $800,000 in the building.

While he did not operate the business after the OMB hearing in 1997, he does still maintain the building and of course has to continue paying the mortgages on the building. If he could borrow enough money he would pay off the mortgages on the building and put the building down.

If it was possible to do so he would move the building to the south side of the ravine. Unfortunately in 1991 he sold the piece of land to the south of the ravine to neighbours for their horses. He has gone to those people and offered to buy the property back and he even offered more money than they paid but they have declined.

The building put up in 1990 was 90 feet by 90 feet and a beautiful building, according to Lamadeleine, with a capacity for 300 people. It had dressing rooms and a stage 28 x 22 feet with a rotating floor. There was a kitchen and a restaurant which accommodated 220 diners. There was a stage in the restaurant for country music presentations. There was a bar and 8 washrooms. The building was heated and air conditioned and there were 6 independent air conditioning systems. The building was equipped with a sophisticated fire alarm system and a sprinkler system.

At Tab 141 is the insurance policy for April 5, 1998 to April 5, 1999 with the landslide exclusion clause.

Mr. Leamen then reviewed with Lamadeleine the Damages Brief which was put in as Exhibit 23. With respect to putting up the new building Lamadeleine explained that he had a replacement cost endorsement on the policy covering the old building and with respect to the first $400,000 of costs, Reid Stenhouse oversaw payment. The contractor would give the bill to Reid Stenhouse in stages, the bill would be approved and paid. Lamadeleine does not have copies of the bills. He explained that in 1992 Mr. Fontez who was the director of economic development for Prescott and Russell and who had been helping him with the project, got angry, came to Lamadeleine's place, took the corporate books and receipts and Lamadeleine never saw them again. Apparently Lamadeleine had refused to co-sign a loan for him. Fontez has since moved to France. I understand that the representative from Reid Stenhouse will be called.

It was obvious that the money available under the insurance policy even with a replacement cost endorsement would not cover the cost of the new building. Accordingly, Lamadeleine borrowed an additional $150,000 from the Ontario Economic Development Bank. As well he put in $7,000 of his own money and borrowed another $15,000. He is personally on the covenants with respect to those borrowings.

At Tab 1 of Exhibit 23 is the $150,000 mortgage. At Tab 2 is the $50,000 mortgage with the La Societe D'Expertise et de Financement de Prescott Russell which loan was incurred for equipment.

At Tab 3 is the appraisal prepared by Norman Lemay that Lamadeleine obtained as a result of the insurance company's request in 1993. Lemay values the property at $640,000. Apparently Lemay will testify at the trial.

At Tab 4 is another appraisal that apparently was obtained from Mark Shenk and Associates when Rita Benson was expressing some interest in buying the property and wondering how much it was worth.

At Tab 5 is the account from Janet Bradley in the amount of $3,773.56 on account of her involvement. As well at Tab 5 is Cohen's bill. The two bills total some $12,075.75 with respect to work performed in connection with the OMB hearing. At Tab 6 are the insurance costs incurred since terminating the business in September of 1997.

At Tab 7 is McRostie's bill in the amount of $2,675.

At Tab 8 is the account from Specs Audio who was called in to evaluate the equipment. You will see that the evaluation is with respect to the cost of the equipment new which is some $78,900. Apparently he will testify that today it is worth $13,000.

At Tab 9 is an estimate from P.F. Donnelly Construction Limited indicating the replacement cost of the building including G.S.T. to be $651,895 and that the cost to replace the parking would be another $55,640. The cost of rebuilding the outside patio would be some $12,000. At Tab 10 is evaluation of the restaurant equipment in terms of what the plaintiff paid for it which is some $56,788. Its present value is $6,000.

At Tab 11 is the estimated cost of demolishing the building at $23,272. At Tab 12 is another estimate for demolition at $24,895.

At Tab 13 is an appraisal of the 22 acres and structures at the present time in the amount of $35,000 by Sutton Group. At Tab 14 is a similar appraisal by Lemay in the amount of $20,000. It should be noted that Leamen advises that the plaintiff is not looking to be compensated for any diminution of land value.

At Tab 15 are records of taxes paid for the land north of the gully with the building situate thereon. Apparently Leamen has asked for information with respect to what the taxes might be with the building demolished.

At Tab 16 are hydro bills for heating the building and keeping it going from 1997 to 1999.

Cross-Examination of Lamadeleine by Rasmussen

Lamadeleine was born in Hawkesbury approximately 45 minutes from Casselman and moved to Casselman when he was 2 1/2 years old. He would not necessarily agree with Rasmussen's suggestion that everyone between Lemieux and Casselman would be aware of the trouble on the river with landslides. He testified that after the 1971 slide he had no concern with respect to the river between Casselman and Lemieux. He conceded that in his life insurance and investment business since 1961 he knew several people who owned river properties. As well he has been involved in local politics since 1985 when he became reeve of Casselman and continued with that position until two years ago.

Lamadeleine bought the subject property in 1982. He paid $45,000 for it in January of 1982. He eventually transferred part of it to the plaintiff company and kept about 8 acres for himself. At Tab 10 of Exhibit 4 is an application to rezone the subject property. The map at the back of Tab 10 is a map of the property. Lamadeleine explained that the dark portion of the lot is the portion conveyed to the plaintiff company. On that portion of the lot was a large building in the bush approximately 40 x 60 feet and a boiling shack. It was this large building that was extended in 1989 to turn it into a theatre and restaurant.

At Tab 8, Exhibit 4, is a letter from the Ministry to Lamadeleine dated November 10, 1987. The letter reads in part as follows:

> The concerns you describe are unfortunate. These concerns are shared by other property owners along the South Nation River. Our Ministry's role is to determine how serious the landslide problem is and to recommend appropriate building set backs or other solutions for consideration by the Township.

In the face of that letter Lamadeleine refused to concede that he had expressed concerns to the Ministry and testified that if he had any concerns it was with respect to the size of the land that he wished to develop. He went on to testify that the only concern that he might have had would have been for the sugar bush. When it was pointed out to him that the letter refers to landslide problems, he admitted to the possibility that he had expressed concern about landslides along the river that might effect his land.

Referencing Tab 10, Lamadeleine confirmed that by-law 122-88 was passed January 5, 1988 to change the zoning on the property owned by the plaintiff company. It was then that the plaintiff company started development.

At Tab 11 is a letter from the Ministry to the municipality dated January 4, 1988, one day before the by-law was passed rezoning lot 17. The letter reads as follows:

> We have these comments on the proposed by-law for the above-noted property. As you are aware we have commented on the Township's comprehensive by-law with regards to the extent of the earth flow zone along the South Nation River. We note this by-law recognizes the existing land use and does not propose any new development. We would comment that this property is partially within the earth flow zone and should be subject to the earth flow restrictions outlined in Section 6.26 of the draft comprehensive by-law.

It was Lamadeleine's evidence that the municipality never advised him of this letter.

At Tab 9 is a letter from the Ministry to Lamadeleine dated December 14, 1987 enclosing a map outlying "known earth flow failures near your property" and advising that these failures have been identified as occurring in the 1800's. The Ministry further advised Lamadeleine that in the earth flow zone between Lemieux and Casselman, 18 large failures have been identified and 3 have occurred in the last 95 years. Lamadeleine admitted that he had received this letter at Tab 9 advising of the potential danger and conceded that that letter and the letter at Tab 11 were in response to his application to have the land rezoned.

The letter of January 4, 1988 from the Ministry to the municipality makes reference to Section 6.26 of the draft comprehensive by-law. The draft comprehensive by-law is at Tab 12 and Section 6.26 of that by-law refers to slope protection set backs. Lamadeleine conceded that by its letter dated January 4, 1988 (Tab 11) the Ministry did make known to him that there were certain restrictions with respect to set backs.

At Tab 18 is a letter from the Ministry to Lamadeleine dated September 19, 1988 acknowledging that Lamadeleine has engaged Randy Morey of Golder Associates to address the stability concerns and problem of earth flow retrogressive failure in relation to the subject lands. The letter states in part as follows:

> I have discussed the proposal with Cornwall District Office. Your application for development will be reassessed on receipt of the report. Based on the investigation should the

> information provided by the geo-technical consultant warrant, a reduced set back will be considered.

At Tab 19 is a notice of public meeting concerning the proposed minor variance to zoning by-law 72-78 to effectively permit Lamadeleine to enlarge the existing building to be used as a theatre and sucrerie. At Tab 22 is the Decision of the Committee of Adjustments permitting the extension to the building on the condition that the construction be under the direction of a geo-technical engineer. That Decision is dated October 31, 1988. By that time Lamadeleine had received Golder's interim report dated October 20, 1988 which is located at Tab 20. The interim report reads in part as follows:

> The purpose of this evaluation was to determine, based on the results of one detailed sampled and tested bore hole, the potential for retrogressive flow slide or earth flow to occur at this site and to determine a safe set back distance from the river (South Nation) for the construction of a proposed theatre building. Remedial measures to reduce or eliminate a required construction set back distance were also to be presented if considered necessary.

The report goes on to advise that based on the results of the in situ and laboratory testing and empirical relationship which can be used to relate soil parameters with the potential for flowslide, or earth flow phenomena, it was considered by Golder that the general site area was susceptible to retrogressive flow sliding but probably not susceptible to the more devastating earth flow form of landslide. The report calculates a safe set back distance from the river edge to be 400 meters and notes that that set back distance might be substantially reduced by ensuring that initial failure of the riverbank does not occur by carrying out significant remedial work, all of which is set out in the first full paragraph on page 2 of the letter. Morey points out in this paragraph that the extent of the riverbank remedial works could not be determined until the desired location for the proposed building has been chosen.

The second full paragraph on page 2 of the interim report of Morey dated October 20, 1988 points out that the portion of the plaintiff company's lands to the south of the east west ravine is naturally protected from retrogressive landslides and that if the desired location of the proposed building was somewhat outside of the area naturally protected by the ravine, the ravine could be extended and/or deepened to provide suitable protection.

At Tab 23 is Morey's full report dated November 1988. The report acknowledges that the plaintiff plans to construct a theatre building in the south east corner of the site some 300 meters south of the river shoreline and that the location of the proposed theatre building is within a Ministry of Natural Resources designated earth flow area.

Rasmussen directed Lamadeleine to Tab 25, Morey's letter to him dated December 28, 1988, referencing two additional site visits; one on October 19, 1988 for the purpose of discussing the location at the site where construction of the proposed theatre building would require no remedial works and a second site visit on November 23, 1988 to inspect and approve the completed remedial works. Lamadeleine acknowledged that at the site being discussed was the site to the south of the ravine. The letter of December 28 confirms that the inspection on November 23, 1988 indicated that the existing ravine had been sufficiently extended and deepened to provide adequate protection "against the possibility of a landslide for a building located on the south side of the ravine and east of the west extent of the ravine".

At page 10 of the final report, Tab 23, under the heading remedial works, Lamadeleine acknowledged that Morey said the following:

> A safe set back distance from the river shoreline for building construction at this site is considered to be 400 meters. This set back distance may be substantially reduced by ensuring that initial failure of the riverbank does not occur.

At page 11 of the report Morey says the following:

> Detailed stability analyses have not been carried out to determine exactly the appropriate remedial measures required to stabilize the riverbank, however, based on previous slope stability analysis carried out within the general area of the site, it is considered that flattening of the slope toe area at the river edge to an inclination of 3 horizontal to 1 vertical together with some upper slope flattening and providing erosion protection using armour stone rip rap and geotextile in the lower portion and mulch and seeding for the upper portion should be sufficient.

In his evidence Morey claimed not to know what all that meant. Rasmussen put it to Lamadeleine that if he had told his lawyer, Mr. Cohen, that he had done all the work required by the Morey report how could he possibly have

told Cohen that if he did not understand what work needed to be done. Lamadeleine responded that he understood from Morey that the shoreline was a bump and would have to be made into a valley. Rasmussen reminded Lamadeleine of the fight at the site after the fire involving the municipality, the Ministry, Morey and himself when Morey pointed out that the remedial work at the shore had not been done. Lamadeleine admitted that when he told Cohen that the work had been done, Morey had already told him that it had not been done. When Rasmussen asked him why he would do that, Lamadeleine explained that what he told Cohen was that he did what he understood had to be done. I don't accept Lamadeleine's evidence in this regard.

In the face of that portion of the Morey report just referred to, Lamadeleine maintained his position that he thought armour stone rip rap referred to in the report was wood chips. He repeated his evidence that he didn't know what armour stone rip rap or geotextile was nor did the municipality and that he did not think to ask Morey what it was. Lamadeleine denied Rasmussen's suggestion that he didn't ask Morey what it was because he didn't intend to do the work. Obviously, suggested Rasmussen, if he didn't understand what Morey was talking about then he could not do the remedial work.

The report at page 11 goes on as follows:

> The length of riverbank along which the remedial work should be carried out depends on the actual location of the proposed building and the distance between the proposed building and the riverbank. Once the desired location for the proposed building has been chosen, the extent and details of the riverbank remedial work can be determined.

Lamadeleine conceded that he never got to that point.

Lamadeleine acknowledged that as a condition to the construction of the extension the municipality made it a condition that the construction be done under the direction of a geo-technical engineer. He explained that he retained Randy Morey for that purpose and he acknowledged that the construction was to be to the north of the ravine. Rasmussen inquired of Lamadeleine whether he had ever said to Morey that he was going to put a 20 foot extension on the building to the north of the ravine and would he please tell Lamadeleine what he had to do in order to make the building safe. Lamadeleine indicated that he had not done so. The Township had a building inspector and he simply assumed that the Township was satisfied.

At Tab 67 is Lamadeleine's letter to the Conservation Authority dated October 1, 1990. The second paragraph on page 2 of the letter reads as follows:

> In 1989 we applied for a building permit for the expansion of the present building and we told early April to obtain a letter that the work had been done. After giving the letter of April 21, 1989 from Golder we did obtain a building permit and did build.

Lamadeleine denied to Rasmussen that he knew full well that Morey would not approve construction north of the ravine without the remedial work being done on the slope. Lamadeleine conceded, however, that Morey had told him very clearly that construction on the north side of the ravine would be unsafe unless the remedial work was done as he recommended. Then Lamadeleine went on to acknowledge that he did not do the remedial work on the slope as recommended by Morey. He acknowledged that he never called Morey to have him come out to check on the slope work and to confirm that it had been done in accordance with his directions and he knew that Morey had said that construction to the north of the ravine was dangerous unless the river edge work was done. Lamadeleine then acknowledged something interesting. He agreed that he knew that the ravine work would not give protection to a building built on the north side of the ravine. Lamadeleine begrudgingly acknowledged that Morey had said in his report that if the building was not set back 400 meters (which would take it south of the ravine) then the remedial work had to be performed on the river slope. Lamadeleine acknowledged that Golder's letter of December 28, 1988 very clearly points out that the ravine sufficiently extended and deepened, would provide adequate protection against the possibility of a landslide for a building located on the south side of the ravine. Lamadeleine explained that both works, the work with respect to the ravine and the work at the river, were done at the same time and were completed by November of 1988.

At Tab 34 is Morey's letter to Lamadeleine dated April 21, 1989 pointing out that the remedial work alternative chosen and carried out consisted of deepening the existing east west running ravine at the site and extending the ravine westward beyond the proposed building location. Lamadeleine conceded that it was clear from this letter that Morey was of the view that Lamadeleine had chosen and undertaken one of two alternatives. Lamadeleine admitted in his evidence that Morey never reported that he, Lamadeleine, had done any work on the river slope. He commented that he doesn't know how Morey could have missed it if it was

done but that assuming it was done it was evident from this letter that Morey had missed it. Lamadeleine did not call Morey after receiving the letter of April 21st. He felt it was up to the Township to be satisfied. He explained simply that he wanted to build to the north of the ravine. He told the municipality that and the municipality told him to get Morey to tell the Township what work had been done.

At Tab 38 is a letter from Morey to Lamadeleine dated May 2, 1989 again setting out the alternatives and pointing out that the ravine alternative work had been carried out and pointing out that the linear extent of the slope flattening alternative required and further details of the required riverbank work could be determined once the location of any proposed building is known. Rasmussen asked Lamadeleine why he had not told Morey of the site on the north side of the ravine during the course of their meeting on May 1, 1989 which is referred to in the letter, Lamadeleine at first, in his evidence, suggested that he might have told Morey about the north site during that meeting and then conceded that obviously he had not.

At Tab 40 is the building permit for the extension. It is dated May 12, 1989. The application is at Tab 35 and dated April 24, 1989. By the time of the application Lamadeleine had Morey's letter dated April 21 and his letter dated May 2nd and he conceded that he did not tell Morey that he had applied for a permit to extend the building on the north of the ravine because he knew Morey would not have given him letters with respect to that site, although Lamadeleine disagreed that he did not want Morey to know that he was going to build on the north side. [In my view, Lamadeleine purposely withheld from Morey the fact that he intended to extend the building located to the north of the ravine, understanding full well the contents of Morey's reports to him and knowing full well that Morey would not approve.]

At Tab 46 is a letter from the Authority dated June 6, 1989 setting out the possibility of three options: relocation, buy out or stabilization. Lamadeleine acknowledged having received this letter. Rasmussen put to him that during the years 1988, 1989 and 1990 he knew that landslide studies were on-going and that they might result in landowners being offered an option or not. Lamadeleine acknowledged that but testified that he thought it related only to Lemieux, notwithstanding that the opening line in the letter relates to "land adjacent to the South Nation River from the Village of Casselman to the hamlet of Lemieux" as being at risk from landslide activity. Lamadeleine in his evidence claimed not to be aware of Spevaks evaluation of his theatre restaurant (Exhibit 21) and suggested that somehow the evaluator got on to his property and into his theatre without his knowing it.

After the theatre restaurant burned down on August 4, 1990, there was a meeting on site with the municipality, the Authority and Morey and according to Lamadeleine's evidence, it was at this time that Morey told him that the work he had done on the river slope was not sufficient and suggested to him that if Lamadeleine didn't like his opinion, he would get other opinions. Lamadeleine went on to explain that at first he wanted to build to the south of the ravine but the health unit had told him that in order for him to do so he would have to put in a brand new water and septic system whereas if he built to the north he could use the same holding tanks that had been used by the expanded building. The letter from the health unit, (Tab 63) however, makes no mention of a prohibition from building on the south side but rather simply says that he will be permitted to use the same sewage facilities for his new building. In any event, Lamadeleine testified that he decided that he was not going to put in a new septic system in order to locate his new building on the south side of the ravine. He decided then to do whatever he could to build on the north side of the ravine.

By this point in time Lamadeleine was quite aware that the Authority objected to his building on the north side without the remedial shore work being done. The municipality told him to get someone who will say that the new building on the north side of the ravine would be safe.

Lamadeleine then called both Jacques Whitford and John D. Paterson. He attended at their offices and reviewed documents with them. After these meetings he first retained Jacques Whitford. He received the Jacques Whitford report on October 31, 1990. It is located at Tab 72. It would appear that the scope of the work to be done by Jacques Whitford was rather limited that is to investigate the soil conditions at the proposed building site and to survey the gully immediately adjacent to the proposed building site in order to determine slope stability conditions. The report does, at page 7, comment that "the stability condition of the Nation River located approximately 350 meters north of the proposed restaurant is not of concern. It is not expected that instability of the riverbank will jeopardize the proposed building at the location investigated. Presently the slope shows no sign of erosion however should erosion occur in the future, control measures should be implemented to maintain a safe slope stability." Lamadeleine testified that he had told Jacques Whitford that he had to rebuild on the same site because of the health unit.

Upon receipt of the Jacques Whitford report Lamadeleine took a copy of it to the municipality and the municipality told him that it would not issue a building permit based on this report.

Lamadeleine had been dealing with Dr. Daniel Lagarec who had been working for the Township and Lamadeleine decided to retain Dr. Lagarec personally having regard to the position of the municipality with respect to the Jacques Whitford report. Dr. Lagarec's report is dated November 15, 1990 and is contained at Tab 3 of Exhibit 25. Lagarec's report reads in part as follows:

> In summary, in the present case, the actual geo-morphemic and hydrological conditions are not favourable to landslide occurrence and the material properties indicate a limited potential retrogression. It would need a very important change in river dynamics to create such conditions. So I think that you can build where you plan to do it as long as the load is not excessive and well distributed.

It was Lamadeleine's evidence that Lagarec explained the Jacques Whitford report to him and explained that the report didn't mention enough about landslides and did not set a sufficient set back.

Lamadeleine was reluctant to admit that he wanted Jacques Whitford to change its report so that he could get a building permit. He did admit, however, that he went to Jacques Whitford with the document at Tab 73. The document has a typewritten paragraph authored by Dr. Lagarec for incorporation into the Jacques Whitford report. In his own handwriting Lamadeleine notes on the document that:

> This note would permit me to obtain a building permit and at the same time allowing you plenty of room in your report. The Municipality of Cambridge share the same opinion since Dr. Lagarec did view the site and said there is a very good set back. Set back along the Nation River would be at 200 meters since Dr. Lagarec has proved that the average landslide that ever occurs along the Nation River is average 200 meter. In my case the elements of safety are in my favour.

On the front page of this document directed to Jacques Whitford, Lamadeleine has written the following:

> Must indicate in report that "they are aware of possible landslide such as indicated in Golder report but maintain that this building should not be jeopardized by the Nation River".

At Tab 76 is Jacques Whitford's letter to Lamadeleine dated November 20, 1990. The letter purports to outline Jacques Whitford's position regarding the risk of the proposed building being jeopardized by the potential instability of the South Nation River "located some 200 meters north (shortest distance rather than measured parallel to the property line) of the building site". The report refers to discussions had with Lamadeleine and the fact that Jacques Whitford has reviewed the Golder Phase 1 report at Lamadeleine's request. The report concludes that one cannot completely rule out the possibility of a future landslide similar to the 1971 and the 1910 slides anywhere along this stretch of the river and that possibilities of similar failures vary widely along the river. Dealing with Lamadeleine's specific site the report notes the presence of vegetation along the riverbank and the entire lot as an important contributing factor towards stability. It notes the terrace that the site has some 8 meters or less above the river level which reduces the effect of slope height thereby reducing the stability number Ns and limits the magnitude of pore water pressures which could develop in a rapid draw down condition. As well this report notes that the riverbank conditions east of the site are rather different and that the possibility of a retrogressive failure at that site has not been investigated and could possibly jeopardize a portion of the present site. The report notes, however, that there is a ravine between the proposed restaurant and the east property line which might act as a potential barrier of retrogressive failure. Finally, the report says the following:

> Provided that the existing site conditions are unaltered, the risk of a retrogressive failure jeopardizing the proposed restaurant is very low. Retrogressive failure at this site would likely be confined within the mid slope terrace.

The letter from Jacques Whitford dated November 20, 1990 was given to the municipality and the municipality was still not prepared to issue a building permit. Lamadeleine went back to Jacques Whitford with the November 20th letter, marked up in his handwriting indicating the changes that he wanted. See Exhibit 17. The letter of November 20th, Tab 76, had closed with the following paragraph:

> As a condition of constructing the restaurant at the proposed location we recommend an annual inspection be carried out to assess the stability conditions of the lower slope. Such inspection should be conducted in the spring and should consist

> of detailed photographic record of conditions such as erosion and other signs of distress. Should the inspections reveal adverse conditions remedial measures may be required. Removal of vegetation should not be carried out anywhere within the property.

The letter of November 22nd which was received by Lamadeleine around November 26th changes the letter of November 20 with the following final paragraph replacing the original:

> Should the conditions of the riverbank (such as erosion etc.) change in the future the overall stability of the site should be assessed at that time. Remedial measures may be required accordingly. Presently removal of vegetation should not be carried out anywhere within the property.

That letter of November 22, 1990 is at Tab 80. Lamadeleine gave this letter to the municipality. Interestingly the municipality had already issued a building permit by the time Lamadeleine got there with the letter of November 22nd. Apparently the municipality already had a copy of the November 22nd letter when Lamadeleine attended.

At Tab 81 is the building inspector's report dated November 27th. It relates to the inspection of the footings. At Tab 82 is the building inspector's report with respect to the tile drains dated November 29th.

Lamadeleine then explained that while the building permit had been issued on November 26th the municipality would not give it to him at that time. The permit is at Tab 70 and appears to be dated October 16, 1990. At Tab 69 is a resolution of the Township dated October 2, 1990 permitting construction of the building on the south side of the ravine.

In the face of the Municipality not being prepared to issue a building permit based on the Jacques Whitford report dated October 31, 1990, Lamadeleine decided to retain Paterson. The letter of retainer is dated November 8, 1990 and is at Tab 74. It refers to:

> Testing my land to put a building to know if it is safe also to check the river slope because there is a lot of discussion going on about the Nation River. To make a long story short find out if it is safe to put a building. Tell me what will be the total cost before you come down.

Again, Lamadeleine explained that he had to find out whether the building would be safe or not. Jacques Whitford was not clear and he could not obtain the building permit with Jacques Whitford's report and letters and therefore he called Paterson.

Lamadeleine acknowledged that Morey had said it was not safe to put the building to the north of the ravine. The Jacques Whitford report was not good enough to see a building permit issued and as a result Lamadeleine was now going to a third geo-tech engineer, Paterson. He acknowledged that he was fighting for the north side in the face of the knowledge that there was a difference of opinion among the experts.

The Paterson preliminary report dated November 19, 1990 is at Tab 75. The preliminary report confirms that a bore hole has been put down at the location of the proposed building which is located "greater than 340 meters from the crest of the South Nation River". The report reads in part as follows:

> We have reviewed the Golder report 881-2486 and have used the factual data to assist us in our analysis. After reviewing the data in that report and on the basis of our findings it is our opinion that the proposed development complies with the concerns that have been expressed regarding development along the South Nation River. At this time our final report on the matter has not been completed however our calculations indicate that the proposed structure is set back a distance that is more than adequate to buffer the structure against a possible slope failure should it occur. As such it is the opinion of this firm that you should proceed with the proposed sucrerie theatre.

On receipt of this preliminary report Lamadeleine gave to Paterson Tab 77 which is the typed paragraph authored by Lagarec for insertion into Paterson's report. Lamadeleine's written notation on the paper is:

> This is important in order to obtain my building permit and it gives you plenty of room.

It was after their preliminary report that Paterson asked as to the contents of the Jacques Whitford report. Upon receipt of Paterson's preliminary report Lamadeleine gave it to the municipality who said that it was good but not good enough.

At Tab 66 is a undated letter from Lamadeleine to Jacques Whitford. In the letter Lamadeleine confirms that he has asked Jacques Whitford for an amendment since it is very important to him. He acknowledges that he has asked Jacques Whitford to read the Golder report 881-2486 and to "tell me in a letter that you still believe that the set back which is about 350 meters is still adequate and should not jeopardize (in your opinion) the construction of my theatre restaurant which is one story high." Lamadeleine explained that he got the 350 meters from converting the distance that he measured in feet and put on the map. This letter to Jacques Whitford must have been after the report from Paterson because it refers to it.

Finally, the Paterson report dated November 22, 1990 was received. It is at Tab 79. Paterson reached the following conclusion:

> Based on the results of this study it is the opinion of this firm that the slopes bordering the South Nation River at this particular site are not in their present condition considered to be unstable. It is also our opinion that should a failure of the banks occur it would not retrogress back to the location of the proposed building.

In the first paragraph of the report Paterson notes that the site is located approximately 340 plus or minus meters from the crest of the slope.

Finally the building permit issued and Lamadeleine started to construct the new building. Lamadeleine acknowledged that after the building was constructed he continued to report to the Township his concern as to whether or not his lands would be included in the hazard zone. He acknowledged that his retainer of Paterson and Jacques Whitford had nothing to do with where the hazard line would be drawn and over and above the fact that he got his building permit, he was still concerned that the hazard line might include his land and that was the cause of his continuing involvement with the Township as the studies continued to come in. He had Laviolette write to the municipality in May of 1996 trying to get the Township to confirm that he was not in the hazard zone. This is at the time that Benson was expressing an interest in buying the property. Rasmussen put to Lamadeleine that if Benson was concerned about the hazard zone, why did he simply not give the Paterson report to Mrs. Benson. He replied that Mrs. Benson, had she purchased, would have been looking for financing and it was thus appropriate that the inquiry be made. [It would appear that Lamadeleine understood full well the difference between obtaining a building permit and the possibility that his property might still end up in the hazard zone.]

At Tab 108 is Lamadeleine's letter to Caisse Populaire dated June 1996 inquiring as to financing. Lamadeleine confirmed that by that time he knew full well the Authority's position. He denied that he was setting up a lawsuit. The Caisse's answer is at Tab 109.

Rasmussen reminded Lamadeleine that his evidence was that he got the Shenk appraisal dated September 22, 1994 when Mrs. Benson expressed interest in buying. Rasmussen asked Lamadeleine why he waited almost two years until the Spring of 1996 to write to the Caisse and the municipality. He responded that "She was slow to make up her mind."

At Tab 110 is the letter from Gowlings to the municipality for which Lamadeleine provided the information. The information in paragraph 9 is incorrect when it says that in 1996 the theatre was listed for sale and appraisal reports were obtained. Lamadeleine first said to Rasmussen that several parties had indicated an interest in acquiring the theatre then he advised that several parties consisted of one actor from Montreal. The Gowling letter says in part:

> This has resulted in the loss of a sale and further could result in problems of refinancing and in obtaining property insurance for this valuable property.

This information is obviously untrue.

Lamadeleine acknowledged to Mr. Rasmussen that this property has been in a hazard zone since 1982 except for the time when it was taken out of the zone in 1996 for a period of time after he spoke to the Township's planner. Lamadeleine acknowledged that at no time during that time did he ever write to the insurance broker and advised him that he was in a hazard zone. He acknowledged that until the Township redrew the line in 1996, which redrawing was short lived, he was in the hazard zone notwithstanding that he had been permitted to build. Even after the Lemieux slide in 1993 he did not call his insurance broker nor did he ever advise his insurance broker of the conflicting opinions that he had with respect to the potential for landslides.

Mr. Lamadeleine acknowledged that he was familiar with the OMB proceedings, that he was present and was eventually allowed to speak at the proceedings. The decision is at Tab 140. At page 9 of the Decision the Board says the following:

> I asked Mr. Lamadeleine after he addressed me at the hearing

> why he had chosen not to seek party status. His response was that he had not really understood what that meant.

Lamadeleine acknowledged having said that to the Board. He acknowledged, however, that he had retained both Janet Bradley and Allan Cohen and that Cohen had told him that it was not appropriate for him to seek party status. He told Rasmussen that party status to him was not clear and that the municipality said that it would defend him.

It should be noted that the Board notes that Mr. Lamadeleine had the advice of counsel and that the Board is satisfied that he was given repeated opportunities to participate in the hearing. At page 10 of the report the Board notes that it is satisfied that the municipality was fully prepared to defend its by-law including the less restrictive line on the Lamadeleine property. It found, however, that the information from Mr. Lamadeleine was the central reason the line was moved and therefore the main reason for any issue between the municipality and the Authority. The Decision goes on to say the following:

> Mr. Lamadeleine had every opportunity to present his views. I am satisfied that to hear the geo-technical evidence would be an unnecessary and costly diversion. I have also found that the planning framework established by OPA 51 and by-law 25-95 represents good planning. As well it was Mr. Miguelez's evidence that the more restrictive line on the Lamadeleine property as elsewhere represented good planning in the absence of adequate site specific reports.

Mr. Lamadeleine confirmed that at the OMB hearing Jacques Whitford and Paterson were there and ready to testify.

It was Lamadeleine's evidence that when Miguelez told the Board that Lamadeleine had told him that the Authority approved of the Jacques Whitford and Paterson reports. Lamadeleine stood up to object but was told to sit down. At page 8 of the report the Board says the following:

> Mr. Lamadeleine chose not to seek party status at the first day of the pre-hearing in person following the pre-hearing through a letter from counsel and at the hearing itself through counsel. He also chose not to address me at the hearing until the very end. At that time he provided information on his frustration of the process however he provided no evidence of the effect the two different set back lines had on his interest and

Mr. Lamadeleine acknowledged to Rasmussen that he had an opportunity at the end to take Miguelez up on his statement but didn't think to do so. The transcript of what he said at the hearing was prepared by him the next day. It is located at Tab 131. The penultimate paragraph reads as follows:

> Madam Chair, I have hired the four best engineer firms there are on the market to study my land. One of these firms is Golder who also worked for South Nation. If I have all those reports plus another report from Dr. Lagarec saying my place is safe and if we remove this new line on my property back to the study line then my theatre is not safe anymore and I may not be able to get insurance.

Having said this Lamadeleine, in his evidence, acknowledged that effectively he told the Board that all four of the experts had said the building was in a safe location which is simply not so.

With respect to the OMB hearing Lamadeleine first told Rasmussen that the Board had taken a break and spoken with Paterson and Jacques Whitford. He then said that he didn't know whether this had occurred or not.

Lamadeleine acknowledged that the death nail for his business was when he was placed back in the hazard zone. It appears from the insurance policy issued after Lamadeleine advised his insurance broker of the fact that he was in the hazard zone that the policy thereafter excludes only property damage arising out of the landslide and not liability coverage. See Tab 141, although Lamadeleine declined to agree with that fact.

The business was terminated at the end of August 1997.

At Tab 65 is the application for the building permit dated September 24, 1990 showing an estimated value of construction at $398,000. The building permit actually issued at Tab 70 indicates an estimated cost of $122,000. Lamadeleine explained that the $122,000 was just for the shell. Exhibit 26 is a letter written by Mr. Lamadeleine to the Ontario Minister of Finance on February 28, 1995 complaining about the estimated fair market value being appraised in the amount of $188,000. Lamadeleine explained that he was

challenging the appraisal because he was in the hazard zone. Rasmussen, however, pointed out to him that he, Lamadeleine, felt by that time that he was home free with respect to the danger zone. Rasmussen pointed out to him that he had written in 1993 to the Township and had gotten confirmation that he was home free. Having acknowledged this he maintained his position that he thought the appraisal should be less because he was in the hazard zone.

Referring to the damages brief, Exhibit 23, and specifically Tabs 1 and 2, charges in the amount of $150,000 in favour of Ontario Development Corporation and $50,000 in favour of Prescott Russell, Lamadeleine confirmed that the plaintiff company did not own any other land apart from the land subject to these charges. He acknowledged that there is registered on title a mortgage dated July 1996 for $400,000 in favour of another of his companies, Major Prestige. He explained that there is no debt actually owing to Major Prestige but that the accountant recommended this device for some reason. Again he confirmed that he had not advanced $400,000 to the plaintiff company. The $400,000 that had come to the plaintiff company was the proceeds of the insurance company. Exhibit 27 is the mortgage from the plaintiff company to Major Prestige Enterprises Inc.

Exhibit 28 is a mortgage from the plaintiff company to Gilles Legault in the amount of $62,000. It's dated July of 1996 and Lamadeleine confirmed that the monies were actually advanced by Legault to the plaintiff company. He explained that no money was coming into the company in 1995 and 1996 and funds were required.

Referring to Exhibit 25, the trial brief of the defendant engineers, Rasmussen pointed Lamadeleine to Tab 10 which are the financial records of the plaintiff company supplied by Lamadeleine at the request of the defence. At Tab A is a document entitled budgeted financial statements for period March 1, 1987 to February 28, 1990. Lamadeleine indicated that it was hard to understand the figures shown there. It was a budget only and does not reflect what happened.

At Tab B is the financial statement for the period ended February 28, 1991 prepared by the company's accountant Sequin. The statement shows that for the 12 month period ending February 28, 1991 total sales were $134,812. Costs of sales were $53,320. for a gross income of $81,492. Indirect expenses totalled $90,493. including depreciation of $16,748. for a net loss of $9,000. When one adds back in the depreciation it appears that net income that year for the business was about $7,700.

At Tab C is the statement for the year ended February 29, 1992 showing on gross sales of $30,399. there was a real loss of approximately $17,000. for the year. At Tab D is the statement for the year ending February 28, 1993 showing on gross sales of $91,000. and a real income of approximately $25,000. after adding back in depreciation. With respect to this profitable year, Lamadeleine confirmed that the expenses do not include anything for his time. At Tab E is the income tax return for the year ending February 28, 1994 showing on sales of $89,000. real income of approximately $10,000.

At Tab F is the income tax return for the year ending February 28, 1995 showing gross sales of $30,350. which yielded a real loss of $13,000. after adding back in depreciation. It was Lamadeleine's evidence that these numbers did not correctly reflect the actual achievement of the company that year.

At Tab G is the return for the year ending February 28, 1996. The statement shows that on sales of $42,000. a real income of $24,000. was earned after adding back in depreciation. Again Lamadeleine testified that the statement does not properly reflect the business that was done by the company that year.

At Tab H is the return for the year ended February 28, 1997 which was just a few weeks after the OMB hearing. The return shows revenues of $28,000. and a real loss of approximately $7,600. Again Lamadeleine denied that this properly reflected the business activity of the company.

Marked as Exhibit 29 was a letter from the municipality to Lamadeleine dated December 19, 1995. This letter was with respect to Lamadeleine's appeal of his assessment. Lamadeleine confirmed for Mr. Rasmussen that at that time, December 1995, he told the municipality that he was still within the zone and that his property was worthless and that he would not be able to sell it or insure it and confirmed with Mr. Rasmussen that that was his view at that time.

Lamadeleine had told me that he was personally on the covenant with respect to the two charges that Exhibit 23, Tabs 1 and 2, the $150,000. to Ontario Development Corporation, and $50,000. to Prescott Russell. There was no guarantees attached to those documents and Lamadeleine does not know where such documents may be.

Lamadeleine confirmed that the policy of insurance in place at the time of the fire provided that actual cash value would be paid or replacement costs would be paid if rebuilt.

At Exhibit 25, Tab 10C at page 7, the costs of the theatre and restaurant is stipulated to be $417,000. Of that $417,000., $400,000. was obtained from the insurance. Lamadeleine was unable to say how much he would have received as actual cash value if he hadn't rebuilt following the fire. Again he confirmed that in December of 1995 he was of the view that the property was worthless because of all the landslide talk. Lamadeleine confirmed that in 1996 Mrs. Benson was interested in buying but they had never discussed price. At Tab 108, Exhibit 4, in writing to the Caisse Populaire Lamadeleine suggests that his building is worth $550,000. This is a letter dated June 20, 1996. Rasmussen suggested that Mr. Lamadeleine says whatever suits him.

Cross-Examination by Marcus

Mr. Lamadeleine confirmed that when he first called Morey to retain him Morey mentioned that he might have a conflict and said he would check it out and get back to him. Lamadeleine is unable to recall who contacted whom next. Mr. Marcus referred him to his letter to the Authority at Tab 67 which says in part:

> The engineer Randy Morey who had the work done on our land happens to be also the engineer for you too which in fact creates a serious conflict of interest since he is collecting monies from both parties at the same time which may not result in his freedom of speech and writing to express his opinion.

Mr. Marcus asked Mr. Lamadeleine why he hired Morey in the first place in 1988 and he really had no response. Mr. Marcus suggested that in saying what he did Mr. Lamadeleine was accusing Morey of being dishonest. He denied that. He explained that as far as he was concerned he had done everything Morey had recommended on the site and then when he visited the site with the municipality and the Ministry, Morey said that he had not done the work properly.

> In his letter to the Authority Lamadeleine also says:
> It has also been found that all the tests that Golder ever did in this area are questionable and need to be re-evaluated seriously.

Lamadeleine says he got that information from the municipality but is unable to show any documentation to support it.

Lamadeleine confirmed that when he asked for a building permit he got it and when he asked the municipality to move the line, they did so. They did everything he asked them to do.

Lamadeleine acknowledged to Mr. Marcus that Morey had indicated in very certain terms that the ravine would protect his building if it was built to the south of the ravine. He did not build to the south of the ravine because he wanted to try the business for a year or two in the expanded existing building to the north of the ravine.

Re-Examination by Mr. Leamen

At Tab 63 is one of the letters from the health unit. There is another letter according to Mr. Lamadeleine from the health unit advising that he may not move the holding tanks to the south side of the ravine.

Tab 49 may be one of the municipality documents that supports Lamadeleine's comment in Tab 67 to the effect that all the tests that Golder ever did in the area are questionable.

With respect to the income earned by the plaintiff company, Lamadeleine said that when he started the business he knew that it would take 8 or 9 years before there would be much profit, that it takes a long time before the business can be built up.

Filed as Exhibit 1A is a copy of Exhibit 1 which has been coloured by Mr. Lamadeleine to show the history of the acquisition. He had the entire area in his name in trust in 1982. He severed off the pink area in 1983 and put it in the name of the plaintiff company. In 1991 he severed the yellow area and sold to his neighbour having built on the north side of the ravine the year before. In 1989 he sold off the white part and in 1995 he sold off the orange piece. The theatre was initially intended to go at X on the south side of the ravine in yellow.

Evidence of Denis O'Grady

Examination-in-Chief

Denis O'Grady has been the General Manager of the South Nation River Conservation Authority since August of 1987. He has his Masters in public administration and prior to coming to the South Nation River Conservation Authority he worked for several other conservation authorities. His role is that of chief of staff and he reports directly to the Board of directors. He is, as General Manager, responsible for the day to day operations of the Authority. The responsibility of the Authority is to manage natural resources within the watershed in partnership with others, including municipalities and individuals.

He explained that retrogressive landslides have been a great issue since 1971. The Authority first got involved in the early 1980s identifying and protecting areas susceptible to retrogressive landslides. By August of 1987 when he became General Manager the Authority had just finished phase 1 of the landslide bank stabilization in Sequinsburg.

The stretch of river between Casselman and Lemieux is a major area of flow slides. Height of bank is required to create a retrogressive landslide and high banks exist between the two towns on the South Nation River.

Following Sequinburg, Lemieux, which was the next largest concentration of homes along the river, became the target of interest. Following Lemieux, the next phase was to concentrate on scattered homes between Lemieux and Casselman.

At Lemieux there were a number of options including stabilization of the slopes and buy out. The residents of Lemieux opted for buy out and as a result the Authority bought all of the residences with the use of grants from the Ontario Government and then either destroyed or relocated the homes.

At Tab 1 of Exhibit 4 is the South Nation River basin development study report 6A which contains calculation of set back lines for slopes with a factor of safety of less than 1.5. O'Grady explained that generally one wants a safety factor of 1.5 for a safe slope.

At Tab 2 is another slope stability study of the South Nation River and portions of the Ottawa River which explains the unique phenomena of retrogressive landslides in Eastern Ontario.

At Tab 3 is a letter from the Municipality of Cambridge to the Ministry of Natural Resources dated October 5, 1983 advising that the Township is currently in the process of preparing its first ever official plan and acknowledging reports that along one particular reach of the South Nation River "there is a potential for massive retrogressive landslides of the type that killed 31 persons and destroyed 40 homes in St. Jean, Vianney, Quebec." The letter also acknowledges that in 1971 a landslide in the Township destroyed 36 hectares of land over night. At Tab 5 is the Minister's response to that letter. Both those letters are in the Authority's file.

At Tab 8 is a letter from the Ministry to Mr. Lamadeleine dated November 10, 1987 which advises that official plan designations, zoning by-laws and building permits which control development, are the direct responsibility of the municipality. O'Grady acknowledged that to be the case but pointed out that if the municipality does not follow government policy, then the government will intervene. As we have already seen, this letter refers to concerns expressed by Mr. Lamadeleine about the landslide problem.

5 At Tab 11 is a letter from the Ministry to the Municipality dated January 4, 1988 with respect to the plaintiff's land. The letter notes that the property is partially within the earth flow zone and should be subject to the earth flow restrictions outlined in Section 6.26 of the draft comprehensive by-law. O'Grady explained that the Authority had a copy of that letter and knew that the plaintiff's property was in a flow zone having regard to the 600 and 800 meter set backs.

At Tab 13 is a letter from Golder Associates to the Authority dated July 15, 1988 with a proposal for a 3 phase plan. The 600 and 800 meter set backs were based on historical evidence and the Authority was hiring Golder to establish where the maximum extent of retroactive distances was. Phase 1 was to identify a study area including all houses that had a possibility for retroactive landslide. Phases 2 and 3 would be initiated once the study area had been delineated. Phases 2 and 3 would involve bore holes and sheer testing to further define the set back lines. Phase 3 would be implemented with the information gained from Phases 1 and 2 and would allow focusing of further investigations to specific locations where remedial measures were required to improve the stability of the riverbank. O'Grady explained that at this point in time the Authority was aware that the set back lines would not be uniform because the underlying geology varied.

Tab 14 is a letter from the Ministry to Mr. Lamadeleine dated August 31, 1988 enclosing a map which shows that the recommended set back line traverses his property and includes most of his bush and the site of the proposed new theatre. The Ministry also notes that a reduction or

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modification to the extent of the earth flow area can only be determined after the completion of the Authority's study and that based on the best available information on slopes in Lamadeleine's area, the Ministry could not recommend a reduction at this time.

At Tab 15 is the Golder Phase 1 report establishing the study zone that would be concentrated on. Tab 16 is a letter from the Ministry to O'Grady advising that the MNR would be the principle agency responsible for commenting on slope stability matters in official plan, zoning by-laws etc.

At Tab 17 is a letter from the Authority to Golder dated September 14, 1988 advising that a letter has been received from Lamadeleine, that his property appears to be located within the designated earth flow zone and that the area is included in the current Casselman to Lemieux study and inquiring whether Golder could advise Mr. Lamadeleine about his proposed development.

At Tab 18 is a letter from the Ministry to Mr. Lamadeleine confirming the Ministry's understanding that Lamadeleine is engaging Morey at his own expense to conduct geo-technical testing and assessment of the landslide hazard for the stretch of river slope likely to have an effect on Lamadeleine's property. The letter further advises that Lamadeleine's application for development will be reassessed on receipt of Morey's report.

At Tab 23 is the Golder report to Lamadeleine dated November 1988 which the Authority would have received.

At Tab 24 is O'Grady's letter to Mr. Roger Brunet, Clerk of the Township of Cambridge, dated November 18, 1988. The letter is of interest in that it certainly brings home to the municipality the Authority's concern about new construction or additions to existing buildings in the set back areas. It reads in part as follows:

> Concerning the above the South Nation River Conservation Authority is of the opinion that based on present available information any further construction in the earth flow zone i.e. that area designated as sensitive slope protection with set backs of 600 and 800 meters in your comprehensive zoning by-law 144-88 is not advisable.

The letter then refers to the Golder study which is on-going and says:

> Until such time as this study is completed all new construction or additions to existing buildings should be put off.

The letter goes on to say that one of the most critical factors effecting the stability of slopes is the amount of weight added to the top of the slope which in turn increases the stress on the bank thus increasing the possibility of an earth flow or landslide. The letter closes with the following:

> The South Nation River Conservation Authority hopes that the Township of Cambridge seriously considers the above comments.

O'Grady explained that the Authority had no authority to prohibit construction and the Authority was simply telling the municipality to be careful. O'Grady explained as well that by this time the Authority knew that the potential lines were greater than 600 and 800 meters. Eventually, the line became 1 kilometer on each side of the river near Lemieux and 700 to 800 meters near Casselman.

At Tab 29 is an internal memo of the Authority dated March 15, 1989. The memo is from Graham Decow, Project Coordinator, to the executive committee directors. The memo notes that on Monday, March 13 Authority staff met with members of Cambridge Township Council to discuss a number of requests the Township had received from residents living within the designated earth flow zone for building permits. The recommendation coming out of that meeting was that until fill and construction regulations are in place for Cambridge Township and a policy statement prepared to control development, the Conservation Authority strongly recommended that building permits for any structure within the designated earth flow zone not be allowed. What is significant about that recommendation is that it came from Mr. Gratton who was, at the time, a council member of the Township of Cambridge. Again this brings home the fact that the Township would have been clearly aware of the concerns of the Authority with respect to the issuance of building permits for construction within the zone. At Tab 30 is O'Grady's letter to the municipality enclosing a copy of Tab 29.

At Tab 31 is a memo from the Ministry that was received by the Authority. It is dated March 20, 1989 and advises that the Ministry has reviewed the revised set back lines, and the supporting study report and has discussed related concerns with Morey of Golder Associates. Based on the above information the Ministry considered the set back lines shown on the map as Schedule A for the Township of Cambridge by-law 144-88 to be

sufficiently conservative to offer reasonable protection to development located outside the lines. The Ministry further advises that with the current level of information, development should not be permitted within the designated set back lines without an appropriate geo-technical investigation.

At Tab 37 is a letter from Golder to Gore & Story dated May 1, 1989 which we have seen before. O'Grady explained that with this letter Golder was making the point that not all lands located within the study area were necessarily hazardous.

At Tab 39 is the minutes of a very large public meeting presided over by the municipality on May 2, 1989.

At Tab 45 is a letter from the Authority to the Clerk of the Township of Cambridge referring to the Casselman to Lemieux study and the updated set back line. The letter is dated June 2, 1989. The letter notes that further to a discussion between the two the day before, it was the opinion of the Authority that the set backs for the earth flow or landslide potential zone as covered by the study, are those as delineated as the study area on the map prepared by Golder Associates enclosed in the letter sent to the Township dated May 25, 1989. The letter points out that this line represents not only the maximum potential retrogressive landslide area but for the Authority's purposes, will also be used as and be sufficient for, a set back for all new development. The letter goes on to read as follows:

> In other words the South Nation River Conservation Authority will discourage any and all new development within this set back area. This set back may be amended pending further studies such as the presently on going environmental study report. Until the time that these studies are completed, the South Nation River Conservation Authority will use the study area line as the set back.

Again, this was clear notice to the municipality of the Authority's position. O'Grady, in his evidence, said that there was no doubt that the Golder line encompassed all of the plaintiff's property and most certainly the theatre to the north of the ravine. O'Grady pointed out that by this point in time there was a great deal of acrimony between the municipality and the Authority.

At Tab 46 is the Authority's letter dated June 6, 1989 to all landowners in the area advising that with respect to buildings at risk, three options would be considered; firstly relocation, secondly buy-out and thirdly stabilization. O'Grady explained that had it come to pass (which it didn't) the plaintiff's theatre would not have been excluded from these options.

At Tab 48 is a letter from the municipality to the Authority dated June 13, 1989 which demonstrates the acrimony mentioned by O'Grady.

At Tab 49 is a letter from the municipality to the Authority dated June 14, 1989. O'Grady explained that at the time the municipality was taking the position that the Golder set back line was a study line only and that there was no proof of risk and was asking the Authority to remove its objection to the council's line. The Authority took the opposite view. The Authority knew that if the municipality issued a construction permit and the Authority's studies showed that the construction was within an area at risk, then the Authority would have to buy-out the construction. O'Grady explained that the Township was proposing lines closer to the river but still south of the proposed theatre site.

At Tab 51 is a minute of a meeting held June 20, 1989. In paragraphs 8 and 9 it is noted that some areas along the river may not require remedial work. At Tab 52 is the Authority's letter to Lamadeleine dated July 20, 1989 acknowledging Lamadeleine's request to participate in the Casselman to Lemieux class environmental assessment.

At Tab 54 is the Golder report to Gore & Story Limited with respect to Phase 2 of the study. This report is dated August 1989 and was used to determine preliminary cost appraisals in terms of remedial work required. Morey had been asked to give the Authority an idea of the cost of stabilization in various cross sections between Lemieux and Casselman so that the Authority could determine cost wise which was the best option, remedial work or buy-out.

Filed as Exhibit 10 was a schedule to Golder's report of August 1989. From Exhibit 10 it can be determined what the remedial proposal was for the section of the riverbank which included the plaintiff's property. If one looks at the schedule one will see along the shoreline of the river either a dark line, a hatched line or a line of dots. These represent rip rap and geo-textile, rock filled berm, or overall slope re-grading. O'Grady explained, referring to Exhibit 10, that there are two large gullies upstream and downstream from the plaintiff's property and in assessing the plaintiff's property one would have to look at the entire reach between the two gullies. I've marked the gullies on my copy of Exhibit 10. The one to the east or upstream of the plaintiff's property is actually somewhere off the map. On Exhibit 10 the set back line is the heavy dark line that I have

marked as "set back line" at the bottom of the map. As a matter of interest, at Lemieux the cost of a kilometer of berm was $500,000 plus engineering fees in 1988 - 1989. There is only one piece of rock berm required in the reach between the two gullies and it is approximately 170 meters in length encompassing approximately one half of the subject property's river front.

At Tab 55 is a resolution of the Township dated September 6, 1989. Part of the resolution at page 2 reads as follows:

> For all such site specific studies the terms of reference shall be approved by the Ministry of Natural Resources and the South Nation River Conservation Authority. The studies shall be conducted to the satisfaction and approval of the Ministry of Natural Resources and the South Nation River Conservation Authority.

O'Grady testified that he was aware of this resolution. [This resolution, which had the effect of amending Section 6.26 of the by-law establishing set back distances, clearly required the input of the Authority with respect to approving any site specific studies.] At Tab 57 is the letter from the Authority to the Township dated September 28, 1989. The letter reads as follows:

> Further to the discussion during the council meeting of September 25, 1989 research into our files indicates that the geo-technical firm Golder Associates was hired by Mr. Lamadeleine to evaluate and provide an assessment of the stability of the bank of the South Nation River.
> The study determined that the area in question was underlain by sensitive silty clays that were susceptible to flow sliding and that active erosion is presently occurring along the banks of the South Nation River. Golder's study also revealed that a portion of the property is naturally protected by the presence of two ravines which act as a barrier and would retard or terminate any local flow sides. The location of this naturally protected area is south of the existing dance hall and south of the ravine which extends east to west there. The report continues to state that if the proposed building were to be located in this naturally protected area the actual site should be approved by the geo-technical engineer.
> At no point in this report did it state that the dance hall was considered a protected area, naturally or otherwise, nor did it state that the remedial works proposed i.e. the extension and deepening of the ravine running to the south of the dance hall would protect this building.
> It appears that Mr. Lamadeleine has improved and expanded his dance hall which is in the landslide potential zone. This may have serious implications should a landslide occur.
> The South Nation River Conservation Authority would hope that all efforts are made in the future to ensure no further development occurs in this potentially hazardous area.

[In my view, this is a reasonable interpretation of Golder's site specific study and one that any reasonable person would understand.]

At Tab 60 is a letter from the municipality to the Authority requesting more specific evidence with respect to the set back line.

Tab 61 is a letter from the municipality to the Authority dated November 30, 1989 requesting a specific study by the Authority to determine early in 1990 the level of risk along those parts of municipal roads that are in the hazardous zone because the municipality intended to improve and reshape the hills on the road allowance between concessions 1 and 2. Here the municipality was asking the Authority for advice with respect to a particular site in which they had a particular interest.

The original theatre was destroyed by fire in August of 1990. At Tab 64 is a letter from the Authority to the Clerk of the Township responding to concerns that the municipality had with respect to redevelopment at the site of the summer theatre on the plaintiff's property. The Authority clearly points out that the Golder report had identified the area south of the ravines as an area where construction on the lot would be feasible and the Authority clearly tells the municipality that "redevelopment is possible here as long as the conditions outlined in the Golder report are observed i.e. construction in that area deemed safe by the presence of the ravines".

At Tab 72 is the Jacques Whitford report dated October 31, 1990. It was O'Grady's evidence that the Authority did not receive the report at that time and the Authority would have gotten a copy at some time but not at the same time as Lamadeleine because this was a private report.

At Tab 78 is the Ministry's letter to the Township dated November 21, 1990, a copy of which was received by the Authority. It advises the Township that no re-grading or protection of the river shoreline as previously advocated in the Golder report had been carried out leaving the bank susceptible to an initial failure. The Ministry expresses concerns

regarding the report of Jacques Whitford. The letter confirms that the proposed construction is north of the ravine and the ravine cannot be considered to protect the proposed structure. The letter points out that the statement in Section 6.1 of the Jacques Whitford report that instability of the riverbank is not expected to jeopardize the proposed building, does not appear to be relevant when it is apparent the firm was not provided with available information concerning the retrogressive slides in the area. The letter closes with the following paragraph:

> The area should be still considered within the earth flow designation and new developments should be discouraged.

Again, the municipality is clearly on notice.

At Tab 79 is the Paterson report. O'Grady did not know when the Authority received that report.

At Tabs 76 and 80 are supplementary reports by Jacques Whitford. O'Grady received Tab 80, the November 22, 1990 report on November 29 and was unable to say when he received the November 20th report, Tab 76. At Tab 83 is the resolution of council dated December 5, 1990 which allows construction of the theatre to the north of the ravine. The Authority received a copy of that resolution.

At Tab 89 is the Golder report to the Authority dated April 13, 1993. This is the Phase 3 report. Attached to this report is a report from Drs. M. Bozozuk and K.T. Law (B & L) whom Golder had hired to make an inquiry into the methodology being used by Golder for determining retrogressive distances. Golder, as a result of the B & L report went to method D as recommended by B & L. It was O'Grady's evidence that he did not believe that this report involved the plaintiff's land. What Morey had done was to pick out areas between gullies which he considered "best bets" for no landslides and analyze those areas with model D methodology and sheer vane testing. The plaintiff's area between the two gullies was too complicated and was not considered a "best bet".

On June 21, 1993 the biggest landslide of recorded history occurred. The maximum extent of retrogression matched the lines and estimates of Golder. The Golder set back was 750 meters and the retrogressive distance turned out to be 700 meters. As well it was noted that the retrogression did not extend past gullies. O'Grady attended at the site immediately and was able to identify Exhibit A as photos of the site. The photos were marked as Exhibit 19.

At Tab 90 is the Gore & Story final report documenting process and cost options with respect to the riverbanks.

At Tab 91 is the Authority's memo to its land and water advisory Board enclosing Tab 90 and providing an executive summary. At page 3 of Tab 91 is a table from the final report setting out certain decision zones and estimated costs in connection therewith. Decision zone 8 includes the plaintiff's property. The estimated cost of stabilizing decision zone 8 was $1,950,000. The buy-out cost was estimated at $1,106,000 and the relocation cost was estimated at $1,443,000. The Authority initially opted for the buy-out option but all of the residents wanted the stabilization option. O'Grady pointed out that the plaintiff's theatre would have been included in any buy-out or stabilization option. He went on to explain in his evidence that neither option was ever pursued because there was simply no funding for it.

At Tab 92 is amendment 51 to the official plan of Cambridge.

At Tab 101 is a memo from McNeely - Tunnock Limited to the Township's representative Oliver Mangione enclosing 4 maps showing the zoning set backs for sensitive slopes in the Township of Cambridge. Map 1 was the hazard zone as defined by by-law 72-78 prior to the geo-technical work being performed. Map 2 shows the slope protection set backs under zoning by-law 144-88 which stipulated the 800 and 600 meter set backs. Map 3 is the landslide potential set back distances under zoning by-law amendment 155-90. These are the Golder Associates set backs (study area) that encompassed all of the plaintiff's property. Map 4 is the sensitive slopes development constraint overlay under zoning by-law amendment 25-95. I have circled the plaintiff's property on this map and it is clear that the set back line excludes the plaintiff's property. O'Grady explained that initially the Authority planner and the town planner had agreed that the line on Map 4 should conform to the Morey report but at some point the plaintiff presented other reports to the town planner who accepted those reports and drew a new line. The Authority did not catch the change until it was approved and the Authority then went to the OMB and got the line changed back to include the plaintiff's property.

Entered as Exhibit 20 was a map which shows decision zone 8. The limit of that zone is the first gully to the west of the plaintiff's property and the second gully to the east of the plaintiff's property.

Entered as Exhibit 21 was the Barber appraisal relating to the plaintiff's property and estimating that the reproduction costs (new) of the theatre

would be $179,000 and of the restaurant $113,000. O'Grady explained that he believed that this was the 1989 building that was being appraised prior to the fire.

At Tab 107 is a letter from the Authority to lawyer Laviolette acting for a proposed purchaser of the plaintiff's property. The letter advises of the Golder recommendations namely the deepening and widening of the ravine and the re-grading of the slope providing rip rap protection with geotextile and cutting the top of the bank. The letter points out to Laviolette that there was evidence that the work recommended for the ravine was conducted however the theatre building is located on the north side of the ravine rather than on the south, meaning that the work conducted had no impact.

At Tab 112 is a letter from the Authority to the OMB outlining the Authority's position with respect to the municipality changing the set back line as it related to the plaintiff's property. The letter refers to technical discrepancies in the reports of the two consultants, Paterson and Jacques Whitford upon which the municipality relied. O'Grady explained that those discrepancies were that the consultants did not look beyond the plaintiff's property upstream or downstream between the gullies whereas Morey had indicated that one had to look between the two gullies to determine the safety of the plaintiff's property.

At Tab 115 is a letter from Cohen dated October 22, 1996 which O'Grady received.

At Tab 117 is the letter from the Authority's solicitor Ault to Cohen in reply. O'Grady explained that the position set out by Ault in his letter to Cohen would have been developed by O'Grady and discussed with Ault. The letter correctly sets out the Authority's position. At Tab 127 is the Authority's letter dated January 6, 1997.

Cross-Examination by Rasmussen

O'Grady conceded that the Authority had asked Golder to define the study area as broad as possible. He conceded that the issue at the OMB hearing in 1997 was where the hazard line should be drawn and that the purpose of drawing the hazard line was if an owner was going to build in the hazard zone that the owner had to get a geo-technical survey approving construction and that no building permit was to issue without a geo-technical survey.

O'Grady confirmed that if a building was already in the hazard zone the owner would not be prohibited from carrying on whatever he was doing in that building.

At Tab 22 is the Decision of the Committee of Adjustments for the Township permitting rezoning of the theatre site and a building permit for a 20 foot extension. The Decision of the Committee was effectively to allow the plaintiff to go ahead with his extension but to do so under the direction of a geo-technical engineer.

At Tab 24 is a letter from the Authority to the municipality which strongly suggests to the municipality that it not issue permits in the set back zones of 600 and 800 meters.

At Tab 26 is a letter from the Authority to the municipality dated January 6, 1989 indicating that it had no objection to the proposal with respect to the amendment of the zoning by-law for La Sucrerie because the development must occur with the approval of a geo-technical engineer. The Authority holds pretty much the same position today with the added proviso that it has delineated guidelines for future geo-technical surveys which the geo-technical engineer must follow.

[It is interesting that everything to this point in time would have been trouble free, had the building that was going to be extended been located to the south of the ravine].

O'Grady confirmed that the Authority had no objection to Paterson or Jacques Whitford as engineers but in his view they failed to look at what they should have looked at. O'Grady confirmed that the terms of reference that are now delineated by the Authority for a geo-tech survey, were not in existence in 1990.

At Tab 55 is the resolution of the municipality dated September 6, 1989 resolving that for all site specific studies the terms of reference shall be approved by the Authority and conducted to the satisfaction of the Authority. O'Grady conceded that at that time the Authority had no such terms of reference. With respect to the Golder report at Tab 89, April 1993, O'Grady explained that Golder was being challenged by other experts namely Dr. Lagarec who had been engaged by the municipality and that is why Golder got the second opinion of Bozozuk and Law who came up with a modified theory.

O'Grady confirmed that Casselman had a representative on the Authority's committees from 1985 on. O'Grady confirmed that all the Authority's information was available to any interested parties at all times.

O'Grady confirmed that he saw both the Paterson report and the Jacques Whitford report. At Tab 72 is the Jacques Whitford report to Lamadeleine dated October 31, 1990. O'Grady was not able to say whether or not the report was reviewed at about that time and whether or not the Authority sent any comments to the municipality.

At Tab 78 is the Ministry's letter to the municipality dated November 21, 1990 which the Authority received on November 23. The Ministry comments in part as follows:

> ... The statement in section 6.1 of the Whitford Report that instability of the (South Nation) riverbank is not expected to jeopardize the proposed building does not appear to be relevant when it is apparent that the firm was not provided with available information concerning the retrogressive slides in the area. The area should be still considered within the earthflow designation and new development should be discouraged.

O'Grady confirmed that anyone reading this letter from the Ministry would be aware that the Ministry was saying don't rely on the Jacques Whitford report when determining stability of the slopes.

At Tab 80 is a letter from Jacques Whitford to Lamadeleine dated November 22, 1990. The Authority's date stamp is on it and indicates that the Authority received it on November 29, 1990. It came either from the Ministry, the plaintiff or the municipality. On page 2 of the letter, third paragraph, the writer notes that the riverbank conditions immediately east (upstream) of the site are rather different and that the possibility of a retrogressive failure at that site has not been investigated. The writer also points out that a failure upstream could possibly jeopardize a portion of the present site, however, it is also noted that a ravine is present between the proposed restaurant and the east property line and that the ravine may act as a potential barrier of retrogressive failure. Rasmussen put it to O'Grady that McRostie had noted in his notes that this letter constituted a retraction of approval of location north of the gully and asked O'Grady whether he agreed. O'Grady said that it is certainly a clarification based on the Phase 1 Golder report. Whitford is now saying that he can't rule out the possibility of failure along the river. O'Grady pointed out that at the same time he is saying that the risk of a retrogressive failure jeopardizing the proposed restaurant is very low. O'Grady has trouble determining what he means by low. It should be noted that the plaintiff's evidence was that this letter was taken to the municipality.

With respect to Exhibit 10, O'Grady confirmed that Morey was suggesting three separate remedial works; firstly rip rap which is stones and which would not erode by reason of the water or ice and secondly a berm which can be put in place even if one is not worried about erosion (its weight prevents a sheer) and finally, regrading. The least costly is alternative number 1. With respect to 2 and 3 it depends on a number of factors which is more costly. O'Grady confirmed that Morey, in his site specific survey for the plaintiff, did not recommend a berm. As a matter of interest O'Grady pointed out that there are mechanisms in place in order to secure the co-operation of neighbours when work is required to the slopes of neighbours adjacent a specific site.

At Tab 105 is a letter from lawyer Laviolette purportedly acting for a prospective purchaser addressed to the Township and dated May 13, 1996 inquiring whether or not the property in question is within the Sensitive Slope Protection. O'Grady explained that the Sensitive Slope Protection area would be, at that time, whatever the geo-tech engineer was recommending. In trying to determine what was being recommended at that time, O'Grady noted with reference to Tab 101 that he believed by-law 155-90 was in the planning documents and that by-law 25-95 was proposed only. He explained that if the Authority had up to date geo-technical information which differed from an existing by-law, that was okay and the question would be answered by the Authority on the basis of the up to date information, not necessarily on the basis of the by-law.

At Tab 106 is the municipality's reply to Laviolette dated May 15, 1996 telling Laviolette that the geologist study of 1993 (Golder) confirms that the subject property is outside of the potential of landslide zone. O'Grady was unable to say whether he had received a copy of that letter. [Clearly the information given by the Municipality in this letter is incorrect. Perhaps what Brunet is telling Laviolette is that having regard to by-law 25-95 the plaintiff is outside the zone. That would make sense in view of the fact that the municipality had taken it upon itself to change the line for the plaintiff].

At Tab 107 is the Authority's letter to Laviolette dated June 12, 1996 telling her that by the Authority's definition of the area, the theatre is caught by where the Authority says the line should go.

Cross-Examination by Marcus

Mr. Marcus initiated his cross-examination by reading into the record the entire contents of the plaintiff's letter to the Authority dated October 1, 1990 which I have already referred to. It was O'Grady's evidence that he did not take as serious the plaintiff's veiled threat to sue.

At Tab 14 is the Ministry's letter to Lamadeleine dated August 31, 1988. O'Grady agreed that the letter was telling the plaintiff that the enclosed map shows that the proposed theatre site was within the set back and that the Ministry could not recommend at that time a reduction in the set back.

At Tab 31 is a letter from the Ministry dated March 20, 1989, a copy of which would have been received by the Authority. Again, the Ministry is saying that development work should not be permitted within the set back lines.

At Tab 34 is a letter from Morey to the plaintiff dated April 21, 1989 referring to the remedial work alternative chosen and carried out consisting of deepening the existing east west running ravine. O'Grady agreed with Marcus that the proposed site of the theatre is not identified in this letter.

At Tab 38 is a letter from Morey to the plaintiff dated May 2, 1989 setting out two alternative remedial works depending on the site of the proposed theatre. [Marcus was trying to make the point and I agree with him that this letter, in my view, clearly sets out the fact that to safeguard the whole property, the riverbank and slope work would have to be done as recommended and would have to be done along a stretch to be determined once the site is chosen.]

O'Grady was unable to say that the Authority received from the municipality all applications for development received by the municipality.

With respect to Tab 51 the minute of the meeting June 20, 1989, O'Grady confirmed that no one from the municipality was present.

With respect to Tab 54 the Golder report to Gore & Story dated August 1989 where it is stated at page 5 that "As a result of both of these previous studies, factors of safety are available for a relatively wide range of slope profiles throughout the study area, having calculated factors of safety ranging from about 1.0 to greater than 1.5". O'Grady confirmed that there are quite a variety of safety factors along the river slopes. As well, O'Grady confirmed that at page 11 of the report, it is noted that the results of evaluation indicate that some 60% of the total length of riverbank within the study area can be adequately stabilized by re-grading of the toe slope together with provision of rip rap and underlying geotextile.

At Tab 15, Exhibit 4, is the Golder report to the Authority dated September 1988. Figure 1 of the report shows the study area along both sides of the South Nation River between Casselman and Lemieux delineated by Golder. O'Grady confirmed that 6 copies of the report were received by the Authority. He was unable to say what the Authority did with the actual 6 copies but he did know that the report was summarized and presented to the Authority's Board of directors. He is unable to guarantee that the municipality would have received a copy of this report at the time. The hazard zone was first established by the MNR in the late 70's with set backs of 600 and 800 meters from the river's edge depending on which side of the river one was on. At Tab 101 is the memo from McNeely Tunnoch dated January 15, 1996 setting out the various by-laws and by-law maps showing the zoning set backs in Cambridge. O'Grady confirmed that the study zone in 1988 was broader than by-law 144-88 which did not encompass the plaintiff's land. The Authority objected to the line drawn on by-law 144-88 which did not encompass the plaintiff's land and the municipality complied with the objection. O'Grady confirmed that as of the Golder report in 1988 then from the Ministry's and Authority's point of view, Golder was the guide and the plaintiff's land was in the study zone as of that year. O'Grady again confirmed that in 1990 the plaintiff's land was still in the hazard zone. He explained again that the fact that land was in the hazard zone did not necessary prohibit development on the land but it did require that development could not take place in that zone unless the owner had appropriate opinions from a qualified geo-technical engineer. O'Grady confirmed to Mr. Marcus that the term "danger zone" is not used in any official document rather the term is either study zone or hazard zone.

At Tab 14 is a letter from the Ministry to the plaintiff dated August 31, 1988. The third paragraph reads as follows:

> A reduction or modification to the extent of the earth flow area can only be determined after the completion of this study. Based on the best available information on slopes in your area, we cannot recommend a reduction at this time.

O'Grady confirmed that this was the situation before the addition was built on the building to the north of the ravine.

At Tab 23 is the Golder report to the plaintiff dated November 1988 which, at page 11, states the following:

> The area of the site which is considered safe from landslide retrogression due to the presence of the ravines encompasses an area bounded on the north by the east west running ravine located immediately south of the existing dance hall building ...

O'Grady agreed with Mr. Marcus that this portion of the Golder report eliminates as a safe site, anything to the north of the ravine. Marcus suggested that one did not have to be an engineer to understand that to which O'Grady responded that one must be very cautious and that his directions to his staff always include going out with the engineer to put stakes in.

O'Grady agreed that the front page of this report does not indicate that it was distributed to the Township.

At Tab 117 is the letter from the Township's solicitors, Ault and Ault, to Mr. Cohen dated November 13, 1996. On the last page thereof the following is said:

> As Mr. Lamadeleine is aware from the evidence given at the pre-hearing on October 9, 1996 SNRCA was never advised that the line was altered between the time SNRCA approved the schedule indicating the landslide zone area and the time that the altered version was approved in council - - in other words SNRCA was not aware of the alteration or it would have appealed in a more timely fashion.

Mr. O'Grady explained that initially the Authority and the Township had agreed on a set back line with the proviso that a geo-technical study might change the line and that is what happened here, he believes. In other words the municipality purported to change the line to exclude Lamadeleine on the basis of a geo-technical report that it had received. O'Grady was not aware that the plaintiff had told the municipality that the Authority had approved of the geo-technical study.

Re-Examination of O'Grady by Mr. Leamen

Mr. O'Grady explained that he advises his staff to go to the site with the engineer because they are dealing with people's lives. So many mistakes are made as to where one is permitted to build. Geo-technical engineering is a real specialty and his staff do not have sufficient experience to interpret engineering reports. He does not want the Authority to make mistakes and end up buying the house.

Referring to Tab 101, the memo from McNeely, Tunnock with the 4 by-law maps attached, O'Grady was not sure whether or not the 600/800 meter set backs established by the province were ever adopted by any by-law. Only the municipality had the authority to enact by-laws in that respect. That set back was, however, "well known".

The first map at Tab 101 is the map attached to by-law 72-78. There was no earlier by-law that established a set back and it is difficult to tell from this map how the set back relates to the plaintiff's property. The next map is attached to by-law 144-88 which as originally drafted excluded the plaintiff's property. The next map is that attached to by-law 155-90. The hazard zone here encompasses all of the plaintiff's property. It is effectively the area that came out of the Golder report. Tab 71 is the by-law to which this map belongs and it was passed October 16, 1990. The next map is attached to proposed by-law 25-95. O'Grady explained that this was the by-law that purported to change by-law 155-90 by excluding the plaintiff's property. This, of course, is the change that the Authority successfully appealed to the OMB to restore essentially the hazard zone as set out in 155-90.

At Tab 34 is the letter from Morey to Lamadeleine dated April 21, 1989. Marcus had asked O'Grady whether or not this letter identified the proposed building location. O'Grady explained to Leamen that this letter references Golder's report 881-2486 which was the site specific report prepared for Mr. Lamadeleine and this letter and that report identifies the safe location. However, O'Grady added the caveat that he would not simply interpret the letter and the report, he would ask the engineer to take him to the site.

With respect to the municipality, O'Grady explained that the municipality of Cambridge had no geo-technical engineers on staff and therefore got geo-technical services from consultants the same way the Authority did. As well the Ministry has a geo-technical engineer available to persons such as the municipality.

At Tab 55 is the minutes of the municipality dated September 6, 1989 which at the top of page 2 says:

> For all such site specific studies the terms of reference shall be approved by the Ministry and the Authority and the study shall be conducted to the satisfaction of the Ministry and the Authority.

O'Grady has no recollection of the municipality ever asking the Authority for approval of terms of reference.

[It should be noted that we attended for a view of the site pursuant to Rule 52.05 on June 20, 2000. It was well worthwhile and assisted in the understanding of the evidence. The east west ravine is extremely substantial. It is quite deep, perhaps 20 feet deep and perhaps 20 feet across. One can easily understand that this ravine would be the southern limit of any landslide into the river. We got to the river by walking through the bush which is extremely thick and dense. We were unable to go right to the river's edge. The bank is extremely high at the front of the plaintiff's property, much higher than looking at the slope cross sections would indicate. If you went down it, you would have trouble getting back up. The theatre restaurant is in deplorable condition.]

Evidence of Guy Lefebvre

Examination-in-Chief

Dr. Lefebvre was called on behalf of the defendants Jacques Whitford and John D. Paterson. His CV was marked as Exhibit 31. He received his Civil Engineering Degree in 1965 at the University of Laval and his Masters Degree in geo-technical engineering at the same university in 1968. He received his PhD in geo-technical engineering at the University of Laval in 1970. He has done a great deal of field work in the field of geo-technical engineering on a consulting basis. He has, however, been primarily a professor doing teaching and research at the University of Sherbroke, Civil Engineering Department, since 1972. He candidly admitted to Mr. Leamen that he, unlike McRostie, Paterson or Jacques Whitford does not deal on a usual basis with everyday problems as do the other consulting engineers.

With respect to the qualifications of Dr. Lefebvre to give evidence with respect to whether or not Paterson or Jacques Whitford met the standards of the profession in preparing their reports, Leamen made an interesting argument that Dr. Lefebvre did not have enough practical experience to render such an opinion. I think Leamen's point was not without foundation but I ruled that the doctor was qualified to give me his opinions with respect to the adequacy of the reports and thereafter it would be a question of what weight I might give to the professor's evidence in that respect.

Dr. Lefebvre was retained by Rasmussen in 1999 to assess the situation. In preparation Dr. Lefebvre reviewed all the documentation and visited the site in November of 1999. He was there for approximately 3 hours and walked and observed what he had to. He looked at the ravine adjacent to the building. He walked to the river from the top through the terrace and to the bottom of the slope observing the trees and some erosion at the toe.

He had Golder's report to Mr. Lamadeleine dated November 1988 and as well had the Golder report to the South Nation Conservation Authority dated September 1988. He did not have Tab 54, the Golder report to Gore & Story, dated August 1989. He had the Jacques Whitford report to Mr. Lamadeleine dated October 31, 1990. He had the first page of Tab 75, the preliminary report from Paterson to Lamadeleine dated November 19, 1990. He had Tab 76, the letter from Jacques Whitford to Lamadeleine dated November 20, 1990. He had Tab 79, the full report from Paterson to Lamadeleine dated November 22, 1990 without the drawing on the last page of the report. He had, he believes, Tab 80 which is Jacques Whitford's report to Lamadeleine dated November 22, 1990. He had Tab 89, the report of Golder to the Authority dated April 13, 1993. He had Tab 142, the McRostie report to Soloway, Wright dated December 14, 1998. As well he had Tab 129, McRostie's report to Soloway, Wright dated January 9, 1997.

At Exhibit 25, Tab 9 is Dr. Lefebvre's report dated February 2000.

It is of interest to note that beginning at page 17 of his report the doctor acknowledges that the purpose of the report is not to fill the roll of another geo-technical engineer who would conclude on the risk of landslide and the necessary set back at the Lamadeleine property, rather the purpose is to examine if the work, conclusions and opinions delivered by Jacques Whitford Limited and John D. Paterson in response to their respective mandates were adequate and were as expected from a reasonably competent engineer.

At page 18 of his report the doctor notes under the heading Evaluation of a Safe Set Back Distance, that a slope or riverbank must first be effected by a landslide before this first landslide could retrogress inland at a certain distance from the riverbank. He points out that two aspects thus need to be examined to evaluate if a site could be effected by landslide retrogression; first the state of stability of the riverbank and second the possibility of retrogression if the riverbank is effected by a landslide.

The doctor, in his evidence, pointed out that the factor of safety of a particular slope depends on a number of parameters including the pore pressure of the water in the clay which indeed is a very important

factor. The doctor explained the factor of under drainage. When the river valley reaches equilibrium and reaches the glacial till, then the clay above drains into the till and the pore water pressure becomes much less and conversely the slope much more stable. He pointed out that Golder, in his 1988 study, installed piezometers on the west side of the plaintiff's property which indicated strong under drainage. According to Dr. Lefebvre the measurements indicated no water pressure at the bottom and if there was almost no pore water pressure then the slope would be much more stable. He went on to explain that in calculating the factor of safety, if one does not take into account under flow drainage, then the factor of safety calculation is too low.

As well as employing this numerical approach to determine the stability of a slope, Dr. Lefebvre pointed out that one also takes into consideration the site observations. For example if there are a number of big trees on the property, it means that the slope has been stable for a long time.

As well the doctor noted that at the plaintiff's site there was a terrace which protects the slope. He observed some erosion at the toe of the slope and explained that the terrace tended to protect the toe of the slope. The terrace extends along the front of the property but as it goes west it gets wider from 20 to 30 feet. He explained that the terrace protects against the fact of erosion in that there is room for erosion to occur. He noted that on the east side of the property the terrace gets narrower and narrower.

Leamen at this point quite properly complained that none of this evidence was in the doctor's report and that, as a result, the Rule was not being complied with. I decided to hear the evidence and provide Leamen with any additional time he required to consider it.

On Figure 3.2 appended to Dr. Lefebvre's report the plaintiff's property and building is identified. There is a gully to the east of the Lamadeleine property and the doctor testified that as a result it should be well drained.

Rasmussen reminded Dr. Lefebvre that McRostie had identified what he considered to be the most critical slope (see McRostie's report dated December 14, 1998 at Tab 142, plate #1). Lefebvre noted that the slope indicated there was steeper and to that extent McRostie was right. McRostie's most critical slope has a 19 degree inclination while at the plaintiff's property it is some 17 degree inclination. Lefebvre pointed out, however, that the slope identified by McRostie as most critical is not the highest slope. The slope on the plaintiff's property is a little higher. As Dr. Lefebvre put it, he would not put all his eggs in the steepest slope.

Filed as Exhibit 32 is a brief of the expert reports provided to Dr. Lefebvre and which he reviewed prior to writing his own report. Filed as Exhibit 33 is a letter from Dr. Lefebvre to Mr. Rasmussen dated April 14, 2000. In his letter of April 14th Dr. Lefebvre acknowledges that McRostie is an outstanding geo-technical engineer "well above the reasonably competent engineer". Dr. Lefebvre acknowledges the confusion about the distance from the river to the sucrerie building (McRostie talks about it at page 4 of his report) and notes that part of the confusion originates from a drawing provided by Mr. Lamadeleine on which the sucrerie building is located significantly farther from the river than it is in reality. Dr. Lefebvre does not believe as was implied in the McRostie report at pages 10, 11 and 12 that Dr. Lagarec has determined set back lines or maximum retrogression distances based only on the existence or not of trees. Lefebvre is in agreement with McRostie that the method of calculating retrogression proposed by Mitchell in 1978 is a landmark publication still applicable today but notes that McRostie nevertheless agreed "in general terms" with the Golder retrogression distance which is about twice the one which is evaluated when using the method of Mitchell 1978. Finally, Dr. Lefebvre notes that the important under drainage identified at the riverbank on the Lamadeleine property has a significant impact in the evaluation of slope stability and that it has been completely neglected in the slope stability analysis in the McRostie report (pages 6 and 7) and in the Golder studies.

Back to Lefebvre's report at Tab 9 of Exhibit 25 and in particular page 19 where he notes that for a retrogression to develop, the soil involved in a first slope failure must be sensitive so that its strength after failure would be low enough for the slide debris to flow out of the crater instead of acting as a stabilizing berm at the toe of the backscarp (the wall of soil left at the back after a slide).

Lefebvre at page 19 of his report goes on to explain that once the backscarp of a slide is left exposed, its stability is controlled by the stability number Ns which is the ratio of the weight of a soil column in the backscarp over the undrained sheer strength of the soil at the base of the soil column. Mitchell has demonstrated that the stability number needs to be at least 6 for the development of plasticity and earth flow whereas failure of vertical backscarp may develop when the stability number exceeds 4 but the height of the backscarp rapidly decreases with this type of phenomena leading to a limited retrogression distance.

Referencing Golder's report to the Authority dated September 1988 and particularly figure 24 thereof at the very back of Tab 15 entitled Stability Number, Bore Hole Locations and Historical Data, Lefebvre pointed out

that Lamadeleine's property is located between bore hole numbers 21 and 1 with the remaining bore hole numbers running downstream from the Lamadeleine property. Lefebvre pointed out that one observes a general increase in the stability numbers as one goes downstream with the increased stability numbers reflecting a greater chance for a retrogressive slide. For example, if one looks at Exhibit 7, the Ns for the 1910 slide is 9, for the 1971 slide it's 10 and for the 1993 slide the Ns is 9.6. The Ns at those sites is much greater than that at the plaintiff's property. This is confirmed in the Golder report to the Authority of September 1988 (Tab 15) where at page 16 Golder says the following:

> With the exception of site 21, near the upstream end of the study area, the calculated Ns for each site is greater than 4 which is the theoretical threshold value for an unstable back scarp and except for sites 1, 20 and 21, all near the upstream end of the study area, the calculated Ns for each site is greater than 6 which is the theoretical threshold value for possible earth flow activity.

Again Lefebvre explained that 6 is the magic number for an Ns. If it's less than 6 there may be a retrogressive slide but not a large one because one only gets the buckling of the back scarp.

At page 19 of his report (Tab 9, Exhibit 25) Dr. Lefebvre points out that the relation between the stability number Ns and the distance of retrogression based on the 41 case records examined by Mitchell, is reproduced at figure 5.1 of his report. It is noted that Mitchell has included two South Nation slides, the 1910 slide and the 1971 slide. It is interesting to note that for the 1910 slide on the South Nation River, for a Ns of 9 the actual retrogression of the 1910 slide was about 1,000 feet whereas Mitchell would have estimated it to be 2,000 feet according to figure 5.1. Dr. Lefebvre's point is that it is worthwhile to note that these empirical co-relations significantly over estimate the retrogression distance for the two landslides of the South Nation River documented by Mitchell.

At page 21 of his report, Dr. Lefebvre addressed the location of the proposed building. Dr. Lefebvre points out the following. The determination of the location of the proposed building was not part of the three site specific geo-technical studies performed at the Lamadeleine site (Golder, Paterson and Jacques Whitford). The location of the proposed building was provided by Mr. Lamadeleine. See the location plan included in the November 1988 Golder report (figure 4.1) referenced by the note "Plan Supplied by R.C. Lamadeleine". The plan supplied by Lamadeleine indicates a set back distance from the river of 1,156 feet measured parallel to the property line and not along the shortest distance to the river. The location plan in the Jacques Whitford report (figure 4.2) has been recopied but obviously from the same plan provided to Golder by Lamadeleine. The set back distance from the river is indeed 1,156 feet and still measured parallel to the property lines. The location of the Lamadeleine building can be verified using the detailed plan included in the 1993 Golder report to the Authority. This plan has been obtained from aerial photographs. The portion of the plan in the sector of the Lamadeleine property was reproduced at Lefebvre's figure 3.2. The distance from the river measured parallel to the property line is not 1,156 feet or 352 meters but rather 250 meters or 100 meters less than indicated on the plan provided by Mr. Lamadeleine. The shortest distance of the building to the river is, in reality, 180 meters (figure 3.2) as compared to about 240 meters when evaluated on the plan provided by Mr. Lamadeleine. The Paterson report did not include any location plan but stated in the first paragraph that "The site is located 340 meters from the crest of the slope". Lefebvre comments that a distance should normally be expressed as the shortest distance otherwise it has no meaning. The distance of 340 meters from the crest of the slope represented a set back of about 400 meters to the edge of the river.

At the bottom of page 21 of his report Dr. Lefebvre addresses the drainage of the slope at the riverbank. It was his evidence that there was good under drainage at this point of the river. The doctor notes that none of the three site specific geo-technical studies have included the installation of piezometers to measure the pore water pressure at depth in the sole at the riverbank vicinity. Again, Lefebvre expresses the opinion that this information is necessary for slope stability analysis. The doctor notes that at the time of these three studies the regional Golder study of September 1988 was available and it included a boring put down in the north west corner of the Lamadeleine property in which three instruments or piezometers had been installed to measure the pore water pressure. In Dr. Lefebvre's opinion the Golder pore water measurements at the crest of the riverbank in the north west corner of the subject property indicated a very good state of drainage in the slope, typical of under drained clay deposit and in his view the clay deposit is drained by an under layer of sandy soil discharging freely into the river valley. Again in his view a strong under drainage is a favourable condition which should be accounted for in slope stability analysis.

With respect to McRostie's theory relating to an ice dam, a sudden rising of the river level, a failure of the ice dam and a quick draw down, it was Lefebvre's view that a rapid draw down can be critical if the water has been damned up for 3 or 4 months because by that time the slope will have

obtained equilibrium however if the situation lasts for only a few days perhaps 5 or 6, then the slope has not reached equilibrium with the river and when the dam breaks, it has very little effect. Lefebvre is of the opinion that McRostie's scenario would have a very small effect on the stability of the slope. Lefebvre is critical of Morey and McRostie in that as far as he is concerned, they have assumed critical pore water pressure and have not taken into consideration the under drainage.

At page 24 in the last paragraph thereof, Dr. Lefebvre says the following:

> ... According to Mitchell and Markell (1974) and Mitchell (1978) which was in 1988 and 1990, as it is today, the state of the art in landslide retrogression the maximum distance of retrogression would be 150 meters considering an Ns value of 5.5. Even considering the maximum Ns value of 5.8 evaluated at a depth of 12 or 13 meters in the east boring, the maximum distance of retrogression would be 180 meters. Using an Ns of 5.9 Golder arrived at a retrogression distance of 340 meters, which again, for reason of safety was increased to 400 meters to represent a safe set back distance.

Marked as Exhibit 34 was a report prepared by Mitchell in 1978 for the Ministry of Transportation and Communications. This report consisted of an analysis of the 1971 landslide and the proposed formula for retrogression. In Table 1 under the introductory portion of the report, both the 1971 slide and the 1910 slide on the South Nation River are identified. Figure 14 to the report is a reconstructed section of the 1971 landslide. On the issue as to where the retrogressive distance was measured from Dr. Lefebvre was of the view that Mitchell was measuring from the water's edge. The distance from the water's edge having regard to figure 14, was approximately 490 meters. If measured from the crest which is the highest point of the slope or the point where it starts to slope to the river, then the retrogressive distance is 370 meters. Dr. Lefebvre pointed out that if one goes back to Table 1 in the report, it is indicated that the 1991 slide retrogressed 490 meters. By the same token if one goes to Exhibit B, the 1973 report of Mitchell and in particular Table 1 thereof, landslide 35 is identified as the 1971 South Nation River landslide. If one goes to Table 3 of this report, the distance of retrogression for landslide number 35 is 1,600 feet which equals 490 meters. On the basis of all this then, Lefebvre was of the view that in using the Mitchell method the retrogressive distance is from the river's edge and not from the crest. It should be noted that at this point Exhibit B was made Exhibit 35.

At page 25 of his report, Dr. Lefebvre addresses the John D. Paterson report. The doctor notes that in its slope stability analysis, Paterson used a very conservative condition for the ground water with a water table at surface and horizontal flow (RU=0.6). Paterson evaluated a factor of safety of 1.4 which in fact is identical to the overall factor of safety of 1.4 evaluated by Golder in his November 1988 report. Lefebvre comments that the John D. Paterson report added however an important statement to the effect "This analysis was conducted using excessively high pore water pressure conditions that are likely never to develop in the slope". Lefebvre comments that this statement was correct and more so considering the strong under drainage of the riverbanks existing at this site.

Lefebvre points out that the Paterson reports concluded that:

> Based on the results of this study, it is the opinion of this firm that the slopes bordering the South Nation River at this particular site are not, in their present conditions, considered to be unstable. It is also our opinion that should a failure of the bank occur, it would not retrogress back to the location of the proposed building.

At page 26 of his report, Lefebvre quite correctly points out that the Paterson report does not contain any details to support the conclusion that should a failure of the bank occur, it would not retrogress back to the location of the proposed building. Lefebvre notes that the Ns values evaluated in the 1988 borings would yield a maximum distance of retrogression of 150 meters or, at the most, 180 meters using state of the art criteria. Lefebvre notes that the true distance of the Lamadeleine building from the river was 180 meters but as mentioned before, the three engineering studies were induced in error on the building location by the location plan information provided by Mr. Lamadeleine. The Paterson report placed the building 400 meters from the river edge (340 meters from the crest) which constitutes a safe set back even when considering the conservative Golder criteria. The Lamadeleine building located on the erroneous plan is at 240 meters from the river and thus further from the river than the 180 meters distance of retrogression evaluated with state of the art criteria.

In any event, based on all of the available information Lefebvre is of the opinion that the conclusions of the Paterson report conformed to the state of the art and as expected, from a reasonably competent engineer faced with the same mandate.

At page 26 Dr. Lefebvre deals with the Jacques Whitford report. He begins by stating that in his view the November 22, 1990 letter constitutes a very strong reserve about the stability of the site. Lefebvre points out that as shown by the scope of work described in their October 31st report, Jacques Whitford had understood its mandate as concerning essentially the bearing capacity at the proposed building site and the slope stability at the adjacent ravine.

Lefebvre does point out however that the Jacques Whitford report did nevertheless mention that the stability condition of the South Nation River was not of concern:

> It is not expected that instability of the riverbank will jeopardize the proposed building at the location investigated.

Again, the report does not detail the basis for that comment. Lefebvre points out that the Ns values evaluated in the Jacques Whitford boring at the building location would yield a maximum distance of retrogression of 130 meters using state of the art criteria. Lefebvre comments that such a distance of retrogression was indeed much less than the set back of the building as shown on the erroneous plan to Jacques Whitford (240 meters) or even appreciatively less than the true set back of 180 meters.

Lefebvre felt that the 3rd paragraph on page 2 of the Paterson report was very significant. It notes that the riverbank conditions immediately east of the site are rather different and that the possibility of a retrogressive failure at that site had not been investigated. The paragraph points out that a failure upstream could possibly jeopardize a portion of the present site. Lefebvre said he found this paragraph of particular significance because existing conditions are always important.

Lefebvre notes that in the letter sent to Lamadeleine on November 22, 1990, Jacques Whitford used careful wording and expressed strong reservation and in the end warned of the need for a new assessment of the overall stability if the condition of the riverbank changed in the future.

In the final analysis, Lefebvre was of the view that the Jacques Whitford comments on slope stability and distance of retrogression were correct and conformed to state of the art analyses. He felt that the careful wording and strong reservation expressed in the report reflected that the Jacques Whitford work to fulfil its mandate had not been directed toward the stability assessment of the riverbank and that in the circumstances Jacques Whitford conducted itself as reasonably competent engineers.

Lefebvre was asked about McRostie's comment that there were sheer strength values in the Paterson report which, if used, would increase the retrogressive distances. Lefebvre commented that Paterson did not use vane strengths as measured on site. Paterson, rather, measured in the lab from samples taken in shelby tubes. Shelby tubes, in his view, usually cause the material to become softer and lose strength. Mitchell, on the other hand, uses field sheer strength.

Cross-Examination of Lefebvre by Paul Leamen

On cross-examination Lefebvre advised Leamen that in preparing his report he examined all of the documents listed on Exhibit 32 and attended at the site where he walked the crest along the river and inspected the terrace of the slope and walked east approximately 200 meters to look at the big gully. To the west he looked to the road, a distance of several hundred meters. As he walked he examined the slope and the trees for any signs of erosion.

At no time before preparing his report did he speak to either of the defendant consulting engineers.

Leamen asked Lefebvre why in the face of the stated purpose of his report at page 17 (to examine if the work conclusions and opinions delivered by the defendants in response to their respective mandates were adequate and as expected from a reasonably competent engineer) why did he walk the site? Lefebvre responded that when doing an evaluation of anything you like to see the subject of your evaluation and that it makes a lot of difference when you see it. He agreed with Leamen that it is not enough to simply read material. He agreed that walking to the east and the west of the actual site was at least useful, if not necessary. When asked to agree whether any reasonably competent engineer retained to do a slope analysis would do the same thing, Lefebvre waffled and said yes and no, explaining that if the building was far enough from the river, there was no necessity to walk the site. Mr. Leamen pointed out that all of the engineers were talking about the same building on the same piece of land and again invited Lefebvre, given that fact, to agree that any competent engineer would do the same as he did and that is walk the site in an east and westerly direction. Again Lefebvre waffled and said it was not that clear how far the building was from the river. Leamen then asked if Lefebvre was suggesting that because it was not clear how far the building was from the slope, it was alright for someone not to do the walk that he had done. Lefebvre pointed out that Paterson did look at the riverbank and did some surveying of the slope.

Lefebvre agreed that at the time Paterson and Jacques Whitford did their reports, it was unclear how far the building was from the river and that the knowledge that they had was not accurate, knowledge being from the drawing in the Golder report.

Leamen asked Lefebvre whether a reasonably competent engineer would be expected to determine for himself the distance from the building to the river for the purpose of analyzing the slope. Lefebvre replied that if it was in their mandate to do so then such would be the case.

Lefebvre then backtracked to some extent. He declined to admit that it was not clear what the distance was when the defendants did their reports. He said that they and indeed Golder felt they had the correct distance and in fact did not.

Lefebvre confirmed that the correct distance is 180 meters but if you scale the drawing the drawing makes it approximately 240 meters.

At Tab 79 is the Paterson report. At the last page thereof is a drawing with Paterson's seal on it showing the scale of 1 to 1000. Leamen asked Lefebvre whether since there is a drawing by Paterson to scale, one would expect them to locate the building correctly. He then indicated that the drawing was wrong and the building was not at the right location when one looks at the drawing. Leamen asked him why the consultant would not be expected to get it right to which Lefebvre responded it was copied from Golder, it was wrong and they didn't know it was wrong. He added that they should not be expected to determine the distance if it's already in a pre-existing report. He added that consultants are not in the surveying business.

Leamen asked Lefebvre whether he agreed that the mandate of Paterson and Jacques Whitford was to do whatever was necessary for the purpose of giving a report to eventually lead to the issuance of a building permit. It was Lefebvre's evidence that he did not understand this to be the case with respect to Jacques Whitford, certainly not with respect to the delivery of their first report. He conceded, however, that in their subsequent letters, November 20 and 22, it was clearly for a building permit. With respect to Paterson he conceded that from the beginning Paterson would have known that he had to look at the slope for the purpose of the issuance of a building permit. He conceded as well that both Paterson and Jacques Whitford knew that the building permit related to a combination theatre and restaurant that would accommodate many people.

When asked whether he agreed that the South Nation River between Casselman and Lemieux was an area prone to retroactive landslides, Dr. Lefebvre responded that in his view only the downstream portion was prone to retroactive landslides. [This notwithstanding that there are three landslides directly adjacent to Lamadeleine's property which is in the upstream portion.] Lefebvre did concede to Leamen that the most critical time for a retrogressive landslide to develop on the river is in the Spring time and that likely the critical time would be the same time that the building was getting maximum use. He conceded that a reasonably competent engineer would be expected to exercise more care assuming all the above was known. He conceded that when human life is at stake, then one is expected to take more care. He then retracted from that and said that if he had known the use of the building he would only expect the engineer to use normal care.

Lefebvre conceded that the soil in the riverbank is sensitive enough that one should be careful. He conceded that if the soil is sensitive then one must ask whether there is a likelihood of initial failure but added the caveat that if the retroactive distance is not great enough then that is the end of the inquiry.

When asked to agree if the initial failure is likely to occur when the slope is steep when opposed to not steep, he responded that the critical cause of a landslide is erosion and if there is no trace of erosion then it is not critical. He then conceded that the steepness of the slope does indeed have something to do with the possibility of failure. He added that "steep" in terms of the jargon used is 20 degrees. The slope on the plaintiff's property is 16 to 17 degrees and the McRostie "most critical slope" is 19.2 degrees.

Dr. Lefebvre was asked if he knew whether Paterson or Jacques Whitford had determined the possibility of an initial failure other than on the plaintiff's property. He replied that Jacques Whitford did no slope stability analysis at all. Lefebvre was asked whether a reasonably competent engineer asked to comment on slope stability for the building would be expected to do some analysis and he responded that Jacques Whitford did not consider it part of its mandate.

Leamen pointed out to Lefebvre that at page 7 of its report at Tab 72, Jacques Whitford said the following:

> The stability condition of the Nation River located approximately 350 meters north of the proposed restaurant is

not of concern. It is not expected that instability of the riverbank will jeopardize the proposed building at the location investigated.

Leamen asked Lefebvre whether a reasonably competent engineer in saying that would be expected to do a slope analysis. Lefebvre completely avoided the question by saying that Jacques Whitford was saying that the building was far enough away from the river that the stability of the slope did not matter although he conceded to Leamen that the building was not 350 meters away but rather half that distance, 180 meters. He was asked whether considering the true distance, he agreed that Jacques Whitford should have done a slope analysis. Lefebvre responded in the negative saying that would not be necessary if Jacques Whitford is convinced on the wrong evidence. He pointed out that if Jacques Whitford did as he did, then the simple answer is that one doesn't have to worry, the state of the art computation yields 150 meters and the building was at 240 meters, almost 100 meters outside the retrogressive distance (at least as far as they knew from the Lamadeleine distance).

Lefebvre did concede that if Jacques Whitford knew that the information that he had from the Lamadeleine map was wrong then he would be at fault. Leamen asked Lefebvre whether if Jacques Whitford knew the building to be 200 meters from the river, should Jacques Whitford have done a slope analysis? Lefebvre answered that he did not know on what basis they went in terms of distance. Leamen pointed out to Lefebvre that at Tab 80, Jacques Whitford letter of November 22nd, the first paragraph refers to the South Nation River being located some 200 meters north (shortest distance rather than measured parallel to the property line) from the building site. Lefebvre agreed that at this point Jacques Whitford knew that the 350 meter distance was wrong. Leamen suggested to Lefebvre that the real distance being 180 meters Jacques Whitford got it wrong for the second time. Leamen asked whether that would be consistent with the responsibilities of a reasonably competent engineer and Lefebvre provided the same stock answer, that is, that the Lamadeleine drawing in the Golder report was at fault. Lefebvre then pointed to his report at Exhibit 25, Tab 9 and particularly figure 2 thereof, which is the Golder map with a recorded distance of 1,156 feet of set back from the river to the building taken parallel to the east west boundary of the property. Again he said this was the source of all of the confusion. He agreed, however, that anyone looking at the map would realize that this was not the shortest distance to the river. He conceded that it is not the way to express the distance to the river and any reasonably competent engineer would know that. Lefebvre agreed with Mr. Leamen that in that sense that distance is simply not relevant for geo-technical purposes. Lefebvre pointed out that on this drawing the distance is 240 meters if scaled. He conceded to Leamen that Jacques Whitford did not do what he should have done in terms of expressing the distance.

With respect to Tab 80 the Jacques Whitford letter of November 22, 1990 to Mr. Lamadeleine, Lefebvre agreed with Leamen that this letter was done for the specific purpose of determining the stability of the riverbank with respect to the building. Leamen asked Lefebvre whether in the circumstances one would expect a reasonably competent engineer to do a slope analysis. Lefebvre responded by saying that there were so many reservations in this letter of November 22nd that obviously Jacques Whitford did not want to go very far into it and what Jacques Whitford is saying is that a retrogressive landslide cannot be ruled out. Leamen pressed the matter and said that given Jacques Whitford knew the report was for a building permit, what is Jacques Whitford saying? Is he saying it's stable enough for a building permit or not? Lefebvre then made a startling revelation. He said that he would be surprised that they got a building permit with this report in that this report does not say it's fully safe and there are very strong reservations.

Leamen asked Lefebvre whether he was saying that with the reservations expressed, Jacques Whitford had no obligation to do a slope stability analysis. Lefebvre replied that Jacques Whitford thought it was finished with the report and then they were asked another question. They were not expected to do another whole study. He commented that this letter shows that they were not doing a slope stability analysis.

Lefebvre conceded that initially Jacques Whitford was required to determine the strength of the soil at the building site and the stability of the adjacent ravine. In that respect they concluded that the building should be set back from the ravine some ten meters. Then secondly they were asked to comment on the slope stability. Lefebvre agreed that this was as equally a critical question to answer as the first in relation to getting a building permit and perhaps it was even more important.

Leamen put the question to Lefebvre "what if it turns out that Jacques Whitford did good work with respect to determining the soil strength at the building site and the stability of the ravine but with respect to the slope stability analysis they did nothing but walk the site? Is that the work of a reasonably competent engineer?" Again Lefebvre evaded the question by responding that Jacques Whitford simply responded to its mandate. Leamen suggested that if Jacques Whitford was asked to give an opinion as to the stability of the riverbank, it would have to do at least as

much work as it did with respect to the strength of the soil at the site and the stability of the ravine. Again Lefebvre evaded the question by saying that Jacques Whitford would not do it just for nothing.

Leamen asked Lefebvre whether from his own examination of the site and the building, was there any gully protecting the building from a landslide. Lefebvre responded that the east west gully behind the building does not protect it and there is no east west gully in front of the building which would protect it. Lefebvre agreed then that there was no gully that he saw that would protect the building from a retrogressive slide. Leamen then referred Lefebvre to Jacques Whitford's letter of November 22, 1990 at Tab 80 and the third paragraph thereof which reads in part as follows:

> We noted that the riverbank conditions immediately east (upstream) of the site is rather different. The possibility of a retrogressive failure at that site has not been investigated. A failure upstream could possibly jeopardize a portion of the present site. However it is also noted that a ravine is present between the proposed restaurant and the east property line. A ravine such as the existing one may act as a potential barrier of retrogressive failure.

Leamen asked Lefebvre whether when he viewed the site he saw any such ravine. Lefebvre responded that there was a large ravine 200 feet to the east but that there was no ravine on the plaintiff's property or nearby that would protect the building from a retrogressive landslide.

Leamen then reviewed with Dr. Lefebvre the Paterson's report at Tabs 75 (preliminary report) and 79. Lefebvre agreed that from a reading of these reports, there was no doubt that Paterson had the mandate to comment on the stability of the slope and the risk of retrogressive landslides. Leamen asked Lefebvre whether, in the circumstances, he would agree that if Paterson was a reasonably competent engineer, he would have attended the site in the face of that mandate. Lefebvre responded that this could involve teamwork. Perhaps someone else such as a technician could attend the site. He commented that a very experienced technician is probably better than a young engineer at that point. Leamen pointed out to Lefebvre that Lefebvre attended the site and Lefebvre explained that if he wanted to criticize someone else's work then he should go to the site. Leamen asked Lefebvre to agree with him that if the person who signed the reports had never been to the site, then he was not a reasonably competent engineer to which Lefebvre responded that if the signatory was relying on someone who was qualified then that would be okay. It was Lefebvre's evidence that he agreed with Mr. Leamen that he would expect who ever did have a look at the property would also look on each side of the property. Leamen asked Lefebvre whether if the person who did visit the site did not look on each side of the subject property, then that would be negligence. Lefebvre responded that when in the field one can see much but if the particular individual simply didn't look then that is much different. Leamen inquired as to how far one might be able to see at the site with all of the large trees and Lefebvre thought perhaps 100 meters would be fair. Leamen asked him if this would be far enough and Lefebvre responded "I guess so".

With respect to the bore hole that Paterson drilled at the building location, Leamen inquired of Lefebvre as to why they would not have bored the hole closer to the slope. Lefebvre professed not to know but did point out that Paterson would have had the Golder report with the bore hole on the east side. Leamen asked Lefebvre why, if they were doing a slope analysis, they would bore the hole up near the building. Lefebvre pretty much gave a non answer saying that if the building was on rock there was no problem but they needed to know the condition at the building site. They dug the bore hole where they did in order to determine the nature of the soil.

Leamen asked Lefebvre what Paterson had done once he got the results from his bore hole. Lefebvre responded that Paterson knew there was soft clay there and a risk of retrogression depending on the distance. Lefebvre was unable to say whether he analyzed the retrogression distance. Leamen asked Lefebvre what was the purpose of the bore hole if there was no analysis of the bore hole results and Lefebvre said he didn't know.

Leamen had reminded Lefebvre of McRostie's evidence that he had done an analysis of the Paterson bore hole test. He again asked Lefebvre what, as far as he knew, Paterson had done with his own bore hole test. Lefebvre responded that Paterson assessed that there was soft clay below the building and then Paterson had to say whether the building was far enough away from the river. If the soil had been strong, that was the end of it. Leamen asked Lefebvre whether he had seen anything in the Paterson reports to show what Paterson concluded from the bore hole. He replied that, as far as he could see, they determined that the building had been constructed on clay. Lefebvre did not know how Paterson had evaluated the retrogressive distance. Lefebvre did not agree with Leamen's suggestion that if Paterson had done the analysis that McRostie did, the retrogressive distance would be 380 meters. Lefebvre pointed out that Paterson did not have a field vane test and therefore could not do the analysis from their own bore hole data using the Mitchell formula. They

had, rather, to use the Golder data with the Golder field vane test. Lefebvre agreed with Leamen that the Mitchell formula was different from the Golder formula explaining that Golder wanted an approach that was very much on the safe side but the criteria is still the Mitchell report in terms of published formula. In other words, Mitchell is the only published formula but Morey has his own approach. He then explained that he did not know what formula Paterson used but in any event the retrogressive distance that they got is correct according to the Mitchell report. Lefebvre confirmed that the Mitchell approach has a solid data base and a solid fundamental basis namely, that with a stability number between 4 and 6, the possibility is a non flow retrogressive slide and with a stability number of 6 plus, the possibility is for a flow slide.

Referencing his own report at Tab 9 of Exhibit 25 and particularly figure 5.1, Lefebvre explained that Mitchell used most of this data to develop his formula. He was unable to tell Leamen whether Mitchell included all of the known retrogressive distances on the South Nation River in figure 5.1. At Tab 15 is the Golder report to the Authority dated September 1988. Table V thereof sets out 4 different formulas for estimating retrogressive distances. Lefebvre agreed that method D is the Mitchell formula and the closest bore hole site listed to the plaintiff's property is the third one down, 1 / 2. Leamen pointed out that the estimated retrogressive distance at that bore hole site using the Mitchell method is 125 meters but historical data shows that the actual retrogressive distance is 200 meters. Leamen put the question "how come". Lefebvre's answer was that we do not know when that slide occurred and referenced figure 24 in the Golder report, Exhibit 34. Lefebvre conceded that Mitchell in his computations had not included in his study the 3 landslides in the vicinity of the plaintiff's land, that is the 2 across the river and the one on the same side of the river further to the west, notwithstanding that if one looks at an air photo one can see those landslide scars. Lefebvre conceded that the existence of those slides could be relevant information because they could lead one to the conclusion that the clay there is susceptible to failure and accordingly the retrogressive distance would have to be determined.

Leamen asked how 2 retrogressive landslides across the river with retrogressive distances in excess of 200 meters could be ignored to which Lefebvre responded if they happened 2000 years ago "so what".

Lefebvre testified that it was quite possible that Morey is correct in saying he sees one to five failures every year on the South Nation River. Leamen pointed out to Lefebvre that if there is under drainage and at the same time there were slides in 71 and 93 then obviously the under drainage had been overcome. Lefebvre explained that if there is erosion eating away at the toe then at sometime it must fail but if the slope is stable, then the under drainage makes a big difference and must be accounted for.

Lefebvre confirmed to Mr. Leamen that the terrace on the plaintiff's property narrows as it goes to the east and also the steepness of the slope increases as one goes to the east. Leamen asked Lefebvre whether he would agree then that as one goes to the east from the plaintiff's property, there is an increased possibility of initial failure and increased risk of retrogression. Lefebvre agreed that that would be the case where there is erosion. He agreed as well that as the terrace narrows there is a bigger chance of retrogression because less reserve is being offered for erosion.

Lefebvre agreed that if the public safety is an issue then that would be a reason for an engineer to be more careful.

Finally, Leamen closed his cross by putting this question to Lefebvre. If the land is unsafe, could one or two reasonably competent engineers have done their work competently by saying that it is safe? Lefebvre answered that if it is clearly unsafe and the engineer unequivocally says that it is safe, then he is incompetent.

Re-Examination by Rasmussen

Rasmussen asked Lefebvre whether two competent engineers could arrive at different conclusions. His response was in the affirmative. He pointed out that if the study was done down stream then probably all of the three consultants (Golder, Paterson and Jacques Whitford) would reach the same conclusion. However, if the risk is very small, there may be a degree of conservatism resulting in different opinions.

Lefebvre had testified on cross that the Golder procedure is not wrong for Golder's purpose. Lefebvre explained to Mr. Rasmussen that Golder's purpose was to establish the potential for a risk.

At Exhibit 25, Tab 9, Lefebvre's report figure 2, is the "Lamadeleine drawing". Lefebvre explained that when telling Leamen the distance that he had walked west, he would have with reference to figure 2, walked to the Forest Road which is the west boundary of the property.

Rasmussen asked Lefebvre what use could be made of the distance of 1156 feet shown on the Lamadeleine drawing assuming it was presented to

him contained in a report. Lefebvre replied that that known distance could be used to get the scale of the diagram and assuming that distance was correct then other distances could be calculated. Lefebvre pointed out that the marked distance of 1156 feet is in error by 100 meters. In other words, 1156 feet equals 352 meters and the actual distance from the building down to the river is 250 meters. As well, the shortest distance to the river is 180 meters as compared to 240 meters when one scales it on the Lamadeleine plan assuming the 1156 feet is correct.

Jim Nault

Examination-in-Chief

Mr. Nault is a property specialist with Co-operators Insurance. In 1990 he was an independent adjuster with Renault Senecal and dealt with the Lamadeleine fire. The insurance policy had been issued through Reed Stenhouse. The claims file no longer exists but Mr. Nault has a recollection of the events in 1990.

Reed Stenhouse had asked him to investigate, assess and settle the fire loss. The cause of the fire was undetermined.

The extent of the insurance coverage was $400,000 on building, equipment and stock and there was a replacement cost endorsement on the policy. The plaintiff decided to reconstruct. The initial payment made by the insurers was for actual cash value and as Lamadeleine proceeded to reconstruct he presented invoices to Mr. Nault which Mr. Nault reviewed and then gave to the insurers with a recommendation for payment. In all, the entire limits of the $400,000 coverage was paid out.

Cross-Examination by Marcus

Mr. Nault confirmed that everything including the building and the equipment inside was destroyed in the fire, even the old slab was condemned.

Re-Examination by Leamen

Mr. Leamen asked how the $400,000 policy limits related to the total cost to which Nault replied that there was sufficient funds to rebuild everything and to replace all of the equipment, much of which was used equipment.

In the circumstances, I permitted Rasmussen to re-cross on the re-examination.

Cross-Examination by Rasmussen

Mr. Nault confirmed that the $400,000 was entirely adequate to cover the replacement of the building and all of the equipment in it. There was some used equipment purchased. Mr. Nault remembers specifically that all the seats that went into the theatre were used.

Ubald Boileau

Examination-in-Chief

Mr. Boileau has been a roofer, renovator and demolisher for the last dozen years. At Tab 11 of Exhibit 23 is his estimate of the cost to demolish the building. He anticipated it would take 6 to 7 men two weeks to take down the building at a cost of $21,750 plus GST for a total of $23,272.50. He would expect to recover 30% salvage which he would try to sell or recycle.

Cross-Examination by Rasmussen

The witness was at the site in 1992 or 1993 for a meal. He had never attended the theatre.

When he made his estimate in May of this year he did not go inside the building.

Mr. Rasmussen directed the witness to Exhibit 24, the original appraisal and he was able to confirm that the building had steel siding and a steel roof. He also confirmed to Mr. Rasmussen that for the estimated demolition cost he got only the building materials. He did not get the air conditioner, the seats or the tables and chairs. Effectively his was an estimate of the cost of demolition of an empty building.

Cross-Examination by Marcus

When Lamadeleine called to ask him to make an estimate as to the cost of demolition, Lamadeleine explained that he had to consider demolishing because the South Nation River Conservation Authority had shut the business down. He could not operate it anymore because of the landslide.

Norman Lemay

Examination-in-Chief

Mr. Lemay has been a real estate appraiser since 1971. In 1993 he was consulted by Mr. Lamadeleine to appraise the sucrerie. At Exhibit 23, Tab 3, is Mr. Lemay's letter to Mr. Lamadeleine dated July 19, 1993 and his appraisal.

What Mr. Lamadeleine had requested was an appraisal of the depreciated cost of the property.

Mr. Lemay inspected the property. He measured the outside of the building, recorded the composition of the walls and roof (all steel). He noted aluminum windows and on the interior vinyl tile, rugs, plywood, gyprock and a soft wood finish. The building was heated by forced hot air and electricity. There was a central air conditioner plus additional wall units, an alarm system and a sprinkler system. The building appeared to be of recent construction and was in good shape.

Mr. Lemay used the Marshall and Swift approach to determine the cost to construct the building. He explained that Marshall and Swift have a publication that shows pictures and costs. Using this approach Mr. Lemay determined that the cost to replace the building would be $721,000. To this figure Mr. Lemay applied a 30% depreciation factor (5% for observed appreciation and 25% by reason of the fact that Marshall and Swift provide city prices and this is was a rural property). The net costs of depreciated replacement was $505,000.

Mr. Lemay appraised the value of the land at $100,000., the value of the terrace, bridge and sugar cabin at $15,000 and the value of the well, septic system and parking lot at $20,000 for a net depreciated cost of $640,000.

At Tab 14 of Exhibit 23 is Mr. Lemay's letter to Mr. Lamadeleine dated June 5, 2000 where he expresses the opinion that because of the landslide problem and the extremely limited use that the land may be put to as a result thereof, the land is probably worth no more than $450 an acre. He expressed the opinion that the building does not increase the value of the land again because of the landslide problem.

Cross-Examination by Rasmussen

Mr. Lemay was never at the site prior to 1993 and has not been there since.

Mr. Lemay conceded that there are three approaches to determine the value of a property. Firstly the income approach, secondly sales comparisons and thirdly depreciated replacement cost which was the method that he was asked to use. He did not do an income approach evaluation or a sales comparison because the latter was impossible to do.

Mr. Lemay was aware that construction people would not use the Marshall and Swift approach but rather would do a more detailed cost approach.

With respect to the land, what we are dealing with here is 8.9 hectors which equals approximately 18 acres.

With respect to page 4 of his report at Tab 3, Exhibit 23, Lemay testified that he got the figure of $11,000 per hector by looking at comparables although he had no record of the comparables that he looked at.

With respect to Tab 14 of Exhibit 23, Lemay's letter of June 5, 2000, Lemay determined that the land was in the retrogressive landslide zone by talking to the Authority. He had not spoken to the Authority in 1993. Rasmussen pointed Lemay to Tab 101, Exhibit 4 and the map that shows that in 1993 when he did his appraisal, the entire Lamadeleine property was within the hazard zone. Lemay conceded that in 1993 he did not realize that the plaintiff's land was included in the landslide zone and the comparables that he used at $11,000 per hector were not in the landslide zone.

Lemay confirmed that he puts the reduced value of the land down to the fact that it is in a potential landslide zone and has no use. As he put it, even the cows would disappear.

Aside from his appraisal in 1993 and his letter of June 2000 to Lamadeleine, Lemay admits that he has done no other work on properties along the river.

Lemay was finally able to come up with some comparables which were marked as Exhibit 37. They are purportedly all low potential lands and interestingly enough appear to be put on the market at values that are

approximately the same as what Lemay says Lamadeleine's lands are now worth. For example, there is a 25 acre parcel up for purchase at $12,500 ($500 an acre), 43 acres for sale for $10,000, 100 acres for sale for $35,000 and 210 acres for sale for $60,000.

Cross-Examination by Marcus

Marcus put to Mr. Lemay that if the plaintiff's land was in the hazard zone in 1993 and it is still in the hazard zone, what is the difference in its value today as opposed to 1993. Lemay first replied that one cannot build on the property any more and cannot get insurance on the premises. When pressed by Marcus, Lemay admitted that there is no prohibition against building if one has a report of an engineer saying its okay to build.

Marcus asked Lemay what he would have done if he knew in 1993 that the property was in a hazard zone and he responded that he would have asked to see the engineering studies. He has not yet seen them to this date.

Lemay does not know why Lamadeleine wanted the appraisal in 1993. He conceded that this Spring Lamadeleine asked him to tell him what the value of the property was, if it was in the landslide zone and dangerous and if he could not get insurance. Lamadeleine, in giving him instructions, told him that he could no longer carry on his business because he couldn't get insurance. He did not say the municipality or the Conservation Authority had closed down his business. Lemay confirmed that it was his view in 1993 that the septic and the well could be replaced for $20,000.

Finally, Lemay confirmed that the appraisal is for the building only and does not include the equipment.

Re-Examination by Leamen

None of the comparables in Exhibit 37 are in landslide areas because there are no sales in the landslide areas.

Rita Benson

Examination-in-Chief

Mrs. Benson has been a caterer for 8 years and in 1992, 1993 and 1994 she worked as an employee of the plaintiff preparing meals in the months of March and April. She estimates that 10,000 to 12,000 people came for meals. She was closed on Monday and opened the rest of the week for lunch and supper.

In 1995 and 1996 she rented the restaurant from the plaintiff and operated the business for herself carrying on the same business as before. It was her evidence that business was good. The arrangement was that she paid rent to the plaintiff and she kept the revenue from the meals.

At some point in time she thought about purchasing the business. She was in business for herself as a caterer, was lacking space and wanted to buy a larger place. She did not, however, purchase the sucrerie because the plaintiff could not sell because of a dangerous zone situation. Accordingly, she purchased something else.

Cross-Examination by Rasmussen

Mrs. Benson was probably interested in buying the whole property including the bush, the theatre and the other buildings, depending on the price. However, no price was ever agreed upon. She is still in the catering business and has bought another property for her business.

She paid her rent to Mr. Lamadeleine and does not recall whether she paid by cheque or by cash and whether it was payable to Mr. Lamadeleine or the company.

At Tab 105 is solicitor Laviolettes's letter to the Township of Cambridge advising that her client is interested in purchasing the subject property and asking confirmation that the property is not "within the Sensitive Slope Protection".

The letter is dated May 13, 1996. Mrs. Benson knows Ms. Laviolette and confirmed to Mr. Rasmussen that she never hired Laviolette to do anything for her with respect to possible purchase of the property.

At Tabs 106 and 107 are the responses from the Township of Cambridge and the Conservation Authority to Ms. Laviolette. Mrs. Benson has never seen these before nor did Ms. Laviolette ever communicate with her about the plaintiff's property in 1996.

It was around the end of 1996 or the beginning of 1997 that Lamadeleine told her that he could not sell his property to her. He said it

was in a danger zone and he could not sell. He did not say that it was a danger zone that existed because the municipality had declared land along the river as a study or hazard zone. He simply told her that it was a danger zone.

Ms. Benson testified that she never asked the plaintiff to make any inquiries with any financial institution to determine if there was any money available to Mrs. Benson to assist in the purchase of the property.

Lamadeleine never showed her any appraisal of the property nor did she ever ask for one, nor did she ever have one done.

It was he who first approached her to tell her that he was interested in selling the property.

Before 1999 she operated her catering business out of her home. She bought a property in May of 1999 in Casselman in the industrial park and paid $130,000 for it.

Roland Landry

Examination-in-Chief

Mr. Landry owns Landry's Restaurant Equipment in Cornwall. He has been buying and selling new and used restaurant equipment for 27 years. Ten to fifteen years ago he started doing evaluations for lenders.

At Exhibit 23, Tab 10 is his evaluation of Lamadeleine's equipment prepared December 7, 1999.

Previously Landry had attended at the sucrerie on two occasions with family and friends to have a meal and see the play. It was his evidence that both times the place was packed.

In December of 1999 Mr. Lamadeleine asked for a replacement appraisal of his equipment and how much he, Landry, would offer to pay.

His appraisal came to some $56,788. He explained that this would be for both new and used equipment. If he could not replace the equipment with used, then he would replace it with new.

It was his evidence that if all of Lamadeleine's equipment were to be sold at a fire sale, he would purchase it for $6,000 and wouldn't pay more than that for it because of the cost of storing it.

Cross-Examination by Rasmussen

Mr. Landry was able to confirm that he has sold to Lamadeline a lot of the equipment that he presently has and that it was used when he sold it to him.

He confirmed as well that many of the things in his evaluation Lamadeleine could sell himself and get a lot more than he would pay him.

Cross-Examination by Marcus

The condition of the equipment was very good in December of 1999 and anyone interested would grab it up.

Sylvain Desjardins

Examination-in-Chief

Mr. Desjardins is an industrial sound designer and technical consultant. He has a diploma in sound engineering from the Ontario Institute of Audio Recording Technology. He is presently employed by Specs Audio. He is fully aware of new and used audio prices for the purpose of bidding.

On November 17, 1999 he attended at the site to do an evaluation to determine the cost to replace the theatre equipment. At Exhibit 23, Tab 8, is his evaluation totalling some $78,900 including the turntable whose value was given to him by Lamadeleine at $20,000. His appraisal was conditional on the condition of the equipment which he did not test.

It was his evidence that the actual value that might be obtained on the sale of this equipment was approximately $13,000. He commented that the equipment was pretty old.

Cross-Examination by Rasmussen

The witness did not take an inventory of the equipment nor was it his intention to be too detailed. Tab 8 is the only written record he has of his evaluation.

He charged Lamadeleine for 3 hours of his time at $45 an hour for a total of $135. He had never done business with Lamadeleine before.

He was asked by Rasmussen what the cost of the equipment would have been in 1990 assuming it was all new and he was not able to say so.

He explained to Rasmussen that the $78,900 cost was the replacement price to change everything in the building to new.

Cross-Examination by Marcus

The lighting was not obsolete although the lighting console was very old and the sound console would have to go. It was his evidence that with some exceptions they "don't make this stuff anymore".

Peter Forest Donnelly

Examination-in-Chief

Mr. Donnelly has been a general contractor since 1985 specializing in restaurant and dental offices. He does new construction and renovations for both residential and commercial properties.

At Exhibit 23, Tab 9 is his estimate for replacing the building, the parking and the outside patio.

He had previously attended at the sucrerie prior to his estimate dated December 5, 1999, approximately 3 to 4 years ago in the springtime when he had an excellent meal and there were many people there.

As of December 5, 1999 he determined the replacement cost of the building to be $609,346 and testified that it would probably be 12% more today. He estimated the cost to replace the parking to be $52,000 plus GST and the cost of rebuilding the outside patio to be approximately $12,000.

Cross-Examination by Rasmussen

The cost to replace the building $609,346 plus GST of $42,000 for a total of $651,000 did not include kitchen appliances but did include the 600 amp service with 2 sub panels, 2 natural gas furnaces, 2 central air conditioners, a sprinkler system, etc.

The price also included three holding tanks which Mr. Lamadeleine said were there. In this respect the witness recounted that in 1997 he obtained a permit for constructing a restaurant with holding tanks and in doing so dealt with the Eastern Ontario Health Unit. He explained that holding tanks are cheaper to install than septics for a building of this size. He calculates that it would cost $35,000 to $40,000 today for a septic system for that particular building whereas holding tanks cost approximately $3,000 per tank.

Cross-Examination by Marcus

The witness has known Lamadeleine since 1996/97 and has RRSPs invested with him.

When Lamadeleine asked him to prepare a replacement cost estimate, Lamadeleine told him that he had found out that he was in a landslide zone and he wanted t know if he were to build the building in another location, how much it would cost. It was the witness' evidence that it would be impossible to relocate the existing building to another site due to its size.

That concluded the plaintiff's evidence apart from the reading in of questions and answers from discovery pursuant to the rules. Marked as Exhibit 40 is a record of the questions and answers that are taken to be read in by the plaintiff pursuant to Section 31.11(1) and additional questions that I have marked in black ink to be read in at the request of defence counsel as qualifying answers pursuant to Rule 31.11(3). I explained to counsel that in my view plaintiff's counsel was not to be taken to approbate the answers that I required him to read in pursuant to Rule 31.11(3) but that I would receive those additional answers to qualify or explain the part first introduced.

Read in from Transcript of Examination for Discovery of Herve Francois held on March 11, 1999

Mr. Francois is employed by the defendant the Township of Cambridge from June 1995 to October of 1998.

There was no municipal planner from 1989 all the way to 1995. During that time all of the responsibilities that Mr. Francois took on in 1995 were done by the clerk.

Anything that had to do with Mr. Lamadeleine's application to build the sucrerie in 1988 and when it was replaced in 1990 would have been the responsibility of the chief building official Mr. Andre Brisson who was there from 1988 to 1997. The issuing of the building permits would have been reviewed by Mr. Brisson as the building inspector.

At Exhibit 4, Tab 124, is a report on the sucrerie. That document was prepared by this witness at the request of counsel in order to give them a history of the file on the Lamadeleine property.

The whole history of the by-laws concerning sensitive slope were very mixed up through the years. 155/90 was certainly one of the by-laws. The witness believes that it was attempted prior to that by-law to alleviate some of the concerns of the citizens but the other by-laws didn't pass.

We may assume that by-law 144/88 was the first by-law that had anything to do with slope stability in the Township of Cambridge.

It appears as though 155/90 was the first one that really came to grips with the issue. It established the set back distance and also put in place a mechanism to notify the Conservation Authority when there was a request for a permit. The by-law applied to the South Nation River between Casselman and Lemieux, an area that included Mr. Lamadeleine's land. The by-law established an area on the basis of on-going studies from years past and also from landslides that had happened along the riverbanks.

This witness identified in a chronology all of the documentary evidence he had or the municipality had in its file that was in any way relevant to this case and it is fair to say from a review of the documents that the municipality always knew that the sucrerie was going to be constructed to the north of the ravine.

The municipality received reports of the geo-technical engineers, Paterson and Jacques Whitford. They had been reviewed by council in 1990.

To the witness' knowledge, permits have not been issued by the municipality within this area designated as a study hazard zone since that time.

The geo-technical reports in 1988 from Golder would have been presented directly to council and council would have reviewed them. There was nobody on staff that had the qualifications to review them in terms of their engineering.

The municipality takes no position on whether the site actually is or is not safe.

Read in from Transcript of Examination for Discovery of Steve Gauthier held on November 4, 1999

Mr. Gauthier is the planner of the Nation Municipality that includes the former Township of Cambridge. Mr. Gauthier was presented to complete what began as the examination for discovery of Herve Francois. Mr. Gauthier eventually replaced Mr. Francois. He was present on the day that Mr. Francois was answering the questions.

Mr. Brisson is presently an inspector in Plantaganent [Brisson was never presented as a witness for the municipality during the course of the trial although he is obviously available].

> Question 93: Well, you got the report of October 1988. We've already discussed that. What else did you get from Golder to show that what was required by the municipality was actually done.
> Answer: Well, Golder made a study saying that it was safe on the south if you extended the ravine. He extended the ravine. Golder approved it, but - - -
> Question 98: My understanding of what we've accomplished here is that we don't really know the answer to the question. We don't know what approval was given by anyone to actually show these conditions were met. Is that fair?
>
> Answer: Yes.

Read in from Transcript of Examination for Discoveryof Raymond Hache held on August 12, 1998

Mr. Hache is the manager of the geo-technical group of Jacques Whitford Limited.

Prior to 1990 Jacques Whitford had not done any work along the South Nation River.

Jacques Whitford holds itself out as an expert in geo-technical work including the assessment of risks of retrogressive failure and is one of the best in Canada as it was in 1990, although it was not in 1990 familiar with the type of studies that were going on along the South Nation River.

At the time of retainer, Jacques Whitford was aware that there had been a building on the river side of the gully and that Lamadeleine wanted to build a new building on the same side of the gully.

The Jacques Whitford report is marked in Exhibit 4 at Tab 72 and is dated October 31, 1990.

Question 135: Now it's the next sentence that concerns me here.
"The stability condition of the Nation River located approximately 350 meters north of the proposed restaurant is not of concern.
"Now, in order to write that in this report what assessment, if any, had been done by you.
Answer: The only assessment that had been done is a visual inspection of the site by Charles and Charles had - - that touches upon that assessment below where he looked at the erosion condition at the site and he didn't feel that they were of any significance. The other assessment that he would have done is the trees that were covering the site as well that the entire site was treed and the distance was very significant.
Question 138: Right. Other than a visual inspection, which is something I suppose even I could do, could you tell me what he relied upon to make that statement?
Answer: The visual inspection of the site, actually you do have to have some expertise in slope stability and in the geo-technical field in order to come and say no, this is a site that I don't need to do a slope stability analysis on so it isn't necessarily something that anybody can make. Anybody can inspect but to make the assessment does require some background knowledge.
Question 139: So are you telling me that as far as you know Mr. Kwok made an eyeball assessment of the slope and concluded that it was not necessary to do anything further.
Answer: I believe that is the case. Now I can't say for sure because I wasn't there with Charles.
Question 140: Would you also ask Mr. Kwok to tell me exactly what it was he did. If he did do an eye ball assessment, where was it done? In other words was it done at one location on Mr. Lamadeleine's property or more than one, was it done on anyone else's property, were there any measurements at all taken of any sort?
Answer: I can answer some of that for you if you want me to right now and I can tell you from the records that we have, he did walk the full length of the property. He did go take a look at the slope because he's providing us some comments on the slope as well, the total slope. He did not take any measurements of any cross sections of the slope. He looked at it visually and made an assessment based on his professional expertise.

The following is a summary of additional evidence read in from the examination for discovery of Hache.

It was Jacques Whitford's expectation that Mr. Lamadeleine was going to take the letter of November 1 to the municipality with a view to getting a building permit. (That is the Jacques Whitford report dated October 31, 1990 at Tab 72).

Jacques Whitford obtained the Golder report, Exhibit 4, Tab 23, before November 20.

The Golder report was given to Jacques Whitford by Mr. Lamadeleine. Charles read the Golder report and Mr. Hache read sections of it. As a result of reading it they looked at the equations that had been proposed and prepared their letter of November 22 (Exhibit 4, Tab 76).

Before either the November 20 or November 22 letter was sent out, Charles and Mr. Hache returned to the site and looked at the site and reviewed the Golder report in detail.

We have a report from Golder who investigated in some detail the slope stability of the Lamadeleine property in 1988 and concluded that there was a significant risk of retrogressive failure. The witness on discovery is

Caselaw

telling Mr. Leamen that on the basis of a visual assessment, Jacques Whitford reached a different conclusion.

At this point counsel for the defendants asked me to have read in questions and answers 264, 265 and 266 under the Rule and I so directed. Those answers disclose the following. Jacques Whitford's conclusions which differed from Golder were based on looking at the toe of the slope and again they felt the toe of the slope was stable as they looked at it. Their visual observation of the grade of the slope led them to believe that this was a slope that was stable at the toe, that is with regard to the initial slide. The second component they looked at was the vegetation and they felt that with that vegetation there retrogression wouldn't happen anyway.

> Question 272: Go over to page 10, the last sentence of the first paragraph says that it's Golder's opinion that a significant portion of the clay material in the slope is susceptible to flow siding. Do you agree or disagree with that?
> Answer: Again we agree with that. We did agree with that, and that's why we didn't say - - we wouldn't say that it's not an issue at a site like this, it has to be considered as an issue.
> Question 273: So do you agree a significant portion is susceptible to flow sliding?
> Answer: The nature of the material yes we agree with that we agree with that nature.

In recounting what his firm did before it issued its report of November 22, the witness testified as follows. They went to the site, they reviewed the reports, they drew some conclusions about the type of soils that were there and agreed with Golder that the nature of these soils under the right conditions should not be ruled out and that's what they decided. They couldn't rule it out that these soils were of that nature. Then they decided to look at the conditions on the site with a cursory review similar to what Golder had concluded or stated at one point, that a visual review would be required in order to assess whether or not ... (See answer to Question 300)

No one at Jacques Whitford ever spoke to anyone at Golder before issuing its two reports.

> Question 415: Mr. Hache, is there any distance from the river on Mr. Lamadeleine's property that you would say a location of the sugar shack is unsafe?
> Answer: I haven't looked at that. I would have to work something out with the profiles and everything else. I haven't done that.

Read in from Transcript of Examinations for Discovery of Stephen J. Walker held on August 12, 1998

Mr. Walker is the president of the defendant John D. Paterson and Associates Ltd.

The person who did the field work on the subject lands was Neil Mutcher who was a technologist and who was no longer with the firm.

Mr. Walker was aware that since the slide of 1971 there had been ongoing studies of the South Nation River.

The Paterson firm holds itself out as an expert in the area of geo-technical work.

Lamadeleine in his letter to Paterson asked for testing of his land to put a building to know if it is safe and also to check the river slope because there is a lot of discussions going on about the Nation River. To make a long story short find out if it is safe to put a building. The total price quoted for the work was $3,000. Mr. Walker confirmed that Mr. Lamadeleine's instruction was to address the slope stability issue with respect to the siting of the building and whether or not it was a safe distance away from the slope. Defence counsel requested the read in of question 73 which I directed.

> Question 73: By safe distance does that mean that it wouldn't be, ... does that mean an assessment of the risk of retrogressive land slide to that point?
> Answer: It's an assessment of the risk to the building in itself which is not to say there couldn't be a retrogressive failure that might go halfway to his building or whatever, the question is is the building a safe distance away?

Walker was aware that Lamadeleine wanted to reconstruct a building on the river side of the gully.

Walker did not attend at the side when the retainer was obtained. Neil Mutcher, the technologist went to the site. He supervised the drilling

operations, recovered samples for testing and took some measurements on the slope.

Prior to the report that Paterson issued and Walker signed, Walker had never been to the site.

At Tab 79 is the Paterson report dated November 22, 1990. There was a preliminary letter that went out before the report.

The significance of the slope analysis was to determine the potential for an initial slope failure and in that respect, Paterson did work only on Mr. Lamadeleine's property.

Question 126: Was there only a risk of progressive slope failure from Mr. Lamadeleine's property or would you agree that the risk was elsewhere as well?
Answer: With any slope there's always risks, it's everywhere.

Rasmussen then requested that questions 127 to 132 be read in and I so directed. In those questions the following was disclosed.

In Walker's opinion the risk of a slope failure was most likely on Mr. Lamadeleine's property. Mr. Walker conceded there is "neighbouring development" there but there are surficial features such as gullies and that that seem to come into play. Notwithstanding that, no one from Patersons went on to other peoples land to do their work because they didn't feel it was necessary based on the results of their stability analysis of the slopes, the soil conditions, the ground water conditions that existed and the technical data that they obtained. All that told them that the chances of a failure were slim.

Question 192: Is there a distance at which Paterson would say that it was not safe to construct a building?
Answer: If we were asked to define the line on the property it can be done. We weren't asked to do that, we were asked to deal with the building and is it safe and the answer is yes.
Question 193: And in reaching that conclusion what was the distance between the building and the shore that Paterson was using?
Answer: Down the center line of the property and everything seemed to be relative to the center line of the property we did spell out a distance in our report.

Question 194: 340 meters?

Answer: Yes. That's down the center of the property.

Question 199: Do you know whether or not the building is actually located closer to the river than 340 meters?

Answer: Yes it is.

Question 200: Would you agree with me it's approximately 170 meters?
Answer: I don't know the distance, probably of that order.
Question 201: Did you ever do any calculations to determine the distance to the closest point of the river?

Answer: No we didn't.

Question 209: What is the slope then at 170 meters from the building or the closest point of the river to the building?
Answer: That would be the closest point where the pen is.

Question 210: Is that on Mr. Lamadeleine's property?

Answer: No.

Question 211: Do you know what the slope is at that?

Answer: Taken no measurements.

Paterson always knew based on the plan that the building was not 340 meters from the river but they never actually physically measured that distance on the neighbouring property. They did appreciate that the distance was approximately 170 meters when their report was being done or of that order.

Sometime during the period that Paterson was doing its work, Lamadeleine made them aware of the Golder report referring to his property and provided them with a partial copy of it.

Paterson appreciated that its report was going to be used for the purpose of obtaining a building permit.

Leamen closed the case for the plaintiff by filing as Exhibit 41, two resolutions of the municipality in 1988 and 1989.

Steven Walker

Examination-in-Chief

Mr. Walker is the president of the defendant company John D. Paterson and Associates Ltd. He graduated in 1978 from Queens University in geological engineering. He has been employed by Paterson since then. His work is primarily geo-technical engineering and Paterson specializes in geo-technical engineering. The company works across Canada. Before 1990 the company had done work along the river and they were aware of the situation with respect to landslides. They were aware in 1990 that Golder had been retained by the Authority with respect to a study along the river but had never seen any published reports. Filed as Exhibit 42 were the notes of his associate Mr. Stewart. The notes are dated October 9, 1990 and record a call from Conrad Lamadeleine. He notes that mention is made of landslides in nearby places and there is a distance quoted "1200 feet from river". Nothing came of the call at that time.

Exhibit 43 is a note made by Stewart on November 6, 1990 again recording another call with Lamadeleine. The understanding was that Lamadeleine was putting up a new building some distance from the river and wanted a bore hole sunk and wanted to determine soil condition under the building and if it was a safe distance from the slope. In this memo it is noted that the building is 1250 feet from the river.

At Tab 74 is a letter that was received November 8, 1990 whereby Paterson was retained by Lamadeleine. The letter says in part:

> Testing my land to put a building to know if it is safe also to check the river slope because there is a lot of discussion going on about the Nation River. To make a long story short find out if it is safe to put a building.

My notes indicate that Paterson had ceased working in the area of the river in 1983 but in any event Walker's evidence was that he undertook the project on behalf of Lamadeleine and dispatched forces to the site.

Walker himself did not go to the site but rather one of his technologists, Mulcher, was sent. It was Walker's evidence that Lamadeleine told the technologist where to put the bore hole and Lamadeleine provided the technologist with a copy of the site specific Golder report. The technologist was to examine the condition of the slope and to take some survey cross sections of the slope. Walker explained that in order to properly assess the slope one must know the geometrics of the slope including height and angle.

Walker identified Tab 23 as the Golder report that was received by Paterson. At Tab 23 is the site specific Golder report to Lamadeleine dated November 1988. Walker testified that they did not receive this report in its entirety. Refer to page 156 of the report. It was Walker's evidence that they received a similar drawing but not one which showed the location of the bore hole. As well the title of Golder Associates was missing. Walker confirmed that Paterson did get the log for bore hole #1 in the north east corner of the site and the text of the Golder report.

Exhibit 25, Tab 4 are the field notes from Mulcher's observations and survey measurements on November 15. On the 3rd page thereof is a sketch of the site indicating slope 1 in the north east corner of the lot and slope 2, some 78 meters west along the bank. The sketch shows bore hole #1 as being the Paterson bore hole.

At page 1 of Tab 4 is the information from the nite with respect to slope #1. Information with respect to slope #2 was on the back of the first page of Tab 4 and is in as Exhibit 44.

It was Walker's task to review the information when it came back to him from Mulcher together with the bore hole information which is also contained in Tab 4.

Beginning at the third last page of Tab 4 is a computer generated print out of slope stability analysis which produces a critical failure circle and a lowest factor of safety. It was Walker's evidence that their analysis using conservative assumptions and high pore water pressure produced a factor of safety of 1.4 which he considered quite satisfactory. Other information available at the time was the Golder bore hole results, and the mapping of the area by the Ministry of Natural Resources showing factors of safety.

At Tab 75 is Paterson's letter to Lamadeleine dated November 19, 1990. The first paragraph refers to the structure being located greater than 340 meters from the crest of the South Nation River. Walker got this distance from the drawing that originates from the Golder report showing the distance to be approximately 1200 feet as the distance from the ravine to

the river. He was aware at the time that it was parallel to the property line. He did not compute the shortest distance. When asked by Rasmussen why he used the distance from the drawing in the Golder report, he replied when reviewing the Golder report it seemed to be the distance that was being discussed.

It was Walker's evidence that he had some discussions with Lamadeleine prior to the letter of November 19 and before they did the work. There were no discussions with any other people up to the point of this letter.

The second paragraph of the letter refers to factual data that has been used to assist Paterson in its analysis. Walker explained that the factual data allowed Paterson to confirm that the soil condition at the theatre was similar to the bore hole of Golder near the slope. They relied on the Golder bore hole to provide soil information down near the river.

The letter of November 19, 1990 goes on to say that after reviewing the data in the Golder report and on the basis of Paterson's findings, it is Paterson's opinion that the proposed development complies with the concerns that have been expressed regarding development along the South Nation River. Walker testified that the concerns being referred to were that there was a study area that did not allow development unless there was confirmation of safety by way of a site specific study. As well there had been preliminary information from the Authority setting out set backs.

In any event, by this time Walker had determined a factor of safety against rotational failure of 1.4 and was satisfied with that. In arriving at a factor of safety of 1.4, he assumed full hydro-static saturation with horizontal flow or other words, high porewater pressure which was unlikely to develop. In fact, if the porewater pressure drops, then the factor of safety goes up. In other words, they assume the worst porewater pressure of .6. It is more likely, according to Walker's evidence that it would have been significantly lower, perhaps .4. That would raise the factor of safety significantly from 1.4 to perhaps 1.7 or more.

The last paragraph of the letter of November 19th states that Paterson's calculations indicate that the proposed structure is set back a distance that is more than adequate to buffer the structure against a possible slope failure should it occur. With respect to this paragraph, Walker explained that when they have an FS less than 1.5 they take a failure circle back into the slope until they get an FS of 1.5. Having done so they got back 10 meters, ignoring retrogression. Walker explained that they did not expect any retrogression because the factor of safety was so good there would not be an initial failure to begin with. In other words, in their opinion, there would not be an initial failure and without that they need not consider retrogression.

At Tab 77 is the typewritten paragraph authored by Lagarec with Lamadeleine's handwritten note "this is important in order to obtain my building permit but it gives you plenty of room". Walker testified that Lamadeleine sometime between the letter and Paterson's formal report, brought that document in indicating that he needed the paragraph in the conclusion of the report. Walker remembers nothing else of the discussion.

At Tab 79 is Paterson's final report. At page 3 in the first full paragraph the report states what Walker was essentially saying in his evidence, that is, that while the Golder report addresses the theory behind retrogressive slope failures which is of particular concern between Casselman and Lemieux, for a retrogressive type failure to occur an initial slope failure is required. Paterson's calculations indicate that the factor of safety against an initial rotational failure occurring is in the order of 1.4 which is considered to represent a marginally stable slope condition and that analysis was conducted using excessively high pore water pressure conditions that are likely never to develop in the slope.

The report at page 3 goes on to state that based on the results of the Paterson study, it is the opinion of the firm that the slopes bordering the South Nation River at this particular site are not in their present condition, considered to be unstable. Walker testified that by "present condition" he was referring to the fact that nature has a way of changing the condition of a slope. As well, human activity can change the condition of a slope.

In the last paragraph of the report the following is stated:

> We have reviewed the Golder Associates report #8812486 and agree that there is always the possibility of landslides occurring along the South Nation River; however, after examining the site conditions (i.e. gullies, slopes, etc.) and the lands being forested and well drained, it is our opinion that the proposed building is sufficiently set back from the river so that should a failure occur, the building would not be adversely effected.

With respect to the information contained in this paragraph, Walker testified that he would have gotten from the technician the fact that the lands were forested and well drained and he also knew from the Golder

report that the porewater pressure was not in fact what they used in their calculation. In other words, they used a higher porewater pressure. Walker testified as well that the reference to the property being well drained would have come from the information from the bore holes both Golders and Patersons.

At the second last page of the report is a document entitled Simplified Bishop Slope Stability Analysis which is produced by a computer program. It relates to slope #1 and shows the circle of slope failure with a factor of safety of 1.4. I had Walker explain this to me and I noted on my copy of the analysis at Tab 79 that in the event that one assumes a factor of safety of 1.5 then the circle of failure goes back into the slope a further 10 meters.

Walker has been to the site on two occasions. Firstly in December of 1996 with respect to the OMB hearings and secondly a day before he gave his evidence at this trial. He has not changed the opinion as expressed in the letter and the report. On both occasions he walked the slope on the property from one cottage to the other and his observations on those two occasions satisfied him that the information he had was representative of the site. He saw no changes in the slope between 1996 and the day before giving his evidence that caused him any concern but he did qualify that statement by saying it was hard to see the day before.

Walker explained that his technician had taken samples of clay in shelby tubes and thereafter took sheer vane strength measurements at the lab. This is different from field sheer vane strength in that field sheer vane strengths are typically higher. It is commonly known that lab sheer vane strengths are lower.

Cross-Examination by Leamen

It was Walker's practice in most cases to send out a technician for slope analysis. Once the geo-tech engineer gets the field results back, if he thinks it appropriate then he will go out. There were 4 or 5 licensed geo-technical engineers with the firm at the time and about a dozen technicians including Mulcher.

Walker knew that the purpose of the report was to enable Lamadeleine to get a building permit for a restaurant theatre which would see high use in the springtime. He conceded that it was an important and responsible task that Paterson undertook.

He instructed Mulcher to confine his investigation to the plaintiff's property. They do not like to trespass on other property without permission. They never asked permission from adjoining land owners to go on their property and indeed they had no interest in seeing the adjoining property unless they could see it from Lamadeleine's property. Although they knew that the land which was closest to the river was not on the plaintiff's property, in their opinion retrogression was not a problem and therefore they restricted their investigation to the plaintiff's property. Walker conceded that the risk of initial failure has nothing to do with the property lines.

Walker conceded that one of the parameters in dealing with initial failure of the slope is the steepness of that slope and that it was accordingly relevant to know whether the plaintiff's slope was steeper or not when compared to the neighbour's slope.

Walker confirmed that he knows today that the closest slope is 170 to 180 meters from the river. He was asked by Leamen if he knew anything about the closest slope and he answered that he only checked slopes leading to the plaintiff's property. He was asked how far past the Lamadeleine property he had gone. He answered that he did not know precisely but said perhaps 200 feet.

Walker has seen the McRostie reports. He confirmed that he had received McRostie's report which is at Tab 129 and that he read it. Leamen suggested to Walker that he saw in the report that it was McRostie's opinion that the most critical slope was to the east of Lamadeleine's property. Walker responded by saying that McRostie had qualified that statement. Leamen asked Walker whether even to this date he had looked at that slope and Walker replied that he did not think McRostie had identified the actual location of it so that he did not know whether he had seen it or not.

Walker confirmed that the factor of safety of 1.4 as calculated was based on slope measurements taken by his technician. He was asked by Leamen whether if the slope to the east is steeper, that might change the factor of safety. Walker conceded that it could, if all other factors were the same.

Walker conceded that his report identified the fact that the slope had marginal safety at 1.4. If the factor of safety had been 1.3 there would have been more risk. He conceded that the lower the factor of safety the more the concern. He conceded that 1.4 indicated marginal safety but still he did

no calculation of retrogressive distance. He explained that the factor of safety of 1.4 was arrived at using very conservative assumptions and that in reality the factor of safety would be higher. As a result he felt no need to do a calculation of retrogressive distance. He does not know whether he would have done such a calculation if the FS had been 1.3. He avoided Leamen's hypothetical question assuming the slope to the east was steeper and the factor of safety was 1.3. He did concede that if the factor of safety had been 1.2 he would have done an analysis based on actual measurements. Leamen having gotten this response asked Walker why he did not start with a realistic calculation to begin with. Walker explained that they like to be conservative and used very conservative assumptions at the beginning to "see where we are".

Again, Walker confirmed that he had the Golder site specific report to Lamadeleine and knew that Golder was saying that it was safe to build to the south of the gully. He knew that Golder had done a lot of investigation along the river but explained that he had an opinion different from Golder based on the information that he had, limited to the plaintiff's property.

Even in the face of the Golder site specific report, Walker felt comfortable with his recommendations and before making his recommendations he did not speak to anyone at Golder's or at the Conservation Authority.

924 He confirmed to Leamen that he was comfortable with his report notwithstanding that he had never been to the site at the time he delivered the report, it was a technician who had taken the measurements limited to the plaintiff's property and no analysis of retrogressive distance was ever done.

Leamen produced to Walker a Paterson report dated October 11, 1991 relating to part of lot 17, Township of Cambridge. It was marked as Exhibit 45 in these proceedings. Walker acknowledged having read the report but was not involved in its preparation. The report is addressed to the National Bank of Canada. The author of the report is Andrew Tovell who is a senior geo-technical engineer with the Paterson firm. Walker became aware of the report last month while reviewing matters with Rasmussen. He has not discussed the report with Tovell. He acknowledged that the property which is the subject of this report has the same description as the plaintiff's property. He acknowledge that the property which is the subject of this report is east of the plaintiff's property and that he has not examined the area but conceded that the area under consideration would be close to the area 170 meters from our building.

The report, Exhibit 45, notes that the "crest of the slope at the closest steep part of the ravine is located 120 meters to the north of the rear wall of the house". A question arose at this point of the cross-examination as to the location of the house referred to and that point was eventually clarified by way of admission.

The report goes on to say that a direct line to the river intersects the crest of the ravine slope at a distance of approximately 150 meters from the rear wall of the house and notes that the field work consisted of determining the geometry of the slope at a critical section along the ravine and along the South Nation River slope to the north of the property. The report notes that "an engineer from this firm also visited the site to assess the existing slope conditions". Leamen asked Walker why it was necessary to send an engineer out in this case and not in the plaintiff's case and Walker really had no answer to the question.

The report notes that the existing soil conditions on the property are known from "our previous works in the area to consist of a veneer of fine sand over a thick deposit of sensitive silty clay". Walker conceded that this probably describes the same soil conditions as the plaintiff's property. At page 2 of the report the Poschmann study of the South Nation River is referred to and the author Tovell says, referring to the study:

> ... It does serve as a valuable assessment of risks associated with development along the South Nation River. In that report, the particular section of the South Nation River bank slope adjacent to the subject site is identified as having a factor of safety of the order of 1.2 to 1.5 which would indicate that the slopes have marginal stability.

Walker noted that he referred to that report in his work and that he came up with similar factors of safety.

Walker conceded that coming up with factors of safety of 1.2 to 1.5, Poschmann used the highest porewater pressure, that is, .62 as did Walker in his report. It should be noted that the Poschmann report was the result of a regional study by the Ministry of Natural Resources. Leamen suggested to Walker that the Ministry accepts a minimum factor of safety of 1.5 and Walker disagreed with that suggestion.

At Tab 1 is an MNR report entitled Calculation of Set Back Lines for Slopes with a Factor of Safety of less than 1.5, which Walker has seen. At page 13 of the report the following is said:

> Factor of safety is a ratio of the forces working to keep a slope intact (resisting forces) to the forces working to destroy it (driving forces). Theoretically a factor of safety of 1.0 implies that the resisting forces are just equal to the driving forces. In practice it has been found that a factor of safety of 1.5 is the critical value; that is, a slope with a factor of safety less than 1.5 will probably fail, while a slope with a factor of safety of greater than 1.5 will possibly fail. However any slope can fail, providing the correct conditions exist in the soil.

Leamen asked Walker whether he acknowledged that as a reasonable proposition. Walker said that if one was going to use terms probably and possibly then there would be merit in what is said at page 13 of the report.

Leamen pointed out that the Ministry determined 1.5 as a critical value using an assumption of high porewater pressure to which Walker responded that these were old set back lines which were used to initially prohibit building within the lines but now building is allowed.

Returning again to Exhibit 45, the Tovell report, and the assumed parameters for the detailed analysis of the stability of the slopes under consideration, Walker conceded that he used exactly the same parameters and indeed the same program to determine slope stability.

At page 2 of the report after indicating the parameters used, the author notes that "The slope along the south bank of the South Nation River has a minimum factor of safety (FS) of the order of 1.06". Leamen suggested that that was McRostie's most critical slope that was being discussed. Walker in response directed Leamen to the next paragraph which notes that "These factor of safety values are based on the slopes becoming fully saturated and using excessively high porewater pressure conditions (i.e. horizontal ground water flow) that are likely never to develop in the slope. The application of more realistic ground water flow criteria (i.e. flow parallel to the slope face) would result in considerably higher factors of safety".

Leamen pointed out to Walker that both he and Tovell did the same analysis using the same parameters and Paterson ended up with factor of safety of 1.4 and Tovell with a factor of safety of 1.06. Walker attempted to explain this away by saying Tovell may have been further east.

At page 3 of Exhibit 45 the following is said:

> In the case of slopes along the South Nation River it has been previously observed and is part of the engineering literature that initial failures along the riverbank often are followed by subsequent failures as the failed material from the initial slide is carried away by the river and does not provide adequate support to the oversteepend scarp slope resulting from the initial slide. Further slides can follow the second failure in the same manner. In this way the failures can retrogress further into the table lands than would be the case if the failure was limited to the initial slide mass.

Walker explained that this was a general comment applicable to the river in general although he was aware of retrogressive slides across the river from the plaintiff's property. He was also aware of the slide just down stream of the plaintiff's property on the same side as the plaintiff's property but did not know how far it retrogressed. Walker then made an interesting admission and that was that he had become aware of the slide downstream of the Lamadeleine property on the same side of the river as the Lamadeleine property since doing the work on the Lamadeleine property. In other words, he does not recall being aware of this slide at the time he prepared his report. He then testified that at the time of the report they had Ministry mapping and he believes that it showed the slides north of the river but doesn't know whether it showed the slide south of the river. He conceded to Leamen that the slide down river and on the same side of the river as the Lamadeleine property would have been of interest to him but would probably not have resulted in any different conclusions.

Walker acknowledged that they did know that with respect to the slides across the river the initial failure had retrogressed a significant distance back but pointed out to Leamen that there had been failures on the plaintiff's property that did not retrogress. As well he pointed out that he did not know when the slides across the river had occurred and conceded that that information would be relevant.

At page 4 of Exhibit 45 it is noted that the overall slope factor of safety at the riverbank is 1.06 and Walker conceded to Leamen that if he had gotten that result he would likely have done a retrogressive distance analysis.

Also at page 4 of the report, Exhibit 45, it is noted that in the face of a factor of safety of 1.06, the slope is isolated from the subject property by a ravine. Walker was asked whether there was any ravine on the plaintiff's property that offered protection to the sucrerie in the location in which it was built. Walker responded in the negative.

Leamen pointed out to Walker that he came up with a factor of safety of 1.4 with no ravine. He still said the building was safe. Tovell, on the other hand, had a factor of safety of 1.06 and a ravine. Tovell's report was done with respect to the safety of a single family residence.

[It should be noted that in general terms, Tovell's report is much more substantial than Walker's report notwithstanding that Walker's report was prepared in connection with the safety of a theatre restaurant that would house hundreds of people.]

Looking again at the Paterson report, Tab 79, Walker confirmed that they last page of the report which is titled Bore Hole Location Plan, was prepared by Mary Granville, Paterson's draft person. It would have been prepared on Walker's instructions. Leamen suggested that the drawing was not accurate. Walker responded that it had been prepared based on the copy of the drawing provided to them, that is the Golder drawing with the bore hole location whited out or removed. Walker did not know who had prepared the Golder drawing but assumed that it was correct. Walker noted, the drawing coming from Golder, he would not reinvent the wheel.

Walker was asked whether he could have, on his bore hole information, determined the estimated retrogressive distance. He responded that this would not be the best information to use because the soil samples had been somewhat disturbed in being taken back to the lab. Leamen asked him whether he could have applied the Mitchell formula to the information that he had from his own bore hole. As I understood his answer he could have done so if he thought it relevant to do so but he did not think it relevant in the circumstances. What they did do was determine the factor of safety and then do the failure circle.

Walker could not say whether Tovell had done a retrogressive distance measurement in connection with Exhibit 45 but Walker pointed out that Tovell was faced with a situation where there was a ravine acting as an interceptor to any retrogressive slide.

Leamen concluded his cross-examination by requesting Walker to get Tovell to tell him where the house was located and which slope he was evaluating.

Re-Examination by Rasmussen

Referencing the McRostie report at Tab 142, plate 1, Walker marked with red circles the two cottages on either side of the plaintiff's property between which he walked.

Still referencing plate 1 in Tab 142, there are two slope indicated there; 2A1-1 and 2A1. Rasmussen pointed out that the most critical slope as identified by McRostie is located between those two slopes. Rasmussen asked Walker whether he agreed with McRostie's identification. There was a long pause. He then responded that it is really tough to say, to pick the most critical slope until one does the calculations. It's the calculations which tell you which is the most critical slope. He chose slope 1 because of its height and steepness.

Walker did not send any reports to anyone other than Lamadeleine in 1990.

Charles Kwok

Examination-in-Chief

Mr. Kwok is 41 years of age and associated with the defendant Jacques Whitford Limited. He obtained his Bachelor of Civil Engineering in 1982 and his Masters in Geo-Technical Engineering in 1984. He has been with Jacques Whitford since 1988 in Halifax, Ottawa and Calgary where he is presently positioned. It was his colleague Raymond Hache who took the initial call from Lamadeleine the result of which Kwok attended at the site with Lamadeleine. He and Lamadeleine either drove or walked the forest road that boundaries the west of the property to the crest of the slope which was about 20 meters from the river's edge. They then went to the building site where the previous building had burned down and Lamadeleine asked him to do a geo-technical investigation with respect to that location.

Sometime before the attendance at the site Lamadeleine had provided Kwok with a site plan. The plan at the second last page of the Jacques Whitford report at Tab 72 is not exactly what Lamadeleine gave him but that page is based on what they received. It was Kwok's evidence that what he received from Lamadeleine had measurements noted on it.

After agreeing on a price a drill rig was set up and a bore hole was drilled. One of Jacques Whitford's hydro-geologists supervised the drilling. At Tab 1 of Exhibit 25, pages 1 and 2 are the hydro-geologists' rough field notes.

Kwok confirmed that the Jacques Whitford report at Tab 72 was prepared by him and in its preparation Kwok relied on the data in Tab 1 of Exhibit 25.

Page 3 of Tab 72, the Jacques Whitford report, describes the scope of the work as Kwok understood it and that was to investigate the soil conditions at the proposed building site by carrying out a field and laboratory study, to survey the gully immediately adjacent the proposed site in order to determine its slope stability and to provide geo-technical recommendations for the design and construction of the proposed structure. It was Kwok's evidence that the scope of work did not include an assessment of the slope stability at the banks of the river.

The report is dated October 31, 1990. At some point prior to the delivery of the report, Kwok had a telephone discussion with Lamadeleine. He told Lamadeleine that the report was pretty close to being ready. At that point Lamadeleine told him that he had to address the stability conditions of the South Nation River because this was very important to him. Kwok, at that point, appreciated that this was not part of the original mandate. He had looked at the riverbank at that one location on the forest road but he was not looking at retrogressive failure as part of his mandate at the time.

The last two sentences of the second paragraph in section 6.1 of his report at Tab 72 say the following:

> The stability condition of the Nation River located approximately 350 meters north of the proposed restaurant is not of concern. It is not expected that instability of the riverbank will jeopardize the proposed building at the location investigated.

Kwok, in his evidence, explained that the measurement of 350 meters was based on the distance of 1156 feet indicated on the drawing that he had received from Lamadeleine. As well, Kwok's evidence was that in including these two sentences in his report, he was intentionally addressing Lamadeleine's concerns as expressed to him over the telephone prior to the report being delivered.

At the last page of the report at Tab 72 is a profile of the gully. At the time that Kwok was doing his work he had no material from Golder nor had Lamadeleine told him before delivery of the report that he had a site specific report from Golder. As well Kwok, while doing his work, did not know that Paterson had been contacted nor, strangely enough, did Kwok know that Golder had been doing studies on the river for years.

With respect to paragraph 6.1, Kwok had gotten the 350 meters from the drawing and thought that this would put the building far enough away from the river and that there would be no problem.

At Tab 73 is the letter of transmittal dated November 1, 1990 which accompanied the Jacques Whitford report as it was delivered to Lamadeleine. After delivery Lamadeleine came in with the letter of transmittal and with another page attached thereto. Lamadeleine explained to Kwok that the suggested paragraph to be included in his report was authored by Lagarec (whom Kwok did not know) and that Lagarec was doing a study for the municipality, had seen the subject property, and in his opinion, it was safe to build north of the ravine. All of the handwriting on the two pages at Tab 73 are Lamadeleines. Lamadeleine, when he brought in the pages, asked Kwok to include in his report the typewritten paragraph prepared by Lagarec. At that point in time Kwok was not aware of the Golder report referred to in the suggested paragraph and so he asked Lamadeleine for it. In response, Lamadeleine provided him with Tab 15, the Golder report dated September 1988 to the Authority.

In his discussions with Lamadeleine, Kwok told him that he had not looked at the river from the point of view of retrogression. Lamadeleine indicated that he would have to put in the Lagarec paragraph because he had already advised with respect to the slope stability at the river and it would look silly if he didn't include it in his report. Kwok in response told Lamadeleine that they were not going to change their report. At the same time they were concerned about retrogression and he told Lamadeleine that he would look at the Golder report and write an addendum. Kwok explained in his evidence that at that point in time he was concerned about retrogression because he had said what he had in section 6.1 of his report (last two sentences) and now found that there were studies around with respect to retrogressive landslides on the river and he would have to address that point.

At Tab 2 of Exhibit 25 is a note that Kwok made during the course of a telephone discussion on November 5, 1990 with Grant Decow from the Conservation Authority. Kwok believes that at that point in time Decow had a copy of his report dated October 31 although Kwok had never sent it to anybody other than Lamadeleine. The notes discloses the following. Decow told Kwok that there was retrogressive failure up to 750 meters observed in historical terms (in 1895). The most recent failure was in 1971

which took 38 hectares. Decow asked him if he had looked at historical data and Kwok replied in the negative. Decow disclosed to him that there was a Golder report site specific for the same property. Kwok told him that he was not aware of that report and told Decow that he had not looked at the retrogressive failure aspect of the South Nation River. Decow told him that he would have to make his recommendations based on two separate reports (Golder and Jacques Whitford) and that he would make it on the more conservative side (Golder). Decow advised Kwok that Golder had indicated that the gully would act as a stop for retrogressive failure.

Kwok and his associate Hache had both Golder reports within a week or so and read them.

At Tab 66 is a letter received from Lamadeleine probably before Hache and Kwok went to the site again. In the letter Lamadeleine refers to Kwok wanting a report that Lamadeleine didn't even know existed. Kwok explained in his evidence that this was Golder's general report.

In the letter Lamadeleine says "I want you to tell me in a letter that you still believe that the set back which is about 350 meters is still adequate and should not jeopardize (in your opinion) the construction of my theatre restaurant which is one storey high." The letter also advises Kwok that Lamadeleine has already had two letters like that from Dr. Lagarec and the firm of John D. Paterson and Associates and Lamadeleine poses the question "If their opinion is the same, why would it be that you be different?" Kwok did get a copy of Lagarec's report which is at Exhibit 25, Tab 3 and dated November 15, 1990 but Kwok did not receive the Paterson report prior to his letter of November 22, 1990. He had no discussions with Paterson before submitting his report and letter of November 22 nor did he have any discussions with Golder prior to that time. It should be noted that the letter from Lagarec dated November 15, 1990 expresses "a limited potential retrogression" with respect to Lamadeleine's property.

Kwok, in his evidence, went on to explain that he wanted to address the slope stability part of his report because he was not prepared to leave it the way it was in that it was "wide open" and he hadn't looked at it from the point of view of a retrogressive landslide and therefore felt his report should be qualified.

About a week before November 22 both he and his associate Hache went to the site. They accessed the property from the forest road on the west side of the property and walked from there east along the bank looking at the terrace and the slope angle and the tree cover. The leaves were off the trees. He believes that they walked not very far past the east property line of the subject property. On the top of the slope they observed large tree trunks. Visibility at the shoreline was quite good and they could see 200 to 300 meters along the bank in an easterly direction (Kwok did admit that this was a total guess).

At Tab 76 is the letter sent out by Kwok to Mr. Lamadeleine bearing date November 20, 1990. Lamadeleine brought the letter back to Kwok with revisions as marked on the copy at Tab 6 of Exhibit 25. What Lamadeleine had done was to purport to completely erase the third paragraph on page 2 of the letter of November 20 wherein Kwok references the conditions immediately east of the site as being rather different and advising that the possibility of a retrogressive failure at that site has not been investigated and that failure upstream could possibly jeopardize a portion of the present site. As well, Lamadeleine had struck out the last paragraph of the letter of November 20 which indicated that as a condition of constructing the restaurant at the proposed location Kwok recommended an annual inspection be carried out to assess the stability conditions of the lower slope. As well, Lamadeleine purported to add a paragraph to the effect that "It is the opinion of this firm that the set back in this case is more than adequate".

At Tab 80 is the letter of November 22 from Kwok which represents the last communication with Lamadeleine. The letter of November 22 changed the letter of November 20 in the following fashion. The letter of November 20 provided as a concluding paragraph the following:

> As a condition of constructing the restaurant at the proposed location, we recommend an annual inspection be carried out to assess the stability conditions of the lower slope. Such inspections should be conducted in the spring and should consist of detailed photographic record of conditions such as erosion and other signs of distress. Should the inspections reveal adverse conditions remedial measures may be required. Removal of vegetation should not be carried out anywhere within the property.

In the November 22 letter the last paragraph read as follows:

> Should the conditions of the riverbank (such as erosion etc.) change in the future, the overall stability of the site should be assessed at the time. Remedial measures may be required according. Presently, removal of vegetation should not be

carried out anywhere within the property.

[So it is apparent that Kwok cooperated with Lamadeleine to a certain extent by removing from the letter of November 20 the condition that there be an annual inspection carried out to assess the stability conditions of the lower slope.]

Kwok in his evidence explained that by his letter dated November 22, he was trying to convey the fact that he could not completely rule out the possibility of a future retrogressive landslide similar to those which occurred in 1971 and 1910. He was also conveying that having regard to the terrace, if there was a failure at the toe of the slope the chances were that it would be confined to the area below the terrace. Kwok explained in his evidence that he retained his reservation with respect to the riverbank conditions immediately east of the site because he had not investigated that location. In his letter of November 22 he declined to strike out the third paragraph on page 2 referencing the conditions to the east of the site because he felt it was an important part of the report to convey that the riverbank failure is not restricted to the property owner. Kwok in his evidence explained that in expressing the caveat in the last paragraph of his letter to the effect "provided that the existing site conditions are unaltered", he was referring to both human activity such as steepening the bank or taking down trees and to natural erosion.

The letter of November 22, 1990 was sent by Kwok to Lamadeleine by fax. He does not recall if he heard back from Lamadeleine with respect to the letter however on December 20, 1990 he got a call from Denis O'Grady of the Conservation Authority requesting a copy of the November 22 letter. He called Lamadeleine for permission to do so and Lamadeleine declined to consent but asked Kwok to fax him a copy of the letter instead. See the memo to file made by Kwok, Exhibit 46, and see the fax from Kwok to Lamadeleine dated December 20, 1990 attaching the letter of November 22. Lamadeleine did not explain why he wanted another copy nor did he offer any explanation why it should not be sent to O'Grady.

Kwok reattended at the site in November/December 1996 in connection with the OMB matter. He took the same route as in 1990, down the forest road and up and down the riverbank. He talked to Morey before he went out. Morey indicated that there was a minor failure in 1995 on the plaintiff's property which took 10 feet at the top of the slope at the west property line where there was no terrace. Morey informed him that the slough had taken out one of the piezometers. On his re-attendance in 1996 Kwok noticed the slough at the west boundary of the property and also noticed smaller erosions along the bank of the property. This did not cause him to change any of the opinions expressed in his report and in his letter of November 22 which had specifically warned that should the conditions of the riverbank (such as erosion) change in the future, the overall stability of the site should be assessed at that time.

Cross-Examination by Leamen

Kwok knew that his retainer was with respect to the construction of the building on the burn out site north of the gully and knew that the purpose of the report was to obtain a building permit.

Leamen put an interesting question to Kwok on cross and that was what was he trying to say in his letter of November 22, 1990. Yes build or no don't build. In response to that question Kwok waffled to some extent and started reading his opinion. Leamen pressed the matter. Finally Kwok said that his letter of November 22 was saying that it was safe to build with a strong reservation. Still Leamen pressed and said "Should Lamadeleine build or not build?" to which Kwok replied it was "Up to him".

Leamen still pressed and asked Kwok what he would do if he was the owner of the property and Kwok conceded that "It would be a gamble". He confirmed that having been back to the property in 1996 he would still consider it a gamble today.

Lamadeleine had not told Kwok not to look at the slopes to the east of the property but Kwok did not do that because he was not asked to do it.

Kwok conceded that before he completed his main report dated October 31, 1990 Lamadeleine had asked him to address the slope stability at the river. He conceded that he addressed that slope stability in section 6.1 of his report without doing any tests. He explained that he did so "Because retrogression was not the topic". He conceded that if it had been the topic then he would have done a slope stability analysis as he did with the gully.

Leamen suggested to him that without appropriate tests he was not in a position to express an opinion on the slope stability at the river to which Kwok responded that that would depend on the conditions and sometimes just a look would be sufficient. In this case, he thought that any failure would extend no more than 40 meters from the river's edge and the building being 200 meters from the river's edge, there was no problem.

Leamen pointed out to Kwok that in section 6.1 of his report he notes that the Nation River is located approximately 350 meters north of the proposed restaurant. Kwok conceded that that was the distance indicated in the site plan and it was not the closest distance to the river. He maintained that it really didn't matter because retrogression was not in his scope of work. [This doesn't make a whole lot of sense]

Leamen asked him why he mentioned the 350 meter distance and Kwok responded that one always has to say where the proposed building is. Leamen suggested that the distance is irrevelant to any consideration of retrogressive failure and Kwok responded that it was irrelevant because retrogressive failure was not a part of his study.

Kwok conceded that by November 22 he knew the distance was less than 200 meters but that reduced distance did not contribute to his strong reservation.

Kwok confirmed that it was his associate Hache who attended at the OMB meeting in 1996/97 in anticipation of his testifying before the Board. Leamen asked if Hache was prepared to say to the Board that it was a "gamble" as Kwok had put it and he was unable to say although he felt that Hache held the same view as he but he might not have used the same word. Again he explained that what they were saying was it's fine with a strong reservation, maybe yes, maybe no. [In my view his report and his letter fails to convey what he says he was attempting to convey and that is that it was a gamble to build north of the ravine].

Kwok conceded that prior to November 22 he had Golder's phase I report and Golder's site specific report and both expressed a reason to be concerned. He had also spoken to Decow with respect to the 750 meter retrogressive slides and this was reason to be concerned. Kwok did not speak to Morey notwithstanding that he had his two reports. It was his evidence that he did not speak to Paterson because he did not think their report was finished notwithstanding the letter at Tab 66 from Lamadeleine indicating that he had two letters, one from Lagarec and one from Paterson. It was Kwok's evidence that what Paterson might think was not important to him. What was important is what he thought.

He does not recall whether he saw the air photos in the Golder site specific report. Leamen referred him to the air photos in Golder's report at Tab 23, page 157 and to Exhibit 2 which is a clearer picture of the area indicating the three retrogressive landslides in the area of the plaintiff's lands. Kwok did not recall whether he had seen them but finally said he would have looked at it. Looking at the air photo now, he was able to see the retrogressive slides across the river from the plaintiff's property. He agreed that they were significant with respect to the plaintiff's property. In the face of that concession, Leamen asked him what consideration he gave to those previous landslides. Kwok responded that what was important was whether or not there would be an initial failure. He looked at the plaintiff's land and saw much vegetation. He looked across and saw no vegetation. He reiterated his opinion that it is unlikely that there would be an initial failure and if there was, it would be limited to the terrace.

Kwok conceded that there had been an initial failure after his report but explained that it was really a sloughing and was not a big rotational failure.

Leamen and Kwok then got into the same discussion as before about the fact that the November 22 letter intended to address the slope stability at the river but that Kwok did no testing in that respect. The situation got curiouser and curiouser with Kwok now saying that the testing had been done prior to the first report and that in his opinion it was border line with respect to retrogression. He conceded that he did no additional testing for the second opinion because the data was already there indicating that the slope was border line for retrogressive failure. He conceded that he gave his first report and the opinion therein without considering retrogression and then after that had to look at retrogressive failure at that location. To do that he visited the site and made quick calculations which he is unable now to locate. He did not do a factor of safety calculation. He then surprised everybody by saying that he did do a retrogressive distance calculation using the Mitchell formula with the result that he calculated the retrogressive distance to be about 100 meters from the shoreline. For this calculation he used the information from his bore hole near the building. He does not have those calculations either.

[Note if anything turns on it, I completely reject Kwok's evidence with respect to his having done any quick calculations after returning to the site and with respect to his having done any calculation as to the retrogressive distance using the Mitchell formula or any formula at all.]

Finally, Leamen directed Kwok once more to page 2 of his report, paragraph 3 which suggests that while a failure upstream could possibly jeopardize a portion of the present site, it is also noted that a ravine is present between the proposed restaurant and the east property line and that a ravine such as the existing one may act as a potential barrier of retrogressive failure. With respect to that suggestion, Kwok conceded that the ravine is

not within the plaintiff's property and if the retrogression was west of the ravine, it would be of no help.

With respect to the location of the house which was the subject matter of Exhibit 45, the Paterson report of October 11, 1991, Rasmussen admitted its location by reference to Exhibit 10 with a circled X. The house is located in the very south east corner of the Lamadeleine property.

That having been admitted it appears that part of the deal for the admission was that Rasmussen would have an opportunity to call Tovell which he did.

Andy Tovell

Examination-in-Chief

Tovell obtained his Bachelor of Applied Science and Civil Engineering in 1979 and by 1982 had successfully completed seven post graduate geo-technical engineering courses at Carleton University. He is a member of the Canadian Geo-Technical Society and has been employed by Paterson from 1979 to present.

Tovell explained that Exhibit 45 was prepared for the National Bank and was not given to anybody else.

Tovell explained in his evidence that he analyzed both the ravine slope and the slope along the south bank of the river. The ravine slope had a FS of 1.15. The slope along the river had a FS of 1.06. In both calculations he used a pore pressure of 0.62. In each analysis he used a pore pressure of 0.62 which represented full hydrostatic saturation with horizontal flow. Exhibit 49 are field notes which Tovell made at the time relating to slope measurements. Tovell explained that he walked the slope with an inclinometer and measuring tape. He identified the slope as being that shown as 2A1 on Exhibit 10. His Exhibit 49 notes indicate slow river velocity at that point and minor slips which have occurred without retrogression.

Arriving at a FS of 1.06 for the slope along the south bank of the river Tovell used the parameters or assumptions indicated immediately above that statement which included a pore pressure ratio of 0.62. The second last paragraph on page 2 of Exhibit 45 states the following:

> These factor of safety values are based on the slopes becoming fully saturated and using excessively high porewater pressure conditions (horizontal ground water flow) that are likely never to develop in the slope. The application of more realistic ground water flow criteria (i.e. flow parallel to the slope face) would result in considerably higher factors of safety.

Tovell explained that by way of example if you have under drainage then this results in a greater reduction of porewater pressure and the safety factor goes up appreciably. It was Tovell's evidence that there was under drainage at this site as evidenced by the Golder report and the results of bore hole nearby.

Tovell then, over Leamen's objections, expressed the view that taking actual circumstances into consideration using actual porewater pressure as opposed to assumed the factor of safety came to 1.87 as indicated in Exhibit 50 and is a computer print out of the calculation. He explained that the information upon which he based his calculations comes from Tab 15, the Golder report of September 1988 to the Authority, using the bore hole information from bore hole 21 but also looking at bore holes 1 and 2 to see if bore hole 21 was representative. In his view, the bore hole information shows significant under drainage below the clay. Bore hole 21 was closest to the slope and close to the edge of the ravine. It was his opinion that the under drainage ran along the entire face of the subject property and that it would give a factor of safety higher than if the information had not been considered.

Cross-Examination by Leamen

The report, Exhibit 45, was prepared for the bank with respect to a house that was already constructed and was generally directed toward the risks of living there. Tovell acknowledged that there are significant risks to living on the river and he had done previous work on this stretch of the river. He speculates that there was probably a pending sale of the property and conceded that an unsafe report from him would not be favourable for a sale.

In attending at the site after receiving the information from the technician he did so because he needed additional information that he could only obtain by attendance at the site. In viewing the site he crossed other people's lands. There was no firm Paterson policy not to trespass. He did not walk the shore to find the most critical slope because the house under consideration was engulfed with two ravines. Had it not been he probably

would have walked the shore to find the most critical slope. He would have gone 100 meters in both directions starting with the closest point on the river to the building. There would be no point in going to a point at an angle perhaps twice the distance to the closest point. The further you get from a perpendicular location, the less the significance.

Tovell agreed that the factor of safety is a theoretical calculation to determine an acceptable level of risk and he conceded that the accepted practice is to use 1.5 as a minimum.

The witness agreed that if one could get precise measurements of the components that go into the FS calculation, that particular FS would be relevant only to the conditions as they exist at that time. The witness agreed that for that reason you usually don't use actual measurements because there is not a long enough record of them but he felt that the Golder information did produce records of sufficient length of time. He agreed that sometimes the worst conditions occur but still those conditions must be tempered with site conditions. He explained that because in these calculations we are dealing with theoretical maximums then we don't rely on 1 or 1.1. Other factors may come into play and so the geo-tech engineers say that they had better use 1.5.

The witness had no quarrel with the MNR saying that the theoretical acceptable factor of safety is 1.5.

Leamen directed the witness to Tab 1, page 13, the MNR report on the calculation of set back lines which says that in practice it has been found that a factor of safety of 1.5 is the critical value, that is a slope with a factor of safety less than 1.5 will probably fail while a slope with a factor of safety of greater than 1.5 will possibly fail. The witness was unable to agree with that portion of the report explaining that he had not seen enough information to say that slopes which approach 1.5 will fail. He did agree that 1.5 is accepted as a theoretical measure.

The witness agreed that his calculated factor of safety at 1.06 was not sufficient in that it didn't satisfy the 1.5 rule but he quickly added that the factors actually on site were not the factors that he used in making the calculation.

The witness confirmed that the alleged under drainage information was actually in existence in 1991 but he was not aware of it. This information on which he concluded the existence of under drainage did not come to him until the day before he testified. He explained that in 1991 it was not that important to determine the conditions at the river because the building was protected by ravines so at the time he did the study in accordance with usual standards.

The witness conceded that what under drainage does is discourage initial failure. It has nothing to do with retrogression in the sense that retrogression can still occur with under drainage but if there is no initial failure, there is no retrogression.

Leamen pointed out that in his report the witness said that there was some initial failures and that meant that the under drainage was not sufficient to stop the initial failure. The witness explained that the failure was as a result of the river eroding, not a circular failure. It was, as he described it, a "minor slippage" as a result of the river flow.

Leamen discussed with the witness the two landslides across the river and the one slightly downstream on the same side as the Lamadeleine property. He put it to the witness that whatever under drainage there was there, it had no effect. The witness replied that he did not know if there was under drainage there.

Tovell conceded that even if there is under drainage there can still be an initial slope failure and retrogression.

He admitted that he had not examined the aerial photos before preparing his report of October 11, 1991 saying it was not a relevant piece of information but on being pressed by Leamen he agreed that there were landslides beside the subject property where a building was to be constructed that would not be protected by gullies, then one could not disregard the existing landslides.

Finally he conceded that a reasonably competent engineer looking across the river and seeing the scars of the retrogressive slides would in those circumstances consider the possibility of retrogression on the subject lands.

Re-Examination by Rasmussen

The witness explained that assuming a factor of safety of 1.5 is theoretically the critical factor then in determining that number and in determining the likelihood of failure, one must use the most conservative factors.

Looking at Exhibit 51 and the piezometer readings from bore holes 21 and 1 and 2, the witness noted that those readings were consistent over a relatively long period of time from February 1 to April 11 the period when one would normally have the worst conditions of the year.

The witness confirmed in re-examination that in his mind sloughing of a riverbank is not synonymous with an initial failure.

Again looking at Exhibit 51 the witness purported to say that he did not consider either of the two landslides across the river to be directly across the river at his site. [What I get from Leamen's cross-examination is that it doesn't really matter if you can take actual figures in the formula and get to a factor of safety of 1.5. The accepted manner of proceeding is to use the most conservative factors and then see what factor of safety you come up with. If its less than 1.5 then it doesn't meet the standard, at least the standard required by MNR.

That finished the evidence for the defendant consultants. Mr. Marcus then called Steve Gauthier to give evidence on behalf of the Township.

Steve Gauthier

Examination-in-Chief

Mr. Gauthier is employed by the Nation Municipality. Cambridge is one of the Townships of the four that were amalgamated in January 1998 to form Nation Municipality. He has done some research and looked at documents and spoken to some people in order to give some evidence at this trial.

He was able to find out that the Township had a planner from 1984 to 1988 but none between 1988 and 1995.

Cambridge was a rural and agricultural community with small hamlets during the period in question.

The letter at Tab 64 from the Conservation Authority to the Clerk of the Township, Roger Brunet, dated September 20, 1990 was received by the clerk on September 26, 1990. The letter references the clerk's concern with respect to redevelopment at the site of the summer theatre. The letter notes that upon reviewing the Golder site specific report which was mandated to assess the slope stability of Lamadeleine's property, it clearly identified an area where construction on the lot might be feasible. The letter points out that the enclosed map taken from the report indicates where on-site existing ravines act as a natural barrier to potential landslides and the report very clearly identifies the area on the site which is considered safe from landslide retrogression as an area bounded on the north by the east west running ravine located immediately south of the existing building and on the west by a line drawn southward from the south east corner of the dance hall building to the north west corner of the existing house. (In other words it's safe to build on the south side of the ravine). Gauthier was able to confirm that that was the understanding at the time.

At Tab 67 is Lamadeleine's letter to the Authority dated October 1st wherein in the last paragraph thereof Lamadeleine then vows to fight to rebuild on the same site because that's where it was before.

At Tab 70 is the building permit issued October 16, 1990 showing an estimated cost of construction of $122,000.

At Tab 65 is the application for the building permit where under the heading "Description of the Work" the phrase "construction of the sucrerie theatre to the south of the ravine" was amended to read "construction of the sucrerie theatre to the north of the ravine" and the amendment is initialled by the building inspector, Andre Brisson and dated December 7, 1990.

The witness Gauthier addressed the question what happened between October 16 and December 7. He indicated that different studies were prepared during that period of time by Jacques Whitford, Paterson and Lagarec showing minimal risk to building to the north of the ravine. Tab 83 is a letter from the municipality to Lamadeleine dated December 5, 1990 advising him that a resolution of counsel had been past on December 3, 1990 to the effect that having regard to the Whitford, Paterson and Lagarec reports, it is confirmed that reconstruction of the restaurant on the north side of the ravine seems to be secure and permission is granted to so construct. Then the application (Tab 65) was changed from south to north on December 7.

Finally the witness confirmed that the letter of Whitford to Lamadeleine dated November 22, 1990, Tab 80, was received by the municipality on November 29, 1990.

Cross-Examination by Leamen

This witness had no involvement with the Nation Municipality or the Township of Cambridge prior to 1998. The witness confirmed that Mr. Brunet who was the town clerk at the material time would know all about this as would Mr. Brisson who was the building inspector at the time as would members of the counsel at the time. The witness confirmed that they're still around in the area and are available to come. Indeed the witness confirmed that he has tried to contact Mr. Brisson by way of telephone and letters. He is there but he will not respond in any way and the witness does not know why.

Country Pork Ltd. v. Ashfield (Township)

Between
Country Pork Ltd., applicant, and
The Corporation of the Township of Ashfield and Chief Building Official of the Corporation of the Township of Ashfield, respondent

[2001] O.J. No. 1127
Court File No. 30858

Ontario Superior Court of Justice
Leitch J.

Heard: October 23-24, 2000.
Judgment: February 28, 2001.

Counsel:

Thomas J. Corbett, for the applicant.
Daniel Murphy, for the respondents.

¶ 1 **LEITCH J.**:— The applicant seeks an order quashing Interim Control By-law No. 14, 2000 of the Corporation of the Township of Ashfield (the "Township") and an order directing Mr. John Maize, the Chief Building Official of the Township to issue a building permit to the applicant pursuant to s. 25 of the Building Code Act, 1992, S.O. 1992, c. 23.

¶ 2 Interim Control By-law No. 14, 2000 received first, second and third reading on June 26, 2000. The By-law is in effect for one year and prohibits the establishment of a livestock facility, building or operation, including liquid manure storage facilities with a capacity for 100 or more livestock units where such livestock operation involves, requires or is designed for a liquid manure system. It also prohibits the expansion of an existing facility, building or operation where the capacity after expansion is 100 or more livestock units.

¶ 3 On July 6, 2000 the Township Council considered the applicant's request to be exempted from the By-law, however, an exemption was not granted.

¶ 4 The applicant asserts that its application for a building permit crystallized before the Council passed the Interim Control By-law. Alternatively, the applicant asserts that the By-law is contrary to the official plan of the Township and therefore s. 24 of the Planning Act, R.S.O. 1990 c. P.13; the By-law is illegal because it was passed in bad faith and in unfair circumstances without notice to the applicant, a breach of natural justice and; the By-law is ultra vires the Township's powers because its provisions are contrary to the Farming and Food Production Protection Act 1998, R.S.O. 1998, c. 1 and the ministerial directive June 26, 2000 pursuant to that statute.

LEGISLATIVE PROVISION RELATING TO INTERIM CONTROL BY-LAWS

¶ 5 Section 38(1) of the Planning Act provides as follows:

> Where the council of a local municipality has, by by-law or resolution, directed that a review or study be undertaken in respect of land use planning policies in the municipality or in any defined area or areas thereof, the council of the municipality may pass a by-law (hereinafter referred to as an interim control by-law) to be in effect for a period of time specified in the by-law, which period shall not exceed one year from the date of the passing thereof, prohibiting the use of land, buildings or structures within the municipality or within the defined area or areas therefore, or except for, such purposes as are set out in the by-law.

¶ 6 With respect to the issue of notice, s. 38(3) provides as follows:

> No notice or hearing is required prior to the passing of a by-law under subsection (1) or (2) but the clerk of the municipality shall, in the manner and to the persons and public bodies and containing the information prescribed, give notice of a by-law passed under subsection (1) or (2) within thirty days of the passing thereof.

ISSUE NO. 1 - DID THE APPLICANT'S APPLICATION FOR A BUILDING PERMIT CRYSTALLIZE BEFORE THE PASSING OF THE INTERIM CONTROL BY-LAW?

¶ 7 The applicant acquired the property in question on June 15, 2000. The applicant retained a consultant, Mr. Matt Ueckermann, to act on its behalf in making application for a building permit. Mr. Ueckermann had acted in a similar capacity with respect to three prior applications for building permits made by the applicant to the Township.

¶ 8 Mr. Ueckermann met with Mr. John Maize on June 16, 2000 and delivered a Nutrient Management Plan prepared by Mr. Ueckermann and approved by OMAFRA on May 23, 2000 and drawings of the proposed barn and manure storage tank prepared by Mr. Nelson Dawley, an independent engineer retained by the applicant. Mr. Ueckermann deposes in his affidavit sworn July 21, 2000 in support of this application that he requested Mr. Maize complete the building permit application and the building permit but Mr. Maize indicated he wished to check distances with the Township's planner, Mr. Scott Tousaw, and wanted to discuss the application further.

¶ 9 Mr. Ueckermann further deposes in para. 24 of his affidavit that:

> I was surprised by Mr. Maize's reluctance because this had not occurred when I had made the three prior applications. In fact, I had brought with me a blank signed cheque to pay for the building permit.

¶ 10 Mr. Ueckermann also deposes that Mr. Maize assured him that everything was in order with respect to the application and there would be no problem in issuing the building permit.

¶ 11 When Mr. Ueckermann followed up with Mr. Maize on Monday, June 19, 2000 he was advised that the project would be discussed at the meeting of Township Council scheduled for Tuesday, June 20, 2000. Mr. Maize attended that meeting and as he deposes in his affidavit, he met with Council to review the Nutrient Management Plan and was instructed to deliver the plan to the Township's solicitors. Mr. Ueckermann deposes that in their June 19th telephone conversation, Mr. Maize had indicated that he did not foresee any problems with the application and invited Mr. Ueckermann to contact him Wednesday, June 21, 2000. Mr. Ueckermann did so and in their conversation of June 21, 2000 Mr. Maize indicated that the permit would not be issued because the Nutrient Management Plan had not been signed and a certificate was required from Mr. Nelson Dawley stating that the storage tank was watertight. Mr. Maize had not imposed these requirements in any of the prior applications that Mr. Ueckermann had made.

Mr. Maize forwarded correspondence dated June 21, 2001 to Dawley Engineering setting out the requirements of the certificate. In their June 21st conversation Mr. Maize directed Mr. Ueckermann to Mr. Murphy who, the applicant asserts, is the solicitor for the Township but not the solicitor for Mr. Maize.

¶ 12 In a subsequent conversation between Mr. Ueckermann and Mr. Murphy, it was clarified that the Nutrient Management Plan had been signed. However, Mr. Murphy indicated the Township took issue with the Nutrient Management Plan in certain respects and in correspondence dated June 22, 2000 Mr. Murphy outlined requirements which had to be met before a building permit would be issued. These requirements were:

(1) that the applicant provide the certificate from Mr. Dawley;
(2) that a development agreement be entered into as required by the Township by-laws;
(3) that a signed application for a permit be submitted together with the necessary fee;
(4) the Nutrient Management Plan may have to be reviewed by an independent consultant.

The significant point for the applicant is that none of these requirements were required in the three prior applications. Additionally the applicant asserts that Mr. Dawley's certificate was faxed to the Township on June 26th before the Council met and the Nutrient Management Plan had been approved by OMAFRA, which is an independent body.

¶ 13 The Township's position is that this application is different from the prior applications in that the prior applications did not contain outside manure tanks. In the prior applications that Mr. Ueckermann has referred to, the manure was to be stored in tanks under the barn rather than in outside tanks.

¶ 14 The Township passed the interim control by-law on June 26, 2000.

¶ 15 When Mr. Ueckermann questioned Mr. Maize on June 27, 2000 on the status of the building permit application, Mr. Ueckerman was informed that the interim control by-law had been passed.

¶ 16 On June 28th the applicant signed the application for a building permit.

¶ 17 The Township takes the position that a building permit cannot be issued to the applicant because its application was not made until June 28th, two days after the By-law was passed.

¶ 18 The applicant's position is that the applicant had complied with all applicable law by June 19, 2000 and was entitled to its building permit on that date.

¶ 19 S. 8(2) of the Building Code Act specifies that a Chief Building Official "shall issue a permit" unless the proposed building will contravene the Building Code Act, the building code or any other applicable law; the application is incomplete or any fees are unpaid. The regulations to the Building Code Act provides the following definition of applicable law:

> ... any general or special Act and all regulations and by-laws enacted thereunder which prohibits the proposed use of the building unless the Act, regulations or by-law is complied with.

¶ 20 Pursuant to s. 25(4) of the Building Code Act this court stands in the shoes of Mr. Maize and may "take such action as ... the chief building official ought to take ... and, for such purpose, may substitute his or her opinion for that of ... the chief building official".

¶ 21 Mr. Maize, as the Chief Building Official for the Township had no discretion to refuse to issue the permit if all the statutory requirements had been fulfilled (see Alaimo v. York (City) Chief Building Official (1995), 26 M.P.L.R. (2d) 69 (Ont. Gen. Div.)). If no law is contravened then the permit must issue. The issue then is whether Mr. Maize was obliged to issue the building permit on June 19th as the applicant asserts. Was there compliance with applicable law on that date? Because the rights of an applicant to a building permit crystallize and are to be determined as at the date when the applicant has fulfilled all of the requirements necessary for the issuance of a building permit, the issue for this court can be put another way - had the applicant fulfilled all of the requirements necessary for the issuance of a building permit before the Interim Control By-law was passed on June 26th (see Woodglen & Co. Ltd. v. North York (City) Chief Building Official [1994] O.J. No. 2206 (Ont. Gen. Div.) citing Karavos v. Toronto (city) et al., [1947] O.J. No. 331, [1948] O.W.N. 17 (C.A.) and Wolfond et al. v. North York (City) Building Commissioner (1990), 1 MPLR (2d) 189 (Ont. Dist. Ct.)).

¶ 22 These questions can be answered by consideration of two arguments advanced by the applicant. The first requires an analysis of the evidence given by Mr. John Maize in his affidavit sworn August 29, 2000 and in the cross-examination on his affidavit September 19, 2000. The applicant's position is that the evidence of Mr. Maize on cross-examination amounts to an admission that the applicant had complied with all applicable law as of June 19, 2000. In making that assertion the applicant relies in large part on the following question and answer given by Mr. Maize after acknowledging that he had indicated to Mr. Ueckermann on June 19th that he did not foresee any problem with the application:

> Q. 229 - And having said that on June 19th to Mr. Ueckermann, you were satisfied at that point that the County Pork application had met all the requirements of law that you knew existed on that date?
> A. Yes.

¶ 23 In his affidavit Mr. Maize deposes that none of the Township's by-laws contained any design criteria for manure storage tanks. Mr. Bruce Potter, a civil engineer for the Township, in an affidavit sworn August 29, 2000 deposes that neither the Ontario Building Code nor the National Building Code provides any design criteria for the floors of the manure tank. Both Mr. Maize and Mr. Potter in their affidavits refer to incidents in the Township involving what they considered to be a failure of manure tank design which had led to discharge of manure into drains and ultimately into Lake Huron. Further, in para. 16 of his affidavit, Mr. Maize makes reference to the manure tank failures in the Township and deposes as follows:

> Previous to the above two manure tank failures, I, as Chief Building Official, relied on plans submitted by engineers from time-to-time in connection with building permits. Since that date I have not issued any building permits for manure tanks without obtaining the certificate from the engineer as outlined in my letter of June 21, 2000 to Dawley Engineering.

In 1999 Mr. Maize required, pursuant to the recommendation of Mr. Potter, a certificate from the engineer retained for that project (who coincidentally was Dawley Engineering) that, amongst other things, the structure was

water-tight on an application for a large barn with an outside manure storage tank (the "Nyland Application")).

¶ 24 Mr. Potter in his affidavit deposes that in connection with this application he "reviewed the engineering plans for a manure tank supplied by Dawley Engineering and instructed the Chief Building Official to write the letters dated June 21, 2000".

¶ 25 On June 21, 2000 Mr. Maize wrote to Dawley Engineering indicating that he would require a certificate confirming a number of things, including a certification that the structure was water-tight and that Dawley Engineering had been "retained to provide review of a construction and certification that this facility is constructed in accordance with the drawings".

¶ 26 Mr. Dawley, in his affidavit, deposes that the two letters that he forwarded to Mr. Maize on June 26, 2000 in response to Mr. Maize's letter of June 21, 2000 were similar to his correspondence relating to the Nyland application. His letter of June 26, 2000 indicates that the manure tank had been designed in accordance with the design for the Nyland tank and that on completion of the project a letter would be issued stating compliance with applicable codes. Both Mr. Potter and Mr. Maize, according to their affidavits, are of the opinion that Mr. Dawley's June 26th correspondence is inadequate in that it did not clearly state that Dawley Engineering had been retained to be responsible for the design of the entire facility, nor did the correspondence specifically give an opinion with respect to water-tightness of the structure. Therefore, in the mind of Mr. Maize, after having taken advice from Mr. Potter, the applicant had not fulfilled all the requirements necessary for the issuance of a Building Permit before the Interim Control By-law was passed. In my view, the applicant cannot rely on Mr. Maize's response to Q. 229 on his cross-examination as an admission that as of June 19th all requirements of applicable law had been met. That response is inconsistent with the actions taken by Mr. Maize after June 19th.

¶ 27 There are two remaining questions to consider - was Mr. Maize influenced by Council after June 19th and were the requirements imposed by Mr. Maize on June 21st on the applicant part of the applicable law?

¶ 28 The applicant's solicitor cross-examined Ms. Linda Andrew, the Township's clerk-treasurer on her affidavit sworn August 31, 2000 and examined in aid of this application Mr. Ben Van Diepenbeek, the Township Reeve; Mr. Art Simpson, the Deputy Reeve; and Marilyn Miltenburg, Connie Black and Michael McKeon, the three Township Councillors. Having reviewed all of the affidavits and the transcripts from the cross-examinations and examinations, I find no evidence that Council interfered with the authority of Mr. Maize to issue a building permit.

While Mr. Maize's letter of June 21st to Dawley Engineering was written after the Council meeting on June 20th, there is no evidence that Council interfered with Mr. Maize's review of the materials filed by the applicant. In fact according to Mr. Maize's evidence on cross-examination, he forwarded his June 21st letter to Dawley Engineering at the suggestion of Mr. Potter. On cross-examination Mr. Maize denied the suggestions that at the June 20th Council meeting he was questioned about a number of things associated with the application and at the meeting people had expressed concerns that they wanted him to address. He also disagreed with the suggestion that the Township had pretty much taken dealings with the applicant out of his hands.

¶ 29 Mr. Ueckermann essentially deposes in his affidavit that he expected to receive the building permit June 16th in accordance with his request and was surprised when he did not. I find it unrealistic to the point of being incredible, that Mr. Ueckermann had such an expectation given the quantity of material submitted with the application - the 150 page Nutrient Management Plan and the engineering drawings. Mr. Ueckermann would have been aware that there had been discharge from manure tanks in the Township and a very recent tragedy in Walkerton and it was not reasonable to expect Mr. Maize to issue the building permit on the spot.

¶ 30 It is important to examine what Mr. Maize did after he received the materials on June 16th. He consulted with Mr. Tousaw with respect to setbacks. He consulted with Mr. Potter with respect to the drawings. It is relevant to note that this was the first application for a building permit since the two manure storage tanks had failed and only the second application involving an outside manure storage tank. Additionally, the proposed barn was significantly larger than the barn in the Nyland application. The Nutrient Management Plan was a requirement of the Township's by-law. Mr. Maize indicated on his cross-examination that he did not understand Nutrient Management Plans at all. Mr. Maize sought the advice of Council with respect to whether the plan complied with the by-law and he was directed to the Township's solicitor in that respect. I am satisfied that there is no evidence that the Township interfered with the authority of Mr. Maize in connection with this application.

¶ 31 Mr. Dawley in his affidavit states his opinion that he cannot guarantee that a structure is water-tight and "such a request demands a

guarantee over circumstances to which I do not have any control." Subsection 7 of s. 2.2.1.13 of the National Building Code provides that manure storage tank walls shall be designed and constructed to prevent leakage of the contents. The subsection references Appendix which sets out what factors are to be taken into account in the design of manure tank walls and bottoms to prevent leakage of the contents. As Mr. Potter and Mr. Maize (relying on Mr. Potter's advice) depose there are no design criteria for manure tanks in the Township by-laws or in the National and Ontario Building Codes. As a result to fulfil the requirement of the National Building Code that the tanks must be designed and constructed to prevent leakage certification to that effect was sought from Dawley Engineering. I am of the view that it was within Mr. Maize's discretion to request the confirmations he did from Dawley Engineering and he was not influenced to do so because of improper interference by Council.

¶ 32 Accordingly, I am satisfied that the applicant was not entitled to a building permit prior to the passage of the Interim Control By-law.

ISSUE NO. 2 - DOES THE INTERIM CONTROL BY-LAW COMPLY WITH THE OFFICIAL PLAN OF THE TOWNSHIP?

¶ 33 The Township, as a result of requests from various citizens groups, had considered the passage of an interim control by-law in 1997. The Township Council on September 16, 1997 requested a report and opinion on the planning rationale of an interim control by-law related to manure management issues. Mr. Tousaw on behalf of the Huron County Planning and Development Department prepared a report dated September 27, 1997. This report concluded that:

> an interim control by-law which would suspend (certain) agricultural activity in the Township while studying its environmental effects would not conform with the Huron County Official Plan and the Ashfield Township Secondary Plan and is not consistent with the community directions in the draft new County Official Plan. The planning rationale does not support a moratorium on new livestock facilities because the issues are related primarily to management practices rather than land use issues. ... There is insufficient planning rationale to reasonably expect a study to provide meaningful direction for changes in the municipality's land use planning policies.

¶ 34 The new official plan, the county plan, received third reading on October 1, 1998.

¶ 35 According to the minutes of the June 6, 2000 meeting of Council, Council received a "complaint of irresponsible manure spreading practices" within the Township. Council indicated an intention to consult the Township's solicitor for his recommendation. The minutes go on to note that there was "a general discussion on concerns over the recent events regarding improper manure spreading practices and the possible contamination due to run-off, the inability of the Ministry of Environment to respond in time to run-off situations, and the recent expansion of intensive livestock operations" in the Township. Further to that discussion, a resolution was passed demanding that "the Government of Ontario immediately put in place a moratorium prohibiting the construction of any new liquid manure facilities or the addition to any existing facilities, until it has been proven that the environment and our drinking water will not be negatively affected by them". During her cross-examination, Ms. Andrews was asked when Council "began to seriously discuss the implementation of an interim control by-law ... and when did it turn from something in which they asked the province to act on June 6th" to something that they intended to act on themselves? Her answer to this Q. 61 is as follows:

> A. I think the issue of the moratorium was always on council's mind and you're asking me to determine at what point they chose to act on that?
> Q. 62. Right. When did actions actually start taking place?
> A. I think even at the point in time when they asked the province to implement the moratorium, I think that council had intentions at that point in time to move on that. That was one more step in, in I think their considerations in doing that. They were looking for provincial support in that area.
>
> But I think certainly from that point forward -- I can't speak for council, it is only my interpretation -- that they had, they had a movement to proceed to that end.

¶ 36 At the time the Interim Control By-law was passed on June 26, 2000, the Township had advice from its Senior Planner, Mr. Tousaw, that such a by-law would conform to the Township's Secondary Plan and the County of Huron Official Plan. The resolution passing the Interim Control By-law reflects that the Township Council received an oral report from Mr. Tousaw. That report was later supplemented by a letter dated July 4, 2000

in which Mr. Tousaw states that while much of the 1997 report remains relevant, there are a number of factors which "lend support for interim control on intensive livestock barns in Ashfield Township." He delineated these factors which included "an acceleration of construction of large barns" and conclusively opined that these issues were "sufficiently acute in Ashfield Township to sustain an interim control by-law." Mr. Tousaw's opinion has changed since 1997.

¶ 37 Mr. Todd Brown, a planner retained by the applicant, has sworn an affidavit August 24, 2000 in support of this application. In that affidavit he expresses his opinion that Mr. Tousaw's 1997 opinion that the application of interim control is inappropriate remains valid and that the Interim Control By-law does not conform with the official plan and is therefore illegal pursuant to s. 24 of the Planning Act.

¶ 38 The applicant asserts that Mr. Tousaw's opinion in June 2000 is neither valid nor reliable and does not form a legitimate basis for the Township to pass the Interim Control By-law. The applicant asks me to infer that the basis for Mr. Tousaw's change in opinion is not sound and that his 1997 opinion is correct as supported by the opinion of Mr. Brown. Essentially the applicant asserts that Mr. Tousaw, in changing his opinion, was "caught up in the same swirl" arising from the concerns in Walkerton, Ontario that pervaded the thoughts of the Township Council was caught up in.

¶ 39 In his affidavit sworn in response to this application September 6, 2000, Mr. Tousaw deposes in para. 18 that since 1977 there has been a shift in the agriculture-environment balance which "now lead to a conclusion that there is planning rationale for a pause in the construction of large barns based on liquid manure to consider their effects and regulatory (and other) responses, and that such an interim control by-law does conform with the Official Plan and Secondary Plan." Mr. Tousaw goes on to set out the factors which led him to this conclusion including his opinion that his assumption expressed in the 1997 report that "any additional livestock units added within the interim control period would be relatively small compared to the total township herd size" has proved inaccurate. He further deposes that there has been an unprecedented and unanticipated rate of growth in the Township of intensive operations since 1997. Mr. Tousaw reiterates his opinion in paragraph 23 of his affidavit as follows:

> There is efficient and reasonable planning rationale for the Ashfield Township interim control by-law. The legitimate planning issues arising from the growth and intensification of livestock production and liquid manure fall under the purview of the Planning Act, the Provincial Policy Statement, the County Official Plan, and the Ashfield Township Secondary Plan. The interim control by-law conforms with the Official Plan and Secondary Plan and represents good planning.

¶ 40 Mr. Tousaw was extensively cross-examined on his affidavit on September 29, 2000 and a transcript of that cross-examination made available at the hearing of this motion. He was specifically challenged on the basis for his change of opinion from his 1997 report to his advice in June 2000.

¶ 41 In particular, the applicant asserts that Mr. Tousaw was incorrect in his assertion that the intensification has been beyond what was expected in 1997. Essentially the applicant's position is that the data relating to the year 2000 is consistent with the data from 15 years ago but not with the 1996 data and that data is simply an aberration. In other words, the applicant asserts that intensification would be clearly expected according to the 1996 data. However, as Mr. Tousaw goes on to indicate in his answer to question 216 of his cross-examination "the degree to which we've seen expansion and intensification in Ashfield was unanticipated" and further in response to Q. 217 he indicated:

> ... the expansion of the industry was anticipated. That may not necessarily have occurred in any intensive degree in Ashfield Township or in the County of Huron for that matter ... so while there was an expansion of the industry anticipated, we were unsure how that might play out in Huron County.
> And indeed in Ashfield Township, as I indicated, I believe that it has had the most intensive growth in the County of Huron in the past five years, in terms of the clustering of large barns. ...
> The Township of Ashfield has received a disproportionate portion of that growth. And hence the concerns today.

¶ 42 Further, in response to Q. 385 Mr. Tousaw stated as follows:

> The purpose of putting a freeze on is that the township has continued to experience problems despite its best efforts to regulate the industry in what they feel - and in fact I believe what the industry feels - is a, is quite an appropriate manner. Despite those best efforts they continue to have

> problems. So the purpose for interim control was to pause to be able to study those problems. It's not just to, to put a freeze or moratorium on development for no valid pending reason.

¶ 43 The applicant's position on this application was that I must choose between the opinions of the two planners and given the challenge to Mr. Tousaw's June 2000 opinion, I ought to accept the opinion of Mr. Brown and quash the Interim Control By-law.

¶ 44 The Court of Appeal in Equity Waste Management of Canada v. Halton Hills (Town) (1997), 35 O.R. (3d) 321 (C.A.), indicated that interim control by-laws are an important planning instrument for a municipality. In particular, at p. 337 the court indicated:

> An interim control by-law permits a municipality to temporarily freeze development. Municipalities no longer have to show a previous intention to rezone to defeat the rights of landowners to use their land. A municipality must give notice of a zoning by-law before passing it, but does not have to give notice of an interim control by-law until after it has been passed, thus enabling the municipality to act quickly as necessary to freeze development. Unlike zoning by-laws, which take effect only after approval by the OMB, interim control by-laws take effect immediately upon passage ... They allow the municipality breathing space to rethink its land use policies by suspending development that may conflict with any new policy ...
> Before passing an interim control by-law, a municipality must meet only one statutory condition. Under s. 38(1) of the Planning Act, it must have by "by-law or resolution directed that a review or study be undertaken in respect of land use planning policies in the municipality or in any defined area" of it.

¶ 45 In my view Equity Waste stands for the proposition that an interim control by-law must be supported by an acceptable planning rationale and must conform to the Official Plan. As indicated in Equity Waste the role of the court is limited to ensuring that the municipality did not exceed its powers or exercise those powers in bad faith. I am not obliged on this application to choose between the opinion of Mr. Tousaw and Mr. Brown. In my view, the Township was entitled to rely on Mr. Tousaw's opinion that there was a valid planning reason for a freeze contemplated under the Interim Control By-law and that such would conform to the Official Plan.

¶ 46 With respect to the requirement that the Township direct a review or study, the Township Council, as part of its resolution passing the Interim Control By-law, directed a review or study in respect of land use planning policies, by-laws, regulations and procedures in the municipality regarding the establishment, construction, maintenance, monitoring and management of livestock liquid manure facilities. The applicant asserts that the Township passed this resolution without any serious intention to pursue a review or study. The applicant points to the evidence of Mr. Tousaw on his cross-examination that the meeting to discuss the terms of reference for a study was not called until August 25, 2000. However, as Mr. Tousaw further stated he was on holidays during most of July and part of August and this meeting was arranged upon his return. Mr. Tousaw indicated that in a general sense there had been discussions about pursuing the terms of reference prior to his leaving on holidays. Specifically in answer to Q. 397 he stated as follows:

> It was of course understood by the municipality in their resolution that a study was required. It was understood that the Planning and Development Department would be involved in such a study, and that there would be progress in due course. There were no specific dates set prior to my departure on holidays.

¶ 47 Mr. Tousaw wrote a memo to Ms. Linda Andrew, the clerk treasurer of the Township on September 19, 2000 attaching draft terms of reference. The terms of reference were completed at 10:30 p.m. the evening prior to Mr. Tousaw's cross-examination on his affidavit. The applicant asserts that these terms were prepared in response to its request that the terms of reference be available for review at Mr. Tousaw's cross-examination.

¶ 48 I am not prepared to draw the inference that the applicant asserts - that the Township had no intention of undertaking a review or study - given the resolution passed by the Township Council, the evidence of Mr. Tousaw that his department would be involved in a study, Mr. Tousaw's explanation for the delay in meeting to discuss the terms of reference for the study and Ms. Andrew's disagreement with the suggestion put to her on cross-examination that Council wanted a moratorium on the construction of intensive livestock facilities and the study was an afterthought. Specifically

she stated at question 191 that she didn't think a study was an afterthought and Council was always aware that a study was required under interim control.

¶ 49 Finally, the applicant raises the issue whether it was appropriate for the Township to attempt to deal with what is acknowledged to be a provincial problem within the time period contemplated under the Interim Control By-law given the Township's resources. Mr. Brown expresses his opinion that interim control is not suited to these circumstances and is best suited to isolated cases. Whether Mr. Brown's opinion should be accepted over the opinion of Mr. Tousaw is not an issue to be determined on this application. In accordance with Equity Waste it must be clear that in enacting interim control, the Township had a planning rationale and ordered a study and as earlier noted I am satisfied that the Township met those requirements in this case.

ISSUE NO. 3 - WAS THERE INTENTIONAL WAS ADMINISTRATIVE DELAY?
THERE PROCEDURAL FAIRNESS? SHOULD THE BY-LAW BE STRUCK
BECAUSE IT WAS PASSED IN BAD FAITH?

¶ 50 Earlier in these reasons I applied the case of Equity Waste. The applicant raises the question whether the deferential approach adopted in that case remains the proper one when considering issues such as are raised on this application. In particular the applicant refers me to the review of the authorities undertaken by Reilly J. in Zivkovic v. Kitchener (City), [1999] O.J. No. 806 (Gen. Div.) and the subsequent decision of the Supreme Court of Canada in Baker v. Canada (Minister of Citizenship and Immigration), [1999] 2 S.C.R. 817 in which the Supreme Court of Canada provided guidance on how the duty of fairness may arise. The applicant asserts that the circumstances surrounding the passage of the Interim Control By-law suggest a standard of review requiring correctness. However I am of the view, as Reilly J. concluded in Zivkovic, that a deferential approach as enunciated in Equity Waste should be applied to the review of the passage of the Interim Control By-law in issue on this application and remains the law of Ontario.

¶ 51 In considering the issues raised on this application I note that as set out in Equity Waste the onus is on a party seeking to quash a by-law to prove bad faith.

¶ 52 The applicant asserts that there was intentional delay in the processing of this application to allow the Interim Control By-law to be passed and that this application was the precipitating factor for the passage of the Interim Control By-law. The applicant relies on the evidence of Mr. Maize on cross-examination in answer to Q. 240 - 241:

> Q. 240. Was there any discussion about -- first of all council as they discussed Interim Control were told by you or somebody else that the Country Pork application was there at that moment, correct?
> A. Yeah, that would be correct.
> Q. 241. That was a precipitating factor for the discussion, as you understood it, correct?
> A. Yes.

¶ 53 The applicant acknowledges that that evidence from Mr. Maize is different from the evidence of the Reeve, Mr. Van Diepenbeek and the other Councillors.

¶ 54 The minutes for the meeting of the Township Council on June 20, 2000 indicate that pursuant to the motion of Ms. Miltenburg as seconded by Ms. Black, Council proceeded into closed session to discuss legal matters with the Township solicitor and Mr. Tousaw, the Township's planner. On her cross-examination, Ms. Andrew testified that she agreed with Mr. Tousaw's evidence that she had called him on June 19th and discussed the drafting of an interim control by-law and that she had done so "not necessarily on anyone's instructions". In response to the question whether she knew that interim control was going to be the subject of discussion on June 20th, she responded as follows:

> I think, yes, I, I would have to say that I was certainly assuming that it would be up for discussion at that meeting.

¶ 55 Ms. Andrew in cross-examination indicated that interim control was discussed hand-in-hand with the Nutrient Management Plan of the Applicant. As Ms. Andrew testified, she was given direction at the June 20th meeting to proceed with the interim control process, including instructing Mr. Tousaw to draft the appropriate resolution and by-law.

¶ 56 Mr. Van Diepenbeek provided the following evidence on his cross-examination with respect to the context of the discussions on interim control:

Q. 56. You were discussing Interim Control in closed session in the context of County Pork's building permit application, fair enough?

A. I don't think that we, that was the intent. The Interim Control By-law was before us. The fact that we had Country Pork's building application or the Nutrient Management Plan there, that is not the sole reason why we went ahead with the Interim Control By-law. We've had, like I said, we've had a lot of pressure.

Q. 57. You say not the sole reason you went ahead. Was it one of the reasons you went ahead?

A. Because we've had a lot of public pressure. In light of the Walkerton issues. In light of the Ministry of Environment investigations on a couple of properties in Ashfield. There was a various amount of reasons. There was a lot of concern about wells being polluted and our water quality being deteriorated.

Q. 58. But if I interpret your answer correctly, when you say County Pork's building permit application was not the sole reason you went ahead with the Interim Control By-law, but it was one of the reasons.

A. Ah, not really, no. I don't think it was. I think it was something that was in the works anyhow, regardless of whether that application had been there or not.

Q. 59. Did the Country Pork application have anything to do with the timing associated with the passing of the Interim Control By-law.

A. In what way?

Q. 60. Well, as you said earlier, this had been an issue for three years at least in the municipality. Walkerton was an early May event. The problems with Acre T were May, 1999. Nothing was happening on May 23rd. On June 6th you had asked the Government of Ontario to act. Now you're deciding to act on your own. And I am looking for the precipitating event in terms of timing. Was it the Country Pork application?

A. I don't think it was, no.

Q. 61. Well, what was it?

A. The, all the other events that led up to it. We were already well into it by then.

¶ 57 Under cross-examination, Mr. Simpson indicated that the Township had considered a "moratorium", as he referred to it, for a considerable period of time. The applicant's theory was very definitively put to Mr. Simpson in Q. 29:

Q. 29. And I'm not, I'm not beating around the bush here, because to me sitting on the opposite side of the table it looks like the June 16th application of Country Pork probably initiated that process, in terms of making it immediate. Is that right?

A. No. The, the application? We, I can tell you very clearly that I did not go into the meeting of June 20, find out there was an application, and say, let's put a moratorium on.

Q. 30. You knew about the Country Pork Building Permit Application before June 20th.

A. No, I did not. I learned of it at the meeting.

¶ 58 Mr. Simpson was also asked specifically whether any of the actions of council associated with the application between June 20th and June 26th were designed to delay the applicant until the Interim Control By-law could be put in place and Mr. Simpson's clear response was "No. No, I would say that that would not be the case". In fact, in response to previous questions Mr. Simpson indicated that he wasn't clear that the Interim Control By-law would stop the applicant "in its tracks" although he was candid in acknowledging that he hoped it would. He was not prepared to agree with the suggestion that he presumed that it would. He testified that it was not clear to him one way or the other but he "knew that the time had come to put in an Interim Control By-law."

¶ 59 Ms. Black's evidence was that she did not have an understanding that the Interim Control By-law was put on the June 20th meeting agenda as a consequence of the applicant. Mr. McKeon was unable to remember any discussion with respect to the applicant before the Interim Control By-law was passed.

¶ 60 The applicant asserts that the councillors' denial that the application by the applicant triggered the passage of the Interim Control By-law is not credible. The applicant asserts that the evidence of the Reeve and Ms. Miltenburg that in their view the applicant was rushing through its application to avoid the possibility of interim control was "rehearsed".

¶ 61 The applicant also asserts that the Township's discussions on June 20th ought to have been in public and if part of the meeting was to be closed to the public, Council was obliged to state the general nature of the matter to be considered at the closed meeting in the resolution referencing the closed meeting (see s. 55(3)(5) & (7)) of the Municipal Act. There is no question that each of the councillors indicated on their examinations that they did not consider giving notice to the applicant or their consideration of the Interim Control By-law and they did not turn their minds in any way to any obligations of procedural fairness.

¶ 62 The applicant points to the following response to questions 303 and 304 on the cross-examination of Mr. Maize in support of its assertions.

Q. 303. Now, from all of those things Country Pork, the applicant, gets a little suspicious that people were stalling its application until after the interim control by-law could be passed. Is that what happened?
A. Well, I can't speak for other people, but it may appear that way.
Q. 304. Does it appear that way to you?
A. Yes.

The applicant asks me to draw the inference that the Councillors were not being truthful and the only rational inference that can be drawn is the one that Mr. Maize came to.

¶ 63 The applicant asks me to infer there was bad faith. The applicant asserts that the Council acted in secret, there was a deliberate administrative delay, there was no notice to the party most directly affected by the passage of the Interim Control By-law and the passage of the By-law was motivated by political concerns. Ultimately the applicant asks that an inference be drawn that the Township Council intervened improperly in the process and deliberately stalled the permit application and passed the By-law to thwart the applicant. The applicant's position is that if Council had acted with procedural fairness the applicant would have ensured that it satisfied the requirements outlined in Mr. Maize's June 21st correspondence and Mr. Murphy's June 22nd correspondence.

¶ 64 As previously noted, the cross-examinations and examinations conducted prior to the hearing of this application were extensive. Each Councillor denied any intentional delay or interference with Mr. Maize's discretion and denied the suggestion that the By-law was passed because of the application. In the face of that evidence, I consider it inappropriate to draw the inferences suggested by the applicant. With respect to Mr. Maize's answers to questions 303 and 304, in my view his responses can be interpreted as an agreement that the applicant may well find the circumstances suspicious, but that he could not speak for others. I do not take his response to Q. 304 as an expression of his opinion that the application was being stalled until after the Interim Control By-law could be passed. Indeed, as Mr. Maize deposes in his affidavit, the three previous applications referred to by Mr. Ueckermann in his affidavit were dealt with over a period of nine days, 16 days and 21 days. On that basis Mr. Maize denies that he delayed the application given that only 10 days elapsed between his first meeting with Mr. Ueckermann June 16th and the passage of the Interim Control By-law on June 26th.

¶ 65 Further, there is simply no evidence of delay between June 20 when the Interim Control By-law was being considered and June 26th when it was passed. Indeed on June 21st and June 22nd the applicant was advised of the requirements that had to be fulfilled for the permit to be issued.

¶ 66 Interim control was first discussed June 6th but not passed until June 26th. In examination both Reeve Diepenbeek and Councillor Miltenburg expressed their opinion that the applicant was rushing its building permit because of the potential for some type of moratorium to be enacted provincially or by the Township in view of recent events.

¶ 67 Section 38 of the Planning Act clearly authorizes the Township to proceed to pass an interim control by-law without giving prior notice of its passage. The issue of whether, under a duty of procedural fairness, the Township ought to have given the applicant notice has been raised on this application. In my view, the fact that the applicant had the opportunity to petition the Township for an exemption from the By-law and was heard in that respect on July 6th provides procedural fairness to the applicant. Further as noted by the Court of Appeal in Equity Waste the requirement for a study, the right to appeal an interim control by-law to the Ontario Municipal Board and the two year limit on such by-laws provide adequate safeguards against abuse. In reaching my conclusion I am mindful of the conclusion of the Court of Appeal in Equity Waste at p. 337-338 that the motions judge "erred in burdening the Town's use of an interim control by-law with other conditions not required by statute".

¶ 68 Certainly the timing of the passage of a by-law (see 1121472 Ontario Inc. v. Toronto (City) (1998), 39 O.R. (3d) 535 (C.A.) citing Equity

Waste) and how it was passed - that is its reading three times at one meeting (see Markham v. Sandwich South (Township), [1998] O.J. No. 2183 (C.A.)) are relevant factors going to good faith. These factors were particularly significant to the Court of Appeal's finding in Markham that "the timing of the passage of the By-law ... indicates that the By-law was passed in bad faith to avoid a motion for summary judgment that might well have been lost due to the unenforceability of Resolution 351/85 and to avoid the result of the overall lawsuit that was likely to be lost". However, in 1121472 Ontario Inc. the Court of Appeal held that the timing of the by-law "must be seen in context" and in that case no context was provided. The Court indicated that there should be evidence of circumstances surrounding its enactment, the planning rationale that provides the basis for the recommendation that a study be undertaken and evidence as to when the matter first became the subject of municipal consideration and the problems giving rise to the consideration. On this application I have before me evidence of the nature described by the Court of Appeal in 1121472 Ontario Inc. and therefore can review the timing of the by-law in context. That was the approach undertaken by Rosenberg J. in Luxor Entertainment Corp. v. North York (City) (1996), 27 O.R. (3d) 259 (Gen. Div.), where while a hearing for an order that a chief building official was obliged to issue a building permit was adjourned, an interim control by-law prohibiting the use proposed by the applicant was enacted without planning advice. In my view the context of this application is distinct from what was considered in Markham and in Luxor Entertainment Corp. Here there is no evidence the Township Council acted unreasonably and arbitrarily and without the degree of fairness, openness and impartiality required of a municipal government to use the language of the Court of Appeal in Equity Waste. There is no evidence the Council was motivated by self-interest or that they acted in other than the public interest. The applicant's property was not singled out. I have found that the June 16th meeting between Mr.Ueckermann and Mr. Maize did not trigger the passage on the Interim Control By-law. I have found that the Township had a planning rationale for the By-law and the study to be undertaken and that the study was not an "afterthought".

¶ 69 As set out earlier in these reasons the applicant also takes the position that the By-law is ultra vires the Township's powers because the provisions of the By-law are contrary to the Farming and Food Production Protection Act. This argument raises the question whether the Interim Control By-law restricts a "normal farm practice" as contemplated by s. 6(1) of the Farming and Food Production Protection Act. That section provides that no municipal by-law can be applied to restrict a normal farm practice. I do not consider the Interim Control By-law as restricting such a practice. To use the words of the Court of Appeal in Equity Waste, an interim control by-law allows a municipality "breathing space to rethink its land use policies by suspending development that may conflict with any new policy". Therefore the Interim Control By-law is not the type of restriction contemplated in s. 6(1) of the Farming and Food Production Protection Act.

¶ 70 For the foregoing reasons I am satisfied that the Interim Control By-law ought not to be quashed. The application is dismissed. If necessary Counsel may make submissions on the issue of costs by filing brief written submissions within thirty days of the date of release of these reasons.

LEITCH J.

Giangregorio v. Hamilton (City)

Between
Lucy Giangregorio, applicant, and
The Corporation of the City of Hamilton and John Lane, Jim Sallas and Jill Sallas, respondents

[2001] O.J. No. 5670
Court File No. 01-4377

Ontario Superior Court of Justice
Matheson J.

Heard: June 25, 2001.
Judgment: June 27, 2001.

Counsel:

John A. Crossingham, for the applicant.
Nancy L. Smith, for the respondents, The City of Hamilton and Peter Lampman.
Sean Lawler, for the respondents, Jim Sallas and Jill Sallas.

¶ 1 **MATHESON J.** (endorsement):— Order to allow extension of time to bring application pursuant to Section 25(3) of the Building Code. On consent to change style of cause replacing John Lane with that of Peter Lampman and the name of the respondent is the City of Hamilton, not the Corporation of the City of Hamilton.

¶ 2 This is an application brought by Lucy Giangregorio for an order revoking the building permit issued by the respondent Municipality Building Official, Peter Lampman permitting the respondents, Jim Sallas and Jill Sallas to construct a garage at 9 Winona Park Drive and a permanent injunction preventing construction pursuant to that building permit.

FACTS

¶ 3 The respondents, Jim Sallas and Jill Sallas applied for a height increase on the proposed garage. The height was to be increased to 7.55 meters from 4.5 meters to allow for storage and play area for the children; not to allow residential use on the second floor.

¶ 4 At the Committee of Adjustments hearing on May 1st, 2000, the issue of preserving the existing trees was raised by a committee member and not the applicant.

¶ 5 The Committee moved that the application be approved; a 1.25 meter setback. No mention was made of preserving the trees.

¶ 6 The applicant appealed the decision to the Ontario Municipal Board under Section 45 of the Planning Act. On the 15th day of September, 2000, a hearing was held and an oral decision given.

¶ 7 At that hearing the two ash trees were discussed. The Board refers to them in the second full paragraph on Page 4 of its decision:

> "Concern was expressed for the preservation of two large trees located along the lot line. No evidence was provided to indicate that this proposed garage would affect the trees in any way."

¶ 8 In its decision, the Board allowed the Committee of Adjustments to proceed deleting the condition imposed by the Committee of Adjustments of a 1.5 meter setback. It also imposed four conditions; condition #2 is the one matter that gives rise to this application. It reads as follows: "That an Arborist report indicating the steps to be followed in preserving the two trees in question, be submitted to the City's satisfaction prior to drainage certification".

¶ 9 Beswick Tree Service Ltd. provided a letter to Jim Sallas dated September 27th, 2000 which is found at Tab 1.E of the Responding Record of the Sallas'. It stated in part: "It is our opinion that those trees will not survive", and later "we feel that the damage from the construction will be too severe and that they will have to be removed."

¶ 10 This was given to the City on February 12th, 2001. On March 21st, 2001, a building permit was obtained to construct the new garage. On June 12th, 2001 work started on the construction. The sub-contractor indicated that a swale had to be built and thus the trees would have to be removed, taking into account the damage done to the root system.

¶ 11 The applicant and his solicitor attended on the Respondent City to issue a stop work order. This was denied. The trees were cut down.

¶ 12 The condition of the trees created a danger and the order to remove them at that time was reasonable.

PROCEDURE

¶ 13 Anyone who feels aggrieved by an order under the Building Code Act may appeal to a Judge of the Superior Court of Justice within 20 days per Section 25(1) of the Building Code Act. That has been complied with.

¶ 14 Section 43 of the Ontario Municipal Board Act allows the Board to "rehear any application before deciding it or may review, rescind, change, defer or vary any decision, approval or order made by it". New evidence is one of the grounds that the Board may take into account on a new application.

¶ 15 A judge on an appeal may substitute his decision for that of the OMB.

STANDARD OF RENEW

¶ 16 This Court is sitting as a Court of Appeal from a decision of the Building Official to grant a building permit.

¶ 17 The applicable standard of review is set out in the case of Runnymede Development Corp. v. 1201262 Ontario Inc. 47 O.R. (3d) 374 at page 383: "[20] One of the few cases to have dealt specifically with the applicable standard of review is the decision of Stinson J. in William F. White Ltd. v. Toronto (City) Chief Building Official, 44 O.R. (3d) 750, supra. In that case, Stinson J. considered a number of relevant authorities and stated (at p. 760): I conclude that an appellant under s. 25 of the [Building Code Act] has the burden of demonstrating by means of evidence placed before the court that the decision below was not reasonable or that it was wrong as a matter of law. In attempting to discharge that burden the appellant may tender additional evidence before the court, as may the respondents to the appeal. [21] Stinson J. held that a decision of the Chief Building Inspector would be set aside if it was "wrong as a matter of law". Therefore, where issues of legal interpretation are concerned, he would apply a standard of correctness. On other questions, Stinson J. held that a standard of reasonableness should be applied. In coming to this conclusion, he relied, in part, upon the decision of Hoilett J. in Griffen v. Teplitsky, [1999] O.J. No. 1552 (Gen. Div.), online: QL, a decision involving an appeal from the tribunal under the Health Care Consent Act. Stinson J. cited with approval the following excerpt from Griffen v. Teplitsky, supra, at para. 13: "Concerning this court's jurisdiction, it is worth noting that although the court may treat this appeal as a hearing de novo the court's fundamental role as an appellate tribunal has not changed. That fact is particularly germane, where as here, no new evidence has been adduced. It is my view in those circumstances, that the customary restraint appropriate for an appellate tribunal should be exercised. In other words, the fundamental issue to be addressed is to determine whether or not the board's decision was reasonable on the evidence having regard to the legal principles applicable. Stated otherwise, it is not this court's role simply to substitute its decision for that of the board's simply because it may, or even would have arrived at a different decision had it been the tribunal of first instance."

ARGUMENT OF APPLICANT

¶ 18 The applicant at the Committee of Adjustments did not raise the issue of the trees for what was deemed as strategic reasons, and relied only on the increase height.

¶ 19 It was raised by her at the OMB review, although the applicant did not present any evidence on the trees.

¶ 20 The OMB referred on three occasions to the trees and in its decision it granted the variance with one change and that was the removal of the setback. The Board imposed four conditions: the only one that concerns this application is #2 which reads as follows: "that an Arborist report indicating the steps to be followed in preserving the two trees in question, be submitted to the City's satisfaction prior to drainage certification".

¶ 21 The position of the applicant was that the City and/or the Sallas' should have gone back to the OMB and obtained a clarification. Because that did not happen, the injunction should be made permanent and that the Sallas' not be able to build its garage outside of the regular height limits.

ARGUMENT OF RESPONDENTS JIM AND JILL SALLAS

¶ 22 They obtained an Arborist report as required and provided it to the City as required. They believed notwithstanding the report that they could save the trees.

¶ 23 Therefore, they honoured their responsibility and proceeded to obtain a building permit and hire a contractor.

¶ 24 The events of June 12th, 2001 were outside of their control. The City ordered the cutting down of the trees as a safety concern. It was a reasonable decision. There was no malfeasance on their part.

¶ 25 The preservation of the trees was not connected with the application to vary the height restrictions. Therefore, it was outside the powers of the OMB.

¶ 26 The Sallas' point out that the trees would have been destroyed without the height increase of the building. They could have taken them down because they were on their property or on the lot line.

¶ 27 The applicant is trying to impose a new condition when her objection to the height restrictions was turned down.

ARGUMENT OF THE CITY OF HAMILTON AND PETER LAMPMAN

¶ 28 The applicant has taken the decision of the OMB out of context.

¶ 29 The OMB was trying to placate the Applicant by putting in Condition #2 -- the Board transferred the condition to the City and it was fulfilled when the Sallas' provided the Arborist report.

¶ 30 The Sallas' could have cut down the two ash trees at any time pursuant to the Trees Act, Chapter T.20.

¶ 31 The OMB was ultra vires by putting in Condition #2 in that no evidence was led by the applicant as to what use the trees would have in respect to the height variance. See the Planning Act, R.S.O. 1990, Section 45(9).

¶ 32 The building inspector could have issued the building permit without looking at the condition.

DECISION

¶ 33 Having reviewed the material filed and hearing from counsel I find as follows:

(a) The Sallas' complied with the OMB order.
(b) The OMB condition with respect to the trees was ultra vires and of no consequence.
(c) The applicant was attempting to use the tree condition to get around the granting of the height increase.
(d) The respondent, Peter Lampman acted within his powers and acted reasonably.
(e) The City did not act outside of its powers.
(f) There was no error in law by the City of Hamilton, Peter Lampman or any of its agents or employees.

¶ 34 Therefore, the injunction will be dissolved forthwith.

¶ 35 The issue of damages and costs, if not agreed to, may be brought back before me.

MATHESON J.

Sapone v. Clarington (Municipality)

Between
Umberto Sapone and Joan Sapone, plaintiffs, and
The Corporation of the Municipality of Clarington, Eridanus Industries Inc. and Wayne Earnest Conrad, defendants

[2001] O.J. No. 4991
Court File No. 6746/01

Ontario Superior Court of Justice
Lane J.

Heard: September 20, 2001.
Judgment: December 18, 2001.

Counsel:

Irving Marks and David Taub, for the defendant Clarington, moving party.
Umberto Sapone, for the plaintiffs, responding party.

¶ 1 **LANE J.** (endorsement):— The defendant Clarington moves to strike out the Statement of Claim and dismiss the action against it on the ground that it does not disclose a cause of action against Clarington. The other defendants take no position. The plaintiffs seek damages and punitive damages against Clarington by reason of the construction and use of certain buildings on a property adjacent to their own by the other defendants. The plaintiffs say that the municipality, Clarington, has negligently failed to enforce its own by-laws, ignored the plaintiffs' concerns and "turned a blind eye" to illegal use of the adjacent lands, thereby causing a nuisance.

¶ 2 The plaintiffs reside in a home located one house north of property owned by the defendant Mr. Conrad and adjacent to other property owned by the defendant Eridanus, a corporation owned by him. I will refer to all of these lands as the Conrad property. The area is zoned as a rural hamlet for single family dwellings only. The Conrad property was originally a 2800 s.f. home like those around it. In the early 1990's, the defendant Conrad applied for and was granted building permits by Clarington for a substantial extension doubling, if not tripling the size of the house. There is also a 2 metre high concrete wall around the property built at the same time.

¶ 3 The plaintiffs say, in paragraph 17, that this property does not comply with the zoning because it is being used for business with numerous people working there day and night, and not as a single family dwelling. They further say, in paragraph 19, that Clarington has failed to comply with their request to investigate and report on the nature of the use of the Conrad property. In paragraph 21, the plaintiffs say that the Conrad building is an eyesore out of character with the vicinity, and is a nuisance because it blocks their view, emits noise, light and fumes and discharges unknown substances onto the plaintiffs' property, damaging their cedar trees. In paragraph 22. the plaintiffs say that the wall contravenes the zoning by-law and that the building is being used for business. In paragraph 23, the plaintiffs say that the numerous cars entering and exiting at all hours, helicopters hovering, brilliant security lights and constant patrolling by security guards have all given rise to apprehension and loss of a sense of security. In paragraph 24, the plaintiffs say that all of this has been caused by the negligence of Clarington in that it failed to enforce the zoning by-laws, ignored the plaintiffs' concerns and turned a blind eye to the business use of the Conrad property.

¶ 4 In paragraph 26, the plaintiffs plead that Clarington: issued building permits for the Conrad property "knowing that the said permits did not comply with the letter and spirit" of the zoning by-law; has known since the early 1990s of the use of the property and has failed to enforce the by-law; knew or should have known that Conrad would use the property for business; has totally disregarded the plaintiffs' concerns as to the eyesore and the nuisance to the plaintiffs; and, in spite of the plaintiffs' concerns, issued further building permits to Conrad. In paragraph 27, the plaintiffs allege that in doing these things, Clarington failed to exercise the standard of care to be expected and thereby facilitated the illegal use of the Conrad property. Finally, in paragraph 28, the plaintiffs say that Clarington acted in a high handed manner and in bad faith by allowing Conrad to circumvent the rezoning process required to establish a business use in this residential area and by abusing its discretionary power and abdicating its duty to the plaintiffs to enforce the by-law.

¶ 5 On a motion such as this, the court must accept the facts as alleged in the Statement of Claim, unless clearly ridiculous or incapable of proof, and read that document generously: Toronto-Dominion Bank v. Deloitte, Haskins & Sells (1991), 5 O.R. (3d) 417 at 419, (O.C.G.D.). The court should not dispose at this stage of matters of law not fully settled: R.D. Belanger & Associates Ltd. v. Stadium Corp. of Ontario Ltd. (1991), 5 O.R. (3d) 778 at 782 (C.A.). It must appear plain and obvious to the motions

judge that even if the facts pleaded are proved, there is no reasonable cause of action: Hunt v. Carey Canada Inc., [1990] 2 S.C.R. 959 at 980.

¶ 6 It is apparent that much of this pleading is in the language of the law of nuisance. In his oral submissions, Mr. Sapone said that his case was that the municipality had issued a building permit when it ought not to have; the building itself was a nuisance. Since 1990 Clarington had known of the business use and went ahead and issued more building permits in 1999 despite the plaintiffs' objections.

¶ 7 Counsel for Clarington submitted that a municipality cannot be liable in nuisance to a landowner where it does not occupy the land from which the nuisance emanates. It is certainly true that nuisance is normally an action brought against a neighbouring landowner based upon some use being made of that land. The municipality here is not the occupier of the offending lands. It is possible, in some circumstances, for a non-occupier to become liable. In Jackson v. Drury Construction Co. Ltd. (1975), 4 O.R. (2d) 735 (C.A.) the court held that a road contractor whose blasting operation broke open fissures in rock which enabled pig farm effluent to pollute the plaintiff's well, was liable in nuisance even though he was not the occupier of the pig farm from which the effluent came. His non-natural use of the nearby county road had directly caused the problem. Dubin J.A. said that in an action for nuisance, liability attaches to anyone who either creates or causes a nuisance, and the cause of action is not dependent on that person being in occupation of the lands from which the nuisance emanates.

¶ 8 In the present case, while the majority of their pleading revolves around the use of the premises, the plaintiffs have pleaded that the building itself causes a nuisance by obstructing their view, and that certain pipes discharge effluent onto the plaintiffs' lands. They further submit that Clarington made this nuisance possible by granting building permits "knowing that the said permits did not comply with ... the by-law." (paragraph 26(i)). If that last sentence were proved, it is not plain and obvious to me that a municipality could not be liable for the results of such an act. The principle in Drury may not be broad enough to encompass a municipality issuing a permit, because in Drury there is reference to the defendant's non-natural use of the road, so that there was an occupation of land in the vicinity involved. But this stage of the action is not the place to resolve such issues of law. I think therefore, that paragraph 26(i) should stand.

¶ 9 Much of the plaintiffs' complaint is that Clarington knows of the illegal use and will not enforce the by-law and put an end to it. Counsel for Clarington submitted that there was no legal duty on a municipality to a ratepayer to enforce a by-law. He referred me to Toronto (City) v. Polai [1970] 1 O.R. 483 (C.A.), aff'd [1973] S.C.R. 38. In that case the City, as a result of wartime housing shortages, had adopted the practice of not enforcing zoning by-law restrictions on multiple family use of single family dwellings. In the postwar period, some such properties were placed on a `deferred' list and were not prosecuted for violating the by-law. Other property owners in the same area were prosecuted for the same offence and one of them defended an action by the City for an injunction on the basis that the City was discriminating against her. The action was dismissed and the City appealed. The appeal was allowed. All three Judges wrote reasons and all referred in one fashion or another to the discretion possessed by the City as to whether to prosecute or not.

¶ 10 Schroeder J.A., at pages 490-1, likened it to the discretion possessed by the Attorney-General when acting as parens patriae, where the decision to prosecute or not could not be challenged in Court. He also observed that "the mere passing of a by-law by a municipal corporation does not cast any legal duty on the municipality to see to its enforcement." He referred to Brown v. Corporation of the City of Hamilton (1902), 4 O.L.R. 249, where the plaintiff was injured by exploding fireworks which were discharged contrary to a by-law prohibiting setting off fireworks in the streets. The plaintiff argued that he had a cause of action against the City because the City had long disregarded the by-law, to the knowledge of its officers and took no steps to enforce it. Chancellor Boyd said that this was a novel proposition, contrary to all authority except in Maryland, and that: "Having enacted such a by-law, there is no duty cast on the municipality to see to its enforcement."

¶ 11 Jessup J.A. said at page 497, that, in the absence of evidence of impropriety in the administration of the deferred list, the City must be assumed to have: "... exercised bona fides the discretion they undoubtedly have in the enforcement of the City's zoning enactments." He also referred to Brown, supra.

¶ 12 Brooke J.A. said, at page 501:

> "Municipal Council has a discretion as to when it will prosecute for a breach of or sue to enforce the provisions of the zoning by-law. To deny the discretion in Municipal Council would be

> to place the most technical breach of the by-law beside the most blatant and to remove from consideration the harm done to the offender and the value to the community of the proposed proceedings when considering when they ought to be taken." Later, at page 502, he said that the Court cannot interfere with that discretion.

¶ 13 The plaintiffs relied on a number of cases demonstrating the existence of a duty of care in municipal inspection of buildings under construction, such as Kamloops (City) v. Neilsen [1984] 2 S.C.R. 2 and Ingles v. Tutkaluk Construction Ltd. [2000] S.C.J. No. 13. They may or may not assist the plaintiffs in their case against the municipality for issuing a building permit knowing that the application did not conform to the zoning by-law, but they do not support the view that merely passing a by-law casts a legal duty upon a municipality to enforce it. They are cases where the municipality has undertaken to inspect for compliance and thereby has come under a duty of care in the conduct of such inspection.

¶ 14 In my opinion Polai is decisive authority against the plaintiffs' reliance upon Clarington having a legal duty to them to enforce the zoning by-law against the other defendants. If there is no legal duty to enforce, it would follow that there is likewise no legal duty to respond to the plaintiffs' complaints by investigating and reporting to the plaintiffs on the activity at the premises of the other defendants.

¶ 15 The Statement of Claim is replete with references to Clarington's failure to respond to the plaintiffs' complaints, or to enforce the by-law. It is likely better that a new document be prepared without these passages than to strike out bits here and there. In the result, the plaintiffs' Statement of Claim against Clarington is struck out, with leave to amend to plead the cause of action referred to in paragraph 26(i).

¶ 16 The defendant Clarington has been substantially successful and will have its costs on a party and party basis, but they will be to it in the cause of the action against it.

LANE J.

Olmstead v. Greenberg

Between
Eleanor Olmstead, plaintiff, and
Marion Greenberg, Richard Samuel, and The Corporation of the City of Toronto, defendants

[2001] O.J. No. 4545
Court File No. 01-CV-205761

Ontario Superior Court of Justice
Day J.

Heard: July 30, 2001.
Judgment: November 21, 2001.

Counsel:

Joyce Harris, for the plaintiff (responding parties).
Christopher R. Dunn, for the defendants (moving parties).

DAY J.:—

NATURE OF ACTION

¶ 1 The personal defendants, Marion Greenberg and Richard Samuel (the "defendants/moving parties) have brought this motion for an order striking out or dismissing the following paragraphs from the plaintiff's Statement of Claim:

(c) a declaration that the roof and eaves troughs on the house located at 7 Strathearn Road, Toronto, Ontario, are in violation of approved site plans, applicable municipal zoning by-laws and building codes;
(d) an Order requiring the defendants Richard Samuel and Marion Greenberg to take all necessary steps in bring the overhanging roof and eaves trough on the west side of 7 Strathearn Road, Toronto, Ontario into compliance with approved site plans, applicable municipal zoning by-laws and building codes;
(e) an Order requiring the defendants Richard Samuel and Marion Greenberg to install a privacy fence on the upper floor balcony of 7 Strathearn Road, Toronto, Ontario;
(f) a declaration that the house located at 7 Strathearn Road, Toronto, Ontario does not comply with the applicable municipal zoning by-laws and building codes;
(g) a declaration that the proposed Structure (defined below) to be constructed on the property of 7 Strathearn Road, Toronto, is illegal as it does not comply with the applicable municipal zoning by-laws and building codes
(h) an order requiring the property located at 7 Strathearn Road, Toronto, be restored to its original grading and elevation.

8. The defendants, Greenberg and Samuel, have permitted the construction of the house contrary to the provisions of the applicable zoning by-laws and the provisions of the Building Code Act, 1992.

15. In addition to the above damages, the plaintiff claims damages for nuisance due to noise, loss of light and loss of privacy, the particulars of which are as follows:

(d) The defendants, Greenberg and Samuel, have built the house too high, too large and too close to Strathearn Road, and too close to the plaintiff's house, in violation of existing zoning and other applicable by-laws, whereby she no longer enjoys the amount of light that had previously shone on her property.
(e) The defendants, Greenberg and Samuel, are planning to construct a structure in their backyard which is at a higher elevation than the plaintiff's backyard, thereby reducing the amount of light which has always shone on the plaintiff's backyard, which may cause further flooding and will reduce the plaintiff's quiet enjoyment of her property.
(f) The plaintiff's privacy has been unduly disturbed as a result of the house's second story deck, which overlooks the plaintiff's property. This invasion of privacy will be further exasperated when the structure is built.

17. Instead of viewing a lawn and trees outside of her eastern windows, the plaintiff now views the house. Further, after the structure is constructed on the property, she will be viewing from the south windows a high series of retaining

walls alongside the edge of her backyard, instead of a grass hill and trees.

FACTS

¶ 2 The plaintiff, Eleanor Olmstead, owns and occupies the property at 9 Strathearn Road, Toronto. The defendants/moving parties bought the home at 7 Strathearn Road, Toronto, next door to that of the plaintiff. Both properties are on the ravine side of Strathearn Road. The defendants/moving parties demolished the home at 7 Strathearn Road and constructed a large home which contravenes the relevant zoning by-laws in size and height, and in proximity to the plaintiff's home and to Strathearn Road. It also occupies green open spaced districts land.

¶ 3 The plaintiff asserts that the City of Toronto has failed to enforce the zoning by-laws, failed to enforce the approved site plan and did not require the defendants/moving parties to seek approvals for variances from the Committee of Adjustment.

¶ 4 The plaintiff claims that as a result of the failure of the defendants/moving parties to comply with applicable by-laws and failure of the City to require compliance, the plaintiff has been damaged in a number of respects, including enduring a number of floods coming from the defendants/moving parties property, changing the character of the neighbourhood, violating the plaintiff's right to quiet enjoyment of her home, causing emission of noxious odours and noise, and infringing upon the plaintiff's residential amenities, adversely affecting her light, privacy and views.

¶ 5 It would appear that the claims of the plaintiff can be categorized into two classes of allegations: first, that the defendants/moving parties home was built in violation of the applicable legislation; this includes the relevant zoning by-laws and Building Code Act, 1992; for these violations the plaintiff claims that both the defendants/moving parties and the City of Toronto should be held liable. Second, that construction by the defendants/moving parties constitutes a nuisance as it interferes with the use and quiet enjoyment of her property; construction has caused water to flow onto her land resulting in consequent damages, created noise, and has caused loss of light, privacy and aesthetic enjoyment with respect to her home.

ISSUES

1) The principles applicable to the present motion;
2) Jurisdiction to deal with the Ontario Building Code; and
3) Claims based on loss of light, loss or privacy and loss of view.

FINDINGS

1) The principles applicable to the present case

¶ 6 On a motion to strike out a pleading or part of a pleading for failure to disclose a cause of action being frivolous, vexatious, or otherwise an abuse of process of the court, the following principles are applicable:

a) The allegations of fact contained in the Statement of Claim, unless patently ridiculous and incapable of proof, must be accepted as proven;
b) The moving party, in order to succeed, must show that it is plain, obvious and beyond doubt that the plaintiff could not succeed at trial;
c) The novelty of the cause of action will not militate against the plaintiff; and
d) The Statement of Claim must be read generously with allowance for inadequacies due to drafting deficiencies.

See Nash v. Ontario (1995), 27 O.R. (3d) 1 at 6 (C.A.) and Hunt v. Carey Canada Inc. (1990), 74 D.L.R. (4th) 321 at 336 (S.C.C.).

2) Jurisdiction to deal with breaches of the Ontario Building Code

¶ 7 Pursuant to section 3 of the Building Code Act, 1992, C. 23, each municipal counsil in Ontario is granted exclusive responsibility to enforce the Act within its territory. The Act provides that this is to be accomplished through the appointment of a chief building official and building inspectors:

3(1) The counsel of each municipality is responsible for the enforcement of this Act in the municipality.
(2) The counsel of each municipality shall appoint a chief building official and such inspectors as are necessary for the enforcement of this Act in the areas in which the municipality has jurisdiction ...

¶ 8 Section 25, (1) and (2) provide as follows:

> 25.(1) Any person who considers themselves aggrieved by an order or decision made by an inspector or chief building official under this Act or the regulations, except a decision not to issue a conditional permit under subsection 8(3), may within twenty days after the order or decision is made, appeal the order or decision to a judge or the Ontario Court (General Division).
>
> (2) A judge to whom an appeal is made may, upon such conditions as the judge considers appropriate, extend the time for making the appeal before or after the time set out in subsection (1), if the judge is satisfied that there is reasonable grounds for the appeal and for applying for the extension.

¶ 9 The defendants/moving parties take the position that the plaintiff's right to redress to the court for the defendants/moving parties' alleged violation of the building code is limited to an application for review of the decisions of Toronto's chief building official in issuing or failing to issue the defendants/moving parties a building permit and approving of construction of their home and pool. This right must be exercised within twenty days of the date of such decision. In the normal course, the aggrieved party would be the applicant, and the City of Toronto would be the respondent. The defendants/moving parties point out that the plaintiff has not made application for such relief, but has instead commenced an action seeking declarations that the construction of the defendants/moving parties' home violated the building code, and seeking orders that such violations be rectified. They claim that the court has no jurisdiction to entertain such an action. In support of this position, the defendants/moving parties cite French v. Rank City Wall Canada Ltd. (1984), 6 O.A.C. 145 (C.A.) and Ziegler v. Sherkston Resorts Inc. (1996), 4 C.P.C. (4th) 225 (Ont. Gen. Div.).

¶ 10 To support their position that where enforcement of legislation is assigned by the legislature to a statutory body, no right of action to the court for enforcement of such legislation is permitted except as provided by the statute, and any action not in compliance with the legislation will be dismissed. The defendants/moving parties cite Woodglen & Co. Ltd. and City of North York et al (1983), 42 O.R. (2d) 385 (Div. Ct.). In that case the plaintiff made an application for judicial review of the issuance of a building permit, seeking a writ of mandamus, and it did not apply under s. 25 of the Act (then s. 15) to appeal that decision. Even though the application was similar in both form and substance to the right of appeal provided by the Building Code Act, 1992, the application was dismissed on the basis that the proper forum was a section 25 application (then s. 15), as provided by the Act.

¶ 11 The plaintiff takes the position that the courts' jurisdiction is not ousted by section 25 of the Building Code Act. She claims that the section is intended to provide some judicial review of decisions of the chief building official in dealings between the chief building official and the owner of the property directly affected by his or her decisions. Typically, disputes coming before the court by way of section 25 of the Ontario Building Code, will be situations similar to the Woodglen case, cited by the defendants/moving parties, in which the owner of land was aggrieved by the failure of the building commissioner to issue a building permit and sought judicial review. In that case, it was held that the owner ought to have appealed under section 25 of the Code, rather than seeking judicial review and, since the owner had adequate statutory remedy, the court declined to exercise jurisdiction to grant judicial review.

¶ 12 The plaintiff argues that section 25 of the Code is not designed to oust the jurisdiction of this court to deal with complaints by neighbours indirectly affected by dealings between the chief building official and the land owner. Indeed, it would be difficult to imagine that it could work effectively in such cases in that the neighbours affected would have no knowledge of the decisions involved from time to time by the chief building official as the building project progresses to completion. Thus, the neighbours could not be expected to appeal such decisions in a timely way as required under ss. 25(1).

¶ 13 At this point, I refer, parenthetically, to subsection 25(2) which allows the judge to whom an appeal is made under subsection 25(1) to extend the time for making the appeal if the judge is satisfied that there is reasonable grounds for the appeal and for applying for the extension. It should be noted that this court is not at that place because it is not dealing with an appeal under subsection 25(1) of the Code for the reasons above set out in expressing the plaintiff's position. Subsection 25(2) is cited merely to point out that even if subsection 25(1) was applicable the 20 day limitation period is not absolute.

¶ 14 Neither French nor Ziegler, supra, cited by the defendants/moving parties in support of their argument that this court lacks jurisdiction, in fact, deal with the Ontario Building Code. Rather, they deal with rent control

situations arising under the Residential Tenancies Act and under the Rent Control Act. Moreover, both cases involved disputes between landlord and tenant directly and did not involve claims asserted by those indirectly affected by decisions made within a statutory scheme.

¶ 15 The plaintiff takes the position that it is clear from the statement of claim and the particulars provided in reply to demands for particulars by the defendant City of Toronto, that the Building Code violations are pleaded out of an abundance of caution and to protect the plaintiff's position once she has a chance to inspect the plans and specifications for the structure under complaint. In contrast to the pleading of Building Code violations, the statement of claim and the particulars specifically identify itemized breaches of the zoning by-laws and of the site plan.

¶ 16 On the issue of jurisdiction to deal with the Building Code, given these observations, I find that, on this motion to strike, the court ought not to accept an argument that its jurisdiction is ousted:

a) in the absence of any judicial authority compelling such a conclusion interpreting s. 25 of the Code;
b) in the absence of any judicial authority considering a claim by a neighbour that a land owner and the municipality have permitted an illegal structure to be erected on the land owner's property; and
c) on the grounds that courts have always been reluctant to accept an argument, the effect of which is to oust the jurisdiction of the court.

See 80 Wellesley St. East Ltd. v. Fundy Bay Builders Ltd., [1972] 2 O.R. 280 (C.A.) and Michie Estates and City of Toronto, [1968] 1 O.R. 266.

3) Claims based on loss of light, loss of privacy and loss of view

Loss of Light

¶ 17 The defendants/moving parties position with respect to the loss of use of light is based on section 33 of the Limitations Act R.S.O. 1990, c. 0.15 , which provides that no person has a right to use light unless they meet the precondition of acquiring such right by 20 years use prior to the 5th day of March 1880 vis:

> 33. No person shall acquire a right by prescription to the access and use of light or to the access and use of air to or for any dwelling-house, work-shop or other building, but this section does not apply to any such right acquired by twenty years use before the 5th day of March, 1880.

¶ 18 In support of that position the defendants/moving parties cite Earl Putnam Organization Ltd. v. Macdonald (1978), 21 O.R. (2d) 815 (C.A.), at page 818:

> The law is clear that a land owner may so build on his land so as to prevent any light from reaching his neighbour's window, unless the neighbour has acquired as easement by way of prescription or by an express or implied grant: see particularly, 14 Hals., 4th ed., p. 99, para. 210, dealing with the nature of right to light. A right to light there is described as a negative easement:
>
> > The difference between the right to light and the right to freedom from smell and noise is that the former has to be acquired as an easement, in addition to the right of property, before it can be enforced; the two latter are ab initio incident to the right of the property.

¶ 19 With respect to loss of aesthetic value and loss of privacy, the defendants/moving parties take the position that neither of these alleged losses disclose a cause of action in nuisance.

¶ 20 The defendants/moving parties cite Re St. Pierre et al and Minister of Transportation & Communications (1983), 43 O.R. (2d) 767 C.A., at pp. 774-775:

> ... What conduct amounts to a nuisance at common law is "incapable of exact definition": Clerk & Lindsell on the Law of Torts, 4th ed. (1971), at p. 571, sums up the nebulous nature of the tort of nuisance in these words:
>
> > There is perhaps no more impenetrable jungle in the entire law than that which surrounds the word "nuisance". It has meant all things to all men, and has been applied indiscriminately to everything from an alarming advertisement to a cockroach baked in a pie. There is

general agreement that it is incapable of any exact or comprehensive definition.

Although it is rare than an owner can recover damages in this kind of case, there are some cases where recovery has been permitted. For example, recovery has been allowed in the following situations:

(a) interference with access to the claimant's property: Re City of Windsor and Larson et al. (1980), 29 O.R. (2d) 669, 114 D.L.R. (3d) 477, 20 L.C.R. 344;
(b) closing or relocating an existing road or street: R. v. Loiselle, [1962] S.C.R. 624, 35 D.L.R. (2d) 274;
(c) altering the course of a creek bed: Fried v. Minister of Transportation & Communications (1972), 3 L.C.R. 262.

What is the interference with the St. Pierres' property that has occurred in the present case? It seems to me that it is this: The neighbourhood has changed. The St. Pierres no longer enjoy the peace and seclusion that they formerly enjoyed; they are not subject to the noise from traffic on Highway 100. Their view has been interfered with. They no longer look out over rolling countryside; instead they now look out onto a major traffic artery.
Does this give rise to cause of action in nuisance? Regrettably, I do not think it does.

And in Muirhead et al v. Timbers Brothers Sand & Gravel Limited et al, (1977), 3 C.C.L.T. 1 (Ont. C.) at pp. 6-7:

(1) Unaesthetic Sites

According to Mr. Muirhead, at the time of the purchase of the Claremont property in 1963, it afforded a "magnificent view" of the surrounding pastoral countryside which had been despoiled as a result of quarrying activities referred to above. The plaintiffs' counsel submitted that dispoliation of view resulting from a legal wrong would give rise to a cause of action in nuisance, arguing by analogy from several Canadian, English and American cases. However, I would concur in this regard with my brother Morden in the Walker case, [Walker v. Pioneer

¶ 21 Contrary to the thrust of the law above cited, the plaintiff focuses on the remedies available under the planning regulatory framework which appears to have been ignored by the defendants/moving parties and, indeed, by the City with apparent prejudice to the plaintiff.

¶ 22 The plaintiff submits that these are amenities to which the plaintiff is entitled based on her reasonable expectations arising from the administration of the planning regulatory framework. These amenities are associated with the permitted uses in her zoning district and the minimum standards which must be observed with respect to the development and use of land.

¶ 23 The plaintiff alleges that the defendants/moving parties have failed to comply with the approved site plan and the zoning by-laws. The plaintiff further alleges that the City of Toronto has failed to enforce the minimum standards set by the zoning by-laws and failed to require compliance with the approved site plan and will not acknowledge the defendants/moving parties' contravention.

¶ 24 In the normal course, in a situation in which an owner is proposing to depart from the standards set out in the zoning by-laws, the owner is required by the municipality to make application to the Committee of Adjustment for relief from the discrepancies. In that case, Ontario Regulation 200/96, made under s. 70.1 of the Planning Act, sets out the procedure for minor variance applications and sets out those persons entitled to notice of the applications. Specifically, the plaintiff, who is an owner of land within 60 metres of the property of the defendants/moving parties, would have been entitled to notice pursuant to s. 3(d) of O. Reg. 200/96.

¶ 25 S. 45 of the Planning Act provides, among other things, that there is a right of appeal to the Ontario Municipal Board from any decision of the Committee of Adjustment. It also provides for a proceeding that goes forward as a quasi-judicial hearing at which the plaintiff would have had a full opportunity to call evidence and cross-examine witnesses who were called by the applicants. Had this usual procedure been followed, the

plaintiff would have been afforded a full opportunity to protect the amenities which she enjoys under the zoning by-law standards.

¶ 26 At the Committee of Adjustment and the Ontario Municipal Board, the cases repeatedly have applied considerations which protect amenities, including light, privacy and view. The plaintiff cites four cases as follows.

¶ 27 In Grant v. City of Toronto Committee of Adjustment, [1996] OMBD No. 1160 (July 26, 1996) at paras. 37-48, the Ontario Municipal Board spoke of "this enshrinement of amenities, including views, through zoning standards, that legitimizes certain established views as an integral part of the bundle of private property rights in a neighbourhood". In the Grant case, the Board refused to allow a variance to build an additional room onto a home in the Avenue Road/Bedford Road area of the City of Toronto based on a challenge by a neighbour, a writer, who used her own back room to write and found that her contemplation of the view aided her creative processes. That view would have been considerably impeded by the proposed addition to the land owner's property. The Board found that the variances requested by the land owner would have caused an unacceptable adverse impact upon the neighbour's "experience of place", especially as it relates to views and openness in the immediate vicinity and the relevant neighbourhood. In particular, the neighbour's property would suffer unduly both as to openness and views because of the size of the proposed addition and the "boxing" it would cause on her property and her "reasonable enjoyment of her property".

¶ 28 In Assaraf v. City of Toronto Committee of Adjustment, [1994] O.M.B.D. No. 1316, 31 OMBR 257 (1994) at pp. 259-60 and at p. 263, the Board considered in some detail the argument that the proposed application for variance and the addition to the structure which it would permit would cause a shadow to fall upon a neighbouring property. For this and other reasons, the Board dismissed the appeal from the Committee of Adjustment which had denied the application for variance. The Board showed in its reasoning and conclusion that variances are a privilege to be bestowed where there is demonstrated justification and the adverse impact in within acceptable limits.

¶ 29 In Milbourne v. City of Toronto, [2000] O.M.B.D. No. 379, 40 OMBR 308 (April 20, 2000) at 311, the Board refused to permit a variance that would have validated a structure. The reason for the refusal to permit the application was because the structure had a significant negative impact upon the views of the neighbours. The Board noted that the by-law in question has put an accent on controlling the house width to ensure the light, view and privacy of the community can be fully enjoyed by everyone".

¶ 30 In Erem v. Town of Richmond Hill Committee of Adjustment, [1994] O.M.B.D. No. 1120, 31 OMBR 186 (August 25, 1994) at pp. 193-194, the applicant for variance wanted to enclosed a swimming pool at the rear of his dwelling and required two variances to do so. At the Committee of Adjustment, he got his variances, but on appeal to the OMB, the OMB allowed the appeal and refused the application for variances. The Board considered the visual impact of the proposal upon the neighbours' property, the impact of shadow, the loss of open space feeling, the "blank wall" view that would deprive a neighbour of "an unobstructed view of the rear yards of the four residences to the west that it now enjoys", and concluded that the enclosure, if erected, "would constitute a clear intrusion and represent an anomaly in the vicinity". Based on its analysis of the relevant factors, the Board found that the proposed swimming pool enclosure had an unacceptable adverse impact upon the existing development in the immediate vicinity and that it was therefore not desirable for the appropriate development or use of the land.

¶ 31 On the issue of claims based on loss of light, loss of privacy and loss of views, while the law presented by the defendants/moving parties is in place and undisputed, for the court to strike pleadings on those grounds at this stage before trial would be to allow the defendants, both the moving parties and the City of Toronto, immunity from what would have been the appropriate due process to which the plaintiff was entitled, eloquently identified by the arguments of the plaintiff set out above. How these conflicting arguments will play out at trial is for another day. In the final analysis, I revert to the first finding herein dealing with principles applicable to the present motion. I do not find that the defendants/moving parties have shown that it is plain, obvious and beyond doubt that plaintiff could not succeed at trial on these issues.

¶ 32 Accordingly, the motion is dismissed.

COSTS

¶ 33 If the parties are unable to come to terms on costs, I will be available to make a determination by appointment.

DAY J.

R. v. 1267017 Ontario Ltd.

Between
Her Majesty the Queen, and
1267017 Ontario Limited

[2001] O.J. No. 3412

Ontario Court of Justice
Newmarket, Ontario
Lampkin J.

Oral judgment: July 19, 2001.

Charge: Building Code Act

Counsel:

R. Duncan, for the Crown.
N. Gerry, for the accused.

¶ 1 **LAMPKIN J.** (orally):— The Appellant appeals against the dismissal of two counts in which the Respondent was charged with the following offences:

(a) that on or about the 26th day of November, 1998, at 360 Enford Road, being part of Lots 9 and 10 of Plan 4840 in the Town of Richmond Hill, the Respondent constructed or caused to be constructed a building within the Municipality of Richmond Hill without first obtaining a permit therefor issued by the Chief Building Official for the Town of Richmond Hill contrary to s. 8(1) of the Ontario Building Code Act; and
(b) that on or about the 15th day of April, 1999, at the said place, the Respondent failed to comply with Order to Comply #A98-106 issued on the 26th day of November, 1998, by Morris Luchetta, a Building Inspector for the Town of Richmond Hill, contrary to s. 12(2) of the Ontario Building Code Act.

FACTUAL BACKGROUND

¶ 2 The Respondent is a corporation duly incorporated under the laws of the Province of Ontario. On December 1, 1997, the Respondent purchased from Danhart Sheet Metal Contractors Limited the premises municipally known as 360 Enford Road, Richmond Hill.

¶ 3 On November 26, 1998, about 3:15 p.m., Morris Luchetta, then the Senior Building Inspector for the Town of Richmond Hill, in performance of his duties inspected the premises at 360 Enford Road. It appeared to be a one-storey, industrial type building which Mr. Luchetta estimated to have an area of 25,000 to 30,000 square feet.

¶ 4 He found a number of areas under construction. There were about 20 or 30 offices that had been constructed in the interior of the building. The offices were complete save and except that they were not painted. Mr. Luchetta could not say when the construction had been completed and did not know whether it had been completed before December 1, 1997. A permit is not required to paint offices.

¶ 5 There were two other offices or recording studios that had red lights on the outside. The studwork had all been erected, drywall was installed, some of it was taped and some was not. There were exposed members of framing above the ceiling which had not yet been installed. He believed it to be new construction because the material appeared to be new. There were unopened bags of insulation, some of the wallboard had been taped and some not; some had been sanded and some not. There was dust everywhere throughout the two offices or studios.

¶ 6 Upon further inspection, Mr. Luchetta found 20 or 30 motor vehicles, including motor homes, parked in the rear of the building which he considered to be a storage area or warehouse. He said the premises were occupied on November 26, 1998. But apart from a couple of people in the storage area whom he believed to be painting, he saw no others in the building.

¶ 7 At about 5:56 p.m., Mr. Luchetta returned to the premises with Order to Comply No. A98-106 addressed to the Respondent at 360 Enford Road. The Order was served by taping a copy thereof to the front door of the premises and by registered mail addressed to the Respondent at the said address.

¶ 8 The Order stated that an inspection of the building had disclosed a contravention of the Building Code Act. It ordered the owner to correct the contravention forthwith. The Building Code Reference was stated as s. 8(1) of the Act. The nature and location of the contravention were stated as follows:

> "Construction has proceeded at the above premises prior to obtaining a Building Permit. Specifically:Internal Partitions, Offices and storage of motor vehicles".

In the Remarks column of the Order adjacent to the column setting out the nature and location of the Contravention, the following direction is stated:

> "Stop Work until a Building permit is issued".

¶ 9 Mr. Luchetta testified that as of the 15th day of April, 1999 no application for a Building Permit had been made and as a result, the present proceedings were launched. Indeed, as of the date of his testimony, January 10, 2001, the owner had made no application for a Building Permit.

¶ 10 Although he has driven by the premises on a number of occasions, Mr. Luchetta has never made a subsequent inspection inside of the building.

RELEVANT LEGISLATION

¶ 11 S. 1(1) of the Building Code Act defines "building", inter alia, as "a structure occupying an area greater than ten square metres consisting of a wall, roof and floor or any of them or a structural system serving the function thereof ....,

The term "construct", inter alia, means to do anything in the erection, installation, extension or material alteration or repair of a building ....",

> S. 8(1) of the Act enacts as follows:
> "No person shall construct or demolish a building or cause a building to be constructed or demolished unless a permit has been issued therefor by the chief building official."

GROUNDS OF APPEAL

The Appellant appeals on the following grounds:

(a) That the learned Justice of the Peace erred in law in placing the onus on the prosecution of proving a specific time of construction.
(b) That the learned Justice of the Peace erred in fact in determining that a second site inspection was necessary to determine compliance with the Order to Comply.

¶ 12 The learned Justice of the Peace stated in her judgment:

> "The officer gave evidence of what he observed in the building on the 26th day of November, 1998. The counsel for the defence is conceding that construction had occurred on the premises so this is not in dispute. The issue before the Court is when did construction occur?
> On the evidence that is before the Court there are different inferences that can be drawn. One was that construction was occurring or had occurred recently or the inference also can be drawn that the building was purchased by the actual owner, the defendant in this case, on the 1st of December, 1997 and at that time, the time of inspection, the building was in the exact same state as it was when it was purchased."
> She stated further:
> "The inspector who conducted the inspection in this case indicated that he did not inspect that building prior to this single inspection in November but he was aware that a permit had been taken sometime in 1984 or '86 but there was no previous inspection to the date we are talking about here on the 26th of November or prior to that so the officer was not able to give evidence whether there was construction that had occurred prior to that - prior to the purchase of the building ....
> There was a comment that is made by the officer when he gave his evidence that there was dust everywhere. Now does this mean that it was dust that had been accumulated in the area because that area was not used and had not been used for a period of time?"

¶ 13 The learned Justice of the Peace was not satisfied that there was enough evidence to make a decision beyond a reasonable doubt and dismissed the first count.

¶ 14 Counsel for the Appellant submits that the Respondent was at the material time the owner of the building and as such is primarily responsible for obtaining a Building Permit with respect to any construction on the premises. He contends that it is irrelevant whether the Respondent purchased the building in that condition. Once the authorities become aware that there is construction without a Building Permit, they are required to order the present owners to obtain a Building Permit without proceeding further. He submits that the prosecution does not have to prove the specific time of construction. He submits further that the approach of the Respondent in doing nothing is in effect a collateral attack on the validity of the Order to Comply, and since the Building Code Act sets up a mechanism for settling disputes, the Respondent is barred from attacking the validity of the Order. He relies on R. v. Consolidated Maybrun Mines Ltd. (1998) 123 C.C.C. (3d) 449.

¶ 15 Counsel for the Respondent submits that there is no evidence that the Respondent who became the owner of the premises on December 1, 1997, did not purchase the building in the condition in which it was when inspected on November 26, 1998, a few days short of a year after its purchase. He submits that the prosecution must show that there was construction between the date of purchase and the date of inspection so that at least an inference may be drawn that the Respondent "constructed or caused to be constructed" the building and that the prosecution has failed to do that. He concedes that the Order to Comply is valid and submits that Maybrun is irrelevant in the circumstances.

¶ 16 The purpose of the Building Code Act is the protection of the general public from unsafe design and construction. In the 1997 edition of the user's guide of the Ontario Building Code at p. 1 the following is stated:

> "The Code is essentially a set of minimum provisions respecting the safety of buildings with reference to public health, fire protection and structural sufficiency. It is not intended to be a textbook on building design, advice on which should be sought from professional sources. Its primary purpose is the promotion of public safety through the application of appropriate uniform building standards."

¶ 17 In Greater Toronto Airports Authority v. City of Mississauga, (1999), 43 O.R. (3d) 9, Mr. Justice MacPherson encapsulated the powers of municipalities under the Building Code Act. At p. 21 he had this to say:

> "The Act provides municipalities with extensive powers to regulate property development, such as by specifying rules for the construction, demolition, use and occupation of buildings and requiring the submission of plans to a municipal building department for approval before construction may proceed. The Act provides municipal building officials with the power to remove buildings from land and to have them demolished. Those officials are also empowered to make assessments of the structural adequacy of buildings for the purpose for which they are to be used, and they have broad powers to enter and search property and to make orders against both owners of buildings and many other persons who have dealings with buildings thus affecting the property rights of anyone with an interest in the property. The Act also provides for a number of liens which may be visited on the land itself. In short, the subject matter of the Act is buildings and the land on which they are placed."

¶ 18 In the performance of his duties, a municipal building inspector may enter upon land and buildings at any reasonable time without notice and without warrant to ensure that the construction is proceeding according to plan. He may order compliance with the Act or order that construction cease. Where an Order of the inspector is not complied with, the chief building official may prohibit the use or occupancy of the building and may cause the building to be renovated, repaired or demolished to remove the unsafe condition for the protection of the public.

¶ 19 The owner is primarily responsible for applying for a Building Permit prior to the commencement of any construction on his lands. But an application for a Building Permit is not restricted to the owner. A long-term lessee may also apply for a permit. So too may a purchaser under an agreement of purchase and sale: Harju v. City of Thunder Bay (1976), 8 O.R. (2d) 633. There is even provision for the transfer of permits when land changes ownership: s. 7(h).

¶ 20 Having regard to the purpose of the Act, if a purchaser purchases a building in which there is ongoing construction, he may complete the construction in accordance with the permit previously granted to the vendor. But if there was no permit ever granted to the vendor, the purchaser is not entitled to sit idly by and not apply for a Building Permit when served with an Order to obtain one.

¶ 21 And that is the position in which the Respondent finds itself. Notwithstanding the evidence that the construction appeared to be recent, which I would construe to be within the past year of inspection without actually seeking to define the term "recent", if the building was purchased in its present condition, once the Order to Comply had been served, the Respondent had to make the necessary arrangements to obtain the Building Permit. If it sought to dispute the authority of the Building Inspector to issue the Order, then the provision for settling disputes in the Act must be employed. Failing that, he is deemed to have constructed the building without a building permit.

¶ 22 In the circumstances, the appeal with regard to the first count will be allowed and a finding of guilt made.

¶ 23 With respect to the second count, the evidence is that the interior of the premises was not inspected after November 26, 1998. The learned Justice of the Peace said:

> "I do agree that a subsequent inspection would have provided the Court with further evidence but it is not before the Court. So based on that I am not satisfied beyond a reasonable doubt on this charge either and it is also dismissed."

¶ 24 This count appears to be another way of forcing the Respondent to apply for a Building Permit because as of April 15, 1999, no application for a Building Permit had been made in accordance with the Order to Comply issued on November 26, 1998.

¶ 25 S. 12(2) of the Act is the governing section and that enacts as follows:

> "An inspector who finds a contravention of this Act or the building code may make an order directing compliance with this Act or the building code and may require the order to be carried out immediately or within such time as is specified in the order."

¶ 26 Order to Comply No. A98-106 has in its Remarks column the following directive: "Stop Work until a Building Permit is issued".

¶ 27 I agree with the learned Justice of the Peace and the submission of Counsel for the Respondent that absent a second inspection to see whether the Order to Comply had been disobeyed and work had been carried on, there is no evidence on which to register a finding of guilt on this count.

¶ 28 In Working Paper No. 29 issued by the Law Reform Commission of Canada in 1982 on Criminal Law: The General part - Liability And Defences, the following comment is made at p. 81 under the heading "Reliance on Authority":

> "A special problem arises regarding areas of law, like tax laws, laws on weights and measures, etc., which are basically non-criminal law but which create offences. Such laws are regularly explained to citizens by those responsible for the administration of those laws. The commonest guide, then, to the scope and meaning of such laws becomes official pronouncements, rulings and directives. So, where reliance in good faith is placed on such authority, it clearly is unfair to penalize the citizen for failing to predict eventual court interpretation."

¶ 29 I consider the Building Code Act to be a statute on which citizens may need explanation by those responsible for its administration.

¶ 30 The Working Paper certainly does not have the force or authority of statute law or of a judgment. But it is interesting to see the names of the Commissioners who carefully considered the paper in its entirety. Among those who did so were Mr. Justice Antonio Lamer, as he then was, who went on to become Chief Justice of Canada, and Mr. Justice Gerard V. La Forest, who was also subsequently appointed to the Supreme Court of Canada.

¶ 31 When one reads the directive in the Remarks Column of the Order to Comply, it is reasonable to come to the conclusion that there would be no breach of the Act if the work is stopped and not continued. The Act provides far more drastic measures to deal with the Respondent if it continues to be recalcitrant than to register a finding of guilt on the second count.

¶ 32 In the circumstances, the appeal on this count is dismissed.

LAMPKIN J.

Thomas Furniture Ltd. v. Toronto

(City) Chief Building Official

Between
Thomas Furniture Limited and Ocean Hiro Ltd., applicants, and Ann Borooah, in her capacity as Chief Building Official of the City of Toronto, the Corporation of the City of Toronto, and Dixon Hall, respondents

[2002] O.J. No. 929
Court File No. 01-CV-222738

Ontario Superior Court of Justice
Motions Court
Jennings J.

Heard: February 25, 2002.
Oral judgment: February 25, 2002.
Released: March 6, 2002.

Counsel:

Patricia Foran, for the applicant.
Thomas H. Wall, for the respondents, Ann Borooah, in her capacity as Chief Building Official of the City of Toronto and the City of Toronto.
Linda Shin, for the respondent, Dixon Hall.

¶ 1 **JENNINGS J.** (orally):— The issue is whether the proposed facility at 2714 Danforth Avenue, Toronto, is a "crisis care facility" or a "hostel".

¶ 2 If it is a crisis care facility, a building permit is not obtainable because another crisis care facility or residential care facility is operating within 245 metres of 2714 Danforth Avenue (see By-law 438-86, s. 8(2)3(ii).

¶ 3 A crisis care facility is defined in the By-law as:

> "Crisis care facility":
>
> "means a temporary residence for persons requiring immediate shelter and assistance for a short period, and:
>
> (i) the facility is supervised, or the members of the group are referred, by a hospital, court or government agency; or
> (ii) the facility is funded wholly or in part by a government, other than funding provided solely for capital purposes; or
> (iii) the facility is regulated or supervised under a general or special Act;
>
> but does not include a use otherwise classified or defined in this by-law".
>
> (emphasis added)

¶ 4 A hostel is defined as "a building or part of a building that contains dwelling accommodation consisting of rooms without culinary facilities, but does not include a rooming house or a crisis care facility".

¶ 5 The evidence is that the facility is intended to provide temporary shelter for homeless individuals.

¶ 6 It is not disputed that the facility is funded by a government so that the necessity of meeting one of the three enumerated requirements is satisfied.

¶ 7 The respondents submit that the users of the facility are not necessarily persons requiring "immediate ... assistance for a short period" in addition to requiring immediate shelter. Additionally, they submit, the assistance, must relate to the particular crisis being experienced. Alternatively, they submit that the assistance to be offered is accessory to the sheltering and is therefore permissible as an accessory use.

¶ 8 The proposed assistance includes housing searches, crisis intervention, employment counselling and harm reduction counselling for substance abuse.

¶ 9 I am unable to read in a requirement to relate the need for immediate assistance to a particular crisis such as abuse or addiction as the respondents submitted. Regardless, in my opinion, being homeless is a crisis in itself. The criteria are that a person requires immediate shelter and assistance. The proposed facility will meet those criteria by providing

temporarily immediate shelter and assistance in the form of food and the services enumerated in paragraph 35 of the applicant's factum.

¶ 10 That appears to me to fit the preamble to the definition section. Because of the language used in the definition I do not believe I need to determine if the assistance is an accessory use.

¶ 11 As the facility is a "crisis care facility" as defined, it cannot be a hostel. The Chief Building Officer acted incorrectly in issuing a permit. The applicant is entitled to a declaration and order as asked in paragraphs 1(a)(b) and (c) of the application.

¶ 12 Costs to the applicant against the City fixed at $4,000.00. Although Dixon Hall strongly supported the City's position, this is not a case where costs should be assessed against it.

JENNINGS J.

Welwood v. Huron-Kinloss (Township)

Chief Building Official

Between
John Welwood, John Power and Pauline Watson, applicants, and
Matthew Farrell, Chief Building Official of the Corporation of
the Township of Huron-Kinloss, The Corporation of the Township
of Huron-Kinloss, Gys Geene, respondents

[2002] O.J. No. 1131
Court File No. 31433

Ontario Superior Court of Justice
Browne J.

Heard: January 28-31, February 1 and 4-5, 2002.
Judgment: March 26, 2002.

Counsel:

Valerie M'Garry, for the applicants.
D. Hawreliak, for the defendants, Matthew Farrell (CBO), The Corporation of the Township of Huron-Kinloss (The Township).
Jim Mays, for the defendant, Gys Geene.

¶ 1 **BROWNE J.**:— In this application the relief sought is an order quashing a building permit issued May 10, 2001 with particular reliance upon ss. 25 and 8 of the Building Code Act, R.S.O. 1992, c. 23 (BCA). Matthew Farrell (CBO) as Chief Building Official of the Township of Huron-Kinloss (The Township) issued the building permit which was for two barns to house 4,000 hogs from which operation there would be generated annually some 1.75 million gallons of liquid hog manure to be spread in the township and in the adjoining township Ashfield-Colborne-Wawanosh (Ashfield). In an overview, the competing interests are that ratepayers generally do not want an intensive livestock operation in their own back yard but the reality is that intensive livestock operations are existing viable agri business.

¶ 2 On January 28 there were three preliminary matters addressed involving a motion by Pauline Watson to be added as an applicant, a motion by a non-profit non-share capital corporation to be added as a party applicant and the issue as to whether any of the applicants, existing or proposed, had standing. In the result, I gave oral reasons adding Pauline Watson as an applicant, subject to certain terms. The motion to add the corporation as an applicant was dismissed. I found that the three applicants remaining had standing and the matter proceeded on the merits. Oral reasons were given for the results noted. Should any party request a copy of those reasons, I shall treat the oral reasons as draft reasons subject to reasonable changes without violence to the result.

¶ 3 I have referred above to ss. 8 and 25 Building Code Act. Those sections and s. 9 are as follows:

> 8.(1) No person shall construct or demolish a building or cause a building to be constructed or demolished unless a permit has been issued therefor by the chief building official. 1992, c. 23, s. 8(1): 1997, c. 30, Sched. B, s. 7(1).
>
> Issue of permits
>
> (2) The chief building official shall issue a permit under subsection (1) unless,
>
> The proposed building, construction or demolition will contravene this Act or the building code or any other applicable law; ... (emphasis added)
>
> Equivalents
>
> 9.(1) The chief building official may, subject to such conditions as may be set out in the building code, allow the use of materials, systems and building designs that are not authorized in the building code if, in his or her opinion, the proposed materials, systems and building designs will provide the level of performance requested by the building code. 1992, c. 23, s. 9.
>
> Appeal
>
> 25.(1) Any person who considers themselves aggrieved by an order or decision made by an inspector or chief building official under this Act or the regulations, except a decision not to issue a conditional permit under subsection 8(3), may, within twenty days after the order

or decision is made, appeal the order or decision to a judge of the Ontario Court (General Division). 1992, c. 23, s. 25(1).

Extension of time
A judge to whom an appeal is made may, upon such conditions as the judge considers appropriate, extend the time for making the appeal before or after the time set out in subsection (1), if the judge is satisfied that there is reasonable grounds for the appeal and for applying for the extension. 1992, c. 23, s. 25(2).
Effect of appeal
If an appeal is made under this section in respect of a matter in which a question is pending before the Building Code Commission, the proceeding before the Commission is terminated. 1992, c. 23, s. 25(3).
Powers of judge
If an appeal is made under this section, the judge shall hold a hearing and may rescind or affirm the order or decision of the inspector or chief building official or take such action as the judge considers the inspector or chief building official ought to take in accordance with this Act an the regulations and, for such purpose, may substitute his or her opinion for that of the inspector or chief building official. 1992, c. 23, s. 25(4).

¶ 4 Regulations under the Building Code Act are generally described as the Building Code and certain sections having relevance will be touched upon subsequently in these reasons.

ISSUE: WAS A MEETING HELD MARCH 27, 2001 A TOWNSHIP COUNCIL MEETING?

¶ 5 I will deal subsequently with minutes relating to this particular meeting. I am told there is other related litigation and there may be that in that litigation an issue as to whether or not the particular meeting of March 27, 2001 was a full-fledged or legal council meeting. For the purposes of these reasons, the legality of the meeting is not an issue and I do not intend any of these reasons to be determinative of the issue identified.

ISSUE:STANDARD OF REVIEW

¶ 6 There is no real issue joined as to what is the applicable standard of review. Issues are raised as to how the standard is to be applied. In a short form approach, the standard not in issue is as follows: 1) On questions of law, the CBO is required to be correct, 2) On questions of fact the CBO is required to meet a standard of reasonableness, and 3) On mixed questions of law and fact, the CBO is required to meet a standard of reasonableness. The standard of correctness would also apply to jurisdiction but jurisdiction issues are not raised in this case. Cases of assistance on the standard of review include the following: Canada (Director of Investigations and Research) v. Southam Inc., [1997] 1 S.C.R. 748, Burns v. Perth South (Township) Chief Building Official (2001), 54 O.R. (3d) 266 and Lock v. Middlesex Centre (Township) Chief Building Official (2001), 22 M.P.L.R. (3d) 66 (Ont. S.C.J.).

¶ 7 From para. 16 of the decision of Madam Justice Leitch in Lock there is the following:

> With respect to the standard of review of the decision of a chief building official, I think it is necessary to refer only to the decision of Malloy J. in Runnymede Development Corp. v. 1201262 Ontario Inc. (2000), 47 O.R. (3d) 374 (Ont. S.C.J.) and her conclusion that a standard of correctness will generally be applied to decisions based on law or jurisdiction and a standard of reasonableness will be applied to questions of fact. With respect to questions of mixed fact and law, the more the decision of the chief building official is a determination of law, the closer the standard will be to correctness whereas if the decision is dependent upon factual determinations within the special expertise of the chief building official the more deferential will be the standard.

¶ 8 Justice Killeen canvasses thoroughly the issue of standard of review in Burns from paras. 34 to 40 inclusive. Justice Killeen's review is complete, instructive and persuasive. I agree with his comments and conclusions.

ISSUE: IS THE ENVIRONMENTAL PROTECTION ACT, R.S.O. 1990, c. E.19 APPLICABLE LAW WITHIN THE BCA FOR THE PURPOSE OF THIS CASE.

¶ 9 The parties are in agreement that this is a question of law and the standard is one of correctness. The CBO determined that the Environmental Protection Act was not applicable law. I reproduce from the statute the following sections:

6.(1) No person shall discharge into the natural environment any contaminant, and no person responsible for a source of contaminant shall permit the discharge into the natural environment of any contaminant from the source of contaminant, in an amount, concentration or level in excess of that prescribed by the regulations.

Exception
Subsection (1) does not apply to animal wastes disposed of in accordance with normal farming practices. R.S.O. 1990, c. E.19, s. 6.

9.(1) No person shall, except under and in accordance with a certificate of approval issued by the Director,

construct, alter, extend or replace any plant, structure, equipment, apparatus, mechanism or thing that may discharge or from which may be discharged a contaminant into any part of the natural environment other than water; or ... (emphasis added)
Prohibition

14.(1) Despite any other provision of this Act or the regulations, no person shall discharge a contaminant or cause or permit the discharge of a contaminant into the natural environment that causes or is likely to cause an adverse effect. (emphasis added)

Exception
Subsection (1) does not apply, in respect of an adverse effect referred to in clause (a) of the definition of "adverse effect" in subsection 1(1), to animal wastes disposed of in accordance with normal farming practices. R.S.O. 1990, c. E.19, s. 14.
Definitions

(1) In this Act, "adverse effect" means one or more of,

impairment of the quality of the natural environment for any use that can be made of it,
injury or damage to property or to plant or animal life,
harm or material discomfort to any person
an adverse effect on the health of any person,
impairment of the safety of any person,
rendering any property or plant or animal life unfit for human use,
loss of enjoyment of normal use of property, and
interference with the normal conduct of business;
("conséquence préjudiciable").

¶ 10 In Burns supra, Justice Killeen had this issue squarely before him. His conclusion is found at para. 92 in the following words:

[92] Orders will issue as follows:

It is ordered and declared that s. 14 of the Environmental Protection Act is not other applicable law within the meaning of s. 8 of the Building Code Act.

(3) It is ordered that the applicant may not tender expert evidence directed to issues under s. 14 of the EPA.

¶ 11 There were other issues before Justice Killeen but he addressed directly the question of whether a future spreading of manure would be a contravention of s. 14 as being a contravention of "other applicable law". The issue in the present case (as well as in Burns) is not whether the Environmental Protection Act is other applicable law within s. 8 of the Building Code Act for all purposes, but whether it is other applicable law pertaining to the building permits in issue in each case which both involve hog barns for intensive agri use. The building permit at issue in Burns was also for two hog barns.

¶ 12 In para. 45, Justice Killeen, having set out s. 6, comments as follows.

As can be seen from s. 6, its s. 6(1) starts with a majestic injunction prohibiting anyone from discharging any contaminate into the natural environment. Subsection 6(2), however, provides a complete exemption from s. 6(1) by saying that it does not apply to "animal wastes" - i.e., including liquid manure - disposed of in conformity with normal farming practices.

¶ 13 And further, in para. 48 having set out s. 9(1) the comments continue as follows:

> Subsection 9(3), however, contains a series of six specified exemptions to the generality of the apparent scope of s. 9(1), including the exemption in para. 9(3)(e) which says that subsection 9(1) does not apply to "any plant, structure, equipment, apparatus, mechanism or thing used in agriculture; (emphasis added)".

And from para. 50:

> The importance of the exempting provisions of ss. 6 and 9 of (the) EPA is that they demonstrate that while some provisions in the EPA may catch a proposed construction project or other activity under the "other applicable law" criterion, some projects - and certainly agricultural building projects such as that proposed by Cold Springs - cannot be stopped under either of these sections because of an unambiguous statutory exemption granted by the legislation for agricultural operations."

¶ 14 The decision in re: Burns does not stand in support of an argument that s. 14, cannot be applicable law within s. 8 CBA but that in that case it was not applicable law for the construction of the hog barns in issue.

¶ 15 In a case comment found in a publication dealing with the Environmental Protection Act, the editor criticizes Justice Killeen's decision taking the narrow position that from a plain reading of s. 14(2) that subsection does not apply with respect to an adverse effect as defined other than in para. (a) of the definition of adverse effect. Justice Killeen canvassed, as I have indicated, s. 6(9). He considered the Environmental Protection Act as a whole and the balancing of the interest addressed in that legislation with the farm practices mandate in the Farming and Food Production Protection Act, S.O. 1998, C. 1. In reaching his conclusion, he read the two pieces of legislation as balancing competing interests. I adopt his conclusion that the Environmental Protection Act is not applicable law as it relates to the building permit for the two hog barns, the subject of this application. It follows that the CBO has satisfied the standard of correctness on the EPA issue.

AGREED APPLICABLE LAW WITHIN S. 8 BCA

¶ 16 The parties are in agreement that certain law is applicable law within s. 8 of the Building Code Act for the purposes of this application. Without attempting to be all inclusive, these include the Building Code Act, the Manure Pit By-law and the Nutrient Management By-law. The two by-laws have much in common. Each has a definition for intensive agricultural use. It is agreed that the intended use is within the definition. Each By-law has a provision in the same wording relating to application of other requirements. In the Manure Pits By-law, the section is s. 5.1. In the Nutrient Management By-law the section is 7.1. The wording is as follows:

> Nothing in this By-law shall operate to relieve any person from the obligation to comply with the requirements of the Ontario Building Code Act, R.S.O. 1992, the Township's Zoning By-laws or any other By-law of the municipality in force from time to time or the obligation to obtain any other licence, permit, authority or approval lawfully required by a governmental authority having jurisdiction to make such restrictions.

¶ 17 Each by-law has a similar definition of a site plan. The following is taken from the Nutrient Management By-law:

> Site plan shall mean a scale drawing showing the relationship between a livestock facility and/or manure pit and neighbouring land uses including areas designated or zoned in a non-agricultural category; non-conforming uses; neighbour's, residences; middle-of-the-road allowances and lot lines.

¶ 18 From the Manure Pit By-law, an application for a permit is required. The application is to include a plan, including the following:

> 4.4.1. Dimensions of the lot to be built upon or otherwise used;
> 4.4.2. The proposed type, location and dimensions of the manure storage facility proposed for such lot and its distance relative to:
>
> 4.4.2.1. the lot lines;
> 4.4.2.2. the adjacent public road;
>
> 4.4.2.3. the nearest drilled, dug or communal well

4.4.2.4. the nearest watercourse, pond, drainage ditch, lake, river, stream or water body, including intermittent flows;
4.4.2.5. the location of the nearest field drainage tile;
4.4.2.6. the location of any area designated or zoned residential, recreational or institutional and has a location which falls within the Provincial and Municipal Minimum Distance Separation II (MDS II) formula. (emphasis added)

¶ 19 Section 4.4.4 of the Manure Pit By-law also incorporates application of the MDS II formula. And from s. 6.2 under the heading Minimum Separation Distances is the following:

Covered concrete, liquid livestock manure pits shall be located in accordance with the Provincial and Municipal Minimum Distance Separation II (MDS II) formula. (emphasis added)

¶ 20 The two hog barns, the subject of the building permit issued, have the manure pit facilities underneath the hog barns with the hogs being upon slats, the manure pit being directly underneath the hogs.

¶ 21 The construction standards are referred to in s. 6 of the Manure Pit By-law as follows:

6.1.1. Be designed and constructed in accordance with the provisions of the Ontario Building Code with specific reference to CAN/CSA A23.3-M84 "Design of Concrete Structures for Buildings".

¶ 22 The Nutrient Management By-law applies to intensive livestock operations. From s. 4 is the following:

A Nutrient Management Plan shall be completed prior to the issuance of a building permit. The Ontario Ministry of Agricultural, Food and Rural Affairs shall review and approve all Nutrient Management Plans prior to submission to the Municipality. (emphasis added)

¶ 23 This by-law also requires that for an application for a permit, a plan be filed including:

5.5.1. Dimensions of the lot to be built upon or otherwise used:
5.5.2. The proposed type, location, and dimensions of the manure storage facility proposed for such lot and its distance relative to:

5.5.2.2. the adjacent public road;

5.5.2.3. the nearest drilled, dug or communal well;

5.5.2.5. the nearest watercourse, pond, drainage ditch, lake, river, stream or water body, including intermittent flows;
5.5.2.5.(sic) the location of the nearest field drainage tile;
5.5.2.6. the location of any area designated or zoned residential, recreational or institutional and has a location which falls within the Provincial and Municipal Minimum Distance Separation II (MDS II) formula.

¶ 24 By itself, the Minimum Distance Separation II (MDS II) is a policy for a calculated distance. It is agreed that the policy document at least insofar as the formula is concerned is incorporated within the by-laws mentioned. It is of assistance to set out the statement of Background for MDS II.

A principle of land use planning is the grouping together of compatible land uses and the separating of incompatible land uses. Industrial parks, residential subdivisions and commercial areas as separate parts of an urban area are a reflection of this principle.
The agricultural community generally acknowledges that even with the best management, noise and dust cannot be eliminated from certain agricultural operations and that odours are associated with livestock production. Not all rural residents, including some farmers, can accept these conditions particularly when the nuisance is perceived to exceed acceptable levels.
In rural areas, this principle of separating different and incompatible land uses has not always been applied. Where there has been sufficient separation distance between differing rural uses, however, there have been few complaints. The distance separation will vary with the source of the potential

complaint and the sensitivity of the neighbouring land use. The primary purpose and use of prime agricultural areas should be for agriculture. Non-farm residents who seek the advantages of country life must be aware of the noise, odour and dust associated with normal farm practices. (emphasis added) Should complaints about odours, noise or dust occur, the Ministry of the Environment and Energy will respond. If the complaint is valid, Ministry of the Environment and Energy staff in cooperation with the farm operator and in consultation with Ministry of Agriculture, Food and Rural Affairs staff recommend measures to resolve the complaint. If the complainant still has concerns they may request a hearing by the Farm Practices Protection Board. This Board can only hold hearings in regard to odour, dust or noise concerns. The Board rules whether the occurrence is a normal farming practice. The Minimum Distance Separation (MDS) is a tool to determine a recommended distance between a livestock facility and another land use. The objective is to prevent land use conflicts and minimize nuisance complaints from odour. MDS does not account for noise and dust (emphasis added). Minimum Distance Separation will vary according to a number of variables including type of livestock, size of the farm operation, type of manure system and the form of development present or proposed. ... MDS II provides minimum distance separation for new or expanding livestock facilities from existing or approved development. ... Ultimately, land use planning decisions (including MDS) and good farm practices must go hand-in-hand to promote harmony in the rural community and to ensure agriculture as an ongoing activity.

¶ 25 From the Implementation Guidelines there are the following:

MDS formulae and criteria are to be referenced in official plans and included in by-laws and are to be applied in designations and zones where livestock facilities are a permitted use and is to be implemented at the time of planning and/or development review. MDS II applies when an application is made for a new, existing, modified or expanding livestock facility. The application may be for a building permit or an application under the Ontario Certificate of Compliance Program. ... Minor variances to the MDS II distances can be considered based on site specific circumstances. Municipal officials must consult with Ontario Ministry of Agriculture, Food & Rural Affairs staff when considering a variance application. Conditions that meet the intent, if not the precise distance of MDS II or mitigate environmental impacts, will receive further consideration. (emphasis added) Distances to Residential Subdivisions, Urban Areas, areas zoned or designated Agriculturally Related Commercial Use, Passive Recreational, Institutional, Active Recreational or Commercial/Industrial are measured as the shortest distance between the barn or manure storage and the land uses noted above. ... All distances are measured from the closest point of the barn used for animal housing. DEFINITIONS:

Residential Area:

Areas zoned or designated residential. (emphasis added)

Urban Area:

Cities, towns, villages, and hamlets for such uses as residential, recreational, institutional, commercial and industrial.

¶ 26 The Data Sheet contains the following statement of purpose:

To permit the orderly development of livestock operations within agricultural areas, and to reduce the potential for environmental conflicts between livestock or poultry operations and incompatible land uses.

¶ 27 In the checklist for sketch preparations there is the following:

Location and distances in metres from subject structures to nearest area zoned "Residential".

¶ 28 The Minimum Distance Separation II Calculation Form uses the following table to calculate that distance which is required in addition to that distance actually measured.

> Areas zoned or
> designated Residential,
> Institutional,
> Active Recreational, or
> Commercial.
> Urban Areas

¶ 29 The Manure Pit By-law and the Nutrient Management By-law quoted in part were each replaced June 18, 2001. More is required to comply with the new by-laws than that which is required to comply with the by-laws before me.

¶ 30 The Nutrient Management Plan is required to include the MDS II formula calculation. The Nutrient Management Plan is submitted firstly to the ministry and, upon approval by the ministry, to the municipality. Compliance with the by-law can possibly require more than that which is required to obtain provincial approval. As for example, the by-law requires that the plan be prepared by a third party certified agronomist. There is no such requirement for provincial consideration or approval.

RESPONDENTS OTHER THAN IN THE STYLE OF CAUSE

¶ 31 The proceedings initially named only the township as respondent. Mr. Geene is the owner of the farm property in issue. He applied and was added as a respondent. Beechcore Group Limited applied and was added as a respondent. Ashfield applied and was added as a respondent. Before this hearing, the issues involving Beechcore were resolved. During the hearing before me the issues involving Ashfield were resolved. I was told at the outset that resolution involving Ashfield was imminent and by endorsement made February 1 the resolution was recorded. The involvement of Ashfield in these proceedings dealt with a by-law of that municipality.

ASHFIELD BY-LAW NO. 24-2001

¶ 32 The township's CBO used as a resource person, the CBO of Ashfield. Ashfield enacted the following by-law April 3, 2001:

> No person shall use any lands within the municipality for depositing, storage, spreading or other disposal of livestock manure which originates outside of the Municipality and has been brought into the Municipality for that purpose, unless such depositing, storage, spreading or disposal is performed in accordance with a Nutrient Management Plan approved by the Municipality.

¶ 33 The Geenes own property in both townships. The Nutrient Management Plan filed by or on their behalf includes the use of lands they own in Ashfield to spread manure. In the settlement document filed in these proceedings Ashfield recently approved a Nutrient Management Plan as required by the terms of By-law 24-2001.

ISSUE - IS ASHFIELD BY-LAW 24-2001 OTHER APPLICABLE LAW?

¶ 34 The position advanced on behalf of the applicants is that the building permit applied for March 19, 2001 and issued May 10, 2001 results in the applicable law being that law which crystallized at least by May 10, 2001. The further position is that the Ashfield By-law is applicable law and that the municipality of Ashfield was required to approve the Nutrient Management Plan before the township could issue a building permit. The township CBO had actual knowledge of the Ashfield By-law requirements. No inquiries were made by the CBO for the approval referred to in the Ashfield By-law being obtained. It is my view that the Ashfield By-law is not applicable law, that the by-laws of Ashfield speak to Ashfield's own jurisdictional (geographic) area.

¶ 35 The Geenes' Nutrient Management Plan, including the spreading of manure upon their land in Ashfield, received approval from the provincial ministry.

¶ 36 It is clear that applicable law includes more than merely the by-laws of the township or the by-laws of the township incorporating the need for other approvals. The argument is advanced that s. 7.1 of the by-law requires a further approval for compliance with the Ashfield By-law. By use of words in this section to the obtaining of "any other licence, permit, authority or approval lawfully required by a governmental authority having jurisdiction to make such restrictions," the argument is made that Ashfield is such a governmental authority having jurisdiction to make the by-law in issue which requires a permit or authority and that as such the municipality's CBO should have inquired and required such authority or

approval. That argument cannot stand when the section is considered in its totality. The purpose of this section of the by-law is to recognize that compliance with the rest of the particular Nutrient Management By-law does not give relief for an obligation to comply with other requirements from different legislation or governmental authority. By way of a simple example, compliance with the municipality's Nutrient Management By-law does not necessarily mean compliance with the municipality's Manure Pit By-law and, in like manner, compliance with both of the township's by-laws does not amount to relief from compliance with any Ashfield By-law. In the result, the Ashfield By-law is not applicable by-law within s. 8 of the BCA for the purposes of this application.

¶ 37 It may be that a consideration of the actions or lack of action by the CBO, factoring in the context of the Ashfield By-law will go to a consideration of reasonableness of the actions of the BCO. Such a consideration does not elevate, from the consideration of the by-law in that evidentiary way, the by-law to other applicable law.

¶ 38 Insofar as the CBO did not consider the Ashfield By-law as requiring him to satisfy himself that there was approval as required further to the terms of that by-law he was correct in law.

BACKGROUND INFORMATION

¶ 39 As referred to above, the Geenes own lands within two adjoining townships, having purchased the property in 1999. The Geenes have been involved for some time in discussions with the municipality of plans for barn(s) for a hog operation. Prospective proposals have been discussed involving 6,000 and/or 4,000 hogs. There have been further discussions with reference to poultry. Different Nutrient Management Plans have been submitted. At least one such plan was approved but approval was subsequently revoked.

¶ 40 Michael Hunter of CropAdvisory.com is a certified crop advisor. Also associated with that company is Susan Schuster described as a practising agronomist. Michael Hunter furnishes services to the Geenes in an ongoing way. Specifically, he furnished services with reference to the preparation and submission of the applications required for the building permit, including the Nutrient Management Plan preparation and filed with the ministry for approval. The Nutrient Management Plan is signed April 18, 2001 by Michael Hunter and by Susan Schuster, he being designated as a Certified Crop Advisor, she being designated as practicing Agronomist.

¶ 41 I have referred earlier to a meeting March 27, 2001 being a meeting attended by representatives on behalf of the ratepayers, the Geenes and representatives on their behalf and by members of council. Minutes were kept. The minutes included the following:

> Recommendations
> After a brief recess, a list of recommendations was developed for Council's consideration:
>
> > 8.1 Have the building plans reviewed by Township's engineers.
> > 8.2 Have engineering inspector on site during construction.
> > 8.3 Have Mike Hunter's Nutrient Management Plan reviewed by a mutually agreed upon independent consultant.

¶ 42 There were 13 such matters listed with a further heading of items titled "Additional Suggestions Proposed by the Ratepayers". There is no evidence of any subsequent council meeting to consider the list of recommendations. However, and notwithstanding the discretion of the CBO under the BCA and municipal by-laws, the CBO did consult with an engineer and steps went forward in the context of the recommendation for an independent consultant to review the Nutrient Management Plan. Such a review was not required as a matter of law. Such a review was little more than extending a courtesy.

¶ 43 The Nutrient Management Plan dated April 18, 2001 was approved further to the "Review Criteria of the Ontario Ministry of Agriculture, Food and Rural Affairs" May 7, 2002. The plan as approved was delivered by hand by the official signing the approval, Don Hilborn, to the CBO, Matthew Farrell.

¶ 44 On or about May 8, 2001, a communication went forward from the township to the applicants herein that it was the intent to issue a building permit within three days and that a building permit would issue May 10. On or about May 9, the approved Nutrient Management Plan was forwarded by the township to James Weeden who had been identified as the "independent consultant".

¶ 45 The building permit issued May 10, 2001 about 8:30 a.m. Construction started within a half hour thereafter being stayed by court order May 15, 2001.

¶ 46 The CBO prepared at least three MDS II calculations bearing the following dates: August 17, 2000, August 20, 2001 and May 9, 2001. From these dates it follows that the May 9 calculation is after the approval by Mr. Hilborn. In the Nutrient Management Plan is contained a calculation sheet dated August 17, 2000. Whether the use of the year 2000 was correct or in error is not clear. In that part previously referred to for neighbouring land use or boundary, under the required distance is a figure generated by formula to indicate the distance required. The figure is 1,300 metres. That is the same distance for manure storage which follows from the fact that the manure storage is directly under each building. The table also requires measurements for actual distances but no figures are entered into the actual figure column. Notwithstanding that absence, the plan was approved by the province.

¶ 47 The calculation sheet for minimum distance separation prepared by the CBO dated May 9, 2001 shows under the column for required measurements the same figure of 1,300 meters for both the barn building distance and manure storage distance. In the actual figure column under each building distance is the figure 1,424 metres, under the manure storage figure is the figure 1,452 metres. There is no explanation as to why those figures differ when there appears to be two separate single structures comprising the barn building and the manure storage each with one foundation or footprint.

¶ 48 The third calculation sheet being the second in the apparent time chronology is dated April 20, 2001. Again, the required distance measurement is 1,300 metres. Under the building distance for actual distance is 1,452 metres. Under the manure storage the actual distance is 1,452 metres. On this basis there appears to be 152 meters more actual distance than required distance.

¶ 49 Different sketches were presented to the CBO on behalf of the Geenes. All sketches show in relationship to Amberley what is labelled as "designated area".

¶ 50 By way of a Fax cover page dated March 19, 2001, the CBO forwarded to the contractor the following message:

> Can you or Gys fill this out and get it back to me as soon as possible? It is so I can issue the permit before Art stamps the drawings. If you have any questions let me know.

From the above quotations "Gys" is Mr. Geene and "Art" is Mr. Clark, engineer for the proposed building contractor.

¶ 51 From this communication, there appears to be a holding out at that point in time, that a building permit would issue before some requirements were completed.

¶ 52 The fax enclosure appears to have been an agreement for the issuance of a conditional building permit with the conditions being "File plans and specifications of the completed building by March 30, 2001 & plans to be stamped by a Professional Engineer". This appears on its face to relegate plans, specifications and the stamping of the plans by a professional engineer to a procedural checklist having little, if any, application of expertise or discretion. Who would want a conditional building permit for plans to be submitted unless it was certain the plans would be approved and an unconditional permit issued. The CBO appears not to have reserved to himself any room to exercise a real discretion to evaluate material to be received at a future time.

¶ 53 David Smith is the planner for the County of Bruce. The Hamlet of Amberley is an urban area within the county for which Smith has responsibilities. By a faxed transmission March 30, 2001 from Smith to Geene's contractor, two maps are forwarded. The transmittal, copied to the CBO, is as follows:

> Attached are two maps showing the "urban area" of Amberley in relation to the OBM mapping and also overlaid on the assessment map.
>
> > The MDS II calculation should be made from the proposed location of the new barn(s) to this dotted line as per the MDS II implementation guidelines, para. 9 (Measurements).

¶ 54 The two maps are an assessment map and an Ontario Base Map. What is within the "dotted line" is arguably the part of the Hamlet of Amberley that is within the township. There is another portion of the hamlet on the other side of the highway within the adjoining municipality. It is

clear that Smith intended the dotted line to show an area designated by the county's Official Plan. The 1,300 metre measurement encroaches inside of the dotted line.

¶ 55 Whether one uses from the calculations of the CBO dated May 9 the figure of 1,424 or 1,452, it appears the intent is that the measurement be from the intended barn(s) to the closest portion of Amberley zoned residential.

¶ 56 On most of the sketches or maps filed on behalf of Geene, there is illustrated and labelled a "designated area" which is consistent with an area designated by the Official Plan. In a sketch prepared by an Ontario Land Surveyor, relying in part upon materials supplied and in part on field work, is shown a designated area with a measurement of 1,115 metres from the line representing the edge of the area marked "designated area", with a further measurement of 1,424 between the barn and the closest portion of Amberley zoned residential.

¶ 57 The plan forming part of the Official Plan illustrates Amberley. The plan is a large plan for the entire county and, although to scale, it would be extremely difficult to use that map with any kind of precision. From the examination of the CBO it is clear that before he received his copy of the communication from the planner Smith, he regarded, in error, the minimum distance calculation to be based upon the distance arrived at using only zoning lines. It was only when he received the Smith communication that he questioned whether there was more. Expressed differently, it appears that prior to that point in time he had not directed his mind to the words "zoned or designated". My understanding from a consideration of his cross-examination and, in particular, questions 205 to 219, is that he took a new position that he could choose either distance based upon 1) zoning or 2) designation and that he had a discretion to use either distance. My understanding from the response at 219 is that he felt the plans were not useful or pertinent to this application. His words are as follows: "I didn't believe those drawings were useful or pertinent to this application".

MDS II FORMULA

¶ 58 It is agreed that further to the terms of the two municipal by-laws the MDS II formula is applicable law within s. 8 Building Code Act. If that were the only issue, the test would be one of correctness and if the CBO directed his mind to formula calculations, the next question would logically be whether he took a reasonable approach. In my view, the issue is to be expressed differently: As a matter of law was the CBO entitled to choose as an end point for measurement of MDS II distances either a) zoned or b) designated land?

¶ 59 It is agreed that, whatever the accurate measurements may be, the distance from the barns to the zoned lands is greater than the distance from the barns to the designated lands being lands designated further to the Official Plan. It is further agreed or in any event my conclusion that if the measurement for actual distance purposes is to be the measurement from the barns to the designated area, that the actual distance measurement is less than that which is required. Was the CBO entitled in his discretion to use the measurement applicable to zoning rather than the measurement applicable to designation or because of the difficulty in accurately assessing the precise measurement to designated lands to fall back upon the use of the measurement to the zoned lands. Measurement from the barns to the Official Plan designation would result in a measurement less than the required measurement whatever the precise measurement may be to lands designated.

¶ 60 The three main points advanced on behalf of the respondent Geene with reference to MDS II is, firstly, that there need to be two hard points for measurement purposes. Secondly, that the limits of Amberley further to the Official Plan cannot be accurately or precisely surveyed or measured. Thirdly, that a consideration of the principles of the Official Plan or an attempt to strictly apply the Official Plan result in a lack of capability of doing so. It is argued the Official Plan policies are not applicable to the area argued by the applicants to be within Official Plan designated area for measurement purposes.

¶ 61 An expert planner was called in support of these positions. Her evidence seems to raise four points as can be seen by her answer to Question 279. The question is in the context of a consideration of para. 9 of the MDS II guideline where, under the heading "Measurement", the following is found:

> Distances to Residential Subdivisions, Urban Areas, areas zoned or designated Agriculturally Related Commercial Use, Passive Recreational, Institutional, Active Recreational or Commercial/Industrial are measured as the shortest distance between the barn or manure storage and the land uses noted above.

> Question 279. ... The whole issue from your perspective turns on the fact that it's a fuzzy line? Is that what it turns on? Answer: It turns on two dimensions. 1, that it is a fuzzy line as you say. And 2, that it is an undeveloped fuzzy area. And that 3, it is owned by and an integral part of the operation that is at question. And that to interpret the Official Plan or therefore to interpret MDS to require a setback from it is not appropriate and is not representative of how one utilizes Official Plan and Official Plan designations for the purpose of development or non-development.

¶ 62 Breaking the answer down into four parts, the first two seem to be related in the context of fuzzy line and/or fuzzy undeveloped area. The third and fourth points appear to be related to land ownership and utilization of land within the intended specific agricultural use. This case involves the spreading of manure and/or the location of hog barns. The land found to be within the designated area on the sketches may be fuzzy in the sense of being difficult to measure. The lands within the required MDS formula distance, even if used for manure spreading, does not by itself have anything to do with the location of the barns. The use of the lands was not fuzzy. The location of the line for designation purposes may be fuzzy but in a narrow sense that has little to do with actual or proposed use. The use of this part of the land contemplates manure spreading and not barn locations. The spreading of manure involves a Nutrient Management Plan which is separate from the location of buildings addressed by the MDS formula. The lands argued by the applicants to be within the designated area include mainly lands of the Geenes' but some other lands are also included. To suggest that certain of the lands have recognition under the Official Plan and certain do not because they are owned by the applicant is, in my view, illogical. The evidence of the expert was that the distance from the barns to the designated area could not be precisely made. It appears to follow that her evidence (argument) was that the designated area could be ignored. I do not agree.

¶ 63 It is agreed that there is ample authority that the provisions of an Official Plan are not other applicable law within s. 8. It is agreed that for the purposes of consideration of the application of the MSD II formula that reference can be to the Official Plan and indeed reference was made by the CBO to the Official Plan and no party takes issue with that. If the measurement to lands designated in the Official Plan, even if it is not capable of precise or accurate measurement, is ignored, there is a well-founded argument which I accept that the policies of the Official Plan would be frustrated in the future. Equally frustrated would be the background policy purposes for MDS II formula, as the balance between residential land use planning or planning of an urban area which would be frustrated by the proximity of barns for intensive agricultural use without the intended separation buffer. The buffer is designed, even if imperfectly, to balance legitimate interests. Where the distance to designated lands is less than the distance to zoned lands and where the measurement ignores designated lands in favour of zoned lands that is contrary to the spirit of the policies I have identified and is, in my view, not correct in law.

¶ 64 In my view, there may be fact situations where there may be zoned land without designated land in which case the appropriate measurement would be to the zoned land. It may be that zoned land and designated land will have the same distance measurements. It may be, as in this case, that the distance for designated land and zoned land will differ. As a matter of the correct application of law, it is my conclusion that the measurement to be utilized is that which is most coincidental with the policy. In this case that would be the measurement from the barn to the designated area subject to a variance as contemplated by the guidelines. I do not attempt to quantify that measurement. This has been an issue that was well identified in advance of the application for the building permit. My comments to counsel included: given that this issue was identified early on, why was the location of the barns not relocated at a further distance from Amberley so as to make the question of the proper MDS distance a non-issue. There is nothing in the evidence to suggest that could not have been done. There is nothing to which I am referred that suggests a variance was ever considered as contemplated in the guidelines such a consideration might have resolved the difficulty of precise measurement.

¶ 65 If I am wrong that this issue is to be determined by a standard of correctness, then it is to be determined by a standard of reasonableness. On all of the evidence before me, not just the fax communication quoted, there is an inference that the CBO was prepared to issue the permit in any event. Prior to this particular application he had never directed his mind to lands designated as opposed to lands zoned. Even though he considered the terms of the Official Plan (the policies not just the actual map or plan), he determined that he, in his discretion, could make an either/or decision. I conclude on the facts as in this case he was wrong as a matter of law.

¶ 66 Upon the facts of this case, most plans submitted by or on behalf of the Geenes show a designated area. The designated area with a measurement for encroachment upon the designated area appears to be an acknowledgement or admission of non-compliance with the formula; at the very least a serious issue was identified. In the end result the CBO has,

after consideration, ignored the designation distance issue in favour of the zoned measurement. That, in my view, was unreasonable. The designated area shown on the various plans suggests that measurement can be made. I accept that the placing of the lines to the designated areas is not precise and the placing of a line upon a sketch does not necessarily lend itself to a reliable precise measurement. That is not to say that a measurement cannot be made. It is not to say that a measurement cannot be made even if within a range. To ignore the advice of the township planner as wrong was unreasonable.

¶ 67 It was argued that provincial approval was not required for the MDS II even though MDS II is a required part of the Nutrient Management Plan. That position appears to ignore paragraph 7 of the guideline which clearly indicates that a minor variance to the MDS II can be considered in which case the municipality must consult with the provincial ministry. The guideline refers to an application and to provincial involvement. It does not follow that provincial approval for MDS II is not involved. There is no evidence of any consideration ever being made of a variance of MDS II having been considered. The fact that there was an issue of what was the proper distance to the Official Plan designated area suggests at least a consideration of a variance. The matter of variance was not raised before me.

¶ 68 It is agreed that the application of the MDS formula for the two hog barns results in a required MDS of 3,000 metres. It is further agreed that if the two barns were built one in year one and the second in year two, the resulting MDS would be considerably less than 3,000 metres. That result promotes strategic staged building. The further result is to marginalize, if not trivialize, the policy merit of the guideline. Should the guidelines ever attain the status of provincial law, the rationale for the above result might be examined. In any event, this example illustrates the guideline may be a worthwhile policy statement, but has moderate effect to create a meaningful buffer zone even if the purpose of that buffer zone is limited to the issue of odour. This paragraph gives focus to the reality that the use of the existing MDS formula deals with odour from farm structures and does not deal with the spreading of manure. The considerations of manure spreading brings into play the adequacy of nutrient management.

EVENTS OF MAY 7 TO MAY 10

¶ 69 The Nutrient Management Plan as approved was hand delivered to the township May 7. On May 8 a copy of the plan was delivered to the independent consultant. There was a communication to or on behalf of the applicants herein that a building permit would issue in three days. The building permit was issued May 10. The three days may or may not have been to May 10. The building permit was issued May 10, 2001 at 8:30 a.m. However, one calculates time, three days was very, very short.

¶ 70 The Nutrient Management Plan dated April 18 was considered and approved by May 7, involving a period of approximately three weeks. No argument was made that three weeks was not a reasonable time for that approval process to be completed. What is a reasonable period of time for an independent consultant to receive and consider the provincially approved plan even if only on a level of courtesy? A reasonable period of time is certainly to be more than three days and more than the time that the consultant had the report in hand to May 10 at 8:30 a.m. As I have found the CBO appeared to be prepared to issue a permit in any event. The forwarding of the Nutrient Management Plan to the independent consultant for meaningful contribution or even review for independent purposes was but a token gesture of compliance with any level of understanding applicable to meeting of March 27, 2001. The issuance of the permit at 8:30 a.m. on May 10 also appears to be token adherence to the holding out that there would be three days from May 7.

¶ 71 The approval by the province of the Nutrient Management Plan, being an approval signed by Mr. Hilborn, was hand delivered by him on May 7. On its face that has the appearance of being unusual. Mr. Hilborn's office was a substantial distance away from that of the township. Several hours would be required to travel the distance between the two offices. Hand delivery suggests some pressure or out of the ordinary circumstances; it appears consistent with a permit issuing at 8:30 a.m. with construction starting immediately (within 1/2 hour) thereafter. The hand delivery of approval is consistent with my conclusion that the CBO was prepared to issue a building permit in any event.

¶ 72 The building permit was issued at 8:30 a.m. on May 10. Work started within a half hour. There could have been no coincidence. It is clear that the Geenes and the builder had such a high level of expectation that steps had been taken for work to start on the date and hour when it in fact did start. There was a high level of certainty that the permit would issue when it in fact did issue. On all of the facts, the haste in issuing the permit in the short time from receipt of the Nutrient Plan approval by the province gave little time for the CBO to realistically approve the lengthy and complex plan other than in a rubber stamp way. There was no meaningful time for any input from the third party expert. In all of the

circumstances of this case, the issuance of the permit in the time frame ending May 10 at 8:30 a.m. was unreasonable.

¶ 73 I regard the township's unseemly haste between the receipt of the approved plan May 7 and the issuance of the building permit May 10 to be unconscionable. With reference to the acts of the CBO, I find his actions in that time frame to be unreasonable or worse.

NUTRIENT MANAGEMENT PLAN CONSIDERATION

¶ 74 The Nutrient Management Plan which received approval contained no actual measurement distance for MDS II. That is curious but there remains nothing in the material to which I was referred addressing that curiosity other than Mr. Hilborn taking the position it was not up to the province to approve MDS calculations. The CBO did make calculations May 9 and the calculations of that date support that the required distance measurement was satisfied. There are other aspects of the approved plan which the CBO would be required to address to assure himself that there was compliance with municipal by-laws. It is agreed that the municipality did not receive the Nutrient Management Plan dated April 18 until it was delivered by hand May 7. There was no prior opportunity to consider the plan in the context of compliance with municipal by-laws. The Nutrient Management By-law requires the plan to be prepared by a "third party certified agronomist". On the face of the plan document neither of the two parties signing the plan purport to be certified agronomists. There is no other evidence from the descriptive words used describing the business of and the persons involved with the company CropAdvisory.com or from the résumés of the two signatories supporting that they are certified agronomists. It is my conclusion that there is no evidence supporting that either one or other of the signatories are certified agronomists.

¶ 75 The meeting of March 27, 2001 may have created no binding obligation, but the CBO ascertained the identity of the "independent consultant" as evidenced by the fact that plans were forwarded to Mr. Weeden. There was created by action some level of expectation. The time permitted road roughshod over any realistic ability to have input to the process.

¶ 76 Section 4.3.1. of the present by-law deals with intensive livestock using the following wording:

> 4.3.1. Intensive Livestock Nutrient Management Plans shall be prepared by a third party certified agronomist. (emphasis added)

¶ 77 The by-law does not contain a definition of a certified agronomist.

¶ 78 The new by-law which came into effect in June, 2001 in a similar section reads as follows:

> Intensive Livestock Nutrient Management Plans shall be prepared by a third party consultant in agriculture.

¶ 79 The new by-law contains a definition of consultant in agriculture. The definition makes reference to certification "and/or recommended by the Ontario Ministry of Agriculture Food and Rural Affairs and approved by the municipality".

¶ 80 The two signatories to the Management Plan were involved in its preparation.

¶ 81 Dictionary definitions from the Canadian Oxford Dictionary of are of some assistance.

> Agronomy - the science of soil management and crop production.
> Certify - declare by certificate that a person is qualified or competent (certified as a bookkeeper).
> A third party - a party or person besides the two primarily concerned. 2 a person involved incidentally.

¶ 82 On the material before me, there is no basis to conclude that either of the signatories are certified agronomists. Mr. Hunter is a certified crop advisor. The material before me suggests that a certified agronomist is something more than a certified crop advisor, although it may be inclusive of the same level of experience, training or education. Susan Schurter does not hold herself out to be certified in any respect. Mr. Hunter, through his company, has been involved with the respondent Geene in his prior farming business. Mr. Hunter is involved in the building permit application. The intent is that he be involved in the construction of the building, that he be involved on a continuing basis with the operation of the business. He has more than an incidental involvement. He cannot be said to be independent of the parties primarily concerned in the building permit application even if that is limited to two parties: the municipality and Mr. Geene. Although the

new by-law appears to be less stringent in the designation of the party responsible for the Nutrient Plan preparation, the requirement remains for the involvement of a third party. The definition of consultant incorporates the concept of certification but with less than certification being something the municipality can accept or approve.

¶ 83 In the minutes quoted from the March 27 meeting is the expression "independent consultant". The Nutrient Management Plan by-law makes reference to plans being prepared by "a third party". From those portions of the transcript of the CBO to which I am referred he appears to accept that the consultant was to be independent of the interest of a party to the application. I agree with that conclusion. I make the fact conclusion that there is a prior and ongoing relationship between the Geenes and the signatories and/or CropAdvisory.com. My conclusion is that this Nutrient Management Plan was, as a matter of law, to be prepared by a third party certified agronomist. The test is one of correctness. The plan was not prepared or signed by a third party and it was not prepared or signed by a certified agronomist.

¶ 84 There is no material before me to suggest that the CBO referred to the by-law requirement that the plan be prepared by a third party certified agronomist or any part of the words designating in the by-law the qualification or standing of a person charged with preparation of the plan. If I am wrong in my application of a correctness standard and the standard should be one of reasonableness, in light of the plain wording of the by-law it was unreasonable for the BCO not to consider the question "Were the signatories third parties, were the signatories certified agronomists?" My conclusion is that the failure to address such questions in a meaningful way was unreasonable and an improper exercise of any discretion or deference which otherwise might be accorded to a CBO. On either a standard of correctness or reasonableness I find the actions of the CBO to be wrong.

CONSTRUCTION CONSIDERATIONS

¶ 85 From the minutes of the meeting of March 27th, reference is to the building plans being reviewed by the township's engineers. By letter dated April 12, 2001, B.W. Potter (Potter), Professional Engineer writes to the CBO indicating a response to a request to review the drawings for the assistance of the CBO prior to the issuance of a building permit. Potter's letter identified seven questions. Upon receipt of that letter, the CBO had a telephone conversation with Mr. A.W. Clark (Clark), Professional Engineer, who is an engineer with a firm who act on behalf of Mr. Geene's contractor. Mr. Clark's signature and seal were upon the drawings submitted for the building permit. On a photocopy of Potter's letter is noted that a copy was faxed to Clark and on the photocopy of the letter, the CBO notes Clark's responses or comments with reference to the seven questions raised by Potter. By letter of May 3, 2001, Clark writes to the CBO "to review the points raised" in the letter of April 12. The letter of May 3 seems to be quite superficial. All of the matters noted by the CBO in the margins of the Potter letter are not addressed in the Clark letter. The notes of the CBO are more inclusive than the letter which was intended as a letter confirming earlier discussion. Clark appeared to make a simplistic response.

¶ 86 The Ontario Building Code deals with the responsibility of a professional engineer for design and general review where buildings such as the subject of this building permit are concerned which require that construction of the buildings be designed and reviewed by a professional engineer. In such cases all plans, sketches, drawings and generally documents used as the basis for the issuance of a building permit are to bear the signature and seal of a professional engineer. The seven points in Potter's letter of April 12, 2001 address those parts of the Code to which I have just referred and, in addition, the National Farm Building Code which is stated to require that manure storage tanks be designed and constructed to prevent leakage with specific reference to Appendix A for the requirements that walls and floors are to meet a requirement to prevent leakage.

¶ 87 Potter's original questions or criticisms also deal with structural components. In subsequent examination and subsequent letter of September 17, 2001, Potter addresses issues. In particular, there is a discussion of CSA standard 22 which is incorporated into the township by-laws. Consideration of that section relates to that which was in effect in 1984 and that in effect 1994. The language differs but the approach and intent is similar in each of 1984 and 1994. In turn, there is reference to s. 14.3.4 which deals with walls greater than 10 inches in thickness and a requirement for two layers of reinforcement. The drawings dealt with one wall of 11 inches with a single layer of reinforcement. The initial floor plans were for plain concrete absent reinforcement. From the telephone conversation between the CBO and Clark there was a holding out that mesh reinforcing would be used. There is general agreement that there is a requirement this kind of manure pit construction be designed to prevent leakage. The Potter letter makes specific reference to the Code section and applicable appendix. My understanding of Potter's position is that as a professional engineer he would not have issued the building permit May 10,

2001 but he does not take the position that the issuance by the CBO of a building permit on that date was unreasonable.

¶ 88 The general contractor for the two proposed hog barns states in his affidavit that "In connection with the barns, we design them and prepared plans for them for building permit purposes. To the extent that engineering input was and is required in connection with the Geene barns, we retained the services of Maitland Engineering and, in particular, Art Clark, P.Eng., of that firm". Attached to this affidavit is a letter from Mr. Clark commenting upon evidence from an expert on behalf of the applicants. The letter is dated August 14, 2001 after the issuance of the building permit. The letter contains some comments which might fairly be termed cavalier. For example, he says: "I am not aware of the details of the township by-laws, but would assume that the Chief Building Official took them into account prior to issuing a permit." He comments further as follows:

> As you are aware, the type of barn to be constructed for Geene has developed over the years and was being built before the Code had any application to farm structures. Experience and general industry practice has guided the actual design of the floors, walls etc.
> The Code, while specifying such things as the use of CSA standards for design, also gives the Chief Building Official a great deal of latitude to accept equivalents and "allow the use of materials, systems, and building designs that are not authorized in the building code if, in his or her opinion the proposed materials, systems and building designs will provide the level of performance required by the building code." (9.-(1) Building Code Act). It seems to me that this clause in the Building Code Act says that the CBO of Huron-Kinloss was within his right to issue the building permit.
> As you are aware, farm buildings have been allowed to be designed to a lesser standard than other types of buildings. The CSA standard sections quoted by Schorn typically apply to those other types of buildings for which the code does not recognize a lowered standard.
> The industry experience and your own experience is that the building as proposed will provide an accepted level of performance. What more needs to be said?

¶ 89 The general tenor of this letter is that the CBO may make substitutes for equivalence, the inference being that it was virtually a given that such substitutes could and would be made. The "what more needs to be said" comment, I am sure the author would like to have back. It basically amounts to stating: "I have decided and I know everyone will agree." What is the purpose in my dealing with this particular subject matter? My overview of Clark's approach is that he appears to have taken what I referred to in comments with counsel as a minimalistic approach. I question that approach in a high-profile undertaking with strong emotional issues identified by the minutes of the meeting March 27, 2001. If the design had been one of over design that surely would have been to the advantage of the Geenes. I find the design to have been a minimal design.

¶ 90 Mr. Potter was critical that the plans were short of particulars or specifications but he never says directly or by reasonable inference that the plans with their notations were insufficient to render the opinion that he rendered, nor for a consideration on the merits for the issuance of a building permit. From the examination of Mr. Potter there is the following

> Okay, and the question I'm trying to get from you then, was it wrong for Mr. Farrell to issue the building permit when an engineer said it did comply, even though you differ with that engineer?
>
> A. How would Mr. Farrell know about the existence of these things? I think poor Mr. Farrell is stuck with an engineer, sends him a letter and says `I've answered all these questions Mr. Potter has, and it complies, and here's the application for a building permit'.

¶ 91 In my view, if the CBO had available to him the material and the different positions advanced before me that on May 10 it would have been unreasonable for him to have issued a building permit. Having said that, that which is before me was not material that needed to be necessarily before the CBO at the crystallized point in time. On material that was before the CBO at that time, my conclusion based upon construction issues is that he was not unreasonable in issuing the building permit. My view is that the question of reasonableness in issuing of the permit was borderline, perhaps best expressed by Mr. Potter to the effect that he would not have issued the permit, but that it was not unreasonable that it did in fact issue. I would hope with the benefit of this application the CBO would not issue a building permit in similar circumstances. I do not agree with the thesis attributed to the witness Schom that proper reinforcing would require a fresh building permit application involving new plans and specifications. There are many remedies available to a CBO which would otherwise have been available absent a fresh application with new material.

¶ 92 In my view, the standard of correctness on construction issues has been satisfied by the CBO including his making reference to the appropriate building code legislation. I find that the standard of correctness has been satisfied. I find that with reference to the facts before him that a standard of reasonableness has been satisfied on the construction issues.

WELLS,DRAINAGE TILE, SITE PLAN, BALANCING OF INTERESTS

¶ 93 The municipal requirements include the filing of plans. For example, the Nutrient Management By-law s. 5.5 requires the filing of a plan to include those things set out including the nearest drilled, dug or communal well and the location of the nearest field drainage tile. There may not be strict compliance with the by-law in that the plan filed does not deal directly with the identified requirements. But the totality of the material filed, in particular, the contents of the Nutrient Management Plan, satisfy the by-law requirements. I am satisfied that a consideration of the total of the material led to a reasonable conclusion that site plan/well location/field drainage tile location have each been reasonably satisfied.

¶ 94 In this case the proposed buildings are in a location above existing drainage tile and the plans deal with re-routing of tile. The locations of wells and drainage are not simply something to be noted on a plan for compliance in some kind of a check-list way. To have meaning, the locations of wells and tile drainage would give rise to other questions addressing whether the plan for the proposed agri business will result in adverse effects. The issues before me do not present a need for me to comment or decide any appropriate follow-up issue dealing with well and tile locations. Having said that, one would hope that there are in place adequate safeguards for water quality and the effect of drainage.

¶ 95 The evidence of Mr. Hilborn is that the provincial guideline dealing with MDS compliance is not something that requires provincial approval. This was an explanation as to why the absence of "actual" measurements in the MDS information were not material in gaining provincial approval. I think it is fair to suggest that the Walkerton experience makes one question if guidelines that do not have the force of provincial law and are not regarded as material in an approval process are good enough. At the start of these reasons I identified two interests to be balanced. On the facts of this case, I have found the Environmental Protection Act (EPA) not to be applicable law. The provincial approval officer found the MDS measurements not to be material to the approval process. These comments have little to do with the legal issues before me, but appear to have something to do with the perception or question of an even-handed balance between legitimate interests.

¶ 96 I recognize that normal farming practices are within the jurisdiction of the Farm Practice Protection Board which has its own expertise. The question remains: are there sufficient safeguards to balance legitimate competing interests? The MDS guidelines address "noise, odour and dust". The guidelines seek "to promote harmony in the rural community and to ensure agriculture as an ongoing activity". The Nutrient Management Plan addresses the type of issues that follow from such things as well location, tile drainage location and manure spreading.

¶ 97 It is agreed the plan was not in the hands of the municipality until it was hand-delivered. I have found the time permitted for the review by a third party, even if not required as a matter of law, was grossly inadequate. I find further that the time for the CBO to examine and approve the lengthy and complex plan was insufficient. I conclude that the CBO's treatment of this important document was insufficient and unreasonable. The short time supports the inference I have otherwise drawn that the CBO was prepared to issue this permit upon receipt of provincial approval of the plan without doing significantly more. He did a further MDS calculation but given his position on distance required that was but a further token gesture.

¶ 98 It is important to repeat that the MDS formula deals with building locations and "odour. MDS does not account for noise and dust." It does not deal with the spreading of manure.

¶ 99 On the facts of this case, EPA is not applicable law.

¶ 100 The CBO has a wide discretion in achieving acceptable building standards.

¶ 101 The Farm Practices Protection Board can determine normal farm practices in the context of complaints generally in regard to odour, dust or noise.

¶ 102 The balancing of the legitimate competing interests is not resolved in these reasons. The issue of balance continues and those charged with the overall responsibility would be advised to consider the following: Does the existing multi-faceted approach through different legislation, different offices, different tribunals and different levels of government balance

interests? This question involves consideration whether existing legislation furnishes a proactive approach to the balance of legitimate competing interests as compared to a reactive approach.

¶ 103 I suggest there is an appearance the playing field is not level. The competing interests before this court apply or are applicable to those having standing. There remain the interests of the broader community, and a rationalization and protection of all interests. The questions remaining are beyond the scope of these reasons.

OVERVIEW

There were strong emotional issues identified by the minutes of the meeting March 27, 2001. The CBO, by his comments as in the Fax transmission of March 19, 2001 and by the unseemly haste of issuing the building permit in the brief time span from receiving the Nutrient Management Plan approval May 7 to May 10, appears to have taken an active side in contentious issues. The issue of the building permit has the appearance of orchestration with the farmer, builder, builder's engineer and CBO. In being so overtly aligned the CBO damaged his own ability to exercise discretion. The office and decisions of a CBO are entitled without more to deference. In this case, the undermining of his own discretion also undermines entitlement to deference.

THE RESULT

¶ 104 In the result, the building permit issued May 10, 2001 for the building of two hog barns housing 4,000 hogs is quashed.

COSTS

¶ 105 Arrangements may be made through the trial coordinator for such attendance as may be required to address the issue of costs.

BROWNE J.

COUNTRY PORK LTD. v TOWNSHIP OF ASHFIELD

DOCKETC36040

COURT OF APPEAL FOR ONTARIO
CATZMAN, DOHERTY AND BORINS JJ.A.

B E T W E E N :

COUNTRY PORK LTD.

Appellant (Applicant)

- and -

THE CORPORATION OF THE TOWNSHIP OF ASHFIELD and CHIEF BUILDING OFFICIAL OF THE CORPORATION OF THE TOWNSHIP OF ASHFIELD
Respondents

Thomas J. Corbett,
for the appellant

Gregory F. Stewart,
for the respondents

On appeal from the judgment of Justice Lynn Leitch dated February 28, 2001.

BORINS J.A.:

[1] This is an appeal by Country Pork Ltd. ("Country Pork") from the dismissal of its application for an order quashing Interim Control By-Law No. 14-2000 of the Corporation of the Township of Ashfield (the "Township") passed pursuant to s. 38(1) of the *Planning Act*, R.S.O. 1990, c. P. 13 and for an order directing Mr. John Maize, the Chief Building Official of the Township, to issue a building permit to it pursuant to s. 25(1) and (4) of the *Building Code Act, 1992*, S.O. 1992, c. 23.

I

[2] On June 15, 2000, Country Pork acquired a substantial parcel of farm land in the Township with the intention of operating a large hog farm on the property. Prior to acquiring the property, Country Pork had retained Mr. Matt Ueckermann to complete the preparatory work for an application for a building permit for the construction of a 9,000 head weaner barn and an open liquid livestock manure storage facility on the property. Mr. Ueckermann was to submit the application to the Township immediately after Country Pork acquired the property. On June 16, 2000 Mr. Ueckermann met Mr. Maize and submitted Country Pork's application for the building permit. The application had not been signed by Country Pork, nor by Mr. Ueckermann on its behalf. Mr. Maize felt that he was unable to approve the application at that time, indicating that he wished to discuss certain aspects of it with the Township's planner.

[3] From the appellant's perspective, after June 16, 2000 the Township deliberately delayed processing its application by making demands for additional materials in respect to matters not required by the legislation governing the issuance of building permits. In particular, the appellant pointed to a letter of June 22, 2000 from the Township's solicitor that outlined four requirements that had to be met before a building permit would be issued, including an engineer's certificate that the proposed manure storage facility would be watertight.

[4] As a result of the of June 16, 2000 meeting between Mr. Ueckermann and Mr. Maize, the appellant's intention to operate a large hog farm and its application for the building permit were brought to the attention of the Township Council. For a number of years, residents of the Township, which is largely agricultural and which contains many livestock operations, had

raised environmental concerns arising from leakage of liquid manure from storage facilities similar to the one Country Pork intended to construct. Their concern was shared by the Township Council. Consequently, the Council held what the appellant contends was a secret meeting on June 26, 2000 at which it passed Interim Control By-Law No. 14-2000. The by-law precluded the use of any land in the Township for the establishment of a livestock facility, including manure storage facilities, with a capacity of 100 livestock units or greater. As Country Pork's proposed facility was intended to accommodate more than 100 livestock units, it fell within the prohibition imposed by the by-law. On June 27, 2000, Mr. Mai ze refused to grant the appellant's application for the building permit on the ground that the passage of the by-law prevented the issuance of the permit. On June 28, 2000, the appellant signed the application for a building permit.

II

[5] It is useful to set out the framework of Country Pork's application to the Superior Court:

(1) Under s. 25(1) of the *Building Code Act, 1992* Country Pork appealed from the refusal of Mr. Maize, the Township's chief building official, to issue the building permit and asked the court to exercise its discretion under s. 25(4) of the Act to issue the permit. Its position was that Mr. Maize was required to issue the building permit because it had satisfied the conditions of s. 8(2) of the Act before the interim control by-law was passed, with the result its application for the permit had "crystallized" prior to the passage of the interim control by-law.

(2) In the alternative, Country Pork attacked the legality of the by-law on the grounds that it was contrary to the Township's official plan and s. 6(1) of the *Farming and Food Production Protection Act, 1998*, S.O. 1998, c. 1 ("FFPA"), and that it was passed in bad faith and in breach of natural justice. This branch of the application was brought under s. 136 of the *Municipal Act*, R.S.O. 1990, c. M. 45.

[6] I would note that the framework of the application differs from the framework of the appeal which, as set out above, is framed as an appeal from the dismissal of Country Pork's application to quash the interim control by-law and the dismissal of its appeal from the Township's refusal to issue a building permit.

[7] In adjudicating the application, the application judge first considered Country Pork's appeal from the refusal of the chief building official to issue the building permit. She found that the appellant's application for the building permit had not crystallized before the Township's passage of the interim control by-law. The application judge then considered each of the grounds advanced by the appellant for an order quashing the bylaw. She found that the by-law complied with the Township's official plan, that it was not passed in bad faith, that the appellant was accorded procedural fairness and that it was not contrary to s. 6(1) of the *FFPA*.

[8] During the course of argument, the court questioned its jurisdiction to hear the appeal from the refusal to issue the building permit and the application judge's jurisdiction to determine whether the interim control by-law should be quashed. We drew the attention of counsel to s. 25(1) of the *Building Code Act, 1992*, which provides that an appeal from the decision of a chief building official lies to the Superior Court of Justice, with a further appeal to the Divisional Court "on any question that is not a question of fact alone", and to s. 38(4) of the *Planning Act*, which provides that an appeal lies to the Ontario Municipal Board from the passage of an interim control by-law under s. 38(1). Counsel assured the court that they had considered the application judge's jurisdiction to hear the application to quash the interim control by-law and this court's jurisdiction to hear the appeal on both branches of the appellant's application and had satisfied themselves that the application to quash by the by-law had properly been taken to the Superior Court of Justice and that the appeal, therefore, lay to this court.

[9] Subsequent to hearing the appeal, as the court continued to have concerns about jurisdiction, counsel were asked to provide written submissions on this issue. I have now had the opportunity to consider counsels' submissions.

III

[10] In considering the application judge's jurisdiction to hear the application to quash the interim control by-law and this court's jurisdiction to hear this appeal, it is helpful to set out the provisions of the applicable legislation.

Building Code Act, 1992, as amended

25. **(1)** Any person who considers themself aggrieved by an order or decision made by an inspector or chief building official under this Act or the regulations, except a decision not to issue a conditional permit under subsection 8(3), may, within twenty days after the order or decision is made, appeal the order or decision to a judge of the Superior Court of Justice.

. . . . .

(4) If an appeal is made under this section, the judge shall hold a hearing and may rescind or affirm the order or decision of the inspector or chief building official or take such action as the judge considers the inspector or chief building official ought to take in accordance with this Act and the regulations and, for such purpose, may substitute his or her opinion for that of the inspector or chief building official.

26. **(1)** A party to the hearing before the judge of the Superior Court of Justice under section 25 may appeal from the decision to the Divisional Court.

. . . . .

(3) An appeal under this section may be made on any question that is not a question of fact alone and the court may,

(a) confirm or alter the decision of the judge;
(b) direct the inspector or chief building official to do any act he or she is authorized to do under this Act;
(c) refer the matter back to the judge for reconsideration; or
(d) substitute its opinion for that of the inspector or chief building official or the judge.

Planning Act

38. **(1)** Where the council of a local municipality has, by bylaw or resolution, directed that a review or study be undertaken in respect of land use planning policies in the municipality or in any defined area or areas thereof, the council of the municipality may pass a by-law (hereinafter referred to as an interim control by-law) to be in effect for a period of time specified in the by-law, which period shall not exceed one year from the date of the passing thereof, prohibiting the use of land, buildings or structures within the municipality or within the defined area or areas thereof for, or except for, such purposes as are set out in the by-law.

. . . . .

(3) No notice or hearing is required prior to the passing of a by-law under subsection (1) or (2) but the clerk of the municipality shall, in the manner and to the persons and public bodies and containing the information prescribed give notice of a by-law passed under subsection (1) or (2) within thirty days of the passing thereof.
(4) Any person or public body to whom notice of a bylaw was given under subsection (3) may, within sixty days from the date of the passing of the by-law, appeal to the Municipal Board by filing with the clerk of the municipality a notice of appeal setting out the objection to the by-law and the reasons in support of the objection.
(5) If a notice of appeal is filed under subsection (4), subsections 34 (23) to (29) apply with necessary modifications to the appeal.

34. (26) The Municipal Board may,

(a) dismiss the appeal; or,
(b) allow the appeal in whole or in part and repeal the by-law in whole or in part or amend the by-law in such manner as the Board may determine or direct the council of the municipality to repeal the by-law in whole or in part or to amend the bylaw in accordance with the Board's order.

. . . . .

71. In the event of conflict between the provisions of this and any other general or special Act, the provisions of this Act prevail.

***Ontario Municipal Board Act,* R.S.O. 1990, c. O. 28**

36. The Board has exclusive jurisdiction in all cases and in respect of all matters in which jurisdiction is conferred on it by this Act or by any other general or special Act.

. . . . .

57. The Board shall not grant or issue any approval or certificate under this or any other general or special Act in respect of any municipal affair or matter, while the same or the validity thereof is called in question in any pending action or proceeding or by which it is sought to quash any by-law of a municipality relating thereto.

. . . . .

96. (1) Subject to the provisions of Part IV, an appeal lies from the Board to the Divisional Court, with leave of the Divisional Court, on a question of law.

***Municipal Act,* R.S.O. 1990, c. M. 45, as amended**

136. (1) The Superior Court of Ontario upon application of a resident of the municipality or of a person interested in a by-law of its council may quash the by-law in whole or in part for illegality.

***Courts of Justice Act,* R.S.O. 1990, c. C. 43**

6. (1) An appeal lies to the Court of Appeal from,

. . . . .

(b) a final order of a judge of the Superior Court of Justice

. . . .

(2) The Court of Appeal has jurisdiction to hear and determine an appeal that lies to the Divisional Court or the Superior Court of Justice if an appeal in the same proceeding lies to and is taken to the Court of Appeal.
(3) The Court of Appeal may, on motion, transfer an appeal that has already been commenced in the Divisional Court or the Superior Court of Justice to the Court of Appeal for the purpose of subsection (2).

IV

[11] In its submissions on jurisdiction, Country Pork advised the court that it in fact appealed from the passage of the interim control by-law to the Ontario Municipal Board ("OMB") pursuant to s. 38(4) of the *Planning Act*

on August 15, 2000, having previously commenced its application to quash the by-law under s. 136 of the *Municipal Act* in the Superior Court on July 21, 2000. By agreement between counsel for Country Pork and the Township, the proceedings before the OMB were "held in abeyance" and were adjourned pending the disposition of Country Pork's application. Although counsel for the parties, in reliance on the decision of this court in *Equity Waste Management of Canada v. Halton Hills (Town)* (1997), 35 O.R. (3d) 321 (C.A.), were of the opinion that the Superior Court and the OMB held concurrent jurisdiction to hear the application concerning the passage of the interim control by-law, they recognized that the Superior Court might decline jurisdiction. Following the release of the application judge's reasons for judgment on February 28, 2001, Country Pork launched its appeal to this court on March 19, 2001. In her reasons for judgment, the application judge made no reference to whether she had, or was assuming, jurisdiction over the application concerning the passage of the interim control by-law**.** On March 21, 2001 the OMB granted a request by the parties to further adjourn Country Pork's appeal to the Board. Thus, Country Pork's appeal of the interim control by-law remains pending before the OMB.

[12] We were also advised that on July 4, 2000 Country Pork "appealed" from the interim control by-law to the Normal Farm Practices Protection Board under the *FFPA* on the ground that the by-law contravened s. 6(1) of that Act. That proceeding was adjourned by a consent order of the Board, pending the determination of Country Pork's application. Presumably, the proceeding remains adjourned.

[13] As I understand the position taken by Country Pork, which, in substance, is supported by the Township, it sought its remedies in the Superior Court because it was the "only . . . forum that had jurisdiction over all issues" - the appeals under the *Building Code Act, 1992*, and the *Planning Act*, the application to quash the interim control by-law for illegality under s. 136 of the *Municipal Act* and the proceeding under the *FFPA* - even though the parties were aware of the possibility that the Superior Court might decline to exercise its jurisdiction to hear the *Municipal Act* application to quash the interim control by-law.

[14] From paragraphs 5 -9 of Country Pork's submissions, it becomes clear why the application judge made no reference in her reasons for judgment to whether or not she should hear the challenge to the interim control by-law. Neither party alerted her to the need to exercise a discretion in deciding whether to hear the challenge. Country Pork gives two reasons why the discretion of the Superior Court to hear the attack on the bylaw was not raised before the application judge. First, counsel relied on the "unequivocal" holding in *Equity Waste Management* that the Superior Court and the OMB have concurrent jurisdiction to hear an appeal under s. 38(4). Second, they assumed, if the application judge was of the opinion that she should not hear the application, that "on her own initiative" she would stay the appeal under s. 106 of the *Courts of Justice Act*, R.S.O. 1990, c. 43 (*"CJA"*).

[15] Both parties concede that Country Pork's appeal from the Township's refusal to issue a building permit properly was taken to the Superior Court under s. 25(1) of the *Building Code Act, 1992*, and that an appeal from that decision lies only to the Divisional Court. They contend that this court has jurisdiction to decide that appeal pursuant to s. 6(2) of the *CJA* because this court, under s. 6(1)(b) of the *CJA*, has jurisdiction over an appeal from the dismissal of Country Pork's application under s. 136 of the *Municipal Act* to quash the interim control by-law. This contention is based on the submission that there were two discrete proceedings before the application judge — an appeal under s. 25(1) of *Building Code Act, 1992*, and an application to quash the interim control bylaw under s. 136 of the *Municipal Act* — and, even though under s. 38(4) of the *Planning Act* an interim control by-law appeal lay to the OMB, that the application judge, as in *Equity Waste Management*, properly exercised her discretion to assume jurisdiction to decide the application to quash the by-law. For the reasons that follow, I do not agree.

V

[16] Earlier I referred to the framework of Country Pork's application to the Superior Court and the approach taken by the application judge in her analysis of the issues raised by the application. I did so because the position advanced by the parties on jurisdiction is based on Country Pork having sought two alternative remedies in its application: (1) an appeal under s. 25(1) of the *Building Code Act, 1992* from the refusal to issue a building permit, and (2) an application under s. 136(1) of the *Municipal Act* to quash the interim control by-law. It is on the basis of this framework that the parties say that this court has jurisdiction to hear Country Pork's appeal. This is borne out by the manner in which Country Pork has framed this appeal.

[17] Had Country Pork's appeal under s. 25(1) of the *Building Code Act, 1992*, succeeded and had the application judge issued the building permit under s. 25(4) of the Act, there would have been no need for her to consider Country Pork's attack on the interim control by-law. In such circumstances, had the Township appealed the granting of the building permit, under s. 26(3) its appeal lay to the Divisional Court "on any question that is not a question of fact alone". However, the application judge dismissed the building permit appeal and went on to consider the alternative remedy requested by Country Pork, an order quashing the interim control by-law. She refused to grant such an order.

[18] In my view, the application judge's order refusing to quash the interim control bylaw is a final order within the meaning of s. 6(1)(b) of the *CJA* and Country Pork's appeal from it properly lies in this court. Consequently, under s. 6(2) of the *CJA*, this court has jurisdiction to hear its appeal from the dismissal of its appeal under s. 25(1) of the *Building Code Act, 1992*. In considering the building permit appeal, this court is governed by s. 26(3) of the *Building Code Act, 1992*, which stipulates the powers of the Divisional Court where an appeal lies to that court. For the reasons that follow, I would dismiss the building permit appeal.

VI

[19] I will now consider whether this court should decide the merits of the appeal from the application judge's dismissal of the application to quash the interim control by-law. The starting point is whether the application judge had jurisdiction to hear the appellant's application to quash the by-law on the ground of illegality under s. 136(1) of the *Municipal Act*. The appellant argues that she had jurisdiction notwithstanding that s. 38(4) of the *Planning Act* stipulates that an appeal from the passage of an interim control by-law lies to the OMB. Both the appeal to the OMB, and the application under s. 136 of the *Municipal Act* to quash the by-law, are predominantly on planning grounds. The parties contend that she had jurisdiction on the authority of this court in *Equity Waste Management*, which they say unequivocally stands for the proposition that the Superior Court and the OMB have concurrent jurisdiction to adjudicate an appeal from the passing of an interim control by-law, with discretion resting in the court to decline to defer to the jurisdiction of the OMB in appropriate circumstances.

[20] This analysis requires a consideration of the circumstances that pertained in *Equity Waste Management*. In that case, Laskin J.A. considered the jurisdiction of the Superior Court and the OMB where, as in this case, both an application to quash an interim control by-law under s. 136 of the *Municipal Act* had been taken to the court and an appeal from the passing of the by-law had been taken to the OMB under s. 38(4) of the *Planning Act*.

[21] In *Equity Waste Management*, an application was brought under s. 136(1) of the *Municipal Act* to quash an interim control by-law on the ground that it was passed in bad faith. The parties had earlier appealed to the OMB under s. 38(4) of the *Planning Act*. However, because the Board could not hear the appeal for several weeks to the prejudice of the applicants, they decided to proceed in the General Division (the predecessor of the Superior Court) under s. 136(1) of the *Municipal Act*. Given that s. 38(4) of the *Planning Act* stipulates that an appeal from the passage of an interim control by-law is to be made to the OMB, that s. 36 of the *Ontario Municipal Board Act* vests the Board with exclusive jurisdiction in all

matters referred to it by any other general or special Act, and that under s. 96 of the *Ontario Municipal Board Act* decisions of the OMB are appealable to the Divisional Court, the respondent argued that this comprehensive scheme evidenced the intention of the legislature to vest the OMB with exclusive jurisdiction to review the validity of interim control by-laws.

[22] On behalf of the court, Laskin J. A. considered, and rejected, this argument at pp. 331-333. He was satisfied that in deciding whether to quash an interim control bylaw the OMB had the power to consider an allegation of bad faith, particularly when it is based on the absence of a planning rationale for the by-law or the lack of proper planning principles to support the by-law, and that the Board is well-suited to do so. However, he concluded that in an appropriate case the court, in its discretion, may decline to defer to the jurisdiction of the OMB and itself decide the validity of the by-law.

[23] The application judge had also rejected the argument on the exclusive jurisdiction of the OMB, concluding that "[n]otwithstanding that such an appeal [to the OMB] has been launched, the Applicants are in no way restricted from moving before the Court to quash the Interim Control By-law.": (1994), 22 M.P.L.R. (2d) 167 at 169 (Ont. Gen. Div.). Although at p. 332 Laskin J.A. acknowledged that courts should be reluctant to exercise their jurisdiction on matters that the legislature has left to a specialized tribunal with broad powers, he agreed with the application judge that in the particular circumstances of that case the applicants could appropriately invoke the jurisdiction of the court under s. 136(1) of the *Municipal Act*. He concluded at p. 333: "The [application] judge, therefore, properly exercised her discretion to hear the application on the ground of urgency."

[24] As I understand the judgment, Laskin J.A. was of the view that in the urgent circumstances of that case it was unnecessary for the application judge to defer to the jurisdiction of the OMB. Laskin J.A. found no grounds on which to interfere with the application judge's exercise of her discretion. In my view, the opinion of Laskin J.A. is relevant to the circumstances of this appeal. In particular, it is significant that Laskin J.A. concluded that the application judge properly exercised her discretion despite being satisfied that the OMB would be well-suited to consider the appeal.

[25] There are both similarities and differences between *Equity Waste Management* and this case. As in *Equity Waste Management*, Country Pork appealed the passage of the interim control by-law to the OMB and then applied under s. 136(1) of the *Municipal Act* to quash the by-law on grounds similar to those advanced in that case. Indeed, in this case the attack on the interim control by-law is predominantly on planning grounds. As for the differences, unlike *Equity Waste Management* there is no evidence of urgency, nor of Country Pork requesting an early hearing date from the OMB that the Board was unable to provide. Nor did the parties ask the application judge to exercise her discretion and to decline to defer to the jurisdiction of the OMB, and to assume jurisdiction to hear the application.

[26] As I have indicated, counsel interpreted *Equity Waste Management* to stand for the proposition that the Superior Court and the OMB have concurrent jurisdiction to determine the validity of an interim control by-law and that counsel are free to decide in which to forum to attack the by-law. In my view, counsel misread *Equity Waste Management* as giving an applicant a choice of forum in which to attack an interim control by-law, rather than as a concurrent forum case which holds that *in appropriate circumstances* the court and the OMB have concurrent jurisdiction to determine the validity of the by-law, provided that the court expressly exercises its discretion on proper grounds to decline deference to the jurisdiction of the OMB.

[27] In my view, therefore it is necessary to consider whether the

application judge should have heard the application under s. 136 of the *Municipal Act*, or whether she should have deferred to the jurisdiction of the OMB. Had she been as ked to properly assume jurisdiction, she would have had to consider the nature of the attack on the interim control by-law, as well as the legislative scheme for appeals from municipal planning decisions contained in the *Planning Act*.

[28] As to the nature of an attack on an interim control by-law, it is necessary to consider both s. 136(1) of the *Municipal Act* and s. 38(4) of the *Planning Act*, which provide the Superior Court and the OMB, respectively, with separate and distinct jurisdiction in relation to attacks on municipal by-laws. Section 136(1) of the *Municipal Act* provides the court with a limited supervisory jurisdiction to quash all or part of a municipal by-law where it has determined that the by-law is illegal, for example, as being *ultra vires* the municipality or contrary to the *Canadian Charter of Rights and Freedoms*. Section 136(1) of the *Municipal Act* is not a vehicle for consideration of the merits of a municipality's decision to pass the by-law, or whether it conforms to proper municipal planning principles. As was said by this court in *Barrick Gold Corp. v. Ontario (Minister of Municipal Affairs & Housing)* (2000), 51 O.R. (3d) 194 at 209-210: "Section 136 of the *Municipal Act* does not mandate a judicial inquiry into the merits, from a policy perspective, of by-laws or resolutions."

[29] One can contemplate a situation where an interim control by-law is based on proper planning principles but is outside of the municipality's jurisdiction and is, therefore, unlawful. In this situation, according to the analysis of the Divisional Court in *Toronto (City) v. Goldist Properties Inc.* (2002), 58 O.R. (3d) 232 (Div. Ct.), the OMB would not have jurisdiction to consider whether the by-law is a valid exercise of authority by the municipality. In *Toronto*, the court held that the OMB's jurisdiction on an appeal under s. 17(50) of the *Planning Act*, as amended, extends to determining whether by-laws should be approved on *Planning Act* principles, but does not include a determination of the validity and legality of a by-law.

[30] In *Toronto*, Blair R.S.J. held at pp. 348-349 that:

> **. . .** neither the *Planning Act* nor the *Ontario Municipal Board Act*, nor the *Municipal Act* , give the OMB a supervisory jurisdiction over the *legislative competency* of municipalities. The Board is given supervisory jurisdiction, in this context, *over their municipal planning* competence.
>
> [Emphasis in original.]

He went on to add at p. 249: "If this were not the case **. . .** there would be no need for the statutory scheme which remains in effect in relation to the quashing of by-laws and the determination of their validity." He then referred to s. 57 of the *Municipal Act*, commenting at p. 250 that it implicitly, if not expressly, requires the OMB " to stay its hand while matters relating to the validity and legality of by-laws are determined by the court".

[31] The two sections of the *Planning Act* operative in *Toronto* and in this appeal,
s. 17(50) and s. 38(4), respectively, form part of a scheme contained in the Act that constitutes the OMB as the forum for deciding whether municipal planning by-laws and resolutions conform to proper *Planning Act* principles. In creating the scheme the legislature has recognized the OMB's expertise in planning issues. In this appeal, it would be for the OMB to determine whether the interim control by-law was appropriate as supported by underlying *Planning Act* principles and the Township's official plan. Under s. 34(26) of the Act the OMB may, essentially, substitute its judgment for that of the municipality. That the OMB is the forum for the determining a merit-based attack on a municipal by-law is confirmed by s. 36 of the *Ontario Municipal Board Act* that provides the OMB with exclusive jurisdiction in relation to such matters.

[32] In my view, when the legislature provided for the OMB to rule upon whether municipal by-laws and resolutions meet the principles of the

Planning Act, it intended for the OMB to have exclusive jurisdiction to determine such questions. The OMB is a tribunal that has expertise in municipal planning. In cases where the court is asked to assume jurisdiction over matters that the legislature has assigned to administrative tribunals, there is a strong policy argument in favour of the court deferring to the jurisdiction of the tribunal in favour of protecting the integrity of administrative mechanisms set up by the legislature. Where the court is an alternative forum to a tribunal provided in a comprehensive legislative scheme, considerable judicial deference is to be given to that scheme and the expertise of the tribunal before the court exercises its discretion to assume jurisdiction. See *Ste. Anne Nackawic Pulp & Paper Co. Ltd. v. Canadian Paper Workers Union, Local 219*, [1986] 1 S.C.R. 704. Were an individual, in circumstances such as this case, free to choose whatever forum he or she wished in order to attack the validity of an interim control by-law on the grounds that it is contrary to proper planning principles, the result would be to undermine the intention of the legislature that all appeals from municipal planning decisions on *Planning Act* grounds be determined by the OMB. See, also, the policy with respect to collateral attacks on the validity of administrative orders as discussed in *Harelkin v. University of Regina*, [1979] 2 S.C.R. 561, *R. v. Consolidated Maybrun Mines Ltd.*, [1998] 1 S.C.R. 706 and *R. v. Al Klippert Ltd.*, [1998] 1 S.C.R. 737.

[33] Therefore, had the application judge been asked to exercise her discretion whether to assume jurisdiction or to defer to the OMB, it would have been necessary for her to consider the following circumstances:

. • the attack on the interim control by-law was predominantly on *Planning Act* principles;
. • unlike the attack on the by-law amending the official plan in *Toronto*, this was not “a direct frontal attack on the underlying validity and legality” of the by-law;
. • incidental and necessary to the OMB’s determination of whether the by-law should be quashed on *Planning Act* principles, which is within the OMB’s jurisdiction, it could properly consider whether the by-law was passed in bad faith and in breach of natural justice;
. • the intention of the legislature expressed in the statutory scheme in the *Planning Act* vesting exclusive jurisdiction in the OMB to review municipal by-laws and resolutions on the basis of proper planning principles;
. • the expertise of the OMB in the field of municipal planning law;
. • the policy that requires judicial deference to a statutory scheme vesting an administrative tribunal with jurisdiction to resolve disputes within its area of expertise.

[34] Given the above analysis, there is good reason to question whether the court should have heard the interim control by-law appeal rather than deferring to the jurisdiction of the OMB. As I have said, unlike *Equity Waste Management*, the application judge was not asked to exercise her discretion and assume jurisdiction to hear the appeal, whether on the ground of urgency, or any other ground. As well, there is no evidence of urgency or that the OMB had rejected a request from the appellant for an expedited hearing. As I have indicated, issues may be common on both the application to quash for illegality and the appeal on the merits, *e.g.*, an allegation of bad faith. Where the same issue, or issues, arise on both the application to quash and the appeal to the OMB, it becomes a matter of choosing the more appropriate forum according to the criteria that I have outlined.

[35] As, in my view, the proper course to follow is to decline to decide the merits of the interim control by-law appeal and to remit the original interim control by-law appeal to the application judge to determine, in accordance with these reasons, whether she should exercise her discretion to hear the appeal, I will say no more on the subject of jurisdiction. If the application judge defers to the jurisdiction of the OMB, Country Pork may, of course, proceed with its appeal to the OMB which, I assume, remains pending, or, if it is so advised, may abandon its court proceedings and proceed directly to the OMB.

VII

[36] It is necessary, now, to consider Country Pork's building permit appeal.

[37] The factual background to this appeal, in brief summary, is as follows. The appellant acquired the property on June 15, 2000. On June 16, Mr. Ueckermann met with Mr. Maize and delivered to him a nutrient management plan and drawings of the proposed barn and manure storage tank prepared by Mr. Nelson Dawley, an independent engineer retained by the appellant. Although no building plan permit application was completed at this meeting, Mr. Ueckermann deposed in his affidavit that he expected to receive the building permit on this occasion and was surprised when he did not. On June 19, Mr. Ueckermann was advised that the project would be discussed at the meeting of the Township council scheduled for the following day. Mr. Maize attended that meeting, met with council to review the nutrient management plan, and was instructed to deliver the plan to the Township's solicitors. On June 21, Mr. Ueckermann spoke to Mr. Maize, who indicated that a certificate was required from Mr. Dawley stating that the storage tank would be watertight. On the same day, Mr. Maize wrote to Mr. Dawley's firm, Dawley Engineering, setting out the requirements of the certificate. On June 22, Mr. Murphy, the Township solicitor, outlined in a letter to the appellant's solicitors the requirements that had to be met before a building permit would be issued. They were:

- that the appellant provide the required certificate from Mr. Dawley;
- that a development agreement be entered into as required by the Township bylaws;
- that a signed application for a permit be submitted, together with the necessary fee; and
- that the nutrient management plan might have to be reviewed by an independent consultant.

On June 26, the Township passed the interim control bylaw. On June 27, Mr. Ueckermann was advised about the passage of the interim control bylaw. On June 28, the appellant signed the application for a building permit.

[38] Before the application judge, the appellant took the position that it had complied with all applicable legal requirements by June 19, and was entitled to its building permit on that date. The Township's position was that the building permit could not be issued because the appellant's application was not made until June 28, two days after the interim control bylaw was passed.

[39] In her reasons for judgment, the application judge made the following findings with respect to this issue:

(a) Mr. Maize had no discretion to refuse to issue the permit if all the statutory requirements had been fulfilled;
(b) neither the *Ontario Building Code* nor the *National Building Code* provides any design criteria for the floors of the manure tank;
(c) there had been previous incidents in the Township involving a failure of manure tank design which had led to discharge of manure into drains and ultimately into Lake Huron;
(d) on a prior application by another owner for a large barn with an outside manure storage tank, Mr. Maize had required Mr. Dawley to certify that, among other things, the structure would be watertight;
(e) there was no evidence that the Township council interfered with Mr. Maize's review of the materials filed by the appellant;
(f) Mr. Ueckermann's suggestion that he expected to receive the building permit on June 16 was unrealistic to the point of being incredible, given the quantity of material submitted with the application;
(g) Mr. Dawley's certification was sought in order to fulfill the requirement of the *National Building Code* that the manure tanks must be designed and constructed to prevent leakage; and
(h) it was within Mr. Maize's discretion to request the confirmations he did from Dawley Engineering, and he was not influenced to do so because of improper interference by the Township council.

[40] In the result, the application judge expressed herself as "satisfied that the applicant was not entitled to a building permit prior to the passage of the

interim control bylaw".

[41] The standard of review on appeal, even in cases where, as here, the entire record consists of documentary or written evidence, is one of deference: *Equity Waste Management*, at 333, 336. Appellate courts may not interfere with findings of fact, inferences of fact or conclusions of mixed fact and law, which may not be reversed in the absence of a legal or palpable and overriding error: *Housen v. Nikolaisen* (2002), 211 D.L.R. (4th) 577 (S.C.C.).

[42] In making the findings she did, the application judge carefully reviewed and marshalled the evidence before her. I cannot find, in doing so, and in concluding that the appellant was not entitled to a building permit prior to the passage of the interim control bylaw, that she made any legal or palpable or overriding error.

VIII

[43] For the foregoing reasons, I would dismiss Country Pork's building permit appeal, allow its interim control by-law appeal, set aside the order of the application judge dismissing that appeal, and remit the interim control by-law application to the application judge to reconsider it in accordance with these reasons. As success has been divided, there will be no costs.

RELEASED: July 29, 2002

"S. Borins J.A."

"I agree M. A. Catzman J.A."

"I agree Doherty J.A."

Pedwell v. Town of Pelham

DOCKET: C30587

COURT OF APPEAL FOR ONTARIO

WEILER, ROSENBERG and ARMSTRONG JJ.A.

ROBERT PEDWELL, KEITH PEDWELL, MARY PEDWELL, LINDA McLEAN and LANDPARK HOMES INC.	)	Peter T.M. Haney and Thomas Bielby for the appellants
Plaintiffs (Respondents)	)	Thomas Richardson and Katherine King for the respondents
- and -	)	Robert Pedwell Keith Pedwell, Mary Pedwell and Linda McLean
THE CORPORATION OF THE TOWN OF PELHAM and ROBERT JUDGE	)	Evert Van Woudenberg for the respondent Landpark
Defendants (Appellants)	)	Homes Inc. **Heard:** October 16, 2002

On appeal from the judgment of Justice Jean-Jacques Fleury of the Superior Court of Justice dated August 25, 1998, reported at [1998] O.J. No. 3461.

ROSENBERG J.A.:

[1] This appeal from the judgment of Fleury J. concerns the legality of an attempt by the appellant municipality, The Corporation of the Town of Pelham, to prevent a land development in the Niagara Region. In 1989, through a mechanism known as a testamentary devise, Tim Pedwell, a St. Catharines solicitor, created 25 lots on the edge of a piece of agricultural land that had been used to grow grapes. By using a testamentary devise, Mr. Pedwell was able to avoid the provisions of the *Planning Act*, R.S.O. 1990, c. P.13 and the intent, at least, of the applicable zoning by-laws. When Landpark Homes, a local builder, applied for a building permit, the Town became aware of Mr. Pedwell's plan, and hastily enacted an interim control by-law. For approximately two years, this effectively froze the Pedwell/Landpark development plans. At the end of the two-year period the Town enacted a further by-law setting the minimum lot size on agricultural land at 1.5 acres. Since the Pedwell lots are, for the most part, one-acre, this had a significant impact on the proposed development.

[2] The trial judge found that the Town acted in bad faith and he directed that the Chief Building Official issue a building permit for most of the lots and declared that the by-law was a nullity. He also awarded the respondents substantial amounts for damages and pre-judgment interest because the Town had illegally held up development on the lands.

[3] The trial judge made strong findings of fact against the Town. The Town submits that in doing so the trial judge made palpable and overriding errors and that he misdirected himself with respect to the applicable law. I have not been persuaded that the trial judge erred in any material way. Accordingly, subject to minor adjustments concerning the amount of loss on invested funds and the scale of costs, I would dismiss the appeal with costs.

THE FACTS

[4] On August 12, 1988, through a numbered company, Tim Pedwell purchased an 85-acre piece of land in the Town of Pelham from Mrs. Lulu Peacock. Mrs. Peacock's late husband had used the land to grow grapes. Tim Pedwell was acquainted with the Peacock family and performed the legal work for the transaction. He agreed that one lot would be severed off

for Mrs. Peacock's grandson. The application for severance proceeded through the Niagara Land Division Committee and, also, because of an objection from a neighbour, to the Ontario Municipal Board. By February 1, 1989, the severance had been finally approved. Because of the nature of the application, Tim Pedwell had to return the property to Mrs. Peacock by way of deed. She would then reconvey all but one acre back to him. Around this time, Mr. Pedwell became aware that Mrs. Peacock was suffering from terminal cancer. He then explained to her the concept of testamentary devises. At the time, the testamentary devise, in effect, allowed a person to subdivide land in a will. Apparently, the intent was that, for example, farmers would be able to convey lots to their children upon death without having to comply with the ordinary procedures in the *Planning Act* that require an approved plan of subdivision or the consent of the Land Division Committee.

[5] The advantage for Mrs. Peacock was that she would be able to convey lots to her children without having to go through the Land Division Committee procedure. The advantage for Tim Pedwell was that he could substantially increase the value of the land since he could, in effect, create a subdivision on agricultural land. After speaking with her family, Mrs. Peacock chose to proceed with the testamentary devise. Tim Pedwell prepared a deed to transfer the property back to Mrs. Peacock. He testified that he delivered the deed to her. She then amended her will to effect the testamentary devise, dividing the land into 25 one-acre (.4 hectare) parcels and a remaining large parcel of approximately 60 acres. The 60-acre lot and 19 of the one-acre lots were left to Tim Pedwell's nominees, the individual respondents (for convenience referred to as the "Pedwells"). The six remaining one-acre lots were left to Mrs. Peacock's relatives. Mrs. Peacock unexpectedly died shortly after these arrangements were made on March 10, 1989.

[6] In October 1989, the Pedwells entered into a contract to sell 15 of the one-acre lots to the respondent Landpark Homes Inc., a company controlled by Allan Breitkreuz, for $1.08 million. The Pedwells warranted that building permits would be available. The transfers were to close on December 31, 1990 with an option to extend the closing on seven of the transfers to October 31, 1991. The Pedwells also sold the large parcel and an access lot. That transaction was also conditional upon obtaining a building permit.

[7] In November 1989, Mr. Breitkreuz met with the appellant Robert Judge, the Town's Chief Building Official about obtaining building permits. He did not present a formal application at that time. Mr. Judge was surprised that the lots existed. Breitkreuz showed him the reference plan and Mr. Judge said he would look into it. Mr. Judge also told him that he would need septic approvals from the Regional Health Unit. Mr. Breitkreuz then, sometime in the same month, spoke to someone in that Unit.

[8] I will review the facts concerning the Health Unit separately after outlining the respondents' and appellants' evidence about the dealings in late 1989 and early 1990. I adopt the trial judge's summary of that evidence:

> In early December 1989, Mr. Pedwell contacted Mr. Judge, advising him of the creation of the lots by testamentary devise and seeking clarifications as to what would be required by way of pre-requisites for the granting of building permits. The next contact was with Mr. Brooks, Town solicitor. He called Mr. Pedwell and asked for details concerning the testamentary devises. On December 6, 1989, Mr. Pedwell wrote to Mr. Brooks, giving him all of the details and asking that he instruct the building officials to issue building permits. When he heard nothing for close to a month, Mr. Pedwell became concerned over the delays and instructed Mr. Breitkreuz to attend and formally apply for the building permits. On January 3, 1990, Mr. Breitkreuz presented formal applications to Mr. Judge for all of the lots in issue.

[9] A substantial element of the respondents' case rests on the proposition that had the Town officials not improperly interfered, Mr. Judge would have issued building permits prior to that date. The trial judge made that finding subject to two caveats:

> I have no hesitation in concluding that, had these applications been treated normally, approval would have been granted well prior to the end of January *subject to the issue of the Hazard Zoning by-law and subject also to the availability of septic tank permits*.

[10] The caveat concerning the Hazard Zoning by-law is of no consequence to the litigation. The trial judge held that certain of the lots were in a hazard zone and could not be built on and he gave no relief in relation to those lots. The question of septic tank permits is more problematic and is a central feature of the appeal.

[11] The next significant series of events concerns the interim control by-law. After Mr. Judge brought the Pedwell issue to the attention of other town officials, they began discussions about ways to halt the development. They were concerned that the development was not in the public interest. On January 24, 1990, in a letter to the respondent Tim Pedwell, drafted by the Town solicitor but signed by Mr. Judge, Mr. Pedwell was informed that a decision with respect to the building applications "had been deferred pending an evaluation of the impact on Local, Regional and Provincial Planning Policies and legislation by our Town Solicitors and Consulting Planners. Unless special circumstances arise of which we are presently not aware, you can expect a decision on or before February 9th next." Unbeknownst to the respondents or Mr. Breitkreuz, the Town solicitor recommended that the Town enact an interim control by-law to halt any development on agricultural land.

[12] On the same day as the letter went out to Tim Pedwell, the Town Planner, Mr. Barker, provided a report to Town Council recommending there be a planning review to address the issue of non-farm development in agricultural areas. On January 29, 1990, Council adopted this recommendation. On February 5, 1990 Council passed the interim control by-law No. 1319 pursuant to s. 38(1) of the *Planning Act*, R.S.O. 1990, c. P.13. Subject to certain exceptions that are not germane to this appeal, the by-law provided that no one could use land or erect a building within land zoned as agricultural. The by-law was in force for one year. The Pedwells and Mr. Breitkreuz were not given notice of the Town's intention to pass the by-law. On February 6, 1990, Mr. Judge wrote to the Pedwells and advised them that the by-law had been passed and provided them with a copy.

[13] The respondents began an application before the Ontario Municipal Board to set aside the by-law and brought an appeal under s. 15 of the *Building Code Act*, R.S.O. 1990, c. B. 13, to review the refusal to issue the building permits. The OMB hearing was adjourned and did not proceed prior to the expiration of the interim control by-law. The s. 15 appeal was one of the matters dealt with by the trial judge at the trial that began in 1997.

[14] At this point it would be helpful to look at the legal landscape of testamentary devises for creating building lots. The trial judge found that although the report and the by-law were drafted in broad terms to look generally at non-farm development of agricultural lands, the by-law was "targeting only testamentary devise lots and in particular, at the time in question, the municipality only knew of the Pedwell lands as having been subdivided by testamentary devise". The trial judge found that when Mr. Breitkreuz applied for the building permits, "There simply was no obligation to comply with the *Planning Act* and the Town knew this." The appellants challenge this finding. The Town solicitor was aware that creating lots by testamentary devise was legal. However, in his evidence, he attempted to cast doubt on the creation of a large number of lots by this method. He testified that he believed that such schemes were a fraud on the *Planning Act*.

[15] Later in 1990 and 1991 a developer used the mechanism of testamentary devise in the nearby town of Niagara-on-the-Lake. In 1991 and 1992 judges of the Ontario Court (General Division) held that the transactions were valid. In January 1993, a majority of this court upheld those decisions.[1] Meanwhile, in December 1990, the provincial government introduced legislation ending the right to divide property by testamentary devise. This legislation received Royal Assent in June 1991 but did not apply to wills of persons who died on or before July 26, 1990. It therefore did not affect the Peacock will.

[16] Sometime after the by-law was enacted, Keith Pedwell, Tim Pedwell's father, encountered the Town solicitor at an OMB hearing and they had a discussion about the legality of testamentary devises. According to Keith Pedwell, the solicitor, Mr. Brooks, acknowledged that the Town knew of the legality of severance by testamentary devise but the Town would hold the Pedwells up "until the lots were not worth anything". Mr. Brooks denied saying this, testifying that he told Mr. Pedwell that he knew testamentary devises were possible but that the scheme that had been adopted could be controlled under the *Planning Act* because it was a device to circumvent the Act. He also told Keith Pedwell that he thought the Town would be successful in blocking his application or any similar one, and that his application was incomplete. The trial judge accepted Mr. Pedwell's version of the conversation. In doing so the trial judge relied, in part, upon the finding that Keith Pedwell had taken notes of the conversation and because that version was indicative of the kind of attitude demonstrated throughout by the Town and its officials. It was common ground on the appeal that in fact Mr. Pedwell did not take notes of this conversation. I will return to this issue later.

[17] On February 4, 1991, Town council extended the interim control by-law for a further year. The respondents were not given prior notice of the Town's intention to do so.

[18] On January 28, 1992, the Town held a public hearing in respect of a report that recommended an amendment to the Town's zoning by-law that would increase the minimum lot size from one acre to 1.5 acres. Notice of this meeting was published in the local paper. Although the respondents were engaged in litigation with the Town over this very issue they were not given notice of the meeting, and since they do not live in the Town they did not receive the local newspaper. The respondents had retained counsel to proceed with their various actions but they had not made a formal written request to the Town to receive notice of any proposed by-law amendments that would affect their property.

[19] On February 3, 1992, Town Council passed a by-law amending the zoning by-law to increase the minimum lot size from one acre to 1.5 acre as recommended in the report. The recommendation was purportedly based upon the Health Unit requirement for larger lots to accommodate septic needs. The planner who prepared this report conceded that he never talked to the Health Unit during this time about this recommendation. He testified that from previous dealings with the Health Unit he believed this increase in acreage was required.

1 *Niagara-on-the-Lake (Town) v. Gross Estate* (1993), 12 O.R. (3d) 1 (C.A.).

THE ISSUES

[20] The appellants raise many issues but they can be summarized as follows:

(1) The trial judge misapprehended the facts relating to the Health Unit approval of the septic system.
(2) The trial judge erred in allowing the *Building Code Act* appeal and directing that building permits issue in respect of the lots for which Mr. Breitkreuz submitted applications on January 3, 1990.
(3) The trial judge erred in failing to comply with s. 200 of the *Municipal Act*.
(4) The trial judge erred in finding that the interim control by-law and the zoning amendment by-law were passed in bad faith and in quashing the latter.
(5) The trial judge erred in finding that Tim Pedwell delivered the deed to Mrs. Peacock.
(6) The trial judge erred in setting the rate of pre-judgment interest at the *Courts of Justice Act* rate.
(7) The trial judge erred in awarding solicitor client costs.

ANALYSIS

Introduction

[21] While the appellants raise some issues of law, their main arguments concern findings of fact and the inferences to be drawn from those facts. An appellate court is required to give deference to both the findings of fact and the inferences drawn by the trial judge.

[22] In *Housen v. Nikolaisen* (2002), 211 D.L.R. (4th) 577, the Supreme Court of Canada discussed at some length the standard of appellate review where the appellate court is called upon to review inferences from facts. The court concluded that the standard is one of considerable deference. Iacobucci and Major JJ. describe the standard at para. 23 as follows:

> We reiterate that it is not the role of appellate courts to second-guess the weight to be assigned to the various items of evidence. *If there is no palpable and overriding error with respect to the underlying facts that the trial judge relies on to draw the inference, then it is only where the inference-drawing process itself is palpably in error that an appellate court can interfere with the factual conclusion*. The appellate court is not free to interfere with a factual conclusion that it disagrees with where such disagreement stems from a difference of opinion over the weight to be assigned to the underlying facts [emphasis added].

[23] As will become apparent, while I might not have made all of the same findings as the trial judge, nor drawn the same inferences, I am not satisfied that the trial judge was palpably in error.

(1) The Health Unit Approval Issue

[24] The question of the Health Unit approval impacts on this appeal in several ways. The appellants contend that the building applications were never complete and therefore the trial judge should not have allowed the *Building Code Act* appeal. The question of Health Unit approval would also affect the question of damages, even if the by-laws were passed in bad faith. If the development could not have been built because the Health Unit would never have approved of the septic system proposed by the respondents, the respondents' damages would be minimal.

[25] I will outline some of the chronology concerning Health Unit approval and then set out the trial judge's reasons. I will then address some of the appellants' submissions on this issue.

[26] Mr. Judge, who was called by the respondents, testified that when Mr. Breitkreuz brought in the building permit applications, he told him he would need Health Unit approval for the septic system. Until Mr. Breitkreuz obtained that approval, the applications were not complete and could not be processed. The applications were never completed prior to the interim control by-law coming into force.

[27] While Mr. Breitkreuz's evidence on this issue is not entirely satisfactory, it appears that he met with the Health Unit on two occasions before the interim control by-law was passed. On the first occasion someone, who was never identified, told him that inquiries would have to be made with the Town because the Health Unit was unaware of the development. On the second occasion, shortly after he submitted the building applications, Mr. Breitkreuz spoke to the Health Unit and was told that there was no point in his applying for septic system approval because the Town "had some issues" and when the Town was satisfied, the septic approval would be given. No objection was taken to the admissibility of this evidence and, in fact, it was introduced as a result of questions during cross-examination of Mr. Breitkreuz by counsel for the Town.

[28] The only other evidence, if it could be characterized as such, of the relationship between the Town and the Health Unit comes from a letter from Mr. Christensen, a manager with the Health Unit. He was not with the Health Unit in early 1990 and had no dealings with the Town over this issue at the time. However, in response to a letter from the Town's solicitor he wrote as follows in December 1996:

> In 1990 the concept of Testamentary Devise lots was a new one for this Department and as a result we spent a considerable amount of time consulting with our solicitors, Ministry of Environment and Energy consultants and planners in an effort to determine the best approach to access these lots. You must remember that a number of these type of proposals also came forward in other municipalities within the Niagara Peninsula about the same time. It is my recollection that in 1990 there was a pending legal proceeding which was to determine the legal status of these types of lots. Until that particular issue could be resolved, this Department's position was not to recognize plans of testamentary devise lots as being legal lots of record. Therefore, had this particular development come forward prior to a legal decision being finalized, we would not have recognized the boundaries as outlined in Reference Plan 59R-6462 and requested that a complete submission be provided with engineering documentation for us to assess this multiple lot development. This would include but not be limited to submitting a proposal to address such issues as drainage, grading, ground water protection, sewage system designs, etc. Once these particulars had been submitted and reviewed, we would have been in a better position to review lot sizes and comment through normal planning channels, i.e. Draft plan approval.

[29] In commenting on that letter, Mr. Christensen testified that this position "came from our own solicitors of the Region after reviewing it with them". Mr. Christensen did not become involved in the Pedwell issues until sometime in 1991.

[30] The trial judge accepted Mr. Breitkreuz's evidence:

> It is unclear when Mr. Judge advised Mr. Breitkreuz as to the requirement of a septic tank approval from the Health Department. In any event, what is clear is that when he approached the Health Unit, Mr. Breitkreuz was told unequivocally that he would not be getting an approval since the lots were considered illegal by the Town and he was referred back to the Town. Mr. Breitkreuz therefore did not consider taking additional steps towards securing the septic tank permits in light of the attitude taken by the Health Unit officials.

[31] On September 4, 1991, Mr. Breitkreuz first made a formal application for septic approval. He did so only in respect of one lot. When the employee of the Health Unit realized that this was part of a larger development he told Mr. Breitkreuz that he might have trouble getting a permit. On October 17, 1991, Keith Pedwell and Mr. Breitkreuz met with the Health Unit managers. The managers told Mr. Pedwell and Mr. Breitkreuz that the Health Unit was concerned about the legality of the lots; that in the context of a normal subdivision agreement application the Health Unit would deal with such things as soil structure and drainage; and, that

the Health Unit would require an approved drainage plan before septic approval. The Unit also suggested an environmental assessment.

[32] On May 14, 1992, the respondents retained an expert to provide an opinion of whether the lots met the Health Unit's requirements for septic approval as of January 3, 1990. The respondents did not, however, make any further application to the Health Unit.

[33] There was conflicting evidence from the appellants' expert, Allan. Gray and the respondents' expert, Peter McGlone, about what kind of septic system could be used. Mr. Gray was particularly concerned about the concentration of nitrates from a development of the size proposed by the respondents. He did not agree that the Class VI system designed by Mr. McGlone could meet these concerns. He testified that at least the size of the individual lots would have to be substantially increased to 2.5 acres. Mr. McGlone testified that each of the lots should be treated separately and he explained how he could design a safe Class VI system without increasing the size of the building lots.

[34] The trial judge accepted the evidence of the plaintiff's expert and he resolved that issue in this way:

> I am aware of the fact that the Chief Official in the Health Unit has a lot of discretion in approving or not a particular septic tank proposal. I would hope that this official would consider these applications as any other application and that he would not insist on treating them as part of a larger development. Based on my finding that these lots are exempt from planning control under the *Planning Act*, I have no hesitation in declaring that each lot should be considered as a single application and not as part of a whole series of lots in a plan of subdivision.
>
> In light of the established facts and the evidence given by Mr. McGlone, I am satisfied that the following findings of fact can be made:
>
> a) The establishment of septic systems of Class VI on the lots will not create a nuisance.
> b) The establishment of septic systems of Class VI will not be or likely to be contrary to the public interest.
> c) The establishment of septic systems of Class VI on the lots will not create or be likely to create a hazard to the health or safety of any person or result in the impairment of the quality of the natural environment for any use that can be made of them.

[35] The Town submits that the trial judge erred because he failed to consider the evidence of Bjorn Christensen, the official from the Health Unit, who testified that even if these lots were so-called lots of record, for the purposes of the *Environmental Protection Act*, R.S.O. 1990, c. E. 19, the entire development had to be considered. Mr. Christensen seemed to rely upon the respondents' expert's evidence, especially concerning the concentration of nitrates.

[36] It would have been preferable had the trial judge dealt squarely with this evidence. I am not convinced, however, that his failure to do so constitutes reversible error. His findings quoted above deal with the concerns raised by Mr. Christensen in his evidence. It is implicit in those findings that the trial judge, having accepted the respondents' expert's evidence, found that the Health Unit would have no legitimate basis for refusing to issue the approvals.

[37] The trial judge also relied upon the fact that Sharon Delaney,

one of Mrs. Peacock's daughters who had obtained one of the lots under the will, had no difficulty in obtaining septic tank approval in December 1989, a month before Mr. Breitkreuz made his application for building permits. The same reference plan used by Mr. Breitkreuz was attached to Ms. Delaney's application.

[38] The appellants have not shown that the trial judge made a palpable and overriding error with respect to the evidence concerning the septic system.

(2) The Building Permit Appeal

[39] The case proceeded before the trial judge on the basis that no building permit could be issued in respect of this unserviced agricultural land until the Regional Health Unit had given its approval for a septic system. As I have said, Mr. Judge and Mr. Breitkreuz testified that when Mr. Breitkreuz brought in the applications on January 3, 1990, Mr. Judge told him that the Health Unit approval would be required. It is common ground that Mr. Breitkreuz never obtained these approvals before the interim control by-law took effect. The appellants submit that as of the time when the interim control by-law was passed, the applications for building permits were not complete and accordingly, Mr. Judge could not have issued the permits. As a result, the respondents' right to have the building permits issued never crystallized before the by-law came into force. Accordingly, the appellants submit, the trial judge erred in allowing the *Building Code Act* appeal.

[40] The trial judge dealt with the question of Health Unit approval in this way.

> I take it that no building permit will be issued with respect to unserviced lands without a septic tank permit being first issued by the Niagara Regional Health Unit. It is, in effect, a condition precedent to the granting of a building permit. It was argued at trial that because the plaintiffs failed to secure a septic tank permit prior to February 5, 1990 that their action is doomed. Let us therefore examine the circumstances of this failure to comply with the condition precedent. The only evidence that we have concerning the failure to apply to the Health Unit for a permit is in Mr. Breitkreuz' own testimony. He states that some time in January of 1990, he contacted the Health Unit to find out their requirements. He was told, right off the bat, that since his lots were considered illegal by the Town, that there would be no permits issued and that he had better talk to the Town to remedy the situation. We all know what good talking to the Town did.
>
> The question to be answered by me is whether or not the failure on the part of Mr. Breitkreuz to secure a septic tank permit beforehand should be fatal to his application for judicial review of the Chief Building Official's decision. *It would be a travesty of justice if it proved to be fatal. Where, as here, the Town has taken steps to notify the Health Unit of their legal concerns with respect to the creation of the lots and where the Health Unit's response is contingent on what the Town might have to say concerning the legality of the uses, the Town should be estopped from raising the absence of septic tank permits as an obstacle in the process of this appeal. After all, even though the Health Unit is technically completely separate from the Town administration, there comes a point when as a result of the collusion of employees between*

> *themselves any such distinctions tend to disappear.*
>
> In the case at bar, there seems to be no question that all planning forces joined to attempt to thwart what they saw as a flagrant attempt to circumvent the *Planning Act*. Unfortunately for every one, at that time the Legislature in its wisdom had chosen to exempt testamentary devises from *Planning Act* controls. So there was nothing wrong with an individual working around the *Planning Act* in this fashion. There simply was no obligation to comply with the *Planning Act* and the Town knew this. Yet, two of its officials instructed the Chief Building Official to delay the processing of the applications for building permits. There is no authority for such delaying tactics [emphasis added].

[41] Thus, the trial judge concluded that there was collusion between the Health Unit and the Town and thus the respondents' failure to obtain the septic approval should not have prevented issuance of the building permits. He therefore directed that the building permits issue, except for those lots in the hazard zone and subject to the respondents obtaining Health Unit approval. I will assume in the appellants' favour that the evidence does not support the finding that there was collusion between the Health Unit and the Town and that the evidence at its highest merely shows that the Town and the Health Unit had the same concern about the legality of these lots.

[42] However, I do not consider that to be fatal to the respondents' case. As I read Mr. Judge's evidence, he would have issued the building permits, since the application was otherwise complete, had Mr. Breitkreuz obtained the necessary approvals from the Health Unit. There is evidence that other Town officials told Mr. Judge to "hold off" in giving the permits. While Mr. Judge was entitled to seek advice from whomever he thought would assist him in making his decision, he could not refuse to issue the permits, if they otherwise complied with the law. I agree with the trial judge that if the Town officials ordered Mr. Judge to refuse the permits, this would be an improper interference in his duties.

[43] I agree with the trial judge that it would have been unfair to dismiss the appeal because of this technical deficiency when the Health Unit had said that it would not process the applications until the problems with the Town had been sorted out. This placed Mr. Breitkreuz in a "Catch 22" position. In the circumstances, the trial judge made the only order that he could. He could not direct that the Health Unit give its approval. He ordered that the Chief Building Official issue a permit to the plaintiffs "subject to the securing by the said Plaintiffs of a septic tank permit".

[44] The appellants raised two further objections to the trial judge's decision on the building permits. First, they submit that Mr. Judge had the legal obligation to refuse to issue the permits because the Regional Official Plan is "other applicable law" within the meaning of s. 6 of the *Building Code* and the proposed development violated the terms of the Regional Official Plan. Section 6 provides that the chief official shall issue a permit except where the proposed building "will contravene any other applicable law". There is some support for the appellants' position. See *Campeau Corporation v. Township of Gloucester et al. and two other actions* (1979), 22 O.R. (2d) 652 (C.A.) affirming (1978), 21 O.R. (2d) 4 (H.C.J.).

[45] The appellants, however, failed to establish that the development would violate the Regional Official Plan. The appellants rely upon Objective 6.A of the Plan concerning "Policies for Agriculture". That policy directs the municipalities to preserve the predominant use of land in good general agricultural areas for agriculture of all types including livestock operations and compatible uses such as forestry and conservation of plants and wildlife. The policy then sets out the circumstances in which the municipality may consent to severances including severances for farm-related residential lots. Under this policy, the development contemplated in Mrs. Peacock's will would not have been permitted had she been required to seek consent from the Land Division Committee. However, because they were created by testamentary devise, the severances in this case did not require such consent. After Mrs. Peacock's death, the provincial government considered the problem created in this region by severances

through testamentary devise and amended the *Planning Act* accordingly. However, that legislation was not made retroactive so as to apply to Mrs. Peacock's will. Further, the size of the lots complied with the Town's Official Plan as it stood when the applications for building permits were made. I would therefore not give effect to this ground of appeal.

[46] Finally, the appellants submit that the *Environmental Protection Act* is "other applicable law" and that the evidence shows that the septic system proposed by the respondents would release nitrates into the soil in such quantities as to violate the Act. Related to this ground of appeal is the submission that the trial judge erred in permitting the respondents to recall their expert in reply to respond to the appellants' evidence on this issue.

[47] I accept that in the circumstances of this case, the *Environmental Protection Act* can be considered other applicable law within the meaning of s. 6(1) of the *Building Code Act*. See *Welwood v. Huron-Kinloss (Township) Chief Building Official* (2002), 29 M.P.L.R. (3d) 1 (Ont. S.C.J.). Although compare *Burns v. Perth South (Township) Chief Building Official* (2001), 54 O.R. (3d) 266 (Ont. S.C.J.).

[48] The trial judge had the discretion to permit the respondents to recall their expert to respond to the nitrate issue. The question of reply evidence principally arose because of unexpected evidence given by the appellants' expert, Mr. Gray, as to the Ministry policies that he relied upon for his opinion that proposed development would violate the *Environmental Protection Act.* The trial judge ruled that the respondents should be entitled to recall their expert, Mr. McGlone, on that topic. I am not persuaded that the trial judge exercised his discretion improperly or that Mr. McGlone's evidence exceeded the scope of the trial judge's ruling. On the substantive issue, as I have indicated, the trial judge preferred the evidence of Mr. McGlone to Mr. Gray and was in fact quite critical of the latter's evidence, which he found "not very impressive". The trial judge found that the system designed by Mr. McGlone would not create a hazard to the health or safety of any person or result in the impairment of the quality of the natural environment. The trial judge was entitled to accept Mr. McGlone's evidence and accordingly, this aspect of the appeal cannot succeed.

(3) Section 200 of the *Municipal Act*

[49] Before dealing with the trial judge's reasons for quashing the by-law I will address an issue raised by the appellants for the first time on appeal. Section 200 of the *Municipal Act*, R.S.O. 1990, c. M. 45, provided that a proceeding shall not be brought for anything done under a by-law that is invalid "until one month after the by-law … has been quashed or repealed". The interim control by-law has long expired by operation of s. 38(1) of the *Planning Act*. By-law No. 1455 was passed by the Town council on February 3, 1992 and increased the minimum lot size to 1.5 acres for residential lots in the agricultural zone. The respondents applied to quash that by-law on the basis that it was enacted in bad faith. The application to quash the by-law was heard with the respondents' action for damages. The appellant Town consented to this procedure and never pleaded s. 200 of the *Municipal Act* in its statement of defence. The issue was raised for the first time on appeal.

[50] In my view, the holding in *Shaver Hospital for Chest Diseases v. Slesar et al.* (1979), 15 C.P.C. 97 (Ont. C.A.) applies. In *Slesar*, the defendant had pleaded that the contract upon which the plaintiff sued was illegal because it violated two provincial statutes. The issue, however, was virtually abandoned at trial and evidence that might have been relevant to that issue was not introduced for that purpose, although there was some evidence on the issue in the record. On appeal, the defendant appellant attempted to resurrect the issue. Lacourciere J.A. at p. 101 referred with approval to a statement by Lord Halsbury from *Browne v. Dunn* (1893), 6 R. 67 (H.L.) at 76:

> … that you cannot take advantage afterwards of what was open to you on the pleadings, and what was open to you upon the evidence, if you have deliberately elected to fight another question, and have fought it, and have been beaten upon it.

[51] In my view, that is the case here. The Town consented to this procedure. It must have perceived some tactical advantages to having all of

the matters dealt with at the same time by the same trial judge. By the time the trial judge heard this matter it was almost eight years since the building permit applications were made and over five years since the by-law was passed. It would be manifestly unfair to require the respondents to begin their damage action all over again because of an issue that could and should have been raised at the first instance. I would not give effect to this ground of appeal.

[52] Accordingly, the trial judge did not err in holding that the building permits should have been issued prior to the town passing the interim control by-law on February 5, 1990.

(4) Bad Faith

[53] The appellants' principal submission on this appeal is that the trial judge erred in finding that the Zoning Amendment By-law 1455 and the interim control by-law were passed in bad faith and in quashing the former. In holding that the by-laws were passed in bad faith the trial judge made a number of findings of fact that can be summarized as follows:

> 1. Mr. Judge took direction from other town officials to delay the granting of the building permits, and, but for the intervention of these persons the building permits would have been granted in the normal course before the interim control by-law was passed on February 5, 1990, subject to health unit approval.
>
> 2. At the direction of town officials, Mr. Judge wrote a misleading letter to Tim Pedwell on January 24, 1990 giving the impression that the delay in issuing the building permits was for evaluation of the impact on planning policies and legislation by the town solicitors and planners. In fact, by that time the decision had been made to use the interim control by-law to block the development.
>
> 3. The interim control by-law itself was targeting only the Pedwell development even though on its face it appeared to have broad application.
>
> 4. Although the town officials were aware that the interim control by-law would directly affect the Pedwells and Mr. Breitkreuz, they were given no notice that the Town intended to pass that by-law.
>
> 5. Mr. Brooks told Mr. Keith Pedwell that he knew that severance by testamentary devise was legal but the Town would give them a "real hard time" and hold up the development until they were not worth anything.
>
> 6. The Town did not give notice to Mr. Breitkreuz or the Pedwells of the intent to renew the interim control by-law or the intent to pass Zoning Amendment By-law 1455 even though they knew of their direct interest in those by-laws.
>
> 7. The Town did not give notice to Mr. Breitkreuz or the Pedwells of the public hearing on January 28, 1992 to consider passage of the zoning amendment by-law.
>
> 8. Publication of notice in the Pelham Herald was a sure way to ensure that notice would not come to the attention of Mr. Breitkreuz or the Pedwells.
>
> 9. The Town deliberately avoided the prospect of a public hearing where the Pedwells would have had the

> opportunity to present their side of the issue.
>
> 10. The Zoning Amendment By-law that was eventually passed itself violates the Regional Official Plan, which states that the maximum lot size is one acre. The real purpose behind the by-law was to frustrate the Pedwell plan.

[54] The appellants attack many of these findings of fact and the legal effect of those findings. I will briefly deal with those submissions.

a. Mr. Judge took direction from the Town officials

[55] The appellants submit that Mr. Judge had the right to consult with Town officials before issuing the building permits. The trial judge stated the following:

> Surely it is imperative that other Town officials not interfere with the Chief Official in the performance of the duties imposed upon him pursuant to section 6 of the *Act*. Once he has been appointed he should be left alone to perform the functions entrusted to him. If the Chief Building Official is to deal fairly with each application, it is imperative that any such decision making be done impartially. The true measure of impartiality is the ability of the judge or other official to take some distance from his own preconceived notions and prejudices to arrive at a fair decision, looking only at the issues in question. *Mr. Judge therefore should have reached his decision without consulting all other planners and officials* and the decision should have been made on the basis of the requirements outlined in section 6 of the *Act* and not on the basis of extraneous concepts and policies [emphasis added].

[56] I agree with the appellants that the trial judge erred if he held that Mr. Judge had no right to consult with other Town officials. However, in my view his finding on this aspect of the case did not turn on that holding. He found that Mr. Judge made his decision on the basis of "extraneous concepts and policies". In any event, the trial judge went on to hold that these were not consultations but instructions from the Town officials that "smack of interference rather than advice". This finding is supported by the evidence. A particularly troubling aspect of the evidence is that Mr. Judge conceded that at the direction of the lawyer retained by the Town he swore a misleading affidavit in these proceedings in April 1990. In the affidavit, Mr. Judge purports to explain the legitimate planning reasons for refusing to issue the permits. Mr. Judge testified, however, that the affidavit was drafted by the lawyer and did not reflect his belief at the time. There could hardly be stronger evidence that Mr. Judge was not simply taking advice but was acting solely on the direction of the Town officials.

[57] The appellants also submit that Mr. Breitkreuz did not make a proper application for building permits since he had no intention of building the type of home specified in the application. Mr. Breitkreuz submitted identical plans for relatively small houses. His admitted intent was to actually build larger custom homes. The trial judge did not deal with this issue. There was, however, evidence from Mr. Judge that it is possible to submit revised plans, updated septic approval and additional fees, in which case the permit can be transferred. In my view, Mr. Breitkreuz adequately explained why he submitted the plans that he did. He and the Pedwells suspected that something was not right, and so he submitted a plan that he knew should receive approval because he had previously used it. As it turned out, their suspicions were correct.

b. The delaying tactics

[58] The appellants submit that the purpose of the interim control by-law is

to protect the public interest and that it was open to the Town to delay the building permit applications until the interim control by-law was in place. There is no question that the purpose and effect of an interim control by-law is to suspend the rights of owners and developers to undertake otherwise permitted uses. Further, as Laskin J.A. said in *Equity Waste Management of Canada v. Halton Hills (Town)* (1997), 35 O.R. (3d) 321 (C.A.) at 338:

> An important purpose of interim control by-laws is to permit a municipality to change its mind, to reconsider its land use policies. Whether an area is suitably zoned, whether development should be suspended in the public interest, and whether proposed projects are compatible with a municipality's long range planning objectives are matters to be decided by municipal councils, not by courts. The role of the court is limited to ensuring that the municipality did not exceed its powers or exercise those powers in bad faith.

[59] However, I do not read the trial judge's reasons as being at variance with any of these principles. He had to consider whether these broad powers were exercised in bad faith. He thought that one indication of bad faith was that Mr. Judge wrote a misleading letter to the respondents. Mr. Judge confirmed that the letter was misleading. It was open to the trial judge to consider that this was simply one indication to be considered with the other evidence of bad faith. I do not think the trial judge misused this evidence or placed unreasonable emphasis upon it.

c. The by-law was targeted at the Pedwell development

[60] There was conflicting evidence at the trial about whether the by-law was targeted only at the Pedwell development or whether there were a number of other developments in the Town that were using the testamentary devise as a severance vehicle. In my view, the better view of the evidence is that the Pedwell development was the only one about which there was any real concern. There were other developers using this device in the area, but they were not developing lands in the Town of Pelham.

d. Lack of notice

[61] The trial judge was very critical of the Town for failing to give notice to the respondents. The appellants point out that under the legislation no notice needs to be given before an interim control by-law is passed, and that by giving notice in the Pelham Herald of the public meeting and the intent to pass the amended zoning by-law, the Town complied with the applicable legislation. However, the trial judge did not misapprehend the legislation or the evidence in this respect. He acknowledged, "Council did not technically offend any requirements contained in the legislation with respect to the giving of notice". He also expressly noted that under s. 38(3) of the *Planning Act* there is no need for notice to affected persons before the interim control by-law as passed. His point was a different one. The only purpose of the interim control by-law was to frustrate the Pedwell development. He considered that the Town's failure to give notice was a further example of bad faith, even if the technical legal requirements were complied with. By their conduct the Town "deliberately avoided the prospect of a public hearing where the Pedwells might have called them to task on some of the more dubious aspects of the proposed remedies". While I might not have drawn the same conclusion from the evidence, I cannot say that the trial judge's view was unreasonable. As I have indicated, his findings of fact and the inferences he drew from those facts are entitled to deference.

e. The Brooks/Pedwell conversation

[62] I have already referred to this incident in outlining the facts. The parties agree that the trial judge misapprehended the evidence when he held that Keith Pedwell had taken notes of the conversation with Mr. Brooks. However, the trial judge gave two reasons for accepting the evidence of Mr.Pedwell over that of Mr. Brooks, and stated his principal reason in these terms:

> I have no difficulty preferring the evidence of Mr. Pedwell over that of Mr. Brooks for the simple reason that

> the kind of attitude demonstrated throughout this application by the Town and its officials was quite illustrative of the mind set shown by Mr. Brooks at the time.

[63] The trial judge also noted that the action for damages was commenced shortly after this conversation. In the circumstances, the trial judge's error about the note-taking was not material and does not undermine his finding of fact about the contents of the conversation.

f. The amendment to the zoning by-law to increase the lot size

[64] The trial judge found that the real purpose behind the amendment to the zoning by-law was to frustrate the Pedwell development plan. This was a critical finding by the trial judge. It is implicit in that finding that the increase in the lot size had no real planning purpose and was simply designed to prevent a development for which there was otherwise no legal impediment. Once the Court of Appeal dismissed the appeal in the Niagara-on-the-Lake case and since the provincial government failed to make the new legislation retroactive to cover the respondents' case, there was no legal impediment to the Pedwell development. The trial judge noted that the amendment to the zoning by-law to increase the maximum lot size was inconsistent with the Regional Official Plan. Not surprisingly, the trial judge was suspicious of the Town's real motives for the amendment. He wrote as follows:

> It does not require much by way of scepticism to assume that the real purpose behind this by-law was to frustrate the Pedwell plan. This, in my opinion, also stands as a further indication of the bad faith of the Town in passing this by-law.

[65] It is not entirely accurate to say that the amendment violated the Regional Official Plan. Policy 6.A.10(f) provides as follows:

> (f) The size of any new lot shall not exceed an area of 0.4 hectares (1 acre) *except to the extent of any additional area deemed necessary to support a well and private sewage disposal system as determined by the Medical Officer of Health* or such other person appointed for that purpose by the Ministry of the Environment [emphasis added].

[66] Mr. Barker did the planning work that led to the amendment to the zoning by-law. He prepared the report that recommended the increase in the maximum lot size. He testified that he did so because of recommendations from the regional health services department. However, Mr. Barker conceded that he did not talk to anyone in the Health Unit about this change and no one in the department advised him that the one-acre lot size was no longer acceptable. He based his recommendation on reports he had read and his "public and private sector work that was done throughout the Region".

[67] In my view, there is a reasonable basis for the trial judge's conclusion concerning the purpose of the by-law amendment and the trial judge properly considered this to be an important indication of bad faith.

[68] The appellants also submit that the trial judge misapprehended the effect of the amendment since it did not defeat the Pedwells' development plan. The appellants point out that the Pedwells would be able to proceed with the development by combining two of the proposed lots. In my view, this is not a basis for interfering with the trial judge's conclusion. The effect of the zoning by-law was to substantially reduce the number of lots available for development and therefore substantially interfere with the Pedwells' proposals. The trial judge was entitled to rely on this factor as an indication of bad faith on the part of the Town.

[69] To conclude, I am not persuaded that, given the deference to which the trial judge's findings of fact are entitled, that there is any basis for interfering with these findings. The appellants have not shown that the trial judge made any palpable and overriding errors of fact or drew unreasonable inferences from those facts.

g. The test for bad faith

[70] The appellants submit that the trial judge erred in his approach to finding bad faith on the part of the Town. They submit that the trial judge erred in failing to adopt the modern approach to review of the validity of by-laws. That approach is set out in *Shell Canada Products Ltd. v. Vancouver (City)*, [1994] 1 S.C.R. 231 at 244 and 247:

> Recent commentary suggests an emerging consensus that courts must respect the responsibility of elected municipal bodies to serve the people who elected them and exercise caution to avoid substituting their views of what is best for the citizens for those of municipal councils.
>
> …
>
> These considerations lead me to conclude that courts should adopt a generous deferential standard of review toward the decisions of municipalities. To say this is not new. Lord Green said it in *Wednesbury*, and his words have been oft-quoted in Canada. Nevertheless, many courts have continued to take a narrow, interventionist approach to municipal decisions.

[71] Similarly, in *Equity Waste Management of Canada*, this court overturned a decision by the motion judge finding that an interim control by-law had been passed in bad faith. Laskin J.A. at page 339 characterized the motion judge's approach as "too interventionist". The appellants rely upon the decision in *Equity Waste Management* and similarly argue that the trial judge's approach was too interventionist.

[72] Some parts of the trial judge's reasons suggest a more interventionist approach than is permitted under authorities. For example, he said the following:

> In these days of increasing accountability of governments to the citizens who have voted them into office, I have no doubt that it would be considered only normal to insist that a municipal corporation act in the public interest but as well that in doing so it demonstrate good faith to the parties affected by its decision.

[73] However, when the trial judge's reasons are considered in their entirety I am not persuaded that he erred. He was alive to the role the court has in reviewing the validity of by-laws and that it could only intervene if there was a finding of bad faith. The trial judge, moreover, accepted that the Town officials believed that they were acting in the public interest. As he said, "their own subjective assessment of the righteous character of their conduct does not resolve the problems of whether they acted in good faith in so doing". The findings by the trial judge did not rest on second-guessing planning decisions by the Town. He was concerned about the process adopted and the evidence that convinced him that the Town's purpose was to target a development that its officials knew to be legal. There was evidence to support his findings in that respect. As in this court's decision in *Re Hall and City of Toronto et al.* (1979), 23 O.R. (2d) 86 at 92 it was open to the trial judge to find that there was "a singular absence of frankness and impartiality, which are the usual *indicia* of good faith" and a "deplorable lack of frankness and a calculated disregard of the appellant's right to make the best use of his property in accordance with the existing by-laws". Again, while I would not necessarily have reached the same conclusion, I cannot say that the trial judge's conclusion is unreasonable. He had the benefit of a lengthy trial in which the entire

course of conduct was canvassed with many witnesses for the plaintiffs and the defendants. He made findings of fact that I have found are supported by the evidence and he drew inferences that are not unreasonable. In my view, this court is not entitled to interfere with his conclusion.

(5) Delivery of the Deed

[74] The appellants submit that the trial judge's finding that Tim Pedwell delivered the deed to Mrs. Peacock was perverse. The appellants submit that if there was no delivery of the deed, Mrs. Peacock never regained title to the lands that she purported to deal with in her will. Tim Pedwell testified that he delivered the deed to Mrs. Peacock. The trial judge believed him and found no evidence to contradict him. He was not persuaded that the fact Mrs. Peacock returned the deed to Tim Pedwell for registration undermined his testimony. There is no basis for upsetting this finding of fact.

(6) Pre-judgment Interest and Claim for Loss of Use of the Funds

[75] The trial judge fixed the rate of pre-judgment interest at the rate provided for in the *Courts of Justice Act,* R.S.O. 1990, c. C. 43, which in the second quarter of 1990 was 13.5%. The appellants submit that it would have been more appropriate to fix a blended rate since over the several years leading up to the trial there was a fluctuation in the rates. The trial judge delivered reasons addressing this question and was not persuaded he should depart from what he considered was the respondents' *prima facie* right to the interest rate in accordance with s. 128 of the Act. He did not consider that fluctuation in the rates alone was a sufficient reason to depart from the rate provided for in the Act. I see no error in principle in his reasons and would not interfere.

[76] In a related submission, the appellants submit that the trial judge erred in permitting an amendment to the statement of claim to permit the Pedwells to claim an additional amount by reason of the losses suffered as a result of their inability to invest the gross amount from the sale of the lands. The trial judge was satisfied that the appellants were not prejudiced by this amendment. They had been placed on notice of this potential claim in a letter from Tim Pedwell on January 29, 1990. This claim was not included in the statement of claim because, as found by the trial judge, the respondents had erred in their interpretation of s. 128. Further, the trial judge was not persuaded that the appellants would have conducted the case any differently.

[77] The appellants submit that even if the amendment was properly made the respondents failed to adduce sufficient reliable evidence as to how they would have invested the money to establish the amount of their loss. The trial judge permitted the respondents to reopen their case and lead evidence about how they would have invested the money. The respondents attempted to show that they would have invested at least some of the money in high return investments. While the trial judge seemed to find the respondents truthful, he found the evidence speculative and therefore used the *Courts of Justice Act* rate of 13.5%. In my view, this was an error in principle. The burden was on the respondents to establish this part of their case. They did not introduce satisfactory evidence about how they would have used the money or even how the purported investments would have fared over the period. In those circumstances, I can see no justification for using the 13.5% rate, which was almost the peak rate over the period. A more reasonable measure of the loss would be the blended rate of 6.5%. I would allow the appeal to that extent.

(7) Costs

[78] The trial judge awarded costs against the appellants on a solicitor-client basis. The trial judge made this order because the Town maintained its position that the building lots were illegal; used the interim control by-law to freeze development; and then passed the zoning amendment by-law that the trial judge found to have been passed in bad faith. The trial judge has a wide discretion in assessing the scale of costs. However, in my view, he erred in fixing costs on a solicitor-client scale on this basis. The Trial Judge found that the respondents had made out their case but he also acknowledged that the Town officials acted in what they thought was the

public interest. This was therefore not a case for solicitor-client costs.

[79] However, the trial judge made a further finding that the respondents had made an offer to settle that was not quite as favourable to them as the judgment. Thus, he held that in the alternative the respondents were entitled to solicitor-client costs from the date of the offer. Accordingly, the respondents are entitled to their costs of the action on a party and party basis to the date of the offer and thereafter on a solicitor-client basis.

DISPOSITION

[80] Accordingly, I would dismiss the appeal except as indicated with respect to the loss on the use of funds and solicitor-client costs. The respondents having been almost completely successful are entitled to their costs of the appeal on a partial indemnity basis. The parties provided the court with bills of costs and brief submissions. At trial, the respondents were represented by one set of counsel. On appeal, the Pedwells retained new counsel. The respondents have submitted bills of cost that in total exceed $100,000. The interests of all of the respondents were identical and yet there seems to have been little collaboration between the respondents' counsel in their preparation. In my view, this resulted in duplication of work and the incurring of unnecessary costs. Accordingly, I would award one set of counsel fees in the amount of $45,000 inclusive of disbursements and GST for the respondents to divide between themselves as they see fit.

Signed: "M. Rosenberg J.A."

"I agree K.M. Weiler J.A."

"I agree Robert P. Armstrong J.A."

Released MAY 9, 2003

Vann Niagara v Oakville

DATE: 20020614
DOCKET: C36773

COURT OF APPEAL FOR ONTARIO BORINS, FELDMAN AND MACPHERSON JJ.A.

B E T W E E N :	)	
	)	
VANN NIAGARA LTD.	)	**John A. Crossingham for the appellant**
	)	
Appellant	)	
	)	
- and	)	
	)	
THE CORPORATION OF THE TOWN OF OAKVILLE	)	**George J. Rust-D'Eye and Barnet H. Kussner for the respondent**
	)	
Respondent	)	
	)	
	)	**Heard: March 4, 2002**

On appeal from the judgment of Justice Linda M. Walters dated April 3, 2001.
BORINS J.A.:

Overview

[1] This appeal concerns the constitutional validity of a municipal by-law restricting or prohibiting the erection of certain kinds of signs in the Town of Oakville. The issue is whether the total prohibition on billboard signs and third party signs infringes the right to freedom of expression protected under s. 2(b) of the *Canadian Charter of Rights and Freedoms* and, if so, whether that infringement is justified under s. 1.

[2] In the court below, Walters J. dismissed the application of Vann Niagara Ltd. (Vann) for a declaration that By-law 1994-142 (the "Sign By-law") of the City of Oakville is unconstitutional for the following reasons: (1) insufficient evidence to determine whether the expression in question (billboard advertising) is protected by s. 2(b); (2) insufficient evidence of the impact of the by-law on the applicant's ability to express itself; and (3) even if the by-law does offend s. 2(b), it is saved under s. 1. For the reasons set out below, I would allow the appeal.

Facts

[3] Vann is an advertising company that applied to the Town of Oakville ("Oakville") in 2000 for permission to erect 86 billboard signs in 52 specific locations. In 1994, Oakville passed a sign by-law regulating the posting of signs on private lands. Section 2(5)(a) of the sign by-law states: "No person shall locate or permit the location of a billboard sign". Section 2(16) of the sign by-law prohibits all third party signs on private land within Oakville. A third party sign is defined as "any sign which directs attention to products, goods, services, activities or facilities which are not the principle products, goods, services, activities or facilities provided on the premises upon which the sign is located". The sign by-law, therefore, creates an absolute prohibition on billboards within Oakville and substantially prohibits third party signs on private lands. Persons who erect signs without a permit are subject to a fine.

[4] In 2000, six years after the sign by-law had been enacted, Oakville held a referendum on whether to modify the by-law and permit the erection of some billboards. The referendum question was: "Should the Town of Oakville amend its Sign By-law 1994-142 to allow for the erection and display of billboard/third party signs in some locations in the Town?" However, less than 50% of the eligible voters turned out to vote, so the

results of the referendum were not legally binding on the Town Council.

[5] Oakville, like all cities in Ontario, has been divided into different zones for the purposes of city planning. The areas in which Vann seeks to erect billboards are designated as commercial and industrial zones, and include the area along the Queensway near manufacturing plants and along railway and hydro corridors. Vann does not seek a permit to erect billboards in any zones that are designated as residential or heritage zones, and concedes that Oakville can regulate the use of billboards in those areas.

[6] Vann's advertising business consists of leasing large signs to companies and individuals for the purpose of advertising the products or services which they offer to the public. Vann locates its signs on property which it leases from its owners, such as on railway or hydro rights of way. In the advertising industry these signs are known as billboards. Billboards come in standard sizes, the most common of which are 10 feet by 20 feet, or 200 square feet. As such, Vann's billboards do not advertise the products or services of the owners of the property upon which they are located.

Submissions of the parties

[7] Vann submits that the sign by-law contravenes its right to freedom of expression protected by s. 2(b) of the *Charter*. It argues that billboard advertising is a form of "expression" that is protected by s. 2(b). Vann acknowledges that there is an important public purpose behind the by-law, which is to prevent the proliferation of unregulated signs in Oakville. However, Vann argues that the sign by-law fails to satisfy the requirements of s. 1 because, as a total prohibition on billboards, the sign by-law does not minimally impair Vann's rights.

[8] For its part, Oakville argues that billboard advertising does not fall within the scope of protection afforded by s. 2(b) of the *Charter*. Moreover, in contrast to Vann's interpretation, Oakville characterizes the objectives of the sign by-law as follows: to preserve and enhance the town's unique character; to prevent aesthetic blight; to minimize distractions to motorists; to protect the public from unsafe signs; and to encourage the compatibility of signs with their surroundings. Oakville asserts that the sign by-law is rationally connected to its purposes.

Relevant legislative and Constitutional provisions

[9] The municipality is delegated the authority to pass by-laws regulating signs pursuant to s. 210(146) of the *Municipal Act*, R.S.O. 1990 c. M. 45. Vann does not challenge the enabling legislation under which the by-law was passed. The relevant provisions of by-law 1994-142 read as follows:

1. Definitions

…

(9) Billboard sign – Any ground sign other than a temporary Real Estate sign…measuring more than 7.5 square metres (80 square feet) in sign area;

…

(20) Ground sign – Any sign which is free standing in a fixed position and is wholly supported by a sign structure permanently attached to or affixed into the ground and which is not supported by any building or other structure;

…

(42) Third party sign – Any sign which directs attention to products, goods, services, activities or facilities which

are not the principal products, goods, services, activities or facilities provided on the premises upon which the sign is located;

2(5)(a) No person shall locate or permit the location of a billboard sign.

2(16) No person shall locate or permit the location of a third party sign.

[10] The relevant provisions of the *Charter* are as follows:

Canadian Charter of Rights and Freedoms

1. **1.** The *Canadian Charter of Rights and Freedoms* guarantees the rights and freedoms set out in it subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society.
2. **2.** Everyone has the following fundamental freedoms:

…

(b) freedom of thought, belief, opinion and expression, including freedom of the press and other media of communication….

Analysis

Is there an infringement of s. 2(b) of the *Charter*?

[11] According to Chief Justice Dickson's analysis in *Irwin Toy v. Quebec (Attorney General)*, [1989] 1 S.C.R. 927, there are two steps to perform when analysing a law in light of s. 2(b) of the *Charter*. The first step consists of two parts. First, it must be determined whether or not billboards constitute expression. As the second part of that inquiry, it must be determined whether that expression is protected under s. 2(b). As for the second step, it must be determined whether the purpose *or the effect* of the by-law is to limit the freedom of expression. Finally, if the by-law infringes s. 2(b), it is to determined whether it is a reasonable limit according to s. 1 of the *Charter*.

.[12] The parties have conceded that billboard advertising is a form of expression. However, Oakville contends that billboard advertising is not a form of expression protected by s. 2(b) of the *Charter*, and they argue that the appellant has not established an infringement of s. 2(b) on the facts. The respondent relies on *MacKay v. Manitoba*, [1989] 2 S.C.R. 357 in support of its contention that there is an insufficient factual basis to support the appellant's application. In *Mackay*, the Supreme Court of Canada held at .p. 361 that

Charter decisions should not and must not be made in a factual vacuum. To attempt to do so wo uld trivialize the *Charter* and inevitably result in ill-considered opinions.

However, I note that in *MacKay*, as Cory J. stated at p. 363, "there [had] been *not one particle of evidence put before the Court*" (emphasis added). That situation is distinct from this case, in which the claim was based on affidavit evidence and some exhibits, including photographs.

[13] The application judge held that she lacked a factual basis to determine whether the advertising is protected under s. 2(b). However, the application judge acknowledged that she *knew* that "the content of the proposed billboard would contain commercial messages." I take this statement to mean that the application judge accepted as a fact that the content of the billboards' messages would be commercial in nature. I note that in addition to the commercial expression of prospective customers, Vann asked the court to take judicial notice of the fact that, as owner of the signs for rent, it can advertise its own business on the billboards. I am satisfied that the record established that the appellant's freedom of expression and that of its customers was affected by the sign by-law.

[14] The application judge's factual finding is sufficient to determine whether the form and content of the proposed expression gar ners the protection of s. 2(b). Clearly, the intended expression is commercial expression, or advertising. As I will set out, it is well-settled as a matter of law that the right to free expression protects commercial expression.

[15] In *Ford v. Quebec*, [1988] 2 S.C.R. 712, the Supreme Court of Canada was asked to consider whether commercial expression is protected by s. 2(b). While it was not necessary to decide that issue, the Court rejected the submission that commercial expression is not protected, stating at pp. 766-67:

[g]iven the earlier pronouncements of this Court to the effect that the rights and freedoms guaranteed in the Canadian *Charter* should be given a large and liberal interpretation, there is no sound basis on which commercial

expression can be excluded from the protection of s. 2(b) of the *Charter*.

[16] In *Irwin Toy*, the Supreme Court determined conclusively that commercial expression is protected by s. 2(b), and it re-iterated that conclusion in *RJR-Macdonald Inc. v. Canada (Attorney General)*, [1995] 3 S.C.R. 199 and most recently in *R. v. Guignard* (2002), 209 D.L.R. (4th) 549.

[17] *Guignard* is very similar to the present case. In *Guignard*, the proprietor of a building installed a billboard on his own property indicating his displeasure with his insurance company. He was prosecuted under the governing municipal by-law which prohibited such signs. LeBel J., for the Supreme Court, affirmed that commercial expression, and in particular, commercial expression on billboards, enjoys the protection of s. 2(b) of the *Charter*. LeBel J. eloquently stated the values underpinning the protection of commercial expression. He wrote at para. 21

[i]n applying s. 2(b) of the *Charter*, this Court has recognized the substantial value of freedom of commercial expression. The need for such expression derives from the very nature of our economic system, which is based on the existence of a free market. The orderly operation of that market depends on businesses and consumers having access to abundant and diverse information.

Commercial expression is, thus, a key component of our economic system and therefore merits *Charter* protection.

[18] LeBel J. also observed that the right to freedom of expression protects even expression that is challenging and disturbing, and acknowledge d at para. 23 that "the ubiquitous presence of advertising is a defining characteristic of western societies" that we accept "sometimes with mixed feelings". He went on to say at para. 25:

[s]igns, which have been used for centuries to communicate political, artistic or economic information, sometimes convey forceful messages. Signs, in various forms, are thus a public, accessible and effective form of expressive activity for anyone who cannot undertake media campaigns.

Vann argues that its clientele are not likely to advertise using media such as television and radio because of the cost and targeted and limited audience exposure. Consequently, they fall squarely within the group identified by LeBel J.

[19] In *Irwin Toy*, Dickson C.J. observed at p. 968, "'[e]xpression' has both a content and a form, and the two can be inextricably connected". Oakville's sign by-law purports to limit both the content and the form of expression. The prohibition against third party signs constitutes a limit on the content of expression, while the restriction on the size of signs limits the form of expression. The precise content of the proposed signs has not been established. However, whether that content be commercial expression in the form of advertising or consumers expressing their dissatisfaction with a business as in *Guignard*, the form and content are protected under s. 2(b).

[20] As I have outlined above, Vann does not suggest that the purpose of the respondent in passing the sign by-law is to limit its freedom of expression. Nevertheless, the effect of the sign by-law is to prevent Vann from engaging in a particular form of expression and from expressing certain messages. Thus s. 2(b) of the *Charter* is engaged.

[21] Finally, I note that there are three cases from this court which have considered the constitutional validity of by-laws similar to Oakville's sign by-law in different communities in Ontario. In all three cases, the responding towns and cities conceded that their by-laws infringed s. 2(b) of the *Charter*, and this court viewed those concessions with approval. See: *Nichol (Township) v. McCarthy Signs Co. Ltd* (1997), 33 O.R. (3d) 771; *Stoney Creek (City) v. Ad Vantage Signs Ltd.* (1997), 34 O.R. (3d) 65; *Canadian Mobile Sign Assn v. Burlington (City)* (1997), 34 O.R. (3d) 134.

Justification

[22] The onus now shifts to Oakville to demonstrate that its sign by-law is a reasonable limit that can be demonstrably justified. The test set out by the Supreme Court of Canada in *R. v. Oakes*, [1986] 1 S.C.R. 103 requires Oakville to show, first, that its objective in passing the sign by-law is pressing and substantial; second, that the by-law is rationally connected to that objective; third, that the by-law minimally impairs the right to freedom of expression; and finally, that there is proportionality between the effects and the objectives of the by-law.

[23] In *RJR-Macdonald*, at para. 129, McLachlin J. held that where freedom of expression is infringed, there must be a "reasoned demonstration of the good which the law may achieve in relation to the seriousness of the infringement." In order to meet the burden of the test set out in *Oakes*, Oakville may draw on evidence that is "supplemented by common sense and inferential reasoning": *Guignard*, at para. 28.

[24] *Oakes* obliges me to begin the s. 1 analysis by determining whether the objective of the by-law is pressing and substantial. Oakville asserts that the purpose of the by-law is to protect the public from unsafe signs, to reduce distractions that may be an impediment to road safety, to prevent the blight of unsightly signs, and to preserve the unique character of Oakville. Vann does not seriously contest this characterization of the purpose, and it concedes that this purpose is pressing and substantial. Assuming that Oakville's assertions accurately reflect the purpose of the sign by-law, I am satisfied that the objective of the sign by-law satisfies the first step of the *Oakes* test.

[25] The second step of the *Oakes* test requires an assessment of the proportionality of the sign by-law. In my view, Oakville has failed to demonstrate that the sign by-law is rationally connected to achieving its stated goals. Moreover, the sign by-law, as a total prohibition on a form of expression, is not minimally impairing. Thus, the sign by-law fails the proportionality analysis of the *Oakes* test.

[26] First, Oakville has failed to demonstrate that the blanket prohibition on billboard signs is rationally connected to preserving the unique small town feel of the city. The zones in which Vann seeks permission to erect billboards cannot be said to be unique. The sign by-law prohibits billboards throughout the whole city, including unremarkable industrial zones. In a telling demonstration, during cross-examination, the manager of Oakville's Current Planning section (who has been employed as a planner in Oakville since 1978) was shown three unmarked photographs of industrial zones of southern Ontario communities and asked to identify which of the photographs depicted Oakville. The manager of planning was unable to identify Oakville, exclaiming "what a test!" A uniform ban on billboard signs that includes a prohibition on signs in unremarkable areas is not rationally connected to preserving the "unique aesthetic" and "small town feel" of Oakville.

[27] In addition, the ban on third party signs is not rationally connected to preserving the small town character of Oakville. This case is easily distinguished from *Nichol Township*, a case in which this court upheld a prohibition on third party signs as a reasonable limit on freedom of expression under s. 1. Nichol Township is a rural, agricultural community that had received requests for permission to erect very large signs in scenic areas. The signs related to businesses in other towns. In that context, the prohibition on third party signs was connected to maintaining the character of the community. Oakville, however, is a city with a population of 142,000 and with a sizable industrial economy. The prohibition on third party signs in industrial areas cannot be said to be rationally connected to preserving a small town feel in this context.

[28] Oakville has provided no evidence to indicate that its prohibition on billboards promotes road safety. Rather, in the place of evidence in the form of data or evidence from studies, Oakville relies on the opinions of its city planners to that effect. Nonetheless, I am willing to accept that fewer visual distractions do promote road safety such that the prohibition on billboards is rationally connected to that goal. However, the location of billboards a sufficient distance from the travelled portion of a highway will not impair

motorists from observing traffic on the highway.

[29] Second, I am not satisfied that the sign by-law minimally impairs the right to freedom of expression. The standard of justification for a by-law such as this, which constitutes a complete ban on a form of expression, is high. In *RJR-Macdonald*, at para. 163, McLachlin J. held: [i]t will be more difficult to justify a complete ban on a form of expression than a partial ban….A full prohibition will only be constitutionally acceptable under the minimal impairment stage of the analysis where the government can show that only a full prohibition will enable it to achieve its objective. Where, as here, no evidence is adduced to show that a partial ban would be less effective than a total ban, the justification required by s. 1 to save the violation of free speech is not established.

In approaching this part of the s. 1 analysis, I find it helpful to make reference to the other two decisions of this court regarding sign by-laws.

[30] In *Stoney Creek*, the city had enacted a by-law generally prohibiting the use of mobile signs. Some limited exceptions were permitted. The appellant was convicted of erecting a mobile sign without having obtained a permit to do so, and would not have qualified for a permit even if it had applied for one. In that case, Charron J.A. refused to accept the city's contention that because the by-law that permitted many other types of signs, including billboards, it struck a fair balance between individual's rights and the community's interest in pursuing its legitimate goals (which were virtually identical to the goals of the by-law in this case). Charron J.A. held that regulation of the size, number, and location of the mobile signs would achieve the legislative purpose equally as effectively as the total prohibition. Since the city failed to show that the by-law minimally impaired the right to freedom of expression, Charron J.A. declared the by-law invalid.

[31] The definition of a billboard in the sign by-law defines a billboard as a sign measuring more than 80 square feet in sign area. This definition indicates that the by-law's drafters acknowledge that a billboard is a sign measuring more than 80 square feet. Thus, the restriction of the size of signs to 80 square feet is not merely a restriction on the size of a billboard. Rather, the by-law prohibits a type of sign. According to *Stoney Creek* at pp. 72-73, such a prohibition cannot be justified under s. 1 as minimally impairing the right of freedom of expression. As Vann acknowledged, Oakville can minimally impair its rights by regulating the number and locations of billboard signs.

[32] In *Burlington*, released simultaneously with *Stoney Creek*, the city had passed a by-law permitting the erection of mobile signs, but regulating their number and illumination, and imposing time limits on their use. Prior to enacting that by-law, the city engaged in several years of study and consultation with the public. The by-law was reviewed by a committee that included members of the mobile sign industry prior to being enacted. The court rejected the appellant sign association's submissions that the by-law was overly broad and therefore not justified under s. 1. Rather, the court held that the by-law was carefully tailored to meet its objectives and that its impact on freedom of expression was proportionate to the demonstrated benefits of reducing the traffic hazards and visual clutter previously caused by such signs.

[33] As I have indicated, Oakville's sign by-law imposes a complete prohibition on billboard signs and on third party signs. The respondent argues that its sign by-law reflects the will of the community, as evidenced by the results of the non-binding referendum, and should therefore be upheld just as the restriction in *Burlington* was upheld. In my view, the results of the non-binding referendum are of no assistance to the respondent. The will of the public to restrict rights does not, without more, justify that restriction. In *Burlington*, the city engaged in meaningful study and discussion with representatives of the public and of the mobile sign industry and enacted a carefully tailored by-law that restricted sign use, but did not prohibit it. In this case, the referendum conducted by Oakville resulted in such a low public response that it was not legally binding, with

the result that it does not assist the respondent.

[34] The only evidence of public consultation regarding the by-law is the Minutes of a Public Meeting on July 19, 2000 concerning whether or not Oakville should hold a referendum on the impugned sign by-law. Unlike the public consultation that occurred in *Burlington*, this meeting occurred six years after the offending by-law had already been in place. Moreover, during the meeting, counsel for members of the billboard industry who had applied, as Vann had, for permission to erect billboard signs and third party signs, indicated their willingness to negotiate with the city to arrive at a mutually agreeable compromise; however, there is no indication that such discussion occurred, and the referendum went ahead. Most importantly, however, there has been no effort to tailor the sign by-law such that it minimally impairs the right to freedom of expression. This case is, therefore, comparable to *Stoney Creek*, with the result that the sign by-law cannot be justified under s. 1 of the *Charter*.

[35] In my view, s. 2(5)(a) of the by-law, regulating billboards, and s. 2(16), regulating third party signs are complementary. Their combined effect is to ban all billboard and third party advertising on private lands in Oakville. I am satisfied that the entirety of Vann's advertising business comes within the prohibition of ss. 2(5)(a) and 2(16), which, no doubt, explains why Vann challenged the constitutionality of both sections.

[36] I reach this conclusion on the basis of Vann's advertising business and the definitions of billboard sign and third party sign in ss. 1(9) and (42), respectively, of the by-law. Each sign which Vann intends to locate, whether it is larger or smaller than the 80 square foot definition in s. 1(9), by the nature of the advertising it contains and where it is to be located is necessarily a third party sign as defined by s. 1(9). This is because the sign advertises products and services which are not the products and services "provided on the premises upon which the sign is located". Thus, if a billboard type of sign is larger than 80 square feet it is prohibited by s. 2(5)(a); if it is less than 80 square feet, it is prohibited by s. 2(16). It follows that by the nature of its business Vann is affected by both sections of the by-law.

Conclusion

[37] Oakville's By-law 1994-142 infringes the right to freedom of expression and it cannot be justified under s. 1 of the *Charter*. I would, therefore, allow the appeal, set aside the judgment of the application judge and order that the appellant's application for a declaration of invalidity be granted, However, I would suspend that declaration for a period of six months. The appellant is to have its costs of the application and the appeal, on a partial indemnity scale. I would fix the appellant's costs of the appeal at $8,000.

"S. Borins J.A."
I agree K. Feldman J.A."

MACPHERSON J.A. (Dissenting in part):

[38] I have had the opportunity to read the draft reasons of my colleague Borins J.A. in this appeal. I agree with his conclusion that the third party sign component of the Town of Oakville by-law is invalid. I disagree with his conclusion that the billboard component of the by-law is invalid. Because my colleague has set out the relevant factual background, statutory provisions and legal principles, I can state my reasons and conclusions in relatively brief compass.

(1) <u>Ripeness</u>

[39] The application judge, Walters J., stated that she was "not satisfied that the applicant has set out the necessary evidentiary foundation for me to determine whether the expression in question is one which is protected by the Charter". She continued:

Without any evidence directed to the nature of the expression that is being conveyed via billboards, the extent to which billboards are necessary to promote this expression, the hardship, effect, or impact of the by-law on the applicant or other interested parties, the court is not in a position to make the finding requested by the applicant. Certainly the applicant has provided evidence of the effectiveness of billboards, the use of billboards in various other municipalities and the number of billboards per capita in other municipalities. However, none of this information deals with the adverse impact this by-law has on any freedom of expression.

[40] Borins J.A. disagrees with Walters J.'s analysis and conclusion on the ripeness issue. He states:

> The application judge held that she lacked a factual basis to determine whether the advertising is protected under s. 2(b). However, the application judge acknowledged that she *knew* that "the content of the proposed billboard would contain commercial messages." I take this statement to mean that the application judge accepted as a fact that the content of the billboards' messages would be commercial in nature. I note that in addition to the commercial expression of prospective customers, Vann asked the court to take judicial notice of the
> fact that, as owner of the signs for rent, it can advertise its own business on the billboards.

The application judge's factual finding is sufficient to determine whether the form and content of the proposed expression garners the protection of s. 2(b). Clearly, the intended expression is commercial expression, or advertising.

[41] I agree with Borins J.A.'s conclusion on this issue. In my view, the appellant placed a sufficient evidentiary record before the application judge to establish that its expression and the expression of prospective customers was affected by the Town of Oakville's sign by-law. However, the application judge's description of the factual record is not irrelevant; indeed, in my view, it becomes important when the analysis turns to the application of s. 1 of the *Charter* to the billboard component of the by-law.

(2) <u>Freedom of expression</u>

[42] I agree with Borins J.A. that the Oakville by-law infringes s. 2(b) of the *Charter*.

(3) <u>Section 1</u>

[43] I begin my analysis with a preliminary, but crucial, point. For the purpose of his *Charter* s. 1 analysis, my colleague joins ss. 2(5)(a) and 2(16) of the sign by-law. He says that they are "complementary" and that their combined effect is to ban all billboard and third party advertising on lands in Oakville.

[44] With respect, I do not agree with this characterization of the by-law. The billboard and third party sign provisions of the by-law are not complementary; rather, they are separate provisions completely unrelated to each other. In my view, a close examination of the definition and prohibition provisions of the by-law supports this conclusion.

[45] The definitions of "billboard" and "third party sign" are:

> **1.(9)** Billboard sign -Any ground sign other than a temporary Real Estate sign . . . measuring more than 7.5 square metres (80 square feet) in sign area;
>
> **1.(42)** Third party sign – Any sign which directs attention to products, goods, services, activities or facilities which are not the principal products, goods, services, activities or facilities provided on the premises upon which the sign is located;

[46] The prohibition provisions of the by-law relating to billboards and signs are:

2.(5)(a) No person shall locate or permit the location of a billboard sign.

2.(16) No person shall locate or permit the location of a third party sign.

[47] I conclude from the structure and wording of these provisions that there is no linkage between the definitions and prohibitions relating to billboards and third party signs. The provisions respecting billboards deal only with size; there is nothing about the message or contents of signs in these provisions. Conversely, the provisions relating to third party signs deal only with message or contents; there is nothing about the form of expression, including the size of signs, in these provisions.

[48] It is true, as my colleague points out, that Mr. Vann challenges both provisions of the by-law. That is because he wants to sell advertising space to his customers (hence the attack on the third party sign provisions of the by-law) and he wants to do so on very large signs (hence the attack on the billboard provisions of the by-law). However, a two-pronged attack by the appellant does not convert two separate provisions into a "complementary" legislative regime. At the end of the day, ss. 2(5)(a) and 2(16) of the by-law deal with entirely different subject matters: s. 2(5)(a) relates *only* to form; s. 2(16) relates *only* to content. Accordingly, it is essential to conduct a separate s. 1 analysis for each provision.

(a) The billboard provision

[49] I agree with my colleague's analytical framework for assessing whether this component of the by-law violates s. 1 of the *Charter*:

The onus now shifts to Oakville to demonstrate that its sign by-law is a reasonable limit that can be demonstrably justified. The test set out by the Supreme Court of Canada in *R. v. Oakes*, [1986] 1 S.C.R. 103 requires Oakville to show, first, that its objective in passing the sign by-law is pressing and substantial; second, that the by-law is rationally connected to that objective; third, that the by-law minimally impairs the right to freedom of expression; and finally, that there is proportionality between the effects and the objectives of the by-law.

(i) Pressing and substantial objective

[50] Borins J.A. describes the multi-faceted objectives of the by-law as "to protect the public from unsafe signs, to reduce distractions that may be an impediment to road safety, to prevent the blight of unsightly signs, and to preserve the unique character of Oakville". He concludes that these objectives are pressing and substantial. I agree.

(ii) Rational connection

[51] Borins J.A. states: "In my view, Oakville has failed to demonstrate that the sign by-law is rationally connected to achieving its stated goals". In the next paragraph he says: "Oakville has failed to demonstrate that the blanket prohibition on billboard signs is rationally connected to preserving the unique small town feel of the city". Two paragraphs later, he states: "Nonetheless, I am willing to accept that fewer visual distractions do promote road safety such that the prohibition on billboards is rationally connected to that goal".

[52] There are three problems with this analysis. First, with respect, the analysis is inconsistent. If the prohibition on billboards is rationally connected to one of the go als of the by-law (road safety), I fail to see how my colleague can conclude that "Oakville has failed to demonstrate that the sign by-law is rationally connected to achieving its stated goals".

[53] Second, in my view a complete prohibition on certain types of signs is entirely rationally connected to three of the four components my colleague

sets out in his description of the purpose of the by-law. No signs larger than 7.5 square metres certainly promotes the goal of an absence of unsafe signs. No signs larger than 7.5 square metres will reduce distractions to motorists. And no signs larger than 7.5 square metres will reduce the blight of unsightly signs.

[54] Third, my colleague's conclusion on the rational connection component of the s. 1 analysis is inconsistent with the conclusion on this issue reached by this court in all of the leading sign by-law cases: see *Nichol (Township) v. McCarthy Signs Co.* (1997), 33 O.R. (3d) 771 at 774 ("*Nichol (Township)*"); *Stoney Creek (City) v. Ad Vantage Signs Ltd.* (1997), 34 O.R. (3d) 65 at 71 ("*Stoney Creek*"); *Canadian Mobile Sign Assn. v. Burlington (City)* (1997), 34 O.R. (3d) 134 at 138, leave to appeal to the Supreme Court of Canada refused, March 19, 1998; and *Urban Outdoor Trans Ad v. Scarborough (City)* (2001), 196 D.L.R. (4th) 304 at 318. As expressed by Charron J.A. in *Stoney Creek*, at p. 71:

In my view, all provisions in the by-law concerning mobile and portable signs are rationally connected to the purpose of the by-law. Even a total prohibition would still be rationally connected to the stated objective. Obviously, if all portable and mobile signs were removed in the City of Stoney Creek the concerns sought to be addressed by the by-law would be fully answered.

(*iii*) *Minimal impairment*

[55] My colleague concludes that s. 2(5)(a) of the by-law violates the minimal impairment component of the *Oakes* analysis. Central to this conclusion is his assertion that the by-law "creates an absolute prohibition on billboards within Oakville".

[56] With respect, this description of the effect of the by-law is inaccurate. The Oakville by-law is not an absolute prohibition against all signs or billboards, as was the by-law ("sign . . . any advertising billboard") struck down recently by the Supreme Court of Canada in *R. v. Guignard* (2002), 209 D.L.R. (4th) 549 ("*Guignard*"). Rather, the Oakville by-law prohibits certain types of billboards, namely, those larger than 7.5 square metres (80 square feet) in sign area. Billboards smaller than these measurements are *not* prohibited.

[57] In several cases, the Supreme Court of Canada and this court have explicitly stated that municipal regulation of the display of signs and posters including, importantly, provisions relating to their size, is permitted and is consistent with the minimal impairment component of the *Oakes* analysis: see *Ramsden v. Peterborough (City)*, [1993] 2 S.C.R. 1084 at 1107; *Toronto (City) v. Quickfall* (1994), 16 O.R. (3d) 664 at 671 (C.A.); and *Stoney Creek, supra*, at p. 72. In my view, the billboard component of the Oakville by-law is consistent with these authorities.

[58] Moreover, once it is accepted that size restrictions on billboards are appropriate, it strikes me that the courts should be deferential about the actual line chosen by a municipality. Absent evidence of an improper purpose or of a thoroughly unreasonable or impractical line, courts should respect the municipality's choice.

[59] In the present case, the rationale for the billboard component of the by-law was explained in an affidavit by John Ghent, the Manager of Current Planning for the Town of Oakville:

Billboard Signs . . .

38. **. . .**[T]he by-law is similarly aimed at regulating only those signs which would pose the greatest concern relative to the objectives of the by-law. Primarily, this has been accomplished by incorporating size and height restrictions, so that if a sign complies with those restrictions it is permitted as of right **. . .** In the case of a "billboard sign", which is prohibited under section 2(5) of the by-law, there is an area restriction of 80 square feet, built right in to the definition in section 1(9) so that if the sign is smaller in area

the by-law does not apply to it.

[60] On the appellant's side, in his affidavit filed in support of the application, Larry Vann, the President of the appellant, said nothing about the size component of the Oakville by-law. Nor is there any evidence from any of his prospective customers about how the size component of the by-law would affect their advertising activities. In short, there is nothing from the appellant to counteract Oakville's explanation for the line it chose to draw.

[61] I can state my conclusion on the minimal impairment issue in succinct fashion. The case authorities clearly establish that municipal regulation of the display of signs, including size restrictions, usually does not offend the minimal impairment component of the *Oakes* test. In my view, in the present case the record put forward by the Town of Oakville and the absence of any conflicting evidence tendered by the appellant lead to the conclusion that the respondent has met its onus to establish that the size component of its by-law minimally impairs the freedom of expression of the appellant.

(*iv*) *Proportionality*

[62] Since the objectives of the size component of the by-law are pressing and substantial, since there is a rational connection between the size restriction and the purposes of the by-law, and since the size restriction minimally impairs the freedom of expression of the appellant, it follows that there is the required proportionality between the effects and the objectives of the by-law.

(b) The third party sign provision

(*i*) *Pressing and substantial objective*

[63] Borins J.A. concludes that the objectives of the entire by-law, including the third party sign component, are pressing and substantial. I agree.

(*ii*) *Rational connection*

.[64] For the reasons set out in my discussion of the billboard component of the by-law, I am of the view that there is a clear and direct rational connection between the prohibition against the third party signs and the pressing and substantial objectives of the by-law. The effect of the third party component of the by-law is fewer signs in Oakville. This effect is consistent with at least three of the four objectives my colleague sets out to protect the public from unsafe signs, to reduce distractions that may be an impediment to road safety, and to prevent the blight of unsightly signs. As Charron J.A. said in rejecting the appellant's argument relating to the rational connection component of the
.s. 1 analysis in *Stoney Creek, supra*, "the appellant's argument is better addressed on the issue of minimal impairment" (p. 71).

(*iii*) *Minimal impairment*

[65] I agree with Borins J.A. that the third party sign component of the Oakville by-law does not minimally impair freedom of expression. However, I reach this conclusion on a different, and much narrower, basis than my colleague. In my view, the wording of the Oakville by-law is almost identical to the wording of the St. Hyacinthe by-law that was struck down recently by the Supreme Court of Canada in *Guignard, supra*. I set out the definitions of the prohibited types of signs in the two by-laws

St. Hyacinthe

Advertising sign:

Sign indicating at least the name of a company and drawing attention to a business, a product, a service or an entertainment carried on, sold or offered other than the property on which it is placed.

Oakville

Third party sign – Any sign which directs attention to products, goods, services, activities or facilities which are not the principal products, goods, services, activities or facilities provided on the premises upon which the sign is located;

[66] The Supreme Court of Canada struck down the St. Hyacinthe by-law because it infringed on *a property owner's right* to erect a sign criticizing an insurance company with which he was unhappy. That, of course, is not the basis for the challenge to the Oakville by-law. However, since the Supreme Court declared the St. Hyacinthe by-law to be invalid (rather than reading it down), it follows that the Oakville by-law, in its current form, is invalid.

[67] Lebel J. concluded his reasons in *Guignard* with this observation: "It will no doubt be in the respondent's interests to rethink the definition of "advertising sign", in particular, and more clearly identify the real objectives of the bans imposed" (p. 563). The Town of Oakville will need to engage in a similar exercise. For myself, I would simply say that once it overcomes the drafting problem of overbreadth identified in *Guignard* (which relates only to a restriction of the freedom of expression of a property owner), a by-law which restricts third party signs in all other respects should be constitutionally sound, provided there is a clear record demonstrating the pressing and substantial objectives of the by-law, such as community aesthetics and road safety.

(*iv*) *Proportionality*

[68] I agree with Borins J.A. that the third party sign component of the by-law does not survive the proportionality branch of the *Oakes* analysis.

Disposition

[69] I would declare that s. 2(5)(a) of the Town of Oakville sign by-law is valid.

[70] I would declare that s. 2(16) of the Town of Oakville sign by-law is invalid. agree with Borins J.A. that it is appropriate to suspend the declaration for a period of six months.

[71] In my view, success on the appeal is not divided. The billboard component of the by-law is valid. The appellant has been successful in its attack on the third party component of the by-law. However, the challenge was successful only because the bylaw was overbroad in that it infringed on the freedom of expression of property owners, *not* the expression of the appellant or its proposed customers. It will be relatively easy for Oakville to amend its by-law to deal with the *Guignard* problem while still prohibiting all of the advertising the appellant seeks. Accordingly, I would award the respondent its costs of the appeal which I would fix at $8000.

RELEASED: June 14, 2002

"J. C. MacPherson J.A."

Vann Niagara Ltd. v. Oakville (Town)

[2003] 3 S.C.R. 158, 2003 SCC 65
Date: *2004-01-20*
Docket: *29359*

Corporation of the Town of Oakville *Appellant*
v.
Vann Niagara Ltd. *Respondent*

Indexed as: Vann Niagara Ltd. *v.* Oakville (Town)

Neutral citation: 2003 SCC 65.

File No.: 29359.

2003: November 13.* [1]

Present: McLachlin C.J. and Iacobucci, Major, Bastarache, Binnie, Arbour, LeBel, Deschamps and Fish JJ.

ON APPEAL FROM THE COURT OF APPEAL FOR ONTARIO

Constitutional law -- Charter of Rights -- Freedom of expression -- Municipal by-law limiting size of billboards -- Whether by-law infringes right to freedom of expression -- If so, whether infringement justifiable -- Canadian Charter of Rights and Freedoms, ss. 1, 2(b).

Statutes and Regulations Cited

Canadian Charter of Rights and Freedoms, ss. 1, 2(*b*).

APPEAL from a judgment of the Ontario Court of Appeal (2002), 60 O.R. (3d) 1, 161 O.A.C. 183, 214 D.L.R. (4th) 307, 94 C.R.R. (2d) 255, [2002] O.J. No. 2323 (QL), reversing a decision of the Superior Court of Justice (2001), 88 C.R.R. (2d) 166, 21 M.P.L.R. (3d) 183, [2001] O.J. No. 3794 (QL), dismissing the respondent's application to quash a municipal by-law. Appeal allowed.

George H. Rust-D'Eye, *Barnet H. Kussner* and *Kim Mullin*, for the appellant.

John A. Crossingham, for the respondent.

The judgment of the Court was delivered orally by

1ARBOUR J. -- There is no appeal from the unanimous decision of the Ontario Court of Appeal that the by-law prohibiting third party signs is unconstitutional.

2 We agree with MacPherson J.A. that the by-law limiting the size of signs to 80 square feet (7.5 square meters) infringes s. 2(*b*) of the *Canadian Charter of Rights and Freedoms* but is saved under s. 1 as it minimally impairs the freedom of expression of the respondent.

3 The appeal is allowed, the judgment of the Court of Appeal on that issue is set aside and the constitutional questions** [2] are answered in the affirmative. The appellant will have its costs in this Court. Each party will bear its own costs in the Court of Appeal.

Judgment accordingly.

Solicitors for the appellant: WeirFoulds LLP, Toronto.

Solicitors for the respondent: Crossingham, Brady, St. Catharines, Ontario.

Maitland Valley Conservation v Cranbrook Swine

DATE: 20030428
DOCKET: C37250 and C37262

COURT OF APPEAL FOR ONTARIO

ABELLA, MACPHERSON and SIMMONS JJ.A.

B E T W E E N :	)	
	)	
MAITLAND VALLEY CONSERVATION AUTHORITY	)	**Darrell N. Hawreliak for the appellant**
(Appellant)	)	
	)	
- and -	)	
	)	
CRANBROOK SWINE INC., CHARLES D. TERPSTRA, and LANDMARK BUILDERS LTD.	)	**David S. Thompson and Laura Tripp for the respondents Cranbrook Swine Inc. and Charles D. Terpstra**
	)	
	)	**Paul J. Trudell for the respondent Landmark Builders Ltd.**
(Respondents)	)	
	)	
- and -	)	
	)	
ATTORNEY GENERAL OF ONTARIO	)	**Jack Coop for the appellant by intervention**
	)	
(Appellant by Intervention)	)	
	)	
	)	**Heard: December 11, 2002**

On appeal from the judgment of Justice R.G.E. Hunter dated August 30, 2001.

ABELLA J.A. (Dissenting):

[1] The issue in this appeal is whether someone who has been granted a building permit under the *Building Code Act*, 1992, S.O. 1992 c. 23, can rely on the defence of officially induced error when the resulting construction is alleged to violate the *Conservation Authorities Act*, R.S.O. 1990, c. C.27.

BACKGROUND

[2] Cranbrook Swine Inc. (“Cranbrook”) is in the business of hog farming. Charles D. Terpstra is a director and officer of the company. In 1999, he hired Landmark Builders Ltd. (“Landmark”), a construction company, to be

the contractor for the design and construction of two barns and a liquid manure storage tank.

[3] Cranbrook and Landmark obtained building permits for the construction from the chief building official of the Township of Morris on August 25, 1999.

[4] The construction of the manure storage tank came to the attention of an employee of the Maitland Valley Conservation Authority (the "Authority"). The employee, concerned about the location of the tank, contacted the chief building official of the Township of Morris to arrange to visit the construction site.

[5] His visit persuaded him that the construction might be a violation of the *Conservation Authorities Act*. As a result, the Authority consulted its hydrologist. The resulting memo, dated September 14, 1999, concluded that "the placement of a liquid manure facility at the location currently under construction should not be considered as acceptable under the Authority regulation policies". This led the Authority, on September 15, 1999, to accept a recommendation from its general manager that a violation notice regarding the construction of the tank be issued, on the grounds that the tank was located within a water resource area or wetland.

[6] The notice, sent by the Authority on September 16, 1999 informed Cranbrook, Terpstra and Landmark that the construction was a violation of the *Conservation Authorities Act* because it was taking place in a wetland area without prior approval from the Authority.

[7] On the same day that the Authority sent the notice of violation, a stop work order was issued by the Township of Morris. No construction has taken place at the site since September 16, 1999.

[8] On November 26, 1999, charges were brought by the Authority against Cranbrook, Terpstra and Landmark. The offence alleged was a violation of s. 3(a) of Ontario Regulation 22/91 of the *Conservation Act* which provides that, absent permission from the Maitland Valley Conservation Authority, no person shall

construct any building or permit any building to be constructed in or on a pond or swamp or in any area susceptible to flooding during a regional storm

[9] At the trial before a Justice of the Peace, the defence led no evidence, instead bringing three motions for non-suit. The first motion was that the prosecution had failed to present a *prima facie* case against Mr. Terpstra, personally. The argument on the second motion was that the issuance of a building permit under the *Building Code Act* provided a defence to the charges under the *Conservation Authorities Act*. The third motion was that the area in which the storage tank was being constructed was not a "swamp" or "wetland". There was no evidence of bad faith on the part of the owner or contractor, nor was there any evidence that the building permit was invalid.

[10] The Justice of the Peace allowed the third motion on the grounds that the prosecution had failed to establish that the specific area on which the tank was constructed was a "swamp" within the meaning of s. 3(a) of the Construction Regulation under the *Conservation Authorities Act*. Although he was satisfied that the area adjacent to the construction site was a swamp, he concluded that there was no evidence that the actual site "was or had been a swamp", finding that "it is supposition that because the area adjacent to the cleared area was swamp, that therefore…the site where the tank was…had been swamp".

[11] On appeal, Hunter J. overturned the finding that the construction site was not a swamp, but acquitted the owner and contractor on the grounds that they were entitled to rely, primarily, on the defence of officially induced error. He summarized his conclusions as follows:

There is no suggestion whatsoever that the Respondents at any time acted in other than a reasonable manner; *they acted in good faith*. They went to the authorities and obtained a building permit to construct the holding tank. After construction commenced, it came to the notice of the conservation authorities that construction was possibly taking place in the area of a swamp and was therefore prohibited. Tests were done and this supported the beliefs of the conservation authority and as a result these charges were

brought.

I am satisfied that the Respondents are entitled to rely on the defence of officially induced error. *Having taken the proper steps*, there is no case law that I am aware of or that has been brought to my attention that there was an obligation on them, having obtained the necessary documentation, to go to any other authorities to check to see whether or not it was permissible to construct the holding tank. They did all that was required of them, as I say, in good faith. There is nothing to suggest that the building permit was issued other than in good faith. *They were entitled to rely on that building permit*. The conservation authorities cannot now expect to find favour in this court when charges are laid against the Respondents for breach of the *Conservation Act* (sic.). At the risk of repetition, the Respondents did all they had to do and they cannot now be held liable nor responsible for a possible error committed by the issuing authorities of the building permit. (Emphasis added.)

[12] The Authority, and the Attorney General for Ontario as Intervenor, applied for and were granted leave to appeal this decision pursuant to s. 131 of the *Provincial Offences Act*, R.S.O. 1990 c. P. 33, which states:

131(1) A defendant or the prosecutor or the Attorney General by way of intervention may appeal from the judgment of the court to the Court of Appeal, with leave of a judge of the Court of Appeal on special grounds, upon any question of law alone or as to sentence.

(2) No leave to appeal shall be granted under subsection (1) unless the judge of the Court of Appeal considers that in the particular circumstances of the case it is essential in the public interest or for the due administration of justice that leave be granted.

(3) No appeal or review lies from a decision on a motion for leave to appeal under subsection (1).

ANALYSIS

[13] The only issue in this appeal is whether the respondents were entitled to rely on the defences of officially induced error, estoppel or due diligence in responding to the strict liability offence with which they were charged. In my view, the facts in this case support a defence of officially induced error. Given the role of the chief building official and the significance of a building permit under the *Building Code Act*, it was open to the trial judge, notwithstanding that the defence called no evidence, to conclude on a balance of probabilities that the owner reasonably relied on the issuance of the building permit as an assurance of the legality of the construction of the storage tank.

[14] There was no evidence to contradict a finding of reasonable reliance. On the contrary, there was evidence to support an inference that it is more likely than not that the respondents were unaware of any problems from the perspective of the *Conservation Authorities Act*. There was uncertainty over whether these were, in fact, “wetlands”, and evidence that the local practice was for a building permit applicant to apply to the Conservation Authority only when directed to do so by the chief building official.

[15] The methodology for ascertaining whether a proposed construction is in accordance with the *Building Code Act*, is to apply for a permit. Section 8(11) of the *Building Code Act* states:

No person shall construct or demolish a building or cause a building to be constructed or demolished except in accordance with this Act and the building code.

[16] It would have been redundant for the owner to be required, in the absence of evidence to the contrary, to state the obvious, namely, that he applied for a permit in order to meet the applicable requirements before he started any construction, and that he relied on the issuance of that permit to conclude that he was entitled, by law, to build.

[17] This case turns, in my view, on the wording of ss. 8(1), and (2)(a), of the *Building Code Act*, which provide:

8.(1) No person shall construct or demolish a building or cause a

building to be constructed or demolished unless a permit has been issued therefor by the chief building official.

> s. 8(2) The chief building official shall issue a permit under subsection (1) unless,

(a) the proposed building, construction or demolition will contravene this Act or the building code *or any other applicable law* [emphasis added];

[18] The phrase "applicable law" is defined on O. Reg. 403/97 to the *Building Code Act* (s. 1.1.3.2.) as follows:

> Applicable law means, for the purposes of Section 8 of the Act, any general or special Act, and all regulations and by-laws, enacted thereunder, which prohibit the proposed construction or demolition of the building unless the Act, regulation or by-law is complied with.

[19] These provisions, in combination, stand for the proposition that no building or construction can take place in Ontario without a building permit, and that no such permit will be issued by a local chief building official if the proposed construction will contravene any applicable law.

[20] The appellants acknowledge that the *Conservation Authorities Act* and the construction regulations enacted under it are "applicable law" within the meaning of s. 8(2) of the *Building Code Act*. That makes compliance with its provisions part of what the chief building official is required to consider in deciding whether to grant a building permit. The granting of the permit is, therefore, on its face, a determination by the chief building official that, among other statutes, the relevant provisions of the *Conservation Authorities Act* have been complied with.

[21] In this case, the owner was required by s. 8(1) of the *Building Code Act* to get a permit prior to building the storage tank. Under the scheme of the Act, anyone applying for a building permit under the *Building Code Act* can reasonably expect to have the permit refused if the proposed construction violates any applicable law; conversely, it seems to me, an applicant can reasonably assume that if the permit has been issued, the chief building official is of the view that no such contravention exists.

[22] The owner and contractor in this case sought permission from the person with the statutory authority to grant it if all applicable laws are complied with – the chief building official of the Township of Morris. It was therefore reasonable for the recipients of what was conceded at the trial to be a valid building permit, to rely on the assumption that since the permit was issued, no applicable law, including the *Conservation Authorities Act*, was being contravened.

[23] These circumstances make the defence of "officially induced error" available. This defence received appellate endorsement from Lacourcière J.A. in *R. v. Cancoil Thermal Corporation and Parkinson* (1986), 11 C.C.E.L. 219 (Ont. C.A.) at p. 231, who explained it as follows:

> The defence of "officially induced error" is available as a defence to an alleged violation of a regulatory statute where an accused *has reasonably relied upon the erroneous legal opinion or advice of an official who is responsible for the administration or enforcement of the particular law*. In order for the accused to successfully raise this defence, he must show that he relied on the erroneous legal opinion of the official and that his reliance was reasonable. The reasonableness will depend upon several factors including the efforts he made to ascertain the proper law, the complexity or obscurity of the law, the position of the official who gave the advice, and the clarity, definitiveness and reasonableness of the advice given. [Emphasis added.]

I agree with the following statement made by Professor Barton [in "Officially Induced Error as a Criminal Defence: A Preliminary Look" (1979-80), 22 Crim. L.Q. 314], at p. 331:

"Where the advice is given by an official who has the job of administering the particular statute, and where the actor relies on this advice and commits what is in fact an offence, even if the agency cannot be estopped does it follow that the actor should not be excused? To do so is not to condone an illegality or say that the agency is estopped into a position of illegality, but

to recognize that the advice was illegal but excuse the actor because he acted reasonably and does not deserve punishment."

[24] In *Jorgensen and 913719 Ontario Limited v. The Queen* (1995), 129 D.L.R. (4th) 510 (S.C.C.) at p. 517, Lamer C.J.C. justifies this defence as an exception to the principle that ignorance of the law does not excuse the commission of a criminal offence, in the following way:

The number of laws under which any person in Canada may incur criminal liability is nothing short of astounding. While knowledge of the law is to be encouraged, it is certainly reasonable for someone to assume he knows the law after consulting a representative of the state acting in a capacity which makes him expert on that particular subject.

[25] Before the defence can succeed, the recipients of the building permit must have considered the legal consequences of their actions, that is, whether their conduct in constructing the tank might be illegal and, as a result, sought advice.

[26] The most obvious reflection of an intention to ascertain whether building the tank was legally permissible, was to apply for a building permit. Because, as s. 8(11) states, it is illegal to construct or demolish a building except in accordance with the *Building Code Act*, and because, under s. 8(1), that requires the issuance of a building permit from the local chief building official, seeking a building permit from the chief building official is therefore seeking advice about whether the proposed construction is legal. A rejection means that the construction is not legally permissible. It follows that the issuance of a valid building permit is *prima facie* evidence of a positive response to the 'advice' sought.

[27] The question then is whether the advice came from an appropriate official. The appellants argue that the only appropriate official who can give advice about whether any construction in the Township of Morris violates the *Conservation Authorities Act*, is someone in the Authority, not the chief building official.

[28] This proposition undermines what appears to be the legislative scheme for ensuring the necessary compliance with all relevant laws before any construction takes place in Ontario.

[29] The *Building Code Act* sets standards for all construction and building projects in Ontario. The scheme it supervises for the issuance of building permits is a mandatory one. The local chief building official is appointed, along with the necessary inspectors, by the council of each municipality, the body entrusted by s. 3 of the *Building Code Act* with enforcement responsibility.

[30] There are, the appellant acknowledges, at least nine statutes affecting the use of land in Ontario, including regulations for environmental protection – the *Building Code Act*, the *Conservation Authorities Act*, the *Environmental Assessment Act*, R.S.O. 1990, c. E.18, the *Environmental Protection Act*, R.S.O. 1990, c. E. 19, the *Fire Marshals Act*, R.S.O. 1990, c. F. 17, the *Municipal Act*, R.S.O. 1990, c. M. 45, the *Ontario Municipal Board Act*, R.S.O. 1990, c. O.28, the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, and the *Planning Act*, R.S.O. 1990, c. P.13.

[31] Each of these statutes sets out standards which may affect the decision to permit construction on a given parcel of land. But no construction can take place in Ontario unless the local chief building official issues a building permit.

[32] The application form for a building permit states that "Sufficient information shall be submitted with each application to enable the chief building official to determine whether or not the proposed work will conform with the *Building Code Act* and regulations thereunder *and any other applicable law*" [emphasis added].

[33] This obliges the chief building official to ensure that he or she has all relevant information from the applicant to determine whether, among other things, environmental concerns under relevant legislation have been satisfied. And if, based on the information provided in good faith, an error has been made, his or her decision can be reviewed under the *Building Code Act*. But until the issuance of a permit is challenged, as it was in this case

by the Authority, individuals acting in good faith should reasonably be able to rely on it for the assumption that they are in compliance with their legal obligations.

[34] It would be, it seems to me, an untenable proposition to suggest that, absent a separate and specific confirmation in connection with each of the approximately nine applicable statutes, the holder of a building permit cannot reasonably proceed on the assumption that a chief building official has complied with his or her statutory duty. This duty is discharged by the chief building official ensuring that the proposed construction is in accordance with *all* applicable laws.

[35] Part of this responsibility includes directing an applicant for a building permit to any additional authority for prior approvals, where necessary. In fact, there was evidence from Phil Beard, an employee at the Authority for 21 years and the general manager and secretary-treasurer during the relevant time period, that, in the normal course, a builder or property owner would only make an application for a construction permit to the Conservation Authority after having been directed or advised to do so by the chief building official. During re-examination, the following exchange took place regarding the local practice followed by landowners and builders in making an application for a construction permit:

> [Mr. Beard]: *They're usually directed to get our permit first, by the building official* except in the municipality of North Perth, we have an experimental program going, where they can apply jointly for permission under our regulation and under the Building Code. (Emphasis added)

[Prosecutor]: I'm confused by this. I just want make sure that I understand. If an application for a permit is made to the Conservation Authority under the construction regulation, usually what happens is the applicant is referred by the Municipality's building department to the Authority to get their permission first?

[Mr. Beard] That's correct…If they go there first. Yes that's right.

[Prosecutor]: Right. So, the most applications to the Authority for permission to construct are made directly by the landowner or contractor. Is that normal?

[Mr. Beard] Yes, that's correct. The landowner or agent, yes.

[36] What that means is that while it would have been open to the owner and contractor to get advice about whether the tank was permissible directly from the Authority or any of the other agencies with jurisdiction over land use in Ontario, it was, given the language and scheme of s. 8 of the *Building Code Act*, at least as reasonable for them to seek centralized advice from the chief building official of Morris Township. He was, after all, the only official in a position to grant or withhold the permit without which the construction would have been illegal. He was, therefore, an official whose duty it was, prior to making a decision, to determine whether the proposed construction constituted a potential violation of the *Conservation Authorities Act* requiring consideration by the Authority. Even if the Authority had approved the construction, however, it would still have been open to the chief building official to refuse the permit if he felt there was a contravention of the laws of another constituent statute in the regulatory constellation.

[37] The chief building official in Morris Township, in other words, was an appropriate official on whom to rely about whether the construction would comply with *all* applicable laws, since, if it did not, no permit would have been issued. The reasonableness of Cranbrook and Landmark's reliance on the building permit flowed not only from their statutory entitlement to rely on the advice given by the chief building official in the form of that permit, but also from their statutory requirement to do so.

[38] In addition, there was evidence that there was no mechanism in place during the relevant time period to inform property owners directly that their lands may fall under the jurisdiction of the Authority. According to the testimony of Mr. Beard and a former employee of the Authority, the only mechanisms in Morris Township for providing information on property affected by the Construction Regulations during the relevant time period were a responsive solicitor's inquiry service and a general mailing sent to real estate agents, lawyers and chief building officials. Mr. Beard testified that in the early eighties, when the first Construction Regulation was

approved, the Authority worked with municipalities and planning departments to prepare maps for them that outlined all of the areas that were regulated by it. The maps and policies were put together along with explanatory notes in all the by-laws that specifically mentioned the Authority and its regulations. The municipalities were obliged to send a copy of every zoning by-law to every ratepayer in the municipality, so they could see how their own properties had been zoned and would also receive information about how the Authority's regulations affected their property.

[39] These efforts were discontinued as a result of reduced provincial funding in 1995 and 1996.

[40] This does not take away from the local Conservation Authority's responsibility for enforcing the significant legislative mandate of protecting the natural resources of the watershed within defined territorial jurisdictions throughout Ontario. Rather, it points to the clear statutory direction in the *Building Code Act* that the local chief building official should also play a significant role.

[41] Nor do I mean to suggest that in such a complex and interrelated regulatory scheme, a building permit can never be issued in error. The *Building Code Act*, in fact, anticipates this possibility by providing a remedy through, for example, the revocation of a permit under s. 8(10) of the *Building Code Act*. The relevant portions of s. 8(10) state:

> 8. (10) Subject to section 25, the chief building official may revoke a permit issued under this Act,
>
> (a) if it was issued on mistaken, false or incorrect information; [or]
>
> …
>
> (d) if it was issued in error

[42] In addition, a challenge can be brought under s. 25 of the *Building Code Act*, which gives access to an expeditious judicial determination about whether the issuance of the permit was proper. The section states, in part:

> 25. (1) Any person who considers themselves aggrieved by an order or decision made by an inspector or chief building official under this Act or the regulations, except a decision not to issue a conditional permit under subsection 8(3), may, within twenty days after the order or decision is made, appeal the order or decision to a judge of the Ontario Court (General Division) [Superior Court of Justice].
>
> …
>
> 25. (4) If an appeal is made under this section, the judge shall hold a hearing and may rescind or affirm the order or decision of the inspector or chief building official or take such action as the judge considers the inspector or chief building official ought to take in accordance with this Act and the regulations and, for such purpose, may substitute his or her opinion for that of the inspector or chief building official.
>
> …
>
> 25. (7) An appeal under subsection (1) does not stay the operation of the order or decision appealed from but a judge may, on such terms as are just, stay the operation of the order or decision until the disposition of the appeal. 1992, c. 23, s. 25(7); 2000, c. 26, Sch. K, s. 1.

[43] The remaining issue is whether the advice given by the chief building official in the form of a building permit was reasonable in the circumstances. On the theory that members of the public relying on advice from public officials have less knowledge of the law than those officials, the threshold of reasonableness is not a high one. As Lamer C.J.C. stated in *Jorgensen*, at p. 527:

> …It is sufficient, therefore, to say that if an appropriate official is consulted, the advice obtained will be presumed to be reasonable unless it appears on its face to be utterly unreasonable.

[44] The record reveals that it was not immediately clear to the Authority whether the site was within their jurisdiction. Consultation with the Authority's hydrologist was necessary before it could be determined that

the site was a wetland feature, and site visits had to be made by the hydrologist and an ecologist in order to verify this. As well, there was no evidence that tests had ever been conducted on this site, and no evidence that the property owner in this case had previously been alerted to the fact that the property may be under the jurisdiction of the Authority.

[45] It seems to me that, given the conflicting evidence, it could not be said that it was unreasonable for the permit to be issued and for its recipients to rely on it. The Justice of the Peace at trial, in fact, after hearing all of the evidence, concluded that the site was not a swamp. I appreciate that this finding was overturned by Justice Hunter on appeal, but that does not make the issuance of the permit, or reliance on it, unreasonable in these circumstances.

[46] No construction of the tank took place until Cranbrook, Terpstra and Landmark ascertained, by applying for a building permit, that they were legally entitled to do so. Permission came in the form of a building permit, an official document which, based on s. 8 of the *Building Code Act*, authorized construction only if all relevant legal requirements are satisfied. The owner and contractor were therefore entitled, reasonably, to rely on the advice implicit in the issuance of the permit, namely, that they were violating no applicable law in building on the site.

[47] I appreciate that the Authority has been assigned a highly sensitive and significant statutory mandate which it is obliged to pursue with protective rigour. But where, as here, the facts reveal a reasonable reliance on what proved to be a mistake on the part of the chief building official, the defence of officially induced error can be justified.

[48] I would dismiss the appeal.

"R.S. Abella J.A."

MACPHERSON J.A.:

[49] I have had the opportunity to read the reasons prepared by my colleague, Abella J.A. I regret that I do not agree with her proposed disposition of the appeal.

[50] I agree with my colleague's summary of the facts and statement of the issue. I also agree with her conclusions in relation to several components of the defence of officially induced error. However, in the end, I disagree with her analysis concerning the reliance component of the defence which, regrettably, leads me to a different proposed disposition of the appeal.

[51] There is a recognized defence of officially induced error. It is available in criminal prosecutions: see *R. v. Jorgensen* (1995), 129 D.L.R. (4th) 510 (S.C.C.).[1] It is also a potential defence of an accused charged with violating a regulatory statute: see *R. v. Cancoil Thermal Corporation et al.* (1986), 11 C.C.E.L. 219 (Ont. C.A.).

[52] There are five elements or components in the defence – (1) the accused must have considered the legal consequences of its actions and sought legal advice, (2) the legal advice obtained must have been given by an appropriate official, (3) the legal advice was erroneous, (4) the persons receiving the advice relied on it, and (5) the reliance was reasonable: see *Jorgensen* at pp. 525-27 and *Cancoil* at p. 231.

[53] My colleague concludes that all five of these elements are present in this case and that the summary conviction appeal judge was correct to apply the defence on the non-suit and acquit the respondents. I agree with my colleague's conclusions with respect to elements (1), (2) and (3), disagree with her conclusion relating to element (4), and do not reach element (5).

[54] In my view, the respondents' invocation of the defence of officially induced error founders on the reliance element. The summary conviction appeal judge dealt with reliance in this fashion:

There is no suggestion whatsoever that the Respondents at any time acted in other than a reasonable manner; they acted in good faith.

[1] Although Lamer C.J.C. observed that "officially induced error of law functions as an excuse rather than a full defence" (p. 527), most of the case law, the commentators and my colleague use the word 'defence' which, in my view, is also an appropriate label.

. . . . .

I am satisfied that the Respondents are entitled to rely on the defence of officially induced error . . . They did all that was required of them, as I say, in good faith.

In other words, in the absence of evidence of bad faith, the summary conviction appeal judge assumed that the respondents relied in good faith on the advice of the chief building official.

[55] On appeal, my colleague draws a similar inference. In the 'Background' section of her reasons, she states: "There was no evidence of bad faith on the part of the owner or contractor". In the 'Analysis' section of the judgment, she reasons:

[The application form for a building permit] obliges the Chief Building Official to ensure that he or she has all relevant information from the applicant to determine whether, among other things, environmental concerns under relevant legislation have been satisfied. And if, *based on the information provided in good faith*, an error has been made, his or her decision can be reviewed under the *Building Code Act*. But until the issuance of a permit is challenged, as it was in this case by the Authority, *individuals acting in good faith* should reasonably be able to rely on it for the assumption that they are in compliance with their legal obligations. [Emphasis added.]

[56] With respect, I do not agree that good faith, and therefore reliance, can be inferred from the absence of evidence of bad faith. The respondents brought their motion for a non-suit at the conclusion of the Crown's case. They called no evidence. Accordingly, there is no basis for concluding that their application to the chief building official was made in good faith. Perhaps it was; however, perhaps it was not. The point is that there is no way of knowing and, with respect, it is wrong to infer good faith, just as it would be wrong to infer bad faith.

[57] I am especially unwilling to infer good faith and reliance on the facts of this case and bearing in mind the statute in question. The respondents were not applying for a building permit to construct a backyard deck. Rather, they sought permission to construct a liquid pig manure storage tank 160 feet in diameter and 12 feet deep. This storage tank would be located in rural Ontario and, specifically, in a location where, it is clear from the exhibits, including aerial photographs, there are obvious wetlands environmental concerns. This simple fact implicates in turn the *Conservation Authorities Act*, R.S.O. 1990, c. C.27, which is a crucial provincial law with a stated purpose, in s. 20, of furthering "the conservation, restoration, development and management of natural resources". In short, the reality of what the respondents propose to build, and the clear nexus between the proposed structure and the *Conservation Authorities Act*, suggest caution and vigilance.

[58] The onus to establish an affirmative defence rests on the party asserting it. As expressed by Lacourcière J.A. in *Cancoil*, "it will be for the trier of fact to decide whether the accused has proved, by a preponderance of evidence, that he was misled by the inspector into thinking that [the accused's conduct] would not be in contravention of the law" (at p. 231). Or, as put succinctly by Lamer J. in *Jorgensen*, "the accused must demonstrate reliance on the official advice" (at p. 527).

[59] The respondents did not demonstrate reliance in the present case. They brought a motion for a non-suit, and said nothing. This placed the trial judge and the summary conviction appeal judge in the same predicament as the trial judge in *R. v. Savard*, [2001] O.J. No. 3350 (O.C.J.), who dealt with the reliance component of the defence of officially induced error, at paras. 18-20:

And finally, for the defence of officially induced error to succeed, there

must be evidence that Mr. Savard did rely on the erroneous advice he claims that he was given by his Member of Parliament. Quite simply, the court is unaware of what was in Mr. Savard's mind. He did not testify at the trial, by choice, and there is no other way for that determination to be made . . . .

. . . What was he thinking? How did he interpret the advice that he was given? I cannot guess.

. . . Mr. Savard has failed to discharge the burden of proving that his conduct was excused by an officially induced error.

[60] In summary, I do not think the respondents have met their burden to establish the reliance element of the defence of officially induced error. The respondents chose to bring a motion for a non-suit/directed verdict at the conclusion of the Crown's case. They led no evidence that they relied on the advice of the chief building official as confirming compliance with the *Conservation Authorities Act*. The respondents were in the best position, *and had the legal obligation*, to satisfy the court that they acted in good faith and relied on the building permit to establish compliance with the *Conservation Authorities Act*. They did not do this; they remained silent on these matters.

[61] For the sake of completeness, I record that, in my view, there is no merit to the respondents' arguments grounded in due diligence and estoppel.

[62] I would allow the appeal and order a new trial.

"J. C. MacPherson J.A."

SIMMONS J.A. (concurring):

[63] I have had the benefit of reading the reasons of my colleagues Abella J.A. and MacPherson J.A. I agree with MacPherson J.A.'s statement that there are five elements of the defence of officially induced error[2] and with his conclusions that, at the close of the prosecution's case, the respondents had not made out the fourth element and that they did not reach the fifth element. I therefore agree with his proposed disposition of this appeal and respectfully disagree with the disposition proposed by my colleague Abella J.A.

[64] However, I respectfully disagree with my colleagues' finding that, at the close of the prosecution's case, the respondents had satisfied the first three elements of the defence of officially induced error. In addition, I conclude that there was no air of reality to the defence at that point and, therefore, that there was no basis for raising it.

[65] Dealing with the question of whether the respondents satisfied the first three elements of the defence, for ease of reference, I will repeat MacPherson J.A.'s summary of its elements: (1) the accused must have considered the legal consequences of its actions and sought legal advice, (2) the legal advice obtained must have been given by an appropriate official, (3) the legal advice was erroneous, (4) the person receiving the advice relied on it, and (5) the reliance was reasonable.

[66] In order to satisfy the first three requirements of the defence, in my view, it would be necessary that the respondents demonstrate three things that were not addressed by the evidence at trial. First, that they turned their minds specifically to the legal consequences of that part of their conduct that is prohibited by the *Conservation Authorities Act*, R.S.O. 1990, c. C.27, regulation. Second, that they obtained erroneous advice from an official who they believed, on reasonable grounds, was in a position to give advice concerning that issue. Third, that they understood the advice they received to mean that the prohibited aspect of their conduct was not illegal.

[67] Phrased more bluntly, I think it necessary that the respondents demonstrate: (1) that they considered whether it was illegal to build a liquid manure holding tank in a swamp; (2) that they obtained advice from an

appropriate official concerning that specific issue; and (3) that, as a result of the advice that they obtained, they believed it was not illegal to build a liquid manure holding tank in a swamp.

[68] None of the cases that were brought to our attention raised, in such precise terms, the issue of what an accused must consider and understand in order to meet the first three requirements of the defence of officially induced error. Accordingly, I base my conclusion on the enunciated rationale for the defence, which is non-blameworthy mistake as opposed to ignorance: see *R. v. Jorgensen* (1995), 129 D.L.R. (4th) 510 (S.C.C.) at paras. 6-11 and paras. 25-31; and P.G. Barton, "*Officially Induced Error as a Criminal Defence: A Preliminary Look*" (1979-80), 22 C.L.Q. 314 at pp. 317-8 and p. 328.

[69] I rely in particular on the following comments of Lamer C.J.C in *Jorgensen*:

> Once it is determined that the error was one of law, the next step is to demonstrate that the accused considered the legal consequences of her actions. *By requiring that an accused must have considered whether her conduct might be illegal* and sought advice as a consequence, *we ensure that the incentive for a responsible and informed citizenry is not undermined. It is insufficient for an accused who wishes to benefit from this excuse to simply have assumed that her conduct was permissible* [emphasis added][3].
>
> Finally, to benefit from this excuse, the accused must demonstrate reliance on the official advice. This can be shown, for example, by proving that the advice was obtained before the actions in question were commenced *and by showing that the questions posed to the official were specifically tailored to the accused's situation* [emphasis added][4].

[70] Although Lamer C.J.C.'s comments concerning "specifically tailored" questions relate to the reliance component of his analysis, it goes without saying that one would have to advert to the prohibited aspect of one's conduct at some point in order to pose appropriate questions.

[71] In my view, if the respondents never considered whether there were legal consequences of building a liquid manure tank in a swamp, and did not obtain advice, from an appropriate official, which they understood related to that issue, they demonstrate ignorance, not mistake, and they should not be entitled to the benefit of this defence. Given that there was no evidence at trial dealing with these specific issues, I conclude that there was no basis for holding that the first three requirements of the defence were satisfied.

[72] I am mindful that it might be argued that the facts in *Jorgensen* do not support my conclusions about what an accused person must consider and understand in order to satisfy the first three requirements of the defence because, in *Jorgensen*, the accused simply relied on Ontario Film Review Board approvals and there was no evidence that he posed any "specifically tailored" questions to an appropriate official. However, there was evidence in *Jorgensen* that the accused told police that he purchased only videos that had been approved by the Ontario Film Review Board[5]. Moreover, Lamer C.J.C. specifically noted, "the appellants were aware that they were involved in a business which risked infringing the *Criminal Code*" and said he found it significant that "those seeking OFRB approval and classification for films must pay the OFRB per minute of film"[6]. He also said "the appellants sought and paid for the OFRB opinion of these particular films before putting them on their shelves"[7]. Accordingly, it appears clear that, in that case, the accused did turn his mind to the potential legal consequences of the prohibited aspect of his conduct and that there was evidence that he understood Ontario Film Review Board approval meant that the videos were not obscene. There was no similar form of evidence in this case.

[73] Finally, in determining what an accused person must consider and understand in order to meet the first three requirements of the defence of officially induced error, I also rely on Lamer C.J.C.'s comments that, like entrapment, this defence functions as an excuse for what is otherwise culpable conduct. Where the defence is made out, the appropriate remedy is to enter a judicial stay, not an acquittal, thus ensuring that it will be successful in only the clearest of cases[8]. Accordingly, the very nature of the

defence requires that its elements be strictly interpreted and applied.

[74] Turning to the air of reality issue, I conclude that before raising the defence of officially induced error, an accused person must first establish that he made an error that constitutes an error of law. In this case, in my view, no evidence was adduced capable of supporting an inference that the respondents contravened the *Conservation Authorities Act* regulation as the result of an error of law. I therefore conclude that there was no air of reality to the defence of officially induced error.

[75] In *Jorgensen*, Lamer C.J.C. alluded to this preliminary requirement on two occasions when discussing the existence and availability of the defence.

[76] First, when beginning his discussion of the elements of the defence, Lamer C.J.C. emphasized the importance of maintaining the distinction between errors of law and errors of fact in preserving the principle that ignorance of the law is no excuse. In doing so, he said the following at paragraph 28:

The first step in raising an officially induced error of law argument will be to determine that the error was in fact one of law or of mixed law and fact. Of course, if the error is purely one of fact, this argument will be unnecessary … Distinguishing between mistakes of fact and those of law remains conceptually important. Mistakes of law will only be exculpatory in narrowly defined circumstances [emphasis added].

[77] Later, when summing up the requirements of the defence, he said the following at paragraph 36:

It can only be raised after the Crown has proven all elements of the offence. In order for an accused to rely on this excuse, she must show, *after establishing she made an error of law*, that she considered her legal position, consulted an appropriate official, obtained reasonable advice and relied on that advice in her actions [emphasis added].

[78] In this case, the respondents led no evidence at trial. Instead they brought three motions at the conclusion of the prosecution's case to dismiss the charges against them. The first motion related to whether the prosecution had established a case against Mr. Terpstra personally. In their second motion, the respondents claimed that the building permit was a complete defence to the charges under the *Conservation Authorities Act* regulation. In their third motion, the respondents claimed that the prosecution had not established that the construction site was a swamp. The presiding Justice of the Peace dismissed the charges based on the third motion.

[79] On appeal, the respondents submitted that, by issuing a building permit, the chief building official gave an opinion, under s. 8(2) of the *Building Code Act*, 1992, S.O. 1992 c. 23, that the proposed construction complied with "any other applicable law", including regulations under the *Conservation Authorities Act*. They claimed that if the chief building official made an error in giving that opinion, they were entitled to rely on the building permit as evidence of officially induced error.

[80] The essence of the respondents' claim that they made an error of law is that the building permit amounted to "advice" from the chief building official that the proposed construction did not contravene "other applicable law". However, there was no evidence that the respondents were aware, at the time they commenced construction, that the chief building official was required to consider whether the proposed construction contravened "other applicable law" before issuing a building permit. Accordingly, in my view, at the close of the prosecution's case, there was no evidence capable of supporting an inference that the respondents actually made an error, and, therefore, no basis for classifying any error that they may have made. The respondents were not therefore entitled to raise the defence of officially induced error.

[81] In reaching this conclusion, I have considered that, in *Jorgensen*, the accused did not testify, but that Lamer C.J.C. nevertheless held that he might have been entitled to a defence based on error of law. However, in that case, as I have already noted, there was other evidence that the accused made an error of law. In particular, there was evidence that the accused told police that he purchased only videos that had been approved by the Ontario

Film Review Board[9]. In addition, Lamer C.J.C. noted, "[t]he appellants were aware that they were involved in a business which risked infringing the *Criminal Code*"[10]. Accordingly, there was an evidentiary basis for Lamer C.J.C.'s conclusion that the accused made an error of law, namely "concluding *that the films* [he] *retailed were not legally obscene* [emphasis added]"[11].

[82] In summary, because I have concluded that, at the close of the prosecution's case, there was no evidence capable of supporting an inference that the respondents made an error of law, I also conclude that there was no air of reality to the defence of officially induced error, and that the respondents were not entitled to raise it.

[83] I agree with my colleagues that there is no merit in the respondents' arguments based on due diligence and issue estoppel.

[84] I would allow the appeal and order a new trial.

RELEASED:

"APR 28 2003" "Janet Simmons J.A."

[2] Like my colleagues, I propose to use the label "defence" as a matter of convenience, recognizing that "excuse" may be the more precise terminology.

[3] At paragraph 29.

[4] At paragraph 35.

[5] See paragraph 105.

[6] At paragraph 40.

[7] At paragraph 40.

[8] *Jorgensen* at paragraph 37.

[9] See paragraph 105.

[10] At paragraph 40.

[11] At paragraph 40.

Riverside Developments Bobcaygeon Ltd. v. Bobcaygeon (Corp. of the Village)

COURT FILE NO.: 001779
DATE: 2004-01-19

ONTARIO

SUPERIOR COURT OF JUSTICE

B E T W E E N:	)	
	)	
Riverside Developments Bobcaygeon Ltd., Gordon Edward Weymouth and Gormaw Developments Limited	)	Peter Millard, for the Plaintiffs
	)	
Plaintiffs	)	
	)	
- and -	)	
	)	
	)	
The Corporation of the Village of Bobcaygeon, Jack Phelps, Springbank Homes Limited, Dewhurst Bros. Construction (Bobcaygeon) Limited, Bank of Montreal, and Canada Mortgage and Housing Corporation	)	Steven Stieber and David W. Demille, for the Defendants The Corporation of the Village of Bobcaygeon and Jack Phelps
Defendants	)	
	)	
	)	**HEARD:** October 14-24, 2003

Justice B. Lass

Introduction

[1] Although the title to the action names many parties, the trial is limited to the Plaintiffs and the remaining Defendants, The Corporation of the Village of Bobcaygeon and Jack Phelps. Since the commencement of the action, the corporate Defendant has become part of a new municipality, The City of Kawartha Lakes. Hereafter, the parties shall be referred to as Riverside, Weymouth, Gormaw, Bobcaygeon and Phelps respectively.

[2] The Plaintiffs have sued for damages in tort and in contract for damages sustained following approval of building plans for several rental buildings. During the construction of the fourth building serious construction infractions with respect to the Ontario Building Code Act were revealed. At one point, there was some concern about the need to level the four buildings. The Plaintiffs also claim negligence by the municipality in conducting inspections of the buildings when they were built and failing to advise of deficiencies in the course of construction.

[3] The Plaintiff Riverside Developments Bobcaygeon Ltd. took on the project as a developer and owner with Dewhurst Bros. Construction (Bobcaygeon) Limited acting as the builder. Dewhurst originally was going to buy the land and build the project with a company called Riverside Place Bobcaygeon Incorporated, subsequently called Springbank Homes Limited. When Dewhurst was not able to do so, Riverside Developments Bobcaygeon Ltd. decided to do the project. At that time, the municipality already approved the plans for the first building.

[4] When the flaws in the structures were disclosed in 1997, major remedial work had to be done. This led to the mortgagee taking over the property and having the work done through a receiver who was appointed by court order.

[5] After the remedial work was finished, the buildings were sold by the mortgagee, Bank of Montreal. The remedial work cost $1,691,179.

[6] The Plaintiff Riverside Developments Bobcaygeon Ltd. was the owner of the lands upon which the buildings had been constructed. Mr. Weymouth was the principal shareholder of the corporation. Gormaw was another company in which Mr. Weymouth was a shareholder. It was a guarantor of the Bank of Montreal mortgages on the property. When the Bank obtained judgment on its mortgage, it tied up the assets of Riverside Developments Bobcaygeon Ltd., Mr. Weymouth and Gormaw so that they could not do anything with their assets unless Bank of Montreal approved.

[7] When the property was liquidated after the completion of the remedial work, the Plaintiffs continued to be tied up with the judgment of Bank of Montreal. There was no surplus of funds after the lands and buildings were sold.

[8] The Plaintiffs seek damages on the basis that the Chief Building Official for the municipality, Jack Phelps, failed to exercise his responsibilities correctly when approving the plans for the buildings. The municipality is pursued for its vicarious liability for the negligence of its employee. The loss of the property, the loss of historic income, the loss of equity, excess costs, the debt to The Bank of Montreal together with damage to the reputations of the Plaintiffs form the foundation for the Plaintiffs' claims. Weymouth and Gormaw Developments Limited guaranteed the indebtedness with The Bank of Montreal as well.

Issues

[9] What is the cause of damages sustained by the Plaintiffs?

[10] Although the Defendants do not dispute negligence on the part of Mr. Phelps in fulfilling his duties as the Chief Building Official for the municipality, they do raise the question whether there is any money owing to the Plaintiffs.

[11] Should the Plaintiffs have mitigated their damages? If they did not, is there any sanction?

[12] If there is money owing, to what extent are the Plaintiffs contributorily negligent?

[13] Should any damages owing to the Plaintiffs be set-off by the sum of the judgment of The Bank of Montreal assigned to the municipality?

Overview of How the Building Development Came About

[14] The project to build the structures was initially that of Dewhurst and his corporation. He was going to buy the land from Riverside Developments Bobcaygeon Ltd. Initially, Dewhurst spoke with Mr. Weymouth about the project in the early 1990s; however, Weymouth assessed the economic climate of the time as not being favourable for such a venture. The most he was prepared to do was sell the land to Dewhurst. There was an agreement of purchase and sale between Riverside Developments Bobcaygeon Ltd. and Dewhurst Bros. Construction (Bobcaygeon) Limited. That agreement was to

close on January 30, 1994. That agreement was replaced with another in which a new Dewhurst company called Riverside Place Bobcaygeon Incorporated was to buy the lands with a closing date of May 31, 1994. In the agreement, the purchaser was given permission to do some site work including construction of a building on the property prior to the conveyance at his own risk.

[15] Dewhurst presented plans for the first building to Phelps as the Chief Building Official for The Corporation of the Village of Bobcaygeon. He intended to be the owner of the property. He contacted many prospective tenants. Dewhurst also commenced arrangements for mortgage financing with The Bank of Montreal.

[16] In the end, Dewhurst was not able to place himself in a financial position to undertake the project. Riverside Developments Bobcaygeon Ltd. by this time agreed to take on the project as the developer with Dewhurst being the builder. Weymouth spoke with Phelps and was assured that the plans were satisfactory. Historically, Weymouth had developed land in the Bobcaygeon area, but he was not a builder. He had had Dewhurst build many structures for him in the past and was very satisfied with the work.

[17] Financing was arranged with the Bank of Montreal. For the initial building, the Bank required that Riverside Developments Bobcaygeon Ltd. mortgage its lands and that Weymouth, Dewhurst and Mr. Mattern guarantee the mortgage. There is some dispute why Dewhurst and Mattern would guarantee the mortgage if they were not partners with Weymouth or shareholders in Riverside Developments Bobcaygeon Ltd. Mr. Leeds from the Bank of Montreal understood that the three were in on the project together and that Dewhurst and Mattern were to become shareholders in Riverside Developments Bobcaygeon Ltd. in time. Dewhurst had conveyed that information to Leeds. Leeds also stated that Weymouth had told him the same information. Weymouth denied ever providing such information to The Bank of Montreal. At no time were Dewhurst or Mattern to become shareholders. They had expended money on the proposed project before Weymouth became involved and hoped to earn enough from the building project to pay off their expenditures, but Weymouth firmly testified that there never was any deal to include them in the company.

[18] At one time in the past, Dewhurst had been a minority shareholder in Riverside Developments Bobcaygeon Ltd., but that had been concluded in 1991, long before Weymouth took on the project.

[19] Riverside Developments Bobcaygeon Ltd. is a company in which Weymouth is the principal shareholder. His wife, daughter and son hold shares in the company as well. Dewhurst ceased to hold shares in the corporation in 1991. Riverside Developments Bobcaygeon Ltd. has been a development corporation.

[20] Gormaw Developments Limited is a corporation in which Gordon and Mary Weymouth are the shareholders. It is a development corporation as well. It owns real property in Bobcaygeon. It guaranteed the mortgages as did Gordon Weymouth.

Was Riverside Developments Bobcaygeon Ltd. a joint venturer with Dewhurst?

[21] When Dewhurst was unable to continue with his plans, Weymouth and Riverside Developments Bobcaygeon Ltd. then became involved as the owner and developer of the lands. The

Defendants submit that Weymouth and Riverside Developments Bobcaygeon Ltd entered into a joint venture with Dewhurst. If that were the case, then the actions of one might be binding on the other. For example, if Dewhurst arranged for the plans and made errors when actively working with the Chief Building Official, the joint venture partner would be in the same position as Dewhurst. If Dewhurst were negligent in such activity, the negligence would also be that of Weymouth and Riverside Developments Bobcaygeon Ltd.

[22] Dewhurst and Mattern had put a lot of time, effort and money into the intended project. Mr. Leeds from The Bank of Montreal had notes referring to Weymouth, Dewhurst and Mattern having an interest in another company that was going to become the owner of the whole project eventually. Weymouth was very definite that he did not provide any such assurance to Mr. Leeds. Weymouth thought that if Leeds had such an impression, it could only have been through his dealings with Dewhurst. The other possibility for Leeds reaching such a conclusion is that he may have traded information from his other Bank of Montreal files for Weymouth and Weymouth's company after incorrectly concluding that Weymouth was to be in a joint venture with Dewhurst and Mattern. The missing information in Leeds' documents regarding Weymouth is the timing of receipt of information from Weymouth. There is no date on his documents to back up when he spoke with Weymouth as he alleges. His care at file-keeping is relied upon by the Defendants as one who is meticulous and therefore reliable. I find that Leeds is not as meticulous as is submitted by the Defendants because he has not dated any discussion times with Weymouth. It is consistent with Weymouth's position that any such suggestion of a joint venture came from Dewhurst prior to Weymouth's involvement. Note the dates of the meetings when Leeds met with Dewhurst. They were prior to Weymouth agreeing to become the developer in the project. They were after the agreement of purchase and sale was entered into between Riverside Developments Bobcaygeon Ltd. and Dewhurst's company. That agreement had simply been for Riverside Developments Bobcaygeon Ltd. to sell the land to Dewhurst's company. That being the case, I come to the conclusion that there was no activity by Weymouth with Dewhurst and Mattern that could lead The Bank of Montreal to conclude there was a valid and subsisting joint venture. The notes of Leeds for the Bank are dated June 1994, which is a time before Weymouth and Riverside Developments Bobcaygeon Ltd. were involved with the project. Any assumption by Leeds that Weymouth was or was to be involved with Dewhurst and Mattern can only have been an assumption based on information received from Dewhurst when he was acting without Weymouth. It appears that the Bank took guarantees from Dewhurst and Mattern for the first three mortgages without establishing firmly that this was a joint venture. By the time the fourth mortgage was executed, the Bank was not looking for the guarantee of Dewhurst and Mattern. That is consistent with an acceptance that they were not in a joint venture with Weymouth. This conclusion puts the icing on the cake that there was not any form of partnership or joint venture between Weymouth and the other two men or the Dewhurst company.

[23] Why did Dewhurst and Mattern sign a guarantee for the mortgage from The Bank of Montreal? If they were not stakeholders in the project, there was no need to have them guarantee the mortgage. The Defence submits that these men were included as guarantors because they were joint venturers with Riverside Developments Bobcaygeon Ltd. Another consideration is that the Bank simply wanted all the guarantors it could get. One additional possibility is that Dewhurst had advised Leeds that there was a plan for a joint venture between

himself, Mattern and Riverside Developments Bobcaygeon Ltd. This could have occurred when Dewhurst was trying to arrange financing and was telling Leeds that he would sell shares in his company, Riverside Place Bobcaygeon Incorporated. Such share sales could have included shares to Mattern and Weymouth after the buildings were constructed. I note that eventually these men ceased to be guarantors. As each building was constructed, a new mortgage for that building was drawn. Each mortgage was ranked pari passu with the others. Dewhurst and Mattern signed as guarantors for the first three mortgages on December 21, 1994, September 22, 1995 and July 26, 1996. By the time they got to the fourth building, the Bank was accepting only guarantees from Mr. Weymouth and Gormaw Developments Limited. Those final guarantees were consistent with the ownership and interconnection between Weymouth and his companies only and inconsistent with a joint venture joint venture with Dewhurst.

[24] I am satisfied that there was not a joint venture here. The agreement of purchase and sale that was to close on May 31, 1994 would have resulted in Riverside Developments Bobcaygeon Ltd. selling the lands to Dewhurst or his company. That agreement specifically identified independent activities between the purchaser and vendor. For example, the purchaser acknowledged that there was a site plan agreement with the municipality that governed the lands so that if the buyer wanted any changes, he would have to negotiate with the municipality. In addition, the purchaser acknowledged that Riverside Developments Bobcaygeon Ltd. might develop its adjoining lands in the future and that the buyer would not object to such developments. Those developments would have included multi-residential and commercial uses of the property. Those provisions in the agreement of purchase and sale are not those expected between participants in a joint venture. Rather, they are more consistent with the limitations that two individuals would employ when they are not acting together in a venture.

Was Riverside Developments Bobcaygeon Ltd. a general contractor?

[25] The Defendants also suggest that Riverside Developments Bobcaygeon Ltd. acted as a general contractor when it received the invoices and paid the bills. Dewhurst was the builder. If Riverside Developments Bobcaygeon Ltd. were the general contractor, again there is an argument that it must take responsibility for the acts of the builder. That might be to the extent of 50% contributory negligence. Again, I do not find that Riverside Developments Bobcaygeon Ltd. was a general contractor. Riverside was the developer and relied on the builder to do the construction work. A general contractor will organize, manage and control the project. Riverside Developments Bobcaygeon Ltd. paid the bills, but nothing more. Dewhurst was the builder who hired the trades and saw to it that the construction work was completed. Paying the bills submitted by the trades did not make Riverside Developments Bobcaygeon Ltd. the general contractor. The Defendants submit that Weymouth hired and paid the trades whereas the evidence is that Dewhurst hired the trades.

Was Riverside Developments Bobcaygeon Ltd. as a developer contributorily negligent?

[26] The Defendants further take the position that Riverside Developments Bobcaygeon Ltd. was contributorily negligent as a developer. In other words, the developer contributed to its own loss and the value of such contribution should be deducted from anything the municipality might owe it. Weymouth, as the main voice of Riverside Developments Bobcaygeon Ltd., did not want to pay for professional services and now wants

everyone to protect him including the municipality. If Weymouth advanced a set of building drawings, he should have a responsibility to make sure the drawings met the Building Code requirements. In failing to do so, he should absorb some responsibility. The municipality takes the position that Weymouth had full control over the design and construction of the project. Therefore, the Defendants submit that Weymouth and Riverside Developments Bobcaygeon Ltd. are 50% liable.

[27] The Defendants take the position that whatever category Riverside Developments Bobcaygeon Ltd. is found, i.e. joint venturer, general contractor or developer, Riverside Developments Bobcaygeon Ltd. are liable for at least 50% of the losses sustained.

[28] It is necessary to determine how Weymouth/Riverside Developments Bobcaygeon Ltd. interacted with Phelps and Dewhurst. Weymouth testified that he met with Phelps on several occasions and was assured that the plans presented previously by Dewhurst when he was going to do the project were satisfactory. Weymouth claimed to have met several times with Phelps. He had asked Phelps if there was a need for an engineer because of the size of the project, but that Phelps had told him it was not necessary. Upon that assurance, Weymouth went ahead with the building after arranging financing with The Bank of Montreal. He was emphatic that he was not a builder. He relied on Phelps as the Chief Building Official when he stated that the plans met the requirements for such an undertaking. He had worked with Dewhurst in the past and was satisfied with the finished product that Dewhurst produced.

[29] Phelps did not recall meeting with Weymouth to discuss the plans. He testified that he did not meet with Weymouth about the buildings while they were being constructed. Yet he testified that he avoided Weymouth because he talked a lot. Phelps has a selective memory. He served as the Chief Building Office for the municipality for more than two decades. I conclude that Phelps simply did not do his job correctly. He could not be sure what he approved and reviewed. He claimed to inspect the buildings as they were being constructed, but he did not go to the upper level where he would have seen that firewalls were not installed. He could have concluded that there were no firewalls just by looking from the ground level because the walls would have projected above the roofline. Both Bernard Finney and Dr. Southward confirmed this. They are professional engineers. I accept that an experienced building official should know that firewalls would go above the roofline. The upper level of the buildings was open so that a fire could have spread from one end of each building to the other without obstruction.

[30] I conclude that Phelps' evidence is less reliable because he does not provide much of an accounting of the events. He denies talking with Weymouth but at other times his reference to Weymouth talking leads to the conclusion that Phelps must have had many conversations with Weymouth. Phelps testified that he got to the point of avoiding Weymouth because Weymouth talked too much. At the same time, Phelps acknowledged the plans for the building. He was of the opinion that the building did not require the work of an architect or an engineer. Mr. Finney advises that they could have put in firewalls correctly but that they put in improper firewalls without severance in the ceiling area. The installed ones did not go through the ceiling to the roof. If firewalls had gone through the attic area, they would have done the job effectively. It is apparent that Phelps and Dewhurst talked about how to get the buildings constructed and meet the Building Code. Phelps did not address the needs of the Building Code sufficiently. The

size of each building makes it a Part 3 Building Code structure. An alternative to make it a Part 9 Building Code structure requires many adjustments that will provide protection to the public. A Part 3 building requires the use of an architect and engineer whereas a Part 9 building does not. These buildings went up as Part 9 buildings without the assistance of architects and engineers. When that happens, the Chief Building Official and inspector becomes more important in making sure that the construction is done within the requirements of the Building Code. A Part 3 building is inspected by the architect and engineer. I am persuaded that Phelps simply did not do his job. He was the person responsible for making sure that the Building Code was met. Phelps had to make the final decision about whether or not something was being done correctly. Weymouth simply came in after the approval, and the plans continued as had been approved with Dewhurst. I do not doubt that Phelps and Weymouth did speak about whether the plans that Dewhurst was using were satisfactory. Weymouth was not a builder. Rather, he was a developer. When the Chief Building Official for the municipality advised him that the plans met the requirements of the Building Code for the Province, it is reasonable for Weymouth to rely on those assurances. It is also reasonable that the owner then relied on the building inspector to check the construction as it advanced.

[31] I do not find any contributory negligence on the part of Weymouth and Riverside Developments Bobcaygeon Ltd. When he made inquiries with the Chief Building Official and was assured that the Code was being met with the plans that were already on file with the municipality, Weymouth did not fall down on his responsibilities as owner and developer of the property. The development was going to be a Part 9 group of structures without the benefit of professionals such as architects and engineers. The municipality failed in its responsibility to the owner to allow an improper structure to go up and then not to inspect it as it was built. Further, I find that Weymouth did not act in a way that would attract liability to him. He relied on the Chief Building Official who reported that the plans that Dewhurst had provided earlier met the Building Code requirements so that the project was an approved one. It is reasonable that a person in Weymouth's and Riverside Developments Bobcaygeon Ltd.'s positions would conclude that they had good plans for a building project. It is further reasonable that they would rely on the building inspector to inspect the construction to be sure that the buildings were being put correctly. The consequences of the mistakes made by Phelps are that three buildings were constructed and a fourth was well under way before any problem came to light.

Would one expect that the errors of Phelps would lead to the full extent of losses claimed by the Plaintiffs? Did the negligence of Phelps cause the losses sustained by the Plaintiffs?

[32] The Plaintiffs' have one grouping of damage claims for lost equity in the property, lost historical income, excess costs incurred that are attributable to the deficiencies together with a higher prejudgment interest than provided in the Courts of Justice Act. The losses claimed by the Plaintiffs take into account proceeds received from the sale of the property, income earned by the receiver from operating the apartments, and the obligations under the mortgages against Riverside Developments Bobcaygeon Ltd. and guaranteed by Weymouth and Gormaw Developments Limited. The Plaintiffs separately claim the debt incurred with the mortgages on the property. The Plaintiffs also claim damages for loss of business reputation for all three and a general damage claim for pain and suffering for Gordon Weymouth. The Defence submits that the full scope of damage claims by the Plaintiffs is excessive and

not reasonably foreseeable as damages flowing from the actions and lack of actions of Phelps.

[33] In Kamloops (City) v. Nielsen]1984] 2 S.C.R. 2, the Supreme Court of Canada reviewed a two-part test when determining whether a public body owes a duty of care to individuals. First, there is a prima facie duty of care from the municipality if there is a proximate relationship between the parties so that it is reasonably foreseeable that carelessness on the part of the public body would result in injury to the individual. Secondly, the court examines the legislation governing the public body to determine whether a private law duty should be imposed in the circumstances.

[34] In Ingles v. Tutkaluk Construction Ltd. [2000] S.C.J. No. 13, the Supreme Court of Canada, in applying the Kamloops test, considered whether the relationship between the public body and the individual was close enough that it was foreseeable that a deficient inspection of the construction could result in damage to the property or injury to the owners. Secondly, the Court found that the Building Code in Ontario was enacted to ensure that uniform standards of construction safety were followed. There, the Court stated that the municipality would escape liability from below standard inspection in the rare case of the owner-builder making it impossible for the inspector to do anything to avoid the danger.

[35] In my reasons following, I have applied the test in Kamloops and Ingles.

[36] It is reasonably foreseeable that by giving the approval to proceed with a project that would fall apart completely years later, the loss would all flow back to the approval of the Chief Building Official together with his neglect to inspect properly the buildings. Weymouth had a small corporation. It is very common that personal guarantees be given to lenders for such projects. Further, it is most common that such projects are not constructed on a cash basis but rather are financed. If the municipality faltered on its approval, it was setting up the developer to have a house of cards that would come tumbling down when the buildings were found to be very much outside the confines of the Ontario Building Code. It is reasonable that when work orders issued requiring remedial work that cost over $1.5 million the owner/developer would not be in a position to meet those requirements. If the project was financed, defects could lead to the lender of the mortgages demanding payment. When an owner is overwhelmed with such financial obligations, all flowing from the negligence of the Chief Building Official, it is also reasonable that the guarantors will be pressed hard financially. All of these problems are reasonably foreseeable as damages flowing from Phelps' negligence.

What is the extent of the financial liability for the municipality?

The total claims of the Plaintiffs total over $10.4 million. The damage claims are broken down into several categories. They are:

[37] Damages composed of lost equity, lost historical income, excess costs incurred, pre-judgment interest rounded off at $3,566,000;

[38] The loss of business reputation sustained by each of the Plaintiffs in the sum of $500,000 each;

[39] The amount of mortgage indebtedness on the Riverside Developments Bobcaygeon Ltd. property as now reflected in a

judgment held by The Bank of Montreal and assigned to the municipality;

[40] Damage to the reputation of Riverside Developments Bobcaygeon Ltd., Gormaw Developments Limited, and Gordon Weymouth personally;

[41] Pain and suffering experienced by Gordon Weymouth personally.

Damages for Lost Equity, Lost Historic Income, Excess Costs and Pre-judgment Interest

[42] Several valuators considered the value of the property. They considered rental property in the area and noted the difficulty in finding comparable properties. The vacancy rate was a significant feature in these valuations. The rate ranged from 4% to 16.5%. I conclude that the 5% vacancy rate recommended by BDO is the more realistic one because it is the median vacancy rate between those used by W.J. Dietrich Ltd. and Veritas who used 4% and 6%. I take into account that this municipality is reported to have had a need for rental accommodations. The only reason that the higher vacancy rates of 10% and 16.5%, used by Colliers and Wilkinson, might be considered is that when the buildings were under work orders and the complaints of deficiencies were at their peak, the vacancy rate was at its highest. This is an artificial consideration flowing from a unique situation with these particular buildings. That means that the vacancy is higher because of the negligence of the municipality. It is inequitable to then use the higher than usual vacancy rate against the injured parties. The valuations vary from $4,650,000 by Mr. Mulvihill of W.J. Dietrich Ltd. to $3,700,000 from Mr. Bender of Colliers. I am satisfied that Mr. Mulvihill has determined a valuation that is the most reasonable because he is more reasonable in his consideration of vacancy rates regarding income projections of the buildings. His valuation does not underscore the value of the project as fully operational residential building complex with a lower than actual value because of the natural drop in sale prices when it comes to forced sales of properties. The lower values address the problems with the buildings and project lower selling prices as bargain hunters approach a vendor in trouble. The reality of the situation is that such lower values do not take into account the fact that buyers will pay lower prices because of the failure of Phelps in allowing the project to get off the ground. The BDO damage calculation is $3,566,000 separate from considerations of the mortgages. The damage assessment takes into account the three appraisals mentioned above. The sum is calculated to November 30, 2003 and increases by $32,000 per month, which included $12,000 in prejudgment interest.

[43] The BDO analysis of the quantum of damages sustained by the Plaintiffs realistically considers the vacancy rate, repairs and maintenance and the management fee structure. The Colliers appraisal allows upwards of 10% vacancy rate is challenged by Mr. Jones of BDO on the basis that it is not realistic for the Bobcaygeon area. Mr. Silverthorn of Wilkinson & Company provides a review of the appraisals and the BDO report. He allows up to 10% and 16.5% for vacancy and bad debt allowance. Mr. Silverthorn is prepared to settle back to the 10% vacancy rate in his analysis. I might add that the means of getting to the higher vacancy rates of 10% and 16.5% vacancy rate arises as the buildings were being constructed and after the alarm arose about the soundness of the buildings. Such higher rates are artificial because they are created through the negligence of Phelps. If the problems with these buildings had not arisen, there would not have been a higher vacancy rate. Another feature of concern in the calculation of damages is the allowance for management fees.

BDO accepts that Weymouth provided a hands-on management service, which did not require him to hire outside a professional manager. I accept that Weymouth could perform such services. To add the recommended sum of $93,000 of Mr. Silverthorn would artificially reduce the damages claimed by the Plaintiffs. I accept Mr. Jones' removal of a management fee because it takes into account the actual way that Weymouth operated the management of the buildings. This falls within the calculation of lost historical income.

[44] The current value of the buildings is calculated as being equal to the present value of the expected future rental income. All the appraisals used an income approach to determine the value of the buildings. Such an approach estimates the anticipated operating income and determines the present value of such income based on an appropriate risk adjusted rate of return, which is a capitalization rate.

[45] The lost equity is made up of the current value of the property without deficiencies and subsequent problems less the amount that would have been owing on the mortgages in the absence of the problems caused by the deficiencies. The total calculation to September 30, 2003 in the BDO reports is $1,508,273.00 together with an increase each month thereafter of $4564.00 per month to January 19, 2004 for a total of $1,524,762.29. I accept these calculations. I do not find any sustainable challenge to them.

[46] I accept the lost historical income calculation of Mr. Jones in the sum of $1,109,503. This is the difference between the income that Riverside Developments Bobcaygeon Ltd. is expected to achieve if there were no deficiencies. Mr. Silverthorn of Wilkinson & Company says that if the vacancy rates were 10% or 16.5%, the figure for this category of claim to July 31, 2003 would be $709,047 and $480,609 respectively. I do not accept Mr. Silverthorn's figures because of my findings above that the vacancy rate should be 5%.

[47] The excess costs claim to September 30, 2003 totals $396,511. These damages cover architectural and engineering fees, handwriting expert, the Dietrich Report, charges on overdue land taxes on properties other than the lands for the apartment buildings, excess repairs, maintenance and upgrades, excess utilities incurred from increased apartment vacancies, legal and accounting costs incurred by the Plaintiffs, photocopying costs. I find that most of these claims are not damage claims but rather are open for consideration of costs in the litigation, if they are awarded to the Plaintiffs. For example, the legal and accounting costs, the architectural and engineering costs, the Dietrich Report, the photocopying fall into this category. The charges on overdue land taxes on other properties have not been substantiated. Mr. Jones' Report shows that he did not perform a cash flow review that Weymouth would have been receiving from his other businesses. The amount shown for charges on overdue land taxes is an estimate. I find that this is not a substantiated damage claim. The only parts of this damage category that might be considered are those for excess repairs, maintenance and upgrades as well as excess utilities resulting from increased vacancies. These totaled $12,861 and $10,450 respectively. This total of $23,311 is a valid damage claim flowing from the negligence of Phelps.

[48] The BDO damage report adds prejudgment interest on lost historical income and excess costs at the arbitrary rate of 12.9% working from 1998 through to September 30, 2003. Mr. Jones does not include such a calculation on the lost equity and receivership features. The Plaintiffs ask the Court to use its discretion in awarding a higher rate that is scheduled in s. 130 of the Courts of Justice Act. I am not persuaded to make an

elevated rate of prejudgment interest because in effect it would amount to punitive damages that have not been claimed. I appreciate that s. 130 of the Act allows the trial court to increase the prejudgment interest rate when considering the circumstances of the case, when looking at the amount claimed and recovered in the trial, and when reflecting on the conduct of a party that tended to shorten or lengthen unnecessarily the duration of the proceedings. There are not sufficient circumstances in this proceeding to draw the decision within these extra features of s. 130 of the Act. Therefore, the prejudgment interest sum of $487,677.00 set out in the BDO Report will not be allowed. The prejudgment interest being allowed when the action was commenced was 5.3%. This will apply to lost equity, lost historical income, excess costs.

[49] With the complaints of deficiencies mounting and with work orders issuing from the Fire Marshal's Office, the outstanding mortgages eventually fell into default. The mortgage debt by Riverside Developments Bobcaygeon Ltd. and guaranteed by Weymouth and Gormaw Developments Limited became a further loss by the Plaintiffs. The amount of the mortgage debt as guaranteed by Weymouth is $4,857,330.11. The guarantee judgment debt for Gormaw Developments Limited is $2,168,449.73 as referred to above. Those monies became judgment debts owing to the mortgage holder by the landowner Riverside Developments Bobcaygeon Ltd. and the guarantors. Because I have found that there is no contributory negligence by the Plaintiffs and further that it is reasonably foreseeable that the mortgage debt and guarantees might fall due because of the deficiencies resulting from the negligence of Phelps both in approving the plans and in failing to inspect the construction in a proper manner, the whole of the mortgage judgment debt is a reasonably foreseeable category of damages for which the municipality should be liable. That liability flows from the negligence of the Chief Building Official.

[50] In this trial, The Bank of Montreal did not participate because it had settled with Phelps and Bobcaygeon with Bobcaygeon paying out the Bank and taking an assignment of the judgment. If The Bank of Montreal had continued in the trial, I do not doubt that Phelps and Bobcaygeon would have been found liable for the amount of the mortgage based on the negligence of Phelps and the fiduciary duty owed to the Bank by the two remaining Defendants. Just because the Bank is now out of the action, it does not mean that the indebtedness is deleted. On the contrary, I find that Riverside Developments Bobcaygeon Ltd. continued to be indebted and is now a judgment debtor because of the negligent conduct of Phelps for whom the municipal employer is vicariously liable. This continues to be a loss to Riverside Developments Bobcaygeon Ltd. flowing from the conduct of Phelps. If he had done his job properly, he would have required additional work to be done so that the buildings complied with the Ontario Building Code. There is nothing to suggest that Weymouth would have avoided the project if those requirements were made. Weymouth in cross-examination testified that it was a matter of satisfaction in what Phelps required rather than being a matter of money. Riverside Developments Bobcaygeon Ltd. relied on the information from Phelps and went ahead with the project. When the deficiencies were detected years later, the municipality issued work orders to correct the deficiencies. As complaints arose from tenants and as rumours arose about the safety of the buildings, tenants left. This affected the income of Riverside Developments Bobcaygeon Ltd. In time, without co-operation from the municipality, Riverside Developments Bobcaygeon Ltd. was unable to do the remedial work and the Bank took over managing the buildings with a court-appointed receiver. Remedial work was done for the receiver and the

costs related to that remedial work amounted to more than $1.5 million. By the time the buildings were down to 50% occupancy and the Bank no longer prepared to lend Riverside Developments Bobcaygeon Ltd. more funds, Riverside Developments Bobcaygeon Ltd. could not do the work. As a result, Riverside Developments Bobcaygeon Ltd. lost the property and became a judgment debtor of the Bank. That is a loss related to the negligence of Phelps. To be awarded a damage claim for this liability is not a windfall for Riverside Developments Bobcaygeon Ltd. It must be remembered that property was sold for a sum that did not retire the whole of the judgment together with the costs of the receiver. The total outstanding on the judgment and remedial works is $4,733,622.11 inclusive of prejudgment interest and costs plus interest from May 25, 2000 to July 31, 2003. The per diem interest charges on the four mortgages totaled $732.00. From August 1, 2003 to January 19, 2004 are a total of 169 for another $123,708.00. That totals $4,857,330.11 for Riverside Developments Bobcaygeon Ltd. The judgment against Gordon Weymouth on the guarantee is for the same amount plus interest from May 25, 2000. The judgment on the guarantee against Gormaw Developments Limited is $1,776,869.80 plus interest from May 25, 2000 being the date of judgment. The interest on the Gormaw Developments Limited judgment from May 25, 2000 has a daily rate of $288.35 for a total of 1358 days running until January 19, 2004 for a total of $391,580.02. The total judgment for Gormaw Developments Limited is $2,168,449.73. Since the interest on the judgments is commensurate with the interest rates on the mortgages, the interest on the award to the Plaintiffs continues at a similar rate until payment.

Should there be any allowance for betterment to the structures resulting from the remediation work of the receiver?

[51] There is an issue of betterment to the buildings by some of the work done by Kleinfeldt, the engineering consultant retained by the receiver. The cost of the remedial work done by Kleinfeldt is $1,154,813.00. That is 38% of the original cost. M.B. Finney Limited assessed that such remedial work would cost about 40% of the original cost when one had to do the work after the structures had been erected. There is some debate about the work of Kleinfeldt bettering the structures. Finney is of the opinion that calculating the betterment features as done by Dr. Southward in his report is not a valid method. The figures of Dr. Southward flow from questions presented to him by counsel for the Defendants and are more related to the value of the structures rather than the costs. Mr. Finney thought that the wrong questions were used as the foundation for the Southward report and that they give an erroneous answer.

[52] The Kleinfeldt report sets out in detail deficiencies in the construction of the four buildings. When reading about these shortfalls in the structures, one is concerned about the quality of the work done when the buildings were put up. Wet crawl space areas that are poorly ventilated, improper doors and ceilings for fire resistance for the time requirements of the Fire Code, the upper levels not being constructed for fire resistance are a few of the headings. As much as one might be critical of the original contracting work, so must one be concerned about the inspection of the work during the course of construction. There is so much faulty work that I find that Phelps and his staff did not conduct proper inspections during construction. Phelps himself never looked at the upper level for fire separations. His only explanation is that there was not a ladder available. This faulty work should have been stopped early in its development. This would have prevented whole buildings being put up only to need so much retrofitting that one would not have been surprised to hear that there was some

discussion of leveling the structures. The remedial work addressed life safety and health issues. The Building Code and Fire Code exist for the protection of the public. Fire rated doors, walls and ceilings to withstand fire for set periods of time are required for life safety. The crawl space areas were not built so as to prevent dampness, sometimes flooding and the development of mould. When some earlier remedial work had been undertaken for the damp and moldy crawl spaces, common ventilation systems were used, but that created a further fire hazard that would allow the spread of fire. I am not surprised that Kleinfeldt Consultants Limited recommended major remedial work as a necessity.

[53] The additional work to make the buildings Code compliant provides a required improvement that the Plaintiffs would have addressed if Phelps had executed his responsibilities correctly. Some of the expenditures incurred by Kleinfeldt are probably outside the original requirements. For example, the mold work totaled $310,041.00. Dr. Southward says he cannot say how much of the mold problem comes from the Building Code problems and how much is due to improper maintenance. However, Kleinfeldt incurred costs to install what should have been in the building to the extent of $676,968.00 plus sprinklers in the tenant storage areas. The total of $676,968.00 should be deducted from the damages awarded because those would be costs that Riverside Developments Bobcaygeon Ltd. would have undertaken initially had Phelps done his job correctly. I have taken into account the Finney and Southward reports regarding the remediation work handled by Kleinfeldt Engineering Consultants.

[54] The Plaintiffs have each claimed damages for loss of business reputation. Each claims $500,000 for such damages. I am not satisfied that these claims have been established. No report has been presented in the trial demonstrating damage to the reputation of the Plaintiffs. Without such information, one cannot measure such a damage claim.

[55] Weymouth has a claim for $500,000 for pain and suffering flowing from the experience of this development failing. He advised that he has been treated for stress over the years. No medical report is before the court on behalf of Weymouth indicating depression as a result of all the negative impact of this failed project. Exhibit 57 is a report from Dr. Oldridge filed during the cross-examination of Weymouth. It is a year 2000 letter. The doctor notes treatment of depression in July 2000 as a new diagnosis with the trigger for this development being the problems from this building project. Dr. Oldridge felt that with the past history of depression and the magnitude of the problems with the development, Weymouth was at risk of recurrent depression. The doctor was not called to give evidence at the trial. The evidence does not establish this claim. At best, it demonstrates a person with a history of experience with stress. Weymouth denied being diagnosed with depression. The evidence does not show that this action and the negligence of the Defendants has enhanced Weymouth's susceptibility to stress.

Issue of Set-off of Judgment Assigned to the Municipality by The Bank of Montreal

[56] The Defendants submit that any damages awarded to the Plaintiffs ought to be set off against the judgment the municipality holds by way of assignment of The Bank of Montreal judgment. Section 111 of the Courts of Justice Act. The Plaintiffs oppose any consideration of set-off because it has not been pleaded nor does it comply with the considerations of s. 111 of the Act. The Bank had obtained judgment. I am advised that the Bank assigned the judgment to

the municipality after the municipality paid out the judgment. I understand that the terms of any settlement between the parties regarding the assignment of judgment are to remain confidential. They should not be revealed to me at this trial.

[57] At the commencement of the trial, counsel for the Defendants made reference to some of the terms of the settlement, and counsel for the Plaintiffs submitted that I should not be apprised of that information. At the conclusion of the trial, the issue arose again with Mr. Millard arguing that I should ignore any details of the settlement. During the written submissions, again Mr. Millard asks that I approach the settlement as if I have no awareness of its contents. Mr. Stieber disagrees on the basis that the assignment of The Bank of Montreal judgment is part of the court record and that I can take it into account. Mr. Stieber also submits that even though the Defence has not pleaded set-off, I can implement a set-off of any damages awarded to the Plaintiffs from the judgment held by the municipality on the basis of s. 111 of the Courts of Justice Act.

[58] S. 111 of the Act provides that set-off may be implemented in an action in which one party claims payment for a debt and the other claims to be able to set off the debt from a debt owed to that party. Mutual debts may be set off even if they are of a different nature. The issue is whether a debt can be set off from a damage claim. Some cases have dealt with equitable set-off between liquidated sums and non-debt obligations such as unliquidated claims when the two obligations are so closely bound up that it would be unconscionable to prevent set-off. See Agway Metals Inc. v. Dufferin Roofing Ltd. (1991), 46 C.P.C. (2d) 133 (Ont. Gen. Div.). In Davis v. Spectrix Microsystems Inc. (1987), 63 O.R. (2d) 151 and affirmed at (1988), 69 O.R. (2d) 639 (Div. Ct.), equitable set-off was not allowed because in that case the claim for unliquidated damages did not arise from the same transaction as the contract in which the plaintiff was suing. There, the court found unliquidated damages could not be a set-off of mutual debts as contemplated by the section in the statute. In Hattori Overseas (Hong Kong) Ltd. v. Phillip Cox Agency Inc. (1985), 2 C.P.C. (2d) 257 (Ont. Div. Ct.), unliquidated damages were set off against liquidated damages if the opposing claims arose out of the same transaction or relationship between the parties.

[59] The parties are not involved in the same transaction in the case before me. The judgment now held by the municipality flows from a mortgage between The Bank of Montreal and Riverside Developments Bobcaygeon Ltd. The issues between the Plaintiffs and the municipality in this trial flow from an unliquidated damage claim arising from negligence of a chief building official in approving plans for buildings as well as negligence in inspecting the buildings during construction. Those issues are distinct from the indebtedness between the Riverside Developments Bobcaygeon Ltd. and The Bank of Montreal. Set-off here would not be legal set-off as addressed in s. 111 of the Courts of Justice. It would not be equitable set-off because they are a mixture of liquidated and unliquidated damages that are not flowing from the same transaction. Further, set-off has not been pleaded.

[60] To allow set-off when they are not pleaded would be unfair to the other party. If a settlement is in effect with a proviso that I not be advised of its details, that agreement between parties to litigation should be honoured. To allow one party to circumvent the settlement would be prejudicial to the other. I accept Mr. Millard's submissions that I should not consider any details of the settlement that have been exposed during the trial and written argument following the conclusion

of the presentation of evidence. Regardless of considerations of pleading set-off or revealing the terms of a settlement, I conclude that set-off does not apply through s. 111 of the Courts of Justice Act. They are claims of liquidated and unliquidated damages that do not have a common transaction as their foundation. That means that both legal and equitable set-off do not apply.

[61] Because the issue of set-off and the settlement continued to come up even during the written argument stage of the proceedings, I had the court office check with counsel to see if there was a concern that my being advised of the contents of the settlement had prejudiced the trial process to the extent that a mistrial ought to be declared. Counsel do not want a mistrial; however, they continue to argue the issue. I conclude that there will not be a set-off, and further that I shall ignore details of the settlement as if I were not informed of them. That retains a level playing field for both sides of the trial.

Conclusion

[62] What are the causes of damages sustained by the Plaintiffs? Phelps' negligence in approving plans that should not have been approved together with his negligence inspecting the buildings as they were constructed are the causes of damages here. Dewhurst may have built poorly, but he and his company are bankrupt. The municipality is vicariously liable for the negligence of its employee.

[63] Is there any money owing to the Plaintiffs? The damages awarded to the Plaintiffs are:

[64] To Riverside Developments Bobcaygeon Ltd. $1,160,449.13 for lost historical income together with prejudgment interest at the rate of 5.3%;

[65] To Riverside Developments Bobcaygeon Ltd. $1,524,762.29 for lost equity together prejudgment interest at the rate of 5.3% ;

[66] To Riverside Developments Bobcaygeon Ltd. $23,311.01 for excess costs together with prejudgment interest at the rate of 5.3%;

[67] Riverside Developments Bobcaygeon Ltd. $4,857,852.53 for the mortgage indebtedness together with post-judgment interest at the rate on the judgment debt assigned to the municipality from January 19, 2004 because interest has been calculated to that date at paragraph 50 in these reasons;

[68] To Gordon Weymouth $4,857,852.53 on the guarantee as reflected in a judgment against him together with post-judgment interest at the rate on the judgment debt assigned to the municipality from January 19, 2004 because interest has been calculated to that date at paragraph 50 in these reasons ;

[69] To Gormaw Developments Limited $2,168,449.73 on the guarantee as reflected in a judgment against it together with post-judgment interest at the rate on the judgment debt assigned to the municipality from January 19, 2004 because interest has been calculated to that date at paragraph 50 in these reasons;

[70] Post-judgment interest on the sums for lost historical income, lost equity, excess costs for Riverside Developments Bobcaygeon Ltd. shall be at the rate allowed by the Courts of Justice Act;

[71] Post-judgment interest on the mortgage indebtedness shall be at the same rate as in the judgment obtained by The

Bank of Montreal and subsequently assigned to the municipality. This applies for Riverside Developments Bobcaygeon Ltd., Gormaw Developments Limited, and Gordon Weymouth.

[72] Should the Plaintiffs have mitigated their damages? If they should have and failed to do so, is there any sanction? The Plaintiffs attempted to mitigate damages by working with the municipality to comply with work orders. They worked for over a year attempting to do so. As the situation became worse with tenants leaving during the process, the Plaintiffs needed a considerable amount of money to do what became the Kleinfeldt remedial work. They could not get it from The Bank of Montreal. There was no chance to get it from another lending source. Then, the Bank took over the property so that the Plaintiffs no longer had control of the buildings to do remediation work. The Plaintiffs did as much as they could, but circumstances beyond their control made mitigation impossible. There is no sanction for not doing what they were unable to do because the Bank took over and precluded mitigation.

[73] If there is money owing, to what extent are the Plaintiffs contributorily negligent? There is no contributory negligence attributed to the Plaintiffs.

[74] Should damages owing to the Plaintiffs be set-off by the sum of the judgment of The Bank of Montreal assigned to the municipality? There should not be any set-off allowed.

[75] There will be an allowance of $676,968 for betterment as referred to in paragraph 53 above. This represents remedial work done by Kleinfeldt that would have been installed initially had proper plans been approved and proper inspection been conducted.

[76] Costs may be addressed by written or oral submissions. Counsel are to advise the Trial Co-ordinator's Office within twenty days if and how they wish to address the issue of costs. If there is no communication, I shall assume that costs have been addressed directly by the parties.

[77] If the mathematical calculations set out above have errors, I invite counsel to bring them to my attention for correction.

Justice B. Glass

Released: January 19, 2004

DATE: 20050808

DOCKET: C41333

COURT OF APPEAL FOR ONTARIO

RE: **RIVERSIDE DEVELOPMENTS BOBCAYGEON LTD., GORDON EDWARD WEYMOUTH and GORMAW DEVELOPMENTS LIMITED (Plaintiffs/Respondents) – and – THE CORPORATION OF THE VILLAGE OF BOBCAYGEON, JOHN PHELPS, SPRINGBANK HOMES LIMITED, DEWHURST BROS. CONSTRUCTION (BOBCAYGEON) LIMITED, BANK OF MONTREAL and CANADA MORTGAGE AND HOUSING CORPORATION (Defendants/Appellants)**

BEFORE: **FELDMAN, GILLESE and LAFORME JJ.A.**

COUNSEL: **Alan Lenczner Q.C. and Ryan Breedon for the appellants**

Geoffrey Adair Q.C. for the respondents

HEARD: **July 18, 2005**

On appeal from the judgment of The Honourable Mr. Justice Glass dated January 19, 2004.

ENDORSEMENT

[1] In this case the respondent built four rental buildings in Bobcaygeon. His contractor proposed plans, which he submitted to the municipality for approval and ultimately for a building permit. Those plans were approved by the Chief Building Officer Mr. Phelps, a building permit was issued, the buildings were constructed and they were inspected and approved by Mr. Phelps. After they were completed and occupied, it came to the attention of the parties that the buildings did not comply with the Building Code in the requirement for firewalls. As a result, the tenants vacated, the bank realized on its mortgage and suffered a shortfall. The owner was responsible for that shortfall and also lost all profits from its investment. At trial, the Town admitted liability for negligence in approving the plans, issuing the building permit and in inspecting the buildings as they were constructed. The town was found 100% responsible for the damages suffered by the owner.

[2] The appellant raises four issues on the appeal. The first is an error made by the trial judge in the amount of the award that has been corrected on consent in the judgment.

[3] The second error alleged is the decision of the trial judge not to order set-off of the amount of the judgment on the Banks' mortgage, as the appellant took an assignment of that judgment from the bank.

[4] During the course of oral argument, issues arose regarding the proper amount of the mortgage judgment and the amount that would be set-off, if set-off were to be ordered. The parties agreed to obtain further details of this amount and to provide them to the court. We have now received the parties' submissions. The parties have now agreed that the appellant is entitled to set off the full amount of the assigned mortgage liability. The amount is corrected from the original judgment to $3,416,261.14 plus pre-judgment interest.

[5] The third issue raised by the appellants is the respondent owners' own responsibility for the error in the plans that caused the problems with the buildings. The appellants make three submissions:

a) The contractor drafted the defective plans and applied for the building permit based on those plans as agent for the owner, making the owner responsible for the negligence of the contractor;

b) The trial judge erred in concluding that the owner and the contractor were not joint venturers on the project, and therefore on that basis, the owner was responsible for the negligence of the contractor;

c) As a matter of law, an owner has the primary responsibility *vis-à-vis* the municipality to ensure that the plans submitted for a building permit are correct, so that as a matter of law, the owner must bear some portion of the liability on that basis of contributory negligence.

[6] The respondents' main answer to these arguments is that there was no evidence led at the trial, including expert evidence, that any action by the contractor in preparing and submitting the plans to the municipality fell below the standard of care of a contractor in Bobcaygeon. Therefore, there was no basis upon which the trial judge could have apportioned any liability to the contractor for which the owner could have been responsible as agent or as joint venturer. We agree with that submission.

[7] The trial judge made a specific finding, after considering all the evidence, that the owner and the contractor were just that, and were not partners or joint venturers in this project. That finding is one of mixed fact and law. The trial judge made no palpable and overriding error in reaching that conclusion.

[8] We are satisfied that the statements made by the court in the case of *Ingles v. Tutkaluk Construction Ltd.* (2000), 183 D.L.R. (4th) 193 S.C.C. regarding the primary responsibility of an owner/builder for the plans were made in the context of a contest regarding apportionment, and not as a statement of law applicable regardless of the evidence presented.

[9] We would not give effect to this ground of appeal.

Conclusion

[10] The appeal on the issue of contributory negligence is dismissed.

[11] The judgment will be amended in accordance with the agreement of the parties as set out in counsels' letter of July 28, 2005.

[12] Costs of the appeal to the respondent on the partial indemnity scale fixed at $30,000 inclusive of disbursements and GST.

"K. Feldman J.A."

"E.E. Gillese J.A."

"H.S. LaForme J.A."

COURT FILE NO. 05-CV-285838PD2
DATE: 20051028

ONTARIO
SUPERIOR COURT OF JUSTICE

B E T W E E N:

1218897 ONTARIO LIMITED,
c.o.b. as CASTLE AUTO COLLISION AND MECHANICAL SERVICE

Applicant

- and -

ANN BOROOAH, CHIEF BUILDING OFFICIAL, CITY OF TORONTO and RYDING AUTO BODY LTD.

Respondents

BEFORE: T. Ducharme J.

COUNSEL: R.M. Kanter for the Appellant

R.E. Zuech for the Respondent, Ann Borooah,
Chief Building Official,
City Of Toronto

P. DeMelo for the Respondent, Ryding Auto Body Ltd.

MOTION HEARD: October 3, 2005

ENDORSEMENT

[1] This is an appeal under s. 25 of the *Building Code Act*, 1992, S.O. 1992, c. 23 from the decision of the respondent, Anne Borooah, Chief Building Official ("C.B.O.") of the City of Toronto, to issue Building Permits Nos. 04-105286 and 04-136693 to the respondent, Ryding Auto Body Ltd ("Ryding"), for its property at 1107 Castlefield Avenue (the "Property"). The building permits allow construction of a paint booth and alterations to the interior of the building for an auto body shop at the Property owned by the Ryding. The applicant, Castle Auto Collision And Mechanical Service ("Castle") is a commercial competitor of Ryding and operates an auto body shop at 1117 Castlefield Avenue ("1117 Castlefield") which is located two lots west of the Property. The parties are agreed that since 1987, zoning by-laws have prohibited spray painting and the repair of auto bodies on both the Property and 1117 Castlefield.

[2] Castle takes the position that the C.B.O. issued the building permits in contravention of the relevant zoning by-law. They submit that the building permits were issued on mistaken, false or incorrect information, or in error, since the Property was not continuously used as an auto body shop until March 2005. In the alternative, if the Property was so used, it was not "lawfully used" for this purpose within the meaning of section 34(9)(a) of the *Planning Act*, R.S.O. 1990, c. P. 13 ("*Planning Act*"). Relying on *Saint-Romuald (City) v. Olivier*, 2001 SCC 57 (CanLII), [2001] 2 S.C.R. 898 (S.C.C.) the applicant also claims that Ryder is over-reaching because: (i) the scale or intensity of the proposed activity would bring about a change in the type of use; (ii) the addition of new activities or the modification of old activities is too remote from the earlier activities; and (iii) the new or modified activities create undue, additional or aggravated problems for the municipality, the local authorities or the neighbours, as compared to what went on before.

[3] The respondents take the position that the Property, like the Castle property, enjoys a legal non-conforming use, which allows

them to carry out motor vehicle repairs including spray painting, and the repairing of metal body and fender components. Specifically, they reject the applicant's argument that the pre-existing use was not lawful or was not continuous. They also dispute that the intensification of the activities would change the type of use or is too remote from the earlier activities. Finally, the respondents dispute that the appellant has demonstrated any adverse neighbourhood effects.

ISSUES:

(1) What is the appropriate standard of review of a C.B.O.?

(2) Was the Property used for a non-conforming purpose at the time of the passage of the by-law?

(3) Was the pre-existing non-conforming purpose lawful?

(4) Was the pre-existing non-conforming use continuous?

(5) Does the proposed use violate any of the principles enunciated in *Saint-Romuald*?

(1) What is the Appropriate Standard of Review of a C.B.O.?

[4] On an appeal under section 25 of the *Building Code Act, 1992* the applicant has the burden of demonstrating that the C.B.O.'s decision was not reasonable or that it was wrong in law. There is nothing in the *Building Code Act, 1992* to alter the normal burden upon the applicant to demonstrate error in order to succeed. The burden is on the applicant to prove on a balance of probabilities that the C.B.O.'s decision was not reasonable and that the building permits at issue should be revoked. In attempting to discharge this burden, the applicants may tender additional evidence before the court as may the respondents to the appeal: *William F. White Ltd. v. Toronto (City) Chief Building Official*, (1999), 44 O.R. (3d) 750 at 759 to 760 (S.C.J.).

[5] The more the C.B.O.'s decision is solely an interpretation of law, the closer the standard of review will be to correctness. The more the C.B.O.'s decision is dependant upon factual determinations within the specific expertise of the C.B.O., the more deferential will be the standard. Generally speaking, however, a standard close to correctness will be applied to decisions based on law or jurisdiction and a standard of reasonableness will be applied to questions of fact. Within the standard of reasonableness, the degree of deference or the "weight" to be given to any particular determination will depend on the circumstances. *Runnymede Development Corp. v. 1201262 Ontario Inc.* (2000), 47 O.R. (3d) 374 at 385 to387 (Sup. Ct. Just.)

[6] Municipal planning and zoning are specialized areas that are squarely within the expertise of the C.B.O. This factor supports a greater degree of deference: *Runnymede Development Corp., supra*. In this case, the decision concerning whether the Property enjoys a legal non-conforming use is a question of mixed fact and law and the C.B.O.'s decisions to issue the building permits and not to revoke the building permits are entitled to deference.

[7] A related issue raised by the applicant is whether I should consider only the initial decision or that decision and the subsequent review carried out after the applicant made various inquiries and brought further information to the attention of the C.B.O. Under section 25(4) of the *B.C.A.* the powers of a judge are:

> 25 (4) On an appeal, a judge may affirm or rescind the order or decision and take any other action that the judge considers the chief building official, registered code agency or inspector ought to take in accordance with this Act and the regulations and, for those purposes, the judge may substitute his or her opinion for that of the official, agency or inspector.

As Lane J. put it in *Albert Bloom Ltd v. Bentinck (Township) Chief Building Official*, (1996), 29 O.R. (3d) 681 (G.D.); aff'd, (1996) 29 O.R. (3d) 681 (C.A.) at p. 686, "As to the appeal, the duty of the judge is to do as the chief building official should have done." In my view, one cannot properly assess what the C.B.O. should have done without considering everything he or she did. It would be highly artificial to consider only the initial decision of the C.B.O. – especially since I am to make the decision the C.B.O. should have made based on the amplified record put before me on the appeal. Therefore, I reject the applicant's position and will consider all of the C.B.O.'s actions, both in issuing the permits and in deciding not to revoke them upon review of further evidence.

(2)Was the Property Used for a Non-Conforming Purpose At the Time of the Passage of the By-Law?

[8] The nature of the non-conforming use is not defined by reference to definitions in a by-law. Rather, it must be determined by reference to the use to which the Property was put prior to the enactment of the by-law. This is because the most that Ryder can claim is a right to carry on using the Property for the purpose to which it was in fact previously being put.[1]

[9] Mr. Kanter for the applicant urges me to consider whether or not the Property was previously an auto body shop. This was both explicitly and implicitly a central element of his submissions. However, that is not the proper question. Rather, as Mr. Zuech submits, the proper question is whether or not the activities carried out on the Property before December 7, 1987 were permitted under the terms of the applicable zoning by-law. Under zoning by-law 15955, the Property was located in an "M" Manufacturing District and one of the permitted uses thereunder was as a "motor vehicle repair shop, Class B" which was defined as, "a public garage used as a motor vehicle repair shop, including spray painting and the repairing of metal body and fender components."

[10] Mr. Kanter argues that the prior use did not fall within this definition. First, he challenged the veracity of the two affidavits filed by the previous owner, Mr. Fansabedian. I expressed concern about being asked to make credibility findings based on affidavit evidence alone. All the parties agreed that I could, if I felt it necessary, order a trial of the issue. However, Mr. Kanter was strongly opposed to my ordering a trial of that issue. Ultimately, I decided that it was not necessary to do so. While Mr. Fansabedian's second affidavit is more detailed than the first, it is not inconsistent with the first nor does the greater specificity of the latter provide any cogent reason for disbelieving Mr. Fansabedian.

[11] Mr. Fansabedian deposed in his second affidavit that, after purchasing the Property, his company carried out general auto repairs and engine rebuilding, occasionally changing fenders and hoods and always maintained an area of the building that was dedicated to spray painting. From 1980 to 1992, a municipal licence for "public garage; body and fender work; repairs; spray painting" was renewed yearly. The renewals ceased after the City no longer sent renewal notices. Notwithstanding that a licence was not renewed after 1992, Mr. Fansabedian continued to perform the same operations including the changing of hoods and fenders and spray painting. These operations continued without interruption until a fire damaged the building in 2000. The operations were closed and relocated for nearly a year while the building underwent repairs. At no time was there any intention to abandon any of the previous uses. Normal operations at the Property resumed in 2001 after the building was repaired and they included general auto repairs, engine rebuilding, works related to hoods and fenders as well as spray painting. These operations continued until 2003 when the mortgagee took possession of the Property and sold it to Ryder.

[12] Mr. Kanter submits that "occasionally changing fenders and hoods" is not enough to bring the prior use within the definition of a "motor vehicle repair shop, Class B." First, he argues that that this "occasional" use is only incidental to the principal use of the Property, i.e., general auto repairs. He submits it is necessary to make this decision based on the "principal" use or purpose for which the Property was being used as opposed to any "accessory use."

Second, Mr. Kanter submits that "changing fenders and hoods" is not the same as "repairing metal body and fender components". Third, Mr. Kanter points to the fact that there was no evidence of the following:

(a) spray painting of metal body and fender components;

(b) an enclosed spray booth or exhaust stack as required by the Ministry of Environment;

(c) a Certificate of Approval from the Ministry of Environment;

(d) repairing metal body and fender components;

(e) equipment for straightening auto frames;

(f) invoices to customers for auto body work;

(g) a sign on the premises indicating an auto body shop;

(h) advertisements in the telephone directory or elsewhere; or

(i) any other indicators of auto body work.

I will deal with each of these submissions in turn.

[13] In making his first argument, Mr. Kanter argues that the occasional changing of hoods and fenders and the spray painting carried out by the previous owner amounts merely to an accessory use of a motor vehicle repair shop, Class A. Of course the definition of a motor vehicle repair shop, Class B does not set any minimum levels for such uses – it merely requires that they be done. More seriously, the provisions of the by-law would preclude interpreting these uses as an accessory use. In 1987, the relevant by-law defined an accessory use as " a use … that is naturally and normally incidental, subordinate and exclusively devoted to a principal use." However, the definition of a motor vehicle repair shop, Class A specifically excludes any spray painting or metal fender and body repairs:

> "motor vehicle repair shop, Class A," means a public garage used as a motor vehicle repair shop, exclusive of spray painting and the repairing of metal body and fender components;
> [Emphasis added]

Therefore, in my view, the above uses cannot properly be categorized as accessory uses under the by-law when (1) they are specifically excluded from the definition of motor vehicle repair shop, Class A; and (2) the presence of either use is what distinguishes a motor vehicle repair shop, Class B from a motor vehicle repair shop, Class A. Thus, while the fact this work was only done occasionally is relevant to the question of intensity, discussed at paragraphs 26 to 29, *infra*, it does not mean that the pre-existing use of the Property falls within a motor vehicle repair shop, Class A.

[14] Mr. Kanter's second argument would require the court to draw a distinction between "changing fenders and hoods" and "repairing metal body and fender components". This argument must be weighed in light of the approach to statutory interpretation repeatedly adopted by the Supreme Court of Canada. As Iacobucci, J. noted in *Re Rizzo & Rizzo Shoes Ltd.*, [1988] 1 S.C.R. 27 (S.C.C.) at p. 41:

> Today there is only one principle or approach, namely, the words of an Act are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament.

Thus, when considering the language of a zoning by-law, the words used should be interpreted in their popular, common and ordinary usage rather than in a narrowly legal or technical sense. The words should be interpreted in this manner unless to do so would lead to some absurdity or inconsistency. The distinction Mr. Kanter urges on the court is a technical one that is unsupported by either the scheme or the history of the by-law. Moreover, it ignores the reality that changing fenders and hoods is one way of repairing damaged automobiles – it is one way of repairing metal body and fender components. For both of these reasons I would reject this argument.

[15] Mr. Kanter's third argument is really a variation of his first. The reason that there was no evidence of many of the factors listed in paragraph 12, *supra*, is because of the undisputed fact that the primary use of the Property was not as an auto body shop. But, as I have already said, that is not the question before the court. The by-law does not require that any of the factors listed in paragraph 12, *supra*, be present for the Property to qualify as a motor vehicle repair shop, Class B.[2] It is not the proper role of the court to import such requirements into the by-law. Thus, this argument fails as well.

[16] On the evidence before the court, I am satisfied that the use made of the Property by the previous owner from 1980 to 2003 fell squarely within the definition of motor vehicle repair shop, Class B:

Zoning Definition Component	Activities of Previous Owner
"public garage used as a motor vehicle repair shop"	- general auto body repairs - engine rebuilding - spray painting - changing of hoods and fenders
"including spray painting"	- spray painting (had dedicated area in building for spray painting)
"and the repairing of metal body and fender components"	- changing of hoods and fenders

As such the previous owner's use of the Property fell within the definition of 'motor vehicle repair shop, Class B' at the time the use was no longer permitted.

(3) Was the Pre-Existing Non-Conforming Purpose Lawful?

[17] A legal non-conforming use is defined in s. 34(9) of the *Planning Act* R.S.O 1990, c. P.13 as follows:

> 34(9) No by-law passed under this section applies,
>
> (a) to prevent the use of any land, building or structure for any purpose prohibited by the by-law if such land, building or structure was lawfully used for such purpose on the day of the passing of the by-law, so long as it continues to be used for that purpose;
> [Emphasis added]

[18] As best as I can understand Mr. Kanter's submission here it is that the previous owner's use of the Property was not lawful as the owner did not have the necessary certificate of approval under the *Environmental Protection Act*, R.S.O. 1990, c. E.19 nor did he have the proper facilities such as an enclosed paint booth and an exhaust stack. Mr. Kanter also points to the previous owner's failure to renew the appropriate municipal licence.

[19] This argument depends on an overly broad interpretation of the word "lawfully" in s. 34(9)(a) of the *Planning Act*. I prefer the interpretation of "lawfully" enunciated by Steele J. in *893472 Ontario Ltd. v. Whitchurch-Stouffville (Town)* (1991), 7 M.P.L.R. 296 at 306:

> In my opinion, "lawfully" relates to being lawful under a zoning by-law passed under the *Planning Act*.
> . . .
> any unlawful or illegal matter relating to the use or occupation of the lands outside of the *Planning Act* is irrelevant to the interpretation of section 34 (9) of the *Planning Act*.

Thus, the question of whether the previous owner complied with other statutory requirements, such as those in the *Environmental Protection Act*, is not relevant to the use of the Property under the zoning by-law or the "lawfulness" of the non-conforming use after 1987. Consequently, I find the Property was lawfully used as a motor vehicle repair shop, Class B at the time of the passage of the by-law as well as thereafter.

(4) Was the Pre-Existing Non-Conforming Use Continuous?

[20] To establish a legal non-conforming use under s. 34(9)(a) of the *Planning Act* it is not enough to establish that the Property was used for that purpose when the by-law was passed. Ryding must also demonstrate that the Property "continues to be used for that purpose." Thus, having established that the Property was used as a motor vehicle repair shop, Class B as of December 7, 1987, the respondent must also demonstrate that this use continued from December 7, 1987 to March 2005.

[21] The issue here is whether or not the use has been continuous despite the fire on the Property in 2000 which damaged the building and forced the previous owner to relocate operations for nearly a year. Mr. Kanter points first to the interruption of the non-conforming use caused by the fire. Second he emphasizes what Mr. Fansabedian stated in his first affidavit:

> After we completed the repairs from the fire and restored the Property, we resumed our use of the Property doing general auto repairs and engine rebuilding until I sold the Property to the existing owner.
> [Emphasis added]

The significance of the highlighted portion is the lack of any mention of spray painting or repairing of metal body and fender components after the fire.

[22] If that were all the evidence before me I would agree that the previous use had not been continuous. However, in his second affidavit Mr. Fansabedian elaborated on the impact of the fire as follows:

> We continued to carry on all operations uninterrupted, including spray painting until a fire damaged the building in 2000. The fire resulted in our operations being closed and relocated for nearly a year while we repaired the building so that we could resume operations. At no time did we intend to abandon the Property or to abandon any uses we had enjoyed prior to the fire.
>
> In 2001, after we had completed the necessary repairs to the building, we resumed our normal operations. Those operations included general auto repairs, engine rebuilding, works related to hoods and fenders, as well as spray painting until 2003 when our Mortgagee took possession of the Property and sold same under Power of Sale to the current owners.

Ryding purchased the Property in January 2003 and there is no issue that they intended to use the Property as a motor vehicle repair shop, class B.

[23] As I have already indicated, I do not accept Mr. Kanter's submission that the fact that Mr. Fansabedian's second affidavit is more fulsome suggests that I should view its contents with caution. I accept the contents of both affidavits and do not attach any significance to the fact that spray painting and hood and fender work were not mentioned in the first, very brief, affidavit. Therefore, I will make the determination of continuous use based on the second, more comprehensive affidavit. On the basis of the evidence before me I am satisfied that, during the year when the Property was under repair, Mr. Fansabedian had a *bona fide* intention to continue to use the Property for all the uses it was put to before the fire. Similarly, I accept that after the building was repaired he resumed the same range of uses on the Property.

[24] In *Haldimand-Norfolk (Regional Municipality) v. Fagundes* (2000), 11 M.P.L.R. (3d) 1 (Ont. C.A.) the court dealt with a case where the non-conforming use of a property was interrupted by the extensive damaging of a cottage by a storm. At p. 5 Carthy J.A., for the court, adopted the reasoning in *572989 Ontario Inc. v. North York (City) Committee of Adjustment* (1997), 35 O.M.B.R. 257 (O.M.B.) This is significant in two respects. First, it makes clear that a legal non-conforming use continues even if the use is temporarily prevented or interrupted because of repairs due to a fire. Second, where the previous use has been interrupted by an event such as a fire, a storm or something else beyond the control of the property owners, the requirement of continuity can nonetheless be met where there is a an intention to continue the non-conforming use and that use is continued as far as possible in the circumstances. Applying this test to the present case I find that there was a continuous non-conforming use of the Property.

(5) Does The Proposed Use Violate Any of the Principles Enunciated in *Saint-Romuald*?

[25] In *Saint-Romuald (City) v. Olivier*, 2001 SCC 57 (CanLII), [2001] 2 S.C.R. 898 (S.C.C.) Justice Binnie, for the majority, explained that, in cases such as this, the court's objective "is to maintain a fair balance between the individual landowner's interest and the community's interest." He also made it clear that this type of decision should be grounded in the objective facts of the case. This involves a consideration of both remoteness of the proposed use and its neighbourhood effects. In particular, Binnie J. mentioned three factors to consider suggesting that a landowner would overreach herself or himself if:

> (i) the scale or intensity of the proposed activity can be said to bring about a change in the type of use of the property;
>
> (ii) the addition of new activities or modification of old ones is seen by the Court as too remote from the earlier activities to be entitled to protection; or if
>
> (iii) the new or modified activities can be shown to create undue additional or aggravated problems for the municipality, the local authorities, or the neighbours.

I will consider each of these in turn.

(i) Can The Scale Or Intensity Of The Proposed Activity Be Said To Bring About A Change In The Type Of Use Of The Property?

[26] While I have rejected the applicant's arguments about the scope of the pre-existing non-conforming use, there is no dispute that the proposed use by Ryder will constitute a change in intensity of the use of the Property. However, an increase in intensity alone will not necessarily result in the loss of a legal non-conforming use status. As Binnie J. noted at p. 912 of *St. Romuald*, the previous decision of the Supreme Court in *Central Jewish Institute v. City of Toronto*, [1948] S.C.R. 101 (S.C.C.) has been consistently interpreted to "sanction

increases in intensity of use so long as the same type of use is continued." As a result he concluded at p. 913:

> In general, merely continuing the precise pre-existing activity, even at an intensified level, is clearly protected, but the intensification may be of such a degree as to create a difference in kind.

Indeed at p. 920 Binnie J. stated, "Where the current use is merely an intensification of the pre-existing activity, it will rarely be open to objection." [Emphasis added] The question therefore, is whether the increase in intensification amounts to a change in the type of use on the Property.

[27] In this regard, Mr. Kanter points to the following passage at p. 917 of *St. Romuald*:

> Thus, adding a metal panel beating operation to an automobile repair shop in a residential neighbourhood will probably (despite the logical business affinity) be characterized as a new type of use, whereas a local non-conforming grocer store use that adds an innocuous fax machine -- clearly an activity unrelated to selling groceries -- will likely succeed (assuming someone wished to challenge it) by defining its prior operation as a "convenience store" rather than a "grocery store".

[28] While I appreciate that, given the facts of this case, this passage may seem very felicitous, this argument ultimately fails. In Justice Binnie's example, the addition of a metal panel beating operation is a completely novel use. For the reasons, outlined in paragraphs 11 to 16, *supra*, the aspects of the proposed use that are new are not unprecedented. The current use, colloquially referred to as an auto body shop, is simply the continuation of the previous legal non-conforming use that was made of the Property, albeit on an intensified scale. Moreover, like the previous use it falls within the scope of a motor vehicle repair shop, class B. Thus, applying the principles enunciated by Justice Binnie, it cannot be said that the intensification involved is of such a degree that it changes the essential nature of the use.

[29] I am heartened in this conclusion by Justice Binnie's further comments at p. 920 of *St. Romuald* where he stated:

> Where the current use is merely an intensification of the pre-existing activity, it will rarely be open to objection. However, where the intensification is such as to go beyond a matter of degree and constitutes, in terms of community impact, a difference in kind (as in the hypothetical case of the pig farm discussed above), the protection may be lost.

This clear linkage to community impact suggests that to establish that the intensification has in fact resulted in a change in the kind of use, there must be some evidence of such impact. For the reasons, discussed at paragraphs 31 to 38, *infra*, there is no such evidence before me.

(ii) Are The Proposed Activities Too Remote From The Earlier Activities To Be Entitled To Protection?

[30] The issue of remoteness simply does not arise in this case. The current use is not remote from the previous legal non-conforming use, as it was part of the use made by the previous owner.

(iii) Will The New Or Modified Activities Create Undue Additional Or Aggravated Problems For The Municipality, The Local Authorities, Or The Neighbours?

[31] In assessing the community impact of the proposed use of the Property I am guided by Justice Binnie's direction at p. 921 of *St.*

Romuald, "Neighbourhood effects, unless obvious, should not be assumed but should be established by evidence if they are to be relied upon." Thus in *Watts v. Benvenuti*, [2005] O.J. No. 3254 (S.C.J.) Turnbull J., in dealing with a quarter horse operation, considered affidavit evidence relating to the real impacts of manure piles, ponds of urine, impact on neighbouring wells and the like. Has the applicant demonstrated that the proposed use will have a negative community impact?

[32] In this regard Mr. Kanter has filed three letters written to the municipal planning office from people who operate neighbouring businesses on Castlefield Avenue. The substance of all three letters is identical and they read:

> Re: 1107 Castlefield Avenue
>
> We are business owners/tenants on Castlefield Avenue, west of Dufferin Street. We understand that our area is zoned Prestige Employment which permits retail, office and some industrial uses but does not allow auto body shops.
>
> We object strongly to the apparent attempt to establish a new auto body shop at 1107 Castlefield Avenue. An auto body shop would conflict with our business and clientele and reduce its value.
>
> The City should protect businesses like ours, not permit uses which threaten them. We urge the City to enforce the existing Zoning By-law, which prohibits new auto body shops.

As evidence of adverse impact on the community these letters are not particularly probative for several reasons.

[33] First, they are not under oath. In *Watts v. Benvenuti*, *supra*, the property owner attempted to establish a legal non-conforming use by attaching letters from neighbours attesting to the type of livestock previously kept on the farm. Turnbull J. at para 16 stated, "these letters do no constitute proper evidence before the court on an application and I have disregarded their import in the consideration of this matter." I agree with this approach and, on this basis alone, I would attach no weight to the letters filed by the applicant.[3]

[34] Second, the fact that these letters were word for word identical strongly suggests that they were form letters rather than being an accurate representation of the views of each of the neighbouring businesses.

[35] Third, the letters proceeds on at least one incorrect assumption – that is, that the use by Ryder constitutes a "new" use. It is unclear how informed these neighbouring business people are about either the former use of the Property or, for that matter, the scope of its proposed use.

[36] However, the most glaring deficiency of these letters is that the only suggestion of an adverse community impact is the fact that these owners object to the proposed use and their bald assertion that, "An auto body shop would conflict with our business and clientele and reduce its value". The later assertion is purely conclusory and there are several problems with it. It is not clear what their understanding of the scope of the proposed use is – something obviously relevant to the legitimacy of their complaint. There is also no explanation as to why the owners think there would be such a conflict. This is particularly striking given that the letters come from three very different types of businesses.[4] It is also worth noting that, if this assertion is true, these business owners should be able to explain it by making reference to the operations of the applicant, Castle, who has been operating an auto body shop in their neighbourhood for many years. These limitations, coupled with the fact that the three business owners are obviously working off a

common script, renders these letters virtually useless as evidence of negative community impact.

[37] As to whether or not the proposed use of the property will create undue additional or aggravated problems for the municipality, it is worth noting that the municipal planning office has approved of the proposed use and Ryder has obtained all necessary permits, both municipal and under the *Environmental Protection Act*. While official approval alone may not always be dispositive of this question, in this case it strongly suggests that the proposed use will not cause problems for local authorities.

[38] For all these reasons, I reject the contention that the proposed use will create undue additional or aggravated problems for the municipality, the local authorities, or the neighbours.

CONCLUSION

[39] For all of the foregoing reasons, I find that the decision of the C.B.O. to issue the challenged building permits was reasonable and was not wrong in law. As a result, I would dismiss the applicant's appeal.

COSTS

[40] The respondents are entitled to their costs. If the parties are unable to agree as to the scale and quantum of costs, the respondents shall provide brief written submissions with respect to costs within seven days of the release of this judgment and the applicant shall provide written submissions within seven days of the receipt of the appellant's written submissions.

T. Ducharme J.

Released: October 28, 2005

[1] This right is subject to the caveat that they will be given some flexibility in the operation of that use.
[2] The one exception is "(d) repairing metal body and fender components" but as I have explained in paragraph 14, *supra*, the changing of hoods and fenders satisfies this requirement.
[3] It is worth noting that at para 35 of *Watts v. Benvenuti*, Turnbull J. also rejected evidence tendered in affidavit form as other affidavit evidence led by the respondent rebutted it.
[4] The three companies are Carole's Cheesecake Company, Dalton Engineering and Construction Ltd. and Irpinia Kitchens.

PERTH COURT FILE NO.: 686/05

DATE: 2005/08/25

ONTARIO

SUPERIOR COURT OF JUSTICE

B E T W E E N:	)	
	)	
1514904 ONTARIO LTD., and WILSON BASSILE	)	Peter A. Hargadon, Q.C., and Richard Bosada, Q.C., for the Applicants/Appellants
	)	
Applicants	)	
	)	
- and -	)	
	)	
	)	
THE CORPORATION OF THE TOWN OF MISSISSIPPI MILLS	)	Joseph Y. Obagi, for the Respondent
	)	
Respondent	)	

HEARD: August 19, 2005

REASONS FOR DECISION

Power J.

Nature of the Application

[1] This application involves an appeal to the court by the Applicants pursuant to s. 25(1) of the *Building Code Act*, S.O. 1992, c. 23. That section reads as follows:

Appeal to court

25(1) A person who considers themself [*sic*] aggrieved by an order or decision made by the chief building official, a registered code agency or an inspector under this Act (except a decision under subsection 8 (3) not to issue a conditional permit) may appeal the order or decision to the Superior Court of Justice within 20 days after the order or decision is made.

…

[2] The jurisdiction of a judge hearing the appeal is set out in s. 25(4) of the Act which states:

Power of judge

25(4) On an appeal, a judge may affirm or rescind the order or decision and take any other action that the judge considers the chief building official, registered code agency or inspector ought to take in accordance with this Act and the regulations and, for those purposes, the judge may substitute his or her opinion for that of the official, agency or inspector.

…

[3] This appeal concerns the issuance of a Stop Work Order dated August 4, 2005.

[4] The project with respect to which the stop work order was made is a shopping mall located at 430 Ottawa Street, in the Town of Almonte or, more accurately, the Corporation of the Town of Mississippi Mills (hereinafter "Mississippi Mills").

[5] On August 3, 2005, William Glen Gordon, Chief Building Official of Mississippi Mills, issued an Order to Comply. The order reads as follows:

1. BUILDING IS NOT CONSTRUCTED IN ACCORDANCE WITH PLANS THAT WERE SUBMITTED FOR THE ISSUANCE OF BUILDING PERMIT 04-380. THIS IS A VIOLATION OF SEC.8.(13) ONTARIO BUILDING CODE ACT, 1992 C. 23 AS AMENDED.

2. RESOLUTION OF COUNCIL THAT OTHER APPLICABLE LAWS: ZONING AMENDMENT APPLICATION TO ALLOW WAS DENIED / THEREFORE NECESSARY CHANGES TO COMPLY WITH THE CURRENT ZONING BY-LAWS MUST BE MADE

The inspection on or about AUG. 03/2005 and the Resolution of Planning Committee on Zoning Requirements at the above-referenced address found the following contravention(s) of the Building code or the *Building Code Act, 1992* and with applicable law being zoning requirements. You are hereby ordered to correct the contraventions itemized below immediately,

Item	Reference	Description & Location	Required Action	Compliance Date
#1	Section 8.(13) B.C.A.	All of the Building	Submit required Revised plans / Permit applications necessary.	Immediately before further construction can continue. Resolution of Planning Committee/Council
#2	Other Applicable law	Contravention of Zoning by-law	Compliance with Zoning by-law #1 Size of structure #2 Front yard setback #3 Second floor addition	Plans Submitted and action taken to comply with zoning by-law and Site plan control agreement

[6] Section 8(13) of the *Building Code Act* reads as follows:

Prohibition

(13) No person shall construct or demolish a building or cause a building to be constructed or demolished except in accordance with the plans, specifications, documents and any other information on the basis of which a permit was issued or any changes to them authorized by the chief building official.

…

[7] Section 12(2) of the Act is the authority for the issuance of the aforesaid Order to Comply. This section reads as follows:

Order

(2) An inspector who finds a contravention of this Act or the building code may make an order directing compliance with this Act or the building code and may require the order to be carried out immediately or within such time as is specified in the order.

…

[8] On the following day, August 4, 2005, Mr. Gordon, again on behalf of Mississippi Mills, issued a Stop Work Order pursuant to s. 14(1) of the Act. That section provides as follows:

Stop Work Order

14(1) If an order made under section 12 or 13 is not complied with within the time specified in it, or where no time is specified, within a reasonable time, the chief building official or registered code agency, as the case may be, may order that all or any part of the construction or demolition cease.

[9] The Stop Work Order ordered that all work cease. The relevant part of the order reads as follows:

1. BUILDING IS NOT CONSTRUCTED IN ACCORDANCE WITH THE PLANS THAT WERE SUBMITTED FOR THE ISSUANCE OF BUILDING PERMIT # 04-380. THIS IS A VIOLATION OF SECTION 8.(13). ONTARIO BUILDING CODE ACT, 1992 C. 23 AS AMENDED.

2. COUNCIL RESOLUTION THAT ZONING BY-LAW REQUIREMENTS WERE NOT COMPLIED WITH AND THAT A FULL STOP WORK ORDER REQUIRED, UNTIL DEVELOPER COMES FORTH WITH AN ACCEPTABLE PLAN/REVISED DRAWINGS AND APPLICATIONS NECESSARY TO CORRECT THE DEFICIENCIES.

The inspection on or about AUG. 04/2005 at the above-referenced address found the following contravention(s) of the *Building Code Act, 1992* or the Building Code have not been rectified as required by the Order(s) indicated below:

☐ Order to Comply number 050803 dated AUG. 03/2005

You are hereby ordered to immediately cease construction and/or demolition as specified below:

Item	Details
#1	FULL STOP WORK ORDER ON ALL OF THE BUILDING, FOR NEW CONSTRUCTION EFFECTIVE 4:30 PM AUGUST 04/2005
#2	(ONE ADDITIONAL DAY PERMITTED TO MAKE SAFE AND SECURE THE BUILDING AND SITE) EFFECTIVE FULL STOP WORK ORDR FOR ALL WORK EFFECTIVE 4:30

	P.M. AUGUST 05/2005

Decision

[10] It is my opinion that the Stop Work Order should be affirmed. It is my further opinion that the Chief Building Officer and Mississippi Mills have acted responsibly and reasonably. In the circumstances of this appeal I see no basis upon which I should substitute my opinion for that of the official and/or Mississippi Mills. I should add that the Applicants concede that the official and the municipality have acted within their statutory powers – i.e., there is no lack of jurisdiction. I reach these conclusions based on a consideration of the following background facts:

(a) On May 17, 2004, the Applicants/Appellants submitted an application for the issuance of a building permit. They also submitted a Site Plan Application. In the Building Permit Application they described the work as follows:

"To construct approx 48,000 sq. ft – Shopping Centre."

Notwithstanding this, the Applicants/Appellants, later submitted architectural plans showing the dimensions of the proposed structures as much larger than was permitted in the existing zoning by-law and Official Plan.

(b) On July 13, 2004, Mississippi Mills passed a resolution adopting Zoning By-law #04-47 establishing a "C4-2 - SHOPPING CENTRE COMMERCIAL EXEMPTION 2" permitting the construction of the structure in accordance with the dimensions set forth in the aforesaid building permit application.

(c) In early August the Applicants/Appellants, at the behest of Mississippi Mills, submitted revised building plans outlining that the structure would comprise 47,000 square feet with an additional 12,000 square feet of walking or mall space, for a total of 59,000 square feet. A final Site Plan Agreement was entered into on October 21, 2004. I find that, notwithstanding these developments, the Applicants/Appellants continued throughout to construct a larger mall than was agreed to – one that was consistent with their earlier, more ambitious, plan.

(d) Without posting the required financial security and securing an issued building permit, the Applicants/Appellants proceeded to build the mall in the fall of 2004. Mr. Gordon, the Chief Building Official of Mississippi Mills, on November 12, 2004, issued an Order to Comply and a Stop Work Order under the authority of the *Building Code Act*. The Applicants/Appellants, notwithstanding these orders, continued their construction efforts. Their non-compliance with these orders resulted in Mississippi Mills seeking an injunction from this Court. On December 10, 2004, Hackland J. released the following endorsement:

"It is not contested that the Respondents (the Applicants in this case) are constructing the foundations of a commercial building without a building permit and in the face of a stop work order. This is a flagrant and, as far as the available evidence discloses, unjustified contravention of the Ontario Building Code Act. The Public Interest in requiring compliance with the law outweighs the particular interests

of this builder in proceeding with the pouring of foundations before the ground freezes. The Respondent has had two months to work out satisfactory arrangements with the Applicant (Mississippi Mills) for the posting of security to obtain a building permit and the current emergency is of the Respondents' own making.

An interlocutory and final injunction will issue requiring the immediate cessation of foundation construction or any other form of construction on the premises until the Applicant issues a building permit. The time for service of this Application is abridged *nunc pro tunc*."

Hackland J. ordered the Respondents in the injunction proceeding to pay Mississippi Mills' legal costs.

I pause here to observe that counsel for the Applicants/Appellants in this appeal argue that I, in exercising my jurisdiction on this appeal, should not consider the aforesaid events or any other wrongful conduct of the Applicants/Appellants other than the facts that existed on August 3rd and 4th. I disagree. In my opinion, in August of 2005, the past conduct of the Applicants/Appellants was relevant in a determination by Mr. Gordon and Mississippi Mills as to whether a Stop Work Order would issue and be enforced. I am also of the opinion that this history is relevant to my determination of whether the appeal should be allowed in whole or in part. In determining what was reasonable, Mr. Gordon was entitled to consider how the Applicants might react to the municipality's efforts to enforce its rights and the public's interests.

(e) On December 30, 2004, following compliance by the Applicants with the order of Hackland J., a building permit was issued. I pause again to note that counsel for the Applicants/Appellants further argue that I should look favourably on this compliance by the Applicants. I have some difficulty with this argument for obvious reasons, especially since the issuance of the building permit was conditional upon the Applicants complying with an Addendum to the permit which, among other things, required the Applicants to file a Real Property Report. The Applicants defaulted in the filing of this report notwithstanding letters of demand from the municipality requesting that this and other obligations be met by the Applicants. The purpose of the Real Property Report was to confirm compliance with the required set backs and the Site Plan Control Agreement. In a January 12, 2005 letter to the Applicants, Mr. Gordon said, "3. "Note" only when the above has been completed, in its entirety, should construction continue with the next phase. See attached inspection schedule which is on the back of Construction Permit given to you." The letter of January 12th said, among other things, that "no footings & foundation inspection has been called for or completed." It went on to say that when a footings and foundation inspection is requested, the municipality will require a number of things which the letter went on to detail.

In a May 5, 2005 letter Mr. Gordon said, ""Note" further requests for inspections can be denied without satisfactory completion of previous inspections. Therefore, to avoid any construction delays, thank you for your prompt attention to this requirement."

On May 27, 2005, another Order to Comply was issued as a result of the Applicants' continued failure to comply with various permit conditions and, in particular, their failure to comply with the need for various inspections. A Stop Work Order was threatened. It seems to me that the Applicants did not take seriously the attempts by

Mississippi Mills to ensure that its laws and agreements were enforced.

(f) On June 17, 2005, as a result of a review of the tardy Real Property Report and a site inspection, Mr. Gordon observed that the gross floor area was 62,183 square feet – 3,183 square feet in excess of the approved Site Plans and the Zoning By-law. Counsel for the Applicants argue that, essentially, this is the only violation of relevance with respect to the plans and agreements which is of any significance on this appeal. He further argues that the discrepancy is *de minimis* and not material enough to justify a complete stoppage of work. I disagree. The Applicants' defaults, according to the evidence, were deliberate and serious. The evidence does not support counsel's argument that this situation resulted from an innocent mistake made by the Applicants – i.e., exceeding the authorized building footprint. I do not accept the argument of counsel for the Applicants that this 3,183 square foot issue is the "central issue" nor do I accept that the offer by the Applicants to construct a demising wall to isolate 32,000 square feet justifies allowing their appeal.

(g) As a result of the aforesaid review of the situation as it then existed, Mr. Gordon also noted, and drew to the attention of the Applicants, that the front yard set back measured 12.48 metres (40.8 feet) notwithstanding a requirement of 15 metres (49.2 feet). He further observed that the building was closer to the lot lines than the distances allowed in the approved Site Plan.

(h) In a Memo dated June 21, 2005, Forbes Symon, the Municipal Planner, reported these developments to the Mayor and council. Mr. Gordon had earlier apprised the Applicants of these concerns. On June 17, 2005, Mr. Gordon asked the Appellants to stop work until all issues were resolved.

(i) On June 23, 2005, the Applicants wrote to the Planner indicating that they had decided to "proceed with all requisite applications to correct any and all discrepancies with respect to the above-noted project." They continued their work on the project in the meantime.

(j) On June 30, 2005, Mr. Gordon issued another Order to Comply requiring the Applicants to cease all work on any part of the north/south wing of the structure and to obtain a revised Site Plan and all necessary variance applications. The order further outlined that a FULL STOP WORK ORDER would be issued in the event of non-compliance.

(k) Notwithstanding this, the Applicants did not cease their construction efforts. Accordingly, on July 4, 2005, Mr. Gordon issued a partial Stop Work Order requiring the Applicants to comply with certain listed items and to cease all work on any part of the north/south wing.

(l) At that point in time, the Applicants retained the services of a leading firm of planning consultants who advised the municipality that they would be proceeding with an application to amend the Zoning By-Law in order to validate the aforesaid breaches. This would involve an application to the Ontario Municipal Board. They also notified the Planner that the application to amend the Zoning By-Law would include an application to allow for a second floor office

and storage area. This latter reference was a surprise to the municipality which quickly learned that construction to this effect had, and was, already taking place (i.e., a second floor office and storage area). The Applicants delivered a modified Site Plan. Mr. Gordon, at this time, noted that two steel columns had been erected in the north/south wing despite the partial Stop Work Order.

(m) Accordingly, on July 28, 2005, Mr. Gordon revoked the building permit. His letter to this effect reads as follows:

"**NOTICE that Building Permit 04-380 is hereby revoked.**

(1) Based on Section 8. (10)(a), Ontario Building Code Act, 1992, c. 23 as amended and based on incorrect information submitted for the issuance of the above building permit.

(2) Based on Section 8-(12), Ontario Building Code Act, 1992, c. 23 as amended in that you failed to provide Notice of Change made to the plans which were submitted for the issuance of Building Permit # 04-380.

(3) Based on Section 8-(13), Ontario Building Code Act, 1992, c. 23 as amended in that you did construct a building not in accordance with the plans which were submitted for the issuance of Building Permit # 04-380.

(4) Based on Section 2.3.2.1 (1), Ontario Building Code Regulation, 1992 as amended requires that an Architect be retained to undertake the general review of the construction of the building. Information revealed that the Architect retained by you for the issuance of the permit is no longer involved in the review of the construction.

The Building By-law #00-75 for the Town of Mississippi Mills allows for the re-submission of plans to make a change to a plan, or specification which was submitted for the issuance of the original permit and that such application shall be made in the same manner as for the original permit. Additional permit fees may also be charged.

Your cooperation in this matter is greatly appreciated."

…

(n) At the same time, Mr. Gordon issued another Order to Comply requiring the submission of revised plans. As well, he issued another Stop Work Order. The Applicants were required to immediately stop work. They did not comply with this. Mr. Gordon then provided a detailed written report of these developments to the municipal council. He explained to council that the Applicants, therefore, would be required to apply for a new building permit addressing the various default issues.

(o) On July 29, 2005, a Conditional Building Permit was issued to allow work to proceed in the east/west wing with regard to items which had previously been approved.

(p) The Planner reported to council on July 28, 2005, with respect to the Applicants' application to amend the Zoning By-law. He recommended that council refuse the proposed amendments on the grounds that the application "has not been proven to have planning merit and is not in the public interest."

(q) On August 2, 2005, at a public meeting, the Planning & Economic Committee (a committee of the council as a whole) recommended denial and council did, indeed, deny the application. The earlier quoted August 3rd Order to Comply and the August 4th Stop Work Order followed. These were followed by the issuance of a further full Stop Work Order on August 10, 2005. The newly retained Planner for the Applicants, on August 10, 2005, advised Mr. Gordon that the Applicants had instructed him to advise that they were willing to enter into an undertaking with the municipality whereby they "would leave the proposed second floor office/storage area as a void with no floor and with no access if the Town would partially lift the Stop Work Order so that he [they] can continue construction on the north wing of the mall as was previously allowed, pending a final resolution of this matter by the Ontario Municipal Board." (I note that the parties estimated that it would take at least six months for the application to reach the Ontario Municipal Board.) Further settlement proposals were made on August 15, 2005, but were not acceptable to the municipality. I can find no fault in the Respondent's rejection of these proposals.

Position of the Applicants/Appellants and the Municipality

[11] In addition to my earlier comments with respect to the position taken by the Applicants on this appeal, they submit that the building is and will continue to suffer damage from exposure to the elements. I heard no detailed evidence concerning the exact degree of completion of the mall. It is obvious, however, that construction has proceeded to a significant degree. The Applicants argue that if they are required to comply with the municipality's demands they will lose a significant amount of money and, indeed, the continuation of the Stop Work Order will threatened the viability of the project. They submit that the costs of demolishing and rebuilding the front wall in order to reduce the size of the shopping centre and eliminate the front yard encroachment will, in and of itself, cost them $251,590.

[12] These "wounds" or injuries, even if completely accurate, are, of course, self-inflicted ones. The evidence shows that, from the beginning, the municipality has sought, unsuccessfully, to persuade the Applicants to comply with their various legal obligations. However, the Applicants proceeded otherwise. I find it difficult to conclude that the negative consequences that flow from the Applicants' conduct should be used as a reason for determining that the municipality has acted unreasonably or that it would be unreasonable for me at this time not to accede to the Applicants' various proposals to mitigate the consequences of their conduct. The Applicants argue that, pursuant to s. 12(2) of the *Building Code Act*, the municipality, or its officials, must exercise a discretion prior to issuing Orders to Comply or Stop Work Orders where there are contraventions of the Act or the *Building Code*. As aforesaid, they argue that the municipality has gone too far and has failed to consider their, [the Applicants'] proposals for a solution. They submit that, at the very least, the Stop Work Order should have been issued only with respect to the excess square footage issue.

[13] On the other hand, the municipality argues that the abuses in this matter have been continuous and flagrant. They note that s. 8(13) of the Act contains a clear prohibition against conduct such as we have in this case – i.e., "no person shall construct or demolish a building or cause a building to be constructed or demolished except in accordance with the plans, specifications, documents and other information on the basis of which a permit was issued or any changes to them authorized by the Chief Building Official." They submit that the issuance of the challenged Stop Work Order was a reasonable act on the part of the Respondent until revisions to the various plans and permit are, if possible, agreed to.

Case Law with respect to s. 25 of the *Building Code Act*

[14] As aforesaid, s. 25(1) of the Act allows for an appeal to the court by "a person who considers themselves aggrieved by an order or decision made by the chief building official." In *Giangregorio v. Hamilton (City)*, [2001] O.J. No. 5670 (Ont. Sup. Crt.), Matheson J. considered s. 25. He noted that the court, under s. 25(1), sits as a Court of Appeal from a decision of the Chief Building Official. At para. 17 of his decision he quoted with approval from the decision of Stinson J. in *William F. White Ltd. v. Toronto (City) Chief Building Official*, 44 O.R. (3d) 750, as follows:

> I conclude that an appellant under s. 25 of the [Building Code Act] has the burden of demonstrating by means of evidence placed before the court that the decision below was not reasonable or that it was wrong as a matter of law. In attempting to discharge that burden the appellant may tender additional evidence before the court, as may the respondents to the appeal. …

[15] Matheson J. went on to note that Stinson J. held that the decision of the Chief Building Inspector would be set aside if it was "wrong as a matter of law." Where issues of legal interpretation are concerned, he would apply a standard of correctness. On other questions, Stinson J. noted that a standard of reasonableness should be applied. As aforesaid, there is no issue in the present case with respect to the jurisdiction to make the Stop Work Order. The issue before me is that of "reasonableness".

[16] Matheson J. said:

> … the customary restraint appropriate for an appellate tribunal should be exercised. In other words, the fundamental issue to be addressed is to determine whether or not the board's decision was reasonable on the evidence having regard to the legal principles applicable. Stated otherwise, it is not this court's role simply to substitute its decision for that of the board's simply because it may, or even would have arrived at a different decision had it been the tribunal of first instance.

…

[17] I pause to repeat my earlier finding that, in my opinion, there was nothing unreasonable with respect to the various decisions of Mississippi Mills and, in particular, with the issuance of the challenged Stop Work Order.

[18] A similar standard of review was propounded by Howden J. in *Rotstein v. Oro-Medonte (Township)*, [2002] O. J. No. 4990 (Ont. Sup. Crt.) and *Runnymede Development Corp. v. 1201262 Ontario Inc.* reflex, (2000), 47 O.R. (3d) 374.

Conclusion

[19] As aforesaid, and for the above reasons, the appeal and this application are dismissed.

Costs

[20] Counsel agreed, prior to the release of this decision, to fix costs at the sum of $7,500 plus GST, subject to each party's right to argue for or against entitlement. I find the amount of $7,500 to be reasonable and, therefore, each party shall have until the end of September 2005 to make brief written submissions regarding entitlement.

Power J.

Released: August 25, 2005

PERTH COURT FILE NO.: 686/05

DATE: 2005/08/25

DATE: 20060508
DOCKET: C43573

COURT OF APPEAL FOR ONTARIO

SIMMONS, CRONK and ROULEAU JJ.A.

B E T W E E N :

ESSEX 143 JOINT VENTURE LTD.	**Michael Fleishman**
Applicant (Respondent in Appeal)	**for the appellant**
- and -	
HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO as represented by THE MINISTER OF TRANSPORTATION	**Myron W. Shulgan, Q.C.**
Respondent (Appellant in Appeal)	**for the respondent**

Heard: February 10, 2006

On appeal from the order of Justice Anthony E. Cusinato of the Superior Court of Justice dated April 28, 2005.

ROULEAU J.A.:

[1] This appeal invites this court to consider the scope and application of s. 38(2)(f) of the *Public Transportation and Highway Improvement Act*, R.S.O. 1990, c. P.50 (the *P.T.H.I.A.*).

[2] In March 2005, Essex 143 Joint Venture Ltd. (the developer) applied for an order determining its rights under s. 38(2)(f) of the *P.T.H.I.A.* In particular, it asked whether it had to obtain a permit from the Minister of Transportation before it could proceed with a proposed residential subdivision located within 800 metres of a controlled-access highway.

[3] By order dated April 28, 2005, the application judge granted declarations that a residential development is not a use of land that is subject to the Minister's approval pursuant to s. 38(2)(f) of the *P.T.H.I.A.* and that the developer was permitted to proceed with its residential development without a permit from the Minister under s. 38(2)(f).

[4] The province appeals the order on several bases, including that the application judge erred by incorrectly characterizing the development as being residential when the uncontradicted evidence established that it was the residential phase of a mixed-use (residential/commercial) development.

[5] For reasons that follow, I would grant the appeal, set aside the application judge's order and substitute in its stead, a declaration that the respondent requires a permit under s. 38(2)(f) of the *P.T.H.I.A.* prior to proceeding with the proposed residential subdivision. In my view, the application judge framed the issue too narrowly. The facts of this case required him to consider the context in which the residential development was proceeding. This context included the fact that the residential development was a part of a mixed-use development that had already received a permit allowing the first commercial phase of the development to proceed.

Background

[6] The developer owned a 140-acre parcel of land adjacent to Highway 3 in the Town of Essex. It proposed a mixed-use development for the site. Approximately eighty-three acres would be for residential use and the balance for commercial use.

[7] From the outset, the developer recognized that, in order for it to develop these lands, it would have to obtain amendments to the official plan, zoning changes and permits pursuant to the *P.T.H.I.A.* The relevant sections of the *P.T.H.I.A.*, sections 38(2)(f) and 38(11), read as follows:

38 (2) Despite any general or special Act, regulation, by-law or other authority, no person shall, except under a permit therefor from the Minister,

…

(f) use any land, any part of which lies within 800 metres of any limit of a controlled-access highway, for the purposes of a shopping centre, stadium, fair ground, race track, drive-in theatre or any other purpose that causes persons to congregate in large numbers; or

…

38 (11) The Minister may issue permits under this section in such form and upon such terms and conditions as he or she considers proper and may in his or her discretion cancel any such permit at any time.

38 (2) Malgré toute autre loi générale ou spéciale, un règlement, un règlement municipal ou une autre autorité, nul ne doit, sauf en vertu d'un permis délivré par le ministre accomplir l'un des actes suivants :

…

f) utiliser un bien-fonds dont une partie est située dans les 800 mètres d'une limite d'une route à accès limité, aux fins d'un centre commercial, d'un stade, d'un champ de foire, d'un terrain de courses, d'un ciné-parc ou à d'autres fins qui donnent lieu à un rassemblement nombreux de personnes;

…

38 (11) Le ministre peut délivrer des permis en vertu du présent article dans la forme et aux conditions qu'il estime appropriées et, s'il le juge opportun, annuler ces permis.

[8] In 2000, the developer took steps to secure the approvals required to allow the project to proceed.

[9] In March 2000, the transportation planning consultant retained by the developer advised the Ministry of Transportation about the proposed mixed-use development and asked the Ministry what concerns it may have that should be addressed in the traffic study that the consultant was undertaking.

[10] The Ministry responded, advising that the development came within the Ministry's permit control area and would require Ministry permits and approvals prior to construction.

[11] Also in 2000, the developer sought changes from the Town of Essex to the industrial zoning and official plan designations of the property. The changes were to reflect the proposed mixed residential/commercial use of the land.

[12] On January 15, 2001, the Town of Essex passed a by-law giving its approval to the requested changes to the official plan and directing that the proposed changes be submitted to the Ministry of Municipal Affairs and Housing for its approval.

[13] When official plan amendments are submitted to the Ministry of Municipal Affairs and Housing, they are circulated within the government and, as part of this process, a determination of the need for the issuance of Ministry of Transportation permits pursuant to s. 38(2)(f) of the *P.T.H.I.A.* is made. The potential traffic generation and traffic volumes are significant factors in making this determination.

[14] In this case, upon review of the proposed changes, the Ministry of Transportation determined that "commercial building/land use and sign permits" were required.

[15] The amendments to the official plan and the zoning changes were implemented.

[16] As part of the ongoing communication between the developer and the Ministry of Transportation, the developer advised that it wished to proceed with the development of the property in phases. Phase 1 concerned a commercial use portion of the development, consisting of a grocery store, a Canadian Tire store and an automobile dealership, as well as the associated parking.

[17] In response to the developer's application for a permit under s. 38(2) of the *P.T.H.I.A.* to proceed with phase 1, the Ministry of Transportation advised that, prior to issuing a permit for the phase 1 portion of the development, certain improvements to an intersection had to be carried out. The Ministry indicated to the developer that once an agreement was reached on the required improvements, the Ministry preferred entering into an agreement with the Town of Essex for funding and implementing the improvements and the Town could then recover these costs from the developer.

[18] Agreement was then reached on the needed improvements and, as proposed by the Ministry, it entered into a June 30, 2004 agreement with the Town of Essex to fund and implement the improvements to the intersection required to allow phase 1 to proceed. Significantly, a recital in that agreement stipulated that the development, defined as the entire parcel, came within the permit provisions of the *P.T.H.I.A.* The agreement also provided that the permit that was to be issued authorizing phase 1 would have annotated to it the stipulation that the permit was subject to the terms of the June 30, 2004 agreement. On the record before us, it does not appear that the developer challenged the Ministry's inclusion of this condition to the issuance of the permit for phase 1.

[19] After proceeding with the commercial phase of the mixed-use development, the developer determined to proceed with the residential phase. The residential phase involves approximately 400 residential units on eighty-three acres of the site. Rather than applying for the issuance of a permit pursuant to s. 38(2)(f) of the *P.T.H.I.A.*, the developer brought the present application.

Position of the parties before the application judge

[20] On the application, the developer took the position that s. 38(2)(f) of the *P.T.H.I.A.* has no application to residential uses and that it applies only to land located within 800 metres of a controlled access highway where the land was to be used as "a shopping centre, stadium, fairground, racetrack, drive-in theatre or any other purpose that causes persons to congregate in large numbers". It argued that the phrase "any other purpose that causes persons to congregate in large numbers" should be read in the context of the listed purposes. According to the developer, the common theme of the listed purposes was that they would all cause large numbers of people to exit the premises at the same time, thereby causing traffic congestion. The proposal to build residences on eighty-three acres of the site was therefore outside of the scope of the Act.

[21] The province submitted that the general purpose of the *P.T.H.I.A.* is to control traffic and that the Minister's discretion to refuse or grant a permit must be exercised having regard to traffic planning requirements (see: *Re Multi-Malls Inc. v. Ontario (Minister of Transportation and Communications)* (1977), 14 O.R. (2d) 49 (C.A.)). It then took the position that:

(a) under s. 38(2)(f) of the *P.T.H.I.A.*, the entire 140 acre mixed-use residential/ commercial development proposed by the developer required permits from the Minister of Transportation; and

(b) in any event, the proposed residential sub-division phase of the development, by itself, would cause people to congregate in large numbers as compared to the previous use of the land as a vacant field.

Analysis

[22] In reaching the decision that "a Minister's permit for residential development is not required within the provisions of s. 38(2)(f)" of the *P.T.H.I.A.*, the application judge, in my view, framed the issue too narrowly. The issue before him was not whether s. 38(2)(f) of the *P.T.H.I.A.* contemplated that a residential development in the nature of the developer's proposed residential phase, as a stand alone project, would require a permit from the Minister of Transportation. Rather, the issue was whether, on the facts of this case, the residential phase of the mixed-use development required a permit before the developer could proceed. The residential phase of the project could not be dealt with in isolation. I say this for two reasons.

[23] First, although the application judge found that the developer did not concede that a permit was required for the residential use, it is clear that it was contemplated from the outset that the residential portion of the development would be part of one single mixed commercial/residential project. The conduct of both the developer and the Ministry of Transportation was consistent with this approach.

[24] The developer represented the project as a mixed-use development in the original contact made with the Ministry by its transportation planning consultant in March 2000. The developer continued to take this position throughout the process of amendment to the official plan and in the application for the phase 1 permit.

[25] The Ministry also considered the whole of the development as one project. It is apparent that, from the Ministry's perspective, phase 1 approval was granted on the understanding that the developer would prepare a traffic impact study and apply for permits before proceeding with any further phase of the development. The Ministry did indicate that the actual traffic volumes experienced at the intersection as a result of having proceeded with phase 1 may well impact on the need for additional highway improvements to support further phases.

[26] Further, the Ministry of Transportation consistently responded to the developer on the basis that the whole of the development was subjected to the permit requirements of the *P.T.H.I.A.* This position is reflected in the agreement entered into between the Minister and the Town of Essex that allowed phase 1 to proceed. As I noted previously, this agreement specified that the permit issued to the developer for phase 1 would be made subject to the terms of the agreement.

[27] Second, making the phase 1 permit subject to the terms of the agreement between the Town of Essex and the Ministry served to confirm that the permit requirements of s. 38(2)(f) of the *P.T.H.I.A.* extended to all phases of the mixed-use development. The imposition of terms and conditions on the issuance of a permit is authorized by s. 38(11) of the *P.T.H.I.A.* In my view, by making the permit subject to the terms of the agreement between the Town of Essex and the Ministry, these terms became "terms and conditions" of the permit as contemplated by s. 38(11). The imposition of those terms and conditions was not challenged by the developer and they must therefore be complied with.

[28] Specifically, the recital in the agreement that the "development [meaning the full 140 acres] comes within the scope of the permit provisions of sections 2, 38(2)(a), (b), (c), (d), (e), (f) and 38(11), of the [*P.T.H.I.A.*]", when considered in the light of the Ministry's and developer's consistent position to that point that it was a mixed-use project, clearly indicates that the approval of the permit for phase 1 was given on the understanding and condition that the developer obtain permits for all future phases of that mixed-use development. The developer cannot now seek to disaggregate the mixed development and proceed with each portion of the development as a separate stand-alone project.

[29] Having reached this conclusion, it is not necessary for me to determine whether, standing alone, a residential development of the type proposed by the developer would fall within the terms of s. 38(2)(f) of the *P.T.H.I.A.* or whether, when one phase of a development requires a permit, the Act allows the Minister to require that all phases of the development be subject to permits.

Disposition

[30] In the result, I would allow the appeal, set aside the application judge's April 28, 2005 order in its entirety and substitute in its stead a declaration that the respondent requires a permit under s. 38(2)(f) of the *P.T.H.I.A.* prior to proceeding with the proposed residential subdivision.

[31] Costs should follow the event both here and below. Accordingly, the appellant is entitled to its costs on a partial indemnity basis fixed at $7,000 for the appeal and $10,000 for the proceedings below, inclusive of GST and disbursements.

"P.S. Rouleau J.A."

"I agree J.M. Simmons J.A."

"I agree E.A. Cronk J.A."

RELEASED: May 8, 2006

[2003] O.J. No. 4530
Court File No. 03-DV-857

The Corporation of the City of Ottawa, applicant,
and
The Chief Building Official of the City of Ottawa Ms. Arlene Grégoire, respondent,
and
1479333 Ontario, Inc., intervenor

Ontario Superior Court of Justice
Divisional Court - Ottawa, Ontario
Cusson, Métivier and Linhares de Sousa JJ.

Heard: September 2 - 4, 2003.
Judgment: November 21, 2003.

Counsel:

J. Bruce Carr-Harris and Jane M. Bachynski, for the applicant (appellant on the appeal/respondent on the cross-appeal).
William R. Hunter, for the respondent (respondent on the appeal and cross-appeal).
Ronald F. Caza and Josée Lafontaine, for the intervenor (respondent on the appeal/appellant on the cross-appeal).

The judgment of the Court was delivered by

¶ 1 **LINHARES de SOUSA J.**:— The matter before this Court concerns an appeal and cross-appeal brought pursuant to s. 26 of the Building Code Act, 1992, c. 23 as amended (the BCA). The Appellant, The Corporation of the City of Ottawa (the City of Ottawa) appeals the judgment of Roy J. dated March 18, 2003, [2003] O.J. No. 1945. In that decision, Roy J. dismissed, in part, the City of Ottawa's appeal, brought pursuant to s. 25(1) of the BCA, from the decision of the Respondent, the Chief Building Official of the City of Ottawa, Ms. Arlene Grégoire (the CBO). The CBO's decision that the City of Ottawa wishes overturned is the decision to issue a building permit, dated October 17, 2002, to the Respondent, 1479333 Ontario Inc. (the Intervenor), authorizing renovation/alteration work to proceed on a property located in the City of Ottawa, at 339 Lafleur Road (the Property), in connection with the operation of an intensive commercial pig farm, consisting of 1,045 sows. In its appeal, the City of Ottawa seeks to have the issued building permit rescinded and not issued again until the Intervenor has complied with certain conditions that the City of Ottawa has stipulated in clause (b) of its Notice of Appeal (see Appeal Book, vol. 1, tab. 1).

¶ 2 The Intervenor cross-appeals from the decision of Roy J. in that same judgment whereby he concluded that the CBO was wrong in law in finding that the Intervenor had a legal non-conforming use on the Property, permitting it to conduct a commercial pig farm of a maximum of 1,045 sows. Roy J. amended the building permit issued by the CBO to allow for the operation of a pig farm with a maximum number of 750 pigs, in accordance with an existing interim control by-law passed by the City of Ottawa on September 12, 2001. The Intervenor seeks to have confirmed the building permit issued by the CBO on October 17, 2002 recognizing their right to a legal non-conforming use for the operation of a pig farm with 1,045 sows.

¶ 3 The Intervenor was also seeking leave to appeal the order of Roy J. dated June 10, 2003 dealing with the question of costs of the application before him. However, it was determined that this panel would not deal with that question. Consequently, it was not addressed.

ISSUES

¶ 4 The issues on the appeal brought by the City of Ottawa are the following:

1. What is the appropriate standard of review by this Court on the appeal?

2. Was the Application Judge correct in concluding that a proper interpretation of the term "other applicable law", pursuant to s. 8(2) of the BCA, excluded, as a category, the environmental statutes at issue here, namely, the Ontario Water Resources Act, R.S.O. 1990, c. C.40 (the OWRA), the Fisheries Act, R.S.C. 1985, c. F.14 (the Fisheries Act) and the Environmental Protection Act, R.S.O. 1990, c. E. 19 (the EPA)?

3. Was the Application Judge correct in concluding that, even if any of the three environmental statutes could be considered "other applicable law", they were nonetheless inapplicable to this case on a proper interpretation of their provisions?

¶ 5 The issues on the cross-appeal brought by the Intervenor are the following:

1. What is the appropriate standard of review by this Court on the cross-appeal?

2. Did the Application Judge err in refusing to recognize the right of the Intervenor to a legal non-conforming use on the Property, as the CBO had so determined?

BACKGROUND FACTS

¶ 6 Sylvio Ouellette & Sons Farms Limited operated the Property through four generations as a family dairy farm. In September 2001, Messrs. Mario Cote and Luc Fontaine incorporated the Intervenor, 1479333 Ontario Inc., and through amalgamation, bought out the Ouellette family dairy farm.

¶ 7 Messrs. Cote and Fontaine operate at least one pig farm together in the Province of Quebec. However, Mr. Cote is also involved in a large number of hog producing partnerships and corporations in that Province which collectively produce approximately 500,000 pigs for slaughter annually. Mr. Cote is one of the largest pig farmers in the Province of Quebec.

¶ 8 In July 2001, the Intervenor filed a building permit application with the City of Ottawa to, among other things, renovate three existing barns and construct two additional barns on the Property at a cost of approximately one million dollars. The plan is to operate a farrowing hog farm. It was intended that the renovated buildings would accommodate 2,831 sows. This initiative was to be the first hog operation undertaking in Ontario by Mr. Cote. At the time that the Intervenor filed his building permit application with the City of Ottawa, there was no legal impediment to the commencement of such an agricultural undertaking. The zoning of the Sarsfield farm was agricultural use which included the use of buildings for "the raising, boarding and keeping of all forms of livestock". The zoning by-laws did not regulate the number of livestock permitted on a farming operation.

¶ 9 As part of his plans for the farrowing hog farm operation, the Intervenor began to work voluntarily with the Ontario Ministry of Food and Agriculture (the OMAF) to develop a Nutrient Management Plan to ensure the approved use of the nutrient fertilizer generated by the hogs. This Plan involved state of the art technology (VUUS) including such things as injecting the nutrient fertilizer into the soil as opposed to spreading it on the surface of the land as was done in the previous dairy farm operation and being able to monitor the soil conditions at all times. The most efficient use of the nutrient fertilizer generated by the pigs is to add it to the fields to fertilize the mostly corn crops which, in turn, would be used to feed

the pigs. The Intervenor's Nutrient Management Plan was approved by the OMAF.

¶ 10 At the time of the Intervenor's building permit application, there was no legal requirement to submit a Nutrient Management Plan to the OMAF before starting a hog operation. Since that time, the Nutrient Management Act has been passed, being proclaimed in July 2003. The purpose of this Act is to provide for the management of materials containing nutrients in ways that will enhance protection of the natural environment and provide a sustainable future for agricultural operations and rural development. All users and producers of nutrients in Ontario will have to meet the requirements of this legislation, depending on their size, in one or two years.

¶ 11 Following the Intervenor's first building permit application, dated July 20, 2001, the City of Ottawa passed, on September 11, 2001, an interim control by-law, pursuant to s. 38 of the Planning Act, prohibiting intensive livestock operations in the City which, in the case of the proposed hog operation, meant no more than 750 sows.

¶ 12 In response to the interim control by-law, the Intervenor then attempted to establish a claim for a legal non-conforming use pursuant to s. 34(9) of the Planning Act. The position taken by the Intervenor is that the Ouellette family operated a dairy farm with 209 cows, prior to the interim control by-law. Accordingly, they had 59 dairy cows beyond the limit provided by the interim control by-law and therefore, the Intervenor would be entitled to 209 livestock units, which translates into 1,045 sows.

¶ 13 At the same time, the Intervenor also submitted a new building permit application requesting permission to do renovations and alterations on the Property, now estimated to be in an amount of $200,000, to accommodate 1,045 sows.

¶ 14 In the summer and fall of 2002, the Intervenor's intended hog operation continued to be a hotly contested issue among City of Ottawa residents. The City of Ottawa passed a Resolution, among other things, specifically requesting that the CBO not issue the building permit to the Intervenor. The Intervenor responded with an application for judicial review to compel the CBO to issue the building permit for which they had applied.

¶ 15 It is well established in the jurisprudence that, pursuant to s. 8(2) of the BCA, the CBO, having properly considered the provisions of the BCA, the Building Code and "other applicable law" to ensure they will not be contravened, is required to issue a building permit, even if the will of the City of Ottawa's residents, as expressed through City Council, is otherwise. The independence of the CBO and her lack of discretion in this regard were not contested by the parties. The CBO issued the building permit to the Intervenor on October 17, 2002. The project for which the building permit was issued is described as: "to alter interior of an existing barn to accommodate a hog farm".

¶ 16 The City of Ottawa appealed the decision of the CBO to issue the building permit to the Intervenor. The matter came before Roy J. for a hearing. In view of the fact that the parties required some time to file affidavit material to argue the application and to proceed with discoveries and, in view of the fact that the Intervenor was proceeding with their renovation plans, Roy J. ordered a stay of the building permit on December 20, 2002 until he rendered his decision in the matter.

¶ 17 His decision was released on March 18, 2003. It did not revoke the building permit issued to the Intervenor. Roy J. did, however, overturn the conclusion of the CBO with respect to the Intervenor's claim for a legal non-conforming use on the Property. He limited the maximum number of sows in the pig farm operation to 750 sows in accordance with the interim control by-law passed by the City of Ottawa on September 11, 2001.

¶ 18 On April 16, 20031 the City of Ottawa filed this appeal before the Divisional Court. In view of the pending appeal, the City of Ottawa requested that the Court, once again, stay the building permit issued to the Intervenor until the matter was decided by this Court. The stay was granted on May 27, 2003 by Lalonde J., [2003] O.J. No. 2292, who concluded that the "balance of convenience favours the Appellant [the City of Ottawa], in view of the potential for serious repercussions to arise from the pig farm, and the status quo should be maintained as it presently exists, that is without the pigs" (see Appellant's Book of Authorities, tab. 1). Lalonde J. also expedited the hearing before this Court.

DECISION OF ROY J.

¶ 19 In considering the standard of review with which he was to decide the case before him, Roy J. indicated that the main issues before him rested on matters of law rather than fact. He concluded, with the apparent agreement of the parties, that the appropriate standard of review "would be a blend of two tests, namely a standard of correctness for questions of law, and a standard of reasonableness for the question of fact" (para. 12). He went on to say that because his decision was more a determination of law than fact, then the standard will be closer to correctness than reasonableness.

¶ 20 Roy J. identified the three issues which were before him. The two which are the subject of this appeal are the following:

1. Was the respondent [CBO] correct in concluding that the Intervenor had a legal non-conforming use, because of the prior dairy farm operation on the property, and therefore, was justified in granting the permit for the raising of 1,045 sows?

2. Was the respondent [CBO] correct in concluding that in granting the permit, she did not have to consider the OWRA, the Fisheries Act, and the EPA as "applicable law" pursuant to s. 8(2) of the BCA?

¶ 21 With respect to the first issue, it was not disputed that the statutory basis for a claim to a legal non-conforming use came from s. 34(9) of the Planning Act, clearly applicable law, which reads as follows:

> No by-law passed under this section applies:
>
> a) To prevent the use of any land, building or structure for any purpose prohibited by the by-law if such land, building or structure was lawfully used for such purpose on the day of the passing of the by-law, so long as it continues to be used for that purpose.

¶ 22 Roy J. decided that the governing law for determining whether the Intervenor had a claim to a legal non-conforming use was the recent decision of the Supreme Court of Canada in Saint Romuald v. Olivier, [2001] 2 S.C.R. 898 in which the Supreme Court dealt with that very issue involving a property in Quebec. In that case, the Supreme Court discussed in great detail the factors that were to be considered by a Court in coming to a decision on the question of whether such a right existed.

¶ 23 Roy J. concluded, based on his reading of Saint Romuald v. Olivier, supra, that it was important to determine what use was made of the Property before the passing of the interim control by-law, namely the Ouellette family dairy farm, and what use was to be made of the Property after the passing of the interim control by-law, namely the new proposed hog farm operation. If the use to be undertaken in the new proposed hog farm operation was of the "same nature" as that of the Ouellette family dairy farm, then the legal non-conforming right would be protected. Based on a

quotation from the dissenting reasons of Gonthier J. in Saint Romuald v. Olivier, supra, "If, on the other hand, it is even minimally different, the protection will be lost."

¶ 24 Roy J. recognized that because of the Supreme Court's analysis found in Saint Romuald v. Olivier, supra, one could no longer determine whether there had been a change of use by using a broad "category" approach to the question. In other words to simply determine that the use is agricultural is not enough. Rather, one had to consider the facts of the case in light of the numerous factors set out by the Supreme Court in Saint Romuald v. Olivier, supra which is what Roy J did in coming to his conclusion at p. 12 of his decision:

> In this matter, after reviewing the factors set out in the Supreme Court Romuald decision, and the evidence before me, I have no difficulty in concluding that the proposed hog farm operation is not a continuance of the pre-existing dairy farm operation. Its character has been so altered, and in terms of impact on the community, is a very different use.

¶ 25 In coming to that conclusion Roy J. considered the following factors that he took directly from the decision of the Supreme Court of Canada in Saint Romuald v. Olivier, supra at p. 920:

1. The purpose of the pre-existing use and the activities that were carried on the Property prior to the interim by-law of September 11, 2001.

2. Is the new proposed use simply an intensification of the old use or does it go beyond a matter of degree and constitute, in terms of community impact, a difference in kind?

3. How remote is the expansion of the activity from the earlier activity?

4. To what extent are the new activities within the original scope of usage? In this the Court has to balance the community interest against the interest of the landowner. The greater the disruption, the more tightly drawn will be the definition of pre-existing use or acquired right.

5. The neighbourhood effects as established by the evidence.

6. The consideration of the proper balance in the characterization of the legal non-conforming use (not too general so as to liberate the owner from the constraints of what he actually did and not so narrow as to rob him of flexibility).

7. The definition of acquired non-conforming right will always have an element of subjective judgment but it must be grounded on objective facts.

¶ 26 In applying the above factors to the facts of his case as established by the evidence before him, Roy J. came to the following conclusions:

> With respect to factor 1: before the interim control by-law, the activity on the Property was that of a "fourth generation family dairy farm" as compared to the planned activity after the by-law of a highly industrialized and sophisticated hog production".
>
> With respect to factor 2: the change from a family dairy farm to an industrialized, sophisticated hog production operation led one to conclude that this was a difference in kind. The evidentiary basis for this was the evidence

relating to the moratorium that had been imposed by the province of Quebec on such hog operations, the evidence of community impact and the concern of the community about their drinking water and the nuisance of the smell when the nutrients would be spread over the property.

With respect to factor 3: the proposed hog operation represented a "marked departure from the family dairy farm that existed before the passing of the interim control by-law".

With respect to factor 4: the disruption to the neighbours, who had for years lived with a family dairy farm around them and were suddenly faced with a sophisticated pork production enterprise next door, had to be weighed in the balance of considering community interests against the interest of the landowner. Given the Intervenor's original plan, the possibility of future expansion was very strong.

With respect to factor 5: there was considerable evidence of neighbourhood effects, namely, the Quebec moratorium on hog operations, the Lathrop report indicating the neighbours' reaction to the commencement of the pig farm operation, the direct correspondence from the neighbours to City Council and finally, the evidence presented by Mr. Brunet about the increase in the smell that goes with a pig farm operation as opposed to a dairy farm operation.

With respect to factor 6: one cannot accept the characterization of the pig farm operation, as proposed by the Intervenor, as simply a continuance of an agricultural use. To do so would effectively undermine the factors listed by the Supreme Court of Canada in Saint Romuald v. Olivier, supra.

¶ 27 Roy J. concluded his analysis with the following words at para. 38

> [para38] In summary, when all of the factors are taken into consideration, along with the neighbourhood effects and the possible impact on the environment, there is good reason for the courts to balance the landowner's interest against the community interest. Obviously, the proposed pig farm operation of the intervenor is not yet in existence, and therefore, many of the neighbourhood and environmental effects are not considered in a factual setting. Nevertheless, there is sufficient history and notoriety about industrialize [sic] a hog operation for the Court to understand that the neighbourhood concerns are not based on imagination or fiction. The Court has to consider that our neighbouring province of Quebec has imposed a moratorium on such hog operations. The neighbours in that area get their drinking water from wells. Given the existence of unused wells on the property, the existence of streams that feed into neighbouring rivers, given the topography, geology and hydrogeology of the property, all of these factors may have some impact on the drinking water of the neighbours. All of these concerns, of course, are taking place within the context of the report of the Walkerton inquiry and the recommendations of the presiding commissioner about the protection of drinking water sources from agricultural activity.

¶ 28 Not only did Roy J. rely on the decision of Saint Romuald v. Olivier, supra, to come to his conclusion, he also relied on the decision of the Manitoba Court of Queen's Bench, 4310845 Manitoba Ltd. v. Morris (Rural Municipality), [2001] M.J. No. 574.

¶ 29 Roy J. found that the CBO obviously did not consider all of the factors set out in Saint Romuald v. Olivier, supra in coming to her decision that the Intervenor had a claim to a legal non-conforming use. He, therefore, amended the building permit to allow for the operation of a pig farm that complied with the interim control by-law with a maximum number of 750 hogs.

¶ 30 With respect to the second issue and the interpretation to be given to the term "applicable law" as found in s. 8(2) of the Building Code Act, Roy J. found the definition of the term "applicable law" in s. 1.1.3.2. of the Ontario Building Code (1997) as follows:

> For the purpose of s. 8 of the Act, any general or special Act, and all regulations and by-laws enacted thereunder, which prohibit the proposed construction or demolition of the building unless the Act, regulation or by-law is complied with.

¶ 31 From this, Roy J. concluded that for the purposes of s. 8, "applicable law" referred to laws that prohibited the proposed "construction" or "demolition" of the building that was the subject of the permit.

¶ 32 The two terms "construction" and "demolition" were also defined in s. 1(1) of the Building Code Act. Given the definitions found in that section, namely,

> "construct" means to do anything in the erection, installation, extension or material alteration or repair of a building and includes the installation of a building unit fabricated or moved from elsewhere and "construction" has a corresponding meaning;
>
> "demolish" means to do anything in the removal of a building or any material part thereof and "demolition" has a corresponding meaning;

¶ 33 Roy J. agreed with the CBO's position that there was no logical or real nexus between the Building Code Act and the three environmental Acts in question. He concluded by saying:

> [para55] Therefore, looking at the provisions of s. 8(2) of the Building Code Act, the interpretation of "applicable law" in the light of the definitions set out, both in the code and in the statute would appear that "applicable law" is restricted, or any law dealing with construction and demolition, not with use. It's difficult for me to see how a Court could interpret "applicable law" for the purposes of s. 8(2), to be anything else. Given the Act and the definitions referred to, I don't see how the respondent could have arrived at any other conclusion. A closer look at these various statutes makes their application even more questionable.

¶ 34 Roy J. went on to examine the three environmental Acts separately concluding in each case for the reasons given on pp. 16 and 17 of his decision that they did not apply to the facts of this case. He concluded by saying at para. 60:

> [para60] Accordingly, I see no error in the respondent's decision not to consider the Fisheries Act, the O.W.R.A. and the E.P.A., as applicable law, prior to issuing the building permit.

POSITION OF THE PARTIES WITH RESPECT TO THE ISSUES ON THE APPEAL

1. What is the appropriate standard of review by this court on the appeal and on the cross appeal?

City of Ottawa

¶ 35 The City of Ottawa takes the position that all of the issues on the appeal deal with conclusions of law and that there are no material issues of fact in dispute. The standard of review is therefore one of correctness.

CBO

¶ 36 The CBO does not dispute that the standard of review on conclusions of law is that of correctness. However she takes the position that this appeal involves a consideration of mixed fact and law which involves applying a legal standard or principle to a set of facts. The standard of review is therefore on a spectrum going from correctness to palpable and overriding error. In this case, the standard of review is closer to the "palpable and overriding error" end of the spectrum.

¶ 37 The CBO argues that, on the application before him, Roy J. had to decide whether the decision of the CBO to issue the building permit to the Intervenor was reasonable or whether it was wrong as a matter of law. On this appeal, the onus is on the City of Ottawa to show that some aspect of the proposed construction would contravene the relevant statute and thus would contravene "applicable law".

Intervenor

¶ 38 The Intervenor does not appear to have taken a position on the question of the standard of review on the appeal.

2. Was the application judge correct in concluding that a proper interpretation of the term "other applicable law", pursuant to s. 8(2) of the Building Code Act excluded, as a category, the three environmental statutes at issue here?

City of Ottawa

¶ 39 The City of Ottawa submits that the application judge was in error in concluding that the term "other applicable law" is restricted to only those laws, "dealing with construction ... not with use". The broader context of use must be considered and is supported by the case law.

¶ 40 The City also relied on two recent decisions of the Ontario Court of Appeal, R. v. Cranbrook Swine Inc., [2003] O.J. No. 1433 (QL) (C.A.) and Pedwell v. Pelham (Town), [2003] O.J. No. 1774 (QL) (C.A.), both of which were released after the decision of the application judge in this case was released.

CBO

¶ 41 The CBO takes the position that for a law to be "other applicable law" within the meaning of s. 8(2) of the BCA, it must relate to the construction or demolition of a building and have a logical and real nexus to the subject and purpose of the BCA. The statutory responsibility and authority of the CBO is solely guided by that purpose of the BCA, which, as has been well established, is to protect the public from unsafe design and construction. In essence, it is to establish and guarantee standards for the construction and the demolition of buildings. It is not to make decisions about or based on agricultural practices.

¶ 42 Consequently, by any accepted principle of legislative interpretation, purposive or via the ejusdem generis rule, the law to be applied must relate to matters of construction or demolition of buildings. The three environmental laws in question do not. The case law relied on by the City of Ottawa is easily distinguishable from the facts of this case.

Intervenor

¶ 43 The Intervenor supports the position of the CBO on this issue. The Intervenor agrees that an examination of the statutory

definitions of "other applicable law" necessarily limits it to laws that relate solely to the construction and demolition of buildings and not use. The Intervenor also argues that there must be a real and logical nexus between the applicable law and the construction and demolition of buildings.

¶ 44 The three environmental statutes in question do not have that connection and are not applicable to questions of agricultural use. Furthermore, the structure of the Intervenor that is in dispute here is well within the usage that is foreseen by the applicable zoning by-laws.

3. Was the application judge correct in concluding that, even if any of the three environmental statues could be considered "other applicable law", they were, nonetheless, inapplicable to this case on a proper interpretation of their provisions?

City of Ottawa

¶ 45 With respect to the OWRA, the City of Ottawa takes the position that the Intervenor's proposed hog farm enterprise comes within the operation of that statute by virtue of its farm waste disposal plan that comes with the definition of "sewage" and "sewage works" as defined in the OWRA. The application judge, therefore, erred in concluding that s. 53 of the OWRA does not apply to agriculture.

¶ 46 The City of Ottawa maintains that, in view of the fact that there is no statutory exemption for farm sewage works, the Intervenor is obligated, under the OWRA, to obtain a Certificate of Approval from the Ministry of the Environment, which enforces s. 53 of the OWRA. The City of Ottawa concedes that it does appear to be the practice that the Ministry of the Environment does not require compliance with this requirement in the case of farm sewage works. Nonetheless, for the reasons given, the clear provisions of the OWRA remain the applicable law.

¶ 47 The application judge also erred in not considering in his reasons, although addressed by the parties in their arguments, Regulation 903 of the OWRA that deals with unused wells. The evidence indicated that there were a number of abandoned wells on the Property where the pig manure would be spread. Because of this, Regulation 903 of the OWRA would logically be "applicable law".

¶ 48 With respect to the Fisheries Act, the City of Ottawa submits that ss. 35 and 36 of the Fisheries Act prohibits anyone from harming fish habitats or from depositing any deleterious substances into water frequented by fish. The Fisheries Act applies to all internal waters of Canada including those which are found on the Property or within a reasonable vicinity of the Property such as Becketts Creek, the North Indian Creek, the South Nation River and the Ottawa River, all of which are or flow into fish habitats.

¶ 49 The Intervenor's plan to spread large quantities of liquid pig manure on the Property, and the presence on the Property of tile drains and "French drains", could impact adversely on the nearby watercourses and their fish habitats. Consequently, ss. 35 and 36 of the Fisheries Act are clearly applicable to the "work" and "undertaking" proposed by the Intervenor in his building permit application. The CBO clearly erred in not even considering the possible application of the Fisheries Act.

¶ 50 The City of Ottawa further argues that the application judge erred in his interpretation of certain case law in concluding that the Fisheries Act would have no application, unless the construction or demolition of the building was in the area of a flood plain. There was no evidence before him that made that comment relevant to this case.

¶ 51 With respect to the EPA, the City of Ottawa takes the position that the proposed hog operation of the Intervenor with its accompanying plan to spread animal waste on the Property, could be in contravention of ss. 6, 9 and 14 of the EPA that prohibits any

person from discharging into the natural environment any contaminant. Based on the following declared facts, the presence of unused wells on the Property, the presence of streams intersecting the Property which feed into the Ottawa and South Nation Rivers and the topography, geology and hydrology of the Property, the EPA should have been considered "applicable law" by the CBO prior to issuing the building permit.

¶ 52 The City of Ottawa further argues that, even though ss. 6 and 14 of the EPA provide for an exemption for "animal wastes disposed of in accordance with normal farming practices", the exemption for agriculture only applies to such discharge of contaminants where there will not be, or there is not likely to be, harm to humans, animals or plants. As the City of Ottawa states at p. 28 of its Factum,

> In short, agriculture operations, including construction or renovations, are exempted up to but not beyond the point where harm of this kind will result or is likely to result.

¶ 53 The City of Ottawa maintains that the application judge erred in concluding from his reading of Burns v. Perth South (Township) Chief Building Official, (2001), 54 O.R. (3d) 266, that there was no nexus between the purpose of s. 14 of the EPA, which is meant to prevent the discharge of harmful contaminants, and s. 8 of the BCA which deals with construction of structures. The decision of Burns v. Perth South (Township) Chief Building Official, supra, is wrong insofar as it purports to extend an exemption to agricultural operations which does not exist in the statute. In the view of the City of Ottawa, Burns v. Perth South (Township) Chief Building Official, supra is clearly wrong in law. In support of this, the City of Ottawa relies on two recent Ontario Court of Appeal decisions, Pedwell v. Pelham (Town), supra and R. v. Cranbrook Swine Inc., supra.

CBO

¶ 54 With respect to the Fisheries Act, the CBO takes the position that there is no logical and real nexus between the Fisheries Act and the subject and purpose of the BCA. The only possible way that the Intervenor might breach the Fisheries Act is if he does not follow his approved Nutrient Management Plan, once the hog operation commences. This has nothing to do with the construction in question. There is nothing in the Fisheries Act that prohibits against the construction of a building. The statutory responsibility of the CBO is only with regard to construction and demolition and not with farming practices.

¶ 55 With respect to the EPA, the CBO puts forward the same argument as was made by her with respect to the Fisheries Act concerning the lack of logical and real nexus between the EPA and the BCA. Furthermore, the CBO argues that ss. 6 and 14 of the EPA grants an unambiguous exemption for agricultural operations or normal farming practices. It is a normal farming practice to spread manure nutrient on fields.

¶ 56 With respect to the OWRA, the CBO argues that the manure trenches proposed for the inside of the barns do not fit the definition of "sewage works" as found in the OWRA and therefore do not require a certificate of approval under s. 53 of the OWRA. Specifically, animal or farm wastes are not specified in the regulations, nor are they included in the definition of "sewage" as found in the OWRA, namely, "drainage, storm water, commercial wastes and industrial wastes and such other matter or substance as is specified by the regulations."

¶ 57 The CBO further submits that even if the Court finds that the proposed manure trench system is a sewage system within the meaning of the OWRA, the uncontradicted evidence was that it is the joint practice of the Ministry of the Environment and the OMAF to not require a Certificate of Approval for farm waste disposal systems. In light of this, for the CBO to request that the Intervenor

obtain this approval before issuing the building permit would be completely beyond the CBO's jurisdiction and authority.

¶ 58 Finally, the CBO argues that the evidence indicated that the Nutrient Management Plan of the Intervenor has been approved by the OMAF after Mr. Brunet reviewed it. Assuming this plan is followed by the Intervenor, the environmental concerns raised by the City of Ottawa will have been addressed. There is no evidence that the proposed construction, in this case, will cause any breaches of the provisions of the three environmental statutes in question.

¶ 59 According to the CBO, all three of the environmental statutes in question have potent enforcement measures should there be any infraction within their specific area of regulation and control, such as wells, fisheries, watercourses and the release of contaminants into the environment. The Legislature cannot have intended to abdicate its responsibilities for regulating these matters to the CBO by having her consider whether or not these Acts are "applicable law" in the context of s. 8 of the BCA.

¶ 60 The CBO argues, lastly, at p. 28 of her Factum:

> As a matter of policy ... it is not appropriate that the chief building official, in each municipality in Ontario, be required to make decisions respecting construction matters as well as potential uses that could be made of the buildings. The result would be a patchwork of standards for approval of the issuance of building permits for farm buildings across Ontario rather than a uniform standard.
>
> Intervenor

¶ 61 With respect to the OWRA, the Intervenor supports the CBO in advancing the position that there is no real and logical nexus between this statute and the planned renovations. If there were any evidence, and the Intervenor maintains that there is not, that the Intervenor was in breach of the OWRA, it would be the responsibility of the Ministry of the Environment to enforce against such breaches and not the CBO.

¶ 62 The Intervenor points out that the language in s. 53 of the OWRA is problematic in that there appears to be a difference in the terms used in the French and English versions of the law. However, that apart, the Intervenor takes the position that the application judge was correct in concluding that s. 53 excludes agricultural operations from the definition of "sewage" and "sewage works". The evidence relating to how the proposed manure trenches will work confirms this.

¶ 63 With respect to Regulation 903 of the OWRA, the application judge did not mention it in his reasons because it cannot be considered "applicable law" for the same reasons that the OWRA is not "applicable law". The evidence indicated that the unused wells referred to by the City of Ottawa are not a real concern and "not a significant threat to groundwater quality at the subject property" in the opinion of one hydrology expert. In addition to this, the Intervenor's Nutrient Management Plan, approved by the OMAF, will avoid the potential risks that have been identified by the City of Ottawa.

¶ 64 The Intervenor's approved Nutrient Management Plan also addresses the speculative risks raised by the City of Ottawa with respect to a possible infraction of the Fisheries Act. The Intervenor submits that there is nothing in ss. 34 or 35 of the Fisheries Act to lead one to conclude that the proposed renovations would come within the regulation of that statute. There is no real or logical nexus between the purpose and provisions of the Fisheries Act and s. 8(2) of the BCA so as to make it "applicable law".

¶ 65 With respect to the EPA, the Intervenor agrees with the CBO that s. 14 of the EPA exempts agricultural operations that carry

out normal agricultural practices. The Intervenor's plans to spread the nutrient fertilizer on the Property is a normal agricultural practice and was done in the dairy farm operation that preceded the planned hog farm operation.

¶ 66 The Intervenor argues that the application judge was correct in concluding, as was concluded in Burns v. Perth South, (Township) Chief Building Official, supra and in Welwood v. Huron-Kinloss (Township) Chief Building Official (2002), 29 M.P.L.R. (3d) 1 (Ont. S.C.J.), that there was no real or logical nexus between the purpose of s. 14 of the EPA, which is to prevent the discharge of harmful contaminants into the environment, and s. 8 of the BCA, which deals with the construction of structures.

¶ 67 The Intervenor further argues that the cases of Pedwell v. Pelham, supra and R. v. Cranbrook Swine Inc., supra can be distinguished from this case on their facts.

POSITION OF THE PARTIES WITH RESPECT TO THE ISSUES ON THE CROSS-APPEAL

1. What is the standard of review to be applied by the Divisional Court?

Intervenor

¶ 68 The Intervenor submits that the application judge correctly stated the standard of review by which he was to decide the application before him; namely, correctness for questions of law and reasonableness for questions of fact. He also correctly concluded that his revision of the decision of the CBO, with respect to whether the Intervenor had a claim to a legal non-conforming right under s. 34(9) of the Planning Act, involved a question of mixed fact and law.

¶ 69 However, the application judge erred in applying the standard of correctness to the decision of the CBO. The analysis of the facts on which he embarked in his decision was a question of fact and not of law. He should only have overturned the decision of the CBO if the application judge could have come to the conclusion that the decision of the CBO, in light of the factors enumerated by the application judge, was not reasonable.

¶ 70 The Intervenor also takes the position that the application judge, in arriving at his decision, considered several irrelevant facts such as: the fact that the Intervenor had the intention of eventually increasing his hog operation to include 2,800 pigs; the fact that the province of Quebec had declared a moratorium on pig farm operations; and, the fact of the Walkerton Report and the events that had led up to the Walkerton Inquiry. In so doing, the application judge committed an error in law. The Intervenor relies on Housen v. Nikolaisen, [2002] 2 S.C.R. 235 in support of this position.

City of Ottawa

¶ 71 The City of Ottawa takes the position that Roy J. applied the proper legal test of correctness with respect to the CBO's approach to the determination of the Intervenor's non-conforming use rights. It was not disputed by the parties that the governing law relating to whether a claim to a legal non-conforming right is justified or not is the test established in Saint Romuald v. Olivier, supra. It was also not disputed on the evidence, including the CBO's own admission, that she failed to consider the factors set out in Saint Romuald v. Olivier, supra. By not applying the proper legal test, the decision of the CBO was a clear error of law and was not reasonable.

¶ 72 Pursuant to s. 25(4) of the BCA, by which the application came before Roy J., the application judge was empowered and entitled to overturn the decision of the CBO, apply the correct legal test established in Saint Romuald v. Olivier, supra and substitute his own opinion for that of the CBO.

¶ 73 With respect to the findings of fact made by Roy J., the City of Ottawa relies on the Housen v. Nikolaisen, supra and submits that this Court ought not to interfere with the application judge's findings of fact or inferences of fact unless this Court finds that he made a palpable and overriding error, or one that is "plainly seen". Based on Housen v. Nikolaisen, supra, the test is the same with respect to issues of mixed fact and law. Only in the event that the Intervenor can establish an erroneous finding of fact which can be traced to an error of law, will the standard of correctness be applicable.

¶ 74 The City of Ottawa disputes the Intervenor's assertions that the application judge's consideration of irrelevant facts amounted to an error of law that is reviewable according to the standard of correctness. The trial judge was rightly entitled to consider those facts in reaching his conclusion on the issue of non-conforming use rights because they were relevant in the context of the approach and the factors to be considered as set out in the Planning Act and the Saint Romuald v. Olivier, supra case. It is also clear from the reasons of Roy J. that those facts did not form the sole basis for his conclusion.

2. Did the application judge err in refusing to recognize the right of the Intervenor to a legal non-conforming use on the Property as the CBO had so concluded?

Intervenor

¶ 75 The Intervenor submits that the application judge made his conclusion of fact, that the Intervenor did not have a claim to a legal non-conforming use, without any evidence to support that conclusion. Consequently, he made a palpable and overriding error.

¶ 76 Firstly, the Intervenor submits that the "use" protected by s. 34(9) of the Planning Act is agricultural use. By virtue of the applicable zoning by-laws, agricultural use includes "the raising, boarding and keeping of all forms of livestock". In this context, whether the livestock is pigs or cows is irrelevant. At the time that the interim control by-law was passed, the buildings on the farm were used for this agricultural purpose and had 209 animal units which translate into 1,045 pigs. This claim to a legal non-conforming use to have 1,045 pigs should stay with Intervenor as long as he had the intention of using the farm for an agricultural purpose. The Intervenor relies on the very case cited by Roy J. 4310845 Manitoba Ltd. v. Morris (Rural Municipality), [2001] M.J. No. 574 (Man. Q.B.) in support of his position.

¶ 77 Secondly, there is no dispute that the Supreme Court decision in Saint Romuald v. Olivier, supra determines the legal approach to the question in issue. It establishes the seven factors to be considered by the Court. The Intervenor submits that the application judge erred in his analysis of the criteria and in the findings of fact on which he relied in arriving at his decision as follows:

> Factor 1: The purpose of the pre-existing use. The purpose of the pre-existing use and the proposed use were not different. In conformity with the zoning by-laws, both were agricultural use for the purpose of raising livestock. The number of animal units was the same.
>
> Factor 2: The intensification of the previous agricultural operation and the degree of comparison between the previous and proposed use. In reality, the application judge came to his conclusion that the Intervenor did not have a claim to a legal non-conforming right because of the proposed renovations to the buildings of the Property, (that were necessary to convert a dairy farm operation into a hog farm operation), amounted to a change, different "in kind" and a "marked departure" from the previous dairy farm operation. In fact, both were agricultural operations and almost identical, with the same number of animal units, and the same amount of animal waste, the same method of storage for the manure

and the same spreading of the manure, but, in the view of the Intervenor, with less impact on the environment as in the past dairy farm operation.

¶ 78 The Intervenor submits that the application judge erred in his analysis of the applicable factors because, as is obvious from his reasons, he was under the wrong impression that the proposed hog operation was of a scale considerably bigger than the pre-existing dairy farm operation. In fact the evidence showed that the number of animal units were the same.

¶ 79 The application judge erroneously considered the previous building permit application of the Intervenor for 2,831 pigs which has nothing to do with the matter now before the court. The application judge erred in concluding that the proposed hog farm operation was more industrialized and sophisticated than the previous dairy farm operation. In essence, it only proposed to use more modem agricultural practices that are more mindful of the environment.

¶ 80 The Intervenor takes the position that the application judge also erred in concluding that the proposed hog farm operation could create harmful effects for the neighbourhood and the environment. The risks raised by the City of Ottawa were both speculative and far from conclusive. The evidence relating to the Intervenor's approved Nutrient Management Plan addressed all of these risks and concerns. In fact, the Intervenor submitted that the evidence indicated the impact on the environment of the hog farm operation would be less than the impact caused by the previous dairy farm operation because of the advanced technology that would go with the pig farm operation.

¶ 81 Finally the Intervenor submits that the application judge, contrary to factor 6 and 7 as described in the decision of Saint Romuald v. Olivier, supra characterized the Intervenor's right to a legal non-conforming use too narrowly in coming to his decision. He also erroneously relied on a "preuve subjective" rather than make a decision on a factual basis.

The City of Ottawa

¶ 82 The City of Ottawa argues that the submissions of the Intervenor characterizing the usage of the Property as agricultural in accordance with the zoning by-laws and the Planning Act is totally contrary to the directive found in the Supreme Court decision, Saint Romuald v. Olivier, supra to not determine questions of existing rights to legal non-conforming use on a property by a "category" approach.

¶ 83 The City of Ottawa takes the position that the application judge correctly rejected the "category" approach and correctly applied the factors to the evidence he had before him. There was ample evidence before the application judge to support his findings and inferences of fact. The decision of the application judge was made after a due consideration of all of this evidence and not on a misunderstanding of the previous use made of the land and a false impression of the proposed pig farm operation.

¶ 84 The City of Ottawa submits that, contrary to the Intervenor's assertions, Roy J. correctly relied on the case of 4310845 Manitoba Ltd. v. Morris (Rural Municipality), supra to support his findings based on the evidence before him with respect to neighbourhood effects and in the difficult task of balancing the community interests with the individual interests.

¶ 85 The City of Ottawa maintains that, in the face of the substantial objective evidence before him, the decision of Roy J. cannot be said to be a primarily subjective one. Although, as the Supreme Court of Canada pointed out in the Saint Romuald v. Olivier, supra decision,

> While the definition of the acquired right will always have an element of subjective judgment, the criteria mentioned above constitute an attempt to ground the Court's decision in the objective facts.

¶ 86 As Roy J. correctly pointed out, the balancing process between community and individual interests is not an exact science. The application judge was in the best position, having had the benefit of examining all of the evidence and having heard the arguments of the parties, to make the findings of fact that he did and in the absence of a palpable and overriding error, this Court ought not to interfere with that decision.

¶ 87 The City of Ottawa submits that, in the face of all of this evidence, Roy J. correctly concluded that the Intervenor's proposed pig farm operation constituted "a very different use" from the pre-existing dairy farm operation and, as a result, the Intervenor did not have a legal non-conforming use pursuant to the Planning Act, entitling it to operate a pig farm consisting of 1,045 sows. In coming to this conclusion, Roy J. correctly considered and applied s. 34(9) of the Planning Act and the approach and factors set out in the Supreme Court decision of Saint Romuald v. Olivier, supra. Based on this and based on the evidence before the application judge, no "palpable and overriding error" can be found in his decision on this issue.

ANALYSIS

Standard of Review

¶ 88 The issue of the standard of review effectively raises two questions. The first concerns what standard of review is to be applied by the Divisional Court on the various issues raised in the appeal and cross-appeal before this court. The second relates to what standard of review was to be applied by the application judge on the appeal before him from the decision of the CBO and to whether he applied that standard of review correctly.

¶ 89 The relief granted under s. 26 of the BCA, pursuant to which the appeal and cross-appeal come before this court, is not the retrial of the case but an appeal of the decision of Roy J. The applicable standard of review then is that of an appellate court on the various issues that arise on the appeal and cross-appeal. The correct standard of review of an appellate court was comprehensively discussed by the Supreme Court of Canada in its decision of Housen v. Nikolaisen, [2002] 2 S.C.R. 235. In that decision, the Supreme Court examined the standards of review relevant to the following types of questions:

1. Questions of law;
2. Questions of fact;
3. Inferences of fact; and
4. Questions of mixed fact and law.

¶ 90 The factual context of the Supreme Court's discussion was its review of a decision of a trial judge who had found contributory negligence against a municipality for failing to post signs at an accident site. What it was reviewing, effectively, was the judge's application of the legal standard of care to the particular facts of the case.

¶ 91 In addition to explaining in detail why, the Supreme Court enunciated the following principles with respect to the applicable appellate standards of review at pp. 247 to 258:

> [para8] On a pure question of law, the basic rule with respect to the review of a trial judge's findings is that an

appellate court is free to replace the opinion of the trial judge with its own. Thus the standard of review on a question of law is that of correctness:

...

[para10] The standard of review for findings of fact is that such findings are not to be reversed unless it can be established that the trial judge made a "palpable and overriding error": Stein v. The Ship "Kathy K", [1976] 2 S.C.R. 802, at p. 808; Ingles v. Tutkaluk Construction Ltd. [2000] 1 S.C.R. 298, 2000 S.C.C. 12, at para. 42; Ryan v. Victoria (City), [1999] 1 S.C.R. 201, at para. 57 ...

[para19] We find it necessary to address the appropriate standard of review for factual inferences because the reasons of our colleague suggest that a lower standard of review may be applied to the inferences of fact drawn by a trial judge. With respect, it is our view, that to apply a lower standard of review to inferences of fact would be to depart from established jurisprudence of this Court, and would be contrary to the principles supporting a deferential stance to matters of fact.

[para25] ... We conclude, therefore, by emphasizing that there is one, and only one, standard of review applicable to all factual conclusions made by the trial judge -- that of palpable and overriding error.

[para26] At the outset, it is important to distinguish questions of mixed fact and law from factual findings (whether direct findings or inferences). Questions of mixed fact and law involve applying a legal standard to a set of facts: Canada (Director of Investigation and Research) v. Southam Inc., [1997] 1 S.C.R. 748, at para. 35. On the other hand, factual findings or inferences require making a conclusion of fact based on a set of facts. Both mixed fact and law and fact findings often involve drawing inferences; the difference lies in whether the inference drawn is legal or factual.

[para27] Once it has been determined that a matter being reviewed involves the application of a legal standard to a set of facts, and is thus a question of mixed fact and law, then the appropriate standard of review must be determined and applied. Given the different standards of review applicable to questions of law and questions of fact, it is often difficult to determine what the applicable standard of review is. In Southam, supra, at para. 39, this Court illustrated how an error on a question of mixed fact and law can amount to a pure error of law subject to the correctness standard: ...

> ... if a decision-maker says that the correct test requires him or her to consider A, B, C, and D, but in fact the decision-maker considers only A, B, and C, then the outcome is as if he or she had applied a law that required consideration of only A, B, and C. If the correct test requires him or her to consider D as well, then the decision-maker has in effect applied the wrong law, and so has made an error of law.

Therefore, what appears to be a question of mixed fact and law, upon further reflection, can actually be an error of pure law.

[para28] However, where the error does not amount to an error of law, a higher standard is mandated. Where the trier of fact has considered all the evidence that the law requires him or her to consider and still comes to the wrong conclusion, then this amounts to an error of mixed

> law and fact and is subject to a more stringent standard of review: Southam, supra, at paras. 41 and 45. While easy to state, this distinction can be difficult in practice because matters of mixed law and fact fall along a spectrum of particularity.

¶ 92 With those legal principles in mind, the issues on the appeal and cross-appeal before this court clearly touch on both questions of law and questions of mixed fact and law. Whether the application judge was correct in concluding that the three environmental statutes cannot be considered "applicable law" for the purpose of s. 8(2) of the BCA is a question of law and the standard of correctness is to be applied. However, whether a particular set of facts relating to a structure or building actually demonstrates a contravention of one of those particular statutes, assuming that it maybe considered "applicable law" within the meaning of s. 8(2), raises questions of mixed fact and law. The standard of review, therefore, is on a spectrum going from correctness (relating to the correct consideration and application of the legal principles in question) to "palpable and overriding error" (relating to the findings of fact or inferences of fact on the evidence to which the legal principle in question is applied to come to the decision under appeal).

¶ 93 Similarly, whether the application Judge erred in refusing to recognize the right of the Intervenor to a legal non-conforming use on the Property raises questions of mixed fact and law. Was the legal principle by which such a right is recognized correctly stated and applied by the application judge? Was there palpable and overriding error in the findings of fact and inferences of fact made by the application judge on the evidence and to which he applied such legal principle. The standard of review, therefore, is on the same spectrum that was discussed in the previous paragraph; namely, from correctness to "palpable and overriding error".

¶ 94 On the question of the standard of review to be applied by the application judge when reviewing the decision of the CBO and whether or not he applied the standard correctly, I can find no error in the decision of the application judge. The test stated by him as being a "blend of two tests, namely a standard of correctness for questions of law, and a standard of reasonableness for the question of fact", with the standard being "closer to correctness than reasonableness" is a correct one and supported by the case cited by him as well as by other jurisprudence.

¶ 95 In Burns v. Serpa, Acting Alternate Chief Building Official, Township of Perth South et al., supra, Killeen J. pointed out that, in view of the generous jurisdictional language found in s. 25(4) of the BCA, pursuant to which the matter came before Roy J, ("the judge shall hold a hearing ... take such action as the judge considers the inspector or chief building official ought to take ... may substitute his or her opinion for that of the inspector or chief building official"), and in view of the fact that the judge may and often will entertain evidence from a variety of sources that were not directly before the CBO, it may be tempting to treat the appeal as a full de novo hearing. Nonetheless, it remains an appeal from the decision of the CBO to which an appellate standard of review is to be applied.

¶ 96 Killeen J. went on to state that the direction for the correct appellate standard of review must be taken from the recent landmark decision of the Supreme Court of Canada in Canada (Director of Investigation and Research) v. Southam Inc., [1997] 1 S.C.R. 748. Killeen J. refers to the decision of Molloy J. in Runnymede Development Corp. v. 1201262 Ontario Inc. (2000), 47 O.R. (3d) 374 in which Molloy J. applied to the s. 25 appeal process under the BCA the teaching of the Supreme Court in Canada (Director of Investigation and Research) v. Southam Inc., supra. The appropriate standard should be a blend of two tests; namely, a standard of correctness for questions of law and a standard of reasonableness for questions of fact, as was recognized by Roy J.

¶ 97 The fact that the standard of review is not necessarily static and can move along the spectrum of correctness to reasonableness and, for example, be closer to correctness as opposed to reasonableness, as was found by Roy J in his decision, was also recognized by Molloy J. in Runnymede Development Corp. v. 1201262 Ontario Inc., supra. At p. 386 she states:

> [para29] ... The standard to be applied to decisions of the Chief Building Official will always be less deferential than the patently unreasonable test. The broad powers on appeal, particularly the power to do what the official "ought to have done", the nature of the decision maker and the decision making process (i.e., the decision of a municipal employee rather than an expert tribunal after a full hearing) are factors which suggest a degree of deference on the lower end of the scale, towards correctness. On the other hand, municipal planning and zoning are specialized areas that are squarely within the expertise of the Chief Building Official, a factor that supports a greater degree of deference. It is not possible to say where on the continuum between "patently unreasonable" and "correct" the appropriate standard will fall for all cases involving a Chief Building Official, as the level of deference to be accorded will vary depending on the nature of the issue before the tribunal. Indeed, the apparent differences in the standard applied by the various decisions of this court to date can largely be explained by the differences in the nature of the question being determined. The more the Chief Building Official's decision is a determination of law, the closer the standard will be to correctness. The more the initial decision is dependent upon factual determinations within the special expertise of the Chief Building Official, the more deferential will be the standard. Generally speaking, however, a standard of correctness will be applied to decisions based on law or jurisdiction and a standard of reasonableness will be applied to questions of fact. Within the standard of reasonableness, the degree of deference or the "weight" to be given to any particular determination will depend on the circumstances.

¶ 98 This is a correct statement of law and accepted by this Court. See also on this point the decisions of William F. White Limited v. Uzumeri, in his capacity as Chief Building Official of the City of Toronto et al.; A. Mantella & Son's Limited et al., Intervenors (1999), 44 O.R. (3d) 750 (S.C.J.) and Welwood v. Huron-Kinloss (Township) Chief Building Official (2002), 29 M.P.L.R. (3d) 1 (S.C.J.).

¶ 99 I can find no error in Roy J.'s application of the standard of review that he adopted. The substantial issues before him did raise questions of law and questions of mixed facts and law and, therefore, were "more a determination of law". On those issues, the standard would be on the spectrum closer to correctness than reasonableness, which is the standard that he applied to the issues before him. In doing this, he concluded that the only correct interpretation that a court could give to "applicable law" in s. 8(2) of the BCA was the decision of CBO to exclude the three environmental statutes from her consideration in deciding to issue the building permit.

¶ 100 With respect to the CBO's decision to grant to the Intervenor a legal non-conforming use to the Property permitting him to have 1,045 hogs, as opposed to 750 hogs permitted by the interim control by-law, it is clear on the evidence that she committed an error in law, therefore raising a question of law before Roy J. It was not disputed that the CBO had not considered the test established by the Supreme Court of Canada in Saint-Romuald v. Olivier, supra before deciding to grant the Intervenor his claim to a legal non-conforming use on the Property. Rather the evidence

indicated undisputedly that she arrived at that conclusion simply by confining her analysis of change of use to the livestock units contained in the interim control by-law. In particular, it was not disputed that her evidence was that, because the previous dairy farm had 209 cows, the Intervenor was entitled to have 1,045 sows based on the 5 to 1 livestock unit ratio contained in the interim control by-law.

¶ 101 Roy J. recognized the error in legal principle made by the CBO in not considering the factors set out in Saint- Romuald v. Olivier, supra, in coming to her decision and applied the correctness standard by applying those factors himself to the facts of the case in order to come to his own decision. I can see no error in this application of the standard of review. Based on the analysis found in Runnymede Development Corp. v. 1201262 Ont. Inc., supra, an error in law made by a CBO is neither correct nor reasonable.

Was the application judge correct in concluding that a proper interpretation of the term "other applicable law" pursuant to s. 8(2) of the BCA. excluded, as a category, the environmental statutes in question?

¶ 102 The interpretation that is to be given to a particular legislative provision, such as the term, "other applicable law" found in s. 8(2) of the BCA is a question of law. The starting point is clearly to commence with the statute in question, to examine any definitions provided by the statute itself and to examine the statute's subject matter and purpose. On this point, I can find no error in the approach taken by Roy J. Nor can I find any error in his conclusion that,

> the interpretation of "applicable law" in the light of the definitions set out, both in the code and in the statute [definitions of the words "applicable law", "construct" and "demolish'] [it] would appear that "applicable law" is restricted [to] any law dealing with construction and demolition, not with use.

¶ 103 The CBO and the Intervenor advance the purposive approach to the interpretation of the term "other applicable law". The reason for a purposive analysis of a piece of legislation is "to clarify the scope of general language" (See R. Sullivan, Statutory Interpretation (Toronto: Irwin Law, 1997). There is no question that the term "other applicable law" qualifies as general language.

¶ 104 The purposive approach advanced by the CBO and the Intervenor agrees with the textual and definitional analysis made by Roy J. as described in the preceding paragraph. It requires, for a law to be relevant and applicable, a real and logical nexus between the applicable law and the essential purpose of the BCA, which is the construction, and demolition of buildings.

¶ 105 This restricted and rather specialized perception of the BCA was recognized by MacPherson J. in Greater Toronto Airports Authority v. Mississauga (City) (1999), 43 O.R. (3d) 9. Macpherson J. had to decide on the facts of that case whether a redevelopment project at a federally owned international airport came within the operation of the BCA to which he answered no. At p. 10 of that decision, Macpherson J. had the following to say about the subject-matter of the BCA:

> The subject-matter of the Building Code Act is, in my view, as its title suggests, buildings. The Act is a relatively short and general one. However, its essence is, per s. 34, "standards for the construction and demolition of buildings". The Act provides municipalities with extensive powers to regulate property development, such as by specifying rules for the construction, demolition, use and occupation of buildings and requiring the submission of plans to a municipal building department for approval before construction may proceed. The Act

> provides municipal building officials with the power to remove buildings from land and to have them demolished. Those officials are also empowered to make assessments of the structural adequacy of buildings for the purpose for which they are to be used, and they have broad powers to enter and search property and to make orders against both owners of buildings and many other persons who have dealings with buildings, thus affecting the property rights of anyone with an interest in the property. The Act also provides for a number of liens which may be visited on the land itself. In short, the subject-matter of the Act is buildings and the land on which they are placed.

¶ 106 It is interesting to note that Macpherson J., in his last statement, extended the subject matter of the Act not only to the buildings but also to the land on which they are placed.

¶ 107 Killeen J., in Burns v. Serpa, Acting Alternate Chief Building Official, Township of Perth South et al., supra, in his discussion of the scope and purpose of the BCA, recognized the Act's limited purpose but saw it as having a broader scope due to its "obvious interrelationships with other statutes". He states at p. 272 of his decision:

> [para19] The BCA is a complex piece of legislation which is, in general terms, aimed at setting and enforcing standards for all manner of construction and building projects in Ontario. It cannot, because of its nature, be considered in splendid isolation because it has obvious interrelationships with other statutes, provincial and even federal, as well as a variety of municipal regulations under local by-laws. Examples of such interplays would be with the provincial Planning Act, R.S.O. 1990, c. P.13, and a local zoning by-law.

¶ 108 Despite this recognition, Killeen J., at p. 273, still concluded that the scope of s. 8 of the BCA and the term "applicable law" were "clarified" and "limited" by the definitions of the terms "construct" and "demolish" set out in the definitional section of the BCA; a conclusion that Roy J. accepted, it being consistent with his own textual analysis of the BCA.

¶ 109 There was no dispute among the parties that the term "other applicable law" found in s. 8(2) of the BCA required the CBO to consider such things as the Planning Act and any relevant local zoning by-laws in force before issuing a building permit. I agree with the City of Ottawa that, therefore, strictly speaking, this necessarily mandates the CBO to consider not only the proposed constriction and buildings but also the intended use of such construction and buildings before issuing a building permit. Accepting this fact, one must logically ask the question, how broad or narrow are these considerations of use by the CBO under "other applicable law" to be? Is it to be broad, with the CBO taking on the role of "gatekeeper" of the environmental statutes, as the City of Ottawa argues? Or, is to be more qualified, restricted to those uses that have a real and logical nexus to the construction and demolition of buildings as the CBO and the Intervenor argue and as Roy J. so found in his decision? An examination of the jurisprudence provides answers to these questions.

¶ 110 The parties' agreement that "other applicable law" includes such laws as the provincial Planning Act and local zoning by-laws is supported by the case law. In Phi Delta Beta of London Inc. v. London (City) Chief Building Official (1995), 25 M.P.L.R. (2d) 140 (Ont. Gen. Div.), the chief building official refused to issue a building permit to the applicant fraternity on the basis that the intended use contravened the relevant zoning by-law. The renovations were to increase the number of living units allowable under the zoning by-law (eleven units as opposed to the allowable three). The fraternity applied for an order rescinding the chief building official's decision not to process its application and an order

to issue the building permit. Leitch J. refused the application, ruling that the chief building official was entitled to consider the "intended use" of the property in exercising his statutory authority under s. 8(2) of the BCA. In coming to this conclusion, Leitch J. relied on the following words of Saunders J. in Axelrod v. Toronto (City), (1981), 15 M.P.L.R. 143 (Ont. Div. Ct.), p. 148:

> [para8] ... It would be irrational to hold that he was so precluded. Such a holding would mean that he could not refuse to issue a permit for a factory in a residential zone if the Building Code and all other applicable laws were complied with.

¶ 111 In Walton v. Lincoln (Town) (1997), 43 M.P.L.R. (2d) 291 (Ont. Gen. Div.), the applicants applied for a building permit to rebuild an outbuilding that had burned down. The intended use of the building was to house a large number of guinea pigs for the purpose of breeding such guinea pigs. The building was to include a heat pump, insulation and air conditioning to facilitate the breeding operation. The chief building official refused to issue a permit to rebuild the structure on the basis that the proposed use, guinea pig breeding, did not comply with the existing zoning byelaw. When the matter came before Quinn J. on appeal pursuant to s. 25(1) of the BCA, counsel for the applicant argued that the definition of "applicable law" as found in s. 8 of the BCA speaks of "construction and demolition" and therefore considerations of "use" as the chief building official undertook in the decision to refuse the building permit, were precluded. Quinn J. refused this argument stating at pp. 324 and 325:

> [para58] ... The matter is more than one of bricks and mortar. The definition of "applicable law" allows a chief building official, when assessing a Permit Application, to consider "by-laws ... which prohibit the proposed construction ... of the building." This definition does not exclude "use" as a consideration. By way of example, can it not be said that a residential zoning bylaw would, effectively, prohibit the proposed construction of a factory?
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> [para60] Accordingly, in the case at bar, I hold that the chief building official, in the course of issuing the building permit, was entitled (indeed, required) to consider whether the intended use of the barn would violate the provisions of the new by-law. It would have been wrong for him to have restricted his review of the Permit Application to a consideration of whether the building itself structurally complied with the by-law.

¶ 112 After examining the by-law in question, Quinn J. ordered that the building permit be issued on the grounds that the intended use did not contravene the by-law and that if the City wished to control the number of guinea pigs they were able to do so, but had not done so.

¶ 113 It is easy to see in these cases, as with any zoning by-law, how the consideration of use dictated by the zoning by-law is directly related to the nature of the construction or building in question. There is a real and logical nexus between the building and the exigencies of the zoning by-law.

¶ 114 In other cases, the term "other applicable law" in s. 8(2) of the BCA has been used to draw into its net a wide variety of laws. In Leeds and Grenville v. Gerard, [1991] O.J. No. 1825, the issue before Cosgrove J. was whether on the facts of the case, persons proposing to build pumps for the purpose of pumping toxic chemical into pipes that could leak into the ground water, the chief building official should act to require a certificate of approval under the EPA. Relying on the fact that the chief building official had a duty of care

to persons in close proximity of the proposed project to not issue a permit where the result might be to cause damage to others, Cosgrove J. found that such an approval was required.

¶ 115 However, for reasons that I find very persuasive, the decision in Leeds and Grenville v. Gerrard, supra, was not followed by Lane J. four years later in Alaimo v. North York (City) (Chief Building Official), [1995] O.J. No. 862 (Ont. Gen. Div.). On the appeal before him, the chief building official had refused to issue a building permit on the grounds that the proposed construction, because of the proximity and height of chimneys on adjacent buildings, might cause a nuisance. The issue was whether the chief building official could refuse to issue a building permit pursuant to s. 8(2) on such common-law considerations as nuisance.

¶ 116 At para. 21 of his decision, Lane J. took a very restrictive view of the question, based on his legislative interpretation of the term, "applicable law", as he found it in the BCA. He rightly observed that the Leeds and Grenville v. Gerrard, supra was decided prior to the Building Code being amended to define "applicable law" in terms,

> that confine it to statutes, regulations or by-laws which prohibit the proposed construction of the building unless complied with. This definition excludes common law considerations such as nuisance. It also confines the relevant enactments to those prohibiting the erection of buildings unless complied with. It seems to me that the decision in Leeds has not survived this statutory change.

¶ 117 He ruled that the chief building official did not have the discretion to refuse to issue a permit when all the statutory requirements, which did not include considerations of common law nuisance, had been fulfilled. He ordered that the building permit be issued.

¶ 118 In both Mayhew v. Hamilton (Township) (Chief Building Official), [2002] O.J. No. 1962 and Rotstein v. North York (City) (Chief Building Official) (1995), 29 M.P.L.R. (2d) 305 (Ont. Gen. Div.), the Court was faced with the question of whether "other applicable law" in s. 8(2) of the BCA could be interpreted to include a subdivision agreement entered into between a municipality and a developer relating to the use of the land in question. On the facts of those cases, the proposed constructions, if allowed to go forward, would be in breach of those agreements. In both cases, the Court ruled such subdivision agreements could not be brought within the purview of the words "applicable law". Subdivision agreements were nothing more than a contract between the City and a developer and did not have the force of law or the effect of converting such contracts into a regulation or by-law.

¶ 119 MacDonald J. in Mayhew V. Hamilton (Township) (Chief Building Official), supra, provides a very useful survey of the case law dealing with the interpretation of the term "other applicable law", some of which were clearly considered by Roy J. in coming to his conclusions. An examination of that case law leads one to conclude that, for the most part, the term has been restrictively interpreted and found to include consideration of other laws when those laws have been found to have, as the CBO and Intervenor argue, a real and logical nexus to the proposed construction in question. The following are some examples of this.

¶ 120 In Upper Thames River Conservation Authority v. London (1989), 67 O.R. (2d) 784 (Ont. Dist. Crt.) and Stacey v. Oxford-On-Rideau (1989), 46 M.P.L.R. 15 (Ont. Gen. Div.), the proposed construction was to be right on a flood plain. As a result, the Conservation Authorities Act and its regulations were held to be "applicable law" requiring the consent of the authority. It is hard to see how the very foundation of the building is not directly related to the construction itself.

¶ 121 The Ontario Heritage Act and a Heritage Easement Agreement registered under that Act, was held to be "applicable law" for purposes of the BCA in the case of Roman Catholic Episcopal Corp. v. Cobourg (1998), 46 M.P.L.R. (2d) 195. It is important to note that the decision in this case rests solely on its very specific facts. The municipality, under the Heritage Act, was empowered to pass by-laws designating property as having a historic or architectural value and for providing historical easement agreements. On the facts of this case the municipality had passed such a designation by-law which thereby incorporated the easement agreement into the statutory scheme. It was, in essence, the existence of the local zoning by-law that determined the application of the Ontario Heritage Act in this case.

¶ 122 In William F. White Limited v. Toronto (City) Chief Building Official (1999), 44 O.R. (3d) 750, the Court was directly faced with the question of whether, the EPA could be considered "applicable law" for the purposes of issuing a building permit. On the facts of that case, tenants of a building sought a building permit to construct a health and fitness club on the second floor of a building. The appellants were the first floor tenants who ran a business dealing with camera and other equipment that was very sensitive to dust, dirt and vibrations. When the building permit was issued to the second floor tenants allowing them to go ahead with the renovations to create the health and fitness club, the appellants brought the appeal under s. 25 of the BCA. They argued that the proposed construction was in contravention of the EPA. In particular, they argued that the operation of the health and fitness club would discharge sound and vibrations from human activities and this would constitute discharge of a contaminate into the natural environment that would interfere with the normal conduct of the appellant's business. There was no question on the facts of the case that the chief building official had not even considered the EPA before issuing the building permit.

¶ 123 Stinson J. found that the EPA "may" fall within the scope of the "applicable law" under s. 8(2) of the BCA. It was not an automatic thing in each case. In some cases, it would be apparent that the EPA is relevant or irrelevant law. Stinson J. left it to the chief building official, in the first instance, to assess whether a particular application for a building permit falls within the ambit of the EPA or any other legislation. If that decision is wrongly made by the chief building official then, as a matter of law, it could become the subject of an appeal pursuant to s. 25 of the BCA.

¶ 124 Relevant to an aspect of this appeal, Stinson J. went on to say that, in his view, in order to succeed on an appeal from a decision of the chief building official who issued a building permit without considering the EPA it was not enough to show that there had been a failure to consider the EPA as "applicable law". The relevancy of the EPA to the particular facts of the case, namely that some aspect of the proposed construction would contravene the relevant statute, must be shown.

¶ 125 After examining the provisions of the EPA and applying it to the facts before him, Stinson J. concluded that the EPA was not engaged by the particular construction in question and no error had been committed by the chief building official. Put another way, I think what Stinson J. was doing was determining whether there was a real and logical nexus between the EPA as applicable law and the construction or building in question. Finding that there was none, Stinson J. rightly concluded that the CBO's failure to consider it did not constitute an error in law.

¶ 126 At this juncture I observe that, the approach to the question before him taken by Stinson J., is very similar to that taken by Roy J. in this case. After determining, on a contextual and definitional analysis, that the three environmental statutes cannot be considered in the interpretation of "applicable law", Roy J. did not end his examination there. He went on in paras. 56, 57 and 58 of his decision to examine whether the proposed construction breached any of the three statutes. I cannot find any error in this approach which appears to be very consistent with the jurisprudence.

¶ 127 In a decision whose facts are much closer to the facts found in this case, Burns v. Serpa, Acting Alternate Chief Building Official, Township of Perth South et al, supra, Killeen J. also concluded that the EPA cannot be considered "applicable law" for the purposes of s. 8(2) of the BCA. On the facts of that case, the acting chief building official issued a building permit for the construction of two hog-raising barns on the property in question. A representative of a ratepayers' association of neighbouring landowners appealed the decision to issue the building permit on the grounds that after the barns were constructed, the spreading of liquid manure on the property, under the Nutrient Management Plan, would cause a discharge of contaminants into the environment in contravention of s. 14 of the EPA.

¶ 128 As has already been mentioned, Killeen J., in the first instances interpreted the scope of s. 8(2) of the BCA as limited by the definition of the terms "construct" and "demolish" set out in the definitions section of the BCA. After examining the purpose of the EPA, in general, and sections 6, 9 and 14 of the EPA, in particular, he determined that the EPA exempted agricultural operations from its ambit because it "does not apply" to adverse effects caused by "animal wastes disposed of in accordance with normal farm practices" (see para. 54). Killeen J. concluded at pp. 281 and 282 of his decision as follows:

> [para59] In my view, a finding that s. 14 is "other applicable law" for the purpose of regulating the construction of buildings and structures within s. 8 of the BCA would not give effect to the clear intent of the legislature to regulate and control the construction of structures from an environmental perspective under s. 9 of the EPA. Section 9, as I have already emphasized, calls for a certificate-of-approval process for structures which may discharge harmful contaminants but -- and this is an important but -- para. 9(3)(c) exempts farm structures such as the Cold Springs Barns. Further, a finding that s. 14 is applicable law will not give effect to the stated statutory policy of the legislature and government not to regulate the construction of structures used in agriculture under the EPA.
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> [para67] When read together as I think they must [be] to get at an articulate commonality of meaning -- the answer must again be that s. 14 of the EPA cannot logically be construed as an applicable law against which to measure whether a building permit should be issued for the construction of these barns. There is simply no rational and necessary nexus between the purpose of s. 14, which is to prevent the discharge of harmful contaminants and s. 8 of the BCA which deals with the construction of structures.

¶ 129 Browne J. followed the decision of Killeen J. in Welwood v. Huron-Kinloss (Township) Chief Building Official, supra because he saw the facts of the case before him as indistinguishable from those before Killeen J. in Burns v. Serpa, Acting Alternate Chief Building Official, Township of Perth South et al., supra. A building permit was issued for the construction of two barns that were intended to house 4,000 hogs from which operation there would be generated annually some 1.75 million gallons of liquid hog manure to spread on the township and adjoining township lands. On the appeal taken from that decision, Browne J. had to decide whether the EPA was "applicable law" within the scope of s. 8 of the BCA that he saw as a question of law. In coming to his conclusion that it was not, Browne J. took the same approach that Stinson J. took in William F. White Limited v. Toronto (City) Chief Building Official, supra. He did not interpret Killeen J.'s decision in Burns v. Serpa, Acting Alternate Chief Building Official, Township of Perth South et al., supra as standing for the proposition that s. 14 cannot, in all

cases, be applicable law within s. 8 of the BCA but rather that, in that case, it is not applicable law for the construction of the hog barns for intensive agricultural use in issue.

¶ 130 The City of Ottawa relies on two recent decisions from the Ontario Court of Appeal in support of its position. In R. v. Cranbrook Swine Inc., [2003] O.J. No. 1433 (C.A.), the defendant, Cranbrook Swine Inc. (Cranbrook) had been issued a building permit by the chief building official under the Building Code to construct two barns and a liquid manure storage tank which he proceeded to do. He was subsequently charged with violating the Conservation Authorities Act, because his liquid manure storage tank had been build within a wetlands which was a water resource area in contravention of the Conservation Authorities Act. The specific question before the Court was not the issue before this Court. Rather it was whether Cranbrook could succeed on the defence of officially induced error to the charge, by virtue of the fact that the chief building official had issued a building permit for the construction of the liquid manure storage tank.

¶ 131 In a dissenting decision, Abella J.A. concluded that the Defendant could succeed on such a defence stating as follows at para. 20:

> [para20] The appellants acknowledge that the Conservation Authorities Act and the construction regulations enacted under it are "applicable law" within the meaning of s. 8(2) of the Building Code Act. That makes compliance with its provisions part of what the chief building official is required to consider in deciding whether to grant a building permit. The granting of the permit is, therefore, on its face, a determination by the chief building official that, among other statutes, the relevant provisions of the Conservation Authorities Act have been complied with.

¶ 132 Later on in her decision, Abella J.A. went on to suggest that the same conclusion might apply to a variety of other statutes that affect the use of land in Ontario, among which were included two of the environmental laws in question in this case, the EPA and the OWRA, (see paras. 30 to 36 inclusive).

¶ 133 I have difficulty in accepting that R. v. Cranbrook Swine Inc., supra supports the position of the City of Ottawa to the extent that it argues or that the case can be taken to overturn the preceding jurisprudence on the question. Firstly, whether the statute in question, namely the Conservation Authorities Act was "applicable law" within the meaning of s. 8(2) of the BCA was not in issue in that case. It was the subject of an agreement between the parties so that the Court of Appeal was not dealing head on with the issue before this Court. Secondly, the context of the decision concerned a quasi-criminal case which puts the focus of the discussion, and rightly so, on the strict rights of the defendant. Thirdly, any comments by Abella J.A. regarding the status of statutes, other than the Conservation Authorities Act, as "applicable law" within the meaning of s. 8(2) of the BCA is obiter. Fourthly, the decision of Abella J.A. is a dissenting one. The majority decision clearly rejected not only her disposition but also her "analysis concerning the reliance component of the defence" which included the obiter part of her reasons.

¶ 134 In Pedwell v. Pelham (Town), [2003] O.J. No. 1774 (C.A.), by a mechanism known as a testamentary devise, Mr. Pedwell was able to avoid certain provisions of the Planning Act and the intent, at least, of the applicable zoning by-laws. In an attempt to stop the development, the Town enacted an interim control by-law that effectively stalled any development on the land. On an application to challenge the interim control by-law, the trial judge found that the Town had acted in bad faith, declared the interim control by-law a nullity and directed the chief building official to issue a building permit for the lots.

¶ 135 On appeal from the judgment of the trial judge, the Town argued that the judge had made a palpable and overriding error on the facts and that he had misdirected himself with respect to the applicable law. One of the alleged misdirections was that the EPA is "other applicable law" for the purposes of s. 8 of the BCA.

¶ 136 With respect to the argument that the trial judge had committed a palpable and overriding error on the findings of fact, one of which was that the Town had acted in bad faith, Rosenberg J.A. stated at para. 23 that while he might not have made all of the same findings as the trial judge, nor drawn the same inferences, he was not satisfied that the trial judge was "palpably in error".

¶ 137 With respect to whether the EPA is "other applicable law" for the purposes of s. 8 of the BCA, because the evidence showed that the septic system proposed by Pedwell would release nitrates into the soil in such quantities as to violate the Act, Rosenberg J.A. had the following rather qualified statement to say at para. 47:

> [para47] I accept that in the circumstances of this case, the Environmental Protection Act can be considered other applicable law within the meaning of s. 6(1) of the Building Code Act. See Welwood v. Huron-Kinloss (Township) Chief Building Official (2002), 29 M.P.L.R. (3d) 1 (Ont. S.C.J.). Although compare Burns v. Perth South (Township) Chief Building Official (2001), 54 O.R. (3d) 266 (Ont. S.C.J.).

¶ 138 On the facts of that case, it is not hard to relate directly by way of a clear and logical nexus, the construction in question, in particular the construction of the septic system, with the environmental law in question, the EPA, that is necessarily concerned with the release of nitrates into the soil. I understand from the results of and reasons given in Pedwell v. Pelham (Town), supra, that whether the EPA is to be considered "applicable law" will depend on the individual "circumstances of [each] case" and whether a real and logical nexus exists between the facts of the case and the EPA.

¶ 139 The ratio of Pedwell v. Pelham (Town), supra is consistent with the preceding jurisprudence, which I find to have been stated particularly well in the decision of Stinson J. in William F. White Limited v. Toronto (City) Chief Building Official, supra.

¶ 140 In sum, and based on the analysis of the preceding case law, I cannot find that Roy J. erred in concluding that a proper interpretation of the term "other applicable law" pursuant to s. 8(2) of the BCA excluded, as a category, the three environmental statutes in issue. Whether such environmental statutes can be considered "applicable law" in any individual case is left to the CBO in the first instance and to the application judge on an appeal pursuant to s. 25 of the BCA as a question of law.

¶ 141 Furthermore, the decision of whether any of the EPA, the OWRA and the Fisheries Act are engaged by the construction, that is the subject-matter of the building permit, must be based on whether there is a real and logical nexus between the applicable law and the erection of the building in question. The relevancy of the three environmental laws as "applicable law" is not shown by the mere failure to consider them, but upon proof that the proposed construction, that is the subject of the building permit, would contravene any of their provisions. Roy J. did not err in failing to consider whether the proposed construction for the hog farm operation on the facts of this case would contravene any of the provisions of the three environmental statutes in question. In fact, he considered all three statutes individually in his decision in paras. 56 to 58. Did he err in this examination is the third issue on the appeal.

¶ 142 Before going on to consider the third issue on the appeal before this Court, the following comments are justified. The law relating to the interpretation of the term "applicable law", for the purposes of s. 8 of the BCA, as I have just enunciated it in the

previous paragraphs, is a reasonable, measured and workable one that is consistent with the statutory language chosen by the Legislators. There is no question that the environmental concerns raised in this appeal are significant to the well being of the Ottawa community. They should be pursued, regulated and enforced, if necessary. However, the power to do that lies elsewhere, than in the limited powers of the CBO and the legislation governing those powers. I agree with the sentiments expressed by Roy J. in his decision that to designate the CBO as the gatekeeper to the concerns of the environmental statutes, in the way suggested by the City of Ottawa, is asking this Court to legislate law rather than interpreting it. It is not for this Court to do. It is not justified by the language found in the BCA and the jurisprudence relating to that language.

Was the application Judge correct in concluding that, even if any of the three environmental statutes could be considered "other applicable law", they were, nonetheless inapplicable to this case on a proper interpretation of their provisions?

¶ 143 I can find no error in the application judge's interpretation of the provisions of the three environmental statutes in question. Roy J. applied the correct test to those provisions and found that there was no rational and necessary nexus between those provisions and s. 8(2) of the BCA. He also examined those provisions in light of the substantial evidence that he had before him and could not find that the proposed construction would, in any way breach those provisions.

¶ 144 With respect to the OWRA, based on the evidence before Roy J., one can take serious issue with his statement in paragraph 56 that "Sewage, as defined in the statute, appears not to apply to agriculture". An examination of the relevant sections of the OWRA and the evidence presented in this case, (see Compendium Supplementaire De L'Intervenante, tab 21), supports the conclusion that farm waste and farm waste disposal systems do come within the definition of "sewage" and "sewage works" and would technically come within the certificate of approval process provided for in s. 53 of the OWRA. Section 30 of the OWRA also does not provide an exemption for agricultural operations, (see Peacock v. Norfolk (County) Chief Building Official, [2003] O.J. No. 2771 (S.C.J.).

¶ 145 Nonetheless, Roy J. had ample evidence before him, evidence that was not disputed by the parties, to conclude that, as a result of discussions between the Ministry of the Environment and the Ministry of Agriculture and Food, certificates of approval for farm waste disposal were not required. As a matter of practice, sanctioned by the two enforcing Ministries in question, Roy J. did not err in finding that the proposed construction, along with its renovations relating to the manure collection, transmission and storage system, would not contravene the OWRA and, hence, had no real or logical nexus to it.

¶ 146 Regulation 903 of the OWRA, which deals with unused wells, was not specifically mentioned by Roy J. in his reasons. However, the evidence concerning the unused wells was extremely conflicting. There was nothing in the evidence to show that the proposed renovations would contravene Regulation 903 of the OWRA. I can find no error in Roy J. treating Regulation 903 of the OWRA in the same way that he dealt with the rest of the provisions of the OWRA.

¶ 147 In his discussion of the Fisheries Act in para. 57 of his decision, Roy J.'s reference to a "flood plain" and Cold Springs Farms Limited v. Serpa, 54 O.R. (3d) 266 is confusing. That decision did not deal with the construction of a building in the area of a flood plain. The case of Upper Thames River Conservation Authority v. London (1989), 67 O.R. (2d) 784 (Ont. Dist. Crt.) deals with the construction of buildings on a flood plain. In that case, the Conservation Authorities Act and its regulations were found to be applicable law.

¶ 148 Nonetheless, with respect to the Fisheries Act, there was no evidence before Roy J. to establish a real and logical nexus

between that Act and the proposed construction. There was no evidence to show that the farm waste from the proposed operation would go into any of the surrounding watercourses. I cannot find that Roy J. erred in finding on the evidence before him that the proposed construction would not contravene ss. 35 and 36 of the Fisheries Act and hence render it applicable law.

¶ 149 Finally, with respect to the EPA, I can find no error in Roy J.'s conclusion that there was no rational and necessary nexus between the purpose of s. 14 of the EPA and s. 8 of the BCA in the circumstances of this case. Roy J. did not accept without reservation Killeen J.'s interpretation of s. 14(1) and (2), that there was an absolute and complete exemption for agricultural activities from the operation of those sections. On my reading of those provisions of the EPA, I can find no such absolute exemption. I agree with the submissions of the City of Ottawa that, on a proper reading of those provisions of the EPA, normal farming practices may be exempt, but not beyond the point where harm results or is likely to result from such activity. However, I cannot find that Roy J. erred in finding that the proposed construction would not, on the evidence before him, in any way breach the provisions of the EPA. It was, therefore, not relevant as applicable law.

¶ 150 The last issue to be dealt with is the second issue on the cross-appeal; namely,

Did the application judge err in refusing to recognize the right of the Intervenor to a legal non-conforming use on the property as the CBO had so concluded?

¶ 151 For the reasons given earlier, this is clearly a question of mixed fact and law. It can be likened to the issue that was before the Supreme Court of Canada in Housen v. Nikolaisen, supra. In that case, the trial judge had to apply the legal principle of duty of care to the facts of the case, grounded on the evidence, to determine whether the party was negligent. As was pointed out in Housen v. Nikolaisen, supra, the finding of negligence made by the trial judge is entitled to the highest deference and should only be overturned by an appeal court if it can be shown that the trial judge made a "palpable and overriding error". So in this case, Roy J. had to apply the accepted legal principle, with respect to a claim for a legal non-conforming use, as established by the Supreme Court in Saint-Romuald v. Olivier, supra, to the facts of the case, grounded on the evidence, to determine whether there has been a change in use. That finding is entitled to the highest deference and should be overturned only if this Court can find that Roy J. has made a "palpable and overriding error".

¶ 152 It was not disputed by the parties that the legal test to be applied to the facts of the case to determine whether there is a change in use is that established by the Supreme Court in its recent decision, Saint Romuald v. Olivier, supra. At an earlier part of this decision, I reviewed in some detail Roy J.'s enunciation and application of the test to the facts of this case. Upon having made that review, I can find no error in the application judge's understanding and enunciation of the test. It was correctly stated.

¶ 153 In his submissions, the Intervenor put great emphasis on the fact that the intended hog farm operation was nothing more than the continuation of the previous agricultural use, that had been made of the farm in the preceding dairy farm operation, with respect to the number of animal units, the volume of animal waste and the farm practices relating to the processing and use of that waste. Clearly, this had to be considered, as Roy J. did, given the evidence before him. However, to have considered that alone would clearly have rendered the analysis merely a "category" approach to deciding whether a claim to a legal non-conforming use existed or not. This broad "category" approach was specifically rejected by the Supreme Court in Saint-Romuald v. Olivier, supra, and correctly not followed by Roy J.

¶ 154 I now consider Roy J.'s application of that test to the facts and evidence presented before him. Just as this Court has had, so too did Roy J. have a substantial amount of evidence presented before him. Without limiting the full inventory of the evidence placed on record, the following is an example of the scope, volume and substance of that evidence:

* Maps and charts relating to the location and identification of the Property, including any near-by creeks and watercourses.

* Information about the historical and current farming usage of the Property and its surrounding land and neighbourhood.

* A number of professional reports and studies commissioned by both the City of Ottawa and the Intervenor relating to the topography, geology and hydrology of the Property. Those reports, among other things, dealt with the soil type, the presence and condition of abandoned wells and the tile drainage and "French drains" on the Property, as well as the significance of all of this for the water resources associated with the Property and the surrounding land.

* Information about the nature and magnitude, both with respect to livestock numbers and financial operation, of the pre-existing dairy farm operation on the Property.

* Information about the nature and magnitude of the proposed hog farm operation. This included, among other things, information about livestock numbers, the new technology to be used in the care and breeding of the hogs, the number of employees and other professionals that would be used on a regular basis in the operation, the delivery system and other details of the day to day operation of the hog farm.

* Information and photographs of the realized and proposed renovations to the buildings in question, including the cost of those renovations. This information also included details relating to the Intervenor's proposed manure transmission, storage and spreading system.

* Detailed information about the Intervenor's proposed Nutrient Management Plan, including the constituent parts of its operation in the hog farming as well as the details of the process by which it was approved by OMAF. There was even information about how the Intervenor's Nutrient Management Plan met, perhaps even more than legally required, the recently passed Nutrient Management Act. Based on their opportunity to question various professionals involved in Nutrient Management Planning relating to agricultural operations, there was also information about the alleged deficiencies and the alleged strengths of Nutrient Management Plans, in general, and the Nutrient Management Plan of the Intervenor, in particular, and how it may impact on the environment and the surrounding farming community.

* The views and evidence of such professionals as Dr. Murray S. McQuigg of the Walkerton Inquiry and Mr. Luc Brunet, and Mr. Robert Chambers about the environmental protections and concerns of the proposed hog farm operation. The CBO provided her own affidavit concerning her perception of certain aspects of the proposed hog farm operation and the process of this litigation.

* Information about the findings and recommendations of the Walkerton Inquiry.

* Information comparing dairy farm operations with pig farm operations from the point of view of livestock numbers, volume of manure production and processing and odour to the community.

* Details of the concerns raised by the City of Ottawa relating to the risks to the environment and the surrounding lands that they anticipated, if the proposed hog operation were to go ahead as well as the Intervenor's reply to the concerns raised.

* Affidavits, as well as the transcripts of the questioning that took place on those affidavits, and letters from neighbours to the Property and Ottawa citizens, relating to the concerns about the environmental and community impact of the proposed hog farm in their midst. There were also affidavits from individuals who supported the Intervenor's proposed plans and these were before the Court too.

* Information about the Quebec moratorium on hog farm operations and the reasons for such moratorium.

* Information about the subject matter, enforcement procedures and practices followed by the various Ministries responsible for the three environmental statutes in question, the OWRA, the Fisheries Act and the EPA.

¶ 155 With all this evidence plus more before him, Roy J. applied the correct legal test, considering all of the seven factors enunciated by the Supreme Court, and came to the conclusion that the proposed hog operation constituted a change in use from the previous dairy-farm operation.

¶ 156 In examining the analysis made by him and the reasons stated in his decision, I cannot find that Roy J. considered irrelevant evidence, in coming to his final decision, as alleged by Intervenor. While Roy J. makes reference to such things as the Quebec moratorium, the Walkerton Inquiry and the original intention of the Intervenor to operate with a much larger number of livestock, when one examines the whole of his decision, one cannot conclude that his decision was based on these few isolated facts.

¶ 157 Furthermore, those facts cannot be considered completely irrelevant. They provide important contextual and narrative information, logically connected to the nature of the factors that the Supreme has mandated be considered in the Saint-Romuald v. Olivier, supra decision. (See also Peacock v. Norfolk (County) Chief Building Official, supra.)

¶ 158 As is evident from his reasons, Roy J considered all of the evidence before him. His findings of fact and inferences of fact are supported by the evidence before him. His findings of fact and inferences of fact are grounded on the evidence before him and are not speculative. Based on the evidence, he did not characterize the legal non-conforming use in question too narrowly nor inflexibly, but dealt with it in a fair and measured manner in his attempt to deal with the interests of the farmer and the community in a balanced way, as directed by the Supreme Court. I can find no basis on the evidence or in Roy J.'s reasons for concluding, as the Intervenor submits, that he came to his conclusion based on "l'utilisation de la preuve subjective".

¶ 159 As Rosenberg J.A. pointed out in Pedwell v. Pelham (Town), supra, while I might not have made all of the same findings as the application judge or drawn the same inferences from the very substantial and oftentimes conflicting evidence, that is not the

standard. I am not satisfied that the application judge was palpably in error. For this reason, the answer to this issue on the cross-appeal is in the negative.

¶ 160 Counsel directed the Court's attention to some jurisprudence on the issue of legal non-conforming use. Some of this case law pre-dated the final crystallization of the test by the Supreme Court of Canada decision in Saint-Romuald v. Olivier, supra. (See Glenelg (Township) v. Davies (1992), 10 M.P.L.R. (2d) 260 (Ont. C.A.); Heutinck v. Oakland (Township) (1997), 42 M.P.L.R. (2d) 258 (Ont. C.A.); Nepean (City) v. D'Angelo, [1998] O.J. No. 5299 (Ont. Gen. Div.).

¶ 161 The few cases that have been decided since the Supreme Court released its decision in Saint-Romuald v. Olivier, supra, to the extent that comparisons can be drawn between the cases on their different facts, appear to support the conclusion of Roy J. In Peacock v. Norfolk (County) Chief Building Official, supra, Taliano J. found, relying on the Supreme Court decision, that even the proposed expansion of an existing hog farm operation could constitute a change in character and not enjoy a legal non-conforming use. He states at p. 13 of his decision:

> [para76] ... Put another way, the doctrine of legal non-conforming use cannot be used to protect expansion that necessarily entails such grave environmental and public safety dangers. I am fortified in this view by the decision of the Supreme Court of Canada in Saint-Romuald (Ville) v. Olivier ...

¶ 162 In 4310845 Manitoba Ltd. v. Morris (Rural Municipality), supra, like the facts in this case, the proposed hog farm operation had not yet commenced. The Court, in dealing with the legal test enunciated by the Supreme Court in Saint-Romuald v. Olivier, supra, dealt with the fact that the hog operation had not yet commenced and that therefore the Municipality could not argue adverse neighbourhood effects from a factually founded position. Despite this, the Court found that, on the evidence, the residents of the community had "expressed reasonable concerns". The Court concluded that there was not a continuation of the pre-existing non-conforming use.

¶ 163 As can be seen from his reasons, Roy J. took the same approach to this issue. I can see no error in this. Given the evidence before him, it did not render his treatment of the factor of community effects and the balancing that he had to do with respect to the community interests and the farmer's interests speculative and any less grounded in the evidence.

¶ 164 In Rolstein v. Oro-Medonte (Township) (2002), 34 M.P.L.R. (3d) 266 (Ont. S.C.J.), the Court had to decide whether a legal non-conforming use continued after renovations were made to a boathouse on a severed property. The appeal was refused by Howden J. who found that he lacked the evidence to conduct the measured approach and analysis, grounded on the evidence, as required by the Supreme Court in Saint-Romuald v. Olivier, supra. The facts of that case are very different from the facts of the case at bar. In this case, the evidence was substantial. Roy J. was able and did carry out the measured analysis grounded on the evidence, as mandated by the Supreme Court in Saint-Romuald v. Olivier, supra.

¶ 165 By way of summary, for all of the reasons given above, the second and third issues on the appeal brought by the City of Ottawa are answered in the negative. The appeal is therefore dismissed. The second issue on the cross-appeal is answered in the negative. The cross-appeal is therefore dismissed.

¶ 166 If the parties cannot reach an agreement on the question of costs, with respect to both the appeal and cross-appeal, the Court will receive the short written reasons of the parties on the question of costs. The City of Ottawa shall have three weeks from the release

of this decision to file and serve its written submissions on costs, with respect to both the appeal and cross-appeal. The CBO and the Intervenor shall have two weeks from that time to file and serve their submissions on costs with respect to the appeal and cross-appeal. The City of Ottawa, if it so chooses, shall have one further week from that date to reply. If the Court deems it necessary, it may ask the parties to supplement their written submissions on costs with brief oral arguments on a date to be fixed by the trial coordinator.

LINHARES de SOUSA J.
CUSSON J.:— I agree.
MÉTIVIER J.:— I agree.

COURT FILE NO.: 05-114
DATE: 2006-02-27

ONTARIO

SUPERIOR COURT OF JUSTICE

B E T W E E N:	)	
THE CORPORATION OF THE TOWNSHIP OF PICKLE LAKE	)	DAVID NATTRESS, for the Applicant
Applicant	)	
- and -	)	
SHETTERLY ENTERPRISES LTD.	)	BERND RICHARDT, for the Respondent
Respondent	)	
	)	**HEARD:** 2006-02-22

REGIONAL SENIOR JUSTICE J. F. McCARTNEY

[1] The Applicant herein seeks an order confirming the emergency order issued by the Applicant February 4, 2005, and for recovery of the costs expended by the Applicant, all pursuant to the Building Code Act, 1992.

[2] Initially confusion arose over the section of the Act under which the building inspector purported to act, it seems clear to me that the reference in the order of February 4, 2005 to Section 15.10(1) is a reference to the Section 17, Section 15 being the replacement section for Section 17 in the amended Act which was not yet in force at the time of the order.

[3] The facts are as follows:

On February 2, 2005, a 26-foot section of a building in the Applicant municipality caved in, apparently due to snow load. On that date the building inspector, Karl Kopf, attempted to notify the owner of the situation.

[4] As a result of the inspection Kopf determined that the building posed an immediate danger to health and safety because of the following:

1. Another roof collapse was possible or probably, and

2. The building protected an old mine shaft which was now exposed.

[5] On February 4, 2005, Kopf prepared the order under Section 17, indicating the danger and requesting the owner to demolish the building and remove all debris, which work had to begin by February 7, 2005 – three days hence. The order was served on the owner by regular mail and a copy was sent to the tenant.

[6] On February 8, 2005 the municipality commenced to do the work as ordered, and on May 24, 2005 the owner was sent a bill for the costs of the work i.e. $5,111.08, with attached invoices.

[7] The Respondent argues that even though the order is entitled "emergency order under Section 17" what it really is is an unsafe building order under Section 15 because it didn't require the work to be done "immediately" as set out in Section 17. Under Section 15, goes the argument; all the inspector can do is to require remedial work to be done by the owner. The Respondent also argues that since the tenant was moving his chattels by February 7, the order was in fact being complied with, and the municipality should not have proceeded with the demolition on February 8th as they did.

[8] The standard of review here is to my mind one of reasonableness. As was said by Ducharme J. in 1218897 Ontario Ltd. V. Toronto:

> "The more the C.B.O.'s decision is solely an interpretation of law, the closer the standard of review will be to correctness. The more the C.B.O.'s decision is dependant upon factual determinations within the specific expertise of the C.B.O., the more deferential will be the standard. Generally speaking, however, a standard close to correctness will be applied to decisions based on law or jurisdiction and a standard of reasonableness will be applied to questions of fact. Within the standard of reasonableness, the degree of deference or the "weight" to be given to any particular determination will depend on the circumstances. Runnymede Development Corp. v. 1201262 Ontario Inc. , (2000), 47 O.R. (3d) 374 at 385 to 387 (Sup.Ct.Just.)

Here the question of what constituted "an immediate danger to the health and safety of any person" in our situation is much more a question of fact then it is of law.

[9] And so, applying the standard of reasonableness to the evidence before me, I cannot come to the conclusion that the building inspector's decision and resulting order were unreasonable. Furthermore, the fact that the tenant had begun moving items from the building could hardly be determinative of compliance with the order, since the basic premise of the order was to correct a danger to the public and not to remove stored items.

[10] Under all the circumstances, the emergency order of February 4, 2005 is confirmed, and the Respondent owner Shetterly Enterprises Ltd. is ordered to reimburse the Applicant for the amount spent to terminate the danger -$5,111.08.

[11] Costs may be spoken to if required within the next 15 days.

Regional Senior Justice J. F. McCartney

Released: 2006-02-27

[2005] O.J. No. 4223
Court File Nos. 04-SC-000039 and 05-SC000051

Ontario Superior Court of Justice

Between

Rexlington Heights Ltd. (9, 11, 25 & 27 Bergamot Avenue),
appellant
and
Her Majesty the Queen
respondent

P.A. Cumming J.

Heard: September 21-22, 2005.
Judgment: October 5, 2005.

Counsel:

David Tang, for the Appellant

Lisa Solish, for the Respondent

REASONS FOR DECISION

¶ 1 **P.A. CUMMING J.**:— This is an appeal by Rexlington Heights Ltd. ("Rexlington") pursuant to s. 15.3(4) of the Ontario Building Code Act, 1992 S.O. 1992, c. 23 as amended (the "Act"). This appeal involves an issue of first instance.

¶ 2 Do certain standards relating to guards and handrails in stairwells and stairways in the Ontario Building Code, 1997 O. Reg. 403/97 (the "Code"), being a regulation to the Act, apply to apartment buildings in the City of Toronto (the "City") whose construction pre-dates the introduction of these standards in the Code?

¶ 3 The issue is whether all buildings constructed prior to the coming into force of the provisions of the Code relating to handrails and guards must be brought into conformity with those provisions. The Crown asserts that City of Toronto Municipal Code by-law 629 relating to "Property Standards" ("by-law 629") requires that this be done.

Background

¶ 4 The amalgamation of several municipalities into the City came into force January 1, 1997.

¶ 5 An Order was made by a Property Standards Officer for the City on December 4, 2004. The Order sets forth in its Schedule "A" required repairs and maintenance in respect of four residential apartment buildings, being #9, #11, #25 and #27 Bergamot Ave. in Toronto; properties owned by the appellant, Rexlington. Two of the buildings are four stories high and have 73 apartments each, while two buildings are seven stories high and have 130 apartments each. There are a total of 406 apartment units. Each building has two interior stairwells. The Order asserts that Rexlington is in violation of the City of Toronto's by-law 629 relating to "Property Standards" in respect of the stairwells.

¶ 6 The subject buildings were constructed and first occupied in 1958, some 47 years ago. The guards and handrails in the multiple stairwells are not in disrepair. They simply do not comply with the standards now seen in current ss. 3.4.6.4 and 3.4.6.5 of the Code. The handrails and guards did comply with all applicable building

standards at the time of construction in 1958. (The buildings are located in what was known, pre-amalgamation, as the City of Etobicoke. The evidence suggests that Toronto and Etobicoke had substantially the same handrail and guard standards in 1958.)

¶ 7 It is common ground that there are hundreds, perhaps thousands, of pre-Code buildings in the City in the same position as Rexlington.

¶ 8 The Order of the Property Standards Officer was first appealed by Rexlington, pursuant to s. 15.3 of the Act, to the Property Standards Committee. The Committee confirmed the Order in a decision dated March 8, 2005.

¶ 9 Rexlington now appeals to this Court, as allowed under s. 15.3(4) of the Act. The matter is heard as a trial de novo.

¶ 10 Rexlington does not dispute the factual findings in the Property Standards Officer's Order. The Crown asserts that the factual findings in the Property Standard Officer's Order, and the Committee's confirmation, substantiate a finding that Rexlington has not complied with the requirements of s. 19.C of the Code.

¶ 11 Section 15.1(3) of the Act provides for "Municipal Property Standards", inter alia:

> Standards for maintenance and occupancy
>
> (3) The council of a municipality may pass a by-law to do the following things if an official plan that includes provisions relating to property conditions is in effect in the municipality or if the council of the municipality has adopted a policy statement as mentioned in subsection (2):
>
> 1. Prescribing standards for the maintenance and occupancy of property within the municipality or within any defined area or areas and for prohibiting the occupancy or use of such property that does not conform with the standards.
>
> 2. Requiring property that does not conform with the standards to be repaired and maintained to conform with the standards or the site to be cleared of all buildings, structures, debris or refuse and left in graded and levelled condition.

¶ 12 Given the clear language of this provision, it is undisputed that the City has the right to legislate property standards for the City. As well, it is undisputed that the City can legislate so that the new property standards apply to pre-existing buildings: George Sebok Real Estate Ltd. v. Woodstock (City) (1978), 21 O.R. (2d) 761 (C.A.) at 762-763.

¶ 13 The definition of "property" in s. 15.1(1) of the Act is applicable to municipal property standards, and includes a building "heretofore or hereafter erected". It therefore provides authority that all property in a municipality can be covered by its by-laws. The definition of "repair" includes "the making of additions or alterations or the taking of any other action that may be required to ensure that a property conforms with the standards established in a by-law passed under this section". (These definitions of "property" and "repair" are the same as seen in s. 1 of by-law 629 and are substantially the same as seen in s. 36(3) of the Planning Act S.O. 1972, c. 118 which governed the predecessor to by-law 629, being by-law 5245-77: Sebok, supra at 761-762.)

¶ 14 The section 15.1 enabling provision provides the authority for the City's by-law 629 relating to "Property Standards". Section 2 of by-law 629 states that the property standards therein apply to all property in Toronto.

¶ 15 Under the heading, "Stairs, guards, handrails and other structures", s. 19.C of this by-law requires that:

> All required guards and handrails shall be installed in accordance with and maintained to comply with the Ontario Building Code.

¶ 16 Section 3.4.6.4 of the Code provides inter alia:

> 3.4.6.4 Handrails
>
> (1) An exit ramp or stairway shall have a handrail on at least one side, and if 1 100 mm (3 ft 7 in) or more in width, shall have handrails on both sides.
>
> ....
>
> (4) Handrails on stairs and ramps shall be not less than 865 mm (2 ft 10 in) and not more than 965 mm (3 ft 2 in) high, measured vertically from a line drawn through the outside edges of the stair nosing or from the surface of the ramp, except that handrails not meeting these requirements are permitted provided they are installed in addition to the required handrail.

¶ 17 Section 3.4.6.5 of the Code provides inter alia:

> 3.4.6.5 Guards
>
> (1) Every exit shall have a wall or a well-secured guard on each side.
>
> ....
>
> (5) Except as provided in Sentence (6), openings through any guard which is required by Sentence (1) shall be of a size which will prevent the passage of a sphere having a diameter more than 100 mm (4 in) unless it can be shown that the location and size of openings which exceed this limit do not represent a hazard.

The Evidence

¶ 18 Mr. David Giezen, the Property Standards Officer who issued the Order for the City, and Mr. Gino Vescio, the Acting Coordinator for the City for the enforcement of property standards, testified for the Respondent.

¶ 19 Mr. Tony Alexander, a professional engineer and founder of Construction Control Inc., testified on behalf of the appellant Rexlington as an expert civil engineer in respect of the subject buildings.

¶ 20 As stated above, Rexlington does not dispute the factual findings of the Order of the Property Standards Officer. These findings establish non-conformity with ss. 3.4.6.4 and 3.4.6.5 of the Code.

¶ 21 For example, the stairways are generally 43 inches in width from the wall or one inch more than the maximum width allowable for only one handrail. The handrails are generally one and a half inches shorter than required (about 32.5 inches rather than the standard of 34 inches). The openings within the ornamental ironworks between the guards are between four and ten inches rather than the maximum of four inches.

¶ 22 Section 15.2(2) of the Act stipulates that when an Officer "finds that a property does not conform with any of the standards prescribed in a by-law passed under s. 15.1" s/he may make an order requiring compliance.

Analysis

¶ 23 Section 19.C of by-law 629 requires that guards and handrails will "comply with the Ontario Building Code". The Crown argues that this requirement is met by simply looking at the straightforward provisions of ss. 3.4.6.4 and 3.4.6.5 of the Code.

¶ 24 I disagree. The requirement of s. 19.C is compliance with the Code as an entirety. Section 19.C does not simply refer to ss. 3.4.6.4 and 3.4.6.5 of the Code. Therefore, how the by-law applies these provisions will depend upon how they have meaning within the context of the Code.

¶ 25 In my view, therefore, the Code must be considered in its entirety to discern the correct application of ss. 3.4.6.4 and 3.4.6.5. This examination requires an exercise of statutory interpretation.

¶ 26 The rules formulated for the construction of statutes are also applicable to interpreting the meaning of municipal by-laws: McLear v. Mason (1988), 65 O.R. (2d) 228 (H.C.J.) at 237. In that case at 237 and 238, Justice Sutherland refers to excerpts from E.A. Driedger, Construction of Statutes, 2nd ed. (Toronto: Butterworths, 1983) at 33-7 and 89-92, and from Maxwell on the Interpretation of Statutes, 12th ed. (London: Sweet & Maxwell, 1969) at 58-64 and 105-8 to summarize the general rules of, or factors in, statutory interpretation as follows:

> (a) ... regard should be had to the whole of the statute or by-law;
>
> (b) ... in making a choice between alternative meanings, the court should favour the meaning that is in harmony with the purpose and the other provisions of the enactment;
>
> (c) ... a construction that avoids absurdity, injustice, anomaly, hardship and inconvenience should be preferred;
>
> (d) ... regard must be had to the scheme of the legislation, and each provision construed in a way that will, where possible, place a consistent, rational, and probable meaning on all of the provisions when read together;
>
> ....
>
> (g) ... if there are two reasonable meanings to the language of a provision, the interpretation that will avoid penalty is to be adopted.

See now Ruth Sullivan, Sullivan and Driedger on the Construction of Statutes, 4th ed. (Markham: Butterworths, 2002).

¶ 27 Of specific relevance in interpreting the correct meaning of the by-law and the Code is the recognition that the Code and by-laws

must balance private interests and public interests in planning and safety concerns. In Bayshore Shopping Centre Ltd. v. Nepean (Township), [1972] S.C.R. 755 at 764, Spence J. recognized that by-laws which are restrictive of rights should be strictly constructed as a "man's property is his own which he may utilize as he deems fit" but that modern zoning provisions should be construed more liberally due to the public interest. Given these conflicting values, neither strict nor liberal interpretation is mandated and a more balanced approach is appropriate: Rotstein v. Oro-Medonte (Township), [2002] O.J. No. 4990 (Sup. Ct.) at para. 22.

¶ 28 Section 2.1.1.2 of the Code provides, inter alia, that Part 3 of the Code applies (with some exceptions) to all buildings with certain uses and exceeding certain areas and heights. It is common ground that the subject buildings are all within the ambit of s. 2.1.1.2. The Code applies to the buildings of Rexlington. But do ss. 3.4.6.4 and 3.4.6.5 of the Code apply to the buildings as they stand at present?

¶ 29 A consideration of the entirety of the Code's provisions establishes that the Code's provisions are generally intended to apply only in respect of new building construction, building extensions, and material alteration or repair.

¶ 30 Section 2.1.1.6 provides that Part 11 of the Code relating to "Renovation" generally does not apply to buildings in existence for less than five years. Part 11 deals with existing buildings that are subject to an extension, material alteration or repair. See ss. 11.1.2.1, 11.3.1.1, and 11.3.2.1. Thus, for example, if a building of less than five years is undergoing a material alteration, compliance with Part 11 is unnecessary (presumably the drafters felt that recently constructed buildings would already meet the Code's standards and need not trigger the requirements of Part 11 (such as an evaluation of the performance level of the building and compensating construction: s. 11.1.2.1)).

¶ 31 Section 2.1.1.7 provides that where an existing building is extended, or subject to material alteration or repair, the Code is applicable only to the design and construction of the extension and those parts of the building that are subject to the material alteration or repair. (In the situation at hand, Rexlington is not constructing an extension or carrying out an alteration or repair.) Only the areas or portions of a building being renovated, or other parts of a building adversely affected by that renovation, need comply with the requirements of the Code. All other areas or portions need not comply with ss. 3.4.6.4 and 3.4.6.5 of the Code and may remain unchanged: see s. A.2.1.1.7 of Appendix A, providing "Explanatory Material" for the Code.

¶ 32 Sections 3.15 and 9.41 of the Code impose additional requirements where the proposed construction in respect of an existing building will result in significant changes to use of all or part of a building.

¶ 33 Together these provisions indicate that in the case of buildings that pre-date the Code, the provisions of the Code are only triggered upon the commencement of constructing an extension or making a material alteration or repair. In the absence of such activity, the building is subject to the standards in place at the time that it was built.

¶ 34 Moving to the by-law itself, section 19.C of by-law 629 could have been drafted to refer directly to ss. 3.4.6.4 and 3.4.6.5 to make it clear the standards therein apply to pre-existing buildings. But instead s. 19.C refers to the Code as an entirety. By referring simply to the Code as an entirety, the by-law is in effect stating that the Code covers the field of applicable regulation in this area. As the Code does not require handrails and guards to meet current standards unless an old building is undergoing an extension, major alteration or repairs, then they are also not required in the situation at hand. If the clause had been written, "guards and handrails shall be installed in

accordance with ss. 3.4.6.4 and 3.4.6.5 of the Code", then it would be necessary to read the by-law to determine what buildings are covered by these standards. The by-law would define the scope, being "all property", to which the requirements would apply.

¶ 35 It is a principle of statutory interpretation that when an act, or by-law, is read as a whole, one can assume that the legislature intended a coherent piece of legislation, with consistency of patterns of expression: Sullivan and Driedger, supra, at 165. Therefore, further clarity can be achieved by reading the by-law in its entirety, and comparing the different provisions. The by-law has several provisions that set out precise standards that clearly apply to all buildings, whenever they were built. See for example, s. 5.1.B as to the lettering size of "Emergency contact signs"; the manner of "firewood storage" required by s. 10.E; the manner of drainage of roofs and roof structures provided for in s. 20.C; and security measures in respect of vacant properties as required by s. 24.B. See also s. 25 dealing with occupancy standards and habitable areas and rooms; s. 29.D proscribing dead bolt locks on certain doors; and s. 38.B establishing heating standards for habitable rooms. Had the City similarly intended that all buildings, whenever built, comply with the standards seen in ss. 3.4.6.4 and 3.4.6.5 of the Code, clear language could have been employed.

¶ 36 By-law 629 does not often refer to specific standards of the Code in specifying its "Property Standards". It is not necessary to do so as the standards of the Code will apply to all buildings irrespective of their incorporation by reference in by-law 629. Therefore, where by-law 629 refers specifically to the Code, as for example in ss. 36.B and 19.C, it seems to be for the purpose of confirming that the Code provides the complete regime applicable to that aspect of buildings in the municipality. Sometimes the standards of the Code are referred to in by-law 629 (see for example ss. 41.D.(5)a, J. and L.) as one element of the by-law, suggesting that the by-law serves to provide additional, supplementary standards to those requirements found in the Code. By-law 629 is careful in stating that where there may possibly be a conflict between it and the Code, the provisions of the Code prevail. See ss. 29.F and 41.I.

¶ 37 The purpose of by-law 629 is both to provide property standards in respect of maintenance and occupancy where the Code is silent, and to supplement the Code provisions as to construction by imposing additional, but not inconsistent, standards. The by-law is therefore not intended to replace the Code and should not be read as expanding on the Code unless this intent is expressly stated. It is a presumption of statutory interpretation that when there is doubt as between two meanings, a judge is justified in choosing the construction which encourages continuity with existing law over an interpretation that departs from it: Pierre-André Côté, The Interpretation of Legislation in Canada, 3rd ed. (Toronto: Carswell, 2000). On the basis of this principle, the preferred interpretation of by-law 629 is that it adopts the Code and does not expand upon its application.

¶ 38 It is also appropriate for courts to rely on social context, and a particular mischief that the legislation is intending to cure, in determining meaning: Sullivan and Driedger, supra, at 460-462. Clearly, many of the provisions in by-law 629 that refer to all buildings, whenever constructed, deal with matters of safety, such as regulating emergency signs and proscribing dead bolt locks on fire exits. A purposive interpretation may suggest it is appropriate to adopt a broader reading of s. 19.C. However, in this case, no evidence was presented as to a particular concern that all old buildings not in strict compliance with the standards of ss. 3.4.6.4 and 3.4.6.5 are a hazard to public safety and that such standards are thereby intended by s. 19.C to be imposed notwithstanding there is not a building extension, major alteration or repair. In the absence of such evidence, it would be inappropriate to attempt to make policy.

Disposition

¶ 39 In my view, and I so find, ss. 3.4.6.4 and 3.4.6.5 of the Code do not apply to pre-existing buildings except in certain limited circumstances, as set forth in the other provisions of the Code (ss. 2.1.1.7, 3.15 and 9.41, discussed above).

¶ 40 In my view, and I so find, section 19.C of by-law 629 does not require buildings that pre-exist the Code to comply with ss. 3.4.6.4 and 3.4.6.5 of the Code except when other provisions of the Code impose such requirements (such as in the case of an existing building being extended, or subject to major alteration or repair).

¶ 41 For the reasons given, I must rescind the Order to repair.

¶ 42 There is an alternative basis for rescission of the Order. The Court has all of the powers and functions of the Property Committee on an appeal (s. 15.3(6) of the Act). Under s. 15.3(3.1):

> ... the committee may do any of the following things if, in the committee's opinion, doing so would maintain the general intent and purpose of the by-law and of the official plan or policy statement:
>
> 1. Confirm, modify or rescind the order to ... repair.
>
> ....

Thus, in its discretion, the Court is not obliged to require absolute compliance with the Order. See generally McAllister Investments Ltd. v. North York (City), [1997] O.J. No. 1435 (Ont. Gen. Div.). Given all of the circumstances of this case, and given the minimal risk associated with the non-conforming variances of the subject buildings, notwithstanding the interpretation of s. 19.C, I would exercise my discretion to rescind the order to repair.

¶ 43 Implementation of the Order at issue would result in an expenditure of tens of thousands of dollars by Rexlington. Given that the variances at issue are reportedly typical of residential buildings of this age, size and type, implementation of a similar requirement throughout the City by all owners of pre-existing buildings would undoubtedly be at a cost of tens of millions of dollars.

¶ 44 Ultimately, it is, of course, up to the legislative body, City Council, to determine the appropriate standards for guards and handrails of buildings. As I have found, the subject buildings are in compliance with the Code. If the standards of ss. 3.4.6.4. and 3.4.6.5 of the Code are seen by City Council to be appropriate for the subject buildings, which were constructed prior to the passage of such provisions of the Code, then City Council can, of course, amend by-law 629. Any such policy determination should be signified explicitly and clearly. City Council could amend by-law 629 to make it explicit that the Code's standards for handrails and guards under ss. 3.4.6.4 and 3.4.6.5 apply to all buildings even when the Code itself does not require compliance. The perceived benefits and costs of such a policy can best be weighed after interested persons have given their views through the legislative process. That is the appropriate approach in accordance with the normative standards of a democratic society.

¶ 45 For the reasons given, the appeal is allowed and the Order is rescinded.

P.A. CUMMING J.

Saint-Romuald (City) *v.* Olivier, [2001] 2 S.C.R. 898, 2001 SCC 57

City of Saint-Romuald
Appellant

v.

Claudette Olivier, Louise Bolduc, Roger Bolduc, all three carrying on business as "Les Immeubles Jancloroc enr.", and 9010-4407 Québec Inc.
Respondents

Indexed as: Saint-Romuald (City) *v.* Olivier

Neutral citation: 2001 SCC 57.

File No.: 27210.

2000: December 5; 2001: September 27.

Present: McLachlin C.J. and L'Heureux-Dubé, Gonthier, Major, Bastarache, Binnie and Arbour JJ.

on appeal from the court of appeal for quebec

Municipal law – Zoning by-laws – Scope of acquired rights – Legal non-conforming use – Definition of purpose of a pre-existing use – Variation, extension or alteration of a use – Nightclub substituting nude dancers for western signers – Whether change in form of entertainment constitutes illegal replacement of original non-conforming use with other non-conforming use – Whether change in form of entertainment amounts to forfeiture of acquired right to operate nightclub.

The individual respondents are owners of a building located within the territory of the appellant City where country and western entertainment had been presented since 1990. In 1991, a new zoning by-law came into force under which uses "restaurant or bar with entertainment" and "restaurant or bar with erotic entertainment or films" are not permitted although they are not expressly prohibited. The by-law also provides that a non-conforming use protected by acquired rights may not be replaced by another non-conforming use. In 1994, the respondent corporation bought out the business and began operating a bar which presented entertainment involving nude dancers. The appellant tried to obtain an order requiring the cessation of what it regarded as the unlawful replacement of one non-conforming use by another. The Superior Court dismissed the appellant's application on the ground that the respondents enjoyed acquired rights. The Court of Appeal affirmed that decision.

Held (L'Heureux-Dubé, Gonthier and Bastarache JJ. dissenting): The appeal should be dismissed.

Per McLachlin C.J. and Major, Binnie and Arbour JJ.: The *Act Respecting Land Use Planning and Development* allows Quebec municipalities to regulate acquired rights, prevent their substitution by other non-conforming uses, and prohibit their extension and alteration. The municipality may not, however, order the cessation of such uses unless they have been abandoned or interrupted for "a reasonable period" no shorter than six months. Here the municipality did not purport to prohibit the alteration of acquired rights nor did it purport to suppress nude dance bars under the *Cities and Towns Act.* The general language of s. 9 of the by-law is not sufficient to constitute an express prohibition sufficient to overcome the respondents' acquired rights.

Under the doctrine of "acquired rights", while the respondents are not entitled to use the premises for any use within a

category previously permitted under the by-law but only to continue to use the premises as they were when the new by-law was passed, they are given some flexibility in the operation of that use. In general, merely continuing the precise pre-existing activity, even at an intensified level, is protected unless the intensification is of such a degree as to create an altogether different use. Both remoteness and neighbourhood effects have a role to play in the proper disposition of this type of case. Each contributes to the real and natural expectation of the landowner. The landowner overreaches itself if (i) the scale or intensity of the activity can be said to bring about a change in the type of use, or if (ii) the addition of new activities or modification of old ones is seen by the Court as too remote from the earlier activities to be entitled to protection, or if (iii) the new or modified activities can be shown to create undue additional or aggravated problems for the municipality, the local authorities, or the neighbours. The factors are balanced against one another.

The issue of limitations on the respondents' acquired right should therefore be approached as follows: (1) It is firstly necessary to characterize the purpose of the pre-existing use actually carried on at the site. (2) Where the current use is merely an intensification of the pre-existing activity, it will rarely be open to objection unless the intensification is such as to constitute a different use altogether. (3) To the extent a landowner expands its activities beyond those it engaged in before, the added activities may be held to be too remote from the earlier ones to be protected under the non-conforming use. In such a case, it is unnecessary to evaluate "neighbourhood effects". (4) To the extent activities are added, altered or modified within the scope of the original purpose, the Court has to balance the landowner's interest against the community interest, taking into account the nature of the pre-existing use, the degree of remoteness and the new or aggravated neighbourhood effects. The greater the disruption, the more tightly drawn will be the definition of the pre-existing use or acquired right. (5) Neighbourhood effects, unless obvious, should be established by evidence if they are to be relied upon. (6) The resulting characterization of the acquired right should not be so general as to liberate the owner from the constraints of what he actually did, and not be so narrow as to rob him of some flexibility in the reasonable evolution of prior activities. (7) While the definition of the acquired right will always have an element of subjective judgment, the criteria mentioned above constitute an attempt to ground the Court's decision in the objective facts. The outcome of the characterization analysis should not turn on personal value judgments.

Substitution of nude dancers for western singers is not such an extreme variation in the nightclub or cabaret formula as to constitute a wholly different and therefore unprotected use. The respondents' pre-existing use can appropriately be characterized as the commercial offering of a combination of food, drink, ambiance and lawful entertainment to the public. The switch to a different form of entertainment is within this general nightclub purpose.

Per L'Heureux-Dubé, Gonthier and Bastarache JJ. (dissenting): Acquired rights confer immunity on the actual use of land being exercised before a change to the by-law, while merely contemplated use will not enjoy the same immunity. If the use undertaken after the change to the by-law is of the same nature as the actual use under the former by-law, it will be protected by acquired rights. In order to determine whether the nature of the use has changed, the use that was actually exercised prior to the prohibition created by the by-law must first be defined. Whether a change in the nature of the use has occurred must be determined on the basis of the real and natural expectations of the user and the extent to which the amendments serve the purposes of land-use by-laws. Nevertheless, each case turns on its own facts and the nature of the use protected by acquired rights must be determined by the court having regard to the unique facts of each situation.

The appellant prohibited uses "restaurant or bar with entertainment" and "restaurant or bar with erotic entertainment or films" by not expressly permitting them. The requirement for such an express prohibition on presenting erotic entertainment, which the lower courts sought to impose, is unnecessary, since it is based directly on the erroneous use of the "category" approach, which holds that the exercise of a use that falls within a category prescribed by the enacting authority creates an acquired right that extends to any use that falls within that category.

The real and natural expectations of the owner of a country and western bar do not include operating a bar with nude dancers, there being a significant difference in the nature of the two types of entertainment. However, that distinction becomes even more germane when we examine it with the objectives of harmonious development and welfare, which land use legislation is intended to advance, in mind. Efforts to advance those objectives may indeed be informed by considerations of a moral nature, as long as those considerations relate to the primary purposes of the by-laws. In the instant case, one use has indeed been illegally replaced by another, rather than the same use being continued. This change results in loss of the protection conferred by acquired rights.

Cases Cited

By Binnie J.

Followed: *Central Jewish Institute v. City of Toronto*, [1948] S.C.R. 101; **considered:** *Campbellton (City) v. Thompson* (1994), 151 N.B.R. (2d) 1; *Lordon v. Pitman* (1980), 33 N.B.R. (2d) 23; **referred to:** *Heutinck v. Oakland (Township)* (1997), 42 M.P.L.R. (2d) 258; *Vancouver (City of) v. Victoria Block Ltd.* (1964), 45 D.L.R. (2d) 118; *Glenelg (Township) v. Davis* (1992), 10 M.P.L.R. (2d) 260; *Nanaimo (City) v. Brickyard Enterprises Ltd.*, [1993] B.C.J. No. 992 (QL); *Appleby v. Erie Tobacco Co.* (1910), 22 O.L.R. 533; *Macievich v. Anderson*, [1952] 4 D.L.R. 507; *Rylands v. Fletcher* (1868), L.R. 3 H.L. 330; *Re Daly and City of Vancouver* (1956), 5 D.L.R. (2d) 474; *Re Lorne Park* (1913), 30 O.L.R. 289; *Boykiw v. Calgary (City) Development Appeal Board* (1992), 90 D.L.R. (4th) 558; *Re Dinnick and McCallum* (1913), 28 O.L.R. 52; *Regina Auto Court v. Regina (City)* (1958), 25 W.W.R. 167; *Canadian Occidental Petroleum Ltd. v. District of North Vancouver* (1983), 148 D.L.R. (3d) 255; *Toronto (City of) v. Wheeler* (1912), 4 D.L.R. 352; *R. v. Howard* (1884), 4 O.R. 377; *R. v. Clark Bros. & Hughes Ltd.*, [1925] 1 D.L.R. 49; *Soudure Mobile D. Pilon Inc. v. Larose*, [1990] R.L. 93; *O'Sullivan Funeral Home Ltd. v. City of Sault Ste. Marie*, [1961] O.R. 413; *Kiss v. Phil Dennis Enterprises Ltd.* (1974), 46 D.L.R. (3d) 196; *Perth (Town) v. Perth Mews Ltd.* (1991), 7 M.P.L.R. (2d) 259; *Magdalena's Rest Home Ltd. v. Etobicoke (City)* (1992), 12 M.P.L.R. (2d) 316; *Moncton (City) v. Como* (1990), 103 N.B.R. (2d) 286; *Borins v. Toronto (City)* (1988), 50 R.P.R. 43; *382671 Ontario Ltd. v. London (City) Chief Building Official* (1996), 32 M.P.L.R. (2d) 1; *R. v. Grant* (1983), 23 M.P.L.R. 89; *Regina ex rel. Skimmings v. Cappy* (1952), 103 C.C.C. 25; *R. v. Kelly Landscape Contractors Ltd.* (1980), 13 M.P.L.R. 67; *Val-d'Or (Ville de) v. 2550-9613 Québec Inc.*, [1997] R.J.Q. 2090; *East Barnet Urban District Council v. British Transport Commission*, [1962] 2 Q.B. 484; *Thames Heliports PLC v. London Borough of Tower Hamlets* (1996), 74 P. & C.R. 164; *Bridgewater (Town of) v. Chuckran*, 217 N.E.2d 726 (1966); *Conforti v. City of Manchester*, 677 A.2d 147 (1996); *Belleville (Town of) v. Parrillo's, Inc.*, 416 A.2d 388 (1980); *Cape Resort Hotels, Inc. v. Alcoholic Licensing Board of Falmouth*, 431 N.E.2d 213 (1982); *Prince Edward Island Museum and Heritage Foundation v. Charlottetown (City)* (1998), 161 Nfld. & P.E.I.R. 56; *Nepean (City) v. D'Angelo* (1998), 49 M.P.L.R. (2d) 243.

By Gonthier J. (dissenting)

Chutes-de-la-Chaudière (Municipalité régionale de comté des) v. Compagnie 1846-0832 Québec Inc., [1994] R.J.Q. 618; *Huot v. L'Ange-Gardien (Municipalité de)*, [1992] R.J.Q. 2404; *Toronto v. Board of Trustees of R.C. Separate Schools for Toronto*, [1925] 3 D.L.R. 880; *Central Jewish Institute v. City of Toronto*, [1948] S.C.R. 101; *Syndics des écoles protestantes de la Cité d'Outremont v. Cité d'Outremont*, [1951] Que. K.B. 676; *Lafontaine (Municipalité du Village) v. Ouellette*, [1976] C.S. 1488; *Montréal (Ville de) v. Bijouterie Lucien Gervais Inc.*, [1981] J.M. 21; *Bernard v. Ville de Belœil*, C.A. Montréal, No. 500-09-000857-896, November 29, 1990, J.E. 91-20; *Anjou (Ville d') v. Vanier*, C.A. Montréal, No. 500- 09-001305-788, J.E. 83-325; *Soudure Mobile D. Pilon Inc. v. Larose*, [1990] R.L. 93; *Girard v. St-Irénée (Municipalité de)*, [2000] R.J.Q. 2689; *St-Michel-Archange (Municipalité de) v. 2419-6388 Québec Inc.*, [1992] R.J.Q. 875; *Saint-Raymond (Ville) v. Entreprises Benoît Demers Inc.*, [1996] Q.J. No. 4387 (QL); *Squillante v. Zoning Board of Appeals of the City of Hartford*, 1997 Conn. Super. Lexis 2612; *Marzocco v. City of Albany*, 629 N.Y.S.2d 847 (1995); *Val-d'Or (Ville de) v. 2550-9613 Québec Inc.*, [1997] R.J.Q. 2090; *Moncton (City) v. Steldon Enterprises Ltd.* (2000), 225 N.B.R. (2d) 11; *Young v. American Mini Theatres, Inc.*, 427 U.S. 50 (1976); *Renton (City of) v. Playtime Theatres, Inc.*, 475 U.S. 41 (1986); *538745 Ontario Inc. v. Windsor (City)* (1988), 64 O.R. (2d) 38.

Statutes and Regulations Cited

Act Respecting Land Use Planning and Development, R.S.Q., c. A-19.1, ss. 113, 227 [am. 1993, c. 3, s. 78; am. 1994, c. 32, s. 21].

Cities and Towns Act, R.S.Q., c. C-19, ss. 410, 414.

Civil Code of Québec, S.Q. 1991, c. 64, art. 947.

Criminal Code, R.S.C. 1985, c. C-46, ss. 163(2)(*b*), 167, 173(1).

Municipal Act, R.S.O. 1990, c. M.45, s. 225 [am. 1996, c. 1, Sched. M, s. 13].

Saint-Romuald By-law 273-90, ss. 7, 9, 10, 11, 16, 22, 204.

Authors Cited

Giroux, Lorne. "Questions controversées en matière de droits acquis", dans *Développements récents en droit municipal (1994).* Cowansville: Yvon Blais, 1994, 131.

Grand Larousse de la langue française, t. 1. Paris: Librairie Larousse, 1971, "cabaret".

Grand Robert de la langue française, t. 2, 2e éd. Paris: Le Robert, 1986, "cabaret".

Kagan, Ira T. "But I Do Not Want to Be Legal" (1993), 13 M.P.L.R. (2d) 252.

McQuillin, Eugene. *The Law of Municipal Corporations*, 3rd ed. Revised vol. 8A by Julie Rozwadowski and James Solheim. Mundelein, Ill.: Callaghan, 1994.

Milner, James Bryce. *Community Planning: A Casebook on Law and Administration.* Toronto: University of Toronto Press, 1963.

APPEAL from a judgment of the Quebec Court of Appeal, [1999] Q.J. No. 215 (QL), affirming a decision of the Superior Court dismissing the appellant's application for an order

requiring the cessation of a non-conforming use. Appeal dismissed, L'Heureux-Dubé, Gonthier and Bastarache JJ. dissenting.

Jacques Tremblay and *Bertrand Gobeil*, for the appellant.

François Marchand, for the respondents.

The judgment of McLachlin C.J. and Major, Binnie and Arbour JJ. was delivered by

1 BINNIE J. – The Court's objective on this appeal is to find the proper balance between an individual's right to the continued use and enjoyment of his or her property and the power of the community, expressed through the local municipality, to enhance, by changing the land use regulations, the amenities of surrounding and other affected landowners. As the case arises in Quebec, the specific issue raised is the limitation of previously acquired rights under the *Civil Code*. However, as this is a *public* law matter, the principles of land use regulation applicable in the common law provinces concerning legal non-conforming uses are also relevant.

2 The facts are straightforward. The respondents' country and western cabaret was renamed *L'Extase* ("Ecstasy") and the singing cowboys and cowgirls were replaced by nude dancers. Business improved. The bar was said to be [TRANSLATION] "very busy". The police increased surveillance, but their heightened interest seemed related to a concern over potential impaired drivers (a concern they have with other bars and nightclubs as well) and the opportunity to look for people against whom warrants were outstanding or who were thought to be in breach of court orders. The evidence was that there was no problem of discipline within the bar itself. Further, there was no evidence that nude floor shows attract more clients in trouble with the law than regular bars or that *L'Extase* in fact attracted a more problematic clientele than it did when it was a country and western bar.

3 My colleague Gonthier J. takes the view that by changing the form of entertainment the respondents forfeited their acquired right to operate the nightclub. With respect, I believe such a result would tilt the balance too far in favour of the municipality. I agree with the conclusion of the unanimous Quebec Court of Appeal and would dismiss the appeal.

I. The Issue

4 The facts and applicable enactments are outlined in my colleague's reasons for judgment. I fully agree with his rejection of the "categorical" approach. This is the theory under which an owner, whose use of land does not conform to a new by-law, nevertheless has an "acquired right" to expand, alter or modify an existing use to include anything and everything permitted on that land under the "use category" defined in the prior law (if indeed there was a prior law). While the "categorical" approach may produce a fair result on the facts of this case, it does so only because the categories of use created by the prior by-law were quite narrow. The word "*cabaret*", which was the operative "use" category in the previous by-law, is quite precisely defined in *Le Grand Robert de la langue française* (2nd ed. 1986), vol. 2, at p. 242, *inter alia*, as:

> [TRANSLATION]
> **2.** Establishment presenting satirical, musical or other types of entertainment where patrons may drink, dine or dance. ⇨ **Café concert; nightclub**.

and in *Grand Larousse de la langue française* (1971), vol. 1, at p. 551:

[TRANSLATION]

> **2.** Small establishment presenting artistic or satiric entertainment where patrons may drink, sometimes dine, dance ....

5 However, as my colleague Gonthier J. demonstrates, the "categorical" approach is wrong in principle and will often deliver a result that unduly favours individual landowners at the expense of the community interest. The protected "acquired right" properly relates only to the *status quo*. It does not protect a potential or contemplated use that has never materialized. A similar rule prevails in the common law provinces: see *Heutinck v. Oakland (Township)* (1997), 42 M.P.L.R. (2d) 258 (Ont. C.A.), at para. 6:

> Central to this analysis is our reliance upon the well established rule that the nature of a non-conforming use is not defined by reference to definitions in the by-law. Rather, it must be determined by reference to the use to which the property was put at the time the by-law was passed.

To the same effect, see: *Vancouver (City of) v. Victoria Block Ltd.* (1964), 45 D.L.R. (2d) 118 (B.C.C.A.), at p. 121; *Glenelg (Township) v. Davis* (1992), 10 M.P.L.R. (2d) 260 (Ont. C.A.); *Nanaimo (City) v. Brickyard Enterprises Ltd.*, [1993] B.C.J. No. 992 (S.C.) (QL), at para. 20. The acquired right is no more than a right to carry on using the land for the purpose to which it was *in fact* previously being put. The issue, of course, is how widely or narrowly to circumscribe the description of the purpose of that "pre-existing use".

II. The Pre-Existing Use

6 As stated, the premises in question here have been used as a nightclub (or "cabaret") for many years. Such use is no longer permitted in the relevant zone under the revised provisions. Choice of a broad definition ("nightclub") or a narrow definition ("*country and western* nightclub") of the pre-existing use will largely determine the outcome of the appeal.

7 The necessity of making a careful choice of definition requires us to look realistically at the business being conducted on the premises prior to the new zoning by-law. Nightclubs or "cabarets" constitute a fickle industry. They rise and fall on swings of popularity. Their operators are forever in search of a "winning formula". Location, we are told, is basic, but beyond that the elements of food, drink, ambiance and entertainment are endlessly varied to generate customer interest. A few years ago, customers may have flocked to hear western singers accompanied by steak and potatoes. Some still do. Irish pubs usually offer Irish melodies, but may have to be transformed next season into a different ambiance offering Karaoke. Last year's successful disco may give way to this year's Texas line dancers. Land used for these purposes serves merely as a platform for a business offering a marketable mix of food, drink and lawful entertainment to the public.

8 The appellant takes the position that substitution of nude dancers for western singers is such an extreme variation in the nightclub or cabaret formula as to constitute a wholly different use. I do not agree. It is open to the municipality as a legislator to introduce such value judgments into its land use controls (as it did here under the new by-law), but I do not think the landowner's "acquired right" to continue to carry on business can retroactively be truncated in this way on the present state of the law.

III. The Role of Zoning

9 Private law has long protected adjoining owners in the enjoyment of the amenities of their land. Article 947 of the *Civil Code of Québec*, S.Q. 1991, c. 64, protects that enjoyment, as does the tort of nuisance at common law. Thus neighbours obtained an injunction in nuisance against a tobacco factory that emitted "noxious odours" in *Appleby v. Erie Tobacco Co.* (1910), 22 O.L.R. 533 (Div. Ct.), and on the same basis successfully opposed the establishment of a dog hospital in a residential area in *Macievich v. Anderson*, [1952] 4 D.L.R. 507 (Man. C.A.). The doctrine of *Rylands v. Fletcher* (1868), L.R. 3 H.L. 330, imposes virtually absolute liability on owners who bring on their land "anything likely to do mischief if it escapes" and causes damage to a neighbour, unless the escape was due to the neighbour's default (pp. 339-40). These private law remedies were designed, in a general sense, to protect neighbourhood amenities.

10 The objectives of modern zoning were also accomplished to some extent by private arrangement using restrictive covenants as in *Re Daly and City of Vancouver* (1956), 5 D.L.R. (2d) 474 (B.C.S.C.), and building schemes as in *Re Lorne Park* (1913), 30 O.L.R. 289 (H.C.). These earlier developments in the law are noted in *Boykiw v. Calgary (City) Development Appeal Board* (1992), 90 D.L.R. (4th) 558 (Alta. C.A.), at p. 563, and described in some detail in J. B. Milner, *Community Planning* (1963), at p. 357 *et seq*. Initially, local government occupied itself with noxious uses, and established building standards in the interest of fire prevention and safety.

11 The objection to more sophisticated land use controls, when they emerged as an instrument of good government, was that they were to some extent confiscatory of the owner's rights: see *Re Dinnick and McCallum* (1913), 28 O.L.R. 52 (C.A.), at p. 58, *Regina Auto Court v. Regina (City)* (1958), 25 W.W.R. 167 (Sask. Q.B.), at pp. 168-69; and *Canadian Occidental Petroleum Ltd. v. District of North Vancouver* (1983), 148 D.L.R. (3d) 255 (B.C.S.C.), at p. 269.

12 To counter the concern about confiscation without compensation, lawful existing uses came to be protected under the concept of "acquired rights" both under the *Civil Code* in Quebec, and by judicial interpretation in the common law provinces: *Toronto (City of) v. Wheeler* (1912), 4 D.L.R. 352 (Ont. H.C.), *per* Middleton J., at p. 353:

> [I]t is, I think, a sound principle that the Legislature could not have contemplated an interference with vested rights, unless the language used clearly required some other construction to be given to the enactment.

See also *R. v. Howard* (1884), 4 O.R. 377 (Q.B.), at p. 381, and *R. v. Clark Bros. & Hughes Ltd.*, [1925] 1 D.L.R. 49 (Man. C.A.), at pp. 51 and 53.

13 It is against that background that the modern regime of land use controls, with their inherent tension between the owner's interest in putting its own property to what *it* regards as the optimal use and the municipality's interest in having all of the land within its boundaries organized in a plan which *it* thinks will maximize the benefits and amenities for all inhabitants, should be interpreted.

IV. The Applicable Legislation

14 *An Act Respecting Land Use Planning and Development*, R.S.Q., c. A-19.1, authorizes Quebec municipalities to regulate the use of land by dividing their territories into zones to which are allocated various groups and classes of uses. This is to be done: [TRANSLATION] "based on common characteristics of land

occupation relating to volume, nuisance, compatibility, use and aesthetics" (s. 16 of the new zoning by-law). The impact of a particular land use on neighbouring lands is clearly a key concern, which is shared by common law jurisdictions. The loss of amenities by noise and air pollution, increased traffic, increased demands on municipal services, or other disruptions, may conveniently be referred to as "neighbourhood effects". The minimization of such adverse effects on surrounding owners or the community as a whole is one of the principal objectives of zoning controls.

15 With respect to acquired rights (or legal non-conforming uses), s. 113(18) of the provincial Act allows Quebec municipalities to regulate them, prevent their substitution by other non-conforming uses, and to prohibit their extension and alteration. The municipality may not, however, order the *cessation* of such uses unless they have been abandoned or interrupted for "a reasonable period" no shorter than six months. In other words, the provincial legislation not only respects the doctrine of acquired rights, but makes it clear that municipalities must do so as well.

16 Here the municipality did not purport to prohibit the alteration (or "*modification*") of acquired rights, although it was empowered to legislate in that regard under s. 113(18)(*c*) of the provincial Act. Nor, as the Court of Appeal pointed out, did it purport to suppress nude dance bars under the *Cities and Towns Act*, R.S.Q., c. C-19, whether under s. 414 ("decency and good morals") or s. 410 ("general welfare in the territory of the municipality"). We therefore do not need to decide whether such a prohibition would have been valid or effective under the existing law.

17 Exercising its statutory powers of delegated legislation, the City of Saint-Romuald did enact zoning by-law No. 273-90, which came into force on May 22, 1991. The appellant places weight on s. 9 of the by-law which provides:

> [TRANSLATION]
>
> 9. Permitted Uses
>
> The uses listed in the specification grid correspond to the description of uses set out in chapter IV. A line appearing opposite a class of uses means that all principal uses in that class are permitted, to the exclusion of all other uses. [Gonthier J.'s emphasis.]

18 In the appellant's submission, the underlined words constitute a specific prohibition of the respondents' non-conforming use. Read in that way, of course, it is a prohibition of *all* non-conforming uses, and if applied in derogation of acquired rights would serve to nullify them. On this point, I prefer the view taken by the Quebec Court of Appeal that the general language of s. 9 is not sufficient to constitute an express prohibition sufficient to overcome the respondents' acquired rights.

V. Scope of the "Acquired Right"

19 Under the doctrine of "acquired rights", the respondents were not only entitled to continue to use the premises as they were when the new by-law was passed, but was given some flexibility in the operation of that use. My colleague Gonthier J. notes that regard is to be had in such cases to "the real and reasonable expectations" of the landowner caught by changes in the zoning (para. 63 (emphasis deleted)). Gonthier J. also acknowledges (at para. 62) that "normal evolution" may occur in some uses with the passage of time, and that "a use protected by acquired rights may be exercised more intensively (*Anjou (Ville d') v. Vanier*, C.A. Montréal, No. 500-09-001305-788, J.E. 83-325; *Huot v. L'Ange-Gardien (Municipalité de)*, [[1992] R.J.Q. 2404 (C.A.)]; *Soudure Mobile D. Pilon Inc. v. Larose*, [1990] R.L. 93 (C.A.)) and adapt to

the demands of the market or the technology that are relevant to it (*Chutes-de-la-Chaudière* [*(Municipalité régionale de comté des) v. Compagnie 1846-0832 Québec Inc.*, [1994] R.J.Q. 618 (C.A.)], at p. 624, Tourigny J.A. dissenting)". In my view, that is what happened here.

20 Similar flexibility also exists at common law. Thus in *Central Jewish Institute v. City of Toronto*, [1948] S.C.R. 101, a legal non-conforming use (private school) previously carried on only in part of the building was lawfully extended throughout the entire building, *per* Kellock J., at p. 114:

> I do not think that the use made of the premises by the appellant after the school term recommenced in September was for a different purpose within the meaning of the statute from the use being made of them on July 24th. [Emphasis added.]

21 At this point, a distinction should be drawn between the *type* of legal non-conforming use and the *intensity* of such use. A legal non-conforming nursing home, for example, may want to double its 15 beds. The type of use would remain the same, but the intensity of that use would be substantially increased.

A. *Intensity of Use*

22 The respondents' nightclub has substantially increased its business since switching from cowboy singers to nude dancers. There are more customers. More cars. More noise. Assuming for the moment that the "type" of use has not changed, is this increased intensity of use a basis for objection?

23 In *Central Jewish Institute*, *supra*, this Court concluded that so long as the *type* of use was continued (private school facilities), the owner was not limited to the then existing *intensity* (at the relevant time only the kitchen and a ground floor room of the building were used for school purposes). Rather, the appellant was entitled to expand the non-conforming use throughout its building. To some extent, the Court's treatment of intensity of use was tied to the specific text of the provincial Act (which extended the immunity to the building itself), but the case has subsequently been applied more generally (I think correctly) to sanction increases in *intensity* of use so long as the same *type* of use is continued. My colleague, Gonthier J., has referred to the Quebec authorities. A similar principle operates in the common law provinces: see *Canadian Occidental Petroleum*, *supra*, at p. 268 (expanded manufacture of hazardous substances); *O'Sullivan Funeral Home Ltd. v. City of Sault Ste. Marie*, [1961] O.R. 413 (H.C.) (infrequent use of a funeral parlour no bar to expanded activity); *Kiss v. Phil Dennis Enterprises Ltd.* (1974), 46 D.L.R. (3d) 196 (Ont. H.C.) (where, at p. 202, the court noted approvingly that "the proposed change is one of degree, and not of kind of use"); *Perth (Town) v. Perth Mews Ltd.* (1991), 7 M.P.L.R. (2d) 259 (Ont. Ct. (Gen. Div.)) (the legal non-conforming right to use pinball machines in one part of the building was extended to all of it); *Magdalena's Rest Home Ltd. v. Etobicoke (City)* (1992), 12 M.P.L.R. (2d) 316 (Ont. Ct. (Gen. Div.)) (rest home expanded from 15 to 17 beds); *Moncton (City) v. Como* (1990), 103 N.B.R. (2d) 286 (Q.B.) (expansion of existing equipment storage and repair business); *Borins v. Toronto (City)* (1988), 50 R.P.R. 43 (Ont. Dist. Ct.) (conversion of office space); *382671 Ontario Ltd. v. London (City) Chief Building Official* (1996), 32 M.P.L.R. (2d) 1 (Ont. Ct. (Gen. Div.)) (addition of a unit in an apartment building).

24 There are, however, some limitations at the outer boundaries of increasing the intensity of use. This appears from the decision of Cory J.A. (as he then was) in *R. v. Grant* (1983), 23

M.P.L.R. 89 (Ont. C.A.), where the court refused to allow a legal non-conforming two-unit apartment building to be further subdivided into four units. While the precise result may to some extent conflict with this Court's decision in *Central Jewish Institute*, *supra* (which was not cited by Cory J.A.), even *Central Jewish Institute* proceeded on the basis that the expansion of school activity would be reasonable and limited – in that particular case limited to the existing building.

25 In general, merely continuing the precise pre-existing activity, even at an intensified level, is clearly protected, but the intensification may be of such a degree as to create a difference in kind. A family farm which has a few pigs on the fringe of a town may continue as a legal non-conforming use, but the result may be otherwise if it is sought to expand its pork operation into "factory in the country" type intensive pig farming. While in one sense the "use" has continued, in another sense its *character* has been so altered as to become, in terms of its impact on the community, an altogether different use.

26 In the more usual type of situation, a non-conforming commercial use in a residential neighbourhood that enjoys increasing business should not ordinarily be penalized for its success by losing its "acquired right" to operate, even if a by-product of that success is some increased traffic and noise.

27 The analogous U.S. principle is succinctly stated in McQuillin, *The Law of Municipal Corporations* (3rd ed. rev. 1994), vol. 8A, at p. 126:

> The distinction is between an increase in the amount of business, even a great increase, which does not work a change in use, and an enlargement of a nonconforming business so as to be different in kind in its effect on the neighborhood. [Emphasis added.]

28 This is a high threshold which it is unnecessary to explore on this appeal. Based on the evidence here, no valid objection could be taken to the respondents' nightclub based on increased intensity of use.

B. *Type of Use*

29 The appellant argues that a nightclub offering western music is a different *type* of use than a nightclub presenting nude dancers. This is the real battleground between the appellant and the respondents.

30 A "use" may include a number of activities. A nightclub, as stated, serves food and drink and provides entertainment. The question here is how many of these activities, and of what nature, can be added, subtracted or modified before it can no longer be called the same "type" of use?

31 In *Regina ex rel. Skimmings v. Cappy* (1952), 103 C.C.C. 25 (Ont. C.A.), Oakwood Stadium in Toronto, a general venue for sports activities, was modified to accommodate stock car racing. The neighbours complained about the increased noise and disruption. The municipality launched a by-law prosecution. The stadium owners defended on the basis of a legal non-conforming use. The majority of the Court of Appeal, *per* Laidlaw J.A., acquitted the stadium owners on the basis that they operated a "general purpose" stadium whose permissible program (which presumably accorded with the owners' "real and natural expectation") was not limited to the type of specific events on "the day of the passing of the by-law" but included "public exhibitions and performances of all kinds" (p. 32). The dissenting judge concluded that the pre-existing use had been limited to certain types

of exhibitions and performances, and stock car racing was obviously not included because the owners had been required to undertake a "substantial expenditure of money and complete reconstruction of the facilities so as to enable motor-racing to be carried on" (p. 29). The interesting question is why the majority took a broad view of the existing use and the dissent took a narrow view. Both of these views were sustainable on the facts. The majority seemed influenced by the idea of *remoteness*, i.e., that the new activity, while different, was *not* remote but was closely related to what had gone before. Although "neighbourhood effects" were not mentioned by the dissenting judge, I think it fair to say that if the facts were reversed so that the stadium had been reconstructed to *eliminate* stock car racing in favour of less noisy exhibitions such as walk-a-thons or lawn tennis, the neighbours (and the dissenting judge) might have taken a more expansive view of the pre-existing use.

32 The more recent common law jurisprudence on "non-conforming uses" is no less divided than the Quebec jurisprudence on "acquired rights": see I. T. Kagan, "But I Do Not Want to Be Legal" (1993), 13 M.P.L.R. (2d) 252. The more restricted end of the definitional spectrum is illustrated by *R. v. Kelly Landscape Contractors Ltd.* (1980), 13 M.P.L.R. 67 (Ont. Co. Ct.), where it was held that a legal non-conforming business which grew flowers for sale could not lawfully sell the flowers (or fertilizers, etc.) from its premises. The added business, while closely related, was not the same.

33 The more generous end of the definitional spectrum is illustrated by *Campbellton (City) v. Thompson* (1994), 151 N.B.R. (2d) 1 (C.A.), where a landowner was permitted to add a rock-crusher to its existing non-conforming quarry operation. The trial judge had concluded that crushing rock was a different activity than extraction, and upheld the municipality's objection. This was reversed by the Court of Appeal which applied its previous decision in *Lordon v. Pitman* (1980), 33 N.B.R. (2d) 23, in asking itself whether the introduction of the "new element" changed "the essential general use of the land" (para. 10). The added activity, it decided, did not do so. Again, the trial judge's narrower view of the pre-existing use (extraction and sale of rock) was as open on the facts as the broader view taken by the Court of Appeal (a quarry operation includes an activity reasonably incidental thereto). The trial judge was worried about the neighbourhood effects of the added activity. The Court of Appeal seems to have decided the case on considerations of remoteness.

34 In my view, both remoteness and neighbourhood effects have a role to play in the proper disposition of this type of case. Each contributes to what Gonthier J. refers to as the real and natural expectation of the landowner. The Court's objective is to maintain a fair balance between the individual landowner's interest and the community's interest. The landowner overreaches itself if (i) the scale or intensity of the activity can be said to bring about a change in the type of use, as mentioned above, or if (ii) the addition of new activities or the modification of old activities (albeit within the same general land use purpose), is seen by the court as too remote from the earlier activities to be entitled to protection, or if (iii) the new or modified activities can be shown to create undue additional or aggravated problems for the municipality, the local authorities, or the neighbours, as compared with what went before. The factors are balanced against one another. Thus, adding a metal panel beating operation to an automobile repair shop in a residential neighbourhood will probably (despite the logical business affinity) be characterized as a new type of use, whereas a local non-conforming grocer store use that adds an innocuous fax machine – clearly an activity unrelated to selling groceries – will likely succeed (assuming someone wished to challenge it) by defining its prior operation as a "convenience store" rather than a "grocery store".

35 The relevance of remoteness is self-explanatory, but the relevance of neighbourhood effects perhaps requires some

discussion. The balancing of interests takes place in the framework of zoning control. The Quebec law, as mentioned, expressly takes neighbourhood effects into account in the *legislative* establishment of use categories. The by-law in this particular case speaks of [TRANSLATION] "volume, nuisance, compatibility, use and aesthetics", and see *Val-d'Or (Ville de) v. 2550-9613 Québec Inc.*, [1997] R.J.Q. 2090 (C.A.)). It stands to reason that in attempting to accommodate the landowner's real and natural expectation of the continuation of the *status quo*, and to properly maintain the balance between the interests of the landowner and the community, the Court should also have these "neighbourhood effects" in mind in considering the situation of a landowner who has somewhat modified or extended pre-existing activities within the same general use category. The adverse impact of neighbourhood effects generated by added or modified activities constitutes one of the guiding principles under the somewhat different regulatory systems in Britain (see, for example, *East Barnet Urban District Council v. British Transport Commission*, [1962] 2 Q.B. 484, and *Thames Heliports PLC v. London Borough of Tower Hamlets* (1996), 74 P. & C.R. 164 (C.A.), and in the United States (see *Bridgewater (Town of) v. Chuckran*, 217 N.E. 2d 726 (Mass. 1966), at pp. 727-28, *Conforti v. City of Manchester*, 677 A.2d 147 (N.H. 1996), at p. 150, *Belleville (Town of) v. Parrillo's Inc.*, 416 A.2d 388 (N.J. 1980), and *Cape Resort Hotels, Inc. v. Alcoholic Licensing Board of Falmouth*, 431 N.E.2d 213 (Mass. 1982), at p. 217). In those jurisdictions, as in Canada, planning is concerned not only with the physical use of land but also with any adverse effects of such uses on the surrounding area. It is appropriate to carry that concern forward into the Court's consideration of added, altered or modified activities which are claimed to be protected by the prior existing use.

36 This approach is implicit in some of the Quebec cases. In *Soudure Mobile D. Pilon Inc. v. Larose*, [1990] R.L. 93 (C.A.), the repair of cars was the legal non-conforming use on the original lots. The owner then intensified this use, in part by extending it to a newly acquired adjacent lot (one which had not previously been used for car repairs). In addition, the owner began to store snow plowing and excavation vehicles on the property. The court issued an order essentially restricting the intensity of the activity and prohibiting the storage of the snow plowing and excavation vehicles. Beauregard J.A. – who dissented in part but not on this point – demonstrated his awareness, at pp. 105-6, of the impact of the increased activity on the complainant neighbours:

> [TRANSLATION] The neighbours, who had never really been bothered by the Laurentide operation, soon realized that the Soudure Mobile operation was causing a variety of problems for them: continual comings and goings on the site, excessive noise; word done outside normal business hours and on weekends; accumulation of garbage on the property; storing and cutting of wood on the property; repairs done outside the workshop building; using the property for parking heavy equipment that belonged to a logging company and a snow removal company; using an adjacent lot (lot 488-49) that did not enjoy "acquired rights" for additional parking, and clearing the property of trees that had served as a screen between the workshop and some of the neighbouring homes . . . .

Thus neighbourhood effects appear to have been factored into the view taken by Beauregard J.A. that the current property use was not fully protected by acquired rights. This seems also to be the underlying factor in the decision of Chamberland J.A. in *Val-d'Or (Ville de) v. 2550-9613 Québec Inc.*, *supra*, quoted by Gonthier J. at para. 82.

37 A concern for the twin criteria of remoteness and neighbourhood effects is also, I think, implicit in *Prince Edward*

Island Museum and Heritage Foundation v. Charlottetown (City) (1998), 161 Nfld. & P.E.I.R. 56 (P.E.I.S.C.). A museum and heritage foundation had for many years used its parcel of land, which included several buildings, for museum-related activities. In 1979, its operation became a legal non-conforming use. Subsequently, the owners began to expand the activities in one of the buildings ("the Carriage House") to include receptions and dinners catered by a local hotel. Some of these *soirées* were for fundraising purposes. The neighbours objected to the added noise and commotion. Notwithstanding the owner's ingenious efforts to tie its hospitality activities to museum functions (e.g., it argued it would "make heritage more palatable by concealing it in another activity such as a concert" (para. 15)), DesRoches J. concluded that the hospitality functions were too remote from the prior non-conforming use to be permitted.

38 At the same time, though, he permitted other added or altered museum activities, including a gift shop, a genealogy centre for research and facilities for public lectures. Although the rationale is not articulated in his reasons, it is apparent that the activities he upheld created fewer adverse neighbourhood effects than those he found to be prohibited, and were, indeed, not the subject of public complaint.

C. *Summary of Approach*

39 I therefore approach the issue of limitations on the respondents' acquired right as follows:

1. It is firstly necessary to characterize the purpose of the pre-existing use (*Central Jewish Institute*, *supra*). The purpose for which the premises were used (i.e., "the use") is a function of the activities actually carried on at the site prior to the new by-law restrictions.

2. Where the current use is merely an intensification of the pre-existing activity, it will rarely be open to objection. However, where the intensification is such as to go beyond a matter of degree and constitutes, in terms of community impact, a difference in kind (as in the hypothetical case of the pig farm discussed above), the protection may be lost.

3. To the extent a landowner expands its activities beyond those it engaged in before (as where a custom picture-framing shop attempted to add a landscaping business in *Nepean (City) v. D'Angelo* (1998), 49 M.P.L.R. (2d) 243 (Ont. Ct. (Gen. Div.)), the added activities may be held to be too remote from the earlier activities to be protected under the non-conforming use. In such a case, the added activities are simply outside any fair definition of the pre-existing use and it is unnecessary to evaluate "neighbourhood effects".

4. To the extent activities are added, altered or modified *within* the scope of the original purpose (i.e., activities that are ancillary to, or closely related to, the pre-existing activities), the Court has to balance the landowner's interest against the community interest, taking into account the nature of the pre-existing use (e.g., the degree to which it clashes with surrounding land uses), the degree of remoteness (the closer to the original activity, the more unassailable the acquired right) and the new or aggravated neighbourhood effects (e.g., the addition of a rock crusher in a residential neighbourhood is likely to be more disruptive than the addition of a fax machine). The greater the disruption, the more tightly drawn will be the definition of the pre-existing use or acquired right. This approach does not rob the landowner of an entitlement. By definition, the

limitation applies only to added, altered or modified activities.

5. Neighbourhood effects, unless obvious, should not be assumed but should be established by evidence if they are to be relied upon.

6. The resulting characterization of the acquired right (or legal non-conforming use) should not be so general as to liberate the owner from the constraints of what he actually did, and not be so narrow as to rob him of some flexibility in the reasonable evolution of prior activities. The degree of this flexibility may vary with the type of use. Here, for example, the pre-existing use is a nightclub business which in its nature requires renewal and change. That change, within reasonable limits, should be accommodated.

7. While the definition of the acquired right will always have an element of subjective judgment, the criteria mentioned above constitute an attempt to ground the Court's decision in the objective facts. The outcome of the characterization analysis should not turn on personal value judgments, such as whether nude dancing is more or less deplorable than cowboy singing. I am unable, with respect, to accept as legally relevant my colleague's observation that "[w]hereas erotic entertainment seeks to sexually arouse the audience by the stripping and suggestive behaviour engaged in by the performers, country and western shows seek to entertain by providing a showcase for the special talents of singers, musicians and dancers" (para. 76). Serious music is also commonly thought to arouse the passions profoundly, but in terms of acquired rights, music stores should not be differentiated by whether they offer Muzak or Mozart.

VI. Application to the Facts

40 As stated earlier, I believe the respondents' pre-existing use can appropriately be characterized as the commercial offering of a combination of food, drink, ambiance and lawful entertainment to the public.

41 The switch to a different form of entertainment, as in the change from western-style concerts to nude dancers, is within this general nightclub purpose. The substitution of nude dancers is no more remote in law than would be the substitution of karaoke singing. My colleague Gonthier J. takes the view that nude dancing raises "considerations of a moral nature" (para. 77) that presumably would not be raised by karaoke singing, but in my view, with respect, it is not our function to create a moral hierarchy of different forms of entertainment. Objectively speaking, there is no problem of remoteness. There is no replacement of one use by a different use.

42 While it appears that the substitution of nude dancing has improved the business, the municipality does not rely on an *intensification* of the existing use as a disqualification.

43 There is no serious evidence of adverse neighbourhood effects. My colleague Gonthier J. relies on the comment of Constable Gelly about increased police surveillance, but the municipality made no effort to demonstrate a link between criminal elements and nude dancing. The police themselves did not make much of a point of added surveillance and the trial judge went out of his way to say that there was no problem of discipline within the premises. In my view, if the appellant's case were to rest on adverse

neighbourhood effects, a better evidentiary base ought to have been provided.

44 In terms of "added" activities, my colleague Gonthier J. points out that the respondents created five private viewing booths in which a customer and the dancer were distanced from the general audience. This, he points out, is a form of private entertainment. The uncontradicted evidence, however, was that there was no sexual touching and that nothing occurred in the booth that did not occur in the general viewing area. Admission to the booths was open to any member of the public. Morality apart, I do not see how this changes the legal nature of the use, any more than would be the case if an ordinary restaurant sought to upgrade its facilities by offering private dining-rooms.

VII. Conclusion

45 In my view, the change in entertainment offered by the respondents did not constitute the illegal replacement of the original non-conforming use with a different and therefore unprotected non-conforming use.

46 If nude dancing is thought to be objectionable on moral or other grounds, the topic could be further considered by legislators rather than by judicial curtailment of acquired rights.

47 I would therefore dismiss the appeal with costs to the respondents.

English version of the reasons of L'Heureux-Dubé, Gonthier and Bastarache JJ. delivered by

GONTHIER J. (dissenting) —

I. Introduction

48 This appeal deals primarily with the extent of the protection conferred by acquired rights in Quebec municipal law. The issue to be determined is the limits of the protection where the use initially exercised has been transformed. Specifically, the Court must decide in the instant case whether acquired rights continue to exist when a bar that had been presenting country and western entertainment subsequently becomes a bar that presents erotic entertainment.

II. Facts

49 The respondents Claudette Olivier, Louise Bolduc and Roger Bolduc are owners of a building located within the territory of the appellant City of Saint-Romuald. Since 1990, several tenants in succession have operated a bar in the building, presenting country and western entertainment. At the time, the City's zoning by-law (C-600) permitted the operation of [TRANSLATION] "cabarets" in the zone where the building is located. However, a new zoning by-law, No. 273-90, came into force on May 22, 1991. Like a number of other by-laws of its type, it sets out the authorized and prohibited uses for a given zone, using a grid known as the [TRANSLATION] "specifications grid" (s. 7). Different uses are first divided into "groups" and then into "classes". Uses are allocated to the various classes [TRANSLATION] "based on common characteristics of land occupation relating to volume, nuisance, compatibility, use and aesthetics" (s. 16). This type of classification enables the City to authorize or to prohibit an entire class of uses or a specific use, at its option. To this end, ss. 9 to 11 of the by-law state:

[TRANSLATION]

9. Permitted Uses

The uses listed in the specifications grid correspond to the description of uses set out in chapter IV. A line appearing opposite a class of uses means that all principal uses in that class are permitted, to the exclusion of all other uses. [Emphasis added.]

10. Other Permitted Use

Where a principal use is specifically permitted, this means that even if the class corresponding to that use is not permitted, that particular use is permitted.

11. Prohibited Use

Where a principal use is specifically prohibited, this means that even if the class corresponding to that use is authorized, that particular use is prohibited.

50 In the new by-law, uses [TRANSLATION] “restaurant or bar with entertainment” (585) and [TRANSLATION] “restaurant or bar with erotic entertainment or films” (586) — which correspond to the former use “cabaret” — are in the [TRANSLATION] “commercial services” class (s. 22). For the zone in which the building is located, there is no line opposite “commercial services” on the specifications grid. Moreover, uses 585 and 586 are not shown on the grid as expressly permitted. Although use [TRANSLATION] “hotel, motel, guest house” (181) is also part of the “commercial services” class, it is shown on the grid as expressly prohibited. The new by-law also governs the issue of acquired rights, in part. It specifically provides, *inter alia*, that a non-conforming use protected by acquired rights may not be replaced by another non-conforming use (s. 204).

51 In the fall of 1994, after buying out the business from the owner of the country and western bar, the respondent 9010-4407 Québec Inc. began operating a bar which presented entertainment involving nude dancers. The appellant then decided to apply to the Superior Court under s. 227 of the *Act Respecting Land Use Planning and Development*, R.S.Q., c. A-19.1, for an order requiring the cessation of what it regarded as the unlawful replacement of one non-conforming use by another.

III. Relevant Statutory Provisions

52 *Act Respecting Land Use Planning and Development*, R.S.Q., c. A-19.1

CHAPTER IV

MUNICIPAL PLANNING BY-LAWS

DIVISION I

ZONING BY-LAWS

113. The council of a municipality may adopt a zoning by-law for its whole territory or any part thereof.

A zoning by-law may include provisions regarding one or more of the following objects:

. . .

(3) to specify, for each zone, the structures and uses that are authorized and those that are prohibited, including public uses and buildings, and the land occupation densities;

. . .

(18) to regulate non-conforming structures and uses protected by acquired rights,

(*a*) by requiring that a non-conforming use protected by acquired rights cease if such use has been abandoned, has ceased or has been interrupted for such period of time as it may define, which must be a reasonable period, taking into account the nature of the use, but must not in any case be shorter than six months;

(*b*) by stipulating that a non-conforming use or structure protected by acquired rights shall not be replaced by another non-conforming use or structure;

(*c*) by prohibiting the extension or alteration of a non-conforming use or structure protected by acquired rights, or by establishing conditions under which a non-conforming use or structure protected by acquired rights may be extended or altered; [Emphasis added.]

TITLE III

SANCTIONS AND RECOURSES

227. The Superior Court may, at the request of the Attorney General, the regional county municipality, the municipality or any other interested person, order the cessation of

(1) a use of land or structure incompatible with a zoning by-law, subdivision by-law, building by-law, a by-law provided for in section 116 or 145.21 or an interim control by-law, or with a plan approved in accordance with section 145.19 or with an agreement under section 145.21;

IV. Judgments under Appeal

A. *Superior Court*

53 Bergeron J. relied on the Quebec Court of Appeal decision in *Chutes-de-la-Chaudière (Municipalité régionale de comté des) v. Compagnie 1846-0832 Québec Inc.*, [1994] R.J.Q. 618, in which Baudouin J.A. held that in zoning matters, where the issue is whether there has been a change in use, the reference point to be used is the categories created by the enacting authority. Bergeron J. added that in this case, three of the four judges found in favour of preserving an acquired right where the new use was not specifically prohibited and where it was in the same category under the by-law as the prior use.

54 Applying these principles to the case between the parties, he held: (i) that the respondents enjoyed acquired rights to operate a "cabaret"; (ii) that a bar that presents entertainment with erotic dancers is a cabaret; and (iii) that neither the *Cities and Towns Act*, R.S.Q., c. C-19, nor the new by-law expressly prohibits entertainment with erotic dancers. He therefore dismissed the City's application.

B. *Court of Appeal (Michaud C.J.Q. and LeBel and Dussault JJ.A.)*, [1999] Q.J. No. 215 (QL)

55 The court agreed, *per* Dussault J.A., with the trial judge's finding that the extent of the acquired rights is determined by the

categories set out in the by-law. Like the trial judge, he was therefore of the view that, absent an express prohibition in the new by-law, the respondents enjoyed an acquired right to operate a "cabaret".

56 After reviewing the specifications grid, Dussault J.A. found that although no line had been entered opposite the "commercial services" category, which meant that the principal uses in that class were not permitted, nonetheless use "restaurant or bar with erotic entertainment or films" (586) was not shown on the grid as expressly prohibited. There was nothing to prevent the municipality from enacting such a prohibition; in fact, it had expressly prohibited the use "hotel, motel, guest house" (181) which is part of the same class. Stating that this factor was [TRANSLATION] "a decisive factor in the outcome of the case" (para. 17), Dussault J.A dismissed the municipality's appeal.

V. Issues

57 The issues are as follows:

A. What is the extent of the protection conferred by acquired rights in municipal zoning matters?

B. Is the change from a bar that presents country and western entertainment to a bar that presents erotic entertainment a replacement of one non-conforming use by another, resulting in the loss of acquired rights?

VI. Analysis

A. *Acquired Rights*

58 Quebec municipal law is based both on the principles developed by the common law courts and on the relevant provincial legislation. We also know that the rules governing the protection of acquired rights *vis-à-vis* land use by-laws were first developed by the courts and that the law was later "codified", to some extent, by the *Act Respecting Land Use Planning and Development*, s. 113 of which refers to "acquired rights".

59 The protection conferred by acquired rights reflects a compromise between the principle that a statute takes immediate effect and the rights of ownership, as pointed out by Chouinard J.A. of the Quebec Court of Appeal in *Huot v. L'Ange-Gardien (Municipalité de)*, [1992] R.J.Q. 2404, at p. 2409:

> [TRANSLATION] Although it is not easy to define " acquired rights" with precision, let us say that it is a necessary compromise that limits rational land development while protecting the equity of the property owners and possibly of others who have made some non-conforming but legal and legitimate use prior to a statute or regulation.

60 If these rights were not recognized, the provisions of the municipality's land use by-law would apply in their entirety, without regard for whatever use of the land had been exercised prior to the by-law coming into force. If the use being made of the land were to be prohibited, the user would be unjustly deprived of the tangible exercise of his or her rights of ownership by the stroke of a pen.

61 Acquired rights therefore confer immunity on the actual use being exercised before the change to the by-law, while merely contemplated use will not enjoy the same immunity (E. McQuillin, *The Law of Municipal Corporations* (3rd ed. rev.), vol. 8A, at p. 37; *Toronto v. Board of Trustees of R.C. Separate Schools for Toronto*, [1925] 3 D.L.R. 880 (P.C.); *Central Jewish Institute v. City of Toronto*, [1948] S.C.R. 101). This distinction between a prior actual use and a potential use that has not yet materialized, between a right

that exists and is being exercised and a mere ability, is a decisive factor in delineating acquired rights in municipal zoning matters. The distinction has in fact been recognized many times by the Quebec courts (see, in particular, *Syndics des écoles protestantes de la Cité d'Outremont v. Cité d'Outremont*, [1951] Que. K.B. 676, and *Lafontaine (Municipalité du Village) v. Ouellette*, [1976] C.S. 1488, referring to *Toronto v. Board of Trustees* and *Central Jewish Institute*, *supra*; see also *Montréal (Ville de) v. Bijouterie Lucien Gervais Inc.*, [1981] J.M. 21 (C.A.), and *Bernard v. Belœil (Ville de)*, C.A. Montréal, No. 500-09-000857-896, November 29,1990, J.E. 91-20).

62 This does not mean, however, that the doctrine of acquired rights fails to take into account the normal evolution that will occur in some uses with the passage of time. Accordingly, a use protected by acquired rights may be exercised more intensively (*Anjou (Ville d') v. Vanier*, C.A. Montréal, No. 500-09-001305-788, J.E. 83-325; *Huot v. L'Ange-Gardien (Municipalité de)*, *supra*; *Soudure Mobile D. Pilon Inc. v. Larose*, [1990] R.L. 93 (C.A.)) and adapt to the demands of the market or the technology that are relevant to it (*Chutes-de-la-Chaudière*, *supra*, at p. 624, Tourigny J.A. dissenting). However, its original nature must always remain the same.

63 If the use undertaken after the change to the by-law is of the same nature as the actual use under the former by-law, it will be protected by acquired rights. If, on the other hand, it is even minimally different, the protection will be lost. That is, I reiterate, because any use that has not yet materialized must, as a general rule, be excluded from the sphere protected by acquired rights. Therefore, in order to determine whether the nature of the use has changed, the use that was actually exercised prior to the prohibition created by the by-law must first be precisely defined. Based on that preliminary determination, the real and reasonable expectations flowing naturally from the exercise of that concrete use can be taken into account. On that point, in *Syndics des écoles protestantes de la Cité d'Outremont*, *supra*, at p. 692, Bissonnette J. held:

> [TRANSLATION] It is well known that acquired rights are part of our patrimony and cannot be taken away without causing a grave injustice and depriving us of what we had a right to expect in their regard. In order to know and understand the extent of these rights, we need only ask what the real and natural expectation of the school board was prior to 1925, before the municipal by-law was enacted. [Emphasis added.]

64 While this part of the analysis of the nature of the use relates mainly to the protection of individual rights of ownership, it will also have to be determined whether the changes in the use of the land are relevant, having regard to the primary purposes of zoning by-laws, such as harmonious land development and the well-being of the inhabitants (McQuillin, *supra*, at p. 99). An affirmative response to this question will tend to demonstrate that the nature of the protected use has been altered and will mean the loss of the acquired rights. In my view, this approach allows a balance to be struck between individual rights and the collective interests that the zoning by-law is designed to further.

65 In addition, although s. 113 of the *Act Respecting Land Use Planning and Development* allows municipalities to regulate certain aspects of acquired rights, it is still up to the courts to determine whether those rights are lost when an initial prohibited use is replaced by a different prohibited use. Because that question, by its very nature, can arise only out of a precise fact situation, only a court will be in a position to resolve it. A municipality may of course decide to override the protection provided by acquired rights by passing a by-law for that express purpose. Very different questions will then arise. In this case, however, the only question that is

presented is whether one use has been replaced by another, and it is inevitably up to the courts to determine the outcome of that question.

66 That being said, it is then apparent that the lower courts erred in suggesting that acquired rights must be determined on the basis of categories or classes of uses created by by-laws. The approach taken by those courts derives from the reasons of Baudouin and Proulx JJ.A. in *Chutes-de-la-Chaudière*, *supra*. In that case, the issue was whether there had been a loss of acquired rights when the protected use, the manufacture of heating systems, boilers and burners, had subsequently been replaced by the manufacture of prefabricated sections of acrylic polymer concrete. In the meantime, any industrial use had been prohibited by the Regional County Municipality's interim control by-law. That by-law, and documents from the municipal affairs department, grouped those two uses together in the same categories, that is, in [TRANSLATION] "metal product manufacturing industries" and [TRANSLATION] "manufacturing industries". Noting how strict the Quebec courts are on the question of protecting acquired rights, Baudouin J.A. held (at p. 625):

> [TRANSLATION] . . . while that strict approach can be understood where there is no statute or by-law governing the matter, it seems to me that the situation must be different when the enacting authority has specifically provided rules dealing with acquired rights and changes in use. I am then of the view that reference must be made to the statute or by-law itself. [Emphasis added.]

67 Concurring with this analysis, Proulx J.A. was of the view that the earlier case law, which applied the test of the nature of the operation or the type of product manufactured, could not be applied because the context of the by-law had to be considered in order to interpret the word "use". Tourigny J.A., dissenting, rejected that methodology, stating that she was in favour of holding to a factual analysis.

68 This approach, which I would describe as the "category" approach for the purposes of this discussion, suggests that the protection conferred by acquired rights extends to any use included in the by-law category to which the use exercised prior to the change in the by-law belongs. Accordingly, the implementation of one use would trigger a protection that extends to all potential uses included in the same category. It seems plain to me that this analysis misses the mark because it deviates from the factual source from which the protection of the acquired rights derives. Although s. 113, para. 18 of the *Act Respecting Land Use Planning and Development* delegates to municipalities the power to make certain rules concerning acquired rights, that provision cannot have operated to change the very nature of these rights. Rather, the judicial definition of those rights has been recognized and incorporated by the legislature.

69 Moreover, in the absence of any previous zoning by-law, it seems to me that this approach cannot be used to determine the extent of acquired rights. In that situation, we must either fall back on the traditional concrete analysis or recognize acquired rights to whatever use is being exercised on the land, which will make any attempt at land use planning quite futile. Even if a prior by-law exists, the "category" analysis automatically, and without applying any other consideration, uses categories created for a specific purpose (establishing authorized and prohibited uses for a part of a territory) for a completely different purpose (determining the protection conferred by acquired rights). Relying on categories such as these, which are sometimes overly general or even residual, creates a risk both of granting disproportionate protection to those who enjoy the acquired rights and significantly fettering municipal planning powers. Tourigny J.A. sounded that warning in *Chutes-de-la-Chaudière*, *supra*, at p. 624, when she observed:

> [TRANSLATION] If we review the list drawn up by the Department, we find, for example, that group 39 is entitled "miscellaneous manufacturing industries". I cannot imagine that a category such as this can confer any right whatsoever, in terms of determining identity of use, or that someone can claim to have acquired rights based on belonging to a sub-group that is described so vaguely and is so insignificant.
>
> The provisions of the interim control by-law classifying industries have been enacted so that permits may be issued in zones where industrial use is permitted. In my view, therefore, this classification also cannot be the basis for claiming identity of use for the purpose of establishing acquired rights in zones where the use is non-conforming.

70 In general, those comments reflect the criticism of the "category" analysis made by Professor Lorne Giroux in his article "Questions controversées en matière de droits acquis" published in *Développements récents en droit municipal (1994)*, 131, at pp. 148-52 (see also *Girard v. St-Irénée (Municipalité de)*, [2000] R.J.Q. 2689 (Sup. Ct.)).

71 In the instant case, the lower courts first recognized, based on the "category" analysis, that the respondents enjoyed acquired rights to operate a "cabaret", and then went on to consider whether bars that present erotic entertainment were expressly prohibited by the new zoning by-law. In my view, the requirement for such an express prohibition is unnecessary, since it is based directly on the erroneous use of abstract categories to determine the extent of the protection conferred by acquired rights.

72 In any event, after reviewing the specifications grid for the zone in question, I am satisfied that the appellant in fact prohibited uses "restaurant or bar with entertainment" (585) and "restaurant or bar with erotic entertainment or films" (586) by refraining from inserting a line opposite the "commercial services" class. In fact, in *St-Michel-Archange (Municipalité de) v. 2419-6388 Québec Inc.*, [1992] R.J.Q. 875, at p. 883, the Quebec Court of Appeal held:

> [TRANSLATION] Although the *Act Respecting Land and Use Planning and Development* requires municipal corporations to provide for authorized and prohibited uses in each zone within the municipality, it does not require a zone by zone listing of all prohibited uses. The exercise of the power to prohibit may be exercized by implication, if certain authorized uses are listed, or expressly, if specific uses are prohibited.

73 Both the respondents and Dussault J.A., for the Court of Appeal, observed that use "hotel, motel, guest house" (181) is expressly prohibited on the grid, although it belongs to the same class. They concluded that if the municipality had really wanted to prevent establishments that present erotic entertainment from being protected by acquired rights, it could have done the same thing in respect of use 586. It seems, however, that the specific prohibition of use 181 only became necessary because of the express authorization of use [TRANSLATION] "restaurants and places where meals and beverages are served" (581), which could have been relied on as authority to operate a hotel, motel or guest house. Accordingly, the fact that this was specified leaves no room for an interpretation *a contrario* of the by-law, whereby the appellant would be required to expressly isolate use 586 in order to prohibit it.

74 Since I am satisfied that zoning by-law 273-90 prohibits uses 585 and 586, the issue that remains to be determined is whether replacing a country and western bar by a bar that presents erotic

entertainment constitutes the replacement of a non-conforming use by another non-confirming use, which is prohibited by both the doctrine of acquired rights and s. 204 of the appellant's zoning by-law.

B. *Replacement of Use*

75 As indicated above, a change in the nature of the use actually made prior to the zoning amendment will result in loss of the immunity conferred by acquired rights. Whether such a change has occurred must be determined on the basis of the real and natural expectations of the user and the relevance of the changes as regards the purposes of land use by-laws. Nevertheless, each case turns on its own facts and the nature of the use protected by acquired rights must be determined by the court having regard to the unique facts of each situation.

76 In the instant case, a country and western bar was replaced by a bar that presented erotic entertainment. The respondents contend that the building has never housed anything but a bar with entertainment and that the nature of the entertainment provided should not have any effect on acquired rights. With respect, I am unable to agree with that assertion. First, I do not believe that the real and natural expectations of the owner of a country and western bar include operating a bar with nude dancers. There is a significant *prima facie* difference in the nature of the entertainment being presented. Whereas erotic entertainment seeks to sexually arouse the audience by the stripping and suggestive behaviour engaged in by the performers, country and western shows seek to entertain by providing a showcase for the special talents of singers, musicians or dancers. That difference is further apparent in some of the physical alterations made to the building and the business it houses because of the transformation from a country and western bar to a bar with nude dancers. Among other things, five closed booths were added so that customers could be offered erotic dances in a private setting. I further find it relevant to note the contrast between private dances performed in booths and country and western entertainment presented in public. In my view, these factors provide further support for the impression that one use has indeed been replaced by another, rather than that the same use has been continued.

77 The foregoing exercise therefore plainly leads me to finding that there is an obvious difference between a bar that presents country and western entertainment and a bar that presents erotic entertainment, even if we disregard individual opinion about the moral value of erotic entertainment. However, that distinction becomes even more germane when we examine it with the objectives of harmonious development and welfare, which land use legislation is intended to advance, in mind. Efforts to advance those objectives may indeed be informed by considerations of a moral nature, as long as those considerations relate to the primary purposes of the by-laws. For example, it would obviously be proper, for the purposes of those by-laws, to distinguish between establishments that serve liquor and establishments that do not. *A fortiori*, it should be apparent that there is a fundamental difference between an establishment that presents country and western entertainment and another establishment that presents entertainment of an erotic nature. As well, the observation that both types of entertainment are legal does nothing to advance the analysis, since by definition, land use planning presupposes a classification of legal uses for the purposes of dividing and organizing the territory.

78 Nonetheless, the nature of an activity must be defined in reference to the perception and values of the society. Accordingly, while it may be legal to operate establishments that present erotic entertainment, those establishments have a particular social and moral connotation that justifies treating them as distinct for land use planning purposes. First, the kind of entertainment presented involves an increased possibility of indecent excesses and illegal acts

(see, for example, s. 163(2)(*b*) of the *Criminal Code*, R.S.C. 1985, c. C-46: exhibiting an indecent show; s. 167: immoral theatrical performance; and s. 173(1): indecent act). Second, that kind of entertainment tends to condone the violation of respect for and the dignity of the performers, whose sexuality and persons are then subservient to and exploited for lewd and commercial purposes. And third, it is worth noting that the police officer, Gelly, testified at trial that the opening of an establishment presenting erotic entertainment prompted the police service to tighten its surveillance in the surrounding neighbourhood, and that it was attracting a criminal element.

79 The decisive question of whether the conversion of an establishment that presents entertainment that is devoid of any sexual or erotic aspect into an establishment that presents erotic entertainment means that the protection offered by acquired rights is lost has only seldom been addressed by the courts. In Quebec, there is only *Saint-Raymond (Ville) v. Entreprises Benoît Demers Inc.*, [1996] Q.J. No. 4387 (QL) (Sup. Ct.), in which Goodwin J. held that a transformation of this sort had resulted in replacement of one prohibited use by another, and led to the loss of the acquired rights. The courts of the other provinces of Canada do not seem to have had occasion to deal specifically with this question. The American courts, however, have examined it on a few occasions.

80 In *Squillante v. Zoning Board of Appeals of the City of Hartford*, 1997 Conn. Super. Lexis 2612, the plaintiffs had obtained a certificate of occupancy from the municipality to operate a "Café Liquor" (p. 2). At the time the certificate was issued, it would have been open to them to present "adult" entertainment under the by-laws then in force. However, there was nothing in the evidence to show that they had done any such thing. The city then amended its zoning by-laws, and "adult" entertainment establishments were prohibited in the zone where the plaintiffs' business was located. The plaintiffs subsequently began to operate an establishment of that nature. The city had issued a notice of violation to the plaintiffs, who then claimed that their activities were protected by acquired rights. The court rejected that argument, stating, at pp. 12-13:

> [T]he simple fact is that the record reflects that no adult entertainment was actually being provided on the premises prior to the time the municipal code was amended on May 9, 1994, to exclude adult entertainment from a B-1 zone.

Accordingly, because a "Café Liquor" and an adult entertainment establishment are entirely different in nature, operation of the former could not mean that operation of the latter was protected by acquired rights.

81 In *Marzocco v. City of Albany*, 629 N.Y.S.2d 847 (App. Div. 1995), the petitioner had purchased a tavern featuring male strippers as entertainment, which catered primarily to the area gay population. That use was prohibited by the zoning by-laws in force, but was protected by acquired rights. The petitioner first replaced the male strippers with topless female dancers. He then decided to surrender his liquor licence and establish a "juice bar", and present totally nude female dancers and other forms of erotic entertainment. He therefore applied to the City of Albany Board of Building, Zoning and Housing Appeals for permission to change the use of the premises. When the request was denied, he turned to the courts, which affirmed the Board's decision. The Appellate Division of the New York State Supreme Court held, at p. 848:

> Initially, we agree with Supreme Court that there is rational basis and substantial evidence in the record to support respondent's factual determination that petitioner's change in the character of his property was sufficient to require a use variance. . . . Notably, the abandonment of petitioner's tavern trade and surrender of his liquor license freed him from the restrictions (and the public from the protections)

> of the Alcoholic Beverage Control Law and the rules of the State Liquor Authority. In the same connection, the primary purpose and profit motive of the business changed from the sale of food and beverages, with adult entertainment a mere incidental attraction, to the exhibition of nude dancing, thereby effecting a fundamental change in the character of the clientele and, as a consequence, the impact of the business on the neighborhood. [Emphasis added.]

82 The dissimilarity between a country and western bar and a bar that presents entertainment involving nude dancers is also revealed by a line of more general cases concerning the validity of land use planning provisions governing establishments that present erotic entertainment. In *Val-d'Or (Ville de) v. 2550-9613 Québec Inc.*, [1997] R.J.Q. 2090 (C.A.), it was argued that the distinction made by the municipality between [TRANSLATION] "taverns, bars and night clubs" and establishments that present entertainment with male and female nude dancers was discriminatory, as that term is understood in administrative law. Chamberland J.A., writing for the Court of Appeal, rejected that argument and stated in his reasons, at p. 2095:

> [TRANSLATION] It is clear from the evidence in this case that the adoption of the zoning by-law (June 7, 1993) and the decision to refuse the [respondent's] request to amend the by-law (July 17, 1995) were based on considerations involving the proximity of a church and an elementary school, child protection, crime prevention and the safety and welfare of the public, as well as the improvement of the image of downtown Val-d'Or. These are relevant considerations in zoning and urban planning matters.

The distinction was therefore held to be permitted under the *Act Respecting Land Use Planning and Development*. As well, in *Moncton (City) v. Steldon Enterprises Ltd.* (2000), 225 N.B.R. (2d) 11 (Q.B.), it was concluded that a by-law adopted under the *Community Planning Act*, R.S.N.B. 1973, c. C-12, prohibiting the operation of "adult cabarets" within the city, was valid. Those cases are also consistent with the opinion stated by the United States Supreme Court regarding the validity of similar zoning ordinances (*Young v. American Mini Theatres, Inc.*, 427 U.S. 50 (1976); *Renton (City of) v. Playtime Theatres, Inc.*, 475 U.S. 41 (1986)).

83 As a final point, I consider it worth noting that in Ontario, the *Municipal Act*, R.S.O. 1990, c. M.45, specifically delegates to municipalities the power to regulate "adult entertainment parlours" (see, for example, *538745 Ontario Inc. v. Windsor (City)* (1988), 64 O.R. (2d) 38 (C.A.)). Section 225 of that Act provides:

> (1) By-laws may be passed by the councils of local municipalities for licensing, regulating, governing, classifying and inspecting adult entertainment parlours or any class or classes thereof and for revoking or suspending any such licence and for limiting the number of such licences to be granted, in accordance with subsection (3).
>
> . . .
>
> (3) Despite subsection 257.2 (4), a by-law passed under this section may define the area or areas of the municipality in which adult entertainment parlours or any class or classes thereof may or may not operate and may limit the number of licences to be granted in respect of adult entertainment parlours or any class or classes thereof in any such area or areas in which they are permitted.

84 To conclude, I believe that these are significant indications that the distinction between a bar that presents country and western entertainment and a bar that presents entertainment involving nude dancers is relevant in the exercise of general land use planning powers.

85 I am of the view therefore that operating a bar that presents erotic entertainment constitutes the illegal replacement of the original non-confirming use by a different non-conforming use. Replacing the one with the other accordingly results in loss of the protection conferred by acquired rights.

VII. Conclusion

86 For these reasons, I would allow the appeal, set aside the judgment of the Court of Appeal, and order the respondents to immediately cease using the premises located at 643 4th Avenue in Saint-Romuald as a bar that presents erotic entertainment, with costs throughout.

Appeal dismissed with costs, L'HEUREUX-DUBÉ, GONTHIER *and* BASTARACHE JJ. *dissenting.*

Solicitors for the appellant: Pothier Delisle, Sainte-Foy.

Solicitors for the respondents: Daignault & Associés, Québec.

2005 CanLII 27154 (ON S.C.)
COURT FILE NO.: 9/05
DATE: July 25, 2005

ONTARIO
SUPERIOR COURT OF JUSTICE

B E T W E E N:	)	
	)	
GREGORY NEIL WATTS and MELANIE ROSE WATTS	)	THOMAS CLINE,Q.C.,for the Applicants
	)	
	)	
Applicants	)	
	)	
- and -	)	
	)	
	)	
SHAWN BENVENUTI and KIM ALDERSON	)	DAVID SCHELL, for the Respondents
	)	
	)	
Respondents	)	
	)	
	)	
	)	**HEARD:** May 3, 2005

THE HONOURABLE MR. JUSTICE J.R.TURNBULL

REASONS FOR JUDGMENT

[1] This is an application brought under rule 14.05(3) of The Rules of Civil Procedure.

[2] At the outset of the proceedings the parties agreed that the style of cause of these proceedings should be amended to name only Shawn Benvenuti as the named Respondent. I so order.

[3] The Applicants seek a declaration that the Respondent is in violation of By-Law NW-1-2000 for the former City of Nanticoke because he is boarding and exercising up to eight horses on his lands known municipally as 1991 Regional Road 24. They seek a mandatory order requiring the removal of all horses from the subject lands forthwith. They further seek an injunction precluding the keeping of horses and livestock on the Respondent's lands in contravention of the by-law.

Chronology

[4] On August 5th, 1986 by-law number 1-NA86 for the former City of Nanticoke was passed and it was approved by the Ontario Municipal Board on February 10th, 1987. The parties agree that the Respondent's lands which were closest to Regional Road 24 (the most easterly portion) were zoned for residential use and the rear of the property (the most westerly portion) making up most of the 5.03 acres of the Respondent's lands was zoned agriculture. Under the by-law, permitted uses of agriculturally zoned agricultural included the following:

1. Air strip and hanger, one each per farm.
2. Animal kennel or hospital
3. Bed and breakfast
4. Bunkhouses, provided occupants are employed by the farm operation where the bunkhouse is located.
5. Commercial greenhouse
6. Farm
7. Farm processing
8. Farm produce grading and distribution station

9. Farm produce outlet

10. Farm vacations

11. Home occupation

12. Home industry

13. Seasonal storage of recreational vehicles and recreational equipment as a secondary use to a farm

14. Single detached dwelling

15. Storage of operational school buses

[5] It was agreed between the parties that at all material times a single family residence and two barns were on the Respondent's property. The two barns were close to the zoning line separating the agricultural portion from the residential portion of the Respondent's property. There seems to be no issue that the barns are located on what were at all times the agricultural portion of the Respondent's property. On the portion of the Respondent's lands zoned for residential purposes, there has been at all material times a single family residence which has been used for that purpose. Counsel indicated that to the Court during submissions.

[6] The Applicants purchased their property, which is a single family residence two doors removed to the north from the residence of the Respondents, in the spring of 2000.

[7] By-law NW-1-2000 (hereinafter also referred to as "the new by-law") was passed by the council of the City of Nanticoke on November 10th, 2000 and approved by the Ontario Municipal Board on March 27, 2001. Under the new by-law, the Respondent's property in it's entirety became designated RH which is a residential hamlet designation. Permitted uses under the RH zoning are:

1. Single detached dwelling

2. Home occupation

3. Home industry

4. Bed and Breakfast

[8] The Applicant Gregory Watts has deposed in his affidavit that when he and his wife took possession of their home in 2000, the Respondent's property did not house any horses and or livestock. The Respondent's property in 2000 was used for the purpose of growing corn. Corn was likewise grown in 2001. In 2002, the Respondent's property was used for growing pumpkins. In the spring of 2003, an area for a corral was fenced and when the fencing was completed the subject property became occupied by horses.

[9] On the 7th day of August, 2003 the Respondent's offer to purchase the lands and premises at 1991 Regional Road #24 was accepted by the executor for the former owner of the property. Sale price was $145,000.00 and the closing of the transaction took place on the 12th day of September, 2003.

[10] After the date of purchase new activity then began occurring on the Respondent's property. The evidence indicates that the barns began to be used, horses were brought onto the property and construction of the fencing completed. The applicant also swore in paragraph 7 of his affidavit, that the Respondent's property currently provides accommodation for eight horses.

[11] At the outset of the hearing, counsel for the Respondent conceded that the last time livestock were kept on the property was sometime in the mid 1990's. This was the testimony of his client Mr. Benvenuti on his cross-examination transcript at page 7, question 36 to question 46. Those questions and answers form part of the exhibit one on the application. There seems to be no issue that the property was

continuously used for residential and agricultural purposes up to and including the time the Respondent acquired the property.

[12] The Respondent purchased his lands from Claude Robert Hill a farmer who retired after living on the farm for approximately 26 years. Mr. Benvenuti swore in his affidavit that he purchased the lands in question solely for the purpose of raising quarter horses. He had looked in many locations in Norfolk County for a suitable farm property and the property owned by Mr. Hill seemed to meet his needs. He knew that sheep were being raised on the property immediately to the north of the former agricultural portion of his land. That sheep farming operation backs onto the entire west side of the Applicants' property. Ginseng was being planted in the field immediately to the south of the Respondent's property.

[13] At exhibit A to the Respondent's affidavit there is a copy of the Agreement of Purchase and Sale by which the Respondent contracted to buy the property. It contained a condition which provided as follows:

> "Seller agrees to provide written verification that the zoning for the property is agricultural at the rear, residential at the front of the subject land prior to closing. If the seller is unable to obtain such then this agreement shall be terminated."

[14] Unfortunately the real estate agent for the Respondent appears to have advised him that the property at the rear was zoned "agricultural". The Respondent's affidavit indicates that the agent provided him with schedule A1A to by-law 1-NA86 for the City of Nanticoke which displayed the rear (or westerly) portion of the farm as being agricultural. His real estate agent also provided him with a letter signed by the owner, Claude Hill who confirmed that during his period of owner ship, he kept livestock on the property. The Respondent understood this livestock to be cattle as well as chicken and pigeons and rabbits. This was all averred to in the affidavit of Mr. Benvenuti. Unfortunately the schedule A-1A to by-law 1-NA86 for the City of Nanticoke was not the relevant schedule as the new by-law had been passed by the Municipality in late 2000 .

[15] The Respondent deposed that he engaged a law firm to represent his interests on the purchase and prior to closing, he made inquiries of the building/zoning department of Norfolk County concerning the zoning of the property. He satisfied himself that the rear of the property was zoned agricultural. Clearly he was wrong in that respect.

[16] Immediately after closing Mr. Benvenuti erected a 100 foot by 200 foot outdoor riding pen to temporarily house three horses until he could fence the pasture adequately. This caused some concern with the nearby neighbours. Shortly thereafter, a complaint was made against him by the local by-law enforcement officer regarding the fence and the housing of horses on his property by the municipal enforcement officer. Mr. Benvenuti was advised the property was zoned residential and that he could only keep horses on the farm if in fact there was a legal non-conforming use that could be established from prior to the establishment of the new by-law. In order to establish that there was a legal non-conforming use Mr. Benvenuti spoke to certain neighbours who knew Mr. Hill and were able to confirm that he kept approximately six to eight beef cattle, chickens, pigeons and rabbits on the property and in the barns. Letters from neighbours verifying that fact were next entered as exhibit D to the affidavit of Mr. Benvenuti. However, these letters do no constitute proper evidence before the court on an application and I have disregarded their import in the consideration of this matter. I further place no weight on the reasons given by the municipal by-law enforcement officer in rendering his decision that this was a legal non-conforming use.

THE LEGAL ISSUE:

[17] The legal issue in this matter is relatively straightforward. Was the legal non conforming use of the lands for a farming purpose

terminated by virtue of the Respondent commencing a quarter horse operation on the subject lands?

[18] The Applicants contend that the legal non-conforming use which existed at the time of the enactment of the new by-law was that of an agricultural cash crop farm and nothing more. They argue that the change to a horse farm for the training and boarding of quarter horses is a change in use and therefore the legal non-conforming designation which formerly attached to the Respondent's property has been lost. As a result, the quarter horse operation on the Respondent's property violates the existing zoning by-law and should not be allowed to continue.

[19] The Respondent on the other hand argues that the use of the property for agricultural purposes has continued on an uninterrupted basis since the enactment of the new by-law and it is simply the type of farming which has been changed.

Argument of the Applicant

[20] The applicants note that there is a statutory basis to the position they are taking on this application. Section 34 of The Planning Act provides as follows:

34(1) Zoning by-laws may be passed by the councils of local municipalities:

1. For prohibiting the use of land, for or except for such purpose as may be set out in the by-law within the municipality or within any defined area or areas or abutting on any defined highway or part of a highway.

Section 34(9) provides as follows:

> No by-law passed under this section applies, (a) to prevent the use of any land building or structure for any purpose prohibited by the by-law if such land building or structure was lawfully used for such purpose on the day of the passing of the by-law, so long as it continues to be used for that purpose.

[21] The applicants contend that the land and buildings on the Respondent's land were not used for a horse farming operation on the day of the passing of the by-law and therefore the Respondent is in contravention of The Planning Act. It is trite law to note that there is an onus on the Respondent to prove he has an exemption to a by-law, which proof must not only go to the use of the lands at the time of the amendment of the by-law but also to it's continued use until the time of the issuance of the proceedings. See Corporation of the City of Toronto v. San Joaquin Investments Ltd. et. al., 5 M.P.L.R.113 at 123.

[22] The Applicant Gregory Watts swore in paragraph 16 of his affidavit that an inquiry about the legality of the horse farming operation of the Respondent had been made by his solicitor to the solicitor for Norfolk County. The Solicitor for Nofolk County responded as follows:

> "The use that predates the current by-law and the prior by-law in 1986, as well, is broader than the keeping of horses in the barn. The use to be considered is the "agricultural uses" (i.e. those uses permitted in an agricultural zone) within the by-law which includes a farm as one of such uses. The definition of farm includes the boarding of livestock and as such definition allows a variety of farming activities to be undertaken. The definition is not restrictive, in

> that only one of the elements listed within it can be undertaken at any point in time, to the exclusion of any other elements within the definition. The information we have is to the effect that the property has consistently been used for agricultural purposes and therefore, the boarding of horses is permitted under the by-law."

[23] This evidence was adduced by the Applicant in his own affidavit. In addition, counsel for the applicants candidly acknowledged that the boarding of livestock would include under any definition the boarding of horses, as is being done by the Respondent.

[24] In support of that contention, the Applicants rely on Dennis v. The Township of East Flamboro et. al., 1956 O.W.N. 282. In that case , the Court of Appeal was dealing with a property that had ceased to be used for a gas station or for any other commercial purposes. After the cessation of such usage, a by-law of the respondent corporation was passed prohibiting the use of the property for a gas station. Subsequent to the enactment of the by-law an application was made by the appellant to the clerk of the municipality for a license to operate a gasoline station on the premises. The application was refused on the ground that the operation of a gasoline station on the premises was contrary to the provisions of the newly enacted by-law. The concrete base for the pumps and the underground gas tanks still remained on the premises at the time the appellant applied for a license. The Appellant argued that a legal non-conforming use existed because the property at all material times was available for usage as a gas station. The court disagreed with the Appellant and at page 285 of the decision The Honourable Mr. Justice J. A. Hogg wrote:

> "It's obvious that the by-law cannot alter or extend the purpose or intention of the statute upon which the authority to act the bylaw rests. The building involved in the appeal may have been arranged designed and intended as a gasoline station but on the day of the passing of the by-law it was not used nor had it been used for that purpose for approximately the preceding three years. Even if it had been so used it did not continue to be used for that purpose after the by-law had been enacted. The premises therefore did not fall within the ambit of the exemption provision contained in Section 390(6) of The Municipal Act (the equivalent of Section 34(9) of The Planning Act.) ."

[25] Thus, in the Dennis decision, the Court held there was no legal conforming use. This case is distinguishable from the one at bar as the commercial usage had terminated prior to the enactment of the by-law. In the case before this Court, the use of the property for farming purposes had not terminated at the time of the passage of the new by-law and I so find on the basis of paragraph 9 of the Applicants' supporting affidavit.

[26] Counsel for the Applicant further referred the Court to the decision of Gayford v. Kolodziej, 1959 O.W.N. 341 at 343 (a decision of the Ontario Court of Appeal). This involved a property on Lake Simcoe in Gwillinbury Township. The defendant's property at the relevant time was used as a tourist home. A by-law was enacted by the municipality which changed the zoning and made the defendant's tourist home a legal non-conforming use. After the enactment of the by-law the owner of the property leased the property for most of the summer season to a lessee who used the property for private residential purposes only i.e. not as a tourist home. The Plaintiffs sought an injunction restraining the defendants from using the property as a tourist home again. The Plaintiffs were granted an injunction at trial as claimed and the Defendants appealed to The Court of Appeal. One of the grounds of appeal was that use of the property as a tourist home was a legal non-conforming use and permitted under The Municipal Act Section 390(6). The Court of Appeal agreed that the discontinuance of

user as a lodge or tourist home catering to the public during the major part of the summer season was tantamount to a discontinuance for the whole year of the use of the property as a legal non-conforming use. In the Court's opinion

> "There was such a lapse in or discontinuance of the nonconforming user so as to remove the property from the cloak that under Section 390(6) up to that time exempted it from the by-law".

[27] The applicant contends that this case is applicable to the case before this court as there has been a discontinuance of the use of the property which existed at the time of passage of the new by-law (cash crop farming) and thus the legal non conforming status has been lost. For reasons I will elaborate on hereafter, I find that there has not been a discontinuance of the use of the property for agricultural purposes.

[28] The applicant further relies upon the case of Heutinck v. Oakland 42 M.P.L.R. (2d) 258 (O.C.A.). In that case the Appellant property owner sought to use the barn on his property for raising emu but was advised by the Respondent municipality that such use was not allowed. The Ontario Court of Appeal clearly held in this case that the nature of a non-conforming use is not defined by references to the definition in a by-law but must be determined by reference to the use which the property was put at the time the by-law was passed. The court held at paragraph 4 of its endorsement that as the property owner's barn "was not being used for the purpose of raising emu or, indeed, for any agricultural purpose" at the time of the enactment of the relevant by-law, it did not fall within the definition of non-complying use, building or structure within the meaning of the by-law. At page 260 of the report The Court of Appeal stated as follows:

> "Central to this analysis is our reliance upon the well established rule that the nature of a non-conforming use is not defined by reference to definitions in the by-law rather it must be determined by reference to the use to which the property was put at the time the by-law was passed. In this case, the activity now engaged in by the Appellant is fundamentally different from that which had occurred at the time of the passage of the by-law: Glenelg (Township) v. Davis (1992), 10 .M.P.L.R. (2d) 260 (Ont. C.A.) at page 265.

[29] The Appellant further referred the Court to Re O'Riley,(1991) 8M.P.L.R.(2d) 190 which is a decision of the Ontario Municipal Board. The Appellants owned two properties in Oshawa, Ontario. There was a single family dwelling located on each of the properties at the time that the municipality enacted a by-law rezoning the properties commercial. The Appellants attempted to renovate their buildings to establish two family residential dwellings on each property. When the City opposed their application, the Appellants sought a minor variance from the by-law before the Committee of Adjustments. The issue before the Board was whether the Appellants' legal non conforming uses were lost through the conversion of the two buildings to dual-family dwellings. The Board applied a strict and narrow interpretation to the definition of use and held that "use" consisted of a precise function. At page 199, the Board made the following statement of principle which is urged on this court in this application:

> "Following on this, the Board cannot accept the contention of the counsel for the appellants that the 'use' need only be a residential use in order to be a continuing legal non-conforming use. It must be the same residential use, that of a single family dwelling. Therefore, it follows that at the time occupation of the buildings as dual dwellings took place,

> their occupation as single-family dwellings ended, since no part of the two buildings could, in these circumstances, remain occupied by single-family dwellings."

[30] However, that strict and narrow definition of use was not absolutely accepted the following year by the Ontario Court of Appeal in Glenelg (Township) v. Davis (supra). After finding that the status of legal non conforming use had been lost by the appellant changing the use of his business from primarily one of the wrecking and storage of vehicles to a scrap metal processing operation, Doherty J.A., writing for a unanimous Court stated :

> "This is not a situation where a subsequent owner merely expands on a pre-existing use, or engages in a different activity which is within the generic description of the pre-existing use: see Central Jewish Institute v. The Corporation of the City of Toronto, [1948] S.C.R. 101 at 105, 113-114; [1948] 2 D.L.R. at 4-5, 12; R.v. Cappy and Smith (1952), 103 C.C.C. 25 at 32-33, (1953) 1D.L.R. 28 at 35-36. Instead, this is a case where Davis engaged in a fundamentally different activity than that which had occurred on the property prior to 1981."

[31] It appears that the position of the Court of Appeal is to not apply a strict and narrow approach to the matter but to look more broadly at the generic use, among other things, and to determine if the activity involved is fundamentally different than that which occurred at the time of the passage of the by-law.

Respondent's Argument

[32] The respondent's position is that the pre-existing use of the lands and premises was for agricultural purposes. Black's Law Dictionary , 8th edition, defines agriculture as "the science or art of cultivating soil, harvesting crops, and raising livestock". The respondent argues that the change in use to farming horses or livestock, in the context of the information before the court falls within the fair definition of agriculture. He contends that his raising and boarding eight quarter horses has not changed "the essential use of the land". The Respondent argues that the essential use of the land at all material times was for agricultural purposes and the only thing that has changed is the type of farming which is taking place.

[33] In support of that contention the Respondent relies largely on The Supreme Court of Canada decision in Saint Romuald (City) v. Olivier, 2001 SCC 57 (CanLII), [2001] 2 S.C.R. 898. In that case the Respondents were the owners of a building located within a commercial zoned area of the city of Saint Romuald. They had provided country and western entertainment in a bar/restaurant environment since 1990. In 1991, a new zoning by-law came into effect which prevented the Respondents from allowing nude dancers as live entertainment. After the enactment of the by-law, the Respondent began using nude dancers instead of western singers to attract patrons to the night club. The municipality argued that this was a contravention of the new by-law. The Respondents argued that expansion of the use was within their rights as a legal non-conforming use and that the by-law did not apply to their establishment.

[34] The Supreme Court of Canada held substitution of nude dancers for western singers is not such an extreme variation in the nightclub or cabaret formula so as to constitute a wholly different and therefore unprotected use. In other words, a user could, in certain circumstances alter the use of the property and still claim a legal non-conforming exemption from the by-law. The Court held that the respondent's pre-existing use could appropriately be characterized as a commercial offering of a combination of food, drink, ambience and lawful entertainment to the public. The change to a different form of

entertainment was within the protected use. Applying the operative terminology of Section 34 of the Planning Act of Ontario, the use of the land and buildings was for the same purpose despite the fact that some of the activities in effecting that purpose had changed

[35] At paragraph 34 of the decision of the majority in the Saint – Romuald decision, the Honourable Mr. Justice Binnie writing for the majority suggested a series of factors that a court should consider in determining if there has been a change of use so as to terminate a previously existing legal non-conforming use. The use of these factors by the court hearing the original application was approved by the Divisional Court in Ottawa (City) v. Ottawa (City) Chief Building Official, [2003] O.J. No. 4530 at paragraphs 25 and 26 . These include the following:

1. The purpose of the pre-existing use and the activities that were carried on the property prior to the enactment of By-law NW-1-2000 (the new by-law). I find that in this case, the pre-existing use of the property was residential and agricultural.

2. Is the new proposed use simply an intensification of the old use or does it go beyond a matter of degree and constitute, in terms of community impact, a difference in kind? I find that the new use of buying, selling training, boarding and exercising quarter horses is simply a change of activities within the old use of the property for agricultural purposes with little community impact. It is noteworthy, but not at all determinative of the issue, that such usage by the Respondent would clearly have been allowed under the former by-law which permitted the use of the lands as a farm.

3. How remote is the change of the activity from the earlier activity? This is the most difficult of the considerations for this court. . In the case of Regina XREL.Skimmings v. Cappy (1952), 103 C.C.C. 25 (Ontario C.A.), the Ontario Court of Appeal had to deal with the issue of whether or not owners of a stadium which allowed stock car racing on the property had violated a by-law. The stadium owners defended on the basis of a legal non-conforming use. The majority of The Court of Appeal per Laidlaw J. A. acquitted the stadium owners on the basis they operated a "general purpose" stadium whose permissible program was not limited to the type of specific events on "the day of passing of the by-law." The majority seemed influenced by the idea of remoteness, meaning that the new activity of stock car racing, while a different activity, was not remote but was closely related to what had gone on before. I find this consideration of use is relevant in the context of this case.

I have carefully considered the evidence before the court and had the opportunity to look at the photographs presented to the court. The house, the barns and the lands continue to be used for farming purposes in conjunction with residential living. The setting is a rural one with nothing more than a few horses living on the property. The property is immediately adjacent to a sheep farm. There is no evidence that the intensification of use of the lands and buildings has been significant nor that it has caused disruption to anyone other than the applicants. There has been no added construction of buildings on the lands. I find the usage of this property as it presently is being used is not remote from the former usage.

4. To what extent are the new activities within the original scope of usage? The greater the disruption,

the more tightly drawn will be the definition of the pre-existing use or acquired right. As stated above, I find the new activities are within the original scope of usage. I find the disruption to the neighborhood to be minimal. In every one of these cases, when someone complains (as is their right) about a new activity not permitted under a new zoning by-law, the court must consider not just the impact on the complainant but on other people in the neighborhood and in the greater community. There has been no such evidence brought before this Court aside from the concerns of the applicants and I find the impact on the neighborhood and the greater community to be minimal.

5. The neighborhood effects as established by the evidence. I have carefully considered the evidence led by the Applicants with respect to the neighborhood effects of the respondent's use of his property. There was an allegation by the Applicant Gregory Watts in his affidavit that manure piles were smelly and urine was allowed to accumulate on the property. The Respondent rebutted such information and in fact in his responding affidavit indicated the manure pile had been moved to an area approximately 650 feet form the Applicant's property. In addition there was no evidence of ponds of urine on the property other than a photocopy of a piece of property showing water on it. There was no evidence that this was urine. There was some vague evidence in the Applicants' affidavit that a neighbor's well water was non potable. There was no evidence though that this was in any way related to the Respondent's farming operation and I discount that evidence. The applicants contended that there were more flies in the vicinity since the horse operations commenced and combined with the odour from the Respondent's operation, it made it difficult and unenjoyable to entertain guests at their home. The respondent has produced evidence from the By-law enforcement officer of the County of Norfolk confirming that as of April 18, 2005, the storage of solid waste manure on the Respondent's property is in compliance with the required minimum distance setbacks. I have further reviewed the decision of Taliano J. in Peacock v. Norfolk (County) Chief Building Official [2003] O.J. No. 2771 and Roy J. in Ottawa (City) v. Ottawa (City) Chief Building Official, [2003] O.J. No. 1945 where the considerations relative to neighbourhood and community impact on expanded hog farming operations were considered extensively. I find in this case, the impact of the Respondent's use of his property on the neighbourhood and the community to be minimal.

6. The Court must consider the proper balance in the characterization of the legal non-conforming use (not too general to liberate the owner from the constraints of what he actually did and not so narrow as to rob him of flexibility). In considering this issue, the decision of the Supreme Court in Saint-Romuald v. Olivier, supra, dictates that the Court can not any longer determine there has been a change of use by using a broad "category" approach to the question. Hence, a categorization of his activities as being "agricultural" within the meaning of the former by-law is not appropriate. The Court must look at the essential purpose for which the property is being used to determine if the change of activities is beyond the scope of that purpose. At paragraph 19 of his reasons for the majority, Binnie J. wrote:

> "Under the doctrine of "acquired rights", the respondents were not only entitled to continue to use the premises as they were when the new by-law was passed, but was given some flexibility in the operation of that use. My colleague Gonthier J. notes that regard is to be had in such cases to "the real and reasonable expectations" of the landowner caught by changes in the zoning by-law. (paragr.63 (emphasis deleted)."

[36] In the circumstances of this case, I am satisfied that this change in use from crops to horses is one that a landowner might reasonably undertake within the context of a legal non-conforming use, provided the number of horses and intensity of use is not excessive. A landowner who farms his property would have "a real and reasonable expectation" that such a change in farming activity as found in this case would be lawful and not terminate his legal non conforming status of his property.

[37] Counsel for the Applicants further relied on the decision of Mr. Justice Quinn of this court in Walton v. Lincoln, 43 M.P.L.R. (2d) 291. At page 319 of that decision, Mr. Justice Quinn was required to consider the wording of Section 34(9)(a) of The Planning Act. He found that the key feature of that section is that the non-conforming use must be a "continuing use" if it is to survive a subsequent prohibitory by-law. He cited with approval Laidlaw J. A. in Wilmot v. Kingston (City) [1946] O.R. 437 (Ont. C.A.). He noted that the Court analyzed Section 406 (2) of The Municipal Act, R.S.O. 1937, C. 266 as re-enacted by The Municipal Amendment Act, 1941 S.O. 1941, C. 35, S 13. That section was an early predecessor to Section 34(9)(a) of The Planning Act. At page 446 Laidlaw J. A. said:

> "Thus if land is used on the day of the passing of a by-law for a purpose prohibited thereby that use may continue and such by-law by express statutory provision is not applicable to that land so long as it continues to be used for that purpose. If the use for that purpose ceases the by-law thereupon becomes applicable and the land cannot thereafter be used for a prohibited purpose in the same manner, and to the same extent, the use of any building in existence at the time a by-law is passed for a purpose prohibited by the by-law may continue."

[38] Quinn J. found no reason why Section 34(9)(a) should not be interpreted literally. I concur with him. If the land or building was used for such purpose on the day of the passing of the by-law and so long as it continues to be used for that purpose the by-law passed under Section 34 does not apply to the property.

[39] In the circumstances of this matter I find that the Respondent's lands were being used for agricultural purposes at the date of the enactment of by-law NW-1-2000 passed by the council of The City of Nanticoke. I find that the use of that property for agricultural purposes has continued to and including the present date and while the type of farming has changed, the use of the property and the buildings for farming purposes has not substantially changed so as to no longer consider the lands of the Respondent as a legal non-conforming use.

[40] In conclusion of argument counsel for the Respondent requested that if his client was successful in this matter I would award costs to his client. However, the court is cognizant of the fact that the Respondent is somewhat the author of his own misfortune in that he, his lawyers or his real estate agent failed to properly check the zoning by-laws of the municipality prior to closing his purchase of the property. The case has raised a relatively novel point in that as noted by the Supreme Court in the Saint-Romuald v Olivier decision (supra), many of these cases will turn on their own facts. I find that this matter has been a very troublesome and difficult matter for both parties and in

the circumstances this Court will not award the Respondent his costs of this application despite his success in these proceedings.

[41] The application is therefore dismissed without costs.

The Honourable Mr. Justice J. R. Turnbull

Released: JULY 25, 2005

44 O.R. (3d) 750; [1999] O.J. No. 2461; Court File No. 99-CV-167381

William F. White Limited v. Uzumeri, in his capacity as Chief Building Official of the City of Toronto et al.; A. Mantella & Sons Limited et al., Intervenors

[Indexed as: William F. White Ltd. v. Toronto (City) Chief Building Official]
Ontario Superior Court of Justice

Stinson J.

June 29, 1999

Christopher J. Williams, William A. Chalmers and Patricia A. Foran, for applicant.

David Leibson, for Yaman Uzumeri and the Corporation of the City of Toronto.

Bernard L. Eastman, Q.C., for A. Mantella & Sons Limited and 1040 Islington Avenue Holdings Limited.

Timothy Pinos and Arthur Hamilton, for 1037423 Ontario Inc., carrying on business under the trade name and style of Premier Fitness Club.

STINSON J.: — This appeal under s. 25(1) of the Building Code Act, 1992, S.O. 1992, c. 23 (the "BCA") raises issues concerning the standard of review on such an appeal, and the interplay between the BCA and the Environmental Protection Act, R.S.O. 1990, c. E.19 (the "EPA"). The appeal is brought by an existing tenant of an industrial building who seeks to rescind a building permit issued to a new fellow tenant who plans to operate a fitness club in part of the building. Questions also arise whether, on the facts of this case, the issuance of the building permit by the City of Toronto should be rescinded under s. 25(4) of the BCA and whether this is an appropriate case for a reference to the Building Code Commission under s. 25(5) of the BCA.

The Facts

The applicant/appellant William F. White Limited ("White") is a company that leases, tests and repairs cameras and other types of equipment used in the production of television programs and motion pictures. Through a sublease arrangement, White is a tenant of ground floor premises located at 1040 Islington Avenue, Toronto, a large, two-storey building constructed for industrial purposes in the mid-1950s. The zoning of the building is light industrial. It is owned by A. Mantella & Sons Limited through 1040 Islington Avenue Holdings Limited ("Mantella").

White has been a tenant of the ground floor premises since late 1996. When White first took possession, a significant portion of the premises was in an office-like configuration, with an acoustic tile ceiling that was suspended many feet below the concrete slab that formed the underside of the floor of the second storey of the building. The space immediately beneath the second storey slab also contained a variety of ducts and pipes, some of which passed through the concrete slab to the floor above. White carried out extensive renovations to its premises that included the removal of the acoustic tile ceiling to give the premises a more "industrial-type look". Additional work carried out by White included installation of light fixtures attached to the underside of the concrete slab and, in due course, installation of sound absorbent baffles, since the premises were found to be quite "reverberant" following the removal of the original ceiling.

White configured its premises to include office and sales space, camera storage and maintenance space, as well as camera testing space. Camera testing is said to be an important aspect of White's business since the reliability and accuracy of the equipment that it leases to customers is vital. Part of the work carried out by White included the installation of specialized camera testing facilities utilizing metal framework bolted to and suspended from the underside of the concrete slab that forms the second floor of the building. White estimates that in all it spent approximately $2.5 million in renovating the premises to suit its requirements.

The evidence of White indicates that the high precision camera equipment that it rents to its customers is extremely sensitive to dust, dirt and vibrations. The evidence further indicates that this equipment must be precisely adjusted and cleaned after each rental in order to ensure its effectiveness. Although there is no express provision in its written lease arrangements concerning White's particularly sensitive use for the premises (apart from the usual covenant for quiet enjoyment), White claims that it made its requirements known to the owner before it moved in. There is some dispute about this on the evidence, but this point is not material for resolution of the issues before me.

Prior to September 1998 the second storey of the building was vacant. In August 1998, the owner leased the second storey premises to 1307423 Ontario Inc. ("Premier") which is one of a group of affiliated health and fitness clubs operating under the Premier Fitness Club name. The use permitted in the Premier lease is the operation of a "health and fitness club", without restriction. A substantial portion of the premises leased to Premier on the second storey of the building is located directly above White's ground floor premises.

Premier began demolition work in September 1998, removing partitioning in its premises in preparation for the construction of a health and fitness club. At that time, White began complaining to Mantella about the prospect of a fitness club on the second storey. White asserted that it had a right to a "complete dust and noise free environment" and also complained about the noise and dust from the work being done to remove the existing partitioning. Mantella responded that the fitness club was an acceptable use in an industrial building and that White's sensitive use was not contracted for in its lease. Mantella further informed White that if White wished to take any measures to protect its special sensitivities, it should do so at its own expense.

The demolition work by Premier continued through the fall of 1998 and into early 1999. The evidence indicates that, on a number of occasions, White's employees and operations were disturbed by noise coming from the second floor immediately above White's premises, and by various types of debris (such as dust, chips of concrete, pieces of metal and some fluids) that fell from above.

Discussions among the parties failed to resolve White's complaints and in December 1998, White commenced an action against, among others, Mantella and Premier, seeking damages for nuisance, as well as injunctive relief. In that action White brought a motion for an interlocutory injunction to restrain Mantella as landlord and Premier as tenant from constructing or operating a fitness club above White's premises. That motion was adjourned from time to time over the course of several months. During that time the demolition work was completed and construction work for the fitness club commenced. White continued to experience and complain about problems arising from noise, falling debris and dust.

In connection with the court proceedings and the injunction motion, the various parties retained consultants and experts who prepared reports concerning the suitability of the second storey of the building for use as a fitness club and the potential effect of that use on White and its operations. Among other things, these experts reviewed the structure of the building and in particular the second

floor slab, and considered such matters as noise and sound transmission, vibration and the like. Among the specific topics considered was the potential impact on White's operations from the operation by Premier of an aerobics exercise studio, a general gymnasium and a weight room in various locations above White's premises.

Premier's plans for the second storey of the building did not require any structural changes to be made. The use of the second floor as a fitness centre was not going to exceed the live load of the original design of the building. The renovation work necessary to convert the space to a fitness club did, however, require Premier to apply to the City of Toronto for a building permit. No permit would have been required had Premier simply moved its equipment into the premises and conducted its business, including aerobics classes and weightlifting, without performing interior renovations.

The permit application was made February 1, 1999 by an architect on behalf of Premier. With the application, the architect submitted plans for the construction prepared by himself and a professional engineer, for review and approval by the respondent Yaman Uzumeri, in his capacity of chief building official of the City of Toronto and the Corporation of the City of Toronto (collectively "the City"). Since there were no structural changes being made to the building, the Ontario Building Code, O. Reg. 403/97, did not require Premier to retain a structural engineer to submit structural drawings.

In the months prior to the permit application (and in parallel to the then ongoing litigation), White's solicitors had forwarded several reports to the City which raised concerns about the potential impact upon White arising from the use of the second storey premises as a fitness club. The particular concerns mentioned in those reports related to sound transmission and floor vibration.

When the application for the building permit was received by the City, it was first reviewed to determine whether the use complied with the relevant zoning. A fitness club is a permitted use. The application was then reviewed by a plan examiner/building engineering who performed a cursory review of the plans to determine whether they generally conformed to those parts of the Building Code addressed by the application. The examiner also reviewed the plans to confirm that they met the life-safety requirements of the Building Code. The examiner was given the reports from White's experts that raised the issues of sound transmission and floor vibration.

Due to White's concerns, the examiner requested Premier's architect to have consulting engineers respond to the expert reports submitted by White. In response to that request Premier submitted three reports from consulting engineers. These reports were reviewed by the City, which was satisfied that the reports addressed the issues raised by White and, further, that the proposed construction did not contravene the Building Code.

White then forwarded additional experts' reports, in response to those submitted on behalf of Premier. The City in turn forwarded these reports to Premier with a request that its consulting engineers respond, in order to assist in the evaluation of the permit application. This request was confirmed by an examiner's notice which asked for a statement from the Premier's consulting engineers "confirming that the floor with or without improvements satisfies the design criteria stipulated in Part IV of the Ontario Building Code . . .".

In response to the examiner's notice, the City received three further reports from Premier. These reports addressed the examiner's notice and reported that even without the improvements to be made by Premier, the second floor complied with Part IV of the Building Code, including s. 4.1.1.6(1), which deals with vibration.

Based upon the professional opinions provided in response to the examiner's notice, the City was satisfied that there was no contravention of the Building Code in respect of vibration. In particular, through their approach and the results of the tests they described, these reports satisfied the City that the floor was sound.

On March 23, 1999 the City issued a building permit to Premier. On April 12, 1999 White commenced this proceeding by way of an appeal from the decision of the City to issue the building permit, pursuant to s. 25 of the BCA.

In light of the extensive factual interconnection between White's motion for an interlocutory injunction in its action commenced in December 1998 and the issues raised in the s. 25 BCA appeal, both matters were argued before me together, during four days in May and June 1999. Following the conclusion of the argument, I delivered oral reasons dismissing White's motion for an interlocutory injunction. These written reasons deal with White's s. 25 BCA appeal with respect to the City's issuance of the building permit to Premier.

The Issues

White's s. 25 BCA appeal raises four issues, as follows:

(1) What is the standard of review to be applied by a court hearing an appeal under s. 25 of the BCA?

(2) Are the provisions of the EPA which prohibit the discharge of a contaminant into the natural environment "applicable law" that should have been considered by the City when assessing Premier's building permit application under the relevant provisions of the BCA?

(3) On the facts of this case, should the issuance of the building permit by the City be rescinded under s. 25(4) of the BCA?

(4) Is this an appropriate case to refer questions "respecting the interpretation of the technical requirements of the Building Code or the sufficiency of compliance with the technical requirements of the Building Code to the Building Code Commission" for a hearing and report to the court under s. 25(5) of the BCA?

The Legislative Scheme of the Building Code Act

Section 8(1) of the BCA prohibits the construction or demolition of a building unless a permit has been issued. Section 8(2)(a) of the BCA provides as follows:

> 8(2) The chief building official shall issue a permit under subsection (1) unless,
>
> (a) the proposed building, construction or demolition will contravene this Act or the building code or any other applicable law;

The duty of the chief building official to issue the permit once compliance is shown is absolute: see Alaimo v. York (City) Chief Building Official (1995), 26 M.P.L.R. (2d) 69 (Ont. Gen. Div.) at pp. 73-74.

The BCA provides for an appeal from a decision to issue or not to issue a building permit, pursuant to s. 25, the relevant provisions of which are as follows:

> 25(1) Any person who considers themselves aggrieved by

an order or decision made by an inspector or chief building official under this Act or the regulations . . . may, within twenty days after the order or decision is made, appeal the order or decision to a judge of the Superior Court of Justice.

. . . . .

(4) If an appeal is made under this section, the judge shall hold a hearing and may rescind or affirm the order or decision of the inspector or chief building official or take such action as the judge considers the inspector or chief building official ought to take in accordance with this Act and the regulations and, for such purpose, may substitute his or her opinion for that of the inspector or chief building official.

(5) A judge may refer a question respecting the interpretation of the technical requirements of the building code or the sufficiency of compliance with the technical requirements of the building code to the Building Code Commission for a hearing and report to the judge.

As a neighbouring tenant on the ground floor of the building, White considered itself aggrieved by the decision to issue the building permit to Premier. White therefore commenced this proceeding naming the City and its chief building official as respondents. Mantella as owner/landlord and Premier as the adjoining tenant/permit grantee sought and were granted status as intervenors. The respondents and the intervenors all opposed the appeal.

Issue 1 -- What is the Standard of Review To Be Applied by a Court Hearing an Appeal Under s. 25 of the BCA?

Where an appeal is commenced under s. 25(1) of the BCA, s. 25(4) requires the judge to hold a hearing. Counsel for White submitted that the powers conferred upon the judge to "substitute his or her opinion for that of the . . . chief building official" indicate that the appeal should, in effect, be a new hearing. She conceded however, that the appellant does bear some onus, but contended further that there should be no automatic deference given to the decision below.

By contrast, counsel for Premier and for Mantella submitted that the onus is on the appellant to demonstrate error in the initial decision to issue the permit. They went further and submitted that where the decision below appears on its face to be a reasonable one which a responsible building official could have made on the basis of the information placed before him or her, the court should not interfere with the decision.

In Griffen v. Teplitsky, [1999] O.J. No. 1552 (Gen. Div.), Justice Hoilett dealt with an analogous issue when considering an appeal made pursuant to s. 80 of the Health Care Consent Act, S.O. 1996, c. 2. Section 80(9) and (10) of that statute prescribe the powers of the court on an appeal as follows:

80(9) The court shall hear the appeal on the record, including the transcript, but may receive new or additional evidence as it considers just.

(10) On the appeal, the court may,

(a) exercise all the powers of the board;

(b) substitute its opinion for that of a health practitioner, an evaluator, a substitute decision-

maker or the board;

(c) refer the matter back to the board, with directions, for rehearing in whole or in part.

While the above provisions are not identical to those found in s. 25 of the BCA, both statutes contemplate an appeal process in which the court may receive additional evidence. (On the admissibility of evidence on an appeal under s. 25 of the BCA, see Albert Bloom Ltd. v. Bentinck (Township) Chief Building Official, [1995] O.J. No. 2425 (Gen. Div.), per Sharpe J.).

In Griffen, Justice Hoilett had the following to say (at para. 13):

> Concerning this court's jurisdiction, it is worth noting that although the court may treat this appeal as a hearing de novo the court's fundamental role as an appellate tribunal has not changed. That fact is particularly germane, where as here, no new evidence has been adduced. It is my view, in those circumstances, that the customary restraint appropriate for an appellate tribunal should be exercised. In other words, the fundamental issue to be addressed is to determine whether or not the board's decision was reasonable on the evidence having regard to the legal principles applicable. Stated otherwise, it is not this court's role simply to substitute its decision for that of the board's simply because it may, or even would have arrived at a different decision had it been the tribunal of first instance.

Unlike the matter I am considering, the Griffen case was one in which no new evidence was tendered on the appeal. Nevertheless, I agree with Justice Hoilett's conclusion that the issue to be addressed on the appeal is whether the decision below was reasonable. In my view, the same test is appropriate on an appeal under s. 25 of the BCA.

I am reinforced in this conclusion by the decision of Justice Sheard in Lofaro v. North York (City) Chief Building Official, [1992] O.J. No. 1493 (Gen. Div.) (reported at 11 M.P.L.R. (2d) 278). In that case, the affidavits and transcripts before the court disclosed factual conflicts. Justice Sheard said the following [at p. 283 M.P.L.R.]:

> It is clear that there was evidence presented to Mr. Uzumeri that can justify the conclusion he reached, and accordingly justified his revocation of the building permit.
>
> It is not possible for me, on the basis of affidavits, even including transcripts of cross-examination on those affidavits, to reach factual conclusions as to matters that remain in factual conflict.
>
> The decision reached by Mr. Uzumeri appears to me to have been made responsibly in the discharge of his duty as chief building official, and on the basis of evidence which reasonably led to his conclusion.

I also agree with the following comment of Justice D. Lane in the full decision in Albert Bloom Ltd v. Bentinck (Township) Chief Building Official (1996), 29 O.R. (3d) 681 at p. 686:

> As to the appeal, the duty of the judge is to do as the chief building official should have done: s. 25(4). In my view, there is nothing in the Act to alter the normal burden upon any appellant to demonstrate error in order to succeed.

I conclude that an appellant under s. 25 of the BCA has the burden of demonstrating by means of evidence placed before the court that the decision below was not reasonable or that it was wrong as a matter of law. In attempting to discharge that burden the appellant may tender additional evidence before the court, as may the respondents to the appeal.

Issue 2 -- Are the Provisions of the EPA Which Prohibit the Discharge of a Contaminant into the Natural Environment "Applicable Law" that Should Have Been Considered by the City When Assessing Premier's Building Permit Application Under the Relevant Provisions of the BCA?

Under s. 8(2)(a) of the BCA the chief building official cannot issue a building permit where the proposed construction will contravene "applicable law". It was not disputed that the term "applicable law" refers to other statutory provisions that may apply to the proposed construction, as well as municipal zoning bylaws. In an appropriate case the EPA may fall within the rubric of "applicable law": see Leeds & Grenville Board of Education v. Gerrard (1991), 8 C.E.L.R. (N.S.) 266 (Ont. Gen. Div.).

In the present case the appellant (White) contended that the construction of the fitness club contravenes applicable law because its operation will result in the discharge of sound and vibration into the natural environment that may cause interference with the normal conduct of the appellant's business, in violation of the EPA. The appellant also complained that the City acted improperly in issuing the building permit because it failed to consider whether the EPA had any application to the circumstances of this case. It further argued that the City had an obligation to defer to the Director under the EPA, who has authority under s. 9(1) of that statute to decide whether or not to issue a certificate of approval for the discharge of a contaminant.

Dealing with the second point first, I agree that the EPA may fall within the scope of "applicable law" under s. 8(2)(a) of the BCA. It is for the chief building official to assess whether a particular application for a building permit falls within the ambit of the EPA or any other legislation. In some cases it may be apparent that a particular statute is relevant or irrelevant. That is a decision for the chief building official to make in the first instance. If that decision is wrong as a matter of law, then, subject to the discussion below, a judge may substitute his or her own decision under s. 25(4) of the BCA.

In the present case, one of the appellant's complaints was that the City failed to consider whether or not a particular statute was relevant. That failure by itself is insufficient to overturn the decision to issue a permit. Rather, in addition to demonstrating that a particular statute is relevant, an appellant must show that some aspect of the proposed construction would contravene the relevant statute and thus would "contravene . . . applicable law". Unless the appellant can establish such a contravention on the evidence, then the appeal cannot succeed on this ground.

It is apparent in the present case that the City did not consider the possible applicability of the EPA. That does not end the matter, for the further necessary inquiry is whether some aspect of the proposed construction would contravene the EPA.

Dealing briefly with the third point, I do not agree that it is necessary to involve the Director under the EPA in the decision-making process. In the first instance, the chief building official must decide whether the EPA is applicable. If no such decision is made by the chief building official, then the court may be asked to decide the question. This requires an examination of the reasons advanced by the appellant in support of its contention that the EPA has been contravened in this situation. Only if a contravention of the EPA is established would the Director under the EPA come to be involved.

In that event (presumably) the party whose activities offend that statute could attempt to regularize matters by seeking a certificate of approval under s. 9(1) of the EPA.

I turn now to the submissions of the appellant regarding the alleged contravention of the EPA. It contended that the aerobics and weightlifting activities contemplated by the proposed occupancy of the second storey of the building as a fitness club will result in the emission of sound and vibration into its ground floor premises. The appellant submitted, therefore, that the sound and vibration will be "discharged" into the atmosphere, as that term is defined in s. 1 of the EPA. It further submitted that the sound and vibration emitted from the fitness club will result directly or indirectly from human activities and, therefore, the sound and vibration are "contaminants" if they cause an "adverse effect" as those terms are defined in s. 1 of the EPA. Finally, it submitted that the interference with the normal conduct of its business arising from the operation of the fitness club is an "adverse effect" under the EPA.

To summarize, the appellant submitted that the proposed operation of the fitness club will contravene "other applicable law" as denoted by s. 8(2)(a) of the BCA, because it may result in, and/or may permit the discharge of sound and vibration from human activities (included in the definition of contaminants under the EPA) into the natural environment that may cause interference with the normal conduct of the appellant's business (an adverse effect as defined under the EPA).

Both the Premier premises and the White premises are located in the same building, one above the other. Assuming that sound and vibration will be transmitted from the Premier premises through the second floor slab to the White premises once the fitness club begins operation, the question remains whether this activity can properly be construed as the discharge of a contaminant into the natural environment as provided in and prohibited by the EPA and in particular s. 14(1) of that Act.

The term "natural environment" is defined in s. 1(1) of the EPA to mean "the air, land and water, or any combination or part thereof, of the Province of Ontario". The term "air" is defined to mean "open air not enclosed in a building, structure, machine, chimney, stack or flue" (emphasis added). Ordinarily, therefore, the discharge of a contaminant from one part of a building to another part of the same building would not constitute a violation of the EPA.

Counsel for the appellant relied on s. 2 of the EPA which provides as follows:

> 2. A contaminant that is discharged into the air within a building or structure as a result of the discharge of the same or another contaminant in another building or structure shall be deemed to be discharged into the natural environment by the owner or the person who has the charge, management or control of the contaminant discharged in the other building or structure.

(Emphasis added)

In the commentary following s. 2 in her Ontario Environmental Protection Act Annotated (Canada Law Book Inc., 1999) Dianne Saxe says the following (at p. A-45):

> The Act does not generally apply to discharges which occur and remain indoors, i.e., which never reach the "natural environment". In response to the facts of a particular case in which toxic gases believed to originate in one building passed through a sewer into a neighbouring building, s. 1a [now s. 2] deems an air contaminant present in one building as a result of a discharge of any contaminant in another building, to have been discharged into the natural

environment. There have been no decisions as to when adjacent structures, such as units in an industrial mall, constitute "another building or structure".

In light of the fact that both the Premier premises and the White premises are located within the same building, counsel for the appellant conceded that the alleged discharge in the present case was not from one building into another building. He did contend, however, that the transmission of sound and vibration from one storey of the same building through to another storey of the same building did amount to a discharge from one "structure" into another "structure", thus triggering the application of s. 2.

I reject that argument. In Superior Pre-Kast Septic Tanks Ltd. v. R., [1978] 2 S.C.R. 612, 86 D.L.R. (3d) 35, the Supreme Court of Canada considered the interpretation of s. 26(4)(a) of the Excise Tax Act, R.S.C. 1970, c. E-13. In particular, the court considered the interpretation of the word "structure". The court accepted that "structure" meant something other than a building. In a more recent case, M.N.R. v. Plastibeton Inc., [1986] 2 C.T.C. 211, Justice Marceau of the Federal Court of Appeal commented on the analysis contained in Superior Pre-Kast as follows (at p. 214):

It seems to be that in this analysis Martland J. endorses three criteria for determining the existence of a structure:

(1) it must be built or constructed;

(2) it must rest on or in the ground; and

(3) it must not be "a part" of another structure.

Applying the foregoing analysis to the terminology in the EPA, I conclude that two adjoining storeys of the same building, one immediately above the other, are not separate "structures" within the meaning of s. 2 of the EPA. It follows that, regardless whether noise or vibration may be transmitted through the second floor slab from the Premier premises to the White premises, this activity would not amount to a contravention of the EPA.

I therefore conclude that the EPA is not engaged in this situation and the chief building official made no error in not considering that statute. In any event, the proposed construction of the fitness club by Premier for which it submitted its application for a building permit to the City will not contravene "applicable law" by reason of the provisions of the EPA. The Director under the EPA has no role to play here.

Issue 3 -- On the Facts of this Case, Should the Issuance of the Building Permit by the City Be Rescinded Under s. 25(4) of the BCA?

The appellant advanced several further grounds upon which it argued that the decision by the City to issue the building permit was improper. The appellant contended that the proposed construction will contravene the Building Code by reason of vibration problems. The appellant further contended that the building permit was issued on the basis of erroneous information in several respects.

With respect to the alleged breach of the Building Code, the appellant relied on s. 4.1.1.6(1) of the Building Code, which provides as follows:

4.1.1.6 (1) Floor systems susceptible to vibrations shall be designed so that there will be no significantly adverse effect on the intended occupancy of the building from

vibrations.

This provision forms part of Part IV of the Building Code, entitled Structural Requirements.

Section 4.1.1.6(1) does not contain any express minimum requirements for vibration resistance. The appellant argued that the Ontario Building Code calls up certain minimum requirements for vibration resistance that are referenced in the National Building Code. The appellant further contended that the second floor of the building, when utilized for fitness club activities, will not meet those minimum requirements.

The real concern of the appellant in relation to the subject of vibration emerged during the cross-examination of one of its experts. That concern does not relate to the structural integrity or ability of the second floor slab to bear the load and impact to which it may be subjected. Rather, the appellant's concern is that the vibration caused by the operation of the aerobics studio and other aspects of the fitness club may cause things attached to the underside of the second floor slab to vibrate. In turn, this may create noise (from rattling) which may cause annoyance to persons working in the space below. It was further argued that the sensitive procedures used to test and calibrate cameras will be adversely affected by the vibration being transferred to the metal framework.

The position of Premier was that the vibration complaint was not a Building Code issue. I agree. Section 4.1.1.6(1) requires that there be no significantly adverse effects on the intended occupancy of the building from vibrations. The term "occupancy" is defined in s. 1.1.3 of the Building Code to mean "the use or intended use of a building or part thereof for the shelter or support of persons, animals or property" (emphasis added).

The complaint advanced by the appellant is not that the vibration arising from the fitness club on the second floor will cause significant adverse effects on the use of the building for the shelter or support of persons. I accordingly conclude that there is no contravention of the Building Code.

Even if I am wrong in the foregoing analysis and s. 4.1.1.6(1) is somehow engaged, the evidence before me falls short of satisfying me that the use of the second storey of the building will contravene s. 4.1.1.6(1) in relation to the vibration that may result. When the issue of vibration was raised by White's experts, the City sought input from consulting engineers on behalf of the other respondents, as it was entitled to do: see Hilton Canada Inc. v. Magil Construction Ltd. (1998), 47 M.P.L.R. (2d) 182 (Ont. Gen. Div.). As noted in that case (at p. 216), "[i]t is not unreasonable for the City to adopt a policy in reliance upon [the] expertise" of outside professionals.

In the present case, the City officials received and weighed submissions from experts retained by both White and by the other respondents. The City concluded that there were no true concerns relating to vibration, notwithstanding the contentions of White and its experts. In all the circumstances, I find that the City acted responsibly and that its conclusion in relation to the vibration issue was a reasonable one. I am not prepared to disturb that decision or to rescind the issuance of the building permit on this ground.

The appellant further argued that the permit should be rescinded because certain recommendations made by experts retained by Premier and/or Mantella were not added to the plans. On the evidence before me I am unable to accept that argument. More significantly, at least one of the respondents' experts provided his opinion, under his professional seal that "the second floor at 1040 Islington Avenue, without tenant improvements, complies with Part IV of the Ontario Building Code" (emphasis added). Acting

responsibly, the City was reasonably entitled to rely upon that opinion.

The appellant further submitted that the plans submitted by Premier in support of its permit application did not address the subject of sound transmission, and that the City erred in issuing the building permit when sound transmission problems were not adequately addressed. There are two answers to this ground of complaint. First, the issue of sound transmission is not addressed by the Building Code in respect of buildings other than those that are residential. The City could not decline to issue a building permit by reason of non-compliance with the Building Code in relation to a subject that the Building Code does not address.

Second, it would appear that the true thrust of the appellant's complaint in relation to noise transmission is that the noise that the appellant anticipates will be emitted from Premier's premises will be an actionable nuisance. On an appeal under s. 25 of the BCA, this argument is without merit. A building permit cannot be refused on the grounds that the building may be used in such a manner as to become a nuisance: see Alaimo v. York (City) Chief Building Official, supra, at pp. 73-75.

Finally, the appellant contended that the building permit was issued by the City on the basis of mistaken or incorrect information. In particular, it submitted that the City erroneously believed that the building permit drawings had been reviewed by one of the respondents' experts in order to determine compliance with s. 4.1.1.6 of the Building Code.

The appellant relied upon the case of Centre City Capital Ltd. v. Mississauga (City) (1984), 30 M.P.L.R. 96. In that case a building permit was revoked five months after it was issued, when it was discovered that the minor variance that was a prerequisite for the issuance of the permit was still under review in the courts and thus not final. Absent the minor variance, the plans in that case could not comply with "applicable law" and thus the permit could not stand. This was so even though the permit had been issued on the honest but mistaken belief that there was compliance with all applicable law: noncompliance was proven.

In the present case, the fact that the City may have wrongly assumed that the final version of the building permit plans had been reviewed by a particular expert does not necessarily undermine the validity of the City's decision to issue the permit. In order for the appellant to rely on this alleged shortcoming as a basis for requesting the court to rescind the decision to issue the building permit, the appellant would need to show that the City's decision was not reasonable and that the erroneous information was material.

In the Centre City case, the erroneous information was central to the question whether the proposed construction did or did not contravene applicable law. In the absence of the minor variance, the work could not have complied with the relevant zoning bylaw. In the present case, by contrast, the evidence falls well short of establishing that the expert's opinion was deficient in any material way due to the fact that he may not have reviewed a certain version of the plans. I therefore cannot conclude that the allegedly erroneous information was material or that the City's decision to issue the building permit was unreasonable.

For the foregoing reasons I have concluded that on the facts of this case the building permit issued by the City should not be rescinded.

Issue 4 -- Is this an Appropriate Case to Refer Questions "Respecting the Interpretation of the Technical Requirements of the Building Code or the Sufficiency of Compliance with the Technical Requirements of the Building Code to the Building Code Commission" for a Hearing and Report to the Court Under s. 25(5) of the BCA?

The issues in this case are not ones that require a reference to the Building Code Commission for technical assistance under s. 25(5) of the BCA. The evidence before the court is sufficiently comprehensible to resolve any questions.

Conclusion

For these reasons the appeal under s. 25 of the BCA must be dismissed.

Costs

In relation to costs, these should follow the event. At the conclusion of my oral reasons for decision in respect of the injunction motion, I directed that submissions regarding the costs of that procedure be deferred until the disposition of this appeal. If the parties are unable to resolve the question of costs of both procedures, I direct that brief written submissions (no more than three pages each) be filed with the court no later than July 19, 1999.

Order accordingly.

Citation: *Ayerswood Development Corporation v. London (City)*, 2006 CanLII 18521 (ON S.C.D.C.)
Date: *2006-06-02*
Docket: *33338;1501*

COURT FILE NO.: 33338
DIVISIONAL COURT FILE NO. 1501

DATE: 2006/06/02

ONTARIO
SUPERIOR COURT OF JUSTICE

DIVISIONAL COURT

CUNNINGHAM A.C.J., CHAPNIK AND FERRIER JJ.

B E T W E E N:	)	
	)	
AYERSWOOD DEVELOPMENT CORPORATION and 1510231 ONTARIO INC.	)	*Alyson Brady*, for the Respondents
	)	
Applicants (Respondents)	)	
	)	
- and -	)	
	)	*Geoffrey P. Belch*, for the Appellants
THE CORPORATION OF THE CITY OF LONDON ROCKY CERMINARA (CHIEF BUILDING OFFICIAL)	)	
	)	
Respondents (Appellants)	)	
	)	**HEARD at London: April 19, 2006**

BY THE COURT

[1] This an appeal by the Corporation of the City of London (the "City") from a decision of Mr. Justice Killeen dated February 28, 2005. In that decision, Killeen J. granted the application of Ayerswood Development Corp. ("Ayerswood") and 1510231 Ontario Inc. ("1510231") to overturn the decision of Rocky Cerminara, Chief Building Official (the "CBO"). The CBO had refused to issue unconditional building permits in respect of 28 townhouse units in Blocks 1-4 (also described as Blocks A-D), on lands owned by 1510231, located at 1203 Hamilton Road, London, Ontario (the "Property").

[2] The CBO issued the permits with a condition that, prior to occupancy, the owner would repair or replace the defective gabion wall on the Property.

[3] Upon hearing submissions and reading the materials filed, Killeen J. concluded that the owner had complied with all statutory requirements and that, in imposing the condition, the CBO was attempting to use the powers in the legislation for his own purposes. Accordingly, Killeen J. ordered that the permits be granted unconditionally.

[4] With respect, we are all of the view that the learned trial judge erred in finding that the CBO acted outside the scope of the powers and authority granted to him in the relevant legislation; and therefore, the appeal should be allowed.

BACKGROUND

Site Plan Control

[5] The entire City of London is designated as a site plan control area. The Property is subject to site plan control and the City's site plan control by-law.

The First Phase of Development

[6] The respondent 1510231 is the current owner of the Property. The respondent Ayerswood performed the role of general contractor. On August 31, 1989, the City entered into a site plan agreement with the previous landowner, Trenlon Developments Corporation ("Trenlon"), pursuant to what is now s. 41 of the *Planning Act*, R.S.O. 1990, c. P.13 ("*Planning Act*") for the construction of 156 townhouse units on Hamilton Road, in London, Ontario ("Phase I"). The agreement was registered on title to the property.

[7] The agreement called for Trenlon to perform at no expense to the City, a number of things, including the installation of a sanitary pumping station, a special access road running through the property along the top of the bank of Pottersburg Creek, and a special gabion mesh wall along the bank of the creek to stabilize it and protect it from erosion.

[8] Trenlon constructed the gabion wall in 1989. Between its construction in late 1989 and about the spring of 1998, the gabion wall performed satisfactorily and without incident.

[9] On or about April 20, 1998, the City's building division received a complaint concerning the deterioration of the gabion wall, which resulted in a letter from the City to the respective owners of the property on which the gabion wall was built.

[10] In the spring of 1998, the gabion wall collapsed partly in the area owned by 1510231 and partly on an adjacent parcel owned by Middlesex Condominium Corporation 229.

[11] By letters dated May 22, 1998, and August 10, 1998, Development Engineering, the engineering consultant for Trenlon, stated that additional gabions had been installed in late November 1989. In particular, the gabion wall had been modified to accommodate a guardrail that was placed around the curve in the roadway. There was no evidence that the City was consulted at that time or told about the modifications which involved the construction of additional gabion baskets.

The Second Phase of Development

[12] On October 2, 1997, the City approved a site plan for 28 townhouse units along Hamilton Road ("Phase II").

[13] On March 5, 1998, Trenlon entered into an amending agreement with the City to provide for an additional 28 townhouse dwelling units to be located along the north part of the original property, now owned by the respondent, 1510231. The 1998 amending agreement incorporates the 1989 agreement into its framework.

[14] On May 7, 1998, the amending development agreement and site plan were registered in respect of Phase II. However, the new owner did not pursue the permits for the second phase of construction at this time.

Application for Building Permits

[15] On August 28, 2003, 1510231 applied for 4 building permits to construct 28 townhouses in four separate blocks (Blocks A-D) as detailed in the 1998 amending agreement.

[16] In the fall of 2003, as agent of the owner and its contractor, Ayerswood applied to the City to amend the existing site plan approval to remove plans for a fence in favour of a "noise barrier berm".

Conditional Building Permits

[17] On October 27, 2003, the CBO agreed to issue 2 conditional permits permitting the construction of Blocks A and D at either end of the project. These permits were subject

to a condition that there be no connect, that is no occupancy of the units, until the owner entered into another amending agreement requiring that the gabion wall be repaired and a slope stabilization report completed with respect to the slope on the Property.

[18] On December 9, 2003, the City forwarded a draft amending development agreement and revised site plan which approved the noise berms, as requested, but was made subject to the condition that, prior to occupancy, 1510231 repair or replace the gabion wall on its lands in accordance with sound engineering principles. Subsequently, an engineering study submitted on behalf of the owner concluded that the four proposed new blocks would not be affected by any deterioration of the creek bank.

[19] In March 2004, a City building inspector observed construction on Blocks B and C, for which no building permit had been issued.

[20] On March 17, 2004, an order to comply was issued to Ayerswood, and on March 18, 2004, a stop work order was issued. The City later issued additional conditional permits for Blocks B and C subject to the same "no occupancy" condition.

[21] The special access road, which is a fire access road to the Phase I development, is currently barricaded. Part of the failed road and part of the gabion wall are located on the Property.

JURISDICTION AND STANDARD OF REVIEW

[22] Pursuant to s. 26 of the *Building Code Act, 1992*, S.O. 1992, c. 23 ("*BCA*"), this Court has jurisdiction to hear the appeal "on any question that is not a question of fact alone". The powers of the Divisional Court on appeal are broad and include confirming or altering the judge's decision, referring the matter back to the judge for reconsideration and substituting its opinion for that of the CBO or the judge.

[23] The standard of review for appeals from the order of a judge is widely accepted to be whether or not the decision of the judge was "clearly wrong". Deference to a trial judge's findings of fact is a well-established principle of appellate review. An appellate court should not interfere with the trial judge's findings of fact unless the trial judge makes a "palpable and overriding error, or a "manifest error" or a "clear error". *Equity Management of Canada v. Corporation of the Town of Halton Hills* 1997 CanLII 2742 (ON C.A.), (1997), 35 O.R. (3d) 321 (C.A.).

[24] In other words, an appellate court will be justified in disturbing a trial judge's findings of fact only if a specific and identifiable error made by the judge convinces it that the conclusion of fact reached is unreasonable: see *Schwartz v. Canada* 1996 CanLII 217 (S.C.C.), (1996), 133 D.L.R. (4th) 289 at 305-306 (S.C.C.). On questions of law, however, the standard of review is correctness: See *Housen v. Nikolaisen* 2002 SCC 33 (CanLII), (2002), 211 D.L.R. (4th) 577 at para. 8 (S.C.C.).

[25] In this case, the key issue before Killeen J. was whether the CBO acted beyond the authority provided to him by statute in rendering his decision not to issue full building permits. This is a question of law, attracting the standard of correctness.

THE STATUTORY FRAMEWORK

The *Building Code Act, 1992*, S.O. 1992, c. 23 as amended (the "*BCA*")

[26] Section 8(1) of the *BCA* provides, in part, that:

> No person shall construct…a building…unless a permit has been

issued therefore by the chief building official.

[27] Section 8(2) states, in part, that:

> The chief building official shall issue a permit under subsection (1) unless,
>
> (a) the proposed building, construction or demolition will contravene this Act or the building code or any other applicable law.

[28] At the relevant time, under O. Reg. 160/93, "applicable law" was defined, for the purposes of s. 8 of the *BCA*, as "any general or special Act, and all regulations and by-laws enacted thereunder, which prohibit the proposed *construction or demolition of the building* unless the Act, regulation or by-law is complied with."

The *Planning Act*, R.S.O. 1990, c. P-13, as amended (the "*Planning Act*")

[29] Section 41(2) of the *Planning Act* provides as follows:

> **Establishment of site plan control area**
>
> (2) Where in an official plan an area is shown or described as a proposed site plan control area, the council of the local municipality in which the proposed area is situate may, by by-law, designate the whole or any part of such area as a site plan control area.

[30] Section 41(4) provides, in part, as follows:

> **Approval of plans or drawings**
>
> (4) No person shall undertake any development in an area designated under subsection (2) unless the council of the municipality or, where a referral has been made under subsection (12), the Municipal Board has approved…:
>
> 1. Plans showing the location of all buildings and structures to be erected and showing the location of all facilities and works to be provided in conjunction therewith and of all facilities and works required under clause (7) (a).

[31] As a condition to the approval of the plans referred to in subsection (4)1, a municipality may require the owner of the land to provide to the satisfaction of and at no expense to the municipality, a number of things pursuant to s. 41(7)(a), including:

> 2. …facilities to provide access to and from the land such as access ramps and curbings and traffic direction signs;
>
> 3. off-street vehicular loading and parking facilities, either covered or uncovered, access driveways, including driveways for emergency vehicles, and the surfacing of such areas and driveways;

> 6. walls, fences….or facilities for the landscaping of the lands or the protection of adjoining lands; and
>
> 9. grading or alteration in elevation or contour of the land and provision for the disposal of storm, surface and waste water from the land and from any buildings or structures thereon.

[32] As a further condition to the approval of the plan and drawings referred to in subs. 41(4), a municipality may, pursuant to ss. 41(7)(b) and (c), require the owner of the land to maintain to the satisfaction of the municipality and at the sole risk and expense of the owner, any of the facilities mentioned in s. 41(7) and enter into one or more agreements with the municipality dealing with and ensuring the provision of such facilities.

[33] Pursuant to s. 41(10), any such agreement may be registered against the land to which it applies and the municipality is entitled to "enforce the provisions thereof against the owner… and any and all subsequent owners of the land".

[34] Finally, s. 41(13) provides for the delegation of powers as follows:

> Where the council of a municipality has designated a site plan control area under this section, the council may, by by-law,
>
> …
>
> (b) delegate to either a committee of the council or to an appointed officer of the municipality identified in the by-law either by name or position occupied, any of the council's powers or authority under this section…

THE RELEVANT CASE LAW

[35] As previously noted, pursuant to s. 8(2) of the *BCA*, the CBO has no discretion to refuse a building permit if all legal requirements for its issue have been met. Nevertheless, as a general rule, a building permit should not be issued for a development in a site plan control area to which s. 41 of the *Planning Act* applies until site plan approval for the development has been obtained. Without such approval, the proposed building would contravene s. 41(4) of the *Planning Act* and the permit should be refused: see *Quay West v. Toronto (City)*(1989), 47 M.P.L.R. 109 (Ont. Div. Ct.) and *Shell Canada Products Ltd. v. Barrie (City) Chief Building Official*, [1992] O.J. No. 1572 (Gen. Div.).

[36] In the case of *723 Rymal Ins. V. Hamilton (City) Chief Building Official*, [2001] O.J. No. 832 (Sup. Ct.), the land proposed to be developed included a house, which had been listed as heritage property. The building permit application was approved on the basis that the house was to be used as a restaurant, and that measures would be undertaken to preserve and maintain the building. After the construction proceeded, the owner applied for a demolition permit in respect of the house. The Court held that the *Planning Act* is "applicable law" and the demolition would contravene the applicable law; that is, demolition of the house would have prevented Rymal from completing the development in accordance with the approved site plan submitted pursuant to s. 41(4) of the *Planning Act* and the *Planning Act* itself.

[37] Clearly, building permits have been issued in some cases in the absence of site plan approval. See, for example, *Sixteenth Warden Ltd. v. Markham (Town) Chief Building Official* (1993), 18 M.P.L.R. (2d) 70 (Gen. Div.); *Foster v.*

Waterloo (City), [1993] O.J. No. 415 (Gen. Div.); and *Re Revenue Properties Co. and Toronto (City)* (1984), 26 M.P.L.R. 165 (Ont. Co. Ct.), aff'd. (1984), 46 O.R. (2d) 60 (Div. Ct.).

[38] However, these cases were fact specific. The weight of judicial authority has interpreted the relevant legislation as requiring site plan approval as a pre-condition for the issuance of a building permit except when the municipality is acting in bad faith or refuses development approval for an obviously unlawful reason.

[39] In *Dominion Stores Ltd. v. Etobicoke (Borough)* (1982), 19 M.P.L.R. 88 (Ont. Div. Ct.), the municipality attempted to interfere with the owner's lawful use of a public road to access its property by refusing site plan approval, even though the municipality had no statutory authority to prohibit access from the public road in the first place. The conduct of the municipality was found to be clearly "unlawful".

[40] Likewise, in *Polla v. Toronto (City) Chief Building Official* (2000), 15 M.P.L.R. (3d) 103 (Ont. Sup. Ct.), where the City attempted to interfere with Polla's lawful construction of a retaining wall by refusing site plan approval though it had no statutory authority to prohibit its construction, the condition requiring it to tear down the wall was found to be unlawful.

[41] The Ontario Court of Appeal conducted a historical analysis of the planning legislation and its objectives in *Re Hi-Rise Structures Inc. v. Scarborough (City)*, (1992), 10 O.R. (3d) 299, stating at para. 13:

> This historical analysis demonstrates that the provisions of s. 40 are essentially an extension of planning controls. It is the fine tuning of the zoning by-laws. To the extent that agreements are contemplated, they are to assure that facilities such as walkways or landscaping are maintained on an ongoing basis. To the extent that registration is contemplated, it is to assure that successors in title will be bound to observe the covenants. The agreements are unique in that there is no contemplation of an obligation of performance on the part of the municipality….

[42] The court concluded at para. 17 that:

> "…in terms of the broad purposes of the statute and its development over the years, a site plan agreement must be viewed primarily as a planning instrument, remaining a contract for enforcement purposes from time to time, but amenable on the change which is inherent in all planning."

[43] In interpreting the relevant legislative provisions, the courts have generally adopted a liberal approach, taking into account the interests of the community. In *Bruce v. Toronto (City)*, [1971] 3 O.R. 62 (C.A.) the court reviewed the strict interpretation of municipal by-laws and then stated, at p. 66:

> Notwithstanding this, it is my belief that Ontario Courts now accept that the obligation imposed on the municipal council to plan for the growth and development of the community demands recognition of the necessity for means to compel the observance of the rights of the community to determine and enforce

> the direction in which the community should be shaped, and in that regard the rights of the community are paramount to the rights of the owner.

THE DECISION OF KILLEEN J.

[44] On June 9, 2004, Killeen J. heard the application brought by 1510231 and Ayerswood for an order requiring the CBO to issue four unconditional building permits referable to the second phase of the development and the building of the 28 townhouses.

[45] Based on the submissions of counsel and the documentary evidence filed, he found that the applicants had complied with all of the statutory requirements, and as such, the CBO was under an obligation to issue the permits unconditionally pursuant to s. 8 of the *BCA*.

[46] Killeen J. held that the owner was bound by and entitled to rely upon the original development agreement and the 1998 amending agreement, and that these agreements only required that Trenlon maintain the wall for a period of one year following construction. In addition, the 1998 amendment, which was not revoked by the City, bestowed upon the owner the right to construct the envisaged four blocks.

[47] Though the owner had requested some "rather simple" modifications to the site plan, the learned justice refused to accept the City's argument that the owner had abrogated the entire agreement. While the City was within its right to impose conditions relating to the minor modifications requested, it could not impose unrelated conditions with respect to the gabion wall.

[48] Thus, in tacking on a duty to repair the gabion wall, the CBO was attempting to use the s. 41 powers in the *Planning Act* "for his own purposes". Further, he had "no right to turn himself into a surrogate for the council or Municipal Board under the building permit process as prescribed by s. 8 of the *BCA*" (para. 69). The court found that, in doing so, Mr. Cerminara "arrogated to himself an *unlawful* authority in purporting to act under s. 8(3)" of the *BCA* and the conditional permits he issued were "all without legal effect" (para. 78, emphasis in original).

ANALYSIS

[49] The first error of the trial judge, according to the City, was his finding at para. 5 that the gabion wall had been constructed "according to specifications approved of by the City". Moreover, the learned judge erred in reaching the conclusions that there was "not a shred of evidence to show that the proposed building work in question would contravene the *BCA*, the building code or any other applicable law" (para. 65); that the owner's maintenance obligation was limited to one year by the 1989 agreement (para. 25); and that the City had no power in 2003 to re-open or amend the earlier agreements (paras. 60-63). The City also submits that the trial judge failed to give sufficient deference to the CBO's exercise of power pursuant to the relevant provisions in the *Planning Act*.

[50] The position taken by the City, in a nutshell, is that the CBO issued the conditional permits properly and lawfully. In doing so, he was attempting to ensure compliance with the owner's continuing obligations in the 1989 and 1998 agreements and the provisions of s. 41 of the *Planning Act*.

[51] We agree and find that the learned trial judge erred in reaching the conclusions he did.

[52] First, the judge's assertion at para. 5 that the gabion wall was constructed "according to the City's specifications" ignores the fact that, once the as-constructed drawings were

approved in November 1989, the owner unilaterally modified the gabion wall without the City's authority or approval.

[53] In a letter dated May 22, 1998, the engineering consultant for Trenlon, Development Engineering, stated in part:

> Development Engineering was involved in the original design and construction of the gabion wall in 1989. We sought and received the advice of a geotechnical consultant in this matter. The plans were prepared and submitted for approval to the City of London and the Upper Thames River Conservation Authority. The drawings were approved and construction was completed in September of 1989. *As-constructed drawings were completed and submitted to the City on November 3, 1989. Late in November of 1989, some additional gabions were installed upstream of the distress location to accommodate a change in the site plan at that time.* (emphasis added)

[54] In explaining the reason underlying the modification to the wall, the consultants in a further letter dated August 10, 1998, stated that "the wall was modified in late November 1989 when, during the course of site servicing, a guardrail was proposed to be placed around the curve in the roadway".

[55] In the result, the approved drawings which showed a gabion wall having a uniform height of four gabion baskets, were modified unilaterally by the owner to include three additional layers of gabion baskets without foundation.

[56] In light of this, it would be clearly wrong, in our view, to conclude that the wall was *constructed* in 1989 pursuant to the approved specifications. It was not. With respect, in finding that the gabion wall was constructed according to the City's specifications, the learned judge reached a conclusion that was not substantiated by the evidence.

[57] This may have led him to err in reaching the legal conclusion that there was "no shred of evidence" to show that the proposed buildings would contravene "any other applicable law".

[58] Based on settled case law that site plan approval constitutes "other applicable law" (see *Quay West, supra*), and the fact that no such approval was given pursuant to s. 41 of the *Planning Act*, the proposed construction of Phase II would contravene the relevant legislative provisions. Indeed, when the City agreed to the amending agreement in March 1998, it was not aware of the defective wall, or the modifications made to it by the owner in 1989. Yet, by the time the owner applied for building permits for the second phase of development in 2003, all parties were well aware that the gabions had collapsed.

[59] This case can be likened to the situation in *Rymal, supra*, in which the building permit had been approved on a certain basis and the owner subsequently applied for a demolition permit. The court in that case held that since the demolition of the house would have prevented Rymal from completing the development in accordance with the approved site plan, it would contravene the *Planning Act* which is "applicable law".

[60] Since the construction of Phase II would, in this case, mean that the completion of the development would not be in accordance with the originally approved site plan, it would contravene s. 41 of the *Planning Act*. In our view, the learned trial judge erred in finding otherwise.

[61] We agree with the judge's finding at para. 27 that the 1998 agreement is not a free-standing agreement replacing or rescinding the 1989 agreement, but rather, it amends the earlier one to allow for the construction of the new phase of the work.

[62] We do not agree with his holding at para. 25 that the provision for a one year maintenance guarantee on bank stabilization works in para. 13(c)(i) was "the legal limit of the owner's obligation to the City for the wall, nothing more and nothing less". On the contrary, a reading of the agreement as a whole demonstrates that there were ongoing maintenance obligations placed upon the owner.

[63] The development agreement of 1989 provided, among other things, for a sanitary pumping station to pump sewage from the project up to Hamilton Road, a special access road running through the project and a special gabion mesh wall along the bank of the creek to stabilize it and protect it from erosion.

[64] Para. 9 thereof refers to joint use of the driveways and services and calls for original and ongoing obligations by Trenlon referable to the road system, sewer system and the gabion wall. It states as follows:

> Joint Use of Common Internal Driveways and Services:
>
> The owner(s) of each phase of the development shall enter into agreement(s) with the owner(s) of the other phase(s) to provide for the joint use *and maintenance* of common internal driveways and services. (emphasis added)

Para. 10 creates ongoing obligations for fire route accesses; and para. 13 contains the special provisions obliging the owner to construct a sanitary pumping station and a riverbank stabilization undertaking which involved the gabion wall. The particular provisions in issue are:

> Paragraph 13 (a) The sanitary sewer pumping station shall be constructed and maintained in perpetuity entirely at the sole expense of the owner such that there is no overflow provision.
>
> (c) Prior to issuance of a building permit the developer shall obtain written approval by the City Engineer and the U.T.R.C.A. for any works to be done adjacent to the Pottersburg Creek with respect to riverbank stabilization and storm sewer outlets. *In addition* the developer shall provide….
>
> (i) a one year maintenance guarantee on bank stabilization works upon final inspection approval.
>
> (ii) "as constructed" drawings of works along the riverbank.

(emphasis added)

[65] Pursuant to para. 14, upon request of the City Engineer, the owner shall deliver a fully registerable grant of easement to the City "for the maintenance of the Pottersburg Creek located at the west limit of this site". We understand that this provision was never put into effect.

[66] Paragraph 24 provides the City with an ongoing right to enter the lands and premises for the purposes of inspecting the facilities, works and matters to be provided and maintained under the agreement and for the purpose of providing *or*

maintaining at the owner's expense any facility, work or matter where the owner is in default of doing so for 30 days or more.

[67] In his reasons, the learned trial judge mentioned Trenlon's consulting engineer's report which stated that the installation of additional gabions by the City in late 1997 "may be a factor in the change of flow characteristics that may have contributed to the undermining of the gabions". The trial judge also made specific reference at para. 15 to a report from an expert indicating that "the proposed townhouse/condominium units are outside the zone of influence of potential slippage connected with the existing or future slope failures". We understand that legal proceedings are pending to determine the issues surrounding the defective gabion wall.

[68] With respect, in our view, the real question is whether the condition imposed by the CBO bears a real and logical nexus to the use of the property. See, for example: *Ottawa (City) v. Ottawa (City) Chief Building Official*, [2003] O.J. No. 4530 at para. 109 (Div. Ct.).

[69] One of the conditions for site plan approval was that the owner construct, among other things, a gabion retaining wall on the property. A fair interpretation of the whole of the agreement discloses an ongoing obligation of the owner for maintenance of the property, including the gabion wall.

[70] This is not a case such as in *Alaimo v. North York (City) (Chief Building Official)*, [1995] O.J. No. 862 (Gen. Div.) where the chief building official had refused to issue a building permit on the grounds that the proposed construction might cause a nuisance due to the proximity and height of chimneys on adjacent buildings. The court, in that case, held that the CBO could not refuse to issue a building permit pursuant to s. 8(2) of the *BCA* on common law considerations of nuisance.

[71] *Alaimo* involved a condition based on speculation; that is not the case here. Indeed, shortly after the granting of site plan approval for Phase II, the gabion wall collapsed.

[72] Prior to the issuance of a building permit, the CBO is mandated by s. 8(2) of the *BCA* to consider not only the proposed construction but its intended use. The condition imposed by the CBO before issuing the building permits for Phase II, that the owner "repair or replace the gabion wall," bore a real and logical connection to the agreement, the property and its uses.

[73] Given the pronouncements of the Court of Appeal in *Bruce*, *supra*, and *Hi-Rise Structures*, *supra*, a site plan agreement is viewed as a planning instrument that remains a contract for enforcement purposes, but is amenable to change, which is inherent in all planning. Overall, the rights of the community are paramount to the rights of the owner.

[74] The access road, which is a fire route, is now closed. 1510231 and Ayerswood proceeded to build and occupy the second phase townhouses without permission. In our view, in granting the building permits for Phase II conditionally, the CBO was acting within the scope of authority provided to him by the legislation.

[75] It makes logical sense that the development should not proceed unconditionally where requirements on the owner relating to a portion of the Property integral to the agreement have not been fulfilled, for whatever reason.

[76] It follows that, in our opinion, the trial judge erred in holding at para. 78 that the CBO arrogated to himself an unlawful authority in purporting to act under s. 8(3) of the *BCA*.

[77] Moreover, the judge's statement at para. 69 that the CBO had "no right to turn himself into a surrogate for the

council or the Municipal Board", is incorrect in that s. 41(13) of the *Planning Act* permits delegation of the authority to the CBO.

[78] In the result, the learned trial judge erred in finding that the CBO exceeded his authority in attaching conditions to the issuance of the said building permits. In our view, the CBO properly and lawfully issued the permits in accordance with the legislation and the community interest.

CONCLUSION

[79] The appeal is allowed. The order of the Honourable Mr. Justice Killeen, dated February 28, 2004, is rescinded, along with the order for costs.

[80] The appellant is entitled to his costs of the appeal and of the hearing before Killeen J., each assessed in the all-inclusive sum of $10,000 for a total amount of $20,000 including G.S.T. and disbursements.

_____

Cunningham A.C.J.

_____

Chapnik J.

_____

Ferrier J.

Released: June 2, 2006

COURT FILE NO.: 05-CV-302521 PD2
DATE: 2006-11-15

ONTARIO

SUPERIOR COURT OF JUSTICE

B E T W E E N:	)	
	)	
CRAFT-BILT MATERIALS, LTD.	)	*Julian Heller* and *Ms. K. Jukes*, Student-at-Law, for the Applicant
	)	
Applicant	)	
	)	
- and -	)	
	)	
CITY OF TORONTO AND ANN BOROOAH, CHIEF BUILDING OFFICIAL FOR THE CITY OF TORONTO,	)	*Kirsten Franz*, for the Respondents
	)	
Respondents	)	
	))	**HEARD:** October 25, 2006, at Toronto, Ontario

Pierce J.

Reasons For Judgment On Application

Introduction

[1] The applicant is a manufacturer of "sandwich panels" that are used in the construction of solariums or sunrooms. Craft-Bilt appeals the refusal of the Chief Building Officer for the City of Toronto to issue building permits for three properties. These properties feature sunrooms that are to be built with sandwich panels manufactured by the applicant.

[2] The City's position is that the panels don't comply with the *Ontario Building Code*, and requires that each application be approved by the Building Materials Evaluation Commission.

[3] The applicant asserts that its sandwich panels comply with the *Building Code*, such that the permits should issue. If the court does not order the permits issued, the applicant asks for an order, in the alternative, referring the applications to the Building Code Commission under s. 25(5) of the *Ontario Building Code Act*.

The Court's Jurisdiction

[4] The court's jurisdiction to hear this appeal is found in s. 25(1) of *The Ontario Building Code Act:*

> "A person who considers themself [sic] aggrieved by an order or decision made by an inspector or chief building official, a registered code agency or an inspector under this Act (except a decision under subsection 8(3) not to issue a conditional permit) may appeal the order or decision to the Superior Court of Justice within twenty days after the order or decision is made."

[5] By way of relief, the court may, pursuant to s. 25(4) of the Act:

> "…affirm or rescind the order or decision and take any other action that

the judge considers the chief building official, registered code agency or inspector ought to take in accordance with this Act and the regulations and, for those purposes, the judge may substitute his or her opinion for that of the official, agency or inspector."

[6] Section 24(5) permits the judge to refer to the Building Code Commission a question dealing with interpretation of technical requirements or sufficiency of compliance with the Code. The Commission is obliged to hold a hearing and report to the judge.

Standard of Review

[7] The appropriate standard of review from a decision of the chief building official varies depending upon the nature of the question the court is asked to review. An articulate analysis of this jurisprudence can be found in the decision of Madam Justice Molloy in *Runnymede Development Corp. v. 1201262 Ontario Inc.* 47 O.R. (3d) 374; [2000] O.J. No. 981 (S.C.J.). As Molloy J. explains at par. 29, "The standard may be different not only from one tribunal to another, but also for different kinds of decisions by the same tribunal." The continuum of review ranges from correctness for errors of law or jurisdiction to reasonableness where an appeal is fact-driven and involves expertise.

[8] Because the standard of review for each case turns on its facts, it is necessary to embark on an analysis of the issues.

[9] The Supreme Court of Canada established a framework for analyzing the standard of review in *Law Society of New Brunswick v. Ryan* 2003 SCC 20 (CanLII), (2003) 1 S.C.R. 247 at par. 27, and *Pushpanathan v. Canada (Minister of Citizenship and Immigration)*, 1998 CanLII 778 (S.C.C.), (1998) 1 S.C.R. 982 at par. 29 – 38. The reviewing court is directed to make an analysis based on four contextual factors:

1. the presence or absence of a privative clause or statutory right of appeal;
2. the expertise of the tribunal relative to that of the reviewing court on the issue in question;
3. the purpose of the legislation; and
4. the nature of the question.

This framework, known as the pragmatic and functional analysis approach, will be considered below.

[10] By virtue of the *Ontario Building Code Act*, a judge hearing an appeal is given full scope to substitute his decision for that of the chief building official. There is no privative clause; the right of appeal is statutory. This signals a lesser standard of deference to the decision-maker generally.

[11] While the chief building official has some expertise in determining whether a building permit should issue under the Act, this expertise is qualified by these factors: first, the chief building official is an employee of the municipality. She is not an independent decision-maker or tribunal.

[12] Second, the *Building Code Act* generally compels the chief building official to issue a building permit unless the application for a permit does not comply with the building code, or is inadequate for other reasons set out in the statute. Thus, the discretion of the chief building official in deciding whether to issue a building permit is very narrow. If the application complies with the Code, a permit shall issue.

[13] Third, the chief building official does not hold hearings when deciding whether to issue a permit. The official does not,

therefore, have the advantage over the appeal court of hearing witnesses, weighing their evidence and drawing inferences. In fact, the reverse is true: the reviewing court may receive additional evidence that was not before the original decision-maker.

[14] Fourth, the fact that the judge may order a reference to the Building Code Commission suggests that the court does not owe great deference to the chief building official on matters of a technical nature.

[15] The purpose of the legislation is to establish a regulatory scheme throughout the province for safe construction and demolition of buildings. Necessarily, this involves the complexities of design and standards for materials used in construction.

[16] The principal question that arises in this appeal is whether load testing is sufficiently described in the building code. Load testing refers to the proof that a building material, such as sandwich panels, or a design can withstand snow, rain, or wind.

[17] It is the City's position that, although load testing is referred to in the code, there is no direction as to how it is to be conducted. Therefore, the City submits, it cannot determine whether the applicant's sandwich panels comply with the code because it does not have the resources to do its own testing to determine compliance.

[18] The City also contends this is a factual decision which is technical in nature. For this reason, it advocates that the standard of review on this appeal should be that of reasonableness.

[19] I do not agree with this submission. The City's approach to issuing building permits involving the applicant's sandwich panels is based on an interpretation of the *Building Code Act*. It is grounded in statutory interpretation, which is a traditional function of the courts. Thus, the court need not defer to the chief building official as the substance of the matter is legal, not factual or technical. I conclude that the standard of review in this case is one of correctness.

The Legislative Framework

[20] Subsection 8(2) of *The Ontario Building Code Act* sets out six criteria for the issuance of a building permit when a building is being constructed or demolished. Only two are relevant for the purpose of this appeal:

> "The chief building official shall issue a permit referred to in subsection (1) [for construction or demolition of a building] unless,
>
> (a) the proposed building, construction or demolition will contravene this Act, the building code, or any other applicable law…;
> (b) a person who prepared drawings, plans, specifications or other documents or gave an opinion concerning the compliance of the proposed building or construction with the building code does not have the applicable qualifications, if any, required by the building code…"

[21] Section 9(1) of the code gives the chief building official discretion to allow materials or designs not authorized by the building code in certain circumstances. It provides:

> "The chief building official or a registered code agency may allow the use of materials, systems and building

> designs that are not authorized in the building code if, in the opinion of the chief building official or registered code agency, the proposed materials, systems and building designs will achieve the level of performance required by the building code."

[22] Many building materials are approved by regulation under the Act. However, the advent of new materials makes it impractical for each one to be incorporated into the code by regulation in a timely way. For this reason, section 28 of the Act sets up the Building Materials Evaluation Commission (B.M.E.C.). The powers and duties of this commission are set out in subsection 28(4). It may:

> "(a) conduct research on, and examine, construction materials, systems and building designs or cause such research to be conducted and examinations to be undertaken;
> (b) upon application therefore, authorize the use, subject to any conditions that may be set out, of any innovative material, system or building design in respect of any building or part thereof; and
> (c) Make recommendations to the Minister respecting changes in this Act or the building code."

[23] By virtue of subsection 28(5), the code is deemed not to be contravened when any innovative material, system or building design is approved by the B.M.E.C. Unfortunately, the Commission's approvals are site-specific. A manufacturer of a building material would have to apply for B.M.E.C. approval each time a customer wished to use the manufacturer's material in his construction.

[24] The applicant argues that this honeycomb style of sandwich panels, (without "H" stiffeners) has been in use for twenty years, and thus is not an innovation. It also notes that these materials have been approved for use under the building code in other municipalities.

[25] Section 29 of the Act also gives the Minister powers to approve innovative materials, systems and designs for inclusion in the building code.

The Building Code

[26] The parties agree that if the applicant's sandwich panels are not specified in Part 9 of the building code, the materials must conform to Part 4 requirements of the code. It is common ground that Part 4 of the building code applies in this case.

[27] The City takes the position that the applicant's sandwich panels with a honeycomb interior construction, are a finished product, and are not among the approved building materials listed in s. 4.3 of the code. It submits that because the applicant's panels are made of an aluminium skin bonded to a core material, they represent a proprietary product which has not been approved. For that reason, the City recommends the panels be approved by the B.M.E.C. It is noteworthy that the City, by inadvertence, has issued building permits for a few dwellings using the honeycomb sandwich panels. Sandwich panels with "H" stiffeners have previously been judged acceptable by the City.

[28] The applicant submits that aluminium, which is the principal material for the manufacture of the panels, is incorporated by reference in the code. In the course of this appeal, the City agreed that sandwich panels such as manufactured by the applicant, are governed by Part 4, clause

4.3.5.1 of the code, and that the standard for aluminium applies.

[29] The key issue arises from Part 4 of the Code, which deals with structural design, rather than the prescribed structural elements found in Part 9 of the Code. Section 4.1.1.3(1) deals with design requirements:

> "(1) Buildings and their structural members including formwork and falsework shall be designed to have sufficient structural capacity and structural integrity to resist safely and effectively all loads and influences that may be reasonably expected, having regard to the expected service of life of buildings, and shall in any case satisfy the requirements of this Section."

[30] Design features are described in s. 4.1.1.4(1):

> "Design basis – Buildings and their structural members shall be designed by one of the following methods:
>
> (a) standard design procedures and practices provided by this Part and any standards and specifications referred to therein, except in cases of conflict the provisions of the building code shall govern, or
>
> (b) one of the following three bases of design:
>
> (i) analysis based on generally established theory,
>
> (ii) evaluation of a given full-scale structure or prototype by a loading test, or
>
> (iii) studies of model analogues,
>
> provided the design is carried out by a person qualified in the specific method applied and provided the design ensures a level of safety and performance at least equivalent to that provided for or implicit in design carried out by the methods referred to on Clause (a)."

The applicant submitted to the City a design for sunrooms using its sandwich panels, and supplied load test results under a testing standard promulgated by the American Society for Testing Materials. The testing standard is identified as ASTM E72. The A.S.T.M. is a credible body that tests building materials and designs. The sunroom design was sealed by a professional engineer, as complying with the building code.

[31] The effect of the engineer's seal affixed to a document is to indicate that the design is a product of professional discipline and responsibility. This issue was canvassed in *Hilton Canada Inc. v. Magil Construction Ltd.* 47 M.P.L.R. (2d) 182; [1998] O.J. No. 3069 (Gen. Div.) at par. 61:

> "It is generally agreed that the stamp and seal of an engineer communicates to the building official and to the public that the contents of the document sealed reflect professional knowledge and care; and that applicable statutes, standards, codes and regulations have been followed…."

[32] In this case, the City refuses to examine the applicant's load test results, or the supporting data. No issue is taken with the qualifications of the professional engineer who supplied and sealed the design; nor is it suggested there are errors in the load chart. It is not even argued that the panels will not sustain the loads. Rather the City maintains it does not have the manpower to review the load test data and refuses to do so.

[33] The nature of construction is that it is evolving. New methods and materials are introduced into the construction site on an on-going basis. The *Ontario Building Code* recognizes some flexibility is required, therefore, in evaluating the suitability of design and materials. The code achieves this by allowing for approval of accepted or standard designs, or by allowing for designs that are not yet accepted, but meet the tests of safety and performance of a standard equivalent to accepted standards. The code requires that the design be prepared by a qualified person. There is no issue here that an engineer possesses such qualifications.

[34] The City can take comfort from the professional qualifications of the designer, who is required by virtue of s. 4.1.1.4(1)(b) to back up his or her design with test data such as a loading test. The plain reading of s. 4.1.1.4 requires that subsections (1)(a) and (1)(b) be read disjunctively. Subsection (1)(b) is not intended to be read as an adjunct to s. (1)(a).

[35] The City submits that if the code does not prescribe how load testing must be conducted, it cannot evaluate the test results, or indeed, the test data. It argues that the chief building official has a discretion under s. 9(1) of the Act to refuse applications for building permits that are not prescribed in the code.

[36] With respect, I do not agree. Such an interpretation is incorrect in law. If adopted, it would render meaningless the provisions of s. 4.1.1.4(1) (b) (ii) which is an alternate means of establishing compliance with the code. The City cannot simply disregard the provisions of the building code that it dislikes and enforce the ones that it does.

[37] Subsection 9(1) of the Act gives a discretion to the chief building officer to accept materials, systems and designs that are *not* authorized in the building code. This discretion cannot act to defeat applications under s. 4.1.1.4 of the code.

[38] Section 4.1.1.4 prescribes that certain buildings can comply with the building code by virtue of meeting design criteria that are set out in the section. Once the alternative criteria in s. 4.1.1.4(1) are satisfied, the applicant is, by definition, in compliance with the building code.

[39] The chief building official cannot chose to disregard this section of the code because it requires her officials to exercise more judgment in processing applications for building permits. It cannot be rendered nugatory by the chief building official's discretion in subsection 9(1).

[40] The city relied on a bulletin, B-8, developed within its building department that purported to clarify the requirements of sandwich panels. The first point in this bulletin states:

> "1. Panels without built-in structural members is [sic] deemed not in compliance with the *Ontario Building Code* subsection 9.4.1 and subsection 9.4.2 structural requirements, unless tested and approved by BMEC or CCMC…."

[41] This directive is not in accordance with the provisions of the building code that mandate an alternate opportunity for compliance under Part 4. A bulletin does not have the binding effect of law; at best, it is advisory. See *Mattabi Mines Ltd. v. Ontario (Minister of Revenue)* 1988 CanLII 58 (S.C.C.), [1988] 2

S.C.R. 175 (S.C.C.). While a directive may be helpful for the better administration of applications for building permits, such a directive cannot substitute for the provisions of the code.

[42] This issue was considered in *Minto Construction Ltd. v Gloucester (Township)* 8 M.P.L.R. 172; 23 O.R. (2d) 634 (Ont. S.C., Divisional Court). In *Minto*, the municipality passed by-laws that were not in direct conflict with the building code, but imposed stricter standards for the purposes of fire control. At par. 19, the court observed that the building code is exclusive legislation for uniform regulation of building construction throughout the province. The court concluded that by-laws attempting to impose more stringent standards were *ultra vires* the municipality.

[43] I have reached the same conclusion in this case. There is no power in the municipality to circumvent the provisions of the building code by administrative directive. In this case, the advisory bulletin more narrowly interprets the building code, eliminating a means of approval for materials and design that is mandated by the Legislature. Such a directive derogates from the consistency that the Legislature seeks in passing *The Building Code Act* in order to regulate building in the province.

[44] For these reasons, the application is granted. An order will issue as follows:

1. The Respondents shall issue building permits for:

   (a) 63 Braywin Drive, Etobicoke;
   (b) 4 Conifer Drive, Etobicoke; and
   (c) 36 Hearst Circle, North York, with this building permit to be subject to zoning compliance.

2. That all future applications by Craft-Bilt for approval of its honeycomb sandwich panels be evaluated without regard to Bulletin B-8.

3. That load test data under Clause 4.1.1.4 (1)(b) (ii) of the Building Code shall be considered on its merits with regard to the load bearing requirements of the Code only.

4. If the parties cannot agree on costs, an appointment may be obtained from the trial coordinator at Thunder Bay to argue same by teleconference.

Original signed by
Madam Justice H. M. Pierce

Released: November 15, 2006

DATE: 20060918
DOCKET: C43637

COURT OF APPEAL FOR ONTARIO

WEILER, BLAIR and ROULEAU JJ.A.

B E T W E E N :

HILL AND HILL FARMS LTD. **(Applicant/Appellant)**	**Anne-Marie Tymec and Michelle Kropp** **for the appellant**
- and -	
THE MUNICIPALITY OF BLUEWATER **(Respondent in Appeal)**	**Valerie M'Garry** **for the respondent**
	John M. Buhlman and Megan Ferrier **for the intervenor** **Ontario Pork Producers Marketing Board**
	William J. Manuel and Lise Favreau **for the intervenor** **Ministry of the Attorney General for Ontario**

Heard: March 10, 2006

On appeal from the order of the Superior Court of Justice (Divisional Court) (Justice Edward F. Then, Justice P. Theodore Matlow and Justice Helen M. Pierce) dated January 14, 2005.

WEILER J.A.:

Overview

[1] This appeal concerns the jurisdiction of the Normal Farm Practices Protection Board under the *Farming and Food Production Protection Act, 1998*, S.O. 1998, c. 1 (the *FFPPA*) to grant relief from the application of a zoning by-law. Pursuant to subsection 6(3) and 6(6) of the *FFPPA*, the Board is empowered to determine whether an agricultural operation or proposed operation that is directly affected by a municipal by-law is a normal farm practice[1]. If so, then, pursuant to s. 6(1) of the Act:

No municipal by-law applies to restrict a normal farm practice carried on as part of an agricultural operation

[2] A central issue on this appeal is whether, as the Divisional Court held, the definition of the term "municipal by-law" in s. 6(1) of the FFPPA is narrower than the commonly understood meaning of the term so as to exclude a zoning by-law or whether, as the Board implicitly held, "municipal by-law" includes a zoning by-law. If the Divisional Court's interpretation is correct, the Board has no jurisdiction to determine whether a zoning by-law restricts a normal farm practice.

[3] For the reasons that follow, I am of the opinion that the Divisional Court erred in law in adopting an

interpretation of the words "municipal by-law" that excluded a zoning by-law. Thus, the Board had jurisdiction to determine whether the zoning-by-law in issue here restricted a normal farm practice.

[4] My conclusion requires me to go on and review the decision of the Board. I am of the opinion that the Board's decision should be reviewed on a standard of reasonableness. Pursuant to section 6(15) of the FFPPA, one of the four factors the Board is required to consider in determining whether a practice is a normal farm practice is whether the by-law reflects a provincial interest as set out in a policy statement. The Board held that its decision did not contradict the provincial policy statements issued under Section 3 of the Planning Act. The provincial policy statements require that new or expanding livestock facilities comply with the minimum distances separation formulae. Inasmuch as the Board's decision cut the required minimum distance separating Hill's proposed operation from the Stanley Complex in half, the Board's conclusion that its decision was in compliance with the provincial policy statements is simply not tenable and is unreasonable.

[5] More importantly, s.9 of the *FFPPA*, requires that," …the Board's decisions under this Act must be consistent with [the Minister of Agriculture's] directives, guidelines or policy statements." The exercise of the Board's power was therefore limited by s. 9. All that By-law 22 -1985 of the Township of Stanley did was enact the Minimum Distance Separation (MDSII) guidelines of the Ministry of Agriculture for the siting of livestock facilities from other uses. The Board's decision that Hill need not comply with the minimum distance specified in the by-law for siting his barns is not consistent with the MDSII guidelines. The Board's decision is therefore unreasonable; it surpasses the limitation imposed by s. 9 and therefore cannot stand.

[6] As a result, I would dismiss the appeal.

History of the Proceedings

[7] Hill owns and operates a pig farm located within the geographic Township of Stanley, Huron County. The former Township of Stanley is now part of the amalgamated Municipality of Bluewater. The by-law in issue here is Stanley Township's zoning by-law #22-1985 and it continued to apply.

[8] In 2001, the appellant applied to the respondent Municipality for a building permit in order to increase the capacity of their pig farm from 700 pigs to 1,350 pigs. Hill also applied to the local Committee of Adjustment for three minor variances to accommodate the proposed construction. Section 4.5 of this by-law provides that the erection or expansion of a livestock facility must comply with the minimum distance separation (MDS II) for new or expanding livestock facilities set out by the Ontario Ministry of Agriculture, Food and Rural Affairs. Section 29 of the by-law stipulates how the MDS II requirements are to be calculated. Two of the variances sought by Hill were for relief from the MDS II requirements. MDS II requires that a new or expanding agricultural operation that is located in the vicinity of an institutional use be

sited double the distance required from an ordinary neighbour, a requirement known as " the doubling factor".

[9] Hill's farm is located next to the Stanley Township Municipal Complex, a community centre and institution. The evidence appears to be undisputed that the land upon which the Complex is located had been used for municipal purposes for a number of years before the Stanley Complex was built in 1984. It was often used for picnics and ball diamonds most evenings from May until September each year. The complex houses municipal offices and an auditorium that is rented for weddings and used for other community events on a regular basis.

[10] Following a hearing, the Municipality dismissed Hill's application for variances. Hill then reduced the size of its proposed expansion plans and the number of animal units, and made a fresh application for minor variances but this application was also dismissed. Hill did not appeal that decision to the Ontario Municipal Board within the time limits for appeal.

[11] Hill next applied to the Normal Farm Practices Protection Board on the basis that its proposed expansion was a "normal farm practice" that the by-law restricted. The Board, whose decision will be discussed in greater detail, held that the proposed expansion was not a normal farm practice. The Board held, however, that Hill's proposed operation would be a normal farm practice if he were relieved of the doubling factor and in effect held he did not have to comply with the by-law.

[12] The Municipality appealed the board's decision to the Divisional Court. The essence of the Court's reasons, reported at 75 O.R. (3d) 352, is contained in the following passages:

[21] A " municipal by-law", as used in section 6, does not include a zoning by-law. Rather, section 6(1) and (2) are intended to refer to municipal by-laws which deal with matters prohibiting or regulating nuisances and disturbances of the type referred to in the preamble of FFPPA. This is one of those rare instances in which a court should not give effect to the literal meaning of a word where the context shows overwhelmingly that the Legislature intended that it should be given a more restricted interpretation.

….

[30] Accordingly, it is our view that the jurisdiction of the Board is confined generally to matters involving the protection of farmers who cause inevitable nuisances and disturbances to others by giving farms the right to do so provided that their farming operations fall within the definition of 'normal farming practice'. The Board has no jurisdiction to interfere with matters pertaining to land use such as arose in the circumstances of this case. Minor variances and spot rezoning are matters that fall exclusively within the various processes recognized by the Planning Act [R.S.O. 1990, c. P.13]. Moreover, section 71 of the Planning Act provides that, in the event of conflict between the provisions of that Act and any other general or special Act, the provisions of the Planning Act prevail.

[13] The Divisional Court gave several reasons in support of its conclusion. 1) Nothing in the preamble or *FFPPA* itself confers authority on the Board to deal with matters involving land use planning. 2) Minor variances and spot rezoning are matters that fall exclusively under the *Planning Act* which provides that in the event of conflict between the provisions of that Act and any other Act the provisions of the *Planning Act* prevail. 3) Land use matters, especially those which involve zoning issues, can have enormous ramifications not only for owners of the land involved but also for the community as a whole. Therefore, they ought to be considered not by the Board, but rather by those persons who have expertise in areas of law and land planning and who are required to safeguard the public interest (*e.g*. Committees of Adjustment or municipal councils).

[14] The appellants sought and obtained leave to appeal the decision of the Divisional Court. The issues I propose to address on this appeal are:

(1) Did the Divisional Court err in determining that the term "municipal by-law" as it is used in s. 6 of the FFPPA does not include a zoning by-law? In other words, did the Divisional Court err in determining that the Board did not have jurisdiction to decide whether a practice is a normal farm practice when the by-law that allegedly restricts the practice is a zoning by-law.

(2) If the Divisional Court erred and the Board did have jurisdiction to consider Hill's application, what is the appropriate standard of review of the Board's decision.

(3) On a proper application of the standard of review can the decision of the Board be upheld?

Analysis

1. Did the Divisional Court err in determining that the term "municipal by-law" as it is used in s. 6 of the FFPPA does not include a zoning by-law?

[15] The reasons that lead me to conclude that the Court erred in its interpretation are derived from the application of the modern approach to statutory interpretation that is set out by E.A. Driedger in the *Construction of Statutes* (2d ed. Toronto: Butterworths 1983), at p. 87:

Today there is only one principle or approach, namely, the words of an Act are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament.

[16] Driedger's modern approach has been cited and relied on by the Supreme Court of Canada on numerous occasions: See *e.g. Rizzo v. Rizzo Shoes Ltd. (Re),* [1998] 1 S.C.R. 27, at para. 21; *Bell Express Vu Limited Partnership v. Rex*, [2002] 2 S.C.R. 559 at para. 26; *H.L. v. Canada (Attorney General),* [2005] 1 S.C.R. 401, at paras. 186-187; *Chieu v. Canada (Minister of Citizenship and Immigration),* [2002] 1 S.C.R. 84 at para. 27; Contino *v. Leonelli-Contino,* [2005] 3 S.C.R. 217, at para. 19 and *Canada 3000 Inc., Re,* 2006 S.C.C. 24 at para. 36.

[17] As I have indicated, a central issue on this appeal is the Divisional Court's interpretation of the term, "municipal by-law" in s. 6(1) as excluding a zoning by-law. That interpretation led the court to conclude that the Board lacked jurisdiction to decide whether the Municipality's zoning by-law restricted a normal farm practice. Applying Driedger's approach to statutory interpretation, there are five reasons why the Divisional Court erred in its interpretation.

[18] First the ordinary meaning of the words "municipal by-law" includes a zoning by-law and the Divisional Court acknowledged as much.

[19] Second, regard to the object of the Act and the legislator's intent in enacting the Act as a whole means consideration must be given to the preamble of the *FFPPA*. The preamble of the *FFPPA* makes clear that it is not simply intended to address nuisances arising from agricultural operations but, more broadly, to address issues that arise from the competing interests of agricultural operations and adjacent properties. The preamble states:

It is desirable to conserve, protect and encourage the development and improvement of agricultural lands for the production of food, fibre and other agricultural or horticultural products.

Agricultural activities may include intensive operations that may cause discomfort and inconveniences to those on adjacent lands.

Because of the pressures exerted on the agricultural community, it is increasingly difficult for agricultural owners and operators to effectively produce food, fibre and other agricultural and horticultural products.

It is in the provincial interest that in agricultural areas, the agricultural uses and normal farm practices be promoted and protected in a way that balances the needs of the agricultural community with provincial health, safety and environmental concerns.

Because the *FFPPA* is intended to address competing land uses, an inference can be drawn that the legislature intended the Board to have the power to consider zoning by-laws which regulate the use of land in a municipality.

[20] Third, Subsection 2(5) states that the *FFPPA* is subject to the Environmental Protection Act, the Pesticides Act and the Ontario Water Resources Act. It does not state that the *FFPPA* is subject to the *Planning Act*.

[21] Fourth, the scheme of the Act is fleshed out by subsection 6(15) of *FFPPA* which requires the Board, in deciding whether a practice is a normal farm practice for purposes of the non-application of a municipal by-law, to consider, among other things, "[t]he effect of the practice on abutting lands and neighbours" and "[w]hether the by-law reflects a provincial interest as established under any other piece of legislation or policy statement". Viewed in combination, sections 2(5) and 6(15), lend strong support to the conclusion that the Board is empowered to consider

competing land use issues and any provincial planning policies.

[22] Fifth, because meaning is derived from context, statutory interpretation requires us to determine whether the ordinary meaning of the words is rationally related to the purpose of the legislation. According to Ruth Sullivan, in *Sullivan And Driedger on the Construction of Statutes*, 4th ed. (Toronto: Butterworths, 2002) at p. 223, modern drafters of legislation tend to write provisions using general language applicable to a number of situations, as opposed to drafting narrow, precise provisions. The result, in her opinion, is a legislative style that is often vague and over- rather than under- inclusive. When the ordinary meaning of legislation is too broad, Sullivan states that judges employ purposive analysis to narrow its scope, "by excluding applications within the ordinary meaning that are not rationally related to the purpose." *Canada 3000, supra*, is an example where the Supreme Court employed a purposive analysis to adopt a narrower interpretation of the word "owner" in s. 55(1) of the *Civil Air Navigation Services Commercialization Act*, S.C. 1996, c. 20 so as to exclude legal titleholders from being liable to pay for civil air navigational services rendered. Binnie J. held that the intent of that Act was to create a "user-pay" scheme for civil air navigational services, and that the only "users" of the civil air navigational services within the contemplation of the Act were the airlines who lease the aircraft from the legal titleholders, not the legal titleholders themselves.

[23] Here, having regard to the history of the legislation, another factor that comprises the "entire context" of the legislation, a narrow interpretation of the term "municipal by-law" would not accord with the purpose of the legislative scheme. The Act that preceded the existing legislation was the *Farm Practices Protection Act, 1988*, S.O. 1988, c.62 which was repealed by the *FFPPA* effective May 11, 1998. The predecessor legislation protected a farmer from claims in nuisance for any odour, noise or dust resulting from the farmer's agricultural operation due to a normal farm practice provided that the farmer complied with "any land use control law", as well as with the *Environmental Protection Act*, the *Pesticides Act*, the *Health Protection and Promotion Act*, and the *Ontario Water Resources Act*. A "land use control law" under the 1988 Act was defined in s. 1 as " any Act and any regulation, plan or by-law made under the authority of an Act that restricts or prescribes the use to which land or premises may be put or the nature of business or activities that may be carried on on any land or premises." That definition captures a zoning by-law. The current *FFPPA* no longer requires compliance with these specified statutes before a farmer can bring an application for protection from nuisance claims: *Pyke v. Tri Gro Enterprises Ltd.* (2001), 55 O.R. (3d) 257, at para. 19. However, in the event a farmer has a charge pending relating to a nuisance or disturbance due to his alleged non-compliance with the *Environmental Protection Act, The Pesticides Act, the Health Protection and Promotion Act*, or the *Ontario Water Resources Act* a court may issue an injunction or order that prohibits the farmer from carrying on the agricultural operation allegedly in contravention of the specified statutes. A "land use control law" has been omitted from the list of specified statutes for which an injunction may issue. Moreover,

subsection 2(5) now makes the *FFPPA* expressly subject to the *Environmental Protection Act, Pesticides Act* and the *Ontario Water Resources Act.* Again a "land use control law" has been omitted from the list. At the same time, the 1998 *FFPPA* introduced section 6(1) which states that a municipal by-law does not apply if it restricts a normal farm practice. Assuming without deciding that the term "municipal by-law" was ambiguous and could be read either as including a zoning by-law or not, the reading that best gives effect to the intention of the legislator on a consistent basis is to be preferred over one that results in interpretations going in different directions. Here, the legislator's intention is that a "land use control law" no longer takes precedence over the *FFPPA* and consistency requires us to interpret municipal by-law as including a zoning by-law. For these reasons, the Divisional Court erred in interpreting the term "municipal by-law" so as to exclude zoning by-laws passed by municipalities.

[24] In omitting a "land use control law" from the *FFPPA*, the legislator's intention was not, however, to give the Board *carte blanche* to determine what constitutes a normal farm practice. The Board is required to consider four factors in determining whether a practice is a normal farm practice: s. 6(15). One of the factors is whether the by-law that allegedly restricts a normal farm practice reflects a provincial interest contained in other legislation or a policy statement: s. 6(15). Further, the Board's decision must be consistent with guidelines or policy statements of the Minister of Agriculture or those of another Ministry adopted by the Minister: s. 9. Thus, if a zoning by-law adopts a provincial policy statement of the Ministry of Agriculture, the Board's decision must be consistent with it. In addition, if a farm practice is consistent with a regulation under the *Nutrient Management Act, 2002*,the Board must determine that the practice is a normal farm practice: s. 6.1.

[25] Before turning to the next issue in this appeal, further brief comment must also be made on the reasons the Divisional Court gave for its conclusion that a zoning by-law was not included in the definition of municipal by-law.

[26] In support of its conclusion that the Board did not have jurisdiction to consider zoning by-laws under s. 6(1) of the *FFPPA*, the Divisional Court observed that minor variances and spot rezoning were matters coming exclusively within the various processes recognized by the *Planning Act.* Section 6 of the *Planning Act* implies that other boards will be involved in considering aspects of the *Planning Act* since it requires any government board or agency to consult with, and have regard for, the planning policies of the municipality.

6.(1) In this section,

"ministry" means any ministry or secretariat of the Government of Ontario and includes a board, commission or agency of the Government.

Planning policies

(2) A ministry, before carrying out or undertaking that the ministry considers will directly affect authorizing any any

municipality, shall consult with, and have regard for, the established planning policies of the municipality.

Thus, the legislature has contemplated that other administrative bodies may apply planning policies. To the extent that the Divisional Court was concerned that the Board lacked the expertise of other decision-making bodies, such as Committees of Adjustment or municipal councils, in land use matters, that fact is not, in itself, a reason for concluding that the Board should not decide the issue before it. See by analogy *Tranchemontagne v. Ontario (Director, DisabilitySupport Program)* [2006] S.C.J. No. 14.

[27] The Divisional Court also relied on section 71 of the *Planning Act* which provides that, in the event of conflict between the provisions of that *Act* and any other general or special Act, the provisions of the *Planning Act* prevail. As Blair J.A. observed in dissent, but not on this point, in *Peacock v. The Corporation of Norfolk County,* (Ont. C.A.), June 28, 2006, at para. 82, s. 71 is not dispositive because,"… the conflict is not between the provisions of the two Acts…". Insofar as the Divisional Court relied on the supremacy of s. 71 of the *Planning Act* as a basis for holding that the Board did not have jurisdiction, the conflict is not between the provisions of the *Planning Act* and the *Farming and Food Production Protection Act*.

[28] The Divisional Court supported its conclusion that the term municipal by-law as used in s. 6(1) did not include a zoning by-law because nothing in the preamble or elsewhere in the *FFPPA* conferred authority on the Board to deal with matters that traditionally fell within the traditional scope of land use planning. Having made the determination that the Act did not expressly empower the Board to deal with matters involving land use planning, the Divisional Court, in accordance with administrative law principles, did not end its analysis there. The Divisional Court was required to go on and determine whether the Board had implied jurisdiction to deal with the zoning by-law, a land use planning matter. Assuming that the term, "municipal by-law" is ambiguous, if a tribunal is empowered to decide questions of law, a presumption arises that it has implied jurisdiction to deal with other enactments that arise in the course of a case properly before it: *Nova Scotia (Workers' Compensation Board) v. Martin* [2003] 2 S.C.R. 504, at paras 33 and 45; *Paul v. British Columbia (Forest Appeals Commission)*, [2003] 2 S.C.R. 585 at paras.8 and 41. The rationale for the presumption is that it is undesirable for a tribunal to shut its eyes to some of the law when deciding a legal issue and that doing so could ultimately lead to a denial of justice or other protracted proceedings. The presumption may be rebutted if the legislature has restricted the tribunal's jurisdiction because tribunals are creatures of statute.

[29] There can be no doubt the *FFPPA* gives the Board the implied power to determine questions of law. Section 8(2) of the *FFPPA* provides for an appeal from the decision of the Board on any question of fact, law or jurisdiction to the Divisional Court. As well, the Board may dismiss an application if it is of the opinion that the application is frivolous or vexatious. A further consideration is whether the Board fulfills a function that

is adjudicative in nature. When, as here, the Board holds a hearing, and gives reasons for its decision, it is fulfilling a function that is adjudicative in nature. Nothing in the *FFPPA* specifically restricts the Board's power to deal with a zoning by-law enacted pursuant to the *Planning Act*, in determining what constitutes a normal farm practice. Thus, in addition to the modern approach to statutory interpretation, the application of administrative law principles would lead to the conclusion that the Board, in considering a question properly before it, namely, whether a farm practice was a normal farm practice, had jurisdiction to deal with the Municipality's zoning by-law.

[30] It is possible to read the Divisional Court's reasons as holding that s. 6(3) did not authorize the Board to consider whether a proposed expansion of a farming operation would be a normal farm practice as opposed to whether a proposed new operation would be a normal farm practice and that, as a result, the application was not properly before the Board. If so, I would respectfully disagree.

[31] For ease of reference s. 6(3) is reproduced below:

(3) An application may be made by,

(a) farmers who are directly affected by a municipal by-law that may have the effect of restricting a normal farm practice in connection with an agricultural operation; and

(b) persons who want to engage in a normal farm practice as part of an agricultural operation on land in the municipality and have demonstrable plans for it.

[32] In relation to s. 6(3)(b), the Board held, "We interpret this to mean that an Applicant may come to this Board with demonstrable plans for an expansion and ask the Board to determine whether or not the proposed expansion will be a normal farm practice for purposes of a non-application of a Municipal by-law." I agree with the Board's conclusion.

[33] Subsection 6(3)(b) empowers the Board to decide if a farm practice not yet engaged in would be a normal farm practice. Both new farming proposals and proposals for expansion are encompassed by the wording of the section, "want to engage in a normal farm practice" and there is no principled reason to distinguish between them. Whether the proposed swine operation is a new operation or an expansion of an existing operation, the effect in terms of nuisance would be the same if the total number of animals is the same. In addition to the wording of the subsection, the preamble to FFPPA also supports the interpretation that the Legislature intended to give the Board jurisdiction to deal with a proposed expansion. The preamble provides, in part, that "It is desirable to conserve, protect and encourage the development and improvement of agricultural lands …". The use of the word "improvement" would clearly apply to expansions.

[34] My conclusion that the Divisional Court erred in holding that the Board did not have jurisdiction to consider whether the proposed expansion was a normal farm practice restricted by the zoning by-law is not, however, dispositive of this appeal. I must now go on to review the Board's decision. That exercise in turn

requires me to determine the standard of review applicable to the Board's decisions, the second issue in this appeal.

2. What is the appropriate standard of review of the Board's decision?

[35] There are three standards for judicial review of administrative decisions: correctness, reasonableness and patent unreasonableness. In order to determine which standard applies, and therefore the extent of deference to be accorded to the decision of an administrative tribunal, a court must employ the pragmatic and functional approach. Pursuant to this approach, four factors are considered: a) the presence or absence of a privative clause or statutory right of appeal (although the absence of a privative clause or existence of a broad right of appeal is not, in itself, determinative that less deference may be due to the tribunal's decisions); b) the expertise of the tribunal relative to that of the reviewing court on the issue in question; c) the purposes of the legislation and the provision in particular; and d) the nature of the question, namely, law, fact, or mixed fact and law: see *Law Society of New Brunswick v. Ryan,* (2003), 223 D.L.R. (4th) 577 (S.C.C.) , [2003] 1 S.C.R. 247 at paras, 20, 27, 29.

[36] Applying those factors to the instant case, I conclude that the standard of review is reasonableness. FFPPA contains no privative clause. Rather, as noted pursuant to s. 8(2), there is a broad right of appeal to the Divisional Court on any question of fact, law or jurisdiction.

[37] However, the expertise of this Board was the subject of judicial comment by Charron J.A. in dissent, in *Pyke v. Tri Gro Enterprises, supra,* whose comments in this regard were adopted by the majority Sharpe and Abella JJ.A. Charron J.A. observed at para. 56 of her reasons that, "The [Normal Farm Practices Protection] Board is an administrative tribunal that has been constituted with the particular expertise to achieve the purposes of the legislation. It also has the power to appoint experts to assist it in performing any of its functions: s. 8(3)." She went on to note that the Board's power to inquire into and resolve a dispute in an informal manner could present significant advantages over the traditional court system. In this regard, she pointed to the fact that all but about 1% of the total complaints received by Ministry staff respecting nuisances under the *FFPPA* end in a Board hearing and even where a hearing does take place, the less formal hearings resulted in the entire process being more accessible to the unrepresented litigant. She also observed that the Board's extensive powers of relief could, in certain cases, be more suitable to the needs of the parties. Although the Board does not have exclusive jurisdiction over complaints created by agricultural operations, having regard to the expertise of the Board, the Court was unanimous in its opinion that, absent special circumstances, such complaints should generally first be brought before the Board before any action in nuisance is brought in court.

[38] With regard to expertise, it is also important to note that the Board consists of not fewer than five members appointed by the Minister of Agriculture for a term not exceeding three years and those members of the

Board who are not public servants of Ontario are paid for their services: see s. 3 generally and s. 3(7) in particular of the *FFPPA*. Thus, the Board is not necessarily an independent tribunal. The members of the Board need not be legally trained. They may, however, be in a better position than a court to understand how a particular agricultural operation will affect the local residents. In addition, as noted in *Tri-Gro* at para 58, the Board has extensive powers of relief that may be more suitable to the needs of the parties. The Boards procedures are governed by the *Statutory Powers and Procedures Act*, R.S.O. 1990, c. S. 22: *FFPPA* s. 3(8). Thus, the Board's expertise favours a standard of deference on matters within its jurisdiction.

[39] Insofar as the nature of the question is concerned, the question of whether a farm practice is a normal farm practice is a question of mixed law and fact, since it involves the application of a legal standard to a set of facts: *Housen v. Nikolaison*, [2002] 2 S.C.R. 235 at para 26.

[40] Adopting the pragmatic and functional approach, I would conclude that although there is a statutory appeal from decisions of the Board, the nature of the question before the Court, a question of mixed fact and law, the expertise of the Board and its broad power to stipulate what would be a normal farm practice, suggest a more deferential standard of review than correctness. Thus, the appropriate standard of review of the Board's decision is reasonableness and this Court may only intervene if the decision is shown to be unreasonable.

3. On a proper application of the standard of review, can the decision of the Board be upheld?

The Board's decision

[41] The Board considered whether Hill's proposed expansion would be a normal farm practice, and it concluded that it would not be. The Board concluded that:

Having reviewed the site specific circumstances it is our opinion that locating the swine barns where proposed by the Applicant, would not be a normal farm practice, because alternate suitable locations for the new barns are available which locations would provide an acceptable separation distance from the institutional use and at the same time be cost efficient in terms of construction, labour and management.

[42] The Board held that although the locating of the swine barns proposed by Hill would not be a normal farm practice, he should not have to bear an increased cost to expand his farming operation because of the MDS requirements in the by-law. The reasons expressed by the Board include the following: Hill was engaged in swine farming at the time the complex was built; he had no way of objecting to the by-law; it was foreseeable a conflict would develop; the purpose of the by-law was to minimize disturbance from institutional use and there had been no complaints from the existing operation.

[43] The Board also held that compliance with MDS II did not appear to be the sole determining factor as to whether a farmer was carrying on a normal farm practice. Pursuant to s. 6(15) of the *FFPPA*, the Board is required

to consider four factors in determining whether a practice is a normal farm practice. They are:

1. The purpose of the by-law that has the effect of restricting the farm practice

2. The effect of the farm practice on abutting lands and neighbours.

3. Whether the by-law reflects a provincial interest as established under any other piece of legislation or policy statement

4. The specific circumstances pertaining to the site.

[44] Having already commented on the specific circumstances pertaining to Hill, the Board commented on the other three factors. It concluded that the purpose of requiring compliance with MDS II in the zoning by-law was to minimize the disturbance to institutional use, in this case, the odour from the expanded swine operation. As there was no evidence of complaint due to odour from Hill's existing operations, the Board "anticipated" that its decision would not have a negative effect upon the abutting land, that is, the complex, despite the increased size of the operation. The Board indicated an awareness of MDS II as being part of the agricultural code of practice as well as the 1996 Provincial Policy statement under s.3 of the *Planning Act*. Section3 of the *Planning Act*, required that the Board, " shall have regard to policy statements…". The MDS II guidelines are an example of such a provincial policy statement. The Board also noted that in 1995, when MDS II was being adopted as a by-law, some local governments had adopted bylaws that lessened the setback distance for some institutional uses to a factor of 1.0. The Board further observed that municipal officials could grant a minor variance from MDS II after consulting with the Ontario Ministry of Agriculture, Food and Rural Affairs when considering a variance application.

[45] The Board held that its decision did not contradict the Policy statement.

[46] Under the heading, "Decision", the Board stated:

Having considered all of the evidence, it is the opinion of this Board that the proposed expansion of the Applicant's present hog operation is not a Normal Farm Practice, but the proposed expansion would be consistent with Normal farm Practices if the *Applicant* makes the following specific modifications to the Practice (emphasis added). The Board does hereby order as follows:

1. The proposed expansion must comply with (MDSII) without regard to the doubling factor with respect to the location of the institutional and recreational use, i.e. the lands of the Municipality of Bluewater, notwithstanding the provisions of the Township of Stanley Consolidated Zoning By-Law 22-185, as amended.

Comments respecting the Board's decision

[47] As noted, the Ontario Ministry of Agriculture, Food and Rural Affairs directive entitled "Minimum Distance Separation II (MDSII)" sets out minimum distance separation requirements for new or expanding livestock facilities from existing (or approved)

development. In this case, compliance with MDS II guidelines required a setback of 604 metres (302 metres multiplied by a factor of 2 or double the distance that would ordinarily be required from the nearest neighbour). The Municipality enacted the provincial guidelines into its by-law. Section 9 of the *FFPPA* requires that the Board's decisions be consistent with Ministry of Agriculture directives, guidelines or policy statements.

[48] In commenting that certain municipalities had enacted bylaws requiring a lesser setback from institutional uses, the Board appears to have ignored the fact that, at the time the municipalities passed those by-laws, s. 9 did not exist.

[49] The fact that municipal officials may grant a minor variance to a by-law is irrelevant to the Board's jurisdiction. Administrative bodies only have the jurisdiction conferred on them directly or implicitly. The Board paid no heed to the limitation on the exercise of its power imposed by jurisdiction in s. 9 of the *FFPPA*.

[50] Moreover, the Board was engaged in determining whether an agricultural operation, which was directly affected by a municipal by-law, was a normal farm practice. The Board purported to make its order pursuant to s. 5(4)(c) of the *FFPPA* which gives it the power to order a farmer to modify his "practice" so that it is consistent with "normal farm practice". I have serious reservations as to whether the exercise undertaken by the Board resulted in the modification of a "normal farm practice". Both the comments of Sharpe J.A. for the majority at paras 80 and 81, and Charron J.A., in dissent at para 59, in *Tri-Gro*, *supra*, support the conclusion that a normal farm practice and, consequently, an order modifying that practice under s. 5(4)(c), relates to farming techniques and methods that are of a requisite standard or established and followed by similar agricultural operations, not to making orders that a farmer need not comply with a by-law concerning the minimum distance for locating his barn from another use.

[51] In deciding whether an agricultural operation that is directly affected by a municipal by-law is a normal farm practice, the Board is required to balance four factors. The third factor is whether the by-law reflects a provincial interest as expressed in a policy statement. This factor is to be considered and weighed with the other three factors. The Board did consider the guidelines in reaching its decision and therefore Hill submits that the Board had "regard for" the policy statement.[2]

[52] The Board's conclusion was a conclusion it drew after applying s 6(15) of the *FFPPA*, not s. 9. Irrespective of what the Board may have concluded as to whether a practice is a normal farm practice after applying s6 (15), s.9 requires that the Board's decision be consistent with the Minister of Agriculture's directives, guidelines or policy statements.

[53] The Board's comment that its decision did not contradict the policy statement was unreasonable. Subsection 2.1.4 of the policy statement in effect at the relevant time required that "…new or expanding livestock facilities will comply with the minimum distance

separation formulae". The Board's order directly contradicted the plain wording of the policy.

[54] The Board referred to the MDS II as being a 'guideline'. The Board, however, does not refer to the Farm Practices Position Statement issued by the Ontario Ministry of Agriculture Food and Rural Affairs in 1998, the year that the *FFPPA*, was adopted. That Position Statement's purpose was to "clearly state the Ministry's position and to *give direction* on matters and issues related to farming and normal farm practices" [emphasis added]. The last paragraph of the Statement refers to Minimum Distance Separation, stating, *inter alia*, that new or expanding livestock facilities are to comply with the MDS formulae 'as per Provincial Policy Statement under the Planning Act'. The direction given in this Position Statement clearly falls within the provisions of s. 9 of the *FFPPA*. It was in effect at the time of the Board's determination. It constitutes more than a 'guideline' and was binding by the Board.

[55] The Board was satisfied that the location of the barns as dictated by its decision adequately addressed the Municipality's concerns regarding separation distance. As I have indicated, the concerns were not those of the Municipality alone. The Municipality's by-law reflected a provincial policy directive with which the Board's decision was required to be consistent.

Conclusion

[56] The Board's decision cannot stand. Pursuant to s. 9(1) of the *FFPPA*, the Board was required to ensure that its decision in this case was consistent with the Ministry's MDS II guidelines. Compliance with the Ministry's MDS II guidelines would have required the appellant's closest proposed barn to be located 604 metres from the institutional zone occupied by the Stanley Complex. Instead, the Board permitted a setback of only 302 metres. This result – a reduction by half of the required setback distance – simply cannot be said to be consistent with the MDS II guidelines. The Board could not ignore section 9 and render a decision that was inconsistent with the MDS II guidelines. It's decision was unreasonable.

[57] In the result I would dismiss the appeal.

[58] Costs of this appeal are payable by Hill to the Municipality of Bluewater and are fixed in the amount of $20,000 all inclusive.

RELEASED: September 18, 2006 ("RAB")

"Karen M. Weiler J.A."

"I agree R. A. Blair J.A."

"I agree Paul S. Rouleau J.A."

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[1] Normal Farm Practice is defined in s. 1(1) . Normal Farm Practice means a practice that ,

(a) is conducted in a manner consistent with proper and acceptable customs and standards as established and followed by similar agricultural operations under similar circumstances; or

(b) makes use of innovative technology in a manner consistent with proper advanced farm management practices;

[2] The *Planning Act* has since been amended and now requires that decisions of Boards affecting planning matters, “shall be consistent with” provincial policy statements.

COBOURG COURT FILE NO.: 004918
DATE: 2002-Feb-6
ONTARIO
SUPERIOR COURT OF JUSTICE

BETWEEN:

SHELLY JANE MAYHEW
Appellant

And

SCOTT JIBB, Chief Building Official for the Corporation of the Township of . Hamilton, and THE CORPORATION OF THE TOWNSHIP OF HAMILTON
Respondents

D. Wayne Fairbrother, for the Appellant
C. Gregory Kay, for the Respondents

HEARD:. January 18, 2002

REASONS FOR JUDGMENT

MACDOUGALL, J.

[1] This is an appeal from the decision of Scott Jibb, the Chief Building Official of the Corporation of the Township of Hamilton, ("the Township") refusing to issue a building permit to the Appellant on October 16, 2001 for a detached, single-family dwelling house on lands described as Block "K", Registered Plan of Subdivision 436 (lithe Subject Lands").

[2] The portion of the Subject Lands on which the Appellant seeks permission to construct a detached, single-family dwelling house is zoned "Estate Residential" by the existing approved Comprehensive Zoning By-Law for the Township. A detached, single-family dwelling house is a permitted use in this zone.

[3] Prior to applying for a building permit, it was the understanding of the Applicant and Township officials that the existing zoning on the Subject Lands was zoned "Open Space Zoning" which would not permit residential construction.

[4] The Applicant applied to the Township for a rezoning of part of Block "K" to "Estate Residential Exception and Environmental - Protection Zoning" and to change the minimum frontyard depth from 75 feet to 50 feet, and the minimum sideyard setback from 40 feet to 25 feet.

[5] - On October 24th, 2000 the Township denied the Appellant's application for rezoning and the Appellant then appealed the Township's decision to the Ontario Municipal Board.

[6] A few days prior to the hearing before the Ontario Municipal Board on April *25th,* 2001, the Township's planner "discovered the error" that the relevant part of Block "K" was still zoned "Estate Residential". The property had not in fact been rezoned to "Open Space" as intended by the Township pursuant to the requirement of the Ministry of Housing when the Ministry gave draft plan approval on March 31, 1978.

[7) The Ministry of Housing for the Province of Ontario had on March 31st, 1978 advised the Township that the draft plan of subdivision had been approved subject to certain amendments and conditions, one of which was the requirement that the Township's restricted area zoning bylaw contain provisions which would have the effect of prohibiting all buildings and structures in the Subject Lands, except those necessary for

flood or erosion control.

[8] At that time when the application for this plan of subdivision was being made, the Township of Hamilton was passing its first -Comprehensive Restrictive-Area zoning by-law. It appears that the Township official mistakenly advised the Ministry of Housing that the restrictive zoning was in place to prevent the development of Block "I". As indicated above, this mistake was not discovered until just prior to the date set for the hearing of the Appellant's appeal to the Ontario Municipal Board.

[9] The Parties proceeded with the appeal before the Ontario Municipal Board. The Board dismissed the Applicant's appeal on April 25, 2001. The Board stated that the zoning requested represented "…inappropriate planning and was not in the public interest".

[10] At the time of the hearing before the Ontario Municipal Board, the Township was revising its Comprehensive Restrictive Area Zoning By-law with the intention of re-zoning Block "K" to correct the zoning error that had been discovered immediately prior to the Ontario Municipal Board hearing.

[11] On September 18, 2001, the Applicant commenced her application process for a building permit to construct a residence on Block "K". Over a period of several months, the Appellant prepared a Site Plan and obtained approvals required by the Township to support her building permit application, including an Entrance Permit, approval from the Health Unit to construct and install a septic system, and the approval of the Ganaraska Region Conservation Authority.

[12] On October 16, 2001 the Appellant was advised by letter from the Respondent Scott Jibb, Chief Building Official, denying the Appellant's building permit application on the basis that paragraph 34 of the Subdivision Agreement for Plan 436, which was registered on title to Block K, *"expressly prohibits building permits on Block K except buildings or structures required for flood or erosion control purposes".*

[13] According to the Appellant, Scott Jibb advised her that, "...the decision to refuse [the Appellant's building permit application] was based solely on the legal interpretation provided [to the Respondents] with respect to paragraph 34 of the Subdivision Agreement and that there were no other grounds for refusing the Appellant's application for a building permit".

[14] The Township had entered into a Subdivision Agreement with the developer dated January 8th, 1980. Paragraph 34 of the Subdivision Agreement is entitled "Lands Unsuitable for Building" and provides as follows:

> 34. The owner agrees that the lots and blocks of the Plan which are set out in Schedule "0" hereto are unsuitable for building purposes and that no application will be made for a building permit for the erection of any structure on any such lot or block until the conditions outlined in Schedule "D" hereto for such lot or block have been satisfied to the approval of the Municipal Engineer and/or other authorities having jurisdiction.

[15] Schedule "0" to the Subdivision Agreement includes the Subject Lands. 'For some inexplicable reason there is no Schedule "D" attached to the Subdivision Agreement registered on title.

POSITION OF THE PARTIES

[16] The parties agree that Section 8(2)(a) of the *Building Code*

Act, 1992, S.O. 1992, c.23 provides that the Chief Building Official shall issue a permit unless,

> (a) The proposed building. construction or demolition will contravene this Act or the building code or any other applicable law;

[17] The term *"applicable law"* as used in section 8(2)(a) of the *Building Code Act* is defined in Ontario Regulation 160/93 as follows:

> For the purpose of s.8 of the Building Code Act, 1992, any general or special Act, and all regulations and by-laws enacted thereunder, which prohibit the proposed construction or demolition of the building unless the Act, regulation or by-law is complied with.

[18) The Appellant submits that where an applicant for a bul1ding permit has satisfied all the requirements of s.8(2) of *The Building Code Act* it is mandatory for the Chief Building Official to issue a building permit. A Chief Building Official bas no discretion when exercising the decision to issue a building permit when all statutory requirements have been fulfilled.

[19] The Appellant submits that the provisions in the Subdivision Agreement, paragraph 34, registered on title is not "applicable law" within the meaning of s. 8(2) (a) of the Act.

[20] On behalf of the Township it is submitted that S.51 (26) of *The Planning Act.* Provides statutory authority for a municipality to enter into a Subdivision Agreement, the provisions of which can be enforced against the existing and subsequent .owners of the Subject Lands. *As* section 34 of the Subdivision Agreement provides that Block "K" is unsuitable for building purposes, the applicant, as a subsequent owner, is therefore bound by the provisions of the Subdivision Agreement and is not entitled to a building permit for the construction of a single-family residence on the Subject Lands.

ANALYSIS

[21] S.25 of the *Building Code Act* provides that any persons who consider themselves aggrieved by an order or a decision made by an inspector or Chief Building Official under this Act or the regulations, except a decision not to issue a conditional permit under S.8 (3) may, 20 days after the order or decision is made, appeal the order or decision to a judge of the Superior Court. Subsection (4) provides:

> If an appeal is made under' this section, the judge shall. hold a hearing and may rescind or affirm the order or decision of the inspector of Chief Building Official, or take such action as the judge considers the inspector or Chief Building Official ought to take in accordance with this Act and the regulations and, for such impose, may substitute his or her opinion for that of the inspector of Chief Building Official.

[22] The duty of the judge under this subsection therefore, is to do what. the judge considers the inspector or Chief Official ought to have done. The judge has no powers other than those that were possessed by the inspector or chief official, and has no discretion to act. or defer action, if that discretion was not enjoyed by the inspector or chief official. (See: Southey J., speaking for the Divisional Court in *Woodglen* & *Co. v. North York (City)* (1984), 47 O.R. (2d) 614, 12 D.L.R. (4th) 146 (Div. Ct.).) .

[23] It is common ground that S.8(l) is mandatory, requiring the Chief Building Official to issue a building permit for the purposes of this case unless the proposed building or

construction will contravene this Act or the Building Code or any other applicable law. There is no suggestion that the proposed building construction would contravene the *Building Code Act* or the Building Code.

[24]' It is also common ground that the rights of the applicant are to be determined at the time the Chief Building Official makes the decision whether to issue the permit. (See *Summit Glenn Dev. Corp. v. Toronto* (198.9), 44 M.P.L.R. 50 (Ont. Dist. Ct.).)

[25] The "applicable law" which S.8(2)(a) directs the official to apply in deciding whether to grant a permit is the law in force at the time of such decision. (See: *H & D Int. Group v. Toronto* (1988), 44 M.P.L.R. 187 (Ont. Dist. Ct.) Therefore, in this case, whether the Appellant at the time she submitted her application for a building permit knew that the intent of the Township was to rezone the Subject Lands as originally intended is of no consequence in these circumstances. (See: *Frontenac-Lennox & Addington R.C.S.S. Bd. v. Kingston* (1994), 25 M.P.L.R. (2d) 102 (Ont. Gen. Div.).)

[26] In Re: *Woodglen & Co.* v. *North York et al* (1984), 47 O.R. (2d) 614 (Div. Ct.) the respondent had applied for a building permit to construct a single family dwelling on certain lands. The proposed use was permitted under the applicable zoning by-law passed and approved in 1953, but, because it conflicted with the Official Plan, approved in 1974, the permit was refused. The municipality had failed to amend its zoning by-law to conform with the Official Plan. The court held that the intention of the municipality to rezone to prohibit such construction was not a valid reason for refusing or postponing the issuance of the permit.

[27] It bas also been held that the common law duty of care to those who may foreseeably be affected by the approval of the permit is not relevant. (See: *Alaimo v. North York (City) (Chief Building Official)* [1995] 26 M.P.L.R. (2d) 69 (Ont. Gen. Div.).

[28] The issue then, is whether the. provisions of paragraph 34 of the Subdivision Agreement registered on title constitutes "any other applicable law" as defined .in Ontario Regulation 160/93.

[29] If the provisions in paragraph 34 of the Subdivision Agreement were considered to be "building restrictions", then according to the decision in McDonald's Restaurants of Can. Ltd. v. Humm et al (1983) 24 M.P.L.R. 103 (Ont. Co. Ct.), building restrictions which run with the land, even though the municipality may be a party to the agreement imposing such restrictions, are not applicable law.

[30] A number of statutes and regulations have been considered by the courts on this issue as to whether requirements thereunder constitute "applicable. law", for example:

The *Conservation Authorities Act* and regulations thereunder were held to be *applicable law* prohibiting the construction of buildings on a flood plain without the consent of the authority. (See: *Upper Thames River Conservation Authority* v. *London* (1989), 67 O.R. (2d) 784 (Dist. Crt.)(and *Stacey* v. *Oxford-On-Rideau* (1989), 46 M.P .L.R. 15 (Ont. Dist. Crt.).)

The *Environmental Protection Act,* requiring approval for a heat pump to be installed in a building was held to be *applicable law* Since, ".. .this Act has a logical and real nexus to the subject and purpose of the *Building Code Act.* (See: *Upper Thames River Conservation Authority* v. *London* (1989), 42 M.P .L.R. 241).

[31] It has also been held that the requirement of the filing of a Drainage Plan and a Site Plan approval constitute II *applicable law"* and both plans should have been submitted prior to the submission of the building permit application. (See: *Woodglen* & *NCO v. North York Chief Bldg. Official* (1994) 23 M.P.L.R. (2d) 219 (Ont. Gen. Div.).)

[32] Section 51(26) of the *Planning Act,* (formerly S.26) provides:

> A municipality and the Minister may enter into agreements imposed as a condition to the approval of a plan of subdivision and any such agreement may be registered against the land to which it applies and the municipality or the Minister, as the case may be, shall be entitled to enforce the provisions thereof against the owner and, subject to the provision of the *Registry Act* and the *Land Titles Act,* any and all subsequent owners of land.

[33] The issue of whether provisions of Subdivision agreements registered on title could constitute "other applicable law" was considered by the court in *Rotstein v. North York (City) . (Chief Building Official)* (1995), 29 M.P.L.R. (2d) 305 (Ont. Gen. Div.).

[34] In the *Rotstein,* there was a provision in the Subdivision agreement that appeared to prohibit the ,proposed use of the lots and the owners, by proceeding with the proposed construction would be in breach of the agreement.

[35] Moldaver, J, (as he then was) stated: at paragraph 24:

> The appellants contend that the Subdivision Agreement should be treated as if it had the force of law, equivalent to a regulation or bylaw, thereby bringing it within the purview of the words "applicable law" defined in s.2 (2) of Regulation 160/93. In support of this, reliance was placed on s. 51(6) of the Planning Act.

And at paragraph 26:

> In my opinion, the Subdivision Agreement did not take on the force of law, and therefore it did not come within the purview. of. the words "applicable law". It was' nothing more than a contract between the City and the developer. The fact that I could be registered on title and enforced by the City under 5.51 (6) of the Planning Act did not have the effect of converting it into a regulation or by-law, or something akin to either.

[36] It has been held, however, that, " other applicable law" includes a Heritage Easement Agreement registered on title under section 37 of the *Ontario Heritage Act.* In *Roman Catholic Episcopal Corp.") v. Cobourg* (1998), 46 M.P.L.R., (2d) 195.) *(Roman Catholic Episcopal Corp.)* the court found that the Heritage Easement Agreement qualified as *applicable law.* Under the provisions of the *Heritage Act* the municipality was empowered to pass a by-law designating property as having historic or architectural value or interest under section 29. Aside from this designation power, section 37 of the *Heritage Act* also provided for historical easement and covenant agreements.

[37] In this case. the Town of Cobourg did pass a designation by-law and also entered into a Heritage Easement Agreement that was registered on title. The court framed the issue as follows:

> [Does] the agreement come within the term "applicable law" given, that the Chief building Official has the authority to refuse a demolition under the *Building*

Code Act if the demolition would contravene an applicable law ?.

[38] The court stated:

> In this case. the casement was created as part of a statutory scheme to protect heritage buildings in Ontario. Under section 37 (2) of the Act, the municipality must have the authority of a by-law to enter into such an agreement. It can then enforce the casement agreement, whether or not it is the. owner of the land that could be benefited or accommodated by the agreement. Most importantly, pursuant to section 37(5), the agreement prevails when there is a conflict with the provisions of the Act relating to alteration and demolition found in sections 33 and 34. That subsection is. In . effect, a statutory incorporation, by reference, of the easement agreement. It gives priority to the easement agreement in the event of a conflict with other parts of the legislation, and thus it allows landowners and municipalities to expand the protection for building beyond that provided elsewhere in the statute. Given the terms of section 37(5) of the Act, I conclude that the Heritage Easement Agreement is applicable law here.[Emphasis added]

[39] The court specifically found that section 37(5) of the Ontario Heritage Act which provides:

> Where there is a conflict between an easement or covenant entered into by council of a municipality under subsection (1) and section 33 or 34, the easement or covenant shall prevail.

[40] It docs not appear from the decision that the *Rotstein* case was considered by the court in *Roman Catholic Episcopal Corp.*

[41] There is not a similar *"statutory incorporation"* in the *Planning Act* with reference to a Subdivision agreement. In my view, this is a distinguishing feature from the *Rotstein* decision Although the Planning Act does provide that the municipality can . enforce the provisions of the Subdivision agreement, the Planning Act does not contain a similar provision to section 37 (5) of the *Ontario Heritage Act.*

[42] In my view, the *Roman Catholic Episcopal Corp.* case is not in conflict with the decision in Rotstein. Accordingly, in my view, the statement in *Rotstein* that the Subdivision Agreement did not come within the purview of the words "applicable law" still remains a persuasive judicial determination.

[43] The case of 723 *Rymel Inc. v. Lampman* (2001) 17 M.P.L.R. (3d) 230 (Ont S.C.J.) does not assist the Respondents. That court, in its final determination, found that the. use of the almost completed building as a residential access care centre would be rendered illegal upon the demolition of a separate building that was to be preserved, resulting in a contravention of a site specific. zoning by-law. The fact that the Site Plan Agreement had been entered into and had been registered on title did not appear to be of significant consequence in the court's ruling. It was the zoning by-law that was held to be, *other applicable law.*

[44] In summary, therefore, the provisions in paragraph 34 of the Subdivision. Agreement registered on title do not constitute "other applicable law".

[45] In addition the wording of paragraph 34 of the Subdivision Agreement docs not state that all buildings and structures except those necessary for flood or erosion control are

prohibited as required by the conditions for draft plan approval from the Ministry. Instead, paragraph 34 of the Subdivision Agreement states that, if certain conditions ".. .have been satisfied.. to the approval of the Municipal Engineer and/or other authorities having jurisdiction.. .". Accordin81Y, this paragraph does allow for building subject to approvals.

[46] The Applicant submits that she has satisfied the requirements of "other authorities having jurisdiction".

(47) In summary, the court is satisfied that, under the circumstances, provided the Applicant has fulfilled all the other prerequisites, (as apparently she has), the chief Building Official was required to issue the requested building permit An order will therefore go to that effect.

[48] The appeal is allowed with costs to the Appellant fixed at $2,500, plus GST.

MACDOUGALL, J.

Released: April 17th, 2002.

Citation: Oxbow Lake Cottagers Association v. Lake of Bays (Township), 2006 CanLII 32324 (ON S.C.)

BARRIE COURT FILE NO.: 04-B7727
DATE: 20060921

ONTARIO

SUPERIOR COURT OF JUSTICE

B E T W E E N:	)	
	)	
OXBOW LAKE COTTAGERS ASSOCIATION	)	E. M. Green and T.C. Tsakopoulos, for the applicant
	)	
Applicant	)	
	)	
- and -	)	
THE CORPORATION OF THE TOWNSHIP OF LAKE OF BAYS, OLYMPIA ATHLETIC CAMPS LIMITED, 563973 ONTARIO LIMITED and STEPHEN WATSON, CHIEF BUILDING OFFICIAL OF THE CORPORATION OF THE TOWNSHIP OF LAKE OF BAYS	)	B. Kussner, for the Corporation of the Township of Lake of Bays, Stephen Watson, Chief Building Official of the Corporation of the Township of Lake of Bays
	)	A. Dryer for Olympia Athletic Camps Limited and 563973 Ontario Limited
Respondents	)	
	)	
	)	**HEARD:** May 24 & 25, 2006

HOWDEN, J.

[1] Olympia Athletic Camps Limited (Olympia), has been operating as a summer camp for children since 1980, on the shores of Oxbow Lake. The respondent 563973 Ontario Limited owns the main camp site on the north shore, as well as a .71 acres (31,000 sq. ft.) property on a point of land on the south shore. Both properties are leased to Olympia. It is the Point on the south shore which is the subject of the building permits in question. The appellant is a ratepayers' association comprised of owners of cottage lots on Oxbow Lake.

[2] Olympia Sports Camp has been operating on a developed site zoned for camp buildings and activities on the north shore. The Point has been used over the years intermittently, but regularly each summer since 1949, for overnight camping by groups who boat over from the main camp. The Kiwanis Club ran the camp until the mid-70's. Other groups leased the camp land on the north shore and the Point for children's camps in the late '70's, again only in the summer. Throughout, the Point has been an undeveloped natural area, zoned for waterfront residential and some other shorelines uses but not camping.

[3] Previous to the building permit approval of August 6, 2004, the only structures on the Point were two tent platforms. They served as floors for the campers' tents. Each measured 10' x 10'.

[4] Though it is difficult to ascertain from the rather incomplete history of the application in the body of the affidavit of the Chief Building Official (CBO), it appears from the attachments to the three permits issued by him that the following applications were made for permits for construction on the Point land:

(i) on July 19, 2004, the president of Olympia applied to install a septic

system, to serve a building having 12 bathroom fixtures (sinks, showers, toilets) and a double kitchen sink.

(ii) on July 26, 2004, the person identified by the CBO as Olympia's site manager signed an application on behalf of Olympia's president David Grace - Mr. Grace is listed as the owner; the application was for "tent platforms for tents", to be 12 feet by 10 feet or 120 square feet, and 16 feet by 16 feet or 256 square feet in floor area (the application appears to be for the two tent platforms having a total square footage of 366 square feet);

(iii) on August 12, 2004, Olympia applied for a permit to construct a building on the Point; plans are attached showing a proposed one-storey building with dimensions of 30 feet by 50 feet, 1500 square feet in total floor area, to contain a bathroom of four sinks, four toilets and two showers, plus a double kitchen sink, a large common room (30 feet by 15 feet), two smaller meeting rooms, and two staff rooms.

[5] The respondent Stephen Watson as the CBO issued the following permits, listed in chronological order:

(i) July 28, 2004 – building permit #2004-0426 covered the septic system installation, to serve the 30' x 50' building proposal. The application originally referred to four bedrooms as the basis for the sewage calculations; it was refused by letter of the CBO of July 23, 2004 because the calculations could not be based on bedrooms and the permit which finally issued is conditioned on the septic system serving meeting rooms only and up to 16 persons;

(ii) August 6, 2004 – building permit #2004-0446 was issued for two tent platforms measuring 16' x 16' and two tent platforms 10' x 12', being 752 square feet in total tent floor area; a site plan is shown as having been reviewed on August 6, 2004 by the Township showing a total of four tent platforms, not merely the two mentioned in the application, as proposed for the Point and it is no doubt this drawing on which the permit was issued;

(iii) August 24, 2004 – building permit #2004-0503 was issued by the CBO for construction of what is referred to as a "shower building"; the floor plan reviewed by the CBO shows a 30' x 50' building, to contain two staff rooms, two "participant" or meeting rooms, a 15' x 30' common room, and bathroom area containing four toilets, four sinks and two showers. No kitchen sink is shown, though the approved application includes installation of a double kitchen sink as I noted earlier.

[6] The appeal from the permit of August 6, 2004 approving installation of the four tent platforms was filed after the expiration of the 20-day period referred to in section 25(1) of the *Building Code Act*. The appeal from the permit issued for the proposed building was brought within the statutory time. No appeal was taken in respect of the septic permit.

[7] There is no controversy, as I understood the submissions of counsel, over the following proposition: that the use of the Point for camping purposes as an adjunct to the main camp on the north shore is legally non-conforming; this seasonal use has subsisted annually in the summer since 1949, well before the zoning bylaw was enacted in 1972. The Point is zoned Waterfront Residential (WR). The uses permitted by the zoning bylaw do not include camping. The permitted uses in the WR zone are:

(a) Residential Uses:
A detached single family house; a private cabin.

(b) Non-residential Uses:
A church; a golf course; a public use.

None of these uses include camping. By itself the Point is too insular and small to accommodate the non-residential uses permitted by the by-law. The Point land was not subject to zoning control until 1972 when the first comprehensive zoning bylaw was enacted (later approved by the Ontario Municipal Board).

[8] The issues on this appeal are:

(i) Should the time for appeal of the tent platform permit be extended?

(ii) What is the standard of review properly applicable to the CBO's decisions in this case?

(iii) A legal non-conforming use having been established on the Point land, do the zoning bylaw and the *Planning Act* allow erection of a structure accessory thereto?

(iv) Are the intended uses of the proposed building accessory to the principal camping use and therefore allowed by the zoning bylaw?

[9] The relevant sections of the *Building Code Act* and the *Planning Act* follow.

Building Code Act:

8(1) No personal shall construction or demolish a building or cause a building to be constructed or demolished unless a permit has been issued therefor by the chief building official 1991, c.23, s 8(1); 1997, c 30, Sched. B, s.7(1).

8(2) The chief building official shall issue a permit referred to in subsection (1) unless,

(a) the proposed building, construction or demolition will contravene this Act, the building code or any other applicable law;

25(1) A person who considers themself aggrieved by an order or decision made by the chief building official, a registered code agency or an inspector under this Act (except a decision under subsection 8(3) not to issue a conditional permit)

may appeal the order or decision to the Superior Court of Justice within 20 days after the order or decision is made. 2002, c.9, s.40(2).

(2) A judge to whom an appeal is made may, upon such conditions as the judge considers appropriate, extend the time for making the appeal before or after the time set out in subsection (1), if the judge is satisfied that there is reasonable grounds for the appeal and for applying for the extension. 1991, c.23, s.25(2).

…

(4) On an appeal, a judge may affirm or rescind the order or decision and take any other action that the judge considers the chief building official, registered code agency or inspector ought to take in accordance with this Act and the regulations and, for those purposes, the judge may substitute his or her opinion for that of the official, agency or inspector. 2002, c.9, s.40(3).

Planning Act

34(9) No by-law passed under this section applies,

(a) to prevent the use of any land, building or structure for any purpose prohibited by the by-law if such land, building or structure was lawfully used for such purpose on the day of the passing of the by-law, so long as it continues to be used for that purpose; or

45(2) In addition to its powers under subsection (1), the committee, upon any such application,

a) where any land, building or structure, on the day the by-law was passed, was lawfully used for a purpose prohibited by the by-law, may permit

(i) the enlargement or extension of the building or structure, if the use that was made of the building or structure on the day the by-law was passed, or a use permitted under subclause (ii) continued until the date of the application to the committee, but no permission may be given to enlarge or extend the building or structure beyond the limits of the land owned and used in connection therewith on the day the by-law was passed, or

(ii) the use of such land, building or structure for a purpose that, in the opinion of the committee, is similar to the purpose for which it was used on the day the by-law was passed or is more compatible with the uses permitted by the by-law than the purpose for which it was used on the day the by-law was passed, if the use for a

purpose prohibited by the by-law or another use for a purpose previously permitted by the committee continued until the date of the application to the committee; or

(c) where the uses of land, buildings or structures permitted in the by-law are defined in general terms, may permit the use of any land, building or structure for any purpose that, in the opinion of the committee, conforms with the uses permitted in the by-law. R.S.O. 1990, c.P13, s.45(2).

[10] It is clear law that the *Planning Act* and the municipal zoning bylaw are part of the "applicable law" which by s.8(2) of the *Building Code Act*, is not to be contravened.[1]

[11] The appellant took the position in its original material that what was being proposed by Olympia went well beyond the intermittent historic use of the Point. The president Mr. Wylie and a land use planner retained by the Association, Wesley Crown, filed affidavits indicating their understanding that Olympia was intending to operate a fulltime summer – long commercial camping program on the point for 30 to 50 participants, using the proposed building with kitchen/washroom facilities to allow longer overnight stays. The planner, Mr. Crown, was of the opinion that the proposed use and buildings were too remote from, and amounted to an unacceptable intensification of, the longstanding occasional camping use of the Point hitherto devoid of any developed facilities other than a covered barrel for sewage use and two tent platforms. The applicant's material was filed in 2004 within one and one-half months of the first building permit issued for the Point. It was based on the views of its president and other cottagers as to the history of use of the Point land.

[12] The respondents filed extensive material focused on the historic use of the Point as an adjunct to the main camp from 1949 to date. The evidence covers the period from the camp's inception under the auspices of the Kiwanis Club, through three years of rental to other camping groups in the late 1970's, to Olympia's operation of the main camp and use of the Point from 1980. Three additional affidavits were filed in April 2005 by two members of the appellant Association with property on the lake as well as a supplementary affidavit by Mr. Crown. He had reviewed the material filed by the respondents. Mr. Crown is of the view that the proposed construction indicated a more intensive use of the Point than in the past with greater impacts on cottagers and on the lake, and that the proposed building was not permitted as an accessory use or structure by the Township bylaw. Cross-examinations on the parties' affidavit material occurred in December 2005 and January 2006.

[13] By the time of the hearing of the application in late May, 2006, the positions of the parties, particularly of the appellant, had been refined somewhat based on the substantial evidentiary record accumulated since 2004.

[14] The appellant's position before me accepts the continuity of the seasonal camping use of the Point since 1972 on an occasional basis; however, it attacks the two permits under appeal essentially on grounds that the CBO erred factually and in law. His factual error was in determining the nature of the use in 1972 as a campground, to which facilities like washrooms, meeting and staff rooms, and even a restaurant or kitchen could be considered ancillary. This is important because it is the type of use at the time of passage of the zoning by-law which is protected by the doctrine of acquired right or legal non-conforming use. (citing *Saint-Romuald (City)v. Olivier* at para. 19-21) His error in law is said to be the allowance of a new building as an accessory structure to a legal non-conforming

use. Counsel for the appellant submits that section 34(9)(a) of the *Planning Act* protects only the actual use as of 1972 when the bylaw was passed, and that the intensification from occasional overnight camping to a serviced indoor accommodation centre (in his words) and increased tent platform area violate the zoning bylaw and the *Act*. He also submitted that the proposed building contravenes the definition of "accessory" in the zoning by-law. Thus, he argues, as violations of the "applicable law", the permits should have been refused.

[15] The appellant requests that the time for appealing the tent platform permit should be extended under section 25(2) of the *Building Code Act*. Its president stated in his affidavit that its officials did not know of the permit until "in or about the middle of August 2004" and the time from then to acquisition of legal assistance and preparation of the appeal material extended beyond the 20 day period. The appellant relies also on the strength of the case for bylaw contravention as its members see it, by allowance of the four tent platforms by the CBO.

[16] The position of Olympia is that the tent platform appeal should be dismissed as being out of time. The applicant's executive officers were aware early in the appeal period of the issuance of the permit, and the building of the new platforms. They were advised of their appeal rights at a meeting of the Township Planning Advisory Committee on August 10, 2004 some 16 days before expiry of the appeal period. He submitted that there is no reasonable ground for the extension of the appeal period and that Olympia would be prejudiced if it was granted. It is further submitted by Olympia that the use of the point for camping purposes in 1972 and since has been continuous throughout the summer, three to four nights per week. The new structures are meant to better accommodate a program to serve as an outdoor overnight camping experience limited to no more than 16 people at a time. No sleeping accommodation and no kitchen are provided in the final approved drawings, thus negating any intent of use for human habitation. Mr. Dryer submits that the building proposals are within the principles governing legal non-conforming uses which allow some improvement and intensification; therefore the building permits are justified as minor structural alterations to a legal non-conforming use within the principles in *Saint-Romuald (City)v. Olivier* 2001 SCC 57 (CanLII), [2001] 2 S.C.R. 898 and *Rotstein v. Oro-Medonte (Township)* [2002] O.J. No. 4990 (Ont. S.C.J.). He further argued that erection of a building accessory to the principal use which is legally non-conforming is permitted specifically by the Township zoning bylaw; if two interpretations of the accessory provision in the bylaw are reasonable, the presumption of regularity should apply to uphold the permits.

[17] The Township's position opposed that of the applicant on standard of review and the availability of a use or structure accessory to a legal non-conforming use where the municipal zoning bylaw enlarges the statutory protection in s.34(9)(a). Mr. Kussner submitted that:

(i) the CBO's decisions were entitled to deference as determinations involving his experience on matters of mixed fact and law;

(ii) the established non-conforming use for camping purposes affects the status of the whole lot;

(iii) the proposed building provides indoor amenity space for campers accessory to the principal use and having no independent life of its own;

(iv) the building permits therefore come within the "applicable law" as elucidated in *Saint-Romuald* and in *Central Jewish Institute v. Toronto*

(City) [1948] S.C.R. 101; they also conform to the option chosen by the Township in passing the zoning bylaw, to expand legal non-conforming rights beyond the minimum protection in section 34(9)(a) of the *Planning Act*.

Time for Appeal from Building Permit #2004-0446 (Tent Platforms)

[18] The applicant's right of appeal from the tent platform permit subsisted for 20 days from August 6, 2004, subject to the discretion of the judge hearing the matter to extend the time. The appeal from the CBO's decision to allow four tent platforms to be constructed in place of the former two is combined with the appeal from the CBO's issuance of permit no. 2004-0503. The appeals were not brought until September 10, 2004, some two weeks after the end of the 20 day appeal period from permit no. 2004-0446. The appeal from the CBO's decision to allow erection of the building was filed within the statutory period.

[19] Section 25(2) of the *Building Code Act* gives a discretion to the court to extend the time for appeal where two threshold tests are met:

(i) there must be reasonable grounds for the appeal; and

(ii) there must be reasonable grounds for the extension.

[20] The evidence of the president of the Association, Mr. Wylie, is that the Association's officials knew of the tent platform permit by mid-August, 2004. The Association officials were also aware that the new tent platforms were being constructed on the site at the same time. What the applicant's evidence omits is that the Association executive knew of this building permit at the meeting of the planning committee on August 10. Mr. Wylie and Mr. McRoberts were informed at that time of the right to appeal and were given a copy of the statutory appeal provision which, of course, states quite clearly that the time for appeal is limited.[2] Thus, by August 10, 2004, 16 days before the expiry of the appeal period, the president of the Association knew of the right of appeal and its limits. There is no explanation by Mr. Wylie for the delay in appealing from issuance of the tent platform permit other than it took time to retain counsel and to prepare the appeal to the court.

[21] I find there to be no reasonable ground or explanation for the delay in bringing the appeal or for an extension of the appeal period.

[22] As I understand the submissions by the appellant's counsel, the principal object of attack is the permit allowing construction of the building as it purportedly marks a change in character of the non-conforming use as it existed since 1972, violates the by-law definition of "accessory", and violates the zoning bylaw and the *Planning Act's* limited protection of legal non-conforming uses. The ground for the appeal from the tent platform permit appears to be that the new platforms go beyond replacement of the old tent platforms in location, number and size. The use for camping purposes remains the same, and the number of persons on site at any one time is not to increase; it is to be 16, not 40 or 50 as the appellants' members originally feared, if the septic design limit is reliable. The zoning provision said to be violated by this permit is section 4(9)(a) of the zoning bylaw. That provision, by itself, limits replacement of structures to the same location and dimensions as the original. However, I note that section 4(9)(c) contemplates an extension where it complies with the bylaw. I am aware, of course, that the appeal based on non-compliance with section 4(1) of the bylaw (accessory structures) and section 34(9)(a) of the *Planning Act* appears to include in its ambit the tent platforms.

[23] While there is an arguable ground for appealing from permit #2004-0446, it is not the central focus of the appeal. Obviously the appellant and its counsel decided not to appeal from it separately within the time for appeal. On balance, I find there to be no reasonable ground for extending the period for appeal in that the second part of the threshold test is not met. I also find that refusal to extend the time does not bring a significant prejudice to the main focus of the appeal, the proposed building and its impact on the historic non-conforming use as well as its compliance with the accessory requirements of the bylaw.

[24] Accordingly, the time for appeal is not extended and the appeal from the CBO's decision to issue permit #2004-0446 is dismissed.

Standard of Review

[25] Pursuant to section 25 of the *Building Code Act*, the judge hearing an appeal may affirm or rescind the decision of the CBO, and may take any other action that, in the judge's view, ought to have been taken within the *Act* and regulations. For those purposes, the judge may substitute his or her opinion.[3]

[26] Nevertheless, the prevailing law as to standard of review is not simply to allow the judge to do as he or she deems fit. The CBO is an official with training and substantial experience in issues involving the *Ontario Building Code*, building plans, construction in the field, and detail adherence to the *Code* and plans. These technical areas are not areas of expertise necessarily shared by a court. However, in approaching issues of law and jurisdiction, the court has expertise, by experience, training and knowledge not shared by a CBO, whatever number of times that official may have read or applied some provisions of a zoning bylaw. I also note that in this case the CBO says that he often consults the Township planner on issues of zoning compliance. There is no affidavit evidence from the planner for the Township. Decisions of law or jurisdiction attract a standard of, or approaching, the correctness end of the continuum; decisions of a factual nature more within the area of expertise of a CBO, or issues of mixed fact and law, are generally entitled to deference on a standard of reasonableness.[4]

[27] In this case, the question of whether the provisions of the *Planning Act* and the township zoning bylaw regarding legal non-conforming uses are properly interpreted to allow, as a matter of law, erection of a structure accessory to the principal use is one of law. The standard of review on that issue is correctness. Whether the intended use and the proposed building come within the protection afforded legal non-conforming uses and the accessory requirements of the by-law involve questions of fact and mixed fact and law on which the decisions of the CBO are entitled to some deference. Mr. Watson is a person of experience in the building field since 1998 during which he has considered the zoning bylaw many times, as well as building applications and inspection of building sites and usage. These decisions attract a standard of reasonableness on review by this court.

Legal Non-Conforming Use and Accessory Use and Structures

[28] The principal disagreement between the applicant and the respondents concerns the issue of law as to whether a new structure is available as accessory to the principal use which is legally non-conforming. Counsel were able to provide no authority directly on this issue.

[29] Counsel for the appellant attacked the characterization by the CBO of the legal non-conforming use of the Point as a campground, rather than as occasional day and overnight camping. Leaving aside the developed connotations of a campground for now, the distinction between continuous and occasional summer camping usage has become somewhat academic in my view. The applicant's perception of the

occasional nature of the use is not borne out by the affidavit evidence of Gerald Withers, George Dee and George Ferguson. All told, they participated in camps using the Point from 1949 through the 1970's. Their evidence is that as of the early 1970's, including 1972, the Point was used for overnight camping purposes by 12 campers and one or two staff. They used the two tent platforms as floors for the tents as well as the fire-pit for cooking and a covered barrel as a primitive toilet. Their evidence as to usage is somewhat vague for obvious reasons. Nevertheless, they say that the tents on these platforms were used "most nights in the summer". (One, sometimes two "cabins" used the point at a time; "cabin" is twelve campers plus one or two staff. Withers and Dee affidavits). Mr. Dee, who was on staff from 1955 until 1970 when the Kiwanis Club ran the principal camp, described a typical excursion from the main camp to the Point as follows:

> Typically a cabin of campers with their counselors would be transported to the point by boat after lunch. They would spend the afternoon at the point, set themselves up to stay over in the tent, cook and eat dinner outdoors at the point, have a campfire in the evening, sleep over, have breakfast in the morning and then return to the main camp property.

The Point was used for this purpose regularly throughout the summers, at times three to four nights per week and at other times less often. Each group stayed for a night at a time. (Dee and Ferguson affidavits)

[30] Since the 1970's, Mr. Grace states that frequency and intensity of use has varied from summer to summer. He described Olympia's use of the point since acquisition of the properties in or about 1980 until the early 2000's.

> The use of the subject lands by campers and staff with the camp has been and continues to be as a camping area, cookout area and outdoor recreational and wilderness area for both day trips and overnight trips. This use of the subject lands has included and continues to include overnight camping, nature trails, campfires, meetings, swimming and boating. … The subject lands have also been continuously used for staff activities such as pre-camp meetings and programs, for recreation, and on their days off. In or about the summer of 2001, Olympia took some steps to improve the subject lands for these uses, which included cleaning up the grounds, erecting a sign with the camp's name on it (since taken down) and improving the fire-pit used for cookouts. The installation of a dock took place in 2002.

[31] Mr. Grace indicates in his affidavit that a new program was commenced by Olympia on the subject lands after the new platforms were installed. He described that program as follows:

> After construction of the tent platforms and new outhouses, Olympia ran a program from August 15 to 28, 2004 on the subject lands named Hero's Journey Camp…. In 2004, this was a 14 day program involving nine campers and five staff members. The subject lands were used for about nine out of the fourteen days of the program. Programming included lessons (in canoeing, portaging nature skills and camping, etc.), co-

> operative games, opening and closing ceremonies, and related outdoor activities. During their time spent at the subject lands, the campers and staff participation in this program slept in tents on the tent platforms and cooked their own food (on the first Sunday night of the program the campers slept on the ground rather than on the tent platforms as the tent platforms did not pass inspection until the next day). In 2005, the program will be extended to three weeks and will provide campers with a high school credit. This program represents a continuation of the use of the subject lands as an adjunct to the camp lands and as part of the camp's operations and programming. There is no intention to turn the subject lands into a separate camp or campground operation. The suggestions to that effect in the Wylie and Crown affidavits are baseless, speculative and false.

[32] Mr. Grace's affidavit does not fully explain why the new building is being proposed for what, until now has allegedly been the main attraction of the Point - its natural wilderness characteristics and proximity to, though separate from, the main property. He lists some environmental issues which he sees as being addressed by the proposed building: matters such as garbage storage, grey water concerns (though none were expressed in evidence), food storage, and fire equipment storage. The proposed building would also house an emergency phone. He describes these as "in part" why the new building is being proposed. His affidavit then defers to the CBO's affidavit where the intended use is said to be "accurately described". Yet it is Mr. Grace who is the chief officer of the body proposing it.

[33] The CBO states the following, without much more detail than Mr. Grace's affidavit, as to the role for the proposed building:

> 27. Specifically, the proposed shower and washroom facilities would comply on the basis that they would function as an amenity for the benefit of campers when using the property for camping purposes….
>
> 31. With the building permit application changes I requested, and based on my understanding of Olympia's intended use of the access re-building, I was satisfied that it would be consistent with the restrictions in the zoning bylaw that applied to accessory uses, in terms of being "secondary to and exclusively devoted to" the main camping use. I believe that if it were not for the camping activities, the accessory building would not be used at all. The accessory building is intended only to provide an indoor amenity to people when they are using the site for camping purposes, and it does not have any freestanding function.
>
> 34. It has always been my understanding and information that whatever term may have been used to describe it on some of the plans, the accessory building is not intended to be used for sleeping or "accommodation" facilities. Rather than providing sleeping quarters, I am advised that the accessory building will offer meeting facilities for

> the campers, in addition to providing washroom and shower facilities for them, at times when they are using the subject lands for camping purposes. I do agree with Mr. Crown that the building will be used for a variety of camp related purposes, but as indicated above, those purposes serve to render the building accessory to the principal camping activities. (emphasis added)

[34] From the evidence before me, the use lawfully established when the first zoning bylaw was passed in 1972 is best characterized as overnight wilderness camping including nature walks, campfires, meetings of staff and/or with campers, swimming and boating, as a proximate adjunct to the principal camp. Since then, there has been an increase in frequency of use by Olympia and some change in the type of use; a day off respite for staff and visiting counselors, overnights for cabins of campers, practice canoeing for the "canoe trip", brush clearance, BBQ's, and since 2004 the Hero's Journey Camp which is intended to become a three week program. (The brochures, attached to the Grace affidavit as exhibits indicate use of the Point and Algonquin or Temagami as wilderness experiences and separation from the familiar world as steps and challenges in a Campbellesque life experience – it describes the Point as "our new Base Camp").

[35] Counsel for the appellant association submitted that the new camping program represents more than the occasional camping use in 1972. He submitted that in finding it to be a campground as of 1972, the CBO erred by ignoring its occasional usage then and by considering that a building with meeting and washroom facilities was a normal part of a campground operation. Counsel for the appellant further submitted that the CBO erred in viewing section 2(1)(c) and 4(1) of the zoning bylaw as permitting the proposed building as accessory to the principal camping use. In this conclusion, the CBO fundamentally mistook a legal non-conforming use and the protection of acquired right in the *Planning Act* and the zoning bylaw as altering the protected status of a legal non-conforming use to one allowed or permitted by the bylaw, to which accessory uses or structures could be added. Mr. Green submitted that the CBO's interpretation of section 2(1) and 4(1) of the bylaw conflicts with other provisions of the bylaw [sections 2, 5 and 4(9)(a)] and of the *Planning Act* [section 34(9) and 45(2)]. Finally, Mr. Green argued that the proposed building, containing a kitchen sink, wash basins, toilets, showers and five meeting rooms, runs afoul of section 4(1) of the zoning bylaw as being capable of providing for human habitation and contravening the definition of accessory in the zoning bylaw (citing *Conlin v. Prowse* [1995] O.J. 3735 Div. Ct.) Mr. Geen submitted that because these errors reflect violations of the "applicable law", the building permit was issued wrongly and should be cancelled.

[36] For Olympia, Mr. Dryer submitted that the legal non-conforming use in this instance is more than a single camping use. It includes several individual uses, as it has for years – overnight camping, group meetings, boating as transport to the point, outdoor toilet facility, and campfires. He sees the program begun with the building of the new tent platforms and the application to permit the new building as a more intense, but essentially a continuation of the, use going back to 1972. It is represented that there is to be no sleeping in the building; what is proposed is not meant to be an indoor camping program. The numbers have reduced from the original proposal to an upper limit of 16, to which the septic system design is restricted. He submitted that the planner retained by the applicant, Wesley Crown, based his opinion on erroneous information – there is no full range commercial camp program at the Point, only a use subordinate to the main camp. He characterized the proposal as a facility addition to carry on the same use, an intensification allowed by the judgment in *Central Jewish Institute*.

[37] Mr. Dryer summarized Olympia's position in the following propositions:

- ➢ The permits allow a minor structural alteration to the legal non-conforming use established in 1972.
- ➢ A presumption of regularity and intra vires should apply to sections 2 and 4 of the zoning bylaw if there are two reasonable interpretations thereof.
- ➢ In any event, in law, a structure or use is permitted accessory to the principal legal non-conforming use.

[38] For the township, Mr. Kussner submitted the following:

(i) deference should be shown to the CBO, the issues being primarily factual or mixed fact and law, with the lone exception being whether the bylaw permits a use accessory to a legal non-conforming use; this issue attracts correctness as the standard of review;

(ii) there is a low threshold required to establish a legal non-conforming use, and the proposed structure as well as the new tent platforms and the principal use by Olympia are within the by-law use protection for legal non-conforming issues;

(iii) there is no principle of law that an accessory use cannot be permitted where the principal use is legally non-conforming; section 34(9) of the *Planning Act* provides a minimum protection for legally established uses, which a municipality can choose to exceed as this one has purported to have done in section 4(1);

(iv) the building proposal meets the bylaw criteria for an accessory use, and;

(v) the basis of the appeal is nothing but unwarranted fear.

[39] Before completion of counsel's submissions, I reminded them of the approach to statutory interpretation preferred in several recent cases by the Supreme Court of Canada and the Ontario Court of Appeal. Writing for the Supreme Court of Canada, Iaccobucci, J. wrote the following:

> In Elmer Driedger's definitive formulation, found at page 87 of his *Construction of Statutes* (2d ed, 1983):
>
> > Today there is only one principle of approach, namely, the words of an Act are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament.
>
> Driedger's modern approach has been repeatedly cited by this court as the preferred approach …

> The preferred approach recognizes the important role that context must inevitably play when a court construes the written words of the Statute [paras 26-27, *Bell ExpressVu LLP v. Rex* 2002 SCC 42 (CanLII), (2002) 2 S.C.R. 559]

[40] The Ontario Court of Appeal referred to the modern approach in dealing with an interpretive problem not unlike this case in that both a provincial statute and a municipal bylaw were involved.[5]

[41] As Blair, J.A. stated in *118143 Ontario Inc.* at para 12:

> … In my view, the issue is not whether, taken in isolation, the still existing authority of subsection 210.146 could justify the portion of the bylaw prohibiting and regulating the signs; rather, the issue is whether bylaw 301-94, taken as a whole, is a bylaw "licensing a business". The motion judge found that it was a bylaw licensing a business. His interpretation of the bylaw in this regard, and his conclusion the "regulation is inherently bound up with most, if not all, proper and effective licensing schemes, including the ability to regulate business premises and the equipment and other personal property used or kept for hire in the business", was plausible, in keeping with the objectives of the legislation in question, reasonable and just: see Ruth Sullivan, *Driedger on the Construction of Statutes* (Butterworths: Toronto) 3d edition, 1994, at page 131 (now 4th ed, at page 3). (emphasis added)

Following my suggestion, counsel requested an opportunity to file written submissions patterned on, and/or taking issue with, the modern approach. I have had an opportunity to consider them and have found them helpful.

[42] In approaching the issue before me, the following provisions of the *Planning Act* and of the zoning bylaw are relevant in understanding the context of section 4(1) of the bylaw relating to accessory uses and section 2 regarding legal non-conforming uses.

The *Planning Act*

> 1.1 Purposes – the purposes of this Act are,
>
> a) to promote sustainable economic development in a healthy natural environment within the policy and by the means provided under this Act;
>
> d) to provide for planning processes that are fair by making them open, accessible, timely and efficient;
>
> f) to recognize the decision making authority and accountability of municipal councils in planning.
>
> 34(1) Zoning bylaws – Zoning bylaws may be passed by the councils of local municipalities:
>
> (1) Restricting use of land – for prohibiting the use of land, for or except for such purposes as may be set out in the bylaw within the municipality or within

any defined area or areas or abutting on any defined highway or part of a highway.

(2) Restricting, erecting, locating or using of buildings – for prohibiting the erecting, locating or using of buildings or structures for or except for such purposes as may be set out in the bylaw within the municipality or within any defined area or areas or upon land abutting on any defined highway or part of a highway.

(9) Excepted lands and buildings – No bylaw passed under this section applies,

a) to prevent the use of any land, building or structure for any purpose prohibited by the bylaw if such land, building or structure was lawfully used for such purpose on the day of the passing of the bylaw, so long as it continues to be used for that purpose; or

b) to prevent the erection or use for a purpose prohibited by the bylaw of any building or structure for which a permit has been issued under section 5 of the *Building Code Act*, prior to the day of the passing of the bylaw, so long as the building or structure when erected is used and continues to be used for the purpose for which it was erected and provided the permit has not been revoked under section 6 of the *Building Code Act*.[6]

Zoning Bylaw

2(1)(a) Scope of Bylaw – Lands Subject to Bylaw: The provisions of this Bylaw shall apply to all lands within the corporate limits of the Township of Lake of Bays.

(b) Conformity with Bylaw: No building or structure shall hereafter be erected or altered, nor shall the use of any building, structure or lot hereafter be changed in whole or in part, except in conformity with the provisions of this Bylaw.

(c) Existing Uses Continued: Nothing in this Bylaw shall prevent the use of any lot, building or structure for any purpose prohibited by this bylaw if such lot, building or structure was lawfully used for such purpose on the date of passing of this Bylaw, so long as it continues to be used for that purpose.

(d) Building Permit Issued: Nothing in this Bylaw shall prevent the erection or use of any building or structure for a purpose prohibited by this Bylaw if the plans for such building or structure were approved by the Building Inspector prior to the date of passing of this bylaw, provided:

(i) when the building or structure is erected, it shall be used and continue to be used for the purpose for which the building permit was issued; and,

(ii) the erection of such building or structure is commenced within two (2) years of the date of passing of this Bylaw and provided the erection of such building or structure is completed within a reasonable time after the erection thereof is commenced.

4(1) Accessory Uses

(a) Uses Permitted: Where this bylaw provides that a lot may be used or a building or structure may be erected or used for a purpose, that purpose includes any accessory building, structure or use, but does not include any of the following:

i. any occupation for profit conducted within or accessory to a dwelling unit;

ii. any building used for human habitation of any description except as specifically permitted in this bylaw.

(9) Non-conforming Uses

(a) Rebuilding or Repair Permitted:
Nothing in this By-law prevents the rebuilding or repair of any building or structure that is damaged or destroyed subsequent to the date of passing of this By-law, provided that the dimensions of the original building or structure is not altered, and the building is replaced on the same location.

(b) Strengthening to Safe Condition Permitted:
Nothing in this By-law prevents the strengthening to a safe condition of any building or structure or part of any such building or structure which does not conform to the provisions of this By-law, provided that such alteration or repair does not increase the height, size or volume, or change the use or location of such building or structure.

(c) Extensions Permitted:
Nothing in this By-law prevents an extension or an addition being made to an existing permitted building or structure, even though such building or structure does not conform to one or more of the provisions of this By-law, provided such extension or addition does not contravene any of the provisions of this By-law.

> 5(1) Zone Classifications - For the purpose of this bylaw, all lands within the corporation are divided into zones and classified as follows:
>
> | Zones | Symbols |
> |---|---|
> | *Residential Zones*: | |
> | Residential Zone | R |
> | Waterfront Residential Zone | WR |
>
> (3) Uses Permitted and Zone Provisions – For each zone listed in section 5(1), there is a section of this bylaw which sets out the uses permitted in the zone provisions.
>
> 7(1) Uses permitted – No person shall within any WR Zone use any lot or erect, alter or use any building or structure for any purpose except one or more of the following WR uses, namely:
>
> a) Residential Uses: a detached single family dwelling house; a private cabin
>
> b) Non-residential Uses: a church; a golf course; a public use.

[43] Mr. Green argued that the official plan policy on non-conforming uses should be considered as an extrinsic aid to interpretation. I agree with that approach where there is a policy or policies that are sufficiently specific to be helpful and where the bylaw language derives directly from the official plan. I have mentioned in prior judgments that the zoning bylaw is part of the planning scheme authorized under the *Planning Act* and has its policy base in the official plan, thus in a proper case the official plan may be helpful in interpreting the zoning bylaw.[7] I tend to agree with the submission of Mr. Kussner in this instance, however, that the official plan policy on non-conforming uses does not address the issue of accessory use where the principal use is legally non-conforming nor does it indicate anything more than the traditional statement that legal non-conforming uses should disappear over time. That statement is not particularly helpful in dealing with the issue before me now which deals with the extent of the protection afforded by the *Planning Act* and the municipal zoning bylaw, as enacted, to continuing uses legally established before enactment of the zoning bylaw. From the Supreme Court of Canada decision in *Saint-Romuald*, supra, it is clear, as Doherty, J. found in *Ottawa (City) v. Capital Parking Inc.* 59 O.R. (3d) 327 (at para. 30):

> The legal non-conforming use doctrine rests on the principal that zoning bylaws which introduce new restrictions on the use of property should not deny land owners the right to use their property in the same manner they did prior to the introduction of those restrictions. In *Saint-Romuald (City)*, supra, at para 39, Binnie, J. stressed that the characterization of an acquired right could not free the owner from the constraint of the actual use at the time the limitation was introduced, but should also be not so restrictive as to deny any flexibility in the evolution of that use.

[44] Binnie, J. in *Saint-Romuald* cited the well-known 1948 case *Central Jewish Institute*, supra, in the majority's analysis of the protection in law afforded the type of legally non-conforming use, as distinct from factors of intensity of use and changes in intensity of the same type of use. *Central Jewish Institute* was found by Binnie, J. to stand for the sanctioning generally of increases in intensity of use provided the same type of use continues. *Central Jewish Institute* was a case of a small school which commenced legally in part of an existing building, but before it developed its educational program to occupy the rest of the building, the municipality passed a zoning bylaw prohibiting the school in that area. At that time, the statute exempted legal non-conforming uses from the zoning by-law. The majority held that the appellant school was entitled to expand throughout the building. What is important to my analysis here, however, is that neither *Saint Romuald* nor *Central Jewish Institute* dealt with a proposal to erect a new structure. They stand for the proposition that the legally established use of a lot or structure in existence at the time of the passing of the zoning bylaw provides statutory protection to continuation of the historic type of use of the entire lot or existing structure provided any intensification is not so great as to change the use. In this case, I agree that the use of part of the Point for the legally non-conforming purpose of camping is not frozen in time and space and affects the use status of the remainder of the lot or structure.

[45] The Township and Olympia submit that section 34(9) of the *Planning Act* and section 2(1)(c) of the bylaw act as, in counsel's words, a "permissive exception" to the general prohibition against uses or structures being established or erected except in conformity with the bylaw. They submit that zoning bylaws can prohibit all uses or structures not permitted by the bylaw [as in section 2(1)(b)], but a use or structure can be said to be permitted by the bylaw either as a use specifically permitted in the applicable zone [in this case, by section 7(1) for the WR zone], or they can be permitted by a general exception from the general prohibition [as in section 2(1)(c)]. Thus, it is submitted as being consonant with the intent of s.34(9) of the *Planning Act* and of this zoning bylaw, in accordance with the ordinary meaning of the words used, to interpret section 4(1)(a) as allowing accessory buildings or structures to be erected in this situation. Mr. Kussner sees the protection for, or in effect the allowance of, legally non-conforming uses or buildings as a minimum protection for the landowner on which a municipality may expand by its zoning by-law. He argues, supported by Mr. Dryer, that section 4(1)(a) is a policy choice by this municipality to allow an accessory structure to be erected either where the principal use is specifically permitted by the by-law or where it is a legally non-conforming use.

[46] I do not accept this argument. It flies in the face of the scheme of s.34 of the *Planning Act* ,the limited authorization to protect non-conforming uses and erection of structures in section 34(9) of the *Planning Act* and s.2(1) of the by-law, and it leads to unnecessary conflicts with other provisions of the zoning bylaw. Moreover, documentary evidence for such a policy choice having been made by this municipality is non-existent. Finally, the interpretation of section 21(c) and section 4(1) of the bylaw urged by the Township and Olympia distorts the ordinary meaning of the words used.

[47] Section 2(1)(c) of the bylaw simply states that the zoning bylaw does not prevent a use of a lot or of a building if such lot, building or structure was lawfully used for such purpose on the day of the passing of the bylaw. Section 2(1)(d) deals with the limited protection afforded the right to erect a building for a purpose prohibited by the bylaw; a building can be erected in that circumstance if the plans are approved prior to the bylaw's passage. They mirror s.34(9)(a) & (b) of the *Planning Act*. In this case, camping is a prohibited use and there was no building in place prior to the passage of the bylaw, nor was any permit approved prior to passage of the by-law.

[48] It is important to recognize that zoning bylaws are authorized by section 34 of the *Planning Act*; that is the source of the municipal zoning power. Section 2(1)(c) and (d) of the bylaw merely repeat the statutory law as to non-conforming uses and structures in s. 34(9). Throughout section 34, the distinction is maintained between prohibition and regulation of uses of land and prohibition and regulation of the erection of buildings and structures. Both the *Act* and the bylaw contemplate, as one method of zoning control, the prohibition of land uses and erection of buildings/structures unless they are permitted expressly by the bylaw. The "general prohibition" approach is the one adopted in this zoning by-law. Section 2(1)(c) and (d) of the bylaw do not contemplate anything more than protection of non-conforming uses and structures existing prior to the bylaw and used since (including acceptable intensification) and for erection of new structures where approval preceded passage of the bylaw. The by-law in s.2(1)(c) and (d) does not permit uses and new structures; it addresses the problem of uses and structures pre-existing the by-law which were established lawfully. Section 2(1)(c) and (d) cannot be said to permit uses of land or the erection of buildings/structures. The interpretation urged upon me by the Township would lead to a breakdown or erosion of meaningful land use control in that no longer would there be a distinction between uses or structures prohibited and permitted by a zoning bylaw. A legal non-conforming use would entitle the owner of the lot to erect accessory structures despite their express prohibition by the bylaw by a torturing of the words of sections 2(1)(c) and 4(1) and ignoring the additional legislative attempt at control of legal non-conforming uses in section 4(9)(a) (whereby a damaged building can only be replaced in its exact location in the case of a legal non-conforming use or structure); section 5(3) (which provides for the uses actually permitted by the bylaw in the different zones, and which in this case do <u>not</u> include camping), and section 2(1)(d) (which limits erection of new structures not in conformity with the bylaw only to those approved before the bylaw).

[49] Mr. Dryer argues that the caselaw interpreting and applying section 34(9) of the *Planning Act* should be the primary tool used in applying its principles to this case. He also submits that, in any event, that caselaw essentially follows the modern principles of statutory interpretation. The caselaw he refers to is primarily *Central Jewish Institute* and *Saint-Romuald*. As I have pointed out, and as those decisions themselves indicate, they do not speak to the distinction between uses permitted by zoning and uses or buildings that are protected from enforcement as legally non-conforming though prohibited by the zoning by-law.

[50] Mr. Dryer cited *Zalev Bros. Ltd. v. Windsor (City)* [1988] O.J. No. 935 (Ont.Dist.Ct.) as authority supporting his reading of section 34(9)(a) of the *Planning Act*. To the extent that *Zalev Bros.* ignores the distinction between legal non-conforming uses and erection of structures in section 34(9)(a) and (b) and approves a new "structure" accessory to a legal non-conforming use, I do not agree with it and I cannot follow it. I am not sure that this is the only interpretation of *Zalev*. In *Zalev*, the use of the land and the existing structures was for baling scrap metal. The company wanted to add a concrete pad as a foundation for a baler. The company had been baling scrap metal on this property for 20 years prior to the zoning restrictions and continuously since; it was a lawful use by way of acquired right. The court directed issuance of the building permit as an extension of an existing concrete pad without any real change to the type or intensity of use of the property. It appears to me that, if it was a case of an extension of a "structure" for purposes of the *Planning Act*, as the court appears to have found, it was a matter for the Committee of Adjustment under section 45(2) of the *Act*. That provision applies for a non-conforming structure to be enlarged or extended. However, it appears that in *Zalev* the court was dealing with an existing concrete pad which was to be extended, without any real change in the type of use of the land. I am not

sure that the pad addition was properly a "structure" within the context of the *Act*.

[51] I do not agree with Mr. Dryer that *Watts v. Benvenutti* [2006] O.J. No. 216 (Ont.C.A.), a case of a legal non-conforming use where no new building or enlargement or change to the land use occurred, somehow supports Olympia's position regarding the legality of the building permit for the new building in this case. In *Watts*, the trial judge found as a fact that there had been no change in the type of use from the period prior to enactment of the new zoning bylaw whereby agricultural uses such as a horse operation were prohibited. The Court of Appeal saw no reason to set aside the conclusion of the trial judge and found that section 45(2) of the *Planning Act* was not triggered because no change in the type of land use had occurred. No new building or structure was involved. *Watts* does not mean that section 45(2) of the *Planning Act* no longer applies to an enlargement of an existing non-conforming structure or a change in the type of legally non-conforming use.

[52] In summary, section 2(1)(c) of the bylaw protects the continuance of a legal non-conforming use as defined. It is to be interpreted, as is s.34(9) of the Act, to include some degree of intensification in line with the principles in *Saint-Romuald*. Section 2(1)(d) does not protect the right to build for a legally non-conforming purpose unless the plans were approved before passage of the bylaw. Section 2(1)(c) and 4(1) cannot be read harmoniously with the intent of the *Act* or their ordinary meaning in context with section 2(1)(d) and 4(9)(a) of the bylaw or within section 34(1) and (9) of the *Planning Act* as somehow converting a building proposed for a prohibited purpose to one to be erected for a purpose allowed by the bylaw. Nothing in what I have stated should be taken to detract from a municipality's power to permit or prohibit buildings as it chooses under s.34(2) of the *Planning Act* but it has not permitted a building accessory to a non-conforming use in this by-law by use of s.34(9)(a).

[53] No authority was cited to me, with the exception of *Zalev*, to support the propositions put forward by the Township and Olympia that section 34(9)(a) of the *Act* and sections 2(1) and 4(1) of the bylaw, in protecting a legally non-conforming use or structure, permit the erection of new structures accessory to the prohibited purpose of camping. For the reasons given, I reject that proposition. On this ground alone, the CBO erred in finding the building permit to not contravene the applicable law.

Compliance of the Proposed Building with the Accessory Requirements of the Bylaw

[54] If I am in error in my conclusion regarding contravention of the zoning by-law by a structure accessory to a legally non-conforming use, I must consider whether the proposed building meets the requirement of "accessory" building or structure in section 4(1)(a) of the zoning bylaw. That issue is a question of mixed fact and law, attracting deference to the CBO's decision to a standard of reasonableness. That standard of review imports an approach to the CBO's decision to ascertain whether it has a reasoned basis, on a reasonably probing review.

[55] Mr. Green submits that the proposed building is intended as an indoor amenity for up to 16 persons, including washroom/shower/toilet facilities, meeting rooms for campers and staff, and a double kitchen sink. Because the words "used for human habitation of any description" are held to include a building with facilities like heating and plumbing, he argues that the proposed building would contravene the accessory requirement in section 4(1)(a)(ii).[8] *Conlin* was a case of a one-storey studio built on the same lot as the owner's house. It was built to be used as an artist's studio where the owner would pursue her hobby of painting. The zoning allowed the house and one accessory structure, but "accessory" does not include a building which may be used for human habitation. The Divisional Court held, in addition to finding the studio to exceed the permitted building envelope without a variance, that heating and plumbing are prima facie indicators of use for human

habitation. Additionally, the Court held that the studio was not normally incidental to a home and was a main use, not secondary to it. It went beyond structures customarily accepted as accessory to a home such as a shed, garage, pool, cabana and similar structures.

[56] In this case, the CBO determined that the proposed building would house showers/washroom facilities for use only by campers from Olympia using the Point for camping purposes. Its meeting room provides shelter in inclement weather; no doubt that includes at night and in daytime, and room for cots or other sleeping equipment when desired. He refused to accept the original proposal for a kitchen because it went beyond the historic function of "this particular campground". (The CBO saw even a restaurant as an accessory use to a campground in his experience). He stated that, in function and use, it was accessory to the main camping use because it would be used solely by the campers and staff. He stated that it had no free-standing function at all.

[57] The planner retained by the applicant stated his opinion in his second affidavit that the proposed building represents a new use and cannot be considered accessory to the overnight camping use established prior to and since the bylaw's passage. He stated that indoor meeting facilities, shower facilities and a permanent septic system, requiring plumbing and electrical installation to operate, will encourage longer more intense usage of the Point. The drawing to the Point of hydro service, or placing of a generator, could serve as a precursor to further intensification. He stated that the building is large enough for use as sleeping quarters for more than 16 persons. He continued to call it an "accommodation centre". The CBO stated that the building is not intended for use for purposes of sleeping or accommodation; its use is only to serve a variety of camp related purposes, therefore, once erected, it is not clear what the control restriction such usage would be.

[58] Mr. Dryer cites in Olympia's factum the three requirements or components within the definition accepted by the courts of "accessory":

- The use or structure must be naturally and normally incidental to the principal use
- The use must be subordinate in purpose or floor area or both to a principal use
- The use must be exclusively devoted to a principal use and be located on the same lot. (Re: *1121472 Ontario Inc. v. Toronto (City)* [1995] O.J. No. 2942 (Ont. Gen. Div.)

[59] The word "accessory" is defined in the bylaw (section 3), when modifying a "building", as "a building that is secondary to and exclusively devoted to a main use, building or structure and located on the same lot".

[60] The building proposed is not supported by any evidence that I can find as a building subordinate and secondary to the main use. The uses to now have been basically those associated with outdoor camping. This lot is not a campground as suggested by the CBO where people come in vehicles, use the washroom, eat, and stay in camping facilities. There is no evidence before me that such a building is customarily incidental to outdoor camping. This building appears to change the main use from outdoor wilderness camping as an adjunct to the main camp to a central indoor facility for staff, campers, meetings, washroom facilities, in effect giving the Point the potential for the kind of new more continuous programming recently begun for two to three week intervals. It is not simply an enclosure for boats used to transport campers, or as an enclosure to protect from the rain. It is a program centre, an "indoor amenity" whose proposed use was never fully explained

by Mr. Grace, the proponent's president, in his affidavit. I do not find a rational basis for the finding that the proposed building was secondary to the main use, or that it is naturally or customarily incidental to it. I accept Mr. Crown's evidence in this regard and, following the reasoning in *Conlin*, find that the decision to permit the proposed building contravenes the zoning by-law.

[61] In my view, it is time that Olympia faces up to its zoning issue here and either applies publicly to rezone the Point in keeping with their plans for the Point as a new base of operation together with the north shore lot or brings an application to the Committee of Adjustment under s. 45(2)(a)ii) of the *Planning Act* for permission to establish a similar use of land. It is not clear, however, and this issue was not before me, whether the Committee could permit erection of a new building under that subsection.

[62] For the foregoing reasons, the appeal is allowed in respect of the building permit for the proposed building. Building permit No. 2004-0503 is hereby rescinded. The appeal in respect of building permit No. 2004-0446 is dismissed.

[63] Counsel may file written submissions on costs within 30 days.

HOWDEN, J.

Released: September 21, 2006

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[1] *Ottawa (City) v. Ottawa (City) Chief Building Official* [2003] O.J. No. 4530 (Div.Ct.), at para 110.
[2] Affidavit of S. Watson, Nov. 25/04, para 46; cross-examination of Mr. Wylie, pp 9-10
[3] Section 25(4), *Building Code Act*
[4] *Runnymede Development Corp. v. 1201262 Ontario Inc.* [2000] O.J. No. 981 (Ont. S.C.J.); *William F. White Ltd. v. Toronto (City) Chief Building Official* [1999] O.J. No. 2461 (Ont. S.C.J.); *Burns v Serpa* [2001] O.J. No. 2117 (Ont.S.C.J.) and *Rotstein v. Oro-Medonte (Township)* (supra).
[5] *118143 Ontario Inc. cob Canamex Promotions v. Mississauga (City)* [2004] O.J. No. 4143 (Ont.C.A. para 12)
[6] Note: clause 34(9)(b) makes reference to sections 5 and 6 of the *Building Code Act*. We believe this clause should refer section 8(1) and (10) of the *Building Code Act*, 1992: *Ontario Planning Act* 2004 – 5th ed., Canada Law Book Inc., at p. 34.
[7] *Aon Inc. v. Peterborough (City)* (1994) O.J. No. 1225; *Rotstain*, supra.
[8] *Conlin v. Prowse et al* (supra)

2006 CanLII 28741 (ON S.C.)
Citation: Philpott v. Innisfil (Town), 2006 CanLII 28741 (ON S.C.)
Date: 2006-08-23
Docket: CV-06-145

BARRIE COURT FILE NO.: CV-06-145
DATE: 20060823

ONTARIO

SUPERIOR COURT OF JUSTICE

B E T W E E N:	)	
	)	
PAUL PHILPOTT and CHRISTINE PHILPOTT	)	Ms. Ellen Anderson, for the Applicants
	)	
Applicants	)	
	)	
- and -	)	
	)	
THE CORPORATION OF THE TOWN OF INNISFIL and HEATHER RUTHERFORD in her capacity as CHIEF BUILDING OFFICIAL OF THE CORPORATION OF THE TOWN ON INNISFIL	)	Mr. E. Marshall Green, for the Respondents
	)	
Respondents	)	
	)	
	))	**HEARD:** August 2, 2006 at Barrie, Ont.

REASONS FOR DECISION ON APPEAL

R. MacKINNON J.:

OVERVIEW

[1] This is an appeal from the refusal of the respondent Rutherford as Chief Building Official (the "CBO") of the Town of Innisfil to issue a building permit for a single family dwelling house on the applicants' lands at 1150 Arnold Street in that municipality. The appellants, under section 25(1) of the *Building Code Act*, (1992), S.O. 1992, c.23 (herein "the Code"), have the burden of demonstrating that the decision was in error. Under section 8 of the Code, it is only where "applicable law" prevents issuance that a CBO can refuse to issue the permit applied for. The legal issue before me is whether the CBO exercised her Code duty validly.

[2] The applicants submitted their application on October 29, 2004. The CBO's refusal was only issued on February 2, 2006. Counsel agree that the appeal standard on this review falls somewhere on a continuum between correctness and reasonableness. I agree, but my view is that the standard is closer to correctness because, pursuant to section 8(2) of the Code, a CBO is required to consider and apply "any other applicable law".

[3] For reasons that will follow, it is my view that Innisfil's CBO very belatedly, but properly, denied the application. In doing so she exercised her duty validly.

BACKGROUND

[4] On September 22, 2004, Innisfil passed consolidated zoning Bylaw 054-04, which granted single, residential (R1S) zoning for the applicants' property. Prior to that date, it was zoned Hold zone pursuant to the Municipality's Bylaw 036-98, which did not permit a single-family residence. Bylaw 054-04 was appealed to the Ontario Municipal Board (the "OMB") by

a number of affected parties, but not the appellants. It remained under appeal on October 29, 2004 when the appellants applied for their building permit.

[5] Between the fall of 2004 and the spring of 2005, Innisfil commenced the process of passing an amending bylaw to reflect approximately 35 errors in Bylaw 054-04. One of those errors related to the appellants' property which Innisfil had meant to retain in a hold category. The applicants received no response from the CBO either approving or denying their building permit application until April 2005. At no time during that period did Innisfil either advise them that the R1S rezoning of their lands under Bylaw 054-04 was an error or pass an interim control bylaw.

[6] The appellants' counsel wrote the CBO in April 2005 to inquire on the status of their application. The Municipality responded that it anticipated passing an amended bylaw to address clerical errors in the consolidated Bylaw 054-04, including an error with respect to the applicants' property. Mr. And Mrs. Philpott's counsel then requested in June 2005 that the permit application be held in abeyance pending resolution of the zoning matters. That abeyance expired with the July 19, 2005 decision of the OMB to which I will shortly refer.

[7] On June 29, 2005, (before that OMB decision) Innisfil enacted amending Bylaw 045-05 which rescinded the R1 zoning in Bylaw 054-04. The Philpotts' property was rezoned from Residential R1S to Future Development (FD) Zone, which once again did not permit a single detached dwelling.

[8] On July 22, 2005, the Philpotts' counsel appealed amending Bylaw 045-05 as it related to their property, but later withdrew the appeal in March 2006. It was accordingly deemed to be in effect as of June 29, 2005, and the FD zoning was confirmed.

[9] On July 19, 2005 the OMB held that consolidated zoning Bylaw 054-04 (except for certain sections not relevant to the applicants) was approved. It was deemed in law to have come into force on September 22, 2004, its date of passing. The applicants thereafter pressed Innisfil for a decision on their application and were eventually advised on February 2, 2006 by its CBO that the permit was refused on grounds that appropriate zoning had yet to be approved.

POSITION OF THE PARTIES

[10] "Applicable law" in this case requires a determination of the appropriate zoning to be applied. It is the position of the appellants that the CBO both failed to issue their building permit in accordance with the applicable zoning in place at the time they applied, and also failed to give proper and timely reasons for her refusal. They argue that they experienced considerable upset in their plans for retirement and incurred legal costs. They point out that they waited from when they applied in October 2004 until June 7, 2005 (when they consented that Innisfil should continue to hold the application in abeyance pending OMB disposition of the appeal of Bylaw 054-04), and also from July 19, 2005 (when the OMB decision in 054-04 was issued) until February 2, 2006 (when the permit refusal decision was conveyed to them). They argue that after the retrospective effect of Bylaw 054-04, a window of opportunity was created for them between September 22, 2004 (its deemed effective start date) and June 29, 2005 (the retrospective effective date for Bylaw 045-05 after abandonment of all appeals). The applicants argue that the only applicable zoning bylaw in effect at the time of submission of their application (and during the opportunity window) was Bylaw 054-04 which permitted what they sought to build.

[11] The Municipality and the CBO argue that at the application date, Bylaw 054-04 was then under appeal and therefore stayed by virtue of section 34(30) of the *Planning Act*. They point to the June 2005 correspondence between the Town and applicants' counsel where it was agreed that no

decision would be made until issues surrounding the zoning of the property had been clarified. That abeyance continued until the applicants requested on July 19, 2005 that the CBO make a decision. Innisfil argues that by that date, Bylaw 054-04 had been passed but was under appeal. The respondents submit that when the CBO was ultimately called upon to make a decision after July 2005, she was obliged to look to amending Bylaw 045-05 as applicable law for the purposes of her decision.

DISCUSSION

[12] Prior to January 2006, no regulation was in force with respect to the time period within which a CBO was required to determine whether to issue or refuse a building permit. The Innisfil CBO, however, operated on a code of conduct for building officials which required standards of professionalism, fairness and independence. Her failure to promptly notify the Philpotts for six months of the municipal intention to rezone their property to correct municipal errors breached that code. While I find no bad faith or mala fides on the part of herself or the municipality, her delay was inappropriate and inexcusable.

[13] Zoning classification questions are issues of mixed fact and law about what actually took place and about whether the facts in an individual case satisfy the legal test. These situations require deference to a decision of a CBO on a standard closer to reasonableness than correctness in situations where the CBO is acting closer to the core of his/her specialized knowledge, training and experience – and closer to correctness than reasonableness on issues which involve determination of the applicable law. This is one of the latter cases.

[14] In *Woodglen and City of North York* (1984) 47 O.R. (2d) 614, the Divisional Court held that municipalities no longer have a need to delay applications for building permit so that new zoning bylaws may be made effective because they have the power under section 38 of the *Planning Act* to pass interim control bylaws when land use policies are being reviewed. Our courts have generally held that building permits should issue when the proposed building complies with all requirements at the time of the application for the permit.

[15] In *Sixteenth Warden Ltd. v. Markham* (1993) O.J. No. 692, the court held that a judge must place herself or himself in the shoes of the CBO as of the date of receipt of the application and decide whether the issuance of a building permit would contravene any applicable law.

[16] In *Mayhew v. Hamilton* (2002) O.J. No. 1962, the court held that a CBO has no discretion to exercise when all statutory requirements have been fulfilled - even in a situation of error and revision of a comprehensive zoning bylaw. That court held that the rights of the applicant were to be determined at the time that the CBO makes the decision and that the applicable law was the law in force at that time. That court held that the intention of the Municipality to rezone to prohibit construction was not a valid reason for refusing or prohibiting the issuance of the permit.

[17] In *Wolfond v. North York* (1990) O.J. 1370, the court held that administrative delay by the CBO in acting on the applicant's building permit applications should not be permitted to deprive the applicants of their rights.

[18] When the Philpotts applied for their permit in October, 2004, Bylaw 054-04 was then under appeal. That is the only bylaw under which the Philpotts could gain a permit for single family dwelling.

[19] It is my view that there was no point in time, relevant to the Philpott application, where the CBO (based on the law as covered in the *Planning Act* and expanded in the case law) could have issued the permit under applicable law. There was considerable confusion in the Innisfil planning process and in the CBO's communication to the Philpotts and their counsel, but I am not satisfied that bad faith is demonstrated. When the

CBO was called upon to make a decision, she was entitled to look and did look at the amending Bylaw 045-05 as applicable law for her decision. It would have then been inappropriate for her to act in a way that was contrary to the clear intention of her council as expressed by its passage in June 2005 of the amending Bylaw 045-05. Innisfil's clear intention was to correct drafting errors in Bylaw 054-04 and not to permit the building of a home on the appellants' property.

[20] The decision of the CBO in these circumstances fell to be determined at the time she was ultimately called upon to make her decision. That decision was, by agreement of the parties, held in abeyance until July 2005. The municipality's amending bylaw had been passed by that date but was under appeal. At the time she was called to make her decision and for a period of time thereafter amending Bylaw 045-05 was in place. When all appeals were subsequently withdrawn to that bylaw, its retroactive effective date was June 29, 2005.

[21] It is my view that at all times material to the applicants' permit application, Innisfil's applicable zoning bylaw did not authorize the use of the land for purpose of a single family detached home by reason of the operation of section 34(30) of the *Planning Act* as it applied to its zoning bylaws. That said, the CBO's decision took an unreasonably long period to make and to be communicated to the applicants.

[22] Considering the continuum between reasonableness and correctness, I am of the view that the appeal fails as the eventual decision was both reasonable and correct. Accordingly this application is dismissed.

COSTS

[23] If the parties are not able to agree on the issue of costs they can, within 20 days from the date of issuance of these reasons, submit Bills of Costs and written argument of no more than three pages, single spaced. The parties from whom costs are sought shall respond, if at all, with materials of no more than the same length, within seven days after receipt of the requesting parties materials.

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R. MacKINNON J.

Released: August 23, 2006

23 M.P.L.R. (4th) 87

Water & Ice Ltd. v. Muskoka Lakes (Township)

Water & Ice Limited, Applicant and Neil Donald. Chief Building Official for the Township of Muskoka Lakes and the Corporation of the Township of Muskoka Lakes, Respondent

Ontario Superior Court of Justice

Shaughnessy R.S.J.

Heard: June 26, 2006
Judgment: June 29, 2006
Docket: Bracebridge 1-06

Counsel: Jameson W. Clow for Applicant
Michael E. Fitton, Q.C. for Respondents

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APPLICATION for declaration that property owner was entitled to building permit and for order requiring municipality to issue permit.

***Shaughnessy R.S.J.*:**

1 The Indian River traverses part of central Ontario and connects Lake Rosseau with Lake Muskoka. The Applicant wishes to develop land as a marina on the Indian River at Port Carling in the Township of Muskoka Lakes. The property is comprised of 2.65 acres of dry land and approximately 1.2 acres of flood land.

2 The Applicant seeks a declaration that it is entitled to a Building Permit for the construction of boat docks and refueling facilities with respect to the development of the marina. The Applicant also seeks an Order that the Respondents be required and directed to issue a Building Permit for this construction pursuant to s. 8 of the *Building Code Act*. S.O. 1992, C.23.

3 The Respondent submits that pending the completion of an environmental assessment, it is premature to decide on a Site Plan Agreement which is a prerequisite to the issuance of a building permit.

Background Circumstances

4 Part of the subject property is zoned C2 which is zoning for a marina: part is zoned EPI as it is a marshy area and the flood area in front along the Indian River is zoned WOS.

5 Historically, part of the subject land was zoned C2 and used as a boat storage facility for many years. There were older docks placed in the Indian River in this location. On or about September 13, 2004. Water and Ice Limited submitted an application for site plan approval to develop the property as a new and expanded marina facility. No new docks or refueling facilities were proposed in this initial application. The Applicant obtained a building permit to construct buildings on the lands zoned C2. However, the Applicant then proceeded to build structures not in accordance with the permit. The Respondents raised objections to the construction and compelled the Applicant to obtain a revised building permit before revised plans and a revised site plan application were approved. The appropriate plans and applications related to the dry land marine storage facility were eventually provided and approved and are no longer an issue in this proceeding.

6 On March 17, 2005, the Applicant, Water and Ice Limited applied for an amendment to the site plan. The Application indicated there was no change in use as the property would still be used for marina storage and service. This amendment proposed two new docks on the Indian River that would be 12 feet wide and 66 feet in length with proposed gasoline dispensing facilities.

7 The Site Plan amendment for 2 new docks with gasoline dispensing facilities was presented with supporting reports from required agencies to the Township Planning Committee meeting of October 6, 2005. At this meeting, the Committee recommended an environmental assessment report. The Committee directed that a consultant be retained for the environmental assessment which it had authorized. The cost of the environmental study was to be borne by the Township of Muskoka Lakes.

8 It is not disputed that at the October 6. 2005 Planning Committee Meeting, the Applicant filed approvals from Transport Canada, the Department of Fisheries and Oceans, the Ministry of Natural Resources, as well as the environmental reports of the Applicant's expert. Michalski Neilson Associates Limited.

9 The Township also commissioned a peer review of the reports of Michalski Nielson. This review was conducted by Gartner Lee Limited. Their report is dated February 3, 2006.

10 The Applicant's environmental experts responded to the Gartner Lee peer review in a reported dated April 27, 2006.

11 The Court is advised that the Environmental Assessment Report will be available as of mid-September. 2006.

12 The Applicant made an application to the Ontario Municipal Board on November 3. 2005, pursuant to s. 41 (12) of the *Planning Act*. to determine the terms of and to approve a Site Plan Agreement relating to the docks and gasoline dispensing facilities. The Court is advised that the OMB hearing is expected in the fall of 2006.

13 On December 12, 2005 Water and Ice Limited submitted a Building Permit application with respect to the docks and refueling facilities. The Applicant was notified that it's

application for a building permit had been rejected on the basis that a Site Plan Agreement with respect to the docks and refueling services had not been agreed to.

Official Plan

14 The property is zoned C2 (Community Commercial Marina). The property zoned C2 is immediately adjacent to an area zoned EPI and designated as Environmental Protection in the Township Official Plan.

15 The Applicant's biologist, in affidavits, has identified the area in which the docks are to be placed as follows:

This type of habitat, particularly the shallow and productive nature, as well as its size is not common on Lake Muskoka or Lake Rosseau. For these reasons, this habitat should be appropriately protected and any in-water work properly mitigated.

16 The Official Plan Section C6.1.3. provides that:

Development adjacent to Environmental Protection wetland areas may be permitted provided that it does not result in any of the following.

I. Loss of wetland functions;

II. Subsequent demand for future development which will negatively impact on existing wetland functions;

III. Conflict with existing site-specific wetland management practices; and

IV. Loss of contiguous wetland area.

The Township may require that a proponent prepare an Environmental Impact Study addressing the above"

(emphasis added)

17 Accordingly, this section provides the opportunity to the Township to require an environmental impact study where development occurs adjacent to an Environmental Protection area.

18 Further, the Township may require under section F18.1 of the Official Plan, that in respect to a Site Plan Agreement, studies that *inter alia*, comment on the impact of a development on parks and recreation, the impact of boating, as well as biophysical concerns.

Legislative Provisions

19 The Township, in making a decision concerning this planning matter, is required by statute to make those decisions having due regard to the Policy Statements issued pursuant to the *Planning Act, R.S.O. 1990*, c.P. 13 ss. 3 (1) and (5). It follows that a decision relating to site plan control must be consistent with the Policy Statements.

20 The Provincial Policy Statement (2005) section 2, provides requirements relating to natural features and areas; fish habitat; restricting development, and site alteration in or near sensitive water features.

Building Code Act, 1992 S.O. 1992, C. 23

21 Section 8 (1) of the *Building Code Act* provides that no person shall construct or demolish a building or cause a building to be constructed or demolished, unless a permit has been issued by the Chief Building Official. Once all requirements are met, the Chief Building Official must issue a

building permit. The application must meet the requirements of applicable law. which *inter alia* includes the requirement of a site plan approval under the provisions of section 41 of the *Planning Act*. The general rule is that a building permit should not be issued where section 41 of the *Planning Act* applies, until site plan approval has been obtained from Council or the Municipal Board (*Quay West v. Toronto (City)*, [1989] O.J. No. 3072 (Ont. Div. Ct.), pg. 3 and *Ross v. Muskoka Lakes (Township)* [2004 CarswellOnt 19 (Ont. S.C.J.)] [2004] Can. L11 18309 pg. 7). Therefore, no person is to undertake construction until a site plan approval has been given.

Bad Faith/Unlawful Acts

22 The Applicant acknowledges that it cannot undertake construction in a site plan control area. It is also accepted that a condition to the approval of plans and drawings may require the owner of the land to meet specified conditions. However, it is submitted that in the present case. there is an attempt by the Township to prevent the land uses permitted by the Zoning By-law and to impose stricter standards on matters set out in the By-law. It is the Applicant's position that the Township is attempting to extend the range of items which they can approve or require through the use of site plan control and site plan agreements.

23 There is authority that a Court may order that a building permit be issued, despite a lack of site plan control, where there are "extraordinary circumstances" in which the municipal authority acted in bad faith, or for a clearly unlawful purpose (*Polla v. Toronto (City) Chief Building Official* , [2000] O.J. No. 4399 (Ont. S.C.J.) para 3); *Luxor Entertainment Corp. v. North York (City)*, [1996] O.J. No. 360 (Ont. Gen. Div.) p. 18; *Quay West v. Toronto (City)*, [1989] O.J. No. 3072 (Ont. Div. Ct.) para. 10.

24 The Courts have determined that the categories of what might be considered to be "extraordinary circumstances" is not closed and the determination is a factual one. However, examples of where "extraordinary circumstances" exist are:

(a) Where a site plan has been withheld for an unlawful reason;

(b) Where a municipality has not been acting in good faith;

(c) Where a municipality is using the lack of site plan approval as a basis for its refusal to issue a building permit and there is nothing to suggest that the site plan approval cannot be obtained in the ordinary course. (*Luxor Entertainment Corp. v. North York (City)*, *supra para. 18; Polla v. Toronto (City) Chief Building Official*, *supra*, *para. 17; Dominion Stores Ltd. v. Etobicoke (Borough)* (1982), 37 O.R. (2d) 661 (Ont. Div. Ct.).

Issue: Do the actions of the Township in this proceeding constitute "extraordinary circumstances" requiring the Court to review the process?"

25 Based on the material filed at this stage of the proceedings, I do not find any evidence of bad faith, or an unlawful act on the part of the Township Council. I do not find that there are any "extraordinary circumstances" requiring this Court to review the process and order that a building permit be issued without site plan control.

26 The Applicant has referred extensively to the decision in *Polla v. Toronto (City) Chief Building Official*, [2000] O.J. No. 4399 (Ont. S.C.J.). In the *Polla* case, the applicant sought to tear down her house and build a new one. The residential property backed onto a ravine and therefore, the applicant submitted a plan wherein she would build a retaining wall at the back of the property, thereby extending the usable land.

27 The applicant *Polla* had met all other conditions for the issuance of a building permit, except for obtaining site plan approval. The City of Toronto stated that it would not provide site plan approval unless the retaining wall was removed and the land restored to its natural state and that the proposed house was located a minimum of 10 meters from the edge of the ravine.

28 In the *Polla* case, (para 3), Justice Molloy cited the decision of the Divisional Court in *Quay West v. Toronto (City)* (1989), 47 M.P.L.R. 109 (Ont. Div. Ct.), at 111 that "as a general rule a building permit should not be issued for a development in a site plan control area to which [s. 41] of the *Planning Act* applies until site plan approval for the development has been obtained." The Polla case also cites *Quay West v. Toronto (City) (supra)*, for the principle that a building permit could only be issued without site plan approval if there were "extraordinary circumstances" in which the municipal authority was "acting in bad faith or for an obviously unlawful reason".

29 Justice Molloy in the *Polla* case, made specific findings on the evidence that the applicant was legally entitled to erect the retaining wall at the rear of her property. It was further a finding that the *Polla* property did not fall within the regulatory control of the Toronto Regional Conservation Authority and it was "not subject to zoning by-laws restricting activity on the property that might adversely affect the ecological balance in the ravine." (para 11)

30 There are specific findings in the *Polla* case that the City of Toronto, consistent with its Official Plan, may have imposed conditions directed towards safeguarding the natural environment of the ravine. Nevertheless until appropriate by-laws were passed, the Official Plan could not be used by the municipality to regulate land use. Therefore, in the *Polla* case, there was a specific finding that "the City has used power given to it for one purpose, to achieve a result that it has no legitimate legal authority to compel." (para 17)

31 There are numerous other authorities both from the OMB and the Courts rejecting attempts by municipal councils to use the guise of site plan control and site plan agreements to exceed their jurisdictions.

32 However, the present case on its facts, is much different. There are zoning by-laws in place governing the subject property. There are reasonable and lawful reasons for the Corporation of the Township of Muskoka Lakes to obtain an environmental assessment *at its own expense*.

33 The subject property zoned C2 is immediately adjacent to an area zoned EP1 and designated environmentally protected lands. The Official Plan requires a site evaluation report pursuant to Section C6.1.3. The Township may also require pursuant to F18.1. a Site Plan Agreement with studies on the impact of this development on parks and recreation, as well as the impact of boating on the area and other biophysical concerns.

34 I have particularly noted that the Township requested the firm of Gartner Lee Limited to provide a technical peer review of the Fish Habitat Assessment, (June 7, 2005) submitted by Michalski Neilson Associates on behalf of the Applicants and in support of the proposed redevelopment of marina lands on the Indian River in Port Carling, Ontario.

35 The Gartner Lee Limited report of February 3. 2006 details that the scope of the assessment by Michalski Neilson report is narrow in that "it is focused on the proposed infrastructure (docks and launch ramp) with little consideration of the activities that accompany this infrastructure." The Gartner Lee report states that the Michalski Neilson report "appears to be lacking an evaluation of potential impacts to fish

habitat." It is further stated that the Michalski Neilson report relies on "outdated (1981) background information" relating to the function that the habitat provides to local fish populations. Further, the Report states that Michalski Neilson does not comment on the potential impacts to fish habitat arising from the proposed re-development. Accordingly, the peer review report states that without "an assessment of impacts, there is a gap in the accepted approach to reporting methodology and between results and conclusions." The peer review report of Gartner Lee details a number of other concerns relating to the Michalski Neilson report (on which I do not propose to comment) and concludes as follows:

In summary, the [Michalski Neilson] report is adequate in terms of its limited scope on whether or not docks and the boat launch can be built to accommodate fish habitat. It provides appropriate conclusions in this regard. We conclude however, that fish habitat assessment is dated, incomplete and that the scope of the assessment should be expanded to consider the environmental implications of the entire project, and in particular, means to protect the aquatic vegetation community.

(emphasis added)

36 The Gartner Lee report of February 3. 2006 is authored and signed by Nick Hodges, an Intermediate Fisheries Biologist and Neil J. Hutchinson, Ph.D, Senior Aquatic Scientist.

37 In response to the peer review report, Mr. E. Al Shaw. MSc. Aquatic Biologist for Michalski Neilson Associates Limited, forwarded a report to the Applicant's planner dated April 27, 2006. In this response, it is stated that it was necessary to confirm their scope and role in the project. It is indicated that while completing an assessment of fish habitat fronting the property, they (Michalski Neilson) were "not retained to undertake an Environmental Impact Statement (EIS); nor was it our understanding that such a study was required." Nevertheless, Michalski Neilson state that overall the comments in the peer review report do not change their views of the proposed docking system and with proposed mitigation measures there will not be an adverse impact on fish and fish habitat.

38 Therefore, at this stage, the Applicant's experts and the peer review do *not* agree on the scope and adequacy of the Michalski Neilson report.

39 In these circumstances, it appears reasonable for the Township to obtain an Environmental Assessment Report in light of the allegation of deficiencies. Indeed, it is the duty and responsibility of the Council to ensure compliance with the policy statements issued pursuant to the *Planning Act*. A site plan control must be consistent with the policy statements of the *Planning Act*. These policy statements specifically address fish habitat and restricting development and site alteration near sensitive water features and/or natural features and areas.

40 Therefore, I find that there are no "exceptional circumstances" warranting the relief requested by the Applicants. Further, I find that the Court, while having jurisdiction, ought not to intervene barring exceptional circumstances. The Supreme Court of Canada in *Guignard c. St-Hyacinthe (Ville)* , [2002] S.C.J. No. 16 (S.C.C.) at para 11 stated:

This Court has often reiterated the social and political importance of local governments. It has stressed that their powers must be given a generous interpretation because their closeness to the members of the public who live or work on their territory make them more sensitive to the problems experienced by those individuals.

41 Therefore, the Township has a public function to protect

the public interest. Accordingly, due deference should be given to the Township provided that it has acted within its jurisdiction.

42 I find that it is appropriate and within the legislated powers of the Township to order, at public expense, an environmental assessment. This report is due approximately mid-September, 2006. Until this environmental assessment is completed, it is not known what the Site Plan Agreement should contain. Specifically, I do *not* find that the Township in directing an environmental assessment, is cloaking an attempt to control use or impose conditions beyond its jurisdiction.

43 Accordingly, the application is dismissed.

44 The parties may contact my secretary to arrange an appointment to speak to the matter of costs.
Application dismissed.

Shaughnessy R.S.J.

Court File No.143/06

ONTARIO SUPERIOR COURT OF JUSTICE
DIVISIONAL COURT

BETWEEN:

ASSOCIATION OF PROFESSIONAL ENGINEERS OF ONTARIO and
BERNARD ENNIS, P. Eng.

Applicants

- and -

HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO as represented by THE MINISTER OF MUNICIPAL AFFAIRS AND HOUSING and DAVID BREZER, P. Eng. in his capacity as DIRECTOR OF THE BUILDING AND DEVELOPMENT BRANCH OF THE MINISTRY OF MUNICIPAL AFFAIRS AND HOUSING and in his capacity as a CHIEF BUILDING OFFICIAL
Respondents

HEARD: October 26-27, 2006

BEFORE: Lane, Chapnik and P. Smith, JJ.

COUNSEL: Richard Steinecke and Lisa S. Braverman, for the Applicants.

Dennis W. Brown, Q.C., and Sandra Di Ciano for the Respondents.

David C. Moore and Kenneth G. G. Jones for the Intervenor, Ontario Association of Architects.

REASONS FOR JUDGMENT

LANE J.:

[1] This application for judicial review challenges the validity of certain amendments to the Building Code, Ont. Reg. 403/97, a regulation enacted pursuant to the *Building Code Act, 1992*, S.O. 1992, c. 23 (the "*Building Code Act*").

[2] The applicants say that the amendments are invalid to the extent that they establish a duplicate registration or qualification scheme for Association of Professional Engineers of Ontario ("PEO") licence holders who prepare designs or conduct general reviews of buildings. The applicants contend that this regulation is invalid and should be read down to exclude PEO licence holders.

[3] For the reasons that follow, the application is allowed.

INTRODUCTION

The Parties

[4] The applicant PEO is the statutory body that regulates the practice of professional engineering in Ontario under the *Professional Engineers Act*, R.S.O. 1990, c. P.28. PEO regulates persons who hold licences, temporary licences, limited licences a provisional licences and entities that offer engineering services directly to the public who must hold certificates of authorization. Collectively they are called PEO licence holders.

[5] The applicant Bernard Ennis is a professional engineer employed by PEO. He is the PEO's Manager of Practice and Standards. He has also been designated as the professional engineer to assume responsibility for, supervise, and direct the professional engineering services performed by PEO itself (i.e. in respect of its own building space).

[6] The intervenor Ontario Association of Architects ("OAA") is the body established under the *Architects Act*, R.S.O. 1990, c. A.27, which is responsible for licencing and regulating architects in Ontario. OAA supports the application.

[7] The respondent Minister of Municipal Affairs and Housing (the "Minister") is responsible for the Building Code. The respondent David Brezer, P. Eng., is employed by the Ministry of Municipal Affairs and Housing ("MMAH") as the Director under the *Building Code Act*. The Director is the official responsible for administering and enforcing the regulatory scheme under the Building Code. The Director also doubles as a chief building official where no other is available.

The Application

[8] As will be detailed below, since December 31, 2005 the Building Code has established a regulatory scheme for persons who prepare designs or conduct general reviews of buildings in Ontario.

[9] Mr. Ennis has been asked to renovate PEO's head office. He is not registered or qualified under the Building Code to prepare building designs or to conduct general reviews and has not taken the required Building Code examinations. As such he is concerned that it would be illegal for him to prepare and submit the designs or file a general review commitment form for the renovations.

[10] The applicants say that PEO licence holders are not subject to the regulatory scheme under the Building Code, and have brought this application seeking declarations to that effect, as well as injunctive and other relief.

The Parties' Positions

[11] The applicants' submission is that, at least to the extent that *Building Code Act* and Building Code provisions establish a competing regulatory scheme for PEO licence holders who design or conduct general reviews of buildings, such provisions are invalid for the following reasons:

> (a) The impugned provisions encroach upon the PEO's exclusive regulatory jurisdiction under the *Professional Engineers Act.*
>
> (b) The impugned Building Code provisions are not authorized by the *Building Code Act*.
>
> (c) The impugned Building Code provisions unlawfully sub-delegate authority.

[12] The respondents submit that the provisions are valid enactments for the purpose of protecting the public by providing for the establishment and enforcement of standards relating to the construction and demolition of buildings. They are laws of general application and do not single out PEO licence holders, nor do they have as their purpose the regulation of PEO licence holders. They apply to the general class of designers and building practitioners with the purpose of ensuring public safety. They do not infringe on the jurisdiction of the PEO, nor is there conflict between the *Building Code Act* and the *Professional Engineers Act*. But if there were such a conflict, the Building Code, as the later enactment, would prevail.

[13] The respondent further submits that s. 34 (1) of the *Building Code Act* contains clear and unequivocal authority for the impugned Building Code provisions, and the Building Code does not constitute unauthorized sub-delegation.

[14] The intervenor OAA supports the applicants. It, like the professional engineers, lobbied the government against the

imposition of regulations to impose this additional regulatory regime in respect of building permit applications. Pending the resolution of this dispute, the OAA entered into a Memorandum of Understanding ("MOU") with the Minister, establishing a parallel regulatory regime within the OAA. Its position is that this regime will be ended if the PEO is successful in the present litigation.

[15] The OAA submits that the Building Code regime goes far beyond the establishment of standards for the content of applications for building permits or rules for their processing. Rather, it provides extensively for the training, qualifications and licensing of persons submitting applications and vests the Director with a variety of intrusive powers as to books and records and the suspension or revocation of an registrant's status. It is the difference between regulating the application for the building permit and regulating the individuals applying that underlies the OAA's objections to the Building Code regime.

[16] The OAA does not dispute the power of the Legislature to revise the governance of the profession of architecture by appropriate legislation, but raises the issue of whether the present legislation empowers the establishment by regulation of a parallel regulatory structure that derogates from the OAA's exclusive jurisdiction to govern architects. It submits that the Building Code provisions at issue are invalid:

> There are two simple and straightforward elements to this position: (1) under the *Architects Act* the OAA has exclusive jurisdiction to regulate architects and the practice of architecture in the Province of Ontario, (2) any regulation which purports to derogate from the established exclusive jurisdiction of the OAA must be clearly and unequivocally authorized by statute.[1]

[17] The resolution of this dispute requires an examination of the regulatory schemes under both the *Professional Engineers Act* and the *Building Code Act* and Building Code.

Regulatory Scheme under the *Professional Engineers Act*

[18] The applicant PEO is statutorily mandated to regulate the practice of professional engineering in the public interest.

[19] The "practice of professional engineering" means "any act of designing, composing, evaluating, advising, reporting, directing or supervising, wherein the safeguarding of life, health, property or the public welfare is concerned and that requires the application of engineering principles"[2].

[20] A significant component of the practice of professional engineering relates to design and general reviews of the construction of buildings.

[21] The word "design" and the phrase "general review" are terms of art in the building construction field and are defined in s. 12 (8) of the *Professional Engineers Act*.[3] The word "design" is defined in a substantially similar manner in s. 15.11 (6) of the *Building Code Act*. A general review assesses the conformity of the construction of the building to the design and is not, *per se*, an evaluation of its conformity with the Building Code.

[22] PEO licence holders share with architects the exclusive right to design and conduct general reviews of buildings. This exclusivity is shared in a carefully negotiated arrangement with architects set out in complementary provisions of the *Professional Engineers Act* and the *Architects Act*.[4] Both statutes were enacted in 1984. A Joint Practice Board of the two professions helps avoid confusion and conflicts between them.

[23] The *Professional Engineers Act* provides a comprehensive regulatory scheme for the registration of PEO licence holders (through a review of education and work experience and the examination of applicants), the investigation of concerns and complaints and the discipline of PEO licence holders, the setting of standards of practice, the carrying of professional liability insurance, and other regulatory powers.

[24] The PEO is active in the regulation of PEO licence holders who design and conduct general reviews of buildings.[5] The PEO's definition of professional misconduct has a number of applicable provisions, including performance standards specifically applicable to the Building Code. A significant proportion (almost half) of the PEO's complaints and discipline activities relate to Building Code work. The PEO has published numerous relevant professional practice guidelines. Finally, all PEO licence holders offering services to the public must obtain a certificate of authorization and meet the specified professional liability insurance requirements.

Regulatory Scheme under the *Building Code Act*

[25] For many years Ontario has had a system to regulate building construction. Plans must be submitted in order to obtain a building permit. Buildings under construction are subject to government inspections and various enforcement orders (e.g., stop work orders). This system was updated with the *Building Code Act*, which was proclaimed into force in 1993, almost ten years after the *Professional Engineers Act* became law.

[26] In 2000 the Trow Report and the BRRAG Report were released. The major theme of both reports was to streamline the building approval process under the *Building Code Act* and Building Code. Neither report identified significant concerns in the conduct of PEO licence holders. The BRRAG report also dealt with increasing the competence and accountability of those involved in the building industry, including those who do the actual construction. Again, PEO licence holders were not singled out. The BRRAG report specifically recommended that new initiatives should not duplicate existing regulatory structures.

[27] In 2003 the *Building Code Act* was amended to authorize a regulatory scheme for, among others, those persons preparing designs and conducting general reviews of buildings. Amendments to the Building Code were made in 2003 and 2005, taking effect on December 31, 2005. (The relevant provisions of the *Building Code Act* and Building Code are reproduced in Schedule A at the end of these reasons).

[28] The *Building Code Act* says the role of "designers" is to provide designs that comply with the Act and the Building Code, to provide sufficient information for building officials to determine such compliance, to perform general reviews, and to have the necessary qualifications and insurance required by the Building Code.[6] These are general role statements and PEO licence holders are not specifically identified in them. The *Building Code Act* also describes the role of chief building officials and other officials who determine whether a design or other construction work complies with the Building Code and who also enforce the legislation by issuing or withholding building permits.[7]

[29] The *Building Code Act* continues to recognize the expertise and qualifications of PEO licence holders and allows the making of regulations restricting certain aspects of general reviews only to PEO licence holders and/or architects.[8] The *Act* also expressly recognizes the regulatory role of the PEO and authorizes building officials to refer concerns about designs and general reviews by PEO licence holders to the PEO for regulatory action. At the request of the PEO, chief building officials must provide documents and information to PEO for regulatory action.[9]

[30] Article 2.3 of the Building Code allocates among PEO licence holders, architects and the public the ability to design and conduct general reviews of various types of buildings. The *Professional Engineers Act* and the *Architects Act* also address these matters.

[31] The Building Code regulatory scheme applies to every person engaged in the business of providing "design activities" to the public, excluding architects.[10] Where a design is intended to be submitted for a building permit, "design activities" include the preparation of the building design or the giving of an opinion concerning whether the building complies with the Building Code. As already mentioned above, this definition is very similar to the definition of "design" in the *Professional Engineers Act*.

[32] Article 2.17 of the Building Code sets out the qualifications and other requirements of designers that are subject to the regulatory scheme, including the following:

a. Successful completion of an examination program administered or authorized by the MMAH for registration / qualification;
b. A requirement to carry specified liability insurance;
c. A condition on registration restricting design and general reviews to the type of building for which one is registered;
d. A requirement to complete any new examinations that are developed;
e. The Director can reasonably require a registrant to provide any documents or information about a registrant's activities;
f. The representatives of the Director have access to a registrant's books and records for the purpose of confirming matters related to registration;
g. The Director can issue a notice of proposal to suspend or revoke the registration of a registrant for various reasons including the opinion that the past conduct of the registrant affords reasonable grounds for the belief that the business will not be carried on in accordance with law.

[33] It appears that Art. 2.17 duplicates many aspects of the requirements under the *Professional Engineers Act*. PEO licence holders must complete examinations administered by the PEO[11], be registered with the Registrar[12], and must carry liability insurance[13]. They are subject to investigation and discipline for professional misconduct.[14] And their licence can be revoked for, *inter alia*, professional misconduct, incompetence, and for past conduct that affords grounds for belief that he or she will not engage in the practice of professional engineering in accordance with the law and with honesty and integrity.[15] I will return to the issue of duplication in the analysis that follows.

ANALYSIS

Issue 1: Are the impugned Building Code provisions invalid because the *Building Code Act* does not authorize them?

[34] The parties agreed that the standard of review on the issue of the validity or *vires* of the impugned Building Code provisions is correctness: *Sunshine Village Corp. v. Canada (Parks Canada)* 2004 FCA 166 (CanLII), (2004), 238 D.L.R. (4th) 647 at para. 10 (Fed. C.A.).

[35] Paragraph 34 (1) 10 of the *Building Code Act* grants the Lieutenant Governor in Council very broad authority to make regulations "requiring any part of the design, construction or demolition of a building to be under the general review of an architect…or a professional engineer", which is reflected in s. 2.3 of the Building Code. Leaving aside the considerations of

contextual interpretation to be addressed later, and reading the language literally, the Lieutenant Governor in Council acted within his authority by enacting s. 2.3 of the Building Code, with two exceptions.

[36] First, I accept the applicants' submission that Art. 2.3.1.1 of the Regulation exceeds the reach of the statute by attempting to allocate between the professions the power to create particular designs (this is reflected in Table 2.3.1.1 – see Appendix A). Paragraph 34 (1) 10 of the *Building Code Act* only authorizes regulations requiring designs or parts of designs to be under the "general review" of one of the professions. The Lieutenant Governor in Council therefore erred in exercising his regulatory power, and Art. 2.3.1.1 is invalid to the extent that it purports to allocate the making of designs between professional engineers and architects.

[37] Second, I agree that the Lieutenant Governor in Council erred by purporting to direct the use of a professional engineer's seal in Art. 2.3.1.1 (4). There is no regulatory authority to make such a direction in s. 34 of the *Building Code Act*. The proper use of a seal is addressed in the *Professional Engineers Act*. Although counsel for the respondents conceded that Art. 2.3.1.1 (4) did not require anything more with regard to seals than what is already provided for under the *Professional Engineers Act*, that fact cannot support the over-broad Regulation.

[38] Paragraphs 34 (1) 33 to 35 and 35.3 of the Act grant the Lieutenant Governor in Council very broad authority to make regulations prescribing the qualifications of "designers" (including competency examinations, insurance and fees) and their registration with the Director. These matters are set out in great detail in Art. 2.17 of the Building Code, and I am not persuaded that the Lieutenant Governor in Council has exceeded his authority in simply creating such a regime for those dealing with the Code. The issue of whether the regime applies to architects and engineers raises different issues.

[39] In my view, the word "designers", as used in the *Building Code Act*, taken literally, is broad enough to include professional engineers. The applicants conceded that professional engineers both create designs and conduct general reviews. The Legislature can be taken to have known that professional engineers routinely perform these functions. While the Legislature has not expressly excluded professional engineers from the Act, there are provisions (dealt with below) suggesting a legislative intention to differentiate among classes of persons and to respect the existing position and statutory authority of the PEO to licence its members. I agree with the respondents' submission, citing *Sunshine*, *supra* at para. 18, that this court "must take the statute as it finds it", but it is the entire statute in its context that we consider. The *Rizzo* case illustrates that the literal meaning does not always prevail. I have no doubt that the Lieutenant Governor in Council had the authority under the Act to enact the regulation, but the issue of whether the Legislature intended to grant the Ministry the authority to exercise such a broad control over professional engineers is a contextual one and will be dealt with in the analysis later in these reasons regarding the principles of interpretation.

Issue 2: Are the impugned Building Code provisions invalid because they unlawfully sub-delegate authority?

[40] Subparagraph 34 (1) 33 (ii) of the *Building Code Act* authorizes the Lieutenant Governor in Council to make regulations "prescribing qualifications for…designers…including…requiring assessments or examinations in connection with obtaining or maintaining the required qualifications." The applicants submit that the Lieutenant Governor in Council unlawfully sub-delegated this power to MMAH in Art. 2.17.4.2 (1) (a) and (b) of the Building

Code, which states that the Director "may register an applicant…if…the applicant…successfully completed the examination program administered or authorized by the [MMAH]".

[41] The Ontario Court of Appeal in *Re Peralta and The Queen* reflex, (1985), 49 O.R. (2d) 705 at 717-18, aff'd 1988 CanLII 28 (S.C.C.), (1989), 66 O.R. (2d) 543 (S.C.C.), held that there is no rule against sub-delegation. Rather, the maxim *delegatus non potest delegare* is a rule of construction. The court must look to a number of factors to determine whether sub-delegation was intended. These factors include "administrative necessity", the suitability of the sub-delegate, and "the language of the whole enactment and of its purposes and objects".

[42] In my view, applying the aforementioned factors in this case indicates that the Legislature intended the Lieutenant Governor in Council to sub-delegate the administration of the examinations.

[43] Administrative necessity weighs heavily in favour of sub-delegation. It is not reasonable to expect the Lieutenant Governor in Council to prescribe in the Building Code the actual assessments and examinations required as part of the qualifications of designers. The Legislature has made MMAH responsible for the *Building Code Act* and Building Code. This makes MMAH the ideal sub-delegate. There can be no dispute that MMAH is a suitable sub-delegate for the administration of examinations that assess an applicant's knowledge of the Building Code regime. Indeed, it seems to me that sub-delegating the administration of examinations to the body that actually is responsible for the *Building Code Act* and Building Code is consistent with the overarching legislative purpose of protecting the public.

[44] Furthermore, the language used in s. 34 (1) 33 ii of the *Building Code Act* is consistent with sub-delegation. Strictly speaking, the Lieutenant Governor in Council need only "prescribe" that examinations be "required". The language of the provision does not go so far as to oblige the Lieutenant Governor in Council to "prescribe" the actual content of the assessments and examinations of designers.

[45] The applicants relied on this Court's decision in *Re Norman and Registration Committee of the Royal College of Dental Surgeons of Ontario* reflex, (1985), 50 O.R. (2d) 443 (Div. Ct.) [*Norman*] in support of their unlawful sub-delegation argument. That case is distinguishable from the case at bar. In *Norman* the Council of the College of Dentistry was given authority under s. 11 (7) (c) of the *Health Disciplines Act*, R.S.O. 1980, c. 196 to make regulations "governing the requirements and qualifications for the issuing of licenses". The Council passed a regulation giving itself the power to set or approve examinations that must be completed in order to obtain a license. The Divisional Court held that this aspect of the regulation was unlawful. Setting or approving examinations was a "requirement" in s. 11 (7) (c) of the *Health Disciplines Act*. The only way the Council could set or approve a "requirement" was by regulation. In other words, the Council could not sub-delegate to itself the power to set or approve the examinations; it had to set the examinations by regulation. In this case there is no self sub-delegation. For the reasons given above, the Lieutenant Governor in Council has properly sub-delegated authority over the administration of the examinations and assessments to the MMAH.

Issue 3: Does the *Building Code Act* and the Building Code encroach upon the exclusive regulatory jurisdiction of PEO under the *Professional Engineers Act*?

[46] The respondents concede that the purposes of the *Professional Engineers Act* and of the *Architects Act* are to regulate the practice and membership of their respective

professions in accordance with the public interest. The respondents submit that the new Building Code regime does not encroach on the regulatory jurisdiction of either of the professional associations. It is implicit in these submissions that the respondents recognize the exclusive authority of PEO and OAA to regulate their respective professions.

[47] The applicants and intervenor made extensive submissions on the exclusive nature of their responsibility and authority over the members of their respective professions. I conclude that the purpose of the two professional Acts is to regulate the conduct and good character of their members as well as their professional training and competence and this purpose is intended to be exclusive. This exclusivity is demonstrated by the comprehensive nature of the schemes, each of which addresses all the essential issues such as qualifications by education and experience to be registered, conduct and character, complaints and disciplinary functions, and punishment up to the level of de-certification. See *Regina Police Ass'n Inc. v. Regina (City) Board of Police Commissioners* 2000 SCC 14 (CanLII), (2000), 183 D.L.R. (4th) 14 at paras. 31-2 (S.C.C.) and *Abbott v. Collins* 2003 CanLII 46127 (ON C.A.), (2003), 64 O.R. (3d) 789 at paras. 4, 27-33 (Ont. C.A.).

[48] Mr. Brown, for the respondents, submits that the purpose of the *Building Code Act* and Building Code is not to regulate the practice of architecture or of professional engineering, but to ensure the safety of the public. He says the Legislature has chosen to enact a further layer of protection for the public relating to the construction of buildings and the new legislation must be read in the light of this purpose. I accept that the protection of the public is the purpose of the impugned legislation. However, as indicated above, parts of the *Building Code Act* and Building Code appear to duplicate the requirements of the professional Acts. One must ask, therefore, to what extent, if any, the protection of the public may be advanced by duplicating the professional regulatory Acts? This raises the question of whether this duplication was actually intended by the Legislature. Should those parts of the *Building Code Act* be read to include PEO license holders or not?

[49] The applicants say that the heart of the issue before the Court is that the Building Code usurps the authority of the professional bodies to govern their members as to the qualifications necessary to practice an important part of their profession. Architects and engineers come into contact with the Building Code on a frequent basis. The engineers are specifically licenced to practice professional engineering, which includes the art of designing, evaluating, reporting on, directing and supervising the design and construction of buildings in the light of engineering principles. Knowledge of the Building Code is a necessity for those practicing in the design of buildings, and education in the Building Code is a part of their professional responsibility. But the applicants submit that the revised Building Code goes much farther than regulating a professional's knowledge of its content. They say it also purports to regulate character and conduct. In these respects the applicants submit the Building Code directly duplicates and conflicts with PEO's exclusive regulatory authority.

[50] The applicants point to a number of instances of duplication. There are the rules in Art. 2.3 of the Building Code as to the application of the professional engineer's seal to plans. Art. 2.3 of the Building Code also allocates among PEO licence holders, architects and the public the ability to design and conduct general reviews of various types of buildings. The *Professional Engineers Act* and the *Architects Act* already address these issues (and I have already held above that the Lieutenant Governor in Council exceeded his statutory authority by regulating these matters).

[51] An even more problematic field is that of professional misconduct. Here, the Building Code by section 2.17 gives the Director the power to suspend a registrant for various reasons, including the opinion that the conduct of the registrant affords reasonable grounds for the belief that the registrant will not carry on business in accordance with law. This duplicates the powers of the Registrar of the PEO to suspend or revoke an engineer's licence. Mr. Brown submitted that there was no duplication because the Director would only revoke for conduct related to the Building Code. When pressed by the court that the Director could act in relation to whether the business was likely to be carried on in accordance with "law", he conceded that the Director could not ignore past conduct as evidence of character, but submitted that the Director's interest in the character of the registrant had nothing to do with engineering principles. This submission is not persuasive. The PEO's interest in the character of the licensees is not defined by engineering principles either, but by their character. It is clear that there is a duplication involved here.

[52] Mr. Brown further submitted that the present case was in parallel with the case of *Wilder v Ontario Securities Commission*, [2000] O.J. No. 758 (Div. Ct.), aff'd [2001] O.J. No. 1017 (C.A.), which I will address in greater detail below, where this court held that the Commission could regulate the conduct of a lawyer actually appearing before it, despite the fact that the lawyer was also subject to conduct regulation by the Law Society.

i. The *Wilder* case

[53] The issue in the *Wilder* case arose out of a letter written by Mr. Wilder, a lawyer acting in his professional capacity, to the Ontario Securities Commission in the course of a prospectus review. The Commission staff alleged that the letter contained a misleading statement of material fact and a Notice of Hearing was issued that the Commission would consider whether it was in the public interest to reprimand him for this act. Mr. Wilder brought a judicial review application seeking to prohibit the hearing and to quash the Notice on the grounds that only the Law Society had jurisdiction over him as a lawyer acting in a professional capacity.

[54] This court held that there was no inconsistency between the role of the Law Society in regulating the legal profession and the role of the Commission in regulating the capital markets – they both protect the public interest but the aspect of that interest is not the same. The Commission did not seek to discipline the lawyer for professional misconduct, but to protect its own process from abuse. Further, the Commission did not seek to control the right of access to practice before it, but only to reprimand an individual for alleged misconduct before it. Therefore, the court refused to quash the Notice of Hearing. In the Court of Appeal the argument turned largely on other issues, but the Court at para. 29 specifically adopted the analysis of Swinton J., for this court, in dealing with the issue now before us.

[55] The principle enunciated in *Wilder* has meaning for this case. I take it to mean that not every requirement of an entity with which a registered professional interacts impinges on the exclusive authority of the professional regulator. Such entities are entitled to protect the integrity of proceedings before them.

[56] It is important to note that the Commission in *Wilder* did not purport to go beyond the actual act that Mr. Wilder allegedly committed in dealing with the Commission. Nor, in my view, could the Commission have done so without invading the exclusive jurisdiction of the Law Society over issues of professional competence, character and conduct. For example, an inquiry by the Commission into Mr. Wilder's past conduct in

general in order to determine fitness on character grounds would be extremely suspect.

[57] The applicants and intervenor submit that the limit of *Wilder* is reached when the entity moves from regulating a particular interaction between itself and a professional, to the establishment of a competing regulatory scheme regulating the general conduct, character and competency of the registered professional. In their submission the Building Code regulatory scheme is the latter. The applicants draw attention to these features in their factum, at para. 36:

> It is submitted that in the present case, section 2.17 of the Building Code regulation establishes a competing regulatory scheme for the registration and discipline of PEO licence holders. For example, under both schemes:
>
> a. The scope of building designs and general reviews are virtually identical.
>
> b. There purports to be an allocation of what must be done by a PEO licence holder, what must be done by an architect and what can be done by anyone.
>
> c. The practitioner cannot practise without registration, qualification or authorization.
>
> d. A jurisprudence-type examination is required for registration / qualification.
>
> e. A practitioner seals / imprints his or her Building Code Identification Number (BCIN) on a document to take responsibility for it.
>
> f. A practitioner is subject to administrative investigation powers including the requirement to provide access to client files and information.
>
> g. A practitioner is subject to disciplinary action for failing to comply with the *Building Code Act, 1992* or the Building Code regulation.
>
> h. In addition a practitioner is also subject to a notice of proposal to suspend or revoke his or her registration or authorization for creating the belief that the practitioner will not carry on business in accordance with any law (not just Building Code law).
>
> i. In addition to the registration and disciplinary tools, a practitioner who fails to comply with the legislation is subject to a provincial offences prosecution before the courts and injunctive relief.
>
> j. There are liability insurance requirements for those offering services to the public.

[58] In addition, the applicant submits at para. 37 that:

> …the concept of assuming professional responsibility for one's work is more extensive under the *Professional Engineers Act* than it is under the Building Code Regulation. The PEO practitioner is expected to have either performed or to have closely supervised work he or she seals. Under the Building Code regulation the

> practitioner is encouraged to simply review and stamp the work of others.

[59] The Building Code certainly bears the distinctive characteristics of a professional regulatory statute. It regulates the requirements for admission to practice in the field of submitting building plans to the various building officials for approval. There are educational and insurance requirements; allocations of responsibility for various kinds of work; rules as to the stamping of work product; administrative obligations such as giving access to client files and information; disciplinary sanctions; and revocation powers on character grounds. In scope and function, it is indistinguishable from professional regulatory acts. If truth be told, the Building Code is a professional regulatory act in search of a profession.

[60] The profession of engineering often requires engineers to deal with compliance with the Building Code and to deal with building officials to obtain approval for their clients. Misconduct, negligence, dishonesty or the like in such dealings are professional failings and fall under the jurisdiction of the PEO. On its face, the Building Code gives power to the Director to examine into matters within the exclusive jurisdiction of the *Professional Engineers Act.* That conclusion does not at once lead to the further conclusion that it is invalid. It is necessary to consider the *Building Code Act* and in particular the power which it grants to make regulations. Does the *Building Code Act* authorize the making of regulations impinging on the exclusive authority of the applicant to govern its members? As I will explain below, I conclude that it does not.

ii. The *Building Code Act* does not authorize regulations that impinge on PEO's exclusive authority to regulate professional engineers

[61] The modern rule of statutory interpretation was formulated by Elmer Driedger[16] and was accepted as the preferred approach by the Supreme Court in *Re Rizzo and Rizzo Shoes Ltd.*, 1998 CanLII 837 (S.C.C.), [1998] 1 S.C.R. 27 at 41. In *Ontario (Attorney General) v. Big Canoe* 2002 CanLII 18055 (ON C.A.), (2002), 62 O.R. (3d) 167 (C.A.), leave to appeal to the S.C.C. ref'd [2003] S.C.C.A. No. 31, the Court of Appeal discussed the modern rule at p. 173:

> Finally, the "modern" interpretation method was reformulated in Canada by Professor R. Sullivan: Driedger on the Construction of Statutes (3rd ed. 1994) at p. 131:
>
> > There is only one rule in modern interpretation, namely, courts are obliged to determine the meaning of legislation in its total context, having regard to the purpose of the legislation, the consequences of proposed interpretations, the presumptions and special rules of interpretation, as well as admissible external aids. In other words, the courts must consider and take into account all relevant and admissible indicators of legislative meaning. After taking these into account, the court must then adopt an interpretation that is appropriate. An appropriate interpretation is one that can be justified in terms of (a) its plausibility, that is, its compliance with the legislative text; (b) its efficacy in its promotion of the legislative purpose; and (c) its acceptability, that is, the outcome is reasonable and just.

[62] The first consideration is the purpose of the *Professional Engineers Act*. It is clear that the purpose of the Act is the regulation of the conduct of professional engineers, including their character (e.g. whether there is reason to believe, based on past conduct, that the licensee will not carry on the profession in

accordance with law). The purpose of the *Building Code Act* is primarily to regulate the construction of buildings by establishing the standards of construction set out in the Building Code. As recently amended, the Building Code has the purpose of ensuring that those who deal with the Building Code and with Building Officials have certain qualifications and be registered.

[63] The respondents submit that there is no actual conflict between the two statutes. The Building Code is geared to testing designers' knowledge of the *Building Code Act* and Building Code. It does not touch upon the heart of PEO's mandate, "such as membership in the organization, professional ethics, competency as a professional engineer or architect, or any other sphere not directly relevant to building construction and demolition." If there is no real conflict, the two regimes can co-exist.

[64] The respondents submit that the case at bar is analogous to the case of *Law Society of Upper Canada v. Barrie (City)* reflex, (2000), 46 O.R. (3d) 620 (S.C. J.), where the City passed a by-law to require all businesses in the City to obtain a business licence. It was held that lawyers governed by the *Law Society Act* were not exempt. Compliance with the by-law did not conflict with the Law Society's jurisdiction over the professional aspects of the lawyer's business.

[65] In my view, the analogy is not apt. The business licence was really a tax. The City did not purport to legislate that the lawyer could not practice her profession without submitting to further professional testing or submitting to inquiries as to her fitness to practice. The situation before us is quite different. The Building Code prevents the professional engineer from performing some significant professional tasks for which he is already licensed by the PEO under the *Professional Engineers Act* unless he complies with these new profession-related requirements and exposes himself to a duplicative disciplinary scheme not confined to his actual interaction with building officials. Therefore it cannot be said that there is no real conflict between the two regimes.

[66] While the Building Code refers to "every person", it does not expressly include engineers among the persons required to obtain "qualifications". Certain provisions of the Building Code, such as Art. 2.3.1.1 discussed above, tend to support a legislative intention to respect the special rights and obligations of the professional engineer. This point is reinforced by the language of s. 34 (1) 33 of the *Building Code Act* (see Schedule A), which permits the making of regulations prescribing qualifications for designers and others, including "different qualifications for different classes of…designers". This signals a legislative intention to differentiate between classes of designers, presumably by reason of differences in training, education and experience. Thus it cannot be said that the purpose of the *Building Code Act* and Building Code support the proposition that the regulatory scheme implemented by this legislation is meant to impinge on the PEO's exclusive regulatory jurisdiction over its members.

[67] The second Driedger consideration is the consequences of opposing interpretations. In my view the inclusion of professional engineers within the Building Code regulatory scheme leads to incongruous results. As noted, they are already licenced through the *Professional Engineers Act* to perform the very acts now regulated by the Building Code. They are already under a scheme of discipline which can see them lose their licence on grounds of lack of competence or, in effect, bad character, through a complaints and discipline system. To involve professional engineers in a second such system over essentially the same professional competence is a form of double jeopardy, which is, as indicated by the various deponents giving affidavit evidence on behalf of the applicants and intervenor, unfair and unnecessary to accomplish the ends of the legislation.

[68] The *Wilder* case illustrates the problem and the solution. If a professional engineer interacts with an entity, such as a chief building official, in a dishonest or unprofessional manner, he or she may be exposed to some punishment under the rules of that entity, as was Mr. Wilder. But the bringing of charges of professional misconduct on character grounds (such as reason to believe from past conduct that the professional engineer will not act honestly), or the evaluation of a professional engineer's competency (through assessments and examinations) are exclusive functions of the PEO. To the extent that the Building Code imposes these and similar conditions on "persons", it should be read as excluding those members of professions already subject to a statutory professional regulatory regime.

[69] Under the third Driedger consideration the courts look to the aids to interpretation and the presumptions and special rules of interpretation. The respondents submit that one test of legislative intent is the presence of an exemption for architects, but none for engineers. This would be a potent argument but for the special circumstances described above that the exemption came about as a temporary measure to await the resolution of the issues being canvassed in these reasons. In those circumstances it is not appropriate to draw the conclusion urged on us by counsel for the respondents.

[70] The respondents submit that in the event (which they deny) that there is some inconsistency between the *Professional Engineers Act* and the *Building Code Act* and Building Code, the latter should prevail because they were enacted later and are deemed to have impliedly repealed the former to the extent of the inconsistency. They rely on *Winnipeg School Division No. 1 v. Craton*, 1985 CanLII 48 (S.C.C.), [1985] 2 S.C.R. 150, where the issue was whether the school board's mandatory retirement policy, set out in s. 39 (2) of its Act, prevailed over the *Human Rights Act*. McIntyre J. for the Supreme Court observed, at para. 7, that:

> Section 6(1) of The Human Rights Act, enacted in 1974, was clearly a subsequent enactment and an express prohibition against discrimination in employment on the basis of age, and even setting aside the notion of any primacy for human rights legislation, it would have prevailed and repealed section 39(2) by implication.

[71] Certainly the relative timing of the passage of the two statutes was a factor in the Supreme Court's decision, but it is important to observe that the later enactment was an express prohibition of what was called for by the earlier, which is decidedly not so in the case before us.

[72] The scope of the concept of implied repeal is somewhat more limited than the respondents submit. Where the later statute is general and the earlier specific, it appears that the general may be construed as allowing an exception for the existing specific Act.[17] Such a principle would be applicable in the case at bar where the earlier *Professional Engineers Act* establishes a regime for a particular profession, whereas the later Building Code applies generally to everyone doing business with the chief building official about building permits. As well, cases show a significant respect for rights already granted and the need for very clear language to over-ride them.

[73] In *Re British Columbia Teachers' Federation and A.G. for British Columbia* reflex, (1985), 23 D.L.R. (4th) 161, the British Columbia Court of Appeal dealt with whether a directive from the B. C. Treasury Board establishing a formula limiting school expenditures prevailed over provisions of the *School Act* placing management, including teacher salaries and lay-offs, in the hands of the School Trustees. At pp. 173-4, Anderson J.A., for the majority, said:

> The Legislature, by enacting the School Act, conferred important statutory rights on school boards, teachers and the residents in each school district. …
>
> In the absence of express language, it will not be presumed that the Legislature intended to abrogate existing statutory rights of the nature described above.
>
> The law is summarized in Maxwell on The Interpretation of Statutes, 12th ed. (1969), at p. 196, as follows:
>
> "Now if anything be certain it is this," said the Earl of Selborne L.C. in The Vera Cruz, "that where there are general words in a later Act capable of reasonable and sensible application without extending them to subjects specially dealt with by earlier legislation, you are not to hold that earlier and special legislation indirectly repealed, altered, or derogated from merely by force of such general words, without any indication of a particular intention to do so." In a later case, Viscount Haldane said: "We are bound ... to apply a rule of construction which has been repeatedly laid down and is firmly established. It is that wherever Parliament in an earlier statute has directed its attention to an individual case and has made provision for it unambiguously, there arises a presumption that if in a subsequent statute the Legislature lays down a general principle, that general principle is not to be taken as meant to rip up what the Legislature had before provided for individually, unless an intention to do so is specially declared. A merely general rule is not enough, even though by its terms it is stated so widely that it would, taken by itself, cover special cases of the kind I have referred to. [Footnotes omitted] [Emphasis added]

[74] To a similar effect is the judgment of the Supreme Court in *Morguard Properties Ltd. v. City of Winnipeg*, 1983 CanLII 33 (S.C.C.), [1983] 2 S.C.R. 493. Estey J., who delivered the judgment of the court, stressed that existing statutory rights will not be deemed abrogated in the absence of express language indicating a clear legislative intention so to do. At p. 509 he said:

> In more modern terminology the courts require that, in order to adversely affect a citizen's right, whether as a taxpayer or otherwise, the Legislature must do so expressly. Truncation of such rights may be legislatively unintended or even accidental, but the courts must look for express language in the statute before concluding that these rights have been reduced.

[75] The cases show that before we could agree with the respondent that professional engineers are subject to the full panoply of control established by the Building Code, we should be able to point to statutory language which clearly indicates that the existing right of the professional engineers to practice in accordance with the *Professional Engineers Act* was intended to be abrogated. In my view, no such clear statutory language exists.

[76] The final Driedger consideration is the plausibility of the interpretation in the light of the actual language, its efficacy in promoting the purpose of the statute, and the fairness of the result. It is significant that there is no provision in the *Building Code Act* or in the Building Code establishing any form of primacy of those enactments over the professional regulatory Acts. By contrast, s. 35 (1) expressly provides that the *Building Code Act* and the Building Code supersede all municipal by-laws. Certainly the words “every person” are broad and are

intended to capture those who deal with the Code by presenting plans to building officials for permits. But there are, as noted, other provisions suggesting a legislative intention to differentiate among classes of persons and to respect the existing position and statutory authority of the PEO to licence its members. To do so in a rational way must result in the exclusion of professional engineers from the duplicative competence and character control scheme under the Building Code as they are already subject to such a statutory regime.

DISPOSITION

[77] I agree with the submissions of the respondents that this is not a case for injunctive relief or for the exercise of the court's prerogative powers. I would grant the following declarations:

1. Article 2.3.1.1 of the Building Code is not authorized by s. 34 (1) 10 of the *Building Code Act* and is invalid to the extent that it purports to allocate responsibility for designs between professional engineers and architects.

2. Article 2.3.1.1 (4) of the Building Code is not authorized by s. 34 of the *Building Code Act* and is invalid.

3. Clause 1.1 (1) (c), subsection 1.1 (2), clause 8 (2) (c), and subsections 15 (5) to (7) of the *Building Code Act* conflict with the exclusive regulatory jurisdiction of the PEO and do not apply to any holder of any licence or certificate issued under the *Professional Engineers Act*.

4. Article 2.17 of the Building Code conflicts with the exlusive regulatory jurisdiction of the PEO and does not apply to any holder of any licence or certificate issued under the *Professional Engineers Act*.

[78] Order to follow accordingly.

[79] While relief is only available to the applicant professional engineers in this case, in my opinion the analysis in these reasons for judgment applies equally to the intervenor architects.

COSTS

[80] Any party wishing to make submissions as to costs may do so by way of brief written submissions to the Court within 30 days of the release of these reasons for judgment.

[81] Before parting with this case, I wish to express my gratitude to my colleagues for their significant contributions to the preparation of these reasons.

_____
Lane J.

I agree. _____
Chapnik J.

I agree. _____
Smith J.

DATE: May 2007

SCHEDULE A

***Building Code Act, 1992*, S.O. 1992, c. 23**

Role of various persons

1.1 (1) It is the role of every person who causes a building to be constructed,

(a) to cause the building to be constructed in accordance with this Act and the building code and with any permit issued under this Act for the building;

(b) to ensure that construction does not proceed unless any permit required under this Act has been issued by the chief building official; and

(c) to ensure that construction is carried out only by persons with the qualifications and insurance, if any, required by this Act and the building code.

Role of designers

(2) It is the role of a designer,

(a) if the designers designs are to be submitted in support of an application for a permit under this Act, to provide designs which are in accordance with this Act and the building code and to provide documentation that is sufficiently detailed to permit the design to be assessed for compliance with this Act and the building code and to allow a builder to carry out the work in accordance with the design, this Act and the building code;

(b) to perform the role described in clause (a) in respect of only those matters for which the designer has the qualifications, if any, required by this Act and the building code; and

(c) if the building code requires that all or part of the design or construction of a building be under general review, to perform the general review in respect of only those matters for which the designer has the qualifications, if any, required by this Act and the building code.

Issuance of permits

8. (2) The chief building official shall issue a permit [to construct or demolish a building] unless,

…

(c) a person who prepared drawings, plans, specifications or other documents or gave an opinion concerning the compliance of the proposed building or construction with the Building Code does not have the applicable qualifications, if any, set out in the Building Code or does not have the insurance, if any, required by the Building Code.

…

Referral of plans, etc.

(9) Upon reasonable grounds, the chief building official or registered code agency may refer drawings, plans or specifications accompanying applications for permits or the reports arising out of the general review of the construction of a building to the Association of Professional Engineers of Ontario or the Ontario Association of Architects for the purpose of determining if the *Professional Engineers Act* or the *Architects Act* is being contravened.

Same

(9.1) At the request of the Association of Professional Engineers of Ontario or the Ontario Association of Architects, the chief building official shall refer documents and information described in subsection (9) to those associations for the purpose of

determining if the *Professional Engineers Act* or the *Architects Act* is being contravened.

Qualifications for designers

15.11 (5) A person is not eligible to engage in any of the following activities unless he, she or it has the qualifications and meets the requirements set out in the Building Code to be a designer:

1. Prepare a design or give other information or opinion concerning whether a building or part of a building complies with the building code, if the design, information or opinion is to be submitted to a chief building official in connection with (i) an application for a permit, (ii) [omitted] or (iii) a report described in paragraph 2.

2. If a general review of the construction of a building is required by the Building Code, prepare a written report based on the general review.

Same

(6) In subsection 5, "design" includes a plan, specification, sketch, drawing or graphic representation respecting the construction of a building.

Prohibition

(7) No person shall represent, directly or indirectly, that he, she or it has the qualifications or meets the requirements established under this section if the person does not have those qualifications or does not meet those requirements.

Regulations

34. (1) The Lieutenant Governor in council may make regulations governing standards for the construction and demolition of buildings, including,

…

10. requiring any part of the design, construction or demolition of a building to be under the general review of an architect as defined in the *Architects Act* or a professional engineer as defined in the *Professional Engineers Act* and that copies of reports arising from the general review be provided to the chief building official or to a registered code agency;

…

33. prescribing qualifications for chief building officials, inspectors, registered code agencies, designers and other persons referred to in section 15.12 and related matters including,

(i) requiring different qualifications for different classes of officials, inspectors, designers and other persons,

(ii) requiring assessments or examinations in connection with obtaining or maintaining the required qualifications,

(iii) [establishment of register of qualified persons];

(iv) [fees];

Building Code, O. Reg. 403/97

Design and Section 2.3. General Review

Design 2.3.1.

2.3.1.1. Design by Architect or Professional Engineer

(1) Except as permitted in Sentences (2) and (3), the *construction*, including, for greater certainty, enlargement or alteration, of every *building* or part thereof described in Table 2.3.1.1. and this Article shall be designed and reviewed by an *architect*, *professional engineer* or both.

(2) An *architect* may provide the services within the practice of professional engineering in any *building* described in Table 2.3.1.1., or a *professional engineer* may provide the services within the practice of architecture in any *building* described in Table 2.3.1.1. where to do so does not constitute a substantial part of the services provided by the other profession related to the *construction* of the *building* and is necessary

(a) for the *construction* of the *building* and is incidental to the other services provided by the *architect* or *professional engineer*, or

(b) for coordination purposes.

TABLE 2.3.1.1.(4)
Design and General Review
Forming Part of Sentence 2.3.1.1.(1)

Building **Classification by** ***Major Occupancy***	***Building*** **Description**	**Design and General Review by:**
Assembly occupancy only	Every *building*	*Architect* and *professional engineer*(1)
Assembly occupancy and any other *major occupancy* except *industrial*	Every *building*	*Architect* and *professional engineer*(1)
Care or detention occupancy only	Every *building*	*Architect* and *professional engineer*(1)
Care or detention occupancy and any other *major occupancy* except *industrial*	Every *building*	*Architect* and *professional engineer*(1)
Residential occupancy only	Every *building* that exceeds 3 *storeys* in *building height*	*Architect* and *professional engineer*(1)
	Every *building* that exceeds 600 m^2 in *gross area* and that contains a *residential occupancy* other than a *dwelling unit* or *dwelling units*	*Architect*(2)
Residential occupancy only	Every *building* that exceeds 600 m^2 in *gross area* and contains a *dwelling unit* above another *dwelling unit*	*Architect*(2)
	Every *building* that exceeds 600 m^2 in *building area* contains 3 or more dwelling units and has no *dwelling unit* above another *dwelling unit*	*Architect*(2)
Residential occupancy and any other *major occupancy* except *industrial, assembly* or *care or detention occupancy*	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*Architect* and *professional engineer*(1)
Business and personal services occupancy only	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*Architect* and *professional engineer*(1)
Business and personal services occupancy and any other *major occupancy* except *industrial, assembly* or *care or detention occupancy*	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*Architect* and *professional engineer*(1)
Mercantile occupancy only	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*Architect* and *professional engineer*(1)
Mercantile occupancy and any other *major occupancy* except *industrial, assembly* or *care or detention occupancy*	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*Architect* and *professional engineer*(1)
Industrial occupancy only and where there are no subsidiary *occupancies*	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*Architect* or *professional engineer*(3)
Industrial occupancy and one or more other *major occupancies* where the portion of the area occupied by one of the other *major* or subsidiary *occupancies* exceeds 600 m^2	The non-industrial portion of every *building*	*Architect* and *professional engineer*(1)
	The industrial portion of every *building*	*Architect* or *professional engineer*(3)
Industrial occupancy and one or more other *major occupancies* where no portion of the area occupied by one of the other *major* or subsidiary *occupancies* exceeds 600 m^2	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*Architect* or *professional engineer*(3)
Column 1	2	3

Notes To Table 2.3.1.1.

(1)An *architect* shall provide services within the practice of architecture and a *professional engineer* shall provide the services within the practice of professional engineering.

(2)An *architect* may engage a *professional engineer* to provide services within the practices of professional engineering.

(3)Only a *professional engineer* may provide services within the practice of professional engineering.

(4)Requirements for design and general review by an *architect* or *professional engineer* or a combination of both for the *construction*, enlargement or alteration of a *building* are set out in the *Architects Act* and the *Professional Engineers Act*.

(3) The requirement for an *architect* does not apply to the preparation or provision of a design for interior space for a *building*, including finishes, fixed or loose furnishings, equipment, fixtures and partitioning of space, and related exterior elements such as signs, finishes and glazed openings used for display purposes, that does not affect or is not likely to affect

(a) the structural integrity,

(b) a fire safety system or *fire separation*,

(c) a main entrance or *public corridor* on a floor,

(d) an *exit* to a public thoroughfare or to the exterior,

(e) the *construction* or location of an exterior wall, or

(f) the usable floor space through the addition of a *mezzanine*, infill or other similar element, of the *building*.

(4) Where a building or part of it described in Table 2.3.1.1. is designed by an architect or a professional engineer or a combination of both as required by this Article, all plans, sketches, drawings, graphic representations, specifications and other documents that are prepared by an architect, professional engineer or both and that form the basis for the issuance of a permit under Section 8 of the Act or any changes to it authorized by the chief building official shall bear the signature and seal of the architect, professional engineer or both, as applicable.

(5) Where the *foundations* of a *building* are to be constructed below the level of the footings of an adjacent *building* and within the angle of repose of the *soil*, as drawn from the bottom of the footings, the *foundations* shall be designed by a *professional engineer*.

(6) The thermal design of a *building* in accordance with Section 9.38. shall be prepared and provided by an *architect* or *professional engineer* or a combination of both.

General Review 2.3.2.

2.3.2.1. General Review by Architect or Professional Engineer

(1) Except as permitted in Sentence (2), a person who intends to construct or have constructed a building required to be designed by an architect, professional engineer or both, shall ensure that an architect, professional engineer or both are retained to undertake the general review of the construction of the building in accordance with the performance standards of the Ontario Association of Architects or the Association of Professional Engineers of Ontario, as applicable, to determine whether the construction is in general conformity with the plans, sketches, drawings, graphic representations,

specifications and other documents that are prepared by an architect, professional engineer or both and that form the basis for the issuance of a permit under Section 8 of the Act or any changes to it authorized by the chief building official, copies of written reports arising out of the general review shall be forwarded to the chief building official or registered code agency, as the case may be, by the architect, professional engineer or both who have been retained to undertake the general review of the construction of the building.

(2) An *architect* or a *professional engineer* need not be retained to undertake the general review of *construction* of a *building* where the *building* is designed in accordance with Section 9.38.

2.3.2.2. Restriction for General Review

(1) Only an *architect* may carry out or provide the general review of the *construction* of a *building*

(a) that is constructed in accordance with a design prepared or provided by an *architect*, or

(b) in relation to services that are provided by an *architect* in connection with the design in accordance with which the *building* is constructed.

(2) Only a *professional engineer* may carry out or provide the general review of the *construction* of a *building*

(a) that is constructed in accordance with a design prepared or provided by a *professional engineer*, or

(b) in relation to services that are provided by a *professional engineer* in connection with the design in accordance with which the *building* is constructed.

2.3.2.3. Demolition of a Building

(1) The applicant for a permit respecting the *demolition* of a *building* shall retain a *professional engineer* to undertake the general review of the project during *demolition*, where

(a) the *building* exceeds 3 *storeys* in *building height* or 600 m^2 in *building area*,

(b) the *building* structure includes pre-tensioned or post-tensioned members,

(c) it is proposed that the *demolition* will extend below the level of the footings of any adjacent *building* and occur within the angle of repose of the *soil*, drawn from the bottom of such footings, or

(d) explosives or a laser are to be used during the course of *demolition*.

Section 2.17. Qualifications for Designers

2.17.1.1. Scope

(1) This Section prescribes, for the purposes of Clause 8 (2) (c) and Subsection 15.11 (5) of the Act, the qualifications for a person who carries out *design activities* after December 31, 2005.

Qualifications — 2.17.4. Persons Engaged in the Business of Providing Design Activities to the Public

2.17.4.1. General

(1) Except as provided in sentences 3 and 4, every person engaged in the business of providing design services to the public after December 31, 2005, must have the following qualification:

(a) The person must be *registered* with the *director*.

2.17.4.2. Registration and Renewal of a Registration

(1) [The Director may register an applicant if]

(a) the applicant…has successfully completed the [Minster's] examination program relating to the person's knowledge of this Act and this Code;

(b) all persons who will review and take responsibility for design activities provided to the public…have successfully completed the examination program administered or authorized by the [MMAH]…relating to the person's knowledge of this Act and of this Code.

(c) the applicant…is covered by the insurance required under Subsection 2.21.2. during the term of the registration applied for, …

2.17.4.9. Suspension, Revocation, Refusal to Register or Renew a Registration

(1) The Director may in the circumstances set out in sentence (2):

(a) refuse to register an applicant or to renew a registration, or

(b) suspend or revoke a registration.

(2) The circumstances referred to in sentence (1) are:

(a) the registered person is in contravention of the Act or this Code;

(b) the registered person is in breach of a condition of the registration…

…

(d) the director is of the opinion that the past conduct of the applicant or registered person…affords reasonable grounds for belief that the business …authorized by the registration will not be carried on in accordance with law.

---

[1] Intervenor's Factum at para. 20 (emphasis in original).

[2] *Professional Engineers Act*, s. 1.

[3] "design" means a plan, sketch, drawing, graphic representation or specification intended to govern the construction, enlargement or alteration of a building or a part of a building.

[4] *Professional Engineers Act*, s. 12 (6); *Architects Act*, s. 11.

[5] Professional Engineers Act, R.R.O. 1990, Reg. 941, ss. 47-49, 72, 74 and 78.

[6] *Building Code Act*, ss. 1.1 and 15.11 (5).

[7] *Building Code Act*, s. 8 (2) (c).

[8] *Building Code Act*, s. 34 (1) 10.

[9] *Building Code Act*, ss. 8 (9) and (9.1).

[10] Due to a negotiated agreement with MMAH architects are exempt from these Building Code provisions. Regulations under the *Architects Act* establish a similar regulatory scheme.

[11] Professional Engineers Act, R.R.O. 1990, Reg. 941, ss. 1, 33.

[12] *Professional Engineers Act*, ss. 12 (1) and (2).

[13] Professional Engineers Act, R.R.O. 1990, Reg. 941, s. 74.

[14] *Professional Engineers Act*, ss. 33, 72, 77.

[15] *Professional Engineers Act*, ss. 14 (2), 15 (8) (a), 18 (2) (a), 28 (4) (a) and (b).

[16] E. A. Driedger *The Construction of Statutes* (Toronto: Butterworths, 1974) at 67.

[17] Peter W. Hogg, *Constitutional Law of Canada*, 4th ed. (Scarborough: Carswell, 1997) at 16-1 fn 2.

COURT FILE NO.: DC-06-081239-00
DATE: 20070328

SUPERIOR COURT OF JUSTICE - ONTARIO
DIVISIONAL COURT

RE: Paul Philpott and Christine Philpott v. The Corporation of the Town of Innisfil and Heather Rutherford in her capacity as Chief Building Official of The Corporation of the Town of Innisfil

BEFORE: Justices Ferrier, Cumming and Donohue

COUNSEL: ***Ellen Anderson*** and ***Michael Adams*** for Appellants/Applicants
Robert Bigioni for Respondents/Respondents

HEARD: **March 15 and 16, 2007**

E N D O R S E M E N T

CUMMING J.

The Appeal

[1] The appellants appeal a judgment of MacKinnon, J. dated August 23, 2006. He dismissed the appellants/applicants' appeal of the Chief Building Official's ("CBO") denial of their application for a building permit. This matter raises novel legal issues.

[2] We dismiss the appeal. Our reasons follow.

Background

[3] The appellants, Mr. and Ms. Philpott, own property referred to as 1150 Arnold Street in the Town of Innisfil. On September 22, 2004 the Town passed Consolidated By-Law 054-04, which granted single, residential (R1S) zoning for the subject property of the Philpotts. Prior thereto the zoning was "H" or "Hold" which did not permit a single-family residence.

[4] By-law 054-04 was appealed by a number of affected parties (not the applicants).

[5] The Town realized at some point in the fall of 2004 that By-Law 054-04 contained a number of errors, one of which was a clerical, mapping error pertaining to the subject property. The Town had not intended in enacting By-Law 054-04 to change the zoning for the subject property. The purported change was inadvertent.

[6] Learning of the zoning change through By-Law 054-04, the appellants applied for a building permit October 29, 2004, authorizing them to build a single-family home. The application was unilaterally held in abeyance by the Town. The appellants first learned about the clerical errors in By-Law 054-04 at a public meeting May 11, 2005. Mr. Philpott was told at that time of the clerical error relating to his property and that the Town intended to restore the "Holding Zone" to his property.

[7] The appellants were then formally advised by the Town by letter June 3, 2005 that the R1S zoning for their property was a clerical error. They were told that By-Law 054-04 was under a pending appeal, and that an amending by-law would be passed, such that the R1S zoning would fall away and the "Holding Zone " restored. They were further advised that pursuant to s. 34(30) of the *Planning Act*, R.S.O., 1990, c. P 13. By-Law 054-04 was not in force until the appeals were dealt with by the Ontario Municipal Board ("OMB"). They were also told that if the amending by-law was appealed the

Court File No.143/06

20070517

ONTARIO SUPERIOR COURT OF JUSTICE
DIVISIONAL COURT

BETWEEN:

ASSOCIATION OF PROFESSIONAL ENGINEERS OF ONTARIO and
BERNARD ENNIS, P. Eng.

Applicants

- and -

HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO as represented by THE MINISTER OF MUNICIPAL AFFAIRS AND HOUSING and DAVID BREZER, P. Eng. in his capacity as DIRECTOR OF THE BUILDING AND DEVELOPMENT BRANCH OF THE MINISTRY OF MUNICIPAL AFFAIRS AND HOUSING and in his capacity as a CHIEF BUILDING OFFICIAL

HEARD: October 26-27, 2006

BEFORE: Lane, Chapnik and P. Smith, JJ.

COUNSEL: Richard Steinecke and Lisa S. Braverman, for the Applicants.

Dennis W. Brown, Q.C., and Sandra Di Ciano for the Respondents.

David C. Moore and Kenneth G. G. Jones for the Intervenor, Ontario Association of Architects.

REASONS FOR JUDGMENT

LANE J.:

[1] This application for judicial review challenges the validity of certain amendments to the Building Code, Ont. Reg. 403/97, a regulation enacted pursuant to the *Building Code Act, 1992*, S.O. 1992, c. 23 (the "*Building Code Act*").

[2] The applicants say that the amendments are invalid to the extent that they establish a duplicate registration or qualification scheme for Association of Professional Engineers of Ontario ("PEO") licence holders who prepare designs or conduct general reviews of buildings. The applicants contend that this regulation is invalid and should be read down to exclude PEO licence holders.

[3] For the reasons that follow, the application is allowed.

INTRODUCTION

The Parties

[4] The applicant PEO is the statutory body that regulates the practice of professional engineering in Ontario under the *Professional Engineers Act*, R.S.O. 1990, c. P.28. PEO regulates persons who hold licences, temporary licences, limited licences and provisional licences and entities that offer engineering services directly to the public who must hold certificates of authorization. Collectively they are called PEO licence holders.

[5] The applicant Bernard Ennis is a professional engineer employed by PEO. He is the PEO's Manager of Practice and Standards. He has also been designated as the professional engineer to assume responsibility for, supervise, and direct the professional engineering services performed by PEO itself (i.e. in respect of its own building space).

[6] The intervenor Ontario Association of Architects ("OAA") is the body established under the *Architects Act*, R.S.O. 1990, c. A.27, which is responsible for licencing and regulating architects in Ontario. OAA supports the application.

[7] The respondent Minister of Municipal Affairs and Housing (the "Minister") is responsible for the Building Code. The respondent David Brezer, P. Eng., is employed by the Ministry of Municipal Affairs and Housing ("MMAH") as the Director under the *Building Code Act*. The Director is the official responsible for administering and enforcing the regulatory scheme under the Building Code. The Director also doubles as a chief building official where no other is available.

The Application

[8] As will be detailed below, since December 31, 2005 the Building Code has established a regulatory scheme for persons who prepare designs or conduct general reviews of buildings in Ontario.

[9] Mr. Ennis has been asked to renovate PEO's head office. He is not registered or qualified under the Building Code to prepare building designs or to conduct general reviews and has not taken the required Building Code examinations. As such he is concerned that it would be illegal for him to prepare and submit the designs or file a general review commitment form for the renovations.

[10] The applicants say that PEO licence holders are not subject to the regulatory scheme under the Building Code, and have brought this application seeking declarations to that effect, as well as injunctive and other relief.

The Parties' Positions

[11] The applicants' submission is that, at least to the extent that *Building Code Act* and Building Code provisions establish a competing regulatory scheme for PEO licence holders who design or conduct general reviews of buildings, such provisions are invalid for the following reasons:

> (a) The impugned provisions encroach upon the PEO's exclusive regulatory jurisdiction under the *Professional Engineers Act.*
>
> (b) The impugned Building Code provisions are not authorized by the *Building Code Act*.
>
> (c) The impugned Building Code provisions unlawfully sub-delegate authority.

[12] The respondents submit that the provisions are valid enactments for the purpose of protecting the public by providing for the establishment and enforcement of standards

relating to the construction and demolition of buildings. They are laws of general application and do not single out PEO licence holders, nor do they have as their purpose the regulation of PEO licence holders. They apply to the general class of designers and building practitioners with the purpose of ensuring public safety. They do not infringe on the jurisdiction of the PEO, nor is there conflict between the *Building Code Act* and the *Professional Engineers Act*. But if there were such a conflict, the Building Code, as the later enactment, would prevail.

[13] The respondent further submits that s. 34 (1) of the *Building Code Act* contains clear and unequivocal authority for the impugned Building Code provisions, and the Building Code does not constitute unauthorized sub-delegation.

[14] The intervenor OAA supports the applicants. It, like the professional engineers, lobbied the government against the imposition of regulations to impose this additional regulatory regime in respect of building permit applications. Pending the resolution of this dispute, the OAA entered into a Memorandum of Understanding ("MOU") with the Minister, establishing a parallel regulatory regime within the OAA. Its position is that this regime will be ended if the PEO is successful in the present litigation.

[15] The OAA submits that the Building Code regime goes far beyond the establishment of standards for the content of applications for building permits or rules for their processing. Rather, it provides extensively for the training, qualifications and licensing of persons submitting applications and vests the Director with a variety of intrusive powers as to books and records and the suspension or revocation of an registrant's status. It is the difference between regulating the application for the building permit and regulating the individuals applying that underlies the OAA's objections to the Building Code regime.

[16] The OAA does not dispute the power of the Legislature to revise the governance of the profession of architecture by appropriate legislation, but raises the issue of whether the present legislation empowers the establishment by regulation of a parallel regulatory structure that derogates from the OAA's exclusive jurisdiction to govern architects. It submits that the Building Code provisions at issue are invalid:

> There are two simple and straightforward elements to this position: (1) under the *Architects Act* the OAA has exclusive jurisdiction to regulate architects and the practice of architecture in the Province of Ontario, (2) any regulation which purports to derogate from the established exclusive jurisdiction of the OAA must be clearly and unequivocally authorized by statute.[1]

[17] The resolution of this dispute requires an examination of the regulatory schemes under both the *Professional Engineers Act* and the *Building Code Act* and Building Code.

Regulatory Scheme under the *Professional Engineers Act*

[18] The applicant PEO is statutorily mandated to regulate the practice of professional engineering in the public interest.

[19] The "practice of professional engineering" means "any act of designing, composing, evaluating, advising, reporting, directing or supervising, wherein the safeguarding of life, health, property or the public welfare is concerned and that requires the application of engineering principles"[2].

[20] A significant component of the practice of professional engineering relates to design and general reviews of the construction of buildings.

[21] The word "design" and the phrase "general review" are terms of art in the building construction field and are defined in s. 12 (8) of the *Professional Engineers Act*.[3] The word "design" is defined in a substantially similar manner in s. 15.11 (6) of the *Building Code Act*. A general review assesses the conformity of the construction of the building to the design and is not, *per se*, an evaluation of its conformity with the Building Code.

[22] PEO licence holders share with architects the exclusive right to design and conduct general reviews of buildings. This exclusivity is shared in a carefully negotiated arrangement with architects set out in complementary provisions of the *Professional Engineers Act* and the *Architects Act*.[4] Both statutes were enacted in 1984. A Joint Practice Board of the two professions helps avoid confusion and conflicts between them.

[23] The *Professional Engineers Act* provides a comprehensive regulatory scheme for the registration of PEO licence holders (through a review of education and work experience and the examination of applicants), the investigation of concerns and complaints and the discipline of PEO licence holders, the setting of standards of practice, the carrying of professional liability insurance, and other regulatory powers.

[24] The PEO is active in the regulation of PEO licence holders who design and conduct general reviews of buildings.[5] The PEO's definition of professional misconduct has a number of applicable provisions, including performance standards specifically applicable to the Building Code. A significant proportion (almost half) of the PEO's complaints and discipline activities relate to Building Code work. The PEO has published numerous relevant professional practice guidelines. Finally, all PEO licence holders offering services to the public must obtain a certificate of authorization and meet the specified professional liability insurance requirements.

Regulatory Scheme under the *Building Code Act*

[25] For many years Ontario has had a system to regulate building construction. Plans must be submitted in order to obtain a building permit. Buildings under construction are subject to government inspections and various enforcement orders (e.g., stop work orders). This system was updated with the *Building Code Act*, which was proclaimed into force in 1993, almost ten years after the *Professional Engineers Act* became law.

[26] In 2000 the Trow Report and the BRRAG Report were released. The major theme of both reports was to streamline the building approval process under the *Building Code Act* and Building Code. Neither report identified significant concerns in the conduct of PEO licence holders. The BRRAG report also dealt with increasing the competence and accountability of those involved in the building industry, including those who do the actual construction. Again, PEO licence holders were not singled out. The BRRAG report specifically recommended that new initiatives should not duplicate existing regulatory structures.

[27] In 2003 the *Building Code Act* was amended to authorize a regulatory scheme for, among others, those persons preparing designs and conducting general reviews of buildings. Amendments to the Building Code were made in 2003 and 2005, taking effect on December 31, 2005. (The relevant provisions of the *Building Code Act* and Building Code are reproduced in Schedule A at the end of these reasons).

[28] The *Building Code Act* says the role of "designers" is to provide designs that comply with the Act and the Building

Code, to provide sufficient information for building officials to determine such compliance, to perform general reviews, and to have the necessary qualifications and insurance required by the Building Code.[6] These are general role statements and PEO licence holders are not specifically identified in them. The *Building Code Act* also describes the role of chief building officials and other officials who determine whether a design or other construction work complies with the Building Code and who also enforce the legislation by issuing or withholding building permits.[7]

[29] The *Building Code Act* continues to recognize the expertise and qualifications of PEO licence holders and allows the making of regulations restricting certain aspects of general reviews only to PEO licence holders and/or architects.[8] The *Act* also expressly recognizes the regulatory role of the PEO and authorizes building officials to refer concerns about designs and general reviews by PEO licence holders to the PEO for regulatory action. At the request of the PEO, chief building officials must provide documents and information to PEO for regulatory action.[9]

[30] Article 2.3 of the Building Code allocates among PEO licence holders, architects and the public the ability to design and conduct general reviews of various types of buildings. The *Professional Engineers Act* and the *Architects Act* also address these matters.

[31] The Building Code regulatory scheme applies to every person engaged in the business of providing "design activities" to the public, excluding architects.[10] Where a design is intended to be submitted for a building permit, "design activities" include the preparation of the building design or the giving of an opinion concerning whether the building complies with the Building Code. As already mentioned above, this definition is very similar to the definition of "design" in the *Professional Engineers Act*.

[32] Article 2.17 of the Building Code sets out the qualifications and other requirements of designers that are subject to the regulatory scheme, including the following:

a. Successful completion of an examination program administered or authorized by the MMAH for registration / qualification;
b. A requirement to carry specified liability insurance;
c. A condition on registration restricting design and general reviews to the type of building for which one is registered;
d. A requirement to complete any new examinations that are developed;
e. The Director can reasonably require a registrant to provide any documents or information about a registrant's activities;
f. The representatives of the Director have access to a registrant's books and records for the purpose of confirming matters related to registration;
g. The Director can issue a notice of proposal to suspend or revoke the registration of a registrant for various reasons including the opinion that the past conduct of the registrant affords reasonable grounds for the belief that the business will not be carried on in accordance with law.

[33] It appears that Art. 2.17 duplicates many aspects of the requirements under the *Professional Engineers Act*. PEO licence holders must complete examinations administered by the PEO[11], be registered with the Registrar[12], and must carry liability insurance[13]. They are subject to investigation and discipline for professional misconduct.[14] And their licence can be revoked for, *inter alia*, professional misconduct, incompetence, and for past conduct that affords grounds for belief that he or she will not engage in the practice of professional engineering in accordance with the law and with

honesty and integrity.[15] I will return to the issue of duplication in the analysis that follows.

ANALYSIS

Issue 1: Are the impugned Building Code provisions invalid because the *Building Code Act* does not authorize them?

[34] The parties agreed that the standard of review on the issue of the validity or *vires* of the impugned Building Code provisions is correctness: *Sunshine Village Corp. v. Canada (Parks Canada)* 2004 FCA 166 (CanLII), (2004), 238 D.L.R. (4th) 647 at para. 10 (Fed. C.A.).

[35] Paragraph 34 (1) 10 of the *Building Code Act* grants the Lieutenant Governor in Council very broad authority to make regulations "requiring any part of the design, construction or demolition of a building to be under the general review of an architect…or a professional engineer", which is reflected in s. 2.3 of the Building Code. Leaving aside the considerations of contextual interpretation to be addressed later, and reading the language literally, the Lieutenant Governor in Council acted within his authority by enacting s. 2.3 of the Building Code, with two exceptions.

[36] First, I accept the applicants' submission that Art. 2.3.1.1 of the Regulation exceeds the reach of the statute by attempting to allocate between the professions the power to create particular designs (this is reflected in Table 2.3.1.1 – see Appendix A). Paragraph 34 (1) 10 of the *Building Code Act* only authorizes regulations requiring designs or parts of designs to be under the "general review" of one of the professions. The Lieutenant Governor in Council therefore erred in exercising his regulatory power, and Art. 2.3.1.1 is invalid to the extent that it purports to allocate the making of designs between professional engineers and architects.

[37] Second, I agree that the Lieutenant Governor in Council erred by purporting to direct the use of a professional engineer's seal in Art. 2.3.1.1 (4). There is no regulatory authority to make such a direction in s. 34 of the *Building Code Act*. The proper use of a seal is addressed in the *Professional Engineers Act*. Although counsel for the respondents conceded that Art. 2.3.1.1 (4) did not require anything more with regard to seals than what is already provided for under the *Professional Engineers Act*, that fact cannot support the over-broad Regulation.

[38] Paragraphs 34 (1) 33 to 35 and 35.3 of the Act grant the Lieutenant Governor in Council very broad authority to make regulations prescribing the qualifications of "designers" (including competency examinations, insurance and fees) and their registration with the Director. These matters are set out in great detail in Art. 2.17 of the Building Code, and I am not persuaded that the Lieutenant Governor in Council has exceeded his authority in simply creating such a regime for those dealing with the Code. The issue of whether the regime applies to architects and engineers raises different issues.

[39] In my view, the word "designers", as used in the *Building Code Act*, taken literally, is broad enough to include professional engineers. The applicants conceded that professional engineers both create designs and conduct general reviews. The Legislature can be taken to have known that professional engineers routinely perform these functions. While the Legislature has not expressly excluded professional engineers from the Act, there are provisions (dealt with below) suggesting a legislative intention to differentiate among classes of persons and to respect the existing position and statutory authority of the PEO to licence its members. I agree with the respondents' submission, citing *Sunshine*, *supra* at para. 18, that this court "must take the statute as it finds it", but it is the entire statute in its context that we consider. The *Rizzo* case illustrates that the literal meaning does not always prevail. I

have no doubt that the Lieutenant Governor in Council had the authority under the Act to enact the regulation, but the issue of whether the Legislature intended to grant the Ministry the authority to exercise such a broad control over professional engineers is a contextual one and will be dealt with in the analysis later in these reasons regarding the principles of interpretation.

Issue 2: Are the impugned Building Code provisions invalid because they unlawfully sub-delegate authority?

[40] Subparagraph 34 (1) 33 (ii) of the *Building Code Act* authorizes the Lieutenant Governor in Council to make regulations "prescribing qualifications for…designers…including…requiring assessments or examinations in connection with obtaining or maintaining the required qualifications." The applicants submit that the Lieutenant Governor in Council unlawfully sub-delegated this power to MMAH in Art. 2.17.4.2 (1) (a) and (b) of the Building Code, which states that the Director "may register an applicant…if…the applicant…successfully completed the examination program administered or authorized by the [MMAH]".

[41] The Ontario Court of Appeal in *Re Peralta and The Queen* reflex, (1985), 49 O.R. (2d) 705 at 717-18, aff'd 1988 CanLII 28 (S.C.C.), (1989), 66 O.R. (2d) 543 (S.C.C.), held that there is no rule against sub-delegation. Rather, the maxim *delegatus non potest delegare* is a rule of construction. The court must look to a number of factors to determine whether sub-delegation was intended. These factors include "administrative necessity", the suitability of the sub-delegate, and "the language of the whole enactment and of its purposes and objects".

[42] In my view, applying the aforementioned factors in this case indicates that the Legislature intended the Lieutenant Governor in Council to sub-delegate the administration of the examinations.

[43] Administrative necessity weighs heavily in favour of sub-delegation. It is not reasonable to expect the Lieutenant Governor in Council to prescribe in the Building Code the actual assessments and examinations required as part of the qualifications of designers. The Legislature has made MMAH responsible for the *Building Code Act* and Building Code. This makes MMAH the ideal sub-delegate. There can be no dispute that MMAH is a suitable sub-delegate for the administration of examinations that assess an applicant's knowledge of the Building Code regime. Indeed, it seems to me that sub-delegating the administration of examinations to the body that actually is responsible for the *Building Code Act* and Building Code is consistent with the overarching legislative purpose of protecting the public.

[44] Furthermore, the language used in s. 34 (1) 33 ii of the *Building Code Act* is consistent with sub-delegation. Strictly speaking, the Lieutenant Governor in Council need only "prescribe" that examinations be "required". The language of the provision does not go so far as to oblige the Lieutenant Governor in Council to "prescribe" the actual content of the assessments and examinations of designers.

[45] The applicants relied on this Court's decision in *Re Norman and Registration Committee of the Royal College of Dental Surgeons of Ontario* reflex, (1985), 50 O.R. (2d) 443 (Div. Ct.) [*Norman*] in support of their unlawful sub-delegation argument. That case is distinguishable from the case at bar. In *Norman* the Council of the College of Dentistry was given authority under s. 11 (7) (c) of the *Health Disciplines Act*, R.S.O. 1980, c. 196 to make regulations "governing the requirements and qualifications for the issuing of licenses". The Council passed a regulation giving itself the power to set or approve examinations that must be completed in order to

obtain a license. The Divisional Court held that this aspect of the regulation was unlawful. Setting or approving examinations was a "requirement" in s. 11 (7) (c) of the *Health Disciplines Act*. The only way the Council could set or approve a "requirement" was by regulation. In other words, the Council could not sub-delegate to itself the power to set or approve the examinations; it had to set the examinations by regulation. In this case there is no self sub-delegation. For the reasons given above, the Lieutenant Governor in Council has properly sub-delegated authority over the administration of the examinations and assessments to the MMAH.

Issue 3: Does the *Building Code Act* and the Building Code encroach upon the exclusive regulatory jurisdiction of PEO under the *Professional Engineers Act*?

[46] The respondents concede that the purposes of the *Professional Engineers Act* and of the *Architects Act* are to regulate the practice and membership of their respective professions in accordance with the public interest. The respondents submit that the new Building Code regime does not encroach on the regulatory jurisdiction of either of the professional associations. It is implicit in these submissions that the respondents recognize the exclusive authority of PEO and OAA to regulate their respective professions.

[47] The applicants and intervenor made extensive submissions on the exclusive nature of their responsibility and authority over the members of their respective professions. I conclude that the purpose of the two professional Acts is to regulate the conduct and good character of their members as well as their professional training and competence and this purpose is intended to be exclusive. This exclusivity is demonstrated by the comprehensive nature of the schemes, each of which addresses all the essential issues such as qualifications by education and experience to be registered, conduct and character, complaints and disciplinary functions, and punishment up to the level of de-certification. See *Regina Police Ass'n Inc. v. Regina (City) Board of Police Commissioners* 2000 SCC 14 (CanLII), (2000), 183 D.L.R. (4th) 14 at paras. 31-2 (S.C.C.) and *Abbott v. Collins* 2003 CanLII 46127 (ON C.A.), (2003), 64 O.R. (3d) 789 at paras. 4, 27-33 (Ont. C.A.).

[48] Mr. Brown, for the respondents, submits that the purpose of the *Building Code Act* and Building Code is not to regulate the practice of architecture or of professional engineering, but to ensure the safety of the public. He says the Legislature has chosen to enact a further layer of protection for the public relating to the construction of buildings and the new legislation must be read in the light of this purpose. I accept that the protection of the public is the purpose of the impugned legislation. However, as indicated above, parts of the *Building Code Act* and Building Code appear to duplicate the requirements of the professional Acts. One must ask, therefore, to what extent, if any, the protection of the public may be advanced by duplicating the professional regulatory Acts? This raises the question of whether this duplication was actually intended by the Legislature. Should those parts of the *Building Code Act* be read to include PEO license holders or not?

[49] The applicants say that the heart of the issue before the Court is that the Building Code usurps the authority of the professional bodies to govern their members as to the qualifications necessary to practice an important part of their profession. Architects and engineers come into contact with the Building Code on a frequent basis. The engineers are specifically licenced to practice professional engineering, which includes the art of designing, evaluating, reporting on, directing and supervising the design and construction of buildings in the light of engineering principles. Knowledge of the Building Code is a necessity for those practicing in the design of buildings, and education in the Building Code is a

part of their professional responsibility. But the applicants submit that the revised Building Code goes much farther than regulating a professional's knowledge of its content. They say it also purports to regulate character and conduct. In these respects the applicants submit the Building Code directly duplicates and conflicts with PEO's exclusive regulatory authority.

[50] The applicants point to a number of instances of duplication. There are the rules in Art. 2.3 of the Building Code as to the application of the professional engineer's seal to plans. Art. 2.3 of the Building Code also allocates among PEO licence holders, architects and the public the ability to design and conduct general reviews of various types of buildings. The *Professional Engineers Act* and the *Architects Act* already address these issues (and I have already held above that the Lieutenant Governor in Council exceeded his statutory authority by regulating these matters).

[51] An even more problematic field is that of professional misconduct. Here, the Building Code by section 2.17 gives the Director the power to suspend a registrant for various reasons, including the opinion that the conduct of the registrant affords reasonable grounds for the belief that the registrant will not carry on business in accordance with law. This duplicates the powers of the Registrar of the PEO to suspend or revoke an engineer's licence. Mr. Brown submitted that there was no duplication because the Director would only revoke for conduct related to the Building Code. When pressed by the court that the Director could act in relation to whether the business was likely to be carried on in accordance with "law", he conceded that the Director could not ignore past conduct as evidence of character, but submitted that the Director's interest in the character of the registrant had nothing to do with engineering principles. This submission is not persuasive. The PEO's interest in the character of the licensees is not defined by engineering principles either, but by their character. It is clear that there is a duplication involved here.

[52] Mr. Brown further submitted that the present case was in parallel with the case of *Wilder v Ontario Securities Commission*, [2000] O.J. No. 758 (Div. Ct.), aff'd [2001] O.J. No. 1017 (C.A.), which I will address in greater detail below, where this court held that the Commission could regulate the conduct of a lawyer actually appearing before it, despite the fact that the lawyer was also subject to conduct regulation by the Law Society.

i. The *Wilder* case

[53] The issue in the *Wilder* case arose out of a letter written by Mr. Wilder, a lawyer acting in his professional capacity, to the Ontario Securities Commission in the course of a prospectus review. The Commission staff alleged that the letter contained a misleading statement of material fact and a Notice of Hearing was issued that the Commission would consider whether it was in the public interest to reprimand him for this act. Mr. Wilder brought a judicial review application seeking to prohibit the hearing and to quash the Notice on the grounds that only the Law Society had jurisdiction over him as a lawyer acting in a professional capacity.

[54] This court held that there was no inconsistency between the role of the Law Society in regulating the legal profession and the role of the Commission in regulating the capital markets – they both protect the public interest but the aspect of that interest is not the same. The Commission did not seek to discipline the lawyer for professional misconduct, but to protect its own process from abuse. Further, the Commission did not seek to control the right of access to practice before it, but only to reprimand an individual for alleged misconduct before it. Therefore, the court refused to quash the Notice of Hearing. In the Court of Appeal the argument turned largely

on other issues, but the Court at para. 29 specifically adopted the analysis of Swinton J., for this court, in dealing with the issue now before us.

[55] The principle enunciated in *Wilder* has meaning for this case. I take it to mean that not every requirement of an entity with which a registered professional interacts impinges on the exclusive authority of the professional regulator. Such entities are entitled to protect the integrity of proceedings before them.

[56] It is important to note that the Commission in *Wilder* did not purport to go beyond the actual act that Mr. Wilder allegedly committed in dealing with the Commission. Nor, in my view, could the Commission have done so without invading the exclusive jurisdiction of the Law Society over issues of professional competence, character and conduct. For example, an inquiry by the Commission into Mr. Wilder's past conduct in general in order to determine fitness on character grounds would be extremely suspect.

[57] The applicants and intervenor submit that the limit of *Wilder* is reached when the entity moves from regulating a particular interaction between itself and a professional, to the establishment of a competing regulatory scheme regulating the general conduct, character and competency of the registered professional. In their submission the Building Code regulatory scheme is the latter. The applicants draw attention to these features in their factum, at para. 36:

> It is submitted that in the present case, section 2.17 of the Building Code regulation establishes a competing regulatory scheme for the registration and discipline of PEO licence holders. For example, under both schemes:
>
> a. The scope of building designs and general reviews are virtually identical.
>
> b. There purports to be an allocation of what must be done by a PEO licence holder, what must be done by an architect and what can be done by anyone.
>
> c. The practitioner cannot practise without registration, qualification or authorization.
>
> d. A jurisprudence-type examination is required for registration / qualification.
>
> e. A practitioner seals / imprints his or her Building Code Identification Number (BCIN) on a document to take responsibility for it.
>
> f. A practitioner is subject to administrative investigation powers including the requirement to provide access to client files and information.
>
> g. A practitioner is subject to disciplinary action for failing to comply with the *Building Code Act, 1992* or the Building Code regulation.
>
> h. In addition a practitioner is also subject to a notice of proposal to suspend or revoke his or her registration or authorization for creating the belief that the practitioner will not carry on business in accordance with any law (not just Building Code law).

i. In addition to the registration and disciplinary tools, a practitioner who fails to comply with the legislation is subject to a provincial offences prosecution before the courts and injunctive relief.

j. There are liability insurance requirements for those offering services to the public.

[58] In addition, the applicant submits at para. 37 that:

> …the concept of assuming professional responsibility for one's work is more extensive under the *Professional Engineers Act* than it is under the Building Code Regulation. The PEO practitioner is expected to have either performed or to have closely supervised work he or she seals. Under the Building Code regulation the practitioner is encouraged to simply review and stamp the work of others.

[59] The Building Code certainly bears the distinctive characteristics of a professional regulatory statute. It regulates the requirements for admission to practice in the field of submitting building plans to the various building officials for approval. There are educational and insurance requirements; allocations of responsibility for various kinds of work; rules as to the stamping of work product; administrative obligations such as giving access to client files and information; disciplinary sanctions; and revocation powers on character grounds. In scope and function, it is indistinguishable from professional regulatory acts. If truth be told, the Building Code is a professional regulatory act in search of a profession.

[60] The profession of engineering often requires engineers to deal with compliance with the Building Code and to deal with building officials to obtain approval for their clients. Misconduct, negligence, dishonesty or the like in such dealings are professional failings and fall under the jurisdiction of the PEO. On its face, the Building Code gives power to the Director to examine into matters within the exclusive jurisdiction of the *Professional Engineers Act.* That conclusion does not at once lead to the further conclusion that it is invalid. It is necessary to consider the *Building Code Act* and in particular the power which it grants to make regulations. Does the *Building Code Act* authorize the making of regulations impinging on the exclusive authority of the applicant to govern its members? As I will explain below, I conclude that it does not.

ii. The *Building Code Act* does not authorize regulations that impinge on PEO's exclusive authority to regulate professional engineers

[61] The modern rule of statutory interpretation was formulated by Elmer Driedger[16] and was accepted as the preferred approach by the Supreme Court in *Re Rizzo and Rizzo Shoes Ltd.*, 1998 CanLII 837 (S.C.C.), [1998] 1 S.C.R. 27 at 41. In *Ontario (Attorney General) v. Big Canoe* 2002 CanLII 18055 (ON C.A.), (2002), 62 O.R. (3d) 167 (C.A.), leave to appeal to the S.C.C. ref'd [2003] S.C.C.A. No. 31, the Court of Appeal discussed the modern rule at p. 173:

> Finally, the "modern" interpretation method was reformulated in Canada by Professor R. Sullivan: Driedger on the Construction of Statutes (3rd ed. 1994) at p. 131:
>
> > There is only one rule in modern interpretation, namely, courts are

> obliged to determine the meaning of legislation in its total context, having regard to the purpose of the legislation, the consequences of proposed interpretations, the presumptions and special rules of interpretation, as well as admissible external aids. In other words, the courts must consider and take into account all relevant and admissible indicators of legislative meaning. After taking these into account, the court must then adopt an interpretation that is appropriate. An appropriate interpretation is one that can be justified in terms of (a) its plausibility, that is, its compliance with the legislative text; (b) its efficacy in its promotion of the legislative purpose; and (c) its acceptability, that is, the outcome is reasonable and just.

[62] The first consideration is the purpose of the *Professional Engineers Act*. It is clear that the purpose of the Act is the regulation of the conduct of professional engineers, including their character (e.g. whether there is reason to believe, based on past conduct, that the licensee will not carry on the profession in accordance with law). The purpose of the *Building Code Act* is primarily to regulate the construction of buildings by establishing the standards of construction set out in the Building Code. As recently amended, the Building Code has the purpose of ensuring that those who deal with the Building Code and with Building Officials have certain qualifications and be registered.

[63] The respondents submit that there is no actual conflict between the two statutes. The Building Code is geared to testing designers' knowledge of the *Building Code Act* and Building Code. It does not touch upon the heart of PEO's mandate, "such as membership in the organization, professional ethics, competency as a professional engineer or architect, or any other sphere not directly relevant to building construction and demolition." If there is no real conflict, the two regimes can co-exist.

[64] The respondents submit that the case at bar is analogous to the case of *Law Society of Upper Canada v. Barrie (City)* reflex, (2000), 46 O.R. (3d) 620 (S.C. J.), where the City passed a by-law to require all businesses in the City to obtain a business licence. It was held that lawyers governed by the *Law Society Act* were not exempt. Compliance with the by-law did not conflict with the Law Society's jurisdiction over the professional aspects of the lawyer's business.

[65] In my view, the analogy is not apt. The business licence was really a tax. The City did not purport to legislate that the lawyer could not practice her profession without submitting to further professional testing or submitting to inquiries as to her fitness to practice. The situation before us is quite different. The Building Code prevents the professional engineer from performing some significant professional tasks

for which he is already licensed by the PEO under the *Professional Engineers Act* unless he complies with these new profession-related requirements and exposes himself to a duplicative disciplinary scheme not confined to his actual interaction with building officials. Therefore it cannot be said that there is no real conflict between the two regimes.

[66] While the Building Code refers to "every person", it does not expressly include engineers among the persons required to obtain "qualifications". Certain provisions of the Building Code, such as Art. 2.3.1.1 discussed above, tend to support a legislative intention to respect the special rights and obligations of the professional engineer. This point is reinforced by the language of s. 34 (1) 33 of the *Building Code Act* (see Schedule A), which permits the making of regulations prescribing qualifications for designers and others, including "different qualifications for different classes of…designers". This signals a legislative intention to differentiate between classes of designers, presumably by reason of differences in training, education and experience. Thus it cannot be said that the purpose of the *Building Code Act* and Building Code support the proposition that the regulatory scheme implemented by this legislation is meant to impinge on the PEO's exclusive regulatory jurisdiction over its members.

[67] The second Driedger consideration is the consequences of opposing interpretations. In my view the inclusion of professional engineers within the Building Code regulatory scheme leads to incongruous results. As noted, they are already licenced through the *Professional Engineers Act* to perform the very acts now regulated by the Building Code. They are already under a scheme of discipline which can see them lose their licence on grounds of lack of competence or, in effect, bad character, through a complaints and discipline system. To involve professional engineers in a second such system over essentially the same professional competence is a form of double jeopardy, which is, as indicated by the various deponents giving affidavit evidence on behalf of the applicants and intervenor, unfair and unnecessary to accomplish the ends of the legislation.

[68] The *Wilder* case illustrates the problem and the solution. If a professional engineer interacts with an entity, such as a chief building official, in a dishonest or unprofessional manner, he or she may be exposed to some punishment under the rules of that entity, as was Mr. Wilder. But the bringing of charges of professional misconduct on character grounds (such as reason to believe from past conduct that the professional engineer will not act honestly), or the evaluation of a professional engineer's competency (through assessments and examinations) are exclusive functions of the PEO. To the extent that the Building Code imposes these and similar conditions on "persons", it should be read as excluding those members of professions already subject to a statutory professional regulatory regime.

[69] Under the third Driedger consideration the courts look to the aids to interpretation and the presumptions and special rules of interpretation. The respondents submit that one test of legislative intent is the presence of an exemption for architects, but none for engineers. This would be a potent argument but for the special circumstances described above that the exemption came about as a temporary measure to await the resolution of the issues being canvassed in these reasons. In those circumstances it is not appropriate to draw the conclusion urged on us by counsel for the respondents.

[70] The respondents submit that in the event (which they deny) that there is some inconsistency between the *Professional Engineers Act* and the *Building Code Act* and Building Code, the latter should prevail because they were enacted later and are deemed to have impliedly repealed the former to the extent of the inconsistency. They rely on *Winnipeg School Division No. 1 v. Craton*, 1985 CanLII 48

(S.C.C.), [1985] 2 S.C.R. 150, where the issue was whether the school board's mandatory retirement policy, set out in s. 39 (2) of its Act, prevailed over the *Human Rights Act*. McIntyre J. for the Supreme Court observed, at para. 7, that:

> Section 6(1) of The Human Rights Act, enacted in 1974, was clearly a subsequent enactment and an express prohibition against discrimination in employment on the basis of age, and even setting aside the notion of any primacy for human rights legislation, it would have prevailed and repealed section 39(2) by implication.

[71] Certainly the relative timing of the passage of the two statutes was a factor in the Supreme Court's decision, but it is important to observe that the later enactment was an express prohibition of what was called for by the earlier, which is decidedly not so in the case before us.

[72] The scope of the concept of implied repeal is somewhat more limited than the respondents submit. Where the later statute is general and the earlier specific, it appears that the general may be construed as allowing an exception for the existing specific Act.[17] Such a principle would be applicable in the case at bar where the earlier *Professional Engineers Act* establishes a regime for a particular profession, whereas the later Building Code applies generally to everyone doing business with the chief building official about building permits. As well, cases show a significant respect for rights already granted and the need for very clear language to over-ride them.

[73] In *Re British Columbia Teachers' Federation and A.G. for British Columbia* reflex, (1985), 23 D.L.R. (4th) 161, the British Columbia Court of Appeal dealt with whether a directive from the B. C. Treasury Board establishing a formula limiting school expenditures prevailed over provisions of the *School Act* placing management, including teacher salaries and lay-offs, in the hands of the School Trustees. At pp. 173-4, Anderson J.A., for the majority, said:

> The Legislature, by enacting the School Act, conferred important statutory rights on school boards, teachers and the residents in each school district. …
>
> In the absence of express language, it will not be presumed that the Legislature intended to abrogate existing statutory rights of the nature described above.
>
> The law is summarized in Maxwell on The Interpretation of Statutes, 12th ed. (1969), at p. 196, as follows:
>
> > "Now if anything be certain it is this," said the Earl of Selborne L.C. in The Vera Cruz, "that where there are general words in a later Act capable of reasonable and sensible application without extending them to subjects specially dealt with by earlier legislation, you are not to hold that earlier and special legislation indirectly repealed, altered, or derogated from merely by force of such general words,

without any indication of a particular intention to do so." In a later case, Viscount Haldane said: "We are bound ... to apply a rule of construction which has been repeatedly laid down and is firmly established. It is that wherever Parliament in an earlier statute has directed its attention to an individual case and has made provision for it unambiguously, there arises a presumption that if in a subsequent statute the Legislature lays down a general principle, that general principle is not to be taken as meant to rip up what the Legislature had before provided for individually, unless an intention to do so is specially declared. A merely general rule is not enough, even though by its terms it is stated so widely that it would, taken by itself, cover special cases of the kind I have referred to. [Footnotes omitted] [Emphasis added]

[74] To a similar effect is the judgment of the Supreme Court in *Morguard Properties Ltd. v. City of Winnipeg*, 1983 CanLII 33 (S.C.C.), [1983] 2 S.C.R. 493. Estey J., who delivered the judgment of the court, stressed that existing statutory rights will not be deemed abrogated in the absence of express language indicating a clear legislative intention so to do. At p. 509 he said:

> In more modern terminology the courts require that, in order to adversely affect a citizen's right, whether as a taxpayer or otherwise, the Legislature must do so expressly. Truncation of such rights may be legislatively unintended or even accidental, but the courts must look for express language in the statute before concluding that these rights have been reduced.

[75] The cases show that before we could agree with the respondent that professional engineers are subject to the full panoply of control established by the Building Code, we should be able to point to statutory language which clearly indicates that the existing right of the professional engineers to practice in accordance with the *Professional Engineers Act* was intended to be abrogated. In my view, no such clear statutory language exists.

[76] The final Driedger consideration is the plausibility of the interpretation in the light of the actual language, its efficacy in promoting the purpose of the statute, and the fairness of the result. It is significant that there is no provision in the *Building Code Act* or in the Building Code establishing any form of primacy of those enactments over the professional regulatory Acts. By contrast, s. 35 (1) expressly provides that the *Building Code Act* and the Building Code supersede all municipal by-laws. Certainly the words “every person” are broad and are intended to capture those who deal with the Code

by presenting plans to building officials for permits. But there are, as noted, other provisions suggesting a legislative intention to differentiate among classes of persons and to respect the existing position and statutory authority of the PEO to licence its members. To do so in a rational way must result in the exclusion of professional engineers from the duplicative competence and character control scheme under the Building Code as they are already subject to such a statutory regime.

DISPOSITION

[77] I agree with the submissions of the respondents that this is not a case for injunctive relief or for the exercise of the court's prerogative powers. I would grant the following declarations:

1. Article 2.3.1.1 of the Building Code is not authorized by s. 34 (1) 10 of the *Building Code Act* and is invalid to the extent that it purports to allocate responsibility for designs between professional engineers and architects.

2. Article 2.3.1.1 (4) of the Building Code is not authorized by s. 34 of the *Building Code Act* and is invalid.

3. Clause 1.1 (1) (c), subsection 1.1 (2), clause 8 (2) (c), and subsections 15 (5) to (7) of the *Building Code Act* conflict with the exclusive regulatory jurisdiction of the PEO and do not apply to any holder of any licence or certificate issued under the *Professional Engineers Act*.

4. Article 2.17 of the Building Code conflicts with the exlusive regulatory jurisdiction of the PEO and does not apply to any holder of any licence or certificate issued under the *Professional Engineers Act*.

[78] Order to follow accordingly.

[79] While relief is only available to the applicant professional engineers in this case, in my opinion the analysis in these reasons for judgment applies equally to the intervenor architects.

COSTS

[80] Any party wishing to make submissions as to costs may do so by way of brief written submissions to the Court within 30 days of the release of these reasons for judgment.

[81] Before parting with this case, I wish to express my gratitude to my colleagues for their significant contributions to the preparation of these reasons.

_____
Lane J.

I agree. _____
Chapnik J.

I agree. _____
Smith J.

DATE: May 2007

SCHEDULE A

***Building Code Act, 1992*, S.O. 1992, c. 23**

Role of various persons

1.1 (1) It is the role of every person who causes a building to be constructed,

(a) to cause the building to be constructed in accordance with this Act and the building code and with any permit issued under this Act for the building;

(b) to ensure that construction does not proceed unless any permit required under this Act has been issued by the chief building official; and

(c) to ensure that construction is carried out only by persons with the qualifications and insurance, if any, required by this Act and the building code.

Role of designers

(2) It is the role of a designer,

(a) if the designers designs are to be submitted in support of an application for a permit under this Act, to provide designs which are in accordance with this Act and the building code and to provide documentation that is sufficiently detailed to permit the design to be assessed for compliance with this Act and the building code and to allow a builder to carry out the work in accordance with the design, this Act and the building code;

(b) to perform the role described in clause (a) in respect of only those matters for which the designer has the qualifications, if any, required by this Act and the building code; and

(c) if the building code requires that all or part of the design or construction of a building be under general review, to perform the general review in respect of only those matters for which the designer has the qualifications, if any, required by this Act and the building code.

Issuance of permits

8. (2) The chief building official shall issue a permit [to construct or demolish a building] unless,

…

(c) a person who prepared drawings, plans, specifications or other documents or gave an opinion concerning the compliance of the proposed building or construction with the Building Code does not have the applicable qualifications, if any, set out in the Building Code or does not have the insurance, if any, required by the Building Code.

…

Referral of plans, etc.

(9) Upon reasonable grounds, the chief building official or registered code agency may refer drawings, plans or specifications accompanying applications for permits or the reports arising out of the general review of the construction of a building to the Association of Professional Engineers of Ontario or the Ontario Association of Architects for the purpose of determining if the *Professional Engineers Act* or the *Architects Act* is being contravened.

Same

(9.1) At the request of the Association of Professional Engineers of Ontario or the Ontario Association of Architects, the chief building official shall refer documents and information described in subsection (9) to those associations

for the purpose of determining if the *Professional Engineers Act* or the *Architects Act* is being contravened.

Qualifications for designers

15.11 (5) A person is not eligible to engage in any of the following activities unless he, she or it has the qualifications and meets the requirements set out in the Building Code to be a designer:

1. Prepare a design or give other information or opinion concerning whether a building or part of a building complies with the building code, if the design, information or opinion is to be submitted to a chief building official in connection with (i) an application for a permit, (ii) [omitted] or (iii) a report described in paragraph 2.

2. If a general review of the construction of a building is required by the Building Code, prepare a written report based on the general review.

Same

(6) In subsection 5, "design" includes a plan, specification, sketch, drawing or graphic representation respecting the construction of a building.

Prohibition

(7) No person shall represent, directly or indirectly, that he, she or it has the qualifications or meets the requirements established under this section if the person does not have those qualifications or does not meet those requirements.

Regulations

34. (1) The Lieutenant Governor in council may make regulations governing standards for the construction and demolition of buildings, including,

…

10. requiring any part of the design, construction or demolition of a building to be under the general review of an architect as defined in the *Architects Act* or a professional engineer as defined in the *Professional Engineers Act* and that copies of reports arising from the general review be provided to the chief building official or to a registered code agency;

…

33. prescribing qualifications for chief building officials, inspectors, registered code agencies, designers and other persons referred to in section 15.12 and related matters including,

(i) requiring different qualifications for different classes of officials, inspectors, designers and other persons,

(ii) requiring assessments or examinations in connection with obtaining or maintaining the required qualifications,

(iii) [establishment of register of qualified persons];

(iv) [fees];

Building Code, O. Reg. 403/97

Design and Section 2.3. General Review

Design 2.3.1.

2.3.1.1. Design by Architect or Professional Engineer

(1) Except as permitted in Sentences (2) and (3), the *construction*, including, for greater certainty, enlargement or alteration, of every *building* or part thereof described in Table 2.3.1.1. and this Article shall be designed and reviewed by an *architect*, *professional engineer* or both.

(2) An *architect* may provide the services within the practice of professional engineering in any *building* described in Table 2.3.1.1., or a *professional engineer* may provide the services within the practice of architecture in any *building* described in Table 2.3.1.1. where to do so does not constitute a substantial part of the services provided by the other profession related to the *construction* of the *building* and is necessary

(a) for the *construction* of the *building* and is incidental to the other services provided by the *architect* or *professional engineer*, or

(b) for coordination purposes.

TABLE 2.3.1.1.[4]
Design and General Review
Forming Part of Sentence 2.3.1.1.(1)

Building **Classification by** ***Major Occupancy***	***Building*** **Description**	**Design and General Review by:**
Assembly occupancy only	Every *building*	*Architect* and *professional engineer*[1]
Assembly occupancy and any other *major occupancy* except *industrial*	Every *building*	*Architect* and *professional engineer*[1]
Care or detention occupancy only	Every *building*	*Architect* and *professional engineer*[1]
Care or detention occupancy and any other *major occupancy* except *industrial*	Every *building*	*Architect* and *professional engineer*[1]
Residential occupancy only	Every *building* that exceeds 3 *storeys* in *building height*	*Architect* and *professional engineer*[1]
	Every *building* that exceeds 600 m^2 in *gross area* and that contains a *residential occupancy* other than a *dwelling unit* or *dwelling units*	*A*
Residential occupancy only	Every *building* that exceeds 600 m^2 in *gross area* and contains a *dwelling unit* above another *dwelling unit*	*A*
	Every *building* that exceeds 600 m^2 in *building area* contains 3 or more dwelling units and has no *dwelling unit* above another *dwelling unit*	*A*
Residential occupancy and any other *major occupancy* except *industrial*, *assembly* or *care or detention occupancy*	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*A*
Business and personal services occupancy only	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*A*
Business and personal services occupancy and any other *major occupancy* except *industrial*, *assembly* or *care or detention occupancy*	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*A*
Mercantile occupancy only	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*A*
Mercantile occupancy and any other *major occupancy* except *industrial*, *assembly* or *care or detention occupancy*	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*A*
Industrial occupancy only and where there are no subsidiary *occupancies*	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*A*
Industrial occupancy and one or more other *major occupancies* where the portion of the area occupied by one of the other *major* or subsidiary *occupancies* exceeds 600 m^2	The non-industrial portion of every *building*	*A*
	The industrial portion of every *building*	*A*
Industrial occupancy and one or more other *major occupancies* where no portion of the area occupied by one of the other *major* or subsidiary	Every *building* that exceeds 600 m^2 in *gross area* or 3 *storeys* in *building height*	*A*

occupancies exceeds 600 m^2		
Column 1	2	3

Notes To Table 2.3.1.1.

(1)An *architect* shall provide services within the practice of architecture and a *professional engineer* shall provide the services within the practice of professional engineering.

(2)An *architect* may engage a *professional engineer* to provide services within the practices of professional engineering.

(3)Only a *professional engineer* may provide services within the practice of professional engineering.

(4)Requirements for design and general review by an *architect* or *professional engineer* or a combination of both for the *construction*, enlargement or alteration of a *building* are set out in the *Architects Act* and the *Professional Engineers Act*.

(3) The requirement for an *architect* does not apply to the preparation or provision of a design for interior space for a *building*, including finishes, fixed or loose furnishings, equipment, fixtures and partitioning of space, and related exterior elements such as signs, finishes and glazed openings used for display purposes, that does not affect or is not likely to affect

(a) the structural integrity,

(b) a fire safety system or *fire separation*,

(c) a main entrance or *public corridor* on a floor,

(d) an *exit* to a public thoroughfare or to the exterior,

(e) the *construction* or location of an exterior wall, or

(f) the usable floor space through the addition of a *mezzanine*, infill or other similar element, of the *building*.

(4) Where a building or part of it described in Table 2.3.1.1. is designed by an architect or a professional engineer or a combination of both as required by this Article, all plans, sketches, drawings, graphic representations, specifications and other documents that are prepared by an architect, professional engineer or both and that form the basis for the issuance of a permit under Section 8 of the Act or any changes to it authorized by the chief building official shall bear the signature and seal of the architect, professional engineer or both, as applicable.

(5) Where the *foundations* of a *building* are to be constructed below the level of the footings of an adjacent *building* and within the angle of repose of the *soil*, as drawn from the bottom of the footings, the *foundations* shall be designed by a *professional engineer*.

(6) The thermal design of a *building* in accordance with Section 9.38. shall be prepared and provided by an *architect* or *professional engineer* or a combination of both.

General Review 2.3.2.

2.3.2.1. General Review by Architect or Professional Engineer

(1) Except as permitted in Sentence (2), a person who intends to construct or have constructed a building required to be designed by an architect, professional engineer or both, shall ensure that an architect, professional engineer or both are retained to undertake the general review of the construction of the building in accordance with the performance standards of the Ontario Association of Architects or the Association of Professional Engineers of Ontario, as applicable, to determine whether the construction is in general conformity with the plans, sketches, drawings, graphic representations,

specifications and other documents that are prepared by an architect, professional engineer or both and that form the basis for the issuance of a permit under Section 8 of the Act or any changes to it authorized by the chief building official, copies of written reports arising out of the general review shall be forwarded to the chief building official or registered code agency, as the case may be, by the architect, professional engineer or both who have been retained to undertake the general review of the construction of the building.

(2) An *architect* or a *professional engineer* need not be retained to undertake the general review of *construction* of a *building* where the *building* is designed in accordance with Section 9.38.

2.3.2.2. Restriction for General Review

(1) Only an *architect* may carry out or provide the general review of the *construction* of a *building*

(a) that is constructed in accordance with a design prepared or provided by an *architect*, or

(b) in relation to services that are provided by an *architect* in connection with the design in accordance with which the *building* is constructed.

(2) Only a *professional engineer* may carry out or provide the general review of the *construction* of a *building*

(a) that is constructed in accordance with a design prepared or provided by a *professional engineer*, or

(b) in relation to services that are provided by a *professional engineer* in connection with the design in accordance with which the *building* is constructed.

2.3.2.3. Demolition of a Building

(1) The applicant for a permit respecting the *demolition* of a *building* shall retain a *professional engineer* to undertake the general review of the project during *demolition*, where

(a) the *building* exceeds 3 *storeys* in *building height* or 600 m^2 in *building area*,

(b) the *building* structure includes pre-tensioned or post-tensioned members,

(c) it is proposed that the *demolition* will extend below the level of the footings of any adjacent *building* and occur within the angle of repose of the *soil*, drawn from the bottom of such footings, or

(d) explosives or a laser are to be used during the course of *demolition*.

Section 2.17. Qualifications for Designers

2.17.1.1. Scope

(1) This Section prescribes, for the purposes of Clause 8 (2) (c) and Subsection 15.11 (5) of the Act, the qualifications for a person who carries out *design activities* after December 31, 2005.

Qualifications — 2.17.4. Persons Engaged in the Business of Providing Design Activities to the Public

2.17.4.1. General

(1) Except as provided in sentences 3 and 4, every person engaged in the business of providing design services to the

public after December 31, 2005, must have the following qualification:

(a) The person must be *registered* with the *director*.

2.17.4.2. Registration and Renewal of a Registration

(1) [The Director may register an applicant if]

(a) the applicant…has successfully completed the [Minster's] examination program relating to the person's knowledge of this Act and this Code;

(b) all persons who will review and take responsibility for design activities provided to the public…have successfully completed the examination program administered or authorized by the [MMAH]…relating to the person's knowledge of this Act and of this Code.

(c) the applicant…is covered by the insurance required under Subsection 2.21.2. during the term of the registration applied for, …

2.17.4.9. Suspension, Revocation, Refusal to Register or Renew a Registration

(1) The Director may in the circumstances set out in sentence (2):

(a) refuse to register an applicant or to renew a registration, or

(b) suspend or revoke a registration.

(2) The circumstances referred to in sentence (1) are:

(a) the registered person is in contravention of the Act or this Code;

(b) the registered person is in breach of a condition of the registration…

…

(d) the director is of the opinion that the past conduct of the applicant or registered person…affords reasonable grounds for belief that the business …authorized by the registration will not be carried on in accordance with law.

---

[1] Intervenor's Factum at para. 20 (emphasis in original).

[2] *Professional Engineers Act*, s. 1.

[3] "design" means a plan, sketch, drawing, graphic representation or specification intended to govern the construction, enlargement or alteration of a building or a part of a building.

[4] *Professional Engineers Act*, s. 12 (6); *Architects Act*, s. 11.

[5] Professional Engineers Act, R.R.O. 1990, Reg. 941, ss. 47-49, 72, 74 and 78.

[6] *Building Code Act*, ss. 1.1 and 15.11 (5).

[7] *Building Code Act*, s. 8 (2) (c).

[8] *Building Code Act*, s. 34 (1) 10.

[9] *Building Code Act*, ss. 8 (9) and (9.1).

[10] Due to a negotiated agreement with MMAH architects are exempt from these Building Code provisions. Regulations under the *Architects Act* establish a similar regulatory scheme.

[11] Professional Engineers Act, R.R.O. 1990, Reg. 941, ss. 1, 33.

[12] *Professional Engineers Act*, ss. 12 (1) and (2).

[13] Professional Engineers Act, R.R.O. 1990, Reg. 941, s. 74.

[14] *Professional Engineers Act*, ss. 33, 72, 77.

[15] *Professional Engineers Act*, ss. 14 (2), 15 (8) (a), 18 (2) (a), 28 (4) (a) and (b).

[16] E. A. Driedger *The Construction of Statutes* (Toronto: Butterworths, 1974) at 67.

[17] Peter W. Hogg, *Constitutional Law of Canada*, 4th ed. (Scarborough: Carswell, 1997) at 16-1 fn 2.

COURT FILE NO.: DC-06-081239-00
DATE: 20070328

SUPERIOR COURT OF JUSTICE - ONTARIO
DIVISIONAL COURT

RE: Paul Philpott and Christine Philpott v. The Corporation of the Town of Innisfil and Heather Rutherford in her capacity as Chief Building Official of The Corporation of the Town of Innisfil

BEFORE: Justices Ferrier, Cumming and Donohue

COUNSEL: ***Ellen Anderson*** and ***Michael Adams*** for Appellants/Applicants
Robert Bigioni for Respondents/Respondents

HEARD: **March 15 and 16, 2007**

E N D O R S E M E N T

CUMMING J.

The Appeal

[1] The appellants appeal a judgment of MacKinnon, J. dated August 23, 2006. He dismissed the appellants/applicants' appeal of the Chief Building Official's ("CBO") denial of their application for a building permit. This matter raises novel legal issues.

[2] We dismiss the appeal. Our reasons follow.

Background

[3] The appellants, Mr. and Ms. Philpott, own property referred to as 1150 Arnold Street in the Town of Innisfil. On September 22, 2004 the Town passed Consolidated By-Law 054-04, which granted single, residential (R1S) zoning for the subject property of the Philpotts. Prior thereto the zoning was "H" or "Hold" which did not permit a single-family residence.

[4] By-law 054-04 was appealed by a number of affected parties (not the applicants).

[5] The Town realized at some point in the fall of 2004 that By-Law 054-04 contained a number of errors, one of which was a clerical, mapping error pertaining to the subject property. The Town had not intended in enacting By-Law 054-04 to change the zoning for the subject property. The purported change was inadvertent.

[6] Learning of the zoning change through By-Law 054-04, the appellants applied for a building permit October 29, 2004, authorizing them to build a single-family home. The application was unilaterally held in abeyance by the Town. The appellants first learned about the clerical errors in By-Law 054-04 at a public meeting May 11, 2005. Mr. Philpott was told at that time of the clerical error relating to his property and that the Town intended to restore the "Holding Zone" to his property.

[7] The appellants were then formally advised by the Town by letter June 3, 2005 that the R1S zoning for their property was a clerical error. They were told that By-Law 054-04 was under a pending appeal, and that an amending by-law would be passed, such that the R1S zoning would fall away and the "Holding Zone " restored. They were further advised that pursuant to s. 34(30) of the *Planning Act*, R.S.O., 1990, c. P 13. By-Law 054-04 was not in force until the appeals were dealt with by the Ontario Municipal Board ("OMB"). They were also told that if the amending by-law was appealed the

Town would seek consolidation of the hearing before the OMB in respect of the parent By-law 054-04. Further, the Philpotts were told that their application for a building permit would be held in abeyance pending the disposition of By-Law 054-04 and that if they sought an earlier decision on the application it would be denied as the property did not comply with the restrictive zoning currently in place.

[8] The solicitor for the Philpotts responded June 7, 2005, stating in part,

> I accept your explanation of the Town's position and would request that the application be held in abeyance, as suggested by you, until the zoning matters are resolved.

[9] On June 29, 2005 the Town passed amending By-Law 045-05, which rescinded the R1S zoning for the subject property and zoned it as Future Development (FD) Zone. Such zoning would not allow the construction of a single-family dwelling.

[10] By order of the OMB dated July 19, 2005 Consolidated By-Law 054-04 was deemed to have come into force September 22, 2004.

[11] On July 22, 2005 the appellants appealed the amending By-Law (but later withdrew this appeal March 17, 2006).

[12] The appellants were advised by the CBO February 2, 2006 that the permit was refused on the basis of the application not complying with the zoning requirements. The Philpotts appealed and the appeal was heard by Mr. Justice MacKinnon.

[13] MacKinnon, J. held that there was no point in time, relevant to the Philpotts' application, when the CBO could have issued the building permit under applicable law.

The Law

[14] The CBO cannot issue a building permit where there would be a contravention of the zoning requirements: *Building Code Act, 1992*, S.O. 1992, c.23, s. 8(1) and 8(2). Section 8 (2)(a) provides:

> The chief building official shall issue a permit…unless,
>
> (a) the proposed building…will contravene this Act, the building code or any other *applicable law*. [Emphasis added]

[15] A by-law does not come into force until all appeals are withdrawn or finally disposed of. Once appeals are exhausted, the by-law is deemed to have come into force on its day of passage. *Planning Act*, s. 34(30), (31). That is, the by-law comes into force with retroactive effect.

[16] As of October 29, 2004 (the date of the appellants' application for the building permit) the zoning prohibited the issuance of a permit for a single-family dwelling. Consolidated By-Law 054-04 could not come into force until all appeals were exhausted, ie. at the point of the OMB decision of July 19, 2005: s. 34(30), *Planning Act*.

[17] Hence, the CBO could not issue the permit between October 29, 2004 (the date of application for the permit) and July 19, 2005, when the OMB hearing disposed of the appeals relating to By-Law 054-04 (with consequential retroactive effect as of that date back to September 22, 2004).

[18] The appellants argue that from its enactment June 29, 2005, until March 17, 2006, when they withdrew their own

Town would seek consolidation of the hearing before the OMB in respect of the parent By-law 054-04. Further, the Philpotts were told that their application for a building permit would be held in abeyance pending the disposition of By-Law 054-04 and that if they sought an earlier decision on the application it would be denied as the property did not comply with the restrictive zoning currently in place.

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[18] The appellants argue that from its enactment June 29, 2005, until March 17, 2006, when they withdrew their own

appeal, there was a stay of amending By-Law 045-05. Thus, the appellants argue that the permit could have been issued after July 19, 2005 and at any point until March 17, 2006 (when the appeal was withdrawn) when amending By-Law 045-05 came into force with retrospective force to June 29, 2005.

[19] The CBO was called upon by the appellants July 22, 2005, and some eight times thereafter, to review and approve their application for a permit. The CBO did not make her decision on the application until February 2, 2006. She says she made her decision at that time because counsel for the appellants/applicants "pressed for a final decision in the matter." She looked to amending By-Law 045-05 as "applicable law" within the meaning of s. 8 (2)(a) of the *Building Code Act, 1992* for the purposes of her decision. Given her view as to the "applicable law", the permit could not be approved. Assuming this interpretation and application of the law is correct, there was non-compliance with the zoning requirements.

[20] The retrospective effect of amending By-Law 045-05 was only operative at the later point in time, March 17, 2006, when there was a withdrawal of the appellants' appeal re that amending By-Law. MacKinnon J. held (para. 29 of his decision):

> …When the CBO was called upon to make a decision, she was entitled to look and did look at the amending Bylaw 045-05 as applicable law for her decision. It would have been inappropriate for her to act in a way that was contrary to the clear intention of her council as expressed by its passage June 29, 2005 of the amending Bylaw 045-05. Innisfil's clear intention was to correct drafting errors in Bylaw 054-04 and not to permit the building of a home on the appellants' property.

[21] We agree with this finding. We are of the view MacKinnon, J correctly interpreted and applied the law to the facts at hand.

[22] We add the following observation. The appellants knew of the clear intention of the Town to bring into force amending By-Law 045-05 as of June 29, 2005, which would ultimately be retrospectively in force as of that date, but was put in abeyance because of appeals, including the appeal of the appellants.

[23] The appellants knew that once their appeal would be dealt with at the scheduled appeal hearing March 27, 2006, their appeal would be exhausted and amending By-Law 045-05 would come into force retrospectively to June 29, 2005. It is reasonable to infer this is why the appellants requested on some eight occasions a review of their pending application for a permit between July 22, 2005 and February 2, 2006. Moreover, the appellants were being encouraged by the Town's Director of Planning to withdraw their application for a building permit but refused to do so.

[24] The certainty of the inevitability of amending By-Law 045-05, with impending ultimate retroactive effect to June 29, 2005, was, of course, known to the CBO when she made her decision to refuse the permit February 2, 2006. Indeed, the CBO would have known of this certainty as of June 29, 2005 when the amending By-law was enacted. This certainty would also be known to the appellants as of June 29, 2005, which is why they were seeking, quite understandably, a decision on their application for a permit as of July 22, 2005 and before amending by-Law would come into force with retroactive effect as of June 29, 2005.

[25] There are two questions raised in respect of the interpretation of s. 8 (2)(a) of the *Building Code Ac, 1992*. First, what is the relevant point in time as to when "applicable law" is to be considered? Is it (as argued by counsel for the appellants) when the application for a permit is submitted (here, October 29, 2004)? Or is it at the later point in time when the CBO makes a decision in respect of the application?

[26] In our view, and we so find, the pertinent point of time for a determination by the CBO of "applicable law" is at the time of the CBO's decision in respect of an application for a building permit. First, the plain wording and meaning of s. 8(2)(a) suggests this interpretation. Second, the policy underlying the imposition of zoning standards is to have orderly development for the general advantage of the overall community as seen by the elected governmental body with the legal authority to enact zoning requirements.

[27] It seems contrary to the policy objectives underlying the legislation that a CBO would be obliged to approve an application for a permit simply on the basis of the "applicable law" as fixed on the date the application was submitted. Consider a hypothetical example. Would this approach be consistent with the policy objectives if the application was submitted on day #1; a downzoning by an amending by-law came into force on day #2; and the application was handed to the CBO for decision-making only on day #3?

[28] The second question relates to what specifically is embraced within the term "applicable law". Section 1.1.3.3 (1) of O. Reg. 403/97, enacted pursuant to the *Building Code Act, 1992*, gives an extensive definition for "applicable law", which includes (at 10. (d)) "by-laws made under section 34 …of the *Planning Act*…." The question then is- does this definition embrace amending By-Law 045-05, enacted June 29, 2005, for the purpose of the CBO's decision-making February 2, 2006 in refusing to issue the building permit applied for October 29, 2004? The amending By-Law would only come into force at a later date, March 17, 2006 (when the final appeal was withdrawn). However, at that point Amending By-Law 045-05 would have retroactive effect to June 29, 2005.

[29] In our view, and we so find, the CBO correctly applied "applicable law" (as set forth in s. 8 (2)(1) of the *Building Code Act* and O. Reg 403/97) as including Amending By-Law 045-05 in making her decision in respect of the appellants' application for a building permit. This interpretation is consistent with, and gives effect to, the apparent underlying public policy to the overall regime of the *Building Code Act, 1992* and zoning by-laws.

[30] Where the subsequent by-law (amending By-Law 045-05) awaiting OMB review before it comes into force retrospectively is more restrictive than the prior by-law (Consolidated By-Law 054-04), a CBO should treat the subsequent by-law as "applicable law", pending the OMB decision. However, where the subsequent appealed by-law (Consolidated By-Law 054-04 in relation to the prior by-law it was amending) is not more restrictive than the prior by-law, the plain meaning of the first part of s. 34(30) (that the amending by-law is not in force until the appeals have been disposed of) requires the CBO to not consider the amending by-law as "applicable law" until it comes into force, but rather, to look to the pre-existing by-law then in force. See the reasons of Cameron J. in *Hastings Corp. v Toronto (City) Chief Building Official*, [2004] O.J. No. 521 at paras. 63-65, affm'd (2004). 50 M.P.L.R. (3d) 31 (Div. Ct.) at paras. 28, 30 and 31.

[31] See also *Foodcorp Ltd. v. Brampton (City)*, [1994] O.J. No. 2379 (Ont. Co. Ct.) at paras. 28-31; *Hastings Corp. v. Toronto (City) Chief Building Official*; *Re Donald Bye Excavating Co. Ltd. et al and City of Peterborough*, [1973] 1 O.R. 139 (Ont. C.A.). R*e Woodglen &Co. Ltd. and City of North York et al*, (1984), 47 O.R. (2d) 814 (Div. Ct.), is

distinguishable on its facts, where the Divisional Court held that an "official plan" was not a "law" and the mere expression of intention of the municipality to re-zone in the future was insufficient to refuse the issuance of a permit. Similarly, *Mahew v. Hamilton* [2002] O.J. No. 1962 (S.C.J.) is distinguishable from the situation at hand, where MacDougall, J. held that a mere "subdivision agreement" was not an "applicable law."

[32] In short, the CBO was entitled to look to amending By-Law 045-05 as "applicable law" when she made her decision February 2, 2006, given the intent of Council in enacting the amendments to correct previous clerical, mapping errors in Consolidated By-Law 054-04, the actual enactment of amending By-Law 045-05 as of June 29, 2005 to meet this objective, and the certainty that the amending by-law would have force retrospectively to June 29, 2005 once the appellants' appeal (and any other appeal) was exhausted.

[33] We find there was no error in law on the part of MacKinnon J., nor any error in his determination of matters of mixed law and fact, nor any palpable and overriding error in his findings of fact.

[34] In our view, the evidentiary record also establishes the CBO engaged in an impartial and fair consideration of the appellants' application for a building permit, as required by ss. 1.1(6), 7.1.and 8 of the *Building Code Act, 1992* and by the Innisfil Code of Conduct for Building Officials. There was some delay in making the decision. MacKinnon was critical of this delay but found there was not any bad faith, noting the "considerable confusion in the Innisfil planning process."

Disposition

[35] For the reasons given, the appeal is dismissed.

[36] Submissions were made as to costs. Costs would normally follow the event. However, given all the circumstances of this case, and the relative novelty of the legal issue, in our view this is a situation where costs should not be awarded.

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CUMMING J.

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FERRIER J.

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DONOHUE J.

DATE: March 28, 2007

QUICKLINKS to BUILDING CASE LAW by STATUTORY REFERENCE

Building Code Act
Section 1
Section 1.1
Section 3
Section 7
Section 7(d)
Section 8 General
Section 8(1)
Section 8(2)
Section 8(9)
Section 8(10)
Section 9
Section 12
Section 13
Section 14
Section 15.1
Section 15.2
Section 15.3
Section 15.4(2)
Section 15.10
Section 15.11 (5) to (7)
Section 16
Section 19
Section 25
Section 28
Section 31
Section 36
Section 38

Building Code
Article 3.4.6.4
Article 3.4.6.5
Article 4.1.1.4(1)
Article 4.3.5.1
C. Article 1.2.1.1
C. Article 3.2.4.1

Planning Act
Section 3
Section 24
Section 33
Section 34
Section 34(9)
Section 34(30)
Section 35
Section 36
Section 37
Section 38
Section 38(8)
Section 41
Section 41(4) to (9)
Section 41(10)
Section 42(1)
Section 46
Section 46(2)
Section 51(24(i)
Section 51(26)
Section 67
Section 76(1)

Conservation Authorities Act
Section 28(1)(c) & (25)

Development Charges Act

Environmental Assessment Act

Environmental Protection Act

Environmental Protection Act
Section 6

Fire Protection and Prevention Act
Section 24
Section 27

Municipal Act
Section 99

Public Transportation and Highway Improvement Act

Ontario Heritage Act

Constitutional Law

Civil Law and Liability

Building Code Act Section 1

SHORT TITLE	DESCRIPTION	CITATIONS
Alaimo v. York (City) Chief Building Official	A CBO is under no common law duty to protect property neighbouring the site of new construction which would allow him to refuse a building permit for construction that complies with the BC. The law of nuisance is not applicable law for the consideration of building permit issuance. New construction which would put the chimney on a neighbouring building out of compliance with building standards is nonetheless legal.	(1995), 26 M.P.L.R. (2d) 69 (Ont. Gen. Div.)
Galway & Cavendish (United Townships) v. Windover	Municipalities have the authority to zone lands covered by water provided they do not interfere with navigation. This is so even though the bed of the waterbody is owned by the Province, provided the bylaw does not work at cross-purposes to provincial legislation. Zoning by-laws should be given a liberal interpretation. A floating boathouse is a structure within the meaning of the BC.	(1995), 30 M.P.L.R. (2d) 109, 130 D.L.R. (4th) 710 (Ont. Gen. Div.)
Innisfil (Township) v. Shakell	A mobile home is a 'building' and is subject to the pre-requisite of a building permit. An owner of lands should not be held responsible for the illegal actions of tenants in their introduction of illegal mobile homes.	(1980). 32 OR. (2d) 329, 14 M.P.L.R. 225, 121 D.L.R. (3d) 366 (H.C.)
Kim v. Mississauga (City)	The BCA does not authorize 'part permits'. A permit issued to allow the plumbing for a car wash gives the car wash building, not just it's plumbing, protection from subsequently passed zoning by-laws.	(1996), 33 M.P.L.R. (2d) 135, 29 C.L.R. (2d) 98 (Ont. Gen.Div.)

Putnam v. Stirling-Rawdon (Township)	**A dwelling and garage connected by an underground tunnel is one building. As the CBO issued a building permit for a structure at a location not permitted by the by-law the municipality is estopped from challenging the regularity of the garage.**	**[2000] O.J. No. 734, Belleville, Court File No. 1880/99, Ontario Superior Court of Justice, Belch J., March 6, 2000.**
R. v. King Insulation Services Ltd.	**The installation of insulation requires a building permit even though no structural alterations are involved. Such installation is a material alteration of a building.**	**(1981), 13 M.P.L.R. 127 (Div. Ct.)**
R. v. Springman,	**At common law, a 'building or structure' does not include mobile trailers.**	**[1964] SCR. 267, 42 CR. 407, 47 W.W.R. 298, [1964] 3 CCC. 105**
Whitchurch-Stouffville Chief Building Official v. 893472 Ontario Ltd.	**A building permit is required for a concrete batching plant. Concrete pads were 'floors', block walls for material holding pens were 'walls' and were a building.**	**(1994). 23 M.P.L.R. (2d) 307 (Ont. Div. Ct.)**

Building Code Act Section 1.1

SHORT TITLE	DESCRIPTION	CITATIONS
Association of Professional Engineers of Ontario v. Minister of Municipal Affairs and David Brezer	**The Building Code Act does not authorize a regulation which duplicates the professional regulation of Professional Engineers in Ontario, particularly as it respects their conduct or competency. To the extent the Building Code imposes such conditions, it should be read as excluding those members of professions already subject to a statutory professional regulatory regime.**	**Court File No.143/06 (Ont. Div. Ct.)**

Building Code Act Section 3

SHORT TITLE	DESCRIPTION	CITATATIONS
Dusevic v. Columbia Shuswap (Regional District)	**At common law a municipality is under no obligation to enforce it's by-laws and is not civilly liable to persons suffering from the non-enforcement. This is unchanged where there is no statutory direction to the contrary i.e. in the by-law**	**(1998)m 44 M.P.L.R. 160 (B.C.S.C.)**

Building Code Act Section 7

SHORT TITLE	DESCRIPTION	CITATIONS
Kim v. Mississauga (City)	The BCA does not authorize 'part permits'. A permit issued to allow the plumbing for a car wash gives the car wash building, not just it's plumbing, protection from subsequently passed zoning by-laws.	(1996), 33 M.P.L.R. (2d) 135, 29 C.L.R. (2d) 98 (Ont. Gen.Div.)
McDonald's Restaurants of Canada Ltd. v. Humm	No ownership in the lands is necessary to make a permit application. Certainly the owner of a leasehold interest in the lands under a long-term lease is entitled to apply. Section 5(2) of the 1983 Building Code Act which gives power to council to enact by-laws as to the application forms should not be construed to allow council to extend its authority in effect by compelling the applicant to agree to do anything. The applicant cannot be required to enter into an agreement with the applicant. The CBO does not make a discretionary decision in deciding to issue or deny a permit. Private agreements restricting the use of a site are not 'applicable law'.	(1983), 24 M.P.L.R. 103 (Co. Ct.)

Building Code Act Section 7(d)

SHORT TITLE	DESCRIPTION	CITATIONS
Erin Dancer Holding Corp. v. Richmond Hill (Town)	Rights to the refund of permit fees are not lost by the repeal of the by-law refund provisions after the fees have been paid.	(1996), 33 M.P.L.R. (2d) 1 (Ont. Div. Ct.)
Erin Dancer Holding Corp. v. Richmond Hill (Town)	A permit fee by-law which provided for refunds if the applicant 'disagrees' with the value ascribed by the CBO requires notice of disagreement to be given at the time the fee is paid. Silence will indicate acceptance.	(1998) 109 O.A.C. 188, 38 OR. (3d) 452 (C.A.), reversing (1996), 33 M.P.L.R. (2d) 1 (Div. Ct.)

Building Code Act Section 8 General

SHORT TITLE	DESCRIPTION	CITATIONS
A.W Banfield Construction Ltd. v. Oshawa (City)	The fact a demolition permit for an existing residential building has not been issued is not good reason to refuse the issuance of a building permit for a new building.	(1978) 6 M.P.L.R. 61,21 OR. (2d) 157 (Div. Ct.)
Campeau Corp. v. Gloucester(Township)	Where statute requires the by-laws of a local municipality to conform with the official plan of an upper-tier municipality, a building permit should not be issued for a use which conflicts with the upper-tier official plan.	(1978), 21 OR. (2d) 4, M.P.L.R. 290, 89 D.L.R. (3d) 135, affirmed (1979), 22 OR. (2d) 652, 8 M.P.L.R. 147, 96 D.L.R. (3d) 321 (CA.)
Conin Construction Co. v. Scarborough (Borough)	Unless authorized by statute, a municipality cannot make the payment of a development charge a condition of issuing a building permit [Ed. note: this case is rendered largely obsolete by the specific authority given by the Development Charges Act]. Monies paid under the practical compulsion of necessity are recoverable if there was no legal authority for their collection.	(1981), 15 M.P.L.R. 133, 32 OR. (2d) 500, 122 D.L.R. (3d) 291 (H.C.)
Csele v. Pelham (Town)	Where an upper-tier municipality has the authority to zone lands in conformity to it's official plan, a conflict between local zoning and an upper tier official plan will be irrelevant and a building permit should be issued for a use even though the use conflicts with the upper-tier official plan.	(1985), 29 M.P.L.R. 188 (Dist. Ct.)
Craft Bilt Materials Ltd. V. City of Toronto	A Chief Building Official is an employee of a municipality and so in not an independent decision maker. A reviewing tribunal may receive additional evidence not before the CBO when the latter's decision was made. The determination of whether a building product complies with the Building Code is a matter of statutory interpretation and so a review of the CBO's decision is a legal matter to be judged on a standard of correctness. Once the alternative criteria for compliance set out the in the Code is satisfied then the Code itself is satisfied. Ministry bulletins regarding the Code do not have the force of law and are at best advisory.	Court File No.: 05-CV-302521 PD2

Dominion Stores Ltd. v. Etobicoke (Borough)	**A municipality cannot prohibit access to a site from abutting local roads as a condition of site plan approval. Where a municipality imposes unlawful conditions to site plan approval the applicant is entitled to a building permit notwithstanding the site plan approval is outstanding. An applicant for site plan approval is not obliged to appeal to the OMB to resolve an illegal condition [Ed. note: When section 41(4.3) of the Planning Act is proclaimed the OMB will be the body to determine the latter].**	**(1982), 37 OR. (2d) 661, 135 D.L.R. (3d) 301, 19 M.P.L.R. 88, 26 R.P.R. 1 (Div. Ct.)**
Pedwell v Town of Pelham	**A CBO has a right to consult with other Town officials but must make an independent decision. The Environmental Assessment Act is applicable law.**	**DOCKET: C30587, COURT OF APPEAL, WEILER, ROSENBERG and ARMSTRONG JJ.A., MAY 9, 2003**
Philpott v. Innisfil (Town)	**It is not correct/reasonable to respond to a building permit application submitted after the passage of a zoning by-law amendment which would have (inadvertently) permitted the building/use which was the subject of the permit where the by-law error was subsequently corrected (and at no time was the by-law in law amended to permit the said building/use).**	**2006 CanLII 28741 (ON S.C.), Docket: CV-06-145**
Re Russell and Banbury et al	**In obiter dicta, a judge expressed the opinion that permits under predecessor legislation did not allow permits to be issued after the fact and that any so issued would be invalid. [Editorial note: This early, and off-hand, view does not accord with a broad and liberal mandate as directed by the Interpretations Act.]**	**[1955] O.R. 653-667, WILSON J., 8th JUNE 1955**

Rothfield v. Manolakos,	**The breach of a building by-law by an owner does not discharge the municipality from it's duty to competently inspect construction, although damages will be reduced by the contributory negligence of the owner.**	**[1989] 2 SCR. 1259, [1990] 1 W.W.R. 408, 63 D.L.R. (4th) 449, 41 B.C.L.R. (2d) 374, (sub nom. Manolakos v. Gohmann) 46 M.P.L.R. 217, 1 C.C.L.T. (2d) 233, (sub nom. Manolakos v. Vernon (City)) 102 N.R. 249**
Rotstein v. North York (City)	**Two or more lots on a plan of subdivision may be a single 'lot' in the context of zoning. A registered subdivision agreement is not applicable law.**	**(December 13, 1994), Doc. No. RE4602/94 (Ont. Gen. Div.), leave to appeal refused (January 11, 1995), O'Leary J. (Ont. Div. Ct.)**
Seel Enterprises Ltd. v. Toronto (City)	**The failure to have a lodging house licence and the existence of building code violations at the time a prohibitory by-law was passed prevent a use from claiming legal non-conforming status.**	**(1982), 17 M.P.L.R. 315 (Div. Ct.).**
Shell Canada Products Ltd. v. Barrie (City) Chief Building Official	**The lack of site plan approval and an intervening interim control by-law disentitled an applicant to a building permit.**	**(1992), 11 M.P.L.R. (2d) 43, 2 C.L.R. (2d) 200 (Ont. Gen. Div.), additional reasons at (1992), 13 M.P.L.R. (2d) 279 (Ont. Gen. Div.)**
Sixteenth Warden Ltd. v. Markham (Town)	**Section 34(9) of the Planning Act can be interpreted as including a situation where a 'permit ought to have been issued' where a permit should have been issued, notwithstanding the post-permit application passage of an interim control by-law. Site plan approval is not a prerequisite to the issuance of a building permit where the approval was improperly withheld.**	**(1993), 12 OR. (3d) 653. 18 M.P.L.R. (2d) 70 (Gen. Div.)**

Stacey v. Oxford-on-Rideau (Township)	**The Conservation Authorities Act and regulations is applicable law. "Construction" in the Conservation Authorities Act does not include the reconstruction of a fire-damaged building.**	**(1989), 46 M.P.L.R. 15 (Ont. Dist. Ct.)**
Toronto Area Transit Operating Authority v. Mississauga (City)	**A Crown in Right of Ontario agent is not required to obtain site plan approval, apply for a building permit, or pay parks levies, for it's building**	**(1996), 32 M.P.L.R. (2d) 97, 133 D.L.R. (4th) 257 (Ont. Gen. Div.)**
Vann Niagara v Oakville	**A sign by-law which prohibits all billboard signs and all third party signs violates the Charter of Rights guarantee of freedom of expression. The municipality failed to show its objective in passing the sign by-law is pressing and substantial; that the by-law is rationally connected to that objective; that the by-law minimally impairs the right to freedom of expression; and finally, that there is proportionality between the effects and the objectives of the by-law. The by-law limitations are invalid.**	**DOCKET: C36773, COURT OF APPEAL, BORINS, FELDMAN AND MACPHERSON JJ.A., June 14, 2002**
Vann Niagara v Oakville	**A sign by-law which limits signs to an area of 80 sq. ft. freedom of expression, but minimally, and is constitutionally valid.**	**[2003] 3 S.C.R. 15, 2004-01-20, Docket: 29359**
Water & Ice Ltd. v. Muskoka Lakes (Township)	**Site Plan Approval must conform to Provincial Policy Statements. Where the municipal Official Plan requires an environmental impact statement in the circumstances, the failure to have same justifies the withholding of site plan approval and does not evidence 'extraordinary circumstances' which would allow a building permit to be issued without site plan approval.**	**23 M.P.L.R. (4th) 87**
W Kirby v. Coquitlam (City)	**Where the CBO was unaware of the existence of fill on site which would have required additional consideration before issuing a permit, there is no actionable negligence if the subsequently constructed building proves inadequate for the actual site conditions. A reasonably prudent building inspector would not have alerted to the condition.**	**(1996), 27 C.L.R. (2d) 120, 37 M.P.L.R. (2d) 113 (B.C. S.C.)**

Walker v. Kingston (City)	**A permit issued on the applicant's advice that the building was a two-family dwelling when it was not so used is properly revoked as given on 'mistaken or false information'.**	**(1991), 6 M.P.L.R. (2d) 316 (Ont. Gen. Div.)**
Walton v. Lincoln (Town)	**Legal non-conforming use status is lost by a fire which destroys the building containing the use. A CBO acts correctly in taking into account not only the structural design of a building but also it's intended use in refusing a permit application. Zoning is applicable law at the plan review stage.**	**(1997), 43 M.P.L.R. (2d) 291 (Ont. Gen. Div.)**
Whitchurch-Stouffville Chief Building Official v. 893472 Ontario Ltd.	**A building permit is required for a concrete batching plant. Concrete pads were 'floors', block walls for material holding pens were 'walls' and were a building.**	**(1994). 23 M.P.L.R. (2d) 307 (Ont. Div. Ct.)**
William F. White Ltd. V. Toronto Chief Building Officia	**Once compliance with applicable laws is shown, there is an absolute duty on the chief building official to issue the permit.**	**(1999) 44 O.R. (3d) 750, Superior Court of Justice, Stinson J., June 29, 1999**
Wolfond v. North York Building Commissioner	**Administrative delay in issuing a building permit should not deprive a permit applicant of grandparent rights which would have existed had a permit been promptly issued. An applicant's rights crystallize on the date of the CBO'S decision.**	**(1990), 1 M.P.L.R. (2d) 189, 74 OR. (2d) 466 (Dist. Ct.)**

Building Code Act Section 8(1)

SHORT TITLE	DESCRIPTION	CITATIONS
723 Rymal Inc. v. Hamilton (City) Chief Building Official	A zoning by-law permitting a (i) "Community and Residential Care Access Centre"; and, (ii) a restaurant, required both uses to exist to comply with the zoning. A demolition permit for an existing building, identified in a site plan approval of the restaurant use, is properly denied as the result would be the remaining "Community and Residential Care Access Centre" would violate the by-law.	[2001] O.J. No. 832, Court File No. 00-2262, Ontario Superior Court of Justice, Lofchik J., January 9, 2001.
Teperman & Sons Ltd. v. Toronto (City)	The right to a demolition permit crystallizes on the day the application is made.	(1975), 7 OR. (2d) 533, 55 D.L.R. (3d) 653 (CA.)
Trivest Developments Ltd. v. Toronto (City)	The Building Code Act and the Planning Act are not in pari materia insofar as the meaning of 'demolition' is concerned.	(1986), 54 OR. (2d) 728, 39 R.P.R.255, 32 M.P.L.R. 124 (H.C.), affirmed (1986), 57 OR. (2d) 799 (CA)
W Kirby v. Coquitlam (City)	Where the CBO was unaware of the existence of fill on site which would have required additional consideration before issuing a permit, there is no actionable negligence if the subsequently constructed building proves inadequate for the actual site conditions. A reasonably prudent building inspector would not have alerted to the condition.	(1996), 27 C.L.R. (2d) 120, 37 M.P.L.R. (2d) 113 (B.C. S.C.)

Whitchurch-Stouffville Chief Building Official v. 893472 Ontario Ltd	**A building permit is required for a concrete batching plant. Concrete pads were 'floors', block walls for material holding pens were walls'and were a building.**	**(1994). 23 M.P.L.R. (2d) 307 (Ont. Div. Ct.)**

Building Code Act Section 8(2)

SHORT TITLE	DESCRIPTION	CITATIONS
1423107 Ontario Inc. v. Woodstock (City)	Any doubt about the compliance of a use to the zoning should be resolved in favour of the proponent. The use of premises for full nudity non-therapeutic body massage is not permitted by the applicable zoning bylaws permission for a 'health club', nor is the operation of a tanning bed facility. The building permit was properly refused.	[2001] O.J. No. 1330 , Court File No. 462/00 , Ontario Superior Court of Justice , Woodstock, Ontario , Heeney J. , Judgment: April 2, 2001.
382671 Ontario Ltd. v. London (City) Chief Building Official	Space within an apartment building which has the status of a legal non-conforming use may be converted to another apartment unit. In this regard, a building can be altered beyond its precise non-conforming status so long as such is reasonable.	28 O.R. (3d) 718, [1996] O.J. No. 1352, Court File No. 20060/96 Ontario Court (General Division), Killeen J., April 4, 1996
382671 Ontario Ltd. v. London (City) Chief Building Official	A zoning by-law provision which conflicts with rights under section 34(9) of the Planning Act is without authority. A legal non-conforming apartment building of 16 units may increase the number of units under it's grandparent rights i.e. it status is not dependent on the number of units simpliciter.	(1996), 32 M.RL.R. (2d) 1, 28 OR. (3d) 718 (Gen. Div.)

861168 Ontario Inc. v Foreshew, CBO of Lindsay (Town)	**Neither the costs of renovation nor the change in income-generating ability are determinative of whether the work requires site plan approval. If fewer people will be using a building after renovations that is indicative of the usability of the building being reduced. changes in 'usability' should be measured in relation to the facilities and matters set out in sec. 41(7)(a) of the Planning Act.**	**(1991), 3 OR. (3d) 721, 6 M.P.L.R. (2d) 84 (Gen. Div.)**
Alaimo v. York (City) Chief Building Official	**A CBO is under no common law duty to protect property neighbouring the site of new construction which would allow him to refuse a building permit for construction that complies with the BC. The law of nuisance is not applicable law for the consideration of building permit issuance. New construction which would put the chimney on a neighbouring building out of compliance with building standards is nonetheless legal.**	**(1995), 26 M.P.L.R. (2d) 69 (Ont. Gen. Div.)**
Association of Professional Engineers of Ontario v. Minister of Municipal Affairs and David Brezer	**The Building Code Act does not authorize a regulation which duplicates the professional regulation of Professional Engineers in Ontario, particularly as it respects their conduct or competency. To the extent the Building Code imposes such conditions, it should be read as excluding those members of professions already subject to a statutory professional regulatory regime.**	**Court File No.143/06 (Ont. Div. Ct.)**
Brantford (Township) v. Doctor	**The Ontario BCA and BC apply to construction on Indian Lands.**	**(1995), 29 M.P.L.R. (2d) 300, [1996] 1 C.N.L.R 49 (Ont. Gen. Div.).**
Country Pork Ltd. v. Ashfield (Township)	**The failure to provide a nutrient management plan as part of a building permit application was fatal to the right to receive the permit when an intervening interim control by-law prohibited the use.**	**[2001] O.J. No. 1127, Court File No. 30858, Ontario Superior Court of Justice, Leitch J., Judgment: February 28, 2001**
David Gallo Building Co. v. Toronto (City)	**Revisions to permit plans which described a building which is taller, larger, and differently configured is a new application and not an amendment to the original. Rights arising from the original application are not inherited by the revision where the applicant had failed to clearly declare a willingness to alter the plans to comply with the zoning and the alterations are not specific and in train.**	**[1934] 3 OR. 892, 38 D.L.R. (3d) 536 (Div. Ct.)**

Davison v. Orangeville (Town)	**The compliance of a use to an official plan policy is irrelevant where the proposed use conflicts with zoning in force which predates the OP policy.**	**(1996), 36 M.P.L.R. (2d) 74 (Ont. Gen. Div.)**
Dominion Stores Ltd. v. Etobicoke (Borough)	**A municipality cannot prohibit access to a site from abutting local roads as a condition of site plan approval. Where a municipality imposes unlawful conditions to site plan approval the applicant is entitled to a building permit notwithstanding the site plan approval is outstanding. An applicant for site plan approval is not obliged to appeal to the OMB to resolve an illegal condition [Ed. note: When section 41(4.3) of the Planning Act is proclaimed the OMB will be the body to determine the latter].**	**(1982), 37 OR. (2d) 661, 135 D.L.R. (3d) 301, 19 M.P.L.R. 88, 26 R.P.R. 1 (Div. Ct.)**
Forster v. Waterloo (City)	**The action of City Council in enacting a down-zoning by-law hard on the heels of the receipt of a report, having delayed its consideration of the applicant's site plan while at the same time instructing engineering and planning staff to continue negotiations with the applicant with respect to engineering and planning issues, constitutes bad faith and brings the situation into the category of extraordinary circumstances in which site plan approval is not required as a pre-condition to the issuance of a building permit.**	**Action No. 3415/92, Ontario Court of Justice General Division, Kitchener, , Sills J., February 12, 1993**

Green v. Dixon	**Where a septic system was installed contrary to original plans, but was subsequently approved by the Health Unit, the CBO bears no liability if the system malfunctions.**	**(March 24, 1995), Doc. Nos. Barrie G858 1, G858 IA (Ont. Gen. Div.)**
H & D International Group v. Toronto (City)	**An Interim Control By-law passed after the decision of the CBO has no application to the consideration of the correctness of the CB0's decision.**	**(1988), 44 M.P.L.R. 187 (Ont. Dist. Ct.)**
Haldimand-Norfolk (Regional Municipality) v. Copland	**The removal of a trailer home from a property causes the loss of the propery's legal non-conforming status. It's subsequent replacement, being a larger park model home, was an entirely different structure.**	**(1993), 28 M.P.L.R. (2d) 308, 131 D.L.R. (4th) 114 (Ont. Div. Ct.)**
Henry LePage v The Archipelago (Township)	**A floating dock attached to land is subject to the BCA. A zoning by-law is applicable law. An official plan is not applicable law and it should not be used to interpret a zoning by-law. Site plan approval is not applicable law [Ed. Note: The latter conclusion is, in it's breadth, wrong].**	**(July 7, 1989), Doc. No. 924/89 (Dist. Ct.)**
Hirmann v. Toronto (City)	**Where a use is permitted by the 'in force' zoning, will be retroactively prohibited by a passed, but appealed, zoning by-law which had been passed several years earlier and for which there is no timetable for the disposition of the appeals, a building permit will issue.**	**(1993), 13 OR. (3d) 54, (sub nom. Hirmann v. Toronto (City) Chief Building Official) 14 M.P.L.R. (2d) 256 (Gen. Div.)**

Hodgins v. Toronto (City)	**A CBO's decision to revoke a permit must be on one of the bases set out in the BCA. The CBO has no inherent jurisdiction to revoke a permit.**	**(1983), 21 M.P.L.R. 165 (Co. Ct.)**
J & R Rite Holdings (Oshawa) Inc. v. Oshawa (City)	**A CBO may refuse to issue a building permit where the proposed use conflicts with the official plan of an upper tier municipality, there is a statutory obligation for local zoning by-laws to be amended to conform with the upper-tier OP, even though the local zoning permits the use.**	**(1988), 64 OR. (2d) 471, 38 M.P.L.R. 97 (H.C.)**
Kally s Restaurant Inc. v. Scarborough (City)	**A municipality cannot require the provision of more parking than that required by it's zoning by-law, as it stood on the date of the application for site plan approval, as a condition of site plan approval. Where a municipality imposes unlawful conditions to site plan approval the applicant is entitled to a building permit notwithstanding the site plan approval is outstanding.**	**(1993), 12 OR. (3d) 312, 14 M.P.L.R. (2d) 117, 99 D.L.R. (4th) 381, 62 O.A.C. 143 (Div. Ct.)**
Kim v. Mississauga (City)	**The BCA does not authorize 'part permits'. A permit issued to allow the plumbing for a car wash gives the car wash building, not just it's plumbing, protection from subsequently passed zoning by-laws.**	**(1996), 33 M.P.L.R. (2d) 135, 29 C.L.R. (2d) 98 (Ont. Gen.Div.)**
Leeds & Grenville Board of Education v. Gerrard	**A geothermal heat pump system related to a new building is a 'building' as defined by the BCA. The Environmental Protection Act is 'applicable law'.**	**(1991), 8 C.E.L.R. (N.S.) 266 (Ont. Gen. Div.)**

Loblaws Inc. v. Ancaster (Town) Chief Building Official	**A building constructed pursuant to a permit issued for an intended use which does not comply with the zoning by-law is to require the occupant to comply with the bylaw. The permit need not be rescinded. The official plan can be looked at to interpret the meaning of a zoning bylaw provision. A use which is comprised of permitted and prohibited activities is not in compliance with zoning and the remedy is to limit the use to the permitted activities.**	**(1993), 13 M.RL.R. (2d) 94, 95 D.L.R. (4th) 695, 10 C.P.C. 232 (Ont. Gen. Div.)**
Lock v. Middlesex Centre (Township) Chief Building Official	**In reviewing a decision of a CBO a standard of correctness will generally be applied to decisions based on law or jurisdiction and a standard of reasonableness will be applied to questions of fact. With respect to questions of mixed fact and law, the more the decision of the chief building official is a determination of law, the closer the standard will be to correctness whereas if the decision is dependent upon factual determinations within the special expertise of the chief building official the more deferential will be the standard. A nutrient management by-law which adopts the provinces minimum distance separation formulas is applicable law. THE MDS II formula does not apply to a single lot zoning residential, but to an area zoned residential.**	**[2001] O.J. No. 3588 , Court File No. 30955, Ontario Superior Court of Justice , Leitch June 29, 2001.**
Lofaro v. North York (City) Chief Building Official	**Minor variances which relate to an 'existing' dwelling cease to have application when the building has ceased to exist except for a small fragment.**	**Action No. 17/91 and 439/91, 11 M.P.L.R. (2d) 278, Ontario Court of Justice General Division, Toronto, Sheard J., July 14, 1992**

Manchester v. North York (City) Chief Building Official	**Interim Control By-laws should be given a strict construction. The municipality's failure to give timely notice of passage of an ICB makes the by-law ineffective from the last date to give notice and not from the date of the by-law's passage.**	**(1994), 20 M.P.L.R. (2d) 213, 18 OR. (3d) 540, 115 D.L.R. (4th) 432, 72 O.A.C. 263 (Div. Ct.)(1993), affirming 15 OR. (3d) 690, 17 M.P.L.R.(2d) 150, 106 D.L.R. (4th) 646 (Gen. Div.)**
McDonald's Restaurants of Canada Ltd. v. Humm	**No ownership in the lands is necessary to make a permit application. Certainly the owner of a leasehold interest in the lands under a long-term lease is entitled to apply. Section 5(2) of the 1983 Building Code Act which gives power to council to enact by-laws as to the application forms should not be construed to allow council to extend its authority in effect by compelling the applicant to agree to do anything. The applicant cannot be required to enter into an agreement with the applicant. The CBO does not make a discretionary decision in deciding to issue or deny a permit. Private agreements restricting the use of a site are not 'applicable law'.**	**(1983), 24 M.P.L.R. 103 (Co. Ct.)**
McLear v. Mason	**An unlicensed salvage yard was an illegal nonconforming use due to the lack of a license.**	**(1988), 65 OR. (2d) 228, 39 M.P.L.R. 111 (H.C.)**
Midland (Town) v. Fred DaSilva Enterprises Ltd.	**A building permit issued ostensibly for a weeping tile bed for a shopping centre will give the intended building grandparent rights over a subsequently passed zoning restriction prohibiting the use.**	**(1977), 3 M.P.L.R. 158, 16 OR. (2d) 657, 79 D.L.R. (3d) 88 (CA.)**
Olympia & York Developments Ltd. v. Toronto (City)	**For the purposes of a site plan agreement a municipality is entitled to demand the registered owner, not only a long-term ground lessee, execute the agreement. A ground lessee is not an owner.**	**(1980), 29 OR. (2d) 353. 12 M.P.L.R. 219, 113 D.L.R. (3d) 695 (Div. Ct.)**

Ottawa (City) v Shore & Horwitz Construction Co.	**A building constructed for the federal crown on federal land is not subject to provincial building permit regulation.**	**[1960] OWN. 137, 22 D.L.R. (2d) 247 (H.C.)**
Ottawa (City of) v. The Chief Building Official of the City of Ottawa and 1479333 Ontario, Inc.	**For a law to be relevant and applicable to the question of the issuance of a building permit a real and logical nexus must exist between the applicable law and the essential purpose of the BCA, which is the construction, and demolition of buildings.**	**Ontario Divisional Court,** November 21, 2003, [2003] O.J. No. 4530, Court File No. 03-DV-857
Peacock v. CBO of Norfolk County	**An applicant's permit rights crystallize on the date the CBO makes the decision to issue or refuse a permit. An interim control by-law passed after an application is filed but before the decision must, absent extraordinary facts, be taken into account. A statute prohibiting the discharge of contaminants is applicable law relative to a permit application for a hog barn. The doctrine of legal non-conforming use cannot be used to protect expansion that necessarily entails grave environmental and public safety dangers.**	**SUPERIOR COURT OF JUSTICE, COURT FILE NO.: 0002/02, 2003/07/03** **Ontario Court of Appeal, Docket No. C42944, June 28, 2006**
Pedwell v. Pelham (Town)	**The fact a condition precedent to the issuance of a building permit (Health Unit septic approval) is not satisfied is irrelevant where the municipality frustrated the satisfaction of the condition by advising the approval authority that the proposed land use was prohibited by the zoning by-law. A municipal council has no authority to direct the CBO to not do an act which the CBO is statue bound to carry out. Compensation for damages follows the wrongful refusal to issue a building permit.**	**(1998). 47 M.P.L.R. (2d) 222 (Ont. Gen. Div.), additional reasons at (February 26, 1999), Doc. Toronto 5650.5/95 (Ont. Gen. Div.)**

Phi Delta Beta of London Inc. v. London (City) Chief Building Official	**A CBO is entitled to consider the intended use of a property in considering the conformity to zoning although that use has not yet been established. A fraternity house cannot be considered a 'single housekeeping unit'.**	**(1995), 25 M.P.L.R. (2d) 140 (Ont. Gen. Div.), affirmed (1996), 36 M.P.L.R. 319 (Ont. Div. Ct.)**
Polla v. Toronto (City) Chief Building Official	**Where the legality of site plan conditions is in issue the court has jurisdiction and will exercise it even though an appeal may be lodged with the OMB. A site plan condition requiring the removal of a lawful structure is illegal.**	**[2000] O.J. No. 4399, Court File No. 00-CV- 194025, Ontario Superior Court of Justice, Molloy J., udgment: November 21, 2000.**
Quay West v. Toronto (City)	**A proposed development does not have grandparent rights where a building permit 'ought to have been issued' before the passage of a prohibitory by-law, but had not in fact been issued. Site plan approval is a prerequisite to the issuance of a building permit, absent unusual circumstances.**	**(1989), 47 M.P.L.R. 109 (Ont. Div. Ct.), leave to appeal to CA. refused (1989), 47 M.P.L.R. 109 (Ont. CA.)**
Revenue Properties Co. v. Toronto (City)	**A building permit may be issued even where site plan approval is required but not yet obtained; however, construction under the permit cannot commence until site plan approval is obtained.**	**(1984), 26 M.P.L.R. 165 (Co. Ct.)**
Ross v. Muskoka Lakes (Township)	**The more the Chief Building Official's decision is a determination of law, the closer the standard will be to correctness. The more the initial decisions depended upon factual determinations within the special expertise of the Chief Building Official, the more deferential will be the standard. The general rule is that site plan approval is required before the building permit is to be issued because site plan approval is "other applicable law". Only where there is bad faith or other unlawful conduct should the court exercise the jurisdiction given to it under the Building Code Act to rectify an injustice by granting a building permit in the absence of site plan approval.**	**COURT FILE NO.: 257-02, Bracebridge, ONTARIO SUPERIOR COURT OF JUSTICE, January 19, 2004.**

Rotstein v. North York (City)	**Two or more lots on a plan of subdivision may be a single 'lot' in the context of zoning. A registered subdivision agreement is not applicable law.**	**(December 13, 1994), Doc. No. RE4602/94 (Ont. Gen. Div.), leave to appeal refused (January 11, 1995), O'Leary J. (Ont. Div. Ct.)**
Seel Enterprises Ltd. v. Toronto (City)	**The failure to have a lodging house licence and the existence of building code violations at the time a prohibitory by-law was passed prevent a use from claiming legal non-conforming status.**	**(1982), 17 M.P.L.R. 315 (Div. Ct.).**
Shell Canada Products Ltd. v. Barrie (City) Chief Building Official	**The lack of site plan approval and an intervening interim control by-law disentitled an applicant to a building permit.**	**(1992), 11 M.P.L.R. (2d) 43, 2 C.L.R. (2d) 200 (Ont. Gen. Div.), additional reasons at (1992), 13 M.P.L.R. (2d) 279 (Ont. Gen. Div.)**
Sixteenth Warden Ltd. v. Markham (Town)	**Section 34(9) of the Planning Act can be interpreted as including a situation where a 'permit ought to have been issued' where a permit should have been issued, notwithstanding the post-permit application passage of an interim control by-law. Site plan approval is not a prerequisite to the issuance of a building permit where the approval was improperly withheld.**	**(1993), 12 OR. (3d) 653. 18 M.P.L.R. (2d) 70 (Gen. Div.)**

Stacey v. Oxford-on-Rideau (Township)	**The Conservation Authorities Act and regulations is applicable law. "Construction" in the Conservation Authorities Act does not include the reconstruction of a fire-damaged building.**	**(1989), 46 M.P.L.R. 15 (Ont. Dist. Ct.)**
Superior Propane Inc. v. York (City)	**A zoning by-law restricting and regulating propane filling stations does not enhance provincial regulation on the same subject and, being in conflict, is invalid.**	**(1995), 27 M.P.L.R. (2d) 1,23 OR. (3d) 161, 123 D.L.R. (4th) 445, 17 C.E.L.R. (N.S.) 1, 80 O.A.C. 362 (C.A.)**
Thomas Furniture Ltd. v. Toronto	**A facility providing temporary shelter and food to homeless persons is a' crisis care facility' and not a hostel.**	**[2002] O.J. No. 929, Court File No. 01-CV-222738, Ontario Superior Court of Justice**
Toronto College Street Centre v. Toronto (City)	**A building permit application which conflicted with a Heritage Easement Agreement was properly refused. The Ontario Heritage Act should be given a broad and liberal interpretation.**	**(1986), 56 OR. (2d) 522. 17 O.A.C. 113, 31 D.L.R. (4th) 402,34 M.P.L.R. 138 (CA.), leave to appeal to 5CC. Refused (1987), 34 M.P.L.R. xxxi (note), 23 O.A.C. 160 (note), 79 N.R. 400 (note), 61 OR. (2d) 669 (note)**
Trucena Properties Ltd. v. Toronto (City)	**Site plan approval is not a prerequisite for the issuance of a building permit.**	**(1988), Doc. No. M l6550 1/88 (Ont. Dist. Ct.)**
Upper Thames Conservation Authority v. London (City)	**Internal renovations may not be subject to conservation regulations and so a building permit may be issued without conservation authority approval.**	**(1989), 67 OR. (2d) 784, 42 M.P.L.R. 241, 2 R.P.R. (2d) 58 (Dist. Ct.)**
Vanderschot v. North Easthope (Township)	**Municipal Interim control by-laws passed to control the height of structures in the vicinity of an airport were the exercise delegated federal authority validly received by the Municipality and authorized by the province. As uch they were constitutionally valid.**	**(1995), 24 OR. (3d) 286 (sub nom. Re Ellice (Township) Zoning By-laws 2-94 &/or 26-94) 28 M.P.L.R. (2d) 1 (Div. Ct.)**

Vann Niagara v Oakville	**A sign by-law which prohibits all billboard signs and all third party signs violates the Charter of Rights guarantee of freedom of expression. The municipality failed to show its objective in passing the sign by-law is pressing and substantial; that the by-law is rationally connected to that objective; that the by-law minimally impairs the right to freedom of expression; and finally, that there is proportionality between the effects and the objectives of the by-law. The by-law limitations are invalid.**	**DOCKET: C36773, COURT OF APPEAL, BORINS, FELDMAN AND MACPHERSON JJ.A., June 14, 2002**
Vann Niagara v Oakville	**A sign by-law which limits signs to an area of 80 sq. ft. freedom of expression, but minimally, and is constitutionally valid.**	**[2003] 3 S.C.R. 15, 2004-01-20, Docket: 29359**
Walton v. Lincoln (Town)	**Legal non-conforming use status is lost by a fire which destroys the building containing the use. A CBO acts correctly in taking into account not only the structural design of a building but also it's intended use in refusing a permit application. Zoning is applicable law at the plan review stage.**	**(1997), 43 M.P.L.R. (2d) 291 (Ont. Gen. Div.)**
Woodglen & Co. Ltd. v. North York (City)	**Official Plan policies are not applicable law. A judge acting under sec 25 should do what the CBO ought to have done. A judge has no other powers than that of the CBO and no discretion which the CBO does not also have.**	**(1983), 43 OR. (2d) 289, 23 M.P.L.R. 18 (Co. Ct.), affirmed (1984), 47 OR. (2d) 614, 9 C.L.R. 232, 26 M.P.L.R. 40, 5 O.A.C. 313, 12 D.L.R. (4th) 146 (Div. Ct.)**

Building Code Act Section 8(9)

SHORT TITLE	DESCRIPTION	CITATION
Hodgins v. Toronto (City)	**A CBO's decision to revoke a permit must be on the bases set out in the BCA. The CBO has no inherent jurisdiction to revoke a permit**	**(1983), 21 M.P.L.R. 165 (Co. Ct)**

Building Code Act Section 8(10)

SHORT TITLE	DESCRIPTION	CITATIONS
Bondy v. Lessard	A permit issued with full information regarding illegal construction on a property cannot subsequently be revoked when the relevant facts have not changed.	[1996] O.J. No. 3108 , DRS 9704913, Court File No. 96-GD-35852, Ontario Court of Justice (General Division), Windsor, Ontario
Budman v. Gravenhurst (Town)	A building permit issued for a lawful extension of a legal nonconforming building is properly revoked if the existing building is demolished.	(1983), 44 OR. (2d) 696, 24 M.P.L.R. 195, 1 O.A.C. 267 (Div. Ct.)
Roman Catholic Episcopal Corp. for the Diocese of Peterborough in Ontario, Canada v. Cobourg (Town)	A judge acting under sec 25 should do what the CBO ought to have done. A judge has no other powers than that of the CBO and no discretion which the CBO does not also have. A heritage easement agreement can be applicable law. A CBO who issues a demolition permit for work which conflicts with a heritage easement agreement act correctly in revoking the permit on the basis of the error.	(May 7, 1998), Doc. Cobourg 000401/98 (Ont. Gen. Div.) see also court file no. 49173/98
Walker v. Kingston (City)	A permit issued on the applicant's advice that the building was a two-family dwelling when it was not so used is properly revoked as given on 'mistaken or false information'.	(1991), 6 M.P.L.R. (2d) 316 (Ont. Gen. Div.)

Building Code Act Section 9

Craft Bilt Materials Ltd. V. City of Toronto	**A Chief Building Official is an employee of a municipality and so in not an independent decision maker.** **A reviewing tribunal may receive additional evidence not before the CBO when the latter's decision was made.** **The determination of whether a building product complies with the Building Code is a matter of statutory interpretation and so a review of the CBO's decision is a legal matter to be judged on a standard of correctness.** **Once the alternative criteria for compliance set out the in the Code is satisfied then the Code itself is satisfied.** **Ministry bulletins regarding the Code do not have the force of law and are at best advisory.**	**Court File No.: 05-CV-302521 PD2**	***B.C.A. Sec 8, 9, 28, B.C. Part 4(4.3.5.1) (4.1.1,4(1))***

Building Code Act Section 12

SHORT TITLE	DESCRIPTION	CITATIONS
Czumak v. Etobicoke (City)	An order to comply cannot prohibit all work from proceeding, but is limited to prohibiting work which does not comply with the building permit. A stop work order is not effective to stop work which is not prohibited by a proper order to comply. Failure to assist a search which is illegal will not found a charge.	September 16, 1994), (Ont. Prov. Div.)
Ingles v Tutkaluk Construction Ltd.	An owner who allows his contractor to proceed with construction without a building permit will bear some responsibility for his consequent damages.	1994), 24 M.P.L.R. (2d) 293 (Ont. Gen. Div.),
Ingles v Tutkaluk Construction Ltd.	A municipality is not absolved by the negligence of an owner of a building under construction. To avoid liability, a municipality must show that its inspectors exercised the standard of care that would be expected of an ordinary, reasonable and prudent inspector in the same circumstances.	Appeal allowed, [2000] 1 S.C.R. , 298
Mortimer v. Cameron	The failure by a plans examiner and a site inspector to use reasonable care in the approval of a renovation was the causative factor in personal damages awarded in the amount of $4.5 millions.	1994), 19 M.P.L.R. (2d) 286, 17 OR. (3d) 1, 68 O.A.C. 332,111 D.L.R. (4th) 428 (CA.), additional reasons at (June 24, 1994), Doc. CAC12036 (Ont. CA.). leave to appeal to SCC. refused (1994), 23 M.P.L.R. (2d) 314 (note) 114 D.L.R. (4th) vii (note), 19 OR. (3d)

Peterson v. Ajax (Town) Fire Marshal	**In the absence of any evidence that a change in facts has increased fire hazards in a building neither an order of a fire marshall nor a Fire Code Commission ruling can be sustained.**	**Ontario Court of Justice (General Division), Divisional Court, [1998] O.J. No. 3303, DRS 98-16383, Court File No. 750-9, B. Wright J., August 18, 1998.**
Petruzzi v. Coveny	**The purchaser of a house constructed by the previous owner is entitled to damages jointly from the owner/builder and the municipality whose inspector was negligent in inspecting the work. Mental distress damages are properly awarded. The original owner/builder is also responsible for damages relating to non-building code defects.**	**(1991), 7 M.P.L.R. (2d) 183, 48 C.L.R. 225 (Ont. Gen. Div.)**
Putnam v. Stirling-Rawdon (Township)	**A dwelling and garage connected by an underground tunnel is one building. As the CBO issued a building permit for a structure at a location not permitted by the by-law the municipality is estopped from challenging the regularity of the garage.**	**[2000] O.J. No. 734, Belleville Court File No. 1880/99, Ontario Superior Court of Justice, Belch J., March 6, 2000.**
R. v. 1267017 Ontario Ltd.	**A charge of failing to comply with an order to stop work until a building permit is obtained will be dismissed, despite the recipient's subsequent failure to obtain a permit, where there is no evidence that work continued. An order to comply requiring a building permit to be obtained is violated regardless of when the illegal work was done when no permit is applied for.**	**[2001] O.J. No. 3412, Ontario Court of Justice Newmarket, Ontario, Lampkin J. Oral judgment: July 19, 2001**

Building Code Act Section 13

SHORT TITLE	DESCRIPTION	CITATIONS
Toronto (City) Chief Building Official v. Vaghela Holdings Inc.	**In the absence of bad faith or similar illegal reasons for refusing a building permit , an applicant who has not received a permit is subject to the terms of a subsequently passed interim control by-law and will be subject to a compliance order**	**(1993), 16 M.P.L.R. (2d) 99 (Ont. Gen. Div.)**

Building Code Act Section 14

SHORT TITLE	DESCRIPTION	CITATIONS
Czumak v. Etobicoke (City)	An order to comply cannot prohibit all work from proceeding, but is limited to prohibiting work which does not comply with the building permit. A stop work order is not effective to stop work which is not prohibited by a proper order to comply. Failure to assist a search which is illegal will not found a charge.	(September 16, 1994), (Ont. Prov. Div.)
R. v. 1267017 Ontario Ltd.	A charge of failing to comply with an order to stop work until a building permit is obtained will be dismissed, despite the recipient's subsequent failure to obtain a permit, where there is no evidence that work continued. An order to comply requiring a building permit to be obtained is violated regardless of when the illegal work was done when no permit is applied for.	[2001] O.J. No. 3412, Ontario Court of Justice Newmarket, Ontario, Lampkin J. Oral judgment: July 19, 2001

Building Code Act Section 15.1

SHORT TITLE	DESCRIPTION	CITATIONS
Rexlington Heights Ltd. v. Her Majesty the Queen	**The provisions of the Code are only triggered upon the commencement of constructing an extension or making a material alteration or repair. In the absence of such activity, the building is subject to the standards in place at the time that it was built.** **A municipal property standards by-law passed under Section 15.1.3 can require the 'retrofitting' of an existing building to bring it into compliance with a new standard even where the Building Code would not require such; however, the language used to direct such a result must be clear. A simple reference to compliance with the Building Code will not be read as require retrofitting to Code standards which apply to, for example, only new buildings.** **A Property Committee in an appeal under Section 15.3(3.1) may grant relief from a requirement such as an obligation to retrofit the stair handrails of an existing building.**	**Ontario Superior Court of Justice, [2005] O.J. No. 4223, Court File Nos. 04-SC-000039 and 05-SC000051, October 5, 2005.**

Building Code Act Section 15.2

SHORT TITLE	DESCRIPTION	CITATIONS
Dusevic v. Columbia Shuswap (Regional District)	**At common law a municipality is under no obligation to enforce it's by-laws and is not civilly liable to persons suffering from the non-enforcement. This is unchanged where there is no statutory direction to the contrary i.e. in the by-law.**	**(1989), 44 M.P.L.R. 160 (B.C.S.C.)**
Whistler Service Park Ltd. v. Whistler (Resort Municipality)	**A policy to enforce by-laws on a 'complaint driven' basis is proper, absent bad faith.**	**(1990), 50 M.P.L.R. 233, 41 C.L.R. 132 (B.C. S.C.)**

Building Code Act Section 15.3

SHORT TITLE	DESCRIPTION	CITATIONS
Rexlington Heights Ltd. v. Her Majesty the Queen	**The provisions of the Code are only triggered upon the commencement of constructing an extension or making a material alteration or repair. In the absence of such activity, the building is subject to the standards in place at the time that it was built.** **A municipal property standards by-law passed under Section 15.1.3 can require the 'retrofitting' of an existing building to bring it into compliance with a new standard even where the Building Code would not require such; however, the language used to direct such a result must be clear. A simple reference to compliance with the Building Code will not be read as require retrofitting to Code standards which apply to, for example, only new buildings.** **A Property Committee in an appeal under Section 15.3(3.1) may grant relief from a requirement such as an obligation to retrofit the stair handrails of an existing building.**	**Ontario Superior Court of Justice, [2005] O.J. No. 4223, Court File Nos. 04-SC-000039 and 05-SC000051, October 5, 2005.**
White v. Vaughan (City)	**Neither the property standards committee nor a judge has the power to limit the municipality's rights to obtain payment of it's costs incurred in cleaning up a property subject to an order which was ignored.**	**1998), 47 M.P.L.R. (2d) 153 (Ont. Gen. Div.), additional reasons at (1998), 47 M.P.L.R. (2d) 161 (Ont. Gen. Div.)**

Building Code Act Section 15.4(2)

SHORT TITLE	DESCRIPTION	CITATIONS
Thunder Bay (City) v. Kasstan Estate	An unauthorized inspection of a dwelling violated the occupant's Charter Rights and , in Consequence, the municipality was denied an order to recover the costs of a related property clean-up	(1999), 43 O.R. (3d) 703, 50 M.P.L.R. (2d) 301, 61 C.R.R. (2d) 164 (Ont. Gen. Div.)

Building Code Act Section 15.10

SHORT TITLE	DESCRIPTION	CITATIONS
Pickle Lake (Township of) v. Shetterly Enterprises Ltd.	**The test of "reasonableness" is applicable to review of an application under Section 15(10)(1) of the BCA to confirm an order of a CBO consequent on the CBO's decision that there existed an "immediate danger to the health or safety of any person" and to obtain an order respecting the reimbursement of costs.**	**Ontario Superior Court of Justice, Court File No: 05-114, Date: 2006-02-27**

Building Code Act Section 15.11 (5) to (7)

SHORT TITLE	DESCRIPTION	CITATIONS
Association of Professional Engineers of Ontario v. Minister of Municipal Affairs and David Brezer	The Building Code Act does not authorize a regulation which duplicates the professional regulation of Professional Engineers in Ontario, particularly as it respects their conduct or competency. To the extent the Building Code imposes such conditions, it should be read as excluding those members of professions already subject to a statutory professional regulatory regime.	Court File No.143/06 (Ont. Div. Ct.)

Building Code Act Section 16

SHORT TITLE	DESCRIPTION	CITATIONS
Thunder Bay (City) v. Kasstan Estate	**An unauthorized inspection of a dwelling violated the occupant's Charter Rights and , in Consequence, the municipality was denied an order to recover the costs of a related property clean-up**	**(1999), 43 O.R. (3d) 703, 50 M.P.L.R. (2d) 301, 61 C.R.R. (2d) 164 (Ont. Gen. Div.)**

Building Code Act Section 19

SHORT TITLE	DESCRIPTION	CITATIONS
Czumak v. Etobicoke (City)	**An order to comply cannot prohibit all work from proceeding but is limited to prohibiting work which does not comply with the building permit. A stop work order is not effective to stop work which is not prohibited by a proper order to comply. Failure to assist a search which is illegal will not found a charge.**	**(September 16, 1994), (Ont Prov. Div.)**

Building Code Act Section 25

SHORT TITLE	DESCRIPTION	CITATIONS
1514904 Ontario Ltd. and Wilson Bassile v. the Corporation of The Town of Mississippi Mills	Where the basis of a challenge to a CBO's decision is not directed at its legal correctness but another aspect, the test is reasonableness of the decision. In the latter regard, it is not enough that the reviewing appeal body may have come to a different decision. The challenged decision must be unreasonable.	Ontario Superior Court of Justice, Perth Court File No: 686/05, 2005/08/25
1218897 Ontario Limited v. Ann Borooah, Chief Building Official,City of Toronto and Ryding Auto Body Ltd.	New evidence in addition to the information before the CBO may be entered on an appeal from the CBO's decision. The burden is on the applicant to show the CBO's decision was unreasonable or wrong in law. A standard close to correctness will be applied to decisions based on law or jurisdiction and a standard of reasonableness will be applied to questions of fact. Within the standard of reasonableness, the degree of deference or the "weight" to be given to any particular determination will depend on the circumstances.	Ontario Superior Court of Justice, Court File No: 05-CV-285838PD2, 2005/10/28

Albert Bloom Ltd. v. Bentinck (Township) Chief Building Official	Where the issuance of a building permit is challenged by a third party evidence can be introduced by the permit applicant which was not before the CBO.	(August 17, 1995). Doc. No. RE 4858/95 (Ont. Gen. Div.)
Cogan v. Toronto (City)	The entitlement to a building permit will not be denied where the application was not complete provided the corrections were specific and in train.	(1974), 3 OR. (2d) 661, 46 D.L.R. (3d) 481 (Div. Ct.) 8(2)(a);
Famous Players Inc. v. Toronto (City)	Where a building stands on two abutting properties the owner of one of the properties is a person 'aggrieved' and has standing to challenge a building permit issued to the other owner.	(1987), 47 R.P.R. 270, 37 M.P.L.R. 49 (Ont. Dist. Ct.)
Friends of McNichol Park v. Burlington (City)	A person is ‘aggrieved’ by the issuance of a building permit for a use not permitted by the zoning on the simple basis that this deprives the person of their right to oppose any rezoning by-law.	31 O.R. (3d) 405, Court File No. 512/96, Ontario Court (General Division), Divisional Court, Steele, McRae and Corbett JJ., November 27, 1996
Friends of Toronto Parkland v. Toronto (City)	To have standing to raise a challenge to a CBS's decision a person must have reasonable grounds for considering being 'aggrieved'.	(1991), 86 D.L.R. (4th) 669, 8 M.P.L.R. (2d) 127, 6 OR. (3d) 196, 53 OR. 376 (Div. Ct.)

Giangregorio v. Hamilton (City)	**An appellant under s. 25 of the [Building Code Act] has the burden of demonstrating by means of evidence placed before the court that the decision below was not reasonable or that it was wrong as a matter of law. In attempting to discharge that burden the appellant may tender additional evidence before the court, as may the respondents to the appeal.**	**[2001] O.J. No. 5670, Court File No. 014377, Ontario Superior Court of Justice, Matheson J., June 27, 2001**
Hastings Corp. Ltd. v. Borooah	**The appropriate standard of review of a decision of the CBO respecting the interpretation of a zoning by-law is closer to correctness than reasonableness. A zoning by-law which was passed before a permit application, continues an existing zoning permission for the subject of the application, but is under OMB appeal, is not applicable law as any changes withdrawing the permission would not be retroactive to the date of passage of the by-law.**	**DIVISIONAL COURT FILE NO.: 145/04, SUPERIOR COURT FILE NOS.:03-CV-255048CM1 & 03-CV-257685CM1, June 22, 2004**
Kally's Restaurant Inc. v. Scarborough (City)	**Where the zoning examiner calculated a buildings parking requirement based on an erroneous interpretation of the bylaw the court will direct the rescission of the permit with a direction that a new permit be issued if the plans are in accordance with the correct by-law interpretation.**	**Ontario Judgments: [1989] O.J. No. 1994, Action No. M186156/89 Ontario District Court -York Judicial District, Toronto, Ontario, Haley D.C.J., November 22, 1989.**
Loblaws Inc. v. Ancaster (Town) Chief Building Official	**A building constructed pursuant to a permit issued for an intended use which does not comply with the zoning by-law is to require the occupant to comply with the by-law. The permit need not be rescinded. The official plan can be looked at to interpret the meaning of a zoning by-law provision. A use which is comprised of permitted and prohibited activities is not in compliance with zoning and he remedy is to limit the use to the permitted activities. .**	**(1993), 13 M.RL.R. (2d) 94, 95 D.L.R. (4th) 695, 10 C.P.C. 232 (Ont. Gen. Div.)**

Noddle v. Toronto (City)	**An employee of a facility seeking a permit has status to challenge the issuance of the permit on the grounds of zoning compliance.**	**(1982), 19 M.P.L.R. 95, 37 OR. (2d) 421, 19 M.P.L.R. 95 (H.C.)**
Olmstead v. Greenberg	**Breaches of the Building Code may be challenged by a third party in an action even though the same relief might have been provided in a section 25 application.**	**[2001] O.J. No. 4545, Court File No. 01-CV-205761, Ontario Superior Court of Justice, Day J., Judgment: November 21, 2001.**
Peacock v. CBO of Norfolk County	**An applicant's permit rights crystallize on the date the CBO makes the decision to issue or refuse a permit. An interim control by-law passed after an application is filed but before the decision must, absent extraordinary facts, be taken into account. A statute prohibiting the discharge of contaminants is applicable law relative to a permit application for a hog barn. The doctrine of legal non-conforming use cannot be used to protect expansion that necessarily entails grave environmental and public safety dangers.**	**SUPERIOR COURT OF JUSTICE, COURT FILE NO.: 0002/02, 2003/07/03** **Ontario Court of Appeal, Docket No. C42944, June 28, 2006**
Ross v. Muskoka Lakes (Township)	**The more the Chief Building Official's decision is a determination of law, the closer the standard will be to correctness. The more the initial decisions depended upon factual determinations within the special expertise of the Chief Building Official, the more deferential will be the standard. The general rule is that site plan approval is required before the building permit is to be issued because**	**COURT FILE NO.: 257-02, Bracebridge, ONTARIO SUPERIOR COURT OF JUSTICE, January 19, 2004.**

	site plan approval is "other applicable law". Only where there is bad faith or other unlawful conduct should the court exercise the jurisdiction given to it under the Building Code Act to rectify an injustice by granting a building permit in the absence of site plan approval.	
Summit Glen Development Corp. v. Toronto (City)	The entitlement to a building permit should be judged as of the date of the CBO's decision.	(1989), 44 M.P.L.R. 50 (Ont. Dist. Ct.)
Weinberg v. Township of Euphrasia et al.	The phrase 'any person who considers himself aggrieved' applies where there are reasonable grounds for a person believing themself to having been wrongfully deprived of something or having title to something wrongfully affected.	Action No. 1238/89, Ontario District Court - Grey County, Owen Sound, Ontario, Zelinski D.C.J., December 12, 1989
Woodglen & Co. Ltd. v. North York (City)	Although the Divisional court has jurisdiction to order the issuance of a building permit under the Judicial Review Procedures Act, section [25] of the Building Code Act sets out the proper avenue for such relief.	(1983), 42 OR. (2d) 385, 23 M.P.L.R. 13, 149 D.L.R. (3d) 186 (Div. Ct.)
Woodglen & Co. Ltd. v. North York (City)	Official Plan policies are not applicable law. A judge acting under sec 25 should do what the CBO ought to have done. A judge has no other powers than that of the CBO and no discretion which the CBO does not also have.	(1983), 43 OR. (2d) 289, 23 M.P.L.R. 18 (Co. Ct.), affirmed (1984), 47 OR. (2d) 614, 9 C.L.R. 232, 26 M.P.L.R. 40, 5 O.A.C. 313, 12 D.L.R. (4th) 146 (Div. Ct.)

Building Code Act Section 28

Craft Bilt Materials Ltd. V. City of Toronto	**A Chief Building Official is an employee of a municipality and so in not an independent decision maker.** **A reviewing tribunal may receive additional evidence not before the CBO when the latter's decision was made.** **The determination of whether a building product complies with the Building Code is a matter of statutory interpretation and so a review of the CBO's decision is a legal matter to be judged on a standard of correctness.** **Once the alternative criteria for compliance set out the in the Code is satisfied then the Code itself is satisfied.** **Ministry bulletins regarding the Code do not have the force of law and are at best advisory.**	**Court File No.: 05-CV-302521 PD2**	***B.C.A. Sec 8, 9, 28, B.C. Part 4(4.3.5.1) (4.1.1,4(1))***

Building Code Act Section 31

Bakhtiari v. Axes Investments Inc.	The plans examiner failed to require interior fire separation doors in a building although a by-law called for them in plain language.. If the employee had a problem with the requirement, he acted unreasonably in failing to take it up with his superiors and obtain an interpretation. That is enough for liability. By way of defence, there must be a reasonable explanation for how this could happen if their employee had exercised reasonable care. This is a life safety matter whose importance is well known in the industry. It is utterly foreseeable that failure to require these devices would, in the case of fire, place the health and lives of the occupants at risk.	[2001] O.J. No. 4720 , Court File No. 95-CQ-61731CM , Ontario Superior Court of Justice, November 30, 2001
Calicloth Textiles Inc. v. Smith Falls (Town)	The payment of $2.175,000 in damages caused by the collapse of a faultily built roof were shared between the municipality and the building contractor.	[2001] O.J. No. 4946 , Court File No. 96 CV-100668 , Ontario Superior Court of Justice
Chapeskie v. Lake of Bays (Township)	Damages awarded by the court on a suit by the purchaser of a dwelling against it's builder and the municipality were divided 50:50 as between the two defendants. The ignorance of standards and failures of the builder were matched by the inadequacy exhibited by the Township's inspections and misleading occupancy permit.	File No. G13082/94, Ontario Superior Court of Justice, Newmarket, Howden J., July 9, 1999
La Sucrerie Casselman Inc. v. Cambridge (Township)	The issuance of a building permit for a building on catastrophe-prone erosion area was a breach of the municipalities duty of care and rendered it liable to make good the damages. In the circumstances of this case there	[2000] O.J. No. 4650, Court File No. 97-CV-002942-CM, Ontario Superior Court of Justice , Morin J.

	were no damages	
Petruzzi v. Coveny	The Purchaser of a house constructed by the previous owner is entitled to damages jointly from the owner/builder and the municipality whose inspector was negligent in inspecting the work. Mental distress damages are properly awarded. The original owner/builder is also responsible for damages relating to non-building code defects	(1991), 7 M.P.L.R. (2d) 183, 48 C.L.R. 255 (Ont. Gen. Div.)
Riverside Developments Bobcaygeon Ltd. v. Bobcaygeon	When the Chief Building Official for the municipality advised a developer that plans met the requirements of the Building Code for the Province, it is reasonable for the developer to rely on those assurances. It is also reasonable that the developer relied on the building inspector to check the construction as it advanced. Damages of some $14m. were awarded against the municipality.	COURT FILE NO.: 001779, 2004-01-19, SUPERIOR COURT OF JUSTICE, Justice B. Lass
Rothfiled v. Manolakos,	The breach of a building by-law by an owner does not discharge the municipality from it's duty to competently inspect construction, although damages will be reduced by the contributory negligence of the owner.	[1989] 2 SCR. 1259, [1990] 1 W.W.R. 408, 63 D.L.R. (4th) 449, 41 B.C.L.R. (2d) 374 (sub nom. Manlakos v. Gohmann) 46 M.P.L.R. 217, 1 C.C.L.T. (2d) 233, (sub nom. Manalakos v. Vernon (City)) 102 N.R. 249
Sapone v. Clarington (Municipality)	A Municipality has no legal duty to enforce it's by-laws and a damage suit against it premised on such a claim will be dismissed	[2001] O.J. No. 4991, Court File No. 6746/01, Ontario Superior Court of Justice, Lane J., December 18, 2001
Wirth v. Vancouver (City)	Where there is no foreseeable risk of personal injury or damage to property a municipality is under no duty of care to an owner of property abutting a site for which a building permit was negligently issued. Economic loss, whether	

	foreseeable or not, does not create a duty of care.	
Wooldridge v. Stack	**A Municipality will not bear civil liability for non-inspection of construction where it had no statutory obligation to inspect and decided not to for valid policy reasons.**	**(1993), 107 Nfld. & P.E.I.R. 280, 336 APR. 280 (Nfld. T.D.)**

Building Code Act Section 36

SHORT TITLE	DESCRIPTION	CITATIONS
Czumak v. Etobicoke (City)	An order to comply cannot prohibit all work from proceeding, but is limited to prohibiting work which does not comply with the building permit. A stop work order is not effective to stop work which is not prohibited by a proper order to comply. Failure to assist a search which is illegal will not found a charge.	(September 16, 1994), (Ont. Prov. Div.)
Maitland Valley Conservation v Cranbrook Swine	To successfully defend charges on the basis of 'officially-induced error' the accused must show: (1) he considered the legal consequences of its actions and sought legal advice, (2) the legal advice obtained must have been given by an appropriate official, (3) the legal advice was erroneous, (4) the person receiving the advice relied on it, and (5) the reliance was reasonable.	DOCKET: C37250 and C37262, COURT OF APPEAL, ABELLA, MACPHERSON and SIMMONS JJ.A., APR 28 2003
R. Pickles	The limitation period for laying a charge for building without a permit starts the day the work is complete, not the day the municipality discovers the offence was committed. The discoverability rule is not applicable.	COURT OF APPEAL FOR ONTARIO, DOHERTY, MACPHERSON and SIMMONS JJ.A, February 24, 2004.
R. v. 593288 Ontario Ltd.	In the case of proceedings for failure to comply with an order to comply, the one year limitation in section 36 (8) runs from the time when damage manifested itself.	[1998] O.J. No. 5670, DRS 99-07931, Ontario Court of Justice (Provincial Division), Newmarket, Lampkin Prov. J., December 18, 1998

Building Code Act Section 38

SHORT TITLE	DESCRIPTION	CITATIONS
Eramosa (Township) Chief Building Official v. Hilts	Although the court is reluctant to order such a destructive result as the demolition of an illegally erected building, to permit such to remain would encourage disobedience of and promote disrespect for the law.	File No. 630/94, Ontario Court of Justice (General Division), Guelph, Ontario, Langdon J., September 8, 1997
Nixon v. Greymac Mortgage Corp.	An order was given requiring a tenant to make application for a required building permit within 30 days or to cease using the premises.	(1984), 35 R.P.R. 271 (H.C.)
Toronto (City) Chief Building Official v. Andriano	A court order requiring the demolition of an addition constructed without a permit should allow 90 days for execution rather than 30 days, as the addition was not dangerous.	Court File No. 97-CV-128925, Ontario Court of Justice (General Division), Pitt J., September 30, 1998
Toronto (City) v. P & M Construction Ltd.	It is appropriate to require internal renovations which conflicted with the plans for the issued permit to be brought into conformity with the plans as filed.	(1981), 16 M.P.L.R. 85 (H.C.)

Building Code Article 3.4.6.4 and 3.4.6.5

SHORT TITLE	DESCRIPTION	CITATIONS
Rexlington Heights Ltd. v. Her Majesty the Queen	**The provisions of the Code are only triggered upon the commencement of constructing an extension or making a material alteration or repair. In the absence of such activity, the building is subject to the standards in place at the time that it was built.** **A municipal property standards by-law passed under Section 15.1.3 can require the 'retrofitting' of an existing building to bring it into compliance with a new standard even where the Building Code would not require such; however, the language used to direct such a result must be clear. A simple reference to compliance with the Building Code will not be read as require retrofitting to Code standards which apply to, for example, only new buildings.** **A Property Committee in an appeal under Section 15.3(3.1) may grant relief from a requirement such as an obligation to retrofit the stair handrails of an existing building.**	**Ontario Superior Court of Justice, [2005] O.J. No. 4223, Court File Nos. 04-SC-000039 and 05-SC000051, October 5, 2005.**

Building Code Article 4.1.4(1) and 4.3.5.1

Craft Bilt Materials Ltd. v. City of Toronto	**A Chief Building Official is an employee of a municipality and so in not an independent decision maker.** **A reviewing tribunal may receive additional evidence not before the CBO when the latter's decision was made.** **The determination of whether a building product complies with the Building Code is a matter of statutory interpretation and so a review of the CBO's decision is a legal matter to be judged on a standard of correctness.** **Once the alternative criteria for compliance set out the in the Code is satisfied then the Code itself is satisfied.** **Ministry bulletins regarding the Code do not have the force of law and are at best advisory.**	**Court File No.: 05-CV-302521 PD2**	***B.C.A. Sec 8, 9, 28,*** ***B.C. Part 4(4.3.5.1) (4.1.1,4(1))***

Building Code Division C Article 1.2.1.1

SHORT TITLE	DESCRIPTION	CITATIONS
Association of Professional Engineers of Ontario v. Minister of Municipal Affairs and David Brezer	**The Building Code Act does not authorize a regulation which duplicates the professional regulation of Professional Engineers in Ontario, particularly as it respects their conduct or competency. To the extent the Building Code imposes such conditions, it should be read as excluding those members of professions already subject to a statutory professional regulatory regime.**	**Court File No.143/06 (Ont. Div. Ct.)**

Building Code Division C Article 3.2.4.1

SHORT TITLE	DESCRIPTION	CITATIONS
Association of Professional Engineers of Ontario v. Minister of Municipal Affairs and David Brezer	**The Building Code Act does not authorize a regulation which duplicates the professional regulation of Professional Engineers in Ontario, particularly as it respects their conduct or competency. To the extent the Building Code imposes such conditions, it should be read as excluding those members of professions already subject to a statutory professional regulatory regime.**	**Court File No.143/06 (Ont. Div. Ct.)**

Planning Act Section 3

Hill and Hill Farms Ltd. v Bluewater (Muncipality)	**Zoning bylaws are 'municipal bylaws' within the meaning of the Farming and Food Production Protection Act, 1998.** **The determination under the Farming and Food Production Protection Act, 1998 of what is a normal farming practice must be consistent with the Minister of Agriculture's directives, guidelines or policies. Reduction by half of a minimum separation distance cannot be considered is directly contradictory with Ministry directives and cannot stand.**	**Docket: C43637 Ontario Court of Appeal**	*PA s. 3*
Water & Ice Ltd. v. Muskoka Lakes (Township)	**Site Plan Approval must conform to Provincial Policy Statements. Where the municipal Official Plan requires an environmental impact statement in the circumstances, the failure to have same justifies the withholding of site plan approval and does not evidence 'extraordinary circumstances' which would allow a building permit to be issued without site plan approval.**	**23 M.P.L.R. (4th) 87**	**Water & Ice Ltd. v. Muskoka Lakes (Township)**

Planning Act Section 24

SHORT TITLE	DESCRIPTION	CITATIONS
Albert Bloom Ltd. v. Bentinck	A by-law passed to lift a holding 'H' provision in a zoning by-law is not capable of being tested against official plan conformity.	(1996), 31 OR. (3d) 317,37 M.P.L.R. (2d) 156, (sub nom. Bloom (Albert) Ltd. v. Bentinck (Township)) 96 O.A.C. 241 (C.A.)
Campeau Corp. v. Gloucester(Township)	Where statute requires the by-laws of a local municipality to conform with the official plan of an upper-tier municipality, a building permit should not be issued for a use which conflicts with the upper-tier official plan.	(1978), 21 OR. (2d) 4, M.P.L.R. 290, 89 D.L.R. (3d) 135, affirmed (1979), 22 OR. (2d) 652, 8 M.P.L.R. 147, 96 D.L.R. (3d) 321 (CA.)
Csele v. Pelham (Town)	Where an upper-tier municipality has the authority to zone lands in conformity to it's official plan, a conflict between local zoning and an upper tier official plan will be irrelevant and a building permit should be issued for a use even though the use conflicts with the upper-tier official plan.	(1985), 29 M.P.L.R. 188 (Dist. Ct.)
Davison v. Orangeville (Town)	The compliance of a use to an official plan policy is irrelevant where the proposed use conflicts with zoning in force which predates the OP policy.	(1996), 36 M.P.L.R. (2d) 74 (Ont. Gen. Div.)
J & R Rite Holdings (Oshawa) Inc. v. Oshawa (City)	A CBO may refuse to issue a building permit where the proposed use conflicts with the official plan of an upper tier municipality, there is a statutory obligation for local zoning by-laws to be amended to conform with the upper-tier OP, even though the local zoning permits the use.	(1988), 64 OR. (2d) 471, 38 M.P.L.R. 97 (H.C.)

Planning Act Section 33

SHORT TITLE	DESCRIPTION	CITATIONS
Trivest Developments Ltd. v. Toronto (City)	**The Building Code Act and the Planning Act are not in pari material insofar as the meaning of 'demolition' is concerned**	**(1986), 54 OR. (2d) 728, 39 R.P.R. 255 32 M.P.L.R. 124 (H.C., affirmed (1986), 57 OR. (2d) 799 (CA)**

Planning Act Section 34

SHORT TITLE	DESCRIPTION	CITATIONS
Axelrod Toronto (City)	A By-law which provides that where a building of a certain type presently exists, it may only be replaced by a building with the height, floor area and density limitations prescribed in the by-law is not concerned with use of property or construction standards but rather with limiting future use where certain structures presently exist. While this may be a proper and meritorious planning purpose, it is not a purpose authorized by The Planning Act and such a by-law is invalid.	(1981), 15 M.P.L.R. 143 (Div. Ct.)
Galway & Cavendish (United Townships) v. Windover	Municipalities have the authority to zone lands covered by water provided they do not interfere with navigation. This is so even though the bed of the waterbody is owned by the Province, provided the by-law does not work at cross-purposes to provincial legislation. Zoning by-laws should be given a liberal interpretation. A floating boathouse is a structure within the meaning of the BC.	(1995), 30 M.P.L.R. (2d) 109, 130 D.L.R. (4th) 710 (Ont. Gen. Div.)
Greater Toronto Airports Authority v. Mississauga (City)	The Building Code and municipal development charge by-laws can have no application to lands owned by Canada where a lease from Canada specifically deals with the use of the lands in the same context as a municipal zoning by-law. The physical structures comprising an airport are within the exclusive jurisdiction of the Federal government and would also intrude over the federal jurisdiction over federal works and undertakings.	(1999), 43 OR. (3d) 9, 50 M.P.L.R. (2d) 54, 45 C.L.R. (2d) 212 (Ont. Gen. Div.)

Loblaws Inc. v. Ancaster (Town) Chief Building Official	**A building constructed pursuant to a permit issued for an intended use which does not comply with the zoning by-law is to require the occupant to comply with the by-law. The permit need not be rescinded. The official plan can be looked at to interpret the meaning of a zoning by-law provision. A use which is comprised of permitted and prohibited activities is not in compliance with zoning and the remedy is to limit the use to the permitted activities.**	**(1993), 13 M.RL.R. (2d) 94, 95 D.L.R. (4th) 695, 10 C.P.C. 232 (Ont. Gen. Div.)**
Pettinato v. Oakville (Town)	**Clear language is required to avoid an interpretation of a zoning by-law which advances a residential community's quality of life.**	**(1996), 33 M.P.L.R. (2d) 216 (Ont. Gen. Div.)**
Philpott v. Innisfil (Town)	**It is not correct/reasonable to respond to a building permit application submitted after the passage of a zoning by-law amendment which would have (inadvertently) permitted the building/use which was the subject of the permit where the by-law error was subsequently corrected (and at no time was the by-law in law amended to permit the said building/use).**	**2006 CanLII 28741 (ON S.C.), Docket: CV-06-145**
Rotstein v. North York (City)	**Two or more lots on a plan of subdivision may be a single 'lot' in the context of zoning. A registered subdivision agreement is not applicable law.**	**(December 13, 1994), Doc. No. RE4602/94 (Ont. Gen. Div.), leave to appeal refused (January 11, 1995), O'Leary J. (Ont. Div. Ct.)**
Superior Propane Inc. v. York (City)	**A zoning by-law restricting and regulating propane filling stations does not enhance provincial regulation on the same subject and, being in conflict, is invalid.**	**(1995), 27 M.P.L.R. (2d) 1,23 OR. (3d) 161, 123 D.L.R. (4th) 445, 17 C.E.L.R. (N.S.) 1, 80 O.A.C. 362 (C.A.)**
Union Gas Ltd. v. Dawn (Township)	**Zoning restrictions pertaining to facilities approved for construction by the Ontario Energy Board are in conflict with provincial legislation and invalid.**	**(1977), 15 OR. (2d) 722, 2 M.P.L.R 23, 76 D.L.R. (3d) 613 (Div. Ct.)**
Vanderschot v. North Easthope (Township)	**Municipal Interim control by-laws passed to control the height of structures in the vicinity of an airport were the exercise delegated federal authority validly received by the Municipality and authorized by the province. As such they were constitutionally valid.**	**(1995), 24 OR. (3d) 286 (sub nom. Re Ellice (Township) Zoning By-laws 294 &/or 26-94) 28 M.P.L.R. (2d) 1 (Div. Ct.)**

1121472 Ontario Inc. v. Toronto (City)	The scale of a dance floor and entertainment provided removed a use from being a 'restaurant' to an 'entertainment facility'.	(1998), 39 OR. (3d) 535 (Ont. CA)
Greater Toronto Airports Authority v. Mississauga (City)	The Building Code and municipal development charge by-laws can have no application to lands owned by Canada where a lease from Canada specifically deals with the use of the lands in the same context as a municipal zoning by-law. The physical structures comprising an airport are within the exclusive jurisdiction of the Federal government and would also intrude over the federal jurisdiction over federal works and undertakings.	Docket Nos. C31539 and C31557, Ontario Court of Appeal, Toronto, Ontario, McMurtry C.J.O., Laskin and Charron JJ.A., November 3, 2000
Nicholls v. Merrickville-Wolford (Village)	A zoning exception permitting uses of a municipality, local boards, and the like, does not extend to lessees of such bodies. A health centre operated under lease by a non-profit group is not permitted by such an exception.	Ontario Court of Justice (General Division), Ottawa, Panet J., December 22, 1998
723 Rymal Inc. v. Hamilton (City) Chief Building Official	A zoning by-law permitting a (i) "Community and Residential Care Access Centre"; and, (ii) a restaurant, required both uses to exist to comply with the zoning. A demolition permit for an existing building, identified in a site plan approval of the restaurant use, is properly denied as the result would be the remaining "Community and Residential Care Access Centre" would violate the by-law.	[2001] O.J. No. 832, Court File No. 00-2262, Ontario Superior Court of Justice, Lofchik J., January 9, 2001.
1423107 Ontario Inc. v. Woodstock (City)	Any doubt about the compliance of a use to the zoning should be resolved in favour of the proponent. The use of premises for full nudity non-therapeutic body massage is not permitted by the applicable zoning by-laws permission for a 'health club', nor is the operation of a tanning bed facility. The building permit was properly refused.	[2001] O.J. No. 1330 , Court File No. 462/00 , Ontario Superior Court of Justice , Woodstock, Ontario , Heeney J. , Judgment: April 2, 2001.

Thomas Furniture Ltd. v. Toronto	**A facility providing temporary shelter and food to homeless persons is a crisis care facility and not a hostel**	**[2002] O.J. No. 929, Court File No. 01-CV-222738, Ontario Superior Court of Justice**

Planning Act Section 34(9)

SHORT TITLE	DESCRIPTION	CITATIONS
382671 Ontario Ltd. v. London (City) Chief Building Official	Space within an apartment building which has the status of a legal non-conforming use may be converted to another apartment unit. In this regard, a building can be altered beyond its precise nonconforming status so long as such is reasonable.	28 O.R. (3d) 718, [1996] O.J. No. 1352, Court File No. 20060/96 Ontario Court (General Division), Killeen J., April 4, 1996
382671 Ontario Ltd. v. London (City) Chief Building Official	A zoning by-law provision which conflicts with rights under section 34(9) of the Planning Act is without authority. A legal nonconforming apartment building of 16 units may increase the number of units under it's grandparent rights i.e. it status is not dependent on the number of units simpliciter.	(1996), 32 M.RL.R. (2d) 1, 28 OR. (3d) 718 (Gen. Div.)
1218897 Ontario Limited v. Ann Borooah, Chief Building Official,City of Toronto and Ryding Auto Body Ltd.	The relevant legality of a non-conforming use concerns it's status under the terms of the zoning by-law. Any unlawful or illegal matter relating to the use or occupation of the lands outside of the *Planning Act* is irrelevant. The requirement of continuity for a legal non-conforming use can be met although use/occupation has been interrupted by an event beyond the owner's control where there is a an intention to continue the non-conforming use and that use is continued as far as possible in the circumstances.	Ontario Superior Court of Justice, Court File No: 05-CV-285838PD2, 2005/10/28
Bice v. Mississaugas of the New Credit	A legal non-conforming use may be established even though it is not in operation i.e. a gasoline station which is set up but has not sold any product. The lack of proof of necessary certification of fuel tanks prevents the establishment of a legal non-conforming use.	DRS 98-09722 ,Court File No. T-1410-96 ,Federal Court, Trial Division ,Jerome, A.C.J. ,March 25, 1998.
Budman v. Gravenhurst (Town)	A building permit issued for a lawful extension of a legal nonconforming building is properly revoked if the existing building is demolished.	(1983), 44 OR. (2d) 696, 24 M.P.L.R. 195, 1 O.A.C. 267 (Div. Ct.)
Cogan v. Toronto (City)	The entitlement to a building permit will not be denied where the application was not complete provided the corrections were specific and in train.	(1974), 3 OR. (2d) 661, 46 D.L.R. (3d) 481 (Div. Ct.) 8(2)(a);

David Gallo Building Co. v. Toronto (City)	**Revisions to permit plans which described a building which is taller, larger, and differently configured is a new application and not an amendment to the original. Rights arising from the original application are not inherited by the revision where the applicant had failed to clearly declare a willingness to alter the plans to comply with the zoning and the alterations are not specific and in train.**	**[1934] 3 OR. 892, 38 D.L.R. (3d) 536 (Div. Ct.)**
Haldimand-Norfolk (Regional Municipality) v. Beres	**The demolition of a legal non-conforming building will effect the abandonment of grandparent rights. A replacement building is illegal and it's occupation will be restrained.**	**(1980), 106 D.L.R. (3d) 760, 27 OR. (2d) 373 (H.C.)**
Haldimand-Norfolk (Regional Municipality) v. Copland	**The removal of a trailer home from a property causes the loss of the property's legal non-conforming status. It's subsequent replacement, being a larger park model home, was an entirely different structure.**	**(1993), 28 M.P.L.R. (2d) 308, 131 D.L.R. (4th) 114 (Ont. Div. Ct.)**
Heutinck v. Oakland (Township)	**To be legally non-conforming a use must be the same legally nonconforming use existing at the date the by-law restriction was passed.**	**(1997), 42 M.P.L.R. (2d) 258 (Ont. CA.)**
Kim v. Mississauga (City)	**The BCA does not authorize 'part permits'. A permit issued to allow the plumbing for a car wash gives the car wash building, not just it's plumbing, protection from subsequently passed zoning by-laws.**	**(1996), 33 M.P.L.R. (2d) 135, 29 C.L.R. (2d) 98 (Ont. Gen.Div.)**
Lofaro v. North York (City) Chief Building Official	**Minor variances which relate to an 'existing' dwelling cease to have application when the building has ceased to exist except for a small fragment.**	**Action No. 17/91 and 439/91, 11 M.P.L.R. (2d) 278, Ontario Court of Justice General Division, Toronto, Sheard J., July 14, 1992**
McLear v. Mason	**An unlicensed salvage yard was an illegal non-conforming use due to the lack of a license.**	**(1988), 65 OR. (2d) 228, 39 M.P.L.R. 111 (H.C.)**

Midland (Town) v. Fred DaSilva Enterprises Ltd.	**A building permit issued ostensibly for a weeping tile bed for a shopping centre will give the intended building grandparent rights over a subsequently passed zoning restriction prohibiting the use.**	**(1977), 3 M.P.L.R. 158, 16 OR. (2d) 657, 79 D.L.R. (3d) 88 (CA.)**
Oxbow Lake Cottagers Association v. Lake of Bays (Twp)	**The protection provided by the Planning Act to legal non-conforming uses does not extend to permitting the introduction of new buildings or structures for the protected uses.**	**2006 CanLII 32324 (ON S.C.), Court File No. 04-B7727**
Peacock v. CBO of Norfolk County	**An applicant's permit rights crystallize on the date the CBO makes the decision to issue or refuse a permit. An interim control by-law passed after an application is filed but before the decision must, absent extraordinary facts, be taken into account. A statute prohibiting the discharge of contaminants is applicable law relative to a permit application for a hog barn. The doctrine of legal nonconforming use cannot be used to protect expansion that necessarily entails grave environmental and public safety dangers.**	**SUPERIOR COURT OF JUSTICE, COURT FILE NO.: 0002/02, 2003/07/03** **Ontario Court of Appeal, Docket No. C42944, June 28, 2006**
Quay West v. Toronto (City)	**A proposed development does not have grandparent rights where a building permit 'ought to have been issued' before the passage of a prohibitory by-law, but had not in fact been issued. Site plan approval is a prerequisite to the issuance of a building permit, absent unusual circumstances.**	**(1989), 47 M.P.L.R. 109 (Ont. Div. Ct.)**
Saint-Romuald (City) *v.* Olivier	**Merely continuing the precise pre-existing activity, even at an intensified level, is protected as legally non-conforming unless there is an intensification of such a degree as to create an altogether different use. The landowner overreaches itself if (i) the scale or intensity of the activity can be said to bring about a change in the type of use, or if (ii) the addition of new activities or modification of old ones is seen by the Court as too remote from the earlier activities to be entitled to protection, or if (iii) the new or modified activities can be shown to create undue additional or aggravated problems for the municipality, the local authorities, or the neighbours. The factors are balanced against one another.** **Substitution of nude dancers for country and western singers is not such an extreme variation in the nightclub or cabaret formula as to constitute a wholly different and therefore unprotected use. The pre-existing use can appropriately be characterized as the commercial offering of a combination of food, drink, ambiance and lawful entertainment to the public. The switch to a different form of entertainment is within this general nightclub purpose.**	**Supreme Ct. of Canada, [2001] 2 S.C.R. 898, September 27, 2001.**

Seel Enterprises Ltd. v. Toronto (City)	**The failure to have a lodging house licence and the existence of building code violations at the time a prohibitory by-law was passed prevent a use from claiming legal non-conforming status.**	**(1982), 17 M.P.L.R. 315 (Div. Ct.). (1992), 11 M.P.L.R. (2d) 43, 2**
Shell Canada Products Ltd. v. Barrie (City) Chief Building Official	**The lack of site plan approval and an intervening interim control by-law disentitled an applicant to a building permit.**	**C.L.R. (2d) 200 (Ont. Gen. Div.), additional reasons at (1992), 13 M.P.L.R. (2d) 279 (Ont. Gen. Div.)**
Sixteenth Warden Ltd. v. Markham (Town)	**Section 34(9) of the Planning Act can be interpreted as including a situation where a 'permit ought to have been issued' where a permit should have been issued, notwithstanding the post-permit application passage of an interim control by-law. Site plan approval is not a prerequisite to the issuance of a building permit where the approval was improperly withheld.**	**(1993), 12 OR. (3d) 653. 18 M.P.L.R. (2d) 70 (Gen. Div.)**
Thorman v. Cambridge (City)	**In a single family zoned area, the exemption provided by s. 34(9) of the Planning Act allows a building containing 3 dwelling units to use space formerly occupied by a butcher shop for another dwelling unit.**	**(1977), 4 M.P.L.R. 220, 18 OR. (2d) 142, 81 D.L.R. (3d) 736 (H.C.)**
Walton v. Lincoln (Town)	**Legal non-conforming use status is lost by a fire which destroys the building containing the use. A CBO acts correctly in taking into account not only the structural design of a building but also it's intended use in refusing a permit application. Zoning is applicable law at the plan review stage.**	**(1997), 43 M.P.L.R. (2d) 291 (Ont. Gen. Div.)**

Watts and Watts v. Shawn Benvenuti and Kim Alderson	**The factors which are to be considered in determining if an allegedly legally non-conforming use is a new use or an iteration of a pre-existing use are:** **1. The purpose of the pre-existing use and the activities that were carried on the property prior to the enactment of the new bylaw.** **2. Whether the new proposed use is simply an intensification of the old use or goes beyond the old use by a matter of degree and constitutes, in terms of community impact, a difference in kind.** **3. The remoteness of the change of the activity from the earlier activity.** **4. The extent to which the new activities are within the original scope of usage.** **5. The neighborhood effects as established.** **6. The proper balance in the characterization of the legal non-conforming use (not too general so as to liberate the owner from the constraints of what he actually did and not so narrow as to rob him of flexibility).** **A conversion of a cash crop agricultural operation into a horse farm is protected by legal non-conforming status where the number of horses is not excessive.**	**Ontario Superior Court of Justice, 2005 CanLII 27154 (ON S.C.), Court File No: 9/05, July 25, 2005**
Wolfond v. North York Building Commissioner	**Administrative delay in issuing a building permit should not deprive a permit applicant of grandparent rights which would have existed had a permit been promptly issued. An applicant's rights crystallize on the date of the CBO'S decision.**	**(1990), 1 M.P.L.R. (2d) 189, 74 OR. (2d) 466 (Dist. Ct.)**

Planning Act Section 34(30)

SHORT TITLE	DESCRIPTION	CITATIONS
Hastings Corp. Ltd. v. Borooah	**The appropriate standard of review of a decision of the CBO respecting the interpretation of a zoning by-law is closer t correctness than reasonableness. A zoning by-law which was passed before a permit application, continues an existing zoning permission for the subject of the application, but is under omb appeal, is not applicable law as any changes withdrawing the permission would not be retroactive to the date of passage of the by-law.**	**DIVISION COURT FILE NO.: 145/04, SUPERIOR COURT FIL NOS.: 03-CV-255048CMI & 03-CV-257685CMI, June 22, 2004**

Planning Act Section 35

SHORT TITLE	DESCRIPTION	CITATIONS
Phi Delta Beta of London Inc. v. London (City) Chief Building Official	**A CBO is entitled to consider the intended use of a property in considering the conformity to zoning although that use has not yet been established. A fraternity house cannot be considered a 'single' housekeeping unit'**	**(1995), 25 M.P.L.R. (2d) 140 (Ont. Gen. Div.), affirmed (1996), 36 M.P.L.R. 319 (Ont. Div. Ct.)**

Planning Act Section 36

SHORT TITLE	DESCRIPTION	CITATIONS
Albert Bloom Ltd v. Bentinck	A by-law passed to lift a holding 'H' provision in a zoning by-law is not capable of being tested against official plan conformity	(1996), 31 OR. (3d) 317,37 M.P.L.R. (2d) 156, (sub nom. Bloom (Alberta) Ltd. v. Bentinck (Township)) 96 O.A.C. 241 (C.A.)

Planning Act Section 37

SHORT TITLE	DESCRIPTION	CITATIONS
Toronto (City) Official plan Residential Development Amendment (Re) Minto BYG Incorporated	**A Requirement for a contribution pursuant to Section 37 must fall within the scope of a Section 34 by-law amendment**	**O.M.B. File No. O000062 et al, File Nos. PL000351, O000062, Z000049, M000053, October 27, 2000**

Planning Act Section 38

SHORT TITLE	DESCRIPTION	CITATIONS
Sixteenth Warden Ltd. v. Markham (Town)	Section 34(9) of the Planning Act can be interpreted as including a situation where a 'permit ought to have been issued' where a permit should have been issued, notwithstanding the post-permit application passage of an interim control by-law. Site plan approval is not a prerequisite to the issuance of a building permit where the approval was improperly withheld.	(1993), 12 OR. (3d) 653. 18 M.P.L.R. (2d) 70 (Gen. Div.)
Toronto (City) Chief Building Official v. Vaghela Holdings Inc.	In the absence of bad faith or similar illegal reasons for refusing a building permit, an applicant who has not received a permit is subject to the terms of a subsequently passed interim control by-law and will be subject to a compliance order.	(1993), 16 M.P.L.R. (2d) 99 (Ont. Gen. Div.)
Vanderschot v. North Easthope (Township)	Municipal Interim control by-laws passed to control the height of structures in the vicinity of an airport were the exercise delegated federal authority validly received by the Municipality and authorized by the province. As such they were constitutionally valid.	(1995), 24 OR. (3d) 286 (sub nom. Re Ellice (Township) Zoning By-laws 2-94 &/or 26-94) 28 M.P.L.R. (2d) 1 (Div. Ct.)

Planning Act Section 38(8)

SHORT TITLE	DESCRIPTION	CITATIONS
Quay West v. Toronto (City)	A proposed development does not have grandparent rights where a building permit 'ought to have been issued' before the passage of a prohibitory by-law, but had not in fact been issued. Site plan approval is a prerequisite to the issuance of a building permit, absent unusual circumstances.	(1989), 47 M.P.L.R. 109 (Ont. Div. Ct.), leave to appeal to CA. refused (1989), 47 M.P.L.R. 109 (Ont. CA.)
Shell Canada Products Ltd. v. Barrie (City) Chief Building Official	The lack of site plan approval and an intervening interim control by-law disentitled an applicant to a building permit.	(1992), 11 M.P.L.R. (2d) 43, 2 C.L.R. (2d) 200 (Ont. Gen. Div.), additional reasons at (1992), 13 M.P.L.R. (2d) 279 (Ont. Gen. Div.)

Planning Act Section 41

SHORT TITLE	DESCRIPTION	CITATIONS
861168 Ontario Inc. v Foreshew, CBO of Lindsay (Town)	Neither the costs of renovation nor the change in income-generating ability are determinative of whether the work requires site plan approval. If fewer people will be using a building after renovations that is indicative of the usability of the building being reduced. Changes in 'usability' should be measured in relation to the facilities and matters set out in sec. 41(7)(a) of the Planning Act.	(1991), 3 OR. (3d) 721, 6 M.P.L.R. (2d) 84 (Gen. Div.)
Dominion Stores Ltd. v. Etobicoke (Borough)	A municipality cannot prohibit access to a site from abutting local roads as a condition of site plan approval. Where a municipality imposes unlawful conditions to site plan approval the applicant is entitled to a building permit notwithstanding the site plan approval is outstanding. An applicant for site plan approval is not obliged to appeal to the OMB to resolve an illegal condition [Ed. note: When section 41(4.3) of the Planning Act is proclaimed the OMB will be the body to determine the latter].	(1982), 37 OR. (2d) 661, 135 D.L.R. (3d) 301, 19 M.P.L.R. 88, 26 R.P.R. 1 (Div. Ct.)
Egarhos v. Ottawa (City)	Increasing the number of residential apartments in a mixed use building by 10% through the conversion of unrentable office space is a 'development'.	(1985), 52 OR. (2d) 190 (Dist. Ct.)
Forster v. Waterloo (City)	The action of City Council in enacting a down-zoning by-law hard on the heels of the receipt of a report, having delayed its consideration of the applicant's site plan while at the same time instructing engineering and planning staff to continue negotiations with the applicant with respect to engineering and planning issues, constitutes bad faith and brings the situation into the category of extraordinary	Action No. 3415/92, Ontario Court of Justice -General Division, Kitchener, , Sills J., February 12, 1993

	circumstances in which site plan approval is not required as a pre-condition to the issuance of a building permit.	
Henry LePage v The Archipelago (Township)	A floating dock attached to land is subject to the BCA. A zoning by-law is applicable law. An official plan is not applicable law and it should not be used to interpret a zoning by-law. Site plan approval is not applicable law [Ed. Note: The latter conclusion is, in it's breadth, wrong].	(July 7, 1989), Doc. No. 924/89 (Dist. Ct.)
Kally s Restaurant Inc. v. Scarborough (City)	A municipality cannot require the provision of more parking than that required by it's zoning by-law, as it stood on the date of the application for site plan approval, as a condition of site plan approval. Where a municipality imposes unlawful conditions to site plan approval the applicant is entitled to a building permit notwithstanding the site plan approval is outstanding.	(1993), 12 OR. (3d) 312, 14 M.P.L.R. (2d) 117, 99 D.L.R. (4th) 381, 62 O.A.C. 143 (Div. Ct.)
Polla v. Toronto (City) Chief Building Official	Where the legality of site plan conditions is in issue the court has jurisdiction and will exercise it even though an appeal may be lodged with the OMB. A site plan condition requiring the removal of a lawful structure is illegal.	[2000] O.J. No. 4399, Court File No. 00-CV-194025, Ontario Superior Court of Justice, Molloy J., udgment: November 21, 2000.
Revenue Properties Co. v. Toronto (City)	A building permit may be issued even where site plan approval is required but not yet obtained; however, construction under the permit cannot commence until site plan approval is obtained.	(1984), 26 M.P.L.R. 165 (Co. Ct.)

Ross v. Muskoka Lakes (Township)	**The more the Chief Building Official's decision is a determination of law, the closer the standard will be to correctness. The more the initial decisions depended upon factual determinations within the special expertise of the Chief Building Official, the more deferential will be the standard. The general rule is that site plan approval is required before the building permit is to be issued because site plan approval is "other applicable law". Only where there is bad faith or other unlawful conduct should the court exercise the jurisdiction given to it under the Building Code Act to rectify an injustice by granting a building permit in the absence of site plan approval.**	**COURT FILE NO.: 257-02, Bracebridge, ONTARIO SUPERIOR COURT OF JUSTICE, January 19, 2004.**
Toronto Area Transit Operating Authority v. Mississauga (City)	**A Crown in Right of Ontario agent is not required to obtain site plan approval, apply for a building permit, or pay parks levies, for it's building**	**(1996), 32 M.P.L.R. (2d) 97, 133 D.L.R. (4th) 257 (Ont. Gen. Div.)**
Trucena Properties Ltd. v. Toronto (City)	**Site plan approval is not a prerequisite for the issuance of a building permit.**	**(1988), Doc. No. M l6550 1/88 (Ont. Dist. Ct.)**
Water & Ice Ltd. v. Muskoka Lakes (Township)	**Site Plan Approval must conform to Provincial Policy Statements. Where the municipal Official Plan requires an environmental impact statement in the circumstances, the failure to have same justifies the withholding of site plan approval and does not evidence 'extraordinary circumstances' which would allow a building permit to be issued without site plan approval.**	**23 M.P.L.R. (4th) 87**

Planning Act Section 41(4) to (9)

SHORT TITLE	DESCRIPTION	CITATIONS
Kally's Restaurant Inc. v. Scarborough (City)	**A municipality cannot require the provision of more parking than that required by it's zoning by-law, as it stood on the date of the application for site plan approval, as a condition of site plan approval. Where a municipality imposes unlawful conditions to site plan approval the applicant is entitled to a building permit notwithstanding the site plan approval is outstanding**	**(1993), 12 OR. (3d) 312, 14 M.P.L.R. (2d) 117, 99 D.L.R. (4th) 381, 62 O.A.C. 143 (Div. Ct.)**

Planning Act Section 41(10)

Ayerswood Development Corporation v. London (City)	**A condition to the issuance of a building permit requiring the repair or replacement of a gabion wall specified in a site plan agreement was authorized by the Building Code Act as the site plan agreement imposed on-going maintenance responsibilities in respect of the gabion wall (which had failed) and therefore bore a nexus to the use of the land.**	**Docket: 33338;1501, 2006 CanLII 18521 (ON S.C.D.C.)**	***B.C.A. Sec. 8(3)*** ***P.A. Sec. 41 (13)***

Planning Act Section 42(1)

SHORT TITLE	DESCRIPTION	CITATIONS
Egarhos v. Ottawa (City)	Increasing the number of residential apartments in a mixed use building by 10% through the conversion of unrentable office space is a 'development'.	(1985), 52 OR. (2d) 190 (Dist. Ct.)
Pension Fund Realty Ltd. v. Ottawa (City)	A park levy relating to an addition to an existing building is to be calculated without regard for the portion of the site relating to the existing building. Where lands have been cleared of existing buildings, new construction is proposed 'development' and not 'redevelopment' .	(1981), 32 OR. (2d) 611, 122 D.L.R. (3d) 308 (H.C.)

Planning Act Section 46

SHORT TITLE	DESCRIPTION	CITATIONS
Haldimand-Norfolk (Regional Municipality) v. Copland	**The removal of trailer home from a property causes the loss of the property's legal non-conforming status. It's subsequent replacement, being a larger park model home, was an entirely different structure**	**(1993), 28 M.P.L.R. (2d) 308, 131 D.L.R. (4th) 114 (Ont. Div. Ct.)**

Planning Act Section 46(2)

SHORT TITLE	DESCRIPTION	CITATIONS
Flamborough (Town) v. 435291 Ontario Ltd.	**Facilitating the establishment of mobile homes is a violation of the Planning Act, see 46.**	**(1990), 2 OR. (3d) 31, M.P.L.R. (2d) 12 (Dist. Ct.)**

Planning Act Section 51(24(i)

SHORT TITLE	DESCRIPTION	CITATIONS
Mississauga (City of) , Peel District Public School Board et al v. Britannai North Holdings Inc.	**A condition of draft subdivision approval requiring satisfaction of the school boards regarding the adequate provision and distribution of educational facilities is within the jurisdiction of the approval authority. The 'adequate provision and distribution' of educational facilities is distinct from the 'the adequacy of school sites'.**	**Ontario Superior Court of Justice, Divisional Court, MacFarland, Dunnet and McCartney JJ. Judgment: December 3, 1999**

Planning Act Section 51(26)

SHORT TITLE	DESCRIPTION	CITATIONS
Mayhew v. Hamilton (Twp.)	**A building permit is properly issued for a parcel of land which was required by the terms of a subdivision agreement to be zoned so as to prohibit buildings, but which in fact was zoned to allow buildings, as a subdivision agreement is not applicable law.**	**Court File No. 004918 Feb. 6, 2002**
Rotstein v. North York (City)	**Two or more lots on plan of subdivision may be a single 'lot' in the context of zoning. A registered subdivision agreement is not applicable law**	**(December 13, 1994), Doc. No. RE4602/94 (Ont. Gen. Div.), leave to appeal refused (January 11, 1995), O'Leary J. (Ont. Div. Ct.)**

Planning Act Section 67

SHORT TITLE	DESCRIPTION	CITATIONS
Dusevic v. Columbia Shuswap (Regional District)	**At common Law a municipality is under no obligation to enforce it's by-laws and is not civilly liable to persons suffering from the non-enforcement. This is unchanged where there is no statutory direction to the contrary i.e. in the by-law.**	**(1989), 44 M.P.L.R. 160 (B.C.S.C.)**
Sapone v. Clarington (Municipality)	**A municipality has no legal duty to enforce it's by-laws and a damage suit against it premised on such a claim will be dismissed.**	**[2001] O.J. No. 4991, Court File No. 6746/01, Ontario Superior Court of Justice, Lane J., December 18, 2001**
Whislter Service Park Ltd. v. Whistler (Resort Municipality)	**A policy to enforce by-laws on a 'complaint driven' basis is proper, absent bad faith.**	**(1990), 50 M.P.L.R. 233, 41 C.L.R. 132 (B.C.S.C.)**

Planning Act Section 76(1)

SHORT TITLE	DESCRIPTION	CITATIONS
Mississauga (City) v. Vandenbergh	**Section 76(1) of the Planning Act does not authorize the increase in the number of apartment units within an existing multi-unit building**	**Court File No. A4740/96, Ontario Court of Justice (Genearl Division), Brampton Mackenzie J., January 7, 1998**

Conservation Authorities Act

SHORT TITLE	DESCRIPTION	CITATIONS
Stacey v. Oxford-on-Rideau (Township)	**The Conservation Authorities Act and regulations is applicable law. "Construction" in the Conservation Authorities Act does not include the reconstruction of a fire-damaged building.**	**(1989), 46 M.P.L.R. 15 (Ont. Dist. Ct.)**
Upper Thames Conservation Authority v. London (City)	**Internal renovations may not be subject to conservation regulations and so a building permit may be issued without conservation authority approval.**	**(1989), 67 OR. (2d) 784, 42 M.P.L.R. 241, 2 R.P.R. (2d) 58 (Dist. Ct.)**

Conservation Authority Act Section 28(1)(c) & (25)

SHORT TITLE	DESCRIPTION	CITATIONS
Upper Thames Conservation Authority v. London (City)	Internal renovations may not be subject to conservation regulations and so a building permit may be issued without conservation authority approval.	(1989), 67 OR. (2d) 784, 42 M.P.L.R. 241, 2 R.P.R. (2d) 58 (Dist. Ct.)

Development Charges Act

SHORT TITLE	DESCRIPTION	CITATIONS
Conin Construction Co. v. Scarborough (Borough)	Unless authorized by statute, a municipality cannot make the payment of a development charge a condition of issuing a building permit [Ed. note: this case is rendered largely obsolete by the specific authority given by the Development Charges Act]. Monies paid under the practical compulsion of necessity are recoverable if there was no legal authority for their collection.	(1981), 15 M.P.L.R. 133, 32 OR. (2d) 500, 122 D.L.R. (3d) 291 (H.C.)
Greater Toronto Airports Authority v. Mississauga (City)	The Building Code and municipal development charge by-laws can have no application to lands owned by Canada where a lease from Canada specifically deals with the use of the lands in the same context as a municipal zoning by-law. The physical structures comprising an airport are within the exclusive jurisdiction of the Federal government and would also intrude over the federal jurisdiction over federal works and undertakings.	(1999), 43 OR. (3d) 9, 50 M.P.L.R. (2d) 54, 45 C.L.R. (2d) 212 (Ont. Gen. Div.)
Greater Toronto Airports Authority v. Mississauga (City)	The Building Code and municipal development charge by-laws can have no application to lands owned by Canada where a lease from Canada specifically deals with the use of the lands in the same context as a municipal zoning by-law. The physical structures comprising an airport are within the exclusive jurisdiction of the Federal government and would also intrude over the federal jurisdiction over federal works and undertakings.	Docket Nos. C31539 and C31557, Ontario Court of Appeal, Toronto, Ontario, McMurtry C.J.O., Laskin and Charron JJ.A., November 3, 2000

Re Ontario Cancer Treatment and Research Foundation and Corporation of the City of Ottawa et al.	**A Foundation incorporated by an Act which includes a provision exempting the Foundation from taxation for municipal or provincial purposes is exempt from charges under the Development Charges Act, 1990**	**38 O.R. (3d) 224, Docket No. C22850, Court of Appeal for Ontario, Finlayson, Osborne and Labrosse JJ.A., February 12, 1998**

Environmental Assessment Act

SHORT TITLE	DESCRIPTION	CITATIONS
Toronto (City) Official Plan Amendment 333, Re	The installation of services by a developer under a subdivision agreement with a municipality is not subject to the Environmental Assessment Act.	(1986), 33 M.P.L.R. 177 (O.M.B)
Pedwell v Town of Pelham	A CBO has a right to consult with other Town officials but must make an independent decision. The Environmental Assessment Act is applicable law.	DOCKET: C30587, COURT OF APPEAL, WEILER, ROSENBERG and ARMSTRONG JJ.A., MAY 9, 2003

Environmental Protection Act

SHORT TITLE	DESCRIPTION	CITATIONS
Leeds & Grenville Board of Education v. Gerrard	A geothermal heat pump system related to a new building is a 'building' as defined by the BCA. The Environmental Protection Act is 'applicable law'.	(1991), 8 C.E.L.R. (N.S.) 266 (Ont. Gen. Div.)
Welwood v. Huron-Kinloss (Township)	In terms of the standard of review of a CBO's decision on questions of law, the CBO is required to be correct, on questions of fact the CBO is required to meet a standard of reasonableness, and on mixed questions of law and fact, the CBO is required to meet a standard of reasonableness. The Environmental Protection Act is not applicable law as it relates to a building permit for the two hog barns.	[2002] O.J. No. 1131, Court File No. 31433, Ontario Superior Court of Justice, Browne J.,March 26, 2002.

Environmental Protection Act Section 6

SHORT TITLE	DESCRIPTION	CITATIONS
Welsood v. Huron-Kinloss (Township)	**In terms of the standard of review of a CBO's decision on question of law, the CBO is required to be correct, on questions of fact the CBO is required to meet a standard of reasonableness, and on mixed questions of law and fact, the CBO is required to meet a standard of reasonableness. The Environmental Protection Act is not applicable law as it relates to a building permit for the two hog barns.**	**[2002 O.J. 1131 Court File No. 31433, Ontario Superior Court of Justice, Browne J., March 26, 2002.**

Fire Protection and Prevention Act Sections 24, 24 and 27

SHORT TITLE	DESCRIPTION	CITATIONS
Peterson v. Ajax (Town) Fire Marshal	**In the absence of any evidence that a charge in facts has increased fire hazards in a building neither an order of a fire marshal nor a Fire Code Commission ruling can be sustained.**	**Ontario Court of Justice (General Division), Divisional Court, [1998] O.J. No. 3303, DRS 98-16383, court File No. 750-9, B. Wright J., August 18, 1998**

Municipal Act

SHORT TITLE	DESCRIPTION	CITATIONS
Jessie's Centre Non-Profit Home Corp v. Bottan	**A municipal by-law authorizing technical trespass in order to construct a building can be relied on as a sword against spite-motivated actions by an abutting landowner to frustrate the exercise of the by-law created right.**	**(1991), 47 C.L.R. 113 (Ont. Gen.Div.)**

Municipal Act Section 99

SHORT TITLE	DESCRIPTION	CITATIONS
Vann Niagara v Oakville	A sign by-law which prohibits all billboard signs and all third party signs violates the Charter of Rights guarantee of freedom of expression. The municipality failed to show its objective in passing the sign by-law is pressing and substantial; that the by-law is rationally connected to that objective; that the by-law minimally impairs the right to freedom of expression; and finally, that there is proportionality between the effects and the objectives of the by-law. The by-law limitations are invalid.	DOCKET: C36773, COURT OF APPEAL, BORINS, FELDMAN AND MACPHERSON JJ.A., June 14, 2002
Vann Niagara v Oakville	A sign by-law which limits signs to an area of 80 sq. ft. freedom of expression, but minimally, and is constitutionally valid.	[2003] 3 S.C.R. 15, 2004-01-20, Docket: 29359

Public Transportation and Highway Improvement Act

SHORT TITLE	DESCRIPTION	CITATIONS
Essex 143 Joint Venture Ltd. v. Her Majesty The Queen In Right of Ontario as represented by the Minister of Transportation	**Where an agreement between the MTO and owner under section 38 of the Public Highway and Transportation Improvement Act entered into as a condition of the issuance of a permit under the PHTIA for a commercial component of a mixed use development provides that subsequent phases of a project are subject to permits, a permit must be obtained although the subsequent phase in issuance is residential. This is so regardless of whether a permit would have, absent the agreement, been required for the subsequent phase.**	**Court of Appeal for Ontario Docket: C43573, 2006/05/08**

Ontario Heritage Act

SHORT TITLE	DESCRIPTION	CITATIONS
Roman Catholic Episcopal Corp. for the Diocese of Peterborough in Ontario, Canada v. Cobourg (Town)	A judge acting under sec 25 should do what the CBO ought to have done. A judge has no other powers than that of the CBO and no discretion which the CBO does not also have. A heritage easement agreement can be applicable law. A CBO who issues a demolition permit for work which conflicts with a heritage easement agreement act correctly in revoking the permit on the basis of the error.	(May 7, 1998), Doc. Cobourg 000401/98 (Ont. Gen. Div.) see also court file no. 49173/98
Toronto College Street Centre v. Toronto (City)	A building permit application which conflicted with a Heritage Easement Agreement was properly refused. The Ontario Heritage Act should be given a broad and liberal interpretation.	(1986), 56 OR. (2d) 522. 17 O.A.C. 113, 31 D.L.R. (4th) 402,34 M.P.L.R. 138 (CA.), leave to appeal to 5CC. Refused (1987), 34 M.P.L.R. xxxi (note), 23 O.A.C. 160 (note), 79 N.R. 400 (note), 61 OR. (2d) 669 (note)

Constitutional Law

Greater Toronto Airports Authority v. Mississauga (City)	**The Building Code and municipal development charge by-laws can have no application to lands owned by Canada where a lease from Canada specifically deals with the use of the lands in the same context as a municipal zoning by-law. The physical structures comprising an airport are within the exclusive jurisdiction of the Federal government and would also intrude over the federal jurisdiction over federal works and undertakings.**	**(1999), 43 OR. (3d) 9, 50 M.P.L.R. (2d) 54, 45 C.L.R. (2d) 212 (Ont. Gen. Div.)**
Greater Toronto Airports Authority v. Mississauga (City)	**The Building Code and municipal development charge by-laws can have no application to lands owned by Canada where a lease from Canada specifically deals with the use of the lands in the same context as a municipal zoning by-law. The physical structures comprising an airport are within the exclusive jurisdiction of the Federal government and would also intrude over the federal jurisdiction over federal works and undertakings.**	**Docket Nos. C31539 and C31557, Ontario Court of Appeal, Toronto, Ontario, McMurtry C.J.O., Laskin and Charron JJ.A., November 3, 2000**

Civil Law and Liability

SHORT TITLE	DESCRIPTION	CITATIONS
Bakhtiari v. Axes Investments Inc.	The plans examiner failed to require interior fire separation doors in a building although a by-law called for them in plain language.. If the employee had a problem with the requirement, he acted unreasonably in failing to take it up with his superiors and obtain an interpretation. That is enough for liability. By way of defence, there must be a reasonable explanation for how this could happen if their employee had exercised reasonable care. This is a life safety matter whose importance is well known in the industry. It is utterly foreseeable that failure to require these devices would, in the case of fire, place the health and lives of the occupants at risk.	[2001] O.J. No. 4720 , Court File No. 95-CQ-61731CM , Ontario Superior Court of Justice, November 30, 2001
Calicloth Textiles Inc. v. Smith Falls (Town)	The payment of $2.175,000 in damages caused by the collapse of a faultily built roof were shared between the municipality and the building contractor.	[2001] O.J. No. 4946 , Court File No. 96-CV-100668 , Ontario Superior Court of Justice
Chapeskie v. Lake of Bays (Township)	Damages awarded by the court on a suit by the purchaser of a dwelling against it's builder and the municipality were divided 50:50 as between the two defendants. The ignorance of standards and failures of the builder were matched by the inadequacy exhibited by the Township's inspections and misleading occupancy permit.	File No. G13082/94, Ontario Superior Court of Justice, Newmarket, Howden J., July 9, 1999
Gadutsis v. Milne	A disclaimer of damages for revocation of a building permit, contained in a municipal permit form, will not protect a municipality from damages due to negligent municipal advice regarding applicable zoning and the negligent issuance of permit.	[1973] 2 OR. 503,34 D.L.R. (3d) 455 (H.C.)

Green v. Dixon	**Where a septic system was installed contrary to original plans, but was subsequently approved by the Health Unit, the CBO bears no liability if the system malfunctions.**	**(March 24, 1995), Doc. Nos. Barrie G858 1, G858 IA (Ont. Gen. Div.)**
Ingles v Tutkaluk Construction Ltd.	**An owner who allows his contractor to proceed with construction without a building permit will bear some responsibility for his consequent damages.**	**(1994), 24 M.P.L.R. (2d) 293 (Ont. Gen. Div.),**
Ingles v Tutkaluk Construction Ltd.	**A municipality is not absolved by the negligence of an owner of a building under construction. To avoid liability, a municipality must show that its inspectors exercised the standard of care that would be expected of an ordinary, reasonable and prudent inspector in the same circumstances.**	**Appeal allowed, [2000] 1 S.C.R. , 298**
Just v. British Columbia	**True policy decisions should be exempt from tortious claims so that governments are not restricted in making decisions based upon social, political or economic factors. However, the implementation of those decisions may well be subject to claims in tort.**	**(1989), 64 D.L.R. (4th) 689. 1 C.C.L.T. (2d) 1, [1989] 2 5CR. 1228, 18 M.V.R. (2d) 1, [1990] 1 W.W.R. 385,41 B.C.L.R. (2d) 350, 103 N.R. 1, 41 Admin. L.R. 161, [1990] R.R.A. 1404**
Kamloops (City) v. Nielsen	**In order to obtain recovery for economic loss there must be a private law duty to the injured landowner alongside the public law duty. The plaintiff has to belong to the limited class of owners or occupiers of the property at the time the damage manifests itself. Loss caused as a result of policy decisions made by the public authority in the bona fide exercise of discretion will not be compensable. Loss caused in the implementation of policy decisions will not be compensable if the operational decision includes a policy element. Loss caused in the implementation of policy decisions, i.e. operational negligence will be compensable. Loss will also be compensable if the implementation involves policy considerations and the discretion exercised by the**	**[1984] 2 SCR. 2, [1984] 5 W.W.R. 1. 10 D.L.R. (4th) 641, 29 C.C.L.T. 97, 26 M.P.L.R. 81, 8 C.L.R. 1, 54 N.R. 1, 66 B.C.L.R. 273**

	public authority is not exercised in good faith. Economic loss will only be recoverable if as a matter of statutory interpretation it is a type of loss the statute intended to guard against.	
Kingsbridge Development Inc. v. Hanson Needler Corp.	A right included in an agreement of purchase and sale to allow the purchaser a subterranean easement for building purposes on the vendor's retained lands, is not denied or violated by the fact there are utilities in the easement area since their placement did not frustrate the construction necessary for the purchaser's building.	(1990), 71 OR. (2d) 636, 37 C.L.R. 180 (H.C.)
La Sucrerie Casselman Inc. v. Cambridge (Township)	The issuance of a building permit for a building on catastrophe-prone erosion area was a breach of the municipalities duty of care and rendered it liable to make good the damages. In the circumstances of this case there were no damages.	[2000] O.J. No. 4650, Court File No. 97-CV-002942-CM, Ontario Superior Court of Justice , Morin J.
Littler v. Mission (District)	An inspector is under a duty of care not to issue permits/licenses which do not comply with zoning by-laws and liability will exist for damages suffered by the owner relying on the issuance.	(1991), 6 M.P.L.R. (2d) 164 (B.C. S.C.)
Mariani v. Puslinch Twp.	A vendor who constructs his own house has the same obligation as a commercial builder-for-sale for damages suffered by a subsequent owner by negligent construction which raises a foreseeable risk of injury to persons or danger to property. The damages are the cost of putting the house in a non-dangerous state.	DOCKET: C39746, appeal from the judgment of Justice Thomas M. Dunn of the Superior Court of Justice dated February 14, 2003, COURT OF APPEAL, MAY 12 2004

Mortimer v. Cameron	**The failure by a plans examiner and a site inspector to use reasonable care in the approval of a renovation was the causative factor in personal damages awarded in the amount of $4.5 millions.**	**(1994), 19 M.P.L.R. (2d) 286, 17 OR. (3d) 1, 68 O.A.C. 332,111 D.L.R. (4th) 428 (CA.), additional reasons at (June 24, 1994), Doc. CAC12036 (Ont. CA.). leave to appeal to SCC. refused (1994), 23 M.P.L.R. (2d) 314 (note) 114 D.L.R. (4th) vii (note), 19 OR. (3d) xvi (note), 76 O.A.C. 400 (note), 178 N.R. 146 (note) (SCC.)**
Petruzzi v. Coveny	**The purchaser of a house constructed by the previous owner is entitled to damages jointly from the owner/builder and the municipality whose inspector was negligent in inspecting the work. Mental distress damages are properly awarded. The original owner/builder is also responsible for damages relating to non-building code defects.**	**(1991), 7 M.P.L.R. (2d) 183, 48 C.L.R. 225 (Ont. Gen. Div.)**
Riverside Developments Bobcaygeon Ltd. v. Bobcaygeon	**When the Chief Building Official for the municipality advises a developer that plans met the requirements of the Building Code for the Province, it is reasonable for the developer to rely on those assurances. It is also reasonable that the developer relied on the building inspector to check the construction as it advanced. Damages of some $14m. were awarded against the municipality.**	**COURT FILE NO.: 001779, 2004-01-19, SUPERIOR COURT OF JUSTICE, Justice B. Glass, Ct. of**
Rothfield v. Manolakos,	**The breach of a building by-law by an owner does not discharge the municipality from it's duty to competently inspect construction, although damages will be reduced by the contributory negligence of the owner.**	**[1989] 2 SCR. 1259, [1990] 1 W.W.R. 408, 63 D.L.R. (4th) 449, 41 B.C.L.R. (2d) 374, (sub nom. Manolakos v. Gohmann) 46 M.P.L.R. 217, 1 C.C.L.T. (2d) 233, (sub nom. Manolakos v. Vernon (City)) 102 N.R. 249**

Sapone v. Clarington (Municipality)	A municipality has no legal duty to enforce it's by-laws and a damage suit against it premised on such a claim will be dismissed.	[2001] O.J. No. 4991, Court File No. 6746/01, Ontario Superior Court of Justice, Lane J., December 18, 2001
T.H. Critelli Ltd. v. Lincoln Trust & Savings Co.	The design of a new building which produced excessive snow loads on the roof of an abutting building was actionable nuisance.	(1978), 20 OR. (2d) 81, 4 C.C.L.T. 217, 2 R.P.R. 290, 86 D.L.R. (3d) 724 (H.C.)
Tridan Developments v Shell Canada Products	The damages caused by a gasoline spill onto an abutting property are properly calculated to be the sum of removing all contamination ($350,000) and the cost of installing an below grade barrier to shield against subsequent seepage from the site of the spill. As the resulting cleaned-up site would be pristine, there should be no damages for 'stigma'. As the site's owner suffered no other loss, no pre-judgment interest should be awarded.	COURT OF APPEAL FOR ONTARIO, DOCKET:C34404, 2002/01/03
W Kirby v. Coquitlam (City)	Where the CBO was unaware of the existence of fill on site which would have required additional consideration before issuing a permit, there is no actionable negligence if the subsequently constructed building proves inadequate for the actual site conditions. A reasonably prudent building inspector would not have alerted to the condition.	(1996), 27 C.L.R. (2d) 120, 37 M.P.L.R. (2d) 113 (B.C. S.C.)
Wirth v. Vancouver (City)	Where there is no foreseeable risk of personal injury or damage to property a municipality is under no duty of care to an owner of property abutting a site for which a building permit was negligently issued. Economic loss, whether foreseeable or not, does not create a duty of care.	50 M.P.L.R. 105. 47 B.C.L.R. (2d) 340, 3 C.C.L.T. (2d) 282,71 D.L.R. (4th) 745, [1990] 6 W.W.R. 225 (CA.)
Woolridge v. Stack	A municipality will not bear civil liability for non-inspection of construction where it had no statutory obligation to inspect and decided not to for valid policy reasons.	(1993), 107 Nfld. & P.E.I.R. 280, 336 APR. 280 (Nfld. T.D.)

BUILDING CODE ACT
FORMS & CERTIFICATES

APPLICATIONS

1. Application for Permit to Construct/Demolish Article 2.4.1.1A(2).
2. Application to the Building Code Commission for a Hearing.
3. Application to the Building Code Commission for Resolution of Time Period Disputes for Site Inspections (Subsection 10.2(2) of the Building Code Act, 1992 and Article 2.4.5.3. of the Building Code)

FORMS

1. Stop Work Order Section 14(1).
2. Order to Comply Section 12(2).
3. Order Not to Cover or Enclose Section 13(1).
4. Order to Uncover Section 13(6).
5. Order Requiring Tests & Samples Section 18(1)(f).

CERTIFICATES

1. Plans Review Certificate Section 15.18, Sentence 2.22.5.3(3).
2. Change Certificate Section 15.18, Sentence 2.22.5.3(4).
3. Occupancy Certificate Section 15.18, Sentence 2.22.5.3(5).
4. Final Certificate Section 15.18, Sentence 2.22.5.3(6).

Principal Authority/Registered Code Agency Identification
Name, Address, Telephone No, Building Code Identification Number

Stop Work Order

Pursuant to Subsection 14(1) of the *Building Code Act,1992*

Order Number: (optional) _____ **Date Order issued:** _____

Address to which Order applies:

Application/Permit Number:

Order issued to (name and address):

1.

2.

3.

4.

The inspection on or about _____ (date) at the above-referenced address found the following contravention(s) of the *Building Code Act, 1992* or the Building Code have not been rectified as required by the Order(s) indicated below:

- ❑ Order to Comply number _____, dated _____
- ❑ Order Not to Cover number _____, dated _____
- ❑ Order to Uncover number _____, dated _____

You are hereby ordered to immediately cease construction and/or demolition as specified below:

Item	Details

Order issued by:

Name _____ BCIN _____

Signature _____ Telephone no. _____

Contact name (optional)_____ Contact tel. number (optional)_____

Note:

- It is illegal to obstruct the visibility of a posted Order. It is also illegal to remove a posted Order unless authorized by an inspector or Registered Code Agency. [*Building Code Act,1992* s. 20]
- An Order may be appealed to the Superior Court of Justice. [*Building Code Act,1992* s. 25]. It may also be appealed to the Building Code Commission concerning the sufficiency of compliance with the technical requirements of the Building Code. [*Building Code Act,1992* s. 24]
- Failure to comply with this Order is an offence which could result in a fine. [*Building Code Act,1992* s.36]
- When a Stop Work Order is issued, no person shall perform any act in the construction or demolition of the building in respect of which the Order is made other than work necessary to carry out an Order to Comply, the Order Not to Cover, or an Order to Uncover. [*Building Code Act, 1992* s. 14]

Principal Authority/Registered Code Agency Identification
Name, Address, Telephone No, Building Code Identification Number

Order to Comply

Pursuant to Subsection 12(2) of the *Building Code Act, 1992*

Order Number: (optional) _____ **Date Order issued:** _____

Address to which Order applies:

Application/Permit Number:

Order issued to (name and address):

1.

2.

3.

4

The inspection on or about _____ (date) at the above-referenced address found the following contravention(s) of the Building Code or the *Building Code Act, 1992*.

You are hereby ordered to correct the contraventions itemized below immediately, by the dates listed below, or by _____ (date).

Item	Reference	Description and location	Required action and compliance date

Order issued by:

Name _____ BCIN _____

Signature _____ Telephone no. _____

Contact name (optional)_____ Contact tel. number (optional)_____

Note:

- It is illegal to obstruct the visibility of a posted Order. It is also illegal to remove a posted Order unless authorized by an inspector or Registered Code Agency. [*Building Code **Act,**1992* s. 20]
- An Order may be appealed to the Superior Court of Justice. [*Building Code Act, 1992* s. 25]. It may also be appealed to the Building Code Commission concerning the sufficiency of compliance with the technical requirements of the Building Code. [*Building Code Act, 1992* s. 24]
- Failure to comply with this Order could result in a Stop Work Order. [*Building Code Act, 1992* s. 14]
- Failure to comply with this Order is an offence which could result in a fine. [*Building Code Act, 1992* s.36]
- No construction affected by this Order is to be covered until inspected and approved. [*Building Code Act, 1992* s.13]

Principal Authority/Registered Code Agency Identification
Name, Address, Telephone No, Building Code Identification Number

Order Not to Cover or Enclose

Pursuant to Subsection 13(1) of the *Building Code Act, 1992*

Order Number: (optional) _____ **Date Order issued:** _____

Address to which Order applies:

Application/Permit Number:

Order issued to (name and address):

1. 3.

2. 4.

The above-referenced building was inspected on or about _____ (date).

You are hereby prohibited from covering or enclosing the parts of the building described below, pending an inspection. Please arrange for an inspection when the part of the building identified below is ready for inspection.

Item	Description of area not to cover or enclose

Order issued by:

Name _____ BCIN _____

Signature _____ Telephone no. _____

Contact name (optional)_____ Contact tel. number (optional)_____

Note:

- It is illegal to obstruct the visibility of a posted Order. It is also illegal to remove a posted Order unless authorized by an inspector or Registered Code Agency. [*Building Code Act, 1992* s. 20]
- An Order may be appealed to the Superior Court of Justice. [*Building Code Act, 1992* s. 25]. It may also be appealed to the Building Code Commission concerning the sufficiency of compliance with the technical requirements of the Building Code. [*Building Code Act, 1992* s. 24]
- Failure to comply with this Order could result in an Order to Uncover and/or a Stop Work Order. [*Building Code Act, 1992* s. 14]
- Failure to comply with an Order is an offence which could result in a fine. [*Building Code Act, 1992* s.36]

Principal Authority/Registered Code Agency Identification
Name, Address, Telephone No, Building Code Identification Number

Order to Uncover

Pursuant to Subsection 13(6) of the *Building Code Act, 1992*

Order Number: (optional) _____ **Date Order issued:** _____

Address to which Order applies:

Application/Permit Number:

Order issued to (name and address):

1.

2.

3.

4.

The inspection on or about _____(date) at the above-referenced address found the following contravention(s) of the *Building Code Act, 1992* or the Building Code.

- ❑ The part was covered or enclosed contrary to an Order Not to Cover number _____ dated _____;
- ❑ The notice required to be given to the chief building official, registered code agent or inspector, before the part was covered or enclosed under a by-law, resolution or regulation made under clause 7(1)(e) of the *Building Code Act, 1992*, was not given or a notice required under section 10.2 was not was not received;
- ❑ In cases where a notice required under section 10.2 is received, the period prescribed under subsection 10.2 (2) did not elapse before the part was covered or enclosed;
- ❑ In cases where a notice required by a by-law, resolution or regulation made under clause 7(1)(e) is given,
  - (i) the inspection period prescribed under clause 7 (1)(e) did not elapse before the part was covered or enclosed
  - (ii) if an inspection period is not prescribed under clause 7(1)(e) a reasonable period of time after the notice was given did not elapse before the part was covered or enclosed; or
- ❑ The part has been constructed without a permit being issued.

You are hereby ordered to uncover or have uncovered, at your own expense, and make available for inspection the parts of the building described below immediately, or by _____ (date).

Description of area to uncover:

Order issued by:

Name _____ BCIN _____

Signature _____ Telephone no. _____

Contact name (optional)_____ Contact tel. number (optional)_____

Note:

- It is illegal to obstruct the visibility of a posted Order. It is also illegal to remove a posted Order unless authorized by an inspector or Registered Code Agency. [*Building Code Act, 1992* s. 20]
- An Order may be appealed to the Superior Court of Justice. [*Building Code Act,1992* s. 25]. It may also be appealed to the Building Code Commission concerning the sufficiency of compliance with the technical requirements of the Building Code. [*Building Code Act,1992* s. 24]
- Failure to comply with this Order could result in a Stop Work Order. [*Building Code Act,1992* s. 14]
- Failure to comply with an Order is an offence which could result in a fine. [*Building Code Act,1992* s.36]

Principal Authority/Registered Code Agency Identification
Name, Address, Telephone No, Building Code Identification Number

Order Requiring Tests and Samples

Pursuant to Subsection 18(1)(f) of the *Building Code Act,1992*

Order Number: (optional) _____ **Date Order issued:** _____

Address to which Order applies:

Application/Permit Number:

Order issued to (name and address)**:**

1. 3.

2. 4.

Description of required tests and samples

The inspection on or about _____ (date) at the above-referenced address found the need for the following tests and samples.

You are hereby ordered at your expense to take and supply to the undersigned the tests and samples described below by _____ (date).

Item	Reference	Test and sample required

Order issued by:

Name _____ BCIN _____

Signature _____ Telephone no. _____

Contact name (optional)_____ Contact tel. number (optional)_____

Note:

- It is illegal to obstruct the visibility of a posted Order. It is also illegal to remove a posted Order unless authorized by an inspector or Registered Code Agency. [*Building Code Act,1992* s. 20]
- An Order may be appealed to the Superior Court of Justice. [*Building Code Act,1992* s. 25]. It may also be appealed to the Building Code Commission concerning the sufficiency of compliance with the technical requirements of the Building Code. [*Building Code Act,1992* s. 24]
- Failure to comply with an Order is an offence which could result in a fine. [*Building Code Act,1992* s.36]

Application for a Permit to Construct or Demolish

This form is authorized under subsection 8(1.1) of the Building Code Act.

For use by Principal Authority	
Application number:	Permit number (if different):
Date received:	Roll number:

Application submitted to: _____
(Name of municipality, upper-tier municipality, board of health or conservation authority)

A. Project information

Building number, street name		Unit number	Lot/con.
Municipality	Postal code	Plan number/other description	
Project value est. $		Area of work (m^2)	

B. Applicant

Applicant is: ❑ Owner or ❑ Authorized agent of owner

Last name	First name	Corporation or partnership	
Street address		Unit number	Lot/con.
Municipality	Postal code	Province	E-mail
Telephone number ( )	Fax ( )		Cell number ( )

C. Owner (if different from applicant)

Last name	First name	Corporation or partnership	
Street address		Unit number	Lot/con.
Municipality	Postal code	Province	E-mail
Telephone number ( )	Fax ( )		Cell number ( )

D. Builder (optional)

Last name	First name	Corporation or partnership (if applicable)	
Street address		Unit number	Lot/con.
Municipality	Postal code	Province	E-mail
Telephone number ( )	Fax ( )		Cell number ( )

E. Purpose of application

❑ New construction ❑ Addition to an existing building ❑ Alteration/repair ❑ Demolition ❑ Conditional Permit

Proposed use of building	Current use of building

Description of proposed work

F. Tarion Warranty Corporation (Ontario New Home Warranty Program)

i. Is proposed construction for a new home as defined in the *Ontario New Home Warranties Plan Act*? If no, go to section G. ❑ Yes ❑ No

ii. Is registration required under the *Ontario New Home Warranties Plan Act*? ❑ Yes ❑ No

iii. If yes to (ii) provide registration number(s): _____

G. Attachments

i. Attach documents establishing compliance with applicable law as set out in Article 1.4.1.3. of Division A.

ii. Attach Schedule 1 for each individual who reviews and takes responsibility for design activities.

iii. Attach Schedule 2 where application is to construct on-site, install or repair a sewage system.

iv. Attach types and quantities of plans and specifications for the proposed construction or demolition that are prescribed by the by-law, resolution, or regulation of the municipality, upper-tier municipality, board of health or conservation authority to which this application is made.

H. Declaration of applicant

I _____ certify that:
(print name)

1. The information contained in this application, attached schedules, attached plans and specifications, and other attached documentation is true to the best of my knowledge.
2. If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership.

_____ _____
Date Signature of applicant

Personal information contained in this form and schedules is collected under the authority of subsection 8(1.1) of the *Building Code Act, 1992*, and will be used in the administration and enforcement of the *Building Code Act, 1992*. Questions about the collection of personal information may be addressed to: a) the Chief Building Official of the municipality or upper-tier municipality to which this application is being made, or, b) the inspector having the powers and duties of a chief building official in relation to sewage systems or plumbing for an upper-tier municipality, board of health or conservation authority to whom this application is made, or, c) Director, Building and Development Branch, Ministry of Municipal Affairs and Housing 777 Bay St., 2nd Floor. Toronto, M5G 2E5 (416) 585-6666.

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information

Building number, street name			Unit no.	Lot/con.
Municipality	Postal code	Plan number/ other description		

B. Individual who reviews and takes responsibility for design activities

Name		Firm		
Street address			Unit no.	Lot/con.
Municipality	Postal code	Province	E-mail	
Telephone number ( )	Fax number ( )		Cell number ( )	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

❑ House	❑ HVAC – House	❑ Building Structural
❑ Small Buildings	❑ Building Services	❑ Plumbing – House
❑ Large Buildings	❑ Detection, Lighting and Power	❑ Plumbing – All Buildings
❑ Complex Buildings	❑ Fire Protection	❑ On-site Sewage Systems

Description of designer's work

D. Declaration of Designer

I _____ declare that (choose one as appropriate):
(print name)

❑ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: _____

Firm BCIN: _____

❑ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

❑ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification:_____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

_____ _____

Date Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

Schedule 2: Sewage System Installer Information

A. Project Information

Building number, street name			Unit number	Lot/con.
Municipality	Postal code	Plan number/ other description		

B. Sewage system installer

Is the installer of the sewage system engaged in the business of constructing on-site, installing, repairing, servicing, cleaning or emptying sewage systems, in accordance with Building Code Article 3.3.1.1, Division C?

- ❑ Yes (Continue to Section C)
- ❑ No (Continue to Section E)
- ❑ Installer unknown at time of application (Continue to Section E)

C. Registered installer information (where answer to B is "Yes")

Name			BCIN	
Street address			Unit number	Lot/con.
Municipality	Postal code	Province	E-mail	
Telephone number ( )	Fax ( )		Cell number ( )	

D. Qualified supervisor information (where answer to section B is "Yes")

Name of qualified supervisor(s)	Building Code Identification Number (BCIN)

E. Declaration of Applicant:

I _____declare that:
(print name)

- ❑ I am the applicant for the permit to construct the sewage system. If the installer is unknown at time of application, I shall submit a new Schedule 2 prior to construction when the installer is known;

OR

- ❑ I am the holder of the permit to construct the sewage system, and am submitting a new Schedule 2, now that the installer is known.

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership.

_____ _____

Date Signature of applicant

Registered Code Agency Identification
(Name, Address, Business Telephone Number, Building Code Identification Number)

Plans Review Certificate

Pursuant to Section 15.18 of the Building Code Act, 1992

Certificate Number:_____ **Date Certificate issued**: _____

Address of Building Site:
(hereinafter called "the building")

Application/ Permit Number:_____

Certificate issued to (Name and Address of Principal Authority):

Certification

I certify that:

- I have been appointed by the above-referenced Principal Authority to undertake work in accordance with Subsections 4.1(1) and (2) of the Building Code Act, 1992.
- I am authorized to issue a plans review certificate under the authority of Clauses 4.1(4)(a) or (c).
- The proposed construction of the building is in substantial compliance with the Building Code.
- I am an authorized person under Article 3.7.4.5 of Division C of the Building Code, and am qualified under the requirements listed in Clause 3.4.3.2 (1) (a) of Division C of the Building Code.

Certificate issued by:

Name: _____ BCIN: _____

Signature: _____ Date: _____

The following to be completed if the building is subject to review under Section 1.2 of Division C of the Building Code as applicable.

I certify that I am an *architect*, and that the proposed construction of the building is in substantial compliance with the Building Code.

Name: _____

Signature: _____ Date: _____

I certify that I am a *professional engineer*, and that the proposed construction of the building is in substantial compliance with the Building Code.

Name: _____

Signature: _____ Date: _____

Registered Code Agency Identification
(Name, Address, Business Telephone Number, Building Code Identification Number)

Change Certificate

Pursuant to Section 15.18 of the Building Code Act,1992

Certificate Number:_____ **Date Certificate issued:** _____

Address of Building Site:
(hereinafter called "the building")

Application/ Permit Number:_____

Certificate issued to (Name and Address of Principal Authority):

Certification

I certify that:

- I have been appointed by the above-referenced Principal Authority to undertake work in accordance with Subsections 4.1(1) and (2) of the *Building Code Act, 1992.*
- I am authorized to issue a change certificate under the authority of Clauses 4.1(4)(a) to (c).
- I am satisfied on reasonable grounds that the proposed construction of the building to which this change certificate relates is in substantial compliance with the Building Code.
- I am an authorized person under Article 3.7.4.5 of Division C of the Building Code, and am qualified under the requirements listed in Clause 3.4.3.2 (1) (a) of Division C of the Building Code.

Certificate issued by:

Name: _____ BCIN: _____

Signature: _____ Date: _____

The following to be completed if the building is subject to review under Section 1.2 of Division C of the Building Code as applicable.

I certify that I am an *architect*, and that I am satisfied on reasonable grounds that the proposed construction of the building to which this change certificate relates is in substantial compliance with the Building Code.

Name: _____

Signature: _____ Date: _____

I certify that I am a *professional engineer*, and that I am satisfied on reasonable grounds that the proposed construction of the building to which this change certificate relates is in substantial compliance with the Building Code.

Name: _____

Signature: _____ Date: _____

This certificate is authorized by the Minister of Municipal Affairs and Housing under the Building Code Act, 1992.

Registered Code Agency Identification
(Name, Address, Business Telephone Number, Building Code Identification Number)

Certificate for the Occupancy of a Building not Fully Completed

Pursuant to Section 15.18 of the Building Code Act, 1992 and
Sentence 3.7.4.3(5) of Division C of the Building Code

Certificate Number:_____ **Date Certificate issued**: _____

Address of Building Site: **Application/ Permit Number**:_____
(hereinafter called "the building")

Certificate issued to (Name and Address of Principal Authority):

Certification
I certify that:

- I have been appointed by the above-referenced Principal Authority to undertake work in accordance with Subsections 4.1(1) and (2) of the *Building Code Act, 1992*.
- I am authorized to issue a certificate for the occupancy of a building not fully completed under the authority of Clauses 4.1(4)(b) or (c).
- I am satisfied on reasonable grounds that the construction of this building is in substantial compliance with Clauses 1.3.3.1(2) (a) to (q) of Division C of the Building Code.
- I am an authorized person, and am qualified under the requirements listed in Clause 3.3.3.2 (1) (a) of Division C of the Building Code.

Certificate issued by:

Name: _____ BCIN: _____

Signature: _____ Date: _____

The following to be completed if the building is subject to review under Section 1.2 of Division C of the Building Code as applicable.

I certify that I am an *architect*, and that I am satisfied on reasonable grounds that the construction of this building is in substantial compliance with Clauses 1.3.3.1 (2) (a) to (q) of Division C of the Building Code.

Name: _____

Signature: _____ Date: _____

I certify that I am a *professional engineer*, and that I am satisfied on reasonable grounds that the construction of this building is in substantial compliance with Clauses 1.3.3.1 (2) (a) to (q) of the Building Code.

Name: _____

Signature: _____ Date: _____

Registered Code Agency Identification
(Name, Address, Business Telephone Number, Building Code Identification Number)

Final Certificate

Pursuant to Section 15.18 of the Building Code Act 1992

Certificate Number:_____ **Date Certificate issued:** _____

Address of Building Site:
(hereinafter called "the building")

Application/ Permit Number:_____

Certificate issued to (Name and Address of Principal Authority):

Certification

I certify that:

- I have been appointed by the above-referenced Principal Authority to undertake work in accordance with Subsections 4.1(1) and (2) of the *Building Code Act, 1992*.
- I am authorized to issue a final certificate under the authority of Clauses 4.1(4)(b) or (c).
- The construction of the building identified in this certificate is in substantial compliance with the Building Code.
- I am an authorized person under Article 3.7.4.5 of Division C of the Building Code, and am qualified under the requirements listed in Clause 3.4.3.2 (1) (a) of Division C of the Building Code.

Certificate issued by:

Name: _____ BCIN: _____

Signature: _____ Telephone no. _____

The following to be completed if the building is subject to review under Section 1.2 of Division C of the Building Code as applicable.

I certify that I am an *architect*, and that the construction of the building identified in this certificate is in substantial compliance with the Building Code.

Name: _____

Signature: _____ Date: _____

I certify that I am a *professional engineer*, and that the construction of the building identified in this certificate is in substantial compliance with the Building Code.

Name: _____

Signature: _____ Date: _____

This certificate is authorized by the Minister of Municipal Affairs and Housing under the Building Code Act, 1992

Ontario

APPLICATION FOR HEARING TO THE BUILDING CODE COMMISSION

DATE: _____

For Commission Use Only	
Application #	
Date Received	
Decision Date	

Please complete this application and return it (i.e., an **original signed copy**) along with **four copies** to the Secretary of the Building Code Commission, together with **five copies** of the following documents:

(a) all supporting documentation referred to in this application; and,
(b) any correspondence you have received from the municipal building department, conservation authority, health unit or the Ministry of Municipal Affairs and Housing concerning the subject matter of this application.

NOTE: In accordance with the policies and procedures of the Building Code Commission, you are required to provide to the Respondent a copy of:

(1) this application and all attachments; and,

(2) all future communications to the Building Code Commission in respect of this matter.

PLEASE PRINT

1. APPLICANT (The Applicant must be an applicant for, or holder of, a permit under the *Building Code Act, 1992*, or a person to whom an order under that Act has been given.)

As someone who is appealing to the Building Code Commission have you:

	Yes	No
Applied for a Permit,	☐	☐
Received a Permit, and/or	☐	☐
Received an Order against you.	☐	☐

2. APPLICANT INFORMATION

Name:	**Position:**
Company Name:	**Address:**
Telephone No.: ( )	**E-Mail:**
Facsimile No.: ( )	**WebSite:**

3. AGENT INFORMATION (If the Applicant is to be represented by another individual, please provide the following information.)

Name:	**Position:**
Company Name:	**Address:**
Telephone No.: ( )	**E-Mail:**
Facsimile No.: ( )	**WebSite:**

NOTE: The Applicant must provide written authorization confirming the Agent's authority to act in this matter.

4. RESPONDENT INFORMATION

(Identify the Chief Building Official or Designated Sewage System Inspector (*BCA* s. 3.1(3)) of the municipality, health unit or conservation authority in which the construction or proposed construction is located.)

Name:	**Position:**
Organization/Agency:	**Address:**
Telephone No.: ( )	**E-Mail:**
Facsimile No.: ( )	**WebSite:**

5. DESIGNATE INFORMATION

(Indicate the individual at the municipality, conservation authority, or health unit, other than the Chief Building Official or Designated Sewage System Inspector that you may have dealt with regarding this issue.)

Name:	**Position:**
Organization/Agency:	**Address:**
Telephone No.: ( )	**E-Mail:**
Facsimile No.: ( )	**WebSite:**

6. PARTICULARS OF DISPUTE (Use attachments, if necessary.)

6.1 Name/address of structure/sewage system:

6.2 Provisions of the Building Code in dispute: (List specific OBC provisions)

6.3 Type of application: _____ building, or _____ sewage system. (If this application pertains to a building, please complete Section 6.4 of this form. If it involves a sewage system, fill out Section 6.5, or attach a complete copy of your sewage permit application, as long as it covers all areas in Section 6.5., including plans, diagrams, etc.)

6.4 Description of construction of the subject building: (Please attach copies of drawings, site plans, permit applications and other relevant documents.)

Major occupancy _____

Building area _____

Building height (# of storeys) _____

	Yes	No		Yes	No
Combustible construction	☐	☐	Fire alarm system	☐	☐
Non-combustible construction	☐	☐	New construction	☐	☐
Sprinkler system	☐	☐	Addition	☐	☐
Standpipe & hose system	☐	☐	Renovation	☐	☐

6.5 Description of construction of the subject sewage system: (Please attach copies of sewage system plans, cross-section drawings, lot diagrams, permit applications, soils analyses and other relevant documents.)

Major occupancy _____

Total finished area _____

Class of system/system description _____

Water supply (e.g. piped or wells) _____

	Yes	No		Yes	No
New construction	☐	☐	Alteration	☐	☐
Enlargement	☐	☐	Repair	☐	☐

Plumbing - total fixture units _____

Total daily design flow rate _____ (expressed as “Q” in litres/day)

Site Description

Slope of site _____

Vegetation Type _____

Depth to bedrock/hardpan _____mm, or

Depth to high groundwater table _____mm

Soil used in sewage system

☐ existing native soil

Percolation time _____ (expressed as "T" in minutes/centimetre), or

☐ imported fill

Percolation time _____ (expressed as "T" in minutes/centimetre)

Size of leaching bed _____m^2

6.6 Description of the portion of the project that is in dispute:

6.7 Concise statement by the Applicant regarding the nature of this dispute, including reasons for non-acceptance of the Applicant's proposal given by the Respondent:

6.8 At what stage is this project:

Permit application _____ Plans review _____ Construction _____

Final inspection _____ Completed _____ Occupancy _____

7. <u>SUPPORTING DOCUMENTATION</u> (List documentation provided in support of this application.)

8. AFFIRMATION AND SIGNATURE OF APPLICANT OR AGENT

The undersigned affirms that the information provided in this application is accurate and that a copy of this application and all accompanying documentation has been provided to the Respondent.

DATED the _____ day of _____, 2005

_____
Signature of Applicant or Agent

_____
Name and Position of Applicant or Agent (Please Print or Type)

NOTE:

1. After receipt of this application, the Building Code Commission will inform you about further arrangements in the form of a notice of hearing.

2. The hearing may be held in French upon request.

3. The hearing may be held by video conference upon request, if facilities are available.

4. The Building Code Commission has been designated as an institution for the purposes of the *Freedom of Information and Protection of Privacy Act*.

   Personal information provided on this form is collected under the authority of the *Building Code Act, 1992* and will be used for the purpose of a hearing before the Building Code Commission. Please direct any questions about the collection of information to the Secretary of the Building Code Commission by phone at (416) 585-6503 or by mail to the following address: Secretary, Building Code Commission, 2nd Floor, 777 Bay Street, Toronto, Ontario, M5G 2E5.

RETURN this application to the Building Code Commission at the following address:

Sally England-Bizjak, Secretary
Building Code Commission
Ministry of Municipal Affairs and Housing
Building & Development Branch
777 Bay Street, 2nd Floor
Toronto, Ontario M5G 2E5

Tel: (416) 585-6503
Fax: (416) 585-7531
Email: sally.england-bizjak@mah.gov.on.ca

Reminder: A copy of this application and all accompanying documentation must be provided to the Respondent.

APPLICATION FOR HEARING
TO THE BUILDING CODE COMMISSION
For Resolution of Time Period Disputes for Site Inspections

(Subsection 10.2(2) of the *Building Code Act, 1992* and Article 2.4.5.3. of the Building Code)

DATE: _____

For Commission Use Only	
Application #	
Date Received	
Decision Date	

Please complete this application and return it (i.e., an **original signed copy**) along with **two copies** to the Secretary of the Building Code Commission, together with **three copies** of the following documents:

(a) all supporting documentation referred to in this application; and,

(b) any correspondence you have received from the principal authority (including the municipal building department, conservation authority or health unit) or the Registered Code Agency (RCA) concerning the subject matter of this application.

NOTE: In accordance with the policies and procedures of the Building Code Commission, you are required to provide the Respondent with a copy of:

(1) this application and all attachments; and,

(2) all future communications to the Building Code Commission in respect of this matter.

PLEASE PRINT

1. APPLICANT INFORMATION The Applicant must be the holder of a building permit under the *Building Code Act, 1992.*

Name:	**Position:**
Company Name:	**Address:**
Telephone No.: ( )	**E-Mail:**
Facsimile No.: ( )	**WebSite:**

2. AGENT INFORMATION (If the Applicant is to be represented by another individual, please provide the following information.)

Name:	**Position:**
Company Name:	**Address:**
Telephone No.: ( )	**E-Mail:**
Facsimile No.: ( )	**WebSite:**

NOTE: The Applicant must provide written authorization confirming the Agent's authority to act in this matter.

3. RESPONDENT INFORMATION

(Identify the principal authority, i.e. Chief Building Official, Designated Sewage System Inspector (*BCA* s. 3.1(3)) of the municipality, health unit or conservation authority or the Registered Code Agency having authority in this matter)

Name:	**Position:**
Organization/Agency:	**Address:**
Telephone No.: ( )	**E-Mail:**
Facsimile No.: ( )	**WebSite:**

4. DESIGNATE INFORMATION

(Indicate the individual at the municipality, registered code agency, conservation authority or health unit, other than the Respondent named above, that you may have dealt with regarding this issue.)

Name:	**Position:**
Organization/Agency:	**Address:**
Telephone No.: ( )	**E-Mail:**
Facsimile No.: ( )	**WebSite:**

5. PARTICULARS OF DISPUTE

5.1 Date Permit Issued: _____ (Please attach a signed copy of the permit application form)

5.2 Permit Number: _____

5.3 Name and Address of the Building/Structure or Sewage System:

5.4 Date of Notice to the Respondent for Inspection: _____ (Please attach any written notice to the municipality)

5.5 Stage of Construction for which Notice was submitted:

5.4 Basis for Dispute:

- ☐ The prescribed Notice for inspection was submitted to the Respondent, however, the Respondent has not yet conducted the inspection
- ☐ The prescribed Notice for inspection was submitted to the Respondent and the inspection was conducted but not within the prescribed time frame set out in the Article 2.4.5.3. of the Building Code

5.5 Concise statement by the Applicant regarding the nature of this dispute

6. DETAILS OF CONSTRUCTION

6.1 Type of permit applied for: ☐ Building ☐ Sewage System

6.2 Provide a brief description of the subject building/structure or sewage system:

7. AFFIRMATION AND SIGNATURE OF APPLICANT OR AGENT

The undersigned affirms that the information provided in this application is accurate and that a copy of this application and all accompanying documentation has been provided to the Respondent.

DATED the _____ day of _____, 2005

_____
Signature of Applicant or Agent

_____
Name and Position of Applicant or Agent (Please Print or Type)

NOTE:

1. After receipt of this application, the Building Code Commission will inform you about further arrangements in the form of a notice of hearing.

2. The hearing may be held in French upon request.

3. The hearing may be held by telephone or video conference, if facilities are available.

4. The Building Code Commission has been designated as an institution for the purposes of the *Freedom of Information and Protection of Privacy Act*.

   Personal information provided on this form is collected under the authority of the *Building Code Act, 1992* and will be used for the purpose of a hearing before the Building Code Commission. Please direct any questions about the collection of information to the Secretary of the Building Code Commission by phone at (416) 585-6503 or by mail to the following address: Secretary, Building Code Commission, 2nd Floor, 777 Bay Street, Toronto, Ontario, M5G 2E5.

RETURN this application to the Building Code Commission at the following address:

Sally England-Bizjak, Secretary
Building Code Commission
Ministry of Municipal Affairs and Housing
Building & Development Branch
777 Bay Street, 2nd Floor
Toronto, Ontario M5G 2E5

Tel: (416) 585-6503
Fax: (416) 585-7531
Email: sally.england-bizjak@mah.gov.on.ca

Reminder: A copy of this application and all accompanying documentation must be provided to the Respondent.

TEMPLATE

Notification Of Marijuana Grow Operation Protocol Agreement Between Police Services And Municipalities

STATEMENT OF PRINCIPLE

Marijuana grow operations (MGOs) pose a serious threat to the safety and security of municipalities throughout Ontario. The detection, investigation, dismantling, and return of premises to legitimate use is a complex undertaking requiring the cooperation of police and municipal officials. A coordinated approach to this problem will help ensure that the entire process is conducted in a safe and effective manner. The safety of the personnel involved in the process and that of the public is of paramount importance.

LEGISLATIVE REQUIREMENTS

The *Municipal Act, 2001* is amended by adding the following sections:

Inspection of buildings containing marijuana grow operations

431.1 (1) If the clerk of a local municipality is notified in writing by a police force that a building located on land in the local municipality contained a marijuana grow operation, the local municipality shall ensure that an inspection of the building is conducted within a reasonable time after the clerk has been notified.

Persons who may conduct inspection

(2) An inspection referred to in subsection (1) may be conducted by,

(a) a by-law enforcement officer of any municipality or of any local board of any municipality; or

(b) an officer, employee or agent of any municipality or of any local board of any municipality whose responsibilities include the enforcement of a by-law, an Act or a regulation under an Act.

Nature of inspection

(3) The requirement in subsection (1) for an inspection is for an inspection that includes entering upon the land and into the building.

SAMPLE

Powers to conduct inspection

(4) The inspection shall be conducted pursuant to the powers of entry and inspection that the person conducting the inspection otherwise has under law, but only to the extent that the person conducting the inspection is able to do so.

Action to be taken

(5) Upon conclusion of the inspection, the person who conducted the inspection shall take whatever actions he or she is authorized by law to take in order to make the building safe and otherwise protect the public.

Definition

(6) In this section,

"police force" means a municipal police force, the Ontario Provincial Police or the Royal Canadian Mounted Police.

Where marijuana grow operation is in a lower-tier municipality

431.2 (1) If the clerk of a local municipality that is a lower-tier municipality is notified under subsection 431.1 (1) that a building located on land in the lower-tier municipality contained a marijuana grow operation, the lower-tier municipality shall, if in its opinion it is appropriate to do so, forward a copy of the notice referred to in subsection 431.1 (1) to the clerk of the upper-tier municipality of which the lower-tier municipality forms a part.

Same

(2) Upon the clerk of the upper-tier municipality being notified under subsection (1), the obligation under subsection 431.1 (1) to ensure that an inspection of the building is conducted becomes the obligation of both the lower-tier municipality and the upper-tier municipality.

PURPOSE

The purpose of this protocol is to assist the police service and municipality to provide an effective and coordinated response when dealing with premises that have operated as a marijuana grow operation. This response will help to ensure that, once police identify a property as a marijuana grow operation, necessary steps are taken to have the building made safe for the public.

For the purposes of this protocol, municipality means a single-tier municipal government or an upper-tier and one or more lower-tier municipal governments.

SAMPLE

PROTOCOL

Responsibilities of the Police Service

When an illicit marijuana growing operation has been discovered to be operating in a premise, building or structure on property within the jurisdiction of the municipality, the police service shall ensure:

1. An investigation is conducted into the illicit marijuana grow operation in accordance with the adequacy requirements in police operations as they pertain to drug investigations, the police service's Criminal Investigation Management Plan, if appropriate, and the police service's policies and procedures.

2. A notice is placed, consistent with Appendix ll, on the principal entrance to the premises.

3. The clerk of the municipality is notified, in writing by fax or by email, consistent with the On-Site Report (Appendix I), upon the completion of the on-site phase of the police investigation.

4. Appropriate agencies/personnel necessary to the police investigation at the premises are contacted, this may include:
    i) Hydro suppliers
    ii) Fire services
    iii) Children's Aid Society
    iv) Immigration

5. A site is deemed suitable for inspection by persons other than police when:
    a. The police investigation of the site premises and removal of marijuana plants is complete;
    b. All hazards of which police are aware of, have been contained, dismantled and/or are listed on the Site Report and sent to the municipality; and
    c. The notice has been affixed to the principle entrance of the premises indicating that a marijuana grow operation was dismantled and the premises may not be suitable for habitation/use until inspected by the municipality.

SAMPLE

Responsibilities of the Municipality

When an illicit marijuana grow operation has been discovered to be operating in a premise, building or structure on property within the jurisdiction of the municipality, the municipality shall ensure:

1. The name of the registered owner of the property as contained in the records of the municipality is forwarded to the police.

2. Appropriate inspection measures are taken by municipal authorities within a reasonable time, to identify and list all hazards resulting from the marijuana grow operation.

3. Appropriate information received from the police is forwarded to the respective inspection agency/personnel.

4. Current contact information for the clerk of the municipality is provided to the police.

5. Subsequent investigations are conducted as required by legislation.

6. Police contact identified on the form is contacted to acknowledge receipt of police notification.

SAMPLE

CONTACT INFORMATION

The clerk of the municipality:

Name:

Phone:

Fax/Email:

Police Service:

Name:

Phone:

Fax/Email:

SAMPLE

THIS PROTOCOL HAS BEEN AGREED TO

DATED AT_____**,** this _____ day of _____, 2006.

_____
Police Service
(name)
(address)

DATED AT_____**,** this _____ day of _____, 2006.

_____
Municipality
(name)
(address)

APPENDIX I

POLICE NOTIFICATION of

ILLICIT MARIJUANA GROW OPERATION

Please be advised that the _____Police Service has investigated and dismantled an Illicit Marijuana Grow Operation at the under-mentioned location.

DATE	TIME	POLICE OCCURRENCE #

CONTACT INFORMATION		
Contact Person	**Police Service**	**Address/Phone and Fax Number/Email Address**
Municipality/County	**Officer in Charge & Badge Number**	**Address/Phone Number/Email Address**

SITE DETAILS		
Lot No./ Street	**Town/Village**	**Postal Code**
Urban	**Rural**	**Industrial**
PLEASE PROVIDE THE FOLLOWING ADDITIONAL INFORMATION IF AVAILABLE:		
Registered Owner	**Mortgagee**	**Length of Ownership/ Own/Lease/Rent**
Realtor/Property Management	**Insurer**	**Name on Rental/Lease Agreement**

COMMENTS / HAZARDS IDENTIFIED*		
Hazard	**Location**	**Comments**
❑ Structural alteration/damage		
❑ Chemicals or fuels		
❑ Mould/Water Damage		
❑ Electrical Wiring/Fire Damage		
❑ Other:		

*Disclaimer: Police Services are not experts at identifying all hazards. This list is not exhaustive and hazards not identified here may exist.

APPENDIX II

Affix Police Service Crest Here

NOTICE

Occurrence # :_____
Date: _____

These premises _____ were investigated by the _____Police Service and found to contain an illegal Marijuana Grow Operation. As a result, the premises may contain numerous hazards and may not be fit for occupancy. The municipality of _____ has been notified.

BUILDING CODE COMMISSION
DECISIONS BY FILE NUMBER

Note: Decisions Highlighted in Yellow (1998 & earlier) concern building regulations pre-dating Reg. 403/97

EDITORS NOTE: The statutory references in column 5 are to the so-numbered article/section in the building regulation at the time of the decision. As such numbers may have changed or the sections amended since the decision, the application of the decision to current regulations should be cross-checked against the original regulation (column 6 indicates the last amendment existing at the time of the decision).

1	2	3	5	4	6
BCC File No.	**Year**	**Date**	**Short Description from Style of Subject Matter of Decision**	**Article/Section of Building Code or other Regulation Referenced by the Decision**	**LAST AMEND. TO 403/97**
06-48-1118	2006	November 21, 2006	Whether the Chief Building Official complied with the requirements under Subsections 8(2.2) and 8(2.3) of the Act and Sentence 2.4.1.1B.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 2.4.4.1B.	8(2.2) and 8(2.3), 2.4.1.1B.(1), Table 2.4.4.1B.	

06-36-1106	2006	August 24, 2006	Whether the Chief Building Official informed the Applicant, within the time period prescribed in the Building Code, of the decision to refuse to issue a building permit and of all of the reasons for the decision.		
06-24-1094	2006	June 22, 2006	Determine whether the 0.6 m wide stationary platform located at the rear of the garage, within which an automated platform operates, having been constructed without guards provides sufficiency of compliance with Sentence 9.8.8.1.(1)	9.8.8.1.(1)	
06-13-1083	2006	March 23, 2006	Determine whether the proposed use of a composite lumber product, referred to as Life Long Decking System, for the exterior walking surface of the proposed deck serving a residential dwelling provides sufficiency of compliance with Parts 4 and 9	Parts 4 and 9	
06-05-1075	2006	January 19, 2006	Whether the existing Group C residential condominium building consisting of a below grade parking garage and four levels of residential suites, where a close proximity sprinkler system is proposed to compensate for the deficient fire resistance rating of the exterior load bearing walls, provides sufficiency of compliance with Section 3.2.2.45.	3.2.2.45.	
06-02-1072	2006	January 12, 2006	Determine whether the 4th level “loft” design in a residential townhouse development provides sufficiency of compliance with the definition of “mezzanine” contained in Sentence 1.1.3.2.(1) and with the provisions of Sentence 9.10.4.1.(2)	1.1.3.2.(1) 9.10.4.1.(2)	

05-51-1065	2005	November 3, 2005	Determine whether the as-installed spiral staircase having a minimum run of 82.5 mm provides sufficiency of compliance with Sentence 9.8.5.2.(1)	9.8.5.2.(1)	
05-45-1059	2005	October 6, 2005	Determine whether the proposed home effluent pasteurization system provides sufficiency of compliance with Part 8	Part 8	
05-44-1058	2005	September 22, 2005	Determine whether the construction of a third floor loft area, which includes open stairwells from the second floor to the third floor loft area, provides sufficiency of compliance with Clause 9.9.9.1.(1)(a) and Sentence 9.9.9.1.(2)	9.9.9.1.(1)(a) 9.9.9.1.(2)	
05-43-1057	2005	September 22, 2005	Determine whether the as-constructed spiral stairs having a minimum run of less than 150 mm provides sufficiency of compliance with Sentence 9.8.5.2.(1)	9.8.5.2.(1)	
05-42-1056	2005	September 22, 2005	Determine whether the as-installed guard, serving a restaurant patio and having been constructed with several continuous horizontal members running throughout the height of the guard and, in particular, located between 140 mm and 900 mm above the level being protected, provides sufficiency of compliance with Sentence 3.4.6.5.(8)	3.4.6.5.(8)	
05-34-1048	2005	August 4, 2005	Determine whether the proposed metal screen storage cubicles with wire-mesh roofs in a self-service storage facility located in the basement of a multiple occupancy building provides sufficiency of compliance with Articles 3.3.1.1. and 3.3.1.4., when considering Article 3.3.4.3.	3.3.1.1., 3.3.1.4.	

05-26-1040	2005	July 7, 2005	Determine whether the proposed use of "Panelcraft™ Honeycomb Roof System" honeycomb sandwich panels in a sunroom provides sufficiency of compliance with Sentence 4.1.1.3.(1)	4.1.1.3.(1)	
05-23-1037	2005	June 7, 2005	Determine whether the proposed main arena seating bowl, in particular the seat configuration, row width, vomitory and aisle widths, exit capacity/width, fire separation of main entry/exit "open stair", designed in accordance with NFPA 101-2000, "Life Safety Code" and NFPA 92B, "Smoke Management Systems in Malls, Atria and Large Areas", provides sufficiency of compliance with Articles 3.3.2.3., 3.3.2.4.. 3.4.3.4. and 3.4.4.1.	3.3.2.3., 3.3.2.4.. 3.4.3.4. and 3.4.4.1.	
05-22-1036	2005	June 7, 2005	Determine whether the as-constructed guardrail, consisting of metal pickets with decorative elements at their mid-points, around the main stairs in a one storey, Group C building provides sufficiency of compliance with Sentence 9.8.8.5.(1)	9.8.8.5.(1)	
05-21-1035	2005	June 7, 2005	Dispute involving the issuance of an Unsafe Order and whether a permit should be issued for the proposed construction of three non-load bearing demising walls to create a general store within an existing Group F, Division 3 major occupancy building		
05-15-1029	2005	April 21, 2005	Determine whether the installation of a septic field remediation technology known as the White KnightTM into an existing septic tank provides sufficiency of compliance with the Building Code when considering Part 11 and the definition of "septic tank" as outlined in Article 1.1.3.2.	Part 11, 1.1.3.2.	

05-14-1028	2005	April 21, 2005	Determine whether the existing Class 4 sewage system fails to comply with Articles 8.7.4.1., 8.7.4.2. and Clause 8.9.1.2.(1)(c)	8.7.4.1., 8.7.4.2., 8.9.1.2.(1)(c)	
05-13-1027	2005	April 14, 2005	Determine whether the proposed public use self-storage facility, having a Group F, Division 2, medium hazard industrial occupancy can be located in the basement level of a building currently designated for Group C, residential occupancy and Group E, retail purposes, provides sufficiency of compliance with Sentences 3.1.3.2.(2) and 3.1.3.2.(4)	3.1.3.2.(2), 3.1.3.2.(4)	
05-11-1025	2005	March 10, 2005	Determine whether the proposed installation of a Class 5 sewage system (holding tank) provides sufficiency of compliance with Article 8.8.1.2.	8.8.1.2.	
05-10-1024	2005	March 10, 2005	Determine whether the proposed Class 4 sewage system will provide sufficiency of compliance with Article 8.2.1.4., Sentences 8.2.1.6.(2), 8.7.4.2.(9) and Table 8.2.1.6.B	8.2.1.4., 8.2.1.6.(2), 8.7.4.2.(9), Table 8.2.1.6.B	
05-09-1023	2005	April 19, 2005	Determine whether the proposed use of high density polyethylene pipe to convey sanitary sewage from a Group B, Division 2 care facility to the municipal sewer main provides sufficiency of compliance with Sentence 7.2.5.9.(1)	7.2.5.9.(1)	
05-08-1022	2005	April 4, 2005	Determine whether the proposed direct vent fireplace sidewall terminations, constructed of type 304 stainless steel and located in walls having a limiting distance ranging from 0.55 m to 1.2 m provides sufficiency of compliance with Articles 9.10.14.1. and 9.10.14.5.	9.10.14.1. and 9.10.14.5.	

05-07-1021	2005	February 3, 2005	Determine whether the proposed automated storage and retrieval system that serves as structural support for the building in addition to support for the racking system components provides sufficiency of compliance with Article 3.2.2.67., Clause 3.4.2.5.(1)(c) and Sentence 3.4.4.1.(1)	3.2.2.67., 3.4.2.5.(1)(c) and 3.4.4.1.(1)	220/02
05-06-1020	2005	February 17, 2005	Determine whether the lower floor of the subject building qualifies as a ground floor when considering the definitions for “grade” and “first storey” as specified in Article 1.1.3.2.	1.1.3.2.	
05-05-1019	2005	January 20, 2005	Determine whether the as-constructed ICF wall system in a 167.2 m2 Group C dwelling, where no vapour barrier is provided, will provide sufficiency of compliance with Article 9.25.4.1.	9.25.4.1.	
05-04-1018	2005	January 20, 2005	Determine whether the as-constructed demising walls between Unit 18 and 18A and between Unit 18/Unit 18A and Unit 15 in the one storey portion Group E retail plaza, with Group D business and personal service occupancies, provides sufficiency of compliance with Article 3.3.1.1.	3.3.1.1.	220/02
05-03-1017	2005	January 19, 2005	Determine whether the size and positioning of openings in the as-constructed firewalls provide sufficiency of compliance with Article 3.1.10.5.	3.1.10.5.	
05-01-1015	2005	January 13, 2005	Determine whether the storage structure, referred to by the Applicant as a tent, provides sufficiency of compliance with Sentences 1.1.3.1.(1) and 2.1.1.3.(1), Subsection 3.13.1. and Sentence 9.1.1.4.(1)	1.1.3.1.(1) and 2.1.1.3.(1), 3.13.1. and 9.1.1.4.(1)	220/02

04-55-1010	2004	December 2, 2004	Determine whether the proposed location of a dry hydrant will provide sufficiency of compliance with Sentences 3.2.5.7.(1) and 3.2.5.7.(2) of the Ontario Building Code for a 929 m2 one storey sawmill	3.2.5.7.(1) and 3.2.5.7.(2)	220/02
04-53-1008	2004	November 18, 2004	Determine whether the proposed 6,524 m2 addition to an existing 5,870 m2 steel shearing and warehouse facility that has been designed without a standpipe and hose system provides sufficiency of compliance with Article 3.2.9.1.	3.2.9.1.	220/02
04-51-1006	2005	January 17, 2005	Determine whether the proposed exterior wall system that incorporates foamed plastic insulation and exterior cladding in an exterior wall of a Group C (Part 3) major occupancy building provides sufficiency of compliance with Sentences 3.2.3.7.(1) and 3.1.5.11.(3)	3.2.3.7.(1) and 3.1.5.11.(3)	
04-04-1000	2004	December 20, 2004	Determine whether the proposed compactor and scrap bin area in the basement level (former Eaton=s basement retail area) provides sufficiency of compliance with Articles 3.3.5.6 and 3.6.2.6	3.3.5.6 , 3.6.2.6	
04-34-989	2004	August 5, 2004	Determine whether the existing outdoor portable metal containers that are used for public storage are considered to be “buildings” under Section 1.-(1) of the *Building Code Act, 1992*	1.1.3.2.(1)	220/02
04-33-988	2004	August 5, 2004	Determine whether the as-constructed landing serving a flight of stairs in a Group A, Division 2 occupancy provides sufficiency of compliance with Sentence 3.4.6.3.(2)	3.4.6.3.(2)	

04-32-987	2004	July 22, 2004	Determine whether the omission of continuous guards between constructed rows of successive fixed seating provides sufficiency of compliance with Clause 3.3.2.8.(1)(c)	3.3.2.8.(1)(c)	
04-27-982	2004	June 17th, 2004	Determine whether the as-constructed exterior deck serving a Group C occupancy, which is comprised of a composite material referred to as "Life-Long Decking" that is manufactured by Brite Manufacturing Inc., will provide sufficiency of compliance with Articles 9.8.8.8. and 4.1.10.1. of the Ontario Building Code at 193 Sunset Beach Road, Richmond Hill, Ontario.	9.8.8.8. and 4.1.10.1.	220/02
04-09-964	2004	March 4, 2004	Determine whether the existing enclosed canopy, intended for use as an indoor and outdoor patio, which is attached to the wall of an existing Group A, Division 2 occupancy, provides sufficiency of compliance with Sentence 2.4.1.1.(5)	2.4.1.1.(5)	
04-04-959	2004	January 22, 2004	Determine whether the as-constructed Group C occupancy that is constructed as a three-storey residential house that includes a total of four separate suites, and which does not provide barrier-free access to the Ground Floor, complies with Article 3.8.1.1.	3.8.1.1	

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BCC File No.	**Year**	**Date**	**Short Description from Style of Subject Matter of Decision**	**Article/Section of Building Code or other Regulation Referenced by the Decision**	**LAST AMEND. TO 403/97**
03-54-952	2003	4-Dec-03	Determine whether the as-installed vertical exhaust shafts serving a residential high rise building which extend three storeys in height, and which are constructed using paper-lined gypsum shaftboard liners, comply with the intent of 6.2.3.2.(1) of the Ontario Building Code (OBC) or, in the alternative, whether these same shafts provide sufficiency of compliance with 6.2.3.2.(2)	6.2.3.2.	220/02
03-52-950	2003	1-Mar-04	Determine whether the proposed replacement of a Class 4 sewage system that is located on a “lot or parcel of land” that is serviced by additional Class 4 systems complies with the definition of sewage system in 1.1.3.2. of the Ontario Building Code, when considering that the lot is located adjacent to two lots that are all under the same ownership	1.1.3.2.	220/02
03-50-948	2003	20-Nov-03	Determine whether the proposed temporary air-supported structure, which has a Group A, Division 2 occupancy, that is not equipped with a sprinkler system or a standpipe and hose system, provides sufficiency of compliance with s 3.2.2.26. and 3.2.9.1., when considering 3.13.2.2.(3)	3.2.2.26. 3.2.9.1., 3.13.2.2.(3)	220/02

03-49-947	2003	20-Nov-03	Determine whether the as-built exterior concrete front entrance stairs, which have more than two risers and two treads and are supported by concrete patio stones, provide sufficiency of compliance with 9.8.9.1.(1)	9.8.9.1.(1)	220/02
03-34-932	2003	28-Aug-03	Determine whether the proposed addition to a Group F, Division 3 occupancy that will not be equipped with water closets, but is located 250 metres away from an adjacent building on the same property that contains water closets, provides sufficiency of compliance with 3.7.4.1.(3)	3.7.4.1.(3)	220/02
03-33-931	2003	28-Aug-03	Determine whether the as-installed fixture drainage outlets in the lavatories of a Group C occupancy comply with 7.2.2.5.(1)	7.2.2.5.(1)	220/02
03-31-929	2003	9-Sep-03	Determine whether the as-installed combustible plumbing fixtures in a Group C occupancy, which have a Smoke Developed Classification of 375, provide sufficiency of compliance with 3.1.13.7.(1)	3.1.13.7.(1)	283/01
03-28-926	2003	3-Jul-03	Determine whether the proposed manufactured mouldings intended for use in a building required to be of non-combustible construction provide sufficiency of compliance with 3.1.5.7.	3.1.5.7.	220/02
03-27-925	2003	4-Nov-03	[See Decision for Description]	9.14.2.1. 9.15.4.6. 9.20.8.3.(1) 9.23.2.2. 9.23.2.3. 9.23.5.1. 9.23.7.2. 9.27.3.2. 9.33.3.1.	220/02
03-26-924	2003	19-Jun-03	Determine whether the proposed combined water main and combined sanitary main serving the two subject buildings provides sufficiency of compliance with 7.1.6.4.	7.1.6.4.	220/02
03-22-920	2003	15-May-03	Determine whether 24 hour per day staffing at the subject group homes offered in lieu of automatic door openers provides sufficiency of compliance with 3.8.3.3.(5)		283/01
03-20-918	2003	15-May-03	Determine whether 24 hour per day staffing at the subject group home offered in lieu of automatic door openers provides sufficiency of compliance with 3.8.3.3.(5)	3.8.3.3. (5)	283/01

03-16-914	2003	1-May-03	Determine whether the as-built stair guard constructed to a height of 819.2 mm as measured vertically above the stair nosings and built in accordance with 9.8.8.2.(4) of the Ontario Building Code (OBC) complies with the intent of OBC 9.8.8.5. to reduce the likelihood of climbing, and whether the same guard with semi-circular elements measured at 698.5 mm above the stair nosings provides sufficiency of compliance with 9.8.8.5.	9.8.8.2.(4) 9.8.8.5.	283/01
03-08-906	2003	20-Feb-03	Determine whether the proposed seasonal boathouse clad with horizontally installed bevelled wood siding and mounted directly onto the framing without the use of a sheathing membrane provides sufficiency of compliance with 9.23.17.6.	9.23.17.5. 9.23.17.6. 9.36.2.1.	283/01
03-07-905	2003	23-Jan-03	Determine whether the two proposed, unsprinklered grandstand buildings, which will include Group D and Group A, Division 2 occupancies beneath a Group A, Division 4 major occupancy, provide sufficiency of compliance with 3.2.2.35.(4)	3.2.2.35.(4)	283/01
03-06-904	2003	23-Jan-03	Determine whether the existing floor assembly, which will separate a proposed bus terminal below from the existing parking garage above, will provide sufficiency of compliance with 11.4.2.3.(4)	11.4.2.3.(4)	283/01
03-04-902	2003	16-Jan-03	Determine whether the as installed upper kitchen cabinet valance, situated at the front edge of the underside of the cabinet approximately 360 mm above the counter surface and adjacent to the range/stove opening, provides sufficiency of compliance with s 9.10.21.2. and 9.10.21.3.	9.10.21.2. 9.10.21.3.	283/01
03-01-899	2003	16-Jan-03	Determine whether the egress lighting, which is not proposed to be illuminated for 24 hours of each day, complies with 3.2.7.1.(1)	3.2.7.1.(1)	283/01
02-43-898	2002	12-Dec-02	Determine whether the viewing walkway, having an area of 207 m2, is a mezzanine which provides sufficiency of compliance with s 3.2.1.1.(4), 3.3.1.5.(2), (3) and (4) of the Ontario Building Code or whether it is considered to be a storey which must be meet the construction requirements for a storey in a building having a Group F, Division 3 occupancy classification	3.2.1.1.(4) 3.3.1.5.(2), (3) and (4)	283/01
02-41-896	2002	4-Dec-02	Determine whether the as-installed natural gas fireplace that is located in the main lobby of a children's learning centre provides sufficiency of compliance with 3.3.1.2.(3)	3.3.1.2.(3)	283/01

02-40-895	2002	21-Nov-02	Determine whether the 800 mm non-climbable zone required for guards in 9.8.8.5. of the Ontario Building Code may be measured directly from the level of the walking surface to a height of 800 mm and, if so, whether the as-installed guard, having pickets with horizontal cross members at approximately 787 mm above the walking surface, provides sufficiency of compliance with 9.8.8.5.	9.8.8.5	283/01
02-39-894	2002	21-Feb-03	Determine whether the as-constructed basement concrete floor slab which varies in thickness from 64 mm to 89 mm provides sufficiency of compliance with 9.16.4.4.	9.16.4.4.	283/01
02-38-893	2002	21-Nov-02	Determine whether the compensating construction offered in an existing, 2 storey, 14 unit apartment building where the length of dead-end corridors exceeds the permitted maximum, provides sufficiency of compliance with 3.3.4.4.(1)(a) of the 1983 Ontario Building Code when considering 11.4.1.1.(1) and 11.5.2.1	11.4.1.1.(1) 11.5.2.1	283/01
02-37-892	2002	7-Nov-02	Determine whether the compensating measures offered where the slope of the bottom of the pool exceeds 8% at a water depth of 1,350 mm or less, provide sufficiency of compliance with 3.11.3.1.(6)(a) and 3.11.3.1. (7)	3.11.3.1.(6)(a) 3.11.3.1.(7)	283/01
02-36-891	2002	7-Nov-02	Determine whether the insulation used to wrap the attic duct work provides sufficiency of compliance with s 9.25.2.3.(1), 9.33.1.1.(1) and 6.2.4.3.(1) and whether the as-constructed wall assembly complies with the air barrier and vapour barrier requirements of 9.25.3.1.(1), 9.25.3.2.(1), 9.25.3.3.(1) and 9.25.4.1.(1) when considering s 5.4.1.1.(2) and 5.5.1.1.(2).	9.25.2.3.(1) 9.33.1.1.(1) 6.2.4.3.(10) 9.25.3.1.(1) 9.25.3.2.(1),	283/01
02-34-889	2002	17-Oct-02	Determine whether the proposed use of Class B wiring for line isolator modules located inside a residential suite and designed to isolate a signal circuit during an alarm condition only, complies with 3.2.4.19.(10)	3.2.4.19.(10)	283/01
02-33-888	2002	17-Oct-02	Determine whether the existing use of the subject building would require a firewall to separate the residential occupancy from the horse stable when considering 1.2.1.2. of the National Farm Building Code or whether, in the alternative, the proposed fire separation between the two uses will provide sufficiency of compliance with 9.10.9.11.(2)	9.10.9.11.(2)	283/01
02-31-886	2002	3-Oct-02	Determine whether the enlargement of the existing septic system to accommodate a proposed daily design flow rate of 8,000 L/day to service a warehouse addition provides sufficiency of compliance with 8.2.1.3.(2) and Table 8.2.1.3.B.	8.2.1.3.(2) Table 8.2.1.3.B.	283/01

02-30-885	2002	3-Oct-02	Determine whether the proposed drip irrigation leaching bed sewage system provides sufficiency of compliance with Part 8 when considering s 2.7.2.1. and 2.7.2.2.	2.7.2.1. 2.7.2.2.	283/01
02-29-884	2002	3-Oct-02	Determine whether the as-installed Class 1 (composting toilet) and Class 2 (greywater pit) systems which serve a seasonal dwelling in lieu of a Class 4 system provide sufficiency of compliance with 8.1.2.1.(1)	8.1.2.1.(1) 9.31.4.1.(1)	283/01
02-28-883	2002	26-Sep-02	Determine whether the elevated floor assembly having an area of 563.5 m2 in a Group F, Division 2 building is considered to be a mezzanine which must comply with the provisions of s 3.2.2.67.(2)(c) and (d) or whether it can be considered a service platform in conformance with the provisions of 3.2.1.1.(8)	3.2.2.67.(2)(c) and (d) 3.2.1.1.(8)	283/01
02-27-882	2002	12-Sep-02	Determine whether the proposed retail kiosk, located in a mall corridor, is required to provide barrier-free accessibility in accordance with the provisions of s 3.8.1.3.(1) and 3.8.2.1.(1)	3.8.	283/01
02-26-881	2002	12-Sep-02	Determine whether the subsurface (future basement) level of a proposed research facility, which will be unoccupied, unsprinklered and provided with limited access until such time as a use for the area has been determined, provides sufficiency of compliance with s 3.2.2.9.(1) and 3.4.2.1.(1) and s 3.2.2.52. and 3.2.2.77	3.2.2.9.(1) 3.4.2.1.(1) 3.2.2.52. 3.2.2.77.	283/01
02-25-880	2002	8-Aug-02	Determine whether the prefinished hardwood flooring proposed for the kitchen of a single detached residential building provides sufficiency of compliance with 9.30.1.2.	9.30.1.2	283/01
02-24-879	2002	8-Aug-02	Determine whether the prefinished hardwood flooring proposed for the kitchen of a single detached residential building provides sufficiency of compliance with 9.30.1.2.	9.30.1.2	283/01
02-22-877	2002	1-Aug-02	Determine whether the proposed natural gas fireplaces to be located in the Fireplace Lounges, which constitute extensions of public corridors leading to exits in sites 1 and 3, provide sufficiency of compliance with 3.3.1.2.(3), and whether the proposed use of glued-laminated heavy timber beams and purlins as well as plywood sheathing for attachment of copper roofing in the construction of the roof assembly of the fireplace lounge in site 3, provides sufficiency of compliance with s 3.2.2.43.(2), 3.2.2.16.(1) and 3.1.5.3.(2)	3.3.1.2.(3) 3.2.2.43.(2) 3.2.2.16.(1) 3.1.5.3.(2)	283/01

02-21-876	2002	1-Aug-02	Determine whether the proposed compensating measures offered in a building containing A2 and D occupancies and having exposing building faces with unprotected openings less than 10% of the exposing building face and which includes elements of combustible construction, provides sufficiency of compliance with 3.2.2.24. and 3.2.3.7.(1)	3.2.2.24. 3.2.3.7.(1)	283/01
02-20-875	2002	1-Aug-02	Determine whether the conversion of a century home into a six room inn, where no renovation to the existing entranceways is contemplated, is required to provide barrier-free access in accordance with 9.5.2.1.(1) and Section 3.8. when considering Part 11 and s 11.4.2.3.(1) and 11.4.3.4.(2)	9.5.2.1.(1) 3.8. Part 11 11.4.2.3.(1) 11.4.3.4.(2)	283/01
02-19-874	2002	4-Sep-02	Determine whether the repair of an existing Class 4 septic system, specifically with respect to the grain size of the imported sand filter material being used, provides sufficiency of compliance with the provisions of 11.3.1.1.	11.3.1.1.	283/01
02-18-873	2002	20-Jun-02	Determine whether the proposed fabric material roof which is not considered as a Class A, B or C roof covering, provides sufficiency of compliance with Section 3.1.15.	3.1.15.	283/01
02-17-872	2002	20-Jun-02	Determine whether the proposed new senior's residence, when considering the date that the building permit application was substantially complete, is permitted to be built to the construction requirements of the 1990 Ontario Building Code (OBC) in accordance with 12.1.1.1.(1)(b)	12.1.1.1.(1)(b)	283/01
02-16-871	2002	20-Jun-02	Determine whether the use of unlisted, alpha-numeric display devices forming part of the call station located in the nursing stations provides sufficiency of compliance with 3.2.4.20.(2)	3.2.4.20.(2)	283/01
02-15-870	2002	6-Jun-02	Determine whether the 6.75 m2 light well opening interconnecting Levels 3, 4 and 5 and which does not include a stairway, escalator or moving walkway, but will be equipped with additional fire safety features, provides sufficiency of compliance with s 3.2.8.2.(5) and (6)	3.2.8.2.(5) and (6)	283/01
02-14-869	2002	6-Jun-02	Determine whether the proposed installation of a Class 5 sewage system (holding tank) to serve a new cottage where the installation of a Code compliant Class 4 system is not possible, provides sufficiency of compliance with 8.8.1.2.(1)	8.8.1.2.(1)	283/01

02-13-868	2002	23-May-02	Determine whether the proposed additions that include crawl space areas which contain mechanical rooms housing HVAC equipment venting to the exterior is permitted to be governed by the construction requirements of 3.2.2.28.	3.2.2.9. 3.2.2.28.	283/01
02-12-867	2002	21-Mar-02	Determine whether the proposed renovation and repair of an existing residential structure provide sufficiency of compliance with the relevant provisions of Parts 2 and 11	Part 2 Part 11	283/01
02-11-866	2002	14-Mar-02	Determine whether the combustible wood screen cladding proposed on the exterior of the north, east and south faces of a parking structure provides sufficiency of compliance with 3.1.5.5.(1), (2) and (3)	3.1.5.5.(1), (2) and (3)	283/01
02-11-866	2002	14-Mar-02	Determine whether the combustible wood screen cladding proposed on the exterior of the north, east and south faces of a parking structure provides sufficiency of compliance with 3.1.5.5.(1), (2) and (3)	3.1.5.5.(1), (2) and (3)	283/01
02-10-865	2002	14-Mar-02	Determine whether the two hour fire separation between proposed A2 and existing F3 occupancies, that is penetrated by roof trusses (supported by the structural members of the separation), provides sufficiency of compliance with 3.1.7.3.(2) and s 3.1.8.1.(1)(a) and (b)	3.1.7.3.(2) 3.1.8.1.(1)(a) and (b)	283/01
02-07-862	2002	14-Feb-02	Determine whether the proposed inward swinging double doors would provide sufficiency of compliance with 3.3.1.10.(2)(a) when considering Subsection 3.1.16.	3.3.1.10.(2)(a)	283/01
02-05-860	2002	24-Jan-02	Determine whether the omission of a roof anchoring system, where window washing and maintenance is intended to be carried out from ladders with grade level access and where equipment is positioned to permit rooftop maintenance without approaching the parapet, provides sufficiency of compliance with 4.1.10.8	4.1.10.8.	283/01
02-04-859	2002	16-Jul-02	Determine whether the proposed foam plastic insulation and metal cladding system provides sufficiency of compliance with s 3.2.3.7.(7) and (8) when considering s 3.1.11.7. (1) and (2)	3.2.3.7.(7) and (8) 3.1.11.7. (1) and (2)	283/01
02-03-858	2002	17-Jan-02	Determine whether the as-installed design of the vertical steel pickets, which includes ornamental “birdcages” and “rosettes” set at a spacing of 55.5 mm (2 3/16 in) for a guard on a horizontal surface and slightly less for a guard serving a stair, complies with the intent of 9.8.8.5.(1)	9.8.8.5.(1)	283/01
02-02-857	2002	17-Jan-02	Determine whether the removal of the interior and exterior bridges, which form part of the continuous pool deck and facilitate the crossing of a 1752.6 mm (5 ft 9 in) portion of a seasonally divided pool, provides sufficiency of compliance with 3.11.3.1.(9)(a)	3.11.3.1.(9)(a)	283/01

02-01-856	2002	17-Jan-02	Determine whether the proposed fire access route, when considering the addition of a firewall between units within a residential townhouse block, creating “buildings” having an area of less than 600 m2, complies with the access route requirements of 9.10.19.3.	9.10.19.3.	283/01
01-62-855	2001	13-Dec-01	Determine whether the proposed interior and exterior guards to be comprised of wrought iron balusters containing sections of ornamental floral design and scroll patterns within the area between 100 mm and 900 mm above the walking surface, provide sufficiency of compliance with 9.8.8.	9.8.8.5.	283/01
01-59-852	2001	6-Dec-01	Determine whether the proposed 56.6 m2 addition to an existing multiple occupancy (A2 and C) building, which is intended to be unsprinklered and constructed using combustible construction, provides sufficiency of compliance with s 3.2.2.4.(2), 3.2.2.5.(1), 3.2.2.6.(1), 3.2.2.24. and 11.2.1.2.(1)	3.2.2.4.(2) 3.2.2.5.(1) 3.2.2.6.(1) 3.2.2.24. 11.2.1.2.(1)	283/01
01-57-850	2001	8-Nov-01	Determine whether the “trucking area”(used for loading/unloading) in an industrial building is considered as a “storage garage” and therefore required to be separated from the adjacent warehouse area by a fire separation having a fire-resistance rating of 1.5 hours in accoradance with 3.3.5.6	3.3.5.6.	283/01
01-56-849	2001	8-Nov-01	Determine whether the as-installed guard on an exterior deck having a horizontal member located at 165 mm above the walking surface, provides sufficiency of compliance with 9.8.8.5.(1)	9.8.8.5.(1)	283/01
01-55-848	2001	8-Nov-01	Determine whether the as-constructed stairs that provide access to a mezzanine level in an industrial occupancy and having a minimum run of 229 mm (9 in), provide sufficiency of compliance with 3.4.6.7.(1)	3.4.6.7.(1)	283/01
01-54-847	2001	25-Oct-01	Determine whether the as-installed guard serving these second floor balconies and having a horizontal member located at approximately 150 mm to 160 mm above the floor level, provides sufficiency of compliance with 9.8.8.5.(1)	9.8.8.5.(1)	283/01

01-53-846	2001	25-Oct-01	Determine whether the ground floor amenity space (exercise room, swimming pool, change room and lounge), that is not proposed to be sprinklered, in a building containing a Group C major occupancy, provides sufficiency of compliance with s 3.2.2.6., 3.2.2.23. and s 3.2.2.7.(1) and 3.2.2.8.(1)	3.2.2.6. 3.2.2.23 3.2.2.7.(1) 3.2.2.8.(1) 1.1.3.1.(1) 1.1.3.2.(1)	283/01
01-52-845	2001	25-Oct-01	Determine whether the compensating measures offered in a multi-tenant building containing Group F, Division 2 and Group D occupancies where the dedicated fume hood ductwork traversesthe2-hour fire separations between floors ,will provide sufficiency of compliance with s 3.1.8.7. and 3.1.8.8.	3.1.8.7. 3.1.8.8.	283/01
01-51-844	2001	25-Oct-01	Determine whether the compensating measures offered in lieu of standpipe and hose systems in buildings containing Group F, Division 2, Group F, Division 3 and Group D occupancies provide sufficiency of compliance with 3.2.9.1.(1)	3.2.9.1.(1)	283/01
01-49-842	2001	11-Oct-01	Determine whether the use of the existing septic system on a property where the reconstruction of a single detached residential dwelling is proposed due to the destruction of existing dwelling by a house fire, provides sufficiency of compliance with s 11.4.1.1., 11.4.2.5. and 11.4.3.6.	11.4.1.1. 11.4.2.5. 11.4.3.6.	283/01
01-48-841	2001	11-Oct-01	Determine whether the performance level of the existing septic system, when considering a proposed second storey addition that will include a three piece ensuite bathroom, provides sufficiency of compliance with s 11.4.2.5.(3) and 11.4.3.6.(1)	11.4.2.5.(3) 11.4.3.6.(1)	283/01
01-47-840	2001	27-Sep-01	Determine whether the construction of a replacement deck provides sufficiency of compliance with 11.3.3.1.(1)	11.3.3.1.(1)	283/01

01-45-838	2001	27-Sep-01	Determine whether the proposed main aisles in a Group F, Division 2 industrial building, which include several direction changes, lead through doors in interior partitions, and which lead to the exit doors located at 60 metre intervals around the perimeter of the building, provide sufficiency of compliance with 3.4.2.5.(2)	3.4.2.5.(2)	283/01
01-44-837	2001	27-Sep-01	Determine whether the distance from the rear of the dressing room area to an exit (in excess of 45 m) and the doors to the ice resurfacing room, that are not equipped with self-closing devices activated by a smoke detector, provide sufficiency of compliance with 3.4.2.5.(1)(c) and 3.1.8.12.(3)	3.4.2.5.(1)(c) 3.1.8.12.(3)	205/00
01-43-836	2001	28-Feb-01	Determine whether the direct supervision of patients at all times in lieu of providing visual signal devices where sound booths will be used provides sufficiency of compliance with s 3.2.4.19.(7) and 3.2.4.20.(1)	3.2.4.19(7) 3.2.4.20.(1)	283/01
01-42-835	2001	13-Sep-01	Determine whether the proposed sewage system with a portion of the distribution pipes located approximately 1 m to 2.2 m from the support posts of a proposed deck, provides sufficiency of compliance with 8.2.1.6.(2)	8.2.1.6.(2)	283/01
01-41-834	2001	13-Sep-01	Determine whether the as-installed holding tank, located approximately 7 m (20 ft) from an existing well, provides sufficiency of compliance with 8.2.1.6.(3) and Table 8.2.1.6.C.	8.2.1.6.(3), Table 8.2.1.6.C.	205/00
01-40-833	2001	30-Aug-01	Determine whether the proposed security gate house, that has not been designed for barrier-free access, provides sufficiency of compliance with s 9.5.2.1., 3.8.1.1., 3.8.1.2. and 3.8.2.3.	9.5.2.1. 3.8.1.1. 3.8.1.2. 3.8.2.3.	205/00
01-38-831	2001	30-Aug-01	Determine whether the as-installed guard, surrounding a 3rd floor opening, and being 15 to 30 mm lower in height than the required 1,070 mm, provides sufficiency of compliance with 3.3.1.17.(1)	3.3.1.17.(1)	205/00
01-37-830	2001	16-Aug-01	Determine whether the proposed 82.15 m2 , unsprinklered classroom addition to the existing unsprinklered detention occupancy, provides sufficiency of compliance with 3.2.2.37	3.2.2.37	205/00
01-36-829	2001	2-Aug-01	Determine whether the proposed sprinkler system, designed in conformance with NFPA 13, with the exception of the attic area which would conform to NFPA 13R (exempt from sprinklering), provides sufficiency of compliance with 3.2.5.13.(1)	3.2.5.13.(1)	205/00

01-35-828	2001	2-Aug-01	Determine whether the exit stair, which contains an opening for an elevator that is proposed to have a pressurized elevator shaft, provides sufficiency of compliance with 3.4.4.4.	3.4.4.4.	205/00
01-34-827	2001	19-Jul-01	Determine whether the proposed radiant thermal mass brick heating unit, having a Finnish design, provides sufficiency of compliance with Sections 9.21. and 9.22.	9.21. 9.22.	205/00
01-33-826	2001	19-Jul-01	Determine whether the shallow (450 to 500 mm), insulated garage footings and foundations provide sufficiency of compliance with 9.12.2.2.	9.12.2.2.	205/00
01-32-825	2001	5-Jul-01	Determine whether the proposed corridor design provides sufficiency of compliance with 3.3.3.3.(1)	3.3.3.3.(1)	205/00
01-31-824	2001	5-Jul-01	Determine whether the enlarged manufacturing and warehouse facility with a total building area of 27, 221 m2 that is not equipped with a standpipe and hose system provides sufficiency of compliance with 3.2.9.1.	3.2.9.1.	205/00
01-30-823	2001	5-Jun-01	Determine whether the as-constructed infill addition that joins together two previously separate structures thereby creating a building having an area of 2, 229 m2 (23,984 ft2), and that is not equipped with a standpipe and hose system, provides sufficiency of compliance with 3.2.9.1.	3.2.9.1.	205/00
01-29-822	2001	21-Jun-01	Determine whether the retrofit elevator, installed to permit barrier-free accessibility throughout the existing two storey building, and proposed without separation in a lobby containing an exit stair, provides sufficiency of compliance with 3.4.4.4.(6)	3.4.4.4.(6)	205/00
01-27-820	2001	7-Jun-01	Determine whether the materials used in the construction of a rain porch addition to the building known as KYO Zen Art's Centre meet the requirements of 9.3.2.1.	9.3.2.1.	205/00
01-26-819	2001	7-Jun-01	Determine whether the work undertaken on ting house constitutes repair or renovation in accordance with s 11.3.1.1. and 11.3.3.1.(1)	11.3.1.1. 11.3.3.1.	205/00
01-25-818	2001	10-Jun-01	Determine whether the as-installed paired corridor doors containing vision panels and which form part of the fire separation, are held open by magnetic hold open devices and are considered part of the barrier-free path of travel, provide sufficiency of compliance with 3.8.3.3.(14)	3.8.3.3.(14)	205/00

01-23-816	2001	10-May-01	Determine whether the 72 m2 (775 ft2) addition to the existing unsprinklered care and treatment occupancy that is also proposed to be unsprinklered provides sufficiency of compliance with 3.2.2.40	3.2.2.40.	205/00
01-22-815	2001	10-May-01	Determine whether the proposed construction of a new mezzanine (in an existing building), that is to have a minimum headroom clearance of 1,975 mm (6', 6") under the open web steel joists located at 1,975 mm (6', 6") on centre, provides sufficiency of compliance with s 3.3.1.8. and 3.4.3.6.	3.3.1.8. 3.4.3.6.	205/00
01-20-813	2001	26-Apr-01	Determine whether the proposed seasonal-use sleeping cabins are required to be barrier-free accessible, when considering 9.5.2.1. and 3.8.1.1.(1)(c)	9.5.2.1. 3.8.1.1.(1)(c)	205/00
01-19-812	2001	12-Apr-01	Determine whether the proposed supermarket that is to contain a delicatessen, a bakery, and a meat department is a listed occupancy under Table 8.2.1.3.B. (forming part of 8.2.1.3.(2)), or whether it is permitted to comply with 8.2.1.3.(4)	8.2.1.3.(4) , Table 8.2.1.3.B.	205/00
01-18-811	2001	12-Apr-01	Determine whether the four storey building, that is to contain a Group B, Division 3 occupancy on the first and second floors and a Group C occupancy on the third and fourth floors and that is proposed to be equipped with a single stage fire alarm system, complies with s 3.2.4.3.(1)(b), (c) and (e)	3.2.4.3.(1)(b), (c), (e)	205/00
01-17-810	2001	12-Apr-01	Determine whether the proposed self-service gas bar with a drive-through window, should be considered as a "service station" in accordance with 8.2.1.3.(2) and Table 8.2.1.3.B.	8.2.1.3.(2), Table 8.2.1.3.B.	205/00
01-16-809	2001	29-Mar-01	Determine whether the building's proposed power system, that includes two independent supply connections to two power supply system conforming with 3.2.7.5. of the Ontario Building Code (OBC) provides sufficiency of compliance with s 3.2.7.4.(1) and 3.2.7.9.(4)	3.2.5.13.(10) 3.2.7.4. 3.2.7.5. 3.2.7.9.	205/00

01-14-807	2001	29-Mar-01	Determine whether the building's proposed power system, that includes two independent supply connections to two separate street substations and one on-site co-generation plant, offered in lieu of a power supply system conforming with 3.2.7.5. of the Ontario Building Code (OBC) provides sufficiency of compliance with s 3.2.7.4.(1) and 3.2.7.9.(4)	3.2.5.13.(1) 3.2.7.4. 3.2.5.5. 3.2.7.9.	205/00
01-12-805	2001	26-Apr-01	Determine whether the as-built roofs with a slope of 7 ½/12 that was not constructed with eave protection, except one layer of 15 lb building paper, provides sufficiency of compliance with 9.26.5.2	9.26.5.1. 9.26.5.2.	205/00
01-11-804	2001	15-Mar-01	Determine whether the proposed design of the original Verona Suite plan, that includes a windowless, enclosed "study" room, complies with s 3.7.2.1.(1) and 9.7.1.2.(1	3.7.2.1.(1) 9.7.1.2.(1)	205/00
01-10-803	2001	15-Mar-01	Determine whether the proposed access to exit corridor, designed using a combination of the parameters outlined in 3.4.2.5.(1)(d) and 3.4.2.5.(2)	3.4.2.5.(1)(d)	205/00
01-09-802	2001	15-Mar-01	Determine whether the 13.25 litre water closets, proposed to be installed in the washrooms of the new hotel addition, provide sufficiency of compliance with 7.6.4.2.(3)	7.6.4.2.(3)	205/00
01-08-801	2001	22-Feb-01	Determine whether the as-installed fuel fired appliances, a portion of each having been situated within 3 m of exterior walls of the same building which contain openings, provide sufficiency of compliance with 6.2.5.2.(1)(c)	6.2.5.2.(1)(c)	205/00
01-07-800	2001	15-Feb-01	Determine whether the proposed air distribution system that is comprised of under-slab combustible duct piping provides sufficiency of compliance with 6.2.3.2.	6.2.3.2.	205/00
01-06-799	2001	15-Feb-01	Determine whether the proposed stacked townhouse units, with property lines occurring on both horizontal and vertical planes between them, comply with the requirements of s 9.10.11.1.(1), 7.1.6.4.(1) and 7.1.7.2.(1)	9.10.11.1.(1) 7.1.6.4.(1) 7.1.7.2.(1)	205/00

01-04-797	2001	8-Feb-01	Determine whether the proposed mezzanine, upper mezzanine and grid iron areas intended for a live performance teaching facility, in conjunction with certain additional protective measures, provides sufficiency of compliance with 3.2.2.24., s 3.2.1.1.(3),(4) and (5), 3.2.8.2.(1), 3.4.2.2. and 3.4.2.5.(1)(c)	3.2.1.1.(3), (4), (5) and (6) 3.2.2.24. 3.2.8.2.(1) 3.4.2.2. 3.4.2.5.(1)(c)	205/00
01-03-796	2001	8-Feb-01	Determine whether the various identified alleged deficiencies provide sufficiency of compliance with the relevant provisions of the Ontario Building Code	9.23. Part 11	205/00
01-02-795	2001	11-Jan-01	Determine whether the shade screen, due to its proposed construction and seasonal use, can be viewed as a structure that may be permitted to conform to the construction standards of Section 3.13.	3.2.3.	205/00
01-01-794	2001	11-Jan-01	Determine whether the location of the existing hydrant proposed to serve the needs of the expanded school facility provides sufficiency of compliance with s 3.2.5.5.(2)(b) and (c)	3.2.5.5.(2)(b) and (c)	205/00
00-61-793	2000	14-Dec-00	Determine whether the main arena seating bowl, in particular the number of seats, row widths, vomitory and aisle width, exits and access to exits and the smoke protection system, designed based on NFPA 101, "Life Safety Code" and NFPA 92B "Smoke Management Systems in malls atria, and large areas," provides sufficiency of compliance with s 3.3.2.3, 3.3.2.4, 3.4.3.4, 3.1.8.1, and 3.2.5.13(1)	3.3.2.3 3.3.2.4 3.4.3.4 3.1.8.1 3.2.5.13(1)	205/00
00-60-792	2000	7-Dec-00	Determine whether the proposed sewage system, which includes terraced distribution pipe runs, provides sufficiency of compliance with 8.7.2.1.(1)(a)	8.7.2.1.(1)(a)	205/00
00-59-791	2000	7-Dec-00	Determine whether the construction of a deck, extending 2.13 m over a portion of an existing septic tank and the stairs serving the deck situated within 1.06 m of the existing filter bed, provide sufficiency of compliance with s 8.2.1.6.(1) and (2)	8.2.1.4.(1) 8.2.1.6.(1) 8.2.1.6.(2)	205/00
00-58-790	2000	30-Nov-00	Determine whether the as-built exterior concrete stairs and landings, having widths ranging from 814 mm to 850 mm, provide sufficiency of compliance with s 9.8.3.3., 9.8.4.1. and 9.9.3.2.	9.8.3.3. 9.8.4.1. 9.9.3.2.	205/00

00-56-788	2000	16-Nov-00	Determine whether the proposed partition walls and corridor configuration provide sufficiency of compliance with s 3.1.5.12.(3), 3.2.2.24.(2), 3.3.1.1.(1), and 3.3.1.4.(3)	3.1.5.12.(1)(a) 3.2.2.24.(2) 3.3.1.1.(1) 3.3.1.4.(3)	205/00
00-54-786	2000	2-Nov-00	Determine whether the proposed guard comprised mainly of 35 mm diameter acrylic rods complies with s 9.8.8.8. and 4.1.10.1. and whether the irregular curved stair provides sufficiency of compliance with 9.8.2.1.(1)	9.8.8.8. 4.1.10.1. 9.8.2.1.(1)	205/00
00-52-784	2000	19-Oct-00	Determine whether the restaurant and fixed seat grandstand areas of the proposed new racetrack facility can be considered as sharing the same major occupancy in accordance with s 3.1.2.1. and 3.1.3.1.	3.1.2.1. 3.1.3.1.	205/00
00-51-783	2000	19-Oct-00	Determine whether the as-built guards, comprised mainly of an ornamental floral design, provide sufficiency of compliance with 9.8.8.5.	9.8.8.5.	205/00
00-49-781	2000	21-Sep-00	Determine whether the linen chute, which is proposed to extend from the basement to the second floor only and not up and through the roof, provides sufficiency of compliance with 3.6.3.3.(3)	3.6.3.3.(3)	205/00
00-48-780	2000	7-Sep-00	Determine whether, due to the consideration of the building as an existing structure and proposed construction of two additions, the classification of the entire structure as per 3.1.2.1.	3.1.2.1.	205/00
00–47-779	2000	7-Sep-00	Determine whether the proposed renovation and conversion of an existing, detached building containing a Group C occupancy to a Group B, Division 3 care facility is required to comply with s 3.3.3.3.(3) and 3.3.3.4.(1), s 3.4.3.1.(2)(d), (c) and 3.8.3.3.(5)(b) and 3.3.3.2.(2)	3.3.3.2.(2) 3.3.3.3.(3) 3.3.3.4.(1) 3.4.3.1.(2)(c), (d) 3.8.3.3.(5)(b)	205/00
00–46-778	2000	7-Sep-00	Determine whether the ventilation and exhaust system that proposes to provide supply air from the corridors to the resident rooms and to exhaust from the resident washrooms provides sufficiency of compliance with 6.2.3.10.(3)	6.2.3.10.(3)	205/00
00-45-777	2000	7-Sep-00	Determine whether the as-built guard provides sufficiency of compliance with s 9.8.8.7. and 9.8.8.8.	9.8.8.7 9.8.8.8	115/89

00-44-776	2000	24-Aug-00	Determine whether the proposed substitution of two water closets with a proprietary composting toilet system to serve a one-classroom portable school with an adequate water supply provides sufficiency of compliance with 3.7.4.1.(2) and Part 8	3.7.4.1.(2)	205/00
00-43-775	2000	24-Aug-00	Determine whether the performance level of the existing sewage system, when considering the proposed renovation that will increase the number of bedrooms and the total finished area by more than 15%, provides sufficiency of compliance with s 11.4.2.5.(3) and 11.4.3.6.(1)	11.4.2.5.(3) 11.4.3.6.(1)	205/00
00-42-774	2000	24-Aug-00	Determine whether the asinstalled sanitary drainage system that includes a sump pit and pumps provides sufficiency of compliance with 7.4.6.3.	7.4.6.3.	205/00
00-41-773	2000	24-Aug-00	Determine whether the specified compensating measures, offered in lieu of a standpipe and hose system, provide sufficiency of compliance with 3.2.9.1.	3.2.9.1.	205/00
00-40-772	2000	24-Aug-00	Determine whether the as-built stairs, handrails and guards provide sufficiency of compliance with s 9.8.2.1.(1), 9.8.3.1.(1) and 9.8.3.3.(2), 9.8.5.2., s 9.8.5.3.(1) and (2), 9.8.7.1.(1)(a), s 9.8.7.2. and 9.8.7.6., 9.8.8.2.(5) and 9.8.8.4.	9.8.2.1.(1) 9.8.3.1.(1) 9.8.3.3.(2), 9.8.5.2. 9.8.5.3.(1) (2) 9.8.7.1.(1)(a) 9.8.7.2. 9.8.7.6. 9.8.8.2.(5) 9.8.8.4.	400/91
00-39-771	2000	10-Aug-00	Determine whether the as-constructed building, which does not provide protection on a floor area with a barrier-free path of travel, which has a combustible canopy and which does not offer a separate heat detection system, provides sufficiency of compliance with 3.3.1.7., 3.1.5.22.(2) and 3.2.4.11.(2)(b) respectively	3.1.5.22.(2) 3.2.4.8.(2)(b) , 3.2.4.11.(2)(b), 3.2.4.16.(1) 3.3.1.7	205/00
00-38-770	2000	10-Aug-00	Determine whether the proposed elevated platform should be considered a stage and must therefore comply with 3.3.2.12.	1.1.3.2.	205/00

				3.3.2.12	
00-37-769	2000	27-Jul-00	Determine whether 3.8.2.1.(2)(k) of the Ontario Building Code, which permits an exemption from the requirement to provide barrier-free accessibility "within" residential suites, also applies to the design of the interior side of the egress doorways proposed for the units in the Sheraton Fallsview Hotel, Stanley Avenue and Livingstone Street, Niagara Falls, Ontario.	3.8.2.1.(1)(k)	205/00
00-36-768	2000	27-Jul-00	Determine whether the new sprinklered facility separated from an existing building by a firewall, but which is proposed to be constructed without facing a street for fire fighting purposes or a fire access route, provides sufficiency of compliance with s 3.2.2.10.(1) and (2), 3.2.5.4.(1), and 3.2.5.5.	3.2.2.10.(1) and (2) 3.2.5.4.(1) 3.2.5.5.	205/00
00-35-767	2000	27-Jul-00	Determine whether the proposed sprinklering of certain bathrooms, offered as a compensating measure in lieu of meeting the required flame-spread rating and smoke developed classification with respect to the as-installed whirlpool bathtubs, provides sufficiency of compliance with s 3.1.5.16., 3.1.13.3. and 3.1.13.7.(1)	3.1.5.16. 3.1.13.3. 3.1.13.7.(1)	205/00
00-34-766	2000	13-Jul-00	Determine whether the working capacity of an existing gravity fed septic tank provides sufficiency of compliance with 8.2.2.3.(1)(a)	8.2.2.3.(1)(a)	205/00
00-33-765	2000	13-Jul-00	Determine whether the proposed Whitewater treatment system discharging to the proposed shallow buried trench sewage system designed to be buried in shallow sand fill provides sufficiency of compliance with 8.6.2.2.(2) and Table 8.6.2.2.A.	8.6.2.2.(2) , Table 8.6.2.2.A.	205/00
00-32-764	2000	13-Jun-00	Determine whether the as-built sewage system consisting of two consecutive 4,500 L septic tanks equipped with an effluent filter (and offered as primary and secondary treatment units) and an in-ground disposal bed at R.R. # 1 Petrolia, 5072 Petrolia Line, Petrolia, Ontario provides sufficiency of compliance with 8.6.2.2.	8.6.2.2.	205/00

00-31-763	2000	29-Jun-00	Determine whether the proposed fabric material roof, which is not considered as a Class A, B or C roof covering, provides sufficiency of compliance with 3.1.15.2.(1)	2.1.1.11. 3.1.15.2.(1) (2)	205/00
00-30-762	2000	29-Jun-00	Determine whether the existing exposing building face that does not offer a fire-resistance rating of 45 minutes and is clad with combustible siding, but which has been built with a zero metre limiting distance, provides sufficiency of compliance with 9.10.14.12.(5)	9.10.14.12.(5)	205/00
00-29-761	2000	14-Jun-00	Determine whether the as-built handrail that projects 100 mm into the required 750 mm minimum width of a landing where a door swings into an exit stair complies with 3.4.3.5.(3	3.4.3.5.(3) 3.4.3.5.(4) 3.3.1.17.(3)	205/00
00-28-760	2000	14-Jun-00	Determine whether the proposed installation of a single fan unit providing 24 L/s exhaust on a continuous basis to serve a bathroom with two fixtures requiring ventilation provides sufficiency of compliance with 6.2.3.9.(12)	2.6.2.1.(1) 6.2.3.9.(12)	205/00
00-27-759	2000	21-Sep-00	Determine whether the subject commercially-used log house, which was disassembled, rebuilt at another location and provided with a barrier-free path of travel, is required to provide barrier-free accessibility in the proposed new washroom when considering 2.1.1.7.(2) and 9.5.2.1	2.1.1.7.(2) 9.5.2.1.	205/00
00-26-758	2000	1-Jun-00	Determine whether proposed Class 1 (composting and incinerating toilet) and Class 2 (greywater system) systems in lieu of a Class 4 septic system to serve a newly built seasonal dwelling, complies with 8.1.2.1.(1) when considering s 7.1.6.1.(1) and 9.31.4.1.(1), and a subsequent proposal to include a different type of a Class 1 system (flush unit/composting toilet), a Class 2 system and a Class 3 system provides sufficiency of compliance with s 8.2.1.5.(1) and 8.2.1.4.(2)	8.1.2.1.(1) 7.1.6.1.(1) 9.31.4.1.(1)	205/00
00-25-757	2000	25-May-00	Determine whether the eighteen sets of as-built spiral stairs, which are not required exit stairs and are measured at 780 mm in width and 50 mm and 160 mm in minimum and average tread depth respectively, are required to comply with 9.8.3.3.(2) and s 3.3.1.15 and 9.8.5.2	9.8.3.3.(2) 3.3.1.15 9.8.5.2.	205/00

00-24-756	2000	25-May-00	Determine whether the proposed roof assembly, which is to be constructed with fibreglass reinforced polymer panels, provides sufficiency of compliance with 3.1.5.1.(1)	3.1.5.1.(1)	205/00
00-23-755	2000	25-May-00	Determine whether the intended use of the proposed building, as a home for ambulatory individuals with disabilities, complies with the definition of "Residential Occupancy" as set out in 1.1.3.2	1.1.3.2. 3.1.2.5.	205/00
00-22-754	2000	18-May-00	Determine whether the 45 m travel distances in the existing portions of the building, which are not to be protected by a 2 hour rated wall at the proposed atrium, provide sufficiency of compliance with 3.2.8.4.(4)	3.2.8.9 3.2.8.4.(4)	205/00
00-21-753	2000	11-May-00	Determine whether the new supermarket, proposed to be constructed adjoining to an existing retail mall as one enlarged building built on two properties complies with s 3.2.3.1.(8), 3.2.3.7.(4), 3.2.3.12.(1), 3.2.3.12.(3), 3.2.3.13.(3) and 3.3.1.4.(4)	3.2.3.	205/00
00-20-752	2000	11-May-00	Determine whether the as-built guards constructed mainly with panels consisting of 50 by 50 mm wire mesh provides sufficiency of compliance with s 3.3.1.17.(5) and 3.4.6.5.(8)	3.3.1.17.(5) 3.4.6.5.(8)	205/00
00-19-751	2000	27-Apr-00	to determine; (1) whether the proposed second storey partitions located in the interconnected floor space between the first and second floors complies with 3.2.8.1.(5) of the Ontario Building Code (OBC), (2) whether the proposed second and third floor travel distances provide sufficiency of compliance with 3.4.2.5.(1)(c) and 3.3.2.5.(4), (3) whether the building should be considered as having one or two suites and thereby provide either a 30 minute or one hour separation as per s 3.3.2.2.(8) or 3.3.1.1.(1), (4) whether the proposed close-spaced sprinklers on both sides of the unrated fire separations on the first floor provide sufficiency of compliance with either s 3.3.2.2.(8) or 3.3.1.1.(1), and (5) whether the proposed installation of a sprinkler activated mechanical exhaust system in lieu of roof mounted gravity vents provides sufficiency of compliance with 3.3.2.12.(5)	3.2.8.1.(5) 3.4.2.5.(1)(c) 3.3.2.5.(4) 3.3.2.2.(8) 3.3.1.1.(1) 3.3.2.12.(5)	597/99

00-18-750	2000	14-Jun-00	Determine whether the as-built landings that are not as long as the width of the stairs they serve provide sufficiency of compliance with 9.8.4.1.(1)	9.8.4.1.(1)	205/00
00-17-749	2000	13-Apr-00	an application by Mr. Emanuel Vommero, owner, Vommero Enterprises, Niagara Falls, Ontario, for the resolution of a dispute with Mr. Mel Brown, Chief Building Official, City of Niagara Falls, Ontario, to interpret whether 3.8.2.1.(2)(k)	3.8.2.1.(2)(k) , 3.8.3.3.(11)	597/99
00-16-748	2000	13-Apr-00	Determine whether the various proposed compensating construction measures, offered in lieu of a standpipe and hose system, provide sufficiency of compliance with 3.2.9.1.(1	3.2.9.1.(1)	205/00
00-15-747	2000	29-Mar-00	Determine the applicability and/or compliance with s 3.2.8.1.(3) and 3.2.8.2.(6) of the Ontario Building Code (OBC) regarding the proposed main floor interconnected floor space, whether the proposed design of the second floor corridor complies with OBC 3.3.3.3.(1), and whether the proposed connection to the adjacent existing building provides sufficiency of compliance with OBC Subsection 3.1.10. or 3.2.3.1.(1)(b) and 3.2.3.7.(1)	3.2.8.1.(3) 3.2.8.2.(6) 3.3.3.3.(1) 3.2.3.18. 3.1.10. 3.2.3.1.(1)(b) 3.2.3.7.(1)	597/99
00-14-746	2000	29-Mar-00	Determine whether the as-built stair landing that measures 1093 by 915 mm and serves a stair 1093 mm in width, the lack of a second handrail in a 1093 mm wide stair and the absence of a railing at the lower flight (comprised of two risers) in the stair between the ground and second floor provide sufficiency of compliance with s 9.8.4.1.(1), 9.8.7.1.(1) and 9.8.7.2.(2) respectively	9.8.4.1.(1) 9.8.7.1.(1), (2) 9.8.7.2.(2)	597/99
00-13-745	2000	5-Oct-00	Determine whether the proposed construction of exterior walls and location of windows provides sufficiency of compliance with 3.2.3.13	3.2.3.13.	205/00
00-12-744	2000	29-Mar-00	Determine whether the as-constructed three separate and irregular stairs provide sufficiency of compliance with s 9.8.2.1.(1) and 9.8.3.1.(1) and 9.8.5.2	9.8.2.1.(1) 9.8.3.1.(1) 9.8.5.2.	395/96

00-11-743	2000	16-Mar-00	Determine whether the as-constructed sewage system, with a clearance of only 0.76 m between the nearest point of the septic tank and the foundation wall of the building, provides sufficiency of compliance with 8.2.1.6.(1)	8.2.1.6.(1)	597/99
00-10-742	2000	2-Mar-00	Determine whether the proposed 3 m by 4.5 m kiosk structure, located in a 9 m wide public corridor, is required to provide barrier-free accessibility in accordance with s 3.8.1.3.(1) and 3.8.2.1.(1)	3.8.1.3.(1) 3.8.2.1.(1)	597/99
00-09-741	2000	2-Mar-00	Determine whether the as-installed roll down security door that is closed only during non-business hours provides sufficiency of compliance with s 3.3.1.10.(1) and 3.3.1.12.(2	3.3.1.10.(1) 3.3.1.12.(2)	597/99
00-08-740	2000	17-Feb-00	Determine whether the as-installed ornamental metal guards and rails, that include pickets ranging in thickness from 13 to 31 mm and sections of scroll pattern, and that have triangular openings (large enough to insert a spherical object 100 mm in diameter) formed by the stair tread and riser and the bottom cord of the railing provides sufficiency of compliance with 9.8.8.5. and 9.8.8.4.(1) respectively	9.8.8.4.(1) 9.8.8.5.	597/99
00-07-739	2000	17-Feb-00	Determine whether the as-constructed acid vents serving plumbing fixtures of more than one laboratory room comply with 7.5.4.4.(1)	7.5.4.4.(1)	597/99
00-06-738	2000	17-Feb-00	Determine whether the proposed sprinklering of the residential portion of the new fire station (a facility not required to be sprinklered) with a sprinkler system designed in accordance with NFPA 13R provides sufficiency of compliance with 3.2.5.13.(1)	3.2.5.13.(1)	597/99
00-05-737	2000	3-Feb-00	Determine whether the proposed roof assembly that includes fireretardant plywood sheathing on Z-girts with a 25 mm air space and RSI 3.25 mineral fibre insulation mounted on a 38 mm decking provides sufficiency of compliance with 3.1.5.3.(2)	3.1.5.3.(2)	597/99
00-04-736	2000	3-Feb-00	Determine whether the church, proposed without a standpipe and hose system, but with a dome measuring approximately 18.3 m in height to the ceiling, provides sufficiency of compliance with 3.2.9.1.(1)	3.2.9.1.(1)	597/99

00-03-735	2000	1-Feb-00	Determine whether the proposed roof, designed to delay the run off of rainwater but which is engineered to support either snow or rain load but not both, complies with 4.1.7.3.(3)	4.1.7.3.(3)	597/99
00-02-734	2000	13-Jan-00	Determine whether the proposed sprinkler system, designed according to NFPA 13R, and intended for use in a Group B, Division 3 occupancy provides sufficiency of compliance with 3.2.2.40. and 3.2.5.13.(1	3.2.2.40 3.2.5.13.(1)	597/99
00-01-733	2000	13-Jan-00	Determine whether the operation of the building compensates for the as-built guards constructed mainly with panels consisting of 50 by 50 mm welded wire mesh and thereby provides sufficiency of compliance with 3.3.1.17.(5)	3.3.1.17.(5)	597/99
99-76-732	1999	16-Dec-99	Determine whether the type of occupancy, proposed as a drive through restaurant, is permitted to comply with 8.2.1.3.(4)	8.2.1.3.(4)	597/99
99-75-731	1999	9-Dec-99	Determine whether the noncombustible bleachers, with a calculated minimum fire-resistance rating of 1.36 hours, offered in lieu of sprinklering the spaces below, provides sufficiency of compliance with 3.2.2.35.(4)	3.2.2.35.(4)	278/99
99-74-730	1999	9-Dec-99	Determine whether the proposed live/work units measuring 146.7 m2 in area, excluding stairs and unfinished basements, comply with the definition of live/work units provided in 1.1.3.2	1.1.3.2.	278/99
99-73-729	1999	2-Dec-99	Determine whether a guard with a bottom rail, measured at more than 100 mm to its top, complies with requirements of 9.8.8.5.(1)	9.8.8.5.(1)	278/99
99-72-728	1999	2-Dec-99	Determine whether the as built guard, installed on the exterior barrier-free ramp with a maximum height of 865 mm and which includes a lower, parallel rail 660 mm above the ramp surface, provides sufficiency of compliance with Sub s 3.8.3.4.(1)(f)(i) and (ii) respectively	3.8.3.4.(1)(f)	278/99

99-71-727	1999	2-Dec-99	Determine whether the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with 3.2.2.41. and s 3.2.5.13.(1) and (2)	3.2.2.41 3.2.5.13.(1) (2)	278/99
99-69-725	1999	18-Nov-99	Determine whether the as constructed guard, consisting of numerous joined diagonal members, provides sufficiency of compliance with 9.8.8.5.(1)	9.8.8.5.(1)	278/99
99-68-724	1999	18-Nov-99	Determine whether the as constructed single stair serving a second storey loft measuring 813 mm in width between wall faces provides sufficiency of compliance with 9.8.3.3.(2)	9.8.3.3.(2)	278/99
99-67-723	1999	4-Nov-99	Determine whether the proposed sprinkler system, designed according to NFPA 13R, and intended for use in a Group B, Division 3 occupancy provides sufficiency of compliance with 3.2.2.40. and 3.2.5.13.(1)	3.2.2.40. 3.2.5.13.(1) (2) 3.1.2.5.	278/99
99-66-722	1999	4-Nov-99	Determine whether the second storey sound and lighting booth, as constructed, with a pull-down ladder and a lockable access hatch provides sufficiency of compliance with 3.4.1.1. and 3.3.1.13.(1)	3.4.1.1. 3.3.1.5.(2)	278/99
99-65-721	1999	4-Nov-99	Determine whether the stair lift, with a width of 1,220 mm when in operation, proposed to be located in an existing exit stair that is 1,675 mm wide provides sufficiency of compliance with 3.4.3.5.(1) and 3.4.3.1.(2)(b)	3.4.3.5.(1) 3.4.3.1.(2)(b)	278/99
99-63-720	1999	21-Oct-99	Determine whether the proposed addition, currently being constructed with fire separations having a 45 minute fire-resistance rating and that will result in a completed structure with a total building area of 5,198.9 m2, provides sufficiency of compliance with 3.2.2.75.	3.2.2.75.	278/99
99-63-719	1999	21-Oct-99	Determine whether the 1.4 m exterior canopy, which has not been provided with sprinkler protection for the area beneath the canopy, provides sufficiency of compliance with 3.2.5.13.(1)	3.2.5.13.(1)	395/96
99-62-718	1999	21-Oct-99	Determine whether the definition of "exit" as set out in 1.1.3.2. and 3.4.4.1.(1)	1.1.3.2. 3.2.3.12.(1), (2) (3),	278/99

				3.4.4.1.(1) 3.4.4.3.(1)	
99-61-717	1999	23-Sep-99	Determine whether the proposed four wired glass panels, none of which exceed 0.8 m2 ,but which have an aggregate area of 1.9 m2 , as part of a wall assembly providing a 3/4 hour fire-resistance rating complies with 3.1.8.16	3.1.8.16.	395/96
99-60-716a	1999	22-Apr-99	Determine whether the proposed expanded steel manufacturing facility with a total building area of 22,135 m2 (238,267 ft2), that is not equipped with a standpipe and hose system, provides sufficiency of compliance with 3.2.9.1	3.2.9.1.	122/98
99-60-716	1999	23-Sep-99	Determine whether the proposed new arena built adjoining to the existing retail mall as one, albeit expanded, building constructed on two properties complies with 3.2.3.4. of the Ontario Building Code (OBC), and if so, whether the proposed design, without the provision of a fire separation with a two hour fire resistance rating complete with closures or special interconnected floor space fire safety measures, provides sufficiency of compliance with 3.2.8.1.(1)	1.1.3.2. 3.2.1.1.(2) 3.2.3.4. 3.2.8.1.(1) 3.2.8.2.(1), (5) (6)	278/99
99-59-715	1999	23-Sep-99	Determine whether the proposed change of use to a Group A, Division 2 (restaurant) occupancy, that is not provided with barrier-free a accessible washroom nor a separate washroom shared between employees only, is required to comply with s 3.8.2.3.(1) and 3.7.4.3.(7) respectively	3.8.2.3.(1)	278/99
99-57-713	1999	26-Aug-99	Determine whether the proposed roof assembly that includes fireretardant plywood sheathing on Z-girts with a 25 mm air space and R19 fibreglass batt insulation mounted on a 38 mm metal decking provides sufficiency of compliance with 3.1.5.3.(1) and (20)	3.1.5.3.(1) (2)	278/99
99-56-712	1999	7-Oct-99	Determine whether the proposed insulation system and wall assembly composed of compressed, stacked straw bales enclosed by metal lath covered on both sides with 15 mm cement stucco and coated (on the outer surface of the interior only) with a waterproof finish provides sufficiency of compliance with s 9.25.2.1.(1), (2) and (4), 9.25.2.3.(1), 9.25.3.1., 9.25.4.1., 9.25.4.2.(5) and s 9.28.4.2. and 9.28.4.3.	9.25.2.1.(1), (2) (4), 9.25.2.3.(1) 9.25.3.1. 9.25.4.1. 9.25.4.2.(5) 9.28.4.2., 9.28.4.3.	278/99

99-55-711	1999	19-Aug-99	Determine whether the Class 4 sewage system filter bed and mantle proposed to be sited in an area with 1:3 slope provides sufficiency of compliance with 8.7.4.2.(8)	8.7.4.2.(8) 8.8.1.2.(1)	278/99
99-54-710	1999	19-Aug-99	Determine whether the proposed Class 1 and 2 sewage systems to serve a residential dwelling equipped with certain water conservation devices but with an estimated daily sanitary sewage flow of 2,700 litres per day provides sufficiency of compliance with 8.4.2.2.(1	8.4.2.2.(1)	278/99
99-53-709	1999	5-Aug-99	Determine whether the proposed combustible PVC window units installed in certain suites as a floor to ceiling wall assembly with approximately only 250 mm of noncombustible vertical separation between storeys and constituting openings of roughly 50 to 70 percent aggregate area of the exterior wall face provides sufficiency of compliance with 3.1.5.4.(5)	3.1.5.4.(5)	278/99
99-52-708	1999	5-Aug-99	Determine whether the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with 3.2.2.41. and s 3.2.5.13.(1) and (2)	3.2.2.41 3.2.5.13.(1) 3.2.5.13.(2)	278/99
99-51-707	1999	5-Aug-99	Determine whether the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with 3.2.2.41. and s 3.2.5.13.(1) and (2)	3.2.2.41 3.2.5.13.(1) 3.2.5.13.(2)	278/99
99-50-706	1999	5-Aug-99	Determine whether the proposed fire alarm system for the entire building, offered in lieu of a required second exit from certain second storey units, provides sufficiency of compliance with 3.4.2.1.	3.4.2.1.	278/99
99-49-705	1999	22-Jul-99	Determine whether the subject piers supporting a second storey balcony as constructed and first storey deck as proposed, with less than 5 m clearance distance to the sewage system distribution pipes, provides sufficiency of compliance with 8.2.1.6.(2)	8.2.1.6.(2)	122/98

99-48-704	1999	8-Jul-99	Determine whether the recently constructed upgraded, noncombustible, one hour rated, pressed steel frame with wired glass panels and a 45 minute rated hollow metal door designed to match the existing exit stairwell enclosure provides sufficiency of compliance with 3.1.8.16	3.1.8.16.	395/96
99-47-703	1999	8-Jul-99	Determine whether the bank vault interior, as constructed, without sprinkler protection in a building required to be sprinklered, provides sufficiency of compliance with 3.2.5.13.(1)	3.2.5.13.(1)	278/99
99-46-702	1999	17-Jul-99	Determine whether the raised dining platform, as constructed, should be required to conform with s 3.3.2.13.(1) and 3.4.6.4.(7)	3.3.2.13.	278/99
99-45-701	1999	24-Jun-99	Determine whether the proposed replacement of a failed Class 4 sewage system to be sited near the existing location with less than 30 m to two dug wells is required to comply with 8.2.1.6.(2)	8.2.1.6.(2) 11.5.1.1.(1)	278/99
99-44-700	1999	24-Jun-99	Determine whether a partially raised Class 4 sewage system, expanded as a result of an addition to the existing seasonal residence, with reduced setbacks and an undersized leaching bed provides sufficiency of compliance with s 8.7.4.2.(9) and 8.7.5.2.(3)	8.7.4.2.(9) 8.7.5.2.(3)	278/99
99-43-699	1999	24-Jun-99	Determine whether the deck, as constructed, with less than 1.5 m setback from the septic tank provides sufficiency of compliance with 8.2.1.6. and whether the proposed screened porch situated on the subject deck provides sufficiency of compliance with the same of the Ontario Building Code at 128 Greystone Drive, Carp, Ontario	8.2.1.6.	278/99
99-42-698	1999	17-Jun-99	Determine whether the structural support system of the first floor of the temporary sales pavilion built to accommodate a live load of 2.4 kPa complies with 4.1.6.2.	4.1.6.2.	278/99
99-41-697	1999	17-Jun-99	Determine whether a drainage system is required beneath the basement level concrete slab-on-grade as per Subsection 9.16.3.	9.16.3.	278/99

99-40-696	1999	3-Jun-99	Determine whether the proposed residential-type ventilation system in the subject B 3 occupancy complies with 6.2.3.10.(5) of the Ontario Building Code (OBC) and whether the proposed 825 mm (2 ft 8 in) width of corridor doors intended for ambulatory users complies with 3.3.3.3.(4)	6.2.3.10.(5) 3.3.3.3.(4)	278/99
99-39-695	1999	3-Jun-99	Determine whether the proposed communal gas-fired fireplace located in a lounge area open to the building's internal corridor system complies with 3.3.1.2.(3)	3.3.1.2(3)	278/99
99-38-694	1999	3-Jun-99	Determine whether the proposed pool deck width of 1,675 mm (5 ft 6 in) provides sufficiency of compliance with 3.11.3.1.(9)(a)	3.11.3.1.(9)(a)	122/98
99-37-693	1999	3-Jun-99	Determine whether the unobstructed open width portion of the casement windows complies with 9.7.1.3.(1)(b)	9.7.1.3.(1)(b)	122/98
99-36-692	1999	27-May-99	Determine whether the new garage, proposed to be situated with a set back of 150mm from the holding tank, provides sufficiency of compliance with 8.2.1.6	8.2.1.6.	122/98
99-35-691	1999	27-May-99	Determine whether, when considering an adequate daily loading rate, the Class 4 sewage system proposed without a 15 m mantle provides sufficiency of compliance with 8.7.4.2.(1)(b)	8.7.4.2.(1)(b)	122/98
99-34-690	1999	27-May-99	Determine whether the proposed expansion of the Class 4 sewage system based on current measured daily design sewage flow rates to serve an enlarged nursing home provides sufficiency of compliance with 8.2.1.3	8.2.1.3.	278/99
99-32-688	1999	13-May-99	Determine whether the existing gravel floor is required to comply with s 4.1.1.3.(1) and 4.1.1.7.(1), 3.8.1.3., and s 3.8.2.1.(1) and 9.9.5.5.(2)	4.1.1.3.(1) 4.1.1.7.(1) 3.8.1.3 3.8.2.1.(1) 9.9.5.5.(2)	278/99

99-31-687	1999	13-May-99	Determine whether the travel distances on the second to fifth floors ranging from 53 to 56 m, in a structure with interconnected floor space due to the full height atrium, provides sufficiency of compliance with 3.2.8.4.(4) and 3.4.2.5.(1)(b)	3.2.8.4.(4) 3.4.2.5.(1)(b)	122/98
99-30-686	1999	13-May-99	Determine whether the proposed vinyl fabric roof on an aluminium frame to serve as a cover for the garden centre provides sufficiency of compliance with 3.1.5.22	3.1.5.22.	278/99
99-29-685	1999	29-Apr-99	Determine whether the proposed sprinkler system to be installed throughout the North Infill portion of the subject building compensates for the lack of a rated roof assembly provided for the North Infill area thereby providing sufficiency of compliance with 3.2.2.17., and whether the proposed hold-open devices at the eight doors between the North Infill, the North Wing and the Link area comply with 3.1.8.12.	3.2.2.1.7. 3.1.8.12.	122/98
99-28-684	1999	29-Apr-99	Determine whether the fabricated asbestos cement pipe fittings comply with 7.2.5.1.	7.2.5.1.	122/98
99-25-681	1999	15-Apr-99	Determine whether a pressurized water system used in conjunction with a Class 2 sewage system provides sufficiency of compliance with 8.4.1.2.(2)	8.4.1.2.(2)	122/98
99-24-680	1999	15-Apr-99	Determine whether the two proposed 5,000 litre holding tanks to serve a 110 m2 cottage containing 6 bedrooms situated on a 1,538 m2 island provide sufficiency of compliance with 8.8.1.2. and 8.8.2.2.(1)	8.8.1.2. 8.8.2.2.(1)	122/98
99-23-679	1999	15-Apr-99	Determine whether the proposed leaching bed with absorption trenches having only a vertical separation of 300 mm and soil with a percolation rate of 125 minutes per cm provides sufficiency of compliance with 8.7.3.2.(2)(e)	8.7.3.2.(2)(e)	122/98

99-22-678	1999	8-Apr-99	Determine whether the proposed location of a fuel fired appliance and the proposed level of illumination of exit signage complies with s 3.6.2.1.(2) and 3.6.2.2.(3) and s 3.2.7.3.(1)(i) and (j) and 3.2.7.3.(3) respectively	3.6.2.2.(3) 3.2.7.3.(1)(i) 3.2.7.3.(1)(j)	122/98
99-21-677	1999	8-Apr-99	Determine whether the modified guard with a total height of 915 mm, consisting of a single steel rail supported by posts located approximately every 1,200 mm constructed upon the original (610 mm in height) historic iron lattice and wood guard, provides sufficiency of compliance with 9.8.8.4.(1) and 9.8.8.5.	9.8.8.4.(1) 9.8.8.5.	122/98
99-20-676	1999	8-Apr-99	Determine whether the proposed 83 m2 Pizza Nova Take Out franchise should be considered a mercantile occupancy and is therefore adequately served by a single unisex, barrier-free accessible washroom in accordance with 3.7.4.8.(3).	3.7.4.3.(4)	122/98
99-19-675	1999	24-Mar-99	Determine whether the structure, with a proposed total building area of 1,508 m2, that is not equipped with a sprinkler system, provides sufficiency of compliance with 3.2.2.59	3.2.2.59	122/98
99-18-674	1999	24-Mar-99	Determine whether the fire separations not required to have a fire-resistance rating proposed to surround the vertical service shafts and to be constructed of 92 mm steel studs and 12.7 mm gypsum board and sealed at the perimeter and at all penetrations provides sufficiency of compliance with 3.6.3.1.(1)	3.6.3.1.(1)	122/98
99-17-673	1999	24-Mar-99	Determine whether a portion of a basement foundation wall and the patio retaining walls, as constructed, complies with 9.12.2.2.(1) and the structural requirements of Part 4 respectively	9.12.2.2.(1)	122/98
99-16-672	1999	11-Mar-99	Determine whether the fire alarm pull stations, installed at a height of 900 mm in accordance with 3.7.1.5., provides sufficiency of compliance with 3.2.4.5.(1)	3.7.1.5. 3.2.4.5.(1)	395/96

99-15-671	1999	11-Mar-99	Determine whether the basement level bathrooms, as constructed, with ceiling heights ranging from 1,950 mm (6 ft, 5 in) to 2,075 mm (6 ft, 10 in), provide sufficiency of compliance with 9.5.2.1. of the 1990 Ontario Building Code at 387 393 Bell Street South, 12 - 24 MacLean Street, and 395 Bell Street South (Units 1 - 13), Ottawa, Ontario.	9.5.2.1.	395/96
99-14-670	1999	11-Mar-99	Determine whether the proposed laboratory and office tenancies should be considered separate suites, and would therefore be required to provide a doorway into a public corridor and to provide a fire separation between the corridor and the suites, including between the second floor corridor and the atrium, in accordance with 3.3.1.3.(8) and 3.3.1.4. respectively	3.3.1.3.(8) 3.3.1.4.	122/98
99-13-669	1999	24-Feb-99	Determine whether the proposed single exit public corridor serving two suites, each having access to a second exit, provides sufficiency of compliance with 3.3.1.3.(9)	3.3.1.3.(9)	122/98
99-12-668	1999	24-Feb-99	Determine whether the proposed sprinkler system installed throughout the three storey town homes compensates for the increase in travel distance to an exit door, thereby providing sufficiency of compliance with 9.9.9.1.(2)	9.9.9.1.(2)	122/98
99-11-667	1999	24-Feb-99	Determine whether the intended smoke management system compensates for the proposed increase in travel distance and the elimination of a second exit to certain stores, thereby providing sufficiency of compliance with 3.4.2.5.(1)(d) and Sub 3.4.2.5.(1)(d)(iv) respectively	3.4.2.5.(1)(d) 3.4.2.5.(1)(d)(v)	122/98
99-10-666	1999	8-Apr-99	Determine whether the existing washroom ventilation and the fire stopping in the subject farm building provide comply with 7.1.7.1.(1) of the Ontario Building Code and 3.1.3.1.(1)	7.1.7.1.(1)	395/96
99-07-663	1999	27-Jan-99	Determine whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with 3.2.2.41 and s 3.2.5.13.(1) and (2)	3.2.2.41 3.2.5.13.(1) 3.2.5.13.(2)	395/96

99-06-662	1999	27-Jan-99	Determine whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with 3.2.2.41 and s 3.2.5.13.(1) and (2)	3.2.2.41 3.2.5.13.(1) 3.2.5.13.(2)	395/96
99-05-661	1999	27-Jan-99	Determine whether the entrance doors, as installed, provides sufficiency of compliance with 3.1.8.13.	3.1.8.13.	395/96
99-04-660	1999	14-Jan-99	Determine whether the movable wall partitions installed as store fronts in numerous business occupancies, and located in their only means of egress, provides sufficiency of compliance with 3.3.1.11.(3)	3.3.1.11.(3)	122/98
99-03-659	1999	19-Jan-99	Determine whether the proposed ground floor elevator lobby, constructed without enclosure, provides sufficiency of compliance with 9.9.7.2.(2)	9.9.7.2.(2)	122/98
99-02-658	1999	12-Jan-99	Determine whether the proposed dwelling unit balconies, which are not intended as areas of refuge, are required to be barrier-free when considering 3.8.2.1.(3)	3.8.2.1.(3).	122/98
99-01-657	1999	12-Jan-99	Determine whether the proposed dwelling unit balconies, which are not intended as areas of refuge, are required to be barrier-free when considering 3.8.2.1.(3) of	3.8.2.1.(3).	122/98
98-51-656	1998	15-Dec-98	Determine whether the proposed installation of a securitydesk in a lobby area leading to an exit provides sufficiency of compliance with 3.4.4.4.(6)	3.4.4.4.(6).	122/98
98-50-655	1998	15-Dec-98	Determine whether the proposed steel shearing and warehouse facility, with an area of 5,870.68 m2, that is not equipped with a standpipe and hose system, provides sufficiency of compliance with 3.2.9.1.	3.2.9.1.	122/98
98-49-654	1998	15-Dec-98	Determine whether the non-water resistant drywall, as installed, in the main bathroom and the master bedroom ensuite washroom provides sufficiency of compliance with Subsection 9.29.2	9.29.2.	122/98

98-48-653	1998	15-Dec-98	Determine whether the natural and mechanical ventilation systems, as constructed, provide sufficiency of compliance with Subsections 9.32.2. and 9.32.3. respectively	3.2.9.1.	122/98
98-47-652	1998	3-Dec-98	Determine whether the proposed installation of combustible piping penetrations through fire separations, with a modified system of fire stopping, in a sprinklered building complies with s 3.1.9.1. and 3.1.9.4	3.1.9.1. 3.1.9.4.	122/98
98-46-651	1998	3-Dec-98	Determine whether the proposed installation of Electroguard delayed access devices on certain exit doors provides sufficiency of compliance with 3.4.6.15.(4)	3.4.6.15.(4)	122/98
98-45-650	1998	18-Nov-98	Determine whether changes to the existing tile field are required as a result of a proposed addition to an existing house in order to achieve sufficiency of compliance with Part 8 and 11.4.2.5.	11.4.2.5.	122/98
98-44-649	1998	5-Nov-98	Determine whether the proposed measures provide sufficiency of compliance with 3.9.3.4	3.9.3.4.	395/96
98-43-648	1998	5-Nov-98	Determine whether the proposed measures provide sufficiency of compliance with 3.9.3.4	3.9.3.4.	395/96
98-42-647	1998	5-Nov-98	Determine whether the proposed measures provide sufficiency of compliance with 3.9.3.4.	3.9.3.4.	395/96
98-41-646	1998	5-Nov-98	Determine whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with 3.2.2.41 and s 3.2.5.13.(1) and 3.2.5.13.(2)	3.2.2.41, s 3.2.5.13.(1) (2)	122/98
98-40-645	1998	5-Nov-98	Determine whether the proposed measures, in lieu of a standpipe and hose system, provide sufficiency of compliance with 3.2.9.1.(1)(b) and Table 3.2.9.A	3.2.9.1.(2)(b) and Table 3.2.9.A.	395/96
98-39-644	1998	21-Oct-98	Determine whether post-indicating valves on a looped fire main around the perimeter of an new building are required to be electrically supervised to achieve sufficiency of compliance with s 3.2.2.12(1) and 3.2.4.16(5)	3.2.2.12(1) , 3.2.4.16(5)	395/96

98-38-643	1998	21-Oct-98	Determine whether corridor walls not constructed to be continuous from the floor to the underside of the ceiling in a self-storage facility achieve sufficiency of compliance with s 3.10.2.4.(2)(b) and (c)	3.10.2.4.(2)(b) (c)	395/96
98-36-641	1998	10-Sep-98	Determine whether an exterior ramp constructed as a barrier free path of travel provides sufficiency of compliance with 3.7.3.4.	3.7.3.4.	395/96
98-35-640	1998	26-Aug-98	Determine whether the proposed design of a residential building achieves sufficiency of compliance with 3.3.1.9.(9	3.3.1.9.(9)	395/96
98-34-639	1998	26-Aug-98	Determine whether the four subject exit doors at widths ranging from 746 mm (2 ft, 5 « in) to 760 mm (2 ft, 6 in) provides sufficiency of compliance with 3.4.3.1.(2)(e)	3.4.3.1.(2)(e)	395/96
98-32-637	1998	16-Jul-98	Determine whether the subject EPS Thermoplastic Panels on an exterior wall and some interior freezer walls are permitted in a sprinklered building required to be of noncombustible construction when considering 3.1.5.11.	3.1.5.11.	395/96
98-31-636	1998	16-Jul-98	Determine whether the as constructed barrier-free path of travel at 1,010 mm (3 ft., 4 in.) provides sufficiency of compliance with 3.7.1.3.	3.7.1.3.	395/96
98-30-635	1998	16-Jul-98	Determine whether the proposed mezzanine complies with 3.2.1.1.(3)	3.2.1.1.(3)	395/96
98-29-634	1998	29-Jul-98	Determine whether the existing sewage system with a working capacity of 6,819 Litres/day serving the proposed renovated house with a total finished area of 819.9 m2 provides sufficiency of compliance with s 8.2.1.3. and 8.2.2.3.	8.2.1.3. , 8.2.2.3.	122/98
98-28-633	1998	29-Jul-98	Determine whether the proposed residential sewage system which incorporates a recirculation sand filter with a shallow buried trench disposal system is permitted to be installed when considering 8.7.6.1	8.7.6.1.	122/98
98-27-632	1998	18-Jun-98	Determine whether the installed plywood platforms in eight assembly lines should be considered as finished flooring with concealed spaces underneath and therefore subject to 3.1.5.8	3.1.5.8.	395/96

98-25-630	1998	4-Jun-98	Determine whether a 428 m 2 retail store in a proposed retail occupancy that is equipped with a single washroom which is handicapped accessible provides sufficiency of compliance with 3.6.4.2.(25)(b)	3.6.4.2.(25)(b)(ii)	395/96
98-24-629	1998	21-May-98	Determine whether the proposed mezzanines, as designed, in sixteen units within the project comply with 9.10.4.1.(2)	9.10.4.1.(2)	395/96
98-23-628	1998	21-May-98	Determine whether the studio floor assembly above the garage, as constructed, with a concrete slab including an embedded hydronic heat radiation system but without insulation provides sufficiency of compliance with s 9.25.2.1. and 9.25.2.7	9.25.2.1. and 9.25.2.7.	395/96
98-22-627	1998	21-May-98	Determine whether the as built floor joists provide sufficiency of compliance with 9.40.3.3.	9.40.3.3.	395/96
98-21-626	1998	6-May-98	Determine whether the recently constructed addition of an airsupported structure to an existing single storey office building is required to install a standpipe and hose system, to provide a 1 hour fire resistance-rating on the mezzanine, and to separate the new and existing portions of the building also by a 1 hour rating in accordance with s 3.2.9.1., 3.13.2.2. and 3.13.2.3. respectively	3.2.9.1., 3.13.2.2. and 3.13.2.3.	122/98
98-20-625	1998	6-May-98	Determine whether the unenclosed walkway in the proposed two storey school structure provides sufficiency of compliance with s 3.2.8.2.(9)(c), 3.2.8.2.(9)(e) and 3.2.8.2.(9)(f)	3.2.8.2.(9)(c), 3.2.8.2.(9)(e) and 3.2.8.2.(9)(f)	395/96
98-19-624	1998	24-Apr-98	Determine whether the proposed windows, as unprotected openings offset at 1.2 metres in a wall 0.94 metres from the adjacent property line, provide sufficiency of compliance with 9.10.14.1.	9.10.14.1	395/96
98-18-623	1998	9-Apr-98	Determine whether the recently installed drop ceiling, at a height averaging 2,088 mm, provides sufficiency of compliance with 3.4.3.7.(1)	3.4.3.7.(1)	395/96
98-16-621	1998	9-Apr-98	to determine, among other things, whether the subject building is required to meet the structural requirements under 9.4.1.1	9.4.1.1.	395/96

98-15-620	1998	25-Mar-98	Determine whether the proposed installation of electromagnetic locking devices on one leaf only of a pair of double egress doors separating two occupancies, a pool and a school, provide sufficiency of compliance with 3.3.1.12.(3)	3.3.1.12.(3)	395/96
98-14-619	1998	25-Mar-98	Determine whether the roof assembly, as constructed, without a thermal barrier between the foam plastic insulation and the steel roof deck, but including other measures provides sufficiency of compliance with s 3.2.2.57.(2)(c) and 3.1.14.2.(2)(a	3.2.2.57.(2)(c) , 3.1.14.2.(2)(a)	395/96
98-13-618	1998	12-Mar-98	Determine whether the addition of a presidential suite can be defined as a mezzanine under 3.2.1.1.(4) to allow a single exit in accordance with 3.4.2.2. at Niagara Falls Ramada Suites Hotel & Conference Centre, 7389 Lundy's Lane, Niagara Falls, Ontario	3.3.2.3.(2), 3.3.2.4.(2), 3.3.2.4.(3), 3.3.2.4.(4) and 3.3.2.4.(5)	395/96
98-12-617	1998	12-Mar-98	Determine whether the existing sewage tank, drain pipe, "Standard" toilet and lack of inspection prior to use comply with Ontario Water Resources Act provisions 5.6.5., 4.8.1.(1), 2.1.5.(2) and 1.8.1.(2) respectively	3.3.2.3.(2), 3.3.2.4.(2), 3.3.2.4.(3), 3.3.2.4.(4) and 3.3.2.4.(5)	395/96
98-11-616	1998	4-Mar-98	Determine whether the shade screen adjacent to the existing building can be considered as a temporary structure adjoining that building and thus be subject to Subsection 3.1.6. and not Subsection 3.2.3.	3.3.1.5.	395/96
98-10-615	1998	4-Mar-98	Determine whether a combination microwave and exterior vented hood fan installed approximately 355 mm (14 in) above the top of a stove burner complies with 9.33.2.1	7.2.5.5. , 2.6.4.1.	395/96
98-09-614	1998	25-Feb-98	Determine whether a standpipe and hose system is required to be installed in accordance with 3.2.9.1	3.3.1.5.	395/96
98-08-613	1998	25-Feb-98	Determine whether the proposed distance between openings is permitted under 3.2.3.14	3.3.1.5.	395/96
98-07-612	1998	25-Feb-98	Determine whether the guard height and the openings in the guard, as constructed, provide sufficiency of compliance with 9.8.8.2.(1) and 9.8.8.4.	3.3.1.5.	395/96

98-06-611	1998	12-Feb-98	Determine whether piping used in the water main or service installation provides sufficiency of compliance with s 7.2.5.5. and 2.6.4.1.	7.2.5.5. , 2.6.4.1.	395/96
98-05-610	1998	12-Feb-98	to det ermine whether the proposed egress distances, which slightly exceed 15 metres from certain classrooms, provide sufficiency of compliance with 3.3.1.5	3.3.1.5.	395/96
98-04-609	1998	12-Feb-98	Determine whether the three oversized, overhead door openings proposed for rear of the building, considering the subject limiting distance, are required to be installed with 1.5 hour fire rated doors at Bretton Imported Cars	3.2.3.1.	395/96
98-03-608	1998	15-Jan-98	Concerning whether the proposed measures provide sufficiency of compliance in li eu of adequate egress from the fourth storey in accordance with 3.3.4.4.(3)	3.3.4.4.(3)	115/89
98-02-607	1998	15-Jan-98	an application by Mr. and Mrs. Jeff Davie, Property Owners, 939 Queen Street West, Mississauga, Ontario, for the resolution of a dispute with Mr. Andrew Feetham, Chief Building Official, Town of Wasaga Beach, Ontario, Concerning whet er the proposed building is required to provide ventilation facilities under 9.32.1.2	9.32.1.	115/89
97-63-605	1997	18-Feb-98	Concerning whether the proposed cinema seating design, especially regarding the number of seats per row and aisle configuration, provides sufficiency of compliance with s 3.3.2.3.(2), 3.3.2.4.(2), 3.3.2.4.(3), 3.3.2.4.(4) and 3.3.2.4.(5)	3.3.2.3.(2), 3.3.2.4.(2), 3.3.2.4.(3), 3.3.2.4.(4) and 3.3.2.4.(5)	395/96
97-61-603	1997	18-Feb-98	Concerning whether the proposed cinema seating design, especially regarding the number of seats per row and aisle configuration, provides sufficiency of compliance with s 3.3.2.3.(2), 3.3.2.4.(2), 3.3.2.4.(3), 3.3.2.4.(4) and 3.3.2.4.(5)	3.3.2.3.(2), 3.3.2.4.(2), 3.3.2.4.(3), 3.3.2.4.(4) and 3.3.2.4.(5)	395/96
97-60-602	1997	18-Dec-97	Concerning whether the proposed closely spaced sprinklers designed to protect an unprotected opening area exceeding the permitted limit provide sufficiency of compliance with 3.2.3.1.(1)	3.2.3.1.(1)	115/89

97-59-601	1997	18-Dec-97	Determine whether the proposed fire hydrant spacing in relation to the distance to the rear lane garages provides sufficiency of compliance with Subsection 9.10.19 and 3.2.5.8.(2)	Subsection 9.10.19. , 3.2.5.8.(2)	115/89
97-58-600	1997	11-Dec-97	Concerning whether an additional fire hydrant is to be installed to comply with 3.2.5.8(2)	3.2.5.8.(2)	115/89
97-57-599	1997	11-Dec-97	Concerning whether a travel distance of 38 metres in a building equipped with early suppression fast response sprinklers provides sufficiency of compliance with 3.4.2.5.(1)(a)	3.4.2.5.(1)(a)	115/89
97-55-597	1997	11-Dec-97	Concerning self closing devices are required between the corridors and sleeping rooms in accordance with 3.1.8.11.(5)	3.1.8.11.(5)	115/89
97-54-596	1997	26-Nov-97	Concerning whether the travel distance from the entry door of certain suites to the exit provides sufficiency of compliance with 3.4.2.5.(1)(f)	3.4.2.5.(1)(f)	115/89
97-52-594	1997	13-Nov-97	Concerning whether the proposed front door steps are exit stairs requiring handrails under 3.4.6.4.	3.4.6.4.	115/89
97-51-593	1997	13-Nov-97	Determine whether the proposed measures provides sufficiency of compliance regarding standpipe and hose pressure in accordance with 3.2.9.3	3.2.9.3.	115/89
97-50-592	1997	13-Nov-97	Concerning whether the stairs, as constructed, provide sufficiency of compliance with 9.8.3.3.(2) of the Ontario Building Code (OBC) and whether OBC 9.8.3.4. requires that the minimum headroom for stairs in a dwelling unit	9.8.3.3.(2) , 9.8.3.4.	115/89
97-49-591	1997	29-Oct-97	Concerning whether the proposed exit stair provides sufficiency of compliance with 3.4.1.4.	3.4.1.4.	115/89
97-48-590	1997	29-Oct-97	Concerning whether the standpipe and hose system provides adequate water pressure to comply with 3.2.9.3.(6)	3.2.9.3.(6)	115/89
97-47-589	1997	29-Oct-97	Concerning whether a renovation enclosing an existing atrium space should comply with Section 9.25	9.25	115/89

97-46-588	1997	9-Oct-97	Determine whether the proposed glass paver floor assembly provides sufficiency of compliance with 3.2.2.45.(2)	3.2.2.45.(2)	115/89
97-45-587	1997	9-Oct-97	Concerning whether the proposed wall assembly, including the Royal Building System exterior cladding, provides sufficiency of compliance with 3.1.5.5.	3.1.5.5.	115/89
97-44-586	1997	9-Oct-97	Determine whether the proposed renovations provide sufficiency of compliance with s 3.2.5.5.(1), 3.2.5.6.(4) and 9.10.19.3, s 3.3.4.4. and 9.9.9.1., and 3.2.3.13.(2) and 9.9.4.4.	9.9.9.1.(1), 3.3.4.4., 9.10.19.3.	115/89
97-43-585	1997	24-Sep-97	Concerning whether the floor assemblies above the oil cellar and caster basement provide sufficiency of compliance with s 3.2.1.4.(1) and (2) of the Ontario Building Code (OBC), whether the openings in the said floor assemblies provide sufficiency of compliance with 3.1.8.1.(2) of the OBC, and whether the number of exits from the caster basement provide sufficiency of compliance with 3.4.2.1.(2)	3.2.1.4.(1) , 3.2.1.4.(2)	115/89
97-42-584	1997	24-Sep-97	Concerning whether the wood guard for the proposed third floor deck provides sufficiency of compliance with 9.8.8.5.	9.8.8.5.	115/89
97-41-583	1997	11-Sep-97	Concerning whether the proposed addition is required to a have stand pipe hose system in accordance with 3.2.9.1.	3.2.9.1.	115/89
97-40-582	1997	11-Sep-97	Concerning whether the proposed third floor office space provides sufficiency of compliance with 9.9.8.2	9.9.8.2.	115/89
97-39-581	1997	11-Sep-97	Concerning whether the proposed water and sewage service connections provides sufficiency of compliance with 7.1.6.4.(1)	7.1.6.4.(1)	115/89
97-38-580	1997	21-Aug-97	Determine whether the unprotected openings on the subject residential addition comply with 9.10.14.1.(1)	9.10.14.1.(1)	115/89
97-37-579	1997	21-Aug-97	Concerning whether the subject stairs containing six winders provides sufficiency of compliance with 9.8.5.3.(1)	9.8.5.3.(1)	115/89
97-36-578	1997	21-Aug-97	Concerning whether the proposed exterior spiral staircase provides sufficiency of compliance with 9.8.5.2.	9.8.5.2.	115/89

97-35-577	1997	12-Aug-97	Concerning whether the proposed sprinkler and egress facility upgrades from an interior office mezzanine provide sufficiency of compliance with 3.2.2.54.	3.2.2.54.	115/89
97-34-576	1997	12-Aug-97	Determine whether a required fire alarm system should sound in the theatre space of a concert building in accordance with 3.2.4.19.(1)	3.2.4.19.(1)	115/89
97-33-575	1997	12-Aug-97	Concerning whether a precast concrete mezzanine using steel HSS sections and steel plate for structural support provides sufficiency of compliance with 3.2.2.22.(2)(b)	3.2.2.22.(2)(b)	115/89
97-32-574	1997	22-Jul-97	the resolution of a dispute whether the roof truss assembly provides sufficiency of compliance with the Ontario Building Code	9.10.9.14.(3)	115/89
97-31-573	1997	22-Jul-97	Concerning whether the wall and ceiling construction containing foamed plastic insulation provides sufficiency of compliance according to 3.1.4.2.(1)	3.1.4.2.(1)	115/89
97-29-571	1997	9-Jul-97	Concerning whether the proposed termination of a 2 hour firewall on the underside of a reinforced concrete roof slab on one side only provides sufficiency of compliance with 3.1.10.3.(2)(a)	3.1.10.3.(2)(a)	115/89
97-28-570	1997	9-Jul-97	Concerning whether the proposed retail supermarket addition should provide washroom facilities based on occupant load in accordance with 3.1.16.1.	3.1.16.1.	115/89
97-27-569	1997	9-Jul-97	Concerning whether the proposed polyethylene skylight should be considered a roof according to 3.2.3.18.	3.2.3.18.	115/89
97-25-567	1997	3-Jul-97	Concerning whether the proposed height of the handrails at the landing of the exit stairways provides sufficiency of compliance with s 3.4.6.4.(4) and 3.4.6.4.(5)	3.4.6.4.(4) , 3.4.6.4.(5)	115/89
97-24-566	1997	3-Jul-97	Concerning whether the proposed stairs to chancel platform should be considered as access stairs and thus be required to have the specified handrails according to 3.4.6.4.(1)	3.4.6.4.(1)	115/89

97-23-565	1997	3-Jul-97	Concerning whether the constructed addition provides sufficiency of compliance with the requirements for a standpipe and hose system, building sprinklering, adequate water supply and sprinklering in the spray booth area in accordance with s 3.2.9.1.(1)(b), 3.2.2.52.(1)(b) and s 3.2.5.8. and 6.2.2.5. respectively	3.2.2.52.(1)(b), 3.2.5.8., 3.2.9.1.(1)(b) , 6.2.2.5.	115/89
97-22-564	1997	22-Jun-97	Concerning whether the proposed window openings on the west of a 2 storey single-detached house at 68 Ellsworth Avenue, Richmond Hill, Ontario provide sufficiency	9.10.14.1. and 9.10.14.12.(4)	115/89
97-21-563	1997	19-Jun-97	Concerning whether the proposed extension of the mezzanine onto the parking area of the existing roof should be considered as part of the mezzanine	3.2.1.1.(3) , 3.2.1.1.(4)	115/89
97-19-561	1997	12-Jun-97	Concerning whether the subject slab-on-ground should be insulated in accordance with 9.25.2.7.(1)	9.25.2.6. and 9.25.2.7.(1)	115/89
97-18-560	1997	12-Jun-97	Concerning whether the subject building is required to be sprinklered in accordance with 3.2.2.44.	3.2.2.44.	115/89
97-17-559	1997	28-May-97	Concerning whether the subject building is 1 storey in height in accordance with 3.2.1.1.(8) of the Ontario Building Code (OBC) and whether structural fire resistance under OBC 3.2.2.57.	3.3.1.1.(8) and 3.2.2.57.	115/89
97-16-558	1997	28-May-97	Concerning whether the performance area is a stage and thus subject to the requirements of 3.3.2.13	3.3.2.13.	115/89
97-14-556	1997	8-May-97	Concerning whether locating occupancies not exceeding 15% of the public corridor area on the same side as new retail units in an unobstructed 6 metre public corridor, provides sufficiency of compliance with 3.3.1.9.(6) and 3.4.2.5.(1)(d)	3.3.1.9.(6) , 3.4.2.5.(1)(d)	115/89
97-13-555	1997	24-Apr-97	Concerning whether a stair with a width of 660 mm (2' 2") rather than the required 860 mm (2' 10") provides sufficiency of compliance with 9.8.3.3.(2)	3.2.5.1.(1) and 3.2.5.1.(2)	115/89
97-12-554	1997	8-May-97	Concerning whether the fire fighting access requirements of s 3.2.5.1.(1) and 3.2.5.1.(2)	3.2.5.1.(1) and 3.2.5.1.(2)	115/89

97-11-553	1997	24-Apr-97	Concerning whether a spiral stair which is a secondary exit provides sufficiency of compliance with 9.8.5.2	9.8.5.2.	115/89
97-09-551	1997	10-Apr-97	Concerning whether 9.10.14.13. applies to an accessory building	9.10.14.13.	115/89
97-08-550	1997	10-Apr-97	Concerning whether i) there is a change in performance level and, ii) a skylight set in a wood frame, prov ides sufficiency of compliance with Section 11.3 and 3.2.3.15.	11.3. and 3.2.3.15.	115/89
97-07-549	1997	26-Mar-97	Concerning whether the "Royal Building System" consisting of a PVC shell structure filled with concrete, provides sufficiency of compliance with 3.2.3.7.(2	3.2.3.7.(2)	115/89
97-06-548	1997	26-Mar-97	Concerning whether an air supported structure with a mezzanines and interior partitions, provides sufficiency of compliance with Subsection 3.1.6	3.1.6.	115/89
97-05-547	1997	26-Mar-97	Concerning whether i) not providing wired glass in fixed steel frames adjacent to an unenclosed exterior stair, provides sufficiency of compliance with 3.2.3.13.(2) and, ii) providing doors crossing a corridor with the left hand door swinging in direction of exit travel, provides sufficiency of compliance with s 3.3.1.10.(3) and 3.3.3.3.(3)	3.2.3.13.(2) 3.3.1.10.(3) and 3.3.3.3.(3)	115/89
97-04-546	1997	11-Mar-97	Determine whether a 2 hour fire separation between an existing school and a gymnasium addition provides sufficiency of compliance with 3.1.10	2.1.3.1. and Subsection 3.1.10	115/89
97-03-545	1997	26-Feb-97	Concerning whether the conversion of 11 units in an existing multi-unit apartment building is to be classified under a residential or institutional major occupancy under Subsection 3.1.2. and 3.1.3.5.(1)	3.1.2. and 3.1.3.5.(1)	115/89
97-02-544	1997	26-Feb-97	Concerning whether adding a mezzanine to an existing building such that the total area of the mezzanine would be 12.5% of the building area complies with s 3.2.1.1.(3) and 3.2.1.1.(4)	3.2.1.1.(3) , 3.2.1.1.(4)	115/89

97-01-543	1997	26-Feb-97	Concerning whether installing a trench and weeping tile around the exterior of a foundation wall provides sufficiency of compliance with s 9.15.4.3. and 9.14.6.1.	9.15.4.3. , 9.14.6.1.	583/83
96-59-542	1996	13-Feb-97	Concerning whether providing fire separated balconies at the front and back, and a wide shared exit for each of the 2 upper units in a 4 unit building provides sufficiency of compliance with 9.9.9.3.	9.9.9.3.	115/89
96-58-541	1996	13-Feb-97	Concerning whether the ventilation requirements for an automobile showroom and new car delivery area are subject to 6.2.2.3.	6.2.2.3.	115/89
96-57-540	1996	13-Feb-97	Concerning whether the proposed combination of straight, winders, and curved stairs provide sufficiency of compliance with Section 9.8.	9.8.	115/89
96-56-539	1996	8-Jan-97	Concerning whether connecting floor drains from the below grade levels of a multi-storey parking lot to the sanitary drainage system, without oil interceptors provides sufficiency of compliance with 7.4.4.3.	7.4.2.1.	115/89
96-55-538	1996	8-Jan-97	Concerning whether Section 9.5. of the Building Code applies to; whether the requirements of 9.5. are met; and, whether the required heating provisions of 9.33.1.3.(1) have been met	Section 9.5 and 9.33.1.3	115/89
96-54-537	1996	12-Dec-96	Concerning whether a secondary spiral stair which has a rise exceeding 200 mm provides sufficiency of compliance with 9.8.3.1.(1) and 9.8.5.2.	9.8.3.1.(1) , 9.8.5.2.	115/89
96-53-536	1996	8-Jan-96	Concerning whether or not a change of occupancy from an office use to a fitness club use complied with the requirements of 11.3.4.1.	11.3.4.1.	115/89
96-52-535	1996	12-Dec-96	Concerning whether the circulation of return air from students' bedrooms to a mechanical room where it is mixed with fresh air and recirculated back to the suites provides sufficiency of compliance with 6.2.3.11.(2)	6.2.3.11.(2)	115/89
96-51-534	1996	21-Nov-96	Determine whether Fire alarm signals which are not activated simultaneously but which activate in other portions of a commercial mall within no more than 5 minutes provides sufficiency of compliance with Subsection 3.2.4	3.2.4.4.(2)(b)	115/89

96-50-533	1996	21-Nov-96	Determine whether the audibility of the fire alarm system complies with 3.2.4.19.(1)	3.2.4.19.(1)	115/89
96-49-532	1996	21-Nov-96	Determine whether the configuration of the corridors and travel distance for a proposed self storage building provides sufficiency of compliance with 3.10.2.4.(2)	9.30.6.3.	115/89
96-48-531	1996	13-Nov-96	Concerning whether the installation of the ceramic tile provides sufficiency of compliance with 9.30.6.3	9.30.6.3.	115/89
96-47-530	1996	31-Oct-96	Concerning whether the spiral staircase that provides sufficiency of compliance with s 9.8.3.1.	9.8.3.1.	20/95
96-46-529	1996	13-Nov-96	Concerning whether providing sprinkler protection for the basement and ground floor and not upgrading second floor/ceiling assembly for the proposed increase in ground floor restaurant seating from 30 to 49 (eg. change of major occupancy from Group E to Group A-2) provides sufficiency of compliance with 11.3.4.1.(4)	11.3.4.1.(4)	115/89
96-45-528	1996	15-Oct-96	Concerning whether i) the building may be considered a Special and Unusual Structure under 3.2.2.61. rather than 3.2.2.2.; ii) whether the below grade process area is more than one storey in accordance with 3.2.1.1.(8); iii) whether the complete floor areas in the building are required to be protected by an automatic sprinkler system in accordance with 3.2.1.5., and s 3.2.2.11.(2), 3.4.2.5.(1), 3.2.8.2.(3); and iv) whether the exits in the below grade process floor areas sufficiently comply with the separation of exits and travel distance requirements in s 3.4.2.1., 3.4.4.1. and 3.4.2.5.(1)	3.2.1.5., 3.2.2.2., 3.2.2.61., 3.4.2.1., & 3.4.4.1., and s 3.2.1.1.(8), 3.2.2.11.(2), 3.2.8.2.(3) & 3.4.2.5.(1)	20/95
96-44-527	1996	26-Sep-96	Concerning whether the ceiling plenum consisting of a 1 ?" wood roof deck, sprinkler system and smoke detectors provide sufficiency of compliance with s 3.5.4.3. 6.2.3.2., and 3.1.5.14.(1)	3.5.4.3., 6.2.3.2., and 3.1.5.14.(1)	20/95
96-43-526	1996	15-Oct-96	Determine whether not sloping the floor and locating the drain so that water from one head will flow over the area that serves another head in a group shower facility provides sufficiency of compliance with 7.2.2.3.(3)	7.2.2.3.(3)	20/95

96-42-525	1996	31-Oct-96	Concerning whether the windows that result from the conversion of a second floor balcony to a sunroom addition provides sufficiency of compliance with 9.10.14.12.(3) and 9.10.14.5.	9.10.14.12.(3) , 9.10.14.5.	20/95
96-41-524	1996	26-Sep-96	Concerning whether the spatial separation and the percentage of window openings in the west face of Block A at Wesley-Robins Retirement Village provides sufficiency of compliance with s 3.2.3.1., 3.2.3.5., 3.2.3.6., 3.2.3.7., and 3.2.3.8.	3.2.3.1., 3.2.3.5., 3.2.3.6., 3.2.3.7., 3.2.3.8.	20/95
96-40-523	1996	11-Sep-96	Concerning whether the bevelled side of a bay window is a wall or exposing building face of a fire compartment and if the portion of the exterior wall between such windows in each suite requires a fire resistance rating at least equal to the rating required for the interior demising wall, as described in s 3.2.3.14.(1) & (2)	3.2.3.14.(1) (2)	20/95
96-39-522	1996	11-Mar-96	Concerning whether the width of the interior stairway provides sufficiency of compliance with 9.8.3.3.(2).	9.8.3.1.(1) , 9.8.5.2.	115/89
96-38-521	1996	26-Sep-96	Concerning whether the warm air supply system which is installed above the ceiling instead of in the concrete slab-on-ground provides sufficiency of compliance with 6.2.4.6.	6.2.4.6.	20/95
96-37-520	1996	1-Aug-96	Concerning whether not sprinklering the interconnected floor space designated as student lounge due to the precedent of non-sprinklered interconnected floor space in the existing building provides sufficiency of compliance with 3.2.8.2.(6)	3.2.8.2.(6)	20/95
96-36-519	1996	23-Aug-96	Concerning three issues: i) Interpretation of the technical requirements of s 3.4.2.1.(1), 3.4.4.1.(1), and 3.4.4.2.(2). At issue is the proposed use of Stair No. 1 as an exit through a lobby, to provide one of the required exits to serve the basement and second floor, in addition to the ground floor. ii) Sufficiency of compliance with the technical requirements of 3.4.4.2.(2)(b). At issue is the maximum path of travel of 16.45 m from the entry into the lobby at the second floor level to the exterior exit door at ground level. iii) Sufficiency of compliance with the technical requirements of 3.5.3.1.(1) and Table 3.5.3.A. At issue is the use of unlabelled elevator doors on the ground floor and second floor entrances into the elevator car.	3.4.2.1.(1), 3.4.4.1.(1), 3.4.4.2.(2) & 3.5.3.1.(1) , 3.4.4.2.(2)(b)	20/95

96-35-518	1996	23-Aug-96	Concerning whether the proposed ground floor market style retail outlet with no fire separations between units nor between units and circulation routes where the corridor widths are less than 5 m wide provide sufficiency of compliance with 3.3.1.1.(2) and 3.3.1.4.(1)(c)	3.3.1.1.(2), 3.3.1.14.(1)(c)	20/95
96-34-517	1996	11-Sep-96	Concerning whether lateral support clips and the supports of the lateral clip for a precast concrete wall are required to have a 2 hour fire resistance rating in accordance with 3.2.3.7.(2)(b)	3.2.3.7.(2)(b)	20/95
96-33-516	1996	11-Sep-96	Concerning whether the separation of exits from the basement and the construction of the south exposing building face provide sufficiency of compliance with 9.9.4.2.(1) and 9.10.14.11.	9.9.4.2.(1) , 9.10.14.11.	20/95
96-32-515	1996	14-Jun-96	Concerning whether the height of the existing balustrade and the provision of a temporary canvas awning attached to the inner side of the openings of an existing balustrade will provides sufficiency of compliance with the requirements in 3.3.1.17.	3.3.1.17.	20/95
96-31-514	1996	25-Jun-96	Concerning whether the use of gas fired sealed combustion heaters mounted within 4.2 metres of an egress doorway in a portable classroom without a 1.5 hour fire separation between the appliance and the classroom provides sufficiency of compliance with 3.9.3.7.	3.9.3.7.	20/95
96-30-513	1996	14-Jun-96	Concerning whether providing strobe lights in the Intensive Care Unit, Operating Rooms and Post Anaesthesia Care Units to visually indicate the activation of the fire alarm system in lieu of audible devices provides sufficiency of compliance with the requirements in 3.2.4.19.	3.2.4.19.	20/95
96-29-512	1996	12-Jun-96	Concerning whether a tent to be used as a new home sales office and display area should be considered a temporary structure in accordance with the requirements of Subsection 3.1.6.	3.1.6.	20/95
96-28-511	1996	25-Jun-96	Concerning whether a wall adjacent to a CNR right of way may be constructed of metal panels on a steel frame in lieu of providing a 2 hour fire resistant rating in accordance with 3.2.3.7.(2)	3.2.3.7.(2)	20/95

96-27-510	1996	9-Jul-96	Concerning whether not sprinklering a non-combustible addition to be used for the shelter of scrap metal provides sufficiency of compliance with the requirements in 3.2.2.52	3.2.2.52. , 3.5.2.7.	20/95
96-26-509	1996	9-Jul-96	Concerning whether the proposed "TD" sign on the east side of the building provides sufficiency of compliance with the requirements in 3.8.5.2.(2)	3.8.5.2.(2)	20/95
96-25-508	1996	9-Jul-96	Concerning whether extending the limiting distance for the south wall of the building to the south side of a right of way on the adjacent property to maximize the permitted percentage of unprotected openings or glazed areas provides sufficiency of compliance with 9.10.14.12.(4)	9.10.14.12.(4)	20/95
96-24-507	1996	30-May-96	Concerning whether not providing a standpipe and hose system in a low hazard industrial occupancy where compensating fire protection is provided in the form of fire extinguishers and a fire safety program provides sufficiency of compliance with 3.2.9.1.	3.2.9.1.	20/95
96-23-506	1996	1-Aug-96	Concerning whether the installation of a sliding glass door in the subject exposing building face complies with s 9.10.14.1 and 9.10.14.12.	9.10.14.1. , 9.10.14.12.	20/95
96-22-505	1996	16-May-96	Concerning whether the use of PVC for the termination kit, 100 mm (4inch) Tee and the 50 mm (2 inch) "Y" and cap for the condensation trap assembly may be considered minor combustible components in accordance with 3.4.6.15.(1) and 3.1.5.2.(1)(h)	3.1.5.15.(1) , 3.1.5.2.(1)(h)	20/95
96-21-504	1996	25-Jun-96	Concerning whether a walkway between a temporary festival tent and a permanent kitchen facility located in an adjacent structure may be used as a serving area in accordance with 3.2.3.20. and 3.1.6.3.(2)	3.2.3.20.	20/95
96-20-503	1996	12-Jun-96	Concerning whether electromagnetic locking devices on two exit doors must release immediately upon activation of door release hardware in accordance with s 3.4.6.15.(1) and 3.4.6.15.(4)	3.4.6.15.(1) , 3.4.6.15.(4)	20/95

96-19-502	1996	30-May-96	Concerning whether the aerosol storage cage in Shoppers Drug Mart's Mississauga Distribution Centre should comply with the provisions of 3.3.1.2.(1) or be considered a Group F, Division 1 Occupancy having to meet the fire separation, travel distance and door swing requirements in s 3.3.1.10.(1) and 3.4.2.5.(2)	3.3.1.2.(1), 3.3.1.10.(1) and 3.4.2.5.(2)	20/95
96-18-501	1996	16-May-96	Concerning whether sufficient water closets and shower heads are provided for an outdoor wave action pool in accordance with Subsection 3.11.9.	3.11.9.	20/95
96-17-500	1996	14-Jun-96	Concerning whether the use of electromagnetic hold-open devices to permit doors to remain open on a constant basis in the north and east tower lobby enclosure will provide sufficiency of compliance with 3.1.8.12.	3.1.8.12.	20/95
96-16-499	1996	21-May-96	Concerning whether the installation of a fire alarm system, implementation of a fire safety plan and a fire department response time of not more than three minutes will provide sufficiency of compliance with the requirement to provide a fire-fighters elevator or divide the floor area into 2 zones in accordance with 3.3.1.7.(1)	3.3.1.7.(1)	20/95
96-15-498	1996	16-May-96	Concerning whether an openable roof window installed on a pitched roof provides sufficiency of compliance with the requirements in 9.9.9.1.	9.9.9.1.	20/95
96-14-497	1996	21-May-96	Concerning whether the width of aisles for the addition to the existing church building provides sufficiency of compliance with 3.3.2.4.(4)	3.3.2.4.(4)	20/95
96-13-496	1996	23-Apr-96	Concerning whether ducts in a return air plenum for a commercial building need be insulated and sealed in accordance with 2.1.1.11. and Sub 6.2.1.1.(1)(a)(v)	2.1.1.11. and Sub 6.2.1.1.(1)(a)(v)	20/95
96-12-495	1996	16-Apr-96	Concerning whether a building containing four hockey rinks is to be classified as a single storey building with a mezzanine or whether it should be classified as a two storey building in accordance with 3.2.1.1.(2) and 3.2.1.1.(4)	3.2.1.1.(2) and 3.2.1.1.(4)	20/95

96-11-494	1996	16-Apr-96	Concerning : i) whether electromagnetic locking devices on five exit doors must release immediately upon activation of door release hardware in accordance with 3.4.6.15.(1) of the Building Code; and, ii) whether the installation of two manual pull stations for a fire alarm system incorporating electromagnetic locking devices beyond the maximum allowance of 600 mm from the door will provide sufficiency of compliance with 3.4.6.15.(4)(c)	3.4.6.15.(1) and 3.4.6.15.(4)(c)	20/95
96-10-493	1996	15-Apr-96	Concerning whether the floor drains in a three level open air parking garage can be connected to the storm drainage system, at King Street Parkade, King Street and Louis Street, Peterborough, Ontario.	7.4.2.1.	20/95
96-09-492	1996	15-Apr-96	Concerning whether a fire separation is required between two warehousing areas, in accordance with 3.3.1.1	3.3.1.1.	20/95
96-08-491	1996	15-Apr-96	Concerning whether a new building sewer is permitted to be connected to an existing private sewer which is currently serving other buildings, at 2050 Victoria Park Avenue, North York, Ontario.	7.1.6.1.(1), 7.1.6.2.(1) and 7.1.6.4.(1)	20/95
96-07-490	1996	28-Mar-96	Determine whether an interconnected floor space in a Group A, Division 3 occupancy will provide sufficiency of compliance with the requirements provided for Group A, Division 1 & 2 occupancies in accordance with 3.2.8.2.(6)(c)	3.2.8.2.(6)(c)	20/95
96-06-489	1996	13-Feb-96	Concerning whether a building used to renovate mobile homes and trailers (i.e. install upholstery, plumbing, air conditioning, beds, seats, tables, etc.) must comply with the storage garage requirements in 3.3.5.7. and 3.3.5.5.(4)	1.1.3.2. , 3.3.5.7. , 3.3.5.5.(4)	20/95
96-05-488	1996	13-Feb-96	Concerning whether the interior stair conforms to 9.8.4.1., 9.8.5.2 and 9.8.5.3.	9.8.4.1., 9.8.5.2. and 9.8.5.3.	20/95
96-04-487	1996	13-Feb-96	Concerning whether the guard and handrail on an exterior barrier free access ramp provides sufficiency of compliance with 3.7.3.4.(1)(e) & (f)	3.7.3.4.(1)(e) & (f)	20/95

96-03-486	1996	24-Jan-96	Concerning whether a sprinkler system is required in a greenhouse addition to an existing mercantile occupancy in accordance with 3.2.2.44. and 3.2.2.12.(1)	3.2.2.44. and 3.2.2.12.(1)	20/95
96-02-485	1996	24-Jan-96	Concerning whether the height of the guard on the 2nd floor balcony; guard on top of the retaining wall and openings of the guard around interior stairwell provide sufficiency of compliance with Subsection 9.8.8.	9.8.8.	20/95
96-01-484	1996	24-Jan-96	Concerning whether applying an intumescent fire retardant paint to combustible cladding on an existing north exposing building face will provide sufficiency of compliance with the requirements for noncombustible cladding in 9.10.14.12.	9.10.14.12.(2)	20/95
95-63-483	1995	21-Dec-95	Concerning the determination of the term discharge pressure in 3.2.9.3.(7)	s 3.2.9.3.(1) , 3.2.9.3.(7)	20/95
95-62-482	1995	21-Dec-95	Determine whether the building configuration and the provision of a voluntary sprinkler system will provide sufficiency of compliance in lieu of a standpipe and hose system	3.2.9.2.(1)	20/95
95-61-481	1995	21-Dec-95	Concerning whether reducing the flow of the recirculation system to 3 litres per second (l/s) when the pool is being used and then increasing the flow rate of three times the pool volume in 24 hours in lieu of providing two or more drains will provide sufficiency of compliance with 3.11.8.1.(15)	3.11.8.1.(15)	20/95
95-60-480	1995	12-Dec-95	Concerning whether two semi-recessed, vanity mounted lavatories installed in the barrier free washroom provides sufficiency of compliance with 3.7.3.10.	3.7.3.10	20/95
95-59-479	1995	5-Dec-95	Concerning whether: i) residential occupancies conform to the light and ventilation requirements; and, ii) the north exposing building face complies with the spatial separation provisions	9.7.1.2., 9.32.2.1. , 9.10.14.1. and Part 11	20/95
95-58-478	1995	5-Dec-95	Concerning whether the proposed renovations to improve the egress conditions in five existing 3-storey residential buildings will provide sufficiency of compliance	9.9.9.3., 9.9.2.6. & 9.9.4.5. , 9.9.9.1.(3)	20/95

95-57-477	1995	21-Nov-95	Concerning whether locked open outside post indicator valves controlling the water supply for a sprinkler system must be electrically supervised in order to obtain a roof rating waiver under 3.2.2.12.	3.2.4.16.(5) , 3.2.2.12.	20/95
95-56-476	1995	21-Nov-95	Determine whether an interconnected floor space in a Group A, Division 3 occupancy will provide sufficiency of compliance with the requirements provided for Group A, Division 1 & 2 occupancies in accordance with 3.2.8.2.(6)(c)	3.2.8.2.(6)(c)	20/95
95-55-475	1995	14-Nov-95	Concerning whether the proposed exterior cavity wall construction details will provide sufficiency of compliance with s 3.1.11.2.(1) and (2) [firestopping wall assemblies]	3.1.11.2.(1)(2)	20/95
95-54-474	1995	14-Nov-95	Concerning whether the FT4 cables and smoke detectors that would shut down the HVAC units installed within the air-return plenum space in an office extension in lieu of FT6 cables will provide sufficiency of compliance with 3.5.4.3.	3.5.4.3.	20/95
95-53-473	1995	10-Nov-95	Concerning whether increasing the allowable unsprinklered building area of 2,400 m² (25,800 ft²) by 142 m² (1529 ft²) and providing fire access routes to all four sides of the existing building and proposed addition will provide sufficiency of compliance with the sprinklering provisions in 3.2.2.52.(1)(b)	3.2.2.52.(1)(b)	20/95
95-52-472	1995	10-Nov-95	Concerning whether not providing smoke detectors and sprinkler heads in the prisoner cell areas and prisoner holding areas, and not providing sprinklers in the prisoner elevator shafts provide sufficiency of compliance with s 3.3.3.9. and 3.2.4.12.	3.3.3.9. , 3.2.4.12.	20/95
95-51-471	1995	26-Oct-95	Concerning whether the sprinklered retail store and unsprinklered open air basement parking area provides sufficiency of compliance with the requirements for a fully sprinklered building, thereby eliminating the requirement to provide a standpipe and hose system in the basement parking garage	3.2.9.1.(1)	20/95

95-50-470	1995	26-Oct-95	Concerning whether providing a fully sprinklered building with a 1 hour fire separation between the high school and college in lieu of a party wall (i.e. firewall) provides sufficiency of compliance with 3.2.3.4.	3.2.3.4.	20/95
95-49-469	1995	19-Oct-95	Concerning whether the one rated exit and a caged ladder will provide sufficiency of compliance with s 3.4.2.1.(1) & 3.4.7.1.(1)	s 3.4.2.1.(1) & 3.4.7.1.(1)	20/95
95-48-468	1995	19-Oct-95	Concerning whether the close proximity of an exit door to the property line (i.e. 0.55 m) affords adequate access to a public thoroughfare and if the relationship between the exterior grade and the interior landing requires steps that may obstruct the landing, in accordance with 1.1.3.2. and s 2.2.1.1. and 9.8.4.1.	1.1.3.2., 2.2.1.1. , 9.8.4.1.	20/95
95-47-467	1995	19-Oct-95	Concerning whether a canopy structure over a parking lot at the rear of an existing industrial building can be considered a covered vehicle passageway under 3.2.3.19. and not be subjected to the spatial separation requirements in 3.2.3.1.	3.2.3.1.	20/95
95-46-466	1995	5-Oct-95	an application by 3.2.3.9.(2), 3.4.2.5.(1)(f) and 3.2.2.12. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95	3.2.3.9.(2), 3.4.2.5.(1)(f) , 3.2.2.12.	20/95
95-45-465	1995	5-Oct-95	Concerning whether a central open area of the corridor system that includes a recessed hexagon pit with fixed benches is required to be separated from the aisle space that surrounds all 6 sides by a 45 minute fire separation	3.3.2.5.(1)(a)	20/95
95-44-464	1995	5-Oct-95	Concerning whether the residential cook top stove and exhaust system used once a month for cooking classes, where the products are precooked provides sufficiency of compliance with 6.2.2.6.	6.2.2.6.	355/94
95-43-463	1995	19-Sep-95	Concerning whether extending the limiting distance required for the west exposing building face onto an adjoining parcel of vacant land to permit the use of unprotected window openings will provide sufficiency of compliance with 3.2.3.1.	3.2.3.1.	20/95

95-42-462	1995	19-Sep-95	Concerning whether not providing a sprinkler system for the addition to one of 6 units in an existing unsprinklered mercantile strip plaza will provide sufficiency of compliance with 3.2.2.44	3.2.2.44.	20/95
95-41-461	1995	22-Aug-95	Concerning whether the dwelling units should be categorized as "Type III" which requires the mechanical ventilation system to be designed under Part 6 of the Building Code.	9.32.3.1.	20/95
95-40-460	1995	22-Aug-95	Concerning whether providing a standpipe and hose system for the two basement levels only and not throughout the two storey building will provide sufficiency of compliance with the technical interpretation of 3.2.9.1	3.2.9.1.	160/93
95-39-459	1995	3-Aug-95	Concerning whether the means of egress from the gymnasium and exercise space provides sufficiency of compliance with the Building Code, Re: 3.4.2.1., Minimum Number of Exits; and, 3.4.4.1., Fire- Resistance Rating of Exit Separations	3.4.2.1. , 3.4.4.1.	20/95
95-38-458	1995	3-Aug-95	Concerning the following two issues: (1) whether the glass on the roof of a greenhouse addition must comply with CAN\CGSB-12.20-M, "Structural Design of Glass for Buildings" in accordance with 4.3.6.1. of the Building Code; and (2) whether a sprinkler system is required in a greenhouse addition to an existing mercantile occupancy in accordance with 3.2.2.44. and s 3.2.2.12.(1) and 3.2.5.13.(1)	4.3.6.1., 3.2.2.44., s 3.2.2.12.(1) , 3.2.5.13.(1)	20/95
95-37-457	1995	3-Aug-95	Concerning whether the use of combustible pipe traps (i.e. ABS material) servicing basins and sinks in a 6 storey noncombustible residential building will provide sufficiency of compliance with the flame spread rating requirements	3.1.5.1. & 3.1.5.15.(1)(a)	20/95
95-36-456	1995	18-Jul-95	Concerning whether the location of a manual pull station for a fire alarm system incorporating electromagnetic locking devices will provide sufficiency of compliance with 3.4.6.15.(4)(c)	3.4.6.15.(4)(c)	20/95

95-35-455	1995	18-Jun-95	Concerning whether not providing a standpipe and hose system to serve three new Junior Kindergarten additions provides sufficiency of compliance with the standpipe and hose system requirements in 3.2.9.1.(1)(b)	3.2.9.1.(1)(b) , 1.1.3.2.	20/95
95-34-454	1995	28-Jun-95	Concerning whether a sprinkler system is required in a greenhouse addition to an existing mercantile occupancy	3.2.2.44. , 3.2.2.12.(1)	355/94
95-33-453	1995	28-Jun-95	Concerning whether the provision of a sprinkler system and a 1 hour fire separation between the public pool and the remainder of the facility will provide sufficiency of compliance with the provision of a two hour firewall and thereby permit the remainder of the facility (i.e. all other portions than the leisure pool) to be developed under the classification of an A-2 occupancy	3.1.3.3. and 2.1.3.1.(1)	355/94
95-32-452	1995	28-Jun-95	Concerning whether the 60 m distance from the fire department connection to a hydrant provides sufficiency of compliance with 3.2.5.16.(2)	3.2.5.16.(2)	355/94
95-31-451	1995	20-Jun-95	Concerning whether not providing sprinkler protection in the attic space of a new four classroom addition to an existing elementary school provides sufficiency of compliance with 3.2.5.13.	3.2.5.13.	355/94
95-30-450	1995	20-Jun-95	Concerning whether a 150 mm (6 inch) galvanized steel pipe to convey potable water is part of the water distribution system and subject to 7.2.6.7.(3) of	7.2.6.7.(3) , 1.1.3.2.	355/94
95-29-449	1995	20-Jun-95	Concerning whether the exhaust system for cooking equipment used for the purpose of customer and staff demonstrations provides sufficiency of compliance with 6.2.2.6.	6.2.2.6.	355/94
95-28-448	1995	30-May-95	Concerning whether a partial fire alarm system that only satisfies the specific requirements for three electromagnetic locking devices installed on exit doors	s 3.4.6.15.(3) , 3.4.6.15.(4)	355/94
95-27-447	1995	30-May-95	Concerning whether the area of unprotected openings in the north exposing building face of the new Speedy Muffler King building shows sufficiency of compliance	Subsection 3.2.3., 3.2.3.1.	355/94

95-26-446	1995	30-May-95	Concerning whether the upper tier seating design that does not provide 660 mm high guards between rows of fixed seats shows sufficiency of compliance	3.3.2.8.(1)(c)	355/94
95-25-445	1995	18-May-95	Concerning whether the provision of a 1 hour vertical fire separation between a Group F, Division 2 and Group D occupancy provides sufficiency of compliance with the requirement to provide a 45 minute fire resistance rating for the adjoining interconnected second floor of the Group D occupancy	3.2.2.52.(2)(a)	355/94
95-24-444	1995	18-May-95	Concerning whether the electromagnetic locking devices on two exterior doors sufficiently comply with 9.9.6.8.	9.9.6.8.	355/94
95-23-443	1995	18-May-95	Concerning whether a Group D or E major occupancy classification is more appropriate for the proposed Teen Activity Centre (TAC) than a Group A-2 classification, thereby eliminating the need to upgrade the vertical fire separation between TAC and the adjacent Drug Store	10.2.1.1., 3.1.2.1.(1) , 1.1.3.2.	355/94
95-22-442	1995	4-May-95	Concerning whether a retaining wall comprised of an engineered system of concrete blocks, known as Risi Stones, anchored by means of woven polymeric geotextile material into cement stabilized soil shows sufficiency of compliance	2.1.2.1.(1)(a) and Sections 4.1 and 4.3	355/94
95-21-441	1995	4-May-95	Concerning whether the proposed ramp to be installed in the pool with a slope of 1 in 12 and a width of 8.83 m, sufficiently complies with the technical requirements	s 3.11.3.1.(4) & 3.11.5.1.(1)	355/94
95-20-440	1995	4-May-95	Concerning whether the construction of a single family dwelling (i.e. house) is in accordance with the log construction requirements of Section 9.37 and the roof and ceiling framing requirements of Subsection 9.23.13.	Section 9.37 & Subsection 9.23.13.	355/94
95-19-439	1995	25-Apr-95	Concerning sufficiency of compliance with the construction and fire resistance rating requirements for the west exposing building face.	3.2.3.7.	355/94

95-18-438	1995	25-Apr-95	Concerning whether the proposed installation for a gas fired forced air heating system to heat 4 apartment units and circulate air to 4 suites, the public corridor and a common exit stair will provide sufficiency of compliance with the requirements	s 6.2.3.11.(2) & 9.9.4.2.(4)	355/94
95-17-437	1995	25-Apr-95	Concerning whether the walkway and two trailers attached to an existing sprinklered building must be also protected by a sprinkler system or whether a noncombustible walkway separated from the building by not less than a 45 min. fire separation must be constructed in accordance with the requirements	3.2.2.55. , 3.2.3.20.	355/94
95-16-436	1995	11-Apr-95	Concerning whether a standpipe and hose system is required for the retail units	3.2.9.1.(1)(a) and 3.2.9.4.(1)	355/94
95-15-435	1995	11-Apr-95	Concerning whether proper door closure hardware is required for the fire separation between Unit #267 and the adjacent public corridor	3.3.1.4.(1)(b), 3.1.8.11. & 3.1.8.13.	355/94
95-14-434	1995	6-Apr-95	Concerning whether sprinkler protection is required for the bus lanes drive through portion of a city and inter-city bus terminal attached to an eleven storey fully sprinklered high-rise office building	s 3.2.5.13.(1) and 3.3.5.5.(8)	355/94
95-13-433	1995	6-Apr-95	Concerning whether the construction between the garages and the dwelling units may conform to 9.10.9.16.(3)	3.3.5.7.	355/94
95-11-431	1995	13-Mar-95	Concerning whether a high mass radiant masonry heater provides sufficiency of compliance	9.22., 9.22.1.4. & 9.22.7.1.	355/94
95-10-430	1995	13-Mar-95	Concerning whether enclosing more than 60% of the carport perimeter with 6 mil poly and an overhead door requires the carport to be considered a garage in accordance with 9.35.2.1	9.35.2.1.	355/94
95-09-429	1995	13-Mar-95	Concerning whether the proposed additional handrail on one side of a stairway and improved lighting condition will provide sufficiency of compliance with the maximum rise requirements in 9.8.3.1.	9.8.3.1.	355/94

95-08-428	1995	28-Feb-95	Concerning whether horizontal bracing members are required to resist horizontal live loads for temporary grandstand structure	4.1.1.4., s 4.1.10.5.(1) , 4.1.10.5.(2)	355/94
95-07-427	1995	28-Feb-95	Concerning whether electromagnetic locking devices on egress doors required to be equipped with door release hardware complies with the technical interpretation of the Building Code	s 3.4.6.15.(1). 3.4.6.15.(3) & 3.4.6.15.(4)	355/94
95-06-426	1995	28-Feb-95	Concerning whether an automatic dry standpipe and hose system in a frozen space (-26 deg C) and other areas, sufficiently complies with the technical interpretation of 3.2.9.3.(9)	3.2.9.3.(9)	355/94
95-05-425	1995	9-Feb-95	Concerning whether the proposed utilization of an open stair, descending from the Second Floor through a two storey high lobby to the Ground Floor level, as a required egress facility, sufficiently complies with the technical interpretation of the Building Code	3.4.2.3., s 3.4.4.1.(1) & 3.4.4.2.(2)	355/94
95-04-424	1995	26-Jan-95	Concerning whether a stand pipe and hose system is required in an addition comprising a library, community rooms and gymnasium	3.2.9.1.(1)(b)(i)	355/94
95-03-423	1995	11-Jan-95	Concerning whether an exterior masonry fire place and chimney required bracing below the roof line to provide lateral stability in compliance with 9.21.4.5	9.21.4.5.	355/94
95-02-422	1995	11-Jan-95	Concerning whether the colour of the pool tiles sufficiently comply with 3.11.3.1.(19)	3.11.3.1.(19)	355/94
95-01-421	1995	26-Jan-95	Concerning whether the proposed new canopy to be located over the fire access route at the outpatient entrance sufficiently complies with 3.2.5.7.(1)(c)	3.2.5.7.(1)(c)	355/94
94-42-417	1994	15-Dec-94	[Refer to decision]	3.3.1.13., 3.4.2.5. & 3.4.4.1.	355/94
94-41-420	1994	2-Dec-94	[Refer to decision]	3.2.9.1.(1)(b)	355/94
94-40-419	1994	9-Dec-94	[Refer to decision]	9.23.17.3.	355/94

94-39-418	1994	2-Dec-94	[Refer to decision]	3.7.2.3.	355/94
94-37-415	1994	22-Nov-94	[Refer to decision]	3.3.5.7.	355/94
94-36-414	1994	22-Nov-94	[Refer to decision]	9.21.4.4.	160/93
94-35-413	1994	10-Nov-94	[Refer to decision]	s 3.3.1.4.(1)	160/93
94-34-412	1994	22-Nov-94	[Refer to decision]	11.3.4.1.(1)(a), and s 11.1.1.3.(1), 11.3.4.1.(3), 11.3.4.1.(7)	160/93
94-33-411	1994	19-Sep-94	[Refer to decision]	s 3.2.7.9.(4)	160/93
94-30-408	1994	24-Aug-94	[Refer to decision]	9.25.4.9. , 9.25.4.10.	160/93
94-29-407	1994	19-Sep-94	[Refer to decision]	3.2.2.55.	160/93
94-28-406	1994	30-Sep-94	[Refer to decision]	9.14.2.1.(2.1)(c)	160/93
94-27-405	1994	10-Nov-94	[Refer to decision]	9.10.14.11. & 9.10.14.12	160/93
94-26-404	1994	30-Sep-94	[Refer to decision]	s 9.8.7.1.(2)	160/93
94-25-403	1994	29-Aug-94	[Refer to decision]	3.10.2.4.(2)(c)	160/93
94-24-402	1994	29-Aug-94	[Refer to decision]	3.7.1.2.	160/93
94-23-401	1994	29-Aug-94	[Refer to decision]	3.1.2.1. , 1.1.3.2.	160/93
94-22-400	1994	29-Sep-94	[Refer to decision]	3.7.1.2.(1)	160/93

94-21-399	1994	18-Aug-94	[Refer to decision]	3.7.3.4.(1)(e)	160/93
94-19-398	1994	21-Jul-94	[Refer to decision]	3.2.9.1.(1)(b) and Table 3.2.9.A.	160/93
94-19-397	1994	21-Jul-94	[Refer to decision]	s 3.1.11.2.(1)&(2)	160/93
94-18-396	1994	21-Jul-94	[Refer to decision]	3.2.9.1.(1) and Table 3.2.9.A.	160/93
94-17-395	1994	29-Sep-94	[Refer to decision]	9.4.4.4. and 4.1.1.3.(1)	160/93
94-16-394	1994	7-Jul-94	[Refer to decision]	9.19.1.3.(2)	160/93
94-15-393	1994	7-Jul-94	[Refer to decision]	3.4.6.2.	160/93
94-14-392	1994	31-May-94	[Refer to decision]	3.3.1.1. and 3.3.1.4.(1)(c)	160/93
94-13-391	1994	31-May-94	[Refer to decision]	9.9.9.3.(1)(a)	160/93
94-12-390	1994	31-May-94	[Refer to decision]	3.3.4.2.(2)(c)	400/91
94-11-389	1994	24-May-94	[Refer to decision]	9.14.2.1.(2.1)(c)	160/93
94-10-388	1994	24-May-94	[Refer to decision]	3.1.5.11.(5)	400/91
94-09-387	1994	25-Apr-94	[Refer to decision]	3.1.5.11.(6)	160/93
94-08-386	1994	25-Apr-94	[Refer to decision]	3.1.6.3.(2)	160/93
94-07-385	1994	24-May-94	[Refer to decision]	9.10.14.1.	115/89

94-06-384	1994	29-Mar-94	[Refer to decision]	9.9.2.7. and 3.7.1.2.	115/89
94-05-383	1994	29-Mar-94	Determine whether the construction requirements of the exposing building face of a firewall erected at or upon a line separating 2 parcels of land complies with 9.10.14.11.	9.10.14.11.	160/93
94-04-382	1994	22-Feb-94	Determine whether providing smoke detectors in the public corridor connected to the fire alarm annunciator panel provides sufficiency of compliance.	3.3.1.9.(8)	160/93
94-03-381	1994	22-Feb-94	[Refer to decision]	3.2.4.8.(1)(h) , 3.2.4.16.	413/90
94-02-380	1994	22-Feb-94	[Refer to decision]	3.2.9.1.(1)	413/90
94-01-379	1994		[Refer to decision]	s 3.2.2.26.(2)(b)	
93-9-365	1993		[Refer to decision]	, 3.4.4.4.(7)	413/90
93-8-364	1993		[Refer to decision]	, 3.7.2.3.(1)	413/90
93--7-363	1993		[Refer to decision]	3.2.5.13.(1)	413/90
93-6-362	1993		[Refer to decision]	3.1.2.1.	413/90
93-5-361	1993		[Refer to decision]	3.4.6.15.(4)	413/90
93-4-360	1993		[Refer to decision]	3.4.6.15.(4)	413/90
93-3-359	1993		[Refer to decision]	3.4.6.15.(4)	413/90
93-2-358	1993		[Refer to decision]	9.5.1. , 3 , 4 , 5 , 9.7.1.2.	413/90
93-22-378	1993	20-Dec-93	[Refer to decision]	9.29.2.1.	413/90
93-21-377	1993	20-Dec-93	[Refer to decision]	3.1.11.2.(1)	413/90
93-20-376	1993	20-Dec-93	[Refer to decision]	9.10.14.1. and 9.10.14.12.(4).	413/90
93-19-375	1993	20-Dec-93	[Refer to decision]	3.4.2.3.(1)(a)	413/90
93-18-374	1993	1-Nov-93	[Refer to decision]	6.2.3.11.(2)	413/90
93-17-373	1993	1-Nov-93	[Refer to decision]	9.14.2.1.(2.1)(c) and 9.25.4.9.(2)(c)	413/90

93-16-372	1993	1-Nov-93	[Refer to decision]	3.1.6.2.(3)	413/90
93-15-371	1993	21-Oct-93	[Refer to decision]	3.2.8.2.(6) and 3.3.1.4.(1)(c)	413/90
93-14-370	1993	21-Oct-93	[Refer to decision]	3.2.7.9.	413/90
93-1-357	1993		[Refer to decision]	11.2.2.1. and 3.2.9.3.	413/90
93-13-369	1993	21-Oct-93	[Refer to decision]	3.2.7.9.	413/90
93-12-368	1993	10-Aug-93	[Refer to decision]	3.1.6.3.(2)	413/90
93-10-366	1993	10-Aug-93	[Refer to decision]	3.2.2.22.(4)	413/90



Ruling No. 04-04-959
Application No. 2003-66

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 3.8.1.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Arnon Kaplansky, Kaplansky Development Inc., for the resolution of a dispute with Rocky Cerminara, Chief Building Official, City of London, to determine whether the as-constructed Group C occupancy that is constructed as a three-storey residential house that includes a total of four separate suites, and which does not provide barrier-free access to the GroundFloor, complies with Article 3.8.1.1. of the Ontario Building Code at 1164, 1166, 1168, and 1170 Richmond Street, London, Ontario.

APPLICANT	Arnon Kaplansky Kaplansky Development Inc. London, Ontario
RESPONDENT	Rocky Cerminara (Via Teleconference) Chief Building Official City of London
PANEL	Len King, Vice-Chair Robert De Berardis Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	January 22, 2004
DATE OF RULING	January 22, 2004
APPEARANCES	Kim Karn Larden Muniak Consulting Inc. Toronto, Ontario **Agent for the Applicant**

RULING

1. The Applicant

Arnon Kaplansky, Kaplansky Development Inc., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and has constructed four, 4-unit dwellings at 1164, 1166, 1168, and 1170 Richmond Street, London, Ontario.

2. Description of Construction

The Applicant has constructed four, three storey Group C residential occupancy buildings having building areas of approximately 127 m^2 to 128 m^2 (1,370 m^2 to 1,378 ft^2). The structures are comprised of combustible construction and each building contains four units stacked such that there is an apartment on each of floors one, two and three as well as in the basement.

The main floor entrance to each building is positioned at grade. A landing is situated between the basement apartment level and the first storey apartment with approximately six steps up to the first storey and six steps down to the basement apartment. The buildings have not been constructed to provided barrier-free access to the principle entrance storey (first storey).

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-constructed three storey, four-plex buildings, which do not provide barrier-free access to the ground floor, comply with the provisions of Article 3.8.1.1. of the Ontario Building Code.

Article 3.8.1.1. stipulates that the barrier-free design requirements of the Building Code apply to all buildings with certain exceptions. In Clause 3.8.1.1.(1)(a) exceptions are specified as being "houses, including semi-detached houses, duplexes, triplexes, town houses, row houses and boarding or rooming houses with fewer than 8 bodies." Clauses (b) and (c) also provide exceptions for Group F, Division 1 buildings and buildings that are not intended to be occupied daily or on a full time basis, including automatic telephone exchanges, pumphouses and substations.

As noted above, the subject residential buildings each contain four residential units and do not provide barrier-free access to the ground floor level. The matter to be determined, therefore, is whether the Code requires that barrier-free access be provided in this instance when considering the provisions of Article 3.8.1.1.

4. Provisions of the Ontario Building Code

Section 3.8. Barrier-Free Design
Subsection 3.8.1. General

Article 3.8.1.1. Application

(1) The requirements of this Section apply to all *buildings* except
(a) houses, including semi-detached houses, duplexes, triplexes, town houses, row houses and boarding or rooming houses with fewer than 8 boarders or roomers,
(b) *buildings* of Group F, Division 1 *major occupancy*, and

(c) *buildings* which are not intended to be occupied on a daily or full time basis, including automatic telephone exchanges, pumphouses and substations.

5. Applicant's Position

The Agent for the Applicant advised that the subject three storey, Group C buildings fall under Part 9 of the Building Code. He noted that each building contains one suite for each above grade storey and a fourth suite in the below grade (basement) level. Each floor is provided with two exits. He suggested that the design, in this respect, is similar to a triplex and, therefore, should be exempt from the barrier-free requirements found in Section 3.8. of the Code. It was submitted that the intent of Clause 3.8.1.1.(1)(a) was to exempt residential houses which are three storeys or less from having to provide barrier-free access.

The Agent submitted that the Applicant was unaware of the requirements for barrier-free access prior to submitting the permit application drawings. He stated that, on the understanding of the parties that this issue would be brought to the Building Code Commission, the permit drawings were revised to show a lift that would service the first floor suite with the appropriate door sizes to meet the barrier-free requirements. He noted, however, that even if the entrance to the ground floor suite was constructed to be barrier-free, the interior of the suite is not barrier-free in design. He suggested that a person requiring barrier-free access would not likely choose to reside in these particular buildings and noted that the units are marketed as student housing. He pointed out that other accommodations in the area would be the preferred option for individuals requiring barrier-free access.

The Agent also submitted that the provision of a lift to provide access to the first storey suite may be cause for other, non Code-related concerns. He again noted that these units are aimed at students and suggested that the lift may be misused by the target residents. Further, regular maintenance of the lift would required.

In summation, the Agent submitted that the subject buildings, with one storey below grade and three storeys above, could be considered similar to a triplex and, therefore, meet the intent of the Code in respect to permitted exceptions to barrier-free requirements. He reiterated that there are other barrier-free student units in the area and restated his opinion that a lift may pose a safety hazard or liability to potential student residents of the buildings. He noted further that the Applicant's insurance carrier has concerns with the provision of lifts because of the potential for misuse by residents.

6. Respondent's Position

The Respondent submitted that, at the preliminary review of the proposed building design, and again at the plans examination stage of the project, the Applicant was advised by municipal staff of the need to provide barrier-free access to the principal entrance storey of the subject buildings. Although the Applicant disagreed with staff's assessment, the drawings were revised to incorporate a lift to the first storey and a permit was issued on the understanding that the matter would be appealed to the Building Code Commission.

The Respondent stated that, in his opinion, the Code is quite clear. Article 3.8.1.1. provides an exception for certain classes of houses but does not exempt four-plexes. As such, the entrance door from exterior grade level, the path of travel to the suite and doors within the suite to the bedrooms and to one bathroom must comply with the Code requirements for barrier-free accessibility.

The Respondent suggested that the Applicant's argument with respect to the misuse of the lifts should not be considered a significant factor in deciding whether to apply the requirements of the Building Code. He agreed that the units were marketed to students but stated that students require barrier-free designed accommodations as much as the remainder of the population. The Respondent submitted that, while he is sympathetic to the concerns of the Applicant, he is bound by the wording of Article 3.8.1.1. of the Building Code.

In summation, the Respondent submitted that not only is the provision of a lift an obligation of the Applicant under the Building Code but also a requirement of an agreement entered into between the Applicant and the municipality. Further, the Respondent agreed that, if only the above grade levels of the building were occupied, the building could be considered a triplex. He argued, however, that four units have been constructed in this building and, as such, it is being treated as a four-plex which is not exempt by the Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-constructed three-storey residential building plus basement level, which contains four separate dwelling units and that does not provide barrier-free access to the Ground Floor, fails to comply with Article 3.8.1.1. of the Ontario Building Code at 1164, 1166, 1168, and 1170 Richmond Street, London, Ontario.

8. Reasons

i) Sentence 3.8.1.1.(1) of the Ontario Building Code exempts single-unit dwellings, duplexes, and triplexes from the requirements of barrier-free design. Each of the as-constructed residential buildings are four-plexes and are not a permitted exemption listed in Sentence 3.8.1.1.(1) of the Ontario Building Code

Dated at Toronto this **22nd** day in the month of **January** in the year **2004** for application number **2003-66**.

Len King, Vice-Chair

Robert De Berardis

Gary Burtch



Ruling No. 04-09-964
Application No. 2003-68

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 2.4.1.1.(5) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Tae Wan Cheng, Arnold's Sports Bar, for the resolution of a dispute with John Tutert, Manager of Inspection Services, Town of Oakville, to determine whether the existing enclosed canopy, intended for use as an indoor and outdoor patio, which is attached to the wall of an existing Group A, Division 2 occupancy, provides sufficiency of compliance with Sentence 2.4.1.1.(5) of the Ontario Building Code at Arnold's Sports Bar, 485 Morden Road, Town of Oakville, Ontario.

APPLICANT	Tae Wan Cheng Arnold's Sports Bar Oakville, Ontario
RESPONDENT	John Tutert Manager of Inspection Services Town of Oakville
PANEL	Michael Steele, Vice-Chair John Guthrie Robert De Berardis
PLACE	Toronto, Ontario
DATE OF HEARING	March 4, 2004
DATE OF RULING	March 4, 2004
APPEARANCES	Richard Yoon Yoon & Associates Engineering Ltd. Toronto, Ontario **Agent for the Applicant** John Tutert Manager of Inspection Services Town of Oakville **The Respondent**

RULING

1. The Applicant

Tae Wan Cheng, Arnold's Sports Bar, has received an Order to Comply and has applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, in relation to the construction of an addition to an existing establishment known as Arnold's Sports Bar, 485 Morden Road, Town of Oakville, Ontario.

2. Description of Construction

The Applicant is the owner of Arnold's Sports Bar, an existing one storey, Group A, Division 2 occupancy building having a building area of approximately 788 m^2. The existing building is comprised of combustible construction and (according to the Respondent) is equipped with a standpipe and hose system but not a fire alarm or sprinkler system.

The Application to the Building Code Commission concerns the construction of an addition to the existing building to be used for the purposes of a "smoking room". The addition measures 5.3 m (17 ft 6 in) by 11.9 m (39 ft) as indicated on drawing A-02 submitted by the Applicant. It is described as an enclosed patio area for use by a maximum of 20 patrons of the establishment. The walls and sloped roof of the addition are framed in structural steel and will be clad with vinyl coated polyester fabric supplied by Soper's Engineered Fabric Solutions. The exit door on the north face of the existing building opens into the new addition.

In respect of this construction, the Applicant is offering certain measures to mitigate any concerns with respect to the Code requirements for what he describes as a "tent" structure. These compensating measures include two new exit doors that will lead directly from the proposed enclosed patio area, portable fire extinguishers that will be located along each wall of the addition and a Fire Safety Program that will be upgraded including requirements for the training of staff in accordance with an emergency response plan.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the enclosed patio addition, attached to the side wall of an existing A2 occupancy building, provides sufficiency of compliance with Sentence 2.4.1.1.(5) of the Building Code, when considering the compensating measures offered by the Applicant.

Sentence 2.4.1.1.(5) states that a tent (or group of tents) is exempt from the requirement to obtain a building permit and from the provisions of the Building Code provided that the tent is not more than 60 m^2, is not attached to a building and is constructed more than 3 m from another structure.

The subject enclosed outdoor patio addition measures 5.3 m by 11.9 m and is attached to the side of the existing building. It is intended to be a permanent enclosure for use as a "smoking room" associated with the smoke-free interior of the sports bar. As noted above, certain compensating measures are being offered in an attempt to offset any concerns with the construction of the proposed addition.

4. Provisions of the Ontario Building Code

Sentence 2.4.1.1.(5)

(5) A tent or group of tents is exempt from the requirement to obtain a permit under Section 8 of the Act and is exempt from compliance with the Code provided that the tent or group of tents are:

(a) not more than 60 m^2 (646 ft^2) in aggregate ground area,
(b) not attached to a *building*, and
(c) constructed more than 3 m (9 ft 10 in) from other structures.

5. Applicant's Position

The Agent for the Applicant described the enclosed canopy structure and outlined the measures being offered to compensate for the fact that the "tent" structure will be attached to the side of the existing building. He noted that, although the patio area will be used year round, the fabric cover and steel framing will be removed during the summer months and then replaced to provide protection from the elements for the remainder of the year. He advised that the enclosed patio will provide shelter for patrons who smoke. He noted that the Town of Oakville Smoking By-law prohibits smoking inside any building, including the existing restaurant/sports bar.

The Agent submitted that the compensating measures being offered, including the proposal for two fire exits, non-combustible fabric and steel framing, portable fire extinguishers and an upgraded Fire Safety Program, will provide a significant level of safety. The Agent further suggested that the Applicant would be willing to abide by any additional conditions that may be imposed by the Commission in respect of the proposed construction.

6. Respondent's Position

The Respondent submitted that he views the structure as a tent. However, he noted Sentence 2.4.1.1.(5) precludes a tent from being attached to a building and requires a 3 m clearance from other structures. He noted that if only the canopy were to be considered, the Town would not have an issue. He stated, however, that the side walls, enclosing the area, constitute a "tent" and, therefore, the Code requirements surrounding this type of construction must be considered.

7. Commission Ruling

It is the decision of the Building Code Commission that the existing enclosed canopy, intended for use as an indoor and outdoor patio, and which is attached to the wall of an existing Group A, Division 2 occupancy, does not provide sufficiency of compliance with Sentence 2.4.1.1.(5) of the Ontario Building Code at Arnold's Sports Bar, 485 Morden Road, Oakville, Ontario.

8. Reasons

1. The existing canopy structure has not been constructed in accordance with the Ontario Building Code.

2. The existing canopy structure, when enclosed during the winter, is not considered a "tent" under Article 3.13.1.2. of the Ontario Building Code.

Dated at Toronto this **4th** day in the month of **March** in the year **2004** for application number **2003-68**.

Michael Steele, Vice-Chair

John Guthrie

Robert De Berardis



Ruling No. 04-27-982
Application No. 2004-19

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.8.8.8.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Edward Leerdam, IBM Canada, for the resolution of a dispute with John DeVries, Chief Building Official, Town of Richmond Hill, to determine whether the as-constructed exterior deck serving a Group C occupancy, which is comprised of a composite material referred to as "Life-Long Decking" that is manufactured by Brite Manufacturing Inc., will provide sufficiency of compliance with Articles 9.8.8.8. and 4.1.10.1. of the Ontario Building Code at 193 Sunset Beach Road, Richmond Hill, Ontario.

APPLICANT	Edward Leerdam IBM Canada Richmond Hill, Ontario
RESPONDENT	John DeVries Chief Building Official Town of Richmond Hill
PANEL	John Guthrie, Chair-Designate Gary Burtch Fred Barkhouse
PLACE	Toronto, Ontario
DATE OF HEARING	June 17th, 2004
DATE OF RULING	June 17th, 2004
APPEARANCES	Andrew Rush Brite Manufacturing Inc. **Agent for the Applicant** Morris Lucchetta Manager of Inspections Town of Richmond Hill **Designate for the Respondent**

RULING

1. The Applicant

Edward Leerdam, IBM Canada, has received an Order to Comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, to rectify certain alleged deficiencies at 193 Sunset Beach Road, Richmond Hill, Ontario.

2. Description of Construction

The Applicant is the owner of a one storey Group C dwelling for which a permit was issued for the construction of a deck in the rear yard of the subject property. The subject deck has been constructed and measures 24.15 m^2 (260 ft^2).

The construction in dispute involves the materials used in the construction of the subject deck and the installation of the guard. The deck has been constructed using hollow 5/4 deck plank composite material, referred to as "Life-Long Decking", manufactured by Brite Manufacturing Inc. The materials used as both the deck planks and guard have been have undergone testing by Intertek Testing Services NA Ltd. and have been certified by a professional engineer as meeting the performance measures specified in the Code. The materials, however, are not listed in the Supplementary Guidelines to the Building Code nor has the product received approval from either the Canadian Construction Materials Centre (CCMC) or the Building Materials Evaluation Commission (BMEC).

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the use of "Life-Long Decking", manufactured by Brite Manufacturing Inc., provides sufficiency of compliance with Articles 9.8.8.8. and 4.1.10.1. of the Building Code (OBC).

Sentence 9.8.8.8.(1) specifies that, except as permitted in Sentence 9.8.8.8.(2), guards are to be constructed in accordance with Article 4.1.10.1. Article 4.1.10.1. specifies the minimum construction requirements in respect of loads on guards. Sentence 9.8.8.8.(2) states that, where guards are to be constructed in accordance with the Supplementary Guidelines, they shall be deemed to comply with Sentence 9.8.8.8.(1).

The subject deck and associated guard are constructed of a composite material not referenced in the Supplementary Guidelines. As such, the Respondent questions whether the deck and guard, as installed using the subject material, will possess the necessary characteristics to perform their intended functions.

4. Provisions of the Ontario Building Code

9.8.8.8. Construction of Guards

(1) Except as permitted in Sentence (2), *guards* shall conform to the loading criteria in Article 4.1.10.1.

(2) Guards constructed in accordance with the requirements in the Supplementary Guidelines shall be deemed to satisfy the requirements of Sentence 9.8.8.8.(1).

4.1.10.1. Loads on Guards

(1) The minimum specified horizontal load applied inward or outward at the top of every required *guard* shall be

(a) 3.0 kN/m (200 lb/ft) for *means of egress* in grandstands, stadia, bleachers and arenas,

(b) a concentrated load of 1.0 kN (225 lb) applied at any point for access walkways to equipment platforms, contiguous stairs and similar areas where the gathering of many people is improbable, and

(c) 0.75 kN/m (50 lb/ft) or a concentrated load of 1.0 kN (225 lb) applied at any point, whichever governs, for locations other than described in Clauses (a) and (b).

(2) Individual elements within the *guard*, including solid panels and pickets, shall be designed for a concentrated load of 0.5 kN (113 lb) at any point in the element.

(3) The loads required in Sentence (2) need not be considered to act simultaneously with the loads provided for in Sentences (1) and (4).

(4) The minimum specified load applied vertically at the top of every required *guard* shall be 1.5 kN/m (100 lb/ft) and need not be considered to act simultaneously with the horizontal load provided for in Sentence (1).

5. Applicant's Position

The Agent for the Applicant noted that Brite Manufacturing Inc. is a relatively large organization involved in the manufacturing of wood composite decking. He stated that they have been producing the subject product for approximately seven years and have been selling within Ontario for the last four years. They have investigated approvals through CCMC but, in other municipalities, the officials have accepted drawings stamped by a professional engineer as equivalent to the Code requirements.

The Agent submitted that extensive testing has been conducted by Intertek Testing Services NA Ltd. on the composite material and the railing system. He referred to the engineering report submitted as evidence, noting that the composite material had been tested for, among other things, structural load, to determine deck board span; creep relaxation; mechanical fastener testing; freeze-thaw resistance; durability; coefficient of friction; fire resistance; resistance to termites; low temperature effect, etc.

The Agent noted that the Town had issued an Order to Comply in connection with the subject deck, which listed contraventions with the Building Code in connection with the deck installation and materials, guard height and guard installation. The Agent confirmed that the guard height will be remedied, but disputed the Order in connection with the installation and material requirements of the Code. He submitted that the subject deck had been installed in accordance with the manufacturers guidelines and while this material is not listed in the Supplementary Guidelines, in his opinion, testing has shown that sufficiency of compliance with the Building Code requirements will be achieved.

6. Respondent's Position

The Designate for the Respondent submitted that the composite material that has been used in the construction of this deck is not recognized by the Building Code. He advised that the Town had issued a permit based on the provision of wood guards. He suggested that the manufacturer should more appropriately have this product evaluated by a body such as CCMC. This would provide assurance to municipal building officials in respect to material performance and installation requirements. He pointed out that, if proven to be an effective alternative, a Minister's Ruling could be issued to recognize the product for province-wide application.

The Designate submitted that, in his opinion, the guards have not been installed in accordance with the Code requirements and, therefore, cannot be accepted by the municipality. He specified concern with the connections and balusters. Further, he reiterated his position that the material is not referenced in the Building Code and has not being accepted as equivalent by the Town. He noted that the municipality does not have the resources to throughly examine and analyse testing documentation in connection with this innovative product.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-constructed exterior deck serving a Group C occupancy, which is comprised of a composite material referred to as "Life-Long Decking" that is manufactured by Brite Manufacturing Inc., will provide sufficiency of compliance with Articles 9.8.8.8. and 4.1.10.1. of the Ontario Building Code at 193 Sunset Beach Road, Richmond Hill, Ontario, on the condition that:

a) An independent third-party engineer, who is knowledgeable of the materials regarding the composite deck and guard in question, approves the design and construction details of the exterior deck and guard at dispute.

8. Reasons

i) During the hearing, it was advised that the Applicant party is prepared to correct the deficiencies with respect to the guard height and connectors.

ii) Upon fulfilment of the above cited condition, the Commission is satisfied that the as-constructed exterior deck at 193 Sunset Beach Road, Richmond Hill, Ontario will provide sufficiency of compliance with Articles 9.8.8.8. and 4.1.10.1. of the Ontario Building Code.

iii) This decision is site-specific and only applies to the exterior deck located at 193 Sunset Beach Road, Richmond Hill, Ontario.

Dated at Toronto this **17th** day in the month of **June** in the year **2004** for application number **2004-19**.

John Guthrie, Chair-Designate

Gary Burtch

Fred Barkhouse



Ruling No. 04-32-987
Application No. 2004-24

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Clause 3.3.2.1.(1)(c) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Blair Kohlmeier, Stafford Haensli Architects Inc., for the resolution of a dispute with Doug Robertson, Chief Building Official, Town of Tillsonburg, to determine whether the omission of continuous guards between constructed rows of successive fixed seating provides sufficiency of compliance with Clause 3.3.2.8.(1)(c) of the Ontario Building Code at the Tillsonburg Community Centre and Arena Complex, 45 Hardy Avenue, Tillsonburg, Ontario.

APPLICANT	Blair Kohlmeier Stafford Haensli Architects Inc. Mississauga, Ontario
RESPONDENT	Doug Robertson Chief Building Official Town of Tillsonburg
PANEL	Tony Chow, Chair John Guthrie Michael Steele
PLACE	Toronto, Ontario
DATE OF HEARING	July 22, 2004
DATE OF RULING	July 22, 2004
APPEARANCES	Rick Mori Leber Rubes Inc. Toronto, ON **Agent for the Applicant** Doug Robertson Chief Building Official Town of Tillsonburg **The Respondent**

RULING

1. The Applicant

Blair Kohlmeier, Stafford Haensli Architects Inc., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and has undertaken an extensive renovation at the Tillsonburg Community Centre and Arena Complex at 45 Hardy Avenue, Tillsonburg, Ontario.

2. Description of Construction

The Applicant has constructed an addition to, and renovation of, a combination Group A, Division 2 and Group A, Division 3 facility, having a building height of 2 storeys and building area of approximately 10,000 m^2. The structure is comprised of a combination of combustible and noncombustible construction and is partially equipped with both sprinkler and standpipe and hose systems. In addition, a fire alarm system serves the entire building.

The construction in dispute involves the fixed seating arrangement where no fixed guard is provided between successive rows of seating. The community centre complex has approximately 750 fixed seats with backs arranged in five tiers with a 600 mm vertical rise between each tier. The risers are constructed of precast concrete steps. The subject stepped seating arrangement has been designed in accordance with NFPA 101 "Life Safety Code" requirements. The fixed seat backs on each level project 228 mm above the adjacent platform and a clearance distance of approximately 500 mm is provided between the seat backs and the seats above (in the unoccupied position). In addition, handrails will be installed at the centre of the stepped aisles serving the seating areas.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed stepped seating arrangement, that does not include a guard between each successive row of fixed seating, provides sufficiency of compliance with Clause 3.3.2.8.(1)(c) of the Building Code.

Clause 3.3.2.8.(1)(c) requires that, where seating is arranged in successive tiers and the rise between the platform measures more than 450 mm, the height of the guards is to be not less than 660 mm along the entire row of seats.

As noted above, the rise between platforms measures 600 mm, however, no guard is proposed between the rows of fixed seating.

4. Provisions of the Ontario Building Code

Clause 3.3.2.8.(1)(c)

(1) Except as required by Sentences (2) to (4) for bleacher seats, guards shall be installed in outdoor and indoor places of assembly with fixed seats so that

> (c) where the seating is arranged in successive tiers and the height of rise between platforms is more than 450 mm (17¾ in), the height of guards is not less than 660 mm (2 ft 2 in) along the entire row of seats at the edge of the platform.

5. Applicant's Position

The Applicant provided the Commission with an overview of the extensive renovation and expansion of the existing facility and highlighted several limitations on the subject construction. He acknowledged the Building Code issue that resulted in this dispute and noted several compensating measures that would ensure the safety of patrons to the stadium. He advised that handrails would be installed in the aisles, bright paint would be applied to the edge of the stairs, and gaps between seat backs would be minimized where possible. He suggested that most falls occur on the stairs rather than in the cross-aisle spaces between seats. In this regard, the handrails at the stepped aisles will increase the overall level of occupant safety, he submitted.

The Agent for the Applicant continued by advising that there is a clear 500 mm row width, which exceeds the requirements established in the Building Code. This would also contribute to the safety of the design, he submitted. He noted that seating is limited to 750 persons and exiting can be accomplished safely. The Agent pointed to the similarities between the subject dispute and an earlier ruling of the Building Code Commission involving the Corel Centre in Ottawa. He also noted that the subject proposal meets the requirements of NFPA 101 "Life Safety Code" which does not require fixed guards between adjacent rows, but admitted that NFPA 101 was not used as the design basis for the entire building.

In summation, the Agent for the Applicant argued that the seat back projection above the walking surface of an adjacent row is not mandated by the Building Code. He submitted that, if no seats were present and the rows were limited to standing room only, there would be no requirement for guards at the edge of the platforms. He questioned why guards would be required where seats are present and suggested that tiers of fixed seats, with fixed seat backs, perform in an acceptable manner without the provision of between-row guards.

6. Respondent's Position

The Respondent submitted that his primary concern is that the back of the seats represent a tripping hazard as the projection is too low and infringes upon the walking surface of the rows behind. He suggested that this tripping hazard is exacerbated by the lack of guard to protect from falling over the top of seats into the rows below.

The Respondent noted that the original design of the seating was not to NFPA 101 and argued that this standard has been used selectively by the Applicant. He submitted that he did not have the authority to permit this alternate design as it deviates from the Building Code and the anticipated acceptance of equivalents as regulated by Section 2.7. of the Code. Although unable to accept the subject proposal, he suggested that by adding handrails in the centre of the stairways, marking the nosing in a contrasting colour and placing guards in any gaps between seats where seat backs are not present, his safety concerns may be somewhat alleviated and a sufficient level of compliance may be achieved.

7. Commission Ruling

It is the decision of the Building Code Commission (the "BCC") that the omission of continuous guards between the constructed rows of successive fixed seating provides sufficiency of compliance with Clause 3.3.2.8.(1)(c) of the 1997 Ontario Building Code (the "Building Code") at the Tillsonburg Community Centre and Arena, 45 Hardy Avenue, Tillsonburg, Ontario, on the condition that:

1. The gaps and spaces between seating within rows be provided with guards to the satisfaction of the Chief Building Official;

2. The handrails will be installed at the centre of the stepped aisles as described in the appropriate section of NFPA 101;

3. The leading edge of the steps on the aisle be identified by stripes of contrasting colour.

8. Reasons

i) The clear width between the back of seats and the projection of seats in the unoccupied position is 500 mm, being 100 mm greater than the requirement of Clause 3.3.2.8.(1)(c);

ii) The back of the seats rise 228 mm above the platform level, which is greater than the dimension of a maximum riser and should minimize the potential of accidental tripping.

Dated at Toronto this **22nd** day in the month of **July** in the year **2004** for application number **2004-24**.

Tony Chow, Chair

John Guthrie

Michael Steele

Ontario

Ruling No. 04-33-988
Application No. 2004-28

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.4.6.3.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Bebe Arghirescu, President, All Saints Romanian Orthodox Church, for the resolution of a dispute with Bruce Ashton, Deputy Chief Building Official, City of Toronto, to determine whether the as-constructed landing serving a flight of stairs in a Group A, Division 2 occupancy provides sufficiency of compliance with Sentence 3.4.6.3.(2) of the Ontario Building Code at the All Saints Romanian Orthodox Church, 545 Danforth Road, Toronto, Ontario.

APPLICANT	Bebe Arghirescu, President All Saints Romanian Orthodox Church Toronto, Ontario
RESPONDENT	Bruce Ashton Deputy Chief Building Official City of Toronto
PANEL	Len King, Vice-Chair Fred Barkhouse Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	August 5, 2004
DATE OF RULING	August 5, 2004
APPEARANCES	Bebe Arghirescu, President All Saints Romanian Orthodox Church Toronto, Ontario **The Applicant** Jerry Cardwell Senior Inspector City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

Bebe Arghirescu, President, All Saints Romanian Orthodox Church, has received an Order to Comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, to re-construct a landing serving a flight of stairs at the All Saints Romanian Orthodox Church, 545 Danforth Road, Toronto, Ontario.

2. Description of Construction

The Applicant is renovating a place of worship having a Group A, Division 2 major occupancy classification. The one storey structure is approximately 285 m^2 in building area and is constructed with combustible materials. In addition to the one above-grade storey, the structure includes a subsurface basement level. The building is not equipped with a sprinkler system, a fire alarm system or a standpipe and hose system.

The renovations include the construction of a flight of stairs and a landing that form part of an emergency exit leading from the basement level to the exterior of the structure. There is a second exit stair that connects the basement to the first floor level. The new flight of stairs has a vertical rise of 2,616 mm (8 ft 7 in) and a width of 1,168 mm (3 ft 10 in). The stair treads have a slip resistant finish and the stairway is equipped with a handrail on both sides.

The landing is comprised of concrete slab and measures 686 mm (2 ft 3 in) from the top of the stairs to the exit door. The concrete slab extends 1,524 mm (5 ft) beyond the face of the building and the exit door swings over this slab. The door itself is equipped with panic hardware and swings outward in the direction of exit. It is the landing located at the top of this flight of stairs that is the subject of this dispute.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-constructed landing serving a flight of stairs in a Group A, Division 2 occupancy provides sufficiency of compliance with Sentence 3.4.6.3.(2) of the Ontario Building Code.

Sentence 3.4.6.3.(2) mandates that the length and width of a landing shall be at least the width of the stairway in which it occurs, except that in a straight run the length of the landing need not be more than 1,100 mm (3 ft 7 in). Sentence 3.4.6.3.(5) mandates that a landing be provided at the top and bottom of every flight of stairs.

Regarding the subject construction, a concrete slab, which forms the landing, extends from the top of the stairs beyond the face of the building and an exit door swings over the concrete slab landing. The concrete slab measures 2,210 mm in its entirety; with the interior portion measuring 686 mm (2 ft 3 in) in length and the exterior portion measuring 1,524 mm (5 ft).

4. Provisions of the Ontario Building Code

3.4.6.3. Landings and Maximum Vertical Rise of Stair Flights

(1) No flight of stairs shall have a vertical rise of more than 3.7 m between floors or landings, except that a flight of stairs serving as an *exit* in a Group B, Division 2 or 3 *occupancy* shall have a vertical rise not more than 2 400 mm between floors or landings.

(2) Except as provided in Sentence (6), the length and width of a landing shall be at least the width of the stairway in which it occurs, except that in a straight run the length of the landing need not be more than 1 100 mm.

(3) Where a doorway or stairway empties onto a ramp through a side wall, there shall be a level area extending across the full width of the ramp, and for a distance of 300 mm on either side of the wall opening, or on one side if the opening abuts on an end wall.

(4) Where a doorway or stairway empties onto a ramp through an end wall, there shall be a level area extending across the full width of the ramp and along its length for not less than 900 mm.

(5) A landing shall be provided at the top and bottom of every flight of stairs.

(6) Where the direction of *exit* travel changes at a landing, the landing is permitted to be chamfered or curved in plan, provided the required width of the stair is maintained where measured perpendicular to the direction of *exit* travel across the landing.

5. Applicant's Position

The Applicant began by acknowledging that the landing at the top of the new stair, which forms part of an emergency exit from the basement, was not constructed as planned. The concrete slab, which extends 686 mm (2 ft 3 in) from the top of the stairs to the exterior doorway threshold, is less than the required 1,100 mm (3 ft 7 in) for a landing as prescribed in Sentence 3.4.6.3.(2) of the Code. The renovated basement is additional space intended for use as storage and occasional church business. In describing the as-built stairway, the Applicant noted that handrails have been installed on both sides and that the exterior door, which swings in the direction of exit, is equipped with panic hardware. The door is used for exiting the building only. He emphasized that there is no hardware on the exterior of the door so it cannot be used as an entrance. The concrete slab, which includes the landing, is level, with the exception of an aluminium threshold in the exterior doorway and the slab extends beyond the exterior face of the building.

The Applicant was asked to describe the church business and responded that the area would be used for meetings and work space when preparing for church functions. The Applicant did not anticipate that more than thirty people would occupy the basement level at any one time and submitted that this area would only be used occasionally.

6. Respondent's Position

The Designate for the Respondent submitted that the landing was not constructed according to the plans examined when the building permit was issued. An Order to Comply was issued to the Applicant after the inspection revealed that the landing at the top of the new stairs was 686 mm (2 ft 3 in) in length. The Applicant was ordered to extend the landing at the top of the new stair to not less than 1,100 mm (3 ft 7 in) to meet the requirements of the Building Code.

The Designate stated that while he did not consider this to be a life safety issue the landing does not comply with the Building Code. He confirmed that the new stairs were not the main stairs for the basement level and the stairway leads directly to the exterior of the structure.

In summation, the Designate stated that the issue is one of liability and of safety; the landing is only two-thirds of the minimum length required for a stairway of this width. The provisions of the Building Code in this dispute involve safety and the deficiency is material in nature, the Designate maintains that the landing does not comply with the prescriptive requirements outlined in the Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-constructed landing serving a flight of stairs in a Group A Division 2 occupancy provides sufficiency of compliance with sentence 3.4.6.3.(2) of the Ontario Building Code at the All Saints Romanian Orthodox Church, 545 Danforth Road, Toronto, based on the following conditions:

1) The emergency lighting installed at the top and bottom of the stairs continues to be maintained.

2) The panic hardware on the exterior door providing egress only (with no exterior hardware) continues to be maintained.

3) The maximum occupancy of the cellar be 60 persons and be posted as such.

4) The exit stairs will be used only for exiting and no other purpose. In particular, no storage is to take place in the stairway.

8. Reasons

i) The concrete slab, which contains the landing portion at the top of a flight of stairs that lead to the exterior of the building, exceeds the minimum length for a stairway that is 1.1684 m (3 ft 10) wide.

ii) The exit stairs will be used only for exiting and for no other purpose. The exterior door has panic hardware and provides exterior egress only.

iii) These and the other compensating measures provide sufficiency of compliance in this dispute.

Dated at Toronto this **5th** day in the month of **August** in the year **2004** for application number **2004-28**

Len King, Vice-Chair

Fred Barkhouse

Gary Burtch



Ruling No. 04-34-989
Application No. 2004-30

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 1.-(1) and Subsection 24.-(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 1.1.3.2.(1) of Regulation 403/97, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Paul Madracki in Trust, Sutton Self Storage, for the resolution of a dispute with Deborah Buck, Chief Building Official, Town of Georgina, to determine whether the existing outdoor portable metal containers that are used for public storage are considered to be "buildings" under Section 1.-(1) of the *Building Code Act, 1992* at Sutton Self Storage, 4428 Baseline Rd., Sutton, Ontario.

APPLICANT	Paul Madracki in Trust Sutton Self Storage Sutton, Ontario
RESPONDENT	Deborah Buck Chief Building Official Town of Georgina
PANEL	Len King, Vice-Chair Fred Barkhouse Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	August 5, 2004
DATE OF RULING	August 5, 2004
APPEARANCES	Robert Madracki Sutton Self Storage Sutton, Ontario **Agent for the Applicant** Glenn Middlebrook Senior Building Inspector Town of Georgina **Designate for the Respondent**

RULING

1. The Applicant

Paul Madracki in Trust has received an Order to Comply, under the *Building Code Act*, S.O. 1992, c. 23, as amended, to apply for and obtain building permits for public storage buildings at Sutton Self Storage, 4428 Baseline Road, Sutton, Ontario.

2. Description of Construction

The Applicant is using metal shipping containers as self-storage units at a public self-storage facility in Sutton, Ontario. The shipping containers were manufactured at another location and then transported to this site and placed on concrete footings. The units measure 2.440 m (8 ft) wide and 2.440 m (8 ft) high. They vary in length from 3.048 m (10 ft) to 12.192 m (40 ft). The building area of the subject containers ranges in size from 14.86 m^2 (160 ft^2) to 29.73 m^2 (320 ft^2). The Applicant has modified some of the storage units by installing roll up type doors to provide access to the units. The self-storage units are arranged in rows and are accessible to the public for the storage of goods.

3. Dispute

The issue at dispute between the Applicant and the Respondent is whether the existing portable metal containers, which are used for public storage, are considered "buildings" under the *Building Code Act, 1992*.

Pertinent to this dispute are various defined terms set out in the *Building Code Act, 1992* and the Building Code. In particular, the definition of "building" in Subsection 1.(1) of the Act includes "a structure occupying an area greater than 10 m^2 consisting of a wall, roof and floor". Further, the term "construct", as defined by the Act, "means to do anything in the erection, installation, extension or material alteration of a building unit fabricated or moved from elsewhere".

Another concept germane to this dispute is the term "occupancy" which is defined in the Building Code as "the use or intended use of a building or part thereof for the shelter or support of persons, animals or property".

As noted above, the subject dispute involves the use of portable metal storage containers as units at a public self-storage facility.

4. Provisions in Dispute

The *Building Code Act, 1992*

Subsection 1.-1 Definitions

1.-(1) In this Act,
"building" means,
(a) a structure occupying an area greater than ten square metres consisting of

a wall, roof and floor or any of them or a structural system serving the function thereof including all plumbing, works, fixtures and service systems appurtenant thereto,

(b) a structure occupying an area of ten square metres or less that contains plumbing, including the plumbing appurtenant thereto,

(c) plumbing not located in a structure,

(c.1) a sewage system

(d) structures designated in the building code;

"construct" means to do anything in the erection, installation, extension or material alteration or repair of a building and includes the installation of a building unit fabricated or moved from elsewhere and "construction" has a corresponding meaning;

The Building Code

1.1.3.2. Defined Terms

(1) The words and terms in italics in this Code have the following meaning for the purposes of this Code, and where indicated, the following meaning for the purposes of the Act as well.

Occupancy means the use or intended use of a *building* or part thereof for the shelter or support of persons, animals or property.

5. Applicant's Position

The Agent for the Applicant explained that the project was begun with the knowledge of the Town of Georgina. In 2001, the Applicant and the owner of an adjacent property submitted applications to the Committee of Adjustment for consent to sever their respective properties. The Applicant planned to use his property as a public self-storage facility and intended on converting shipping containers into self-storage units. In 2002, shipping containers were placed on the property. In April 2003, the Town of Georgina directed that the Applicant remove the shipping containers in order to comply with the Town of Georgina Zoning By-law #500, which prohibits the use of shipping containers for storage.

The Agent submitted a copy of the Order to Comply with the Building Code that was issued by the Town of Georgina on August 20, 2003. This Order required the Applicant to apply for building permits to erect public storage buildings, prohibited the use of the public storage buildings until permits were obtained and required the removal of the public storage buildings if permits could not be issued for any reason.

The Agent submitted that, in his opinion, the storage units retained the character of shipping containers because they were portable and, therefore, a building permit is not required. The Agent described how a shipping container is placed on concrete footings. The container could then be moved to another location on the property or placed on a transport trailer for delivery to another property. In response to questioning, the Agent advised that only a few containers have been moved to and from other properties since the business began operating.

The Agent referred to a site visit made by the Chief Fire Official. He noted that the Chief Fire Official was of the opinion that the self-storage units were not buildings, however the Agent admitted that he did not get that opinion in writing.

The Agent submitted additional exhibits at the hearing. The exhibits included copies of photographs that showed the use of shipping containers as self-storage units.

6. Respondent's Position

The Designate for the Respondent maintained that the Applicant constructed "buildings" when he placed shipping containers, occupying an area greater than 10 m^2, on the property for use as self-storage units. The Designate stated that the definition of *occupancy* in the Building Code would include public self-storage. He further submitted that the definition for *building* in the *Building Code Act, 1992* is fairly general for a reason. The Designate explained that a "building" is defined as "a structure occupying an area greater than ten square metres consisting of a wall, roof and floor or any of them or a structural system serving the function thereof". This definition, he stated, is broad enough so that many of the subject structures can be considered buildings. The Designate further stated that there are some self-storage units that are only 7.43 m^2 (80 ft^2) in size and that the Building Division of the Town of Georgina does not have an issue with those units.

The Designate said that an Order to Comply was issued because the Applicant did not obtain building permits for the subject shipping containers, which occupy an area greater than ten square meters. These shipping containers, he reiterated, are buildings being used as self-storage units.

7. Commission Ruling

It is the decision of the Building Code Commission that the existing outdoor portable metal containers that are used for public storage are considered to be "buildings" under Section 1.-(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended, at Sutton Self Storage, 4428 Baseline Rd., Sutton, Ontario.

8. Reasons

i) These containers consist of a wall, a floor and a ceiling or roof.

ii) Those containers that are occupying an area greater than ten square metres are buildings. The containers that are eight feet by twenty feet or eight feet by forty feet occupy areas greater than ten square metres.

iii) The applicants suggest that they are temporary although the first of which was installed in February 2002. Permanent or temporary, they are buildings.

iv) The containers are used for an occupancy, as defined in Part 1 of the Ontario Building Code. In this case they are intended to be used for the storage of property.

Dated at Toronto this **5th** day in the month of **August** in the year **2004** for application number **2004-30.**

Len King, Vice-Chair

Fred Barkhouse

Gary Burtch

Ontario

Ruling No. 04-04-1000
Application No. 2004-52

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 3.3.5.6 and 3.6.2.6 of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Building Code").

AND IN THE MATTER OF an application by Bruno Bartel, 20 Vic Management Inc., for the resolution of a dispute with Ann Borooah, Chief Building Official, City of Toronto, to determine whether the proposed compactor and scrap bin area in the basement level (former Eaton's basement retail area) provides sufficiency of compliance with Articles 3.3.5.6 and 3.6.2.6 of the Ontario Building Code, at the Yorkdale Shopping Centre, at 3401 Dufferin Street, Toronto Ontario.

APPLICANT	Bruno Bartel 20 Vic Management Inc., Toronto, Ontario
RESPONDENT	Ann Borooah Chief Building Official City of Toronto
PANEL	Tony Chow, Chair Yaman Uzumeri Gerry Egberts
PLACE	Toronto, Ontario
DATE OF HEARING	October 7, 2004
DATE OF RULING	December 20, 2004
APPEARANCES	David Syrett Leber Rubes Inc. Toronto, Ontario **Agent for the Applicant** Hung Yip Building Engineer City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

Bruno Bartel, 20 Vic Management Inc., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing an extension to the Yorkdale Shopping Centre, at 3401 Dufferin Street, Toronto, Ontario.

2. Description of Construction

The Applicant is constructing an extension to a large commercial development (Yorkdale Shopping Centre). This shopping centre has undergone several major additions and renovations in its history. The current expansion project consists of the redevelopment of a 3-storey department store (formerly Eaton's) and a 1-storey retail mall expansion having an area of 5,642 m^2. The subject building is classified as Group E and Group F, Division 2 occupancies and is comprised of noncombustible construction. It is equipped with sprinkler, fire alarm and standpipe and hose systems.

The construction in dispute involves a proposed new open truck loading area in the southeast corner of the existing parking garage. Specifically at dispute is a garbage compactor and scrap bin area which sits on a raised concrete platform within the open loading area. The garbage compactor area is separated from the parking garage by a 1,070 mm high pipe guardrail situated along the edge of the concrete platform. The ceiling height of the loading area and parking garage measures approximately 5 m and the east side of the parking garage is open to the outside. Further, the existing garage and the proposed truck loading area are sprinklered (as is the entire shopping centre).

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed garbage compactor and scrap bin area situated on the basement level of the existing shopping centre and separated from the existing parking garage by a pipe guardrail, provides sufficiency of compliance with Articles 3.3.5.6. and 3.6.2.6. of the Building Code.

Article 3.3.5.6. requires that a storage garage be separated from other occupancies by a fire separation having a fire-resistance rating of at least 1.5 hours. Further, Article 3.6.2.6. requires that a room used for the storage of combustible refuse shall be separated from the remainder of the building by a fire separation having a fire-resistance rating of not less than 1 hour and be sprinklered.

As noted above, the area subject to this dispute will house garbage compactors and scrap bins. The area is sprinklered and is proposed to be separated from the parking garage by a metal pipe guard.

4. Provisions of the Ontario Building Code

Article 3.3.5.6. Storage Garage Separation

(1) Except as permitted by Sentences 3.3.4.2.(4) and (5), a *storage garage* shall be separated from other *occupancies* by a *fire separation* with a *fire-resistance rating* not less than 1.5 h.

Article 3.6.2.6. Combustible Refuse Storage

(1) Except as required by Sentence 3.6.3.3.(9), a room for the storage of *combustible* refuse shall be

(a) separated from the remainder of the *building* by a *fire separation* with a *fire-resistance rating* not less than 1 h, and

(b) sprinklered.

5. Applicant's Position

The Agent for the Applicant summarized the nature of this dispute as being whether a fire separation was required between the truck loading area, which includes a raised platform for a trash compactor and bins, and the parking garage. In the opinion of the Agent, the existing 1.5 h fire separation between the existing parking garage and the remainder of the shopping centre satisfies the requirements of Articles 3.3.5.6. and 3.6.2.6. of the Building Code.

As further support for his position in this particular circumstance, the Agent advised that the parking garage has a height of 5 m, while only 2 m is required. He further noted that the truck loading area is fully sprinklered, as is the remainder of the shopping centre. He also explained that the eastern exterior wall of the loading area is completely open to a laneway. The Agent described the construction in dispute and advised that the area is relatively unenclosed, with no overhead door to the truck loading area. He noted that a compactor is situated to the west of the truck loading area, located on a raised platform and separated from the parking garage by a pipe guardrail. He acknowledged that this would create a physical separation of the two areas and believes that a fire separation between the compactor/storage bins and the parking garage is not necessary. He noted that it is often difficult to completely separate a compactor area and referred to similar circumstances that have been accepted in the past.

The Agent for the Applicant also advised the Commission of an opinion provided in 1987 from Code Interpretation staff at the Ministry of Municipal Affairs and Housing, on an unrelated matter, which supports the Applicant's position in this dispute. He noted that the Code requirements have not changed since the time the opinion was given.

The Agent described the function of the area and how garbage/refuse will be deposited by tenants of the shopping centre. The Agent for the Applicant advised that the metal scrap bins used in this location are open at the top. Tenants will use the bins to dispose of metal merchandising fixtures, however, the bins will not be used for the disposal of combustible material. He advised that the garbage compactors are fully enclosed and suggested that tenants would place refuse and empty cardboard containers in the compactors. He further advised that tenants are not to leave combustible materials on the floor within the loading/compactor areas.

In summation, the Agent reiterated that the truck loading area is open to the outside and, given the excess height of the parking garage, the area is naturally ventilated. He emphasized that there is an existing 1.5 hour fire separation between the parking garage and the existing mall, meeting the requirements of the Building Code. In his experience, he advised that it was not unusual to find compactors located on the loading dock without separation from either the loading area or any adjacent parking.

6. Respondent's Position

The Designate for the Respondent submitted that, in his opinion, the compactors and the scrap bins must be separated from the parking area in the basement with a 1.5 hour fire separation in accordance with Sentence 3.3.5.6.(1) of the Building Code. Further, in accordance with Clause

3.6.2.6.(1)(b) the proposed compactor and garbage storage areas must be sprinklered.

The Designate argued that he did not consider the loading area to be open, as suggested by the Applicant, as the laneway referred to, while open to above, is not open to the street. The 30 ft wide laneway only separates the basement level of the shopping centre from the multi-storey parking structure. He explained that the only access point for trucks/vehicles into the loading area is through the basement parking garage. Further, he noted that there is an exit door from an exit corridor than opens into this space. This exit leads to grade level by way of an exterior stair adjacent to the proposed compactor area.

The Designate acknowledged the 1987 opinion of the Ministry of Municipal Affairs and Housing but suggested that this was an old opinion that has never been formalized into an interpretation. He further noted that there was no impediment to constructing a 1.5 hour fire-separation in this area.

In summation, the Designation reiterated that, in his opinion, a fire-separation is required in this instance. He emphasized that the area is intended for refuse storage and noted that a “room” is expected for this purpose as suggested in Article 3.6.2.6. of the Code. A “room” would require walls and those walls, in his opinion, should provide the required fire-resistance rating mandated by the Code. He submitted that the proposed pipe guardrail does not satisfy the requirements of the Building Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed compactor and scrap bin area in the basement level of the subject retail mall provides sufficiency of compliance with Articles 3.3.5.6. and 3.6.2.6. of the Building Code at the Yorkdale Shopping Centre, 3401 Dufferin Street, Toronto, Ontario, on condition that:

a) Refuse materials will only be stored within the compactor and two storage bins and shall not be left outside of these containers on the platform and/or trucking area. Signs to that affect are to be posted in the immediate vicinity.

b) Materials to be disposed of in the scrap bins shall be limited to metal merchandising fixtures. A letter from the Management of the Yorkdale Shopping Centre confirming that the area will not be used for the disposal of combustible material shall be provided to the chief building official of the City of Toronto.

c) The quantity of material stored in this area shall be limited to 50 kg/m^2 of floor area meeting the definition for *low hazard industrial* occupancy as specified in Article 1.1.3.2. of the Building Code.

8. Reasons

i) The ceiling height of the existing parking garage and proposed open truck loading area is 5 m (16.4 ft) above the floor level and the eastern side of the garage is unenclosed.

ii) The compactor/scrap bin area is adjacent to a 9.1 m (30 ft) wide laneway that is open to above, providing direct venting to the exterior.

iii) The compactor and scrap bin area is located immediately adjacent to a fire route.

iv) The floor area is fully sprinklered, as is the retail mall.

v) The conditions of this ruling will effectively restrict the type and quantity of material stored in this area.

Dated at Toronto this **20th** day in the month of **December** in the year **2004** for application number
2004-52.

Tony Chow, Chair

Yaman Uzumeri

Gerry Egberts



Ruling No. 04-51-1006
Application No. 2004-50

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 3.2.3.7.(1) and 3.1.5.11.(3) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Walter Harhay, Harhay Construction Management, for the resolution of a dispute with Jim Laughlin, Director & Deputy Chief Building Official, City of Toronto, to determine whether the proposed exterior wall system that incorporates foamed plastic insulation and exterior cladding in an exterior wall of a Group C (Part 3) major occupancy building provides sufficiency of compliance with Sentences 3.2.3.7.(1) and 3.1.5.11.(3) of the Ontario Building Code, at 42-44 Camden Street, Toronto, Ontario.

APPLICANT	Walter Harhay Harhay Construction Management Etobicoke, Ontario
RESPONDENT	Jim Laughlin Director & Deputy Chief Building Official City of Toronto
PANEL	Tony Chow, Chair Susan Friedrich Rick Florio
PLACE	Toronto, Ontario
DATE OF HEARING	November 4, 2004 - and - January 17, 2005
DATE OF RULING	January 17, 2005
APPEARANCES	Harold Locke Locke & Locke Inc. Vancouver, British Columbia **Agent for the Applicant** Peter Au Manager, Plan Review City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

Walter Harhay, Harhay Construction Management, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing a residential apartment building at 42-44 Camden Street, Toronto, Ontario.

2. Description of Construction

The Applicant is constructing a 9 storey, Group C residential apartment building having a building area of 3,851 m^2. The building is to be comprised of noncombustible construction and, when completed, will be sprinklered and equipped with both fire alarm and standpipe and hose systems.

The construction in dispute involves the use of foamed plastic insulation in the exposing building face of the subject building where the walls abut adjacent property lines and where the resulting limiting distance permits unprotected openings of not more than 10%. In this case, the Applicant is proposing the use of the ECO-Block wall system. The components of this wall system include a reinforced concrete core, sandwiched between expanded polystyrene foam (EPS), and a noncombustible ADEX base coat and finish coat measuring 6.35 mm (¼ in) thick, applied to the exterior of the wall forms. The ECO-Block insulating concrete forms terminate at the underside of each reinforced concrete floor slab. Furthermore, no unprotected openings will penetrate the wall assembly where it abuts the adjacent property lines.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed wall assembly, incorporating foamed plastic insulation in the form of ECO-Block insulating concrete forms, provides sufficiency of compliance with the provisions of Sentences 3.2.3.7.(1) and 3.1.5.11.(3) of the Building Code.

Sentence 3.2.3.7.(1) provides that, except as permitted by Articles 3.2.3.9 and 3.2.3.10 of the Code, where a limiting distance is such that it permits an exposing building face to have unprotected openings of not more than 10% of the exposing building face, the construction of the exposing building face shall be of noncombustible construction having a fire-resistance rating of 1 hour. The exposing building face is also to be clad with noncombustible cladding.

Article 3.1.5.11. addresses the use of combustible insulation and its protection. Sentence 3.1.5.11.(3) prescribes protection for combustible insulation in exterior walls of a building where insulation is exposed to the adjacent spaces in the building.

In this particular dispute, the parties disagree as to the application and interpretation of the provisions of the Code. The Applicant argues that, by virtue of the protection prescribed in Sentence 3.1.5.11.(3), the Code would permit the use of foamed plastic insulation in an exterior wall of a building required to comply with Sentence 3.2.3.7.(1). On the other hand, the Respondent maintains that Sentence 3.2.3.7.(7) does not permit foamed plastic insulation for walls that are subject to the construction requirements of Sentence 3.2.3.7.(1) of the Building Code. Sentence 3.2.3.7.(7) provides that, except as permitted by Sentence (9) and, in addition to the requirements of Sentences (2), (3), (5) and (6), foamed plastic insulation must be protected on the exterior surface by

prescribed methods. Further, it is the Respondent's position that the subject ECO-Block insulating concrete forms and "cladding" are a joint system and cannot be considered as independent elements of construction.

A further aspect of the Code referenced in the consideration of this dispute involves the provisions of Sentence 3.1.5.5. as raised in the technical background information report prepared by the Building and Development Branch of the Ministry of Municipal Affairs and Housing in connection with this application. The Branch memo notes that Article 3.1.5.5. prescribes various conditions under which an exposing building face can contain combustible components. The Branch maintains, however, that these conditions do not apply to walls required to conform with Sentence 3.2.3.7.(1) or (4) or where foamed plastic insulation is protected in conformance with Sentences 3.2.3.7.(7) or (8). The Branch memo goes on to state that "Article 3.1.5.11. gives rules for the protection of combustible insulation when it is located in various parts of a building required to be of noncombustible construction. Provided the appropriate thermal barrier is used, and the combustible insulation is protected on the exterior by a cladding system conforming to Article 3.1.5.5. or Sentences 3.2.3.7.(7) and (8). However, this permission does not supersede the noncombustible cladding requirements of either Sentence 3.2.3.7.(1) or Sentence 3.2.3.7.(4)."

In considering all relevant Code provisions and the specific nature of the subject construction, the Commission will consider whether the subject proposal sufficiently complies with the requirements of the Building Code.

4. Provisions of the Ontario Building Code

3.2.3.7. Construction of Exposing Building Face

(1) Except as permitted by Articles 3.2.3.9. and 3.2.3.10., if a *limiting distance* shown in Table 3.2.3.1.A. or Table 3.2.3.1.C. for a Group A, B, C, D or Group F, Division 3 *occupancy* classification permits an *exposing building face* to have *unprotected openings* not more than 10% of the *exposing building face*, the *exposing building* face shall be

(a) of *noncombustible construction* having a *fire-resistance rating* not less than 1 h, and
(b) clad with *noncombustible* cladding.

3.1.5.11. Combustible Insulation and its Protection

(3) *Combustible* insulation having a *flame-spread rating* more than 25 but not more than 500 on an exposed surface, or any surface that would be exposed by cutting through the material in any direction, is permitted in the exterior walls of a *building* required to be of *noncombustible construction*, provided the insulation is protected from adjacent space in the *building*, other than adjacent concealed spaces within wall assemblies, by a thermal barrier as described in Sentence (2), except that in a *building* that is not *sprinklered* and is more than 18 m high, measured between *grade* and the floor level of the top *storey*, or in a *building* that is not *sprinklered* and is regulated by the provisions of Subsection 3.2.6., the insulation shall be protected by a thermal barrier consisting of

(a) gypsum board not less than 12.7 mm thick, mechanically fastened to a supporting assembly independent of the insulation and with all joints either backed or taped and filled,
(b) lath and plaster, mechanically fastened to a supporting assembly independent of the insulation,
(c) masonry or concrete not less than 25 mm thick, or

(d) any thermal barrier that, when tested in conformance with CAN/ULC-S101-M, "Standard Methods of Fire Endurance Tests of Building Construction and Materials", will not develop an average temperature rise more than 140°C or a maximum temperature rise more than 180°C at any point on its unexposed face within 10 min.

5. Applicant's Position

The Agent for the Applicant submitted that the subject matter in dispute is relatively complex and noted that the issue may warrant future consideration, possibly involving an amendment to the Building Code, for clarification of this point. He provided the Commission with a history of Code development in respect to this issue, on both a national and provincial level. He stated that the Code Committees involved in the development of these provisions were not as concerned about the exposure from an exposing building face but, rather, were more concerned with the protection from fire on the interior of the building, i.e., through window openings, etc.

The Agent stated that it is important to note that all of the Code changes on this subject dealt with the cladding system itself and not whether foamed plastic could be used in exterior walls. He suggested that this supports the assumption that foamed plastic can be used if it is properly protected. He emphasized that nothing in the Code prevents the use of noncombustible insulation in an exterior wall assembly. The Code does, however, set limitations on the types of cladding that can be used. In this regard, he submitted, the subject proposal complies with the requirements of the Code.

The Agent for the Applicant suggested that the focus of this dispute should be whether the Code allows the use of combustible insulation in wall assemblies constructed under 3.2.3.7.(1). In his opinion, the Code does allow for combustible insulation provided that it is adequately protected. He submitted that Article 3.1.5.5. and Sentence 3.2.3.7.(7) do not apply. He pointed to the definitions for "Noncombustible" and "Noncombustible Construction" as outlined in the Building Code and submitted that, since many building materials do not meet the test criteria to be classified as "noncombustible", the Code included Subsection 3.1.5. for Noncombustible Construction. This Section sets out those combustible materials that are permitted to be used in a building required to be of "noncombustible construction".

In support of this application, at the request of the Commission, the Applicant also submitted test results for the subject wall assembly, as well as cross-sectional drawings and a copy of the associated Minister's Ruling for ECO-Block, relative to Part 9 applications. In addition, the Commission was also presented with results from testing conducted under CAN4-S114 standards. At the continuation of the hearing, it was noted by the Agent that the ADEX cladding, which has been tested to the standards of CAN4-S114, is separate from the ECO-Block Wall assembly. The Agent stated that the ECO-Block was tested to CAN/ULC-S101-M and pointed out that the foamed plastic vaporized very quickly. This leaves the concrete as the protective element. He noted that the test on the wall assembly was performed for 5 hours and 39 minutes on a 10 ft by 10 ft sample. Further, the test was performed on the worst case scenario at a construction joint and a connector. Even still, he noted, it was given a 4 hour fire rating.

The Agent also responded to issues raised by both the Respondent and staff representing the Building and Development Branch of the Ministry of Municipal Affairs and Housing. He submitted that the implications of their positions would mean that any exterior wall that must comply with

3.2.3.7.(1) or (4) could contain no insulation as there is no insulation that meets the CAN4-S114 standard. He further argued that Sentence 3.1.5.11.(3) permits the use of combustible insulation in buildings required to be of noncombustible construction.

In summation, the Agent for the Applicant concluded that the Building Code, in "Clause 3.2.3.7.(1)(a) requires the exposing building face to be of noncombustible construction and have a fire resistance rating of 1 h. Sentence 3.1.5.1.(1) permits the use of combustible materials in buildings required to be of noncombustible construction by reference to Articles 3.1.5.2. to 3.1.5.23." He further noted that "Sentence 3.1.5.11.(3) allows the use of combustible insulation having a flame spread rating greater than 25 but not greater than 500, provided the insulation is protected from adjacent spaces within the building in accordance with Sentence (2) or any of Clauses (3)(a) to (d)." In his opinion, therefore, the Building Code permits the use of combustible insulation in the construction of an exposing building face that is required to comply with Clause 3.2.3.7.(1)(a). He further submitted that the "relaxation permitted by Sentences 3.2.3.7.(7) and (9) does not apply to Sentence (1). The foamed plastic is not required to be noncombustible in order to meet Sentence 3.1.5.11.(3)." In respect of the subject proposal, the Agent noted that the "cladding system complies with the definition of noncombustible i.e. it meets the acceptance criteria of CAN4-S114, 'Standard Method of Test for Determination of Non-Combustibility in Building Materials'."

6. Respondent's Position

The Designate for the Respondent submitted that the subject building falls under the construction requirements of Article 3.2.2.42. of the Building Code. He further submitted that the exterior walls of the subject building are located adjacent to the property line and, in accordance with the provisions of Sentence 3.2.3.7.(1), the walls must be comprised of noncombustible construction having a fire-resistance rating of at least 1 hour and must be clad with noncombustible cladding. The Designate then referred to the provisions of Sentence 3.2.3.7.(7) which restrict the use of foamed plastic insulation in exterior walls. He pointed out that Sentence 3.2.3.7.(7) states that (except as permitted in Sentence (9)), in addition to the requirements of Sentences (2), (3), (5) and (6), foamed plastic insulation used in an exterior wall is to be protected on the exterior surface by concrete or masonry not less than 25 mm in thickness or noncombustible material that meets the criteria of acceptance under 3.2.3.7.(8) when tested to CAN/ULC-S101-M. In his opinion, therefore, the Building Code, as written, does not permit foamed plastic in a wall assembly that is subject to the construction requirements specified in Sentence 3.2.3.7.(1).

At the continuation of the hearing, the Designate for the Respondent advised that he is in agreement with the position put forward in the technical memorandum prepared by the Building and Development Branch of the Ministry of Municipal Affairs and Housing in connection with this dispute. He reiterated his position that exterior walls, adjacent to the property line, where only up to 10% openings are permitted, do not allow for foamed plastic insulation. His position is that, by virtue of the provisions of 3.2.3.7.(7), foamed plastic insulation would be allowed under the relaxed requirements of 3.2.3.7.(2) because the wall is further away from the property line. He argued that, if the Code was not interpreted to differentiate between Sentence 3.2.3.7.(1) and Sentence 3.2.3.7.(2) then there would be no need to include both as separate provisions in Article 3.2.3.7.

In summation the Designate submitted that, in his opinion, the ECO-Block system coated with ADEX base coat cannot be used in situations where the permitted unprotected openings is less than 10%.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed exterior wall system that incorporates foamed plastic insulation and exterior cladding provides sufficiency of compliance with Sentences 3.2.3.7.(1) and 3.1.5.11.(3) of the Building Code at 42-44 Camden Street, Toronto, Ontario.

8. Reasons

i) The exterior cladding has been tested to CAN4-S114 "Standard Method of Test for Determination of Non-combustibility in Building Materials" and meets the material requirements for noncombustibility as defined in the Code.

ii) The ECO-Block wall forming system has been tested to CAN/ULC-S101-M "Standard Methods of Fire Endurance Tests of Building construction and Materials".

iii) The ECO-Block wall, including insulation, terminates at the underside of each floor slab creating a fire-break and fire compartments at each floor level.

iv) CCMC Evaluation Report no. CCMC 12966-R and Minister's Ruling No. 04-12-116 (12966-R) have approved this wall forming system for limited use. In this particular application, sealed architectural drawings and certification by a Professional Engineer under Part 4 of the Code have been submitted.

v) There are no unprotected openings penetrating this exterior wall assembly.

Dated at Toronto this **17th** day in the month of **January** in the year **2005** for application number **2004-50**.

Tony Chow, Chair

Susan Friedrich

Rick Florio



Ruling No. 04-53-1008
Application No. 2004-45

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 3.2.9.1. as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Allan Schutten, 1201068 Ontario, for the resolution of a dispute with Tom Redmond, Chief Building Official, City of Hamilton, to determine whether the proposed 6,524 m^2 addition to an existing 5,870 m^2 steel shearing and warehouse facility that has been designed without a standpipe and hose system provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code at the Janco Steel Plant, 925 Arvin Avenue, Stoney Creek, Ontario.

APPLICANT	Allan Schutten 1201068 Ontario Stoney Creek, Ontario
RESPONDENT	Tom Redmond Chief Building Official City of Hamilton
PANEL	Len King, Vice-Chair Fred Barkhouse John Guthrie
PLACE	Toronto, Ontario
DATE OF HEARING	November 18, 2004
DATE OF RULING	November 18, 2004
APPEARANCES	Nick VandenOever Quarrystone Construction Limited Beamsville, Ontario **Agent for the Applicant** Tom Redmond Chief Building Official City of Hamilton **The Respondent**

RULING

1. The Applicant

Allan Schutten, 1201068 Ontario, has applied for and received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing to construct a 6,524 m^2 addition to the existing steel shearing and warehouse facility at the Janco Steel Plant, 925 Arvin Avenue, Stoney Creek, Ontario.

2. Description of Construction

The Applicant is proposing the construction of a 6,524 m^2 addition to the existing steel shearing and warehouse structure, which currently has a building area of 5,870 m^2 and a building height of one storey. The combined area of the existing building and the proposed addition would be 12,394 m^2. The building and the proposed addition are of noncombustible construction and are equipped with a fire alarm system, but not a sprinkler system, nor a standpipe and hose system. The structure is classified as a Group F, Division 3 - Low Hazard Industrial occupancy.

The construction in dispute involves the omission of the standpipe and hose system which would be required under the Building Code for a structure of this size and classification. To compensate for the omitted system, the Applicant has proposed to provide additional fire extinguishers. Several other measures are also cited as ensuring a level safety within the facility including fire access route around the premises, a fire alarm system, an annunciator panel connected with the security panel, heat sensors, smoke detectors and pull stations throughout the plant.

The plant is used in the production of rolled steel, specifically plates and coils. It will also be used for the storage of the material produced in the plant, as well as similar material produced elsewhere.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed 6,524 m^2 addition to the existing 5,870 m^2 steel shearing and warehouse facility, that is not equipped with a standpipe and hose system, provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code.

Article 3.2.9.1. requires that a building having an F3 occupancy exceeding 3,000 m^2 must be equipped with a standpipe and hose system. The combined area of the proposed addition and existing building would result in a total building area of 12,394 m^2 . To compensate for the ommission of a standpipe and hose system, the Applicant has proposed an alternative system of fire protection and detection as noted above.

4. Provisions of the Ontario Building Code

Article 3.2.9.1.

(1) Except as provided in Sentences (4) to (7), a standpipe system shall be installed in every building that

(a) is more than 3 storeys in building height

(b) is more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey, or

(c) is not more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the to storey but has a building area exceeding the area shown in Table3.2.9.1. for the applicable building height if the building is not sprinklered.

5. Applicant's Position

The Agent for the Applicant submitted that the building in question is constructed of noncombustible materials, such as concrete and steel. The majority of the material stored at the facility (ie. steel coils and plate) are also considered noncombustible. He noted that there are some combustible materials contained within the building. These items include spacers used between the steel plates and chock blocks, which are used to prevent the coils from moving. The handling and shearing equipment used within the facility are operated by electric motors and therefore this equipment, according to the Agent, is protected with the utmost care.

The Agent for the Applicant began by stating that it is not their intent to create a hazard and that they would like to abide by the Building Code. He went on to explain that the reason for requesting the exemption is that the material being stored in the facility could be more adversely affected by the water used for the purpose of fighting a fire than by the heat of the fire itself.

The Agent reported that several measures will ensure safety within the facility. These measures included fire access route around the premises, a fire alarm system, an annunciator panel connected with the security panel, and additional fire extinguishers beyond the Code requirements. He further reported that the building will also be equipped with heat sensors, smoke detectors and pull stations throughout the plant.

The Agent indicated that they were concerned with the possibility of water damage to the steel in the event of vandalism or accidental breaks in the piping. There would not have to be a fire for water to pose a threat to the product, he stated. He described the steel coils as being stacked two high on skids on the floor and that millions of dollars worth of product could be involved. He went on to state that, not only is their own product stored at the plant, but client inventory as well. In response to questioning as to how the steel would be affected, the Agent stated that the steel would degrade and would then be devalued.

When asked if the Fire Department had commented, the Agent responded that they were contacted and did not indicate a concern. He mentioned that there is a fire hall across the street from the facility and the response time to a call would be approximately 4 minutes. He further noted that there are two fire hydrants located on the property. In response to being questioned by the panel regarding whether a fire safety plan has been submitted to the Fire Department, the Agent for the Applicant admitted that this had not been done. The Agent assured the Commission that the Applicant does not want to put the Fire Department at further risk and offered to establish a fire safety plan.

In summation, the Agent stressed that the owner is very concerned about the introduction of water to the plant and its detrimental affect on the steel stored within the facility. He further reiterated that the building is comprised of noncombustible materials and that most of the contents of the building are also noncombustible. He also claimed that there are other similar facilities, some even larger in area, that have been exempt from the requirement of having to install a standpipe.

6. Respondent's Position

The Respondent submitted that the proposed 6,524 m^2 addition to the existing 5,870 m^2 building would bring the total building area for the new structure well above the limits outlined in Clause 3.2.9.1.(1)(c) of the Building Code. In his submission, he stated that he did not allow relief from the requirement for a standpipe system as the new building area, including the proposed addition, would be almost four times the maximum area permitted by Table 3.2.9.1. of the Code. Moreover, the Respondent stated that the proposed addition would be more than double the current building area. He further stated that this facility already exceeds the building area requirements for standpipe systems and has recevied an exemption from the standpipe requirements by virtue of a previous Building Code Commission ruling.

The Respondent is of the opinion that the majority of the compensating measures being offered by the Applicant are already required by the Code and he does not believe that the proposal provides sufficiency of compliance with the Code provisions.

The Respondent went on to say that he has concerns with respect to the distance between the building and the fire hydrants. A further concern, according to the Respondent, is the Fire Department's expectation that a facility such as this would be equipped with a standpipe system. He indicated that the Applicant should, at the very least, submit a fire safety plan to the Fire Department.

In summation, the Respondent reiterated that he does not feel that this proposal provides an equivalent level of safety to what the Code would require.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed 6,524 m^2 addition to an existing 5,870 m^2 steel shearing and warehouse facility that has been designed without a standpipe and hose system does not provide sufficiency of compliance with Article 3.2.9.1. of the Building Code at Janco Steel Ltd., 925 Arvin Avenue, Stoney Creek, Ontario.

8. Reasons

i) The proposed building, including the existing portion and the addition, will be 12,394 m^2 in area. This area is approximately four times greater than the building limit of 3,000 m^2 specified in Table 3.2.9.1. of the Building Code for a Group F, Division 3 facility.

ii) The majority of the measures being offered as compensation by the Applicant would already be requirements of the Building Code for a 12,394 m^2 Group F, Division 3 structure.

Dated at Toronto this **18** day in the month of **November** in the year **2004** for application number **2004-45**.

Len King, Vice-Chair

Fred Barkhouse

John Guthrie



Ruling No. 04-55-1010
Application No. 2004-48

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 3.2.5.7.(1) and 3.2.5.7.(2) of Regulations 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Lory Rickard, Little John Enterprises, for the resolution of a dispute with Greg Krankovich, Chief Building Official, City of Timmins, to determine whether the proposed location of a dry hydrant will provide sufficiency of compliance with Sentences 3.2.5.7.(1) and 3.2.5.7.(2) of the Ontario Building Code for a 929 m^2 one storey sawmill at 1515 Norman Street, City of Timmins, Ontario.

APPLICANT	Lory Rickard Little John Enterprises Timmins, Ontario
RESPONDENT	Greg Krankovich Chief Building Official City of Timmins
PANEL	Len King, Vice-Chair Ed Link Neal Barkhurst
PLACE	Toronto, Ontario
DATE OF HEARING	December 2, 2004
DATE OF RULING	December 2, 2004
APPEARANCES	Sylvano Carlesso Carlesso Barazzutti Timmins, Ontario **Agent for the Applicant** Esa Saarela Plans Examiner and Building Inspector City of Timmins **Designate for the Respondent**

RULING

1. The Applicant

Lory Rickard, Little John Enterprises, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and has constructed an addition to the existing saw mill at 1515 Norman Street, Timmins, Ontario. In addition, an Order to Comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, has been issued against the Applicant to rectify certain alleged deficiencies in respect to the subject construction.

2. Description of Construction

The Applicant has constructed an addition to an existing building which, according to the Applicant measures 929 m^2 (10,000 ft^2) or, according to the Respondent, 892.6 m^2 (9,608 ft^2). The structure is one storey in building height and has a Group F, Division 2 occupancy classification. The building is comprised of noncombustible construction and is to be used for the purposes of a saw mill.

The issue at dispute between the parties involves the provision of an adequate water supply for fire fighting purposes and the location of a hydrant in relation to the subject building. In this regard, the Applicant is proposing a dry hydrant, designed to the requirements of NFPA1 1231-1993, "Water Supplies for Suburban and Rural Fire Fighting" and connected by piping to the nearby natural water source (the Mattagami River). It was originally proposed that the dry hydrant be located on the sawmill property, within 90 m of the subject building. The Fire Chief deemed this proposal to be unworkable because of the excess run of connecting pipe required to connect the hydrant to the river. Further, the vertical draft of the fire hydrant would exceed the pumping capacity of fire fighting equipment and there was a potential for freezing in extreme winter conditions.

In lieu of a hydrant situated on the subject property, the Applicant is now proposing that the hydrant be installed near the shoreline, between the river and the existing roadway, approximately 152 m from the building perimeter. Water would be drawn by the equipment of a pumper truck and relayed to other pumper vehicles and then to the subject property as may be required to fight fire.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed location of a dry hydrant for the provision of water for fire fighting purposes, provides sufficiency of compliance with Sentences 3.2.5.7 (1) and (2) of the Building Code.

Sentence 3.2.5.7.(1) requires that an adequate supply of water for fire fighting purposes be provided for every building. Sentence (2) specifies that fire hydrants are to be located within 90 m of any portion of a building perimeter which is required to face a street.

In the case of the subject dispute, the Applicant is proposing to draw water from the nearby Mattagami River for fire fighting purposes. However, due to situational factors and to satisfy concerns of the fire department, the current proposal places the hydrant at a distance greater than 90 m from the perimeter of the building. This option, although preferred by the fire department, does not meet the prescriptive terms of Article 3.2.5.7.

4. Provisions of the Ontario Building Code

3.2.5.7. Water Supply

(1) An adequate water supply for fire fighting shall be provided for every *building*. (See Appendix A.)

(2) Hydrants shall be located within 90 m (295 ft 3 in) horizontally of any portion of a *building* perimeter which is required to face a *street* in Subsection 3.2.2.

5. Applicant's Position

The Agent for the Applicant advised that the original proposal, submitted with the permit drawings, was to install a dry hydrant on the subject property and pipe water approximately 168 m (550 ft) from the nearby river. Upon closer evaluation by the fire department, however, the Applicant was advised by the Fire Chief that this proposal would be unworkable in light of the excess horizontal run of the connecting pipe. The Applicant was advised that it would exceed the capabilities of the fire department's pumping equipment.

The Agent submitted that, based on consultation with the municipality and the fire department, a reasonable compromise would be to locate the dry hydrant on the opposite side of the adjacent roadway, nearer to the river. This proposal requires a shorter horizontal run of pipe resulting in less risk of freezing, which was originally one of the fire department's concerns. The fire department pumper trucks could then transfer water, as needed, to the site.

In response to questioning by the Commission, the Agent advised that the new proposal had not been designed by an engineer but suggested that the only change from the original proposal is the shorter length of pipe connecting the intake/outlet. Further, upon questioning, the Agent confirmed that the Applicant plans to install a fire alarm system in the subject building, including heat detection devices and a link to the fire department. He also noted that the combustible product that may be situated on site has a moisture content of approximately 50% and is stored well away from the building to provide for vehicle access. Processing of the material is carried out within the building itself.

6. Respondent's Position

The Designate for the Respondent advised that the fire department has confirmed that they would be capable of pumping water from the river if the hydrant were to be located as proposed by the Applicant. He noted that the fire department is supportive of locating the hydrant farther from the building than the Code may allow, recognizing that the alternative (original proposal) is unworkable in this instance. The Respondent noted that municipal servicing is not available to this site and stated that there are no plans to extend services to the property.

In response to questioning, the Designate confirmed that it would be unlikely that the pipe from the hydrant would freeze if located as now proposed by the Applicant. He suggested it would certainly be less likely than with the original proposal which would have required piping to run beneath the street.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed dry hydrant which will serve a 929 m^2, one storey sawmill and be located approximately 152 m (500 ft) from the building and placed between a roadway and the river provides sufficiency of compliance with Sentences 3.2.5.7.(1) and 3.2.5.7.(2) of the Building Code at 1515 Norman Street, Timmins, Ontario, on condition that:

a) The Applicant apply for and receive a building permit for installation of a code compliant fire alarm system that will be monitored on a 24 hour basis.

b) No outside storage be permitted within 15.25 m (50 ft) of the building.

c) The fire fighting access routes be established or designated on site.

d) A fire safety plan be established with the local fire department.

e) The dry hydrant system be designed and reviewed by a professional engineer.

f) The dry hydrant system be tested upon completion to the satisfaction of the Chief Building Official.

8. Reasons

i) The Timmins Fire Department is satisfied with the location of the proposed dry hydrant.

ii) There is no municipal water supply at the site and the nearest municipal water supply is approximately 800 m (2625 ft) away.

iii) The wood that is stored and processed at this facility has a moisture content of approximately 50%, thus reducing the fire hazard associated with this combustible element.

Dated at Toronto this 2nd day in the month of **December** in the year **2004** for application number **2004-48**.

Len King, Vice-Chair

Ed Link

Neal Barkhurst

Ontario

Ruling No. 05-01-1015
Application No. 2004-61

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 1.1.3.1.(1) and 2.1.1.3.(1), Subsection 3.13.1. and Sentence 9.1.1.4.(1) of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by David Starr, owner, to determine whether the storage structure, referred to by the Applicant as a tent, provides sufficiency of compliance with Sentences 1.1.3.1.(1) and 2.1.1.3.(1), Subsection 3.13.1. and Sentence 9.1.1.4.(1) of the Ontario Building Code at 2056 River Road, London, Ontario.

APPLICANT	David Starr, owner London, Ontario
RESPONDENT	Rocky Cerminara Chief Building Official City of London
PANEL	Tony Chow, Chair Donald Pratt Michael Steele
PLACE	Toronto, Ontario
DATE OF HEARING	January 13, 2005
DATE OF RULING	January 13, 2005
APPEARANCES	Barry R. Card Barrister and Solicitor London, Ontario **Agent for the Applicant** Owen Clarke Manager of Inspections London, Ontario **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, and has constructed a storage structure, referred to by the Applicant as a tent, at 2056 River Road, London, Ontario.

The subject building is a 1 storey, F2 storage structure having a building area of 120 m^2. The structure is similar to a Quonset hut, having a structural frame of "hoops" tied together by purlins and a wind brace. A polyfabric membrane covers the framework while the ends of the structure are comprised of wood studded walls with fibreglass panels. There is a doorway opening at each end of the building which provides access to the storage space inside. The headroom at the highest point measures 3.35 m.

The structure has been erected 9.14 m from the northern property line, 7.92 m from the western property line, 14 m from an existing house on the property and 7 m from an existing shed, also on the property. The purpose of the structure is to provide year-round shelter for refuse and other material associated with the operation of the salvage yard.

The construction in dispute involves whether the subject structure may be considered a "tent" that provides sufficiency of compliance with Subsection 3.1.13. of the Building Code.

2. Provisions of the Building Code in Dispute

1.1.3.1. Non-defined Terms

(1) Definitions of words and phrases used in this Code that are not included in the list of definitions in this Part shall have the meanings which are commonly assigned to them in the context in which they are used in this Code, taking into account the specialized use of terms with the various trades and professions to which the terminology applies.

2.1.1.3. Part 9

(1) Except as provided in Sentences 2.1.1.4.(2), 2.1.1.6.(1) and Article 2.1.1.5., Part 9 applies to *buildings* occupying an area greater than ten square metres

(a) of 3 *storeys* or less in *building height*,
(b) having a *building area* not exceeding 600 m^2, and
(c) used for
  (i) Group C, *residential occupancies*,
  (ii) Group D, *business and personal services occupancies*,
  (iii) Group E, *mercantile occupancies*, or
  (iv) Group F, Division 2 and 3, *medium* and *low hazard industrial occupancies*.

Tents 3.13.1.

3.13.1.1. Application

(1) Except as provided in this Subsection, tents are exempted from complying with the requirements of this Code.

3.13.1.2. General

(1) Except as provided in Sentence (2), the requirements of this Subsection shall apply to all tents.

(2) Articles 3.13.1.4., 3.13.1.5., 3.13.1.6. and 3.13.1.10. apply to tents that
- (a) do not exceed 225 m^2 in ground area,
- (b) do not exceed 225 m^2 in aggregate ground area and are closer than 3 m apart,
- (c) do not contain bleachers, and
- (d) are not enclosed with sidewalls.

3.13.1.3. Means of Egress

(1) Except as provided in Sentences (2) and (3), tents shall conform to Sections 3.3. and 3.4.

(2) A tent need not conform to Article 3.4.6.11. except where swing type doors are provided.

(3) Where the area between adjacent tents or a tent and the property line is used as a *means of egress*, the minimum width between stake lines shall be the width necessary for *means of egress*, but not less than 3 m.

3.13.1.4. Clearance to Other Structures

(1) Tents shall not be erected closer than 3 m to the property line.

(2) Except as provided in Sentences (3), (4) and (5), tents shall not be erected closer than 3 m to other tents or structures on the same property.

(3) A *walkway* between a *building* and a tent occupied by the public is permitted provided
- (a) the tent is not closer than 3 m from the *building*, and
- (b) the *walkway* conforms to Article 3.1.3.18.

(4) Tents not occupied by the public need not be separated from one another, and are permitted to be erected less than 3 m from other structures on the same property, where such closer spacing does not create a hazard to the public.

(5) Tents located on fair grounds or similar open spaces, need not be separated from one another provided such closer spacing does not create a hazard to the public.

3.13.1.5. Clearances to Flammable Material

(1) The ground enclosed by a tent and for not less than 3 m outside of such structure shall be cleared of all flammable or *combustible* material or vegetation that will carry fire.

3.13.1.6. Flame Resistance

(1) Every tent, and tarpaulins, decorative materials, fabrics and films used in connection with tents, shall be certified to CAN/ULC S-109-M, “Standard for Flame Tests of Flame-Resistant Fabrics and Films”, or NFPA 701 “Standard Method of Fire Tests for Flame-Resistant Textiles and Films”.

3.13.1.7. Design of Framing and Supports

(1) The supporting framing structure and anchorage system for tents shall be designed and reviewed by a *professional engineer*.

3.13.1.8. Bleachers

(1) Where bleachers are provided in tents, they shall be designed in conformance with Articles 3.3.2.8., 3.3.2.10., 4.1.6.11., and 4.1.10.6.

3.13.1.9. Sanitary Facilities

(1) Except as provided in Sentence (3), the minimum number of water closets for tents shall be determined in accordance with Table 3.7.4.3.E.

(2) Article 3.7.4.16. applies to sanitary facilities in Sentence (1).

(3) Sanitary privies, chemical closets or other means for the disposal of human waste may be provided in lieu of toilet fixtures.

3.13.1.10. Provision for Fire-fighting

(1) Access shall be provided to all tents for the purpose of fire-fighting.

9.1.1.4. Tents and Air-Supported Structures

(1) Tents shall conform to the requirements in Subsection 3.13.1.

3. Applicant's Position

The Agent for the Applicant outlined the history of this proposal. He advised that his client has constructed what he considered to be a tent to be used as a shelter for the storage of material related to the salvage yard. Upon inspection of the structure, the municipality requested that a permit be obtained and the Applicant proceeded to apply for a permit for the construction of a tent, meeting the requirements of 3.13.1. of the Building Code. The Agent advised that, in the course of discussions with the City, some issues were raised that required resolution by the Building Code Commission (BCC).

The Agent submitted that the Applicant is willing to modify the structure in any way necessary to comply with the requirements for a tent. However, the Code provides little guidance as to any identifiable requirements for a "tent" as this term is not defined in the Building Code. The Agent described the intended use of the building as a "non-habitable (storage) structure". It is the Applicant's contention that the term "tent" applies to "any product which supports fabric over poles, as per Article 1.1.3.1." He referred to the Canadian Oxford Dictionary definition in this regard.

The Agent contended that the structure is supported by poles, covered in fabric and can be disassembled and erected elsewhere and is, therefore, "portable". The question, he suggested, is whether the structure must be considered "temporary" to be considered as a tent. As the term "temporary" is also not defined by the Code, the Agent requested guidance from the Commission in this regard. If the structure was not considered to be a tent, he asked that the Commission indicate why it is not a tent and what would need to be done to secure such a classification. This would enable the Applicant to modify the structure to meet the intent of the Code in respect to tents, which are exempt from certain construction requirements that would apply to buildings.

The Agent noted that the primary function of the structure is to shelter salvaged material in the winter months so the Applicant would not need to dig the material out from under snow cover. In summation, the Agent reiterated his request for clarification from the Commission on what constitutes a "tent" as anticipated by the Building Code. He noted that, based on the

Commission's decision, the Applicant would modify the structure, if necessary, to comply with 3.13.1. of the Code.

4. Respondent's Position

The Designate for the Respondent submitted that his primary concern is with the use of the structure in that, if this proposal is approved, anyone could erect a fabric covered building for storage or warehousing purposes and call it a tent. In his opinion, a tent is a temporary structure and will, in due course, be removed from the premises. It is not a building to be used for year round storage on a subject property. The subject structure, he suggested, is a storage building, which will house vehicles/tires etc. for the salvage facility. He further stated that, simply because it is covered with fabric, it is not necessarily a tent. He noted that the structure has a frame, is not portable, is not intended for temporary use and does not, in his opinion, meet the intent of the Code. This is a "building", he suggested, that should meet the requirements for a building on the property and does not qualify as a tent which, under 3,13.1., would be exempt from a number of construction requirements for a building.

In response to questioning in regard to the flame spread rating of the fabric covering the structure, the Designate noted that he had no information in relation to whether the fabric complied with the Code requirements for flame spread and noted that he had no identifiable concern with the fabric at the time of the hearing. Rather, he reiterated, the key issue is whether the structure is actually a tent or a building. He noted that, if the structure is classified as a "building" it would not comply with the Code requirements in respect to spatial separation, etc. If the structure is determined to be a "tent", however, it would be exempt from a number of the Part 9 requirements applying to buildings.

The Designate referred to a previous BCC ruling in respect to a Home Depot property whereby the Commission found that a shade screen which was considered to be a permanent, seasonally used structure, was not a tent. In that decision the Commission reasoned that the permanence of the structure precluded it from meeting the definition of a tent.

In summation, the Designate reiterated his contention that the as-built structure is not a tent. He submitted that the structure has been up for almost one year and is used for winter storage. The BCC, he submitted, must rule on the facts presented and should not consider hypothetical possibilities for construction. Moreover, he stated, it is not the role of the Commission to write new Code.

5. Commission Ruling

It is the decision of the Building Code Commission that the proposed storage structure, referred to by the Applicant as a tent, does not provide sufficiency of compliance with Sentences 1.1.3.1.(1) and 2.1.1.3.(1), Subsection 3.13.1. and Sentence 9.1.1.4.(1) of the Ontario Building Code at 2056 River Road, London, Ontario.

6. Reasons

i) The proposed storage use and details of construction of the subject building are inconsistent with the intent of the Building Code as outlined in Appendix A-3.13. and, as a result, Subsection 3.13.1. is not applicable to this building.

ii) Article 1.1.3.1. states that words that are not defined in the Building Code shall have the meanings which are commonly assigned to them in the context in which they are used in the Code. The subject structure cannot be considered a tent when having regard for the dictionary definition for this term which suggests that a tent is both temporary and portable.

iii) The as-constructed storage structure is not intended for use as a temporary shelter as anticipated by the Code for tents. The structure has been constructed as a permanent building for year round use in the storage of material related to the operation of the salvage yard.

iv) No evidence was provided to suggest that the building has been designed in compliance with Article 3.13.1.7. which would ensure that the subject structure would have the capacity to perform the intended function of providing year round shelter for refuse material, etc.

Dated at Toronto this **13th** day in the month of **January** in the year **2005** for application number **2004-61.**

Tony Chow, Chair

Donald Pratt

Michael Steele

Ontario

Ruling No. 05-03-1017
Application No. 2004-73

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 3.1.10.5. of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by John McIntyre, Maple Reinders Constructors Ltd., for resolution of a dispute with Shelly Switzer, Chief Building Official, Town of Oakville, to determine whether the size and positioning of openings in the as-constructed firewalls provide sufficiency of compliance with Article 3.1.10.5. of the Building Code at the Clearview Christian Reformed Church, 2300 Sheridan Garden Drive, Oakville, Ontario.

APPLICANT	John McIntyre Maple Reinders Constructors Ltd.
RESPONDENT	Shelly Switzer Chief Building Official Town of Oakville
PANEL	Tony Chow, Chair Donald Pratt Michael Steele
PLACE	Toronto, Ontario
DATE OF HEARING	January 13, 2005
DATE OF RULING	January 19, 2005
APPEARANCES	Walter Miller, Consulting Engineer Arencon Inc. **Agent for the Applicant** Shelly Switzer, Chief Building Official Town of Oakville **The Respondent**

RULING

1. Particulars of Dispute

The Applicant has received a building permit under the B*uilding Code Act*, *1992*, and has constructed an assembly occupancy building referred to as the Clearview Christian Reformed Church at 2300 Sheridan Garden Drive, Oakville, Ontario.

The subject structure is a 1 storey, Group A, Division 2 major occupancy building, comprised of combustible construction. The structure has been subdivided into three separate "buildings" by firewalls having a 2 hour fire resistance rating. Buildings A (the sanctuary), B (offices) and C (fellowship hall) have areas of 1,483.4 m^2, 397.3 m^2 and 941.5 m^2 respectively. The entire facility is equipped with a fire alarm system.

The construction in dispute involves the openings that penetrate the two firewalls that subdivide the structure. The subject firewalls are penetrated by several openings including doors, ducts and a "pass-through" window. Each opening in the firewall is protected with a 90 minute rated closure (door, shutter or fire damper). Where mechanical ducts penetrate the firewalls they are positioned directly above an opening for a door or "pass-through" window separated from the larger openings below by a 2 hour masonry panel. Further, the duct openings do not surpass the vertical extension of the width of the opening above which they are located.

According to the Applicant, the total width of all door and "pass-through" window openings does not exceed 25% of the lineal length of either firewall. This calculation for percentage openings, however, does not include separate consideration for the width of the mechanical openings.

The issue for consideration is whether placing the duct openings directly above the door and window openings will provide sufficiency of compliance with the provisions of Article 3.1.10.5. of the Building Code.

2. Provisions of the Building Code in Dispute

3.1.10.5. Maximum Openings

(1) Openings in a *firewall* shall conform to the size limits described in Article 3.1.8.6. and the aggregate width of openings shall be not more than 25% of the entire length of the *firewall*.

3. Applicant's Position

The Agent for the Applicant provided the Commission with an overview of the issue at dispute. He submitted several exhibits depicting the as-constructed firewall openings and offered a comparison between what is proposed and what would be permitted by the Code if the door and window openings were vertically extended to incorporate the area where the duct penetrations are positioned. The hypothetical scenario, he submitted, would encompass a greater cumulative area than the current proposal, and yet would still not exceed 25% of the entire length of the firewall.

The Agent submitted that, generally, he agreed that each opening should be measured independently. However, in this instance, greater life safety is provided where openings are positioned directly above one another. He noted further, that the City has now agreed, in principal, to the Applicant's reasoning but, because of the technical opinion provided by the Building and Development Branch of the Ministry of Municipal Affairs and Housing, the Town is

still requiring that this matter be resolved by the Building Code Commission.

In summation, the Agent reiterated that, following the example depicted in Scenario 2 presented in Exhibit 7, significantly larger openings would be permitted than what is proposed in this building. He noted that the walls were constructed in accordance with Article 3.1.8.6. and comply with the requirements of 3.1.10.5. He suggested that the proposed configuration of openings offers better protection than what would be permitted by the Code.

4. Respondent's Position

The Respondent submitted that, in his opinion, the Applicant has achieved sufficiency of compliance with Sentence 3.1.10.5. of the Code. He requested that the Commission, however, still rule on this matter since the Ministry's Building and Development Branch has provided a contrary opinion suggesting that the as-built configuration does not comply with the Code requirements. He noted that the technical background information report prepared in connection with this dispute states that combining openings in this manner is not an option permitted by the Code.

In response to questioning, the Respondent submitted that he did not believe that the structural integrity of the wall system was at issue in respect to the aggregate length of openings. Instead, he suggested, that the issue is related to fire safety and protection (i.e. closures). He stated that the Town would satisfy itself as to the structural integrity of the firewalls and compliance with other relevant provisions of the Building Code. He asked, however, that the Commission rule as to the sufficiency of compliance of the proposal with Sentence 3.1.10.5.

5. Commission Ruling

It is the decision of the Building Code Commission that the size and positioning of openings in the as-constructed firewalls will provide sufficiency of compliance with Article 3.1.10.5. of the Building Code at the Clearview Christian Reformed Church, 2300 Sheridan Garden Drive, Oakville, Ontario, on condition that:

1. The Chief Building Official is satisfied that:
    a) The as-constructed firewalls will meet the definition of "firewall" as set out in Article 1.1.3.2. of the Code in respect to the structural stability of the wall under fire conditions;
    b) The as-constructed firewalls will comply with Sentences 3.1.10.1.(1) and 3.1.10.1.(2) of the Building Code;
    c) The as-constructed firewalls have been designed to meet the requirements of Article 4.1.10.4. of the Building Code; and
    d) Fire dampers and mechanical duct openings in the firewalls will comply with the requirements of 3.1.10.1.(4). of the Code.

2. The mechanical duct openings in the firewalls are to be positioned such that the width of the mechanical opening is entirely within the vertical extension of the width of the door or shutter opening located directly below it.

3. Those portions of the masonry firewalls situated between the door/shutter openings and the mechanical duct openings will remain structurally stable under fire conditions as required by Article 3.1.10.1. of the Building Code.

6. Reasons

i) The mechanical duct openings are positioned directly above the openings for a door or shutter.

ii) The horizontal projection of the individual mechanical duct openings will be within the width of the corresponding door or shutter opening above which the mechanical openings are situated.

iii) The aggregate width of all door and shutter openings in each firewall does not exceed 25% of the entire length of the firewall.

Dated at Toronto this **19**th day in the month of **January** in the year **2005** for application number **2004-73.**

Tony Chow, Chair

Donald Pratt

Michael Steele

Ontario

Ruling No. 05-04-1018
Application No. 2004-69

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 3.3.1.1 of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Peter Tsang, 1082750 Ontario Limited, to determine whether the as-constructed demising walls between Unit 18 and 18A and between Unit 18/Unit 18A and Unit 15 in the one storey portion Group E retail plaza, with Group D business and personal service occupancies, provides sufficiency of compliance with Article 3.3.1.1. of the Building Code at 8401 Weston Road, Vaughan, Ontario.

APPLICANT	Peter Tsang 1082750 Ontario Limited
RESPONDENT	Mani Navabi Chief Building Official City of Vaughan
PANEL	Len King, Vice-Chair Fred Barkhouse Yaman Uzumeri
PLACE	Toronto, Ontario
DATE OF HEARING	January 20, 2005
DATE OF RULING	January 20, 2005
APPEARANCES	Nicholas Sum Louis Cheung Architect Inc. **Agent for the Applicant** Larry Ptashynski Manager of Inspection Services City of Vaughan **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Comply under the *Building Code Act*, *1992*, to remedy certain alleged deficiencies with respect to the as-built demising walls between units in a retail plaza at 8401 Weston Road, Vaughan, Ontario.

The structure is an irregularly shaped building having a building height of two storeys by virtue of a large mezzanine above a portion of the first storey. The building is classified Group E retail plaza, with Group D business and personal service occupancies. It has a building area of 5,671 square metres and is comprised of non-combustible construction and is equipped with both a fire alarm and sprinkler system.

The construction in dispute involves the demising walls that have been erected between Units 18/18A and Unit 15 located on the ground level of the single storey portion of the building. Originally, building plans were approved showing one larger unit, numbered Unit 18. This unit has since been divided into three separate units, now numbered 18, 18A and 15. The demising walls that separate these units are comprised of 12.5 mm drywall on 9mm metal stud extending to the underside of the ceiling.

The issue at dispute in this respect is whether the demising walls, as constructed, provide sufficiency of compliance with Article 3.3.1.1. which would require a fire separation having a 45 minute fire resistance rating in this instance.

2. Provisions of the Building Code in Dispute

3.3.1.1. Separation of Suites

(1) Except as permitted by Sentences (2) and (3), each *suite* in other than *business and personal services occupancies* shall be separated from adjoining *suites* by a *fire separation* having a *fire-resistance rating* not less than 1 h.

(2) The *fire-resistance rating* of the *fire separation* required by Sentence (1) is permitted to be less than 1 h but not less than 45 min provided the *fire-resistance rating* required by Subsection 3.2.2. is permitted to be less than 1 h for

(a) the floor assembly above the *floor area*, or

(b) the floor assembly below the *floor area*, if there is no floor assembly above.

(3) *Occupancies* that are served by *public corridors* conforming to Sentence 3.3.1.4.(5) in a *building* that is *sprinklered*, are not required to be separated from one another by *fire separations* provided the *occupancies* are

(a) *suites* of *business and personal services occupancy*,

(b) fast food vending operations that do not provide seating for customers, and

(c) *suites* of *mercantile occupancy*.

3.3.1.4. Public Corridor Separations

(5) If a *floor area* is *sprinklered*, no *fire separation* is required between a room or a *suite* and a *public corridor* that serves it provided the *public corridor* complies with Sentence 3.3.1.9.(6).

3. Applicant's Position

The Agent for the Applicant stated that he purchased the building in 1994 and that no new construction has been undertaken since that time. He claimed that the units at the heart of this dispute have been in existence in their current state since he purchased the property.

In 2000, the City of Vaughan requested supporting documentation with respect to the demising walls in question, as the previous owner had not provided the information. The Agent provided as-built drawings to the City, and, in applying for a permit as requested by the municipality, outlined the as-built conditions. The Agent maintains that there have been no changes to the building since he purchased it and that the occupancy of the units has not changed since that time.

The Agent indicated that two of the units in question, 18 and 18A, have a means of egress leading directly outside. The remaining unit, number 15, has access to the public corridor which measures 3.8 m wide and approximately 18 m long. He further indicated that the building is fully sprinklered. The Agent stated that while he does not meet the Code requirements to the letter, he believes that he does meet the intent of the Code.

The Agent was questioned as to whether all of the other units within the building comply with the Code. He confirmed that to the best of his knowledge all other units have fire rated separations and that these three units are the only ones that do not meet the separation requirements.

The Agent summed up by asking the Commission to consider that he has undertaken no new construction since he bought the building and that the demising walls in question were already in existence when he purchased the plaza

He reiterated that while the as-built construction does not strictly meet the Code requirements, he contends that he meets the intent of the Code, given that two of the units have a means of egress leading directly outside and the other unit has access to the public corridor. The corridor has an exit at either end and the length of the corridor is approximately 18 m, therefore the travel distance to either exit point is not more than 10 m. The Agent requests that the Commission consider all of this and find that the as-constructed demising walls provide sufficiency of compliance with the Building Code.

4. Respondent's Position

The Designate for the Respondent submitted that the Municipality's records indicate that the building was erected in the early 1990s, and that permits were issued between 1989-1990 for the original construction. The Municipality's records indicate that no building permit was taken out for the construction of the subject demising walls. When the Municipality discovered that construction has taken place in 2000, an Order was issued directing the owner's to obtain a permit for the division of Unit 18 into three independent units, being Units 18, 18A and 15.

The Designate reported that on a recent site visit to the location in question, it was noted that the two exits to the corridor from unit 18A are blocked by shelving and/or merchandise. That being the case, unit 18A is left with only one means of egress directly to the outside.

The Designate indicated that an Order to Comply was issued on September 16, 2004, as it was their view that a 45-minute fire separation was required for the subject demising walls. The Respondent claims that improvements were done without the benefit of a building permit and restated his position that fire separation between suites is required.

5. Commission Ruling

It is the Decision of the Building Code Commission that the as-constructed demising walls between Unit 18 and 18A and between Unit 18/Unit 18A and Unit 15 in the one storey portion of a Group E retail plaza, with Group D business and personal service occupancies, provide sufficiency of compliance with Article 3.3.1.1. of the Building Code at 8401 Weston Road, Vaughan, Ontario, on condition that:

a) The two doors exiting into the public corridor from Unit 18A that are currently blocked by shelving and/or merchandise either be made accessible as alternate exits or any existing exit signage marking the doors as an exit route be removed.

6. Reasons

i) The building is fully equipped with a sprinkler system.

ii) Units 18 and 18A have a means of egress leading directly to the outside.

iii) The as-built units would comply with the proposed change to Building Code Article 3.3.1.4.(4) which would eliminate the requirement for a public corridor to be 5 m wide and alternatively would require the travel distance to be not greater than 45 m. As this building has a total width of only 18.3 m, the maximum distance to either exit from the centre of the corridor would be 9.15 m. Therefore, the maximum travel distance from Unit 18 or Unit 15 is less than 45 m.

iv) The physical arrangement of these units has been in existence since at least 1993 when the building was purchased by the current owners (the Applicant). No new construction or renovation has been undertaken since that time.

Dated at Toronto this **20**th day in the month of **January** in the year **2005** for application number **2004-69**

Len King, Vice-Chair

Fred Barkhouse

Yaman Uzumeri

Ontario

Ruling No. 05-05-1019
Application No. 2004-70

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 9.25.4.1 of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Ron Anderchek, owner, to determine whether the as-constructed ICF wall system in a 167.2 m^2 Group C dwelling, where no vapour barrier is provided, will provide sufficiency of compliance with Article 9.25.4.1. at 3680 John Shaw Road, Ottawa, Ontario**.**

APPLICANT	Ron Anderchek Owner
RESPONDENT	Arlene Gregoire Chief Building Official City of Ottawa
PANEL	Len King, Vice-Chair Fred Barkhouse Yaman Uzumeri
PLACE	Toronto, Ontario
DATE OF HEARING	January 20, 2005
DATE OF RULING	January 20, 2005
APPEARANCES	Tom Patton ARXX Building Products Cobourg, Ontario **Agent for the Applicant** Robert Moore Program Manager City of Ottawa **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Comply under the *Building Code Act*, *1992*, to remedy certain alleged deficiencies at 3680 John Shaw Road, Ottawa, Ontario**.**

The Applicant has constructed a one and a half storey, Group C residential unit having a building area of 167.2 m^2. The structure is comprised of combustible construction and was constructed using an insulating concrete form (ICF) wall system, referred to as Arxx High Performance Wallsystems. A vapour barrier was not provided.

Arxx High Performance Wallsystems has received approval from the Canadian Construction Materials Centre (CCMC) in Report 12641-R for use in construction up to two storeys high in Part 9 buildings. Similarly, Minister's Ruling No. 98-24-54 has approved its use in Part 9 construction up to two storeys high.

The issue at dispute is whether the ICF wall system, as constructed without the use of a vapour barrier, provides sufficiency of compliance with Article 9.25.4.1, which would require a vapour barrier having an initial permeance of not greater than 45 ng/(Pa•s•m^2).

2. Provisions of the Building Code in Dispute

Article 9.25.4.1. Required Barrier to Vapour Diffusion

(1) Thermally insulated wall, ceiling and floor assemblies shall be constructed with a vapour barrier sufficient to prevent condensation in the wall spaces, floor spaces or *attic or roof spaces*.

3. Applicant's Position

The Agent for the Applicant submitted that the use of a vapour barrier in conjunction with Arxx High Performance Wallsystem is not required and could be detrimental to the performance of the wall assembly. He referred to a report entitled "Moisture in Arxx Wall Assemblies" prepared by R. W. Wright Design as the basis for this conclusion. This report implies that the inclusion of a vapour barrier in the wall assembly did not provide any benefit and, in fact, may be detrimental to the moisture performance of the assembly.

The Agent reported that the ICF wall system being used is a solid wall with no cavity. The wall offers R10 insulation, which he claims exceeds Code values. He noted that both the CCMC Evaluation Report and Building Code are silent on the requirement of a vapour barrier in this type of wall.

The Agent referred to Article 9.25.4.1. and pointed out that the wording of this Article states that the vapour barrier should be sufficient to "…prevent condensation in the wall spaces,…" He again reported that the ICF wall system being used in this project does not have any "wall spaces".

The Agent further stated that it was his belief that the inclusion of a vapour barrier would increase the moisture in the wall. He claimed that this system has been used in the past without a vapour barrier and that there have been no problems reported.

In response to a question regarding what detrimental effect the inclusion of a vapour barrier would have on the wall assembly, the Agent responded with a reference to the report prepared by R. W. Wright Design which states that "…when a vapour barrier is included it effectively restricts the flow of moisture out of the wall assembly. This can result in very high moisture levels building up in the EPS immediately behind the vapour barrier. Consequently, any building elements that penetrate the vapour barrier and are permanently in contact with this high moisture environment may be subject to moisture induced damaged."

When questioned as to the wall assembly material not meeting the minimum permeance of 45ng prescribed in the Code and whether any compensating measures were being offered to off-set this deficiency, the Agent offered no compensating measures to achieve sufficiency of compliance. He clarified that it was his view that the Code requirements for permeancy speaks to cavity walls and the Arxx Wallsystem is not a cavity wall.

In summation, the Agent reiterated that it is his belief that Article 9.25.4.1. relates to conventional wall construction and not to an ICF wall system. He requests that the Commission recognize this difference and find that the requirement for a vapour barrier does not apply in this instance and again referenced the report by R. W. Wright and the finding that the inclusion of a vapour barrier may prove detrimental.

4. Respondent's Position

The Designate for the Respondent submitted that the EPS foam used in the Arxx product has a vapour permeance of 60 ng/pa•m•s, which exceeds the limit of 45 ng/pa•m•s prescribed in the Code. The Designate also emphasized that CCMC 12641-R evaluation report for the Arxx Wallsystem is silent on the acceptance of EPS foam in place of a dedicated vapour barrier.

It is the Designate's position that the Applicant has failed to address the basic underlying issue. In his opinion, Sentence 9.25.4.2.(1) clearly specifies that the threshold for acceptance as a vapour barrier is 45 ng. He further submitted that Sentence 9.25.4.2.(2) stipulates that the use of cladding materials, such as EIFS, would require a vapour barrier with a lower threshold of 15 ng.

The Designate further claimed that there are presently 12 ICF manufacturers listed under the CCMC listings and that the vapour barrier issue at dispute in this instance is common to all ICF manufacturers. He further submitted that "EPS foam insulation is manufactured to varying density (sic) dependent upon the specifications of the end product". The Municipality would require test data from an independent third party testing agency "confirming EPS foam compliance with the prescriptive vapour permeance requirements" found in the Code.

In summary, the Designate for the Respondent stated that CCMC has presently approved 12 manufacturers of EPS foam wall systems and that several manufacturers have submitted test data complying with the Code requirements. He concluded that the Code, in Article 9.25.4.1., requires that a vapour barrier be used and that the Arxx Wallsystem does not meet the requirements contained in Article 9.25.4.2. of the Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the as-constructed ICF wall system in a 167.2 m^2 Group C dwelling, where no vapour barrier is provided, does not provide sufficiency of compliance with Article 9.25.4.1. at 3680 John Shaw Road, Ottawa.

6. Reasons

i) Article 9.25.4.1. mandates that a vapour barrier be provided.

ii) Article 9.25.4.2.(1) of the Building Code requires the use of a vapour barrier having a permeance of not greater than 45 ng/(Pa•s•m^2) whereas the ICF foam used in the Arxx High Performance Wallsystem has a permeance of 60 ng/(Pa•s•m^2).

iii) The referenced evaluation report, CCMC 12641-R Arxx High Performance Wallsystem, does not provide an exemption to the requirement for a vapour barrier. The Minister's Ruling 98-04-54 (12641-R) does not address the exemption for requirement of a vapour barrier.

iv) No compensating measures were proposed to achieve sufficiency of compliance with the minimum requirements set out in the Code.

v) This proposal may be more appropriately considered by an evaluation body, such as the Canadian Construction Materials Centre (CCMC) or the Building Materials Evaluation Commission (BMEC).

Dated at Toronto this **20**th day in the month of **January** in the year **2005** for application number **2004-70.**

Len King, Vice-Chair

Fred Barkhouse

Yaman Uzumeri

Ontario

Ruling No. 05-06-1020
Application No. 2004-74

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 1.1.3.2 of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Dan Einwechter, Challenger Motor Freight Inc., to determine whether the lower floor of the subject building qualifies as a ground floor when considering the definitions for “grade” and “first storey” as specified in Article 1.1.3.2. of the Building Code at Challenger Motor Freight, 300 Maple Grove Road, City of Cambridge, Ontario.

APPLICANT	Dan Einwechter Challenger Motor Freight Inc. Cambridge, Ontario
RESPONDENT	Larry Simonato Chief Building Official City of Cambridge
PANEL	Tony Chow, Chair Susan Friedrich Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	February 17, 2005
DATE OF RULING	February 17, 2005
APPEARANCES	Robert Dyck Robert Dyck Architect & Engineer Inc. Kitchener, Ontario **Agent for the Applicant** Hardy Bromberg Deputy Chief Building Official City of Cambridge **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received a permit under the *Building Code Act*, *1992*, and is constructing an office building at Challenger Motor Freight, 300 Maple Grove Road, Cambridge, Ontario.

The subject building is a Group D office building, having a building area of 2,351 m^2. The building is comprised of non-combustible construction and is equipped with a sprinkler and fire alarm system.

The construction in dispute involves the determination of the height of the building, specifically, whether the lowest level of the building can be considered the basement as opposed to the first storey. The dispute has arisen as a result of differing interpretations regarding the calculation of grade, which will then dictate whether a basement is present. If a basement is present then the floor assembly above the basement would be required to provide a minimum 45 minute fire resistance rating.

The Applicant is basing his calculations for grade on the area of the footprint of the lowest level of the building. Two sides of this level are situated above grade, while the other two sides are underground with approximately 4 m above the finished floor. The issue with respect to grade calculation results from the fact that the second level of the building extends beyond the footprint of the lowest level. If calculating grade based on the footprint of the building on the ground level (above the first level), the calculation would result in the lowest level being considered a basement.

2. Provisions of the Building Code in Dispute

1.1.3.2. Defined Terms

(1) The words and terms in italics in this Code have the following meaning for the purposes of this Code, and where indicated, the following meaning for the purposes of the Act as well.

First storey means the *storey* with its floor closest to *grade* and having its ceiling more than 1.8 m above *grade*.

Grade means the average level of proposed or finished ground adjoining a *building* at all exterior walls.

3. Applicant's Position

The Agent for the Applicant submitted that subject structure is a Group D office building, having a building area of 2,351 m^2 and a height of 3 storeys. He also submitted that the lowest level of the building has a smaller footprint than the second and third levels, which extend beyond the lower level at ground level. It is the determination of the average grade based on the exterior walls, which has precipitated this dispute and brought the parties to the Commission.

In the application submitted, the Agent contended that the average grade should be calculated using the perimeter of the lowest level of the building. Using this approach, as is detailed in the average grade calculation submitted by the Agent, the average grade was calculated to be 1.999 m. It was submitted that the ceiling of the lowest level is 0.1016 m below the finish floor level of

the upper floor. Carrying this theory through to its conclusion, in order for the lowest level to qualify as the first storey, its ceiling is required to be 1.8 m above the adjoining average grade. The average grade, using the Agent's calculation approach, was determined to be 1.999 m. 1.999 m minus 0.1016 m (for the ceiling of the lowest level) equals 1.8074 m, which is more than the requirement of 1.8 m. The Agent maintained that the lowest level therefore qualifies as the first storey of the subject building and, there would be no requirement to construct the floor assembly over the lowest level as a fire separation with a 45 minute fire resistance rating.

The Agent presented a diagram of the subject building which detailed the layout and the grade plan. He drew attention to the fact that the lowest level of the building is approximately 930 m^2 while the next level up is approximately 2,323 m^2. He explained how he had determined the average grade using the perimeter of the lowest level and based on that calculation, he concluded that the subject building should be considered a 3 storey building.

The Agent stated that the real concern is the spread of fire from the lowest level to the level above. He speculated that the grade could have been lowered around the building in order to "have the numbers work" for the determination of average grade but contends that this would not make the building any safer.

The Agent described the occupancy of the lowest level as being offices, meeting rooms and a cafeteria. He added that there are a number of means of egress directly to the outside from this level. He explained the reason for not wanting to provide the floor assembly with a rated fire separation is that the owner wants the look of open ceilings and open steel joists in this building.

The Agent suggested that the building should be considered a 3 storey building, and therefore the fire separation would not be required to have a 45 minute rating but rather the separation could be unrated. He noted that the building is fully sprinklered.

In summation, the Agent reiterated that they could adjust the grade around the building such that the lowest level could be considered the first storey, but he stressed that this would not make the building any safer. He went to say that there are many access points for the Fire Department and that two of the four walls are completely exposed. He asked the Commission to look favourably upon their proposal.

4. Respondent's Position

The Designate for the Respondent submitted that the subject structure is a Group D office building, having a building area of 2,351 m^2 and a height of two storeys. The Designate submitted that, based on his calculations, the building, in his opinion, is two storeys with a basement and therefore, the floor assembly above the lowest level is required to have a minimum 45 minute rated fire separation.

The Designate submitted that based on his calculations, the average grade around the perimeter of the building area was determined to be 310.88 m and the elevation of the lower level ceiling was determined to be 312.06 m. This means the average grade, as measured around the building area is 1.21 m below the ceiling of the lower level. Therefore, it is the opinion of the Designate that the subject building is considered a two storey building with a basement.

The Designate stated that the average grade should be calculated using the finished ground adjoining a building at <u>all</u> exterior walls. As such, the calculation of average grade, according to the Designate, should be determined using the entire building exterior which is adjacent to grade. It is the opinion of the Designate that using this approach for calculating average grade, the subject building is considered a two storey building with basement.

The Designate concluded by reiterating that the lowest level of the subject building, in his view, is considered a basement that should be subject to the applicable construction requirements for a basement, including the requirement of a 45 minute rated fire separation for the floor assembly above.

5. Commission Ruling

It is the Decision of the Building Code Commission that the lowest floor of the subject building does not qualify as the first storey when considering the definitions for “grade” and “first storey” as specified in Article 1.1.3.2. of the Building Code at Challenger Motor Freight, 300 Maple Grove Road, Cambridge, Ontario.

6. Reasons

i) “Grade” is calculated based on the average level of proposed or finished ground adjoining the building at all exterior walls and establishes the second level of this building as the “first storey”.

Dated at Toronto this **17** day in the month of **February** in the year **2005** for application number **2004-74.**

Tony Chow, Chair

Susan Friedrich

Gary Burtch

Ontario

Ruling No. 05-07-1021
Application No. 2005-02

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 3.2.2.67., Clause 3.4.2.5.(1)(c) and Sentence 3.4.4.1.(1) of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Garry Fraser, TDL Group, to determine whether the proposed automated storage and retrieval system that serves as structural support for the building in addition to support for the racking system components provides sufficiency of compliance with Article 3.2.2.67., Clause 3.4.2.5.(1)(c) and Sentence 3.4.4.1.(1) of the Building Code at the Southgate Distribution Centre, 950 Southgate Road, Guelph, Ontario.

APPLICANT	Garry Fraser TDL Group Oakville, Ontario
RESPONDENT	Bruce Poole Chief Building Official City of Guelph
PANEL	Len King, Vice-Chair Ed Link John Guthrie
PLACE	Toronto, Ontario
DATE OF HEARING	February 3, 2005
DATE OF RULING	February 3, 2005
APPEARANCES	Les Muniak Larden Muniak Consulting Incorporated Toronto, Ontario **Agent for the Applicant** Jeremy Laur Plans Examiner City of Guelph **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, and is constructing an automated storage and retrieval system (ASRS) at the Southgate Distribution Centre, 950 Southgate Road, Guelph, Ontario.

The proposed building will be 14,396 m^2 in building area and will have a Group F, Division 2 major occupancy classification. The structure is to be comprised of non-combustible construction and will be equipped with sprinkler, fire alarm and standpipe and hose systems.

The proposed structure is described by the Applicant as a one storey warehouse facility having a Group F, Division 2 major occupancy classification. The subject of this hearing is the Automated Storage and Retrieval System (ASRS), which is approximately 30 m in height, 143 m in length and 18 m in width. The structure will be assembled on site and the structure will support its own walls and roof, as opposed to a "typical" ASRS, which is installed within a building as a self-contained structural system.

The subject ASRS as described by the Applicant is "a high bay rack storage modular rack frame structure built on a mat slab foundation that is used to support the building envelope, pick levels, pallet storage locations, ventilation and/or refrigeration equipment, conveyors and automated cranes called SRMs (Storage and Retrieval Machines). A vestibule area between the Freezer ASRS and the Ambient ASRS is column-supported structure with box beam foundations.

The rack frame structure consists of a system of vertical truss frames made of hollow structural section members. The rack frames are anchored to the mat slab and include cross ties and bracing to transfer loads between the frames. Siding panels and roof deck are fastened to girts supported from the rack frames. Pick levels are supported from the rack frames. Ventilation equipment installed in steel framing is supported from the rack frames. Refrigeration equipment, housed in penthouse enclosures, is installed on grating supported from the rack frames. Conveyors are supported from platforms that are supported from the rack frames. The cranes are supported from the mat slab and guided by rails from the mat slab at the bottom and from the cross ties at the top between the rack frames. One or more elevated levels are for personnel access to perform pallet pick operations. The pick levels may also support conveyors and other distribution equipment."

Several issues are at dispute between the two parties, the first being the height of the structure, the Applicant maintains that the building should be considered to be one storey, while the Respondent believes the building to be between one and three storeys. Specifically, if each of the pick levels are considered to be storeys, then the Code would require these levels to be constructed in accordance with the floor fire separation requirements found in Section 3.2.2.67. To compensate for compliance in this area, the Applicant is proposing to upgrade the sprinkler system to meet Factory Mutual Standards. Further, the travel distance from each pick level would be required to adhere to Clause 3.4.2.5.(1)(c) and not exceed the maximum travel distance of 45 m. In lieu of the travel distance requirements, the Applicant has conducted a time based egress analysis. Additionally, Article 3.4.1.1.(1) would require the exit stairs from the pick levels to be separated from the rest of the building by a fire separation.

A further issue at dispute is the subject structure and the ASRS itself providing the structural frame support for the buildings exterior walls and roof as opposed to the "typical" ASRS where the system is installed "within a building as a self contained structural system."

2. Provisions of the Building Code in Dispute

3.2.2.67. Group F, Division 2, Any Height, Any Area, Sprinklered

(1) Except as permitted by Articles 3.2.2.68. to 3.2.2.72., a *building* classified as Group F, Division 2 shall conform to Sentence (2).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered*,

(b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,

(c) *mezzanines* shall have a *fire-resistance rating* not less 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

Clause 3.4.2.5.(1)(c) Location of Exits

(1) Except as permitted by Sentences (2), (3) and 3.3.2.4.(6), if more than one *exit* is required from a *floor area*, the *exits* shall be located so that the travel distance to at least one *exit* shall be not more than

(c) 45 m in a floor area that contains an *occupancy* other than a *high hazard industrial occupancy*, provided it is *sprinklered*,

Sentence 3.4.4.1.(1) Fire-Resistance Rating of Exit Separations

(1) Except as permitted by Sentences (2), (4), 3.3.5.4.(3), 3.4.4.2.(2) and 3.4.4.3.(1), every *exit* shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than that required by Subsection 3.2.2., but not less than 45 min, for

(a) the floor assembly above the *storey*, or

(b) the floor assembly below the *storey*, if there is no floor assembly above.

3. Applicant's Position

The Agent for the Applicant submitted that the Building Code does not adequately address the uniqueness of the subject ASRS structure with respect to exiting requirements. It is his submission that a time-based egress analysis is more appropriate when evaluating exiting from the subject structure. The Agent further submitted that the installation of a sprinkler system, which has been increased in design to Factory Mutual standards, provides active fire protection instead of passive fire protection as is usually provided by spray on fireproofing.

The Agent described the structure as being designed with "pick levels" and stated that the majority of the product stored within the system is loaded and unloaded by cranes, adding that there is only a narrow strip in the middle which is occupied by employees. He explained that the first level is accessed by employees and uses manned trucks to move the product. The second and third levels have a limited number of occupants, two per level in the ambient storage area and the freezer storage area. Above that point the system is unoccupied and fully automated.

The Agent went on to say that in order to comply to the Code requirements the floor assembly and the structure would require a fire resistance rating of 2 hours. He explained that structure,

including the storage racks, is fully sprinklered. He referred to Article 3.2.2.2. of the Code which states, in part, "A structure…shall be protected against fire spread and collapse in conformance with good fire protection engineering practice." He elaborated on the design of the sprinkler system, which has been significantly enhanced, being designed and configured to both extinguish product fires and to wet and cool the steel supporting elements of the rack structures. He further explained that the racks have been structurally designed to withstand the weight of the products plus the discharge weight of the sprinkler water. In his opinion, the design of this active, sprinkler water based fire protection system, which has been tested to Factory Mutual standards, provides the equivalency of the Code's requirement of providing a 2-hour fire resistance rating. The Agent also stated that a fire alarm system would be installed, even though this is not a requirement.

With respect to travel distance to an exit point, the Agent advised that exit points are provided at the centre and each end of the levels. He admitted that the travel distance is beyond the 45 m limit and uses open stairs as the means of egress. He informed the Commission that in lieu of meeting the required 45 m travel distance, they have instead used a time-based egress analysis in hopes of providing a sufficiency of compliance with Clause 3.4.2.5.(1)(c) of the Code. The detailed findings of their analysis can be found in Appendix A of the Supporting Documentation report submitted by the Agent for the Applicant. In brief, the actual egress time from the most remote location within the ASRS to the outside of the building was calculated as being 1 minute, 16 seconds. Additionally, a very conservative pre-flow time of 3 minutes was added to account for any delay in egress, such as potential delay in becoming aware of an alarm or delay by an occupant in taking action in case of an emergency, this resulted in a worst case evacuation time of 4 minutes, 16 seconds. It is the Agent's belief that this recognized method meets with the objectives and time periods described in the Supplementary Guidelines of the Code and therefore provides sufficiency of compliance for exiting requirements.

When questioned as to whether the structure would comply with the proposed amendment to the Code numbered 03-15-01, the Agent was able to confirm that it would comply with this amendment in all aspects with the exception of two. The structure is beyond the 24 m maximum height as stipulated in proposed amendment 03-15-01 and it is not a "self-contained structural system within a building".

The Agent summed up by stating that it is his opinion the structure provides sufficiency of compliance. The occupancy of the facility is relatively low and the structure would comply with the proposed amendment 03-15-01 in all but two aspects. The following compensating measures were offered, the building will be equipped with a fire alarm system and the sprinkler system will exceed the requirements of NFPA.

4. Respondent's Position

The Designate began by saying that the City supports the Applicant in this concept. It is his opinion that Article 3.2.2.2. of the Code could apply to the fire rating requirements but it would not apply to the exiting requirements.

The Designate for the Respondent submitted that he had two concerns with respect to this particular ASRS. The first is that in a "typical" ASRS the storage systems are used "within a building as a self-contained structural system" while this building's proposed rack and storage system is not contained within a building but is the structural frame for supporting the building's exterior walls and roof. His second concern is with the height of the structure itself being approximately 30 m.

He then explained that, in looking to proposed amendment number 03-15-01, he determined that this proposal could comply with these requirements except for the fact that the structure is not a

rack and storage system within a building and that the building exceeds the height restriction.

The Designate stated that he accepts the use the time-based egress analysis for most of the structure, however, they believed that this approach should not be applied to the ground floor. It was his belief that the ground floor level would still need to meet the 45 m requirement of the Code.

The Designate would like to see this proposal meet all of the requirements contained in proposed amendment 03-15-01. He made specific mention of the following requirements: draft stops at the opening of stairs, fire alarm system, and conveyor and lift gate requirements. He further stated that a sprinkler system would be required under each platform.

The Designate then questioned the reliability of smoke alarms in the freezer area of the ASRS. The Agent responded that they have been investigating some new products and agreed to install an equivalent detection device in the freezer area.

The Designate summed up by restating that he would expect this proposal to meet the requirements stipulated in proposed amendment 03-15-01.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed automated storage and retrieval system that serves as structural support for the building in addition to support for the racking system components provides sufficiency of compliance with Article 3.2.2.67., Clause 3.4.2.5.(1)(c) and Sentences 3.4.4.1.(1) and 3.4.2.1.(1) of the Building Code at the Southgate Distribution Centre, 950 Southgate Road, Guelph, Ontario, on condition that:

a) The proposed automated storage and retrieval system (ASRS) building is to comply in all respects with the proposed amendment to the Building Code numbered 03-15-01, with the following exceptions:

   i) The 24 m maximum height cited in proposed amendment 03-15-01 may be exceeded in the proposed building by 6.48 m.

   ii) The ASRS and the “building” may be combined as opposed to being a “self-contained structural system within a building” as described in the proposed amendment.

b) Smoke detectors are to be installed under all solid decking and walkways as cited in proposed amendment 03-15-01 with the exception of in the freezer area, where equivalent detection devices will be installed to the satisfaction of the Chief Building Official for the City of Guelph.

c) A sprinkler system meeting Factory Mutual standards 2-8N and 8-9 is to be installed. In the ambient temperature area of the ASRS building, the system will have an in-rack sprinkler design density of 0.40 usgpm/ft^2 over 2,000 ft^2, increased to 0.45 usgpm/ft^2 over the 2,000 ft^2 where plastics are stored. In-rack sprinklers, in both the ambient ASRS and the freezer ASRS, will have a minimum flow of 30 usgpm/head.

d) The building will be equipped with a fire alarm system installed in accordance with the requirement of the Building Code.

6. Reasons

i) The proposed automated storage and retrieval system building would comply with proposed amendment, 03-15-01, in all respects except for the height requirement and the shelf and rack system is self- supporting as opposed to being a “self-contained structural system within a building” as is described in the proposed amendment.

ii) A complete fire alarm system is being provided.

iii) A sprinkler system meeting Factory Mutual standards, and exceeding the requirements of NFPA is being installed.

iv) The highest occupied floor of the building is 9 m above ground level.

v) The facility will operate with relatively low occupancy with only two employees on each pick level.

vi) A time based egress analysis has been conducted, resulting in an actual egress time from the most remote location within the ASRS to the outside of the building to be 1 minute 16 seconds. The worst case results, including a 3 minute pre-flow period before evacuation, results in a time of 4 minutes 16 seconds. The Commission is satisfied that the results of this analysis will provide sufficiency of compliance with the exiting requirements outlined in the Code.

Dated at Toronto this **3rd** day in the month of **February** in the year **2005** for application number **2005-02.**

Len King, Vice-Chair

Ed Link

John Guthrie

Ontario

Ruling No. 05-08-1022
Application No. 2005-03

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF in Articles 9.10.14.1. and 9.10.14.5. of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by David Speigel, Tribute Communities (York) Inc., for resolution of a dispute with Ann Borooah, Chief Building Official, City of Toronto, to determine whether the proposed direct vent fireplace sidewall terminations, constructed of type 304 stainless steel and located in walls having a limiting distance ranging from 0.55 m to 1.2 m provides sufficiency of compliance with Articles 9.10.14.1. and 9.10.14.5. of the Building Code at the Village at York University (Tribute Communities), Murray Ross Parkway and Sentinel Road, Toronto, Ontario.

APPLICANT	David Speigel, Tribute Communities (York) Inc. Pickering, ON
RESPONDENT	Ann Borooah Chief Building Official City of Toronto
PANEL	Tony Chow, Chair Susan Friedrich Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	February 17, 2005 and April 4, 2005
DATE OF RULING	April 4, 2005
APPEARANCES	Andy Vella CFM Corporation Mississauga, ON **Agent for the Applicant** Ben Lievers Building Code Examiner City of Toronto **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received permits under the *Building Code Act*, *1992*, and is constructing approximately 300 single and semi-detached dwellings at York University (Tribute Communities), Murray Ross Parkway and Sentinel Road, Toronto, Ontario. It is proposed that the homes be equipped with direct-vent gas fireplaces, which will be vented to the outside of the dwellings. It is the vent terminations of the proposed fireplaces in dwellings having a limiting distance of less than 1.2 m which has resulted in the dispute between the parties.

The subject buildings are residential, single and semi-detached dwellings having building areas of approximately 140 m^2. The dwellings, which are 2 storeys in building height, are comprised of combustible construction. The structures are not equipped with standpipe and hose, fire alarm or sprinkler systems.

The construction in dispute involves the openings of the vent terminations in exposing building faces having limiting distances less than 1.2 m. The limiting distance from the structures to the lot lines ranges from 0.61 m (2 ft.) to zero. The vent termination assemblies consist of the (0.050 aluminium) vent terminal, a 177.8 mm (7 in.) galvanized steel outer air conduit pipe (0.4572 mm in thickness), a galvanized steel wall sleeve (0.5512 mm in thickness), and a firestop spacer (0.7712 mm in thickness), which is also manufactured out of galvanized steel. The wall terminations are available in both aluminium and an optional type 304 stainless steel. The 304 type stainless steel termination is proposed to be used in the subject installations.

The seams of the joints between the wall sleeve, plate and pipe will be sealed with high temperature sealants. The wall sleeve, firestop spacer and outer pipe form a galvanized steel box behind the vent termination.

The Applicant contends that the venting system, when properly installed, meets the requirements of a 45-minute fire rating as would be required for zero lot line applications. The issue at dispute pertains to the percentage and size of openings in an exposing building face having a limiting distance of less than 1.2 m. The Respondent claims that the size of the opening, approximately 0.025 m^2 (38.5 in^2), is more than double the allowable opening size for an unprotected opening under the Code. The Respondent further claims that since this a vent termination for a fuel fired direct-vent appliance, no closure would be permitted. Therefore, the issue before the Commission is whether the vent termination box and fire stop provide sufficiency of compliance with Articles 9.10.14.1. and 9.10.14.5. of the Building Code.

2. Provisions of the Building Code in Dispute

9.10.14.1. Maximum Percentage Area of Unprotected Openings

(1) Except as provided in Sentence (2) and Articles 9.10.14.3. to 9.10.14.11., the maximum percentage of unprotected openings in an exposing building face shall conform to Table 9.10.14.1. or to Subsection 3.2.3., whichever is the least restrictive for the occupancy being considered.

Table 9.10.14.1.
Maximum Percentage of Unprotected Openings or Glazed Areas, % of *Exposing Building Face* Area
Forming Part of Sentence 9.10.14.1.(1)

Occupancy Classification of *Building*	Maximum Area of *Exposing Building Face*, m^2	*Limiting Distance,* m													
		Less than 1.2	1.2	1.5	2.0	2.5	3.0	4.0	6.0	8.0	10.0	12.0	16.0	20.0	25.0
Residential, business and Personal services and Low hazard Industrial	10	0	8	12	21	33	55	96	100	—	—	—	—	—	—
	15	0	8	10	17	25	37	67	100	—	—	—	—	—	—
	20	0	8	10	15	21	30	53	100	—	—	—	—	—	—
	25	0	8	9	13	19	26	45	100	—	—	—	—	—	—
	30	0	7	9	12	17	23	39	88	100	—	—	—	—	—
	40	0	7	8	11	15	20	32	69	100	—	—	—	—	—
	50	0	7	8	10	14	18	28	57	100	—	—	—	—	—
	100	0	7	8	9	11	13	18	34	56	84	100	—	—	—
	Over 100	0	7	7	8	9	10	12	19	28	40	55	92	100	—
Mercantile and medium Hazard Industrial	10	0	4	6	10	17	25	48	100	—	—	—	—	—	—
	15	0	4	5	8	13	18	34	82	100	—	—	—	—	—
	20	0	4	5	7	11	15	27	63	100	—	—	—	—	—
	25	0	4	5	7	9	13	22	51	94	100	—	—	—	—
	30	0	4	4	6	9	12	20	44	80	100	—	—	—	—
	40	0	4	4	6	8	10	16	34	61	97	100	—	—	—
	50	0	4	4	5	7	9	14	29	50	79	100	—	—	—
	100	0	4	4	4	5	6	9	17	28	42	60	100	—	—
	Over 100	0	4	4	4	4	5	6	10	14	20	27	46	70	100
Column 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

9.10.14.5. Openings in Walls Having a Limiting Distance Less Than 1.2 m.

(1) Openings in a wall having a limiting distance of less than 1.2 m shall be protected by closures, of other than wired glass or glass block, whose fire protection rating is in conformance with the fire-resistance rating required for the wall.

3. Applicant's Position

The Agent for the Applicant submitted that, in his opinion, the side wall vent system meets the requirement for a 45-minute fire rating.

The Agent assembled the vent in question for the benefit of the Commission. He clarified that the size of the pipe, which penetrates the wall, is 177.8 mm (7 in.) in diameter resulting in a .025 m^2 (38.5 in^2) opening. The walls are constructed using wood studs with the zero clearance sleeve being placed at the drywall and sealed using a high temperature sealant.

In response to questions from the Commission as to how the venting system works in a zero lot line situation, the Agent explained that there were not any applications where the venting system projected to the lot line. He indicated that what they were really referring to was the distance between wall to wall separations and that the distances ranged between 0.61 m and 1.22 m (2 ft. and 4 ft.). He clarified that the openings in question are 0.025 m^2 (38.5 in^2).

The Commission asked the Agent if the vent assembly had been tested for a 45-minute fire

resistance rating. The Agent replied that it had not been tested but, in his opinion, the fact that the assembly is constructed using stainless steel and that it is a completely sealed unit infers that the assembly would provide a minimum of a 45-minute rating. The Agent referred to a letter of opinion, from a professional engineer, which stated that the vent system would meet the 45-minute fire resistance requirement of the Building Code.

In response to the Commission's request for further information, the Applicant submitted a site plan showing each of the subject houses, the location of the side wall vent termination and the corresponding limiting distances between lot lines.

At the continuation of the hearing, the Agent stated that the vent terminations will be staggered and will not be positioned immediately opposite one another in adjacent buildings. He elaborated on this statement by adding that the openings will be staggered horizontally, vertically or a combination of the two.

In clarification, the Agent informed the Commission that the openings are 177.8 mm (7 in.) in diameter and will be separated a minimum of 127 mm (5 in.) from edge to edge. As a further point of clarification, the Agent confirmed that the exterior cladding material for the houses in question is a non-combustible masonry veneer that will be a minimum of 88.9 mm (3½ in.) thick. The Commission referenced the Manufacturer's Installation Manual, which was included in the Applicant's submission, and questioned how the installation procedures will be met. Specifically, the reference, at page 9, which sets out limits for obstructions and the reference of providing at least a 0.61 m (24 in.) clearance from the front of the hood termination. The Agent responded to this inquiry by stating that this reference referred mostly to obstructions such as bushes or trees. The houses in question have a stone walking surface between them and there is only 1.22 m (4 ft.) between the homes, in his view it is unlikely that planted material would obstruct the vent.

In summation, the Agent maintained that the vent terminations will provide a 45-minute fire resistance rating and referenced a letter of support from a professional engineer. He indicated that the Applicant is willing to stagger the positioning of the vent terminations and also noted that the vent terminations will be equipped with a "cool touch" anti-scald/anti-burn cap, which has been tested to CSA standards. He argued that sufficiency of compliance with the Building Code requirements will be achieved in this instance.

4. Respondent's Position

The Designate for the Respondent submitted that the Building Code stipulates the maximum percentage of unprotected openings in an exposing building face with a limiting distance of less than 1.2 m to be 0%. He further submitted that Sentence 9.10.14.1.(2) states that an opening in an exposing building face of not more than 0.013 m^2 (20 in^2) shall not be considered an unprotected opening. The opening for this vent termination, he noted, is 0.025 m^2 (38.5 in^2) and should therefore be considered an unprotected opening. He referenced Sentence 9.10.14.5.(1) as requiring openings to be protected by a closure. However, since this is a vent termination for a gas-fired direct vent appliance, no closure is permitted.

The Designate also expressed a concern with the possibility of vent openings being installed directly across from one another. The Designate advised that the Municipality had not been provided with any test results to prove that a 45-minute fire resistance rating is being achieved.

In response to the Applicant's submission of the further information as requested by the Commission, the Designate reiterated his concerns with respect to the openings being more than double the allowable size for unprotected openings and also reiterated that the Municipality has not received any approved test results to confirm that the installation of the venting system

will meet a 45-minute fire resistance rating.

In summation, the Designate for the Respondent expressed his concerns with respect to the size of the openings for the vent terminations being more than the allowable limit stipulated in the Building Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed direct vent fireplace sidewall terminations, constructed of type 304 stainless steel and located in walls having a limiting distance ranging from 0.55 m to 1.2 m provide sufficiency of compliance with Articles 9.10.14.1. and 9.10.14.5. of the Building Code at the Village at York University (Tribute Communities), Murray Ross Parkway and Sentinel Road, Toronto, Ontario, on condition that:

a) The exterior walls in which the vent terminations are situated shall consist of non-combustible masonry cladding.

b) The direct vent fireplace systems are installed in accordance with the requirements contained in the manufacturer's installation manual.

c) Where vent openings are located in opposite facing walls having a limiting distance ranging from 0.55 m to 1.2 m, the vents are to be offset by a minimum of 457.2 mm (18 in) from edge to edge such that the openings are staggered and will not be positioned across from one another.

d) All vent terminations will include an anti-scald/anti-burn cap feature that will limit surface temperatures so as to prevent burning upon contact.

6. Reasons

i) The sidewall termination assembly for the proposed fireplaces consists of a type 304 stainless steel vent termination, an inner 101.6 mm (4 in) diameter galvanized steel pipe, a 177.8 mm (7 in) diameter galvanized steel outer air conduit pipe, (0.4752 mm thickness), a galvanized steel zero clearance sleeve (0.5512 mm thickness), and a galvanized steel firestop spacer (0.7112 mm thickness).

ii) The proposed assembly forms a galvanized steel box behind the stainless steel vent termination. The seams of the joints between the wall sleeve, plate and pipe will be sealed with high temperature sealants.

iii) The proposed vent termination, in combination with the zero clearance sleeve and firestop spacer will provide a barrier to flame infiltration.

iv) The Commission is satisfied that, subject to the implementation of the conditions noted above, sufficiency of compliance with the provisions of the Building Code will be achieved.

Dated at Toronto this **4th** day in the month of **April** in the year **2005** for application number **2005-03.**

Tony Chow, Chair

Susan Friedrich

Gary Burtch

Ontario

Ruling No. 05-09-1023
Application No. 2005-04

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF in Part 7 of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Dario Valente, Cobra Drain, for resolution of a dispute with John Wright, Chief Building Official, Town of Markham, to determine whether the proposed use of high density polyethylene pipe to convey sanitary sewage from a Group B, Division 2 care facility to the municipal sewer main provides sufficiency of compliance with Sentence 7.2.5.9.(1) of the Building Code at Unionville Home Society Long-Term Care Facility, 4300 Highway No. 7, Town of Markham, Ontario.

APPLICANT	Dario Valente Cobra Drain Concord, ON
RESPONDENT	John Wright Chief Building Official Town of Markham
PANEL	Tony Chow, Chair Susan Friedrich Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	February 17, 2005
DATE OF RULING	April 19, 2005
APPEARANCES	Mika Slingerland Stantec Consulting Ltd. Markham, ON **Agent for the Applicant** Anthony Boyko Manager, Building Inspections Town of Markham **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant received a permit under the *Building Code Act*, *1992*, and is constructing a Group B, Division 2 facility at Unionville Home Society Long-Term Care Facility, 4300 Highway No. 7, Markham, Ontario. The Applicant has also received an order to comply to remedy certain alleged deficiencies at the same location.

The subject building is 3 storeys in height with a building area of 3,851 m^2 and is comprised of non-combustible construction material. The facility is equipped with a sprinkler system and a fire alarm system but not a standpipe and hose system.

The issue at dispute pertains to the proposed use of 200 mm (8 in.) high density polyethylene pipe to convey sanitary sewage from the building to the municipal sewer main. According to the current Building Code requirement, the scope of the applicable CAN/CSA-B137.1, "Polyethylene Pipe, Tubing and Fittings for Cold Water Pressure Services" only covers the use of such pipe in potable cold water supply services. There is a proposed Code amendment (07-02-07), which, if adopted, would allow the use of polyethylene pipe conforming to ASTM-F714 - "Standard Specification for Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter" to be used underground in a drainage system for rehabilitation of existing systems using trenchless technology.

The Applicant contends that the proposed use of high density polyethylene piping achieves sufficiency of compliance with the requirements of the Building Code, while the Respondent maintains that the subject pipe is only permitted to be used in underground installations of cold water distribution piping. This difference of opinion has brought the parties to the Building ode Commission for resolution of the dispute.

2. Provisions of the Building Code in Dispute

7.2.5.9. Plastic Pipe, Fittings and Solvent Cement Used Underground

(1) Plastic pipe, fittings and solvent cement used underground outside a building or under a building in a drainage system shall be certified to

(a) CAN/CSA-B181.1, "ABS Drain, Waste, and Vent Pipe and Pipe Fittings",

(b) CAN/CSA-B181.2, "PVC Drain, Waste, and Vent Pipe and Pipe Fittings",

(c) CAN/CSA-B182.1, "Plastic Drain and Sewer Pipe and Pipe Fittings",

(d) CAN/CSA-B182.2, "PVC Sewer Pipe and Fittings, (PSM Type)",

(e) CAN/CSA-B182.4, "Profile (Ribbed) PVC Sewer Pipe and Fittings",

(f) CAN/CSA-B182.6, "Profile Polyethylene Sewer Pipe and Fittings",

(g) CAN/CSA-B137.2, "PVC Injection-Moulded Gasketed Fittings for Pressure Applications", or

(h) CAN/CSA-B137.3, "Rigid Poly (Vinyl Chloride) (PVC) Pipe for Pressure Applications".

3. Applicant's Position

The Agent for the Applicant submitted that a temporary sanitary sewer has been installed by directional drill method using high density polyethylene (HDPE) pipe. He further submitted that this horizontal drilling method, in his opinion, ensures that landscaping and parking areas are not disturbed during the installation process.

In the opinion of the Agent, the proposed use of HDPE pipe to convey sanitary sewage from the building to the municipal sewer main achieves sufficiency of compliance with the requirements of the Building Code. He indicated that HDPE piping has been used for more than thirty years in municipal sewage applications and has demonstrated the necessary resistance to provide reliable long-term performance. He also pointed out that it is a temporary installation until such time as regional sewer lines are brought down Highway 7. The Commission questioned whether the pipe would be dug up once the regional sewer lines are put in and the Agent responded that the pipe would not be dug up, it would, however, be decommissioned.

The Agent explained that this type of pipe was used for the project because the subject pipe runs through existing landscape in a retirement community and the contractor did not want to open cut the land. This type of pipe, according to the Agent, can be installed using trenchless technology, which will not disturb the surface materials of the surrounding area. The Agent advised that an auger drill is used to bore a tunnel for the pipe to be fed through. The auger drill has a detector at the front of the drill which sets the line to grade. The pipe is fused at 6m – 7 m lengths as it is being pulled back through the bored tunnel.

At the request of the Commission, the Applicant provided confirmation from the manufacturer that the solid wall HDPE pipe, being used for this project, is manufactured to standard ASTM F714 and that the pipe is suitable for direct burial under a wide range of burial conditions that include the applications of live loads.

In summary, the Agent restated his position that the pipe has been used for more than thirty years in municipal sewage applications and has demonstrated that it has the necessary resistance to provide reliable long term performance, despite the scope of the applicable Code referenced standard only covering for the use in potable cold water supply services. He further argued that he believes he has provided sufficient information to support the proposed use of high density polyethylene piping in this type of application. He reaffirmed his position that he believes the proposal provides sufficiency of compliance with the requirements of the Building Code.

4. Respondent's Position

The Designate for the Respondent submitted that the subject pipe has not been certified to the standards listed in Sentence 7.2.5.9.(1) of the Building Code. He maintained that the current Code only permits this type of pipe to be used in underground installations of cold water distributing piping and not as part of an underground drainage system.

The Designate stated that he understands the reason for using this type of pipe and trenchless technology; however, he does not believe that the material is referenced in the Building Code and therefore the municipality does not have the authority to approve the use of it in this type of application. He contended that the municipality is not prepared to accept the proposal as an equivalency because the municipality is not convinced that this pipe provides an equivalent level of performance as would materials permitted by the Code. Furthermore, the municipality is unable to properly inspect the installation of the pipe. He elaborated by saying that with trenched installation, the municipality would look for the proper bedding and soil conditions,

however, with trenchless installations, the municipal inspectors are unable to thoroughly inspect the work. He acceded that he can see the benefit of using this type of pipe and technology but pointed out that, at this point, the municipality has no assurance that it provides sufficiency of compliance with the requirements of the Code.

The Designate asserted that the municipality is looking for some assurance that the pipe has been installed properly and suggested that a ball test be performed to ensure that the slope is adequate for proper drainage. He further suggested that an engineer should be on site to certify that the pipe has been installed in accordance with the required standard.

In summation, the Designate reiterated that the subject pipe is not addressed in the current Building Code for use in an underground drainage application as is proposed by the Applicant. He added that, if the use of the pipe is allowed, the municipality would like to see a ball test performed and that an engineer should certify that the piping has been installed properly.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed use of high density polyethylene pipe to convey sanitary sewage from a Group B, Division 2 care facility to the municipal sewer main provides sufficiency of compliance with Sentence 7.2.5.9.(1) of the Building Code at Unionville Home Society Long-Term Care Facility, 4300 Highway No. 7, Markham, Ontario, on condition that:

a) A Professional Engineer is to certify that the pipe has been installed in accordance with the ASTM-F714 standard.

b) A ball test is to be performed in order to certify that the slope is sufficient to ensure proper drainage.

c) A manhole is to be installed at or near the midpoint of the run of pipe.

6. Reasons

i) The 203.2 mm high density polyethylene pipe (HDPE) used in the construction of this drainage system is manufactured to conform to ASTM-F714 - “Standard Specification for Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter”.

ii) Proposed Code amendment, 07-02-07, would allow polyethylene piping conforming to the above noted ASTM standard to be used underground in a drainage system for rehabilitation of existing systems using trenchless technology.

iii) Regular discharge sewage from the building will not likely exceed 60^{o}C and any excessive hot water temperature will be cooled within the building drain before being discharged through the pipe. The manufacturer has provided documentation certifying that the pipe meets the temperature requirements.

iv) The high density polyethylene pipe, manufactured by KWH Pipe (Canada) Ltd., has been used in municipal sewage applications for more than thirty years and has demonstrated the necessary resistance to provide long-term performance.

Dated at Toronto this **19th** day in the month of **April** in the year **2005** for application number **2005-04.**

Tony Chow, Chair

Susan Friedrich

Gary Burtch

Ontario

Ruling No. 05-10-1024
Application No. 2004-71

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF in with Article 8.2.1.4., Sentences 8.2.1.6.(2), 8.7.4.2.(9) and Table 8.2.1.6.B of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Stan and Sheila Chudziak, for the resolution of a dispute with Tom Cathcart, Chief Building Official, Peterborough County-City Health Unit, to determine whether the proposed Class 4 sewage system will provide sufficiency of compliance with Article 8.2.1.4., Sentences 8.2.1.6.(2), 8.7.4.2.(9) and Table 8.2.1.6.B of the Building Code at Lot 5 Conc. 10, #551 Fire Rt 27, Peterborough, Ontario.

APPLICANT	Stan and Sheila Chudziak Pickering, ON
RESPONDENT	Tom Cathcart Chief Building Official Peterborough County-City Health Unit
PANEL	Judy Beauchamp, Chair-Designate Jim Wilkinson Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	March 10, 2005
DATE OF RULING	March 10, 2005
APPEARANCES	Stan and Sheila Chudziak Owners Pickering, ON **The Applicant** Brad Clark Sewage System Inspector Peterborough County-City Health Unit **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, and is proposing to construct a Class 4 sewage system at Lot 5 Conc. 10, #551 Fire Rt 27, Peterborough, Ontario.

The Applicant is proposing to install a new Class 4 sewage system to serve an existing, three bedroom, Group C occupancy. The building is described as a one storey, single-family cottage constructed on piers and used as a seasonal dwelling. The building contains 8.5 fixture units and has total finished area of 100 m^2. The calculated daily design flow is 1600 L/day and the water supply for the building is provided by an existing drilled well. The cottage had previously been serviced by a composting toilet, which was not sufficient in the owner's opinion and a new Class 4 sewage system was proposed.

The proposed sewage system will consist of a 4,500 L septic tank connected to a 28 m^2 filter bed containing four runs of distribution pipe. The filter bed is proposed to be dug into the existing soil, however, due to site conditions, including the presence of large rocks; the filter bed will be partially raised. Sentence 8.7.4.2.(9) of the Building Code states that the clearance distances set out in Table 8.2.1.6.B. of the Code must be increased by twice the height that the leaching bed is raised above the original grade.

The issue in dispute between the Applicant and the Respondent involves the clearance distances from the filter bed to the structure, the drilled well, the lake and the property line. As the filter bed is required to be raised the clearance distances must be increased as a result. Therefore, the issue in dispute is whether the partially raised Class 4 sewage system with reduced clearance distances provides sufficiency of compliance with the Article 8.2.1.4., Sentences 8.2.1.6.(2), 8.7.4.2.(9) and Table 8.2.1.6.B of the Building Code.

2. Provisions of the Building Code in Dispute

8.2.1.4. Clearances

(1) Unless it can be shown to be unnecessary, where the *percolation time* is 10 minutes or greater, the location of all components within a *sewage system* shall be in conformance with the clearances listed in Articles 8.2.1.5. or 8.2.1.6.

8.2.1.6. Clearances for a Class 4 or 5 Sewage System

(2) Except as provided in Sentences 8.2.1.4.(1) and (2), a *distribution pipe* shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B. and these distances shall be increased when required by Sentence 8.7.4.2.(9).

Table 8.2.1.6.B.
Minimum Clearances for Distribution Piping
Forming Part of Sentence 8.2.1.6.(2)

Column 1	Column 2
Object	Minimum Clearance, m
Structure	5
Well with a watertight casing to a depth of 6 m	15
Any other well	30
Lake	15
Pond	15
Reservoir	15
River	15
Spring not used as a source of *potable* water	15
Stream	15
Property Line	3

8.7.4.2. Construction Requirements

(9) The distances as set out in Column 2 of Table 8.2.1.6.B. shall be increased by twice the height that the *leaching bed* is raised above the original grade.

3. Applicant's Position

The Applicant submitted that he applied for a permit in July and that he was unclear as to what the issue at dispute involved. The Applicant stated that initially he was advised that a deck, located on the property, was required to be removed in order for the permit to be approved. The Applicant advised that he decided to investigate the validity of needing to remove the deck, as in his opinion, since the deck was constructed on piers, the deck would not impact on the sewage system.

The Applicant stated that he was then advised by the municipality that the issue was not the deck but rather the minimum clearance distances outlined in Table 8.2.1.6.B. of the Code. The Applicant maintained that it is his belief that there is sufficient space to install the sewage system while still maintaining the appropriate clearance distances from the lot line, drilled well and the lake. He further submitted that the deck is not a permanent fixture and will not, in his view, affect or impede the operation of the sewage system.

When questioned as to the on-site conditions, the Applicant suggested that the Commission contact the installer for the proposed sewage system so that the questions can be adequately addressed. In response to questions from the Commission during the hearing, the installer acknowledged that as a result of site conditions, the bed will be partially raised. He advised that it is necessary to raise the bed partially on the cottage side of the bed. He further advised that it is necessary to raise the bed approximately 1 m on the lake side. When questioned as to whether imported sand was to be used, he reported that imported sand was not being used. The installer advised that the minimum clearance distances as outlined in Table 8.2.1.6.B. of the Code can be met as long as the distances are not increased. He argued that the bed is not fully raised and therefore should not be subject to the increased clearance distances prescribed in Sentence 8.7.4.2.(9) of the Code.

In summation, the Applicant reiterated that he believes the proposed sewage system achieves sufficiency of compliance with the Code requirements.

4. Respondent's Position

The Respondent stated that the deck will not impact on the sewage system and therefore it is unnecessary to remove the deck. The Respondent indicated that the issue at dispute pertains to the required clearance distances.

The Respondent described the proposed sewage system as having a raised bed. He explained that, based on his calculations, the bed would be raised by approximately 1 m and therefore in accordance with the requirements of Sentence 8.7.4.2.(9) of the Code, the minimum clearance distances must be increased by 2 m. He advised that, based on the requirement to increase the clearance distances, in his opinion, there is insufficient space to install the proposed system.

While the Respondent admitted that the bed would not be raised on all sides, he declared that the Code does not refer to partially raised beds. He indicated that, in his interpretation, the Code speaks only to raised beds and the subject bed, for the purposes of the Code and in his opinion, is a raised bed. Therefore, pursuant to Sentence 8.7.4.2.(9) of the Code, the clearance distances must be increased by twice the height that the bed is raised above the original grade.

Summarizing the position of the municipality, the Respondent stated that the necessity to raise the filter bed and the resultant increase in the required clearance distances creates a situation whereby there is insufficient space to install the proposed sewage system. In his opinion, sufficiency of compliance with the minimum clearance distances as outlined in Table 8.2.1.6.B. when considering Sentence 8.7.4.2.(9) of the Code cannot be achieved.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed Class 4 sewage system provides sufficiency of compliance with Article 8.2.1.4., Sentences 8.2.1.6.(2), 8.7.4.2.(9) and Table 8.2.1.6.B of the Building Code at Lot 5 Conc. 10, # 551 Fire Rt. 27, Peterborough, Ontario, on condition that:

a) The Peterborough County-City Health Unit inspect the existing excavation in the spring of 2005 (as ground conditions permit) and find that the water table is at a depth greater than 900 mm below existing ground surface, and that bedrock is at a depth greater than 900 mm below existing ground surface.

6. Reasons

i) The proposed system includes an in-ground leaching bed. Imported sand will not be used to construct the base and no mantle is required.

ii) The distribution piping will be setback 6 m from the house and, although the deck will be within the 5 m setback requirement, in the opinion of the Building Code Commission, it will not have an impact on the proposed sewage system.

Dated at Toronto this **10th** day in the month of **March** in the year **2005** for application number **2004-71.**

Judy Beauchamp

Jim Wilkinson

Gary Burtch

Ontario

Ruling No. 05-11-1025
Application No. 2004-75

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 8.8.1.2. of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Allan Avery, 914007 Ontario Inc. for the resolution of a dispute with Terry Davidson, Director of Regulations, Ottawa Septic System Office, to determine whether the proposed installation of a Class 5 sewage system (holding tank) provides sufficiency of compliance with Article 8.8.1.2. of the Building Code at the Constance Bay Gas Bar, 117 Constance Bay Rd, Woodlawn, Ontario.

APPLICANT	Allan Avery 914007 Ontario Inc. Woodlawn, ON
RESPONDENT	Terry Davidson Director of Regulations Ottawa Septic Systems Office
PANEL	Judy Beauchamp, Chair-Designate Jim Wilkinson Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	March 10, 2005
DATE OF RULING	March 10, 2005
APPEARANCES	Allan Avery 914007 Ontario Inc. Woodlawn, ON **The Applicant** Terry Davidson Director of Regulations Ottawa Septic Systems Office **The Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, and is proposing to install a Class 5 sewage system (holding tank) to service a convenience store and gas bar at the Constance Bay Gas Bar, 117 Constance Bay Rd, Woodlawn, Ontario.

The Applicant is proposing to install a Class 5 holding tank to service a one storey, convenience store and gas bar, having a building area of approximately 90 m^2. The water supply to the building is from a sand point well and the building has a total of seven plumbing fixtures. The total daily design flow rate will be 2,630 L/day. According to the Respondent, the site is described as fairly level, having a slope of less than one percent, and with a depth of greater than 2,000 mm to the high groundwater table. Existing soils are proposed to be used and the percolation time ranges from six to eight minutes per centimetre.

The construction in dispute involves the proposed installation of a Class 5 holding tank to service the facility. According to the Applicant, there is insufficient space on the site to install anything other than a Class 5 sewage system. The Building Code prohibits the installation of a Class 5 sewage system except in specific circumstances.

Article 8.8.1.2. of the Code outlines specific circumstances under which it is acceptable to install a holding tank. The issue at dispute between the parties is whether the proposed installation of the Class 5 sewage system provides sufficiency of compliance with Article 8.8.1.2. of the Building Code.

2. Provisions of the Building Code in Dispute

8.8.1.2. Acceptable Installation

(1) A Class 5 sewage system may be installed in the following circumstances:

(a) where the proposed use of the sewage system is for a temporary operation, excluding seasonal recreational use, not exceeding 12 months in duration,

(b) to permit the extension of an existing single-family dwelling provided that

(i) the extension will not increase the wastewater load, and

(ii) the building is already served by a Class 5 sewage system,

(c) to remedy an unsafe sewage system where the remediation of the unsafe condition by the installation of a Class 4 sewage system is impracticable,

(d) to upgrade a sewage system serving an existing building, where upgrading through the use of a Class 4 sewage system is not possible due to lot size, site slope or clearance limitations, or

(e) as an interim measure for a lot or parcel of land until municipal sewers are available, provided that the municipality undertakes to ensure the continued operation of an approved hauled sewage system until the municipal sewers are available.

(2) Where a Class 5 sewage system is installed, a written agreement for the disposal of sanitary sewage from the sewage system shall be entered into with a hauled sewage system operator.

3. Applicant's Position

The Applicant stated that he understands that the Building Code does not permit the installation of holding tanks; however, he advised that because of the size of the lot, there is insufficient space to install a Class 4 sewage system while still maintaining the required clearance distance to the property line. He advised the Commission that it would be his preference to install a Class 4 sewage system if there were sufficient room. The Applicant explained that, in his opinion, a holding tank is the only option for the property in question.

The Applicant advised that the sewage system would not be used frequently as it would be primarily for the use of employees of the gas bar. He further advised that he believes that a holding tank is better for the environment since the property is located very close to the Ottawa River.

In summary, the Applicant claimed that there is insufficient space for a Class 4 sewage system and therefore the only option is to install a Class 5 sewage system.

4. Respondent's Position

The Respondent stated that a permit application was received in October 2004 requesting approval to install a holding tank to service the subject property. He advised that the permit was denied because of the provisions of Article 8.8.1.2. of the Building Code. The Respondent reported that a letter was sent to the Applicant advising of the denial of the permit and advising that the Code prohibits the installation of Class 5 sewage systems except in the specific circumstances outlined in Article 8.8.1.2. of the Building Code. He advised that in his opinion the subject proposal does not fall within the criteria outlined in Article 8.8.1.2. of the Code for acceptance of a Class 5 sewage system and therefore the permit was denied.

The Respondent informed the Commission that, in his opinion, the Applicant has not demonstrated that a Class 4 sewage system will not fit on the property. He further explained that he believes there is sufficient building area to install a Code compliant Class 4 sewage system. He advised that the Applicant constructed the building without determining how the building would be serviced and that, in his opinion, it is inappropriate to construct a building and then state that there is insufficient space to properly service the building.

In summation, the Respondent reiterated that the Building Code prohibits installation of Class 5 sewage systems except in the specific circumstances outlined in Article 8.8.1.2. He advised that in his opinion, this proposed installation does not meet any of the requirements outlined in Article 8.8.1.2. and therefore does not comply with the requirements of the Building Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed installation of a Class 5 holding tank does not comply with Article 8.8.1.2. of the Building Code at the Constance Bay Gas Bar, 117 Constance Bay Rd, Woodlawn, Ontario.

6. Reasons

i) While the Commission may sympathize with the Applicant's frustration with the permit approval process, Article 8.8.1.2. prohibits the installation of holding tanks except in certain circumstances. None of these explicit circumstances apply to this proposed development.

ii) No evidence was presented to suggest that the site (prior to the construction of the new building for which a permit had not yet been issued) could not accommodate a Class 4 system.

Dated at Toronto this **10** day in the month of **March** in the year **2005** for application number **2004-75.**

Judy Beauchamp

Jim Wilkinson

Gary Burtch

Ontario

Ruling No. 05-13-1027
Application No. 2005-05

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 3.1.3.2.(2) and 3.1.3.2.(4) of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Avi Gottlieb, Avcon Construction Inc. for resolution of a dispute with Jim Laughlin, Deputy Chief Building Official, City of Toronto, to determine whether the proposed public use self-storage facility, having a Group F, Division 2, medium hazard industrial occupancy can be located in the basement level of a building currently designated for Group C, residential occupancy and Group E, retail purposes, provides sufficiency of compliance with Sentences 3.1.3.2.(2) and 3.1.3.2.(4) of the Building Code at 427 Parliament Street, Toronto, Ontario.

APPLICANT	Avi Gottlieb Avcon Construction Inc. Toronto, Ontario
RESPONDENT	Jim Laughlin Deputy Chief Building Official City of Toronto
PANEL	Tony Chow, Chair Fred Barkhouse Rick Florio
PLACE	Toronto, Ontario
DATE OF HEARING	April 7, 2005
DATE OF RULING	April 14, 2005
APPEARANCES	Leszek Muniak Larden Muniak Consulting Inc. **Agent for the Applicant** Prabhakar Mahant Manager, Plan Review City of Toronto **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, and proposes to use the basement level of an existing mixed-use building as a self-storage facility at 427 Parliament Street, City of Toronto, Ontario.

The subject building is two storeys in building height with a basement level and has a building area of 1,003 m^2. Both combustible and non-combustible materials have been used in the construction of the building. The ground floor and the basement level are fully sprinklered. Only the east portion of the second floor is sprinklered and the structure is equipped with a fire alarm system but not a standpipe and hose system.

The building is a mixed-use building containing a Group C residential occupancy on the second floor and Group E mercantile occupancy on the ground floor. The floor assemblies between the ground floor and the second floor provide a 2 h fire-resistance rating. The floor assemblies between the basement and the ground floor provide a 1 h fire-resistance rating.

It is proposed that the basement level of the building be used as a public self-storage facility. This use would result in a Group F, Division 2 – medium hazard industrial occupancy for the basement level. Floor assemblies between the basement level and the ground floor are constructed using concrete floor on a metal deck. Steel beams, joists and a metal floor deck have a 1 h rated spray fireproofing. All columns, which support the structures above, are 2 h fire rated.

The construction in dispute involves the resulting combination of occupancies. In particular, the combination of a Group F, Division 2 major occupancy and a Group C, residential major occupancy within the same building. In this regard, the issue in dispute involves the whether the proposed public self-storage facility located in the basement of the existing mixed-use building provides sufficiency of compliance with the provisions outlined in Sentences 3.1.3.2.(2) and 3.1.3.2.(4) of the Building Code.

2. Provisions of the Building Code in Dispute

3.1.3.2. Prohibition of Occupancy Combinations

(2) Except as provided in Sentence (4) and Sentence 3.10.2.4.(9), not more than one *suite* of *residential occupancy* shall be contained within a *building* classified as a Group F, Division 2 *major occupancy*.

(4) A Group F, Division 2 *major occupancy* is permitted in a *building* containing only *live/work units* and is for the exclusive use of the occupants of the *live/work units*.

3. Applicant's Position

The Agent for the Applicant submitted that the building is a two-storey building with a basement. The structure faces one street for fire fighting access. The ground floor has a floor area of approximately 1000 m^2 and is used for retail purposes. The second floor, has a floor area of approximately 800 m^2, and is used for residential purposes. It is proposed that the basement level of the building be used as a self-storage facility for persons in the neighbourhood. The rental and use of the proposed storage units would be available to the general public and would not be confined to the use of the tenants in the building.

The Agent outlined some key elements as assurance that the level of safety in the building is adequate to ensure the safety of the occupants. He noted that the building will be equipped with a sprinkler system as well as a fire alarm and smoke detection system and fire separations are provided between the occupancies. He also informed the Commission that, in his opinion, the travel distance of 45 m would allow adequate time for person to evacuate the basement floor area. Additionally, he pointed out that the entrance to the basement level would be from Parliament Street and would be separate from the entrance for the residential occupancy. It is his belief that, based on the existing conditions, an adequate protection against fire spread from occupancy to occupancy is achieved.

The Agent further submitted that the basement had previously been used as a storage area for the retail occupancy located on the ground floor. The building changed ownership in 2000 and the new owner now wishes to convert the basement level to a self-storage facility as the retail occupancy located on the ground floor no longer uses the basement for storage.

The Agent stated that the Building Code appears to disallow the inclusion of a Group F, Division 2 self-storage facility because of the existing Group C occupancy. Sentence 3.1.3.2.(2) of the Code restricts buildings classified as F2 major occupancy to having not more than one suite of residential occupancy, except as provided by Sentence 3.1.3.2.(4). Sentence 3.1.3.2.(4) of the Code refers to conditions under which more than one suite of residential occupancy may be contained within a building having a Group F, Division 2 major occupancy. This Sentence permits a Group F, Division 2 major occupancy in a building containing only live/work units and is for the exclusive use of the occupants of those live/work units.

The Agent indicated that in discussing the issue with National Building Code staff as to why these references were included in the Code, the reason given was that at one time factories had truck deliveries and the truck drivers wanted a place to rest, therefore one unit of residential occupancy was allowed. This provision has been in the National Building Code since 1960. He further indicated that the Ontario Building Code was amended to permit the use of residential spaces for business purposes. It is the Agent's opinion that both of these Sentences were included in the Code for specific purposes. He went on to suggest that the Building Code does not prohibit an F2 occupancy in a building from containing a Group C occupancy. He cited a dry cleaning establishment as an example. It was the opinion of the Agent that the Code is being applied to this specific situation in a way that it was not intended.

The Agent was questioned as to how it was determined whether the proposed self-storage facility should be classified as a Group F, Division 2 or Group F, Division 1 occupancy. He explained that the Code refers to self-storage facilities as an F2 classification. He stated that an F1 classification includes the storage of highly flammable or explosive contents. Self-service storage buildings are listed in A-3.1.2.1.(1) of the Code as an example of the type of use that might be considered a Group F, Division 2 major occupancy.

Upon being questioned as to how the material being stored within the facility could be controlled, the Agent advised that the facility would be monitored by video cameras and contracts would be entered into with the users of the facility in order to stipulate the restrictions on allowable materials to be stored. He further advised that there would be on-site supervision during business hours.

The Agent also stated that emergency lighting would be provided. In response to being questioned as to whether the fire alarm and the sprinkler systems are required, the Agent stated that the fire alarm system is a requirement and the sprinklering is required in the basement and the retail floor as they are over 6,000 m^2. The Agent went on to say that smoke detectors could also be installed as a compensating measure. The detectors would offer early warning in the event of a fire and would not be required by the Building Code.

The Agent summarized his position by stating that the building in question is a multiple use building, having a residential occupancy on the top floor, a mercantile occupancy on the ground level and a proposed medium hazard industrial occupancy in the basement. In his opinion the Code does not prohibit the combination of residential and medium hazard industrial occupancies in the same building. He also referenced the Applicant's willingness to install smoke detection devices in the basement of the building as a compensating measure.

4. Respondent's Position

The Respondent submitted that the proposed use of the existing basement as a medium hazard industrial occupancy when combined with the existing residential occupancy, results in non-compliance with the Building Code. He further submitted that building permits were issued for the ground floor retail occupancy and the second floor residential occupancy. The permits do not refer to any occupancy in the basement portion of the building.

The Respondent is of the opinion that the Municipality has not been provided with sufficient information to determine the proper classification of the proposed self-storage use in the basement. In the Respondent's view, there has been no determination of the hazardous content that may be stored within the proposed facility and this is why the Municipality is questioning the occupancy classification.

The Respondent stated that Part 11 of the Building Code does not provide any relief from having to comply with Article 3.1.3.2. of the Code. He went on to say that Sentence 3.1.3.2.(1) of the Code prohibits a Group F, Division 1 major occupancy in a building containing Group A, B or C occupancies. The Respondent submitted that he would like to have some confirmation that the proposed facility would not contain an F1 occupancy and claimed that he had not received any information which would provide him with a level of comfort in this regard.

The Respondent referenced Sentences 3.1.3.2.(2) and 3.1.3.2.(4) of the Code and argued that these exceptions do not apply to the facility in question. He maintained that Sentence 3.1.3.2.(2) allows for not more than one suite of residential occupancy to be contained within a building classified as having a Group F, Division 2 major occupancy. Since this facility has more than one suite of residential occupancy, this exception does not apply to this facility. He further maintained that Sentence 3.1.3.2.(4) does not apply to the facility either, as the F2 use is not for the exclusive use of the occupants of the building. It was his opinion that a building could not contain a Group C occupancy and a public self-storage facility.

The Respondent also voiced a concern as to whether Section 3.10. should apply to the self-storage use in the basement. Section 3.10. of the Building Code outlines specific requirements for self-service storage buildings. It would appear that since the entire building is not a self-storage facility that the requirements of that Section would not apply. He explained that he felt the self-storage industry is more regulated than the self-storage use would be in this facility.

In summation, the Respondent reiterated that it is his belief that the Code restricts an F2 use within a building containing a Group C occupancy to being for the exclusive use of the residents of the building. This is not the case with this building. The residents living in the residential portion of the building would not have any control over what is being stored in the basement of their building.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed public self-storage facility, Group F, Division 2, medium hazard industrial major occupancy located in the basement level of a building currently designated as Group C, residential major occupancy on the second storey and Group E, retail major occupancy on the first storey, provides sufficiency of compliance with Sentences 3.1.3.2.(2) and 3.1.3.2.(4) of the Building Code at 427 Parliament Street, Toronto, Ontario, on condition that:

a) The floor assembly between the proposed Group F, Division 2 occupancy and the existing Group E occupancy shall be upgraded to provide a fire resistance rating of not less than 2 hours.

b) All stairwell enclosures shall provide a fire resistance rating of not less than 2 hours.

c) Smoke detection devices, connected to the fire alarm system, shall be installed in each suite or portion of the proposed Group F, Division 2 occupancy, such that all areas will be covered.

d) A single stage fire alarm system shall be installed throughout the building. The system shall be designed to notify the fire department that an alarm signal has been initiated.

e) On site supervision by an employee of the self-storage facility shall be provided and public access to the storage facility shall be restricted to those hours during which on site supervision is provided.

f) Material permitted to be stored within the facility will be restricted to medium hazard industrial content. Contracts shall be entered into between patrons of the facility and the self-storage management, informing the patrons of the restriction on permitted storage items and identifying items, which are not permitted (i.e. high hazard industrial material).

6. Reasons

i) The proposed Group F, Division 2 medium hazard industrial occupancy is to be located in the basement of the subject building while the Group C residential occupancy is located on the second storey. The Group E mercantile occupancy, located on the first storey, separates the uses.

ii) The basement, first storey and a portion of the second storey of the subject building are equipped with a sprinkler system.

iii) The proposed storage facility will be monitored by video cameras.

iv) The subject building is only two storeys in building height.

v) The Commission is satisfied that, subject to the implementation of the conditions noted above, the subject proposal will achieve sufficiency of compliance with the provisions of the Building Code.

Dated at Toronto this 14th day in the month of April in the year 2005 for application number 2005-05.

Tony Chow, Chair

Fred Barkhouse

Rick Florio

Ontario

Ruling No. 05-14-1028
Application No. 2004-64

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 8.7.4.1., 8.7.4.2. and Clause 8.9.1.2.(1)(c) of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Steve Jackson, property owner, for resolution of a dispute with Terry Davidson, Director of Regulations, Ottawa Septic Systems Office, to determine whether the existing Class 4 sewage system fails to comply with Articles 8.7.4.1., 8.7.4.2. and Clause 8.9.1.2.(1)(c) of the Building Code at 5644 South Island Park Drive, Manotick, Ontario

APPLICANT	Steve Jackson Property owner Manotick, ON
RESPONDENT	Terry Davidson Director of Regulations Ottawa Septic Systems Office
PANEL	Len King, Vice-Chair Judy Beauchamp Jim Wilkinson
PLACE	Toronto, Ontario
DATE OF HEARING	April 21, 2005
DATE OF RULING	April 21, 2005
APPEARANCES	Steve Jackson Property owner Manotick, ON **The Applicant** Terry Davidson Director of Regulations Ottawa Septic Systems Office **The Respondent**

RULING

1. Particulars of Dispute

The Applicant is the owner of the property located at 5644 South Island Park Drive, Manotick, Ontario. The issue at dispute, as described by the Applicant, involves the design and construction of the existing Class 4 sewage system located on his property. The Respondent's position is that there is no dispute.

At the outset of the hearing, the Commission questioned whether it had the jurisdiction to resolve this issue since Mr. Jackson is not the applicant for a permit, the holder of a permit nor has an order been given to him. The Parties spoke to the issue of jurisdiction.

2. Applicant's Position

The Applicant submitted that the Class 4 sewage system located on his property does not comply with the construction requirements of the Building Code. He agreed that he is not the holder of the permit nor has he applied for a permit or been issued an order. It is his submission that as owner of the property, he is the de facto holder of the permit and therefore should be afforded the opportunity to have the Commission make a determination on the technical requirements of the Building Code as they relate to the sewage system located on his property.

3. Respondent's Position

The Respondent submitted that, since the certificate of completion has been issued, the Ottawa Septic Systems Office considers the Class 4 sewage system located at 5644 South Island Park Drive to be in general compliance with the requirements of the Building Code and therefore there is no dispute.

4. Commission Ruling

It is the Decision of the Building Code Commission (BCC) that the BCC has no jurisdiction to determine the dispute relating to whether the existing Class 4 sewage system fails to comply with Articles 8.7.4.1., 8.7.4.2. and Clause 8.9.1.2.(1)(c) of the Building Code at 5644 South Island Park Drive, Manotick, Ontario.

5. Reasons

i) The mandate of the Building Code Commission is set out in Subsection 24(1) of the *Building Code Act, 1992* which stipulates that "(i)f there is a dispute between **an applicant for a permit or holder of a permit or a person to whom an order is given** (emphasis added) and the chief building official or an inspector, any party to the dispute may apply to the Building Code Commission…".

ii) Although there may be a dispute between Mr. Jackson and the municipal officials involving the pre-existing on-site sewage system, Mr. Jackson is neither the permit applicant nor holder of a permit and no order to comply has been issued in respect to the alleged failure of the subject septic system. Any dispute between the subject individuals must be resolved in another forum, as the Commission has no authority to exceed its established mandate.

Dated at Toronto this **21st** day in the month of **April** in the year **2005** for application number **2004-64.**

Len King, Vice-Chair

Judy Beauchamp

Jim Wilkinson

Ontario

Ruling No. 05-15-1029
Application No. 2005-07

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 1.1.3.2. of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Tim Sullivan, Everyday Septic Solutions, for the resolution of a dispute with Terry Davidson, Director of Regulations, Ottawa Septic Systems Office, to determine whether the installation of a septic field remediation technology known as the White Knight™ into an existing septic tank provides sufficiency of compliance with the Building Code when considering Part 11 and the definition of "septic tank" as outlined in Article 1.1.3.2. at 1358 Potter Drive, Manotick, Ontario.

APPLICANT	Tim Sullivan Everyday Septic Solutions Nepean, ON
RESPONDENT	Terry Davidson Director of Regulations Ottawa Septic Systems Office
PANEL	Len King, Vice-Chair Judy Beauchamp Jim Wilkinson
PLACE	Toronto, Ontario
DATE OF HEARING	April 21, 2005
DATE OF RULING	April 21, 2005
APPEARANCES	Tim Sullivan Everyday Septic Solutions Nepean, ON **The Applicant** Terry Davidson Director of Regulations Ottawa Septic Systems Office **The Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Comply under the *Building Code Act*, *1992*, to remedy certain alleged deficiencies at 1358 Potter Drive, Manotick, Ontario.

The Applicant has applied for a permit and is proposing to install a septic field remediation technology known as the White Knight™ into an existing septic tank located at 1358 Potter Drive, Manotick, Ontario.

The building on the subject property is a Group C, residential dwelling having a building area of approximately 260 m^2. The dwelling contains four bedrooms with a total of 28.5 fixture units and has a total daily design flow rate of 2,600 L/day. The subject dwelling is served by an existing drilled well.

The White Knight™ is a technology combining patented, non-pathogenic, aerobic bacteria and an aeration system that claims to remediate septic beds that are failing due to biological clogging or the excessive build up of biomat. The aeration unit is placed in the second chamber of an existing septic tank. An external, forty-watt, linear air pump will provide air to the aeration unit. Bacteria grow in the effluent, on a fixed film media in the aeration unit as well as on the effluent filter provided with the unit. The bacteria are then carried out into the leaching field by the oxygenated effluent. In the field, the bacteria consume the biomat and restore the percolation capacity of the soil.

Part 11 of the Code allows for material alteration and/or repair of an existing sewage system, however, the Code does not specifically dictate how such an alteration or repair be conducted. Sentence 11.3.1.1.(1) of the Code states that where an existing building system is materially altered or repaired, the performance level of the building after the material alteration or repair shall be at least equal to the performance level of the building prior to the material alteration or repair.

The Building Code defines a septic tank, in Article 1.1.3.2., as “a watertight vault in which sanitary sewage is collected for the purpose of removing scum, grease and solids from the liquid without the addition of air and where solids settling and anaerobic digestion of sanitary sewage takes place.”

The issue in dispute involves the proposed installation of a septic field remediation technology known as the White Knight™ into the existing septic tank and whether the installation of the White Knight™ provides sufficiency of compliance with the Building Code when considering Part 11 and the definition of “septic tank” as outlined in Article 1.1.3.2. of the Code. Specifically, the dispute pertains to whether air can be supplied to the White Knight™ when installed in the septic tank while still maintaining sufficiency of compliance with the definition of a septic tank as outlined in the Building Code.

2. Provisions of the Building Code in Dispute

1.1.3.2. Defined Terms

(1) The words and terms in italics in this Code have the following meaning for the purposes of this Code, and where indicated, the following meaning for the purposes of the Act as well.

Septic tank means a watertight vault in which sanitary sewage is collected for the purpose of removing scum, grease and solids from the liquid without the addition of air and where solids settling and anaerobic digestion of the sanitary sewage takes place.

Proposed Construction Section 11.3.

New and Existing Building Systems 11.3.1.

11.3.1.1. Material Alteration or Repair of a Building System

(1) Where an existing *building system* is materially altered or repaired, the *performance level* of the *building* after the material alteration or repair shall be at least equal to the *performance level* of the *building* prior to the material alteration or repair.

11.4.1. General

11.4.1.1. Performance Level

(1) The performance level of a building after construction shall not be less than the performance level of the building prior to construction.

(2) For the purposes of Sentence (1), reduction of performance level shall be determined in accordance with Subsection 11.4.2.

(3) Where the proposed construction would reduce the performance level of an existing building, compensating construction shall be required in conformance with Subsection 11.4.3

11.4.2.5. Sewage Systems

(1) The performance level of an existing building is reduced where the existing building is extended or subject to material alteration or repair and a sewage system serving the existing building is adversely affected by the extension, alteration or repair of the existing building.

3. Applicant's Position

The Applicant submitted that the White Knight™ unit has been tested over a period of five years and has been installed with successful results in more than five hundred cases. He further submitted that, while the White Knight™ is an addition to an existing septic system, it does not materially change or alter any part of the existing septic system into which it is installed. The addition of the White Knight™ does not change the size of the load, septic tank or leach field and the volume of effluent displaced in the tank is minimal at approximately 9 L.

The Applicant described the White Knight™ system as being a leaching field recovery technology. The device is installed into the septic tank and the tank is then inoculated with task specific bacteria to consume the biomat. He indicated that air is supplied to the device to support the growth of the bacteria as bacteria growth is based on nutrients in the tank and oxygen. He stated that the phrase "without the addition of air" contained in the definition of septic tank, in his opinion, is meant to differentiate between a septic tank and a treatment unit. He asserted that this product is not a treatment unit and advised that this product does not change the flow, the volume of the tank or the size of the drainage field.

When questioned as to the length of time that the White Knight™ unit would remain in the tank, the Applicant replied that it would become a permanent fixture. In response to being questioned as to whether the permanency of the White Knight™ unit in the tank makes the system a tertiary treatment unit, the Applicant reiterated that White Knight™ is not, and does not, claim to be a treatment unit.

In summation, the Applicant stated that the White Knight™ is installed in systems that are already in failure mode, where an effluent breakout has already occurred. He further advised that, in his opinion, the performance level of the sewage system will not be reduced. He added that if the White Knight™, once installed correctly, does not remediate the situation, then the sewage system must still be repaired. He offered that the use of this product provides a lower cost option for recovery of a leaching field. He maintained that if the breakout is eliminated as a result of the addition of the White Knight™ to the septic tank then the sewage system is performing better than it was prior to the installation of the White Knight™ and, therefore, sufficiency of compliance with the requirements of the Building Code has been achieved.

4. Respondent's Position

The Respondent submitted that, in his opinion, the installation of the White Knight™ unit into a septic tank violates the definition of "septic tank" because air is added to the tank and also because the unit agitates the contents of the septic tank thereby adversely affecting the settling of solids.

The Respondent noted that the existing Class 4 sewage system was approved by the Ministry of the Environment in 1989. He further noted that a use permit was issued in December 1989 which clearly states that the sewage system consists of a 4,500 L tank with a filter media bed. The Respondent maintained that the site is accessible with ample room for replacement of the leaching field.

The Respondent asserted that the Building Code is clear in its definition of "septic tank" and stressed the inclusion of the words "without the addition of air" contained within the definition. He maintained that, in his opinion, the installation of the White Knight™ contravenes the definition of "septic tank" not only with respect to the addition of air but also with respect to the agitation of the contents of the septic tank.

The Respondent related the dictionary definition for anaerobic digestion as being "growing without air or requiring oxygen free conditions to live"; in addition he stated that if air is added then digestion is no longer anaerobic but rather aerobic. He added that, in his opinion, this further demonstrates that a septic tank cannot have air injected into it. Furthermore, he noted that agitating the tank goes against the principle of tank design in terms of solids settling. He also expressed a concern as to whether the task specific bacteria inoculation described by the Applicant is safe for groundwater and indicated that evidence had not been presented to attest to the safety of this practice.

The Respondent stated that he believes he has demonstrated that, in accordance with the Building Code definition, a septic tank performs anaerobic digestion without the addition of air. The addition of the White Knight™ unit introduces air into the septic tank and creates turbulence, in his opinion, the performance of the septic tank is reduced. Furthermore, in his view, the Applicant has not demonstrated that the performance of the tank is increased, in fact, he argued that the performance is decreased with the addition of air and therefore does not sufficiently comply with the requirements of the Building Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the installation of a septic field remediation technology known as the White Knight™ into an existing septic tank does not provide sufficiency of compliance with the Building Code when considering Part 11 and the definition of “septic tank” as outlined in Article 1.1.3.2. at 1358 Potter Drive, Manotick, Ontario.

6. Reasons

i) Article 11.3.1.1 of the Building Code allows for the alteration or repair of an existing building system where the performance level of the system remains at least equal to the performance level of the system prior to the alteration or repair. The Commission, however, is not satisfied, based on the evidence presented, that the introduction of this remediation technology into the septic tank will not adversely affect the intended operation and function of the system.

ii) The introduction of air into the septic tank may adversely impact this component of the system where the settling of solids and anaerobic digestion of sanitary sewage are to take place. Further, increased turbidity as a result of the agitation of effluent in the second chamber of the septic tank will impact settling and may have the effect of increasing the total suspended solids leaving the tank.

iii) Based on the performance data submitted as evidence, the Commission is not satisfied that this remediation measure will consistently function as intended to recover the leaching field.

iv) The proposal to install this remediation technology in an existing septic tank may be more appropriately considered and thoroughly evaluated by a body, such as the Canadian Construction Materials Centre (CCMC) or the Building Materials Evaluation Commission (BMEC).

Dated at Toronto this **21st** day in the month of **April** in the year **2005** for application number **2005-07.**

Len King, Vice-Chair

Judy Beauchamp

Jim Wilkinson

Ontario

Ruling No. 05-21-1035
Application No. 2005-15

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Lawrence Ryan, 1353837 Ontario Inc., for the resolution of a dispute with David Carroll, Chief Building Official, City of Stratford, involving the issuance of an Unsafe Order and whether a permit should be issued for the proposed construction of three non-load bearing demising walls to create a general store within an existing Group F, Division 3 major occupancy building at 105 St. Patrick Street, City of Stratford, Ontario.

APPLICANT	Lawrence Ryan 1353837 Ontario Inc.
RESPONDENT	David Carroll Chief Building Official City of Stratford
PANEL	Len King, Vice-Chair Ed Link Rick Florio
PLACE	Toronto, Ontario
DATE OF HEARING	June 7, 2005
DATE OF RULING	June 7, 2005
APPEARANCES	Lawrence Ryan 1353837 Ontario Inc. **The Applicant** David Carroll Chief Building Official City of Stratford **The Respondent**

RULING

1. Particulars of Dispute

The Applicant has attempted to apply for a permit under the *Building Code Act*, *1992*, and is proposing the construction of three demising walls within an existing building. Further, an Unsafe Order was issued on June 26, 2001 requiring that the Applicant remedy certain alleged deficiencies at 105 St. Patrick Street, City of Stratford, Ontario.

The subject building is comprised primarily of non-combustible construction with some combustible roof elements. The building is one storey in building height and approximately 16,815 m^2 (181,000 ft^2) in building area. The original building was constructed in 1907 with an addition constructed in 1949. At one time the structure was used for Group F, Division 1 occupancy purposes, primarily for the repair of railway engines. Upon discontinuation of that use, the building was, in the submission of the Applicant, classified as Group F, Division 3.

The current proposal is to construct three demising walls within the existing building that would facilitate the creation of a proposed general store having a Group E major occupancy classification and measuring approximately 190 m^2 (2,044 ft^2).

The dispute between the parties appears to involve several issues, including whether the Applicant may use the subject building for retail purposes at this time, whether sufficient information has been provided to the municipality pursuant to their municipal building by-law and whether the municipality was within its rights to issue an Unsafe Order dated June 26, 2001 and whether the Applicant has, or is required to, address the issues itemized in said Unsafe Order.

2. Provisions of the Building Code in Dispute

The parties did not identify any specific Building Code provisions in dispute in reference to the proposed construction of the three demising walls. Rather, the dispute appeared to involve the interpretation and implementation of the legislative requirements of the *Building Code Act, 1992*, specifically subsections 8(2) and 15(2) and (3) of the Act.

3. Applicant's Position

The Applicant summarized the history of the property advising that the building, known as the CNR Centre, is situated on a 14-acre property in the City of Stratford. He noted that the building is a "superstructure" built in 1907 and comprised of steel and concrete. It was his position that the property is fully serviced.

Aside from the four washrooms within the building, the Applicant noted that there are no other internal walls. His proposal is to construct three demising walls for the purpose of operating a general store in one section of the building. In this regard, he advised that he attempted to submit a building permit application to the City of Stratford for the proposed construction. He noted that the City refused to accept this application and, instead, provided him with a list of 23 items that must be dealt with before they would consider the matter further. The Applicant submitted that many of these items had nothing to do with the proposed demising walls. Further, he advised, the Chief Building Official (CBO) would not consider issuing a conditional permit to allow the construction of the walls while other issues were being resolved. The Applicant also noted that City staff are involved in litigation in regard to matters relating to this property and noted that other issues were to be resolved by the courts.

The Applicant noted the Respondent's position that no Building Code provisions were in dispute and suggested that, if this was the case, a permit should have been issued. He argued that the dispute should involve only the proposal for the creation of three, 12.2 m (40 ft) demising walls within a fully serviced, structurally sound building. He noted that he has responded to the CBO's request to remove other unsafe structures on the property and has focused his development on the main building. He advised that his engineering report confirms that there is no structural deterioration of this main structure.

In respect to the continued use of the building, the Applicant advised that the interior of the structure has been occupied for limited use and that part of the building is being used as an office. He noted that the structure is classified as F3, low hazard industrial. The general store would be a subsidiary use. In response to questioning, the Applicant argued that he was not proposing a change in occupancy, merely the construction of three demising walls. Further, he disputed the City's claim that the building is vacant, derelict and unserviced. He noted that systems are in place but needed some repair and remedial work. However, his current proposal would not require all systems to be functional.

The Applicant advised that he has attempted to meet with the City to discuss any unresolved issues but the City has refused to meet with him personally and, instead, has asked to meet with his architect and/or engineer. He argued that the City has unreasonably chosen not to process his building permit application and requested that the Commission rule on two points. Namely, that a building permit be issued in respect to the three non-load bearing walls as they comply with the Building Code and secondly, that the Unsafe Order issued on June 26, 2001 have no force and effect as it failed to provide details as to what remedial action was required to render the building(s) safe.

4. Respondent's Position

The Respondent submitted that the dispute essentially revolves around what constitutes a complete application and what information would be necessary for the municipality to process and fully consider an application for a building permit. He noted "(t)here are no Building Code provisions in dispute at this time because the City of Stratford does not currently have a permit application." He suggested that, by filing this application for hearing to the BCC, the Applicant was attempting to have the Commission rule that a permit application must be accepted for the construction of three non-load bearing demising walls to create a general store, despite the fact that the submission does not comply with the City of Stratford's municipal building by-law. In the opinion of the Respondent, this dispute goes beyond the jurisdiction of the Building Code Commission.

The Respondent noted that the municipality's building by-law requires the submission of a site plan, site service, mechanical and electrical drawings that have been stamped by a professional engineer, plus an engineering report addressing issues itemized in the Unsafe Order and two emergency orders that were issued against the subject property. He advised that, following an inspection some time ago, it was determined that the building was vacant and all systems had been stripped out. He suggested that there was barely a shell of a structure remaining, noting that holes in the roof had been observed.

To proceed with the proposed construction, the Respondent advised that staff would need to satisfy themselves of the safety of the structure, compliance with the Building Code and adherence to other applicable law by reviewing the appropriate documentation in accordance with the municipal building by-law. He stated that, as the Applicant did not have all requisite documentation when he initially attempted to file his permit application, staff advised him to obtain and submit the information before the application could be considered. In this regard, he

noted that municipal staff have offered to meet with the Applicant's architect and engineer to discuss what would be required for the general store proposal to proceed.

5. Commission Ruling

It is the decision of the Building Code Commission that, under subsection 24(1) of the *Building Code Act, 1992*, the Commission does not have the jurisdiction to make a determination on the subject dispute at 105 St. Patrick Street, City of Stratford, Ontario.

6. Reasons

a) Subsection 24(1) of the *Building Code Act, 1992* provides the Building Code Commission (BCC) with the jurisdiction to resolve disputes between the chief building official or building inspector and the applicant for a permit, holder of a permit or a person to whom an order has been given in connection with the *interpretation of, or sufficiency of compliance with, the technical requirements of the Building Code* (emphasis added). In this case, while the Commission recognizes that there is a dispute between the parties, it does not appear to be related to the technical requirements of the Building Code. Rather, the dispute results from provisions contained within the *Building Code Act, 1992* and the municipal building by-law.

b) The primary dispute appears to involve the actions of municipal officials and their application of municipal building by-law #67-2001 and provisions contained within the *Building Code Act, 1992*. The Building Code Commission, as noted above, has a very narrow jurisdiction outlined in subsection 24(1) of the Act. It cannot overrule or overturn the wording in a municipal building by-law in respect to what constitutes a complete application. Moreover, the BCC does not have the authority to issue building permits in place of a municipality nor make a determination that an Unsafe Order has no force or effect under the Act. Again, the mandate of the BCC is to make a determination on whether the technical construction requirements set out in the Building Code have been sufficiently satisfied.

c) It would appear that this dispute involves a question of law that may more appropriately be considered by the Courts under Section 25 of the Act or through some other mechanism as counsel for the parties may advise.

Dated at Toronto this **7th** day in the month of **June** in the year **2005** for application number **2005-15.**

Len King, Vice-Chair

Ed Link

Rick Florio

Ontario

Ruling No. 05-22-1036
Application No. 2005-18

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.8.8.5.(1) of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Allen Hovey, owner, to determine whether the as-constructed guardrail, consisting of metal pickets with decorative elements at their mid-points, around the main stairs in a one storey, Group C building provides sufficiency of compliance with Sentence 9.8.8.5.(1) of the Building Code at 738 Moore Avenue, City of Thunder Bay, Ontario.

APPLICANT	Allen Hovey Owner Thunder Bay, ON
RESPONDENT	Jim Buie Chief Building Official City of Thunder Bay
PANEL	Len King, Vice-Chair Ed Link Rick Florio
PLACE	Toronto, Ontario
DATE OF HEARING	June 7, 2005
DATE OF RULING	June 7, 2005
APPEARANCES	Marianne Thompson Colonial Elegance Inc. Montreal, Quebec - and - Michael Lio Executive Director Ontario Railing Manufacturers Association **Agents for the Applicant** Warren Johnson Manager, Inspections City of Thunder Bay **Agent for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an order to comply under the *Building Code Act*, *1992*, to remedy certain alleged deficiencies at 738 Moore Avenue, City of Thunder Bay, Ontario.

The subject building is a 1 storey Group C residential dwelling occupying a building area of 135 m^2. The house is built using combustible construction materials and is not equipped with a sprinkler system, fire alarm system or a standpipe and hose system.

The construction in dispute involves the design of the guard that has been installed around the landing of the main stair leading to the basement. The guard in question is constructed using 89 mm by 89 mm (3 ½ in by 3 ½ in) hemlock posts and a 94 mm (2 ½ in) wide oak handrail. The posts are bolted to the rim-joists. The pickets consist of wrought iron panels with decorative elements near the top and at the mid-point of the centre picket. Each wrought iron panel is screwed to the bottom of the handrail and to the floor. The panels measure 153 mm (6 in) in width and are constructed using 9.53 mm by 9.53 mm (⅜ in by ⅜ in) wrought iron pickets. Each panel consists of three pickets set approximately 76.2 mm (3 in) apart from the adjacent picket. The middle picket of the panel includes the first ornamental feature, located at approximately 386 mm above the walking surface. The "birdcage" is described as a twisted basket consisting of four 4.76 mm by 4.76 mm ($^3/_{16}$ in by $^3/_{16}$ in) rods. The clearance between the "birdcage" and the adjacent picket is 39.7 mm (1 ½ in). The second ornamental feature, located at approximately 730 mm above the walking surface, consists of a horizontal bar with ornamental scrollwork connecting the two outer pickets of the panel.

The Applicant contends that the as-installed guard does not facilitate climbing while the Respondent is of the opinion that the inclusion of two design features within the 800 mm non-climbing zone does facilitate climbing.

The issue at dispute between the Applicant and the Respondent is whether the as-installed guard provides sufficiency of compliance with Sentence 9.8.8.5.(1) of the Building Code.

2. Provisions of the Building Code in Dispute

9.8.8.5. Design to Prevent Climbing

(See Appendix A)

(1) *Guards* required by Article 9.8.8.1. and serving *buildings* of *residential occupancy* shall be designed so that no member, attachment or opening located between 100 mm and 900 mm above the floor or walking surface protected by the *guard* will facilitate climbing.

3. Applicant's Position

The Agent for the Applicant, Marianne Thompson, submitted that Colonial Elegance is headquartered in Montreal and is part of the Ontario Railing Manufacturers Association (ORMA). ORMA represents over 40 railing companies from across Ontario representing the large majority of railing installations in the province.

She stated that Colonial Elegance would not manufacture a product that had any liability associated with it and noted that the company has been manufacturing and selling staircase components to home improvement retailers for 30 years. She assured the Commission that there has never been an issue with any of their interior guards.

The Agent for the Applicant, Michael Lio, explained the difficulties faced by railing manufacturers across the province due to the inconsistency in interpreting the Building Code with respect to the issue of climbability. In his opinion the Building Code needs to be revised so as to address this inconsistency.

The Agent referred to Sentence 9.8.8.5.(1) and stated that the intent of this Sentence is not to prevent climbing but rather to not invite climbing. He then referred to BCC Ruling 02-03-858 which he felt was instructive as to how the Commission interpreted the Building Code. He referenced an analysis of the abilities of children at different ages and suggested that the prime concern would be with respect to children between the ages of 2 and 3 years. It was his submission that children younger than 2 years would not have the physical strength or coordination to climb up and over the guard and that older children, between the ages of 3 and 4 years, would possess better judgement and have an understanding of the danger associated with climbing the guard.

In examining the design of the guard in question, the Agent stated that the protruding elements do not create a ladder effect and indicated that the decorative scrollwork at the top of the railing does not provide enough space for a toehold. He noted that the “birdcage” element is positioned on the picket in such a way that the surface of the “birdcage” is angled downward approximately 55^{o} and is approximately 40 mm from the adjacent picket. It is his belief that as a result of the angling of the “birdcage”, a child would not be able to gain a toe hold on this element. He demonstrated using the guard in question that a toddler’s shoe does not fit between the vertical pickets. Furthermore, he stated that in order for the “birdcage” to be used as a toehold the child’s leg would have to be angled to an uncomfortable, if not impossible, degree. He also offered that he had reviewed literature on child injuries in the home and cited that garage doors and cabinetry cause more injuries than guards. The Agent admitted that the shoe used in his demonstration is not the standard to which guards should be held. He referred to the proposed code amendment regarding guards and stated that a 45 mm distance between pickets is acceptable. He further alleged that the guard in question meets all of the requirements contained in the proposed code amendment.

In summation, the Agent contended that this guard does not facilitate climbing nor does it provide a toehold for children between the ages of 2 and 3 years. He further claimed that a ladder effect is not present in this guard. He asked the Commission to consider that this guard has been installed in many locations, over the past 5 years, without incidence. He reiterated his opinion that the design of this guard does not facilitate climbing and therefore complies with the intent of the Code.

4. Respondent’s Position

The Respondent submitted that the two decorative elements in the design of this guard make the guard climbable. In his opinion, the “birdcage” located at the midpoint of the middle picket is spaced at 39.7 mm from the adjacent picket and creates a toehold which would facilitate climbing. He stated that the ornamental scrollwork, located within the 800 mm restricted area at the top of the guard, creates a handhold and further facilitates climbing.

The Respondent maintained that the guard is climbable and pointed to two areas of concern with respect to this guard. The “birdcage”, located at a height of 386 mm above the floor, is less than

40 mm from the adjacent picket and the ornamental scrollwork located at the top of the guard. The combination of these two elements, in the opinion of the Respondent, presents a toehold and a handhold, which facilitate climbing.

In summary, the Respondent contended that the guard does facilitate climbing and as such, does not meet the requirements set out in Sentence 9.8.8.5.(1).

5. Commission Ruling

It is the Decision of the Building Code Commission that the as-constructed guardrail, consisting of metal pickets with decorative elements at their mid-points, around the main stairs in a one storey, Group C building does not provide sufficiency of compliance with Sentence 9.8.8.5.(1) of the Building Code at 738 Moore Avenue, City of Thunder Bay, Ontario.

6. Reasons

i) The ornamental “birdcage”, located approximately 386 mm above the floor or walking surface and within 40 mm from the adjacent baluster, provides a toehold, which facilitates climbing.

ii) The ornamental scrollwork, situated at 750 mm above the floor, is located within the restricted 100 mm – 900 mm area above the floor or walking surface. This design feature provides a handhold, which facilitates climbing.

Dated at Toronto this **7th** day in the month of **June** in the year **2005** for application number **2005-18.**

Len King, Vice-Chair

Ed Link

Rick Florio

Ontario

Ruling No. 05-23-1037
Application No. 2005-19

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 3.3.2.3., 3.3.2.4., 3.4.3.4. and 3.4.4.1 of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Ken Burns, Giffels Partnership Solutions Inc., for resolution of a dispute with Mike Leonard, Chief Building Official, City of Oshawa, to determine whether the proposed main arena seating bowl, in particular the seat configuration, row width, vomitory and aisle widths, exit capacity/width, fire separation of main entry/exit "open stair", designed in accordance with NFPA 101-2000, "Life Safety Code" and NFPA 92B, "Smoke Management Systems in Malls, Atria and Large Areas", provides sufficiency of compliance with Articles 3.3.2.3., 3.3.2.4.. 3.4.3.4. and 3.4.4.1. of the Building Code for the Oshawa Sports and Entertainment Consortium, 90 Athol Street East, City of Oshawa, Ontario.

APPLICANT	Ken Burns Giffels Partnership Solutions Inc. Toronto, ON
RESPONDENT	Mike Leonard Chief Building Official City of Oshawa
PANEL	Len King, Vice-Chair Ed Link Rick Florio
PLACE	Toronto, Ontario
DATE OF HEARING	June 7, 2005
DATE OF RULING	June 7, 2005
APPEARANCES	Eric Esselink Leber/Rubes Inc. Toronto, Ontario **Agent for the Applicant** S.K. Lo Manager City of Oshawa **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, to construct a multi-purpose sports arena, known as the Oshawa Sports and Entertainment Facility, at 90 Athol Street East, City of Oshawa, Ontario.

The Applicant is proposing the construction of an arena-type facility, which will be classified as having a Group A, Division 3 major occupancy, having a building area of approximately 10,500 m^2 and being two storeys in building height. The facility will be comprised of noncombustible construction and will be equipped with sprinkler, standpipe and hose, fire alarm systems. The arena will be constructed in accordance with Article 3.2.2.29. of the Building Code. Floors will be constructed as fire separations having a 2 hour fire-resistance rating and the mezzanine will be constructed as a fire separation having a 1 hour fire-resistance rating.

The arena is proposed to have a maximum seating capacity of approximately 5,590 persons, 4,223 persons in the lower concourse (stands) level and approximately 1,345 additional patrons located in the upper concourse (suites) level. It is also anticipated that an additional 1,650 seats could be accommodated on the central ice surface or “event floor” for concert venues, etc. During a centre stage concert, the facility will a have a maximum occupant load of approximately 7,500 persons, including staff, event performers, security personnel, etc.

The ice/event surface will be located at the basement level, the first storey will contain the lower concourse and the second storey will contain the upper concourse (suites). The principal entrance will be located at a mid-landing level and will provide access to all floor levels via open stairs. In addition, barrier-free access to all floor levels will be provided via an elevator. The architectural floor plans indicate that the facility will consist of two ice rinks with spectator stands (southwest and northeast) arranged in the configuration of an inverted “L” with common amenity areas in between. The ice surface located at the southwest side of the building is within a one storey portion of the building and includes a mezzanine. The size and area of the mezzanine will represent approximately 21% of the room/storey in which it is to be located. The construction and exiting for the mezzanine will comply with the requirements of the Building Code.

The ice surface located at the northeast side of the building will be provided with spectator stands around the entire perimeter and viewing sites on both the north and south sides. It is the proposed design of the northeast ice rink that is at the centre of this dispute. The architect for the Applicant has proposed that the seating layout, aisles, vomitories and exits for the northeast ice rink be designed to comply with the requirements for smoke-protected assembly seating of NFPA 101-2000, “Life Safety Code” and to provide smoke control in conformance with NFPA 92B, “Smoke Management Systems in Malls, Atria and Large Arenas” in lieu of complying with the requirements contained in Articles 3.3.2.3., 3.3.2.4., 3.4.3.4. and 3.4.4.1. of the Building Code.

The Applicant has indicated that the requirements of the Building Code do not adequately address large indoor facilities such as this, including seating layouts that typically involve aisles that dead end into dasher boards, long row lengths, open concourse and event floor seating.

The issue at dispute between the Applicant and the Respondent is whether the proposal to design the arena in conformance with the requirements of NFPA 101 and NFPA 92B provides sufficiency of compliance with Articles 3.3.2.3., 3.3.2.4., 3.4.3.4. and 3.4.4.1. of the Building Code.

2. Provisions of the Building Code in Dispute

3.3.2.3. Fixed Seats

(1) Except for the requirements of Article 3.3.2.7. for bench-type seats and except as required or permitted by Sentence (2) and Articles 3.3.2.9. and 3.3.2.10., fixed seats in places of assembly shall be

(a) attached or secured to the floor, platform or platform riser,
(b) provided with arms and back, and
(c) arranged in rows having an unobstructed passage not less than 400 mm wide measured horizontally between plumb lines from the backs of the seats in one row and the edges of the furthest forward projection of the seats in the next row in the unoccupied position.

(2) For fixed seats with backs and with folding tablet arms, the value of 400 mm required by Clause (1)(c) shall be measured when the tablet arms are in the use position, but is permitted to be measured in the stored position provided

(a) there are not more than 7 seats between any seat and the nearest aisle,
(b) the seats are located in a lecture hall or an auditorium used for instructional purposes, and
(c) the tablet arm, when raised manually to a vertical position, falls by the force of gravity to the stored position.

(3) Except as permitted by Sentences (4) and (5), aisles shall be located so that there are not more than 7 seats with backs or 20 seats without backs between any seat and the nearest aisle.

(4) The requirements of Sentence (3) do not apply if

(a) egress doorways are provided to serve both ends of rows of seats,
(b) each doorway referred to in Clause (a) serves not more than 3 rows of seats, and
(c) each row contains not more than 100 seats.

(5) The requirements of Sentence (3) do not apply if

(a) there are not more than 7 seats between any seat and the nearest aisle, where the seats are served by a single aisle,
(b) there are not more than 20 seats between any seat and the nearest aisle, where the seats are served by two aisles,
(c) each row has an unobstructed passage with minimum width of 400 mm plus 6.1 mm for each additional seat above 16 seats in the row, and
(d) the travel distance is not more than 45 m measured along the path of travel from any seat to an exit or to an egress doorway.

(6) Seating arrangements that do not conform to the requirements of Sentences (3) to (5) are permitted provided the standard of safety is not reduced and the time required for egress is not increased.

3.3.2.4. Aisles

(1) Except as required by Articles 3.3.2.7., 3.3.2.9. and 3.3.2.10., aisles leading to egress doors or exits shall be provided in conformance with Sentences (2) to (24) in places of assembly which contain fixed seats.

(2) In this Subsection, a converging aisle is an aisle into which the occupants of 2 or more aisles converge in travelling to an exit.

(3) An aisle shall terminate at
(a) a converging aisle,
(b) an egress doorway from the seating area, or
(c) an exit from the seating area.

(4) A converging aisle shall terminate at
(a) an egress doorway from the seating area, or
(b) an exit from the seating area.

(5) The minimum clear width of aisles shall be not less than 1 100 mm, except that the width is permitted to be reduced to not less than
(a) 750 mm if serving not more than 60 seats, and
(b) 900 mm if serving seats on one side only.

(6) The minimum clear width of each aisle shall be measured at the point in the aisle furthest from
(a) an egress doorway referred to in Clause (12)(a),
(b) an exit referred to in Clause (12)(b), or
(c) an exit referred to in Sentence (13).

(7) Except for an aisle serving bleacher seats, where rows of seats discharge into an aisle, the minimum clear width required by Sentence (6) shall be increased by 25 mm for each metre of length of the aisle measured in the direction towards an exit.

(8) The width of a converging aisle shall be not less than the required width of the widest aisle plus 50% of the total required width of the remaining aisles that it serves.

(9) If rows of seats discharge directly into the converging aisle, the width required by Sentence (8) shall be increased by 25 mm for each metre of length of the aisle where the rows of seats discharge into the aisle.

(10) The width of an egress doorway or an exit leading directly from the seating area shall be not less than the required width of the widest aisle or converging aisle plus 50% of the total required width of the remaining aisles and converging aisles that it serves.

(10.1) The requirements in Sentences (5) to (10) and Sentence (14) do not apply if
(a) the minimum clear width of an aisle is in accordance with Article 3.3.1.16., but is not less than 900 mm if serving seats on one side only,
(b) the minimum clear width of an aisle is in accordance with Article 3.3.1.16., but is not less than 1 200 mm if serving seats on both sides,
(c) the minimum clear width of a converging aisle is in accordance with Article 3.3.1.16., but not less than the width of the widest aisle leading to the converging aisle,

(d) the minimum clear width of an exit leading directly from the seating area is in accordance with Article 3.4.3.4.,
(e) except as provided in Clause (f), the minimum clear width of an egress doorway leading directly from the seating area is in accordance with Article 3.3.1.16., but not less than the required width of the aisle or the converging aisle leading to the doorway, and
(f) if more than one vomitory is provided
  (i) the minimum total clear width of the egress doorways leading from one vomitory is not less than the required width of the aisle or the converging aisle leading to the doorways, and
  (ii) the minimum clear width of egress doorways from additional vomitories is in accordance with Article 3.3.1.16.

(11) Except as provided in Sentences (11.1) and (11.2), dead-end aisles shall be not more than 6 m long.

(11.1) Dead-end aisles are permitted to be more than 6 m long, but not more than 10 m long if
(a) the seating area is separated from other seating areas and adjacent occupancies, including a corridor serving any seating area, by a fire separation in accordance with Sentences 3.3.2.2. (1) and (2),
(b) the travel distance is not more than 25 m measured along the path of travel from any seat to an exit, to an egress doorway or to an opening into a vomitory,
(c) at least one means of egress, comprising not less than 30% of the required exit capacity, is through an exterior exit, an exit stairway or a corridor not containing an occupancy,
(d) each row served by the dead-end aisle has a minimum unobstructed width of 400 mm plus 6.1 mm for each additional seat above 7 seats in a row, but not more than 550 mm,
(e) the minimum ceiling height above the seating area is 3 m,
(f) the activation of a fire detector or a sprinkler head in the seating area will
  (i) cause the shutdown of the projection system serving the seating area, and
  (ii) turn on the normal lighting in the seating area, and
(g) the floor area is sprinklered.

(11.2) Dead-end aisles are permitted to be more than 10 m long, but not more than 13 m long if
(a) the seating area is separated from other seating areas and adjacent occupancies, including a corridor serving any seating area, by a fire separation in accordance with Sentences 3.3.2.2. (1) and (2),
(b) the travel distance is not more than 25 m measured along the path of travel from any seat to an exit, to an egress doorway or to an opening into a vomitory,
(c) at least one means of egress, comprising not less than 30% of the required exit capacity, is through an exterior exit, an exit stairway or a corridor not containing an occupancy,
(d) each row served by a dead-end aisle has a minimum unobstructed width of 400 mm plus 6.1 mm for each additional seat above 7 seats in a row, but not more than 550 mm,
(e) the activation of a fire detector or a sprinkler head in the seating area will
  (i) cause the shutdown of the projection system serving the seating area, and
  (ii) turn on the normal lighting in the seating area,

(f) a voice communication system is installed in conformance with Article 3.2.4.22.,
(g) a smoke control system is installed to control movement of smoke in the seating area or a smoke exhaust system is provided so that, in the event of detection of smoke by a smoke detector in the seating area, air handling equipment is activated to extract air directly from the seating area at the rate of at least 6 air changes per hour, and
(h) the floor area is sprinklered.

(12) Where a seating area is separated as required by Sentences 3.3.2.2.(1) and (2) or 3.3.2.2.(8), the length of travel by any aisle shall be not more than 45 m measured from the most remote point of the aisle to
(a) an egress doorway in the required separation, or
(b) an exit leading directly from the seating area.

(13) Where a seating area is not required to be separated by Sentences 3.3.2.2.(1) and (2) or 3.3.2.2.(8), the travel distance shall be not more than 45 m measured from the most remote point of the aisle to an exit.

(14) Side aisles shall be not less than 1 100 mm wide if seating is provided in conformance with Sentence 3.3.2.3.(4).

(15) An aisle that has a slope not more than 1 in 8 shall not be stepped.

(16) An aisle that slopes more than 1 in 8 shall be stepped.

(17) The passageway between rows of seats served by a stepped aisle shall be level at right angles to the line of travel.

(18) The riser of a step in an aisle shall be
(a) not less than 110 mm high, and
(b) not more than 200 mm high.

(19) Variations are permitted in riser height provided
(a) the height of adjacent risers does not vary by more than 6 mm, and
(b) the depth of a tread or a platform in the direction of travel is not less than 430 mm.

(20) Steps in an aisle shall
(a) have a run not less than 230 mm exclusive of nosings,
(b) have a tread depth not less than 250 mm,
(c) extend to the adjacent rows of seats in a manner that will not create a hazard from tripping, and
(d) have a finish on the treads conforming to Sentence 3.4.6.1.(1).

(21) The location of every riser in an aisle shall be made apparent from both directions of travel by strategically placed lighting or contrasting marking stripes.

(22) A platform in an aisle shall be level, except that a slope not more than 1 in 50 is permitted for a platform that is not less than 430 mm deep in the direction of exit travel.

(23) If a step is used at the entry to a row of seats from a stepped aisle, an unobstructed platform not less than 800 mm square shall be provided adjacent to the aisle.

(24) The finish of the surface of a platform in or adjacent to a stepped aisle shall conform to Sentence 3.4.6.1.(1).

3.4.3.4. Exit Capacity

(1) Except as permitted by Sentence (3), the aggregate required width of exits serving floor areas intended for assembly occupancies, residential occupancies, business and personal services occupancies, mercantile occupancies, and industrial occupancies shall be determined by multiplying the occupant load of the area served by
- (a) 6.1 mm per person for ramps with a slope not more than 1 in 8, doorways, corridors and passageways,
- (b) 8 mm per person for a stair consisting of steps whose rise is not more than 180 mm and whose run is not less than 280 mm, or
- (c) 9.2 mm per person for
  - (i) ramps with a slope more than 1 in 8, or
  - (ii) stairs, other than stairs conforming to Clause (b).

(2) The aggregate required width of exits serving floor areas intended for care or detention occupancy shall be determined by multiplying the occupant load of the area served by 18.4 mm per person.

(3) The required width of means of egress serving a Group A, Division 4 occupancy shall be determined by multiplying the occupant load of the area served by
- (a) 1.8 mm per person for
  - (i) aisles,
  - (ii) stairs other than exit stairs, and
  - (iii) ramps and passageways in vomitories and exits, and
- (b) 2.4 mm per person for exit stairs.

3.4.4.1. Fire-Resistance Rating of Exit Separations

(1) Except as permitted by Sentences (2), (4), 3.3.5.4.(3), 3.4.4.2.(2) and 3.4.4.3.(1), every exit shall be separated from the remainder of the building by a fire separation having a fire-resistance rating not less than that required by Subsection 3.2.2., but not less than 45 min, for
- (a) the floor assembly above the storey, or
- (b) the floor assembly below the storey, if there is no floor assembly above.

(2) The fire-resistance rating of the fire separation referred to in Sentence (1) need not be more than 2 h.

(3) If an exit stair in an assembly hall or theatre serves more than one balcony level, the exit stair shall be separated from the remainder of the building in conformance with Sentence (1).

(4) The path of exit travel may lead from an exit door or exit enclosure through open air parking that is located below a roof or floor assembly that is part of the building served by the exit door or exit enclosure where
- (a) the portion of the path of exit travel that leads through the open air parking is not more than 9 m in length measured from the exit door to a point at ground level at the perimeter of the building,
- (b) measures are taken to prevent vehicles intended to park in spaces adjacent to the path of exit travel from encroaching on the path of exit travel, and

(c) an alternate means of egress not leading through the open air parking is available from the interior side of the door opening onto the path of exit travel through the open air parking area.

3. Applicant's Position

The Agent for the Applicant stated that, in his opinion, the standards for assembly occupancies set out in the Code do not adequately address large arenas of the type anticipated in this situation. Rather, the Code provisions apply more appropriately to smaller indoor areas or large outdoor venues. He contended that the Code had not been updated to address large arena designs.

The Agent maintained that it is impractical to comply with the requirements of the Code in a project such as is being undertaken here. In lieu of strict compliance with the Code, the Applicant has proposed to design the main arena seating bowl including open stairways with "smoke-protected" seating and egress routes in conformance with NFPA 101-2000 "Life Safety Code". The Agent argued that the proposed design, which would include compliance with NFPA 92B "Smoke Management Systems in Malls, Atria and Large Areas", would achieve sufficiency of compliance with the requirements outlined in the Building Code in respect to fixed seating, exits and vomitory widths. He referred to several other arenas throughout the province that have used this same concept for achieving an equivalent level of performance. He further advised that they have been involved with utilizing these design principles in the Air Canada Centre in Toronto, the Corel Centre in Ottawa, the John Labatt Centre in London and the arena for the Brampton Battalion.

The Agent, in his presentation, which was included as part of his submission, stated that smoke-protected seating and egress routes are required for a facility such as is being proposed. He indicated that NFPA 101 specifically addresses indoor assembly seating areas and that their proposal is to follow the requirements of NFPA 101 for seating layout, means of egress and smoke-protection. He explained that smoke-protection would be achieved by the inherent height and volume of the bowl and concourse in conjunction with an engineered smoke control system, which will be designed in conformance with NFPA 92B, "Smoke Management Systems in Malls, Atria and Large Areas." It is his opinion that such measures are not required under the literal application of the minimum Building Code requirements, however, they are necessary to achieve smoke-protected assembly seating and egress routes under the proposed application of NFPA 101 and NFPA 92B. These measures include smoke exhaust and make-up air provisions for the bowl and the concourse, as well as the provision of an emergency air supply to the exit stairs.

The Agent further advised that although the facility is not considered to be a high-rise building, many of the safety features generally applicable to high-rise buildings are also proposed for this facility. These features would include the provision of emergency voice communication, fire protection of electrical conductors, a 2 hour emergency power supply for life safety equipment, a central alarm and control facility, and an active fire alarm annunciator and control panel. These proposed measures are based on the application of NFPA 101 standards and would not be required under the provisions of the Building Code.

In response to being questioned as to whether it has been determined how long it would take to evacuate the building, the Agent indicated that it would take approximately 8 minutes.

The Agent argued that it is appropriate, in this instance, to use an alternate standard for areas where the requirements of the Code cannot reasonably be achieved. He asserted that by using NFPA 101 and NFPA 92B standards jointly with the Building Code, an equivalent level of life safety would be provided in lieu of the prescriptive requirements of the Code.

In summary, the Agent contended that the proposed egress system, which includes seating configuration, row width and aisle width, exits and access to exits, designed in accordance with NFPA 101, “Life Safety Code”, including the use of the main entry “open stair” as a means of egress provided with smoke-protection per NFPA 101 and NFPA 92B, and contained in a building equipped with a smoke management system conforming to NFPA 92B, “Smoke Management Systems in Malls, Atria and Large Areas” provides sufficiency of compliance with Articles 3.3.2.3., 3.3.2.4., 3.4.3.4. and 3.4.4.1. of the Building Code.

4. Respondent’s Position

The Respondent submitted that while he may agree, in principle, with the proposal, as presented, he is of the opinion that there is no authority under the Building Code for a Chief Building Official (CBO) to accept the alternative design. Section 2.7 of the Code provides for a CBO to accept alternative materials or systems as an equivalent but it does not provide for the acceptance of an alternative design.

In summation, the Respondent stated that the Municipality is satisfied that the smoke-protected seating proposed by the Applicant would provide an equivalent level of safety as would be achieved by conformance with the requirements of the Building Code. He maintained that the Municipality simply does not have the authority to accept a design as an equivalency.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed main arena seating bowl, in particular the seat configuration, row width, vomitory and aisle widths, exit capacity/width, fire separation of main entry/exit “open stair”, designed in accordance with NFPA 101-2000, “Life Safety Code” and NFPA 92B, “Smoke Management Systems in Malls, Atria and Large Areas”, provides sufficiency of compliance with Articles 3.3.2.3., 3.3.2.4.. 3.4.3.4. and 3.4.4.1. of the Building Code for the Oshawa Sports and Entertainment Consortium, 90 Athol Street East, City of Oshawa, Ontario, on condition that:

a) All requirements and/or provisions contained in NFPA Standard 101-2000, “Life Safety Code” are to be followed so as to provide smoke-protection for the seating and egress routes. NFPA 101-2000, specifically addresses large indoor assembly seating areas such as the proposed facility.

b) An engineered smoke control system designed in conformance with NFPA Standard 92B, “Smoke Management Systems in Malls, Atria and Large Areas” is to be installed so as to achieve smoke-protection for the seating and egress routes. This smoke control system will also address the open entry/egress stair at the suite level.

c) The exit stairs, which service the main bowl, are to be equipped with emergency pressurization.

d) Quick response sprinklers are to be installed in the concession areas.

e) The arena is to be equipped with emergency voice communication, a central alarm and control facility and a live graphic annunciator and control panel.

f) Critical electrical conductors are to be fire protected and critical wiring is to be electrically supervised.

g) A 2-hour emergency power supply is to be provided.

h) The aisles of the building are to be equipped with uniform treads and handrails.

i) Smoke detection is to be provided for the concourses.

j) The independent peer review, which was commenced by LMDG Building Code Consultants Ltd., is to continue so as to ensure that the requirements of NFPA 101-2000 and NFPA 92B are satisfied.

6. Reasons

i) Sufficiency of compliance with Articles 3.3.2.3., 3.3.2.4. and 3.4.3.4. of the Building Code will be achieved, for the arena seating bowl, through adherence to the provisions contained in both NFPA 101-2000 and NFPA 92B in respect of smoke protected arena seating and egress by fulfilling the conditions stated above.

ii) Sufficiency of compliance with Article 3.4.4.1. of the Building Code will be achieved, for the open main entry/exit stair design, based on the provision of an engineered smoke management system designed in accordance with NFPA 92B and by fulfilling the conditions noted above.

Dated at Toronto this **7th** day in the month of **June** in the year **2005** for application number **2005-19.**

Len King, Vice-Chair

Ed Link

Rick Florio

Ontario

Ruling No. 05-26-1040
Application No. 2005-17

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 4.1.1.3.(1) of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Beverly Hills Home Improvements, for resolution of a dispute with John DeVries, Chief Building Official, Town of Richmond Hill, to determine whether the proposed use of "Panelcraft™ Honeycomb Roof System" honeycomb sandwich panels in a sunroom provides sufficiency of compliance with Sentence 4.1.1.3.(1) of the Building Code at 42A Graydon Crescent, Town of Richmond Hill, Ontario.

APPLICANT	John Witten Beverly Hills Home Improvements Mississauga, ON
RESPONDENT	John DeVries Chief Building Official Town of Richmond Hill
PANEL	Tony Chow, Chair Susan Friedrich Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	July 7, 2005
DATE OF RULING	July 7, 2005
APPEARANCES	Bart Bremmers CraftBilt Materials Ltd. Markham, ON **Agent for the Applicant** Michael Janotta Deputy Chief Building Official Town of Richmond Hill **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, to construct sunroom addition to the existing dwelling at 42A Graydon Crescent, Town of Richmond Hill, Ontario.

The subject building is a two storey single detached dwelling comprised of combustible construction that is not equipped with a standpipe and hose system, fire alarm system or a sprinkler system.

The construction in dispute involves the proposed use of "Panelcraft™ Honeycomb Roof System" honeycomb sandwich panels to construct the roof of the sunroom addition. The roof panels are comprised of 114 mm (4½ in) thick sandwich panels with extruded "H" connectors, consisting of an aluminium outer skin, which is bonded to a cellulose honeycomb filler. The length of the panel, shown on the plan, from top of wall to ridge beam is 3.45 m (11 ft 4 in) and has a governing load condition of 80 lb/ft^2.

The Applicant feels that the sandwich panel is suitable for use as a roof and that the panel meets the serviceability and structural requirements of the Code. The Respondent's position is that the information provided was not adequate and therefore, the municipality was unable to accept a design based on Sentence 4.1.1.3.(1) of the Code.

2. Provisions of the Building Code in Dispute

4.1.1.3. Design Requirements

(1) Buildings and their structural members including formwork and falsework shall be designed to have sufficient structural capacity and structural integrity to resist safely and effectively all loads and effects of loads and influences that may reasonably be expected, having regard to the expected service life of buildings, and shall in any case satisfy the requirements of this Section.

3. Applicant's Position

The Agent for the Applicant explained the history of the dispute by saying that he is the manufacturer of the sandwich panels in question and that these types of panels have been selling for more than 25 years in Canada. The Applicant applied for a building permit in order to construct a sunroom addition using the "Panelcraft™ Honeycomb Roof System" and the permit was denied by the municipality. The reason for the Town of Richmond Hill's denial of the permit was, in the opinion of the Agent, due to the innovative design of the sandwich panels.

The Agent believes that the sandwich panels provide sufficiency of compliance with the requirements of the Building Code. He advised the Commission that he provided allowable load tables to the municipality when he applied for the building permit. The Agent explained that he became aware of the municipality's concern regarding the safety factor being used in March. He argued that he has worked with many engineering firms over the years and they have all been satisfied with using a safety factor of 1.5. It appears to the Agent that the Town of Richmond Hill is not satisfied with a safety factor of 1.5.

The Agent stated that Craft-Bilt retained the services of a third-party professional engineer to determine the appropriate safety factor and deflection to be used when building with aluminium

and it was determined that a safety factor of 1.875 is appropriate. As supported by the testimony of the professional engineer appearing at the hearing on behalf of the Applicant, the Commission was advised that the current version of CSA S157 “Strength Design in Aluminium”, “using a load factor of 1.5 and a resistance factor of 0.8, gives an overall factor of 1.875”. The Agent advised that, as result of this finding, new tests were performed and new load tables were prepared using the revised safety factor of 1.875. The panels used for testing are described as 3.7 m (12 ft) with extruded “H” connectors. According to the allowable load charts for honeycomb core sandwich panels, submitted to the Commission as Exhibit 7, a 114 mm (4½ in) thick honeycomb core panel with “H” stiffener results in a maximum allowable roof load (PSF) of 90 psf lbs per square foot.

The Agent also maintained that L/120 is adequate deflection. Originally the Agent had considered L/60 to be acceptable as competitors use L/60 and engineer designers use L/60 based on past experiences for aluminium. However, L/120 has been applied to this application in an attempt to be consistent with a BMEC authorization for a slightly different product. He also noted that the United States Building Code references L/120 as being adequate for aluminium.

When questioned as to how the product before this Commission differs from the product approved by the Building Materials Evaluation Commission (BMEC), the Agent responded by saying that the product approved by BMEC had a polystyrene core and this product has a honeycomb core.

In summary, the Agent argued that the substantial evidence submitted by the experts in attendance at the hearing on behalf of the Applicant supports his position that this proposal meets the requirements of the Building Code. In closing, he stated that he believes that he has shown that this product achieves sufficiency of compliance with the provisions of Sentence 4.1.1.3.(1).

4. Respondent’s Position

The Designate for the Respondent submitted that in his view the Applicant has not provided sufficient information to demonstrate the product complies with the provisions of the Code and therefore, the municipality was unable to issue a building permit.

The Designate explained that it was difficult to understand the data provided by the Applicant and advised that answers were not provided to the many questions that arose during the process of reviewing the permit application. The municipality was not convinced that the proposed use of the subject sandwich panels would provide the same level of safety as would be required by the Code.

The Designate elaborated by saying that deflection and safety is the main issue. He informed the Commission that the Applicant had used safety factors ranging from 1.5 up to 3 and the municipality sought clarification on what should be the appropriate safety factor. The Designate contended that a safety factor of 1.5 is not appropriate and claimed that a safety factor of closer to 3 would be more acceptable. He also noted that the municipality has never been provided with information regarding the durability of this product. Upon being questioned as to whether an 80 lb psf load had been agreed upon, the Designate agreed that this was the case.

In summation, the Designate indicated that the municipality was not comfortable with the data provided. He reiterated his opinion that the municipality had not received sufficient information to determine whether the use of the sandwich panels would achieve compliance with the requirements of the Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed use of “Panelcraft™ Honeycomb Roof System” honeycomb sandwich panels in a sunroom provides sufficiency of compliance with Sentence 4.1.1.3.(1) of the Building Code at 42A Graydon Crescent, Town of Richmond Hill, Ontario.

6. Reasons

i) The Commission was satisfied that the expert testimony, documentation and data provided by the Applicant, signed and sealed by a professional engineer, demonstrated sufficiency of compliance with Sentence 4.1.1.3.(1) of the Code.

ii) The proposed “Panelcraft™ Honeycomb Roof System” built using 114 mm (4½ in) thick sandwich panels with extruded “H” connectors, consisting of an aluminium outer skin which is bonded to a cellulose honeycomb filler, has been designed for a snow load accumulation of 80 psf lbs per square foot. The anticipated accumulation in this area of the province would be significantly lower than 80 psf.

iii) This decision is site-specific and only applies to the sunroom addition located at 42A Graydon Crescent, Richmond Hill, Ontario.

Dated at Toronto this **7th** day in the month of **July** in the year **2005** for application number **2005-17.**

Tony Chow, Chair

Susan Friedrich

Gary Burtch

Ontario

Ruling No. 05-34-1048
Application No. 2005-35

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 3.3.1.1. and 3.3.1.4., when considering Article 3.3.4.3. of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Avi Gottlieb, Avcon Construction Inc., for resolution of a dispute with Jim Laughlin, Deputy Chief Building Official, City of Toronto, to determine whether the proposed metal screen storage cubicles with wire-mesh roofs in a self-service storage facility located in the basement of a multiple occupancy building provides sufficiency of compliance with Articles 3.3.1.1. and 3.3.1.4., when considering Article 3.3.4.3. of the Building Code at 427 Parliament Street, City of Toronto, Ontario.

APPLICANT	Avi Gottlieb Avon Construction Inc Toronto, ON
RESPONDENT	Jim Laughlin Deputy Chief Building Official City of Toronto
PANEL	Tony Chow, Chair Rick Florio Michael Steele
PLACE	Toronto, Ontario
DATE OF HEARING	August 4, 2005
DATE OF RULING	August 4, 2005
APPEARANCES	Leszek Muniak Larden Muniak Consulting Incorporated Toronto, ON **Agent for the Applicant** Prabhakar Mahant Manager, Plan Review City of Toronto **Designate to the Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, and proposes to use the basement level of an existing building for self-storage purposes at 427 Parliament Street, City of Toronto, Ontario.

The subject building is two storeys in building height plus basement level. It is comprised of combustible construction and has a building area of 1,003 m^2. The ground floor and the basement level of the building are fully sprinklered while only the eastern portion of the second floor level is sprinklered. The structure is equipped with a fire alarm system but not a standpipe and hose system. The floor assemblies between the ground floor and the second floor provide a 2 h fire-resistance rating and steel beams, joists and a metal floor deck are provided with 1 h rated spray fireproofing. All supporting columns have a fire resistance rating of 2 hours.

The building has a mixed-use occupancy classification and includes a Group C residential occupancy on the second floor, a Group E mercantile occupancy on the ground floor and subject to conditions, Group F, Division 2 – medium hazard industrial occupancy in the basement level (BCC Ruling 05-13-1027). The Applicant had previously appeared before the Building Code Commission regarding the proposed use of the basement level of this building as a self-storage facility. The Commission ruled that, subject to certain conditions, the basement level of the building could be used as an F2 self-storage facility.

The construction in dispute at this time involves the design of the self-storage facility. In particular, whether the tenant storage cubicles are to be considered suites and therefore required to be separated from adjoining cubicles by a fire separation having a fire resistance rating of 1 h in accordance with Article 3.3.1.1. and be provided with a public corridor in accordance with Sentence 3.3.1.4.(3).

The basement level of the building, where the self-storage area is to be located, has an area of 1,003 m^2. It is proposed that metal screen storage cubicles with wire-mesh roofs will be situated in the basement level to form individual storage units. The average cubicle size will be approximately 3 m by 3 m and there will be approximately 90 units in total.

All corridors between the cubicles are a minimum of 1.5 m wide. The individual cubicles are not fire-separated from one another nor is a public corridor being proposed. The entrance to the self-storage area is separate from the entrance for the residential occupancy. The floor assemblies above the basement level provide a 2 h fire-resistance rating and are constructed using concrete floor on a metal deck. Further, the stairs located in the basement level will be separated from the remainder of the building by a 2 h fire separation.

2. Provisions of the Building Code in Dispute

3.3.1.1. Separation of Suites

(1) Except as permitted by Sentences (2) and (3), each suite in other than business and personal services occupancies shall be separated from adjoining suites by a fire separation having a fire-resistance rating not less than 1 h.

(2) The fire-resistance rating of the fire separation required by Sentence (1) is permitted to be less than 1 h but not less than 45 min provided the fire-resistance rating required by Subsection 3.2.2. is permitted to be less than 1 h for

(a) the floor assembly above the floor area, or

(b) the floor assembly below the floor area, if there is no floor assembly above.

(3) Occupancies that are served by public corridors conforming to Sentence 3.3.1.4.(5) in a building that is sprinklered, are not required to be separated from one another by fire separations provided the occupancies are

(a) suites of business and personal services occupancy,

(b) fast food vending operations that do not provide seating for customers, and

(c) suites of mercantile occupancy.

3.3.1.4. Public Corridor Separations

(1) Except as otherwise required by this Part or permitted by Sentences (2) to (7), a public corridor shall be separated from the remainder of the building by a fire separation having a fire-resistance rating not less than 1 h.

(2) The fire-resistance rating of a fire separation between a public corridor and the remainder of a floor area is permitted to be less than 1 h but not less than 45 min provided the fire-resistance rating required by Subsection 3.2.2. is permitted to be less than 1 h for

(a) the floor assembly above the floor area, or

(b) the floor assembly below the floor area, if there is no floor assembly above.

(3) If a floor area is sprinklered, no fire-resistance rating is required for a fire separation between a public corridor and the remainder of the floor area provided the corridor does not serve a care or detention occupancy or a residential occupancy.

(4) If a floor area is sprinklered, no fire separation is required between a public corridor and the remainder of the floor area provided the public corridor

(a) is more than 5 m in unobstructed width, and

(b) does not serve

(i) a care or detention occupancy, or

(ii) a residential occupancy.

(5) If a floor area is sprinklered, no fire separation is required between a room or a suite and a public corridor that serves it provided the public corridor complies with Sentence 3.3.1.9.(6).

(6) A floor assembly of a public corridor above a crawl space that conforms to Sentence 3.2.2.9.(2) is not required to be a fire separation.

(7) If a floor area is sprinklered, no fire separation is required between a public corridor and a room containing water closets and lavatories provided the room and the public corridor are separated from the remainder of the floor area by a fire separation that has a fire-resistance rating not less than that required between the public corridor and the remainder of the floor area.

(8) The sprinkler system in Sentences (3), (4), (5) and (7) shall be electrically supervised in conformance with Sentence 3.2.4.9.(2) and, upon operation, shall cause a signal to be transmitted to the fire department in conformance with Sentence 3.2.4.7.(4) when the corridor serves a Group E or Group F, Division 1 or 2 occupancy.

3.3.4.3. Storage Rooms

(1) Sprinklers shall be installed in a storage room provided for the use of tenants in a residential occupancy within a floor area but not contained within a suite.

(2) Except as permitted by Sentence (3), a storage room referred to in Sentence (1) shall be separated from the remainder of the building by a fire separation having a fire-resistance rating not less than 1 h.

(3) The fire-resistance rating of the fire separation required by Sentence (2) is permitted to be less than 1 h but not less than 45 min provided the fire-resistance rating required by Subsection 3.2.2. is permitted to be less than 1 h for

(a) the floor assembly above the floor area, or

(b) the floor assembly below the floor area, if there is no floor assembly above.

3. Applicant's Position

The Agent for the Applicant submitted that the issue before the Commission is the design of the self-storage facility. In his opinion, the storage cubicles should not be considered as suites despite being leased/rented by individual tenants. His position was that there is only one tenant and that owns the self-storage facility. He compared the scenario to that of a flea market or executive office space. In the office scenario there is the company who leases a space and then divides the floor plate into individual offices. He maintained that the storage cubicles would always be under the full control of the landlord and likened the storage cubicles to storage lockers in residential occupancies. As such, it is his view that the cubicles should not be required to comply with Article 3.3.1.1. of the Code.

The Agent described the proposed layout of the cubicles within the basement level of the building as consisting of approximately 90 cubicles having wire-mesh roofs and roll-up type doors. The cubicles range in size with the largest cubicle being approximately 14 m^2 (150 ft^2). He noted that the corridors between blocks of cubicles will be 1.5 m wide.

The Agent maintained that the dispute is not with respect to contravention of the Code but rather that the Code does not specifically address a self-storage facility such as the one in this building. It is his belief that the self-storage cubicles should not be required to comply with Articles 3.3.1.1. and 3.3.1.4. Since this self-storage facility is located in the basement of a mixed occupancy building, he suggested that the area could be considered as similar to storage areas located in buildings of residential occupancy and that Article 3.3.4.3. of the Code should apply. Article 3.3.4.3. requires that a residential storage area be separated from the remainder of the building

by an adequate fire separation. He stated that an adequate fire separation would be provided in accordance with Article 3.3.4.3. of the Code. He explained that the facility will also have on-site supervision; access will be restricted to hours when supervision is available; it will be equipped with smoke detectors, and; no hazardous materials will be allowed to be stored in the facility. He added that the area is sprinklered and has 2 h rated floor assemblies.

In summation, the Agent stated that the Code does not address this specific self-storage facility and that Articles 3.3.1.1. and 3.3.1.4. of the Code do not apply in this case. It is his belief that an appropriate level of safety is achieved in the building with the additional safety measures previously noted. He compared this self-storage facility to that of a storage area in buildings of residential occupancy and stated that there will be no significant difference between this use and that of a storage area in a building of residential occupancy.

4. Respondent's Position

The Respondent submitted that the tenant storage cubicles should be considered individual suites and therefore are required to be separated from adjoining cubicles by a fire separation in accordance with Article 3.3.1.1. He further submitted that, in an F2 occupancy such as this, Sentence 3.3.1.4.(3) requires fire separations between public corridor walls and the remainder of the floor area.

The Respondent began by citing the definition of "suite" contained in Part 1 of the Code. In his view, the cubicles are considered suites and therefore are required to comply with Articles 3.3.1.1. and 3.3.1.4.

Article 3.3.1.1. requires a fire separation having a fire resistance rating of not less than 1 h. He cited Sentence 3.3.1.1.(3) as allowing some relief to Group D and Group E occupancies but stated that this does not apply to this particular facility as it is a Group F, Division 2 occupancy. In his opinion, the cubicles are required to comply with Article 3.3.1.1. and should be fire separated accordingly.

The Respondent indicated that Article 3.3.1.4. is also at dispute in this case. It is his view that 3.3.1.4.(3) applies to this facility because the area is sprinklered. Therefore a fire separation is required between a public corridor and the remainder of the floor; however, no fire resistance rating is required for the separation.

Further, the Respondent referenced Sentence 3.3.1.10.(1) as applying to this case as well. This would require doors opening into the corridor to swing on a vertical access. In responding to the Applicant's contention that Article 3.3.4.3. is the closest Code requirement that applies to this specific storage facility, the Respondent disagreed. He noted that the requirements contained within Article 3.3.4.3. apply only to storage rooms provided for the use of tenants in a residential occupancy. That is not the case here. He elaborated by saying that storage rooms in a residential occupancy would typically contain household storage items, while this facility is classed as a Group F, Division 2 occupancy and could contain such items as paper, furniture and tires. He does not believe this specific facility should be compared to storage rooms associated with a residential occupancy.

Summarizing his position, the Respondent reiterated his opinion that the storage cubicles are considered suites. Hence, a fire separation is required between the suites and also between the public corridor and the remainder of the floor area. In his opinion, the proposal does not comply with the requirements of Article 3.3.1.1. or Sentence 3.3.1.4.(3).

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed metal screen storage cubicles with wire-mesh roofs in a self-service storage facility located in the basement of a multiple occupancy building provides sufficiency of compliance with Articles 3.3.1.1. and 3.3.1.4., when considering Article 3.3.4.3. of the Building Code at 427 Parliament Street, City of Toronto, Ontario, on condition that:

a) The self-service storage facility shall be subdivided, by a fire separation having a 1 hour fire resistant rating, into areas not more than 500 m^2.

6. Reasons

i) The Commission is satisfied that, subject to the above noted condition along with the conditions imposed by BCC ruling number 05-13-1027, the proposal will achieve sufficiency of compliance with the provision of the Building Code.

Dated at Toronto this **4th** day in the month of **August** in the year **2005** for application number **2005-35.**

Tony Chow, Chair

Rick Florio

Michael Steele

Ontario

Ruling No. 05-42-1056
Application No. 2005-32

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.4.6.5.(8) of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Michael Yerich, Holiday Inn (Niagara Falls) Limited, for resolution of a dispute with John Castrilli, Chief Building Official, City of Niagara Falls, to determine whether the as-installed guard, serving a restaurant patio and having been constructed with several continuous horizontal members running throughout the height of the guard and, in particular, located between 140 mm and 900 mm above the level being protected, provides sufficiency of compliance with Sentence 3.4.6.5.(8) of the Building Code at Wolfgang Puck / Café Tutu Tango Restaurant, 6300 Fallsview Boulevard, City of Niagara Falls, Ontario.

APPLICANT	Michael Yerich Holiday Inn (Niagara Falls) Limited Niagara Falls, ON
RESPONDENT	John Castrilli Chief Building Official City of Niagara Falls
PANEL	Len King, Vice-Chair Neal Barkhurst Rick Florio
PLACE	Toronto, Ontario
DATE OF HEARING	September 22, 2005
DATE OF RULING	September 22, 2005
APPEARANCES	Roy Turner Atkins Group Corporation, Architects Mississauga, ON **Agent for the Applicant** John Kedzierski Senior Plans Examiner City of Niagara Falls **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Comply under the *Building Code Act*, *1992*, to remedy certain alleged deficiencies at the Wolfgang Puck / Café Tutu Tango Restaurant, 6300 Fallsview Boulevard, City of Niagara Falls, Ontario

The subject structure is a 2 storey, Group A, Division 2 major occupancy building comprised of combustible construction. The facility, having a building area of 708.07 m^2, is equipped with a fire alarm system. Neither a standpipe and hose system nor a sprinkler system has been installed.

The construction in dispute involves the design of the guard which has been installed around the exterior patio seating area. The guard has been constructed with continuous horizontal members located between 140 mm and 900 mm above the level being protected by the guard. It is a required guard as the difference in grade is in excess of 600 mm. The guard is comprised of approximately ten 2.4 m (8 ft) panels between steel posts. The posts are constructed using 69.9 mm x 69.9 mm (2¾" x 2¾") steel tubing which is welded to a 152 mm x 152 mm (6" x 6") base plate. The panels are formed when the two posts are connected with 25 mm x 69.9 mm (1" x 2¾") steel tubing at the top and bottom of the posts, creating a frame-like structure for the horizontal and vertical members. The horizontal and vertical members are fabricated using 4.8 mm x 69.9 mm (3/16" x 2½") flat steel bars. The vertical members are positioned at 254 mm (10") on centre and the horizontal members are positioned at 69.9 mm (2¾") on centre.

It is the design of the guard and in particular whether the guard will facilitate climbing that is the centre of this dispute before the Building Code Commission.

2. Provisions of the Building Code in Dispute

3.4.6.5. Guards

(8) Unless it can be shown that the location and size of openings do not present a hazard, a guard shall be designed so that no member, attachment or opening located between 140 mm and 900 mm above the level being protected by the guard will facilitate climbing.

3. Applicant's Position

The Agent for the Applicant contended that since the guard protects the patio of a fine dining restaurant, patrons will be standing only when going to and from their tables and not standing at the guard/railing as in a "bar situation".

The Agent argued that Sentence 3.4.6.5.(8) of the Code states "unless it can be shown that the location and size of openings do not present a hazard". It is his position that the location of the subject guard within this fine dining restaurant does not present a hazard. He contended that any children would be accompanied and supervised by their parents, guardians or other responsible adult and it should not be expected that they would be allowed to climb the guard.

In summation, the Agent stated that the horizontal members are more closely spaced than the rungs of a ladder so it would not be an easy climb. He reiterated his position that the location of the guard within the restaurant and the use of the building as a fine dining establishment support his opinion that the guard does not present a hazard.

4. Respondent's Position

The Designate for the Respondent submitted that in his opinion the guard facilitates climbing. The continuous horizontal members located within the 140 mm to 900 mm restricted area above the level being protected by the guard provide toeholds that would facilitate climbing. He is looking to the Building Code Commission for a determination on this issue.

5. Commission Ruling

It is the Decision of the Building Code Commission that the as-installed guard, serving a restaurant patio and having been constructed with several continuous horizontal members running throughout the height of the guard and, in particular, located between 140 mm and 900 mm above the level being protected, does not provide sufficiency of compliance with Sentence 3.4.6.5.(8) of the Building Code at Wolfgang Puck / Café Tutu Tango Restaurant, 6300 Fallsview Boulevard, City of Niagara Falls, Ontario.

6. Reasons

i) The design of the subject guard creates a ladder effect having continuous horizontal members located within the restricted 140 mm to 900 mm area above the level being protected by the guard. Each horizontal member is 4.8 mm ($^{3}/_{16}$ in) thick positioned at 69.9 mm (2 ¾ in) on centre creating both toeholds and handholds that would facilitate climbing.

ii) The difference in grade varies between 635 mm and 1219 mm, which is in excess of the 600 mm minimum distance in grade requiring a guard.

iii) The restaurant is adjacent to a road allowance with significant pedestrian traffic.

iv) The facility is currently considered an adult style restaurant, however, in time the facility could be used as a family style restaurant or other use for which no change of use permit would be required.

Dated at Toronto this **22nd** day in the month of **September** in the year **2005** for application number **2005-32.**

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Len King, Vice-Chair

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Neal Barkhurst

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Rick Florio

Ontario

Ruling No. 05-43-1057
Application No. 2005-46

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.8.5.2.(1) of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Robert Martin, Homeowner, for resolution of a dispute with Rocky Cerminara, Chief Building Official, City of London, to determine whether the as-constructed spiral stairs having a minimum run of less than 150 mm provides sufficiency of compliance with Sentence 9.8.5.2.(1) of the Building Code at 40 Mayfair Drive, City of London, Ontario.

APPLICANT	Robert Martin Homeowner London, ON
RESPONDENT	Rocky Cerminara Chief Building Official City of London
PANEL	Len King, Vice-Chair Neal Barkhurst Rick Florio
PLACE	Toronto, Ontario
DATE OF HEARING	September 22, 2005
DATE OF RULING	September 22, 2005
APPEARANCES	Robert Martin Homeowner London, ON **The Applicant** Owen Clarke Manager of Inspections City of London **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Make Safe under the *Building Code Act*, *1992*, to remedy certain alleged deficiencies at 40 Mayfair Drive, City of London, Ontario.

The subject building is a two storey single detached residence having a building area of approximately 90 m^2. The dwelling is of combustible construction and is not equipped with a sprinkler, standpipe and hose or a fire alarm system.

The construction in dispute involves the spiral stairs leading from the main floor family room to the office located in the basement. The building contains two staircases that provide access to the basement. The primary staircase meets the requirements of the Building Code while the spiral stairs are a secondary means of access to the basement level. It is the design and dimensions of the spiral stairs, in particular the run of the stairs, which is at issue in this dispute.

The as-installed stairs have a central column that is approximately 125 mm (5 in) in diameter with each riser having a tread width of approximately 710 mm (28 in). A latched gate has been installed at the top of the spiral stair. The Applicant and the Respondent have differing opinions on the measurements for the minimum run of the stairs. The Applicant believes the minimum run to be 150 mm (5 ⅞ in). The Respondent maintains that the minimum run is less than the required 150 mm. The minimum run is measured at the portion of the tread where the stair dimensions are reduced as the curved stair converges to a central post. The requirements prescribed in Article 9.8.5.2. of the Code would apply to the stairs that are the centre of this dispute before the Commission.

2. Provisions of the Building Code in Dispute

9.8.5.2. Curved Stairs not in Exits

(1) Except as permitted in Article 9.8.5.3., a curved stair not required as an exit shall have an average run of not less than 200 mm and a minimum run of 150 mm and shall have risers conforming to Article 9.8.3.1.

3. Applicant's Position

The Applicant submitted that the issue at dispute is the run of the spiral stairs. He stated that the parties are in agreement that these stairs are secondary stairs and that the requirements prescribed in Article 9.8.5.2. of the Code are applicable.

The Applicant contends that the stairs comply with the requirements contained in the Code. He referred to a series of photographs (Exhibit 5), which depict the as-built staircase. He described the width of the treads as being 710 mm (28 in) and indicated that photograph #1 demonstrates that the run of the stairs measured at a distance 241 mm (9 ½ in) from the outer stair railing results in a run of 200 mm (7 ⅞ in). It is the opinion of the Applicant that this photograph demonstrates that the stairs sufficiently comply with the average run requirement of 200 mm (7 ⅞ in) as prescribed by the Code.

The Applicant stressed that the stairs are secondary stairs and provide for an easy transition from the main floor family room to the office located below. He further claimed that the stairs will not be used for everyday family life and that the only reason to use them would be to access the

office. He went on to describe a swinging, locking gate that has been installed at the top of the stairs. The Applicant referenced two previous Building Code Commission rulings, which dealt with run requirements of spiral stairs and maintained that the current situation before the Commission is similar. He cited both of the previous cases which resulted in sufficiency of compliance rulings and suggested that, in his opinion, this case should also result in a sufficiency of compliance ruling.

In summation, the Applicant stated that the stairs do not pose a safety risk and that the locking gate, which has been installed at the top of the stairs, provides an additional safety feature. He expressed his opinion that the 710 mm (28 in) width of the risers provides sufficient tread to allow for safe and easy travel from the family room to the office. He reiterated his belief that the stairs, as constructed, achieve sufficiency of compliance with the requirements of the Code.

4. Respondent's Position

The Respondent submitted that the spiral stairs, as installed, do not comply with the provisions contained in Sentence 9.8.5.2.(1) of the Building Code. He explained that the main issue with the stairs is the minimum run requirements. The Code stipulates that curved stairs not required as an exit shall have a minimum run of not less than 150 mm and the Respondent indicated the as-constructed stairs do not comply with this provision.

The Respondent explained the history of the dispute to the Commission stating that the Applicant applied for a building permit for an addition to his home in 1998, the permit drawings included spiral stairs. The municipality advised the Applicant that the spiral stairs shown on the plans would not meet the requirements of the Building Code. The plans were then revised by the Applicant to indicate a curved stair design and the permit was issued. The work for the addition was completed in 2001 without the curved stairs being installed and the permit was closed off. The Building Division received a complaint in April 2005 regarding stairs being installed without a building permit. In May 2005, an Order to Make Safe was issued by the municipality to the Applicant and shortly thereafter the Applicant filed this application with the Building Code Commission.

The Respondent outlined the municipality's position by explaining that the as-installed stairs do not comply with the prescriptive requirements of the Code with respect to the minimum run requirements. He went on to say that the municipality could not waive the minimum run requirements. He added that the inspector who attended at the property believes that the Applicant measured the tread width of the stair and not the minimum run. This could account for the different measurements submitted by the Applicant and the Respondent. According to the measurements taken by the inspector, the minimum run is substantially less than 150 mm (5 ⅞ in). A measurement of 60 mm (2 ⅜ in) is indicated on the Respondent's diagram of the stairs, although it appears from the diagram that the stair treads narrow further as they converge to the central post.

The Respondent summarized his position by stating that the stairs do not comply with the requirements of the Code as stated in Sentence 9.8.5.2.(1) as a minimum run of 60 mm is significantly less than the 150 mm requirement prescribed in the Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the as-constructed spiral stairs having a minimum run of less than 150 mm does not provide sufficiency of compliance with Sentence 9.8.5.2.(1) of the Building Code at 40 Mayfair Drive, City of London, Ontario.

6. Reasons

i) Sentence 9.8.5.2.(1) of the Code requires a minimum run of 150 mm (5 ⅞ inches). The minimum run provided is substantially less than the required 150 mm (5 ⅞ inches).

ii) The only compensating measure proposed was the installation of a locking gate at the top of the stair, which, in the Commission's opinion, was not considered adequate compensation for a stair that does not meet the minimum set of construction requirements outlined in the Code.

Dated at Toronto this **22nd** day in the month of **September** in the year **2005** for application number **2005-46.**

Len King, Vice-Chair

Neal Barkhurst

Rick Florio

Ontario

Ruling No. 05-44-1058
Application No. 2005-48

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Clause 9.9.9.1.(1)(a) and Sentence 9.9.9.1.(2) of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Albert Ashley, Stone Mansion Inc., for resolution of a dispute with Bruce Poole, Chief Building Official, City of Guelph, to determine whether the construction of a third floor loft area, which includes open stairwells from the second floor to the third floor loft area, provides sufficiency of compliance with Clause 9.9.9.1.(1)(a) and Sentence 9.9.9.1.(2) of the Building Code at 22 Oxford Street, City of Guelph, Ontario.

APPLICANT	Albert Ashley Stone Mansion Inc. Guelph, ON
RESPONDENT	Bruce Poole Chief Building Official City of Guelph
PANEL	Len King, Vice-Chair Neal Barkhurst Rick Florio
PLACE	Toronto, Ontario
DATE OF HEARING	September 22, 2005
DATE OF RULING	September 22, 2005
APPEARANCES	Albert Ashley Stone Mansion Inc. Guelph, ON **The Applicant** Tammy Hogg Plans Examiner City of Guelph **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received a permit under the *Building Code Act*, *1992*, and has constructed a loft space above the existing second storey of a three unit dwelling at 22 Oxford Street, City of Guelph, Ontario.

The subject building is an existing Group C residential dwelling containing three dwelling units and having a building area of approximately 225 m^2. The dwelling is comprised of combustible construction and is not equipped with standpipe and hose, sprinkler or fire alarm systems. The building is divided into three residential suites. One side of the building contains a single, two storey dwelling unit (Unit 3) while the other side of the building contains two dwelling units. The main floor contains a one storey unit (Unit 1) and the upper floor, directly above Unit 1, contains a second dwelling unit, (Unit 2).

The construction in dispute involves the Applicant's proposal to construct loft space above the existing second storey dwelling unit (Unit 2), which will be accessed by open stairs, effectively creating a third storey within the building.

The construction of the third storey loft area creates a situation whereby occupants of the third storey loft area of Unit 2 would be required to travel more than one storey to reach a level served by an egress door or exit. Article 9.9.9.1. of the Code addresses travel limits to exits or egress doors for dwelling units. Clause 9.9.9.1.(1)(a) states that every dwelling unit containing more than one storey, as is the case in Unit 2, shall have exits or egress doors located so that is not necessary to travel more than one storey to reach a level served by an egress door to a public corridor, enclosed exit stair or exterior passageway. The third storey loft area, in this instance, is served by an open stair leading down to the egress door located on the first storey of the building.

Sentence 9.9.9.1.(2) states that where a dwelling unit is not located above or below another suite, as is the case with Unit 3, the travel limit from a floor level in the dwelling unit to an exit or egress door is permitted to exceed one storey, provided that floor level is served by an openable window or door. The openable window or door is required to provide an unobstructed opening of not less than 1,000 mm in height and 550 mm in width, and is to be located so that the sill is not more than 1,000 mm above the floor and not more than 7 m above the ground level.

The issue at dispute between the parties is whether the proposal to provide an unenclosed stair to access the third storey loft area of Unit 2 provides sufficiency of compliance with Clause 9.9.9.1.(1)(a) and Sentence 9.9.9.1.(2) of the Code.

2. Provisions of the Building Code in Dispute

9.9.9.1. Travel Limit to Exits or Egress Doors

(1) Except as provided in Sentences (2) and (3), every dwelling unit containing more than 1 storey shall have exits or egress doors located so that it shall not be necessary to travel up or down more than 1 storey to reach a level served by

(a) an egress door to a public corridor, enclosed exit stair or exterior passageway, or

(b) an exit doorway not more than 1 500 mm above adjacent ground level.

(2) Where a dwelling unit is not located above or below another suite, the travel limit from a floor level in the dwelling unit to an exit or egress door is permitted to exceed 1 storey where that floor level is served by an openable window or door

(a) providing an unobstructed opening of not less than 1 000 mm in height and 550 mm in width, and

(b) located so that the sill is not more than

(i) 1 000 mm above the floor, and

(ii) 7 m above adjacent ground level

3. Applicant's Position

The Applicant submitted that he took ownership of the property in February 2005 and described the building as containing five dwelling units at that time. He stated that the building was constructed sometime between 1852 and 1870 and told the Commission that the building has a heritage designation.

The Applicant advised the Commission that the building was in a state of disrepair at the time of purchase and of his intention to restore the building. He further advised that in March 2005 the final tenant vacated the building and he began renovating and restoring the structure.

The Applicant explained that he proposed to renovate the building so that it would contain three separate dwelling units. He described his proposal to renovate so that one side of the building would contain a single, two storey dwelling unit (Unit 3) while the other side of the building would contain two dwelling units of one storey each. The main floor is to contain a one storey unit (Unit 1) and the upper floor, directly above Unit 1, is to contain a second dwelling unit, (Unit 2). Upon beginning construction, the Applicant stated that he noted there was sufficient room to create a loft space for Unit 2. He indicated that an open stair was constructed to access the loft area. It is his opinion that the open stair is more visually appealing than an enclosed stair and advised that this design is more in keeping with the heritage designation of the building. Upon being questioned as to the heritage designation, the Applicant confirmed that historical preservation covers the exterior of the building only.

The Applicant directed the Commission to pictures of the construction, which were included as part of Exhibit 5 submitted by the Applicant, specifically pointing to photos which depicted possible alternate routes of egress from the dwelling units. He further stated that he believed that some of the interior renovations have resulted in upgrades which, in his opinion, provide additional safety to the occupants of the dwelling units.

In response to questions regarding what was previously constructed with respect to the third level of the building, the Applicant advised that the third storey loft area was newly constructed and did not exist previously.

In summation, the Applicant suggested that the requirement to provide an enclosed stair is not in keeping with the historical character of the building and reiterated his opinion that the changes made to the units have made the building safer than it was before the renovations.

4. Respondent's Position

The Designate for the Respondent submitted that the construction of the loft area creates a situation where it is necessary to travel more than one storey to an egress door or enclosed exit stair as required by Sentence 9.9.9.1.(1) of the Building Code. In the opinion of the Designate, Sentence 9.9.9.1.(1) of the Code clearly states that it shall not be necessary to travel more than one storey to an egress door or enclosed exit stair. Therefore, in her opinion, the construction contravenes the requirements of the Building Code.

The Designate informed the Commission that alternative options were discussed with the Applicant. She reported that the Applicant was advised that in order to comply with the requirements of Clause 9.9.9.1.(1)(a) of the Code, an enclosed exit stair from the second floor dwelling unit (Unit 2) must be provided. She added that a further option was available for Unit 3, as it is not located above or below another dwelling unit, and that was the option to provide an openable window that would be in conformance with the requirements outlined in Sentence 9.9.9.1.(2).

Summarizing the Respondent's position, the Designate stated that creating the third storey loft in Unit 2 results in a situation where it becomes necessary to travel more than one storey to an enclosed exit stair or an egress door. She maintained that the Code requirements at issue are very clear and specific; therefore, an enclosed exit stair is required to be provided for the second floor dwelling unit (Unit 2). She restated that there is the further option of providing an openable window meeting the requirements of Sentence 9.9.9.1.(2) for Unit 3.

5. Commission Ruling

It is the Decision of the Building Code Commission that the construction of a third floor loft area, which includes open stairwells from the second floor to the third floor loft area, does not provide sufficiency of compliance with Clause 9.9.9.1.(1)(a) and Sentence 9.9.9.1.(2) of the Building Code at 22 Oxford Street, City of Guelph, Ontario.

6. Reasons

i) The proposal does not comply with the minimum set of construction requirements outlined in the Building Code. No compensating measures were proposed to offer a sufficient level of compliance with the Building Code requirements.

ii) Compliance with the Building Code requirements could be readily achieved.

Dated at Toronto this **22nd** day in the month of **September** in the year **2005** for application number **2005-48.**

Len King, Vice-Chair

Neal Barkhurst

Rick Florio

Ontario

Ruling No. 05-45-1059
Application No. 2005-16

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Part 8 of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Stuart Blaber, homeowner, for resolution of a dispute with Mark Green, Chief Building Official, Leeds, Grenville & Lanark District Health Unit, to determine whether the proposed home effluent pasteurization system provides sufficiency of compliance with Part 8 of the Building Code at 576 Slack Road, Township of Athens, Ontario.

APPLICANT	Stuart Blaber Homeowner Athens, ON
RESPONDENT	Mark Green Chief Building Official Leeds, Grenville & District Health Unit
PANEL	Judy Beauchamp, Chair-Designate Jim Wilkinson Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	October 6, 2005
DATE OF RULING	October 6, 2005
APPEARANCES	Stuart Blaber Homeowner Athens, ON **The Applicant** Mark Green Chief Building Official Leeds, Grenville & District Health Unit **The Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Comply under the *Building Code Act*, *1992*, to remedy certain alleged deficiencies at 576 Slack Road, Athens, Ontario.

The subject building is a solar powered residential dwelling having a finished area of approximately 65 m^2. The dwelling is served by a drilled well and situated on a property having area of approximately 3.2 hectares (8 acres).

The dispute before the Commission is two-fold. The first issue is related to the construction of a Class 5 (holding tank) sewage system, as was indicated in the Order to Comply. This holding tank has been installed without the benefit of the required permit and, according to the Respondent, does not comply with the requirements of the Building Code. The Building Code prohibits the use of Class 5 sewage systems except in specific circumstances. The second issue centres on the Applicant's intent to use the holding tank as part of a "home effluent pasteurization" system, which is being developed by the Applicant.

The proposed "home effluent pasteurization" system is an innovative design that would consist of three main components: a sewage-holding tank, a batch pasteurizer and a potable water heat exchanger. The sewage-holding tank will collect the raw wastewater from all household drains and will include a cutter blade that will break up paper and soft solids. Level sensors in the tank will start and stop the pump when appropriate. The batch pasteurizer will consist of a high temperature, tri-purpose circulation and emptying pump, three level sensors, an electric heater and specially designed control valves with leak detection. The system will also be equipped with an audible alarm system, which will sound an alarm and turn the interior water supply off in the event of an alarm condition. While it is possible to manually turn off the alarm sound, the system cannot be restarted until the alarm condition has been resolved.

It is the Applicant's intent to heat the wastewater to a significant degree for a specified period so as to pasteurize it and thereby eliminate all pathogens. The system is also proposed to be equipped with a special sensor to monitor the holding tank for volatile liquids such as paint thinners and gasoline. If such solvents are detected, it is intended that the system will shut down until such time as the solvents are removed.

There is no associated filter or leaching bed for the distribution of effluent following the pasteurization process. The treated effluent, referred to by the Applicant as potable water, would be collected in a cistern for distribution as an on-site "top dressing".

The proposed use of this home effluent pasteurization system as an alternative to the types of systems prescribed in Part 8 of the Building Code is the main focus of this dispute. The Leeds, Grenville & District Health Unit has not approved the use of this system, as, in the opinion of the Chief Building Official, the Applicant has not proven that the system will provide the level of performance that would be achieved by conformance with the requirements of Part 8 of the Building Code.

2. Provisions of the Building Code in Dispute

Part 8 – Sewage Systems

(Please see Part 8 of the Building Code)

3. Applicant's Position

The Applicant stated that he does not want to pollute the environment and he firmly believes that it is not the intention of the Code to force the general public to pollute the environment. He explained that, in his opinion, septic waste could be reused and indicated that he had been working on a system that would accomplish this task.

The Applicant said that he believes his submission had been well presented though he was hoping to be able to provide the Commission with some test results of his system. He contended that his proposal will work and that his submission included the opinion of a doctor who had performed significant work in the field of solar pasteurization in foreign countries. His research indicated that pasteurization should make the wastewater safe. The Applicant indicated that his property is located close to a stream, and the heavy clay soil on his property is not suitable for a septic system. He added that he cannot afford to install a septic system and noted that the existing Code compliant system did not work very well.

The Applicant remarked that there are a number of problems with traditional septic systems, as regulated by the Building Code. He referred to various articles, which were included in his submission, as being supportive of his argument that a septic system may not be the best solution. Two points that he referenced as being relevant were the lack of snow coverage threatening to freeze septic systems and that many countries are starting to ban septic systems. He indicated that his proposal to pasteurize wastewater would be a viable alternative to standard septic systems.

When questioned by the Commission as to whether he had explored the process of obtaining approval for treatment units with the Building and Development Branch, the Applicant advised that he had not. Nor had he examined other routes to approval for innovative technology.

In response to the suggestion that he may consider putting his pasteurization system in front of a standard septic system with a leaching bed, the Applicant argued that this would still pollute the land. He claimed that a standard septic system is not safe as far as he is concerned and that it is not a viable option for him. When questioned as to whether the proposed pasteurization system includes a disinfection procedure, the Applicant responded that there could be one included but that he was trying to avoid using chemicals, and that the heating of the wastewater would kill all of the pathogens. He insisted that the output would be 99.999% pure following treatment.

In summation, the Applicant reaffirmed his position that he is against any kind of sewage system that would pollute the environment and that he is trying to improve environmental conditions. The Applicant indicated that he had applied for a permit to install a holding tank and was turned down by the Municipality. He reiterated his desire to work with the Municipality in order to achieve some type of agreement. He stated that he believes his innovative system has some merit and should not be dismissed lightly. The Applicant contends that he should be permitted to use his system so as to verify that it works and argued that the Municipality should be supportive of his desire to clean up the environment.

4. Respondent's Position

The Respondent submitted that the Applicant had installed a homemade holding tank, which does not comply with the requirements of the Building Code and which was installed without the benefit of a permit. He claimed that greywater was being disposed of onto the surface of the ground and, as such, an Order to Comply was issued to the Applicant. The Order to Comply directed the Applicant to apply for a permit to install a Class 1, 2, 3, or 4 sewage system in

accordance with the Building Code; to install the new system as per the approved design and to cease the use of the existing unapproved system. The Respondent added that the Applicant had submitted information pertaining to a "home effluent pasteurization" system, which the Chief Building Official (CBO) was unable to accept as an equivalent as the information submitted was insufficient to convince the CBO that the proposed system would provide the level of performance that would be achieved by conformance with the requirements of the Building Code.

As part of an historic review for this property, the Respondent advised the Commission that the Municipality had received a call from a concerned citizen which prompted the Respondent to visit the Applicant's property. The Respondent stated that once he attended the site, he was unsure as to what type of sewage system was being used so he arranged to meet with the Applicant at the property.

The Respondent indicated that during this meeting he noted that a holding tank had been installed without the benefit of a permit. The Respondent researched the Municipality's records and determined that a temporary building permit had been issued in 1977 for the construction of a residence and a second permit was issued in 1986 for the construction of a garage. Based on these two permits, he determined that the Applicant had applied for a temporary building permit to construct an experimental cottage which was to be heated with solar power and that no plumbing was to be installed. It was noted that, at the time of the construction of this cottage, a Class 1 system could have been installed and no permit for a Class 1 system would have been required.

The Respondent stated that he advised the Applicant on what type of sewage systems could be installed and he further advised that the holding tank, which had been installed, was not acceptable as it did not meet the requirements of Part 8 of the Building Code. Specifically, the Respondent advised that a Class 5 sewage system would not be acceptable but that the Applicant could apply for a permit to install a Class 1, 2, 3 or 4 sewage system.

The Respondent claimed that the Applicant proceeded with the installation of the Class 5 sewage system prompting the issuance of an Order to Comply on January 7, 2004. It was noted that a makeshift sewer line was crossing the yard and discharging into a holding tank. The Respondent advised the Commission that the Order to Comply has not been complied with to date and that the Applicant has continued with construction of his "home effluent pasteurization" system.

The Respondent submitted that he had reviewed the information submitted by the Applicant in respect of the proposed pasteurization system and was unable to accept the proposal as providing an equivalent level of performance to the requirements of the Building Code. He told the Commission that he had not been provided with any substantive test results or information on the proposed system, therefore, he was not satisfied that an equivalent level of performance would be achieved.

The Respondent contended that a Code compliant sewage system could be installed on the Applicant's eight acre property. He acceded that it may be necessary to import leaching bed fill to accommodate such a system, however, he was very confident that there was ample room to install a Code compliant sewage system.

In summary, the Respondent reaffirmed that it is his opinion that the property can support the installation of a Code compliant Class 1, 2, 3, or 4 system. He indicated that the Municipality is simply looking for the Applicant to comply with the requirements of the Building Code. He added that he has advised the Applicant, both in person and in writing, why the Municipality has not accepted the proposed "home effluent pasteurization" system as an alternative. He reiterated

that the Order to Comply, which was issued, clearly stated that “in the opinion of the Chief Building Official the proposed system has not been adequately tested and evaluated to establish whether it can provide the level of performance achieved by conformance with requirements of the Building Code.”

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed home effluent pasteurization system does not provide sufficiency of compliance as a secondary or tertiary treatment unit under Part 8 of the Building Code at 576 Slack Road, Athens, Ontario.

6. Reasons

i) The documentation, evidence and information provided by the Applicant was insufficient to support the claim that the proposed home effluent pasteurization system will provide an equivalent level of performance as would be achieved by conformance with the requirements of the Building Code.

ii) No long-term empirical test data was provided to support the Applicant’s claims as to the systems performance.

iii) The *Safe Drinking Water Act* provides for the control and regulation of drinking-water systems and drinking-water testing. The Building Code Commission does not have jurisdiction over the provisions contained in the *Safe Drinking Water Act.*

iv) Article 8.8.1.2. of the Building Code prohibits the installation of holding tanks except in specific circumstances. None of these explicit circumstances apply in the proposal presented in this case.

Dated at Toronto this **6th** day in the month of **October** in the year **2005** for application number **2005-16.**

Judy Beauchamp, Chair-Designate

Jim Wilkinson

Gary Burtch

Ontario

Ruling No. 05-51-1065
Application No. 2005-58

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.8.5.2.(1) of the Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Don Geldart, Homeowner, for resolution of a dispute with Wib Bethune, Chief Building Official, Township of Seguin, to determine whether the as-installed spiral staircase having a minimum run of 82.5 mm provides sufficiency of compliance with Sentence 9.8.5.2.(1) of the Building Code at 75 Sunset Cove, Parry Sound, Ontario.

APPLICANT	Don Geldart Homeowner Mississauga, ON
RESPONDENT	Wib Bethune Chief Building Official Township of Seguin
PANEL	Len King, Vice-Chair Gary Burtch Rick Florio
PLACE	Toronto, Ontario
DATE OF HEARING	November 3, 2005
DATE OF RULING	November 3, 2005
APPEARANCES	Don Geldart Homeowner Mississauga, Ontario T**he Applicant** Peter Shoebottom Deputy Chief Building Official Township of Seguin **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received a permit under the *Building Code Act*, *1992*, and has constructed a set of spiral stairs at 75 Sunset Cove, Parry Sound, Ontario.

The subject building is a two storey Group C seasonal residential dwelling having a building area of 69.7 m^2. The dwelling is comprised of combustible construction and is not equipped with fire alarm, sprinkler or standpipe and hose systems.

The construction in dispute involves the spiral stairs that have been installed to provide access to the second storey loft of the dwelling. The plans submitted for permit indicated the original design of the stair to be a straight run rather than the curved type of stair that was installed.

According to the inspection report, the stairs are comprised of a central column that is approximately 350 mm (14 in) in diameter with each tread measuring approximately 890 mm (35 in) from the central column to the outside railing. Each tread measures 82.5 mm (3¼ in) in depth at the point closest to the central column, 228 mm (9 in) at the midpoint of the tread and approximately 400 mm (15¾ in) in depth at the outermost point near the handrail.

It is the minimum run of the as-installed stair that is the centre of this dispute between the Applicant and the Respondent. The Applicant submitted that the minimum run of the stair was measured to be 128 mm while the Respondent claimed that the minimum run of the stair was measured to be 82.5 mm.

The Building Code by virtue of Sentence 9.8.5.2.(1) would require the stairs to provide a minimum run of 150 mm and an average run of not less than 200 mm. The minimum run of the stairs in question, as reported by both the Applicant and the Respondent, is less than the required 150 mm.

2. Provisions of the Building Code in Dispute

9.8.5.2. Curved Stairs not in Exits

(1) Except as permitted in Article 9.8.5.3., a curved stair not required as an exit shall have an average run of not less than 200 mm and a minimum run of 150 mm and shall have risers conforming to Article 9.8.3.1.

3. Applicant's Position

The Applicant submitted that he applied for a building permit to construct a seasonal dwelling and that a stair leading from the first storey to the second storey was included in the original permit drawings. He acceded that the stairs, as shown on the permit drawings, were designed differently than what was installed. He informed the Commission that he was not aware that Building Code requirements pertained to internal features.

The Applicant advised that once he became aware that the stairs did not comply with the requirements of the Code, he made an attempt to modify the stair treads in order to comply with the Code requirements. He explained that he had fashioned a metal step that would sit on top of the original stair tread, and that he hoped that this would address the issue of the minimum run.

In response to being questioned as to the width of the tread from the post to the outer railing, the Applicant stated that it measures 889 mm (35 in), adding that it is 25 mm (1 in) more than the Code would require. Upon being asked whether there were any spatial constraints within the building that would prohibit installing Code compliant stairs, the Applicant replied that there was no issue with space but that it was more of a personal preference to install the more attractive spiral stair.

4. Respondent's Position

The Designate for the Respondent submitted that stairs do not meet the minimum requirements of the Building Code. He stated that the original permit plans included a set of conventional straight run stairs from the first floor to the second floor loft area. He advised that spiral stairs had been installed instead of the conventional stairs and that, upon inspection, it was determined that the stairs did not meet the Code requirements for minimum run. It is the opinion of the Designate that the as-installed stairs do not provide proper access to the second storey as they do not meet the Code requirements.

The Designate acceded that the Applicant was willing to work on modifying the stairs in order to bring the stairs into compliance with the Code requirements; however, neither the Applicant nor the Respondent could find a way to modify the stairs so as to make them Code compliant. He noted the Applicant's proposal to add a fabricated stair tread but submitted that this would not address the issue of minimum run. While the addition of the metal steps results in a deeper tread, it does not alter the minimum run of the stair and, therefore, the modifications have not been accepted as achieving compliance with Article 9.8.5.2. of the Code.

In summary, the Designate declared that curved stairs pose a safety concern for emergency service personnel at the best of times. He reiterated that the stairs do not comply with the requirements of the Building Code with respect to the minimum run and therefore, it is his opinion that the stairs pose a safety hazard.

5. Commission Ruling

It is the Decision of the Building Code Commission that the as-installed spiral staircase having a minimum run of 82.5 mm and an average run of 241 mm does not provide sufficiency of compliance with Sentence 9.8.5.2.(1) of the Building Code at 75 Sunset Cove, Parry Sound, Ontario.

6. Reasons

i) The minimum run of the existing staircase is substantially less than the minimum run requirement of 150 mm as prescribed in the Building Code.

ii) There were no compensating measures proposed to offset the substantial deviation from the Code requirements.

iii) The original drawings included a staircase that was compliant with the Code. There were no evident construction difficulties present in the building, which would prevent the construction of a staircase complying with the Code requirements.

Dated at Toronto this 3rd day in the month of November in the year 2005 for application number 2005-58.

Len King, Vice-Chair

Gary Burtch

Rick Florio

Ontario

Ruling No. 06-02-1072
Application No. 2005-65

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 1.1.3.2.(1) and 9.10.4.1.(2) of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Gord Lorimer, Barry K. Hobin Architects, for the resolution of a dispute with Arlene Gregoire, Chief Building Official, City of Ottawa, to determine whether the 4th level "loft" design in a residential townhouse development provides sufficiency of compliance with the definition of "mezzanine" contained in Sentence 1.1.3.2.(1) and with the provisions of Sentence 9.10.4.1.(2) of the Building Code at The Moorcroft, 100, 102, and 104 Bellwood, City of Ottawa, Ontario.

APPLICANT	Gord Lorimer Barry K. Hobin Architects Ottawa, Ontario
RESPONDENT	Arlene Gregoire Chief Building Official City of Ottawa
PANEL	Tony Chow, Chair Rick Florio Susan Friedrich
PLACE	Toronto, Ontario
DATE OF HEARING	January 12, 2006
DATE OF RULING	January 12, 2006
APPEARANCES	Judy Jeske Morrison Hershfield Limited Ottawa, Ontario **Agent for the Applicant**
	Henri Diotte Program Manager, Permit Approval City of Ottawa **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, and is proposing to construct a residential townhouse development known as The Moorcroft. The three units subject to this dispute are located at 100, 102, and 104 Bellwood, City of Ottawa, Ontario.

The proposed buildings will be comprised of combustible construction, and will not be equipped with fire alarm, standpipe and hose, or sprinkler systems. The structures will have a Group C major occupancy classification.

The proposed development will consist of five individual dwelling units, separated by a party wall, on a site bounded by Bellwood Avenue, Willard Street and Scotia Place in the City of Ottawa. It is proposed that two of the buildings will include one or more townhouse unit designs that incorporate a "loft" area above the third storey. The Applicant describes the buildings as being three storeys in building height, while the Respondent describes them as being four storeys in building height. This discrepancy in building height forms part of the dispute between the parties.

The units in question will contain a partial crawl space beneath a ground floor. The ground floor will include the main entry, den and private parking garage. The second level will contain the primary living quarters with the bedrooms being located on the third level. The "loft" area is proposed to be used as an additional den, family room or an open concept sleeping room. The "loft" area is described by the Applicant as a partial floor at level four of the dwelling. It is this proposed "loft" area that is at the centre of this dispute.

It is the Applicant's contention that the buildings are considered three storeys in building height with a "mezzanine" loft. The Respondent considers the buildings to be four storeys in building height and construction would therefore be required to comply with the design requirements of Part 3 of the Building Code.

If the "loft" area is considered to be a mezzanine, as per the Applicant's submission, the building would be considered to be three storeys in building height and the provisions of Part 9 of the Building Code would be applicable. If the "loft" area is considered to be a separate storey, as per the Respondent's reasoning, the building would be considered a four storey building and would then have to comply with the requirements set out in Part 3 of the Building Code. The differences in Building Code design requirements for Part 3 vs Part 9 are quite significant.

The issue at dispute between the parties is whether the proposed fourth level "loft" area provides sufficiency of compliance with the definition of "mezzanine" contained in Sentence 1.1.3.2.(1) and with the provisions of Sentence 9.10.4.1.(2) of the Building Code.

2. Provisions of the Building Code in Dispute

1.1.3.2. Defined Terms

(1) The words and terms in italics in this Code have the following meaning for the purposes of this Code, and where indicated, the following meaning for the purposes of the Act as well.

Mezzanine means an intermediate floor assembly between the floor and ceiling of any room or storey and includes an interior balcony.

9.10.4.1. Mezzanines not Considered as Storeys

(2) Mezzanines shall not be considered as storeys for the purpose of determining building height where they occupy an aggregate area not exceeding 40% of the area of the room or the storey in which they are located provided the space above the mezzanine floor has no visual obstructions more than 1 070 mm above such floors.

3. Applicant's Position

The Agent for the Applicant submitted that the "loft" area of the subject units has been designed as a mezzanine that meets the provisions of Sentence 9.10.4.1.(2) of the Building Code. In support of the claim that the "loft" meets the requirements of Sentence 9.10.4.1.(2), the Agent argued that the aggregate area of the mezzanine does not exceed 40% of the room or the storey in which it is located. Further, she advised that the space above the mezzanine floor has no visual obstructions more than 1 070 mm above the mezzanine floor. The Agent stated that although bathrooms are shown in dashed lines on the drawings submitted, this issue is separate and apart from the scope of this application to the Building Code Commission (BCC). She stated that the Applicant is not pursuing a ruling from the BCC that includes bathrooms on the loft level. She suggested that the fundamental issue was deciding whether the "loft" area provided sufficiency of compliance with the Part 9 mezzanine requirements. The bathroom concept, she advised, may become an issue later but it is not part of the dispute before the Commission.

The Agent proposed that the "loft" area be treated as a mezzanine that complies with the provisions of Sentence 9.10.4.1.(2) of the Code. She stated that the Applicant has always deemed the "loft" area to be a mezzanine as, in the opinion of the Applicant, it meets the definition of mezzanine. A mezzanine is defined in the Code as being an intermediate floor assembly between the floor and ceiling of any room or storey. The Agent maintained that the "loft" area is an intermediate floor assembly above the floor of the third storey and therefore should be considered a mezzanine.

The Agent stated that the City had indicated that the "loft" area could not be considered a mezzanine as it did not have visual continuity to the floor below. In response to this argument, the Agent claimed that the requirement for visual continuity to the floor below is limited to Sentence 3.2.8.2.(1) only and does not, in her opinion, apply to 40% mezzanines under Part 9 of the Code. However, in an effort to address the City's concerns regarding life safety, the Applicant proposed to install interconnected smoke alarms in each room on the storey above and below the "loft" area, except for bathrooms and closets, as well as installing a smoke alarm in the corridor on the third storey and in the open area of the "loft". Further, the fire separation between the affected units and all other units will be upgraded to provide a minimum 1 ½ hour fire resistance rating. In this regard, the Agent believed that the City's life safety concerns involving visual continuity would be addressed.

In summation, the Agent asserted that, even though the Applicant believes that the proposed design already meets the requirements of the Building Code, the additional measures proposed would ensure sufficiency of compliance with the requirements of the Building Code. She reiterated her belief that the "loft" area should be considered a mezzanine meeting the definition outlined in Sentence 1.1.3.2.(1) and the provisions detailed in Sentence 9.10.4.1.(2) of the Code. She reaffirmed her position that the subject building is a three storey building with a mezzanine and therefore falls within the provisions of Part 9 of the Code. She added that the proposal to install smoke alarms and upgrade the fire separation between affected units addresses the life safety issues raised by the City and, therefore, the Agent believes that sufficiency of compliance has been achieved.

4. Respondent's Position

The Designate for the Respondent submitted that the dispute centres on the proposed "loft" area to be located on the fourth level of three of the Applicant's townhouse units. He advised that the City reviewed the plans and drawings submitted for building permit. The City determined, contrary to the Applicant's position, that the proposed "loft" area should be considered as a fourth storey and not a mezzanine.

The Designate submitted that, in the City's opinion, the proposed "loft" design did not meet the provisions of Sentence 9.10.4.1.(2) with respect to visual obstruction. He added that, based on this determination, the "loft" area should be considered a storey for the purposes of building height and, therefore, the building must comply with the provisions of Part 3 of the Code.

The Designate stated that the plans examiner reviewed the drawings submitted and established that the garage area is at grade and, therefore, would be considered the first storey. The kitchen and media area are located on the second storey, the bedrooms on the third storey and the proposed "loft" area is on the fourth level of the building. He explained that based on this review, the City determined the "loft" area to be the fourth storey of the building.

The Designate referenced the definition of mezzanine as outlined in the Code and when questioned as to whether the "loft" area is an intermediate floor area, the Respondent replied that, in his opinion, the "loft" is enclosed, except for the stairway, and therefore it is not considered an open mezzanine. He drew the Commission's attention to the phrase "provided the space above the mezzanine floor has no visual obstructions more than 1 070 mm above such floors" contained in Sentence 9.10.4.1.(2) of the Code, and stated that, in the City's opinion, the proposed loft has visual obstructions. He went on to say that the Code does not define what constitutes a visual obstruction but the City is of the opinion that a mezzanine should provide a view to the floor below. He commented that the intent of the Code is for mezzanines to provide an open view so that a fire, either above or below, would be apparent to all occupants. He reasoned that the proposed design lacks visual continuity to the floor below and, therefore, would not provide the occupants of the "loft" area with the ability to gather sufficient information by sight, sound or smell, that a fire was present on the storey below.

In response to being asked to confirm that the "loft" has one wall with a balustrade that is open to below, the Designate acknowledged that there is a wall with a balustrade but argued, even with this balustrade for the stair, an unobstructed view of the floor below is not provided.

The Designate summarized the City's position by saying that the "loft" area cannot be considered a mezzanine as it does not meet the prescriptive requirements of the Code with respect to visual obstructions. He reiterated that the "loft" area is fully enclosed on three sides of the perimeter of the area with a balustrade along the stairwell. In the opinion of the City, the buildings are considered four storeys in building height and, as a result, the provisions of Part 3 of the Code must be applied.

5. Commission Ruling

It is the Decision of the Building Code Commission that the 4th level "loft" design in a residential townhouse development provides sufficiency of compliance with the definition of "mezzanine" contained in Sentence 1.1.3.2.(1) and with the provisions of Sentence 9.10.4.1.(2) of the Building Code at The Moorcroft, 100, 102 and 104 Bellwood Avenue, City of Ottawa, Ontario, on condition that:

a) Interconnected smoke alarms shall be installed in each room, except bathrooms, on the storey immediately below the "loft". This is in addition to the smoke alarms in the

corridor on the 3rd level and in the open area of the “loft”.

b) The fire separation between the affected units and all other units shall be upgraded to provide a minimum 1½ hour fire resistance rating.

6. Reasons

i) The aggregate area of “lofts” does not exceed 40% of the storey in which they are located.

ii) The provision of additional smoke alarms and the increased fire resistance rating of the fire separation between the affected units enhances the performance of the “loft”.

iii) There are no visual obstructions above 1070 mm of the floor of the individual “lofts”.

Dated at Toronto this **12th** day in the month of **January** in the year **2006** for application number **2005-65**.

Tony Chow, Chair

Rick Florio

Susan Friedrich

Ontario

Ruling No. 06-05-1075
Application No. 2005-70

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Subsection 3.2.2.45. of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Michele Farley, FCS Fire Consulting Services Ltd., for resolution of a dispute with Brian Gass, Chief Building Official, Town of Penetanguishene, whether the existing Group C residential condominium building consisting of a below grade parking garage and four levels of residential suites, where a close proximity sprinkler system is proposed to compensate for the deficient fire resistance rating of the exterior load bearing walls, provides sufficiency of compliance with Section 3.2.2.45. of the Building Code at 4 Beck Boulevard, Town of Penetanguishene, Ontario.

APPLICANT	Michele Farley FCS Fire Consulting Services Ltd. Innisfil, ON
RESPONDENT	Brian Gass Chief Building Official Town of Penetanguishene
PANEL	Len King, Vice-Chair Gary Burtch Gerry Egberts
PLACE	Toronto, Ontario
DATE OF HEARING	January 19, 2006
DATE OF RULING	January 19, 2006
APPEARANCES	Michele Farley FCS Fire Consulting Services Ltd. Innisfil, ON **The Applicant** Brian Gass Chief Building Official Town of Penetanguishene **The Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an order and applied for a permit under the *Building Code Act*, *1992*, to remedy certain deficiencies at 4 Beck Boulevard, Town of Penetanguishene, Ontario.

The subject building, having a building area of approximately 1,100 m^2, is a 26 unit, Group C residential condominium building consisting of a below grade parking garage and four levels of residential suites. The structure is equipped with standpipe and hose and fire alarm systems as well as a partial sprinkler system. The subject building has been constructed with a timber roof assembly, and as such, is comprised of combustible construction.

The building in question was constructed in 2001, with an occupancy permit being issued in 2002. The original construction permit application and plans described the subject building as being a five storey residential building intended to be designed and constructed in accordance with the requirements of Article 3.2.2.43. of the Building Code. In October 2003, an independent building audit revealed a number of Building Code deficiencies. The Agent for the Applicant does not dispute the deficiencies and many of the issues have been satisfactorily addressed.

There are two remaining issues at dispute, the first being a determination of whether the building, as-constructed, can be considered four storeys in building height. It is the Applicant's opinion, based on reviews by the builder's architect, civil engineer and surveyor, that it is a four storey building required to meet the requirements of Article 3.2.2.45. of the Code. The Respondent describes it as a five storey building as per the plans submitted for the original building permit. This difference of opinion is germane to the dispute before the Commission because the requirements of Articles 3.2.2.43. and 3.2.2.45. differ significantly. Article 3.2.2.43. requires the building to be of non-combustible construction while Article 3.2.2.45. allows a building to be constructed of combustible material. Both Article 3.2.2.43. and 3.2.2.45. require load bearing walls to have a 1 hour fire resistance rating. Article 3.2.2.45. requires the building to be sprinklered and does not require a rating for the roof, while Article 3.2.2.43. does not require the building to be sprinklered but does require a rating for the roof assembly.

Assuming the building in question can be considered a four storey building required to comply with the requirements of Article 3.2.2.45. of the Building Code, the issue then becomes whether the close proximity sprinkler system proposed to compensate for the deficient fire resistance rating of the exterior load bearing walls provides sufficiency of compliance with the intent of the Building Code.

2. Provisions of the Building Code in Dispute

3.2.2.45. Group C, up to 4 Storeys, Sprinklered

(1) A building classified as Group C is permitted to conform to Sentence (2) provided

(a) except as permitted by Sentence 3.2.2.7.(1), the building is sprinklered,

(b) it is not more than 4 storeys in building height, and

(c) it has a building area not more than

(i) 7 200 m^2 if 1 storey in building height,
(ii) 3 600 m^2 if 2 storeys in building height,
(iii) 2 400 m^2 if 3 storeys in building height, or

(iv) 1 800 m^2 if 4 storeys in building height.

(2) The building referred to in Sentence (1) is permitted to be of combustible construction or noncombustible construction used singly or in combination, and

(a) except as permitted by Sentences (3) and (4), floor assemblies shall be fire separations with a fire-resistance rating not less than 1 h,

(b) mezzanines shall have a fire-resistance rating not less than 1 h, and

(c) loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.

(3) In a building that contains dwelling units that have more than 1 storey, subject to the requirements of Sentence 3.3.4.2.(2), the floor assemblies, including floors over basements, which are entirely contained within these dwelling units, shall have a fire-resistance rating not less than 1 h but need not be constructed as fire separations.

(4) In a building in which there is no dwelling unit above another dwelling unit, the fire-resistance rating for floor assemblies entirely within the dwelling unit is waived.

3. Applicant's Position

The Applicant began by describing the history of this building and how the matter has been brought to the Commission. The building was designed by an architect, plans were submitted to the building department, a permit was issued, the building was constructed as per the plans submitted, required municipal inspections were made, occupancy permits were applied for and granted and the building permits were cleared. Subsequently, an independent audit revealed construction deficiencies and these deficiencies were brought to the attention of the municipal building department. An Order (as to Unsafe Condition) was issued by the municipality as a result of the deficiencies identified during the independent audit. The builder then retained FCS Fire Consulting Services Ltd. (the Applicant) to facilitate an agreement with the Chief Building Official in regards to addressing the construction deficiencies identified.

The Applicant stated that the builder wants to rectify the identified deficiencies, adding that most of them have been addressed. She detailed the steps that have been taken so far in order to rectify the situation. She stressed that the building is an existing building that is currently occupied. As a result, the builder is trying to rectify the deficiencies so as to ensure life safety without causing extensive disruption to the residents.

The Applicant argued that the existing building is consistent with the design parameters of a four storey building, as confirmed through survey and third party architectural review, and therefore Article 3.2.2.45. of the Code should be applicable to the design of the building. This Article would allow for the use of either combustible or non-combustible construction material, meaning that the roof assembly with the wood sheathing would be permitted to remain. This Article also requires the entire building to be sprinklered, the Applicant conveyed that the entire building will be sprinklered as required. In addition, the Applicant proposed that close proximity sprinkler heads be installed and directed at all load bearing walls having a deficient fire resistance rating in order to compensate for the inadequate fire resistance rating of those walls. In addition, the Applicant advised the Commission that the building will be fully sprinklered, including the attic and that the design of the sprinkler system exceeds Building Code and NFPA 13R requirements.

In summation, the Applicant reiterated that documentation from an independent architect and survey has confirmed that the existing building is in fact a four storey structure required to

comply with Article 3.2.2.45. of the Code, allowing the combustible roof assembly to remain. She suggested that the proposal to provide close proximity sprinkler heads within the building at all deficient exterior load bearing walls improves building safety, exceeds Code requirements and further contributes to the effectiveness of the suppression system as a compensating measure. The Applicant argued that the proposal will improve the safety without being intrusive and disruptive for the residents, and that, in her opinion, sufficiency of compliance would be achieved.

4. Respondent's Position

The Respondent stated that it is incumbent on the designing architect to demonstrate to the authority having jurisdiction, through design and supporting documentation, that the building design will be compliant with the chosen 3.2.2. classification and all other applicable code provisions relating to the design of the building. He explained that the drawings on file classify the building as a five storey building required to comply with the provisions of Article 3.2.2.43. of the Building Code. He further explained that the existing building does not comply with Article 3.2.2.43. requirements as the building includes a combustible roof assembly and the exterior load bearing walls have a fire resistance rating of less than 1 hour.

The Respondent claimed that the municipality does not oppose the building being classified as a four storey building provided the appropriate plans and drawings are submitted by the architect responsible for the design. He indicated that the municipality previously advised the Applicant that an architect must provide a repair design and that part of that repair design would involve a 3.2.2. classification of the building by the architect.

With regard to the Applicant's proposal to address the deficient fire resistance rating of the exterior load bearing walls by incorporating close proximity sprinklers, the Respondent claimed that, in his view, a Chief Building Official is not empowered to authorize the replacement of required materials with a system. Furthermore, he advised that detailed design plans for the close proximity sprinkler system have not been submitted for consideration by the municipality.

Summarizing the position of the municipality, the Respondent reiterated that the Chief Building Official does not have the authority to allow the substitution of a system for a required material and therefore he could not accept the Applicant's proposal regarding close proximity sprinkler heads.

5. Commission Ruling

It is the Decision of the Building Code Commission that the existing Group C residential condominium building consisting of a below grade parking garage and four levels of residential suites, where a close proximity sprinkler system is proposed to compensate for the deficient fire resistance rating of the exterior load bearing walls provides sufficiency of compliance with Section 3.2.2.45. of the Building Code at 4 Beck Boulevard, Town of Penetanguishene, Ontario, on condition that:

a) The building, including the attic, shall be fully sprinklered. The sprinkler system shall be designed and installed in accordance with NFPA 13R.

b) The close proximity sprinkler heads, located at exterior load bearing walls having a deficient fire resistance rating, shall be designed and installed in accordance with NFPA 13.

c) In addition, sprinkler heads are to be installed in all washrooms and closets located on the penthouse level of the building.

d) The owner's engineer shall verify that the exterior walls are structurally adequate and not dependent on the interior drywall finish for structural integrity.

6. Reasons

i) The existing building is being upgraded by installing a sprinkler system throughout the building in accordance with NFPA Standard 13R and close proximity sprinklers, in accordance with NFPA Standard 13, along the exterior walls, which have recently been identified as not meeting the fire resistance rating requirements prescribed in the Building Code.

ii) The performance of the exterior walls, with respect to the fire resistance rating, will be improved by the installation of the close proximity sprinkler heads.

iii) The building is substantially non-combustible with the exception of the roof deck, which has been treated with a fire retardant spray. The Building Code would permit a four storey building to be comprised of combustible construction.

iv) The Fire Safety Plan will be revised to provide a permanent record of the sprinkler system close proximity provision as compensation for the exterior load bearing wall fire resistance deficiency.

v) A Fire Safety Plan box is installed in the building lobby and will include a copy of the Fire Department Accepted Plan. This is not required by the Building Code.

vi) The Fire Department will be made aware of the compensation measures and will be asked to include this information in the Operation Guideline for the Penetanguishene Fire & Emergency Services Response to 4 Beck Boulevard.

vii) The Board of Directors of 4 Beck Boulevard, Corporation SSCC#260, have agreed to develop a building evacuation plan and to train occupants on the evacuation plan.

viii) Each suite has a balcony in addition to the required means of egress.

ix) There is an existing fire route around the entire complex and a municipal fire hydrant located at the face of the building.

Dated at Toronto this **19th** day in the month of **January** in the year **2006** for application number **2005-70.**

Len King, Vice-Chair

Gary Burtch

Gerry Egberts

Ontario

Ruling No. 06-13-1083
Application No. 2005-66

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Parts 4 and 9 of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Chris Stegehuis, homeowner, for the resolution of a dispute with Gord Allison, Chief Building Official, City of Barrie, to determine whether the proposed use of a composite lumber product, referred to as Life Long Decking System, for the exterior walking surface of the proposed deck serving a residential dwelling provides sufficiency of compliance with Parts 4 and 9 of the Building Code at 10 Brookwood Drive, City of Barrie, Ontario.

APPLICANT	Chris Stegehuis Homeowner Barrie, ON
RESPONDENT	Gord Allison Chief Building Official City of Barrie
PANEL	Len King, Vice-Chair Gerry Egberts Neal Barkhurst
PLACE	Toronto, Ontario
DATE OF HEARING	March 23, 2006
DATE OF RULING	March 23, 2006
APPEARANCES	Andrew Rush Brite Manufacturing Inc. Bolton, ON **Agent for the Applicant** Stephen Barks Manager of Permits City of Barrie **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant is the owner of a Group C, residential dwelling and has applied for a permit under the *Building Code Act*, *1992*, to construct a backyard deck at 10 Brookwood Drive, City of Barrie, Ontario.

The subject dwelling is comprised of combustible construction material and is not equipped with standpipe and hose, fire alarm or sprinkler systems. The proposed deck is intended to be a 17.6 m^2 (190 sq. ft.) free standing deck and will not be connected to the dwelling. The deck will not be equipped with guards as it will be approximately 460 mm (18 in.) in height and, therefore, a guard would not be required. The deck is to be constructed on deck blocks attached to wooden joists. The substructure of the deck will be constructed using pressure treated dimensional lumber.

The construction in dispute involves the proposal to use a composite lumber product in place of conventional lumber for the walking surface of the subject deck. The walking surface of the deck is to be constructed using 5/4 inch hollow deck board product, referred to as Life Long Decking, manufactured by Brite Manufacturing Inc. Life Long Decking Material is a manufactured composite product that consists of approximately 50% wood fibre and 50% polyethylene.

The issue at dispute between the parties is whether the proposed use of “Life Long Decking” provides sufficiency of compliance with Parts 4 and 9 of the Building Code. The material proposed to be used for the walking surface of the subject deck has undergone testing by Intertek Testing Services. However, the material is not recognized by the Building Code nor has the product received approval from either the Canadian Construction Materials Centre (CCMC) or the Building Materials Evaluation Commission (BMEC).

2. Provisions of the Building Code in Dispute

Part 4 – Structural Design

(Please see Part 4 of the Building Code)

Part 9 – Housing and Small Buildings

(Please see Part 9 of the Building Code)

3. Applicant’s Position

The Agent for the Applicant stated that Brite Manufacturing (Brite) has spent two years in research and development of the subject composite decking material and has been manufacturing and selling this product for seven years. He indicated that Brite is currently undergoing an evaluation of this product with the Canadian Construction Materials Centre (CCMC). He stated that the CCMC process is quite lengthy, having taken approximately 18 months to two years so far with the process not yet complete. He added that there are a couple of tests, such as the 4000 hour weathering test, which are not yet finalized.

The Agent noted that the composite decking material has a good balance of properties. He indicated that the material typically outperforms construction grade softwood lumber in hardness, side compression, fastening strength, dimensional stability and durability but is weaker in

bending strength, stiffness, toughness and creep performance.

The Agent submitted that Intertek Testing Services has performed extensive testing on the composite decking material. He further submitted that other municipalities have accepted this product, based on stamped engineering drawings, as being equivalent to the Code requirements. As part of the Agent's presentation it was noted that the material has been tested for, among other things, fungi and decay; flame spread; resistance to termites; structural load, to determine deck board span; creep relaxation; mechanical fasteners; freeze-thaw resistance; durability; coefficient of friction; and moisture effect. Intertek Testing Services summarized their testing and indicated that, in the opinion of Intertek, the deck board in question sufficiently complies with the requirements of the Building Code.

In summary, the Agent stated that he believes that sufficient information has been presented to indicate that composite decking material provides sufficiency of compliance with the requirements of the Building Code and, therefore, an approval should be granted.

4. Respondent's Position

The Designate for the Respondent submitted that the proposed composite decking material is not a recognized material prescribed in either Part 4 or Part 9 of the Building Code. He further submitted that the Applicant has not provided the municipality with any information to show that the material has been approved for use by either the Canadian Construction Materials Evaluation Centre or the Building Materials Evaluation Commission.

The Designate stated that the composite material in question is new and innovative and that there are currently no established standards for such a product. He submitted that without prescribed tests, the municipality is not able to determine the equivalency of the product under Section 2.7 of the Building Code. He further submitted that the test results provided do not compare the composite material to a known product approved for use as a decking material by the Building Code.

The Designate suggested that the product should be evaluated by a body, such as CCMC, as this organization is designed for the testing and approval of new and innovative products.

The Designate summarized the City's position by stating that there is no mention of the subject composite decking material in the Building Code and, therefore, there are no standards or criteria outlined to which the product must be tested. He indicated that the municipality did not approve the material as an equivalent material as it was not, in the opinion of the Chief Building Official, shown to provide an equivalent level of performance that would be achieved by conforming to the requirements of the Building Code. He further stated that there may be other criteria that should be taken into consideration in respect of this material in order to determine whether the product will possess the necessary characteristics to perform as an equivalent to conventional lumber. He reiterated that this product is not mentioned in the Building Code and, therefore, his position is that the product should be fully assessed by a body designed to test and evaluate new and innovative material.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed use of a composite lumber product, referred to as Life Long Decking System, for the exterior walking surface of the proposed deck serving a residential dwelling does not provide sufficiency of compliance with Parts 4 and 9 of the Building Code at 10 Brookwood Drive, City of Barrie, Ontario.

6. Reasons

i) The subject deck has been constructed using a new and innovative composite lumber material. Although the Commission recognizes that significant test data is available for this particular composite lumber product, and that the structural requirements of Part 4 of the Building Code may be satisfied through proper engineering, the Commission remains concerned with the performance of the subject decking in other areas.

ii) The Commission is cognizant of other considerations in relation to the sufficiency of compliance of this innovative product with the Building Code. These considerations include, but may not be limited to, the toughness of the material, creep and bending. Evidence was presented to suggest that the material is weaker in these areas than lumber regulated by the Code. Furthermore, in respect of Canadian Construction Materials Centre (CCMC) there may be other limitations with respect to this product in terms of point loads or interaction with commonly used substances such as sun block or bug spray.

iii) No documentation, drawings or specifications were submitted regarding the actual construction and installation of the subject deck. Furthermore, there was no evidence presented to suggest that the subject deck at 10 Brookwood Drive has been constructed in accordance with recommended manufacturer's guidelines or accepted engineering standards.

iv) Evidence was presented to confirm that the Life Long Decking System is currently being evaluated by CCMC and much of the CCMC testing has been completed for this product. The CCMC evaluation, however, is not yet complete and a final evaluation has not been prepared. The Commission cannot be assured that any evaluation report produced by CCMC would not limit or restrict the use of this product. Furthermore, the Commission heard evidence that the CCMC technical guides for similar (i.e. thermoplastic wood decking) products deem the composite lumber material to be equivalent to a subfloor sheathing and not equivalent to lumber decking. For use as exterior decking each of these innovative products may, or may not, involve additional specific terms and conditions best defined following a comprehensive evaluation by a body such as CCMC.

Dated at Toronto this **23rd** day in the month of **March** in the year **2006** for application number **2005-66.**

Len King, Vice Chair

Gerry Egberts

Neal Barkhurst

Ontario

Ruling No. 06-24-1094
Application No. 2006-09

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.8.8.1.(1) of the Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Roger Ball, EDB Financial Planners Inc., for resolution of a dispute with Ann Borooah, Chief Building Official, City of Toronto, to determine whether the 0.6 m wide stationary platform located at the rear of the garage, within which an automated platform operates, having been constructed without guards provides sufficiency of compliance with Sentence 9.8.8.1.(1) of the Building Code at 1840 Lakeshore Boulevard East, City of Toronto, Ontario.

APPLICANT	Roger E Ball EDB Financial Planners Inc Toronto, ON
RESPONDENT	Ann Borooah Chief Building Official City of Toronto
PANEL	Tony Chow, Chair Gerry Egberts Rick Florio
PLACE	Toronto, Ontario
DATE OF HEARING	June 22, 2006
DATE OF RULING	June 22, 2006
APPEARANCES	Roger Ball EDB Financial Planners Inc. Toronto, ON **The Applicant** Martin Elksnitis Building Inspector City of Toronto **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Remedy Unsafe Building under the *Building Code Act*, *1992*, to remedy certain alleged deficiencies at 1840 Lakeshore Boulevard East, City of Toronto, Ontario.

The subject building is a Group C residential dwelling. It is the garage of this residential dwelling that is the central location for the subject dispute. The garage is one storey in building height and has a 1.8 m deep "pit" below grade. The garage is approximately 20 m^2 in area and is comprised of combustible construction material.

The single car garage is equipped with a car elevating device which allows for occupants of the dwelling unit to park more than one vehicle within the garage. In the centre of the garage there is a below grade pit within which the automated platform operates and there is a stationary platform located at the rear of the garage. A car is driven into the garage and onto the automated platform. Occupants of the vehicle then exit the vehicle and proceed to the stationary platform located at the rear of the garage. Once the occupant is safely on the stationary platform, a key is used to activate the elevating device and the vehicle is lowered into the below grade pit. A second platform, located directly above the first platform, simultaneously lowers into place. Once the first platform has reached the bottom of the pit, the second platform is level with the garage floor and is available for a second car to be parked in the garage. When the platform is in motion and not level with the garage floor, there is a difference in elevation of more than 600 mm. In accordance with Sentence 9.8.8.1.(1) of the Building Code, where there is a difference in elevation of more than 600 mm between adjacent surfaces, every surface shall be protected by a guard.

The issue at dispute between the Applicant and the Respondent is whether a guard is required to protect the stationary platform located at the rear of the garage when the car elevating device is in motion.

2. Provisions of the Building Code in Dispute

9.8.8.1. Required Guards

(1) Except for the edges of floor pits in *repair garages* and loading docks, every surface to which access is provided for other than maintenance purposes, including but not limited to exterior landings, porches, decks, balconies, *mezzanines*, galleries, raised *walkways* and roofs, shall be protected by a *guard* on each side which is not protected by a wall and where there is a difference in elevation to adjacent surfaces of more than 600 mm.

3. Applicant's Position

The Applicant submitted that he believes, if a guard is required, the installation of the type of guard suggested by the municipality, creates difficulties with accessing the vehicles in the garage and the overall use of the garage. He referred to the pictures included in his submission and described the car elevating device as having two platforms which move up and down simultaneously. He informed the Commission that it takes approximately 45 seconds to elevate the platform from the below grade pit level to the level of the garage floor. In describing the daily use of the elevating device, he stated that the elevating device is used an average of three to

four times a day and therefore the platform is in motion approximately two to three minutes a day.

The Applicant agreed that safety may be a concern when the platform is in motion but maintained that the occupants of the dwelling unit are aware of the associated risks and understand how to operate the mechanism in a safe and responsible manner. He advised the Commission that a key is required to be turned and a button pushed in order to operate the elevating device. He further advised that the elevating device is prevented from operating when the overhead garage door is open and this feature, in essence acts as a guard for the laneway side of the garage.

The Applicant stated that once a car is parked in the garage there is very little space left to manoeuvre in that area. His initial position was that a guard should not be required and that the current situation complied with the intent of the Building Code. Alternatively, he submitted, if the Commission felt that the existing construction did not comply, he offered two options which he believed would be preferable to the solution dictated by the municipality. He described two options of providing compliance with the Code requirements while still maintaining the functionality of the garage. The first involved installing a moveable guard across the 0.6 m stationary platform located at the end of the garage. This moveable guard would be interlocked with the electrical system to prevent operation of the elevating device unless the guard is in position. The second proposal was to relocate the operating key switch to the outside of the garage and to interconnect the key switch with the electrical system. By interconnecting the key switch with the electrical system, the elevating device would be prevented from operating unless both doors to the garage are closed. When questioned as to which option would be his preference, the Applicant responded that he would prefer to relocate the spring-loaded key switch.

The Applicant summed up his position by stating that he believes his proposal adequately addresses the life safety concerns of Sentence 9.8.8.1.(1) of the Building Code while still maintaining the functionality of the design and intended use of the elevating device and the garage.

4. Respondent's Position

The Respondent submitted that an Order to Remedy Unsafe Building was issued to the Applicant in January 2006. The Order indicated that, pursuant to Sentence 9.8.8.1.(1) of the Building Code, guards were required to be provided within the single car garage. He stated that when the car elevating device is not level with the garage floor, the difference in elevation is greater than 600 mm, therefore, in his opinion, a guard is required on the sides of the pit to prevent injury from falls.

The Respondent indicated that the Building Code does not specifically speak to car elevating devices such as is installed in the Applicant's garage. He further indicated that when the elevating platform is in motion and not level with the grade of the garage floor, there is a significant difference in elevation and therefore a guard is required. He advised the Commission that a code consultant firm had been contracted by the builder to develop a proposed guard system meeting the objective of Sentence 9.8.8.1.(1) of the Code. The Respondent stated that the Applicant has refused the installation of this guard to date and thus an Order was issued.

When questioned as to whether the municipality had considered the options proposed by the Applicant, the Respondent responded that his preference would be option number two involving the relocation of the key switch.

In summation, the Respondent reaffirmed that, since there is a difference in elevation of more than 600 mm between surfaces when the platforms are in motion, Sentence 9.8.8.1.(1) stipulates that a guard is required. He further stated that, since no guard is presently installed, compliance with the technical requirements of the Building Code has not been achieved.

5. Commission Ruling

It is the Decision of the Building Code Commission that the 0.6 m wide stationary platform located at the rear of the garage, within which an automated platform operates, having been constructed without guards provides sufficiency of compliance with Sentence 9.8.8.1.(1) of the Building Code at 1840 Lakeshore Boulevard East, City of Toronto, Ontario, on condition that:

a) The spring-loaded key switch, which operates the automated platform, shall be relocated to the outside of the exterior wall of the garage on the hinge side of the swing door. Furthermore, the key switch shall be interconnected with the swing door as well as the overhead garage door, so as to prevent the elevating platform from being operated unless both doors are closed. The interconnected doors shall only be opened when one of the automated platforms is level with the stationary platform.

6. Reasons

i) The requirements for guards as outlined in Sentence 9.8.8.1.(1) of the Building Code are based on the premise that, where there is a difference in elevation of 600 mm or more between two surfaces, the potential risk of injury in a fall is sufficient that there must be some kind of barrier to reduce the chances of such a fall. The relocation of the key switch and the interconnecting of the garage doors, so as to prevent the elevating platform from being operated unless the doors are closed will, in the opinion of the Commission, achieve sufficiency of compliance with the intent of the Code.

ii) The interlocking of the key switch will prevent the elevating platform from being operated unless the doors are closed, thereby protecting persons from a fall during normal operation. The relocation of the key switch will make it impossible for the person operating the elevating platform to physically be in the garage while the elevating platform is in motion, thereby protecting the operating person from a fall. There is also a window in the swing door through which the person operating the elevating platform can view the interior of the garage to ensure that the overhead garage door is closed and that no one else is in the garage before operating the platform.

iii) The difference in grade between the 0.6 m stationary platform and the “pit” level of the garage is only an issue when the elevating platform is in motion, as when the elevating platform is in place; both the stationary platform and the elevating platform are at the same level.

Dated at Toronto this **22nd** day in the month of **June** in the year **2006** for application number **2006-09.**

Tony Chow, Chair

Gerry Egberts

Rick Florio



Ruling No. 06-36-1106
Application No. P-2006-38

BUILDING CODE COMMISSION

IN THE MATTER OF Clause 24(1)(b) of the *Building Code Act*, S.O. 1992, c. 23 ("Act").

AND IN THE MATTER OF Subsections 8(2.2) and (2.3) of the Act and Sentence 2.4.1.1.B.(1) of O. Reg. 403/97 ("Building Code").

AND IN THE MATTER OF an application for a permit by Ravenda Homes Ltd. under subsection 8(1) of the Act for the construction of a building at 26 Abbott Street West, St. Catharines.

AND IN THE MATTER OF a dispute between Ravenda Homes Ltd. and Sandra Korakis, Chief Building Official of the City of St. Catharines, about whether the Chief Building Official informed the Applicant, within the time period prescribed in the Building Code, of the decision to refuse to issue a building permit and of all of the reasons for the decision.

APPLICANT	John Ravenda Ravenda Homes Ltd. Welland, Ontario
RESPONDENT	Sandra Korakis Chief Building Official City of St. Catharines
PANEL	Tony Chow, Chair Yaman Uzumeri Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	August 24, 2006
DATE OF RULING	August 24, 2006
APPEARANCES	John Ravenda, President Ravenda Homes Ltd. **The Applicant** Brian Thiessen Chief Building Inspector City of St. Catharines **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant applied for a permit under subsection 8(1) of the Act to construct a one storey, five unit townhouse block at 26 Abbott Street West, St. Catharines.

The dispute between the parties is whether the Chief Building Official complied with subsections 8(2.2) and (2.3) of the Act and Sentence 2.4.1.1B.(1) of the Building Code and, in particular, whether the Respondent informed the Applicant of the decision to refuse to issue a permit, and of all of the reasons for the decision, within the time period prescribed in Table 2.4.1.1B. of the Building Code.

2. Provisions of the Act and Building Code in Dispute

Act: subsections 8(2.2) and (2.3)

Decision

(2.2) When an application for a permit contains the prescribed information, the chief building official is required to determine within the period prescribed by regulation whether to issue the permit or to refuse to issue it.

Same, reasons for refusal

(2.3) If the chief building official refuses to issue the permit, he or she shall inform the applicant of all of the reasons for the refusal of the permit and shall do so within the period prescribed by regulation.

Building Code:

2.4.1.1B. Period Within Which a Permit is Issued or Refused

(1) Subject to Sentences (2) and (3), if an application for a permit under Subsection 8 (1) of the Act that meets the requirements of Sentence (5) is submitted after December 31, 2005 to a *chief building official*, the *chief building official* shall, within the time period set out in Column 3 of Table 2.4.1.1B. corresponding to the class of *building* described in Column 2 of Table 2.4.1.1B. for which the application is made:

(a) issue the permit, or

(b) refuse to issue the permit and provide in writing all of the reasons for the refusal.

TABLE 2.4.1.1B.

Period Within Which Permit Shall be Issued or Refused Forming Part of Article 2.4.1.1B.

Row Number	Class of *Building*	Time period
1	(a) A detached house, semi-detached house, townhouse, or row house where no *dwelling unit* is located above another *dwelling unit.* (b) A detached structure that serves a *building* described in Clause (a) and does not exceed 50 m^2 in *building area*. (c) A tent to which Section 3.13. applies. (d) A sign to which Section 3.14. applies.	10 days
2	(a) *Buildings* described in Clauses 2.1.1.3.(1)(a), (b) and (c), other than *buildings* described in Column 2 of any of Rows 1 and 4 of this Table. (b) *Farm buildings* that do not exceed 600 m^2 in *building area*.	15 days
3	(a) *Buildings* described in Clause 2.1.1.2.(1)(a) or (b), other than *buildings* described in Column 2 of any of Rows 1 and 4 of this Table. (b) *Farm buildings* exceeding 600 m^2 in *building area*.	20 days
4	(a) *Post-disaster buildings*. (b) *Buildings* to which Subsection 3.2.6. or any provision in Articles 3.2.8.3. to 3.2.8.11. applies.	30 days
Column 1	Column 2	Column 3

3. Applicant's Position

The Applicant stated that on July 20, 2006 the application for a building permit in this matter was submitted to the building department of the City of St. Catharines and payment was made of certain of the fees required to be paid when a permit application is made. The Applicant stated that payment of the balance of the required fees was made on July 24, 2006. The Applicant provided a copy of a "Payment Transaction" receipt from the City of St. Catharines, dated July 24, 2006, which lists fees collected in respect of proposed residential construction at 26 Abbot Street West, St. Catharines. The payment receipt lists no fees as being outstanding.

The Applicant submitted that the one storey, five unit townhouse building at issue is subject to the ten day time period set out in Table 2.4.1.1B. of the Building Code.

The Applicant stated that the Respondent's decision in respect of the permit application was first communicated in an e-mail of August 17, 2006, which contained as an attachment a letter from the Respondent, dated August 16, 2006. The Applicant did not provide a printed copy of this e-mail, although a copy of the letter attached to the e-mail was provided. This letter informed that the Respondent had reviewed the Applicant's building permit application, and that "[w]hen you have complied with the following [four] conditions, we will complete the processing of your application". The Applicant understood from this letter that the Respondent had refused to issue the permit, and that the Applicant's failure to satisfy the four "conditions" listed in the letter were the reasons why the permit had been refused.

The Applicant advised that the building permit in question had not been issued as of the date of the Commission hearing. The Applicant stated that he had not yet provided to the Respondent documentation evidencing compliance with an applicable law requirement, and expected to provide this shortly.

In summation, the Applicant submitted that the date on which the Respondent had informed him of the decision to refuse to issue the building permit, and of the reasons for the decision, was

outside of the ten day time period within which the Respondent was obliged to provide this information.

4. Respondent's Position

The Respondent stated that the Applicant submitted the building permit application in this matter on July 21, 2006 and that the application met the requirements of Sentence 2.4.1.1B.(5) of the Building Code. The Respondent agreed that it was on July 24, 2006 that payment in full was made of all fees required to be paid when an application is made.

The Respondent submitted that, according to Sentence 2.4.1.1B.(6) of the Building Code, the time period for making a decision about the issuance of a permit began on July 25, 2006, which was the day after the later of the day on which Applicant's building permit application met the requirements of Sentence 2.4.1.1.B.(5) and the day on which payment was made of all fees required to be paid when an application is made.

The Respondent indicated that, initially, the construction proposed under the permit application in question was considered, by the municipality, to be as described in Column 2 of Row 2 of Table 2.4.1.1B. and therefore to be subject to the fifteen day time period set out in Column 3 of Row 2 of the Table. At the Commission hearing, however, the Respondent stated that it accepted that the proposed construction was as described in Column 2 of Row 1 of Table 2.4.1.1B and was therefore subject to the ten day time period in Column 3 of Row 1 of the Table.

The Respondent stated that it informed the Applicant of the decision to refuse to issue a building permit, and of the reasons for the decision, in the Respondent's letter of August 16, 2006. The Respondent agreed that this letter was sent as an attachment to an e-mail; however, the Respondent submitted that this e-mail was sent to the Applicant on August 16, 2006. The Respondent did not provide a printed copy of this e-mail. The Respondent also indicated that it had on August 16, 2006 faxed a copy of the letter to the owner of the property where the construction was to take place and had tried, without success, to fax the letter to the Applicant.

The Respondent submitted that the four "conditions" listed in their letter of August 16, 2006 comprised all of the reasons why it had refused to issue the permit at issue to the Applicant.

The Respondent agreed that documentation evidencing compliance with an applicable law requirement was still outstanding as of the date of the Commission hearing and indicated that, upon being provided with this documentation in satisfactory form, a building permit could be issued.

In summation, the Respondent submitted that the time period for informing the Applicant of the decision to refuse to issue the permit and the reasons for the decision in respect of the permit application at issue commenced on July 25, 2006. The Respondent further submitted that it provided this information to the Applicant in the letter of August 16, 2006 which was e-mailed to the Applicant on that date. While the Respondent had initially taken the view it was required to provide this information within a fifteen day time period, as of the hearing the Respondent took the view that a ten day time period was applicable.

5. Commission Ruling

It is the Decision of the Building Code Commission that the Respondent did not comply with the requirements under Subsections 8(2.2) and (2.3) of the Act and Sentence 2.4.1.1B.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the

permit, to provide in writing all of the reasons for the refusal, within the applicable time period set out in Table 2.4.1.1B. of the Building Code.

While the Respondent did inform the Applicant of the decision to refuse to issue the permit and all of the reasons for the decision, the Respondent did not do so within the applicable time period set out in Table 2.4.1.1B. of the Building Code.

6. Reasons

i) Sentence 2.4.1.1B.(6) of the Building Code specifies when the time periods set out in Table 2.4.1.1B. commence:

> The time period described in Sentences (1) to (3) shall begin on the day following the later of
>
> (a) the day on which an application meeting the requirements of Sentence (5) is submitted to the chief building official, and
>
> (b) the day on which payment is made of all fees that are required, under a by-law, regulation or resolution made under Clause 7 (1) (c) of the Act, to be paid when the application is made.

The parties disagreed about whether the building permit application at issue was submitted by the Applicant to the Respondent on July 20 or July 21, 2006. The Respondent accepted that the permit application was complete for the purposes of Sentence 2.4.1.1B.(1) (that is, the application satisfied the requirements of Sentence 2.4.1.1.B.(5)). However, both parties agreed that it was on July 24, 2006 that payment was made by the Applicant of all fees that are required to be paid when the application was made.

As a result, regardless of the date on which the permit application was submitted to the Respondent, it is July 25, 2006 (the date on which payment was made of all fees required to be paid) that the applicable time period set out in Table 2.4.1.1B. commenced in this case.

ii) The parties agreed that the construction proposed under the application in question was subject to the ten day time period set out in Column 3 of Row 2 of Table 2.4.1.1B.

Sentence 2.4.1.1B.(7) provides that the time periods described in Column 3 of Table 2.4.1.1B. does not include Saturdays, holidays and all other days when the offices of a principal authority are not open for the transaction of business with the public.

In the present case, the applicable ten day time period ended on August 8, 2006, and the Respondent was required by that date to issue or refuse to issue a permit in respect of the Applicant's permit application and, if the permit was refused, to provide in writing all reasons for the refusal.

iii) There was no dispute between the parties about whether the Respondent had informed the Applicant of the decision to refuse to issue the permit and provided all of the reasons the refusal: the parties agreed that the Respondent did this in the letter of August 16, 2006. The dispute between the parties was whether the Respondent had had done so within the time period set out in the Table 2.4.1.1B; that is by August 8, 2006.

The parties submitted that the letter of the Respondent containing this information was sent by the Respondent either on August 16, 2006 (Respondent's submission) or on August 17, 2006 (Applicant's submission). The Commission accepts that the e-mail containing the letter was sent on one of these dates, but notes that both of these dates are after the expiry of the applicable ten day time period on August 8, 2006. The letter of the Respondent informing the Applicant of the decision to refuse to issue a permit and of the reasons for the refusal was therefore not provided to the Applicant within the applicable time period set out in Table 2.4.1.1B. of the Building Code.

iv) The Commission notes that, at the hearing, the Applicant stated that he intends to shortly provide to the Respondent certain documentation evidencing compliance with an applicable law requirement, and the Respondent indicated that upon being provided with satisfactory documentation the building permit could be issued.

Dated at Toronto this **24th** day in the month of **August** in the year **2006** for application number **2006-38.**

Tony Chow, Chair

Yaman Uzumeri

Gary Burtch

Ontario

Ruling No. 06-48-1118
Application No. P-2006-56

BUILDING CODE COMMISSION

IN THE MATTER OF Clause 24(1)(b) of the *Building Code Act*, S.O. 1992, c. 23 ("Act").

AND IN THE MATTER OF Subsections 8(2.2) and 8(2.3) of the Act and Sentence 2.4.1.1.B.(1) of O. Reg. 403/97 ("Building Code").

AND IN THE MATTER OF an application for a permit by Brian Fernandes under subsection 8(1) of the Act for the construction of townhouse dwellings at Block 28, Brookside Street, Township of Cavan, Millbrook and North Monaghan.

AND IN THE MATTER OF a dispute between 1087086 Ontario Inc. and Andy Van Hoof, Chief Building Official of the Township of Cavan, Millbrook and North Monaghan, about whether the Chief Building Official complied with the requirements under Subsections 8(2.2) and 8(2.3) of the Act and Sentence 2.4.1.1B.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 2.4.4.1B. of the Building Code regarding Block 28, Brookside Street, Township of Cavan, Millbrook and North Monaghan, Ontario.

APPLICANT	Brian Fernandes 1087086 Ontario Inc.
RESPONDENT	Andy Van Hoof Chief Building Official Township of Cavan, Millbrook and North Monaghan
PANEL	Tony Chow, Chair Ed Link Alison Churchill
PLACE	Toronto, Ontario
DATE OF HEARING	November 21, 2006
DATE OF RULING	November 21, 2006
APPEARANCES	Alex Talwood Talwood Group Architects Inc. Toronto, Ontario **Agent for the Applicant** Karen Ellis Director of Planning and Building Services Township of Cavan, Millbrook and North Monaghan **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant applied for a permit under subsection 8(1) of the Act to construct a one storey, five unit townhouse block referred to as Block 28, Brookside Street, Township of Cavan, Millbrook and North Monaghan.

The dispute between the parties involves whether the Chief Building Official complied with subsections 8(2.2) and 8(2.3) of the Act and Sentence 2.4.1.1B.(1) of the Building Code and, in particular, whether the Respondent informed the Applicant of the decision to refuse to issue a permit, and specified all of the reasons for the decision, within the time period prescribed in Table 2.4.1.1B. of the Building Code.

2. Provisions of the Act and Building Code in Dispute

Act: subsections 8(2.2) and (2.3)

Decision

(2.2) When an application for a permit contains the prescribed information, the chief building official is required to determine within the period prescribed by regulation whether to issue the permit or to refuse to issue it.

Same, reasons for refusal

(2.3) If the chief building official refuses to issue the permit, he or she shall inform the applicant of all of the reasons for the refusal of the permit and shall do so within the period prescribed by regulation.

Building Code:

2.4.1.1B. Period Within Which a Permit is Issued or Refused

(1) Subject to Sentences (2) and (3), if an application for a permit under Subsection 8 (1) of the Act that meets the requirements of Sentence (5) is submitted after December 31, 2005 to a *chief building official*, the *chief building official* shall, within the time period set out in Column 3 of Table 2.4.1.1B. corresponding to the class of *building* described in Column 2 of Table 2.4.1.1B. for which the application is made:

(a) issue the permit, or

(b) refuse to issue the permit and provide in writing all of the reasons for the refusal.

TABLE 2.4.1.1B.

Period Within Which Permit Shall be Issued or Refused Forming Part of Article 2.4.1.1B.

Row Number	Class of *Building*	Time period
1	(a) A detached house, semi-detached house, townhouse, or row house where no *dwelling unit* is located above another *dwelling unit.* (b) A detached structure that serves a *building* described in Clause (a) and does not exceed 50 m^2 in *building area*. (c) A tent to which Section 3.13. applies. (d) A sign to which Section 3.14. applies.	10 days
2	(a) *Buildings* described in Clauses 2.1.1.3.(1)(a), (b) and (c), other than *buildings* described in Column 2 of any of Rows 1 and 4 of this Table. (b) *Farm buildings* that do not exceed 600 m^2 in *building area*.	15 days
3	(a) *Buildings* described in Clause 2.1.1.2.(1)(a) or (b), other than *buildings* described in Column 2 of any of Rows 1 and 4 of this Table. (b) *Farm buildings* exceeding 600 m^2 in *building area*.	20 days
4	(a) *Post-disaster buildings*. (b) *Buildings* to which Subsection 3.2.6. or any provision in Articles 3.2.8.3. to 3.2.8.11. applies.	30 days
Column 1	Column 2	Column 3

3. Applicant's Position

The Agent for the Applicant provided the Commission with a brief history and overview of the subdivision development. He conveyed that the plan of subdivision had been developed in three phases, Phase I, Phase II and Phase III respectively, and consisted of 81 single family homes and 32 townhomes. He advised that the subdivision was approved on October 9, 2002 and that this approval included the involvement of the Otanabee Region Conservation Authority (ORCA) and the Ontario Municipal Board concerning conservation, grading and fill issues.

The Agent stated that Phase III of the development is the subject of this hearing. He informed the Commission that on May 1, 2006 the application for a building permit was submitted to the building department of the Township of Cavan, Millbrook and North Monaghan along with a cheque for the payment of the fees required to be paid when a permit application is made. The Agent advised that the permit application proposed the construction of five, one storey townhomes at Block 28 on the south side of Brookside Street within the Town of Millbrook.

The Agent submitted that, in his opinion, the permit application in question was complete on September 12, 2006. He further submitted that the permit application at issue is subject to the ten day time period set out in Table 2.4.1.1B. of the Building Code.

The Agent confirmed that the Respondent's decision in respect of the permit application was communicated in a letter dated November 15, 2006. The letter informed the Applicant that the Respondent had reviewed the building permit application and that the Township could not issue the building permit because the applicant had not received a permit from ORCA. The Agent argued that ORCA provided its approval of the subdivision, including the townhomes that are the subject of this dispute, four years ago. He advised the Commission that the 2002 subdivision agreement did not contain any conditions or provisions pertaining to further Conservation Authority approval. He further advised that the 2006 site plan agreement made no reference to further approvals being required. In the opinion of the Agent, ORCA gave their approval in 2002 and he stated that he believes that a second approval by ORCA is not warranted and should not be a reason fro refusal of the building permit at this point in the process. He referred to other

building permits that have been obtained for this plan of subdivision where there was no similar Conservation Authority permit required.

In summation, the Agent maintained that a building permit application including all of the prescribed information was before the Township as of September 12, 2006. He affirmed that his client had not received any written communication from the Township suggesting that the permit would not be issued until the November 15, 2006 letter was received. He argued that the reason provided by the Town for not issuing the permit was not valid. He maintained that the Township has not complied with the legislated time frames for making a determination in respect of this building permit application.

4. Respondent's Position

The Designate for the Respondent maintained that the building permit application does not contain all of the prescribed information, even as of the date of this hearing. She advised that the building permit application does not include a permit under the *Conservation Authorities Act* and *Ontario Regulation 167/06* and further advised that a permit from ORCA is required. The Designate argued that the building permit application does not include the approval permit in respect of these applicable law requirements and therefore, in her opinion, the permit application is not complete.

The Designate confirmed that there are no Building Code related issues remaining in respect of the plans. In response to being questioned as to whether the ORCA permit is the only outstanding issue, the Designate answered in the affirmative. She admitted that a permit application was submitted by the Applicant on May 1, 2006 but added that the site plan agreement was not received until September 12, 2006. The Designate agreed that on September 12, 2006 the building permit application contained all of the prescribed information, with the exception of the ORCA permit. She noted that the Township became aware that an ORCA permit was required in the middle of October 2006. She added that the Township received a copy of a letter, dated November 14, 2006, from the Otonabee Region Conservation Authority which advised the Applicant that a permit under the *Conservation Authorities Act* and Ontario Regulation 167/06 is required.

The Designate advised that upon receiving a copy of the letter from ORCA requiring a permit under the *Conservation Authorities Act* and Ontario Regulation 167/06, a letter dated November 15, 2006 was sent by the Respondent to the Applicant advising that the building permit was not being issued and citing the reasons for the refusal to issue the permit.

In summary, the Designate claimed that, in her opinion, the building permit application is considered incomplete until such time as the permit from ORCA is obtained. As a resulted, she stated that the Township is unable to issue the permit until such time as the ORCA permit is obtained. Further, she advised that the Township, by way of the November 15, 2006 letter to the Applicant, has made a determination to not issue the building permit and has provided, in writing, all of the reasons for the refusal.

5. Commission Ruling

It is the Decision of the Building Code Commission that the Respondent did not comply with the requirements under Subsections 8(2.2) and 8(2.3) of the Act and Sentence 2.4.1.1B.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal, within the applicable time period set out in Table 2.4.1.1B. of the Building Code.

While the Respondent did inform the Applicant of the decision to refuse to issue the permit and all of the reasons for the decision, the Respondent did not do so within the applicable time period set out in Table 2.4.1.1B. of the Building Code.

6. Reasons

i) Sentence 2.4.1.1B.(6) of the Building Code specifies when the time periods set out in Table 2.4.1.1B. commence:

> The time period described in Sentences (1) to (3) shall begin on the day following the later of
>
> (a) the day on which an application meeting the requirements of Sentence (5) is submitted to the chief building official, and
>
> (b) the day on which payment is made of all fees that are required, under a by-law, regulation or resolution made under Clause 7 (1) (c) of the Act, to be paid when the application is made.

The parties agreed that the building permit application was submitted to the Township on May 1, 2006. Further, the parties generally concurred that, on September 12, 2006, the building permit application met the requirements prescribed in Sentence 2.4.1.1B.(5).

As a result, it is September 13, 2006 (the day following the day on which an application meeting the requirements of Sentence (5)) that the applicable time period set out in Table 2.4.1.1B. commenced in this case.

ii) The parties agreed that the construction proposed under the application in question was subject to the ten day time period set out in Column 3 of Row 1 of Table 2.4.1.1B.

Sentence 2.4.1.1B.(7) provides that the time periods described in Column 3 of Table 2.4.1.1B. do not include Saturdays, holidays and all other days when the offices of a principal authority are not open for the transaction of business with the public.

In the present case, the applicable ten day time period ended on September 27, 2006, and the Respondent was required by that date to issue or refuse to issue a permit in respect of the Applicant's permit application and, if the permit was refused, to provide in writing all reasons for the refusal.

iii) The parties submitted that the letter of the Respondent informing the Applicant of the decision to refuse to issue a permit and of the reasons for the refusal was sent on November 15, 2006. The Commission accepts that the letter was sent on November 15, 2006 but notes that this date is after the expiry of the applicable ten day time period on September 27, 2006. Therefore, the refusal to not issue a permit, including the written reasons for refusal, was not provided to the Applicant within the applicable time period set out in Table 2.4.1.1B. of the Building Code.

The Commission notes, however, the validity, legality or reasonableness of the reasons for refusal of a permit identified in writing by the municipality is not within the mandate of the Commission to determine.

iv) The Commission notes that, pursuant to s. 8(2.2.) of the *Building Code Act, 1992*, where an application for a permit contains the prescribed information, the service

level duties of the Chief Building Official are triggered. The “prescribed information” is set out in Clauses 2.4.1.1B.(5)(a) to (e) of the Building Code. Upon receipt of an application for permit containing the prescribed information, the CBO is obligated, by virtue of Sentence 2.4.1.1B.(1), to, within the time period set out in Column 3 of Table 2.4.1.1B., either issue the permit or refuse to issue the permit and provide in writing all reasons for the refusal.

Dated at Toronto this **21st** day in the month of **November** in the year **2006** for application number **P-2006-56.**

Tony Chow, Chair

Ed Link

Alison Churchill

Ruling No. 03-54-952
Application No. 2003-64

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 6.2.3.2. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Grace Sweatman, Christie Gardens, for the resolution of a dispute with Ann Borooah, Chief Building Official, City of Toronto, to determine whether the as-installed vertical exhaust shafts serving a residential high rise building which extend three storeys in height, and which are constructed using paper-lined gypsum shaftboard liners, comply with the intent of Sentence 6.2.3.2.(1) of the Ontario Building Code (OBC) or, in the alternative, whether these same shafts provide sufficiency of compliance with Sentence 6.2.3.2.(2) of the OBC at 600 Melita Crescent, Toronto, Ontario.

APPLICANT	Grace Sweatmam Christie Gardens Toronto, Ontario
RESPONDENT	Ann Borooah Chief Building Official City of Toronto
PANEL	Len King, Vice-Chair Gary Burtch Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	December 4, 2003
DATE OF RULING	December 4, 2003
APPEARANCES	Randy Brown Randy Brown & Associates Willowdale, Ontario **The Applicant** Peter Kaczmarek Building Inspector City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

Grace Sweatman, Christie Gardens, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing an addition to an existing building referred to as Christie Gardens, 600 Melita Crescent, Toronto, Ontario.

2. Description of Construction

The Applicant is constructing an addition to an existing building that contains a Group A, Division 2 assembly occupancy, Group B, Division 2 care and treatment occupancy, Group C residential occupancy, and Group F, Division 3 low hazard industrial occupancy. The structure is seven storeys in building height, with a three storey addition being constructed on top of the existing building. The building is approximately 4, 642 m^2 in building area and is comprised of non-combustible construction. The building is partially sprinklered and is equipped with both a fire alarm and standpipe and hose system.

The construction at dispute pertains to the vertical exhaust shafts that have been used in the three storey addition. The subject exhaust shafts are constructed as extensions of brick-lined exhaust shafts serving the residential units in the existing seven storey building. The subject exhaust shafts are located within the new building envelope rising vertically to the roof and are finished with an enclosed exhaust fan. There are 24 shafts at issue. They range in size between 203 mm x 305 mm (8 in x 12 in) and 203 mm x 457 mm (8 in x 18 in). The various connector ducts supplying these exhaust shafts are 101 mm (4 in) in diameter. The subject exhaust shafts are constructed as 1 hr. fire separations in accordance with cUL Design No. U 469, using paper-lined shaftboard liners.

3. Dispute

The issue at dispute between the Applicant and Respondent pertains to whether the as-installed vertical exhaust shafts serving a residential high rise building which extend three storeys in height, and which are constructed using paper-lined gypsum shaftboard liners, comply with the intent of Sentence 6.2.3.2.(1) of the Ontario Building Code (OBC) or, in the alternative, whether these same shafts provide sufficiency of compliance with Sentence 6.2.3.2.(2) of the OBC.

Sentence (1) of Article 6.2.3.2. of the OBC outlines the various materials that are permitted to be used in the construction of ducts, duct connectors, associated fittings and plenums used in air duct systems. As per the requirements of Sentence 6.2.3.2.(1), all ducts "shall be constructed of steel, aluminum alloy, copper, clay, asbestos-cement or similar *noncombustible* material." Noncombustible is a defined term in the Code. Its meaning is found in Article 1.1.3.2.; "*Noncombustible* means that a material meets the acceptance criteria of CAN4-S114, "Standard Method for Determination of Non-Combustibility in Building Materials".

It should be noted that Article 3.1.5.2. of the Code provides a list of minor combustible components that are permitted to be found in a building that is required to be of non-combustible construction. Of particular importance to the issue at dispute is Clause 3.1.5.2.(1)(b), which permits the use of tightly adhering paper covering not more than 1 mm (0.039 in) thick applied to noncombustible backing

provided that the assembly has a flame-spread rating not more than 25. The as-installed exhaust shafts at dispute have been constructed using paper-lined gypsum shaftboard liners and have a flame-spread rating of 20.

Sentence 6.2.3.2.(2) is an exception to Sentence 6.2.3.2.(1) of the Code in that it permits ducts, associated fittings, and plenums to contain combustible material provided that they comply with the stipulated clauses that are assigned therein. In Clause 6.2.3.2.(2)(a), ducts, associated fittings, and plenums are permitted to contain combustible material provided they conform to the appropriate requirements for Class 1 duct materials in CAN/ULC-S110-M, "Standard Methods of Test for Air Ducts". The Standard CAN/ULC-S110-M includes tests with respect to surface burning, flame penetration, corrosion, mould growth and humidity, temperature, puncture, static load, impact, erosion, tension, pressure, collapse, bending and leakage. In terms of fire safety, the standard permits combustible air ducts and connectors provided that they have a flame spread rating of not more than 25 and a smoke developed classification of no greater than 50. It should also be noted that the standard requires mould growth and humidity tests in situations where a duct carries air that contains excessive moisture or is exposed to moisture. The ducts must also have no appreciable loss of strength when wet and must be corrosion resistant.

Also relevant to the case at dispute is Clause 6.2.3.2.(2)(e), which limits the use of ducts containing combustible materials to vertical runs serving only two storeys in a non-combustible building. The purpose of this Code provision is to minimize the fire load and heat generation in the case of fire, as well as limit the spread of fire and production of combustion products, such as smoke, in air distribution systems. As previously mentioned, the subject exhaust shafts rise vertically through the three storey addition and, as such, are in contravention with the two-storey vertical run limit stipulated in Clause 6.2.3.2.(2)(e) of the Code.

The root of the issue at dispute, therefore, appears to be whether the exemption for combustible materials found in Clause 3.1.5.2.(1)(b) of the OBC is intended to extend also to the requirement for noncombustible shafts found in Sentence 6.2.3.2.(1). If so, there is no need to examine the as-installed exhaust shafts against the requirements found in Sentence (2). In other words, the exemption found there is not necessary and not applicable. If, however, the duct material is considered to be combustible, then Sentences 6.2.3.2.(2) to 6.2.3.2.(4) are applicable. Moreover, if the criteria set out in Sentences (2) to (4) are not met then the proposal will be assessed for its sufficiency of compliance with these Sentences.

4. Provisions of the Ontario Building Code

6.2.3.2. Materials in Air Duct Systems

(1) Except as provided in Sentences (2) to (4) and in Article 3.6.4.3., all ducts, duct connectors, associated fittings and *plenums* used in air duct systems shall be constructed of steel, aluminum alloy, copper, clay, asbestos-cement or similar *noncombustible* material.

(2) Ducts, associated fittings and *plenums* are permitted to contain *combustible* material provided they

(a) conform to the appropriate requirements for Class 1 duct materials in CAN/ULC-S110-M, "Standard Methods of Test for Air Ducts",

(b) conform to Article 3.1.5.14. in a *building* required to be of *noncombustible construction*,

(c) conform to Subsection 3.1.9.,

(d) are not used in horizontal runs in a *building* required to be of *noncombustible construction*,

(e) are not used in vertical runs serving more than 2 *storeys* in a *building* required to be of *noncombustible construction*, and

(f) are not used in air duct systems in which the air temperature may exceed 120°C (248°F).

(3) Duct sealants shall have a *flame-spread rating* of not more than 25 and a smoke developed classification of not more than 50.

(4) Duct connectors that contain *combustible* materials and that are used between ducts and air outlet units shall

(a) conform to the appropriate requirements for Class 1 air duct materials in CAN/ULC-S110-M, "Standard Methods of Test for Air Ducts",
(b) be limited to 4 m (13 ft 1 in) in length,
(c) be used only in horizontal runs, and
(d) not penetrate required *fire separations*.

(5) Materials in Sentences (1) to (4) which when used in a location where they may be subjected to excessive moisture shall have no appreciable loss of strength when wet and shall be corrosion-resistant.

5. Applicant's Position

The Agent for the Applicant began by providing a brief overview of the building at dispute. He stated that the project involves a three storey addition on top of an existing seven story residential building. The Agent advised that the issue at dispute pertains to the construction of the exhaust shafts that serve the kitchens and bathrooms of both new and existing residential units. As described by the Agent, the shaft walls consist of one layer of ⅝ inch Type X gypsum wallboard on steel studs with 25 mm shaft liner panels. As per the Agent, this design is in accordance with cUL Design No. U469, and achieves a 1 hour fire-resistance rating.

The Agent submitted that while gypsum board has combustible properties, it is his belief that the as-constructed exhaust shafts comply with Sentence 6.2.3.2.(1) of the OBC. He stated that since Clause 3.1.5.2.(1)(b) of the Code specifically permits the use of tightly adhered paper on noncombustible backing provided the assembly has a flame spread rating of not more than 25, it is his opinion that the as-constructed exhaust shafts, with a flame spread rating of 20, meet the intent of noncombustibility inherent within Sentence 6.2.3.2.(1). In this regard, the Agent submitted that since the as-installed exhaust shafts comply with Sentence 6.2.3.2.(1), there is no need to assess them on the basis of their compliance with Sentences 6.2.3.2.(2) to (4) of the Code.

The Agent stated that he disagrees with the Respondent's position that the subject exhaust shafts are combustible since they are constructed using paper-lined gypsum, and as a result their construction is required to meet the provisions of Sentence 6.2.3.2.(2) of the OBC. He noted that the Respondent is of the view that the subject shafts do not comply with Clause (a) or (e) of this provision, nor do they comply with the CAN/ULC-S110-M "Standard Method of Test for Air Ducts" or the two storey vertical rise limit respectively. In response, the Agent acknowledged that the shafts do rise three storeys, however, he reiterated his position that, in his view, the gypsum constructed shafts are an equivalent to the ducts specified in Sentence 6.2.3.2.(1) of the Code.

The Agent then stated that he also disputed the Respondent's concern regarding whether the subject exhaust shafts are prone to excessive moisture and will thereby experience mould and mildew growth. He indicated that while some condensation may occur, it his opinion that the shafts will not be subjected to excessive moisture. He argued that as the exhaust shafts serving the residential units are only marginally humidified and are located in interior walls, the dew point of the exhausted air will not be reached. Consequently, mould and mildew will not grow in the as-built shafts, existing and new. As support for this argument, the Agent referenced a letter from the project's mechanical engineer indicating that the conditions for condensation and thus potential mould and mildew growth would not occur in the subject building. The Agent continued by stating that Sentence 6.2.3.2.(5) of the Code

addresses the issue of excessive moisture and that this would not be a problem in the building at dispute and the shafts will not experience an appreciable loss in strength as a result.

When questioned, the Agent advised that the Applicant was not made aware of the fact that the 24 subject air shafts were an issue until after the renovation was complete, which was in the summer of 2003. He also stated that he found the municipality's position to be surprising, because there is ample precedence of the use of the exhaust shafts at dispute and that their installation is quite common.

In summary, the Agent submitted that while gypsum board has combustible properties, it is his belief that the subject exhaust shafts can be viewed as an equivalent to those required under Sentence 6.2.3.2.(1) of the OBC, since Clause 3.1.5.2.(1)(b) of the Code specifically permits the use of tightly adhered paper on noncombustible backing with a flame spread of less than 25. The Agent maintained that compliance has, in his opinion, been achieved with Sentence 6.2.3.2.(1) and, therefore, the as-installed exhaust shafts do not need to be assessed on the basis of their compliance with Sentences 6.2.3.2.(2) to (4) of the Code.

6. Respondent's Position

The Designate for the Respondent submitted that Sentences 6.2.3.2.(1) and (2) of the OBC address materials acceptable for duct system construction and also provide for exceptions. He stated that it is the Respondent's position that the construction of the subject exhaust shafts do not comply with Sentence 6.2.3.2.(1) as they are viewed as being of combustible construction. The Designate submitted that, in his opinion, drywall is not a realistic material when one is exhausting a kitchen or bathroom and he stated that one cannot say that gypsum board is classified in the OBC as a non-combustible material. In this regard, the subject exhaust shafts, in his view, do not comply with Sentence 6.2.3.2.(1) of the Code and, as a result, he directed the Commission's attention to Sentence 6.2.3.2.(2) of the Code.

Sentence 6.2.3.2.(2) of the Code, the Designate explained, permits the use of ducts that are constructed of combustible material provided that they comply with the specific clauses contained therein. He then specifically addressed Clause 6.2.3.2.(2)(a) of the Code, which permits the use of ducts, associated fittings, and plenums, provided that they conform to the appropriate requirements for Class 1 duct materials in CAN/ULC-S110-M, "Standard Method of Test for Air Ducts". The Designate submitted that this Clause was of particular importance to the issue at dispute, because he does not know whether the subject exhaust shafts would be able to pass the tests associated with CAN/ULC-S110-M, "Standard Method of Test for Air Ducts".

The Designate then raised the issue of allowable height limits and stated that Clause 6.2.3.2.(2)(e) maintains that ducts constructed of combustible material shall not be used in vertical runs serving more than 2 storeys. He stated that the purpose of this particular Code provision is to prevent the growth of mould and mildew in the exhaust shaft. He advised that this issue was of particular importance to the City, because the building at dispute is a home for senior citizens who are extremely vulnerable and susceptible to potential health risks. In addition to this, he added that no information was submitted by the Applicant party to indicate that gypsum board has been tested to be resistant to moisture and would therefore make this material acceptable under Sentence 6.2.3.2.(5) of the Code.

In summary, the Designate maintained that gypsum board is not an acceptable material for duct system construction. He stated that the subject exhaust shafts do not provide sufficiency of compliance with Sentences 6.2.3.2.(1) and (2) of the OBC and that both their materialistic properties and installation are an inappropriate application of the Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the as in-stalled exhaust shafts extending three storeys in height, which are constructed using paper-lined gypsum shaftboard liners, do not comply with the intent of Sentence 6.2.3.2.(1) of the Ontario Building Code at 600 Melita Crescent, Toronto, Ontario.

It is also the decision of the Building Code Commission that these same shafts do not provide sufficiency of compliance with Sentence 6.2.3.2.(2) of the Code at the subject building.

8. Reasons

i) Sentence 6.2.3.2.(1) states that except as provided in Sentences (2) to (4) and in Article 3.6.4.3., all ducts, duct connectors, associated fittings and plenums used in air duct systems shall be constructed of steel, aluminum alloy, copper, clay, asbestos-cement or similar *non-combustible* material.

ii) *Non-combustible*, as defined, means that a material meets the acceptance criteria of CAN4-S114 "Standard Method of Test for Determination in Building Materials".

iii) Appendix A-3.1.5.2.(1)(b) of the Ontario Building Code states: "[g]ypsum board of the typical thickness used in building construction and that is paper faced will not generally comply with the criteria in CAN4-S114-M, "Standard Method of Test for Determination of Non-Combustibility in Building Materials", even though there are no combustible components in the core. Gypsum board has satisfactory properties for resisting the spread of fire and Clause 3.1.5.2.(1)(b) has been included to specifically permit the use of paper faced gypsum board in a building of noncombustible construction." The exemption found in provision 3.1.5.2.(1)(b), however, in the BCC's view, is intended for the general noncombustible construction requirements of Part 3. The OBC does not state that this exemption may be extended to a Part 6 mechanical system.

iv) Sentence 6.2.3.2.(2) prohibits the use of combustible elements in a vertical shaft serving more than 2 storeys. The subject building at dispute is seven stories in height, with a three storey addition.

v) There were no compensating measures provided by the Applicant party.

Dated at Toronto this **4th** day in the month of **December** in the year **2003** for application number **2003-64**.

Len King, Vice-Chair

Gary Burtch

Donald Pratt



Ruling No. 03-52-950
Application No. 2003-55

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 1.1.3.2. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Roy Fletcher, Fletcher Associates Consulting Engineers & Planners, for the resolution of a dispute with Doug Kopp, Chief Building Official, Township of Southgate, to determine whether the proposed replacement of a Class 4 sewage system that is located on a "lot or parcel of land" that is serviced by additional Class 4 systems complies with the definition of *sewage system* in Article 1.1.3.2. of the Ontario Building Code, when considering that the lot is located adjacent to two lots that are all under the same ownership at Homestead Resort/Golf Course, RR 4, 263530 Wilder Lake Road, Durham, Ontario.

APPLICANT	Roy Fletcher Fletcher Associates Consulting Engineers & Planners Toronto, Ontario
RESPONDENT	Doug Kopp Chief Building Official Township of Southgate
PANEL	Bryan Whitehead
PLACE	Toronto, Ontario
DATE OF HEARING	December 4, 2003 and February 10, 2004
DATE OF RULING	March 1, 2004
APPEARANCES	Roy Fletcher Fletcher Associates Consulting Engineers & Planners Toronto, Ontario **The Applicant** Doug Kopp Chief Building Official Township of Southgate **The Respondent**

RULING

1. The Applicant

Roy Fletcher, Fletcher Associates Consulting Engineers & Planners, has applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing to replace an existing Class 4 sewage system at Homestead Resort/Golf Course, RR 4, 263530 Wilder Lake Road, Durham, Ontario.

2. Description of Construction

The Applicant is proposing to replace an existing Class 4 septic system comprised of a septic tank and leaching bed serving a "Recreation Hall" on a site referred to as the Homestead Resort/Golf Course. At present, there are two Class 4 systems servicing an area of land the Agent refers to as the "Part Lot" upon which the "Recreation Hall" is situated. The Applicant's proposal is to replace one of the two systems and has calculated the new combined total daily design flow rate at 8,050 L/d.

The site referred to as Homestead Resort/Golf Course is located on a 123-acre holding of land consisting of Part Lots 2, 3, and 4, Concession 21., Egremont (R.P. 16R6386 Parts 1, 2, and 3). Part Lot 2 has a farm house, Part Lot 3 has the "Recreation Hall" plus an office/pro shop, and Part Lot 4 has several cottages. All three Part Lots are held by the same owner. Each of the three Part Lots is serviced by separate Class 4 sewage systems.

The issue at dispute pertains to the whether the three contiguous Part Lots are considered to be one or three separate and delineated "lots or parcels of land". The Respondent party has denied the Applicant a building permit, as he is of the view that the site in question consists of one "lot" and, as such, the total design capacity of all septic systems on the "lot" exceeds 10,000 L/d. This is an issue because one of the defining criteria of a *sewage system*, as per Article 1.1.3.2. of the Ontario Building Code, is that the system have a design capacity of 10,000 L/d or less.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed replacement of a Class 4 sewage system that is located on a "lot or parcel of land" that is serviced by additional Class 4 systems complies with the definition of *sewage system* in Article 1.1.3.2. of the Ontario Building Code, when considering that the lot is located adjacent to two lots that are all under the same ownership at Homestead Resort, RR 4, 263530 Wilder Lake Road, Durham, Ontario.

Article 1.1.3.2. of the OBC provides the definition of certain terms with respect to how they are used and/or applied in the context of the Code. As per the OBC, the term *sewage system* refers to "a chemical toilet, an incinerating toilet, a recirculating toilet, a self-contained portable toilet and all forms of privy; a greywater system; a cesspool; a leaching bed system; or a system which requires or uses a holding tank". Also included in this definition are three conditions, to which a *sewage system*, in order to be defined as such, must comply. These are: i) a design capacity of 10,000 L/d or less; ii) a total design capacity of 10,000 L/d or less where more than one of these are located on a lot or parcel of land; and iii) located wholly within the boundaries of the lot or parcel of land on which is located the building or buildings that they serve. If a septic system, or series of septic systems, yield a design capacity that is greater than 10,000 L/d then it is not considered a *sewage system* as defined in the OBC, but rather a *sewage works* as defined in the *Ontario Water Resources Act*. The regulation of *sewage works* is the responsibility of the Ministry of Environment.

Central to this dispute, therefore, is whether the property known as Homestead Resort/Golf Course consists of one lot or three separate "lots". The interpretation of "lot" is critical, because if it is found that the property is one "lot" then the sewage flows emanating from the proposed replacement of the Class 4 septic system on Part Lot 3 must be included in the total design capacity for all septic systems located on the "lot". If, however, the Building Code Commission (BCC) finds that the property consists of three separate "lots", then each "lot" can have a total design capacity of up to, but not more than, 10,000 L/d as per the definition of *sewage system* outlined in the OBC.

4. Provisions of the Ontario Building Code

1.1.3.2. Defined Terms

(1) The words and terms in italics in this Code have the following meaning for the purposes of this Code, and where indicated, the following meaning for the purposes of the Act as well.

Sewage system means

(a) a chemical toilet, an incinerating toilet, a recirculating toilet, a self-contained portable toilet and all forms of privy including a *portable privy*, an *earth pit privy*, a *pail privy*, a *privy vault* and a composting toilet system,
(b) a *greywater* system,
(c) a cesspool,
(d) a *leaching bed* system, or
(e) a system which requires or uses a *holding tank* for the retention of *hauled sewage* at the site where it is produced prior to its collection by a *hauled sewage system*,

where these

(f) have a *design capacity* of 10,000 litres per day or less,
(g) have, in total, a *design capacity* of 10,000 litres per day or less where more than one of these are located on a lot or parcel of land, and
(h) are located wholly within the boundaries of the lot or parcel of land on which is located the *building* or *buildings* they serve.

5. Applicant's Position

The Applicant began by submitting that the issue at dispute stems from a proposal to replace an existing Class 4 septic system located at a site referred to as Homestead Resort/Golf Course. He then advised that he wished to clarify the matter germane to this dispute, which is determining whether the property in question is one "lot" or three separate "lots". He stated that he was not prepared at this point to speak to issue of total design capacities, and stated that he wished to limit the scope of this particular hearing to whether the property in question consists of one or three "lots".

The Applicant continued by advising that the difficulty in determining the number "lots" results from the fact that although the term "lot" is used throughout the Code, there is no definition provided in Section 1.1.3.2. of the OBC. This has resulted in the parties having conflicting views on what a "lot" is and the number of "lots" that constitute the property in question.

The Applicant indicated that the nub of this dispute rests on the interpretation of the term "lot". He advised that since the term "lot" is not defined in the Code, he turned to the Concise Oxford Dictionary

for its meaning. According to the Concise Oxford Dictionary, the term "lot" means a "plot or allotment of land". Furthermore, he advised the word "lot" is clearly defined in Part I of the *Land Titles Act*, R.S.O. 1990, Chapter L.5 as including a "block, reserve and any other delineation of land on a plan". The Agent then drew the Commission's attention to Registered Plan 16R6386, which, he advised, shows the property as consisting of three separate Part Lots.

The Applicant then went on to provide some detail on the property and proposal at dispute. As outlined by the Applicant, Homestead Resort/Golf Course consists of, in his view, three adjacent "lots" which are all under the same ownership. He submitted that the proposed Class 4 sewage system replacement is located Part Lot 3, which is currently serviced by two Class 4 sewage systems. As per the Applicant's proposal, these systems are intended to service the Recreation Hall, the office/pro shop, one bedroom, and one toilet. The Applicant advised that, upon the proposed replacement, the sewage load for Part Lot 3 would be 8,050 L/d, with System 1 having a design flow of 550 L/d and System 2 having a design flow of 7,500 L/d.

In summary, the Applicant advised that he wished to limit the scope of this particular BCC hearing to the determination of whether the property in question consists of one or three "lots". He reiterated that although the term "lot" is not defined in the Code, the term, as defined in the *Land Titles Act*, supports his contention that there are three parcels of land held by Homestead Resort/Golf Course. In this regard, the Agent concluded by stating that the property in question consists of three separate "lots", since Registered Plan 16R6386 shows three Part Lots.

6. Respondent's Position

The Respondent submitted that his position on the matter is straightforward. He advised that the property referred to as Homestead Resort/Golf Course is made up of Part Lots 2, 3, & 4, Concession 21 (Egremont) and is an *amalgamated* (*emphasis added*) parcel of land owned by 1028541 Ontario Limited (Homestead Resort/Golf Course). In this regard, the Respondent advised that the entire 123-acre holding of land in question is a single "lot" that would require consent to sever from a Land Division Committee if any part(s) were to be sold in the future.

The Respondent continued by advising that since the property in question is one, amalgamated "lot", the total design capacity for all septic systems on the property must not exceed 10,000 L/d in order to comply with the definition of *sewage system* outlined in the OBC. He submitted that the 10,000 L/d limit is exceeded when considering the total design capacity for all septic systems located on the "lot" and, as such, advised that the application to replace the existing Class 4 system should be made to the Ministry of the Environment (MOE), who deal with the regulation of *sewage works*. Despite having raised the issue of total design capacity, the Respondent, when questioned, did agree to limit the scope of this particular BCC hearing to the number of "lots" that constitute the property in question.

In summary, the Respondent argued that the property known as Homestead Resort/Golf Course is an amalgamated parcel of land that would require consent to sever if a part were to be sold in the future. Although not germane to this BCC hearing, the Respondent did advise that he believes the application to replace the existing Class 4 sewage system should be made to the MOE, since, in his interpretation, the total design capacity for all septic systems on the property likely exceeds 10,000 L/d.

7. Commission Ruling

It is the decision of the Building Code Commission that, when considering Article 1.1.3.2. (definition

of "lot" or "parcel of land" as it pertains to a *sewage system*) in relationship to the lands owned by 1028541 Ontario Ltd (Homestead Resort/Golf Course), the entire 123 acre-holding identified as Part Lots 2, 3 and 4 RP 16R6386 are considered to be one lot.

8. Reasons

The regulation of on-site sewage system construction in Ontario is divided between the Ontario Building Code (OBC) for projects with a total daily design sanitary sewage flow of 10,000 litres per day or less and the *Ontario Water Resources Act* (OWRA) for flows over 10,000 litres per day. Review and enforcement of proposals under the OBC is done through local municipalities, health units, and conservation authorities. In the case of the OWRA, review and enforcement is done through the Ministry of Environment (MOE). For all sewage applications, the assessment of the total daily design sanitary sewage flow is made in accordance with Article 8.2.1.3. of the OBC, which requires consideration of Tables 8.2.1.3.A and B, or the highest metered flow of three similar establishments.

Although the design, construction and operation of an on-site sewage system should be carried out with due consideration to the local environment (particularly the groundwater), the purpose of the division in responsibilities for approval is to afford the MOE an opportunity to scrutinize proposed larger (over 10,000 litres per day) *sewage works* relative to the local environmental conditions and potential impacts of effluent disposal. In particular, the proponent of the larger sewage works must consider the impact of dissolved nitrogen species on the local groundwater and down gradient uses of the water (Reasonable Use Policy).

In the case at hand, the Applicant has applied under the OBC to his local municipality with a proposal to replace the tanks and leaching bed serving the bank barn "Recreation Hall", which was renovated to include bar and dining facilities. The recreation centre is located on a 123-acre holding of land under single ownership along with additional uses including eight cottages, one occupied house, one unoccupied house and several other buildings without sanitary facilities. The sanitary facility that is the subject of this dispute is one of several *sewage systems* on the 123-acre holding.

On this matter, the Commission agrees with the Respondent that the subject 123-acre holding of land is one lot. The reason for this is that the Applicant would require consent from a Land Division Committee in order to sever the property into individual parcels. This would also be a necessary step prior to the step prior to the selling and/or transferring of this property.

Accordingly, it is the decision of the Commission that the 123-acre property known as "Homestead Resort" is a single lot or parcel, when referencing Article 1.1.3.2. of the OBC.

Dated at Toronto this **4th** day in the month of **December** in the year **2003** for application number **2003-55**.

Bryan Whitehead



Ruling No. 03-50-948
Application No. 2003-53

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 3.2.2.26., 3.2.9.1., and Sentence 3.13.2.2.(3) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ken Bright, University of Ontario, for the resolution of a dispute with Michael Leonard, Chief Building Official, City of Oshawa, to determine whether the proposed temporary air-supported structure, which has a Group A, Division 2 occupancy, that is not equipped with a sprinkler system or a standpipe and hose system, provides sufficiency of compliance with Articles 3.2.2.26. and 3.2.9.1., when considering Sentence 3.13.2.2.(3) of the Ontario Building Code, at Durham College/UOIT Tennis Facility, 50 Conlin Road West, Oshawa, Ontario.

APPLICANT	Ken Bright University of Ontario Oshawa, Ontario
RESPONDENT	Michael Leonard Chief Building Official City of Oshawa
PANEL	John Guthrie, Chair-Designate Fred Barkhouse Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	November 20, 2003
DATE OF RULING	November 20, 2003
APPEARANCES	Demir Delen Morrison Hershfield Ltd. Toronto, Ontario **Agent for the Applicant** Cvjeta Prgin Chief Building Official City of Oshawa **Designate for the Respondent**

RULING

1. The Applicant

Ken Bright, University of Ontario has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing an air-supported structure at Durham College/UOIT Tennis Facility, 50 Conlin Road West, Oshawa, Ontario.

2. Description of Construction

The Applicant is constructing an air-supported, fabric-covered structure having a Group A, Division 2 occupancy. The proposed structure is one storey in building height and approximately 4, 085 m^2 in building area. The building is comprised of combustible construction and is not equipped with a fire alarm system, a sprinkler system, nor a standpipe and hose system. The proposed air-supported structure is intended to be used during the winter months as a shelter for six existing tennis courts.

The construction in dispute involves the requirement to install a sprinkler system and a standpipe and hose system in the proposed air-supported structure. The Applicant maintains that the proposed as-supported structure does not require a sprinkler system nor a standpipe and hose system, since it is a temporary structure, which will be removed for five months every year. The Respondent, however, maintains that the proposed air-supported structure is required to be sprinklered due to its size. Furthermore, the Respondent is of the opinion that if a sprinkler system is not required, then a standpipe and hose system should be installed.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed temporary air-supported structure, which has a Group A, Division 2 occupancy, that is not equipped with a sprinkler system or a standpipe and hose system, provides sufficiency of compliance with Articles 3.2.2.26. and 3.2.9.1., when considering Sentence 3.13.2.2.(3) of the Ontario Building Code (OBC).

The term *air-supported structure* is defined in the OBC as "a structure consisting of a pliable membrane which achieves and maintains its shape and support by internal air pressure". Subsection 3.13.2. of the Code governs the construction of such structures. As per Sentence 3.13.2.1.(1), air-supported structures shall comply with the requirements of the Code except as permitted in Subsection 3.13.2.

Sentence 3.13.2.2.(3) of the OBC, exempts air-supported structures from complying with Articles 3.2.2.20. to 3.2.2.83., with the exception of maximum building size. The reference to maximum building size in this Sentence is not to determine whether the construction is to be combustible or non-combustible, but rather to determine the requirements for sprinklering. The building area and classification determined for the subject air-supported structure result in it falling under Article 3.2.2.26. of the Code, which requires sprinkler protection to be provided.

In addition, Article 3.2.9.1. of the Code outlines the various buildings where a standpipe system is required. Since the subject air-supported structure has a building area greater than 2, 500 m^2, Table 3.2.9.1. requires that a standpipe and hose system be installed.

4. Provisions of the Ontario Building Code

3.2.2.26. Group A, Division 2, up to 2 Storeys, Increased Area, Sprinklered

(1) A *building* classified as Group A, Division 2 is permitted to conform to Sentence (2) provided
- (a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,
- (b) it is not more than 2 *storeys* in *building height*, and
- (c) it has a *building area* not more than
  - (i) 4 800 m^2 (51,700 ft^2) if 1 *storey* in *building height*, or
  - (ii) 2 400 m^2 (25,800 ft^2) if 2 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and
- (a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min,
- (b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less 45 min, and
- (c) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall
  - (i) have a *fire-resistance rating* not less than 45 min, or
  - (ii) be of *noncombustible construction*.

3.2.9.1. Standpipe Systems, Where Required

(1) Except as provided in Sentences (4) to (7), a standpipe system shall be installed in every *building* that
- (a) is more than 3 *storeys* in *building height*,
- (b) is more than 14 m (45 ft 11 in) high measured between *grade* and the ceiling of the top *storey*, or
- (c) is not more than 14 m (45 ft 11 in) high measured between *grade* and the ceiling of the top *storey* but has a *building area* exceeding the area shown in Table 3.2.9.1. for the applicable *building height* if the *building* is not *sprinklered*.

(2) A standpipe system shall be installed in every *basement* of a *building* that requires a standpipe system above *grade*.

(3) A standpipe system shall be installed in every *basement* of a building that is regulated by Sentence 3.2.2.15.(2).

Table 3.2.9.1.
Building Limits without Standpipe Systems
Forming Part of Sentence 3.2.9.1.(1)

Occupancy Classification	*Building Area*, m^2 (ft^2)		
	1 *Storey*	2 *Storeys*	3 *Storeys*

A C D F, Division 2 F, Division 3	2 500 (24,200) 2 000 (21,500) 4 000 (43,100) 2 000 (21,500) 3 000 (32,300)	2 000 (21,500) 1 500 (16,100) 3 000 (32,300) 1 500 (16,100) 2 000 (21,500)	1 500 (16,100) 1 000 (10,800) 2 000 (21,500) 1 000 (10,800) 1 000 (10,800)
Column 1	2	3	4

(4) A standpipe system is not required to be installed in the lowest *storey* in a *building* if this *storey* is a *service room* which has an area not more than 50 m^2 (538 ft^2).

(5) A standpipe system is not required to be installed in a roof-top enclosure if this enclosure has an area not more than 50 m^2 (538 m^2).

(6) A standpipe system is not required to be installed in a *storage garage* conforming to Article 3.2.2.83. provided the *building* is not more than 15 m (49 ft 3 in) high.

(7) A standpipe system is not required to be installed in a *dwelling unit* which
(a) extends not more than 3 *storeys* above adjacent ground level,
(b) is completely cut off from the remainder of the *building* so that there is no access to the remainder of the *building*, and
(c) has direct access to its interior by means of an exterior doorway located not more than 1 500 mm (4 ft 11 in) above or below adjacent finished ground level.

3.13.2.2. Air-Supported Structures, General

(3) Except as provided in Sentence (5), *air-supported structures* are exempt from complying with Articles 3.2.2.20. to 3.2.2.83., except for maximum *building* size.

5. Applicant's Position

The Agent for the Applicant began by offering a brief overview of the construction at dispute and distributing photos of the subject air-supported structure for the Commission's review. He submitted that there are two issues at dispute: i) whether the as-constructed air-supported structure should be provided with sprinkler protection and ii) whether a standpipe and hose system should be installed.

The Agent then continued by stating that Sentence 3.13.2.2.(3) exempts air-supported structures from complying with the requirements contained in Articles 3.2.2.20. to 3.2.2.83. of the OBC, except for maximum building size. He then added that it is the Respondent's opinion that, based on building size, the air-supported structure at dispute, falls under Article 3.2.2.26., which requires it to be sprinklered. The Agent stated that, in his opinion, Article 3.2.2.26. applies to *permanent* air-supported structures that are of a greater size, such as large golf domes, as opposed to *temporary* structures, such as the as-constructed tennis bubble at dispute (*emphasis* added). In this regard, the Agent argued that the subject air-supported structure should be exempt from the provision of sprinklering, since it is a temporary structure that will be removed for five months every year.

As outlined by the Agent, air-supported structures have been included in the Code since its inception

in 1975. Despite this, it was not until the 1997 Code when interior walls, mezzanines, or intermediate floors were permitted in these structures, provided that these complied with the applicable construction requirements. As per the Agent, no provisions were added to the 1997 OBC that required temporary air-supported structures to be sprinklered and, furthermore, he argued that no other building code in North America requires sprinklers to be installed in an air-supported structure. In addition, he stated that the National Building Code of Canada continues to permit an air-supported structure of any area without sprinklers, provided it complies with the requirements of Subsection 3.1.6.

The Agent continued by outlining the implications associated with providing sprinkler protection in the subject air-supported structure. He submitted that, if required, the sprinkler system would have to comply with Article 3.2.5.13. of the Code, which stipulates, in Sentence (1), that an automatic sprinkler system shall be designed, constructed, installed, and tested in conformance with NFPA 13 "Standard for the Installation of Sprinkler Systems". As per the Agent, the requirements of NFPA 13 mandate that sprinkler piping be supported by a building's structure. The Agent advised that this is a feasible requirement to fulfil when a building structure is non-dynamic. However, as submitted by the Agent, providing sprinklers in the subject structure would be extremely difficult, if not impossible, because rigid piping would have to be hung in a building that is supported by internal air-pressure.

With respect to the second issue at dispute, the Agent submitted that the subject air-supported structure should also be exempt from the requirements of a standpipe and hose system, because there is virtually no fire load in the building. Since the air-supported structure at dispute will be used to cover six existing tennis courts, the Agent advised that there will be very few elements present in the building that will contribute to the fire load, for example tennis nets and a minimal number of chairs for seating. He also stated that the fabric used for the air-supported structure complies with both NFPA 701 "Standard Method of Fire Tests for Flame-Resistant Textile and Films" and CAN/ULC S-109 "Standard for Flame Test of Fabrics and Films" as required by Sentence 3.13.2.5.(1) of the OBC.

In addition, the Agent advised that the manufacturer of the air-supported structure does not recommend that a standpipe and hose system be installed, because, if a fire were to occur, it is not recommended that it be fought internally. In this regard, the Agent advised that a standpipe and hose system, installed inside the structure, would not be of much use. He then added that the Building Code Commission had made a previous decision (Ruling 98-21-626), which permitted an air-supported structure without a sprinkler system, without a standpipe and hose system, and with an occupant load of 160 persons.

The Agent then went on to outline the various compensating measures that the Applicant is willing to provide in lieu of providing sprinkler protection and installing and standpipe and hose system. He submitted that fire extinguishers will be provided inside the air-supported structure and hydrants will be located outside the structure for fire suppression capabilities. The Agent also stated that the air-supported structure will have five 1.2 m (4 ft) wide exit doors, which will provide an exit capacity for 999 persons. This exit capacity, as per the Agent, is much higher than the actual maximum occupant load of 50 persons. He added that the travel distance to an exit does not exceed the maximum limit specified for an unsprinklered building; thereby, mitigating any problems that might be associated with evacuation.

In summary, the Agent submitted that temporary air-supported structures, which are not provided with sprinkler systems, have been installed over tennis courts and swimming pools during the winter months in North American since the early 1980s and that no adverse effects have been experienced. He concluded by stating that both he and the Applicant believe that there is no history, nor technical reason, to justify the installation of a sprinkler system or standpipe and hose system in a temporary building, such as the air-supported structure at dispute.

6. Respondent's Position

The Designate for the Respondent began by submitting that she agrees with the Agent in the respect that providing sprinkler protection in the subject air-supported structure is not practical. She also stated that she is aware of the fact that the National Building Code differs from the OBC with respect to the provision of sprinkler protection in an air-supported structure, but that it is the responsibility of the City of Oshawa's Development Services Department to enforce the provisions of Ontario's Code. In this regard, the Designate submitted that sprinkler protection is required in the air-supported structure at dispute by virtue of the building's size as per Article 3.2.2.26. of the Code. She also submitted that the current OBC contains no special provisions, or exemptions, for temporary structures with respect to the requirements for sprinklering. As such, the Designate advised that this was the reason why the issue was brought before the Commission.

The Designate then continued by submitting that if sprinkler protection was not required, then she believes that a standpipe and hose system should be installed. She argued that since the building area is larger than 2, 500 m^2, Table 3.2.9.1. of the OBC requires that a standpipe and hose system be installed. Again, the Designate submitted that the Code does not contain any special exemptions for temporary structures in this regard, and that the City of Oshawa is not in the position to permit this technical deviation from the Code.

In summary, the Designate submitted that she is cognizant of the difficulties that are associated with providing sprinkler protection in the subject air-supported structure, but that it is her responsibility to enforce the provisions of the OBC. She then reiterated that there are no special provisions in the Code, which exempt temporary structures from the requirements of sprinkler protection, nor the installation of a standpipe and hose system.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed temporary air-supported structure, which has Group A, Division 2 occupancy, and is not provided with a sprinkler system or a standpipe and hose system, does not provide sufficiency of compliance with Articles 3.2.2.26. and 3.2.9.1., when considering Sentence 3.13.2.2.(3) of the Ontario Building Code, at Durham College/UOIT Tennis Facility, 50 Conlin Road West, Oshawa, Ontario.

8. Reasons

i) The intention of Sentence 3.13.2.2.(3) of the OBC is to limit the size of unsprinklered buildings.

Dated at Toronto this **20th** day in the month of **November** in the year **2003** for application number **2003-53**.

John Guthrie, Chair-Designate

Fred Barkhouse

Donald Pratt



Ruling No. 03-49-947
Application No. 2003-47

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.8.9.1.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Terry Kaufman, 995347 Ontario Ltd., for the resolution of a dispute with Ann Borooah, Chief Building Official, City of Toronto, to determine whether the as-built exterior concrete front entrance stairs, which have more than two risers and two treads and are supported by concrete patio stones, provide sufficiency of compliance with Sentence 9.8.9.1.(1) of the Ontario Building Code at 18B, 20, 22, 44, 76, 78, 80, 82, and 84 Osler Street, Toronto, Ontario.

APPLICANT	Terry Kaufman 995347 Ontario Ltd. Toronto, Ontario
RESPONDENT	Ann Borooah Chief Building Official City of Toronto
PANEL	John Guthrie, Chair-Designate Fred Barkhouse Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	November 20, 2003
DATE OF RULING	November 20, 2003
APPEARANCES	Dave Johnson, Senior Project Manager/Associate Randal Brown and Associates Ltd. Toronto, Ontario **Agent for the Applicant** Carl Baron, Senior Buildings Inspector City of Toronto Toronto, Ontario **Designate for the Respondent**

RULING

1. The Applicant

Terry Kaufman, 995347 Ontario Ltd., has received an order to comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, to remedy certain alleged deficiencies with respect to the construction of a residential townhouse complex located at 18B, 20, 22, 44, 76, 78, 80, 82, and 84 Osler Street, Toronto, Ontario.

2. Description of Construction

The Applicant has constructed a complex of townhomes having a Group C occupancy. The individual dwellings are two storeys in building height and approximately 115 m^2 in building area.

The construction at dispute involves the front entrance stairs that provide access to the individual townhomes. The as-constructed stairs are precast concrete step stairs that consist of four risers. Specifically, the issue at dispute pertains to the method that was used to support the concrete stairs in question. Presently, the as-constructed stairs are supported by concrete patio stones that have been placed over compacted soil.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-built exterior concrete front entrance stairs, which have more than two risers and two treads and are supported by concrete patio stones, provide sufficiency of compliance with Sentence 9.8.9.1.(1) of the Ontario Building Code (OBC).

Article 9.8.9.1. of the OBC sets out the requirements with respect to the construction of exterior concrete stairs. Sentence (1) of this Article states that stairs with more than 2 risers and 2 runs are required to be supported on unit masonry, concrete walls, piers, or must be cantilevered from the main foundation wall. The unit masonry or concrete walls referenced in Clause (a) of this Sentence, refer to foundation walls in most cases. Where concrete stairs are cantilevered from the foundation wall, as referenced in Clause 9.8.9.1.(1)(b), they are required to be installed to support the loads that they are subjected to, anchored as required, and mounted to prevent damage due to frost.

4. Provisions of the Ontario Building Code

9.8.9.1. Exterior Concrete Stairs

(1) Exterior concrete stairs with more than 2 risers and 2 treads shall be

(a) supported on unit masonry or concrete walls or piers not less than 150 mm (5⅞ in) in cross section, or

(b) cantilevered from the main *foundation* wall.

5. Applicant's Position

The Applicant for the Agent began by providing a brief overview of the stairs in dispute. He indicated that the exterior stairs in question are precast concrete stairs, which consist of four risers. The Agent stipulated that the issue at dispute specifically pertains to the method of support that was employed when installing the subject stairs. As per the Agent, the exterior concrete stairs were installed approximately two years ago and are supported by concrete patio stones.

The Agent advised that when the stairs were installed, the Applicant relied on product information provided by the manufacturer, which did not indicate that a foundation support was required. In this regard, the Agent stated that the Applicant supported the stairs on concrete patio stones, which are mounted on top of compacted soil. The Agent submitted that the Applicant was notified of the Code infraction shortly after having installed the stairs through an Order to Comply that was issued on May 28th, 2002.

The Agent continued by submitting that the Applicant retained the services of a structural engineer upon discovering that the subject stairs were allegedly not installed according to the provisions outlined in the OBC. The Agent then referred to an opinion letter that was issued by the retained structural engineer, which stipulates that the compacted soil is capable of sustaining the load imposed by the entrance stairs in its current configuration. In this regard, he advised that it is the Applicant's position that the stairs are not required to be constructed on a unit masonry foundation.

The Applicant then advised that he wished to address the Commission with respect to the safety of the exterior stairs at dispute. He submitted that the stairs have been in place for two years now and that he has not experienced any problems with respect to movement of the stairs. He also submitted that the subject stairs are sold across the province and that he would have never installed them if he believed that were unsafe.

In summary, the Agent argued that the Applicant relied on product information when installing the exterior stairs at dispute. As per the Agent, the product information did not stipulate that the stairs were required to be supported on foundation and, as a result, the Applicant chose to install them on concrete patio stones laid upon compacted soil. As per the Agent, it is the Applicant's belief that the stairs provide sufficiency of compliance with OBC, as it is the opinion of a Structural Engineer that the compacted soil is capable of sustaining the imposed loads.

6. Respondent's Position

The Designate for the Respondent began by submitting that Sentence 9.8.9.1.(1) of the Code clearly stipulates that exterior concrete stairs shall be supported on unit masonry or cantilevered from the main foundation wall. In this regard, the Designate submitted that the exterior stairs in question are currently in violation of the Code, because they have been simply laid upon concrete patio stones and have not been anchored or attached to the main foundation wall in any manner.

The Designate then submitted that during a recent site visit, he noticed that approximately 40% of the exterior stairs belonging to the individual townhomes showed substantial signs of sloping, movement, and instability. In his opinion, this is ample evidence to indicate that the soil is not adequately compacted and, therefore, unable to sustain the imposed loads. In this regard, the Designate submitted that the exterior concrete stairs, as currently installed are uneven and irregular, and represent a potential hazard and, therefore, need to be rectified.

When questioned as to whether the exterior concrete stairs were approved by the City of Toronto's

Building Division, the Designate submitted that the original drawings submitted for approval indicated the stairs would be constructed from wood and supported on piers. The Designate added that the City has received several calls from homeowners residing in the townhouse complex with respect to the safety of the exterior stairs at dispute. In this regard, the Designate submitted that the City is concerned in terms of liability, as there is a tremendous possibility of slipping and tripping on the subject stairs. He concluded by stating that he believes it would be negligent on the City's part if they were to accept the stairs as they are currently installed.

In summary, the Designate for the Respondent argued that the as-installed exterior stairs do not comply with Sentence 9.8.9.1.(1) of the OBC, as they are not supported on unit masonry or cantilevered from the main foundation wall. The Designate advised that the subject exterior stairs show substantial signs of movement and, as such, are unsafe and should be remedied.

7. Commission Ruling

It is the decision of the Building Code Commission that the exterior concrete front entrance stairs, which have more than two risers and two treads, and are supported by concrete patio stones do not provide sufficiency of compliance with Sentence 9.8.9.1.(1) of the Ontario Building Code at 18B, 20, 22, 44, 76, 78, 80, 82, and 84 Osler Street, Toronto, Ontario.

8. Reasons

i) Stairs with more than two risers and two treads must be supported by foundations, which provide frost protection.

Dated at Toronto this **20th** day in the month of **November** in the year **2003** for application number **2003-47**.

John Guthrie, Chair-Designate

Fred Barkhouse

Donald Pratt



Ruling No. 03-34-932
Application No. 2003-41

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.7.4.1.(3) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Frank Mills, Westside Cemeteries Ltd., for the resolution of a dispute with Ms. Ann Borooah, Chief Building Official, City of Toronto, to determine whether the proposed addition to a Group F, Division 3 occupancy that will not be equipped with water closets, but is located 250 metres away from an adjacent building on the same property that contains water closets, provides sufficiency of compliance with Sentence 3.7.4.1.(3) of the Ontario Building Code at Westminster Cemetery Mausoleum, 3850 Bathurst Street, Toronto, Ontario.

APPLICANT	Frank Mills Westside Cemeteries Ltd Weston, Ontario
RESPONDENT	Ms. Ann Borooah Chief Building Official City of Toronto
PANEL	Tony Chow, Vice-Chair Robert De Berardis Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	August 28, 2003
DATE OF RULING	August 28, 2003
APPEARANCES	David Hine Hine Reichard Tomlin Inc. Markham, Ontario **Agent for the Applicant** Tony Fiorino Building Engineer City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

Frank Mills, Westside Cemeteries Ltd., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing an addition to a mausoleum at Westminster Cemetery Mausoleum, 3850 Bathurst Street, Toronto, Ontario.

2. Description of Construction

The Applicant is constructing a second-storey addition to an existing single-storey mausoleum having a Group F, Division 3 occupancy. The second-storey addition is proposed to have an area of approximately 311 m^2, while the existing single-storey facility has a building area of 946 m^2. Both the existing facility, and the proposed addition, are of non-combustible construction.

The issue at dispute pertains to the requirement of providing a plumbing system to serve occupants in the subject mausoleum. The Applicant is of the opinion that a plumbing system, specifically water closets, is not required, because the subject mausoleum is not normally occupied and there are barrier-free public washrooms provided in a nearby building located approximately 250 m away. While the Respondent agrees that the water closets can be excluded, he is also of the opinion that the 250 m travel distance is too great. Since the Ontario Building Code does not require a minimum travel distance to a washroom, at issue is whether the distance of 250 m is reasonable for a visitor to travel.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed addition to a Group F, Division 3 occupancy that will not be equipped with water closets, but is located 250 metres away from another building located on the same property that contains water closets, provides sufficiency of compliance with Sentence 3.7.4.1.(3) of the Ontario Building Code (OBC).

Since its inception, the OBC has required buildings to be provided with, or have accessible to its occupants, a plumbing system. Despite this, the first edition of the Code did provide an exemption to this provision in situations when the installation of a sanitary drainage system was not possible because of the absence of a water supply. In cases such as this, however, the Code also required that other means for the disposal of human waste be provided, for instance, sanitary privies or chemical closets.

In 1978, an amendment to the Code was introduced stipulating that plumbing facilities may be omitted in a building that is not normally occupied by persons, where such installations are impractical, and where other facilities are available in nearby buildings when the subject building is in use. The current Code [as prescribed in Sentence 3.7.4.1.(3)] continues to include this exemption; however, the Sentence numbering has changed from the 1978 amendment.

4. Provisions of the Ontario Building Code

3.7.4.1. Plumbing and Drainage Systems

(3) *Plumbing fixtures* need not be provided in a *building* which is not normally occupied by persons where such installations are impractical and other *fixtures* are available in nearby *buildings* when the subject *building* is in use.

5. Applicant's Position

The Agent for the Applicant began by offering a brief description of the site on which the subject mausoleum is located. The Agent advised that the site consists of burial plots, access roads, and a total of fifteen mausoleums. The subject mausoleum is located on the southwest corner of the access road that provides entrance into the mausoleum complex.

The Agent continued by advising that the subject mausoleum consists of an above grade, indoor cemetery where the deceased are buried in crypts. He stated that the subject mausoleum is both nominally heated, as well as nominally cooled. The Agent submitted that despite the fact that the subject mausoleum is not serviced by a municipal water main, potable water is available. He added that there is no assembly space, per se, offered in the mausoleum, and that there are relatively few services held in the facility. As per the Agent, the crypts in the subject mausoleum are approximately 60% occupied, thereby, resulting in the need to construct the second storey addition.

As indicated by the Agent, a permit was issued for the addition to the subject mausoleum. Shortly thereafter, however, a revision to the permit was applied for that pertained to the removal of the proposed janitor closets and the water closets shown on the original permit application drawings. The Agent submitted that the proposal to remove the water closets was based on the fact that the subject mausoleum is not normally occupied and is located within a reasonable distance to an adjacent building that has barrier-free washrooms. Furthermore, he submitted that while constructing the addition results in an increase in the number of crypts, it does not translate to an increase in the occupant load. As per the Agent, the addition will simply assist in re-establishing visitation to the mausoleum, as it has been found that the number of visits to a mausoleum decrease as time from date of burial increases. In this regard, the Agent maintained that the existing water closets, located in an adjacent building 250 m away, should be adequate as the occupant load is not increasing as a result of the addition.

The Agent then submitted that while the City of Toronto Building Department agrees that washrooms are not required by the OBC in the subject mausoleum, they feel that the travel distance to the nearest water closet, is too far. He submitted that the crux of the matter before the Commission is a subjective determination of whether 250 m is too far to travel to the washroom, since in this instance the OBC does not require a minimum travel distance to a washroom.

In summary, the Agent argued that the subject mausoleum should not be required to have water closets, because the building is not normally occupied. Furthermore, he submitted that the proposed addition will not result in an increase in occupancy, but will rather assist in maintaining current visitation levels to the mausoleum. Finally, the Agent argued that water closets should not be required on the basis that barrier-free washrooms are located within 250 m of the subject mausoleum which, in his opinion, is a reasonable distance for visitors to travel.

6. Respondent's Position

The Designate for the Respondent submitted that drawings for the original permit application showed two washrooms for the subject mausoleum, but that a revision to remove these was later made due to fiscal constraints. He then stated that the OBC does not specifically address the provision of water closets in mausoleums, but that the expectation on the part of visitors to find these types of sanitary facilities still exists, as mausoleums are typically buildings with controlled environments. Furthermore, the Agent submitted that while there are no expectations in an open, outdoor cemetery to have plumbing facilities available, there are within buildings were funeral services are held.

The Designate continued by submitting that the Applicant is proposing to use the sanitary facilities

located in a building 250 m away in lieu of providing water closets in the proposed mausoleum addition. As per the Designate, this is not a reasonable distance for occupants to travel, especially given the mental and physical state that occupants may be in when they are within subject mausoleum. Furthermore, he added that the plumbing facilities may be difficult to access during inclement weather.

The Designate then advised that he believes a travel distance of 250 m is unreasonable, especially since an occupant will have to leave the subject mausoleum, travel a distance of 250 m, and then enter a second mausoleum to access sanitary facilities. He submitted that while he acknowledges that Sentence 3.7.4.1.(3) of the OBC permits the exemption of plumbing fixtures when these are available in a nearby building, he does not believe that a travel distance of 250 m meets the intent of the Code.

In summary, the Designate argued that while the OBC does not specifically address the provision of water closets in mausoleums, there still exists the expectation that these types of sanitary facilities will be provided. He also acknowledged that Sentence 3.7.4.1.(3) of the Code permits the exemption of plumbing fixtures in certain building when these fixtures are provided in a nearby building. Despite this, the Designate submitted that he believes the proposed travel distance of 250 m is excessive for a visitor to travel.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed addition to a Group F, Division 3 occupancy that will not be equipped with water closets will provide sufficiency of compliance with Sentence 3.7.4.1.(3) of the Ontario Building Code at the Westminister Cemetery Mausoleum, 3850 Bathurst Street, Toronto, Ontario, on the condition that:

a) Signage is provided within the subject building, indicating the location of the available washrooms.

8. Reasons

i) There is no dedicated space for entombment services to be conducted within the subject building, thereby reducing the likelihood of large funerary services, which may necessitate the need for washroom facilities.

ii) The Applicant is proposing an addition to an existing building, which currently does not have a sanitary drainage system.

iii) There are water closets provided in an existing mausoleum, which is also located on this cemetery property.

Dated at Toronto this **28th** day in the month of **August** in the year **2003** for application number **2003-41**.

Tony Chow, Vice-Chair

Robert De Berardis

Gary Burtch



Ruling No. 03-33-931
Application No. 2003-32

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 7.2.2.5.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Arash Beheshti, Concord Adex Development Corporation, for the resolution of a dispute with Ann Borooah, Chief Building Official, City of Toronto, to determine whether the as-installed fixture drainage outlets in the lavatories of a Group C occupancy comply with Sentence 7.2.2.5.(1) of the Ontario Building Code, at the Optima Condominium Tower, 65 Navy Wharf Court, Toronto, Ontario.

APPLICANT	Arash Beheshti Concord Adex Development Corporation Toronto, Ontario
RESPONDENT	Ann Borooah Chief Building Official City of Toronto
PANEL	Tony Chow, Vice-Chair Robert De Berardis Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	August 28, 2003
DATE OF RULING	August 28, 2003
APPEARANCES	Allan Larden Larden Muniak Consulting Inc. Toronto, Ontario **Agent for the Applicant** Dave Deonarine Manager, Inspections, South District City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

Arash Beheshti, Concord Adex Development Corporation, has received an order to comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, to remedy certain alleged deficiencies with respect to the construction of a Group C occupancy referred to as the Optima Condominium Tower at 65 Navy Wharf Court, Toronto, Ontario.

2. Description of Construction

The Applicant has constructed a Group C residential high-rise condominium. The structure is 34 storeys in building height and approximately 1,750 m^2 in building area. The building is comprised of non-combustible construction and is equipped with sprinkler, fire alarm, and standpipe and hose systems.

The item particular to this dispute involves the drainage outlets that serve the lavatories in the washrooms of the residential units. The lavatories in question have not been provided with overflow drains, nor are they installed with grid drains. Instead, the disputed lavatories are currently fitted with standard fixture drainage outlets, which include mechanical, pop-up style stoppers.

A grid drain is generally described as a draining device equipped with a flat grid located at its uppermost point where the water exits the lavatory basin and enters the drain. Grid drains are specifically intended not to be equipped with plugs, mechanical stoppers or blockers of any type. "Centre outlet waste fitting" is a trade term used by some in the plumbing industry to refer to grid drains. Grid drains and centre outlet waste fitting are not defined terms in the Ontario Building Code (OBC).

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-installed fixture drainage outlets in the lavatories of a Group C occupancy comply with Sentence 7.2.2.5.(1) of the Ontario Building Code (OBC).

Sentence 7.2.2.5.(1) of the OBC mandates that a lavatory that does not have an overflow must be equipped with a centre outlet waste fitting. The intent of this Sentence is to minimize the impact of damage should overflowing occur, especially within high-rise units. The premise of this Sentence is to require installation of drain fittings that would be less likely to get plugged. At issue, is whether the as-installed drain fittings, which are not grid drains, meet the definition of "centre outlet waste fitting" found in OBC.

Also germane to the dispute at hand is Article 1.1.3.1. of the Code, which addresses non-defined terms. This Article notes that phrases and words which are not defined in the Code are to assume the meaning most commonly assigned to them in the context in which they are used in the Code, while also taking into account the specialized use of terms with the various trades and professions to which the terminology applies. The intent of this Article is to clarify that some of the words and phrases used in the OBC do not require explicit definition, since they are specialized terms used within various trades and professions. Article 1.1.3.1. is significant to the issue at dispute because, there is no definition of "centre outlet waste fitting" in the Code. This means that the Commission must, in its consideration of this matter, rely upon the commonly assigned meaning and specialized trade use of the words "centre outlet waste fitting" in order to determine whether the disputed drain fittings comply with Sentence 7.2.2.5.(1) of the OBC.

4. Provisions of the Ontario Building Code

7.2.2.5. Lavatories

(1) A lavatory that does not have an overflow shall be equipped with a centre outlet waste fitting.

5. Applicant's Position

The Agent for the Applicant began by submitting that the issue at dispute pertains to the drainage outlets that have been installed in the lavatories of the subject Group C occupancy. He submitted that the lavatories in question have not been provided with overflows and are equipped with mechanical pop-up style drain fittings. The Agent explained that the dispute arose because the Respondent party is of the opinion that the as-installed drain fittings do not comply with Sentence 7.2.2.5.(1) of the Code, which requires that a lavatory without an overflow be equipped with a "centre outlet waste fitting".

The Agent continued by advising that the term "centre outlet waste fitting" is not defined in the Code and that, furthermore, there is nothing in the term that would lead a Code reader to believe that a conventional drain is unacceptable when fulfilling the requirements of Sentence 7.2.2.5.(1). He then argued that, when taken apart, the definition of the term "centre outlet waste fitting" does not imply that a conventional drain does not fall within its meaning. The Agent submitted, when taken literally, the term "centre" means in the middle, the term "outlet" means a device where water comes out of, the term "waste" means water that has been used, and the term "fitting" means a device that is tightly adhered. In this regard, he maintained that the term simply means a tightly adhered drainage outlet located in the centre of a lavatory where used water passes through. The Agent stated that this literal definition does not exclude a conventional drain.

The Agent then submitted that, as per Article 1.1.3.1. of the Code, non-defined terms are to have the meanings that are commonly assigned to them in the context in which they are used in the Code, taking into account the specialized use of terms with the various trades and professions to which the terminology applies. With this in mind, the Agent stated that he conducted an informal survey of three consulting mechanical engineers and one retail plumbing supply shop in order to gauge professional and trade understanding of the term "centre outlet waste fitting". He submitted that the results from his survey indicate that there are some inconsistencies with regards to the definition of "centre outlet waste fitting" and what this device is intended for. The Agent argued that this ambiguity amongst even those in the trades and professions can very well exist amongst average readers of the Code.

Finally, the Agent argued that there are several residential high-rise developments in the City of Toronto that have lavatories without overflows and which are fitted with standard drain outlets. He submitted that, in his opinion, the Respondent party is being unfair to the Applicant by citing non-compliance of a situation that exists in several other instances.

In summary, the Agent for the Applicant argued that the term "centre outlet waste fitting" is broad, even among those involved in the trades. He submitted that this ambiguity likely exists among average users/readers of the Code. Furthermore, he submitted that the term's elusive meaning does not suggest that a standard drain outlet is unacceptable when applying Sentence 7.2.2.5.(1) of the OBC.

6. Respondent's Position

The Designate for the Respondent submitted that Sentence 7.2.2.5.(1) of the Code clearly states that a

lavatory without an overflow shall be equipped with a centre outlet waste fitting. In this regard, he stated that an order to comply was issued upon discovering the as-installed standard drainage outlets in the lavatories of the subject high-rise building. As per the Designate, two methods for achieving compliance were identified on the order: i) provide lavatories with overflows or ii) replace drain with a centre outlet waste fitting.

The Designate continued by stipulating that he began noticing lavatories without overflows in the mid-to-late 1990s and contacted the Ministry of Municipal Affairs and Housing's Building and Development Branch to obtain their opinion on the matter. The Designate noted that the opinion offered by the Building and Development Branch identified "centre outlet waste fitting" as a trade term, which manufacturers specify to be a grid drain for use in washbasins without overflows.

As identified by the Designate, centre outlet waste fittings are required in lavatories that are not equipped with overflows, because there are relatively fews methods of clogging the device, unless one were to place tape over the grid or block it with a rag. In this regard, a lavatory that is equipped with a centre outlet waste fitting is less likely to overflow; thereby, minimizing potential damages to other areas of a building.

Finally, the Designate submitted that the City of Toronto's Building Division is required to enforce the requirements of the Code and, therefore, the subject lavatories must be equipped with a centre outlet waste fitting, i.e. grid drain. The Designate stated that, simply put, the City of Toronto's Building Division is striving for compliance with the Code.

In summary, the Designate submitted that Sentence 7.2.2.5.(1) of the Code clearly states that a lavatory that does not have an overflow shall be equipped with a centre outlet waste fitting. He argued that the subject lavatories should either be replaced with those equipped with overflows or retrofitted with centre outlet waste fittings.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-installed fixture drainage outlets in the lavatories of a Group C occupancy comply with Sentence 7.2.2.5.(1) of the Ontario Building Code, at the Optima Condominium Tower, 65 Navy Wharf Court, Toronto, Ontario.

8. Reasons

i) The term "centre outlet waste fitting" is not defined in the Ontario Building Code. The as-installed fixture drainage outlets comply with the literal meaning ascribed to the term "centre outlet waste fitting" and, as such, the Building Code Commission maintains that the as-installed devices conform with Sentence 7.2.2.5.(1) of the Code.

Dated at Toronto this **28th** day in the month of **August** in the year **2003** for application number **2003-32**.

Tony Chow, Vice-Chair

Robert De Berardis

Gary Burtch



Ruling No. 03-31-929
Application No. 2003-38

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.1.13.7.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Steve Trach, Alterra / Barnett, for the resolution of a dispute with George Kotsifas, Acting Chief Building Official, City of Burlington, to determine whether the as-installed combustible plumbing fixtures in a Group C occupancy, which have a Smoke Developed Classification of 375, provide sufficiency of compliance with Sentence 3.1.13.7.(1) of the Ontario Building Code at 2085 Amherst Heights Boulevard, Burlington, Ontario.

APPLICANT	Steve Trach Alterra / Barnett Toronto, Ontario
RESPONDENT	George Kotsifas Acting Chief Building Official City of Burlington
PANEL	Michael Steele, Vice-Chair Fred Barkhouse John Guthrie
PLACE	Toronto, Ontario
DATE OF HEARING	August 7, 2003
DATE OF RULING	September 9, 2003
APPEARANCES	Steve Trach Alterra / Barnett Toronto, Ontario **The Applicant** Terry Hewitson Supervisor of Inspections City of Burlington **Agent for the Respondent**

RULING

1. The Applicant

Steve Trach, Alterra / Barnett, has received an order to comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, to remedy certain alleged deficiencies with respect to the construction of a Group C occupancy located at 2085 Amherst Heights Boulevard, Burlington, Ontario.

2. Description of Construction

The Applicant has constructed a high-rise Group C occupancy building. The structure is seven stories in building height and approximately 2,492 m^2 in building area. In addition to the seven above-grade storeys, the facility includes an underground single storey parking garage. The building is comprised of non-combustible construction and is equipped with a standpipe and hose and fire alarm system. Only the underground parking garage has been equipped with a sprinkler system.

The structure in dispute is considered to be a high building under the Ontario Building Code (OBC), since its floor level is more than 18 m above grade. In fact, the building in question exceeds the height threshold outlined in Subsection 3.2.6. of the OBC by 0.6 metres. Accordingly, as a high building, the construction requirements as per the provisions outlined in Subsection 3.2.6. of the Code are also applicable.

The issue at dispute involves the as-installed combustible plumbing fixtures, which have a smoke developed classification that exceeds the value permitted in Sentence 3.1.13.7.(1) of the Code. As mentioned above, the building at dispute must comply with the flame spread ratings and smoke developed classification values outlined in Sentence 3.1.13.7.(1) of the OBC since it is classified as a high building. In comparison with the smoke developed classification value of 300 outlined in Table 3.1.13.7. of the Code, the as-installed combustible plumbing fixtures, which have a smoke developed classification of 375, are in excess by a value of 75.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-installed combustible plumbing fixtures in a high-rise Group C occupancy, which have a smoke developed classification of 375, provide sufficiency of compliance with Sentence 3.1.13.7.(1) of the Ontario Building Code.

It should be noted that Article 3.1.5.16. of the OBC permits the use of combustible plumbing fixtures, including wall and ceiling enclosures that form part of the pluming fixtures, in buildings required to be of non-combustible construction provided they are constructed of material having a flame-spread rating and smoke developed classification not more than that permitted for the wall surface of the room or space in which they are installed.

Article 3.2.6.1. of the OBC considers residential buildings which have a storey that is more than 18 m above grade to be "high buildings". In high buildings, the interior walls and ceiling finishes are further regulated by Sentence 3.1.13.7.(1) which states that the interior wall, ceiling, and floor finishes in a building regulated by the provisions of Subsection 3.2.6., shall conform to the flame-spread ratings and smoke developed classification values outlined in Table 3.1.13.7. of the Code. From Table 3.1.13.7., a maximum smoke developed classification of 300 for walls and 50 for ceilings is set for bathrooms.

Despite this, Sentence 3.1.13.7.(2) permits the smoke developed classification for walls and ceilings to exceed the maximum values specified in Table 3.1.13.7. when the building does not contain a Group B major occupancy and is provided with a sprinkler system that is electronically supervised in conformance with the provisions outlined in Sentence 3.2.6.4.(1) of the Code. Since the building at dispute contains a Group C occupancy, and is not provided with sprinkler protection, the maximum smoke developed classification values outlined in Table 3.1.13.7. of the Code are applicable to the matter at hand.

4. Provisions of the Ontario Building Code

3.1.13.7. High Buildings

(1) Except as permitted by Sentences (2) and (3), the interior wall, ceiling and floor finishes in a *building* regulated by the provisions of Subsection 3.2.6. shall conform to the *flame-spread rating* requirements in Articles 3.1.13.2. to 3.1.13.6. and to the *flame-spread rating* and smoke developed classification values in Table 3.1.13.7.

5. Applicant's Position

The Agent for the Applicant began by offering a brief description of the construction at dispute, which is an upscale condominium project that consists of two seven-storey towers constructed on a single-storey joined parking garage. The Agent added that the issue at dispute, which pertains to the as-installed combustible plumbing fixtures, only applies to one of the subject buildings located on the property, since only one of the towers is considered a "high building" as defined in Article 3.2.6.1. of the Code. The Agent submitted that the combustible plumbing fixtures in dispute are the as-installed acrylic soaker tubs and shower basins that are featured in the residential suites.

The Agent continued by stating that the Applicant did not know that the combustible plumbing fixtures were a problem until after they had been installed. The Agent added that it was the Designate for the Respondent who discovered that the plumbing fixtures in question have a smoke developed classification that exceeds the value outlined in Article 3.1.13.7. of the OBC. The Agent submitted that following this discovery, the Applicant searched the market to find a soaker tub and shower basin that would comply with the Code's maximum smoke developed classification value of 300. After having completed their search, the Applicant came to realize that there is no product on the market, except for metal fixtures, that meet the maximum smoke developed classification value of 300. The Agent added that the Applicant party was extremely surprised when they learnt that the plumbing fixtures in question were not in compliance with the Code, because these very fixtures have been, and are currently being, installed in almost every residential condominium building constructed in Toronto and the Greater Toronto Area (GTA). As a result, the Agent submitted that the outcome of this hearing before the Building Code Commission will have widespread implications, even though he acknowledged that the decision of the Commission is site specific.

The Agent added that the Applicant does not consider the acrylic tubs and shower basins in question to pose a huge threat with respect to combustibility, because the tubs are protected by a ceramic tile tub skirt that consists of ceramic tiles bonded to a 12.7mm (½") cement board. It is the Applicant's position that this ceramic tub skirt will prevent any fire, occurring outside of the tub, from contacting the soaker tub and thereby resulting in its ignition. Furthermore, the Agent noted that each residential suite is equipped with a fire alarm system that is located within reasonable distance to the bathroom; thereby, enhancing fire protection.

The Agent continued by stating that the Applicant had even tried to alter the grading so that the height of the building would not exceed the 18 m "high building" height threshold; however, the parties could not reach an agreement on this proposal and thus, the notion was abandoned. According to the Agent, the only measures that could be taken to ensure compliance would be to provide sprinkler protection in the building, which would be cost prohibitive, or retrofitting the as-built bathrooms with metal fixtures, which are difficult to install in condominium projects. When asked whether the Applicant would consider installing sprinkler heads only above the soaker tubs and shower basins at dispute, the Agent maintained that anything was possible, but that he felt that this would be extremely intrusive to occupants. The Agent added that the combustible plumbing fixtures should be accepted on the basis that the building only marginally exceeds the height threshold that classifies it as a "high building" and the smoke developed classification value of the combustible plumbing fixtures only marginally exceeds the value outlined in Table 3.1.13.7. of the Code.

In summary, the Agent for the Applicant submitted that there are no combustible plumbing fixtures on the market which comply with the smoke developed classification values outlined in Table 3.1.13.7. of the Code, except for metal fixtures that are both expensive and impractical. The Agent added that he believes that the Applicant has done everything to achieve compliance with the Code, short of retrofitting in metal fixtures.

6. Respondent's Position

The Respondent submitted that the building permit for the structure at dispute was issued on November 30th, 1999 and that construction was completed in 2002. At that time occupancy was permitted in the building despite the fact that the soaker tubs and shower basins were listed as a deficiency. The Respondent stated the flame spread rating of the as-installed soaker tubs and shower basins complies with Code requirements and that it is only the smoke developed classification value that is an issue. The Respondent submitted that the acrylic soaker tubs and shower basins in question do not have a smoke developed classification value that is less than or equal to the requirements of Article 3.1.13.7. of the Code and, as such, are clearly in contravention with the provisions of the OBC.

The Respondent continued by stating that he is aware that the building in question only marginally exceeds the 18 m "high building" height threshold and that he had advised the Applicant to alter the grading by approximately 0.762 m (2.5 ft.) so that the building might be exempted from the high building requirements found in Subsection 3.2.6. of the Code. The Respondent added that he had also suggested as an alternative that sprinkler protection be provided throughout the entire building, which would, in turn, relieve the Applicant party from the issue at dispute. He continued by stating that, to date, the Applicant party has not acted on this suggestion.

The Respondent maintained that he is cognizant of the fact that the combustible plumbing fixtures at dispute have been, and are presently being, installed in many condominium projects across the City of Toronto and the wider GTA. Despite this, the Respondent argued, that it is the mandate of the City of Burlington's Building Department to ensure that the provisions of the OBC are enforced. As such, the Respondent stated that the Code does permit the use of combustible plumbing fixtures in "high buildings" as long as the fixtures in question comply with the flame-spread rating and smoke developed classification values outlined in Table 3.1.13.7. of the Code. The Respondent noted, however, that the combustible plumbing fixtures at dispute are clearly in contravention with the Code as the smoke developed classification value exceeds 300. The Respondent submitted that he believes that the City of Burlington does not have the authority to permit this deviation from the technical requirements of the OBC, which explains why this issue was brought before the Building Code Commission.

In summary, the Respondent maintained that the combustible plumbing fixtures in questions are clearly in contravention with the provisions of the OBC. The Respondent party also submitted that the City of Burlington is not a position to permit this deviation from the technical requirements of the Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-installed combustible plumbing fixtures in a high-rise Group C occupancy, which have a smoke developed classification of 375, do not provide sufficiency of compliance with Sentence 3.1.13.7.(1) of the Ontario Building Code at 2085 Amherst Heights Boulevard, Burlington, Ontario.

8. Reasons

i) The subject building is considered a high rise as per Subsection 3.2.6. of the Code and, consequently, Table 3.1.13.7. applies.

ii) No compensating measures were offered by the Applicant party with respect to:

a) The height of the building, which exceeds the height threshold of Sentence 3.2.6.1 of the Ontario Building Code.

b) The Smoke Developed Classification requirements of Sentence 3.1.13.7.(1) of the Ontario Building Code.

Dated at Toronto this **9th** day in the month of **September** in the year **2003** for application number **2003-38**.

Michael Steele, Vice-Chair

Fred Barkhouse

John Guthrie



Ruling No. 03-28-926
Application No. 2003-30

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 3.1.5.7. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Joe DiCosimo, owner, for the resolution of a dispute with John Castrilli, Chief Building Official, City of Niagara Falls, to determine whether the proposed manufactured mouldings intended for use in a building required to be of non-combustible construction provide sufficiency of compliance with Article 3.1.5.7. of the Ontario Building Code at the Niagara Falls Hilton Hotel, 6361 Fallsview Boulevard, Niagara Falls, Ontario.

APPLICANT	Joe DiCosimo, Owner Hospitality Motel Limited Niagara Falls, Ontario
RESPONDENT	John Castrilli Chief Building Official City of Niagara Falls
PANEL	Len King, Vice-Chair Robert De Berardis Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	July 3, 2003
DATE OF RULING	July 3, 2003
APPEARANCES	Allan Larden Larden Muniak Consulting Inc. Toronto, Ontario **The Agent** Robert Romanuk Building Services Coordinator City of Niagara Falls **Designate for the Respondent**

RULING

1. The Applicant

Joe DiCosimo, Owner, Hospitality Motel Limited, has received an order to comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, to remedy certain alleged deficiencies with respect to the construction of a building referred to as the Niagara Falls Hilton Hotel, 6361 Fallsview Boulevard, Niagara Falls, Ontario.

2. Description of Construction

The Applicant has constructed a hotel that contains both Group A, Division 2 and Group C occupancies. The structure is 35 storeys in building height and approximately 2,300 m^2 in building area. The building is comprised of non-combustible construction and has been equipped with sprinkler, fire alarm, and standpipe and hose systems.

The construction at dispute pertains to the interior moulding profiles that have been installed in the subject building. The moulding profiles in question, known as Trimroc mouldings, consist of an expanded polystyrene (EPS) foam core coated with a glass fibre-reinforced cementitious base layer and plaster liner finish. The Trimroc mouldings have been used at lighting coves on ceilings in public corridors and meeting rooms on the first and second floors of the building. In addition, they have also been used as pilasters on walls of public corridors serving the residential suites.

Specifically, at issue, is the polystyrene core of the subject moulding profiles, which have been identified as a prohibited combustible element in a building that is required to be of non-combustible construction. It should be noted that the moulding profiles in question are similar to other Trimroc mouldings that have been approved by the Building Materials Evaluation Commission (BMEC).

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed manufactured mouldings intended for use in a building required to be of non-combustible construction provide sufficiency of compliance with Article 3.1.5.7. of the Ontario Building Code (OBC).

Article 3.1.5.7. of the OBC permits the use of combustible millwork in buildings that are required to be of non-combustible construction. Combustible millwork permitted in Article 3.1.5.7. include interior trim, doors and door frames, show windows together with their frames, aprons and backing, handrails, shelves, cabinets, and counters. As previously indicated, the as-installed moulding profiles have been used as interior trim in the subject building, specifically as lighting coves on ceilings and as pilasters on walls of public corridors.

Similar mouldings manufactured in exactly the same manner were recently approved by the BMEC (see Authorization #03-02-281). Although some Trimroc moulding profiles have been granted BMEC approval, the Applicant has installed other profiles which have not been reviewed or authorized by the BMEC. Specifically, the as-installed moulding profiles are larger than those approved by the BMEC and have been installed at locations that have not been identified in the Specific Terms and Conditions of Authorization #03-02-281. At issue therefore is whether the moulding profiles at dispute, which are not recognized as a combustible material permitted in a noncombustible building under Article 3.1.5.7., and which are not specifically authorized under the BMEC, may be used in the subject hotel.

4. Provisions of the Ontario Building Code

Article 3.1.5.7. Combustible Millwork

(1) *Combustible* millwork including interior trim, doors and door frames, show windows together with their frames, aprons and backing, handrails, shelves, cabinets and counters is permitted in a *building* required to be of *noncombustible construction*.

5. Applicant's Position

The Agent for the Applicant began by offering a brief overview of the structure at dispute. He submitted that the subject building is a 35 storey hotel which is fully sprinklered. As indicated by the Agent, the issue at dispute pertains to the interior moulding profiles that have been installed at various locations throughout the building. He advised that these moulding profiles, known as Trimroc mouldings, are manufactured by Canamould Extrusions Inc. (Canamould) and that three different profiles have been used. As per the Agent, the profiles in question have been used at lighting coves on the ceilings in the public corridors and in meeting rooms on the first and second floors of the building. He also advised that they have been used as pilasters on the walls of public corridors serving the residential suites.

The Agent continued by submitting that the Respondent party objected to the use of the Trimroc moulding on the basis that its polystyrene core is not identified in Article 3.1.5.7. of the Code as an allowable element in a building required to be of noncombustible construction. As a result, Canamould applied to the Building Materials Evaluation Commission (BMEC) for an authorization that would allow Trimroc, as an innovative product, to be installed as interior elements in buildings required to be of non-combustible construction. As part of the BMEC approval process, certain Trimroc products were subject to the ASTM E84 flame-spread and UL 1715 room burn tests at Underwriters' Laboratories of Canada (ULC) and performed successfully. The BMEC subsequently authorized the installation of the specific Trimroc profiles that were tested, provided that such products cover not more than 10% of the wall or ceiling on which they are installed.

The Agent then advised that the subject dispute at hand arose because the City of Niagara Falls has indicated that they will not accept the BMEC authorization for Trimroc as a basis for accepting the moulding profiles at dispute. As per the Agent, this is due to the fact that the as-installed profiles are not the specific profiles that were tests at ULC, and consequently authorized by the BMEC.

The Agent argued that, in his opinion, sufficiency of compliance has been met, because successful testing on Trimroc moulding has been conducted; albeit, not particularly on those profiles at dispute. He also submitted that the profiles in question are thinner than those tested at ULC and coverage on surface areas is a fraction of the condition stipulated under the BMEC authorization. As per the Agent, the profiles in question cover no more than 3.5% of the surface area on which they have been installed. In addition, the Agent argued that the building is entirely sprinklered thereby minimizing the impacts associated with the as-installed moulding profiles.

In summary, the Agent for the Applicant argued that sufficiency of compliance with Article 3.1.5.7. of the Code has been met because successful testing has been conducted on similar profiles, the moulding profiles in question are limited in their application, and the building is fully sprinklered.

6. Respondent's Position

The Designate for the Respondent submitted that the City of Niagara Falls looks to formal product approvals when approving materials for use in a proposed building. In this case, he submitted that he looked to the BMEC's Authorization when considering the moulding profiles at dispute. As per the Designate, the as-installed moulding profiles do not comply with the BMEC's Authorization in two important respects: location and size.

The Designate then directed the Commission's attention to Item 4 on the BMEC's Authorization, which details the Specific Terms and Conditions under which the tested Trimroc moulding profiles may be used. As detailed by the Designate, the subject moulding profiles installed at the perimeter of the lighting cove openings are not at a location identified in the Specific Terms and Conditions of the BMEC Authorization. He also advised that the size of the subject moulding profiles installed as pilasters in the public corridors serving suites of residential occupancies exceeds the maximum dimensions of the same Specific Terms and Conditions.

In summary, the Designate argued that City of Niagara Falls simply does not feel that the conditions outlined in the BMEC Authorization have been met and, as such, cannot accept the as-installed moulding profiles as a permissible combustible element in a building required to be of non-combustible construction.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed manufactured mouldings intended for use in a building required to be of non-combustible construction provide sufficiency of compliance with Article 3.1.5.7. of the Ontario Building Code at 6361 Fallsview Boulevard, Niagara Falls, Ontario on the condition that:

i) The manufacturer of the mouldings certifies to the Chief Building Official for the City of Niagara Falls that the expanded polystyrene foam (EPS) is in fact a fire retardant, Type II material.

8. Reasons

i) The material is used for a trim application only and does not exceed 3.5% of the surface area involved;

ii) The trim is being used in a fully sprinklered building;

iii) The EPS foam is a Type II EPS fire retardant material;

iv) The cross-sections are fully adhered to fire rated drywall, concrete, or cement board and all other edges and joints are protected by gypsum joint compound.

Dated at Toronto this **3rd** day in the month of **July** in the year **2003** for application number **2003-30**.

Len King, Vice-Chair

Robert De Berardis

Donald Pratt



Ruling No. 03-27-925
Application No. 2003-14

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 9.14.2.1., 9.15.4.6., Sentence 9.20.8.3.(1), Articles 9.23.2.2., 9.23.2.3., 9.23.5.1., 9.23.7.2., 9.27.3.2., 9.33.3.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Peter Popadiuk, owner, for the resolution of a dispute with John Schonewille, Chief Building Official, Town of Grimsby, to determine whether the foundation wall located under the garage of the subject Group C occupancy, which has not been provided with a drainage layer, complies with Article 9.14.2.1. of the Ontario Building Code at 6 Sophie Court, Grimsby, Ontario.

AND IN THE MATTER OF an application by Peter Popadiuk, owner, for the resolution of a dispute with John Schonewille, Chief Building Official, Town of Grimsby, to determine whether the existing north foundation wall of the subject Group C occupancy that measures approximately 26.08 m in length, and which has not been provided with a crack control joint, provides sufficiency of compliance with Article 9.15.4.6. of the Ontario Building Code at 6 Sophie Court, Grimsby, Ontario.

AND IN THE MATTER OF an application by Peter Popadiuk, owner, for the resolution of a dispute with John Schonewille, Chief Building Official, Town of Grimsby, to determine whether the use of wood and grout as an end bearing for certain steel beams located in the basement of the subject Group C occupancy provides sufficiency of compliance with Sentence 9.20.8.3.(1) of the Ontario Building Code at 6 Sophie Court, Grimsby, Ontario.

AND IN THE MATTER OF an application by Peter Popadiuk, owner, for the resolution of a dispute with John Schonewille, Chief Building Official, Town of Grimsby, to determine whether the basement walls in the subject Group C occupancy, which are supported on wood shims that are in contact with the concrete floor provide sufficiency of compliance with Articles 9.23.2.2. and 9.23.2.3.of the Ontario Building Code at 6 Sophie Court, Grimsby, Ontario.

AND IN THE MATTER OF an application by Peter Popadiuk, owner, for the resolution of a dispute with John Schonewille, Chief Building Official, Town of Grimsby, to determine whether the holes drilled in the framing members of the existing Group C occupancy provide sufficiency of compliance with Article 9.23.5.1. of the Ontario Building Code at 6 Sophie Court, Grimsby, Ontario.

AND IN THE MATTER OF an application by Peter Popadiuk, owner, for the resolution of a dispute with John Schonewille, Chief Building Official, Town of Grimsby, to determine whether the bottom plate beneath the bearing wall in the basement, and the sill plate located in the garage of the subject Group C occupancy, provide sufficiency of compliance with Article 9.23.7.2. of the Ontario Building Code at 6 Sophie Court, Grimsby, Ontario.

AND IN THE MATTER OF an application by Peter Popadiuk, owner, for the resolution of a dispute

with John Schonewille, Chief Building Official, Town of Grimsby, to determine whether the installation of flashing forming part of the as-constructed cladding system on the subject Group C occupancy provides sufficiency of compliance with Article 9.27.3.2. of the Ontario Building Code at 6 Sophie Court, Grimsby, Ontario.

AND IN THE MATTER OF an application by Peter Popadiuk, owner, for the resolution of a dispute with John Schonewille, Chief Building Official, Town of Grimsby, to determine whether the central heating and air-conditioning system installed in the subject Group C occupancy provides sufficiency of compliance with Article 9.33.3.1. of the Ontario Building Code at 6 Sophie Court, Grimsby, Ontario.

APPLICANT	Peter Popadiuk 6 Sophie Court Grimsby, Ontario
RESPONDENT	John Schonewille Chief Building Official Town of Grimsby
PANEL	Len King, Vice-Chair Tony Chow Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	July 3, 2003 and November 4, 2003
DATE OF RULING	November 4, 2003
APPEARANCES	Peter Popadiuk, owner 6 Sophie Court Toronto, Ontario **The Applicant** Tom Richardson Sullivan Mahoney Barristers & Solicitors St. Catherines, Ontario **Designate for the Respondent**

RULING

1. The Applicant

Peter Popadiuk, owner, has received a building permit and Order to Comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, and has constructed a residential dwelling at 6 Sophie Court, Grimsby, Ontario.

2. Description of Construction

The Applicant has constructed a Group C single detached dwelling. The structure is two storeys in building height and approximately 290 m^2 in building area. There are eight separate areas of dispute. These are listed below:

9.14.2.1. Foundation Wall Drainage

The construction at dispute involves the portion of the basement foundation wall where the garage of the subject occupancy abuts the dwelling. The wall is described as an interior foundation wall between the attached garage and the subject dwelling. While a drainage layer has been installed on all of the exterior walls of the subject dwelling, it has been omitted on the interior foundation wall in question on the basis that this wall is not exposed to the elements and, thus, exterior sources of moisture.

9.15.4.6. Crack Control Joints

The construction at dispute involves the north foundation wall of the subject occupancy and the omission of a crack control joint for this wall. The as-constructed foundation wall measures approximately 26.08 m in length. As per the provisions of the Ontario Building Code (OBC), a crack control joint shall be provided in a foundation wall that is more than 25 m in length. In this regard, the subject foundation wall exceeds the maximum length for a wall to be constructed without a crack control joint by 1.08 m.

9.20.8.3.(1) Bearing of Beams and Joists

The construction at dispute involves the adequacy of the load bearing material that has been used to support the steel beams located in the basement of the subject occupancy. Certain steel beams have one, or both, ends supported by a poured concrete foundation wall. At the top of these walls, pockets were created to support the ends of the steel beams. To level out these ends, sections of 2 x 4 wood studs were placed under the steel beams and then packed with grout. As such, the load of the beams is supported by wood and grout.

The Respondent, through an Order to Comply, has indicated that the current situation needs to be rectified and has provided two methods of achieving compliance: i) provide a professional engineer's review of the end bearings for the steel beams, or, ii) provide protection for the wood. The Applicant is of the opinion that the recommendation of providing protection for the wood is inappropriate and will not provide assurance with respect to the wood and grout performing as an adequate load bearing material.

9.23.2.2. and 9.23.2.3. Protection from Decay and Dampness

The construction in dispute involves the basements walls in the subject occupancy that are supported on wood shims, which are in direct contact with the concrete floor. As per the provisions of the OBC,

wood framing members, which are in direct contact with concrete, shall be pressure treated with a wood preservative or shall be separated from the concrete by polythylene film or Type S roll roofing in order to provide protection from decay and dampness. The wood shims in question have not been provided with a wood preservative or protective layer as identified in the Code.

9.23.5.1. Holes Drilled in Framing Members

The construction at dispute pertains to the dimensions of the holes that have been drilled into the framing members of the subject occupancy. Specifically at dispute are the size of the holes that have been drilled into the floor joists to provide for the passage of certain heating ducts. The Applicant maintains that the holes which have been drilled into the framing members are significantly larger than that permitted by Code. The Respondent party, on the other hand, has identified the framing members at dispute to be "Wood I Joists", which are a pre-engineered product that are not subject to the Code's requirements of cutting, notching, and drilling.

9.23.7.2. Levelling of Sill Plates

The construction at dispute pertains to the adequacy of wood shims as a method of levelling the bottom plate located beneath the bearing wall in the basement and a sill plate located in the garage of the subject occupancy. As required by the Code, sill plates shall be levelled by setting them on a full bed of mortar in situations where the top of the foundation wall is not level. Alternatively, in cases where the top of the foundation wall is level, sill plates may be laid directly on the foundation wall provided the junction between the wall and the sill plate is caulked or the sill plate is placed on a layer of mineral wool. The use of wood shims is not identified as a method of levelling sill plates in the Code.

9.27.3.2. Installation of Flashing

The construction at dispute involves the installation of the flashing, which forms part of the as-constructed cladding system at the subject occupancy. Specifically at issue is the omission of flashing forming part of the as-constructed cladding system, which has not been provided between the foundation and the exterior cladding system, nor around the doors and windows of the subject occupancy.

It should be noted that the as-constructed home has an exterior insulation and finish system (EIFS), as its cladding system. In particular, the specific EIFS system used in the subject home was the Dryvit system, which employs a stucco finish. The Applicant asserts that several deviations from the manufacturer's prescribed EIFS installation method occurred during construction. As a result, the Applicant maintains that the as-installed cladding system, including its flashing details, does not meet the intended level of performance.

9.33.3.1. Interior Design Temperature

The construction at dispute pertains to the adequacy of the as-installed central heating system in the subject occupancy. As per the Applicant, the as-installed heating system is not capable of maintaining an indoor design temperature of 22ºC (72ºF) in two of the rooms found in the dwelling. The OBC stipulates that required heating devices shall be capable of maintaining an indoor air temperature of not less than 22ºC (72ºF) in all living spaces.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-constructed Group C

occupancy complies with Article 9.14.2.1. and provides sufficiency of compliance with Article 9.15.4.6., Sentence 9.20.8.3.(1) and Articles 9.23.2.2., 9.23.2.3., 9.23.5.1., 9.23.7.2., 9.27.3.2., and 9.33.3.1. of the OBC.

The following describes the eight issues at dispute with respect to the as-constructed home at 6 Sophie Court, Grimsby, Ontario:

9.14.2.1. Foundation Wall Drainage

Sentence (1) of Article 9.14.2.1. of the OBC stipulates that drainage shall be provided at the bottom of every foundation wall that contains the building interior, unless it can be shown to be unnecessary. Further to this is Sentence 9.14.2.1.(2), which states that a drainage layer is required to be installed adjacent to the exterior surface of a foundation wall when the insulation on the foundation wall extends more than 900 mm (2 ft 11 in) below the adjacent exterior ground level. Sentence (5) is the exception to Sentence 9.14.2.1.(2) however. It states that the drainage layer may be omitted when the foundation wall is not required to be dampproofed or when the foundation wall is waterproofed. At issue is whether the portion of the basement foundation wall where the garage abuts the house is required to be provided with foundation wall drainage in accordance with Article 9.14.2.1. of the Code.

9.15.4.6. Crack Control Joints

Sentence (1) of Article 9.15.4.6. stipulates that a crack control joint shall be provided in foundation walls more than 25 m (82 ft) long at intervals of not more than 15 m (49 ft. 3 in). As noted earlier, the subject dwelling contains a wall measuring 26.08 m in length and which does not contain a crack control joint.

9.20.8.3.(1) Bearing of Beams and Joists

Sentence (1) of Article 9.20.8.3. requires that the bearing area under a beam is designed in order to carry its intended load. As previously stated, the steel beams located in the basement of the subject dwelling are supported by wood and grout and encased in mortar. The Respondent has provided two proposed methods for achieving compliance: i) provide a professional engineer's review of the steel beams, or, ii) provide protection for the wood. The Applicant is of the opinion that the recommendation of providing protection for the wood is inappropriate and will not provide assurance with respect to the wood and grout performing as an adequate load bearing material. At issue is whether these proposed methods for achieving compliance will provide for an appropriate bearing material for the steel beams in question.

9.23.2.2. and 9.23.2.3. Protection from Decay and Dampness

Sentence (1) of Article 9.23.2.2. of the Code is germane to the issue at dispute. It states that the end of wood joists, beams, and other members framed into masonry or concrete shall be treated to prevent decay where the bottom of the member is at or below ground level. Alternatively, a 12 mm (½ in) air space shall be provided at the ends and sides of the member. In other words, where the bottom of a support member is below ground level, the ends of the member must be treated to prevent decay or the ends and side of the member must be surrounded by an air space to prevent contact with the concrete which could lead to dampness and decay.

Sentence (1) of Article 9.23.2.3. is also relevant as it requires, with certain exemptions not applicable here, that wood framing members, which are not pressure treated with a wood preservative, and that are supported on concrete in contact with the ground or fill, be separated from the concrete by not less than 0.05 mm (0.002 in) of polyethylene film or Type S roll roofing. The purpose of this Code provision is to prevent the wood framing member from decaying, and thus, compromising its structural integrity.

At issue is that the shims supporting the framing members have not been protected through either treatment or physical separation from the concrete.

9.23.5.1. Holes Drilled in Framing Members

Article 9.23.5.1. of the Code provides a description of the holes that are permitted to be drilled in roof, floors, and ceiling members. It states that holes drilled into framing members shall not be larger than one-quarter the depth of the member and shall be located not less than 50 mm (2 in) from the edges, unless the depth of the member is increased by the size of the hole. It should be noted that the size limitations outlined in Sentence 9.23.5.1.(1) apply to conventional wood-frame construction in which the framing members are spaced not more than 600 mm (23 5⁄8 in) o.c. as outlined in Sentence 9.23.1.1. of the Code.

At issue is that the Applicant claims that certain framing members, in particular the floor joists, have oversized holes cut into them to permit the passage of mechanical equipment. Despite this, the Respondent party is of the opinion that the joists in question are not subject to the Code's specifications for cutting, notching, and drilling, since they are a pre-engineered product.

9.23.7.2. Levelling of Sill Plates

Sentence 9.23.7.2.(1) of the OBC outlines the appropriate methods for the levelling of sill plates. As per this provision of the Code, sill plates must be laid in a full bed of mortar in instances where the top of the foundation wall is not level. The purpose for this is to compensate for irregularities in order to reduce air leakage and to provide an even bearing for the supported loads. Alternatively, in instances where the top of the foundation is level, the sill plate my be laid directly on the foundation provided the plate is sealed at the foundation to prevent air leakage as noted.

As previously described, wood shims have been used as a method of levelling the bottom plate located beneath the bearing wall in the basement and the sill plate located in the garage of the subject occupancy. To establish whether the shims in question will adequately transfer the loads to the foundation, an engineering analysis is required since the detail is not within the scope of Part 9 of the OBC. Notwithstanding the structural adequacy of the shims, the space below the sill plates still allows the leakage of air.

9.27.3.2. Installation of Flashing

Article 9.27.3.2. of the Ontario Building Code outlines the appropriate methods for the installation of flashing. As per Sentence 9.27.3.2.(1), flashing shall be installed at every horizontal junction between two different exterior finishes, except where the upper finish overlaps the lower finish. Specifically at issue is the omission of flashing forming part of the as-constructed cladding system, which has not been provided between the foundation and the exterior cladding system, nor around the doors and windows of the subject occupancy.

Regarding the entire cladding system installed at the subject house, it should be noted, however, that the use of EIFS is not governed under the OBC, and is instead regulated under a Ruling of the Minister of Housing, Ruling No. 98-02-052 (12788-R), approving the use of Dryvit outsulation. The purpose of this Ruling is to set out installation requirements and intended performance levels. It should be noted that as a product/system regulated under a Minister's Ruling, Dryvit is considered external to the OBC and, thus, in the view of the Commission is not appealable to the BCC. However, when a material is approved under a Minister's Ruling, other parts of the Code may still apply unless the Ruling specifically addresses the matter. On matters where the OBC still governs, such as in this case regarding the

flashing, these items may be appealed to the BCC.

9.33.3.1. Interior Design Temperature

Sentence 9.33.3.1.(1) of the OBC lists the various indoor air temperatures that a Part 9 building is required to maintain. As detailed in this particular provision of the Code, houses intended for year-round use must be equipped with a heating system capable of maintaining an indoor temperature of 22ºC (72ºF) in all living spaces and unfinished basements. This indoor air temperature is based on outside design temperatures recorded for locations in Ontario and listed in Table 2.5.1.1. of the Code. Since the subject occupancy at dispute is located in Grimsby, Ontario, as per Table 2.5.1.1. the building's heating system must be capable of maintaining an indoor temperature of 22ºC (72ºF) when the outdoor design temperature is -16ºC (3.2ºF). According to the Applicant, there are certain areas within the house to which the heating system cannot maintain an average temperature of 22ºC (72ºF).

4. Provisions of the Ontario Building Code

9.14.2.1. Foundation Wall Drainage

(1) Unless it can be shown to be unnecessary, drainage shall be provided at the bottom of every *foundation* wall that contains the *building* interior.

(2) Except as permitted in Sentences (4), (5) and (6), where the insulation on a *foundation* wall extends to more than 900 mm (2 ft 11 in) below the adjacent exterior ground level

(a) a drainage layer shall be installed adjacent to the exterior surface of a *foundation* wall consisting of

(i) not less than 19 mm (¾ in) mineral fibre insulation with a density of not less than 57 kg/m^3 (3.6 lb/ft^3), or

(ii) not less than 100 mm (4 in) of free draining granular material, or

(b) a system shall be installed which can be shown to provide equivalent performance to that provided by the materials described in Clause (a).

(3) Where mineral fibre insulation, crushed *rock* or other drainage layer medium is provided adjacent to the exterior surface of a *foundation* wall, it shall extend to the footing level and facilitate drainage of ground water to the *foundation* drainage system. (See Appendix A.)

(4) Except when the insulation provides the drainage layer required in Clause (2)(a), when exterior insulation is provided, the drainage layer shall be installed on the exterior face of the insulation.

(5) The drainage layer required in Sentence (2) is not required

(a) when the *foundation* wall is not required to be dampproofed, or

(b) when the *foundation* wall is waterproofed.

(6) The drainage layer in Sentence (1) is only required where the *foundation* wall is constructed after the day this Regulation comes into force.

(7) Where drainage is required in Sentence (1), the drainage shall conform to Subsection 9.14.3. or 9.14.4.

9.15.4.6. Crack Control Joints

(1) Crack control joints shall be provided in *foundation* walls more than 25 m (82 ft) long at intervals of

not more than 15 m (49 ft 3 in).

(2) Joints required in Sentence (1) shall be designed to resist moisture penetration and shall be keyed to prevent relative displacement of the wall portions adjacent to the joint.

9.20.8.3.(1) Bearing of Beams and Joists

(1) The bearing area under beams and joists shall be sufficient to carry the supported load.

9.23.2.2. Protection from Decay

(1) Ends of wood joists, beams and other members framing into masonry or concrete shall be treated to prevent decay where the bottom of the member is at or below ground level, or a 12 mm (½ in) air space shall be provided at the end and sides of the member.

(2) Air spaces required in Sentence (1) shall not be blocked by insulation, *vapour barriers* or air tight materials.

9.23.2.3. Protection from Dampness

(1) Except as permitted in Sentence (2), wood framing members that are not pressure treated with a wood preservative and which are supported on concrete in contact with the ground or *fill* shall be separated from the concrete by not less than 0.05 mm (0.002 in) polyethylene film or Type S roll roofing.

(2) Dampproofing material referred to in Sentence (1) is not required where the wood member is at least 150 mm (5⅞ in) above the ground.

9.23.5.1. Holes Drilled in Framing Members

(1) Holes drilled in roof, floor or ceiling framing members shall be not larger than one-quarter the depth of the member and shall be located not less than 50 mm (2 in) from the edges, unless the depth of the member is increased by the size of the hole.

9.23.7.2. Levelling of Sill Plates

(1) Sill plates shall be levelled by setting them on a full bed of mortar, except that where the top of the *foundation* is level, they may be laid directly on the f*oundation* provided the junction between the *foundation* and the sill plate is caulked or the sill plate is placed on a layer of mineral wool not less than 25 mm (1 in) thick before being compressed. (See also Article 9.23.2.3.).

9.27.3.2. Installation (of Flashing)

(1) Flashing shall be installed at every horizontal junction between 2 different exterior finishes, except where the upper finish overlaps the lower finish.

(2) Except as provided in Sentence (4), flashing shall be applied over exterior wall openings where the vertical distance from the bottom of the eave to the top of the trim is more than one-quarter of the horizontal overhang of the eave.

(3) Flashing shall be installed so that it extends upwards not less than 50 mm (2 in) behind the sheathing paper and forms a drip on the outside edge.

(4) Where a window or exterior door is designed to be installed without head flashing, the exterior flange of the window or door frame shall be bedded into a non-hardening type caulking material and the exterior flange screwed down over the caulking material to the wall framing to form a waterproof joint.

9.33.1.1. **Design and Installation Requirements** (See Appendix A.)

(1) The design and installation of central heating systems including requirements for combustion air, shall conform to the requirements in Part 6 and to this Section.

(2) The design and installation of *air-conditioning* systems shall conform to Part 6.

(3) Repairs, adjustments or component replacements that change the capacity or extent of safety of an existing heating, ventilating or *air-conditioning* system and that alter the method of operation shall conform to this Code.

5. Applicant's Position

9.14.2.1. **Foundation Wall Drainage**

The Applicant began by stating that Delta-MS was used in the construction of the subject occupancy. He noted that the use of Delta-MS in construction is authorized by Minister's Ruling 98-02-052, and is an approved drainage and dampproofing material that is applied against the foundation wall to protect against water that may come into contact with the foundation wall. As per the Applicant, the manufacturer of the Delta-MS membrane (Cosella Dorken Products Inc.) specifies that the material be added to all exterior walls. The Applicant stated that despite the manufacturer's specifications, the builder of the subject occupancy failed to install the material on the portion of the foundation wall running under the attached garage. He added that although it may appear that the omission of a wall drainage membrane below the garage is not a critical issue, it does, in his opinion, compromise the integrity of the sub grade drainage system. In this regard, the Applicant submitted that this omission of a drainage layer has left the basement of the subject occupancy vulnerable to water leakage.

9.15.4.6. **Crack Control Joints**

The Applicant stated that the final grading plan for the subject occupancy indicates the north wall of the home to be 26.08 m in length. He submitted that Article 9.15.4.6. of the Code states that a crack control joint shall be provided in walls that are more than 25 m long at intervals of not more than 15 m. The Applicant stated that despite this, no crack control joint was installed on the subject wall even though it exceeds the required length by 1.08 m. The Applicant also added that in a letter from the Respondent party, dated March 14, 2003, the Respondent states that a crack control joint is not required in a foundation wall if it has been laterally supported. The Applicant then stated that he believes the Respondent party has mistakenly tried to apply the conditions under Article 9.20.10.1. of the OBC (Lateral Support Required) to Article 9.15.4.6.

9.20.8.3.(1) **Bearing of Beams and Joists**

The Applicant submitting that he first noted the deficiency with the steel beam end bearings in question when the subject home was being constructed. At that time he observed that the steel beams were resting on 2 x 4 wood blocks and asked the builder whether the wood would be removed upon completion. As per the Applicant, the builder submitted that the wood shims would be removed; however, upon returning to the home the next day, the entire unit was covered in mortar making it

difficult to decipher whether the wood had, in fact, been removed.

The Applicant then continued by stating he retained an engineering firm to review the subject occupancy once construction was complete. It was during this review that the retained engineering firm exposed a steel beam-bearing pocket and found that the beam was still sitting on a piece of 2 x 4 wood. The Applicant submitted that this was brought to the Respondent party's attention shortly thereafter who, in turn, later issued an Order to Comply to the builder of the subject occupancy. The Applicant then stated that while he believes that the Order to Comply was issued correctly, he disagrees with the remedy proposed by the Respondent party. As he noted, the Order to Comply required either a professional engineer's review of the steel beam end bearings or protection for the wood. The Applicant indicated that he believes that the only suitable method for compliance is to have the wood removed, because, in his opinion, the use of wood and grout is not a suitable bearing for steel beams.

9.23.2.2. and 9.23.2.3. Protection from Decay and Dampness

The Applicant advised that the wood shims, located beneath some of the bearing walls in the basement of the subject Group C occupancy, are situated beneath the polythylene film used to damp proof the sill plate and, therefore, are in direct contact with the concrete floor slab. As such, the Applicant submitted that the wood shims are subject to rotting and are in direct violation of the OBC.

9.23.5.1. Holes Drilled in Framing Members

The Applicant began his submission on the drilled holes in the floor joists of the subject occupancy by referring the Commission's attention to a series of photographs that were included with the original application for a hearing before the Building Code Commission. He submitted that the photos clearly indicate that the holes have been drilled to allow for the passage of heating ducts. The Applicant then stated that he believes that the holes are greater than that which is permitted by the Code in Article 9.23.5.1. He submitted that, in his opinion, the size of the drilled holes severely compromise the integrity (namely, strength and stability) of the framing members, as a significant proportion of the core area of the joists has been removed. When questioned on the exact measurements of the drilled holes at dispute, the Applicant submitted that he was unable to provide precise details, as the subject occupancy is now completely constructed and, as such, the floor joists in question are now concealed by drywall.

The Applicant then continued by stating that the Respondent party, when questioned on the adequacy of the drilled holes at dispute, stated that the floor joists provided in the subject occupancy are not traditional wood joists, but rather "Wood I Joists". As per the Applicant, the Respondent maintained that "Wood I Joists" are a pre-engineered product, which are not subject to the Code's requirements of cutting, notching, and drilling. The Applicant also maintained that the Respondent party directed him to refer to the product's specifications, which permit the joists to be cut and drilled in accordance with pre-approved specifications. The Applicant then submitted that he felt the Respondent's response was ambiguous and questioned how the Respondent party could consider the holes at dispute acceptable.

9.23.7.2. Levelling of Sill Plates

The Applicant directed the Commission's attention to a photograph that depicted the use of wood shims as a method of levelling the sill plate located in the garage of the subject occupancy. As illustrated in the photograph, the Applicant stated that the sill plate located in the garage is not in direct contact with the foundation wall, as required in OBC Article 9.23.7.2., but is rather sitting on wood shims. The Applicant also stated that there are two particular instances where wood shims have been used as a method of levelling the bottom plates located beneath the bearing walls in the basement of the subject occupancy. The Applicant maintained that he believes the use of these shims severely compromises the

integrity of the subject occupancy, especially if they experience dampness and decay.

As further evidence citing his position, the Applicant cited a report authored by 2M Architects, which stated that "the wood shims alter the structural forces on the bottom plate with respect to the masonry base, thus effectively rendering the nature of the single bottom plate into a structural member required to horizontally transmit the load weights to the shims". As per the Applicant, this has resulted in the bottom plate performing a structural function it was not designed or constructed to carry. He concluded by submitting that not only are the shims in direct contact with the concrete foundation, and thereby subject to dampness and decay, but also seriously compromise the integrity of the subject dwelling.

The Applicant continued by stating that he retained an engineering firm to review the structural adequacy of the wood shims in question. As per the engineer's report, the instance of wood shims under a load bearing wall supporting a steel beam is unusual, as the normal practice is to use steel shim plates that have greater load-capacity. The Applicant stated that the engineer's report confirms his belief that the shims are structurally inadequate and maintained that, at a minimum, the shims in question should be provided with dampproofing material.

9.27.3.2. Installation (of Flashing)

The Applicant noted that he decided to use stucco as an exterior cladding for the subject occupancy because that was his wife's preference. He continued by stating that there is an abundance of evidence that suggest there are failures associated with stucco as an exterior cladding. In this regard, the Applicant maintained that he wanted to use a product that had a good reputation and, as such, chose an exterior insulation and finish system (EIFS), known as the stucco Dryvit system. As per the Applicant, the building contract clearly specified that a Dryvit system was to be used.

The Applicant continued by stating that he noticed several cracks in the flashing upon moving into the subject occupancy. As a result of these failures, the Applicant arranged for a Technical Representative from Dryvit to inspect the installation. As per the Applicant, the Dryvit Technical Representative noticed discrepancies between the as-installed cladding system and the standardized Dryvit installation. Specifically, the Dryvit Representative noticed that the contractor did not install a secondary moisture barrier and chose to use nails, not adhesive or screws as required in the specifications. In addition, other materials, accessories and caulking were not used according to specifications. The Applicant then stated that these deviations, identified by Dryvit, were also confirmed by Morrison Hershfield Limited, a consulting engineering firm who, as per the Applicant, specialize in EIFS. Morrison Hershfield Limited also noted that there is no flashing between the foundation and the EIFS, nor around the doors and windows. In this regard, the Applicant maintained that the as-installed cladding does not conform with either the manufacturer's specifications or industry practice.

The Applicant then stated that both the Dryvit analysis and the study conducted by Morrison Hershfield Limited were submitted to the Respondent for his review. The Respondent's reply, in a letter dated March 14th, 2003, advised that the Town of Grimsby Building Department is of the opinion that while the as-constructed system may not have been installed in strict accordance with manufacturer's specifications, there appears to be no evident Code contraventions.

9.33.3.1. Interior Design Temperature

The Applicant began by submitting that the subject occupancy has two rooms that do not receive sufficient heating and air-conditioning as a result of inadequate duct work: i) the ensuite (or master bathroom) and ii) one of the bedrooms. He then stated that temperatures in these rooms are below 15°C in the winter months, even though the house is kept at 22°C.

The Applicant noted that an application for a building permit requires the name of the heating, ventilation, and air conditioning (HVAC) contractor, as well as heat loss calculations and heating verification sheets to be submitted prior to installation of an HVAC system. Furthermore, he advised that the terms of the application state that there must be notification when there is substantial completion of the HVAC and air-contamination extraction equipment. Despite this requirement, the Applicant submitted that none of the aforementioned was completed prior to construction, nor was any inspection of the HVAC system carried out by the Respondent.

The Applicant continued by advising that the Respondent, in a letter dated March 14th, 2003, acknowledges these inadequacies, but submits that compliance with OBC Article 9.33.3.1. is not required. He then concluded by stating that the as-installed HVAC system does not achieve the level of performance expected by the Code.

6. Respondent's Position

9.14.2.1. Foundation Wall Drainage

The Respondent submitted that he does not believe that a drainage layer should be installed on the basement foundation wall under the garage of the subject occupancy, since, in his opinion, the interior wall of the garage is not part of the exterior of the building envelope and, thus, is not subjected to the elements. He stated that, in his opinion, usually a drainage layer is required to address the infiltration of moisture from exterior ground surfaces that are exposed to the elements. In this regard however, the Respondent argued that there is no need for a drainage layer, such as that required for a typical exterior wall, because in this instance the exterior walls of the garage protect the garage floor from exterior sources of moisture.

9.15.4.6. Crack Control Joints

The Respondent advised that the northerly foundation wall of the subject occupancy measures approximately 26.08 m, which includes approximately 17 m of full height basement foundation and an additional 9 m (approx.) of reduced height foundation wall for the garage. He argued that due to the change in height between the full height basement wall and the reduced height garage wall, he is of the opinion that there are two walls: one being the dwelling foundation and the other being the garage foundation. The Respondent then stated that he feels the foundation possesses the necessary characteristics to perform its intended functions and, therefore, a crack control joint is unnecessary due to the intersecting walls.

9.20.8.3.(1) Bearing of Beams and Joists

The Respondent stated that his position on the end bearings for the steel beams in question was simple. He noted that he did, in fact, issue an Order to Comply, which proposed two possible methods for remedying the situation at dispute: i) provide a professional engineer's review of the end bearings for the steel beams, or, ii) provide protection for the wood. The Respondent stated that if the Applicant did not want to provide protection for the wood in contact with the concrete foundation wall then a professional engineer's review of the steel beams end bearing was required. He then went on to state that he felt it was not outside of his purview to request such a report from the Applicant party, as Section 18.-(1)(c) of the Building Code Act states that a municipal inspector may require information from any person concerning a matter relating to a building or part thereof.

9.23.2.2. and 9.23.2.3. Protection from Decay and Dampness

The Respondent submitted that his position on the adequacy of the wood shims, located beneath the load bearing wall in the basement of the subject Group C occupancy, was similar to that of the end bearings for the steel beams, which are also in question. He submitted that while an Order to Comply was not issued on this matter, the Applicant could either provide a professional engineer's review on the adequacy of the wood shims or provide protection for the wood in contact with the concrete floor slab.

9.23.5.1. Holes Drilled in Framing Members

The Respondent began by submitting that it is difficult to determine whether the holes that have been drilled into the floor joists of the subject occupancy are in compliance with the OBC, based on the lack of detailed information with respect to their exact sizing. Furthermore, he stated that the drilled holes in question were not identified as a problem in the inspection report for the subject occupancy and, in this regard, he was not aware of the fact that the drilled holes were an issue.

The Respondent then stated that the floor joists provided in the subject occupancy are not traditional wood joists, but rather "Wood I Joists", which are a pre-engineered product that are not subject to the OBC's requirements for cutting, notching, and drilling. He then continued by stating that in viewing the Applicant's photos, it appears that a 127 mm (5 in) diameter duct passes through a circular hole of approximately 178 mm (7 in) in diameter located roughly 1.2 m (4 ft) from the steel beam support. As per the Respondent, the manufacturer's specifications identify this as an acceptable practice.

9.23.7.2. Levelling of Sill Plates

The Respondent submitted that wood shims were provided under the sill plate located in the garage and under certain bearing walls in the basement of the subject occupancy in order to provide reasonable support to the structure in terms of level walls. He then went on to state that the situation of the shims coming into contact with the concrete floor had been corrected and called upon a witness who confirmed that he did, in fact, attempt to ensure that the shims beneath the sill plate would be protected from dampness and decay. When questioned as to how the shims were protected, the witness submitted that he pulled down the vapour barrier from the bottom of the sill plate and then ran the shims under the sill plate above the vapour barrier so that the vapour barrier separated the shims from the concrete floor slab.

9.27.3.2. Installation (of Flashing)

The Respondent submitted that throughout his review of the documents that have been submitted by the Applicant, with regard to the installation of the Dryvit system, it has not been clearly demonstrated that Code contraventions have been identified. The Respondent then advised that he did not have the opportunity to be on site to witness the installation of the as-installed cladding system, nor was he required to perform any mandatory inspections throughout the process. Furthermore, he added that a more definitive review of the claims of Code infractions is required before it can be determined whether the as-installed cladding system fails to provide sufficiency of compliance.

The Respondent called upon an a witness who was questioned as to whether or not the as-constructed cladding is, in fact, a Dryvit system. The witness submitted that Dryvit products were used, but that the process employed during installation deviated from the Dryvit specifications. He stated that flashing was not installed between the foundation and the EIFS, nor around the doors and windows, as it is not required by the manufacturer.

9.33.3.1. Interior Design Temperature

The Respondent indicated that he was aware of the fact that the Applicant had brought the concerns regarding his HVAC system to his homebuilder's attention. The Respondent advised that he responded to these concerns in a letter addressed to the Applicant, dated March 14th, 2003, in which he stated that a review of the HVAC system had been carried out and changes to the system were made in accordance with Section 6 of the Code and good engineering practices. The Respondent stated that he appended to his March 14th, 2003 letter a copy of the review conducted by A-Plus Air Systems, who were retained to analyze the as-installed HVAC system. The Respondent stated that the review conducted by A-Plus Air Systems outlines actions that were taken to balance the system so that it performed as close to its intended design as possible and, furthermore, suggests additional remedial measures.

The Respondent then called upon a representative from A-Plus Air Systems as a witness to speak to the as-installed HVAC system. The witness submitted that in order to further improve problem areas, and meet design requirements, some round runs would have to be replaced and/or added, some balancing dampers would have to be added, and some registers would need to be replaced. When questioned as to why these additional measures were not carried out, the witness submitted that the home builder advised him not to proceed as a result of contractual disputes with the Applicant party.

The Respondent party concluded by stating that although he acknowledges there is still room for improvement of the as-installed HVAC system, he believes that this is not a technical issue with respect to the requirements of the Code, but, rather, a contractual dispute between the Applicant and the home builder.

7. Commission Ruling

The following are the decisions of the Building Code Commission with respect to the as-constructed Group C occupancy located at 6 Sophie Court, Grimsby, Ontario.

9.14.2.1. Foundation Wall Drainage

It is the decision of the Building Code Commission that the foundation wall located under the garage of the subject Group C occupancy, which has not been provided with a drainage layer, complies with Article 9.14.2.1. of the Ontario Building Code.

9.15.4.6. Crack Control Joints

It is the decision of the Building Code Commission that the existing north foundation wall of the subject Group C occupancy that measures approximately 26.08 m in length, and which has not been provided with a crack control joint, provides sufficiency of compliance with Article 9.15.4.6. of the Ontario Building Code.

9.20.8.3.(1) Bearing of Beams and Joists

It is the decision of the Building Code Commission that the use of wood and grout as bearing for the steel beams located in the basement of the subject Group C occupancy does not provide sufficiency of compliance with Sentence 9.20.8.3.(1) of the Ontario Building Code.

9.23.2.2. and 9.23.2.3. Protection from Decay and Dampness

It is the decision of the Building Code Commission that the basement walls in the subject Group C

occupancy, which are supported on wood shims that are in contact with the concrete floor, does not provide sufficiency of compliance with Articles 9.23.2.2. and 9.23.2.3. of the Ontario Building Code.

9.23.5.1. Holes Drilled in Framing Members

It is the decision of the Building Code Commission that there was insufficient evidence submitted to come to a determination with respect to the whether the holes drilled in the framing members of the existing Group C occupancy provide sufficiency of compliance with Article 9.23.5.1. of the Ontario Building Code.

9.23.7.2. Levelling of Sill Plates

It is the decision of the Building Code Commission that the bottom plate located beneath the bearing wall in the basement and the sill plate located in the garage of the subject Group C occupancy, which are supported on wood shims, do not provide sufficiency of compliance with Article 9.23.7.2. of the Ontario Building Code.

9.27.3.2. Installation (of Flashing)

It is the decision of the Building Code Commission that the installation of flashing forming part of the as-constructed cladding system on the subject Group C occupancy does not provide sufficiency of compliance with Article 9.27.3.2. of the Ontario Building Code.

9.33.3.1. Interior Design Temperature

It is the decision of the Building Code Commission that the central heating and air-conditioning system installed in the subject Group C occupancy, does not provide sufficiency of compliance with Article 9.33.3.1. of the Ontario Building Code.

8. Reasons

9.14.2.1. Foundation Wall Drainage

The soil adjacent to the basement foundation under the garage slab and within the enclosed garage, is not exposed to the elements and, hence, the foundation wall between the basement and garage is not considered an exterior wall. As such, the need to provide a drainage layer is not required.

9.15.4.6. Crack Control Joints

The existing north foundation wall, which measures approximately 26.08 m in length, although in excess of the 25 m requirement outlined in Article 9.15.4.6. of the Code, provides sufficiency of compliance since:

i) The exterior of the existing foundation wall has a drainage layer, which will help prevent the infiltration of water if it cracks; and,

ii) The wall exceeds the maximum length that requires a crack control joint by only 1.08 m or 4.1%.

9.20.8.3.(1) Bearing of Beams and Joists

The compliance order issued March 17th, 2003, by the Town of Grimsby addresses the use of wood to

support the end of the steel beams in the basement or cellar of the as-constructed building at dispute. The engineer's report, which dealt with only one of the beam pockets, confirms the Town of Grimsby's compliance order and recommends a method of repair to comply with the order. The engineer's recommendation is to remove the wood supporting the steel beam and replace it with non-shrink, cementitious grout. The Building Code Commission believes that this method of repair would provide sufficiency of compliance with Sentence 9.20.8.3.(1) of the Ontario Building Code.

9.23.2.2. and 9.23.2.3. Protection from Decay and Dampness

The as-installed wood shims are not protected as described in Articles 9.23.2.2. and 9.23.2.3. of the Ontario Building Code.

9.23.5.1. Holes Drilled in Framing Members

Neither the Applicant, nor the Respondent party, were able to give exact measurements of the holes cut into the floor joists since the subject Group C occupancy is completely constructed and the area in dispute is now concealed by drywall.

9.23.7.2. Levelling of Sill Plates

Sentence 9.23.7.2.(1) of the Ontario Building Code requires that sill plates are levelled on a full bed of mortar. The sill plates for the subject walls are supported on non-compliant wood shims.

9.27.3.2. Installation (of Flashing)

Minister's Ruling #99-07-66 (12874-R) states that the use of Dryvit Outsulation must be in accordance with the CCMC Evaluation Report No. 12874-R. The evidence submitted to the Building Code Commission indicated that the as-constructed Group C occupancy does not comply with CCMC Evaluation Report "CCMC 12874-R" in several respects. Since the system, as installed, is not in accordance with the Minister's Ruling, it must then demonstrate sufficiency of compliance with the applicable requirements of the Ontario Building Code. The evidence presented to the Commission indicates that the flashing requirements as outlined in Article 9.27.3.2. had not been complied with. However, with respect to the other applicable cladding requirements found in the Ontario Building Code, there was insufficient information to determine whether other aspects of the cladding system, apart from the flashing details, provided sufficiency of compliance with the Ontario Building Code.

9.33.3.1. Interior Design Temperature

The evidence that was submitted to the Building Code Commission indicated that bedroom #1 receives no air flow from the heating system. As well, the ensuite bathroom has insufficient air flow based on calculations as per the Applicant's evidence.

The ensuite bathroom to the master bedroom has insufficient air flow based on calculations and cannot be heated to 22°C as per the Applicant's evidence.

Dated at Toronto this **4th** day in the month of **November** in the year **2003** for application number **2003-14**.

Len King, Vice-Chair

Tony Chow

Donald Pratt



Ruling No. 03-26-924
Application No. 2003-27

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 7.1.6.4. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00, 283/01 and 220/02 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ed Applebaum, Montgomery Sisam Associates, for the resolution of a dispute with John Wright, Chief Building Official, Town of Markham, to determine whether the proposed combined water main and combined sanitary main serving the two subject buildings provides sufficiency of compliance with Article 7.1.6.4. at Union Home Society, 4300 Highway No. 7, Markham, Ontario.

APPLICANT	Ed Applebaum Montgomery Sisam Associates Toronto, Ontario
RESPONDENT	John Wright Chief Building Official Town of Markham
PANEL	John Guthrie, Chair-Designate Fred Barkhouse Robert De Berardis
PLACE	Toronto, Ontario
DATE OF HEARING	June 19, 2003
DATE OF RULING	June 19, 2003
APPEARANCES	Leszek Muniak Larden Muniak Consulting Inc. Toronto, Ontario **Agent for the Applicant** Chris Bird Manager of Plans Review Town of Markham **Designate for the Respondent**

RULING

1. The Applicant

Ed Applebaum, Montgomery Sisam Associates, has applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing a care and treatment facility referred to as Unionville Home Society, 4300 Highway No. 7, Markham, Ontario.

2. Description of Construction

The Applicant is constructing a treatment and care facility having a Group B, Division 2 occupancy. The proposed structure is three storeys in building height and approximately 3,851 m^2 in building area.

The construction in dispute involves the proposed installation of a new water service main and sanitary sewer connection intended for the proposed building. The Applicant is proposing to connect the new water and sanitary sewer mains intended to serve the proposed building to existing water and sanitary sewer lines that serve a nearby building located on an adjacent property. The Applicant advises that the two properties are held by the same owner. The Respondent is of the opinion that the proposed connections are not permitted by the Code, since the proposed building is not an ancillary building located on the same property as the existing building that is currently serviced by the existing water and sanitary sewer mains.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed combined water and sanitary mains serving the two subject buildings provides sufficiency of compliance with Article 7.1.6.4. of the Ontario Building Code (OBC).

Sentence (1) of Article 7.1.6.4. of the OBC requires that piping serving a building be connected to the public mains separately from the piping of any another building, unless the subject building is ancillary to another building located on the same property. The purpose of this provision is to minimize the impact of damages if a sewage backup occurs or if a problem arises as a result of servicing/repair of water/sewage mains across property lines. Furthermore, this Code provision is intended to ensure that each property owner is responsible for the repair of his/ her own sewers and water services.

The Appendix note to this Sentence (A-7.1.6.4.), while not an official part of the OBC, offers an alternative to this Code provision. As per A-7.1.6.4., the interconnection of exterior piping serving buildings located on the same property is permitted when the connection is registered on the land titles with the local authority and an agreement has been reached with all interested parties.

4. Provisions of the Ontario Building Code

7.1.6.4. Separate Services

(1) Piping in any *building* shall be connected to the public services separately from piping of any other *building*, except that an ancillary *building* on the same property may be served by the same service. (See Appendix A.).

(2) No *plumbing* serving a *dwelling unit* shall be installed under another unit of the *building* unless the

piping is located in a tunnel, pipe corridor, common basement or parking garage, so that the piping is *accessible* for servicing and maintenance throughout its length without encroachment on any private living space, but this Sentence does not prevent *plumbing* serving a unit located above another unit from being installed in or under the lower unit.

5. Applicant's Position

The Agent for the Applicant began by directing the Commission's attention to a survey plan of the property upon which the subject building is located. He stated that this property is part of a larger 18 acre holding all owned by the same owner, Unionville Home Society, but that the lots were severed in order to obtain more favourable mortgage rates. The Agent advised that the existing building, known as the Wyndham Garden Apartments, is located on an adjacent lot within the same property holding. He submitted that the issue at dispute pertains to the Applicant's desire to connect a new water main and sanitary sewer line, which will serve the proposed building, to the existing water main and sanitary sewer line serving the Wyndham Garden Apartments. This will result in combined service mains serving two buildings that will cross severance lines.

The Agent continued by advising that the proposed combined service connections are understood to be only a temporary measure until the municipality constructs new water and sewage mains along Highway No. 7., at which time the services will be likely reconfigured. He then followed this by submitting that he does not know when the municipality intends on constructing this new water main and sewage line.

When questioned as to the deeds for the property, the Applicant advised that there are two separate names registered on the titles: i) Unionville Home Society and ii) Wyndham Garden Apartments. Despite this, the Applicant maintained that the Unionville Home Society is the sole owner of the entire 18 acre parcel of land in question. The Applicant also added that Unionville Home Society has no intention of selling any of the land and reiterated that the lots were severed for financial purposes only. The Agent then interjected and stipulated that, although the deeds regard the subject land as consisting of separate lots, the Applicant's proposal meets the intent of the Code as the subject property is entirely under the ownership of the Unionville Home Society.

In summary, the Agent argued that the proposal meets the intent of the Code, as the lots in question are all under the same ownership. Furthermore, he argued that the proposal is only a temporary connection that will likely be reconfigured once the municipality constructs new water and sewage mains along Highway No. 7.

6. Respondent's Position

The Designate for the Respondent submitted that, in his opinion, the Applicant's proposal does not conform to Sentence 7.1.6.4.(1) of the Ontario Building Code, which requires the piping serving any building to be connected to the public mains separately from piping of any other building except for an ancillary building located on the same property. The Designate argued that, based on the language of the Code, the Applicant's proposal does not comply with Sentence 7.1.6.4.(1), as the proposed building is not ancillary to the existing one and the buildings are technically located on separate lots.

The Designate continued by submitting that the Appendix note to Sentence 7.1.6.4.(1) [A-7.1.6.4.] elaborates on this provision by stating that the exterior piping of buildings located on the same property may be interconnected if they are registered on the land titles with the local authority and an agreement has been reached by all parties. The Designate added that he does have some reservations with respect

to this Appendix note because, although the easement agreement would run with the land for perpetuity, the subject lots could still be individually sold at any given time. He submitted that if this were to occur, he could foresee legal disputes arising between the property owners should a problem were to arise with the combined service connection. As per the Designate, although registering the combined connection may be an option, there is still no guarantee in determining liability when there are new property owners.

In response to the argument made by the Applicant with respect to the proposed connection being "temporary" in nature, the Designate advised that has no guarantee that the services will be reconfigured when the municipality does, in fact, construct new water main and service lines along Highway No. 7. Furthermore, he submitted that the proposed construction is scheduled to occur anywhere from 3-10 years into the future, which is not a "temporary" connection in his opinion.

In summary, the Designate submitted that he does not believe that the Applicant's proposal to provide a combined service connection complies with Sentence 7.1.6.4.(1) of the Code, because the buildings in question are located on separately owned lots. Furthermore, he added that although Appendix A-7.1.6.4. permits the interconnection of exterior piping serving buildings located on the same property, this easement must be registered on title and does not address situations which may occur if the individually owned lots are sold in the future.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed combined water and sanitary mains serving the two subject buildings does not provide sufficiency of compliance with Article 7.1.6.4. at Union Home Society, 4300 Highway No.7, Markham, Ontario.

8. Reasons

i) Sentence 7.1.6.4.(1) of the Ontario Building Code requires that piping in any building not be connected to piping of any other building except in the case of an ancillary building on the same property.

Dated at Toronto this **19th** day in the month of **June** in the year **2003** for application number **2003-27**.

John Guthrie, Chair-Designate

Fred Barkhouse

Robert De Berardis

Ruling No. 03-22-920
Application No. 2003-21

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.8.3.3. (5) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Shaune Lawton, Sunbeam Residential Development Centre, for the resolution of a dispute with Jim Witmer, Chief Building Official, City of Kitchener, to determine whether 24 hour per day staffing at the subject group homes offered in lieu of automatic door openers provides sufficiency of compliance with Sentence 3.8.3.3.(5) of the Ontario Building Code at 2749 Kingsway Drive, Kitchener, Ontario.

APPLICANT	Shaune Lawton Sunbeam Residential Development Centre Kitchener, Ontario
RESPONDENT	Jim Witmer Chief Building Official City of Kitchener
PANEL	Michael Steele, Vice-Chair Robert De Berardis Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	May 15, 2003
DATE OF RULING	May 15, 2003
APPEARANCES	Rick Reichard Snider Reichard March Architects Waterloo, Ontario **Agent for the Applicant** Lynn Balfour Building Code Specialist City of Kitchener **Designate for the Respondent**

RULING

1. The Applicant

Shaune Lawton, Executive Director, Sunbeam Residential Development Centre, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing two group homes at 2749 Kingsway Drive, Kitchener, Ontario.

2. Description of Construction

The Applicant is constructing two group homes having Group B Division 3 occupancies. Building 'A' is one storey in building height and approximately 474 m^2 in building area. Building 'B' is also one story in building height and is approximately 470 m^2 in building area. Both buildings are comprised of combustible construction and will be equipped with a sprinkler system.

The construction in dispute involves the requirement of power door openers for the operation of the front entry of the proposed buildings. The Applicant has proposed that the use of power door openers presents a hazard, because residents would be capable of physically activating the opening devices and then possibly leaving the facilities unnoticed or unattended. This would be a dangerous occurrence, because the proposed buildings will house some individuals with profound mental and physical disabilities. The Applicant is seeking relief from this requirement on the basis that there is sufficiency of compliance due to the 24 hour staffing that will be provided at the subject group homes.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the 24 hour per day staffing at the subject residential care facilities offered in lieu of automatic door openers provides sufficiency of compliance with Sentence 3.8.3.3.(5) of the Ontario Building Code (OBC).

Article 3.8.1.2. of the OBC requires that buildings of Group B Division 3 occupancy be provided with *barrier-free* entrances. As defined in the Code, *barrier-free* means that a building and its facilities can be approached, entered, and used by persons with physical or sensory disabilities. Sentence (5) of Article 3.8.3.3. provides some of the construction requirements in order to fulfill the barrier-free standards mandated in Article 3.8.1.2. of the OBC. Specifically, it requires that buildings of Group B, Division 2 or 3 major occupancy, be equipped with a power door opener. The intent of this sentence is to provide freedom of movement for disabled individuals, so that they are not required to depend on assistance when accessing the building.

The Appendix to Sentence 3.8.3.3(5), while not formally part of the OBC, provides useful information regarding the application of the Sentence at hand. It states that; "[d]oors equipped with a power operator activated by a pressure plate identified with the international symbol for accessibility or, where security is required, by a key, card or radio transmitter, and that can otherwise be opened manually meet the intent of the requirement".

To achieve sufficiency of compliance with the Code, the Applicant has submitted that 24 hour staffing will be implemented at the proposed buildings to provide the proper supervision and to assist residents when entering and exiting the buildings. The Applicant has also added that the appropriate rough-ins are being made for the possible installation of automatic door openers should circumstances change in the future.

4. Provisions of the Ontario Building Code

3.8.3.3. (5) Doorways and Doors

(5) Except as permitted in Sentence (7), the door for the entrance described in Article 3.8.1.2. shall be quipped with a power door operator in

(a) *hotels*,
(b) *buildings* of Group B, Division 2 or 3 *major occupancy*, and
(c) *buildings* of Group A, D or E *major occupancy* having more than 300 m^2 (3,230 ft^2) in *building area*.

(See Appendix A.)

5. Applicant's Position

The Agent for the Applicant began by submitting that Sunbeam Residential Development Centre provides care for individuals with some of the most profound mental and physical disabilities. The Agent advised that it is Sunbeam's objective to enhance the quality of their clients' lives by trying to normalize their existence to the greatest extent possible. According to the Agent, Sunbeam's mandate of providing clients with a homelike environment has had a good degree of success in improving the quality of life experienced by these individuals. The Agent added, however, that providing clients with a homelike environment has often caused situations of conflict with the general intent of the OBC.

The Agent stated that he believes the application of power door operators is inappropriate in this particular case due to the nature of the proposed buildings, which are intended as residences for those with physical and mental disabilities. The Agent added that the proposed buildings are not public buildings, but rather private residential occupancies that will serve private clients. The Agent continued by submitting that he regards the intent of Sentence 3.8.3.3.(5) of the OBC as noble and well warranted in cases where a physically adept person needs assistance. He added that the clients who will live in the proposed facilities do not have the cognitive ability to open a door and will therefore always need assistance when entering and exiting the buildings. The Agent coupled this with the fact that there will be full staffing on site at all times and that he believes the application of Sentence 3.8.3.3.(5) of the OBC, which is more suitable to a commercial use, is not called for in these residential environments.

The Agent also submitted that Sunbeam staff has occasionally experienced difficulties when integrating its clients into so-called "community living". The Agent added that Sunbeam has always educated new neighbours on their proposals, the designs of the houses, and the numerous safety features contained therein. Despite these attempts, the Agent argued that Sunbeam still faces certain community pressures regarding the appearance of their residential care facilities. The Agent added that one of the primary

concerns that community members have with the proposed buildings are the entrance doors. The Agent argued that the installation of power door openers would make the proposed buildings look less residential and might not be popular with community members.

In summation, the Agent argued that the application of power door openers in the proposed buildings would present itself to be more of a hazard then an assistance. He reiterated that 24 hour staffing at the proposed buildings would provide the proper supervision and would also assist residents and visitors when entering and exiting the buildings. Lastly, the Agent added that the appropriate rough-ins for the installation of power door operators have been made should circumstances change in the future.

6. Respondent's Position

The Designate for the Respondent submitted that Sentence 3.8.3.3.(5) of the OBC mandates that the main entrance doors of the proposed buildings be equipped with a power door operator and furthermore, that buildings of B3 occupancy are not listed as exemptions from this provision. The Designate added that the City of Kitchener is not in a position to determine the validity of applying Sentence 3.8.3.3.(5) to the proposed buildings. The Designate stated that she could envision a scenario where the use of a power door operator in the subject buildings would be needed (e.g. when an individual in a wheelchair visited the buildings). The Designate reiterated that the City of Kitchener is only in the position to enforce the provisions of the OBC and not to determine whether provisions can be exempt in certain applications.

The Designate concluded by stipulating that she sympathizes with the Applicant's position, but that it is not the City of Kitchener's jurisdiction to determine whether the provisions of the OBC should or should not be applied in the proposed buildings. The Designate also stated that she recognizes that there may be security issues with a power door operator (e.g., individuals being able to easily enter and exit the proposed buildings).

7. Commission Ruling

It is the decision of the Building Code Commission that the 24 hour per day staffing at the subject group homes offered in lieu of the automatic door openers provides sufficiency of compliance with Sentence 3.8.3.3.(5) of the Ontario Building Code at 2749 Kingsway Drive, Kitchener, Ontario.

8. Reasons

i) The facilities require controlled access and staff is available to operate the entrance doors when required.

ii) The front doors are equipped with door bells that are hard wired with audible signals located centrally within the residences.

Dated at Toronto this **15th** day in the month of **May** in the year **2003** for application number **2003-21**.

Michael Steele, Vice-Chair

Robert De Berardis

Gary Burtch



Ruling No. 03-16-914
Application No. 2003-08

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.8.8.2.(4) and Article 9.8.8.5. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by John Kuiack, Wasko Development, for the resolution of a dispute with Rocky Cerminara, Chief Building Official, City of London, to determine whether the as-built stair guard constructed to a height of 819.2 mm as measured vertically above the stair nosings and built in accordance with Sentence 9.8.8.2.(4) of the Ontario Building Code (OBC) complies with the intent of OBC Article 9.8.8.5. to reduce the likelihood of climbing, and whether the same guard with semi-circular elements measured at 698.5 mm above the stair nosings provides sufficiency of compliance with Article 9.8.8.5. of the OBC at 99 Fitzwilliam Boulevard, City of London, Ontario.

APPLICANT	John Kuiack Wasko Development London, Ontario
RESPONDENT	Rocky Cerminara Chief Building Official City of London
PANEL	Bryan Whitehead, Vice-Chair John Guthrie Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	May 1, 2003
DATE OF RULING	May 1, 2003
APPEARANCES	Carl Roes Roes Stair Co. Inc. Mt. Brydges, Ontario **Agent for the Applicant** Dave Howe **(Via Teleconference)** Manager of Inspections City of London **Designate for the Respondent**

RULING

1. The Applicant

John Kuiack, Wasko Development, has received an order to comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, to remedy certain alleged deficiencies with respect to the construction of a dwelling located at 99 Fitzwilliam Boulevard, City of London, Ontario.

2. Description of Construction

The Applicant has constructed a Group C single detached dwelling. The structure is two storeys in building height and approximately 472 m^2 in building area.

The construction in dispute involves the guard serving the interior stairs. The as-installed guard consists of a wood top rail and wrought iron vertical members (hereafter pickets). The pickets have been designed into groups of three, with each group having a decorative cross member towards the upper portion of the guard system. A curved portion, which extends to the wood top rail, has been attached above each horizontal member; thereby, creating a semi-circular/crescent design. The horizontal members are not continuous and do not extend from one group of pickets to the next. Each picket also has a small decorative protrusion at its midpoint.

The as-installed guard at dispute, when measured vertically from a line drawn through the outside edges of the stair nosings to the top of the handrail, extends to a height of 819.2 mm. The semi-circular/crescent element, as described above, extends to a height of 698.5 mm when measured vertically from the tread of the stair.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-built stair guard constructed to a height of 819.2 mm as measured vertically above the stair nosings and built in accordance with Sentence 9.8.8.2.(4) of the Ontario Building Code (OBC) complies with the intent of OBC Article 9.8.8.5. to reduce the likelihood of climbing, and whether the same guard with semi-circular elements measured at 698.5 mm above the stair nosings provides sufficiency of compliance with Article 9.8.8.5. of the OBC at 99 Fitzwilliam Boulevard, City of London, Ontario.

Sentence 9.8.8.2.(4) of the OBC outlines the height requirements for guards serving stairs located within dwelling units. According to this provision, stairs within dwelling units and stairs serving not more than one dwelling unit shall be not less than 800 mm (2 ft 7 in) measured vertically to the top of the guard from a line drawn through the outside edges of stair nosings. Since the guard in dispute measures to a height of 819.2 mm, the as-installed guard has been built in accordance with Sentence 9.8.8.2.(4) of the OBC.

The Appendix to Article 9.8.8.2. (A-9.8.8.2.), while not an official part of the Code, offers a rationale as to the intent of this Code provision, because it explains how minimum height requirements have been established for guards. It states that guard heights are based on the waist heights of average persons; however, they are generally lower in dwelling units because the occupants become familiar with the potential hazards and, more so, because jostling under crowded conditions are less likely to arise in residential settings.

Sentence 9.8.8.5.(1) stipulates that required guards, which serve buildings of residential occupancy, must be designed in such a way so as not to facilitate climbing between 100 mm and 900 mm above the floor or walking surface of the area the guard is protecting. This requirement provides for a non-climbable zone of 800 mm. The 800 mm protected region, beginning 100 mm above the walking surface, is intended to limit the likelihood that a picket, decorative element, or horizontal/near horizontal member, would produce a ladder effect, which could lead to a child climbing over the guard. In the disputed construction, both the handrail of the guard, and the semi-circular/crescent members, are located within non-climbable zone (at heights of 819.2 mm and 698.5 mm respectively).

It should be noted that the issue of the 800 mm protective zone was addressed by a previous decision at the Building Code Commission (Ruling No. 02-40-895), which pertained to the same as-installed guard system in question here. In this previous decision, the Commission ruled that the 800 mm non-climbable zone, in this particular instance, could be measured directly from the level of the walking surface to a total height of 800 mm.

At dispute, therefore, in the case at hand is whether the handrail portion of the guard, located at 819.2 mm above the walking surface of the stair nosings as permitted by Sentence 9.8.8.4.(4) of the OBC, complies with Sentence 9.8.8.5.(1) requiring guard design to prevent climbing, even though the total guard height is considerably less than 900 mm. In other word, can a handrail as part of a guard serving a stair be located within the non-climbable zone stipulated in Sentence 9.8.8.5.(1) and still meet the intent of that provision? Also at dispute is whether the semi-circular/crescent element may facilitate climbing when considering Article 9.8.8.5. and its zone of non-climbability.

4. Provisions of the Ontario Building Code

Sentence 9.8.8.2. Height of Guards

(4) *Guards* for stairs within *dwelling units* and stairs serving not more than one *dwelling unit* shall be not less than 800 mm (2 ft 7 in) measured vertically above a line drawn through the outside edges of stair nosings, and not less than 900 mm (2 ft 11 in) above landings.

(See Appendix A)

Article 9.8.8.5. Design to Prevent Climbing

(1) *Guards* required by Article 9.8.8.1. and serving *buildings* of *residential occupancy* shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2 ft 11 in) above the floor or walking surface protected by the *guard* will facilitate climbing.

(See Appendix A)

5. Applicant's Position

The Agent for the Applicant began by submitting that there seems to be a contradiction between Sentence 9.8.8.2.(4) and Sentence 9.8.8.5.(1) of the Code. He argued that Sentence 9.8.8.2.(4) requires that the height of a guard measures no less than 800 mm when measuring vertically from above a line drawn through the outside edges of stair nosing; whereas, Sentence 9.8.8.5.(1) stipulates that a guard must be designed in such a way so as not to facilitate climbing between 100 mm and 900 mm above the floor or walking surface of the area the guard is protecting. The Agent argued that when considering these two Sentences in conjunction, it appears that Sentence 9.8.8.2.(4) requires a guard to be designed

to a height of 800 mm, while Sentence 9.8.8.5.(1) requires a non-climbable zone that extends to a height of 900 mm, which is 100 mm above the height of the guard required by Sentence 9.8.8.2.(4). The Agent stated that, in this opinion, these two provisions of the Code are clearly at odds with one another.

The Agent continued by asking the Commission whether they would consider the notion of a "sliding" non-climbable zone downwards to the stair nosing, which would maintain the integrity of the 800 mm non-climbable zone outlined in Sentence 9.8.8.2.(4). In this case, the Agent argued that the non-climbable zone should be measured from the imaginary line that runs through the stair nosings to a height of 800 mm, instead of being measured from 100 mm above the tread of the stair to a height of 900 mm. The Agent continued by stating that the integrity of the 800 mm non-climbable zone would still be maintained; however, it would be shifted slightly downwards. If measured in this manner, the handrail of the guard in dispute, which is 819.2 mm in height when measuring vertically above a line drawn through the outside edges of the stair nosing, would be located 19.2 mm above the non-climbable zone and therefore, would be considered in compliance.

Shifting the non-climbable zone in this manner, however, would not address the semi-circular/crescent elements, as these are located 673.1 mm above the walking surface of the tread and therefore situated in the zone of non-climbability. In order to address this issue, the Agent advised the Commission to consider the overall climbability of the guard at dispute. As per the Agent's opinion, the guard does not pose a ladder effect and, therefore, is not very tempting for a child to climb over.

In summary, the Agent for the Applicant submitted that clearly the Code poses a contradiction with respect to the provisions outlined for residential guard design. As a result, he argued that the Commission should consider concessions with respect to the determination of the non-climbable zone. Finally, the Agent advised that it is both his opinion, and the opinion of the Applicant, that the guard in dispute does not provide a hazard with respect to child climbing.

6. Respondent's Position

The Designate for the Respondent submitted that he had two questions that he wanted the Commission to consider. The first of which was whether the semi-circular/crescent element of the guard in dispute poses a hazard with respect to child climbing. The second question, which was intended for the purposes of clarity, pertained to the Commission's opinion with respect to the 800 mm non-climbable zone outlined in Sentence 9.8.8.5.(1) of the Code and whether it can shifted up or down.

The Designate continued by stating that it is the position of the City of London's Building Division that the interior guard in dispute does not comply with Sentence 9.8.8.5.(1) - Design to Prevent Climbing. In his opinion, the semi-circular/crescent element, which is located 698.5 mm above the tread of the stair, could facilitate climbing, because it is located within the non-climbable zone outlined in Sentence 9.8.8.5.(1) of the OBC.

Furthermore, the Designate added that Sentence 9.8.8.2.(4) permits a guard on a stair to be no more than 800 mm in height. When considering Sentence 9.8.8.5.(1), which stipulates that a guard shall be designed so that no member, attachment, or opening, be located between 100 mm and 900 mm above the walking surface the top of the handrail for the guard in dispute is clearly within the non-climbable zone at a height of 819.2 mm. As per the Designate, this again presents a climbable element; thereby, increasing the probability of hazards resulting from the as-installed guard.

In summary, the Designate stated that his position is clear. He maintained that it is the opinion of the City of London's Building Division that the both the semi-circular element and the handrail of the guard

in dispute could facilitate child climbing, as both are located within the non-climbable zone outlined in Sentence 9.8.8.5.(1) of the Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-built stair guard constructed to a height of 819.2 mm, as measured vertically above the stair nosings, and built in accordance with OBC Sentence 9.8.8.2.(4) complies with the intent of Article 9.8.8.5. to reduce the likelihood of climbing at 99 Fitzwilliam Boulevard, London, Ontario.

It is also the decision of the Building Code Commission that the same guard with semi-circular elements measured at 698.5 mm above the stair nosings does not provide sufficiency of compliance with Article 9.8.8.5. of the OBC at 99 Fitzwilliam Boulevard, London, Ontario.

8. Reasons

i) In the BCC's view, the zone of non-climbability between 100 and 900 mm above the walking surface as set out in Article 9.8.8.5. does not need to be fixed at this height and may be moved slightly upwards or downwards as long as the intent of the provision is maintained, i.e., the integrity of the 800 mm zone of non-climbability is not compromised. In the present instance, the Commission holds that the climbable zone can be shifted down to the imaginary line that runs through the stair nosings and therefore the handrail, constructed as part of the subject OBC 9.8.8.2.(4) compliant guard, and measured at 819.2 mm above the stair nosings is considered to comply with the intent of Article 9.8.8.5.

ii) The guard serving a stair, constructed to a height of 819.2 mm, meets and surpasses the prescriptive requirements of OBC Sentence 9.8.8.2.(4), which mandates a minimum height of 800 mm for such guards.

iii) Notwithstanding the above, the subject guard does however contain certain semi-circular elements, the bottom of which are measured at 698.5 mm above the stair nosing. In the BCC's view, these elements represent a possible climbing hazard and are located almost wholly within the 800 mm zone of non-climbability.

iv) No compensatory measures were offered to mitigate the potential climbing hazard presented by the semi-circular elements.

Dated at Toronto this **1st** day in the month of **May** in the year **2003** for application number **2003-08**.

Bryan Whitehead, Vice-Chair

John Guthrie

Donald Pratt



Ruling No. 03-08-906
Application No. 2003-04

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 9.23.17.5., 9.23.17.6. and Article 9.36.2.1.of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Margaret Sisley, owner, for the resolution of a dispute with Neil Donald, Chief Building Official, Township of Muskoka, to determine whether the proposed seasonal boathouse clad with horizontally installed bevelled wood siding and mounted directly onto the framing without the use of a sheathing membrane provides sufficiency of compliance with Article 9.23.17.6. of the Ontario Building Code at 1126-1 Pleasant View Road, Lake Muskoka, Ontario.

APPLICANT	Margaret Sisley, owner Willowdale, Ontario
RESPONDENT	Neil Donald Chief Building Official Township of Muskoka
PANEL	Len King, Vice-Chair Fred Barkhouse Robert De Berardis
PLACE	Toronto, Ontario
DATE OF HEARING	February 20, 2003
DATE OF RULING	February 20, 2003
APPEARANCES	Peter Sisley, Agent Toronto, Ontario **Agent for the Applicant** Henry Hess Building Inspector Township of Muskoka Lakes **Designate for the Respondent**

RULING

1. The Applicant

Margaret Sisley, owner, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing a boathouse located at 1126-1 Pleasant View Road, Lake Muskoka, Ontario.

2. Description of Construction

The Applicant is constructing a boathouse having a Group C occupancy. The proposed structure is two storeys in building height, approximately 60 m^2 in building area, and comprised of combustible construction.

The construction in dispute involves the nature of the wall assembly for the second storey of the proposed structure. This storey is currently used for storage, but it is anticipated that it will be used for seasonal occupation during the summer months at some time in the future. The Applicant wishes, as part of the construction of the second storey, to horizontally mount 16 mm (5/8") rabetted, shiplapped, pre-painted solid wood bevelled siding directly onto the framing of the wall assembly without the use of a sheathing membrane.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed seasonal boathouse clad with horizontally installed bevelled wood siding and mounted directly onto the framing without the use of a sheathing membrane provides sufficiency of compliance with Article 9.23.17.6. of the Ontario Building Code (OBC).

In cases such as the one at hand, where no sheathing is used, Sentence (1) of Article 9.23.17.5. requires that two layers of sheathing membrane be installed beneath the cladding. Sentence 9.23.17.5.(3) permits that one layer of sheathing membrane may be omitted if a single layer of wall sheathing is installed in the wall assembly. However, as the Applicant has not chosen to provide sheathing membranes, Article 9.23.17.6. becomes the relevant OBC provision in dispute.

Sentence (1) of Article 9.23.17.6. provides an exemption to Article 9.23.17.5. in that it permits the sheathing membrane to be omitted beneath cladding where the cladding joints are "formed effectively" to prevent the penetration of wind and rain in conformance with Sentences (2) or (4) of the same Article. Sentence (4), which describes metal siding, is not relevant; however, Sentence (3) is germane. It describes various types of cladding material and the manner in which it should be installed in order to comply with Sentence (1). Sentence 9.23.17.6.(3) adds that the joints described in Sentence (2) should be caulked.

The Appendix to this Article (A-9.23.17.6.), while not an official part of the OBC, provides useful information regarding the case at hand and the application of Article 9.23.17.6. It states that Article 9.23.17.6. only applies to certain types of cladding consisting of very large sheets or panels and it does not apply to material installed in narrow strips, which is intended to look like lapped wood siding. The Appendix goes on to state that; "(s)uch material does not act as a substitute for sheathing membrane

since it incorporates provisions for venting the wall cavity and has many loosely-fitted joints which cannot be counted on to prevent the entry of wind and rain".

It should be noted that, according to Article 9.36.2.1. of the OBC, buildings used or intended to be used as seasonal recreational buildings need not comply with Sections 9.5. to 9.7. and 9.9. to 9.11. of the Code. Although the subject building is intended to serve as a seasonal boathouse, Article 9.36.2.1. provides no relief from the sheathing membrane as required by Subsection 9.23.17. of the OBC.

To achieve sufficiency of compliance with the Code, the Applicant has proposed to provide weathertight joints between the sheets of the solid wood bevelled siding by using shiplapped boards and caulking.

4. Provisions of the Ontario Building Code

9.23.17.5. Sheathing Membranes in Lieu of Sheathing

(1) Except as provided in Article 9.23.17.6., where no sheathing is used, at least 2 layers of sheathing membrane shall be applied beneath the cladding. (See Article 9.23.16.1. and Appendix A.)

(2) All joints in the sheathing membrane required in Sentence (1) shall occur over framing, and the membrane shall be fastened to the framing with roofing nails or staples spaced not more than 150 mm (5⅞ in) along the edges of the outer layer of sheathing paper.

(3) Wall sheathing is permitted to be used in lieu of 1 layer of sheathing membrane required in Sentence (1), and the thickness need not conform to Table 9.23.16.2.A.

9.23.17.6. Face Sealed Cladding

(1) Sheathing membrane is permitted to be omitted beneath cladding when the joints in the cladding are formed to effectively prevent the passage of wind and rain in conformance with Sentence (2) or (4) as applicable.

(2) Cladding consisting of sheets of plywood, hardboard, OSB, waferboard or asbestos cement is considered to meet the requirements of Sentence (1) provided the cladding is applied so that
(a) all edges are directly supported by framing, and
(b) the vertical joints between adjacent sheets are
(i) covered with battens,
(ii) shiplapped, or
(iii) otherwise matched to provide weathertight joints.

(3) Joints between sheets described in Sentence (2) shall be caulked.

(4) Metal siding consisting of sheets of metal is considered to meet the requirements of Sentence where the joints between sheets are of the locked seam type.

9.36.2.1. Exclusions

(1) Except as provided in Articles 9.36.3.1. and 9.36.2.4. and Subsection 9.10.15., *buildings* used or

intended to be used as seasonal recreational *buildings* need not comply with Sections 9.5. to 9.7. and 9.9. to 9.11.

(2) Flooring need not comply with Section 9.30., but tight-fitting floors shall be provided to support the *live* and *dead loads*.

(3) Except as provided in Sentences (4) and (5), thermal insulation, vapour barrier, air-barrier construction, interior finishes, plumbing, heating, mechanical ventilation, *air-conditioning* and electrical facilities, need not be provided, but where any of these are provided, they shall comply with the requirements of this Part.

(4) Where heating and *air-conditioning* are provided, Article 9.33.3.1. need not be complied with.

(5) Where thermal insulation is provided, the minimum thermal resistance of insulation in Table 9.25.2.1. need not be provided.

5. Applicant's Position

The Applicant's Agent submitted that the first storey of the proposed boathouse has been constructed with the use of a sheathing membrane. Despite this, he advised that it is the Applicant's intention to maintain a rustic appearance inside the second storey and that the use of a sheathing membrane would only work to defeat this purpose. Furthermore, the Agent added that several structures located in the area of the proposed boathouse (Lake Muskoka) have been constructed without the use of a sheathing membrane.

The Agent submitted that Sentence 9.36.2.1.(3) of the OBC excludes the proposed boathouse from requiring the use of air-barrier construction. Further, the Agent added that it was the Applicant's belief that Article 9.23.17.6. of the OBC permits a sheathing membrane to be omitted when the joints in the cladding are formed to effectively prevent the penetration of wind and rain. The Agent advised that, in his view, the shiplapped design of the proposed siding would prevent this from occurring and added that only an excessive force of wind would result in water penetrating into the wall assembly.

The Agent added that a bubbler, which constantly agitates the lake's water during the winter months, is located just in front of the boathouse. The Agent submitted that the presence of moisture caused by this bubbler does not pose a huge threat with respect to additional wind driven moisture entering the wall assembly of the proposed boathouse. Furthermore, the Agent advised that any water which penetrates into the wall assembly would have the opportunity to dry out, because of the lack of insulation and interior finish.

In summation, the Agent argued that there should be no concern over water penetrating into the wall cavity, because the shiplap design of the proposed siding would prevent such an occurrence. Lastly, the Agent added that it is the Applicant's intention to provide a weathertight joint by applying caulking to the sheets of the proposed siding.

6. Respondent's Position

The Designate for the Respondent submitted that correspondence from the manufacturer of the

proposed wood bevelled siding clearly states that the product is to be installed in compliance with the OBC and that its shiplap joints will not prevent wind driven rain from migrating into the wall assembly. The Designate submitted that the presence of water in a normally insulted wall assembly would work to reduce the value of the insulation and also cause deterioration of the wood framing, because that space is difficult to dry out once made wet. The Designate added that he does not believe that wind driven rain would sooner dry out in a wall assembly where there is no interior finishing membrane.

The Designate indicated that the Applicant's intention to use the proposed boathouse as a future residential occupancy heightens the need to ensure that wind driven rain does not enter the building, damaging both the framing and interior contents. Moreover, the Designate submitted that renovation is a common occurrence in the Lake Muskoka area and that although the proposed boathouse may be currently used for storage it could be turned into a living space in the future. In this respect, correcting the proposed wall assembly may be a difficult endeavour for future occupants.

The Designate submitted that the absence of sheathing in the wall assembly of the proposed boathouse is not consistent with the fact that in 1997 a decision to make sheathing membranes a requirement in a similar situation was made by the Chief Building Official for Parry Sound. In this respect, the Designate advised that ensuring uniform OBC enforcement across the Parry Sound-Muskoka Region is important, and this extends to the proposed boathouse.

In summation, the Designate stated that the manufacturer of the proposed wood siding indicated that it does not provide protection from water penetration and that furthermore, the manufacturer instructs that the joints between the proposed siding should not be caulked as per the Applicant's intention.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed seasonal boathouse clad with horizontally installed bevelled wood siding and mounted directly onto the framing without the use of a sheathing membrane does not provide sufficiency of compliance with Article 9.23.17.6. of the Ontario Building Code at 1126-1 Pleasant View Road, Lake Muskoka, Ontario.

8. Reasons

i) Provision of a sheathing membrane is a required element in the construction of this boathouse. There is no compelling technical reason as to why this structure cannot be built to comply with the Code.

ii) As noted by the building inspector, it is not unusual in this region of the Province, for unprotected wood building materials to show signs of rot and decay as a result of water penetration. Furthermore, the siding manufacturer does not certify the product to prevent wind driven rain from migrating into the wall cavity behind the siding.

iii) The Commission is concerned that, in the future, the inside of the second storey could be finished, thereby trapping moisture in the wall cavity and causing the walls to deteriorate.

Dated at Toronto this **20th** day in the month of **February** in the year **2003** for application number **2003-04**.

Len King, Vice-Chair

Fred Barkhouse

Robert De Berardis



Ruling No. 03-07-905
Application No. 2002-51

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.2.2.35.(4) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Bill Campbell, Chairman of Finances, The Glengarry Highland Games, for the resolution of a dispute with Gerald Murphy, Chief Building Official, Township of North Glengarry, to determine whether the two proposed, unsprinklered grandstand buildings, which will include Group D and Group A, Division 2 occupancies beneath a Group A, Division 4 major occupancy, provide sufficiency of compliance with Sentence 3.2.2.35.(4) of the Ontario Building Code at the Glengarry Highland Games at the 2003 Grandstands and Site Improvements, Maxville, Ontario.

APPLICANT	Bill Campbell Chairman of Finances The Glengarry Highland Games Maxville, Ontario
RESPONDENT	Gerald Murphy Chief Building Official Township of North Glengarry
PANEL	Michael Steele, Vice-Chair Tony Chow Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	January 23, 2003
DATE OF RULING	January 23, 2003
APPEARANCES	Geoff Smith, The Thompson Rosemount Group Cornwall, Ontario **Agent for the Applicant**

RULING

1. The Applicant

Bill Campbell, Chairman of Finances, The Glengarry Highland Games, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing two grandstand buildings at the 2003 Grandstands and Site Improvements, Maxville, Ontario.

2. Description of Construction

The Applicant is constructing two grandstand buildings. The first building, Building 'A', is two storeys in building height and approximately 201 m^2 in building area. The ground level has a Group D and Group A, Division 2 occupancy, while the second level, which consists of a portion of open air seating, has a Group A, Division 4 occupancy. The second building, Building 'B', which has a building area of 230 m^2, consists of 13 rows of bench type seating with direct access to the ground floor from the entire front elevation. Building 'B' has a Group A, Division 2 occupancy on the ground level and a Group A, Division 4 occupancy on the second level. Both buildings are comprised of non-combustible construction.

The proposed grandstand buildings are being constructed to provide additional facilities for the Glengarry Highland Games in Maxville, Ontario. The Glengarry Highland Games is an annual event that is host to athletes and spectators from around the world. The proposed grandstand buildings will provide additional spectator areas with protection from the sun and elements.

The construction in dispute involves the requirement to sprinkler below the tiered seating assemblies (herein bleachers) in both of the proposed grandstand buildings. The Applicant contends that the proposed grandstand buildings should be exempt from the sprinkler requirement due to the lack of an available municipal water source and the limited use of the two structures.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the two proposed, unsprinklered grandstand buildings, which will include Group D and Group A, Division 2 occupancies beneath a Group A, Division 4 major occupancy, provide sufficiency of compliance with Sentence 3.2.2.35.(4) of the Ontario Building Code (OBC).

Sentence 3.2.2.35.(4) of the OBC mandates that sprinklers be installed in all spaces below tiers of seats in a building classified as Group A, Division 4 if those spaces are used for *occupancy*. The term *occupancy*, as defined in the Code, means "the use or intended use of a building or part thereof for the shelter or support of persons, animals or property". Sentence 3.2.2.35.(4) is applicable in both of the proposed grandstand buildings since the spaces below the bleachers are in fact intended for various Group D and Group A, Division 2 occupancies. For instance, the ground floor of Building 'A' includes business and personal services, such as a treasurer's office and a washroom, while the ground floor of Building 'B' will have a washroom/change room.

The Appendix to Sentence 3.2.2.35.(4), while not formally part of the OBC, provides useful information to the case at hand, because it identifies some of the various spaces that must be sprinklered as per Sentence 3.2.2.35.(4) of the Code. Appendix A-3.2.2.35.(4) states that; "[s]paces in a building of Group

A, Division 4 occupancy, that are intended to be equipped with sprinklers include, but are not limited to, dressing and changing rooms, concession stands and areas, toilet rooms, locker rooms, storage areas, service rooms, offices and other spaces that provide service to the building".

4. Provisions of the Ontario Building Code

3.2.2.35. Group A, Division 4

(4) Sprinklers shall be installed in all spaces below tiers of seats in a *building* classified as Group A, Division 4 if those spaces are used for *occupancy*. (See Appendix A.)

5. Applicant's Position

The Agent for the Applicant began by submitting that the Glengarry Highland Games is an important cultural event for the village of Maxville, surrounding communities and the Province. He added that spectator needs have changed since the start of the Games in 1948 and that the proposed grandstand buildings are being constructed to provide additional spectator viewing areas.

The Agent continued by stating that the Applicant has several reasons as to why the proposed grandstand buildings should be exempt from the sprinkler requirement outlined in Sentence 3.2.2.35.(4) of the Code. The first of such reasons, as identified by the Agent, is the lack of an available water supply. The Agent stated that the existing site does not have any municipal water available and therefore it would be necessary to have extensive servicing work done in order to provide for sprinklering in the proposed structures. The Agent coupled this with the cost of installing sprinklers, which has been estimated at approximately $240,000. The Agent stated that since the estimated construction cost of the two buildings is $85,000, the additional costing to provide sprinkler protection would ultimately impact the feasibility of the entire project.

The Agent also submitted that the proposed grandstand buildings should be exempt from the sprinkler requirement on the basis that both buildings will be constructed of non-combustible materials. The Agent advised that spectator seating areas and second floor spaces in both buildings will be constructed utilizing concrete slabs supported by structural steel framing. The perimeter walls and partitions will also be framed with hollow block masonry and metal stud wall framing. The Agent added that the spaces below the bleachers would be totally constructed with non-combustible materials and that therefore there would very limited materials within the spaces that would pose a threat of fire. The Agent also noted that the floor assemblies separating the ground and second floor seating areas in both of the proposed buildings have been designed and detailed to provide a minimum two hour fire resistance rating, which is not required under the Code.

Finally, the Agent stated that the sprinkler requirement be waived on the basis that the proposed buildings will be of minimal use, since the Glengarry Highland Games takes place on the first weekend of August for three days. According to the Agent, the infrequent use of the proposed facilities further minimizes fire risk.

In summary, the Agent argued that the proposed grandstand buildings should be exempt from the sprinkler requirement outlined in Sentence 3.2.2.35.(4) of the OBC due to the lack of an available water supply and the costs associated with installing the sprinklers. Furthermore, the Agent added that the buildings will be constructed of non-combustible materials and therefore do not pose a significant threat

of fire. Finally, the Agent argued that the requirement to sprinkler the proposed grandstand buildings be waived on the basis that the buildings will be used on a minimal basis.

6. Respondent's Position

The Respondent submitted that Sentence 3.2.2.35.(4) of the OBC clearly states that sprinklers shall be included in all spaces below tiers of seats in buildings classified as Group A, Division 4, if those spaces are used for occupancy. The Respondent added that the Code defines the term occupancy as "the use or intended use of a building or part thereof for the shelter or support of persons, animals or property". The Respondent stated that the plans submitted by the Applicant do in fact show occupancy under the bleachers in both of the proposed grandstand buildings; however, the required sprinkler system is not shown on these plans. The Respondent stated that the proposed grandstand buildings are classified as Group A, Division 4 occupancy and, as such, any space below the bleachers is required to be protected with sprinklers as per Sentence 3.2.2.35.(4) of the Code.

The Respondent also made reference to a conversation that he had with the Applicant party in which the Applicant mentioned the possibility of an exemption from the sprinkler requirement, based on the limited use of the buildings and the fact that the buildings are not heated. The Respondent stated that while exemptions to Code requirements may be granted in some cases, he did not have the authority to grant such a variance from the provisions outlined in the OBC.

In summary, the Respondent argued that the proposed grandstand buildings are required to be equipped with sprinklers as detailed in Sentence 3.2.2.35.(4) of the Code. The Respondent also added that he is not in the position to exempt the Applicant from the requirement to sprinkler the proposed grandstand buildings.

7. Commission Ruling

It is the decision of the Building Code Commission that the non-combustible bleachers and second floor construction supported by a structural system providing a 2 hour fire resistance rating offered in lieu of the sprinklering of the space below, provides sufficiency of compliance with Sentence 3.2.2.35.(4) of the Ontario Building Code at the 2003 Grandstands and Site Improvements, Maxville, Ontario.

8. Reasons

i) The proposed buildings are to be entirely of non-combustible construction.

ii) The proposed bleachers and second floor construction, including their supporting structural system, provide a fire resistance rating of 2 hours in lieu of sprinklering the spaces below. The 2 hour fire separation provides a greater degree of fire resistance rating than the minimum required under the Ontario Building Code.

Dated at Toronto this **23rd** day in the month of **January** in the year **2003** for application number **2002-51**.

Michael Steele, Vice-Chair

Tony Chow

Gary Burtch



Ruling No. 03-06-904
Application No. 2002-50

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 11.4.2.3.(4) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Celia Johnson, Richard Stevens Architects, for the resolution of a dispute with Ann Borooah, Chief Building Official, City of Toronto, to determine whether the existing floor assembly, which will separate a proposed bus terminal below from the existing parking garage above, will provide sufficiency of compliance with Sentence 11.4.2.3.(4) of the Ontario Building Code at the Toronto Transit Commission's Eglinton Bus Terminal, 2200/2190 Yonge Street, Toronto, Ontario.

APPLICANT	Celia Johnson Richard Stevens Architects Toronto, Ontario
RESPONDENT	Ann Borooah Chief Building Official City of Toronto
PANEL	Michael Steele, Vice-Chair Tony Chow Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	January 23, 2003
DATE OF RULING	January 23, 2003
APPEARANCES	Jonathan Rubes, Leber/Rubes Toronto, Ontario **Agent for the Applicant** Peter Au, Manager Plans Examination City of Toronto **The Respondent**

RULING

1. The Applicant

Celia Johnson, Architect, has applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing renovation that involves a change in the occupancy of a portion of an existing bus repair garage (Group F, Division 2) to a new bus terminal (Group A, Division 2) at the Toronto Transit Commission's Eglinton Bus Terminal, 2200/2190 Yonge Street, Toronto, Ontario.

2. Description of Construction

The Applicant is proposing renovation to an existing Toronto Transit Commission (TTC) bus garage that will result in a change of occupancy to the new Eglinton Bus Terminal. The existing TCC bus repair garage has a Group F, Division 2 occupancy and is approximately 18,180 m^2 in building area. The proposed renovation will result in a new bus terminal, having a Group A, Division 2 occupancy, that will consist of a platform waiting area for occupants. In addition, retail units having a Group E occupancy have been proposed to be located adjacent to the platform waiting area. The proposed renovation is limited to a building area of approximately 7,851 m^2. The remainder of the floor area, not being renovated, will no longer be used to repair buses. Instead, it will be separated from the new bus terminal area and will remain as decommissioned space. The proposed renovation will be compromised of non-combustible construction and will be equipped with a sprinkler, standpipe and hose, and fire alarm system.

The renovation will take place in an existing development that is five storeys in building height. Two parking garage levels, classified as Group F, Division 3 occupancy, are located directly above the existing bus repair garage and two floors of cinemas, including retail space, are located above the parking garage levels at the north end of the building. The existing floor assembly that currently separates the bus repair garage from the parking garage levels is constructed of a concrete slab supported by unprotected steel trusses and concrete columns. This floor assembly is proposed to be protected with a 1 h fire rated ceiling assembly over the leaseable retail area only. The floor assembly above the remainder of the renovated floor area, which is comprised of the bus terminal, is proposed to remain in its existing condition.

The construction in dispute involves the existing floor assembly that separates the proposed bus terminal from the existing parking garage floor levels above. The Respondent's position is that the existing floor assembly should be upgraded with the required fire-resistance ratings in order to ensure that the performance level of the building is maintained once there is a change in major occupancy. The Applicant's position is that the existing floor assembly meets the intent of the Ontario Building Code, because Part 11 of the Code states that where compliance with a specific requirement presents a construction difficulty, the proposed construction is required to demonstrate that the performance level of the building after renovation will no be less than the performance level prior to the renovation. The Applicant is of the position that the possible approaches for achieving the required fire-resistance ratings present construction difficulties and that, furthermore, the performance level of the building will not be reduced as a result of change in major occupancy.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the existing floor assembly, which will separate a proposed bus terminal below from the existing parking garage above, will provide sufficiency of compliance with Sentence 11.4.2.3.(4) of the Ontario Building Code (OBC).

The provisions outlined in Part 11 of the OBC apply to existing buildings that are subject to renovation, which includes extension, material alteration, and/or repair. Article 11.1.2.1., which details the application of Part 11, has been designed to ensure that the proposed construction to an existing building complies with the provisions outline in Section 11.3 of the Code. Furthermore, Article 11.1.2.1. mandates that the performance level of a building prior to renovation shall be evaluated and maintained. If the performance level of a building is reduced as a result of renovation, then compensating construction shall be undertaken in order to ensure that the performance level is restored.

Sentence 11.4.1.1.(1) of the OBC states that the performance level of a building after construction shall not be less than the performance level of a building prior to construction. As defined in the Code, *performance level* means "[t]he level of performance under which all or part an existing building functions with respect to its building system". Subsection 11.4.2. of the Code outlines the various factors that are considered as resulting in the reduction of performance level. One of the activities listed under Subsection 11.4.2. is a change of major occupancy.

Article 11.4.2.3. lists certain changes of major occupancy in the renovation of existing buildings that would be considered as resulting in the reduction of the performance level of a building and which, therefore, would require compensating construction. Specific to the case at hand is Sentence 11.4.2.3.(4) of the Code, which states that the performance level of a building is reduced where the proposed major occupancy in a building is not separated from the adjoining major occupancies by fire separations having fire resistance ratings conforming to Tables 3.1.3.1. and 11.4.3.4.B. of the Code. In this particular instance, a minimum 1 h fire resistance rating would be required between the new bus terminal (Group A, Division 2) and the parking garage level (Group F, Division 3) located above. In addition, a minimum 2 h fire resistance rating would be required between the new bus terminal and the leaseable Group E retail units, which are proposed to be located adjacent to the bus platform waiting area. It should be noted, however, that Table 11.4.3.4.B. permits the specified 1 h rating to be reduced to 30 minutes and the 2 h fire separation reduced to 1 h, since the subject building is an existing building that is fully sprinklered.

To achieve sufficiency of compliance with Code requirements, the Applicant has proposed to equip the bus terminal with a new sprinkler system that will comply with NFPA 13. This will replace the existing sprinkler system and, according to the Applicant, result in the building having an improved performance level.

4. Provisions of the Ontario Building Code

Sentence 11.4.2.3.(4)

(4) The *performance level* of an existing *building* is reduced where the proposed *major occupancy* in the *building* is not separated from the adjoining *major occupancies* by *fire separations* having *fire-resistance ratings* conforming to Tables 3.1.3.1. and 11.4.3.4.B.

5. Applicant's Position

The Agent for the Applicant began by offering the Commission with a brief overview of the project in dispute. He advised that the project involves the renovation of an existing bus repair garage, which will result in a change in occupancy to the new Eglinton Bus Terminal. The function of the bus terminal will be to pick up and drop off TCC passengers arriving to and departing from the Eglinton subway station. It will consist of a platform waiting area for occupants and leaseable retail units that are proposed to be located adjacent to the bus platform waiting area. According to the Agent, two entrance/exits will serve the bus terminal. Both entrance/exits are open directly to the exterior and located at the north and south ends of the facility.

The Agent continued by stating that it is his opinion that the premise of Part 11 of the OBC is to ensure that the performance level of a building is maintained following renovation (in accordance with Article 11.4.1.1. of the Code). He then noted that there are four possible circumstances under Subsection 11.4.2. that could cause a reduction in performance level. The Agent submitted that the first of these circumstances pertains to the structural floor system and its capability of supporting the dead and live loads imposed by the new major occupancy. As per the Agent, this condition does not apply to the specific case at hand due to the fact that there will not be a change (i.e. increase) in the dead and live loads present in the building following the proposed renovation.

The second circumstance, outlined by the Agent, deals with a reduction in performance level that is a direct result of an increase in occupant load. The Agent submitted that, in this particular case, the proposed renovation will result an occupant load that has been increased by more than 15%. To address this issue, the Code requires that the exits and fire alarm system be upgraded in order to comply. The Agent stated that the Applicant has already implemented these upgrades and, as such, the increase in occupant load will not result in a reduced performance level.

The third circumstance itemized by the Agent concerns a change in major occupancy that results in a building with a greater Hazard Index. As per the Agent, the Hazard Index of the proposed Group A, Division 2 occupancy is 6, which is exactly the same as the previous Group F, Division 2 occupancy. The Agent argued that the performance level has not been compromised in this regard, since the Hazard Index has not been increased as a result of the change of major occupancy.

The fourth, and final, circumstance outlined by the Agent pertains to Sentence 11.4.2.3.(4) of the Code, which references fire separations between adjoining major occupancies. The Agent argued that when considering that the exposure to the underside of the floor slab from use as a terminal is no greater than the previous fire exposure as a bus garage, it can be considered that the performance level of the floor slab has not been reduced as a result of the change of major occupancy.

The Agent continued by arguing that certain measures resulting from the subject renovation will actually result in an improvement, not a reduction, in the performance level of the building. He submitted that the non-renovated floor area of the bus repair garage will be separated from the new bus terminal area and will remain as decommissioned space; thus, reducing the potential hazard. In addition, the leaseable retail units that are proposed to be located adjacent to the bus platform waiting area will be provided with a 1 h rated ceiling assembly. According to the Agent, this will improve fire protection in the renovated building. The Agent also submitted that the existing sprinkler system will be replaced with a new system that will conform with NFPA 13. Egress/early warning systems will also be upgraded to meet OBC requirements.

According to the Agent, the requirement to provide the appropriate upgrades to the existing floor assembly also presents various construction difficulties. As per the Agent, this would involve an intumescent coating/spray-on fire protection or gypsum board protection. He then added that the Applicant has investigated this option and has found that there is a difficulty with the intumescent coating from an application point of view and is impractical from a cost point of view. For instance, in discussions with the manufacturer, it was determined that the existing steel could not be prepared in a suitable manner to accept spray fireproofing. In addition, the Agent submitted that the affected floor assembly could be subject to significant moisture, which could be a problem for a gypsum board system. The Agent concluded that, based on this information, compliance with the requirement to fire rate the underside of the slab above the bus terminal clearly presents construction difficulties. As such, the Agent argued that alternative measures are appropriate and should be accepted by the Respondent party since compliance with Code requirements is impractical due to construction difficulties (in accordance with Article 11.5.2.1. of the OBC).

In summary, the Agent advised that certain measures resulting from the proposed renovation will result in an improvement in the performance level of the subject building and not in a reduction. The Agent maintained that the requirement to provide the appropriate upgrades to the existing floor assembly presents various construction difficulties. As a result, the Agent argued that alternative measures should be accepted by the Respondent party since compliance with Code requirements is difficult from both an application point of view and cost point of view.

6. Respondent's Position

The Respondent submitted that it is the City of Toronto's position that the floor assembly in the proposed renovation needs to be upgraded by virtue of Sentence 11.4.2.3.(4) of the OBC. The Respondent submitted that he concurred with this Sentence of the Code in that he believes that the performance level of the building will be reduced if the floor assembly is not upgraded with the required fire-resistance rating. If the Code stipulates that proposed major occupancies must be separated by fire separations that have the appropriate fire-resistance ratings then, according to the Respondent, this is what the City of Toronto will enforce. The Respondent submitted that regardless of whether the previously discussed fire separations were provided, some form of protection needs to be provided to ensure safety between the proposed bus terminal below and existing parking garage above.

The Respondent continued by arguing that, in his opinion, there are no foreseeable construction difficulties associated with providing appropriate upgrades. Unlike the Applicant, the Respondent maintained that he believes providing the appropriate upgrades is more of a maintenance issue then anything else. He argued that upgrading the fire separation is not a problem of construction, but rather a problem of upkeep and therefore, according to the Respondent, the Applicant should be required to separate the proposed major occupancies from one another with the fire separations described in Sentence 11.4.2.3.(4) of the Code.

In summary, the Respondent argued that it is the City of Toronto's position that the existing floor slab above the proposed bus terminal should be upgraded by virtue of Sentence 11.4.2.3(4) of the Code. The Respondent asserted that the Applicant should be mandated to provide the appropriate upgrades since, in his opinion, there are no foreseeable construction difficulties in doing so.

7. Commission Ruling

It is the decision of the Building Code Commission that the fire-resistance rating of the existing floor assembly, which will separate the proposed bus terminal below from the existing parking garage above, provides sufficiency of compliance with the provisions of 11.4.2.3.(4) of the Ontario Building Code at the Toronto Transit Commission's Eglinton Bus Terminal, 2200/2190 Yonge Street, Toronto, Ontario.

8. Reasons

i) The change in major occupancy has not resulted in a change to the Hazard Index.

ii) The fire load over the entire area has been reduced given that the bus storage and repair garage will be fully decommissioned as a result of the change in occupancy.

iii) The new Group A, Division 2 occupancy will be separated from the decommissioned areas by a one hour fire-resistance rating. Further, the decommissioned areas will be unoccupied.

iv) A new sprinkler system conforming with NFPA 13 standards will be installed throughout the new occupancy area.

v) Improvements will be made to the egress and early warning systems to meet OBC requirements.

Dated at Toronto this **23rd** day in the month of **January** in the year **2003** for application number **2002-50**.

Michael Steele, Vice-Chair

Tony Chow

Gary Burtch



Ruling No. 03-04-902
Application No. 2002-45

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 9.10.21.2. and 9.10.21.3. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Jeff Jansen, Fernbrook Homes, for the resolution of a dispute with Frank Asta, Chief Building Official, Town of Oakville, to determine whether the as-installed upper kitchen cabinet valance, situated at the front edge of the underside of the cabinet approximately 360 mm above the counter surface and adjacent to the range/stove opening, provides sufficiency of compliance with Articles 9.10.21.2. and 9.10.21.3. of the Ontario Building Code at 1392 Pinery Crescent and 1392 Clearwater Crescent, Oakville, Ontario.

APPLICANT	Jeff Jansen Fernbrook Homes Concord, Ontario
RESPONDENT	Frank Asta Chief Building Official Town of Oakville
PANEL	Len King, Vice-Chair Tony Chow Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	January 16, 2003
DATE OF RULING	January 16, 2003
APPEARANCES	Jeff Jansen, Fernbrook Homes Concord, Ontario **The Applicant** Frank Asta, Chief Building Official Town of Oakville **The Respondent**

RULING

1. The Applicant

Jeff Jansen, Fernbrook Homes, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and has constructed residential dwellings at 1392 Pinery Crescent and 1392 Clearwater Crescent, Oakville, Ontario.

2. Description of Construction

The Applicant is constructing a residential subdivision in the Town of Oakville. Included in this development are the subject dwellings located at 1392 Pinery Crescent and 1392 Clearwater Crescent. These homes are classified as Group C residential dwellings and have a gross floor area of approximately 279 m^2 (3,000 sq. ft). They are two storeys in building height and constructed of combustible construction.

The construction in dispute involves the valance feature associated with the upper kitchen cabinets. The kitchen cabinets are situated approximately 450 mm (17¾ in) above the counter surface. The subject valance extends downward approximately 77 mm to 90 mm from the underside of the upper cabinets, running along the front edge and returning toward the wall where the cabinet ends. This projection brings the valance to within 360 mm (14 inches) of the counter surface. The valance itself is generally constructed of wood material, approximately 13 mm to 25 mm (½ in to 1 in) in thickness, and finished to complement the kitchen cabinet. This feature is often purchased as an option from the builder and is typically used to camouflage indirect flourescent lighting affixed to the underside of the upper cabinet and used to illuminate the counter surface.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-installed valance feature, situated at the edge of the upper cabinet adjacent to the stove/range area and extending to within approximately 360 mm above the counter surface, provides sufficiency of compliance with Article 9.10.21.3. of the Ontario Building Code (OBC).

Article 9.10.21.3. outlines horizontal clearances associated with fire protection for gas and electric ranges. Sentence (1) stipulates that, except as provided in Sentences (2) and (3) any combustible wall framing, finishes or cabinets within 450 mm of the area where the range is to be located must be protected above the level of the heating elements with a minimum resistance of no less than what would be provided by a 9.5 mm thickness of gypsum board.

As a specific exemption to this requirement Sentence (2) permits that counter-top splash boards or back plates need not be protected. Further Sentence (3) provides that, except for cabinetry described in Article 9.10.21.2 (situated directly above the area of the range), cabinetry located at least 450 mm above the heating element level also need not be protected. The valance is not being proposed for the cabinetry located directly above the range area therefore the vertical clearance provisions of Article 9.10.21.2. are not at issue.

In the subject dispute, a valance has been attached to the underside of the upper kitchen cabinets. As noted above, the bottom of the cabinet itself is approximately 450 mm (17¾ in) above the level of the heating elements and adjacent to the area where the range will be located. With the extension of the valance into this clearance, the projection reaches approximately 360 mm from the counter surface. The

issue in this regard is whether this valance is considered to be part of the cabinet, a finish or framing and/or whether it will provide sufficiency of compliance with Article 9.10.21.3., particularly when considering the exemption in this provision for features such as splash boards and back plates.

4. Provisions of the Ontario Building Code

9.10.21.3. Horizontal Clearances

(1) Except as provided in Sentences (2) and (3), *combustible* wall framing, finishes or cabinets within 450 mm (17¾ in) of the area where the *range* is to be located shall be protected above the level of the heating elements by material providing fire resistance not less than that of a 9.5 mm (⅜ in) thickness of gypsum board.

(2) Counter-top splash boards or back plates which extend above the level of the heating elements need not be protected as described in Sentence (1).

(3) Except for cabinetry described in Article 9.10.21.2., cabinetry located not less than 450 mm (17¾ in) above the level of the heating elements need not be protected as described in Sentence (1).

5. Applicant's Position

The Applicant submitted that the feature in question and being referred to as a valance is attached to the underside of a standard sized upper kitchen cabinet. This is offered to purchasers, primarily of high-end residential dwellings, as an option in the finish of their homes. He advised that the feature has become quite popular and builders throughout the province have been offering it to home buyers. Further, cabinet manufacturing industry has been regularly producing this type of feature as an add-on to standard sized cabinets. In his opinion, it was not part of the cabinet and was frequently added on as an after-thought by many purchasers.

The Applicant advised that it was not until this development in Oakville that the issue had been challenged by a building official. In this regard, he suggested that there is nothing in the Code to specifically prohibit a valance or to regulate the valance encroachment into the area beneath the cabinet. In fact, he argued, the valance feature was similar in nature to the counter back splash that is specifically exempted from providing any level of fire protection in the same Article of the Code. In his opinion, the back splash would be much or more of a hazard than the valance under dispute. Flames erupting from the heating element, he argued, would come into contact with the counter-top extension before ever reaching the valance projection. Furthermore, he argued that, considering the design of many modern kitchens, range surfaces may be directly adjacent to exposed wall board, again causing more concern than a valance extension.

In summation, the Applicant submitted that the cabinetry has been manufactured to meet Code requirements, providing 450 mm clearance. The issue was merely with respect to the valance, which he again considered to be equivalent to a back splash for which there were no restriction on size or projection. He suggested that this ruling would be important industry wide especially when considering the increase in popularity of indirect cabinet lighting and valance additions.

6. Respondent's Position

The Respondent submitted that, while this issue has arisen in the subject homes constructed by the Applicant builder, it is also a concern in other homes presently being constructed. He suggested that as many as 70% to 75% of the high-end homes being constructed offer this feature as an option to the design of the cabinetry. Many home purchasers, he advised, consider the indirect lighting to be appealing and are opting for the decorative valance alternative to hide the light fixtures. This design and the issue associated with it has been evolving in the industry for some time. In his review of the situation, however, he couldn't reconcile how the valance could comply with the present Code requirements for 450 mm of clearance in the area of the stove. To be prudent, therefore, this is an issue to be decided upon by the Commission.

The Respondent advised that, if not for the valance, the cabinet would comply in all other respects with the Code requirements. Valances however, unlike counter-top back splashes, are not addressed in the Code. He was concerned with the projection of radiant heat from the elements or the hazard associated with "aggressive cooking" when considering the encroachment of the valance into the 450 mm required clearance.

In summation, the Respondent submitted that he felt unable to determine whether this type of valance feature would contribute to a fire if the source of ignition was the stove-top burner. Because this feature is relatively new, the Code does not address the issue nor whether this type of encroachment would be acceptable from a fire safety perspective. In conclusion, he stated that he was looking for direction from the Commission as to whether sufficiency of compliance with the OBC requirements is being achieved.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-installed upper kitchen cabinet valance, situated at the front edge of the underside of the upper cabinet approximately 360 mm above the counter surface and adjacent to the area where the range/stove is to be located, does not provide sufficiency of compliance with Article 9.10.21.3. of the Ontario Building Code at 1392 Pinery Crescent and 1392 Clearwater Crescent, Oakville, Ontario.

8. Reasons

i) The valance is considered to form part of the upper cabinet and, as a result, is required to provide a minimum clearance of 450 mm above the level of the heating elements.

ii) Presently, no Code amendment is proposed by the Building and Development Branch of the Ministry of Municipal Affairs and Housing to exempt this type of valance feature from the minimum Code requirements for cabinets outlined in Article 9.10.21.3.

Dated at Toronto this **16th** day in the month of **January** in the year **2003** for application number **2002-45**.

Len King, Vice-Chair

Tony Chow

Donald Pratt



Ruling No. 03-01-899
Application No. 2002-34

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.2.7.1.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Duff Ryan, Ryan Company Architect Inc., for the resolution of a dispute with Jim Oakely, Chief Building Official, Township of Severn, to determine whether the egress lighting, which is not proposed to be illuminated for 24 hours of each day, complies with Sentence 3.2.7.1.(1) of the Ontario Building Code at St. Francis of Assisi Catholic Church, 3315 Muskoka Street, Township of Severn, Ontario.

APPLICANT	G. Duff Ryan Ryan Company Architect Inc Richmond Hill, Ontario
RESPONDENT	Jim Oakley Chief Building Official Township of Severn
PANEL	Len King, Vice-Chair Tony Chow Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	January 16, 2003
DATE OF RULING	January 16, 2003
APPEARANCES	G. Duff Ryan Ryan Company Architect Inc Richmond Hill, Ontario **The Applicant** Douglas Tennant Fire Chief Township of Severn **The Designate**

RULING

1. The Applicant

G. Duff Ryan, Ryan Company Architect Inc., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing an addition to the St. Francis of Assisi Catholic Church, at 3315 Muskoka Street, Township of Severn, Ontario.

2. Description of Construction

The Applicant is constructing an addition to a church having a Group A, Division 2 occupancy. The structure is one storey in building height and is approximately 539 m^2 in building area. The building is comprised of combustible construction and is equipped with a fire alarm system.

The issue at dispute pertains to the lighting requirements for exits and access to exits in the proposed addition of the building. The Applicant has proposed an egress lighting scheme that involves manual wall switch lighting, which may be turned on and off at various times throughout the day. The Respondent, however, is of the opinion that exits and access to exits in the subject building, specifically the mezzanine egress stair, should be equipped to provide continuous illumination to an average level not less than 50 Lx at the floor and tread levels.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the egress lighting, which is not proposed to be illuminated for 24 hours of each day, complies with Sentence 3.2.7.1.(1) of the Ontario Building Code (OBC).

Sentence 3.2.7.1.(1) mandates that an exit, a public corridor, a corridor providing access to exit for the public, a corridor serving patients of residents in a Group B, Division 2 or Division 3 occupancy, a corridor serving classrooms, an electrical equipment room, a transformer vault and a hoistway pit shall be equipped to provide illumination to an average level not less than 50 Lx at floor or tread levels. The purpose of this average level of illumination is to facilitate the rapid egress of persons in an emergency situation and to minimize the risk of injury to persons as a result of tripping, slipping, falling, contact or collision.

Germane to the issue at dispute is the statement in Sentence 3.2.7.1.(1) "shall be equipped to provide". In this regard, while the Sentence requires that certain means of egress, a transformer vault, and a hoistway vault, be equipped to provide illumination to an average level, it does not specifically stipulate that illumination must be continuously maintained. In this regard, the issue before the Building Code Commission (BCC) is whether the intent of Sentence 3.2.7.1.(1) is to ensure that illuminations be provided continuously for 24 hours/day.

4. Provisions of the Ontario Building Code

3.2.7.1. Minimum Lighting Requirements

(1) An *exit*, a *public corridor*, a corridor providing *access to exit* for the public, a corridor serving patients or residents in a Group B, Division 2 or Division 3 *occupancy*, a corridor serving classrooms, an electrical equipment room, a transformer vault and a hoistway pit shall be equipped to provide

illumination to an average level not less than 50 lx (4.6 ft-candles) at floor or tread level and at angles and intersections at changes of level where there are stairs or ramps.

5. Applicant's Position

The Applicant began by submitting that the issue at dispute pertains to the egress lighting in the subject building and whether this lighting needs to be continuous for 24 hours/day. He stated that it is the Respondent's position that the egress lighting requirement outlined Sentence 3.2.7.1.(1) is to ensure that continuous illumination is provided in a building even when there are no occupants. The Applicant submitted that, in his opinion, it is not the intention of Sentence 3.2.7.1.(1)to ensure that egress lighting is perpetually activated.

The Applicant then stated that he hired a fire protection consultant in order to obtain a third-party opinion on the interpretation of Sentence 3.2.7.1.(1). As per the Applicant, the retained fire protection consultant concurred with the Respondent's position that the mezzanine stair in the subject building should be equipped to provide illumination to an average level not less than 50 Lx, since it is a means of egress. Despite this, the fire protection consultant also submitted that this requirement only applies when the building is occupied. The Applicant advised that he provided a copy of the fire protection consultant's opinion to the Respondent who, in turn, did not accept it.

The Applicant continued by stating that he contacted the Building and Development Branch (BDB) within the Ministry of Municipal Affairs and Housing, regarding the Respondent's refusal to accept the opinion of the retained fire protection consultant. The Applicant stated that he requested the written opinion of a building code advisor employed with the BDB with respect to the interpretation of Sentence 3.2.7.1.(1). He advised that the opinion offered by the BDB indicates that Sentence 3.2.7.1.(1) of the Code mandates that the average lighting level of at least 50 Lx must be provided in the areas identified, but does not stipulate that such lighting must be left on 24 hours of each day.

The Applicant then stated that the issue at dispute was brought before the BCC, as occupancy for the subject building is contingent upon the Commission's Ruling. He submitted that the requirement to provide continuous lighting in the exits and access to exits in the subject building is a concern due to the associated costs. Moreover, he added that the building is not occupied on most days, thereby resulting in a waste of both money and electricity.

In summary, the Applicant argued that while Sentence 3.2.7.1.(1) of the Code requires exits and access to exits to be equipped to provide illumination to an average level of not less than 50 Lx at floor or tread level, it does not, in his opinion, specify that this illumination be continuous for 24 hours/day. Furthermore, he added that this is not only his opinion, but also that of a professional fire protection consultant and a building code advisor with the Building and Development Branch of the Ministry of Municipal Affairs and Housing.

6. Respondent's Position

The Respondent submitted that he is of the opinion that the intention of Sentence 3.2.7.1.(1) of the Code is to ensure that an exit or access to exit is equipped to provide continuous illumination to an average level not less than 50 Lx at floor or tread level on a 24 hour/day basis. He submitted that this is not only his opinion, but also that of the Designate, Mr. Douglas Tennant, who is the Fire Chief for the Township of Severn. The Respondent added that he has looked seriously into the requirements for egress lighting in an assembly occupancy and has come to the conclusion that illumination should be continuous in order to ensure occupants' safety. He then submitted that the issue at dispute was brought

to the BCC as the lighting scheme proposed by the Applicant does not provide for continuous illumination. As per the Respondent, since the Applicant's proposed lighting scheme involves the use of wall switch lighting, which may be turned on and off at various times throughout the day, the lighting may be inadvertently, or even consciously, turned off at any given time. He then concluded by stating that the Designate also wished to address the members of the presiding BCC panel.

The Designate began by stating that the Ontario Fire Code requires lighting in exits to be maintained at all times in order to ensure the safe egress of occupants in the case of an emergency. The Designate submitted that this is of significant importance in assembly occupancies, where occupants may not be familiar with the means of egress. He then submitted that the risk of injury is heightened in situations where egress lighting is not provided on a continuous basis.

The Designate continued by outlining the risks associated with the egress lighting scheme proposed by the Applicant. He stated that the proposed lighting scheme is not sufficient as the switches may be accidentally turned off. Furthermore, he added that occupant safety is compromised in situations when the egress lighting is not activated, as an individual who is unfamiliar with the building may have to travel through a dark room in order to find the wall switch that activates illumination.

The Designate then continued by stating that the provision of continuous egress lighting is particularly important in certain instances. For example, the Designate cited instances where natural lighting is reduced, such as sudden thunderstorms, and during the winter months when it becomes darker earlier in the evening. Furthermore, he also added that continuous egress lighting should be provided, because there is very little outdoor illumination since the subject building is located in a rural setting.

Finally, the Designate submitted that there are several instances of other assembly occupancies in the Township of Severn that have continuous egress lighting provided 24 hours/day. He stated that, in his opinion, this provision makes sense from a practical point of view and also ensures that safety is maintained while occupants exit the building.

In summary, both the Respondent and Designate submitted that they are of the opinion that the intent of Sentence 3.2.7.1.(1) of the Code is to ensure that an exit or access to exit is equipped to provide continuous illumination to an average level not less than 50 Lx at floor or tread level on a 24 hour/day basis. As a result, both the Respondent and Designate indicated that the proposed egress lighting scheme, which may be manually turned on or off at any given time, fails to comply with Sentence 3.2.7.1.(1) of the OBC.

7. Commission Ruling

It is the decision of the Building Code Commission that the egress lighting required by Sentence 3.2.7.1.(1) of the Ontario Building Code is not required to be illuminated for 24 hours of each day, but rather is required to be illuminated whenever the building is occupied.

It is also the decision of the Building Code Commission that egress lighting in the subject building, as currently designed to be operated, does not provide sufficiency of compliance with Sentence 3.2.7.1.(1) of the Ontario Building Code at St. Francis of Assisi Catholic Church, 3315 Muskoka Street, Township of Severn, Ontario.

8. Reasons

i) The existing design of the egress lighting system, by providing typical wall switches for on/off

activation, does not provide assurance that the lighting will be on when required, nor is there any control over whether it will remain illuminated during times of occupancy.

ii) It is not reasonable to expect a person who is perhaps unfamiliar with the building to travel from room to room, occasionally through darkened areas, to turn on each of the wall switches that will activate the required lighting in this assembly occupancy.

iii) The system should be designed to ensure that the required lighting will not be turned off accidentally, facetiously (as a result of horseplay) or by a well meaning individual concerned with energy consumption.

Dated at Toronto this **16th** day in the month of **January** in the year **2003** for application number **2002-34**.

Len King, Vice-Chair

Tony Chow

Donald Pratt

Ruling No. 02-43-898
Application No. 2002-46

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 3.2.1.1.(4), 3.3.1.5.(2), (3) and (4) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by David MacDonald, Facilities Manager, Coca-Cola Bottling Co., for the resolution of a dispute with Brenda Campbell, Chief Building Official, City of Brampton, to determine whether the viewing walkway, having an area of 207 m^2, is a mezzanine which provides sufficiency of compliance with Sentences 3.2.1.1.(4), 3.3.1.5.(2), (3) and (4) of the Ontario Building Code or whether it is considered to be a storey which must be meet the construction requirements for a storey in a building having a Group F, Division 3 occupancy classification at the Coca-Cola Bottling Company, 15 Westcreek Boulevard, Brampton, Ontario.

APPLICANT	David MacDonald, Facilities Manager Coca-Cola Bottling Co. Brampton, Ontario
RESPONDENT	Brenda Campbell Chief Building Official City of Brampton
PANEL	Michael Steele, Vice-Chair John Guthrie Robert De Berardis
PLACE	Toronto, Ontario
DATE OF HEARING	December 12th, 2002
DATE OF RULING	December 12th, 2002
APPEARANCES	Randy Brown Randal Brown & Associates Toronto, Ontario **Agent for the Applicant** Lillyan McGinn Manager of Plans and Permits City of Brampton **Designate for the Respondent**

RULING

1. The Applicant

David MacDonald, Facilities Manager, Coca-Cola Bottling Co., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and has constructed an industrial building at the Coca-Cola Bottling Company, 15 Westcreek Boulevard, Brampton, Ontario.

2. Description of Construction

The Applicant has constructed a Coca-Cola bottling facility having a Group F, Division 3 occupancy classification. The structure has a building area of 51,900 m^2 according to the Applicant or 53,521.55 m^2 according to the Respondent. It is two storeys in building height and comprised of noncombustible construction. The building is equipped with sprinkler and fire alarm systems.

The northern area of the building has two levels of offices and a mezzanine which is open to the plant below. The upper level of offices and mezzanine, having a combined area of 5,705 m^2, exceeds 10% of the building area and has, therefore, been constructed as a storey, having a two hour fire resistance rating and meeting the exiting requirements for second storey construction.

The item particular to this dispute involves the construction of a viewing walkway intended for use by tour groups for viewing the bottling production area below. The walkway has an area of 207 m^2 and measures 84.73 m (278 ft) long by 2.44 m (8 ft) wide. One end of the walkway is adjoined to the second storey floor area, however, the walkway itself has been constructed as a 10% mezzanine. A one hour fire-resistance rating to the underside of the walkway will be provided including the supporting columns and beams. Three egress facilities leading off the walkway have been provided. Two of the egress stairs lead to the plant floor below and a third leads onto the second storey at the west end of the walkway by way of the connection to this level.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the viewing walkway can be considered to be a mezzanine which provides sufficiency of compliance with Sentences 3.2.1.1.(4), 3.3.1.5.(2), (3) and (4) of the Ontario Building Code (OBC) or whether it must be constructed to the same standards as the second storey to which it is adjoined..

Sentence 3.2.1.1.(4) provides that, with exceptions not applicable here, a mezzanine need not be considered as a storey in calculating building height provided that the aggregate area of the mezzanine is not greater than 10% of the area of the storey or suite in which it is located. The subject viewing walkway, having an area of 207 m^2, is less than 10% of the of the building area. One end of this feature, however, forms an 8 m wide connection with the second storey of the structure.

Further, Sentences 3.3.1.5.(2), (3) and (4) outline the egress requirements for mezzanines. Clause (d) of Sentence (2) stipulates that, except for mezzanines within a dwelling unit, every mezzanine that is not required to terminate at a vertical fire separation as set out in Article 3.2.8.2. is to have two egress facilities located so that one would provide egress should the other become inaccessible in suites where the floor area is sprinklered and the travel distance to an egress doorway is more than 25 m.

Moreover, Sentence (3) provides that if the room or suite in which the mezzanine is located is permitted to have one egress doorway, the travel distance is to be measured from any point on the mezzanine to that doorway. In the alternative, where more than one doorway is required, travel distance is measured from any point on the mezzanine to the nearest egress facility. In addition, as specified in Sentence (4) where the space below the mezzanine is enclosed, an egress facility from the mezzanine shall not lead into the enclosed space.

The subject viewing platform, if considered to be an independent feature relative to the second storey construction, is less than 500 m^2 in area. For the purposes of Sentence 3.3.1.5.(2) it would not be required to terminate at a fire separation. Also, according to the Applicant, a 45 m travel distance can be achieved from any point on the viewing walkway using one of the three egress facilities provided. As noted above, two of these egress facilities lead to the production level where exits are then provided at 60 m intervals around the perimeter of the building. A third egress facility is also provided, leading through the second storey from the walkway connection to that floor area.

In respect to these construction requirements, it should be noted that the Respondent takes the position that the viewing walkway is an extension of the existing second storey and is, therefore, required to meet the same construction standards and exiting requirements as mandated for a storey in an F3 occupancy.

4. Provisions of the Ontario Building Code

Sentence 3.2.1.1. Exceptions in Determining Building Height

(4) Except as required by Sentence (5), a *mezzanine* shall not be considered as a *storey* in calculating *building height* and need not conform to Sentence (3) provided the aggregate area of the *mezzanine* floor is not more than 10% of the area of the

(a) the *suite* in which it is located, where there is more than one *suite* in the *storey*, or

(b) the *storey* in which it is located, in all other cases.

(See A-3.2.1.1.(3) in Appendix A.)

Sentence 3.3.1.5. Egress Doorways

(2) Except for a *mezzanine* within a *dwelling unit*, every *mezzanine* that is not required to terminate at a vertical *fire separation* in Article 3.2.8.2. shall have 2 egress facilities placed in such a manner that one facility could provide egress from the *mezzanine* if the other facility becomes inaccessible to the occupants of the *mezzanine* due to a fire which might originate in the room or *suite* in which the *mezzanine* is located where

(a) the *occupancy* of the *mezzanine*, room or *suite* is classified as Group F, Division 1,

(b) the *mezzanine* is intended for an *occupant load* of more than 60 persons,

(c) in a *floor area* that is not *sprinklered*,

  (i) the area of a *mezzanine* is more than the value in Table 3.3.1.5.A., or

  (ii) the travel distance to an egress doorway or an egress facility is more than the value in Table 3.3.1.5.A., or

(d) in a *floor area* that is *sprinklered*,

  (i) the travel distance to an egress doorway or an egress facility is more than 25 m (82 ft), or

(ii) the area of the *mezzanine* is more than the value in Table 3.3.1.5.B.

(3) For the purpose of Clause (2)(c) and Clause 2(d),

(a) if the room or *suite* in which the *mezzanine* is located is permitted to have one egress doorway, the travel distance is measured from any point on the *mezzanine* to that doorway, or

(b) if the room or *suite* in which the *mezzanine* is located is required to have more than one egress doorway, the travel distance is measured from any point on the *mezzanine* to the nearest egress facility leading from the *mezzanine*.

(4) Except for a *mezzanine* which is not considered as a *storey* in calculating *building height* in Sentence 3.2.1.1.(4), where the space below a *mezzanine* is enclosed, an egress facility from the *mezzanine* shall not lead into the enclosed space. (See Article 3.4.2.2. for *exits* requirements.)

5. Applicant's Position

The Agent for the Applicant described the feature in dispute as a viewing platform which, in his opinion, can be viewed as a mezzanine. He explained that the primary function of this platform will be to allow visitors to tour the plant and view the production area below. It would be used periodically for school field trips and other such educational tours. The Agent advised that a maximum of 36 people would be permitted to use the walkway at any one time and that children must be a minimum of 10 years old to participate in the tour. Conditions to this effect will be included in an approved Fire Safety Plan.

In respect to the construction of the walkway the Agent advised that this is an intermediate floor assembly for which the reduced requirements of a 10% mezzanine apply. The walkway will be provided with a one hour fire resistance rating and the two required egress facilities are provided from the mezzanine level. While noting that one end of the walkway is connected to the second storey he stated that there is nothing in the Code which would prohibit that connection. He considers it to be more of a convenience connection and further noted that a third means of egress is provided as a result.

In addition, the Agent advised that the building is provided with a single stage fire alarm system and that manual pull stations would be provided at the three egress points from the mezzanine. In summation, the Agent argued that the platform should be viewed as a mezzanine which provides sufficiency of compliance with the associated Code requirements.

6. Respondent's Position

The Designate for the Respondent submitted that the initial building permit for this facility was issued in 2000. Since that time 26 permits have been issued at various stages of construction. A final occupancy permit has still not been issued however, the building is fully operational and several partial occupancy permits have been approved.

The Designate submitted that, in her opinion, the feature in question must be considered as an extension to the second storey of the building, consequently requiring a two hour fire-resistance rating and conforming with the exit provisions of Section 3.4. She based this conclusion on the fact that the

viewing platform is an addition to, and continuation of, the second floor area by virtue of the narrow connection at the end of the walkway.

The Designate advised that, in her opinion, "the intent of the building code is not to consider parts of a continuous floor area distinctly and separately for the purpose of determining less restrictive construction requirements, egress and other life safety measures. It is entirely another matter when considering a separate floor area. Indeed, there are numerous separate mezzanine floor areas within the Coca Cola plant which are not considered a storey as they are less than 10% of the building area and thus conform to Sentence 3.2.1.1.(4)." Those mezzanines differ, she stated, because they are separate and distinct floor areas.

In summation, the Designate submitted that the aggregate area of the north mezzanine, upper level offices and the subject viewing platform is considered to be a part of the second storey. She argued that various areas of this storey cannot be considered separately for the purposes of determining less restrictive requirements for the fire resistance rating of the floor assembly, egress from the floor area and life safety requirements.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-constructed viewing walkway is considered to be a mezzanine that will provide sufficiency of compliance with Sentences 3.2.1.1.(4), 3.3.1.5.(2), (3), and (4) of the Ontario Building Code at the Coca-Cola Bottling Company, 15 Westcreek Boulevard, Brampton, Ontario.

8. Reasons

i) Notwithstanding the narrow connection to the second storey, the viewing walkway functions as a mezzanine.

ii) The occupant load is restricted in accordance with the approved Fire Safety Plan.

iii) Additional directional exit signs are to be provided to identify alternate egress routes from the mezzanine.

Dated at Toronto this **12th** day in the month of **December** in the year **2002** for application number **2002-46**.

Michael Steele, Vice-Chair

John Guthrie

Robert De Berardis

Ruling No. 02-41-896
Application No. 2002-42

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.3.1.2.(3) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Bud Johnson, Principal, Jasco Holdings Inc., for the resolution of a dispute with Frank Asta, Chief Building Official, Town of Oakville, to determine whether the as-installed natural gas fireplace that is located in the main lobby of a children's learning centre provides sufficiency of compliance with Sentence 3.3.1.2.(3) of the Ontario Building Code at the Wildwood Learning Centre, 2250 Sheridan Garden Drive, Town of Oakville, Ontario.

APPLICANT	Bud Johnson, Principal Jasco Holdings Inc. Oakville, Ontario
RESPONDENT	Frank Asta Chief Building Official Town of Oakville
PANEL	Len King, Vice-Chair Fred Barkhouse Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	December 4, 2002
DATE OF RULING	December 4, 2002
APPEARANCES	David Syrett Leber/Rubes Inc. Toronto, Ontario **Agent for the Applicant** Frank Asta Chief Building Official Town of Oakville **The Respondent**

RULING

1. The Applicant

Bud Johnson, Principal, Jasco Holdings Inc., has received an order under the *Building Code Act*, S.O. 1992, c. 23, as amended, in connection with an alleged deficiency at the Wildwood Learning Centre, 2250 Sheridan Garden Drive, Oakville, Ontario.

2. Description of Construction

The Applicant is constructing a children's learning centre (hereafter "private school") having a Group A, Division 2 occupancy. The L-shaped structure is one storey in building height and approximately 1,650 m^2 in building area. The building is a mix of combustible and noncombustible construction and is equipped with sprinklers and a fire alarm detection system, which is monitored by an independent central station. The fire alarm system includes a control panel, sprinkler flow switches, corridor smoke detection, manual pull stations at each exit corridor and alarm signalling appliances throughout. Emergency lighting and exit signage are also provided throughout the building.

Access to exits for the classrooms, gymnasium, library, lunch/meeting area, service spaces, administration offices and other amenity spaces in the proposed building is by way of two main corridors arranged in an 'L' configuration. The entrance lobby serves as the main entrance and is the intersection of the two corridors. The two main corridors and the entrance lobby are separated from the rest of the building by fire separations not having a fire-resistance rating.

The building has a total of six classrooms. Each classroom has two means of egress: one that leads directly to the building exterior and one that leads to an interior corridor. The library has three means of egress: two that lead to the building exterior and one that leads to the entrance lobby. In addition, the gymnasium has three means of egress: one that leads to the exterior, one that leads to an interior corridor, and one that leads to the entrance lobby. Rooms that have a doorway to one of the main corridors have either an exterior door to the outdoors, a doorway that opens into a subsidiary corridor where it is possible to go in opposite directions to two separate exits without travelling through the entrance lobby, or both.

The construction in dispute involves the open hearth natural gas fireplace, which is located in the entrance lobby of the private school. The Respondent's position is that the entrance lobby is part of a corridor serving as an access to exit, and therefore the location of the fireplace is in contravention of the Code, which prohibits a fuel-fired appliance in a corridor serving as an access to exit. The Applicant maintains that the entrance lobby is not part of a corridor serving as an access to exit, because it is not a required means of egress from other parts of the building.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-installed natural gas fireplace located in the main lobby of a children's learning centre provides sufficiency of compliance with Sentence 3.3.1.2.(3) of the Ontario Building Code (OBC).

Sentence 3.3.1.2.(3) deals with fuel-fired *appliances* and their restrictions regarding corridors serving as an *access to exit*. According to OBC Article 1.1.3.2., an *appliance* means "a device to convert fuel into energy and includes all components, controls, wiring and piping required to be part of the device by the

applicable standards referred to in this Code". Since, by definition, an appliance is a "device to convert fuel into energy", a natural gas fireplace is a fuel-fired appliance under the OBC and, as such, its application is required to conform to the provisions outlined in Sentence 3.3.1.2.(3) of the Code.

Sentence 3.3.1.2.(3) of the Code states that a fuel-fired appliance shall not be installed in a corridor serving as an *access to exit*. Article 1.1.3.2. defines *access to exit* as "part of a means of egress within a floor area that provides access to an exit serving the floor area". Despite the configuration of the corridor at dispute, and the numerous means of egress in a possible emergency situation, the Building Code Commission (BCC) regards the entrance lobby as forming part of the access to exit corridor system, because it provides immediate access to the main entrance doors, which serve as a means of egress from the floor area.

Based on this determination, and the presence of the natural gas fireplace in the entrance lobby, the issue at hand is then whether there are any compensating measures offered by the Applicant party and, if so, whether they are sufficient to adequately address the required level of safety mandated by OBC Sentence 3.3.1.2.(3).

4. Provisions of the Ontario Building Code

Sentence 3.3.1.2. Hazardous Substances, Equipment and Processes

(3) A fuel-fired *appliance* shall not be installed in a corridor serving as an *access to exit*.

5. Applicant's Position

The Applicant's Agent began by submitting that it is his belief that the entrance lobby, in which the proposed fireplace is located, is not part of a corridor serving as an access to exit due to the fact that there are numerous means of egress from the floor area that individuals can access without having to travel through the entrance lobby. For example, he noted that rooms in the proposed building, which have a doorway to one of the two main corridors, have either an exterior door to the outdoors, a doorway that opens into a subsidiary corridor where it is possible to go in opposite directions to two separate exits without having to travel through the entrance lobby, or both.

The Agent continued by stating that he considers the application of a natural gas fireplace in the entrance lobby to be reasonable due to the fact that the proposed building is fully sprinklered and equipped with a fire detection and alarm system. Smoke detection devices have been installed in the corridors and entrance lobby to ensure early detection and warning of a potential emergency. The Agent noted that the gas valve for the fireplace is connected to the fire alarm system control unit, so that it will close automatically upon activation of the fire alarm system. In addition, the automatic sprinkler system serves as automatic fire detection in addition to automatic fire suppression. The Agent added that the system is monitored by an independent central station, so as to ensure timely notification to the Fire Department.

The Agent stated that, according to Sentence 3.3.2.5.(4) of the OBC, the corridors in the subject building are not required to be constructed as fire separations, because the travel distance to an exit from any point of the building does not exceed the 45 m limit outlined in Clause 3.4.2.5.(1)(c)of the Code. Despite this, the two main corridors in the subject building are separated from the remainder of the floor area by unrated fire separations that are continuous from the floor slab to the underside of the roof deck, thereby providing a smoke tight seal should a fire occur. According to the Agent, this not

only provides for fire containment, but also enhances the building's safety by offering increased time for egress from the classrooms and the library. Furthermore, the Agent submitted that the gymnasium is separated from the remainder of the building by a 30 minute fire separation, as required by Sentence 3.3.2.2.(8) of the Code, and also has two means of egress independent of the entrance lobby.

In summary, the Agent reiterated that the entrance lobby is not a corridor serving as an access to exit, because it is not the only means of egress from the floor area of the building. In this regard, it is the Agent's belief that the as-installed fireplace is in compliance with Sentence 3.3.1.2.(3) of the Code. Furthermore, the Agent added that the installation of the natural gas fireplace is reasonable due to the fact that the building is fully sprinklered and equipped with a fire detection and alarm system. Lastly, the Agent submitted that the two main corridor walls have been designed and constructed as fire separations, so as to provide a smoke tight seal should a fire ensue in the proposed building.

6. Respondent's Position

The Respondent submitted that the entrance lobby of the proposed building is what connects the two corridors serving classrooms on both sides. In this regard, the purpose of the entrance lobby, as per the Respondent, is to function as the hub between the two main corridors. He added that Sentence 3.3.1.2.(3) of the OBC clearly states that a fuel fired appliance shall not be installed in a corridor serving as an access to exit. In his view, occupants must travel through the entrance lobby to get to the front door, which is one of the means of egress from the floor area. The Respondent reiterated that the Code prohibits fuel fire appliances in an access to exit, and that it is his opinion that the entrance lobby is, in fact, an access to exit.

The Respondent continued by stating that it appears that the entrance lobby has been designed to be used as a place of congregation, with the fireplace serving as its focal point. The Respondent submitted that while he can appreciate that the fireplace will serve as a focal point, the corridor in which it is located is not permitted to function as a place of congregation/activity. The Respondent stated that he believes the presence of a fuel fireplace in the entrance lobby will only encourage congregation in this area.

In summary, the Respondent submitted that it is his belief that the entrance lobby of the proposed building is, in fact, an access to exit and therefore a fuel-fired appliance is not permitted as outlined in Sentence 3.3.1.2.(3) of the Code. Furthermore, the Respondent stated that he believes that the presence of a fireplace in the entrance lobby will only encourage congregation in this area.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed natural gas fireplace located in the main lobby of a children's learning centre will provide sufficiency of compliance with Sentence 3.3.1.2.(3) of the Ontario Building Code at the Wildwood Learning Centre, 2250 Sheridan Garden Drive, Oakville, Ontario on condition that:

1. The fireplace is to be enclosed by a secured and lockable glass enclosure.

2. The doors leading from the gymnasium to the exterior of the building are to be equipped with panic hardware and the doors providing access from the gymnasium to the lobby and corridor are to have no locking capabilities.

3. The operating controls for the fireplace and thermostat shall be situated in a remote location and locked to prevent tampering or actuation by unauthorized individuals.

4. The fuel supply to the fireplace is to be shut off by activation of the fire alarm system and in the event of a loss of power.

8. Reasons

i) The corridors are fire separated from the remainder of the floor area which exceeds the requirements of the Building Code.

ii) All major rooms have a separate and second means of egress, at grade level, leading directly to the exterior of the building.

iii) A fire plan will be approved and implemented.

iv) The building is equipped with an independently monitored fire alarm system and is fully sprinklered.

v) Each room having access to the corridor is also provided with a second and separate means of exit without the need to travel through the lobby area.

Dated at Toronto this **4th** day in the month of **December** in the year **2002** for application number **2002-42**.

Len King, Vice-Chair

Fred Barkhouse

Gary Burtch

Ruling No. 02-40-895
Application No. 2002-41

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 9.8.8.5 of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by John Kuiack, Wasko Development, for the resolution of a dispute with Rocky Cerminara, Chief Building Official, City of London, to determine whether the 800 mm non-climbable zone required for guards in Article 9.8.8.5. of the Ontario Building Code may be measured directly from the level of the walking surface to a height of 800 mm and, if so, whether the as-installed guard, having pickets with horizontal cross members at approximately 787 mm above the walking surface, provides sufficiency of compliance with Article 9.8.8.5. of the Ontario Building Code at 99 Fitzwilliam Boulevard, City of London, Ontario.

APPLICANT	John Kuiack Wasko Development London, Ontario
RESPONDENT	Rocky Cerminara Chief Building Official City of London
PANEL	Len King, Vice-Chair John Guthrie Donald Pratt
PLACE	Toronto and London, Ontario
DATE OF HEARING	November 21, 2002
DATE OF RULING	November 21, 2002
APPEARANCES	Carl Roes Roes Stair Co. Inc. Mt. Brydges, Ontario **Agent for the Applicant** Dave Howe **(Via Teleconference)** Manager of Inspections City of London **Designate for the Respondent**

RULING

1. The Applicant

John Kuiack, Supervisor, Wasko Development, has received an order to comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, to remedy certain alleged deficiencies with respect to the construction of a single family dwelling located at 99 Fitzwilliam Boulevard, City of London, Ontario.

2. Description of Construction

The Applicant has constructed a Group C single detached dwelling. The structure is two storeys in building height and approximately 472 m^2 in building area.

The construction in dispute involves the design of the guard serving the interior stairs and the open floor area on the second floor. The as-installed guard consists of a wood top rail and wrought iron vertical members (hereafter pickets). The pickets have been designed into groups of three, with each group having a decorative horizontal cross member towards the upper portion of the guard system. A curved portion, which extends to the wood top rail, has been attached above each horizontal member, thereby creating a semi-circular/crescent design. These horizontal cross members, which are located 787 mm above the walking surface, are not continuous and do not extend from one group of pickets to the next. Each picket also has a small decorative protrusion at its midpoint.

3. Dispute

There are two issues at dispute between the Applicant and Respondent. The first is whether the 800 mm non-climbable zone (as measured perpendicularly above the walking surface of the floor area) required for guards in Article 9.8.8.5. of the Ontario Building Code (OBC) may, in the subject case of the as-installed guard at 99 Fitzwilliam Boulevard, City of London, Ontario, be measured directly from the level of the walking surface to a total height of 800 mm. The second dispute is whether the as-installed guard, having pickets with horizontal cross members at approximately 787 mm above the walking surface, provides sufficiency of compliance with Article 9.8.8.5. at the same residence.

Sentence 9.8.8.5.(1) stipulates that required guards, which serve buildings of residential occupancy, must be designed in such a way so as not to facilitate climbing between 100 mm (4 in) and 900 mm (2 ft 11 in) above the floor or walking surface of the area the guard is protecting. This requirement provides for a non-climbable zone of 800 mm (2 ft 7 in). The 800 mm protected region, beginning 100 mm above the walking surface, is intended to limit the likelihood that a picket, or decorative element, would produce a ladder effect, which could lead to a child climbing over the guard system. As noted above, the horizontal cross members, located 787 mm above the walking surface of the floor area, are within the non-climbable zone required by Sentence 9.8.8.5.(1) of the Code.

The Appendix to Article 9.8.8.5. (A-9.8.8.5.), while not an official part of the Code, offers a rationale as to the intent of this Code provision, because it outlines why guards must be designed to prevent climbing. It states that the risk of falling over a guard is especially prevalent for young children, who may use decorative elements as foot and handholds. This risk is especially prevalent in guards that are constructed with horizontal or near horizontal members between pickets, as a ladder effect may be achieved, thereby becoming very tempting for a young child to climb. This could, in turn, result in accidental falls from one level to another. A-9.8.8.5. stipulates that the requirements are stringent for guards in all buildings except industrial occupancies, where children are unlikely to be present unless

under strict supervision. It should be noted that Article 9.8.8.5. is not intended to entirely eliminate the possibility of climbing. Instead, it is intended to reduce the likelihood and temptation of scaling a guard by young children.

4. Provisions of the Ontario Building Code

9.8.8.5. Design to Prevent Climbing
(See Appendix A.)

(1) *Guards* required by Article 9.8.8.1. and serving *buildings* of *residential occupancy* shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2 ft 11 in) above the floor or walking surface protected by the *guard* will facilitate climbing.

5. Applicant's Position

The Agent for the Applicant began by providing the Commission with a sample of the guard in dispute. He maintained that the installation of the guard proceeded without prior discussion with the Respondent party in regards to its shape and design. The Agent cited that it is the opinion of the manufacturer of the guards that its design poses no problem, despite the fact that the Respondent party maintains the opposite opinion.

The Agent added that the issue at dispute pertains to the horizontal elements located 787 mm above the walking surface, and not the ornamental protrusion present at approximately the mid-point of every vertical picket. He stated that a previous ruling made by the Commission dealt with the ornamental protrusions and the Respondent party concurred with this statement.

The Agent added that the entire guard in dispute measures to a height of 921 mm (measuring from the floor to the top of handrail), which is 21 mm higher than required. The Agent submitted that it is his belief that the semi-circular/crescent member, which is attached to, and located immediately above, the horizontal member is the only portion of the guard system that a child can gain a foot or handhold. The lower portion of this semi-circular/crescent member is located 787 mm above the floor of the walking surface.

The Agent then went on to question whether the 800 mm non-climbable zone, required by Sentence 9.8.8.5.(1) of the Code, needs to be measured from 100 mm above the walking surface of the floor area to a height of 900 mm, or whether it can be measured directly from the walking surface of the floor area to a height of 800 mm. The Agent argued that the integrity of the 800 mm non-climbable zone is still maintained if measured from the walking surface of the floor area and that it has only been shifted slightly downward in this particular instance. In this regard, if the non-climbable zone is measured directly from the floor of the walking surface, then the distance from the lower point of the semi-circular/crescent element to the floor of the walking surface, which measures 787 mm, is only 13 mm shy of the 800 mm non-climbable zone outlined in Sentence 9.8.8.5.(1) of the Code. The Agent then asked the Commission whether they would consider the notion of a "sliding" non-climbable zone and, if so, whether the 13 mm variance, provided sufficiency of compliance with the intent of Sentence 9.8.8.5.(1) of the Code.

In summary, the Agent for the Applicant submitted that it is both his opinion, and the opinion of the manufacturer, that the guard system in question poses no design problems with respect to the issue of child climbing.

6. Respondent's Position

The Designate for the Respondent submitted that it is his belief that the climbing protection zone should be measured to the upper portion of the horizontal cross member and not to the lower portion of the semi-circular/crescent element, which is attached to, and featured immediately above, the horizontal cross member. The Designate added that it is his opinion that the horizontal cross member produces a visual effect that is somewhat similar to a ladder, which may entice child climbing. The Designate added that the horizontal cross member, which measures to a height of 775 mm from the floor of the walking surface, is clearly within the 100 mm to 900 mm zone outlined in Sentence 9.8.8.5.(1) of the Code.

The Designate continued by stating that the Code does not address a "sliding" non-climbable zone and therefore disagrees with the Agent's assertion of measuring the zone directly from the walking surface of the floor area to a height of 800 mm. Furthermore, he added that regardless of whether the climbing protection zone is measured from 100 mm above the walking surface to a height of 900 mm, or directly from the floor of the walking surface to a height of 800 mm, the horizontal cross member and its semi-circular/crescent attachment still falls within the vertical zone applicable to guard design that is intended to protect against climbing and, therefore, does not comply with the OBC.

In summary, the Designate argued that the horizontal members could provide a graspable ledge, which may assist a child in pulling him or herself over the guard. In his opinion, the as-installed guard system is not in compliance with the Code, because it could facilitate child climbing.

7. Commission Ruling

It is the decision of the Building Code Commission that the 800 mm non-climbable zone (as measured perpendicularly above the walking surface) required for guards in Article 9.8.8.5. of the Ontario Building Code may, in the subject case of the as-installed guard at 99 Fitzwilliam Boulevard, London, Ontario, be measured directly from the level of the walking surface to a total height of 800 mm.

It is also the decision of the Building Code Commission that the as-installed guard, containing pickets with horizontal cross members located 787 mm above the walking surface, provides sufficiency of compliance with Article 9.8.8.5. of the Ontario Building Code at 99 Fitzwilliam Boulevard, London, Ontario.

8. Reasons

i) Article 9.8.8.5. prescribes a vertical zone applicable to guard design that is intended to protect against climbing. The Article indicates that this zone is to be between 100 mm and 900 mm above the walking surface. In the Commission's view, the prescribed zone of non-climbability does not need to be fixed at 100 to 900 mm and may be moved slightly upwards or downwards as long as the intent of the provision is maintained, i.e., the integrity of the 800 mm zone of non-climbability is not compromised.

ii) The existing guard provides a vertical clearance from the floor to the upperside of the lowest point of the semi-circular elements of 787 mm, which is only 13 mm less than the 800 mm requirement discussed above.

iii) The vertical guard is 921 mm in height which exceeds the minimum height requirement of 900

mm by 21 mm and provides compensation for the above 13 mm compliance discrepancy.

iv) The BCC holds that the existing, as-built design does not entice children to climb the subject guard, nor is it, we believe, easy for young children to climb over.

Dated at Toronto this **1st** day in the month of **May** in the year **2003** for application number **2002-41**.

Len King, Vice-Chair

John Guthrie

Donald Pratt

Ruling No. 02-39-894
Application No. 2002-37

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 9.16.4.4. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Robert Muzick, Tri-Valley Development Corporation, for the resolution of a dispute with Mani Navabi, Chief Building Official, City of Vaughan, to determine whether the as-constructed basement concrete floor slab which varies in thickness from 64 mm to 89 mm provides sufficiency of compliance with Article 9.16.4.4. of the Ontario Building Code at 49 Pinemeadow Drive, Vaughan, Ontario.

APPLICANT	Robert Muzick Tri-Valley Development Corporation Weston, Ontario
RESPONDENT	Mani Navabi Chief Building Official City of Vaughan
PANEL	Len King, Vice-Chair John Guthrie Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	November 21, 2002
DATE OF RULING	February 21, 2003
APPEARANCES	Allan Larden Larden Muniak Consulting Inc. Toronto, Ontario **Agent for the Applicant** Mani Navabi Chief Building Official City of Vaughan **The Respondent**

RULING

1. The Applicant

Robert Muzick, Tri-Valley Development Corporation, has received an order to comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, to remedy certain alleged deficiencies at 49 Pinemeadow Drive, Vaughan, Ontario.

2. Description of Construction

The Applicant has constructed a 185.80 m^2 (2,000 ft^2) single detached dwelling. The dwelling is one storey in building height and comprised of combustible construction.

The construction in dispute involves the poured concrete basement floor slab. In this regard, core samples obtained from the concrete slab measure from 64 mm to 89 mm in length. The compressive strength of the concrete as determined by testing of the core samples, ranges from 36.5 Mpa to 38.1 Mpa.

An order to comply has been issued by the municipality as the Code standard in respect to concrete slabs requires a minimum thickness of 75 mm in this instance.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-constructed concrete basement floor slab which varies in thickness from 64 mm to 89 mm provides sufficiency of compliance with Article 9.16.4.4. of the Ontario Building Code (OBC).

This Article stipulates that concrete slabs shall not be less than 75 mm thick, exclusive of concrete topping. The subject concrete slab, as noted above measures from 64 mm to 89 mm in thickness, thereby surpassing Code requirements in some areas while proving to be deficient in thickness in others. That being the case, the Applicant notes that the compressive strength of the concrete exceeds the OBC requirement of 25 Mpa. This fact is offered as compensation for the minimal reduction in thickness below the 75 mm requirement.

4. Provisions of the Ontario Building Code

Article 9.16.4.4. Thickness

(1) Concrete slabs shall be not less than 75 mm (3 in) thick exclusive of concrete topping.

5. Applicant's Position

The Agent for the Applicant advised that a situation had occurred whereby new homeowners were being approached by an independent third party and advised that their basement floor slabs may not meet the prescribed thickness requirements of the Code. The suggestion made by this third party to the homeowners, he explained, is that, if this proved to be the case, they may be able to extract some compensation from the builder. How this worked was, following discussions with the homeowner of

the subject dwelling, the third party individual would obtain core samples from the concrete slab, some of which were found to be less than the 75 mm requirement while others exceeded the minimum standard. This fact was then brought to the attention of City officials who subsequently issued an order to comply to the homebuilder, i.e. the Applicant in this dispute.

By way of explanation for the areas of deficiency the Agent advised that, while contractors pouring concrete slabs are directed to do so based on Code thickness requirements, site conditions are sometimes such that slight variations may occur. He explained that workers walking on the stone may create minor indentations or leak-throughs in some areas may also occur. These conditions, he argued, are normal variations in the construction standards. He stated that the rights of the homeowner in this regard are protected by the Ontario New Home Warranty Program and he emphasized that, in the subject dwelling, there was no issue as to the quality of the concrete poured. No cracking had occurred and it was only as a result of core sampling that it was discovered that there was any deficiency.

In respect to the quality of the concrete used in the construction of the floor slab and to demonstrate that an equivalent level of performance would be achieved, the Agent advised that the compressive strength of the concrete exceeded the Code requirement of 25 Mpa. At the request of the Commission, further testing by a professional engineer found the compressive strength to range from 36.5 Mpa to 38.1 Mpa. The Agent further submitted that the average length of the core slabs obtained by both the representative of the homeowner and the testing firm contracted by the Applicant surpassed the 75 mm minimum.

In summation, the Agent submitted that when considering all factors there was, in his opinion, a strong argument in support of a ruling for sufficiency of compliance. He suggested that, while tolerances in the standards of construction in this respect are not presently outlined in the OBC, the latest version of the CSA standard for slab on grade does include such allowances. He further emphasized that the engineering analysis of the concrete illustrate that the anticipated loads will be supported by the slab as constructed.

6. Respondent's Position

The Respondent submitted that the prescriptive requirements contained in Part 9 of the Code dictate that the concrete floor slab be a minimum of 75 mm thick. He suggested that this does not preclude the slab from being poured so that it is thicker than 75 mm, however, it is not acceptable fo the slab to fall short of this requirement. He further stated that there is nothing in the Code which would support consideration of the average thickness, as suggested by the Agent for the Applicant. This could create situations where the slab could be quite thin in areas and thicker in other. Moreover, in respect to any inclusion of tolerances in the OBC by way of a Code amendment, the Respondent suggested that there would also likely be an associated increase in the minimum thickness requirement.

In respect to the Applicant's argument that the strength of the concrete compensates for the deficiency in thickness, the Respondent stated that, for him to consider acceptance of this argument, a complete structural report conducted under Part 4 of the Building Code would be required. He suggested that "(a)ny comprehensive report must take into account the compaction of the ground under the floor slab, which in this case has not been substantiated. Further, the ground under the floor slab in houses is often disturbed and not usually compacted and a certain thickness of concrete is required to span any soft spots that may be present. For this reason the Building Code has mandated a minimum thickness of 3 inches." The minimum strength requirement, he submitted, is independent from the thickness requirement and should not be used to compensate for a deficiency in this regard.

In summation, the Respondent stated that the Code requirement was clear in respect to the minimum thickness for concrete slabs. He argued that this was not a matter open to interpretation and that the samples taken from the subject house demonstrate that the minimum requirement has not been met.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-constructed basement concrete floor slab which varies in thickness from 64 mm to 89 mm provides, sufficiency of compliance with Article 9.16.4.4. of the Ontario Building Code at 49 Pinemeadow Drive, Vaughan, Ontario.

8. Reasons

i) The results of an independently conducted analysis, as requested by the Building Code Commission and performed by a professional engineer, concluded that the compressive strength of the three separate core samples ranged from 36.5 Mpa to 38.1 Mpa, exceeding the requirement of 25 Mpa stipulated in Article 9.16.4.2.

ii) The core samples that were analyzed in this test were obtained by an independent testing agency.

iii) The length of the majority of the core samples taken from the floor slab equalled or exceeded the minimum thickness requirement and, furthermore, the average thickness of the samples was greater than the 75 mm minimum established by the Code.

Dated at Toronto this **21st** day in the month of **February** in the year **2003** for application number **2002-37**.

Len King, Vice-Chair

John Guthrie

Donald Pratt

Ruling No. 02-38-893
Application No. 2002-33

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Clause 3.3.4.4.(1)(a) of O. Reg. 583/83 and Sentence 11.4.1.1.(1) and Article 11.5.2.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Paul and Linda Clement, property owners, for the resolution of a dispute with Philip Gerrard, Chief Building Official, Township of North Grenville, to determine whether the compensating construction offered in an existing, 2 storey, 14 unit apartment building where the length of dead-end corridors exceeds the permitted maximum, provides sufficiency of compliance with Clause 3.3.4.4.(1)(a) of the 1983 Ontario Building Code when considering Sentence 11.4.1.1.(1) and Article 11.5.2.1. of the 1997 Ontario Building Code, at 101 Joseph Street, Township of North Grenville, Ontario.

APPLICANT	Paul and Linda Clement Property owners Vars, Ontario
RESPONDENT	Philip Gerrard Chief Building Official Township of North Grenville
PANEL	Len King, Vice-Chair John Guthrie Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	November 21, 2002
DATE OF RULING	November 21, 2002
APPEARANCES	David Connelly Dacon Management Services Orleans, Ontario **Agent for the Applicant**

Philip Gerrard Chief Building Official Township of North Grenville **The Respondent**	J. Peter Vice Barristers & Solicitors Vice & Hunter **Solicitor for the Respondent**

RULING

1. The Applicant

Paul and Linda Clement, property owners, have received an Order to Remedy Unsafe Building under the *Building Code Act*, S.O. 1992, c. 23, as amended, pertaining to certain alleged deficiencies including the existing dead-end corridor configuration at 101 Joseph Street, Township of North Grenville, Ontario.

2. Description of Construction

The Applicant is the owner of a two storey apartment building constructed in 1985. The structure has a building area of 967 m^2, is comprised of a combination of noncombustible and combustible construction and is equipped with a fire alarm system. It has a Group C major occupancy classification and also incorporates a storage garage, classified as an F3 occupancy.

The item specific to this dispute is the length of the existing dead-end corridors on the first and second floors. The building is essentially rectangular in shape with the entrance situated approximately at the mid-point of the structure. The stairs and elevators serving the second floor are also situated in the middle of the building with a single public corridor extending in both directions from this central area. As a result, on both floors the corridors measure approximately 13.7 m and terminate at a dead-end. No alternate exit is provided at or near the ends of these corridors, however, the ground floor units each have an exit directly to the exterior.

Occupancy permits were issued for this building at the time of construction in 1985, however upon recent review by the municipality and discovery of this situation, an unsafe order was issued. In response to this order the Applicant is proposing to install 45 minute rated doors and frames in one hour rated partitions to subdivide the existing corridors. The partitions would run from floor level to the underside of the existing ceiling. The doors are proposed to be equipped with accessible egress latching hardware and automatic closing devices.

The aim of this proposal is to shorten the dead-end portion of the corridor running from the access to exit at the mid-point of the building to the entrance of the partitions. In addition, as a result of the proposed partitions, semi-private "vestibule" areas will be created at the ends of the existing corridors. The Applicant is proposing to pressurize these vestibules and protect the pressurization system by one hour rated construction. In addition, an exit light and a smoke detector will be installed in each vestibule and the ceiling structures above the vestibules will be reinforced to resist collapse.

Although the Applicant is prepared to construct these vestibules on both the first and second floors in response to the unsafe order, it is argued that because each dwelling unit on the ground floor has its own exit to the exterior, only the second storey would need to altered to address any "unsafe" situation.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed compensating construction offered in a 17 year old building where the length of the existing dead-end corridors exceeds the permitted maximum will provide sufficiency of compliance with Clause 3.3.4.4.(1)(a) of the 1983 Ontario Building Code (OBC) when considering Sentence 11.4.1.1.(1) and Article 11.5.2.1. of the current OBC.

Clause 3.3.4.4.(1)(a) mandates that dead-end corridors are not to exceed 6 m in length. The corridors on both the first and second floor were constructed in 1985 and measure approximately 13.7 m in length, terminating at a dead-end where no second and separate means of egress is provided. An occupancy permit was issued by the municipality at the time of construction and, until recently, no issue with respect to this existing situation had been raised. Upon recent inspection, the deficiency was noted and an Order to remedy the perceived unsafe situation was issued. As a result of this Order, as described above, the Applicant has proposed to compartmentalize the existing hallways to create shorter dead-end corridors measuring approximately 6 m in both directions from the point of access to exit.

In respect to the renovation of an existing building Sentence 11.4.1.1.(1) requires that the performance of the building after construction shall not be less than the performance level prior to construction. Furthermore, when considering alteration of an existing building, Article 11.5.2.1. permits the use of alternative measures where the Chief Building Official (CBO) (or alternatively the Building Code Commission under appeal) is satisfied that compliance with other parts of the code may be impractical because of construction difficulties or may be detrimental to the preservation of a heritage structure. Moreover, the CBO must be satisfied that the performance level of the building after use of the alternative measures shall not be less than the performance level of the building prior to construction.

As this is an existing building, falling under the purview of Part 11 of the Code, the Applicant has proposed the use of alternative measures to address the dead-end corridor issue identified in the Order to Remedy Unsafe Building issued by the municipality. The Applicant's position is that the proposed construction will not reduce the performance level of the existing building and that, to require strict compliance with the prescriptive requirements of the 1983 OBC is not practical because of the construction difficulties and cost involved.

4. Provisions of the Ontario Building Code

1983 Ontario Building Code, O.Reg. 583/83

3.3.4.4.(1) Except for corridors served by a single *exit* as described in Sentence 3.3.4.3.(5), a dead-end public corridor is permitted in a *residential occupancy* where

(a) it does not exceed 6 m in the distance of travel from the most remote point of the dead-end portion to a point where it is possible to go in opposite directions to each of 2 separate exits, and

1997 Ontario Building Code, O.Reg. 403/97

11.4.1.1. Performance Level

(1) The *performance level* of a *building* after *construction* shall not be less than the *performance level* of the *building* prior to *construction*.

11.5.2.1. Alternative Measures

(1) An *alternative measure* may be utilized where the *chief building official* is satisfied that

(a) compliance with the requirement of Part 3, 4, 5, 6, 7, 8 or 9 of the Code or with the *compliance alternative*, as the case may be, is impracticable because

(i) of structural or *construction* difficulties, or

(ii) it is detrimental to the preservation of a *heritage building*, and

(b) the *performance level* of the *building* after the use of the *alternative measure* shall not be less than the *performance level* of the *building* prior to *construction*.

5. Applicant's Position

The Agent for the Applicant provided the Commission with some background on the subject building, advising that it was constructed in 1985 and occupied since that time as rental accommodation. He submitted that permits had been obtained by the original permit applicant and when his client purchased the property they were advised that there were no outstanding work orders that would have to be addressed. It was not until his client contemplated converting the building into condominium units that any concern was raised. This is because when considering the conversion, the Applicant requested an inspection from the municipality and it was then that a number of deficiencies were noted. Shortly after the inspection an Order to Remedy Unsafe Building was issued outlining a number of Code violations. The Agent emphasized however, that no new construction was being proposed for the building. They were simply investigating the possibility of converting the rental units to condominium ownership. The Agent questioned the validity of the Order but advised the Commission that steps had been taken to remedy many of the items identified by the municipality as being of concern.

Notwithstanding their perception that errors have been committed by the municipality in relation to the issuance of the Order to Remedy Unsafe Building and any deficiencies with the order itself, the Applicants have prepared a proposal in an attempt to make the building safer. To address the safety issues associated with the dead-end corridor situation they are proposing to compartmentalize the areas, effectively creating shorter, more Code compliant, dead-end corridor portions and semi-private vestibules beyond the proposed partitions. Furthermore, to manage smoke movement in this area they are proposing to pressurize the vestibule areas that will be created. By doing so, the Agent submitted, the existing situation will be improved and sufficiency of compliance with the provisions of the Code will be achieved.

When questioned by the Respondent as to whether the proposed construction would provide an equal level of safety as would strict compliance with the Code requirements, the Agent acknowledged that it would not be equivalent. He emphasized, however, that this was an existing building for which building and occupancy permits had been obtained. He acknowledge the options for compliance suggested by the municipality but submitted that the proposed compensation being offered here, would be an improvement to the existing situation and would not reduce the performance level of the building. This is not a case of new construction, he argued, simply a renovation of an existing building in response to an Order that was arguably deficient. He maintained that to comply with 1983 Code requirements, as suggested by the municipality, would be both onerous and impractical at this point in time, causing disruption to tenants of this fully occupied building.

In support of the proposed remedy the Agent advised the Commission that "the existing structural elements of the building, excepting the roof trusses, are non-combustible, and therefore add no fuel to a fire. The Code however, allows the entire structure to be of combustible construction." As a second point the Agent submitted that "all corridor walls, exit stair walls, exterior bearing walls and demising walls include 8" concrete block, and can safely be assumed as having a 1 hour fire resistance rating. In each respect, then these walls exceed the Code, which permits 45 minute separations." Furthermore, the agent advised that "the 8" hollow concrete floor plans, are non-combustible, and according to the shop drawings by Coreslab included in the file, provide a fire resistance rating of 2 hours.

The Agent submitted that the existing ground floor units which are affected by the dead end corridor

situation are all provided with a second and separate means of egress by way of patio doors leading directly to the exterior of the building. In this regard, the Agent submitted that the dead-end corridors on the ground floor are permissible when considering Sentences 3.3.1.9.(9) and 3.3.4.4.(7) of the OBC. Furthermore, while acknowledging that the second floor units are not similarly equipped with a separate means of egress, the Agent submitted that each unit is provided with an existing balcony that may function as an area of refuge to occupants of that suite. These areas of refuge, he argued, would allow "for the safe evacuation of all second floor apartments, roughly equivalent in value to a second egress for each tenancy."

In summation, the Agent submitted that the proposed compensating measures would "enhance life safety in this existing building, while avoiding the expensive difficult, impractical and unattractive options suggested by the Respondent."

6. Respondent's Position

Legal Counsel for the Respondent provided the Commission with further background information acknowledging that the original permits were issued in error in 1985. As a result of this error a claim was filed by the Applicant against the municipality and a settlement had been reached on the basis of "the total cost to rectify as well as numerous and sundry costs for the relocation and disruption of tenants during the construction." Based on this settlement, he advised that the municipality has provided the Applicant with options to achieve compliance in respect to the excessive length of the dead-end. Instead, the Applicant has brought forward a number of proposals including the use of alternative measures instead of satisfying the prescriptive Part 3 requirements of the 1983 Code.

The Respondent submitted that, upon consideration of the subject proposal, it was his opinion that it will not satisfactorily comply with the OBC requirements. He submitted that to approve the use of alternative measures, he as the CBO must be satisfied of two things. Namely, that it would be impractical to comply with the Code requirements and that the performance level of the building will be at least equal to the performance level of the building prior to construction. In both regards the Respondent submitted that the Applicant's proposal fails. He stated that there has been no proof offered by the Applicant as to the impracticality of complying with the Code nor, in his opinion, will the proposal offer an equivalent level of safety as that of a Code compliant structure.

In response to the specific aspects of the proposal the Respondent offered the following comments. In respect to consideration of the second floor balconies as "areas of refuge" the Respondent submitted that, "(w)hile the floor assembly (Coreslab) of the existing balconies may provide adequate protection from exposure to heat and flame from the fire compartment below, it wouldn't meet the intent of protection from smoke emanating from the lower unit." Moreover he suggested that the balconies would have to be fire-separated from the remainder of the building which would not be accomplished by this existing open balcony situation.

In reference to the pressurized vestibules being proposed to shorten the dead-end portions of the corridors the Respondent submitted that the creation of this separation does not redefine that portion of the hallway within the vestibule area. The "vestibule" would still form part of the dead-end corridor and therefore exceed the permitted length without providing an alternate means of exit. Furthermore, notwithstanding the Applicant's request for relief under the provisions of Article 11.5.2.1., "the acceptance of a Compliance Alterative is dependent upon the Applicant meeting both tests; i.e. not only that there is an acceptable alternative to full Code compliance, but that Code compliance cannot be achieved since it is "*impractical because of structural or construction difficulties*" (emphasis added). The

Respondent argued that the Applicant had "already been fully compensated for the rectification of the outstanding deficiencies, to full compliance with the 1983 Building Code." In his opinion the proposal put forth here is not better than or equal to those prescriptive requirements and should, therefore, be rejected.

In summation, the Respondent emphasized that the Order that had been issued came as a result of a request by the Applicant for an inspection of the structure when they were considering the conversion of the building into a condominium. It was determined at the time that a number of Code violations existed and that, as a result, the building was unsafe. Moreover, one of the options that had been provided to the Applicant as a result of the claim that was filed, should be implemented to bring the building into compliance with the 1983 OBC, which applied at the time of construction.

7. Commission Ruling

It is the decision of the Building Code Commission that the provision of two pressurized vestibules on the second floor of the building to compensate for the length of the existing dead-end corridors will provide sufficiency of compliance with Clause 3.3.4.4.(1)(a) of O. Reg. 583/83 (1983 Ontario Building Code) when considering Sentence 11.4.1.1.(1) and Article 11.5.2.1. of the 1997 Ontario Building Code on condition that:

a) The doors to the two second floor vestibules are to be equipped with magnetic hold open devices which will release upon activation of the fire alarm system.

8. Reasons

i) The proposal to create two pressurized vestibules on the second floor, effectively reducing the length of the dead-end corridors, will improve the existing corridor system in the 17 year old building that was originally approved by the municipality. The provisions of Sentence 11.4.1.1.(1) will be satisfied in that the performance level after construction will exceed the performance level of the existing building.

ii) The existing building is primarily of noncombustible construction with the exception of the roof trusses.

iii) The corridor walls have a one hour fire resistance rating which exceeds the 45 minute Code requirement. Likewise, the concrete floor construction provides a fire rating in excess of that required by the OBC.

iv) The balconies of the second floor residential suites can be considered to function as areas of refuge to occupants of those units.

v) First storey units have direct access to the exterior providing occupants of these units with an alternate means of exit.

Dated at Toronto this **21st** day in the month of **November** in the year **2002** for application number **2002-33**.

Len King, Vice-Chair

John Guthrie

Donald Pratt

Ruling No. 02-37-892
Application No. 2002-35

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Clause 3.11.3.1.(6)(a) and Sentence 3.11.3.1.(7) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Robert Tomei, Tridel, for the resolution of a dispute with Ann Borooah, Chief Building Official, City of Toronto, to determine whether the compensating measures offered where the slope of the bottom of the pool exceeds 8% at a water depth of 1,350 mm or less, provide sufficiency of compliance with Clause 3.11.3.1.(6)(a) and Sentence 3.11.3.1. (7) of the Ontario Building Code at Parkside at Northtown, 880 Grandview Way, Toronto, Ontario

APPLICANT	Robert Tomei Tridel North York, Ontario
RESPONDENT	Ann Borooah Chief Building Official City of Toronto
PANEL	Len King, Vice-Chair Fred Barkhouse Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	November 7, 2002
DATE OF RULING	November 7, 2002
APPEARANCES	Randy Brown Randal Brown & Associates Toronto, Ontario **Agent for the Applicant** Algimantas Jasinevicius Acting Manager, Plans Examination City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

Robert Tomei, Tridel, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and has constructed a residential condominium building known as Parkside at Northtown, 880 Grandview Way, Toronto, Ontario

2. Description of Construction

The Applicant has constructed an 18 storey condominium building having a Group C major occupancy classification. The structure is 1,404 m^2 in building area and comprised of noncombustible construction. It is equipped with sprinkler, standpipe and hose and fire alarm systems.

The item in dispute involves the construction of an indoor swimming pools intended for use by building occupants and their guests. The pool has been constructed such that a portion of the pool having a water depth of less than 1,350 mm provides a slope which exceeds 8%. Where the depth of the pool falls between 1,066.8 mm (42 in) and 1,346.2 mm (53 in), the slope increases from 6 % to 10%. To compensate for this deficiency the Applicant is proposing an additional safety line situated 300 mm to the shallow side of the point where the gradient increases to 10%. This safety line would be a permanent fixture, mechanically fastened to the pool. It is also intended that the water depth be indicated on both sides of the pool deck to alert bathers to any hazards associated with the increased depth.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the compensating measures proposed where the slope of the pool deck exceeds 8% at a water depth of less than 1350 mm provide sufficiency of compliance with Clause 3.11.3.1.(6)(a) and Sentence 3.11.3.1.(7) of the Ontario Building Code (OBC).

Clause 3.11.3.1.(6)(a) provides that, with exceptions not applicable here, the slope of the bottom of any portion of a pool where the water depth is 1,350 mm or less shall not exceed 8%. Sentence (7), again with exceptions not applicable here, permits that where the slope of any portion of the pool exceeds 8%, the walls of the pool are to be equipped with recessed fittings to which a buoyed safety line could be attached across the water surface. The recessed fittings are to be installed at a horizontal distance of at least 300 mm towards the shallow end of the pool.

The shallow end of the subject pool initially provides a slope of 6% until a water depth of 1,066.8 mm (42 in) is reached. Between 1,066 mm and 1,346.2 mm (53 in) the slope at the bottom of the pool increases to approximately 10%, thereby exceeding the 8% standard permitted where the depth is less than 1,350 mm.

The Applicant is proposing certain measures aimed to compensate for the steeper slope at this water depth. Namely, an additional buoyed safety line is proposed, 300 mm toward the shallow side of the point where the slope increases from 6% to 10%. Further, both sides of the pool deck are to be permanently marked to indicate the water depth at each of the safety lines being provided.

4. Provisions of the Ontario Building Code

3.11.3.1. Construction Requirements

(6) Except for a *modified pool*, a *wave action pool* and a pool used exclusively for scuba diving, the slope of the bottom of any portion of a *public pool* shall not exceed

(a) 8% where the water depth is 1 350 mm (4 ft 5 in) or less,

(7) Except for a *modified pool* and *wave action pool*, where the slope of any portion of the bottom of a *public pool* is more than 8%, the walls of the pool shall be equipped with recessed fittings to which a safety line supported by buoys can be attached across the surface of the water and the recessed fittings shall be installed at a horizontal distance of at least 300 mm (11¾ in) measured from the vertical projection of the top of the slope in the direction of the shallow end of the pool.

5. Applicant's Position

The Agent for the Applicant submitted that the subject swimming pool has been constructed such that the slope in a portion of the pool where the water depth is less than 1,350 mm exceeds the 8% permitted by the Code. He advised that in the shallow end of the pool where the water is between 34 in and 42 in deep the pool slope is approximately 6%. The grade changes however, where the water is 42 in to 53 in deep, providing a slope of approximately 10%.

The Agent advised that because of the long term potential for spalling of finishes, it would not be advisable to alter the existing floor of the pool or to add a new flooring over the existing finished floor. He acknowledged, however, that the slope did not conform with the OBC requirements and offered certain measures to provide an equivalent level of safety in the pool environment. The Agent stated that, in his opinion the intent of Sentences 3.11.3.1(6) and (7) is to provide users of the pool with a warning of the change in gradient slope. To satisfy this intent, in addition to the provision of the required safety line prior to the 1,350 mm depth mark, the Applicant is offering an additional safety line, 300 mm toward the shallow side of the pool where the change in slope occurs.

The Agent suggested that, "(i)n this manner, bathers will have entered the pool but will not have built up a momentum to carry them into the deep end of the pool." It was his opinion that the additional safety line would provide bathers with advanced notification of a change in gradient and that an equal level of life safety would be provided. When questioned, the Agent also stated that he would agree to the safety lines being permanent fixtures and would further accept a condition requiring that the pool deck be marked to indicate the depth at each line. In addition he offered to include the requirement for safety lines within the Condominium documents or register them on title, which ever proved more efficient.

6. Respondent's Position

The Designate for the Respondent submitted that the slope at the bottom of the pool exceeded the Code permitted 8%. He felt that there was insufficient background information and experience in the Building Department for him to make a determination as to whether the additional safety line would provide an equivalent level of safety where the slope exceeds the permitted maximum at a depth of less than 1,350 mm.

7. Commission Ruling

It is the decision of the Building Code Commission that the compensating measures offered where the slope of the bottom of the pool exceeds 8% at a water depth of 1,350 mm or less, will provide sufficiency of compliance with Clause 3.11.3.1.(6)(a) and Sentence 3.11.2.1.(7) of the Ontario Building Code at Parkside at Northtown, 880 Grandview Way, Toronto, Ontario on condition that:

a) Two buoyed safety lines be installed, one of which will be positioned 300 mm in advance of the 1,350 mm depth mark, as required by Sentence (7) and the second to be positioned 300 mm toward the shallow side of the point at which the slope of the pool bottom increases from 6% to 10%.

b) The two safety lines are to be permanently installed and mechanically fastened in such a manner that they will not be able to be removed without the use of tools.

c) The water depth is to be permanently marked on both sides of the pool deck at the two safety lines.

d) The requirements for the additional safety line and deck markings are to be either registered on title or in the appropriate condominium documents to ensure future owners are aware of the prerequisite conditions for use of the pool.

8. Reasons

i) With fulfillment of the conditions imposed, the compensating measures will achieve sufficiency of compliance with the requirements of the Code.

Dated at Toronto this **7th** day in the month of **November** in the year **2002** for application number **2002-35**.

Len King, Vice-Chair

Fred Barkhouse

Gary Burtch

Ruling No. 02-36-891
Application No. 2002-35

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 9.25.2.3.(1), 9.33.1.1.(1), 6.2.4.3.(10), 9.25.3.1.(1), 9.25.3.2.(1), 9.25.3.3.(1), 9.25.4.1.(1), 5.4.1.1.(2) and 5.5.1.1.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Martin Bruggeman, LA Lutte Holdings Ltd., for the resolution of a dispute with Rocky Cerminara, Chief Building Official, City of London, to determine whether the insulation used to wrap the attic duct work provides sufficiency of compliance with Sentences 9.25.2.3.(1), 9.33.1.1.(1) and 6.2.4.3.(1) and whether the as-constructed wall assembly complies with the air barrier and vapour barrier requirements of Sentence 9.25.3.1.(1), 9.25.3.2.(1), 9.25.3.3.(1) and 9.25.4.1.(1) when considering Sentences 5.4.1.1.(2) and 5.5.1.1.(2) of the Ontario Building Code at 7 McAlpine Avenue, London, Ontario.

APPLICANT	Martin Bruggeman LA Lutte Holdings Ltd. London, Ontario
RESPONDENT	Rocky Cerminara Chief Building Official City of London
PANEL	Len King, Vice-Chair Fred Barkhouse Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	November 7, 2002
DATE OF RULING	November 7, 2002
APPEARANCES	Martin Bruggeman LA Lutte Holdings Ltd. London, Ontario **The Applicant** Owen Clarke Manager of Inspections City of London **Designate for the Respondent**

RULING

1. The Applicant

Martin Bruggeman, LA Lutte Holdings Ltd., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and has constructed a residential dwelling at 7 McAlpine Avenue, London, Ontario.

2. Description of Construction

The Applicant has constructed a Group C residential dwelling. The structure has a building area of 80.26 m^2 and a building height of one storey. It is comprised of combustible construction and will be used as the personal residence of the Applicant.

There are two items of construction in dispute. The first dispute involves the type of insulation applied to the duct work in the unheated attic. In this regard, the ducts have been wrapped with Reflectix, which is a reflective insulating product using aluminum foil as a reflector of heat energy, resulting in a thermal resistance of RSI 1 (R 5.6).

The second item in dispute involves the plywood sheathing used in the wall assembly and whether the joints and seams must be sealed in such a way as to provide a continuous air barrier. Presently, the sheathing has been installed as a vapour barrier and no air barrier system is being provided.

3. Dispute

The issues in dispute between the Applicant and Respondent is whether the insulation provided around the duct work in the attic provides sufficiency of compliance with Sentences 9.25.2.3.(1), 9.33.1.1.(1) and 6.2.4.3.(10) of the Ontario Building Code (OBC) and whether the vapour barrier/air barrier systems provide comply with Sentences 9.25.3.1.(1), 9.25.3.2.(1), 9.25.3.3.(1), and 9.25.4.1.(1) when considering Sentences 5.4.1.1.(2) and 5.5.1.1.(2) of the OBC.

Sentence (1) of Article 9.25.2.3. states that insulation shall conform to one of the listed CAN/CGSB Standards. Further, Sentence 9.33.1.1.(1) requires the design and installation of central heating systems, including the requirements of combustion air, to conform with the provisions of Part 6. In this regard, Article 6.2.4.3. governs the construction and installation of ducts and plenums. Sentence 6.2.4.3.(10) specifies that, where supply or return ducts are not protected by an insulated exterior wall or are exposed to unheated space, they must be insulated to provide a thermal resistance of at least RSI 2.1 (R12).

Based on the information provided to the BCC, it does not appear that the Reflectix radiant heat reflector which has been utilized to insulate the duct work in the attic of the subject dwelling has been approved under one of the listed standards outlined in Sentence 9.23.2.3.(1). However, an evaluation has been undertaken by the National Research Council of Canada to determine whether the product could be used as part of an insulating system in a wall cavity. It has not, however, been certified for use around duct work. Further, the Reflectix radiant heat reflector which provides an "R" value of R5.6 when installed to wrap heating or air conditioning ducts with a 3/4 inch airspace falls short of the R12 thermal resistance required by the Code.

In respect to the Code requirements set out in Subsection 9.25.3. for the provision of an air barrier, Sentence 9.25.3.1.(1) mandates that thermally insulated wall, ceiling and floor assemblies be constructed to include an air barrier which will provide a continuous barrier to air leakage. An "air barrier" is defined in Sentence 1.1.3.2.(1) to mean the assembly installed to provide a continuous barrier to the movement of air. Sentence 9.25.3.2.(1) provides that sheet and panel type materials may be used to provide this function if they meet the specified requirements for air-tightness. Moreover, Sentence 9.25.3.3.(1) requires that where the air barrier consists of air-impermeable panel-type materials that all joints are to be sealed to prevent air leakage.

Sentence 9.25.4.1.(1) also requires that thermally insulated wall, ceiling and floor assemblies be constructed with a vapour barrier which will prevent condensation in the wall spaces, floor spaces or attic and roof spaces. For the purposes of applying the code requirements it should be noted that the vapour barrier may also be installed to act as the air barrier. Where this occurs, the vapour barrier must also meet the requirements for continuity of an air barrier. To achieve this, the assembly must be free of openings where leakage could occur, sealed at all penetrations at the building envelope and installed sufficiently close to the warm side of the insulation to prevent condensation.

As part of the wall assembly subject to this dispute, plywood sheathing has been used. A distinct air barrier has not been included in the construction and the joints, seams and penetrations, of the vapour barrier have not been caulked or sealed in such as way at provide a continuous, air-tight assembly which would allow the vapour barrier to act as the air barrier. In this regard, the Applicant refers to Sentences 5.4.1.1.(2) and 5.5.1.1.(2) of the Code which provide that neither an air barrier nor a vapour barrier is required where it can be shown that uncontrolled air leakage and vapour diffusion will have no adverse affect on either the health and safety of the building users, the intended use of the building or the operation of the building services. No further information has been offered in this regard.

4. Provisions of the Ontario Building Code

9.25.2.3. Insulation Materials

(1) Except as required in Sentence (2), thermal insulation shall conform to the requirements of

(a) CAN/CGSB-51.20-M, "Thermal Insulation, Polystyrene, Boards and Pipe Covering",
(b) CGSB 51-GP-21M, "Thermal Insulation, Urethane and Isocyanrate, Unfaced",
(c) CAN/CGSB-51.23, "Spray Applied Rigid Polyurethane Cellular Plastic Thermal Insulation",
(d) CAN/CGSB-51.25-M, "Thermal Insulation, Pheonolic, Faced",
(e) CAN/CGSB-51.26-M, "Thermal Insulation, Urethane and Isocyanurate, Board, Faced",
(f) CGSB 51-GP-60M, "Cellulose Fibre Loose Fill Thermal Insulation",
(g) CSA A101, Thermal Insulation, Mineral Fibre, for Buildings", or
(h) CAN/CSA-A247-M, "Insulating Fibreboard".

9.33.1.1. Design and Installation Requirements

(1) The design and installation of central heating systems including requirements for combustion air, shall conform to the requirements in Part 6 and to this Section.

6.2.4.3. Construction and Installation of Ducts and Plenums

(10) Where a *supply* or *return duct* is not protected by an insulated exterior wall or where the duct is exposed to an unheated space it shall be insulated to provide a thermal resistance of not less than RSI 2.1 (R12).

9.25.3.1. Required Barrier to Air Leakage

(1) Thermally insulated wall, ceiling and floor assemblies shall be constructed so as to include an *air barrier system* which will provide a continuous barrier to air leakage

(a) from the interior of the *building* into wall, floor, *attic* or *roof spaces* sufficient to prevent excessive moisture condensation in such spaces during the winter, and

(b) from the exterior inward sufficient to prevent moisture condensation on the room side during winter.

9.25.3.2. Air Barrier System Properties

(1) Sheet and panel type materials intended to provide the principal resistance to air leakage shall have an air leakage characteristic not greater than 0.02 L/(s•m^2) (0.004 cfm/ft^2) measured at an air pressure differential of 75 Pa (0.011 psi).

9.25.3.3. Continuity of the Air Barrier System

(1) Where the *air barrier system* consists of an air-impermeable panel-type material, all joints shall be sealed to prevent air leakage.

9.25.4.1. Required Barrier to Vapour Diffusion

(1) Thermally insulated wall, ceiling and floor assemblies shall be constructed with a vapour barrier sufficient to prevent condensation in the wall spaces, floor spaces or *attic* or *roof spaces*.

5.4.1.1. Required Resistance to Air Leakage (See Appendix A.)

(2) An *air barrier system* is not required where it can be shown that uncontrolled air leakage will not adversely affect any of

(a) the health or safety of *building* users,

(b) the intended use of the *building*, or

(c) the operation of *building* services.

5.5.1.1. Required Vapour Barrier

(3) A *vapour barrier* is not required where it can be shown that uncontrolled vapour diffusion will not adversely affect any of

(a) the health or safety of *building* users,

(b) the intended use of the *building*, or

(c) the operation of *building* services.

5. Applicant's Position

The Applicant advised that the municipality provided him with a list of building code deficiencies with respect to the residential dwelling that is being constructed. He submitted that many of the items identified on this list were not mandated by the Building Code as requirements for construction. In his opinion, the building department, therefore, had no basis for their suggestion that the joints in the ceiling vapour barrier perpendicular to the trusses be taped and sealed or for penetrations of electrical wiring through the studs to be calked, etc.

The Applicant submitted that, in his experience as a builder, caulking of the wiring does not make sense. He stated that any wind penetrating the wall assembly would be directed to the attic. In his opinion, more ventilation in this respect would be favourable and to allow air to move horizontally through the wiring penetrations would be preferable. In any event, he advised that the building officials were acting inappropriately by requesting work to be done which was not set out in the Code. The Applicant advised the Commission that, in the past, he had been asked for an engineering report for a slab on grade. He was subsequently asked for a second report after inspection even though it had been constructed as originally deigned. This, he submitted was excessive and should not have occurred. He argued that the items subject to this dispute were just further examples of the building officials exceeding their mandate.

The Applicant stated that in his reading of the Code, Sections 5.5. and 5.4. would exempt him from the requirements for the provision of a vapour barrier. He did not believe that there would be any health hazard associated with the omission of these barrier systems. Further, he stated that the plans submitted to the municipality did not illustrate an air barrier system and he was not advised that there was any issue in this regard. Now that construction was almost completed the municipality should not be able to raise new issues, particularly when not governed by the OBC.

With respect to the insulation provided around the duct work in the attic, the Applicant submitted that a CCMC report had suggested that the bubble wrap insulation used was sufficient for wall assemblies. He did not believe that to use the same product around the duct work would be a significant problem. He stated that when the attic was to be finished he would ensure that a thermal resistance of R12 was provided.

In summation, the Applicant reiterated his position that the municipal officials were pursuing standards of construction which lay beyond the parameters of the Building Code. He felt that he was being treated unreasonably and had, in the past, requested the involvement of a different building official in hopes of coming to a solution to these outstanding problems. He advised the Commission that he had been denied this request and continued to maintain that there was a bias against him in the application of the Code.

6. Respondent's Position

The Designate for the Respondent submitted that Subsections 9.25.3. and 9.25.4. outline the requirements for the provision of air barrier and vapour barrier systems. At the time the building was inspected several deficiencies in this regard had been noted, particularly with respect to the continuity of the air barrier. The Designate submitted that in this situation the vapour barrier is also acting as an air barrier and, in this regard, must be adequately sealed to prevent air and moisture penetration. In the municipality's list of deficiencies provided to the Applicant, they made suggestions as to how this could accomplished, namely, by caulking the joints and penetrations. He did not believe this to be an unreasonable request and stated that the requirements certainly fell within the parameters of the Ontario Building Code.

In respect to the insulation that has been installed around the duct work in the attic, the Designate advised that the R value did not meet the Code requirements for R12 thermal resistance. He further stated that the product had not been approved for the use to which it has been employed and, despite the Applicant's offer to properly insulate at the time the attic was finished, he expressed concern with allowing the foil sided bubble wrap to remain in place around the heating ducts.

In summation, the Designate submitted that all of the deficiencies listed by the municipality as requiring attention were governed by the requirements of the Building Code. In respect to the Applicant's request for consideration under Sections 5.4. and 5.5. for the omission of the air and vapour barriers, the Designate submitted that Part 9 of the Code is applicable to the subject building. Furthermore, the onus would be on the Applicant to provide documentation to illustrate how the prerequisites for omission outlined in the Code would be met.

7. Commission Ruling

It is the decision of the Building Code Commission that the insulation used to wrap the attic duct work does not provide sufficiency of compliance with Sentences 9.25.2.3.(1), 9.33.1.1.(1) and 6.2.4.3.(1) and further, the as-constructed wall assembly of the 80.3 m^2 residential dwelling does not comply with the, air barrier and vapour barrier requirements of Sentence 9.25.3.1.(1), 9.25.3.2.(1), 9.25.3.3.(1) and 9.25.4.1.(1) when considering Sentences 5.4.1.1.(2) and 5.5.1.1.(2) of the Ontario Building Code at 7 McAlpine Avenue, London, Ontario.

8. Reasons

i) The insulation provided around the duct work in the attic is not listed as an approved insulating material under Article 9.25.2.3. and provides a thermal resistance of only RSI 1 (R 5.6). It does not, therefore, provide sufficiency of compliance with the insulation requirements of the Code.

ii) The vapour barrier which is also being used as an air barrier in this building is not currently a continuous element. The barrier must have all joints sealed in accordance with the requirements of 9.25.3.3.

iii) Part 5 of the Building Code cannot be considered in respect to the omission of the required building systems as this part of the Code is not applicable to the subject construction. Furthermore, evidence would be required to ensure that there would be no adverse impacts as a result of the omission of these systems. No such evidence was provided.

Dated at Toronto this **7th** day in the month of **November** in the year **2002** for application number **2002-32**.

Len King, Vice-Chair

Fred Barkhouse

Gary Burtch

Ruling No. 02-34-889
Application No. 2002-31

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.2.4.19.(10) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Elver Pippo, Concord Adex Development Corporation, for the resolution of a dispute with Ann Borooah, Chief Building Official, City of Toronto, to determine whether the proposed use of Class B wiring for line isolator modules located inside a residential suite and designed to isolate a signal circuit during an alarm condition only, complies with Sentence 3.2.4.19.(10) of the Ontario Building Code at the Concord Adex Development, Blocks 20/23, Towers A and B, in the City of Toronto, Ontario.

APPLICANT	Elver Pippo Concord Adex Development Corporation Toronto, Ontario
RESPONDENT	Ann Borooah Chief Building Official City of Toronto
PANEL	Kenneth Peaker, Chair Robert De Berardis Tony Chow
PLACE	Toronto, Ontario
DATE OF HEARING	October 17, 2002
DATE OF RULING	October 17, 2002
APPEARANCES	Allan Larden Larden Muniak Consulting Inc. Toronto, Ontario **Agent for the Applicant** David Craig Toronto Fire Service City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

Elver Pippo, Concord Adex Development Corporation, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing two high-rise residential buildings at the Concord Adex Development, Blocks 20/23, Towers A and B, in the City of Toronto, Ontario.

2. Description of Construction

The Applicant is constructing two 49 storey residential buildings, each having a building area of 4,200 m^2. The buildings are comprised of noncombustible construction and are equipped with sprinkler, standpipe and hose and fire alarm systems.

The construction in dispute involves the design of the fire alarm system, specifically with respect to the audibility and protection of in-suite signalling devices within the residential units. It is proposed that each in-suite audible device be equipped with an isolator module capable of isolating the signal during an alarm condition only. It is further proposed that Class B wiring be used in the connection of the system and that the isolator modules be situated inside the residential suites.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed use of Class B wiring for isolator modules, designed to isolate a sound signal during an alarm situation only, and where the modules are located in the residential suites complies with the requirements of Sentence 3.2.4.19.(10) of the Ontario Building Code (OBC).

This Sentence requires that fire alarm audible devices which are located within a dwelling or suite of residential occupancy must be connected to the fire alarm system in a manner that would ensure that disconnection or damage to an audible device would not prevent other devices from sounding an alarm. At issue is whether the proposed system which includes the use of isolator modules situated within the residential suites and wired using Class B wiring and which will provide protection to the in-suite fire alarm signal devices when such devices are disabled only after the fire alarm has been activated complies with the OBC requirement in this regard.

4. Provisions of the Ontario Building Code

3.2.4.19. Audibility of Alarm Systems

(10) A fire alarm audible signal device located within a *dwelling unit* or a *suite* of *residential occupancy* shall be connected to the fire alarm system in a manner that disconnection of, or damage to, that device will not interfere with the ability of devices in other *dwelling units*, *public corridors*, or *suites* to sound an alarm. (See Appendix A.)

5. Applicant's Position

The Agent for the Applicant advised that, as a result of a previous Commission ruling which determined that in-suite devices were to be isolated, a further issue has arisen in respect to the installation of devices

which would perform this function. A specific issue arose when the City's Fire Department was reviewing the installation of the system in place in the subject building. During their testing procedures it was discovered that, although the isolator modules were incorporated into the fire alarm system, they protected the audible signal only after the fire alarm system had been activated. If a short were created when in stand-by mode, the circuit failed to activate when a fire alarm was initiated.

In support of the use of these modules the Agent advised that this type of isolator had been used in many buildings over a number of years and there has never been a problem with their operation. He suggested that the intent of the Code was to protect the devices during the time when someone may become annoyed at the sound of the alarm. In this respect, the subject modules, he argued, would protect the circuit as the fire alarm would have already sounded. He stated that there was no presumption in the Code that the device would be tampered with when it was silent. Further, if the devices were tampered with during this time a trouble signal would be activated and building maintenance would be alerted to the problem.

The Agent advised that a second issue relative to the installation of these devices is whether Class A or B wiring must be used. He submitted that, while the City is insisting that only Class A wiring is acceptable, there is nothing in the Code standard which would suggest that to be the case. He argued that Class B wiring in combination with the isolator modules would be sufficient to perform the function anticipated by Sentence 3.2.4.19.(10).

A third factor in the appropriate installation of the modules is whether they can be located inside the residential suites. Again, he stated, the Code does not dictate where these devices are to be positioned. In respect to all of the issues that have arisen the Agent stated that, while he understands the City's attempt to attain perfection in the design of the system, the is no qualification of any hazard involved in alternate proposals. In addressing all possible contingencies for failure the City is merely postulating as to what might constitute a better design. They cannot impose an unsupported notion as being required by the Code.

In summation, the Agent reiterated that there were three issues to be determined in respect to acceptable installation of the isolator modules. Namely, whether the modules were required to isolate a signal when in stand-by mode, whether Class A wiring was required and, lastly, whether the modules were required to be located outside of the residential suites. He submitted that the proposal in the subject building to use modules, located within the residential suites using Class B wiring and designed to isolate a signal during an alarm condition, complies with the meaning and intent of the OBC.

6. Respondent's Position

The Designate for the Respondent submitted that the Applicant has accurately described the disputed issues. In his Department's review of the fire alarm system they had concern with regard to the three areas of installation. The first concern arose when it was discovered that the proposed isolator modules would only serve to isolate the signal if damage occurred during a fire alarm situation. In his opinion, the Designate stated, the isolators must also function when in stand-by mode. This will protect the device in the event of vandalism or a short circuit. His interpretation of the disputed Code provision requires that audible devices must be isolated so that they would continue to sound if one were damaged. This should occur even if the devices are not already sounding.

The Designated admitted that for a period of time the subject modules `were permitted, however, as they learned more about their effectiveness they no longer consider them acceptable. He suggested that there are other devices supplied by different manufacturers which would perform the desired function.

The aim in this regard, as always, is to improve the life safety conditions for the building occupants.

The Designate advised that, with respect to the location of the isolator modules inside the residential suites and the requirement for use of Class A wiring, he was implementing the conditions for acceptance outlined in an opinion letter from the Building and Development Branch of the Ministry of Municipal Affairs. Class A wiring, he argued, provides a superior level of protection to the Class B alternative. Further, in allowing the isolator modules to be positioned inside the residential units, damage could occur to the device should a fire erupt within the suite. His goal in both regards is to protect the integrity of the in-suite audible devices. While the Code is not specific as to how this may be accomplished, its intent is to provide an appropriate level of protection. In his opinion, this level of protection may not achieved with the use of Class B wiring or if the devices are situated within the residential units.

In summation, the Designate stated that it is not uncommon for in-suite audible devices to become inoperable, particularly in a high rise building. He was most concerned with the reaction of individuals when an alarm signal stops sounding. In situations where this has occurred people stopped reacting assuming that the emergency situation no longer existed. This occurs despite the continued signal from elsewhere in the building. In requiring the level of protection being sought, the goal is to prevent similar situations from occurring in the future.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed use of Class B wiring for line isolator modules located inside a residential suite and designed to isolate a signal circuit during an alarm condition only, does not comply with the requirements of Sentence 3.2.4.19.(10) of the Ontario Building Code at the Concord Adex Development, Blocks 20/23, Towers A and B, Toronto, Ontario.

8. Reasons

i) The proposed system, which includes the use of isolator modules which will not protect the audible devices if damaged or tampered with when the system is in stand-by mode. This does not provide a sufficient level of protection to the audible devices as is anticipated by Sentence 3.2.4.19.(10).

Dated at Toronto this **17th** day in the month of **October** in the year **2002** for application number **2002-31**.

Kenneth Peaker, Chair

Robert De Berardis

Tony Chow

Ruling No. 02-33-888
Application No. 2002-30

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.10.9.11.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Jodi Lougheed, property owner, for the resolution of a dispute with Don Warner, Chief Building Official, Township of Brock, to determine whether the existing use of the subject building would require a firewall to separate the residential occupancy from the horse stable when considering Article 1.2.1.2. of the National Farm Building Code or whether, in the alternative, the proposed fire separation between the two uses will provide sufficiency of compliance with Sentence 9.10.9.11.(2) of the Ontario Building Code at 1605 Concession 7, R.R. #3, in the Township of Brock, Ontario.

APPLICANT	Jodi Lougheed Property owner Sunderland, Ontario
RESPONDENT	Don Warner Chief Building Official Township of Brock
PANEL	Kenneth Peaker, Chair Robert De Berardis Tony Chow
PLACE	Toronto, Ontario
DATE OF HEARING	October 17, 2002
DATE OF RULING	October 17, 2002
APPEARANCES	Jodi Lougheed Property owner Sunderland, Ontario **The Applicant** Don Warner Chief Building Official Township of Brock **The Respondent**

RULING

1. The Applicant

Jodi Lougheed, property owner, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing the construction of a fire separation between the existing residential and farm related portions of the building at 1605 Concession 7, R.R. #3, in the Township of Brock, Ontario.

2. Description of Construction

The Applicant is proposing an addition to the residential portion of an existing building which has been classified as containing both Group C and Group F, Division 3 major occupancies. The structure is one storey in building height, and with the inclusion of the addition, will be 526 m^2 (5,662 ft^2) in building area. It is comprised of combustible construction and is not equipped with either sprinkler, fire alarm or standpipe and hose systems. The F3 occupancy portion of the building, comprising 320.52 m^2, is essentially used as a horse stable while the remaining Group C occupancy is a single residential unit.

The Applicant purchased the subject property and existing building in June 2002. The existing structure was originally constructed as a barn with an attached tack room. This tack room was converted into a residence by the previous owners without the benefit of a permit. At the time of purchase by the Applicant there was an outstanding work order against the property directing the previous owners to separate the two occupancies with a firewall.

The construction in dispute involves the nature of the separation to be provided between the two uses. The Applicant is proposing a one hour fire separation between the two occupancies using an assembly of wood studs and fire-rated drywall, whereas the Respondent is requiring a two hour firewall to be constructed between what he classifies as a residential use and a farm building.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether a two hour firewall is required between the two occupancies when considering Article 1.2.1.2. of the National Farm Building Code of Canada or whether the proposed one hour fire separation between the two existing uses, namely a Group C residential dwelling and a Group F, Division 3 horse stable, provides sufficiency of compliance with Sentence 9.10.9.11.(2) of the Ontario Building Code (OBC).

Article 1.2.1.2. of the National Farm Building Code of Canada defines "farm building" as being a building or part of a building which does not contain a residential occupancy and which is associated with and located on land devoted to the practice of farming. Furthermore, it is a building used essentially for the housing of equipment or livestock, or the storage, production or processing of produce or feeds. The Respondent's position in this regard is that the use of a portion of the building for a horse stable, which he considers to constitute a farm building, precludes the inclusion of residential occupancies within the same building. As a result, he is requesting the erection of a two hour firewall between the two occupancies to divide the structure into two separate buildings.

Sentence (2) of Article 9.10.9.11. states that, with an exception not applicable here, a residential major occupancy, including live/work units, must be separated from other major occupancies classified as mercantile or medium hazard industrial occupancies with a separation having a fire-resistance rating of at least two hours.

As noted above, the existing building contains both Group C and F3 occupancies and houses a single residential unit and a horse stable. The Applicant is proposing a fire separation between the two occupancies having a one hour fire-resistance rating. They would be amenable to an increase in the resistance rating of a fire separation, however, because of construction constraints consider it excessive to require the two hour firewall requested by the Respondent.

4. Provisions of the Ontario Building Code

Article 1.2.1.2. Defined Words and Phrases
National Farm Building Code of Canada, 1995

> *Farm building* means a *building* or part thereof which is associated with and located on land devoted to the practice of farming, and used essentially for the housing of equipment or livestock, or the production, storage or processing of agricultural and horticultural produce or feeds.

9.10.9.11. Separation of Residential Occupancies

(2) Except as provided in Sentence (3), a *major occupancy* classified as a *residential occupancy*, including *live/work units*, shall be separated from other *major occupancies* classified as *mercantile* or *medium hazard industrial occupancies* by a *fire separation* having a *fire-resistance rating* of not less than 2 h.

5. Applicant's Position

The Applicant provided the Commission with a brief history of the subject site, advising that the existing building had been converted by the previous owners to include a residential dwelling and a horse stable. She stated that, because these two occupancies were not separated, the building was in contravention of the Code and a work order was issued by the municipality in this regard. She was aware of this outstanding work order at the time of the purchase of this property and she had also been advised that steps were being undertaken by the previous owners to respond to the work order. In this regard, an engineering firm had been retained to design the necessary firewall.

The Applicant advised that she took possession of the building on June 28, 2002 and was prepared to carry out construction of the firewall. It was at this point that she became aware that the design plans which were prepared could not be used as the previous owners had failed to pay for the engineered drawings. In addition, during this time, she stated that a masonry professional had reviewed the design and expressed concern that the firewall may jeopardize the integrity of the pre-engineered roof trusses which would have to be cut to accommodate the separation. Morever, in his opinion the design of the firewall was excessive. It was at this point the Applicant advised that she approached the municipality again to discuss alternatives to the masonry firewall.

The Applicant submitted that she retained the services of another engineer who was of the opinion that, despite the definition of "farm building" in the National Farm Building Code, provisions in the Ontario Building Code would permit the use of a fire separation as opposed to a firewall. Plans to this effect were drawn up and submitted to the municipality and a building permit was issued by one of the municipal inspectors. This was done at a time when the Chief Building Official was absent and, upon his return, the proposed fire separation was questioned. All work on the construction has since stopped and the Applicant stated they are seeking a ruling on the appropriate separation from the Building Code Commission.

In respect to the use of the subject building, the Applicant advised that the horse stable portion of the structure is used strictly to house horses. There is no storage of hay or other combustible materials in the building. She further advised that the Group C portion of the structure is her personal residence. It is presently a fairly small living unit, measuring providing 918 ft^2, and she is seeking to expand that portion of the structure. The Applicant further stated that she would be willing to install a fire alarm system in the building, including both heat and smoke detectors if this were considered appropriate by the Commission.

In summation, the Applicant advised that in her interpretation of the Ontario Building Code, a fire separation between the two uses could be permitted rather than the firewall requested by the municipality. She acknowledged the Respondent's concern with respect to the definition of "farm building" but submitted that the housing of a few horses for recreational purposes did not seem to completely fall within that definition.

6. Respondent's Position

The Respondent submitted that in 1988 a permit was issued to the previous owners for the construction of a barn and tack room. It was then discovered that the tack room had been converted to habitable space and was being used as living quarters. Following some legal discussions involving the applicability of various municipal regulation, it was decided that some improvements to the building could be undertaken to turn the tack room into a dwelling unit.

The Respondent advised that the primary factor in his requirement for a firewall to separate the residence from the horse stable is the definition of "farm building" found in the National Farm Building Code of Canada. In his opinion a farm building precludes any residential component from being included within the same structure. As such, with the construction of a masonry firewall, two buildings will be created and the structure will then comply with the Code. He stated that a permit had been issued for the construction of such a firewall but intervening occurrences have, thus far, prevented its erection.

The Respondent acknowledged that there may be structural concerns where the proposed firewall intersects the roof trusses but his aim is this regard is still to create two separate buildings. Aside from that he did not believe that a fire separation would comply with the requirements of the Code in Sentence 2.1.1.5.(2) which state that farm buildings must conform with the requirements of the Farm Code.

In summation, the Respondent submitted that the root of the problem stems from the definition of a farm building and whether this definition applies to the subject structure. He acknowledged the Applicant's efforts to achieve an acceptable level of safety but felt that a fire separation simply did not comply with the requirements of the regulations.

7. Commission Ruling

It is the decision of the Building Code Commission that a fire separation between the existing residential dwelling and horse stable in the subject building will provide sufficiency of compliance with Sentence 9.10.9.11.(2) of the Ontario Building Code at 1605 Concession 7, R.R. #3, in the Township of Brock, Ontario on condition that:

a) A two hour fire separation is to be constructed between the existing residence and the stable.

b) A fire alarm system providing heat detection in the horse stable and smoke detectors in the residence is to be installed.

8. Reasons

i) The subject horse stable is considered to be a storage facility where only horses are housed. No combustible material is to be stored within the horse stable.

ii) With implementation of the above conditions, sufficiency of compliance will be achieved in this existing building.

Dated at Toronto this **17th** day in the month of **October** in the year **2002** for application number **2002-30**.

Kenneth Peaker, Chair

Robert De Berardis

Tony Chow

Ruling No. 02-31-886
Application No. 2002-28

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 8.2.1.3.(2) and Table 8.2.1.3.B. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Sandy Gott, Ice River Springs, for the resolution of a dispute with Rick Cole, Chief Building Official, Municipality of Grey Highlands to determine whether the enlargement of the existing septic system to accommodate a proposed daily design flow rate of 8,000 L/day to service a warehouse addition provides sufficiency of compliance with Sentence 8.2.1.3.(2) and Table 8.2.1.3.B. of the Ontario Building Code when considering the number of loading bay doors at the Ice River Springs facility, Part Lot 15, Concession 9, Municipality of Grey Highlands, Ontario.

APPLICANT	Sandy Gott Ice River Springs Feversham, Ontario
RESPONDENT	Rick Cole Chief Building Official Municipality of Grey Highlands
PANEL	Frank Wright, Chair-Designate Doug Robinson Bill Fellner
PLACE	Toronto, Ontario
DATE OF HEARING	October 3, 2002
DATE OF RULING	October 3, 2002
APPEARANCES	Brian Dempsey DBD Systems Inc. Singhampton, Ontario **Agent for the Applicant** Rick Cole Chief Building Official Municipality of Grey Highlands **The Respondent**

RULING

1. The Applicant

Sandy Gott, Ice River Springs, has applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing to construct an addition to the existing warehouse facility at Ice River Springs, Part Lot 15, Concession 9, Municipality of Grey Highlands, Ontario.

2. Description of Construction

The Applicant is proposing to construct a 12,493 m^2 addition to an existing 12,352 m^2 Group F, Division 3 warehouse facility. The existing building contains a total of 25 loading bays and five water closets. The addition would provide for an additional two water closets and 24 loading bays. The warehouse is presently serviced by an existing Class 4 system constructed in 2002.

The site is relatively flat and the native soil, which consists of a gravel/sand/silt mixture, provides a percolation time of 8 to 10 minutes per centimetre. There are presently two septic systems located on the property. The more recently installed system was designed to service a previous addition and was oversized to accommodate further anticipated expansions. The system currently in operation provides a reinforced 22,730 litre, two chamber septic tank, a 2,700 litre pump station and 50.8 mm (2 in) force main. There are two cells of tile distribution and each cell contains 7 runs of 30.5 metre distribution pipe. The site also accommodates an additional 4,500 litre, 2 chamber tank, 2,700 litre pump station and 50.8 mm (2 in) force main which serviced the original building when it was constructed in 2000.

The construction in dispute involves the construction of the new building addition and requirement to enlarge the existing septic system. The proposal by the Applicant in this regard is to provide a system having a total daily design capacity of 8,000 litres per day. When considering the Building Code specifications for warehouses, however, which include the total number of water closets and loading bays in the calculation requirements, the resulting total daily design flow is 14,000 litres per day. In support of the proposed system design the Applicant cites special circumstances in relation to the operation of the facility and has offered measures to ensure that the facility will operate as anticipated.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the enlargement of the proposed system to accommodate a total daily design flow of 8,000 litres per day provides sufficiency of compliance with the provisions of Sentence 8.2.1.3.(2) and Table 8.2.1.3.B. of the Ontario Building Code (OBC).

Article 8.2.1.3. establishes the requirements for calculation of the total daily design flow for a sewage system. Sentence (2) provides that, for occupancies other than residential occupancies, the flow shall be determined by reference to Table 8.2.1.3.B. This Table, which forms part of Sentence 8.2.1.3.(2), provides values for the total daily design flow for a number of non-residential uses including warehouse establishments. In this regard, the daily design flow for a warehouse use is to be calculated based on the figures established for the number of water closets and the number of loading bays being provided.

For the subject building, when calculating total daily design flow based on the table values, the expected daily flow would be 14,000 litres per day, placing the system outside the governance of the Ontario Building Code. For the purposes of this dispute, however, while acknowledging that the building is a

warehouse facility, the Applicant argues that the figures established in the Code do not provide for an accurate calculation of daily flow for the site. In the Applicant's estimation, a system designed to accommodate a total daily flow of 8,000 litres per day would be sufficient to service the building. In support of this request for a ruling on sufficiency of compliance, the Applicant is relying on consideration of special circumstance and measures that would ensure that the warehouse operates as designed, to limit occupancy and use of washroom facilities.

It should be noted that, because the regulatory environment governing sewage systems and sewage works in Ontario is divided between Part 8 of the Ontario Building Code and Section 53 of the *Ontario Water Resources Act* (OWRA - a Ministry of Environment legislation), the Commission must consider under which of these jurisdictional spheres an application will fall. If, upon consideration, the Commission determines that the system has a total daily design flow of greater than the 10,000 litre per day cap set by the OBC, the design would then be considered a sewage work, subject to the requirements of OWRA.

4. Provisions of the Ontario Building Code

8.2.1.3. Sewage System Design Flows

(2) For all other *occupancies*, the total daily design *sanitary sewage* flow shall be at least the value in Column 2 as determined from Table 8.2.1.3.B. (See Appendix A.)

Table 8.2.1.3.B.
Other *Occupancies*
Forming Part of Sentence 8.2.1.3.(2)

Warehouse		
a)	Per water closet, and	950
b)	Per loading bay	150

5. Applicant's Position

The Agent for the Applicant submitted that the Code requirement to assess daily design flow based on the number of loading bays was not appropriate when applied to the subject building. The inference in this requirement is that the level of sewage generated would increase when considering the number of truck drivers that may use the facilities of the building. This, he argued, would not be the case with the operation of this warehouse. He felt it would be more appropriate to base the total daily design flow for the system on either the number of plumbing fixtures in the building or on occupant load which is relatively low in this instance.

The Agent advised that truck drivers are not allowed into the building itself and that portable toilets are provided on site for their specific use. He did not feel that the daily design flow calculated when using the Code referenced standards was truly reflective of the actual daily water use. Further, he provided water metre readings to support this position. As further assurance that the number of loading bays would not contribute to the level of sewage generated by the facility he advised that the owner would be willing to post signs limiting the number of occupants and prohibiting truck drivers from entering the building.

In summation, the Agent submitted that, given the unique circumstances involved in the operation of this warehouse facility, he felt there was merit to the argument that the strict prescriptive requirements of the OBC did not fully apply. The number of loading bay doors in this instance would not be indicative of the amount of sewage that would be generated and he was seeking relief from these provisions.

6. Respondent's Position

The Respondent provided the Commission with some background information on the development of the subject site. He submitted that in the year 2000 a building permit was issued for a warehouse/office building with an occupant load of 20 persons. Further, a septic permit was issued by the health unit for a system having a daily design flow of 1,500 litres per day. This system was then installed as designed. However, after further consideration, only an F3 warehouse was constructed with no office component. This warehouse building consisted of fifteen loading bay doors, one water closet and had an occupant load of four persons.

In March 2002, the Applicant applied for an addition to the facility which would consist of an expanded warehouse area increasing the number of loading bays and water closets and providing an occupant load of ten persons. A further septic permit was issued in response to this proposal, requiring a system with a design capacity of 3,250 litres per day. The original system which was installed was subsequently abandoned in favour of the larger one. The designer of the latter system further chose to design and install an oversized system to allow for further anticipated expansions. The Respondent summarized the septic systems presently located on this property as follows:

"1. 4500 litre, 2 chambers approved tank, 2700 litre pump station and a 2" force main.
2. 22,730 litre, 2 chamber approved tank, 2700 litre pump station and a 2"force main.
There are two cells of distribution tile. Each cell contains 7 runs of 30.5 metres of distribution pipe. Total distribution pipe equals 426.72 metres."

The Respondent advised that in July 2002 the Applicant applied for a further building addition which was now the subject of this hearing. The expanded facility would now comprise a total of seven water closets and 49 loading bays. Using Table 8.2.1.3.B. in reference to this new development, he has calculated the total daily design flow to be 14,000 litres per day. This, he argued, exceeds the 10,000 litre per day which is allowed under the Ontario Building Code. The development, therefore, is within the jurisdiction of the Ministry of the Environment, he stated.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed warehouse facility is a defined use as indicated in Table 8.2.1.3.B. Accordingly, when considering the number of water closets and the number of loading bays, the total daily design flow calculation exceeds 10,000 litres per day. Under Article 1.1.3.2. of the Ontario Building Code this proposed system, therefore fails to meet the definition of a sewage system. The approval of the system design, therefore, is the responsibility of the Ministry of Environment.

8. Reasons

i) For residential and other occupancies that are captured in Sentences (1) and (2) of Article 8.2.1.3.

(Tables 8.2.1.3.A. and B respectively) the total daily design flow is the key factor determining design capacity which, in turn, dictates applicable jurisdiction.

ii) The OBC requirements specific to warehouses, reference the number of loading bays as an element to be considered in the total daily design flow calculation. In this regard, the additional flow from the expansion, when added to the existing flow, would total 14,000 litres per day.

iii) Based on the above, the calculation of the total daily design sanitary sewage flow will considerably surpass the 10,000 litre per day threshold articulated in the OBC.

Dated at Toronto this **3rd** day in the month of **October** in the year **2002** for application number **2002-28**.

Frank Wright, Chair-Designate

Doug Robinson

Bill Fellner

Ruling No. 02-30-885
Application No. 2002-27

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 2.7.2.1. and 2.7.2.2. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Andrew Sherwin, owner, for the resolution of a dispute with Steve Franklin, Deputy Chief Building Official to determine whether the proposed drip irrigation leaching bed sewage system provides sufficiency of compliance with Part 8 when considering Articles 2.7.2.1. and 2.7.2.2. of the Ontario Building Code at 95 Meadowcliffe Road, Toronto, Ontario.

APPLICANT	Andrew Sherwin Property owner Toronto, Ontario
RESPONDENT	Steve Franklin Chief Building Official City of Toronto
PANEL	Frank Wright, Chair-Designate Doug Robinson Bill Fellner
PLACE	Toronto, Ontario
DATE OF HEARING	October 3, 2002
DATE OF RULING	October 3, 2002
APPEARANCES	Alexander Campbell R.J. Burnside & Associates Ltd. Orangeville, Ontario **Agent for the Applicant** Anna Sawicki Building Engineer City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

Andrew Sherwin, owner, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing the construction of a drip irrigation septic system to service the dwelling at 95 Meadowcliffe Road, Toronto, Ontario.

2. Description of Construction

The Applicant is proposing an addition to the existing single detached dwelling on the subject property. The structure has a finished area of 318.6 m^2 and a total of 27 plumbing fixture units. The daily design flow rate for the property is 3,200 litres per day and the building is currently served by a conventional septic tank (4,500 L) and an in-ground leaching bed. The site itself has a variable slope, is well treed and terraced to provide lawn areas. The existing upper terrace is composed of sand fill, whereas the lower terrace is clay backfill.

To permit the expansion of the residence and to remedy the existing problems with the septic system, which is presently malfunctioning, the Applicant is proposing the installation of a drip irrigation disposal system as the most viable alterative for the disposal of sewage from the subject site. To minimize the need for regrading of the property it is proposed that the system be installed on the existing terraced areas. The soils in these areas will be excavated and replaced with clean sand fill having a percolation time of 6 - 10 min/cm.

The proposed system will be comprised of a conventional septic tank, a pump chamber and a patented pressure filter system. The pressure filter system includes multiple zones of drip irrigation tubing. In addition, as described by the Applicant's Agent "(t)he filter is equipped with a control panel which automatically back-washes the filter unit. The filter itself consists of several stackable disks held together with a spring compression unit. Effluent from the pump chamber is directed to the zones of drip tubing through a specialized controller unit in order to ensure equal distribution of effluent. The drip tubing is a specialized ½ inch tubing equipped with pressure compensating emitters. These emitters permit equal amounts of effluent to be discharged from each perforation regardless of the length of tubing, provided that the pressure within the tubing is withing (sic) the operating range of 7 to 70 psi. The normal operating limit of the system is 35 psi in order to ensure adequate pressure is available. The drip system is a closed loop system which returns effluent back to the pump chamber for further disposal if required."

The construction in dispute involves the design of the sewage disposal system which is not recognized by the Ontario Building Code (OBC). The proposal for use of this innovative system would include the use of conventional sizing criteria for systems of this type and, where possible, adherence to the requirements of the OBC.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed drip irrigation system will provide sufficiency of compliance with Part 8 of the Ontario Building Code when considering the equivalency provisions of Articles 2.7.2.1 and 2.7.2.2.

Part 8 of the Code applies to the design, construction and operation of sewage systems as defined in Article 1.1.3.2. Sewage systems meeting this definition are the Classed as one of the following; 1) a chemical toilet, 2) a greywater system, 3) a cesspool, 4) a leaching bed system or 5) a system utilizing a holding tank for the retention of hauled sewage. Subsection 2.7.1. permits the acceptance of equivalents where the chief building official is of the opinion that an equal level of performance would be achieved. Article 2.7.2.1. permits materials not specifically described in Part 8 or for which no recognized test procedure has been established, to be used if it can be determined, based on past performance or other evaluation, that the use of such materials would achieve an equal level of performance to what would be acceptable in the Code. Further, Article 2.7.2.2. provides for the acceptance of equivalent systems, again, where it can be established that the level of performance that would be achieved by conformance with the OBC requirement will be obtained.

The proposed drip irrigation sewage disposal system is not specifically described by the prescriptive requirements of Part 8 of the Building Code and, therefore, not approved for installation in Ontario. When considering the provisions of Articles 2.7.2.1. and 2.7.2.2., however, the system may be considered as an equivalent if it can be established that it would provide the level of performance that would be achieved by compliance with the requirements of Part 8. In this regard, the Applicant has outlined the design rational of the system and provided technical briefs on the use of drip disposal technology.

4. Provisions of the Ontario Building Code

Part 8 Sewage Systems

Please see Ontario Building Code.

2.7.2. Acceptance of Equivalents

Article 2.7.2.1. Materials

(1) Materials not specifically described in Parts 3, 5, 6, 7, 8 and 9, or which vary from the specific requirements in those Parts or for which no recognized test procedure has been established, may be used if the person requesting the use of such material can establish on the basis of past performance, tests described in Article 2.7.2.4. or other evaluation that the use of the proposed material will provide the level of performance that would be achieved by conformance with the requirements of the *building code*.

Article 2.7.2.2. Systems

(1) Systems not specifically described in Parts 3, 5, 6, 7, 8 and 9, or for which no recognized test procedure has been established, may be used if the person requesting the use of such system can establish on the basis of past performance, tests described in Article 2.7.2.4. or other evaluation that the use of the proposed system will provide the level of performance that would be achieved by conformance with the requirements of the *building code*.

5. Applicant's Position

The Agent for the Applicant provided the Commission with a history and background of the subject property. He advised that the site is close to the bluffs in the City of Toronto in an unserviced part of

the City. The present owners purchased the property in 1998 and, in 1999, decided to construct a two storey addition. In March 1999, the sewage system was assessed and it was determined to be insufficient in size, even to serve the existing house. Furthermore, in April it was discovered that the system was malfunctioning and, upon further analysis, it was determined that the on site constraints precluded the installation of a conventional, Code compliant, system.

Several options were considered to address the situation, including connection to existing services situated approximately 180 m from the property. In this regard a private connection would be required to run up a steep grade. Cost estimates to implement this option ran from $65,000 to $100,000, according to the Agent. It was decided that this would not be an economically feasible option for the development of the site. Further, construction of a modified Class 4 system would be difficult given the physical constraints on site. Not all of the OBC specifications could be met and concessions in this regard would be required.

The Agent advised that when his firm was retained by the owners it was concluded that a conventional system would not be the best option for this site. They proposed, instead, the use of alternative technologies and came to the conclusion that the proposed drip irrigation system would be the best alternative. While recognizing that it is not specifically described in the Code, he was confident that it could be accepted as an equivalent system.

In selecting the drip irrigation system, the Agent advised that the size and configuration of the site was considered. Because of the limited area on which to construct they have proposed to excavate the terraced areas and replace the existing soil with clean sand fill having a percolation time of 6 - 10 min/cm. He stated that the design flow for the house and addition was calculated to be 3,200 L/day and that a 6,800 L/day septic tank was proposed as part of the system. Furthermore, he emphasized that both design and construction constraints have been factored in to the installation of the proposed system and that he was confident it would operate as intended.

In terms of performance of the system the Agent offered an example of this type of installation in Nova Scotia and also provided a technical brief on the construction and performance of this type of system. He argued that these results conclude that the use of the system in cold weather climates should not be factor. He submitted that any problems associated with the system were generally a result of faulty installation or unusual weather. This, he argued, could be said of any system regulated by the Code.

In summation, the Agent stated that, in his opinion, the drip irrigation disposal system would provide an equivalent level of performance as would be anticipated by the OBC. In this regard, it meets the criteria for the acceptance of equivalents. The Agent acknowledged the City's concern that they did not have the in-house expertise to reach the same conclusion and was looking to the Building Code Commission for a ruling on this issue. Further, to allay any concerns, he offered to provide the City with a monitoring report on a regular basis for the first two years of operation.

6. <u>Respondent's Position</u>

The Designate for the Respondent submitted that the proposed drip irrigation system was an innovative technology which is not described in Part 8 of the Code. She acknowledged that the Applicant had submitted specification and technical briefs describing the detail and operation of the system but advised that the City's Building Department did not have the technical expertise to effectively evaluate the suitability of the system as an equivalent under Subsection 2.7.2. There were no recognized test procedures established or past performance data available from Canadian sources which would enable them to approve of the use of this system.

In summation, the Designate stated that, while she was sympathetic to the Applicant's situation and recognized the difficulties in developing this site, she felt unable to approve of the proposed drip irrigation system as equivalent in performance to a conventional system.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed drip irrigation leching bed sewage system does not provide sufficiency of compliance with Part 8 of the Ontario Building Code when considering the equivalency provisions found in Articles 2.7.2.1. and 2.7.2.2. at 95 Meadowcliffe Road, Toronto, Ontario.

8. Reasons

i) There is insufficient data on the performance of the drip irrigation system in Ontario and Canada. In particular the BCC has concern over the effect of suspended solids from the conventional septic tank effluent given that the emitters have very fine holes that may be susceptible to clogging.

ii) The subject property is a difficult site on which to prove the effectiveness of this innovative system. The Commission is concerned with its long term viability when considering lot size and on site conditions.

iii) The technology may be better assessed by a body such as the Building Materials Evaluation Commission

Dated at Toronto this **3rd** day in the month of **October** in the year **2002** for application number **2002-27**.

Frank Wright, Chair-Designate

Doug Robinson

Bill Fellner

Ruling No. 02-29-884
Application No. 2002-26

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 8.1.2.1.(1) and 9.31.4.1.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Michael Osborne, owner, for the resolution of a dispute with Doug Kopp, Chief Building Official to determine whether the as-installed Class 1 (composting toilet) and Class 2 (greywater pit) systems which serve a seasonal dwelling in lieu of a Class 4 system provide sufficiency of compliance with Sentence 8.1.2.1.(1) of the Ontario Building Code when considering Sentence 9.31.4.1.(1) at Part Lot 16, Concession 4, Township of Southgate in the County of Grey, Ontario.

APPLICANT	Michael Osborne Property owner Kitchener, Ontario
RESPONDENT	Doug Kopp Chief Building Official Township of Southgate
PANEL	Frank Wright, Chair-Designate Doug Robinson Bill Fellner
PLACE	Toronto, Ontario
DATE OF HEARING	October 3, 2002
DATE OF RULING	October 3, 2002
APPEARANCES	Michael Osborne Property owner Kitchener, Ontario **The Applicant** Doug Kopp Chief Building Official Township of Southgate **The Respondent**

RULING

1. The Applicant

Michael Osborne, owner, has applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and has installed a Class 1 (composting toilet) and Class 2 (greywater pit) to service an existing mobile home at Part Lot 16, Concession 4, Township of Southgate in the County of Grey, Ontario.

2. Description of Construction

The Applicant owns a 14 acre rural property on which he has placed a mobile home intended for seasonal residential use. Mobile homes are not typically permitted for residential use by the municipal zoning by-law, however, this unit has been approved subject to a three year temporary use by-law which may or may not be extended at the discretion of the municipality. The by-law does not limit use of the unit to seasonal occupancy, however, there is no winter maintenance of the road which provides access to the property.

The mobile home unit is 110 m^2 in building area and is equipped with two sinks, one bath/shower and an Envirolet composting toilet. A Class 2, greywater system measuring 3 m by 1.5 metres and having a depth of 2 m has been constructed for the treatment and disposal of greywater. The water supply to the unit is from a well on site.

The construction in dispute involves the use of Class 1 and 2 septic systems intended to service this site. While the composting toilet and greywater pit which service the dwelling are purported to meet the requirements of Part 8 of the Building Code, Part 9 requires that a water closet be provided in a dwelling unit having a water distribution system.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the construction of Class 1 and Class 2 systems in lieu of a Class 4 septic system to serve the proposed seasonal dwelling complies with Sentence 8.1.2.1.(1), when considering Sentence 9.31.4.1.(1) of the Ontario Building Code (OBC).

Sentence 8.1.2.1.(1) classifies different types of on-site sanitary sewage systems under the OBC. Every on-site sanitary sewage system classified under the OBC has its own design, construction, installation, operation, and maintenance requirements that are regulated by the Code. A composting/incinerating toilet system and a greywater system are among the recognized sewage systems which are regulated under Part 8. These systems have been classified, respectively, as Class 1 and Class 2 systems under Sentence 8.1.2.1.(1).

Sentence 9.31.4.1.(1) states that a dwelling unit with a water distribution system must be provided with certain fixtures including a water closet. The water distribution system referred to in this sentence is defined as "an assembly of pipes, fittings,... that conveys water from the water services pipe or private water supply system (in this case a private well) to water supply outlets, fixtures, plumbing appliances, and devices". Water closets are one of the required fixtures in a dwelling unit that must be provided with a water connection as stipulated by Sentence 9.31.3.2.(2). The proposed composting toilet is not connected to a water supply system as mandated by this provision.

Greywater, on the other hand, is defined as sanitary sewage of domestic origin which is derived from fixtures other than sanitary units. A sanitary unit under the Code means a water closet, urinal, bidet or bedpan washer. Put simply, a water closet is defined as a sanitary unit that not only is connected to a water supply system, but also conducts human body waste to a sewer or private sewage system. However, a Class 2 system is a greywater system designed for effluent other than that originating from human bodies.

4. Provisions of the Ontario Building Code

Sentence 8.1.2.1. Classification of Systems

(1) All *sewage systems* shall be classed as one of the following:

(a) Class 1-- a chemical toilet, an incinerating toilet, a recirculating toilet, a self-contained portable toilet and all forms of privy including a *portable privy*, an *earth pit privy*, a *pail privy*, a *privy vault* and a composting toilet system,

(b) Class 2 -- a *greywater* system,

(c) Class 3 -- a cesspool,

(d) Class 4 -- a *leaching bed* system,

(e) Class 5 -- a system which requires or uses a *holding tank* for the retention of *hauled sewage* at the site where it is produced prior to its collection by a *hauled sewage system*,

Sentence 9.31.4.1. Required Fixtures

1) In a dwelling unit with a water distribution system, a kitchen sink, lavatory, bathtub or shower stall and water closet shall be provided.

5. Applicant's Position

The Applicant provided the Commission with some background on the issue in dispute. He advised that in 1995 he purchased the subject property on the understanding that there would be no winter maintenance of the access roadway. He also set about to overcome the municipal restrictions on the placement and siting of the mobile home on the property. In this regard a temporary use by-law was approved which is reconsidered by the municipality for renewal every three years.

Having obtained approval for the mobile home he then applied for a septic permit and a number of tests and inspections were conducted in this regard. Because of the poor drainage on site he was advised that a raised bed with an imported mantle would be required. In exploring this option he discovered that, while a normal system would reasonably cost approximately $3,500, the imported mantle system was expected to cost approximately $15,000.

The proposal was then put on hold during the winter months at which time the Applicant stated that he became aware of the Envirolet composting toilet as a means to deal with the treatment and disposal of human waste. When he approached the township with this option he was advised at the time that the composting system would be sufficient and that no permit would be required. He was also advised to contact the building department to obtain a permit for a greywater pit to handle household effluent. In 2000 he contacted the new municipality to enquire about such a permit. He then proceeded to file a permit application and construct the system to service this temporary use dwelling.

It was not until May 2002, when he approached the Township for a building permit for the construction of a pole barn that he discovered that a septic permit had not been issued for the Class 2 system and that there was also an issue about the Part 9 requirements for required facilities. The Applicant stated that, while he acknowledges the requirements in Part 9 for a Class 4 system, he believed that the Class 1 and 2 systems installed would be sufficient to service this seasonal dwelling.

The Applicant asked that the Commission consider the fact that the structure in question is a mobile home provided with only seasonal road access. He suggested that, at most, his family used the dwelling for 100 days out of the year. He stated that the composting toilet and greywater pit meet all of the Code requirements and have been installed in accordance with Ministry guidelines. He reiterated that the structure is subject to periodic review and approval by the municipality by way of the temporary use by-law and he understood that if a permanent dwelling were to be considered, a Class 4 system would be required.

In summation, the Applicant was requesting a finding of sufficiency of compliance to permit the existing Class 1 and 2 systems to continue to service the seasonal residential dwelling.

6. Respondent's Position

The Respondent submitted that his involvement in this case began in April 2000 when he was contacted about a septic permit. He provided the application documents to the Applicant who also inquired about the use of a composting toilet and greywater system for the treatment of waste. No decision was made at that time and, while he eventually did receive some more information from the Applicant in respect to composting toilets, an application for permit was never received.

The Respondent advised that in May 2002, the Applicant contacted him in respect to a request for the construction of a pole barn. The municipality's files on the property were reviewed and it was discovered that a septic permit had not been issued. He advised the Applicant of the Code provisions for required facilities where a water distribution system was in place and noted that the temporary use by-law for the property was up for review in December 2002. At that time the Applicant reiterated his request for the use of Class 1 and 2 systems.

The Respondent advised that, in his opinion, the mobile home is not a seasonal dwelling. It is winterized and could be used during this time of the year as well. He also expressed concern that, despite the Applicant's claims, there was no record of a permit application for a septic system in connection with this property. In this regard, a permit and inspection of the greywater system would be required.

In summation, the Respondent submitted that when considering the provisions of 9.31.4.1.(1), the proposal for only a composting toilet and greywater pit to serve this dwelling did not comply with all of the requirements outlined in the Code.

7. Commission Ruling

It is the decision of the BCC that the as-installed Class 1 (composting toilet) and Class 2 (greywater pit) systems serving a seasonal dwelling will provide sufficiency of compliance with Sentences 8.1.2.1.(1) and 9.31.4.1.(1) of the OBC at Part Lot 16, Concession 4 in the Township of Southgate on condition that:

a) The applicant obtain a permit for the Class 2 system based on compliance with the provisions

of Section 8.4 of the OBC.

b) The municipality is required to inspect the systems prior to any continued renewal of the temporary use by-law applicable to the subject property.

8. Reasons

i) The OBC permits class 2 septic systems for waste from sinks, showers, etc. as greywater which covers the use of facilities within the dwelling.

ii) The composting toilet produces no liquid waste and is permitted by the Code as a Class 1 system.

iii) Although there is a water distribution system in the dwelling, replacement of the water closet with a composting toilet, in this instance, will achieve sufficiency of compliance with Sentence 9.31.4.1.(1).

iv) The municipality has a temporary use by-law which allows the subject trailer to be used on the property for a period of three years at which time the municipality may review the situation and decide upon renewal of the by-law.

v) When considering the conditions imposed, the Commission is satisfied that the municipality has sufficient control over the continued use and inspection of this seasonal use.

Dated at Toronto this **3rd** day in the month of **October,** in the year **2002** for application number **2002-26**.

Frank Wright, Chair-Designate

Doug Robinson

Bill Fellner

Ruling No. 02-28-883
Application No. 2002-25

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Clauses 3.2.2.67.(2)(c) and (d) and Sentence 3.2.1.1.(8) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Frank Tozzi, Magna-MI Developments Inc., for the resolution of a dispute with Shelly Switzer, Chief Building Official to determine whether the elevated floor assembly having an area of 563.5 m^2 in a Group F, Division 2 building is considered to be a mezzanine which must comply with the provisions of Clauses 3.2.2.67.(2)(c) and (d) or whether it can be considered a service platform in conformance with the provisions of Sentence 3.2.1.1.(8) of the Ontario Building Code at the Modatek Facility, 400 Chisholm Drive, Milton, Ontario.

APPLICANT	Frank Tozzi Magna-MI Developments Inc. Aurora, Ontario
RESPONDENT	Shelly Switzer Chief Building Official Town of Milton
PANEL	Michael Steele, Vice-Chair John Guthrie Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	September 26, 2002
DATE OF RULING	September 26, 2002
APPEARANCES	Randy Brown Randal Brown & Associates Willowdale, Ontario **Agent for the Applicant** Shelly Switzer Chief Building Official Town of Milton **The Respondent**

RULING

1. The Applicant

Frank Tozzi, Magna-MI Developments Inc., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing an industrial building referred to as the Modatek Facility at 400 Chisholm Drive in the Town of Milton, Ontario.

2. Description of Construction

The Applicant is constructing a Group F, Division 2 industrial building, one storey in building height and 49,320 m^2 in building area. The structure is of noncombustible construction and will be equipped with sprinkler and fire alarm systems.

The facility contains two office mezzanines and several service platforms. In addition, there is another raised floor assembly having an area of 563.5 m^2, used to support electrical and mechanical equipment. This floor assembly has been constructed as a service platform. It is comprised of a poured concrete floor slab on steel decking and is supported on open-web steel joists which span steel beams that are supported on steel columns. The floor area is bounded on two sides by full size concrete block partition walls, a third side borders an exterior wall and the remaining side is provided with a Code compliant guard. The subject floor area is accessed by two stairways to provide the required egress from this level.

The construction in dispute involves the subject floor assembly which, as constructed, does not provide a one hour fire-resistance rating. It is considered by the Applicant to be a platform rather than a mezzanine, for which the more restrictive standard would apply.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the subject intermediate floor assembly is to be considered a mezzanine, required to comply with the provisions of Clauses 3.2.2.67.(2)(c) and (d) or whether it is a service platform in conformance with Sentence 3.2.1.1.(8) of the Ontario Building Code (OBC).

Clauses 3.2.2.67.(2)(c) and (d) outline the construction requirements for mezzanines in any sprinklered F2 building. Clause (c) specifies that mezzanines must have a fire-resistance rating of at least one hour and Clause (d) requires that loadbearing walls, columns and arches shall have a fire-resistance rating at least equal to that of the supported assembly. The subject floor assembly has been completed on the assumption that it is a service platform rather than a mezzanine, consequently, the required fire-resistance rating has not been provided.

Sentence 3.2.1.1.(8) provides that mezzanines, elevated walkways and platforms in F2 or F3 major occupancies need not be considered storeys for the purposes of calculating building height provided that a) the building is comprised of noncombustible construction, b) the intermediate floor assembly is intended for periodic service and maintenance, and c) if intended to be occupied, the occupancy be limited to no more than four persons. The subject assembly is of noncombustible construction and is intended for use by no more than four persons to periodically service and maintain the equipment located in this area.

The subject dispute, therefore, centres on whether the subject floor assembly should be considered a mezzanine, required to meet the construction parameters specific to this feature or whether, as constructed, the floor assembly represents a service platform, to be used to for the support of equipment and its periodic maintenance, as purported by the Applicant.

4. Provisions of the Ontario Building Code

3.2.2.67. Group F, Division 2, Any Height, Any Area, Sprinklered

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and

(c) *mezzanines* shall have a *fire-resistance rating* not less 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.1.1. Exceptions in Determining Building Height

(8) *Mezzanines*, elevated walkways and platforms in Group F, Division 2 or 3 *major occupancies* need not be considered as *storeys* in calculating *building height* provided

(a) the *building* is of *noncombustible construction*,

(b) except for Clause (c), the *mezzanines*, elevated walkways and platforms are intended solely for periodic service and maintenance, and

(c) where they are intended to be occupied, no *mezzanine*, elevated walkway or platform shall have an *occupant load* more than 4 persons.

5. Applicant's Position

The Applicant's Agent submitted that the floor assembly in dispute has been constructed in this F2 building, as a service platform, in conformance with the provisions of Sentence 3.2.1.1.(8). As such, he advised that the area is to be used to house electrical and mechanical equipment and will be occupied by not more than four persons when servicing and maintenance is periodically required. He stated that no desks or other office furniture are to be located on this level, nor will the platform be used for storage of material. He emphasized that the area will only be occupied during maintenance operations.

The Agent suggested that the dispute has arisen as a result of the fact that the Code does not define what a constitutes a platform. Essentially, it is considered to be raised flooring and the traditional application, he submitted, would find the area housing items such as humidifiers, fans, paint booths and other industrial equipment. The Building Code, he stated, does not address how much equipment can be located on a platform, nor does it restrict platform area or make reference to whether the assembly must be free standing or can form part of the structure of the building. In his opinion, given the intended use of the space, the concept of a platform applies to this floor assembly.

In response to concerns in respect to the size of the assembly, the Agent submitted that the building itself is 50,000 m^2 and the subject platform has an area of 563.5 m^2. It is used to support electrical and mechanical equipment, the nature of which may change from time to time. He emphasized that there is no plan to use the area for storage and that the added floor space simply takes the equipment off the main floor. The Agent suggested that, if in the Commission's view, the assembly would more closely meet the concept of a platform, they could replace the stairways with vertical ladders which are frequently employed to provide access to such platforms. He emphasized, however, that this proposal

would also reduce the life safety of the area.

In respect to the claim that this area should be considered to mezzanine, the Agent argued that, unlike the other mezzanines constructed in this building, this area is not intended to be occupied on a regular basis. This level, he reiterated, will only support equipment and, therefore, does not require the fire resistance rating associated with a mezzanine. He submitted that the Applicant would offer as a condition, to include the prohibition of storage in this area in the Fire Safety Plan for the building. In addition, they would also agree to restrict access to this level by gating the top of the stairs with a lock barrier.

In summation, the Agent submitted that, despite its size and construction, the floor assembly in question serves the function of a service platform and, as constructed, meets the parameters of Sentence 3.2.1.1.(8) of the OBC.

6. Respondent's Position

The Respondent submitted that this issue is essentially one of semantics. The Code contains no definition for service "platform", but the common usage of the term applies to walkways or free standing structural platforms, accessed by ladders, which serve to raise equipment off the floor level. A service platform, he argued, is provided for the service and maintenance of equipment. This proposal, however, creates a substantial amount of floor space for the subject equipment and, as such, this floor space should be considered to be a mezzanine. The term "platform", he argued, simply does not apply to this floor assembly.

In regard to the term "mezzanine", the Respondent submitted that this is defined in the Code. A mezzanine is " an intermediate floor assembly between the floor and ceiling of any room or *storey* and includes an interior balcony". In his opinion, this level meets the definition of "mezzanine". The Respondent did not dispute the Application of Sentence 3.2.1.1.(8) and agreed that this is not a storey. His argument was that it is a mezzanine and, consequently, should be provided with a one hour fire-resistance rating as required by 3.2.2.67.(2)(c) and (d).

In summation, the Respondent reiterated that this area is not being used as a service platform. In addition, he expressed concern over potential future uses of the area and suggested that his main concern was with the protection of those working beneath the floor assembly. This area is constructed identically to the other mezzanines in the building, he argued, and should be treated as a mezzanine as well.

7. Commission Ruling

It is the decision of the Building Code Commission that the elevated floor assembly having an area of 563.5 m^2 in the subject F2 building is not considered to be a mezzanine which must comply with the provisions of Clauses 3.2.2.67.(2)(c) and (d) and can be considered to be a service platform in conformance with the provisions of Sentence 3.2.1.1.(8) of the Ontario Building Code at the Modatek Facility, 400 Chisholm Drive, Milton, Ontario subject to the following conditions:

a) The Fire Safety Plan for the Modatek Facility is required to reflect that the use of the platform be restricted to the support and service of equipment with no storage for maintenance materials permitted.

b) The platform is to be equipped with a locked barrier which will restrict access.

c) Occupant load on the platform is to be restricted to a maximum of 4 persons.

8. Reasons

i) The Ontario Building Code is not specific in respect to the definition of a service platform and the proposal, in our view, meets the intended uses and performance of a service platform.

ii) With adherence to the conditions imposed the space in question can be considered to serve the function of a service platform.

Dated at Toronto this **26th** day in the month of **September** in the year **2002** for application number **2002-25**.

Michael Steele, Vice-Chair

John Guthrie

Donald Pratt

Ruling No. 02-27-882
Application No. 2002-29

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Section 3.8. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Manoj Garg, owner, Silver Mine, for the resolution of a dispute with Larry Simonato, Chief Building Official, City of Cambridge, to determine whether the proposed retail kiosk, located in a mall corridor, is required to provide barrier-free accessibility in accordance with the provisions of Sentences 3.8.1.3.(1) and 3.8.2.1.(1) of the Ontario Building Code at the Silver Mine Kiosk, Cambridge Place Mall, 355 Hespeler Street, Cambridge, Ontario.

APPLICANT	Manoj Garg, owner Silver Mine Kiosk, Cambridge Place Cambridge, Ontario
RESPONDENT	Larry Simonato Chief Building Official City of Cambridge
PANEL	Len King, Vice-Chair Fred Barkhouse Michael Steele
PLACE	Toronto, Ontario
DATE OF HEARING	September 12, 2002
DATE OF RULING	September 12, 2002
APPEARANCES	John Newell Jondy Retail Interiors Inc. Pickering, Ontario **Agent for the Applicant** Hardy Bromberg Supervisor of General Inspectors City of Cambrdige **Designate for the Respondent**

RULING

1. The Applicant

Manoj Garg, owner, Silver Mine, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing to construct a retail kiosk in a corridor of the Cambridge Place Mall, at 355 Hespeler Street, Cambridge, Ontario.

2. Description of Construction

The Applicant is proposing to construct a kiosk designed to operate as a jewellery retail outlet in one of the public corridors serving the Cambridge Place Mall. The mall itself is classified as having a Group E mercantile occupancy and is 64,351 m^2 in building area. It is one storey in building height and comprised of noncombustible construction. The building is equipped with sprinkler, fire alarm and standpipe and hose systems.

The proposed kiosk measures 3.4 m by 5.55 m (11 ft 2.5 in by 18 ft 2.5 in) and is comprised of 10 modular rectangular sections. The proposal also includes a centre island which measures 2.03 m by 0.68 m (6 ft 8 in by 2 ft 3 in) creating an interior aisle width measuring between 317.5 mm (2 ft 0.5 in) and 406.4 mm(2 ft 4 in) within the kiosk. The counter surface is situated 1016 mm (40 in) above the floor surface and is continuous around the perimeter of the kiosk. The counter is equipped with a 3 m wide lift-up flap to facilitate access into the interior or working area of the kiosk.

The construction in dispute involves the design of the subject kiosk which, as proposed, does not provide a barrier-free path of travel within the employee work area.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed retail kiosk located in a public corridor of an existing mall is required to provide barrier-free accessibility within the occupied area in accordance with Sentences 3.8.2.1.(1) and 3.8.1.3.(1) of the Ontario Building Code (OBC).

Sentence 3.8.2.1.(1) defines areas where a barrier-free path of travel is required based on occupancy classification. According to this provision, expect where essential obstructions that would exist in the "work areas" that would make a barrier-free path of travel dangerous, and except for the provision of Sentences (2), (3) and (4) of the same Article that provide a list of spaces and occupancies which are exempted from the provision of barrier-free paths of travel, all entrance storeys and occupied floor areas with a passenger elevating device that are required to have barrier-free entrances are required to provide barrier-free paths of travel. The exceptions defined and listed in Sentences 3.8.2.1.(1), (2), (3) and (4) do not apply to retail kiosks.

Following from this provision, any area that is deemed to require a barrier-free path of travel is subject to certain construction requirements. Among these requirements are those outlined in Sentence 3.8.2.3.(1) of the OBC which stipulate that a barrier-free path of travel must have an unobstructed width of at least 1060 mm for the passage of mobility challenged individuals.

The proposed retail kiosk, operating as a Group E (mercantile) occupancy, will provide aisle widths ranging from 317.5 mm (2 ft 0.5 in) and 406.4 mm (2 ft 4 in). This results from the size and location of the proposed centre island within the employee work area. The specific issue therefore, is whether, under the Ontario Building Code, the proposed retail kiosk is required to provide for barrier-free accessibility and meet the minimum established requirements for barrier-free paths of travel.

4. Provisions of the Ontario Building Code

3.8.2.1. Areas Requiring Barrier-Free Path of Travel

(1) Except where essential obstructions in the work area would make a *barrier-free* path of travel hazardous, and except as provided in Sentences (2), (3) and (4), a *barrier-free* path of travel from the entrances required by Sentences 3.8.1.2.(1) and (2) to be *barrier-free* shall be provided throughout the entrance *storey* and within all normally occupied *floor areas* served by a passenger type elevator or other platform equipped passenger elevating device.

3.8.1.3. Barrier-Free Path of Travel

(1) Except as required in Sentence (4) and except as permitted in Subsection 3.8.3., every *barrier-free* path of travel shall provide an unobstructed width of at least 1 060 mm (3 ft 6 in) for the passage of wheelchairs.

5. Applicant's Position

The Agent for the Applicant submitted that his client is intending to operate a retail jewellery kiosk in the Cambridge Place Mall. He stated that the prime objective of any retail kiosk is to generate a profit. The cost of construction and operation of the kiosk, he submitted, must be considered when evaluating whether it would be profitable to operate such a kiosk. He further suggested that the centre island proposed in this instance is an integral element of the operation of a kiosk. It is generally considered the "hub" of the business, housing the cash register and other items considered private and/or potentially hazardous. To forgo the centre island concept and redesign to provide barrier-free access would be impractical and would impact on the cost to business owners and the profitability of operating a mall kiosk, he submitted.

In support of his position that barrier-free access within the occupied area should not be required, the Agent offered the following points in relation to the operation of a retail kiosk. Firstly, he argued that an employee working in a retail kiosk, unlike a service kiosk, must be able to stand. Customers shopping and reviewing merchandise must not have their attention span broken as it may be if the person behind the counter were in a wheelchair creating a diversion by, for example, banging their chair against the interior of the kiosk. The employee of any retail kiosk, he submitted, must be able to move with the customer without distracting them. In addition, they must be able to view the merchandise from the same vantage point as the customer which, typically, is from above the counter.

Secondly, he argued that the confines of a kiosk would make it impractical for a person in a wheelchair to effectively work within that environment. He stated that the height of a kiosk counter would generally be higher than the head of most individuals in a wheelchair. Further, it would be difficult, if not impossible, for a person in a wheelchair to change directions in a Code compliant aisle that is created between the counter and the centre island. They would be forced to travel continuously in one direction, he argued. In addition, drawers and cupboards would be difficult to open within the kiosk

given the limited space available to a person in a wheelchair. Also, the physical requirements involved in retrieving merchandise, cleaning equipment placed atop the counter space and positioning of display items would be difficult if not impossible for someone requiring the use of a wheelchair for mobility, despite their level of dexterity.

As a third point in his argument, the Agent stated that the material used in the construction of a kiosk would not stand up to accidental damage that would be sustained from a wheelchair colliding with the interior of the structure. A minimum turning circle measuring 5 feet would be required to adequately accommodate a wheelchair, he submitted. In addition, other employees within the kiosk would not be able to move freely and should expect the same degree of mobility and safety as in any other retail environment. This may not occur if they were confined to a kiosk with a 42 inch aisle and working with someone in a wheelchair, he argued. In any respect, he submitted that he considered the intent of Section 3.8. to be to accommodate persons with disabilities in a manner which most respects their dignity without creating undue hardship. This would not be the case in a kiosk environment, he argued, as they are designed and built to accommodate a person of average height. It would not be profitable for kiosk designers and/or operators to cater, in all respects, to a small percentage of the population.

The Agent continued by stating that, even if you don't consider the physical impracticality of someone in a wheelchair working behind a kiosk counter, this is a mute point because a retail kiosk is not a "building" that should be subject to the provisions of the Ontario Building Code. A kiosk, he argued, is akin to a store fixture or furniture. The module compartments of a kiosk are constructed of plywood and built by a cabinet maker. This could be considered a series of interconnected bookcases, he argued. Power is provided to the unit with a floor plug, just as it would be for a lamp. In fact, many aspects of a kiosk, he submitted, are not considered by the OBC. The Code was not intended to apply to this type of fixture.

The Agent acknowledged that a retail kiosk was not listed as a use which would be excluded from the barrier-free access requirements of the Code but submitted that Section 3.8. was not written with kiosks in mind. One must look at this issue logically, he stated. When considering the physical requirements of working within a retail kiosk environment, and when further considering that this element within a mall corridor is essentially a piece of furniture, he could not comprehend how anyone could consider that this was a "building" requiring barrier-free access within the working space. In his opinion, it made sense to provide a path of travel around the fixture to accommodate customers in a wheelchair or those passing by, but to expect someone requiring the use of a wheelchair to work in a retail kiosk is ridiculous, he argued. He advised that, to his knowledge there is no one who makes use of a wheelchair working in this type of environment nor would they be hired to do so as it wouldn't be cost effective for the owner. He submitted that a retail kiosk operates quite differently from a service kiosk where the same level of mobility may not be required.

In summation the Agent submitted that, as a taxpayer, it is his view that laws were written to benefit the people. They are to be interpreted with common sense and, as far as he can tell, that has not been the case when it comes to retail kiosks. He stated that he had been advised that the Town of Cambridge had denied many similar designs causing excessive expense in the redesign process. He argued that the OBC never intended to provide the occupied area of such a structure with barrier-free accessibility. If the Commission could not make a decision based on common sense and reality, he argued, then the Ontario Building Code should be amended to reflect an exemption for retail kiosks.

6. Respondent's Position

The Designate for the Respondent submitted that in reviewing this matter he considered three issues.

Firstly, a determination was made as to whether a building permit was required. In this regard they felt that a permit was required as they considered this structure to meet the definition of "building" as set out in the *Building Code Act*. It was, he argued, a structural system serving the function of the building, therefore, it must comply with the requirements of the Building Code.

Secondly, the Designate advised that the structure was reviewed in terms of whether it was an occupancy. In this respect he submitted, a retail kiosk was considered as an occupancy functioning similarly to a retail store. In examining the occupancy requirements for this use, Section 3.8. of the OBC requires barrier-free accessibility and makes no exemption for retail kiosks.

As a third consideration in the review of this matter the municipality had regard to a previous Building Code Commission ruling in respect to a kiosk in the City of London. The BCC, in that instance, found that the kiosk must provide barrier-free accessibility and used the same logic in its conclusion that kiosks were not exempt from these Code provisions.

In summation the Designate submitted that, in his opinion a retail kiosk must provide for barrier-free accessibility within the occupied area. In response to the Applicant's claim that it is simply furniture, he argued, that the function and operation of the space as a retail outlet had to be considered. In his opinion, a permit was required and has been issued based on a kiosk design without the centre island feature. This open interior design would provide the required aisle width as determined by the Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed retail kiosk to be located in a mall corridor is required to provide barrier-free accessibility within the occupied area in accordance with the provisions of Sentences 3.8.2.1.(1) and 3.8.1.3.(1) of the Ontario Building Code at the Silver Mine Kiosk, Cambridge Place Mall, 355 Hespeler Street, Cambridge, Ontario.

8. Reasons

i) The kiosk is a building or portion of a building as defined by the *Building Code Act*.

ii) Kiosks are not listed as one of the areas exempted from providing a barrier-free path of travel in Article 3.8.2.1., therefore a barrier-free path of travel of the appropriate width is required.

Dated at Toronto this **12th** day in the month of **September** in the year **2002** for application number **2002-29**.

Len King, Vice Chair

Fred Barkhouse

Michael Steele

Ruling No. 02-26-881
Application No. 2002-24

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 3.2.2.9.(1) and 3.4.2.1.(1) and Articles 3.2.2.52. and 3.2.2.77. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mike Finn, Project Manager, Physical Plant Services, Queen's University, for the resolution of a dispute with Terry Willing, Chief Building Official, City of Kingston, to determine whether the subsurface (future basement) level of a proposed research facility, which will be unoccupied, unsprinklered and provided with limited access until such time as a use for the area has been determined, provides sufficiency of compliance with Sentences 3.2.2.9.(1) and 3.4.2.1.(1) and Articles 3.2.2.52. and 3.2.2.77. of the Ontario Building Code at the Cancer Research Institute, Queen's University, 18 Stuart Street, Kingston, Ontario.

APPLICANT	Mike Finn, Project Manager Physical Plant Services Queen's University Kingston, Ontario
RESPONDENT	Terry Willing Chief Building Official City of Kingston
PANEL	Len King, Vice-Chair Fred Barkhouse Michael Steele, Vice-Chair
PLACE	Toronto, Ontario
DATE OF HEARING	September 12, 2002
DATE OF RULING	September 12, 2002
APPEARANCES	Peter Colquhoun, Consultant Arencon Inc. Mississauga, Ontario **The Applicant** Ted Marecak Building Official City of Kingston **Designate for the Respondent**

RULING

1. The Applicant

Mike Finn, Project Manager, Queen's University, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing a research laboratory at Queen's University, referred to as the Cancer Research Institute, 18 Stuart Street, Kingston, Ontario.

2. Description of Construction

The Applicant is constructing a cancer research laboratory having Group F, Division 3 and Group D occupancy classifications. The structure is four storeys in building height and approximately 1,290 m^2 in building area. In addition to the four above-grade storeys, the facility includes a subsurface basement level and a mechanical penthouse. The building is comprised of noncombustible construction and will be equipped with fire alarm and standpipe and hose systems. Sprinklering is proposed for the occupied, above-grade, levels of the structure.

The subsurface level, or future basement of the building, is presently unoccupied and no use for the area has been determined. The future basement space is comprised of poured concrete walls with an unfinished, gravel floor. The height of the area, from floor to ceiling, exceeds 1,800 mm. It is proposed that ingress to the area will be limited to an access panel measuring 550 mm wide by 1,100 mm high, opening at the bottom of a stairway. Entrance to this area will be restricted to authorized personnel for the purpose of service and maintenance only. In addition, until a use for the area has been determined, there is no proposal to sprinkler the future basement level.

The construction in dispute involves the limited exit facilities from the subsurface level and the omission of a sprinkler system in the future basement for a building in which sprinklering is required. In this regard, the Applicant has proposed that, until such time as a use for the space has been determined, the area will be considered similar to that of a crawl space and will not be used for any occupancy. In addition, building services (pipes, ducts, etc.) which penetrate to the first level floor slab above the future basement will be fire stopped or protected with dampers to maintain a 45 minute fire separation.

Further, as noted above, access to the area is to be restricted to maintenance personnel in a manner consistent with the requirements for a crawl space. Also, emergency lighting and audible signal devices for the fire alarm system will be provided to the area. A manual pull station will be located beside the proposed access door and measures will be included in the building's Fire Safety Plan which will address the limitations on the use of the space.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the future basement space, which will be unoccupied, unsprinklered, and provided with limited access, until such time as a use for the area has been identified, provides sufficiency of compliance with Sentences 3.2.2.9.(1) and 3.4.2.1.(1) and Articles 3.2.2.52. and 3.2.2.77. of the Ontario Building Code (OBC).

Sentence 3.2.2.9.(1) mandates that, for the purposes of Articles 3.2.1.4. and 3.2.1.5., a crawl space shall be considered to be a basement if it a) exceeds 1,800 mm between the lowest part of the floor assembly and the ground or other surface below, b) is used for any occupancy, c) is used for the passage of flu pipes or, d) is used as a plenum in combustible construction. In the subject building, while the disputed

area is acknowledged to be a future basement, it presently has many of the characteristics of a crawl space, as purported by the Applicant. It is not presently intended to be used for any occupancy. In addition, it is proposed that building services (pipes, ducts, etc.) which penetrate to the first level floor slab above the future basement will be fire stopped or protected with dampers to maintain a 45 minute fire separation. However, it's height (as noted above) exceeds 1,800 mm.

A further requirement for the basement area, outlined in Sentence 3.4.2.1.(1) of the Code, addresses the minimum number of required exits from a floor area. In this regard, with exceptions not applicable here, every floor area which is intended for occupancy shall be served by a minimum of two exits. The future basement of the subject building, for which a use has not been determined and which will remain unoccupied until such time as such determination has been made, is provided with one exit panel measuring 550 mm by 1,100 mm to provide limited access for servicing and maintenance.

In addition, the subject four storey high building having both Group D and F3 major occupancies falls under the construction requirements for Articles 3.2.2.52. and 3.2.2.77., respectively. These Articles require the building (including the basement) to be sprinklered, comprised of either noncombustible or combustible construction and establish the required fire resistance ratings in accordance with Part 3 of the Code. In respect to the subject building, while all occupied areas are intended to be equipped with a sprinkler system, no sprinklering is presently proposed for the basement level until a use or occupancy has been determined. Following such a determination, it is intended by the Applicant that a sprinkler system will be designed to accommodate the intended use and floor layout.

To achieve sufficiency of compliance with the Code requirements for this space, the Applicant has suggested that the area can be considered, temporarily, to be a crawl space. They have offered to ensure that access to the area is restricted to authorized personnel. Emergency lighting, audible fire alarm devices and a manual pull station near the proposed access panel door will also be provided and the limitations on use of the space will be specified in the Fire Safety Plan for the building. All well, the Applicant has committed that sprinklering and the required exits will be provided once a use for the space has been determined.

4. Provisions of the Ontario Building Code

3.2.2.9. Crawl Spaces

(1) For the purposes of Articles 3.2.1.4. and 3.2.1.5., a crawl space shall be considered as a *basement* if it is

(a) more than 1 800 mm (5 ft 11 in) high between the lowest part of the floor assembly and the ground or other surface below,
(b) used for any *occupancy*,
(c) used for the passage of *flue pipes*, or
(d) used as a *plenum* in *combustible construction*.

3.4.2.1. Minimum Number of Exits

(1) Except as permitted by Sentences (2) to (4) and (6), every *floor area* intended for *occupancy* shall be served by at least 2 *exits*.

3.2.2.52. Group D, up to 4 Storeys, Sprinklered

(1) A *building* classified as Group D is permitted to conform to Sentence (2) provided

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 4 *storeys* in *building height*, and

(c) it has a *building area* not more than 3 600 m^2 (38,800 ft^2).

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.77. Group F, Division 3, up to 4 Storeys, Sprinklered

(1) A *building* classified as Group F, Division 3 is permitted to conform to Sentence (2) provided

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 4 *storeys* in *building height*, and

(c) it has a *building area* not more than

(i) 14 400 m^2 (155,000 ft^2) if 1 *storey* in *building height,*

(ii) 7 200 m^2 (77,500 ft^2) if 2 *storeys* in *building height*,

(iii) 4 800 m^2 (51,700 ft^2) if 3 *storeys* in *building height*, or

(iv) 3 600 m^2 (38,800 ft^2) if 4 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min, and

(c) *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall

(i) have a *fire-resistance rating* not less than 45 min, or

(ii) be of *noncombustible construction*.

5. Applicant's Position

The Applicant's Agent advised that, in respect to the subject future basement space, it was the University's desire to defer sprinklering of the area until such time as a use for the space had been decided upon. At present, he advised, a diverse range of uses are being contemplated however, there is no firm plan in place for any specific occupancy at this time. Consequently, it is anticipated that any sprinkler system put in place now could require extensive alteration, depending on the future occupancy involved. Omitting the sprinkler system at this time would save the university the additional cost required to upgrade and reconfigure the system at a later date. It is more cost effective, he argued, to design a system for a specific use relative to the varying hazards involved.

The Agent submitted that this future basement presently functions as a crawl space. It is unoccupied, provided with limited access and houses a sump pump/storm drain which may require periodic servicing. He argued that, although the term "crawl space" is not defined in the Code that it is generally considered to be a low or narrow space below the lower storey of a building which can be accessed for servicing and maintenance. With the exception of the floor to ceiling height, the subject space qualifies in all other respects as a crawl space. As such, no sprinklering would be required and only limited access need be provided.

In reference to the issue of access to the area, the Agent advised that a small door is being proposed to permit authorized personnel to gain entry for servicing and maintenance when required. He also submitted that it is not the university's intent to use this area for storage of any kind. He emphasized that, once a use has been determined, the future basement would be made to comply with all Code requirements.

In response to any concerns about the use of this space the Agent advised that written confirmation was offered to the municipality to ensure that access to the area would be restricted and a limited number of keys would be issued to authorized individuals. In addition, an undertaking would be provided to ensure that the area would not be used for storage or otherwise until such time as a use had been established. He also advised that the Fire Department was invited to conduct random, unscheduled, inspections to assure that the space was not being used inappropriately. These proposals, however, had been rejected by the Respondent.

The Agent submitted that they are seeking a ruling in respect to the sufficiency of compliance of their proposal with the disputed provisions of the Building Code. As compensation for the period of noncompliance while the space is unoccupied, the Agent advised that certain compensating measures were being offered. These measures include a) consideration that the future basement presently functions as a crawl space, b) pipes which would penetrate the upper floor assembly will be fire stopped to maintain the fire separation between the two levels, c) sufficient emergency and normal lighting, together with exit signs will be provided in the area (this is not normally required for a crawl space), d) audible devices connected to the fire alarm system will be maintained and a pull station will be located at the bottom of the stair in which the access door is located, and e) the basement is enclosed in noncombustible construction and will not be used for any occupancy. In addition he noted, these measures would be included in the Fire Safety Plan for the building ensuring that all provisions would be adhered to.

In summation, the Agent argued that the present proposal represented the most responsible and effective use of public and donor funds made available to the university. He emphasized that, the space presently serves as a crawl space and suggested that if the ceiling were lowered, it would meet all of the parameters associated with such a feature. Sprinklering of the area and the concealed space above the lowered ceiling would, therefore, not be required. He further reiterated that, once a use had been determined a building permit would be applied for and full compliance ensured.

6. <u>Respondent's Position</u>

The Designate for the Respondent submitted that, in his opinion, the issue was fairly clear. Compliance with the provision of the Building Code requires that the basement be sprinklered and that two exits be provided. He suggested that the proposal for noncompliance was a result of financial concerns rather than design limitations. There are no provisions in the Code, he argued, that would permit this space to be left unsprinklered.

The Designate noted that, although the space was presently unoccupied, it was still accessible and did not meet the accepted concept of a crawl space. Further, he disputed the claim that the area would not be used for storage in the interim period until a use had been determined. The offer to permit random inspections, he suggested, put the onus on the municipality to ensure that the space was not being utilized. In his opinion, this would not offer the same level of protection anticipated by the Code. The Designate also disputed the Applicant's claim that the required sprinkler system would have to be totally redesigned or replaced depending on the use of the area. He conceded that some reconfiguration may be required but didn't feel it would be as extensive or costly as was being claimed.

In terms of the present lack of occupancy for the area, the Designate submitted that, when examining the minimum construction requirements for an unoccupied building, the Code still applies. It is standard practice to require compliance whether floor space is occupied or not. The omission of sprinklering in this instance also raises concerns about protection of this floor while construction occurs. In addition, he noted the allowance in NFPA to avoid sprinklering of a conceled space but argued that it does not apply here. The basement is an accessible area and not a concealed space.

In summation, the Designate stated that the Code is clear in respect to what is required for a basement in this instance. This space meets the definition of a "basement" as determined by the Ontario Building Code and, therefore, should be constructed by meeting all Code requirements.

7. Commission Ruling

It is the decision of the Building Code Commission that the subsurface (future basement) level of the proposed research facility, which will be unoccupied, unsprinklered and provided with limited access until such time as a use for the area has been determined, does not provide sufficiency of compliance with Sentences 3.2.2.9.(1) and 3.4.2.1.(1) and Articles 3.2.2.52. and 3.2.2.77. of the Ontario Building Code at the Cancer Research Institute, Queen's University, 18 Stuart Street, Kingston, Ontario.

8. Reasons

i) When considering the provisions of Sentence 3.2.2.9.(1), the subsurface level is a basement, as defined by the Code, and is not considered to be a crawl space.

ii) Articles 3.2.2.52. and 3.2.2.77. require the building, including the basement area, to be sprinklered.

iii) Sentence 3.4.2.1(1) requires that two exits be provided from the basement floor space.

iv) The compensating measures being offered are not adequate to achieve sufficiency of compliance with the provisions of the Code, despite the area being presently unoccupied and provided with limited access.

Dated at Toronto this **12th** day in the month of **September** in the year **2002** for application number **2002-24**.

Len King, Vice Chair

Fred Barkhouse

Michael Steele

Ruling No. 02-25-880
Application No. 2002-21

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 9.30.1.2 of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Dave de Sylva, Del Ridge Homes Inc., for the resolution of a dispute with Shelly Switzer, Chief Building Official, Town of Milton, to determine whether the prefinished hardwood flooring proposed for the kitchen of a single detached residential building provides sufficiency of compliance with Article 9.30.1.2. of the Ontario Building Code at 319 Malick Street, Milton, Ontario.

APPLICANT	Dave de Sylva Del Ridge Homes Inc. Markham, Ontario
RESPONDENT	Shelly Switzer Chief Building Official Town of Milton
PANEL	Kenneth Peaker, Chair Fred Barkhouse Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	August 8, 2002
DATE OF RULING	August 8, 2002
APPEARANCES	Dave de Sylva Del Ridge Homes Inc. Markham, Ontario **The Applicant** Shelly Switzer Chief Building Official Town of Milton **The Respondent**

RULING

1. The Applicant

Dave de Sylva, Del Ridge Homes Inc., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing a residential dwelling unit at 319 Malick Street, Milton, Ontario.

2. Description of Construction

The Applicant is constructing a single detached dwelling having a Group C occupancy classification. The structure has a building area of 134.7 m^2 and a building height of two storeys.

The construction in dispute involves the type of finished flooring proposed for the kitchen of the dwelling. The proposed kitchen flooring will be comprised of prefinished oak planks having a factory applied urethane finish to the top of the wood strip. The sides, ends and bottom of the hardwood strips are left unfinished. Asphalt paper or wax paper is proposed for use between the hardwood product and the subfloor. The paper is designed to protect the hardwood from moisture penetration originating from beneath the subfloor and additionally, protects the subfloor should water permeate from above.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the prefinished hardwood flooring proposed for the kitchen of a single detached dwelling provides sufficiency of compliance with Article 9.30.1.2. of the Ontario Building Code (OBC).

This Article of the Code deals with water resistance and finished floor coverings. It provides a list of acceptable water resistant finished floorings for bathrooms, kitchens, public entrance halls, laundry and general storage areas. The list includes "felted-synthetic-fibre floor coverings, concrete, terrazzo, ceramic tile and mastic...". It also states that other types of flooring are permitted provided that they offer "a similar degree of water resistence".

It is proposed in this instance that the kitchen floor in a residential dwelling be covered with a prefinished hardwood product. While not specifically listed in Article 9.30.1.2., the Applicant contends that this type of flooring will provide "a similar degree of water resistence" within a kitchen environment and, therefore, sufficiency of compliance with Article 9.30.1.2. will be achieved.

4. Provisions of the Ontario Building Code

Article 9.30.1.2 Water Resistence

(1) Finished flooring in bathrooms, kitchens, public entrance halls, laundry and general storage areas shall consist of resilient flooring, felted-synthetic-fibre floor coverings, concrete, terrazzo, ceramic tile, mastic or other types of flooring providing similar degrees of water resistance. (See Appendix A.)

5. Applicant's Position

The Applicant submitted that, while it is recognized that the subject application applies to only one property, the issue of hardwood floors for kitchens could have a far reaching impact. In fact, for this particular subdivision alone, a number of requests for hardwood flooring in the kitchen have been received from prospective purchasers. Other municipalities, he argued, already accept its use for this area and approve of the installation. Some, however, will permit hardwood in kitchens only if the owner signs a waiver that indemnifies the municipality, the builder and the New Home Warranty Program from any responsibility if water damage should occur. This type of waiver has been offered in this case but the municipality has chosen not to accept the proposal.

In respect to the appropriateness of using hardwood flooring in the kitchen of a dwelling, the Applicant submitted that the Code provision in dispute was written out of concern for permeability of the finished flooring and prospective damage to the subfloor from water penetration. He argued that the prefinished hardwood plank being proposed for use is not a permeable material. He suggested that the only area of concern could be at the plank joints and stated that these areas are tightly connected. He argued that material such as ceramic tile was also jointed and that the masonry used in that application could shrink, letting water through to the subfloor. The key to ensuring that the flooring functions as designed is to provide quality hardwood product install as per the manufacturers specifications.

The Applicant submitted that based on permeability tests conducted for the proposed prefinished hardwood, he was confident that the product would perform as desired when used in the kitchen of a detached dwelling. The factory applied finish, he submitted, would exclude water vapour. In addition, if installed as recommended by the manufacturer and by using either asphalt paper or wax paper between the hardwood flooring and the subfloor, he submitted that a similar degree of water resistance will be offered when compared to Code specified products.

6. Respondent's Position

The Respondent submitted that, as a municipal official, his mandate is to enforce the Ontario Building Code. In this respect, he argued, he had no luxury to accept the waiver or release from responsibility being offered by the Applicant.

He advised the Commission that the National Building Code (NBC) would permit the type of prefinished hardwood flooring anticipated in this application however, an impermeable layer would be required between the subfloor and installed product. He further submitted that, if the Commission were to rule in favour of allowing hardwood flooring in kitchens, he would be more comfortable accepting the ruling if a similar condition were imposed in respect to installation.

In summation, the Respondent submitted that in his interpretation of Article 9.30.1.2, hardwood flooring is not a permitted material for installation in the kitchen of a residential dwelling. He, therefore, looks to the Commission for a ruling on whether the flooring will achieve sufficiency of compliance with the provisions of the OBC.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed prefinished hardwood flooring in the kitchen of a single detached residential building provides sufficiency of compliance with Article 9.30.1.2. of the Ontario Building Code 319 Malick Street, Milton, Ontario, on condition that:

a) The product must be supplied with a urethane finish having a minimum of seven (7) coats applied under factory conditions.

b) The flooring must be installed in accordance with the manufacturers recommendations.

8. Reasons

i) This application is restricted to the kitchen only of a Group C residential dwelling constructed under Part 9 of the Ontario Building Code. The use of prefinished hardwood flooring in bathrooms, laundry areas, etc., where the incidence of standing water may be more frequent, has not been considered.

ii) When considering the conditions imposed in this decision, the type of flooring anticipated for use in the kitchen, will provide a similar degree of water resistence as that anticipated by Article 9.30.1.2.

Dated at Toronto this **8th** day in the month of **August** in the year **2002** for application number **2002-21**.

Kenneth Peaker, Chair

Fred Barkhouse

Donald Pratt

Ruling No. 02-24-879
Application No. 2002-20

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 9.30.1.2 of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Robert Marini, Mattamy Homes, for the resolution of a dispute with Shelly Switzer, Chief Building Official, Town of Milton, to determine whether the prefinished hardwood flooring proposed for the kitchen of a single detached residential building provides sufficiency of compliance with Article 9.30.1.2. of the Ontario Building Code at Lot 116, Trudeau Dive, Milton, Ontario.

APPLICANT	Robert Marini Mattamy Homes Oakville, Ontario
RESPONDENT	Shelly Switzer Chief Building Official Town of Milton
PANEL	Kenneth Peaker, Chair Fred Barkhouse Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	August 8, 2002
DATE OF RULING	August 8, 2002
APPEARANCES	Robert Marini, Mattamy Homes Oakville, Ontario **The Applicant** Shelly Switzer Chief Building Official Town of Milton **The Respondent**

RULING

1. The Applicant

Robert Marini, Mattamy Homes, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing a residential dwelling at Lot 116, Trudeau Dive, Milton, Ontario.

2. Description of Construction

The Applicant is constructing a Group C residential dwelling having a building area of 217 m^2 and a building height of 2 storeys. The structure is comprised of combustible construction and is part of a new subdivision within the Town of Milton.

The construction in dispute involves the type of finished flooring proposed for the kitchen of the dwelling. The proposed kitchen flooring will be comprised of prefinished hardwood strips having a factory applied urethane finish to the top of the wood strip. The sides, ends and bottom of the hardwood strips are left unfinished. Installation of the product will include a wax paper layer beneath a vapour barrier material installed between the subfloor and the hardwood product. The paper is designed to protect the hardwood from moisture penetration originating from beneath the subfloor and additionally, protects the subfloor should water permeate from above.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the prefinished hardwood flooring proposed for the kitchen of a single detached dwelling provides sufficiency of compliance with Article 9.30.1.2. of the Ontario Building Code (OBC).

This Article of the Code deals with water resistance and finished floor coverings. It provides a list of acceptable water resistant finished floorings for bathrooms, kitchens, public entrance halls, laundry and general storage areas. The list includes "felted-synthetic-fibre floor coverings, concrete, terrazzo, ceramic tile and mastic...". It also states that other types of flooring are permitted provided that they offer "a similar degree of water resistence".

It is proposed in this instance that the kitchen floor in a residential dwelling be covered with a prefinished hardwood product. While not specifically listed in Article 9.30.1.2., the Applicant contends that this type of flooring will provide "a similar degree of water resistence" within a kitchen environment and, therefore, sufficiency of compliance with Article 9.30.1.2. will be achieved.

4. Provisions of the Ontario Building Code

Article 9.30.1.2 Water Resistence

(1) Finished flooring in bathrooms, kitchens, public entrance halls, laundry and general storage areas shall consist of resilient flooring, felted-synthetic-fibre floor coverings, concrete, terrazzo, ceramic tile, mastic or other types of flooring providing similar degrees of water resistance. (See Appendix A.)

5. Applicant's Position

The Applicant informed the Commission that the issue in dispute is the proposed use of hardwood flooring in the kitchen of a Group C dwelling. Relief is being sought under Part 9 of the Code for a finding of sufficiency of compliance to use this type of flooring when considering the intent of Article 9.30.1.2.

The Applicant submitted that, when considering the type of owner-occupied Group C building contemplated here, there is a vested interest by the occupants respecting the upkeep of the dwelling. The anticipated level of upkeep would be different, he suggested, if considering other occupancy types where maintenance may not be undertaken by the owners of the building. He further submitted that the request for relief was in relation to the kitchen area only. He acknowledged that the use of hardwood may not be as appropriate for a bathroom or laundry area where the incidence of water usage and occurrence of standing water may be increased.

In respect to the proposed product to be installed he submitted that the prefinished wood flooring will have a seven coat, factory applied finished on which the manufacturer provides a 25-year guarantee on the finish. The finish, he argued, does not allow for water penetration. The ends of the wood strip are unfinished but with proper installation where the floor boards are butted tightly together, water absorption would generally not be an issue unless there were extended periods of standing water. The manufacturer of the hardwood product has written in support of the application of wood flooring in kitchens and indicated that, in over 30 years of operation, no record of a claim in respect to mold or bacteria related issues has ever been reported. Any claims for wood rot were always related to long-term leaks that had developed. The Applicant further argued that wood flooring was the dominant covering in all homes up until the mid-sixties. Furthermore, the covering at that time was generally a wax finish which does not protect the wood nearly as well as the finishes today.

In respect to the concern regarding the protection of the subflooring, the Applicant submitted that, in their experience, "any tile floor or seamed vinyl floor over time may develop cracks in the grout joint or cuts in the vinyl. In these cases any moisture that may spill on the floor, that is not immediately addressed, will pass through the scratch coat and may compromise the flooring and the subfloor." It was their position that a properly installed prefinished wood floor would perform as well in the kitchen as a properly installed tile of vinyl floor.

In summation, the Applicant reiterated their position that, given the durability and degree of water resistance expected from the prefinished hardwood product proposed, sufficiency of compliance with the provisions of the OBC as they relate to kitchens in a Group C dwelling will be achieved.

6. Respondent's Position

The Respondent submitted that the requirements outlined in the building Code, in his opinion, would not permit hardwood flooring in a residential kitchen. He stated that the prescriptive wording restricts the type of flooring that could be considered acceptable.

He advised the Commission that the National Building Code (NBC) would permit the type of prefinished hardwood flooring anticipated in this application however, an impermeable layer would be required between the subfloor and installed product. He further submitted that, if the Commission were to rule in favour of allowing hardwood flooring in kitchens, he would be more comfortable accepting the ruling if a similar condition were imposed in respect to installation.

In summation, the Respondent submitted that in his interpretation of Article 9.30.1.2, hardwood flooring is not a permitted material for installation in the kitchen of a residential dwelling. He, therefore, looks to the Commission for a ruling on whether the flooring will achieve sufficiency of compliance with the provisions of the OBC.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed prefinished hardwood flooring in the kitchen of a single detached residential building provides sufficiency of compliance with Article 9.30.1.2. of the Ontario Building Code at Lot 116, Trudeau Dive, Milton, Ontario, on condition that:

a) The product must be supplied with a urethane finish having a minimum of seven (7) coats applied under factory conditions.
b) The flooring must be installed in accordance with the manufacturers recommendations.

8. Reasons

i) This application is restricted to the kitchen only of a Group C residential dwelling constructed under Part 9 of the Ontario Building Code. The use of prefinished hardwood flooring in bathrooms, laundry areas, etc., where the incidence of standing water may be more frequent, has not been considered.

ii) When considering the conditions imposed in this decision, the type of flooring anticipated for use in the kitchen, will provide a similar degree of water resistence as that anticipated by Article 9.30.1.2.

Dated at Toronto this **8th** day in the month of **August** in the year **2002** for application number **2002-20**.

Kenneth Peaker, Chair

Fred Barkhouse

Donald Pratt

Ruling No. 02-22-877
Application No. 2002-19

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 3.3.1.2.(3), 3.2.2.43.(2), 3.2.2.16.(1) and 3.1.5.3.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Pat Caulfield, Queen's University, for the resolution of a dispute with Terry Willing, Chief Building Official, City of Kingston, to determine whether the proposed natural gas fireplaces to be located in the Fireplace Lounges, which constitute extensions of public corridors leading to exits in sites 1 and 3, provide sufficiency of compliance with Sentence 3.3.1.2.(3), and whether the proposed use of glued-laminated heavy timber beams and purlins as well as plywood sheathing for attachment of copper roofing in the construction of the roof assembly of the fireplace lounge in site 3, provides sufficiency of compliance with Sentences 3.2.2.43.(2), 3.2.2.16.(1) and 3.1.5.3.(2) of the Ontario Building Code at the Student Residence Buildings for Queen's University, 23 Albert Street (site 1) and 194 Stuart Street (site 3), Kingston, Ontario.

APPLICANT	Pat Caulfield Queen's University Kingston, Ontario
RESPONDENT	Terry Willing Chief Building Official City of Kingston
PANEL	Len King, Vice-Chair John Guthrie Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	August 1, 2002
DATE OF RULING	August 1, 2002
APPEARANCES	Peter Colquhoun, Consultant Arencon Inc. **Agent for the Applicant** Ted Marecak Building Official City of Kingston **Designate for the Respondent**

RULING

1. The Applicant

Pat Caulfield, Construction Manager, Queen's University, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing two new student residence buildings at Queen's University, 23 Albert Street (site 1) and 194 Stuart Street (site 3), Kingston, Ontario.

2. Description of Construction

The Applicant is constructing two buildings having Group C occupancy classifications and intended for use as student residences in conjunction with Queen's University. The buildings, referred to as site 1 and site 3, have building areas of 1,288 m^2 and 2,906 m^2 respectively. The site 1 structure is 6 storeys in building height and the site 3 building reaches 5 storeys in building height. Both structures also include mechanical penthouses. The buildings are comprised of noncombustible construction and are equipped with sprinkler, standpipe and hose and fire alarm systems.

The two buildings are being constructed concurrently and share certain design features such as resident room layouts, amenity spaces and construction techniques. As part of the design of both structures, lounge areas have been provided in the one storey portions of the buildings. These lounges, termed fireplace lounges, are open to the adjacent public corridors and are intended to include a natural gas fireplace as an amenity feature for the residents.

There are three items of construction in dispute, one of which is common to both buildings. The common dispute involves the provision of natural gas fuelled fireplaces in the fireplace lounges of both residences. The lounges are situated on the ground floor of each building and are open to the adjacent public corridor which provides access to exits. To address concerns with allowing a fuel fired appliance in an access to exit, the following measures have been offered by the Applicant.

- "Provision of an automatic shut off of the fuel supply to the fireplace on activation of the fire alarm system,
- An enclosure (e.g. glass doors) that will prevent the occupants from coming in contact with the open flame,
- Carbon monoxide detectors, connected to the building fire alarm system, will be provided in each Fireplace Lounge, between the fireplace and the main circulation area of the public corridor,
- The buildings are sprinklered throughout and the sprinkler systems are supervised by the building fire alarm system,
- The fireplaces will be controlled by a thermostat in each Fireplace Lounge that will limit temperature in the fireplace lounges as a result of operation of the fireplace,
- Choices of exits are available for the public corridor and from the Fireplace Lounges that do not pass close to the fireplaces, and
- The fireplaces are located at the most remote points of the Fireplace Lounges from the main circulation area of the public corridors leading to the exits serving the Ground Floors of the buildings."

The second and third items of construction in dispute are particular to the site 3 building. In this regard, it is proposed that glued-laminated (glu-lam) heavy timber beams and purlins will be used to support a roof assembly consisting of a metal roof deck, insulation, Z girts supporting a nailing surface and

copper sheet roofing, in the construction of the fireplace lounge pavilion. The proposed beams would exceed the minimum size requirements outlined in the Code and, according to the Applicant, will provide a heavy timber alternative to a 45 minute fire resistance rating in lieu of the nonrated, noncombustible assembly which would be permitted by the Code. The fireplace lounge pavilion is a one storey portion of the building which will be separated from the adjacent upper storeys by 1.5 m to the south and 3 m to the north. Further, sprinklering of the pavilion will exceed the minimum requirements of NFPA13.

The final item of construction in dispute, again particular to the site 3 building, involves the use of 19 mm exterior grade plywood as a nailing surface for the copper sheet horizontal seam roof proposed for the fireplace lounge pavilion. To compensate for the use of this combustible plywood roof sheathing the Applicant is proposing the installation of a thermal barrier consisting of 16 mm thick water resistant gypsum board above the metal deck and below the rigid insulation and plywood sheathing. Further, fast response sprinklers are to be installed with deflectors to within 150 mm of the underside of the ceiling.

3. Dispute

The dispute between the Applicant and Respondent is threefold. The first issue involves whether the gas fuelled fireplaces located in the fireplace lounges, which constitute extensions of the public corridors, provide sufficiency of compliance with Sentence 3.3.1.2.(3) of the Ontario Building Code (OBC). Secondly, at issue is whether the use of glued-laminated heavy timber beams and purlins in the roof framing of the fireplace lounge of the site 3 building provides sufficiency of compliance with Sentences 3.2.2.43.(2) and 3.2.2.16.(1). And lastly, at dispute is whether the use of plywood sheathing as a nailing surface for the proposed copper sheet roofing will provide sufficiency of compliance with Sentence 3.1.5.3.(2) of the OBC.

In respect to the proposal to include gas fuelled fireplaces within the lounge areas of the site 1 and 3 buildings, Sentence 3.3.1.2.(3) states that a fuel-fired appliance shall not be located in a corridor serving as an access to exit. As noted, the lounge areas of both buildings are considered to be extensions of the public corridors which provide access to exits. As discussed above, however, certain measures of compensation are being offered to address concerns with the proposal and achieve sufficiency of compliance with the requirements of the Code. These measures include the provision of an automatic shut off feature and carbon monoxide detectors (both of which would be activated by the fire alarm system), and enclosure of the fireplace opening, etc.

On the second issue, Sentence 3.2.2.43. which governs the construction of buildings up to six storeys in building height and containing a Group C occupancy, stipulates that such buildings shall be of noncombustible construction and specifies the fire resistance ratings for floor assemblies and mezzanines. In addition, Sentence 3.2.2.16.(1) permits the use of heavy timber beams in the roof assembly of buildings up to two storeys in building height if sprinklering is provided. The subject site 3 building proposes the use of glu-lam heavy timber beams and purlins in the construction of the fireplace lounge roof assembly. The size of the proposed heavy timber beams and purlins will exceed the minimum size requirements outlined for such materials in the Code and would, arguably, provide the equivalent of a 45 minute fire resistance rating, whereas a nonrated, noncombustible assembly would be permitted.

Lastly, Sentence 3.1.5.3.(2), applicable to the project for its proposed use of combustible roofing materials, provides that combustible roof sheathing and supports installed above a **concrete** (emphasis added) deck are permitted, upon condition, in buildings required to be of noncombustible construction.

As noted above, the Applicant is proposing the use of a plywood sheathing above a metal deck for the purposes of providing a nailing base for the attachment of copper sheet roof materials. To compensate for deviation from the requirements of the Code in this regard, the Applicant is proposing the installation of a thermal barrier between the deck and the sheathing as well as the use of quick response sprinkler heads with deflectors positioned within 150 mm from the ceiling.

4. Provisions of the Ontario Building Code

3.3.1.2. Hazardous Substances, Equipment and Processes

(3) A fuel-fired *appliance* shall not be installed in a corridor serving as an *access to exit*.

3.2.2.43. Group C, up to 6 Storeys

(2) The *building* referred to in Sentence (1) shall be of *noncombustible construction*, and

(a) except as permitted by Sentence (3), floor assemblies shall be *fire separations* with a *fire-resistance rating* of not less than 1 h,

(b) *mezzanines* shall have a *fire-resistance rating* of not less than 1 h,

(c) if the *building* is not *sprinklered*, roof assemblies shall have a *fire-resistance rating* not less than 1 h, and

(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.16. Heavy Timber Roof Permitted

(1) Unless otherwise permitted by Articles 3.2.2.20. to 3.2.2.83., a roof assembly in a building up to 2 *storeys* in *building height* is permitted to be of *heavy timber construction* regardless of *building area* or type of construction required, provided the *building* is *sprinklered*.

3.1.5.3. Combustible Roofing Materials

(2) *Combustible* roof sheathing and roof sheathing supports installed above a concrete deck are permitted on a *building* required to be of *noncombustible construction* provided

(a) the concrete deck is not less than 50 mm (2 in) thick,

(b) the height of the roof space above the deck is not more than 1 000 mm (3 ft 3 in),

(c) the roof space is divided into compartments by fire stops in conformance with Article 3.1.11.5.,

(d) openings through the concrete deck other than for *noncombustible* roof drains and plumbing piping are protected by masonry or concrete shafts

(i) constructed as *fire separations* having a *fire-resistance rating* not less than 1 h, and

(ii) extending from the concrete deck to not less than 150 mm (5⅞ in) above the adjacent roof sheathing,

(e) the perimeter of the roof is protected by a *noncombustible* parapet extending from the concrete deck to not less than 150 mm (5⅞ in) above the adjacent sheathing, and

(f) except as permitted by Clause (d), the roof space does not contain any *building* services.

5. Applicant's Position

The Agent for the Applicant stated that there are three areas of construction in dispute in the

construction of the two new student residences. He submitted that all issues were particular to the proposed fireplace lounges included in the design and layout of the subject buildings.

In outlining the first issue in dispute, the Agent stated that the Applicant is proposing the installation of natural gas fireplaces in the fireplace lounges. He noted that these lounges, while distinct in their function, were open to the adjacent public corridors serving as access to exits. The Agent acknowledged the position of the municipality in this regard and advised that, to address any concern in this regard and to achieve sufficiency of compliance, he was proposing certain compensating measures.

As part of the proposal, the Agent advised that the fireplaces would be provided with a shut off valve which would cut off the natural gas supply to the units when the fire alarm system is activated. Further, carbon monoxide detectors are proposed in the lounges which would also be activated by the fire alarm system. It is also intended that the fireplace openings will be enclosed in glass and that thermostats will limit the temperature in the lounge areas. He further noted that the fireplaces themselves were to be situated at the farthest point from the path of travel through the public corridors. These measures, he argued, demonstrated sufficiency of compliance with the provisions of the Code and were also consistent with measures included in two previous Building Code Commission Rulings approving of similar proposals.

In respect to the second issue in dispute, the Agent advised that glu-lam heavy timber beams and purlins were being proposed in the construction of the roof assembly of the fireplace lounge pavilion at site 3. These beams, he stated, will exceed the minimum size requirement dictated by the Code and will provide the equivalent of a 45 minute fire resistance rating. He suggested that this is an improvement over what would be permitted by the Code, including nonrated noncombustible assemblies.

In addition to the timber support assembly being proposed in the fireplace lounge pavilion, the Agent advised that they are intending to apply copper sheet roofing to this one storey portion of the site 3 residence. This material, he argued, ideally requires a plywood nailing base to allow for proper installation. He acknowledged that the plywood sheathing was not listed in the Code as an acceptable material for use in a building required to be of noncombustible construction and, as a result, is offering compensation in this regard.

To address concerns in respect to the use of the plywood sheathing, the Agent noted that a thermal barrier was being proposed on top of the metal deck and below the insulation and sheathing. This barrier, he argued, was not required by the Code. He further noted that the sprinkler protection in the fireplace lounge will exceed the requirements of NFPA13 and advised that quick response sprinkler heads equipped with deflectors were to be installed within 150 mm of the underside of the finished ceiling. These protective measures, he submitted, would provide sufficiency of compliance with the safety requirements anticipated by the OBC.

In summation, the Agent reiterated the design concept proposed and emphasized that all of the measures being offered where the proposed construction deviated from the strict prescriptive requirements of the Code will achieve an appropriate level of sufficiency of compliance. In his opinion, an equivalent level of life safety was being afforded to the occupants of the buildings in this regard.

6. <u>Respondent's Position</u>

The Designate for the Respondent submitted that the Code requirements in respect to the items in dispute were clearly set out and that their interpretation was not at issue in this regard. He stated that the proposed natural gas fireplaces in the lounge areas of the building and the use of heavy timber and

plywood sheathing in the roof assembly were contrary to the specific provisions of the Ontario Building Code.

The Designate acknowledged the proposal put forth by the Applicant and the compensating construction being offered, however, in his opinion, these measures did not fall within the scope of Section 2.7 of the Code governing the acceptance of equivalents. He further noted that the past BCC rulings referred to by the Agent for the Applicant could not be applied to the subject proposals. As such, he stated that he did not have the authority to grant permit approval in this regard.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed natural gas fireplaces to be located in the fireplace lounges, which constitute extensions of public corridors leading to exits in sites 1 and 3 do not provide sufficiency of compliance with Sentence 3.3.1.2.(3) of the Ontario Building Code.

It is also the decision of the Building Code Commission that the use of glued-laminated heavy timber beams and purlins as well as plywood sheathing for attachment of copper roofing proposed for use in the roof assembly of the fireplace lounge pavilion of site 3 provides sufficiency of compliance with Sentences 3.2.2.43.(2), 3.2.2.13.(1) and 3.1.5.3.(2) of the Ontario Building Code at the Student Residence Buildings for Queen's University, 23 Albert Street (site 1) and 194 Stuart Street (site 3), Kingston, Ontario.

8. Reasons

i) The installation of a fuel fired appliance (gas fireplace) in a public corridor serving as an access to exit is not permitted by the Code. Furthermore, the compensating measures offered will not provide sufficiency of compliance to maintain the integrity of the access to exits.

ii) The Commission is satisfied with the proposed roof assembly at the site 3 building in as much as the fireplace lounge sprinkler system exceeds the NFPA13 requirements set out in the OBC.

iii) The sprinklers heads are to be equipped with deflectors within 150 mm of the underside of the ceiling.

iv) The proposed use of combustible thermal insulating material is permitted by the Code.

v) A 16 mm layer of water resistant gypsum board is being provided as a thermal barrier on top of the metal deck and below the rigid insulation and plywood sheathing.

vi) The size of the beams and purlins used in the roof assembly of the fireplace lounge exceed the minimum specifications for heavy timber set out in the Code and the heavy timber components provide an alternative to a 45 minute fire resistance rating in lieu of the nonrated, non combustible assembly.

vii) The proposed glu-lam beams and purlins offer better fire performance than elements of a decorative wood ceiling which would be permitted by the Code.

Dated at Toronto this **1st** day in the month of **August** in the year **2002** for application number **2002-19**.

Len King, Vice-Chair

John Guthrie

Gary Burtch

Ruling No. 02-21-876
Application No. 2002-17

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 3.2.2.24. and Sentence 3.2.3.7.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Michael Moldenhauer, Moldenhauer Developments, for the resolution of a dispute with Frank Asta, Chief Building Official, Town of Oakville, to determine whether the proposed compensating measures offered in a building containing A2 and D occupancies and having exposing building faces with unprotected openings less than 10% of the exposing building face and which includes elements of combustible construction, provides sufficiency of compliance with Article 3.2.2.24. and Sentence 3.2.3.7.(1) of the Ontario Building Code at 130 - 132 Thomas Street, Oakville, Ontario.

APPLICANT	Michael Moldenhauer Moldenhauer Developments Mississauga, Ontario
RESPONDENT	Frank Asta Chief Building Official Town of Oakville
PANEL	Len King, Vice-Chair John Guthrie Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	August 1, 2002
DATE OF RULING	August 1, 2002
APPEARANCES	Leszek Muniak Larden Muniak Consulting Inc. Toronto, Ontario **The Applicant** Frank Asta Chief Building Official Town of Oakville **The Respondent**

RULING

1. The Applicant

Michael Moldenhauer, Moldenhauer Developments, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and has constructed a double occupancy building at 130 - 132 Thomas Street, Oakville, Ontario.

2. Description of Construction

The Applicant has undertaken construction of a building, originally intended to be used as two, three-storey semi-detached dwellings. It is now the Applicant's intent that the building will contain both Group A, Division 2 and Group D occupancies. The structure is comprised of combustible construction and will be equipped with fire alarm and sprinkler systems.

The construction in dispute involves the fact that combustible building materials have been used in the erection of this building, which will now be used for A2 and D occupancies. In particular, as a result of the original plan for the building as a Group C occupancy, the structure includes combustible wood framing and the application of stucco to the exterior walls. After the framing and enclosure of the building had been competed a new prospective purchaser advised that he was interested in obtaining the subject the building for assembly occupancy and office uses. Plans were subsequently revised to accommodate the new intended occupancies, however, the combustible framing and building cladding remains at issue.

To compensate for the use of combustible construction where noncombustible materials are required the Applicant is proposing complete sprinkler protection for the interior of the building with the use of fast response sprinklers. In addition, protection from exterior exposure will be addressed through the provision of a dry deluge water system for the exterior side walls of the building. This system will be activated by linear heat detectors situated at the floor assemblies above the first and second storeys. Further, as noted above, the building will also be equipped with a fire alarm system which would not be required by the Code.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed measures, offered to compensate for the use of combustible construction in a building containing Group A, Division 2 and Group D occupancies and having exposing building faces containing unprotected openings of less than 10% of the exposing building face, provide sufficiency of compliance with Article 3.2.2.24. and Sentence 3.2.2.7.(1) of the Ontario Building Code (OBC).

Article 3.2.2.24. provides that a building classified as having a Group A, Division 2 occupancy is permitted to conform to the provisions of Sentence (2) if the building is sprinklered and not more than six storeys in building height. Sentence (2) requires that the building be comprised of noncombustible construction and that floor assemblies be fire separations having a fire-resistance rating of at least one hour. Furthermore, mezzanines are also to be provided with a one hour fire-resistance rating and all loadbearing walls, columns and arches are to have a fire-resistance rating at least equal to the supported assembly.

In regard to the construction requirements of the exposing building face, Sentence 3.2.3.7(1) requires

that, with exceptions not applicable here, where the prescribed limiting distance for a Group A, B, C, D or F3 occupancy permits the building face to include unprotected openings of no more than 10%, the exposing building face is to be of noncombustible construction having a fire-resistance rating of not less than one hour. In addition, the building is to be clad with noncombustible construction.

With respect to the subject building where the most restrictive construction requirements are associated with the proposed Group A, Division 2 occupancy, the Code would require the building to be constructed of noncombustible construction. Further, as noted in the requirements of Sentence 3.2.3.7.(1), noncombustible construction and cladding would be required where the exposing building face contains unprotected openings of less than 10% of the exposing building face, as is the case in this building.

To compensate for the use of combustible construction framing materials and stucco in the subject building the Applicant is proposing certain compensating measures. These measures include sprinklering the entire building area, where only sprinklering of the A2 portions of the building would be required. Further, a dry deluge water system is proposed for protection of the building exterior walls in addition to the inclusion of a monitored fire alarm system which would not be required in this instance.

4. Provisions of the Ontario Building Code

3.2.2.24. Group A, Division 2, up to 6 Storeys, Any Area, Sprinklered

(1) A *building* classified as Group A, Division 2, that is not limited by *building area*, is permitted to conform to Sentence (2) provided

(a) except as permitted by Sentence 3.2.2.7.(1), *the building* is *sprinklered*, and
(b) it is not more than 6 *storeys* in *building height*.

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,
(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and
(c) all *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.3.7. Construction of Exposing Building Face

(1) Except as permitted by Articles 3.2.3.9. and 3.2.3.10., if a *limiting distance* shown in Table 3.2.3.1.A. or Table 3.2.3.1.C. for a Group A, B, C, D or Group F, Division 3 *occupancy* classification permits an *exposing building face* to have *unprotected openings* not more than 10% of the *exposing building face*, the *exposing building* face shall be

(a) of *noncombustible construction* having a *fire-resistance rating* not less than 1 h, and
(b) clad with *noncombustible* cladding.

5. Applicant's Position

The Agent for the Applicant outlined the history of the construction of the subject building advising that it was originally designed as a Part 9 structure for use as two, three storey semi-detached dwellings.

During the time the building was being constructed and after the wood framing had been completed and stucco had been applied to the exterior, a prospective purchaser advised that they wished to use the building to accommodate a restaurant on the ground floor and offices and meeting rooms on the upper levels. In this regard, a change of use was applied for which brought the construction under Part 3 of the Code which includes more restrictive requirements for wall and floor assemblies.

The Agent advised that the situation was now such that, given the intended use, the structure would no longer comply with the Building Code requirements. The wall assembly would be required to provide a one hour fire-resistance rating and be clad in noncombustible construction. Unfortunately, as a result of the advanced stage of construction, these requirements could not be easily accommodated. To compensate for the use of combustible construction elements, the Agent advised that quick response sprinkler heads were to be installed throughout the building. He also stated that a fire alarm system, which would not be required by the Code was also offered. In respect to protection of the exterior of the structure, the Agent advised that a deluge water system would be installed at the eaves of the building and a one hour fire rating would be provided on the interior of the structure by the use of drywall. Linear heat detectors situated at the floor assemblies above the first and second floors would activate the deluge system and, he submitted, would provide an equivalent level of protection as a one hour fire-resistance rating on the exterior.

In summation, the Agent advised that the compensating measures being proposed to address the use of combustible building materials will, in his opinion, achieve sufficiency of compliance with the requirements of the Building Code.

6. Respondent's Position

The Respondent submitted that a permit for the construction of two residential units had been issued by the building department. This permit included the used of fully combustible construction as would be permitted in a Part 9 application. When approached about the change of use to accommodate A2 and D occupancies within the subject building, the issue of conformance with the Part 3 requirements for use of noncombustible construction became apparent.

The Respondent acknowledged the measures proposed by the Applicant to compensate for the use of combustible material but stated that he continued to have a concern. He did not feel comfortable accepting an equivalency of the magnitude as was being proposed.

In summation, the Respondent maintained that he was unable to accept the proposed compensation and was concerned with what would be a Part 3 use in a Part 9 building in the centre of the downtown area. A significant amount of wood was involved in the framing and enclosure of the structure and, as a result, he could not view the building as being Code compliant.

7. Commission Ruling

It is the decision of the Building Code Commission that the compensating measures to be provided in the multiple occupancy building (A2 and D) having exposing building faces with unprotected openings less than 10% of the exposing building face and includes elements of combustible construction will provide sufficiency of compliance with Article 3.2.2.24. and Sentence 3.2.3.7.(1) of the Ontario Building Code at 130-132 Thomas Street, Oakville, Ontario.

8. Reasons

i) Sprinklering of the entire building will exceed OBC requirements which would only mandate sprinklering of the first and second floors. In addition, quick response sprinkler heads are to be used which will further contribute to the effectiveness of the suppression system as a compensating measure.

ii) A fire alarm system, which is not required by the Code, will be provided.

iii) A dry deluge water system is to be installed at the eaves of the building on both sides of the structure . This deluge system will be activated by linear heat detectors.

iv) The building contains no residential occupancy.

Dated at Toronto this **1st** day in the month of **August** in the year **2002** for application number **2002-17**.

Len King, Vice Chair

John Guthrie

Gary Burtch

Ruling No. 02-20-875
Application No. 2002-14

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.5.2.1.(1), Section 3.8. , Part 11 and Sentences 11.4.2.3.(1) and 11.4.3.4.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Troy Loop, owner, The Vintage Goose Inn, for the resolution of a dispute with Dave Gibson, Chief Building Official, Town of Kingsville, to determine whether the conversion of a century home into a six room inn, where no renovation to the existing entranceways is contemplated, is required to provide barrier-free access in accordance with Sentence 9.5.2.1.(1) and Section 3.8. when considering Part 11 and Sentences 11.4.2.3.(1) and 11.4.3.4.(2) of the Ontario Building Code at The Vintage Goose Inn, 31 Division Street South, Kingsville, Ontario.

APPLICANT	Troy Loop, owner The Vintage Goose Inn Kingsville, Ontario
RESPONDENT	Dave Gibson Chief Building Official Town of Kingsville
PANEL	Len King, Vice-Chair John Guthrie Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	August 1, 2002
DATE OF RULING	August 1, 2002
APPEARANCES	Troy Loop, owner - via telephone conference The Vintage Goose Inn Kingsville, Ontario **The Applicant** Dave Gibson Chief Building Official Town of Kingsville **Designate for the Respondent**

RULING

1. The Applicant

Troy Loop, owner, The Vintage Goose Inn, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is undertaking renovations to an existing residential dwelling which will result in its conversion into a multi-suite inn known as The Vintage Goose Inn at 31 Division Street South, Kingsville, Ontario.

2. Description of Construction

The Applicant is undertaking renovations to an existing building, originally constructed in 1887. The structure has a building area of 237.8 m^2(2,560 ft^2) and is three storeys in building height. Ongoing renovations will serve to convert the single detached dwelling into an inn, having a Group C occupancy classification and containing six guest suites. The building is comprised of combustible construction and is equipped with a fire alarm system.

The construction in dispute involves the nature of the renovations proposed and whether barrier-free access into the building is required as a result of the conversion. In this respect, the Applicant has not proposed any alteration to the entranceways or paths of travel into the building. The main front entrance is situated approximately six or seven feet above grade and is accessed by way of an existing stair which leads to the front porch of the building. The rear entrance is situated on the ground level with an interior stair leading to the first floor of the structure. Original drawings have been revised to show one barrier-free accessible guest suite situated on the ground floor of the building. Originally, however, no such proposal was made.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the conversion of a single detached dwelling into a Group C occupancy of more than one suite, where no alterations are proposed for the building's entrances, is required to comply with the barrier-free access provisions of Sentence 9.5.2.1.(1) and Section 3.8. when considering Part 11 and Sentences 11.4.2.3.(1) and 11.4.3.4.(2) of the Ontario Building Code (OBC).

Sentence 9.5.2.1.(1) provides that, with exceptions not applicable here, every building shall be designed in conformance with the barrier-free accessibility provisions outlined in Section 3.8. As an inn, operating to serve more than eight persons, the barrier-free design provisions outlined in Section 3.8. would be applicable. However, given that this is an existing building and renovations are being conducted in accordance with Part 11, the dispute involves whether barrier-free access into the structure is required in light of the fact that no alterations to the exterior entranceways or paths of travel leading into the building are being proposed.

In this respect, when considering Part 11, Clause 11.4.2.3.(1)(b) stipulates that the performance level of an existing building is reduced when it is converted from a single suite Group C major occupancy to a Group C major occupancy containing more than one suite, which is the case in this instance. Further, Sentence 11.4.3.4.(2) requires that, where the performance level is reduced as a result of a change in major occupancy, additional construction is required in conformance with other parts of the Code, including Sections 9.5., as it applies to the new major occupancy.

As noted above, no alterations are being proposed for the existing entranceways into the building. It is the Applicant's position that, because the structure is an existing building, barrier-free access is not required to be provided into the interior since there is no proposal to change the exterior access. The Respondent, however, takes the position that the conversion from a single suite Group C major occupancy to a multi-suite Group C classification, reduces the performance level and/or increases the hazard index of the structure and, therefore, additional construction is required, including the provision of barrier-free design, both into and throughout the first level of the building.

4. Provisions of the Ontario Building Code

Sentence 9.5.2.1. Barrier-Free Design - General

(1) Except as provided in Sentence (2) and Article 3.8.1.1., every *building* shall be designed in conformance with Section 3.8.

(2) The requirements of Section 3.8. need not be provided for houses including semi-detached houses, duplexes, triplexes, town houses, row houses and *boarding, or rooming houses* with fewer than 8 boarders or roomers.

Section 3.8. Barrier-Free Design

See the Ontario Building Code

Part 11 Renovation

See the Ontario Building Code

11.4.2.3. Reduction in Performance Level - Change of Major Occupancy

(1) Except as required in Sentence 11.4.2.5.(4), the *performance level* of an existing *building* is reduced where proposed *construction* will result in

(b) the conversion of a *suite* of a Group C *major occupancy* into more than one *suite* of Group C *major occupancy*,

11.4.3.4. Compensating Construction - Change in Major Occupancy

(2) Where the *performance level* of an existing *building* is reduced under Sentence 11.4.2.3.(1), additional *construction* shall be required in order that the *building* or part of the *building* subject to change of *major occupancy* conforms to the requirements of Subsection 3.2.6., Sections 3.7., 3.11., 9.5., and 9.7., Subsections 9.10.16., Sections 9.31. and 9.32., and Subsections 9.34.1., 9.34.2., and 9.34.3. as they apply to the new *major occupancy* that the *building* or part of the *building* is to support.

5. Applicant's Position

The Applicant advised the Commission that he is one of the owners of the Vintage Goose Inn and Spa. He, acknowledged at the outset that he does not know much about the Ontario Building Code but, in undertaking this conversion he sought advice from others in the business about, among other things, the barrier-free access requirements. In this regard he reviewed other similar building conversions, in and around this area of the province. As a result he discovered that none had been required to provide

for barrier-free accessibility when there were no alterations to the building's entranceways or exterior access routes.

In respect to the subject building, which was constructed in 1887, the Applicant submitted that they have undertaken renovations to the plumbing, mechanical and electrical systems to accommodate the proposed use. Other than those alterations, very little else has been done to change the character of the structure as they are intending to maintain the historic appearance of the building. No renovations were undertaken to either the outside of the building nor to the entrances. Presently, partons are required to climb the existing stair leading to the grand front porch of the building. This porch, he submitted, is six to seven feet above ground and dominates the front of the structure. A ramp to access this level would have to be approximately 60 to 70 feet long and would vastly alter the historic appearance of this old home. He argued, it was his understanding that, if the existing entrances weren't modified to permit barrier-free accessibility, then no alterations would be required as this was an existing situation.

The Applicant noted that, if the building were larger, and did not fall under Part 9 of the Code, they would not be led to the barrier-free design requirements outlined in 3.8. and would, therefore, not be required to alter the entrances. The Applicant submitted that it was simply illogical to require barrier-free access into the old building. Patrons requiring such access would be unable to travel to the upper floors of the structure and, before his original plans were altered to satisfy the building official, there would not have been barrier-free accommodations on the first floor either. In fact, plans were only altered to obtain the permit required to start work on the structure. The Applicant argued that, although plans were drawn up to provide for a barrier-free accessible suite, it remained his position that, since the entrances were not being renovated, barrier-free access into the structure should not be required.

6. Respondent's Position

The Respondent submitted that he had advised the Applicant at the start of the process that the municipality required barrier-free access into and throughout the first floor of the building. Several issues were discussed as a result of the original plans submitted with the permit application, with barrier-free accessibility being one of them. In this regard, most other items had already been addressed and only this dispute remained.

The Respondent advised that, although the building is an older home, it has not been designated as a heritage building. In his review of the application for conversion and renovation, he examined the Code requirements of Clause 2.4.1.2.(1)(b) and Table 2.4.1.2., which led him to conclude that the change in occupancy from a single unit Group C building to a multi-suite Group C occupancy would increase the hazard index, requiring conformance with Article 9.41.1.1.(1)(b) and Section 9.5. In addition, a review under Parts 10 and 11 of the Code lead to the conclusion that compensating construction would be required under 11.4.3.4. which, in turn, mandates compliance with Section 9.5. This section further leads to the requirement for conformance to Section 3.8. which mandates, among other thing, that barrier-free access into the structure be provided.

In addition, the Respondent submitted that his reading of the Code was confirmed by the Building and Development Branch (BDB) of the Ministry of Municipal Affairs and Housing, who were consulted for an opinion in this regard. He also noted that the Technical Background Information Report prepared by the BDB for the Commission hearing approached the issue as one where the performance level would be decreased as a result of the conversion, however, the result was the same. Barrier-free access is required in this circumstance.

The Respondent continued by submitting that there were a number of ways in which the required access could be provided. He submitted that it was his understanding that the widths of the existing doorways were sufficient to meet the Code requirements. The only issue was overcoming the obstacle presented by the stairs. He argued that access could be provided by either a ramp or an hydraulic lift, or a combination of both, as pictured in the revised drawings submitted by the Applicant which allowed them to proceed with renovations. He didn't believe that it would be especially problematic to provide the required means to access the building.

In summation, while he recognized the Applicant's desire to maintain the historic character and appearance of the structure, his reading of the Code requirements led him to conclude that disabled persons must be provided with the means to access the main floor of the structure. He noted that on this level they would have access to the living room, dining room, and a bed and bath suite, designed to provide barrier-free accessibility.

7. Commission Ruling

It is the decision of the Building Code Commission that the conversion of a century home into a six room inn, where no renovation to the existing entranceways is contemplated, is required to provide barrier-free access in accordance with Sentence 9.5.2.1.(1) and Section 3.8. when considering Part 11 and Sentences 11.4.2.3.(1) and 11.4.3.4.(2) of the Ontario Building Code at The Vintage Goose Inn, 31 Division Street South, Kingsville, Ontario.

8. Reasons

i) As a result of the conversion of the building from a single detached dwelling into an inn, there is a reduction in the performance level of the structure under Sentence 11.4.2.3.(1).

ii) Sentence 11.4.3.4.(2) requires that, where the performance level is reduced, additional construction is required in conformance with Section 9.5.

iii) Further, Sentence 9.5.2.1., requires conformance with Section 3.8. in respect to barrier-free design, which includes barrier-free accessibility into the building.

Dated at Toronto this **1st** day in the month of **August** in the year **2002** for application number **2002-14**.

Len King, Vice Chair

John Guthrie

Gary Burtch

Ruling No. 02-19-874
Application No. 2002-16

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 11.3.1.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by A.C. Houle, Principal, Morey Houle Chevrier Engineering Ltd., for the resolution of a dispute with Terry Davidson, Sewage System Inspector, Ottawa Septic System Office, to determine whether the repair of an existing Class 4 septic system, specifically with respect to the grain size of the imported sand filter material being used, provides sufficiency of compliance with the provisions of Article 11.3.1.1. of the Ontario Building Code at 1376 River Road, Manotic, Ontario.

APPLICANT	A.C. Houle Morey Houle Chevrier Engineering Ltd. Manotick, Ontario
RESPONDENT	Terry Davidson Manager Ottawa Septic System Office
PANEL	Bryan Whitehead, Vice-Chair
PLACE	Toronto, Ontario
DATE OF HEARING	July 4th, 2002 and August 8th, 2002
DATE OF RULING	September 4th, 2002
APPEARANCES	A. C. Houle, Principal Morey Houle Chevrier Engineering Ltd. **The Applicant - via telephone conference**
	Terry Davidson, Manager Ottawa Septic System Office **The Respondent - via telephone conference**

RULING

1. The Applicant

A.C. Houle, Principal, Morey Houle Chevrier Engineering Ltd., has applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and has undertaken a repair to the existing Class 4 septic system at 1376 River Road, Manotic, Ontario.

2. Description of Construction

The Applicant is under contract to institute repairs to the septic system serving an existing Class C, residential building having a total finished area of 260 m^2. The dwelling contains a total of 22.5 fixture units and is serviced by the existing class 4 septic system having a total daily design flow rate of 2200 litres/day. The site is grass covered and has a northerly slope of approximately 13%. There is a drilled well on site to supply water to the residential dwelling.

The subject septic system is identified as a Class IV F.M. (filter media) type leaching bed, 28 m^2 in contact area. It was approved by the Ministry of Environment and Energy (MOEE) and constructed in 1988. The original system was failing and a permit for the repair of the system was sought to rectify the situation. Upon investigation of the malfunctioning system by the Applicant it was discovered that the leaching bed did not have a sand mantle which was to have been provided under MOEE guidelines at the time of initial construction. In addition, it was apparent that filter media sand had not been used in the construction of the leaching bed. Further, the bed had been backfilled and covered with low permeability silty clay material. The pipe between the septic tank and leaching bed was cracked and sloping in the wrong direction and the upper 0.3 m of the sand filter material below the distribution pipes was plugged with organic material (biomat) which was preventing the dispersion of effluent.

As part of the repair of the malfunctioning system the biomat impacted sand filter material beneath the leaching bed was removed and replaced with crushed stone. The distribution pipes were also replaced and an additional two runs of pipe to the leaching bed were added, increasing the loading area from 28 m^2 to 42 m^2. Further, the silty clay material was removed from the sides and top of the leaching bed and the 15 metre long, 0.5 m thick sand mantle extending the full width of the bed, which should have been provided with the initial construction, was added.

The specific element of the repair in dispute involves the sand filter material used in the repair of the leaching bed. An initial grain size evaluation of the sand filter material, informed that the gradation of the subject material was slightly outside the OBC envelope for filter media sand. The permit which as issued in connection with the repair specified that Filter Media sand was required if the bed was to be rebuilt, as such, the Respondent is of the opinion that the material used in the leaching bed repair does not comply with Code requirements. The Applicant's position in this regard is that the permeability of the subject sand material is at least equal to or exceeds that of the sand filter material used in the original construction. In this regard, as determined by additional testing of the material at the request of the Commission, it was found that the coefficient of uniformity of the original sand filter material was 10.7, while the sample taken from the new material in dispute had a uniformity coefficient of 12. Further, it was determined that the grain size curve for the new material more closely reflected the gradation envelope depicted in the Code.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the grain-size of the sand filter material used in the repair of the existing septic system provides sufficiency of compliance with Sentence 11.3.1.1.(1) of the Ontario Building Code (OBC).

This sentence of the Code provides that, when an existing building system is materially altered or repaired, the performance level of the building shall be at least equal to the performance level prior to the alteration or repair. In this regard, the grain-size analysis performed on samples of both the original and newly added material would appear to illustrate a slight improvement in quality. In other words, while not meeting the requirement for filter media material as outlined in the permit approval in relation to the repair work being undertaken, the grain size curve of the new material more closely conforms to the OBC gradation envelope than does the original sand.

4. Provisions of the Ontario Building Code

11.3.1.1. Material Alteration or Repair of a Building System

(1) Where an existing *building system* is materially altered or repaired, the *performance level* of the *building* after the material alteration or repair shall be at least equal to the *performance level* of the *building* prior to the material alteration or repair.

5. Applicant's Position

The Agent for the Applicant outlined the condition of the existing failed system upon initial inspection. He advised that the leaching bed was surrounded by clay on all four sides and effluent was being discharged to the surface. In an effort to improve the situation, the clay material was removed from three sides of the bed and new sand filter material was laid. Furthermore, although the Ministry of the Environment issued a Use Permit in August 1988, the required mantle for the system was not provided. They have now constructed this mantle in accordance with the original permit. The Agent argued that all of the repair work undertaken constitutes an improvement to the existing situation and, therefore, complies with the Part 11 requirements of the Code.

The Agent acknowledged that the permit issued by the Ottawa Septic System Office in connection with the subject repair specified that filter media sand was to be used if the bed needed to be rebuilt. He also acknowledged that there are exacting specifications for filter media sand, in light of the potential for substandard material to contribute to the clogging of the bed. Despite this, the Agent advised that the contractor had obtained sand filter material that did not meet the standards for new construction set out in the Code. He admitted that the subject material was preferred by the installer because it was less expensive than filter media sand. Despite this however, the Agent emphasized that the material which has been used is equal or superior to the original sand filter material employed in the subject system.

At the request for testing by the Commission, the Agent submitted results which indicated that the coefficient of uniformity of the original sand filter material was found to be 10.7 while the sample taken from the new material in dispute had a uniformity coefficient of 12. The results further illustrated that the grain size curve for the new material more closely conformed to the OBC gradation envelope than the curve depicted for the original sand. This, the Agent argued, represents an improvement in the quality of material used in the filter bed and therefore provides sufficiency of compliance with the Part 11 requirements of the Code.

In summation, the Agent stated that, when considering Article 11.3.1.1., the repair which was undertaken does not reduce the performance level of the system. The tests conducted prove that the filter sand used to replace the existing material is better than what had been approved for use by MOEE at the time of original construction. He emphasized that this is a repair situation and should not be held to the same standards as new construction.

6. Respondent's Position

As background to the subject dispute the Respondent advised that the sewage system was approved by the Ministry of Environment as a filter bed in May 1988. The sand supplier, Greely Sand and Gravel Inc., for the 1988 bed provided weigh bills for filter media for the sand fill for the bed. The contractor Eric Draper certified that sand filter material was used. The Ministry of the Environment issued a Use Permit (August 8, 1988) for the system, despite the absence of a mantle, backfilling and grading. No mantle was installed.

The Respondent submitted that, in response to the Applicant's request, a sewage permit was issued by the Septic System Office for the repair of the tile bed on the subject property. Further, it was specified on the permit that if the bed was to be replaced, filter media sand was to be used. In this regard, by way of a letter from the Agent for the Applicant dated May 2, 2002 it was acknowledged that "(t)he grain size distribution of the filter sand is also known to be a factor contributing to the clogging of the filter sand. For this reason, there are strict specifications for filter madia sand material." Agreeing with this analysis the Respondent advised that receipts/waybills are required to be provided by permit applicants to prove that the grain size of the filter media sand would meet Code requirements. No such receipts were supplied in connection with this case, however it appeared evident upon inspection that the grain size of the new material used would not meet Code specified standards.

Furthermore, the Respondent stated that the work that has been undertaken on the subject site constitutes more of a replacement than a repair. He was uncertain exactly how much sand had been used and believed that the entire bed had been replaced and expanded. In any event, he was not satisfied that the material that had been used was at all satisfactory. He also argued that the Agent's claim that the system had been improved was not entirely valid. He stated that any repair made to a failed system will result in some improvement in performance but this does not mean that all changes will result in a viable sewage system. The standard which must be met is whether it constitutes an improvement to what the system was originally designed and constructed to achieve. The benchmark of Part 11 is not the failed system but the old, original, system. The Respondent submitted that, in his opinion, filter media sand was required in the construction of the original system and, therefore, filter media sand must be used in the repair.

In respect to the results of the testing done at the Commission's request, the Respondent admitted that the new material tested marginally better than the original sand but stated that neither is acceptable, and both have coefficient uniformities greatly beyond OBC requirements. The Respondent also provided the Commission with a report of what has occurred on the property between the initial hearing of this matter and the reconvened session. He submitted that, in contravention of acceptable standards of practice, the installer had proceeded to backfill the site without inspection and has sodded the area. Moreover, the Respondent argued that, because of the new runs of distribution pipe added, this "repair" also contained an element of new construction that is required to comply with the minimum standards of the Code.

In summation, the Respondent reiterated that the permit which had been issued specified the use of filter media sand. Cost, he argued, should not be an acceptable reason for not complying with the Code. He is concerned that the system, as now constructed without the benefit of inspection, will fail again.

He submitted that as little as three inches of biomat material would cause a system to fail and with the use of this substandard material in the bed, he felt that failure would likely occur.

7. Commission Ruling

It is the decision of the Building Code Commission that, in the matter of the grain-size quality of the imported sand fill used to repair the existing leaching bed, the sand fill provides sufficiency of compliance with Sentence 11.3.1.1.(1) of the Ontario Building Code at 1376 River Road, Manotic, Ontario.

8. Reasons

i) Based on the construction details provided by Morey Houle Chevrier Engineering Ltd. and the single grain-size analysis for the existing sand fill, the existing bed, although approved in 1988 as a filter bed (now defined in Section 8.7.5.), and provided with a Use Permit on August 8, 1988, was not constructed to the prevailing standards.

ii) The sand fill used in the repair, based on the two grain-size analyses provided is, on average, superior in quality to the existing sand fill.

iii) Although the Building Permit and the Engineer's specifications both required filter sand (as defined by Sentence 8.7.5.3.(3)), no Order was issued relative to the system and, therefore, Part 11 of the Code applies to the repair that has been undertaken through a permit.

iv) In viewing the repair, it is considered that the quality of the new sand fill provided will not result in a loss of performance when compared to the existing sand fill, prior to the plugging of the sand by biomat.

9. Comments/Recommendation

Although not considered in this Decision, it is recognized that the provision of the mantle (not considered a compensating measure because it was required in the original approval) and the extra runs of pipe and accompanying stone should improve the performance of the system. However, it should be noted that the substandard filter sand material may result in a future failure because of plugging and biomat formation. In addition, the system expansion by the provision of extra runs of distribution pipe supplied does not meet the requirements of Sentence 11.3.1.2.(1), in that the sand fill used in this new construction does not meet the requirements of Sentence 8.7.5.3.(3) of the Ontario Building Code.

In view of the discrepancy between Part 11 and the requirement of the Septic System Permit (and design specifications) outlined in Part 8 and issued for this repair, it is recommended that the Building and Development Branch of the Ministry of Municipal Affairs and Housing consider an amendment to the Ontario Building Code which would require that any construction undertaken under Part 11 must, at a minimum, conform to the requirements outlined in the Building Permit which was issued for the original construction.

Dated at Toronto this **8th** day in the month of **August** in the year **2002** for application number **2002-16**.

Bryan Whitehead, Chair

Ruling No. 02-18-873
Application No. 2002-13

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.1.15. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Hank Allen, Raha Ranch & Equipment, for the resolution of a dispute with Ron Liinamaa, Chief Building Official, Municipality of St. Charles, to determine whether the proposed fabric material roof which is not considered as a Class A, B or C roof covering, provides sufficiency of compliance with Section 3.1.15. of the Ontario Building Code at Granifab Corp., Casimir Road, Part 5, Lot 10, Concession 6, (Casimir), St. Charles, Ontario

APPLICANT	Hank Allen Raha Ranch & Equipment St. Charles, Ontario
RESPONDENT	Ron Liinamaa Chief Building Official Municipality of St. Charles
PANEL	Len King, Chair-Designate Fred Barkhouse Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	June 20, 2002
DATE OF RULING	June 20, 2002
APPEARANCES	Hank Allen Raha Ranch & Equipment St. Charles, Ontario **The Applicant**

RULING

1. The Applicant

Hank Allen, Raha Ranch & Equipment, has applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing to construct a building for use as a granite cutting and polishing facility by Granifab Corp., Casimir Road, Part 5, Lot 10, Concession 6, (Casimir), St. Charles, Ontario

2. Description of Construction

The Applicant is proposing to construct a new industrial facility for the processing of granite. The structure will be one storey in building height and have a Group F, Division 3 occupancy classification. The total building area of the facility would be 557.42 m^2 (6000 ft^2). No sprinkler system, fire alarm system nor standpipe and hose system are proposed for the building.

The construction in dispute involves the nature of the roof covering for the proposed structure. The Applicant is proposing to erect the structure using pre-engineered arched steel frames to support the combustible fabric material covering.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed fabric material roof covering, which is not considered as a Class A, B or C roof covering, provides sufficiency of compliance with Section 3.1.15. of the Ontario Building Code (OBC).

Article 3.1.15.1. stipulates that any roof covering classification shall be determined in conformance with CAN/ULC-S107-M, "Standard Methods of Fire Tests of Roof Coverings". Furthermore, Sentence 3.1.15.2.(1) mandates that, except under certain circumstances, every roof covering shall have a Class A, B or C classification. Sentence (2) outlines the exceptions to this requirement which would include a tent, an air supported structure or a building of A2 occupancy which is not more than 2 storeys in height and 1,000 m^2 in area, on the condition that the roof covering is underlaid with noncombustible material.

The subject roof, as proposed by the Applicant, consists of a combustible fabric material which does not have an A, B or C classification in accordance with the CAN/ULC-S107-M standard. In addition, the proposed structure would not meet any of the provisions for exemption outlined in Sentence 3.1.15.1.(2).

4. Provisions of the Ontario Building Code

3.1.15.1. Roof Covering Classification

(1) A roof covering classification shall be determined in conformance with CAN/ULC-S107-M, "Standard Methods of Fire Tests of Roof Coverings".

3.1.15.2. Roof Coverings

(1) Except as permitted by Sentence (2), every roof covering shall have a Class A, B or C classification as determined in accordance with Article 3.1.15.1.

(2) A roof covering is not required to have a Class A, B or C classification for
(a) a tent,
(b) an *air-supported structure*, or
(c) a *building* of Group A, Division 2 *occupancy* not more than 2 *storeys* in *building height* and not more than 1 000 m^2 (10,800 ft^2) in *building area* provided the roof covering is underlaid with *noncombustible* material.

5. Applicant's Position

The Applicant submitted that the fabric roof proposed for this structure represents the most economical means to cover the building. He submitted that, because this is a small municipality, hydro service is difficult and costly to obtain. The translucence of the proposed fabric cover would permit sunlight to filter through to assist in lighting the facility. He stated that, in his opinion, the roof material would not pose a hazard in respect to the anticipated industrial operation. He submitted that the contents of the building would consist of rock and heavy cast iron processing equipment. There would be no combustible contents inside the building.

The Applicant argued that, in the past, he had been granted a permit for similar structures from this municipality. He also pointed out that this material is commonly used to cover agricultural buildings. In this respect the Applicant provided photos for the Commission's consideration, of a similar structure that had been destroyed by fire. He pointed out that only the tarp covering the support structure burned. Nothing inside the building was destroyed including the exposed hay and other combustible materials. In addition, he emphasized that the fire did not spread to an adjacent silo. His argument was that the fabric would burn itself out so quickly that there was no risk to person or property. As a result, he argued, sprinklering would be of no assistance.

6. Respondent's Position

The Respondent did not attend the hearing and, instead, relied on his written submission. In this respect his position was that the proposed roof covering did not comply with Articles 3.1.15.1. and 3.1.15.2. in that the material did not have an A, B or C classification.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed fabric material roof which is not considered as a Class A, B or C roof covering, does not provide sufficiency of compliance with Section 3.1.15. of the Ontario Building Code at Granifab Corp., Casimir Road, Part 5, Lot 10, Concession 6, (Casimir), St. Charles, Ontario.

8. Reasons

i) The proposed roof covering does not conform with the CAN / ULC-S107-M standard. It is not considered a Class A, B or C covering.

ii) No adequate compensating measures were offered to achieve sufficiency of compliance with the provisions established by the Ontario Building. Code.

Dated at Toronto this **20th** day in the month of **June** in the year **2002** for application number **2002-13**.

Len King, Chair-Designate

Fred Barkhouse

Donald Pratt

Ruling No. 02-17-872
Application No. 2002-09

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Clause 12.1.1.1.(1)(b) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Tammy Yantha, for the resolution of a dispute with Pat Pilgrim, Chief Building Official, Township of Madawaska Valley, to determine whether the proposed new senior's residence, when considering the date that the building permit application was substantially complete, is permitted to be built to the construction requirements of the 1990 Ontario Building Code (OBC) in accordance with Clause 12.1.1.1.(1)(b) of the OBC at the Water Tower Lodge Retirement Home, Stafford Street, Barry's Bay, Ontario.

APPLICANT	Tammy Yantha Dunn and Bay Holdings
RESPONDENT	Pat Pilgrim Acting Chief Building Official Township of Madawaska Valley
PANEL	Len King, Chair-Designate Fred Barkhouse Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	June 20, 2002
DATE OF RULING	June 20, 2002
APPEARANCES	Robert Dyck, President Robert J. Dyck Architect and Engineer Inc. **Agent for the Applicant**
	Roy C. Reiche Barrister & Solicitor **Legal Counsel for the Respondent**

RULING

1. The Applicant

Tammy Yantha, Dunn and Bay Holdings Ltd., has applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing to construct a senior's residence known as the Water Tower Lodge Retirement Home, Stafford Street, Barry's Bay, Ontario.

2. Description of Construction

The Applicant is proposing to construct a Group C senior's residence having a building area of 888 m^2. The structure is proposed to be 3 storeys in building height and comprised of combustible construction. The building is to be equipped with both a sprinkler system and a fire alarm system.

The construction in dispute involves the entire structure and, specifically, which version of the Ontario Building Code should be applied in determining the construction requirements for the building. According to the information supplied, an initial application for a building permit was submitted to the Township on June 29, 1998. However, a subsequent application, for which a permit was issued, was submitted to the Township on September 12, 2001. A ruling on which of these applications is valid will determine which version of the Ontario Building Code applies to the proposed construction.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the Transition Rule outlined in Clause 12.1.1.1.(1)(b) of the 1997 Ontario Building Code can be invoked to determine that the 1990 OBC construction requirements apply to the proposed building.

Clause 12.1.1.1.(1)(b) of the Code stipulates that, notwithstanding its revocation, Regulation 61 of the Revised Regulations of Ontario will continue to be in force for construction where working drawings, plans, etc. were substantially completed before April 6, 1998 and for which an application for a building permit under the 1990 Regulation was made before July 6, 1998. In addition, construction is to be commenced within six months after the issuance of the permit.

In this instance, an application for a building permit was submitted to the municipality on June 29, 1998. The applicants contend that, based on the date of this initial application, and the fact that drawings and specifications were submitted to the municipality prior to April 6, 1998, the provisions of the 1990 Building Code should apply to the proposed construction. The Respondent disputes this claim and takes the position that the earlier application was premature and incomplete. In addition, the municipality also contends that the 1998 application was abandoned in light of the new application submitted in 2001 for which a permit was issued. If this position is accepted, the 1997 Building Code would apply to this development.

4. Provisions of the Ontario Building Code

12.1.1.1. Continuation of Regulation 61 of R.R.O. 1990

(1) Notwithstanding the revocation of Regulation 61 of the Revised Regulations of Ontario, 1990, that Regulation continues in force in respect of *construction*

(a) for which a permit has been issued before the 6th day of April, 1998, or

(b) for which the working drawings, plans and specifications are substantially completed before the 6th day of April, 1998, and for which an application for a permit under Regulation 61 of the Revised Regulations of Ontario, 1990 is made before the 6th day of July, 1998

on condition that the *construction* is commenced within six months after the permit is issued.

5. Respondent's Position

Prior to the commencement of the hearing, the Solicitor for the Respondent raised the issue of jurisdiction, suggesting that this was not a matter to be decided upon by the Building Code Commission (BCC) but rather a legal dispute between the parties. In support of his position that the hearing should not proceed he outlined the dispute and addressed the jurisdictional issues in this regard.

The Solicitor stated that s.24 of the *Building Code Act* provides the BCC with the authority to make a determination on disputes where interpretation or sufficiency of compliance with the technical provisions of the Ontario Building Code are at issue. He argued that that is not the case in this instance. Furthermore, he advised that there are other legal encumbrances on proceeding at this time.

He continued by outlining the development history of the subject property stating that, despite the date of the June 29, 1998 application, it was never processed because it was not considered to be substantially complete. In addition, there were a number of other issues that had to be addressed including planning approvals that needed to be obtained. The Zoning and Official Plan Amendments were passed by council on January 17, 2000 and no appeals were filed, however, a conditional holding provision was attached to those approvals. The holding designation had to be lifted prior to the issuance of a building permit and this did not occur until January 14, 2002. The Solicitor further explained that a second building permit application was filed by the Applicant in September 2001. The initial application was, therefore, considered to have been abandoned and a permit was issued in response to the new application.

The Solicitor emphasized that, in his opinion, the Applicant was made aware from the beginning regarding the difficulties associated with this proposal. He brought to the Commission's attention a series of correspondence whereby the Applicant had been notified of the municipality's position and steps to be taken in obtaining a building permit were outlined. In addition, the Solicitor maintained that the historical facts of this case are also in dispute. The Applicant's claim that the 1998 application was substantially complete and that drawings, plans and specifications were submitted prior to April 1998 is being challenged by the municipality.

In summation, the Solicitor for the Respondent maintained that the dispute between the parties is only one of many legal issues to be resolved. The nature of the dispute is, therefore, not an interpretation of the technical provisions of the Code nor is it one where sufficiency of compliance with the technical provisions can be determined by the BCC. Section 24(1), he argued, provides the

Commission the authority to make a ruling only in one of those two areas.

6. Applicant's Position

In response to the assertion by Counsel for the Respondent that the Commission had no jurisdiction to consider the subject application, the Agent for the Applicant submitted that the provision in dispute is contained in the Ontario Building Code. He argued that the parameters outlined in Clause 12.1.1.1.(1)(b) have been met by the filing of an application in June 1998 and therefore the provisions of the 1990 Building Code should apply to the proposed construction.

In support of his claim that the 1990 Code should apply, the Agent pointed out that plans, drawings and specifications were submitted to the municipality prior to April 1998 and an application for a building permit was submitted prior to the July 6, 1998 deadline established in the Transition Rule set out in the Code. He further suggested that the long history of this matter is not a relevant factor in the determination of this dispute. What should be regarded, he stated, is the time frames set out in the Code and whether they have been met in this instance.

The Agent stated that, if the time frames are met then the 1990 Code applies. In addition, s. 8(2) of the *Building Code Act* stipulates that the Chief Building Official shall issue a permit unless the proposal is in contravention of another act or other applicable law. In response to the claim by Counsel for the Township that the first application was never processed, he argued that processing is not a requirement outlined in the Transition Rule. Only the requirement to submit and apply are specified.

When questioned by the Commission in respect to what technical issues, rather than legal ones, were to be decided, the Applicant submitted that the implementation of the Transition Rule in Part 12 requires a simple test as to which dates apply. If the Commission rules that the Applicant met the test then the OBC 1990 should apply to the construction. In this regard he argued that this client has met the parameters prescribed in the Code for the continuation of Regulation 61.

7. Commission Ruling

It is the decision of the Building Code Commission that, under section 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended, the Building Code Commission does not have the jurisdiction to determine the applicability of Clause 12.1.1.1.(1)(b) of the Ontario Building Code.

8. Reasons

i) Under s. 24(1) of the *Building Code Act*, the Building Code Commission has jurisdiction to resolve disputes:

- that are between a chief building official or building inspector and an applicant for, or holder of, a permit or a person to whom an order is given; and

- that concern the interpretation of, or the sufficiency of compliance with, the technical requirements of the Ontario Building Code.

In this case, while the Commission acknowledges that there is a dispute between the Chief Official and the Applicant, the parameters of that dispute involve legal issues arising from an administrative provision in the Ontario Building Code.

ii) Clause 12.1.1.1.(1)(b) is an administrative section of the Ontario Building Code and does not involve any technical requirement for construction that could be determined by this Commission.

iii) The courts are better equipped to make a determination on matters such as this, where facts are in dispute and issues of law are raised.

Dated at Toronto this **20th** day in the month of **June** in the year **2002** for application number **2002-09**.

Len King, Chair-Designate

Fred Barkhouse

Donald Pratt

Ruling No. 02-16-871
Application No. 2002-07

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.2.4.20.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Michael Bonnah, G.M. of Operations & Logistics, West Park Hospital, for the resolution of a dispute with Bruce Ashton, Deputy Chief Building Official, City of Toronto, to determine whether the use of unlisted, alpha-numeric display devices forming part of the call station located in the nursing stations provides sufficiency of compliance with Sentence 3.2.4.20.(2) of the Ontario Building Code at the West Park Long-Term Care Facility, 82 Buttonwood Avenue, Toronto, Ontario.

APPLICANT	Michael Bonnah G.M. of Operations & Logistics West Park Hospital
RESPONDENT	Bruce Ashton Chief Building Official City of Toronto
PANEL	Len King, Vice-Chair Fred Barkhouse Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	June 20, 2002
DATE OF RULING	June 20, 2002
APPEARANCES	Allan Larden Larden Muniak Consulting Inc. Toronto, Ontario **Agent for the Applicant** Sait Toprak Manager, Plan Review City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

Michael Bonnah, G.M. of Operations & Logistics, West Park Hospital, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing a nursing home known as the Extendicare Long-Term Care Facility, West Park Hospital Site, 82 Buttonwood Avenue, Toronto, Ontario.

2. Description of Construction

The Applicant is completing construction of a nursing home facility having a Group B, Division 2 occupancy classification. The structure is three storeys in building height and 4,450 m^2 in building area. The facility will be equipped with both a sprinkler system and a fire alarm system.

The construction in dispute involves the visual signals required in addition to the requirements for fire alarm and smoke detection systems. It is proposed that a series of triple dome lights be located on the ceiling of the corridor in the immediate vicinity of each residential bedroom. A smoke detector located inside the residential room will actuate a red dome light in the corridor. The dome lights also activate when the nurses call buttons are pushed. A yellow light will appear if the nurses call is generated from the bathroom, a green light is illuminated if a call is initiated from the bedroom area.
In addition to the triple dome lights in the bedroom corridors, wall mounted alpha-numeric display devices will be located at the nurses call stations and will identify the room in which a signal has been activated. These devices are not listed by ULC as an ancillary device to the fire alarm system. The displays, however, will indicate the room number and simultaneously provide an indication of the type of signal that has been triggered. A ceiling mounted strobe light is also proposed at each nurses call station. These lights will be triggered if a smoke detector is activated anywhere in the area of the home in which the nursing station is situated.

Finally, it is proposed that an additional fire alarm annunciating device be located at the centrally located ground floor nursing station. This annunciating device will also identify the individual room in which a smoke detector has been activated.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed system of dome lights, together with the unlisted alpha-numeric display devices at the call stations, provide sufficiency of compliance with Sentence 3.2.4.20.(2) of the Ontario Building Code (OBC).

This sentence requires that, in addition to the requirements for fire alarm and detections systems, visual signals from smoke detectors located in sleeping rooms of a Group B occupancy, must be provided to allow staff to easily identify the room or location of the fire alarm initiation. In this respect, a series of dome lights and alpha numeric display devices referred to as a "Nurse Call System" are being proposed. As noted above, dome lights will be situated outside each sleeping room and will light with a red indicator if activated by a smoke detector. In addition, a signal will appear at the alpha-numeric displays located at each nursing station and at the centrally located ground floor nursing station. These signals will identify the individual room in which a detector has been activated.

The proposed alpha-numeric display devices, however, are not ULC listed. The system is not

electronically supervised by the building base fire alarm system nor is it provided with a dedicated back-up source of power.

4. Provisions of the Ontario Building Code

3.2.4.20. Visual Signals

(2) In addition to the requirements for fire alarm and detection systems in this Subsection, visual signals from *smoke detectors* required in sleeping rooms of Group B *occupancy* shall be provided so that staff serving those rooms can easily identify the room or location of fire alarm initiation. (See Appendix A.)

5. Applicant's Position

The Agent for the Applicant explained that the new nursing home is currently in the final stages of construction. It was during one of the final inspections that the design and function of the required visual signals was raised as an issue of concern by the Respondent. In January 2002 the Applicant was advised that a) the colour coding of the dome lights outside sleeping rooms was an issue, b) all of the dome lights could not be seen from the nursing stations, c) the alpha-numeric display system was not listed by ULC as an ancillary device to the fire alarm system, and d) the additional fire alarm annunciator at the ground floor nursing station did not satisfy the intent of the Code to require a visual display at each nursing station.

The Agent submitted that, in his opinion, Sentence 3.2.4.20.(2) requires visual signals in addition to the fire alarm system. These signals, he argued, need not be ULC listed and form part of the fire alarm system. He referred to the Appendix note in the Code and suggested that there were two methods of compliance available. The first would be to provide visual signals in the corridor at the location of each sleeping room. This would be appropriate if staff could see each sleeping room from one spot. If this was not possible, signals are to be provided where staff are expected to be present, i.e. the nursing station. In this regard, the Agent argued that the building in question had been designed by employing both methods of visual signals anticipated by the Appendix note.

The Agent for the Applicant explained that, because staff could not visualize all of the dome lights from one location, the alpha-numeric display would be used in conjunction with the corridor dome lights. He advised that staff of the facility are frequently walking through the corridors. As such, they felt is appropriate to use both types of visual signals to ensure the fastest possible response. In respect to the colour of the dome light on activation of a smoke detector, the Applicant argued that there is no basis for the Respondent's claim that the light should be amber in colour. He submitted that the red light proposed was more identifiable as an alarm or alert colour.

Furthermore, the Agent argued that there is no requirement in the Code for the visual signal devices to be ULC listed or to be considered part of the fire alarm system. He submitted that ancillary devices, such as these alpha-numeric display devices, are to be activated by the fire alarm system but are not required to be part of the fire alarm system. In referring to an extract from the ULC Standard, the Applicant noted that a fire alarm may include other devices such as voice communications. Strobe lights or other visuals could be added if desired. This, he argued, supported the position that there was no requirement that these ancillary devices be listed and form part of the fire alarm system.

In summation, the Agent submitted that the "Nurse Call System" proposed for this facility will serve

to visually identify the room in which a smoke detector has been actuated. The Agent stated that other long term care facilities have been constructed throughout the province that have been equipped with the type of system proposed here. The dome lights outside the individual rooms will provide a visual signal in addition to the alpha-numeric display at the nursing station. Furthermore, the annunciator panel to be provided at the ground floor nursing station will provide staff in this location with information regarding the activation of a detector. Staff throughout the facility are also supplied with pagers that would indicate the room number and priority level of an activated signal. The Agent submitted that the Applicant is voluntarily exceeding the minimum requirements of the Code by providing both the dome light system and the alpha-numeric displays. He reiterated that there is no provision in the Code to require these ancillary devices to be ULC listed.

6. Respondent's Position

The Designate for the Respondent submitted that, upon inspection of the facility, they had identified two areas of concern. Namely, the type of visual signals being proposed and the colour coding of those signals. The Designate advised the Commission that in 1990 the colour of visual signals became an issue with the Ministry of Health. In this respect he submitted that an amber signal has been the colour of choice for Toronto Fire Services in their effort to standardize operations with those of the Ministry, which has adopted this colour as being most appropriate.

In respect to the visual signal system itself, the Designate argued that these devices are marketed as life safety systems. Staff have to be able to respond to the signal and will come to rely on its accuracy and efficiency. He argued that, because it is not ULC listed, there would be no control over maintenance, inspection or monitoring.

As a way to ensure that the system is operating as designed, the Designate argued that it should be listed. To be consistent with past practices, the Designate stated that fire alarm annunciators at each nursing station, in addition to the alpha-numeric displays would satisfy their concerns. This would be a maintained system and part of the fire alarm system. Such a system would reliably alert staff immediately and would satisfy his concerns in respect to the potential for failure of the unsupervised system being proposed by the Applicant.

In summation, the Designate submitted that by relying on these visual signals as a life safety system it is appropriate to ensure its effective operation. If staff are not able to properly respond to a signal, the response time of the fire department may be affected. To ensure continued maintenance, monitoring and inspection it is, therefore, appropriate to require listed devices to satisfy the provisions of Sentence 3.2.4.20.(2).

7. Commission Ruling

It is the decision of the Building Code Commission that the use of unlisted, alpha-numeric display devices forming part of the call station located in the nursing stations provide sufficiency of compliance with Sentence 3.2.4.20.(2) of the Ontario Building Code at the West Park Long-Term Care Facility, 82 Buttonwood Avenue, Toronto, Ontario.

8. Reasons

i) The system of dome lights outside of each patient room, in addition to the alpha-numeric display devices, is sufficient to provide the visual signals required by Sentence 3.2.4.20.(2).

ii) The alpha-numeric display system will be used in conjunction with remote pagers supplied to the nursing staff which would identify the room where a smoke detector has been activated.

iii) An additional annunciator, which is capable of identifying individual smoke detector activation anywhere in the facility, is provided at the ground floor nursing station.

Dated at Toronto this **20th** day in the month of **June** in the year **2002** for application number **2002-07**.

Len King, Chair-Designate

Fred Barkhouse

Donald Pratt

Ruling No. 02-15-870
Application No. 2002-12

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 3.2.8.2.(5) and (6) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Darryl Boyce, Director of Physical Plant, for the resolution of a dispute with Arlene Gregoire, Chief Building Official, City of Ottawa, to determine whether the 6.75 m^2 light well opening interconnecting Levels 3, 4 and 5 and which does not include a stairway, escalator or moving walkway, but will be equipped with additional fire safety features, provides sufficiency of compliance with Sentences 3.2.8.2.(5) and (6) of the Ontario Building Code at the National Wildlife Research Centre, Carleton University, Raven Road, Ottawa, Ontario.

APPLICANT	Darryl Boyce, Director of Physical Plant Carleton University Ottawa, Ontario
RESPONDENT	Arlene Gregoire Chief Building Official City of Ottawa
PANEL	Kenneth Peaker, Chair Tony Chow Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	June 6, 2002
DATE OF RULING	June 6, 2002
APPEARANCES	Peter Colquhoun Arencon Inc. **Agent for the Applicant** Ron Mills Plans Examiner City of Ottawa **Designate for the Respondent**

RULING

1. The Applicant

Darryl Boyce, Director of Physical Plant, Carleton University, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing an addition to an exsiting building for use as a laboratory facility known as the National Wildlife Research Centre, Carleton University, Raven Road, Ottawa, Ontario.

2. Description of Construction

The Applicant is constructing a 1,140 m^2 addition to a Carleton University campus building referred to as the National Wildlife Research Centre (NWRC). The existing structure has a Group A, Division 2 occupancy classification and includes an 89 m^2 greenhouse component. The completed building will be 4,329 m^2 and four storeys in building height (Levels 2 to 5) plus one basement (Level 1) and a mechanical penthouse (Level 6). The NWRC component of the building will include Group D, office uses and Group F, Division 2, laboratories, mechanical and electrical service rooms and the existing greenhouse. The structure is comprised of noncombustible construction and is equipped with a sprinkler, standpipe and hose and fire alarm systems.

The basement level of the new addition will accommodate F2 occupancy uses and will be separated from the existing building by a 2 hour fire separation. Level 2, situated on the ground floor, consists entirely of offices and will be separated from the exsiting structure by a one hour fire separation. Levels 3, 4 and 5 include a combination of F2 and D uses. There is no fire separation required between the Group D and Group F, Division 2 major occupancies within the new addition and a convenience stair links the Group D portions of each floor area from Levels 2 to 5 (inclusive). The stair opening measures 13.5 m^2 in area. In addition to the convenience stair, the NWRC addition includes an adjacent light well opening, measuring 6.75 m^2 in area, which extend from Level 2 to Level 5. The combined area of the convenience stair (Stair No. 1) and light well openings in each floor assembly is approximately 20.25 m^2.

The construction in dispute is particular to the light well opening where it extends to interconnect Levels 3, 4 and 5 of the building, north of the convenience stair opening. The interconnection of Levels 2 and 3 has been accepted as Code compliant, however the interconnection of the further two floor areas is also being proposed. To compensate for the opening through these levels the Applicant is proposing that the light well be protected in the same manner as the convenience stair opening. These measures of protection include the provision of draft stops extending 457.2 (18 in) below the ceiling around the perimeter of the openings. In addition, close spaced sprinklers around the perimeter of the light well and stair openings as well as horizontal sprinklers on the western sidewall of the light well opening will be provided. The sprinklers protecting the openings will be connected to a separate zone from the floor area sprinklers. Further, intelligent multi-sensor smoke detectors will be placed around the perimeter of the openings at Levels 2, 3 and 4, which will be connected to the buildings fire alarm system.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether, provides sufficiency of compliance with Sentences 3.2.8.2.(5) and (6) of the Ontario Building Code (OBC).

Sentence 3.2.8.2.(5) provides that, except as permitted by Sentence (6) openings are permitted for stairs, escalators and inclined moving walkways without the need to conform to the requirements of 3.2.8.3. to 3.2.3.11 if the opening does not exceed 10 m^2 in area and if the building is sprinklered. A further requirement is that the interconnected floor space contain only Group A, Division 1, 2 or 3, Group D or Group E occupancies.

As an exception to this provision, Sentence (6) provides that an interconnected floor space need not meet the requirements of Articles 3.2.8.2. to 3.2.8.11. if the floor space consists of the first storey and the storey above or below it (but not both). Further, the interconnected floor space must be sprinklered and contain only Group A, Division 1, 2 or 3, Group D or Group E occupancies.

In the subject building, the floor areas in question contain Group D major occupancies and the building is fully sprinklered. The light well opening being disputed, however, does not contain either a stair, escalator or moving walkway. Moreover, the opening extends beyond the first storey and the floor above to incorporate all four above ground levels. In recognition of the technical requirements of the Code and to compensate for any discrepancy in this regard, the Applicant is proposing the provision additional fire safety measures. These include the provision of draft stops and placement of multi-sensor smoke detectors around the perimeter of the light well openings and the convenience stair openings at levels 2, 3 and 4. Close spaced water curtain sprinklers around the perimeter of the light well openings as well as horizontal side wall sprinklers on the west side of the openings are also being proposed. A separate zone for the sprinklers which protect the convenience stair and light well openings will be provided.

4. Provisions of the Ontario Building Code

3.2.8.2. Exceptions to Special Protection

(5) Except as permitted by Sentence (6), openings for stairways, escalators and inclined moving walks need not conform to the requirements in Articles 3.2.8.3. to 3.2.3.11. provided

(a) the opening for each stairway, escalator or walk does not exceed 10 m^2 (108 ft^2),
(b) the *building* is *sprinklered* throughout, and
(c) the *interconnected floor space* contains only Group A, Division 1, 2 or 3, Group D or Group E *occupancies*.

(6) An *interconnected floor space* need not conform to the requirements of Articles 3.2.8.3. to 3.2.8.11. provided

(a) the *interconnected floor space* consists of the *first storey* and the *storey* next above or below it, but not both,
(b) the *interconnected floor space* is *sprinklered*, and
(c) the *interconnected floor space* contains only Group A, Division 1, 2 or 3, Group D, Group E, or Group F, Division 3 *occupancies*. (See Appendix A.)

5. Applicant's Position

The Agent for the Applicant stated that the unenclosed light wells proposed in this building will facilitate the introduction of natural light through the floor areas. A skylight is situated at the top of the openings. He advised that the light well is located adjacent to the opening for the convenience stair and creates a combined opening area of approximately 20.25 m^2. He noted that the Building Code Commission had

previously found openings of up to 25 m^2 to provide sufficiency of compliance with the OBC.

The Agent submitted that the Respondent had already agreed to accept the interconnection between Levels 2 and 3, as well as the convenience stair opening through Levels 3, 4 and 5, despite the fact that the size of the stair opening marginally exceeds the Code specified maximum. The remaining dispute was particular to the 6.75 m^2 light well opening interconnecting Levels 3, 4 and 5. In this regard he submitted that the opening would be permitted if it contained a stair, escalator or moving walkway. He suggested that the hazard associated with the opening is the same whether one of these features was present or not, in terms of the possibility of fire gases passing through the opening.

To address any concern in this regard the Agent advised that the proposal included the use of intelligent multi-sensor smoke detectors around the perimeter of the light wells and the convenience stairs. These would be programmed below the required sensor levels to provide an early warning. He also stated that strategically placed horizontal sprinkler heads would provide additional protection to the openings. These sprinklers would be placed in a manner to facilitate the cooling of fire gases to less than 100 ^oF through evaporative cooling. Further, he submitted that the sprinklers would be linked to a separate zone to avoid the need to take them out of service when the floor area sprinklers are being serviced.

In summation, the Agent stated that there is some precedent for the Commission having accepted similar types of openings. Further, the Code he argued, does not limit the number of openings for convenience stairs, etc. In conclusion, he suggested that the compensating measures being proposed would adequately address the potential hazard associated with a light well opening and stated that the Fire Department had indicated that they did not consider these openings to be a problem from a fire fighting perspective. Sprinklering, he argued, would help to control the migration of smoke and gases through the openings.

6. Respondent's Position

The Respondent submitted that the subject openings do not contain either a stair, escalator or moving walkway making them subject to the exemption requirements of 3.2.8.2.(6) which permits the interconnection of the ground floor, in this case Level 2, and one storey up or down. To interconnect Levels 3 through 5 simply does not comply with the Code.

In considering the additional protection proposed for the opening and the previous BCC rulings, the designate stated that he was unprepared to consent to the argument of the Applicant for acceptance of the proposal. He stated that other Commission rulings were immaterial to this dispute as they were site specific applications and not precedent setting. He also submitted that the municipality had already accepted the stair well opening even though it was in excess of the OBC size requirements. In this regard, he felt the presence of a stair was important as it filled the opening and inhibited the movement of gases through the openings.

In summation, the Designate stated that the acceptance of alternative measures to compensate for the light well openings did not comply with the clear and prescriptive requirements outlined in the Building Code. The openings considered in previous BCC decisions all contained a stair, escalator or moving walkway as referenced in 3.2.8.3.(5). In this case, the increase in area is particular to an additional unprotected opening used merely as a light well. Further, the Designate advised that the building permit which was issued for this structure included the provision of tempered glass having a one hour fire resistance rating surrounding the opening. In his opinion this is a practical way to meet the Code requirements.

7. Commission Ruling

It is the decision of the Building Code Commission that the 6.75 m^2 light well opening interconnecting Levels 3, 4 and 5 and which does not include a stairway, escalator or moving walkway, but will be equipped with additional fire safety features does not provide sufficiency of compliance with Sentences 3.2.8.2.(5) and (6) of the Ontario Building Code at the National Wildlife Research Centre, Carleton University, Raven Road, Ottawa, Ontario.

8. Reasons

i) The opening in question does not contain a stairway, escalator or moving walk. The exception provisions outlined in Sentence 3.2.8.2.(6), therefore, do not apply.

ii) The fire safety measures offered to compensate for unenclosed openings extending beyond the first storey and the next storey above or below do not achieve sufficiency of compliance with Sentence 3.2.8.2.(6).

Dated at Toronto this **6th** day in the month of **June** in the year **2002** for application number **2002-12**.

Kenneth Peaker, Chair

Tony Chow

Gary Burtch

Ruling No. 02-14-869
Application No. 2002-10

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 8.8.1.2.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Peter Janzen, for the resolution of a dispute with Tom Cathcart, Chief Building Official, Peterborough County-City Health Unit, to determine whether the proposed installation of a Class 5 sewage system (holding tank) to serve a new cottage where the installation of a Code compliant Class 4 system is not possible, provides sufficiency of compliance with Sentence 8.8.1.2.(1) of the Ontario Building Code at 867 Southview Drive, Lot 12, Part Concession A, Township of South Monaghan, Peterborough County, Ontario.

APPLICANT	Peter Janzen St. Catharines, Ontario
RESPONDENT	Tom Cathcart Chief Building Official Peterborough County-City Health Unit
PANEL	Bryan Whitehead, Chair Bill Fellner Doug Robinson
PLACE	Toronto, Ontario
DATE OF HEARING	June 6, 2002
DATE OF RULING	June 6, 2002
APPEARANCES	Peter Janzen St. Catharines, Ontario **The Applicant** Kathleen Shepherd Public Health Inspector Peterborough County-City Health Unit **Designate for the Respondent**

RULING

1. The Applicant

Peter Janzen, has applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing to construct a cottage which will be serviced by a Class 5 sewage system on the property located at 867 Southview Drive, Lot 12, Part Concession A, Township of South Monaghan, Peterborough County, Ontario.

2. Description of Construction

The Applicant is the prospective purchaser of the subject property and is proposing to construct a three bedroom single detached dwelling for use as a cottage. The proposed dwelling would have a building area of 190 m^2 and 28.5 plumbing fixture units. The resulting total daily design flow is 2025 litres/day. It is proposed that a Class 5 holding tank will be installed to service the dwelling.

The lot in question is a lakefront lot and measures approximately 20.98 m (68.85 ft) in width and 32.26 m (105.85 ft) in depth. The property is undeveloped with the exception of a small shed having an area of less than 9.29 m^2(100 sq ft). In addition there is a dug well located near the easterly property line. A second well is located on an adjacent property also near the lot line.

The construction in dispute involves the proposed installation of a Class 5 septic system which the Code prohibits except in certain circumstances. The difficulty however, arises as a result of the size of the lot and the location of the two dug wells. Due to the specific position of these wells, a Class 4 system with treatment unit and disposal field can not be situated on the lot, together with the proposed cottage, and meet the minimum clearance distances set out in the Code.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the installation of a Class 5 system on the subject property provides sufficiency of compliance with Sentence 8.8.1.2.(1) of the Ontario Building Code (OBC) in light of the fact that it is not possible to install a Code compliant Class 4 system on site.

Sentence 8.8.1.2(1) sets out the conditions under which a Class 5 system may be installed. The intent of this Article seems to be to restrict the installation of new holding tanks unless extraordinary circumstances exist. Without conformance with the conditions outlined in this provision, Article 8.8.1.1. prohibits the installation of a Class 5 system. In the present case, the construction of a new cottage on a lot where no previous sewage system has been installed, does not appear to meet the conditions set out in the Code.

4. Provisions of the Ontario Building Code

8.8.1.2. Acceptable Installation

(1) A Class 5 *sewage system* may be installed in the following circumstances:

(a) where the proposed use of the *sewage system* is for a temporary operation, excluding seasonal recreational use, not exceeding 12 months in duration,

(b) to permit the extension of an existing single-family dwelling provided that
  (i) the extension will not increase the wastewater load, and
  (ii) the *building* is already served by a Class 5 *sewage system*,

(c) to remedy an unsafe *sewage system* where the remediation of the unsafe condition by the installation of a Class 4 *sewage system* is impracticable,

(d) to upgrade a *sewage system* serving an existing *building*, where upgrading through the use of a Class 4 *sewage system* is not possible due to lot size, site slope or clearance limitations, or

(e) as an interim measure for a lot or parcel of land until municipal sewers are available, provided that the municipality undertakes to ensure the continued operation of an approved *hauled sewage system* until the municipal sewers are available.

5. Applicant's Position

The Applicant submitted that he has entered into an agreement to purchase the subject lot conditional on his ability to obtain a building permit. As part of the permit process, he had encountered difficulty in obtaining approval for a septic system to service his proposed cottage in light of the existing restrictions on the property. He stated that, when considering the installation of a Class 4 system, it was discovered that the minimum clearances from the well on the neighbouring property could not be met. This meant that there would be no possibility for him to construct the building that he wanted served by a Class 4 system, and meet the separation distance set out in the Code.

As a solution to this problem, the Applicant advised that he approached the municipality with a proposal to install a Class 5 system on the site which would meet the separation distances for that type of installation. He argued that this is a reasonable solution and stated that approval of a holding tank is the only way this lot can be developed given the existing site restrictions. Without relaxation of the Code provisions, he submitted, nothing can be done with the property and it will essentially be sterilized.

The Applicant also suggested that, to his understanding, there was previously a cottage on the subject lot. He was informed, however, that this building had burnt down and there was no remaining evidence that it existed with the exception of the existing well at the easterly property line. This may have been a water source for any previous dwelling.

In summation, the Applicant emphasized that it was his desire to construct his "dream cottage" on this property. If he could receive a variance from the Code provisions and be permitted to install a Class 5 system he may be in a better position to approach the neighbouring property owner to discuss moving the problematic well. He could then consider installing a Class 4 system in compliance with the Code.

6. Respondent's Position

The Designate for the Respondent submitted that she received the permit application for the installation of a holding tank on the subject property. In her review of this application she considered the circumstances for acceptable installation outlined in the OBC. It was her position that this proposal did not meet any of the criteria whereby a Class 5 system could be approved.

The Designate stated that the parameters outlined in the Code are not new, they are merely new to the Building Code. In fact, the holding tank restrictions were in place for many years under the Ministry of the Environment. She acknowledged that a holding tank could be successfully located on the property to meet the Code requirements for a Class 5 system but maintained that such a system was not permitted in this instance.

7. Commission Ruling

It is the decision of the Building Code Commission (BCC) that the proposed installation of a Class 5 sewage system (holding tank) to serve a new cottage where the installation of a Code compliant Class 4 system is not possible, does not provide sufficiency of compliance with Sentence 8.8.1.2.(1) of the Ontario Building Code at 867 Southview Drive, Lot 12, Part Concession A, Township of South Monaghan, Peterborough County, Ontario.

8. Reasons

i) The proposed new construction does not meet any of the circumstances established by the Code in Sentence 8.8.1.2.(1) for acceptable installation of a Class 5 sewage system.

ii) The Building Code Commission does not have the authority to simply grant exemptions to the requirements of the Ontario Building Code. Under its statute, the Commission can make a determination on matters of interpretation and sufficiency of compliance with the technical requirements set out in the Code. In relation to its powers involving rulings of sufficiency of compliance, the Commission can examine matters of proposed or existing alleged deficiencies. The Code is viewed as a minimum set of health and safety standards and, where proposals are deficient in certain areas, the Commission looks for measures to compensate for that deficiency. In this instance, no compensating measures were offered that would allow for a ruling of sufficiency of compliance with the provisions of the Code.

iii) The BCC is of the view that the property may not be entirely sterilized. Options may be available for use of the land with lesser development than what is proposed.

Dated at Toronto this **6th** day in the month of **June** in the year **2002** for application number **2002-10**.

Bryan Whitehead, Chair

Bill Fellner

Doug Robinson

Ruling No. 02-13-868
Application No. 2002-11

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 3.2.2.9. and 3.2.2.28. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Randi Glos, President, Randi Glos Architect Inc. for the resolution of a dispute with Edward J. Link, Commissioner of Building Development Services, City of Windsor, to determine whether the proposed additions that include crawl space areas which contain mechanical rooms housing HVAC equipment venting to the exterior is permitted to be governed by the construction requirements of Article 3.2.2.28. of the Ontario Building Code when considering Article 3.2.2.9. at the Jefferson Child Care Centre, 2605 Jefferson Blvd., Windsor, Ontario.

APPLICANT	Randi Glos President Randi Glos Architect Inc.
RESPONDENT	Edward J. Link Chief Building Official City of Windsor
PANEL	Kenneth Peaker, Chair Robert De Berardis Tony Chow
PLACE	Toronto, Ontario
DATE OF HEARING	May 23rd, 2002
DATE OF RULING	May 23rd, 2002
APPEARANCES	Randi Glos President Randi Glos Architect Inc. **The Applicant**

RULING

1. The Applicant

Randi Glos, President, Randi Glos Architect Inc., has applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing to construct two additions to an existing child care facility known as the Jefferson Child Care Centre, 2605 Jefferson Boulevard, Windsor, Ontario.

2. Description of Construction

The Applicant is constructing two new, separate additions to an existing building, having a Group A, Division 2 occupancy classification and operating as a child care facility. The existing structure has a building area of 392.79 m^2 (4228 ft^2) and a building height of one storey. The larger of the two additions, situated to the west of the existing structure, has a building area of 276.39 m^2 (2975 ft^2) while the smaller addition located at the north east corner of the existing structure has a building area of 79 m^2 (850 ft^2). Both additions will also be one storey in building height. The entire finished structure will encompass a building area of 748.18 m^2 (8,053 ft^2) and is sited such that it faces two streets. Further, the building is comprised of combustible construction and will be equipped with a fire alarm system.

The existing portion of the building contains a subsurface level which has been identified as a crawl space. Similarly, the two new additions will also contain subsurface areas which the Applicant has also referred to as crawl spaces. These areas provide a clear height of approximately 1676 mm (5 ft 6 in) to the underside of the floor joists. Within each of these two new subsurface spaces, mechanical rooms are proposed which will house high efficiency HVAC systems. These units have supply and exhaust piping which will penetrate the exterior wall of the subsurface level and the surrounding area will be compartmentalized from the remainder of the building by a one hour fire-rated separation.

The construction in dispute involves the classification of the subsurface areas of the new additions and the associated construction requirements involved. If considered to be "crawl spaces" there would be no requirement to separate the floor assembly above the area. However, if considered to be a "basement", a fire separation having a 45 minute fire-resistance rating would be required.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the subsurface level in the two new additions which includes mechanical rooms containing HVAC equipment can be considered to be a crawl space and permitted to comply with the requirements of Article 3.2.2.28, when considering Article 3.2.2.9. of the Ontario Building Code (OBC).

Sentence (1) of Article 3.2.2.28. permits a building having a Group A, Division 2 major occupancy classification to be constructed using combustible or noncombustible construction materials (or a combination of both), provided that the building height does not exceed one storey and the area meets the requirements relative to the number of streets the building faces. Further, Sentence (2) permits a building without a basement to exceed the building area limitations of Sentence (1) provided that a one hour fire separation is used to separate the building into fire compartments, each of which would not exceed the area requirements of Clause 1(b).

Sentence (1) of Article 3.2.2.9. mandates that, for the purposes of Articles 3.2.1.4. and 3.2.1.5., relative

to floor assembly and containment requirements for basements, a crawl space shall be considered to be a basement if it, a) exceeds 1,800 mm between the lowest part of the floor assembly and the ground or other surface below, b) is used for any occupancy, c) is used for the passage of flu pipes or, d) is used as a plenum in combustible construction. Sentence (2) of this Article provides that floor assemblies above a crawl space need not be constructed as a fire separation and are not required to have a fire-resistance rating provided that they are not considered basements by Sentence (1)

As noted, the subject day care facility is one storey in building height, having a Group A, Division 2 occupancy classification. Further, a subsurface level, designed as a crawl space, has been included in the construction of the new additions. While this level neither has the floor-to-ceiling height nor is to be used as a plenum, it is to contain an HVAC system with associated exhaust piping. In this light, the mechanical rooms will be separated from the remainder of the building by a one hour fire-rated separation.

The dispute in this respect involves whether the presence of HVAC systems within the subject crawl space requires that the area be considered a basement for the purposes of Articles 3.2.1.4. and 3.2.1.5.

4. Provisions of the Ontario Building Code

3.2.2.9. Crawl Spaces

(1) For the purposes of Articles 3.2.1.4. and 3.2.1.5., a crawl space shall be considered as a *basement* if it is

(a) more than 1 800 mm (5 ft 11 in) high between the lowest part of the floor assembly and the ground or other surface below,
(b) used for any *occupancy*,
(c) used for the passage of *flue pipes*, or
(d) used as a *plenum* in *combustible construction*.

(2) A floor assembly immediately above a crawl space is not required to be constructed as a *fire separation* and is not required to have a *fire-resistance rating* provided the crawl space is not required to be considered as a *basement* by Sentence (1).

3.2.2.28. Group A, Division 2, One Storey

(1) A *building* classified as Group A, Division 2 is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, provided

(a) it is not more than 1 *storey* in *building height*, and
(b) except as permitted by Sentence (2), it has a *building area* not more than
  (i) 400 m^2 (4,310 ft^2) if facing one *street*,
  (ii) 500 m^2 (5,380 ft^2) if facing 2 *streets*, or
  (iii) 600 m^2 (6,460 ft^2) if facing 3 *streets*.

(2) In a *building* referred to in Sentence (1) without a *basement*, the *building area* limits of Sentence (1) are permitted to be doubled provided a *fire separation* with a *fire-resistance rating* not less than 1 h is used to separate the *building* into *fire compartments*, each one of which does not exceed the area limits of Clause 1(b).

5. Applicant's Position

The Applicant advised that the existing child care facility is doubling in size as a result of the two new additions which were currently under construction. The building, he advised, falls under the provisions of provisions of Article 3.2.2.28. In this respect, combustible construction material has been used and crawl spaces have been included beneath each of the new additions, similar to the crawl space beneath the existing building. Whereas, the majority of the crawl space area is not proposed to be separated from the storey above he stated, however, that two mechanical room compartments have been created within these crawl spaces each of which will be separated by a one hour fire-rated separation.

The Applicant stated that the mechanical room compartments that are being created represent approximately 7% of the crawl space area and will house high efficiency HVAC systems. These systems include supply and exhaust piping which will penetrate to the exterior of the crawl space wall assembly within the fire-rated compartment. He suggested that the heating appliances do not contain flue pipes, as defined by the Code because there is no connection to a chimney. Rather, the appliances have gas vents which exhaust warm vent gases. The Applicant further advised that the HVAC spaces and crawl spaces are equipped with heat detectors which will be connected to the monitored fire alarm system for the building.

The Applicant argued that, in his opinion, the areas can be considered crawl spaces for the purposes of applying Code requirements. He stated that the HVAC spaces are minimal and are separated from the remainder of the building by a one hour separation. He further advised that there was limited access to the crawl spaces and that service personnel would only need to gain entrance to the areas a few times a year. He stated that, to require these areas to be wholly constructed as a basement providing a 45 minute fire separation to the entire floor assembly above, would be impractical and cost prohibitive. These areas, he argued, function as crawl spaces despite the inclusion of the HVAC equipment within a small segment of the floor space.

In summation, the Applicant also advised that double the number of required exits are provided in the facility and that the anticipated occupant load for the building is relatively low in comparison to what would be permitted by the Code. Finally, he reiterated his position that the HVAC systems do not contain flue pipes and that the fire compartments created to house this equipment should be sufficient to allow the remainder of the floor area to be considered a crawl space.

6. Respondent's Position

The Respondent did not attend the hearing, the Commission instead relied on his written submission. He submitted that where a crawl space is used for any occupancy, it shall be considered as a basement. In his opinion, the presence of HVAC equipment in the crawl space area, despite the intended separation, represents the use of the space for an occupancy. As a result, he argued, the basement would be required to comply with the provisions of 3.2.1.4. and 3.2.1.5. of the Code.

7. Commission Ruling

It is the Decision of the Building Code Commission that the proposed additions which include crawl space areas containing mechanical rooms housing HVAC equipment which vents to the exterior are not permitted to be governed solely by the construction requirements of Article 3.2.2.28. of the Ontario Building Code when considering the provisions of Article 3.2.2.9. at the Jefferson Child Care Centre, 2605 Jefferson Blvd., Windsor, Ontario.

8. Reasons

i) The subsurface floor areas do not satisfy the requirements of Sentence 3.2.2.9.(1) for the purposes of Articles 3.2.1.4. and 3.2.1.5.

ii) The mechanical rooms which include HVAC equipment within a portion of the crawl space constitutes use of the space for an occupancy. Where this occurs, Clause 3.2.2.9.(1) requires the crawl space to be considered a basement.

Dated at Toronto this **23rd** day in the month of **May** in the year **2002** for application number **2002- 11** .

Ken Peaker, Chair

Robert De Berardis

Tony Chow

Ruling No. 02-12-867
Application No. 2002-03

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Parts 2 and 11 of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Jameel Mohammed, property owner, for the resolution of a dispute with Dan Sayers, Chief Building Official, Township of Dysart et al, to determine whether the proposed renovation and repair of an existing residential structure provide sufficiency of compliance with the relevant provisions of Parts 2 and 11 of the Ontario Building Code at Part Lot 15, Concession 4, Township of Dysart et al, Ontario.

APPLICANT	Jameel Mohammed Property owner
RESPONDENT	Dan Sayers Chief Building Official Township of Dysart et al
PANEL	Len King, Chair-Designate Robert De Berardis Tony Chow
PLACE	Toronto, Ontario
DATE OF HEARING	March 21st, 2002
DATE OF RULING	March 21st , 2002
APPEARANCES	Jameel Mohammed Property owner **The Applicant** Dan Sayers Chief Building Official Township of Dysart et al **The Respondent**

RULING

1. The Applicant

Jameel Mohammed, property owner, has applied for a building permit under the *Building Code Act*, S.O. 1992, c.23, as amended, and is proposing to undertake renovations and repairs to an existing residential building located at Part Lot 15, Concession 4, Township of Dysart et al, Ontario.

2. Description of Construction

The Applicant is proposing to carry out renovations and repairs to a small Group C structure. The existing building is described by the Applicant as a single storey, two bedroom cabin having a floor area of approximately 60.4 m^2 (650 ft^2).

The construction in dispute involves the proposed renovations and repairs to this structure. The anticipated construction includes the addition of a crawl space and ductwork associated with a proposed new heating system. In addition, several repairs to the building are being contemplated. These repairs include the removal and replacement of siding and structural supports, installation of new windows, roofing and improvements to the building insulation.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed renovations and repairs provide sufficiency of compliance with the relevant provisions of Parts 2 and 11 of the Ontario Building Code (OBC).

Part 2 of the Code outlines the general requirements for construction while Part 11 provides direction with respect to the extension, material alteration or repair of existing structures. The Applicant proposes to renovate and repair the existing building to make the structure more habitable. A determination on whether the proposed work provides sufficiency of compliance with Parts 2 and 11 is being sought in this regard.

4. Provisions of the Ontario Building Code

Part 2 General Requirements

Please refer to the Ontario Building Code.

Part 11 Renovation

Please refer to the Ontario Building Code.

5. Applicant's Position

The Applicant advised that he purchased the subject property in 1992. At that time there were two residential buildings on the property, one of which was subsequently destroyed by fire. He initially applied for and received a building permit to construct a new dwelling to replace the one which was

destroyed, however, he was unable to complete construction because of financial difficulties. He is now interested in repairing and upgrading the smaller, 60.4m^2 (650 ft^2) dwelling for use as his residence. As such, he applied for a building permit to carry out the necessary construction.

The Applicant explained that he had not been issued a building permit for this work by the Respondent. According to the Applicant, the two reasons for this refusal, cited to him by the Respondent, were that the structure did not comply with the zoning by-law and that an incomplete permit application had been filed. The Applicant disputed both of these claims. He advised the Commission of provisions found in the *Planning Act* with respect to legal nonconforming uses. He argued that, by virtue of its existence, the subject building would fall under that category. The applicant then stated that the BCC should provide a ruling consistent with this argument, i.e., that the by-law does not apply because the building is considered a legal nonconforming use.

As further support for his position, the Applicant submitted that Article 2.1.1.6. is relevant to the proposed construction as the building has been in existence for more than five years. Furthermore, Sentence 11.3.1.1.(1) provides that where a building is materially altered or repaired, the performance level shall be at least equal to the performance level of the building prior to any work being undertaken. He argued that, based on these two provisions, the Respondent did not have any discretion to refuse the permit being requested.

When questioned about what information had been supplied to the municipality in connection with the recent permit application, the Applicant stated that he did not provide drawings or specifications because this is not a new house. He argued that the Respondent knew the building and should have had access to original construction drawings. He simply wanted to undertake repairs to damaged areas and provide a heating system for the structure.

6. Respondent's Position

The Respondent confirmed that a permit for the proposed work has not been issued to the Applicant. He outlined the provision of subsection 8(2) of the *Building Code Act*, and emphasized that a permit may not be issued where the proposal would contravene other applicable law or where an application is considered to be incomplete. In this instance he explained that it is the position of the municipality that the subject building is in contravention of the municipal zoning by-law and that the application for permit was substantially incomplete. There were no building plans supplied nor was there a detailed description of the work to be undertaken. A permit was, therefore, not issued for the proposed construction.

In addition to these concerns, the Respondent advised that there is also a dispute between the parties with respect to the septic system that would be required to serve this dwelling. He noted, however, that this matter was not the subject of the present hearing.

In summation, the Respondent emphasized that, in light of the deficiencies with the permit application and the outstanding issue with respect to zoning conformity, he is not in a position to issue a permit for the proposed work.

7. Commission Ruling

It is the decision of the Building Code Commission that, under 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended, the Building Code Commission (BCC) does not have the jurisdiction to

determine this dispute.

8. Reasons

i) Subsection 24(1) of the *Building Code Act*, provides the Building Code Commission with jurisdiction to resolve disputes:

- that are between a chief building official or building inspector and an applicant for, or holder of, a permit or a person to whom an order is given; and

- that concern the interpretation of, or the sufficiency of compliance with, the technical requirements of the Ontario Building Code.

In this case, the Commission acknowledges that there is a dispute between the Chief Official and the Applicant, however, the parameters of that dispute presently fall outside the consideration of the technical requirements of the Ontario Building Code.

ii) The primary contention between the parties is with respect to the local zoning by-law and it's applicability to the subject property. Determination of this issue is clearly not within the mandate of the BCC.

iii) Despite the Applicant's dissatisfaction with the Respondent's interpretation of Parts 2 and 11 of the Building Code, the Commission found that the permit application submitted to the municipality was incomplete and contained insufficient information to make an informed decision as to whether a technical dispute exists.

Dated at Toronto this **21st** day in the month of **March** in the year **2002** for application number **2002-03**.

Len King, Vice-Chair

Robert De Berardis

Tony Chow

Ruling No. 02-11-866
Application No. 2002-06

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 3.1.5.5.(1), (2) and (3) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Matthew Stanton, Project Manager, PCL Constructors Canada Inc., for the resolution of a dispute with Frank Asta, Chief Building Official, Town of Oakville, to determine whether the combustible wood screen cladding proposed on the exterior of the north, east and south faces of a parking structure provides sufficiency of compliance with Sentence 3.1.5.5.(1), (2) and (3) of the Ontario Building Code at the Oakville Trafalgar Memorial Hospital Parking Garage, Oakville, Ontario.

APPLICANT	Matthew Stanton PCL Constructors Canada Inc. Mississauga, ON
RESPONDENT	Frank Asta Chief Building Official Town of Oakville
PANEL	Len King, Vice-Chair Gary Burtch Tony Chow
PLACE	Toronto, Ontario
DATE OF HEARING	March 14th, 2002
DATE OF RULING	March 14th, 2002
APPEARANCES	Les Muniak Larden Muniak Consulting Inc., Toronto, ON **Agent for the Applicant** Frank Asta Chief Building Official Town of Oakville **The Respondent**

RULING

1. The Applicant

Matthew Stanton, Project Manager, PCL Constructors Canada Inc., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing a parking garage to serve the Oakville Trafalgar Memorial Hospital, Oakville, Ontario.

2. Description of Construction

The Applicant is proposing the construction of a parking garage having an F3 occupancy classification and a building area of 4,200 m^2. The structure will be comprised of noncombustible construction and is five storeys in building height. A further two storeys, proposed below grade level, will be equipped with a sprinkler system.

The construction in dispute involves the wood screen combustible cladding proposed for use on the north, east and south faces of the parking structure. The proposed cladding would be comprised of western cedar that has a low combustibility level, however, the wall assembly has not been tested in accordance with CAN/ULC-S134 standards. The cladding would be positioned approximately 406 mm (16 in) from the exterior face of the structure and tied off to the parking structure at the top and mid-point. In addition, as compensation for the use of combustible cladding which has not been subjected to Code prescribed testing, a closed-head sprinkler system is proposed around the perimeter of the structure located at the downturn on each level of the parking garage. Sprinkler heads are to be positioned approximately 2.4 m (8 ft) on centres and will be activated in the event of a fire.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposal for combustible wood screen cladding on the north, east and west facings of the subject parking garage will provide sufficiency of compliance with Sentences 3.1.5.5.(1), (2) and (3) of the Ontario Building Code (OBC).

Article 3.1.5.5. sets out restrictions on the use of combustible components in the construction of exterior walls. Sentence (1) provides that, with exceptions not applicable here, an exterior non-loadbearing wall assembly which includes combustible components may be used in a building requiring noncombustible construction provided that a) the building is not more than three storeys in building height or b) is not more than six storeys if the building is sprinklered. As a further requirement, this sentence stipulates that the interior surfaces of the wall assembly must be protected with a thermal barrier and that the wall assembly must satisfy the criteria set out in Sentences (2) and (3) when subjected to testing in conforming with CAN/ULC-S134 standards.

In this regard, Sentences (2) and (3) prescribe that flaming on or in the wall shall not spread more than 5 m above the opening during the test procedure and that the heat flux during flame exposure on the wall assembly shall not be more than 35 kW/m^2 when measured at 3.5 m above the opening during the same procedure.

As noted above, the proposed combustible exterior cladding has not been tested in conformance with CAN/ULC-S134 "Standard Method of Fire Test of Exterior Wall Assemblies", however, testing has been conducted in accordance with CAN/ULC-S102 "Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies". The Applicant argues that there is a good

correlation between these two tests when materials such as the proposed combustible cladding are being analysed. Results from the S102 test would appear to meet the parameters outlined in Sentences (2) and (3). Further, as an additional measure of fire protection for the wood cladding, a closed-head sprinkler system, which would be activated in the event of a fire, is also being offered as compensation.

4. Provisions of the Ontario Building Code

3.1.5.5. Combustible Components for Exterior Walls

(1) Except for an *exposing building face* required to conform to Sentence 3.2.3.7.(1) or Sentence 3.2.3.7.(4), an exterior non-*loadbearing* wall assembly that includes *combustible* components is permitted to be used in a *building* required to be of *noncombustible construction* provided

(a) the *building* is

(i) not more than 3 *storeys* in *building height*, or

(ii) not more than 6 *storeys* in *building height* if *sprinklered*,

(b) the interior surfaces of the wall assembly are protected by a thermal barrier conforming to Sentence 3.1.5.11.(3), and

(c) the wall assembly satisfies the criteria of Sentences (2) and (3) when subjected to testing in conformance with CAN/ULC-S134, "Standard Method of Fire Test of Exterior Wall Assemblies". (See Appendix A.)

(2) Flaming on or in the wall assembly shall not spread more than 5 m (16 ft 5 in) above the opening during the test procedure referenced in Sentence (1). (See Appendix A.)

(3) The heat flux during the flame exposure on a wall assembly shall be not more than 35 kW/m^2 (11,100 $Btu/ft^2 \cdot h$) measured 3.5 m (11 ft 6 in) above the opening during the test procedure referenced in Sentence (1). (See Appendix A.)

5. Applicant's Position

The Agent for the Applicant advised that the proposed parking garage was a part of the current redevelopment project for the hospital. The aim of providing the wood cladding was to make the design of the parking garage blend into the residential streetscape and to avoid creating what might appear to be a "concrete bunker". The Agent described the cladding as a series of interwoven telephone poles with lattice in between. This wall assembly, he submitted, would be applied to three sides of the 5 storey parking structure.

The Agent acknowledged the OBC requirement for testing in accordance with the CAN/ULC-S134 standards. He advised that this test has not been conducted because the Applicant had been unable to find a testing facility that was equipped to test a 5 storey high structure. Furthermore, he suggested that this test would be cost and time prohibitive. In support of this application, however, the Agent advised that a test had been conducted in accordance with CAN/ULC-S102 standards. He suggested that a "(c)correlation has previously been demonstrated between the CAN/ULC-S134 test on a 3-storey high wall assembly and the extended CAN/ULC-S102 test in the Steiner Tunnel Furnace." In support of this argument, testimony from a former ULC employee revealed that the two flame spread tests being considered operate on the same principal. The witness submitted that, if S134 is designed to test flame spread, then all the data needed to analyse the result of flame spread for the subject assembly could be gathered in the smaller, simpler, S102 tunnel test.
The Agent submitted that "the correlation developed previously between CAN/ULC-S102 and the

Standard CAN/ULC-S134 demonstrates that exterior claddings having 1.8 m of flame propagation in the extended Steiner Tunnel Furnace test perform favourably when tested on a 3-storey high wall assembly." Further, the Agent advised that "(t)he limited distance of flame propagation in the tunnel furnace over a prolonged period indicates that the wood screen will not propagate flame more than 5 m above the opening nor develop a heat flux exceeding 35 kW/m^2 above the opening during a 3-storey high wall test. As such, the wood screen will not contribute to fire growth on the exterior face of the parking structure beyond that permitted for exterior claddings that have demonstrated favourable performance when tested in accordance with the Standard CAN/ULC-S134."

The Agent advised that a sample of the lattice had been subjected to a tunnel test and was examined for a period longer than the standard test would require. In the Agent's view, he was satisfied that the results achieved in this test indicate that the wall assembly would perform well and would meet the requirements of CAN/ULC-S134. Moreover, despite the successful testing of the product, the Applicant is offering an additional measure of compensation for the use of combustible exterior wall components. To protect the wood screen, "a closed-head sprinkler system will be provided at the downturn on each level of the parking garage. The sprinkler heads will be spaced at approximately 8-foot OC and will activate in the event fire occurs within the parking structure." The Agent argued that, because the OBC "does not require the provision of a fire suppression system for combustible exterior cladding", this sprinkler system around the perimeter will contribute to the provision of an equivalent level of life safety to that of noncombustible exterior construction.

In summation, the Agent submitted that, in his opinion, the proposal meets the intent of the requirements of Sentence 3.1.5.5.(1) of the Code. The provision of the sprinkler system around the perimeter will provide protection to the combustible elements of the proposal. A thermal barrier is, in his opinion, being provided through the use of 1,117.6 mm (44 in) of concrete upstand at the exterior walls and the 406.4 mm (16 in) separation between the wood lattice and the main structure. Further, the comparable test that has been conducted illustrates that the cladding will perform to an acceptable degree during a fire.

6. Respondent's Position

The Respondent submitted that the proposed combustible wall assembly did not meet the requirements set out in Article 3.1.5.5. In his opinion, he could see no correlation between the required testing method of CAN/ULC-S134 and that of the much smaller test conducted using the CAN/ULC-S102 standard. Further, he advised that he could see no similarity of comparison in the results obtained from a closed horizontal test (S102) and the open vertical test anticipated by S134.

In summation, the Respondent argued that the proposed wood screening represented a substantial amount of highly combustible material which would contribute to the overall fire load of the building. He emphasized that the building was not fully sprinklered and questioned the benefit of sprinkler heads around the perimeter as proposed by the Applicant. In his opinion, sufficiency of compliance with the prescriptive requirements of Article 3.1.5.5. was not being provided.

7. Commission Ruling

It is the decision of the Building Code Commission that the combustible wood screen cladding proposed on the exterior of the north, east and south faces of the parking structure does not provide sufficiency of compliance with Sentences 3.1.5.5.(1), (2) and (3) of the Ontario Building Code at the Oakville Trafalgar Memorial Hospital Parking Garage, Oakville, Ontario.

8. Reasons

i) The entire building is not sprinklered as would be required by Clause 3.1.5.5.(1)(a).

ii) The interior surfaces of the wall are not protected in their entirety by a thermal barrier conforming to 3.1.5.11.(3).

iii) There are concerns with the sprinkler heads located along the perimeter of the building in regard to whether there would be a sufficient rise in temperature to activate the system.

Dated at Toronto this **14th** day in the month of **March** in the year **2002** for application number **2002-06**.

Len King, Vice-Chair

Gary Burtch

Tony Chow

Ruling No. 02-10-865
Application No. 2002-04

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.1.7.3.(2) and Clauses 3.1.8.1.(1)(a) and (b) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Peter C. Barbour, Fire Chief, Township of Seguin, for the resolution of a dispute with Wilbert Bethune, Chief Building Official, Township of Seguin, to determine whether the two hour fire separation between proposed A2 and existing F3 occupancies, that is penetrated by roof trusses (supported by the structural members of the separation), provides sufficiency of compliance with Sentence 3.1.7.3.(2) and Clauses 3.1.8.1.(1)(a) and (b) of the Ontario Building Code at the Humphrey District Fire Hall, 115 Highway 141, R.R. #2, Parry Sound, in the Township of Seguin, Ontario.

APPLICANT	Peter C. Barbour Fire Chief Township of Seguin
RESPONDENT	Wilbert Bethune Chief Building Official Township of Seguin
PANEL	Len King, Vice-Chair Gary Burtch Tony Chow
PLACE	Toronto, Ontario
DATE OF HEARING	March 14th, 2002
DATE OF RULING	March 14th, 2002
APPEARANCES	Peter Barbour Fire Chief Township of Seguin **The Applicant** Wilbert Bethune Chief Building Official Township of Seguin **Designate for the Respondent**

RULING

1. The Applicant

Peter C. Barbour, Fire Chief, Township of Seguin, has applied for building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing a change in occupancy for the existing building to accommodate Group A, Division 2, assembly occupancy uses at the Humphrey District Fire Hall, 115 Highway 141, R.R. #2, Parry Sound, in the Township of Seguin, Ontario.

2. Description of Construction

The Applicant is proposing a change of use for the existing fire hall which is currently classified as a Group F, Division 3 occupancy. The proposal would provide for Group A, Division 2 assembly occupancy uses to be incorporated into the building, using the existing meeting room area, while maintaining the F3 classification for the remainder of the building. The existing structure has a building area of 755 m^2 and is one storey in building height. The building is comprised of a combination of combustible and non-combustible construction and is not equipped with either sprinkler or standpipe and hose systems. As part of the proposal for a change of occupancy, however, a fire alarm system is being proposed.

As noted, the portion of the building involved in the change of occupancy includes the existing meeting room and support rooms which are presently used by the Fire Department as accessory space to the primary fire hall functions. These areas are presently separated from the apparatus room/garage area by a wall which has been labelled as a two hour fire separation. While there are no other fire rated walls in the building, some of the doors and door frames throughout the building are rated. In the existing meeting room area, two exit doors lead directly to the exterior of the building. Further, an additional set of double doors lead through the main lobby and to another set of double doors providing an exit route to the outside. Two additional access to exit routes are provided from the lobby into the garage area and from the meeting room into the garage area. While these doors are not all presently equipped with panic hardware, the proposal includes the installation of same where it is deemed appropriate.

The construction in dispute is the existing wall assembly which would separate the apparatus room/garage area from the proposed assembly occupancy. While noting that the wall assembly has been labelled as a two hour fire separation, the wall as constructed, does not provide a true fire separation in as much as the ends of the roof trusses pierce the drywall and rest on the top plate of the wall. The points of penetration of the fire separation have been fire stopped and smoke dampers have been installed in the HVAC system. To compensate for the penetration of the required two hour fire separation, as noted above, a fire alarm system (not required by the Code) is proposed to be installed in the building.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the existing wall, designed to provide a two hour fire separation but which is penetrated by roof trusses, provides sufficiency of compliance with Sentence 3.1.7.3.(2) and Clauses 3.1.8.1.(a) and (b) of the Ontario Building Code (OBC).

Sentence 3.1.7.3.(2) mandates that interior vertical fire separations must be rated for exposure on each side. Further, Clauses 3.1.8.1.(a) and (b) require, with exceptions not applicable here, that the required

fire separation be continuous and rated as specified in the Code. For the construction in dispute, it is acknowledged that a one and a half hour fire separation is required between the existing F3 occupancy and the proposed A2 occupancy. Through an oversight at the time of construction, the existing interior wall which would separate the two uses, while labelled as a two hour fire separation, is penetrated by roof trusses. It, therefore, is not considered to be a continuous fire separating membrane. This was allowed to remain as part of the original construction, however, because the building had been classified as an F3 major occupancy with Group D subsidiary elements. With the present proposal to dedicate a portion of the building for public assembly uses, the fire separation requirement would apply. In this regard, to compensate for the penetration of the fire separation, the Applicant is proposing to install a fire alarm system in the building.

4. Provisions of the Ontario Building Code

3.1.7.3. Exposure Conditions for Rating

(2) *Firewalls* and interior vertical *fire separations* shall be rated for exposure to fire on each side.

3.1.8.1. General Requirements

(1) Any wall, *partition* or floor assembly required to be a *fire separation* shall
(a) except as permitted by Sentence (2), be constructed as a continuous element (see Appendix A), and
(b) as required in this Part, have a *fire-resistance rating* as specified (see Appendix A).

5. Applicant's Position

The Applicant submitted that at the time the building was constructed it was anticipated that the meeting room would be used by fire personnel only. The proposal now is to allow community groups to use the space for public functions. It was not until the proposal for a change in occupancy for this portion of the fire hall that the issue of the fire separation came to the forefront.

The Applicant acknowledged that the interior wall was supposed to have been constructed as a fire separation but stated that the penetration of the butt ends of the roof trusses onto the top of the wall assembly was missed upon inspection by building officials. In his opinion, this penetration is only a very minor concern and would not substantially compromise the fire separation. He suggested that a significant fire would have to occur before the disputed construction caused any problem. He further emphasized that occupants of the area have two direct exits available from the room leading directly to the outside and a further exit available which routes them through an exit from the lobby. He suggested that the installation of panic hardware on the doors and the proposed fire alarm system, which would not be required by the Code, would ensure the safety of the building occupants.

In summation, the Applicant stated that while the building was not designed by an architect, it has been reviewed by an architect who determined that the additional construction required to provide the continuous fire separation anticipated by the Code would be an extremely costly venture. They would be required to rate the other three walls of the apparatus room to protect the trusses to a two hour rating. He felt the measures being offered, together with any addition requirements the Commission may request, would provide a significant level of life safety for the occupants of the building. He further emphasized that the A2 portion of the building would generally be used for short durations of time and

that, users of the F3 occupancy portion are trained to a high level in response to fire emergencies.

6. Respondent's Position

The Respondent submitted that, at the time the building was constructed, the original intent had been to allow the public to use the subject meeting area. In this regard, Council had requested that an architect be employed in the design of the building. After further consideration, it was decided that the building would be used by fire department personnel only and the entire structure was subsequently classified as an F3 major occupancy with a Group D subsidiary component.

The Respondent acknowledged that the Building Department has accepted the disputed wall as constructed because the building was to be used for Fire Department related uses only. In review of this present proposal, however, he was not comfortable accepting the as-constructed wall as the necessary fire separation between the garage and the new A2 area. He stated that because the building was only between three and five years old, Part 11 of the Code could not be used in respect to this construction.

In summation, the Respondent advised that, despite the compensating measures being offered, he did not believe he was in a position to accept the as-constructed separation and was concerned with respect to the municipality's liability in this matter if it were accepted. He had recommended that the Applicant bring the matter before the Building Code Commission as a way to resolve this dispute and would rely on the Commission's judgement in this regard.

7. Commission Ruling

It is the decision of the Building Code Commission that the two hour fire separation between proposed A2 and existing F3 occupancies, that is penetrated by roof trusses (supported by the structural members of the separation), will provide sufficiency of compliance with Sentence 3.1.7.3.(2) and Clauses 3.1.8.1.(1)(a) and (b) of the Ontario Building Code at the Humphrey District Fire Hall, 115 Highway 141, R.R. #2, Parry Sound, in the Township of Seguin, Ontario on condition that:

a) The entire building be equipped with a fire alarm system.

b) The double doors at D3 and single door at D1 are to be equipped with doors having a 45 minute fire resistance rating and provided with panic hardware. In addition, doors D2, D21 and D3 are to be equipped with panic hardware.

c) The fire separation being provided, as shown on plan A4, is to be continuous from floor to ceiling.

8. Reasons

i) Fulfilment of conditions imposed will provide sufficiency of compliance with the requirements of the OBC.

ii) The original building design anticipated use of this area as a multi-purpose room for use by the Fire Department.

Dated at Toronto this **14th** day in the month of **March** in the year **2002** for application number **2002-04**.

Len King, Vice-Chair

Gary Burtch

Tony Chow

Ruling No. 02-07-862
Application No. 2002-02

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Clause 3.3.1.10.(2)(a) and Subsection 3.1.16. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Frank Perras, President, Perras Distefano Construction Inc., for the resolution of a dispute with Barry Coleman, Chief Building Official, City of Cornwall, to determine whether the proposed inward swinging double doors would provide sufficiency of compliance with Clause 3.3.1.10.(2)(a) when considering Subsection 3.1.16. of the Ontario Building Code at United Tri-Tech Corporation, 550 Campbell Drive, Cornwall, Ontario.

APPLICANT	Frank Perras, President Perras Distefano Construction Inc. Cornwall, Ontario
RESPONDENT	Barry Coleman Chief Building Official City of Cornwall
PANEL	Kenneth Peaker, Chair Robert De Berardis Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	February 14, 2002
DATE OF RULING	February 14, 2002
APPEARANCES	Frank Perras, President Perras Distefao Construction Inc. Cornwall, Ontario **For the Applicant**

RULING

1. The Applicant

Frank Perras, President, Perras Distefano Construction Inc., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is undertaking renovations to the United Tri-Tech Corporation building located at 550 Campbell Drive, Cornwall, Ontario.

2. Description of Construction

The Applicant is renovating a Group F, Division 3, low hazard industrial facility having a building area of 1,740 m^2 (18,730 ft^2). The existing structure is two storeys in building height and is comprised of noncombustible construction. The building is equipped with a sprinkler system, a fire alarm system and a standpipe and hose system.

The renovations being undertaken include the redesign of a vacant portion of the building for use as a production area on the second floor. The production area has been designed for a maximum occupant load of 45 people but, in practice, is intended to accommodate only 20 persons. It has been provided with two required exits, one leading directly to the exterior of the building and a stair providing access to ground level.

The construction in dispute involves the double exit doors which lead from the production area into the adjacent corridor. Specifically, the doors at issue are designed to swing inwards which would comply with the Code when considering the intended occupant load of 20 individuals within the production area. However, the production area also borders an adjacent cafeteria space with a designed occupant load of up to 185 persons (plans show seating for 116 individuals). As a result of this occupant load, the cafeteria is required to be provided with two separate exits. One of the required exits from the cafeteria leads through the production area and, subsequently, through the doors which are subject to this dispute. Consequently, it is the opinion of the Respondent that the exit doors from the production area to the corridor form part of the access to exit from the cafeteria and thus, should swing outward, in the direction of exit.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the inward swinging double doors provide sufficiency of compliance with Clause 3.3.1.10.(2)(a) when considering Subsection 3.1.16. of the Ontario Building Code (OBC).

Clause 3.3.1.10.(2)(a) requires that, with an exception not applicable here, a door that opens into a corridor providing access to exit from a room or suite shall swing in the direction of travel to the exit if the occupant load is more than 60 people. In this respect, the occupant load in the room from which the doors open is less than the 60 person benchmark established by the Code. However, the doors in question also form part of the access to exit from the adjacent cafeteria area.

When considering the occupant load specifications established in Section 3.1.16. the cafeteria could be occupied by up to 185 persons. Plans submitted with the Application show tables and chairs in this space to accommodate 116 non-fixed seats, however according to the Applicant, the anticipated use of the cafeteria is not expected to exceed 30 persons.

4. Provisions of the Ontario Building Code

3.3.1.10. Door Swing

(1) Except as permitted by Article 3.3.1.11., a door that opens into a corridor or other facility providing *access to exit* from a *suite*, or a room not located within a *suite*, shall swing on a vertical axis.

(2) Except as permitted by Article 3.3.1.11., a door that opens into a corridor or other facility providing *access to exit* from a room or *suite* shall swing in the direction of travel to the *exit* if the room or *suite* is used or intended for

(a) an *occupant load* more than 60,
(b) a *high hazard industrial occupancy*, or
(c) a *hazardous classroom* in an elementary or secondary school.

Section 3.1.16. Occupant Load

Please see Ontario Building Code

5. Applicant's Position

The Applicant submitted that it was his preference for the subject double doors to swing inward, into the production area. He explained that the corridor into which the doors lead frequently accommodates large production/testing equipment which must roll along the aisle. These units are quite expensive and, to prevent damage, it is preferable for the doors from this area to swing inward. In addition, the Applicant suggested that the equipment may also interfere with the operation of the doors themselves if they were to swing outward and advised that these doors are typically left closed.

In respect to accommodating the exiting requirements of the cafeteria, the Applicant argued that, although designed to accommodate 116 to 185 persons, the cafeteria generally accommodates 15 to 20 individuals, even during the lunch hour. He suggested that a maximum of 30 persons would use the cafeteria at any one time. In addition, he submitted that no food is prepared in this area and that vending machines were the only source of food provision. It is generally a space for those to sit and eat rather than a fully operational cafeteria, he argued.

In summation, the Applicant submitted that the occupancy for both areas would not likely exceed the 60 person maximum established by the Code. In addition, he advised that the building is provided with emergency lighting and is fully sprinklered. Furthermore, one of the exits from the production area leads directly to an exterior steel stair. The stair offers ground level access to occupants of this area exiting the building and is the closest means to exit the building from the door that leads from the cafeteria into the production area.

6. Respondent's Position

The Respondent chose not to attend the hearing. The Commission, therefore, relied upon his written submission only.

The Respondent argued that "the occupant load as per submitted and reviewed plans, show a production area with 45 persons and a cafeteria space with 116 non-fixed seats (tables and chairs). The maximum allowable design occupant load for this cafeteria space could be as high as 185 persons as per table 3.1.16.1." He argued that the "(t)he cafeteria space required two separate exists (sic) because of this occupant load and travel distance. This production area now serves as part of the access to exit (Door D36 and D51) serving a total of occupant load exceeding 60. Clause 3.3.1.10(2)(a) would apply and these access to exit doors must swing outwards in the direction of exit travel."

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed inward swinging double doors will provide sufficiency of compliance with Clause 3.3.1.10.(2)(a) when considering Subsection 3.1.16. of the Ontario Building Code at United Tri-Tech Corporation, 550 Campbell Drive, Cornwall, Ontario on condition that:

1. The cafeteria is to have a maximum occupant load of not more than 30 persons. A permanent sign indicating that occupant load shall be posted in a conspicuous location.

2. Floor line painting or the equivalent is to indicate to path of travel between door D51 (door to the exterior and stair to ground level) and D52 (cafeteria door opening into production area).

3. The production area shall have a maximum occupant load of 45 persons. A permanent sign indicating that occupant load shall be posted in a conspicuous location.

8. Reasons

i) With fulfilment of the conditions imposed above, sufficiency of compliance with the Code requirements will be provided.

ii) The second floor is considered to be a suite, as the area is used by a single tenant only.

iii) The second floor corridor is not considered to be a public corridor under the OBC since it does not provide access from more than one suite (OBC A-1.1.3.2.).

iv) There is no kitchen component to the cafeteria and it is not used for food preparation.

v) The building is fully sprinklered.

vi) Equipment traversing the aisle outside the production area may interfere with outward swinging doors.

Dated at Toronto this **14th** day in the month of **February** in the year **2002** for application number **2002-02.**

Kenneth Peaker, Chair

Robert De Berardis

Donald Pratt

Ruling No. 02-05-860
Application No. 2001-82

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 4.1.10.8. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Joan Ross, CEO, Northumberland Health Care Corporation, for the resolution of a dispute with Frank Lukes, Chief Building Official, Town of Cobourg, to determine whether the omission of a roof anchoring system, where window washing and maintenance is intended to be carried out from ladders with grade level access and where equipment is positioned to permit rooftop maintenance without approaching the parapet, provides sufficiency of compliance with Article 4.1.10.8 of the Ontario Building Code at Northumberland Health Care Corporation, 1000 De Palma Drive, Cobourg, Ontario.

APPLICANT	Joan Ross, CEO Northumberland Health Care Corporation Coburg, Ontario
RESPONDENT	Frank Lukes Chief Building Official Town of Cobourg
PANEL	Michael Steele, Chair-Designate Robert De Berardis Fred Barkhouse
PLACE	Toronto, Ontario
DATE OF HEARING	January 24, 2002
DATE OF RULING	January 24, 2002
APPEARANCES	Dan MacKay, Building Code Consultant Larden Muniak Consulting Inc., Toronto, Ontario **Agent for the Applicant** Frank Lukes Chief Building Official Town of Cobourg **The Respondent**

RULING

1. The Applicant

Joan Ross, CEO, Northumberland Health Care Corporation, Cobourg, Ontario, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing a care and treatment facility referred to as the Northumberland Health Care Corporation at 1000 De Palma Drive, Cobourg, Ontario.

2. Description of Construction

The Applicant is constructing a health care facility having a Group B, Division 2 occupancy classification. The building is 2 storeys in height and has a total building area of 10,145 m^2. It is comprised of noncombustible construction and will be equipped with fire alarm, sprinkler and standpipe and hose systems.

The building forms an irregular footprint and measures between 8.35 m to 8.7 m in height. Atop the building are three mechanical penthouses through which access from the building's interior to the roof surface is provided. Concrete pavers on the roof form a walkway between penthouses. Numerous window openings penetrate the exterior walls of the building, providing views from patient rooms and administrative areas on the two treatment floors.

The construction in dispute involves the omission of a rooftop anchor system where window cleaning and maintenance is intended to be carried out from the exterior of the building. Instead, it is intended that ladders, up to 13 m in length, will be used to conduct window cleaning and exterior maintenance. These ladders would be securely fastened or stabilized to prevent tipping or falling. In addition, rooftop equipment is positioned a minimum of 3 m from the edge of the roof such that maintenance can be carried out in this area from the roof surface.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposal to perform window washing and maintenance from ladders with grade level access and where rooftop equipment is positioned to permit its maintenance from the roof surface, provides sufficiency of compliance with the provisions of Article 4.1.10.8. of the Ontario Building Code (OBC).

This Article requires that, where maintenance and window cleaning are intended to be undertaken from the exterior of the building, an anchor system must be provided where any portion of the roof is more than 8 m above the ground level. The Article continues by describing the design and testing requirements for anchor systems and the composition of materials to be used. It also permits the use of other anchor systems provided that an equivalent level of safety will be provided.

For the building subject to this dispute, it is intended that maintenance and window cleaning activities will be performed from the exterior of the building. In addition, the height of the structure slightly exceeds the 8 m criterion outlined in the Code as being the height at which an anchor system shall be installed. Despite this, no anchor system is being proposed as it is the owners intention to carry out maintenance and window washing from ladders with grade level access. In addition, rooftop equipment has been set back from the parapet to allow for regular maintenance without the need to approach the edge of the roof.

4. Provisions of the Ontario Building Code

4.1.10.8. Anchor Systems on Building Exterior

(1) Where maintenance and window cleaning operations are intended to be carried out on the exterior of a *building* described in Article 2.1.1.2, anchor systems shall be provided where any portion of the roof is more than 8 m (26 ft 3 in) above adjacent ground level.

(2) Except as provided in Sentence (3), the anchor systems in Sentence (1) shall be designed, installed and tested in conformance with CSA Standard Z91, "Safety Code for Window Cleaning Operations".

(3) Other anchor systems may be used where such systems provide an equal level of safety.

(4) The anchor system material shall be made of stainless steel, aluminum, or other corrosion resistant base material, or from steel that is hot dipped galvanised, in accordance with CSA Standard G164-M81, "Hot Dip Galvanising of Irregularly Shaped Articles".

5. Applicant's Position

The Agent for the Applicant acknowledged that the Building Code requires a roof anchor system be provided where a building exceeds 8 m in height. He also acknowledged that the subject building exceeds this height, although marginally. He emphasized however that there are two contrary pieces of provincial legislation governing the matter of maintenance to the exterior of a building, namely the Ontario Building Code and the *Occupational Health and Safety Act*.

In this regard, he advised the Commission that the *Occupational Health and Safety Act* permits work to be carried out from ladders up to 13 m high. In addition, workers on ladders at this height are exempt from the requirement to be protected by a fall arrest system provided that the ladders are securely fastened or stabilized to prevent tipping or falling. He also argued that, in this *Act*, a fall arrest system is not prescribed in situations where workers are not required to come closer than 3 m to the edge of a roof that is located more than 3 m above the next highest surface. He submitted that both of these provisions are intended to be met in this situation. Ladders, he argues, will be secured and it has been demonstrated that all required maintenance can be undertaken from ladders or a surface not more than 3 m above the adjacent level.

As a further argument in support of the omission of an anchor system, the Agent submitted that Sentence 2.7.2.2.(1) of the OBC permits the use of systems not described in the Code provided that a level of performance is achieved in keeping with its intent. He suggested that ladders, and a program that limits access to the edge of the roof, will provide a level of performance in keeping with the intent of Article 4.1.10.8. In respect to the provision of equivalents, the Agent acknowledged that Section 2.7. excludes Part 4 requirements, however, Article 2.7.2.3., Building Designs, permits designs not specifically described in Part 4.

In summation the Agent submitted that, while the Building Code may require the installation of an anchor system, the *Occupational Health and Safety Act* does not require it to be used, provided that safe working practices are implemented. He suggested that, if installed, the anchors would not likely be used since the owners intend to conduct maintenance from ladders at ground level.

6. Respondent's Position

The Respondent submitted that the Code is specific in requiring that buildings exceeding 8 m in height be equipped with an anchor system when maintenance and window washing are to be carried out from the exterior. He argued that he did not consider ladders to be an alternative anchor system. The roof anchors are safety features and to accept anything less than the minimum Code requirement could potentially create an unsafe situation. The Building Code is intended to offer all available safety measures and if this building were to be permitted to exempt an anchor system, employees would not be afforded any choice in how to conduct their work.

In addressing the provisions of the *Occupational Health and Safety Act*, the Respondent argued that at no point does this *Act* exempt a building from being equipped with safety features required by the Building Code. In addition, he stated that the two pieces of legislation are not necessarily in conflict since the Ontario Building Code is meant to address new construction whereas the *Occupational Health and Safety Act* governs all existing working conditions. The building which is subject to this dispute is being newly constructed and therefore must comply with the provisions of the OBC.

7. Commission Ruling

It is the decision of the Building Code Commission that the omission of a roof anchoring system, where window washing and maintenance is intended to be carried out from ladders with grade level access and where equipment is positioned to permit rooftop maintenance without approaching the parapet, does not provide sufficiency of compliance with Article 4.1.10.8 of the Ontario Building Code at Northumberland Health Care Corporation, 1000 De Palma Drive, Cobourg, Ontario.

8. Reasons

i) Portions of the roof of the building complex are located such that they minimally exceed the requirement of 8 m above ground level. Sentence 4.1.10.8.(1) requires that, where this situation occurs, an anchor system shall be provided.

ii) No alternative anchoring systems or safety features were proposed which would allow for a finding of sufficiency of compliance with Article 4.1.10.8.

Dated at Toronto this **24th** day in the month of **January** in the year **2002** for application number **2001-82.**

Michael Steele, Chair-Designate

Robert De Berardis

Fred Barkhouse

Ruling No. 02-04-859
Application No. 2001-81

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 3.2.3.7.(7) and (8) and Sentences 3.1.11.7. (1) and (2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by David Sheps, Project Manager, Metro Toronto Housing Corporation, for the resolution of a dispute with Steve Franklin, Director, Building Division, East District, City of Toronto, to determine whether the proposed foam plastic insulation and metal cladding system provides sufficiency of compliance with Sentences 3.2.3.7.(7) and (8) when considering Sentences 3.1.11.7. (1) and (2) of the Ontario Building Code at 1021 Birchmount Road, Toronto, Ontario.

APPLICANT	David Sheps, Project Manager Metro Toronto Housing Corporation, Toronto, Ontario
RESPONDENT	Steve Franklin Director, Building Division East District City of Toronto
PANEL	Michael Steele, Chair-Designate Robert De Berardis Fred Barkhouse
PLACE	Toronto, Ontario
DATE OF HEARING	January 24, 2002
DATE OF RULING	July 16, 2002
APPEARANCES	Andrew Holford, Engineer Norman Lee & Associates Ltd. Markham, Ontario **Agent for the Applicant** Arthur Jammer Building Plan Examiner City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

David Sheps, Project Manager, Metro Toronto Housing Corporation, Toronto, Ontario, has received an order to comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, to remedy certain alleged deficiencies with respect to renovations conducted at 1021 Birchmount Road, Toronto, Ontario.

2. Description of Construction

The Applicant has undertaken certain renovations/repairs to an existing Group C, residential apartment building. The structure is 12 storeys in building height and 1922 m^2 (20,688 ft^2) in building area. It is comprised of noncombustible construction and is equipped with fire alarm and standpipe and hose systems.

The building is constructed of reinforced concrete slabs supported on concrete columns and walls. The exterior is brick veneer construction which is supported on the edge of the concrete slab at each floor level. The work that has been carried out on this building involved the repair of the concrete balconies and replacement of balcony railings. In addition, repairs to the building envelope have been undertaken, including the installation of new insulation and metal cladding to the exterior face of the top four floors on the eastern elevation of the building.

The construction in dispute involves the new insulation and metal cladding system and, specifically, the use of foam insulation beneath the metal clad exterior. As outlined in the Applicant's submission, the new cladding system and the remaining existing wall are comprised of the following components:

- "22 Gauge (0.76mm) flat sheet steel panels, profile to be AD-300 by VicWest;
- 2" Styrofoam blue board by Dow Chemical (Type IV insulation);
- L2x2x⅜" and L1-¾x1-¾x¼" angles anchored to the floor slabs with ⅜" Ø Hilti Kwik Bolts @ 24" c/c;
- ½" Stucco cladding;
- 4" clay brick;
- 4" concrete block;
- 1" foam plastic insulation (Type 1);
- 1" plaster
- Painted finish."

The issue in dispute with respect to this construction is whether the as-installed wall system is required to be tested in accordance with the provisions of the Ontario Building Code.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-installed insulation and metal cladding system will provide sufficiency of compliance with Sentences 3.2.3.7.(7) and (8) when considering Sentences 3.1.11.7. (1) and (2) of the Ontario Building Code.

Sentences 3.2.3.7.(7) provides that, with an exception not applicable here, and in addition to the requirements outlined in Sentences (2), (3), (5) and (6), foam plastic insulation used in the construction

of an exterior wall for a building more than 3 storeys in height shall be protected on its exterior surface by either concrete or masonry not less than 25 mm in thickness or by noncombustible material that complies with the criteria for testing and acceptance outlined in Sentence (8). The testing in this instance is required to conform to the CAN/ULC-S101-M "Standard Methods of Fire Endurance Tests of Building Construction and Material".

As noted, Sentence (8) of Article 3.2.3.7. outlines the criteria for testing and conditions of acceptance for a wall assembly that would satisfy the requirements of Clause (7)(b). These criteria and conditions include a) that the exposed area of the wall assembly shall be not less than 9.3 m^2 and have no dimension less than 2,750 mm, b) the exposed surface is to include typical vertical and horizontal joints, c) tests are to be continued for a minimum of 15 minutes following the standard time/temperature curve of the referenced standard, d) the noncombustible protective material will remain in place and no openings will develop that would be visible when viewed normal to the face of the material, and e) the same protective material will not disintegrate in a manner that would foster the spread of fire along the surface of the test assembly.

In respect to the subject construction in which foam plastic insulation has been used, the metal cladding has not been tested specific to the parameters outlined in Sentence 3.2.3.7.(8) and to the specified standard required in Sentence (7). The Applicant's position in this regard is that the 22 Gauge sheet steel being used as an exterior cladding is a noncombustible material that would provide sufficiency of compliance with the provisions of Sentences 3.2.3.7.(7) and need not be tested as outlined in Sentence (8). In support of the claim that the metal cladding would meet the intent of the Code the Commission is asked to refer to Sentences 3.1.11.7.(1) and (2).

Sentence 3.1.11.7.(1), in respect to Fire Stop Materials, requires that materials used to separate concealed spaces into compartments shall remain in place for a minimum of 15 minutes when subjected to the same ULC standard of fire exposure anticipated in Sentence 3.2.3.7.(7). Further, Sentence (2) of Article 3.1.11.7 provides that gypsum board not less than 12.7 mm thick and sheet metal not less than 0.38 mm thick does not require testing with the CAN/ULC standard provided that all joints have continuous support.

It is argued that these provisions, while not specific to the construction of an exposing building face, illustrate the compliance of the metal cladding material used in the protection of the foam plastic insulation subject to this dispute. As noted above, the sheet metal used in this instance is 0.76 mm in thickness and would meet the exemption for testing when considering the provisions outlined in Sentence 3.1.11.7.(2), but is not specifically noted in Sentence 3.2.3.7.(7) being the provision applicable to the construction in dispute.

4. Provisions of the Ontario Building Code

3.2.3.7. Construction of Exposing Building Face

(7) Except as permitted by Sentence (9), in addition to the requirements of Sentences (2), (3), (5) and (6), foamed plastic insulation used in an exterior wall of a *building* more than 3 *storeys* in *building height* shall be protected on its exterior surface by

(a) concrete or masonry not less than 25 mm (1 in) thick, or

(b) *noncombustible* material that complies with the criteria for testing and conditions of acceptance of Sentence (8) when tested in conformance with CAN/ULC-S101-M, "Standard Methods of Fire Endurance Tests of Building

Construction and Materials".

(8) The criteria for testing and the conditions of acceptance for a wall assembly to satisfy the requirements of Clause (7)(b) are that

(a) the fire exposed area of the wall assembly shall be not less than 9.3 m^2 (100 ft^2) and have no dimension less than 2 750 mm (9 ft),

(b) the exposed surface will include typical vertical and horizontal joints,

(c) the test shall be continued for not less than 15 min and the standard time/temperature curve of the referenced standard shall be followed,

(d) the *noncombustible* protective material will remain in place and no through openings will develop that are visible when viewed normal to the face of the material, and

(e) the *noncombustible* protective material will not disintegrate in a manner that would permit fire to propagate along the surface of the test assembly.

3.1.11.7. Fire Stop Materials

(1) Except as permitted by Sentences (2) to (4), materials used to separate concealed spaces into compartments shall remain in place and prevent the passage of flames for not less than 15 min when subjected to the standard fire exposure in CAN/ULC-S101-M, "Standard Methods of Fire Endurance Tests of Building Construction and Materials".

(2) Gypsum board not less than 12.7 mm (½ in) thick and sheet steel not less than 0.38 mm (0.015 in) thick need not be tested in conformance with Sentence (1) provided all joints have continuous support.

5. Applicant's Position

The Agent for the Applicant explained that an application for a building permit was submitted to the municipality for a retrofit of the subject building. As part of this retrofit, new cladding for the top four floors of the eastern building face was required. In this respect, the Agent advised that they conducted research as to an appropriate cladding system that would provide compliance with the provisions of the Ontario Building Code.

Resulting from this research it was decided that a cladding system which incorporated foamed plastic insulation covered with a 22 Gauge (0.76mm) steel cladding would be installed. Upon inspection by the City they were advised that this system would require testing as set out in Sentences 3.2.4.7.(7) and (8) of the OBC because of the use of foam plastic insulation. The Agent stated that, in his opinion, testing of this system is not necessary as the sheet steel being used as exterior cladding is a noncombustible material that would meet the requirements of the OBC and is, in fact, recognized as a material exempt from testing in Article 3.1.11.7. This Article in the Code refers to the same ULC standard as set out in the Sentences in dispute and states that, sheet steel not less than 0.38 mm thick need not be tested. The sheet steel in question, he argued, is two times thicker than the exempted material permitted by this Article.

In addition to having regard for this provision, the Agent contacted a representative of Bodycote Ortech Inc. who opined that the subject material would retain a significant amount of its original strength and that no phase change would occur at a temperature of 538°C. This is well above the 450°C required by the OBC. Also, the Agent advised that a technical advisor for Part 3 of the building code at the

Canadian Code Centre was contacted for an opinion. In his response the Agent was advised that it appeared as though the wall assembly in question would provide protection of the foamed plastic insulation to both the adjacent spaces in the building and protection on the exterior from fire spread up the facade.

The Agent argued that the intent of the Ontario Building Code was to ensure that the cladding being provided to protect foam plastic insulation would not disintegrate. The proposed system, which includes a 0.76 mm steel cladding will meet this intent, he argued. In addition, he submitted that "there are insulated wall panels constructed with similar materials and with similar configurations that have passed the requirements of CAN/ULC S-101-M. An example of such a panel is the Thermawall 1000 manufactured by Coldmatic Building Systems." He submitted that "(t)his insulated wall panel is constructed with foamed plastic insulation varying in thickness from 2" to 6" laminated between 2 layers of 26 Gauge (0.46mm) sheet steel and is listed as complying with ULC S-101."

As further support for this application, and at the request of the Commission, the Agent supplied as-built details of the metal exterior wall cladding system, safety data sheets of the foam plastic insulation, and other detailed information intended to ensure that the system would provide sufficiency of compliance with the requirements of the OBC. In summation, the Agent submitted that, based on the information contained in the Code, as well as information obtained from experts in the field, it was his opinion that the proposed cladding system would stay in place and not disintegrate and would meet the testing requirements outlined in the OBC.

6. Respondent's Position

The Designate for the Respondent submitted that the cladding system used on the eastern elevation of this 12 storey building did not meet the requirements as set out in the OBC in terms of testing to ensure that exterior protection is provided. The foam plastic insulation used in the installation is an extremely flammable and toxic material and must be adequately protected, he argued. In this regard the Building Code provides for either a masonry exterior surface or a noncombustible material that is ULC listed, thus meeting the appropriate standard.

The Designate argued that a full size test, including joints in the assembly, would be required to determine whether the metal cladding meets the Code standards. He emphasized that the city has never given a prior approval for this type of system. In all cases, they would have required the insulation to be replaced with a noncombustible material.

In respect to the Applicant's argument that the material meets the equivalency standards, the Designate stated that, in addition to not having enough information to make such a determination, he also did not have the authority to consider equivalence in this instance. Where the Code sets out specific test procedures that must be undertaken to ensure compliance, he must ensure that the criteria are met and all concerns have been addressed prior to approval.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-installed foam plastic insulation and metal cladding system does not provide sufficiency of compliance with Sentences 3.2.3.7.(7) and (8) when considering Sentences 3.1.11.7.(1) and (2) of the Ontario Building Code at 1021 Birchmount Road, Toronto, Ontario.

8. Reasons

i) The wall assembly has not been tested in accordance with the requirements of the Building Code.

ii) The Commission has concern with respect to the thermal protection of the foam plastic insulation, particularly at window openings.

iii) The wall assembly contains combustible material that has a maximum use temperature of 165°F and is specified by the manufacturer to avoid temperatures of 572°F.

iv) If exposed to fire or heat dense smoke will be produced and flame spread will develop. Adequate protection must be provided to ensure this does not occur.

Dated at Toronto this **16th** day in the month of **July** in the year **2002** for application number **2001-81.**

Michael Steele, Chair-Designate

Robert De Berardis

Fred Barkhouse

Ruling No. 02-03-858
Application No. 2001-80

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.8.8.5.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Luigi Mongillo, President, Mongillo Construction Ltd., for the resolution of a dispute with John Wright, Chief Building Official, Town of Markham, to determine whether the as-installed design of the vertical steel pickets, which includes ornamental "birdcages" and "rosettes" set at a spacing of 55.5 mm (2 3/16 in) for a guard on a horizontal surface and slightly less for a guard serving a stair, complies with the intent of Sentence 9.8.8.5.(1) of the Ontario Building Code at 26 and 28 Lee Avenue, Markham, Ontario.

APPLICANT	Luigi Mongillo, President Mongillo Construction Ltd. Markham, Ontario
RESPONDENT	John Wright Chief Building Official Town of Markham
PANEL	Len King, Vice-Chair John Guthrie Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	January 17, 2002
DATE OF RULING	January 17, 2002
APPEARANCES	Michael Lio Lio & Associates Toronto, Ontario **Agents for the Applicant**
	Fabio Di Mambro Canadian Railings Concord, Ontario
	Anthony Boyko Chief Building Official Town of Markham **Designate for the Respondent**

RULING

1. The Applicant

Luigi Mongillo, President, Mongillo Construction Ltd., has received an order to comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, to remedy certain alleged deficiencies with respect to the construction of two residential dwellings at 26 and 28 Lee Avenue, Markham, Ontario.

2. Description of Construction

The Applicant is constructing two Group C single detached dwellings. Each building is two storeys in height with a building area of 388 m^2.

The construction in dispute involves the design of the guards serving the main stairs of the house and the second floor landings. The as-installed guards are comprised of square metal pickets spaced 101.6 mm (4 in) on centre with decorative elements at their mid-points. The two types of decorative elements are described as "bird cages" and "rosette knobs". The bird cage features are 203.2 mm (8 in) high and project 19.05 mm (¾ in) from the sides of the picket, at an angle of greater than 30° from horizontal. These elements are not installed adjacent to one another, but rather, occur on every fourth picket, at the same height as the decorative rosette knob located on either side. This rosette feature measures 50.8 mm (2 in) in height and projects 14.29 mm ($^{9}/_{16}$ in) from the edge of the picket, also on an angle greater than 30°. These knobs are positioned adjacent to one another as well as adjacent to the bird cage elements.

As a result of these projections, spacing between the decorative elements at the mid point of the pickets ranges from 55.5 mm to 70 mm for the guards located at the landings. Spacing between the elements is slightly less where the guard serves the stairways. Pickets at these locations are more closely spaced, because of the need to have at least two pickets situated side by side on the run of each stair.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-installed guards with decorative elements at their mid-point which are spaced a minimum of 55.5 mm apart, provide sufficiency of compliance with Sentence 9.8.8.5.(1) of the Ontario Building Code (OBC).

This provision stipulates that required guards must be designed in such a way so as not to facilitate climbing between 100 and 900 mm above the floor or walking surface of the area the guard is protecting. The issue at dispute is whether the guards as designed and installed will facilitate climbing.

4. Provisions of the Ontario Building Code

9.8.8.5. Design to Prevent Climbing
(See Appendix A.)

(1) *Guards* required by Article 9.8.8.1. and serving *buildings* of *residential occupancy* shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2 ft 11 in) above the floor or walking surface protected by the *guard* will facilitate climbing.

5. Applicant's Position

The Applicant's Agent provided the Commission with some background in respect to the difficulties that have faced railing manufactures across the province as a result of the inconsistency in interpretation of Article 9.8.8.5. of the Ontario Building Code. He suggested that a Commission ruling on the interpretation of this provision would he helpful in providing guidance and clarity in respect to the issue of climability. The Agent submitted that, in light of recent interpretations by some building officials and the Building and Development Branch of the Ministry of Municipal Affairs and Housing (MMAH), many traditionally approved guard designs are now being rejected because of their perceived climbability. In this regard he emphasized that, while not looking to compromise safety, he felt there was a need for some flexibility in design.

The Agent submitted that the intent of the Article in question was to not entice or to make it easy for someone, particularly a child, to climb a guard. He argued that, in this regard, it was not the intent of the provision to prevent or prohibit climbing. This, he submitted, would be a near impossible task given the dexterity of children of varying ages. The Agent provided the Commission with an analysis of the abilities of children at different ages and suggested that, the prime concern would be in respect to a child at age two to three. A one year old child would not have the physical strength or coordination to pull up and over a barrier, he submitted. Once a child reached the age of three to four they would likely be able to climb any guard using knees and feet but would exercise more judgement and recognize the danger associated with their activities.

When examining a guard design in relation to the creation of a toe hold for a two to three year old child, the Agent presented evidence that the average shoe of a child this age would have a sole width of approximately 70 mm. He suggested that a 50 mm distance between protrusions having a sloped edge greater than 30º would not be sufficient to facilitate a toe hold for a child within that age range. They simply would not have sufficient surface on which to stand and pull themselves over. This 50 mm distance between protrusions, incorporating a sloped edge, is less than the 80 mm suggested by the MMAH as being the minimum distance between protrusions. This minimum he argued is not reasonable when considering the foot widths of small children.

Again the Agent emphasized that the intent of this Article was to not *entice* children to climb the guard. It is felt that 50 mm between protrusions is sufficient to meet the intent of this OBC requirement. The 80 mm suggested by the Ministry, he stated, is creating havoc in the railing industry. In fact, requiring an 80 mm opening would not be possible in many traditional picket designs. In fact, it has never been questioned for traditional wooden railing designs, it is only now becoming more of an issue since iron pickets are again becoming more popular.

The Agent also advised that data gathered from Health Canada in respect to statistics on injuries resulting from falls in the home indicates that one in four injuries is a result of falling down basement stairs. Others result from tripping while running on hard surfaces or while carrying objects. Falls from windows were also noted as being rare, but serious. The statistics, he noted, did not mention climbing up and over a guard as being of great concern. From a risk point of view he suggested that other household features were more hazardous.

In summation, the Agent reiterated that, when considering the intent of the Article in dispute, the application was primarily in reference to children and their ability to climb. The Ministry position that has been circulated doesn't take into consideration the judgement and awareness of older children. He stated that the guard design anticipated by this application clearly meets the intent of the Code. The decorative protrusion at the mid point of each picket, being more than 50 mm apart and at an angle of

more than 30°, will not entice or encourage children to climb the guard.

6. Respondent's Position

The Respondent submitted that two orders to comply had been issued for the properties subject to this hearing. In his opinion the guard that has been installed in these two dwellings does not meet the intent of this objective-based Code provision. This intent, as stated, is to ensure that no attachment between 100 mm and 900 mm above the floor will facilitate climbing. The protrusions at the mid-point of the picket are clearly within this climbing zone. He advised that he would have accepted a modified design containing the rosette feature provided that the rosettes were offset with a straight edge on an adjacent picket. This would provide the clearance level anticipated in Ministry communication which suggested that 80 mm distance between protrusions would be the minimum acceptable.

The Respondent advised that this matter has been discussed at a number of meetings but no measurement could be agreed upon as to what, in fact, would be acceptable from a design standpoint. He felt this would be an excellent test case in which to determine wether angled decorative features as close as 50 mm to 60 mm would be appropriate. However, it remained his position that the as-installed guard may facilitate climbing and therefore would not meet the intent of the Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-installed design of the vertical steel pickets, which includes ornamental "birdcages" and "rosettes" set at a spacing of 55.5 mm (2 3/16 in) for a guard on a horizontal surface and slightly less for a guard serving a stair, complies with the intent of Sentence 9.8.8.5.(1) of the Ontario Building Code at 26 and 28 Lee Avenue, Markham, Ontario.

8. Reasons

i) The standard of performance set out in Sentence 9.8.8.5.(1) is not to prevent climbing. Rather, it is to avoid the facilitation of climbing, which, we hold is to make climbing easier and more inviting. Moreover, it is not the intention of this provision to preclude all design elements from vertical guard pickets. It is simply to prevent the installation of guards with designs that increase the likelihood of guard climbing hazards.

ii) Based on the above, the BCC maintains that certain types of vertical picket ornamentation can protrude into the space between pickets without facilitating climbing.

iii) Considering the present picket example found at 26 and 28 Lee Avenue, Markham, Ontario, that proposes an alternating pattern of birdcage and rosette decorated pickets with a space of 55.5 mm (2 3/16 in) between them, the design does not facilitate climbing since:

   a) the space between decorations is enough that young children (1 to 3 years of age) will experience great difficulty in gaining a foothold;

   b) the alternating of birdcages and rosettes creates uneven protrusions from the pickets also makes securing a foothold problematic; and,

   c) the birdcages and rosettes protrude from the pickets at an angle of greater than 30^0

below horizontal which will reduce foot grip as well.

iv) The design presents no more of a climbing hazard than guards constructed of wood pickets which have similar spaces between the decorative protrusions of the pickets.

Dated at Toronto this **17th** day in the month of **January** in the year **2002** for application number **2001-80**.

Len King, Chair - Designate

John Guthrie

Gary Burtch

Ruling No. 02-02-857
Application No. 2001-79

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Clause 3.11.3.1.(9)(a) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Peter Bryk, Executive Director of Engineering, Howard Johnson/Ritz Motel Limited, for the resolution of a dispute with Mel Brown, City of Niagara Falls, to determine whether the removal of the interior and exterior bridges, which form part of the continuous pool deck and facilitate the crossing of a 1752.6 mm (5 ft 9 in) portion of a seasonally divided pool, provides sufficiency of compliance with Clause 3.11.3.1.(9)(a) of the Ontario Building Code at the Howard Johnson hotel, 5905 Victoria Avenue, Niagara Falls, Ontario.

APPLICANT	Peter Bryk, Executive Director of Engineering Howard Johnson/Ritz Motel Limited Niagara Falls, Ontario
RESPONDENT	Mel Brown Chief Building Official City of Niagara Falls
PANEL	Len King, Vice-Chair John Guthrie Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	January 17, 2002
DATE OF RULING	January 17, 2002
APPEARANCES	Peter Bryk, Executive Director of Engineering Howard Johnson/Ritz Motel Limited Niagara Falls, Ontario **The Applicant** Robert Romanuk Manager of Inspection Services City of Niagara Falls **Designate for the Respondent**

RULING

1. The Applicant

Peter Bryk, Executive Director of Engineering, Howard Johnson/Ritz Motel Limited, has received an order to comply and has applied for a demolition permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, in respect to the removal of two bridges that span portions of a seasonally divided swimming pool at the Howard Johnson hotel, 5905 Victoria Avenue, Niagara Falls, Ontario.

2. Description of Construction

The Applicant is the Executive Director of Howard Johnson/Ritz Motel Ltd., owners of a hotel property in Niagara Falls. The building is classified as a Group C major occupancy. It is comprised of noncombustible construction and is equipped with a fire alarm system.

The hotel also accommodates a swimming pool which is subject to this dispute. The pool combines two, kidney shaped areas. One indoors and the other outdoors. The maximum water depth of the pool is approximately 1,524 mm (5 ft) at its deepest point. As a combination indoor/outdoor facility the two pool elements are connected by a swim-through water channel which allows users to travel between the indoor and outdoor portions. The channel measures 1,752.6 mm (5 ft 9 in) wide and is 2,006.6 mm (6 ft 7 in) long on the interior portion of the pool and 1,854.2 mm (6 ft 1 in) in length on the exterior. It connects the two larger, kidney shaped segments. During times of inclement weather, the water channel can be blocked by a retractable plexiglass gate. When in place, this barrier serves to divide the pools such that the indoor area can be used independent from the outdoor area, essentially creating two pools. A windowed wall separates the indoor and outdoor pool areas. A set of outward swinging double doors, equipped with panic hardware, is situated on one side of the water channel and provides access to the pool deck between the two areas.

The construction in dispute involves two arched bridges which cross the swim-through water channel on either side of the windowed wall. These bridges were originally constructed to provide a continuous deck around each area of the pool. The water depth beneath the bridges is approximately 1,270 mm (4 ft 2 in) and a clearance of 2,133.6 mm is provided from the underside of the bridge to the bottom of the pool. The Applicant has presently removed the indoor bridge and is proposing the removal of the outdoor bridge as well. Demolition of these features has been requested in that they are viewed as a safety hazard to patrons of the pool. As compensation for removal of the bridges it is proposed that additional life safety equipment will be situated on the pool deck so that a ring buoy and 3.66 m (12 ft) rescue pole are available on both sides of the narrow channel where the bridges would have crossed.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the removal of the interior and exterior bridges, which facilitate the crossing of a 1752.6 mm (5 ft 9 in) portion of a seasonally divided pool and form part of the continuous pool deck, provides sufficiency of compliance with Clause 3.11.3.1.(9)(a) of the Ontario Building Code (OBC).

This Clause stipulates that, with exceptions not applicable here, a public pool shall be surrounded by a hard-surfaced pool deck that is at least 1,800 mm wide. The width of the deck is permitted to be reduced behind diving boards or structural columns provided that a passageway measuring 900 mm is

maintained.

In the subject case, in light of the unique configuration of the divided indoor/outdoor pool, the bridges proposed for removal are considered to form part of the continuous pool deck, allowing passage over the narrow channel of water connecting the indoor and outdoor pool areas. Measures to compensate for the removal of the bridges are being proposed by the Applicant in attempt to provide sufficiency of compliance with the OBC requirements.

4. Provisions of the Ontario Building Code

Sentence 3.11.3.1. Construction Requirements

(9) Except for a *modified pool* and *wave action pool* and except as provided in Sentence (11), a *public pool* shall be surrounded by a hard-surfaced *pool deck* that shall

(a) except for a pool described in Sentence 3.11.5.1.(1), be not less than 1 800 mm (5 ft 11 in) wide and provide at least 900 mm (2 ft 11 in) width of clear passage,
  (i) behind any *diving board* and its supporting structure, and
  (ii) between any column piercing the deck and the edge of the pool or between the column and outer perimeter of the *pool deck*,

(b) in the case of an *outdoor pool*, be sloped away from the pool to waste drains or to adjacent lower ground at a slope of between 2% and 4%, and

(c) in the case of an indoor pool, be impervious and sloped away from the pool to waste drains at a slope of between 1% and 4%.

5. Applicant's Position

The Applicant submitted that in removing the existing bridges the aim is to improve safety within the pool areas. He advised that the indoor bridge, in particular, was a safety hazard and as a result, it has already been removed. As a result of this action, an Order to Comply was issued and it was at that time that he discovered that the bridge was considered to form part of the continuous pool deck. He has since applied for a permit to demolish both the indoor and outdoor bridges.

The Applicant stated that the bridges were considered to be hazardous by hotel management because children have been known to climb on top of the bridge guards and jump off into the water. In addition, bathers are not visible when underneath the bridges causing further safety concerns where rescue may be required. Further, it would be difficult to reach an individual located in the corner of the swim-through channel when the plexiglass gate is in place. The bridge itself would be an obstacle to any rescue effort in that area.

The Applicant recognized that the bridges were considered to be part of the continuous pool deck and, as compensation for their removal, he was offering measures to ensure the safety of those using the pool. He suggested that, since the channel is only 5 ft 9 in wide and 4 ft 2 in deep, rescue could be easily facilitated from either side of the channel. He was therefore offering to provide an additional 12 ft reach pole and ring buoy so that one set of rescue equipment was situated on both sides of the channel. When questioned about additional compensation, the Applicant stated that he would also agree to install a door to the exterior, equipped with panic hardware, to facilitate deck access to the outdoor area from both sides of the water channel.

In summation, the Applicant reiterated that safety was the prime focus of his argument. The bridges he submitted, particularly the bridge spanning the indoor portion of the channel, pose a safety hazard to those using the pool. In his opinion, with implementation of the compensating measures being offered, safety in the pool would be increased as a result of the removal of one or both of the bridges.

6. Respondent's Position

The Designate for the Respondent advised that the subject pool was built in 1987/1988, prior to the construction requirements for public pools being incorporated into the Ontario Building Code. In this regard, there was some general discussion with the Ministry of Municipal Affairs and Housing as to how to accommodate a continuous pool deck in pools with swim-through channels. As a result of these discussions the suggestion was made to include the subject bridges which would span the channel and connect both sides of the pool.

In respect to the municipality's position on removal of the bridges, the Designate submitted that he considers them to form part of the pool deck which is required to surround the pool. He acknowledged that the bridges may create their own set of problems but was concerned that, by permitting their removal, a precedent may be set.

7. Commission Ruling

It is the decision of the Building Code Commission that:

a) the removal of the interior bridge will provide sufficiency of compliance with Clause 3.11.3.1.(9)(a) of the Ontario Building Code subject to the following conditions:

i) An additional door (equipped with panic hardware) leading to the outdoor pool deck must be installed. This door is to be located along the windowed portion of the pool deck where access is currently not available.

ii) An additional life saving ring and reach pole are to be provided to ensure safety equipment is available on both sides of the water passageway.

b) the removal of the exterior bridge does not provide sufficiency of compliance with Sentence 3.11.3.1.(9) of the Ontario Building Code.

8. Reasons

i) The additional rescue equipment and door to be installed will provide an increase in the level of safety for the pool. The additional door will allow access to the outdoor portion of the pool in summer months, promoting a faster response time if difficulties should arise in the outdoor area.

ii) The swimming pool is relatively small, having a limited path of travel around the perimeter. In addition, the swim-through water channel is fairly shallow and narrow enough that rescue efforts from the deck on either side would not be significantly hampered.

iii) The interior bridge itself is a hazard. Children play underneath the bridge where they are not visible. In addition, diving off the bridge and railing has been known to occur.

iv) The bridge also prevents access to an area in the corner of the passageway between the interior and exterior that is inaccessible from the pool deck.

v) The exterior bridge is not viewed to be a substantial hazard and will continue to provide a means to cross the channel during times of operation of the outdoor pool area.

Dated at Toronto this **17th** day in the month of **January** in the year **2002** for application number **2001-79**.

Len King, Chair - Designate

John Guthrie

Gary Burtch

Ruling No. 02-01-856
Application No. 2001-76

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 9.10.19.3. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Fernando Fabiani, President, Fabiani Architect Ltd., for the resolution of a dispute with Frank Asta, Chief Building Official, Town of Oakville, to determine whether the proposed fire access route, when considering the addition of a firewall between units within a residential townhouse block, creating "buildings" having an area of less than 600 m^2, complies with the access route requirements of Article 9.10.19.3. of the Ontario Building Code at the Marine Cove Condominiums, Oakville, Ontario.

APPLICANT	Fernando Fabiani, President Fabiani Architect Ltd. Burlington, Ontario
RESPONDENT	Frank Asta Chief Building Official Town of Oakville
PANEL	Len King, Vice-Chair John Guthrie Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	January 17, 2002
DATE OF RULING	January 17, 2002
APPEARANCES	Fernando Fabiani, President Fabiani Architect Ltd. Burlington, Ontario **The Applicant** Gary LaFramboise Fire Prevention Officer Town of Oakville **Designate for the Respondent**

RULING

1. The Applicant

Fernando Fabiani, President, Fabiani Architect Ltd., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing the construction of a townhouse complex at the Marine Cove Condominiums, Oakville, Ontario.

2. Description of Construction

The Applicant is proposing the construction of a residential development which includes two blocks of townhouses consisting of 14 dwelling units. It is proposed that each block of townhouses will be subdivided by a fire wall to, in effect, create four separate "buildings". Each block would then consist of two "buildings" having building areas of 179 m^2 and 444 m^2. All four buildings would be two stories in building height with an optional loft for some of the units. The structures will be comprised of combustible construction.

The nature of the dispute involves the location of the fire truck access route in relation to the front entrances of the dwelling units in the two townhouse blocks. Furthermore, the adequacy of the size and configuration of the proposed fire route itself is in question. In this respect, the two proposed blocks of townhouses are situated perpendicular to the proposed fire access route which ends at a turning circle near the middle of the two structures. The distance measured from the edge of the turning circle to the entrance of the furthest unit in the western block of townhouses is approximately 28.4 m. Similarly, the measurement from the access route to the farthest easterly dwelling entrance is approximately 38.6 m. The access route itself measures 6 m from curb to curb and dead-ends at a cul-de-sac turning circle having a radius of approximately 12.75 m. Situated at the centre of this turning circle are 6 parking spaces, dedicated for use by visitors of the development.

At issue in this regard is whether the distances measured from the fire access route to the most remote of the dwelling units are permitted by the Code when considering the size of the buildings being constructed and whether the proposed fire route is adequate to serve the purpose for which it is designed.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed fire access route, when considering the addition of firewalls to create buildings having an area of less than 600 m^2, provides sufficiency of compliance with the requirements of 9.10.19.3. of the Ontario Building Code (OBC).

Article 9.10.19.3. outlines the fire access route requirements for building governed by Part 9 of the Code. Sentence (1) provides that access for fire department equipment must be provided to each building by way of a street or private roadway. Sentence (2) details that the design of this access route shall take into account connection with public thoroughfares, weight of fire fighting equipment, width of roadway, radius of curves, location of hydrants, etc.

As noted above, the townhouse blocks in question are divided by firewalls to effectively create "buildings" having a building area of less than the 600 m^2 criterion that would mark the cut off for

consideration under Part 9 of the Code. The Applicants argue that, in providing a roadway into the residential development designed for use as a fire access route, they have complied with the requirements of Article 9.10.19.3., despite the fact that the farthest unit is approximately 38.6 m from the turning circle, as no restrictions on travel distance are included in this Code provision.

4. Provisions of the Ontario Building Code

9.10.19.3. Fire Department Access to Buildings

(1) Access for fire department equipment shall be provided to each *building* by means of a *street*, private roadway or yard (See A-3.2.5.6.(1) and A-9.10.19.3.(1) in Appendix A.)

(2) Where access to a *building* as required in Sentence is provided by means of a roadway or yard, the design and location of such roadway or yard shall take into account connection with public thoroughfares, weight of fire fighting equipment, width of roadway, radius of curves, overhead clearance, location of fire hydrants, location of fire department connections and vehicular parking.

5. Applicant's Position

The Applicant's Agent advised that he has been involved in this project since the early rezoning stages of development. At that time, a site plan had been submitted in connection with the proposal outlining the desired access route configuration. He was advised by municipal staff that this would be acceptable to the City on condition that fire walls were added between certain units to create smaller buildings, bringing the development under Part 9 of the OBC. Based on those assurances, his client proceeded to purchase the property and file the appropriate development applications.

The Agent continued by advising that when the formal application for site plan approval was submitted to the City, the fire department comments differed from those initially received in connection with this proposed development. The Applicants were now being advised that they would have to sprinkler the building because the proposed fire department access route did not meet Code requirements. At that time, the Agent submitted, he undertook a more detailed analysis of the Code and determined that the Part 9 requirements were fairly vague and not at all prescriptive in nature. As a result, being that the buildings that were created by way of the addition of firewalls between units were of a size that would be governed by Part 9, and in the provision of a roadway designed for use as a fire access route, it was his belief that the proposal provided sufficiency of compliance with the OBC in this regard.

In summation, the Agent further argued that the City's consideration of the more prescriptive requirements outlined in Part 3 of the Code were not warranted. He submitted that building size is the basis of interpretation of which provisions of the Code should apply. Admittedly, Part 3 would be applicable if not for the firewalls creating smaller buildings as defined by the Code. He acknowledged the fire department's concern for an access route that could function to serve the purpose for which it was designed, however in his opinion, the proposed fire route access to the development meets the intent of the Part 9 provisions of the OBC.

6. Respondent's Position

The Designate for the Respondent advised the Commission that it is unusual for a fire access route to be designed as proposed by the Applicant. Typically, where a 15 m travel distance from the access route to the entrance of a building cannot be met, sprinklering is provided by the Applicant. In respect to the proposed development, the Designate argued that, there is usually no problem associated with a 6 m wide access route where the street runs parallel to the rows of houses. However, in this instance, since the access route is designed so that it runs perpendicular to the blocks of houses, it provides limited access to emergency vehicles and fire fighters. The size and configuration of the access route and the turning circle will create a bottleneck for fire department vehicles. This will result in an unacceptable increase in response time. In particular, he was concerned that the City's ariel and Tower 1 trucks would not be able to manoeuver through the fire access route. These trucks measure 100 ft and 75 ft long respectively.

He advised the Commission that the fire department had undertaken an analysis of response times and manoeuverability for this type of access route design. He submitted that during normal operations in response to an emergency call, the fire department would have difficulty operating within the design proposed by the Applicant. A larger turning circle may be of assistance in this respect, however, once the initial response vehicles come to the end of the cul-de-sac, it still prevents the free flow of movement for other approaching vehicles. This fact, combined with the travel distance to the farthest units, creates a concern for the fire department in being able to adequately respond to a fire situation.

The Designate emphasized that the focus of his concern was on the life safety of the occupants of the proposed units. When considering all factors associated with this development, including that the garages of the units are situated to the rear of the structures, he was troubled by the fact that the fire department may not be able to adequately fight a fire in these building. The Designate submitted that, in this opinion, the proposed access route should have been designed to comply with the prescriptive Code requirements of Articles 3.2.5.4. and 3.2.5.5. He suggested that, failing this, the buildings should be sprinklered to provide the additional time required for the fire department to adequately respond.

In summation, the Designate submitted that, even if this development is considered under Part 9 of the Code, consultation with the fire department in the design of a fire access route is required. In this regard, they are not satisfied that the present design would meet their needs in respect to their ability to achieve an acceptable standard of fire fighting. In his opinion, the more prescription requirements of Part 3 of the Code should be applied, particularly with respect to the travel distance between the access route and the dwelling unit entrances.

7. Commission Ruling

It is the decision of the Building Code Commission that the addition of firewalls between certain units within the residential townhouse blocks to create buildings having an area of less than 600 m^2 brings the design within the scope of Part 9 of the Ontario Building Code. As a result, the buildings are required to comply with Article 9.10.19.3. of the OBC, which will ensure fire department access.

It is also the decision of the Building Code Commission that the proposed fire fighting access complies with the intent of Article 9.10.19.3. of the OBC at the Marine Cove Condominiums, Oakville, Ontario.

8. Reasons

i) With the construction of the proposed firewalls, all buildings on the site will be less than 600 m^2 in building area and a maximum of three storeys in building height. As buildings with building

areas of less than 600 m^2, Part 9 and Article 9.10.19.3. specifically are the relevant construction standards governing this dispute.

ii) OBC 9.10.19.3. states that "(a)ccess for fire department equipment shall be provided to each *building*...". Such fire route access need not follow the prescriptive requirements set out in Part 3 of the OBC, however, it must still be located and designed so as to be practical and functional when considering the fire fighting equipment of the local municipality. It is for this reason that this Article refers to the OBC Appendices, which in turn suggest that the designer consult with the local fire department. It is also good practice to refer to Part 3, specifically Articles 3.2.5.5. and 3.2.5.6., for guidance in the design.

iii) Article 3.2.5.5. begins by referencing Sentence 3.2.5.4.(1). This Sentence, however, which deals with access routes for fire department vehicles, is intended only for large buildings as it makes clear that it applies just to buildings exceeding three storeys in height and larger than 600 m^2 and not simply to Part 3 buildings as a whole. (Indeed, a building can be 600 m^2 and less and/or three storeys and less and still be considered Part 3 construction due to its occupancy classification. However, such a building would not be subject to the access route provisions of Sentence (1) of Article 3.2.5.5.) As a result, compliance with the prescriptive access route requirements of Sentence 3.2.5.5.(1), as suggested by the Respondent, is not reasonable for the subject buildings, especially since they are Part 9 construction.

iv) Despite the fact that the prescribed requirements of Part 3 need not be adhered to, the proposed design is substantially in compliance with Articles 3.2.5.5. and 3.2.5.6. with the exception of Sentence (1) of Article 3.2.5.5. This Sentence deals with the distance required between the access route and the principal entrance and access openings of a building which permits a maximum distance of 15 m (49 ft 3 in). The farthest distance in this instance between the access route and a principal entrance is 38.6 m (126 ft 7 in).

Dated at Toronto this **17th** day in the month of **January** in the year **2002** for application number **2001-76**.

Len King, Chair - Designate

John Guthrie

Gary Burtch

Ruling No. 01-62-855
Application No. 2001-73

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 9.8.8.5. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Harold Prell, Homeowner, for the resolution of a dispute with Jim Witmer, Chief Building Official, City of Kitchener, to determine whether the proposed interior and exterior guards to be comprised of wrought iron balusters containing sections of ornamental floral design and scroll patterns within the area between 100 mm and 900 mm above the walking surface, provide sufficiency of compliance with Article 9.8.8.5. of the Ontario Building Code at 49 Bingeman Street, Kitchener, Ontario.

APPLICANT	Harold Prell Homeowner, Kitchener, Ontario
RESPONDENT	Jim Witmer Chief Building Official City of Kitchener
PANEL	Michael Steele, Chair - Designate Donald Pratt Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	December 13, 2001
DATE OF RULING	December 13, 2001
APPEARANCES	Harold Prell Homeowner, Kitchener, Ontario **The Applicant** Glen Good Deputy Chief Building Official City of Kitchener **Designate for the Respondent**

RULING

1. The Applicant

Harold Prell, Homeowner, Kitchener, Ontario, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and has constructed an addition to his single detached dwelling at 49 Bingeman Street, Kitchener, Ontario.

2. Description of Construction

The Applicant has recently undertaken renovations to his Class C, residential dwelling. As well, an addition to the dwelling is currently being constructed. The building has an area of less than 600 m^2 with a building height of two storeys.

The construction in dispute involves the design of the guards proposed to be used at several locations throughout the interior and exterior of the dwelling. The guards are comprised of hand crafted wrought iron members with a stainless steel handrail. All pieces will be assembled on site and welded together. There are three guard designs proposed for various aspects of the building.

The first design, proposed for use on the interior stair and landing areas, is partially comprised of curving metal members designed in an ornamental floral pattern. The vertical pickets of the guard are interwoven with this floral pattern and other ornate decorative attachments that protrude into the area between the balusters.

The second guard design, proposed to serve the two exterior rectangular balconies, incorporates a scroll-like fixture at the mid point of each picket. This decorative feature projects approximately 40 mm (1.5 in) out from the vertical picket.

The third guard in dispute will serve the semi-circular exterior balconies. The subject balusters of this guard design, when viewed in cross section, are not vertical. They are designed with an outward projecting curvature, i.e., in a bow shape. The lower portion of the balusters curves away from the exposing face of the building. The slope of this portion is measured at approximately 45° to 55° from horizontal at approximately 100 to 150 mm above the walking surface. This balustrade also incorporates a number of ornate decorative protrusions that join the pickets in various locations.

For all three of the guard designs the Applicant has undertaken to ensure that the loading requirements of the Code are met and that there will be no openings greater than 100 mm.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed guards which include ornate decorative elements in the area between 100 mm and 900 mm above the walking surface provide sufficiency of compliance with Article 9.8.8.5. of the Ontario Building Code.

This provision stipulates that required guards must be designed in such a way so as not to facilitate climbing between 100 and 900 mm above the floor or walking surface of the area the guard is protecting. The issue at dispute is whether the various designs of the proposed guards will facilitate climbing.

4. Provisions of the Ontario Building Code

9.8.8.5. Design to Prevent Climbing
(See Appendix A.)

(1) *Guards* required by Article 9.8.8.1. and serving *buildings* of *residential occupancy* shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2 ft 11 in) above the floor or walking surface protected by the *guard* will facilitate climbing.

5. Applicant's Position

The Applicant advised that he is currently renovating a 100 year old home and has also constructed an addition to the building. Without realizing that this would be an issue, the Applicant imported the components of the guard to be assembled on site. The renovations are nearing completion and, after discussions with the municipality, the proposed guard design became an issue. He advised that this has been a frustrating process for both himself and his architect who advised that similar ornate designs had been approved elsewhere throughout the province.

At the hearing the Applicant undertook to ensure that all aspects of the Code in respect to structural loading and size of openings would be complied with. The only dispute, he submitted, was with respect to the subjective issue of climbability. In respect to the interior and exterior vertical guards, the Applicant acknowledged that the design was very ornate but suggested that there was no ladder effect being created. He argued that the appearance of the guard does not invite climbing and that the features are merely decorative.

In respect to the outward curving balusters the Applicant made the argument that this bow-like effect made the guard more difficult to climb. He stated that, to gain a toe hold on the balusters, one would have to be leaning backward, away from the top of the handrail. This would not facilitate climbing. In addition he advised that the exterior balconies in question were quite small and that doors to these areas would generally be locked.

In summation, the Applicant submitted that it remained questionable whether a child would, or could, climb the guards. He suggested that, because many of the decorative elements have sharp edges, a potentially painful hand or foot hold would help to deter climbing. He advised that he had spent a considerable amount of time on the renovation of this building and in trying to incorporate a guard design that would conform to the general character of the neighbourhood.

6. Respondent's Position

The Designate for the Respondent submitted that the municipality is regularly presented with ornamental and decorative guards for consideration. He recognized the investment that the Applicant has made and acknowledged the unique design being proposed. The Designate agreed that the designs do not look like a ladder but argued that, as a result of the decorative features throughout the guard, a toe hold could be obtained.

The Designate recognized that the guards were not situated in a public space and advised that he was more concerned with the interior guard than the ones serving the small exterior balconies. He conceded

that the balcony areas were quite small with restricted access and that people would not tend to congregate there. However the interior guard, he argued, would be a focal point within the home. Guests may have children who could be enticed by the design to attempt to climb the guard.
In summation the Designate advised that the Code does not provide much latitude in guard design. In this instance, despite the increased level of supervision one might expect in a private residence, he could not accept the guard designs as proposed since, in his opinion, the they do not comply with the Code.

7. Commission Ruling

It is the decision of the Building Code Commission that:

i) The ornamental wrought iron guard with balusters having an outward curve creating a slope on the lower portion of the picket provide sufficiency of compliance with Article 9.8.8.5. of the OBC, and

ii) The guards designed with vertical balusters containing decorative wrought iron elements within the safety zone between 100 mm and 900 mm above the walking surface provide sufficiency of compliance with the OBC on condition that they are modified to prevent climbing as follows:

   a) The guard is to be protected on the interior surface by the installation of an additional covering, approved by the municipality, which prevents climbing.
   b) The additional material is to be affixed in a manner which prevents removal except through the use of tools to, for example, facilitate cleaning or repair.

8. Reasons

i) The curvature of the balusters is directed outward from the balcony and from the upper rail of the guard, making climbing difficult.

ii) The additional protective covering on the interior surface of the vertical guards will satisfy the provisions of the Building Code, whereas, the design of the vertical pickets with ornamental features and attachments within and throughout the safety zone could otherwise be considered to facilitate climbing.

Dated at Toronto this **13th** day in the month of **December** in the year **2001** for application number **2001-73.**

Michael Steele, Chair - Designate

Donald Pratt

Gary Burtch

Ruling No. 01-59-852
Application No. 2001-71

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 3.2.2.4.(2), 3.2.2.5.(1), 3.2.2.6.(1), Article 3.2.2.24. and Sentence 11.2.1.2.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Jeffrey W. Glendinning, Glendinning Funeral Home, for the resolution of a dispute with Jim Watson, Chief Building Official, Township of Blandford-Blenheim, to determine whether the proposed 56.6 m^2 addition to an existing multiple occupancy (A2 and C) building, which is intended to be unsprinklered and constructed using combustible construction, provides sufficiency of compliance with Sentences 3.2.2.4.(2), 3.2.2.5.(1), 3.2.2.6.(1), Article 3.2.2.24. and Sentence 11.2.1.2.(1) of the Ontario Building Code at the Glendinning Funeral Home, 40 William Street, Plattsville, Ontario.

APPLICANT	Jeffrey W. Glendinning Glendinning Funeral Home Plattsville, Ontario
RESPONDENT	Jim Watson Chief Building Official Township of Blandford-Blenheim
PANEL	Kenneth Peaker, Chair Robert De Berardis Fred Barkhouse
PLACE	Toronto, Ontario
DATE OF HEARING	December 6, 2001
DATE OF RULING	December 6, 2001
APPEARANCES	Tim Schaner Tim A. Schaner Project Management Design-Management Waterloo, Ontario **Agent for the Applicant** Jim Watson Chief Building Official Town of Blandford-Blenheim **The Respondent**

RULING

1. The Applicant

Jeffrey W. Glendinning, Glendinning Funeral Home, Plattsville, Ontario, has applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing to construct an addition to the Glendinning Funeral Home, 40 William Street, Plattsville, Ontario.

2. Description of Construction

The Applicant is proposing to construct a 56.6 m^2 addition to an existing multiple occupancy building. The existing structure has a building area of 667.7 m^2 and accommodates both Group A, Division 2 and Group C major occupancies. The existing building is comprised of combustible construction and is not equipped with either a fire alarm system or a sprinkler system.

The purpose of the proposed addition is to enlarge the lobby area of the existing funeral home. This portion of the building has an A2 occupancy classification and is one storey in building height. The structure also encompass a one storey, Group C dwelling, directly to the north of the funeral home portion as well as a seven unit, three storey, Group C apartment building occupying the southwest portion of the structure. The proposed lobby addition is solely attached to the one storey section of the building along the east side and does not come into contact with the three storey apartment. While a masonry block wall separates the three storey portion from the remainder of the building, this is not considered to be a fire wall and, as such, the entire structure is considered to have a building height of three storeys.

The construction in dispute involves the one storey addition to the funeral home lobby which is to be constructed using combustible construction and, without a sprinkler system. The proposal for this addition calls for the use of wood frame construction and fire rated drywall. In addition, while the Applicant's preference is to avoid sprinklering this small area entirely, he would concede to sprinklering the addition using the existing domestic water supply as well as provide interconnected smoke alarms to compensate for the use of combustible material in the construction.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed unsprinklered addition comprised of combustible construction provides sufficiency of compliance with Sentences 11.2.1.2.(1), 3.2.2.4.(2), 3.2.2.5.(1) and 3.2.2.6.(1) and Article 3.2.2.24. of the Ontario Building Code (OBC).

Sentence 11.2.1.2.(1) of the Code, concerning renovations to buildings with multiple major occupancies, directs readers to Articles 3.2.2.5. to 3.2.2.8. Furthermore, Sentence 3.2.2.4.(2) provides that, where a building contains more than one major occupancy, the Code provisions concerning building size and construction relative to occupancy will apply according to Articles 3.2.2.5. to 3.2.2.8.

Particular to this dispute, Sentence 3.2.2.5.(1) requires that, in determining fire safety requirements in relation of each major occupancy, building height and area shall be used. In addition, Sentence 3.2.2.6.(1) provides, with an exception not applicable here, that for a building containing more than one major occupancy, the requirements for the more restricted major occupancy shall apply to the whole building.

In respect to the subject proposal, when considering building height, area and the most restricted major occupancy, the relevant requirements for the structure are outlined in Article 3.2.2.24. These requirements apply to the Group A, Division 2 occupancy. Article 3.2.2.24. would require that the subject addition be sprinklered and be constructed using noncombustible materials. Floor assemblies are to be fire separations having a resistance rating of not less than one hour and all loadbearing walls, columns and arches shall provide a fire-resistance rating not less than what is required for the supported assembly.

In respect to the proposed construction as noted above, the addition to the funeral home lobby is intended to be comprised of combustible construction and, as originally proposed, will not be equipped with a sprinkler system. In the alternative, sprinklering with use of the existing domestic water supply has been offered as well as a system of interconnected smoke detectors intended to compensate for the use of combustible construction material.

4. Provisions of the Ontario Building Code

3.2.2.4. Buildings with Multiple Major Occupancies

(1) The requirements restricting fire spread and collapse for a *building* of a single *major occupancy* classification are provided in this Subsection according to its *building height* and *building area*.

(2) If a *building* contains more than one *major occupancy*, classified in more than one Group or Division, the requirements of this Subsection concerning *building* size and construction relative to *major occupancy* shall apply according to Articles 3.2.2.5. to 3.2.2.8.

3.2.2.5. Applicable Building Height and Area

(1) In determining the fire safety requirements of a *building* in relation to each of the *major occupancies* contained therein, the *building height* and *building area* of the entire *building* shall be used.

3.2.2.6. Multiple Major Occupancies

(1) Except as permitted by Articles 3.2.2.7. and 3.2.2.8., in a *building* containing more than one *major occupancy*, the requirements of this Subsection for the most restricted *major occupancy* contained shall apply to the whole *building*.

11.2.1.2. Multiple Occupancies

(1) The classification of an existing *building* of multiple *occupancy* under Article 11.2.1.1. shall be applied according to Articles 3.2.2.5. to 3.2.2.8.

3.2.2.24. Group A, Division 2, up to 6 Storeys, Any Area, Sprinklered

(1) A *building* classified as Group A, Division 2, that is not limited by *building area*, is permitted to conform to Sentence (2) provided

(a) except as permitted by Sentence 3.2.2.7.(1), *the building* is *sprinklered*, and

(b) it is not more than 6 *storeys* in *building height*.

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,
(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and
(c) all *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

5. Applicant's Position

The Applicant's Agent advised that they are looking to construct a small addition to the vestibule/lobby area of the existing funeral home portion of the building. It is proposed that the addition would be of similar construction to the existing building, consisting of wood frame construction and fire rated dry wall. Although it is the Applicant's preference not to sprinkler this relatively small area, they offered to sprinkler the addition using the existing domestic water supply and suggested that engineered drawings could be provided for an appropriate system.

The Agent emphasized that their prime concern was with respect to the requirement for the use of noncombustible construction material. In this regard, to allow for continuity in the appearance between the addition and the existing the building it would be preferable to build using similar construction materials as the remainder of the structure. This would be the most cost effective and aesthetic option, particularly in light of the relatively small size of the addition.

The Agent emphasized that, although the funeral home is connected to the three storey residential portion of the building, the addition itself is not. The construction would be located adjacent to the single storey residential building at the front entrance of the one storey funeral home which would stand between the new construction and the seven unit apartment. To compensate for the use of combustible construction in the addition, the Agent submitted that the Applicant is willing to install a system of interconnected smoke alarms throughout the building. This would provided for an increased level of safety for the occupants of the Group C portions of the building.

In summation, the Agent recognized the OBC requirements for buildings up to six storeys in height containing a Group A, Division 2 occupancy, but suggested that in light of the relatively small size of the addition and considering the composition of the rest of the building, there would be little or no benefit to require strict compliance with these provisions in this instance. In addition, he reiterated the Applicant's willingness to provide sprinklering from the domestic water supply and to furnish the building with interconnected smoke detectors, although not required by the Code.

6. Respondent's Position

The Respondent submitted that it was his position that the proposed addition did not comply with the provisions outlined in the Code. In this regard he advised that noncombustible construction and a sprinkler system would be required. He was unable to accept the Applicant's proposal for the use of combustible construction and, in respect to any proposed sprinkler system from the existing domestic water supply, he stated that engineered stamped drawings would be required to ensure compliance with Code standards. He emphasized, however, that sprinklering would only be required in the area of the new addition.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed 56.6 m^2 addition to an existing,

multiple occupancy (A2 and C) building which is intended to be unsprinklered and constructed using combustible construction does not provide sufficiency of compliance with Sentences 3.2.2.4.(2), 3.2.2.5.(1), 3.2.2.6.(1), Article 3.2.2.24. and Sentence 11.2.1.2.(1) of the Ontario Building Code at the Glendinning Funeral Home, 40 William Street, Plattsville, Ontario.

8. Reasons

i) The new addition is required to comply with the construction requirements of Article 3.2.2.24. of the Ontario Building Code.

ii) The compensating measures offered in lieu of compliance are inadequate to achieve sufficiency of compliance with the requirements of the Code.

Dated at Toronto this **6th** day in the month of **December** in the year **2001** for application number **2001-71.**

Kenneth Peaker, Chair

Robert De Berardis

Fred Barkhouse

Ruling No. 01-57-850
Application No. 2001-70

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 3.3.5.6.of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Larry McDonald, Director, Ira McDonald Construction Ltd. for the resolution of a dispute with Agris Robeznieks, Chief Building Official, City of Mississauga, to determine whether the "trucking area" (used for loading/unloading) in an industrial building is considered as a "storage garage" and therefore required to be separated from the adjacent warehouse area by a fire separation having a fire-resistance rating of 1.5 hours in accoradance with Article 3.3.5.6. of the Ontario Building Code at Ontario Flower Growers, 910 Midway Boulevard, Mississauga, Ontario.

APPLICANT	Larry McDonald, Director Ira McDonald Construction Ltd.
RESPONDENT	Agris Robeznieks Chief Building Official City of Mississauga
PANEL	Kenneth Peaker, Chair Donald Pratt Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	November 8th, 2001
DATE OF RULING	November 8th, 2001
APPEARANCES	Stephen Parazder, President S.P. Design Inc. **Agent for the Applicant** Frank Spagnolo Manager, Building Engineering & Inspections City of Mississauga **Designate for the Respondent**

RULING

1. The Applicant

Mr. Larry McDonald, Director, Ira McDonald Construction Ltd., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended and is constructing an addition to a warehouse facility known as Ontario Flower Growers, 910 Midway Boulevard, Mississauga, Ontario.

2. Description of Construction

The Applicant is constructing a one storey addition to an existing one storey warehouse facility. The building is classified as a Group F, Division 3 major occupancy and, with the completion of the 8,362 m^2 addition, will have a total building area of 14,514 m^2. Both the existing building and proposed addition are comprised of noncombustible construction and are equipped with fire alarm and sprinkler systems.

The addition itself is divided into two equal halves. The western half is designed as a truck loading area and the eastern portion of the addition is designated for warehouse purposes. A north-south running, 203 mm (8 in), thick concrete block partition separates these two areas. The ceiling height within the building is approximately 9.1 m. The masonry partition will be less than this height, i.e., it will extend not extend to the underside of the ceiling. In addition, non-rated swing doors and overhead doors are proposed to provide access through the partition for the purposes of transferring products between the truck loading area and the warehouse portion of the building.

The construction in dispute involves design of the partition which divides the two areas of the addition. Specifically, the determination of whether the truck loading area is considered as a "storage garage" for the purposes of the application of the Building Code will affect its design. As noted, the concrete block wall that will divide the trucking area and warehouse portion of the structure does not extend to full ceiling height and is penetrated by swing and overhead doors. This wall would not provide a fire separation with a resistance rating of 1.5 hours that would be required if the trucking area were considered as a storage garage.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the "trucking area" is considered a "storage garage" and is therefore required to be separated from the adjacent warehouse area by a fire separation having a fire-resistance rating of 1.5 hours in accordance with Article 3.3.5.6. of the Ontario Building Code (OBC).

Article 3.3.5.6. of the Code outlines the separation requirements for a "storage garage" and mandates that, such an area be separated from other occupancies by a fire separation having a resistance rating of not less than 1.5 hours. It should be noted that "storage garage" is defined in the Building Code as "a *building* or part thereof intended for the storage or parking of motor vehicles and which contains no provision for the repair or servicing of such vehicles."

The Respondent is advancing the position that the truck loading area is, in fact a storage garage, and therefore subject to the provisions outlined in Article 3.3.5.6. The Applicant disagrees with this assertion and, as noted above, the partition separating the two areas of the new addition is not designed to provide for a fire-resistance rating of 1.5 hours.

4. Provisions of the Ontario Building Code

3.3.5.6. Storage Garage Separation

(1) Except as permitted by Sentences 3.3.4.2.(4) and (5), a *storage garage* shall be separated from other *occupancies* by a *fire separation* with a *fire-resistance rating* not less than 1.5 h.
Articles 3.1.8.7. and 3.1.8.8.

5. Applicant's Position

The Applicant's Agent advised that the building operation involves the transport of plants and flowers that are susceptible to extreme whether conditions. As a result, the loading and unloading of product would ideally occur within the building to prevent damage during the winter months. He ensured the Commission that the Applicant acknowledges the importance of fire and life safety features. He submitted that the building is comprised of noncombustible construction, it faces three streets, has vehicular access on all four sides and is within 90 metres of 9 fire hydrants.

The Agent stated that it was his interpretation that the passageway through the truck loading area was not a "storage garage" as defined by the Building Code. It is merely an area for trucks to drive into for the purpose of loading and unloading. He suggested that there are many such buildings being constructed, particularly for use by the steel industry . He further maintained that it would be almost impossible to fire separate the two areas given the nature and function of the building.

The Agent advised that it was also important to note that the existing building, built in 1985, incorporated similar trucking areas. There were no fire separations between those areas and adjacent uses. These portions of the original structure have since been converted to cooling areas for cut flowers and potted pants. In his opinion, the new addition has the same use and function as the previously approved structure. He further argued that the entire building is classified as an F3 occupancy. As a result, the warehouse and truck loading areas are not required to be fire separated.

In support of his position and the proposed partition design, the Agent advised the that there would be staff present to monitor the area. He stated that there is no extended parking inside the facility. Trucks simply line up, a load is transferred, and the vehicles drive out. He suggested that the masonry wall that currently divides the areas is primarily for the control of carbon monoxide and to address security concerns. The doors are not proposed to be fire rated and there is some question, from a structural standpoint, about whether the wall under construction can be safely extended to the height of the building. In addition he stated that, for the purpose of this operation, it is not functional to have the doors close after each use. This would significantly impede the flow of product between the two areas.

In summation, to alleviate any concerns, the Agent offered to post signs within the area to prevent extended parking and to double the number of available fire extinguishers. He reiterated that this is a fully sprinklered building and maintained that a fire separation in this area is not required. His position remained that this was not a storage garage. It was, he argued, a monitored area used for the transference of product. He submitted that there are many such buildings throughout the province which have not been required to fire separate the subject areas.

6. Respondent's Position

The Designate for the Respondent submitted that, while the portion of the building in question may be termed a loading and unloading area, it is also considered a storage garage for the purposes of applying the Building Code. Although the occupancy classification is the same throughout the building, the OBC requires a fire separation of other building areas from a storage garage. Therefore, he submitted, a 1.5 hour fire resistance rating is required between the trucking area and the remainder of the building.

The Designate advised that, from the time he has held his present position, this requirement has been consistently enforced in the City of Mississauga, even in steel operations. He emphasized that there is no control over how long a vehicle may remain in the truck loading area. It maybe 5 minutes or possibly 2 hours or more. In fact, he argued, there is the potential for parking inside the structure for extended periods of time.

He stated that, while he understands that a fire separation may hinder the flow of material between the warehouse and the truck loading area, he emphasized that safety is his main concern. He maintained that his position in the application of Code is that this area is considered as a storage garage and must meet the requirements set out in Article 3.3.5.6.

7. Commission Ruling

It is the decision of the Building Code Commission that the "trucking area" (used for loading/ unloading) in the subject industrial building is a "storage garage" and therefore required to be separated from the adjacent warehouse area by a fire separation having a fire-resistance rating of 1.5 hours in accordance with Article 3.3.5.6. of the Ontario Building Code at Ontario Flower Growers, 910 Midway Boulevard, Mississauga, Ontario.

8. Reasons

i) Trucks will be temporarily parked inside the building within the trucking area for the loading and unloading of material. Regardless of the length of time the vehicles remain parked, the function is still one of a storage garage as defined by the Ontario Building Code. A 1.5 hour fire separation is therefore required.

ii) While the major occupancy classification for the entire building is F3, the requirement to separate a storage garage from the adjacent occupancies remains. The function of the adjacent area is different and the prescribed level of construction is appropriate for the protection of the warehouse facility and its occupants.

Dated at Toronto this **8th** day in the month of **November** in the year **2001** for application number **2001-70**.

Kenneth Peaker, Chair

Donald Pratt

Gary Burtch

Ruling No. 01-56-849
Application No. 2001-68

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.8.8.5.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Pierre and Jacky Doyon, property owners, for the resolution of a dispute with Edward Link, Chief Building Official, City of Windsor, to determine whether the as-installed guard on an exterior deck having a horizontal member located at 165 mm above the walking surface, provides sufficiency of compliance with Sentence 9.8.8.5.(1) of the Ontario Building Code at 2429 Trappers Avenue, Windsor, Ontario.

APPLICANT	Pierre and Jacky Doyon, property owners 2429 Trappers Avenue Windsor, Ontario
RESPONDENT	Edward Link Chief Building Official City of Windsor
PANEL	Kenneth Peaker, Chair Donald Pratt Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	November 8th, 2001
DATE OF RULING	November 8th, 2001
APPEARANCES	Pierre Doyon, property owner **The Applicant** Eddie Stout Building Inspector City of Windsor **Designate for the Respondent**

RULING

1. The Applicant

Pierre and Jacky Doyon, property owners, have received an Order to Comply under the *Building Code Act*, S.O. 1992, c. 23, as amended to remedy certain alleged deficiencies with respect to the guard on a newly constructed rear yard deck at 2429 Trappers Avenue, Windsor, Ontario.

2. Description of Construction

The Applicants are the owners of a Class C, residential dwelling having a building area of 132.4 m^2. In the Spring of 2001 they applied for and were given approval to construct a deck at the rear of the subject building. The newly constructed deck measures 3 m x 3.66 m (10 ft x 12 ft) and is comprised of pressure treated lumber set into concrete footings.

The guard serving the deck has been constructed to a height of 914 mm (36 in) and is capped with a 2 x 4 handrail supported in a "T" shaped configuration by a 2 x 6. This handrail and the lower horizontal member running across the bottom of the guard are connected by a series of vertical wooden balusters. The construction in dispute specifically relates to the height of this bottom horizontal member which is situated 165 mm (6.5 inches) above the walking surface.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the deck guard, having a horizontal member located at 165 mm above the walking surface, provides sufficiency of compliance with Sentence 9.8.8.5.(1) of the Ontario Building Code.

This provision stipulates that required guards must be designed in such a way so as not to facilitate climbing between 100 mm and 900 mm above the floor or walking surface of the area the guard is protecting. As noted above, the newly constructed deck has a bottom horizontal rail, the top of which is 165 mm above the deck surface.

4. Provisions of the Ontario Building Code

9.8.8.5. Design to Prevent Climbing
(See Appendix A.)

(1) *Guards* required by Article 9.8.8.1. and serving *buildings* of *residential occupancy* shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2 ft 11 in) above the floor or walking surface protected by the *guard* will facilitate climbing.

5. Applicant's Position

The Applicant outlined the process undertaken in obtaining a building permit from the municipality. At the time of their application they were advised by municipal staff that only a site plan outlining the location of the deck was required. In addition to the site plan the Applicant's also offered drawings that outlined the specifications of construction for the deck. They were advised that these drawings were unnecessary and a permit was issued.

They then proceeded with the construction based on their original plans and the permit that was issued. After construction was complete, the deck was inspected and they were advised of the compliance issue. The Applicant submitted that the slight variation from the Code requirement was not a safety concern and, in any event, if the municipality had been more diligent in the initial stages, this problem would never have occurred. He stated that he was not advised of the construction parameters for a deck or guard when he filed his application. He asserted that he should not have to amend the situation after receiving little or no direction for the City in this regard.

6. Respondent's Position

The Designate for the Respondent confirmed the Applicant's account of the permit application process. He advised that, after construction had commenced, the footings for the deck were inspected and the owners given approval to continue. He stated that the Applicants were told to contact the City if they had any questions in this regard. The Designate stated that the responsibility to find out what Building Code requirements are involved in any construction lies with the homeowner. If they were uncertain, staff could have provided them advice.

The Designate submitted that the primary issue in this instance he submitted is with respect to climbability. He has no difficulty in regard to the openings or structural integrity, however, the horizontal member located 165 mm from the walking surface fails to meet the intent of the Code. He suggested that to achieve compliance the Applicant could either lower the bottom rail or, alternatively, add to the top railing to create the same 800 mm zone of safety where climbing would not be facilitated. Either alternative would be acceptable to the City, he indicated.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-installed guard on an exterior deck having a horizontal member located 165 mm above the walking surface does not provide sufficiency of compliance with Sentence 9.8.8.5.(1) of the Ontario Building Code at 2429 Trappers Avenue, Windsor, Ontario

8. Reasons

i) The as-installed guard does not meet the intent of the Building Code to provide a zone of safety where climbing would not be facilitated. The horizontal rail located 165 mm clearly exceeds the Code requirement that no member be located between 100 mm and 900 mm above the walking surface.

ii) Sufficiency of compliance with respect to the issue of climbability has not been achieved in this instance. No compensating measures were offered.

Dated at Toronto this **8th** day in the month of **November** in the year **2001** for application number **2001-68**.

Kenneth Peaker, Chair

Donald Pratt

Gary Burtch

Ruling No. 01-55-848
Application # 2001-58

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.4.6.7.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Harry Ziegler, Chief Engineer, Technical Coatings Co. Ltd., for the resolution of a dispute with Dan Mousseau, Chief Building Official, City of Burlington, to determine whether the as-constructed stairs that provide access to a mezzanine level in an industrial occupancy and having a minimum run of 229 mm (9 in), provide sufficiency of compliance with Sentence 3.4.6.7.(1) of the Ontario Building Code at Technical Coatings Co. Limited, 1164 Walkers Line, Burlington, Ontario.

APPLICANT	Harry Ziegler, Chief Engineer Technical Coatings Co. Ltd. Burlington, Ontario
RESPONDENT	Dan Mousseau Director of Buildings City of Burlington
PANEL	Kenneth Peaker, Chair Donald Pratt Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	November 8th, 2001
DATE OF RULING	November 8th, 2001
APPEARANCES	Wagdi Tadros, President Pyramids Engineering Inc. Richmond Hill, Ontario **Agent for the Applicant** J.T. Hewitson Building Inspector City of Burlington **Designate for the Respondent**

RULING

1. The Applicant

Harry Ziegler, Chief Engineer, Technical Coatings Co. Ltd., Burlington, Ontario, has received an Order to Comply under the *Building Code Act*, S.O. 1992, c. 23, as amended to remedy certain alleged deficiencies with respect to the interior stairs leading from the mezzanine area at Technical Coatings Co. Limited, 1164 Walkers Line, Burlington, Ontario.

2. Description of Construction

The Applicant is the Chief Engineer for Technical Coatings Co. Limited, a subsidiary of Benjamin Moore & Co. Limited. The subject building is classified as a Group F, Division 1, high hazard industrial occupancy. It has a total building area of 7572 m^2 and a building height of 1 storey. The structure is comprised of noncombustible construction and is fully equipped with sprinkler, fire alarm and standpipe and hose systems.

An addition has recently been constructed which includes a mezzanine area that serves as an access platform for the mixing tanks situated on the ground floor. The construction in dispute specifically involves the 5 stairways leading from this mezzanine. The metal stairways are 910 mm (3 ft) in width with an open riser design. The treads are comprised of serrated grating and the run of each stair measures 229 mm (9 in). The Code requires a minimum run of 255 mm (10 in) in this instance. Initially, the building's exterior stairs were also constructed with 229 mm (9 in) stair runs but have since been modified to comply to the Ontario Building Code (OBC) requirements. Because of physical constraints within the building, however, the Applicant would prefer not to modify the stairs from the mezzanine level.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the stairs to the mezzanine level with a run of 229 mm (9 in) per stair provide sufficiency of compliance with Sentence 3.4.6.7.(1) of the Ontario Building Code.

This provision in the code specifies that, except for situations not applicable here, the steps for stairs shall have a minimum run of not less than 255 mm (10 in) and not more than 355 mm (14 in) between each subsequent step.

The stairs to the mezzanine level for the subject building have a run of 229 mm (9 in). In recognizing this deficiency the Applicant has proposed certain compensating measures in an attempt to achieve sufficiency of compliance. These measures include additional stairways to the mezzanine level (all having stairs with a 229 mm run), improved lighting, extra safety features, serrated grating on the step tread and an open riser design.

4. Provisions of the Ontario Building Code

3.4.6.7. Treads and Risers

(1) Except as permitted for *dwelling units* and by Sentence 3.4.7.5.(1) for fire escapes, steps

for stairs shall have a run of not less than 255 mm (10 in) and not more than 355 mm (14 in) between successive steps.

5. Applicant's Position

The Applicant's Agent acknowledged that the newly constructed stairs from the mezzanine did not comply with the present OBC requirements. There was apparently an oversight in the reading of the Code during the construction phase. In the previous edition of the OBC, a nine inch run was permitted. He emphasized, however, that in his opinion, the stairs were not unsafe. He suggested that the run of the stairs in the addition was consistent with the stairs in the original building and that all employees using the mezzanine were familiar and comfortable with this length of run. He further suggested that any hazard posed by the nonconforming stair runs would be diminished by the fact that there are 5 stair cases serving the mezzanine area while only 2 are required by the Code.

The Agent submitted that he has received advice from the Ministry of Labour suggesting that the run of the stairs could be considered acceptable from a safety standpoint. In addition he emphasized that, prior to the 1997 Code, a nine inch run was acceptable throughout the province. Numerous facilities have been constructed using this run dimension. He also stated that this design has been used elsewhere within Benjamin Moore facilities as well as in many industrial work platforms in the United States. While he acknowledged the present OBC requirements, he was confident that no hazard was created in the use of these stairs.

The Agent outlined several safety features that would support his proposal for a reduced run. He advised that the stairs have open risers which will provide for additional foot room on the tread. He also suggested that the serrated grating and static dissipating shoes required to be worn by all employees would decrease the risk of slipping on the stairs. He argued that the area is well lit and he offered to post signs in the area advising staff to make use of the handrails when walking on the stairs. It would be unlikely that workers would be carrying equipment onto the stair case and would, therefore, have their hands free at most times. The Agent also advised that the mezzanine is not a permanent part of the building. If Technical Coatings Co. Limited were to relocate the mezzanine would be disassembled. It is specific to the paint mixing operation being undertaken.

The Agent advised the Commission that the exterior stairs had been constructed using the same dimensions but have since been modified to a Code compliant design. It was recognized that the exterior stairs may, at times, be used by members of the public, however with respect to the stairs from the mezzanine, the Agent emphasized that only employees had access to this area. He also expressed concern about modifying the stair run in this area of the building. With an increased run, he argued, the stairs would extend into the floor area used by fork lifts, thus, posing more of a hazard for those using the stairways.

6. Respondent's Position

The Respondent submitted that a permit was issued in October 2000. The stairs were reviewed and found to be compliant at that time. Upon inspection, however, it was noted that, the uniform run for all stairs was nine to nine and a quarter inches.

The Designate recognized the safety measures being offered by the Applicant and conceded that the additional stairway exceed the OBC requirements, however, he submitted that the stair run is a minimum and, in his opinion, safety would be compromised by the reduction. He advised that one

could feel the difference between a nine inch and a ten inch run, particularly when descending a stairway.

In summation the Designate noted that the previous standard in the Code had been changed based on the findings of an accident study that was conducted. He also submitted that the National Building Code had increased the stair run requirement from nine inches to eleven inches. He suggested that these are significant amendments that should be considered when contemplating a reduction in the minimum requirement. He emphasized that the stairs are an integral part of the egress route and, by not complying with relevant, present day standards, the risk of hazard would be increased.

7. Commission Ruling

It is the decision of the Building code Commission that the as-constructed stairs that provide access to the mezzanine level in an industrial occupancy and having a minimum run of approximately 229 mm (9 in) do not provide sufficiency of compliance with Sentence 3.4.6.7.(1) of the Ontario Building Code at 1164 Walkers Line, Burlington, Ontario.

8. Reasons

i) The stair run does not comply with the OBC provisions outlined in Sentence 3.4.6.7.(1) and, when considering the compensating measures to be provided, sufficiency of compliance has not been achieved.

ii) The 1997 Ontario Building Code increased the minimum run requirement by 25 mm, from 230 mm to 255 mm. As noted in the technical background report submitted by the Building and Development Branch of the Ministry of Municipal Affairs and Housing, this amendment was a result of “extensive research into stair design and its impact on accidents and injuries on stairs”. In light of such a recent amendment, it would not be appropriate to revert back to a standard that was found to be unacceptable when the latest edition of the Code was published.

Dated at Toronto this **8th** day in the month of **November** in the year **2001** for application number **2001-58**.

Kenneth Peaker, Chair

Donald Pratt

Gary Burtch

Ruling No. 01-54-847
Application # 2001-69

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.8.8.5.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Judy and Michael Djurdjevic, owners, The Old Bank House, for the resolution of a dispute with William Walker, Chief Building Official, Town of Niagara-on-the-Lake, to determine whether the as-installed guard serving the second floor balconies and having a horizontal member located at approximately 150 mm to 160 mm above the floor level, provides sufficiency of compliance with Sentence 9.8.8.5.(1) of the Ontario Building Code at The Old Bank House, 10 Front Street, Niagara-on-the-Lake, Ontario.

APPLICANTS	Judy and Michael Djurdjevic, owners The Old Bank House Niagara-on-the-Lake, Ontario
RESPONDENT	William Walker Chief Building Official Town of Niagara-on-the-Lake
PANEL	Kenneth Peaker, Chair Fred Barkhouse Robert De Berardis
PLACE	Toronto, Ontario
DATE OF HEARING	October 25th, 2001
DATE OF RULING	October 25th, 2001
APPEARANCES	Judy and Michael Djurdjevic, owners The Old Bank House Niagara-on-the-Lake, Ontario **The Applicants** Rolf Wiens Assistant Chief Building Official Town of Niagara-on-the-Lake **Designate for the Respondent**

RULING

1. The Applicant

Judy and Michael Djurdjevic, owners, The Old Bank House, have applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended and have undertaken renovations at 10 Front Street, Niagara-on-the-Lake, Ontario.

2. Description of Construction

The Applicants are the owners of a building known as The Old Bank House. The original building was constructed in 1902 and served as the first branch of the Bank of Canada in Niagara-on-the-Lake. In the 1940s and 1950s the building was operated as a guest house and in the mid 1970s it was converted to a bed and breakfast facility and now operates as a 9 bedroom country inn. The building is classified as having a Group C occupancy. It is comprised of combustible construction, is equipped with a fire alarm system and is partially sprinklered. The structure has a building area of 566.7 m^2 (6,100 ft^2) according to the Applicant and 549.7 m^2 (5,917 ft^2) according to the Respondent.

The building has been recently renovated by the Applicants. The construction in dispute involves the exterior guards that have been installed for the second floor balconies serving three of the guest suites. The metal guards are 1,070 mm (42 in) in height and contain two horizontal members along the lower portion. The lowest of these members is approximately 50 mm (2 in) above the floor level, whereas the higher member is approximately 150 mm (5 7/8 in) to 160 mm (6 1/4 in) from the finished floor. The guard also incorporates some decorative detailing along its upper portion, just below the handrail. This detailing is located approximately 940 mm (37 in) from the floor level and is situated at roughly 780 mm (30 3/4 in) to 790 mm (31 1/8 in) from the highest of the two lower members.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-installed guards having a horizontal member located approximately 150 mm to 160 mm above the floor level provides sufficiency of compliance with Sentence 9.8.8.5.(1) of the Ontario Building Code (OBC).

Sentence 9.8.8.5.(1) mandates that required guards serving building of residential occupancy shall be designed so that no member, attachment or opening located between 100 mm (4 1/8 in) and 900 mm (35 3/8 in) above the walking surface will facilitate climbing. In this instance, the higher of the two lower horizontal members occurs at approximately 150 mm to 160 mm above the floor level. However, it should be noted that the decorative detailing at the top of the guard is located approximately 940 mm from the floor. The separation between the two elements is 780 mm to 790 mm.

4. Provisions of the Ontario Building Code

9.8.8.5. Design to Prevent Climbing

(1) *Guards* required by Article 9.8.8.1. and serving *buildings* of *residential occupancy* shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2 ft 11 in) above the floor or walking surface protected by the *guard* will facilitate climbing.

5. Applicant's Position

The Applicants advised they acquired this building in 1996 and, through the course of their renovations, consulted with a number of individuals and organizations in their attempt to maintain the historic character of the structure. This included some precise design detailing that was thought to exemplify the appropriate time period. As part of their consultations they looked at constructing guards for the second floor balconies that would have been similar in nature to the guard surrounding the porch on the lower level. They were advised that the characteristics of the porch guard would not conform with today's Building Code requirements. They were then advised that the requirements for new guards were a minimum height of 1,070 mm and a maximum opening between balusters of 100 mm.

Keeping those requirements in mind and, after consulting with the Town's architectural committee about the guard design, a permit was applied for and issued. It was not until the final inspection that they were advised of the problem respecting the horizontal members along the bottom of the guard. They now understand that this does not comply with the strict wording of the Code but are appealing to the Commission to view the discrepancy as a minor one. The Applicants emphasized that, in their view, these railings do not pose a safety hazard. They do not facilitate climbing and no ladder effect is created. They argued that, to remedy the situation at this point would not be a simple exercise. The guards are handmade and would have to be completely removed and replaced to strictly comply with the requirements. This endeavour would be quite costly.

In support of their submission, the Applicants advised that the guards in question are located on the second floor and cannot be accessed by the general public. They serve the private bedroom suites of guests to the bed and breakfast. They also advised that the establishment caters to adults only. It is a policy of their operation that children under 14 are not permitted. In addition, they advised that the property is monitored 24 hours a day and keyed access to the rooms is required to gain entry to the area. They also submitted that the balconies themselves are relatively small and would not function as a space for gatherings.

In summation, the Applicants emphasized that they do not want to jeopardize the safety of any of the occupants of this building in any way. They have exceeded Code requirements in a number of areas and were simply unaware of the requirement regarding horizontal members within the guard design. When they did become aware, they explored options to comply but, in all instances, the historic look of this feature would have been compromised. They also noted that the decorative detailing along the top of the guard is at 940 mm from the finished floor. They believe that this maintains the intent of the Code to protect the area between 100 mm and 900 mm from being used for climbing, despite the horizontal member at the bottom being slightly higher than permitted.

6. Respondent's Position

The Designate for the Respondent submitted that the building was classified for review under Part 9 of the OBC, being that it is a small bed and breakfast with an area of approximately 5,900 ft^2. When the permit was issued the municipality did not have any drawing to review the design of the railings. It was not until final inspection that it was visually noted that the higher of the horizontal members at the bottom of the guard exceeded the 100 mm provision. At that time, it was discussed with the builder and the architect which part of the OBC would apply to this structure. The Designate advised that the builder had suggested that the guard was constructed in accordance with the provision of Part 3. These provisions would have permitted a horizontal member at 140 mm (5 ½ in) above the finished floor. The guard that was eventually installed would still exceed those provisions, but not by as much.

The Designate maintained that the building falls within the parameters of Part 9 and, as such, the guard, with a horizontal member between 100 mm and 900 mm, does not comply with Code. His position therefore, was that he is unable to issue an approval in this circumstance.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-installed guard serving the second floor balconies and having a horizontal member located at approximately 160 mm about the finished floor provides sufficiency of compliance with Sentence 9.8.8.5.(1) of the Ontario Building Code at The Old Bank House, 10 Front Street, Niagara-on-the-Lake, Ontario.

8. Reasons

i) In Sentence 9.8.8.5.(1) the OBC sets out a vertical zone or band above a walking surface within which the design of a guard shall not facilitate climbing. This "safety zone" is established as 100 mm to 900 mm in height from its lower to upper limits with the width of the vertical band being 800 mm (31 ½ in). In the present instance, while the safety zone has been shifted slightly upwards it total width, measured between the top lower rail and the underside of the decorative detailing at the top of the guard, is approximately 780 mm (30 3/4 in) to 790 mm (31 1/8 in), or nearly 800 mm.

ii) There is no ladder effect created within this "safety zone".

iii) Access to the balcony areas is controlled and not open to the general public.

Dated at Toronto this **25th** day in the month of **October** in the year **2001** for application number **2001-69**.

Mr. Kenneth Peaker, Chair

Mr. Fred Barkhouse

Mr. Robert De Berardis

Ruling No. 01-53-846
Application # 2001-64

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 3.2.2.6. and 3.2.2.23 and Sentences 3.2.2.7.(1), 3.2.2.8.(1), 1.1.3.1.(1) and 1.1.3.2.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ray Mandel, Principal, The Terraces of Old Mill Developments Ltd., for the resolution of a dispute with Bruce Ashton, Deputy Chief Building Official, City of Toronto, to determine whether the ground floor amenity space (exercise room, swimming pool, change room and lounge), that is not proposed to be sprinklered, in a building containing a Group C major occupancy, provides sufficiency of compliance with Articles 3.2.2.6., 3.2.2.23. and Sentences 3.2.2.7.(1) and 3.2.2.8.(1) of the Ontario Building Code when considering Sentences 1.1.3.1.(1) and 1.1.3.2.(1), at the Old Mill Apartments, 2662 Bloor Street West, Toronto, Ontario.

APPLICANT	Ray Mandel, Principal The Terraces of Old Mill Developments Ltd. Toronto, Ontario
RESPONDENT	Bruce Ashton Deputy Chief Building Official City of Toronto
PANEL	Kenneth Peaker, Chair Fred Barkhouse Robert De Berardis
PLACE	Toronto, Ontario
DATE OF HEARING	October 25th, 2001
DATE OF RULING	October 25th, 2001
APPEARANCES	Allan Larden Larden Muniak Consulting Inc. **Agent for the Applicant** Tamer Mikhail Senior Plan Examiner City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

Ray Mandel, Principal, The Terraces of Old Mill Developments Ltd., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended and is constructing a residential apartment building known as the Old Mill Apartments at 2662 Bloor Street West, Toronto, Ontario.

2. Description of Construction

The Applicant is in the process of constructing a 12 storey, Group C, residential apartment building. When complete, it will have a total building area of 1,900 m^2. The structure is comprised of noncombustible construction and will be equipped with a fire alarm system and a standpipe and hose system. In addition, sprinklering is proposed for select areas of the building's ground floor, including the parking garage, garbage chute and vestibule, the garbage room and storage rooms.

The ground floor of the building is divided by a driveway which travels roughly through the middle of the structure and separates it into northeast and southwest portions. The northeast portion of the ground floor accommodates an enclosed storage garage while the southwest portion encompasses a number of distinct uses, including the apartment lobby, storage areas and a garbage room. The southwest portion of the ground floor also includes amenity space in the form of an exercise room, lap pool and change rooms.

The construction in dispute specifically involves this amenity space. The issue in this regard is whether this portion of the building is required to be sprinklered. The amenity space occupies a net area of 259 m^2 and is designed to serve the occupants of the building and their guests. It has an occupancy classification of Group A, Division 2 and amounts to approximately 14% of the ground floor area. This amenity space is considered by the Applicant to be ancillary to the major residential occupancy and therefore, no sprinklering is being proposed for this portion of the building.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the amenity space on the ground floor of the residential apartment building is required to be sprinklered or whether the absence of sprinklering provides sufficiency of compliance with Articles 3.2.2.6., 3.2.2.23. and Sentences 3.2.2.7.(1) and 3.2.2.8.(1) of the Ontario Building Code when considering Sentences 1.1.3.1.(1) and 1.1.3.2.(1).

Article 3.2.2.6. requires that, except as outlined in Articles 3.2.2.7. and 3.2.2.8. where a building contains more than one major occupancy, the requirement of the most restricted major occupancy shall apply to the whole building. Sentence (1) of Article 3.2.2.7., in reference to superimposed major occupancies, stipulates that in a building where one major occupancy is located entirely above another major occupancy, the requirements for each portion of the building accommodating a major occupancy will apply to that portion of the structure as if the entire building were of that occupancy classification. As an exception to this provision, Sentence 3.2.2.8.(1) provides that, for a building where the aggregate area of all major occupancies of any one Group or Division is less than 10% of the floor area or the storey in which they are contained, they need not be considered as major occupancies for the purposes of applying the building fire safety requirements, provided that they are not Group F, Division 1 or 2 occupancies.

Furthermore, Article 3.2.2.23. requires, among other things, that a building having a Group A, Division 2 occupancy classification be sprinklered and provide floor assemblies with a fire resistance rating of at least 2 hours.

Central to this dispute is the difference of opinion as to whether the amenity space must be considered a major occupancy, thereby necessitating the application of the more restrictive Code requirements, including the provision of sprinklering. Article 1.1.3.2. defines the term "major occupancy" as being the principal occupancy for which a building is intended to be used and shall be deemed to include subsidiary occupancies which are considered an integral part of that principal occupancy. Code users are informed in Article 1.1.3.1. that phrases and words such as "subsidiary" which are not defined in the Code are to assume the meaning most commonly assigned to them in the context in which they are used in the Code. As noted in the technical information provided by the Building and Development Branch of the Ministry of Municipal Affairs and Housing in connection with this application, "The Concise Oxford and Webster's New World dictionary use the following language to define 'subsidiary' as : Serving to assist or supplement; auxiliary; supplementary; being in a subordinate relationship, and to define 'principal' as: First in rank or importance; one to which another is subordinate."

In relation to this dispute, the amenity area is classified as a Group A, Division 2 occupancy. It represents 14% of the ground floor area of the building and thus, does not qualify for the exemption under sentence 3.2.2.8.(1). Nevertheless, according to the Applicant, the amenity space is meant to serve the occupants of the building and their occasional guests and should, therefore, be considered as an integral part of the principal occupancy. The Respondent, on the other hand, views the Group A, Division 2 use as a major occupancy which would be subject to the more restrictive Code requirements. The issue to be determined, therefore, is whether this amenity space must be sprinklered or, in the alternative, whether the omission of sprinklering in this area provides sufficiency of compliance with the provisions of the Code.

4. Provisions of the Ontario Building Code

1.1.3.1. Non-defined Terms

(1) Definitions of words and phrases used in this Code that are not included in the list of definitions in this Part shall have the meanings which are commonly assigned to them in the context in which they are used in this Code, taking into account the specialized use of terms with the various trades and professions to which the terminology applies.

1.1.3.2. Defined Terms

(1) The words and terms in italics in this Code have the following meaning for the purposes of this Code, and where indicated, the following meaning for the purposes of the Act as well.

3.2.2.6. Multiple Major Occupancies

(1) Except as permitted by Articles 3.2.2.7. and 3.2.2.8., in a *building* containing more than one *major occupancy*, the requirements of this Subsection for the most restricted *major occupancy* contained shall apply to the whole *building*.

3.2.2.23. Group A, Division 2, Any Height, Any Area, Sprinklered

(1) Except as permitted by Articles 3.2.2.24. to 3.2.2.28., a *building* classified as Group A, Division 2 shall conform to Sentence (2).

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* shall be *sprinklered*,
(b) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 2 h,
(c) *mezzanines* shall have a *fire-resistance rating* not less 1 h, and
(d) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

3.2.2.7. Superimposed Major Occupancies

(1) Except as permitted by Article 3.2.2.8., in a *building* in which one *major occupancy* is located entirely above another *major occupancy*, the requirements in this Subsection for each portion of the *building* containing a *major occupancy* shall apply to that portion as if the entire *building* was of that *major occupancy*.

3.2.2.8. Exceptions for Major Occupancies

(1) In a *building* in which the aggregate area of all *major occupancies* in a particular Group or Division is not more than 10% of the *floor area* of the *storey* in which they are located, these *major occupancies* need not be considered as *major occupancies* for the purposes of this Subsection, provided they are not classified as Group F, Division 1 or 2 *occupancies*.

5. Applicant's Position

The Applicant's Agent advised an apartment building is currently being constructed on the undeveloped land near the Old Mill; south of Bloor Street, east of the Humber River valley. As part of this construction a modest amenity space is being incorporated into the design of the ground floor of the building. This space will include an exercise room, change rooms and a lap pool. This amenity space will overlook the adjacent ravine, southwest of the property.

The Agent submitted that the Respondent is regarding this amenity space as a major occupancy rather than one subsidiary to the residential occupancy of the building. As a result, he is requesting that the disputed area be sprinklered in accordance with the more restrictive provisions for Group A, Division 2 major occupancies. The Agent emphasized that this space was an amenity area for use by the individuals who live in the residential tower. He suggested that it is a natural part of the residential function of the building and therefore, subsidiary to the major occupancy which is not required to be sprinklered. In his opinion, no different standard should apply to the space at issue.

The Agent submitted that a major occupancy can incorporate subsidiary occupancies without having the higher standards applied to those areas. This amenity space, he argued, does not meet the definition of a major occupancy. It is an integral part of the major, Group C, occupancy in this circumstance. He also submitted that the area is supervised by a concierge who is able to observe access to the area, as well, video cameras will be installed to monitor the use of the pool.

In summation, the Agent stated that this is a relatively small area, incorporating approximately 14% of the ground floor. He submitted that the subject area contains a low fire load and represents little hazard to the building. It is not, in his opinion, a major occupancy that would require sprinklering.

6. Respondent's Position

The Designate for the Respondent submitted that, although the swimming pool is intended to be used by residents of the building, guests are often invited and the use of space, therefore, becomes much like that of a party room. The Code definition of public pool would include a pool designed for use by more than six units. The pool in question would meet that criteria.

In addition, the Designate advised that the City is also asking for sprinklering of the parking garage and garbage room. The Applicant is voluntarily providing sprinklering to those areas. In his opinion the sprinklering of the entire ground floor would prevent fire spread and potential building collapse. He acknowledged that the amenity space represented a relatively small portion of the building but advised that it totals more than 10% of the ground floor area. Furthermore, he submitted that the ground floor is comprised of F2, F3 and A occupancies. The floor area, he argued, is not used as a Group C occupancy and, in his view, the amenity space can be considered a major occupancy when applied to this floor level.

In summation, the Designate maintained that the amenity space is required to be sprinklered since it is a more restrictive occupancy classification. Furthermore, in light of the fact that the F3 parking garage and garbage room are to be sprinklered, he sees no reason why the sprinkler system could not be extended to cover this amenity space occupancy as well.

7. Commission Ruling

It is the decision of the Building Code Commission that the ground floor amenity space (exercise room, swimming pool, change room and lounge), that is not proposed to be sprinklered, in a building containing a Group C major occupancy, provides sufficiency of compliance with Articles 3.2.2.6., 3.2.2.23., and Sentences 3.2.2.7.(1) and 3.2.2.8.(1) of the Ontario Building Code when considering Articles 1.1.3.1. and 1.1.3.2., at the Old Mill Apartments, 2662 Bloor Street West, Toronto, Ontario.

8. Reasons

i) The area is considered an amenity space occupancy, accessory to the major occupancy, that will be used only by tenants and their guests.

ii) The space will be under video surveillance.

iii) The amenity space incorporates a lap pool which limits the number of persons capable of using the pool at any one time.

iv) The space will be monitored by heat detectors.

Dated at Toronto this **25th** day in the month of **October** in the year **2001** for application number **2001-64**.

Mr. Kenneth Peaker, Chair

Mr. Fred Barkhouse

Mr. Robert De Berardis

Ruling No. 01-52-845
Application # 2001-60

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 3.1.8.7. and 3.1.8.8. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Nickolas Dorazio, Property Manager, Bodycote Property Holdings Inc. for the resolution of a dispute with Agris Robeznieks, Chief Building Official, City of Mississauga, to determine whether the compensating measures offered in a multi-tenant building containing Group F, Division 2 and Group D occupancies where the dedicated fume hood ductwork traverses the 2-hour fire separations between floors, will provide sufficiency of compliance with Articles 3.1.8.7. and 3.1.8.8. of the Ontario Building Code at the Bodycote Technology Centre, 2395 Speakman Drive, Mississauga, Ontario.

APPLICANT	Nickolas Dorazio, Property Manager Bodycote Property Holdings Inc. Mississauga, Ontario
RESPONDENT	Agris Robeznieks Chief Building Official City of Mississauga
PANEL	Kenneth Peaker, Chair Fred Barkhouse Robert De Berardis
PLACE	Toronto, Ontario
DATE OF HEARING	October 25th, 2001
DATE OF RULING	October 25th, 2001
APPEARANCES	David Bailey, Operation Manager Bodycote Materials Testing Ltd. Mississauga, Ontario **Agent for the Applicant** Frank Spagnolo Manager, Building Engineering & Inspections City of Mississauga **Designate for the Respondent**

RULING

1. The Applicant

Nickolas Dorazio, Property Manager, Bodycote Property Holdings Inc., has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended and has undertaken renovations to the Bodycote Technology Centre building at 2395 Speakman Drive, Mississauga, Ontario.

2. Description of Construction

The Applicant operates a research laboratory facility known as the Bodycote Technology Centre. The structure is four storeys in height and has a total building area of 22,100 m^2. The building is comprised of noncombustible construction and is classified as a mix of Group D and Group F, Division 2 major occupancies. The building is fully sprinklered and is equipped with a fire alarm system and a standpipe and hose system.

The building was constructed in 1967 at which time it contained an administrative wing and three floors of lab facilities. Approximately 10 years ago, the corporation received funding from the province to under take improvements to the building. At that time, part of the facility was converted to rental accommodations. In addition, a number of renovations were undertaken. These renovations included improvements to building access, installation of an elevator and the addition of a sprinkler system. The building is now designed for multi-tenant use.

The construction in dispute involves the existing penetration of fume hood ductwork through the risers at each floor of the building. This ductwork serves as exhaust systems for each individual lab area. The main building contains over 168 risers and, of these, 104 have ductwork projecting through the floor and ceiling. This would account for over 273 sections of ductwork which is primarily comprised of heavy 16 gauge steel, with only 24 sections of ductwork composed of a lighter more conventionally designed steel. The ducts area able to withstand heat in excess of 400^{o}C and are protected by adjacent sprinkler heads.

In all cases, the original construction is such that the concrete floor was cast in place leaving openings for the installation of the subject ductwork. As a result of the nature of the laboratory operation the owners have determined that the ducts cannot be equipped with fire dampers at the required fire-rated separations because of potential toxicity. In addition, in light of the existing spatial constraints within these areas, it is impractical and/or impossible to wrap the exterior of the ductwork. To compensate for this element of compliance, the Applicant is proposing certain compensating measures and safety features including alarm networks, safety lighting, improved sprinkler system (one sprinkler head every 6 feet and in each riser), etc.

In addition, a detailed Riser Inspection Report was completed which outlines the safety characteristics of the service risers. This report confirms that access doors to the risers have locking cylinders which will prevent the storage of combustible material; the risers are sprinklered with heads located near the ceiling and set at 165^{o}C; there is “a continuous floor to ceiling rear block wall with limited access”; “all empty circular floor penetrations are filled with 3" of safing compressed to 50% and filled with ¼" 3M fire stop silicone. All metallic pipes or wire penetrating these circular openings are wrapped with 3" of safing compressed to 50% and filled with 3M fire stop silicone. All plastic pipes penetrating these circular openings are wrapped with 3M In Hole Plastic Pipe Fire Stop.” All features identified in the

Riser Report are offered to ensure the safety of the area in dispute in lieu of the inability to strictly comply with the present Building Code requirements.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the compensating measures proposed for where the dedicated fume hood ductwork traverses the 2-hour fire separations between floors in a multi-tenant building containing Group D and Group B occupancies, provide sufficiency of compliance with Articles 3.1.8.7. and 3.1.8.8. of the Ontario Building Code (OBC).

Article 3.1.8.7. requires that a duct which connects two fire compartments or penetrates an assembly be a fire separation and be equipped with a fire damper. In addition, where a required fire damper is used as a closure in a fire separation it shall have a fire-protection rating conforming to Sentence 3.1.8.4.(2). This requirement for the provision of fire dampers at every penetration of a required fire separation is intended to limit fire exposure through ductworks between compartments.

As an exception to Article 3.1.8.7., Article 3.1.8.8. outlines circumstances where the requirements for fire dampers would be waived. Sentence (1) of this Article permits the waiver of dampers where noncombustible ducts, which have a melting point above 760ºC, penetrate a required fire separation provided that these ducts serve only air-conditioning units or combined heating/air-conditioning units discharging air not more than 1,200 mm above the floor. This Sentence also permits the connection of these ducts to exhaust duct risers that are under negative pressure and in which the air is flowing upward and carried up, inside the riser, not less than 500 mm.

Sentences (2) through (7) of Article 3.1.8.8. outline other exceptions to the provision of fire dampers. These would include a) a continuous noncombustible duct which penetrates a vertical or horizontal fire separation which is not required to have a fire resistance rating, b) a noncombustible duct which penetrates a fire separation that separates a vertical service space from the rest of the building provided that the duct has a melting point above 760ºC and that each duct exhaust directly to the outside at the top of the vertical service space, c) a continuous noncombustible duct with a melting point above 760ºC that penetrates a vertical fire separation as required by Sentence 3.3.1.1.(1) between suites other than residential, care or detention occupancies, d) a duct that serves commercial cooking equipment, and e) a duct having a melting point above 760ºC located in elementary and secondary schools that pierces a fire separation having a resistance rating of 30 minutes.

The ductwork subject to this dispute penetrates the required fire separations between floor assemblies, however, no fire dampers are proposed in light of the potential for the spread of toxic gases throughout the building. It is recognized that the existing ductwork does not meet any of the specific criteria for an exemption from the provision of fire dampers. In light of this, measures to compensate for the fire damper requirement are proposed to achieve a measure of sufficiency of compliance in this situation.

4. Provisions of the Ontario Building Code

3.1.8.7. Fire Dampers

(1) Except as permitted by Article 3.1.8.8., a duct that connects 2 *fire compartments* or that penetrates an assembly required to be a *fire separation* shall be equipped with a *fire damper*.

(2) A *fire damper* required by Sentence (1) or a *fire damper* used as a *closure* in a *fire separation* shall have a *fire-protection rating* conforming to Sentence 3.1.8.4.(2).

3.1.8.8. Fire Dampers Waived

(1) *Fire dampers* need not be provided in n*oncombustible* branch ducts that have a melting point above 760°C (1,400°F) and that penetrate a required *fire separation* provided the ducts

(a) serve only air-conditioning units or combined air-conditioning and heating units discharging air not more than 1 200 mm (3 ft 11 in) above the floor and have a cross-sectional area not more than 0.013 m^2 (20 in^2), or

(b) are connected to exhaust duct risers that are under negative pressure and in which the air flow is upward as required by Article 3.6.3.4. and are carried up inside the riser not less than 500 mm (19¾ in).

(2) A continuous *noncombustible* duct penetrating a vertical *fire separation* not required to have a f*ire-resistance* rating need not be equipped with a *fire damper* at the *fire separation*.

(3) A n*oncombustible* duct that penetrates a horizontal *fire separation* not required to have a *fire-resistance rating* need not be equipped with a *fire damper* at the *fire separation*.

(4) A *noncombustible* duct that penetrates a *fire separation* that separates a *vertical service space* from the remainder of the *building* need not be equipped with a *fire damper* at the *fire separation* provided

(a) the duct has a melting point above 760°C (1,400°F), and

(b) each individual duct exhausts directly to the outside at the top of the *vertical service space*.

(5) A continuous *noncombustible* duct having a melting point above 760°C (1,400°F) that penetrates a vertical *fire separation* as required by Sentence 3.3.1.1.(1) between *suites* of other than *residential* or *care or detention occupancy* need not be equipped with a *fire damper* at the *fire separation*.

(6) A duct that serves commercial cooking equipment and penetrates a required *fire separation* need not be equipped with a *fire damper* at the *fire separation*. (See also Article 6.2.2.6.)

(7) In elementary and secondary schools, a continuous *noncombustible* duct having a melting point above 760°C (1,400°F) that pierces a *fire separation* having a *fire-resistance rating* of 30 min need not be equipped with a *fire damper* at the *fire separation*.

5. Applicant's Position

The Agent for the Applicant outlined the key issues in dispute. Essentially, the ducts which penetrate required fire-rated separations are not provided with fire dampers and cannot be successfully wrapped. He explained that the building was constructed in 1967 and has been used for laboratory services. The facility is designed with individual independent labs, each with the capabilities for performing different services or testing.

The Agent advised that, approximately 10 years ago, funding was received from the province to facilitate building improvements. As a result, a number of changes were proposed to improve the facility. When examining the situation involving the risers questions were raised with respect to Code compliance. A review of all risers was undertaken and a Riser Inspection Report was generated to address each

individual riser. Each of the 168 risers, he explained, have access doors and many have ductwork which penetrate the fire separation between floors. At this point, he emphasized that Bodycote was meticulous about removing combustibles from the risers. He stated that all doors are locked and supervised by the property manager. Staff and maintenance workers do not have free access to these areas.

The Agent submitted that the duct work is essential for the operation of this building as it is used to exhaust fumes that may be generated by the labs. He explained that the ducts are in close proximity to the block walls (within a few millimetres) surrounding the risers. As a result, it would be difficult, if not impossible to adequately wrap the ducts. He also submitted that the fume hoods which the ductwork serves are the first line of defence if smoke was detected within a lab. These are not automatically activated but are turned on by personnel within those areas. Fire dampers would defeat that purpose and would pose a potential hazard where toxic chemicals inside the labs are present. The fume hoods, he also submitted, are inspected monthly and audited for function.

In summation, the Agent noted that Bodycote would like to rent space to prospective tenants and is requesting a finding from the Commission for sufficiency of compliance based on the compensating measures being proposed to ensure the safety of both persons and property. He suggested that the function of the building, despite having multiple tenants, will not have changed significantly from its original purpose. He also advised that an approved fire safety plan is in place and a number of safety features that would maintain the spirit of the OBC requirements are being offered.

6. Respondent's Position

The Designate for the Respondent submitted that as a result of the change in use from a single tenant building to a multi-tenant format, safety concerns were identified and many have been addressed by the Applicant. Items such as exit doors and the provision of public corridors have been upgraded to meet the current Code standards. He advised that the Applicant has been very responsive to concerns that have been raised. Only the issue with respect to the subject duct penetrations remains outstanding. He submitted that it was originally thought compliance could be addressed by wrapping ducts but it was discovered that this would not be possible given the physical constraints of the space in question.

The Designate advised that it was their position that Article 3.1.8.8. did not provide the flexibility for him to find this situation in compliance with the Code. The fire separation, he submitted, must be maintained because none of the exceptions warrant the waiver of fire dampers. He had no discretion in this regard and therefore had no option but to deny the proposal, despite the compensating measures proposed.

The Designate advised that his primary concern is with respect to the increased risk associated with a multi-tenant building in relation to the 168 risers at issue. He stated that this building was constructed under the previous Building Code requirements and acknowledged the tight constraints and the numerous services located within the disputed areas. Despite this retrofit situation, however, he was unable to accept the proposal under Part 11 of the Code now that the use of the building has changed.

7. Commission Ruling

It is the decision of the Building Code Commission that the compensating measures offered in the multi-

tenant building containing group F, Division 2 and Group D occupancies where the dedicated fume hood duct work traverses the 2-hour fire separations between floors, will provide sufficiency of compliance with Articles 3.1.8.7. and 3.1.8.8. of the Ontario Building Code at the Bodycote Technology Centre, 2395 Speakman Drive, Mississauga, Ontario on condition that:

a) The vertical separation between the labs and the corridor must be continuous from one floor slab to the underside of the floor slab above.

b) The vertical service shaft must be separated between the lab and corridor from the floor slab to the underside of the floor slab above.

c) The metal doors in the floor slab, that are not being used as service penetrations, must be protected with rated separations equivalent to the floor rating.

d) The sprinkler system must be expanded to include the concealed space above the corridor ceiling.

8. Reasons

i) With implementation of the above conditions, the requirements of the OBC will be adequately addressed and sufficiency of compliance will be achieved.

Dated at Toronto this **25th** day in the month of **October** in the year **2001** for application number **2001-60**.

Mr. Kenneth Peaker, Chair

Mr. Fred Barkhouse

Mr. Robert De Berardis

Ruling No. 01-51-844
Application # 2001-57

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.2.9.1.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Art Rebek, Engineering Manager, Jungbunzlauer Canada Inc., for the resolution of a dispute with Dave Rose, Chief Building Official, City of Port Colborne, to determine whether the compensating measures offered in lieu of standpipe and hose systems in buildings containing Group F, Division 2, Group F, Division 3 and Group D occupancies provide sufficiency of compliance with Sentence 3.2.9.1.(1) of the Ontario Building Code at Jungbunzlauer Canada Inc. facility, 1555 Elm Street, Port Colborne, Ontario.

APPLICANT	Art Rebek, Engineering Manager Jungbunzlauer Canada Inc. Port Colborne, Ontario
RESPONDENT	Dave Rose Chief Building Official City of Port Colborne
PANEL	Kenneth Peaker, Chair Fred Barkhouse Robert De Berardis
PLACE	Toronto, Ontario
DATE OF HEARING	October 25th, 2001
DATE OF RULING	October 25th, 2001
APPEARANCES	Gino Niro Sandwell Consulting Engineers Ltd. Burlington, Ontario **Agent for the Applicant** Dave Rose Chief Building Official City of Port Colborne **The Respondent**

RULING

1. The Applicant

Art Rebek, Engineering Manager, Jungbunzlauer Canada Inc., Port Colborne, Ontario, has received a building permit under the Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended and is constructing an industrial complex to be operated by Jungbunzlauer Canada Inc. at 1555 Elm Street, Port Colborne, Ontario.

2. Description of Construction

Jungbunzlauer Canada Inc. (JBL) is a manufacturer of food grade citric acid, commonly found in a vast range of products. The process involves the specialized fermentation of corn syrup which results in the production of citric acid solution. This solution is then dried to form citric acid crystals. The proposed JBL facility incorporates a number of buildings which would include a large Citric Acid Plant Building and five other ancillary buildings identified as Stores, Spores, Utility, Maintenance and Drying Buildings. The buildings subject to this dispute include the Citric Acid Plant and Drying Building.

The Citric Acid Plant itself has an area of 8,518 m^2 and is subdivided into five smaller buildings by firewalls. The buildings formed by these firewalls are identified as follows: (A) the Packing, Storage and Shipping Building, having a height of one storey, (B) the Centrifugation Building, having a height of four storeys, (C) the Filtration and Purification building, with a height of three storeys, (D) Preparation, Offices and Staff Facilities Building, being five storeys in height and (E) the Fermentation and Compressor Room building, which is two storeys high. These buildings are equipped with a fire alarm system and are classified as Group F, Division 3 occupancies with the exception of Building A, the Packing and Storage building, which has a Group F, Division 2 occupancy classification. In addition, Building D includes a three storey office component as a subsidiary occupancy.

The Drying Building has an area of 886 m^2 an is a single storey structure. It has a sloped roof which reaches a maximum height of 14.5 m. Both the Citric Acid Plant Buildings and the Drying Building are of noncombustible construction. They are not equipped with either a sprinkler system and only Building D is to be equipped with a standpipe and hose system.

The construction in dispute relates to the proposed omission of the required standpipe and hose systems in the Citric Acid Plant Buildings A, B, C and E and the Drying Building. As compensation for not providing this system the Applicant is offering a ULC listed fire alarm system in all buildings with the exception of the Drying Building. In addition, ABC fire extinguishers are to be provided within 30 ft of all motors in lieu of type A extinguishers located at 15.24 m intervals (10.06 m in the office area) throughout the building. As well, the stairs which provide a means of egress from all floors in Buildings B, C and D are to be constructed having a 2-hour fire resistance rating as opposed to the 45 minute (Buildings B and C) and 1-hour (Building D) ratings required by Code. The Applicant also notes that all personnel would be required to carry radio handsets to permit immediate communication and will receive training in fire safety and first aid procedures.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the compensating measures offered in lieu of a standpipe and hose system in the Citric Acid Plant Buildings A, B, C and E and the

Drying Building will provide sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code (OBC).

This provision of the Code sets out the parameters under which the installation of a standpipe and hose system would be required. The standpipe requirement is determined according to the major occupancy, size and height of the building. In this case the building sizes exceed either the permitted number of storeys, building height or building area. As noted, however, the Applicant is offering certain compensating measures in lieu of providing the standpipe system. At issue then, is whether the subject measures are sufficient to compensate for the required standpipe and hose systems.

4. Provisions of the Ontario Building Code

3.2.9.1. Standpipe Systems - Where Required

(1) Except as provided in Sentences (4) to (7), a standpipe system shall be installed in every building that

(a) is more than 3 storeys in building height,
(b) is more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey, or
(c) is not more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey but has a building area exceeding the area shown in Table 3.2.9.1. for the applicable building height if the building is not sprinklered.

5. Applicant's Position

The Applicant advised the Commission that Jungbunzlauer is a company based out of Austria. It is in the business of manufacturing citric acid and is currently constructing a facility in the City of Port Colborne. As a result of the process of obtaining approvals for their proposed facility, several aspects of construction have arisen which were not familiar to the parent company. One such aspect was the requirement for a standpipe and hose system. The Agent suggested that they had never encountered the need for such a system at facilities established in other countries around the world.

In requesting approval for the omission of the required standpipe and hose system the Agent stated that the basic reasoning behind this request is threefold. First, the buildings in question are noncombustible. Second, the product is primarily noncombustible and, third, there is a relatively low overall occupancy load within the buildings. The plant, he argued is fully automated with only 6 people working in the processing area.

The Agent submitted that the Citric Acid Plant building has been divided into fire compartments to prevent or slow the spread of fire between buildings. It was initially their intent to have the requirement for standpipe waived in all building areas but they have since agreed to install this feature in Building D containing the office area, which has a higher occupant load. The question remains, he submitted, whether the other buildings were required to be similarly equipped when considering the nature of the operation and the compensation being offered.

In this regard, the Agent stated that the JBL facility was comprised of a number of buildings. Building A, used for warehousing and packaging is an F2 occupancy. The proposal is to install additional heat

detectors and use ABC type extinguishers in lieu of a standpipe and hose system in this location. In respect to Building B, where the citric acid is filtered, the Agent argued that this process is a closed system. Equipment is of stainless steel construction and the area is a dry production area. He acknowledged the additional fire load in this building as a result of the electrical equipment employed in this area but suggested that the fire extinguishers to be provided would be preferable for fighting any type of electrical fire that may occur. In respect to Building E, where the fermentation process is carried out, the Agent submitted that this is a very wet area with limited access. In this regard there is very little that could burn and fire extinguishers would be adequate to fight fire in that area.

In addition to the low occupancy and noncombustible construction, the Agent submitted that they have employed a number of other safety features. These features include the proposal to install a fire alarm system throughout the facility with pull stations and a 24 hour/day manned control station. They are also proposed to train employees in the use of extinguishers, first aid and evacuation procedures and to provide them with handsets for immediate communication. As well, the fire department response time to reach this facility is very short, being approximately 5 minutes from the time a call is received. In summation, the Agent argued that, in light of all of these considerations, there was really no justification for standpipe and hose systems in the subject buildings.

6. Respondent's Position

The Respondent submitted that, although the Applicant has offered measures to compensate for the required standpipe and hose systems, the City does not have the authority to accept this proposal. The Code is specific in its requirement for a standpipe and hose in this situation and they are not permitted to make an exception in this regard.

7. Commission Ruling

It is the decision of the Building Code Commission that the compensating measures offered in lieu of standpipe and hose systems in buildings containing Group F, Division 2, Group F, Division 3 and Group D occupancies do not provide sufficiency of compliance with Sentence 3.2.9.1.(1) of the Ontario Building Code at Jungbunzlauer Canada Inc. facility, 1555 Elm Street, Port Colborne, Ontario.

8. Reasons

i) The compensating measures offered are not adequate to provide sufficiency of compliance with the Building Code requirements.

ii) The manufacturing processes within the buildings are not such that a hazardous situation would be created if a standpipe and hose system is introduced to the structures.

Dated at Toronto this **25th** day in the month of **October** in the year **2001** for application number **2001-57**.

Mr. Kenneth Peaker, Chair

Mr. Fred Barkhouse

Mr. Robert De Berardis

Ruling No. 01-49-842
Application # 2001-56

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 11.4.1.1., 11.4.2.5. and 11.4.3.6. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by James and Gloria Vasey, property owners, for the resolution of a dispute with Bob Hexter, Chief Building Official, County of Lambton, Ontario, to determine whether the use of the existing septic system on a property where the reconstruction of a single detached residential dwelling is proposed due to the destruction of existing dwelling by a house fire, provides sufficiency of compliance with Articles 11.4.1.1., 11.4.2.5. and 11.4.3.6. of the Ontario Building Code at 4490 LaSalle Line, Township of Enniskillen, County of Lambton, Ontario.

APPLICANTS	James and Gloria Vasey Property owners Watford, Ontario
RESPONDENT	Bob Hexter Chief Building Official County of Lambton
PANEL	Frank Wright, Chair-Designate Doug Robinson Bill Fellner
PLACE	Toronto, Ontario
DATE OF HEARING	October 11, 2001
DATE OF RULING	October 11, 2001
APPEARANCES	James and Gloria Vasey Property owners **The Applicants** Mark Wetering Septic Systems Administrator County of Lambton **Designate for the Respondent**

RULING

1. The Applicant

James and Gloria Vasey, property owners, have applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended and are proposing to reconstruct a single detached dwelling that was destroyed as a result of a fire at 4490 LaSalle Line, Township of Enniskillen, County of Lambton, Ontario.

2. Description of Construction

The Applicants are proposing to reconstruct a Class C residential building, having a building area of 140 m^2. The original dwelling was destroyed by fire in November 1999. The replacement dwelling is smaller in building area and will contain 22.5 plumbing fixture units (no more than the original structure). The Applicants are proposing to use the existing Class 4 septic system to service the new house that would be constructed to replace the damaged one.

The septic system itself was undamaged by the fire that razed the building. The soil on site is clay having a percolation rate of T = 60 minutes. The existing septic tank operates with a working capacity of 3600 litres. The system is equipped with a chlorination chamber and a filtration bed, with trenches measuring 16.76 m in length, for the treatment of effluent. Leading from the filtration bed is a pipe designed to discharge effluent into a municipal ditch along LaSalle Line. This ditch is located approximately 150 to 180 m from the bed.

The construction in dispute involves the design and operation of the existing septic system. The system serving this property was designed 1977 and permits surface discharge to a ditch along an adjacent roadway. This type of operation is typically referred to as an “under drain system”. The system was approved for use by the County of Lambton in 1978 but would currently not be permitted by the either the Ontario Building Code or the Ontario Water Resources Act.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the use of the existing septic system to serve a single detached residential dwelling that will replace a building, destroyed as a result of a house fire, provides sufficiency of compliance with Articles 11.4.1.1., 11.4.2.5. and 11.4.3.6. of the Ontario Building Code (OBC).

Article 11.4.1.1. states that the performance level of a building after construction shall not be less than the performance level of the building prior to construction. It further indicates that Subsection 11.4.2. shall be considered when making any determination regarding a reduction in performance level. In addition the Article also notes that, where the proposed construction would reduce the performance level of a building, compensating construction would be required.

When having regard to whether the performance level of a building is reduced, Article 11.4.2.5. sets out several situations that would result in such a reduction. These situations include cases where a sewage system serving an existing building would be adversely affected by the proposed construction, an increase in the occupant load of a building, an increase in the number of bedrooms, an addition of more than 15% to the building area of an existing dwelling, an increase in the number of the plumbing fixtures and a change of major occupancy which, together or alone, would result in a daily design sewage flow in excess of the designed capacity for the existing sewage system. In other words, if the resultant increase in the daily design sewage flow, due to any of the above conditions, exceeds the capacity of the septic system, the performance

level is reduced.

If the performance level of a dwelling is reduced, Sentence (1) of Article 11.4.3.6. requires sufficient up-grading of the components of an existing septic system to comply with the requirements of Part 8 of the OBC. This sentence applies if one of the conditions specified in Article 11.4.2.5. leads to a reduction in the performance level of an existing dwelling.

In the present case the reconstruction of the building would not appear to involve any of the above situations identified by the Building Code as contributing to the reduction in performance level. The proposed dwelling will be smaller in size than the original and no additional plumbing fixtures are anticipated. In fact, it may be presumed that the new fixtures would work more efficiently than the original ones. In addition, there will be no change in occupancy and no additional occupant load to be accommodated.

The issue between the parties remains, however, whether the system must be upgraded in light of its design and operation.

As noted above, the existing sewage disposal system operates so as to permit surface discharge into an open ditch along an adjacent roadway. It should be noted that Subsection 8.9.1. of the Ontario Building Code prohibits the discharge of effluent onto the surface of the ground. This requirement applies to all "sewage systems" constructed in accordance with the Ontario Building Code requirements. The operation in dispute, as previously stated, was approved by the Region in 1978 under previous guidelines established by the Ministry of the Environment. When applying the present criteria for evaluating a sewage disposal system, the existing operation could be considered to be a "sewage work" as defined and regulated by the *Ontario Water Resources Act*.

4. Provisions of the Ontario Building Code

11.4.1.1. Performance Level

(1) The *performance level* of a *building* after *construction* shall not be less than the *performance level* of the *building* prior to *construction*.

(2) For the purposes of Sentence (1), reduction of *performance level* shall be determined in accordance with Subsection 11.4.2.

(3) Where the proposed *construction* would reduce the *performance level* of an existing *building*, compensating *construction* shall be required in conformance with Subsection 11.4.3.

11.4.2.5. Sewage Systems

(1) The *performance level* of an existing *building* is reduced where the existing *building* is extended or subject to material alteration or repair and a *sewage system* serving the existing *building* is adversely affected by the extension, alteration or repair of the existing *building*.

(2) Except as provided in Sentence (3), the *performance level* of an existing *building* is reduced where proposed *construction* will increase the *occupant load* of an existing *building*, and the new *occupant load* will result in the total daily design *sanitary sewage flow* of the *building*, calculated in accordance with Article 8.2.1.3., exceeding the capacity of any component of a *sewage system* serving the *building*.

(3) The *performance level* of an existing *dwelling unit* is reduced where *proposed construction* which,

(a) increases the number of bedrooms in the *dwelling unit*,

(b) exceeds 15% of the finished area of the *dwelling unit*, or

(c) adds new *plumbing fixtures to the dwelling unit*,

will result in the total daily design *sanitary sewage* flow of the *dwelling unit*, calculated in accordance with Article 8.2.1.3., exceeding the capacity of any component of a *sewage system* serving the *dwelling unit*.

(4) The *performance level* of an existing *building* is reduced where proposed *construction* will result in the change of a *major occupancy* of all or part of the existing *building* to another *major occupancy* and:

(a) the total daily design *sanitary sewage flow* of the proposed *major occupancy*, calculated in accordance with Article 8.2.1.3., exceeds the capacity of any component of a *sewage system* serving the *building*, or

(b) the type or amount of *sanitary sewage* which will, under the proposed *major occupancy*, be discharged to a *sewage system* serving the *building*, is prohibited by Article 8.1.3.1..

11.4.3.6. Sewage Systems

(1) Where the *performance level* of an existing *building* is reduced under Article 11.4.2.5., upgrading of a *sewage system* which is adversely affected by the *construction*, increase in *occupant load*, increase in the total daily design *sanitary sewage* flow or change in amount or type of *sanitary sewage* shall be required in conformance with Part 8.

5. Applicant's Position

The Applicants explained that their house was destroyed by fire in 1999. For some time they were uncertain as to whether they were going to rebuild or relocate. When the decision to rebuild was made they applied to the Town for a permit. It was their intention to use the existing sewage system to serve the proposed building as it had not sustained any damage in the fire and was oversized to begin with. They submitted that the municipality would not approve their building permit because of some concerns with respect to their sewage system.

They were advised by municipal staff that the existing system was no longer legal and would have to be replaced. They then investigated with their insurance provider and were advised that a replacement septic system would not be covered under their policy. This left them with the responsibility for paying for the total cost of replacing a system that had been approved by the municipality and had been functioning efficiently for quite some time. The only change in circumstance occurred because their house had to be rebuilt. The new house, they argued, is smaller and would have less impact on the existing system than the original. The performance level of the sewage system would not be reduced as a result of this construction.

The Applicants feel justified in asking that their system be "grandfathered" and, thereby, a permit issued for the new building. They merely want to restore the situation that existed prior to the unforseen destruction of their home. In respect to concerns raised regarding surface discharge, they argued that, in all their years living on the property, they have never observed any discharge from the pipe into the roadside ditch.

6. Respondent's Position

The Respondent submitted that, in the past, Lambton County had approved many of these types of "under drain" systems under the *Environmental Protection Act*. In 1981 the regulations changed and there were no further approvals given. Since that time, it has been the municipality's policy to require replacement of any

of the existing under drains when any new construction was to occur. They recognized the problems with this type of system but the problem became an enforcement issue.

The Respondent argued that the *Building Code Act* and the Ontario Building Code are clear on prohibiting a system which discharges to a water body. While he recognizes that the new construction will not increase the building size or the occupant load, he considers the current septic system to be unsafe and, based on the municipality's policy, it should be replaced. He suggested that, when the operation doesn't comply with Part 8 of the Code, Part 11 cannot even be applied. The impact on performance level is, therefore, not an issue. The system is simply not covered, nor permitted, by the Building Code.

7. Commission Ruling

It is the decision of the Building Code Commission that 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended, the Building Code Commission does not have the jurisdiction to determine this dispute.

8. Reasons

i) Under s. 24(1) of the *Building Code Act*, the Building Code Commission has jurisdiction to resolve disputes:

- that are between a chief building official or building inspector and an applicant for, or holder of, a permit or a person to whom an order is given; and

- that concern the interpretation of, or the sufficiency of compliance with, the technical requirements of the Ontario Building Code.

In this case, while the Commission acknowledges that there is a dispute between the Chief Official and the Applicant, the parameters of that dispute fall outside the provisions of the Ontario Building Code.

ii) The Ontario Building Code provides definitions for both "sewage system" and "leaching bed". Neither definition can be applied to the existing septic disposal method employed on this site. The operation is better defined as "sewage works" which is governed by the provisions of the *Ontario Water Resources Act*.

Dated at Toronto this **11th** day in the month of **October** in the year **2001** for application number **2001-56**.

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Mr. Frank Wright, Chair-Designate

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Mr. Doug Robinson

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Mr. Bill Fellner

Ruling No. 01-48-841
Application # 2001-54

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 11.4.2.5.(3) and 11.4.3.6.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by George and Christina Toulouse, property owners, for the resolution of a dispute with Fritz Enzlin, Deputy Chief Building Official, Municipality of Chatham-Kent, Ontario, to determine whether the performance level of the existing septic system, when considering a proposed second storey addition that will include a three piece ensuite bathroom, provides sufficiency of compliance with Sentences 11.4.2.5.(3) and 11.4.3.6.(1) of the Ontario Building Code at 5038 Dufferin Avenue, Wallaceburg, Municipality of Chatham-Kent, Ontario.

APPLICANT	George and Christina Toulouse Property owners
RESPONDENT	Fritz Enzlin Deputy Chief Building Official Municipality of Chatham-Kent
PANEL	Frank Wright, Chair-Designate Doug Robinson Bill Fellner
PLACE	Toronto, Ontario
DATE OF HEARING	October 11, 2001
DATE OF RULING	October 11, 2001
APPEARANCES	George and Christina Toulouse **The Applicants** Fritz Enzlin Deputy Chief Building Official Municipality of Chatham-Kent **The Respondent**

RULING

1. The Applicant

George and Christina Toulouse, property owners, have applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended and are proposing to construct an addition to their dwelling at 5038 Dufferin Avenue, Wallaceburg, Municipality of Chatham-Kent, Ontario.

2. Description of Construction

The Applicants are proposing to construct an addition to the second floor of their existing residential (Group C occupancy) dwelling. The proposed construction would enlarge the master bedroom and include a three piece ensuite washroom. This would increase the total number of plumbing fixture units in the building from 11 to 17 and would generate a total daily design sewage flow of 1600 litres per day.

The Applicants are not proposing any changes or upgrades to the existing sewage system which was installed in 1970. The existing sewage system is described by the Respondent as a conventional Class 4 sewage treatment facility, comprised of a 600 gallon tank and approximately 250 ft of weeping tile in 5 runs. This description is based on an earlier Certificate of Approval issued for the existing system. The site itself is relatively flat with a percolation time for the native soil of approximately 30 minutes.

The construction in dispute involves the working capacity of the existing septic system in light of the proposed addition to the building and the resulting increase in total daily design flow.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the performance level of the existing septic system, when considering the proposed addition that includes a three piece bathroom, provides sufficiency of compliance with Sentences 11.4.2.5.(3) and 11.4.3.6.(1) of the Ontario Building Code (OBC).

Sentence 11.4.2.5.(3) sets out the situations that would reduce the performance level of an existing dwelling. These situations include an increase in the number of bedrooms, an addition of more than 15% to the building area of an existing dwelling and an increase in the number of the plumbing fixtures that, together or alone, would result in a daily design sewage flow in excess of the designed capacity for any component of the existing sewage system. In other words, if the resultant increase in the daily design sewage flow, due to any of the above conditions, exceeds the capacity of one component or the whole septic system, the performance level of the dwelling is reduced.

If the performance level of a dwelling is reduced, Sentence 11.4.3.6.(1) requires up-grading of an existing septic system to comply with the requirements of Part 8 of the OBC. This sentence applies if one of the conditions specified in Sentence 11.4.2.5.(3) leads to a reduction in the performance level of an existing dwelling.

In the present case the addition to the subject dwelling includes a three piece ensuite bathroom which would increase the total number of plumbing fixture units from 11 to 17. Therefore, at issue is whether the existing septic system will sufficiently comply with the requirements set out in the Building Code or whether the system will require upgrading.

4. Provisions of the Ontario Building Code

11.4.2.5. Sewage Systems

(3) The *performance level* of an existing *dwelling unit* is reduced where *proposed construction* which,

(a) increases the number of bedrooms in the *dwelling unit*,
(b) exceeds 15% of the finished area of the *dwelling unit*, or
(c) adds new *plumbing fixtures to the dwelling unit*,

will result in the total daily design *sanitary sewage* flow of the *dwelling unit*, calculated in accordance with Article 8.2.1.3., exceeding the capacity of any component of a *sewage system* serving the *dwelling unit*.

11.4.3.6. Sewage Systems

(1) Where the *performance level* of an existing *building* is reduced under Article 11.4.2.5., upgrading of a *sewage system* which is adversely affected by the *construction*, increase in *occupant load,* increase in the total daily design *sanitary sewage* flow or change in amount or type of *sanitary sewage* shall be required in conformance with Part 8.

5. Applicant's Position

The Applicants advised that they are seeking to construct an addition to the second floor of their existing dwelling. This addition would include a three piece ensuite bathroom. They submitted that when they applied for a permit for the anticipated construction, municipal officials advised that the existing septic system would require upgrading.

The Applicants argued that, while there may be an increase in the number of plumbing fixtures, there would continue to be only two people living in the building and that no additional sewage would be generated. The washroom on the second floor, they argued, is merely a convenience. They continued by submitting that they had raised a family in the existing dwelling and had never encountered any problems with respect to the septic system. In their opinion, the current capacity has always been adequate and they do not agree with the contention that, simply by adding some plumbing fixtures, the system will become overloaded.

In summation they argued that the existing system would continue to be sufficient to accommodate the daily sewage flow from their dwelling. They maintained their assertion that no additional sewage would result from the proposed addition.

6. Respondent's Position

The Respondent submitted that, when applying the criteria outlined in Part 11 of the Building Code, the proposed addition will decrease the performance level of the building because of the additional fixture units proposed. He agreed that the existing system is not failing but emphasized that the provisions of the Code are clear in this respect.

The Respondent advised the Commission that, based on the specifications outlined in the Certificate of Approval that was issued in 1970, the total daily design flow calculated based on the requirements of

Part 8 will exceed the capacity of the existing system. As such, he was unable to issue a permit for the proposed construction.

7. Commission Ruling

It is the decision of the Building Code Commission that the performance level of the existing septic system, when considering a proposed second storey addition that will include a three piece bathroom, does not provide sufficiency of compliance with Sentences 11.4.2.5.(1), 11.4.2.5.(3) and 11.4.3.6.(1) of the Ontario Building Code at 5038 Dufferin Avenue, Wallaceburg, Municipality of Chatham-Kent, Ontario.

8. Reasons

1. The total daily design flow, when considering the increase in fixture units from 11 to 17, would exceed the design capacity for the existing system. As a result, the additional fixture units proposed in the present case would decrease the performance level of the existing building.

Dated at Toronto this **11th** day in the month of **October** in the year **2001** for application number **2001-54**.

Mr. Frank Wright, Chair-Designate

Mr. Doug Robinson

Mr. Bill Fellner

Ruling No. 01-47-840
Application # 2001-59

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 11.3.3.1.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Bruce Schulz, co-owner of the property, for the resolution of a dispute with Chris Mowat, Chief Building Official, Township of Faraday, to determine whether the construction of a replacement deck provides sufficiency of compliance with Sentence 11.3.3.1.(1) of the Ontario Building Code at 383 Pine Drive, Township of Faraday, Ontario.

APPLICANT	Bruce Schulz Property co-owner
RESPONDENT	Chris Mowat Chief Building Official Township of Faraday
PANEL	Len King, Chair-Designate Fred Barkhouse John Guthrie
PLACE	Toronto, Ontario
DATE OF HEARING	September 27th, 2001
DATE OF RULING	September 27th, 2001
APPEARANCES	Carl Schulz **Agent for the Applicant** Chris Mowat Chief Building Official Township of Faraday **The Respondent**

RULING

1. The Applicant

Bruce Schulz, co-owner of the property, has received an order to comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, to remedy certain alleged deficiencies with respect to a replacement deck at 383 Pine Drive in the Township of Faraday, Ontario.

2. Description of Construction

The Applicant and his brother are the co-owners of a cottage in the Township of Faraday. The building is a one storey seasonal dwelling having a Group C occupancy and a building area of 74.32 m^2 (800 sq ft).

The construction in dispute involves the recent repair and replacement of an exterior rear yard deck, which the Applicant believed to have been constructed during the 1960s. After the time of purchase in 1999, it was discovered that the lumber comprising the original deck was rotting and considered unsafe by the present owners. As a result, the deck was demolished and reconstructed in the same location. This replacement deck is the same size and configuration as the deck that was in existence at the time of purchase. It has been placed on the same ground pads as the original and is comprised of 4" x 4" vertical posts and 2" x 6" floor boards as decking. Minor changes to the design of the original structure include the support joists, which have now been spaced 406 mm (16 in) on centres, as opposed to 609 mm (24 in) on centres for the previous deck. In addition, the stairway and stair treads are wider than what had appeared on the original structure.

The dispute primarily centres around the guard that has been provided for the reconstructed deck. It consists of 4" x 4" pressure treated lumber support posts connected by two 2" x 6" horizontal members. The top of the lowest member is approximately 457 mm (18 in) from the finished floor and the top of the handrail reaches a height of approximately 787 mm (31 in) from the deck floor. These dimensions are consistent with the design of the original deck.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the replacement deck construction provides sufficiency of compliance with Sentence 11.3.3.1.(1) of the Ontario Building Code (OBC).

Article 11.3.1.1. requires that, where a building system is altered or repaired, the performance level of the building must be at least equal to the performance level of the building prior to the material alteration. Sentence 11.3.3.1.(1) outlines the provisions for basic renovation and states that, except as noted in Article 11.3.3.2., construction may be carried out to maintain the performance level of an existing building. This can be achieved by the reuse, relocation or extension of the same or similar materials, provided that the construction will not adversely affect things such as certain safety features or the structural adequacy of the building.

In this instance, a dilapidated deck was removed and replaced using new materials. The structure has the same general dimensions and design as the original, however, the guard of both the original deck and the replacement structure contains a horizontal member that may be considered climbable when considering other provision of the OBC. In addition, the horizontal loading capacity and structural integrity of the guard has not been determined.

4. Provisions of the Ontario Building Code

11.3.3.1. Basic Renovation

(1) Except as provided in Sentence (2) and Article 11.3.3.2., *construction* may be carried out to maintain the existing *performance level* of all or part of an existing *building*, by the reuse, relocation or extension of the same or similar materials or components, to retain the existing character, structural uniqueness, heritage value, or aesthetic appearance of all or part of the *building* if, the *construction* will not adversely affect the early warning and evacuation systems, fire separations, the structural adequacy or create an unhealthy environment in the *building*.

5. Applicant's Position

The Agent for the Applicant began his submission by referring to two photographs of the rear of the cottage. The photographs allowed for comparison of the deck prior to reconstruction with the structure that is the subject of this hearing. In addition, he presented a copy of the real estate listing of the previous owner which included a photograph of the cottage showing the subject deck. He advised that after the time of purchase, the original deck was discovered to be rotten and was crumbling underfoot. He brought to the hearing a sample of the wood from the original deck as proof of that claim.

To remedy the unsafe situation, the Applicant had initially considered replacing just the individual floor boards but discovered that the frame was also an issue. As a result, it was determined to be prudent to remove the existing structure and reconstruct a replacement deck of the same size and configuration. This work was completed in the summer of 2000. In the Agent's opinion, the Applicant has reconstructed a deck of the same size and design as the original. He submitted that this was a basic renovation and repair and, therefore, at the time of construction, he didn't think that a building permit was required.

The Agent argued that the newly constructed deck does not lessen, but in fact increases, the performance level of the building and retains the character of what existed prior to the renovation. In his opinion, the deck is safer and stronger now than it was before the repair work had been done.

The Agent advised that it was his understanding that the Respondent's primary concern was with respect to the climbability of the guard. His position was that the guard was no more hazardous now than prior to the reconstruction. He argued that the character of the guard is identical to the original and, although there is a horizontal member that may be considered climbable when considering other provisions of the Code for new construction, it should not be considered as a factor in this circumstance.

6. Respondent's Position

The Respondent submitted that he has viewed this deck as being new construction. Based on his information and previous inspections, nothing was discovered to indicate that there was a deck on this property immediately prior to the recent construction. He advised that a situation occurred with a previous owner in the year 1989, whereby it was discovered that the location of the cottage crossed over a property line. As a result, the cottage was moved to a location wholly on the lot in question. The Respondent advised that, during all of the inspections conducted at that time he did not observe a deck, nor was there any reference to the deck in the detailed notes kept in regard to this work.

The Respondent advised that his ultimate concern is with respect to the safety of the construction undertaken. He submitted that, because a permit had not been applied for, no inspections were conducted during construction to ensure compliance with the OBC. In respect to the climbability issue, the Respondent acknowledged that, if the deck were an existing structure then the replacement guard posed no greater hazard than what had previously existed. The issue that would remain a concern for him in that instance would be whether the guard is structurally sound. At this point he had no information that would convince him that structural adequacy is not an issue. In addition, he noted that the Applicant had not applied for a permit and no formal inspection had been carried out.

The Respondent concluded that, assuming the deck were an existing structure, and if he were convinced as to the structural integrity of the guard, he would be satisfied that the deck complied with the OBC provisions as outlined in Part 11.

7. Commission Ruling

It is the decision of the Building Code Commission that the replacement deck provides sufficiency of compliance with Sentence 11.3.3.1.(1) of the Ontario Building Code at 383 Pine Drive, Township of Faraday, Ontario on condition that:

a) The Applicant apply for a building permit.
b) The guard is reinforced, if necessary, to comply with the structural requirements of the OBC.
c) A handrail is provided for the stairs of the deck.

8. Reasons

i) Upon fulfilment of the above conditions, the deck will provide sufficiency of compliance with the OBC provisions.
ii) The replacement deck retains the existing character and aesthetic appearance of the original structure.
iii) The existing guard design is acceptable with respect to climbability and openings since the guard replaces an existing guard in accordance with Part 11 of the Ontario Building Code.

Dated at Toronto this **27th** day in the month of **September** in the year **2001** for application number **2001-59**.

Mr. Len King, Chair-Designate

Mr. Fred Barkhouse

Mr. John Guthrie

Ruling No. 01-45-838
Application # 2001-51

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 3.4.2.5.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Mario Pecile, Project Manager, Magna-MI Developments Inc., Aurora, Ontario, for the resolution of a dispute with Mr. Mani Navabi, Director of Building Standards, City of Vaughan, Ontario, to determine whether the proposed main aisles in a Group F, Division 2 industrial building, which include several direction changes, lead through doors in interior partitions, and which lead to the exit doors located at 60 metre intervals around the perimeter of the building, provide sufficiency of compliance with Sentence 3.4.2.5.(2) of the Ontario Building Code at Splitcraft/STT Technologies, 800 Tesma Way, Vaughan, Ontario.

APPLICANT	Mr. Mario Pecile, Project Manager, Magna-MI Developments Inc. Aurora, Ontario
RESPONDENT	Mr. Mani Navabi Director of Building Standards City of Vaughan
PANEL	Mr. Len King, Chair-Designate Mr. Fred Barkhouse Mr. John Guthrie
PLACE	Toronto, Ontario
DATE OF HEARING	September 27th, 2001
DATE OF RULING	September 27th, 2001
APPEARANCES	Mr. Randal Brown, President Randal Brown & Associates **Agent for the Applicant**
	Mr. Mani Navabi, Director of Building Standards City of Vaughan **The Respondent**

RULING

1. The Applicant

Mr. Mario Pecile, Project Manager, Magna-MI Developments Inc., Aurora Ontario, has applied for a building permit under the Building Code Act, 1992 and is proposing an expansion of the industrial plant known as Splitcraft/STT Technologies, 800 Tesma Way, Vaughan, Ontario.

2. Description of Construction

The Applicant is proposing the expansion of its existing Splitcraft/STT Technologies facility in Vaughan. The building is one storey in building height and, when completed, will have an area of 17,187.5 m^2, including the northern, southern and eastern expansions. The structure is comprised of noncombustible construction and is equipped with a sprinkler system, a fire alarm system and a standpipe and hose system.

The existing building is currently subdivided into several areas by partitions, creating rooms of varying sizes. With the additions, the two east-west exit corridors in the existing building will be eliminated and replaced by two continuous east-west partitions. The partitions will subdivide the western portion of the final building into three sections, with access to each section through egress doors in the partitions. The southern addition will be separated from the western addition and from the existing building by continuous east-west running partitions.

As a result of the increase in building area and the configuration of the expanded structure, it is no longer possible to achieve the 45 m travel distance to an exit, as outlined in the OBC. Exit doors, therefore, have been located, at minimum, every 60 m around the perimeter of the facility. This is in accordance the Building Code requirements where the 45 m travel distance cannot be achieved. The construction in dispute, however, specifically involves the layout of the main aisles that lead to these required exits. The aisles that are provided to link the perimeter exit doors on opposite sides of the building incorporate several direction changes and, where an aisle crosses a partition, double swinging egress doors have been provided.

In light of the aisle design, and to facilitate the evacuation of the building in an emergency, the Applicant is proposing a number of added measures. There will be extra aisles and perimeter doors, in excess of OBC requirements, incorporated into the design of the facility. In addition, the main aisles will be identified by yellow floor markings throughout the building and arrows will be utilized where a slight change in direction occurs. It is also proposed that exit signs will be located approximately 2.74 m (9 ft) above the finished floor over the egress doors that lead through partitions.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the design of the main aisles leading to the required exits located at 60 m around the perimeter of the building, provides sufficiency of compliance with Sentence 3.4.2.5.(2) of the Ontario Building Code.

Sentence 3.4.2.5.(2) provides relief from Sentence 3.4.2.5.(1). Sentence 3.4.2.5.(1) would require a maximum travel distance of 45 m from a floor area to an exit in this instance. Sentence 3.4.2.5.(2) provides that Sentence (1) need not apply if exits are placed at 60 m intervals along the perimeter of the building provided that each main aisle leads directly to an exit.

In this instance, exit doors are proposed to be placed, at minimum, 60 m around the perimeter of the building, with additional exits also incorporated into the design of the facility. The dispute in respect to this provision of the Code centres around whether the main aisles can be considered to lead "directly" to a required exit. As mentioned above, the main aisles includes several direction changes and travel through double swinging egress doors between partitions.

4. Provisions of the Ontario Building Code

Sentence 3.4.2.5.(2) **Location of Exits**

(2) Except for a *high hazard industrial occupancy*, Sentence (1) need not apply if *exits* are placed along the perimeter of the *floor area* and are not more than 60 m (196 ft 10 in) apart, measured along the perimeter, provided each main aisle in the *floor area* leads directly to an *exit*.

5. Applicant's Position

The Applicant's Agent provided a brief history of this dispute, advising that he had been working for some time to achieve a consensus on this issue with municipal officials. He submitted that the Building Code doesn't cover every situation that may occur and, in his considerable experience, the concept of aisles that deviate from a straight line design has never before been an issue. He provided the Commission with several examples of buildings where similar aisle patterns can be found. These buildings encompassed varied uses and occupancies. The Agent submitted that, in almost all cases the aisles do not provide a straight line approach to the exit.

The Agent continued by submitting that, in a real life setting one would find many areas in a building separated by partitions. For example, office areas would be separated from production areas. Main aisles only need to occur every 60 m throughout the facility. In his opinion, the open space concept, with the grid line aisle pattern anticipated by the municipality, doesn't work out in the field. In this regard, the Agent submitted that the Applicant has already made many concessions in an attempt to achieve a visual openness for the facility. They have proposed the deletion of several overhead doors and have agreed to add glass to several of the partition doors. He submitted, however, that in some areas this approach would not be desirable. Splitcraft is a manufacturer of automotive parts and portions of the facility are quite noisy given the nature of the operation.

The Agent submitted that all areas of the building have access to two means of egress. In some cases there are additional aisles provided in excess of the OBC requirements. The aisles in this facility exceed the minimum 1,100 mm width requirement and will be clearly identified with floor markings and arrows to indicate any change in direction. He further advised that the facility was clean and bright with a high roof deck. This feature should alleviate any concern with respect to smoke obscuring the floor markings. In addition, the Applicant advised that there will be additional exit signs located above partition and exit doors. He further outlined that, as part of the Fire Safety Plan, visitors must be signed in and escorted by an employee at all times.

The Applicant's Agent brought a Building Action Newsletter, published by the Housing Development and Buildings Branch of the Ministry of Municipal Affairs and Housing, dated August 1989, to the Commission's attention. This newsletter offered discussion about the use of partitions and essentially suggested that, where partitions are used, as is the case here, there must be openings to facilitate the path of travel. There is no mention of any requirement for an open floor area. The Agent submitted that, in the proposed design, doorway openings have been provided in the partitions to facilitate a continuous path of travel to the required exits.

In summation, the Agent stated that, despite some change in direction, the facility provides an open view along wide main aisles and guidance to the exits will be provided by the additional measures being proposed in this building. He stated that partitions are not prohibited by the Code and with the additional egress aisles, exits and compensating measures to be provided, in his opinion, sufficiency of compliance is achieved in this instance.

6. Respondent's Position

The Respondent submitted that, from his point of view, the dispute is relatively simple. The problem here results from an extension of the original building whereby the 45 m travel distance would have initially been applied. As a result of the additions, a 45 m travel distance is no longer possible and the Applicant must turn to the alternative offered in Sentence 3.4.2.5.(2). This exception states that, if the 45 m distance cannot be achieved, exit doors must be located every 60 m around the perimeter of the facility. When this occurs, main aisles must lead "directly" to an exit. He further stated that, while the OBC does not define "directly" the dictionary definition suggests that it means a straight line - not crooked.

In this regard, the Respondent submitted, the Code anticipates a grid like main aisle pattern to the exits around the perimeter with internal aisles leading to the main aisles. He suggested that, if this interpretation is not used then aisles that do not lead "directly" to exits would be created, plus, the 45 m travel distance would be exceeded. This application would meet neither provision outlined in the Code. He noted that, in this proposal, some aisles require several direction changes and, therefore, do not meet the intent of the OBC.

He further submitted that the presence of partitions is another complication that is not specifically addressed in the Code. In his opinion, passing through a partition does not provide a "direct" path of travel to an exit. In addition, the presence of partitions could complicate the recognition of smoke or fire in other areas of the building.

In summation, the Respondent stated that with a greater number of buildings being expanded beyond a level where the maximum travel distance can be obtained, this provision of the Code is being used more often. He understands the complications involved in this area but maintains that, in his opinion, the proposal before the Commission does not comply with the Building Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed main aisles, which include several direction changes and lead through doors in the interior partitions, and which lead to the exit doors located at 60 metre intervals around the perimeter of the building, do not provide sufficiency of compliance with Sentence 3.4.2.5.(2) of the Ontario Building Code at Splitcraft/STT Technologies, 800 Tesma Way, Vaughan, Ontario.

8. Reasons

i) The main aisle pattern proposed cannot be considered to lead directly to the exits as is required by Sentence 3.4.2.5.(2) of the Building Code.

ii) The measures proposed to compensate for the direction changes and partitions fail to provide sufficiency of compliance for the direct line of travel anticipated by the Code.

Dated at Toronto this **27th** day in the month of **September** in the year **2001** for application number **2001-51**.

Mr. Len King, Chair-Designate

Mr. Fred Barkhouse

Mr. John Guthrie

Ruling No. 01-44-837
Application No. 2001-48

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Clause 3.4.2.5.(1)(c) and Sentence 3.1.8.12.(3) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Geordan Green, Designer, PBK Architects, for the resolution of a dispute with Bruce Poole, Chief Building Official, City of Guelph, to determine whether the distance from the rear of the dressing room area to an exit (in excess of 45 m) and the doors to the ice resurfacing room, that are not equipped with self-closing devices activated by a smoke detector, provide sufficiency of compliance with Clause 3.4.2.5.(1)(c) and Sentence 3.1.8.12.(3) of the Ontario Building Code at the West End Community Recreation Centre, Guelph, Ontario.

APPLICANT	Geordan Green, Designer, PBK Architects Toronto, Ontario
RESPONDENT	Bruce Poole Chief Building Official City of Guelph
PANEL	Len King, Chair - Designate Fred Barkhouse John Guthrie
PLACE	Toronto, Ontario
DATE OF HEARING	September 27th, 2001
DATE OF RULING	September 27th, 2001
APPEARANCES	Les Muniak Larden Muniak Consulting Inc. Toronto, Ontario **Agent for the Applicant** Paul Moore Permit & Zoning Administrator City of Guelph **Designate for the Respondent**

RULING

1. The Applicant

Geordan Green, Designer, PBK Architects, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is constructing a recreation centre known as the West End Community Recreation Centre in the City of Guelph, Ontario.

2. Description of Construction

The Applicant is constructing a recreational complex known as the West End Community Recreation Centre. The building is classified as a Group A, Division 3 major occupancy and will include Group A, Division 2 and Group D subsidiary occupancies. The structure has a building area of 11,416 m^2 and is comprised of noncombustible construction. The facility will be equipped with a sprinkler system and a fire alarm system.

The construction in dispute involves two areas of concern. The first disputed item is the travel distance from the rear the dressing room area to the nearest required exit. In this regard, the rear portion of at least two of the dressing rooms serving the ice rinks will exceed the maximum 45 m travel distance by, at most, 5 m to 6 m. This area of the dressing rooms includes the shower stalls and toilets representing a total occupant load of approximately 5 or 6 people. To compensate for the excess distance, it is proposed that a curtain wall between the two ice pads be installed as a non-rated smoke barrier. Doors on this curtain wall, linking the ice pads, would be equipped with positive latching and self closing devices.

The second item of construction in dispute involves the overhead doors serving the ice resurfacing room. The doors form part of the required fire separation and are to be equipped with hold open devices. The devices, however, are not designed to release upon activation of a smoke detector located in accordance with OBC requirements. In defence of this area of noncompliance, the Applicant cites the fact that there are no listed smoke detectors that are certified to work within an ice rink environment.

3. Dispute

The issues in dispute between the Applicant and Respondent are whether the travel distance from the rear of the dressing room area, and the proposed doors to the ice resurfacing room, provide sufficiency of compliance with Clause 3.4.2.5.(1)(c) and Sentence 3.1.8.12.(3) of the Ontario Building Code (OBC).

Clause 3.4.2.5.(1)(c) requires that, except for certain situations not applicable here, an exit must be located so that the travel distance does not exceed 45 m. In this case, the rear portion of the dressing room areas will exceed the 45 m travel distance by approximately 5 m or 6 m. To compensate for this, the Applicant has installed a non-rated curtain wall between the ice rinks, designed to facilitate smoke control. In addition, a timed egress analysis has been conducted and, while not literally accepted by the OBC as an equivalent to compliance, it is offered to illustrate the effect of the deficiency on exiting the building.

In respect to the dispute involving the overhead doors to the ice resurfacing room, Sentence 3.1.8.12.(2) of the Code provides that, with certain exceptions not applicable here, a hold-open device

permitted by Sentence (1) must be designed to release by a signal from an automatic sprinkler system, a heat-actuated device, fusible link or a smoke detector located as described in Appendix B of NFPA 80, "Standard for Fire Doors and Fire Windows". In this instance, the doors to the ice resurfacing room form part of the fire separation and are to be equipped with hold open devices. They are not, however, proposed to incorporate self-closing devices designed to be activated by smoke detectors located so as to meet the applicable standard. NFPA 80 would require smoke detectors to be placed on either side of the doors in question. The hold-open devices would then be designed to release upon activation of either detector. The proposal here does not anticipate smoke detectors in the vicinity of the overhead doors.

4. Provisions of the Ontario Building Code

Clause 3.4.2.5. Location of Exits

(1) Except as permitted by Sentences (2), (3) and 3.3.2.4.(6), if more than one *exit* is required from a *floor area*, the *exits* shall be located so that the travel distance to at least one *exit* shall be not more than

(c) 45 m (147 ft 8 in) in a floor area that contains an *occupancy* other than a *high hazard industrial occupancy*, provided it is *sprinklered*,

3.1.8.12. Hold-Open Devices

(1) A hold-open device is permitted on a door in a required *fire separation*, other than an *exit* door in a *building* more than 3 *storeys* in *building height*, and on a door for a vestibule required by Article 3.3.5.7., provided the device is designed to release the door in conformance with Sentences (2) to (7).

(2) Except as required by Sentences (3), (5), (6) and (7), a hold-open device permitted by Sentence (1) shall be designed to release by a signal from

(a) an automatic sprinkler system,
(b) a heat-actuated device,
(c) fusible link, or
(d) a *smoke detector* located as described in Appendix B of NFPA 80, "Standard for Fire Doors and Fire Windows".

(3) Except as required by Sentences (4), (5), (6) and (7), a hold-open device permitted by Sentence (1) shall be designed to release upon a signal from a *smoke detector* located as described in Appendix B of NFPA 80, "Standard for Fire Doors and Fire Windows", if used on

(a) an *exit* door,
(b) a door opening into a *public corridor*,
(c) an egress door referred to in Sentence 3.4.2.4.(2),
(d) a door serving
  (i) an *assembly occupancy*,
  (ii) a *care or detention occupancy*, or
  (iii) a *residential occupancy*, or
(e) a door required to function as part of a smoke control system.

5. Applicant's Position

The Applicant's Agent's outlined the nature and function of the proposed recreation centre advising that the items of dispute were confined to the arena area, which incorporates two ice rink pads. These ice rinks are to be separated by a floor to ceiling wall and are served by a series of change rooms and an ice resurfacing room.

In respect to the issue of travel distance, the Agent advised that the rear portion of at least two of the dressing rooms in the centre of the building would exceed the allowable travel distance of 45 m. This space includes a small portion of the dressing areas, the shower stalls and toilets. It was suggested that, overall, a relatively small occupant load would be anticipated in these portions of the dressing rooms.

To illustrate the effect of the difference in travel time, the Applicant's Agent advised that a timed exit analysis was prepared. This analysis was based on the methodology set out in the SFPE Handbook of Fire Protection Engineering, 2nd Edition. It was argued that the assumed travel time for a Code complying structure would be 1 - 2 minutes to evacuate a room and 3 - 5 minutes to evacuate a floor area. He further submitted that, based on their analysis, a measured time to travel to an exit from the areas exceeding the maximum allowable travel distance was approximately 39 seconds to the closest exit and 48 seconds to the alternate exit. Based on this analysis, he concluded that the travel times involved are significantly less than those anticipated by the OBC.

In addition to the timed analysis, the central wall dividing the ice rinks was initially offered to the municipality as a smoke separation in an attempt to compensate for the excess distance. Doors, forming part of this curtain wall, were to be equipped with hold open devices to provide access between ice pads. In light of the use of these hold open devices, the municipality was also requiring self closures that would be activated upon actuation of listed smoke detectors. At that point, it was then discovered that there are no listed smoke detectors certified for use within the cold environment of an ice rink. The Respondent, therefore, advised that they could not consider this an adequate measure of compensation.

The issue with respect to technical limitations of listed smoke detectors raised an additional question with respect to compliance in the area of the ice resurfacing room. The Agent questioned whether, in fact, closures were required for the doors of the ice resurfacing room. He suggested that these types of closures were more appropriate in convention centres or similar facilities with lower ceiling heights. In any event, to satisfy the requirements for the use of hold open devices on the doors of this room would include release by activation of smoke detectors located on both sides of the door. This would again, require a smoke detector within the ice rink environment. The Applicant argued that the limitations on the technical capabilities of the smoke detectors made this an impossible restriction to comply with.

In support of the current design of the facility, the Applicant emphasized that the doors to this room will close upon activation of the fire alarm system and a heat activated fusible link. When questioned, the Agent also agreed to the provision of a smoke detector in the warm environment of the ice resurfacing room. He further submitted that the partition between the two ice rinks, while not protected as desired by the municipality, will offer an additional level of protection to occupants of the building by inhibiting the spread of smoke between the two ice rink areas. He noted too, that the building is fully sprinklered and has a high ceiling. This would be a factor in the activation of the fire alarm system before the smoke detectors would be triggered.

In summation, the Agent addressed the two areas in dispute. He stated that the excess distance

beyond what the Code permits will not likely be a factor in the efficient exiting of the facility. The difference in time to exit would be minimal. In respect to the issue of the hold open devices being released by smoke detectors he submitted that, even if smoke detectors were located within the ice rink environment, the manufacturers would not certify their operation. There is no guarantee that they would be at all effective. The Agent further submitted that the safety features in place would be sufficient to achieve an acceptable level of compliance with the intent of the Code requirements.

6. Respondent's Position

The Designate for the Respondent submitted that, with respect to the issue of travel distance, the Code maximum is exceeded in the rear change room area. An acceptable method of compensation was offered by the Applicant in lieu of compliance with the 45 m travel distance requirement. This compensation involved the provision of a dividing wall between the two arenas. The wall was initially proposed as a one hour fire separation but was subsequently reduced to a 0 hour separation with additional smoke detectors. The Designate advised that doors located in this separation would require self-closures to release the hold-open devices, thereby closing upon activation of the smoke detectors and the fire alarm system. Furthermore, he advised that he no longer considers the wall to be adequate compensation for the excess travel distance in that the Applicant is not providing the agreed upon smoke detection to activate the self-closures.

The Designate further commented that the Applicant's difficulty in providing smoke detectors in the area of the dividing wall also brought to light a further issue involving the requirement for smoke detectors which would activate the self-closing devices employed on the doors to the ice resurfacing room. He indicated that there was some debate as to whether these door were serving an assembly occupancy and therefore are required to release upon a signal from a smoke detector located as described in Appendix B of NFPA 80, "Standard for Fire Doors and Fire Windows". In support of his position that self closures are required, he submitted that although used primarily for ice rink purposes, this facility has the capability to be used for trade shows and other such exhibitions. This would result in a higher occupant load in the arena area. He suggested that the ice resurfacing room was the primary access for vehicles to load and unload onto the surface of the ice rinks.

In summation the Respondent submitted that that other facilities have employed smoke detectors within the ice rink environment without incident. He did concede, however, that the smoke detectors may not be as effective in a cold environment, especially when combined with the high ceiling of the facility.

7. Commission Ruling

It is the decision of the Building Code Commission that:

i) the travel distance from the rear portion of the dressing room area to the nearest exit, which would slightly exceed the 45 m requirement, provides sufficiency of compliance with Clause 3.4.2.5.(1)(c); and,

ii) the doors to the ice resurfacing room which are provided with hold open devices that are not designed to release upon activation of a signal from a smoke detector located as described by NFPA 80 will provide sufficiency of compliance with Sentence 3.1.8.12.(3) of the Ontario Building Code on condition that:

The hold open devices be designed to release upon activation of:

a. The fire alarm system;
b. A heat activated fusible link; and,
c. A smoke detector, located in the vicinity of each door within the warm environment of the ice resurfacing room.

8. Reasons

i) The applicant has carried out an engineering study using an accepted methodology which shows the measured time of travel to two exits is less than the design time of a Code complying structure to one exit.

ii) Only a relatively small area of the building, with a low estimated occupant load, is at most 5 m to 6 m in excess of the 45 m maximum travel distance.

iii) There are no listed smoke detectors certified to work in a cold ice rink environment. This technological limitation prevents strict compliance with the requirement for the hold open devices to release as anticipated by the OBC.

iv) Fulfilment of the conditions of this decision will achieve sufficiency of compliance with the intent of the OBC requirements.

Dated at Toronto this **27th** day in the month of **September** in the year **2001** for application number **2001-48**.

Mr. Len King, Chair-Designate

Mr. Fred Barkhouse

Mr. John Guthrie

Ruling No. 01-43-836
Application No. 2001-85

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 3.2.4.19(7) and 3.2.4.20.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Dr. J. MacRae, for the resolution of a dispute with Dan Mousseau, Chief Building Official, City of Burlington, to determine whether the direct supervision of patients at all times in lieu of providing visual signal devices where sound booths will be used provides sufficiency of compliance with Sentences 3.2.4.19.(7) and 3.2.4.20.(1) of the Ontario Building Code at 777 Guelph Line, Suites 201 and 212, Burlington, Ontario.

APPLICANT	Dr. J. MacRae 777 Guelph Line Burlington, Ontario
RESPONDENT	Dan Mousseau Chief Building Official City of Burlington
PANEL	Kenneth Peaker, Chair John Guthrie Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	February 28th, 2002
DATE OF RULING	February 28th, 2002
APPEARANCES	Dr. J. MacRae **The Applicant** Brad Swainsbury, Building Inspector City of Burlington **Designate for the Respondent**

RULING

1. The Applicant

Dr. J. MacRae, owner, Burlington, has received an order to comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, to remedy certain alleged deficiencies in respect to interior alterations in a doctor's office building at the 777 Guelph Line, Suites 201 and 212, Burlington, Ontario.

2. Description of Construction

The Applicant has undertaken renovations to two joined suites located within a retail mall having a Group E occupancy. The building itself is two storeys in height and comprised of noncombustible construction. It is equipped with a sprinkler system, fire alarm system and a standpipe and hose system. The two units subject to this dispute occupy an area of 278.21 m^2 (3000 ft^2) and operate as a medical office.

The construction in dispute involves two sound proof booths for use in the testing of patient's hearing. Despite the sound proof nature of the areas, no visual signal devices to supplement the fire alarm audible signal are proposed. Reasoning for this includes the assertion that the auditory integrity of the sound proof nature of the booths will be compromised by the addition of signalling devices. In lieu of visual signals the Applicant is proposing direct supervision of patients at all times by qualified staff of the facility.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed direct supervision of patients in lieu of visual signalling devices will provide sufficiency of compliance with Sentences 3.2.4.19.(7) and 3.2.4.20.(1) of the Ontario Building Code (OBC).

Sentence 3.2.4.19.(7) requires that a fire alarm audible signal shall be supplemented by visual signal devices where, among other things, the occupants of a floor area are located within an audiometric booth or sound insulated enclosures. Furthermore, Sentence 3.2.4.20.(1) stipulates that such a required visual signal devise is to be installed so that the signal from at least one device is visible throughout the floor area or portion thereof in which they are installed.

In regard to the subject construction, the sound proof booths associated with this dispute would trigger the OBC requirement for the provision of visual signals to supplement the fire alarm system. In lieu of providing a visual signal device it is proposed that patients will be directly supervised at all times by trained staff.

4. Provisions of the Ontario Building Code

3.2.4.19. Audibility of Alarm Systems

(7) Fire alarm audible signal devices shall be supplemented by visual signal devices in any *floor area* in which

(a) the ambient noise level is more than 87 dBA, or

(b) the occupants of the *floor area*

(i) use ear protective devices,
(ii) are located within an audiometric booth, or
(iii) are located within sound insulated enclosures.

3.2.4.20. Visual Signals

(1) Visual signal devices required by Sentences 3.2.4.18.(4) and 3.2.4.19.(7) and (8) shall be installed so that the signal from at least one device is visible throughout the *floor area* or portion thereof in which they are installed. (See Appendix A.)

5. Applicant's Position

The Applicant provided the Commission with an understanding of the function of the sound booths in question. He submitted that the booths are used to test a patient's hearing. As such, the Applicant emphasized the importance of maintaining the acoustic integrity of these areas. He suggested that this integrity had already been compromised as a result of the requirement to sprinkler the booths. Any further penetration for a visual signal device, he argued, would affect the results of the testing being conducted.

As an additional argument, the Applicant submitted that many of the patients for whom the booths are employed are not only hearing impaired but visually impaired as well. Visual signals would be no more effective for them than the audible signal. In addition, children are also tested in the subject booths. In all cases, regardless of the abilities of the patient, direct supervision of the patient for whom the sound booth is used occurs at all times within the facility. Individuals inside the booths, he submitted, are never left alone. In addition, the doors to the booths are never closed unless they are in use. No one would be inside without supervision.

The Applicant further submitted that the decision not to provide the required visual signals in this instance is a matter of principal. In his opinion, the direct supervision of patients is superior to the visual strobe that would be required by the Building Code. Individuals inside the booths would be immediately alerted of a fire alarm signal by their attendant. In fact, he argued, the visual signal device could be considered a fallible system in that it would go unrecognized by the visually impaired.

When questioned about locating the visual signal outside the booth in an area that could be viewed through the window the Applicant advised that a person may not be able to see a set point outside the booth from all areas inside. He was uncertain whether the municipality would accept that solution but suggested that it would be a more acceptable alternative if required.

In summation, the Applicant stated that the doctors and staff on site receive fire safety training every year. He emphasized that they would know how to respond in the event of an alarm and would take the appropriate action to ensure that patient safety was never jeopardized.

Respondent's Position

The Designate for the Respondent submitted that the provisions in the Building Code are quite clear. Where booths such as these are used, a visual signal device is required to supplement the fire alarm auditory system. The purpose of this provision in the Code, he argued, is to alert those inside the sound proof area of the activation of the fire alarm. He suggested that, if there was a way to situate the device outside the booth so that it would be visual to those inside, he may be able to accept that

arrangement. However, he was unable to accept the assertion that direct patient supervision was adequate compensation for the passive visual signal. It would require individuals to take action to alert those inside the booths. The actions of individuals may be unpredictable during an emergency situation.

In summation the Designate submitted that, regardless of his reservations about direct supervision in lieu of visual signals, the Code requires the installation of supplementary devices and he is not able to accept the proposed alternative.

7. Commission Ruling

It is the decision of the Building Code Commission that the direct supervision of patients at all times in lieu of providing visual signal devices where sound booths will be used does not provide sufficiency of compliance with Sentences 3.2.4.19.(7) and 3.2.4.20.(1) of the Ontario Building Code at 777 Guelph Line, Suites 201 and 212, Burlington, Ontario.

8. Reasons

i) The direct supervision of patients does not offer sufficient compensation for the required visual signal devices.

ii) The visual signal devices are part of the automatic fire alarm system whereas supervision anticipates individual action on the part of those responsible. This action may be delayed and/or unpredictable.

Dated at Toronto this **28th** day in the month of **February** in the year **2002** for application number **2001-85**.

Kenneth Peaker, Chair

John Guthrie

Donald Pratt

Ruling No. 01-42-835
Application No. 2001-50

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 8.2.1.6.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Dale and Chris Hewat, owners, for the resolution of a dispute with Rick Cole, Chief Building Official, Municipality of Grey Highlands, Ontario, to determine whether the proposed sewage system with a portion of the distribution pipes located approximately 1 m to 2.2 m from the support posts of a proposed deck, provides sufficiency of compliance with Sentence 8.2.1.6.(2) of the Ontario Building Code at 232 Peter's Crescent., Lake Eugenia, Municipality of Grey Highlands, Ontario.

APPLICANT	Dale and Chris Hewat Property owners
RESPONDENT	Rick Cole Chief Building Official Municipality of Grey Highlands
PANEL	Bryan Whitehead, Chair
PLACE	Toronto, Ontario
DATE OF HEARING	September 13, 2000
DATE OF RULING	September 13, 2000
APPEARANCES	Lloyd Hunt Architect **Agent for the Applicants** Rick Cole Chief Building Official Municipality of Grey Highlands **The Respondent**

RULING

1. The Applicant

Dale and Chris Hewat, property owners, have applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and are proposing to construct a septic system and a deck at 232 Peter's Crescent, Lake Eugenia, Municipality of Grey Highlands.

2. Description of Construction

The Applicants are the owners of a residential property located on Lake Eugenia in the Municipality of Grey Highlands. They are currently constructing a single detached dwelling with a floor area of 2,730 ft^2 and having a total of 31 plumbing fixture units. The dwelling will be serviced by a drilled well on the property and a Class 4, shallow buried trench, sewage system, designed to accommodate a total daily design flow of 4500 litres per day. The soil conditions on site indicate a percolation time of 20 to 40 minutes per cm.

The construction in dispute involves the proximity of the proposed septic system in relation to the proposed second storey deck at the rear of the building, over looking the lake. Given the size of the dwelling under construction and the municipal setback requirements, the Applicant's are constrained in terms of locating the deck in relation to the proposed septic system. In this regard, while the main dwelling is situated the requisite 5 m from the system, the support posts of the proposed deck, however, will come to within 1 m of a portion of the distribution pipes in the filter bed. As compensation for this perceived deficiency, the Applicants are offering a total of 67 m of distribution pipe in four runs. The Code requires only 36 metres of pipe in this instance.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the subject support posts, with approximately 1 m to 2.2 m of clearance from a portion of the distribution pipes in the filter bed of the proposed septic system, provides sufficiency of compliance with Sentence 8.2.6.1.(2) of the Ontario Building Code (OBC).

The provisions outlined in this Sentence of the OBC require a clearance distance of 5 m between a structure and a distribution pipe. In this instance the clearance to the main building would meet this requirement, however, a portion of the distribution pipe would be within 1 m to 2.2 m of the proposed deck support posts. As a measure to compensate for this reduction in separation distance, the Applicants are proposing to provide surplus distribution pipe that would exceed the minimum length required by the Building Code.

4. Provisions of the Ontario Building Code

Sentence 8.2.1.6.(2) Clearances for a Class 4 or 5 Sewage System

(2) Except as provided in Sentences 8.2.1.4.(1) and (2) a *distribution pipe* shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B. and these distances shall be increased when required by Sentence 8.74.2.(9)

5. Applicant's Position

The Applicant's Agent advised that in designing the deck in relation to the proposed septic system he has been constrained by a very tight building envelope. He has tried to maximize the potential for the deck while acknowledging the importance of protecting the integrity of the proposed septic system. He submitted that the main building meets the setback requirements set out in the Code and only the support posts fail to maintain the required 5 m setback from a portion of the distribution pipe.

In reviewing the proposed design, and after alteration to the design of the deck, the Agent submitted a proposal aimed to compensate for the deficiency in this setback. He advised that 4 runs of pipe at 16.75 metres each for a total of 67 metres could be accommodated on site. In this regard, he submitted, the proposal would provide 1.8 times more length of distribution pipe than the minimum design length required by the Code. While he acknowledged that the surplus length of pipe may be shaded by the deck, his position was that the excess pipe would permit the septic system to work efficiently and without incident. The pipe, he argues, would still be effective by absorption.

In summation, the Agent emphasized that the Applicants do not want to compromise the safety of their septic system. He submitted that with the excess length of pipe, performance of the system would not be jeopardized in any way.

6. Respondent's Position

The Respondent submitted that the proposed deck is considered to be a structure for the purposes of determining setback requirements from any element of a septic system. In this regard, the support posts would not meet the 5 m clearance distance from the proposed distribution pipe.

He acknowledged the site constraint facing the Applicants and confirmed the municipal by-law requirement to maintain a 30 m setback from the high water mark of Lake Eugenia. He submitted, however, that the Applicants were aware of these requirements prior to purchasing the property. They had initially submitted building plans that included the second floor deck and projecting roof but were refused a permit because that proposal did not comply. A permit was eventually issued for the dwelling only.

In summation, the Respondent acknowledged the additional absorption to be provided by the excess lines of distribution pipe found in the Applicant's revised proposal. He maintained that, despite this compensation, the minimum clearance distance was still not achieved.

7. Commission Ruling

It is the decision of the Building Code Commission that the separation distance ranging from 1.0 m to 2.2 m between a portion of the proposed shallow buried trenches and the proposed deck and support posts provides sufficiency of compliance with Sentence 8.2.6.1.(2) of the Ontario Building Code at 232 Peter's Crescent, Lake Eugenia, in the Municipality of Grey Highlands, Ontario on condition that:

a) The distribution to the chambers will be by two forcemains and two headers with valves to each header to allow adjustment to the flow in the event that the shading of the west area has an impact on the infiltration/uptake of effluent.

8. Reasons

i) The applicant has demonstrated that a shallow buried trench system can be constructed on the eastern portion of the site to meet the minimum requirements of the OBC with respect to the setback to the basement of the building and the property line.

ii) The proposed additional trenches on the western portion of the site, which are in excess of the minimum length requirements, are closer to the support posts and overhanging deck than permitted by the OBC (5.0 metres), as the deck and posts are considered to be structures. Although the additional trenches may be compromised by the shadowing effect of the deck, with implementation of the condition imposed, the trenches and the deck supports can be constructed without negative impacts on performance.

iii) The proposed additional trenches will add to the performance of the system.

Dated at Toronto this **13th** day in the month of **September** in the year **2001** for application number **2001-50**.

Bryan Whitehead, Chair

Ruling No. 01-41-834
Application # 2001-44

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 8.2.1.6.(3) and Table 8.2.1.6.C. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Lyle and Rebecca Downey, property owners, for the resolution of a dispute with Anthony Wong, Manager, Environmental Health & Chief Building Official, Durham Region Health Department, to determine whether the as-installed holding tank, located approximately 7 m (20 ft) from an existing well, provides sufficiency of compliance with Sentence 8.2.1.6.(3) and Table 8.2.1.6.C. of the Ontario Building Code at, 4054 Mabels Road, (Nestleton), Township of Scugog, Ontario.

APPLICANT	Lyle and Rebecca Downey Property Owners
RESPONDENT	Anthony Wong, Manager, Environmental Health Chief Building Official Durham Regional Health Department
PANEL	Bryan Whitehead, Chair
PLACE	Toronto, Ontario
DATE OF HEARING	September 13, 2001
DATE OF RULING	September 13, 2001
APPEARANCES	Jack Cummings Cummings Contracting **Agent for the Applicant** Anthony Wong, Manager, Environmental Health Chief Building Official Durham Regional Health Department **The Respondent**

RULING

1. The Applicant

Lyle and Rebecca Downey, property owners, Nestleton, Ontario, have applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and have installed a new holding tank to serve a proposed granny flat at 4054 Mabels Road, (Nestleton), Township of Scugog, Ontario.

2. Description of Construction

The Applicant is proposing to convert an existing 39.02 m^2 (420 sq ft) boat-house into a granny flat intended for occupancy as a one storey, Group C dwelling unit. The building is located on the subject property adjacent to an existing house/cottage. The existing house is currently served by a Class 5, 10,910 L (2,400 gal) holding tank situated at the front of the property and located approximately 4.57 m (15 ft) from an existing well.

According to the Applicant's Agent, the boat house is currently a vacant shell of a building with all fixtures removed. When fully converted to a granny flat, the unit will have a maximum of 10 plumbing fixture units and a total daily design flow of 750 litres per day. In anticipation of the occupancy of this dwelling unit, the Applicant has installed an additional Class 5 holding tank, at the front of the property, having a 9,000 L (2,000 gal) capacity. The new holding tank is the subject of this dispute in as much as it has been located approximately 7 m (20 ft) from the existing well.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the newly installed Class 5 holding tank which is located approximately 7 m (20 ft) from the existing well, provides sufficiency of compliance with Sentence 8.2.1.6.(3) and Table 8.2.1.6.C. of the Ontario Building Code.

Sentence 8.2.1.6.(3) provides that a holding tank shall be located no closer than the minimum horizontal distances set out in Table 8.2.1.6.C. With respect to the distance required between a holding tank and a well, Table 8.2.1.6.C. provides a minimum distance separation of 15 m. In this instance, the new holding tank is located approximately 7 m from the well on the subject property.

It should also be noted that Article 8.8.1.2. outlines the parameters under which a Class 5 sewage system may be installed. Sentence (1) of this Article provides for installation of this type of system in certain circumstances including :

a) as a temporary measure, excluding seasonal recreational uses not exceeding 12 months,
b) to permit the expansion of an existing single family dwelling where the expansion will not increase the wastewater load and the building is already served by a Class 5 system,
c) to remedy an unsafe system where remediation by way of a Class 4 system is impractical, d) to upgrade an existing system where it would not be possible to do so with a Class 4 system because of site constraints, and
e) as an interim measure to serve a lot where municipal services are expected to be available in the near future.

In this instance, the proposed granny flat does not appear to fall within any of the circumstances where a Class 5 system would be permitted. It is an existing building on the lot that is being converted into habitable space.

4. Provisions of the Ontario Building Code

Sentence 8.2.1.6. Clearances for a Class 4 or 5 Sewage System

(3) Except as provided in Sentences 8.2.1.4.(1) and (2), a *holding tank* shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.C.

Table 8.2.1.6.C.
Minimum Clearances for Holding Tanks
Forming part of Sentence 8.2.1.6.(3)

Structure	1.5 m
Well with a watertight casing to a depth of at least 6 m	15 m
Any other well	15 m
A spring	15 m
Property Line	3 m
Column 1	2

5. Applicant's Position

The Applicant's Agent advised that he is a licensed installer who was requested by the property owners to install a new 2,000 gallon holding tank on the subject property for the purpose of servicing a proposed granny flat. The property, he noted, is located on Lake Scugog and contains an existing boat-house that is presently vacant. The Agent advised that, at one time, the boat-house was equipped with a toilet and, as a result, he is hoping that Part 11 of the Code may apply in this instance.

He noted that there is a slightly larger holding tank already in existence on the property. This tank is located approximately 15 feet from the well and serves the house / cottage that is occupied by his clients. He submitted that the new tank, as installed, is farther away from the well than the existing tank and will create no greater impact than already exists.

6. Respondent's Position

The Respondent submitted that, after they had learned of the installation, an inspection was conducted and a building permit subsequently applied for. Upon inspection, it was noted that the new holding tank had been located approximately 7 m (20 ft) from the existing well. It is his position that this clearly does not meet the parameters set out in the Code which require a minimum separation distance of 15 m between holding tank and the well.

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The Respondent recognized that the older tank was located closer to the well than the new one. He suggested Part 11 would apply in a situation where the new tank had been installed to replace a malfunctioning older one, as long as the performance level had not been reduced. That, however, is not the case here. The original system is not malfunctioning and the new tank has been added to serve a new dwelling unit, still to be created on the subject lot. This is a unit that, when combined with the total daily design flow of the existing cottage, would exceed the capacity of the existing holding tank.

In summation he concluded that, while he may be sympathetic to the constraints placed on the Applicants, his hands are tied by the Code requirements and, in this case the installation does not meet the setback requirements imposed.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-installed holding tank servicing the boat-house fails to provide sufficiency of compliance with Sentence 8.2.1.6.(3) of the Ontario Building Code at 4054 Mabels Road, (Nestleton), Township of Scugog, Ontario.

8. Reasons

i) The boathouse fails to meet the conditions for permitted installation of a holding tank outlined in Sentence 8.8.1.2.(1) of the Ontario Building Code. The proposed granny flat is essentially a new dwelling unit on the subject property.

ii) The holding tank does not meet the minimum distance separation outlined in the Code and no compensating measures were offered in lieu of compliance.

Dated at Toronto this **13th** day in the month of **September** in the year **2001** for application number **2001-44**.

Mr. Bryan Whitehead,Chair

Ruling No. 01-40-833
Application # 2001-49

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Articles 9.5.2.1., 3.8.1.1., 3.8.1.2. and 3.8.2.3. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Vivek Ananbarajah, Property Manager, York Condominium Corporation No. 42, Etobicoke, Ontario, for the resolution of a dispute with Ms. Paula Dill, Chief Building Official, City of Toronto, Ontario, to determine whether the proposed security gate house, that has not been designed for barrier-free access, provides sufficiency of compliance with Articles 9.5.2.1., 3.8.1.1., 3.8.1.2. and 3.8.2.3. of the Ontario Building Code at York Condominium No. 42, 330 Dixon Road, Suite 100, Toronto, Ontario.

APPLICANT	Mr. Vivek Ananbarajah, Property Manager York Condominium Corporation No. 42 Etobicoke, Ontario
RESPONDENT	Ms. Paula Dill Chief Building Official City of Toronto
PANEL	Mr. Len King, Chair (Designate) Mr. John Guthrie Mr. Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	August 30, 2001
DATE OF RULING	August 30, 2001
APPEARANCES	Mr. Michael Tindale Gerald R. Genge Building Consultants Inc. Sutton West, Ontario **Agent for the Applicant** Mr. Philip Ho Building Engineer City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

Mr. Vivek Ananbarajah, Property Manager, York Condominium Corporation No.42, Etobicoke, Ontario, has received a building permit under the Building Code Act, 1992 and the process of constructing a security gate house at, 330 Dixon Road, Toronto, Ontario.

2. Description of Construction

The Applicant is constructing a building, referred to as a security gate house, having a building area of 18.58 m2. The structure has a Group D occupancy classification. It is one storey in building height and comprised of combustible construction. It will not be equipped with either a sprinkler system, a fire alarm system or a standpipe and hose system.

The security gate house is situated at the entrance to a residential condominium building and will house employees whose primary function will be monitor vehicular traffic into the development. There are generally one or two individuals on duty in the gate house at any given time. Accommodations within the gate house include desks and chairs for the employees, a storage closet and a two piece washroom.

The construction in dispute involves the design of the building entrance and the washroom facility. The entrance doorway on the plans submitted for approval has a width of 914 mm (3 ft), with one step from the finished grade into the building. The washroom facility provides a 658 mm (2.16 ft) wide entrance with a total room area of 1.88 m^2 (20.25 sq ft), having a length of 2,057 mm (6.75 ft) and a width of 914 mm (3 ft). Neither the parameters of the building entrance nor the dimensions of the washroom meet the Code requirements for barrier-free access.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed security gate house provides sufficiency of compliance with Articles 9.5.2.1., 3.8.1.1., 3.8.1.2. and 3.8.2.3. of the Ontario Building Code (OBC), in respect of the requirements for barrier-free access.

The building in question is to be constructed in accordance with Part 9 of the OBC. Article 9.5.2.1., specifically dealing with barrier-free design, requires that (with exceptions not applicable here) every building must be designed in accordance with Section 3.8.

Article 3.8.1.1. mandates that the provisions for barrier-free design be applied to all buildings with the exception of houses, buildings having a Group F, Division 1 major occupancy and buildings that are not occupied on a daily or full time basis. The security gate house in question does not fall within the scope of any of these specific exemptions.

Article 3.8.1.2. identifies the requirements for entrances to a barrier-free structure. The Code provisions in this regard require that, where there are one to three pedestrian entrances into a building, one entrance must be designed to provide barrier-free access. This design must conform to the requirements of Article 3.8.3.3. of the Code. The subject building contains one pedestrian entrance door for employee use only. The entrance, however, has not been designed to permit barrier-free access.

As a further requirement in the provision of barrier-free access within a building, Article 3.8.2.3. stipulates that a barrier-free washroom must be provided wherever a washroom is required. The design of the barrier-free washroom must comply with the provisions set out in the Code. Furthermore, Sentence (2) of Article 3.8.2.3. requires that, when a washroom is provided in excess of those required by Subsection 3.7.4., these washrooms shall also be designed to accommodate disabled persons. Sentence (3) of Article 3.8.2.3. outlines situations where a building would be exempt from the requirements of Sentence (2). None of these exemptions would appear to apply to the building in question and, as previously noted, the washroom has not been designed to provide barrier-free access.

4. Provisions of the Ontario Building Code

9.5.2.1. Barrier-Free Design General

(1) Except as provided in Sentence (2) and Article 3.8.1.1., every *building* shall be designed in conformance with Section 3.8.

(2) The requirements of Section 3.8. need not be provided for houses including semi-detached houses, duplexes, triplexes, town houses, row houses and *boarding, or rooming houses* with fewer than 8 boarders or roomers.

3.8.1.1. Application (See Appendix A.)

(1) The requirements of this Section apply to all *buildings* except

(a) houses, including semi-detached houses, duplexes, triplexes, town houses, row houses and boarding or rooming houses with fewer than 8 boarders or roomers,

(b) *buildings* of Group F, Division 1 *major occupancy*, and

(c) *buildings* which are not intended to be occupied on a daily or full time basis, including automatic telephone exchanges, pumphouses and substations.

3.8.1.2. Entrances (See Appendix A.)

(1) In addition to the *barrier-free* entrances required by Sentence (2), the number of *barrier-free* entrances in a *building* referred to in Sentence 3.8.1.1.(1) shall be not less than those as specified in Table 3.8.1.2. and shall lead from

(a) the outdoors at sidewalk level, or

(b) a ramp that conforms to Article 3.8.3.4. and leads from a sidewalk.

(2) A *suite* of *assembly occupancy, business and personal services occupancy* or *mercantile occupancy* that is located in the *first storey* of a *building* or in a *storey* to which a *barrier-free* path of travel is provided, and that is separated from the remainder of the *building*, so that there is no access to the remainder of the building, shall have at least one *barrier-free* entrance.

Table 3.8.1.2.
Minimum Number of Pedestrian Entrances Required to be Barrier-Free
Forming Part of Sentence 3.8.1.2.(1)

Number of pedestrian entrances into *building*	Minimum number of pedestrian entrances required to be *barrier-free*
1 to 3	1
more than 3 to 5	2
more than 5	not less than 50 percent
Column 1	2

(3) A *barrier-free* entrance required by Sentences (1) or (2) shall be designed in accordance with Article 3.8.3.3.

(4) At a *barrier-free* entrance that includes more than one doorway, only one of the doorways is required to be designed in accordance with the requirements of Article 3.8.3.3.

3.8.2.3. Washrooms Required to be Barrier-Free (See Appendix A.)

(1) Except where other *barrier-free* washrooms are provided on the same floor level within 45 m (147 ft 8 in) and except within *suites* of *residential occupancy*, and *buildings* exempted in Clauses 3.8.1.1.(1)(a), (b) and (c), in *buildings* where a washroom is required in accordance with Subsection 3.7.4., a *barrier-free* path of travel shall be provided to a *barrier-free* washroom designed to accommodate disabled persons in conformance with the appropriate requirements in Articles 3.8.3.8. to 3.8.3.12.

(2) Except as permitted in Sentence (3), where washrooms in excess of those required by Subsection 3.7.4. are provided in a *storey* to which a *barrier-free* path of travel is required in conformance with Article 3.8.2.1., these washrooms shall be designed to accommodate disabled persons in conformance with the appropriate requirements in Articles 3.8.3.8. to 3.8.3.12.

(3) Washrooms need not conform to the requirements in Sentence (2) provided
(a) they are located within *suites* of *residential occupancy*,
(b) other *barrier-free* washrooms are provided on the same floor level within 45 m (147 ft 8 in), or
(c) they are located in an individual *suite* having an area of less than 300 m^2 (3,230 ft^2) in *buildings* where such *suite* is completely cut off from the remainder of the *building* so that there is no access to the remainder of the *building*.

5. Applicant's Position

The Agent for the Applicant advised that the gate house in dispute is one of three that serve a security function for the associated condominium complex. One gate house serves the entrance to each of the three high-rise towers. In order to access the development, visitors and service personnel are required to pass by a gate house. As a function of monitoring the incoming traffic, security personnel are required to move about the traffic lane and parking areas. The Agent also advised this is the third and final gate house to be built at this location. The same set of plans has been used for this building as for the other two, which were approved by the municipality.

The Agent acknowledged that there was no specific reference in the Building Code that would exempt a security gate house from providing barrier-free access. He submitted, however, that Appendix 3.8.1.1. suggests that it would be reasonable to exempt a building from the barrier-free provisions where a handicapped person would not be expected to perform a particular duty because of the hazards associated with the business. In this situation, given the need for security staff to patrol the traffic lanes and parking area of the complex, the agent stated that it would be appropriate to waive the barrier-free requirements. The area would not be safe for a wheelchair-bound individual. He suggested that travelling through and around the traffic lane and parking area could be a significant hazard. It is the Agent's position that it would be unreasonable to require barrier-free access to the security gate house, given the role and expectations placed on the employees. In light of the hazards involved, it was his opinion that the building could be classified as a Group F, Division 2 industrial occupancy.

He stated that, while the gate house serves some remedial office functions, it is not intended to be used as an office as such. It functions primarily as a shelter for the one or two employees posted at the gate to monitor traffic and act in a security capacity. It was the Applicant's intention in this regard to provide more than just a kiosk for this purpose. They determined it to be desirable to heat the structure and provide a washroom for the use of the employees. As a further argument, the Agent submitted that the building itself would not be open to the public.

In summation, the Agent reiterated that if there was no justification in providing this building barrier-free access. The role and function of the security staff is such that it would not be appropriate to employ a handicapped individual. In addition, the path of travel leading up to the entrance of the building could be considered hazardous, thereby creating an exemption situation for barrier-free access. He submitted that it would be unreasonable to provide barrier-free access and, therefore, the cost could not be warranted in this situation.

6. Respondent's Position

The Designate for the Respondent submitted that the proposed gate house has been designed to accommodate security personnel. The building is used on a full-time, daily basis and serves an office function. There are desks and phones shown on the plans that would support a Group D - office classification. As a result, barrier-free access is required into and throughout the building.

The Designate noted that Article 9.5.2.1. exempts certain buildings from the barrier-free requirements, however, a security gate house is not one of them. The building, therefore, must be designed in accordance with Section 3.8., specifically, the requirements to provide a barrier-free entrance, path of travel and washroom facilities. The design of the building does not incorporate any of the access requirements outlined in the Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed security gate house that is not designed for barrier-free access does not provide sufficiency of compliance with Articles 9.5.2.1., 3.8.1.1., 3.8.1.2. and 3.8.2.3. of the Ontario Building Code at York Condominium No. 42, 330 Dixon Road, Suite 100, Toronto, Ontario.

8. Reasons

i) The gate house is a building and therefore required to provide barrier-free access.
ii) No compensating measures were offered in lieu of compliance with the Code.
iii) There are no extenuating circumstances to warrant waiving the OBC requirements.

Dated at Toronto this **30th** day in the month of **August** in the year **2001** for application number **2001-49**.

Mr. Len King, Vice-Chair

Mr. John Guthrie

Mr. Donald Pratt

Ruling No. 01-38-831
Application # 2001-47

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 3.3.1.17.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Joe DiCosimo, owner, 876891 Ontario Limited, Niagara Falls, Ontario, for the resolution of a dispute with Mr. Mel Brown, Chief Building Official, City of Niagara Falls, Ontario, to determine whether the as-installed guard, surrounding a 3rd floor opening, and being 15 to 30 mm lower in height than the required 1,070 mm, provides sufficiency of compliance with Sentence 3.3.1.17.(1) of the Ontario Building Code at the Hilton Niagara, 6361 Buchanan Avenue, Niagara Falls, Ontario.

APPLICANT	Mr. Joe DiCosimo, owner 876891 Ontario Limited Niagara Falls, Ontario
RESPONDENT	Mr. Mel Brown Chief Building Official City of Niagara Falls
PANEL	Mr. Len King, Chair (Designate) Mr. John Guthrie Mr. Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	August 30, 2001
DATE OF RULING	August 30, 2001
APPEARANCES	Mr. Chris Hawkswell Niacon Ltd. Niagara Falls, Ontario **Agent for the Applicant** Mr. Robert Romanuk Building & Inspections Coordinator City of Niagara Falls **Designate for the Respondent**

RULING

1. The Applicant

Joe DiCosimo, owner, 876891 Ontario Ltd., Niagara Falls, Ontario, has received a building permit under the Building Code Act, 1992 and has undertaken renovations at the Hilton Niagara, 6361 Buchanan Avenue, Niagara Falls, Ontario.

2. Description of Construction

The Hilton Niagara is a 33 storey hotel having a building area of 5,172 m^2. The use is classified as a Group C major occupancy and the building is equipped with fire alarm, sprinkler and standpipe and hose systems.

The Applicant has recently undertaken renovations to the structure which includes the construction of an interconnected floor area. The construction in dispute involves the height of the guard that has been installed in this area. The guard has been installed on the third floor of the building and the distance between floor levels is 6.5 m. The third floor primarily houses meeting room facilities and there are no guest suites on this level.

The disputed guard that has been constructed is comprised of a handmade glass rail atop a tempered glass balustrade. The handrail is secured to the balustrade with an epoxy. The guard runs around the third floor mezzanine area and proceeds down a grand stair to the first floor lobby. The height of the subject guard ranges between 1,040 mm and 1,055 mm above the finished floor.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the subject guard, constructed approximately 15 mm to 30 mm less than the required 1,070 mm height, provides sufficiency of compliance with Sentence 3.3.1.17.(1) of the Ontario Building Code.

The Code requirements in Sentence 3.3.1.17.(1) provide that, with the exception of certain circumstances not applicable here, a guard of not less than 1,070 mm will be provided at each raised floor, mezzanine balcony, etc., where the difference in floor level is more than 600 mm.

In this instance, the third floor opening requires that a guard be provided as the difference in floor levels is 6.5 m. The height of the guard is mandated by the Code at 1,070 mm. However, a guard ranging from 1,040 mm to 1,055 mm has been provided at this level.

4. Provisions of the Ontario Building Code

3.3.1.17. Guards

(1) Except for the front edges of *stages*, floor pits in repair garages and loading docks, a *guard* not less than 1 070 mm (3 ft 6 in) high shall be provided

(a) around each roof to which access is provided for other than maintenance,

(b) at openings into smoke shafts referred to in Subsection 3.2.6. that are

less than 1 070 mm
(3 ft 6 in) above the floor, and

(c) at each raised floor, *mezzanine*, balcony, gallery, interior or exterior vehicular ramp, and at other locations where the difference in level is more than 600 mm (23e in).

5. Applicant's Position

The Agent for the Applicant submitted that the handrail and associated glass balustrade are considered a major architectural feature of the mezzanine at the third level of the hotel. The architectural drawings submitted in connection with this application specified a guard that would have met the Building Code height requirement. Unfortunately, the guard was installed at a height less than what was intended. This discrepancy was not identified until the guard was almost completed.

The Agent advised that, because of the material used in the installation of the guard, it would be virtually impossible to remove the handrail from the glass guard. The rail itself is a handmade, blown glass feature that has been secured to the glass guard with a potent epoxy. The guard assembly was an expensive item to install and would be equally expensive to redo at this point. The Agent advised that he had considered options that would achieve compliance but, to change the handrail, or add height to it in some way, would take away from the "clean line" of the feature. Alternatives that had been explored were not aesthetically pleasing. The Agent suggested that the existing guard height represents only a slight variation from the Code requirement. He requested that the Commission consider making a ruling of sufficiency of compliance in this regard in light of this marginal difference.

The Agent and the Applicants architect were of the opinion that the discrepancy in guard height would pose no added danger to any person using the third floor area. They submitted that the height requirement in the Code was calculated to approximate the waist height of an average adult with the intent of this provision being to prevent a fall. The existing guard, varying only slightly from the requirement, meets the intent of the OBC in this regard. Safety, it was argued, would not be compromised with a shortfall of approximately one inch.

6. Respondent's Position

The Respondent submitted that, upon inspection of the floor area, it was discovered that the height of the guard did not meet the Code requirement of 1,070 mm. He is not especially concerned by the difference in height but his hands are tied by the Code provisions. He recognized that it was the Applicant's intent to have a Code compliant guard and that an error occurred in the execution of the architectural drawings. He reiterated, however, that anything less than 1,070 mm did not comply with the strict wording of the Building Code and, therefore, could not be approved by the municipality.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-installed guard, surrounding a 3rd floor opening, and being 15 to 30 mm lower in height than the required 1,070 mm, provides sufficiency of compliance with Sentence 3.3.1.17.(1) of the Ontario Building Code at the Hilton Niagara, 6361 Buchanan Avenue, Niagara Falls, Ontario.

8. Reasons

i) The height of the existing railing is only slightly lower than the required guard height.
ii) This is an as built condition that occurred as a result of an execution error by the installer.
iii) It would be difficult to remedy the situation at this stage of construction. The guard is not easily disassembled and replaced.

Dated at Toronto this **30th** day in the month of **August** in the year **2001** for application number **2001-47.**

Mr. Len King, Vice-Chair

Mr. John Guthrie

Mr. Donald Pratt

Ruling No. 01-37-830
Application # 2001-41

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 3.2.2.37 of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Lawrence Carter, Architecture Incorporated, Waterloo, Ontario, for the resolution of a dispute with Mr. Jim Witmer, Chief Building Official, Township of Wilmot, Ontario, to determine whether the proposed 82.15 m^2, unsprinklered classroom addition to the existing unsprinklered detention occupancy, provides sufficiency of compliance with Article 3.2.2.37 of the Ontario Building Code at Hope Manor, R.R. #2, Petersburg, in the Township of Wilmot, Ontario.

APPLICANT	Mr. Lawrence Carter Architecture Incorporated Waterloo, Ontario
RESPONDENT	Mr. Jim Witmer Chief Building Official Township of Wilmot, Ontario
PANEL	Dr. Kenneth Peaker, Chair Mr. Robert De Berardis Mr. Fred Barkhouse
PLACE	Toronto, Ontario
DATE OF HEARING	August 16th, 2001
DATE OF RULING	August 16th, 2001
APPEARANCES	Mr. Lawrence Carter Architecture Incorporated Waterloo, Ontario **The Applicant** Mr. Glen Good Acting Deputy Chief Building Official Township of Wilmot, Ontario **Designate for the Respondent**

RULING

1. The Applicant

Mr. Lawrence Carter, Architecture Incorporated, Waterloo, Ontario has applied for a building permit under the Building Code Act, 1992 and is proposing the construction of an addition at Hope Manor, R.R. #2, Petersburg, in the Township of Wilmot, Ontario.

2. Description of Construction

Hope Manor is a youth detention facility that was originally constructed in the 1960s. The building provides accommodation for boys and girls ranging in age from 12 to 15 years old. This is a maximum security operation for youth of this age. The facility is classified as a Group B, Division 1 major occupancy. The children are continually supervised and have no independent freedom of movement. In 1996, a major addition was constructed. The original building is comprised of combustible material whereas the 1996 addition is of noncombustible construction. The existing facility is two storeys in building height and has an area of approximately 600 m^2. The building is equipped with a fire alarm system. However, it is not provided with a sprinkler system.

Presently, the Applicant is proposing to construct a one storey, 82.15 m^2 classroom addition to the existing detention facility. This addition will replace the existing "portable" classroom, located some distance from the main building.

The construction in dispute centres on the new classroom addition and the current Building Code requirement for sprinklering of all Group B occupancies. The site is in a rural area and is not connected to municipal water service. In lieu of sprinklering the addition, it is proposed that the classroom will be fire separated from the remainder of the building by a 2 hour fire wall. This compartmentalization is not required by the Building Code. In addition, fire detection devices would be installed in the classroom area and connected to the fire alarm system for the rest of the building. Fire extinguishers, to be used by teachers in the classroom area would also be provided. Neither of these measures is required by the OBC.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the compensating measures offered in lieu of the required sprinklering of the proposed 82.15 m^2 classroom addition provide sufficiency of compliance with Article 3.2.2.37. of the Ontario Building Code (OBC).

Article 3.2.2.37. of the Code requires (with exceptions not applicable here) that a building having a Group B, Division 1 occupancy be of noncombustible construction and be equipped with a sprinkler system. The classroom addition proposed in this case is of noncombustible construction but is not intended to be sprinklered. In lieu of the requirement to sprinkler, and as noted above, a number of compensating measures are offered in an attempt to achieve sufficiency of compliance with the OBC requirements. In all other respects, the proposed addition will comply with the requisite conditions of the Article in dispute.

4. Provisions of the Ontario Building Code

Article 3.2.2.37. Group B, Division 1, up to 3 Storeys, Sprinklered

(1) A *building* classified as Group B, Division 1 is permitted to conform to Sentence (2) provided
- (a) except as permitted by Sentence 3.2.2.7.(1) the *building* is *sprinklered*,
- (b) it is not more than 3 *storeys* in *building height*, and
- (c) it has a *building area*
  - (i) that is not limited if the *building* is not more than 1 *storey* in *building height*,
  - (ii) not more than 12 000 m^2 (129,000 ft^2) if 2 *storeys* in *building height*, or
  - (iii) not more than 8 000 m^2 (86,100 ft^2) if 3 *storeys* in *building height*.

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and
- (a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,
- (b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and
- (c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

5. Applicant's Position

The Applicant submitted that Hope Manor, a highly regarded detention provider, is looking to construct an addition to their existing facility. He outlined the history of the site and advised that a classroom addition is proposed that will replace the existing portable classroom on site.

The Applicant continued by advising that the existing structure is not sprinklered and suggested that sprinklering the relatively small, noncombustible addition would not increase life safety for the occupants of the building. He described the nature of the operation and advised that the children detained at the facility are constantly supervised. There would always be a staff member present in the classroom whenever it was in use. This staff member would possess a key to unlock the exit doors in case of an emergency. He also advised that there is a two stage fire alarm system that would first alert staff to an alarm and then allow three minutes for a response. After the three minute interval, if the alarm is not disengaged, all of the doors are released to allow the evacuation of the building. In addition, he submitted that regular fire drills are conducted at the facility and evacuation generally occurs within 2 minutes.

The Applicant acknowledged the Code requirement for sprinklering in a B1 occupancy, but suggested that, because the property is not connected to the municipal water system, a significant portion of the budget would be required to sprinkler the addition. He is asking for relief with the consideration that the addition is relatively small in size and does not facilitate any increase to the occupant load (there area approximately 40 staff and residents of the facility). In addition, he suggested that the compensating measures he is willing to provide would adequately achieve sufficiency of compliance in this instance. By fire separating the addition and providing extra protection by way of additional fire detection devices and fire extinguishers, life safety would not be compromised.

When questioned about the current provision of water to the facility, the Applicant advised that there is a small pipeline that currently runs from the municipal system to a storage tank. The water is pressurised for use in the building. This line was installed back at the time of the original construction in the 1960s and runs across a neighbouring farm. The system provides adequate pressure for their

current needs but is not considered to be part of the municipal water supply. There is no guarantee that the required sprinklering could be installed using this line. A water storage tank would likely be required for any sprinklering of the building. Despite the size of the addition, a substantial tank would be required along with the operational pumps. This would cost approximately $50,000. The Applicant advised that the budget for the entire project was only $115,000.

In summation the Applicant stated that this is a fairly important addition from the standpoint of the facility operators. He reiterated the compensating measures offered in lieu of sprinklering and suggested that sufficiency of compliance can be achieved in this instance, especially when considering the small size of this noncombustible addition that would not increase the occupant load of the facility.

6. Respondent's Position

The Respondent submitted that sprinklering is a mandatory requirement of all B1 occupancy buildings. He acknowledged that Hope Manor has been a good municipal citizen and runs an excellent facility. He further recognized the challenge facing the Applicant with respect to an adequate water supply.

The Respondent suggested that an alternative may be to permit the Applicant to install fast response sprinkler heads that could feed off the domestic water supply available. He advised that, up until the time of the hearing, he was unaware of the small water pipeline running off the municipal system. To consider any option, however, he would need to verify the existing flow. The Respondent advised that he would like to work out a solution with the Applicant but his hands are tied by the OBC's requirements.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed 82.15 m^2 unsprinklered classroom addition to the existing unsprinklered detention occupancy does not provide sufficiency of compliance with Article 3.2.2.37. of the Ontario Building Code at Hope Manor, R.R. #2, Petersburg, Wilmot Township, Ontario.

8. Reasons

i) The compensatory measured offered in lieu of sprinklering are not adequate to achieve sufficiency of compliance.
ii) Sprinklering of the detention facility is an important and required life safety feature when considering the limited freedom of movement of the occupants.

Dated at Toronto this **16th** day in the month of **August** in the year **2001** for application number **2001-41** .

Dr. Kenneth Peaker, Chair

Mr. Robert De Berardis

Mr. Fred Barkhouse

Ruling No. 01-36-829
Application # 2001-45

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 3.2.5.13.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Stephen Bent, Director of Finance, Ottawa-Carleton Lifeskills Inc., Ottawa, Ontario, for the resolution of a dispute with Ms. Catherine Junop, Chief Building Official, City of Ottawa, Ontario, to determine whether the proposed sprinkler system, designed in conformance with NFPA 13, with the exception of the attic area which would conform to NFPA 13R (exempt from sprinklering), provides sufficiency of compliance with Sentence 3.2.5.13.(1) of the Ontario Building Code at the Ottawa-Carleton Lifeskills Group Home at 810 Ivanhoe Avenue, Ottawa, Ontario.

APPLICANT	Mr. Stephen Bent, Director of Finance Ottawa-Carleton Lifeskills Inc. Ottawa, Ontario
RESPONDENT	Ms. Catherine Junop Chief Building Official City of Ottawa
PANEL	Dr. Kenneth Peaker, Chair Mr. John Guthrie Mr. Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	August 2nd, 2001
DATE OF RULING	August 2nd, 2001
APPEARANCES	Mr. Leonard Koffman Leonard Koffman Architect Ottawa, Ontario **Agent for the Applicant** Mr. Luc Nadeau Part 3 Plan Examiner City of Ottawa **Designate for the Respondent**

RULING

1. The Applicant

Mr. Stephen Bent, Director of Finance, Ottawa-Carleton Lifeskills Inc., Ottawa, Ontario, has received a building permit under the Building Code Act, 1992 and is in the process of constructing the Ottawa-Carleton Lifeskills Group Home at 810 Ivanhoe Avenue, Ottawa, Ontario.

2. Description of Construction

The Applicant is currently constructing a one storey (with a full basement), group home with a building area of 453 m^2 that is intended to house up to 12 residents who would receive staff supervision 24 hours a day. The structure is built of combustible construction and is classified as having a Group B, Division 3 (care) occupancy. The structure will be equipped with a single stage fire alarm system and a sprinkler system.

The construction in dispute involves the design of the sprinkler system for the group home. Although it is proposed that the system for most of the building be designed in accordance with the NFPA 13 standard, it is also proposed that, in the attic area, the system installation would be in accordance with NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height." The relief requested in this instance is essentially to exempt the attic area from any sprinklering while still providing the required sprinklering on the ground floor.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the sprinkler design, constructed to the NFPA 13R standard in the attic area, achieves sufficiency of compliance with Sentence 3.2.5.13.(1) .

As outlined in Article 3.2.2.41., a B3 occupancy facility may comprised of combustible or noncombustible construction. Whichever material is used, however, the building must be sprinklered. The dispute here centres on the type of sprinkler system that is required in this instance. Sentence 3.2.5.13.(1) states that the sprinkler system must meet NFPA 13, while Sentence 3.2.5.13.(2), provides an exception to Sentence (1) by allowing low rise (four stories or less) residential occupancies to comply with the more relaxed sprinkler standards found in NFPA 13R.

The NFPA 13R standard stipulates that a sprinkler system must be designed and installed for all occupied rooms. The NFPA 13 standard, however, goes further by also requiring sprinklering in unoccupied areas such as closets and concealed spaces such as attics.

In this instance, it is proposed that the ground floor of the dwelling be equipped with a sprinkler system designed and installed in accordance with the NFPA 13 standard, however, it is proposed that the attic area be exempt from sprinklering in this instance. The dwelling, while designed to appear as a house-like structure, is classified as a Group B, Division 3 occupancy and does not meet the criteria for the exemption permitted to residential occupancies.

4. Provisions of the Ontario Building Code

3.2.5.13. Automatic Sprinkler Systems

(1) Except as permitted by Sentences (2), (3) and (4), an automatic sprinkler system shall be designed, constructed, installed and tested in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems". (See Appendix A.)

5. Applicant's Position

The Applicant described the operation of Ottawa-Carleton Life Skills as an organization that provides community living opportunities for developmentally challenged individuals. They provide a nurturing environment in a community setting.

The Applicant's Agent continued by advising that they are currently constructing a one storey, home-like building. He submitted that the building could be considered residential if there were to be less than 10 residents and where no more than two persons who would require assistance to evacuate the premises in the event of an emergency. He suggested that, in this case, they only marginally exceed this provision by accommodating up to 12 residents. If classified as residential, he argued, the sprinkler system could be designed in accordance with NFPA 13R.

The Agent also advised that the building is intended to comply, in all other respects, with the requirements for a B3 facility. This includes fire separations and sprinklering in the garage area in accordance with NFPA 13. He advised that the building is equipped with a single stage fire alarm system, smoke detectors and smoke alarms, CO_2 detectors and four exit doors on the ground floor. He advised that the travel distance to an exit would not exceed 40 ft. This, he argued, is far less distance than the OBC requires. In addition, he advised, there are two patio doors that could be used in an emergency.

The Applicant advised that there is a Fire Plan in place that outlines fire evacuation procedures and both scheduled and spontaneous fire drills are conducted with the residents. He estimates the approximate evacuation time to be from 2 to 4 minutes. The Agent advised that all 12 residents will be ambulatory individuals who respond well to verbal direction and commands.

The Applicant was originally seeking approval of an NFPA 13R system for the entire dwelling, but after contemplation of what this would mean for the design of the system and the areas to be sprinklered, decided that he would conform with NFPA 13 on the ground floor but was seeking relief from this requirement in the attic area only; here he was requesting an exemption from sprinklering. As a result of limited funding, the Applicant submitted, the money that would be used to sprinkler the attic could be better used to fund other ventures for the benefit of the occupants. As compensation for sprinklering in the attic, the Agent offered to install smoke detectors throughout the space at a rate of one detector for every 100 m^2. These detectors, they suggested, would serve as an early warning approach to activate the alarm system should a fire ignite in the attic.

6. Respondent's Position

The Respondent submitted that, while he recognizes the nature of this operation and the limited size of the dwelling, his hands are tied by the specific wording of the Building Code. In this instance, there is accommodation for greater than 10 individuals and the building must be considered as a B3

occupancy for the purposes of applying the OBC. In this regard, sprinklering is required in conformance with NFPA 13. He suggested that, while the building is no different from a typical residential dwelling, it is operating as a group home for 12 developmentally challenged individuals.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed sprinkler system in a B3 occupancy, designed in conformance with NFPA 13 with the exception of the attic area which would be designed in accordance with NFPA 13R (exempt from sprinklering), does not provide sufficiency of compliance with Sentence 3.2.5.13.(1) of the Ontario Building Code at the Ottawa-Carleton Lifeskills Inc. Group Home at 810 Ivanhoe Avenue, Ottawa, Ontario.

8. Reasons

i) The compensating measures offered do not achieve sufficiency of compliance with the OBC requirements.

ii) This B3 occupancy requires conformance with NFPA 13 and does not meet the parameters for exemption from this standard.

Dated at Toronto this **2nd** day in the month of **August** in the year **2001** for application number **2001-45** .

Dr. Kenneth Peaker, Chair

Mr. John Guthrie

Mr. Donald Pratt

Ruling No. 01-35-828
Application No. 2001-40

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 3.4.4.4. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ferdinand Regier, Chapman Murray Associates Architects Inc. for the resolution of a dispute with Mel Brown, Chief Building Official, City of Niagara Falls, to determine whether the exit stair, which contains an opening for an elevator that is proposed to have a pressurized elevator shaft, provides sufficiency of compliance with Article 3.4.4.4. of the Ontario Building Code at the Minolta Tower, Niagara Falls, Ontario.

APPLICANT	Ferdinand Regier Chapman Murray Associates Architects Inc. Niagara Falls, Ontario
RESPONDENT	Mel Brown Chief Building Official City of Niagara Falls
PANEL	Kenneth Peaker, Chair John Guthrie Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	August 2nd, 2001
DATE OF RULING	August 2nd, 2001
APPEARANCES	Rick Mori Leber/Rubes Inc. Toronto, Ontario **Agent for the Applicant**

RULING

1. The Applicant

Ferdinand Regier, Chapman Murray Associates Architects Inc., has applied for a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and is proposing renovations to the Minolta Tower in the City of Niagara Falls, Ontario.

2. Description of Construction

The Applicant is undertaking renovations to the Minolta Tower building, which has most recently been used as an observation tower with associated restaurant uses. The building is a 30 storey structure and will be classified as having Group C and Group A, Division 2 occupancies. The tower is of noncombustible construction and is partially sprinklered. In addition, the building is equipped with a fire alarm and a standpipe and hose system.

The building itself is a unique structure. The first floor of the structure is at grade level whereas the next accessible storey is located 64.62 m (212 ft) above ground on the 25th floor. There are currently two fire separated exit stairs, one that serves from grade level to the 26th floor and another that serves up to the 30th floor. In addition, there is also an open stair that leads from the 26th floor through to the 30th floor. The upper floors of the tower are also served by three elevators, equally spaced around the building's interior. One of the elevators runs from the basement level to the top of the tower. The other two are only accessed at ground level and progress to the upper storeys.

The renovations to the building will maintain the two levels of restaurant use on the 25th and 26th floors while the observation levels on floors 27 through 30 will be converted to hotel suites. In light of the alterations being undertaken, the open stair must now be considered as a required exit. As a result, this stair will be enclosed with a fire separation and will cross over and link with the exit stair that stops at the 26th floor. The construction in dispute involves the elevator opening that would be present within the egress route at this crossover location. In linking the two stairs for use as a required exit, and given the configuration of the building and location of the elevator openings in proximity to the exit stairs, the doors to one of the elevators lies between the two stairways and would be included within the enclosure.

The Applicant has proposed to pressurize the elevator shafts as a measure to compensate for the opening within the required exit. Pressurization in these areas would exceed the Code requirements in this building.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the exit stair, which would contain an opening for an elevator where it is proposed that the elevator shaft will be pressurized, provides sufficiency of compliance with Article 3.4.4.4. of the Ontario Building Code (OBC).

Article 3.4.4.4. outlines the provisions for ensuring that the integrity of exits is maintained. Sentence (1) of this Article provides that fire separations that separate an exit from the remainder of the building shall have no openings. There are several exceptions to this provision, none of which include a door to an elevator hoistway. Sentences (2) through (10) of Article 3.4.4.4. outline prohibitions on the use of an exit area and proscribe any openings, penetrations or appliances from being located within a required exit.

The renovations proposed for the building in dispute would include an elevator opening within the required exit area. However, as compensation for this penetration it is proposed that the building's elevators shafts will be pressurized. An analysis of the early warning and evacuation systems of the building under Part 11 of the OBC reveals that, in a sprinklered building, under Measurement A of the Supplemental Guidelines, the elevator shafts are not required to be pressurized. Given that this is an existing building, the anticipated renovations fall within these provisions of the Code.

4. Provisions of the Ontario Building Code

3.4.4.4. Integrity of Exits

(1) A *fire separation* that separates an *exit* from the remainder of the *building* shall have no openings except for

(a) standpipe and sprinkler piping,
(b) electrical wires and cables, totally enclosed *noncombustible* raceways and *noncombustible* piping that serve only the *exit*,
(c) openings required by the provisions of Subsection 3.2.6.,
(d) *exit* doorways, and
(e) wired glass and glass block permitted by Article 3.1.8.14.

(2) *Exits* within scissors stairs and other contiguous *exit* stairways shall be separated from each other by a smoke-tight *fire separation* having a *fire-resistance rating* not less than that required for the floor assembly through which they pass.

(3) *Fire separations* separating contiguous stairs described in Sentence (2) shall not be pierced by doorways, ductwork, piping or any other openings that affect the continuity of the separation.

(4) A fuel-fired *appliance* shall not be installed in an *exit*.

(5) An *exit* shall not be used as a *plenum* for a heating, ventilating or air-conditioning system.

(6) An *exit* shall be designed for no purpose other than for exiting, except that an *exit* is permitted also to be designed to serve as an access to a *floor area*.

(7) A *service room* shall not open directly into an *exit*.

(8) Storage rooms, washrooms, toilet rooms, laundry rooms and similar ancillary rooms shall not open directly into an *exit*.

(9) *Service spaces* referred to in Sentence 3.2.1.1.(7) shall not open directly into an *exit*.

(10) In elementary and secondary schools, an *exit* shall be designed so that it does not serve as an access from one portion of a *floor area* to another portion of the same *floor area*.

5. Applicant's Position

The Agent for the Applicant submitted that the Minolta Tower is a unique structure that was constructed prior to either the Ontario Building Code or the National Building Code. He described the structure as a long tower with a "goblet-like" top. There are presently two fire rated stairs in the tower; one running from the ground level to the 26th storey and the other running from ground level to the 30th

There is also an open stair that runs between floors 26 and 30. When originally constructed, these stairs were to serve the restaurants and observation decks at the top of the tower.

As part of the current renovations it has been a goal of the Applicant to make the building as Code compliant as possible. The second required exit stair that would serve the residential hotel suites must cross over at the 26th floor between stairwells. This area will be fire separated from the remainder of the floor area, however, an elevator opening is located within the proposed exit route between the two stairs. The Agent recognized that an elevator opening within a required exit space is not usually permitted but advised that the elevator in question is a prime elevator needed to access the restaurant uses on the 25th and 26th floors.

The Agent argued that, because of the spatial limitations within the tower, they had no other option than to include the elevator within the required exit route between the two stairwells. As a measure to compensate for this penetration, however, they are proposing to pressurize all of the elevator shafts. In their analysis of the building, and based on the renovations proposed, it was concluded that the hazard index would not be increased, therefore, pressurization would not be required. The compensating measure would, therefore, be in excess of the OBC requirements in this instance.

The Agent further submitted that a proposed Fire Safety Plan could address the issue of when pressurization of the elevator shaft would be warranted. He stated that, as a result of the change in major occupancy from an assembly use to residential hotel suites, there will be fewer people on the upper floors that would require evacuation in an emergency. In fact, he advised that the fire department anticipated that people would likely wait in their rooms for evacuation by fire department personnel.

In terms of the added value of pressurizing the elevator shaft, the Agent submitted that his research concluded that several literary sources supported the protection of an exit using pressurization. In addition, he argued that there is little possibility of a fire starting below the 26th floor. He also advised that the elevator cabs themselves are fairly fire resistant being comprised of a marble floor, steel ceiling and essentially noncombustible walls. He emphasized that most fires that start in elevators do not originate from the mechanical systems but from vandalism of the cabs.

In summation, the Agent submitted that in his opinion, pressurization of the elevator shaft would adequately maintain the integrity of the exit at this crossover location. He submitted that the shaft of the elevator is much larger than the cab and that pressurization would be quite effective. In addition, the elevators are all fully manned and can be recalled to the ground level if required. He stated that the elevator in question is required for patrons to access the restaurant levels. To remove the elevator opening on the 26th floor would pose a hardship for the restaurant operators.

6. Respondent's Position

The Respondent chose not to attend the hearing and as a result the Building Code Commission relied on his written submission only.

In his summarization of the dispute the Respondent advised that "(i)n accordance with 3.4.4.4. Integrity of Exits, an opening for an elevator shaft in an exit is not a listed exception." In this instance the exit stair at the 26th floor contains an elevator door opening to the shaft and cannot be accepted as code compliant by the municipality.

7. Commission Ruling

It is the decision of the Building Code Commission that the exit stair, which contains an opening for an

elevator that is proposed to have a pressurized elevator shaft, does not provide sufficiency of compliance with Article 3.4.4.4. of the Ontario Building Code at the Minolta Tower, Niagara Falls, Ontario.

8. Reasons

i) The integrity of the required exit is compromised by the elevator opening.

ii) The proposed compensating measure, while making the elevator safer, does not adequately address the problem of the exit's integrity.

Dated at Toronto this **2nd** day in the month of **August** in the year **2001** for application number **2001-40** .

Dr. Kenneth Peaker, Chair

Mr. John Guthrie

Mr. Donald Pratt

Ruling No. 01-34-827
Application No. 2001-39

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sections 9.21. and 9.22. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mrs. Eija Lukkarinen, property owner, Willowdale, Ontario, for the resolution of a dispute with Mr. Ted Tipping, Deputy Chief Building Official, City of Toronto, Ontario, to determine whether the proposed radiant thermal mass brick heating unit, having a Finnish design, provides sufficiency of compliance with Sections 9.21. and 9.22. of the Ontario Building Code at 5 Ennismore Place, Toronto, Ontario.

APPLICANT	Mrs. Eija Lukkarinen, Owner 5 Ennismore Place Willowdale, Ontario
RESPONDENT	Mr. Ted Tipping Deputy Chief Building Official City of Toronto
PANEL	Dr. Kenneth Peaker, Chair Mr. Michael Steele Mr. Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	July 19th, 2001
DATE OF RULING	July 19th, 2001
APPEARANCES	Mrs. Eija Lukkarinen, Owner 5 Ennismore Place Willowdale, Ontario **The Applicant** Mr. Victor Araujo Senior Plans Examiner City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

Mrs. Eija Lukkarinen, owner, Willowdale, Ontario, has applied for a building permit under the Building Code Act, 1992 and is proposing the construction of a Finnish-design heating unit in the basement of her dwelling at 5 Ennismore Place, Willowdale, Ontario.

2. Description of Construction

The Applicant is the owner of a single detached dwelling. The building is one storey in height, less than 600 m^2 in building area and is classified as having a Group C major occupancy. It is of combustible construction and is not equipped with a fire alarm system.

The construction in dispute involves a "fireplace" intended to be located in a basement recreation room within the dwelling. It should be noted at the outset, however, that the proposed Finnish-design "fireplace" is less of a conventional convection fireplace and is more akin to a heating unit or a masonry baking oven.[1] Indeed, the proposal is a unique masonry radiant heater that is substantially different from a typical fireplace anticipated by the Building Code. For example, the heater operates according to downdraft contraflow principles, not convection (see discussion below). The design also contains components not addressed in the Building Code such as the "steel by-pass channel", "smoke blade" and "cast re-factory slab". In addition, the heating unit and chimney are separate but connected items in a heater of Finnish design. Often the chimney is positioned behind the heating unit, but in this case it is proposed to be located to the right of the burning unit (when facing the heater).

In terms of construction specifics, both the proposed heater and chimney are to be situated on a footing having dimensions of 1,995 mm (78.5 in) wide, 1,500 mm (59 in) deep and 305 mm (12 in) thick. The footing will be made of poured concrete with 13 mm (½ in) rebar laid in a 305 mm (12 in) grid. The footing pad is to be built so that its top will be at the same height as the existing finished concrete floor. On top of the footing will be the heating unit and chimney. These will be positioned such that the footing will project 150 mm (6 in) outwards from the rear and sides of the heater and chimney. The front of the heater, however, will be set back 405 mm (16 in) from the front edge of the footing to allow space for the hearth.

The heating unit is to be constructed of masonry and will be 1,270 mm (50 in) wide, 940 mm (37 in) in depth and 1,930 mm (76 in) in height. A 205 mm (8 in) clearance will be maintained between the top of the burning unit and the underside of the ceiling. (The floor to ceiling height in the subject basement is 2,135 mm (84 in).) The rear of the heating unit will also be separated from the basement wall by a 150 mm (6 in) clearance. As well, the heater construction proposes a hearth to be situated directly on the footing projecting out 405 mm (16 in) from its face. The hearth will run the 1,270 mm (50 in) width of the heater and will be 305 mm (12 in) high. It too will be made of masonry, but will be a hollow structure topped with a noncombustible material that will act as the actual hearth surface.

The chimney unit is to be constructed directly on top of the footing as well and will be connected to

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[1] Accordingly, this decision shall hereafter refer to the proposed construction as a heating unit or heater.

the top and bottom of the heater structure. The chimney will also be masonry construction and is to measure 405 mm (16 in) wide and 510 mm (20 in) in depth. It will extend up through the ground floor and roof of the dwelling to a height of 5 m above grade level. It will be topped with a solid concrete cap with a drip edge and is to be fitted with a clay liner. The chimney is to be separated from the burning unit by a 13 mm (½ in) clearance and from the rear basement wall by at least 150 mm (6 in). Further, as it travels up through the house, the chimney will be separated from the ground floor and roof assembly combustible framing members by 50 mm (2 in). The same 50 mm separation will be provided from the chimney to the nearest finished wall of the ground floor.

Within the heating unit, the construction will be as follows: The main portion of the firebox, or combustion chamber, will be 455 mm (18 in) wide, 595 mm (23 ½ in) in depth and approximately 510 mm (20 in) in height. Access to the firebox is through two hinged doors at the front of the heater unit. Above the actual combustion area is the smoke chamber. This is a flat, funnel-shaped space with front and rear corbelled masonry walls which taper together at a 60^0 angle from horizontal. This funnel-shaped area terminates at what is called the "throat", which is a 75 mm (3 in) narrow slit centred over the middle of the firebox. At 455 mm (18 in) in length, however, the throat is as wide as the firebox.

Above the throat is to be another chamber described as the "secondary combustion chamber" which is to be nearly as large as the lower firebox and smoke chamber together. The secondary chamber is proposed as a rectangular-shaped box except for the upper one quarter of its walls which are to angle inwards 60^0 from horizontal all the way around. The ceiling of this chamber is to be flat and will be capped with a removable "cast refractory slab" which, according to the Applicant, is a manufactured heat shield capable of withstanding the high temperatures that occur during secondary combustion. On top of this will be another removable concrete slab, although this one is to be made of standard material.

Proposed at the sides of the secondary combustion chamber are two narrow heat exchange channels both 89 mm (3 ½ in) wide and approximately 455 mm (18 in) in depth that are to travel downwards nearly to floor level and connect at the rear of the heating unit. The connection area of the two channels is, in turn, connected to the chimney at the right side. Within the secondary combustion chamber itself, these channels are both separated from the main area by a baffle. At the upper portion of the rear wall of this chamber is a second throat which leads to a bypass channel made of steel fitted and with a damper. This damper leads directly to the chimney (bypassing the heat exchange channels) and when open will allow heat and smoke to dissipate rapidly up the chimney similar to a conventional fireplace. This damper will also be opened when lighting the fire in the primary combustion chamber in order to expel carbon monoxide quickly through the unit. According to the Applicant, "(w)hen draft is established, the bypass damper is then closed and the heater goes into downdraft mode."

The purpose of the secondary combustion chamber is to manage the heat and smoke produced by the fire. Specifically, in this area the superheated gases will move to the top of the heater and as the heat builds it will then drop down into the heat exchange channels located on both sides. As the heated gases pass through these side channels heat will then be transferred to the exterior brick shell of the heating unit. The flue gases would then enter a common channel at the base of the heater and exit into the chimney flue. The intent of this design is to provide heat to the room/house for up to 24 hours after the burn is complete.

Supply air will be provided to the combustion chamber through two means. The primary air source will come from the ash pit located below the firebox. The ash pit door will have openable slats which will allow air to be drawn in, which can then pass up through the floor grating of the firebox

that separates the firebox from the ash pit. The secondary air supply source is provided by additional openable slats located in the base of the two hinged doors at the front of the firebox.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed Finnish heating unit provides sufficiency of compliance with Sections 9.21. and 9.22. of the Ontario Building Code (OBC). These Sections provide the construction requirements for chimneys and flues and fireplaces respectively.

The numerous standards found within OBC 9.21. and 9.22. are intended, however, to apply to and were developed specifically for conventional convection fireplaces. As noted above, the proposed "fireplace", or rather heating unit, performs significantly differently. Its purpose is not simply to act as a protective enclosure for the safe burning of solid fuel, instead its objective is to act as a facility for the purpose of slow diffusion thermal heating. As such, it not only protects the remainder of the building from the combustion occurring within, it also processes the heated gases and fumes so that heat is stored and dissipates over a period of time. Nevertheless, as a site-built, solid fuel heating unit, the proposed construction is also not covered by Part 6 of the OBC.

The Applicant's proposal thus falls outside the prescriptive requirements of the Ontario Building Code. In such appeals, it is necessary for the BCC to consider the application, as either an alternative or equivalent system to those envisage by Code. The Commission must do so on the basis of whether the proposal sufficiently complies with the *intent* of the technical requirements of the OBC, and not the actual prescriptive requirements themselves since, in this case, these are to apply to a different type of solid fuel burning unit. In doing this, the proposal, albeit different than an OBC-type fireplace, must be weighed on whether it provides the same minimum level of health and safety as that intended by the Code provisions in Sections 9.21. and 9.22.

In the present matter, the Commission considers that sufficiency of compliance can be achieved with OBC 9.21. and 9.22. if the proposal were to meet the American Society for Testing and Materials (ASTM) Standard E 1602-94, "Standard Guide for Construction of Solid Fuel Burning Masonry Heaters". This is a standard that specifically outlines construction requirements for site-built masonry heaters. It does not address conventional fireplaces. Its purpose is to provide requirements precisely for what the Applicant intends to build. Indeed, Finnish heaters are included as an example of the construction covered by ASTM E 1602-94.

The BCC has reviewed the ASTM E 1602-94 standard. The Commission has determined that, in this instance, ASTM E 1602-94 meets the same level of fire safety protection as that required by Sections 9.21. and 9.22. As a result, the BCC holds that it is an appropriate alternative standard to which the proposal may be compared in an effort to determine its sufficiency of compliance.

4. Provisions of the Ontario Building Code

9.21. Chimneys and Flues

See provisions in the Ontario Building Code.

9.22. Fireplaces

See provisions in the Ontario Building Code.

5. Applicant's Position

The Applicant initiated her discussion with an outline of the road blocks she has encountered since her building permit application was presented to the City. She advised that she has spoken with several staff members and returned to the City on a number of occasions with additional information that would support her proposal. She emphasized the unwillingness of City staff to fully review or consider her proposal and expressed her frustration with the process to date. She submitted that the City, rather than reviewing the information she presented, which included three books authored on the design and construction of a Finnish heater, took the position that she would require an engineered design in order to obtain approval. In this regard, she further advised that both she and the mason she has retained for this project had contacted a number of engineers but none would review her heating unit plans or take on the project.

In support of her proposal, the Applicant advised that the Finnish heater design is recognized worldwide as an effective and efficient system. As well, Tampire University in Finland has published a study attesting to its performance. She advised the Commission that, in her opinion, all aspects of the Ontario Building Code would be adequately complied with except for the angle of the flue incline and the smoke chamber slope. For these areas, she stated, it was simply not possible to comply because such slopes are essential for the downdraft functioning of the unit. She submitted, however, that the performance history of the Finnish heater and the manuals presented as evidence should be satisfactory to ensure sufficiency of compliance with the intent of the Code. In addition, she offered to have the system tested, if necessary, by the Tulikivi Lab in Mississauga, specialists in this type of masonry heater design.

The Applicant further submitted that it is her desire to have this heating unit constructed on-site. In the alternative, she advised that she may look at having a pre-fabricated model installed, but emphasized that this was not her preference. In this regard she requested, if the Commission could not render a decision in favour of the proposed heater, that they make a decision on the specific elements of construction such as the foundation and chimney.

In summation the Applicant stated that, based on her substantial research, and as outlined in the books she had entered into evidence, "the major components of the downdraft masonry heater ensure its proper operation and safety." She reiterated that this system is universally recognized and that its design has been proven to operate successfully for over a century. In this regard she could foresee no reason that the proposal would not provide sufficiency of compliance with the intent of the OBC.

6. Respondent's Position

The Designate for the Respondent submitted that the proposed contraflow heater does not comply with the prescriptive requirements outlined in the Ontario Building Code. He further stated that the drawings submitted with the permit application were insufficient to determine compliance in certain areas. He advised that the City had concerns with respect to the risk of smoke and fire that may be associated with this type of downdraft unit and needed to have regard for the safety of the occupants of the dwelling. He went on to state that in ensuring safety, the City is bound by the standards outlined in the OBC. Those standards, he argued, do not cover the type of heating unit design anticipated in this application.

The Designate continued by stating that, in his experience, he had approved four similar "fireplaces". Those structures, however, had engineering approvals and full specifications were provided. He submitted that City staff have been trying to advise the Applicant of this for some time, to no avail. When questioned in relation to the difficulties encountered by the Applicant in retaining an engineer, the Designate suggested that perhaps the wrong type of engineers were being contacted or that the information being provided for their consideration was not sufficient. For this project he advised that a mechanical engineer would be required. He further advised that, in his capacity with the City, however, he was unable to refer the Applicant to a specific engineer because of the municipality's policies on the referral of professionals. The Designate also stated that he had never been made aware of any difficulties encountered by others who have required the services of an engineer for similar projects.

In respect to the Applicant's suggestion regarding a prefabricated model, the Designate responded that, from the City's point of view, acceptance of that proposal would be no different from being provided with documentation from a qualified engineer. The key component is that certification is provided in both instances as to the function and operation of the unit.

In conclusion, the Designate stated that, by virtue of its design, some aspects of this fireplace are not covered by the OBC which is used as a prescriptive guideline for approvals. In absence of any substantive information from a professional engineer that would lead him to reach an alternate conclusion, he is not in the position to grant a building permit.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed radiant thermal mass brick heater, having a Finnish design, will provide sufficiency of compliance with Sections 9.21. and 9.22. of the Ontario Building Code at 5 Ennismore Place, Toronto, Ontario, on condition that:

a) The Applicant obtain stamped design drawings and construction specifications from a qualified professional engineer(s) licensed in Ontario.
b) Details and timing of required site inspections of materials and construction must be outlined by the engineer(s).
c) Upon completion, the drawings, specifications and site inspection details be provided to the City of Toronto and a permit issued based on that submission.
d) During construction and upon completion, site inspections be carried out by the design engineer(s) in accordance with the details submitted to the City.

8. Reasons

i) The contraflow masonry heater anticipated by this application is a proven system recognized for use in Europe with an established history of proven performance.
ii) Despite the difference in design between the proposed heater and a conventional fireplace, with expert engineering, occupant safety will be maintained and potential risks minimized.
iii) As the proposal will comply with the ASTM E 1602-94 standard, the BCC considers the design of the heater as an acceptable alternative to the prescriptive requirements of OBC Sections 9.21. and 9.22.

Dated at Toronto this **19th** day in the month of **July,** in the year **2001** for application number **2001- 39**.

Dr. Kenneth Peaker, Chair

Mr. Michael Steele

Mr. Donald Pratt

Ruling No. 01-33-826
Application # 2000-75

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 9.12.2.2. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Lyle Dayman, property owner, Forest, Ontario, for the resolution of a dispute with Mr. Bob Hexter, Chief Building Official, County of Lambton, Ontario, to determine whether the shallow (450 to 500 mm), insulated garage footings and foundations provide sufficiency of compliance with Article 9.12.2.2. of the Ontario Building Code at R.R. # 2, 6494 Proof Line Road, Forest, Ontario.

APPLICANT	Mr. Lyle Dayman, 6494 Proof Line Road Forest, Ontario
RESPONDENT	Mr. Bob Hexter Chief Building Official County of Lambton
PANEL	Dr. Kenneth Peaker, Chair Mr. Michael Steele Mr. Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	July 19th, 2001
DATE OF RULING	July 19th, 2001
APPEARANCES	Mr. Bob Hexter Chief Building Official County of Lambton **The Respondent**

RULING

1. The Applicant

Mr. Lyle Dayman, property owner, Forest, Ontario, has applied for a building permit under the Building Code Act, 1992 and is in the process of constructing a detached garage at 6494 Proof Line Road, Forest, Ontario.

2. Description of Construction

The Applicant is intending to construct a detached garage on his property. The garage would accommodate two vehicles and is proposed to be approximately 1, 008 ft^2 in building area and one storey in building height. This structure would be an unheated accessory building, of combustible construction, located on a property which also contains a residential dwelling having a Group C occupancy classification.

The construction in dispute involves the as-installed shallow insulated footings that would support the proposed garage structure. The footings have been installed approximately 400 mm - 500 mm into the clay soil. They have been insulated with 304 mm (1 ft) of 25 mm (1 in) Styrofoam SM insulation applied vertically on the foundation wall below grade and 914 mm (3 ft) of 25 mm (1 in) Styrofoam SM insulation applied horizontally to form an "L" shape with the vertical applied SM.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the shallow (450 to 500 mm), insulated garage footings and foundations provide sufficiency of compliance with Article 9.12.2.2. of the Ontario Building Code.

Sentence 9.12.2.2.(1) states that, except as provided in Sentences (4) and (5), the minimum depth of foundations below finished ground level must conform with Table 9.12.2.2. For foundations located in clay soil, the Table indicates that footings and foundation for spaces that are not heated must be 1.2 m (3 ft 11 in) in depth but not less than the depth of frost penetration. However, Sentence 9.12.2.2.(5) permits foundation depths to be decreased where experience with local soil conditions shows that lesser depths are satisfactory or where the foundation is designed for lesser depths. The Code provision in this regard would require this design to be carried out by a person qualified in the specific method applied and based on a subsurface investigation.

As noted above, the footings and foundations subject to this dispute have a depth of only 400 mm - 500 mm but have been provided with some insulation. From the information provided however, and in the opinion of the respondent, it does not appear as though a specific design has been carried out by a person qualified in this field of work.

According to the Technical Background Information report submitted in connection with this matter from the Housing Development and Building Branch of the Ministry of Municipal Affairs and Housing, "E.I. Robinsky and K.E. Bespflug recommend that in unheated structures a continuous insulation mat be provided beneath the entire area of both floor and footings in addition to the required perimeter strip." In this instance, only insulation of the perimeter is being proposed.

4. Provisions of the Ontario Building Code

Article 9.12.2.2 Minimum Depth of Foundations

(1) Except as provided in Sentences (4) and (5), the minimum depth of *foundations* below finished ground level shall conform to Table 9.12.2.2.

(2) Where a *foundation* is insulated in a manner that will reduce the heat flow to the soil beneath the footings, the *foundation* depth shall conform to that required for *foundations* containing no heated space (See Appendix A.)

(3) The minimum depth of *foundations* for exterior concrete steps with more than 2 risers shall conform to Sentences (1) to (5).

(4) Concrete steps with 1 and 2 risers are permitted to be lain on ground level.

(5) The *foundation* depths required in Sentence (1) are permitted to e decreased where experience with local *soil* conditions shows that lesser depth are satisfactory, or where *foundation* is designed for lesser depths.

(6) The foundation depths required in Sentence (1) do not apply to *foundations* for *building* of other than masonry or masonry veneer construction

(a) whose superstructure conforms with the deformation resistance test in CAN/CAS-Z240.2.1., "Structural Requirements for Mobile Homes", or

(b) used as accessory *buildings* of not more than 1 *storey* in *building height* and not more than 50 m^2 (538 ft^2) in *building area.*

Table 9.12.2.2.
Minimum Depths of Foundation
Forming Part of Sentence 9.12.2.2.(1)

Type of *Soil*	*Foundation* containing heated *Basement* or Crawl Space[1]		*Foundation* Containing no Heated Space[2]	
	Good *Soil* Drainage	Poor *Soil* Drainage	Good *Soil* Drainage[3]	Poor *Soil* Drainage
Rock	No limit	No limit	No limit	No limit
Coarse grained *soils*	No limit	No limit	No limit	Below the depth of frost penetration
Silt	No limit	No limit	Below the depth of frost penetration	Below the depth of frost penetration
Clay or *soils* not clearly defined[4]	1.2 m (3 ft 11 in)	1.2 m (3 ft 11 in)	1.2 m (3 ft 11 in) but not less than the depth of frost penetration	1.2 m (3 ft 11 in) but not less than the depth of frost penetration
Column 1	2	3	4	5

Notes to Table 9.12.2.2.:
(1) Foundation no insulated to reduce heat loss through the footings.
(2) Including foundations containing heated space insulated to reduce heat loss through the footings.
(3) To not less than the depth of frost penetration.
(4) See Appendix A.

5. Applicant's Position

The Applicant did not attend the hearing and chose to rely on his written submission. His position was that the footings have been installed as suggested by Dow Chemical. In a memo to the Applicant from Dow, concerning insulated shallow foundations, the company outlined the requirements for Styrofoam SM insulation to provide frost protection. The advice in this memo was based on the information supplied to them by the Applicant. In addition, as an attachment to their memo, the Dow Chemical included several pages of specifications from their design manual.

6. Respondent's Position

The Respondent submitted that soils in this region offer poor drainage and are susceptible to the penetration of frost. In relation to these site conditions, footings are required to be installed at a depth of 1.2 m. The Applicant's footings are significantly more shallow than what is required by the Building Code.

In respect to the memo provided by Dow Chemical, the Respondent advised that Dow's recommendations were based upon the requirements for a heated structure. The Applicant's garage will be unheated. The requirements for insulating the shallow footings and foundation of an unheated structure far exceed what has been provided by the Applicant. He stated that he has received no documentation from a qualified individual to convince him that the as-installed footings would provide sufficient protection from frost penetration. Such convincing documentation would be required to permit the footings to remain at a lesser depth than the standard OBC requirements.

7. Commission Ruling

It is the decision of the Building Code Commission that the shallow insulated garage footings and foundation will provide sufficiency of compliance with Article 9.12.2.2. of the Ontario Building Code at R.R. #2, 6494 Proof Line road, Forest, Ontario, on condition that:

a) The Applicant obtain a stamped design from a professional geotechnical engineer and implement that design for the insulation installation.

8. Reasons

i) The shallow footings and foundation will not be at significant risk from frost penetration provided that the insulation installation meets the specifications designed and approved by a qualified professional.

Dated at Toronto this **19th,** day in the month of **July,** in the year **2001** for application number **2000-75.**

Dr. Kenneth Peaker, Chair

Mr. Michael Steele

Mr. Donald Pratt

Ruling No. 01-32-825
Application # 2001-37

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 3.3.3.3.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Ed Applebaum, Principal, Montgomery Sisam Associates Inc. Architects, Toronto, Ontario, for the resolution of a dispute with Ms. Brenda Campbell, Chief Building Official, City of Brampton, to determine whether the proposed corridor design provides sufficiency of compliance with Sentence 3.3.3.3.(1) of the Ontario Building Code at the Extendicare Canada - Long Term Care Facility, Davis Campus, Sheridan College, Brampton, Ontario.

APPLICANT	Mr. Ed Applebaum, Principal Montgomery Sisam Associates Inc. Architects Toronto, Ontario
RESPONDENT	Ms. Brenda Campbell Chief Building Official City of Brampton
PANEL	Dr. Kenneth Peaker, Chair Mr. Fred Barkhouse Mr. Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	July 5, 2001
DATE OF RULING	July 5, 2001
APPEARANCES	Mr. Leszek Muniak, Principal Larden Muniak Consulting Inc. Toronto, Ontario **Agent for the Applicant** Ms. Lillyan McGinn Manager, Plans and Permits City of Brampton **Designate for the Respondent**

RULING

1. The Applicant

Mr. Ed Applebaum, Principal, Montgomery Sisam Associates Inc. Architects, Toronto, Ontario, has received a building permit under the Building Code Act, 1992 and is constructing a rest home known as the Extendicare Canada - Long Term Care Facility, Davis Campus, Sheridan College, Brampton, Ontario.

2. Description of Construction

The Applicant is in the process of constructing a long term care facility having a Group B, Division 2, care and treatment occupancy classification. The facility is divided into 4 smaller buildings (Wings A, B, C and D) separated by two-hour rated firewalls. The entire structure will be two storeys in building height, 4,379 m^2 in building area, and is proposed to be of combustible construction. The building is intended to be fully sprinklered and equipped with a point addressable fire alarm system.

The subject care facility, when complete, will consist of a central portion, referred to as Wing D, and three residential areas, referred to as Wings A, B, and C, that will be connected through the central building. Wings A, B and C will contain the residential sleeping rooms. Wing D will contain ancillary occupancies to serve the needs of the residents of the entire facility. All wings are to be operated as a single facility.

The construction in dispute involves the proposed dead-end corridors that would be constructed on the ground floor and second floor of the wings in which the residential sleeping rooms would be located. Each of the corridor extensions would measure 7.4 m in length by 3.2 m in width and serve a single sleeping room. The travel distance from the egress door of each sleeping room to the point in the corridor where the resident has two directions of travel toward an exit is 4 metres. A total of 12 sleeping rooms would be affected by this proposal.

The original drawings submitted to the City, and for which a permit was issued, do not include the dead end corridor configuration. To obtain sufficiency of compliance with the Code requirements, the Applicant is offering certain compensating measures including additional smoke detectors and an ancillary paging system.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed corridor design provides sufficiency of compliance with Sentence 3.3.3.3.(1) of the Ontario Building Code.

Article 3.3.3.3. sets out the design criteria for corridors serving care and detention facilities. According to Sentence (1), no public corridor serving patient or resident rooms is allowed to contain a dead-end portion unless there is a second separate exit located within the area served by that portion. The intended dead-end sections are public corridors and would serve the residential wings of the proposed facility. These corridors will be fully sprinklered and are proposed to be equipped with smoke detection devices. However, no separate exit is proposed in the area served by the dead-end portion of the corridors.

At issue is whether the proposed fire safety measures incorporated into the design of the facility sufficiently compensate for the Code requirements that prohibit dead-end corridors.

4. Provisions of the Ontario Building Code

Article 3.3.3.3. Corridors

(1) A corridor used by the public or serving patients or residents shall have no dead-end portion unless the area served by the dead-end portion has a second and separate *means of egress*.

5. Applicant's Position

The Agent for the Applicant described the proposed facility as a fully sprinklered, B2 occupancy that will be provided with a fire alarm system. As an architectural feature in the design of the building, he is proposing dead-end corridors at the ends of the hallways in the residential wings. There will be windows located at the end of these corridors that would enable residents to view the grounds. This is an important feature, he emphasized, since many of the residents are confined to the building and walk the halls for exercise. These windows would allow residents an opportunity to view the outside world. This would be beneficial to their mental well-being.

The Agent advised that the corridors would not contain any occupancy or furnishings. He stated that additional smoke detectors are proposed that would be located within 2 ft on either side of doors of the residential suit that would be served by the corridor. The hallway detectors would signal the central annunciation panel and, in addition, an ancillary system is proposed that would allow the nurses to be paged and advised of where an alarm had been activated. This ancillary system would exceed the current Code requirements. He continued by advising that there would be nursing staff on site at all times to respond to such a page. With these measures, the Agent argued, there is no reduction in life safety to the residents of the facility and, therefore, sufficiency of compliance with the OBC would be achieved.

The Agent concluded his argument by stating that he recognized the OBC requirements in respect to corridor design but did not believe there would be any risks associated with this proposal. He brought to the Commission's attention a previous BCC ruling for a facility that had been constructed using the same design in a different area of the province. The application for the as-built facility received a favourable ruling and so, he argued, should this proposal.

6. Respondent's Position

The Designate for the Respondent submitted that the Applicant had originally proposed this corridor design in their building permit application. The design was reviewed, bearing in mind the previous BCC ruling, and ultimately rejected by staff. The Applicant then brought forward a Code compliant design that was accepted by the municipality.

The Designate advised that many of the safety features emphasized by the Applicant are already required by the Building Code. The only exception would be the additional smoke detectors and the paging of nurses. Annunciation at the nurses station is an OBC requirement. In the City's opinion, the additional detectors, located a short distance from those required by the Code, do not provide any

added value in terms of safety. In addition, they are not convinced that the paging of nurses to identify the location of an alarm is sufficient to compensate for a Code compliant corridor design. Many of the patients may suffer from dementia or have limited mobility and may become confused or trapped within a dead-end corridor.

The Designate argued that each BCC ruling must be considered independently and that the previous decision is not precedent setting. They have suggested an alternative to the Applicant that would include a second means of egress through the residential suite and thereby allow the dead-end corridors in the proposed locations. This alternative was rejected primarily because the exit doorway would have been located within the bathroom facility of the residential suite. This raised privacy concerns for those involved. The Designate stated that she is sympathetic to the Applicant's desire to achieve a design that would allow those travelling the corridors to have a view of the outside environment, but must consider the safety of the occupants first and foremost.

In summation, the Designate submitted that there is a reason why dead-end corridors are not permitted by the Code. One cannot predict how an individual will react in an emergency situation. This holds doubly true for those with diminished mental or physical capabilities. She emphasized that there are other alternative designs available that could allow the Applicant to achieve the desired goals.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed dead-end corridor design does not provide sufficiency of compliance with Sentence 3.3.3.3.(1) of the Ontario Building Code at the Extendicare Canada - Long Term Care Facility, Davis Campus, Sheridan College, Brampton, Ontario.

8. Reasons

i) Upon full examination of the proposed design, and after hearing from both parties, the compensating measures offered in lieu of the OBC requirements do not allow for sufficiency of compliance to be achieved.

ii) The City's argument was complete and persuasive. No attempt at compliance has been made, despite the initial drawings for which a permit was issued.

iii) Sufficiency of compliance has not been achieved in the circumstances of the present case.

Dated at Toronto this **5th** day in the month of **July** in the year **2001** for application number **2001-37.**

Mr. Kenneth Peaker, Chair

Mr. Fred Barkhouse

Mr. Donald Pratt

Ruling No. 01-31-824
Application # 2001-21

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 3.2.9.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. William Barnes, V.P., Technical Services, Atlas Tube Inc., Harrow, Ontario, for the resolution of a dispute with Mr. Kevin Carter, Chief Building Official, Town of Essex, to determine whether the enlarged manufacturing and warehouse facility with a total building area of 27, 221 m^2 that is not equipped with a standpipe and hose system provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code at Atlas Tube Inc., 200 Clark Street, Harrow, Ontario.

APPLICANT	Mr. William Barnes V.P. Technical Services, Atlas Tube Inc., Harrow, Ontario
RESPONDENT	Mr. Kevin Carter Chief Building Official Town of Essex
PANEL	Dr. Kenneth Peaker, Chair Mr. Fred Barkhouse Mr. Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	July 5, 2001
DATE OF RULING	July 5, 2001
APPEARANCES	Mr. William Barnes, V.P., Technical Services, Atlas Tube Inc., Harrow, Ontario **The Applicant** Mr. Kevin Carter Chief Building Official Town of Essex **The Respondent**

RULING

1. The Applicant

Mr. William Barnes, V.P., Technical Services, Atlas Tube Inc., Harrow, Ontario, has received an Order to Comply under the Building Code Act, 1992 to provide a standpipe and hose system at the Atlas Tube Inc. facility, 200 Clark Street, Harrow, Ontario.

2. Description of Construction

The Applicant has constructed or is in the process of constructing three large new additions to a manufacturing/warehouse facility. The buildings are being constructed in three phases with building areas of 12, 821 m^2, 5, 574 m^2 and 8, 826 m^2 respectively, for a total building area of 27, 221 m^2. All of the buildings are standardized at 29.97 metres wide, with various lengths and a building height of 12.19 m (one storey). The facility is of noncombustible construction and classified as a Group F, Division 3, low hazard industrial occupancy. The building is not equipped with a sprinkler system, a standpipe and hose system or a fire alarm system (with the exception of a small office area).

The facility is operated by Atlas Tube Inc., a manufacturer of structural steel tubing products. According to the Applicant, of the total 27, 221 m^2 of building area, approximately 4, 961 m^2 is used for manufacturing purposes with the balance of the space used for the storage of raw material and finished goods. The raw material is comprised of steel coils of various widths and diameters. The finished goods consist of hollow steel structural tubes of various shapes and sizes. The finished goods are not packaged or wrapped for shipment and neither the raw material nor the end product contain any oil or petroleum products. In the manufacturing process, a synthetic tube mill coolant is used for lubricating and cooling the product. This coolant consists of 95% water and 5% concentrate that, again, contains no petroleum products. Movement of materials throughout the facility is carried out with electrically powered overhead cranes of varying capacities.

The construction in dispute involves the entire facility where, despite the building area being in excess of 3,000 m^2, a standpipe and hose system is not being provided. Because of the nature of this operation, the Applicant has taken the position that the introduction of such a water source is inappropriate and potentially hazardous. In lieu of the required standpipe and hose system, the Applicant is proposing several compensating measures.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the manufacturing and warehouse facility, having a total building area of 27,221 m^2 and not being equipped with a standpipe and hose system, provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code, in light of the compensating measures being offered by the Applicant.

Article 3.2.9.1. of the Building Code requires that a one storey building with an area in excess of 3,000 m2, and containing a Group F, Division 3 occupancy, be provided with standpipe and hose system, if the building is not sprinklered. The building in question, when fully complete, will be well in excess of 3,000 m^2 in area. The facility is not sprinklered and, as mentioned above, is not proposed to be equipped with a standpipe and hose system.

In lieu of the requirements of Article 3.2.9.1, the Applicant is offering certain measures to provide sufficiency of compliance, including the provision of a fire access route around the entire facility, an increased number of portable fire extinguishers and registration, on title, that the exemption applies only to the current use of the building.

4. Provisions of the Ontario Building Code

Article 3.2.9. Standpipe Systems

3.2.9.1. Where Required

(1) Except as provided in Sentences (4) to (7), a standpipe system shall be installed in every building that

(a) is more than 3 storeys in building height,
(b) is more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey, or
(c) is not more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey but has a building area exceeding the area shown in Table 3.2.9.1. for the applicable building height if the building is not sprinklered.

Table 3.2.9.1.
Building Limits without Standpipe Systems
Forming Part of Sentence 3.2.9.1.(1)

Occupancy Classification	Building Area, m^2 (ft^2)		
	1 Storey	2 Storeys	3 Storeys
A	2 500 (24,200)	2 000 (21,500)	1 500 (16,100)
C	2 000 (21,500)	1 500 (16,100)	1 000 (10,800)
D	4 000 (43,100)	3 000 (32,300)	2 000 (21,500)
F, Division 2	2 000 (21,500)	1 500 (16,100)	1 000 (10,800)
F, Division 3	3 000 (32,300)	2 000 (21,500)	1 000 (10,800)
Column 1	2	3	4

5. Applicant's Position

To assist the Commission in understanding the nature of this operation, the Applicant described the building and advised that only 4, 961 m^2 of the entire 27, 221 m^2 would be used for manufacturing purposes. The remainder of the facility is to be used for storage of raw material and finished products. The Applicant went on to advise that natural gas fired infrared tube style heaters, mounted in the trusses of the ceiling, are the only source of heat for the building. They are located only in the production areas and where employees are working. The Applicant further emphasized that there were no oil or petroleum products used in the manufacturing operation; neither in the production nor the materials used.

The Applicant argued that, because this facility was a steel manufacturing operation, a standpipe and hose system was not appropriate. Water damage to either the raw material or the finished product would render them virtually worthless. The facility also contains sensitive electronic equipment, including computers and other communication devices, that could incur damage from such a water

source. In addition, the Applicant advised that movement of material through the facility is conducted by overhead cranes operated with electric motors. The cranes have exposed conductor bars that could prove hazardous and potentially fatal, if a stream of water were to strike either the power bar of the electric motors. In this regard, the Applicant suggested that it is more appropriate to fight fire in this facility with CO_2 extinguishers. In fact, the Applicant submitted, the Fire Department agrees that it would not be advisable to fight a fire with water in this environment.

In support of his request to omit the standpipe and hose system, the Applicant advised that the local Fire Hall is located only 2 minutes away and the Fire Department has been provided with a site plan showing all access points and fire hydrant locations. He stated that an access route around the entire plant will be maintained year round and the number of fire extinguishers in the facility will be increased beyond OBC requirements. The status of these extinguishers is checked by an outside contractor as well as internal staff examinations. In addition, there are security staff on site 24 hours a day, 7 days a week. He is also prepared to register on title the fact that the exemption for a standpipe and hose system applies only to this use. Any change of use would require approval of the Town of Essex Building Department.

The Applicant advised that both the municipality and the Fire Department have indicated that they are content with the measures proposed in lieu of a standpipe and hose system at this location. He brought to the Commission's attention several similar BCC rulings and suggested that his situation also warranted a favourable decision.

6. Respondent's Position

The Respondent submitted that both he and Fire Department officials have agreed that the compensating measures offered by the Applicant are sufficient to provide sufficiency of compliance, but his hands are tied because the Code requires that an F3 occupancy in excess of 3, 000 m^2 be equipped with a standpipe and hose system. His main concern, however, is with respect to a change of use in the building if the requested relief is granted to Atlas Tube. He noted that the Applicant has agreed to register on title an explanation that the exemption applies only to the existing use and any subsequent owners would be aware of the standpipe and hose requirement.

He acknowledged that the proposed number of fire extinguishers exceed the OBC requirements and emphasized that the Fire Department has advised that they wouldn't want to fight a fire in this building with water. If a standpipe and hose system were provided, it would not be used by the Fire Department. According to the Respondent, the Fire Department would prefer to use foam or the extinguishers, whichever was more appropriate given the situation.

7. Commission Ruling

It is the decision of the Building Code Commission that the enlarged manufacturing warehouse facility with a total building area of 27, 221 m^2 that is not equipped with a standpipe and hose system provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code at Atlas Tube Inc., 200 Clark Street, Harrow, Ontario on condition that:

a) A year round access route be maintained around the entire plant for firefighting purposes.
b) ABC type portable fire extinguishers be provided and located every 50 feet on both sides of the building with bulk units provided at each of the four hydraulic units in the manufacturing area.
c) ABC type portable fire extinguishers be provided at each door on both sides of the building.

d) In the main electrical rooms (27,6000V/4, 160V/480V) $C0_2$ type extinguishers are to be provided.

e) The Applicant must register on title that the exemption for a standpipe and hose system is for this use only. Change of use will automatically fall under the jurisdiction of the Town of Essex Building Department.

8. Reasons

i) The local fire hall is two minutes away and the Fire Department has been provided with a site plan showing all access points and fire hydrant locations.

ii) There are two fire hydrants on the subject property and an additional two located along Clark Street on the south side of the plant.

iii) The status of the requisite fire extinguishers is checked by an outside contractor as well as staff at the facility.

iv) The staff is trained in the use of extinguishers and a fire safety plan is in place.

v) A security department is on site 24 hours a day, 7 days a week.

vi) There was no objection registered from either the Fire Department or the Town of Essex Building Department.

vii) The introduction of water can be a safety hazard when considering the use of this building.

viii) The Fire Department has advised of problems that would be encountered with the use of water to fight fires at this location.

Dated at Toronto this **5th** day in the month of **July** in the year **2001** for application number **2001-21.**

Mr. Kenneth Peaker, Chair

Mr. Fred Barkhouse

Mr. Donald Pratt

Ruling No. 01-30-823
Application # 2001-04

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 3.2.9.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Grant Stummer, CEO, Universal Mold Inc., Mississauga, Ontario, for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, to determine whether the as-constructed infill addition that joins together two previously separate structures thereby creating a building having an area of 2, 229 m^2 (23,984 ft^2), and that is not equipped with a standpipe and hose system, provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code at Universal Mold Ltd., 1746 Mattawa Avenue, Mississauga, Ontario.

APPLICANT	Grant Stummer, CEO Universal Mold Inc. Mississauga, Ontario
RESPONDENT	Mr. Agris Robeznieks Chief Building Official City of Mississauga
PANEL	Dr. Kenneth Peaker, Chair Mr. Fred Barkhouse Mr. Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	July 5, 2001
DATE OF RULING	July 5, 2001
APPEARANCES	Mr. Peter DeMan DeMan Construction Mississauga, Ontario **Agent for the Applicant** Mr. Paul Farrant City of Mississauga **Designate for the Respondent**

RULING

1. The Applicant

Mr. Grant Stummer, CEO, Universal Mold Inc., Mississauga, Ontario, has received a building permit under the Building Code Act, 1992 and has constructed an addition at Universal Mold Ltd., 1746 Mattawa Avenue, Mississauga, Ontario.

2. Description of Construction

The Applicant has constructed a 315 m^2 addition that joins two existing buildings creating a building with an area of 2, 229 m^2. The facility is owned and operated by Universal Mold Ltd., a plastic mold manufacturer. The building is of noncombustible construction and is not equipped with a fire alarm system, a sprinkler system or a standpipe and hose system. The facility is classified as a Group F, Division 2, industrial occupancy.

The construction in dispute involves the addition which fills the 9.14 m (30 ft) space between two existing buildings. The addition is approximately 9.14 m (30 ft) by 30.48 m (100 ft) and is to be used for a loading dock. The construction of the addition triggers the building area requirement in the OBC for a standpipe and hose system. However, none is proposed in this instance. The standpipe and hose is required to be located only within the area of the addition. The remainder of the building, as it is already in existence, is not subject to the standpipe and hose requirement.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-constructed infill addition, joining together two previously separate structures and creating a building with an area of 2, 229 m^2 (23,984 ft^2), but not equipped with a standpipe and hose system, provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code.

Article 3.2.9.1. requires that a one storey building with an area in excess of 2, 000 m^2, and containing a Group F, Division 2 occupancy, be provided with a standpipe and hose system if the building is not sprinklered. The building in question is 2, 229 m^2 as a result of the construction of the addition which joined two smaller buildings. The facility is not sprinklered and, as mentioned above, is not equipped with a standpipe and hose system.

4. Provisions of the Ontario Building Code

Article 3.2.9. Standpipe Systems

3.2.9.1. Where Required

(1) Except as provided in Sentences (4) to (7), a standpipe system shall be installed in every building that

(a) is more than 3 storeys in building height,
(b) is more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey, or

(c) is not more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey but has a building area exceeding the area shown in Table 3.2.9.1. for the applicable building height if the building is not sprinklered.

Table 3.2.9.1.
Building Limits without Standpipe Systems
Forming Part of Sentence 3.2.9.1.(1)

Occupancy Classification	Building Area, m^2 (ft^2)		
	1 Storey	2 Storeys	3 Storeys
A	2 500 (24,200)	2 000 (21,500)	1 500 (16,100)
C	2 000 (21,500)	1 500 (16,100)	1 000 (10,800)
D	4 000 (43,100)	3 000 (32,300)	2 000 (21,500)
F, Division 2	2 000 (21,500)	1 500 (16,100)	1 000 (10,800)
F, Division 3	3 000 (32,300)	2 000 (21,500)	1 000 (10,800)
Column 1	2	3	4

5. Applicant's Position

The Agent for the Applicant submitted that by joining the 30 ft space between the two existing buildings, a structure had been created that is 10% greater than the maximum area permitted to exempt a building with an F2 major occupancy from the standpipe and hose requirement. He argues that the Applicant has exceeded the provisions by a mere 229 m^2. He continued by advising that the buildings will still be somewhat independent, with the exception of a few doors and a drive through area. As a result, the walls cannot be considered firewalls and, therefore, the total structure is considered one building for the purposes of the Code.

The Agent also advised that, since the manufacturing area of the building was relatively small (approximately 1, 746 m^2), there was a strong possibility that the use could be re-classified as a Group F, Division 3 occupancy. If the facility were an F3 occupancy, the standpipe and hose requirement would no longer be an issue; a building of up to 3, 000 m^2 would not require this system. They are currently pursuing this possibility with their consultants and City officials.

The Agent acknowledged that, given this present situation, the OBC requires a standpipe and hose system in the addition, but advised that providing this connection would be cost prohibitive. In addition, he didn't believe that much value would be added as the system would only be provided in the small addition at the centre of the building. In lieu of the standpipe and hose system, the Applicant proposed to provide extra protection by way of additional portable ABC type fire extinguishers and two mobile cart mounted 50 lb units.

The Agent further advised that the building is accessible from all sides for firefighting purposes, but when questioned, advised that there was not necessarily a designated route that was maintained year round. He stated that there were many doors around the building that could be used for search and rescue operations.

In summation, the Agent submitted that there is a fire safety plan in place and employees have been trained in case of an emergency. He felt that the proposed measures would be sufficient to compensate for the OBC requirement, given the size of the affected addition and the fact that the building exceeds the Code parameters by such a small amount.

6. Respondent's Position

The Designate for the Respondent submitted that a building permit was issued for this addition on the basis that a standpipe and hose system would be provided. He explained that the nature of this business with the use of plastics is relatively hazardous. As a result, the Fire Department would prefer an inexhaustible supply of water for firefighting purposes. While he recognized that only the small addition was affected by this requirement, he noted that this was now considered one building; a fire might not be as easily contained as when the buildings were separate.

He further submitted that the mobile carts, proposed by the Applicant, may be difficult to use and only provide a limited firefighting capability. The Fire Department may require the standpipe connection to adequately fight a fire within this building. A building the size of this structure, he argued, starts to exceed the limit of an advancing hose line. While they would not likely use the hose provided with the system, they may require the standpipe connection to reach certain areas of the facility.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-constructed addition that joins together two previously separated structures, thereby creating a building having an area of 2, 229 m^2 and that is not equipped with a standpipe and hose system does not provide sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code at Universal Mold Ltd., 1746 Matheson Avenue, Mississauga, Ontario.

8. Reasons

i) The compensating measures offered do not provide sufficiency of compliance with the OBC requirements.

ii) Given the relative hazard posed by the use of plastics at this facility, having an F2 classification, the Fire Department would reasonablely require an inexhaustible supply of water that the proposed mobile cart units and additional fire extinguishers would not provide.

Dated at Toronto this **5th** day in the month of **July** in the year **2001** for application number **2001-04.**

Mr. Kenneth Peaker, Chair

Mr. Fred Barkhouse

Mr. Donald Pratt

Ruling No. 01-29-822
Application # 2001-16

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 3.4.4.4.(6) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. George Nichols, George Nichols Architect Inc., Ottawa (Kanata), Ontario, for the resolution of a dispute with Ms Catherine Junop, Director of Building Services, City of Ottawa, to determine whether the retrofit elevator, installed to permit barrier-free accessibility throughout the existing two storey building, and proposed without separation in a lobby containing an exit stair, provides sufficiency of compliance with Sentence 3.4.4.4.(6) of the Ontario Building Code at 232 Herzberg Road, Ottawa, Ontario.

APPLICANT	Mr. George Nichols George Nichols Architect Inc. Ottawa, Ontario
RESPONDENT	Ms Catherine Junop Director of Building Services City of Ottawa
PANEL	Dr. Kenneth Peaker, Chair Mr. Robert De Berardis Mr. John Guthrie
PLACE	Toronto, Ontario
DATE OF HEARING	June 21, 2001
DATE OF RULING	June 21, 2001
APPEARANCES	Mr. George Nichols George Nichols Architect Inc. Kanata, Ontario **The Applicant** Mr. Allan Morris Plan Examiner II City of Kanata **Designate for the Respondent**

6. Respondent's Position

The Designate for the Respondent submitted that, in this instance, building permits were issued in phases. When a permit was issued for the construction of the addition, a second stairwell exit, at the end of the building, was indicated on the plans. As a result, this lobby exit was not an exit required by the Code and, therefore, the elevator opening was approved.

Upon inspection it was discovered that the second exit was omitted from the building plan and now the situation requires this new exit to be considered a required exit under the Code. The City's interpretation of the requirements in this regard is that an elevator opening is not allowed in a required exit and must be fire separated from the exit area. In the Designate's opinion, whether the building is two storeys or ten storeys, the application of the Code would be the same. The separation is required to protect individuals using the exit stair.

7. Commission Ruling

It is the decision of the Building Code Commission that the retrofit elevator, installed to permit barrier-free accessibility throughout the existing two-storey building, and proposed without separation in a lobby containing a required exit stair, does not provide sufficiency of compliance with Sentence 3.4.4.4.(6) of the Ontario Building Code at 232 Herzberg Road, Ottawa, Ontario.

8. Reasons

i) The integrity of the required exit is compromised by the opening of the elevator.
ii) The compensating measures, offered by the Applicant, are not adequate to achieve sufficiency of compliance with Building Code requirements.
iii) The elevator does not comply with Article 3.4.4.4. of the Ontario Building Code.

RULING

1. The Applicant

Mr. George Nichols, George Nichols Architect Inc., Ottawa (Kanata), Ontario, has received a building permit under the Building Code Act, 1992 and has constructed an addition to the existing building at 232 Herzberg Road, Ottawa, Ontario.

2. Description of Construction

The original building and the addition are both two storeys in building height and constructed of noncombustible material. The building is not equipped with either a sprinkler or a fire alarm system. The addition is approximately 30.66 m^2 (330 ft^2) in building area while the existing building has an area of approximately 1393.55 m^2 (15, 000 ft^2). The facility is currently used for administrative offices and is classified as a Group D occupancy.

The original building was constructed in the 1970s. Originally, a small area at the front of the building was used for administrative offices with the remainder of the building used for warehouse purposes. The owners have recently undertaken renovations and have constructed an addition, for use as a main entrance, located in the centre of the building along the north side.

The construction in dispute involves an elevator that opens into the entrance addition. The elevator was added to facilitate barrier-free movement throughout the building but is not a requirement of the Building Code. It serves both floor levels but is not isolated from the exit stair. In the original permit application, an interior corridor was proposed to run the length of the building and would have lead to an exit stair at both ends. During construction, however, one end of this corridor was eliminated to provide more leasable floor space area to one of the tenants. The new exit created in the middle of the building is now a required exit from the second storey.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the elevator, constructed without separation in a lobby containing an exit stair, provides sufficiency of compliance with Sentence 3.4.4.4.(6).

Article 3.4.4.4. outlines requirements for the maintenance of the integrity of exits. Sentence 3.4.4.4.(6) specifically provides that an exit shall not be designed for a purpose other than exiting the building, except that it may provide access to a floor area. In the opinion of the Housing Development and Building Branch of the Ministry of Municipal Affairs and Housing in their report to the Commission, the intent of this Sentence is "to ensure that exits are used only for exiting from a floor area with the exception that access is permitted through the exits to access another floor area."

In addition to the requirements of Sentence 3.4.4.4.(6), the OBC also requires, in Sentence 3.4.4.1.(1) that every exit be separated from the remainder of the building by a fire separation having a rating not less than, at a minimum, 45 minutes. In addition, Sentence 3.4.4.4.(1) provides that a fire separation that separates an exit from the remainder of the building shall have no openings, with several exceptions, none of which includes a door to an elevator hoistway.

In this instance, the exit contains an opening to an elevator that will service the two floors of the building. The entrance to the elevator has not been constructed with a fire separation from the remainder of the exit route.

4. Provisions of the Ontario Building Code

Sentence 3.4.4.4.(6)

(6) An *exit* shall be designed for no purpose other than for exiting, except that an *exit* is permitted also to be designed to serve as an access to a *floor area.*

5. Applicant's Position

The Applicant advised that the building in question is a 30 year old structure that has recently been renovated. As part of these renovations, an addition was designed and constructed for use as a new main entrance to the building. The owners considered it desirable to include an elevator in the addition to provide barrier-free access to the building and to assist in the movement of furniture and equipment between floors, when necessary.

The Applicant submitted that the original layout provided an internal corridor that would have allowed for access to an exit at both ends of the building. This design was abandoned, however, because a tenant requested use of part of the floor area in which the corridor would have run. As a result, the new entrance is now considered the second required exit in this building. In addition, the Applicant advised that the retrofit elevator was located within the new addition because it would have penetrated the roof of the existing structure if it had been located elsewhere.

The building, the Applicant stated, has two or three exits directly to grade. The concern with respect to OBC requirements is relevant only to the second floor. As a result, he is seeking relief from the Code requirements but preferably a ruling on the interpretation of the OBC provisions with respect to this issue. He argued that the Code does not specifically prohibit elevator openings in an exit area. This interpretation has built up over time. He further stated that the elevator door is fire rated and that the elevator is "providing access to a floor area" as permitted in the Code. He went on to suggest that the intent of the Code in this regard is applicable to multi-storey buildings and that an exception should be made in this case since the building is only two storeys in height. He would like to see the Code amended as it applies to two storey structures.

The Applicant suggested a number of scenarios that would allow the elevator to work within the existing confines. To enclose the elevator opening, he argued, would jeopardize the aesthetics of the entrance. He suggested that a sprinkler head could be provided in the elevator area; a screened enclosure could be provided around the elevator entrance, or a rolling fire shutter could be placed in front of the elevator door. The Applicant, with the support of the owners of the building submitted, however, that they would prefer that the Commission provide a ruling on the interpretation of the OBC provisions and view this entrance to be in compliance with the Code requirements. He reiterated that, in his opinion, the elevator is providing access to a floor area, as permitted by the Code. Safety, he stated, is not jeopardized. The Applicant emphasized that the elevator was installed to provide barrier-free access; this is of benefit to the building and its occupants.

Dated at Toronto this **21st** day in the month of **June** in the year **2001** for application number **2001-16.**

Mr. Kenneth Peaker, Chair

Mr. Robert De Berardis

Mr. John Guthrie

Ontario

Ruling No. 01-27-820
Application # 2001-29

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 9.3.2.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Dave Kowalchuk and Dan Kowalchuk, owners, KYO Zen Art's (sic) Centre, for the resolution of a dispute with David J. Anderson, Chief Building Official, Municipality of Whitestone, Ontario, to determine whether the materials used in the construction of a rain porch addition to the building known as KYO Zen Art's Centre meet the requirements of Article 9.3.2.1. of the Ontario Building Code respecting the use of graded lumber, at R.R. 2, Dunchurch, in the Municipality of Whitestone, Ontario.

APPLICANT	Dave and Dan Kowalchuk Owners, KYO Zen Art's Centre Dunchurch, Ontario
RESPONDENT	David J. Anderson Chief Building Official Municipality of Whitestone
PANEL	Len King, Vice-Chair Michael Steele Fred Barkhouse
PLACE	Toronto, Ontario
DATE OF HEARING	June 7, 2001
DATE OF RULING	June 7, 2001
APPEARANCES	Dave and Dan Kowalchuk Owners, KYO Centre Dunchurch, Ontario **The Applicants**
	David J. Anderson Chief Building Official Municipality of Whitestone **The Respondent**

RULING

1. The Applicant

Dave and Dan Kowalchuk, owners and operators of KYO Zen Art's Centre, Dunchurch, Ontario, have received an order to comply under the *Building Code Act*, S.O. 1992, c. 23, as amended, to remedy certain alleged deficiencies at R.R. 2 (Dunchurch), in the Municipality of Whitestone, Ontario.

2. Description of Construction

The Applicants have constructed, what was referred to in the hearing as, a "rain porch" addition that will serve to provide shelter from the elements for patrons entering and exiting the building. This rain porch is approximately 27.87 m^2 (300 sq ft) and has been attached to the existing building known as the KYO Zen Art's Centre which operates as a restaurant and martial arts training facility. Both the rain porch and the main building are of combustible construction and have been crafted from rough timber. The main building is one storey in building height and is not equipped with either a fire alarm or a sprinkler system.

According to the records of the Respondent, the building is currently listed as both a Group D, business and personal services occupancy and a Group E, mercantile occupancy. It is their opinion, however, that the building actually operates a Group A, Division 2, assembly occupancy. The Applicants contend that they had applied for, and received from the municipality, a change of occupancy and have been given the approvals required to operate their facility as a restaurant and gymnasium, or dojo, for martial arts training.

The issue in dispute involves the materials used in the construction of the rain porch addition. The subject lumber is essentially rough cut timber that includes 8" diameter posts cemented into 4 inch concrete pads. The overhead rafters are comprised of 2"x 6"s set at 2 feet on centres and notched into the support beams. 1" board siding has been used for the side walls of the structure and all elements of construction have been connected with 5"-6" long spiked nails. The building materials were obtained from the same local mill as was the lumber used in the construction of the main building. The rough cut timber however, is not grade stamped, nor has it been evaluated by a licenced grader.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the materials used in the construction of the subject "rain porch" can be considered to meet the requirements of Article 9.3.2.1. respecting the grading of lumber.

Article 9.3.2.1. requires that lumber used for joists, rafters, trusses and beams, and for uses listed in Table 9.3.2.1., has a grade stamp to indicate its grade as determined by the "Standard Grading Rules for Canadian Lumber". Table 9.3.2.1. includes such uses as posts and beams not less than 114 mm in thickness, roof sheathing, plank frame construction, etc.

In this instance the rain porch, which is attached to the existing building, has been constructed with rough cut timber. The lumber was obtained from a local mill and is not labelled with a grade stamp, nor has an evaluation of the lumber been undertaken by an expert in the field. In an attempt to compensate for the lack of grade stamp, the Applicants submitted that, in 1994 they were required to obtain a letter from an architectural technologist in relation to the lumber used in the construction of the main

building. This letter, they argue, should be sufficient to prove that the material used in the rain porch addition is sufficient, since the lumber in dispute was obtained from the same source.

4. Provisions of the Ontario Building Code

Article 9.3.2.1. Grade Marking

(1) Lumber for joists, rafters, trusses and beams and for the uses listed in Table 9.3.2.1. shall be identified by a grade stamp to indicate its grade as determined by the NLGA "Standard Grading Rules for Canadian Lumber". (See Appendix A.)

5. Applicant's Position

The Applicants' case primarily involved their perception that the grading of the building materials used in the construction of a rain porch is an insignificant dispute that should have easily been resolved between the parties. The Applicants argued that, in 1994 they were "illegally" required to obtain certification from a qualified professional in respect to the quality and grade of lumber that was used in the construction of the main building. Although, at the time, this was not a requirement of the Building Code, they obtained a letter from an architectural technologist with respect to the method of calculation used in the analysis of the wood in question. This letter, dated June 6, 1994, was submitted as an exhibit for the Commission's consideration.

The Applicants submitted that, since they were required to obtain this certification in 1994, without justification, they should now be allowed some leeway in respect to the Code requirements for the materials used in the construction of the rain porch. This is especially true in light of the fact that the materials used now were obtained from the same mill and source as the lumber that was previously graded. They anticipated some give and take from the Respondent and were frustrated by his insistence that the wording of the Code be followed to the letter. In the Applicants' opinion, the Respondent was being completely unreasonable.

In addition, the Applicants contend that there is a general lack of public knowledge about the provision for graded lumber in the Building Code. They offered examples from around their area of the province where people were unaware of the Code requirements and had built structures that were significantly less sturdy than the rain porch they have attached to their building. It was suggested to the Commission that, an exemption should be allowed in this instance because of the lack of information and then, from this point on, the Code could be enforced; once word got out to others about the requirement for graded lumber.

When questioned, the Applicants advised that they had attempted to have the lumber graded but were experiencing considerable difficulty finding a qualified expert in the area who would perform the assessment. They had attempted to contact at least three sources to no avail. They emphasized however, that even if they could find a licenced grader to attend at the property and analyze the lumber, they do not feel that this level of certification is warranted. In their opinion, anyone using common sense and reasonable judgement could determine that the lumber used in the construction of the rain porch is of excellent quality.

6. Respondent's Position

The Respondent submitted that, as a result of his examination of the property it was discovered that ungraded lumber had been used in the construction of the rain porch. The municipality's records indicate that the subject property has been classified for Group D and E occupancies and, therefore, his assessment involved the Code requirements outlined in Part 9. He acknowledged that the facility was operating as a Group A, Division 2, assembly occupancy and, that being the case, Parts 3 and 4 of the Code would be applicable. In either event however, the requirement for graded lumber remains consistent within the provisions of the OBC.

When evaluating the construction using Part 9 of the Code, the Respondent submitted that Article 9.3.2.1. requires that lumber be grade stamped; Table 9.3.2.1. outlines the minimum grade for posts. He has received no confirmation that the lumber used in the subject construction meets the minimum standards set out in the Building Code. Even if a change in occupancy was confirmed, Part 4 of the OBC, specifically Article 4.3.1.1., requires that "*Buildings* and their structural members made of wood shall conform to CAN/CSA-0177-M, 'Qualification Code for Manufactures of Structural Glued-Laminated Timber'." When referring to these guidelines, the requirement for graded lumber remains consistent with Part 9 requirements.

In addressing the 1994 letter from the architectural technologist that was submitted by the Applicants as proof of lumber quality, the Respondent stated that this correspondence does not imply that the wood was graded; it does not outline specific grades that correspond to Table 9.3.2.1. As a result, there was no confirmation that the lumber used in the construction of the main building met the grade classifications set out in the Code.

In summation the Respondent stated that, while the wood may appear structurally sound, the opinion of a professional, trained in the analysis of lumber, would be required to determine the characteristics of the building material, including species group and grade.

7. Commission Ruling

It is the decision of the Building Code Commission that the materials used in the construction of the rain porch addition at the KYO Zen Art's Centre, R.R. 2, Dunchurch, must comply with the requirements of Article 9.3.2.1. of the Ontario Building Code. Furthermore, if the building is used as a Group A, Division 2 occupancy, the lumber would still be required to be graded in accordance with the requirements of the National Lumber Grades Authority.

8. Reasons

i) The Ontario Building Code requirements clearly mandate that graded lumber be used in order to provide assurance of minimum quality and performance of material.

ii) No satisfactory measure of compensation was offered in lieu of the OBC requirements.

Dated at Toronto this **7th** day in the month of **June** in the year **2001** for application number **2001-29.**

Mr. Len King, Chair

Mr. Michael Steele

Mr. Fred Barkhouse

Ontario

Ruling No. 01-26-819
Application # 2001-28

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Articles 11.3.1.1. and 11.3.3.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. and Mrs. Daniel and Mary McIssac, property owners, Haliburton, Ontario, for the resolution of a dispute with Mr. W.J. Moore, Chief Building Official, Township of Sherborne Stanhope et al, Ontario, to determine whether the work undertaken on the existing house constitutes repair or renovation in accordance with Articles 11.3.1.1. and Sentence 11.3.3.1.(1) of the Ontario Building Code for the property located at Part of Lot 8, Concession 6 in the Township of Stanhope, Ontario.

APPLICANT	Mr.& Mrs. Daniel and Mary McIssac owners Haliburton, Ontario
RESPONDENT	Mr. W.J. Moore Chief Building Official Township of Sherborne Stanhope et al
PANEL	Mr. Len King, Chair Mr. Michael Steele Mr. Fred Barkhouse
PLACE	Toronto, Ontario
DATE OF HEARING	June 7, 2001
DATE OF RULING	June 7, 2001
APPEARANCES	Mr. & Mrs. Daniel and Mary McIssac Property owners **The Applicants** Mr. W.J. Moore Chief Building Official Township of Sherborne Stanhope et al **The Respondent**

RULING

1. The Applicant

Mr. Daniel and Mary McIssac, property owners, Haliburton, Ontario, have retroactively applied for and received a building permit under the Building Code Act, 1992 for renovation and repair work undertaken at the existing single detached dwelling at Part of Lot 8, Concession 6 in the Township of Stanhope, Ontario.

2. Description of Construction

The subject dwelling unit was constructed in 1920 and was occupied as a single detached residence until the time it was abandoned by a previous owner in the late 1980s. The building is one storey in building height, approximately 77.76 m^2 (837 ft^2) in building area and classified as a Group C occupancy. The dwelling was purchased by the Applicants in 1997 and is being used as their principal residence.

The construction in dispute involves the work that was undertaken on the dwelling since the time of purchase. Since that time, the Applicants have cleaned up and repaired the subject building. An itemized list of work conducted, according to Applicants, is as follows:

- removal of an dilapidated porch,
- removal of a garage that was destroyed by a tree,
- replacement of a hydro panel and wiring,
- repair of existing windows and doors,
- removal of garbage and old appliances,
- landscaping to improve lot grading,
- repair of a water pump,
- installation of a sump pump,
- repair of the existing drywall
- installation of carpet and/or hardwood over existing floor, and
- improvements to the bathroom including installation of ceramic tile and replacing the bathtub and sink.

Upon application for a previous permit to reconstruct the garage that had been destroyed by a fallen tree, the Applicants were advised of outstanding work orders which required that the building be secured and repaired and demolished. When the applicant made an application for a subsequent permit to cover the work they had already undertaken, the Respondent attached to the permit a list of deficiencies regarding the subject building. This list of deficiencies included such items as the requirement to install updated heating and ventilation systems and smoke alarms, provide a minimum size plumbing vent stack, provide attic access, install minimum required insulation throughout the dwelling, etc. It was his contention that the requirements of Parts 9 and 7 of the Building Code must be met in this instance.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the work undertaken on the existing house constitutes repair or renovation as outlined in Article 11.3.1.1. and Sentence 11.3.3.1.(1) of the Ontario Building Code.

Article 11.3.1.1. requires that, where a building system is altered or repaired, the performance level of the building must be at least equal to the performance level of the building prior to the material alteration. The building in question was cleaned and repaired by the Applicants. Fixtures were replaced and a dilapidated porch was removed.

Sentence 11.3.3.1.(1) outlines the provisions for basic renovation and states that, except as noted in Article 11.3.3.2., construction may be carried out to maintain the performance level of an existing building. This can be achieved by the reuse, relocation or extension of the same or similar materials, provided that the construction will not adversely affect things such as certain safety features or the structural adequacy of the building. Even if the work undertaken could be considered extensive renovations, the exceptions outlined in Sentence 11.5.2. would apply in this instance.

The exception to the provisions of Sentence 11.3.3.1.(1), as outlined in Article 11.3.3.2., relates to extensive renovation. This Article provides that, except as outlined in Subsection 11.5.2., extensive renovations, including removal and/or the addition of interior walls, ceilings, floor assemblies or roofs, structural and fire-resistance elements shall be constructed in compliance with other Parts of the Code. This exception, the Applicant's argue, does not apply in this case, as they did nothing more than repair existing walls, floors, windows etc.

The building that is the subject of this dispute was constructed in 1920. In the opinion of the Applicants, the work that was undertaken, as outlined in section 2 above, falls within the parameters outlined in Article 11.3.1.1. and Sentence 11.3.3.1.(1) of the Code. The Respondent's position, however, is that the building was unfit for human habitation and must now comply with current minimum residential standards for new construction. To meet the Code requirements with respect to the application for the new permit, in his opinion, would be to comply with Parts 9 and 7 of the OBC, as the residential use was discontinued over 10 years ago.

4. Provisions of the Ontario Building Code

Article 11.3.1.1. Material Alteration or Repair of a Building System

(1) Where an existing *building system* is materially altered or repaired, the *performance level* of the *building* after the material alteration or repair shall be at least equal to the *performance level* of the *building* prior to the material alteration or repair.

Article 11.3.3.1. Basic Renovation

(1) Except as provided in Sentence (2) and Article 11.3.3.2., *construction* may be carried out to maintain the existing *performance level* of all or part of an existing *building*, by the reuse, relocation or extension of the same or similar materials or components, to retain the existing character, structural uniqueness, heritage value, or aesthetic appearance of all or part of the *building* if, the *construction* will not adversely affect the early warning and evacuation systems, fire separations, the structural adequacy or create an unhealthy environment in the *building*.

5. Applicant's Position

The Applicants advised that they purchased the subject property in 1997 and proceeded to clean and repair the existing dwelling for use as their principal residence. They were unaware of the outstanding works orders associated with this property as a result of an omission in the search conducted by their lawyer. At the time of purchase they were advised by their legal counsel that there were no leans or encumbrances against the property. When they personally inspected the property, prior to purchase, they submitted that there were no notices posted on or near the building that would have alerted them to the outstanding orders.

The Applicants stated that, from 1997 to 1999 they cleaned up the house, repaired windows, walls, replaced fixtures, etc. to make it a livable dwelling. At no time during this period were they approached by the municipality or ordered to stop the work they were undertaking. When questioned about why they had not applied for a permit for the work they were undertaking on the building, the Applicants replied that, in their opinion, nothing was being done to the dwelling that would have normally required a building permit. They were primarily cleaning, painting and carrying out limited repairs to a structure that was already in existence.

It was not until after they moved into the house in 1999 and applied to the municipality for a building permit to reconstruct the garage that they were advised of any concerns with respect to the dwelling unit. The Applicants submitted that, at that time, they were provided with a list of alleged deficiencies that the municipality expected to be remedied to satisfy the outstanding work orders. The Applicants proceeded to apply for a permit for work undertaken on the residential building and met with municipal officials in an attempt to alleviate their concerns.

The deficiencies listed by the municipality as part of the permit approval would require compliance with Parts 7 and 9 of the Building Code. The Applicant's argued that, since the dwelling has been in existence since 1920, they cannot reasonably be expected to comply, nor are they required to comply, with current Building Code standards. The work undertaken, they submitted, should be considered under Part 11 of the Code as repair or renovation and those are the standards that should apply, not the current Code requirements for new construction outlined in Parts 7 and 9 as the municipality is insisting.

6. Respondent's Position

The Respondent submitted that he has been involved in this matter for a considerable amount of time. His initial involvement in the 1980s, came as a result of complaints to Council about the derelict building on the subject property. He advised that, upon inspection at that time, it was noted that the building had been vandalized; there was debris and broken glass throughout the dwelling and the basement was flooded. In September 1995, the municipality issued an Order to Remedy an Unsafe Building and an Order Prohibiting the Use or Occupancy of an Unsafe Building. These orders were issued to the previous owner and a copy was provided to the mortgage holder. In addition, the orders were posted on the building itself deeming the dwelling to be unsafe and prohibiting occupancy. The following site conditions were outlined in the orders:

- vandalized building
- broken door, windows and furniture
- animals living inside the dwelling
- foundation/basement flooded and full of debris
- building is open to the elements
- broken glass everywhere, and
- rotten front porch steps and floor

As a result of these conditions the Respondent considered the building to be uninhabitable. He was unaware, at the time, of the subsequent sale of the property but emphasized that the onus was on the purchaser to do a complete search to uncover any outstanding orders.

The Respondent confirmed the chronology of events leading up to this dispute and maintained that the itemized list provided as Schedule "A" to the building permit is, in his opinion, what would be required for a building compliance permit and occupancy permit to be issued. The Respondent defended the list of requirements identified in that schedule and submitted that "(t)he building was in very poor condition and unsuitable for human habitation. The building should have been used as an accessory building such as for storage or a work shop and a new residence constructed. The derelict building was renovated without permits or approvals."

The Respondent continued by submitting that "(t)his is a new issue. Not one that should be 'grand-fathered'. The residential use of this building was discontinued at least ten years ago. The building should be made to comply with Sections 9 & 7 of the Ontario Building Code as per Schedule 'A' attached to the Building Permit. The purchaser changed the use of the building from derelict, vacant and uninhabitable to residential."

When questioned whether he had conducted a recent inspection of the property, the Respondent stated that he had been advised by legal counsel against such an inspection. Schedule "A" was developed in relation to the permit application. He submitted that the work undertaken, although not inspected, must constitute a major renovation given the previous condition of the dwelling. The municipality, he stated, does not condone people living in derelict buildings. Safety and liability are an issue in this situation.

7. Commission Ruling

It is the decision of the Building Code Commission that the work undertaken on the existing house constitutes repair or renovation in accordance with Articles 11.3.1.1. and Sentence 11.3.3.1.(1) of the Ontario Building Code for the property located at Part of Lot 8, Concession 6 in the Township of Stanhope, Ontario.

8. Reasons

i) The building in question is an existing house constructed in 1920. It has, therefore, been in existence for more than 5 years. The house remained vacant for several years. The present owners bought the property in 1997 and proceeded to clean up and repair an existing house. Any such renovation or construction shall therefore take place in accordance with Part 11 of the OBC.

ii) The building is still considered an existing residential structure and therefore subject to Part 11 even thought it was vacant and unused for several years.

Dated at Toronto this **7th** day in the month of **June** in the year **2001** for application number **2001-28.**

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Mr. Len King, Chair

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Mr. Michael Steele

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Mr. Fred Barkhouse

Ruling No. 01-25-818
Application # 2001-15

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 3.8.3.3.(14) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Fraser Wilson, OMNI Health Care, Peterborough, Ontario for the resolution of a dispute with Ms Catherine Junop, Director, Building Services, City of Ottawa, Ontario to determine whether the as-installed paired corridor doors containing vision panels and which form part of the fire separation, are held open by magnetic hold open devices and are considered part of the barrier-free path of travel, provide sufficiency of compliance with Sentence 3.8.3.3.(14), regarding vision panels at the Kanata Long Term Care Residence, Campeau Blvd., Ottawa, Ontario.

APPLICANT	Mr. Fraser Wilson OMNI Health Care Peterborough, Ontario
RESPONDENT	Ms Catherine Junop Director Building Services City of Ottawa
PANEL	Mr. Len King, Chair Mr. Michael Steele Mr. Fred Barkhouse
PLACE	Toronto, Ontario
DATE OF HEARING	June 7, 2001
DATE OF RULING	June 7, 2001
APPEARANCES	Ms Gail E. Lamb Gail E. Lamb Incorporated Architect Lucan, Ontario **Agent for the Applicant** Mr. Tim Stewart Building Official City of Kanata **Designate for the Respondent**

RULING

1. The Applicant

Mr. Fraser Wilson, OMNI Health Care, Peterborough, Ontario, has received a building permit under the Building Code Act, 1992 and has constructed a building known as the Kanata Long Term Care Residence, Campeau Blvd., Ottawa, Ontario.

2. Description of Construction

The Applicant has constructed a long term care facility, having a building height of 5 storeys and a building area of 1, 958 m^2 according to the Applicant or 1, 619 m^2, according the Respondent. The facility is classified as a Group B, Division 2, care and treatment occupancy. It is of noncombustible construction and is equipped with a sprinkler system, a fire alarm system and a standpipe and hose system.

There are paired doors throughout the building that provide a double egress, separating the bedrooms of the facility from the common areas on floors two through five. During regular operation all of the doors are held open by magnetic hold open devices that are activated by the fire alarm system. Upon activation, the magnetic hold open devices release and the doors are closed forming a fire separation across the bedroom corridors.

The construction in dispute involves the vision panels that have been installed on the corridor doors that are located in a barrier-free path of travel. Within each door the Applicant has installed a 254 mm x 254 mm (10" x 10") vision panel, the bottom of which is located approximately 1, 524 mm (5 ft) above the finished floor. The Applicant's intent upon installing the vision panels was to provide a clear line of site for staff and firefighters to assist in the evacuation of the facility.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the paired corridor doors, forming part of the fire separation and located within the barrier-free path of travel, provide sufficiency of compliance with Sentence 3.8.3.3.(14) of the Building Code.

According to Sentence 3.8.3.3.(14), where vision panels are provided in a door located within a barrier-free path of travel, the panel shall be at least 75 mm wide, located not more than 900 mm above the finished floor and not more than 250 mm from the latch side of the door. It should be noted, however, that the Code does not require vision panels as an element of a barrier-free path of travel.

In this instance, the doors in question are located within the barrier-free path of travel and have been installed 1,524 mm (5 ft) above the finished floor. The doors remain open by use of magnetic hold open devices during normal operation of the facility and would be closed only during a fire alarm situation.

4. Provisions of the Ontario Building Code

Sentence 3.8.3.3.(14)

(14) Where a vision panel is provided in a door in a *barrier-free* path of travel, such panel shall be at least 75 mm (3 in) in width and be located so that

(a) the bottom of the panel is not more than 900 mm (2 ft 11 in) above the finished floor, and

(b) the edge of the panel closest to the latch is not more than 250 mm (9 7/8 in) from the latch side of the door.

5. Applicant's Position

The Agent for the Applicant submitted that the corridor doors, located at two locations on floors two through five, provide a double egress between the sleeping quarters and the common areas of the facility. The doors are held open by magnetic hold open devices and closed only during a fire alarm situation. The push plates to activate the doors are located on one side only with travel through the corridors being on the right side. There is a light located over the active side of the door.

In her submission, the Agent stated that this is not a normal path of travel in the traditional sense. Residents of the facility would not be expected to open the doors in any instance. On the occasion of an evacuation, residents would be assisted from the building by staff members and, during routine operation, the doors will remain open providing a barrier-free path of travel.

She noted that vision panels are not a requirement of the Building Code. In this instance they have been provided at the request of the Fire Department. They would serve the purpose of assisting both staff and firefighters in viewing the corridors during an evacuation situation. To facilitate this, the panels have been located at eye level for an average firefighter. She stated that, if the vision panels were to be removed, the Fire Department may have concern with respect to their abilities in an emergency situation.

6. Respondent's Position

The Designate for the Respondent submitted that he has a concern with respect to the double egress doors in question. He suggested that individuals using a wheelchair and operating the active leaf of the doorway would be located in a position that would block the inactive leaf. For increased safety, he argues, the vision panels should be provided in accordance with the strict wording of the Code and located no higher than 900 mm from the finished floor. This would allow those using a wheelchair to see through to the other side of the doorway.

In response to the assertion by the Agent for the Applicant that the doors are only closed during a fire situation, the Designate advised that the doors will be closed during any alert signal; whenever an initiating device has been activated. The vision panels, he argued, should be available for use by any individual using the door. Given that this is a B2 occupancy, a higher number of wheelchair users could reasonably be expected to traverse these corridors. In addition, visitors to the facility may also require barrier-free access. Magnetic hold open devices, he submitted, are not sufficient to ensure that accidents are avoided.

The Designate recognized that the Code does not require vision panels in a barrier-free path of travel but submitted that, where the designers determine that panels are needed, they must comply with the OBC requirements. He suggested that it may be beneficial if the intent of vision panels, and when they should be provided, are clarified in the Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-installed paired corridor doors containing vision panels and which form part of the fire separation, are held open by magnetic hold open devices and are considered part of the barrier-free path of travel, provide sufficiency of compliance with Sentence 3.8.3.3.(14) of the Ontario Building Code at the Kanata Long Term Care Residence, Campeau Boulevard, Ottawa, Ontario.

8. Reasons

i) The vision panels are not required by the Ontario Building Code
ii) The vision panels increase the level of safety in the building by assisting firefighters in the event of a fire.
iii) The doors are held open in the normal use of the building by the magnetic hold open devices.

Dated at Toronto this **7th** day in the month of **June** in the year **2001** for application number **2001-15.**

Mr. Len King, Chair

Mr. Michael Steele

Mr. Fred Barkhouse

Ruling No. 01-23-816
Application # 2001-06

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 3.2.2.40. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Diane Roy, Hilltop Manor Nursing Home, Cambridge, Ontario, for the resolution of a dispute with Mr. Larry Simonato, Director of Building and By-law Enforcement, City of Cambridge, Ontario, to determine whether the 72 m^2 (775 ft^2) addition to the existing unsprinklered care and treatment occupancy that is also proposed to be unsprinklered provides sufficiency of compliance with Article 3.2.2.40. of the Ontario Building Code at the Hilltop Manor Nursing Home, 42 Elliot Street, Cambridge, Ontario.

APPLICANT	Ms. Diane Roy Hilltop Manor Nursing Home Cambridge, Ontario
RESPONDENT	Mr. Larry Simonato Chief Building Official City of Cambridge
PANEL	Dr. Kenneth Peaker, Chair Mr. Robert De Berardis Mr. Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	May 24, 2001
DATE OF RULING	May 24, 2001
APPEARANCES	Ms. Gail Lamb Gail E. Lamb Incorporated Architect Lucan, Ontario **Agent for the Applicant** Mr. Larry Simonato Chief Building Official City of Cambridge **The Respondent**

RULING

1. The Applicant

Ms. Diane Roy, Hilltop Manor Nursing Home, Cambridge, Ontario has applied for a building permit under the Building Code Act, 1992 for the construction of a proposed 72 m^2 (775 sq ft) unsprinklered addition to an existing unsprinklered care and treatment facility at the Hilltop Manor Nursing Home, 42 Elliot Street, Cambridge, Ontario.

2. Description of Construction

The Applicant is the operator of a nursing home having a building height of two storeys and a building area of approximately 1241.28 m^2 (13, 361 sq ft). The facility is classified as a Group B, Division 2 - care and treatment occupancy and is equipped with a fire alarm system. The existing building is of noncombustible construction and is not sprinklered.

The construction at dispute involves a proposed 72 m^2 addition to the nursing home. The addition would contain administration offices in the basement level, dining room facilities for residents of the nursing home on the first and second floors and a sitting room at the second storey level. The doors from the addition to the corridors of the existing building are proposed to have electromagnetic hold open devices activated by activation of the smoke detection system. The addition in question will also be of noncombustible construction and is not proposed to be sprinkled. The total building area, including the proposed addition, would be 1313.28 m^2 (14, 136 sq ft).

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed unsprinklered addition to the existing unsprinklered nursing home provides sufficiency of compliance with Article 3.2.2.40. of the Ontario Building Code (OBC).

Article 3.2.2.40.(1)(a) requires that, except as permitted by Sentence 3.2.2.7.(1) (not applicable here), a Group B, Division 2 or Division 3 occupancy must be sprinklered. The nursing home facility is classified as a Group B, Division 2 major occupancy. The addition being contemplated will have the same classification. Despite this classification, the addition is proposed to be unsprinklered. The existing building is also unsprinklered as it was constructed prior to 1976 when sprinklering was not a Code requirement. In all other respects, the proposed addition meets the requirements of the OBC.

4. Provisions of the Ontario Building Code

3.2.2.40. Group B, Division 2 or Division 3, up to 2 Storeys, Sprinklered

(1) A *building* classified as Group B, Division 2 or Division 3 is permitted to conform to Sentence (2) provided

(a) except as permitted by Sentence 3.2.2.7.(1), the *building* is *sprinklered*,

(b) it is not more than 2 *storeys* in *building height*, and

(c) it has a *building area* not more than

(i) 2 400 m^2 (25,800 ft^2) if 1 *storey* in *building height*, or

(ii) 1 600 m^2 (17,200 ft^2) if 2 *storeys* in *building height*.

(2) The *building* referred to in Sentence (1) is permitted to be of *combustible construction* or *noncombustible construction* used singly or in combination, and

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* not less than 45 min, and

(c) *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

5. Applicant's Position

The Agent for the Applicant submitted that, while it is clear that Group B, Division 2 occupancies are to be sprinklered, the Building Code makes no provision for small additions to presently unsprinklered buildings. The addition in question is only 72 m^2 and of noncombustible construction. It is not intended as living quarters for any of the residents and will be used for administration offices, dining facilities and a sitting room. The Agent advised that there will be no additional fire load, nor will the proposal facilitate an increase to the occupant load. In fact, the Commission was advised that the occupancy for the home was being reduced from 102 to 89 residents.

The Applicant went on to advise that the proposed addition will add quality of life for the residents of the facility. The dining room area is currently located in the basement of the existing building. This causes inconvenience to staff and residents at meal times when all occupants must be transported from the first and second floors to the basement level. The addition in question will eliminate this procedure as residents would be able to dine on the floor level where they reside. The dining rooms would not contain any cooking equipment and would be provided with only with a fridge and sink. Pre-prepared food would be transported from the basement kitchen to the proposed dining areas for service.

It was the Applicant's argument that the sprinklering of this small addition to an existing unsprinklered building would not enhance life safety for the occupants of this facility. The addition is of noncombustible construction and the Fire Marshall has reviewed the plans and advised that he is satisfied that the proposal would not require that sprinklers be added. As a measure to compensate for the lack of sprinklering, the Applicant is prepared to ensure a one-hour fire separation of masonry construction between the existing building and the proposed addition. This measure would be in addition to the electromagnetic hold open devices that are proposed for doors from the addition to the corridors (a feature which would also exceed OBC requirements).

6. Respondent's Position

The Respondent submitted that, while they acknowledge the relatively small size of the addition, the Code requires mandatory sprinklering in this instance. There is no provision in the Code that would permit them to waive this requirement regardless of the size of the addition.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed 72 m^2 unsprinklered addition to the existing unsprinklered care and treatment occupancy provides sufficiency of compliance with Article 3.2.2.40. of the Ontario Building Code at the Hilltop Manor Nursing Home, 42 Elliot Street, Cambridge, Ontario on condition that:

a) The Applicant provide electromagnetic hold open devices with proper detection on the corridor doors of the proposed addition.
b) The Applicant confirms that the wall between the existing and new construction is masonry, providing a one-hour fire separation, or, that a masonry wall will be constructed at this location having a one-hour fire separation rating.

8. Reasons

i) There will be no increase in occupant loading as a result of the addition. A reduction in occupancy from 120 to 89 residents is expected.
ii) Both the existing building and the proposed addition will be of noncombustible construction.
iii) The individual rooms, suites and corridors are provided with a fire separation of masonry construction.
iv) There is supervisory and nursing staff on site.
v) The facility has an existing fire alarm system.

Dated at Toronto this **24th** day in the month of **May** in the year **2001** for application number **2001-06.**

Dr. Kenneth Peaker, Chair

Mr. Robert De Berardis

Mr. Donald Pratt

Ontario

Ruling No. 01-22-815
Application # 2001-14

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Articles 3.3.1.8. and 3.4.3.6. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Gabriel Costa, President, Costa & Gunnar Construction Inc., Toronto, Ontario, for the resolution of a dispute with Mr. Bruce Ashton, Deputy Chief Building Official, City of Toronto, Ontario, to determine whether the proposed construction of a new mezzanine (in an existing building), that is to have a minimum headroom clearance of 1,975 mm (6', 6") under the open web steel joists located at 1,975 mm (6', 6") on centre, provides sufficiency of compliance with Articles 3.3.1.8. and 3.4.3.6. of the Ontario Building Code at Unit #2, 30 Titan Road, Toronto, Ontario.

APPLICANT	Mr. Gabriel Costa, President Costa & Gunnar Construction Inc. Toronto, Ontario
RESPONDENT	Mr. Bruce Ashton Deputy Chief Building Official City of Toronto
PANEL	Dr. Kenneth Peaker, Chair Mr. Robert De Berardis Mr. Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	May 10, 2001
DATE OF RULING	May 10, 2001
APPEARANCES	Mr. Norbert Sebris Consultant Toronto, Ontario **Agent for the Applicant** Mr. Sait Toprak Manager, Plan Review, West District City of Toronto **Designate for the Respondent**

RULING

1. The Applicant

Mr. Gabriel Costa, President, Costa & Gunnar Construction Inc., Toronto, Ontario, has applied for a building permit under the Building Code Act, 1992 for the construction of a new mezzanine in Unit # 2, 30 Titan Road, Toronto, Ontario.

2. Description of Construction

The Applicant represents the owner of several units within an existing mixed use industrial condominium building, containing a Group F, Division 2, industrial major occupancy. The facility is one storey in building height with an area of approximately 6,473.76 m^2 (69, 683 sq ft). It is comprised of noncombustible construction and has been provided with a fire alarm system and is fully sprinklered.

The construction in dispute involves a proposed mezzanine addition to Unit #2. The unit has an area of approximately 451.42 m^2 (4,859 sq ft) and the mezzanine is proposed to be approximately 114.87 m^2. It is contemplated that the mezzanine will run along the extent of the western wall of the unit, providing headroom clearance of ,1975 mm (6', 6") under the 457.21 mm (18 inch) open web steel joists located every 1,975 mm (6', 6").

A printing business is currently operated out of Unit #2 and it is anticipated that the proposed mezzanine level would be used by the graphic arts designers. It is suggested that 3 to 5 people would occupy the mezzanine level and there would be no partitions to obstruct movement or view.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the minimum headroom clearance proposed for the mezzanine level at 1,975 mm (6', 6") provides sufficiency of compliance with Articles 3.3.1.8. and 3.4.3.6. of the Ontario Building Code.

With two exceptions not applicable here, Article 3.3.1.8. requires compliance with Article 3.4.3.6. in respect to the minimum headroom clearance required in every access to exit.

Article 3.4.3.6 requires that every exit shall have a minimum headroom clearance of 2,100 mm (6', 11"). In this instance the Applicant is providing headroom clearance at the open web steel joists of only 1,975 mm (6', 6"). Although the coffered ceiling between the joists offers headroom clearance that would exceed Code requirements, compliance is not achieved at each joist location throughout the subject unit.

4. Provisions of the Ontario Building Code

3.3.1.8. Headroom Clearance

(1) Except within the *floor area* of a *storage garage*, the minimum headroom clearance in every *access to exit* shall conform to the requirements of Article 3.4.3.6. for *exits*. (See also Sentence 3.3.5.4.(5).)

3.4.3.6. Headroom Clearance

(1) Except as permitted by Sentences (2) to (4), every *exit* shall have a headroom clearance of

not less than 2,100 mm (6 ft 11 in).

(2) The headroom clearance for stairways measured vertically above any landing or the nosing of any stair tread shall be not less than 2,050 mm (6 ft 9 in).

(3) The headroom clearance for doorways shall be not less than 2,030 mm (6 ft 8 in).

(4) No door closer or other device shall be installed so as to reduce the headroom clearance of a doorway to less than 1,980 mm (6 ft 6 in).

5. Applicant's Position

The Applicant's Agent submitted that the design of the proposed mezzanine is based on permit drawings for Unit #8 that were submitted to the City in 1977. The mezzanine design in Unit #8 was based on the provision of 6', 6" of headroom at the open web steel joists that run throughout the building. In addition to Unit #8, the owner has since purchased Units 6, 10, 12 and, most recently, Unit #2. Units 6, 10 and 12 also have mezzanines that provide 6', 6" of headroom clearance. The mezzanines in these units were constructed by previous tenants prior to the current ownership. In addition to the five units currently owned by the this company, the owner anticipates purchasing Unit #4 and constructing a similar mezzanine; he has a verbal agreement with the present owner of Unit #4 with respect to this prospective purchase. The owner's future intent is to merge all 6 units for the purpose of operating his printing business.

The Applicant's Agent acknowledged that, while it may be possible to comply with the Code requirements, it would be desirable to have a continuous mezzanine at the same level throughout all units owned by his client. This would avoid the 5 inch drop that would occur from the as-constructed mezzanines in the other units to the mezzanine proposed in Unit #2. He suggested that it would be preferable, from a safety standpoint, to obtain a uniform floor level for all mezzanines. He stated that this 5 inch differential in floor level may cause people to stumble down the stair or ramp once all units had been merged. This may prove more dangerous than the reduction in headroom at certain locations throughout the unit.

In addition to his concern over the lower floor grade on the mezzanine level, the Agent submitted that the ceiling height on the main floor would also be affected. He stated that it would be the owner's preference to obtain a maximum ceiling height for the office and client reception areas on the ground floor. When questioned, the Agent acknowledged that it would be structurally possible to address the first floor ceiling height concern with appropriate building material and design.

In summation, the Applicant's Agent concluded that the building offers a significant level of safety given the required sprinklering, smoke detection and alarm systems in place. Safety to the occupants of the mezzanine level would more affected by the eventual floor level grade change, or stepping down between units, than by the reduction of headroom that would occur at the open web steel joists located every 6', 6" across the unit.

6. Respondent's Position

The Designate for the Respondent submitted that the Building Code is clear in requiring a minimum headroom of 6', 11' in this instance. He questioned whether the City had, in fact, issued a building permit for Unit #8 in 1977 with a 6', 6" headroom. He advised the Commission that a search of the City's records uncovered no such permit. He went on to acknowledge that the City could not, at this point, require changes to the as-constructed mezzanines in the other units, however, consideration of the headroom issue in Unit #2 stands alone in this application.

The Designate submitted that the Applicant did not presently own Unit #4, located between Unit #6 and Unit #2, however, if all units were eventually connected, the difference in floor grade could be addressed. He suggested that a ramp could be provided at a 1:8 ratio since this is not a barrier free situation.

The Designate expressed concern with the safety of a 5 inch reduction in headroom on the mezzanine level. He stated that the Code requirement of 6', 11" is relatively new and suggested that there is no justification to vary the requirement in this instance. In his opinion, taller individuals would have difficulty exiting the mezzanine level in an emergency situation. There are many joists to consider and people may not always be aware of their location as they would with a doorway, where the headroom is expected to be reduced.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed construction of a new mezzanine in the existing building that is to provide a minimum headroom clearance of 1,975 mm (6', 6") under the open web steel joists located at 1,975 mm (6', 6") on centre does not provide sufficiency of compliance with Articles 3.3.1.8. and 3.4.3.6. of the Ontario Building Code at Unit #2, 30 Titan Road, Toronto, Ontario

8. Reasons

i) The mezzanine, as proposed, does not comply with the intent of the Code.

ii) The Applicant has offered no measure of compensation in order to achieve sufficiency of compliance.

iii) Design alternatives are available that would enable the Applicant to comply with the Code requirements.

Dated at Toronto this **10th** day in the month of **May** in the year **2001** for application number **2001-14**.

Dr. Kenneth Peaker, Chair

Mr. Robert De Berardis

Mr. Donald Pratt

Ruling # 01-20-813
Application # 2001-23

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 9.5.2.1. and Clause 3.8.1.1.(1)(c) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Jack Feldman, Director, Camp George, Thornhill, Ontario, for the resolution of a dispute with Mr. Wib Bethune, Chief Building Official, Township of Seguin, Ontario, to determine whether the proposed seasonal-use sleeping cabins are required to be barrier-free accessible, when considering Article 9.5.2.1. and Clause 3.8.1.1.(1)(c) of the Ontario Building Code at the Union of American Hebrew Congregations - Camp George, Township of Seguin, Ontario.

APPLICANT	Mr. Jack Feldman, Director Camp George Thornhill, Ontario
RESPONDENT	Mr. Wib Bethune Chief Building Official Township of Seguin
PANEL	Dr. Kenneth Peaker, Chair Mr. Fred Barkhouse Mr. John Guthrie
PLACE	Toronto, Ontario
DATE OF HEARING	April 26th, 2001
DATE OF RULING	April 26th, 2001
APPEARANCES	Mr. Les Muniak, Principal Larden Muniak Consulting Inc. Toronto, Ontario **Agent for the Applicant** Mr. Peter Shoebottom Deputy Chief Building Official Parry Sound, Ontario **Designate for the Respondent**

RULING

1. The Applicant

Mr. Jack Feldman, Director, Camp George, Thornhill, Ontario, has applied for a building permit under the Building Code Act, 1992 for the construction of four additional sleeping cabins at the facility known as the Union of American Hebrew Congregations - Camp George, Township of Seguin, Ontario.

2. Description of Construction

Camp George currently operates as a youth camp facility, providing summer activities in a woodland setting. The organized camping activities provided are available to children of various ages. Accommodations at Camp George currently consist of two clusters of sleeping cabins with four cabins in each cluster. At present, one cabin per cluster is barrier-free accessible.

The Applicant is proposing an expansion of the existing facility which would include the construction of four additional cabins. The facility is classified as a Group C residential major occupancy. The individual cabins are one storey in building height and built of combustible construction. Each cabin is considered as a separate building and will have an area of approximately 95 m^2.

The construction in dispute involves the accessibility of the proposed cabins. As noted, four additional sleeping cabins are proposed; two in each existing cluster. Of those four new cabins, two are proposed to provide barrier-free access; one in each cluster. As a result, a total of two barrier-free accessible cabins will be provided in each of the two clusters.

Access to the barrier-free cabins will be by a ramp, whereas access to the other cabins will be by stairs. The sleeping cabins, whether barrier-free or not, will contain eight single beds and four bunk beds. The maximum number of occupants per cabin would be 16 persons. The washrooms in the barrier-free cabins provide one large stall and one regular stall. In addition, a barrier-free shower would be provided in a separate room. The non barrier-free cabins would have two regular washroom stalls and two non-barrier free showers.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether all four cabins proposed in the anticipated expansion are to be made barrier-free accessible when considering Sentence 9.5.2.1.(1) and Clause 3.8.1.1.(1)(c) of the Ontario Building Code.

Sentence 9.5.2.1.(1) requires that every building be designed to comply with the provisions outlined in Section 3.8. in respect to barrier-free access. Section 3.8. requires, with certain exceptions, that all buildings be designed with barrier-free access and outlines the provision of such design. Clause 3.8.1.1.(1)(c), however, states that buildings that are not intended to be occupied on a daily or full time basis are exempt from the provisions of 3.8.

In this case, each cabin is considered a separate building while only two of the four proposed cabins to be constructed will provide barrier-free access. However, Camp George is a seasonal operation, providing camping facilities and accommodation throughout the summer months only. The cabins, both proposed and existing, are not winterized. The Building Code is unclear as to whether the type of buildings being proposed would fall under the exemption noted in Clause 3.8.1.1.(1)(c).

4. Provisions of the Ontario Building Code

9.5.2.1. General

(1) Except as provided in Sentence (2) and Article 3.8.1.1., every *building* shall be designed in conformance with Section 3.8.

3.8.1.1. Application (See Appendix A.)

(1) The requirements of this Section apply to all *buildings* except
(c) *buildings* which are not intended to be occupied on a daily or full time basis, including automatic telephone exchanges, pumphouses and substations.

5. Applicant's Position

The Agent for the Applicant outlined the nature of the construction anticipated, advising that his client is proposing to construct cabins that would provide sleeping accommodation at a recreational camp. The cabins are organized into clusters of six; three for girls and three for boys. One of the girls and one of the boys cabins are proposed to be barrier-free accessible. There would be two clusters of this type at Camp George for a total of twelve cabins at the facility; four providing barrier-free access. Of those twelve, eight cabins already exist. The existing cabins were built by the Applicant a few years ago, and at that time only two of the eight were required by the municipality to be barrier-free.

The Agent continued by explaining that the terrain at the camp is an issue in the provision of barrier-free access to each of the cabins. The cabins are located in a rugged, natural setting. The ramps required to access each cabin are 4 ft wide and roughly 60 ft in length. This would create a total of 240 sq. ft. of ground cover.

The Agent acknowledged that Section 9.5.2.1. of the Ontario Building Code requires that all buildings be barrier-free accessible. He also stated that this proposal may not fall under the exemptions outlined in Clause 3.8.1.1.(1)(c). In support of his position however, the Agent submitted, that Section 9.36. dealing with cottages and outlining requirements for seasonal accommodation, may apply in this instance. The cabins at Camp George provide seasonal accommodations for a recreational use. He argued that it was unclear from the provisions of the Building Code, whether the cabins should be considered seasonal recreational by virtue of their design or by the function of the camp. The Agent put forth the argument that, if the cabins can be considered under the provisions of Section 9.36.1.1.(1), then the Applicant has already, voluntarily, exceeded the Code requirements with the existence of even one barrier-free cabin. Buildings constructed in accordance with 9.36.1.1.(1) need not comply with the barrier-free access provisions outlined in Section 9.5.

6. Respondent's Position

The Designate for the Respondent submitted that it is his understanding that Section 9.5. applies in this instance. The provisions outlined in this Section would require that all buildings be barrier-free accessible. In response to the Applicant's suggestion regarding the application of the provisions of Section 9.36., he submitted that, while the buildings may be seasonal and/or recreational, they are also considered tourist accommodation and would, therefore, fall under the specific provisions of Subsection 9.36.3.

Under the provisions of 9.36.3.1.(1), buildings that are intended to be used for seasonal tourist accommodation or are for rent, would be subject to the provisions of Section 9.5. and, therefore, must be barrier-free. In that regard, the Respondent submitted that, since the campers pay a fee for food, accommodation, use of the facilities, etc., and since they are in the area for a limited period of time, they should be considered tourists. He submitted that the definition of tourist and camper may overlap somewhat and he sought some direction from the Building Code Commission as to what might apply in this instance.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed seasonal-use sleeping cabins are not required to be barrier-free accessible, when considering Article 9.5.2.1. and Clause 3.8.1.1.(1)(c) of the Ontario Building Code at the Union of America Hebrew Congregations - Camp George in the Township of Seguin.

8. Reasons

1. This camp is not a tourist facility; it is a recreational residential use, therefore, barrier-free access provisions do not apply.

Dated at Toronto this **26th,** day in the month of **April,** in the year **2001** for application number **2001-23.**

Dr. Kenneth Peaker, Chair

Mr. Fred Barkhouse

Mr. John Guthrie

Ontario

Ruling # 01-19-812
Application # 2001-26

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 8.2.1.3.(4) and Table 8.2.1.3.B. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Mike Feld, Manager of Store Development, Sobeys Properties Ltd., Mississauga, Ontario, for the resolution of a dispute with Mr. Dave Tantalo, Sewage System Inspector, Renfrew County and District Health Unit, Pembroke, Ontario, to determine whether the proposed Sobeys IGA supermarket that is to contain a delicatessen, a bakery, and a meat department is a listed occupancy under Table 8.2.1.3.B. (forming part of Sentence 8.2.1.3.(2)), or whether it is permitted to comply with Sentence 8.2.1.3.(4) of the Ontario Building Code at Lot 19, Concession IX, Township of North Algona-Wilberforce, Ontario.

APPLICANT	Mr. Mike Feld, Manager of Store Development Sobeys Properties Ltd. Mississauga, Ontario
RESPONDENT	Mr. Dave Tantalo Sewage System Inspector Renfrew County & District Health Unit
PANEL	Mr. Bryan Whitehead, Chair Mr. Frank Wright Mr. Doug Robinson
PLACE	Toronto, Ontario
DATE OF HEARING	April 12th, 2001
DATE OF RULING	April 12th, 2001
APPEARANCES	Mr. Tom Jones, Civil Technologist McIntosh Perry Consulting & Engineers Carp, Ontario **Agent for the Applicant** Mr. Mike Klatt Supervisor, Sewage System Inspections Pembroke, Ontario **Designate for the Respondent**

RULING

1. The Applicant

Mr. Mike Feld, Manager of Store Development for Sobeys Properties Ltd., has applied for a building permit under the Building Code Act, 1992 for the construction of a Sobeys IGA supermarket, containing a delicatessen, a bakery, and a meat department on lands comprising Part Lot 19, Concession IX, in the Township of North Algona-Wilberforce, Ontario.

2. Description of Construction

The Applicant is proposing to construct a grocery store, including a delicatessen, bakery, and meat department, having a total finished floor area of 2,347 m^2. The slope of the site is 2% with a 20 metre depth to the hardpan. The soil on which the sewage system will be located consists of imported fill providing a percolation time of 10 minutes per centimetre. The sewage facility itself is described as a Class 4 system equipped with a Waterloo Biofilter tertiary treatment unit and a Nitrex filter installed at the output end of the tank. The leaching bed will have an area of 105 m^2. Water will be supplied to the building from a drilled well.

The construction in dispute involves the daily design sewage flow for the proposed sewage system. The Applicant in indicating an output of 9,000 L/day will be produced. This design is based on water records obtained from several similar establishments. These records indicate that the daily flow does not exceed 4,600 L/day. The applicant is proposing to almost double this figure, providing, in his opinion, a 100% margin for safety on high use days. In addition, a monitoring program will be implemented to further ensure that the daily design flow is not being surpassed.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed Sobeys IGA supermarket that is to contain a delicatessen, a bakery, and a meat department is a listed occupancy under Table 8.2.1.3.B. (forming part of Sentence 8.2.1.3.(2)), or whether it is permitted to comply with Sentence 8.2.1.3.(4) of the Ontario Building Code.

Table 8.2.1.3.B. forms part of Sentence 8.2.1.3.(2) and provides values for the total daily design flow for occupancies other than those residential occupancies listed in Table 8.2.1.3.A. Table 8.2.1.3.B. provides a number of classifications including Food Service Operations. As part of the Food Service Operations category, the Table provides separate daily design flow volumes for both floor areas of food outlets that do not include delis, bakeries or meat departments and for floor areas that do contain these services.

Sentence 8.2.1.3.(4), on the other hand, provides that, for occupancies not listed in Table 8.2.1.3.B., metered data from at least three similar establishments can be used to determine the total daily design sanitary sewage flow expected to be generated by a given occupancy. In this case, the Applicant is proposing a grocery store use which will include a delicatessen, bakery and meat department.

The Applicant agues that, although the use appears to be classified in Table 8.2.1.3.B. as a Food Service Operation that includes a bakery, delicatessen and meat department, if the table values are used, the expected daily flow would be in excess of 20,000 L/day. Even using the category of Store from the Table, given the floor area of this building, a yield of 11,600 L/day would be produced. In the

Applicant's opinion, these figures do not accurately represent the expected flow production for the site. As a result, his position is that Sentence 8.2.1.3.(4) applies in this instance and the daily design flow may be based on the average daily flow calculations from similar grocery store operations. The Respondent disagrees with this assertion. In his view, the proposed use is clearly anticipated under the Food Service Operation category within Table 8.2.1.3.B.

It should be noted that if the Commission determines that the use does fall within Table 8.2.1.3.B., and based on the flow calculations of approximately 20,000 L/day provided by both the Applicant and Respondent parties, an issue of jurisdiction is then raised for the BCC to consider. This is because the regulatory environment governing sewage systems and sewage works in Ontario is divided between Part 8 of the Ontario Building Code and Section 53 of the *Ontario Water Resources Act* (OWRA - a Ministry of Environment legislation). Each application of a proposed sewage system/work must be determined between these jurisdictional spheres. The jurisdictional divide is as follows:

The Ontario Building Code is the governing regulation for sewage systems (see definition below) that have a total daily design sanitary sewage flow (or design capacity [see definition below]) of 10,000 litres per day or less. Sewage works, subject to the requirements of S. 53 of the OWRA, on the other hand, are facilities that may include design capacities of greater than 10,000 litres per day[1]. For residential and other occupancies that are captured in Sentences (1) and (2) of Article 8.2.1.3. (Tables 8.2.1.3.A. and B respectively) the total daily design flow is the key factor determining design capacity which, in turn, dictates applicable jurisdiction. In this instance, design capacity may not be a measure of flows actually entering the ground (if certain dosing measures such as balancing are utilized), but is rather a calculation of potential or anticipated flows from a listed occupancy.

However, if the BCC determines that Sentence 8.2.1.3.(4) is applicable, the prescribed flows in the Tables are not relevant. As a result, metered data from other similar establishments becomes appropriate to establish the daily design sanitary sewage flow. If such data indicates that the anticipated flow to be less than 10,000 L/day there is likely no jurisdictional issue to consider.

4. Provisions of the Ontario Building Code

Article 1.1.3.2. Defined Terms

Design capacity, when used in the definition of the term *sewage system*, means total daily design *sanitary sewage* flow determined in accordance with Article 8.2.1.3.

Sewage system means (among other things)
(d) a *leaching bed* system
where these
(f) have a *design capacity* of 10,000 litres per day or less...

Sentence 2.1.1.14.(1) Sewage Systems

(1) Part 8 applies to the *construction*, operation and maintenance of all *sewage systems* and to

[1] It is significant to note that both regulatory regimes, OBC and OWRA (Clause 53(6)(c) use the subject Tables in the OBC as their point of divergence.

the *construction* of *buildings* in the vicinity of *sewage systems.*

Sentence 8.2.1.3.(2) Sewage System Design Flows

(2) For all other *occupancies*, the total daily design *sanitary sewage* flow shall be at least the value in Column 2 as determined from Table 8.2.1.3.B. (See Appendix A.)

Table 8.2.1.3.B.
Other *Occupancies*
Forming part of Sentence 8.2.1.3.(2)

Establishments	Volume (Litres)
Food Service Operations	
j) Food outlets (excluding delis, bakeries or meat departments	
i) per 9.25 m^2 of floor space,	40
ii) Per 9.25 m^2 of deli floor space,	190
iii) Per 9.25 m^2 of bakery floor space,	190
iv) Per 9.25 m^2 of meat department floor space, and	380
v) Per Water Closet	950

Sentence 8.2.1.3.(4) Sewage System Design Flows

(4) Where an *occupancy* is not listed in Table 8.2.1.3.B., the highest of metres flow data from at least 3 similar establishments shall be acceptable for determining total daily design *sanitary sewage* flow.

5. Applicant's Position

The Agent for the Applicant submitted that a "grocery store" use is not specifically addressed in the Code and that, by using the calculation from Table 8.2.1.3.B. for a "food outlet", the flow rate is unrealistically high. The rate of flow of 20,000 to 25,000 L/day that would be generated using the figures obtained from the Table, is an inaccurate reflection of the actual anticipated output. He argued, therefore, that Sentence 8.2.1.3.(4) may be applied in this instance. In support of this position, the Agent obtained metered data from several similar establishments, identifying a daily average flow of 4,500 litres. The empirical data that has been obtained from these other establishments is more representative, in his opinion, of the expected daily sanitary sewage flow.

Doubling this figure to 9,000 L/day, the Agent continued, establishes an acceptable margin of safety and thus a level of comfort could be provided for high use days. He further outlined that, because grocery stores are now open 7 days a week, there are no peak days to consider as part of the flow rate calculation.

When questioned on the issue of jurisdiction as a result of the level of estimated sanitary sewage flow, the Agent explained that the Health Unit and the Building Code Commission had the jurisdiction to consider this application as the daily design flow is, in his opinion, below 10,000 L/day. The construction, therefore, is mandated by the Ontario Building Code rather than the *Ontario Water Resources*

Act. He stated that staff at the Ministry of the Environment had advised him that they would not review the design of this system as it did not exceed the 10,000 litre per day threshold.

6. Respondent's Position

The Designate for the Respondent submitted that the intended grocery store use is defined in Table 8.2.1.3.B. as a "food outlet", with a delicatessen, bakery, and meat department. Sentence 8.2.1.3.(4) does not apply where the occupancy is listed in the Table. In addition, when using the calculations generated by Table 8.2.1.3.B., the total daily design flow exceeds 10,000 L/day, therefore the sewage system for this facility is not regulated under the Ontario Building Code. He argued that neither the Health Unit nor the Building Code Commission has the authority to consider this application.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed supermarket is a defined use as indicated in Table 8.2.1.3.B. Accordingly, based on the calculations, the flow rate exceeds 10,000 litres per day and the approval of the sewage system design is the responsibility of the Ministry of the Environment.

8. Reasons

i) The proposal, as a supermarket/grocery store with ancillary areas, in our opinion, is consistent with a "Food Service Operation" in Table 8.2.1.3.B.

ii) Based on the above, the calculation of the total daily design sanitary sewage flow will considerably surpass the 10,000 litre per day threshold articulated in the OBC.

Dated at Toronto this **12th** day in the month of **April,** in the year **2001** for application number **2001-26.**

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Mr. Bryan Whitehead, Chair

BCC Ruling No. 01-18-811

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 01-18-811

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Clauses 3.2.4.3.(1)(b), (c) and (e) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Tom Dutton, Senior Vice President, The Daniels Corporation, Toronto, Ontario, for the resolution of a dispute with Mr. John Wright, Chief Building Official, Town of Markham, Ontario, to determine whether the four storey building, that is to contain a Group B, Division 3 occupancy on the first and second floors and a Group C occupancy on the third and fourth floors and that is proposed to be equipped with a single stage fire alarm system, complies with Clauses 3.2.4.3.(1)(b), (c) and (e) of the Ontario Building Code at the Renaissance at Swan Lake, 6360 16th Avenue, Markham, Ontario.

APPLICANT
Mr. Tom Dutton, Senior Vice President
The Daniels Corporation
Toronto, Ontario

RESPONDENT
Mr. John Wright
Chief Building Official
Town of Markham

PANEL
Dr. Kenneth Peaker, Chair
Mr. Fred Barkhouse
Mr. Donald Pratt

PLACE
Toronto, Ontario

DATE OF HEARING
April 12th, 2001

DATE OF RULING
April 12th, 2001

APPEARANCES
Mr. Randy Brown, President
Randal Brown & Associates
Willowdale, Ontario
Agent for the Applicant

Mr. Chris Bird
Manager of Plan Review
Markham, Ontario
Designate for the Respondent

RULING

1. The Applicant

Mr. Tom Dutton, Senior Vice President, The Daniels Corporation, Toronto, Ontario, has received a building permit under the Building Code Act, 1992 for the construction of an assisted living facility and senior's residential building known as the Renaissance at Swan Lake located at 6360 16th Avenue, Markham, Ontario.

2. Description of Construction

The Applicant has constructed a four storey building containing a Group B, Division 3 care occupancy on the first and second floors with a Group C residential occupancy on the third and fourth floors. The total building area is approximately 3,022 m^2. The entire building has been sprinklered and provided

with smoke detectors in the corridors. The structure is of noncombustible construction and includes a two hour rated fire separation between the second and third floors.

The construction in dispute involves the single stage fire alarm system proposed for the subject building. For the residential floors (third and fourth), hard-wired smoke alarms will be installed within each suite. It is intended that one smoke alarm within each suite will, upon actuation, be capable of sending a signal to an identification device located the concierge desk. The concierge will then, if necessary, be able to use the paging system to announce to the staff the specific suite in which the alarm occurred. The smoke alarms themselves, however, will be audible in the individual suites only.

In contrast, the B3 occupancy (first and second) floors will be provided with smoke detectors connected to the fire alarm system. Upon actuation of a specific smoke detector, a signal will be sent to the fire alarm control panel and an identification device. The identification device will then indicate the source of the signal at both the concierge's desk and the second floor nurse's station. In doing so, it will show the actual number of the room of the signal source. In addition, the Markham Fire Department will also be alerted. The signal they receive will indicate both the property address and the room number in which the alarm originated. The annunciating devices on these floors will provide a general alarm audible throughout the floors within the B3 occupancy.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the provision of a single stage fire alarm system provides sufficiency of compliance with Clauses 3.2.4.3(1)(b), (c) and (e) of the Ontario Building Code.

Sentence 3.2.4.3.(b) requires a two stage alarm system in a Group B occupancy however, Sentence 3.2.4.3.(c) permits a single stage system for Group B, Division 3 occupancies in buildings of three storeys or less. In addition, Sentence 3.2.4.3.(1)(e) provides that Group C residential occupancies are permitted to be served by a single stage fire alarm system.

As mentioned above, the building subject to this dispute is a total of four storeys in height, contains a B3 occupancy and is to provide only a single stage fire alarm system.

4. Provisions of the Ontario Building Code

Article 3.2.4.3. Types of Fire Alarm Systems

1. A fire alarm system shall be
    a. a single stage system in a Group F, Division 1 *occupancy*.
    b. a 2 stage system in a Group B *occupancy* other than those described in Clause (c).
    c. a single of 2 stage system in a *building 3 storeys* or less in *building height* which contains a Group B, Division 2 *occupancy*.
    d. a single stage system in elementary and secondary school, except for a special needs facility, and
    e. a single or 2 stage system in all other cases.

5. Applicant's Position

The Applicant submitted that the type of fire alarm system should reflect the level of hazard present. He advised that while a Group C occupancy permits a single stage system, a Group B, Division 3 occupancy in buildings exceeding three storeys would require a two stage alarm system. In this instance, however, the increased hazard level and risks associated with a B3 care facility only apply to the first and second floors. He advised that the occupants of the facility are not bedridden and are frequently evaluated (every three months) to determine whether their physical condition has deteriorated. The single stage system proposed, requiring the immediate evacuation of the building, is sufficient in this instance. There are emergency nursing personnel present 24 hours a day on the first and second floors to assist in evacuation and a Fire Safety Plan is being approved and has been implemented.

The Applicant continued that the building exceeds the Code requirements in a number of respects. There is an addressable system installed, providing voice communication speakers throughout the building. In addition, there are smoke alarms in the individual suites which provide annunciation at the second floor nurse's station and the concierge desk. There are also smoke detectors in the corridors and the building is fully sprinklered, as required by the Code.

In summation, the Applicant put forth the position that, as the increased hazard is only present on the first two floors, the Code requirements for Group B, Division 3 occupancies in buildings three storeys or less, which would require only a single stage system, should apply in this instance.

6. Respondent's Position

The Respondent submitted that the Code requirement reads that a two stage system is required in buildings exceeding three storeys, containing a Group B, Division 3 occupancy. They have no authorization to vary from the Code requirements.

Based on the Applicant's assurances with respect to the physical condition of the occupants, the Respondent indicated that they are satisfied there would be no unnecessary risk involved in the mandatory evacuation of the building required by a single stage alarm system, however the wording of the Code does not permit them to accept this proposal.

7. Commission Ruling

It is the decision of the Building Code Commission that the four storey building that is to contain a Group B, Division 3 occupancy on the first and second floors and a Group C occupancy on the third and fourth floors and is proposed to be equipped with a single stage fire alarm system provides sufficiency of compliance with Clauses 3.2.4.3(1)(b)(c) and (e) of the Ontario Building Code at the Renaissance at Swan Lake, 6360 16th Avenue, Markham, Ontario.

8. Reasons

i. Only the first and second floors contain a Group B, Division 3 occupancy, hence the risks associated with this type of use apply to only two storeys, not the entire four storey building.

ii. There will be no compromise to the level of safety present.

iii. The Fire Department agrees with the single stage alarm system.

iv. The first and second storey occupants are not bedridden or on life support systems and are evaluated every three months.

Dated at Toronto this **12th** day in the month of **April,** in the year **2001** for application number **2001-24.**

BCC Ruling No. 01-17-810

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 01-17-810

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 8.2.1.3.(2) and Table 8.2.1.3.B. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Gary Maddock, General Manager-Operations, Cango Inc., Burlington, Ontario, for the resolution of a dispute with Mr. Dan Mousseau, Director of Building, City of Burlington, Ontario, to determine whether the proposed self-service gas bar with a drive-through window, at 6783 Guelph Line, Part Lot 10, Concession 4 N.S., R.R. # 2, Milton, Ontario, should be considered as a "service station" in accordance with Sentence 8.2.1.3.(2) and Table 8.2.1.3.B. of the Ontario Building Code.

APPLICANT
Mr. Gary Maddock, General Manager-Operations
Cango Inc.
Burlington, Ontario

RESPONDENT
Mr. Dan Mousseau
Director of Building
City of Burlington

PANEL
Mr. Bryan Whitehead, Chair

PLACE
Toronto, Ontario

DATE OF HEARING
April 12th, 2001

DATE OF RULING
April 12th, 2001

APPEARANCES
Mr. David Greenfield, President
D. Greenfield Associates Ltd.
Milton, Ontario
Agent for the Applicant

Mr. Paul Nickerson
Building Technologist
Burlington, Ontario
Designate for the Respondent

RULING

1. The Applicant

Mr. Gary Maddock, General Manager-Operations, Cango Inc., Burlington, Ontario, has applied for building permit under the Building Code Act, 1992 for the purpose of constructing a self-service gas bar and drive through kisok at 6783 Guelph Line, Part Lot 10, Con. 4 N.S., R.R. # 2, Milton, Ontario.

2. Description of Construction

The Applicant is proposing to construct a self-service gas bar with a kiosk containing a drive through window designed for the sale of take-out food items, including donuts, coffee, soft drinks, etc. The use has been classified as a Group E major occupancy. The total area of the building will be 120 m^2, with a portion dedicated to the drive through operation. With the exception of coffee, there will be no food preparation on site. The building design incorporates one water closet and a total of 8.5 plumbing fixture units. The gas bar will have two islands and 4 pumps that can service a maximum of eight (8) cars at any one time. There will be a total of two employees in the kiosk, one serving the gas bar patrons and the other providing service for the drive through. The building will be serviced by a private drilled well.

The site characteristics include a slope of 8% with a hardpan depth of 13.5 m and a depth of 10 m to the groundwater table. The soil on which the sewage system will be located consists of the existing clay base with a percolation time estimated to be greater than 50 minutes/centimetre and imported fill

providing a percolation time of 8 minutes/centimetre. The facility will operate with a Class 4, trench bed sewage system. According to the Applicant, the total daily design flow will be 3, 324 litres.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed self-service gas bar and drive through window kiosk should be considered a "service station" for the purpose of calculation of the total daily design flow under Article 8.2.1.3. and Table 8.2.1.3.B. of the Ontario Building Code.

Article 8.2.1.3. requires that, when calculating the total daily design flow for service stations, 950 litres for each water closet, in addition to the highest of the flow that would be generated from either the fuel outlets (at 560 litres per day each) or the number of vehicles served (at 20 litres per day per vehicle). The Code however, does not provide a definition for either service station or fuel outlet, but does stipulate that undefined terms shall have the meaning which is commonly assigned to them in the context in which they are used.

4. Provisions of the Ontario Building Code

8.2.1.3. Sewage System Design Flows

1. For *residential occupancies*, the total daily design *sanitary sewage* flow shall be at least the value in Column 2 as determined from Table 8.2.1.3.A. (See Appendix A.)
2. For all other *occupancies*, the total daily design *sanitary sewage* flow shall be at least the value in Column 2 as determined from Table 8.2.1.3.B. (See Appendix A.)
3. Where a *building* contains more than one establishment, the total daily design *sanitary sewage* flow shall be the sum of the total daily design *sanitary sewage* flow for each establishment.
4. Where an *occupancy* is not listed in Table 8.2.1.3.B., the highest of metered flow data from at least 3 similar establishments shall be acceptable for determining total daily design *sanitary sewage* flow.

Table 8.2.1.3.B. (Cont'd)

Other *Occupancies*

Forming part of Sentence 8.2.1.3.(2)

Establishments[1]	Volume (litres)
Service Stations (No vehicle	

washing)[4] a. Per water closet, and i. Per fuel outlet, or ii. Per vehicle served)	950 560 20

5. Applicant's Position

The Applicant stated that they are in the process of redeveloping the gas station currently located on site. The proposed self-service gas bar would serve a maximum of eight cars at any one time with an estimated 400 vehicles serviced per day. The Applicant submitted that, while he has agreed to use the Code provision for the food service portion of this development, it is inappropriate to use the calculation for daily design flow generated by the "service station" definition in Table 8.2.1.3.B. He argued that a gas bar is not a service station, since that would imply a more elaborate, full service operation. The flow calculated using the "service station" criteria in the Code far exceeds the expected flow that would be generated from a self-service gas bar use. As a result, the Applicant argued that the highest of the metered flow from three other similar establishments may be used in this instance.

In this regard, the Applicant provided metered readings from two establishments in Milton and one in Burlington that are operating similar gas-bar type uses. This data showed that the other facilities all produced a daily flow well below the level found in the Table. Therefore, the Applicant took the position that, to accurately calculate the flow rate from this proposal, the flow generated from the food service operation should be combined with the flow rate identified by using the data collected from similar area establishments.

6. Respondent's Position

The Respondent submitted that a gas bar, or gas station, is considered a service station and, therefore, Table 8.2.1.3.B. of the Ontario Building Code should be used. While the numbers in the table may appear high, it would be inappropriate to deviate from the approved calculation method which requires that the daily design flow be based on the Table for identified establishments.

7. Commission Ruling

It is the decision of the Building Code Commission that, while this type of facility is considered a service station for the purpose of calculating the total daily design flow under Article 8.2.1.3. and Table 8.2.1.3.B., given the location of the proposed facility and the water meter data provided from similar locations, the total daily design sewage flow may be calculated based on 560 litres per pump stand. Accordingly, the total daily design sewage flow for the gas bar portion of the facility will be 2240 litres per day, plus 950 litres for the washroom. The total daily design sewage flow for the drive through portion of the facility is not in dispute and will be negotiated between the parties based on the contributing area.

8. Reasons

i. The water meter data provided by the Applicant demonstrated that the flows calculated under Table 8.2.1.3.B. for a Service Station at this type of location may be considered excessive if the term fuel outlet refers to the number of cars serviceable at one time. It was demonstrated through this data that the average day water consumption on a monthly basis for three "similar" gas bars was well below the total daily design sewage flow calculated under Table 8.2.1.3.B. using the "fuel outlet" definition.

ii. (ii) The calculated total daily design sewage flow generated by the facility results in a leaching bed requiring in excess of 150 metres of distribution pipe and a pump, syphon or balancing system. This dosing will allow some "balancing" of occasional peak flows generated by short term intense use of the gas bar.

Dated at Toronto this **12th,** day in the month of **April,** in the year **2001** for application number **2001-20.**

Ruling Numbers 01-14-807 and 01-16-809
Application Numbers 2001-13 and 2001-25

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 3.2.5.13.(1) and Articles 3.2.7.4., 3.2.7.5. and 3.2.7.9. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Richard Cerny, V.P. Construction, Matthews Southwest Properties Inc., Mississauga, Ontario, for the resolution of two disputes with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, Ontario, to determine whether the building's proposed power system, that includes two independent supply connections to two separate street substations and one on-site co-generation plant, offered in lieu of a power supply system conforming with Article 3.2.7.5. of the Ontario Building Code (OBC) provides sufficiency of compliance with Sentences 3.2.7.4.(1) and 3.2.7.9.(4) of the OBC, and also to determine whether the proposed sprinkler system design offered as an alternative to NFPA 13, "Standard for the Installation of Sprinkler Systems", provides sufficiency of compliance with Sentence 3.2.5.13. (1) of the OBC at the Bell Mobility Centre, 5099 Creekbank Road, Mississauga, Ontario.

APPLICANT	Mr. Richard Cerny, V.P. Construction Matthews Southwest Properties Inc. Mississauga, Ontario
RESPONDENT	Mr. Agris Robeznieks Chief Building Official City of Mississauga
PANEL	Dr. Kenneth Peaker, Chair Mr. John Guthrie Mr. Fred Barkhouse
PLACE	Toronto, Ontario
DATE OF HEARING	March 29th, 2001
DATE OF RULING	March 29th, 2001
APPEARANCES	Mr. Frank Verri, Agent Frank Verri and Associates Inc. Mississauga, Ontario **Agent for the Applicant** Mr. Greg Phelps Supervisor - Fire Prevention Department Mississauga, Ontario **Designate for the Respondent**

RULING

1. The Applicant

Mr. Richard Cerny, V.P. Construction, Matthews Southwest Properties Inc., Mississauga, Ontario, has received a building permit under the Building Code Act, 1992 and is currently constructing an office complex known as the Bell Mobility Centre, 5099 Creekbank Road, Mississauga, Ontario.

2. Description of Construction

The Applicant is constructing a new office complex comprised of three separate oval-shaped towers, two of which will be six stories (the north and east towers) and one is to be four stories (the south tower). The ground floor, which is shared by all three towers, is to contain a call centre. The buildings are also connected at the "lower ground floor" (or concourse level). This space will be allocated for retail uses. Below this will be two levels of parking (referred to as floors P1 and P2) serving the entire complex with enough space for roughly 1,600 cars. A portion of the P1 level is to contain some amenity space that is to include washrooms, a lounge, internet stations and a games/arcade room. (The amenity portion of the P1 floor area was the subject of a different BCC hearing - BCC Ruling No. 01-15-808.)

The overall complex is classified as having a Group D - Business and Personal Services (office) occupancy with an ancillary Group E - Mercantile (retail) occupancy on the lower ground floor level. The building is described as six storeys in building height (not considered a high building under OBC 3.2.6.) and 79,247 m^2 (852,693 ft^2) in building area. It is of noncombustible construction and will be equipped with a full sprinkler system, a fully addressable fire alarm system and a standpipe and hose system complete with 38 and 63.5 mm (1 ½ and 2 ½ in) hose outlets.

The construction in dispute involves two areas; the emergency power supply to the building and the design of the sprinkler system.

Regarding power supply, it is the Applicant's intention *not* to maintain an on-site store of fuel to supply back-up generators nor to install individual battery packs throughout the building to provide emergency power. Instead, as an alternative source of normal and emergency power, he is proposing that the building be supplied by two independent 13.8 kV substations that will be connected to the local hydro utility. In addition, a co-generation plant is to be constructed that will generate power on-site and will be used primarily as a source of energy for the complex during daily peak demand power periods (when the hydro power rates are high). A switchboard system will automatically transfer electrical supply to the building between the two hydro substations and the co-generation plant.

According to the Agent's (for the Applicant) submission, "(t)he co-generation plant will be a separate, fire-rated structure attached to the building." The plant will contain four 1250 kW, 600V, 60 Hz generators "driven by natural gas supplied by the local utility." They will be installed "in accordance with requirements of CAN/CSA-C282-M89, "Emergency Electrical Power Supply for Buildings" with the exception of paragraph 6.4 "Fuel Supply"." As noted, an on-site fuel supply will not be provided as required by CAN/CSA-C282-M89. However, "(t)he residual fuel supply available to the co-generation plant in the event that the main gas valve is closed at the street will allow engines to operate for 30 minutes." To provide the anticipated 400 kW of emergency power required for lighting, building services and fire alarms in the event of a sudden loss of utility power,

"at least one generator will be kept running all the time so that it will be ready to pick up the life safety related loads within fifteen (15) seconds as required."

In essence, the Applicant's proposal is to provide a normal, daily power supply system that receives energy from a variety of sources which, in the Applicant's view, obviates the need for an independent, dedicated emergency back-up system.

The second area of dispute involves the corridor and office configuration and the proposed sprinkler system design. In particular, the Applicant is proposing a unique interior design for the office floors of the north, east and south towers of the complex where the main corridors would rise the full height (3.48 m, 11 ft, 5 in) between the floor slab and the underside of the floor slab above. For the areas where the actual offices and work stations would be located the Applicant is proposing a typical drop ceiling installation fixed at 737 mm (2 ft, 5 in) below the underside of the ceiling slab. The construction in this ceiling cavity contains, in the Agent for the Applicant's words, "virtually no combustible material".

The perimeter walls, where the offices meet the corridors under this proposal, would not be extended to the underside of the floor slab above. Instead, these walls would terminate at the height of the drop ceiling. The Applicant is proposing to provide sprinkler heads in the ceiling of the office area, but not in the concealed space above. In addition, in the corridor near the opening where the upper portion of the corridor walls meet the ceiling cavity, the Applicant is also proposing to hang from the slab above (at the same height as the office ceiling) a 457 mm (18 in) wide noncombustible cable tray for the many communication wires, cables and fibre optics.

The construction in dispute involves the opening where the corridors connect to the ceiling cavity and the lack of sprinklering in the concealed space above the offices. In more typical office interior design the drop ceiling would either cover the entire floor area or be fully enclosed. In other instances the drop ceiling may be omitted completely.

As an alternative to either providing a fully enclosed ceiling space or sprinklering the ceiling cavity, the Applicant is proposing to protect the opening or connection between the corridor and the ceiling cavity by installing closely spaced, quick response sprinklers in the corridors near the underside of the ceiling slab (305 mm, 12 in or less) above the office perimeter walls. The Applicant is also proposing to construct a baffle that is attached to, and projects 584 mm (23 in) down from the ceiling slab so that it terminates within 152 mm (6 in) of the top of the drop ceiling. This baffle is to run the length of the opening and would be set back into the space above the drop ceiling by approximately 305 to 457 mm (12 to18 in), as measured from the outer side of the office perimeter wall and sprinkler head above.

The Applicant is proposing this interior office design and sprinkler system installation because the building's occupant - a telecommunications corporation - will require nearly continuous access to the cable trays and hence the trays are intended to be put in the upper portions of the corridors. Extending the perimeter walls to the underside of the ceiling slab would not be feasible, in the Agent's opinion, due to the number of cables that would run from the cable trays to serve the adjacent office floor areas. In addition, the Agent notes that "(i)nstalling sprinkler heads above the finished ceilings is also not feasible due to the number of obstructions located above the finished ceilings and the logistics of maintaining unobstructed sprinkler coverage." As well, the Agent notes that the full height corridors, with exposed floor slab, sprinkler lines and cable trays is the aesthetic the occupants desire.

3. Dispute

There are two issues at dispute between the Applicant and Respondent. The first dispute is whether the building's proposed power system, that includes two independent supply connections to two separate street substations and one power producing on-site co-generation plant, offered in lieu of a power supply system conforming with Article 3.2.7.5., provides sufficiency of compliance with Sentences 3.2.7.4.(1) and 3.2.7.9.(4) of the Ontario Building Code.

Prior to examining the Code provisions in dispute it should be noted that Article 3.2.7.5. pertains to the requirement for emergency power and how it is to be installed. In contrast, Sentences 3.2.7.4.(1) and 3.2.7.9.(4) discuss the emergency services, lighting and water supply for fire fighting respectively, and the performance thereof that are to be provided by the emergency power required in Article 3.2.7.5. Similarly, Article 3.2.7.8., the provision requiring emergency power for fire alarm systems, is another service to be provided through the emergency power supply.

Article 3.2.7.5. of the OBC determines the installation requirements for an emergency power system. This Article states, with certain exceptions that are not applicable in the present instance, that an emergency electrical power system must be installed in accordance with CAN/CSA-C282-M, "Emergency Electrical Power Supply for Buildings". Section 6.4.1. of this standard requires that "sufficient fuel supply shall be maintained on site at all times... for at least 2 h."

Clause (1)(a) of Article 3.2.7.4. sets out the requirements for an emergency power supply to provide for emergency lighting in the event that regular power supply is interrupted. Clause (1)(b) stipulates the length of time that the required emergency power system must provide emergency lighting. As the subject structure is not a high building nor a Group B occupancy, 30 minutes of emergency power is the required duration for lighting as mandated in Subclause 3.2.7.4.(1)(b)(iii).

Emergency water supply for fire fighting purposes is required by Sentence 3.2.7.9.(4). In particular, this provision stipulates, with an exemption in Sentence (5) which is not applicable here, that for buildings not within the scope of Subsection 3.2.6. (high buildings), an emergency generator capable of operating under a full load for at least 30 minutes must be provided.

As noted above, the Applicant is proposing a power supply system for this complex that differs from the typical power supply hook-up for most buildings. The multiple electrical service connections and sources of power are offered as an alternative to providing two hours of fuel supply on-site. At issue is whether the Applicant's proposed power supply is equivalent, (i.e., provides sufficiency of compliance) or in fact is superior, to more typical power supply arrangements such as a single source hydro connection combined with on-site emergency back-up generators. In other words, are the engineered levels of power supply contingency the Applicant maintains has been designed into this system, adequate to permit the omission of the mandatory emergency power generation system, which is independent of the public utility grid and still meet the intent of OBC requirements?

If the BCC determines that the proposed power system is an acceptable alternative, the associated question then becomes whether, in lieu of a dedicated, independent emergency back-up system, the power supply arrangement is adequate in terms of fulfilling the requirements of emergency power for lighting and water supply for fire fighting purposes.

The second issue in dispute is whether the proposed sprinkler system design offered as an alternative to NFPA 13, "Standard for the Installation of Sprinkler Systems", provides sufficiency of compliance with Sentence 3.2.5.13. (1) of the OBC.

This provision requires, with certain exemptions that are not applicable to the issue at hand, that sprinkler systems be designed, constructed, installed and tested according to NFPA 13, "Standard for the Installation of Sprinkler Systems". As a referenced document in the OBC, in order to comply with Sentence 3.2.5.13.(13), it is necessary to conform with the standards set out in NFPA 13. Again, similar to the above issue regarding the proposed emergency power supply system, the partially enclosed drop ceiling space combined with the sprinkler system configuration is not specifically addressed by the Code nor its referenced document - the NFPA 13 standard.

The general rule of sprinkler protection under NFPA 13 is found in Sentence 4-1.1 of that standard where it states that sprinkler protection is to be provided throughout the entire building unless it is specifically exempt. Section 4-13.1 of NFPA 13 deals with concealed spaces. This Section does permit some exemptions to the requirement for sprinkler protection.

Clause 4-13.1.1. states that "all concealed spaces enclosed wholly or partly by exposed combustible construction shall be protected by sprinklers." This provision is then followed by 10 exceptions that permit sprinklers to be waived in such spaces. This Clause and the exceptions to it, however, all deal with concealed spaces that contain at least some "exposed combustible construction". As the space above the drop ceiling is comprised of non-combustible construction, the relevance of this Clause then is the corollary to it which is that a concealed space of noncombustible construction would not require sprinkler protection. Put another way, waiving sprinklers from a noncombustible concealed space may not be a specific exception under NFPA 13, but doing so is not prohibited according to that standard either.

The Applicant and the Respondent appear to agree on the above reading of NFPA 13[1]. Where the issue arises between them, however, is whether omitting sprinklers is allowed for partially enclosed spaces as is proposed in this instance. On this matter NFPA 13 appears to be silent.

The Applicant is also proposing the closely spaced sprinkler arrangement in conjunction with baffles as a method to protect the openings to the ceiling cavity. This configuration of sprinklers and baffles is permitted within NFPA 13 as a way to protect openings in floor assemblies in interconnected floor spaces. The Applicant, however, is offering this method as an alternative form of protection for an opening in a wall assembly. This method of protecting an opening in a wall assembly is not recognized by NFPA 13.

At issue, therefore, is whether a concealed space constructed entirely of noncombustible construction for which no sprinklers are proposed is permitted to be only partially enclosed. In addition, do closely spaced, quick response sprinklers combined with baffles provide adequate protection for this opening to the concealed space above the drop ceiling?

For the sake of convenience, since both aforementioned issues relate to the same project on the same site which is currently under construction, the Commission offered that the matters could be heard concurrently. The parties consented to a simultaneous hearing. Accordingly, the BCC's intention is to provide a single ruling document for the two items at issue.

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[1] The Designate submitted two Formal Interpretation documents from NFPA which described scenarios of fully concealed spaces containing near total noncombustible construction. The interpretations from NFPA indicate that no sprinklering is required in these situations.

4. Provisions of the Ontario Building Code

Sentence 3.2.7.4.(1) Emergency Power for Lighting

(1) An emergency power shall be
(a) provided to maintain the emergency lighting required by this Subsection by a power source such as batteries or generators that continue to supply power in the event that the regular power supply to the *building* is interrupted, and
(b) so designed and installed that upon failure of the regular power it will assume the electrical load automatically for a period of
(i) 2 h for a *building* within the scope of Subsection 3.2.6.,
(ii) 1 h for a *building* of Group B *major occupancy* classification that is not within the scope of Subsection 3.2.6., and
(iii) 30 minutes for a *building* of any other *occupancy*.
(See Appendix A)

Article 3.2.7.5. Emergency Power Supply Installation

(1) Except as required by Articles 3.2.7.6. and 3.2.7.7., an emergency electrical power system shall be installed in conformance with CAN/CSA-C282-M, "Emergency Electrical Power Supply for Buildings". (See Sentence 3.2.7.8.(5) for emergency power supply for voice communication systems.)

Sentence 3.2.7.9.(4) Emergency Power for Building Services

(4) Except as provided by Sentence (5), an emergency power supply capable of operating under a full load for not less than 30 minutes shall be provided by (an) emergency generator for water supply for fire fighting in conformance with Article 3.2.5.7., if the supply is dependent on electrical power supplied to the *building*, and the *building* is not within the scope of Subsection 3.2.6.

Sentence 3.2.5.13.(1) Automatic Sprinkler Systems

(1) Except as permitted by Sentence (2), (3) and (4), an automatic sprinkler system shall be designed, constructed, installed and tested in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems". (See Appendix A.)

5. Applicant's Position

On the issue of the emergency power supply, the Agent for the Applicant submitted that the proposed power arrangement was an alternative to that typically envisaged in the OBC. He stated that the proposal, which emphasizes multiple sources of power, is at minimum equivalent, and quite likely superior, to a conventional power supply for a building and, therefore, an emergency power system as specified under OBC Article 3.2.7.5. is not necessary. And because this alternative power supply proposal provides multiple sources of energy, in essence, it negates the need to provide a separate emergency back-up system dedicated to supplying emergency power needs, including lighting and water supply for fire fighting. As such, the proposal, he asserted, provides sufficiency of compliance with the requirements of Sentences 3.2.7.4.(1) and 3.2.7.9.(4) of the OBC.

The Agent continued that the size and nature of the building lends itself to the proposed alternate

power arrangement. He explained that there are three sources of power, two power plants and a co-generation plant, all of which switch back and forth using sophisticated switching equipment. In his view, this arrangement is completely adequate for the power requirements in both normal and emergency situations. The proposal aims to avoid single dependency situations that cause complete shut-downs as happened during the ice storm. However, in addition to these three sources of power, the Agent noted that they are also proposing to have 30 minutes of available natural gas fuel supply stored at the site.

The Agent argued that standards other than the OBC allow more flexibility in terms of back-up power supply. The Code, he noted, does not provide alternatives. It assumes that there is only one source of power and that is from the street. The Code does not recognize that this building has two lines from the street direct to two substations and that power is actually produced on-site at the co-generation plant. And it is because of this multiple power source arrangement, the Agent reiterated, that a dedicated emergency power system is not necessary.

As support for this position the Agent submitted letters from Mulvey and Banani, his electrical engineers, stating: "With two reliable sources of energy (Hydro and Gas), three different sources of power as mentioned above, including a total of four on-site generators, very sophisticated synchronizing and control switchgear arrangement, we trust the possibility of losing electrical power is essentially eliminated. We even opine that this proposed power supply arrangement will in reality provide a level of security of supply higher than that stipulated in CSA Standard C282, under which only two sources of power are provided and the diesel generator is required to cold start."

The Agent noted that, as this is not a high building regulated under Subsection 3.2.6. of the OBC, the complex is only required under Subclause 3.2.7.4.(1)(b)(iii) to provide 30 minutes of emergency power to supply the light fixtures. He noted that this 30 minute supply could be possible with the installation of "individual battery packs throughout the building." Nevertheless, his position was that the "proposed electrical system for the project would provide normal and emergency power to all lighting fixtures throughout the building including elevators, public address systems, etc., subject to a major failure of both electrical service feeds and fuel supply to the building at the same time."

The Agent further noted that for this project, again since it is not a high building within the scope of Subsection 3.2.6., "where fire pumps are installed, (the Code) would require a minimum 30 minutes emergency power supply, provided by generators, where the fire pump is dependant (sic) on electrical supply to the building." He argued that, as with emergency lighting, the proposed electrical system, with its multiple sources of energy, would provide adequate normal and emergency power supply to satisfy the water supply for fire fighting Code requirement. The Agent also argued that NFPA 20, "Standard for the Installation of Centrifugal Fire Pumps", allows more flexibility in providing emergency power to supply water for fire pumps than the OBC. He indicated that this standard permits, subject to the authority having jurisdiction, electric drive pumps to be fed from a single public or private utility, two independent public or private utilities, emergency generators, or a combination of both.

As a summation of his position regarding emergency power supply, the Agent rebutted the Designate's comment that fire departments routinely cut off power sources to a property as part of their initial fire fighting strategies. He stated that the level of fire fighting pre-planning conducted by many fire departments today means that shut off of power supply is not automatic. He also reiterated that under his proposal the subject complex would receive an uninterrupted 24 hour a day power supply that would be available for emergency uses as well. In contrast, the Code only requires 30 minutes of emergency power for this building and its required emergency services.

On the issue of sprinkler design, the Agent stated that he is proposing an alternative to the Code required NFPA 13 standard for sprinklers. His intention is to use this configuration for nearly all of the principle corridors throughout the office floors of the north, east and south towers. He said they are proposing this sprinkler configuration because they are attempting to design the building specific to its use, in this case, a high tech facility. As such, the building has countless communication wires, cables and fibre optics and in order to update, modernize and repair this equipment, they were looking for a design with maximum flexibility, referred to as a "web cool" approach. Their solution was to hang the cable trays in the upper portions of the corridors where they would be completely accessible with minimal disruption to the offices and the existing construction. The ceiling cavity under his proposal, the Agent noted, will be used as a plenum.

The Agent provided the following rational as to why his sprinkler design proposal is acceptable as a "compliance alternative":

"The majority of the area exposed to the ceiling (cavity) is a corridor with no combustible content.

"There is virtually no combustible materials located above the finished ceiling space.

"This alternative approach mirrors the design approach in NFPA 13 for protection of opening between floors.

"The proposed wall with closely spaced 'quick response' sprinklers would prevent heat from migrating through to above the finished ceiling."

The Agent noted that the baffles would be constructed throughout most of the corridors where the openings above the drop ceiling are present and in some parts of the ceiling cavity they would also provide sprinkler protection. He concluded by stating that, in his view, the proposal still meets the intent of NFPA 13 while also offering the flexibility of design and use his clients require in their building.

6. <u>Respondent's Position</u>

Regarding the issue of emergency electrical power supply, the Designate for the Respondent submitted that the Applicant's proposal, in their view, does not comply with the OBC, nor other standards or authorizations. As they stated in their submission:

"Article 3.2.7.5. of the OBC requires emergency electrical power to be installed in conformance with CAN/CSA-C282-M, Emergency Electrical Power Supply for Buildings.

"Emergency electrical power is required for this complex in the event of an interruption of the normal supply to the building. Neither the OBC nor the C282 standard appear to consider multiple electrical service connections to a building as an acceptable alternative to providing an emergency power generation system independent of the public utility grid.

"Under 6.4 of CAN/CSA-C282, a sufficient supply of fuel for the in-house generation of electrical energy shall be maintained on site, at all times, to operate the engine under full load for not less that (sic) two hours.

"BMEC authorization 96-05-204 describes the specific terms and conditions for the use of a Natural Gas Emergency Standby Power system and the requirements for on site fuel storage.

"The data currently submitted to this Corporation does not indicate that on site storage of fuel is included in the current design nor does it confirm that the emergency generator meets the requirements of CAN/CSA-C282-M or that it is a BMEC authorized system.

"Consequently, we do not believe that it meets the minimum requirements of 3.2.7.5. of the OBC."

The Designate also added that NFPA 20 only applies to emergency power supply for fire pumps. Therefore, the flexibility the Agent claims that it provides in terms of back-up power supply is not particularly germane to the complete water supply requirements found in Sentence 3.2.7.9.(4).

To conclude this portion of their argument, the Designate stated that the Building Code requires two hours of fuel to be stored on-site. This is consistent with the Ontario Fire Code (which deals with the operation of buildings), specifically Part 6, which also requires two hours of emergency stored fuel. On-site storage of fuel, he argued, was necessary because fire fighters typically cut power to a property in order to reduce the risk when fighting a fire. He stated that it would be onerous on the fire department to create individual information about how each property is supplied with power. He asked that if this proposal is approved, a maintenance document for the property should be attached to the BCC decision. Lastly, the Designate commented that since this is new construction, he did not understand why the Applicant cannot meet Code.

With respect to the issue of sprinkler design, the Designate submitted the following statement:

"Article 3.2.5.13. of the OBC requires that the entire building be sprinkler protected in conformance with NFPA 13.

"NFPA 13 requires that the entire structure be protected with automatic sprinkler(s) unless specifically exempted. One case where protection would be exempt is within totally enclosed, non-combustible concealed spaces. To provide further clarification on the issue of spaces above suspended ceilings, we reference 1999 edition of NFPA 13, 5-13.23 which indicates that protection is required unless the ceiling cavity is totally enclosed[2].

"The use of closely spaced quick response sprinklers to protect the opening into the ceiling space is not recognized by either the OBC nor NFPA 13. This type of design is typically used to augment the protection of openings through floor assemblies, such as inter-connected floor spaces, in which sprinkler protection is provided throughout both compartments, both above and below, and just at the interface.

"No documentation has been submitted such as an opinion or formal interpretation from NFPA to support this proposal and therefore, we are not satisfied that it provides the level of protection required by the OBC and its referenced standard."

The Designate added that their opinion is based on the belief that a concealed space, in order to be a concealed space, must be totally enclosed, otherwise "it cannot be defined as a concealed space." Consequently, if an area is required to be a concealed space in order to eliminate sprinklers under NFPA 13, then it should be completely enclosed. As a result, the corridor wall should be extended to the underside of the ceiling. He continued that he was concerned that the Technical Background Information memo produced by the Ministry's Housing Development and Building Branch for this particular hearing erred in concluding that a concealed space need not be totally enclosed. Because

[2] The current version of the OBC (1997) references the 1996 edition of NFPA.

of this, the Designate argued that the Ministry reached the wrong conclusion regarding the need for sprinkler protection in the ceiling cavity. He suggested that the Ministry "obtain an interpretation directly from NFPA on the definition of a concealed space and the acceptability of the alternative approach."

The Designate concluded by stating that the use of closely spaced, quick response sprinklers in conjunction with baffles is not described in any edition of NFPA 13 and therefore their position was that it is not an acceptable method of omitting the required sprinkler protection in the ceiling cavity.

7. Commission Ruling

It is the decision of the Building Code Commission that the building's proposed power system, that includes two independent supply connections to two separate street substations and one on-site natural gas co-generation plant, does not provide sufficiency of compliance with Sentence 3.2.7.5.(1) of the Ontario Building Code (OBC).

It is also the decision of the Building Code Commission that the proposed sprinkler system design, which includes baffles and close-space sprinkler coverage employed to provide protection with respect to a partially enclosed concealed ceiling space, provides sufficiency of compliance with Sentence 3.2.5.13.(1) of the OBC.

8. Reasons

Re: Proposed Power Supply System

i) Sentence 3.2.7.5.(1) of the OBC, which references Article 6.4.1. of CAN/CSA-C282-M89, requires that two hours worth of fuel be provided on-site for the purposes of operating an in-house generator. The proposed power system for the subject building provides, according to the Applicant, only 30 minutes of stored fuel supply.

ii) The necessary two hour fuel supply is a separate requirement articulated in the OBC than that required for the duration of emergency power for lighting, fire alarm systems and building services. The OBC 3.2.7.5.(1) fuel storage requirement is irrespective of the length of time emergency power is required for services under Articles 3.2.7.4., 3.2.7.8. and 3.2.7.9. Indeed, the only exceptions to Sentence 3.2.7.5.(1) and its referenced standard are the emergency power for hospitals and, under certain circumstances, the installation of fuel supply shut-off valves and exhaust pipes.

iii) Fire fighters routinely cut off natural gas supply to a site when approaching for fire fighting purposes. This practice would leave the proposed co-generation plant, and thereby the subject building, with far less than the required two hour fuel supply. Moreover, the lack of back-up fuel would also become an issue during calamitous weather conditions that may debilitate both near-by substations.

Re: Proposed Sprinkler System

i) OBC 3.2.5.13.(1) references NFPA 13, "Standard for the Installation of Sprinkler Systems". Subsection 4-13.1 of NFPA 13 permits that the concealed space need not be fully enclosed.

ii) The construction located in the ceiling space is noncombustible.

iii) A baffle and close-spaced sprinklers (located on the corridor side of the baffle) will be provided.

iv) The location of the close-spaced sprinkler heads will augment the protection provided by the baffle and will also protect the corridor.

Dated at Toronto this **29th,** day in the month of **March,** in the year **2001** for application numbers **2001-13 and 2001-25**.

Dr. Kenneth Peaker, Chair

Mr. John Guthrie

Mr. Fred Barkhouse

Ontario

Ruling # 01-12-805
Application # 2000-83

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Articles 9.26.5.1. and 9.26.5.2. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Gary Treusch, Freure Riverwalk Ltd., Kitchener, Ontario, for the resolution of a dispute with Mr. Larry Simonato, Chief Building Official, City of Cambridge, Ontario, to determine whether the as-built roofs with a slope of 7 ½/12 that was not constructed with eave protection, except one layer of 15 lb building paper, provides sufficiency of compliance with Article 9.26.5.2. of the Ontario Building Code at the Riverwalk Condominiums, 333-385 George Street North, Cambridge, Ontario.

APPLICANT	Mr. Gary Treusch, Freure Riverwalk Ltd. Kitchener, Ontario
RESPONDENT	Mr. Larry Simonato Chief Building Official City of Cambridge
PANEL	Dr. Kenneth Peaker, Chair Mr. Fred Barkhouse Mr. John Guthrie
PLACE	Toronto, Ontario
DATE OF HEARING	April 26th, 2001
DATE OF RULING	April 26th, 2001
APPEARANCES	Mr. Gary Treusch Freure Riverwalk Ltd. Kitchener, Ontario **The Applicant**

RULING

1. The Applicant

Mr. Gary Treusch, Freure Riverwalk Ltd., Kitchener, Ontario, has received an order to comply under the Building Code Act, 1992 to remedy an alleged deficiency in the eave protection for the Riverwalk Condominiums at 333-385 George Street North, Cambridge, Ontario.

2. Description of Construction

The Applicant has constructed a multi-unit residential development for condominium ownership, having a Group C major occupancy. The development was constructed in several phases over the past five years, with the most recent phase being completed in 2000. The buildings are single storey in building height, designed in a row house or quatroplex format. There are 15 buildings with four dwelling units per block, for a total of 60 units within the development.

The construction in dispute involves the eave protection for these buildings. The roof pitch is 7½ to 12 and the eaves have been protected with one ply of 15 lb asphalt-saturated felt. The roofs have also been shingled with 230 lb shingles having a 20 year product warranty. At each phase of development the condominium buildings passed inspection with the municipality and occupancy permits have been issued for all of the built units. Through a private audit on select units, however, it was discovered that the level of eave protection installed by the roofing contractor was not according to plans and was inadequate to comply with the requirements of the Ontario Building Code.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the one ply of 15 lb asphalt-saturated felt, installed on the building roofs having a slope of 7 ½ in 12 provides sufficiency of compliance with Article 9.26.5.2. of the Ontario Building Code.

Subsection 9.26.5. outlines the OBC requirements for "Eave Protection for Shingles and Shakes". In particular, Article 9.26.5.1. requires eave protection on all shingle roofs, with the exceptions to this requirement listed in Sentence 9.26.5.1.(2). Clause 9.26.5.1.(2)(d) specifically, is applicable in this instance. It exempts roofs from eave protection where the roof has a slope of 1 in 1.5 or greater. A roof with a pitch of 8/12 would provide this slope, however, with a slope of 7½ to 12 as is the case in the subject development, the benchmark for the exemption from eave protection is not met.

Article 9.26.5.2 outlines the materials required for eave protection. In this case, with a roof pitch of 7½/12, either one layer of 50 lb asphalt felt or two layers of 15 lb asphalt felt, cemented together with lap cement would be required. As noted, the Applicant has installed only one layer of 15 lb asphalt-saturated felt on these roofs.

4. Provisions of the Ontario Building Code

9.26.5.1 Required Eave Protection for Shingles and Shakes

(1) Except as provided in Sentence (2), eave protection shall be provided on shingle, shake

the roof slope to a line not less than 300 mm (11 ¾ in) inside the inner face of the exterior wall.

(2) Eave protection is not required
(a) over unheated garages, carports and porches,
(b) where the roof overhang exceeds 900 mm (2 ft 11 in) measured along the roof slope from the edge of the roof to the inner face of the exterior wall,
(c) on roofs of asphalt shingles installed in accordance with Subsection 9.26.8.,
(d) on roofs with slopes of 1 in 1.5 or greater, or
(e) in regions with 3 500 or fewer degree-days.

9.26.5.2. Materials

(1) Eave protection shall be laid beneath the starter strip and shall consist of
(a) No. 15 asphalt-saturated felt laid in two plies lapped 480 mm (18 7/8 in) and cemented together with lap cement,
(b) Type M or S roll roofing laid with not less than 100 mm (4 in) head and end laps cemented together with lap cement,
(c) glass fibre or polyester fibre coated base sheets, or
(d) self-sealing composite membranes consisting of modified bituminous coated material.

5. Applicant's Position

The Applicant submitted that an independent technical audit commissioned by the owners uncovered that, despite the pitch of the roof being 7 ½ /12, there was only one ply of 15 lb felt applied at the eaves. The building plan originally called for two plies, however, the installer inadvertently provided only one. He recognized the deficiency in the eave protection relative to the Code requirement, however, as the roof pitch is only slightly less than the 8/12 slope which would provide exemption from any type of eave protection, he believed that the effect would be negligible.

The Applicant stated that his company has been in business for 47 years with an estimated 8,000 homes built during that time. In his experience it has been found that ice damming occurs only on lower sloped roofs (i.e., less than 6/12 pitch). In addition, he advised that the buildings are provided with 230 lb shingles, exceeding Code requirements. Most buildings, he noted, have only 210 lb shingles. (The installed shingles also carry a 20 year guarantee which also surpasses the usual 15 year guarantee that most house shingles possess.) As a result, the Applicant argued that adequate protection from ice damming will be provided by the one layer of felt and the higher grade shingles.

The Applicant also submitted that some of the roofs in question had been in existence for 5 years with no leaks reported. The Applicant stated that it may be more detrimental to the integrity of the roofs if repairs were to be undertaken at this point. All roofs have been installed and have had an opportunity to seal. If repairs were to be conducted, which would include the removal of 900 mm of shingles to apply the additional layer of felt, the "monolithic" layer of shingles would be damaged. In his opinion, this would provide a seal that " would be inferior to what is there now."

6. Respondent's Position

The Respondent did not attend the hearing. The Commission therefore relied only on his written submission which concluded:

"The Builder, Freure Homes, was issued a Building Permit based upon the plans showing eaves protection of 50 lb Felt for the roofs. We have been advised by Freure Homes, the builder, that the roofer applied 1 layer of 15 lb felt paper only. Although this can be used to suggest that the builder attempted to meet the 'intent' of the code, the 1 ply does not meet the code either.

"We have also been advised by the builder that the roof slope is actually 7 ½ to 12. This is short of the actual code requirement by ½ inch, the code being 8 to 12 before eaves protection may be eliminated. A review of the plans also showed the slope of the roofs to be 7.5 to 12."

The Respondent concluded by indicating that they will rely on the ruling of the Commission with respect to whether sufficiency of compliance for the eave protection has been provided in this development.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-built roof with slope 7 ½ to 12 that was not constructed with eave protection, except one layer of 15 lb building paper provides sufficiency of compliance with Article 9.26.5.2. of the Ontario Building Code at the Riverwalk Condominium, 333-385 George Street North, Cambridge, Ontario on condition that:

a) The builder will provide a 10 year warrantee on installation and workmanship for the roofs.

8. Reasons

i) The slope is very close (at 94%) to the pitch required for exemption from the eave protection requirement in the Ontario Building Code.
ii) One layer of 15 lb building paper has been provided.
iii) Most roofs are provided with 210 lb shingles. These roofs have 230 lb shingles with a 20 year warrantee.
iv) The manufacture's warrantee remains in effect.
v) Some roofs have been in place for 5 years without a problem.

Dated at Toronto this **26th,** day in the month of **April,** in the year **2001** for application number **2000-83.**

Dr. Kenneth Peaker, Chair

Mr. Fred Barkhouse

Mr. John Guthrie

Ruling No. 01-11-804
Application # 2001-12

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentences 3.7.2.1.(1) and 9.7.1.2.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Liz Root, Employee, Context Ideal Inc., for the resolution of a dispute with Yaman Uzumeri, Chief Building Official, City of Toronto, to determine whether the proposed design of the original Verona Suite plan, that includes a windowless, enclosed "study" room, complies with Sentences 3.7.2.1.(1) and 9.7.1.2.(1) of the Ontario Building Code at the Ideal Condominium building, 301 Markham Street, Toronto, Ontario.

APPLICANT	Liz Root, Employee Context Ideal Inc. Toronto, Ontario
RESPONDENT	Yaman Uzumeri Chief Building Official City of Toronto
PANEL	Len King, Vice-Chair Fred Barkhouse Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	March 15th, 2001
DATE OF RULING	March 15th, 2001
APPEARANCES	Allan Larden Larden Muniak Consulting Inc. Toronto, Ontario **Agent for the Applicant** Ashraf Hakimjee Building Engineer Toronto, Ontario **Designate for the Respondent**

RULING

1. The Applicant

Liz Root, Employee, Context Ideal Inc., Toronto, Ontario, has received a building permit under the Building Code Act, 1992 and is presently constructing a residential high rise structure known as the Ideal Condominium building, at 301 Markham Street, Toronto, Ontario.

2. Description of Construction

The Applicant is erecting a Group C - residential condominium tower, nine storeys in building height and 1,100 m^2 in building area. Like most condominium towers, the Ideal project contains various suite options with differing design configurations. Among the options is a unit known as the Verona which is rectangular in shape and measures approximately 6 m by 10 m (not including terrace) with the narrow dimension facing the exterior.

The Verona is described as a one bedroom suite approximately 600 m^2 in area that includes an entrance hallway, an open kitchen, a three piece bathroom, a living/dining/bedroom area and a study. The rooms are configured with the entrance hallway and adjacent study located in the interior, or corridor, end of the suite. The mid portion of the unit is occupied by the bathroom which is divided from the open kitchen. The exterior end of the suite in the revised plan contains the main room of the unit; the combined living/dining/bedroom area. This space faces out towards a full width terrace.

As shown on the original plans, the study was a four wall enclosure with a closet, no window and direct access to the bathroom. At the other end of the suite, the bedroom on these plans was to be an enclosed room with two small bedside closets, direct bathroom access and a glazed sliding door providing walkout access to the balcony. A non-structural wall with paired sliding doors was proposed to separate the bedroom from the living/dining area.

After discussions with the City, the plans were revised to remove the door and a connected portion of wall from the study. The intent of this was to partially open up the study to the cooking area in order to introduce “borrowed light” from the exterior of the suite. All other aspects of the study, however, remain as before. The living/dining and bedroom areas were also modified in the revised plan. The bedside closets were removed and the partition wall between the living/dining space and the bedroom was made optional and could be included at the request of the purchaser. The result of this change created a combined living/dining/bedroom space that has no closets and is integrally connected to the open kitchen.

The construction in dispute involves the provision of windows when considering the proposed layout of the original Verona suite, specifically the designated versus intended function of the study and the bedroom areas.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed design of the original Verona Suite plan, that includes a windowless, enclosed “study” room, complies with Sentences 3.7.2.1.(1) and 9.7.1.2.(1) of the Ontario Building Code at the Ideal Condominium

building.

The first provision, Sentence 3.7.2.1.(1), requires (with certain exceptions not applicable here) that every room in a Part 3 building such as the Ideal Condominium used for sleeping and every principal room be provided with windows sized according to the standards prescribed in Part 9 of the OBC. Principal rooms are not a defined term in the OBC, they are simply referred to as rooms "such as a living room, dining room or combination thereof". OBC 3.7.2.1.(1) offers no indication as to whether a study is to be considered as a principal room.

The reference in Sentence 3.7.2.1.(1) to Part 9, it should be noted, is for window sizing only. OBC 3.7.2.1.(1) also makes clear that the requirements of Article 9.7.1.3. (which deals with requirements for using a bedroom window as a means of escape) do not apply.

Sentence 9.7.1.2.(1), then is where the OBC sets out its requirements for window sizes for both Part 3 (as referred in Sentence 3.7.2.1.(1)) and Part 9 residential occupancies. Table 9.7.1.2. is included as part of this Sentence. As study rooms are not specifically cited on this table nor are "principal rooms", the category found on the lowest row, "Bedrooms and other finished rooms not mentioned above", becomes applicable. For rooms in this catch-all category five per cent unobstructed glass area is mandated.

Thus, it seems apparent that if the study room in question can be considered either as a bedroom or a principal room then, by reference to Part 9, specifically Table 9.7.1.2., at least some window area is required. However, if the room is deemed not to be either a bedroom or principal room as described in Sentence 3.7.2.1.(1) no reference to the table occurs, in which case no window area would be required.

Based on the revised plans the Applicant obtained a building permit, but is now requesting that the original design be reinstated. This proposed reversion back to the first design created the subject dispute with the municipality. The essence of this dispute then is whether the rear room as originally designed within the proposed Verona suite is required to be provided with direct access to natural light by means of windows or other such wall openings to the exterior.

4. Provisions of the Ontario Building Code

Sentence 3.7.2.1.(1) Window Areas

(1) Except as provided in Sentences (2) and (3) or otherwise permitted, every room used for sleeping in any *building*, and every principal room such as a living room, dining room or combination thereof in *dwelling units* shall be provided with windows having areas conforming to Part 9, except that Article 9.7.1.3. does not apply. (See Appendix A.)

Sentence 9.7.1.2.(1) Minimum Window Areas

(1) Except as required in Article 9.7.1.3. and Sentence (3), the minimum window glass area for rooms in *buildings* of *residential occupancy* or which are used for sleeping shall conform to Table 9.7.1.2.

5. Applicant's Position

The Agent for the Applicant submitted that the study is not a principal room and therefore no window is required. Indeed, without status as a "principal room" Sentence 3.7.2.1.(1) cannot be used as the basis for referral to Table 9.7.1.2. The municipal officials, he argued, seem to have ignored the "principal room" test and are simply applying the "finished room" criteria found in Table 9.7.1.2. The Agent noted that, when determining the requirements of a Part 3 building, proper application of the OBC requires that the room be evaluated to determine whether it is considered as a principal room. If so, only then are the Table 9.7.1.2. requirements applicable.

The Agent then offered some history of how the dispute arose. He acknowledged that they wanted the rear, interior room with no window to be considered as a bedroom. The City, however, refused. Consequently, the Applicant revised the plans to make this room into a study. Along with this change were several design modifications that were intended to let borrowed, or second hand, light into the study from the perimeter of the suite.

Regarding the issue as to the ultimate use of the study space, the Agent argued that the Code cannot "constrain the ultimate manner in which a dwelling unit occupant uses his or her space". It is impossible to control whether someone will sleep in the study. To attempt to do so would be fruitless micro-managing by the state in terms of how people use their space. As a result, it makes no sense to focus the hearing on the likely use of the disputed room. Instead, he reiterated that the subject dispute should be centred on whether or not the study should be viewed as a principal room. A determination on this matter will provide OBC direction regarding window requirements.

The Agent explained that the study, as a separated space, was an important concept in the marketing of the units. As the role of computers have grown in importance, so has the space dedicated for them within newly designed and built living space. Moreover, the original proposed suite represents a growing trend in residential condominium design where space must be innovative and flexible to use. He noted that the Verona unit without the study still meets the OBC's minimum size requirements for all the basic rooms. In other words, he argued, the study can be viewed as "add-on" area, not principal space.

The Agent continued by discussing previous correspondence from 1998 he had with the Ministry of Municipal Affairs and Housing's Building and Development Branch which indicated that dens, libraries and media rooms in Part 3 residential buildings need not be provided with windows. He argued that a "study" can be reasonably be regarded as a synonym for den. The Agent then pointed to the Technical Background Information memo produced by the Branch for this hearing. This memo confirmed the Branch's earlier position, and in so doing, supports his view that a window is not required in the den/study, he argued. He quoted the following section from the Branch memo:

"Any room which is acknowledged not to be a principal room is therefore not required to be provided with a window.

"A den in a residential apartment in a building governed by OBC Part 3 is not considered to be a principal room and is therefore not required to be provided with a window. A "Study" is synonymous with "den".

"Once a dwelling unit design provides sleeping accommodation which satisfies the minimum provisions of the Code for such functions, there is no basis in the Code for requiring additional rooms or spaces designed as study rooms or dens to be considered to be bedrooms which are required to be provided with windows."

The Agent further argued that"(t)here are many recent examples of residential apartment design

where a study or den not located adjacent to an exterior wall has been incorporated in apartment plans and where such study or den has little, if any, line-of-sight exposure of openings in its perimeter walls to windows in the wall of an adjacent room or space.

"Many, if not most, of these examples have other rooms which are clearly designated bedrooms. However, the spaces designated as dens or studies are certainly big enough to sleep in and have not suffered the interpretation that they must be considered to be bedrooms."

The Agent questioned whether municipal inspectors should have the authority to assume that if a room has a closet it must be considered as a bedroom. He noted that "(t)here are many examples of closets or cupboards being built into or openable from rooms and spaces which are not designed as sleeping areas in dwelling units."

In response to comments made by the Designate during the hearing the Agent made the following three statements: First, principal rooms in the Code are not based on size. Principal room status is conferred because of necessity and function that contribute to making a unit a residential space. Second, the difference between a Part 3 and Part 9 building relates mostly to size. A smaller building has more wall space relative to the number of rooms unlike in a large building which has the potential for a greater number of deeper interior rooms. Third, municipal by-laws are superceded by the Ontario Building Code and as a result the City's property standards by-law regulating windows has no applicability.

Finally, the Agent concluded by stating that, "(t)he original design of the Verona suite at 301 Markham Street provided for sleeping accommodation in a combined living, dining and sleeping area. This satisfied OBC provisions for a dwelling unit. The provision of a designated Study room in a portion of the dwelling unit not next to an exterior wall where such room had no openings facing windows did not represent a violation of the OBC."

6. Respondent's Position

The Designate for the Respondent submitted that the study is a finished room which should comply with Article 9.7.1.2. As a reasonably small unit with few rooms, the study as a space assumes relative importance within the suite. On this basis, he indicated that the City considered the study to be a principal room. The Designate noted that if the building was governed by Part 9 of the OBC, the requirements would be more onerous and a window would be necessary in this room even if it were considered a non-principal room.

In addition, with the optional nature of the partition wall between the front bedroom and the living area, functionally this renders the study as a natural bedroom, the Designate argued. Besides, the study is large enough under the OBC to be a bedroom and it contains a full closet. In fact, it is even larger than the area described as bedroom in the original plan. Based on these reasons, the City viewed this space within the Verona suite as being both a principal room and a sleeping room.

The Designate then indicated that the City had approved the second, or revised, option in which a portion of the wall, including the door, of the study was cut away to allow the transmittal of borrowed light, even though this is a concept not recognized by the OBC. He noted that the City also has a property standards by-law mandating natural light. While the by-law is based on the requirements found in the Table in Part 9, it is applied by the City to Part 3 buildings as well. The property standards by-law, however, offers certain flexibility since it incorporates the concept of borrowed light.

On the issue of borrowed light, the Designate questioned why the present structure, comprised of new construction and not a conversion project of an existing building, should enjoy such leniency in terms of its provision of natural light. He indicated he would have more sympathy for the Agent's arguments and comments if the building was facing the design constraints and limitations often encountered by conversion projects.

In summation, the Designate stating that windows are not trivial, they serve an important function in a building. They are needed for natural light, ventilation and preventing cabin fever. And whereas he has heard about potential changes to the National Building Code to relax window standards for such buildings, the current version of the OBC remains in effect. As a result, in his view, a window is required. The Designate concluded by stating that the ruling on this issue is significant and will likely have wider implications.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed design of the original Verona Suite plan, that includes a windowless, enclosed "study" room, does not comply with Sentences 3.7.2.1.(1) and 9.7.1.2.(1) of the Ontario Building Code at the Ideal Condominium building, 301 Markham Street, Toronto, Ontario.

8. Reasons

i) Based on reasons a) and b) below it is the assessment of the BCC that the study is a principal room and may possibly function as a bedroom as well. Consequently, the requirements of Table 9.7.1.2. apply.

   a) The Verona unit does not comply with Sentence 3.7.2.1.(1) of the Ontario Building Code regarding windows in that the area indicated as "bedroom" at the outer perimeter of the building is divided from the living/dining area by an optional wall. When the optional wall is removed this area does not constitute a sleeping room consistent with a suite marketed and sold as a one bedroom unit.

   b) Likewise, the area designated as a "study" is provided with direct access to the bathroom and a permanent closet which will invite the use of this room as a bedroom in contravention of Sentence 3.7.2.1.(1) of the Code.

ii) The revised design, which employs the concept of "borrowed light", is an innovative solution to the problem of providing natural light to the area designated as a study.

Dated at Toronto this **15th** day in the month of **March,** in the year **2001** for application number **2001-12.**

Mr. Len King, Vice-Chair

Mr. Fred Barkhouse

Mr. Donald Pratt

Ruling No. 01-10-803
Application # 2001-10

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Clause 3.4.2.5.(1)(d) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Pan Giammarco, Project Engineer, Norampac Incorporated Leaside Division, for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, to determine whether the proposed access to exit corridor, designed using a combination of the parameters outlined in Clause 3.4.2.5.(1)(d) and Sentence 3.4.2.5.(2) of the Ontario Building Code, provides sufficiency of compliance within a Group F, Division 2 occupancy at the Creditstone Industrial Building, Blocks 16, 17 and 18 on Plan 65M - 2696, Vaughan, Ontario.

APPLICANT	Mr. Pan Giammarco, Project Engineer Norampac Incorporated Leaside Division Toronto, Ontario
RESPONDENT	Mr. Mani Navabi Chief Building Official City of Vaughan
PANEL	Mr. Len King, Vice-Chair Mr. Michael Steele Mr. Fred Barkhouse
PLACE	Toronto, Ontario
DATE OF HEARING	March 15th, 2001
DATE OF RULING	March 15th, 2001
APPEARANCES	Mr. Leszek Muniak Larden Muniak Consulting Inc. Toronto, Ontario **Agent for the Applicant** Mr. Mani Navabi, Chief Building Official City of Vaughan Toronto, Ontario **The Respondent**

RULING

1. The Applicant

Mr. Pan Giammarco, Project Engineer, Norampac Incorporated Leaside Division, Toronto, Ontario, has received a building permit under the Building Code Act, 1992 and has recently constructed a new industrial building known as the Creditstone Industrial Building, at Blocks 16, 17 and 18 on Plan 65M - 2696, Vaughan, Ontario.

2. Description of Construction

The Applicant is nearing completion on the construction of a new one storey industrial building having a Group F, Division 2 major occupancy. The structure is comprised of noncombustible construction and has a building area of 35, 435 m^2. It will be equipped with a sprinkler system, a standpipe and hose system and a fire alarm system.

The proposed building has an irregular perimeter framing a floor area generally measuring 200 m by 221 m. The facility is essentially divided into two areas. A warehouse area is located on the eastern side of the building and a manufacturing plant is located on the west. These areas will be separated by a north-south partition that spans almost the entire width of the building. In addition, immediately east of the warehouse area and adjacent to the eastern exterior wall is a depressed rail siding that will run through the building, extending from the north exterior wall to the south exterior wall. A 9 m wide corridor is proposed to run between the rail siding and the warehouse portion of the building with an egress doorway located at either end. The corridor will exceed 10 m in height and it is also proposed that a air handling system will be installed in the vicinity of this corridor to facilitate hourly air exchange.

The construction in dispute involves the access to exit design within the subject building. The layout is designed so that corridors throughout the building lead to exits spaced at 60 m around its perimeter which measures approximately 844 linear m. However, when the rail siding is in use, three of these required exit doors will be blocked. To compensate for this period of inaccessibility, the Applicant has proposed that the 9 m wide corridor will serve to comply with the requirements of Clause 3.4.2.5.(1)(d) of the Code which permits a travel distance of 105 m in a sprinklered floor area. This combination of design parameters (location of exits 60 m around the perimeter and 105 m travel distance through a public corridor) incorporates two access to exit provisions outlined in the Code.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed access to exit corridor design that incorporates the provisions of Sentence 3.4.2.5.(2) in combination with Clause 3.4.2.5.(1)(d) of the Ontario Building Code (OBC), provides sufficiency of compliance within a Group F, Division 2 occupancy.

Sentence 3.4.2.5.(2) is an exception to Sentence 3.4.2.5.(1) of the OBC. With the exception of high hazard industrial occupancies, Sentence (2) permits the travel distance stipulated in Sentence (1) to be waived provided that exit doors are situated at a spacing of not more than 60 m around the perimeter of the building and that each main aisle in the floor area leads directly to an exit.

With respect to Clause 3.4.2.5.(1)(d) the Building Code states that, where more than one exit from a floor area is required, the travel distance to at least one exit shall not exceed 105 m in any floor area served by a public corridor in which rooms and suites are not separated from the remainder of the area by a fire separation. The Code stipulates that the public corridor be a minimum of 9 m wide and 4 m high. In addition the building must be sprinklered and not more than one half of the required egress doorways from a room or suite are to open into the public corridor. When reviewing this provision one should note that the term "public corridor" has been italicized and is therefore a defined term within the Building Code. The OBC defines a public corridor as "a corridor that provides access to exit from more than 1 suite."

The subject building has been designed with access to egress by way of aisles that lead to exits located every 60 m around the perimeter of the building. Where this access is compromised by use of the internal spur rail line, the Applicant has proposed a 9 m wide corridor to ensure that a travel distance of 105 m is not exceeded. This, together with other compensating measures, is intended to provide sufficiency of compliance with the requirements of the OBC. The building is sprinklered and the proposed corridor will meet the corridor dimensions outlined. In addition, less than one quarter of the required egress routes will be served by this corridor.

To address the question of sufficiency of compliance regarding this proposal the following issues need exploration. The first is whether it is appropriate to apply the requirements of Sentence 3.4.2.5.(2) in combination with Clause 3.4.2.5.(1)(d). As noted above, Sentence 3.4.2.5.(2) is an exception to Sentence 2.4.2.5.(1) where, because of the size of a building, the minimum travel distance requirements cannot be achieved. The second issue is whether Clause 3.4.2.5.(1)(d) applies to this single F2 occupancy building. It is argued by the Respondent that, in light of the reference in this provision to providing access to exit from more than 1 suite, it cannot be considered an acceptable standard for single occupancy buildings.

4. Provisions of the Ontario Building Code

3.4.2.5. Location of Exits

(1) Except as permitted by Sentences (2), (3) and 3.3.2.4.(6), if more than one *exit* is required from a *floor area*, the *exits* shall be located so that the travel distance to at least one *exit* shall be not more than

(d) 105 m (344 ft 6 in) in any *floor area*, served by a *public corridor*, in which rooms and *suites* are not separated from the remainder of the *floor area* by a fire separation, provided

(i) the *public corridor* is not less than 9 m (29 ft 6 in) wide,

(ii) the ceiling height in the *public corridor* is not less than 4 m (13 ft 1 in) above all floor surfaces,

(iii) the *building* is *sprinklered*, and

(iv) not more than one half of the required egress doorways from a room or *suite* open into the *public corridor* if the room or *suite* is required to have more than one egress doorway,

(2) Except for a *high hazard industrial occupancy*, Sentence (1) need not apply if *exits* are placed along the perimeter of the *floor area* and are not more than 60 m (196 ft 10 in) apart, measured along the perimeter, provided each main aisle in the *floor area* leads directly to an *exit*.

5. Applicant's Position

The Agent for the Applicant advised that the subject company manufactures paper products. The building has an occupant load of approximately 138 to 140 people, with 64 in the office area, 70 in the manufacturing plant and approximately 4 to 6 in the warehouse adjacent to the spur rail line. To allow the manufactured products to be loaded directly onto train cars, a depressed rail siding runs into the structure through the warehouse area.

The Agent advised that in designing the facility many options were explored. They had reviewed proposals to incorporate stair towers over top of the train and also investigated the possibility of uncoupling the cars to allow building personnel access to the doors on the eastern wall. It was concluded, however, that the access to exit requirements could be addressed with alternative corridor configurations. In addition to meeting the exit requirements set out in the Code, the Agent submitted that air handling equipment over the corridor will be provided to facilitate air changes every hour. The building will also be equipped with a fire alarm system, although one is not required by the Code in light of the low occupant load. These compensating measures, he argued, would provided sufficiency of the compliance with the Building Code.

The Agent emphasized that the layout of the warehouse area is such that the perimeter doors on three of the buildings's exterior faces may be readily accessed. The fourth side is periodically blocked by rail cars inside the building. He argued that the 9 m wide aisle running the full length of the building in front of this rail line could be considered as an open corridor. The aisle is not separated from the remainder of the floor area and a doorway is located at either end. He stated that this aisle will be kept clear of obstruction at all times. He suggested that any fire will not easily spread and, in any event, the sprinkler system will automatically be activated, thereby further limiting the spread of smoke and fire.

In support of the proposed design, the Agent submitted that " the travel distance to an egress door along the main aisles in the centre of the manufacturing facility is the same as the distance to an egress door along the public corridor serving as egress on the fourth side of the building. OBC sentence 3.4.2.5. does not differentiate exit requirements by occupancy type. Furthermore, sentence 3.4.2.5.(1)(d) permits a public corridor to exist without a fire separation to the floor area served." He advised that less than one quarter of the required egress routes are served by this corridor.

In summation, the Agent advised that, although the final design is not yet complete, all main aisles will lead directly to exits. He emphasized that "(t)he utilization of two types of egress routes out of a floor area is common in many building types." In addition, he argued that the Code does not state that 105 m can only be applied to mall occupancies.

6. Respondent's Position

The Respondent submitted that in an F2 occupancy where sprinklering is provided, the Code permits a travel distance of 45 m in Clause 3.4.2.5.(1)(c). If this distance cannot be attained the Code states, in Sentence 3.4.2.5.(2), that exits can be provided at 60 m intervals around the perimeter of the building with aisles leading directly to these exits. In considering these two choices of compliance with the Code, he finds the Applicant's proposal to use the Code provisions developed for retail mall uses to be unacceptable.

He submitted that a train using the rail siding will reduce the 9 m corridor width and, moreover, the train cars will be filled with combustible paper products. When considering the use of a public corridor in a mall situation, each store unit would be separated from one another, thereby providing

some compartmentalization should a fire occur. In this case there is not a separation between any area within the large building. The Respondent submitted that the logical solution would be to have the train uncouple allowing unimpeded access to the perimeter exit doors.

In summation the Respondent submitted that there is a considerable difference between 45 m and 105 m. If this proposal is approved he suggested that it would be a significant deviation from the Code requirements. He argued that travel distance is a passive fire safety measure. Compensation with an active measure, such as the proposed air handling system, in his opinion, would not off set benefits of a shorter travel time. To allow such compensation would be beyond the realm of what the Code permits.

7. Commission Ruling

It is the decision of the Building Code Commission that the access to exit designed using a combination of the provisions outlined in Clause 3.4.2.5.(1)(d) and Sentence 3.4.2.5.(2) of the Ontario Building Code does not provide sufficiency of compliance within a Group F, Division 2 occupancy at the Creditstone Industrial Building, Blocks 16, 17 and 18 on Plan 65M - 2696, Vaughan, Ontario.

8. Reasons

i) Notwithstanding the fact that the building is occupied by one tenant, the corridor adjacent to the railway line could be considered a public corridor in accordance with 3.4.2.5.(1)(d), however, the use of a corridor could not replace the requirement for exits located at 60 m around the perimeter of the building.

ii) The additional ventilation to be provided by way of an air handling system in the vicinity of the corridor is not adequate to achieve sufficiency of compliance in lieu of the exit doors at 60 m intervals as required by the Ontario Building Code.

Dated at Toronto this **15th,** day in the month of **March,** in the year **2001** for application number **2001-10.**

Mr. Len King, Vice-Chair

Mr. Michael Steele

Mr. Fred Barkhouse

BCC Ruling No. 01-09-802

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 01-09-802

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentences 7.6.4.2.(3) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. William (Bill) Zlepnig, President, Southway Inn, Ottawa, Ontario, for the resolution of a dispute with Ms. Catherine Junop, Director of Building Services, City of Ottawa, to determine whether the 13.25 litre water closets, proposed to be installed in the washrooms of the new hotel addition, provide sufficiency of compliance with Sentence 7.6.4.2.(3) of the Ontario Building Code at the Southway Inn, 2431 Bank Street, Ottawa, Ontario.

APPLICANT
Mr. William (Bill) Zlepnig, President
Southway Inn
Ottawa, Ontario

RESPONDENT
Ms. Catherine Junop
Director of Building Services
City of Ottawa

PANEL
Mr. Len King, Vice-Chair
Mr. Michael Steele
Mr. Fred Barkhouse

PLACE
Toronto, Ontario

DATE OF HEARING
March 15th, 2001

DATE OF RULING
March 15th, 2001

APPEARANCES
Mr. William (Bill) Zlepnig, President
Southway Inn
Ottawa, Ontario
The Applicant

RULING

1. The Applicant

Mr. William (Bill) Zlepnig, President, Southway Inn, Ottawa, Ontario, has received a building permit under the Building Code Act, 1992 and is currently constructing an addition to the Southway Inn, 2431 Bank Street, Ottawa, Ontario.

2. Description of Construction

The Applicant is presently constructing a new six storey, 75 room addition onto an existing two storey, 102 unit hotel for a total of 177 rooms. When completed, the enlarged Group C - residential occupancy will be six stories in building height, 5,238 m^2 (56,360 ft^2) in building area and will be of noncombustible construction.

The construction in dispute involves the proposed water closet fixtures the Applicant intends to install in all of the washrooms in the guest rooms of the new hotel addition. Instead of six litre flush toilets, the Applicant is proposing to use water closets that have a maximum flush cycle of 13.25 litres.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the 13.25 litre water closets, proposed to be installed in the washrooms of the new hotel addition, provide sufficiency of compliance with Sentence 7.6.4.2.(3) of the Ontario Building Code at the Southway Inn, 2431 Bank Street, Ottawa, Ontario.

This provision stipulates that the flush cycle for water closet and urinal fixtures shall not exceed the limits prescribed in Table 7.6.4.2.B. For tank type water closets, this Table sets out that six litres is the maximum volume per flush cycle. The exemption to Sentence (3) is found in Sentence (2) of this Article. It permits a replacement fixture for one that existed before January 1, 1996 to conform to Table 7.6.4.2.A., which allows a 13.25 litre maximum flush for a tank type water closet.

At dispute therefore is the Applicant's proposal to use 13.25 litre toilets, not six litre toilets, in the new washrooms of the hotel he is currently constructing.

4. Provisions of the Ontario Building Code

Sentence 7.6.4.2. Plumbing Fixtures

3. Except as provided in Sentence (2) the flush cycle for each fixture that is a water closet or urinal shall not exceed the maximum flush cycle for that fixture listed in Table 7.6.4.2.B.

5. Applicant's Position

The Applicant submitted that he is fully aware that the Ontario Building Code requires him to install six litre toilets in the new addition at his hotel. However, he wishes to install 13 litre toilets for the simple reason that, in his view, six litre toilets fail frequently and cannot be relied upon to perform consistently. To support his claim regarding the inadequacy of six litre toilets, the Applicant indicated that he had assembled significant amounts of data both through his own analysis and through the experience of others.

The Applicant stated that the problem with six litre flush toilets first came to his attention at his church. All the churches' toilet were replaced with 13 litre ones. It was this situation that caused him to think seriously about the kind of toilet he would install in his hotel expansion.

With respect to his own research on this issue, the Applicant indicated that he conducted a four week experiment as to the reliability of six litre toilets using a lavatory at his own hotel as the testing facility. He summarized his experiment and its results as follows:

"The existing toilet of 1983 (18-20 litre water closet), situated in a medium-to-high use lavatory, was replaced on January 11 2001 at 11:30 a.m. with a new 6-litre toilet. At 2:30 p.m. that same day we experienced our first plugged toilet. Over the next four-week period we experienced sixteen different such instances (attachment 1) where this new 6-litre toilet failed to meet the ability of its predecessor. Therefore, it was removed on February 7, 2001 and replaced with a 13-litre American Standard (Plebe model). This was a water savings of approximately 5-8 litres of water compared to the model of 1983. Since the new 13-litre toilet has been installed we have not experienced any such plugs or overflows.

"In conclusion, the 6-litre toilet installed, plugs and overflows on a regular basis, posing an inconvenience to guests as well as a health threat to our employees whereas the American Standard 13 litre (Plebe) is performing without plugging or overflowing eliminating all health hazards and at the same time there is a water savings of 5-8 litres."

In addition to this study, the Applicant noted that he also conducted a camera investigation from inside the sewer line to determine where the plugging was occurring and how. The pictures showed that the blockage was in the toilets. They also showed that the problem relates directly to the fact that the throat diameter of six litre toilets have been reduced to maintain water velocity with the reduced amount of water. But the narrower throat then causes friction, especially in the trap. This forces a separation of the liquids and solids. The end result is blockage. To rectify this situation, a second and third flush are sometimes necessary. If this becomes the case, as the Applicant argued, all water savings intended by utilizing six litre toilets are negated. Indeed, the reduction from 20 to 13 litres resulted in a savings of water with functional toilets, but the reduction to six litres has not really achieved either.

By way of background, the Applicant stated that prior to applying to the BCC he had been in touch with Code Advisors in the Housing Development and Buildings Branch of the Ministry of Municipal Affairs and Housing. As the government body responsible for developing and administering the OBC, they instructed him that six litres was the requirement for his project and that the exemptions in Sentence 7.6.4.2.(2) do not apply in his case. They also noted that the OBC provision referenced a standard developed by the Canadian Standards Association (CSA) CAN/CSA-B45.0, "General Requirements for Plumbing Fixtures". In order to meet this standard, manufacturers had to ensure that their water closets passed a CSA performance test. If he wanted more information about the CSA standard, they offered that he could contact CSA directly.

The Applicant continued that he did get in touch with CSA and, in fact, went to one of the meetings of the CSA committee responsible for the water closet standard. He indicated that he presented his concerns to the committee. He explained that his problem with the CSA standard is twofold. First, the testing involved does not use real life situations. As the Applicant stated; "golf balls and beer caps (which are used in the CSA test) don't replicate the real deal." Secondly, directly related to this is that the standard does not guarantee that a toilet will work, i.e., meeting the standard provides no assurance that the fixture functions in real life. Apparently all that meeting the standard means is that the water closet has passed a test, not that it works. But the point of the test is to determine if the fixture functions, otherwise why have a standard at all? From a consumer protection point of view, the Applicant argued that the CSA standard is not doing its job.

The Commission was informed by the Applicant that CSA is reviewing their CAN/CSA-B45.0 standard. As he elaborated, CSA is studying whether to establish a different grading system whereby toilets would be rated in terms of how well they performed on CSA's flush test. As well, CSA is investigating the value of creating use classifications for water closets. This system would indicate whether a toilet was suitable for institutional, commercial or residential and whether it was appropriate for high, medium or low usage. The Applicant stated that he thought such refinements to the standard would be quite helpful.

In response to a question from the panel, the Applicant admitted that he has tried only one type of six litre water closet. He countered, however, that as a consumer he does not have the resources to investigate all the toilets on the market to get one that works and is right for his uses. At the time he purchased the water closet he was assured by the plumbing supplier that he was buying the best. Besides, he should be able to have certainty that the current regulatory system ensures that the toilet he buys works. After all, buying a toilet should not be a crap shoot.

In answer to a question regarding whether he had installed six litre toilets with pressure assist devices, the Applicant said that he had not done so in his hotel, but had seen them elsewhere. He admitted that such devices work, but noted that they are expensive and are yet another device that must be maintained at additional cost. He also asserted that pressure assists are not appropriate for hotel uses because they are fairly loud and may cause disturbances for the guests.

The Applicant then turned his attention to the extensive amount of material he had gathered from numerous other individuals and organizations that supported him in his application to the BCC. The letters were from other hotels (some even offered their own service record showing many blocked toilet calls), hotel associations, seniors residences, sewer contractors, various engineers, homeowners and car dealerships. There were also supportive newspaper and magazine articles. All of this documentation

essentially contained the same argument - that new six litre toilets do not work well and when replaced with 13 litre fixtures the blockage problems were eliminated.

One letter in particular the Applicant felt he wanted to highlight to the Commission was from the City of Ottawa. It discussed a situation where they converted the six litre toilets installed in 1998 in the new wing of the Centre d'accueil Champlain to 13 litre toilets. The letter stated:

"At that time, the Region requested these toilets be changed to a higher model (18 ? inches) to accommodate the needs of our elderly clients who were finding it difficult to transfer on and off our low toilets. We had also been experiencing problems with blockages and overflow spillage. Due to lack of funds, we had to wait until year 2000 to proceed.

"Sometime last year (2000), our plumbing contractor changed those 85 American Standards... to American Standards with a tank of 13 litres only because an 18 ? inches high toilet with a 6 litre tank was not available."

While the Applicant confirmed with technical advisors from the Ministry present at the hearing that such models are available, he argued that his point was the City, the entity responsible for OBC enforcement, also does not seem to support the use of six litre water closets. (As an aside, the Applicant noted that many of letters submitted on his behalf were seeking a Code amendment regarding the six litre flush. While he acknowledged that the BCC cannot amend the OBC, he nevertheless reiterated that all of the writers had negative experiences with the water closets currently permitted.)

The Applicant then discussed the specific Code reference directly. He offered two arguments concerning Article 7.6.4.2. One, he noted that there are exemptions allowed in Sentence 7.6.4.2.(2) from utilizing six litre toilets in certain uses. These uses are heritage buildings, certain institutional facilities and passenger terminals. Except for heritage structures, the Applicant argued that the Sentence (2) exemptions are buildings where for health or high demand reasons a toilet must be counted on to flush every time and therefore a 13 litre fixture is permitted. The corollary of this is that in less critical uses such as residential, the Code allows, in fact requires, less than peak performance toilets in Sentence (3). The very existence of the exemptions is tantamount to an admission that six water closets are not entirely reliable, the Applicant insisted.

He followed this by arguing that because of the special circumstances of the hotel industry - guests are paying to use their residential space - that they should also be exempt. Their business depends on a quality accommodation and a backed up toilet can ruin that experience.

Having poorly performing toilets in every single newly built guest room is a definite hardship on the hotel industry, which is a very competitive business where even the slightest item can become an advantage, or in this case, a disadvantage. The very slight water conservation these toilets ostensibly offer has been gained at the expense of cost effectiveness due to high maintenance and potential lost revenue from unsatisfied customers.

In conclusion, the Applicant stated that if not all toilets are created equal, but the manufacturer nor CSA will indicate which ones are quality, then how can a consumer find out what is the best, or simply the appropriate water closet for their intended installation. He reiterated that he felt there is a problem with the testing procedures because they are not protecting the public. And lastly, he indicated that a grading system as well as a classification system would be very helpful.

6. Respondent's Position

The Respondent party chose not to attend the hearing. The Commission therefore relied only on their written submission.

In their supporting documents, the Respondent expressed a degree of sympathy toward the Applicant's position regarding six litre toilets. As they stated; "we acknowledge the concerns raised and your reluctance to install fixtures that have the potential to cause considerable disruption to your business and service to the public." They also thanked the Applicant for the investigation he carried out and for bringing the matter to them.

The Respondent submitted, however, that they have "no authority to approve the installation of fixtures other than those specified by the Ontario Building Code." They explained that, in their view, the intent of OBC 7.6.4.2. is water conservation, an initiative undertaken by the provincial government. The Respondent noted that the National Plumbing Code has no parallel requirement.

Finally, they suggested that the Applicant apply to the BCC and stated that "the municipality would offer no objections to your submission (to the BCC), but would merely make a statement concerning our limited authority."

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed use of 13.25 litre water closets in the new hotel addition provides sufficiency of compliance with Sentence 7.6.4.2.(3) of the Ontario Building Code on condition:

a. That for each 13.25 litre toilet proposed to be installed in the new hotel wing in lieu of a six litre water closet, a 20 litre toilet in the existing portion of the building be removed and replaced with a 13.25 litre water closet; and,
b. That the work described above, retrofitting water closets in the existing hotel, be completed prior to occupancy of the new wing.

8. Reasons

i. Sentence 7.6.4.2.(3) and Table 7.6.4.2.B. of the OBC address the requirements for water closets in new construction. As the standard for new construction, at six litres, is lower than for existing fixture retrofit, at 13.25 litres, it appears that this provision has two objectives. One, that new construction must meet a more rigorous standard than renovation, and two, that new buildings must achieve a higher level of water conservation. In the present circumstance, a new structure is being added onto an older facility. We hold that with fulfilment of the attached conditions, the overall water usage by all toilets in the entire building will be similar to that if the Applicant had installed six litre fixtures in the new wing. In this manner, the retrofit of an equal number of existing toilets will provide for water conservation as intended by OBC 7.6.4.2.(3) and thereby achieve appropriate compensation.

Dated at Toronto this **15th**, day in the month of **March,** in the year **2001** for application number **2001-07.**

BCC Ruling No. 01-08-801

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 01-08-801

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Clause 6.2.5.2.(1)(c) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by The Roman Catholic Episcopal Corporation for the Diocese Holy Family Parish, Toronto, Ontario, for the resolution of a dispute with Ms. Pam Coburn, Deputy Chief Building Official, City of Toronto, to determine whether the as-installed fuel fired appliances, a portion of each having been situated within 3 m of exterior walls of the same building which contain openings, provide sufficiency of compliance with Clause 6.2.5.2.(1)(c) of the Ontario Building Code, at the Holy Family Church, 1372 King Street West, Toronto, Ontario.

APPLICANT

The Roman Catholic Episcopal Corporation
for the Diocese Holy Family Parish
Toronto, Ontario

RESPONDENT
Ms. Pam Coburn
Deputy Chief Building Official
City of Toronto

PANEL

Dr. Kenneth Peaker, Chair
Mr. John Guthrie
Mr. Donald Pratt

PLACE
Toronto, Ontario

DATE OF HEARING
February 22nd, 2001

DATE OF RULING
February 22nd, 2001

APPEARANCES
Mr. Robert Niessl, Senior Mechanical Engineer
McGregor Allsop Ltd.
Stouffville, Ontario
Agent for the Applicant

Mr. Robin Parnell
HVAC Inspector
Toronto, Ontario
Designate for the Respondent

RULING

1. The Applicant

The Roman Catholic Episcopal Corporation for the Diocese Holy Family Parish, Toronto, Ontario, has received a building permit under the Building Code Act, 1992 and has extended an existing church building at the Holy Family Church, 1372 King Street West, Toronto, Ontario.

2. Description of Construction

The Applicant has added new worship space to an existing church building. The enlarged structure is classified as a Group A, Division 2 - Assembly occupancy. The existing building is one storeys in building height and of combustible construction, whereas the new addition is two storeys in building height and of noncombustible construction. Together, the two portions occupy a building area of 1747 m^2 and are equipped with a fire alarm system.

The recent construction at the site involved the erection of a new church building to the west of the existing church and rectory. The existing and new portions are linked by two separate single storey sections, one at the north and one at the south of the building. Two air condition units (one on each) have been located on top of these one storey linking sections. A single unprotected window is located at the second floor level of each of the walls formed where the new two storey church abuts these single storey sections.

The construction in dispute involves the clearance distances between the two rooftop gas-fired air conditioning units installed on the low level roofs adjacent to the second floor exterior walls of the new church. Specifically, the unit located on the roof of the north linking section is situated directly in front of and 2.5 m away from a window in the western wall of the new church. If measured from the centre line of the burner component of the air conditioner, the distance to the window and wall is 3.0 m.

For the unit located on the roof of the south linking section, the nearest wall face measured at right angles to the air conditioning unit is 1.8 m away. The window in this wall is not positioned directly in front of the air conditioner, therefore the distance is measured from the nearest corner of the window to the nearest corner of the unit. This corner to corner separation is 2.3 m, and as measured to the centre of the unit, the distance is 3.1 m. Unlike the appliance installed on the north side, there is a shingled roof of the existing building in close proximity to the unit installed on the south low roof.

The Applicant is proposing to provide a heat shield between each unit and the adjacent opening to avoid the spread of a possible appliance fire.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-installed fuel fired appliances, a portion of each having been situated within 3 m of exterior walls of the same building

which contain openings, provide sufficiency of compliance with Clause 6.2.5.2.(1)(c)of the Ontario Building Code.

Clause 6.2.5.2.(1)(c) requires that a fuel-fired appliance installed on a roof must be set back at least 3 m from an adjacent wall of the same building if that wall has an opening(s) within either three storeys above 5 m horizontally of the subject appliance. However, this requirement can be waived if such openings are protected by a closure assembly having either a Code recognized 45 minute fire protection rating, or wired glass installed as required by Code. As installed, the subject appliances have a distance of less than 3 m with the adjacent walls and their openings (windows). The windows are unprotected and located less than three storeys above the subject appliances.

4. Provisions of the Ontario Building Code

Clause 6.2.5.2. Appliance Installed Outside the Building

1. Fuel-fired *appliances* installed on the roof of a *building* or otherwise outside the *building* shall be

    c. installed not less than 3 m (9 ft 10 in) from an adjacent wall of the same *building* when such wall contains an opening or openings within 3 *storeys* above and 5 m (16 ft 5 in) horizontally from the *appliance*, unless such openings are protected by a closure assembly having a 45 min *fire-protection* rating determined in conformance with Article 3.1.8.4., or by wired glass conforming to Article 3.1.8.14.

5. Applicant's Position

The Agent for the Applicant submitted that the installation of the rooftop units provides sufficiency of compliance with 6.2.5.2.(1)(c) of the Ontario Building Code. He stated that it is only the metal housing of the gas-fired air conditioning units that are actually too close to the adjacent walls and their openings. The burners themselves within the units, he argued, are 3 m from the walls. Moreover, the blower for the units points 180^0 in an opposite direction from the walls.

The Agent continued that the wired glass required by Code to provide protection to the openings would be costly to install. The closure assemblies were also ruled out because the subject windows are decorative and the closures would detract from their appearance. He indicated, however, that the Applicant would be prepared to install a three-sided heat shield made of reflective metal around the appliances for additional protection in case of fire or explosion.

The Agent concluded by reiterating that with the burner sections of the rooftop air conditioning units being at least 3 metres from the adjacent walls and by installing the proposed heat shield, it was his position that the installation of the subject appliances meets the intent of the separation distance required in the OBC.

6. Respondent's Position

The Respondent stated that the original structure of the subject building was destroyed by a fire. As a result, vigilance should be applied to this building with respect to its fire safety. In this regard, the Respondent felt it important to note that besides there being inadequate clearance distance between the rooftop gas-fired appliances and the adjacent walls and their openings, there is also combustible roof material within a certain radius of the south unit. He did acknowledge, however, that the situation represented a difficult and tight installation.

The Respondent concluded that he is prepared to accept the proposed heat shield as a compensation measure, however, he would like to see the drawings of the proposal first.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-installed fuel fired appliances, a portion of each having been situated within 3 m of an exterior wall of the same building which contains openings, provide sufficiency of compliance with Clause 6.2.5.2.1.(1)(c) of the Ontario Building Code at the Holy Family Church, 1372 King Street West, Toronto, Ontario, on the condition that:

d. The units be provided with a heat shield; and,

e. The heat shields be designed and installed to the satisfaction of the City of Toronto's Building Department.

8. Reasons

. The heat shields, once installed, will provide protection to the openings in the subject walls.

i. Considering the location of the actual burner portions within the air conditioning units, the separation is close to the required 3 m distance.

Dated at Toronto this **22nd,** day in the month of **February,** in the year **2001** for application number **2001-01.**

BCC Ruling No. 01-07-800

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 01-07-800

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 6.2.3.2. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Dan Vernescu, Property Manager, Town of Oakville, Ontario, for the resolution of a dispute with Mr. Frank Asta, Chief Building Official, Town of Oakville, Ontario, to determine whether the proposed air distribution system that is comprised of under-slab combustible duct piping provides sufficiency of compliance with Article 6.2.3.2. of the Ontario Building Code at the Oakville Municipal Building, 1225 Trafalgar Road, Oakville, Ontario.

APPLICANT
Mr. Dan Vernescu, Property Manager
Town of Oakville
Oakville, Ontario

RESPONDENT
Mr. Frank Asta
Chief Building Official
Town of Oakville

PANEL
Dr. Kenneth Peaker, Chair
Mr. Fred Barkhouse
Mr. Donald Pratt

PLACE
Toronto, Ontario

DATE OF HEARING
February 15th, 2001

DATE OF RULING
February 15th, 2001

APPEARANCES
Mr. Gunnar Heissler, President
The ECE Group Ltd.
Toronto, Ontario
Agent for the Applicant

Mr. Frank Asta
Chief Building Official
Oakville, Ontario
The Respondent

RULING

1. The Applicant

Mr. Dan Vernescu, Property Manager, Town of Oakville, Ontario, has received a building permit under the Building Code Act, 1992 to renovate and construct an addition onto the Town of Oakville's municipal building located at 1225 Trafalgar Road, Oakville, Ontario.

2. Description of Construction

The Applicant is renovating and expanding an existing municipal building classified as having a Group D - Business and Personal Services occupancy. The building is two storeys in building height, 14,054 m^2 in building area (existing and new) and of noncombustible construction. The addition consists of a new office complex with an atrium (considered as an interconnected floor space) that provides a link to

the existing building. Both the existing building and the new addition are sprinklered and equipped with a fire alarm system and a standpipe and hose system.

The construction in dispute involves an installed under-slab air circulation system consisting of plastic duct piping. This pipe, known as "Big O", is made of reinforced high molecular weight, high density polyethylene and is approved as a sewer pipe for underground applications. The Applicant is proposing to use the disputed system as an air carrying facility that is to provide both air cooling and ventilation. As a result, the air temperature in the system will range from 13 to 30^0 C.

The subject combustible ducts are entirely confined within the newly constructed two-storey high atrium and are to serve only the same area. Specifically, the duct design consists of a central supply main that runs much of the length of the atrium and measures 915 mm (36 inches) in diameter. Five branch ducts 457 mm (18 inches) in diameter run from the main supply duct and terminate at vertical concrete plenums that are to pass the air up and through the floor slab. When completed, the upper (above slab) portions of the concrete plenums are to be incorporated into fixed bench seating located within the atrium. The air outlets, to be covered with low velocity metal grills, will be positioned 200 mm above the floor level, on the side of the benches.

At the supply end of the plastic ducts, the main duct will connect to a noncombustible (metal) vertical shaft that leads to the roof. A power-operated air handler located on the roof supplies the shaft, and thereby the entire system, with air. Part way down, the shaft will have a horizontal offset as air travels through the system.

The combustible pipes within the duct system therefore all run horizontally. The vertical elements of the system, the metal supply duct and the concrete plenums, are noncombustible.

In terms of fire safety, at the connection point between the vertical metal duct and the horizontal combustible duct a fire damper will be installed to provide fire stopping. The system will also be provided with heat and smoke detectors that, when actuated, will stop the operation of the supply fan.

According to the original drawings submitted for building permit, the under floor conduit was to be constructed of concrete. Later, during construction the concrete pipe was substituted with the reinforced Big O plastic piping.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed air distribution system that is comprised of under-slab combustible duct piping provides sufficiency of compliance with Article 6.2.3.2. of the Ontario Building Code.

Article 6.2.3.2. addresses materials that can be used in air duct systems. Sentence 6.2.3.2.(1) requires that all ducts, etc., be made of similar noncombustible materials. Sentence (2) provides an exemption to Sentence (1) if the criteria laid out in Clauses (a) to (f) are met. Since the proposed material does not fulfill these requirements, the exemption offered in Sentence (2) does not apply.

At issue therefore is wether the installed plastic duct piping at the Oakville Municipal Building, used as a portion of an air distribution system for cooling and ventilation purposes, provides sufficiency of compliance with OBC requirements mandating that air conduits must be noncombustible.

4. Provisions of the Ontario Building Code

Article 6.2.3.2. Materials in Air Duct Systems

1. Except as provided in Sentences (2) to (4) and in Article 3.6.4.3., all ducts, duct connectors, associated fittings and *plenums* used in air duct systems shall be constructed of similar *noncombustible* material.
2. Ducts, associated fittings and *plenums* are permitted to contain combustible material provided they
    i. conform to the appropriate requirements for Class 1 duct materials in CAN/ULC-S110-M, "Standard Methods of Test for Air Ducts",
    ii. conform to Article 3.1.5.14. in a *building* required to be of *noncombustible construction*,
    iii. conform to Subsection 3.1.9.,
    iv. are not used in horizontal runs in a *building* required to be of *noncombustible construction*,
    v. are not used in vertical runs serving more than 2 storeys in a *building* required to be of *noncombustible construction*, and
    vi. are not used in air duct systems in which the air temperature may exceed 120C (248F).

5. **Applicant's Position**

The Agent for the Applicant submitted that the proposed duct material is "safe, functional, durable and potentially superior" to the type of materials addressed by the Code. In his view, it meets and exceeds the intent of Code requirements. As a result, he argued that the substitution of the Big O material "does not violate the terms and conditions of the building permit." (Although he did acknowledge that the contractor was "proactive" in terms of the pipe installation.) The Agent then stated he would focus his arguments along the following themes; safety, functionality and "approvability".

Regarding the safety of the Big O product, the Agent indicated that the proposed ducts are used extensively as thermo-plastic conduits, drainage piping or culverts in buried applications. These installations, he argued, have just as much potential exposure to exterior fires as can be anticipated for those in the Oakville Municipal Building. The Agent noted that, to his knowledge, he is not aware of any incidents nor failures in this regard to date.

The Agent continued that, in addition to sprinklering of the entire building and having a smoke control system in the atrium, additional fire safety measures are proposed in connection with the proposed air duct system. Included in these measures is the installation of a fire damper at the connection between the vertical supply shaft and plastic ducts (to be located at the floor line) to separate the combustible portion of the subject air supply system from the remainder of the building. The system also contains a heat and smoke detectors that will shut down air movement in case of a fire. The Agent also argued that the system is safe because the plastic portion is buried within ground and under concrete and is thereby protected from direct heat radiation (if a fire were to occur) and other exterior influences.

Moreover, the chance of a fire occurring in the pipe is remote, the Agent stated. All portions of the system above ground are noncombustible. The outlet grills in the plenums, located 200 mm above the floor level, protect the exhaust end of the system from refuse and combustibles. At this height, no materials such as cigarettes can get swept into the system. As well, the plastic pipes have no heat source and no fuel load, except the pipe itself.

The pipe is also safe with respect to microorganism growth. As he argued, concrete is porous and allows fungal contamination. The Big O has no porosity and therefore "is completely immune from colonization of microorganism such as fungii (sic)." The Respondent's claim that the corrugated form of the pipe creates grooves on the interior is not true. The pipe is smooth on the inside. It is only the exterior that is corrugated to provide structural strength. There are no grooves inside the pipe where water could accumulate and cause microorganism growth. Besides, any water that may get into the system would evaporate when in operation.

Regarding the functionality of the pipe, the Agent argued that the Big 'O', as a sewer pipe, has been designed to withstand the same soil pressures for underground applications as the one in dispute. In addition, these pipes have a life expectancy of 65 years above ground and ageless when buried underground. The durability of the material was supported by a representative of the Big O product that attended the hearing.

As far as the approvability of the subject material is concerned, the Agent noted that the Big O pipe is very common and is used extensively. He noted, however, that the OBC does not seem to directly address the use of products such as the Big O for this type of application. Instead, for under floor air distribution systems it seems to rely extensively on referenced standards. These standards, however, he indicated support the use of under floor plastic air ducts. Indeed, ASHRAE, SMACNA, NFPA 91 and the International Mechanical Code Issue 2000 all endorse the use of material (as found in the Big O) as appropriate for the disputed application.

As the Agent argued, if the subject air system were to be viewed as part of the floor, it appears to conform to Code requirements for under floor air distribution systems. It also complies with provisions in the Code that require non-metallic (plastic) components of duct systems to have operating temperatures of up to 49^0 C. As he noted, the installed material is approved for an operating temperature of 60^0 C or higher.

The Agent concluded by stating that the ultimate goal of the air system in dispute was to achieve functionality, while providing safety. It is his belief that the duct system is very safe. It is a single use duct to serve a single space within a building that is sprinklered. The fire safety intent of the OBC therefore has been met. The Big O product is appropriate in this application, the Code simply does not address such usage at this point.

6. Respondent's Position

The Respondent submitted that the plastic pipes, used as air distribution ducts, are combustible and therefore do not meet Article 6.2.3.2. of the Code. Specifically, the Big O pipe does not qualify under the exemptions to the noncombustible material requirement (Sentence 6.2.3.2.(1)) found in Sentence 6.2.3.2.(2). The flame spread rating and the smoke development classification for the product exceed the permitted limits for air distribution systems set out in the CAN/ULC S110-M Standard, which is referenced by the OBC.

The Respondent argued that the pipe has not been tested for the use proposed by the Applicant as air duct system. Article 6.2.3.2. does allow combustible materials to be used in air carrying facilities,

however these systems must comply with certain standards. This system does not. He noted that, to his knowledge, no other examples exist in which this material is employed for air handling. In fact, the Respondent explained that he had contacted the manufacturer of the product who indicated that they did not recommend the Big O system for use as air ducts. In addition, there is no evidence to prove the equivalency of the proposed material to those addressed by the Code.

The Respondent stated that his main concern is that the subject combustible air duct system will serve a large atrium space that can accommodate between 300 to 400 people. And since the duct system contains a considerable amount of pipe, an extensive volume of combustible material has been introduced into the atrium. He noted that the Fire Department of Oakville has expressed concern regarding this increased fuel load, in particular the potential amount of deadly CO^2 (carbon dioxide) that could be released into the building if the duct system were ever to ignite.

The pipe also appears to be corrugated on its interior, the Respondent noted. Such grooves may allow for the accumulation of moisture. This in turn may lead to the production of bacteria and other organisms, such as Legionnaires Disease.

The Respondent concluded by indicating that this change of pipe product was not shown on the plans submitted for permit and was not discussed and approved prior to installation. Lastly , he stated that the duct piping neither complies with Code requirements, nor does it meet the level of fire safety intended by the OBC.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed air distribution system comprised of under-slab combustible duct piping provides sufficiency of compliance with Article 6.2.3.2. of the Ontario Building Code at the Oakville Municipal Building, 1225 Trafalgar Road, Oakville, Ontario on condition that:

a. The duct system serves only the atrium; and,
b. The duct system be used to convey only ventilation air and air-conditioned (cooled) air, and not for any other purpose.

8. Reasons

i. The subject duct plays a limited role in the total air carrying of the building.

ii. There are no structural concerns related to this application.

iii. The atrium will be provided with an engineered smoke control system.

iv. This particular installation does not present a fire hazard since the duct is completely buried under the floor slab, the supply duct to the underground duct is noncombustible and equipped with a fire damper, and air is discharged into occupied areas through noncombustible plenums.

Dated at Toronto this **15th,** day in the month of **February,** in the year **2001** for application number **2001-11**.

BCC Ruling No. 01-06-799

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 01-06-799

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentences 9.10.11.1.(1), 7.1.6.4.(1) and 7.1.7.2.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Larry Law, Law Development Group, Thornhill, Ontario, for the resolution of a dispute with Mr. John Wright, Chief Building Official, Town of Markham, Ontario, to determine whether the proposed stacked townhouse units, with property lines occurring on both horizontal and vertical planes between them, comply with the requirements of Sentences 9.10.11.1.(1), 7.1.6.4.(1) and 7.1.7.2.(1) of the Ontario Building Code at the Bur Oak Townhouses, Bur Oak Avenue, Cornell Community, Markham, Ontario.

APPLICANT

Mr. Larry Law
Law Development Group
Thornhill, Ontario

RESPONDENT

Mr. John Wright
Chief Building Official
Town of Markham

PANEL

Dr. Kenneth Peaker, Chair
Mr. Fred Barkhouse
Mr. Donald Pratt

PLACE

Toronto, Ontario

DATE OF HEARING
February 15th, 2001

DATE OF RULING
February 15th, 2001

APPEARANCES
Mr. Randy Brown, President
Randal Brown & Associates
Willowdale, Ontario
Agent for the Applicant

Mr. Chris Bird
Manager of Plan Review
Markham, Ontario
Designate for the Respondent

RULING

1. The Applicant

Mr. Larry Law of the Law Development Group in Thornhill, Ontario, has applied for a building permit under the Building Code Act, 1992 to construct freehold residential townhouses, known as the Bur Oak Townhouses, located on Bur Oak Avenue, in the Cornell Community, Markham, Ontario.

2. Description of Construction

The Applicant is proposing the construction of four blocks containing a total of 34 Group C - residential townhouses. The townhouse blocks are proposed to be a maximum of three storeys in building height.

They are to be of combustible construction and have access to two streets. Most of the townhouses are to contain two separate freehold dwelling units each ranging from 83.61 m^2 to 130.06 m^2 in floor area.

The construction in dispute involves two main areas; fire separation between units and the sharing plumbing services. These disputes arise as a result of the stacked design of the townhouses whereby one unit sits mainly over top of another. Each unit has split levels and has its own at-grade front door and garage, in the front and rear yards respectively. As a result of the stacked design, a property line within the townhouse would be created on both vertical and horizontal planes between each dwelling unit. It is intended that the walls and/or floors occurring at the property lines that are shared by two units will be constructed with a suite-to-suite fire separation having a 1 hour fire-resistance rating.

With respect to the sharing of plumbing services, the Applicant is proposing to service the two freehold units in each townhouse with a single connection to the municipal services. As well, because of the stacked design of the units within the townhouses, the plumbing systems cannot be located exclusively within each individual unit. In addition, unlike in a condominium development or apartment complex, there are no common spaces within the townhouses through which plumbing services could be run. To address this situation, the Applicant is offering to implement reciprocal agreements and mutual easements respecting access to neighbouring dwelling units for repair and maintenance purposes, etc.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed stacked townhouse units, with property lines occurring on both horizontal and vertical planes between them, comply with the requirements of Sentences 9.10.11.1.(1), 7.1.6.4.(1) and 7.1.7.2.(1) of the Ontario Building Code.

Sentence 9.10.11.1.(1) of the Code requires, with certain exceptions, that party walls on property lines be constructed as firewalls. Sentence 9.10.11.2.(1) outlines one of the circumstances where such a firewall would not be required. It states that, in a residential building where no dwelling unit is located above another dwelling unit, a party wall is permitted to be constructed as a fire separation with a 1 hour fire resistance rating. In the subject situation, as freehold stacked townhouses, units are located upon others and yet, the demising partitions are proposed as 1 hour rated walls and floors. (It should be noted that, as the proposed unit-to-unit configurations are comprised of both horizontal and vertical separations, the concept of party wall is being extended to the separating floor assemblies as well.)

Sentences 7.1.6.4.(1) and 7.1.7.2.(1) deal respectively with the design and installation of piping and the accessibility of fixtures, plumbing appliances, equipment etc. Specifically, Sentence 7.1.6.4.(1) requires that piping in a building be connected to the public services separately from the piping of another

building. As noted, the Applicant is intending that both units within each townhouse be legally parcelled and sold as separate properties. The proposed plumbing services, however, are to be shared within each townhouse. Whereas the sharing of plumbing services is common between units in apartment or condominium buildings, it is not permitted between buildings.

Sentence 7.1.7.2.(1) requires that plumbing fixtures etc., be installed so that they are accessible. However, since there is no common space devoted for utilities such as plumbing, it may be necessary to enter one unit to provide service to the other. In lieu of common service spaces, the Applicant has proposed to create binding legal agreements with easements to allow for servicing. Nevertheless, such easements are not addressed in Article 7.1.7.2. of the OBC.

For this development, in determining the construction and life safety requirements, the Applicant has considered the entire block of townhouse units to be one building for the purposes of the Code. The Building Code requirements are proposed to be applied to the group of dwellings rather than the ownership of individual units.

4. Provisions of the Ontario Building Code

9.10.11.1. Required Firewalls

1. Except as provided in Articles 9.10.11.2. and 9.10.11.4., a *party wall* on a property line shall be constructed as a *firewall*.

9.10.11.2. Firewalls Not Required

1. In a *building* of *residential occupancy* in which there is no *dwelling unit* above another *dwelling unit*, a *party wall* on a property line between *dwelling units* need not be constructed as a *firewall* provided it is constructed as a *fire separation* having not less than a 1 h *fire-resistance rating*.

7.1.6.4. Separate Services

1. Piping in any *building* shall be connected to the public services separately from piping of any other *building*, except that an ancillary *building* on the same property may be served by the same service. (See Appendix A.)

7.1.7.2. Accessibility

1. Every *fixture*, *plumbing appliance*, *interceptor*, *cleanout*, valve, device or piece of equipment shall be so located that it is readily *accessible* for use, cleaning and maintenance.

5. Applicant's Position

The Applicant submitted that, with the townhouse complex designed to function as one building, the requirements of the Building Code would be met. In this regard, the provisions of the Code would permit walls occurring at a property line to be constructed as a suite-to-suite fire separation. In his opinion "life safety and fire protection requirements are satisfied based upon the relative orientation of dwelling unit to dwelling unit within a building rather than upon the ownership of the individual dwelling unit." In light of this, walls and floors constructed with a 1 hour fire separation of combustible construction would meet the intent of the Code.

The Applicant's position was that the project would provide "a level of life safety equivalent to that which would be found within other multi-unit buildings such as condominiums". He stated that, with respect to the issue of services and accessibility, the reciprocal agreement and mutual easements proposed would satisfy the requirements of the Code. These agreements would alert individual owners to all of the limitations and requirements of purchasing this type of unit. In addition, the agreements could be registered on title for the benefit of any future owner. He also suggests that a Homeowners' Association would be established to enforce access to units for servicing purposes.

In support of their position, the Applicant referred to previous Building Code Commission (BCC) rulings that address the concept of buildings being constructed across property lines where no fire walls were required. As he noted, "(i)n these rulings, the BCC found that these could be treated as one building since they functioned as one building and since agreements were in place regarding the function of the building."

6. Respondent's Position

The Respondent submitted that their primary difficulty with this project is the fact that the units are being offered for freehold ownership. The two issues that present concern are; 1) the requirement of party walls and, 2) the location of the plumbing piping between and throughout the units.

On these issues the Respondent put forward the following arguments:

"In the case of the proposed building, the walls and floors are located on property lines that separate individually owned properties. By virtue of their location (ie. on the property lines) and shared

ownership, these walls by definition must be considered party walls. As such, Sentence 9.10.11.1.(1) requires the party walls to be designated as firewalls. Furthermore, notwithstanding the absence of specific requirements pertaining to the unusual location of floors on property lines, similar standards should apply to the design and construction of the floor assemblies in my opinion.

"The provisions of Sentence 9.10.11.1.(1) require party walls to be constructed as firewalls except that the standards applied to party walls can be relaxed in accordance with the requirements of Article 9.10.11.2. in buildings of residential occupancy where there is no dwelling unit located above another dwelling unit. The proposed buildings contain dwelling units located above other dwelling units.

"The applicants proposal is based on the premise that the building will be designed and operated as an integral unit through the establishment of a 'Homeowners' Committee'. The legal basis for the existence of the 'Committee' is unclear as is the relationship between each homeowner and each homeowner and the Committee. Furthermore, the implementation and enforceability of the conditions contained within the 'Reciprocal Agreements' is unclear and is not addressed by the code.

"It is unclear whether the provisions of the 'Reciprocal Agreement' proposed by the applicant provides the level of accessibility to fixtures, plumbing appliances, interceptors, cleanouts etc. required by Sentence 7.1.7.2.(1) of the code."

In reference to the prior BCC rulings advanced by the Applicant, the Respondent cited that the difference between those cases and the proposed development is that the previous decisions were with respect to large commercial buildings. In those instances full scale maintenance agreements were put in place. In this case there is only a reciprocal agreement and easements with no extra protection for the access to, and maintenance of, systems proposed.

In summation, the Respondent advised that they could foresee difficulty with respect to the enforcement of the agreements, in light of the freehold ownership of the units in question. If the townhouses were developed for condominium ownership, the Respondent's position may have been different. In that situation, condominium buildings would have common areas, with ownership by the Corporation, where plumbing could be situated.

7. Commission Ruling

It is the decision of the Building Code Commission that the residential townhouse development at the Bur Oak Townhouses on Bur Oak Avenue in the Cornell Community, Markham, Ontario does not comply with the requirements of Sentences 9.10.11.1.(1), 7.1.6.4.(1) and 7.1.7.2.(1)

8. Reasons

i. In this particular townhouse development, since dwelling units are proposed to be located over other dwelling units, the exemption from constructing a party wall as a firewall found in Sentence 9.10.11.2.(1) is not applicable. The 1 hour rated separation allowed in that Sentence and proposed between the freehold units within the townhouses, therefore, is not permitted.

ii. Moreover, since the townhouses consist of stacked dwelling units, a firewall is required between the townhouses because they too do not qualify for the exemption in Sentence 9.10.11.2.(1).

iii. The OBC does not recognize a horizontal firewall between suites. As a result, the subject residential townhouses cannot have freehold units stacked above one another.

iv. Plumbing serving an individual freehold unit must be separate from the municipal mains to the unit and also within that unit from the plumbing serving another such unit.

v. Plumbing fixtures must be accessible. While the proposed easement agreement does offer legal access to service the plumbing, it does not provide direct physical access as would be found in a freehold building or in the service spaces of an apartment or a condominium building.

Dated at Toronto this **15th,** day in the month of **February,** in the year **2001** for application number **2001-09.**

Ontario

Ruling No. 01-04-797
Application No. 2000-82

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentences 3.2.1.1.(3), (4), (5) and (6) Article 3.2.2.24., Sentence 3.2.8.2.(1), Article 3.4.2.2. and Clause 3.4.2.5.(1)(c) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Harry Cavender, Team Leader, Fanshawe College, London, Ontario, for the resolution of a dispute with Mr. Jim Foster, Chief Building Official, City of St. Thomas, Ontario, to determine whether the proposed mezzanine, upper mezzanine and grid iron areas intended for a live performance teaching facility, in conjunction with certain additional protective measures, provides sufficiency of compliance with Article 3.2.2.24., Sentences 3.2.1.1.(3),(4) and (5), Sentence 3.2.8.2.(1), Article 3.4.2.2. and Clause 3.4.2.5.(1)(c) of the Ontario Building Code at the Fanshawe College "Live Performance Industry" Facility, St. Thomas / Elgin Campus, 120 Bill Martyn Parkway, St. Thomas, Ontario.

APPLICANT	Mr. Harry Cavender, Team Leader Fanshawe College London, Ontario
RESPONDENT	Mr. Jim Foster Chief Building Official City of St. Thomas
PANEL	Dr. Kenneth Peaker, Chair Mr. John Guthrie Mr. Fred Barkhouse
PLACE	Toronto, Ontario
DATE OF HEARING	February 8th, 2001
DATE OF RULING	February 8th, 2001
APPEARANCES	Ms. Valerie M'Garry Solicitor London, Ontario **Agent for the Applicant** Mr. Jim Foster Chief Building Official St. Thomas, Ontario **The Respondent**

RULING

1. The Applicant

Mr. Harry Cavender, Team Leader, Fanshawe College, London, Ontario, has received a building permit under the Building Code Act, 1992 and is constructing an addition onto the existing Fanshawe College building, St. Thomas / Elgin Campus, 120 Bill Martyn Parkway, St. Thomas, Ontario.

2. Description of Construction

The Applicant is proposing to construct a live theatre performance teaching facility onto an existing college structure. As a teaching space, the addition has been classified as a Group A, Division 2 - assembly occupancy, and not as an A1 use, which is applicable to most theatres. The addition, to the north of the existing building, with a building area of 1,259 m^2, combined with the 10,580 m^2 building area of the existing structure will create an expanded facility of 11,839 m^2.

The building, including addition, is further described as being of noncombustible construction and as having fire separations with fire resistance ratings of one hour in accordance with the requirements of Article 3.2.2.24. The structure is considered as facing one street for fire fighting purposes. The building will be equipped with a sprinkler system and a fire alarm system, but not a standpipe and hose system.

Among the features provided within the proposed addition, which is known as the "Live Performance Industry" facility, there is to be a studio theatre (referred to as the studio). As an instructional facility, the studio is designed to be a legitimate theatre with a fully equipped stage, fly tower and control room, etc. However, because its purpose is mainly teaching students how to operate stage equipment, it is to have far fewer seats than a regular theatre. As such, the ratio of stage area to seating area in the facility is considerably smaller than a conventional legitimate theatre. Consequently, the mezzanine levels have a much larger percentage in terms of area in comparison with the size of the room/studio.

The studio is to be configured with the stage area located at the eastern end of the room. Immediately above the stage, covering nearly its entire area, will be the grid, or grid iron, level. Opposite the stage is to be the audience area that will accommodate the non-fixed seats. Above the audience area, at the farthest, or extreme western end of the studio, is to be the mezzanine, or control room. On top of the control room will be the upper mezzanine, or catwalk. A single flight of stairs running near the southern, stage left, side of the studio is to connect the upper mezzanine with the loading bridge. The loading bridge, in turn, will form the southern end of the grid iron. The loading bridge is designed to span the entire width of the grid and will terminate at a spiral stair that is to descend down all levels ending at the stage.

The determination of the number of storeys present in the studio, and thereby the building, is part of the dispute between the Applicant and Respondent. The Applicant holds that the building has remained at one storey despite the construction of the theatre space. In his view, the various levels of the studio should be considered as mezzanines. The Respondent believes the studio room within the theatre addition may contain multi storeys. From this basic dispute arises much of the following more specific concerns between the parties.

The mezzanine areas have three distinct levels: the grid, the upper mezzanine/catwalk, and the control room. None of these areas will be considered as being accessible by the public.

The grid (in front of the audience), the highest of the levels, is to be constructed mainly with an open 76 mm (3 in) steel mesh floor to allow good visual and oral communication between the flymen (those on the grid) and the stagehands below. There are to be five slots or channels 254 mm (10 in) wide, known as grid wells, that traverse the entire width of the grid (or depth of the stage). These are to accommodate the lift lines that will be used for rigging props, scenery etc.

At the proscenium opening, where the stage and auditorium area interface, the grid will be provided with an open steel guard that consists of a single horizontal rail measuring 1,070 mm (42 in) in height supported by vertical posts set at approximately 915 mm (3 ft) on centre. This guard, which is also to be used as a fixture to attach lighting, is not in dispute.

At its far southern end, or stage left, the grid will connect to the loading bridge which is an area that will be used for hoisting equipment between the stage and grid level. Due to the requirement of lifting material and equipment (in this side stage area where it will not be seen by the audience), the loading bridge, however, is to terminate approximately 915 mm (3 ft) short of connecting to the studio's south wall. At this edge, the loading bridge is to be provided with a guard having the same design as at the proscenium opening.

The catwalk (behind and above the audience) is to be positioned approximately 1.2 to 1.5 m (4 to 5 ft) below the level of the grid. The catwalk is intended to provide an area to conduct various theatrical effects, especially lighting. It will have a solid decking surface. At its rear, or western end, a single straight flight of stairs connecting to the control room level below is to be provided. The guard proposed to separate the catwalk from the open space overlooking the audience and the stair opening to the lower level will be the same as on the grid iron. The guard on the audience side of the catwalk will also be used for attaching lights.

The control room (behind and above the audience) is to be the lowest of the raised levels. It will contain three separate booths that are to house the main sound controls, lighting controls and the "follow spot light". As booths, the control room level will not have guards protecting persons from the differing floor levels, but will instead have mainly glazed partitions overlooking the audience. (The audience seating can be extended underneath the raised control room.) A two flight stair separated by a 90^0 landing will serve the control room area. As a stair with a right angle run, it is to be located at the rear and south of the control rooms.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed grid, catwalk and control room areas intended for use within a live performance theatre teaching facility, in conjunction with certain additional protective measures, provides sufficiency of compliance with Sentences 3.2.1.1.(3), (4), (5) and (6), Article 3.2.2.24., Sentence 3.2.8.2.(1), Article 3.4.2.2. and Clause 3.4.2.5.(1)(c) of the Ontario Building Code.

The first provision, Article 3.2.1.1., in certain circumstances, determines building height. Specifically, it provides exceptions when raised levels need not be considered as storeys. Applicable to the present case is Sentence 3.2.1.1.(3) which, with exceptions discussed below, sets out the conditions under which a mezzanine can be exempted from being a storey. Among the requirements imposed is that a mezzanine cannot exceed 40 percent of the area of the room in

which it is located. As noted before, since the proposed addition is designed as a teaching studio and not a regular theatre, the instructional spaces are fully sized but the audience space is considerably reduced. This situation allots a far larger percentage, exceeding 40 percent, of raised areas in comparison with the room size. The grid, catwalk and control room levels therefore do not conform with this condition necessary in order to enable them to be considered mezzanines under Sentence (3).

Sentence 3.2.1.1.(4) is an exception to Sentence (3). It provides an alternative exemption from designating a raised level as a storey. Sentence (4), with the exception of Sentence (5), allows a mezzanine not to be considered as a storey if the total area of the raised level does not exceed ten percent (in this case Clause (b) is applicable) of the storey in which it is located. The aggregate area of the three mezzanines, however, also exceeds 10 percent of the storey (of the new addition).

Nevertheless, Sentence 3.2.1.1.(5), as an exception to Sentence (4), is relevant in the present instance. It requires, with an exception not applicable here, that if one mezzanine level is located above another, then the upper level must be considered as a storey. As described in the previous section, the catwalk in the studio is wholly situated on top of control booth level. Consequently, even if the mezzanine areas were of a size that compliance with Sentences (3) or (4) were possible, due to Sentence (5), the studio would have to be considered as a two storey space. As a result, Sentence (6) of Article 3.2.1.1. is germane. It states that a mezzanine that is considered as a storey must meet the fire separation requirements of Articles 3.2.2.20. to 3.2.2.83. For the subject addition, the appropriate Article is 3.2.2.24.

Article 3.2.2.24. sets out building size and construction relative to occupancy. In this instance, the subject addition must, in terms of construction standards, provide floor assemblies, mezzanines and load bearing members with a fire resistance rating of one hour. As proposed, the various upper levels of the studio will not provide a one hour rating.

Sentence 3.2.8.2.(1) provides a specific set of exemptions to the special protection, especially in terms of fire safety, often required for a mezzanine. Among the conditions set out that offer exemption is that the mezzanine serve an A1 major occupancy, which is the classification given to most legitimate theatres. As indicated prior, the addition however, as an instructional space, is classified as an A2 occupancy.

Article 3.4.2.2. deals with exiting from a mezzanine. It states that the exit facilities for a mezzanine shall be the same as those for a floor area unless specifically exempted in Sentences (2) to (4). Again, the proposed mezzanines do not qualify for the exceptions provided. This means that the grid iron, having a proposed travel distance of approximately 60 m from its most remote area, must be provided with an additional exit in order to comply with the exiting requirement of 45 m found in Clause 3.4.2.5.(1)(c).

It is alleged therefore that the construction as proposed does not meet Code requirements in certain areas described above. To address these apparent deficiencies, the Applicants are proposing certain compensating measures. According to the Applicant, this compensating construction includes the installation of a smoke-activated visual alarm system and a smoke hatch over the grid iron area. The Applicant is also proposing to "develop and post a fire safety plan, and ensure that all instructors and other users of the facility are knowledgeable of it."

The issue at dispute then is whether the proposed construction, in conjunction with the intended compensating measures achieves a level of safety in the studio so as to sufficiently comply with the aforementioned requirements of the Ontario Building Code.

4. Provisions of the Ontario Building Code

Sentences 3.2.1.1.(3) to (6) Exceptions in Determining Building Height

(3) Except as required in Sentence (4), (5) & (8), a mezzanine shall not be considered as a storey in calculating the building height provided

(a) the aggregate area of the mezzanine floor is not more than 40% of the area of the room or storey in which it is located,

(b) it is used as an open floor area except as permitted by Sentence 3.3.2.11.(3), and

(c) the space above the mezzanine floor has no visual obstructions more than 1 070 mm (3 ft 6 in) above the floor.

(See Appendix A).

(4) Except as required by Sentence (5), a mezzanine shall not be considered as a storey in calculating building height and need not conform to Sentence (3) provided the aggregate area of the mezzanine floor is not more than 10% of the area of the

(a) the suite in which it is located, where there is more than one suite in the storey, or

(b) the storey in which it is located, in all other cases.

(See A-3.2.1.1.(3) in Appendix A).

(5) Except as permitted by Sentence (8), if one or more levels of mezzanine is partially or wholly superimposed above another mezzanine in the room or storey, each level additional to the first level shall be considered as a storey in calculating the building height.

(6) The floor assembly of a mezzanine that is required to be considered as a storey in determining building height, shall be constructed in conformance with the fire separation requirements of Articles 3.2.2.20 to 3.2.2.83, for floor assemblies.

Article 3.2.2.24. Group A, Division 2, up to 6 Storeys, Any Area, Sprinklered

(1) A building classified as Group A, Division 2, that is not limited by building area, is permitted to conform to Sentence (2) provided

(a) except as permitted by Sentence 3.2.2.7.(1), the building is sprinklered, and

(b) it is not more than 6 storeys in building height.

(2) Except as permitted by Article 3.2.2.16., the building referred to in Sentence (1) shall be of noncombustible construction, and

(a) floor assemblies shall be fire separations with a fire-resistance rating not less than 1 h,

(b) mezzanines shall have a fire-resistance rating not less than 1 hr, and

(c) all load-bearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.

Sentence 3.2.8.2. Exceptions to Special Protection

(1) A mezzanine need not terminate at a vertical fire separation nor be protected in conformance with the requirements of Article 3.2.8.3. to 3.2.8.11. provided the mezzanine

(a) serves a Group A, Division 1 major occupancy,

(b) serves a Group A, Division 3 major occupancy in a building not more than 2 storeys in building height, or

(c) is not considered as a storey in Sentences 3.2.1.1.(3) or 3.2.1.1.(5) in calculating building height provided
  (i) every point on the mezzanine is within 25 m (82 ft) of a point or points on the mezzanine perimeter from which, in the aggregate, an occupant may view 60% of the area of the room or storey in which the mezzanine is located, and
  (ii) the mezzanine does not contain a Group B occupancy,
(d) is not considered a storey in Sentence 3.2.1.1. (4) in calculating building height provided the mezzanine is not more than 500 m (5,380 m) in area and does not contain a Group B occupancy, or
(e) is not considered a storey in calculating building height in Sentence 3.2.1.1.(8).

Article 3.4.2.2 Mezzanine Exiting

(1) Except as permitted by Sentences (2), (3) or (4), a mezzanine shall be provided with exits on the same basis as required for floor areas by this Section.
(See Sentences 3.3.1.5.(2) and (3) for egress requirements.)

(2) A mezzanine need not conform to Sentence (1) provided Article 3.2.8.1. does not require it to terminate at a vertical fire separation.

(3) In a floor area that is not sprinklered, a mezzanine need not conform to Sentence (1) where Article 3.2.8.1. does require it to terminate at a vertical fire separation provided the total occupant load of the mezzanine is not more than 60 and,
(a) the area of the mezzanine does not exceed the area limits for rooms and suites in Table 3.3.1.5.A., and
(b) the distance limits in Table 3.3.1.5.A are not exceeded from any point on the mezzanine to
  (i) the egress doorway from the room in which the mezzanine is located if that room has a single egress doorway, or
  (ii) an egress facility leading from the mezzanine if the room in which the mezzanine is located has 2 egress doorways provided in conformance with Subsection 3.3.1.

(4) In a floor area that is sprinklered, a mezzanine need not conform to Sentence (1) where Article 3.2.8.1. does require it to terminate at a vertical fire separation provided the total occupant load of the mezzanine is not more than 60 and,
(a) the area of the mezzanine does not exceed the area limits for rooms and suites in Table 3.3.1.5.B, and
(b) the distance of travel is not more than 25 m (82 ft) when measured from any point on the mezzanine to
  (i) the egress doorway from the room in which the mezzanine is located if that room has a single egress doorway, or
  (ii) an egress facility leading from the mezzanine if the room in which the mezzanine is located has 2 egress doorways provided in conformance with Subsection 3.3.1.

Clause 3.4.2.5.(1)(c) Location of Exits

(1) Except as permitted by Sentences (2), (3) and 3.3.2.4.(6), if more than one exit is required from a floor area, the exits shall be located so that the travel distance to at least one exit shall be not more than...

(c) 45 m (147 ft 8 in) in a floor area that contains an occupancy other than a high hazard industrial occupancy, provided it is sprinklered.

5. Applicant's Position

The Agent for the Applicant began their presentation with a brief description of the project. As an instructional facility, it is a mini theatre, she stated, but because it has a low number of seats, the proportion of the mezzanine area in comparison with the remainder of the room is well over 40 percent. However, in order to serve its purpose, the studio must be constructed as such. Fanshawe College, she noted, trains theatre technicians, not actors.

The Agent then described the proposed multiple mezzanines in the studio space and how they are to function. The three levels must operate with coordination from each other and from the stage below. As a result, they need to be as open as possible. The grid, in particular, since it sits directly above the stage, must have an open floor system with its line well slots. Without being constructed in this manner, it would be impossible to perform its intended function. This openness, the Agent added, also makes the mezzanines, especially the grid, quite safe. Fire and/or other emergencies will be detected almost instantly, giving persons on the grid ample time to react appropriately, she argued.

A theatre safety consultant, appearing on behalf of the Applicant, also provided explanation as to how the three levels of the facility are to operate. He elaborated on the argument that the facility had to be designed in this manner or it would render the training of theatre technicians meaningless. He added that it enhances the future safety of all theatres and the individual safety for the in-training students if they learn in a real life situation so they are well prepared for the facilities in which they will eventually work. The consultant also noted that many similar multi mezzanine facilities have been built, most being in legitimate theatres and some found in post-secondary performance centres.

Also contributing to the safety of the mezzanines will be their low occupant load, the Agent explained. She indicated that a maximum of 15 to 16 persons, including instructors, would be on the various mezzanine levels during classes. The students will be of relatively mature age, being at least 18 years old or more. As well, while on the mezzanines, they will be supervised. On the grid there would be as few as four persons when setting up a show and no one would be on the grid during a show, the Agent noted. In addition, the total occupant load for the studio when a performance is taking place would be approximately 75 persons, including students and instructors. During such times, the audience will be prevented from gaining access to the mezzanines since the stairs will be gated at the ground floor level.

The Agent acknowledged that much of the issue at hand dealt with fire safety and as a consequence had to be taken as a "matter of utmost importance". In this regard, she argued that the studio and the addition as a whole will be quite safe. For example, the building, including the addition, are noncombustible construction and the studio itself is to be separated from the remainder of the building by a one hour rated wall. The building is also equipped with full sprinkler and fire alarm systems, she noted. Moreover, as compensatory measures, the studio portion of the alarm system will be equipped with a smoke-activated visual (strobe) alarm. In addition, the smoke management system in the studio will include a smoke hatch above the grid iron area and a fire safety plan will be developed with training provided for faculty and students, etc.

During the hearing the Agent offered to improve upon the compensating measures already provided in three ways. First, the proposed spiral stairs at the southeast corner will be replaced with a Code

compliant set of egress stairs. Secondly, the Agent offered to ensure that all proposed guards would be modified to comply with OBC requirements except in the loading gallery area where the guard design would be changed to include a single upper horizontal rail and a mid-level horizontal rail. Thirdly, she also offered to improve the safety of the loading gallery area by affixing a series of horizontal metal rods, 203 mm (8 in) on centre which span between the floor of the loading gallery area and the wall opposite.

With respect to the issue of travel distance, the Agent indicated that it had been resolved with the Respondent. The travel distance will now meet the 45 m requirement set out in Clause 3.4.2.5.(1)(c).

The Agent also argued that the stage and mezzanine areas, as designed, are recognized by Code. In fact, if they were to simply create additional seating capacity in the audience area of the facility compliance would be achieved. However, adding seats would in no way improve the physical safety of the building. Adding seats is an unnecessary expense, the Agent argued. And building a large theatre in St. Thomas, with a population of approximately 30,000 people, does not make economic sense.

Finally, the agent argued that the BCC could choose to consider the mezzanines as working areas or platforms which may allow for some exemptions or relaxations under the Building Code. She indicated that a precedent has already been created in this regard. The Mississauga Living Arts Centre successfully established that is its grid area can be considered as a working platform.

6. Respondent's Position

The Respondent submitted that he does not object to the proposal, however, he indicated that he does not have the authority to approve it. The Code is clear on the matter of the mezzanines and their determination as floor levels, he argued.

Regarding the proposed compensating measures, the Respondent noted that while they would improve the level of safety in the building, the building code does not specifically recognize such alternative methods of compliance. As a result, he stated that the municipality must abide by its responsibility to enforce the prescriptive standards in the Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed mezzanine, the upper mezzanine and grid iron areas intended as part of a live performance teaching facility, in conjunction with the additional protective measures offered, provide sufficiency of compliance with Sentences 3.2.1.1.(3),(4) and (5), Article 3.2.2.24., Sentence 3.2.8.2.(1), Article 3.4.2.2. and Clause 3.4.2.5.(1)(c) of the Ontario Building Code at the Fanshawe College "Live Performance Industry" Facility, St. Thomas/Elgin Campus, 120 Bill Martyn Parkway, St. Thomas, Ontario on condition that:

a) All stairs and guards must conform to the OBC, except in the loading gallery area where the guard is to be modified to include a single upper horizontal handrail and a single centre horizontal rail; and,

b) Installed at the edge of the loading gallery area will be a series of horizontal metal bars at 203 mm (8 in) on centres that span perpendicular from floor level of the loading gallery to the opposite wall.

8. Reasons

i) The proposed addition includes a training facility equipped with all the characteristics and elements for live theatre performances, but which is not contained within a legitimate theatre. As a result, in the Commission's view, it will not function as a typical A2 occupancy.

ii) The occupant load on the mezzanines and grid iron areas, at less than 20 students, will be limited. Students will be supervised when on these areas.

iii) The stair to the mezzanines and grid iron areas is to be gated for limited control and access.

iv) With the above condition "a" fulfilled, the proposed stairs and guards will satisfy OBC requirements.

v) The proposed travel distances comply with OBC requirements.

vi) The facility will also be provided with a fire alarm system.

vii) Smoke control will be provided in the theatre facility.

viii) The smoke alarm system will be equipped with a highly visual strobe alarm light.

ix) A fire safety plan approved by the municipal fire department will be developed and all persons to occupy the mezzanine and grid iron areas will receive such training prior to use.

Dated at Toronto this **8th** day in the month of **February** in the year **2001** for application number **2000-82.**

Dr. Kenneth Peaker, Chair

Mr. John Guthrie

Mr. Fred Barkhouse

BCC Ruling No. 01-03-796

BUILDING CODE COMMISSION DECISION ON B.C.C. #. 01-03-796

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Section 9.23. and Part 11 of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Thomas Lehan, Homeowner, St. Catharines, Ontario, for the resolution of a dispute with Mr. John Fisher, Chief Building Official, City of St. Catharines, Ontario, to determine whether the various identified alleged deficiencies provide sufficiency of compliance with the relevant provisions of the Ontario Building Code at the Lehan Residence, 1164 Pelham Road, St. Catharines, Ontario.

APPLICANT
Mr. Thomas Lehan
Homeowner
St. Catharines, Ontario

RESPONDENT
Mr. John Fisher
Chief Building Official
City of St. Catharines

PANEL
Dr. Kenneth Peaker, Chair
Mr. John Guthrie
Mr. Fred Barkhouse

PLACE
Toronto, Ontario

DATE OF HEARING
February 8th, 2001

DATE OF RULING
February 8th, 2001

APPEARANCES
Mr. Thomas Lehan
Homeowner
St. Catharines. Ontario

The Applicant

RULING

1. The Applicant

Mr. Thomas Lehan, Homeowner, St. Catharines, Ontario, has received an order under the Building Code Act, 1992 to remedy certain alleged deficiencies at the Lehan Residence, 1164 Pelham Road, St. Catharines, Ontario.

2. Description of Construction

The construction in dispute was not described at the hearing.

3. Dispute

The issue at dispute between the Applicant and Respondent, as stated by the Applicant, is whether the various identified alleged deficiencies provide sufficiency of compliance with the relevant provisions of the Ontario Building Code at the Lehan Residence, 1164 Pelham Road, St. Catharines, Ontario. The Respondent, on the other hand, claims there is no dispute.

4. Provisions of the Ontario Building Code

Section 9.23. Wood-Frame Construction

Please refer to the Ontario Building Code.

Part 11 Renovation

Please refer to the Ontario Building Code.

5. Applicant's Position

At the hearing, the Applicant stated that it was his belief that the BCC could make a determination regarding the compliance of the identified alleged deficiencies in terms of the technical requirements of the OBC. While he acknowledged that he had completed all of the work indicated on the order issued to him, he argued that the Commission should still rule on these matters. This was because, as he claimed, he was given erroneous information about his appeal rights to the BCC, specifically regarding the statute of limitations in which an appeal could occur. As the Applicant explained, he was instructed that he had only 20 days to appeal

his order to the Commission. He later discovered this 20 day limit does not apply to the BCC.

In summation, the Applicant stated that the BCC was the most appropriate body in Ontario to hear matters regarding the technical compliance with the OBC. Since his issues deal with conformance to the technical requirements of the Code, the BCC should therefore make decisions on the matters at hand.

6. Respondent's Position

The Respondent did not attend the hearing. The Commission therefore relied on his written submission only.

The Respondent submitted that since all of the various items in the work order had been complied with, they no longer had a dispute with the Applicant.

7. Commission Ruling

It is the decision of the Building Code Commission that as there is no longer a dispute between the Applicant and Respondent, the Commission cannot make a determination in this matter. To do so, in our opinion, would be beyond the mandate of the BCC.

8. Reasons

i. The mandate of the BCC is found is Section 24 of the Building Code Act. This Section authorizes the BCC to hold hearings regarding technical matters of the Ontario Building Code that involve ***disputes*** (our emphasis) between applicants and respondents as they are defined in Section 24. As this Section indicates, a dispute must be present between the defined parties for the Commission to have jurisdiction. Indeed, for adjudicative tribunals, hearing disputes between parties is the purpose of their existence.

ii. By fulfilling all of the items of the work order issued against him to the satisfaction of the municipality, the Applicant no longer qualifies, as Subsection 24(1) states, as "someone to whom an order has been given." Moreover, to our knowledge, he does not match the other criteria that makes one eligible as an applicant to the BCC either.

Dated at Toronto this **8th**, day in the month of **February,** in the year **2001** for application number **2000-65.**

BCC Ruling No. 01-02-795

BUILDING CODE COMMISSION DECISION ON B.C.C. #01-02-795

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Subsection 3.2.3. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Thomas Phelan, Construction Manager, The Home Depot, Scarborough, Ontario, for the resolution of a dispute with Mr. Gerald Bilous, Director of Building Services, City of Oshawa, Ontario, to determine whether the shade screen, due to its proposed construction and seasonal use, can be viewed as a structure that may be permitted to conform to the construction standards of Section 3.13. Tents and Air Supported Structures of the Ontario Building Code at the Home Depot, 1481 Harmony Road, Oshawa, Ontario.

APPLICANT
Mr. Thomas Phelan, Construction Manager
The Home Depot
Scarborough, Ontario

RESPONDENT
Mr. Gerald Bilous,
Director of Building Services
City of Oshawa

PANEL
Mr. Len King, Vice- Chair
Mr. Michael Steele
Mr. Fred Barkhouse

PLACE
Toronto, Ontario

DATE OF HEARING
January 11th, 2001

DATE OF RULING
January 11th, 2001

APPEARANCES

Mr. Randy Brown
Randal Brown & Associates
Toronto, Ontario
Agent for the Applicant

Mr. Kwan Lo
Manager, Permit Services
Oshawa, Ontario
Designate for the Respondent

RULING

1. The Applicant

Mr. Thomas Phelan, Construction Manager, The Home Depot, Scarborough, Ontario, has applied for a building permit under the Building Code Act, 1992 to construct a seasonal-use shade screen within an outdoor garden centre at the Home Depot, 1481 Harmony Road North, Oshawa, Ontario.

2. Description of Construction

The Applicant is proposing to construct a new shade screen to be used for the sale and display of plant material and agricultural products. The shade screen is to be located within an outdoor garden centre that abuts an existing Home Depot building. The structure is described as L-shaped, unheated, one storey in building height and 613 m^2 in building area. It consists of a concrete slab floor and a polyethylene fabric roof supported by a steel frame structure. The fabric has a flamespread rating of 25 based on tests conducted in accordance with CAN/ULC-S109. The roof must be removed in the winter because it is not designed to sustain snow

loading.

The shade screen will be positioned such that its length abuts the Home Depot store. A 150 mm (6 in) gap will separate the shade screen from the existing building. The other three sides of the shade screen are to be open. (The ends of the shade screen will not have gables.) The open sides will have at least 3 m horizontal distance to adjacent buildings and property lines. The south end of the shade screen will be enclosed with a high security chain link fence. Beyond the shade screen, the remainder of the garden centre will be used for the open air display of other products, such as landscaping materials.

The existing Home Depot store is described as a one storey, Group E - mercantile occupancy with a building area of 10,754 m^2. The building is noncombustible construction, with the exterior walls made of precast concrete having a two hour fire resistance rating. The store is equipped with electrically supervised sprinkler and fire alarm systems. There are also fire hydrants located adjacent to the existing store and the proposed location for the shade screen. The building is considered to face two streets for fire fighting purposes.

The proposed exiting arrangement between the two structures will allow occupants from the store to discharge through two exits into the shade screen area. This will account, however, for no more than 25% of the store's total required exit capacity. The two exit doors will be equipped with close spaced sprinklers. As well, window sprinklers are to be installed on one side of the glazing over the doors. At least two means of egress will be provided for the shade screen area, one of these will be through two doors in the chain link fence which form part of the means of egress. The egress aisles through the garden centre, including the shade screen, will be at least 1.1 m wide.

3. Dispute

The primary issue at dispute between the Applicant and Respondent is whether the shade screen, due to its proposed construction and seasonal use, can be viewed as a structure that may be permitted to conform to the construction standards of Section 3.13. Tents and Air Supported Structures. This Section sets out provisions that govern the use and construction of certain structures, specifically tents and air-supported structures.

If the shade screen does not meet the test of a structure as currently set out in OBC 3.13., then it must be deemed a building under the Code. (The shade screen was not presented by the Applicant as an Article 3.2.2.2. Special and Unusual Structure.) If so, among the provisions of the Ontario Building Code it would be required to comply with would include, but not be limited to, Sections 3.2. Building Fire Safety, 3.3. Safety Within Floor Areas and 3.4. Requirements for Exits.

In the determination of this question, it should be noted that in earlier versions of the Code this Section (known as Subsection 3.1.6. Tents, Air-Supported Structures and Temporary Structures

in the 1990 OBC) contained provisions for the construction of temporary structures. This Commission in the past found other similar seasonal-use structures to have sufficiency of compliance with Subsection 3.1.6. with certain conditions (e.g., BCC Ruling 98-11-616). Since that time, Subsection 3.1.6. was amended as one of the revisions to the 1997 version of the OBC. The amendment to Subsection 3.1.6. deleted the entire category of structures described as temporary. The current OBC therefore has no provisions governing such construction.

In pursuing its mandate of determining interpretation or sufficiency of compliance issues regarding the technical requirements of the OBC, the BCC must look to the version of the Code current at the time the permit was applied for or issued or when the order was made. In the case of the subject shade screen, the 1997 OBC is the relevant edition.

The second issue is whether the shade screen, which is to be located approximately 150 mm away from an existing exterior wall, is to be considered as an addition onto the existing store or as a separate structure. This question depends, in part, on the answer to the first issue. If it is deemed not to be a Section 3.13.-type structure, then, as a building, the spatial separation requirements of Subsection 3.2.3. Spatial Separation and Exposure Protection would apply. However, if the shade screen is permitted to conform to OBC 3.13. then the spatial separations would be dictated by provisions in that Section.

If this is the case, regardless of whether the structure is considered a tent or an air-supported structure, the required horizontal separations, if deemed to be a separate structure, are the same - both at 3 m. On the other hand, if the shade screen is viewed as an addition, the requirements for tents and air-supported structures differ. Article 3.13.1.4. (which would be applicable because the shade screen is larger than 225 m^2) does not permit a tent occupied by the public to be constructed as an addition to a building. In contrast, Article 3.13.2.3. permits an air-supported structure to be attached to another building, but under certain conditions.

4. Provisions of the Ontario Building Code

Article 3.2.2.2. Special and Unusual Structures

1. A structure which cannot be identified with the characteristics of a *building* in Articles 3.2.2.20. to 3.2.2.83. shall be protected against fire spread and collapse in conformance with good fire protection engineering practice. (See A-3, A-3.2.2.2.(1) and A-3.2.5.13.(1) in Appendix A.)

Sentence 3.2.3.7. (2) Construction of Exposing Building Face

2. Except as permitted by Sentence (9) and Articles 3.2.3.9. and 3.2.3.10., if a *limiting distance* shown in Table 3.2.3.1.A. or Table 3.2.3.1.C. for a Group A, B, C, D or Group F, Division 3 to have *unprotected openings* more than 10% but not more than 25% of the *exposing building face* , the *exposing building face* shall
    a. have a *fire-resistance rating* not less than 1 h, and
    b. be clad with *noncombustible* cladding.

Subsection 3.13.1. Tents (Selected Articles)

Article 3.13.1.1. Application

1. Except as provided in this Subsection, tents are exempted from complying with the requirements of this Code.

Article 3.13.1.2. General

1. Except as provided in Sentence (2), the requirements of this Subsection shall apply to all tents.
2. Articles 3.13.1.4., 3.13.1.5., 3.13.1.6. and 3.13.1.10. apply to tents that

(a) do not exceed 225 m^2 (2,420 ft^2) in ground area,
(b) do not exceed 225 m^2 (2,420 ft^2) in aggregate ground area and are closer than 3 m (9 ft 10 in) apart,
(c) do not contain bleachers, and
(d) are not enclosed with sidewalls.

Article 3.13.1.3. Means of Egress

1. Except as provided in Sentences (2) and (3), tents shall conform to Sections 3.3. and 3.4.
2. A tent need not conform to Article 3.4.6.11. except where swing type doors are provided.
3. Where the area between adjacent tents or a tent and the property line is used as a *means of earess*. the minimum width between stake lines shall be the width necessarv for

means of egress, but not less than 3 m (9 ft 10 in).

Article 3.13.1.4 Clearance to Other Structures

1. Tents shall not be erected closer than 3 m (9 ft 10 in) to the property line.

2. Except as provided in Sentences (3), (4) and (5), tents shall not be erected closer than 3 m (9 ft 10 in) to other tents or structures on the same property.

3. A *walkway* between a *building* and a tent occupied by the public is permitted provided,

   (a) the tent is not closer than 3 m (9 ft 10 in) from the *building*, and

   (b) the *walkway* conforms to Article 3.2.3.18.

4. Tents not occupied by the public need not be separated from one another, and are permitted to be erected less than 3 m (9 ft 10 in) from other structures on the same property, where such closer spacing does not create a hazard to the public.

5. Tents located on fair grounds or similar open spaces, need not be separated from one another provided such closer

Subsection 3.13.2. Air-Supported Structures (Selected Articles)

Article 3.13.2.1. Application

(1) Except as provided in this Subsection, the requirements of the Code apply to *air-supported structures*.

Article 3.13.2.2. General

6. *Air-supported structures* shall not be used for Groups B, C, or Group F, Division 1 *major occupancies* or for classrooms.

7. Except where no *fire separation* is required between *major occupancies*, *air-supported structures* shall contain not more than one *major occupancy*.
8. Except as provided in Sentence (5), *air-supported structures* are exempt from complying with Articles 3.2.2.20. to 3.2.2.83., except for maximum *building* size.
9. *Air-supported structures* may be designed with interior walls, *mezzanines*, or similar *construction*.
10. Interior construction contained within *air-supported structures* must meet the construction requirements of Articles 3.2.2.20. to 3.2.2.83.

Article 3.13.2.3. Spatial Separation

11. Except as provided in Sentences (2), (3) and (4), *air-supported structures* shall not be erected closer than 3 m (9 ft 10 in) to other structures on the same property or to the property line.
12. *Air-supported structures* not occupied by the public need not be separated from one another, and are permitted to be erected closer than 3 m (9 ft 10 in) from other structures on the same property where such closer spacing does not create a hazard to the *building* occupants or the public.
13. Except as provided in Sentence (4), an *air-supported structure* is permitted to be attached to another *building* provided the *building* to which it is attached
    a. conforms to the requirements of other Parts of the Code based on the total *building areas* of the *air-supported structure* and the attached *building*,
    b. is *sprinklered*, and
    c. is separated from the *air-supported structure* by a *fire separation* having a *fire-resistance rating* of not less than 1 h.

5. Applicant's Position

The arguments made by the Agent for the Applicant did not specifically address the first issue regarding whether the provisions of Section 3.13. are applicable to the proposed shade screen. He focussed his discussion instead on proving why the shade is not a conventional building and thus should not be subject to the construction requirements of

Sections 3.2. to 3.4. To this end he submitted that the shade screen, while fitting the definition of a building found in the Building Code Act since it comprises a roof sheltering an occupancy below, does not have a floor area nor a building area as defined in the OBC because there are no exterior walls. As such, the Agent asserted that to apply the full requirements for a conventional building found in the Code to subject structure would not only be problematic, but also onerous. Further, he noted that in the past the Commission approved numerous such structures.

The Agent also elaborated on, as he argued, the inherent safety of the shade screen. He noted that three sides were completely open and provided access to an approved open space refuge area. The roof fabric itself, with a low flame spread rating of 25, meets the CAN/ULC-S109 standard. Moreover, the only material stored under the screen will be plants and plant material and not lumber, etc.

Another argument developed by the Agent was that as a seasonal-use facility, the construction of the structure is not intended to be similar to that of a conventional building. The sole purpose of the shade screen, he noted, was to protect plants from the sun and people from the rain. It is not designed to do more or perform other functions. It is the incongruity between the simple purpose of the shade screen, as proposed, and the standards of a full fledged building that may be at the centre of the subject dispute, the Agent suggested.

Regarding the issue of whether the shade screen is an addition or a separate structure, the Agent indicated that in his view it is clearly a separate and distinct structure. Whereas this would normally mean that Subsection 3.2.3. is applicable to both buildings, he argued however, in the present instance it does not apply to the shade screen, only to the existing store. As he explained, "(b)y the definition of "exposing building face" in Subsection 3.2.3., since there is no exterior wall, Subsection 3.2.3. is not applicable."

The Agent further expanded on his position by stating:

"In order to separate (the) buildings, it is our opinion that the Home Depot store must meet the provisions of the OBC for a building facing an imaginary line which has a 0 m limiting distance for spatial separation purposes. Under Clause 3.2.3.7.(2)(a), this requires the exterior wall of the Group E occupancy adjacent to the shade screen to have a 2 h fire-resistance rating, only (not a fire separation), be of noncombustible construction, and have noncombustible cladding."

As he continued:

"The OBC allows two buildings to be created on one property. The requirements of Subsection 3.2.3. for spatial separation are applicable to the Home Depot store which is achieved by the provision of the 2 h fire-rated exterior wall which is of noncombustible construction with noncombustible cladding and has protected openings. The provisions of Subsection 3.2.3. are not applicable to the shade screen since there are no exterior

walls and therefore, no exposing building face."

With respect to the exiting arrangement between the two structures, the Agent argued that the Home Depot store is permitted to egress through the shade screen, but this will be limited to 25 percent of the store's total required exiting capacity. And since these are two separate structures, the travel distance may be measured from the exterior wall of the Home Depot building. As well, the Agent is proposing to protect the two exit doors from the store leading into the shade screen with close space exposure sprinklers on the Home Depot side of the doors. The glazing above these doors is also to be protected from store side with a window sprinkler assembly. These measures, he asserted, will provide a safe interface between these structures at the exit doors.

Lastly, the Agent also offered to add more pull stations at the exit doors and the paint lines in the garden centre area, including the shade screen, to better articulate the required location and width of the aisles.

In summation, the Agent stated that it was his opinion that their above interpretation of the OBC is consistent with the life safety and fire protection requirements of that document.

6. Respondent's Position

The Respondent submitted that his primary difficulty with the proposal is that he cannot classify it under the OBC and therefore is unable to determine appropriate construction requirements. His position therefore on the first issue was that the shade screen is a structure that is subject to neither the requirements of Section 3.13, nor can it be classified under Articles 3.2.2.20. to 3.2.2.83. or any other provisions in the OBC for that matter.

The Respondent then explained that while he acknowledges the Agent's arguments regarding the seasonal use of the facility, he is nonetheless concerned because during the months the shade screen and garden centre are in operation the occupant load of those areas will likely be just as high per m^2 as the existing store.

The Respondent stated that prior to appeal being made to the BCC he had offered his own suggestions to the Applicant to achieve equivalency. One of the proposals he put forward included a combination of: maintaining the roof with the flame spread rating of 25 and the store's 2 h noncombustible wall, but limit the openings and protect them as if they were in a firewall; excluding the required exit capacity of the main building that leads into the garden centre; providing sufficient exits from the garden centre and prohibiting storage of any combustible material at any time of year in the shade screen.

unless a dry-type sprinkler system is installed. This proposal failed because the Applicant, he explained, could not accept discounting the two store exits from discharging into the garden centre.

As an alternative, the Respondent indicated that he also suggested that a 4 h rated wall conforming to OBC Subsection 3.1.10. be provided between the two structures. This proposal also was not favoured by the Applicant.

The Respondent did not pose specific arguments addressing the second issue.

In conclusion, the Respondent stated that he knows that many of these buildings exist in Ontario. But, in his view, their construction was not supported by the Building Code. He indicated that the Code is either not clear on regulating such structures or simply does not address them. Either way, he hoped that the BCC hearing might provide clarity on the current OBC or lead to a possible Code amendment. He also indicated that he would have accepted the previous BCC rulings as a guide to approve the subject structure, but since the Commission cannot, in a strictly legal sense, set precedent he felt he could not rely on earlier decisions. Moreover, since the Code was amended to remove the provisions regarding temporary structures, he was unsure if those BCC decisions could even be used as de facto precedent.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed shade screen cannot be permitted to conform to the construction standards of Section 3.13. Tents and Air Supported Structures. We hold that the shade screen is not a tent in that it is intended to be a permanent, seasonally used structure. It cannot be regarded as an air-supported structure either. As such, the Commission views the shade screen as a building and since no exceptions are allowed in the Code for such a facility, the requirements of Sections such as 3.2. to 3.4. are applicable. The Commission notes that notwithstanding that these structures have been erected throughout the Province, no special standards exist within the OBC to govern such seasonal-use, permanent buildings.

Having determined that the structure is a building, the Commission notes that it fails to comply with applicable Code requirements. The following are among some of the deficiencies: The building is not sprinklered in accordance with Article 3.2.2.62., the provision determining the construction requirements of buildings of this size and occupancy. Also, the roof covering does not comply with Subsection 3.1.15., which requires the roof to be classified in accordance with CAN/ULC-S-107-M.

On the secondary issue, it is the decision of the Building Code Commission that the shade screen, which is to be located approximately 150 mm away from an existing exterior wall, is considered as a separate building, and as a result must meet the spatial

separation requirements of Subsection 3.2.3. This is in addition to the existing building also being required to meet the spatial separation standards.

8. Reasons

n. While the roof is to be removed in the winter, the construction of the shade screen is permanent. The Commission considers even the use of the facility to be permanent, albeit on a seasonal basis. This permanence precludes the shade screen from meeting the definition of a tent, which the Code clearly requires to be temporary.
o. The shade screen does not meet the definition of an air-supported structure since it is not supported by air. The roof is held up by steel trusses and other structural framing.
p. The shade screen is separated from the home depot building by a 150 mm gap. It is not attached as an addition must be.

Dated at Toronto this **11th** day in the month of **January** in the year **2001** for application number **2000-80**.

Ruling No. 01-01-794
Application # 2000-73

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Clauses 3.2.5.5.(2)(b) and (c) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Dr. G. Sauve, Board of Directors, Lycee Claudel Private School, Ottawa, Ontario, for the resolution of a dispute with Mr. Chris Freeman, Chief Plan Examiner, City of Ottawa, Ontario, to determine whether the location of the existing hydrant proposed to serve the needs of the expanded school facility provides sufficiency of compliance with Clauses 3.2.5.5.(2)(b) and (c) of the Ontario Building Code (OBC) at Lycee Claudel (Private School), 1635 Riverside Drive, Ottawa, Ontario.

APPLICANT	Dr. G. Sauve Board of Directors Lycee Claudel (Private School) Ottawa, Ontario
RESPONDENT	Mr. Richard Hewitt Chief Building Official City of Ottawa
PANEL	Mr. Len King, Vice-Chair Mr. Michael Steele Mr. Fred Barkhouse
PLACE	Ottawa and Toronto, Ontario
DATE OF HEARING	January 11, 2001
DATE OF RULING	January 11, 2001
APPEARANCES	Mr. George Nichols, Architect George Nichols Architect Inc. Kanata, Ontario **Agent for the Applicant** Mr. Frank Bell / Luc Nadeau Part 3 Plan Examiners City of Ottawa **Designates for the Respondent**

RULING

1. The Applicant

Dr. G. Sauve, Board of Directors, Lycee Claudel (Private School), Ottawa, Ontario, has received a building permit under the Building Code Act, 1992 and has expanded an existing school complex at Lycee Claudel, 1635 Riverside Drive, Ottawa, Ontario.

2. Description of Construction

The Applicant has expanded an existing school facility, built in 1960, by adding a new one storey multipurpose room to the rear of its gymnasium. The entire complex including the new addition has a Group A, Division 2 - Assembly occupancy. The building is of noncombustible construction, and is equipped with a fire alarm system but not a sprinkler system. The existing complex is 3,075 m^2 in building area. The new addition occupies an area of 499 m^2.

The existing portions of the school complex, referred to as blocks A, B, and C, are located around a rectangular open air podium. Blocks A and B border the podium at its north and south sides, respectively. The east side of the podium is flanked by block C (the gymnasium). The new portion, referred to as block D, has been added to the east side of block C (or the gymnasium).

While the three parts of the building appear above grade to be separate structures, they are in fact considered to be one building since they are connected by below grade corridors located underneath the open air podium. This below grade link contains pedestrian corridors, student locker rooms, showers, washrooms and a storage room. The adjacent blocks (A, B, and C) are separated from the link by a fire separation having a fire resistance rating of 45 minutes. As currently built and used, the link does not comply with an underground walkway as envisaged in Article 3.2.3.19. and therefore cannot be considered as a facility to separate two or more buildings.

The addition is accessible through block C and a new above grade covered walkway constructed along the south side of block C. This walkway terminates at the main entrance to block D and is connected to the podium through a stairway located at the south-east corner between blocks B and C.

The construction in dispute involves the location of the existing fire hydrant which is proposed to serve the fire fighting needs of the new addition.

As part of the construction, the Applicant is proposing to construct a firewall at the western exposing building face of block C where it abuts the podium. In so doing, the Applicant is creating a separate building comprised of blocks C and the addition onto to it; block D. This structure, with a smaller building area of only 1,219 m^2, will be subject to less stringent OBC requirements.

As a distinct building, blocks C and D are required to face a street or an access route. The Applicant is proposing that the existing access route to the south of the building be considered as the access route serving the new building.

There are two fire hydrants currently on the property. One is located in the extreme north-west corner of the lot to serve a separate administration building. The second hydrant, subject to the dispute at hand, is located directly opposite the open air podium and is approximately 45 m (via the podium) from the main entrance of the gymnasium - block C. The Applicant intends to use this

existing fire hydrant in order to provide water for fire fighting for the gymnasium and its extension (the multipurpose room).

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the location of the existing hydrant proposed to serve the needs of the expanded school facility provides sufficiency of compliance with Clauses 3.2.5.5.(2)(b) and (c) of the OBC.

According to Clause 3.2.5.5.(2)(b), for a building not provided with a fire department connection, the total travel distance from a fire hydrant to the building must not exceed 90 metres. The distance described in this provision is comprised of two components; the length from the hydrant to the vehicle and the length from the vehicle to the building. This latter distance is specifically addressed in Clause 3.2.5.5.(2)(c) which states that the path of travel from the pumper vehicle to the building must be unobstructed and not exceed 45 metres.

The travel distance from the fire hydrant opposite the open air podium as measured south on Riverside Drive to the existing fire access route south of block B and northward on the east side of block B to blocks C and D clearly exceeds the 90 m threshold. Exact figures were not supplied by the parties, but it is estimated to be at least 140 m. As a result, the Applicant is proposing that the path of travel envisaged in Clause 3.2.5.5.(2)(b) be measured from the subject hydrant across the podium to the stairs between blocks B and C and along the southern face of blocks C and D. He asserts that this distance, at 88 to 90 m, is within the allowable limit. As noted, the distance between this hydrant and the principle entrance of blocks C and D is 45 m.

At issue then is whether the path of travel from the existing fire hydrant via the podium to blocks C and D can be deemed as an unobstructed path of travel for fire fighting purposes.

4. Provisions of the Ontario Building Code

Clauses 3.2.5.5. Location of Access Routes

(2) Access routes shall be provided to a *building* so that

(b) for a *building* not provided with a fire department connection, a fire department pumper vehicle can be located so that the length of the access route from a hydrant to the vehicle plus the unobstructed path of travel for the fire fighter from the vehicle to the *building* is not more than 90 m (295 ft 3 in), and

(c) the unobstructed path of travel for the fire fighter from the vehicle to the *building* is not more than 45 m (147 ft 8 in).

5. Applicant's Position

The Agent for the Applicant began by submitting that the new addition of 499 m^2 attached to the existing gymnasium does not diminish the complex's current life safety situation. He noted that the new addition occupies only 16% of the total footprint. Also, the new addition is noncombustible construction and there is no increase in the occupant load due to this expansion. As a result, from a fire safety point of view, there is no reduction in the performance level of the building that would require the installation of another fire hydrant, he argued.

The Agent then stated that the distance between the existing fire hydrant and the principle entrance of block C (the gymnasium) is less than 45 metres. Furthermore, the total travel distance to block D is within the 90 metre limit. Based on this, he argued that they comply with OBC provision 3.2.5.5.(2)(b) and that the existing hydrant already provides the level of safety required. In fact, the location of the new hydrant, as proposed by the City, is farther away from blocks C and D than the existing one. He described the additional hydrant as redundant.

The only issue remaining, therefore, in his view is whether the open air podium is considered an obstruction to the required path of travel. On this point the Agent noted that the podium is a two hour horizontal fire separation and he stated that "running firehoses (sic) across it is no different than running (them) across an underground parking structure that extends out beyond a building footprint." He added that it may be possible to remove some of the perceived obstacles that may prevent access across the podium.

The Agent reiterated that he feels they already meet Code. He stated that the local fire department also thinks they meet the Code in a literal sense, but they thought it would be preferable from a fire fighting perspective that a third hydrant be installed.

In summation, the Agent added that while the City's position is admirable, they also have to balance cost issues. In his view, if they meet Code they do not feel it is justifiable to add another hydrant. Especially so when the proposed hydrant is questionable with respect to improving public safety. He concluded by stating that the City's position seems to be an exercise about striving for literal compliance with the Code.

6. Respondent's Position

The Respondent submitted that with the construction of the proposed firewall, blocks C and D would now be considered a separate building under the OBC and in accordance with Sentence 3.2.2.10.(1) must therefore either face a street or be provided with an access route conforming to Articles 3.2.5.5. and 3.2.5.6. In the plan review process, the Respondent noted, the Applicant indicated that they would provide an OBC compliant access route to the south of the complex and that a new hydrant would be installed on that access route. On this basis, a permit was issued. However, since then the Applicant has instead opted to rely on the existing fire hydrant, he explained.

Assuming no new hydrant will be installed, the Respondent stated that the Applicant basically has two choices regarding the existing hydrant. In terms of utilizing the access route south of the building, the Respondent described it as "nowhere close" to the disputed hydrant. As such, he indicated that the option of providing fire fighter access around the southern end of the school would far exceed the 90 m limit. The other option, measuring the path of travel from the hydrant to block C and D across the podium, is problematic. He argued that, in his view, the podium is obstructed since it contains certain fences and gates. The Respondent noted that, contrary to the Applicant's statement, the municipal fire department's inspector David Port found the podium approach route to be "not an acceptable solution".

As result, he argued that the city has no choice but to require that a new fire hydrant be installed at the southern access route within 90 metres of the building to ensure conformance with the Ontario Building Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the location of the existing hydrant proposed to serve the needs of the expanded school facility does not provide sufficiency of compliance with Clauses 3.2.5.5.(2)(b) and (c) of Ontario Building Code at Lycee Claudel School, 1635 Riverside Drive, Ottawa, Ontario.

8. Reasons

i) The configuration of the podium with respect to the existing blocks and the new addition, in conjunction with the fences and lockable gates, create a proposed path of path of travel for fire fighting purposes that is indirect and has potential to be obstructed.

Dated at Toronto this **11 th,** day in the month of **January,** in the year **2001** for application number **2000-73.**

Mr. Len King, Vice-Chair

Mr. Michael Steele

Mr. Fred Barkhouse

Ontario

Ruling No. 00-61-793
Application No. 2000-81

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 3.1.8.1., Sentence 3.2.5.13.(1) and Articles 3.3.2.3., 3.3.2.4. and 3.4.3.4. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Jack Stelpstra, Operations Manager, Ellis-Don, London, Ontario, for the resolution of a dispute with Mr. Rocky Cerminara, Chief Building Official, City of London, Ontario, to determine whether the proposed main arena seating bowl, in particular the number of seats, row width, vomitory and aisle width, exits and access to exits and the smoke protection system, designed based on NFPA 101, 2000 "Life Safety Code" and NFPA 92B "Smoke Management Systems in Malls, Atria and Large Areas," provides sufficiency of compliance with Articles 3.3.2.3., 3.3.2.4., 3.4.3.4. and 3.1.8.1. and Sentence 3.2.5.13.(1) of the Ontario Building Code at the London Downtown Multipurpose Entertainment and Sports Centre, Dundas St. at Talbot St., London, Ontario.

APPLICANT	Mr. Jack Stelpstra, Operations Manager Ellis-Don London, Ontario
RESPONDENT	Mr. Rocky Cerminara Chief Building Official City of London
PANEL	Dr. Kenneth Peaker, Chair Mr. Michael Steele Mr. John Guthrie
PLACE	Toronto, Ontario
DATE OF HEARING	December 14th, 2000
DATE OF RULING	December 14th, 2000
APPEARANCES	Mr. Jonathan Rubes Leber/Rubes Inc. Toronto, Ontario **Agent for the Applicant**
	Mr. Rocky Cerminara Chief Building Official London, Ontario **The Respondent**

RULING

1. The Applicant

Mr. Jack Stelpstra, Operations Manager, Ellis-Don, London, Ontario, has applied for a building permit under the Building Code Act, 1992 to construct a multi-purpose sports and entertainment facility known as the London Downtown Sports and Entertainment Centre to be located on Dundas Street at Talbot Street in the City of London, Ontario.

2. Description of Construction

The Applicant is proposing the construction of an arena-type facility classified as having a Group A, Division 3 major occupancy. The building is considered as being two storeys in building height with the stories referred to as the ground or concourse level and the suites level. The building will also include a mezzanine known as the upper concourse level. (The three levels of the building - the two storeys and the mezzanine - correspond to the three levels found within the arena bowl; the lower bowl, the private suites and the upper bowl.) The structure will have a building area of 9,100 m^2 and is to be of noncombustible construction. It will be equipped with sprinkler, fire alarm and standpipe and hose systems. The building is to be constructed in accordance with Article 3.2.2.29. of the OBC.

The arena is proposed to have a total seating capacity of approximately 9,000 persons, with roughly 5,800 seats located on the lower bowl and suites levels and 3,200 intended for the upper bowl level. It is also anticipated that an additional 1,800 to 2,000 seats could be accommodated on the central ice surface or "event floor" for concert venues, etc.

The construction in dispute involves three main areas of the proposed arena. The first matter in dispute is the design of the fixed seating and the exiting configuration. It is proposed that the lower bowl contain 17 rows of seating with a maximum of 28 or 29 seats per row. The upper bowl will have the same number of seats per row, however, it will have fewer rows - only nine, except at the east end where there will be 12 rows. The maximum number of seats in lower bowl and upper bowl sections would be approximately 350 and 250 respectively. Each section of the arena is to be served by two vomitories, with those vomitories being shared between adjacent sections.

As designed, the proposal would permit narrower rows, more seats per row, narrower aisles and vomitories and less exit capacity and narrower exit width than prescribed by Code. The result would be an increase in time required to arrive at the exit points of the facility.

In conjunction with the proposed seating design and exit configuration, and offered in terms of providing an alternative method of conforming with OBC standards, the Applicant is intending to comply with the full requirements of NFPA 101-2000, "Life Safety Code", which can be employed to address indoor assembly fixed seating arenas such as the building in dispute. The principal features, as listed by the Applicant, included in this standard that are applicable to the design of the subject arena are as follows:

- emergency voice communication
- smoke-protection of the seating bowl and both concourses
- smoke-protection of exit stairs serving the seating bowl
- smoke-protection relative to escalator openings
- an engineered smoke control system
- fire protection of electrical conductors

- 2 hour emergency power for all life safety systems
- central alarm and control facility with active graphic annunciator and controls
- electrical supervision of smoke control system control and power wiring, by fire alarm system
- activation and control of smoke control equipment through fire alarm system (shutdown of normally operating HVAC systems via building automation system)
- smoke detection in concourses
- quick response sprinklers in all concourse concessions
- preparation of a Life Safety Evaluation per NFPA 101
- handrails in aisles in the upper bowl
- uniform treads in aisles
- increased guard heights at foot of aisles in the upper bowl

As indicated above, among the things required of NFPA 101 compliant buildings is that they be designed so that the seating areas and egress routes are smoke protected through the provision of a smoke control system. The smoke control and protection aspect of this proposal is to be achieved through compliance with another NFPA standard, in particular NFPA 92B, "Smoke Management Systems in Malls, Atria, and Large Areas".

The smoke control is to be performed, not by a dedicated smoke management system, but instead by a facility combined with the proposed HVAC system for the building. In order to assist the performance of the smoke control system, smoke detectors are to be provide throughout the upper and lower concourse levels, including around escalator openings, within exit stairs and within air handling systems. The objective of the smoke control system is to provide tenable (non-life threatening) conditions within which persons may exit the building. Central to the smoke protection strategy, according to the Applicant, will be the proposed system's ability to provide a smoke layer maintained at 2.4 m above the upper concourse floor level.

The second issue in dispute involves the fire separation of exit stairs at the upper concourse level, or mezzanine. There are four exit stairs serving this level, one located roughly in the four corners of the building. The Applicant is proposing to omit the fire-rated doors at the exit stairs and in doing so would not be providing a continuous separation. This is being done in order to facilitate the ease of egress from the building, especially in an emergency situation. In lieu of the required doors, he is offering to pressurize the exit stairs in question. (It is also proposed that the escalators will have the ability to be reversed, i.e., to travel in a downward direction at the end of an event in the main bowl, to ease day-to-day egress from the building.)

The extent of sprinkler coverage is the final matter in dispute. The Applicant is proposing what he describes as "enhanced sprinkler coverage", which is essentially based on NFPA 101, but is not full coverage throughout the structure as is permitted by NFPA 101. In particular, the Applicant intends to omit the sprinkler coverage over the ice surface area. At its maximum, the height from the event floor area to the under side of the ceiling structure is 23 m. At this distance, in the Applicant's view, sprinklers might not be effective, or would certainly take longer to activate.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the fire safety measures provided by conformance with NFPA 101-2000, "Life Safety Code" and NFPA 92B, "Smoke Management Systems in Malls, Atria and Large Areas" provide sufficiency of compliance with Articles 3.3.2.3., 3.3.2.4., 3.4.3.4. and 3.1.8.1. and Sentence 3.2.5.13.(1) of the Ontario Building Code.

Article 3.3.2.3. determines the requirements, with certain exceptions not applicable here, for row widths for fixed seating in assembly occupancies. As noted in the previous section, the Applicant is proposing narrower seat rows. Specifically, he intends to construct the row widths in the subject arena at 459 mm in the lower bowl and 484 mm in the upper bowl instead of the 520 mm width required by Code for this particular building under Sentence (1) of Article 3.3.2.3. (in conjunction with Sentence (11.2) of the following Article 3.3.2.4.).

Article 3.3.2.4., also with exceptions that are not applicable to the present instance, sets out the requirements for aisles in assembly occupancies that contain fixed seating. This provision mandates that for the subject arena; the maximum number of seats per clear row width is 16, the aisle widths are required to be 1,936 mm (in the lower bowl with event floor seating included as the worst case scenario), and the required vomitory width is 3,567 mm (using the same scenario as above). In contrast, using the intended NFPA 101 design approach, the Applicant's corresponding figures are proposed as; a maximum of 29 seats per row, a lower bowl aisle width of 1,200 mm, and a lower bowl vomitory width of 1,500 mm.

Exit capacity which, in turn, determines exit width for occupancies such as stadia, is provided in Sentence (1) of Article 3.4.3.4. This provision stipulates that in the present case, the exit capacity must be based on 8 mm per person (in upper bowl as worst case). Utilizing this figure yields a mandatory aggregate exit width of 27.2 m for the upper concourse exit stairs. Based on NFPA 101, the Applicant is proposing an exit capacity based on 3.2 mm per person resulting in 12 m of total exit width provided at the upper concourse exit stairs.

In essence, rather than comply with the requirements for fixed seating under Article 3.3.2.3., aisles under Article 3.3.2.4. and exits under Article 3.4.3.4., the Applicant is proposing to comply with the requirements for smoke-protected assembly seating facilities under NFPA 101-2000. In doing so the smoke protection would be provided in accordance with NFPA 92B standards. It is noted that to some degree, compliance with these NFPA standards would provide several safety features that exceed Building Code requirements, such as smoke protection for the concourses, the exit stairs and escalator openings, fire protection of electrical conductors, two hour emergency power for life safety systems, etc. This approach, however, does not comply with the prescriptive wording of Articles 3.3.2.3., 3.3.2.4. and 3.4.3.4. of the Code.

With respect to the fire separation of the stairs, the proposed removal of the fire-rated doors at the upper concourse floor level is dealt with in Article 3.1.8.1. In Sentence (1) of this provision it states that a wall assembly required to be a fire separation must be constructed as a continuous element. In addition, Sentence (2) stipulates that if there is to be an opening in such a fire separation for, say, a door, that opening shall be protected in the prescribed manner. In the present case, fire-rated doors would be required to maintained the continuity, and thus the integrity, of the separation. As noted, the Applicant has proposed to remove such fire-rated doors to facilitate better egress in an emergency situation, but has offered pressurization of the stairs as compensation. It should be noted, however, that NFPA 101, to which the Applicant is designing much of the facility, also requires that the fire separation around the exit stairs be maintained.

Regarding the matter of sprinklering, OBC 3.2.5.13.(1) is applicable. This provision states that for the facility at hand sprinkler protection must be provided in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems". In turn, the NFPA 13 standard requires that the building be fully sprinklered. This would include over the central ice surface/event floor area. NFPA 13, unlike NFPA 101, requires sprinkler protection in all parts of a building's floor areas. As discussed, the Applicant has proposed to omit sprinkler coverage over the ice surface or event area floor area.

4. Provisions of the Ontario Building Code

Article 3.1.8.1 General Requirements

(1) Any wall, *partition* or floor assembly required to be a *fire separation* shall
- (a) except as permitted by Sentence (2), be constructed as a continuous element (see Appendix A), and
- (b) as required in this Part, have a *fire-resistance rating* as specified (see Appendix A).

(2) Openings in a *fire separation* shall be protected with *closures*, shafts or other means in conformance with Articles 3.1.8.4. to 3.1.8.17. and Subsections 3.1.9. and 3.2.8. (See Appendix A.)

Sentence 3.2.5.13.(1) Automatic Sprinkler Systems

(1) Except as permitted by Sentences (2), (3) and (4), an automatic sprinkler system shall be designed, constructed, installed and tested in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems". (See Appendix A.)

Article 3.3.2.3. Fixed Seats

(1) Except for the requirements of Article 3.3.2.7. for bench-type seats and except as required or permitted by Sentence (2) and Articles 3.3.2.9. and 3.3.2.10., fixed seats in places of assembly shall be
- (a) attached or secured to the floor, platform or platform riser,
- (b) provided with arms and back, and
- (c) arranged in rows having an unobstructed passage not less than 400 mm (15¾ in) wide measured horizontally between plumb lines from the backs of the seats in one row and the edges of the furthest forward projection of the seats in the next row in the unoccupied position.

(2) For fixed seats with backs and with folding tablet arms, the value of 400 mm (15¾ in) required by Clause (1)(c) shall be measured when the tablet arms are in the use position, but is permitted to be measured in the stored position provided
- (a) there are not more than 7 seats between any seat and the nearest aisle,
- (b) the seats are located in a lecture hall or an auditorium used for instructional purposes, and
- (c) the tablet arm, when raised manually to a vertical position, falls by the force of gravity to the stored position. (See Appendix A.)

(3) Except as permitted by Sentences (4) and (5), aisles shall be located so that there are not more than 7 seats with backs or 20 seats without backs between any seat and the nearest aisle.

(4) The requirements of Sentence (3) do not apply if
- (a) egress doorways are provided to serve both ends of rows of seats,
- (b) each doorway referred to in Clause (a) serves not more than 3 rows of seats, and
- (c) each row contains not more than 100 seats.

(5) The requirements of Sentence (3) do not apply if
- (a) there are not more than 7 seats between any seat and the nearest aisle, where the seats are served by a single aisle,
- (b) there are not more than 20 seats between any seat and the nearest aisle, where the seats are served by two aisles,
- (c) each row has an unobstructed passage with minimum width of 400 mm (15¾ in) plus 6.1 mm (¼ in) for each additional seat above 16 seats in the row, and
- (d) the travel distance is not more than 45 m (147 ft 8 in) measured along the path of travel from any seat to an *exit* or to an egress doorway.

(6) Seating arrangements that do not conform to the requirements of Sentences (3) to (5) are permitted provided the standard of safety is not reduced and the time required for egress is not increased.

Article 3.3.2.4. Aisles

(1) Except as required by Articles 3.3.2.7., 3.3.2.9. and 3.3.2.10., aisles leading to egress doors or *exits* shall be provided in conformance with Sentences (2) to (24) in places of assembly which contain fixed seats.

(2) In this Subsection, a converging aisle is an aisle into which the occupants of 2 or more aisles converge in travelling to an *exit*.

(3) An aisle shall terminate at
- (a) a converging aisle,
- (b) an egress doorway from the seating area, or
- (c) an *exit* from the seating area.

(4) A converging aisle shall terminate at
- (a) an egress doorway from the seating area, or
- (b) an *exit* from the seating area.

(5) The minimum clear width of aisles shall be not less than 1 100 mm (3 ft 7 in), except that the width is permitted to be reduced to not less than

(a) 750 mm (2 ft 6 in) if serving not more than 60 seats, and

(b) 900 mm (2 ft 11 in) if serving seats on one side only.

(6) The minimum clear width of each aisle shall be measured at the point in the aisle furthest from

(a) an egress doorway referred to in Clause (12)(a),

(b) an *exit* referred to in Clause (12)(b), or

(c) an *exit* referred to in Sentence (13).

(7) Except for an aisle serving bleacher seats, where rows of seats discharge into an aisle, the minimum clear width required by Sentence (5) shall be increased by 25 mm for each metre of length of the aisle measured in the direction towards an *exit*.

(8) The width of a converging aisle shall be not less than the required width of the widest aisle plus 50% of the total required width of the remaining aisles that it serves.

(9) If rows of seats discharge directly into the converging aisle, the width required by Sentence (8) shall be increased by 25 mm (1 in) for each metre of length of the aisle where the rows of seats discharge into the aisle.

(10) The width of an egress doorway or an *exit* leading directly from the seating area shall be not less than the required width of the widest aisle or converging aisle plus 50% of the total required width of the remaining aisles and converging aisles that it serves.

(10.1) The requirements in Sentences (5) to (10) and Sentence (14) do not apply if

(a) the minimum clear width of an aisle is in accordance with Article 3.3.1.16., but is not less than 900 mm (2 ft 11 in) if serving seats on one side only,

(b) the minimum clear width of an aisle is in accordance with Article 3.3.1.16., but is not less than 1 200 mm (3 ft 11 in) if serving seats on both sides,

(c) the minimum clear width of a converging aisle is in accordance with Article 3.3.1.16., but not less than the width of the widest aisle leading to the converging aisle,

(d) the minimum clear width of an *exit* leading directly from the seating area is in accordance with Article 3.4.3.4.,

(e) except as provided in Clause (f), the minimum clear width of an egress doorway leading directly from the seating area is in accordance with Article 3.3.1.16., but not less than the required width of the aisle or the converging aisle leading to the doorway, and

(f) if more than one vomitory is provided

(i) the minimum total clear width of the egress doorways leading from one vomitory is not less than the required width of the aisle or the converging aisle leading to the doorways, and

(ii) the minimum clear width of egress doorways from additional vomitories is in accordance with Article 3.3.1.16.

(11) Except as provided in Sentences (11.1) and (11.2), dead-end aisles shall be not more than 6 m (19 ft 8 in) long.

(11.1) Dead-end aisles are permitted to be more than 6 m (19 ft 8 in) long, but not more than 10 m (32 ft 10 in) long if

(a) the seating area is separated from other seating areas and adjacent *occupancies*, including a corridor serving any seating area, by a *fire separation* in accordance with Sentences 3.3.2.2. (1) and (2),

(b) the travel distance is not more than 25 m (82 ft) measured along the path of travel from any seat to an *exit*, to an egress doorway or to an opening into a vomitory,

(c) at least one *means of egress*, comprising not less than 30 per cent of the required *exit* capacity, is through an exterior *exit*, an *exit* stairway or a corridor not containing an *occupancy*,

(d) each row served by the dead-end aisle has a minimum unobstructed width of 400 mm (15¾ in) plus 6.1 mm (¼ in) for each additional seat above 7 seats in a row, but not more than 550 mm (21⅝ in),

(e) the minimum ceiling height above the seating area is 3 m (9 ft 10 in),

(f) the activation of a *fire detector* or a sprinkler head in the seating area will

(i) cause the shutdown of the projection system serving the seating area, and

(ii) turn on the normal lighting in the seating area, and

(g) the *floor area* is *sprinklered*.

(11.2) Dead-end aisles are permitted to be more than 10 m (32 ft 10 in) long, but not more than 13 m (42 ft 7 in) long if

(a) the seating area is separated from other seating areas and adjacent *occupancies*, including a corridor serving any seating area, by a *fire separation* in accordance with Sentences 3.3.2.2. (1) and (2),

(b) the travel distance is not more than 25 m (82 ft) measured along the path of travel from any seat to an *exit*, to an egress doorway or to an opening into a vomitory,

(c) at least one *means of egress*, comprising not less than 30 per cent of the required *exit* capacity, is through an exterior *exit*, an *exit* stairway or a corridor not containing an *occupancy*,

(d) each row served by a dead-end aisle has a minimum unobstructed width of 400 mm (15¾ in) plus 6.1 mm (¼ in) for each additional seat above 7 seats in a row, but not more than 550 mm (21⅝ in),

(e) the activation of a *fire detector* or a sprinkler head in the seating area will

(i) cause the shutdown of the projection system serving the seating area, and

(ii) turn on the normal lighting in the seating area,

(f) a voice communication system is installed in conformance with Article 3.2.4.22.,

(g) a smoke control system is installed to control movement of smoke in the seating area or a smoke exhaust system is provided so that, in the event of detection of smoke by a *smoke detector* in the seating area, air handling equipment is activated to extract air directly from the seating area at the rate of at least 6 air changes per hour, and

(h) the *floor area* is *sprinklered*.

(12) Where a seating area is separated as required by Sentences 3.3.2.2.(1) and (2) or 3.3.2.2.(8), the length of travel by any aisle shall be not more than 45 m (147 ft 8 in) measured from the most remote point of the aisle to

(a) an egress doorway in the required separation, or

(b) an *exit* leading directly from the seating area.

(13) Where a seating area is not required to be separated by Sentences 3.3.2.2.(1) and (2) or 3.3.2.2.(8), the travel distance shall be not more than 45 m (19 ft 8 in) measured from the most remote point of the aisle to an *exit*.

(14) Side aisles shall be not less than 1 100 mm (3 ft 7 in) wide if seating is provided in conformance with Sentence 3.3.2.3.(4).

(15) An aisle that has a slope not more than 1 in 8 shall not be stepped.

(16) An aisle that slopes more than 1 in 8 shall be stepped.

(17) The passageway between rows of seats served by a stepped aisle shall be level at right angles to the line of travel.

(18) The riser of a step in an aisle shall be

(a) not less than 110 mm (4⅜ in) high, and

(b) not more than 200 mm (7⅞) high.

(19) Variations are permitted in riser height provided

(a) the height of adjacent risers does not vary by more than 6 mm (¼ in), and

(b) the depth of a tread or a platform in the direction of travel is not less than 430 mm (16⅞ in).

(20) Steps in an aisle shall

(a) have a run not less than 230 mm (9 in) exclusive of nosings,

(b) have a tread depth not less than 250 mm (9⅞ in),

(c) extend to the adjacent rows of seats in a manner that will not create a hazard from tripping, and

(d) have a finish on the treads conforming to Sentence 3.4.6.1.(1).

(21) The location of every riser in an aisle shall be made apparent from both directions of travel by strategically placed lighting or contrasting marking stripes.

(22) A platform in an aisle shall be level, except that a slope not more than 1 in 50 is permitted for a platform that is not less than 430 mm (16⅞ in) deep in the direction of *exit* travel.

(23) If a step is used at the entry to a row of seats from a stepped aisle, an unobstructed platform not less than 800 mm (2 ft 7 in) square shall be provided adjacent to the aisle.

(24) The finish of the surface of a platform in or adjacent to a stepped aisle shall conform to Sentence 3.4.6.1.(1).

Article 3.4.3.4. Exit Capacity

(1) Except as permitted by Sentence (3), the aggregate required width of *exits* serving *floor areas* intended for *assembly occupancies*, *residential occupancies*, *business and personal services occupancies*, *mercantile occupancies*, and *industrial occupancies* shall be determined by multiplying the *occupant load* of the area served by

(a) 6.1 mm (¼ in) per person for ramps with a slope not more than 1 in 8, doorways, corridors and passageways,

(b) 8 mm (5/16 in) per person for a stair consisting of steps whose rise is not more than 180 mm (7⅛ in) and whose run is not less than 280 mm (11 in), or

(c) 9.2 mm (⅜ in) per person for

(i) ramps with a slope more than 1 in 8, or

(ii) stairs, other than stairs conforming to Clause (b).

(2) The aggregate required width of *exits* serving *floor areas* intended for *care or detention occupancy* shall be determined by multiplying the occupant load of the area served by 18.4 mm (¾ in) per person.

(3) The required width of *means of egress* serving a Group A, Division 4 *occupancy* shall be determined by multiplying the *occupant load* of the area served by

(a) 1.8 mm (1/16 in) per person for

(i) aisles,

(ii) stairs other than *exit* stairs, and

(iii) ramps and passageways in vomitories and *exits*, and

(b) 2.4 mm (3/32 in) per person for *exit* stairs.

5. Applicant's Position

The Agent for the Applicant submitted that the standards for assembly occupancies set out in the Code do not adequately address large arenas of the type anticipated here. The provisions apply more appropriately to smaller indoor arenas or large outdoor venues. Unfortunately, for the construction of buildings of this size, however, the OBC and other codes have not been updated to address large arena design. Moreover, the process for change in the Building Code to recognize this situation has been slow. He noted that the reason for this may be that the frequency of construction of this type of facility is not sufficient to prompt a significant, timely change.

In the case under dispute, the Agent argued that because of site restrictions, the proposed 9,000 seat facility, designed in a conventional hockey arena layout, would not meet all of the requirements outlined in the Ontario Building Code. In lieu of strict compliance with the OBC, they have proposed to design the main arena seating bowl with "smoke-protected" seating and egress routes in conformance with NFPA 101-2000 "Life Safety Code. He argued that this proposed design, which includes compliance with NFPA 92B, could achieve sufficiency of compliance with the requirements outlined in the Building Code in respect to fixed seating, exits and aisle and vomitory widths. The Agent submitted that several other arenas throughout the province have been designed and built according to these standards. He indicated that they have been involved with utilizing these design principles in the Air Canada Centre in Toronto, the Corel Centre in Ottawa and General Motors Place in Vancouver.

In his outline of the proposal, the Agent advised that the Applicant intends to use smoke management as compensation for the seating and exiting issues addressed by Building Code requirements. Smoke-protection would be achieved by the inherent height and volume of the bowl and concourses in conjunction with the mechanical smoke-protection measures that would be provided. Such measures are not required under a literal application of the minimum OBC requirements, however, they are necessary to achieve smoke-protected assembly seating and egress routes under the proposed application of NFPA 101-2000 and NFPA 92B. These measures include smoke exhaust and make-up air provisions for the bowl and the concourses, as well as the provision of an emergency air supply to the exit stairs.

In addition, the Agent argued that although the structure is less than 18 m in height, many of the safety features generally applicable to high rise buildings are also proposed. These features include the provision of emergency voice communication; fire protection of electrical conductors and a 2 hour emergency power supply for life safety equipment; a central alarm and control facility; and, an active fire alarm annunciator and control panel. These proposed measures are also based on the application of NFPA 101-2000 standards and would not be required under the provisions of the Building Code.

In summation, the Agent submitted that it is appropriate in this instance to use an alternate standard for areas where the requirements of the OBC cannot reasonably be achieved. By using NFPA 101-2000 and NFPA 92B standards jointly with the OBC, an equivalent level of life safety would be provided in lieu of the prescriptive requirements outlined in the Code for the three areas in dispute.

6. Respondent's Position

The Respondent submitted that while he agrees the Code does not address large stadia well and despite the fact he does not oppose the use of NFPA 101-2000 and NFPA 92B, there is no authority or jurisdiction in the Building Code Act for a Chief Building Official to approve an alternative. They may authorize alternate materials and systems, but not design.

The Respondent did submit, however, that if NFPA standards are to be accepted, they should be

consistently applied. This would require that doors be provided at the exit stairs in the upper concourse level. He noted that not only does OBC Article 3.1.8.1. require that the separation surrounding the exit stairs be continuous but so too does NFPA 101. The Respondent stated that he thought it was the Applicant's intention of conforming to NFPA 101 in its entirety. If so, why it is proposed to leave out the required fire-rated doors? Moreover, neither the OBC nor NFPA 101 specifically permits such fire separations to be waived if the exit stairs are pressurized.

The Respondent continued by arguing that the entire facility should be sprinklered, including over the ice surface/event floor area. In addition, a Life Safety Evaluation must be done to cover panic situations not related to smoke or fire. He also asserted that any mechanical smoke control system should be a dedicated air handling facility. In his opinion, it should not be combined with the regular air handling system.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed egress system, which includes seating configuration, row width, vomitory and aisle width, exits and access to exits, designed in accordance with NFPA 101, 2000 "Life Safety Code", and contained in a building equipped with a Smoke Management System conforming to NFPA 92B, "Smoke Management Systems in Malls, Atria and Large Areas", provides sufficiency of compliance with Articles 3.3.2.3., 3.3.2.4. and 3.4.3.4. of the Ontario Building Code at the London Sports and Entertainment Centre on condition that:

i) The building will be sprinklered in its entirety, including the area over the ice surface/event area.

ii) Smoke detection devices will be provided throughout the upper and lower concourses.

iii) A maximum of four minutes travel time will be maintained between the most remote seat and vomitory.

iv) A Life Safety Evaluation study will be submitted and accepted by the municipality before occupancy.

v) Fire-rated doors will be provided at the top of the exit enclosures.

8. Reasons

The combination of the proposed detection, suppression and smoke control systems offered as compensation in lieu of an OBC conforming egress system will provide an equivalent level of fire safety in the subject arena.

Dated at Toronto this **14 th,** day in the month of **December,** in the year **2000** for application number **2000-81.**

Dr. Kenneth Peaker, Chair

Mr. Michael Steele

Mr. John Guthrie

BCC Ruling No. 00-60-792

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-60-792

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Clause 8.7.2.1.(1)(a) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Joe Bazarin, Property Owner, 14 Christie Crescent, Port Perry, Ontario, for the resolution of a dispute with Mr. E. J. Ristan, Designated Sewage Inspector, Pine Ridge District Health Unit, Port Hope, Ontario, to determine whether the proposed sewage system, which includes terraced distribution pipe runs, provides sufficiency of compliance with Clause 8.7.2.1.(1)(a) of the Ontario Building Code at Conc. 3, Plan 412, Sub lot 25, in the Township of Alnwick, Ontario.

APPLICANT
Mr. Joe Bazarin, Property Owner
14 Christie Crescent
Port Perry, Ontario

RESPONDENT
Mr. E. J. Ristan
Designated Sewage Inspector
Pine Ridge District Health Unit

PANEL
Mr. Bill Fellner

PLACE
Toronto, Ontario

DATE OF HEARING
December 7th, 2000

DATE OF RULING
December 7th, 2000

APPEARANCES

Mr. Eric Smith
Meric Homes
Grafton, Ontario

Agent for the Applicant

Mr. Roy Packer and Peter Hargreaves
Appointed Inspectors
Pine Ridge District Health Unit, Port Hope, Ontario
Designate for the Respondent

RULING

1. The Applicant

Mr. Joe Bazarin, owner, Port Perry, Ontario, has applied for a building permit under the Building Code Act, 1992 to install a Class 4 sewage system at Conc. 3, Plan 412, Sub lot 25, in the Township of Alnwick, Ontario.

2. Description of Construction

The Applicant is proposing to install a Class 4 sewage system to service a Group C - residential building currently under construction. When completed the building will have three bedrooms, a total of 25.5 plumbing fixture units, and a finished area of 195 m2. The calculated daily design sewage flow will be 1875 Litres.

The site in dispute is a country lot covering an approximate area of 0.5 hectare, mostly covered with mature trees. The slope of most of the site (except where the building is being constructed) is more than 25%. The soil cover is estimated to be 0.7 metre underlaid by a clay till with an estimated percolation time of more than 50 min/cm. The water supply to the site is provided by a drilled well.

The dispute involves the steep slope of the site and the modifications proposed in the design of the filter bed area in order to reduce this slope.

To overcome the slope issue, the Applicant is proposing extensive re-engineering of the site by clearing existing vegetation, removing the natural soil, cutting terraces into the slope, and creating a swale to divert surface water run-off.

The proposed system is a Class 4 sewage system to be constructed at the north-east corner of the property. The system will consists of a 3800 L two-compartment septic tank, a gravity-fed filter bed with a surface area of 48 m2, and a contact area of 200 m2. The filter bed is to consist of six 7.5 metre distribution pipes placed level on the terraces. There will be a minimum of 0.7 m of filter sand underlying the pipes and a minimum of 0.15 m crushed or washed stone covering them. The bed will be finish-graded with a crown above it to promote drainage.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed sewage system, which includes terraced distribution pipe runs, provides sufficiency of compliance with Clause 8.7.2.1.(1)(a) of the Ontario Building Code.

Clause 8.7.2.1.(1)(a) prohibits the construction of a leaching bed in an area with an average slope of more than 25% (four units horizontally per one unit vertically). The slope of the site proposed for construction of the filter bed is between 27 to 33 percent. The Applicant is proposing some engineering modifications to the filter bed area including constructing terraces for the distribution pipe runs in order to alter this slope and achieve compliance with the Code's requirements.

At issue is whether the proposed modifications adequately compensate for the site's slope.

4. Provisions of the Ontario Building Code

Clause 8.7.2.1. General Requirements

(1) A *leaching bed* shall not be located:

(a) in an area that has an average slope that exceeds one unit vertically to four units horizontally,

5. Applicant's Position

The Agent for the Applicant submitted that the filter bed system as designed would be stable, and meet the requirements of the Ontario Building Code.

The Agent stated that the Applicant is proposing to shave down the area to a depth of between 0.3 m to 0.6 m and cut into the existing grade to provide the required slope. Based on the information provided to the Agent by the engineering firm he retained, it is assumed that the slope at the clay level is fairly uniform and most likely less steep than the surface level. As a result, it is possible to re-grade and create the required 1:4 slope, he argued.

The Agent continued that in order to prevent water run-off from entering the bed area, the Applicant is proposing to maintain the drainage in a north-west direction by creating a swale at the top of sloping area.

The Agent then provided the following responses for issues raised during the hearing:

Regarding the conflicting information provided on the site survey map (topographical information) and site plan, as raised by the ministry's Code Advisor during the hearing, the Agent agreed to re-evaluate the information and provide the Commission and the Respondent with accurate data.

Regarding the Respondent's concern over erosion, the Agent argued that erosion can only occur if a proper method is not introduced to prevent it and they were proposing terracing, which is a known method for preventing erosion.

In conclusion, the Agent stated that although they agree with the Respondent about the steep slope (over 30%) of the site, by re-grading the area and providing terraces, they not only reduce the slope of the site to an appropriate level, but they also provide stability under the bed area.

6. Respondent's Position

The Respondent submitted that the site for the proposed installation of the Class 4 filter bed sewage system has a slope over 25%, which is not allowed under the Ontario Building Code.

At the outset, the Respondent referred to site conditions that would neutralize the effectiveness of the proposed design as follows:

> A slope of over 33% where the filter bed is proposed to be constructed;
>
> The high groundwater table during the spring season; and,
>
> Very heavy clay into which the proposed terraces are to be cut.
>
> The Respondent then argued that they believe the proposed design can neither solve the problem of the slope nor assure its stability. The Respondent based his argument on the following facts:
>
> The proposal involves extensive engineering of the site, removal of better soil at the top of the soil strata and
> cutting of all mature trees, which can act as a barrier against erosion;
>
> The material that is removed to level out the slope must be replaced with

imported material;

Without knowing the exact steepness of clay soil within the slope at the area of the proposed filter, the
Respondent was not convinced that overall slope can be reduced to less than 25%; and,

The proposed filter bed must be a raised bed system. This is consistent with the fact that the majority of the
properties in this area are serviced by a raised bed system. The finish grade where the bed can be raised has
a slope of 25%. Putting a raised bed on a slope of 25% creates stability concerns.

The Respondent also argued that, as far as he is concerned, cutting into clay is not allowed under the Code. In addition, although he is familiar with terraced tile runs in conventional leaching beds, he has never seen a step-down filter bed.

The Respondent concluded that the area where the foundation of the cottage has been constructed has a slope of 21% and is large enough to accommodate a filter bed. However, despite their advice, the Applicant did not consider this option and constructed the footings without a permit.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed modified filter bed to be built on a slope of more than 25% (four units horizontally and one unit vertically) does not provide sufficiency of compliance with Clause 8.7.2.1.(1)(a) of the Ontario Building Code.

8. Reason/s

i. The Commission is not satisfied that the changes proposed to alter the slope steepness of the bed area have addressed the slope stability in the long run.

Dated at Toronto this **7th,** day in the month of **December** in the year **2000** for application number **2000-76**.

BCC Ruling No. 00-59-791

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-59-791

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentences 8.2.1.4.(1), 8.2.1.6.(1) and 8.2.1.6.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Ken Page, Owner, Pickering, Ontario, for the resolution of a dispute with Mr. Brad Clark, Chief Building Official, Peterborough City County Health Unit, Peterborough, Ontario, to determine whether the construction of a deck, extending 2.13 m over a portion of an existing septic tank and the stairs serving the deck situated within 1.06 m of the existing filter bed, provide sufficiency of compliance with Sentences 8.2.1.6.(1) and (2) of the Ontario Building Code at 1821 Fire Route 12A - Pt. Lot 24, Conc. 13, Smith Ward, Ontario.

APPLICANT
Mr. Ken Page
Owner
Pickering, Ontario

RESPONDENT
Mr. Brad Clark
Health Inspector
Peterborough County-City Health Unit
Peterborough, Ontario

PANEL
Mr. Bryan Whitehead, Vice Chair
Mr. Bill Fellner
Mr. Doug Robinson

PLACE
Toronto, Ontario

DATE OF HEARING
December 7th, 2000

DATE OF RULING
December 7th, 2000

APPEARANCES
Mr. Tome Joore

Pickering, Ontario
Agent for the Applicant

Mr. Brad Clark
Health Inspector
Peterborough County-City Health Unit
Peterborough, Ontario
The Respondent

RULING

1. The Applicant

Mr. Ken Page, Owner, Ontario, has applied retroactively for a building permit under the Building Code Act, 1992 for the construction of a stairway previously added to a exterior deck at his cottage at 1821 Fire Route 12A - Pt. Lot 24, Conc. 13, Smith Ward, Ontario.

2. Description of Construction

The Applicant received a building permit in 1994 to construct a Group C - residential cottage in the Township of Smith Ward. In 1995, before the construction of the cottage was completed, the Applicant added a stairway to the deck at the front of the cottage. The stairs were not included in the original plan submitted for the building permit, however, they were constructed after the final inspection of the sewage system by the then authority responsible for enforcing on-site septic regulations.

The cottage is serviced by a Class 4 sewage system consisting of a septic tank and a filter bed. The subject deck extends 2.13 m over a portion of the septic tank. There are six posts supporting the deck. Each post stands on a cement pad. Two posts have been constructed in close proximity to the side walls of the septic tank. The clearance between the deck and top of the septic tank is less than 1.5 m. Moreover, the deck also extends within 1.83 m from the filter bed and there is a stairway leading to the deck that is situated 1.06 m from the north-west corner of the filter bed.

The dispute involves the clearance distances maintained between the deck and the septic tank and between the stair and the filter bed.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the construction

of a deck, extending 2.13 m over a portion of an existing septic tank and the stairs serving the deck situated within 1.06 m of the existing filter bed, provide sufficiency of compliance with Sentence 8.2.1.6.(1) and 8.2.1.6.(2) of the Ontario Building Code.

Both Sentences 8.2.1.6.(1) and 8.2.1.6.(2) govern the minimum clearance distances that must be maintained between components of a Class 4 or 5 sewage system and structures or natural foundations. However, according to Sentence 8.2.1.4.(1), complying with these provisions can be waived where, in the case of soils with a percolation time of 10 min/cm or greater, it is proved that maintaining these distances are not necessary. In other words, compliance with the above provisions can be waived in certain circumstances, if it is proved that the operation and maintenance of a sewage system is not negatively effected as a result of lesser clearance distances than those required by the Code. Since the soil at the site under dispute has a percolation time of 10 min/cm, Sentence 8.2.1.4.(1) is therefore applicable.

According to Sentence 8.2.1.6.(1), the horizontal clearance distances between a treatment unit such as a septic tank and any structure or natural foundation must not be less than the values set out in Table 8.2.1.6.A.. As given in Table 8.2.1.6.A, the minimum clearance distance between a septic tank and a structure must be at least 1.5 m. The minimum clearance distances to be maintained between distribution pipes (a leaching bed or filter bed) and structures or natural foundations are provided in Table 8.2.1.6.B, referenced by Sentence 8.2.1.6.(2). As set out in this Table, the minimum clearance distance that must be maintained between a structure and any part of a bed must be 5 metres. As noted, the subject deck as constructed, extends 2.13 m over a portion of the septic tank. The distance between the stairs and the north-west corner of the filter bed is 1.06 m.

At issue is whether maintaining the clearance distances required by Sentences 8.2.1.6.(1) and 8.2.1.6.(2) would be unnecessary given the circumstances at the site.

4. Provisions of the Ontario Building Code

8.2.1.4. Clearances

(1) Unless it can be shown to be unnecessary, where the percolation time is 10 minutes or greater, the location of all components within a sewage system shall be in conformance with the clearances listed in Articles 8.2.1.5. or 8.2.1.6.

Sentence 8.2.1.6. Clearances for a Class 4 or 5 Sewage System

(1) Except as provided in Sentences 8.2.1.4.(1) and (2), a *treatment unit* shall not be located closer than the minimum horizontal distances as set out in Table 8.2.1.6.A.

(2) Except as provided in Sentences 8.2.1.4.(1) and (2), a distribution pipe shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B. and these distances shall be increased when required by Sentence 8.7.4.2.(9).

5. Applicant's Position

The Agent for the Applicant stated that although the stairs were not included in the original plans submitted for the building permit and were added later, in the final inspection done in 1996 for occupancy permit, there was no mention of then built stairs as an unacceptable addition to the building.

The Agent continued that last summer the Applicant was granted a minor variance by Smith Ward's committee of adjustment that required setback reductions in the front and rear of his property. It was during these set back adjustments that the Chief Building Official required the Applicant to apply for a building permit to legitimize construction of the stairs. However, after an application was submitted by the Applicant, the Chief Building Official refused to grant a building permit unless the existing clearance distances between the deck and the septic tank and stairs and the filter bed were modified to meet the requirements of the Code or were approved by the Health Unit or by the Building Code Commission.

The Agent argued that, during the last five years of use, the sewage system has been functioning properly and there has been no problem associated with its maintenance. During this period, the septic tank has been pumped out several times without any difficulty in accessing to the tank, he emphasized.

The Agent concluded that although the Applicant would like to keep the deck and stairs as they are, he (the Applicant) would do whatever required to prevent any potential problem that may arise in the future.

6. Respondent's Position

The Respondent submitted that the existing clearance distances between the deck and septic tank do not meet the requirements of the OBC.

The Respondent argued that as far as the Health Unit is concerned, the deck is part of a structure, so it is required to maintain the same clearance distances with different components of a sewage system as a structure must. However, he also agreed that there are some situations where complying exactly with requirements of the Code is not

possible. Moreover, such situations usually have little if any negative impact on the performance of a septic system. Indeed, he acknowledged that there has been no malfunctioning of the system due to the current clearance distances, nor any problem regarding the accessibility of the tank during the last five years of use.

Nevertheless, the Respondent concluded by reiterating that the required clearances were not being met and they had no choice but to refuse the Applicant's submission.

7. Commission Ruling

It is the decision of the Building Code Commission that the current clearances from the existing septic tank and deck and from the exiting distribution pipe to the stair and deck provide sufficiency of compliance with Sentences 8.2.1.6.(1) and 8.2.1.6.(2), on condition that:

1. The supports for the deck in the vicinity of the tank are modified to spread the load over 61 cm by 61 cm (two feet by two feet) pads not bearing on the tank.

8. Reasons

i. The modifications to the support of the deck in the vicinity of the tank will reduce any potential impact on the tank.
ii. The performance of the septic tank and the filter bed apparently have not been impacted by the deck and stairs over the past five years.

Dated at Toronto this **7th,** day in the month of **December** in the year **2000** for application number **2000-69**.

Ruling No. 00-58-790
Application No. 2000-72

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Articles 9.8.3.3., 9.8.4.1. and 9.9.3.2. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Bruno G. Schickedanz, B.G. Schickedanz Homes Inc., Woodbridge, Ontario, for the resolution of a dispute with Mr. Yaman Uzumeri, Chief Building Official, City of Toronto, Ontario, to determine whether the as-built exterior concrete stairs and landings, having widths ranging from 814 mm to 850 mm, provide sufficiency of compliance with Articles 9.8.3.3., 9.8.4.1. and 9.9.3.2. of the Ontario Building Code at Units 9 and 10 Charlton Settlement Avenue, and Units 13, 15 and 17 Rivers Edge Drive the Riverboat Landing development, 1400 Weston Road, Toronto, Ontario.

APPLICANT	Mr. Bruno G. Schickedanz B.G. Schickedanz Homes Inc. Woodbridge, Ontario
RESPONDENT	Mr. Yaman Uzumeri Chief Building Official City of Toronto
PANEL	Dr. Kenneth Peaker, Chair Mr. Fred Barkhouse Mr. Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	November 30th, 2000
DATE OF RULING	November 30th, 2000
APPEARANCES	Mr. Alex Talwood Toronto, Ontario **Agent for the Applicant** Mr. Jim Laughlin Manager, Field Office City of Toronto, Ontario **Designate for the Respondent**

RULING

1. The Applicant

Mr. Bruno G. Schickedanz, B.G. Schickedanz Homes Inc., Woodbridge, Ontario, has received an order to comply under the Building Code Act, 1992 to rectify certain alleged deficiencies in respect to the construction of a townhouse complex known as Riverboat Landing, Charlton Settlement Avenue and Rivers Edge Drive, 1400 Weston Road, Toronto, Ontario.

2. Description of Construction

The Applicant has constructed a townhouse complex consisting of 43 townhomes arranged in 7 blocks. The buildings have a Group C occupancy classification, a building area of less than 600 m^2 and are three storey in building height. Throughout the townhouse blocks are five units subject to this dispute. These are identified as Units 9 and 10, fronting onto Charlton Settlement Avenue and Units 13, 15 and 17, fronting onto Rivers Edge Drive. The units are called the Simcoe and York models and have floor areas of 111.48 m^2 (1,200 ft^2) and 104.05 m^2 (1,120 ft^2) respectively. All of the buildings are comprised of combustible construction.

The construction in dispute involves the width of the exterior covered concrete stairs and landings which form part of the required exit from each of the subject units. The front entrance to each unit is located approximately 1,371 mm (4 ft 6 in) to 1,524 mm (5 ft) above grade and is recessed behind the front wall face of the subject dwelling. The widths of the front stairs and landings range from 814 mm (Unit 15) to 850 mm (Units 10 and 13) when measured between the adjacent wall faces. The front door to each of the units measures 790 mm (31 in) in width.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-built concrete stairs and landings at the front of the subject units provide sufficiency of compliance with Articles 9.8.3.3., 9.8.4.1. and 9.9.3.2. of the Ontario Building Code.

Sentence (1) of Article 9.8.3.3. requires a minimum width for exit stairs, when measured between wall faces or guards, of 900 mm (2 ft 11 in). In the case at hand, the as-built stairs form part of a required exit from the dwelling units in question and as a result, the 900 mm minimum width requirement applies. The stair widths, however, measure between 814 mm (32 in) and 850 mm (33 ½ in) rather than the required 900 mm.

Further, Article 9.8.4.1. requires that landings shall be at least as wide and as long as the width of the stairs in which they occur. This article continues by providing certain exemptions for that length of some landings, however, it offers no relief for the width requirement (i.e., must be the same as stairs) of landings. In this instance, while the landings are generally the same width as the stairs in which they occur, like the stairs, they do not meet the minimum 900 mm width requirement.

Article 9.9.3.2. further prescribes the widths of required exits, mandating that (except for doors and corridors) the width of every exit facility shall be not less than 900 mm. As already noted, the as-built stairs and landings, with measurements between 814 mm and 850 mm, do not meet this minimum standard.

4. Provisions of the Ontario Building Code

Article 9.8.3.3. Stair Width

(1) *Exit* stairs and stairs used by the public shall have a width, measured between wall faces or *guards*, of not less than 900 mm (2 ft 11 in).

(2) At least 1 stairway between each floor level in a *dwelling unit* shall have a width between wall faces of not less than 860 mm (2 ft 10 in).

Article 9.8.4.1. Dimensions of Landings

(1) Landings shall be at least as wide and as long as the width of stairs in which they occur, except that

(a) the length of landing for exterior stairs serving not more than 1 *dwelling unit* need not exceed 900 mm (2 ft 11 in), and

(b) the length of landing for all other stairs in a straight run need not exceed 1 100 mm (3 ft 7 in).

(See also Articles 9.9.6.2. and 9.9.6.6. for landings in *exits*.)

Article 9.9.3.2. Exit Width

(1) Except for doors and corridors, the width of every *exit* facility shall be not less than 900 mm (2 ft 11 in). (See Article 9.9.6.4. for doors and Subsection 9.8.3. for stairs.)

5. Applicant's Position

The Agent for the Applicant began by providing the Commission with some background information, explaining that construction of the townhomes commenced in the fall of 1999. The issue of non-compliance was discovered in late winter or early spring of 2000, when an order to comply was issued by the City. At this point, he argued, it was too late to halt construction and alter the design to comply with the OBC. He advised that the townhomes are now built and occupied. In his opinion, safety is not reduced because of the differential in stair and landing widths. He noted that the as-built condition is only slightly less than the minimum requirement.

The Agent stated that his client did not intentionally construct the stairs and landings to be non-compliant with the OBC requirements. He indicated that, the problem occurred as a result of a construction error. Specifically, it appeared that the landings were built without taking into consideration the thickness of the masonry veneer used on the lower portion of the townhouses. In effect, the masonry veneer thereby narrowed the landing areas and the stairs were subsequently built to the same narrowed width as the landings.

The Agent then argued that the stair and landing widths are greater than the width of the associated doors and, as such, it is his opinion that if a person can pass through the wooden door frame, they are also able to pass through the landing area. In addition, he submitted that more than the required number of exits have been provided within each unit. An occupant, he argued, has the option of exiting from the front door, the rear door or any one of the operable casement windows on the second and third floors. In addition, many of the units have access to the garage from the interior of the dwelling.

In summation, the Agent submitted that the Code violation in this instance was a genuine mistake. The stairs and landings were constructed unintentionally narrow and given the extenuating circumstances involved, rectifying the situation would have been difficult at the time the order to comply was issued. The Agent again emphasized that additional means of egress from the buildings had been provided, stating that safety would not be compromised in this instance.

6. Respondent's Position

The Designate for the Respondent submitted that a permit had not been issued for this development at the time construction commenced. The permit plans, however, indicated landings and stairs which would have been wide enough to satisfy the OBC requirements. In his opinion, it was not too late to remedy the situation at the time the order was issued. There were alternatives available to the Applicant that were not pursued. In fact, stucco was used on the wall face of one of the units that was identified prior to finished construction. Using a similar material here may have resolved the dispute involving the units in question.

The Designate argued, because this is a means of egress, the narrow landings and stairways pose a real problem and may jeopardize the safety of the occupants of the subject units. This access point, being the front door to the dwelling, he submitted, is the most frequently used entrance/exit and is logically the route for safety first thought of in an emergency situation. In addition he disputed the Applicant's claim with respect to the number of available egress routes. He argued that one may not reasonably be expected to jump out of a second or third storey window and, in any event, it should not be considered as a route that would contribute to the safe evacuation of the dwelling.

In summation, the Designate argued that the stairs and landings in question are considered to be part of the required exit. In addition, the front door of the dwellings would likely be selected as the main exit by the occupants of the units in an emergency. It is important that the minimum provisions of the Building Code be complied with in this respect.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-built exterior concrete exit stairs and landings, having widths ranging from 814 mm to 850 mm, do not provide sufficiency of compliance with Articles 9.8.3.3., 9.8.4.1., 9.9.3.2. and of the Ontario Building Code at Units 9 and 10 Charleton Settlement Avenue and Units 13, 15 and 17 Rivers Edge Drive, 1400 Weston Road, Toronto, Ontario.

8. Reasons

i) The as-built stairs and landings do not meet the minimum standards set out in the Building Code, nor have any acceptable compensating measures been offered in lieu of compliance.

ii) There were, and continue to be, viable options available to the Applicant enabling him to comply with the minimum standard outlined in the OBC.

Dated at Toronto this **30th,** day in the month of **November** in the year **2000** for application number **2000-72.**

Dr. Kenneth Peaker, Chair

Mr. Fred Barkhouse

Mr. Donald Pratt

Ruling No. 00-56-788
Application # 2000-68

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Clause 3.1.5.12.(1)(a), Sentences 3.2.2.24.(2) and 3.3.1.1.(1), and Sentence 3.3.1.4.(3) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Sasha Milenov, Architect/Principal, Sasha Milenov Architect, Toronto, Ontario, for the resolution of a dispute with Mr. Yaman Uzumeri, Chief Building Official, City of Toronto, Ontario, to determine whether the proposed partition walls and corridor configuration provide sufficiency of compliance with Sentences 3.1.5.12.(3), 3.2.2.24.(2), 3.3.1.1.(1), and 3.3.1.4.(3) of the Ontario Building Code for Unit 4, 9 Milvan Drive, Toronto, Ontario.

APPLICANT	Mr. Sasha Milenov, Architect/Principal Sasha Milenov Architect Toronto, Ontario
RESPONDENT	Mr. Yaman Uzumeri Chief Building Official City of Toronto
PANEL	Dr. Kenneth Peaker, Chair Mr. Robert De Berardis Mr. Fred Barkhouse
PLACE	Toronto, Ontario
DATE OF HEARING	November 16th, 2000
DATE OF RULING	November 16th, 2000
APPEARANCES	Mr. Sasha Milenov, Architect/Principal Sasha Milenov Architect Toronto, Ontario **The Applicant** Mr. Norm Kevilovski Plan Examiner City of Toronto, North District **Designate for the Respondent**

RULING

1. The Applicant

Mr. Sasha Milenov, Architect/Principal, Sasha Milenov Architect, Toronto, Ontario, has applied for a building permit under the Building Code Act, 1992 to construct new partition walls and corridor in an existing social club facility located at Unit 4, 9 Milvan Drive, Toronto, Ontario.

2. Description of Construction

The Applicant is proposing to remove a portion of an existing "retail" area contained within a Latin American social club (located in Unit 4 of the subject building) and construct a replacement merchant area. The subject building containing Unit 4 is described as two storeys in building height, 2,890 m^2 in building area and as having a Group A - Division 2 major occupancy. The structure is of noncombustible construction and is equipped with sprinkler and fire alarm systems.

The disputed unit, number 4, is L-shaped and 916 m^2 in area. At the narrow, or front, portion of the unit are existing stores, washrooms and offices configured around one central corridor. At the wider, rear area of the unit is a large open eating space containing cooking and dining facilities. Both of these areas are not being altered. It is the space in between them for which the new work is intended.

The new "retail" area is to have larger tenant stores and will have a single 3 m (10 ft) wide central corridor (replacing the two current corridors) linking the eating area at the rear to the existing 3 m wide corridor at the front portion which, in turn, connects to the main entrance. The proposed work will increase the area within the unit devoted to "mercantile" uses. The proposal is the latest change in the evolution of the "retail" space that originated as an area of free market stalls for the display and selling of items, which then became individual stores, and is now intended as a larger area of reconfigured stores and corridor. The Applicant, however, is not proposing a change of use.

The construction in dispute therefore involves the proposed new "retail" store units and the corridors serving them. Specifically, the Applicant is proposing to construct the partition walls between the stores to a height of 3 m (10 ft) thereby leaving a gap of 1,295 mm (4 ft, 3 in) between the top of the wall and the underside of the ceiling. The walls are to be comprised of 2 by 4 wood studs with gypsum wallboard fastened on both sides. The same construction (including height) is intended for the wall separating the stores and the corridor. These walls, however, as the store fronts, will contain a substantial glazed window area and doors that swing outward in the direction of egress. The corridor, as stated, will be 3 m (10 ft) in width and is to be a direct, straight line from the food court, through the stores, to the exit.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed partition walls and corridor configuration provide sufficiency of compliance with Sentences 3.1.5.12.(3), 3.2.2.24.(2), 3.3.1.1.(1), and 3.3.1.4.(3) of the Ontario Building Code (OBC).

Specifically, there are three main components to this dispute. The first involves Article 3.1.5.12. which describes when combustible elements may be used in partition walls within buildings required

to be of noncombustible construction (see paragraph below). Sentence (3) of OBC 3.1.5.12. is intended for sprinklered buildings. It permits combustible partition elements if the floor area is sprinklered and if the partitions are not utilized under certain conditions not applicable to the present case. The Applicant is proposing to use combustible construction, i.e., wood stud framing, for the subject partition walls in a noncombustible, sprinklered building.

It should be noted that the construction for the building in which Unit 4 is contained is governed by Article 3.2.2.24. The building qualifies under the conditions of Sentence (1) and is therefore permitted to be built according to Sentence 3.2.2.24.(2). Among other things, this provision stipulates that the building be of noncombustible construction and that the floor assemblies have one hour rated fire separations.

The second issue relates to the separation of the retail store units. As proposed, the Applicant does not intend to separate the individual stores from each other. His plan is to erect 3 m high partition walls that leave a 1.3 m gap to the ceiling. Sentence 3.3.1.1.(1) requires that suites be separated from adjoining suites by one hour fire separations. The two exceptions to Sentence (1), found in Sentences (2) and (3), are not applicable. In particular, Sentence (2) permits the fire resistance rating to be less than one hour but not less than 45 minutes if the construction requirements in Subsection 3.2.2. allow such a reduction. As shown, in the present case, however, Sentence 3.2.2.24.(2) requires one hour separations. Sentence (3), on the other hand, exempts certain occupancies from the suite to suite separation requirement. Group E - mercantile occupancies, for example, are among those excepted. Nevertheless, as indicated above, the use of the social club (A2) was not proposed to be changed to a Group E occupancy. Moreover, to qualify for this exemption the suites in question must be served by corridors at least 9 m in width, not 3 m as proposed.

The final matter pertains to the separation of proposed corridor. Sentence 3.3.1.4.(3) permits a fire separation between a corridor and a portion of the floor to be unrated if the area is sprinklered and if the corridor does not serve certain uses not applicable here. In doing so, Sentence (3) is an exemption to Sentence 3.3.1.4.(1) which mandates that all corridors shall have one hour rated separations. Article 3.3.1.4., specifically Sentence (4), goes further to permit a sprinklered floor area to waive the separation between it and a public corridor, however, the corridor must be at least 5 m in width. The Applicant's proposed corridor, at only 3 m wide, does not qualify for the exemption from a separation under Sentence (4) and is therefore subject to Sentence (3).

4. Provisions of the Ontario Building Code

Sentence 3.1.5.12. Combustible Elements in Partitions

(3) Solid lumber *partitions* not less than 38 mm (1 ½ in) thick and *partitions* that contain wood framing are permitted to be used in a *building* required to be of *noncombustible construction* provided
(a) the *floor area* containing the *partitions* is *sprinklered*, and
(b) the partitions are not
(i) located in a *care* or *detention occupancy*,
(ii) installed as enclosures for *exits* or *vertical service spaces*, or
(iii) used to satisfy the requirements of Clause 3.2.8.1.(1)(a).

Sentence 3.2.2.24. Group A, Division 2, up to 6 Storeys, Any Area, Sprinklered

(2) Except as permitted by Article 3.2.2.16., the *building* referred to in Sentence (1) shall be of *noncombustible construction*, and

(a) floor assemblies shall be *fire separations* with a *fire-resistance rating* not less than 1 h,
(b) *mezzanines* shall have a *fire-resistance rating* not less than 1 h, and
(c) all *loadbearing* walls, columns and arches shall have a *fire-resistance rating* not less than that required for the supported assembly.

Sentence 3.3.1.1. Separation of Suites

(1) Except as permitted by Sentences (2) and (3), each *suite* in other than *business and personal services occupancies* shall be separated from adjoining *suites* by a *fire separation* having a *fire-resistance rating* not less than 1 h. (See also Subsection 3.3.3. for *care or detention occupancies*, Article 3.3.4.2. for *residential occupancies* and Article 3.1.8.7. for *fire dampers*.)

Sentence 3.3.1.4. Public Corridor Separations

(3) If a *floor area* is *sprinklered*, no *fire-resistance rating* is required for a *fire separation* between a *public corridor* and the remainder of the *floor area* provided the corridor does not serve a *care or detention occupancy* or a *residential occupancy*. (See A-3.1.8.1.(1)(b) in Appendix A.)

5. Applicant's Position

The Applicant commenced his discussion by providing a background of the building, Unit 4 and its various work undertaken over the years. He explained that the previous renovation, with the many small stores, the double corridors and ornamental wood trim was intended to achieve a Mexican look. He submitted that the current proposal is simply an improvement to the existing concept previously approved by the building department.

The Applicant stated that the unit under dispute was originally approved as a social club for a Latin-American community group which was to be used only by its members. He noted that the occupancy and restricted usage of the building will remain. The proposed changes are internal and limited to enlargement of existing retail units and combination of two existing corridor to create a larger one.

The Applicant continued that with proposed construction all combustible materials used for the Mexican-style decorations of the ceiling and elsewhere was being removed. This alteration decreases the fire load of the building to a large extent. In addition, instead of open stalls there will now be larger suites with outward swinging doors oriented perpendicularly to one wider corridor. As he noted, all of the above construction does not bring about any substantial nor structural change.

In conclusion, the Applicant requested that because the building is entirely sprinklered and equipped with a fire alarm system that they be permitted to proceed with their proposal.

6. Respondent's Position

The Respondent submitted that the retail units under dispute meet the criteria associated with suites under the Code, therefore, they should comply with the construction requirements set out for suites

under the Ontario Building Code.

The Respondent argued that as the proposed corridor is only 3 metre wide, the retail suites are required to be separated from the corridor by a rated fire separation. In addition, he stated that under the Code, fire separations are also required to be maintained between adjoining suites. However, the proposed construction does not meet any of these requirements as the intended separations are neither rated nor extend to the ceiling.

The Respondent continued that the amount of combustible materials proposed for the partitions exceeds that which is permitted in a building required to be of noncombustible construction.

The Respondent concluded by stating that if the partitions were not present, then the social club and Unit 4 would comply with the OBC.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed partition walls and corridor configuration do not provide sufficiency of compliance with Sentences 3.1.5.12.(3), 3.2.2.24.(2), 3.3.1.1.(1), and 3.3.1.4.(3) of the Ontario Building Code for Unit 4, 9 Milvan Drive, Toronto, Ontario.

8. Reasons

i) Each single-room retail unit is considered a suite. As a result, the proposed demising walls between units are considered as fire separations between suites. Accordingly, since the various relief available in the Code is not applicable, a one hour separation must be provided.

ii) Sentence 3.3.1.4.(3) waives the fire resistance rating for the proposed corridor, however, a continuous separation between the corridor and the remainder of the floor area is required since the corridor is only 3 m in width.

iii) Inadequate compensating measures were offered to achieve sufficiency of compliance with the above referenced OBC provisions.

Dated at Toronto this **16th** day in the month of **November** in the year **2000** for application number **2000-68**.

Dr. Kenneth Peaker, Chair

Mr. Robert De Berardis

Mr. Fred Barkhouse

Ruling No. 00-54-786
Application No. 2000-66

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Articles 9.8.8.8., 4.1.10.1. and Sentence 9.8.2.1.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Christian Wingelaar, Waterloo, Ontario, for the resolution of a dispute with Mr. James A. Witmer, Chief Building Official, City of Kitchener, Ontario, to determine whether the proposed guard comprised mainly of 35 mm diameter acrylic rods complies with Articles 9.8.8.8. and 4.1.10.1. and whether the irregular curved stair provides sufficiency of compliance with Sentence 9.8.2.1.(1) of the Ontario Building Code at the Zinger Residence, Lot 9, 2121 Hidden Valley Crescent, Kitchener, Ontario.

APPLICANT	Mr. Christian Wingelaar, President Wingelaar Estate Homes Waterloo, Ontario
RESPONDENT	Mr. James A. Witmer Chief Building Official City of Kitchener
PANEL	Dr. Kenneth Peaker, Chair Mr. Fred Barkhouse Mr. Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	November 2, 2000
DATE OF RULING	November 2, 2000
APPEARANCES	Mr. Hans Gollek, President/Owner Wooden Stairs & Railing Ltd. Kitchener, Ontario **Agent for the Applicant** Mr. Glen D. Good Deputy Chief Building Official City of Kitchener **Designate for Respondent**

RULING

1. The Applicant

Mr. Christian Wingelaar, Waterloo, Ontario, has received a building permit under the Building Code Act, 1992 and has constructed a new detached dwelling at Lot 9, 2121 Hidden Valley Crescent, Kitchener, Ontario.

2. Description of Construction

The Applicant has recently constructed a new single detached dwelling, one storey in building height and less than 600 m^2 in building area. The building is to be used as the principal residence of the Zinger family. At the request of the owners, the stairs and guards in the subject house were custom built. The Applicant, the general contractor, contracted out the construction of the stairs and guards to a custom builder.

There are two areas of construction in dispute. The first involves the design and structural integrity of the guard serving stairs that connect the ground floor of the dwelling to the basement level. The guard is also installed on the ground floor to protect the elliptical opening for the subject stair assembly. The balusters that make up the guard are solid acrylic rods, spaced at 100 mm (4 in) on centre and are secured into the wooden handrail at the top and into each stair tread at the bottom. The acrylic rods are 35 mm (1 3/8 in) in diameter and are embedded 50 mm (2 in) into the stair and 38 mm (1 ½ in) into the railing.

The second issue at dispute involves the design of the aforementioned stair. Described as providing access to egress, the proposed 17 riser stair has a modified curved design. As part of this unique design, the stair treads do not radiate from a common point nor are the curved stringers parallel to one another throughout the stair run. In fact, as the stairs descend they become wider. The width between stringers at the top of the stairs is 1,118 mm (44 in) and at the bottom is 1,486 mm (58 ½ in). As well, the second, third and fourth lower most stairs have elliptical nosing, i.e., they are slightly bowed or outward projecting.

The minimum run of the individual stairs, ranging between 206.25 and 206.5 mm (8.12 and 8.13 in), surpasses the 150 mm (5 7/8 in) requirement. No measurements were provided for the average stairs runs, but it exceeds the minimum required of 200 mm (7 7/8 in) since even the minimum run is greater than 200 mm. The bottom stair, however, which functions more like a landing, proposes a tread depth of 813 mm (32 in) and has a semi-elliptical shape.

In terms of the uniformity of the stair run, again no measurements were provided at the average or mid-point of each tread. The Applicant, however, has noted that the proposed stair (including stairs 2, 3 and 4) has runs varying between 243 and 245 mm (9.57 to 9.59 in) at the "walking line". The walking line (see BCC Ruling # 00-12-744) is an imaginary line running throughout the stair and is measured at 300 mm (12 in) from the inside handrail. This is the line, according to the Applicant, which, from an ergonometric point of view, represents the path of the mid-point of the body that an individual would actually take to ascend or descend the stair, and not the average run (i.e., the precise middle of each stair) that the Code recognizes.

3. Dispute

The two issues at dispute between the Applicant and Respondent are i) whether the proposed guard, comprised mainly of 35 mm diameter acrylic rods, complies with Articles 9.8.8.8. and 4.1.10.1. of the

Ontario Building Code; and ii) whether and the irregular curved stair provides sufficiency of compliance with Sentence 9.8.2.1.(1) of the OBC.

Article 9.8.8.8. stipulates that all guards shall conform to the loading criteria in Article 4.1.10.1. except where guards are constructed with the requirements outlined in the Supplementary Guidelines (SG-7), in which case they are deemed to satisfy the requirements of Sentence 9.8.8.8.(1).

Article 4.1.10.1. outlines the requirements for loads on guards. Sentences (1) and (2) indicate the specifications required for the minimum horizontal load applied inward or outward at the top of every guard and for the individual elements within the guard, including solid panels and pickets.

As outlined by the Housing Development and Building Branch of the Ministry of Municipal Affairs and Housing in their memorandum dated October 12, 2000, "(w)here guards differ from the prescriptive code requirements outlined in the Supplementary Guidelines to the OBC, guards may be designed according to the Part 4 requirements to determine the loading criteria." The Branch opinion further stated that "(w)here the railing does not conform to the requirements of the SG-7 Guidelines, it shall conform to the applicable requirements of Article 4.1.10.1."

In this instance, the proposed guard that will run the length of the stair opening and the 17 riser stair, has been reviewed Truetek Engineering Inc. with respect to certain loading capabilities. At dispute however, is whether further loading calculations are required to confirm compliance with the OBC requirements.

In respect to the second area of dispute involving the design of the stair, Sentence 9.8.2.1.(1) requires that stairs have a uniform rise and run in any one flight. This requirement, which must be applied to exit and non-exit stairs alike is intended to provide consistent and uniform stair construction so that users will avoid missteps potentially resulting in injury. With the irregular curve of the stair (as noted, they do not radiate from a common point) and the elliptical shape of stairs two to four, the run has certain variations. At issue then, is whether the proposed design, with the previously described discrepancies in run uniformity, provides sufficiency of compliance with OBC Sentence 9.8.2.1.(1).

The Respondent raised concerns regarding whether the stair also failed to comply with Article 9.8.5.1. which requires that curved stairs in exits meet Article 3.4.6.8. Among other stipulations, Sentence (2) of Article 3.4.6.8. mandates that the inside radius must be "not less than twice the stair width." In doing so, this provision assumes that curved exit stairs are designed so that a line drawn at the riser face of each individual tread towards the inside of the stair would meet at a common, single point. These provisions, OBC 3.4.6.8. and 9.8.5.1., however, are applicable only to exit stairs. The present disputed stairs, as private stairs within a dwelling, are considered as access to egress stairs and not exit stairs. As a result, their failure to meet at a common radius point is not a Code violation and will therefore not be addressed.

4. Provisions of the Ontario Building Code

Article 9.8.8.8. Construction of Guards

(1) Except as permitted in Sentence (2), *guards* shall conform to the loading criteria in Article 4.1.10.1

(2) Guards constructed in accordance with the requirements in the Supplementary Guidelines shall be deemed to satisfy the requirements of Sentence 9.8.8.8.(1).

Article 4.1.10.1. Loads on Guards

(1) The minimum specified horizontal load applied inward or outward at the top of every required *guard* shall be
(a) 3.0 kN/m (200 lb/ft) for *means of egress* in grandstands, stadia, bleachers and arenas,
(b) a concentrated load of 1.0 kN (225 lb) applied at any point for access walkways to equipment platforms, contiguous stairs and similar areas where the gathering of many people is improbable, and
(c) 0.75 kN/m (50 lb/ft) or a concentrated load of 1.0 kN (225 lb) applied at any point, whichever governs, for locations other than described in Clauses (a) and (b).

(2) Individual elements within the *guard*, including solid panels and pickets, shall be designed for a concentrated load of 0.5 kN (113 lb) at any point in the element.

(3) The loads required in Sentence (2) need not be considered to act simultaneously with the loads provided for in Sentences (1) and (4).

(4) The minimum specified load applied vertically at the top of every required *guard* shall be 1.5 kN/m (100 lb/ft) and need not be considered to act simultaneously with the horizontal load provided for in Sentence (1).

Sentence 9.8.2.1.(1) Uniform Treads and Risers

(1) Treads and risers shall have uniform rise and run in any one flight.

5. <u>Applicant's Position</u>

The Agent for the Applicant submitted that, when designing a stair they always keep the Ontario Building Code requirements uppermost in their minds. Nevertheless, he argued that, in the design of this stair, the "walking line" concept measured at 300 mm (12 in) from the inside handrail was applied and therefore a consistent tread run has been provided at that distance. This "walking line" they submit, is the area determined to be the "centerline of an adult body transcending the stair, while holding on to the handrail". The only exception to this consistent stair run, he acknowledged, is the first stair which has a width of 813 mm (32 in); it has been designed more as a landing than a stair. The Agent argued that, when considering this design in the context of Article 9.8.5.2. and taking into account "a minimum variation allowed in the home construction industry, the run along the inside/right stringer and any slight alteration thereof due to the change in focal point are deemed permissible."

In respect to the rise of the stair, the Agent submitted that "the Zinger stair is 7 1/4 (in), a comfortable rise for a 17 rise staircase. In the Agent's opinion, "Article 9.8.5.2. does not state that the stair must be exactly as shown in article 9.8.5.2., nor that it must be a '90° curved stair, nor that the stair can't be flared, nor that the stair can't have elliptical treads, nor that the stair can't not have multiple focal points along the inside stringer".

In respect to the guards located along both the balcony and the stair, the Agent submitted that the "Zinger handrail design is based on previous staircases (which have been built over the last 10 years), where the handrail design has been made with the same profile, the same manufacturing techniques and the same installation techniques. There has been no record of design and/or structural failure with this design...". He emphasized that the acrylic rods have been reviewed and approved by Truetek Engineering to meet the requirements of article 4.1.10.1.. In addition, they have followed all OBC and SG-7 requirements for the stair and handrails and the connection system. In the Agent's opinion,

neither the requirements nor the intent of the Building Code are being violated.

6. Respondent's Position

The Designate for the Respondent stated that the stair designer has not considered the Ontario Building Code's prescriptive requirements in the design of this stair. He submitted that the "stair incorporates a curved section, a modified winder section (at Top & Bottom) complete with elliptical shaped nosing on the bottom three treads." The curved and winder sections do not comply with the Ontario Building Code due to the fact that the treads do not radiate from a common centre point, and /or turn through an angle of 30°; the curved stringers are not parallel to each other and therefore are neither a curved stair or a stair with winders.

The Designate argued that the stair that is the subject of this dispute is not the stair for which a permit was issued. This stair was built completely in the designers shop, without notice to the Respondent of any proposed changes. The Designate submitted that, in his opinion, when "you descend these stairs, your body naturally wants to move from the inside to the outside of the curved path of travel which results in having to negotiate a non-uniform run and tread width and a tendency for your body to move away from the handrail." This is not an appropriate design nor is it compliant with the OBC requirements. He did state however, that he has come to an agreement with the Applicant that the bottom stair can be considered as a landing.

In respect to the proposed guards, the Designate for the Respondent submitted that the design does not comply with SG-7, nor has it been reviewed for compliance with Part 4 of the OBC. While he acknowledges that this type of guard is structurally sound in respect to vertical loading, there is no confirmation that these balusters would meet the requirements for lateral loading. He indicated that he would need confirmation from a qualified engineer to satisfy his concerns in that regard.

7. Commission Ruling

It is the decision of the Building Code Commission that concerning the Zinger Residence, Lot 9, 2121 Hidden Valley Crescent, Kitchener, Ontario, the proposed guard, comprised mainly of 35 mm diameter acrylic rods complies with Articles 9.8.8.1. and 4.1.10.1. of the Ontario Building Code on the condition that:

(1) the lateral capacity of the guard is verified by a qualified engineer.

It is also the decision of the Building Code Commission that the irregular curving stair provides sufficiency of compliance with Sentence 9.8.2.1.(1) of the Ontario Building Code at the aforementioned Zinger Residence.

8. Reasons

i) With verification of the lateral capacity, the guard will comply with the Ontario Building Code.

ii) The variations related to the run of the stair are considered minimal and therefore sufficiently comply with OBC requirements.

Dated at Toronto this **2nd** day in the month of **November** in the year **2000** for application number **2000-66**.

Dr. Kenneth Peaker, Chair

Mr. Fred Barkhouse

Mr. Donald Pratt

Ruling No. 00-52-784
Application No. 2000-63

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 3.1.2.1. & 3.1.3.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. David Climans, Principal, Climans, Green, Liang Architects, Toronto, Ontario, for the resolution of a dispute with Ms. Heather Rutherford, Chief Building Official, Town of Innisfil, Ontario, to determine whether the restaurant and fixed seat grandstand areas of the proposed new racetrack facility can be considered as sharing the same major occupancy in accordance with Articles 3.1.2.1. and 3.1.3.1. of the Ontario Building Code at the Georgian Downs Racing Centre, Innisfil, Ontario.

APPLICANT	Mr. David Climans, Principal Climans, Greens, Liang Architects Toronto, Ontario
RESPONDENT	Ms. Heather Rutherford Chief Building Official Town of Innisfil
PANEL	Dr. Kenneth Peaker, Chair Mr. Robert De Berardis Mr. Donald Pratt
PLACE	Toronto, Ontario
DATE OF HEARING	October 19, 2000
DATE OF RULING	October 19, 2000
APPEARANCES	Mr. Rick Mori, Senior Associate Leber/Rubes Inc. Toronto, Ontario **Agent for the Applicant** Ms. Heather Rutherford Chief Building Official Town of Innisfil **The Respondent**

RULING

1. The Applicant

Mr. David Climans, Principal, Climans, Green, Liang Architects, Toronto, Ontario, has received a conditional building permit under the Building Code Act, 1992 to construct a new racetrack facility known as the Georgian Downs Racing and Gaming Centre, in the Town of Innisfil, Ontario.

2. Description of Construction

The Applicant is proposing to construct a new racetrack facility in the Town of Innisfil. The structure will have a building height of three storeys, will occupy a building area of 17,622 m^2 (including the racetrack surface) and will be of noncombustible construction. The building is proposed to be equipped with sprinkler and fire alarm systems.

The facility will contain an enclosed grandstand and a stepped restaurant with a gaming centre. The restaurant and the grandstand areas are located next to one another and have been designed as viewing areas overlooking the racetrack. Both areas face the open air racetrack to the east, and both are totally enclosed and separated from the racetrack by a glass curtain wall. The restaurant will occupy an area of 579 m^2 and will consist of six stepped levels with one row of tables at each level. Each of the 106 tables will accommodate a maximum of four seats resulting in a total of 424 seats in the restaurant. There will also be a stepped gaming centre that will accommodate slot machines within the restaurant area. The grandstand will occupy an area of 779 m^2 and will have 11 rows of fixed seating with an occupant load of 550.

The construction in dispute involves the differentiation of the two uses and the separation between the grandstand and the restaurant areas. It is proposed that the restaurant and grandstand be considered as sharing the same major occupancy classification and that a plain glass partition will separate the areas from one another.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the restaurant, including gaming centre and fixed seat grandstand area of the new racetrack facility can be considered as sharing the same major occupancy in accordance with Articles 3.1.2.1. and 3.1.3.1. of the Ontario Building Code (OBC).

Article 3.1.2.1. classifies buildings according to their major occupancy, that is "the principal occupancy for which a building or part thereof is used or intended to be used". Sentence (1) of this Article classifies the major occupancies regulated under the Code (these occupancies are listed in Table 3.1.2.1. which forms part of Sentence 3.1.2.1.(1)). In addition to the occupancy classifications, examples of each occupancy are provided in Appendix A to the 1997 Ontario Building Code. According to the examples listed in Appendix A, a grandstand qualifies as an Assembly occupancy, Division 4, while a restaurant is categorized as an A2 occupancy. It should be noted, however, that the Appendix also defines an A4 occupancy as one where the occupants are gathered in the open air. Further, Sentence (2) of Article 3.1.2.1. stipulates that if a building is intended to have more than one major occupancy, its classification must include all of those occupancies.

In addition, according to Sentence 3.1.3.1.(1), in a building with more than one major occupancy,

adjoining major occupancies must be separated by fire separations having a fire-resistance rating conforming to Table 3.1.3.1. As applied to the present case, if the restaurant and the subject grandstand are defined as having different assembly occupancies, a fire separation with a fire-resistance rating of one hour is required to be maintained between the two areas.

4. Provisions of the Ontario Building Code

Article 3.1.2.1. Classification of Buildings

(1) Except as permitted by Articles 3.1.2.3. to 3.1.2.6., every *building* or part thereof shall be classified according to its *major occupancy* as belonging to one of the Groups or Divisions described in Table 3.1.2.1. (See Appendix A.)

(2) A *building* intended for use by more than one *major occupancy* shall be classified according to all *major occupancies* for which it is used or intended to be used.

Article 3.1.3.1. Separation of Major Occupancies

(1) Except as permitted by Sentences (2) and (3), *major occupancies* shall be separated from adjoining *major occupancies* by *fire separations* having *fire-resistance ratings* conforming to Table 3.1.3.1.

5. Applicant's Position

The Agent for the Applicant submitted that, regardless of the different major occupancy classification that could be attributed to the restaurant and the grandstand under dispute, there is no need for a fire separation between them because of proposed fire safety measures incorporated into the design of the structure.

The Agent argued that the OBC regulates the life safety and building construction requirements of a building based on the major occupancies for which the building is intended to be used. Functionally, both the proposed grandstand and restaurant have been designed for the same purpose, that is to view the races. As a result, they should be classified under the same occupancy.

The Agent continued by stating that the purpose of the requirement for a fire separation between major occupancies is to prevent the spread of fire from a more hazardous occupancy to a less hazardous adjoining occupancy. By providing the same function of use, neither the grandstand nor the restaurant pose a greater risk or hazard to the occupants of the other area. In fact, they can be considered as a subsidiary occupancy to one another. For example, the Agent argued, when there is no race, the grandstand can be used as a waiting area for the restaurant.

The Agent stated that there are eighteen other racetracks in Ontario, in addition to other facilities such as Skydome and Air Canada Centre, where a restaurant operates within a large sporting or public assembly facility without any fire separation between the fixed seating area and restaurant use.

The Agent concluded by advising that it is his position that both the restaurant and the grandstand have an A2 occupancy and that no fire separation is required between the two areas. He went on to state

that, even if they are considered as having different occupancies, the requirement for a rated fire separation can be waived because both areas are fully sprinklered and have exits totally independent from one another. Therefore, he submitted, no hazard is posed to either area from the adjacent occupancy.

6. Respondent's Position

The Respondent submitted that it is her position that the proposed grandstand has a Group A, Division 3 Assembly occupancy and, therefore, must be separated from the restaurant by a one-hour rated fire separation as required by the Ontario Building Code. The Respondent explained that she reached this conclusion, even though in her view the grandstand under dispute does not fit the precise definition of either the A3 or A2 occupancy classifications. She submitted that in " the classification of the Grandstand as such...(i)t appears that both of the classifications can be considered since the actual guidance comes from the Appendix of the Ontario Building Code which is just that, guidance, not regulatory."

Nevertheless, she indicated that she has taken a conservative approach to the question of how to review the Code compliance issues related to the proposed construction. The Town's responsibility, she stated, is to the safety of the "would be occupants" and, in this regard, a cautious stand has been taken.

7. Commission Ruling

It is the decision of the Building Code Commission that the intended restaurant/gaming space and fixed seating grandstand area of the proposed new racetrack facility, with no fire separation to be provided between, complies with Articles 3.1.2.1. and 3.1.3.1. of the Ontario Building Code at the Georgian Downs Racing and Gaming Centre, Innisfil, Ontario.

8. Reasons

i) The Commission views that both the restaurant/gaming and grandstand areas as being included within the A2 occupancy classification of the OBC.

ii) The Commission is also satisfied that the proposed fire safety measures provided in the different portions of the building are adequate:

a) The building is fully sprinklered;

b) A glass smoke separation has been provided between the two principal areas; and,

c) Adequate and sufficient independent exits exist for both the restaurant and grandstand portions.

Dated at Toronto this **19th** day in the month of **October** in the year **2000** for application number **2000-63**.

Dr. Kenneth Peaker, Chair

Mr. Robert De Berardis

Mr. Donald Pratt

BCC Ruling No. 00-51-783

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-51-783

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 9.8.8.5. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. David Burstein and Mina Battaglino, Owners, 16 Steele Valley Road, Thornhill, Ontario, for the resolution of a dispute with Mr. John Wright, Chief Building Official, Town of Markham, Ontario, to determine whether the as-built guards, comprised mainly of an ornamental floral design, provide sufficiency of compliance with Article 9.8.8.5. of the Ontario Building Code at 16 Steele Valley Road, Markham, Ontario.

APPLICANTS
Mr. David Burstein and Mina Battaglino, Owners
16 Steele Valley Road
Thornhill, Ontario

RESPONDENT
Mr. John Wright
Chief Building Official
Town of Markham

PANEL
Dr. Kenneth Peaker, Chair
Mr. Robert De Berardis
Mr. Donald Pratt

PLACE
Toronto, Ontario

DATE OF HEARING
October 19, 2000

DATE OF RULING
October 19, 2000

APPEARANCES
Mr. David Burstein, Owner
Markham. Ontario

The Applicant

Mr. Tony Boyko, Manager and Mr. Joe Holley, Building Inspector
Building Inspections
Town of Markham
Designates for the Respondent

RULING

1. The Applicant

Mr. David Burstein and Mina Battaglino, Owners, 16 Steele Valley Road, Thornhill, Ontario, have received an order to comply under the Building Code Act, 1992 to remedy certain alleged deficiencies regarding the design of a guard at 16 Steele Valley Road, Markham, Ontario.

2. Description of Construction

The Applicant has recently completed a renovation of his existing dwelling and as well has constructed an addition thereto. The building is described as a two storey, Group C - residential occupancy with a building area of approximately 300 m^2.

The construction in dispute involves the as-constructed guards that have been installed in a stair that provides access between the basement, ground and second floor levels. The guard is comprised mainly of curving metal members designed in an ornamental floral pattern. The metal members predominantly run vertically, however, most also contain a loop as part of the pattern. Supporting these members at the bottom of the guard are two parallel horizontal (except on the stairs) metal rails fixed approximately 100 and 200 mm above the walking surface. The guard is topped with wood handrails that are fastened to either newel posts or walls and that sit directly on top of the looping portion of the metal members.

Besides being located directly on either side of the flights within the stair, the subject guard has also been installed in other areas within the stairwell. This includes at the second floor to separate a corridor/hallway from the stairwell and at the landing between the first and second floors to separate the stair from a bay window.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-built guards, comprised mainly of an ornamental floral design, provide sufficiency of compliance with Article 9.8.8.5. of the Ontario Building Code at 16 Steele Valley Road, Markham, Ontario.

This provision stipulates that required guards must be designed in such a way so as not to facilitate climbing between 100 and 900 mm above the floor or walking surface of the area the guard is protecting. The issue at dispute is whether the guards, as designed and constructed, facilitate climbing.

4. Provisions of the Ontario Building Code

Article 9.8.8.5. Design to Prevent Climbing

1. Guards required by Article 9.8.8.1. and serving buildings of residential occupancy shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2 ft 11 in) above the floor or walking surface protected by the guard will facilitate climbing.

5. Applicant's Position

The Applicant submitted that he takes pride in his house, and because of this he and his family were interested in a more decorative guard for their stairs. As a result, the ornamental floral design was chosen. However, in doing so he would never put the safety of his family at risk. He argued that the subject guards are neither climbable nor hazardous. In his view, they meet the intent of the guard requirements of the Building Code in that they assist persons in getting up and down the stairs and prevent them from falling over the side at any point in the stairwell.

He noted, nevertheless, that it is impossible to regulate one hundred per cent safety. Users of stairs have to take responsibility for how they use them. And in the case of children who might not be fully aware of the potential dangers, their parents have the responsibility of looking out for them.

The Applicant explained that he has seen numerous other homes in the Toronto area that have had these and other similar types of guards installed. He indicated that there are various manufacturers selling such products throughout the Toronto market. To illustrate his argument, the Applicant showed an article from a magazine and pictures from homes he

recently visited, all of which contained ornamental metal guards employing a floral pattern. If such products are being sold and installed so widely, how is it possible they do not meet Code, he inquired.

Moreover, the Applicant expressed frustration that standards found in the Ontario Building Code were not being applied and enforced equally across the province and even within his own municipality. He argued that one standard should be applicable to the whole of Ontario. But in this case, he felt like he was being singled out.

In summation, the Applicant stated that inspections conducted earlier in the project should have identified this issue. Further, the extent of the problem was not made known to him until the guards were fully built. He indicated that the option of installing plexiglass on the inner side of the guard did not appeal to him. And besides, he felt it to be unnecessary. He concluded by stating he is very satisfied with the safety of the guards and by reiterating that people have a responsibility for their actions, including using stairs safely.

6. Respondent's Position

The Respondent submitted that the as-built guards contain members between the height of 100 to 900 mm above the walking surface that are climabable, and as a result are not in compliance with Article 9.8.8.5. They noted that, in their estimation, some of the ornamental metal members are curved to such an extent that a ladder effect is created. As well, the upper of the two horizontal rails near the bottom of the guard is well within the 100 to 900 mm range. This rail, at approximately 800 mm above the walking surface, is a tempting step in terms of climbing the guard, they argued.

The Respondent rejected the Applicant's claim that the level of service regarding inspections was inadequate.

The Respondent concluded by stating that things in magazines are not always Code compliant and that they cannot speak to the issue of Code enforcement in other municipalities. They noted that the subject hearing concerned the guards at the Applicant's house, which they believe do not meet Code. As such, they stand by the Order issued. In their view the guard is climbable.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-built guards comprised mainly of an ornamental floral design do not provide sufficiency of compliance with Article 9.8.8.5. of the Ontario Building Code at 16 Steele Valley Road, Markham, Ontario.

8. Reasons

i. We hold that the guard, as constructed, with its ornamental, looping floral pattern is considered to facilitate climbing, and as a result does not comply with Sentence 9.8.8.5.(1).
ii. No compensating measures were provided to mitigate the climbable nature of the guard's design.

Dated at Toronto this **19th** day in the month of **October** in the year **2000** for application number **2000-61**.

BCC Ruling No. 00-49-781

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-49-781

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 3.6.3.3.(3) of Regulation 403, as amended by O. Reg.22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. D.J. Thomas Dutton, Vice President, The Daniels Corporation, Toronto, Ontario, for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, Ontario, to determine whether the linen chute, which is proposed to extend from the basement to the second floor only and not up and through the roof, provides sufficiency of compliance with Sentence 3.6.3.3.(3) of the Ontario Building Code at the Renaissance in Erin Mills, 4620 and 4680 Kimbermount Avenue, Mississauga, Ontario.

APPLICANT
Mr. D.J. Thomas Dutton, Vice President
The Daniels Corporation
Toronto, Ontario

RESPONDENT
Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL
Dr. Kenneth Peaker, Chair
Mr. Len King
Mr. Fred Barkhouse

PLACE
Toronto, Ontario

DATE OF HEARING
September 21st, 2000

DATE OF RULING

September 21st, 2000

APPEARANCES

Mr. Allan E. Larden, Principal
Larden Muniak Consulting Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Frank Spagnolo,
Manager, Building Engineering and Inspections
City of Mississauga
Designate for the Respondent

RULING

1. The Applicant

Mr. D.J. Thomas Dutton, Vice President, The Daniels Corporation, Toronto, Ontario, has applied for a building permit under the Building Code Act, 1992 to construct a retirement community centre known as the "Kimbermount Village" at the Renaissance in Erin Mills, 4620 and 4680 Kimbermount Avenue, Mississauga, Ontario.

2. Description of Construction

The The Applicant is proposing to construct a new retirement complex known as "Kimbermount Village". The building complex is to consist of two towers referred to as building A and Building B, which are to be connected at the ground floor level. The ground floor of the complex will contain dining facilities and other amenities and will be classified as Group A, Division 2 - Assembly occupancy. Building A is intended as a retirement home tower and is to be seven storeys in building height and will accommodate a Group B, Division 3 - Care Occupancy on its second floor. The remaining floors (three to seven) of this building will contain a Group C - Residential occupancy. The B3 floor is to have 24 hour supervision.

Building B is intended as a condominium apartment tower and is to be eight storeys in building height and is classified as a residential occupancy from its second to eighth floors. The entire building will also have one level

of underground parking. The complex is to have a building area of approximately 2636 m2, will be of noncombustible construction, and will be equipped with a sprinkler system, a fire alarm system, and a standpipe and hose system.

The construction in dispute involves the installation of a linen chute.

The subject linen chute is proposed to be located in the central portion of Building A. It will extend from the basement level to the second floor level only, where the chute will be housed within a dedicated room. The walls of the anteroom have a fire resistance rating of 45 minutes and the door to the room is also fire rated and is to be equipped with a closer as well as weatherstripped. The chute itself, measured at 600 mm in diameter, will have a two hour rating and is to be installed with a self-closing, two hour door equipped with a latching device. The chute will also be sprinklered with quick response heads.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the linen chute, which is proposed to extend from the basement to the second floor only and not up and through the roof, provides sufficiency of compliance with Sentence 3.6.3.3.(3) of the Ontario Building Code. This provision requires a linen chute installed within a building to extend at least one metre above the building's roof and to be appropriately vented above the roof.

As noted, the linen chute will only extend between the basement and second floor and will not be vented. The Applicant has, however, proposed certain compensating measures. At issue, therefore, is whether these proposed measures, offered in lieu of the linen chute extending through the roof of the subject building, provide adequate compensation to achieve sufficiency of compliance with Sentence 3.6.3.3.(3).

4. Provisions of the Ontario Building Code

Article 3.6.3.3. Linen and Refuse Chutes

(3) An interior linen chute or refuse chute shall extend not less than 1 000 mm (3 ft 3 in) above the roof and shall be vented above the roof with a vent which

a. has an unobstructed area not less than the cross-sectional area of the chute, and

b. is equipped with a cover that will open automatically, or that can be opened manually, in the event of a fire in the chute.

5. Applicant's Position

The Agent for the Applicant acknowledged that the proposed chute design represented a "literal transgression" of the Code, but he submitted that the proposed fire safety measures for the entire building will provide sufficiency of compliance with the intent of the OBC for the purpose of Sentence 3.6.3.3.(3). In support of his submission the Agent offered the following compensating factors:

1. The shaft containing the linen chute will be provided with a 2 h rating while 1 h rating is required by the OBC (Sentence 3.6.3.3.(2));
2. The chute will have a self-latching closure with a 2 h rating;
3. The entire building will be protected by an electrically supervised sprinkler system with a connection to the fire department;
4. Quick response sprinklers will be installed within the chute and in the basement;
5. The linen chute anteroom on the second floor will be provided with a smoke detector;
6. The door between the second floor corridor and the linen chute anteroom will be weatherstripped on the top and sides with a high quality weatherstripping material and the bottom of the door will be provided with a sweep; and,
7. Both the elevator shaft and exit stair shafts will be pressurized to prevent smoke infiltration.

The Agent noted that the requirement for a linen chute to extend above a building's roof was developed in a time when most of buildings were not sprinklered and thus there was greater chance of a fire propagating than would

be the case in a sprinklered building, such as the one in dispute. He indicated that Code requirements for linen and refuse chutes, especially to extend through the roof, have not evolved much over the years despite the many advances in the fire safety of buildings.

The Agent also argued that the requirement for linen chutes to extend to the roof of buildings and to be equipped with automatically opening vents would seem to make more sense in a building with multi-storey access to a chute. In this way, he argued, such venting could help prevent smoke from a fire originating in the chute from migrating to many levels of a building. In the subject building, however, with only one floor level with access to the chute, it seems that the requirement to vent to the roof is onerous, especially considering the proposed compensating measures such as additional sprinklering that exceeds Code requirements.

With respect to the Commission's concern over the potential occurrence of linen blockage within the chute, the Agent offered to widen the size of the chute from 600 mm (24 in) in diameter to 750 mm (30 in) part way down during descent.

In conclusion, the Agent indicated that the proposals discussed above provide sufficiency of compliance with the intended level of fire and life safety required under Sentence 3.6.3.3.(3).

6. Respondent's Position

The Designate for the Respondent submitted that the proposed linen chute does not comply with Sentence 3.6.3.3.(3) of the OBC.

The Designate argued that the OBC requirement for a chute to extend above a building's roof is a prescriptive requirement that must be met. The OBC clearly states that a linen chute must extend not less than 1 m above the roof and be vented with a vent equipped with a cover that can be opened automatically or manually in the event of a fire.

In addition, the Designate stated that he was concerned about the fact that the linen chute will terminate on the second floor, the level that contains the B3 occupancy. This is the area where the most vulnerable residents of the building are located and should the smoke from the chute penetrate to this floor a hazardous situation could be created, he argued.

7. Commission Ruling

It is the decision of the Building Code Commission that the linen chute, which is proposed to extend from the basement to the second floor only and not up and through the roof, provides sufficiency of compliance with Sentence 3.6.3.3.(3) of the Ontario Building Code at the Renaissance in Erin Mills, 4620 and 4680 Kimbermount Avenue, Mississauga, Ontario.

8. Reasons

The overall level of safety in the building has been improved through the following factors:

1. The proposed linen chute will only connect two floors and that there will be only one opening on a floor area (the second floor) in which people live;
2. The sprinklers provided inside the chute will be more than required by Code;
3. The chute, including door, will have a two hour fire rating instead of one hour;
4. The laundry chute door will be self-closing and equipped with a latching device;
5. The chute will be increased in diameter from 600 mm (24 in) to 750 mm (30 in) part way through its descent to avoid blockage;
6. The anteroom will be provided with a smoke detector and a door with a closer; and,
7. The elevator shafts and corridors will be pressurized.

Dated at Toronto this **21st,** day in the month of **September** in the year **2000** for application number **2000-55**.

BCC Ruling No. 00-48-780

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-48-780

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 3.1.2.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF ?an application by Mr. John Cardillo, CEO, Premier Fitness Club, Oakville, Ontario, for the resolution of a dispute with Mr. Frank Asta, Chief Building Official, Town of Oakville, Ontario, to determine whether, due to the consideration of the building as an existing structure and proposed construction of two additions, the classification of the entire structure as per Article 3.1.2.1. of the Ontario Building Code is changed from a Group A, Division 2 to a Group D occupancy at the Premier Fitness Club, 474 Iroquois Shore Road, Oakville, Ontario.

APPLICANT
Mr. John Cardillo, CEO
Premier Fitness Club
Oakville, Ontario

RESPONDENT
Mr. Frank Asta
Chief Building Official
Town of Oakville

PANEL
Mr. Len King, Vice-Chair
Mr. Fred Barkhouse
Mr. John Guthrie

PLACE
Toronto, Ontario

DATE OF HEARING
September 7th, 2000

DATE OF RULING
September 7th, 2000

APPEARANCES
Mr. Demir Delen
Morrison Hershfield Ltd.
Toronto, Ontario
Agent for the Applicant

Mr. Frank Asta
Chief Building Official
Town of Oakville
The Respondent

RULING

1. The Applicant

Mr. John Cardillo, CEO, Premier Fitness Club, Oakville, Ontario, has applied for a building permit under the Building Code Act, 1992 to renovate and extend an existing private health and fitness club known as the Premier Fitness Club, 474 Iroquois Shore Road, Oakville, Ontario.

2. Description of Construction

The The Applicant is proposing to extend and renovate an existing building which serves as a private health and fitness club in order to expand its fitness activities and add a new indoor swimming pool. The existing building is described as having a Group D - Business and Personal Services occupancy by the Applicant and a Group A, Division 2 - Assembly occupancy by the Respondent. The existing building is two storeys in building height, 2184 m2 in building area, of noncombustible construction, and is equipped with a fire alarm system.

The subject building was constructed in 1977. The current proposal, as submitted for building permit, includes renovation of the existing building and construction of two new additions. The additions will be at the south (rear) and west sides of the first floor. The rear addition will cover an area of 253 m2,

whereas the side addition will have an area of 304 m2. With these additions, the building area of the entire building will be increased to 2741 m2. Both additions are one storey in building height.

?The construction in dispute involves the classification of the entire building.

The performance level of the exiting building is proposed to be maintained by the Applicant by limiting the increase in occupant load of the entire building to less than 15 percent of the current load and by retaining the current major occupancy. As a result, he is intending that only the proposed additions are subject to requirements of Part 3, and thereby only they should be sprinklered.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether, due to the consideration of the building as an existing structure and the proposed construction of two additions, the classification of the entire structure as per Article 3.1.2.1. of the Ontario Building Code is changed from a Group A, Division 2 to a Group D occupancy.

Article 3.1.2.1. requires, with a few exceptions which are not applicable here, that every building be classified according to its major occupancy or occupancies (Sentences (1) and (2) respectively) as set out in Table 3.1.2.1. This Article also refers to Appendix A of the OBC where various examples of building uses and their classifications can be found. In the Appendix, gymnasia are listed under the category of A2, not Group D occupancies. Appendix 3.1.2.1. does not refer to anything that may be construed as a gym, health club or fitness facility. Under Part 11 for existing buildings, however, specifically the Hazard Index Table 11.2.1.1.J., "Health/Fitness Clubs" are listed as Group D occupancies. (Part 11 is applicable since the existing structure is older than five years.)

The Applicant is not proposing to change the major occupancy of the building. Instead, he insists that it is already changed, or that the building, by virtue of being an existing structure, can be considered as a Group D occupancy.

At issue therefore is whether the classification of the building, because it is now considered existing, has changed from an A2 occupancy to a D and whether the proposed additions, one of which includes a pool, also have an impact on the major occupancy/ies.

4. Provisions of the Ontario Building Code

Article 3.1.2.1. Classification of Buildings

1. Except as permitted by Articles 3.1.2.3. to 3.1.2.6., every building or part thereof shall be classified according to its major occupancy as belonging to one of the Groups or Divisions described in Table 3.1.2.1. (See Appendix A).
2. A building intended for use by more than one major occupancy shall be classified according to all major occupancies for which it is used or intended to be used.

5. Applicant's Position

The Agent for the Applicant submitted that the major occupancy of the building, after renovation and extension, will remain the same, that is to say a D occupancy. In addition, the occupant load of the completed building will not be increased by more than 15 percent. As a result, a D occupancy should be applied to the entire building.

By way of explanation, the Agent argued that the building in dispute is existing and subject to the requirements of Part 11. Under Part 11, a fitness club is classified as a Group D occupancy in Table 11.2.1.1.A. As no change of occupancy is proposed, this classification also applies to the new addition at the rear of the building which is to be used as a work out area.

The Agent continued that despite the fact an indoor swimming pool is listed as an example of Group A, Division 3 - Assembly occupancy in the Appendix A to the OBC, the proposed swimming pool will only occupy 304 m2 of the entire 2741 m2 building, so it can be considered as an integral part of the principal occupancy and thus subsidiary to it as per Article 1.1.3.1.

The Agent then argued that the classification of a fitness club as an A2 or D occupancy does not make much difference in new buildings as the construction requirements are almost the same for both of these occupancies under Part 3. However, under Part 11 these requirements are different and impose higher standards on assembly than Group D occupancies. The reason for this is that under Part 11, unlike Group D buildings such as a fitness club, A2 buildings are often regularly frequented and are more likely to have areas with dimmer lighting such as restaurants and movie theatres.

The Agent concluded that based on the entire building remaining as a Group D occupancy and that the performance level of the existing building will be maintained, the following measures are proposed: Sprinklering the rear addition of the building; Sprinklering the swimming pool area; and, separating the indoor pool area from the remainder of the building by a fire separation having a 2 hour fire resistence rating including doors with a 1.5 hour rating.

6. Respondent's Position

The Respondent submitted that the major occupancy of the existing building has always been and remains A2. Moreover, he stated that the performance level of the structure is reduced because the proposed addition along the west side of the building eliminates the designated fire access route created by municipal zoning by-law. A performance level reduction of this nature, he added, does not have a specific remedy in terms of compensating construction in Part 11. As a result, he argued that the entire

building should be viewed as falling under Part 3 and thus the sprinkler system required in the additions should be extended throughout the whole facility.

The Respondent rejected the Agent's arguments that simply because a building is now older than five years and is considered existing means that its occupancy has changed. He stated that a building is classified for occupancy when constructed and a change of use is required to amend that occupancy. He argued that Part 11 cannot be used as a vehicle to change occupancy.

Municipal Fire Department officials that attended the hearing also reiterated the view that the performance level would be reduced since the proposed side addition would cut off fire fighting access on the building's western exposure. They also noted that the existing fire hydrants in the vicinity are located on the far side of the adjacent public street.

The Respondent concluded by stating that the elimination of the fire route reduces the performance level of the subject building. For this reason, the entire building must comply with the requirements of Part 3 rather than Part 11, meaning therefore that the existing building is required to be sprinklered as well as the additions.

7. Commission Ruling

It is the decision of the Building Code Commission that both the existing fitness club and proposed additions thereto constitute an A2 occupancy in accordance with Article 3.1.2.1 of the Ontario Building Code at the Premier Fitness Club, 474 Iroquois Shore Road, Oakville, Ontario.

8. Reasons

1. Considering its use is similar to a gymnasium, the existing building was originally and properly classified as an A2 occupancy.

2. The definition of an A2 occupancy is determined on the basis of the list of uses included in Appendix "A", which includes gymnasia.
3. The swimming pool is considered as an ancillary use and does not affect the major occupancy.

Dated at Toronto this **7th,** day in the month of **September** in the year **2000** for application number **2000-51**.

BCC Ruling No. 00–47-779

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 00–47-779

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentences 3.3.3.2.(2), 3.3.3.3.(3) and 3.3.3.4.(1) and Clauses 3.4.3.1.(2)(c), (d) and 3.8.3.3.(5)(b) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Cathy Wood, Executive Director, Ottawa-Carleton Lifeskills Inc. (OCLS), Nepean, Ontario, for the resolution of a dispute with Mr. Richard Hewitt, Chief Building Official, City of Ottawa, Ontario, to determine whether the proposed renovation and conversion of an existing, detached building containing a Group C occupancy to a Group B, Division 3 care facility is required to comply with Sentences 3.3.3.3.(3) and 3.3.3.4.(1), Clauses 3.4.3.1.(2)(d), (c) and 3.8.3.3.(5)(b) and Sentence 3.3.3.2.(2) of the Ontario Building Code at 3041 Otterson Drive, Ottawa, Ontario.

APPLICANT
Ms. Cathy Wood, Executive Director
Ottawa-Carleton Lifeskills Inc.
Nepean, Ontario

RESPONDENT
Mr. Richard Hewitt
Chief Building Official
City of Ottawa

PANEL
Mr. Len King, Vice-Chair
Mr. Fred Barkhouse
Mr. John Guthrie

PLACE
Toronto, Ontario

DATE OF HEARING
September 7th, 2000

DATE OF RULING
September 7th, 2000

APPEARANCES
Mr. Doug Hardie, Principal
Douglas Hardie Architect Inc.
Ottawa, Ontario
Agent for the Applicant

Mr. Frank Bell
Supervisor, Part 3 Building Code Plan Examination
City of Ottawa
Designate for the Respondent

RULING

1. The Applicant

Ms. Cathy Wood, Executive Director, Ottawa-Carleton Lifeskills Inc. (OCLS), Nepean, Ontario, has received a building permit under the Building Code Act, 1992 for the renovation and conversion of a residential building into a care facility at 3041 Otterson Drive, Ottawa, Ontario.

2. Description of Construction

The Applicant has recently renovated a Group C, residential building (formerly a house) to facilitate its conversion to a Group B, Division 3 - Care occupancy. The structure is described as one storey in building height (with a basement) and has a building area of 419 m2. It is constructed of combustible material, is fully sprinklered and is equipped with a residential smoke detection system with multiple interconnected smoke detectors and multiple alarm broadcast.

It is intended that the building will house eight individuals with special needs, specifically persons whom are likely to be significantly disabled, both physically and mentally. The residents will, therefore, require assistance for most daily activities. The facility will be staffed 24 hours a day with three staff

members in attendance from 7 a.m. to 11 p.m. and two in attendance from 11 p.m. to 7 a.m. These staff members will continually be available to provide assistance to the residents of the care facility.

The areas of construction in dispute involve the width of corridors throughout the building and the width of the doors serving bedrooms two and three. Also in dispute is the width of a newly constructed access ramp to the main entrance of the facility and the door at the main entrance which does not provide a power operating device. In addition, the non-rated wall between bedrooms two and three is also at issue.

There are a total of three corridors in the building that provide access to common areas such as the kitchen and dining room. All of the corridors are 1321 mm in width and also provide access to the five bedrooms and two exit doors. There is one exit door at the main entrance, located in the front of the building, and another one leading to the side yard. In addition, there is a newly built, 1346 mm wide, wheelchair ramp leading to the main entrance door. The door to this entrance is not a power operated door. The existing doorways serving bedrooms two and three are 915 mm wide and the wall dividing these bedrooms is composed of 13 mm gypsum wallboard on wood studs and is not rated. There are however side mounted sprinkler heads built into this wall.

With the exception of the newly constructed ramp to the entrance door, all of the items in dispute existed within the residential building prior to the conversion of use.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed renovation and conversion of an existing, detached building containing a Group C occupancy to a Group B, Division 3 care facility is required to comply with Sentences 3.3.3.3.(3) and 3.3.3.4.(1), Clauses 3.4.3.1.(2)(d), (c) and 3.8.3.3.(5)(b) and Sentence 3.3.3.2.(2) of the Ontario Building Code.

The first provision, Sentence 3.3.3.3.(3), requires that the corridors in a building containing a Group B, Division 2 or 3 occupancy be at least 1650 mm wide if the residents are not mobile. Many of the residents to be housed in the proposed care facility are completely immobile. However, all of the existing corridors serving the subject building are 1321 mm wide.

Sentence 3.3.3.4.(1), with few exceptions not applicable here, mandates that the doorways serving the patients or residents of care or detention occupancies must have a minimum width of 1050 mm. The existing doorways to bedrooms two and three are 915 mm wide. There are to be two residents in each room and it is intended that they would be carried or assisted out of the rooms by staff in an emergency situation.

Sentence 3.4.3.1.(2)(d) is a further requirement that reinforces Sentence 3.3.3.4.(1) above by stipulating that doorways serving patient or resident sleeping rooms be a minimum of 1050 mm in width. As noted above, the two bedrooms in question have doorway widths of 915 mm.

Sentence 3.4.3.1.(2)(c) requires ramps and stairs serving patient or resident sleeping rooms in a Group B, Division 3 occupancy to have a minimum width of 1650 mm. The newly built ramp at the main entrance is 1346 mm wide.

According to Clause 3.8.3.3.(5)(b), with one exception not applicable here, doors for barrier-free entrances to Group B, Division 2 or 3 occupancies are required to be opened automatically, i.e., to be equipped with a power operating device. The main entrance to the subject building will meet barrier-free requirements in terms of width, but it will not be equipped with a power door operator.

Sentence 3.3.3.2.(2) stipulates that a fire separation with a minimum fire-resistance rating of one hour be maintained between sleeping rooms and other adjacent rooms unless the floor assemblies are required to have a fire-resistance rating of 45 minutes. In this case, the walls can also have the same rating (45 min). The wall existing between bedrooms two and three is not a rated wall.

The building, however, is an existing structure, older than five years. Part 11 of the OBC is therefore applicable. At issue then is whether Part 11 dictates that the construction undertaken at the facility should be subject to the above provisions from other parts of the Code (outside of Part 11).

4. Provisions of the Ontario Building Code

Sentence 3.3.3.2. Fire Separation

(2) In a Group B, Division 3 occupancy, walls between sleeping rooms and adjacent rooms shall be constructed as fire separations having a fire-resistance rating not less than 1 h, except that the fire-resistance rating need not be more than 45 min where the floor assembly is not required to be more than 45 min.

Sentence 3.3.3.3. Corridors

(3) A corridor serving residents who are not ambulatory in a Group B, Division 2 or 3 occupancy shall be not less than 1650 mm (5 ft 5 in) wide.

Sentence 3.3.3.4. Doorway Width

(1) Except as permitted in Sentence 3.3.1.12.(11), the minimum clear width of doorways serving patients or residents shall be 1 050 mm (3 ft 5 in).
(See Appendix A.)

Clauses 3.4.3.1. Exit Width

(2) The required width of an exit shall be not less than

(c) 1650 mm (5 ft 5 in) for stairs and ramps serving patients' or residents' sleeping rooms in a Group B, Division 2 or 3 Occupancy,

(d) 1050 mm (3 ft 5 in) for doorways serving patients' or residents' sleeping rooms.

Clause 3.8.3.3. Doorways and Doors

(5) Except as permitted in Sentence (7), the door for the entrance described in Article 3.8.1.2. shall be equipped with a power door operator in

(b) buildings of Group B, Division 2 or 3 major occupancies.

(See Appendix A.)

5. Applicant's Position

The Agent for the Applicant submitted that Ottawa-Carleton Lifeskills provides housing for developmentally challenged clients. While he indicated his belief that the house is subject to OBC Part 11, he stated that they had made every effort in their renovation to comply with Part 3 of the Code, specifically the construction requirements of Article 3.2.2.41. Several Code requirements though were not implemented due to structural or construction difficulties.

In addressing the perceived deficiency in corridor width, the Agent advised that it would be expensive and unnecessary to move the existing walls. The width of the corridors, at 1321 mm, is adequate for the occupants of the care facility. Similarly, the existing doorways of bedrooms two and three are located within load bearing walls and would therefore be difficult to widen. As they exist, the Agent argued, they provide sufficient access to the bedrooms by the occupants and staff. Moreover, the separation between the two bedrooms is satisfactory given the additional fire safety provided by the sprinkler heads installed in this wall.

Regarding the width of the ramp to the entrance door, even though it is new construction, the Agent saw no benefit to making it wider than the doorway opening. The ramp, although slightly narrower than required, as well as the existing doorway to the main entrance can be used by persons in wheelchairs and would therefore meet the needs of both occupants and visitors to the facility. In addition, the Agent argued, because the residents require assistance to move about, a staff member must always be present whenever a resident uses the main entrance door, thereby negating the need for a power door operator.

In conclusion, the Agent contended that since the building is covered by Part 11, compliance with the disputed OBC requirements is not necessary. Moreover, with the 24 hour presence of staff in the facility to offer assistance to residents and visitors, as needed, in addition to the fire safety measures provided, the subject facility will not only be safe, but easy and convenient for its occupants and visitors to use.

6. Respondent's Position

The Respondent submitted that as a result of this conversion of major occupancy, the performance level of the building is reduced. While he may be sympathetic to the arguments of the Applicant, he has no authority to accept the proposals put forth. Even though the corridors and doors may be wider than usual in existing buildings, they do not meet the 1997 Ontario Building Code requirements for a Group B, Division C Care facility.

7. Commission Ruling

It is the decision of the Building Code Commission that at the recently renovated B3 occupancy located at 3041 Otterson Drive, Ottawa, Ontario:

a. The fire separation for sleeping rooms and adjacent rooms outlined in Sentence 3.3.3.2.(2) is not required;
b. Compliance is not required with Sentence 3.3.3.3.(3) concerning corridor width;
c. Compliance is not required with Sentence 3.3.3.4.(1) regarding doorway width;
d. The front door is not required to comply with Clause 3.8.3.3.(5)(b) as the door/entrance was not modified; and,
e. The ramp width is required to comply with Clause 3.4.3.1.(2)(c) of the Code.

8. Reasons

i. The building is an existing structure that has undergone a change of use and conversion from Group C to B3. As a result, Part 11 of the OBC is applicable.

ii. The compensating measures proposed by the Applicant are sufficient to ensure that life safety is not jeopardized in this instance

iii. The performance level of the building is therefore satisfactorily addressed.

iv. As the access ramp is a newly constructed feature added to the facility, it is required to comply with the current Code provisions.

Dated at Toronto this **7th** day in the month of **September** in the year **2000** for application number **2000-50**.

Ruling No. 00–46-778
Application # 2000-48

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentences 6.2.3.10.(3) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Mike Godawa, Principal, Keen Engineering Co. Ltd., Toronto, Ontario, for the resolution of a dispute with Mr. Michael Janotta, Acting Chief Building Official, Town of Richmond Hill, Ontario, to determine whether the ventilation and exhaust system that proposes to provide supply air from the corridors to the resident rooms and to exhaust from the resident washrooms provides sufficiency of compliance with Sentence 6.2.3.10.(3) of the Ontario Building Code at York Central Hospital - Long Term Care Centre, 10 Trench Street, Richmond Hill, Ontario.

APPLICANT	Mr. Mike Godawa, Principal Keen Engineering Co. Ltd. Toronto, Ontario
RESPONDENT	Mr. Michael Janotta Acting Chief Building Official Town of Richmond Hill
PANEL	Mr. Len King, Vice- Chair Mr. Fred Barkhouse Mr. John Guthrie
PLACE	Toronto, Ontario
DATE OF HEARING	September 7th, 2000
DATE OF RULING	September 7th, 2000
APPEARANCES	Mr. Bill Mardiame, President York Health Care Development Thornhill, Ontario **Agent for the Applicant** Mr. Morris Lucchetta Manager of Inspections Town of Richmond Hill **Designate for the Respondent**

RULING

1. The Applicant

Mr. Mike Godawa, Principal, Keen Engineering Co. Ltd., Toronto, Ontario, has received a building permit under the Building Code Act, 1992 and has constructed a continuing care facility known as the York Central Hospital - Long Term Care Centre, at 10 Trench Street, Richmond Hill, Ontario.

2. Description of Construction

The Applicant has constructed a new 5 storey continuing care centre that is attached to the York Central Hospital. The long-term care facility has a building area of 3,530 m^2 and is classified as a Group B, Division 2 occupancy. It is equipped with a fire alarm system, a sprinkler system and a standpipe and hose system. The building is constructed of noncombustible construction.

A typical floor plate in the facility consists of a central or core area from which project three wings. A one hour fire separation is located between the central area and each of the three wings. The central area houses nursing stations which are surrounded by staff and community offices and patient lounges, etc. The three wings consist primarily of patient, or resident, rooms. All of the resident rooms have been designed with an independent heating, ventilating and air-conditioning (HVAC) system, while the central core and the corridors are served by a separate system.

The construction in dispute involves the design of the HVAC system serving the facility. During the course of the BCC application process, the Applicant modified his proposed HVAC system. The basic design of the original system is as follows: In the patient wings two separate HVAC systems would operate. One of these would provide the patient rooms with supply air which would then be exhausted through a return air system in the washroom of each unit.

The other HVAC system, which is the same as the one that serves the core area, would supply air to the corridors. Exhaust in the corridors is to occur in the service rooms that open onto the corridors and by return air travelling through the corridors towards the core area. To get into the core area, the air must pass through a set of double doors located within a required fire separation. These doors are currently held open by magnetic hold open devices that are released when the fire alarm system has been activated. The doors are weather stripped to retard the passage of smoke through the corridors. In this design, air transfer grills would be positioned above these doors to allow the air easier passage through the one hour separation. The grills would not be equipped with smoke dampers or other fire stopping devices. In this system, the total volume of air supplied to each wing is equal to the total exhausted.

Under this proposal, the same air circulation principal would be applied to the central core area as well. The core area is also to be used as a return air plenum for the rooms to which it is adjacent. The air would be supplied and exhausted from all rooms located on the perimeter of the core area, while the core area itself would supplied independently. Air transfer ("supply/return") grills to allow for the exchange of air would be provided in the demising walls between the perimeter rooms and the centre of the core area.

For both of these areas (the core and the wings), the main air intake duct on each floor is located within the central core area at ceiling level.

The Applicant's subsequent modified proposal was designed to achieve what he described as "a

balanced air circulation system" in which no return air would travel from the wings of the building to its central core. To accomplish this, he offered to eliminate the air transfer grills over the doors in the fire separations. Moreover, he also planned to allow some infiltration of supply air into the patient rooms where it would get exhausted through the return air ducts in the unit washrooms by increasing the capacity of that system.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the ventilation and exhaust system that proposes to provide supply air from the corridors to the resident rooms and which will exhaust from the resident washrooms provides sufficiency of compliance with Sentence 6.2.3.10.(3) of the Ontario Building Code.

Sentence 6.2.3.10.(3) requires that, with certain exceptions not applicable here, a public corridor shall not be used as part of a supply, return or exhaust air system other than as part of a supply air system serving washroom facilities and similar auxiliary spaces that would open directly to a public corridor. In this instance (i.e., the latter, modified proposal), the corridors, which are equipped with a separate HVAC system, are also serving as a supply air system for adjoining areas, namely the patient rooms. This is also the case for the HVAC arrangement for the rooms located off the central core area. However, at the time of the hearing, the dispute between the parties was limited only on the HVAC systems in the wings of the subject building. The BCC thus focussed on that dispute alone.

4. Provisions of the Ontario Building Code

Sentence 6.2.3.10. Interconnection of Systems

(3) Except for Sentence 3.3.1.4.(4) and Sentences (4) & (5), a public corridor or corridor serving the public shall not be used a portion of a supply, return or exhaust air system serving adjoining areas, other than as part of a supply air system serving toilet rooms, bathrooms, shower rooms and similar auxiliary spaces opening directly to the public corridor or corridor used by the public.

5. Applicant's Position

The Agent for the Applicant submitted that the Richmond Hill Building Department rejected their original HVAC proposal. In particular, they "requested that combination smoke/fire dampers be installed at all return air transfer ducts that serve corridor wings." However, the Agent countered that "(t)he corridor wing doors are normally open and close in the event of a fire alarm as does the air handling systems." Nevertheless, it was in response to this municipal opposition that they modified their original proposal and offered an alternative to installing the smoke dampers and fire alarm connection. Instead, the Agent explained that he is now proposing to omit the corridor air transfer grills and would re-balance the air system such that no return air will travel into the core area.

The Agent submitted that this "...design philosophy for ventilation in Residential Home Areas of long-term care facilities provides supply air to the corridors and resident rooms, and exhaust from the resident washrooms and service rooms. The total supply equals the total exhaust. As this is a total fresh air system with no recirculation, there is no transfer of air to other adjacent zones in the building."

The Agent also emphasized that this proposal complies with the Ministry of Health and Long-Term Care Design Manual on ventilation. He argued that the modified HVAC system design is identical to those in the "vast majority of long term care facilities in Ontario". He also added that the subject design has been reviewed and approved by the Ministry of Health and the Office of the Fire Marshal of Ontario.

6. Respondent's Position

The Respondent submitted that the current (i.e., the latter) proposed HVAC system intends to utilize the corridors as supply air plenums. This, they noted, is in contradiction to both the permit drawings submitted and to Building Code requirements, specifically Sentence 6.2.3.10.(3). Despite the Applicant's proposal for air balancing, the Respondent was still of the opinion that the system was not in compliance with the OBC. He felt that it represented air mixing which was, in his opinion, not appropriate.

The Respondent also rejected the Agent's argument that the HVAC system was acceptable since it complies with the Ministry of Health's ventilation manual. He noted that that manual is intended only to address health related issues and that HVAC design in the newly constructed subject building must comply with the standards found in the OBC.

7. Commission Ruling

It is the decision of the Building Code Commission that the ventilation and exhaust system that proposes to provide supply air from the corridors to the resident rooms and to exhaust from the resident washrooms does not provide sufficiency of compliance with Sentence 6.2.3.10.(3) of the Ontario Building Code at York Central Hospital - Long Term Care Centre, 10 Trench Street, Richmond Hill, Ontario.

8. Reasons

i) The Code states that the public corridor shall not be used as a portion of the supply, return or exhaust system serving adjoining areas other than the listed exceptions.

ii) The adjoining patient bedrooms do not fall within the listed exemptions.

iii) No satisfactory compensating measures were offered to achieve sufficiency of compliance.

Dated at Toronto this **7th** day in the month of **September** in the year **2000** for application number **2000-48**.

Mr. Len King, Vice-Chair

Mr. Fred Barkhouse

Mr. John Guthrie

BCC Ruling No. 00-45-777

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 00-45-777

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Articles 9.8.8.7 and 9.8.8.8 of Regulation 419/86, as amended by O. Reg. 183/88, 581/88, 114/89, and 115/89 of the 1986 Ontario Building Code.

AND IN THE MATTER OF an application by Mr. and Mrs. William McGuigan, 15995 Horseshoe Hill Road, Caledon, Ontario, for the resolution of a dispute with Ms. Mary Schofield, Deputy Chief Building Official, Town of Caledon, Ontario, to determine whether the as-built guard provides sufficiency of compliance with Articles 9.8.8.7. and 9.8.8.8. of the 1986 Ontario Building Code at the McGuigan Residence, 15995 Horseshoe Hill Road, Caledon, Ontario.

APPLICANT
Mr. and Mrs. William McGuigan
Owners
Caledon, Ontario

RESPONDENT
Ms. Mary Schofield
Deputy Chief Building Official
Town of Caledon

PANEL
Mr. Len King, Vice- Chair
Mr. Fred Barkhouse
Mr. John Guthrie

PLACE
Toronto, Ontario

DATE OF HEARING
September 7th, 2000

DATE OF RULING
September 7th, 2000

APPEARANCES
Mr. Alexander Temporale, Principal
ATA Architect Inc.
Oakville, Ontario
Agent for the Applicant

Mr. Laszlo Pandy
Barrister and Solicitor
Brampton, Ontario
Designate for the Respondent

RULING

1. The Applicants

Mr. and Mrs. William McGuigan, owners, Caledon, Ontario, have received a building permit under the Building Code Act, 1986 and have constructed a residential building at 15995 Horseshoe Hill Road, Caledon, Ontario.

2. Description of Construction

The Applicants applied for a building permit in 1990 and thereafter constructed a custom two storey, detached dwelling.

The construction in dispute involves the design of the guard protecting exterior balconies. The guard is comprised entirely of welded 51 mm diameter tubular steel. The design consists of five parallel horizontal members spaced evenly apart with 178 mm between the top of one rail and the underside of the one above. The upper side of the lowest rail is measured at 152 mm above the balcony walking surface, whereas the upper side of the top rail, i.e. the total height of the guard, is 1,070 mm high. The horizontal members are supported by vertical posts located at 1,422 mm on centre. The horizontal distance between the vertical posts is 1,372 mm.

The guard is employed in a few locations on the exterior of the house. On the ground floor, a considerable distance of the guard has been installed, including around a semi-circular porch that overlooks a sunken patio located on the same level as the basement. There is also a small portion of the same guard on the second floor that protects a walkout balcony.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-built exterior guard provides sufficiency of compliance with Articles 9.8.8.7. and 9.8.8.8. of the 1986 Ontario Building Code. (As the permit to construct the house was applied for in March of 1990, the applicable regulation at that time was the 1986 Ontario Building Code.)

The first provision, Article 9.8.8.7., requires that openings in guards on balconies or exit stairs of residential occupancies be of size that prevent passage of a spherical object having a diameter of 100 mm. The guard under dispute has openings as measured between the horizontal and vertical members of 178 by 1,372 mm respectively.

Article 9.8.8.8., the latter provision, stipulates that required guards surrounding exterior balconies must be designed in such a way so as not to facilitate climbing between 100 and 900 mm above the floor or walking surface of the area the guard is protecting. In the subject guard there are four horizontal members located between the 100 and 900 mm range above the balcony surface.

The issue at dispute therefore is whether the guard, as designed and constructed, has openings large enough to allow a spherical object with a diameter of 100 m to pass through and whether it facilitates climbing.

4. Provisions of the Ontario Building Code

Article 9.8.8.7. Openings in Guards

Openings through a *guard* on a balcony or an *exit* stair, except an exit stair serving not more than 1 *dwelling unit*, shall be of size so as to prevent the passage of a spherical object having a diameter of 100

mm in *residential occupancies* and 200 mm in other *occupancies*, unless it can be shown that the location and size of such openings which exceed these limits do not represent a hazard.

Article 9.8.8.8. Design to Prevent Climbing

Guards around exterior balconies of buildings of *residential occupancy* shall be designed so that no member, attachment or opening located between 100 mm and 900 mm above the balcony floor will facilitate climbing.

5. Applicant's Position

At the outset, the Agent for the Applicant submitted that when considering the size of the balconies, their locations and the use of the house, the design of the guard is very safe. He argued that the openings and the alleged climbability have never been an issue. He noted that in all the years the owners have lived there no incident related to the guards has occurred.

The Agent explained that after living in their completed house for eight to nine years the owners realized that they never received their final inspection from the municipality. When this inspection occurred in 1999 the municipality took issue with the design of the guards. He stated that the design of the exterior balcony guard is the same as the one that appeared in the original drawings submitted for the building permit and approved by the Town of Caledon. Neither in the building permit approval process, nor during the inspections carried out later was there any indication from the municipality that the design of the subject guards did not comply with the Ontario Building Code.

The Agent also elaborated that the architecture of the house was based on Frank Lloyd Wright's prairie school design where the dominating theme is to create a horizontal linear sense. It was upon this concept that the horizontal rails of the guard were predicated. As he noted, in a house in which the overwhelming aesthetic is to reference the linear flatness of a prairie horizon, to add vertical pickets in the guards would be incongruous.

The Agent continued that guards comprised of several horizontal rails have been employed in many locations inside and outside Ontario. Of the examples of guards in Ontario, he cited specifically a bridge at Bronte Park in Caledon East and Ontario Place, both of which are used by the public.

The subject house has been designed as a country home for adult use, the Agent stated. It is not used by the wider public as it is a private residence. The house and its guards therefore receive constant supervision when guests are present, especially children. Taking these facts into account and considering that during the last eight years of occupancy there has been no incident connected to the guards under dispute, the Agent concluded that there is no danger associated with the openings and horizontal members of the subject guards.

Finally, the Agent suggested that they would be prepared to restrict the access to the subject balconies if it allows them to maintain the guards as they are. He hoped that the Commission would take a reasonable approach when deliberating on the safety of the guards.

6. Respondent's Position

The Designate for the Respondent submitted that the exterior balcony guards, as constructed and installed, do not conform with the requirements of the 1986 Ontario Building Code.

The Designate stated that at the time the drawings (showing the disputed guards) were submitted for the building permit they were clearly stamped in red, requiring compliance with the provisions of the OBC. Moreover, during the subsequent inspections of the house throughout its construction the guards were not inspected and declared non-compliant because they had not been installed.

The argument that the subject guards are acceptable because similar ones have been installed elsewhere was rejected by the Designate. He noted that the Agent used some examples from outside Ontario which are obviously not subject to the OBC. Also not covered by the OBC is the bridge structure. Further, Ontario Place is not a residential structure regulated under Part 9 of the Code, as is the Applicant's house.

The Designate also refuted the argument that the use of the house primarily by adults eliminates any potential hazard. That this is fact provides no basis for deviating from the Code. The OBC, he noted, does not have standards for guard design for houses with adults only and houses with adults and children. There is only a single standard for Part 9 construction. And the guard does not meet the requirements in two areas; the openings are far too large and the horizontal rails make it very climbable.

On the fist issue, the Designate stated that the test in Article 9.8.8.7. is that "unless" an opening larger than 100 mm in diameter can be shown not to be a hazard then it cannot be allowed. The openings are many times the size permitted, the vertical drop between the balconies and the adjacent grade is significant and the Agent has demonstrated nothing to prove that such openings are not a hazard. As a result, the guard has not met the "unless" test in OBC 9.8.8.7.

Regarding climbability, the Designate discussed that Article 9.8.8.8. hinges on whether the guard "facilitates climbing". With regularly spaced horizontal rails, the guard looks exactly like a ladder. Clearly, such a design facilitates climbing, he asserted.

The Designate concluded by pointing out that the Applicants and their Agent are offering to restrict access to the disputed guards and balconies. By doing so, he argued that they are admitting that the guards are a hazard because they are trying to keep people away from them. Moreover, restricting access to an area of a building is also not a reason to justify a deviation from the minimum safety requirements of the Ontario Building Code. Lastly, he stated that this is a required guard and it must be built according to Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-built exterior guards do not provide sufficiency of compliance with Articles 9.8.8.7. and 9.8.8.8. of the 1986 Ontario Building Code at the McGuigan Residence, 15995 Horseshoe Hill Road, Caledon, Ontario.

8. Reasons

- The subject guards, with their horizontal members, create a clear ladder effect and are therefore considered as facilitating climbing.

- The openings are well in excess of the 100 mm diameter threshold. In fact, they are large enough to allow a small child to pass through.

Dated at Toronto this **7th** day in the month of **September** in the year **2000** for application number **2000-46**.

BCC Ruling No. 00-44-776

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-44-776

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 3.7.4.1.(2) and Part 8 of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Karen Schad, Director, Carp Ridge Community School, Carp, Ontario, for the resolution of a dispute with Mr. Robert W.J. Moore, Chief Building Official, Township of West Carleton, Carp, Ontario, to determine whether the proposed substitution of two water closets with a proprietary composting toilet system to serve a one-classroom portable school with an adequate water supply provides sufficiency of compliance with Sentence 3.7.4.1.(2) and Part 8 of the Ontario Building Code at 4596 Carp Rd., Carp, Ontario.

APPLICANT
Karen Schad, Director
Carp Ridge Community School
Carp, Ontario

RESPONDENT
Mr. Robert W. J. Moore
Chief Building Official
Township of West Carleton

PANEL
Mr. Bryan Whitehead, Vice Chair
Mr. Bill Fellner
Mr. Frank Wright

PLACE
Toronto, Ontario

DATE OF HEARING
August 24th, 2000

DATE OF RULING
August 24th, 2000

APPEARANCES
Ms. Karen Schad, Director
Carp Ridge Community School
Carp, Ontario
Applicant

RULING

1. The Applicant

Ms. Karen Schad , Director, Carp Ridge Community School, Carp, Ontario, has received a building permit under the Building Code Act, 1992 to install a Class 4 septic system at 4596 Carp Road, Carp, Ontario.

2. Description of Construction

The Applicant has constructed a portable school building containing one classroom and a washroom yet to be built. The building is described as having a Group A, Division 2 - Assembly Occupancy. The total number of plumbing fixture units is 12.5 and the building has a total finished area of 173 m2. The calculated daily design sewage flow, based on 35 persons at 30 litres per day, is 1 050 litres.

The Applicant has received a building permit to install a Class 4 raised bed sewage system to serve the existing school and a future eco-wellness centre with an approximate building area of 75 m2 to be constructed in the near future. The building permit for the school building has been issued on the basis of an occupancy threshold of 12 persons, however the ultimate development would increase this number to 35 persons. The original proposal, based on which the building permit for the septic system has been issued, comprises a plumbing system with two water closets, an urinal and two lavatories. Later, the Applicant changed this proposal to substitute the water closets with a proprietary composting toilet system (Clivus Multrum Model) with two toilets. The black water from the urinal and the grey water from the remaining plumbing fixtures will be directed to a Class 4 septic system.

The subject site is a 7.29 hectare country lot with minimal slope and is mostly covered with mature trees. The depth to the bed rock is roughly 200 mm. The percolation time of the native soil is reported to be more than 50 min/cm. The water supply to the site will be from two drilled wells.

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The construction in dispute involves the substitution of the two water closets with a composting toilet system.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed substitution of two water closets with a proprietary composting toilet system to serve a one-classroom portable school with an adequate water supply provides sufficiency of compliance with Sentence 3.7.4.1.(2) and Part 8 of the Ontario Building Code.

Sentence 3.7.4.1(2) allows the use of sanitary units without a water connection such as sanitary privies, chemical toilets, or composting toilets, which are classified as Class 1 systems under Part 8 of the OBC, wherever a sanitary drainage system cannot be installed due to the lack of water supply. A sanitary drainage system is defined as " a drainage system that conducts sanitary sewage" under Article 1.1.3.2. of the Ontario Building Code (OBC). Sanitary sewage means " liquid or water borne waste (a) of industrial or commercial origin, or (b) of domestic origin, including human body waste, toilet or other bathroom waste, and shower, tub, culinary, sink and laundry waste" (Article 1.1.3.2). The site under dispute has two drilled wells for water supply. The black water originating from the urinal and the greywater originating from other plumbing fixtures will be directed to a Class 4 raised bed sewage system. The human body waste other than that originating from the urinal is proposed to be handled by the composting system.

Therefore, at issue is whether the proposed substitution of two water closets with a Class 1 composting toilet system despite an adequate water supply to the site affects the sufficiency of the system in complying with related requirements of the OBC.

4. Provisions of the Ontario Building Code

Sentence 3.7.4.1 (2) **Plumbing and Drainage Systems**

(2) When the installation of a sanitary drainage system is not possible because of the absence of a water supply, sanitary privies, chemical closets or other means for the disposal of human waste shall be provided.

Part 8 **Sewage Systems**

5. Applicant's Position

The Applicant submitted that the Clivus Multrum composting toilets are largely being used in other provinces such as British Colombia and have proved to be environmentally friendly.

The Applicant, stated that they will soon construct an eco-wellness centre on the subject site to host workshops and seminars on environmentally friendly technology. So as a first step, they want to provide a model for these kinds of initiatives.

The Applicant indicated that the "Wild Care Bird Centre" located in Ottawa has been using a similar composting toilet system for more than 8 years serving more than 10 000 visitors per year without any problem.

The Applicant continued that their original submission to the Building Code Commission included a composting toilet system in conjunction with a greywater system (Class 2) to replace the Class 4 system. However, because of the lack of time to investigate the suitability of the greywater system for the site under dispute and also comparatively high cost of installing a greywater system, they have changed their submission to include the proposed substitution of two water closets with a composting toilet system and to discharge the remaining sewage, including the "composting tea" from the composter to the approved Class 4 system.

6. Respondent's Position

The Respondent chose not to attend the hearing, so the Commission relied on his written submission for the purpose of hearing.

The Respondent submitted that the installation of a composting toilet system in lieu of two water closets is not permitted under the OBC, which requires the installation of water closets wherever there is an adequate water supply.

The Respondent proposed that the installation of a composting toilet system in addition to the minimum number of required water closets would be acceptable, if they can agree (with the Applicant) on a monitoring system to evaluate the performance level of this system.

7. Commission Ruling

It is the decision of the Building Code Commission the proposed two-toilet Class 1 composting system provides sufficiency of compliance with Sentence 3.7.4.1.(2), on the condition that, any liquid (composting tea) produced from the system is discharged to the approved Class 4 system.

8. Reasons

i. The proposed Class 1 composting system for this eco-wellness centre classroom with 12 students is an acceptable substitute for a water closet provided the excess liquid is discharged to a Class 3,4 or 5 sewage system (8.3.1.2.(3)).

Dated at Toronto this **24th,** day in the month of **August** in the year **2000** for application number **2000-25**.

BCC Ruling No. 00-43-775

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-43-775

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentences 11.4.2.5.(3) and 11.4.3.6.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. David M. Bath, Homeowner, 208 Upper Mount Albion Road, Stoney Creek, Ontario, for the resolution of a dispute with Mr. Henry Dekker, Chief Building Official, City of Stoney Creek, Ontario, to determine whether the performance level of the existing sewage system, when considering the proposed renovation that will increase the number of bedrooms and the total finished area by more than 15%, provides sufficiency of compliance with Sentences 11.4.2.5.(3) and 11.4.3.6.(1) of the Ontario Building Code at 208 Upper Mount Albion Road, Stoney Creek, Ontario.

APPLICANT
Mr. David M. Bath, Homeowner
208 Upper Mount Albion Road
Stoney Creek, Ontario

RESPONDENT
Mr. Henry N. Dekker
Chief Building Official
City of Stoney Creek

PANEL
Mr. Bryan Whitehead, Vice Chair
Mr. Bill Fellner
Mr. Frank Wright

PLACE
Toronto, Ontario

DATE OF HEARING
August 24, 2000th, 2000

DATE OF RULING
August 24, 2000th, 2000

APPEARANCES
Ms. Cynthia Woods
Barrister & Solicitor
Toronto, Ontario
Agent for the Applicant

Mr. Collin Potter
Plans Examiner, Building Inspector
City of Stoney Creek
Designate for the Respondent

The Respondent

RULING

1. The Applicant

Mr. David Bath, Homeowner, Stoney Creek, Ontario, has received an order to comply under the Building Code Act, 1992 to up-grade the existing sewage system at 208 Upper Mount Albion Road, Stoney Creek, Ontario.

2. Description of Construction

The Applicant is constructing a new addition to his one storey Group C - residential building. The existing building has an area of 83.24 m2 and accommodates two bedrooms. The new addition includes the expansion of the main floor and the construction of a second floor that will house an extra bedroom. With this, the total finished area of the dwelling will increase to 239.22 m^2. The calculated daily design sewage flow is 2000 litres. The total number of plumbing fixture units, as reported by the Respondent, is 13.

The existing building was constructed before 1950. The Applicant bought the house in 1982. In 1995, he decided to customize the house. In 1996, the Applicant discussed his proposal for a new addition with the then-enforcement authority for regulations governing on-site sewage systems (the Ministry of the Environment). A response from the Health Unit, at that time, indicated that he did not need to obtain a Certificate of Approval for a new sewage system as he was only proposing to enlarge the first floor without any additional plumbing fixture units. In 1997, the Applicant constructed the footings without a building permit. In 1998, after a "stop work order" was issued by the municipality, the Applicant formally applied for a building permit and received a conditional permit. At this time, the septic regulations were transferred to the Ministry of Municipal Affairs and Housing. For this reason, later in November of 1999, when the Applicant applied for a building permit and submitted the working drawings for his proposal to finish the construction, he was required to upgrade the existing sewage system. The Applicant continued the construction of the new addition until he was issued an "order to comply" and a "stop work order" both in March of 2000.

The construction in dispute involves the adequacy of the existing septic system in servicing the enlarged dwelling

Two different drawings were submitted to demonstrate the existing septic system, which is described as an in-ground absorption trench system consisting of a 4500 litre septic tank and a leaching bed. The leaching bed was described as consisting of six tile runs and nine tile runs in different drawings. The septic tank, as shown in the drawings, is set back 3m from the existing building and 1.5 m and 2.4 m from the new addition. The clearance distance between the absorption trenches and the new construction is 0.6 m. The total length of the absorption trenches is 64 m for the six-tile run bed. During the hearing, the Applicant indicated that there is also a greywater system connected to the leaching bed. However, he did not know where exactly it is located nor its capacity.

The subject site has an area of 1393 m2 and a slope of three percent. The native soil is reported to be clay soil with a percolation time of more than 50 min/cm.

The water supply to the site is provided by municipal water supply.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the performance level of the existing sewage system, when considering the proposed renovation that will increase the number of bedrooms and the total finished area by more than 15%, provides sufficiency of compliance with Sentences 11.4.2.5.(3) and 11.4.3.6.(1) of the Ontario Building Code.

Sentence 11.4.2.5.(3) sets out the situations that would reduce the performance level of an existing dwelling. These situations include an addition of more than 15% to the building area of an existing dwelling, an increase in the number of the plumbing fixture units, and an increase in the number of bedrooms that together, or alone would result in a daily design sewage flow in excess of the designed capacity for any component of an existing sewage system. In other words, if the resultant increase in the daily design sewage flow, due to any of the above conditions, exceeds the capacity of one component or the whole septic system, the performance level of the dwelling is reduced.

Sentence 11.4.3.6.(1) requires up-grading of an existing septic system to comply with requirements of Part 8, if the performance level of the dwelling is reduced. In other words, this sentence applies, if one of the conditions specified in Sentence 11.4.2.5.(3) leads to a reduction in performance level of an existing dwelling.

In the present case the addition to the subject building area is more than 50 percent and the number of bedrooms is increased from two to three. There is no change in the total number of plumbing fixture units, which is reported to be six by the Applicant, but 13 by the Respondent.

Therefore, at issue is whether the subject additions negatively affect the performance level of the existing building and, as a result, require that the existing septic system be upgraded.

4. Provisions of the Ontario Building Code

Sentence 11.4.2.5 Sewage Systems

(3) The performance level of an existing dwelling unit is reduced where proposed construction which,

a. increases the number of bedrooms in the dwelling unit,
b. exceeds 15% of the gross area of the dwelling unit, or
c. adds new plumbing fixtures to the dwelling unit, will result in the total daily design sanitary sewage flow of the dwelling unit, calculated in accordance with Article 8.2.1.3., exceeding the capacity of any component of a sewage system the dwelling unit.

Sentence 11.4.3.6. Sewage Systems

(1) Where the performance level of an existing building is reduced under Article 11.4.2.5., upgrading of a sewage system which is adversely affected by a construction, increase in occupant load, increase in the total daily design sanitary sewage flow or change in amount or type of sanitary sewage shall be required in conformance with Part 8

5. Applicant's Position

The Agent for the Applicant submitted that the construction of the new addition started in 1996 and continued as funds became available. He was not informed of any time restriction for a building permit nor was he aware of the transfer of the septic regulations to the Ministry of Municipal Affairs and Housing.

The Agent argued that the municipality had not informed the Applicant about the reasons for what the conditional building permit was issued. Had he (the Applicant) been informed about this, he would not have continued the construction.

The Agent then stated that she believes that there should be a mechanism to allow the Applicant to finish the construction. If the sewage system does not function properly, then the Applicant should be required to upgrade the system. With a system that is functioning well for years and with the possibility of municipal sewers coming to the site soon, the upgrading of the system imposes an unnecessary burden on her client, she argued.

The Agent proposed that the Applicant be allowed to finish the roof to protect the constructed parts, on the condition that the newly built areas are not occupied.

6. Respondent's Position

The Respondent submitted that the application for a building permit was submitted in 1998. Therefore, it should be processed under current regulations that require upgrading of the existing septic system.

The Respondent stated that the conditional permit was issued to legitimize what was already in the ground. The application for the building permit with the drawings were submitted in November 1999. At this time, the foundation walls had also been constructed.

The Respondent argued that it was after examining the building drawings that the addition of a new bedroom was discovered. In addition, the increase in building area is significant. For all these reasons, it was their position that the performance level of the existing building is reduced and the existing septic system is required to be upgraded to comply with the requirements of Part 8 of the Ontario Building Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the performance level of the existing dwelling is reduced by construction of the proposed additional bedroom and floor area. The sewage system must be upgraded to service the proposed construction.

8. Reasons

i. The sewage load for the proposed house far exceeds the capacity of the existing system.
ii. The existing sewage system does not meet the setback requirements from the new foundation and appears to be constructed in soils with a percolation time greater than permitted for a trenched inground leaching bed.
iii. There was no demonstration that the existing leaching bed is functioning adequately except for the comment that there is no seepage.
iv. The greywater system does not meet the requirements of the Ontario Building Code.

Dated at Toronto this **24th,** day in the month of **August** in the year **2000** for application number **2000-25**.

BCC Ruling No. 00-42-774

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-42-774

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 7.4.6.3. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Heather Feikema, Environmental Engineer, IKO Industries, Brampton, Ontario, for the resolution of a dispute with

Ms. Brenda Campbell, Chief Building Official, City of Brampton, Ontario, to determine whether the as-installed sanitary drainage system that includes a sump pit and pumps provides sufficiency of compliance with Article 7.4.6.3. of the Ontario Building Code at 40A Hansen Road South, Brampton, Ontario.

APPLICANT
Ms. Heather Feikema, Environmental Engineer
IKO Industries
Brampton, Ontario

RESPONDENT
Ms. Brenda Campbell
Chief Building Official
City of Brampton

PANEL
Dr. Kenneth Peaker, Chair
Mr. Fred Barkhouse
Mr. John Guthrie

PLACE
Toronto, Ontario

DATE OF HEARING
August 24th, 2000

DATE OF RULING
August 24th, 2000

APPEARANCES

Ms. Heather Feikema
Environmental Engineer
IKO Industries
The Applicant

Mr. Steve Hystek, Project
Manager
Economy Contracting
Agent for the Applicant

Ms. Brenda Campbell
Chief Building Official
City of Brampton
The Respondent

Jerry Monaco
Plumbing Plans Examiner
City of Brampton
Designate for the Respondent

RULING

1. The Applicant

Ms. Heather Feikema, Environmental Engineer, IKO Industries, Brampton, Ontario, has received an order to comply under the Building Code Act, 1992 to remedy certain alleged deficiencies regarding a drainage system serving new plumbing fixtures installed at 40A Hansen Road South, Brampton, Ontario.

2. Description of Construction

The Applicant has recently made renovations to an existing building with an F2 major occupancy. The structure is described as two storeys in building height, 4,580 m^2 in building area and is of combustible construction. The building is equipped with a sprinkler system.

As part of the renovation on the ground floor, the Applicant added a new hand washing sink in a newly constructed laboratory. As well, new male and female staff washrooms were installed, each with a sink and water closet. Also added, adjacent to the washrooms, is a single stall shower room. The lab sink is located approximately 37 m (120 ft) from the washroom/shower area.

The construction in dispute involves the drainage piping for the laboratory sink and five plumbing fixtures installed in the new washrooms and shower as described above. A 100 mm (4 in) sanitary drain pipe, approximately 37 m (120 ft) in length, has been installed for the hand sink. Also connected to this sanitary pipe are the fixtures in the washrooms and the shower stall. The pipe drains to a sump pit located in the area of the new washrooms. Sanitary sewage is then pumped up and across the ceiling space of the existing ground floor of the facility for a distance of approximately 15.5 m (50 ft) where it returns to ground level and feeds into an existing cleanout.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-installed sanitary drainage system that includes a sump pit and pumps provides sufficiency of compliance with Article 7.4.6.3. of the Ontario Building Code. This provision describes the conditions when pumps and tanks can be used and sets out requirements. In particular, Sentence (1) stipulates that only drainage piping that is not capable of draining by gravity may be connected into a sewage tank with pumping devices. In the case at hand, while it may be possible through an extensive retrofit to drain by gravity, all drainage piping for the subject fixtures is provided through mechanical means (i.e. a sump pit and pumps).

Specifically, the issue before the Commission is whether the as-built drainage piping that utilizes a mechanical pumping system in lieu of gravity-based drainage sufficiently complies with Sentence 7.4.6.3.(1) of the Code regarding circumstances of installation for sumps and tanks. In addressing this

question, the Commission must assess whether, as an existing building, "construction difficulties" as envisaged in Article 11.5.2.1. were sufficient to warrant the use of an alternative method of Code compliance.

4. Provisions of the Ontario Building Code

Article 7.4.6.3. Sumps or Tanks

1. Only piping that is too low to drain into a building sewer by gravity shall be drained to sump or receiving tank.
2. Where the sump or tank receives sanitary sewage it shall be water and air-tight and shall be vented.
3. Equipment such as a pump or ejector than can lift the contents of the sump or tank discharge it into the sanitary building drain or sanitary building swear shall be installed.
4. Where the equipment does not operate automatically the capacity of the sump shall be sufficient to hold at least a 24 hours accumulation of liquid.
5. Where there is a building trap the discharge pipe from the equipment shall be connected to the sanitary building drain downstream of the trap.
6. The discharge pipe from every sanitary sewage sump shall be equipped with a union, a check valve and a shut-off valve installed in that sequence in the direction of discharged.
7. The discharge piping from a pump or ejector shall be sized for optimum flow velocities at pump design conditions.

5. Applicant's Position

The Applicant submitted that it was IKO's intent to renovate and update their 50 year old building. Accordingly they set out to convert a portion of the subject building into a laboratory and install new male and female staff washroom facilities on the ground level.

Regarding the issue of building without the issuance of a permit, the Applicant argued that they had difficultly in obtaining a permit at the time due to a City strike in progress. Moreover, the office building and laboratory space were critically needed and they could not afford to hold off on the renovations indefinitely, as the City allegedly refused to inspect the rest of the plumbing.

The Applicant noted that the newly installed laboratory sink was installed 15.5 m (50 ft) from the existing sanitary connection. It was not practical and would have likely resulted in future problems if the washroom fixtures and the laboratory sink were drained by gravity, as mandated by the OBC. This is because over that considerable distance and the limited fall possible, the drainage pipe would have only been able to achieve a minimum slope. As a result, given the situation, the Applicant felt that the only practical method was to install the sump pump, as the 'regulated' slope could not be maintained otherwise. The Agent for the Applicant further added that he was aware that the construction was *not* to Code, but he too asserted that a proper 1% slope could not be maintained if they strictly adhered to Code provisions.

In addition, the Applicant was concerned over the impact of cutting through the existing flooring. She stated that the decision to install the sump pump was selected because the alternative involved cutting the floor through a Print Shop and Machine Shop, both of which operate on a 24 hour basis. The loss of production, workers hours and money were notable concerns in the disruption of these shops' operations.

To reinforce her position, the Applicant also indicated that IKO consulted with and sought the advice of a professional engineer who recommended the that the installation of the sump pump was in keeping with good engineering practice and existing site conditions. The engineer's opinion was that installing a new drain by gravity and "cutting existing floor within existing industrial, fully occupied and obstructed spaces, was not practical."

6. Respondent's Position

At the outset, the Respondent clarified that the City strike did not interfere in the permit process, and that the strike itself was not in progress during the time of the client's permit request. Moreover, the Respondent felt that it was the Applicant's responsibility to attain the proper permit before proceeding with construction. Yet, the renovations in question were completed prior to the issuance of a permit. The Respondent stated that if the BCC were to approve the subject completed work it would send a

misleading message. In effect it would tell people that even work not done in accordance with Code, but which has been finished, will nevertheless get approved.

In addition, it was noted that Jerry Monaco, the City Plumbing Plans Examiner, went to assess the site only to discover the job had been completed. At that point he felt that he had no business to comment on the subject installations.

The Respondent then elaborated upon the City's policy regarding alternative construction approaches, which was developed to consider projects that do not completely conform and/or are deemed to face substantial challenges in terms of achieving strict conformance to Code requirements. As noted, she explained that she does not consider the regulations of the Building Code as the only construction approach, and is thus willing to consider alternatives given the proper circumstances. However, she felt strongly that the case in question was not eligible to be considered under their policy with respect to 'disruption distances.' This policy stipulates that 310 m (1000 ft) is the threshold when construction alternatives may be considered. Moreover, the policy was also not applicable because she felt it was viable to construct in accordance with Code for the disputed drainage work.

Turning to the technical issues, the Respondent stated that the dispute at hand is whether there is sufficient slope. While she acknowledged that the engineer supported the as-built drainage system including sump pit and pumps, the same engineer's report, she argued, noted that the plumbing installation was capable of being drained by gravity. Indeed, the engineer's calculations verified that sufficient fall exists for the approximately 15.5 m (50 ft) of drainage pipe required to drain the new plumbing fixtures. Gravity drainage is possible because the existing invert on the riser is approximately 47 cm (18 in) below finished floor. By reducing the thickness of the concrete floor, the required fall could be achieved, she explained.

Since the disputed drainage was possible by means of gravity, the Municipality's view was that no insurmountable construction difficulties were present. Therefore, the installation of the sewage tank could not be approved, as Article 7.4.6.3. of the OBC prohibits the subject drainage piping from draining into a sanitary sewage tank.

In addition, the Respondent argued that the Applicant's claim of cutting 15.5 m (50 ft) through the shop floors as being a significant construction challenge was spurious. As she indicated, the Applicant had already cut through 37 m (120 ft) of concrete floor to connect the laboratory sink as well as the new washrooms and shower to the sump pit. Also, the Applicant went to the effort of installing a complicated drainage system that includes above ground piping running through the ceiling space of the shop areas.

Regarding the issue of potential work disruption and financial impacts that may be caused by cutting through existing flooring, the Respondent stated that their concern was focussed on the fact that the as-built drainage system not only does not comply with the OBC, but in their view was a significant deviation from the Code.

In summation, the Respondent stressed that it was her job to enforce the Building Code and not to be swayed by financial factors or by the fact that the work was completed prior to the issuance of a permit. Therefore, the City was of the opinion that the as-constructed mechanical sewage pumping system cannot be substituted for gravity drains when drainage could be achieved in conformance with OBC provisions.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-installed sanitary drainage system that includes a sump pit and pumps provides sufficiency of compliance with Sentence 7.4.6.3.(1) of the Ontario Building Code at 40A Hansen Road South, Brampton Ontario.

8. Reasons

i. In our opinion, the installation of a gravity based drainage system in the present circumstance would meet with certain construction difficulties.
ii. The as-built system with a sump pit and pumps should perform adequately and therefore achieves sufficiency of compliance with Code requirements.

Dated at Toronto this **24th,** day in the month of **August** in the year **2000** for application number **2000-40**.

BCC Ruling No. 00-41-773

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 00-41-773

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 3.2.9.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Paul Brophy, Engineering Manager, Orlick Industries Ltd. Hamilton, Ontario, for the resolution of a dispute with Mr. Henry Dekker, Chief Building Official, City of Stoney Creek, Ontario, to determine whether the specified compensating measures, offered in lieu of a standpipe and hose system, provide sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code at the as-built Orlick Industries Ltd. aluminium smelting plant at 20 Teal Avenue, Stoney Creek, Ontario.

APPLICANT
Mr. Paul Brophy, Engineering Manager
Orlick Industries Ltd.
Hamilton, Ontario

RESPONDENT
Mr. Henry Dekker
Chief Building Official
City of Stoney Creek

PANEL
Dr. Kenneth Peaker, Chair
Mr. Fred Barkhouse
Mr. John Guthrie

PLACE
Toronto, Ontario

DATE OF HEARING

August 24th, 2000

DATE OF RULING
March 22nd, 2001

APPEARANCES
Mr. Paul Brophy,
Engineering Manager
Orlick Industries Ltd.
Hamilton, Ontario
The Applicant

David Johnson
Randall Brown & Associates
Toronto, Ontario
Agent for the Applicant

Mr. Collin Potter
Plans Examiner/Building Inspector
City of Stoney Creek
Designate for the Respondent

RULING

1. The Applicant

Mr. Paul Brophy, Engineering Manager, Orlick Industries Ltd., Hamilton, Ontario, received an Order to Comply under the Building Code Act, 1992 requiring that a standpipe and hose system be installed in the Orlick Industries Ltd. building located at 20 Teal Avenue, Stoney Creek, Ontario.

2. Description of Construction

In 1998, the Applicant purchased the existing building at 20 Teal Avenue for the purpose of operating an aluminium smelting plant, considered to be a Group F, Division 3 industrial occupancy. Since 1999, two additions have been constructed. The first was an addition of 440 m^2 at the northeast portion of the facility. It houses a gas-fired furnace used to re-melt poor quality aluminum products, for recycling into holding ovens within the diecasting area. The second addition, located at the north face of the building, contains mechanical and electrical rooms as well as holding rooms for equalization and bio-reactor tanks. This second addition has an area of approximately 370 m^2. During this same period, the existing standpipe system was removed from the original building without the benefit of a demolition permit. As a result of the two additions to the original building, the total area of the plant is now 12, 775 m^2.

The entire facility consists of a one storey manufacturing area with a two storey office portion. The building is of noncombustible construction and will be equipped with 60 ABC and BC type fire extinguishers. Currently, the facility is neither sprinklered nor equipped with a fire alarm system. It is, however, proposed that a fire detection/alarm system will be installed throughout the building. The plant will ultimately contain eight electrical induction furnaces and one gas-fired furnace. The hydraulic fluid used in this operation is a nonflammable liquid.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the compensating measures offered in lieu of a standpipe and hose system, provide sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code. Specifically, Article 3.2.9.1. requires that a one storey building with an area in excess of 3000 m^2 in area, and containing a Group F, Division 3 occupancy, be provided with standpipe and hose system, if the building is not sprinklered.

The building in question is not sprinklered and is well in excess of 3000 m^2 in area. In addition, the original portion of the building, when purchased by the Applicant, did contain the required standpipe and hose system, but this has since been removed.

4. Provisions of the Ontario Building Code

Article 3.2.9. Standpipe Systems

3.2.9.1. Where Required

(1) Except as provided in Sentences (4) to (7), a standpipe system shall be installed in every building that

- is more than 3 storeys in building height,
- is more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey, or
- is not more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey but has a building area exceeding the area shown in Table 3.2.9.1. for the applicable building height if the building is not sprinklered.

Table 3.2.9.1.

Building Limits without Standpipe Systems

Forming Part of Sentence 3.2.9.1.(1)

***Occupancy* Classification**	***Building Area*, m^2 (ft^2)**		
1 *Storey*	**2 *Storeys***	**3 *Storeys***	
A C D F, Division 2 F, Division 3	2 500 (24,200) 2 000 (21,500) 4 000 (43,100) 2 000 (21,500) 3 000 (32,300)	2 000 (21,500) 1 500 (16,100) 3 000 (32,300) 1 500 (16,100) 2 000 (21,500)	1 500 (16,100) 1 000 (10,800) 2 000 (21,500) 1 000 (10,800) 1 000 (10,800)
Column 1	2	3	4

5. Applicant's Position

The Applicant submitted that he wanted to avoid a "dry system" because of the nature of the manufacturing undertaken in this plant. He is concerned with the possible fatal reaction of molten aluminum material with water from any source, including a standpipe system. The combination of molten aluminum and water would create a steam explosion, resulting in considerable damage and potential loss of life. The Applicant stated that the handling of molten aluminum is not formally addressed in the Building Code and, while a standpipe system would be appropriate in normal

circumstances, it should not be required in this aluminium smelting facility.

As compensation for the omission of a standpipe and hose system the Applicant lists, among others, the following factors:

- The entire complex is of noncombustible construction and the building contains minimal fuel load.
- The property can be considered to face two streets thereby permitting the Fire Department with full access to the building.
- There are two municipal fire hydrants in close proximity to the exterior of the building.
- A fire detection/alarm system is proposed to be installed throughout the building.
- Increased fire protection from small fires will be provided by the installation of twice the required number of fire extinguishers.
- The Fire Safety Plan will address extinguisher and fire safety training for staff, in addition, the Company would conduct regular pre-fire planning sessions with the Fire Department.

The Applicant urged the panel to consider the benefit of fire hydrants made accessible to knowledgeable fire fighters versus the potential hazard of standpipe and hose systems used by employees as a first action measure against a fire.

6. Respondent's Position

The Respondent submitted that there were presently no safety measures in place at this plant. He advised the Commission that he had no authority to waive the standpipe and hose requirement as dictated by the Building Code and would, therefore, defer to the Commission in this regard.

The Respondent did request that a fire alarm system be a condition of any approval, if a favourable ruling was to be granted.

7. Commission Ruling

It is the decision of the Building Code Commission that the Orlick Industries Ltd. plant at 20 Teal Avenue in the City of Stoney Creek provides sufficiency of compliance with Article 3.1.9.1. of the Building Code provided that

a) An approved Fire Safety Plan be provided.

b) A single stage fire detection and alarm system, designed in accordance with Section 3.2.4., be installed throughout the entire facility.

8. Reasons

i. The use of the building as an aluminium smelting plant, combined with the potential for the introduction of water through a standpipe and hose system would create a hazardous situation, unnecessarily endangering the lives of the occupants.

ii. A Fire Safety Plan will be provided that will indicate to the municipal Fire Department that the subject plant is not equipped with a standpipe and hose system and will outline the training for employees in the use of fire extinguishers.

iii. The fire alarm system will provide early warning of emergency situations.

Dated at Toronto this **24th,** day in the month of **August** in the year **2000** for application number **2000-33**.

BCC Ruling No. 00-40-772

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 00-40-772

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentences 9.8.2.1.(1), 9.8.3.1.(1) and 9.8.3.3.(2), Article 9.8.5.2., Sentences 9.8.5.3.(1) and (2), Clause 9.8.7.1.(1)(a), Articles 9.8.7.2. and 9.8.7.6., Sentence 9.8.8.2.(5) and Article 9.8.8.4. of Regulation 61, as amended by O. Reg. 400/91 (the "1990 Ontario Building Code").

AND IN THE MATTER OF an application by Messrs. Lawrence A. Lundy and Antony T. F. Lundy, Toronto, Ontario, for the resolution of a dispute with Mr. Wib Bethune, Chief Building Official, Township of Seguin, Ontario, to determine whether the as-built stairs, handrails and guards provide sufficiency of compliance with Sentences 9.8.2.1.(1), 9.8.3.1.(1) and 9.8.3.3.(2), Article 9.8.5.2., Sentences 9.8.5.3.(1) and (2), Clause 9.8.7.1.(1)(a), Articles 9.8.7.2. and 9.8.7.6., Sentence 9.8.8.2.(5) and Article 9.8.8.4. of the 1990 Ontario Building Code at the Lundy Cottage, Cranberry Cove Fire Route, Hamer Bay, Lake Joseph, Seguin Township, Ontario.

APPLICANT
Messrs. Lawrence A. Lundy and Antony T. F. Lundy
Owners
Toronto, Ontario

RESPONDENT Mr. Wib Bethune
Chief Building Official
Township of Seguin

PANEL Dr. Kenneth Peaker, Chair
Mr. Fred Barkhouse
Mr. John Guthrie

PLACE
Toronto, Ontario

DATE OF HEARING
August 24th, 2000

DATE OF RULING
August 24th, 2000

APPEARANCES
Mr. Ken Selby
Construction Dispute Resolution
Toronto, Ontario
The Agent for the Applicant

Ms. Debbie Swim
Deputy Chief Building Official
Township of Seguin
Designate for the Respondent

RULING

1. The Applicants

Messrs. Lawrence A. Lundy and Antony T. F. Lundy, Toronto, Ontario, received a building permit under the Building Code Act, 1990 and constructed a cottage at Cranberry Cove Fire Route, Hamer Bay, Lake Joseph, Seguin Township, Ontario.

2. Description of Construction

The Applicants received a building permit in 1992 and constructed their new seasonal cottage sometime thereafter based on the standards found in the 1990 version of the Ontario Building Code. The building is a Group C - residential occupancy and consists of a main cottage that includes a hexagonal-shaped tower and a guest house, that is to be connected by a breeze way. (There is also a boathouse on the subject property.) The main building is two storeys in building height (including basement) and occupies

a building area of 263 m^2 (2,835 ft^2). The building is of combustible construction and is equipped with sprinkler and fire alarm systems.

The construction in dispute involves three sets of stairs with accompanying handrails and two guards installed in different areas of the building. For the sake of clarity, each of the three stairs will be referred to as stair A, B, or C. The guards will be referred to as either guard 1 or 2.

The first stair (referred to as stair A) provides access from the ground level of the main cottage to the upper level of the hexagonal-shaped tower. This area is less than 20 m^2 and is used as an office. The stairs leading to the office are 737 mm (2 ft, 5 in) wide and are the only means of egress provided from this floor area. (Although the office area does have a door that opens onto a deck constructed over a portion of the first floor roof.) The stairs contain two sets of winders less than 1,200 mm (3 ft, 11 in) apart that turn in opposite directions. The first winder turns through an angle of 45^0 and the second winder rotates 90^0. (These two winders thereby create a rough S-shape to the stair.) Stair A also has varying riser heights, ranging between 234 and 242 mm (9 1/8 and 9 ? in). Accompanying these stairs is a handrail attached to the tower's exterior wall. This handrail is not continuous, however, as it switches to the other (or interior) side on the lower half of the stair.

A guard (referred to as guard 1) separates the remainder of the office from the stair opening. It is measured at 737 mm (2 ft, 5 in) in height.

The second stair (referred to as stair B) is an open-tread stair and provides access from the ground floor to a loft bedroom located on an upper level. Stair B is 559 mm (1 ft, 10 in) in width and is also the only means of egress from this floor area. The upper portion of these stairs can be described as curved as they rotate 180^0 around a central column. From their mid-point, the stair then continues straight to the ground floor level. The riser height is 222 mm (8 3/4 in) throughout and the tread depth (straight portion only) is 228 mm (9 in) with a run of 152 mm (6 in). The run dimension in the upper, curved portion of stair B does not meet the minimum run of 150 mm (5 7/8 in) for curved stairs not in exits.

Stair C provides access to the raised platform area that serves the upper shelf level of the library, which is located in the basement of the subject cottage. The access to this platform is provided through an irregular stair located under the platform itself. The stair (from the bottom) consists of two winder stairs that lead to a square landing. Users are then required to make a 90^0 turn and then mount a seven step ladder. The ladder is comprised of a central stringer with alternating steps protruding out from either side. There is no handrail. The entire stair is hidden from view as it is located behind a swinging bookshelf found on the lower level. No information was provided regarding the run and rise of stair C.

The guard protecting the upper bookshelf platform (referred to as guard 2) is an open guard. It consists of a single horizontal rail and two diagonal members that create an X shape in the space between the platform floor and the horizontal rail and between the vertical posts.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-built stairs, handrails and guards provide sufficiency of compliance with Sentences 9.8.2.1.(1), 9.8.3.1.(1) and 9.8.3.3.(2), Article 9.8.5.2., Sentences 9.8.5.3.(1) and (2), Clause 9.8.7.1.(1)(a), Articles 9.8.7.2. and 9.8.7.6., Sentence 9.8.8.2.(5) and Article 9.8.8.4. of the 1990 Ontario Building Code.

The building permit for the subject cottage was issued in 1992. The applicable regulation at that time was the 1990 OBC. The following table summarizes the requirements of the 1990 Code and compares it with the existing situation in the subject cottage.

Provision of the Code in dispute	Required	Existing Situation
Sentence 9.8.2.1.(1)	Uniform rise and run is required in any one flight	Stair A: has various riser heights, ranging from 234 to 242 mm Stair C: consists of three stairs, a landing, and a ladder
Sentence 9.8.3.1.(1)	Required dimensions for interior and exterior stairs serving a dwelling unit: Maximum rise: 200 mm Minimum run: 210 mm Minimum tread width: 235 mm	Stair A: all risers exceed maximum Stair B: all risers exceed maximum Stair C: no information
Sentence 9.8.3.3.(2)	At least one stairway must have a minimum width of not less than 860 mm between floor levels	Stair A: 737 mm wide Stair B: 559 mm wide

Article 9.8.5.2.	Curved stairs not allowed as exits stairs shall have an average run of 200 mm and a minimum run of 150 mm	Stair B: average run appears to comply, minimum run, at 0 mm, does not
Sentence 9.8.5.3.(1)	Winders shall not turn through an angle of more than 90^0 and individual treads shall have a 30^0 rotation each	Stair A: top winder turns through approximately 45^0 on a single step
Sentence 9.8.5.3.(2)	Only one winder is permitted between floor levels	Stair A: contains two winders
Clause 9.8.7.1.(1)(a)	At least one handrail shall be provided in a stair less than 1100 mm in width	Stair A: no handrail
Article 9.8.7.2.	A handrail shall be continuous throughout the stair	Stair A: handrail is interrupted as it changes sides of the stair Stair C: no handrail
Article 9.8.7.6.	A clearance of at least 40 mm shall be provided between the handrail and the wall to which it is attached	Stair A: no clearance provided Stair C: no handrail
Sentence 9.8.8.2.(5)	All guards within dwelling units other than those for stairs must be at least 900 mm high	Guard 1: 737 mm high Guard 2: no information provided regarding height
Article 9.8.8.4.	In a residential occupancy a guard on a balcony must not have an opening that allows passage of an spherical object with a diameter of 100 mm, unless it is shown that the openings do not represent a hazard	Guard 2: is an open design

4. Provisions of the Ontario Building Code

Article 9.8.2.1. Uniform Treads and Risers

(1) Treads and risers shall have uniform rise and run in any one flight.

Sentence 9.8.3.1. Rise and Run of Stairs

- Except for stairs to areas used only as service rooms, interior stairs within *dwelling units* and exterior stairs serving dwelling units shall have a maximum rise of 200 mm ($7^{7/8}$ in), a minimum run of 210 mm ($8^{1/4}$) and a minimum tread width of 235 mm ($9^{1/4}$).

Sentence 9.8.3.3. Stair Width

- At least one stairway between each floor level in a *dwelling unit* shall have a minimum width between wall faces of not less than 860 mm (2 ft 10 in).

Article 9.8.5.2. Curved Stairs not in Exits

Except as permitted in Article 9.8.5.3., a curved stair not required as an exit shall have an average run of not less than 200 mm ($7^{7/8}$ in) and a minimum run of 150 mm ($5^{7/8}$) and shall have risers conforming to Article 9.8.3.1.

Article 9.8.5.3. Winders

- Stairs within *dwelling units* may contain winders that turn through an angle of not more than 90 and individual treads turn through an angle of 30.

- Only one set of winders described in Sentence (1) shall be permitted between floor levels.

Clause 9.8.7.1. Required Handrails

- Except as permitted in Sentences (2) and (3), a handrail shall be provided on

- at least one side of stairs less than 1 100 mm (3 ft 7 in) in width.

Article 9.8.7.2. Continuous Handrail

Except for stairs serving 1 *dwelling unit*, not less than one handrail shall be continuous through the length of the stairway, including landings, except where interrupted by doorways or newels at changes in direction. (See A-3.4.6.4.(5) in Appendix A).

Article 9.8.7.6. Handrail Clearance

A clearance of at least 40 mm ($1^{9/16}$) shall be provided between each handrail and the wall to which it is fastened.

Article 9.8.8.2. Height of Guards

- All required *guards* within dwelling units other than those described in Sentence (4) shall be not less than 900 mm (2 ft 11 in) high.

Article 9.8.8.4. Openings in Guards

Openings through a guard on a balcony, an exit stair, or stairs, landings and the floor level around a stairwell in a *dwelling unit*, shall be of a size so as to prevent the passage of a spherical object having a diameter of 100 mm (4 in) in *residential occupancies* and 200 mm ($7^{7/8}$) in other occupancies, unless it can be shown that the location and size of such openings which exceed the limits do not represent a hazard.

5. Applicant's Position

The Agent for the Applicant submitted that during five years of use they have not experienced any safety problems regarding the subject stairs or guards. Moreover, they have not encountered any difficulty moving furniture to the upper levels.

The Agent stated that the cottage was designed by an architect and that construction was supervised by an engineer. Their work took into consideration the building type, usage, frequency of use, and limited space when designing and building the cottage, including the stairs. Considering the limited space, compliance with provisions such as those governing winders in stairs would create more problems than they would solve the Agent argued. He also noted the quality craftsmanship that went into constructing the cottage. In dealing with the particular issues the Agent did not address the specifics of the Code provisions in dispute.

Regarding Stair A, the Agent stated that it has been built into a very tight space, and because of the shape of the tower it had to conform to a restricted geometry in terms of its design. He argued that the upper level, or office area, of the tower was safe because an alternative exit is available on the roof of the building.

The Agent also likened the office area to a mezzanine in live/work units found in Article 9.8.3.1. of the 1997 version of the OBC. He noted that such units have no maximum rise, no minimum run and no minimum tread width for stairs accessing mezzanines. He argued that if such relaxations were permitted in this instance, they could also be applied to the use at hand.

In terms of Stair B, the Agent explained that the original design had a ladder accessing the upper loft level but once the building had been framed it was realized that a regular, albeit narrow, stair could be built. It was felt that this was far safer than the original ladder proposal. The Agent used the live/work mezzanine concept as an argument for alternative compliance with respect to this area as well.

The Agent stated that using ladders to access upper areas of libraries is quite common. He argued that the design of Stair C and the raised platform area above is safer than trying to access books from a rolling ladder, which is usually the case in private libraries.

On the issue of fire safety, the Agent argued that the cottage is safe. He noted that it is the only cottage in the area that is sprinklered and equipped with a fire alarm system. These features would greatly enhance the safety of occupants that had to negotiate the subject stairs in an emergency situation. The Agent asserted that the provision of a sprinkler system and a fire alarm system adequately compensate for the above referenced Code variations.

The Agent concluded that the cottage has been functioning well since it has been occupied. He stated that any of the Code issues raised by the municipality have not caused any safety problems, nor have they impaired the owners use and enjoyment of the cottage.

6. Respondent's Position

At the outset, the Respondent stated that the building permit issued in 1992 did not include a functional upper level for the tower. Besides, they were not given full access to the cottage for inspection purposes until late in construction.

The Respondent indicated that they are not sure wether the cottage will be turned into a year round residence or would continue to be used simply as a seasonal dwelling. If it did become a year round building the chances of an accident occurring on the stairs, etc. would increase greatly, he stated.

The Respondent did not addressed the specific provisions of the Code as they pertained to each of the stairs, handrails and guards. Instead, he mentioned that the report he submitted to the Commission covered his concerns.

The Respondent concluded by stating that, in his view, compliance with the Code was not achieved in numerous areas with respect to the subject stairs, handrails and guards.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-built stairs, handrails and guards do not provide sufficiency of compliance with Sentences 9.8.2.1.(1), 9.8.3.1.(1) and 9.8.3.3.(2), Article 9.8.5.2., Sentences 9.8.5.3.(1) and (2), Clause 9.8.7.1.(1)(a), Articles 9.8.7.2. and 9.8.7.6., Sentence 9.8.8.2.(5) and Article 9.8.8.4. of the 1990 Ontario Building Code at the Lundy Cottage, Cranberry Cove Fire Route, Hamer Bay, Lake Joseph, Sequin Township, Ontario.

8. Reason/s

i. The deficiencies itemized above represent, in most cases, significant deviations from Code requirements.

ii. The sprinkler and fire alarm systems are excellent safety features in an emergency situation, however, they do not compensate for the present stair, handrail and guard deficiencies during the course of their everyday, normal usage.

iii. No compensating measures relating to the use of the stairs was proposed.

Dated at Toronto this **24th,** day in the month of **August** in the year **2000** for application number **2000-30**.

BCC Ruling No. 00-39-771

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-39-771

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 3.1.5.22.(2), Clauses 3.2.4.8.(2)(b) and 3.2.4.11.(2)(b), Sentence 3.2.4.16.(1) and Article 3.3.1.7. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Paul Munro, President, Cornerstone Builders Limited, Belleville, Ontario, for the resolution of a dispute with Mr. Dan Mousseau, Chief Building Official, City of Burlington, Ontario, to determine whether the as-constructed building, which does not provide protection on a floor area with a barrier-free path of travel, which has a combustible canopy and which does not offer a separate heat detection system, provides sufficiency of compliance with Article 3.3.1.7., Sentence 3.1.5.22.(2) and Clause 3.2.4.11.(2)(b) respectively of the Ontario Building Code at 2109 Lakeshore Road, Burlington, Ontario.

APPLICANT
Mr. Paul Munro, President
Cornerstone Builders Limited
Belleville, Ontario

RESPONDENT
Mr. Dan Mousseau
Chief Building Official
City of Burlington

PANEL
Dr. Kenneth Peaker, Chair
Mr. Michael Steele
Mr. Donald Pratt

PLACE
Toronto, Ontario

DATE OF HEARING
August 10th, 2000

DATE OF RULING
August 10th, 2000

APPEARANCES
Mr. Robert J. Dyck, President
Robert J. Dyck Architect & Engineer Incorporated
Kitchener, Ontario
Agent for the Applicant

Mr. Brad Swainsbury
Building Inspector
City of Burlington
Designate for the Respondent

RULING

1. The Applicant

Mr. Paul Munro, President, Cornerstone Builders Limited, Belleville, Ontario, has received a building permit under the Building Code Act, 1992 and has recently constructed a residential condominium building known as the Martha Street Apartments at 2109 Lakeshore Road, Burlington, Ontario.

2. Description of Construction

The building in dispute is a new building classified as having a major occupancy of Group C - residential. It also includes an ancillary Group A, Division 2 assembly occupancy located on the ground floor. The L-shaped structure is described as five storeys in building height and has a building area of 880 m2. The building was constructed in accordance with the requirements of Article 3.2.2.43. and consists of noncombustible construction and is equipped with a fire alarm system, a standpipe and hose system and a noncompliant electrically supervised sprinkler system (see below).

The building is intended as a condominium for elderly persons. As a result, there are no kitchen facilities in the suites and the dining facilities are located on the ground floor. The building is supervised 24 hours a day, seven days a week.

The construction in dispute varies depending on whether the building is considered to be sprinklered. This situation arises because while there is a sprinkler system installed throughout the building, certain aspects of its design (discussed below) do not comply with the OBC. The following represents differing descriptions of the construction in dispute based on the building being either an unsprinklered or sprinklered facility.

As an unsprinklered building, the construction in dispute would involve three areas.

The first is the lack protection on floor areas with a barrier-free path of travel. Since the building is new construction, a barrier-free path of travel has been provided on every floor served by an elevator. The protection of this path of travel can be accomplished in several ways; providing a protected elevator, or areas of refuge or a Code conforming sprinkler system. These areas of refuge may be provided as zones within the building that are protected by separations having a certain fire- resistance rating or on the balconies of suites. However, because the structure does not conform to the elevator requirements in Sentence 3.3.1.7.(1), and currently does not have any areas of refuge, and nor does the sprinkler system comply with Code, the barrier-free path of travel is not protected.

The second area of dispute would be the two canopies or marquees that have been constructed on the exterior of the building over its main entrances, one on the north and one on the south. Both marquees are of combustible materials and project more than 1.2 m from the exterior exposing face of the building. Moreover, the windows above and around the marquees have not been protected by wired glass.

The third area of dispute would be the lack of a separate heat detection system. Currently, the provision of heat detection is being provided through the noncompliant sprinkler system. (A separate heat detection system can be waived according to Article 3.2.4.15. if the building is equipped with an electrically supervised sprinkler system designed and installed as per Code.)

If the building is sprinklered, on the other hand, the construction in dispute would involve, among other things, the sprinkler system the Applicant has installed throughout the building. Specifically, the dispute regarding the sprinkler system is the fact that it was not equipped with waterflow detection devices per floor. Instead, there is only a single waterflow detection device that serves the entire building.

Related to this, is that the sprinkler system, lacking waterflow detection devices, cannot provide separate zone indication on the fire alarm system's annunciator panel. However, in order to achieve separate zone indication on the annunciator panel as well as provide additional early warning to residents and the fire department, the Applicant has extended the interconnected smoke detection system required in other parts of the building (per 3.2.4.11.(1)) into the resident suites. The provision of these smoke detectors are in addition to the smoke alarms that have been installed in the suites in accordance with Article 3.2.4.21.

As well, neither marquee has been equipped with sprinkler protection either inside or underneath.

3. Dispute

From a Building Code perspective the issues at dispute also depend on whether the building is considered as sprinklered or unsprinklered. According to OBC 3.2.2.43., the structure can be built either with or without a sprinkler system. In the case at hand, the building has been equipped with a sprinkler system, albeit one that is not fully compliant with the OBC. Scenarios articulating the issues concerning the building both as an unsprinklered and sprinklered facility will be presented below. This is followed by a determination by the Commission as to the dispute(s) it sees before it.

Again, assuming at first that the building is unsprinklered, the issues are whether the as-constructed building, which does not provide protection on floor areas with a barrier-free path of travel, which has a combustible canopy and which does not offer a separate heat detection system, provides sufficiency of compliance with Article 3.3.1.7., Sentence 3.1.5.22.(2) and Clause 3.2.4.11.(2)(b) respectively of the Ontario Building Code.

The first provision, Article 3.3.1.7., "Protection on Floor Areas with a Barrier-Free Path of Travel", sets out the requirements for fire safety on floors that have a barrier-free path of travel. Sentence (1) of this Article stipulates that every floor with a barrier-free path of travel above or below the ground floor shall either be provided with a protected elevator described in that Article, or divided into at least two fire separated zones, i.e., areas of refuge. Sentence (2) allows buildings with residential occupancies to waive the requirements of Sentence (1) if balconies that can be used as areas of refuge are built. As well, Sentence (3) permits that both the requirements of Sentences (1) and (2) can be waived if the building is sprinklered. The building in dispute is not equipped with the prescribed protected elevator, nor is it designed to include areas of refuge on each floor area or on the balconies, and it is also not considered to be sprinklered as per the OBC. As a result, compliance is not achieved with any of the options in Sentences (1), (2) and (3).

Sentence 3.1.5.22.(2) permits combustible marquees of a certain size to be attached to the exterior of buildings that are required to be of noncombustible construction as long as every opening in the exposed wall within 4.5 m horizontally and 9 m vertically above the marquee is protected with wired glass as per the Supplementary Guidelines. Since the window openings in the north and south walls near the marquees are not protected in this fashion, the marquees, as constructed, do not conform with Code. Sentence 3.1.5.22.(3) provides an exemption to the window protection requirements of Sentence (2) if the building is sprinklered. However, the sprinkler system has not been extended to the marquees and even if it were, due to the nonconformance of the sprinkler system, this requirement could not be waived.

The last provision, Clause 3.2.4.11.(2)(b), sets out the requirements for a separate heat detection system. This provision stipulates that if a fire alarm system is required, then heat detectors must be installed in every suite and rooms located in all other areas not within the suites in a Group C building higher than three storeys. The exception to this requirement is found in Article 3.2.4.15. which states that if the building has been sprinklered, a separate heat detection system is not required. This relaxation is allowed because in order to actuate, the performance of a sprinkler system relies on detecting heat. Again, without a Code conforming sprinkler system the relaxation found in Article 3.2.4.15. for a heat

detection system is not applicable.

If the building is sprinklered, the issues are then whether the as-installed sprinkler system, which does not include waterflow detection devices nor the capacity for zoned indication on the annunciator panel, and whether the unsprinklered canopy provide sufficiency of compliance with Sentence 3.2.4.16.(1), Clause 3.2.4.8.(2)(b) and Sentence 3.2.5.13.(1) of the OBC.

Sentence 3.2.4.16.(1) is the provision that sets out the requirements for water flow detection devices. It states they must be installed as part of a sprinkler system, and if an annunciator is required, that the devices perform so as to indicate certain zones of the sprinkler system. Clauses (a) and (b) set out the area limits for the zoned coverage of the sprinkler system through the use of the waterflow devices. In the subject building, a waterflow detection device is required per floor since the floor areas do not exceed the area limits as specified in NFPA 13 (which is referenced in Sentence 3.2.4.16.(1)). These devices allow a sprinkler system to indicate where fire is detected. As mentioned, only a single waterflow detection device serves the entire building.

Related to this is how the sprinkler system, lacking waterflow detection devices, works with the fire alarm system, in particular the requirement for separate zone indication on the annunciator panel. As the building is required by Articles 3.2.4.1. and 3.2.4.8. to have a fire alarm system with an annunciator panel, the actuation of the sprinkler system (required or not) and with it the alarm system, must provide separate zone indication on the annunciator panel.

With respect to annunciator and zone indication requirements, these are addressed by Article 3.2.4.8. Sentence (1) of which stipulates, with a few exceptions that are not applicable here, that as part of a fire alarm system, an annunciator panel be installed in a specified location within a building. Sentence (2) mandates that the annunciator shall provide separate zone indication determining the area in which the fire alarm has been actuated. Clauses (a) and (b) of Sentence (2) then follow by setting out the size of floor area that may be covered by a zone in unsprinklered and sprinklered buildings respectively. In either case, sprinklered or unsprinklered, since the floor areas in Subclauses (a)(ii) and (b)(ii) are larger than the individual floor areas of the subject building, the zone indication provided must be per storey as in either Subclause (a)(i) or (b)(i). (It should be noted that the area limits set out in Clause (2)(b) are identical to those for sprinkler zone coverage mandated through the use of waterflow detection devices in Sentence 3.2.4.16.(1).) Without the waterflow detection devices, the sprinkler system in the disputed building, when activated, is not able to provide separate zone (or floor by floor) indication on the fire alarm system's annunciator panel.

Sentence 3.2.5.13.(1) states that sprinkler systems must meet NFPA 13, the "Standard for the Installation of Sprinkler Systems". This Standard, specifically Sentence 4-13.7, addresses "Exterior Roofs and Canopies" and mandates that sprinklers must be installed on the underside of exterior combustible roofs and canopies that project more than 1.2 m. In addition, NFPA 4-13.1.1. requires that all concealed spaces including the exterior combustible canopies be sprinklered, i.e. a canopy must be sprinklered on the interior as well. Since both canopies are combustible and extend more than 1.2 m from the building's exterior face, they lack sprinkler protection on both on the interior and the underside of the exterior.

Having described the various issues, the Commission's approach to them must now be discussed.

It is noted that at the outset the Applicant appealed the commission seeking a ruling on the sufficiency of compliance of his alternative sprinkler system with the requirements for sprinklering found in the OBC. There are two considerations for the Commission here. The first is to determine the nature of this sufficiency of compliance application, i.e., whether the construction in dispute should be seen as an alternative to OBC standards or rather as deficient in terms of those requirements. The second is to determine the focus of the technical dispute.

On the first consideration, we view the sufficiency of compliance question in respect of the disputed construction as one of perceived deficiency. In our opinion, it is clear that without the waterflow detection devices to service each floor separately and the ability to provide independent zone indication on the annunciator panel, the as-installed sprinkler system fails to comply with Sentences 3.2.4.16.(1) and 3.2.4.8.(2). Moreover, the design of the installed system seems more consistent with earlier versions of the OBC, which did not require waterflow detection devices when installing sprinklers in this type of structure.

Regarding the focus of the technical dispute, the Commission believes that the sprinkler system is not the principle issue. We take this position because the Building Code permits the subject building to be constructed either with or without a sprinkler system. And if a sprinkler system is installed (even if not required) then the building is allowed to benefit from certain reductions in the construction standards elsewhere in the building. In the present case, for example, a protected elevator or areas of refuge would not be required if a Code compliant sprinkler system was installed in the building. This relaxation of certain construction standards through the provision of sprinklering applies whether the building is required to be sprinklered or is being done so voluntarily. Of paramount importance, however, in order to qualify for such reductions is that the sprinkler system offered must meet Code. Because the sprinkler system is in fact deficient, according to Code, the building should therefore not enjoy the various permitted relaxations.

On this point, the Commission would like to emphasize the words of the Housing Development and Building Branch's Technical Background Information memo submitted respecting this case.

> The more fundamental issue that must be addressed prior to any discussions of compliance with Code provisions, is that all building systems must be capable of performing their functions in an expected manner and do not mislead or give a false sense of security to the current and future users as well as to the emergency response teams. Existence of a building system, such as a fire alarm or sprinkler system, naturally triggers an expectation that the system performs according to the Building Code provisions. Over the life time of the building, this assumption plays a constant role in most of the decisions made related to the building. Therefore, unlike previous editions of the OBC, the current Code reflects the concern in appropriate provisions by using phrases such as "where...system is installed,..." rather than stating "where...system is required,..."

As a result, the Commission must regard the building as if it did not benefit from sprinkler protection. Accordingly, the alleged deficiencies for an unsprinklered building have been identified. They are; the lack of the protection on floor areas with a barrier-free path of travel, the combustible canopies and the lack of a separate heat detection system.

With these perceived deficiencies in mind the Commission must then turn its attention to the compensating measures being offered. This brings us to the sprinkler system which is not a requirement in this building and can thus be offered as compensation. However, as discussed above, the sprinkler system too has deficiencies. Nevertheless, in the opinion of the BCC, if the disputed building is regarded as unsprinklered, the as-constructed sprinkler system can be viewed as a compensating measure for the supposed deficiencies therein. As well, the Commission must consider the Applicant's argument that the noncompliant sprinkler system provides a heat detection function and that the extension of the smoke detection system into the resident suites provides separate zone indication on the annunciator panel.

Therefore, the question before the Commission then is whether the said building, regarded as not benefiting from sprinkler protection and with certain alleged deficiencies, that is being compensated by, among other things, an installed yet deficient sprinkler system, achieves sufficiency of compliance with the relevant provisions of the Ontario Building Code at 2109 Lakeshore Road, Burlington, Ontario.

4. Provisions of the Ontario Building Code

Article 3.1.5.22. Canopies Having Combustible Elements

(2) Except as permitted in Sentence (3), exterior marquees, not greater than 7.5 m (24 ft 7 in) from ground level to the top of the marquee, having combustible elements other than fabrics or films conforming to Sentence are permitted on a building required to be of noncombustible construction, provided every opening in the exposed wall of the building above the marquee is protected with wired glass in accordance with the Supplementary Guidelines where these openings are within

a. 4.5 m (14 ft 9 in) horizontally of the marquee, and
b. 9 m (29 ft 6 in) vertically above the marquee.

(3) The protection required by Sentence (2) is permitted to be waived if the building is sprinklered.

Article 3.2.4.8. Annunciator and Zone Indication

(1) Except as permitted in Sentences (3) to (5), an annunciator shall be installed in close proximity to a building entrance that faces a street or an access route for fire department vehicles that complies with Sentence 3.2.5.5.(1).

(2) Except as permitted by Sentence (6), the annunciator required by Sentence (1) shall have separate zone indication and of the actuation of the alarm initiating devices in each,

a. floor area so that in a building that is not sprinklered, the area of coverage for each zone is neither more than
   i. one storey, nor
   ii. 2 000 m2 (21,500 m2),

b. floor area so that in a building that is sprinklered, the area of coverage for each zone is neither more than
   i. one storey, nor
   ii. the system area limits as specified in NFPA 13, Standard for the Installation of Sprinkler Systems

Clause 3.2.4.11. Smoke and Heat Detectors

(2) Except as provided in Article 3.2.4.15, if a fire alarm system is required, heat detectors shall be installed in

a.
b. except in a hotel, in every suite, and every room not located within a suite, in portions of buildings classified as Group C major occupancy and more than 3 storeys in building height, and

Article 3.2.4.16. System Monitoring

(1) An automatic sprinkler system shall be equipped with waterflow detecting devices and, if an annunciator is required by Article 3.2.4.8., shall be installed so that each device serves

a. not more than one storey, and
b. an area on each storey that is not more than the system area limits as specified in NFPA 13, "Standard for the Installation of Sprinkler Systems".

(2) Waterflow detecting devices required by Sentence (1) shall be connected to initiate an alert signal or an alarm signal on the fire alarm system if a fire alarm is provided.

Sentence 3.2.5.13. Automatic Sprinkler Systems

(1) Except as permitted by Sentences (2), (3) and (4), an automatic sprinkler system shall be designed, constructed, installed and tested in conformance with NFPA 13, Standard for the Installation of Sprinkler Systems . (See Appendix A.)

Article 3.3.1.7. Protection on Floor Areas with a Barrier-Free Path of Travel

(1) Except as provided in Sentences (2) and (3), every floor area above or below the first storey that has a barrier-free path of travel shall

a. be served by an elevator
   i. conforming to Sentences 3.2.6.9.(4) to (6),
   ii. protected against fire in conformance with Clauses 3.2.6.9.(3)(b) or (c), and
   iii. in a building over 3 storeys in building height, protected against smoke movement so that the hoistway will not contain more than 1% by volume of contaminated air from a fire floor during a period of 2 h after the start of a fire, assuming an outdoor temperature equal to the January design temperature on a 2.5% basis determined in conformance with Subsection 2.5.1., or

b. be divided into at least 2 zones by fire separations conforming to Sentences (4), (5) and (6) so that
   i. persons with physical disabilities can be accommodated in each zone,
   ii. the travel distance from any point in one zone to a doorway leading to another zone shall be not more than the value for travel distance permitted by Sentence 3.4.2.5.(1) for the occupancy classification of the zone, and
   iii. a barrier-free path of travel is provided to an exit. (See Appendix A.)

(2) In residential occupancies, the requirements of Sentence (1) are waived if a balcony conforming to Sentence (7) is provided for each suite, except for suites on the storey containing the barrier-free entrance described in Article 3.8.1.2.

(3) The requirements of Sentences (1) and (2) are waived when the building is sprinklered.

5. Applicant's Position

The Agent for the Applicant submitted that the subject sprinkler system was installed in the condominium on a voluntary basis to provide extra protection, as it was not required by the Ontario Building Code. However, he noted that the sprinkler system is not equipped with waterflow detecting devices that serve each storey and initiate an alarm as required by the new and revised Code Article 3.2.4.16. Nevertheless, he argued that as the building stands, it provides a higher level of life safety than that required by Code. An active suppression system, even one that does not conform to the letter of the OBC, is superior than a passive heat and smoke detection system as is required. He stated that if this application was made a few years ago, the owner would be applauded for voluntary sprinklering. However, due to the higher Code requirements of Article 3.2.4.16, there is no distinguishment between voluntary or required sprinklering.

The Agent indicated that they had originally approached the municipality regarding the sprinklering issue using Section 2.7 "Equivalents", of the OBC and argued that the as-built system was as good, if not better than that required by Code. The municipality, he stated, supported the voluntary installation of the sprinkler system, but because of the wording of the OBC provisions could not accept it. The Agent then noted that their appeal of this dispute to the BCC as a sufficiency of compliance argument is similar. It is based on the view that their system is superior and should be seen not as deficient but rather as an alternative method of conformance.

The Agent continued by noting that Article 3.2.2.43., under which the building was reviewed, allows the structure to be unsprinklered and that the size of the building is considerably under the threshold for required sprinklering. He added that the ground floor has a common dining area, but he asserted that it is not an Group A occupancy. Even if it were, only that floor would have to be sprinklered and the remainder of the building can still be viewed as being voluntarily sprinklered.

The Agent then discussed an email he had received from Alistair Aikman at the National Research

Council. The email, he stated, offered that with the expansion of sprinkler use into more buildings, the NRC realized there was concern about their reliability and the possibility of water damage. As a response, certain Code (NBC) changes were made such as "full electrical supervision of the sprinkler system by means of a fire alarm system" and "by requiring storey by storey zoning with waterflow switches for each zoned storey." Based on this, the Agent argued that the disputed waterflow detection devices became a requirement, in part, because of concerns for property damage. He insisted that the subject systems within the building, the voluntary sprinkler system and the enhanced early warning capacity, are designed more so to provide greater safety for the occupants than to protect property.

The Agent then asked the Commission which type of suite they would prefer to see their family members in - one that complies with the Code and offers no sprinklering and no in-suite smoke detection, or their's which provides additional early warning with the smoke detectors and suppression through the sprinkler system. He stated that a negative ruling by the Commission may send the wrong message to developers who may want to voluntarily sprinkler a building. He then noted that unfortunately one way to conform with the OBC would be to cap the sprinkler system, but he expressed hoped that a BCC decision would not force him to do so.

Regarding the use of smoke detectors in the suites in lieu of heat detectors as required by Clause 3.2.4.11.(2)(b), the Agent indicated that the smoke detectors are wired to the annunciator panel and provide zoned indication. As well, the smoke detection system as a whole actuates faster in a fire situation than heat detectors, thereby making them safer. As a result, the Agent argued that their system fully conforms with the early warning system requirements in the OBC.

The Agent then noted that there are other minor issues to be resolved in the building such as the requirement under OBC 3.2.5.13. and its reference to NFPA 13 (specifically Article 4-13.7.1.) which mandates that the canopies be sprinklered and whether the combustible construction in the marquees is acceptable according to Article 3.1.5.22. He stated, however, that he felt these issues are contingent on the ruling of the sprinklering issue.

Lastly, the Agent itemized what he felt were other safety factors inherent in the building. For example, he noted that the building is to have full 24 hours supervision and that since there will be no kitchens in the resident suites the risk of fire has been dramatically reduced. He also indicated that the parking available at the building is quite limited. It was kept low by the municipality during site plan approval. The net result of this, however, is that there would be little chance that the building could be easily converted into a condominium catering to all ages due to the higher parking requirements.

In summation, the Agent noted that their sprinkler system is not deficient, it is different and superior. And that the subject building is not required to be sprinkled, but was done so above and beyond what is mandated by the OBC its fire safety requirements.

6. Respondent's Position

?The Designate for the Respondent submitted that the building was reviewed under Article 3.2.2.43. as a sprinklered structure. The Code, he noted, does not differentiate between voluntary and required sprinklers, it sets standards for installed sprinklers as is the present case. On this basis, he stated that the building has various deficiencies. Primary among these is the omission of waterflow detection devices and their annunciator connections that allow for zoned indication in accordance with OBC 3.2.4.16.(1) and 3.2.4.8.(2)(b) respectively. In addition, the marquees, which are combustible and project more than 1.2 m from the exposing building faces, have not been sprinklered in conformance with Sentence 3.2.5.13.(1) and NFPA 13.

In his view, the as-built early warning system does not provide sufficiency of compliance with Code. He argued that the combination of having both smoke alarms and smoke detectors in suites in lieu of smoke alarms and heat detectors is not what the Code intends. Since smoke detectors have different capacities than smoke alarms and heat detectors, their use in the present instance may not be appropriate. In fact, the Designate argued that by having a smoke sensitive device in suites that activates a general alarm in the building and alerts the fire department (unlike smoke alarms) the tendency to create what he called a "cry wolf" syndrome is high.

The Designate summarized his position by stating that if the building is to be considered as sprinklered, the sprinkler system must meet the OBC and NFPA. As a result, properly installed waterflow devices on each floor which are connected to an addressable annunciator panel are required, as is sprinkler coverage for the marquees.

For these reasons, the Respondent indicated that he felt that he did not have the authority to allow the disputed construction.

In conclusion, the Designate stated that he hoped the Commission could find some way to allow the sprinkler system to remain but yet meet Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-constructed building, which does not provide protection on a floor areas with a barrier-free path of travel, which has a combustible canopy and which does not offer a separate heat detection system, provides sufficiency of compliance with Article 3.3.1.7., Sentence 3.1.5.22.(2) and Clause 3.2.4.11.(2)(b) respectively of the Ontario Building Code on the condition that:

a. The as-installed smoke detectors are removed and replaced with multi sensor detectors; and,
b. The marquees are sprinklered according to NFPA 13.

8. Reasons

i. The building, as constructed, with a sprinkler system that does not contain waterflow detections per floor does offer an improvement in life safety in comparison to a building with no sprinkler protection.
ii. The building is fully sprinklered and this system can serve to compensate for the lack of protection on floor areas that have a barrier-free path of travel.
iii. The replacement of the smoke detectors with multi sensor detectors will improve the building's detection system and will provide not only a separate heat detection system, but will retain the extension of the smoke detection system into the resident suites undertaken by the Applicant.
iv. Zoned indication will be provided on the annunciator panel through this multi sensor detection system.
v. By fulfilling condition "b" above, the marquees will conform with OBC requirements.
vi. Staffing at the building will provide full supervision.
vii. There will be no kitchens in the residents suites.
viii. The parking at the site is well below what a general public condominium would require.

Dated at Toronto this **10th,** day in the month of **August** in the year **2000** for application number **2000-45**.

BCC Ruling No. 00-38-770

BUILDING CODE COMMISSION DECISION ON B.C.C. # 00-38-770

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Articles 1.1.3.2. and 3.3.2.12 of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the ?Ontario Building Code?).

AND IN THE MATTER OF an application by Mr. Franco Lora, Project Coordinator, City of Toronto, Economic Development, Culture & Tourism, Toronto, Ontario, for the resolution of a dispute with Mr. Yaman Uzumeri, Chief Building Official, City of Toronto, Ontario, to determine whether the proposed elevated platform should be considered a stage and must therefore comply with Article 3.3.2.12. of the Ontario Building Code at the Lakeshore Grounds Assembly Hall, 3121 Lakeshore Blvd. West, Toronto, Ontario.

APPLICANT
Mr. Franco Lora, Project Coordinator
Economic Development, Culture & Tourism, City of Toronto
Toronto, Ontario

RESPONDENT
Mr. Yaman Uzumeri
Chief Building Official
City of Toronto

PANEL
Dr. Kenneth Peaker, Chair
Mr. Michael Steele
Mr. Donald Pratt

PLACE
Toronto, Ontario

DATE OF HEARING
August 10th, 2000

DATE OF RULING
August 10th, 2000

APPEARANCES
Mr. David Hine, Principal
Hine Reichard Tomlin Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Sait Toprak
Manager, Plan Examination
City of Toronto
Designate for the Respondent

RULING

1. The Applicant

Mr. Franco Lora, Project Coordinator, City of Toronto, Economic Development, Culture & Tourism, Toronto, Ontario, has received a building permit under the Building Code Act, 1992 and is currently constructing an addition onto, and renovating the interior of, a facility known as the Lakeshore Grounds Assembly Hall, 3121 Lakeshore Blvd. West, Toronto, Ontario.

2. Description of Construction

The building at issue is an existing community centre that is described as two storeys in building height, 740 m2 in building area, facing one street and is of combustible construction. (The new construction will be of noncombustible material.) The existing structure contained meeting rooms for a variety of purposes and a multipurpose room and was classified as having a Group A - Division 2 major occupancy. As part of the renovations currently underway, the multipurpose room is being converted into a multiuse assembly hall that can accommodate dances, lectures and theatrical events. This portion of the building is classified as having a Group A - Division 1 occupancy.

The completed facility will be equipped with a sprinkler system and a single stage fire alarm system.

The construction in dispute involves the renovation of the multipurpose assembly hall, specifically the proposed addition of a raised platform to be constructed at the south end of the hall. This platform will serve as the area upon which theatrical performances, lectures and speeches will occur. To enhance the viewing of these activities on the platform, telescopic seating is proposed to be installed in approximately the northern half of the hall facing the platform. The platform area is 78.5 m2, the curtain area (at 6.6 m in width and 4.5 m in height) is approximately 30 m2 and the ceiling height is 6 m, as measured from the platform. It does not include a fly tower above nor a backstage area. As well, the platform area, as is the case for the rest of the building, will be sprinklered, but the Applicant does not intend to equip the proscenium opening with a fire curtain nor a sprinkler deluge system.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed elevated platform should be considered a stage and must therefore comply with Article 3.3.2.12. of the Ontario Building Code.

This provision sets out certain fire safety requirements for stages used for theatrical performances that address the greater hazard associated with the production of theatrical performances such as increased fire load and overhead lighting. It includes requirements to sprinkler the stage (Sentence (1)), to provide a 1 hour fire separation between the stage and its ancillary spaces (Sentence (2)), to provide a 1 hour separation between the stage (including ancillary spaces) and the seating area and, to maintain this separation at the proscenium opening, to install a fire curtain or a sprinkler deluge system (Sentence (3)), and to provide at least two vents (Sentence (5)). These provisions, however, obviously only apply when a stage is involved. In order to ascertain if the requirements of Article 3.3.2.12. apply, it must be determined whether the raised platform is a stage.

4. Provisions of the Ontario Building Code

Article 1.1.3.2. Defined Terms - Stage

Stage means a space designed primarily for theatrical performances with provision for quick change scenery and overhead lighting, including environmental control for a wide range of lighting and sound effects and which is traditionally, but not necessarily, separated from the audience by a proscenium wall and curtain opening.

Article 3.3.2.12. Stages for Theatrical Performances

1. A stage for theatrical performances and ancillary spaces, including workshops, dressing rooms and storage areas, shall be sprinklered.
2. A fire separation with a fire-resistance rating not less than 1 h shall be provided between a stage for theatrical performances and ancillary spaces, including workshops, dressing rooms and storage areas.
3. Except as permitted by Sentence (6), a stage for theatrical performances and ancillary spaces, including workshops, dressing rooms and storage areas, shall be separated from the seating area by a fire separation having a fire-resistance rating not less than 1 h, except for a proscenium opening protected with
    a. a sprinkler deluge system conforming to the requirements of NFPA 13 ?Standard for the Installation of Sprinkler Systems?,
    b. an unframed fire curtain if the opening is not more than 20 m (65 ft 7 in) wide, or
    c. a semi-rigid fire curtain if the opening is more than 20 m (65 ft 7 in) wide.
4. A fire curtain required by Sentence (3) shall be of a type designed to close
    a. automatically upon the actuation of the sprinkler system,
    b. automatically upon actuation of the fire alarm system,
    c. manually by remote control devices located at the curtain control panel and at each side of the stage, and
    d. automatically by heat-actuated devices.

5. At least 2 vents for the purpose of venting fire and smoke to the outside of a building shall be provided above a stage designed for theatrical performances and shall
    a. have an aggregate area not less than one eighth of the area of the stage behind the proscenium opening, and
    b. be arranged to open automatically upon actuation of the sprinkler system.
    c. The fire separation referred to in Sentence (3) is not required between a stage and a seating area in a floor area that is sprinklered, provided a sprinkler deluge system is installed at the boundary between the stage and the seating area.

5. Applicant's Position

The Agent for the Applicant submitted that the proposed raised platform does not meet the definition of stage as set out in the OBC. He argued that the platform is simply an elevated area that is to be used as the focal point of the room and is raised to enhance the viewing of activities that will occur in the hall. He noted that the platform does not have a fly tower nor a backstage area. Moreover, since at least approximately 85 percent of the platform is visible form the seating area there is also very little in the way of wing space at the sides of the platform. Because of these limitations, the facility is not capable of accommodating productions that include large moveable scenery that may have a high combustible load.

The Agent then stated that Article 3.3.2.12. and its stage requirements, in his view, is intended to apply to large theatres such as the Princess of Wales Theatre in Toronto and others of its size. As he argued, OBC 3.3.2.12. deals with large stages that have the capacity for quick change scenery for which a fly tower is necessary. Such theatres also have large combustible loads, are equipped with sophisticated lighting systems and they are able to produce many complicated visual effects. This is not the case with the subject building, the Agent noted.

The Agent continued by stating that the hall is a multipurpose space and is not specifically designed for theatre productions. He noted that the seating can be folded up and the space can be used for athletic activities like fitness classes or for weddings, etc. The hall, the Agent added, is ?reminiscent of a high school (auditorium) stage or a gymnasium with a stage?, or even a raised sanctuary in a church. Larger theatres, on the other hand, are not multipurpose as such and are designed specifically for musicals and full-sized stage shows which have greater potential for higher fire risk. Accordingly, facilities that specialize in large theatrical productions must be built to higher building standards to reflect the level of associated hazard. The OBC, in particular Article 3.3.2.12., addresses this.

The key, however, is knowing how to differentiate between a stage and a raised platform and when to apply Article 3.3.2.12., the Agent stated. And to differentiate requires a certain level of judgement of Code requirements based on the circumstances at hand. It is because of the requirement to make a judgement, the Agent argued, that there are many facilities across the City and the Province that have a ?stage?-like platform but have not been required to meet OBC 3.3.2.12. To require this in the building at hand would be onerous.

The Agent then discussed NFPA 101, the ?Life Safety Code? standard, as a means by which some light might be shed on this situation. This standard, he indicated, separates stages into two main categories; legitimate stages where the height from the stage surface to the ceiling above it is more than 15.2 m (50 ft), and regular stages where the height is less than 15.2 m (50 ft). This standard provides higher requirements for legitimate stages than for regular stages. The requirements for legitimate stages are more in line with those in Article 3.3.2.12., he noted. Thus, since the ?stage? to ceiling height is 6 m, he asserted that the hall should not be considered a legitimate stage subject to higher construction standards.

The building, especially the hall, is receiving some physical improvements as a result of the renovation work they are doing, the Agent indicated. For example, the ?stage? area is being equipped with a mechanical exhaust system that is capable of six air changes per hour to vent smoke. As well, two, and in some areas three, additional layers of drywall are being added to the ceiling of the platform space. Also, the building is being fully sprinklered throughout.

In response to the question that the hall provide a guarantee that it only be used as a theatre on a limited basis, the Agent stated that it should not have to offer such a restriction because the facility is not capable of accommodating bigger and potentially more dangerous productions.

In summation, the Agent reiterated his view that the platform should not be considered as a stage. It does not meet the Code?s definition as a stage, especially because it lacks the capacity for quick change scenery. Consequently, he concluded that the requirements for a stage found in Article 3.3.2.12. do not apply.

6. Respondent's Position

The Designate for the Respondent submitted that the elevated platform should be considered a stage and it should be built in conformance with Article 3.3.2.12. He then proceeded to offer some background to the present dispute.

The Designate noted that the application for permit originally came in, in part, as a change of use from an A2 general use assembly building to an A1 occupancy to be used for performing arts. It was as an A1 occupancy that the building was reviewed. This change required that the building be sprinklered because the existing building is of combustible construction, and if it were built new would be required to be of noncombustible material. As a result, however, the sprinkler system cannot be seen as a compensating measure for the items mandated in Article 3.3.2.12.

The Designate then argued that it is clear that the hall will be used primarily for staging theatrical performances. And while full scale productions cannot be housed in the space, there will certainly be productions that will involve props, thus resulting in an increased fire load. Indeed, it doesn?t matter how small the production is, the scenery can contribute to a high combustible load, he asserted. Moreover, since it is anticipated that the building will be rented out to any interested party, professional or non-professional, to use for their productions, there will be very little control over the space and its use. This could mean, the Designate argued, that the hall could be used by individuals who have little or no experience in terms of theatre fire safety. Also, there will be no control over how many times the building is used for theatrical events. As it stands, it could be used every night for such purposes and the more times it is, the greater the risk of a fire occurring.

The Designate explained that the proponents are spending a considerable amount of money to make the building conducive for performing arts, but, in his view, they are not willing to pay what is required to meet OBC 3.3.2.12.

In conclusion, the Designate expressed concern regarding the safety of the stage if the requirements of Article 3.3.2.12. are waived. He stated that as an A1 building to be used for performing arts, the stage must be separated by a one hour fire separation, except for the proscenium opening which must be protected with a deluge sprinkler or a fire curtain.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed elevated platform is not considered a stage and therefore does not need to comply with Article 3.3.2.12. of the Ontario Building Code at the Lakeshore Grounds Assembly Hall, 3121 Lakeshore Blvd. West, Toronto, Ontario.

8. Reasons

1. The construction is considered to be a raised platform in a multipurpose facility.
2. The subject platform area does not provide for quick change and storage of scenery, etc.

Dated at Toronto this **10th,** day in the month of **August** in the year **2000** for application number **2000-45**.

BCC Ruling No. 00-37-769

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 00-37-769

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Clause 3.8.2.1.(1)(k) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Michael Moxam, Principal, Dunlop Farrow Architects Inc., Toronto, Ontario, for the resolution of a dispute with Mr. Mel Brown, Chief Building Official, City of Niagara Falls, Ontario, to determine whether Clause 3.8.2.1.(2)(k) of the Ontario Building Code, which permits an exemption from the requirement to provide barrier-free accessibility "within" residential suites, also applies to the design of the interior side of the egress doorways proposed for the units in the Sheraton Fallsview Hotel, Stanley Avenue and Livingstone Street, Niagara Falls, Ontario.

APPLICANT
Mr. Michael Moxam, Principal
Dunlop Farrow Architects Inc.
Toronto, Ontario

RESPONDENT
Mr. Mel Brown
Chief Building Official
City of Niagara Falls

PANEL
Dr. Kenneth Peaker, Chair
Mr. John Guthrie
Mr. Len King

PLACE
Toronto, Ontario

DATE OF HEARING

July 27th, 2000

DATE OF RULING
July 27th, 2000

APPEARANCES
Mr. Allan Larden, Principal
Larden Muniak Consulting Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Robert Romanuk
Building and Inspections Coordinator
City of Niagara Falls
Designate for the Respondent

RULING

1. The Applicant

Mr. Michael Moxam, Principal, Dunlop Farrow Architects Inc., Toronto, Ontario, has received a building permit under the Building Code Act, 1992 and is constructing an addition onto the Sheraton Fallsview Hotel, Stanley and Livingstone Street, Niagara Falls, Ontario.

2. Description of Construction

The Applicant is constructing a 15 storey addition on top of an existing 24 storey hotel. The addition will create a hotel with a building height of 39 storeys and a building area of 7, 075 m2, containing Group A, Division 2 and Group C occupancies. The addition and the existing building are both of noncombustible construction and equipped with a sprinkler system, a fire alarm system and a standpipe and hose system.

The construction in dispute involves the configuration of the egress doorways within the interior of the suites of the hotel. Specifically, the issue involves the amount of clear space to be provided on the latch side of the doors in the interior of the suites. All of the doors entering the suites swing inward towards

the interior of the unit. The Respondent is requiring that a minimum 600 mm clearance be included between the latch side of the door and the demising wall that runs perpendicular to the corridor wall, thereby assisting in the barrier-free path of travel from the interior of the suite to the corridor.

The Applicant maintains that there is no basis for requiring this measurement of clearance adjacent to the latch side of the suite entry doors. It is suggested that a "barrier-free path of travel is not required within a residential suite (OBC 3.8.2.1.(2)(k)." In this regard, the Applicant is proposing a clearance ranging from approximately 127 mm to 711 mm between the latch side of the door and the demising wall. The clearance measurement is dependent on the design of the suite in question.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether Clause 3.8.2.1.(2)(k) of the Ontario Building Code, which permits an exemption from the requirement to provide barrier-free accessibility "within" residential suites, also applies to the design of the interior side of the egress doorways proposed for the subject hotel suites. Article 3.8.2.1. determines which areas and which buildings are required to be barrier-free and which may be exempt.

Since this provision of the OBC deals with an exemption from a specific requirement, an understanding of the requirement itself is essential. In this instance, Sentence 3.8.2.1.(1) outlines the parameters of construction. It specifies that, except under certain circumstances, a barrier-free path of travel shall be provided throughout the entrance floor and all normally occupied floor areas of a building. Sentence 3.8.2.1.(2), including Clause 3.8.2.1.(2)(k), is a series of exceptions to the provisions of Sentence 3.8.2.1.(1). Specifically, Clause (k) exempts the requirement for barrier-free travel "within a suite of residential occupancy".

If a determination is made that an area is required to be barrier-free, then certain additional construction requirements apply. In this regard, Sentence 3.8.3.3.(11) mandates the amount of clear space required beyond the latch side of a door with a closer located in a barrier-free path of travel. The requirement is a minimum of 600 mm when the door swings toward the approach side and a minimum of 300 mm when the door swings away from the approach side. This provision is intended to make it easier for individuals in wheelchairs to open a door and travel through the doorway. As noted, the Applicant intends to provide, depending on the design of the suite, clearance from 127 mm to 711 mm on the interior latch side of suite doors. In some instances, this clearance will not meet the 600 mm minimum where a door swings inward in a barrier-free path of travel.

The Code ensures accessibility into the subject hotel rooms by extending the barrier-free path of travel into residential suites. The key question, however, is whether the interior side of the suite doors, as approached from the inside in order to exit, are considered to be "within" a path or travel that is required to be barrier-free. If so, the clear space requirements of Sentence 3.8.3.3.(11) would be applicable.

4. Provisions of the Ontario Building Code

Clause 3.8.2.1. Areas Requiring Barrier-Free Path of Travel

1. Except where essential obstructions in the work area would make a barrier-free path of travel hazardous, and except as provided in Sentences (2), (3) and (4), a barrier-free path of travel from the entrances required by Sentences 3.8.1.2.(1) and (2) to be barrier-free shall be provided throughout the entrance storey and within all normally occupied floor areas served by a passenger type elevator or other platform equipped passenger elevating device.
2. The provision of a barrier-free path of travel in Sentence (1) does not apply
    j. into suites of residential occupancy that are in storeys other than the entrance storey and that have all entrance doors at floor levels that do not correspond to elevator stop levels,
    k. within a suite of residential occupancy, or

Sentence 3.8.3.3. Doorways and Doors

11. Every door equipped with a closer in a barrier-free path of travel shall have a clear space beyond the latch side of not less than
    a. 600 mm (23? in) where the door swings towards the approach side, and
    b. 300 mm (11? in) where the door swings away from the approach side.

5. Applicant's Position

The Agent for the Applicant advised that it is their intention to add several storeys to an existing 24 storey hotel, providing a total building height of 39 stories. In doing this, it is recognized that the route approaching the suites in the new portion must provide a barrier-free path of travel in accordance with OBC requirements. The additional floors have been designed in such a way that accessibility to the suites has been improved relative to the design of the existing floors.

The Agent contended that "within a guest suite, there is no basis for requiring a space next to the latch side of the suite entry doors as a barrier-free path of travel is not required within a residential suite (OBC 3.8.2.1(2)(k)." The Agent also advised that there is a prior ruling by the Building Code Commission in

respect to this same issue. The Commission found, as is the Applicant's position, that there was no requirement for a barrier-free path of travel "within" a residential suite. In this regard, the design of the suites meets the specific parameters outlined in the Code.

The Applicant went on to state that both the existing and proposed portions of the hotel are fully sprinklered and that 3 accessible rooms are provided in the existing part of hotel.

In conclusion, the Applicant acknowledged that the Code requirements are not perfect; there are some inconsistencies. He emphasized that, in this case, the current OBC requirements did not mandate the 600 mm clear distance being requested by the Respondent. If this is an appropriate requirement and whether the OBC needs to be amended is a policy question for the Housing Development and Buildings Branch of the Ministry of Municipal Affairs and Housing. It should not impact on the Commissions ruling in this instance.

6. Respondent's Position

The Designate for the Respondent submitted that Clause 3.8.2.1.(2)(j) requires a barrier-free path of travel on floors with elevator stops. A barrier-free path of travel, therefore, is required into the suites of the subject hotel. As the doorway is located in the path of travel, the Applicant is thus expected to comply with Sentence 3.8.3.3.(11) by providing 600 mm of clear space on the latch side of the door when the door swings into the unit, as is the case in this instance.

The Designate questioned why access to balconies and the doorway to at least one bathroom were required to provide enough clearance to be considered barrier-free when approached from the interior of a unit. The same standards, he suggested, should apply to the interior doorway of the suites and therefore Sentences 3.8.3.3.(10) and 3.8.3.3.(11) of the OBC are applicable.

The Designate acknowledged the Building Code Commission ruling on a similar application but questioned what, if anything, had happened as a result of the Commission's Recommendation to the Housing Development and Buildings Branch. It was recommended that the "Branch review these aspects of the Ontario Building Code to examine the possibility of amending such provisions to allow for greater ease of barrier-free egress with respect to hotels and similar use buildings that provide short term accommodation where occupants may not be familiar with their surroundings." The Designate still felt strongly that the barrier-free access provisions should apply in this instance. They are concerned that, without proper clearance, a disabled person may not be able to adequately move about or get out of one of these suites.

In conclusion, the Designate advised there are inconsistencies in the Code. It is their opinion that the interpretation of this issue could be viewed either way. In addition, the Designate emphasized that they would like to see such inconsistencies clarified, as recommended in the previous Commission ruling.

7. Commission Ruling

It is the decision of the Building Code Commission that Clause 3.8.2.1.(2)(k) of the Ontario Building Code, which permits an exemption from the requirement to provide barrier-free accessibility "within" residential suites, also applies to the design of the interior side of the egress doorways proposed for the units in the Sheraton Fallsview Hotel, Stanley Avenue and Livingstone Street, Niagara Falls, Ontario.

8. Reasons

i. Sentence 3.8.2.1.(1) specifies the floor areas that require a barrier-free path of travel. Sentences 3.8.1.2.(2), (3) and (4) provide a list of exemptions to Sentence (1). Since a barrier-free path of travel within a suite of residential occupancy in Sentence (1) is listed as one of the exemptions, the requirements of Article 3.8.3.3. would not apply.

9. Recommendation

The Building Code Commission recommends that the Housing Development and Buildings Branch review these aspects of the Ontario Building Code to examine the possibility of amending such provisions to allow for greater ease of barrier-free egress with respect to hotels and similar use buildings that provide short term accommodation where the occupants may not be familiar with their surroundings.

Dated at Toronto this 27 th day in the month of July in the year 2000 for application number 2000-56.

BCC Ruling No. 00-36-768

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 00-36-768

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentences 3.2.2.10.(1) and (2) and 3.2.5.4.(1) and Article 3.2.5.5. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Robin Ng, Principal, Ng Chee Architects, Toronto, Ontario, for the resolution of a dispute with Mr. Gerry Bilous, Chief Building Official, City of Oshawa, to determine whether the new sprinklered facility separated from an existing building by a firewall, but which is proposed to be constructed without facing a street for fire fighting purposes or a fire access route, provides sufficiency of compliance with Sentences 3.2.2.10.(1) and (2), Sentence 3.2.5.4.(1), and Article 3.2.5.5. of the Ontario Building Code at the Thorntonview Long Term Care Facility, 186 Thornton Road South, Oshawa, Ontario.

APPLICANT
Mr. Robin Ng, Principal
Ng Chee Architects
Toronto, Ontario

RESPONDENT
Mr. Gerry Bilous
Chief Building Official
City of Oshawa

PANEL
Dr. Kenneth Peaker, Chair
Mr. John Guthrie
Mr. Len King

PLACE
Toronto, Ontario

DATE OF HEARING
July 27th, 2000

DATE OF RULING
July 27th, 2000

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Mr. S. Kwan Lo
Manager, Permit Services
City of Oshawa
Designate for the Respondent

RULING

1. The Applicant

Mr. Robin Ng, Principal, Ng Chee Architects, Toronto, Ontario, has applied for a building permit under the Building Code Act, 1992 to extend an existing building known as the "Thorntonview Long Term Care Facility" located at 186 Thornton Road South, Oshawa, Ontario.

2. Description of Construction

The Applicant is proposing to extend an existing one-storey long term care facility by constructing a new 1581.48 m^2, two-storey structure to the rear (or north) of the present building. Both the existing and the proposed construction have a Group B, Division 2 - Care and Treatment occupancies. The buildings are and will be of combustible construction and are to be equipped with a fire alarm system. The new facility will be fully sprinklered and will be separated from the existing building by a firewall. Doors in the firewall, however, will allow intercommunication between the new structure and the existing building.

The construction in dispute involves the fact that the new structure will not face a street, nor will it be provided with a fire access route. The Applicant is, however, proposing to sprinkler the presently unsprinklered central portion of the existing building that would abut the link to the new facility.

The lack of access to the proposed building is primarily the result of the physical constrains of the site in question. The property is bordered to the east by Thornton Road South, which is the only municipal roadway adjacent to the property. (There is a fire access route to the front of the existing building connected to this road.) Between Thornton Road South and the east exposing walls of both the new and existing buildings is a very steep slope. Grading this slope to provide an access route/street to the proposed facility is, in the opinion of the Applicant, impractical. In addition, the site of the new building is bounded to the north by a flood plain, to the west by a river and to the south by the existing building, the length of which will completely preclude access to the new building.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the new sprinklered facility separated from an existing building by a firewall, but which is proposed to be constructed without facing a street for fire fighting purposes or a fire access route, provides sufficiency of compliance with Sentences 3.2.2.10.(1) and (2), Sentence 3.2.5.4.(1), and Article 3.2.5.5. of the Ontario Building Code.

The first provision, Sentence 3.2.2.10.(1), requires that every building face a street conforming to Articles 3.2.5.5. and 3.2.5.6. However, Sentence 3.2.2.10.(2) then permits, for the purposes of establishing construction requirements for buildings based on their occupancy, size and height and complying with fire fighting requirements, that a fire access route can be considered as a street if it conforms to Subsection 3.2.5. In addition, Sentence 3.2.5.4.(1) requires that buildings of a certain size also provide a fire access route directly to specific areas of a building, thus ensuring that if the structure is large enough that continuous access is provided from the street onto the property and to particular areas of the building. Sentence 3.2.5.4.(1) is a separate requirement than that of Article 3.2.2.10. and becomes applicable when a building surpasses the height and area thresholds it sets out. The subject building is of a size that it is required to both face a street and provide a fire access route.

The requirements of Article 3.2.5.5. expand upon the above concept. It details the standards to be met when determining the location of a fire access route where one is required. This Article requires that, for a building not provided with a fire department connection, a fire access route must be located between three and fifteen metres from the main entrance and other required openings of the building face. This access route must be designed in such a way that it provides an unobstructed path of travel not longer than 45 metres from the pumper vehicle to the main entrance of the building, and not longer than 90 metres measured from the fire hydrant to the main entrance of the building.

As noted, no street or access route is being proposed for the new building. In lieu of these, the Applicant is proposing to fully sprinkler the central portion of the existing building that is to abut the connecting

portion between buildings. The issue to be considered therefore is whether partial sprinklering of the existing building can sufficiently compensate for the Building Code requirements of facing a street and providing an access route.

4. Provisions of the Ontario Building Code

Sentence 3.2.2.10. Streets

1. Every building shall face a street located in conformance with the requirements of Articles 3.2.5.5. and 3.2.5.6. for access routes.
2. For the purposes of Subsections 3.2.2. and 3.2.5. an access route conforming to Subsection 3.2.5. is permitted to be considered as a street.

Sentence 3.2.5.4. Access Routes

1. A building which is more than 3 storeys in building height or more than 600 m^2 (6,460 ft^2) in building area shall be provided with access routes for fire department vehicles
    a. to the principal entrance, and
    b. to each building face having access openings for fire fighting as required by Articles 3.2.5.1. and 3.2.5.2. (See appendix A.)

Article 3.2.5.5. Location of Access Routes

1. Access routes required by Article 3.2.5.4. shall be located so that the principal entrance and every access opening required by Articles 3.2.5.1. and 3.2.5.2. are located not less than 3 m (9 ft 10 in) and not more than 15 m (49 ft 3 in) from the closest portion of the access route required for fire department use, measured horizontally from the face of the *building*.
2. Access routes shall be provided to a *building* so that
    a. for a *building* provided with a fire department connection, a fire department pumper vehicle can be located adjacent to the hydrants referred to in Article 3.2.5.16.,
    b. for a *building* not provided with a fire department connection, a fire department pumper vehicle can be located so that the length of the access route from a hydrant to the vehicle plus the unobstructed path of travel for the fire fighter from the vehicle to the *building* is not more than 90 m (295 ft 3 in), and
    c. the unobstructed path of travel for the fire fighter from the vehicle to the *building* is not more than 45 m (147 ft 8 in).

3. The unobstructed path of travel for the fire fighter required by Sentence (2) from the vehicle to the *building* shall be measured from the vehicle to the fire department connection provided for the *building*, except that if no fire department connection is provided, the path of travel shall be measured to the principal entrance of the *building*.
4. If a portion of a *building* is completely cut off from the remainder of the *building* so that there is no access to the remainder of the *building*, the access routes required by Sentence (2) shall be located so that the unobstructed path of travel from the vehicle to one entrance of each portion of the *building* is not more than 45 m (147 ft 8 in).

5. Applicant's Position

The Applicant submitted that the construction of the required street/fire access route for the new addition cannot practically be achieved in this location because of the characteristics of the site. There is a steep escarpment on one side of the building and a river and flood plain on the other. In an attempt to create an access route, the Applicant proposed that firefighter access could be provided through a heavily sprinklered area at the middle front of the existing building which would lead to the new addition.

The Applicant submitted the following arguments to demonstrate sufficiency of compliance with the requirements of the OBC:

1. It is unrealistic to expect that, if there is a fire in the proposed addition, there would be an impediment to firefighter access to the addition in the existing building.

   "The Fire Safety Plan will address the necessity of maintaining clear access between the main entrance of the existing building and the door in the fire wall (sic) separating the existing building from the addition.

2. If a fire were to occur in the existing building, it would not be reasonable to expect that a fire would occur simultaneously in the addition.
3. The allowance in OBC 3.2.5.5.(4) whereby a 45 m distance from a fire vehicle to an entrance of a portion of a building completely cut off from the remainder of the building is permitted, effectively constitutes an exception to the requirement for a maximum 15 m distance from a fire route to a main entrance which generally applies.

   "The actual distance from the door in the fire wall (sic) providing access to the addition to the fire route is less than 24 m - considerably less than the 45 m allowed in OBC 3.2.5.5.(4).

"The fact that, by virtue of the fire doors in the fire wall (sic), the addition is not 'completely cut off' from the existing building, may be appreciated as being advantageous in that direct access is provided to the addition from the vehicle and the main entrance containing the fire alarm annunciator.

"This is superior to a situation where there is a considerable distance to travel around the exterior of the building from the fire department response point to a remote entrance in a 'completely cut off' portion of the building.

4. The existing building is subdivided by fire walls (sic). The owner's representative has indicated that the central portion of the existing building containing the firefighter access route from the existing main entrance to the door to the addition may be sprinklered. Such sprinklering would cover the entire centre portion of the existing building between fire walls (sic) separating such portion from the east and west wings containing patient rooms."

6. Respondent's Position

The Respondent advised that the City welcomed the development of this project and recognized the difficulties stemming from the physical constraints on site. However, he submitted that the new structure is a separate building, and is therefore required to be provided with a fire access route in compliance with the Ontario Building Code.

The Respondent outlined that they would be content with the proposal if the new building was of noncombustible construction and if the middle front portion of the existing building was sprinklered.

7. Commission Ruling

It is the decision of the Building Code Commission that the new sprinklered facility, separated from the existing building by a firewall, but which is proposed to be constructed without a fire access route, does not provide sufficiency of compliance with Sentences 3.2.2.10.(1) and (2), Sentence 3.2.5.4.(1), and Article 3.2.5.5 of the Ontario Building Code at the Thorntonview Long Term Care Facility, 186 Thornton Road South, Oshawa, Ontario.

8. Reasons

i. The new structure is considered to be a separate building and is, therefore, required to face a street or a fire access route considered as a street in accordance with Article 3.2.2.10. In addition, due to the size of the proposed new building, at 1581.48 m^2, a fire access route from the street

and onto the property to the principal entrance and each building face having access openings for fire fighting purposes is required in conformance with Article 3.2.5.4. The subject proposal does not provide either.

ii. The proposed sprinklering and access through the existing building is not sufficient to compensate for the level of life safety that would be provided with direct access to the facility for emergency personnel as set out in the Code.

Dated at Toronto this **27th** day in the month of **July** in the year **2000** for application number **2000-44**.

BCC Ruling No. 00-35-767

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 00-35-767

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Articles 3.1.5.16., 3.1.13.3. and Sentence 3.1.13.7.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Bert Steenburgh, General Manager, 1086891 Ontario Inc., Burlington, Ontario, for the resolution of a dispute with Mr. Daniel Mousseau, Chief Building Official, City of Burlington, to determine whether the proposed sprinklering of certain bathrooms, offered as a compensating measure in lieu of meeting the required flame-spread rating and smoke developed classification with respect to the as-installed whirlpool bathtubs, provides sufficiency of compliance with Articles 3.1.5.16., 3.1.13.3. and Sentence 3.1.13.7.(1) of the Ontario Building Code at Units 1 to 9, Fifth Floor, Burlington Square Plaza Garden Apartments, 1460 Ghent Avenue, Burlington, Ontario.

APPLICANT
Mr. Bert Steenburgh, General Manager
1086891 Ontario Inc.
Burlington, Ontario

RESPONDENT
Mr. Daniel Mousseau
Chief Building Official
City of Burlington

PANEL
Dr. Kenneth Peaker, Chair
Mr. John Guthrie
Mr. Len King

PLACE
Toronto, Ontario

DATE OF HEARING
July 27th, 2000

DATE OF RULING
July 27th, 2000

APPEARANCES
Mr. Myron Karp, Principal
Karp Namisniak Yamamoto Architects Inc.
Burlington, Ontario
Agent for the Applicant

Mr. Terry Hewitson
Building Official
City of Burlington
Designate for the Respondent

RULING

1. The Applicant

Mr. Bert Steenburgh, General Manager, 1086891 Ontario Inc., Burlington, Ontario, has received a building permit under the Building Code Act, 1992 and has renovated an existing building, creating residential suites on the fifth floor (Units 1 to 9) at the Burlington Square Plaza Garden Apartments, 1460 Ghent Avenue, Burlington, Ontario.

2. Description of Construction

The Applicant has carried out renovations to an existing 17 storey building having a building area of 22, 275 m^2. The structure is of noncombustible construction and is equipped with a sprinkler system (in the commercial area only), a fire alarm system and a standpipe and hose system. The building, previously used for commercial purposes, now has a Group C major occupancy classification.

As part of the renovation of the building for residential purposes, the storage units located on the fifth floor of the building, have been converted into nine residential suites. Within each of these suites the bathroom has been designed to include an acrylic whirlpool bathtub. The tubs are CSA approved, however, they have not been tested under the guidelines set out in the Ontario Building Code. As a

result, it has not been determined whether the tubs meet the flame-spread rating or smoke developed classification requirements for plumbing fixtures within residential units of a high building. Based on similar testing of the acrylic material used in these tubs, it appears unlikely that the fixtures would meet all of the OBC requirements.

As compensation for the likely reduction in the performance level of the nine tubs, the Applicant is proposing to install wall-mounted sprinklers in each of the affected bathrooms.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed sprinklering of the bathrooms, offered as a compensating measure in lieu of confirmation that the whirlpool tubs meet the flame-spread rating and smoke developed classification requirements, provides sufficiency of compliance with in Articles 3.1.5.16., 3.1.13.3. and Sentence 3.1.13.7.(1) the Ontario Building Code.

As outlined in Article 3.1.5.16., combustible plumbing fixtures are permitted within a building that is required to be of noncombustible construction provided that they do not have a flame-spread rating and smoke developed classification more than the walls of the room in which they are installed. Article 3.1.13.3. specifies that the flame-spread rating for interior walls and ceilings for a residential bathroom suite shall not be more than 200.

In this instance, the acrylic whirlpool tubs have not been specifically analyzed to determine whether their flame-spread rating and smoke developed classification are in conformance with CAN/ULC-S102-M, "Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies". It is anticipated however, that if tested, the bathtubs may fail to meet the requirements of the OBC.

Further, Sentence 3.1.13.7.(1) outlines the requirements for flame-spread rating and smoke developed classification in high buildings. As mentioned above, the building in this instance is 17 storeys in building height, however, the installed bathtub fixtures do not appear to meet the parameters outlined in Table 3.1.13.7. This table requires a maximum smoke developed classification of 300 and a maximum flame-spread rating of 200.

It may be noted that Sentence 3.1.13.7.(2) permits the smoke developed classification to exceed the maximum levels outlined in Table 3.1.13.7., for buildings not containing a Group B major occupancy, provided that the building is sprinklered and that the sprinkler system is electrically supervised.

Sprinklering is proposed as a compensating measure in this instance however, it would be limited to the bathrooms containing the whirlpool tubs. The building, with the exception of the commercial areas, is not fully sprinklered.

4. Provisions of the Ontario Building Code

Articles 3.1.5.16. Combustible Plumbing Fixtures

(1) Combustible plumbing fixtures, including wall and ceiling enclosures that form part of the plumbing fixtures, are permitted in a building required to be of noncombustible construction provided they are constructed of material having a flame-spread rating and smoke developed classification not more than that permitted for the wall surface of the room or space in which they are installed.

Article 3.1.13.3. Bathrooms in Residential Suites

(1) The flame-spread rating of interior wall and ceiling finished for a bathroom within a suite of residential occupancy shall not be more than 200.

Sentence 3.1.13.7. High Buildings

(1) Except as permitted by Sentences (2) and (3), the interior wall, ceiling and floor finishes in a building regulated by the provisions of Subsection 3.2.6. shall conform to the flame-spread rating requirements in Articles 3.1.13.2. to 3.1.13.6. and to the flame-spread rating and smoke developed classification values in Table 3.1.13.7.

5. Applicant's Position

By way of background, the Agent for the Applicant explained that, in the conversion of the storage units to residential suites, it was thought to be beneficial, from a leasing point of view, to include acrylic whirlpool bathtubs as a feature of the bathroom facilities. After the tubs were installed, it came to their intention that the Building Code requirements for combustible construction in a combustible building had changed. As a result, they proceeded to seek out information with respect to the flame

spread rating and smoke developed classification for the installed tubs. They contacted the tub manufacturer, Tomlin Industries, who provided various documentation relative to the materials used in the construction of the tub enclosures. The testing of the materials was conducted using ASTM E84 parameters. It was concluded, however, that this could not be compared or converted to measurements relative to the CAN/ULC-S102 standard required. Moreover, Tomlin Industries would not agree to undertake the specific testing required to make a determination on the standards of the tubs. In any event, it was expected that the tubs may not meet the required standards outlined in the OBC.

The Agent went on to submit that, the bathtubs in question can be used in residential suites wherever the high building standards do not apply. He acknowledge, however, that because Section 3.2.7. of the Code does come into play, the tubs do not meet the OBC requirements. Nevertheless, in lieu of these requirements he has proposed to install wall mounted sprinklers in the bathrooms containing the noncompliant tubs. This, he argued, is sufficient compensation to alleviate life safety concerns and would meet the intent of the Building Code.

6. Respondent's Position

The Designate for the Respondent submitted that the ASTM standards are different from the required CAN/ULC-S102 standard outlined in the Code. He suggested that the tubs may, in fact, meet the flame-spread requirements, however, he believes they would be far from meeting the smoke developed classification measurements.

In response to the proposed compensation offered by the sprinklering of the bathroom, the Designate argued that, if a fire were to start in one of these bathrooms, sprinklering of that area may help. If the fire started outside of the bathroom, however, it would most likely overwhelm the area. He acknowledged that the Code makes allowance for combustible fixtures in a building of noncombustible construction where sprinklering is provided, but submitted that the whole building must be sprinklered for this exception to apply. That is not the case in this instance.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed sprinklering of the affected bathrooms, offered as a compensating measure in lieu of meeting the required flame-spread rating and smoke developed classification for the whirlpool bathtubs, provides sufficiency of compliance with Articles 3.1.5.16., 3.1.13.3 and Sentence 3.1.13.7.(1) of the Ontario Building Code for Units 1 to 9 on the fifth floor, Burlington Square Plaza Garden Apartments, 1460 Ghent Avenue, Burlington, Ontario.

8. Reasons

i. The proposed sprinklering, which is not required by the Ontario Building Code, will provide a sufficient increase in the safety for the occupants of the residential units.

ii. The tubs have been tested under ASTM standards and may comply with the flame-spread requirements of the OBC.

iii. Sprinklering of the bathroom area will sufficiently compensate for the expected deficiency in compliance with the CAN/ULC-S102 standard outlined in the Code.

Dated at Toronto this **27th** day in the month of **July** in the year **2000** for application number **2000-37**.

BCC Ruling No. 00-34-766

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-34-766

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Clause 8.2.2.3.(1)(a) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Thomas Leitz, Owner, Toronto, Ontario, for the resolution of a dispute with Ms. Robin Allen, Area Manager, North Bay-Mattawa Conservation Authority, Ontario, to determine whether the working capacity of an existing gravity fed septic tank provides sufficiency of compliance with Clause 8.2.2.3.(1)(a) of the Ontario Building Code at Lot 22, Concession 6, Plan 42R-8123, Township of Seguin/Foley, Ontario.

APPLICANT
Mr. Thomas Leitz, Owner
45 Russel Hill Road
Toronto, Ontario

RESPONDENT
Ms. Robin Allen
Area Manager
North Bay-Mattawa Conservation Authority

PANEL
Mr. Bryan Whitehead, Vice-Chair
Mr. Frank Wright
Mr. Bill Fellner

PLACE
Toronto, Ontario

DATE OF HEARING
July 13th, 2000

DATE OF RULING
July 13th, 2000

APPEARANCES
Mr. Thomas Leitz, Owner
Toronto, Ontario
The Applicant

Ms. Robin Allen
Area Manager
North Bay-Mattawa Conservation Authority
The Respondent

RULING

1. The Applicant

Mr. Thomas Leitz, owner, Toronto, Ontario, has applied for a building permit under the Building Code Act, 1992 to construct a new cabin as an addition to his cottage at Lot 22, Concession 6, Plan 42R-8123, Township of Seguin/Foley, Ontario.

2. Description of Construction

The Applicant is proposing to construct a new one-bedroom cabin on his property which already has a three-bedroom Group C - dwelling unit. The proposed construction will increase the number of bedrooms from three to four and the total number of fixture units from 22 to 28. As a result, the daily design sewage flow will increase from 1700 litres to 2400 litres. The total finished floor area will be 225 m2.

The Applicant is not proposing any changes or upgrades to his existing sewage system, which has been installed in 1993. The existing sewage system is described as a conventional Class 4 sewage treatment facility. It has a 4540 litre septic tank and transmits effluent to a 86 m leaching bed by gravity. The leaching bed comprises six four-inch distribution pipes.

The subject site is a cottage property with minimum slope and is covered with grass. The T-time of the native soil is reported to range between five to six minutes per centimetre. The depth to high groundwater table is six metres.

The construction in dispute involves the working capacity of the existing septic tank.

3. Dispute

The issue at dispute between the Applicant and the Respondent is whether the working capacity of the existing gravity fed septic tank provides sufficiency of compliance with Clause 8.2.2.3.(1)(a) of the Ontario Building Code (OBC). According to this Clause the working capacity of a septic tank servicing a residential occupancy must be twice the calculated daily design sanitary sewage flow for that occupancy (however, regardless of the type of occupancy and daily design sewage flow, a septic tank must in no case have a working capacity less than 3600 litres). As a result, based on calculated daily design sewage flow of 2400 litres, the required tank size for the subject dwelling is 4800 litres. The existing tank is a two compartment tank without a siphon or pump. The inside dimensions of the tank, as described by the Applicant, are 2388 mm (length) by 1523 mm (width) by 1399 mm (depth to the bottom of the outlet). The chamber divider measures as 1523 by 1399 mm with an average thickness of 63.5 mm.

Therefore, at issue is whether the volume of the existing septic tank, when considering its interior dimensions, is adequate for a working capacity of 4800 litres.

4. Provisions of the Ontario Building Code

Clause 8.2.2.3.(1) (a) Septic Tanks

1. The minimum working capacity of a septic tank shall be the greater of 3 600 L and,

    a. in residential occupancies, twice the daily design sanitary sewage flow

5. Applicant's Position

The Applicant submitted that the working capacity of the existing septic tank exceeds the working capacity attributed to it by the manufacturer.

The Applicant argued that manufacturers typically oversize their tanks to accommodate such things as pump chambers and to allow for bowing of forms and un-level tanks. The existing system is a gravity fed system and does not have a pump chamber. Besides he asserted, based on the OBC definition of working capacity (Article 1.1.3.2.) and information regarding the inside dimensions of the existing tank as provided by its manufacturer, the working capacity of the tank is calculated to be 4 953 litres instead

of 4 540 litres stamped on it. As he explained this size has been calculated by subtracting the volume of the chamber divider from the overall volume of liquid accumulated to a depth under the outlet pipe.

Based on this calculation the existing tank meets and exceeds the 4800 litres OBC size requirement for a septic tank to serve a four bedroom dwelling unit with a daily design sewage flow of 2400 litres, he concluded.

6. Respondent's Position

The Respondent submitted that she accepts the working capacity of septic tanks based on the manufacturer=s stamp. She stated that the working capacity of the tank under dispute, as indicated by the manufacturer, is 4 540 litres. If it is not, i.e., if Brooklin and other tanks tanks have a working capacity larger than labelled, installers and regulators should be informed, she argued.

The Respondent then concluded that based on manufacturer's stamp on the existing tank, the existing tank cannot handle the increased calculated flow and is required to be upgraded to an acceptable size as required by the OBC.

7. Commission Ruling

It is the decision of the Building Code Commission that the existing labelled 4 540 septic tank provides sufficiency of compliance with Clause 8.2.2.3.(1)(a) of the OBC on the condition that it is equipped with an effluent filter.

8. Reason/s

1. The required tank volume to permit the additional building is likely contained within the over-sizing of the tank by the manufacturer.
2. The addition of an effluent filter, which will remove part of the Suspended Solids and the Biological Oxygen Demand would compensate for any very small tank volume shortfall.

Dated at Toronto this **13th,** day in the month of **July** in the year **2000** for application number **2000-47**.

BCC Ruling No. 00-33-765

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-33-765

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 8.6.2.2.(2) and Table 8.6.2.2.A. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. John Hyjek, Owner, Oil Springs, Ontario, for the resolution of a dispute with Mr. Bob Hexter, Chief Building Official, County of Lambton, Ontario, to determine whether the proposed Whitewater treatment system discharging to the proposed shallow buried trench sewage system designed to be buried in shallow sand fill provides sufficiency of compliance with Sentence 8.6.2.2.(2) and Table 8.6.2.2.A. of the Ontario Building Code at Lot #10, Concession II, County of Lambton, Ontario.

APPLICANT
Mr. John Hyjek, Owner
Oil Springs, Ontario

RESPONDENT
Mr. Bob Hexter
Chief Building Official
County of Lambton

PANEL
Mr. Bryan Whitehead (Vice Chair)
Mr. Frank Wright
Mr. Bill Fellner

PLACE
Toronto, Ontario

DATE OF HEARING
July 13th, 2000

DATE OF RULING
July 13th, 2000

APPEARANCES
Mr. Ken Dickson
Dickson Environmental Consulting
Wallaceburg, Ontario
Agent for the Applicant

Mr. Mark Wetering
Junior Planner
County of Lambton
Designate for the Respondent

RULING

1. The Applicant

Mr. John Hyjek, R.R. #3, Oil Springs, Ontario, has applied for a building permit under the Building Code Act, 1992 to install a Class 4 sewage system at Lot #10, Concession II, County of Lambton, Ontario. Building Code Act, 1992 to construct a new cabin as an addition to his cottage at Lot 22, Concession 6, Plan 42R-8123, Township of Seguin/Foley, Ontario.

2. Description of Construction

The Applicant is proposing to install a Class 4 shallow buried trench sewage system in order to serve a Group C - residential building currently under construction. The building is described as having two bedrooms, a total of 17 fixture units, and a finished area of 126.34 m2. The calculated daily design sewage flow is 1100 litres.

The proposed system is to consist of a "Whitewater" treatment system with a capacity of 1900 litres per day, a pump chamber and a shallow buried trench system. The shallow buried trench system will consist of four runs of chambers with total length of 40 m. These chambers are to be placed on 150 to 200 mm imported sand fill with a percolation time of less than 10 minutes over a native soil with a percolation time over 125 minutes. The trench system would be covered with a layer of 250 mm pea stone or coarse sand prior to backfilling by the native topsoil. The proposed leaching bed area would be 441 m2 (21 by 21 metres) and the mantle would extend four metres from the pipe. The treated effluent is proposed to be

pumped directly from the treatment unit to the distribution pipes for final disposal. The free access sand filter component of the system, as required by the manufacturer and set out as a condition for approving the Whitewater system by the then-approval authority (the Ministry of the Environment) for soils with a percolation time between 50 to 125 minutes is not proposed.

The site is a 40-hectare farm having a minimal slope and is mostly covered with bush. The depth to bedrock or high groundwater table, as described by the Applicant, is 1.8 metres. The percolation time of the native soil is reported to be greater than 125 minutes.

The water to the site is supplied by municipal waterline.

The construction in dispute involves the proposed change in configuration of the Whitewater treatment system.

3. Dispute

The issue at dispute between the Applicant and the Respondent is whether the proposed Whitewater treatment system discharging to the proposed shallow buried trench system designed to be buried in shallow sand fill provides sufficiency of compliance with Sentence 8.6.2.2.(2) and Table 8.6.2.2.A of the OBC (Ontario Building Code).

Sentence 8.6.2.2.(2) sets out standards for the quality of the effluent that is allowed to be discharged to a shallow buried trench system. According to this provision, the effluent applied to a shallow buried trench system must not exceed the maximum concentrations given in column three of Table 8.6.2.2.A, which identifies the thresholds for the tertiary level effluent. The treatment units listed in the Supplementary Guidelines to the 1997 OBC, including the Whitewater system, are also deemed to comply with the requirements of column three of Table 8.6.2.2.A (Sentence 8.6.2.2.(5)).

Table 8.6.2.2.A.
Other Treatment Unit Effluent Quality Criteria
Forming Part of Sentence 8.6.2.2.(1), (2) and (5)

Parameter	Secondary Effluent1	Tertiary Effluent1
BOD5	40	15
CBOD5	30	10

Suspended Solids	30	10
Column 1	2	3

Note to Table 8.6.2.2.A.:
1. Maximum concentration based on 30 day averages in milligrams per litre (mg/L)

Designers/installers may either use a treatment unit that is listed and described in the Supplementary Guidelines, or a treatment unit that complies with Table 8.6.2.2.A. Where a treatment unit is selected from the Supplementary Guidelines to the 1997 OBC, the unit shall follow all the requirements specified for that unit. Otherwise, the installation shall be according to the requirements of Part 8.

As described in the Supplementary Guidelines to the 1997 Ontario Building Code, when installing a Whitewater treatment unit in soils between 50 to 125 min/cm, a single pass free access sand filter must also be installed. However, for the proposed system it appears that the Applicant is not intending to install such a sand filter according to the Supplementary Guidelines. Instead, he is proposing that the free access sand filter be replaced with a layer of sand fill placed beneath the trench system.

Another issue raised during the hearing was the requirement for a mantle as per Clause 8.7.4.2.(1)(a) that concerns the leaching bed fill proposed by the Applicant in lieu of the free access sand filter. According to this clause, if the absorption trenches of a leaching bed are constructed in leaching bed fill with a percolation time identified under Clause 8.7.2.1.(1)(b), this fill (in this case, the 150 mm sand fill with a percolation time of less than 10 minutes proposed to be placed under the shallow buried trench system) must extend at least 15 meters beyond the outer distribution pipes in direction that provides horizontal movement of the effluent entering the soil. The mantle proposed by the Applicant, extends only four meters beyond the distribution pipes.

Therefore, at issue is whether the proposed elimination of a free access sand filter and the addition of 150 mm sand fill under the shallow buried trench system would affect the sufficiency of the system in complying with the relevant provisions of the OBC.

4. Provisions of the Ontario Building Code

Sentence 8.6.2.2.(2) Other Treatment Units

1.

2. A treatment unit that is used in conjunction with a leaching bed constructed as shallow buried trenches shall be designed such that the effluent does not exceed the maximum concentrations stipulated in Column 3 of Table 8.6.2.2.A.

Clause 8.7.4.2. Construction Requirements

1. A leaching bed comprised of absorption trenches may be constructed in leaching bed fill provided that the unsaturated soil or leaching bed fill complying with Clause 8.7.2.1.(1)(b) extends

    a. ,
    b. for at least 15 m beyond the outer distribution pipes in any direction in which the effluent entering the soil will move horizontally.

Clause 8.7.2.1. General Requirements

1. A leaching bed shall not be located:

    a. ,
    b. in soil or leaching bed fill having a percolation time

        i. less than one minute, or greater than 125 minutes if constructed as a shallow buried trench, or

        ii. less than one minute, or greater than 50 minutes for all other leaching beds.

5. Applicant's Position

The Agent for the Applicant submitted that the elimination of the free access sand filter is compensated for by placing the chamber system on a layer of sand fill with a percolation time of less than 10 min/cm.

The Agent started his argument by addressing the issues raised in the Technical Background Information (TBI) report prepared by the Housing Development and Buildings Branch of the Ministry. With respect to Sentence 8.7.4.1.(1) and Table 8.7.4.1.A. (loading requirements), the Applicant argued that the loading rate of the proposed system is 2.49 L/m2/day, which is less than the loading rate of 4.0 L/m2/day permitted by the OBC for soils with a percolation time of more than 50 min/cm.

The Agent continued that the low loading rate would compensate for the mantle size, which is proposed to extend only four metres beyond the outer distribution pipes instead of the 15 metre requirement under the OBC. With a loading rate less than the maximum specified by the OBC, there should be no lateral flow that requires a full mantle, he argued. However, comments made regarding the requirement for a minimum sand fill of 250 millimetres (Clause 8.7.4.2.(1)(a)) resulted in the Agent volunteering to increase the sand fill to 250 millimetres.

The Agent also considered that with a low loading rate and partial evapotranspiration of the effluent before reaching to the subsoil, the formation of biomat and resultant clogging of the pores of the native soil is unlikely. The Agent suggested that he had reached an agreement with the County regarding the size of the mantle.

The Agent argued that the system generally used in the County of Lambton is a conventional filter bed system. This system utilizes filter media sand in the bed to treat the effluent to the secondary level. As a result, the effluent that is applied to the top of the contact area sand for the final disposal has a secondary quality. According to the proposed design, however, a tertiary level effluent will be applied to the same sand fill prior to final discharge to the environment, he emphasized.

To support his assertion, the Agent submitted lab results from the same type of system installed in Windsor that demonstrates the effluent quality. This installed system has neither a septic tank proceeding the Whitewater unit nor a free access sand filter following it. However, from the lab results, it provides a tertiary level effluent, he argued.

The Agent then argued that the MOE classification of a Whitewater unit allowed the elimination of the free access filter sand, if the percolation time of the native soil is less than 50 minutes. The 150 mm sand fill (subsequently proposed to be 250 mm) proposed to be located under the shallow buried trench system will have a percolation time of less than 50 minutes and it was argued that the sand filter was no longer required.

The Agent concluded that instead of cutting a shallow buried trench system into the native subsoil, he is proposing to bury it in shallow sand fill and he offers this as a compensating measure for the free access sand filter.

6. Respondent's Position

The Respondent submitted that the OBC's recognition of "Whitewater" treatment systems and its description in the Supplementary Guidelines only concerns the treatment component of the sewage

system and that the sewage system itself must comply with the related provisions of the Ontario Building Code.

The Respondent argued that the requirement for a free access sand filter in treatment systems such as Whitewater systems is to "provide a sufficient level of treatment to ensure proper disposal in heavier soils". There is no evidence to show that the proposed sand under the chamber is equivalent to the required free access sand filter and that it can provide the same level of treatment equivalent to the approved design. Thus, it is the County's position that the proposed sand fill as a compensating measure for the free access sand filter cannot be deemed acceptable.

The Respondent continued that the "construction of the absorption trenches including the shallow buried trench system does not refer to a reduction of the construction requirement itself". So it is the County's opinion that the chamber system should comply with the OBC requirements for shallow buried trench systems. The Respondent indicated that they had not initially been concerned about the absence of the mantle, however, during the hearing the issue of the mantle became more important.

In summation, the Respondent stated that the installation of Whitewater treatment unit is acceptable if it is installed in conjunction with the required free access sand filter, as described in the Supplementary Guidelines to the 1997 OBC.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed Whitewater treatment system discharging to a shallow buried trench on a 150 mm sand fill layer, without the provision of a free access sand filter and without a full mantle fails to provide sufficiency of compliance with Clause 8.7.4.2.(1)(b). The 15 metre mantle must be supplied and the sand fill must be at least 250 mm thick.

The Commission agrees that the Whitewater system likely meets the requirements of Sentence 8.6.2.2.(2) because it has been included within the Supplementary Guidelines and a free access sand filter may not be required by Sentence 8.6.2.2.(2). However, no information was provided relative to Clause 8.9.2.2 (1)(b) that the manufacturer does not require the free access sand filter where the percolation time of the native soil is between 50 and 125 minutes per centimetre

8. Reason/s

a. A 250 mm sand mantle is required by Clause 8.7.4.2 (1)(b) of the OBC. The low loading rate does not negate the need for a mantle as the loading rate not only could be exceeded during peak uses, but it also may be augmented by precipitation, both resulting in effluent moving laterally.
b. The Commission is not satisfied that a 150 or 250 mm thick layer sand fill is sufficient to "mask" the percolation time of the native soil, and as such it can not compensate for the high percolation rate of the native soil and elimination of the free access sand filter.
c. Based on the fact that the "Whitewater" system is a listed treatment unit under the OBC (SG-5), it can be assumed that the equipment meets the requirements of Table 8.6.2.2.A. If the equipment meets these requirements, under Sentence 8.6.2.2.(2), there is no requirement for a free access sand filter.
d. The equipment must be installed and operated in accordance with the requirements of the manufacturer (Clause 8.9.2.2.(1)(b)). Since the understanding in the past has been for the requirement for the free access sand filter, the manufacturer has placed this requirement in their design. Therefore, the free access sand filter is required, unless the manufacturer is prepared to make submissions under 8.6.2.2.(2).

Dated at Toronto this **13th,** day in the month of **July** in the year **2000** for application number **2000-38**.

BCC Ruling No. 00-32-764

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-32-764

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 8.6.2.2. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Rick Patterson, owner, Petrolia, Ontario, for the resolution of a dispute with Mr. Bob Hexter, Chief Building Official, County of Lambton, Ontario, to determine whether the as-built sewage system consisting of two consecutive 4,500 L septic tanks equipped with an effluent filter (and offered as primary and secondary treatment units) and an in-ground disposal bed at R.R. # 1 Petrolia, 5072 Petrolia Line, Petrolia, Ontario provides sufficiency of compliance with Article 8.6.2.2. of the Ontario Building Code.

APPLICANT

Mr. Rick Patterson, Owner

5072 Petrolia Line

Petrolia, Ontario

RESPONDENT

Mr. Bob Hexter

Chief Building Official

County of Lambton

PANEL

Mr. Bryan Whitehad, Vice-Chair

Mr. Frank Wright

Mr. Bill Fellner

PLACE

Toronto, Ontario

DATE OF HEARING

July 13, 2000

DATE OF RULING

July 13, 2000

APPEARANCES

Mr. Rick Patterson, Owner

5072 Petrolia Line

Petrolia, Ontario

The Applicant

Mr. Mark Wettering

Junior Planner

County of Lambton

Designate for the Respondent

RULING

1. The Applicant

Mr. Rick Patterson, owner, 5072 Petrolia Line, Ontario, has received an order to comply under the Building Code Act, 1992 to remedy the deficiency of the septic system installed at R.R. # 1 Petrolia, 5072 Petrolia Line, Petrolia, Ontario.

2. Description of Construction

The Applicant has constructed a sewage system with a Class 4 disposal bed to serve a newly built Group C - residential occupancy. The building is described as a single detached dwelling unit containing three bedrooms and 18 fixture units with a finished area of 192 m2. The calculated daily design sewage flow is 1600 litres and the building is served by municipal water supply.

In 1997, the Applicant was issued a certificate of approval under the Environmental Protection Act to install a fully raised leaching bed system. To avoid the installation of a raised bed disposal system, the Applicant used a holding tank until he was required to install an approved system in 1998. This coincided with the transfer of septic regulations to the Ontario Building Code which allowed installation of shallow buried trench systems in soils with a percolation time of less than 125 min/cm. The Applicant then installed an in-ground sewage system designed by himself.

The as-built septic system is described as containing two 4500 L concrete septic tanks and a disposal bed covering an area of 160 m2. The septic tanks have been installed in series and each of them is equipped with an effluent filter attached to their outlets. The effluent from the second tank is discharged to the disposal bed for final disposal. The disposal bed consists of six 21-metre runs. Each of the runs measures approximately 105 mm in width and 900 mm in depth. The runs have been filled with a layer of dunganon drainage stone (87 mm in size) to a depth of 462 mm to 513 mm, and are capped with non-corrosive PVC perforated pipes. These pipes have been covered with a layer of dunganon drainage stone and geo-textile blanket prior to backfilling with 77 to 154 mm of topsoil.

The subject site is a 40-hectare "county lot" with minimal slope and is covered with grass. The soil profile of the site is clay and loam with a percolation time of greater than 50 minutes. No soil evaluation has been carried out to determine the depth to the bedrock or the level of the high groundwater table.

The construction in dispute involves the design and the level of the treatment offered by the proposed system.

2. Dispute

The issue at dispute between the Applicant and the Respondent is whether the as-built sewage system complies with the requirements of the Ontario Building Code for treatment units under Article 8.6.2.2.

Article 8.6.2.2. sets out the thresholds for concentrations of BOD5 (the five day biochemical oxygen demand), CBOD5 (the five day carbonaceous biochemical oxygen demand), and TSS (total suspended solids) in secondary and tertiary level effluent and governs the design criteria to be met in the installation of secondary and tertiary treatment units.

Sentence 8.6.2.2.(1) requires every treatment unit, excluding septic tanks, to be designed in such a way that it provides a secondary level effluent with maximum concentrations given in column two of Table 8.6.2.2.A. However, if the treatment unit is connected to a shallow buried trench disposal system, the effluent must not exceed concentrations stipulated in column three of the same table, i.e. it must have a tertiary level quality (Sentence 8.6.2.2.(2)). In the as-built system, the septic tanks are offered as treatment units that ultimately will provide a secondary level effluent.

Table 8.6.2.2.A.
Other Treatment Unit Effluent Quality Criteria
Forming Part of Sentence 8.6.2.2.(1), (2) and (5)

Parameter	Secondary Effluent1	Secondary Effluent1
BOD5	40	15
CBOD5	30	10
Suspended Solids	30	10
Column 1	2	3

Note to Table 8.6.2.2.A.:

1. Maximum concentration based on 30 day averages in milligrams per litre (mg/L)

Sentences 8.6.2..2.(3) and 8.6.2.2.(4) require all treatment units, excluding septic tanks, to be equipped with an audible and visual warning alarm and that they permit the sampling of the effluent, respectively. The as-built septic tanks are equipped with sampling points, which are accessible from grade, but they are not equipped with warning alarms (although there are no pumps to monitor).

Sentences 8.6.2.2.(5) and 8.6.2.2.(6) concern treatment units described in the Supplementary Guidelines to the 1997 OBC. The as-built septic system does not include any of the treatment units listed in the Supplementary Guidelines to the OBC.

Therefore, at issue is whether the design and performance level of the as-built septic system sufficiently meet the OBC's requirements discussed above.

3. Provisions of the Ontario Building Code

Article 8.6.2.2 Other Treatment Units

(1) A treatment unit other than those described in Article 8.6.2.1. and Sentence (2) shall be designed such that effluent does not exceed the maximum concentrations stipulated in Column 2 of Table 8.6.2.2.A.

(2) A treatment unit that is used in conjunction with a leaching bed constructed as shallow buried trenches shall be designed such that the effluent does not exceed the maximum concentrations stipulated in Column 3 of Table 8.6.2.2.A.

(3) All treatment units referred to in Sentences (1) and (2) that contain mechanical components shall be equipped with an audible and visual warning alarm so located to warn the occupants of the building served or the operator of the treatment unit of a malfunction in the operation of the treatment unit.

(4) All treatment units referred to in Sentences (1) and (2) shall permit the sampling of the effluent.

(5) A treatment unit described in the Supplementary Guidelines to the 1997 Ontario Building Code is deemed to comply with the requirements of Table 8.6.2.2.A. as set out in the Guideline.

(6) Every manufacturer or distributor of a treatment unit shall provide, for each model sold, printed literature that describes the unit in detail and provides complete instructions regarding the operation, servicing, and maintenance requirements of the unit and its related components necessary to ensure the continued proper operation in accordance with the original design and specifications.

5. Applicant's Position

The Applicant submitted that the tests done on the effluent at the very early stages of the system's operation show a high level of reduction in concentrations of TSS and BOD5.

In support of his argument, the Applicant submitted the results of the tests done by an independent lab as well as the lab facilities where he works. The sample analysed by the independent lab one month after the system's installation shows the concentration of the BOD5 as 13.2 mg/L and the concentration of TSS as 57.3 mg/L. However, two months later, the same lab determined the level of TSS as 8.8 mg/L. On the other hand, the tests done in the Applicant's work place lab at different stages of the system's operation show a reduction in concentration of TSS from 345.14 mg/L in the primary effluent to an average of 19.60 mg/L in the secondary effluent. The Applicant explained that the reason for this gradual decrease is due to the system working on the principal of increased settling time within the two treatment units where anaerobic digestion and solid settling occurs. The high level of TSS at the beginning is, therefore, due to inadequate settling time. However, as the test results show, the performance level of the system has increased over time and so too has the quality of the effluent improved. This may also result from the maturing of the biomat on the effluent filters.

In respect of the installation of a smaller bed, the Applicant argued that his property could not accommodate longer distribution pipes and that the composition of the bed, the high quality of the effluent applied to it, and the low level of water consumption compensate for this deficiency.

The Applicant concluded that in his opinion the as-built system is equivalent to a Class 4 septic system with different bed composition, but the same level of performance as required by the OBC. The successful operation of the system over the past two years without any effluent breaking out or odour problems of any sort despite all variations of climate conditions, proves the system's effectiveness and its sufficiency of compliance with requirements of the OBC.

6. Respondent's Position

The Respondent submitted that the test results provided by the Applicant are not extensive enough to prove the level of treatment provided by the septic tanks. In addition, the installed leaching bed does not comply with the requirements of the OBC provided in Part 8.

At the outset, the Respondent noted the timing for approvals in relation to the transfer of the septic regulations to the OBC. The Respondent stated that the Applicant installed the subject septic system without a permit because of his dislike for the then-required raised bed system on clay soils under the Environmental Protection Act (EPA). The Applicant had discussed the matter of an experimental sewage system with the Ministry of the Environment (MOE). However, he has never formally applied to MOE for a permit for such an experimental sewage system. Instead, the Applicant has only been issued a temporary use permit to install the septic tanks as holding tanks until he applies for a shallow buried trench sewage system approval (formerly considered by the MOE as an experimental system), which was to be allowed in the County of Lambton under the EPA. However, the regulations concerning the construction of private sewage systems were transferred from the EPA to Building Code Act, where shallow buried trench systems were classified as Class 4 systems, providing tertiary effluent level treatment for domestic sewage.

The Respondent argued that as the Applicant's certificate of approval under the EPA had expired, the design of the septic system must comply with the requirements of the OBC. However, despite the referencing of seven different tertiary treatment units in the Supplementary Guidelines to the OBC, the Applicant has never approached the County (the Respondent) to amend his certificate under the EPA, nor has he designed a system that sufficiently meets the requirements of the OBC and provides the performance level mandated by the OBC.

The Respondent argued that the analysis of the effluent collected by the Applicant and tested by an independent lab is not extensive enough in duration to show actual levels of treatment offered by the septic tanks. Furthermore, it does not include information about the level of CBOD5.

The Respondent also argued that the system cannot be considered as a shallow buried trench system as it is not a pressurized system and has been installed too deep in the ground. As well, under the OBC, the level of treatment associated with a shallow buried trench system is tertiary while the level of treatment offered by the subject septic tanks is secondary at best.

For theses reasons, the Respondent concluded that he believes neither the design of the system nor its performance level sufficiently meets the requirements of the OBC and should not, therefore, be considered as an equivalent to a shallow buried trench system for the purpose of Clause 2.7.1.1.(1)(b).

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed septic system consisting of two 4500 litre septic tanks, two effluent filters and an existing trenched leaching bed with six 21-metre long trenches does not provide sufficiency of compliance with Article 8.6.2.2. of the Ontario Building Code.

8. Reasons

1) There was not adequate evidence provided to demonstrate that the effluent quality meets the thresholds set out in Table 8.6.2.2.A over a sufficient period of time.

2) Sentence 8.7.2.1.(1) of the OBC does not permit the construction of a trenched in-ground leaching bed in soils having a percolation time greater than 50 minutes per centimetre.

Dated at Toronto this **13th,** day in the month of **July** in the year **2000** for application number **1999-86**.

BCC Ruling No. 00-31-763

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-31-763

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 2.1.1.11. and Sentences 3.1.15.2.(1) and (2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Jason Abbott, Manager, Air Athletics Inc., Oakville, Ontario, for the resolution of a dispute with Mr. Frank Asta, Chief Building Official, Town of Oakville, Ontario, to determine whether the proposed fabric material roof, which is not considered as a Class A, B or C roof covering, provides sufficiency of compliance with Sentence 3.1.15.2.(1) of the Ontario Building Code (OBC) and whether the building, as a structure covered in a fabric material, is required to comply with Article 2.1.1.11. of the OBC at the Air Athletics sports complex, 1333 North Service Road, Oakville, Ontario.

APPLICANT
Mr. Jason Abbott, Manager
Air Athletics Inc.
Oakville, Ontario

RESPONDENT
Mr. Frank Asta
Chief Building Official
Town of Oakville

PANEL
Dr. Kenneth Peaker, Chair
Mr. Fred Barkhouse
Mr. Len King

PLACE
Toronto, Ontario

DATE OF HEARING
June 29th, 2000

DATE OF RULING
June 29th, 2000

APPEARANCES
Mr. Dave Johnson
Randal Brown & Associates Ltd.
Willowdale, Ontario

Agent for the Applicant
Mr. Frank Asta
Chief Building Official
Town of Oakville

The Respondent

RULING

1. The Applicant

Mr. Jason Abbott, Manager, Air Athletics Inc., Ontario, has applied for a building permit under the Building Code Act, 1992 to construct a tennis facility at the Air Athletics sports complex, 1333 North Service Road, Oakville, Ontario.

2. Description of Construction

The Applicant is proposing to construct a new sports facility classified as having a Group A, Division 2 assembly occupancy. The structure is described as one storey in building height, 3,344 m^2 in building area and having dimensions of 91.44 by 36.57 m. The building is to be equipped with a sprinkler system, but not a fire alarm system. The structure is intended for use as a tennis facility and is proposed to hold a maximum of six courts. It will be heated in winter for year round usage.

The construction in dispute involves the basic construction of the building. The Applicant is proposing to erect the subject structure using arched steel frames set in concrete piers. This frame will support the building envelope, which is to be comprised of a translucent combustible fabric membrane.

3. Dispute

There are two issues in dispute between the Applicant and Respondent. The first is whether the proposed fabric material roof, which is not considered as a Class A, B or C roof covering, provides sufficiency of compliance with Sentence 3.1.15.2.(1) of the Ontario Building Code at the Air Athletics sports complex, 1333 North Service Road, Oakville, Ontario. This provision requires that all roofs must have a Class A, B or C classification as set out in Article 3.1.15.1., which in turn mandates that a roof covering must be determined in conformance with CAN/ULC-S107-M, "Standard Methods of Fire Tests of Roof Coverings". The roof, as proposed by the Applicant, is to consist of a combustible fabric membrane and does not have a Class A, B or C classification in accordance with the CAN/ULC-S107-M standard.

Sentence 3.1.15.2.(2) provides an exception to Sentence (1). It permits the Class A, B or C roof covering requirement to be waived for tents, air-supported structures and buildings with an A2 occupancy that are less than two storeys and 1,000 m^2 if a noncombustible material is installed under the roof cover. Since the subject building is intended to be a permanent structure and because it is not supported by air pressure but instead by a steel frame, the proposed tennis facility cannot be considered as either a tent or an air-supported structure. Moreover, with a proposed building area of 3,344 m^2, it is too large to be considered under the final exemption in Sentence 3.1.15.2.(2). As a result, the relaxation offered in this provision regarding the roof classification is not applicable to the building in dispute.

The second issue is whether the building, as a structure covered in a fabric material, is required to comply with Article 2.1.1.11. of the OBC at the above referenced structure. OBC 2.1.1.11. stipulates that the energy efficiency of all buildings shall be designed to good engineering practice in a manner consistent with that described in ASHRAE/IES 90.1-1989, "Energy Efficiency Design of New Buildings Except Lowrise Residential Buildings" and the 1997 OBC Supplementary Guidelines or the Model National Energy Code (MNEC) for Buildings, 1997. Essentially, Article 2.1.1.11. requires that buildings be energy efficient and the referenced standards provide "good engineering practice" to achieve this.

ASHRAE 90.1 and MNEC deal with energy efficiency requirements in numerous building systems, such as auxiliary systems and equipment, building envelope, electrical power, energy management, HVAC systems, lighting and service water heating systems and equipment. Similar to a tent or an air supported structure, the subject building, proposed to be enclosed by a fabric membrane, would have difficulty meeting the energy efficiency standards for some of these building systems, especially those relating to building envelope. ASHRAE 90.1 and MNEC both offer an exemption to tents and air-supported structures with respect to meeting the building envelope requirements. Again, however, the proposed building is considered neither a tent nor an air-supported structure.

At issue, therefore, is whether the structure, due to its proposed enclosure with a fabric membrane, is required as per Article 2.1.1.11. to conform to all energy efficiency requirements set out in ASHRAE 90.1 or the MNEC.

4. Provisions of the Ontario Building Code

Article 3.1.15.2. Roof Coverings

1. Except as permitted by Sentence (2), every roof covering shall have a Class A, B or C classification as determined in accordance with Article 3.1.15.1.
2. A roof covering is not required to have a Class A, B or C classification for
    a. a tent,
    b. an air-supported structure, or
    c. a building of Group A, Division 2 occupancy not more than 2 storeys in building height and not more than 1,000 m 2 (10,800 ft 2) in building area provided the roof covering is underlaid with noncombustible material.

Article 2.1.1.11. Energy Efficiency

1. Except for buildings of residential occupancy within the scope of Part 9, farm buildings and areas of buildings intended primarily for manufacturing or commercial or industrial processing, the energy efficiency of all buildings shall be designed to good engineering practice such as described in
    a. the ASHRAE/IES 90.1.1989, "Energy Efficient Design of New Buildings Except Lowrise Residential Buildings" and the Supplementary Guidelines to the 1997 OBC, or
    b. the Model National Energy Code for Buildings, 1997.

5. Applicant's Position

At the outset, the Agent argued that the proposed building, as a tension membrane structure, should be viewed as a tent or as an air supported structure, even though it does not strictly adhere to either definition. He then added, however, if the Commission rejects this view, the following discussion will demonstrate the safety of the building as a permanent structure.

On the issue of the roof classification, the Agent acknowledged that the fabric membrane does not meet CAN/ULC-S107-M, "Standard Methods of Fire Tests of Roof Coverings" and as a result cannot be classified as a Class A, B or C roof covering. Nevertheless, as he stated, the fabric has been tested to

both NFPA 701, "Standard Method of Fire Tests for Flame-Resistant Textiles and Films" and CAN/ULC S109, "Standard for Flame Tests of Flame Resistant Fabrics and Films" which are the standards that recognized by the OBC and the Ontario Fire Code for awnings and tents. The tests indicated that flame does not propagate when exposed to the membrane. Consequently, the material, while still considered combustible, performs as well as can be expected in a fire situation. Moreover, the Agent argued that the building has been made considerably safer since it is to be fully sprinklered. As well, he noted that the sprinkler system, albeit installed on the high roof of the structure, would actuate prior to fire causing damage to the fabric since the sprinkler activation temperature is much lower than the melt point of the roof.

The Agent also indicated that the building was safe from a fire safety standpoint because, at approximately 48 to 50 people, it will have a low occupant load. As he reasoned, on six courts of tennis a maximum of 24 people could play at any one time, plus a total of 24 potential observers were anticipated. No viewing facilities for spectators are proposed and the building is to be used for tennis only. No other sports, parties, gatherings or raves are to be allowed, the Agent noted. In addition, the building will contain very little in terms of fuel load to propagate fire and the spatial separation between the proposed structure and the existing buildings and property lines are nearly triple the required distance. As well, fire extinguishers are to be provided.

Regarding the second issue, energy efficiency, the Agent argued that the proposed building should be exempt from the requirements found in ASHRAE 90.1 or MNEC. As he argued, apart from the fact that the tennis facility is structurally supported by steel arches and not air pressure, there is very little to distinguish this building from an air-supported structure. Consequently, he saw no reason why the subject structure should also not enjoy an exemption from at least some of the energy efficiency requirements, especially those relating to building envelope. In his view, it is not practical nor feasible for the proposed building to comply with Article 2.1.1.11. This impracticality, he continued, is recognized by Sentence 1.1.2.1.(5) of the MNEC which references Appendix commentary E-1.1.2.1.(5). The Appendix provision, he noted, specifically mentions "sports facilities" as being one of the buildings that may have difficulty meeting the requirements of the MNEC and still function as intended. The Appendix commentary adds that in such cases the authority having jurisdiction may wish to permit an exception.

In terms of the actual energy that will be consumed by the tennis building, the Agent argued it will be minimal. He indicated that the only energy usage would be heat in the winter and lighting at night. The translucent fabric, he noted, will make daytime operation possible without lighting, which itself is a considerable energy savings. And since the building is to be supported by a steel frame it would not

need constant air pressure supplied continuously by fans to remain standing. Thus representing an improvement over air-supported buildings.

Lastly, the Agent concluded that based on the above reasons, sufficiency of compliance for the lack of a classified roof had been provided. Further, the structure, as a building enclosed with a fabric membrane, need not comply with the energy efficiency requirements found in Article 2.1.1.11.

6. Respondent's Position

The Respondent submitted that the proposed building is not a tent nor is it a air-supported structure. The building, he argued, is accurately described as a tension membrane structure. Moreover, the Code does not permit such buildings. As a result, the proposed tennis facility should be treated as a permanent building and must comply with all applicable provisions of the OBC, including Sentence 3.1.15.2.(1) and Article 2.1.1.11. regarding roof classification and energy efficiency respectively.

The Respondent indicated that he has some specific concerns about the project. Specifically, he was troubled by the fact that the sprinkler heads, being approximately 16 to 17 m high, would likely not activate until a roaring fire had developed at the tennis surface. He also felt that the intended location of the building, near houses situated on an escarpment, could be a problem despite that the spatial separation was more than required. In addition, if the sports facility were to change ownership, the future owners may wish to use the tennis facility for uses that may have a higher occupant load. He noted that the site had changed hands frequently.

In summation, the Respondent argued that the proposed building did not fit the existing categories of buildings found in the current OBC. And as an anomalous structure, erring on the side of caution insofar as building standards are concerned is prudent. In addition, he insisted that if the BCC were to approve the proposal at hand they should attach some serious limitations controlling its usage and operation. For example, he hoped the Commission would restrict the use of the building to tennis only and limit the occupant load to the minimum number of actual users. He also expressed a desire to see the combustible load of the building remain low, in particular prohibiting the construction of any other structures within the facility.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed fabric material roof, which is not considered as a Class A, B or C roof covering provides sufficiency of compliance with Sentence

3.1.15.2.(1) of the Ontario Building Code (OBC) at the tennis facility within the Air Athletics sports complex, 1333 North Service Road, Oakville, Ontario on condition that:

1. The use of the building is restricted to not more than 6 courts of tennis and is limited to tennis use only;
2. The occupant load is restricted to a maximum of 48 persons;
3. No additional structures are permitted to be constructed inside the subject building;
4. No storage of any material except as is consistent with that of an indoor tennis court is permitted; and,
5. A spatial separation from adjacent buildings and property lines of at least 30 m must be provided.

   It is also the decision of the Building Code Commission that the structure covered in a fabric material is not required to comply with Article 2.1.1.11. of the OBC at the above referenced facility on condition that:

6. The electrical lighting and HVAC systems provided in the building exceed the prescriptive requirements for such systems in ASHRAE 90.1 or the Model National Energy Code for Buildings; and,
7. A portion of the heating system make use of solar heating, heat pumps or heat exchanges.

8. Reasons

a. The occupant load of the structure will be low considering its building area.
b. The fuel load will be low.
c. The proposed structure will have considerable separation from any other building.
d. The HVAC and lighting systems will provide improved energy efficiency than would be normally required.

Dated at Toronto this **29th,** day in the month of **June** in the year **2000** for application number **2000-34**.

BCC Ruling No. 00-30-762

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-30-762

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 9.10.14.12.(5) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Lou Squazzin, Construction Manager, Kenmore Homes (1987) Inc., London, Ontario, for the resolution of a dispute with Mr. R. Cerminara, Chief Building Official, City of London, Ontario, to determine whether the existing exposing building face that does not offer a fire-resistance rating of 45 minutes and is clad with combustible siding, but which has been built with a zero metre limiting distance, provides sufficiency of compliance with Sentence 9.10.14.12.(5) of the Ontario Building Code for at Lot 191, 331 Whitesands Drive, London, Ontario.

APPLICANT
Mr. Lou Squazzin, Construction Manager
Kenmore Homes (1987) Inc.
London, Ontario

RESPONDENT
Mr. Rocky Cerminara
Chief Building Official
City of London

PANEL
Dr. Kenneth Peaker, Chair
Mr. Fred Barkhouse
Mr. Len King

PLACE
Toronto, Ontario

DATE OF HEARING
June 29th, 2000

DATE OF RULING
June 29th, 2000

APPEARANCES
Mr. Lou Squazzin
Kenmore Homes (1987) Inc.
London, Ontario
The Applicant

Mr. Rocky Cerminara
Chief Building Official
City of London
The Respondent

RULING

1. **The Applicant**

   Mr. Lou Squazzin, Construction Manager, Kenmore Homes (1987) Inc. London, Ontario, has received an order to comply under the *Building Code Act, 1992,* to remedy certain perceived deficiencies at Lot 191, 331 Whitesands Drive, London, Ontario.

2. **Description of Constrution**

   The Applicant has recently constructed a new, detached Group C - residential building. The dwelling is described a 1 ? storey backsplit house with a building area of 111 m^2 and is of combustible construction.

   The north facing wall of the house has a limiting distance of zero metres to the lot line. The one storey western portion of this wall, located to the front of the dwelling, is clad with a veneer of brick. The 1 ? storey rear, or eastern portion, of the wall is clad with brick veneer on the lower third while the upper two thirds is vinyl siding. The construction of the wall assembly where the siding is located is (from interior to exterior); 12.7 mm drywall, 6 mm poly, fibreglass batt insulation, 2" by 4" wood studs, Cladmate sheathing, building paper, and vinyl siding. The fire-resistance rating of this exposing building face is not considered to be at least 45 minutes.

The distance between the rear of the subject house, where the siding is located, and the adjacent house is 4.15 m. A 1.8 m wide municipal easement located directly beside the disputed building runs the entire length of the lot line on the neighbouring property. This easement, created by by-law, provides for municipal access onto this property for servicing purposes.

The construction in dispute involves the as-constructed combustible exposing building face built with a limiting distance of zero to the lot line.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the existing exposing building face that does not offer a fire-resistance rating of 45 minutes and is clad with combustible siding, but which has been built with a zero metre limiting distance, provides sufficiency of compliance with Sentence 9.10.14.12.(5) of the Ontario Building Code. This provision permits the effective limiting distance to be projected to a point beyond a property line under certain conditions, namely that the owners of the affected properties and the municipality enter into an agreement to do so and that this agreement be registered on title.

The Applicant proposes that the 1.8 m wide easement, which has been created by a municipal by-law and is registered on title of both properties, be substituted for the legal agreement specified in Sentence 9.10.14.12.(5). The appropriate limiting distance necessary to ensure conformance for the approximately 18 m^2 vinyl siding portion of the wall is 1.2 m as per Sentence 9.10.14.12.(2).

While the substitution of a municipal easement in lieu of an agreement conforming to Sentence 9.10.14.12.(5) is a significant question, it is, in the Commission's view, predominantly a legal, not a technical, consideration. Since the mandate of the BCC is to deal with the technical requirements of the OBC, the Commission will therefore focus on the technical issue of whether sufficient protection with respect to the subject exposing building face has been provided.

At issue thus, is whether adequate compensatory measures are being offered in lieu of providing a legal agreement as required in Sentence 9.10.14.12.(5).

4. **Provision of the Building Code**

Sentence 9.10.14.12.(5) - Exposing Building Face of Houses

(5) The required limiting distance for an exposing building face is permitted to be measured to a point

beyond the property line that is not the centre line of a street, lane or public thoroughfare if;

a. the owners of the properties on which the limiting distance is measured and the municipality enter into an agreement in which such owners agree that,

i. each owner covenants that, for the benefit of land owned by the other covenantors, the owner will not construct a building on his or her property unless the limiting distance for exposing building faces in respect of the proposed construction is measured in accordance with the agreement,

ii. the covenants contained in the agreement are intended to run with the lands, and the agreement shall be binding on the parties and their respective heirs, executors, administrators, successors and assigns,

iii. the agreement shall not be amended or deleted from title without the consent of the municipality, and

iv. they will comply with such other conditions as the municipality considers necessary, including indemnification of the municipality by the other parties; and

b. the agreement referred to in Clause (a) is registered against the title of the properties to which it applies.

5. **Applicant's Position**

The Applicant acknowledged that they do not have a written legal agreement as stipulated in Sentence 9.10.14.12.(5) of the Ontario Building Code. He argued, however, that since no construction will occur in the easement on the neighbour's property directly beside the subject house, the agreement is unnecessary. The easement, in fact, accomplishes everything that would an agreement referred to in Sentence 9.10.14.12.(5). To this end he offered the following statement:

"We feel sufficiency of compliance with the technical requirements of Section 9.10.14.12.(5) of the building code have been met for this home. The limiting distance for the North wall of this

home we believe can be measured to a minimum distance of 1.2 meters (sic) into the 1.8 meter (sic) easement along the North side of this property on the adjacent property which is registered to both property owners. Construction on this easement is protected from construction as outlined in the City of London By-law Z-1, Section 5(3). This By-law is only able to be removed by the City of London if they decide to amend the By-law. Thus, we feel that a sufficient agreement is in place to prevent the construction on this easement without written consent from the City. We feel all requirements have been met to show sufficiency of compliance of Section 9.10.14.12.(5)."

In support of this argument, the Applicant submitted two other documents. The first was a letter expressing an opinion by his legal counsel that reiterated the position that the situation with respect to building encroachments between the two properties is governed by the By-Law. The letter, he noted, states that the easement is sufficient to allow the City to prevent construction. The second item was a copy of the By-Law which demonstrated the requirement to register these easements on title. Attached to that was a copy of the actual deed of land for the subject property showing the easement it enjoys on the neighbouring land as well as an easement the adjacent owner on the other side of the property has on the opposite side of the disputed lot.

6. **Respondent's Position**

The Respondent submitted that, in their view, there are two ways the subject zero lot line exposing building face can comply with the Ontario Building Code. The first is by conforming to the construction requirements in Sentences 9.10.14.12.(2) and (3), which in the present case would mean that the wall assembly would have to provide a minimum fire-resistance rating of 45 minutes. This could be achieved, he noted, by removing the siding and building paper and adding a layer of 12.7 mm (? in) drywall on the outside of the studs. The second way is to enter into an agreement as stipulated in Sentence 9.10.14.12.(5). Since neither of these alternatives have been met, the Respondent indicated that the exposing wall was in violation of the Code.

On the question of whether an easement can be substituted in lieu of a legal agreement between the property owners and the municipality (which he described as a "no build agreement"), the Respondent stated that the Code specifically asks for an agreement. He argued that a literal reading of the Code clearly does not allow easements to be used in place of a Sentence 9.10.14.12.(5) agreement.

Nevertheless, the Respondent recognized that the easement prevents the neighbouring owners from building in that area, and as a result he expressed a degree of support for the Applicant's

position. Indeed, he indicated that the Applicant has raised an important question as to whether an easement as such can in fact replace the legal agreement set out in Sentence 9.10.14.12.(5). He added that it was his hope that the Commission could provide some direction on this issue.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the existing exposing building face that does not offer a fire-resistance rating of 45 minutes and is clad with combustible siding, but which has been built with a zero metre limiting distance, does not provide sufficiency of compliance with Sentence 9.10.14.12.(5) of the Ontario Building Code for at Lot 191, 331 Whitesands Drive, London, Ontario.

8. **Reasons**

i. Since a legal agreement between the relevant parties and the municipality has not been prepared the proposal does not meet OBC 9.10.14.12.(5).

ii. No compensating measures were proposed.

9. **Recommendation(s)**

The BCC recommends that this issue be examined by the Branch to determine if an agreement between adjacent property owners, as referenced by Sentence 9.10.14.12.(5), is necessary where there is an easement in place created by municipal by-law.

Dated at **Toronto** this **29th** day in the month of **June**, in the year **2000**, for application number **2000-31**.

BCC Ruling No. 00-29-761

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 00-29-761

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentences 3.4.3.5.(3), 3.4.3.5.(4), and 3.3.1.17.(3) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Hugh Magennis, Vice-President, Invar (Post Road) Corporation, North York, Ontario, for the resolution of a dispute with Mr. Yaman Uzumeri, Chief Building Official, City of Toronto, Ontario, to determine whether the as-built handrail that projects 100 mm into the required 750 mm minimum width of a landing where a door swings into an exit stair complies with Sentence 3.4.3.5.(3) of the Ontario Building Code (OBC), and whether the guards containing outward curving metal balusters comply with OBC Sentence 3.3.1.17.(5) at One Post Road, Toronto, Ontario.

APPLICANT
Mr. Hugh Magennis, Vice-President
Invar (Post Road) Corporation
North York, Ontario

RESPONDENT
Mr. Yaman Uzumeri
Chief Building Official
City of Toronto

PANEL
Dr. Kenneth Peaker, Chair
Mr. Robert De Berardis
Mr. John Guthrie

PLACE
Toronto, Ontario

DATE OF HEARING
June 14, 2000

DATE OF RULING
June 14, 2000

APPEARANCES
Mr. Allan Larden, Principal
Larden Muniak Consulting Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Mario Angelucci, Manager, Plan Review
North District
City of Toronto
Designate for the Respondent

RULING

1. The Applicant

Mr. Hugh Magennis, Vice-President, Invar (Post Road) Corporation, North York, Ontario, has received a building permit under the Building Code Act, 1992 and is constructing a new four storey residential building known as One Post Road, Toronto, Ontario.

2. Description of Construction

The Applicant is constructing a new Group C - residential building. The building is four storeys in height and 3,065 m2 in building area. It is of noncombustible construction and equipped with a sprinkler system, fire alarm system, and a standpipe and hose system.

There are two elements in dispute in the construction of this building. The first involves the projection of a handrail into the required width of a landing where a door swings into an exit stair. In this regard, the handrail in question projects 100 mm into the 750 mm clearance from the arc of the door swing and the opposing wall in the exit stair landing. As a result of the handrail projection, the clear width of the landing is reduced to 650 mm.

The second area of construction in dispute involves the design of the balusters used in the guards of the exterior terraces. The subject balusters, when the balcony is viewed in section, are not vertical. They are designed with an outward projecting curvature, i.e., in a bow shape. At issue in particular is the lower portion of the balusters which curve away from the exposing face of the building. The slope of this portion is measured at 55° from horizontal at approximately 300 to 350 mm above the terrace surface.

3. Dispute

There are two issues at dispute between the Applicant and Respondent. The first being whether the as-built handrail, that projects 100 mm into the 750 mm required minimum width of a landing where a door swings into an exit stair, complies with Sentence 3.4.3.5.(3) of the Code and the second involves whether the guards, containing outward curving metal balusters, comply with OBC Sentence 3.3.1.17.(5).

In reference to the first issue, according to Sentence 3.4.3.5.(3), swinging doors cannot reduce the required width of exit stairs or landings to less than 750 mm. However, Sentence 3.4.3.5.(4) provides that, if a landing or an exit stair accommodates a handrail, the handrail and any construction below it, can project up to 100 mm into the required width. The handrail in dispute projects 100 mm into the required width of the exit stair landing, thereby providing a clear width of 650 mm. At issue between the parties is whether compliance with Sentence 3.4.3.5.(3) can be achieved when considering Sentence 3.4.3.5.(4). In this case the question being posed is, can the required width of exit stairs or landings, already reduced to 750 mm by a swinging door, be further reduced to 650 mm by way of a 100 mm handrail projection?

In respect to the second issue, Sentence 3.3.1.17.(5) stipulates that, unless it can be shown that openings in a guard do not pose a hazard, the guard must be designed so that it does not facilitate climbing. The subject guards contain balusters that curve outward for a short distance. The curved portion of balusters has a maximum slope of 55° from horizontal and 35° from vertical. The dispute between the parties in this regard involves whether the outward slope created by this curvature is horizontal enough that it may represent a foothold and thereby facilitate or promote climbing of the guard.

4. Provisions of the Ontario Building Code

Sentences 3.4.3.5. Exit Width Reduction

3. Swinging doors in their swing shall not reduce the required width of exit stairs or landings to less than 750 mm (2 ft 6 in) or reduce the width of an exit passageway to less than the minimum required width.
4. Handrails and construction below handrails are permitted to project into the required width of means of egress but the projections shall be not more than 100 mm (4 in) on each side of the required width.

Sentence 3.3.1.17. Guards

5. Unless it can be shown that the location and size of openings do not present a hazard, a guard shall be designed so that no member, attachment or opening located between 140 mm (5 ? in) and 900 mm (2 ft 11 in) above the level protected by the guard will facilitate climbing.

5. Applicant's Position

The Agent for the Applicant submitted his position on the two issues in dispute, namely that, a) the Code permits a handrail to project up to 100 mm into the required 750 mm minimum width of a landing, including where a door swings into an exit stair, and b) the design of the curved metal balusters or pickets cannot reasonably be held to "facilitate climbing".

With respect to the first dispute, the Agent argued that Sentences 3.4.3.5.(3) and 3.4.3.5.(4) are linked and should be read in conjunction with one another. The required width of 750 mm where a door swings into an exit stair or landing has been provided in this instance. The literal wording of the Code allows handrails and construction below handrails to project 100 mm into this minimum required width. In the Agent's opinion, "the minimum 750 mm clear width of means of egress required where a door swings into a stair landing relates to the clear width at shoulder and upper arm height. The projection of a handrail 100 mm into this 750 mm clear width will not impede the effectiveness of the required minimum width."

The Applicant's Agent also noted that "both Sentences 3.4.3.5.(3) and (4) use the words ‘required width' when referring to the required clearance between the arc of the door swing and an opposing side of the exit as well as to the width of the means of egress into which the handrail is allowed to project. Very literally, the minimum required width of the exit stair at a landing where a door swings into the exit stair is 750 mm beyond the arc of the door. If this is the ‘required width' of the exit at the arc of the door swing, then the ‘required width' into which a handrail may project up to 100 mm is 750 mm. On this basis, the clearance from this handrail to the arc of the door swing may be not less than (750-100) = 650 mm in accordance with the literal Code."

With regard to the second dispute, the Agent argued that the primary concern related to the outward curving of balusters is whether the sloped portion facilitates climbing. The common definition of "facilitate" is "to make it easy". In this respect, he suggested that regard must be had as to whether the slope of the subject pickets makes it easy to climb the guard. He went on to state that, because the Code provides no direction as to when a baluster's angel becomes climbable, he has obtained an expert opinion in this regard. According to an evaluation of the Applicant's plans by Jake Pauls of Jake Pauls Consulting Services in Building Use and Safety, the pickets would not facilitate climbing, given the proposed design. Mr. Pauls, in his letter of September 3, 1999, states with "(a) small portion of the curvature is at approximately 35 degrees, maximum, from vertical...(e)ven if one were to place ones feet on this portion of the pickets, one would have to tilt away from the exterior side of the guard to gain any possible footing due to friction against the pickets. Such a body posture is in the safe direction."

The Agent for the Applicant concluded his submission on both issues by advising the Commission that, when reasonably considered, both areas of construction in dispute comply with the literal interpretation of the Code.

6. Respondent's Position

The Respondent submitted that, in relation to the first issue, the Code requires that landings be 1,100 mm wide. A reduction in the required width is permitted to not less than 750 mm to allow for the swing of a door opening into the landing. This width cannot, in his opinion, be further reduced by the 100 mm projection of handrails. The two requirements are mutually exclusive and the effect cannot be cumulative. The Code did not intend, in this instance, to allow the required width of a landing that accommodates a door swing to be reduced to 650 mm.

With respect to the second dispute, the Respondent also argued that the term "facilitate" in the Code means "to make easier". In his view, however, the baluster design in the guard does not comply with the literal meaning of the Code since the outward curvature can be considered to make it easier to climb. The Respondent questioned whether this design was safe. The requirements of the OBC, he argued, are intended to protect children and adults with diminished capacity. Children have greater flexibility than adults and could easily climb this guard. They wouldn't need to lean back when standing on the curved portions, as suggested by the Applicant's expert.

The Respondent went on to suggest that normal construction practice provides balusters that are completely vertical. That is the reference point from which the safety of this construction should be considered. Even then, a guard could be considered climbable. In summation, the Respondent noted that

this is a performance based-type Code issue and, in the City's view, the balusters in questions facilitate climbing.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-built handrail that projects 100 mm into the 750 mm required minimum width of a landing where a door swings into an exit stair complies with Sentence 3.4.3.5.(3) of the Ontario Building Code and also that the guards containing outward curving metal balusters comply with Sentence 3.3.1.17.(5) of the Ontario Building Code at One Post Road, Toronto, Ontario.

8. Reasons

i. The reduction in the required width of a landing to facilitate the door swing and handrail is in compliance with Code provisions. The OBC requires a landing width of 750 mm to accommodate the arc of a door swing and also permits a 100 mm projection by handrails or construction below handrails into the required width of a means of egress.

ii. The guards, with balusters having an outward curve creating a slope on the lower portion of the picket to a maximum of 55° from the horizontal, do not facilitate climbing. The curvature is directed outward from the terrace and from the upper rail of the guard, therefore, making it difficult to climb.

Dated at Toronto this 14 th day in the month of June in the year 2000 for application number 2000-27.

BCC Ruling No. 00-28-760

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-28-760

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 2.6.2.1.(1) and 6.2.3.9.(12) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Claudio Rabagliao, Turner Fleischer Inc., Toronto, Ontario, for the resolution of a dispute with Mr.John Wright, Chief Building Official, City of Markham, Ontario, to determine whether the proposed installation of a single fan unit providing 24 L/s exhaust on a continuous basis to serve a bathroom with two fixtures requiring ventilation provides sufficiency of compliance with Sentence 6.2.3.9.(12) of the Ontario Building Code at the Sunrise Assisted Living facility of Markham, Swansea Road, Markham, Ontario

APPLICANT
Mr. Claudio Rabagliao
Turner Fleischer Inc.
Toronto, Ontario

RESPONDENT
Mr. John Wright
Chief Building Official
City of Markham

PANEL
Dr. Kenneth Peaker, Chair
Mr. Robert De Berardis
Mr. Michael Steele

PLACE
Toronto, Ontario

DATE OF HEARING
June 14th, 2000

DATE OF RULING
June 14th, 2000

APPEARANCES
Mr. David Kaminker, President
Leipciger Kaminker Mitelman and Partners Inc.
North York, Ontario
Agent for the Applicant

Mr. George Chan
Mechanical Engineer
City of Markham
Designate for the Respondent

RULING

1. The Applicant

Mr. Claudio Rabagliao, Turner Fleischer Inc., Toronto, Ontario, has received a building permit under the Building Code Act, 1992 and is currently constructing a care facility known as the Sunrise Assisted Living facility of Markham located on Swansea Road, Markham, Ontario.

2. Description of Construction

The The Applicant is currently building a new care and treatment facility classified as having a Group B, Division 2 major occupancy. The structure is described as three storeys in building height, 1,891 m2 in building area and is of noncombustible construction. The building is equipped with a fire alarm system, a standpipe and hose system and a sprinkler system. A central kitchen and dining facility will be provided in the building for the residents.

The facility consists of a total of 81 suites, each with a separate bathroom. Each bathroom consists of a water closet, a lavatory and a bathtub. The bathrooms are ventilated to the roof by a central exhaust system which includes a heat recovery ventilator.

The suites are equipped with individual heat/cooling systems which can be controlled. As well, the windows may be opened.

The construction in dispute involves the exhaust ventilation in the suite washrooms. Each suite washroom has two fixtures that require ventilation. The Applicant is proposing that the suite washrooms be equipped with a single fan unit that provides 24 L/s of exhaust on a continuous basis. The exhaust would then be vented to a heat recovery system which preheats the fresh air supply ventilation. The design of the system is intended to provide continuous ventilation consisting of supply and exhaust air in each suite.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed installation of a single fan unit providing 24 L/s exhaust on a continuous basis, which serves a washroom with two fixtures requiring ventilation, provides sufficiency of compliance with Sentence 6.2.3.9.(12) of the Ontario Building Code. This provision requires that the exhaust capacity for each sanitary fixture, excluding wash basins, within a bathroom must be at least 24 L/s (50 cfm). Therefore, for washrooms with two fixtures requiring ventilation as is the case in the subject building, the required level of ventilation is 48 L/s (100 cfm).

As noted, the Applicant is proposing to provide fan units that offer only 24 L/s of exhaust. The system, as proposed however, operates on a continuous basis and not intermittently, i.e., only when in use. The OBC, however, does not contain provisions which

4. Provisions of the Ontario Building Code

Sentence 2.6.2.1. Governing Documents

(1) In the case of a conflict between the provision of this Code and those of a referenced document, the provision of this Code shall govern.

Sentence 6.2.3.9. Exhaust Ducts and Outlets

(12) Except for wash basins (lavatories), the exhaust air provided shall not be less than 24 L/s (50 cfm) for each sanitary fixture listed in Sentence (8).

5. Applicant's Position

At the outset, the Agent for the Applicant stated that the subject building is based on an assisted living concept, but has the appearance of a regular residence. He further noted that the building was designed by a US architectural firm. Likewise, the ventilation system has been designed by a mechanical engineer from the US.

The Agent outlined that the proposed design of the single fan unit provides 24 L/s for the washroom and that the exhaust is continuous. He further added that the exhaust is connected to a heat recovery system which preheats the fresh air supply and that the proposed ventilation system relies on a concept of a continuous ventilation of supply and exhaust air in each suite.

The Agent stated that the exhaust system provided is a superior system to the minimum intermittent system accepted by the Code. He argued that if 48 L/s of intermittent exhaust satisfies Code requirements, then 24 L/s of continuous exhaust should at least be considered equivalent to Code. The Agent acknowledged that the proposed washroom ventilation system does not comply with the prescriptive requirements of Sentence 6.2.3.9.(12). Nevertheless, he maintained that the proposal meets the intent of this provision.

As the Agent argued, an intermittent system that operates probably only one hour per day would exhaust roughly 6,000 ft3 whereas a continuously running ventilation system would output 72,000 ft3, a 12-fold increase in air quality. Moreover, since the suites are private with nearly all having a single occupant the washroom fixtures would therefore tend not to be used simultaneously. As well, the Agent felt that the ventilation requirement for each fixture seemed onerous and questioned the additional exhaust capacity which would merely consume more energy.

The Agent referenced the ASHRAE 62-1989 Standard and the CAN/CSA-F326-M91 Standard, both of which provide for intermittent or continuously operated single fan units. The ASHRAE 62- 1989 Standard is generally accepted across North America and distinguishes between ventilation for public washrooms and residential washrooms. Its requirement for residential washrooms is 24 L/s for intermittent operation, or 10 L/s for continuous operation. He noted that the ASHRAE Standard does not

specify an exhaust quantity per fixture for a residential washroom, as it is presumed that only one fixture is operated at one given time. The level of ventilation required in the CAN/CSA-F326-M91 Residential System Ventilation Code is almost exactly the same, the Agent added.

Lastly, the Agent concluded that the ventilation design proposal is reasonable and represents good engineering practice. In his view, the Respondent was interpreting the Code in an excessively rigid manner. While there are obviously two fixtures requiring ventilation, the Agent felt it important that the Code be interpreted consistent with an understanding of engineering principles. If only one fixture is used at a time, coupled with continuous ventilation, then that should be considered sufficient and thus meet Code requirements.

6. Respondent's Position

The Designate for the Respondent submitted that the OBC is very clear on the issue in dispute and that no interpretation is needed. In the context of the subject building, Sentence 6.2.3.9.(12) requires that each bathroom containing a water closet and shower must have an exhaust capacity of not less than 48 L/s (2 x 24 L/s for each sanitary fixture). In addition, the OBC does not provide an alternate option for the exhaust capacity for a fan which operates on a continuous basis.

Nevertheless, the Designate did concede, however, that he thought the proposal had some merit. He commended the HRV on the washroom exhaust and acknowledged that the ASHRAE 62-1989 Standard for the continuous exhaust allows for a reduction of ventilation to only 24 L/s for each bathroom.

However, the Designate noted that Sentence 2.6.2.1.(1) of the OBC stipulates that where there is a conflict between the provisions of the OBC and the provisions of a document referenced by the Code, the "provision of this Code shall govern". Thus the Designate felt compelled to uphold Ontario Building Code requirements and concluded by indicating that each bathroom must have a minium of 48 L/s (100 cfm) exhaust as required by 6.2.3.9.(12).

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed installation of a single fan unit providing 24 L/s exhaust on a continuous basis to serve a bathroom with two fixtures requiring

ventilation provides sufficiency of compliance with Sentence 6.2.3.9.(12) of the Ontario Building Code at Sunrise Assisted Living facility of Markham, Swansea Road, Markham, Ontario.

8. Reasons

The overall level of safety in the building has been improved through the following factors:

1. The building incorporates a ventilation system that provides for good air quality and includes energy conservation measures.
2. A central continuous exhaust system is provided incorporating a heat recovery system.
3. Since the suite washrooms are private facilities where only one fixture will likely be used at a time, continuous exhaust at 24 L/s may be used in this instance.
4. The continuous exhaust system will provide for greater air change than normally required.
5. The ventilation system design conforms to ASHRAE 62-1989 and CAN/CSA F326-M91.
6. Suite windows are openable.
7. A separate heat/cooling system is available in each suite.
8. The central kitchen and dining facility within the building reduces the need to utilize individual cooking appliances within the suites.

Dated at Toronto this **14th,** day in the month of **June** in the year **2000** for application number **2000-24**.

Ruling No. 00-27-759
Application # 2000-42

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 2.1.1.7.(2) and Article 9.5.2.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Zena Reinhardt, Owner, Kleinburg Book Company, Kleinburg, Ontario, for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, Ontario, to determine whether the subject commercially-used log house, which was disassembled, rebuilt at another location and provided with a barrier-free path of travel, is required to provide barrier-free accessibility in the proposed new washroom when considering Sentence 2.1.1.7.(2) and Article 9.5.2.1. of the Ontario Building Code at the Murray-Diceman Log House, 10499C Islington Avenue, Kleinburg (Vaughan), Ontario.

APPLICANT	Ms. Zena Reinhardt, Owner Kleinburg Book Company Kleinburg, Ontario
RESPONDENT	Mr. Mani Navabi Chief Building Official City of Vaughan
PANEL	Dr. Kenneth Peaker, Chair Mr. Len King Mr. Fred Barkhouse
PLACE	Toronto, Ontario
DATE OF HEARING	September 21, 2000
DATE OF RULING	September 21, 2000
APPEARANCES	Mr. Paul Reinhardt, Co-owner Kleinburg Book Company Kleinburg, Ontario **Agent for the Applicant** Mr. Steve Penna Technical Supervisor City of Vaughan **Designate for the Respondent**

RULING

1. The Applicant

Ms. Zena Reinhardt, owner, Kleinburg Book Company, Kleinburg, Ontario, has received a building permit under the Building Code Act, 1992 to construct a book store at 10499 Islington Avenue, Kleinburg, Ontario.

2. Description of Construction

The Applicant has relocated and constructed a log house to be used as a book store. The building is two storeys in building height, 96 m^2 in building area, and of combustible construction. The structure is classified as having a Group E - mercantile occupancy.

The building is primarily the reconstitution of an old log house originally built in the 1830s. The Applicant disassembled the log house and rebuilt it at a new location in 1996. The footprint of the building measures the same as the old log house, which is 7.32 m by 5.8 m. For the most part, the current building has been constructed using the original logs. The building has also been provided with a second floor that projects above the footprint of the first floor; a basement containing a washroom; and a wider entrance. In addition, another new washroom is proposed to be installed on the first floor of the building.

The construction in dispute involves the applicability of the requirements for barrier-free accessibility in the ground floor washroom. As part of the work undertaken during the rebuilding of the log house, the Applicant provided a landscaped ramp to the level of the front entrance threshold. The front entrance door opening was also widened. As well, between the door and the proposed washroom is a level path of travel wide enough to be considered as providing barrier-free accessibility. Although the path leading to the proposed washroom is described as being barrier-free, the Applicant is not proposing a barrier-free washroom. She is instead requesting an exemption from this OBC requirement.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the subject commercially-used log house, which was disassembled, rebuilt at another location and provided with a barrier-free path of travel, is required to provide barrier-free accessibility in the proposed new washroom when considering Sentence 2.1.1.7.(2) and Article 9.5.2.1. of the Ontario Building Code (OBC).

According to Sentence 2.1.1.7.(2), where an existing, once occupied, building is relocated or disassembled and rebuilt somewhere else, the OBC provisions apply only to those changes that are required as a result of the new location. These changes would include changes to design, or to the parts of construction, such as a foundation, that might be required at the new site.

The proposed addition of a washroom to the new log house is not a required change resulting from the relocation of the building. It is proposed as a convenience to customers of the book shop. In this respect, the Commission does not regard the proposed washroom as mandatory construction needed to relocate the building and that would be covered by Sentence 2.1.1.7.(2) of the Ontario Building Code. The washroom is considered new construction even though it is located within an existing structure.

Renovations to existing buildings are covered by Part 11 of the OBC. If the washroom was also considered as existing, the work undertaken on other parts of the structure would not, under Part 11 of the OBC, require the installation of a barrier-free washroom. However, in the present case, the

travel up to and into the structure.

New construction for a building of this size is regulated in Part 9 of the OBC. The relevant provision regarding this dispute is Article 9.5.2.1. It states that every building (or part thereof) shall be designed in conformance with Section 3.8., the barrier-free accessibility requirements. The exceptions to this are found in Sentence (2) of Article 9.5.2.1., however, these do not apply to the subject building.

At issue, therefore, is whether the creation of a new washroom in an existing building that is provided with a barrier-free path of travel triggers the applicability of the barrier-free accessible requirements of the OBC for that washroom.

4. Provisions of the Ontario Building Code

Article 2.1.1.7. Existing Buildings

(2) Where an existing previously occupied *building* is moved from the original location to be installed elsewhere, or is dismantled at the original location and moved to be reconstituted elsewhere, the Code applies only to changes to the design and *construction* of the *building* required as a result of moving the *building*.

Article 9.5.2.1. Barrier-Free Design

(1) Except as provided in Sentence (2) and Article 3.8.1.1., every building shall be designed in conformance with Section 3.8.

(2) The requirements of Section 3.8. need not be provided for houses including semi-detached houses, duplexes, triplexes, town houses, row houses and *boarding, or rooming houses* with fewer than 8 boarders or roomers.

5. Applicant's Position

At the outset of the hearing, the Agent for the Applicant stated that, as a businessman without any expertise in the Ontario Building Code, he will discuss the subject matter of the dispute from an economic point of view and hoped the Commission would take his argument at face value. He submitted that the additional cost involved with retrofitting an existing building to meet the new standards imposes a heavy financial burden on small businesses such as the one under dispute.

With regards to its construction, the Agent indicated that, in general, the use of the original materials constrained any structural changes when re-building the log house. They have, however, created an access route to the building that is considered barrier-free as a convenience to their customers. Both a 36.58 m long unobstructed pedestrian path and a ramp have been provided to the level of the threshold of the entrance door. A wider entrance door has also been installed to facilitate this accessibility.

The Agent argued that a prime location for sales in his business is at the entrance area of the first floor. Installing a barrier-free washroom would tremendously reduce the available first floor space that is vital to their business. He argued that, according to his calculations, the addition of a barrier-free washroom to the subject log house would create an annual loss of $3,600 in gross profit. As a result, the owner suggested that they would have to invest $51,430 to make up for this annual loss. He also stated that if they had constructed a new building it would have cost them 20 percent less in the long run.

The Agent continued by advising that, modern standards such as those established for protecting the

consideration the economic cost that would be associated with such a level of performance. As a result, they can do more harm than good as they impose heavy financial burdens on small businesses; many owners are put out of business.

In summation, the Agent added that there has been a mass of modern construction in the City of Vaughan recently and that they felt this type of construction would be appreciated, particularly in the Kleinburg area. He also indicated that it was his hope that the preservation of such an historic structure would have been more appreciated. Lastly, it was his position that there were already barrier-free accessible washroom facilities available at other nearby establishments. Customers would not have to travel far to reach such a facility.

6. Respondent's Position

The Respondent submitted that the disassembled logs have been partially used in the reconstitution of the subject log house. In his view, the building of the book store was entirely new construction under the Code. It simply utilized some existing materials. Moreover, the proposal for the addition of a washroom changes the original design of the building and, therefore, further adds to the rationale as to why the book store should be considered as a new building that should be subject to the OBC provisions regulating new construction. In this instance, the Code requires that a Group E occupancy be provided with barrier-free washrooms, the Respondent noted.

The Respondent advised that they occasionally get complaints from the public regarding the lack of barrier-free accessibility in new buildings. As a responsible authority, it is important for them to provide the public with such facilities. He argued that the monetary cost of compliance should not be considered a reason that would justify exemption from OBC requirements. He further stated that, although he is sympathetic to the Applicant's situation, there is no provision under the OBC that would allow the requested relief.

7. Commission Ruling

It is the decision of the Building Code Commission that the commercially-used log house, which was disassembled and rebuilt at another location, is required to provide a barrier-free accessible washroom when considering Sentence 2.1.1.7.(2) and Article 9.5.2.1. of the Ontario Building Code at the Kleinburg Book Company, 10499C Islington Avenue, Kleinburg (Vaughan), Ontario.

8. Reasons

i) Whereas the reconstructed log house is considered an existing building, the creation of a barrier-free path of travel up to and within the structure means that the proposed new washroom must also, as per Code, be barrier-free accessible.

ii) The Applicant did not offered any alternative proposals that may have allowed the BCC to consider the subject dispute under its powers of determining sufficiency of compliance with the required OBC provisions.

Dated at Toronto this **21st,** day in the month of **September** in the year **2000** for application number **2000-42**.

Dr. Kenneth Peaker, Chair

Mr. Len King

Mr. Fred Barkhouse

BCC Ruling No. 00-26-758

BUILDING CODE COMMISSION DECISION ON B.C.C. Ruling No. 00-26-758

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 8.1.2.1.(1), 7.1.6.1.(1) and 9.31.4.1.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Rudy Kmetic, Property Owner (prospective), 33 Merkley Square, Scarborough, Ontario, for the resolution of a dispute with Mr. Robert Hexter, Chief Building Official, County of Lambton, Ontario to determine whether proposed Class 1 (composting and incinerating toilet) and Class 2 (greywater system) systems in lieu of a Class 4 septic system to serve a newly built seasonal dwelling, complies with Sentence 8.1.2.1.(1) when considering Sentences 7.1.6.1.(1) and 9.31.4.1.(1), and a subsequent proposal to include a different type of a Class 1 system (flush unit/composting toilet), a Class 2 system and a Class 3 system provides sufficiency of compliance with Sentences 8.2.1.5.(1) and 8.2.1.4.(2) of the Ontario Building Code at 28 Smuggler's Lane, "Chicken Island", Port Franks, Ontario.

APPLICANT
Mr. Rudy Kmetic, Property Owner (prospective)
33 Merkley Square
Scarborough, Ontario

RESPONDENT
Mr. Robert Hexter
Chief Building Official
County of Lambton

PANEL
Mr. Bryan Whitehead (Vice Chair)
Mr. Frank Wright
Mr. Doug Robinson

PLACE
Toronto, Ontario

DATE OF HEARING
June 1st, 2000

DATE OF RULING
June 1st, 2000

APPEARANCES
Mr. Rudy Kmetic, Property Owner (prospective)
33 Merkley Square
Scarborough, Ontario
The Applicant

Mr. Mark Wetering
Junior Planner
County of Lambton
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Rudy Kmetic, Property Owner (prospective), 33 Merkley Square, Scarborough, Ontario, has applied for a building permit under the *Building Code Act, 1992*, to construct a seasonal dwelling and install Class 1, Class 2, and Class 3 sewage systems at 28 Smuggler's Lane, "Chicken Island", Port Franks, Ontario.

2. **Description of Constrution**

   The Applicant has applied for a building permit to construct a Group C - seasonal dwelling which is proposed to be serviced by two alternative combinations of Class 1, Class 2, and Class 3 sewage systems. The proposed dwelling will contain two bedrooms, 4.5 plumbing fixture units and will have a total finished area of 96 m^2. The calculated daily design sewage flow is 900 litres.

   The original proposal was for a Class 1 self-contained composting toilet and a Class 2 leaching pit. After discussion with the Chief Building Official regarding the requirement for a water

closet, the proposal was changed to include (in addition to the Class 2 greywater system) a different Class 1 composting toilet comprising of a one pint (0.568 litre) flush unit and a central composting system to be located under the main floor bathroom and connected to a Class 3 (cesspool) system. This alternate proposed toilet unit would be a "Sealand 510 Travellers" model which is described as meeting the requirements for a water closet in that it is connected to a water supply system and is certified under CAN/CSA B-45 "General Requirements for Plumbing Fixtures". Both the toilet and the composting unit are equipped with vent stacks for the elimination of odours. The effluent from the 4.5 fixture units in excess of the sanitary fixture (the composting toilet) will be directed to the Class 2 greywater system.

The site is one of a limited number of lots on Chicken Island that has received provincial consent for severance and residential development, though under restrictive conditions. The area is accessible only by water and has no municipal services available. Any development that may demand extension of such services is prohibited by the Official Plan due to the fact that the lands on this island are environmentally sensitive.

The lot is described as a cottage property with minimum slope. It is mostly covered with dune grass and scrub vegetation and measures 31 m by 52 m covering an approximate total area of 0.16 ha. The depth to high groundwater table, according to the Applicant, is 1.6 to 3 metres. The percolation time of the native soil is reported to be less than 1 minute per centimetre. No soils evaluations were carried out to determine the percolation time or the specific level of the high groundwater table.

The water supply to the dwelling will be from a well.

The construction in dispute involves the proposed combinations of Class 1, Class 2, and Class 3 sewage systems to serve the subject dwelling unit.

3. **Dispute**

There are two issues at dispute before the Building Code Commission. The first issue concerns the original proposal which consists of a Class 1 self-composting toilet and a Class 2 greywater system. In this case the dispute is whether the construction of Class 1 and Class 2 systems in lieu of a Class 4 septic system to serve the proposed seasonal dwelling complies with Sentence 8.1.2.1.(1), when considering Sentences 7.1.6.1.(1) and 9.31.4.1.(1) of the OBC (Ontario Building Code). The second issue before the commission concerns the subsequent proposal which replaces the self-composting toilet with a one pint flush toilet connected to a Class 3

(cesspool) system. In this case the dispute is whether this proposal provides sufficiency of compliance with Sentences 8.2.1.5.(1) and 8.2.1.4.(2).

With regard to the first issue at dispute, Sentence 8.1.2.1.(1) classifies different types of on-site sanitary sewage systems under the OBC. These systems have been defined under Article 1.1.3.2 and are referred to as private sewage disposal systems in Sentence 7.1.6.1.(1). Every on-site sanitary sewage system classified under the OBC has its own design, construction, installation, operation, and maintenance requirements that are regulated by the OBC. A composting/incinerating toilet system, a greywater system, and a cesspool are among the recognized sewage systems which are regulated under Part 8 of the Code. These systems have been classified, respectively, as Class 1, Class 2, and Class 3 systems under Sentence 8.1.2.1.(1).

Sentence 9.31.4.1.(1) states that a dwelling unit with a water distribution system must be provided with certain fixtures including a water closet. The water distribution system referred to in this sentence is defined as "an assembly of pipes, fittings,... that conveys water from the water services pipe or private water supply system (in this case a private well) to water supply outlets, fixtures, plumbing appliances, and devices" under Article 1.1.3.2. Water closets are one of the required fixtures in a dwelling unit that must be provided with a water connection as stipulated by Sentence 9.31.3.2.(2). The proposed composting toilet is not connected to a water supply system as mandated by this provision.

Sentence 7.1.6.1.(1) requires every sanitary drainage system to be connected to a public sanitary sewer, a public combined sewer or a private sewage disposal system. The sanitary drainage system referred to in this sentence is defined as an assembly of pipes, fittings, fixtures and appurtenances on the property that is used to conduct sanitary sewage to a main sewer or private sewage disposal system. Sanitary sewage means liquid or water borne waste ... of domestic origin, including human body waste, toilet or other bathroom waste, and shower, tub, culinary, sink and laundry waste.

Greywater, on the other hand, is defined as sanitary sewage of domestic origin which is derived from fixtures other than sanitary units. A sanitary unit under the Code means a water closet, urinal, bidet or bedpan washer. Put simply, a water closet is defined as a sanitary unit that not only is connected to a water supply system, but also conducts human body waste to a sewer or private sewage system. However, a Class 2 system is a greywater system designed for effluent other than that originating from human bodies. As a result, a requirement for a water closet in a dwelling unit as stipulated by Sentence 9.31.4.1.(1) generally restricts installation of a Class 2

system. At issue is whether this restriction must be considered while applying Sentence 8.1.2.1.(1) to a seasonal dwelling unit.

With regard to the second issue at dispute, Sentence 8.2.1.4.(2) sets out horizontal clearance distances which must be maintained between Class 1, Class 2, and Class 3 systems and property lines as well as natural features such as wells and lakes. Sentence 8.2.1.4.(2) requires these distances to be increased where the percolation time of the native soil is less than 10 minutes. In this case, the percolation time of the native soil is reported to be less than 1 minute.

No information was provided as to the type of the well (dug or drilled) or the proposed well location. There was no information offered regarding the location or type of wells on adjoining properties. Nor was any information provided regarding the proposed location for the Class 2 and Class 3 (cesspool) systems. However, considering the dimensions of the subject lot (31 m by 52 m), the issue is whether the required setbacks as mandated by the OBC can be met.

4. **Provision of the Building Code**

Sentence 8.1.2.1. - Classification of Systems

1. All sewage systems shall be classed as one of the following:
b. Class 1 - a chemical toilet, an incinerating toilet, a recirculating toilet, a self-contained portable toilet and all forms of privy including a portable privy, an earth pit privy, a pail privy, a privy vault and a compositing toilet system,
c. Class 2 - a greywater system,
d. Class 3 - a cesspool,
e. Class 4 - a leaching bed system,
f. Class 5 - a system which requires or uses a holding tank for the retention of hauled sewage at the site where it is produced prior to its collection by a hauled sewage system.

Sentence 7.1.6.1. - Sanitary Drainage Systems

7. Every sanitary drainage system shall be connected to public sanitary sewer, a public combined sewer or a private sewage disposal system.

Sentence 9.31.4.1. - Required Fixtures

8. In a dwelling unit with a water distribution system, a kitchen sink, lavatory, bathtub or shower stall and water closet shall be provided.

Sentence 8.2.1.5.

9. Except as provided in Sentences 8.2.1.4.(1) and (2), no Class 1, 2, or 3 sewage system shall have a horizontal distance of less than that permitted by Table 8.2.1.5.

Sentence 8.2.1.4.

10. ,

11. Unless it can be shown to be unnecessary, where the percolation time is less than 10 minutes, the clearances listed in Articles 8.2.1.5. and 8.2.1.6. for wells, lakes, ponds, reservoirs, rivers, springs or streams shall be increased to compensate for the lower percolation time.

5. **Applicant's Position**

The Applicant submitted that because of the unique circumstances prevailing on Chicken Island, it is appropriate to use a self-contained composting toilet, thereby avoiding the discharge of contaminants into the soil on an environmentally sensitive area.

The Applicant argued that according to his information, even the best septic or wastewater systems only break down 90 percent of the suspended solids and fecal coliform. Preventing any pollutants from contacting the soil and water by using a composting toilet appears to be the best answer given the soil conditions. The Applicant stated that the Asauble Bayfield Conservation Authority appears to support the original servicing proposal.

The Applicant indicated that he originally wanted a self-contained composting toilet. However, to meet the requirements of having a water closet, he had amended his proposal to include a one pint flush toilet, a different type of composter, and a Class 3 "cesspool" (in addition to the Class 2 system).

With respect to the question of using a Class 4 system, the Applicant argued that installation of an "Ecoflo" system, as recommended by the Respondent, is neither physically nor financially feasible. The area is isolated and only accessible by water which makes both installation and maintenance of the system very difficult and expensive. The seasonal use of the cottage and low sewage flow rate makes installation of such an expensive system even less attractive.

The Applicant concluded that even though he wants to comply with all requirements of the OBC, he would be most satisfied if he is allowed to install an affordable system.

6. **Respondent's Position**

The Respondent submitted that if the proposed composting toilet system meets the requirements for water closets under the Code, then a Class 4 septic system is required under Part 8.

The Respondent argued that under the OBC the proposed dwelling unit must have a water distribution system which in this case will be connected to a potable private water supply. This requires that a water closet conforming to CAN/CSA-B45.0 be provided in the dwelling unit. There is no evidence that shows the proposed composting toilet is certified to this standard. However, if it does, then it is the Respondent's position that a Class 4 sewage system must be installed to serve the proposed dwelling unit.

The Respondent continued that it is the County's planning policy since 1998 that any residential dwelling constructed in this area should be served by an "Ecoflo" system as they have an opinion from the Housing Development and Buildings Branch of the Ministry of Municipal Affairs and Housing regarding the suitability of the "Ecoflo" system for highly permeable soils. As a result, under this policy, any applicant requesting a building permit for residential development is required to install an "Ecoflo" sewage system.

The Respondent concluded that even if the proposed systems are recognized under the OBC, they have no conclusive data about the volume and the quality of the black water that would be discharged from the composting system to guide them about the design and construction requirements of a Class 3 system, nor have they any idea about quality of the greywater that will be discharged to a Class 2 system. For these reasons, they cannot approve the proposed systems.

7. **Commission Ruling**

Ruling 1: It is the decision of the Building Code Commission (BCC) that a composting toilet (Class 1) and Class 2 leaching pit for a seasonal dwelling comply with Sentence 8.1.2.1.(1) and need not comply with Sentences 7.1.6.1.(1) and 9.31.4.1.(1). The conditions for installation are:

1) That the Class 2 leaching pit be at least 5.0 metres from the dwelling to avoid interactions with foundations and drains and to distance the system from the dwelling.

2) That a minimum of 30 metre setback to dug wells and a minimum of 15 metre to drilled wells be provided for the Class 2 system.

Ruling 2: It is also the decision of the BCC that the second proposal, consisting of a one pint flush toilet, a Class 2 greywater system, and a Class 3 (cesspool) system, does not provide sufficiency of compliance with Sentences 8.2.1.5.(1) and 8.2.1.4.(2).

8. **Reasons**

Ruling 1:

(a) A composting toilet is a permitted Class 1 system (Clause 8.1.2.1.(1)(a)). Such a system, if adequately sized, can serve the sanitary needs of a seasonal dwelling.

(b) A Class 1 toilet is considered a suitable alternative for a conventional water closet in serving a seasonal dwelling.

(c) A Class 2 leaching pit is a permitted system (Clause 8.1.2.1.(1)(b)) and compliments a composting toilet for a seasonal dwelling.

Ruling 2:

(a) The panel had concerns regarding the setback requirements for this site. Table 8.2.1.5.(1) requires a 10 metre setback from a "drilled" well and a 15 metre setback from a dug well or other water source to a Class 2 leaching pit. In view of the requirements of 8.2.1.4. for increased setbacks in soils under 10 minutes per centimetre percolation time, a Class 2 system may not be appropriate for this lot. The panel also had concerns that the 15 metre setback to a dug well is inadequate in view of the possible bacteria and chemical components of greywater.

(b) The setbacks to a cesspool (Table 8.2.1.5) are 30 metres to a drilled well and 60 metres to a dug well, plus additional setback required for low percolation time soils (8.2.1.4). The panel expressed doubt about accommodating a cesspool on the lot under consideration.

Dated at **Toronto** this **1st** day in the month of **June**, in the year **2000**, for application number **2000-15**.

BCC Ruling No. 00-25-757

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-25-757

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 9.8.3.3.(2) and Articles 3.3.1.15. and 9.8.5.2. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Tony Manocchio, Project Manager, Saddlebrook Construction Inc., 40 LePage Court, Downsview, Ontario, for the resolution of a dispute with Mr. Morris Lucchetta, Manger of Inspections, Town of Richmond Hill, to determine whether the eighteen sets of as-built spiral stairs, which are not required exit stairs and are measured at 780 mm in width and 50 mm and 160 mm in minimum and average tread depth respectively, are required to comply with Sentence 9.8.3.3.(2) and Articles 3.3.1.15 and 9.8.5.2. of the Ontario Building Code at the Gates of Bayview Residences - Phase I, 3 Ellesmere Road, Richmond Hill, Ontario.

APPLICANT
Mr. Tony Manocchio, Project Manager
Saddlebrook Construction Inc.
Downsview, Ontario

RESPONDENT
Mr. Morris Lucchetta
Manager of Inspections
Town of Richmond Hill

PANEL
Dr. Kenneth Peaker (Chair)
Mr. Fred Barkhouse
Mr. John Guthrie

PLACE
Toronto, Ontario

DATE OF HEARING
May 25th, 2000

DATE OF RULING
May 25th, 2000

APPEARANCES
Mr. Randy Brown, President
Randy Brown & Associates Ltd.
Willowdale, Ontario
Agent for the Applicant

Mr. Morris Lucchetta
Manager of Inspections
Town of Richmond Hill
The Respondent

RULING

1. **The Applicant**

   Mr. Tony Manocchio, Project Manager, Saddlebrook Construction Inc., Downsview, Ontario, has received a building permit under the *Building Code Act, 1992,* and is currently constructing a residential condominium known as the Gates of Bayview Residences -Phase I located at 3 Ellesmare Road, Richmond Hill, Ontario.

2. **Description of Constrution**

   The Applicant is currently building a new condominium residence classified as having a Group C occupancy. The structure is described as eight storeys in building height, 1,563 m^2 in building area and is of noncombustible construction. The building will be equipped with a fire alarm system, a standpipe and hose system and a partial sprinkler system in the basement levels only.

The construction in dispute involves the installation of prefabricated metal spiral stairs in eighteen units with two floor levels. Both levels of the units have a floor area of approximately 30 m^2 and the spiral stairs are the only means of passage between floors. The stairs are not considered as a required means of egress since all such units are equipped with an egress door on both levels leading directly to a public corridor.

The as-constructed stairs are supported by a floor-to-ceiling 100 mm diameter centre steel post. Each stairs is described as having 13 treads that together span a 270^0 total rotation. The clear width between the post and the handrail on the outside of the stair is 780 mm. The tread depth measured directly adjacent to the centre post is 50 mm, excluding the area covered by the overhang from the above protruding step. Measured at 330 mm from the post the tread is approximately 153 mm in depth without the overhang area, and at 381 mm away, roughly the centre line of the stair, it is approximately 160 mm deep, also excluding the overhung portion.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the eighteen sets of as-built spiral stairs, which are not required exit stairs and are measured at 780 mm in width and 50 mm and 160 mm in minimum and average tread depth respectively, are required to comply with Sentence 9.8.3.3.(2) and Articles 3.3.1.15 and 9.8.5.2. of the Ontario Building Code. (While the building in dispute has been constructed according to Part 3 of the OBC, certain stair requirements of Part 9 are applicable because of Article 3.3.4.7. which states that "(s)tairs, handrails and guards within a dwelling unit shall conform to the appropriate requirements in Section 9.8.")

The above provisions set out requirements for stair width and tread depth. Specifically, Sentence 9.8.3.1.(2) stipulates that at least one stair between levels in a dwelling unit shall be a minimum of 860 mm in width. This provision applies to any stair, not just spiral ones. As noted, the Applicant's stairs are 780 mm wide. As well, Articles 3.3.1.15. and 9.8.5.2., both mandate that the minimum run of a curved or spiral stair (although Article 9.8.5.2. refers only to a curved stair) is required to be 150 mm and the average run must be 200 mm. The minimum and average runs of the subject stairs are 50 mm and 160 mm respectively.

Specifically, the issue before the Commission is not whether the as-installed stairs meet the prescriptive requirements found in the OBC regarding stair width and tread depth. Clearly they

do not. Rather, the issue, as presented by the parties, is, as spiral and not curved stairs that are not required for exiting, whether it is necessary that they must conform with Sentence 9.8.3.3.(2) and Articles 3.3.1.15. and 9.8.5.2. of the Building Code.

4. **Provision of the Building Code**

Sentence 9.8.3.3.(2) - Stair Width

1. ,

2. At least 1 stairway between each floor level in a dwelling unit shall have a width between wall faces of not less than 860 mm (2 ft 10 in).

Article 3.3.1.15. - Curved or Spiral Stairs

3. A curved or spiral stair is permitted in a stairway not required as an exit provided the stair has:

(a) treads width

iv. a minimum run not less than 150 mm ($5^{7/8}$), and

v. an average run not less than 200 mm ($7^{7/8}$), and

(b) risers in conformance with Sentence 3.4.6.7.(2).

Article 9.8.5.2. - Curved Stairs not in Exits

6. Except as permitted in Article 9.8.5.3., a curved stair not required as an exit shall have an average run of not less than 200 mm ($7^{7/8}$) and a minimum run of 150 mm ($5^{7/8}$) and shall have risers conforming to Article 9.8.3.1.

5. **Applicant's Position**

The Agent for the Applicant commenced his presentation by noting that the eighteen sets of stairs in dispute are spiral and not curved stairs. He argued that such stairs are not adequately

addressed in the OBC. In his view, the Code requirements for curved stairs are clear but the same cannot be said for spiral stairs. However, he stated that it was important to understand that the OBC does not exclude nor prohibit the use of spiral stairs in the circumstances at hand.

The Agent submitted that the 860 mm minimum width requirement, for example, only makes sense if the stairs are required to be used for exiting and moving furniture. In the present situation neither demand is being placed on the subject stair. As he noted, since there is an egress door leading to a public corridor on both levels of the units individuals could exit from either the upper and lower floor areas directly without using the stairs. Moreover, when moving furniture of any size it would be obvious and, in fact, much easier to take such objects out of the unit, into the corridor and onto the elevator. Therefore the requirement of Sentence 9.8.3.3.(2), he offered, is neither appropriate nor practical in terms of achieving compliance for the subject spiral stairs.

Regarding the issue of tread depth, the Agent argued that since the OBC seems to provide regulatory standards only for circular and curved, but not spiral, stairs it is difficult and in some cases impossible to meet the requirements of Articles 3.3.1.15. and 9.8.5.2. concerning tread depth. Article 3.3.1.15., which he noted is titled "Curved or Spiral Stairs", requires a minimum tread run of 150 mm, but on a spiral stair, which by definition is constructed around a centre support post, meeting such a minimum tread depth is not possible. The same situation holds for compliance with Article 9.8.5.2. as well, he asserted.

As a result, the Agent argued that it would be appropriate to look to model codes such as the National Fire Prevention Association, the Standard Building Code and the Building Officials and Code Administrators code which, in his view, more adequately address the concept of spiral stairs. When assessing the disputed spiral stairs under these model code standards, the Agent stated that they met all requirements (including overall stair width), with the exception of the minimum tread depth of 7 ? inches (191 mm) when measured 12 inches (305 mm) from the centre post. The latter, he explained, is the principle standard that these model codes use in terms of safety requirements for tread runs instead of minimum and average depths.

To mitigate the non-compliance with the 191 mm tread depth requirement, the Agent proposed that a second handrail attached to the centre post be added to the inside of the stairs. This handrail would project 100 mm from the post and would make the stairs safer and would effectively mean that users of the stair would be forced to walk closer to the outside where the tread run is deeper. In fact, he argued that by measuring 305 mm from the outside of the proposed inner handrail, and not the post itself, the prescriptive requirements of 191 mm for

tread depth found in the model codes will be met. While the additional handrail would further narrow the stair, it would reduce the width to 668 mm which still exceeds the minimum of 660 mm set out in the referenced model codes.

In summation, the Agent indicated that since the subject stairs were assembled off-site and lowered into place with a crane as the floor slabs were being poured removing them would be exceedingly difficult and costly. He also noted that the same stairs have been approved by other municipalities, installed in numerous other projects, and used without problem. Lastly, the Agent argued that, in his view, the subject stairs, with the inside handrail, comply with the various model codes and present no safety concerns.

6. **Respondent's Position**

The Respondent submitted that the OBC is very clear on the issues in dispute. Sentence 9.8.3.3.(2) and Articles 3.3.1.15. and 9.8.5.2. are applicable to the subject stairs. And as such, the stair width and the minimum and average tread runs, he argued, were not in compliance. He stated that during an inspection of the stairs (after installation) he found that ascending was not an issue, but descending was unsafe due to the narrow tread runs.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the eighteen sets of as-built spiral stairs, which are not required exit stairs and are measured at 780 mm in width and 50 mm and 160 mm in minimum and average tread depth respectively, are required to comply with Sentence 9.8.3.3.(2) and Articles 3.3.1.15. and 9.8.5.2. of the Ontario Building Code at the Gates of Bayview Residences - Phase One, 3 Ellesmere Road, Richmond Hill, Ontario. The as-built stairs currently do not comply with the OBC in terms of width and minimum and average stair tread dimensions.

8. **Reasons**

. The above provisions are applicable to curved or spiral stairs, even those not required for exiting.

a. The proposed measure of adding a second handrail attached to the centre steel post on the inside of the stairs does not compensate for the deficiencies. In fact, it further narrows the stairs.

Dated at **Toronto** this **25th** day in the month of **May**, in the year **2000**, for application number **2000-41**.

BCC Ruling No. 00-24-756

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-24-756

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 3.1.5.1.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Don Gordon, Head of Design Build, Cooper Construction Ltd., Oakville, Ontario, for the resolution of a dispute with Mr. Doug Ferguson, Chief Building Official, City of Brantford, to determine whether the proposed roof assembly, which is to be constructed with fibreglass reinforced polymer panels, provides sufficiency of compliance with Sentence 3.1.5.1.(1) of the Ontario Building Code at the Pure Metals Galvanizing Plant, 32 Bodine Drive, Brantford, Ontario.

APPLICANT
Mr. Don Gordon, Head of Design Build
Cooper Construction Ltd.
Oakville, Ontario

RESPONDENT
Mr. Doug Ferguson
Chief Building Official
City of Brantford

PANEL

Dr. Kenneth Peaker (Chair-Designate)

Mr. Fred Barkhouse

Mr. John Guthrie

PLACE

Toronto, Ontario

DATE OF HEARING

May 25th, 2000

DATE OF RULING

May 25th, 2000

APPEARANCES

Mr. Jonathan Rubes

Leber/Rubes Inc.

Toronto, Ontario

Agent for the Applicant

Mr. Doug Ferguson

Chief Building Official

City of Brantford

The Respondent

RULING

1. The Applicant

Mr. Don Gordon, Head of Design Build, Cooper Construction Ltd., Oakville, Ontario, has received a building permit under the Building Code Act, 1992 to construct an addition to an existing industrial building located at 32 Bodine Drive, Brantford, Ontario.

2. Description of Construction

The Applicant is proposing to extend an existing Group F, Division 3 - Low Hazard Industrial building. The building primarily serves as a used steel galvanizing plant. The existing building is 2,882.5 m^2 in building area, one storey in building height, and of combustible construction. The new addition will occupy an area of 2,856.8 m^2, thereby increasing the total building area to 5,739.3 m^2. The proposed addition will be one storey in building height, of noncombustible construction, and will be equipped with a standpipe and hose system. The maximum occupant load of the entire building is intended to remain at 300.

The proposed roof assembly for the new addition consists of fibreglass reinforced polymer (FRP) roof deck panels, 12.5 mm gypsum board, 25 mm foamed plastic insulation, and a built-up roof membrane. The proposed FRP panels are described as combustible. However, according to the Applicant, the panels meet CAN/ULC-S126-M (Standard Method of Test for Fire Spread Under Roof-Deck Assemblies), the standard for metal roof decks that support combustible materials. As well, with a maximum flame spread rating of 25, the roof deck panels also meet CAN/ULC-S102-M, "Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies". (Compliance with this standard is also required since the deck panels are to be installed below the drywall and therefore act as an interior finish.)

The construction in dispute involves the Applicant's proposed use of a combustible material in the roof assembly of the new addition.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed roof assembly, which is to be constructed with combustible fibreglass reinforced polymer panels, provides sufficiency of compliance with Sentence 3.1.5.1.(1) of the Ontario Building Code (OBC).

This provision requires, with certain exceptions which do not apply to the construction in dispute, that noncombustible materials must be used in a building, which under the Code, is required to be of noncombustible construction. The new addition is proposed to be of noncombustible construction except for a portion of the roof assembly. As noted above, the proposed roof assembly is to contain combustible fibreglass reinforced polymer (FRP) panels.

4. Provisions of the Ontario Building Code

Sentence 3.1.5.1.(1) Noncombustible Materials

1. Except as permitted by Articles 3.1.5.2. to 3.1.5.23., 3.1.13.4. and 3.2.2.16., a building or part of a building required to be of noncombustible construction, shall be constructed with noncombustible materials.

5. Applicant's Position

The Agent for the Applicant submitted that the FRP roof panels provide sufficiency of compliance with Sentence 3.1.5.1.(1) of the Code.

The Agent explained that because of the nature of the used steel galvanizing process undertaken in the subject plant, they are trying to limit the amount of material, i.e. metal, that can corrode as a result of fugitive vapours created from the chemical cleansing of steel. During this process, which occurs prior to galvanizing, used steels are put into several baths and rinses containing chemicals such as hydrochloric acid. The vapours from the chemicals are not compatible with metals and cause corrosion. Due to the rising vapours, metal roof panels especially are susceptible to this corrosive effect. As a result, the Applicant intends to use the subject fibreglass reinforced polymer panels.

The Agent stated that while the FRP panels do not meet CAN4-S114, "Standard Method of Test for Determination of Non-Combustibility in Building Materials", they do meet the roof deck (CAN/ULC-S126-M) and the interior finish standards (CAN/ULC-S102-M). Moreover, with as much as 45 percent of the content of the panels consisting of glass - a noncombustible material - the Agent argued that the proposed roof decking offers the highest level of noncombustibility for a combustible material. As well, the roof for the proposed addition, he noted, is not required to be fire rated under Article 3.2.2.82.

The Agent also agued it can be demonstrated that the FRP panel "achieves the performance intent of the Code for a roof material in the context of fire safety in a building. As he stated:

"The Code recognizes that it is not practical to construct a building entirely of noncombustible material. As such, the Code permits certain elements to be of combustible materials in a building required to be of noncombustible construction. None of those exceptions identify a roof deck. However, the Code does establish performance criteria for the roof deck with respect to fire spread and flame spread rating, both of which are met.

"The Code also recognizes, by Sentence 2.7.2.1.(1), that materials which vary from specific requirements in Parts 3, 4, 5, 6, 7, 8 and 9 may be used if the person requesting their use can establish on the basis of past performance, tests described in Article 2.7.2.4., or other evaluation that the use of the proposed material will provide a level of performance that would be achieved by conformance with the requirements of the Code." In other words, materials can also be evaluated to ensure that the intent of the specific Code provision is met. And in the Agent's view, "(t)he intent of the Code for requiring a building to be constructed of noncombustible materials is to preclude those materials from contributing to the fire load of a building and directly causing the spread of fire." The Agent then turned his attention to tests conducted on the FRP panels regarding their fuel contribution and fire spread.

In terms of these tests, the Agent stated that they "indicate that the FRP roof deck material contributes minimally to the building's fire load and does not directly contribute to the spread of fire beyond the area of flame impingement. A FRP roof deck assembly is rated as a Class 1 roof assembly by FMRC (Factory Mutual Research Corporation). This classification is based on a metal roof deck."

The Agent noted that if a metal sheet was placed between the decking and the drywall, and if that sheet were called the deck, then there would be no dispute. He indicated, however, that such a metal sheet would not improve the fire safety of the proposed roof system because it already meets all the appropriate performance requirements. And in the case of the subject galvanizing plant, with its corrosive vapours, installing a metal sheet might create a less appropriate roofing system.

The Agent concluded that while the FRP roof panels are considered combustible, the FRP roof panels provide sufficiency of compliance with the performance intended by the Code for a roof deck that is not required to be fire rated.

6. Respondent's Position

The Respondent chose not to attend the hearing. The Commission therefore relied upon his written submission only.

The Respondent submitted that they do not accept the proposed FRP roof deck as noncombustible material as it has not been tested to CAN4-S114, nor has it been listed as an acceptable combustible material to be used in noncombustible construction under the Code.

The Respondent argued that under the Code noncombustible construction is defined as " that type of construction in which a degree of fire safety is attained by the use of noncombustible materials for structural members and other building assemblies". The Code also defines "noncombustible" as material that meets CAN4-S114 standards. There is no evidence or submission that indicates the proposed roof panels meet the acceptance criteria of CAN4-S114. As a result, the proposed material cannot attain the performance level of noncombustible material, the Respondent concluded.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed roof assembly, which is to be constructed with fibreglass reinforced polymer panels, provides sufficiency of compliance with Sentence 3.1.5.1.(1) of the Ontario Building Code.

8. Reasons

i. Moisture protected, fire rated 16 mm (5/8 in) drywall is incorporated into the roof design.
ii. Life safety in the proposed addition is not reduced due to the presence of FRP panels.
iii. The performance criteria for a roof that supports a combustible material has been met.

Dated at Toronto this **25th** day in the month of **May** in the year **2000** for application number **2000-29**.

BCC Ruling No. 00-23-755

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 00-23-755

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Articles 1.1.3.2. and 3.1.2.5. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Carlos Goncalves, President, Westhaven Homes Inc., London, Ontario, for the resolution of a dispute with Mr. R. Cerminara, Chief Building Official, City of London, to determine whether the intended use of the proposed building, as a home for ambulatory individuals with disabilities, complies with the definition of "Residential Occupancy" as set out in Article 1.1.3.2. of the Ontario Building Code (OBC) and, if not, whether the structure meets the conditions that would permit it to be classified as a residential occupancy under OBC 3.1.2.5. at Westhaven Homes Residence, Lot 19, 1832 Louise Boulevard, London, Ontario.

APPLICANT
Mr. Carlos Goncalves, President
Westhaven Homes Inc.
London, Ontario

RESPONDENT
Mr. Rocky Cerminara
Chief Building Official
City of London

PANEL
Dr. Kenneth Peaker (Chair-Designate)
Mr. Fred Barkhouse
Mr. John Guthrie

PLACE
Toronto, Ontario

DATE OF HEARING
May 25th, 2000

DATE OF RULING
May 25th, 2000

APPEARANCES
Mr. Randy Wilson
Randy Wilson Architect
London, Ontario
Agent for the Applicant

Mr. Gary Edwards
Chief Plan Examiner
City of London
Designate for the Respondent

RULING

1. The Applicant

Mr. Carlos Goncalves, President, Westhaven Homes Inc., 60 North Centre Road, London, Ontario, has applied for a building permit under the Building Code Act, 1992 to construct a new building for operation by Participation House Support Services, at Lot 19, 1832 Louise Boulevard, London, Ontario.

2. Description of Construction

The Applicant is proposing to construct a new building intended to be owned and run by Participation House Support Services, an agency whose mandate is to provide services to persons with diminished mental and/or physical capacities. The building would provide accommodation for four individuals described by the Applicant as "ambulatory persons with disabilities." The structure would be one storey in building height, 180 m^2 in building area and of combustible construction. The building is proposed to be constructed as a single detached, four bedroom dwelling in accordance with Part 9 of the OBC. It is to be equipped with a fire alarm system, but not a sprinkler system.

The construction in dispute involves the occupancy classification of the subject structure and therefore, the Code requirements to be applied in the design and construction of the building. The Applicant purports that the use of the building falls under the definition of a Group C residential occupancy while

the Respondent asserts that the classification is more appropriately defined as a Group B, Division 3 care occupancy.

3. Dispute

There are potentially two issues at dispute between the Applicant and Respondent. The principal dispute between the parties is whether the intended use of the proposed building, as a home for ambulatory individuals with disabilities, complies with the definition of "Residential Occupancy" as set out in Article 1.1.3.2. of the Ontario Building Code at the subject location. The latter dispute is dependent on the outcome of the main issue. If it is ruled that the subject building is a B3 occupancy, then the secondary question is whether it conforms to the conditions in Article 3.1.2.5. and thus can be considered as a residential occupancy.

As the chief dispute pertains to the occupancy of a building, specifically which OBC category is applicable, it is appropriate to examine the occupancies to which the parties argue that the subject building belongs. The Applicant has stated it is his belief that the proposed facility should be classified as residential. "Residential Occupancy" is defined in Article 1.1.3.2. of the OBC as the use of a building where sleeping accommodation is provided but where occupants are not harboured or detained involuntary or otherwise to receive medical care or treatment.

The Respondent, on the other hand, disputed the application of "Residential Occupancy" and indicated that the definition in Article 1.1.3.2 that most appropriately describes the use of the building is "Care Occupancy" (Group B, Division 3). This occupancy would include persons receiving special or supervisory care because of cognitive or physical limitations, but does not include a dwelling unit. Dwelling unit is also a defined term in the Code. This definition is set out in the following section. Significant for our purposes, however, is that a dwelling unit is a space used as a domicile and is operated as a "housekeeping unit".

The nature of this dispute is fundamental for the construction of the building. Indeed, whereas the Ontario Building Code is a document that regulates physical structures and not human behaviour and activity, occupancy and use is nevertheless at the root of appropriate construction. Therefore, in order to correctly prescribe building regulations for a structure, how persons intend to use that structure and what its function will be must be determined. To a large degree, the use and purpose of a building dictate its associated hazard and thus the risk to the occupants. The varying levels of construction standards in the OBC are, in turn, based partially on the potential hazards inherent with certain uses.

Occupancy classification then is an essential step in determining the construction requirements for a building. In this regard, the OBC requires that all buildings be classified "in accordance with every major occupancy for which the building is used or intended to be used." (A-3.1.2. Use Classification) For a proposed building, therefore, occupancy categories are based on intended use of the structure. The Applicant has indicated the following about the intended use of the building:

The building in question is to be used by ambulatory individuals with disabilities and will be operated by Participation House Support Services under the direction of the Ministry of Community and Social Services. According to the Applicant, the building, designed as a four bedroom, single detached dwelling is intended to look as compatible as possible with the neighbourhood in which it is situated. In this manner, the main design objective is to achieve a typical residential setting for the occupants. The Applicant has also indicated that the residents would not be harboured or detained in any way. No reference was made, however, to the type or level of care or supervision that may be provided by the operator, if such care or supervision is to exist.

Upon analysis of the above definitions, the BCC begins with the premise that residential occupancies are comprised of one or more dwelling units. From this basic assumption, it is possible to see the definition of residential and care (B3) occupancies as attempting to be mutually exclusive of one another within the OBC. To elaborate, as we have assumed, a residential occupancy must contain (a) dwelling unit(s). Moreover, a residential occupancy must not contain persons "harboured or detained to receive medical care or treatment...". In contrast, a care occupancy contains persons that receive "special or supervisory care because of cognitive or physical limitations...". As well, it specifically does not include a dwelling unit.

As stated in the Technical Background Information memo written for this application by the Housing Development and Buildings Branch of the Ministry of Municipal Affairs and Housing:

"Within these definitions, the Code draws a distinction between occupancies containing sheltered occupants who receive special care or supervision and those occupancies containing persons who exercise independent control over their accommodation."

The BCC agrees with this assessment. We hold that the receipt of special or supervisory care or the lack thereof, and the degree of independent control exercised within the accommodation are the principal distinctions between residential and care occupancies.

To reach a classification then of the proposal, it is necessary to employ certain tests that will provide a determination. Based on the above described distinctions between Group C and B3 occupancies, the relevant tests are:

1) Will the occupants of the proposed building receive care?
   And;
2) Will the occupants reside in a dwelling unit operating as a housekeeping unit (which infers that occupants are able to exercise a degree of control over their suite) to receive such care?

If the answer to the first question is no, the occupancy should be considered residential. However, if the answer to the first is yes, then the second test must be applied. If the latter question receives an affirmative response, the occupancy is still likely Group C. If it is not considered a dwelling unit, however, the occupancy is most appropriately described as B3. On this basis and using this approach, the BCC will examine the evidence.

If, after occupancy is determined, the proposed structure is a B3 occupancy, the BCC must then address the secondary question regarding whether the proposed building meets the conditions set out in Article 3.1.2.5. This provision permits, under certain conditions, that some B3 occupancies may be classified and constructed as residential occupancies. The conditions are that the occupants must operate as a single housekeeping unit, that there is sleeping accommodation for no more than ten persons and that no more than two persons would require assistance to evacuate in case of an emergency. The Applicant has indicated that there would be a total of four "ambulatory persons with disabilities" housed in the structure, however, no specifics were available with respect to the nature of the resident's disabilities. It is also not clear whether the occupants will function as a housekeeping unit.

4. Provisions of the Ontario Building Code

Article 1.1.3.2. Defined Terms

(1) The words and terms in italics in this Code have the following meaning for the purposes of this Code, and where indicated, the following meaning for the purposes of the Act as well.

Care Occupancy (group B, Division 3) means an *occupancy* in which persons receive special or supervisory care because of cognitive or physical limitations, but does not include a *dwelling unit*.

Dwelling Unit means a *suite* operated as a housekeeping unit, used or intended to be used as a domicile by 1 or more persons and usually containing cooking, eating, living, sleeping and sanitary facilities.

Residential Occupancy means the *occupancy* or use of a *building* or part thereof by persons for whom sleeping accommodation is provided but who are not harboured or detained to receive medical care or treatment or are not involuntarily detained.

Article 3.1.2.5. Group B, Division 3 Occupancies

(1) Group B, Division 3 occupancies are permitted to be classified as Group C major occupancies provided:

(a) the occupants live as a single housekeeping unit in a dwelling unit with sleeping accommodation for not more than 10 persons, and

(b) not more than 2 occupants require assistance in evacuation in case of an emergency.

Article 9.10.2.2. Custodial and Convalescent Homes

(1) Children's custodial and convalescent homes for ambulatory occupants living as a single housekeeping unit in a dwelling unit with sleeping accommodation for not more than 10 persons is permitted to be classified as residential occupancies.

5. Applicant's Position

The Agent for the Applicant submitted that the main issue involves a question of interpretation. He suggested that the classification of a building is the first and most important step in the application of the Building Code. In his opinion, there is no question that the intended use of this building meets the definition of "Residential Occupancy" outlined in Article 1.1.3.2. of the Code. As a result, he submitted that, under Sentence 2.1.1.3.(1) of the OBC, the Part 9 construction requirements, and not those in Part 3, should apply.

In support of his opinion, the Agent submitted that the operators have confirmed that they do not harbour or detain individuals for care or treatment. Instead, Participation House Support Services will provide housing for ambulatory individuals with disabilities in a residential "home" environment as opposed to an institutional setting. The Agent submitted that "(t)he residential setting must model as close as possible a typical home environment. This direction is supported by the Ministry of Community and Social Services and Ministry of Health policy directions for community integration and de-institutionalization." As a result of this directive, the building will be located in a residential neighbourhood and has been designed as a four bedroom, one storey, single detached dwelling, using the Code requirements found in Part 9 of the OBC.

In terms of the occupants of the dwelling, the Agent noted the residents are free to come and go as they please. Their freedom is restricted only by the measure of assistance that they may require. Moreover, there are no written guidelines or restrictions to dictate the nature of the disability an individual may have. In addition, the Agent advised that the house will not be staffed by nurses nor are the residents intended to be supervised. There will, however, be a 24 hour staff on site that may provide assistance when required.

The Agent concluded by stating that there is no compelling reason to link this building with a Group B, Division 3 use. The definition of "Residential Occupancy", as outlined by the Code, is applicable to every facet of this proposal. In addition, he advised that it was not necessary to refer to the provisions of Article 3.1.2.5. of the Code, that outline the requirements that would permit a Group B, Division 3 occupancy to be classified as a Group C occupancy. The use of this building already clearly conforms to the residential occupancy classification and no further consideration should be required. However, if the Commission were to conclude that the building is classified as B3, they meet the criteria specified in Article 3.1.2.5., he argued.

6. Respondent's Position

The Respondent submitted that, although a residential home is being built by Westhaven Homes Inc., it will be sold to and operated by Participation House Support Services, "a care provider under the direction of the Ministry of Community and Social Services." This operation involves some form of care for the occupants and, as a result, "the code requires the building to be designed to the most restrictive classification." In this regard, he has considered it to be a Group B, Division 3 care occupancy when considering the definitions listed in Article 1.1.3.2.

As a B3 occupancy, the Respondent then considered the building under Article 3.1.2.5. of the OBC. This would permit a B3 occupancy to be considered as a Group C occupancy, provided

that; a) the occupants live as a single house keeping unit, b) sleeping accommodation is limited to 10 persons and, c) not more than two persons require evacuation assistance. The Respondent advised that not enough information was available for them to accurately assess whether those conditions were met in this instance. They contended therefore that the classification remains as a B3 care occupancy. This classification would provide the appropriate level of life safety to the occupants of the building.

The Respondent raised several additional issues for consideration, including, the applicability of prior court rulings on similar cases; lack of control over the future occupants of the building and the nature of their disabilities, and; lack of information available to the Applicant from the care operator and, in turn, the Respondent in respect to the level of assistance required by the occupants and level of care to be provided at the facility.

The Respondent acknowledged that the construction requirements for a B3 occupancy are more onerous, specifically the building must be sprinklered and provided with upgraded fire separations. It was suggested that it may be appropriate for the Commission to recommend a Minister's Ruling that would allow an owner to forego the fire separation requirements for a Group B, Division 3 occupancy, provided that such buildings have a maximum building area of 200 m^2, a maximum occupancy of 10 persons, full sprinklering and a fire alarm system. The Respondent noted that there is no requirement in the OBC for a fire alarm system in a B3 occupancy containing not more than 10 persons.

In summation, the Respondent argued that their position remains that the building is most appropriately defined as containing a Group B, Division 3 care occupancy. This position is based on the nature of the operation and the known service offered, the potential limitations of the occupants of the building, and the lack of information available to reach any alternative conclusion.

7. Commission Ruling

The following are the decisions of the Building Code Commission regarding the Westhaven Homes Residence, Lot 19, 1832 Louise Boulevard, London, Ontario:

i. The intended use of the proposed building, as a home for ambulatory individuals with disabilities does not comply with the definition of "Residential Occupancy" as set out in

Article 1.1.3.2. of the Ontario Building Code, and, as a result, the Care, or B3, occupancy is considered the most appropriate classification; and further,

ii. The proposed structure fails to meet the conditions set out in OBC Article 3.1.2.5. and therefore is not permitted to be classified as residential.

8. Reasons

Re: Determination Between Groups C and B3 Occupancies

a. The proposed occupancy is not considered residential because care is to be provided to the occupants. At least one staff person will be available to provide assistance, if necessary, 24 hours a day.
b. The building will be operated as a non-profit business providing services for the rehabilitation of patients. Since the occupants will require and receive supervisory care from the operator, the building should be classified as a care occupancy.
c. The occupants will seem to have less control or influence over their environment within the proposed building as would persons owning, renting or simply occupying a house, an apartment or a condominium unit. The future occupants are to be residents in a facility where care is provided. The living arrangement therefore cannot be considered as a housekeeping unit. Operating as a housekeeping unit is essential for a suite to be considered as a dwelling unit and thereby a residential occupancy.

Re: Application of Article 3.1.2.5.

d. The evidence presented did not indicate that the operator of the facility could guarantee over the long term use of the building that no more than two persons would require assistance in the event of an emergency evacuation.
e. As stated in reason "c" above, the occupants will not operate as a housekeeping unit.

Dated at Toronto this **25th** day in the month of **May** in the year **2000** for application number **2000-26**.

BCC Ruling No. 00-22-754

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 00-22-754

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992. AND IN THE MATTER OF Article Article 3.2.8.9 and Sentence 3.2.8.4.(4) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Greg Varrette, Project Co-ordinator, Thomas Fuller Construction Co. Ltd., 2700 Queensview Drive, Ottawa, Ontario for the resolution of a dispute with Ms. Terry Dalkowski, Chief Building Official, City of Nepean, to determine whether the 45 m travel distances in the existing portions of the building, which are not to be protected by a 2 hour rated wall at the proposed atrium, provide sufficiency of compliance with Sentence 3.2.8.4.(4) of the Ontario Building Code (OBC), and whether the proposed smoke management system designed in conformance with NFPA 92B, "Guide to Smoke Management in Malls, Atria and Large Areas", and intended for the atrium to be constructed adjoining to the existing building, provides sufficiency of compliance with Article 3.2.8.9. of the OBC, at JDS Uniphase, 3000 Merivale Road, Nepean, Ontario.

APPLICANT
Mr. Greg Varrette, Project Co-ordinator
Thomas Fuller Construction Co. Ltd.
Ottawa, Ontario

RESPONDENT
Ms. Terry Dalkowski
Chief Building Official
City of Nepean

PANEL
Dr. Kenneth Peaker, Chair-Designate
Mr. John Guthrie
Mr. Fred Barkhouse

PLACE
Toronto and Ottawa, Ontario

DATE OF HEARING
May 18th, 2000

DATE OF RULING
May 18th, 2000

APPEARANCES
Mr. Jonathan Rubes, Leber/Rubes Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Frank Bidin
City of Nepean
Designate for the Respondent

RULING

1. The Applicant

Mr. Greg Varrette, Project Co-ordinator, Thomas Fuller Construction Co. Ltd., Ottawa, Ontario, has applied for a building permit under the Building Code Act, 1992 to construct a new addition consisting of an office structure and a large atrium onto an existing office-industrial complex known as JDS Uniphase, at 3000 Merivale Road, Nepean, Ontario.

2. Description of Construction

The Applicant is proposing to construct a three storey office structure and multi-storey atrium onto an existing four storey office-industrial complex that serves as the corporate world headquarters for JDS Uniphase, a producer of fibre optic components. The existing building, which initially commenced construction in 1998, has been built in three phases. Phases 1 and 2 are both four storey office-industrial areas that combine administration and manufacturing within each. Located to the south-east of phases 1 and 2 is phase 3, which is currently under construction. It too is a four storey office-industrial area. The proposed construction is designated as phase 4 and, as office space only, will be used exclusively for administration purposes. Also proposed is an atrium to be located in the centre of all four phases that

will effectively join these areas together to form a new, larger building. (The phases of the existing building were previously connected by common service and office areas and walkways.)

The existing complex, phases 1 to 3, is currently classified as having Group D (business) and Group F - Division 3 (low hazard industrial) major occupancies. The completed building, with the proposed addition, will have the same classifications. Including phase 4, the total building area for the entire structure will be 21,000 m2 and the building height will be four storeys. The building is, and will be, of noncombustible construction and is to be fully sprinklered with a supervised and monitored system and equipped with a standpipe and hose and fire alarm systems throughout.

A smaller, full height atrium, known as the Executive Atrium, is also proposed to be included within the new phase 4 administration building. This atrium will fully comply with OBC requirements for interconnected floor spaces in Subsection 3.2.8. and will feature "the provision of smoke detectors and baffles at floor openings, limited travel distance, and exhaust at a rate of 6 air changes per hour from the top of the atrium." This atrium is not in dispute.

The proposed construction of the large atrium space, however, has implications for the existing building. Construction of the atrium facility (the opening of which complies with the minimum size requirements for openings in floor assemblies found in Article 3.2.8.3. of the OBC) means that some of the existing exterior curtain walls in the phase 1, 2 and 3 three portions will become interior walls adjoining the atrium space. As these walls are comprised mostly of fixed laminated glass panels, they are considered unrated assemblies and will act as smoke separations only. Without a continuous and rated fire separation between the atrium and the existing areas, the floor levels of the office and manufacturing portions will thus become interconnected floor space with the atrium. This creation of an interconnected floor space situation raises two main areas of dispute.

The first deals with the travel distances in the existing building. The travel distances in these areas of the sprinklered building have been designed and built to meet the OBC requirements for Group D and F3 occupancies for a floor space not considered to be interconnected, which in this case is 45 m for both. (Clause 3.4.2.5.(1)(c) permits the travel distances to be increased to 45 m in a sprinklered building of these occupancies, however, Sentence 3.2.8.4.(4) waives this increased travel distance.) The Applicant is proposing that these existing travel distances, even though they are now in an interconnected floor space, remain unchanged. The only modification intended for the existing portions of the building is decommissioning of certain stairwells that will no longer discharge to the exterior due to the pending construction of the central atrium. It is proposed that the decommissioned stairs will act as communication and circulation facilities. (It should be noted that the phase 4 administration building

will be built to comply with the interconnected floor space requirements of OBC Subsections 3.2.8., including the maximum travel distance of 40 m permitted in Sentence 3.2.8.4.(4) for a Group D occupancy in a sprinklered building on an floor area in an interconnected space.)

The second area of dispute raised by the construction of the proposed atrium concerns the smoke management within the interconnected floor space area. This dispute specifically relates to the existing phases 1 to 3 and the large atrium. (Whereas the phase 4 area is considered to be within the larger interconnected floor space with respect to the central atrium, this phase has been designed to meet the requirements for interconnected floor space as mandated in Subsection 3.2.8. of the OBC. Therefore, as new construction, phase 4 will be equipped with a zoned smoke management system as per Article 3.2.8.9.) Due to the construction difficulties involved in retrofitting the existing building's HVAC system, and because of the sheer volume of air space in the proposed large atrium, the Applicant is intending to offer an alternative smoke management system than that required by Code for the interconnected floor space area. The major features of this smoke management system, as described by the Applicant, are as follows:

- "smoke exhaust from the top of the atrium at a rate as specified by NFPA 92B"; (The exhaust rate for the atrium area only, as proposed, is 224 489 m3/hour which is approximately four air changes per hour for that 56,633 m3 space.)

- "no zoned smoke exhaust for existing floor areas which are smoke separated from the atrium"; and,

- "automatic and manual operation of all fans and controls associated with atrium exhaust. Manual activation capability of supply fans serving existing floor areas at 100% outdoor air, so as to provide positive pressure of a floor area in the even (sic) that a fire within the atrium causes glazing to break."

To achieve compliance with the Code with respect to the above referenced items in dispute, the Applicant is offering the following package of safety features in the building:

- "existing exterior walls and glazing to remain in place to act as a smoke separation between the atrium and existing floor areas;

- "closely spaced pendant quick response sprinklers to be installed around the interior of the atrium at the level of the 2nd floor slab to respond to fires originating in the atrium in close proximity with the atrium walls; (and,)

- "smoke exhaust from the top of the atrium in accordance with the engineered design criteria of NFPA 92B."

(It should be noted that while the smoke management of the interconnected floor space is an issue at dispute, the Applicant is not simply offering the NFPA 92B system as an alternative to the Code's prescriptive smoke management requirements but also as a proposed measure to relieve the travel distance deficiency.)

The Applicant is also providing smoke detection in various parts of the building. Specifically, smoke detectors are to be installed within the second and third floor circulation spaces of the new administration building as well as at the top of the large atrium. These latter detectors are to operate the atrium's smoke management system. No detection is proposed to be installed on existing floor areas at the fixed glazing overlooking the atrium. This is because it is anticipated that the glazing will prevent smoke caused by a fire originating in the existing areas from entering into the atrium. (Except, of course, when a fire begins in the immediate vicinity of the glazing and breaks the glass separation. In this scenario, however, according to the Applicant the atrium smoke management and detection systems and the remainder of the glazing would perform as if the fire occurred within the atrium itself.)

3. Dispute

There are two disputes between the Applicant and the Respondent. The first is whether the 45 m travel distances in the existing portions of the building, which are not to be protected by a 2 hour rated wall at the proposed atrium, provide sufficiency of compliance with Sentence 3.2.8.4.(4) of the OBC. The second is whether the proposed smoke management system designed in conformance with NFPA 92B, "Guide to Smoke Management in Malls, Atria and Large Areas", and intended for the atrium to be constructed adjoining to the existing building, provides sufficiency of compliance with Article 3.2.8.9. of the OBC. (The aforementioned Code provisions are applicable to the existing building since it has been constructed in phases over the last two years and is therefore not eligible to be considered under Part 11 of the OBC, in particular the alternative measures provision contained therein.)

The first provision, Sentence 3.2.8.4.(4), stipulates that the increased travel distance to exits provided by Clause 3.4.2.5.(1)(c) for a sprinklered floor area does not apply to space within a building above ground level even though sprinkler protection is provided if that same area is within an interconnected floor space. In essence, the effect on the travel distance requirements due to the inclusion of the interconnected floor space within the subject building is as if it did not contain sprinklering, and thus the existing portions of the facility no longer qualify for the extension in permitted travel distance.

As a result, the maximum travel distance permitted for such floors above the ground level is 40 m for the Group D occupancy areas and 30 m for the Group F3 occupancy areas, as based on Clauses 3.4.2.5.(1)(b) and 3.4.2.5.(1)(f) respectively. As noted, the existing travel distances on certain floors of phases 1, 2, and 3 for both administrative and manufacturing areas is 45 m. To compensate for this perceived deficiency, the Applicant is offering certain measures of compensation as outlined in the previous section.

Article 3.2.8.9., the second provision in dispute, requires in Sentence (1) that a smoke control system, designed in conformance with the provisions of the remainder of the Article (Sentences (2) to (8)), be incorporated in a building with an interconnected floor space. Within Sentences 3.2.8.9.(2) to (8) two different types of smoke management systems are set out. Sentence (4) describes a system of zoned smoke control, whereas Sentences (6) and (7) outline a total smoke control system.

The differing characteristics of these systems is that a zone-type smoke control system provides for air exchanges at a rate of six times an hour from the zone in which the fire was detected and that smoke is prevented from moving from one zone to another. With a total smoke control system, on the other hand, air is mechanically exhausted not from individual zones but from the top of the interconnected floor space at a rate of six times an hour, unless the volume of space exceeds 17,000 m3 (600,000 ft3) in which case the air exchange rate need only be four times an hour. Since phases 1 to 3, at 260,513 m3 (9,200,000 ft3), and the large atrium, at 56,633 m3 (2,000,000 ft3), consist of a total of 317,145 m3 (11,200,000 ft3), the subject interconnected floor space far exceeds the threshold which permits four air changes an hour.

However, to install either type of smoke control system in the existing parts of the building would be difficult for the Applicant to achieve. As he stated:

"Both of the two prescribed smoke management options of the OBC would require extensive modifications to the existing air handling systems in the existing buildings. In addition to many smoke dampers, special controls for the operation of the fans would be required. The existing fan and duct sizes in Phase 1 are not suitable for the required air exchange rate. The Phase 1 air handling system would be required to be reconstructed. Where the process air handling system of Phase 2 could be used to accomplish the objective, substantial modifications of the existing building would be required to cover all areas of the floor.

"As such, the introduction of one of the prescriptive options of the OBC would cause significant construction difficulty and business interruption."

As a result, the Applicant has proposed the previously described alternative system of smoke management that he believes is equivalent to those articulated in the prescriptive requirements of the Code.

At issue, therefore, is whether the proposed smoke management system for the atrium which is not prescribed nor recognized by the Code, and the proposed compensating fire safety measures, as specified, offered in lieu of reducing the travel distance within the interconnected floor areas provide sufficiency of compliance with the OBC.

4. Provisions of the Ontario Building Code

Sentences 3.2.8.4. Exits

4. Except where exits serving the floor area are at ground level, the increased travel distance to exits permitted by Clause 3.4.2.5.(1)(c) shall not apply to a floor area within an interconnected floor space.
5. Where a portion of a floor area is not within an interconnected floor space, required access to exit from such portion of a floor area shall not lead through an interconnected floor space.

Article 3.2.8.9. Smoke Control

1. A smoke control system conforming to Sentences (2) to (8) shall be designed to control the movement of smoke within a building containing an interconnected floor space.
2. The design of the smoke control system shall assume an outdoor temperature equal to the January design temperature on a 2.5% basis.
3. Upon activation of the sprinkler system or automatic detection of smoke by at least two smoke detectors in a single zone within an interconnected floor space, the system shall
    a. stop air moving fans which provide for the normal exhausting or re-circulating of air in an interconnected floor space,
    b. activate exit stair shaft protection required in Article 3.2.8.4.,
    c. activate elevator protection required in Article 3.2.8.5., and
    d. activate the vestibule air supply required in Sentence 3.2.8.6.(1).
4. A building containing an interconnected floor space may be designed so that, in the event of a fire arising in a floor area or part of a floor area within the interconnected floor space, automatic detection of such fire will activate air handling equipment that
    a. extracts air directly from such floor area or part of a floor area at the rate of at least 6 air changes per hour, and

b. supplies air in sufficient quantities and at appropriate locations to prevent smoke from passing out of such floor area into other portions of the interconnected floor space.

5. For purposes of Sentences (6) and (7), the volume of an interconnected floor space need not include the aggregate volume of those floor areas or portions of floor areas designed to have zoned air extraction in accordance with Sentence (4).
6. A mechanical exhaust shall be provided to remove air at the top of an interconnected floor space at the rate of at least 6 air changes per hour, except that where the volume of the interconnected floor space exceeds 17 000 m3 (600,000 ft3), only 4 air changes per hour need be provided.
7. Except where zoned mechanical exhaust described in Sentence (4) has been activated, upon automatic detection of smoke within the volume of the interconnected floor space, the mechanical exhaust described in Sentence (6) shall be automatically activated and supply air shall be provided in sufficient quantity and at appropriate locations to allow a consistent rate of removal of smoke throughout the volume of the interconnected floor space.
8. Overriding manual controls for the smoke control system shall be provided for fire department use at an acceptable location in the vicinity of the fire alarm annunciator.

5. Applicant's Position

A the outset, the Agent for the Applicant submitted that the introduction of an atrium space into the JDS Uniphase building does not compromise the level of safety afforded to the building's occupants. He offered the following arguments to support this assertion.

Prior to this, however, the Agent offered some background information about the subject complex. He noted that phases 1 and 2 are completed and occupied and the construction of phase 3 is well under way. He also noted that phase 4, with its Executive Atrium, will comply in full with the requirements of the OBC. The Agent indicated that the exterior walls of phases 1 to 3, which are to become interior walls, were built to the appropriate construction requirements at the time. He further described the building as having a substantial portion dedicated to office use and that the manufacturing done in the facility produces high-tech electronic components, specifically fibre optics switching cable. This production is highly controlled and not very combustible, he stated.

Regarding the issue of travel distance, the Agent began his argument by noting that "technically" the existing floor areas in phases 1 to 3 are considered as being part of the interconnected floor space, however, this space will be physically separated from the proposed large atrium by the existing walls. And while these walls are not rated, they will act as a screen to control the movement of smoke. This function will be greatly enhanced by the proposed NFPA 92B smoke management system, he argued.

Because this system vents out through the roof of the atrium, smoke from a fire on an existing floor area that breaks the smoke screen, or smoke from a fire that originates in the atrium itself, will be expelled to the exterior before it spreads to other parts of the building. In this way, the Agent noted that their NFPA 92B alternative solution regarding the smoke management dispute is also intended as a compensating measure for the travel distance issue.

The Agent then described the serious construction challenges that would be faced if they had to retrofit the existing portions of the building to comply with the reduced travel distance requirements for interconnected floor spaces. In order to meet the 40 and 30 m travel distances for the Group D and F3 occupancies respectively, fire rated exit corridors would have to be extended deep within certain floor areas so as to shorten the access to exits routes. The cost of doing this would be significant, he stated. Besides, according to their calculations the majority of the disputed floor area (roughly 55%) is Group D office and administrative space, which is only 5 m over the required distance, he noted. Additionally, the Agent argued that F3 occupancies, especially the subject one, are not much more hazardous than D, and the Code recognizes this by permitting similar travel distances for these uses in some circumstances. And since the manufacturing done in this building is quite safe, the lesser distance of 30 m instead of 40 m seems onerous in this instance.

The Agent continued that even if access to exits routes in the affected floor areas could be reduced, it would not quicken the evacuation time because of the width of the exit doors provided on each floor area. As he explained, exit time is comprised of not only the time it takes to get to an exit or access to exit door, but also of the time it takes to get through the door in question. Because, in an emergency, other occupants of a floor area have also moved to the exit door a queue of people will form. The time it takes for this queue to pass through the exit must be added to the time it took to travel across the floor area to the exit. In the case of the subject building, when considering the occupant load, the existing travel distance and, most critically, the width of the access to exit doors, the Agent argued that the overall time to exit would still be approximately the same. In other words, the queue that would form as a result of the width of the exit doors would take sufficient time to funnel through that it would negate the additional travel distance currently in dispute.

In addition, the Agent argued that the entire existing floor space, both D and F3 occupancies, are sprinklered. This will greatly contribute to the safety of those areas and would lessen the hazard of the extra distance required to travel.

On the issue of the proposed smoke management system, the Agent stated that both the solution for atrium (the NFPA 92B system) and the existing building (the smoke screen and the various sprinkler

protection) must be viewed as a comprehensive fire safety package. As such, he argued that the total proposal addresses the building - both existing and new - in its entirety (except of course for the phase 4 area). The Agent indicated that he hoped the BCC would assess the project in this holistic fashion. He then described both elements of the proposal.

Because of the sheer volume of air in the atrium and phases 1 to 3 (over 300,000 m3) that the OBC requires to be vented for smoke management purposes, the Agent explained they felt it prudent to explore other alternatives. For the atrium, NFPA 92B was a logical choice since it provides a standard for smoke control in large atria space and offers more flexibility in design than the OBC. Moreover, the principles of the NFPA 92B standard are essentially the same as those in the Code, the Agent argued. Specifically, the methodology of NFPA 92B also follows an engineered approach for smoke management that calculates the maximum rate of exhaust required to maintain the smoke interface above a prescribed level. This is done by predicting the maximum fire size and consequent smoke production likely to happen within a floor area. As part of the smoke production calculation, the NFPA formula takes into account the accompanying sprinkler system and its limiting of smoke generation by suppression of fire. In short, the Agent explained, the approach of NFPA 92B is to curtail smoke generation and propagation by limiting the size of fire through suppression and by providing an equilibrium for the smoke layer interface by exhausting smoke at a rate at which it is supplied by the fire.

The Agent then explained that they created a series of scenarios regarding differing locations for a fire to originate with respect to the atrium. According to their calculations, the worst case scenario was a fire that originated close to the floor level of the atrium. In this scenario, the largest fire size within the atrium would be over 8,000 Btu/second and would take 430 seconds before sprinkler activation. Such a blaze would require approximately 3,734 m3/min (132,000 ft3/min) of exhaust from the top of the atrium. As the Agent noted, this is the same exhaust evacuation rate that they have proposed for this space.

The Agent continued that the NFPA 92B standard also assumes that any potential fire would occur on a single floor area, and not on more than one area simultaneously. This assumption also applies to the relationship between the floor areas and the atrium, i.e. the smoke management system is designed assuming that a fire would not occur in a floor area and concurrently in the atrium. This is a significant assumption in terms of the comprehensive approach of the proposal, the Agent noted, and it supports the concept that the existing and new portions of the building are taken in conjunction with each other and function together. Further, since the chance of fires starting in two separate areas of the building is quite remote, such an assumption is safe and rational.

It must be appreciated therefore that the smoke screen is an essential component for the two areas in regards to controlling the movement of smoke, the Agent indicated. Protecting the screen thus is vital to maintaining the integrity of the separation. Due to the fact that the smoke separation is a former exterior wall, it will perform well as a screen, he added. These walls have the capability of preventing the migration of smoke between the atrium and adjacent floor areas until the heat from the fire is intense enough to break them. This is more likely to happen if a fire originates immediately adjacent to the glazing, he noted. It is for this reason that the curtain wall is to be protected with close-spaced sprinklers installed beneath a 300 mm wide baffle located around the perimeter of the atrium area.

With respect to the existing floor areas, the Agent stated that in this case they are again faced with an situation where extensive and disruptive modifications are needed to bring about the changes required to meet either of the types of Code compliant smoke control systems. The existing air handling system, he noted, does not have the capacity to perform to the level required for smoke management in an interconnected floor space. The existing curtain walls, however, will protect these areas. Indeed, these walls, as a physical barrier between the spaces, represents an excellent passive safety system. And passive systems, the Agent argued, are always superior to active, or mechanical, ones. The Agent reiterated that the smoke screen will be sprinkler protected. In addition, he noted that the existing floor areas are safe since they enjoy complete protection offered by sprinkler, fire alarm and standpipe and hose systems as per Code.

Lastly, the Agent noted that he has been involved with projects in which NFPA 92B has been employed in other large buildings elsewhere in the province and in the country such as the Air Canada Centre in Toronto, the Corel Centre in Ottawa and GM Place in Vancouver. In his view, NFPA 92B is appropriate for the JDS Uniphase building. And added to the safety brought to the building by the NFPA 92B smoke management system is the safety factor of the curtain wall smoke separation, which is a passive safety feature. These systems, together with the other Code complying safety features, led the Agent to conclude that the objectives of the OBC for areas within an interconnected floor space have been met with their overall approach to fire safety within the structure.

6. Respondent's Position

The Respondent commenced their presentation with some of their own background of the project. They noted that the entire project was presented to municipal officials prior to development of the site and construction of any of the phases, therefore, they see no reason why the Applicants and their Agents did not foresee the two issues at hand.

On the matter of travel distance, the Respondent submitted that they tried to see this as an equivalency issue, but they came to the conclusion that it is not. In their view, it is a sufficiency of compliance issue because the proposal does not comply with the prescriptive requirements of the Code. As he stated, the travel distances, now that they are to be contained within an interconnected floor space, are deficient. Whereas he acknowledged that the Group D areas are only somewhat deficient, the F2 areas, at 50 % over the allowable distance, are a long way from meeting the Code. The Respondent also indicated that he disputed the floor area percentages the Agent outlined. He argued that the F3 occupancy, where the deficiency is greater, has the larger floor area.

In terms of the smoke management issue, the Respondent made the following statement:

"The Nepean Building Division has reviewed the Report to attempt to establish an equivalency as permitted under Section 2.7.2.2. of the Code for systems. Although NFPA 92B is not a referenced document under 2.6 of the Code it can be considered to have some validity in the prediction of smoke production and design of smoke management in atria. Although the use of NFPA 92B may be considered as the basis for an equivalency to the prescriptive requirements for smoke control found in 3.2.8.9. of the Ontario Building Code (for the atrium), it does not provide an equivalency for the required 2 hour vertical fire separation for the existing complex. Clearly, the additional mitigating measures proposed to further protect the smoke separation (existing exterior wall) ie. closed space sprinklers & heat baffles, used to limit smoke movement must be considered as an application for sufficiency of compliance and outside the regulatory framework provided under the Ontario Building Code."

In other words, while they felt they could offer qualified support for the proposal to install an NFPA 92B compliant smoke control system as an alternative solution in the atrium area, they felt that the proposed measures intended to address the issue of upgrading the smoke management system in the existing areas was a concept they felt they had no authority over.

7. Commission Ruling

It is the decision of the Building Code Commission that at the JDS Uniphase building, 3000 Merivale Road, Nepean, Ontario:

a. Sufficiency of compliance with Sentence 3.2.8.4.(4) of the OBC is provided with respect to the proposed 45 m travel distance in the office occupancy areas; however,
b. Sufficiency of compliance with Sentence 3.2.8.4.(4) is not provided regarding the proposed 45 m travel distance in the manufacturing occupancy areas.

It is also the decision of the Building Code Commission that at the JDS Uniphase building, 3000 Merivale Road, Nepean, Ontario, the proposed smoke management system designed in conformance with NFPA 92B, "Guide to Smoke Management in Malls, Atria and Large Areas", and intended for the proposed atrium to be constructed adjoining to the existing building, provides sufficiency of compliance with Article 3.2.8.9. of the OBC.

8. Reasons

Re: Proposed Travel Distances in the Group D Office Occupancy Areas

i. The travel distance proposed for the Group D areas, at 45 m, is only slightly over the required travel distance of 40 m.

ii. The smoke separation provided by the existing (formerly exterior) curtain walls that are to face the atrium, the smoke exhaust system proposed for the atrium and the closely-spaced sprinklers around the atrium perimeter are adequate to mitigate the excess travel distance proposed.

Re: Proposed Travel Distances in the Group F3 Manufacturing Occupancy Areas

iii. The travel distance proposed for the Group F3 areas, at 45 m, exceed the Code requirement of 30 m by 50 % and the proposed compensating measures (described in reason ii above) were not considered commensurate with such an increase of permitted egress distance.

Re: Proposed Smoke Management System

iv. In the present circumstance, the utilization of a smoke management system designed on NFPA 92B is an acceptable alternative to the prescriptive requirements of OBC Article 3.2.8.9.

v. The NFPA - 92B standard is based on sound engineering practices and its requirements have been satisfied in the Applicant's proposal.

Dated at Toronto this 18 th day in the month of May in the year 2000 for application number 2000-32.

BCC Ruling No. 00-21-753

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-21-753

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Subsection 3.2.3. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Chris Boyd, Rebanks Architects Inc., Toronto, Ontario for the resolution of a dispute with Mr. Terry Willing, Chief Building Official, City of Kingston, to determine whether the new supermarket, proposed to be constructed adjoining to an existing retail mall as one enlarged building built on two properties complies with Sentences 3.2.3.1.(8), 3.2.3.7.(4), 3.2.3.12.(1), 3.2.3.12.(3), 3.2.3.13.(3) and 3.3.1.4.(4) of the Ontario Building Code at the Loblaws Supermarket, 1100 Princess Street, Kingston, Ontario.

APPLICANT
Mr. Chris Boyd
Rebanks Architects Inc.
Toronto, Ontario

RESPONDENT
Mr. Terry Willing
Chief Building Official
City of Kingston

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. Donald Pratt
Mr. Fred Barkhouse

PLACE
Toronto, Ontario

DATE OF HEARING
May 11th, 2000

DATE OF RULING
May 11th, 2000

APPEARANCES
Mr. Randal Brown, Consulting Engineer, President
Randal Brown & Associates Ltd.
Willowdale, Ontario
Agent for the Applicant

Mr. Ted Marecak
Building Official
City of Kingston
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Chris Boyd, Rebanks Architects Inc., Toronto, Ontario, has applied for a building permit under the *Building Code Act, 1992* to construct a Loblaws Supermarket, at 1100 Princess Street, Kingston, Ontario.

2. **Description of Constrution**

   The Applicant is proposing to construct a new addition to the north of an existing mall to serve as a Loblaws supermarket. The addition is described as a two storey, noncombustible structure with a building area of 7,432 m^2, that is classified as having a Group E - (retail) mercantile major occupancy. The building is to be equipped with a sprinkler system and a fire alarm system, but not a standpipe and hose system.

   The existing mall is 23,180 m^2 in building area excluding the Sears store, which is to be demolished and will be replaced by the proposed Loblaws facility. The mall is also two stories in building height and is of non-combustible construction. It too is equipped with sprinkler and fire alarm systems, but not a standpipe and hose.

Apart from the standard supermarket food shelves, grocery isles, check out counters, shipping, storage and receiving areas, the ground floor will also contain a pharmacy, a bakery, a photolab/shop and other commercial retail space. The second storey of the supermarket is proposed as an L-shape mezzanine along the north and east perimeter walls of the building. This level will provide space for employee facilities and administrative offices as well as a cooking classroom, a restaurant and a fitness centre. No connection is proposed between this storey and the existing mall.

The supermarket will be provided with two public entrances directly from the exterior on the east wall. Immediately inside the entrance at the south-east corner will be the connection to the mall. This connection is to be comprised of a short north-south corridor that will terminate at a longer existing east-west covered pedestrian corridor that is to separate the two buildings. This latter corridor, which is to be rebuilt as part of the construction, is 6 m in width and has exit doors at both its east and west ends to serve the existing mall's main central corridor. At present, the east-west covered corridor straddles the property line between the two buildings (extending 1.8 m onto the Loblaws' land). The entire south exposing building face of the Loblaws store, a portion of which will form the north wall of the subject corridor, is to be constructed as an unrated fire separation.

To accommodate more parking directly in front of the Loblaws store, the Applicant is proposing to shift the entire supermarket considerably to the west of the former footprint of the Sears store. The placement of the supermarket at this location means that the internal corridor connections between the two buildings will be offset. It also means that the exterior walls of the opposing buildings will be offset, specifically the easterly portion of the mall's north wall and the westerly portion of the supermarket's south wall will be exposed to the dividing property line (4.2 m and 1.8 m away respectively) but not the opposing building.

The construction in dispute involves the proposal to build the supermarket's southern exposing building face as an unrated separation 1.8 m from a property line, a portion of which is to form part of an exit corridor. The Applicant is proposing to include spatial separation agreements registered on title as per OBC Sentence 3.2.3.1.(8) to require if either party were to sell their property that measures be taken to meet the spatial separation requirements.

3. **Dispute**

The dispute between the Applicant and the Respondent is whether the new supermarket proposed to be constructed adjoining to an existing retail mall as one enlarged building built on two properties complies with Sentences 3.2.3.1(8), 3.2.3.7.(4), 3.2.3.12.(1), 3.2.3.12.(3), 3.2.3.13.(3) and 3.3.1.4.(4) of the Ontario Building Code. Subsection 3.2.3. (including the first five Sentences above) governs structural and design requirements for spatial separation and exposure protection of separate buildings located on different properties, separate buildings located on different properties but with zero distance between them (i.e., attached buildings), and buildings connected by (a) walkway(s). Sentence 3.3.1.4.(4) permits, with certain exceptions that are not applicable in this instance, a public corridor to be constructed without fire separations if the floor area is sprinklered and the corridor is more than 5 m in width.

The more fundamental issue that must be addressed prior to any discussion of compliance with the aforementioned Code provisions, however, is whether the proposed expanded, fully sprinklered structure located over two properties should be considered as one building. If the answer to this question is affirmative then Sentences 3.2.3.1.(8), 3.2.3.7.(4) and 3.2.3.13.(3) are no longer applicable since they deal with spatial separation and limiting distance issues from separate buildings. Moreover, if the complex is viewed as one building in conjunction with the fact that the proposed addition will be fully sprinklered (as is the existing building), the covered pedestrian corridor exceeds 5 m in width, and the structure does not contain Group B or C occupancies, then Sentence 3.3.1.4.(4) would be satisfied and also not in dispute. As one building, the only requirements referred to above that would be germane are those relating to the protection of exit facilities found in Sentences 3.2.3.12.(1) and (3).

Put simply, the issues before the Commission are whether the subject structure with the addition of an adjoining supermarket on the adjacent property can be considered for the purposes of Ontario Building Code conformance as one building and whether the proposed design complies with, or in fact is required to comply with, OBC Sentences 3.2.3.1.(8), 3.2.3.7.(4), 3.2.3.12.(1), 3.2.3.12.(3), 3.2.3.13.(3) and 3.3.1.4.(4).

4. **Provision of the Building Code**

Sentence 3.2.3.1. - Limiting Distance and Area of Unprotected Openings

(8) The required limiting distance for an exposing building face is permitted to be measured to a point beyond the

property line that is not the centre line of a street, lane or public thoroughfare if,

a. the owners of the properties on which the limiting distance is measured and the municipality enter into an agreement in which such owners agree that,
   i. each owner covenants that, for the benefit of land owned by the other covenantors, the owner will not construct a building on his or her property unless the limiting distance for exposing building faces in respect of the proposed construction is measured in accordance with the agreement,
   ii. the covenants contained in the agreement are intended to run with the lands, and the agreement shall be binding on the parties and their respective heirs, executors, administrators, successors and assigns,
   iii. the agreement shall not be amended or deleted from title without the consent of the municipality, and
   iv. they will comply with such other conditions as the municipality considers necessary, including indemnification of the municipality by the other parties, and
b. the agreement referred to in Clause (a) is registered against the title of the properties to which it applies.

Sentence 3.2.3.7. - Construction of Exposing Building Face

(4) Except as permitted by Article 3.2.3.9., if a limiting distance shown in Table 3.2.3.1.B. or Table 3.2.3.1.D. for a

Group E, or Group F, Division 1 or 2 occupancy classification permits an exposing building face to have

unprotected openings not more than 10% of the exposing building face, the exposing building face shall be:

c. of non-combustible construction having a fire-resistance rating not less than 2 h, and
d. clad with noncombustible cladding.

Sentence 3.2.3.12 - Protection of Exit Facilities.

5. Except as required by Sentence (3) and as permitted by Sentence 3.4.4.3.(1), if the plane of an exterior wall of an exit enclosure forms an angle less than 135 with the plane of an exterior wall of the building it serves, and an opening in the exterior wall of the exit

enclosure could be exposed to fire from an opening in the exterior wall of the exit or the exterior wall of the building shall be protected in conformance with the requirements of Sentence (4) where the opening in the exterior wall of the building is within 3 m (9 ft 10 in) horizontally and;

a. less than 10 m (32 ft 10 in) below an opening in the exterior wall of the exit, or;
b. less than 2 m (6 ft 7 in) above an opening in the exterior wall of the exit.

(See A-3.2.3.13.(1) in Appendix A).

6. ,

7. Except as permitted by Sentence 3.4.4.3.(1), if an exterior exit door in one fire compartment is within 3 m (9 ft 10 in) horizontally of an opening in another fire compartment and the exterior walls of these fire compartments intersect at an exterior angle of less than 135 , the opening shall be protected in conformance with the requirements of Sentence (4).

Sentences 3.2.3.13. - Wall Exposed to Another Wall

(3) Sentence (1) does not apply to unprotected openings of the fire compartments within a building that is

sprinklered, but shall apply to:

8. unprotected openings of fire compartments on opposite sides of a firewall, and;
9. exposure from unprotected openings of a fire compartment that is not protected by an automatic sprinkler system.

Sentences 3.3.1.4. - Public Corridor Separations

(4) If a floor area is sprinklered, no fire separation is required between a public corridor and the remainder of the

floor area provided the public corridor;

10. is more than 5 m (16 ft 5 in) in unobstructed width, and;
11. does not serve:

. a care or detention occupancy, or;
i. a residential occupancy.

5. **Applicant's Position**

The Agent for the Applicant submitted that the mall and the Loblaws store, although on separate properties, should be considered as a single building for the purposes of Building Code compliance. To support the argument that the complex should be seen as one building he indicated that an interconnected electronically supervised sprinkler system will protect the entire structure. Further, a maintenance agreement and a spatial separation agreement as per Sentence 3.2.3.1.(8), although the latter is not required, would be concluded covering the two properties and registered on title, thereby ensuring that the mall and supermarket function as a single complex. (The purpose of the spatial separation agreement, he noted, "was to ensure that if either parties were to sell their respective lands, no changes to the buildings would occur unless measures were taken to meet the OBC spatial separation requirements.")

As a result, he argued that, as one building, the requirements of Sentences 3.2.3.1.(8), 3.2.3.7.(4) and 3.2.3.13.(3) are not applicable since they relate to the separation and protection of separate buildings. Moreover, if viewed as one building, Sentence 3.3.1.4.(4) is not an issue since the conditions of that provision are met; the complex will be fully sprinklered, the corridor is to be wider than 5 m, and there will be no Group B or C occupancies. Consequently, the Agent added, that the covered public corridor is not required to be constructed with fire separations.

The Agent continued by arguing that the Code does not require a firewall or a fire separation to be built on a property line. The OBC, he asserted, has certain requirements for both firewalls and fire separations if one is mandated, but no where in the Building Code does it stipulate that these must be built on property lines. The Agent noted that the BCC upheld this position in a recent decision (#99-60-716) in which it ruled that a firewall was not required on a lot line where a single building straddled two properties.

In conclusion, the Agent reiterated that the proposed design of the Loblaws addition to the existing mall conforms to the provisions of the Building Code that, as a single entity, are applicable. He also noted that the design will ensure that the exit facilities are protected as per Sentences 3.2.3.12.(1) and (3).

6. **Respondent's Position**

The Respondent began by submitting that he had no problem with the concept of a single building extending over a property line without a firewall between them. He stated that his concern with the design of the subject structure is that the mall (including corridor) and the supermarket should be compartmentalized from each other. Specifically, he argued that in accordance with Sentence 3.2.3.7.(4) of the OBC the south wall of the proposed supermarket, at 1.8 m from the lot line, is required to be built with a fire separation having a two hour resistance rating and must have non-combustible cladding.

The Respondent indicated that he was also concerned about exiting from the covered pedestrian corridor. He noted that a large portion of the subject wall assembly will be immediately adjacent to the exit from west end of the public corridor in the mall. The U-shaped configuration formed by the mall to the south, the recessed exit doors from the corridor and the substantial projection of the Loblaws south exposing wall to the west makes it necessary to travel in close proximity to the disputed wall assembly. In the event of a fire within the Loblaws supermarket, he argued that travelling next to this unrated wall may present a hazardous situation. He felt that this could result in the exit becoming unuseable during an emergency which would obviously present a serious life safety concern.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the new supermarket proposed to be constructed adjoining to an existing retail mall as one enlarged building built on two properties need not comply with Sentences 3.2.3.1.(8), 3.2.3.7.(4) and 3.2.3.13.(3) of the Ontario Building Code at the Loblaws Supermarket, 1100 Princess Street, Kingston, Ontario.

It is also the decision of the Building Code Commission that the proposed construction for the covered pedestrian corridor complies with Sentence 3.3.1.4.(4) of the OBC. However, the concerns dealing with Sentences 3.2.3.12.(1) and (3) must be addressed in the design of the building.

8. **Reasons**

i) It is the position of the commission that this complex can be considered as one building.

Dated at **Toronto** this **11th** day in the month of **May**, in the year **2000**, for application number **2000-23**.

BCC Ruling No. 00-20-752

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-20-752

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentences 3.3.1.17.(5) and 3.4.6.5.(8) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Ray Abbott, Co-Owner, NRG Fitness Centre Inc., Oshawa, Ontario for the resolution of a dispute with Mr. G.N. Bilous, Chief Building Official, City of Oshawa, to determine whether the as-built guards constructed mainly with panels consisting of 50 by 50 mm wire mesh provides sufficiency of compliance with Sentences 3.3.1.17.(5) and 3.4.6.5.(8) of the Ontario Building Code at NRG Fitness Centre Inc., 69 Taunton Road West, Oshawa, Ontario.

APPLICANT
Mr. Ray Abbott, Co-Owner
NRG Fitness Centre Inc.
Oshawa, Ontario

RESPONDENT
Mr. G.N. Bilous
Chief Building Official
City of Oshawa

PANEL
Mr. Kenneth Peaker, Chair-Designate
Mr. Donald Pratt
Mr. Fred Barkhouse

PLACE
Toronto, Ontario

DATE OF HEARING
May 11th, 2000

DATE OF RULING
May 11th, 2000

APPEARANCES
Mr. Ray Abbott, Co-Owner
NRG Fitness Centre Inc.
Oshawa, Ontario
The Applicant

Mr. Carmelo Reitano
Building Inspector
City of Oshawa
Designate for the Respondent

RULING

1. The Applicant

Mr. Ray Abbott, Co-Owner, NRG Fitness Centre Inc., Oshawa, Ontario, has received a building permit under the Building Code Act, 1992 and has recently constructed a new fitness facility known as NRG Fitness Centre Inc., at 69 Taunton Road West, Oshawa, Ontario.

2. Description of Construction

The Applicant has recently constructed a new fitness complex called "NRG Fitness Centre" classified as having Group A, Division 2 major occupancy. The structure is described as one storey in building height, 1313.86 m2 in building area, and of non-combustible construction.

On the eastern portion of the main floor, the building consists of a gymnasium divided into a weight room (16 m by 8 m), a resistance training area (16 m by 16 m) in the middle, and an aerobic room (12 m by 15 m). Also on this side of the building are areas such as the locker rooms, showers, laundry facilities, etc. that are ancillary to the gymnasium. On the building's west side and immediately adjacent to the central main entrance of the building (on the south side) is a nursery followed by a laundry room,

both of which open to an entrance lounge. This lounge contains the reception counter which acts as a partial border on the north side to allow for controlled entrance to the corridor leading to the gymnasium and its ancillary areas.

The building has a second level that is considered a mezzanine and which covers the areas above the weight room, entrance lounge and the corridor. The mezzanine accommodates some of the exercise equipment. The stairs leading to this level are located within the resistance training area.

The building is operated under a lease agreement and prohibits unsupervised use of the equipment by youths under the age of 15.

The issue at dispute between the Applicant and Respondent is whether the operation of the building compensates for the as-built guards constructed mainly with panels consisting of 50 by 50 mm wire mesh and thereby provides sufficiency of compliance with Sentences 3.3.1.17.(5) and 3.4.6.5.(8) of the Ontario Building Code. Both provisions stipulate that unless it can be shown that openings in a guard do not pose a hazard, the guard must be designed so as not to facilitate climbing. Specifically, Sentence 3.3.1.17.(5) mandates safety requirements within floor areas and Sentence 3.4.6.5.(8) mandates safety requirements related to exit signs. The guards in dispute are located both within a floor area and in exits.

3. Dispute

Both parties to this dispute apparently agree that the design of the guards could facilitate climbing. The dispute, however, is whether in this instance, with supervised utilization of equipment for youths under 15, the guards constitute a hazard. Therefore the issue before the Building Code Commission is whether the intended supervised use of the facility compensates for the inherent climability of the guards.

4. Provisions of the Ontario Building Code

Sentence 3.3.1.17. Guards

(5) Unless it can be shown that the location and size of openings do not present a hazard, a guard shall be designed so that no member, attachment or opening located between 140 mm (5 ? in) and 900 mm (2 ft 11 in) above the level protected by the guard will facilitate climbing.

Sentence 3.4.6.5. Guards

(8) Unless it can be shown that the location and size of openings do not present a hazard, a guard shall be designed so that no member, attachment or opening located between 140 mm (5 ? in) and 900 mm (2 ft 11 in) above the level being protected by the guard will facilitate climbing.

5. Applicant's Position

At the outset, the Applicant submitted that the design and locations of the as-built guards do not pose a hazard as the gym is restricted to persons 15 years or older. In addition, no persons of diminished capacity are permitted. The Applicant also noted that the gym is a controlled space where a member card must be scanned to gain full access.

The Applicant stated that the design of the guards was based on his suggestion after seeing the same design in some YMCA complexes. He continued that although they were warned by the city at the construction stage about the climability of the guards they had to proceed with construction in order to be prepared for their January opening.

The Applicant argued that their supervised operation of the centre would compensate for the climbability of guards for the following reasons: the open-concept structure is not a large building and

the mezzanine area is visible from every point on the ground floor; youths under 15 years cannot use the equipment without one-on-one adult supervision; the nursery is located by the front door to the building away from the controlled access gymnasium and ancilliary areas; children are not allowed to enter the controlled access areas; there are always at least two employees at the reception counter to supervise who enters; tours for prospective members are supervised; and one hour orientation sessions are offered to every new member to the centre.

The Applicant also argued that they have stability as a tenant in the building. He indicated that they have a 15 year lease with the intention to possibly purchase thereafter.

In closing, the Applicant stated that although he is aware that the decisions of the Commission are all site specific, he believes they provide the same level of security and supervision in their complex as is the case in the Durham YMCA building, which recently had identical guards approved by the Building Code Commission.

6. Respondent's Position

The Respondent submitted that even though NRG Fitness members under 15 require supervision, this stipulation does not restrict children of lower ages from joining and attending the club.

The Respondent mentioned that they had advised the Applicant about the climability of the guards at the design stage. It was also suggested that vertical pickets could be provided in lieu of the wire mesh and would thereby avoid the climbability issue. Moreover, the Respondent felt that the proper process in terms of submitting all the building plans was not fully followed.

In terms of the as-constructed guards, the Respondent argued that the 50 by 50 mm welded wire mesh would provide a foothold that could facilitate climbing by children and this, in his opinion, contravenes Sentences 3.3.1.17.(5) and 3.4.6.5.(8) of the OBC. In addition, there was concern raised regarding the

future use or extension of the building that could include some facilities to be used by children, which could pose serious hazards. The Respondent noted that if a future owner decided to use the building as a childcare centre, the guards would be very dangerous as children are not supervised on a one-on-one basis in such facilities. Such a change in tenancy is a possibility, as the Applicant is only leasing the building.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-built guards constructed mainly with panels consisting of 50 by 50 mm wire mesh do not provide sufficiency of compliance with Sentences 3.3.1.17.(5) and 3.4.6.5.(8) of the Ontario Building Code at NRG Fitness Centre Inc., 69 Taunton Road West, Oshawa, Ontario.

8. Reasons

i. The guards are climbable.
ii. The guards are climbable. The security arrangements do not appear to be adequate so as to ensure that only eligible persons will be allowed in the areas containing the subject guards.
iii. The guards are climbable. The BCC is concerned that since the building is leased a future tenant may propose a use that could expose children to the guards thus creating a dangerous situation.

Dated at Toronto this **11th,** day in the month of **May** in the year **2000** for application number **2000-22.**.

BCC Ruling No. 00-19-751

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-19-751

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.8.1.(5), Clause 3.4.2.5.(1)(c) and Sentences 3.3.2.5.(4), 3.3.2.2.(8), 3.3.1.1.(1) and 3.3.2.12.(5) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Karl Stevens, Stevens Burgess Architects Ltd., Toronto, Ontario, for the resolution of a dispute with Mr. Paul Allore, Chief Building Official, Town of Ajax, Ontario, to determine; **(1)** whether the proposed second storey partitions located in the interconnected floor space between the first and second floors complies with Sentence 3.2.8.1.(5) of the Ontario Building Code (OBC), **(2)** whether the proposed second and third floor travel distances provide sufficiency of compliance with Clause 3.4.2.5.(1)(c) and Sentence 3.3.2.5.(4), **(3)** whether the building should be considered as having one or two suites and thereby provide either a 30 minute or one hour separation as per Sentences 3.3.2.2.(8) or 3.3.1.1.(1), **(4)** whether the proposed close-spaced sprinklers on both sides of the unrated fire separations on the first floor provide sufficiency of compliance with either Sentences 3.3.2.2.(8) or 3.3.1.1.(1), and **(5)** whether the proposed installation of a sprinkler-activated mechanical exhaust system in lieu of roof mounted gravity vents provides sufficiency of compliance with Sentence 3.3.2.12.(5) of the OBC at Ajax Secondary School, 1375 Harwood Avenue North, Ajax, Ontario.

APPLICANT
Mr. Karl Stevens
Stevens Burgess Architects Ltd.
Toronto, Ontario

RESPONDENT
Mr. Paul Allore
Chief Building Official
Town of Ajax

PANEL
Mr. Kenneth Peaker (Chair-Designate)

Mr. Fred Barkhouse
Mr. John Guthrie

PLACE
Toronto, Ontario

DATE OF HEARING
April 27, 2000

DATE OF RULING
April 27, 2000

APPEARANCES
Mr. Jon Winton
Leber/Rubes Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Paul Allore
Chief Building Official
Town of Ajax
The Respondent

RULING

1. **The Applicant**

   Mr. Karl Stevens, Stevens Burgess Architects Ltd., Toronto, Ontario, has applied for a building permit under the *Building Code Act, 1992*, to construct a school facility known as Ajax Secondary School at 1375 Harwood Avenue North, Ajax, Ontario.

2. **Description of Constrution**

The Applicant is proposing to construct a multi-purpose school building classified as Group A, Division 2 occupancy to serve as a secondary school for both the Durham Catholic District School Board and the Durham District School Board. The proposed building is described as 20,378 m^2 in building area, three stories in building height and will be built (according to OBC Article 3.2.2.24.) of non-combustible, 1 hour rated construction. The building will be equipped with a full sprinkler system and a fire alarm system, but not a standpipe and hose system.

The proposed building will consist of a central portion flanked by north and south wings. The central area is proposed to accommodate shared facilities such as a 200 seat food court, libraries, and an auditorium. The north and south wings are nearly identical and will each house a secondary school, complete with classrooms, gymnasia and administrative facilities. The north wing will be allocated to the Durham District School Board and the south to the Durham Catholic District School Board.

A central, two storey corridor, described as a pedestrian "street" running throughout both school wings, is to act as the spine of the entire building. The branches of this "street"/ corridor will connect to the food court, which is to be located in the middle portion of the shared facilities area. As well, the "street" serves to separate the three storey classroom areas on the west from the one storey gymnasia and communication/construction/technical design studios on the east.

The two storey street will also create an interconnected floor space between the first and second floors. Since the portions of both schools to the east of this corridor are one storey, the east wall of the upper (or second storey) level of the pedestrian street becomes an exterior wall of the building. The west wall of the corridor at this level, however, forms the rear partition wall of a row of classrooms on the second floor of both schools. This wall is comprised mostly of large glazed areas and is considered an unrated separation. The second floor classrooms overlooking the pedestrian street form part of the interconnected floor area with the first floor. The opposite wall in these rooms will separate the remainder of the second floor with a 30 minute rated separation, including 20 minute rated doors which will not be equipped with closing devices.

The three storey classroom areas of both wings have been designed in an L-shape, with the long portion running parallel to (and west of) the street. Classrooms are to be located on either side of north-south and east-west public corridors. In the Public Board's secondary school the north-south and east-west corridors measure 76 and 37 m in length respectively. On the third floor of this school these corridors are 78 m and 37 m. The Separate School Board's wing is slightly smaller, with the north-south and east-west corridors measuring 72 and 30 m respectively on the

second floor and 74 m and 30 m on the third floor. (The east wall of the north-south, or longer, corridors on the second floor are to be provided with the above mentioned 30 minute separation, including the 20 minute rated doors equipped with closing devices.)

The classroom areas of both schools are to be served by three exit stairs, one each at either end of the north-south and east-west corridors and one at the point where the corridors intersect. On the second floor of the public secondary school the travel distance from the mid-point of the north-south corridor (excluding classrooms) to the exit stair is 38 m. The travel distance for the east-west corridor on this floor is 37 m. On the third floor of this school the same dimensions are measured at 39 and 37 m. Likewise for the separate secondary school, the second and third floor (corridor only) travel distances are 36 and 30 m and 37 and 30 m respectively.

The shared facilities area, to be located in the centre of the building, will be separated from the two adjoining schools by a 1 hour rated wall. However, where the pedestrian street from both schools joins the food court area, the separations, each comprised of four doors with sidelight panels, are proposed to be unrated. The Applicant intends to install close-spaced sprinklers on both sides of these unrated separations.

An auditorium, designed for use by the schools as well as the surrounding community, is to be situated in the western portion of the shared facilities area adjacent to the food court. At the stagehouse area of this auditorium, a mechanical exhaust system is proposed for venting purposes that will provide six air changes per hour. The system will be designed so that it is connected to the building's emergency power system and activates automatically on sprinkler water flow.

The construction in dispute involves the interconnection of the first and second storeys, specifically the unrated separation at the second storey level of the pedestrian street, the travel distances on the second and third floors of both schools, the use of unrated separations and close-spaced sprinklers in lieu of a 1 hour separation in the pedestrian street between the schools and the food court and the use of mechanical smoke exhaust for the stage area in lieu of roof vents.

3. **Dispute**

There are five issues in dispute between the Applicant and Respondent. The first and third issues are matters of interpretation of the Ontario Building Code (OBC), the remaining disputes involve sufficiency of compliance with certain provisions of the OBC.

The first question, a matter of interpretation, is whether the proposed second storey classroom partitions, as unrated separations overlooking the two storey pedestrian corridor, comply with the restrictions for interconnected floor spaces found in Sentence 3.2.8.1.(5) of the Ontario Building Code (OBC). This provision, specifically Clause 3.2.8.1.(5)(c), requires that the upper floor area of an interconnected floor space terminate at a vertical floor-to-ceiling fire separation. Clause (d) permits this vertical separation to be unrated. Clause (e), however, is an exception to Clause (d). It states that where a corridor is located "immediately adjacent" to the subject vertical fire separation, a minimum 30 minute rating is required.

As noted, the second storey classroom partition walls along the upper level of the west side of the pedestrian street are to be unrated separations. It is the opposite walls in these rooms that will have a 30 minute fire-resistance rating. At issue is whether the classrooms, albeit on the second floor, should be considered as being "immediately adjacent" to the two storey high pedestrian street corridor. If found to be the case, a 30 minute rating would be required in the separation overlooking the pedestrian street.

The second issue is whether the travel distances in the second and third floor corridors provide sufficiency of compliance with Clause 3.4.2.5.(1)(c) and Sentence 3.3.2.5.(4) of the OBC. Clause 3.4.2.5.(1)(c) requires that the subject building have maximum travel distance of no more than 45 m. The proposed travel distance in a total of 12 classrooms in both schools (all situated in the central portion of the of the north-south corridors) will exceed 45 m when measured into the most remote part of these rooms. In the worst case, the excess distance is 4.6 m for a total travel distance of 49.6 m.

The latter provision, Sentence 3.3.2.5.(4), permits the one hour fire-resistance rating required in the corridor walls of such buildings (as per Sentence 3.3.2.5.(1)) to be waived if the maximum travel distance standard (of 45 m) is met. As described above, only the east wall of the north-south corridor on the second floor will be constructed with a fire-resistance rating, proposed as a 30 minute separation. Therefore, all four corridors (north-south second and third floor corridors in both schools) that are proposed to have travel distances exceeding 45 m must be considered as having unrated separations.

At issue then, is whether the excess travel distance sufficiently complies with the 45 m requirement. If deemed so, the fire separations required in the corridors by Article 3.3.2.5. may be waived.

The third issue is also an interpretive question. It is whether the two schools proposed for the structure are considered as separate suites and therefore must conform to the separation requirements found in Sentence 3.3.1.1.(1) of the OBC. This provision requires, except under certain circumstances not applicable to the present situation, that differing suites in a building must be separated from adjoining ones by a one hour fire separation. However, if the schools, due to their similar nature and proposed joint use of many facilities, can be viewed as a single suite then the separation requirements of 3.3.2.2.(8) would be applicable. This Sentence stipulates that, in a sprinklered elementary or secondary school, a room or an area of complementary use with an occupant load of more than 200 must provide a 30 minute rated separation from the rest of the school. Put simply, the question before the Commission therefore is whether the proposed Ajax school building will contain one or two schools. The answer will dictate the appropriate construction requirements.

Depending on the outcome of the above question is the related issue of whether the proposed close-spaced sprinklers on both sides of the unrated fire separations at the connection points between the pedestrian street and the food court provides sufficiency of compliance with Sentence 3.3.1.1.(1) or Sentence 3.3.2.2.(8) of the OBC. Regardless of whether the separation is required to be one hour or 30 minutes, a certain rating is necessary, and as a fire separation it must be continuous. The unrated separation, however, proposed by the Applicant for the doors and sidelight panels at the access points between the street and the food court interrupts the one hour separation to be built between the schools and the shared facilities area. To compensate for this penetration of the fire separation, the Applicant is offering to provide close-spaced sprinklers on both sides of each access point. The issue before the Commission then is whether this is adequate compensation for the required (one hour or 30 minute) rated separation.

The fifth dispute is whether the proposed installation of a sprinkler-activated mechanical exhaust system in lieu of roof mounted gravity vents in the stagehouse area of the theatre provides sufficiency of compliance with Sentence 3.3.2.12.(5) of the OBC. This last provision stipulates that stages designed for theatrical performances must be equipped with at least two roof vents of certain aggregate area and which open automatically when the sprinkler system activates. The proposed system does not rely on gravity venting nor is it sized on the prescribed 1/8 ratio of the

stage area. Again, at issue is whether the proposed mechanical system provides adequate compensation for the venting required by Code.

4. **Provision of the Building Code**

Sentence 3.2.8.1.(5) - Mezzanines & Openings through Floor Assemblies

(5) An interconnected floor space is permitted in an elementary or secondary school provided;

a. the interconnected floor space consists of the first storey, and the storey next above or below it, but not both,
b. the interconnected floor space is sprinklered,
c. the portions of the upper floor area that do not terminate at an exterior wall, a firewall or a vertical shaft shall terminate at a vertical fire separation extending from the floor assembly to the underside of the floor or roof assembly above,
d. except as provided in Clause (e), the fire separation required in Clause (c) need not have a fire-resistance rating,
e. where a corridor is located immediately adjacent to the fire separation required in Clause (c), the fire separation shall have a fire-resistance rating of not less than 30 min, and
f. where a portion of a floor area is not within the interconnected floor space, the required access to exit from this portion of the floor area shall not lead through the interconnected floor space.

Clause 3.4.2.5.(1)(c) - Location of Exits

(1) Except as permitted by Sentences (2), (3) and 3.3.2.4.(6), if more than one exit is required from a floor area, the exits shall be located so that the travel distance to at least one exit shall be not more than; (c) 45 m (147 ft 8 in) in a floor area that contains an occupancy other than a high hazard industrial occupancy, provided it is sprinklered.

Sentence 3.3.2.5.(4) - Corridors

(4) The fire separation required by Sentence (1) is permitted to be waived if the distance from any point in the floor area to an exit measured along the path of travel to an exit does not exceed the travel distance permitted by Article 3.4.2.5.

Sentence 3.3.1.1.(1) - Separation of Suites

(1) Except as permitted by Sentences (2) and (3), each suite in other than business and personal services occupancies shall be separated from adjoining suites by a fire separation having a fire-resistance rating not less than 1 h.

Sentence 3.3.2.2.(8) - Fire Separations

(8) Except as required in Sentence (9), in an elementary or secondary school, where the occupant load of a room exceeds 200 persons, the room and ancillary rooms of a complimentary use shall be separated from the remainder of the building by a fire separation having a fire-resistance rating not less than; (a) 1 hour where the building is not sprinklered, or
(b) 30 minutes where the building is sprinklered.

Sentence 3.3.2.12.(5) - Stages for Theatrical Performances

(5) At least 2 vents for the purpose of venting fire and smoke to the outside of a building shall be provided above a stage designed for theatrical performances and shall; (a) have an aggregate area not less than one eighth of the area of the stage behind the proscenium opening, and
(b) be arranged to open automatically upon actuation of the sprinkler system.

5. **Applicant's Position**

At the request of the Commission, the Agent for the Applicant began his presentation on the subject school with the issue of the proposed travel distance and its sufficiency of compliance with the OBC.

However, prior to arguing sufficiency of compliance with Sentences 3.4.2.5.(1) and 3.3.2.5.(4), the Agent offered the interpretive argument that Sentence 3.1.8.11.(3) is significant in terms of dictating the subject building's travel distance. This provision can be read, he argued, as permitting the measurement of the required 45 m travel distance from a classroom door because it waives the requirement for a closing device. As he explained, by not mandating closing devices on the doors, the Code allows the continuousness of the corridor separations to be interrupted. By allowing this, the separations therefore cannot be employed in the usual manner as a method to extend the travel distance beyond 45 m and into classrooms.

Conversely, if the Code intended that the entire floor area must have a travel distance of less than 45 m, then this provision would be irrelevant. As a result, it would seem inconsistent with Sentence 3.1.8.11.(3) to measure the travel distance into the remotest area of the room. The classroom door, he asserted, is the logical starting point of measurement. And since the distance to the classroom doors in all cases is less than 45 m, the Agent indicated that the proposed design will comply with Sentence 3.1.8.11.(3).

Notwithstanding the above, in terms of sufficiency of compliance, the Agent submitted that the travel distances, which only slightly exceed the 45 m requirement, do not reduce the life safety of the occupants. As he noted, in the worst cases the travel distance is 49.6 m and only a very small portion of the total floor area of the building exceeds the prescribed limit. Moreover, much of the floor areas that are beyond the 45 m distance are located at the perimeters of rooms and in corners. He argued that these are very likely places for putting large furniture or millwork, meaning that the number of occupants that would actually be affected would be minimal. The added time to travel the extra 4.6 m, at 4 to 5 seconds, is not significant, he added.

Indeed, the Agent argued that the extra distance would not affect the time required to evacuate the floor area because, as he stated, "the time required to safely exit a floor area is practically governed by the access time (to get) into exit stairs, and not the time of travel to the stairs". He supported this position by referring to a stair exit analysis he conducted based on NFPA 101A, "Guide on Alternative Approaches to Life Safety". The conclusion of this research, he indicated, was that the "time required to walk to an exit (2.24 minutes), including the additional time associated with a travel distance greater than 45 m, will still be less than the time required to leave the floor area by entering an exit stair (2.72 - 2.91 minutes), (sic) complying with Building Code capacity requirements. Reducing travel distance to 45 m will not reduce the time required for the occupants to leave a floor area." In other words, the length of time to wait in the queue to enter the door to the exit stair will surpass the time required to travel from anywhere on the floor area to the exit stairs.

The Agent stated that he was using NFPA 101A as a stand-alone test methodology and not as an alternate standard of conformance. He also noted that although NFPA 101A is a U.S.-based standard, the estimated exit times are compatible with those expected in a building built to Canadian standards.

Based on the above reasons, the Agent argued that the requirement mandated in the Code for fire separated corridors, in particular closing hardware on the classroom doors, can be waived.

Regarding the interconnected floor space and the fire separations at the second storey classrooms, the Agent stated that, in his interpretation of Clause 3.2.8.1.(5)(e), the partition wall overlooking the pedestrian street is permitted to be an unrated separation. He argued that the 30 minute rated wall required in this provision is necessary only when the corridor is located "immediately adjacent" to the separation. The requirement referred to in Clause (e), however, specifically relates to the separation on the upper storey of the interconnected floor space. As a result, the "corridor identified in Clause (e) is therefore interpreted to be a corridor located at the upper storey of the interconnected floor space."

The subject classrooms, he asserted, are therefore only "immediately adjacent" to the north-south public corridor located on the second floor running parallel to the pedestrian street, and the 30 minute separation will be provided in that (the entry side) wall. The pedestrian street, as a corridor for the first floor, cannot be viewed as being "immediately adjacent" to the second storey classrooms and thus the separation may be unrated, as permitted in Clause (d).

The Agent then discussed why the Code requires a 30 minute separation in the interconnected floor space to protect the corridor on the second floor. As he explained, since fire primarily travels upwards it makes sense that the OBC would require the second storey corridor to have additional protection. Conversely occupants on the lower floor would not be exposed to the same level of risk from a fire originating on the upper storey. Moreover, it is the corridors and not the individual rooms that serve the most occupants, and for this reason the separations "immediately adjacent" to the corridors must have a 30 minute fire-resistance rating. This fire protection philosophy, as enunciated in the Code, has been reflected in the design of the building's interconnected floor area and incorporated specifically in the placement of the unrated and 30 minute separations on either side of the second floor classrooms, the Agent noted.

On the interpretive issue of whether the entire school building can be viewed as having one suite, the Agent argued that due to the similar functions of both high schools and their high degree of integration (through the sharing of the library, food court and auditorium), the structure should be considered as having one occupancy. He indicated that the Technical Background Information memo produced by the staff of the Ministry's Housing Development and Buildings Branch supported this position. In fact, he referred to the Branch's presentation which likened the school building to a government office that often has different ministries and departments in the same building.

Based on this interpretation, the Agent argued that Sentence 3.3.2.2.(8) and not 3.3.1.1.(1) is the applicable Code requirement. Sentence 3.3.2.2.(8), he noted, only requires a 30 minute separation between the food court and the schools on either side. Currently, however, a one hour separation is proposed, which has been agreed to by the Applicant and Respondent. Nevertheless, the Agent indicated that it is the 30 minute rating stipulated in Sentence 3.3.2.2.(8) with which he will argue sufficiency of compliance on the following issue.

In terms of the close-spaced sprinklers then, the Agent noted that the system has been designed in accordance with NFPA 13, 5-3.7 and are proposed for both sides of each access point from the food court into the pedestrian street. He argued that the water curtain created by this system (upon actuation of the full sprinkler system) would provide "an effective means of controlling radiation from a fire." He also noted that, as major pedestrian circulation areas, the access points into the street and the corridor itself would not have a combustible load of any significance. For these reasons, the Agent stated that the close-spaced sprinkler proposal provides sufficiency of compliance with the 30 minute separation required in Sentence 3.3.2.2.(8).

Lastly, on the issue of the stage smoke venting, the Agent asserted that the proposed "sprinkler-activated mechanical exhaust system for the auditorium stage will provide a superior level of safety to stage venting." In other words, he argued that the mechanical venting system will not only provide sufficiency of compliance with Sentence 3.3.2.12.(5), it will surpass the required level of safety. The Agent offered the following reasons as to why the sprinkler-activated mechanical exhaust system is more effective:

"- the purpose of the vents is to assist clearing smoke from the stage house. A mechanically operated exhaust system can be designed to perform the same function.

"- the efficiency of the required gravity vent system is dependent on exterior climate conditions. The efficiency of natural venting is reduced as external temperature decreases. A mechanical exhaust system will exhaust the stagehouse at a consistent rate, regardless of external weather conditions.

"- the opening of gravity vents can be adversely affected by ice and snow, thereby affecting operating efficiency. Mechanical exhaust equipment can be weather protected more readily, reducing the likelihood of failure due to inclement weather.

"- mechanical exhaust equipment will be connected to the building (sic) emergency power supply system.

"- mechanical exhaust equipment will be designed to exhaust the stagehouse at a rate of 6 air changes/hr, comparable to that used for smoke venting in highrise buildings and smoke control in interconnected floor spaces.

"- the system will be designed to activate on sprinkler water flow, identical to the operation required for roof vents."

The Agent also stated that many similar proposals have been approved in jurisdictions across Ontario and North America. In fact, similar applications have come before the Building Code Commission in the past and have been accepted. There is growing acceptance that such mechanical venting systems are more reliable and are preferable as exhaust systems in these installations, he added.

Finally, the Agent argued that mechanical systems are also superior because they are less likely to transmit exterior noise into the building which would adversely affect the use of the auditorium.<

In conclusion, the Agent submitted that the design of the proposed building, including the above discussed issues, provides the same, or better, level of fire and life safety protection as that intended by the Ontario Building Code.

6. **Respondent's Position**

The Respondent began his presentation by noting that the proposed building in dispute, with an occupant load of approximately 3,500, will be the largest high school in the country. As a result, it is very important that the subject Code compliance issues are adequately addressed.

On the issue of travel distance, the Respondent indicated that 45 m was the maximum distance to an exit as per Clause 3.4.2.5.(1)(c), unless the corridors providing access to exit are built with fire separations in accordance Sentence 3.3.2.5.(4). In the latter case, the travel distance need only be measured from the door of the classroom. However, since much of the wall area in these corridors cannot be considered as fire separations because the doors will not be provided with closing hardware, he stated that the travel distance should be measured into the most remote point within the classrooms. (The Respondent did not address the interpretive issue of Sentence 3.1.8.11.(3).) When measuring into the rooms, he noted that a portion of 12 classrooms are

beyond the 45 m limit. As a result, he argued that the fire separations, as set out in Article 3.3.2.5., are required. The Respondent did acknowledge that the additional distances in dispute are relatively minor.

Regarding the separations at the interconnected floor space, the Respondent argued that he views the pedestrian street as a two storey corridor. Therefore, even though the upper level of the street is an open space and cannot be used for exiting, it is still part of a corridor area. Based on this interpretation of the Code, he asserted that the partition walls in the classrooms overlooking the pedestrian street should be considered as being "immediately adjacent" to a corridor and, in accordance with Clause 3.2.8.1.(5)(e), are therefore required to be built as a separation having a 30 minute fire-resistance rating. On this issue also the Respondent did concede that there are other legitimate interpretations of the OBC. He indicated, however, that he felt it prudent to follow the more cautious interpretation.

In so far as the issue of whether the school has one or two suites, and whether it should have a 30 minute or one hour separation around the food court, the Respondent indicated that not enough is known yet about how the school will operate in order to determine if it will function like one or two schools/suites. Again, he rationalized that erring on the side of caution would be the wiser approach. Consequently, he stated that he considers the two schools as separate tenants. In his view, the one hour rated wall as mandated by Sentence 3.3.1.1.(1) is the appropriate standard.

Following the above interpretation, the Respondent argued that the separations at the access points between the food court and pedestrian street, as designed, do not provide a one hour rating, nor even 30 minutes. Moreover, the proposal to install close-spaced sprinklers on both sides of these separations does not, in his mind, provide adequate compensating benefits for the lack of a required separation. The OBC does not specifically recognize the addition of close-spaced sprinklers in lieu of maintaining a fire separation, he added. The Respondent stated that he would feel more comfortable with the proposal if deluge sprinklers were being offered.

Lastly, with respect to stage venting, the Respondent indicated that from a strictly prescriptive point of view Sentence 3.3.2.12.(5) of the Code requires at least two gravity vents to be provided in the stage roof that will open automatically with activation of the sprinkler system. The proposed mechanical ventilation is an alternative system which is also not recognized by the Code. However, he acknowledged that the proposal offers certain advantages over the venting system mandated by the OBC. Nevertheless, he felt he did not have the authority to accept such a system since the Code requirements were clear.

7. **Commission Ruling**

The following are the decisions of the Building Code Commission as they relate to the proposed Ajax Secondary School, at 1375 Harwood Avenue North, Ajax, Ontario.

It is the decision of the Building Code Commission that sufficiency of compliance with Clause 3.4.2.5.(1)(c) and Sentence 3.3.2.5.(4) has been obtained as it relates to the proposed second and third floor travel distances. Moreover, the corridors serving the classrooms need not be fire separated, since the travel distance is accepted. However, the entry side wall of the second storey classrooms, as a separation between interconnected floor space and a public corridor, must be provided with a 30 minute fire-resistance rating. Door closing hardware may be excluded from this separation as per Sentence 3.1.8.11.(3).

It is the decision of the BCC that the partition wall overlooking the interconnected floor space, as designed, need not, according to OBC 3.2.8.1.(5), be separated from the floor opening by a rated fire separation.

It is the decision of the BCC that the proposed Ajax Secondary School will be operated under a single tenancy and, as a result, the suite separation requirement of Sentence 3.3.1.1.(1) does not apply.

However, it is also the decision of the BCC that the unrated partitions with glass doors equipped with close-spaced sprinklers and proposed to be located across the school's main corridor, or pedestrian street, do not provide sufficiency of compliance with Sentence 3.3.2.2.(8).

Lastly, it is the decision of the BCC that sufficiency of compliance with Sentence 3.3.2.12.(5)has been obtained for the proposed venting system to exhaust the stage area.

8. **Reasons**

1. The excess distances, at 4.6 m or less, are small and are located in room corners that are likely to be occupied by furniture.
2. The exit travel distances, slightly in excess of 45 m, do not reduce the level of safety for the occupants as the time required to safely exit a floor area in this instance is governed in practice by the access time to the exit stairs.

3. The proposed design of the interconnected floor space at the second storey classrooms that proposes an unrated separation overlooking the pedestrian street and a 30 minute rated wall opposing, in our interpretation, is in compliance with Sentence 3.2.8.1.(5) of the OBC.
4. Thirty minute fire separations are required by OBC 3.3.2.2.(8) and the proposed partition and glass doors with close-spaced sprinklers do not provide adequate compensatory measures.
5. The mechanical exhaust system is equal or superior to roof mounted gravity vents.

Dated at **Toronto** this **27th** day in the month of **April**, in the year **2000**, for application number **2000-19**.

BCC Ruling No. 00-18-750

BUILDING CODE COMMISSION DECISION ON B.C.C. No. 00-18-750

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 9.8.4.1.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Don Desrocher, Vice-President, 1147771 Ontario Ltd., Toronto, Ontario, for the resolution of a dispute with Mr. Yaman Uzumeri, Chief Building Official, City of Toronto, Ontario, to determine whether the as-built landings that are not as long as the width of the stairs they serve provide sufficiency of compliance with Sentence 9.8.4.1.(1) of the Ontario Building Code at units 15, 15a, 17 and 17a, Boulton Avenue, Toronto, Ontario.

APPLICANT
Mr. Don Desrocher, Vice-President
1147771 Ontario Ltd.
Toronto, Ontario

RESPONDENT
Mr. Yaman Uzumeri
Chief Building Official
City of Toronto

PANEL
Dr. Kenneth Peaker (Chair)
Mr. Michael Steele
Mr. Robert De Berardis

PLACE
Toronto, Ontario

DATE OF HEARING
June 14, 2000

DATE OF RULING
June 14, 2000

APPEARANCES
Mr. Rick Mori, Senior Associate
Leber/Rubes Inc., Consulting Engineers
Toronto, Ontario
Agent for the Applicant

Mr. Ted Marek, Senior Inspector
City of Toronto
Designate for the Respondent

RULING

1. The Applicant

Mr. Don Desrocher, Vice-President, 1147771 Ontario Ltd., Toronto, Ontario, has received an order to comply under the Building Code Act, 1992 to remedy certain alleged deficiencies regarding the as-built stairways within four recently constructed residential units at 15, 15a, 17 and 17a, Boulton Avenue, Toronto, Ontario.

2. Description of Construction

The Applicant has recently constructed a Group C - residential townhouse complex consisting of four units. Each unit is two and a half storeys in building height, 139.41 m^2 (1500 ft^2) in building area, and of combustible construction.

The construction in dispute involves the dimensions of landings serving the interior stairs of each unit.

The subject units are referred to as unit 15, 15a, 17, and 17a. There are two landings in each of the four units, one located at the stairs leading from the ground floor to the second floor and the other located at the stairs leading from the second floor to the third floor. Each landing is at the base of the stair run and two risers up from the floor level it serves. The dimensions of the subject landings are as follows:

UNIT	FIRST FLOOR	LANDING SIZE	SECOND FLOOR	LANDING SIZE

	STAIR WIDTH	(W X L)	STAIR WIDTH	(W X L)
15	915 mm (845)	960 mm X 820 mm	915 mm (845)	960 mm x 870 mm
15A	910 mm (828)	920 mm X 810 mm	940 mm (860)	990 mm x 840 mm
17	918 mm (848)	920 mm X 800 mm	915 mm (845)	990 mm x 880 mm
17A	900 mm (840)	920 mm X 800 mm	940 mm (870)	980 mm x 830 mm

According to the Applicant, the clear width of the subject stairs, when measured between the stringers, is less than the overall (wall face to wall face) width. The measurements between the stringers have been provided in the parentheses next to the stair widths.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-built landings that are not as long as the width of the stairs which they serve provide sufficiency of compliance with Sentence 9.8.4.1.(1) of the Ontario Building Code.

Sentence 9.8.4.1.(1) governs the dimensions of landings. According to this provision, with two exceptions not applicable here, a landing must be at least as long and as wide as the width of the stairs in which they are located. Neither of the landings in the four units in dispute have a length equal to or greater than the width of the stairs that they serve.

4. Provisions of the Ontario Building Code

Sentence 9.8.4.1.(1) Dimensions of Landings

1. Landings shall be at least as wide and as long as the width of stairs in which they occur, except that
    a. the length of landing for exterior stairs serving not more than 1 dwelling unit need not exceed 900 mm (2 ft 11 in), and
    b. the length of landing for all other stairs in a straight run need not exceed 1,100 mm (3 ft 7 in).

5. Applicant's Position

The Applicant submitted that the landings, as constructed, meet the intent of the Code and do not pose a life or fire safety hazard to the occupants.

At the outset of the hearing it was acknowledged that, under the Ontario Building Code, the width of a stair is the basis for determining the landing size. The Code, however, does not specifically define the term "stair width". The Applicant submitted that "(f)or exiting purposes, the Code specifies how to measure the width. Sentence 9.8.3.3.(1) states '...stairs used by the public shall have a width measured between wall faces or guards, of not less than 900 mm (2 ft 11 in)'. However, Article 9.8.7.6. permits encroachments into this width for handrails and construction below handrails of 100 mm (4 in) on each side. Thus, the effective width of the stair (width of stair tread or clear width between stringers) could be 700 mm". He went on to argue that all of the landings in dispute exceed this measurement.

The Agent continued that the intent of the Code in governing stair width is to ensure that the width of the means of egress does not decrease in the direction of exit travel. This is clearly stated in the Uniform Building Code where it reads "(e)very landing shall have a dimension measured in the direction of travel not less than the width of the stairway" (UBC 1997, 1003.3.3.5 Landings). In dwelling units, however, the governing factors for assessing a landing size are the safety of use and functionality of the landing (i.e. for the purpose of moving furniture), rather than for exiting purposes. In this respect, the Agent emphasized that the width of the subject stairs is larger than that required by Code and, although the Code does not allow for a reduction in landing size in this instance, there is no hazard created where a landing has a length that is less than the stair width but is equal to or greater than the minimum stair width required by the Code (i.e. 700 mm, as noted above). No problems have been reported so far as a result of the deficiency in stair width at this location.

The Agent concluded by advising that they could have used winders in this instance, but their belief was that the landings would be a safer design and, while their deviation from the literal Code is minimal (25 mm to 50 mm), they completely comply with the intent of the Code. It was suggested that, for the reasons discussed above the minimal deficiencies in this case should be accepted.

6. Respondent's Position

The Respondent submitted that the plans presented with the application for building permits showed winders instead of landings. He further stated that the Code is clear in this regard and the landings, as constructed, do not meet minimum dimensions prescribed. He is, however, willing to uphold the Commission's ruling in this matter, whatever it may be.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-built landings that are not as long as the width of the stairs that they serve do not provide sufficiency of compliance with Sentence 9.8.4.1.(1) of the Ontario Building Code at units 15, 15a, 17 and 17a, Boulton Avenue, Toronto, Ontario.

8. Reasons

i. The landings, as constructed, do not comply with the intent of the OBC. A basic principle of the Code is that the width of the means of egress does not decrease in the direction of exit travel. This Code principle of egress width is measured from either wall face to wall face or door width, and is not measured between handrails and other allowed projections. In the subject stairs, the distance between wall faces is decreased at the landings.

ii. The Applicant has offered no compensation in order to achieve sufficiency of compliance.

Dated at Toronto this **14th** day in the month of **June** in the year **2000** for application number **2000-18**.

BCC Ruling No. 00-17-749

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-17-749

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Clause 3.8.2.1.(2)(k) and Sentence 3.8.3.3.(11) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Emanuel Vommero, owner, Vommero Enterprises, Niagara Falls, Ontario, for the resolution of a dispute with Mr. Mel Brown, Chief Building Official, City of Niagara Falls, Ontario, to interpret whether Clause 3.8.2.1.(2)(k) of the Ontario Building Code, which permits an exemption from the requirement to provide barrier-free accessibility "within" residential suites, also applies to the design of the interior side of the egress doorways proposed for the units in the Econo Lodge, Lundy's Lane, Niagara Falls, Ontario.

APPLICANT
Mr. Emanuel Vommero, owner
Vommero Enterprises
Niagara Falls, Ontario

RESPONDENT
Mr. Mel Brown
Chief Building Official
City of Niagara Falls

PANEL
Dr. Kenneth Peaker (Chair-Designate)
Mr. John Guthrie
Mr. Donald Pratt

PLACE
Toronto, Ontario

DATE OF HEARING
April 13, 2000

DATE OF RULING
April 13, 2000

APPEARANCES
Mr. Emilio Raimondo, Architect
Piraino + Raimondo Associate Architects Inc.
Niagara Falls, Ontario
Agent for the Applicant

Mr. Robert Romanuk
Building and Inspections Coordinator
City of Niagara Falls
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Emanuel Vommero, owner, Vommero Enterprises, Niagara Falls, Ontario, has received a building permit under the *Building Code Act, 1992,* and is currently constructing a new hotel known as the Econo Lodge, at Lundy's Lane, Niagara Falls, Ontario.

2. **Description of Constrution**

   The Applicant is currently constructing a new hotel structure classified as having a Group C - Residential occupancy. The building is described as five storeys in building height, 1,614 m^2 in building area and is of noncombustible construction. The hotel will be equipped with a fire alarm system, a sprinkler system and a standpipe and hose system.

   The hotel, when completed, is to have a total of 107 units, with 15 suites on the ground floor and 23 suites each on floors two through five. The ground floor of the proposed hotel will be provided with a limited number of specially designed barrier-free suites.

The construction in dispute involves the configuration of the egress doorways within the interior of the suites, in particular the amount of clear space provided on the latch side of the doors. The Applicant is proposing that in each unit 300 mm clearance be included between the latch side of the door and the demising wall that runs perpendicular to the corridor wall and that separates the suite's washroom from its interior hallway leading to the egress door. The doors of the subject hotel suites swing inward towards the interior of the units.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether Clause 3.8.2.1.(2)(k) of the Ontario Building Code, which permits an exemption from the requirement to provide barrier-free accessibility "within" residential suites, also applies to the design of the interior side of the egress doorways proposed for the subject hotel units. Article 3.8.2.1. determines which areas and which buildings are required to be barrier-free and which may be exempt.

Since this provision of the OBC deals with an exemption from a requirement, an understanding of the requirement itself is essential. In this instance, Sentence 3.8.2.1.(1) sets out the required construction. It states that, except under certain circumstances, a barrier-free path of travel shall be provided throughout the entrance floor and all normally occupied floor areas of a building as described below. Sentence 3.8.2.1.(2), including Clause 3.8.2.1.(2)(k), is a series of exceptions to Sentence 3.8.2.1.(1). Clause (k) specifically exempts the requirement for a barrier-free path of travel "within a suite of residential occupancy".

If, based on a review of Article 3.8.2.1., a determination is made that an area is required to be barrier-free, then certain additional construction requirements apply. Among these is Sentence 3.8.3.3.(11) which mandates the amount of clear space required beyond the latch side of a door with a closer located in a barrier-free path of travel. The requirement is a minimum of 600 mm when the door swings towards the approach side and a minimum of 300 mm when the door swings away from the approach side. The intent of this provision is to make it easier for individuals in wheelchairs to open a door and travel through it. As noted, the Applicant is proposing to provide 300 mm, not 600 mm, clear distance on the approach side of the inward-swinging suite doors.

The Code ensures accessibility into the subject hotel rooms by extending the barrier-free path of travel into residential suites. The key question, however, is whether the interior side of the suite

doors, as approached from the inside in order to exit, are considered to be "within" a path of travel that is required to be barrier-free. If so, the clear space requirements of Sentence 3.8.3.3.(11) are applicable.

4. **Provision of the Building Code**

Sentence 3.8.2.1. - Areas Requiring Barrier-Free Path of Travel

1. Except where essential obstructions in the work area would make a barrier-free path of travel hazardous, and except as provided in Sentences (2), (3) and (4), a barrier-free path of travel from the entrances required by Sentences 3.8.1.2.(1) and (2) to be barrier-free shall be provided throughout the entrance storey and within all normally occupied floor areas served by a passenger type elevator or other platform equipped passenger elevating device.

Clause 3.8.2.1. - Areas Requiring Barrier-Free Path of Travel

(2) The provision of a barrier-free path of travel in Sentence (1) does not apply:

(j) into suites of residential occupancy that are in storeys other than the entrance storey and that have all entrance doors at floor levels that do not correspond to elevator stop levels,
(k) within a suite of residential occupancy, or:

Sentence 3.8.3.3. - Doorways and Doors

(11) Every door equipped with a closer in a barrier-free path of travel shall have a clear space beyond the latch side of not less than:

(a) 600 mm where the door swings towards the approach side, and
(b) 300 mm where the door swings away from the approach side.

5. **Applicant's Position**

At the outset, the Agent for the Applicant stated that he viewed the subject dispute as one of interpretation of the OBC and he indicated that he hoped the Commission would view it likewise.

The Agent submitted that Sentences 3.8.2.1.(1) and (2) of the Code are clear. In his view, these Sentences indicate that the hotel corridors are not exempt and therefore are required to provide a barrier-free path of travel, but the inside of the residential suites, i.e., the hotel rooms, are exempt. He argued that the interior side of the suite door and the interior approach hallway leading to it are entirely inside the suite, thereby satisfying the meaning of the word "within" used in the subject exemption Clause. A literal interpretation of the Code can only reach the conclusion that the interior side of the suite door is not in the barrier-free path of travel, the Agent stated. Consequently, the requirement found in Sentence 3.8.3.3.(11) to provide 600 mm clear distance on the latch side of the door is not applicable.

The Agent then described the significant impacts the additional 300 mm, if required, would have on the entire design of the suites. First, the washrooms would have to be reconfigured so that their length would run parallel to the room and not the hotel corridor. This would have the effect of moving the washroom farther into the remainder of the suite and would cause considerable problems in terms of fitting the standard furniture expected in a hotel room such a two double beds, night tables, etc. In fact, the Agent indicated that one of the sides of one bed would essentially be only inches away from a wall. This situation, he noted, was not acceptable to his client. And since the building is currently under construction with floor slabs being poured such significant design changes could not be easily met.

The Agent concluded by stating that his firm has done numerous barrier-free projects and, in his own personal opinion, he would like to see the Code changed to expand the scope of accessibility. However, in the present case, the current OBC requirements did not mandate the 600 mm clear distance.

6. **Respondent's Position**

The Respondent submitted that the barrier-free path of travel required in the hotel corridor extends through the doorway and into the suite. He supported this argument by stating that "the only exemption for doorways into (original emphasis) a suite of residential occupancy is in 3.8.2.1.(2)(j) of the OBC for suites in other than the entrance storey where an elevator does not

stop." Clause 3.8.2.1.(2)(k) cannot be used to exempt residential suite doors, he continued, because it specifically "deals with the situation within (original emphasis) a suite of residential occupancy (washrooms, corridors, etc.)..." As a result, he argued, the suite door is a part of the barrier-free path of travel and this applies to both sides of the door. As the Respondent asked; why would the Code allow accessibility into an area but not out? Doesn't a barrier-free path of travel go in both directions?

The Respondent continued by arguing that if the door, both inside and out, is in the barrier-free path of travel, then the 600 mm clear space requirement of Sentence 3.8.3.3.(11) is applicable. The Respondent highlighted Sentence A.3.8.3.3.(11) of the Appendix to the Code to prove his point. He noted that this provision states the 600 mm distance should be provided for all doors, even those without closers.

The Respondent concluded by stating that they were looking for clarification of the Code. He indicated that if his view of the Code was incorrect then it should be amended to allow the disabled community greater ease in approaching and opening an egress door when exiting a residential suite, especially in hotel and short stay accommodation-type situations.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the exemption from the requirement to provide barrier-free accessibility "within" residential suites found in Clause 3.8.2.1.(2)(k) of the Ontario Building Code also applies to the design of the interior side of egress doorways. Moreover, since the barrier-free path of travel is not required within a suite of residential occupancy, then the requirements of Sentence 3.8.3.3.(11) are not applicable to the interior side of the suite entrance door.

8. **Reasons**

While the Commission is sympathetic to the Respondent's position, we believe that the meaning of Clause 3.8.2.1.(1)(k) is clear. It does not require a barrier-free path of travel within a suite of residential occupancy. In our interpretation, the exemption, which employs the word "within",

refers to the design of the interior of the residential suite. This, we believe, also includes the layout of the interior approach hallway leading to the egress door on the inside of the suite.

9. **Recommendation**

The Building Code Commission recommends that the Housing Development and Buildings Branch review these aspects of the Ontario Building Code to examine the possibility of amending such provisions to allow for greater ease of barrier-free egress with respect to hotels and similar use buildings that provide short term accommodation where the occupants may not be familiar with their surroundings.

Dated at **Toronto** this **13th** day in the month of **April**, in the year **2000**, for application number **2000-20**.

BCC Ruling No. 00-16-748

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-16-748

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 3.2.9.1.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Gary Leblanc, 340268 Ontario Limited, Kitchener, Ontario, for the resolution of a dispute with Mr. Bruce Poole, Chief Building Official, City of Guelph, Ontario, to determine whether the various proposed compensating construction measures, offered in lieu of a standpipe and hose system, provide sufficiency of compliance with Sentence 3.2.9.1.(1) of the Ontario Building Code at Patene Building Supplies, 641 Speedvale Avenue West, Guelph, Ontario.

APPLICANT
Mr. Gary Leblanc
340268 Ontario Limited
Kitchener, Ontario

RESPONDENT
Mr. Bruce Poole
Chief Building Official
City of Guelph

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. John Guthrie
Mr. Donald Pratt

PLACE
Toronto, Ontario

DATE OF HEARING
April 13th, 2000

DATE OF RULING
April 13th, 2000

APPEARANCES
Mr. Gary Leblanc
340268 Ontario Limited
Kitchener, Ontario
The Applicant

Mr. Rob Reynen
Supervisor of Inspection Services
City of Guelph
Designate for the Respondent

RULING

1. The Applicant

?Mr. Gary Leblanc, 340268 Ontario Limited, Kitchener, Ontario, has received a building permit under the Building Code Act, 1992 to construct a wholesale warehouse known as Patene Building Supplies, 641 Speedvale Avenue West, Guelph, Ontario.

2. Description of Construction

The Applicant has constructed a building to serve as a wholesale warehouse for construction materials. The building consists of two main parts, a one storey warehouse portion which covers an area of 2119 m2 and a two storey administrative and sales portion with a building area of 558 m2. The building is described as having a Group F, Division 3 - Low Hazard Industrial major occupancy as well as a Group D - Business and Personal Services occupancy, which is subsidiary to the warehouse. The entire building is 2677 m2 in building area, two storeys in building height, and of noncombustible construction. The structure is equipped with a fire detection system, but not a sprinkler system nor a standpipe and hose system.

The subject building is rectangular in shape and has dimensions of 36.5 m by 73 m with its length constructed along the western property line. The property is also rectangular with dimensions of 114 by 242 m. The building is situated in the south-west corner of the property and is set back 4.4 m and 23.5 m

from the west and south property lines respectively. There is a 1060 m2 drive through canopy attached to the warehouse portion of the building's eastern exposing face. A parking lot adjacent to the street occupies the entire southern end of the property. The remainder of the site, to the north of the building and east of the canopy, is a material storage yard. The property is considered to face two streets and there are two fire hydrants near the property, one is located 6.4 m to the west of the building (on the adjacent property) and the other is 26 m from the front of the building (on its south side).

The structure is served by a total of six exit doors, with at least one on each exposing building face. As well, there are four large shipping doors, three on the east side and one on the north. There are 19 fire extinguishers located within the facility, four of which are on the exterior side of the building's east wall. The fire detection system includes thirty-four monitored detectors installed throughout the building, 31 of which are in the two floors of the office area and 3 are in the warehouse. It is ULC approved, provides zone indication and is centrally monitored with notification at the fire department. The occupant load of the building is 16, according to the Applicant.

The construction in dispute involves the omission of the standpipe and hose system. At 2677 m2, the subject building is required to be fitted with such a system. The Applicant describes the wall assembly separating the warehouse and office areas as being firestopped with a minimum fire resistance rating of 1.5 hours and equipped with doors with closing devices. (Between such occupancies, the OBC does not require a fire separation. Nevertheless, it is not considered a firewall that would create two smaller buildings for Code purposes.) This wall also has several wired glass window openings between the shipping office on the ground floor, the lunchroom on the second floor and the warehouse. It also has three doors to allow access between the two areas.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the various compensating construction measures, offered in lieu of a standpipe and hose system, provide sufficiency of compliance with Sentence 3.2.9.1.(1) of the Ontario Building Code. This provision requires that every building (with a few exceptions that are not applicable here), which is more than three storeys in building height, 14 m in height (measured between grade and the ceiling of the top storey), or of a certain building area if the building is unsprinklered, to be equipped with a standpipe system. If the final situation is applicable, the building area thresholds are set out in Table 3.2.9.1.

Table 3.2.9.1.

Occupancy Classification	*Building Area*, m^2 (ft^2)		
1 *Storey*	2 *Storeys*	3 *Storeys*	
A C D F, Division 2 F, Division 3	2 500 (24,200) 2 000 (21,500) 4 000 (43,100) 2 000 (21,500) 3 000 (32,300)	2 000 (21,500) 1 500 (16,100) 3 000 (32,300) 1 500 (16,100) 2 000 (21,500)	1 500 (16,100) 1 000 (10,800) 2 000 (21,500) 1 000 (10,800) 1 000 (10,800)
Column 1	2	3	4

According to this Table, an F3 building two storeys in building height may have a maximum area of 2000 m2 or less in order to be exempted from the requirement to install a standpipe and hose system. The subject building is considered two storeys in building height and has an area of 2675 m2. As noted, however, the Applicant is offering certain compensating measures in lieu of providing the standpipe system. At issue then, is whether subject measures are adequate to achieve the same level of safety offered by a standpipe system and thereby provide sufficiency of compliance with Sentence 3.2.9.1.(1).

4. Provisions of the Ontario Building Code

Article 3.2.9.1. **Standpipe Systems - Where Required**

1. Except as provided in Sentences (4) to (7), a standpipe system shall be installed in every building that
   a. is more than 3 storeys in building height,
   b. is more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey, or
   c. is not more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey but has a building area exceeding the area shown in Table 3.2.9.1. for the applicable building height if the building is not sprinklered.

5. Applicant's Position

The Applicant submitted that the five principle measures they are offering in lieu of the required standpipe system provide adequate compensation to meet the fire safety standards intended under Article 3.2.9.1. These compensatory measures are:

- A fire separation with a 1.5 hr fire resistance rating between the warehouse and the office portions of the building;
- A monitored fire detection system and numerous fire extinguishers throughout the building;
- Proximity to the fire fighting department;
- Proximity to two hydrants and good fire fighting access to 90 % of the building; and,
- Extremely low fire load.

The Applicant noted that no separation is required under the Code between the warehouse and the office building, and as a result he argued that the as-built 1.5 hour wall can be considered as a significant compensating measure.

The Applicant then noted that the fire detection system, with a total of 34 monitored detectors, will provide a comprehensive and interconnected level of fire detection throughout the building. The as-installed fire detection system, he argued, also provides a higher level of early warning than is required by Code for such a building. As well, the 19 fire extinguishers that are strategically placed around the structure will provide a good level of protection in the early stages of a fire emergency. Moreover, the staff have been trained by the fire department in terms of the use of the extinguishers, he added.

Regarding the proximity to the fire department, the Applicant stated that the building is located only 4 km from the nearest municipal fire station which means that their response time to his facility is less than five minutes. As far as the proximity of hydrants is concerned, he noted that there are two hydrants, one to the west and one to the front, of the building at an approximate distance of 6.4 m and 29 m respectively. As a result, the building is well served by hydrants.

The Applicant also indicated that because the building is of entirely noncombustible construction and is used as a wholesale facility for mainly noncombustible building materials, such as drywall and masonry, the fire load of the building and its contents is extremely low. He noted that materials such as roofing products are stored outside.

The Applicant concluded that the compensating measures provided, combined with the low occupant load of 16, is sufficient to achieve the same level of safety offered by a standpipe and hose system.

6. Respondent's Position

The Respondent submitted that the building area of the Patene Building Supplies facility is in excess of the area specified in Table 3.2.9.1 by 33%. As a result, he stated that the building is required to be equipped with a standpipe and hose system.

The Respondent argued that no relief from the standpipe system can be obtain as a result of the 1.5 hour fire rated wall separating the office and warehouse areas. This wall, he noted, is not a firewall that would serve to divide the building into two separate ones. Moreover, the subject fire separation has been breached by several penetrations. As well, the Code does not offer specific allowances providing relief from a standpipe system with the provision of such compartmentalization, he added.

The Respondent indicated that while the fire detection could be construed as above minimum Code requirements, it is not a full fledged system that would provide a substantial compensating measure. For example, the fire detection system does not have pull stations.

The Respondent stated that to his knowledge the hydrant to the west of the building is a private one on the adjacent property, thus making it uncertain whether it can be used for the building under dispute, if necessary. Besides, even if the hydrant can be used for the Applicant’s property, there are few openings in the west wall of the building to offer a decent level of accessibility into the structure.

Finally, the Respondent argued that while the building is currently used as a facility that stores and supplies mainly noncombustible building material, the situation may not remain that way. The Applicant, or a future purchaser, may decide at a later date to supply combustible materials instead. When, or if, this occurs the building department would have no control or input to require a standpipe system at that time, the Respondent said.

In conclusion, the Respondent acknowledged that certain levels of compensation were being offered, however, he indicated that, in his view, they were not sufficient to offset the need for the required standpipe system.

7. Commission Ruling

It is the decision of the Building Code Commission that the various proposed compensating construction measures, offered in lieu of a standpipe and hose system, do not provide sufficiency of compliance with Sentence 3.2.9.1.(1) of the Ontario Building Code at Patene Building Supplies, 641 Speedvale Avenue West, Guelph, Ontario.

8. Reasons

a. The measures offered to achieve sufficiency of compliance were not commensurate with the substantial amount of building area found in the existing structure over the threshold of allowable building area in Table 3.2.9.1.
b. Some of the measures offered as compensation such as occupant or fuel loads may be transitory and could change significantly and quickly.
c. The use of the building, as Group D and F3 occupancies, is not one such as a steel plant or heavy industry that may create a hazard if a standpipe and hose system is introduced to the structure.

Dated at Toronto this **13th,** day in the month of **April** in the year **2000** for application number **2000-16**.

BCC Ruling No. 00-15-747

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-15-747

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentences 3.2.8.1.(3), 3.2.8.2.(6), 3.3.3.3.(1), Article 3.2.3.18., Subsection 3.1.10., Clause 3.2.3.1.(1)(b) and Sentence 3.2.3.7.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. D. J. Thomas Dutton, Vice-President, Renaissance (Villa Giardino) Community Corporation, Toronto, Ontario, for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, Ontario, to determine the applicability and/or compliance with Sentences 3.2.8.1.(3) and 3.2.8.2.(6) of the Ontario Building Code (OBC) regarding the proposed main floor interconnected floor space, whether the proposed design of the second floor corridor complies with OBC Sentence 3.3.3.3.(1), and whether the proposed connection to the adjacent existing building provides sufficiency of compliance with OBC Subsection 3.1.10. or Clause 3.2.3.1.(1)(b) and Sentence 3.2.3.7.(1) at Villa Giardino, 7365 Martin Grove Road, Vaughan, Ontario.

APPLICANT
Mr. D. J. Thomas Dutton, Vice-President
Renaissance (Villa Giardino) Community Corporation
Toronto, Ontario

RESPONDENT
Mr. Mani Navabi
Chief Building Official
City of Vaughan, Ontario

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. Fred Barkhouse
Mr. James Lischkoff

PLACE
Toronto, Ontario

DATE OF HEARING
March 29, 2000

DATE OF RULING
March 29, 2000

APPEARANCES
Mr. Allan E. Larden, Principal
Larden Muniak Consulting Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Mani Navabi
Chief Building Official
City of Vaughan
The Respondent

RULING

1. **The Applicant**

   Mr. D. J. Thomas Dutton, Vice-President, Renaissance (Villa Giardino) Community Corporation, Toronto, Ontario, has applied for a building permit under the *Building Code Act, 1992*, to construct a retirement home known as Villa Giardino, at 7365 Martin Grove Road, Vaughan, Ontario.

2. **Description of Constrution**

   The Applicant is proposing to construct a new, L-shaped, retirement facility intended as a residence for elderly people of European background. The building is to contain a total of 124 suites, a few of which may have dual occupancy at times, thus resulting in a maximum number of residents of approximately 130 persons. The operating philosophy, as described by the Applicant, is to encourage an independent lifestyle for the residents with most suites containing small kitchenettes thereby resembling apartments. As well, so that some degree of "age in place"

flexibility is provided in the building, an entire floor has been designed as an assisted living area where food is prepared and a level of nursing service is offered.

The proposed building is described as five storeys in building height, 1,756 m^2 in building area, and is of noncombustible construction. It will be equipped with a full sprinkler system with quick response sprinkler heads, a fire alarm system and a standpipe and hose system. The structure will be connected at two levels to an existing retirement facility on the adjacent lot to the east.

The Applicant and Respondent have apparently agreed that the subject building should be classified as having Group A - Division 2, Group B - Division 3 and Group C occupancies. The Applicant has elected to construct the subject building according to the occupancy with the most stringent standards, in this case the B3 occupancy. Because of the height of the building, the specific provision involved is Article 3.2.2.38., "Group B, Division 2 or Division 3, Any Height, Any Area, Sprinklered". A floor by floor description of the building follows below:

Due to the moderate slope at the site, the ground floor is proposed as having two levels (referred to as the lower main floor and the upper main floor). As designed, the lower main floor is to be entirely below grade at the north end of the building, whereas at the south it would be at grade. The proposed connection to the adjacent six storey existing building to the east would be provided at both the upper and lower main floor levels. On the upper main floor a vestibule-type walkway is proposed to be constructed onto the east end of the new building. The punch out panel on this level in the exterior west wall of the existing building would be removed to create the passageway into that building. The exposing wall construction proposed at either end of the vestibule includes a new masonry or concrete partition wall with wired glass screen in the new building which is rated as providing a 2 hour separation from the walkway and a solid masonry wall in the existing building offering a 2 hour separation. The vestibule itself will be built with a 2 hour rated concrete roof supported by 2 hour rated construction and enclosed with glass partition walls on the north and south.

Below the walkway area, however, at the lower main floor, the new building is to be extended to the existing one, with the space presently proposed as storage. As such, at this level the existing building's punch out panel would remain. Three of the storage room's four walls would be in the new building and would be constructed with 2 hour rated concrete and masonry. The west facing 2 hour rated exposing wall of the existing building would comprise the fourth wall of this room. This area will also be capped by a 2 hour concrete slab. No east facing exposing wall is to be

constructed in the new building's connecting storage room that would abut the existing building's west wall.

The east-west wing of the main levels is to contain the A2 occupancy. Included in this area is a lounge, lobby, wellness centre, chapel, wine tasting room, hair salon and a pool on the lower main floor and a library, gallery, crafts room and dining and kitchen facilities on the upper main floor. (This area contains some administrative and utility space as well.) Also contained within the A2 occupancy is a large opening in the floor area connecting the two levels of the main floor. The opening occurs in the north-west corner of the building where the principal entrance is located. A large curved stair connects the two levels of the opening. As a result of this floor penetration, the entire A2 area is considered to be an interconnected floor space.

The north-south wing of the main floors is proposed as having a Group C occupancy and is intended for independent, ambulatory residents. A total of 16 units will be provided on the two levels, nine of which will be studios and seven as one bedroom suites. This area will be separated from the adjoining A2 space by a 2 hour fire separation. Exiting on the lower main floor is by an exit door directly to the exterior at the south end of the corridor. As well, all suites on this level are provided with an exit door to patio areas at grade. Occupants of the upper main floor are served by two exit stairs (No. 3 and 4) leading directly to the exterior, one at the north end and one at the south end of the corridor.

The second floor is proposed as the B3 care occupancy area. It is to consist of 32 units, an assisted dining room, a nurse's station with medical room, amenity space and a linen area. This floor will be separated by a 2 hour separation from the A2 and C occupancies below. Two corridors will serve the units on this floor, one is to run east/west while the other north/south. The exiting will be provided by three exit stairs; Stair No. 1 at the east end of the east/west corridor, Stair No. 3 at the south end of the north/south corridor, and Stair No. 2 located where the two wings of the building converge. While the occupants of this floor will be provided with a level of care, including their own dining facilities, they will not be prevented from visiting other areas of the building. To do so, however, they may require assistance.

The east/west corridor on the second floor will not terminate precisely where the north/south corridors begins, it is to extend approximately 1.8 m to the west beyond the intersection point with the north/south corridor. In this area the east/west corridor also widens to form a rectangular space to which access is provided to four suite doors.

Floors three to five are classified as having a Group C occupancy and are also for independent, ambulatory occupants. The third and fourth floors will have the same L-shaped configuration as the second floor. These floors will include 31 units each (a mix of studio and one bedroom suites), laundry facilities and amenity areas. The fire resistance rating of the separation between the third floor and the B3 occupancy below will also be 2 hours. The exiting arrangement on this floor will be identical to that of the second floor. These two floors have the same corridor configuration as the second floor, except that in the area where the east/west corridor extends beyond the intersection point of the north/south corridor only three suite doors are proposed. The corridor design, however, is not an issue on the Group C floors.

The building is proposed to extend to a fifth floor in the eastern portion of the east/west wing only. This floor will contain 14 units, most of them one bedroom suites, as well as the laundry and amenity areas found on other floors. The exiting for this floor will be via Stairs No. 1 and 2 at the east and west ends respectively of the corridor.

The proposed construction in dispute involves three areas; the interconnected floor space in the A2 occupancy, the second floor corridor design, and the connection between the new and old buildings.

3. **Dispute**

There are three issues at dispute between the Applicant and the Respondent. On the first issue the primary question is whether, in a building containing a B3 occupancy, an interconnected floor space is permitted when considering Sentence 3.2.8.1.(3) of the Ontario Building Code. This provision prohibits floor areas containing sleeping rooms to be built as a part of an interconnected floor space in a building that contains a B2 or B3 major occupancy. As noted, the proposed building will contain a B3 occupancy on the second floor and the Group C areas on the upper and lower main floor will be on the same level as the interconnected floor space to be located in the A2 area. A 2 hour separation, however, will divide these three occupancies. At issue therefore is whether Sentence 3.2.8.1.(3) is applicable to the subject building and whether it can be read as preventing the construction of the interconnected floor space.

If the answer to the first question is that an interconnected floor space is allowed in the Villa Giardino building, the subsequent question then becomes whether the proposed design of the floor penetration complies with the conditions (see below) set out in OBC Sentence 3.2.8.2.(6)

and, if so, thereby may be exempt from the construction requirements for buildings with an interconnected floor space as determined in Articles 3.2.8.3. to 3.2.8.11. While the first two conditions, (a) and (b), in Sentence 3.2.8.2.(6) clearly seem to be met in the proposed structure, the fulfilment of condition (c), which excludes certain occupancies from being in an interconnected floor space area, causes dispute. Since the common activity rooms located in the A2 interconnected floor space area may, through the provision of assistance and/or supervision, be used by residents from the B3 floor, the issue then becomes whether the restrictions of the B3 classification should be extended into the A2 zone.

The second issue is whether the proposed design for the second floor B3 occupancy corridor that includes a roughly 1.8 m extension of the east/west corridor past the connection point of the north/south corridor is considered a dead end corridor and thus contravenes Sentence 3.3.3.3.(1) of the OBC. This provision stipulates that corridors used by the public or serving patients or residents must not have a dead-end portion unless that part of the building is provided with a second and separate means of egress. The layout of the east/west corridor on the second floor does continue beyond the intersection point with the north/south corridor. Further, this part of the building is not served with a separate means of egress. Nevertheless, the length of corridor in question is only approximately 1.8 m. Moreover, the Code does not define when a certain corridor configuration for this occupancy must be considered a dead-end situation.

The third dispute involves the design of the proposed two level connection to the existing building on the adjacent site. Regarding the upper main floor, the question is whether the connection may be considered a walkway and would therefore be permitted to comply with Article 3.2.3.18. of the OBC. This Article dictates the construction requirements (see below) for walkways connecting two adjacent buildings. Pertinent to this discussion are the requirements that the walkway must be noncombustible when the two connected buildings are noncombustible construction and that at least a 45 minute separation be provided at both ends of the walkway when it is closed.

The walkway referred to in OBC 3.2.3.18. is defined in Article 1.1.3.2. as "a covered or roofed pedestrian thoroughfare used to connect 2 or more buildings". As stated in the March 20, 2000 Technical Background Information memo issued for this dispute by the Housing Development and Buildings Branch, " (t)his definition implies that a *walkway* [original emphasis] is a separate entity that is used to connect 2 or more buildings. As such, it should not be part of any of the buildings that it connects to". We agree. And while the proposed upper main floor building connection, or walkway, appears that it will be separated from the new and existing structures at

this level, the entire walkway, however, runs directly on top of the storage room below. In our view, this contravenes the meaning of walkway as envisaged by the Code.

Thus, as two physically connected buildings with a doorway penetration, the issue then becomes whether the current design provides sufficiency of compliance with either of the ways the OBC permits a separate building to be contiguous or closely spaced with another building. The relevant provisions are Subsection 3.1.10., "Firewalls", or Articles 3.2.3.1., "Limiting Distance and Area of Unprotected Openings", and 3.2.3.7., "Construction of Exposing Building Face." The difference in terms of construction in order to conform with these provisions is that for the subject building a 2 hour rated wall would be required to achieve a firewall, whereas a 1 hour rated wall is necessary in the case of an exposing building face with 0 m limiting distance.

Regarding the storage room, the issue is the same. As noted, there is no exposing wall of the new building proposed at the east end of the storage room that would face or abut the west wall of the existing building. Essentially, one of the four walls in the new building's storage room is comprised of the west-facing wall of the existing building.

4. **Provision of the Building Code**

Sentence 3.2.8.1. - Mezzanines and Openings through Floor Assemblies

1. ,
2. ,
3. A floor area containing sleeping rooms in a building of Group B, Division 2 or 3 major occupancy shall not be constructed as part of an interconnected floor space.

Sentence 3.2.8.2. - Exceptions to Special Protection

6. A interconnected floor space need not conform to the requirements of Articles 3.2.8.3. to 3.2.8.11. provided:

d. the interconnected floor space consists of the first storey and the storey next above or below it, but not both,
e. the interconnected floor space is sprinklered, and
f. the interconnected floor space contains only Group A, Division 1, 2 or 3, Group D, Group E, or Group F, Division 3 occupancies. (See Appendix A.)

Sentence 3.3.3.3. - Corridors

7. A corridor used by the public or serving patients or residents shall have no dead-end portion unless the area served by the dead-end portion has a second and separate means of egress.

Article 3.2.3.18. - Walkway between Buildings

8. Except as required by Sentence 3.2.3.19.(2), if buildings are connected by a walkway, each building shall be separated from the walkway by a fire separation with a fire-resistance rating not less than 45 min.
9. Except as permitted by Sentence (3), a walkway connected to a building required to be of non-combustible construction shall also be of non-combustible construction.
10. A walkway connected to a building required to be of non-combustible construction is permitted to be of heavy timber construction provided:
    a. not less than 50% of the area of any enclosing perimeter walls is open to the outdoors, and
    b. the walkway is at ground level.
11. A walkway of noncombustible construction used only as a pedestrian thoroughfare need not conform to the requirements of Articles 3.2.3.13. and 3.2.3.14.
12. A walkway between buildings shall be not more than 9 m (29 ft 6 in) wide.

Subsection 3.1.10. - Firewalls

(REFER TO OBC)

Clause 3.2.3.1. - Limiting Distance and Area of Unprotected Openings

13. Except as permitted by Articles 3.2.3.9. to 3.2.3.11., the area of unprotected openings in an exposing building face for the applicable limiting distance shall not be more than the value determined in accordance with:

n. ,
o. Table 3.2.3.1.C. or Table 3.2.3.1.D. for an exposing building face conforming to Article 3.2.3.2. of a sprinklered fire compartment that is part of a building which is sprinklered in conformance with Section 3.2.

(See A-3, Fire Fighting Assumptions in Appendix A.) (See also Section 3.13.)

Sentence 3.2.3.7. - Construction of Exposing Building Face

16. Except as permitted by Articles 3.2.3.9. and 3.2.3.10., if a limiting distance shown in Table 3.2.3.1.A. or Table 3.2.3.1.C. for Group A, B, C, D or Group F, Division 3 occupancy classification permits an exposing building face to have unprotected openings not more than 10% of the exposing building face, the exposing building face shall be:

q. of non-combustible construction having a fire-resistance rating not less than 1 h, and

r. clad with non-combustible cladding.

5. **Applicant's Position**

Regarding the issue of whether an interconnected floor space is permitted in a building that contains a B3 occupancy, the Agent for the Applicant submitted that Sentence 3.2.8.1.(3) makes no such prohibition. In his view, this provision simply seeks to prevent an interconnected floor space from being located in a B3 occupancy and does not preclude the possibility that one may be constructed in a building that houses somewhere within a B3 occupancy. OBC 3.2.8.1.(3) is not applicable to the subject design, he argued, because it proposes that the B3 be located wholly on the second floor and the interconnected floor space only on the upper and lower main floors, thereby completely separating the occupancies. Moreover, the only dwelling units on the main floor levels are classified as Group C occupancies and they are also separate from the A2 area. As he noted, the A2 area containing the interconnected floor space, the main floor Group C and the second floor B3 are all separated from each other by two hour separations.

In so far as the question of whether the interconnected floor space requirements of Articles 3.2.8.3. to 3.2.8.11. must be met, due to the fact that the B3 residents, with assistance, may occasionally use the amenity area found in the A2 space, the Agent argued that the presence of B3 occupants in the A2 area does not change the A2 into a B3 occupancy. "This (the Agent stated) is consistent with long established means of regulating hospital (B2) occupancy design. Patient care areas which are considered to be B2 occupancies are typically patient sleeping rooms and medical treatment facilities where patients are immobilized or unconscious, such as operating theatres. Portions of hospital buildings containing examination rooms, clinics or facilities such as physiotherapy treatment areas are considered to be Group D business and personal services occupancies and are not required to be designed to the requirements applicable

to B2 occupancies. If this is the approach to the assigning of occupancy classification in hospitals, it does not make sense that a more restrictive approach should apply to a building containing a B3 occupancy on one floor level.

"In the context of hospital and nursing home design, OBC Subsection 3.3.3. has always been understood as applying to patient sleeping or medical treatment areas and not to other portions of the building where patients or residents may happen to visit for consultation, eating, recreation or even some forms of treatment.

"OBC 3.2.8.1.(3) has been cited as a basis to deny the design of the interconnected floor space. The argument would seem to be that any floor area containing sleeping rooms - even if the entire floor area was to be regarded as Group C occupancy - could not have a portion of the floor area (not including the sleeping rooms) designed as an interconnected floor space because somewhere else in a portion of the building remote from the interconnected floor space there was a B3 occupancy. This does not appear to be reasonable; our interpretation of this sentence is that the sleeping rooms in question are B2 or B3 sleeping rooms in which case the portion of floor area containing such sleeping rooms is not to be constructed as part of an interconnected floor space.

"This argument is reinforced by OBC 3.2.8.6. which applies to B occupancy sleeping rooms in a larger atrium building where configurational and smoke control restrictions are imposed on the atrium design. In such case(s) (sic) it is clearly recognized that Group B sleeping rooms can be in a floor area which is, in part, within an interconnected floor space, as long as the portion of floor area containing the B sleeping rooms is not within the interconnected floor space.

"OBC 3.2.8.6.(1) is not referenced as an exception to OBC 3.2.8.1.(3); this strongly supports the notion that the intent of OBC 3.2.8.1.(3) is to preclude a portion of a floor area containing B occupancy sleeping room from being within an interconnected floor space and that other portions of the same floor area could be within an interconnected floor space."

Regarding whether the interconnected floor space construction requirements are applicable, the Agent stated:

"There is no application to OBC Articles 3.2.8.3. to 3.2.8.11. for the case at hand. The design is intended to comply with OBC 3.2.8.2.(6) which concerns a 2-storey interconnected floor space where one of the storeys is the first storey.

"All three conditions in 3.2.8.2.(6) are met; the occupancies in the interconnected floor space are Group A2 or D (not Group B); the interconnected floor space consists of portions of the first two storeys of the building; the interconnected floor space is sprinklered.

"It is worth noting that OBC 3.2.8.2.(6) now only refers to "occupancies" in terms of those uses which are permitted within the interconnected floor space. Previous editions of the Code referred to "major occupancies" which occasionally resulted in problems when a very literal-minded building official was applying the Code sentence. For example, 2-storey interconnected floor spaces containing recreational facilities in a Group C major occupancy apartment building were sometimes questioned because the reference was to major occupancies and not occupancies in general. If amenity spaces which are subsidiary components of a Group C occupancy apartment building are permitted to be in an interconnected floor space, even though they are held by some to be subsidiary components of the major Group C occupancy, then the same principle should apply to amenity areas in an interconnected floor space in a building which contains Group C and B3 major occupancies."

On the issue of the second floor corridor design, the Agent disputed that it represented a dead-end situation and instead likened it to an alcove. He noted that since there is no Code definition for a dead-end corridor for such a building, then it is up to common sense interpretation to determine whether such a condition applies. In his view, "a dead-end condition occurs when someone in that portion of corridor has no choice of travel in different directions" and "travel is constrained in one direction for some distance before a choice of direction of travel is available". This is not the case in the present situation, he argued.

The Agent then described how in the past the opinion of the Housing Development and Building Branch was that if there was a niche or alcove in a corridor design where the width of the space did not exceed its depth then it need not be considered as a dead-end. He argued that such an interpretation represented a functional common sense application as to what construes a dead-end situation and would clearly exempt the Villa Giardino example.

To ameliorate the potential for any practical or Code compliance issues regarding this corridor, the Agent offered two solutions. The first involved reconfiguring the partition walls in the corridor so that the alcove becomes part of a U-shaped corridor design. The second was to add additional exit signs providing direction at the intersection point of the corridors.

With respect to the issue of the connection to the adjacent building, the Agent maintained that the proposed walkway on the upper main floor does comply with the definition thereof in the

OBC. He argued that the Code definition does not impose any restrictions on design, it simply describes what a walkway is. And this description, in his view, encompasses the subject Villa Giardino design.

Regardless of whether the Commission accepts the proposed design as a walkway, the Agent argued that the intended construction at both the upper and lower main levels would provide an adequate level of fire safety. In describing the storage room, he reiterated that there is no passageway between the two buildings and that the room is surrounded by 2 hour rated walls and ceiling. The walls at either end of the walkway (especially the existing building's wall) would provide more than a 45 minute separation as required by Article 3.2.3.18. and the concrete roof is to be 2 hour rated. The Agent did, however, offer to upgrade the new building's walkway wall to a 1.5 or 2 hour separation.

6. **Respondent's Position**

At the outset, the Respondent indicated that the proposed retirement home was a facility that caused him some concern for several reasons. For example, while the Code views the structure as being five stories in reality it is six levels. It is also to be built very close to the neighbouring building. Moreover, he indicated that he was not entirely comfortable with the classification of the building. As a result, he argued that it was important to consider the three disputed areas seriously. Any further concession might be quite detrimental to the safety of the building.

On the issue of whether an interconnected floor space is allowed in the subject building, the Respondent submitted that his reading of Sentence 3.2.8.1.(3) is that it prohibits such a floor penetration in a building that houses a B3 occupancy. This, he noted, clearly creates a non-compliant situation with respect to the proposed A2 interconnected floor space area. He continued by stating that if only Group C occupancies existed outside of the A2 area, then conformance with Sentence 3.2.8.1.(3) would be achieved.

The Respondent then argued that if an interconnected floor space were to be allowed, it should have to meet the construction requirements of Articles 3.2.8.3. to 3.2.8.11. In his view, these provisions must be met because condition (c) of Sentence 3.2.8.2.(6) has not been met. This Clause sets out what occupancies can be found in an interconnected floor space and Group C and B3 uses are not among them. As he argued, since the residents of especially the B3 floor, through supervision or assistance, have access to the amenity areas on the A2 floor space, then the level

of protection provided in the B3 area should be extended into the A2 zone. This should result in the omitting of the interconnected floor space entirely from the building's design, but at a minimum the floor penetration should be compensated for by complying with OBC 3.2.8.3. to 3.2.8.11.

With respect to the corridor design issue, the Respondent stated that the current layout contains a dead end situation. Sentence 3.3.3.3.(1) does not permit such a condition. Unlike other occupancies, no dead end corridors of any length are allowed in the proposed structure.

Regarding the building connections, the Respondent noted that the walkway is to sit on top of part of the new building, i.e., the storage room. As a result, he argued that the walkway does not meet the Code definition of being a structure between two buildings and thus must meet either the firewall standards or the exposing building wall at 0 m limiting distance requirements. The design of the storage room, he submitted, makes it clear that the new building is being extended directly to the old, and the fact that no fourth wall facing the old building was to be constructed concerned him. He also indicated concern about the potential storage of combustible materials in this room. The Respondent thought that compromises should not be made on the building connections because the proposed work involves new construction.

7. **Commission Ruling**

It is the decision of the Building Code Commission (BCC) that the proposed building, which is to contain a B3 occupancy on a remote and separated floor from an interconnected floor space within the structure, complies with Sentence 3.2.8.1.(3) of the Ontario Building Code and the location of separated Group C occupancies that are to occupy a portion of the same floors containing the interconnected floor space are also in compliance with the Ontario Building Code.

It is also the decision of the BCC that the subject interconnected floor space complies with Sentence 3.2.8.2.(6) and need not meet the construction requirements of Articles 3.2.8.3. to 3.2.8.11. of the OBC.

It is also the decision of the BCC that the "alcove" located in the public corridor at the north-east corner of the second floor is not considered to be a dead end situation provided two exit signs are installed to define the direction of egress in the area of the alcove.

And it is also the decision of the BCC that the connections between the adjacent existing building meets the intent of the Code provided a vertical fire separation conforming to either Subsection 3.1.10. or Clause 3.2.3.1.(1)(b) and Sentence 3.2.3.7.(1) be incorporated into its design.

8. **Reasons**

. The occupancies are separated from the interconnected floor space by 2 hour fire separations that are equal to the rating of the floor slab and therefore are deemed to be not within the interconnected floor space.

a. The interconnected floor space is located entirely within an area considered to be an A2 occupancy.

b. The length of dead end corridor is minimal and the width of the alcove exceeds its depth.

c. The area proposed as a walkway does not conform to the OBC's definition since it is placed directly upon a portion of the new building.

d. The new building at both the upper and lower main floor levels does not have an exposing building wall at the property line.

Dated at **Toronto** this **29th** day in the month of **March**, in the year **2000**, for application number **2000-14**.

BCC Ruling No. 00-14-746

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-14-746

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentences 9.8.4.1.(1), 9.8.7.1.(1), (2) and 9.8.7.2.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Gordon Naismith, Project Manager, Van Lagen Homes, Norwich, Ontario, for the resolution of a dispute with Mr. Doug Robertson, Chief Building Official, Town of Tillsonburg, Ontario, to determine whether the as-built stair landing that measures 1093 by 915 mm and serves a stair 1093 mm in width, the lack of a second handrail in a 1093 mm wide stair and the absence of a railing at the lower flight (comprised of two risers) in the stair between the ground and second floor provide sufficiency of compliance with Sentences 9.8.4.1.(1), 9.8.7.1.(1) and 9.8.7.2.(2) respectively of the Ontario Building Code at the Robinson residence, 2 Eden Place, Tillsonburg, Ontario.

APPLICANT
Mr. Gordon Naismith, Project Manager
Van Lagen Homes
Norwich, Ontario

RESPONDENT
Mr. Doug Robertson
Chief Building Official
Town of Tillsonburg

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. Fred Barkhouse
Mr. James Lischkoff

PLACE
Toronto, Ontario

DATE OF HEARING
March 29, 2000

DATE OF RULING
March 29, 2000

APPEARANCES
Mr. Gordon Naismith, Project Manager
Van Lagen Homes
Norwich, Ontario

The Applicant
Mr. Doug Robertson
Chief Building Official
Town of Tillsonburg

The Respondent

RULING

1. The Applicant

Mr. Gordon Naismith, Project Manager, Van Lagen Homes, Norwich, Ontario, has received a building permit under the Building Code Act, 1992 and has recently constructed a single, detached dwelling at 2 Eden Place, Tillsonburg, Ontario.

2. Description of Construction

The Applicant has recently constructed a new single, detached Group C residential occupancy. The building is described as 167.3 m^2 in building area and two storeys in building height.

As part of the construction the Applicant built an access to egress stair between the ground floor and the second floors. The stair is "L-shaped" and consists of two flights and a landing. The lower flight has two risers and is 915 mm (36") in width and the upper flight has twelve risers and is 1093 mm (43") wide.

The construction in dispute involves the width of the stair landing. The landing measures 1093 by 915 mm, while the width of the stairs in which the landing occurs is 1015 mm. As well, the upper flight of the stair is equipped with a single handrail and the lower flight has no handrails on either side.

3. Dispute

There are three issues in dispute between the Applicant and the Respondent. The first is whether the as-built stair landing that measures 1093 by 915 mm and serves a stair 1093 mm in width provides sufficiency of compliance with Sentence 9.8.4.1.(1) of the Ontario Building Code. This provision requires a landing to be as wide and as long as the width of the stairs in which it occurs. The as-built landing is as wide as the width of the subject stairs, however, the length of the landing is less than the width of stairs.

The second issue is whether the subject stair, which measures 1093 mm (3' 7") in width but which has only one handrail, provides sufficiency of compliance with Sentence 9.8.7.1.(1). Specifically, this provision stipulates that handrails must be installed on at least one side of stairs less than 1093 mm in width and on both sides of stairs 1093 mm in width or greater. As noted, the stairs in question are 1093 mm in width but have only one handrail.

The third issue pertains to whether the absence of a railing at the lower flight (comprised of two risers) provides sufficiency of compliance with Sentence 9.8.7.2.(2) of the Ontario Building Code. Sentence 9.8.7.2.(2) mandates that a continuous handrail must be installed throughout the length of a stairway, including landings. The stair in question does not have a continuous handrail throughout its entire length.

4. Provisions of the Ontario Building Code

Sentence 9.8.4.1. Dimensions of Landings

(1) Landings hall be at least as wide and as long as the width of stairs in which they occur, except that

(a) the length of landing for exterior stairs serving not more than 1 dwelling unit need not exceed 900 mm (2 ft 11 in), and

(b) the length of landing for all other stairs in a straight run need not exceed 1,100 mm (3 ft 7 in).

Sentence 9.8.7.1. Required Handrails

(1) Except as permitted in Sentences (2) and (3), a handrail shall be provided on

- at least one side of stairs less than 1 100 mm (3 ft 7 in) in width,
- two sides of stairs 1 100 mm (3 ft 7 in) in width or greater, and
- two sides of a curved stair used as an exit.

(2) Handrails are not required for stairs within dwelling units having not more than 2 risers, or for exterior
stairs having not more than 3 risers and serving not more than one dwelling unit.

Sentence 9.8.7.2. Continuous Handrail

(2) Except as provided in Sentence (2), at least one handrail shall be continuous throughout the length of the stairway, including landings, except where interrupted by

(a) doorways, or

(b) newel posts at changes in direction.

5. Applicant's Position

The Applicant submitted that there are two ways to make the present situation comply with Sentence 9.8.4.1.(1). The first would be to reduce the width of the stair and the second would be to increase the length of the landing by reducing the depth of the stair run. He argued that "reducing the width of the stair to match the depth of the landing does not serve any reasonable purpose." The applicant felt that because of the constraints at the top and bottom of the stairway, it would not be possible to alter the size of the landing. Moreover, the option of reducing the depth of the stair run would not result in a safer solution, he argued.

In addition, the Applicant stated that the current size of the landing provided superior appearance and functionality and thus he indicated that increasing the size of the landing would not be necessary. He

argued that this situation was "minor," as the width difference of the stairs involved was only a few inches. It was further noted that the stairs in question have a "90 degree" turn in the landing which adds to their safety. Full compliance with Sentence 9.8.4.1.(1) is more essential, he asserted, when considering a straight stair.

Regarding the issue of the second handrail, the Applicant conceded that an extra railing on the opposite side could be required and was willing to comply if necessary. However, he noted that the stairs were exactly at the 1093 mm (3' 7") threshold.

On the issue of the continuous handrail, the Applicant argued that since the lower flight consisted of only two stairs Sentence 9.8.7.1.(2) allowed the handrail requirements to be waived. However, he also acknowledged that the two flights together constituted one continuous stair.

6. Respondent's Position

The Respondent submitted that not only does the size of the landing not comply with requirements of the Ontario Building Code (OBC), but the handrails provided also are not in conformance with Code.

He noted that the OBC clearly states that the length and width of a landing shall be equal to the width of the stair in which it occurs. Therefore, either the landing length or the stair width must be adjusted such that the requirements of Sentence 9.8.4.1 (1) are satisfied.

In reference to Sentence 9.8.7.1.(1), the Respondent argued that since the subject stairs are 1093 mm (3' 7") in width, handrails are required on both sides, and not just one as has been built. As well, he indicated that a handrail continuing from the landing newel post to the ground floor was necessary as per Sentence 9.8.7.2.(2). He noted that the exemption for handrails in OBC 9.8.7.1.(2) was for entire stairs within a dwelling unit with two risers or less, and not for flights within a stair.

Lastly, the Respondent stated that he would be satisfied if a solution could be reached, but indicated that he felt he did not have the authority to approve the constructed stairs.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-built stair landing measuring 1093 by 915 mm and serving a stair 1093 mm in width provides sufficiency of compliance with Sentence 9.8.4.1.(1) of the Ontario Building Code.

It is also the decision of the Building Code Commission that a second handrail is not required in the subject stairs, as the said construction provides sufficiency of compliance with Sentence 9.8.7.1.(1) of the Ontario Building Code.

It is also the decision of the Building Code Commission that the existing handrail, which is omitted at the lower flight (comprised of two risers) in the stair between the ground and second floor does not provide sufficiency of compliance with Sentence 9.8.7.2.(2) of the Ontario Building Code.

8. Reasons

1. The width of the stairwell and the smallest dimension of the landing both exceed minimum requirements in the Code.
2. The existing construction of the landing is within accepted tolerances, therefore, the second handrail is not necessary.
3. The handrail must be continuous throughout the entire length of the stair as required in Sentence 9.8.7.2.(2).

Dated at Toronto this **29th** day in the month of **March** in the year **2000** for application number**2000-12**.

Ontario

Ruling No. 00-13-745
Application No. 2000-57

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 3.2.3.13. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. David Scott, Vice-President, Grand Shores Realty Development Corporation, Toronto, Ontario, for the resolution of a dispute with Mr. Gord Allison, Chief Building Official, City of Barrie, Ontario, to determine whether the proposed construction of exterior walls and location of windows provides sufficiency of compliance with Article 3.2.3.13. of the Ontario Building Code for at the Toronto Street Condominiums, 2-4 Toronto Street, Barrie, Ontario.

APPLICANT	Mr. David Scott, Vice-President Grand Shores Realty Development Corporation Toronto, Ontario
RESPONDENT	Mr. Gord Allison Chief Building Official City of Barrie
PANEL	Dr. Kenneth Peaker, Chair Mr. Michael Steele Mr. John Guthrie
PLACE	Toronto, Ontario
DATE OF HEARING	October 5, 2000
DATE OF RULING	October 5, 2000
APPEARANCES	Mr. Steve McKerroll, Architect Ian Malcolm Architects **Agent for the Applicant** Mr. Stephen Barks Supervisor of Permits City of Barrie **Designate for the Respondent**

RULING

1. The Applicant

Mr. David Scott, Vice-President, Grand Shores Realty Development Corporation, Toronto, Ontario, has received a building permit under the Building Code Act, 1992 and is currently constructing a condominium building located at 2-4 Toronto Street, Barrie, Ontario.

2. Description of Construction

The Applicant is constructing a 16-storey residential condominium building. The structure has a Group C - residential occupancy classification and a building area of 1251 m^2. It is of noncombustible construction and equipped with a partial sprinkler system. In addition, the building is provided with a fire alarm system and a standpipe and hose system.

The construction in dispute involves the proposed changes to the design of the exterior walls of the residential units. The changes include the reconfiguration of one-hour rated fire walls that would separate two adjacent suits; a total of eight suits on each floor are affected.

The exterior fire walls separating adjoining units of the building are to be subtended at an angle of 90°, 135°, or 180°. It is the exposing unprotected openings of the exterior walls with a subtended angle of 90° which are the subject of this dispute. Under the proposed design, the exterior wall of the building is, when viewed in plan, to have a saw-tooth pattern. Specifically, in this configuration, the narrower wall of one suite will consist entirely of window (i.e., the ratio of total wall area to unprotected opening will be one to one (1:1)) and will be set at 90^0 to the adjacent wall of the next door suite. The adjacent wall, on the other hand, will have a window constituting 38 percent of the wall (i.e., the ratio of total wall area to the unprotected opening will be 2.6:1). The window on this wall is to be located 1,500 mm from the intersection point of two walls. As a result, the distance between two windows, as measured on the exterior of the building, will be 1,500 mm.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed construction of exterior walls and window locations, whereby an unprotected exterior wall/window opening is exposed to an unprotected exterior wall/window opening in another fire compartment, provides sufficiency of compliance with Sentence 3.2.3.13.(1) of the Ontario Building Code (OBC).

Sentence 3.2.3.13.(1) identifies the formula that calculates the required distance between unprotected openings of two exterior adjacent walls which are parallel or at an angle of less than 135° to one another. (This provision also stipulates that in no case is this distance permitted to be less than 1000 mm. In the current situation, however, the prescribed formula is applicable.) The formula mandates that the minimum distance between openings of exterior walls is a function of the greater of the two limiting distances required to be maintained between the exposed building faces and the angle between these two faces. The required distance for the exposing building faces in residential occupancies with unsprinklered fire compartments (here the adjacent suits) is set out in Table 3.2.3.1.A. When the distances from the Table are applied to the Sentence 3.2.3.13.(1) formula, the calculated required distance becomes 5 metres between the unprotected openings under dispute. As noted, the Applicant is proposing a distance of a 1,500 mm between two windows.

4. Provisions of the Ontario Building Code

Article 3.2.3.13. Wall Exposed to Another Wall

(1) Except as required by Sentences (3) and 3.2.3.12.(1) or as permitted by Sentence 3.2.3.18.(4), if an *unprotected opening* in an exterior wall of a *fire compartment* is exposed to an *unprotected opening* in the exterior wall of another *fire compartment*, and the planes of the 2 walls are parallel or at an angle less than 135˚, measured from the exterior of the *building*, the *unprotected openings* in the 2 *fire compartments* shall be separated by a distance not less than D◦ where D◦ = 2D - {(q/90) x D} but in no case less than 1 000 mm (3 ft 3 in), and

D = the greater required *limiting distance* for the *exposing building faces* of the 2 *fire compartments*, and
q = the angle made by the intersecting planes of the *exposing building faces* of the 2 *fire compartments* (in the case where the exterior walls are parallel and face each other, q = 0˚).

5. Applicant's Position

The Agent for the Applicant submitted that the method of calculation they have used to determine the exterior wall intersection angle and location of windows from suite to suite creates no greater hazard than if the exterior windows/walls intersected at an angle of 135°. The windows in adjoining suites are separated by a distance of at least 1,500 mm and the exterior walls in between are provided with a one hour fire resistance rating. In his opinion the radiant heat effect of fires between suites will be reduced by this proposed configuration. To construct in compliance with OBC requirements, in this instance, would provide less safety than the proposed design.

The Applicant stated, that this proposal complies with the intent of the Building Code despite a 90° wall intersection, "there are no unprotected openings beyond the line of 135 degrees, (the line to which the exterior walls could have intersected at and still be considered to not expose each other to thermal radiation). He suggested that , "(w)hen the two exterior walls intersect at an angle of 135 degrees or more, the two windows are not considered to be exposing each other and they can be right adjacent to each other." This, he argues, would be less safe than the proposal for which they are seeking approval, where the exposing windows are separated by a distance of at least 1,500 mm.

In summation, the Applicant submitted that, by adopting this method of calculation the intent of the Code is clearly maintained and there is no additional, unacceptable risk from fire spreading between compartments.

6. Respondent's Position

The Designate for the Respondent submitted that Article 3.2.3.13. does not allow this proposal as the subject walls intersect at a 90° angle. He argued that the Applicant was seeking approval of a design that "would result in an unprotected opening in one fire compartment to be exposed to an unprotected opening in another fire compartment without providing the minimum distance between openings." In terms of the subject building, the minimum distance has been calculated at 5 m, using the standard method of calculation.

The Designate submitted that the minimum distance has not been achieved when measuring the limiting distance at right angles to the exposing building face. In addition, the design of the structure could easily incorporate reductions in the unprotected openings that would comply with the OBC

requirements. He acknowledged that the residential suites had already been sold and suggested that, if the Commission did not rule that the proposal has sufficiency of compliance, the Applicant would have the option of exploring other alternatives such as providing shutters, to create protected openings, or sprinklering the units and windows.

In summation, the Designate reiterated that the proposed wall construction exposed to another wall does not comply with strict wording of the provisions set out in the Building Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed construction of exterior walls and the location of windows provides sufficiency of compliance with Sentence 3.2.3.13.(1) of the Ontario Building Code at the Toronto Street Condominium, 2-4 Toronto Street, Barrie, Ontario.

8. Reasons

i) The proposed window arrangements and one-hour fire rated exterior wall construction meet the intent of Sentence 3.2.3.13.(1) of the Ontario Building Code for a wall exposed to another wall.

ii) The unprotected wall openings are outside the 135° angle and, despite the wall intersection at a lesser degree, heat radiation resulting from a fire within one suite, where the exterior walls have a one hour fire-resistance rating, will pose no greater risk to another suite than would a configuration designed in accordance with OBC 3.2.3.13.(1).

Dated at Toronto this **5th** day in the month of **October** in the year **2000** for application number **2000-57**.

Dr. Kenneth Peaker, Chair

Mr. Michael Steele

Mr. John Guthrie

BCC Ruling No. 00-12-744

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-12-744

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentences 9.8.2.1.(1) and 9.8.3.1.(1) and Article 9.8.5.2. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF OF an application by Mr. Christiaan Wingelaar, President, 762429 Ontario Inc., Waterloo, Ontario for the resolution of a dispute with Mr. Jim Witmer, Chief Building Official, City of Kitchener, to determine whether the as-constructed three separate and irregular stairs provide sufficiency of compliance with Sentences 9.8.2.1.(1) and 9.8.3.1.(1) and Article 9.8.5.2. of the 1990 Ontario Building Code at 694 Glasgow Street West, Kitchener, Ontario.

APPLICANT
Mr. Christiaan Wingelaar, President
762429 Ontario Inc.
Waterloo, Ontario

RESPONDENT
Mr. James Witmer
Chief Building Official
City of Kitchener

PANEL
Mr. Kenneth Peaker, Chair-Designate
Mr. Fred Barkhouse
Mr. James Lischkoff

PLACE
Toronto, Ontario

DATE OF HEARING
March 29th, 2000

DATE OF RULING
March 29th, 2000

APPEARANCES
Mr. Christiaan Wingelaar, President
762429 Ontario Inc.
Waterloo, Ontario
The Applicant

Mr. Glen Good
Deputy Chief Building Official
City of Kitchener
Designate for the Respondent

The Respondent

RULING

1. The Applicant

Mr. Christiaan Wingelaar, President, 762429 Ontario Inc., Waterloo, Ontario, has received an order to comply under the Building Code Act, 1992 to remedy certain alleged deficiencies at 694 Glasgow Street West, Kitchener, Ontario.

2. Description of Construction

The Applicant completed construction of a new, detached Group C - residential building three years ago. The dwelling is described as two stories in building height (plus a finished basement), 600 m2 in building area and is of combustible construction.

As part of the construction, the Applicant built three sets of access to egress stairs. All of the subject stairs were custom built of solid ash. Each stair has open treads, i.e., there are no risers and all of the stairs have carpeting applied to the upper surface of the treads. The design of the stairs was not on the original plan approved by the municipal building department. The present design was a revision made

during construction. (For the sake of clarity, each of the three sets of stairs will be referred to as stair A, B or C and each individual stair will be numbered commencing from the bottom.)

The main stair (referred to as stair A) is located on the ground floor in the front foyer at the centre of the house and leads to the basement. This stair, comprised of 16 risers and consisting of two curved flights separated by a nearly rectangular landing [considered stair number 6], is elliptical in shape when viewed in plan. The ten stairs [stair numbers 7 to 16] on the upper flight have straight nosings with a 35 mm (1 3/8 in) overhang and a uniform run of 270 mm (10 5/8 in) at the midpoint of the stair.

Four stairs on the lower flight [numbers 2 to 5] have forward curving nosings with a 35 mm (1 3/8 in) overhang and differing run lengths (measured at the midpoint) for each stair. The run length increases during descent, ranging from 292 mm (11 in) for the highest stair to 348 mm (13 11/16 in) for the lowest. There is a large, oval-shaped stair [number 1] at the bottom of the lower flight, however, since it has a run of approximately 930 mm (3 ft, 5/8 in) it is considered as a second landing. All stairs have an inside run of 203 mm (7 15/16 in). As well, this stair has a uniform stair rise of 189 mm (7 7/16 in) and has been provided with handrails on both sides throughout its entire length.

The second stair (stair B), located on the west side of the house, has a total of 15 risers and is a secondary stair that also leads from the main floor to the basement. This stair, starting from the top, has a straight run of seven steps [stairs 15 to 9] and then turns 450 to the right between stairs 7 and 6. Whereas the stairwell itself is comprised of straight walls with a precise 450 turn, stairs 8 through 5, however, have been designed to negotiate this change of direction in a gradual fashion.

The upper stairs [down to and including stair 9] have a run of 208 mm (8 3/16 in). Stairs 8, 7, 6, and 5 have runs at their midpoints of 212 mm (8 3/8 in), 247 mm (9 3/4 in), 305 mm (12 in) and 212 mm (8 3/8 in) respectively. (The minimum runs on the inside of the stair also vary, but with the smallest being 162 mm (6 3/8 in) they all exceed the OBC's minimum inside run requirement of 150 mm (5 7/8 in).) The run lengths for stairs 4, 3 and 2 are all 208 mm (8 3/16 in). The bottom stair is similar in design to the lowest stair in stair A, and it too has such a long run, at 1,000 mm (3 ft, 3 in), that it is considered as

a landing. This stair has a uniform rise of 190 mm (7 in) and each stair has a 35 mm (1 3/8 in) nosing. There is a continuous handrail on the left side (when descending) and a second handrail on the right side, but only on the lower portion after the 450 turn.

Stair C, leading from the main floor to a room above the garage area, is located directly above stair B and as a result navigates the same 450 right turn. This stair, however, is divided into two flights and provides a landing at the turn. There are a total of 14 risers, each measured at 186 mm (7 5/16 in). The upper flight has 9 stairs [numbers 14 to 6], each with a consistent run of 212 mm (8 3/8 in). The landing [considered stair number 5] has an irregular shape and is curved on the inside and has straight walls (with the 450 turn) on the outside. It does not, however, provide the full 450 rotation throughout its turn.

The remainder of this turn, approximately 5 to 100, has been built into the remaining four stairs [4 to 1] of the lower flight, which are contained within a straight stairwell (as articulated by the handrail on the inside and the opposing wall on the outside). To achieve this turn, these stairs are similar in design to curved stairs with narrower runs on the inside. All inside runs exceed the minimum requirement of 150 mm (5 7/8 in) as set out in the OBC, and despite the difference in shape between each of these stairs, the midpoint run length is consistent at 212 mm (8 3/8 in). Stair C has a single handrail on the inside and the tread nosing is uniform at 35 mm (1 3/8 in).

The construction in dispute involves the lower flight of stair A, stairs 5, 6, 7 and 8 of stair B and the lower flight of stair C.

3. Dispute

The dispute between the Applicant and the Respondent is whether the three as-built separate and irregular stairs, specifically the lower flight of stair A, stairs 5, 6, 7 and 8 of stair B and the lower flight of stair C, provide sufficiency of compliance with Sentences 9.8.2.1.(1) and 9.8.3.1.(1) and Article 9.8.5.2. of the 1990 Ontario Building Code. The first provision stipulates that all treads and risers must have a uniform run and rise within each flight of a stair. While the riser height is uniform in all three sets of stairs, the runs, in the portion of the stairs identified, vary.

Article 9.8.5.2., the last provision, governs minimum and maximum dimensions for the run and rise of curved stairs not serving as exit stairs. According to this provision the average run for such stairs must be at least 200 mm and the minimum run at least 150 mm. Although the average stair runs are not consistent, they appear to fall within the dimensions set out in Article 9.8.5.2. As well, there seems to be no issue concerning minimum run.

In terms of the standards for risers, OBC 9.8.5.2. states that they must conform to those set out in Article 9.8.3.1. Sentence (1) of this provision limits stairs on the interior and exterior of a dwelling unit to a maximum rise of 200 mm. The riser heights are different between each of the stairs A, B and C, but, as indicated, are consistent within each stair. Based on information submitted by the Applicant (stair A - 189 mm, stair B - 190 mm, stair C - 186 mm), it appears that all risers are less than 200 mm.

Other OBC provisions have been cited by the parties as also being a matter of dispute. In the opinion of the Commission, however, these articles are not relevant. For example, Articles 9.8.5.1., which deals with curved stairs in exits, and 9.9.2.9., which requires exit or access to exit stair nosings to be at right angles to the direction of travel, are not applicable because these are not exit nor access to stairs as envisaged in the Code. All three are egress stairs. Moreover, the Commission does not consider the subject stairs as containing winders. It views the intended design of each stair as a curved stair that has been constructed in stairwells that contain straight demising walls. As a result, the provisions of the OBC relating to winders such as Article 9.8.5.3. do not apply.

At issue, therefore, is whether the irregular stair runs sufficiently comply with the OBC stair requirements for uniformity.

4. Provisions of the Ontario Building Code

Sentence 9.8.2.1. Uniform Treads and Risers

(1) Treads and risers shall have uniform rise and run in any one flight.

Sentence 9.8.3.1. Rise and Run of Stairs

(1) Except for stairs to areas used only as service rooms, interior stair within dwelling units and exterior stairs within dwelling units and exterior stairs serving dwelling units shall have a maximum rise

of 200 mm (7 7/8 in), a minimum run of 210 mm (8 1/4 in) and a minimum tread width of 235 mm (9 1/4 in).

Article 9.8.5.2. Curved Stairs not in Exits

Except as permitted in Article 9.8.5.3., a curved stair not required as an exit shall have an average run of not less than 200 mm (77/8 in) and a minimum run of 150 mm (57/8 in) and shall have risers conforming to Article 9.8.3.1.

5. Applicant's Position

At the outset, the Applicant stated that the current stair design was a revision to the original approved plan. He explained that stairs A and B, both leading to the basement, had to be modified because the level of the basement floor was made lower during construction. And as a consequence of maintaining adequate headroom on the modified stair B, stair C above it also had to be changed. The net result for all three stairs was that two additional risers were added to each, yet the stair openings remained the same size. Since the stairs had to be redesigned, further revisions were made to enhance their aesthetic appeal, the Applicant stated.

The Agent for the Applicant then acknowledged that the changes to the stairs were done without consultation nor approval of the Building Department. Nevertheless, he submitted that the stairs in dispute are a high quality custom built product made by a master stair builder. He argued that despite the alterations to the approved stairs, the as-built ones "provide safe and comfortable travel in both directions and do not constitute a hazard to any user." The Agent asserted that while the stairs may not meet all the prescriptive requirements of the OBC, they certainly meet the intent of the various safety standards.

By way of general comments, the Agent noted that all of the individual steps within the three sets of stairs adhere to the minimum and maximum rise and run criteria found in the Code. And while the average run (measured at the midpoint of the stair width) is not consistent in the disputed areas, the stair runs are uniform within each flight at what he described as the "walking line". The walking line, he explained, is where a person would actually walk on the stairs and is located 305 mm (12 in) from the

inside handrail. As a concept, the walking line makes more ergonomic sense than the Code's average run because users almost never walk down the middle of a stair. Providing uniformity at the walking line, he argued, makes the subject stairs safer.

Turning specifically to each set of stairs, the Agent asserted that the lower flight of stair A, with its stair runs increasing in length as one descends, incorporates another ergonomic design principle: deceleration. As he indicated, slightly longer runs during descent of a stair provides more generous step sizes that are better able to allow descending users to slow down, if necessary. The large bottom step, which is more akin to a landing, is the culmination of the decelerator principle. He added that the outward curved nosings of these stairs does not reduce its performance in terms of uniformity in the walking line and providing for deceleration.

In the case of stair B, the Agent described the lower portion as a curved stair in a stairwell with straight walls. As a result, in his view, the disputed stairs (5, 6, 7 and 8), should not be regarded as winders, nor regulated as such. He noted that as curved stairs they meet the Code's dimensional rise and run criteria. And while stairs 5, 6, 7 and 8 are not consistent with each other in terms of average run, they too are uniform at the walking line. The Applicant offered to improve the negotiability of the stair by modifying the outside handrail so that it follows the intended curve of the stair instead of the straight lines articulated by its demising walls. He also proposed to continue the inner handrail on through the upper portion to the top of the stair. With the extensive run of the bottom stair (1)/landing, the decelerator principle has been incorporated into the design of stair B as well, the Agent noted.

Regarding stair C, the Agent indicated that the walking line principle has also been employed in its design. As a result, the lower flight has a uniform run measured at 305 mm from the inside handrail. The Agent reiterated the arguments concerning the benefits of the walking line principle with respect to stair C.

In conclusion, the Agent stated that while they may not comply fully with all of the prescriptive requirements of the OBC, the finished stairs have not compromised the safety of the users. This was

supported by the homeowner, who stated that in the three years since the stairs have been built they and their many guests have used them without incident. Lastly, the Applicant stated that extensive modification at this point would be very disruptive in terms of using the house and would be costly. He expressed hope that the Commission would allow the as-constructed stairs to remain.

6. Respondent's Position

The Respondent submitted that since, in his view, stair A or B and stair C "serve as a required means of egress and are considered as access to an exit, their designs must fully comply with requirements of Sections 9.8 and 9.9, respectively." He then listed the following as, in his view, the deficiencies or potential deficiencies of the subject stairs.

Assuming that stair A is a curved access to exit stair, the lower portion has steps that do not radiate from a common point, the Respondent stated. This situation, he noted, does not comply with Article 9.8.5.1. Or, if it were assumed that these stairs represent a winder, then they would violate the requirement in Article 9.8.5.3., specifically Sentence (1) that requires winders to turn 300. Moreover, as a winder, the stairs of the lower flight have elliptical shaped nosings which contravenes Article 9.9.2.9. Regardless of whether they are curved stairs or winders, their runs are irregular and do not comply with Subclause 9.8.5.1.(2)(c)(iii), he argued.

Regarding stair B (assuming for the sake of discussion that this and not Stair A is the access to exit stair), the Respondent stated that he does not believe it is a curved stair because the curving steps do not radiate from a common point, and like stair A it has a "floating reference point". Instead, he views it as having a winder, specifically at stair # 6. As a winder however, stair # 6 does not rotate 300 and therefore does not comply with OBC 9.8.5.3.(1). The requirement in Article 9.9.2.9. that the nosings of stairs be at right angles to the direction of travel is also not satisfied. As well, this stair lacks a uniform run stipulated as per Subclause 9.8.5.1.(2)(c)(iii).

As for stair C, the Respondent offered the same arguments as he did for stair B.

In summation, the Respondent stated that the stairs are well built and would be difficult to modify now. Nevertheless, he felt that he had little choice under the Code but to reject their design. Lastly, he stated that he hoped the Commission decision would clarify some of the provisions of the Building Code in dispute.

7. Commission Ruling

It is the decision of the Building Code Commission that the three separate and irregular stairs, specifically the lower flight of stair A, stairs 5, 6, 7 and 8 of stair B and the lower flight of stair C, provide sufficiency of compliance with Sentences 9.8.2.1.(1) and 9.8.3.1.(1) and Article 9.8.5.2. of the 1990 Ontario Building Code at 684 Glasgow Street West, Kitchener, Ontario on condition that:

a) A second handrail is installed in the lower flight of "stair C";

b) Signs are posted at the top and bottom of the disputed stairs ("stairs A, B and C") warning users of their irregularity; and,

c) The existence of irregular stairs in the dwelling and the requirement to maintain the above referenced warning signs as long as the stairs exist are registered on title of the subject property.

8. Reasons

a) The home has been occupied for three plus years without problems associated with the stairs and there have been no relevant insurance related claims submitted.

b) The average run is uniform at the "walking line" (305 mm from the inside handrail).

c) The stairs will be equipped with handrails on both sides of the disputed flights.

d) The stairs are provided with more than adequate lighting.

e) The required signage will provide warning to infrequent or first time users of the stairs.

Dated at Toronto this **29th,** day in the month of **March** in the year **2000** for application number **1999-58**.

BCC Ruling No. 00-11-743

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-11-743

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 8.2.1.6.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Warren Brent, Brent Systems Ltd., Port Carling, Ontario for the resolution of a dispute with Ms. Robin Allen, Inspector, North Bay-Mattawa Conservation Authority, to determine whether the as-constructed sewage system, with a clearance of only 0.76 m between the nearest point of the septic tank and the foundation wall of the building, provides sufficiency of compliance with Sentence 8.2.1.6.(1) of the Ontario Building Code at the Wells Cottage, Lot 27, Concession 8, Sub-lot 6, Plan 42R-9075, Seguin/Humphrey Township, Ontario.

APPLICANT
Mr. Warren Brent
Brent Systems Ltd.
Port Carling, Ontario

RESPONDENT
Ms. Robin Allen, D.D.S.S.I.
North Bay-Mattawa Conservation Authority
Parry Sound, Ontario

PANEL
Mr. Doug Robinson, Chair-Designate
Mr. Frank Wright
Mr. Bill Fellner

PLACE
Toronto, Ontario

DATE OF HEARING
March 16th, 2000

DATE OF RULING
March 16th, 2000

APPEARANCES
Mr. Brian Howden, President
Pristine Environmental
Bracebridge, Ontario
Agent for the Applicant

Ms. Robin Allen, D.D.S.S.I.
North Bay-Mattawa Conservation Authority
Parry Sound, Ontario
The Respondent

RULING

1. **The Applicant**

   Mr. Warren Brent, Brent Systems Ltd., Port Carling, Ontario, has applied for a building permit under the *Building Code Act, 1992*, to construct a as-constructed sewage system at the Wells Cottage, Lot 27, Concession 8, Sub-lot 6, Plan 42R-9075, Seguin/Humphrey Township, Ontario.

2. **Description of Constrution**

   The Applicant has recently installed a new Class 4 fully raised septic system to serve a newly constructed Group C occupancy. The building is described as a two storey, detached structure and will be used as a seasonal dwelling. The building contains four bedrooms, 21.5 fixture units and has total finished area of 236 m^2. The calculated daily design sewage flow is 2400 L/day and the water supply for the building is provided by a drilled well.

   The site is a 2.7 ha cottage property located on Lake Joseph that is covered with brush and some hardwood and pine trees. It has a moderate five to 15° slope that covers most of the lot, including where the cottage sits and all of the portion to the rear, or roadside, of the building. In front of the cottage, at the lakeside, there is a steep 45° slope to the water. A substantial, large granite

boulder retaining wall was constructed in front of the cottage to stabilize the steep slope in that area. The soil at the site is thin with the depth to bedrock being only 0.33 m. The profile of the natural soils on the property is silty brown sand with a percolation time of 14 min/cm.

The as-installed septic system includes a 5000 L plastic septic tank, a pump chamber with pump, and a 35 m^2 fully raised sand filter bed consisting of 4 runs located at 1.2 m on centres and mantle. The septic tank, installed on the lakeside of the cottage between the building and retaining wall, will receive sewage by means of gravity disposal from the dwelling. When the effluent reaches the pump chamber it will be pumped uphill to the filter bed located approximately 50 m away to the rear of the cottage.

The construction in dispute involves the clearance distance between one corner of the septic tank and a corner of the building located in the facade facing the lake. The clearance distance from the septic tank to the structure at this point is 0.76 m. (The corner in the building is created by a set back in the lakeside wall of the structure. Without this set back, the 0.76 m clearance distance would continue along the entire building-facing length of the septic tank.)

3. **Dispute**

The dispute between the Applicant and the Respondent is whether the as-constructed sewage system, with a clearance of only 0.76 m between the nearest point of the septic tank and the foundation wall of the building, provides sufficiency of compliance with Sentence 8.2.1.6.(1) of the OBC.

This provision sets out the clearance distances required between the treatment unit component of a Class 4 or 5 septic system and structural or environmental foundations. According to this provision, the minimum horizontal clearance distance, as set out in Table 8.2.1.6.A., between a treatment unit, in this case a septic tank, and a building, i.e., the "structure", must be at least 1.5 m. The subject septic tank has a clearance distance of only 0.76 m at its nearest point to the foundation wall of the building.

4. **Provision of the Building Code**

Sentence 8.2.1.6. - Clearances for a Class 4 or 5 Sewage System

1. Except as provided in Sentences 8.2.1.4.(1) and (2), a treatment unit shall not be located closer than the minimum horizontal distances as set out in Table 8.2.1.6.A.

5. **Applicant's Position**

The Agent for the Applicant submitted that the as-installed septic tank provides sufficiency of compliance with Sentence 8.2.1.6.(1) of the Code.

The Agent acknowledged that the placement of the tank, at 0.76 m from the cottage, does not meet the minimum clearance distances set out in table 8.2.1.6.A. He explained, however, that this discrepancy was caused by construction difficulties experienced at the site. Specifically, he mentioned that underlying bedrock meant that blasting would be necessary to position the tank 1.5 m away from the cottage. (This is why it was not possible to rotate the tank as the Respondent suggested.) Nevertheless, blasting was impossible at the time since both the cottage and retaining wall had already been built when the sewage system installation occurred.

The Agent then argued that the subject installation was acceptable. He noted that from a structural standpoint neither the building nor the retaining wall would be adversely affected. In fact, due to the sound construction methods of these structures they do not rely on the infill sand for lateral support. (The entire cottage and retaining wall area was excavated down to bedrock and was backfilled with clean sand.) The cottage foundations are especially strong, he continued. It consists of a poured concrete footing pinned to the bedrock with seven courses of 250 mm concrete block reinforced internally with steel wire and core filled concrete and externally with clean compacted sand on both sides of the foundation wall.

The Agent also argued that the tank installation was environmentally safe. He pointed out that apart from the proximity to the building, the system's construction met Code. Further, he noted that the tank was placed in new, clean sand fill, thereby protecting the tank from the underlying bedrock. In addition, there is no weeping tile located along the entire front of the building where the tank is placed. As such, no effluent can migrate into the stormwater system.

Lastly, the Agent noted that the tank, in his view, could easily be maintained or even replaced without problem.

For these reasons, the Agent concluded that the present tank installation posed "no risk of structural or environmental damage" to the building, the retaining wall, the property or its vicinity.

6. **Respondent's Position**

The Respondent submitted that the as-installed septic tank, situated only 0.76 m away from the cottage, does not comply with the 1.5 m minimum setback requirement as determined in the OBC.

By way of background, the Respondent noted that a 1.5 m separation was shown on the plans submitted for approval. During an inspection, however, she discovered that the tank was too close. She suggested at the time that by placing the tank at an angle to the building it might be possible to provide the required separation.

The Respondent then stated that the Code "outlines 'minimum' clearances and does not allow discrepancy for new construction".

She concluded by indicating that she does not have the authority to waive OBC requirements and allow a reduced clearance distance due to the construction difficulties encountered by the Applicant.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the as-constructed sewage system, with a clearance of only 0.76 m between the nearest point of the septic tank and the foundation wall of the building, provides sufficiency of compliance with Sentence 8.2.1.6.(1) of the Ontario Building Code.

8. **Reasons**

a) The elevation of the septic tank with respect to the lowest floor level in the building is such that potential for structural and environmental damage is reduced.

b) The foundation of the cottage is sound.

c) Maintenance or replacement of the tank will not be a problem.

d) The Commission is of the opinion that the subject installation will not cause environmental or structural damage to the building or surrounding area.

Dated at **Toronto** this **16th** day in the month of **March**, in the year **2000**, for application number **2000-05**.

BCC Ruling No. 00-10-742

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-10-742

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentences 3.8.1.3.(1) and 3.8.2.1.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Joe Goodbaum, Clearnet Communications Inc., Scarborough, Ontario for the resolution of a dispute with Mr. Rocco Cerminara, Director of Building Controls, City of London to determine whether the proposed 3 m by 4.5 m kiosk structure, located in a 9 m wide public corridor, is required to provide barrier-free accessibility in accordance with Sentences 3.8.1.3.(1) and 3.8.2.1.(1) of the Ontario Building Code at the Clearnet Kiosk, Masonville Place Mall, 1680 Richmond Street North, London, Ontario.

APPLICANT
Mr. Joe Goodbaum
Clearnet Communications Inc.
200 Consilium Place, Ste. 1600
Scarborough, Ontario

RESPONDENT
Mr. Rocco Cerminara
Director of Building Controls
City of London, Ontario

PANEL
Mr. Kenneth Peaker, Chair-Designate
Mr. John Guthrie
Mr. Robert De Berardis

PLACE
Toronto, Ontario

DATE OF HEARING
March 2nd, 2000

DATE OF RULING
March 2nd, 2000

APPEARANCES
Mr. Les Muniak, Principal
Larden Muniak Consulting Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Gary Edwards
Chief Plan Examiner
City of London, Ontario
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Joe Goodbaum, representing Clearnet Communications of Scarborough, Ontario, has applied for a building permit under the *Building Code Act, 1992*, to construct a kiosk structure at Masonville Place Mall, 1680 Richmond St. N, London, Ontario.

2. **Description of Constrution**

   The Applicant is proposing to construct a kiosk as a phone retail outlet in one of the public corridors serving the second floor of Masonville Place Mall located in London, Ontario. The newly renovated mall is classified as having a Group-E mercantile major occupancy. The mall is 81 641 m^2 in building area, two storeys in building height, of non-combustible construction, and equipped with sprinkler and fire alarm systems.

   The proposed kiosk will have an overall area of 13.5 m^2 (3m by 4.5m). It will be constructed in the middle of a 9 m wide public corridor which connects the north-west wing of the Masonville Place Mall with its south-west wing.

The kiosk's structure, as proposed by the applicant, consists of a 1.2 m^2 (2m by 0.6m) central island containing a cash area in order to incorporate two cashier counters. It will also include two L-shape counter assemblies (that will surround the central island) each comprised of five connected cabinets to be used as accessory showcases and phone counters. The L-shape counters are .45 m in width and will be arranged so that the long and short portions run parallel to each other. The counters will be placed far enough apart to allow an opening to the interior area at the north-west and south-east corners. The distance between central island and surrounding cabinetry will be 810 mm. The width of each entrance opening will be 651 mm. The clearance distance between the exterior boundaries of the kiosk on both east and west sides and the adjacent shops will be 3m.

The construction in dispute involves the design of the subject kiosk which, as proposed, does not provide a barrier-free path of travel within the kiosk area and does not meet the minimum width requirements mandated by the Ontario Building Code (OBC) for barrier-free entrances and corridors.

3. **Dispute**

The dispute between the Applicant and the Respondent is whether the proposed 3 m by 4.5 m kiosk structure, located in a 9 m wide public corridor, is required to provide barrier-free accessibility in accordance with Sentences 3.8.2.1.(1) and 3.8.1.3.(1) of the Ontario Building Code.

The first provision, Sentence 3.8.2.1.(1), defines areas where a barrier-free path of travel is required based on the type of occupancy. According to this provision, except where essential obstructions that would exist in the "work areas" that would make a barrier-free path of travel dangerous, and except for provisions of Sentences (2), (3), and (4) of the same Article that provide lists of spaces and occupancies which are exempted from the provision of barrier-free paths of travel, all entrance storeys and occupied floor areas equipped with a passenger elevating device that are required to have barrier-free entrances are also required to provide barrier-free paths of travel. The exceptions defined and listed in Sentences 3.8.2.1.(1), (2), (3), and (4) do not apply to kiosks.

Thus, if an area is deemed to require a barrier-free path of travel then certain construction requirements apply. Among these is Sentence 3.8.1.3.(1) which stipulates that a barrier-free path

of travel must have an unobstructed width of at least 1060 mm for the passage of mobility challenged people. The kiosk will be located in a 9 m wide public corridor. Keeping the structural parameters of the kiosk as proposed by the applicant means any increase in the width of the interior corridor of the kiosk will affect the width of the public corridor where the kiosk is located (Sentence 3.3.1.9.(6)(a) of the OBC requires a public corridor under such circumstances to have "an unobstructed width of not less than 3 m at all times adjacent and parallel to all rooms and suites that front onto" it). Thus, increasing the internal dimensions of the kiosk would either violate Clause 3.3.1.9.(6)(a) or require the reduction in the dimensions of the kiosk cabinetry.

Therefore, the specific issue before the Commission is whether under the Ontario Building Code the proposed kiosk is required to be barrier-free and meet minimum width requirements for barrier-free paths of travel.

4. **Provision of the Building Code**

Sentence 3.8.1.3.(1) - Barrier-Free Path of Travel

1. Except as required in Sentence (4) and except as permitted in Subsection 3.8.3., every barrier-free path of travel shall provide an unobstructed width of at least 1 060 mm (3 ft 6 in) for the passage of wheelchairs.

Sentence 3.8.2.1.(1) - Areas Requiring Barrier-Free Path of Travel

2. Except where essential obstructions in the work area would make a barrier-free path of travel hazardous, and except as provided in Sentences (2), (3) and (4), a barrier-free path of travel from the entrances required by Sentences 3.8.1.2.(1) and (2) to be barrier-free shall be provided throughout the entrance storey and within all normally occupied floor areas served by a passenger type elevator or other platform equipped passenger elevating device.

5. **Applicant's Position**

The Agent for the Applicant submitted that the minimum width requirement to make the interior corridor of the proposed kiosk barrier-free "conflicts with the fire safety requirements of a 10' [3

m] wide corridor clearance which bounds the kiosk on either side and restricts the kiosk expansion beyond the allocated boundary."

The Agent argued that providing a barrier-free path of travel within the kiosk area would cause them to increase width of the interior corridor by 250 mm [from 810 mm to 1060 mm]. He added that this expansion, which could only benefit one disabled person at a time, will affect the width of the public corridor that serves many people at all times.

Regarding the Respondent's proposals, the Agent argued that the relocation of the centre island (cashier counters) is not feasible for security reasons and decreasing the width of the cabinetry will make them too narrow and operationally unuseable.

The Agent stated that the requirement of the minimum corridor clearance of 3 m on either side of the kiosk is for fire safety reasons. Thus, they believe in this particular case that the fire safety concerns that will affect many people should take precedence over the "general welfare" of one individual and they should be allowed to proceed with their construction.

6. **Respondent's Position**

The Respondent chose not to attend the hearing. The commission, therefore, relied only upon his written submission.

The Respondent submitted that in order for a building permit to be issued, the Applicant must verify that the proposed kiosk will not interfere with the minimum width of the mall corridor and also ensure other relevant sections of the OBC (in this case barrier-free accessibility) are complied with. He argued that the interior floor surface within the proposed kiosk does not meet the minimum width requirement of 1060 mm for barrier-free accessibility as specified in Sentence 3.8.1.3.(1). For this width to be met without interfering with the width of the public corridor, the Respondent has proposed that the Applicant consider one of the following options:

(1) To remove the centre island,

(2) To reduce the size of the cabinetry (perimeter units and centre island) in order to provide the required 1060 mm clearance, or

(3) To relocate the kiosk to another location within the mall which would have a corridor width with a minimum dimension of 9708 mm (31'-10") and would allow the kiosk with the present fixture sizes to be expanded to 3708 mm without interfering with the minimum clear corridor width of 3 m (9'-10") (OBC 3.3.1.9.(6).(a)) on each side of the kiosk .

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed 3 m by 4.5 m kiosk structure, located in a 9 m wide public corridor is required to provide barrier-free accessibility in accordance with Sentence 3.8.1.3.(1) and 3.8.2.1.(1) of the Ontario Building Code at the Clearnet Kiosk, Masonville Place Mall, 1680 Richmond Street North, London, Ontario.

8. **Reasons**

Kiosks are not listed as one of the areas in terms of providing a barrier-free path of travel as determined in Article 3.8.2.1., therefore a barrier-free path of travel of the appropriate width is required.

Dated at **Toronto** this **2nd** day in the month of **March**, in the year **2000**, for application number **2000-11**.

BCC Ruling No. 00-09-741

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-09-741

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.3.1.10.(1) and 3.3.1.12.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code")

AND IN THE MATTER OF an application by Mr. Patrick Corvetti, Director of Store Planning, Grafton-Fraser Inc., Ontario for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, to determine whether the as-installed roll down security door that is closed only during non-business hours provides sufficiency of compliance with Sentences 3.3.1.10.(1) and 3.3.1.12.(2) of the Ontario Building Code at the Suit Exchange at Colossus, Grafton-Fraser Inc., 7601 Weston Road, Unit 201, Woodbridge, Ontario.

APPLICANT
Mr. Patrick Corvetti
Director of Store Planning, Grafton-Fraser Inc.
Toronto, Ontario

RESPONDENT
Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL
Mr. Kenneth Peaker, Chair-Designate
Mr. John Guthrie<
Mr. Robert De Berardis

PLACE
Toronto, Ontario

DATE OF HEARING
March 2nd, 2000

DATE OF RULING
March 2nd, 2000

APPEARANCES
Mr. Patrick Corvetti
Director of Store Planning, Grafton-Fraser Inc.
Toronto, Ontario
The Applicant

Mr. Mani Navabi
Chief Building Official
City of Vaughan
The Respondent

RULING

1. **The Applicant**

   Mr. Patrick Corvetti, Director of Store Planning, Grafton-Fraser Inc., Toronto, Ontario, has received an order to comply under the *Building Code Act, 1992,* to remedy certain alleged deficiencies at a retail clothing store known as the Suit Exchange at Colossus, located at 7601 Weston Road, Unit 102, Woodbridge, Ontario.

2. **Description of Constrution**

   The Applicant has recently constructed a Group E - (clothing) mercantile occupancy in a retail plaza described as one storey in building height and 4,747 m^2 in building area. The subject suite has an approximate area of 530 m^2, with dimensions of roughly 11 by 48 m. The building is constructed of noncombustible materials and is equipped with a sprinkler system, but not a standpipe and hose system nor a fire alarm system.

   The retail suite is provided with two separate doors, one at the front and one at the rear. The front exit door is the principal entrance used by customers and staff. The door at the rear accesses an

interior public corridor that runs behind the clothing store that serves as a service lane. This door is used as a shipping and receiving area.

The construction in dispute involves the installation of a second door on the interior side of the rear access to exit door. This door is described as a vertical, rolling security grill that measures approximately 1.2 by 2.1 m. It is manually opened and closed by a chain mechanism and is equipped with a keyed locking device.

The Applicant installed the roll-down door to enhance the security of the premises.

3. **Dispute**

The dispute between the Applicant and the Respondent is whether the as-installed roll down security door that is closed only during non-business hours provides sufficiency of compliance with Sentences 3.3.1.10.(1) and 3.3.1.12.(2) of the Ontario Building Code. Sentence 3.3.1.10.(1) requires (with limited exceptions which are not applicable in this case) that access to exit doors must swing on a vertical axis. As a roll-down device, this door does not operate by swinging on a vertical axis. The latter provision, Sentence 3.3.1.12.(2), requires that a door in an access to exit be readily openable without requiring keys or any specialized knowledge to open it. The subject door requires both keys and specialized knowledge to operate.

Since the roll-down security door does not meet these provisions, the issue in dispute, therefore, is whether there are adequate measures provided in the suite to compensate for the reduction in performance of the rear access to exit door.

4. **Provision of the Building Code**

Sentence 3.3.1.10. - Door Swing

1. Except as permitted by Article 3.3.1.11., a door that opens into a corridor or other facility providing access to exit from a suite, or a room not located within a suite, shall swing on a vertical axis.

Sentence 3.3.1.12. - Doors and Door Hardware

2. ,

3. A door in an access to exit shall be readily openable in travelling to an exit without requiring keys, special devices or specialized knowledge of the door opening mechanism, except that this requirement does not apply to a door serving a contained use area, or an impeded egress zone, provided the locking devices conform to Sentence (6).

5. **Applicant's Position**

The Applicant submitted that the roll-down security door provides sufficiency of compliance with Sentences 3.3.1.10.(1) and 3.3.1.12.(2) of the building code because the door is always open during business hours and when anyone is in the store. As a result, the door cannot pose a hazard to any occupants due to the fact that no one will be inside when the door is shut. He noted that the door is even open when the overnight security guard inspects the premises. Further, there is no concern about night cleaning staff because the store is cleaned immediately after closing by sales staff, during which the subject door is still open.

The Applicant indicated that he hoped there could be a way to retain the present roll-down door and still comply with the Code. He indicated that safety was their highest concern, but that they would like to achieve a certain level of security as well. The door, he argued, was necessary to enhance the security of the store, which sells high-end men's clothing. He stated that the door would be extremely valuable in preventing the type of theft they have experienced at some of their other locations. As a secondary barrier to entry, the roll-down door would delay thieves from gaining entry into the store until the police would have a chance to respond, he argued.

6. **Respondent's Position**

The Respondent submitted that the subject suite is large enough that two Code complying exits are required. He stated that Sentence 3.3.1.10.(1), which requires that a door into an access to exit shall swing on a vertical axis, and Sentence 3.3.1.13.(2), which requires a door in an access to exit be readily openable without requiring keys, special devices or special knowledge, are applicable and must therefore be met. He argued that the current situation did not meet these provisions.

In the Respondent's view, the installation of the steel shutter door creates a hazardous situation by erecting a physical barrier blocking the exit. He also expressed concern about the fact that the subject door significantly complicates what would normally be a passive life safety (exit) system with an active device that relies on additional mechanical elements and on human behaviour to open and shut the door at the appropriate times. The roll down door, as the Respondent indicated, certainly requires keys and specialized knowledge to operate.

The Respondent also argued that the combustible load was high due to the nature of the retail operation.

Lastly, the Respondent asked that if banks and other higher risk businesses can achieve a good level of security as well as comply with the Code, why not this facility? He concluded by stating that if the Commission were to approve this door it would send out the wrong message to users of the OBC.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the as-installed roll-down security door that is closed only during non-business hours does not provide sufficiency of compliance with Sentences 3.3.1.10.(1) and 3.3.1.12.(2) of the Ontario Building Code at Grafton-Fraser Inc., Suit Exchange at Colossus, 7601 Weston Road, Unit 102, Woodbridge (Vaughan), Ontario.

8. **Reasons**

a) The roll-down door does not comply with Sentences 3.3.1.10.(1) and 3.3.1.12.(2) in that it does not swing on a vertical axis and it requires keys and special knowledge to operate.
b) Sufficiency of compliance was not demonstrated.
c) Other alternatives are available.

Dated at **Toronto** this **2nd** day in the month of **March**, in the year **2000**, for application number **1999-89**.

BCC Ruling No. 00-08-740

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-08-740

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

IN THE MATTER OF Sentence 9.8.8.4.(1) and Article 9.8.8.5. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Doug Dean, President, Bricker Building Ltd., Oakville, Ontario for the resolution of a dispute with Mr. Frank Asta, Chief Building Official, Town of Oakville, to determine whether the as-installed ornamental metal guards and rails, that include pickets ranging in thickness from 13 to 31 mm and sections of scroll pattern, and that have triangular openings (large enough to insert a spherical object 100 mm in diameter) formed by the stair tread and riser and the bottom cord of the railing provides sufficiency of compliance with Article 9.8.8.5. and Sentence 9.8.8.4.(1) respectively of the Ontario Building Code at 76 Chancery Lane, Oakville, Ontario.

APPLICANT
Mr. Doug Dean, President
Bricker Building Ltd.
Oakville, Ontario

RESPONDENT
Mr. Frank Asta
Chief Building Official
Town of Oakville

PANEL
Mr. Kenneth Peaker, Chair-Designate
Mr. James Lischkoff
Mr. Fred Barkhouse

PLACE
Toronto, Ontario

DATE OF HEARING
February 17th, 2000

DATE OF RULING
February 17th, 2000

APPEARANCES
Mr. Doug Dean, President
Bricker Building Ltd.
Oakville, Ontario
The Applicant

Mr. Frank Asta
Chief Building Official
Town of Oakville
The Respondent

RULING

1. **The Applicant**

   Mr. Doug Dean, President, Bricker Building Ltd., Oakville, Ontario, has received a building permit under the *Building Code Act, 1992,* to construct a single detached dwelling at 76 Chancery Lane, Oakville, Ontario.

2. **Description of Constrution**

   The Applicant has recently constructed a Group C residential building which is described as two storeys in building height and 313.2 m^2 in building area.

   The construction in dispute involves the wrought iron guards installed on both sides of the stairs leading to the second floor and in the open second floor hallway. The Applicant, upon request of the home owner, has used a customized, decorative design for the subject guards. The guard contains two distinct patterns. The predominant one consists of a scroll design that is repeated in sections measuring approximately 1.22 m in width. (There is apparently no space in between the scrolling metal members that would accommodate a spherical object 100 mm in diameter.) Separating the scroll panels are a series of vertical 13 mm thick cylindrical balusters each with

several sets of decorative cast iron knobs. These knobs extend the picket's width by 9 mm on each side, thereby increasing its total width at these locations to 31 mm. The decorative knobs are placed in an alternating pattern on each picket, and thus the protrusions on each picket caused by the knobs do not coincide with the knobs on adjacent pickets on a horizontal level.

Both the scrolling pattern and the balusters are supported throughout the entire length of the guard by a bottom and top rail, which runs below and parallel to the handrail. On the horizontal surfaces, the bottom rail is located below 100 mm in height, as measured from the walking surface. The top (supporting) rail is roughly 800 mm in height. (The handrail is measured at 900 mm to its top.) On the stairs, the rail at the bottom forms one side of a triangle with the stair tread and riser comprising the other two sides. These openings are large enough to insert a 146 mm diameter spherical object.

3. **Dispute**

The issue at dispute between the Applicant and the Respondent is wether the as-installed ornamental metal guards and rails, that include pickets ranging in thickness from 13 mm to 31 mm and sections of scroll pattern, and that have triangular openings (large enough to insert a spherical object 100 mm in diameter) formed by the stair tread and riser and the bottom cord of the railing provides sufficiency of compliance with Article 9.8.8.5. and Sentence 9.8.8.4.(1) respectively of the Ontario Building Code.

The former provision stipulates that guards must not be designed in such a way as to facilitate climbing between 100 mm and 900 mm above the floor level. At issue, therefore, is whether the design of the guard facilitates climbing within this range. Among the specific aspects of the guard's design that must be examined in order to address this question is whether the scroll pattern within the subject guard produces a ladder effect that could facilitate climbing and whether the 9 mm protrusion on the pickets also contributes to their climbability.

Sentence 9.8.8.4.(1), regulates the size of openings in required guards. According to this provision the size of the guard openings must be small enough to prevent passage of a spherical object having a diameter of more than 100 mm, unless such openings can be shown that they are not a hazard. Since the subject triangular openings permit the passage of a 146 mm sphere the issue to be determined is whether they represent a hazard.

4. **Provision of the Building Code**

Sentence 9.8.8.4.(1) - Openings in Guards

1. Except as provided in sentence (2), openings through any guard which is required by Article 9.8.8.1. shall be of a size which will prevent the passage of a spherical object having a diameter of more than 100 mm (4 in) unles sit can be shown tha tthe location and size of penings which exceed this limit do not represent a hazard. (See A-9.8.8.4.(1) and (2) in Appendix A.)

Article 9.8.8.5. - Design to Prevent Climbing

2. Guards required by Article 9.8.8.1. and serving buildingsof residential occupancy shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2 ft 11 in) above the floor or walking surface protected by the guard will facilitate climbing.

5. **Applicant's Position**

At the outset the Applicant offered an explanation as to how the disputes arose. In his opinion, he felt that there had been an understanding reached between himself and the building inspector regarding conformity of the guard (which the homeowners had a hand in designing). This agreement was based on an examination of a sample section prior to installation. During subsequent inspections, however, the Respondent then took the view that the guard was deficient.

On the issue of a climbability, the Applicant acknowledged that the sections containing the scrolling pattern could facilitate climbing. He offered that those areas could be covered with plexiglass. He submitted, however, that the vertical balusters with their ornamentation should not be considered as facilitating climbing. He argued that if the subject balusters were seen as climbable "then every tuned wood spindle with any type of contour along its shaft with any type of staggered pattern would then be in dispute".

The Applicant stated that some common sense was necessary when applying the Building Code. For example, he noted that on some stairs (including the present one) it is possible to climb all the way up on the outside of the railing by standing on the tread overhang or that a small child could fall through open risers in other stairs. However, these two issues which he argued could be more hazardous than balusters with ornamentation are not prevent by the Code.

Regarding the issue of the triangular opening, the Applicant submitted that the space looks larger than it actually is. He noted that any spherical objects with a diameter of 146 mm or less could fit in the triangular opening. Further, he argued that the location of the opening, tucked into the rigid confines of a right angle corner, make the space quite difficult for a child to actually get their head into. Moreover, the opening is made even less accessible due to the 18 mm thick carpet on the stairs.

For the above reasons, the Applicant concluded by stating that, in his view, the as-built guard and railing are not a hazard and provide sufficiency of compliance with the Ontario Building Code.

6. **Respondent's Position**

The Respondent submitted that the scrolling pattern is very tempting to climb and the balusters could also be climbed. Therefore, in his view, the guard does not conform with Sentence 9.8.8.4.(1). He stated that the climbability of the guard concerned him especially since the vertical drop is approximately 3 m. He also expressed concern about the proposal to put plexiglass on the guard since, as he argued, it could easily be removed and is not a permanent solution.

The Respondent also stated the triangular openings represent a hazard because they are large enough to insert a 146 mm in diameter spherical object, well in excess of the 100 mm maximum set out in Article 9.8.8.5.

Lastly, the Respondent stated that he hoped the Building Code Commission could offer the parties some guidance on these issues.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the as-installed ornamental guards and rails do not comply with Sentence 9.8.8.4.(1) and Article 9.8.8.5. of the Ontario Building Code at 76 Chancery Lane, Oakville, Ontario.

8. **Reasons**

a) The triangular openings on the stairs exceeds the 100 mm criteria.

b) The scroll pattern facilitates climbing.

c) The rail beneath and parallel to the top rail is within 900 mm of the walking surface.

Dated at **Toronto** this **17th** day in the month of **February**, in the year **2000**, for application number **2000-08**.

Ruling No. 00-07-739

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-07-739

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 7.5.4.4.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Mike Godawa, Principal, Keen Engineering Co. Ltd., Toronto, Ontario, for the resolution of a dispute with Mr. Bruce Poole, Chief Building Official, City of Guelph, Ontario, to determine whether the as-constructed acid vents serving plumbing fixtures of more than one laboratory room comply with Sentence 7.5.4.4.(1) of the Ontario Building Code at the Southern Crop Protection and Food Research Centre, 93/95 Stone Road West, Guelph, Ontario.

APPLICANT
Mr. Mike Godawa, Principal
Keen Engineering Co. Ltd.
Toronto, Ontario

RESPONDENT
Mr. Bruce Poole
Chief Building Official
City of Guelph

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. James Lischkoff
Mr. Fred Barkhouse

PLACE
Toronto, Ontario

DATE OF HEARING
February 17, 2000

DATE OF RULING
February 17, 2000

APPEARANCES
Mr. Paul Dowsett, Partner
Scott Morris Architects
Toronto, Ontario
Agent for the Applicant

Mr. Rob Reynen
Supervisor of Inspection Services
City of Guelph
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Mike Godawa, Principal, Keen Engineering Co. Ltd., Toronto, Ontario, has received an order to comply under the *Building Code Act, 1992*, to remedy certain alleged deficiencies at the Southern Crop Protection and Food Research Centre, 93/95 Stone Road West, Guelph, Ontario.

2. **Description of Constrution**

   The Applicant has recently completed a partial renovation of, and construction of a new addition onto, an existing building known as the Southern Crop Protection and Food Research Centre. The addition is described as one storey in building height, approximately 9,796 m^2 in building area and is classified as a Group F, Division 2 occupancy. The building is of noncombustible construction and is equipped with a sprinkler system and a fire alarm system, but not a standpipe and hose system.

   The addition is intended as a research facility and has been designed to contain ten separate laboratory areas. Each laboratory is equipped with several plumbing fixtures. The entire new addition is leased by a single tenant, Agriculture and Agri-Food Canada. All laboratories are supervised by a single director of operations.

The construction in dispute involves the as-constructed acid waste vent system. This system, which is entirely separate from the sanitary drainage venting, has been designed and installed so that the ten laboratories are served by a venting network that terminates in four openings to the exterior. Thus, the four connections to the open air in the as-built acid waste vent system each serve multiple plumbing fixtures in multiple laboratory rooms.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the as-constructed acid vents serving plumbing fixtures of more than one laboratory room comply with Sentence 7.5.4.4.(1) of the OBC. According to this provision, vent piping serving a corrosive waste drainage system or dilution tank must extend separately to the open air. At issue is whether Sentence 7.5.4.4.(1) simply requires that the vents serving a corrosive waste drainage system be separate from the sanitary drainage venting, as is the case in the Southern Crop Protection and Food Research Centre, or whether each vent serving an acid waste plumbing fixture must extend independently of other such vents to the exterior.

4. **Provision of the Building Code**

Sentence 7.5.4.4.(1) - Venting of Corrosive Drain Piping and Dilution Tanks

1. Vents connecting to the corrosive drain piping or dilution tank shall extend independently to and terminate in open air.

5. **Applicant's Position**

The Agent for the Applicant submitted that his interpretation of Sentence 7.5.4.4.(1) is that it only requires that the acid waste venting system be separate from that of the sanitary drainage vents. He argued that the intent of this Code provision is to prevent corrosive fumes from entering the sanitary plumbing venting system, thereby eliminating a potentially hazardous mix of gases. In his opinion, this Sentence does not, in any way, require that each and every plumbing fixture designed to handle corrosive substances is to be separately vented to the

exterior from all other like vents. In fact, he argued that since the Code is silent on how many acid waste vents are required to extend to the exterior, it would be permissible to interconnect all corrosive plumbing fixtures to one single vent terminating in the open air.

To support his position, the Agent referenced a letter he received from the National Research Council's Canadian Codes Centre in Ottawa stating the intent of National Plumbing Code provision 5.5.3.(1), which is identical to OBC 7.5.4.4.(1). It states that "to prevent corrosive fumes from entering the sanitary venting system, vents serving corrosive drains, should be independent of sanitary venting system." It does not make any mention of extending the individual acid vents to the exterior, he noted. The Agent also quoted from a letter submitted to the Applicant by Peter Hughes, a Principal at Keen Engineering, the mechanical engineers for the project, which he indicated articulated their position well. Referring to the wording in Sentence 7.5.4.4.(1) the letter states:

"This means that acid vents, the word "vents" is plural not singular connected to drain piping (the word "piping" is plural not singular) indicates the entire system independent from the regular sanitary vent system [original emphasis] not each fixture vent shall terminate to open air.

"There is no way or has it ever to my knowledge meant taking each and every single vent from each and every fixture separately piped to atmosphere, just think about how ridiculous this would be if you had a multi-storeyed building with hundreds of fixtures, there would be a maze of vertical vent pipes looking like a salt shaker top building with the hundreds of vent pipes sticking through the roof [sic].

"If any building in North America has a [sic] acid waste vent system installed this way then the Engineers and building officials in my opinion would likely be open to legal action due to the additional costs that they have placed on the owner without justification or code requirements.

"An example of how wrong it is to interpret the code the way you have mentioned is as follows:

"If each fixture vent must be separate to the roof and atmosphere then why would not each fixture waste not be separate to the acid neutralizer chamber.

"I have been designing plumbing systems for over thirty years and have sat in so many plumbing code committees and plumbing task forces, never have I heard of such a [sic] interpretation.

"In conclusion the wording in the code is similar wording used in most North American codes and is meant to tell the designers that acid vent systems must be independently piped up to atmosphere and not connected to the regular sanitary vent system, that's all the wording means. Perhaps it's not a well-worded clause but there is no other meaning intended."

The Agent then focussed his arguments on the safety of the as-built acid venting system in the Southern Crop Protection and Food Research Centre. He argued the system is very safe primarily because the separation between the sanitary and corrosive plumbing venting systems, as required in Sentence 7.5.4.4.(1), has been achieved. The dilution tank is also separately vented. As a result, no volatile mixture of gases will occur between these systems.

Furthermore, he noted that in accordance with the Industrial Health and Safety Act there was a single director responsible for the entire facility, its staff and laboratory activities. The director's responsibilities include purchasing of all substances, monitoring the use of chemicals during experiments and disposal of waste products, including discharge into the plumbing fixtures. The Agent submitted a letter from this director indicating that due to the nature of the experiments conducted in the labs, the materials discharged into the corrosive fixtures will be compatible in vapour and liquid form and will thereby not create a hazardous condition. Thus, the Agent concluded by stating that the interconnecting of corrosive vents serving these subject labs will provide perfectly safe venting.

6. **Respondent's Position**

The Respondent submitted that Sentence 7.5.4.4.(1) of the OBC could be read that each trap serving every fixture requires separate and individual venting to exterior. However, as a Code provision, the Sentence, he noted, lacks clarity. As he explained, since Sentence 7.5.4.4.(1) was introduced into the OBC in its 1997 version, he and his colleagues have had some doubt as to its intent, specifically how it is to be applied. In an effort to gain an understanding of this issue, the building department obtained a verbal interpretation from the Ontario Plumbing Inspectors Association in 1998. The interpretation of that body was that "each trap serving a fixture, which handles corrosive waste, was to be individually vented to the open air."

The Respondent also indicated that previous correspondence with the technical staff in the Ministry's Housing Development and Buildings Branch supported a similar view in that all fixture traps in a single lab may, under the right conditions, be safely interconnected. Moreover,

any interconnection between separate labs depends on good design, good engineering practice and appropriate supervised use.

For these reasons, and because of past experience with other labs, the municipality took the position that they were prepared to accept that all the fixtures in a single lab could be collectively vented. However, interconnecting venting among different labs creates a hazardous situation due to the fact that scientists in different rooms will have little idea what is being poured into a sink in another lab. The municipality, the Respondent noted, does not have the authority nor the staff and expertise to control what chemicals are used and how they are mixed. In fact, they have no control over the operation of the building. Their responsibility ends with occupancy. And if a lab were to be leased to another similar tenant there would be no change of use triggered. Because of this, the Respondent argued that he would prefer to see a passive life safety system built under the OBC, i.e. adequate venting to the exterior, that does not rely on regulating the behaviour of individuals now and into the future.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the acid vents serving plumbing fixtures of more than one laboratory room complies with Sentence 7.5.4.4.(1) of the Ontario Building Code at the Guelph Food Research Project, 93/95 Stone Road West, Guelph, Ontario, provided:

a) That no hazardous chemical interaction occurs in the subject corrosive waste venting system.

8. **Reasons**

a) It is our interpretation that Sentence 7.5.4.4.(1) of the Ontario Building Code does not require each trap serving a plumbing fixture capable of handling corrosive waste to be separately and individually vented to the exterior. It simply requires that the acid waste venting system be separate from that of the sanitary venting and that it extend to the exterior.

b) The Code is silent regarding the number of exterior termination points required of an acid waste venting system.

Dated at **Toronto** this **17th** day in the month of **February**, in the year **2000**, for application number **1999-90**.

BCC Ruling No. 00-06-738

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-06-738

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.2.5.13.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Steve Thurlow, Fire Chief, City of Burlington Fire Department, Burlington, Ontario, for the resolution of a dispute with Mr. Dan Mousseau, Chief Building Official, City of Burlington, Ontario, to determine whether the proposed sprinklering of the residential portion of the new fire station (a facility not required to be sprinklered) with a sprinkler system designed in accordance with NFPA 13R provides sufficiency of compliance with Sentence 3.2.5.13.(1) of the Ontario Building Code at Burlington Fire Station #7, 4100 Dundas Street, Burlington, Ontario.

APPLICANT
Mr. Steve Thurlow, Fire Chief
City of Burlington Fire Department
Burlington, Ontario

RESPONDENT
Mr. Dan Mousseau
Chief Building Official
City of Burlington

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. James Lischkoff
Mr. Fred Barkhouse

PLACE
Toronto, Ontario

DATE OF HEARING
February 17, 2000

DATE OF RULING
February 17, 2000

APPEARANCES
Mr. Dave Cioruch, Chief Fire Prevention Officer
City of Burlington Fire Department
Burlington, Ontario
Agent for the Applicant

Mr. Joe Wintar, Manager of Permit and Zoning Administration
City of Burlington Building Department
Burlington, Ontario
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Steve Thurlow, Fire Chief, City of Burlington Fire Department, Burlington, Ontario, has applied for a building permit under the *Building Code Act, 1992*, to construct a new fire station known as Burlington Fire Station #7, located at 4100 Dundas Street, Burlington, Ontario.

2. **Description of Constrution**

   The Applicant is proposing to construct a new fire station facility. The building is described as one storey in building height, 658 m^2 in building area and is to be constructed of combustible construction. The building will not be equipped with a fire alarm system nor a standpipe and hose system. A partial sprinkler system, however, will be installed in the residential portion of the structure, an area dedicated for the living space of the fire fighting crews.

   The proposed fire station may be considered as having three major occupancies; Group C for the crew living space, Group D for the administrative offices, and Group F, Division 3 for the fire hall containing the vehicles and equipment. (The construction requirements, as determined in Subsection 3.2.2., for all three occupancies in the subject building are identical. The separations

required between the occupancies varies, however.) Fire separations with a fire resistance rating of 1.5 hours will be provided between the vehicle storage area and the remainder of the building. Between the administrative area and the residential a 1 hour rated separation will be constructed.

The construction in dispute involves the proposed sprinkler system intended for the residential portion of the fire station. The Applicant proposes that this system be built according to NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height". The sprinklers are being provided as a demonstration model to promote their use in residential buildings.

3. **Dispute**

There are two issues in dispute between the Applicant and Respondent. The first is whether the proposed sprinklering of only the residential portion of the new fire station (a facility not required to be sprinklered) provides sufficiency of compliance with Sentence 3.2.5.13.(1) of the Ontario Building Code. The second is whether the proposed sprinkler system, designed in accordance with NFPA 13R, also provides sufficiency of compliance with Sentence 3.2.5.13.(1). This provision requires, with certain exceptions, that a sprinkler system be designed, constructed, installed and tested according to NFPA 13, "Standard for the Installation of Sprinkler Systems". This Sentence applies even if a sprinkler system is not required in a building, i.e., elective or voluntary sprinkler systems - as is the case here - must also conform with Sentence 3.2.5.13.(1) and thereby NFPA 13.

In particular, NFPA 13 requires that the entire building be sprinklered. Moreover, NFPA 13 mandates a higher level of sprinkler protection than NFPA 13R in that all concealed spaces must also be provided with sprinkler protection. As mentioned above, however, the subject building is not required under the OBC to be sprinklered.

It should be noted that the exception found in Sentence 3.2.5.13.(2) does not apply to the case at hand. This provision permits *buildings* of residential occupancy that are less than four stories in height to comply with the more relaxed sprinkler standards found in NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height". This standard, however, is intended for buildings where residential is the only occupancy or at least the principal occupancy. This cannot be said of the subject building.

4. **Provision of the Building Code**

Sentence 3.2.5.13.(1) - Automatic Sprinkler Systems

1. Except as permitted by Sentences (2), (3) and (4), an automatic sprinkler system shall be designed, constructed, installed and tested in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems". (See Appendix A.)

5. **Applicant's Position**

The Agent for the Applicant submitted that: "The building in question is community based satellite Fire Station that is being constructed in a predominantly residential area of the city that is undergoing substantial development. This station will also house the Departments Public Education Office and this being the case this partial system will be used as an educational tool to promote Residential Sprinkler Installations which are endorsed by the Burlington Fire Department for enhanced life safety and property protection. It is acknowledged that there have been no design or construction concessions or the waiving of any code mandated requirements as the result of the implementation of this partial system.

"Sentence 3.2.5.13.(1) of the Building code would normally apply to a Fire Station if required to be protected with sprinklers, thus mandating compliance with the more stringent NFPA #13 Standard that would require protection throughout the building. Although this proposal doesn't comply fully it does however offer an enhanced level of protection in the residential area of the building which is separated from the Apparatus Bays and the remainder of the Station by a 1 ? hour fire separation. It is also believed that the "residential" area of the building could be equated to nothing more hazardous than a normal residential setting with a home occupation. This being the case it is argued that NFPA #13R would provide adequate protection for this area as covered under Sentence 3.2.5.13.(2).

"In summary, acceptance of this proposal will enhance the level of protection in living quarters area of the building and would also provide a valuable teaching tool for the Department in the educational promotion of similar residential systems. The Fire Department wants to be perceived by the public as practising what we preach while being fiscally responsible. By allowing the

installation of the proposed system, it will in no way be detrimental to the life and fire safety function or protection of this building."

6. **Respondent's Position**

The Designate for the Respondent submitted that: "Sentence 3.2.5.13.(1) of the Ontario Building Code 1997 edition requires automatic sprinkler systems to be designed, constructed and installed in accordance with NFPA-13, "Installation of Sprinkler Systems". While the same Sentence in previous editions of the OBC only required compliance with NFPA-13 when the sprinkler system was a required system, the 1997 edition was changed to require all sprinkler systems to meet the NFPA-13 standard.

"In NFPA-13, paragraph 1-6.1 states that a building containing an automatic sprinkler system must be protected with sprinklers in all areas. The Building Department does not have the authority to permit the installation of the sprinkler system within only a part of the facility.

"In addition, Sentence 3.2.5.13.(13) [sic] of the OBC 1997 edition states that NFPA-13R may be used in lieu of NFPA-13 where dealing with buildings of residential occupancies not exceeding 4 storeys in building height. While there is a residential component to this building, the major occupancy is deemed to be Group F, Division 2 [sic] with the storage of the fire fighting and rescue vehicles and therefore, the Building Department does not have the authority to accept a design not in conformance with NFPA-13."

7. **Commission Ruling**

It is the decision of the Building Code Commission the proposed sprinklering of the residential portion of the new fire station (a facility not required to be sprinklered) with a sprinkler system designed in accordance with NFPA 13R provides sufficiency of compliance with Sentence 3.2.5.13.(1) of the Ontario Building Code at Burlington Fire Station #7, 4100 Dundas Street, Burlington, Ontario.

8. **Reasons**

(i) The installation complies to NFPA 13R.
(ii) The facility is not required to be sprinklered.

Dated at **Toronto** this **17th** day in the month of **February**, in the year **2000**, for application number **2000-13**.

BCC Ruling No. 00-05-737

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-05-737

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.1.5.3.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Christopher Boyd, Project Architect, Rebanks Architects Inc., Toronto, Ontario, for the resolution of a dispute with Mr. Terry Willing, Chief Building Official, City of Kingston, Ontario, to determine whether the proposed roof assembly that includes fire-retardant plywood sheathing on Z-girts with a 25 mm air space and RSI 3.25 mineral fibre insulation mounted on a 38 mm decking provides sufficiency of compliance with Sentence 3.1.5.3.(2) of the Ontario Building Code at the Loblaws Supermarket, Princess Street and Bath Road, Kingston, Ontario.

APPLICANT
Mr. Christopher Boyd, Project Architect
Rebanks Architects Inc.
Toronto, Ontario

RESPONDENT
Mr. Terry Willing
Chief Building Official
City of Kingston

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. John Guthrie
Mr. Robert De Berardis

PLACE
Toronto, Ontario

DATE OF HEARING
February 3, 2000

DATE OF RULING
February 3, 2000

APPEARANCES
Mr. Randal Brown, President/Consulting Engineer
Randal Brown & Associates Ltd.
Toronto, Ontario
Agent for the Applicant

RULING

1. **The Applicant**

   Mr. Christopher Boyd, Project Architect, Rebanks Architects Inc., Toronto, Ontario, has applied for a building permit under the *Building Code Act, 1992,* to construct a new Loblaws Supermarket, at the intersection of Princess Street and Bath Road, Kingston, Ontario.

2. **Description of Constrution**

   The Applicant is proposing to construct an addition to an existing mall that will serve as a Loblaws supermarket. The mall is 23 180 m^2 in building area excluding the Sears store, which is to be demolished and will be replaced by the proposed Loblaws facility. The addition is described as a two storey, non-combustible structure with a building area of 7,432 m^2, that is classified as having a Group E - (retail) mercantile major occupancy. The building is to be equipped with a sprinkler system and a fire alarm system, but not a standpipe and hose system.

   The roof assembly, as proposed by the Applicant, consists of Class A shingles and roofing felt nailed to 13 mm thick exterior grade fire-retardant treated plywood sheathing that is fastened to 18 gauge galvanized Z-shaped metal girts (spaced at 24 in. on centres) which are, in turn, mounted on 38 mm thick fluted metal decking on steel framing. Directly underneath the plywood sheathing will be a 25 mm air space below which will be (in descending order in the roof assembly) RSI 3.25 mineral fibre insulation sitting on 6 mm poly vapour barrier that rests directly on the metal decking. The majority of the proposed roof will be at an angle of approximately 30^0 to the horizontal.

The construction in dispute involves the intended use of combustible plywood sheathing in the proposed roof assembly of a building that is required to be constructed of non-combustible construction.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed roof assembly that includes fire-retardant treated plywood sheathing intended for a building that is required to be noncombustible according to Article 3.2.2.57. provides sufficiency of compliance with Sentence 3.1.5.3.(2) of the Ontario Building Code. This provision allows a combustible roof under certain conditions but only if it is constructed above a concrete roof deck. The Applicant's proposed roof deck, however, is steel not concrete. Further, the OBC does not set out specific conditions which would permit a combustible roof over a metal roof deck.

4. **Provision of the Building Code**

Sentence 3.1.5.3.(2) - Combustible Roofing Materials

1. ,

2. Combustible roof sheathing and roof sheathing supports installed above a concrete deck are permitted on a building required to be of noncombustible construction provided:

c. the concrete deck is not less than 50 mm (2 in) thick;

d. the height of the roof space above the deck is not more than 1000 mm (3 ft 3 in);

e. the roof space is divided into compartments by fire stops in conformance with Article 3.1.11.5.;

f. openings through the concrete deck other than for non-combustible roof drains and plumbing piping are protected by masonry or concrete shafts:

   i. constructed as fire separations having a fire-resistance rating not less than 1 h; and

   ii. extending from the concrete deck to not less than 150 mm ($5^{7/8}$ in) above the adjacent roof sheathing;

g. the perimeter of the roof is protected by a noncombustible parapet extending from the concrete deck to not less than 150 mm ($5^{7/8}$ in) above the adjacent sheathing; and

h. except as permitted by Clause (d), the roof space does not contain any building services.

5. **Applicant's Position**

The Agent for the Applicant submitted that the proposed roof assembly which includes a fire-retardant plywood sheathing and rigid fibreglass insulation provides an equivalent level of safety to that intended in the OBC. As he argued, Sentence 3.1.5.11.(5) and Clause 3.1.14.2.(2)(b) allow the use of foam plastic insulation above a roof deck if the building is sprinklered. In his view, the plywood sheathing is less hazardous than the permitted foam plastic insulation because it has been treated with a fire-retardant thereby giving it a maximum flame-spread rating of 25. Moreover, since the proposed air space in the assembly is small, at 25 mm or less, flames will not propagate throughout such a restricted space regardless of the flame-spread rating, the Agent argued. He indicated that there were test results on wall assemblies to support this position.

The Applicant added that the treated plywood only chars, it does not propagate flame. Only continuous exposure to flame will cause the material to burn, he stated. Since the material is located between Class A shingles and metal roof decking it would therefore not be readily exposed to any exterior source of flame.

As well, since the building is being sprinklered (which allows the roof assembly to be unrated) the resulting ceiling temperature of 295^0C combined with an ambient temperature of 22^0C for a total temperature of 317^0C allows the use of the foamed plastic insulation in the roof assembly. The same principle of sprinkler protection, the Agent asserted, could also apply to the combustible plywood sheathing proposed for the roof assembly. As he argued, wood not treated with fire retardant protection has an ignition point of between 330^0C to 600^0C, but since this wood is treated it would not ignite unless exposed to a much higher temperature. (The proposed plywood is treated throughout, not just surface coated.) In other words, in the event of a fire the sprinkler system would actuate and keep the temperature in the ceiling and roof areas low enough that the combustible elements, specifically the plywood, would not ignite.

The Agent also argued that using treated plywood as the nailing surface has advantages over the permitted combustible cant strips. Plywood creates fewer voids in the roof assembly than the wood strips. As well, the untreated wood strips, if used, add significantly to the allowable combustible load in a roof assembly.

Lastly, the Agent noted that this exact same issue had been addressed in a previous BCC ruling (No. 99-57-713) also in Kingston. He indicated that in the earlier ruling, the Commission found

that the proposed roof assembly with fire-retardant treated plywood provided sufficiency of compliance with Sentence 3.1.5.3.(2) of the Code. He stated that he had asked that the municipality consider the present dispute with regard to the previous BCC ruling and approve the proposed roof assembly using their powers of "equivalency" in Section 2.7. of the Code. They refused.

For these reasons, the Agent argued that the proposed roof assembly provides sufficiency of compliance with Sentence 3.1.5.3.(2) of the OBC.

6. **Respondent's Position**

The Respondent chose not to attend the hearing. The Commission therefore relied upon his written submission only.

The Respondent stated that the proposed use of combustible plywood, albeit treated with a fire-retardant, in a roof assembly of a building required to be of non-combustible construction does not provide sufficiency of compliance with Sentence 3.1.5.3.(2) of the OBC. He noted that Sentence 3.1.5.3.(2) specifically permits a combustible roof sheathing under certain conditions but only if the roof deck is constructed of concrete. He indicated, however, that in the subject dispute the decking is to be steel, not concrete. As a result, he argued that the proposal does not comply with OBC Sentence 3.1.5.3.(2).

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed roof assembly that includes fire-retardant plywood sheathing on Z-girts with a 25 mm air space and RSI 3.25 mineral fibre insulation mounted on a 38 mm decking provides sufficiency of compliance with Sentence 3.1.5.3.(2) of the Ontario Building Code at the Loblaws supermarket located at Princess Street and Bath Road, Kingston, Ontario.

8. **Reasons**

(i) Class A shingles will be used;
(ii) For Trent treated plywood, when the flame source is removed, the treated plywood ceases to char and since it will not support combustion the flame will not spread;
(iii) The treated lumber is considered equal or better than the permitted combustible nailing strips and foam insulation;
(iv) Mineral fibre insulation will be used.

Dated at **Toronto** this **3rd** day in the month of **February**, in the year **2000**, for application number **2000-02**.

BCC Ruling No. 00-04-736

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-04-736

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.2.9.1.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Tony Demakos, President, Holy Trinity Greek Community of London and Vicinity, London, Ontario, for the resolution of a dispute with Mr. Rocco Cerminara, Director of Building Controls, City of London, Ontario, to determine whether the church, proposed without a standpipe and hose system, but with a dome measuring approximately 18.3 m in height to the ceiling, provides sufficiency of compliance with Sentence 3.2.9.1.(1) of the Ontario Building Code at the Holy Trinity Greek Orthodox Church, 131 Southdale Road, London, Ontario.

APPLICANT
Mr. Tony Demakos, President
Holy Trinity Greek Community of London and Vicinity
London, Ontario

RESPONDENT
Mr. Rocco Cerminara
Director of Building Controls
City of London

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. John Guthrie
Mr. Robert De Berardis

PLACE
Toronto, Ontario

DATE OF HEARING
February 3, 2000

DATE OF RULING
February 3, 2000

APPEARANCES
Mr. Thor Dingman, Project Manager
Marklevitz Architect
Stratford, Ontario
Agent for the Applicant

RULING

1. **The Applicant**

   Mr. Tony Demakos, President, Holy Trinity Greek Community of London and Vicinity, London, Ontario, has applied for a building permit under the *Building Code Act, 1992,* to construct a new church facility known as the Holy Trinity Greek Orthodox Church, located at 131 Southdale Road, London, Ontario.

2. **Description of Constrution**

   The Applicant is proposing to construct a new one storey (plus partial basement) church building classified as having a Group A - Division 2 assembly occupancy. The church is proposed to be 1,176 m^2 in building area and will be of mainly noncombustible construction. The building will be equipped with a fire alarm system, but not a sprinkler system nor a standpipe and hose system.

   The construction in dispute involves the Applicant's intention to omit a standpipe and hose system from the church. While the building is only one storey, it has been designed with a large dome centred over the nave that measures approximately 18.3 m in height at its interior peak from grade level. The building height threshold for when a standpipe and hose system must be installed, however, is 14 m.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the church, proposed without a standpipe and hose system, but with a dome measuring approximately 18.3 m in height to the ceiling, provides sufficiency of compliance with Sentence 3.2.9.1.(1) of the Ontario Building Code. This provision sets out some of the conditions which require the installation of a standpipe and hose system in a building. In particular, Clause (b) of this Sentence requires a standpipe and hose system in buildings greater than 14 m in building height as measured to the ceiling of the top storey. The proposed dome of the church, which represents seven percent of the total building area, exceeds this height.

4. **Provision of the Building Code**

Article 3.2.9.1. - Standpipe Systems - Where Require

1. Except as provided in Sentences (4) to (7), a standpipe system shall be installed in every building that:
    a. is more than 3 storeys in building height;
    b. is more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey; or
    c. is not more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey but has a building area exceeding the area shown in Table 3.2.9.1. for the applicable building height if the building is not sprinklered.

5. **Applicant's Position**

The Agent for the Applicant submitted that the design of the subject church, proposed without a standpipe and hose system, provides sufficiency of compliance with Sentence 3.2.9.1.(1) of the OBC. He offered the following arguments to support this assertion.

The Agent argued that a standpipe and hose system would not be effective in terms of fighting fire in the upper portion of the structure's interior, especially in the dome. The building will contain no other access to the ceiling space of the dome that one could use to fight fire if a standpipe system was installed. As the Agent argued, the only access for fire fighting purposes

from the interior of the building is from the ground floor. However, from here, he noted, there is a clear view of the dome space to observe if a fire were to occur and the floor area would act as a suitable location from which to fight a fire.

In addition, the Agent argued that whereas the church is allowed to be combustible construction according to Article 3.2.2.25. it has been built with mostly noncombustible materials. All of the structural elements of the church including the dome are noncombustible construction, he noted. The wood sheathing is the only combustible element of the dome.

The Agent added that the dome, at approximately 74 m^2, represents only seven percent of the church's total building area and the average ceiling height of the entire structure is roughly 10.7 m. Moreover, the building area of the church is well below the threshold that would require a standpipe system, he added.

Lastly, the Agent noted that there is no occupied space above the ground floor therefore the present issue is not one of life safety.

In conclusion, based on the above arguments the Agent requested that the Commission consider that the disputed standpipe and hose system be waived for the subject building.

6. **Respondent's Position**

The Respondent chose not to attend the hearing. The Commission therefore relied upon his written submission only.

He submitted that a portion of the building has a height greater than 14 m above grade, thus a standpipe and hose system is required as per Clause 3.2.9.1.(1)(b) of the OBC. He stated that, in his view, the design of the building, without provision for a standpipe system, does not comply with requirements of the Code for new construction.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the design of the church, that includes a large central dome measured at a height in excess of 14 m, proposed without a standpipe and

hose system provides sufficiency of compliance with Sentence 3.2.9.1.(1) of the Ontario Building Code at the Holy Trinity Greek Orthodox Church, 131 Southdale Road, London, Ontario.

8. **Reasons**

(i) No occupancy in upper level;
(ii) Open floor space;
(iii) Access available at seven locations;
(iv) Non-combustible construction.

Dated at **Toronto** this **3rd** day in the month of **February**, in the year **2000**, for application number **2000-01**.

BCC Ruling No. 00-03-735

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-03-735

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 4.1.7.3.(3) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Simon Ng, Architect, Simon Ng Architects, Toronto, Ontario, for the resolution of a dispute with Mr. John Wright, Chief Building Official, Town of Markham, Ontario, to determine whether the proposed roof, designed to delay the run off of rainwater but which is engineered to support either snow or rain load but not both, complies with Sentence 4.1.7.3.(3) of the Ontario Building Code at the Toronto Chinese Community Church at 100 Acadia Avenue, Markham, Ontario.

APPLICANT
Mr. Simon Ng, Architect
Simon Ng Architects
Toronto, Ontario

RESPONDENT
Mr. John Wright
Chief Building Official
Town of Markham

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. John Guthrie
Mr. Robert De Berardis

PLACE
Toronto, Ontario

DATE OF HEARING
February 3, 2000

DATE OF RULING
February 3, 2000

APPEARANCES
Mr. Simon Ng, Architect
Simon Ng Architects Ltd.
Toronto, Ontario
The Applicant

Mr. Chris Bird
Manager of Plans Review
Town of Markham
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Simon Ng, Architect, Simon Ng Architects, Toronto, Ontario, has received a building permit under the *Building Code Act, 1992,* and is currently constructing a church building known as the Toronto Chinese Community Church, located at 100 Acadia Avenue, Markham, Ontario.

2. **Description of Constrution**

   The Applicant is currently constructing a new church structure classified as a Group A, Division 2 assembly occupancy. The building is described as three storeys in building height, 2,868 m^2 in building area and of noncombustible construction. It will be equipped with a fire alarm system and a sprinkler system. The subject project is the last phase of a three building, 3.035 ha site that initially commenced development in 1987.

   As part of his overall strategy to manage surface water on the site, the Applicant is also proposing to slow the discharge rate of rain from the roof of the proposed church by using six (Zurn Control-Flo) flow control hoppers. A total of 15 intake slots will be provided among the six roof control hoppers. Through their design and positioning on the roof, these devices would

permit a maximum accumulation of water measured at 57 mm deep. At this depth the roof would hold a total of 158 m^3 of water for delayed run off purposes. Drainage from the flow control hoppers will be provided by a connected piping system that will ultimately flow to a 200 mm pvc pipe to be located 1.2 m below grade and which will extend under the west side of the building to an over-sized storm sewer that the Applicant is proposing to construct on the west and south of the building that will provide at least 78.5 m^3 of extra capacity.

The construction in dispute involves the design of the roof structure with respect to its support of live loads. In terms of structure, the roof has been designed only to support snow load plus the Subsection 2.5.1. 24 hour rain fall. The proposed roof is described as flat and has several different levels. A parapet of varying heights surrounds the roof. The framing construction of the building is structural steel.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed roof, designed to delay the run off of rainwater but which is engineered to support either snow or rain load but not both, complies with Sentence 4.1.7.3.(3) of the Ontario Building Code. This provision stipulates that a roof, with certain exceptions such as where it is "intended to provide rain water retention", need not be designed based on the consideration that rain loads will "act simultaneously with" snow loads. Put simply, unless a roof is intended to store water, it does not need to be capable of structurally supporting snow as well as rain load.

Rain water retention provided on the roof of a building is done as a method of storing and managing stormwater on some properties. In such cases, rain water is held on the roof for a certain period and is released over time through devices such as flow control roof drains. It is these stormwater storage roofs to which Sentence 4.1.7.3.(3) is meant to apply. In the dispute at hand, the Applicant has indicated that the proposed roof is not a stormwater retention facility as intended in the OBC, but he has included flow control drains in his roof design and he does intend to slow the drain off of rain water from the roof so that it takes approximately 4 to 6 hours.

The OBC, however, offers no clarification regarding rain water retention, specifically how long water must be held before it is considered stored or retained and what the roof design implications are of storing water. To address this issue, the Housing Development and Buildings

Branch of the Ministry of Municipal Affairs and Housing issued a formal Branch Opinion on April 28, 1999 stating that if certain conditions were met in the roof design, the structure would not need to be considered as providing retention of rain water and would not have to be engineered as such.

The issue at dispute then is whether, through an interpretation of Sentence 4.1.7.3.(3), and by considering the intent of this provision as stated in the Branch Opinion and its attached conditions, the proposed roof, as designed, should be regarded as providing retention for rain water and thus must be designed for the combined live loads of snow and rain.

4. **Provision of the Building Code**

Sentence 4.1.7.3.(3) - Specified Rain Load

(3) Except as provided for in Sentence 4.1.7.1.(1) and except where a roof is intended to provide rain water

retention, loads due to rain need not be considered to act simultaneously with loads due to snow.

5. **Applicant's Position**

The Applicant submitted that the proposed roof complies with Sentence 4.1.7.3.(3) of the OBC. He based this assertion on the premise that their rain water control strategy proposed for the roof is only a 4 to 6 hour temporary delaying of run off and is not retention for the purposes of stormwater management, as the officials from Markham argue. He indicated that their stormwater management plan utilizes the existing unused capacity on the rest of the site as well as constructing an over-sized sewer as part of the current work for the exclusive use of the church. The plan does not rely upon any assumed storage of water on the church's roof. As a result, since the roof is not intended to store water, the building does not need to be constructed to support snow and rain live loads.

The Applicant argued that the Opinion released by the Housing Development and Buildings Branch on April 28th, 1999 supports his position. He indicated that the proposed church will fulfill the four conditions set out in the Branch Opinion. As he noted, the drain down time will be

far less than 24 hours, scuppers will be installed and the roof water depth will not exceed 57 mm, the roof drains will be closer than 15 m to the edge of the roof and less than 30 m to each other, and there will be six drains serving a total roof area of 2,790 m^2.

The Applicant also noted that he has made direct inquiries with the Canadian Institute of Steel Construction and the Housing Development and Building Branch regarding the intent of Sentence 4.1.7.3.(3) and its application with respect to the structural design of a building.

In conclusion, he stated that the current interpretation of the Markham Building Department regarding the use of roof control flow hoppers forces unnecessary and additional construction costs on project proponents in the form of enhanced structural support in the building or extra capacity in underground storage tanks.

6. **Respondent's Position**

The Respondent submitted that he interprets Sentence 4.1.7.3.(3) of the Code as requiring that both snow and rain loads be considered when the proposed roof is intended to retain water. As he stated; "the stormwater management consultant for the subject project has designed a stormwater drainage system that intentionally relies upon the storage (actual wording used by the consultant) of 158 m^3 of stormwater on the roof of the subject building. This quantity has been calculated using a 1 in 100 year storm event as required by the Town of Markham Engineering Department. It is the opinion of the chief building official therefore that the roof must be designed to support the simultaneous loading of rain and snow as required by Sentence 4.1.7.3.(3)."

The Respondent argued that "the branch opinion issued in April of 1998 addressed the general use of flow control roof drains and their effect on the design of roof structures." This opinion, he added, "which was based on provisions contained in the 1995 National Pluming Code, was intended to clarify that where flow control roof drains are routinely utilized outside the scope of a stormwater management design, loads due to rain need not be added to loads due to snow." The Respondent continued by noting that the opinion, however, concludes by stating that "where the roof drainage system exceeds the limitations (set out in the conditions) contained above or where the roof is designed for permanent storage of stormwater, the potential for additional structural loading of rain and snow has to be considered." He argued that this was the case in the present proposal since, in his view, the roof has been designed with the intention of storing water.

To support his interpretation, the Respondent then presented arguments about the development of this provision and in particular its recent amendment in the current version of the Building Code. He argued that the change was included to clarify that roofs that are to retain water must be built for snow and rain load. It did not provide any relaxation for roofs that are to temporarily hold water.

For the above reasons, the Respondent concluded by stating that the requirements of Sentence 4.1.7.3.(3) applies to this application and both loads should be considered in the design and construction of the church.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed roof, designed to delay the run off of rainwater but which is engineered to support either snow or rain load but not both, complies with the requirements of Sentence 4.1.7.3.(3) of the Ontario Building Code for the Toronto Chinese Community Church at 100 Acadia Avenue, Markham, Ontario, provided:

a) The maximum drain down time does not exceed 24 hours;
b) Scuppers are installed so that the maximum depth of water on the roof cannot exceed 150 mm;
c) Drains are located not more than 15 m from the edge of the roof and not more than 30 m from adjacent drains; and,
d) There is at least one drain for each 900 m^2 of roof.

8. **Reasons**

1) The structural design of a roof incorporating flow control roof drains need not be treated any differently from a conventionally drained roof if the roof drainage system conforms to the conditions listed as a), b), c) and d); and,
2) The roof system is designed as part of a stormwater management system for delaying discharge of rainwater and is not designed as a storage facility.

Dated at **Toronto** this **3rd** day in the month of **February**, in the year **2000**, for application number **1999-78**.

BCC Ruling No. 00-02-734

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-02-734

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.2.40 and Sentence 3.2.5.13.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Al Evans, Project Manager, David J. Cupido Construction Limited, Kingston, Ontario, for the resolution of a dispute with Mr. Doug Ferguson, Chief Building Official, City of Brantford, Ontario, to determine whether the proposed sprinkler system, designed according to NFPA 13R, and intended for use in a Group B, Division 3 occupancy provides sufficiency of compliance with Article 3.2.2.40. and Sentence 3.2.5.13.(1) of the Ontario Building Code at the McInnes House, 170 Henry Street, Brantford, Ontario.

APPLICANT
Mr. Al Evans, Project Manager
David J. Cupido Construction Limited
Kingston, Ontario

RESPONDENT
Mr. Doug Ferguson
Chief Building Official
City of Brantford<

PANEL
Mr. James Lischkoff (Chair-Designate)
Mr. Donald Pratt
Mr. Fred Barkhouse

PLACE
Toronto, Ontario

DATE OF HEARING
January 13, 2000

DATE OF RULING
January 13, 2000

APPEARANCES
Mr. Al Evans, Project Manager
David J. Cupido Construction Limited
Kingston, Ontario
The Applicant

RULING

1. **The Applicant**

   Mr. Al Evans, Project Manager, David J. Cupido Construction Limited, Kingston, Ontario, has received a building permit under the *Building Code Act, 1992* and is currently constructing a care facility for deaf and blind persons known as the McInnes House at 170 Henry Street, Kingston, Ontario.

2. **Description of Constrution**

   The Applicant is currently constructing a new care facility intended as a residence for 14 deaf and blind persons. The building is described as one storey in building height, 665.53 m^2 in building area, and is of combustible construction. The structure is slab on grade construction (with in-floor hydronic heating) and therefore has no crawl space or basement. The building is classified as having a Group B, Division 3 (care) occupancy under the 1997 Ontario Building Code.

   The building is to have a total of six independent suites, each with their own livingroom and diningroom areas and kitchen and bathroom facilities. Four of the suites are to have three bedrooms, while the other two will be single bedroom units for a total of 14 bedrooms. All of the suites are provided with at least one barrier-free accessible washroom. The suites are arranged three per side along a central corridor that is equipped with exit doors at each end.

Administrative offices, staff washrooms, an activity room and mechanical and electrical rooms are located off either side of the central corridor as well. There will also be a mechanical room located in the central portion of the attic space that will house the air conditioning equipment. Beyond the two exits that will lead directly to the exterior at grade level, each suite and the activity room will contain an inward swinging, access door that will also lead directly to the exterior.

Fire separations with a 3/4 hour fire-resistance rating are to be provided in the wall assemblies between the suites (as well as the administrative areas) and between the suites and the corridor. The same fire-resistance rating will be provided in the separation between the ceiling and attic space. The mechanical room in the attic will also be enclosed with 3/4 hour rated walls.

The structure will be equipped with a computerized, centrally controlled and monitored motion sensor and fire alarm system as well as a sprinkler system. The alarm system will be equipped with pull stations, strobe lights (corridor only) and sirens and will be interconnected with the smoke detectors. Smoke detection will be provided throughout the floor area, but only in the mechanical room of the attic. There is also a fire hydrant on the property.

Staff will be present in the facility 24 hours a day to provide supervision and assistance for the residents. The staffing level will be at its lowest overnight when a minimum of three persons will be present. The motion sensor will enable staff to determine when residents are moving about within their rooms and/or suites. This will give staff the opportunity to visit the resident to ascertain if they need assistance. All 14 of the residents are ambulatory. This may change with time, however. The construction in dispute involves the proposed sprinkler system. The Applicant is proposing that the sprinkler system be designed and installed in accordance with the requirements of NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height."

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed sprinkler system, designed according to NFPA 13R, and intended for use in a Group B, Division 2 occupancy provides sufficiency of compliance with Article 3.2.2.40. and Sentence 3.2.5.13.(1) of the Ontario Building Code.

Article 3.2.2.40. requires that a B2 occupancy must be sprinklered even though it may be of combustible construction. Sentence 3.2.5.13.(1) states that a required sprinkler system must meet NFPA 13, whereas Sentence 3.2.5.13.(2), provides an exception to Sentence (1) by allowing low rise (four stories or less) residential occupancies to comply with the more relaxed sprinkler standards found in NFPA 13R. The basic difference between these sprinkler systems is that the NFPA 13 standard requires that all spaces of a building be protected with sprinklering. This includes unoccupied areas such as closets and concealed spaces such as attics and crawl spaces. The NFPA 13R standard, on the other hand, stipulates that a sprinkler system need only be designed and installed for all occupied rooms.

In such an application in order to ascertain the sprinkler requirements it is therefore essential to determine whether the subject building can be considered residential due to its use and occupancy. Article 3.1.2.5. permits certain buildings classified as having a Group B occupancy to be considered residential occupancies in the appropriate circumstances and under various conditions. The conditions set out in this provision are that the occupants operate as a single housekeeping unit, that there is sleeping accommodation for no more than ten persons and that no more than two persons would require assistance to evacuate in case of an emergency.

The subject proposal does not meet any of the conditions stipulated in Article 3.1.2.5. With six separate suites, the residents would not operate as a single housekeeping unit. Sleeping accommodation is provided for 14 persons. As well, due to the fact that the residents will possess certain degrees of blindness and deafness obviously more than two persons would require assistance to evacuate in an emergency. As a result, the subject building cannot be considered as residential as per Article 3.1.2.5. and as a Group B occupancy is thus required under the OBC to install a sprinkler system as per NFPA 13.

At issue therefore, is whether the proposed B3 building offers any compensating measures to achieve sufficiency of compliance with Article 3.2.2.40. and Sentence 3.2.5.13.(1), which require that the sprinkler system be built according to NFPA 13.

4. **Provision of the Building Code**

Article 3.2.2.40. - Group B, Division 2 or Division 3, up to 2 Storeys, Sprinklered

1. A building classified as Group B, Division 2 or Division 3 is permitted to conform to Sentence (2) provided:
    a. except as permitted by Sentence 3.2.2.7.(1), the building is sprinklered;
    b. it is not more than 2 storeys in building height; and
    c. it has a building area not more than:
        i.) 2,400 m^2 (25,800 ft^2) if 1 storey in building height; or
        ii. 1,600 m^2 (17,200 ft^2) if 2 storeys in building height.
2. The building referred to in Sentence (1) is permitted to be of combustible construction or noncombustible construction used singly or in combination, and:
    a. floor assemblies shall be fire separations with a fire-resistance rating not less than 45 min,
    b. mezzanines shall have, if of combustible construction, a fire-resistance rating not less than 45 min, and
    c. loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.

Sentences 3.2.5.13.(1) and (2) - Automatic Sprinkler Systems

3. Except as permitted by Sentences (2), (3) and (4), an automatic sprinkler system shall be designed, constructed, installed and tested in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems". (See Appendix A.)
4. Instead of the requirements of Sentence (1), NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height", is permitted to be used for the design, construction, installation and testing of an automatic sprinkler system installed in a building of residential occupancy that is not more than 4 storeys in building height.

Article 3.1.2.5. - Group B, Division 3 Occupancies

5. Group B, Division 3 occupancies are permitted to be classified as Group C major occupancies provided:
    a. the occupants live as a single housekeeping unit in a dwelling unit with sleeping accommodation for not more than 10 persons; and
    b. not more than 2 occupants require assistance in evacuation in case of an emergency.

5. **Applicant's Position**

The Applicant submitted that the proposed design of the building provides a similar level of life safety to that intended in the OBC and thereby provides sufficiency of compliance with Article 3.2.2.40. and Sentence 3.2.5.13.(1). In addition to the fire safety features shown on plan, he indicated that he was also prepared to supply the entire floor area of the building with sprinkler protection conforming to NFPA 13, which would include concealed spaces such as closets and all washrooms (even those less than 5.1 m^2) as well as adding smoke detection in rest of attic. This would leave the attic as the only unsprinklered area, he noted.

The Applicant also argued that although the residents are deaf and blind, due to the nature of their disabilities they become very familiar with their physical surroundings and once advised to evacuate could do so quickly. Also, with a minimum of 3 staff to assist in evacuation and with doors leading directly to the exterior in each suite, the total emergency evacuation process would be prompt and orderly. He indicated that a fire safety plan is being developed in conjunction with the local fire department.

Lastly, the Applicant indicated that, in his view, the primary benefit of installing a fully compliant NFPA 13 sprinkler system would be enhanced property protection. He stated that with respect to the subject care home he believes it has been designed with cost effective, but adequate, life safety features.

6. **Respondent's Position**

The Respondent chose not to attend the hearing. The Commission therefore relied upon his written submission only.

The Respondent submitted that the NFPA 13 standard of sprinklering provides a greater degree of protection than NFPA 13R. Moreover, the building at hand, he argued, would contain more than two people who would require assistance to evacuate in an emergency. As a result, the subject building does not meet the criteria found in Article 3.1.2.5. of the 1997 Ontario Building Code that allows a care facility to be considered as having a residential occupancy. As a care occupancy, therefore, the structure must conform to the NFPA 13 standards for sprinkler design and installation.

No comment was provided as to whether any of the proposed compensating measures were, in his view, adequate.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed sprinkler system in the group home (known as the McInnes House) at 170 Henry Street, Brantford, Ontario, provides sufficiency of compliance with Article 3.2.2.40. and Sentence 3.2.5.13.(1) of the Ontario Building Code on condition that:

i) Smoke and heat detectors are provided throughout the attic spaces including the mechanical room and that these are interconnected with the heat detection system installed in the occupied areas.
ii) The mechanical area in the attic is sprinklered as well as all spaces on the main floor.

8. **Reasons**

(i) The building is a non-smoking facility.
(ii) There are two egress routes from each suite.
(iii) There are pull stations in the common areas as well as at the suite exits and these are interconnected with the smoke/heat detection system.
(iv) There is trained supervision done in conjunction with the fire department.
(v) A building evacuation plan will be developed and the occupants will be trained.
(vi) There is a 100 mm water line and fire hydrant on site.

Dated at **Toronto** this **13th** day in the month of **January**, in the year **2000**, for application number **1999-88**.

BCC Ruling No. 00-01-733

BUILDING CODE COMMISSION DECISION ON B.C.C. #00-01-733

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.3.1.17.(5) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Daniel Teramura, Moriyama and Teshima Architects, Toronto, Ontario, for the resolution of a dispute with Mr. G. N. Bilous, Chief Building Official, City of Oshawa, Ontario, to determine whether the operation of the building compensates for the as-built guards constructed mainly with panels consisting of 50 by 50 mm welded wire mesh and thereby provides sufficiency of compliance with Sentence 3.3.1.17.(5) of the Ontario Building Code at Durham YMCA, 99 Mary Street North, Oshawa, Ontario.

APPLICANT
Mr. Daniel Teramura
Moriyama and Teshima Architects
Toronto, Ontario

RESPONDENT
Mr. G. N. Bilous
Chief Building Official
City of Oshawa

PANEL
Mr. James Lischkoff (Chair-Designate)
Mr. Donald Pratt
Mr. Fred Barkhouse

PLACE
Toronto, Ontario

DATE OF HEARING
January 13, 2000

DATE OF RULING
January 13, 2000

APPEARANCES
Mr. Randal Brown, President
Randal Brown & Associates Ltd.
Toronto, Ontario
Agent for the Applicant

Mr. Herman Guta
Senior Building Inspector
Senior Building Inspector
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Daniel Teramura, Moriyama and Teshima Architects, Toronto, Ontario, has received a building permit under the *Building Code Act, 1992* and has recently constructed a new YMCA facility - known as the Durham YMCA - at 99 Mary Street North, Oshawa, Ontario.

2. **Description of Constrution**

   The Applicant has recently constructed a new YMCA complex classified as having Group A, Division 2 and 3 major occupancies. The structure is described as two storeys in building height, 5 574 m^2 in building area and is of noncombustible construction. The building has four main areas. On the ground floor there is a gymnasium, pool and licenced daycare centre, and on the second floor there is a conditioning area with a running track. Also found on the ground floor is a child minding area, which is separate from the day care centre.

   The construction in dispute involves the guards surrounding running track and conditioning area and in the gymnasium. At the running track and conditioning area the guards serve to separate second storey spaces that overlook the ground floor. The as-built guards are described as 1 070 mm in total height and are constructed with a single steel rail supported at regular intervals by vertical steel posts. Fastened to the posts and acting as infill between the posts, rail and floor

surface are a series of panels comprised of 50 by 50 mm welded wire mesh sheets attached to a steel frame. The openings surrounding each infill panel are 100 mm to the floor, 50 mm to the vertical posts and 50 mm to the rail above.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the operation of the building compensates for the as-built guards constructed mainly with panels comprised of 50 by 50 mm welded wire mesh and thereby provides sufficiency of compliance with Sentence 3.3.1.17.(5) of the Ontario Building Code. This provision stipulates that unless it can be shown that openings in a guard do not pose a hazard, the guard should be designed so as not to facilitate climbing.

Both parties to this dispute apparently agree that the design of the guard could facilitate climbing. The dispute, however, is whether in this instance, as utilized in the subject supervised YMCA building, the guards constitute a hazard. Specifically at issue therefore is whether the intended supervised use of the building and the limited access to certain areas of the facility compensate for the inherent climbability of the guards.

4. **Provision of the Building Code**

Sentence 3.3.1.17.(5) - Guards

Unless it can be shown that the location and size of openings do not present a hazard, a guard shall be designed so that no member, attachment or opening located between 140 mm and 900 mm above the level protected by the guard will facilitate climbing.

5. **Applicant's Position**

At the outset, the Agent for the Applicant indicated that it was his understanding that the permit application had been made when the previous version of the Ontario Building Code was in effect. As a result, it could be possible to review this situation under the former edition of the OBC, he stated. In this case the guards would be in compliance, he argued, because the previous version of the Code had no requirements regarding climbability of guards in Part 3 buildings.

Nevertheless, the Agent indicated that he would also present arguments regarding sufficiency of compliance with the current version of the OBC. He submitted that used under the present

circumstances in the subject YMCA, the guards, as designed and constructed, do not present a hazard and thereby provide sufficiency of compliance with Sentence 3.3.1.17.(5) of the OBC.

The Agent stated that the disputed guards are located at the running track and conditioning area, which are spaces used primarily by adults and eligible youth. The youth who do utilize these areas of the YMCA are required to pass a proficiency test demonstrating that they understand the hazards of using the conditioning area and its equipment. This upper level of the building, he added, is not open to the general public. As a result, he argued that only persons aware of the guard's potential climbability would be allowed in the area and if they are they would be supervised.

In addition, the Agent argued that beyond limiting the access of the areas served by the guards, the YMCA also provides supervision of young children through its child monitoring area located on the ground floor. This area is offered so that the adults using the YMCA can exercise, etc. while their children play in an attended environment. It also means that children would not be present in the areas served by the guards.

Lastly, the Agent argued that other YMCA facilities in the Greater Toronto Area, such as the ones in Toronto, the former North York and Mississauga, have used the same guards for 10 to 20 years without incident.

In conclusion, the Agent stated that while he agrees the guards could be considered climbable by small children, in the location and circumstances under which they are used, they do not present a hazard.

6. **Respondent's Position**

The Respondent submitted that the location of the guards and size of their openings present a hazard and thus do not meet the requirements of Sentence 3.3.1.17.(5). He indicated that the guards are obviously climbable and consequently pose an inherent danger.

The Respondent rejects the idea that the present issue could be regarded under the previous version of the OBC since the entire building had been reviewed under the 1997 edition. As he stated, it is not possible to pick and choose between versions of the Code.

He noted that the wire mesh guards are not limited to the running track and conditioning area and are used elsewhere in the building, including at the open sides of the stairs, ramps, and second

floor balconies. Due to their widespread use, the likelihood that children will come in contact with the climbable guards is high. He also argued that he was not convinced that the disputed areas of the building would be completely restricted in terms of access by children nor would it receive adequate supervision when children are present. As a result, the Respondent indicated that the as-constructed guards, in his opinion, are not acceptable and he stated that he felt he did not have the authority to allow such a deviation from the Code.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the guards as installed at Durham YMCA, 99 Mary Street North, Oshawa, provide sufficiency of compliance with Sentence 3.3.1.17.(5) of the Ontario Building Code.

8. **Reasons**

(i) There is restricted access to the areas (which contain the guards) by the use of coded entry cards.

(ii) There is a YMCA policy (visibly displayed) which restricts access to children to these areas.

(iii) There is full time supervision in the areas that contain the guards.

iv) Children between the ages of nine and twelve must pass a proficiency test to use the restricted areas.

Dated at **Toronto** this **13th** day in the month of **January**, in the year **2000**, for application number **1999-84**.

BCC Ruling No. 99-76-732

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-76-732

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 8.2.1.3.(4) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99 and 597/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Mark Bodrug, Planner, The TDL Group Ltd., Oakville, Ontario for the resolution of a dispute with Mr. Gerry Gosselin, Supervisor, Healthy Environment Team, The Regional Municipality of Haldimand-Norfolk, to determine whether the type of occupancy, proposed as a drive through restaurant, is permitted to comply with Sentence 8.2.1.3.(4) of the Ontario Building Code for a Tim Hortons facility at 401 Simcoe Street, Highway No. 3, Norfolk, Region of Haldimand.

APPLICANT
Mr. Mark Bodrug, Planner
The TDL Group Ltd.
Oakville, Ontario

RESPONDENT
Mr. Gerry Gosselin
Supervisor, Healthy Environmental Team
The Regional Municipality of Haldimand-Norfolk

PANEL
Mr. Bryan Whitehead, Chair-Designate
Mr. Doug Robinson
Mr. Frank Wright

PLACE
Toronto, Ontario

DATE OF HEARING
December 16th, 1999

DATE OF RULING
December 16th, 1999

APPEARANCES

Mr. David Greenfield, President
D. Greenfield Associates Ltd.
Burlington, Ontario
Agent for the Applicant

Mr. Joe Gibbons, Manager for Environmental Health
The Regional Municipality of Haldimand-Norfolk
Simcoe, Ontario
Designate for the Respondent

RULING

1. The Applicant

Mr. Mark Bodrug, Planner, The TDL Group Ltd., Oakville, Ontario, has applied for a building permit under the *Building Code Act, 1992*, to construct a Tim Hortons drive-through and restaurant facility at 401 Simcoe Street, Highway No. 3, Norfolk, Region of Haldimand, Ontario.

2. Description of Construction

The Applicant is proposing to install a new aerobic Class 4 sewage system to serve a new, drive-through and 61 seat Group A, Division 2 - (food service operation) occupancy located on Highway No. 3. Consistent with the expanded range of food provided at their other outlets, the proposed Tim Hortons facility will offer (beyond the traditional coffee and doughnuts) sandwiches, soups, bagels, muffins, etc. When completed, the subject facility will contain 37.5 fixture units, a total finished floor of 281.5 m^2 and a total daily design flow rate, as calculated by the Applicant, of 9,821 L/d.

The proposed sewage system consists of two septic tanks, a 10,000 L low profile tank to receive wastes directly from the kitchen and a 12,000 L tank which would serve the sanitary sewage from the building.

Effluent would travel by gravity from the smaller through the larger tank and into a 1.8 m diameter pumping chamber equipped with a double pump system and a alarm float. From there the effluent would be sent to three 6,800 L NPS Aerobic CCA 10 secondary treatment units, each fitted with a pump. The secondary quality effluent would then be pumped to three leaching beds each comprised of eight runs of 27 metres for a total bed of 648 m. A 23,000 L surge, or balancing, tank is connected to the outlet end of the three NPS secondary treatment units and receives overflow from those units via gravity.

The site is described as having a variable topography, covered with grass and has a total area of 22,202 m^2. The percolation rate of the native soil (fine sand), as determined from sampling, is approximately 12 minutes per centimetre and the soil has a depth of 16 m. (The clay fill present in one of the proposed leaching bed areas will be removed to the level of the native fine sand.) The highwater table is measured at 15 m below the surface. The site will be served by a new cased well.

The construction in dispute involves the proposed total daily design sanitary sewage flow for the subject structure as determined by its occupancy.

3. Dispute

There are two issues in dispute between the Applicant and Respondent. The primary issue is whether the type of occupancy, proposed as a drive through/sit down restaurant, conforms to an establishment listed in Table 8.2.1.3.B, or should be permitted to comply with Sentence 8.2.1.3.(4) of the Ontario Building Code. This provision allows the total daily design sanitary sewage flow to be calculated based on the highest metered flow of three similar establishments if the occupancy does not fit within the categories set out in Table 8.2.1.3.B. This Table lists numerous "Food Service Operations" and their sewage volume per seat, etc. Doughnut Shops are listed as item "e" and are shown to have a daily flow of 400 L per seat. Using this figure times the number of seats (61) yields a flow of 24,400 L per day, far in excess of the Applicant's claim of 9,821 L per day. However, considering the expanded range of foods now proposed to be dispensed at this facility, the issue at hand is whether subject facility should still be considered a doughnut shop. If so, then due to the 10,000 L/d threshold in the OBC, the calculated daily flow of 24,400 L would mean that the proposed application is not regulated under the Code and therefore the municipality and the Commission would not have jurisdiction over the matter.

Assuming the Commission interprets the subject proposal as being something other than the categories listed under "Food Service Operation", including doughnut shop, as shown in Table 8.2.1.3.B., the secondary issue to be addressed is whether, through the use of balancing tanks, the flow of a sewage

system may be calculated on the basis of the "average daily sanitary sewage flow for the week" as described in A-8.2.1.3.(1) & (2), the Appendix note to Sentences 8.2.1.3.(1) and (2). (These Sentences deal with determining daily design flow.) The Appendix note, as shown below, indicates that flows may be balanced and that the system may be designed (not calculated) using a daily flow that is equal to an average daily flow based over a week. Sentence 8.2.1.3.(4), on the other hand, stipulates that when calculating sewage flow the highest flow rates of other similar establishments must be used. At issue therefore, is whether in calculating the flow rate of a proposed sewage system the peak, or highest, daily flow rate must be used, or whether an average flow is acceptable. Again, based on the figures submitted, if the highest flow rate is the operable figure, the Tim Hortons facility would exceed the 10,000 L limit.

4. Provisions of the Ontario Building Code

8.2.1.3.(1),(2) and (4) - Sewage System Design Flows

(1) For residential occupancies, the total daily design sanitary sewage flow shall be at least the value in Column 2 as determined from Table 8.2.1.3.A. (See Appendix A.)

(2) For all other occupancies, the total daily design sanitary sewage flow shall be at least the value as determined from Table 8.2.1.3.B. (See Appendix A.)

(4) Where an occupancy is not listed in Table 8.2.1.3.B., the highest of metered flow data from at least 3 similar establishments shall be acceptable for determining total daily design sanitary sewage flow.

A-8.2.1.3.(1) & (2) Balancing Tanks

Where variable daily flows or peak flows occur, the flows to the sewage system may be balanced. The sewage system and any pump(s) that are installed to move the sanitary sewage, should be sized to accommodate a daily sanitary sewage flow at least equal to the average daily sanitary sewage flow for the week. Balancing tanks should be sized in accordance with good engineering practice to ensure that peak flows can be accommodated.

5. Applicant's Position

The Applicant submitted that the proposed Tim Hortons facility, with a calculated daily design flow of 9,821 L per day, complies with the technical requirements of the Ontario Building Code. On the issue of whether a Tim Hortons facility be considered as something other than a doughnut shop, he argued that

over the last ten years their corporation has expanded the range of food that they dispense. He noted that only 18 percent of their sales now come from doughnuts. Ten years ago that figure was 75 percent. Aside from coffee, the rest of their sales now come from all the other foods on their menu, such as bagels, sandwiches and soups. In fact, the Applicant described their operation not as a doughnut shop but as a "quick service restaurant".

The Applicant also argued that how they operate their locations is different than it was in the past. For example, many of their outlets are equipped with drive through facilities, which accounts for approximately 40 to 60 percent of a typical store's business. As well, many of their locations, including the present application, are now open 24 hours. As a result, due to their expanded food service and the changed nature of their operation, the Applicant asserted that they no longer fit within the traditional concept of a doughnut shop as contain in the OBC. Consequently, he argued that it was appropriate for them to use Sentence 8.2.1.3.(4), which permits them to use metered data from some of their other locations.

With respect to the issue of whether the highest metered flow must be used, the Applicant argued that the Appendix note A-8.2.1.3.(1) & (2) appears to indicate that a sewage system can be built on the premise of a weekly average flow, if one installs a balancing tank. The Appendix note refers to the "sizing" of a sewage system, which infers the calculation of flows to determine capacity, he stated. He also argued that, in his view, the reason for the inclusion of the subject Appendix note in the OBC was because it recognized that with the use of water saving devices sewage flows can be reduced and therefore offered designers greater flexibility.

Based on this view, the Applicant then explained how he arrived at his figures for the sewage flow of the proposed building. He indicated that he examined ten other Tim Horton locations and chose six of them for a comparison. Of these, the average of the peak flows was 251 L/seat/day, however, based on the average extended over a weekly basis (as per the Appendix note) the calculated flow rate was 161 L/seat/day. Using this latter figure and considering the number of seats (61), he arrived at a design flow of 9,821 L. This, he argued, fell below the 10,000 L threshold and could therefore be reviewed under the OBC.

(The Applicant did not provide any data as to the similarity of the other locations to the proposed restaurant with respect to the traffic patterns or catchment areas.)

6. Respondent's Position

On the first issue, the Respondent submitted that, in his view, the subject facility is a doughnut shop and is therefore listed in Table 8.2.1.3.B. of the OBC. As a result, the daily sewage flow for the building, based on 400 L per day times 61 seats, would be 24,400 L. This, he noted, would clearly take the proposal beyond the limit set out in the Code.

With respect to whether a weekly average can be used to determine sewage flow, he stated that Sentence 8.2.1.3.(4) clearly states that the highest of flows must be used. On this basis, even using the numbers put forward by the Applicant for peak flow (251 L) the proposal would also greatly exceed the 10,000 limit. He argued that the Applicant was using the average of the average to reach his flow figures. In his view, this is not the intent of the Code.

7. Commission Ruling

It is the decision of the Building Code Commission that the occupancy of the proposed

Tim Hortons restaurant with donuts and quick service food and a single drive through does not fully conform to the list of establishments in Table 8.2.1.3.B. It is therefore appropriate to consider the calculation of the total daily design sanitary sewage flow under Sentence 8.2.1.3.(4).

On the basis of the water use data provided, it is the decision of the BCC that the highest metered flows on a per seat basis would result in a total daily design sanitary sewage flow in excess of 10,000 litres per day for the proposed building.

Under Clause (f) of Article 1.1.3.2. (as amended by Ontario Regulation 278-99), this proposed system fails the definition of a sewage system. Accordingly, the approval of the system design is the responsibility of the Ministry of Environment.

8. Reasons

a. The Applicant's proposed flow figures, which include an average of 161 litres per seat for six restaurants over a three year period, demonstrates a trend of annual flow increases.
b. The proposed flow is less than the highest year average shown by the Applicant. Applying this average would result in a calculated flow in excess of 10,000 L.
c. A number of metered flows (shown in three month periods) exceed 10,000 L per day for smaller restaurants.

d. The Code does not permit the use of balancing tanks to reduce the total daily design sanitary sewage flow for the purposes of determining conformity to Article 1.1.3.2.

Dated at Toronto this **16th** day in the month of **December** in the year **1999** for application number **1999-83**.

BCC Ruling No. 99-75-731

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-75-731

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.2.35.(4) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Dan Alexander, Superintendent of School Support Services, Near North District School Board, North Bay, Ontario for the resolution of a dispute with Mr. Brian Horsman, Chief Building Official, City of North Bay, Ontario to determine whether the noncombustible bleachers, with a calculated minimum fire-resistance rating of 1.36 hours, offered in lieu of sprinklering the spaces below, provides sufficiency of compliance with Sentence 3.2.2.35.(4) of the Ontario Building Code at the Trojan Alumni Complex at West Ferris Secondary School, 60 Marshall Park Drive, North Bay, Ontario.

APPLICANT

Mr. Dan Alexander, Superintendent
School Support Services
Near North District School Board
North Bay, Ontario

RESPONDENT

Mr. Brian Horsman
Chief Building Official
City of North Bay

PANEL

Mr. Kenneth Peaker (Chair-Designate)
Mr. John Guthrie
Mr. Fred Barkhouse

PLACE

Toronto, Ontario

DATE OF HEARING

December 9, 1999

DATE OF RULING

December 9, 1999

APPEARANCES

Mr. Dave Richards, P. Eng.
Northland Engineering (1987) Ltd.
North Bay, Ontario
Agent for the Applicant

Mr. Brian Horsman
Chief Building Official
City of North Bay
The Respondent

RULING

1. **The Applicant**

   Mr. Dan Alexander, Superintendent of School Support Services, Near North District School Board, North Bay, Ontario has received a building permit under the *Building Code Act, 1992* to construct an addition onto, and renovate, an existing bleacher facility known as the Trojan Alumni Complex at West Ferris Secondary School, 60 Marshall Park Drive, North Bay, Ontario.

2. **Description of Constrution**

   The Applicant is currently constructing an addition onto, and renovating an existing bleacher structure which is situated in the football field of West Ferris Secondary School. The bleacher building is located approximately 90 m from the school building. The existing bleacher facility is described as one storey in building height and is 262 m^2 in building area. The bleachers are constructed of noncombustible construction consisting of 203 mm thick precast hollow core

slabs as the upper and lower walking surfaces and 102 mm thick precast bleacher slabs as seating supported by load-bearing masonry walls. The space below the bleachers is to be renovated and will be used for dressing rooms, showers and a training room.

The addition, to be built on the west side, or to the rear, of the existing structure, is described as one storey, 288 m^2 in building area (which includes a covered walkway on the addition's west side) and is constructed mostly of combustible (wood) construction but has a steel roof. The addition is to be used mainly for a concession area but will also contain a kitchen, washrooms, and storage and utility rooms.

The proposed expanded bleacher facility is classified as a Group A, Division 4 (open air) assembly occupancy. It will have a total occupant load of 1,034 persons, 580 allocated to the bleachers themselves and 454 persons within the addition and in the renovated space below the bleachers. The completed structure will be equipped with a fire alarm system, but not a sprinkler system.

The construction in dispute is the omission of a sprinkler system in the space directly below the bleachers.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the noncombustible bleachers, with a calculated minimum fire-resistance rating of 1.36 hours, offered in lieu of sprinklering the spaces below, provides sufficiency of compliance with Sentence 3.2.2.35.(4) of the Ontario Building Code. This provision requires that sprinklers must be installed in all spaces below the tiers of seats in a Group A, Division 4 building. By allowing the subject building to be of noncombustible construction, however, it permits the wall, floor and ceiling assemblies to be unrated separations. While the Applicant does not intend to sprinkler the area below the bleachers, he is offering an enhanced fire-resistance rating (at least 1.36 hours according to his own calculations) in terms of the construction of the bleacher building. At issue then, is whether the supplemented minimum fire-resistance rating of the bleachers compensates for the omission of the required sprinkler system and thereby achieves sufficiency of compliance with Sentence 3.2.2.35.(4)

4. **Provision of the Building Code**

Sentence 3.2.2.35.(4) Group A, Division 4

4. Sprinklers shall be installed in all spaces below tiers of seats in a building classified as Group A, Division 4 if those spaces are used for occupancy.
   (See Appendix A.)

5. **Applicant's Position**

The Agent for the Applicant submitted that the enhanced fire separation compensates for the omission of sprinklers below the bleachers and thus provides sufficiency of compliance with Sentence 3.2.2.35.(4). He explained that intent behind the sprinkler requirement was to provide protection for people sitting in the bleachers viewing sporting events. This protection, he argued, was still being provided but through additional fire containment due to the increased fire separation. He noted that the 1.36 hour separation offered in the bleacher seating component was the minimum resistance provided. The other components of the bleacher construction provided even higher fire resistance rating, specifically the reinforced block walls offered a 1.9 hour rating while the hollow core slabs allowed a 2 hour rating.

The Agent also argued that the new use of the space below the bleacher seats, as dressing and training rooms and as a washroom, will not pose an undue fire risk. These rooms will have a low fire load in terms of stored material and will be of noncombustible construction, he added. As well, the activities that are to occur in these spaces are non-fire related.

The Agent stated that based on the fact that the minimum fire-resistance rating of the structure is 1.36 hours and that the combustible load will be low, the users of the bleachers will have more than adequate time to evacuate in an emergency. The new fire alarm system will also provide some early warning to persons in and on the facility.

6. **Respondent's Position**

The Respondent submitted the proposed addition and renovation are regulated by Article 3.2.2.35. and in particular Sentence (4) which requires that the space under the bleachers be sprinklered. Since the Applicant did not intend to sprinkler this area, the Respondent indicated that he felt the proposal did not comply with the Code. He made reference to Appendix A to the OBC which provide further clarification of the requirement to sprinkler such spaces.

The Respondent indicated that he felt he did not have the authority to accept such a proposal.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the noncombustible bleachers with a minimum calculated fire-resistance rating of 1.36 hours, offered in lieu of the sprinklering the space below, provides sufficiency of compliance with Sentence 3.2.2.35.(4) of the Ontario Building Code at the Trojan Alumni Complex at West Ferris Secondary School, 60 Marshall Park Drive, North Bay, Ontario.

8. **Reasons:**
9. Sufficiency of compliance has been achieved through the provision of the enhanced fire-resistance rating of 1.36 hours in the bleacher construction.

Dated at Toronto, this 9th day, in the month of December, in the year 1999, for application number 1999-80.

BCC Ruling No. 99-74-730

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-74-730

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 1.1.3.2. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Peter Turner, Principal, Turner Fleischer Architects Inc., Toronto, Ontario for the resolution of a dispute with Mr. Yaman Uzumeri, Chief Building Official, City of Toronto, Ontario to determine whether the proposed live/work units measuring 146.7 m^2 in area, excluding stairs and unfinished basements, comply with the definition of live/work units provided in Article 1.1.3.2. of the Ontario Building Code at 1590 O'Connor Drive, Toronto, Ontario.

APPLICANT

Mr. Peter Turner, Principal
Turner Fleischer Architects Inc.
Toronto, Ontario

RESPONDENT

Mr. Yaman Uzumeri
Chief Building Official
City of Toronto

PANEL

Mr. Kenneth Peaker (Chair-Designate)
Mr. John Guthrie
Mr. Fred Barkhouse

PLACE

Toronto, Ontario

DATE OF HEARING

December 9, 1999

DATE OF RULING

December 9, 1999

APPEARANCES

Mr. Randal Brown, President/Consulting Engineer
Randal Brown and Associates Ltd.
Toronto, Ontario
Agent for the Applicant

Mr. Eric Tsotsos
Senior Field Officer
City of Toronto, East District
For the Respondent

RULING

1. **The Applicant**

   Mr. Peter Turner, Principal, Turner Fleischer Architects Inc., Toronto, Ontario has applied for a building permit under the *Building Code Act, 1992*, to construct a townhouse condominium project at 1590 O'Connor Drive, Toronto, Ontario.

2. **Description of Constrution**

   The Applicant is proposing to construct 12 new, Group C (residential) condominium townhouse structures. The buildings are described as three storeys (plus basement) in building height, having various sized building areas (all are Part 9 buildings) and are constructed of combustible construction. A total of 94 units are proposed for the project, with 31 one of these to be built on the concept of live/work spaces.

   All of the live/work units of the project face onto O'Connor Drive, a large commercial street. The work portion of the live/work are proposed to be located at the front of the ground floor only and would have a direct entrance onto O'Connor Drive. Another ground floor entrance, for the residential portion of the units, is to be located at the rear of each unit.

The Applicant is also proposing to separate the work component from the residential area of the units by constructing the walls and ceiling of the work area as a one hour fire separation.

The construction in dispute involves the area of the proposed live/work units. As measured without factoring in the stairs and the unfinished basement, the typical live/work unit will have an area of 146.7 m^2. When the excluded areas, the stairs and basement, however, are added, the calculated area of the live/work units increases to approximately 204 m^2.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed live/work units measuring 146.7 m^2 in area, excluding stairs and unfinished basements, comply with the definition of live/work units provided in Article 1.1.3.2. of the Ontario Building Code. The OBC definition of a live/work unit, as shown below, limits the "area" of such a unit to 150 m^2. The total area of the proposed units, at roughly 204 m^2, exceeds the 150 m^2 limit by 54 m^2, or 36 per cent.

The intention of the 150 m^2 area limit, as stated in the Housing Development and Buildings Branch's Technical Background Information memo, is "to restrict the size, fire load and hazard associated with these special units. The size limit also has the practical effect of helping to ensure live/work units are used as residential units, rather than Group D or Group F, Division 3 occupancies with subsidiary sleeping areas."

The OBC does not contain a definition of area as it pertains specifically to a live/work unit. It does contain a definition of floor area (also shown below) which offers a method of calculating the space on the various storeys of a building, but which excludes certain areas such as exits and the spaces set aside for vertical service shafts. In the present dispute, however, by proposing to exclude the stairs but as well the unfinished basement, the Applicant is seeking relief from more than that set out in the definition of floor area. At issue therefore is whether, in the calculation of the area of a live/work unit, the stairs and unfinished basement can be excluded. If not, the issue to be addressed then is whether the Applicant is proposing adequate compensating measures to achieve sufficiency of compliance with Article 1.1.3.2., in particular, the maximum area limitation set out for live/work units.

4. **Provision of the Building Code**

Article 1.1.3.2. Defined Terms

Live/work unit means a dwelling unit that contains a subsidiary business and personal services occupancy or a subsidiary low hazard industrial occupancy, has an area of not more than 150 m^2, and is used and operated by one or more persons of a single household.

Floor area means the space on any storey of a building between the exterior walls and required firewalls including the space occupied by interior walls and partitions, but not including exits, vertical service spaces, and their enclosing assemblies.

5. **Applicant's Position**

The Applicant acknowledged that a literal interpretation of the Code definition of a live/work unit restricts the maximum area to 150 m^2. He argued, however, that this size limit is arbitrary and originated from the former City of Toronto's policy on live/work units, which was intended for single-storey units in loft-style warehouse conversion projects. The subject proposal, he submitted, were not similar to loft spaces at all. Instead, they are very much like standard, three storey residential townhouse condominiums, which require stairs and normally have basements, some of which include parking. He argued that it was problematic to adapt the current OBC live/work area standards to the proposed uses, including the present one, that are evolving in the market.

The Applicant indicated that when the basement and stairs, which he described as unusable space, are excluded then the total area that can be devoted to live/work purposes is approximately 147 m^2. On this basis, he asserted that the subject units meet the intent of the OBC's definition of live/work in the context of a multi-storey building. He also argued that the additional floor area of each unit will not reduce the performance level of the building.

In terms of compensating measures to provide sufficiency of compliance if the interpretive arguments are not accepted, the Applicant argued that the proposed one hour fire-separation separating the work and residential areas provides a certain degree of compartmentation that would contain any fire that originated in the work area. Such separations are not required for live/work units under the Code, he noted.

In summation, the Agent argued that the subject proposal was safe and, in his opinion, met the spirit of the definition of live/work units.

6. **Respondent's Position**

The Respondent submitted that the definition of live/work unit in the Building Code limits such uses to a maximum area of 150 m^2. He indicated that his calculations of the total area of the unit is 187 m^2. As such, he argued that the proposed live/work units exceed the allowable limit by 37 m^2.

The Respondent rejected the arguments posed by the Applicant regarding the exclusion of certain areas from the total area calculation. He noted that the definition of live/work unit did not explicitly state that such unusable areas should be excluded.

Lastly, the Respondent indicated that the subject units can still get built, but that they must not be sold as live/work units. Instead, they must be sold as residential townhouse units or as mixed residential and commercial developments not containing live/work uses. He indicated that the proposal has not been clear as to how the subject units would actually be used, and as a result, how they will get built.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the proposed live/work units with areas greater than 150 m^2 (including the basement but not including the stairs and garage) do not comply with the requirements of live/work units provided by Article 1.1.3.2. of the Ontario Building Code.

On the issue of sufficiency of compliance, it is the decision of the Building Code Commission that the proposed one hour fire separation separating the work area from the remainder of the live/work units does not provide sufficiency of compliance with the maximum area requirements contained in Article 1.1.3.2. of the Ontario Building Code.

8. **Reasons:**
    i. It is view of the Building Code Commission that the definition of area as it applies to live/work dwellings provided by the Housing Development and Buildings Branch is appropriate. It states that "'area' is intended to count all spaces on any storey of a building between exterior walls and firewalls including the space occupied by interior walls and partitions, where activities related to residential, business and personal service or low hazard industrial occupancies may occur", and in our opinion this includes the basement as well.

ii. The proposed one hour separation of the work area, as a compensating measure to achieve sufficiency of compliance, does not provide adequate fire containment to the point where that space may subtracted from the overall area of live/work.

Dated at Toronto, this 9th day, in the month of December, in the year 1999, for application number 1999-77.

BCC Ruling No. 99-73-729

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-73-729

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992* .

AND IN THE MATTER OF Sentence 9.8.8.5.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Brian Crann, President, 1115572 Ontario Inc., O/A Southridge Building Company, Tillsonburg, Ontario for the resolution of a dispute with Mr. Douglas Robertson, Chief Building Official, Town of Tillsonburg, Ontario to determine whether a guard with a bottom rail, measured at more than 100 mm to its top, complies with requirements of Sentence 9.8.8.5.(1) of the Ontario Building Code at 49 Trillium Drive, Tillsonburg, Ontario.

APPLICANT
Mr. Brian Crann, President
1115572 Ontario Inc., O/A Southridge Building Company
Tillsonburg, Ontario

RESPONDENT
Mr. Douglas Robertson
Chief Building Official
Town of Tillsonburg

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. Robert De Berardis
Mr. James Lischkoff

PLACE
Toronto, Ontario

DATE OF HEARING
December 2, 1999

DATE OF RULING
December 2, 1999

APPEARANCES

Mr. Brian Crann, President
1115572 Ontario Inc., O/A Southridge Building Company
Tillsonburg, Ontario
The Applicant

Mr. Douglas Robertson
Chief Building Official
Town of Tillsonburg
The Respondent

RULING

1. **The Applicant**

   Mr. Brian Crann, President, 1115572 Ontario Inc. O/A Southridge Building Company, Tillsonburg, Ontario has received an order to comply under the *Building Code Act, 1992* to remedy an exterior guard at 49 Trillium Drive, Tillsonburg, Ontario.

2. **Description of Construction**

   The Applicant has recently constructed a new, detached single storey Group C - residential occupancy with a building area of 172 m^2.

   The construction in dispute involves the guard located on a deck at the rear of the house. The guard is composed of vertical pickets supported at the top and bottom by a horizontal rail. Specifically at issue is the height of the bottom horizontal rail, the top of which is measured at 138 mm in height from the surface of the deck. The underside of the rail from the deck surface is 100 mm.

   The subject guard is required since the surface of the deck is more than 600 mm above the adjacent grade level.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether a guard with a bottom rail, measured more than 100 mm to its top, complies with the requirements of the Sentence 9.8.8.5.(1) of the Ontario Building Code. The provision stipulates that guards constructed in residential occupancies shall be designed in a way so that no member, attachment or opening located between 100 mm and 900 mm can be used to facilitate climbing. The guard, as constructed, has a height of 100 mm to the bottom of the lower rail and 138 mm to the top of this rail. At issue therefore is whether the horizontal bottom rail, located within the 100 to 900 mm range specified in Sentence 9.8.8.5.(1), can be considered as a climbable feature of the guard.

4. **Provisions of the Ontario Building Code**

Sentence 9.8.8.5.(1) - Design to Prevent Climbing

(1) Guards required by Article 9.8.8.1. and serving buildings of residential occupancy shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2 ft 11 in) above the floor or walking surface protected by the guard will facilitate climbing.

5. **Applicant's Position**

The Applicant submitted that the as-constructed guard, measuring 138 mm in height from the top of the bottom rail to the porch surface below, complies with Sentence 9.8.8.5.(1) of the OBC. He argued that this provision of the Building Code is intended for situations where a guard design includes another member, attachment, etc., found within the 100 to 900 mm range, besides those required to support the pickets, that could be used for climbing. He stated that he does not believe that the Code can be interpreted as to mean that if the thickness of the bottom rail extends into the 100 to 900 mm range then it is considered climbable. In other words, the 100 mm limitation above the deck should apply to the underside of the rail, not the top. He added that, in his view, Sentence 9.8.8.5.(1) is to be applied where optional design features of a guard may create the opportunity for climbing. In the present case, he noted, the bottom rail is not an optional feature, it is essential to hold the pickets in place.

The Applicant explained that he felt two provisions of the Code were at odds with each other. Specifically, he wondered how it can be possible to have a 100 mm opening under the bottom

rail as allowed under the Code, but at the same time not have a climbable member within the 100 to 900 mm range.

The Applicant also argued that he simply assembled the railing as it was manufactured. He indicated that wood railing manufacturers produce railings to meet the required 900 mm guard height and that the factory produced spindle length dictates how far apart the top and bottom rails are constructed. However, since the spindle length is only approximately 825 mm this makes it necessary to raise the bottom rail in order to meet the overall guard height requirement measured at the top rail. He noted that in his experience such railing production is widespread and if proven not to comply with the OBC then he felt that the manufacturers should be so informed.

6. **Respondent's Position**

The Respondent submitted that the as-built guard on the rear porch does not comply with Sentence 9.8.8.5.(1) of the OBC. He argued that the lower rail is clearly within the 100 to 900 mm range specified in Sentence 9.8.8.5.(1). As a result, he stated that in his view the subject guard is climbable.

The Respondent rejected the Applicant's interpretation that this provision of the Code is intended to prevent the design of guards that include another member, attachment, etc., beyond the lower rail necessary to support the pickets, that could be used for climbing from being located in the indicated range. As he noted, Sentence 9.8.8.5.(1) does not make any suggestion of "another member", it simply says "no member" will be located in the 100 to 900 mm range.

On the issue of manufactured products and building materials that do not meet Code, the Respondent submitted that this is not the first time he has this experience. He stated that railing manufacturers should make their pickets longer so that this situation does not occur.

Lastly, the Respondent indicated that Articles 9.8.8.4. and 9.8.8.5. are critical for life safety in the home. He has sought clarity on these issues over the years. He noted that Appendix A and the Illustrated Guide to the 1997 OBC have helped in this regard. He hoped that the subject hearing would also provide an interpretation on Sentence 9.8.8.5.(1).

7. **Commission Ruling**

It is the decision of the Building Code Commission that the guard with a bottom rail, measured at approximately 138 mm to its top, does not comply with the requirements of Sentence 9.8.8.5.(1) of the Ontario Building Code.

8. **Reasons**

(1) The Ontario Building Code states that a guard shall have no climbable member between 100 mm and 900 mm from the floor surface. A horizontal bottom rail within that range could be used for the purposes of climbing the guard.

Dated at **Toronto** this **2nd** day in the month of **December** in the year **1999** for application number **1999-81**.

BCC Ruling No. 99-72-728

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-72-728

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Clause 3.8.3.4.(1)(f) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Peter Moy, Peter Moy Architect, Nepean, Ontario for the resolution of a dispute with Mr. Tom Gallagher, Chief Building Official, Town of Carleton Place, Ontario to determine whether the as built guard, installed on the exterior barrier-free ramp with a maximum height of 865 mm and which includes a lower, parallel rail 660 mm above the ramp surface, provides sufficiency of compliance with Subclauses 3.8.3.4.(1)(f)(i) and (ii) respectively of the Ontario Building Code at Carlton Place District Hospital, 211 Lake Avenue East, Carlton Place, Ontario.

APPLICANT
Mr. Peter Moy
Peter Moy Architect
Nepean, Ontario

RESPONDENT
Mr. Tom Gallagher
Chief Building Official
Town of Carleton Place

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. Robert De Berardis
Mr. James Lischkoff

PLACE
Toronto, Ontario

DATE OF HEARING
December 2, 1999

DATE OF RULING
December 2, 1999

APPEARANCES
Mr. Peter Moy
Peter Moy Architect
Nepean, Ontario
The Applicant

Mr. Tom Gallagher
Chief Building Official
Town of Carleton Place
The Respondent

RULING

1. **The Applicant**

   Mr. Peter Moy, Peter Moy Architect, Nepean, Ontario has received a building permit under the *Building Code Act, 1992* to renovate an existing structure known as the Carlton Place District Hospital, 211 Lake Avenue East, Carlton Place, Ontario.

2. **Description of Construction**

   The Applicant has recently constructed a new barrier-free access ramp at the main entrance of the Carleton Place District Hospital. The building is described as two storeys in building height (plus basement) and is classified as having a Group B, Division 2 - care and treatment occupancy.

   The subject ramp is approximately 18 m in running length with two 180^0 double back turns. From grade level at the sidewalk to the top of the ramp the height is 915 mm. Adjacent to the ramp is a set of stairs containing six risers.

   The construction in dispute involves the guard built to serve the ramp. The guard consists of a concrete curb running along the entire edge of the ramp that projects 254 mm above the ramp surface. A tubular metal railing with a total height of 865 mm, as measured vertically from the

ramp surface, runs above the curb. A lower tubular metal rail, parallel to the top one and set at 660 mm, also comprises part of the guard. The two rails are supported by tubular metal posts set approximately 0.9 m on centre that are mounted into the curb.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the as built guard, installed on the exterior barrier-free ramp with a maximum height of 865 mm and which includes a lower, parallel rail 660 mm above the ramp surface, provides sufficiency of compliance with Subclauses 3.8.3.4.(1)(f)(i) and (ii) respectively of the Ontario Building Code. Clause 3.8.3.4.(1)(f) stipulates that ramps located in a barrier-free path of travel must have a wall or guard on both sides. In the case where a guard is provided, Subclauses (i) and (ii) set out the requirements regarding height and climbability. Specifically, the height of the guard must be at least 1070 mm as measured vertically from the ramp surface to the top of the guard and the guard must also not be designed in such a way that any member, attachment, etc. between 140 mm and 900 mm above the ramp could facilitate climbing.

4. **Provisions of the Ontario Building Code**

Clause 3.8.3.4.(1)(f) - Ramps<

(1) Ramps located in a barrier-free path of travel shall:

(f) except as provided in Sentence (2), have a wall or a guard on both sides and where a guard is provided the guard shall
(i) be not less than 1070 mm (3 ft 6 in) measured vertically to the top of the guard from the ramp surface; and
(ii) be designed so that no member, attachment or opening located between 140 mm (5? in) and 900 mm (2 ft 11 in) above the ramp surface being protected by the guard will facilitate climbing.

5. **Applicant's Position**

At the outset, the Applicant acknowledged that the subject railings do not meet the prescriptive requirements for guards found in OBC 3.8.3.4.(1)(f). Nevertheless, the ramp design was not intended to meet these standards because, in his interpretation, a guard is not required under the Building Code. He based this view on the design of the ramp which, when examined in cross-section, shows that between the entrance level at the top, the three differing levels of the ramp (as it doubles back) and the sidewalk level, there is no vertical drop of more than 600 mm. The principle of not requiring a guard where there is less than a 600 mm difference in elevation between a ramp and its adjacent surface is established in Sentence 3.4.6.5.(3), the Applicant noted. The ramp, he argued, serves as an exit, and it was the exit requirements found under OBC Subsection 3.4.6. "Types of Exit Facilities" according to which the ramp was designed.

In addition, the Applicant noted that the CSA Standard, CAN/CSA-B651-95, "Barrier-Free Design" makes no specific mention of guards at ramps, which he argued implies that guards should not be construed as a specific need of physically challenged individuals. Guards as they apply to ramps, he asserted, should be done in accordance with usual exit facility requirements. In the instance at hand a guard is not necessary, only a railing. And in the present design, far more than a railing was included, he noted.

The Applicant also argued, using a previous decision, that the BCC has in the past (1996) allowed a ramp without guards where the difference between the ramp and adjacent surface was less than 100 mm.

Assuming a guard was required, the Applicant then offered arguments regarding the three specific aspects of the disputed construction; penetrability, climbability and height, of which the safety has been questioned. Prior to this, however, he indicated that the as built railing is safe and does not pose a hazard to the public, both able bodied and physically challenged.

On the issue of penetrability, the Applicant noted that between the curb and the lower rail and between the vertical posts there are openings measuring 360 mm by 838 mm respectively. Handicapped individuals, the principle users of the ramp, would not be able to fall through this opening, he argued. Moreover, the vertical drop, if someone were to fall, is not a significant height. In the Applicant's view, therefore, penetrability is not a serious concern.

Regarding the aspect of climbability, the Applicant argued that the guard was not an attractive feature to climb for children. However, any child that has the dexterity to mount the curb and duck under the lower rail has the ability to manage themselves well and do not need legislation to protect them. Certainly, handicapped persons would not attempt climbing, he stated.

The Applicant recognized that, if viewed as a guard, the height does not comply. Nevertheless, he argued that the ramp was not an area where people would linger. They would simply use it to pass through, thereby reducing the danger of a lower guard.

Lastly, the Applicant stated that he thought that the Code is moving away from common sense and has become too rigid. Alternative designs should be allowed and encouraged. The subject ramp, he reiterated, is safe and will benefit the ambulatory and non-ambulatory public.

6. **Respondent's Position**

The Respondent submitted that while the subject ramp, in his view, does not present a danger to the public and complies with the OBC standards for exits, it does not meet the barrier-free path of travel requirements for guards as found in Clause 3.8.3.4.(1)(f). In particular, he noted that the height of the guard, at 865 mm, did not meet the required 1070 mm and that the lower rail, at 660 mm, must be considered a climbable member. He declined to comment on the issue of the penetrability of the guard.

The Respondent concluded by indicating that he hoped to learn from the Commission whether a guard was required in this instance.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the as built guard, installed on the exterior barrier-free ramp with a maximum height of 865 mm and which includes a lower, parallel rail 660 mm above the ramp surface does not provide sufficiency of compliance with Subclauses 3.8.3.4.(1)(f)(i) and (ii) respectively of the Ontario Building Code at the Carleton Place District Hospital, 211 Lake Avenue East, Carleton Place, Ontario.

8. **Reasons**

1) Adequate compensating measures have not been provided.

2) Guards are required for barrier-free ramps regardless of differences in elevation.

3) The guard height of 865 mm does not meet the requirement of 1070 mm.

4) The design of the guard offers opportunities for climbing.

Dated at **Toronto** this **2nd** day in the month of **December** in the year **1999** for application number **1999-76**.

BCC Ruling No. 99-71-727

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-71-727

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 3.2.2.41 and Sentences 3.2.5.13.(1) and (2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Clare Warmsteeker, Manager, Physical Plant, Brantwood Residential Development Centre, Brantford, Ontario for the resolution of a dispute with Mr. Doug Ferguson, Chief Building Official, City of Brantford, to determine whether the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with Article 3.2.2.41. and Sentences 3.2.5.13.(1) and (2) of the Ontario Building Code at the St. Paul Avenue Group Home, 485 St. Paul Avenue, Brantford, Ontario.

APPLICANT
Mr. Clare Warmsteeker, Manager, Physical Plant
Brantwood Residential Development Centre
Brantford, Ontario

RESPONDENT
Mr. Doug Ferguson
Chief Building Official
City of Brantford

PANEL
Mr. Kenneth Peaker, Chair-Designate
Mr. Robert De Berardis
Mr. James Lischkoff

PLACE
Toronto, Ontario

DATE OF HEARING
December 2nd, 1999

DATE OF RULING
December 2nd, 1999

APPEARANCES
Mr. Rick Reichard, Architect/Planner
Snider Reichard March Architects
Waterloo, Ontario
Agent for the Applicant

RULING

1. **The Applicant**

   Mr. Clare Warmsteeker, Manager, Physical Plant, Brantwood Residential Development Centre, Brantford, Ontario, has received a building permit under the *Building Code Act, 1992* and is currently constructing a group home known as the St. Paul Avenue Group Home, 485 St. Paul Avenue, Brantford, Ontario.

2. **Description of Construction**

   The Applicant is currently constructing a new care facility intended as a group home for a maximum of seven persons. The Building is described as one storey (with a partial basement and a separated crawl space) in building height, 363.5 m^2 (excluding carport) in building area, and is of combustible construction. The building is classified as having a Group B, Division 3 - (group home) care occupancy under the 1997 Ontario Building Code. The structure will not be equipped with a fire alarm system, but will be supplied with a hard-wired interconnected smoke detection system complete with two pull stations and a sprinkler system. The group home will also have five means of egress direct to the exterior at grade level.

   The main floor of the subject building is to contain a total of seven bedrooms arranged in a U-shaped configuration on the east, south and west facing walls. Bathroom facilities, a living room, a dining room and a kitchen are to occupy the remainder of the ground floor. The partial basement will contain a storage room and mechanical and electrical equipment room. The separations provided in the floor assembly between the basement (but not the crawl space) and ground floor, and in the wall assemblies between the bedrooms and the rest of the ground floor

and between the individual bedrooms themselves will have a 3/4 hour fire-resistance rating. The floor assembly of the crawl space has not been separated due to the fact that the crawl space is not to be used as a plenum and any flues will be fully ducted.

The seven group home residents are to be supervised 24 hours a day with 3 full time staff members present during working hours and 4 full time employees during the evening. After midnight one awake staff will be on duty throughout the night and will be backed up by a roving supervisor who is to drop in periodically. In case of an emergency, three residents would need assistance to evacuate.

The construction in dispute involves the proposed sprinkler system. The Applicant is proposing that the sprinkler system be designed and installed in accordance with the requirements of NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height."

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed sprinkler system, design according to the NFPA 13R standard, and intended for use in a Group B, Division 3 occupancy, achieves sufficiency of compliance with Article 3.2.2.41. and Sentences 3.2.5.13.(1) and 3.2.5.13.(2) of the Ontario Building Code. Article 3.2.2.41. requires that a B3 occupancy must be sprinklered even though it may be of combustible construction. The dispute therefore centres on the type of sprinkler system that is required.

Sentence 3.2.5.13.(1) states that a required sprinkler system must meet NFPA 13, whereas Sentence 3.2.5.13.(2), provides an exception to Sentence (1) by allowing low rise (four stories or less) residential occupancies to comply with the more relaxed sprinkler standards found in NFPA 13R. Specifically, the NFPA 13 standard requires that all spaces of a building be protected with sprinklering. This includes unoccupied areas of the building such as closets and concealed spaces such as attics and crawl spaces. The NFPA 13R standard, however, stipulates that such a sprinkler system need only be designed and installed for all occupied rooms.

Certain buildings classified as having a B3 occupancy are permitted under Article 3.1.2.5. to be considered as residential occupancies with conditions. The first condition is that the occupants operate as a single housekeeping unit and that there is sleeping accommodation for no more than

ten persons. Only seven bedrooms are proposed for the subject building and since the rooms are not equipped with cooking facilities it is conceivable that it may be considered as a single housekeeping unit. The second condition is that not more than two persons would require assistance to evacuate in case of an emergency. As the Applicant has noted, three occupants would require assistance in an emergency. As a result, the subject building cannot be considered as having a residential occupancy as per Article 3.1.2.5.

At issue therefore, is whether the proposed building offers any compensating measures to achieve sufficiency of compliance with Article 3.2.2.41. and Sentence 3.2.5.13.(1), which require that the sprinkler system be built according to NFPA 13.

4. **Provisions of the Ontario Building Code**

Article 3.2.2.41. - Group B Division 2 or Division 3, One Storey, Sprinklered

(1) A building classified as Group B, Division 2 or Division 3 is permitted to be of combustible construction or noncombustible construction used singly or in combination, provided

(a) except as permitted by Sentence 3.2.2.7.(1), the building is sprinklered;
(b) it is not more than 1 storey in building height; and
(c) it has a building area not more than 500 m2 (5,380 ft2).

Article 3.2.5.13. - Automatic Sprinkler Systems

(1) Except as permitted by Sentences (2), (3) and (4), an automatic sprinkler system shall be designated, constructed, installed and tested in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems".

(2) Instead of the requirements of Sentence(1), NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height", is permitted to be used for the design, construction, installation and testing of an automatic sprinkler system installed in a building of residential occupancy that is not more than 4 storeys in building height.

Article 3.1.2.5. - Group B, Division 3 Occupancies

(1) Group B, Division 3 occupancies are permitted to be classified as Group C major occupancies provided: (a) the occupants live as a single housekeeping unit in a dwelling unit with sleeping accommodation for not more than 10 persons; and
(b) not more than 2 occupants require assistance in evacuation in case of an emergency.

5. **Applicant's Position**

At the outset, the Agent for the Applicant indicated that has been to the Building Code Commission numerous times over the past year representing similar projects to the one at hand, and since the dispute centred on the same issue he would be making similar arguments as before.

Prior to discussing the technical issues, however, the Agent indicated that he had some general comments about the issue of determining a B3 occupancy with the fundamental shift of care provision for certain challenged individuals from large institutional settings to smaller home-like environments, providers of such care have found some difficulty in using the B3 occupancy. They are finding it too broad and seems to fit a larger building better. Moreover, there is not definition of group homes in the Ontario Building Code. Adding to the confusion, the Agent noted is that a group home can be interpreted as meeting both the definition of care and residential occupancies. The government's response to the Meadowcroft retirement, i.e., in part, the creation of the BC occupancy home was so wide-sweeping that it caught even very small group homes. The B3 occupancy to date, has not provided much flexibility and seems out of sync with the current trends of this type of care provision. Turning his attention to the technical issues.

The Agent acknowledged that while strictly speaking it was not possible to consider the subject building as a residential facility under Article 3.1.2.5. because more than two residents would require assistance in an emergency, he submitted that the care occupancy currently under construction should still be considered as residential occupancy. The Agent argued that the subject group home will operate as a single house-keeping unit with a family like environment. He also argued that the home physically resembles a house from both the exterior, with its small size, and interior, with its homelike floor plans. He noted that the construction techniques are also residential in nature. In his view, it was not the intent of the 1997 OBC to require the more onerous NFPA 13 sprinkler standard for such small buildings of residential character and function. He suggested that smaller facilities (as measured by their floor area or occupant load) in the B3 classification be allowed to comply with NFPA 13R standard for sprinkler protection.

All occupied rooms would be sprinklered, which, he noted, is far more fire protection than is required of the average house.

In terms of compensating measures to achieve sufficiency of compliance with Sentence 3.2.5.13.(1), the Agent noted that the fire separations to be provided between the common areas and the bedrooms and between the individual bedrooms are not required by Code and would offer a higher level of containment than standard construction. These additional separations would act as a direct compensating measure to offset the lesser sprinkler protection provided under NFPA 13R.

The Agent also argued that the hard-wired interconnected smoke detection system would increase the fire safety of the house. He explained that the smoke detectors would be installed (beyond Code requirements) throughout the house, including in some concealed areas such as the crawl space, i.e., among the areas where sprinklers would be necessary under NFPA 13. The Agent indicated that the presence of additional detection would mean that fire in such areas would not go unnoticed and due to early warning would therefore pose no threat to the occupants. Moreover, he added that two manual pull stations, which are also not required, are to be installed and connected to the smoke detection system.

The last major area in which compensating construction is proposed the Agent noted, is the number of egress facilities. He indicated that the Code requires only two exits for a building of this size. The subject structure, however, is proposed to have five exits that will lead directly to the exterior at grade level. This would provide numerous escape options and would directly compensate for the fact that three residents would require assistance to exit in an emergency. As a result, the Agent argued that the overall exiting time would be comparable to a situation in which there were two residents that needed assistance and only two exits.

In response to questions raised during the hearing, the Applicant also offered to provide a connected heat detector in the attic and sprinkler (as per NFPA 13R standards) in the crawl space.

Finally, the Agent stated that the above compensating measures and the NFPA 13R sprinkler system would offer the same level of fire safety for the residents of the proposed group home without relying upon the more rigorous and expensive NFPA 13 sprinkler requirements.

6. **Respondent's Position**

The Respondent chose not to attend the hearing. The Commission therefore relied upon his written submission only.

The Respondent submitted that the subject care home is not a residential facility and thus the sprinkler system should be designed and installed according to NFPA 13. The building at hand, he argued, would contain more than two people who would require assistance to evacuate in an emergency. As a result, the subject building does not meet the criteria found in Article 3.1.2.5. of the 1997 Ontario Building Code that allows a care facility to be considered as having a residential occupancy. Therefore, in the Respondent's view, a care occupancy must conform with NFPA 13 standards for sprinkler design and installation.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with Article 3.2.2.41. and Sentences 3.2.5.13.(1) and (2) of the Ontario Building Code at the St. Paul Avenue Group Home, 485 St. Paul Avenue, Brantford, Ontario on the condition that:

i. Fire detectors are provided in the attic, basement, crawl space and carport/garage;
ii. The two pull stations are interconnected with the smoke detection system;
iii. The proposed level of fire separations be constructed;
iv. Five exits are provided; and,
v. Sprinklers, designed according to NFPA 13R, are installed in all occupied areas of the building including closets and the crawl space.

8. **Reasons**

(a) With conformance to the above conditions, the Commission is satisfied that the proposed sprinkler system does not represent an increased hazard to life safety.

(b) The building will be a non-smoking facility.

(c) Staff will receive safety training and fire training, which includes fire drills to be carried out.

(d) Adequate staff will be provided to accommodate the physical condition of the residents.

Dated at Toronto this **2nd** day in the month of **December** in the year **1999** for application number **1999-75**.

BCC Ruling No. 99-69-725

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-69-725

AND IN THE MATTER OF Sentence 9.8.8.5.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by John and Shirley Smith, property owners, Arthur, Ontario, for the resolution of a dispute with Mr. Ron Steffler, Chief Building Official, Township of Wellington North, Ontario, to determine whether the as constructed guard, consisting of numerous joined diagonal members, provides sufficiency of compliance with Sentence 9.8.8.5.(1) of the Ontario Building Code at 16 Andrew Street, Arthur, Ontario.

APPLICANT
John and Shirley Smith
Property owners
Arthur, Ontario

RESPONDENT
Mr. Ron Steffler
Chief Building Official
Township of Wellington North

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. James Lischkoff
Mr. John Guthrie

PLACE
Toronto, Ontario

DATE OF HEARING
November 18, 1999

DATE OF RULING
November 18, 1999

APPEARANCES

Mr. John Smith
Property owner
Arthur, Ontario
The Applicant

Mr. Bert Coffey
B. C. Construction
Arthur, Ontario
Agent for the Applicant

RULING

1. **The Applicant**

   Mr. John and Shirley Smith, Ontario, have received an order to comply under the *Building Code Act, 1992,* to remedy certain deficiencies concerning the guards at 16 Andrew Street, Arthur, Ontario.

2. **Description of Construction**

   The Applicant's have recently constructed a new, two storey, detached Group C - Residential structure with a building area of approximately 350 m^2. Two separate decks with a total length of approximately 18.3 m have been constructed on the ground floor of the east and south sides of the house.

   The construction in dispute involves the guards built around the perimeter of both decks. The wood guards consist of numerous joined members inclined at 45° supported at the sides, top and bottom by vertical and horizontal rails. The grade level beyond the deck in terms of vertical height varies from approximately 350 mm to 1100 mm as measured from the deck surfaces. While the areas where the grade level is 600 mm or less do not require a guard to be constructed on the deck, the Applicant's have chosen for aesthetic reasons to continue the same guard design for these areas as well.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the as constructed guard, which includes numerous joined diagonal members, provides sufficiency of compliance with Sentence 9.8.8.5.(1) of the Ontario Building Code. This provision stipulates that a required guard be designed so that no member, attachment or opening located between 100 mm and 900 mm above the floor or walking surface, here the surface of the deck, will facilitate climbing. The rationale for this requirement is provided in the Appendix note for Sentence 9.8.8.5.(1) which states that:

"Guards are sometimes constructed with horizontal or near-horizontal members between balusters such that a ladder effect is achieved; this can be very tempting for young children to climb, thus exposing themselves to risk of falling over the guard..."

At issue therefore is whether the design of the as constructed guards facilitates climbing.

4. **Provisions of the Ontario Building Code**

Sentence 9.8.8.5.(1) - Design to Prevent Climbing

(1) Guards required by Article 9.8.8.1. and serving buildings of residential occupancy shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2 ft 11 in) above the floor or walking surface protected by the guard will facilitate climbing.

5. **Applicant's Position**

The Agent for the Applicant submitted that the as built guards do not pose a hazard and should be considered as being in compliance with the requirements of Sentence 9.8.8.5.(1). He noted that the vertical height of the deck above the adjacent grade level was relatively low, in fact, certain portions of the guards are not even required by Code since the vertical drop is less than 600 mm. As well, the surface of the adjacent grade is comprised of soft soil and grass. It is not concrete or some other hard surface. He also noted that there are no children living in the house that would be tempted into climbing the subject guards.

The Agent presented examples of other guards, some located in Ontario and some not. Among the examples of other guards found elsewhere in Ontario were ones at the Elora Gorge and at Niagara Falls. He argued these were far more dangerous and climbable than the one built at the Smith residence. The Agent also offered examples of guards very similar in design to those in

dispute. He noted that these must have been approved by the relevant authority having jurisdiction, and that while some of these guards were located in the US and therefore subject to different building codes, at least one was found in Queenston, Ontario.

The Agent explained that the situation regarding the guards arose due to the following circumstances: Prior to constructing the decks the he took a prototype design of the proposed guards to the municipal building department for review. The officials there allowed that the proposed design would not be deemed to facilitate climbing if the interior (or deck side) of the guards were covered with plexiglass or some other type of screening. However, once constructed the Applicants decided that the guards do not pose a hazard and would be reduced aesthetically if a screening material were to be added.

In conclusion, the Agent stated that the owners of the house have run their own family insurance business for many years and are aware of the legal requirements that have been established for the safety of a household and its residents. Nevertheless, in their opinion, they do not believe the guards pose a safety risk to anyone.

6. **Respondent's Position**

The Respondent choose not to attend the hearing. The Commission therefore relied upon his written submission only.

The Respondent submitted that the Applicant's as constructed guards, in his view, would facilitate climbing. As a result, he argued that Sentence 9.8.8.5.(1) of the Code has not been met. It was for this reason, he indicated, that an order to comply was issued.

The Respondent stated that he offered to take a four year old child to the house to ascertain whether the guard was climbable. The Applicant's declined, but in doing so conceded that the subject guards could be deemed as climbable.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the as constructed guard consisting of numerous joined diagonal members does not provide sufficiency of compliance with Sentence 9.8.8.5.(1) of the Ontario Building Code at 16 Andrew Street, Arthur, Ontario.

8. **Reasons**

(i) No compensating measures to achieve sufficiency of compliance were provided.

Dated at **Toronto** this **18th** day in the month of **November** in the year **1999** for application number **1999-71**.

BCC Ruling No. 99-68-724

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-68-724

AND IN THE MATTER OF Sentence 9.8.3.3.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Victor Heinrichs, Principal, V. J. Heinrichs Architect, Toronto, Ontario, for the resolution of a dispute with Mr. Anthony Krimmer, Chief Building Official, City of Waterloo, Ontario, to determine whether the as constructed single stair serving a second storey loft measuring 813 mm in width between wall faces provides sufficiency of compliance with Sentence 9.8.3.3.(2) of the Ontario Building Code at Block A - Luther West Village, 1 Sunshine Avenue, Waterloo, Ontario.

APPLICANT
Mr. Victor Heinrichs, Principal
V. J. Heinrichs Architect
Toronto, Ontario

RESPONDENT
Mr. Anthony Krimmer
Chief Building Official
City of Waterloo

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. James Lischkoff
Mr. John Guthrie

PLACE
Toronto, Ontario

DATE OF HEARING
November 18, 1999

DATE OF RULING
November 18, 1999

APPEARANCES
Mr. Rick Mori
Leber/Rubes Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Mike McKean
Fire/Building Official
City of Waterloo
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Victor Heinrichs, Ontario, has received an order to comply under the *Building Code Act, 1992* to remedy certain deficiencies regarding the as built stairways within three of the recently constructed residential units at Luther Village West - Block A, 1 Sunshine Avenue, Waterloo, Ontario.

2. **Description of Construction**

   The Applicant has recently constructed a townhouse complex consisting of seven buildings (Blocks A to F [Block A contains two buildings separated by a firewall]). Blocks A and B contain model units known as the "Lilac" and "Iris" suites, both of which come in two versions, a one storey unit and a one storey with loft unit. The ground floor area for these units is approximately 150 m^2, with the lofts having roughly 35 m^2 of floor area.

   The construction in dispute involves three of the seven newly constructed, and occupied, two storey Lilac and Iris units in Block A, which is described as combustible construction, two stories in building height, 900m^2 in building area and having a Group C (townhouse condominium) residential occupancy. Specifically at issue is the width of the single stair serving the loft area. The stairs of these three units have a clear width of 813 mm between wall faces,

and only 711 mm between the wall and the projecting handrail. The subject stairs run straight and begin in the foyer of the main floor and terminate to the side of the loft area.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the as constructed single stair serving a second storey loft measuring 813 mm in width between wall faces provides sufficiency of compliance with Sentence 9.8.3.3.(2) of the Ontario Building Code. This provision stipulates that at least one stairway between each floor level in a dwelling unit should have a width of not less than 860 mm between wall faces. Minimum width requirements are established in the Building Code so that stairs will be able to serve the double function of allowing for the movement of people, in particular as a means of egress for occupants if required, and the movement of furniture. The stairways at issue have a clear width of only 813 mm between wall faces, which in turn has been reduced to 711 mm by a handrail fixed on one side of the stair. Sentence 9.8.7.6.(1), it should be noted, allows handrails to project up to 100 mm into the required width of a stair.

4. **Provisions of the Ontario Building Code**

Sentence 9.8.3.3.(2) - Stair Width

(2) At least 1 stairway between each floor level in a dwelling unit shall have a width between wall faces of not less than 860 mm (2 ft 10 in).

5. **Applicant's Position**

The Applicant submitted that the width of the as built stair provides sufficiency of compliance with the minimum stair width of 860 mm as specified in Sentence 9.8.3.3.(2). He argued that the OBC allows an exit stair under Clause 3.4.3.1.(2)(b) to have a minimum width of 900 mm, which can be further reduced to 700 mm by the encroachment of handrails on both sides that are permitted to project into the required width by 100 mm each. Thus, for exit purposes the Code allows a clear width of 700 mm between handrails. In the present situation, the clear width between the single handrail and the opposite wall is 711 mm, he noted. Further, a minimum width of 660 mm is permitted as a means of egress for a spiral stair serving a floor area with an occupant load of not more than five persons under NFPA 101, Section 5-2.2.2.4.

Moreover, the Code also allows doors in the exit path to be narrower than the 860 mm required in Sentence 9.8.3.3.(2).

If one were to examine the situation based on the relationship between occupant load and width of the exit, the stairs would be more than adequate, the Applicant also argued. He indicated that a 700 mm wide exit stair is permitted to serve an occupant load of 76 persons, however the 35 m^2 loft has only 17 m^2 useable space which, based on 0.95 m^2 /p, would equate to an occupant load of 18 people. Nevertheless, he noted that if the loft is classified as a bedroom then the OBC would determine the occupant load to be 2 persons. The Applicant did acknowledge, however, that in most residential suites the width of an interior stair is governed by the occupant load.

The Applicant indicated that it was interesting to note that the wording of Sentence 9.8.3.3.(2) refers to "at least one stairway" and "between wall faces" which is different from the text used in Part 3 which describes width of exits. While he conceded that the as built stair does not meet the prescriptive width requirements of Sentence 9.8.3.3.(2), he argued, based on the above discussion, that if they were viewed as an exit and not as a "stairway" then the width requirements and thus the exit standards have been met. The Applicant therefore indicated that for Sentence 9.8.3.3.(2) at least, the intent of the Code's minimum dimensions relates more to a functional requirement with respect to the movement of furniture and/or equipment and not the egress of people.

Concerning the movement of furniture, he argued that since the subject stairs have a straight run they provide an easier path for the transportation of furniture than stairs that contain a bend. In addition, the Applicant argued that because the lofts overlook the living/dining rooms below this would allow large furniture and equipment to be lifted over the guards through the openings from the floor levels below without using the stairs.

Finally, the Applicant stated that it would be exceedingly difficult to remedy this situation to widen the stairs.

Based on the above considerations, the Applicant concluded by stating that, in his view, the subject stairs provide sufficiency of compliance with Sentence 9.8.8.3.(2).

6. **Respondent's Position**

The Respondent submitted that the stair widths in the subject two storey units do not meet the minimum width of 860 mm from wall face to wall face as required by Sentence 9.8.3.3.(2) of the

Building Code. He noted that the as constructed width is 813 mm. The municipality's position is that it cares not whether the Code standard is for the movement of people or furniture. The Code requirement is clear.

The Respondent also indicated that the plans submitted and approved by the municipality showed a stair width in conformance Sentence 9.8.3.3.(2). The deficient width was only discovered during an inspection in the latter stages of construction.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the single stair serving a second storey loft measuring 813 mm in width between wall faces provides sufficiency of compliance with Sentence 9.8.3.3.(2) of the Ontario Building Code at Block A - Luther West Village, 1 Sunshine Avenue, Waterloo, Ontario.

8. **Reasons**
   - i. The current stair width will not pose a life safety problem.
   - ii. The loft is a small area and if large furniture is required it can be lifted over the openings to the loft.
   - iii. The problem is limited to three units of a 70 unit complex and was corrected as soon as it was made known.

Dated at **Toronto** this **18th** day in the month of **November** in the year **1999** for application number **1999-70**.

BCC Ruling No. 99-67-723

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-67-723

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.2.40. and Sentences 3.2.5.13.(1) and (2) and Article 3.1.2.5. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Sheila O'Donovan, owner, Lisaard House Charitable Foundation, Cambridge, Ontario for the resolution of a dispute with Mr. Larry Simonato, Director of Building Enforcement Services, City of Cambridge, Ontario to determine whether the proposed sprinkler system, designed according to NFPA 13R, and intended for use in a Group B, Division 3 occupancy provides sufficiency of compliance with Article 3.2.2.40. and Sentence 3.2.5.13.(1) of the Ontario Building Code at the Lisaard House, 950 Speedsville Road, Cambridge, Ontario.

APPLICANT
Ms. Sheila O'Donovan, owner
Lisaard House Charitable Foundation
Cambridge, Ontario

RESPONDENT
Mr. Larry Simonato
Director of Building Enforcement Services
City of Cambridge

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. Donald Pratt
Mr. James Lischkoff

PLACE
Toronto, Ontario

DATE OF HEARING
November 4, 1999

DATE OF RULING
November 4, 1999

APPEARANCES
Mr. Rick Reichard, Architect
Snider Reichard March Architect
Waterloo, Ontario
Agent for the Applicant

Mr. David Carroll
Supervisor of Building Inspectors
City of Cambridge
Designate for the Respondent

RULING

1. **The Applicant**

   Ms. Sheila O'Donovan, owner, Lisaard House Charitable Foundation, Cambridge, Ontario has applied for a building permit under the *Building Code Act, 1992* to construct a new palliative care facility for cancer patients known as the Lisaard House, at 950 Speedsville Road, Cambridge, Ontario.

2. **Description of Constrution**

   The Applicant is proposing to construct a new care facility intended as a hospice for the use of patients terminally ill with cancer. The building is described as one storey in building height (with a partial basement and two separated crawl spaces), 562 m^2 in building area, and is of combustible construction. The building is classified as having a Group B, Division 2 (care and treatment) occupancy under the 1997 Ontario Building Code. The structure will not be equipped

with a fire alarm system, but will be supplied with a hard-wired interconnected smoke detection system and a sprinkler system.

The building is to have a total of six bedrooms, each with their own bathroom facilities. The bedrooms are arranged on the outer side of a ring corridor, the centre of which contains a nurses station, administrative offices and a bathing facility. The building is also to contain a kitchen/dining area, several lounges and a reception room. Storage space and mechanical and electrical equipment will be located in the partial basement. A total of five exits that lead directly to the exterior at grade level are proposed for the hospice. As well, each of the six bedrooms will have a set of inward swinging, double-leaf doors that also lead directly to the exterior.

The separations provided in the floor assembly between the basement and ground floor, and in the wall assemblies between the individual bedrooms and between the bedrooms and the ring corridor will have a 3/4 hour fire-resistance rating. The floor assembly above the crawl space has not been separated due to the fact that it will not be used as a plenum and any flues will be fully ducted.

The building is intended for six cancer patients. Staff will be present in the facility 24 hours a day. During the day the staffing level will be up to 3 or 4 full time persons, including home care nurses that are to drop by on a periodic basis. This number is to be reduced to two overnight, with one of these being a practical nurse. A senior physician that also acts as a house manager will be present at all times. In case of emergency, some persons (depending on the health of residents at the time of the emergency) would require assistance to evacuate.

Since the residents of the proposed building will be persons in the final stages of life, they would have abandoned most treatment. Some medication will be provided, however, but this would only be to reduce suffering and make the residents more comfortable. In many cases, patients will be equipped with pain pumps in order to administer medication themselves. Staff is available in this regard if needed. The average length of stay for the residents will be approximately three to four weeks.

The construction in dispute involves the proposed sprinkler system. The Applicant is proposing that the sprinkler system be designed and installed in accordance with the requirements of NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height." (The Applicant is proposing, however, that the entire ground floor of the building be supplied with sprinkler protection conforming to NFPA 13, which would include concealed spaces such as closets and all washrooms [even those less than 5.1 m^2].)

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed sprinkler system, designed according to NFPA 13R, and intended for use in a Group B, Division 2 occupancy provides sufficiency of compliance with Article 3.2.2.40. and Sentence 3.2.5.13.(1) of the Ontario Building Code.

Article 3.2.2.40. requires that a B2 occupancy must be sprinklered even though it may be of combustible construction. Sentence 3.2.5.13.(1) states that a required sprinkler system must meet NFPA 13, whereas Sentence 3.2.5.13.(2), provides an exception to Sentence (1) by allowing low rise (four stories or less) residential occupancies to comply with the more relaxed sprinkler standards found in NFPA 13R. Specifically, the NFPA 13 standard requires that all spaces of a building be protected with sprinklering. This includes unoccupied areas of the building such as closets and concealed spaces, for example, attics and crawl spaces. The NFPA 13R standard, on the other hand, stipulates that such a sprinkler system need only be designed and installed for all occupied rooms.

Nevertheless, since the subject building is classified as a B2 occupancy under the 1997 OBC the sprinkler system must be installed in accordance with NFPA 13 standard, not NFPA 13R. This is due to the fact that the structure cannot be considered as having a residential occupancy. While certain buildings classified as having a Group B occupancy are permitted to be considered residential occupancies in the appropriate circumstances and under various conditions, this particular building does not qualify as such for several reasons.

First, residential consideration of a Group B occupancy is only available for B3 buildings under certain conditions as set out in Article 3.1.2.5. Because the residents will require treatment, albeit limited, the Commission regards the hospice as classified as a B2 occupancy. Further, some of the treatment at the facility will be administered by qualified medical personnel. Secondly, even if the proposed building were classified as B3, it is doubtful that it would meet the conditions stipulated in Article 3.1.2.5. These conditions are that the occupants operate as a single housekeeping unit, that there is sleeping accommodation for no more than ten persons and that no more than two persons would require assistance to evacuate in case of an emergency.

On the first two items, it is recognized that the hospice, with only six proposed bedrooms, is small, and since these individual sleeping rooms are not to be equipped with cooking facilities it

is conceivable that the facility could operate as a single housekeeping unit. Regarding the issue of assistance in an emergency, however, it is not clear how this condition would be met on a consistent basis, especially considering the deteriorating health of the residents. This is, after all, a cancer hospice for terminally ill patients, and while at times no more than two people would require assistance to evacuate, there would certainly be other occasions where more than two would need help. There would be no way to enforce such a condition either. To do so would be inconsistent with the purpose of the facility, which is to give dying cancer patients the dignity and comfort they deserve. As a result, the subject building, if classified as a B3 occupancy, could not be considered as residential as per Article 3.1.2.5.

At issue therefore, is whether the proposed B2 building offers any compensating measures to achieve sufficiency of compliance with Article 3.2.2.40. and Sentence 3.2.5.13.(1), which require that the sprinkler system be built according to NFPA 13.

4. **Provision of the Building Code**

Article 3.2.2.40. - Group B, Division 2 or Division 3, up to 2 Storeys, Sprinklered

(1) A building classified as Group B, Division 2 or Division 3 is permitted to conform to Sentence (2) provided:
(a) except as permitted by Sentence 3.2.2.7.(1), the building is sprinklered;
(b) it is not more than 2 storeys in building height; and
(c) it has a building area not more than: (i) 2,400 m^2 (25,800 ft^2) if 1 storey in building height; or (ii) 1,600 m^2 (17,200 ft^2) if 2 storeys in building height.**(2)** The building referred to in Sentence (1) is permitted to be of combustible construction or noncombustible construction used singly or in combination; and
(a) floor assemblies shall be fire separations with a fire-resistance rating not less than 45 min,
(b) mezzanines shall have, if of combustible construction, a fire-resistance rating not less than 45 min; and
(c) loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.

Sentences 3.2.5.13.(1) and (2) - Automatic Sprinkler Systems

(1) Except as permitted by Sentences (2), (3) and (4), an automatic sprinkler system shall be designed, constructed, installed and tested in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems". (See Appendix A.)

(2) Instead of the requirements of Sentence (1), NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height", is permitted to be used for the design, construction, installation and testing of an automatic sprinkler system installed in a building of residential occupancy that is not more than 4 storeys in building height.

Article 3.1.2.5. - Group B, Division 3 Occupancies

(1) Group B, Division 3 occupancies are permitted to be classified as Group C major occupancies provided:
(a) the occupants live as a single housekeeping unit in a dwelling unit with sleeping accommodation for not more than 10 persons; and
(b) not more than 2 occupants require assistance in evacuation in case of an emergency.

5. **Applicant's Position**

Prior to submitting arguments about sufficiency of compliance, the Applicant described the project and its purpose and why in her view it could still be considered residential (and possibly a B3, and not a B2, occupancy). She argued that the building, set on a large rural lot, is designed to create a homelike environment where families would be encouraged to stay as long as they wanted. She noted that the residents would not be "supervised" insofar as the Code uses that concept. As well, there would most likely not be more than two persons requiring assistance to evacuate in an emergency. She also noted that the level of medication that residents would receive would be no more than they would get in their own homes. Anyone needing more treatment than this would have to return to the hospital.

At the outset of his presentation, the Agent for the Applicant indicated that he had recently been to the Building Code Commission on six previous applications regarding similar projects. In his view, the subject building, consistent with his previous BCC applications, could appropriately be considered as a B3 facility (and under Article 3.1.2.5. as having a residential occupancy) under the OBC, thereby allowing the proposed NFPA 13R sprinkler system to be installed. The Agent

argued that the subject group home physically resembles a house from both the exterior, with its small size, and interior, with its homelike floor plans. He noted that the construction techniques are also residential in nature. It was not the intent of the 1997 OBC to require the more onerous NFPA 13 sprinkler standard for such small buildings of residential character and function.

If the proposed hospice could not be considered as a B3 or residential occupancy, however, the Agent offered various compensating measures beyond minimum construction requirements to achieve sufficiency of compliance with the OBC. Specifically, he noted that the interconnected, hard-wired smoke detection system proposed for not only the occupied areas but also areas such as the crawl spaces goes beyond minimum Code requirements. He argued that while there may be no suppression of fire in spaces such as the crawl spaces, there will be a detection system to provide early warning. The Agent also indicated that the proposed wall assembly separations are not required by Code. Such separations, he asserted, would provide a higher level of fire compartmentation than normally found in a building of this size. He argued that the separations provide clear and direct compensation to the omission of sprinklers from certain areas. As well, the Agent noted that the number of exits serving the building, in addition to the six access doors in the bedrooms, provides a level of exiting far in excess of Code requirements.

Considering that the ground floor would be sprinklered (according to NFPA 13), that fire separations would be provided between floors and bedrooms, that hard-wired interconnected smoke detectors would be installed in most areas of the hospice, and that evacuation would be quick, the Agent stated that the life safety of the residents would be adequately protected without relying upon the more rigorous NFPA 13 requirements for the entire building.

Lastly, the Agent indicated that, in his view, the primary benefit of installing a fully compliant NFPA 13 sprinkler system would be enhanced property protection. He stated that with respect to the subject cancer hospice he has tried to focus his design efforts on cost effective life safety features.

6. **Respondent's Position**

The Respondent submitted that the subject cancer hospice should be classified as a B2 - care and treatment - occupancy. As a result, he indicated that, in accordance with Article 3.2.2.40., the proposed hospice was required to be sprinklered in conformance with NFPA 13. He rejected the Applicant's arguments that the building could be viewed as a B3 or even a residential use. As he

noted, the intended purpose of the structure is to provide comfort and treatment to dying cancer patients.

The Respondent also rebuffed the Agent's arguments that the present application to the Building Code Commission was analogous to his previous ones. Those buildings were much smaller in area and were subject to the construction requirements of Article 3.2.2.41. Moreover, as group homes, a credible argument could be made that most of the residents of the Agent's earlier projects were ambulatory. This is not the case in the present situation, the Respondent argued. Regardless, he stated that he was aware that the Commission was not bound by their previous decisions and viewed each issue on a case-by-case basis.

Nevertheless, the Respondent did state that he was sympathetic to the Applicant's proposal and the dilemma facing them with respect to their classification under the OBC. He also added that while he supported the proposed compensating measures, in particular those relating to enhanced early warning and upgraded compartmentation offered by the Agent, he felt he did not have the authority to accept such a deviation from Code.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed sprinkler system intended to serve a B2 occupancy does not provide sufficiency of compliance with Article 3.2.2.40. and Sentence 3.2.5.13.(1) of the Ontario Building Code at the Lisaard House, 950 Speedsville Road, Cambridge, Ontario.

8. **Reasons**

1) As a building of care and treatment, i.e., a B2 occupancy, the sprinkler system must be designed, constructed, installed and tested in conformance with NFPA 13.

2) While certain compensating measures were proposed, they were not adequate to achieve the same level of protection offered by fully sprinklering the building.

Dated at **Toronto**, this **4th** day, in the month of **November**, in the year **1999**, for application number **1999-72**.

BCC Ruling No. 99-66-722

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-66-722

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992,* .

AND IN THE MATTER OF Article 3.4.1.1. and Sentence 3.3.1.5.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. D. W. Durant, Plant Services Controller, District School Board of Niagara, St. Catharines, Ontario for the resolution of a dispute with Ms. Christel Meyer, Chief Building Official, Township of West Lincoln, Ontario to determine whether the second storey sound and lighting booth, as constructed, with a pull-down ladder and a lockable access hatch provides sufficiency of compliance with Article 3.4.1.1. and Sentence 3.3.1.13.(1) of the Ontario Building Code at South Lincoln High School, 260 Canborough Road, Smithville, Ontario.

APPLICANT
Mr. D. W. Durant, Plant Services Controller
District School Board of Niagara
St. Catharines, Ontario

RESPONDENT
Ms. Christel Meyer
Chief Building Official
Township of West Lincoln

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. Donald Pratt
Mr. James Lischkoff

PLACE
Toronto, Ontario

DATE OF HEARING
November 4, 1999

DATE OF RULING
November 4, 1999

APPEARANCES
Mr. Peter Colquhoun, Consultant
Arencon Inc.
Mississauga, Ontario
Agent for the Applicant

Ms. Christel Meyer
Chief Building Official
Township of West Lincoln
The Respondent

RULING

1. **The Applicant**

   Mr. D. W. Durant, Plant Services Controller, District School Board of Niagara, St. Catharines, Ontario has received an order under the *Building Code Act, 1992*, to address certain deficiencies in an addition to the South Lincoln High School, 260 Canborough Road, Smithville, Ontario.

2. **Description of Construction**

   The Applicant has recently constructed an addition onto an existing high school. The addition contains extra classroom space, a gymnasium, staff offices, changerooms and a sound and lighting booth overlooking the gymnasium. The existing building had a building area of 3,300 m^2, and together with the 2,077 m^2 addition, the total building area of the current structure is 5,377 m^2. The building is further described as having a Group A, Division 2 - (high school) assembly occupancy, one storey in building height, and is of noncombustible construction. It is equipped with a sprinkler system and fire alarm system.

   The construction in dispute involves the small (6.5 m^2) sound and lighting booth that overlooks the new gymnasium. In order to function effectively as a room to control sound and lighting for theatre arts productions, the booth was constructed in the opposite wall from the stage and on top

of the single storey phys. ed. staff offices that adjoin the gymnasium. The booth is accessible only through an access hatch complete with a pull down ladder that is located in the phys. ed staff offices. When the booth is not in use, the ladder is pushed up and out of the offices below and the access hatch is closed. (Currently, the access hatch has been removed due to a hardware problem.) A door leading directly to the roof is provided within the booth. The parapet around the building's perimeter extends 750 mm above the level of the roof.

The addition to the building is designed to accommodate a future second floor which would incorporate the recently built sound and lighting booth. When the second floor is constructed, there will be direct access to the sound and lighting booth from the second storey corridor, which in turn will be served by two separate exit stairs.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the second storey sound and lighting booth, as constructed, with a pull down ladder and a lockable access hatch provides sufficiency of compliance with Article 3.4.1.1. and Sentence 3.3.1.13.(1) of the Ontario Building Code.

The first provision stipulates that an exit facility for a floor area intended for occupancy must comply with the exit standards of Section 3.4. of the Building Code, including the dimensional, guards and handrails requirements. Further, Article 3.3.1.13., in particular Sentence (1), states that except under a few circumstances ramps and stairs shall also conform to Section 3.4. Sentence (2) of that Article, however, is an exception. It states that ramps and stairs that serve service rooms and spaces and industrial occupancies and that are used infrequently need not comply with Sentence (1) and thereby Section 3.4.

The definition of a service room as found in Article 1.1.3.2. of the OBC is found below. It indicates that to be considered a service room, a space must contain equipment associated with the building services, such as heating, air conditioning or electrical equipment. It also states that such rooms are usually separated by an increased level of fire separation from the rest of the building. A room dedicated to the control of sound and light of a theatre production cannot be considered as an area devoted to containing building services equipment. Moreover, the booth is not provided with an enhanced or even continuous separation from the gymnasium.

As a result, the as constructed sound and light booth does not qualify for the exemption under Sentence 3.3.1.13.(2) and must therefore meet the requirements of Sentence (1) and Section 3.4.

The as built pull down ladder and access hatch, however, do not conform to this Section. At dispute therefore, is whether the booth, as constructed, provides any compensating measures to achieve sufficiency of compliance with Article 3.4.1.1. and Sentence 3.3.1.13.(1).

4. **Provisions of the Ontario Building Code**

Article 3.4.1.1. - Scope

(1) Exit facilities complying with this Section shall be provided from every floor area which is intended for occupancy.

Article 3.3.1.13. - Ramps and Stairways

(1) Except as permitted by Sentence (2), Article 3.3.4.7., ans Subsection 3.3.2., ramps and stairways shall conform to the dimensional, guard and handrail requirements in Section 3.4. for exit ramps and stairways.

(2) Ramps and stairways that do not conform to the requirements of Sentence (1) are permitted to serve service rooms and service spaces and in industrial occupancies, provided the ramps and stairways are intended only for occasional use for service equipment and machinery.

Article 1.1.3.2. - Definition of Service Room

Service room means a room provided in a building to contain equipment associated with building services. (See Appendix A.)

5. **Applicant's Position**

The Applicant acknowledged at the outset that the pull down ladder and access hatch does not conform to the exit requirements of Section 3.4. He also recognized that the sound and lighting booth does not fit the definition of a service room in the Code. He explained that the situation regarding the ladder and the access hatch came as result of the building official's advice at the plan review stage that the booth was a service room. Nevertheless, he argued that the booth does provides sufficiency of compliance with Article 3.4.1.1. and Sentence 3.3.1.13.(1) and that it should not be considered as a hazardous space. He offered several reasons.

Prior to making any sufficiency of compliance arguments however, the Applicant offered a possible Code interpretation of the situation. He stated that under the NFPA 101B standard,

"Code for Means of Egress from Buildings and Structures", it was plausible to view the booth as a "lighting and access catwalk". Such catwalks are cited in Exception No. 4 to provision 3-4.1, which deals with the number of means of egress from balconies, mezzanines, stories, etc. Specifically, Exception No. 4 states that a second means of egress is not required from a lighting catwalk and that ladders are permitted as a means of escape.

In terms of compensating measures to achieve sufficiency of compliance, the Applicant indicated that the booth will only be used for two or three times a year when the school's drama department stages a theatrical performance. For the rest of the year the booth will not be in use and will not be accessible. In fact, he argued that there are two levels of security ensuring that the booth remains inaccessible except under supervision of a phys. ed. teacher. The first is that the hatch in the ceiling of the phys. ed. office is locked and remains so unless the booth is being used under appropriate supervision. Second, the phys. ed. office is locked at all times when not occupied by a phys. ed teacher. Access to the booth therefore is strictly controlled and monitored, he argued.

The Applicant also argued that the booth itself should be considered a safe space. It is sprinklered and will be tested to ensure audibility of the fire alarm. (If found lacking, an audible device will be installed in the booth, he noted.) The controls for the sound and lighting will utilize electronic and/or solid state controls. There will be no movie projection equipment or spot lights located in the booth. As well, he indicated that there are openable windows between the booth and the gymnasium. The Applicant also added that a door equipped with free egress hardware is also provided from the booth onto the roof of the building. The door will be monitored by the school's security system and will always be unlocked from inside and locked from outside.

The Applicant offered that specific procedures would be added to the fire safety plan to address access and use of booth. He also stated that he would be willing to add emergency lighting to the booth and the phys. ed. office below to ensure sufficient lighting for safe emergency evacuation.

If the use of the booth was prevented, this would force the school to rent temporary scaffolding and platforms, which would require access by ladders, and would not provide the control and safety offered by the existing, permanent booth. The Applicant argued that this would create a more dangerous situation than anything posed by the access ladder.

The installation of an access and egress stair is not possible due to space limitations, the Applicant noted. Moreover, constructing an exterior stair to access the booth is not feasible

because of security concerns. As a result, short of building the future second floor, the Applicant argued that the pull down ladder and lockable hatch are the best possible solutions given the situation.

6. **Respondent's Position**

The Respondent submitted that because the main function of the booth is to operate sound and lighting for theatrical performances in the gymnasium, it does not conform to the definition of a mechanical or service room as found in the OBC. Besides, the use of the equipment within the room will be by students and not service personnel, she added. As a result, the booth cannot be exempted from the requirements of Section 3.4 as permitted in Sentence 3.3.1.13.(2), and must therefore comply with the exit requirements of Section 3.4. She noted that the as constructed ladder and lockable hatch do not meet these requirements.

The Respondent explained that, in their view, the dispute originated because the construction drawings did not label the rooms and indicate their use. Instead, the rooms were numbered and the numbers were listed in a schedule to the drawings.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the second storey sound and lighting booth as constructed, with a pull down ladder and a lockable access hatch, does not provide sufficiency of compliance with Article 3.4.1.1. and Sentence 3.3.1.13.(1) of the Ontario Building Code at South Lincoln High School, 260 Canborough Road, Smithville, Ontario.

8. **Reasons**

1) The sound control room does not fall within the description of a service room.
2) Adequate compensating measures to achieve sufficiency of compliance were not demonstrated.

Dated at **Toronto** this **4th** day in the month of **November** in the year **1999** for application number **1999-66**.

BCC Ruling No. 99-65-721

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-65-721

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.4.3.5.(1) and Clause 3.4.3.1.(2)(b) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Andrew Howcroft, Director of Vocational Services, Welland District Association for Community Living, Welland, Ontario for the resolution of a dispute with Mr. Mike Mantesso, Chief Building Official, City of Welland, Ontario to determine whether the stair lift, with a width of 1,220 mm when in operation, proposed to be located in an existing exit stair that is 1,675 mm wide provides sufficiency of compliance with Sentence 3.4.3.5.(1) and Clause 3.4.3.1.(2)(b) of the Ontario Building Code at the Seaway Mall, 800 Niagara Street, Welland, Ontario.

APPLICANT
Mr. Andrew Howcroft, Director of Vocational Services
Welland District Association for Community Living
Welland, Ontario

RESPONDENT
Mr. Mike Mantesso
Chief Building Official
City of Welland

PANEL
Mr. Kenneth Peaker (Chair-Designate) Mr. Donald Pratt
Mr. James Lischkoff

PLACE
Toronto, Ontario

DATE OF HEARING
November 4, 1999

DATE OF RULING
November 4, 1999

APPEARANCES

Mr. Andrew Howcroft, Director of Vocational Services
Welland District Association for Community Living
Welland, Ontario
The Applicant

Mr. Mike Mantesso
Chief Building Official
City of Welland
The Respondent

RULING

1. **The Applicant**

   Mr. Andrew Howcroft, Director of Vocation Services, Welland District Association for Community Living, Welland, Ontario has applied for a building permit under the *Building Code Act, 1992*, to install a stair lift into an existing public stair path at the Seaway Mall, 800 Niagara Street, Welland, Ontario.

2. **Description of Construction**

   The Applicant proposes to install a chair lift on the main exit stairs to serve a non-profit agency that provides support and services to adults with a developmental disability known as the Welland District Association for Community Living (WDACL). The WDACL offers a vocational services employment program called "Community Options", which is located in a mezzanine suite in the Seaway Mall. Currently program staff have been meeting clients with limited mobility on the ground floor of the mall, however, this arrangement offers no privacy and does not afford access to the computer link up with the Human Resources Canada Office in the Community Options' office.

   The building is described as two storeys in building height, 54,554 m^2 in building area and is of noncombustible construction. The mall contains some Group A, Division 2 (assembly), Group D (office) business occupancies, but is mostly comprised of Group E (retail) mercantile occupancies. The building is equipped with a sprinkler system, fire alarm system and a standpipe and hose system.

The construction in dispute involves the placement of the proposed stair lift in the principal exit stair serving the subject mezzanine. Currently, the mezzanine, which consists of nine suites (connected by a public corridor), approximately 1,115 m^2, has an occupant load of 83, and is provided with three exit stairs. Only two of these are considered public stairs, since one stair is located entirely within a suite. Of the two public stairs, the proposed stair lift is to be located in the larger, open stairs that front directly onto the public corridor. The Community Options suite is located immediately adjacent to the subject exit stairs.

The Applicant proposes to fix the stair lift measuring 1,220 mm when in operation, into the 1,675 mm width of the existing stair. When not in operation, the stair lift would only reduce the exit stairs minimally because the single steel rail it runs on is set off to one side and the chair platform folds up when not in use. However, while the lift is in operation, it would reduce the stair width to 456 mm.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the stair lift, with a width of 1,220 mm when in operation, proposed to be located in an existing 1,675 mm wide exit stair provides sufficiency of compliance with Sentence 3.4.3.5.(1) and Clause 3.4.3.1.(2)(b) of the Ontario Building Code.

The former provision stipulates that except under certain circumstances (which are not applicable in this instance) no fixture is permitted to reduce the width of an exit. This requirement applies to all fixtures, etc. regardless of whether they are in operation or not.

The latter Clause is the relevant provision in this case that determines the required exit width. It mandates that the subject exit shall have a width of not less than 900 mm for stairs and ramps. If the occupant load of the mezzanine area was higher and if the stair configuration was different, then Article 3.4.3.4. would be applicable. And if Article 3.4.3.4. applied then the required stair width would probably be wider than the minimum of 900 mm. In this instance, however, Article 3.4.3.4. is not relevant.

4. **Provisions of the Ontario Building Code**

Sentence 3.4.3.5.(1) - Exit Width Reduction

(1) Except as permitted by Sentences (2) to (4) , no fixture, turnstile or construction shall project into or be fixed within the required width of an exit.

Clause 3.4.3.1.(2)(b) - Exit Width

(2) The required width of an exit shall not be less than;
(b) 900 mm (2ft 11 in) for stairs and ramps that serve not more than 3 storeys above grade or not more than one storey below grade.

5. **Applicant's Position**

The Applicant submitted that the installation of the stair lift will not reduce the performance level of the existing exit stairs or block the path of travel in an emergency situation. He noted that as part of the lift installation it would be equipped with a device that would connect it to the mall's fire alarm system. This would offer several safety advantages, he argued. First, in an emergency when the fire alarm had been triggered, the lift would automatically shut down (unless in operation) thereby remaining in its folded-up position at the bottom of the stair. Secondly, if in operation and the fire alarm actuated, then the lift would immediately head in the direction of egress, in this case downwards, to the ground floor and fold up. As well, the lift is also equipped with a release mechanism that if for some reason the lift had malfunctioned during an emergency it could be folded up and locked in position at any point in the stair.

The Applicant also argued that even if the lift was in operation when the fire alarm triggered it would not cause delays. As he noted, the maximum time for the lift to travel from the mezzanine to ground floor is approximately 70 seconds. He asserted that if an emergency were to occur with the lift in operation it would be unlikely that the lift would be at the very top of the stair. As a result, he thought that a median time of 35 seconds for descent of the lift was appropriate. Therefore, using 35 seconds as the operative figure, he argued that most of the occupants on the mezzanine level would not have reached the stair yet, or if in the stair, would not be as far down as the lift.

For these reasons, the Applicant concluded by stating that the stair lift, would not reduce the performance level of the main exit stairs and thereby cause a hazardous exiting situation.

Lastly, the Applicant appealed to the Commission to consider how useful the lift would be to the disabled clients of the Community Options program.

6. **Respondent's Position**

The Respondent submitted that although the lift would make the mezzanine barrier-free accessible, it would create a hazardous situation by narrowing the main exit stair. In particular, he noted that the proposal violated Sentence 3.4.3.5.(1) and Clause 3.4.3.1.(2)(b) by installing a fixture that reduced the required exit width. This, he claimed, would reduce the performance level of the building.

The Respondent also expressed concern about the existing mezzanine, which he claimed does not conform to Code. He noted that if it were constructed new it would need to contain a vertical fire separation between the mall and the corridor and a public corridor leading to two enclosed exit stairs. As it stands now, the existing mezzanine is not well served by exits. He indicated that the other public exit stair is difficult to locate, confusing to navigate, and is not equipped with handrails. He feared that the proposed stair lift would further worsen the situation.

In summation, the Respondent noted that the stair lift did not conform to the relevant provisions of the Ontario Building Code and as a result he indicated that he felt he did not have the authority to accept the proposal.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the stair lift with a width of 1,220 mm when in operation proposed to be located in an existing stair 1,675 mm wide does not provide sufficiency of compliance with Sentence 3.4.3.5.(1) and Clause 3.4.3.1.(2)(b) of the Ontario Building Code.

8. **Reasons**

(i) Adequate measures to achieve sufficiency of compliance were not provided.

Dated at **Toronto** this **4th** day in the month of **November** in the year **1999** for application number **1999-57**.

BCC Ruling No. 99-63-720

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-63-720

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.2.75. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Ian Campbell, Executive Vice-President, Lee Valley Tools Ltd., Ottawa, Ontario for the resolution of a dispute with Mr. Richard Hewitt, Chief Building Official, City of Ottawa, Ontario to determine whether the proposed addition, currently being constructed with fire separations having a 45 minute fire-resistance rating and that will result in a completed structure with a total building area of 5,198.9 m^2, provides sufficiency of compliance with Article 3.2.2.75. of the Ontario Building Code at Lee Valley Tools Ltd., 1090 Morrison Drive, Ottawa, Ontario.

APPLICANT
Mr. Ian Campbell, Executive Vice-President
Lee Valley Tools Ltd.
Ottawa, Ontario

RESPONDENT
Mr. Richard Hewitt
Chief Building Official
City of Ottawa

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. Robert De Berardis
Mr. Fred Barkhouse

PLACE
Toronto and Ottawa, Ontario

DATE OF HEARING
October 21, 1999

DATE OF RULING
October 21, 1999

APPEARANCES

Mr. Robert W. Hipwell, Engineer
Durell Construction Ltd.
Nepean, Ontario
Agent for the Applicant

Mr. Chris Freeman
Chief Building Code Plan Examination
City of Ottawa
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Ian Campbell, Executive Vice-President, Lee Valley Tools Ltd., Ottawa, Ontario has received a building permit under the *Building Code Act, 1992* to construct an addition to a warehouse at Lee Valley Tools Ltd., 1090 Morrison Drive, Ottawa, Ontario.

2. **Description of Construction**

   The Applicant is currently constructing a two storey (with mezzanine and an underground parking garage) addition to an existing Group F, Division 3 - (warehouse) low hazard industrial occupancy (plus a small office) that is used to store gardening tools and supplies. The building is described as being three storeys in building height, constructed of noncombustible construction and equipped with a sprinkler system and a fire alarm system. The extension to the building will be a Group F, Division 3 occupancy on the ground floor and a Group D (office) business use on the second floor. It has a building area of 1,719.3 m^2, and together with the existing building at 3,479.5 m^2, the completed structure will have a building area of 5,198.9 m^2.

The construction in dispute involves the level of structural fire protection to which the building is currently being constructed. At present, the Applicant is constructing the wall and floor assemblies of the addition with a 45 minute fire-resistance rating in accordance with Article 3.2.2.77. of the OBC. This classification, however, places a maximum building area of 4,800 m^2 on the structure if it is sprinklered and considered three storeys in building height. At a total building area of 5,198.9 m^2, the Applicant's building exceeds the permitted area for a three storey building under Article 3.2.2.77. by 398.9 m^2. Considering the projected size of the building when completed, the structural fire protection requirements of Article 3.2.2.75. may be more applicable. This provision allows a three storey sprinklered building to have a total building area of 14,400 m^2, but the building must be of noncombustible construction only and have floor and wall assemblies with a fire-resistance rating of 1 hour.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed addition, currently being constructed with fire separations having a 45 minute fire-resistance rating and that will result in a completed structure with a total building area of 5,198.9 m^2, provides sufficiency of compliance with Article 3.2.2.75. of the Ontario Building Code. This provision sets out the structural fire protection requirements for certain Group F, Division 3 buildings, including three storey sprinklered structures with a maximum building area of 14,400 m^2. Among the fundamental construction standards indicated, are requirements that the building must be of noncombustible construction and that the floor and wall assemblies must have a fire-resistance rating of 1 hour. The Applicant's building, however, has been constructed according to Article 3.2.2.77. which, in comparison to Article 3.2.2.75., allows relaxations on whether combustible material is used in construction and permits the fire-resistance rating to be 45 minutes.

While the Applicant's building is of noncombustible construction, the level of fire-resistance rating is only 45 minutes, however. In order to qualify for the construction requirements found in Article 3.2.2.77., the building must be limited to a building area of 4,800 m^2. The Applicant's building exceeds this maximum by 8.3 percent.

4. **Provisions of the Ontario Building Code**

Article 3.2.2.75 - Group F, Division 3, up to 6 Storeys, Sprinklered

(1) A building classified as Group F, Division 3 is permitted to conform to Sentence (2) provided:

a. except as permitted by Sentence 3.2.2.7.(1), the building is sprinklered;
b. it is not more than 6 storeys in building height, and;
c. it has a building area **that**:
    i. is not limited if the building is more than 1 storey in building height;
    ii. is not more than 21,600 m^2 (233,000 ft^2) if 2 storeys in building height;
    iii. is not more than 14,400 m^2 (155,000 ft^2) if 3 storeys in building height;
    iv. is not more than 10,800 m^2 (116,000 ft^2) if 4 storeys in building height;
    v. is not more than 8,640 m^2 (93,000 ft^2) if 5 storeys in building height, or;
    vi. is not more than 7,200 m^2 (77,500 ft^2) if 6 storeys in building height.

(2) Except as permitted by Article 3.2.2.16., the building referred to in Sentence (1) shall be of noncombustible construction, and;

d. floor assemblies shall be fire separations with a fire-resistance rating not less than 1 h;
e. mezzanines shall have a fire-resistance rating not less than 1 h, and;
f. loadbearing walls, columns and aches shall have a fire-resistance rating not less than that required for the supported assembly.

Article 3.2.2.77. - Group F, Division 3, up to 4 Storeys, Sprinklered

(1) A building classified as Group F, Division 3 is permitted to conform to Sentence (2) provided;

g. except as permitted by Sentence 3.2.2.7.(1), the building is sprinklered;
h. it is not more than 4 storeys in building height, and;
i. it has a building are not more than:
    i. 14,400 m^2 (155,000 ft^2) if 1 storey in building height;
    ii. 7,200 m^2 (77,500 ft^2) if 2 storeys in building height;
    iii. 4,800 m^2 (51,700 ft^2) if 3 storeys in building height, or;
    iv. 3,600 m^2 (38,800 ft^2) if 4 storeys in building height.

(2) The building referred to in Sentence (1) is permitted to be of combustible construction or noncombustible construction used singly or in combination, and;

j. floor assemblies shall be fire separations and, if of combustible construction, shall have a fire-resistance rating not less than 45 min;
k. mezzanines shall have, if of combustible construction, a fire-resistance rating not less than 45 min, and;
l. loadbearing walls, columns and arches supporting an assembly required to have a fire-resistance rating shall:
    i. have a fire-resistance rating not less than 45 min, or;
    ii. be of non-combustible construction.

5. **Applicant's Position**

The Applicant acknowledged at the outset that size of the currently constructed building addition exceeds the maximum permitted in Article 3.2.2.77. As a result, the structural fire protection standards of 45 minutes also found in that provision may not be applicable to their building under a literal reading of the OBC. Nevertheless, in his view, the finished building will meet the same level of life safety intended in the Building Code. He indicated that he would present arguments to demonstrate sufficiency of compliance with Article 3.2.2.75.

The Applicant argued that the intent of Subsection 3.2.2. of the OBC is to ensure adequate fire protection and safety for the building occupants. He stated that the subject building provides a sufficient level of safety for the occupants. To demonstrate this, he argued that it is sensible to consider, especially when dealing with occupants and specifically issues of occupant load, the overall floor area of the building as an important factor. He offered two discussions regarding the size of the building in terms of floor area and its level of structural fire protection.

The first discussion was based on an extrapolation of the maximum building area allowed for a 3 storey building under Article 3.2.2.77. The Applicant argued that if the 4,800 m^2 maximum footprint were multiplied by the number of permitted storeys for that area, the total floor area allowed in a building under the more relaxed standards found in Article 3.2.2.77. would be 14,400 m^2. In comparison, the total floor area of his building when the addition is completed, at 9,648.7 m^2, he noted will be far less. In other words, he felt that the design of his building, with the significantly smaller upper floors and the inherent increase of safety that this creates is not recognized by the OBC.

The Applicant also argued that the provision which directly applies to the construction of his building, Article 3.2.2.75., was onerous and is meant for considerably larger structures. At 14,400 m^2 of building area for a 3 storey building, this Article determines the construction

standards for buildings that have considerably more floor area per floor than he has in his entire building.

The second discussion offered by the Applicant was that if the areas of the existing building and new addition that currently meet the fire-resistance rating requirements of OBC 3.2.2.75., such as the small office space, the fire-rated stair enclosures and vehicle ramp, and the lobby were subtracted from the total building area, the net building area remaining is only 4,632 m^2. Well within the maximum building area imposed by Article 3.2.2.77., the Applicant indicated.

Lastly, the Applicant stated that at roughly eight percent over the allowable limit, the building is only marginally over the maximum. Moreover, the structure will have a low occupant load and it has exceptional fire fighting access since it faces three streets and is surrounded by large windows.

In conclusion, the Applicant indicated that in order to achieve sufficiency of compliance they would be willing to restrict the total gross floor area of the building to under 5,200 m^2.

6. **Respondent's Position**

The Respondent submitted that the building's area is too large to be considered under Article 3.2.2.77. As a result, he argued that Article 3.2.2.75. is the applicable construction criteria, and therefore the appropriate fire-resistance rating for the wall and floor assemblies of the subject building is one hour.

The Respondent did indicated that he was sympathetic to the arguments present by the Applicant, nevertheless he felt that the municipality did not have the authority to accept neither the eight percent additional building area nor the arguments based on floor area or subtracting the one hour rated areas from the rest of the ground floor as an equivalent to Article 3.2.2.75.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the addition, currently being built with fire separations having a 45 minutes fire-resistance rating and that will result in a completed structure with a total building area of 5,198.9 m^2, does not provide sufficiency of compliance with Article 3.2.2.75. of the Ontario Building Code at Lee Valley Tools Inc., 1090 Morrison Drive, Ottawa, Ontario.

8. **Reasons**

i. A building constructed to the requirements of Article 3.2.2.77. is limited to a building area of 4,800 m^2. The Applicant's proposed building will have a building area of 5,198.9 m^2.

Dated at **Toronto** this **21st** day in the month of **October** in the year **1999** for application number **1999-73**.

BCC Ruling No. 99-63-719

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-63-719

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.2.5.13.(1) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Eli Swirsky, Brant Plains Holdings Inc., Toronto, Ontario for the resolution of a dispute with Mr. Daniel Mousseau, Chief Building Official, City of Burlington, Ontario to determine whether the 1.4 m exterior canopy, which has not been provided with sprinkler protection for the area beneath the canopy, provides sufficiency of compliance with Sentence 3.2.5.13.(1) of the Ontario Building Code at the Brant Plains Plaza, 1053 Brant Street, Burlington, Ontario.

APPLICANT
Mr. Eli Swirsky
Brant Plains Holdings Inc.
Toronto, Ontario

RESPONDENT
Mr. Daniel Mousseau
Chief Building Official
City of Burlington

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. Robert De Berardis
Mr. Fred Barkhouse

PLACE
Toronto, Ontario

DATE OF HEARING
October 21, 1999

DATE OF RULING
October 21, 1999

APPEARANCES

Mr. Randal Brown, President & Consulting Engineer
Randal Brown & Associates Ltd.
Toronto, Ontario
Agent for the Applicant

Mr. Joe Wintar
Manager, Plans Examination
City of Burlington
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Eli Swirsky, Brant Plains Holdings Inc., Toronto, Ontario has received an order to comply under the *Building Code Act, 1992,* to remedy certain deficiencies at the Brant Plains Plaza, 1053 Brant Street, Burlington, Ontario.

2. **Description of Construction**

   The Applicant has recently constructed an addition to a Group E - (retail plaza) mercantile occupancy. The completed building is described as an L-shaped structure one storey in building height, having a building area of 2,445.17 m^2 and facing two streets for fire fighting access. The building is constructed of noncombustible construction and is equipped with a sprinkler system and a standpipe and hose system.

   The construction in dispute involves the 1.4 m canopy projecting from the exterior wall. Specifically at issue is the absence of sprinkler protection from the underside of the canopy

covering the area below. The canopy is constructed of metal framing members enclosed with sheathing consisting of exterior grade plywood which has been treated with a fire-retardant coating to provide a flame spread rating of 25 or less. The wall separating the canopy from the from the interior of the building provides a one hour fire separation, but from the interior only.

The building's sprinkler system was also not extended to the space within the canopy itself. This issue was resolved to the satisfaction of the municipality, however, through the application of the fire-retardant material. In their view, since this brought the flame spread rating to 25 or less, NFPA 13, in particular Clause 4-4.1.7.1., has been met. (This provision requires that all concealed spaces enclosed with any combustible construction must be sprinklered. Exceptions are provided to Clause 4-4.1.7.1. Of these, Exception No. 8 states that "when the exposed surfaces have a flame spread rating of 25 or less and the materials have been demonstrated not to propagate fire in the form in which they are installed in the space.")

The addition, including the canopy, was constructed under OBC Article 3.2.2.44., which permitted the structure to be of combustible construction if sprinklered.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is to determine whether the 1.4 m exterior canopy, which has not been provided with sprinkler protection in the area beneath the canopy, provides sufficiency of compliance with Sentence 3.2.5.13.(1) of the 1990 Ontario Building Code. This provision stipulated that a sprinkler system must meet the requirements of NFPA 13-91, "Installations of Sprinkler Systems". In turn NFPA 13, in particular Clause 4-4.1.7.6., specifically 4-4.1.7.6.1. and 4-4.1.7.6.2. respectively, require that sprinklers must be installed in canopies over areas where combustibles are stored and handled and that they must be installed in canopies that extend more than 1.2 m in width. The control over what is placed under a canopy is difficult. As well, the width of the Applicant's as constructed canopy is 1.4 m.

At issue therefore is whether limiting the storage and handling of combustible materials under the canopy is sufficient to compensate for the omission of sprinkler protection below the canopy.

4. **Provisions of the Ontario Building Code**

Sentence 3.2.5.13.(1) - Automatic Sprinkler Systems

(1) Except as provided in Sentences (2) and (3), where a sprinkler system is required, it shall be

designed, constructed, installed and tested in conformance with NFPA 13, "Installation of Sprinkler Systems". (See Appendix A.)

5. **Applicant's Position**

The Applicant acknowledged at the outset that a literal reading of the various applicable Clauses in NFPA 13, as referenced by OBC Sentence 3.2.5.13.(1), for a canopy over 1.2 m in width would require sprinklers to be installed. He indicated, however, that the owners and tenants of the plaza have provided letters stating that they would restrict the storage, handling and vending of combustible material under the canopy and that these have been submitted to the municipality.

By way of compensating measures to achieve sufficiency of compliance, the Applicant argued that there would be no combustible materials under the canopy to contribute to the fuel load. He argued that the letters already provided would bind the owners from doing this. He also offered to post a sign under the canopy to remind tenants, owners and patrons of the plaza regarding the prohibition of combustible materials. Lastly, the Applicant indicated that he was willing to fire stop the canopy between the individual tenancies.

The Applicant concluded by stating that, in his opinion, the above measures would adequately compensate for the lack of sprinkler protection below the disputed canopy.

6. **Respondent's Position**

The Respondent submitted that as per OBC Sentence 3.2.5.13.(1) sprinkler systems must be installed in accordance with and NFPA 13, in particular Clauses 4-4.1.7.6.1. and 4-4.1.7.6.2. These provisions, he argued, both require that sprinkler protection be provided below the as built 1.4 m wide combustible canopy.

The Respondent argued that sprinklering was required below the canopy for two reasons. The first is that although the Applicant has submitted letters agreeing not to display, store or sell combustible material under the canopy, experience has shown that such letters have proved ineffective in preventing such an occurrence. To support this argument, some enforcement files of the Fire Department were presented. He indicated that owners sometimes forget that they have agreed to such a limitation concerning the space underneath the canopy, whereas at other times accidental situations occur, such as a shipment or delivery which gets left under the canopy. Moreover, constant enforcement of the situation by the Fire Department is neither practical nor

possible. The situation is even harder to control in multi-tenant facilities where the turnover of tenants is much higher.

The Respondent also argued that if sprinklers are installed to protect the area under the canopy both parties benefit because owners and tenants are free to use that space as they want and the municipality does not have to waste precious enforcement time fighting a losing battle. For these reasons, his position was that to achieve conformance with NFPA 13 Clause 4-4.1.7.6.1., sprinklers are necessary, but they are also practical.

The second reason is that NFPA 13, Clause 4-4.1.7.6.2., requires sprinklering under combustible canopies wider than 1.2 m. As the Respondent noted, the disputed canopy is 1.4 m in width.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the 1.4 m exterior canopy, which has not been provided with sprinkler protection in the area below the canopy, does not provides sufficiency of compliance with Sentence 3.2.5.13.(1) of the 1990 Ontario Building Code at the Brant Plains Plaza, 1053 Brant Street, Burlington, Ontario.

8. **Reasons**

(1) Sufficiency of compliance was not provided and the canopy does not meet the Ontario Building Code.

Dated at **Toronto** this **21st** day in the month of **October** in the year **1999** for application number **1999-63**.

BCC Ruling No. 99-62-718

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-62-718

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 1.1.3.2., Sentences 3.2.3.12.(1), (2) and (3) and Sentences 3.4.4.1.(1) and 3.4.4.3.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Bruce Stanton, Director, Resort Services, Bayview-Wildwood Resort Ltd., Severn Bridge, Ontario for the resolution of a dispute with Mr. Jim Oakley, Acting Chief Building Official, Township of Severn, Ontario to determine whether the definition of "exit" as set out in Article 1.1.3.2. and Sentence 3.4.4.1.(1) of the Ontario Building Code require that the proposed exterior stairway serving a second storey exterior walkway be enclosed with a fire separation with an appropriate fire-resistance rating at Bayview Wildwood Resort, 1500 Port Stanton Parkway, R. R. 1, Severn Bridge, Ontario.

APPLICANT

Mr. Bruce Stanton, Director
Resort Services
Bayview-Wildwood Resort Ltd.
Severn Bridge, Ontario

RESPONDENT

Mr. Jim Oakley
Acting Chief Building Official
Township of Severn

PANEL

Mr. Kenneth Peaker (Chair-Designate)
Mr. Robert De Berardis
Mr. Fred Barkhouse

PLACE

Toronto, Ontario

DATE OF HEARING

October 21, 1999

DATE OF RULING

October 21, 1999

APPEARANCES

Mr. Rod Young, Architect
Roderick H. Young Architect
Orillia, Ontario
Agent for the Applicant

Mr. Jim Oakley
Acting Chief Building Official
Township of Severn
The Respondent

RULING

1. **The Applicant**

   Mr. Bruce Stanton, Director, Resort Services, Bayview-Wildwood Resort Ltd., Severn Bridge, Ontario has received a building permit under the Building Code Act, 1992 and is currently rebuilding a hotel structure, known as Lakeshore House, at the Bayview-Wildwood Resort Ltd., 1500 Port Stanton Parkway, R. R. 1, Severn Bridge, Ontario.

2. **Description of Constrution**

   The Applicant is currently reconstructing and renovating a hotel building located on a year-round resort property. The subject building, as the second largest on the site, is one of the principal buildings on the resort. The structure was gutted by fire in April of 1999. The reconstruction portion of the project will essentially create an upgraded version of the earlier structure that will include two floors of hotel suites (6 suites per floor) and a pool in the basement. The major

renovation work involved is the construction of an addition to the west of the existing building that will include a squash court, a conference area and a viewing mezzanine. (This portion of the project is not in dispute.) The complete building is therefore classified as having three major occupancies; Group A - Division 2 (conference area, etc.), Group A - Division 3 (swimming pool) and Group C (hotel).

The structure is described as facing one street, of combustible construction, two storeys in building height (plus basement) and 472.8 m^2 in building area. This includes the 269 m^2 of building area of the existing hotel occupancy and the 203.8 m^2 of building area to be added with the construction of the squash court and conference area. All three occupancies in the building will provide, as required, separations with a fire-resistance rating of 45 minutes and a one hour separation between occupancies. The building will also be equipped with a fire alarm system.

The construction in dispute involves the two exit stairs located at either end of the exterior corridors the serve the ground and second floor residential suites. Both exit stairs are covered with roofs and partial walls enclosing the ends and sides of the landing areas. The sides of the stairs themselves, however, are open. In particular, there are also no walls separating the stairs at their access point from the corridors.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the definition of "Exit" as set out in Article 1.1.3.2. and Sentence 3.4.4.1.(1) of the Ontario Building Code require that the proposed exterior stairway serving a second storey exterior walkway be enclosed with a fire separation with an appropriate fire-resistance rating. The definition of exit includes the words "protected from fire exposure from the building". The Respondent is reading this to mean that the exit, in particular the exit stairs, must by definition be protected. The Applicant disagrees with this view.

The second provision, Sentence 3.4.4.1.(1), stipulates, except under certain conditions, that an exit be fire separated to a certain level of fire-resistance rating from the remainder of the building. While the other exceptions listed in this Sentence are not relevant to the dispute at hand, Sentence 3.4.4.3.(1) is germane. This Sentence states that the fire separation requirements for exits found in Sentence 3.4.4.1.(1) and in Sentences (1) and (3) of Article 3.2.3.12., "Protection of Exit Facilities", are not applicable to an exterior exit passageway if at least fifty percent of the exterior side is open and an exit stair is located at either end of the passageway. The subject building meets both of these criteria.

Sentence (2) of Article 3.2.3.13., however, is relevant. This provision requires that if an unenclosed stair may be exposed to fire from openings in the exterior wall of the building it serves, the relevant openings, as measured within certain distances horizontally, above or below, shall be protected in accordance with Sentence (4) of that Article. The proximate openings in the structure at hand have all been protected. Significantly, whereas Sentence 3.2.3.13.(2) determines when (and in Sentence (4) how) to protect unenclosed exit stairs from openings in the building, it does not stipulate that the exit be enclosed.

At issue therefore, is whether the Building Code requires the subject building to provide a fire separation with adequate fire-resistance rating between the remainder of the building and the unenclosed exterior stairs.

4. **Provision of the Building Code**

Article 1.1.3.2. Defined Terms

Exit means that part of a means of egress, including doorways, that leads from the floor area it serves, to a separate building, an open public thoroughfare, or an exterior open space protected from fire exposure from the building and having access to an open public thoroughfare. (See Appendix A.)

Article 3.2.3.12. Protection of Exit Facilities

1. Except as required by Sentence (3) and as permitted by Sentence 3.4.4.3.(1), if the plane of an exterior wall of an exit enclosure forms an angle less than 135^0 with the plane of an exterior wall of the building it serves, and an opening in the exterior wall of the exit enclosure could be exposed to fire from an opening in the exterior wall of the building, the opening in either the exterior wall of the exit or the exterior wall of the building shall be protected in conformance with the requirements of Sentence (4) where the opening in the exterior wall of the building is within 3 m (9 ft 10 in) horizontally and;
    a. less than 10 m (32 ft 10 in) below an opening in the exterior wall of the exit; or
    b. less than 2 m (6 ft 7 in) above an opening in the exterior wall of the exit.

    > (See A-3.2.3.13.(1) in Appendix A.)

2. If an unenclosed exterior exit stair or ramp could be exposed to fire from an opening in the exterior wall of the building it serves, the opening in the exterior wall of the building

shall be protected in conformance with the requirements of Sentence (4) where the opening in the exterior wall of the building is within 3 m (9 ft 10 in) horizontally and;

a. less than 10 m (32 ft 10 in) below the exit stair or ramp; or
b. less than 5 m (16 ft 5 in) above the exit stair or ramp.

3. Except as permitted by Sentence 3.4.4.3.(1), if an exterior exit door in one fire compartment is within 3 m (9 ft 10 in) horizontally of an opening in another fire compartment and the exterior walls of these fire compartments intersect at an exterior angle of less than 135^0, the opening shall be protected in conformance with therequirements of Sentence (4).

Article 3.4.4.1. Fire-Resistance Rating of Exit Separations

4. Except as permitted by Sentences (2), (4), 3.3.5.4.(3), 3.4.4.2.(2) and 3.4.4.3.(1), every exit shall be separated from the remainder of the building by a fire separation having a fire-resistance rating not less than that required by Subsection 3.2.2., but not less than 45 min, for:

a. the floor assembly above the storey; or
b. the floor assembly below the storey, if there is no floor assembly above.

Article 3.4.4.3. Exterior Passageway Exceptions

5. The requirements of Sentences 3.4.4.1.(1) and 3.2.3.12.(1) and (3) do not apply to an exterior exit passageway provided:

a. not less than 50% of the exterior side is open to the outdoors; and
b. an exit stair is provided at each end of the passageway.

5. **Applicant's Position**

The Agent for the Applicant submitted that the OBC does not require that the exterior stairs be enclosed. He pointed out that if the conditions of Sentence 3.4.4.3.(1) are met, then the fire separation requirements of Sentences 3.2.3.12.(1) and (3) and 3.4.4.1.(1) can be waived. He noted that both of the conditions - having fifty percent of the exterior side open to the outside and having exit stairs at each end of the passageway - have clearly been met in the design of the subject building.

The Agent also rejected the Respondent's argument that exits by definition must be fire separated from the rest of the building. In his interpretation, the definition of exit in Article 1.1.3.2. indicates that where it says "protected from fire exposure from the building" actually relates only

to the words "an exterior open space" immediately proceeding those and is not a condition that pertains to exits in general as they are defined. To support this assertion he pointed out that Clause (1)(d) of Article 3.4.1.4. specifically lists "an exterior stairway" as a type of exit. He argued that it would inconsistent if the Building Code required separation and enclosure of exits (including stairs) in Article 1.1.3.2. and then permitted exterior stairs to be considered as an exit. As a result, he stated that Code does require a fire separation in this situation.

The Agent also argued that the building provided a high level of safety without the disputed separation. He noted that the building meets Sentence 3.2.3.13.(2) which requires that openings in the building face in the proximity of the exit stairs be protected. There are no windows in the exposing building face, which will have a 45 minute rating , and the doors will provide the required 20 minute rating, he added. Another factor making the building safe, the Agent indicated, is that each suite is provided with its own balcony on the side of the hotel opposite to the exterior corridors. As well, the new fire alarm system goes beyond minimum Code requirements and will be an improvement on the previous one.

For the above reasons, the Agent concluded that the exterior unenclosed exit stairs are not required to be fire separated from the remainder of the building and the stairs - as designed - will provide the level of safety intended in the OBC.

6. **Respondent's Position**

The Respondent submitted that the exposed exterior wooden stairs must be compartmentalized in order to conform to the requirements of the OBC. He argued that according to its definition in Article 1.1.3.2 exits are required to "protected from fire exposure from the building" they serve. This level of safety was warranted, he noted, because exits are a fundamental life safety feature of any building. However, in the subject structure the disputed fire separation is especially important as the building is constructed of combustible materials, the volunteer fire department cannot respond as quickly as in urban areas and the hotel has recently experienced a catastrophic fire.

The Respondent also expressed concern about various other aspects of the facility's safety. For example, he noted that there is a CN rail line that, if occupied by a train during an emergency, could potentially cut off access to the resort. In addition, being a remote site the water supply for fire fighting purposes is limited. Because of this, the Respondent indicated that he would prefer to see a dry pump system installed that could draw water from the lake.

While the Respondent acknowledged that his interpretation of this issue differed from that of the Applicant and the Technical Background Information memo written for this hearing by the Ministry's Housing Development and Buildings Branch, he asserted that the training he has received throughout his career taught him that all exit stairs, even those serving exterior corridors, had to be fire separated from rest of the building. He indicated that the present hearing afforded him the opportunity to seek clarification on this matter.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that neither the definition of "Exit" as set out in Article 1.1.3.2. nor Sentence 3.4.4.1.(1) require that the proposed exterior stairway serving ground and second floor exterior walkways be enclosed with a fire separation at the Bayview-Wildwood Resort, Severn Bridge, Ontario.

8. **Reasons:**
   a. With compliance with all applicable other Code requirements in Sections 3.3 and 3.4, the as-constructed unenclosed stairs will provide adequate exiting for the subject building.

Dated at Toronto, this 21st day, in the month of October, in the year 1999, for application number 1999-61.

BCC Ruling No. 99-61-717

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-61-717

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.1.8.16. of Regulation 61, as amended by O. Reg. 400/91, 158/93,383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Susan Croswell, Associate, Griffiths Rankin Cook Architects, Ottawa, Ontario, for the resolution of a dispute with Ms. Terry Dalkowski, Chief Building Official, City of Nepean, Ontario, to determine whether the proposed four wired glass panels, none of which exceed 0.8 m^2 ,but which have an aggregate area of 1.9 m^2 , as part of a wall assembly providing a 3/4 hour fire-resistance rating complies with Article 3.1.8.16. of the Ontario Building Code at John McCrae Secondary School, Walter Baker Centre, Nepean, Ontario.

APPLICANT

Ms. Susan Corswell, Associate
Griffiths Rankin Cook Architects
Ottawa, Ontario

RESPONDENT

Ms. Terry Dalkowski
Chief Building Official
City of Nepean

PANEL

Mr. James Lischkoff (Chair-Designate)
Mr. Robert De Berardis
Mr. Stewart Smith

PLACE

Toronto, Ontario

DATE OF HEARING

September 23rd, 1999

DATE OF RULING

September 23rd, 1999

APPEARANCES

Mr. Tom Dunfield, Principal
Morrison Hershfield Limited
Ottawa, Ontario
Agent for the Applicant

Mr. Peter Black, Building Official
City of Nepean
Designate for the Respondent

RULING

1. The Applicant

Ms. Susan Croswell, Associate, Griffiths Rankin Cook Architect, Ottawa, Ontario, has received a building permit under *the Building Code Act, 1992* to construct an addition onto the John McCrae Secondary School, Walter Baker Centre, Nepean, Ontario.

2. Description of Construction

The Applicant proposes to construct a new wing to the south of an existing Group A, Division 2 (secondary school and sports facility) occupancy. The completed building will be three storeys in building height, 4,675 m^2 (in building area) and will be of noncombustible construction. The structure will be equipped with a sprinkler system, a standpipe and hose system and a fire alarm system. The three storey addition is to be provided with 3 exit stairs.

The construction in dispute involves the amount of glazed area in the interior enclosure wall assemblies that separate exit stairs number two and three from the corridors they serve. Specifically, the stair enclosures in dispute are located at the ground, second and third floors for exit stair number two and at

the second and third floors for exit stair number three. All of the proposed stair enclosures are to be constructed of wired glass supported by a hollow metal frame providing a 3/4 hour fire-resistance rating.

In terms of their design, the exit enclosures on the ground and second floor of stair number two and on the second floor for stair number three have four fixed windows of differing sizes (the largest of which measures 600 mm by 800 mm for an area of 0.72 m^2) , for a total aggregate glazed area of approximately 1.9 m^2 . For the wider third floor enclosures at stairs number two and three, the window pattern at the other locations is repeated separated by a 600 mm drywall partition. All stair enclosures are provided with two access to exit doors each.

A temporary solution of 18 mm thick drywall has been installed over the glazed area in excess of 0.8 m^2 .

The amount of glazed area in the access to exit doors serving the subject exit stairs is not in dispute.

3. Dispute

The issue at dispute between the Applicant and Respondent is to determine whether the proposed exit stair enclosures containing a set of four wired glass panels (and in some cases two sets), none of which exceed 0.8 m^2 , but which have an aggregate area of 1.9 m^2 , as part of a wall assembly providing a 3/4 hour fire-resistance rating complies with Article 3.1.8.16. of the 1990 Ontario Building Code. Among other things, this provision sets out in Table 3.1.8.B. the maximum glazing allowed in an area which is not in a door. As indicated in the Table, the maximum aggregate area of wired glass permitted which is not in a door is 0.8 m^2 . The Applicant's stair enclosures exceed this amount by at least 1.1 m^2 .

4. Provisions of the Ontario Building Code

Article 3.1.8.16. Area Limits for Wired Glass or Glass Block

Except as provided by Article 3.1.8.17., the maximum area of wired glass in a door and the maximum area of wired glass panels or glass block not in a door shall conform to Table 3.1.18.B. when used in the locations shown in the Table.

5. Applicant's Position

The Applicant submitted that proposed stair enclosures, as designed, complies with the intent of Article 3.1.8.16. of the OBC. As he argued, the intent of this provision is to minimize radiant heat caused by the ignition of combustible materials located near the enclosure walls t hat may pass through the glass

panels and expose occupants to excessive temperatures during emergency exiting. The glazed area restriction in the Code, he noted, does not apply to the access to exit doors in the subject enclosures because the placement of combustible materials, or any type of materials for that matter, would disrupt the usage of the door.

The same rationale of permitting the waiving of standards for the doors, however, can be applied back to the rest of the enclosure wall assembly, he argued. This is due to the fact that there is no occupancy in the adjacent corridors, and thus no storage will be permitted next to the enclosure walls. Regardless, no materials would be placed there because, as the Applicant stated, the point of the increased glazed area is to enhance natural lighting and security in the stairs.

The Applicant compared the proposed design to other situations envisage in the Building Code. In Article 3.4.4.2., "Exit Through Lobbies", for example, an exit is allowed to lead through a lobby with an unrated separation provided the lobby and adjacent areas are sprinklered. As well, Article 3.2.3.13., "Wall Exposed to Another Wall", waives the requirement for a limiting distance between two unprotected openings in two separate fire compartments if both compartments are sprinklered. In both these examples he argued that the effect of the sprinklers would be to control the fire and would therefore control the fire exposure. In the case in the first example, this control of the fire exposure would specifically allow exiting to occur unimpeded. It is also an example of where an active system - the sprinklers - is allowed to replace a passive system, i.e., a fire separation. Drawing a parallel between those examples and the subject building, the Applicant argued that since this is a fully sprinklered facility, the fire suppression that would be provided would act to minimize radiant heat from a fire thereby allowing safe passage of occupants in the exit stairs.

To support this assertion, the Applicant presented the results of a fire modelling analysis done on this project conducted by a fire safety research scientist. The fire modelling analysis looked at two scenarios, the worst of which placed a fire in a room with an open door directly opposite from the third floor enclosure which has an aggregate glazed area of 3.8 m^2 . The findings of the analysis demonstrated that the sprinkler system would actuate and control the fire before dangerous levels of radiant heat exposure was experienced in the exit stair.

In conclusion, the Applicant stated that the design of the stair enclosure meets the intent of the Code and that no radiant heat problem would occur. As a result of the building being sprinklered no aggregate limit of wired glass should be imposed on the stair enclosures.

6. Respondent's Position

The Respondent submitted that the exit stair enclosures that have 1.9 and 3.8 m^2 of glazed area contravene the prescriptive requirements of Table 3.1.8.B. of the 1990 OBC. A relaxation of the 0.8 m^2 maximum glazed area requirement is only possible by providing enhanced physical separations through the introduction of vestibules or rated corridors, as per Article 3.1.8.17. The Respondent noted, however, that the Applicant has not chosen to exercise this option.

The Respondent rejected the argument that the fact the building is of noncombustible construction and is sprinklered that the proposed glazed area should be permitted. The Code does not allow a trade off between sprinklers and the amount of glazed area allowed, he noted. The exiting of occupants is the highest priority of building fire safety, he argued, and while the noncombustible construction and the sprinkler system assist in maintaining the integrity of the building in a fire, it is only the exit route that provides for a way out in an emergency. The integrity of the exit itself should not be reduced, he stated.

7. Commission Ruling

It is the decision of the Building Code Commission that the requirements of Article 3.1.8.16. of the Ontario Building Code have not been satisfied.

8. Reasons

The Applicant did not submit any compensating measures or alternative proposals to achieve sufficiency of compliance.

Dated at Toronto this 23rd day in the month of September in the year **1999** for application number **1999-54**.

BCC Ruling No. 99-60-716

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-60-716

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.2.9.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. David Malcolm, Purchasing Manager, Taylor Steel Inc., Stoney Creek, Ontario, for the resolution of a dispute with Mr. Henry Dekker, Chief Building Official, City of Stoney Creek, Ontario, to determine whether the proposed expanded steel manufacturing facility with a total building area of 22,135 m^2 (238,267 ft^2), that is not equipped with a standpipe and hose system, provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code at the Taylor Steel plant, 395 Green Road, Stoney Creek, Ontario.

APPLICANT

Mr. David Malcolm, Purchasing Manager
Talyor Steel Inc.
Stoney Creek, Ontario

RESPONDENT

Mr. Henry Dekker
Chief Building Official
City of Stoney Creek

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Robert De Berardis

PLACE

Toronto, Ontario

DATE OF HEARING

April 22, 1999

DATE OF RULING

April 22, 1999

APPEARANCES

Mr. David Malcolm
Taylor Steel Inc.
Stoney Creek, Ontario
The Applicant

Mr. Collin Potter
Plan Examiner
City of Stoney Creek
For the Respondent

RULING

1. **The Applicant**

   Mr. David Malcolm, Purchasing Manager, received a building permit under the *Building Code Act, 1992*, and is currently constructing an addition onto an existing steel processing plant at the Taylor Steel plant, 395 Green Road, Stoney Creek, Ontario. As well, the Applicant has recently applied for another building permit to construct a further addition to the subject building.

2. **Description of Construction**

   The Applicant is currently constructing phase one of a two stage expansion plan to their existing one storey steel processing plant with a building area of 6,132 m^2. Phase one consists of a one storey, 7,472 m^2 L-shaped addition that will be attached to the south and east portions of the existing building. Phase two, which is presently in plans review, proposes to construct a second one storey, 8,531 m^2 addition that is to run almost the complete length of the southern exposing building face (which is currently being built in phase one).

The total building area when both phase one and two are completed would be 22,135 m^2. The entire building, including the existing, under construction and proposed portions is of noncombustible construction. It is equipped with a fire alarm system and a standpipe and hose system, but the hose system is limited to the original building only. There is no sprinkler system in the building. The structure is classified as a Group F, Division 3 - Low Hazard Industrial occupancy.

The plant is to be used in the processing of cold, rolled steel. It will also be used for the storage of materials produced in the plant and elsewhere.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed expanded steel processing facility, with a total area of 22,135 m^2, of which 16,003 m^2 of building area currently being built and proposed to be built is not to be equipped with a standpipe and hose system, provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code. This provision requires that a building with an F3 occupancy exceeding 3,000 m^2 must be equipped with a standpipe and hose system. The proposed expansions to the steel plant will make the building far larger than the maximum allowed in Article 3.2.9.1. The Applicant has, however, proposed sufficiency of compliance with this OBC provision by offering an enhanced fire alarm system.

4. **Provisions of the Ontario Building Code**

Article 3.2.9.1. - Where Required

(1) Except as provided in Sentences (4) to (7), a standpipe system shall be installed in every building that;

(a) is more than 3 storeys in building height;
(b) is more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey, or;
(c) is not more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey but has a building area exceeding the area shown in Table 3.2.9.1. for the applicable building height if the building is not sprinklered.

(2) A standpipe system shall be installed in every basement of a building that requires a standpipe system above grade.

(3) A standpipe system shall be installed in every basement of a building that regulated by Sentence 3.2.2.15.(2).

(4) A standpipe system is not required to be installed in the lowest storey in a building if this storey is a service room which has an area not more than 50 m^2 (538 ft^2).

(5) A standpipe system is not required to be installed in a roof-top enclosure if this enclosure has an area not more than 50 m^2 (538 ft^2).

(6) A standpipe system is not required to be installed in a storage garage conforming to Article 3.2.2.83 provided the building is not more than 15 m (49 ft 3 in) high.

(7) A standpipe system is not required to be installed in a dwelling unit which;

(a) extends not more than 3 storeys above adjacent ground level;
(b) is completely cut off from the remainder of the building so that there is no access to the remainder of the building, and;
(c) has direct access to its interior by means of an exterior doorway located not more than 1 500 mm (4 ft 11 in) above or below adjacent finished ground level.

5. **Applicant's Position**

The Applicant submitted that a standpipe and hose system, although required, may not be appropriate for the proposed building because it is, and will be, constructed entirely of noncombustible materials. He also indicated that the materials produced and stored in the facility are not combustible. The handling and shearing equipment, which is operated by electric motors and a propane-powered tow motor is combustible but this would only cause a very localized fire. As the Applicant noted, the risk of fire is low.

The Applicant argued, in fact, that the steel products and manufacturing equipment in the plant would be more severely damaged by water used for fire fighting purposes than by the heat created during a small fire. He was also concerned about accidental breakage of water pipes due to pipe rupture, etc. The Applicant stated that any uncontrolled introduction of water into the plant's manufacturing and storage areas would be catastrophic and would render the steel orthless.

In terms of providing sufficiency of compliance for the proposed omission of a standpipe and hose system, the Applicant is proposing three compensating measures. The first measure the Applicant intends to provide is a fire suppression system provided by a series of ABC type portable extinguishers located throughout the plant. The staff at the plant would be trained to check, service and use the fire extinguishers, as well as perform other fire procedures. Also, the plant is operated on a 24 hour basis and the Applicant indicated that they have never had a previous fire.

The second compensating measure that the Applicant is providing an access route around the entire plant for fire fighting purposes. He also noted that there is an adequate water supply to the site since there are three fire hydrants on the property, one located on the Applicant's property and two on the municipal street facing the plant. As well, there is a local fire hall only 5 minutes away.

The third measure proposed by the Applicant is a fire alarm system that includes heat detection devices, bells, pull stations and a system monitoring panel that is interconnected to the security system.

The Applicant asserted that their alternative fire safety measures provide sufficiency of compliance with OBC Article 3.2.9.1. In his view, these three compensating measures, the extinguishers, the fire fighting access routes, and the fire alarm system, compensate for not providing a standpipe and hose system.

6. **Respondent's Position**

The Respondent submitted that as an F3 occupancy with a building area of 22,135 m^2, the proposed structure is required to have a standpipe and hose system in accordance with Article 3.2.9.1. of the OBC. He noted that the two existing hose racks do provide some protection, but their coverage is poor considering the vastly expanded size of the plant. The Respondent indicated that he was concerned about future owners of the building and being able to require a standpipe system at a later date. He stated that registering the building's current use on title would be quite useful. This would allow the municipal building department an opportunity to review the building and assess whether a standpipe and hose system should be required of a potential future owner. Lastly, he noted that other steel plants in the area have sprinklered their entire building.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the expanded steel manufacturing facility with a total area of 22,135 m^2 not equipped with a standpipe and hose system provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code provided:

(i) The use of the building is registered on title to ensure that the current use continues.
(ii) The fire access route is provided on the south face complying with Article 3.2.5.5.
(iii) A hydrant(s) is provided on the south access route in conformance with Article 3.2.5.7.

8. **Reasons**

(i) The primary building use is for storage of cold rolled steel with a low fire load.
(ii) A monitored fire alarm system is provided.
(iii) All construction is non combustible.
(iv) Access and water supply for fire fighting is provided via access routes and additional hydrants.

Dated at Toronto this 22nd day in the month of April in the year 1999 for application number **1999-18**.

BCC Ruling No. 99-60-716

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-60-716

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 1.1.3.2., Sentence 3.2.1.1.(2), Article 3.2.3.4., Sentence 3.2.8.1.(1) and Sentences 3.2.8.2.(1), (5) and (6) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Gary Hauck, Estimating Manager, Ball Construction Inc., Kitchener, Ontario for the resolution of a dispute with Mr. Bruce Poole, Chief Building Official, City of Guelph, to determine whether the proposed new arena built adjoining to the existing retail mall as one, albeit expanded, building constructed on two properties complies with Article 3.2.3.4. of the Ontario Building Code (OBC), and if so, whether the proposed design, without the provision of a fire separation with a two hour fire resistance rating complete with closures or special interconnected floor space fire safety measures, provides sufficiency of compliance with Sentence 3.2.8.1.(1) of the OBC at the Guelph Sports and Entertainment Centre, Guelph, Ontario.

APPLICANT

Mr. Gary Hauck, Estimating Manager
Ball Construction Inc.
Kitchener, Ontario

RESPONDENT

Mr. Bruce Poole
Chief Building Official
City of Guelph

PANEL

Mr. James Lischkoff (Chair-Designate)
Mr. Stewart Smith
Mr. Robert De Berardis

PLACE

Toronto, Ontario

DATE OF HEARING

September 23, 1999

DATE OF RULING

September 23, 1999

APPEARANCES

Mr. Allan Larden, Principal
Larden Muniak Consulting Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Bruce Poole
Chief Building Official
City of Guelph
The Respondent

RULING

1. **The Applicant**

   Mr. Gary Hauck, Estimating Manager, Ball Construction Inc., Kitchener, Ontario has applied for a building permit under the to renovate an existing retail mall by constructing a new sports arena addition and multi-purpose entertainment facility to become known as the Guelph Sports and Entertainment Centre, Guelph, Ontario.

2. **Description of Construction**

   The Applicant is proposing to construct a new Group A, Division 3 - (5,000 seat sports arena) assembly occupancy to the north of, and adjoining to, an existing Group E - mercantile and Group A, Division 2 - assembly (retail mall) facility that was built in the early 1980s. The combined total of the 6,500 m^2 arena addition and the 8,600 m^2 of the existing mall will create an aggregate building area of approximately15,100 m^2. The completed structure will be constructed

of noncombustible construction and will be equipped with a sprinkler system, a two-stage fire alarm system and a standpipe and hose system.

The existing mall is considered a two storey structure containing retail and fast food outlets. The arena is to have three levels. The lowest level will contain the ice surface and, beneath the stands, dressing and training rooms, offices, and storage and mechanical areas. This level will also have a public corridor containing a sports hall of fame that will wrap around the west end of the arena. The middle level of the stadium will be called the main, or concourse, level. This level is to contain an oval-shaped concourse area around the entire perimeter of the arena from which the majority of the seats are to be accessed. Several concession stands, a bar and washrooms will be located off the concourse area. The third level, described as the VIP balcony, is to contain 31 private boxes. The total occupant load for the arena will be approximately 6,000.

The new arena, to house the Ontario Hockey League's Guelph Storm, is to be built on the site of a recently demolished Eaton's Department Store. Currently, the City of Guelph owns the land upon which the existing mall sits and the proposed stadium is to occupy. It is the City's intention, however, to sever the land into two parcels along a discontinuous plane between the mall and the arena in order to allow for separate ownership of the two facilities. The future owners of the arena and mall structures will lease the land from the City.

The arena is to be constructed as an addition to the existing mall, and not as a separate building. There will be no continuous demising wall built on the property line at the various storeys where the structures join. In fact, in terms of its architecture and operation, the arena and mall are to be as integrated as possible. At the interface between the two structures on the lowest level, where the ground floor of the mall is to intersect with the ice level of the arena, the main corridor of the mall will connect to a curved public corridor used as a sports hall of fame. The curved corridor is to be separated from the remainder of the stadium by a 2 hour fire separation and will be used as a principle means of egress from the north end of the lower mall level.

A food court and kitchen are to be located where the two buildings join at the upper level, i.e., where the second floor of the mall will connect with the concourse level of the arena. The food court is to be accessible to arena patrons during an event and will be available to shoppers in the mall during business hours. At the north side of the food court area, between the food court and the arena, a wall will partially separate these spaces. This wall will be comprised mostly of concrete block with a 2 hour rating, as well as sliding tempered glass panels located directly beside the existing stair at the north side of the mall. The wall will also contain several sets of

doors, including four doors and a solid-panel folding security grill at the east side of the arena and a pair of swing doors and a set of tempered sliding glass panels at the west side. The sliding glass panels, with an approximate area of 8 m^2, are to be manually operated and are to be used as a security barrier to prevent access to the arena when not in use. The panels are to be slid open during an event. Considering the unrated glazed area and the wall penetrations, especially the sliding glass panels, the interface of the structures at this level is not considered as providing a continuous 2 hour rated fire separation.

There is no direct connection between the mall and the VIP balcony found at the 3rd level of the stadium.

The construction in dispute relates to the fact that no firewall is being proposed on the property line that separates the mall and the arena. Further, the Applicant is not intending to construct the arena addition with either a continuous 2 hour vertical fire separation where the mall and the arena intersect including the appropriate closures, nor in accordance with the interconnected floor space requirements as found in Articles 3.2.8.3. to 3.2.8.11. These additional fire safety requirements may be necessary because of the building height of the mall and arena addition, which could be interpreted as being 3 storeys. Such an interpretation is due to the fact that the building, when viewed in section, will have three distinct levels. The VIP balcony at the top level of the arena must be counted as a storey because it exceeds the Building Code's requirements for a balcony. Moreover, part of the area under the seats at the arena's lowest level - usually not considered a storey if incidental to the major occupancy of the building according to Sentence 3.2.1.1.(2) - contains a sports hall of fame, thereby potentially rendering that level as a storey. Thus, if a three storey building, certain additional fire safety measures may be required since the exceptions in terms of providing the interconnected floor space requirements, as per Clause 3.2.8.2.(1)(b) and Sentences 3.2.8.2.(5) and (6), are limited to a building having only a two storey interconnected floor space.

The mall on its own, on the other hand, is described as a two storey structure with an interconnected floor space. However, no additional OBC interconnected floor space fire safety measures were provided in the mall because, as per Sentence 3.2.8.2.(6), these measures were not required in a building having only a two storey interconnected floor space.

3. **Dispute**

There are two issues at dispute between the Applicant and Respondent. The first is whether the proposed new arena built adjoining to the existing retail mall as one, albeit expanded, building

constructed on two properties complies with Articles 1.1.3.2. and 3.2.3.4. of the Ontario Building Code. The second is whether the building design with respect to the arena addition and the interface between the mall and arena, proposed without the provision of either a continuous 2 hour rated separation with closures to terminate the floor areas, or interconnected floor space fire safety measures, provides sufficiency of compliance with Sentence 3.2.8.1.(1) of the OBC.

The first dispute centres on the interpretation of Article 3.2.3.4., which states that "a party wall shall be constructed as a firewall." As described above, the proposed completed structure will straddle two properties and will not be separated by a firewall. At issue, therefore, is whether Article 3.2.3.4. requires a building straddling a property line to be separated by a firewall on that line.

The second dispute is whether the proposed design of the arena and the interface between the mall and the arena offered in lieu of either a 2 hour fire separation with closures between the structures or interconnected floor space fire safety measures achieves the same level of safety intended in the Sentence 3.2.8.1.(1). If the arena is considered a three storey building, then the exceptions to the interconnected floor space requirements found under Article 3.2.8.2. in general, and Sentence 3.2.8.2.(1), (2) and (6) in particular, no longer apply. This would mean that either the floors must terminate at vertical fire separations having a fire rating equal to the separation required in the floors and the openings must be installed with appropriate protective closures, or interconnected floor space fire safety measures must be provided. At issue then is whether the arena should be considered a 3 storey building and whether its design compensates for the lack of 2 hour vertical fire separations with closures, or interconnected floor space fire safety measures.

4. **Provisions of the Ontario Building Code**

Article 1.1.3.2.- Defined Terms

Firewall means a type of fire separation of noncombustible construction which subdivides a building or separates adjoining buildings to resist the spread of fire and which has a fire-resistance rating as prescribed in this Code and has structural stability to remain intact under fire conditions for the required fire-rated time.

Party wall means a wall jointly owned and jointly used by 2 parties under easement agreement or by right in law, and erected at or upon a line separating 2 parcels of land each of which is, or is capable of being, a separate real-estate entity.

Sentence 3.2.1.1.(2) - Exceptions in Determining Building Height

(2) Space under tiers of seats in a building of the arena type shall not be considered as adding to the building height provided the space is used only for dressing rooms, concession stands and similar purposed incidental to the major occupancy of the building.

Article 3.2.3.4. - Party Wall

(1) A party wall shall be constructed as a firewall.

Sentence 3.2.8.1. Application

(1) Except as permitted by Article 3.2.8.2. and Sentence 3.3.4.2.(3), the portions of a floor area or a mezzanine that do not determine at an exterior wall, a firewall or a vertical shaft shall:

(a) terminate at a vertical fire separation having a fire-resistance rating not less than that required for the floor assembly and extending from the floor assembly to the underside of the floor or roof assembly above, or;
(b) be protected in conformance with the requirements of Articles 3.2.8.3. to 3.2.8.11.

Sentences 3.2.8.2.(1),(5) and (6) Exceptions to Special Protection

(1) A mezzanine need not terminate at a vertical fire separation nor be protected in conformance with the requirements of Articles 3.2.8.3. to 3.2.8.11. provided the mezzanine (a) serves a Group A, Division 1 major occupancy,
(b) serves a Group A, Division 3 major occupancy in a building not more than 2 storeys in building height, or
(c) is not considered as a storey in Sentences 3.2.1.1.(3) or 3.2.1.1.(5) in calculating building height provided:

i. every point on the mezzanine is within 25 m (82 ft) of a point or points on the mezzanine perimeter from which, in the aggregate, an occupant may view 60% of the area of the room or storey in which the mezzanine is located, and
ii. the mezzanine does not contain a Group B occupancy,

(d) is not considered a storey in Sentence 3.2.1.1.(4) in calculating building height provided the mezzanine is not more than 500 m^2 (5,380 m^2) in area and does not contain a Group B

occupancy, or;
(e) is not considered a storey in calculating building height in Sentence 3.2.1.1.(8).

(5) Except as permitted by Sentence (6), openings for stairways, escalators and inclined moving walks need not conform to the requirements in Articles 3.2.8.3. to 3.2.3.11. provided;

(a) the opening for each stairway, escalator or walk does not exceed 10 m2 (108 ft2);
(b) the building is sprinklered throughout, and;
(c) the interconnected floor space contains only Group A, Division 1, 2 and 3, Group D or Group E occupancies.

(6) An interconnected floor space need not conform to the requirements of Articles 3.2.8.3. to 3.2.8.11. provided:

(a) the interconnected floor space consists of the first storey and the storey next above or below it, but not both;
(b) the interconnected floor space is sprinklered, and;
(c) the interconnected floor space contains only Group A, Division 1, 2 or 3, Group D, Group E, or Group F, Division 3 occupancies. (See Appendix A.)

5. **Applicant's Position**

The Applicant stated at the outset that there are two separate but related issues in dispute; the firewall and the interconnected floor space requirements. He indicated that he would present arguments of interpretation on the former and sufficiency of compliance on the latter.

On the first issue, the Applicant submitted that Sentence 3.2.3.4.(1) of the OBC does not mandate that a firewall be built on a property line. It merely states, he argued, that if a party wall is constructed, then it should be built as a firewall. The wording in the Code, especially the definition of party wall, does not indicate that a partywall is obligatory where a building straddles a property line. Moreover, this definition contains nothing which could be construed as preventing the owners of a building from erecting a single structure on both properties and managing it jointly. This is exactly their intention in the subject proposal, he noted.

To support this, the Applicant then presented a copy of a draft memorandum of agreement for joint building management of the subject mall and arena. He described how the building would be managed and maintained and how the various safety systems would be operated. As further

evidence, the Applicant submitted a previous BCC ruling that permitted a single building to straddle two properties because the parties had committed to "enter into an agreement with respect to the management, maintenance, and the conditions of future sale of either property."

The intent of the OBC, the Applicant argued, is to protect the occupants of a building and to limit property damage. If this has been achieved in a single building sitting on two properties, then the intent of the Code has been realized.

On the interconnected floor space issue, the Applicant argued that the proposed arena facility was not the type of structure to which Articles 3.2.8.3. to 3.2.8.11. were meant to apply. He discussed how these provisions were developed in the mid-1980s and that he was the chairman of the advisory committee that examined them. He presented extracts of minutes of committee meetings to support this position.

The Applicant also indicated that it was possible to view the completed building, including arena, as only a two storey structure. He asserted that the space under the seats, including the sports hall of fame corridor, did not have to be counted as a storey. In his view, a sports hall of fame could be seen as ancillary to the arena's main purpose. The Applicant did acknowledge, nonetheless, that the two levels of the mall and the two levels of the arena did not align with each other.

If the Commission found it difficult, however, to accept the arena and mall as anything less than a three storey structure, then the Applicant stated that it is also possible to demonstrate sufficiency of compliance with the relevant provisions of the OBC. And in terms of sufficiency of compliance, he indicated that if the building is considered three storeys and since they are not proposing to construct a two hour fire separation, complete with closures between the mall and the arena, then the interconnected floor space requirements found in Articles 3.2.8.3. to 3.2.8.11. would be applicable. It was with respect to these provisions that the Applicant stated that he would be arguing sufficiency of compliance.

By way of compensating measures to achieve sufficiency of compliance then, the Applicant stated that a principle factor to be considered was the large volume of space contained in the arena. He argued that in the event of a fire in such a large space, the arena would act as a "smoke sink" and would serve to dilute the smoke until well after the occupants had exited and the fire was under control. Obviously, the smoke dilution activity would most directly reduce the danger of a fire in the arena, but it would also help in the event of a fire in the mall. Nevertheless, in a noncombustible, sprinklered building, and considering the size of the overall structure and the

distances smoke would have to travel, it is unlikely that the mall and the arena would pose much danger to each other, he added.

The design of the building with respect to the interface between the mall and arena also provides a compensating measure to the interconnected floor space requirements. As he noted, the ground floor of the mall as it connects to the ice level of the arena at the sports hall of fame corridor is equipped with fire rated doors with closure devices. The corridor itself is separated from the arena by a two hour fire separation. As well, the third level of the arena is not connected to the mall. It is only where the concourse level of the arena joins the second storey of the mall that a penetration occurs. He argued, however, that much of the interface at this level is a two hour separation, with other portions being an unrated glazed separation. The only area not provided with a separation is the sliding glass panel security barrier and at 8 m^2, the Applicant described this as relatively minor considering the size of the complex.

Other compensating measures featured in the building include the more than adequate egress facilities and corresponding exit time, especially from the third level of the arena. He indicated that the exit time from this level would be in the order of the 3 to 3.5 minutes. As well, the building will be equipped with a two stage fire alarm system. A fire safety plan will also be developed for the entire building.

For these reasons, the Applicant summarized that the design of the building, especially at the interface between the mall and arena, provides sufficiency of compliance with Articles 3.2.8.3. to 3.2.8.11.

Lastly, the Applicant stated, in response to the Housing Development and Buildings Branch's Technical Background Information report, that it was not necessary to conduct an analysis of the proposed building under the NFPA 92B standard, "Guide for Smoke Management in Malls, Atria, and Large Areas". In his view, this would impose requirements on the building that would be in excess of the OBC. He argued that it makes different assumptions and is usually used for much larger buildings such as the Air Canada Centre and the Corel Centre.

6. **Respondent's Position**

On the firewall issue, the Respondent submitted that while the Code does not explicitly state that a firewall constructed as a party wall is required on a property line demarking two parcels of land, he argued that the Code assumes that one is to be built and it is therefore implicitly required. He indicated that a four hour firewall would be necessary and with this level of

protection it would protect both buildings from each other. He pointed out, however, that the current design proposes a separation with much of it having a zero hour rating, as well as including an 8 m^2 penetration. The separation does not even follow the line of severance.

The Respondent also asserted that building a firewall would have practical benefits for the Applicant, namely it would allow them to avoid the interconnected floor space requirements. Moreover, he explained that it was his view that the joint management agreement might be difficult to implement.

On the second issue, the Respondent stated that even if the arena is not considered a three storey structure on its own, because the levels of the mall and arena are offset as they connect to each other, the combined building must then be viewed as a three storey structure that has an interconnected floor space. Since the Applicant's design does not include a firewall, nor a continuous two hour separation between the mall and the arena, the requirements for interconnected floor space fire safety measures such as smoke control etc. found in Articles 3.2.8.3. to 3.2.8.11. must therefore apply. The Respondent noted that the current design of the facility has not proposed these measures.

Regarding the Applicant's argument that the design of the structure offers sufficiency of compliance with these provisions in the OBC, the Respondent indicated that he believed it was beyond his authority to make such an assessment.

7. **Commission Ruling**

It is the decision of the Building Code Commission that OBC Sentence 3.2.3.4.(1) is satisfied without the construction of a party wall on condition that the building is managed and operated as a single entity and that a single legal agreement dealing with the operation of the buildings and their respective fire and life safety systems is registered on title.

It is also the decision of the Building Code Commission that Articles 3.2.8.3. to 3.2.8.11. of the OBC have not been satisfied.

8. **Reasons**

(i) No compensating measures to prevent smoke migration and flame spread have been provided.

Dated at **Toronto** this **23rd** day in the month of **September** in the year **1999** for application number **1999-51**.

BCC Ruling No. 99-59-715

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-59-715

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.8.2.3.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Paul Pappas, owner, 1090302 Ontario Limited, Hamilton, Ontario, for the resolution of a dispute with Mr. Len C. King, Building Commissioner, City of Hamilton, Ontario, to determine whether the proposed change of use to a Group A, Division 2 (restaurant) occupancy, that is not provided with barrier-free a accessible washroom nor a separate washroom shared between employees only, is required to comply with Sentences 3.8.2.3.(1) and 3.7.4.3.(7) respectively of the Ontario Building Code at Smooth Herman's Bar and Grill, 109 George Street, Hamilton, Ontario.

APPLICANT

Mr. Paul Pappas, owner
1090302 Ontario Limited
Hamilton, Ontario

RESPONDENT

Mr. Len C. King
Building Commissioner
City of Hamilton

PANEL

Mr. James Lischkoff (Chair-Designate)
Mr. Robert De Berardis
Mr. Stewart Smith

PLACE

Toronto, Ontario

DATE OF HEARING

September 23rd, 1999

DATE OF RULING

September 23rd, 1999

APPEARANCES

Mr. Paul Pappas, owner
1090302 Ontario Limited
Hamilton, Ontario
The Applicant

Mr. Willie Wong, Manager
Customer Services
Hamilton Building Department
Designate for the Respondent

RULING

1. The Applicant

Mr. Paul Pappas, owner, 1090302 Ontario Ltd., Hamilton, Ontario, has received a building permit under *the Building Code Act, 1992* to renovate an existing building and to convert it to bar/restaurant known as Smooth Herman's Bar and Grill, 109 George Street, Hamilton, Ontario.

2. Description of Construction

The Applicant proposes to renovate an existing Group D - (office) Business occupancy by converting it to a Group A, Division 2 - (bar/restaurant) Assembly use. The building is described as two storeys in building height, 255 m2 in building area, and is of combustible construction. The structure is a heritage building located in an historic area of downtown Hamilton known as Hess Village. The occupant load of the facility has been calculated at a maximum of 40 persons, which includes the staff of four.

The construction in dispute involves the provisions of washrooms in the renovated facility. Currently, the Applicant is proposing only two washrooms, one per sex, to serve both the patrons and the staff. A

barrier free washroom is not proposed, nor is a barrier free path of travel, including an entrance, being contemplated. Specifically at issue therefore is whether the two washrooms provided are required to be barrier free and whether a single, separate shared washroom for employees only is also required.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed change of use to a Group A, Division 2 restaurant/bar occupancy, necessitates that a barrier free washroom be provided in accordance with Sentence 3.8.2.3.(1) of the Ontario Building Code and whether a separate washroom facility dedicated for employees only is required as per Sentence 3.7.4.3.(7).

The former provision stipulates that a barrier free washroom and a barrier free path of travel serving that washroom are required in buildings where a washroom is required under Subsection 3.7.4. The larger question at issue, however, is whether this existing building, as a result of its change of use, is required to become barrier free accessible in the first place. As a change of use with a renovation to an existing building that is older than five years Parts 10 and 11 of the OBC are applicable. The proposed change in building use and renovation are considered to reduce the performance level of the structure and therefore certain additional construction as per Parts 3 and 9 of the Code is required. Subsection 3.8, "Barrier-Free Design", however, is not among the areas with which compliance is needed as determined in Sentences 10.3.1.1.(1) and 11.4.3.4.(2).

The latter provision determines the appropriate number of washrooms that are required in this type of assembly occupancy. In this instance, with a 36 seat restaurant/bar plus four staff for a total occupant load of 40, the sharing of water closets between staff and patrons is permitted, but the number of lavatories must conform to Table 3.7.4.3.F. This Table mandates that two washrooms per sex are required in the subject establishment. Sentence 3.7.4.3.(8) is an exception to Sentence (7), however, in that cases where the total number of staff is less than five, employees of both sexes are allowed to share a single water closet if the facility has a door capable of locking from the inside. The Applicant is not proposing a third washroom.

4. Provisions of the Ontario Building Code

Sentence 3.8.2.3.Washrooms Required to be Barrier-Free

(1) Except where other barrier-free washrooms are provided on the same floor level within 45 mm (147 ft 8 in) and except within suites of residential occupancy, and buildings exempted in Clauses 3.8.1.1.(1)(a), (b) & (c), in buildings where a washroom in required in accordance with Subsection

3.7.4., a barrier-free path of travel shall be provided to a barrier-free washroom designed to accommodate disabled persons in conformance with the appropriate requirements in Articles 3.8.3.8. to 3.8.3.12.

Sentence 3.7.4.3.Plumbing Fixtures for Assembly Occupancies

(7) Except as provided in Sentence (8), in every dining room, restaurant, cafeteria and alcoholic beverage establishment having not more than 40 seats, patrons are permitted to share the sanitary facilities provided for employees, and the minimum number of water closets and lavatories shall conform to Table 3.7.4.3.F. based on

(a) a male occupant load of 50% of the number of seats plus the number of male employees, and
(b) a female occupant load of 50% of the number of seats plus the number of female employees.

5. Applicant's Position

The Applicant submitted that neither the barrier free accessibility nor the third washroom are required in his bar/restaurant. He argued that it was not his intention to renovate to create a barrier free path of travel, including widening the front entrance door and flattening its stoop, in his establishment. As a result, he did not see why a barrier free washroom would be required. He indicated that it was his understanding of the Building Code that barrier free requirements pertained to the construction of new buildings and not to limited renovations of existing, non-barrier free buildings like his. The Applicant stated that it was his belief that none of the barrier free requirements applied to his bar.

Regarding the issue of an extra washroom, the Applicant argued that Sentence 3.7.4.3.(4) was applicable. It refers to Table 3.7.4.3.D. which requires only one washroom per 20 persons of each sex, he noted. Thus, for his bar, with an occupant load of 40 only two water closets in total are required. He indicated that whereas other sentences in Article 3.7.4.3. specify regarding washrooms per number of seats or per employee, Table 3.7.4.3.D. simply refers to persons. This more general term could include both staff and patrons, he asserted.

Lastly, the Applicant argued that none of the other eight to ten restaurants in the area have been subjected to these requirements. He argued that the enforcement of the Building Code should be consistent.

6. Respondent's Position

The Respondent submitted that both the barrier free requirements and the additional washroom were mandatory. On the issue of barrier free requirements, he indicated that it was his belief that the change of use and work involved meant that the requirements of Section 3.8 were applicable. He also noted that the existing front door of the building was approximately 0.9 m in width and with additional minor modifications the facility could be made barrier free. As a result, he argued that the barrier free requirements are appropriate in this instance. Specifically, the Respondent argued that a barrier free path of travel (including the entrance), two barrier free seats and two barrier free washrooms should be provided.

Regarding the provision of a third washroom, the Respondent argued that Sentence 3.7.4.3.(4) and Table 3.7.4.3.D. only provided part of the total requirement in terms of the number of washrooms. It does not indicate how many washrooms should be included when considering staff as well. Sentences 3.7.4.3.(7) and (8) are more appropriate for the subject establishment, he stated, since they make allowances for a bar/restaurant with less than 40 seats and staff of five or fewer. In the Respondent's view, these sentences clearly require that an additional washroom for employees is required.

7. Commission Ruling

It is the decision of the Building Code Commission that it is not necessary to comply with the requirements of Sentence 3.8.2.3.(1) of the Ontario Building Code.

It is also the decision of the Building Code Commission that one additional washroom be provided for use of the staff as per OBC Sentence 3.7.4.3.(8) and that this washroom may be used by patrons in accordance with Sentence 3.7.4.3.(7).

8. Reasons

i) The existing building does not have a barrier free entrance and no renovations are proposed to alter the entrance.

ii) We have reviewed the partial plan (dated May 25, 1999) and the letter from Fabiani Architect Ltd. (dated September 23, 1999 - Exhibit 5a) and consider this information to be correct.

Dated at Toronto this 23rd day in the month of September in the year **1999** for application number **1999-38**.

BCC Ruling No. 99-57-713

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-57-713

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.1.5.3.(1) and (2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Christopher Boyd, Project Architect, Rebanks Architects Inc., Toronto, Ontario for the resolution of a dispute with Mr. Terry Willing, Chief Building Official, City of Kingston, Ontario to determine whether the proposed roof assembly that includes fire-retardant plywood sheathing on Z-girts with a 25 mm air space and R19 fibreglass batt insulation mounted on a 38 mm metal decking provides sufficiency of compliance with Sentence 3.1.5.3.(1) and (2) of the Ontario Building Code at the Loblaws Supermarket, 1048 Midland Avenue, Kingston, Ontario.

APPLICANT

Mr. Christopher Boyd, Project Architect
Rebanks Architects Inc.
Toronto, Ontario

RESPONDENT

Mr. Terry Willing
Chief Building Official
City of Kingston

PANEL

Mr. Kenneth Peaker (Chair-Designate)
Mr. Fred Barkhouse
Mr. John Guthrie

PLACE

Toronto, Ontario

DATE OF HEARING

August 26, 1999

DATE OF RULING

August 26, 1999

APPEARANCES

Mr. Randal Brown, President & Consulting Engineer
Randal Brown & Associates Ltd.
Willowdale, Ontario
Agent for the Applicant

Mr. Ted Marecak
Building Official
City of Kingston
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Christopher Boyd, Project Architect, Rebanks Architects Inc., Toronto, Ontario has received a building permit under the Building Code Act, 1992 to construct a new Loblaws Supermarket at 1048 Midland Avenue, Kingston, Ontario.

2. **Description of Construction**

   The Applicant is currently constructing a two storey, noncombustible structure with a building area of 7,504 m^2, that is classified as having a Group E - (retail) mercantile major occupancy. The building is considered to face one street for fire fighting purposes and is equipped with a sprinkler system and a fire alarm system, but not a standpipe and hose system.

   The roof assembly, as proposed by the Applicant, consists of Class A shingles and roofing felt nailed to 13 mm thick exterior grade fire-retardant treated plywood sheathing that are fastened to 18 gauge galvanized Z-shaped metal girts (spaced at 24 in. on centres) which are, in turn,

mounted on 38 mm thick fluted metal decking on steel framing. Below the plywood sheathing is to be a 25 mm air space below which will be found R19 fibreglass insulation sitting on top of 6 mm poly vapour barrier that rests directly on the metal decking. The majority of the proposed roof will be at an angle of approximately 30 degrees to the horizontal.

The construction in dispute involves the intended use of combustible plywood sheathing in the proposed roof assembly of a building that is required to be constructed of noncombustible construction.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed roof assembly that includes fire-retardant treated plywood sheathing intended for a building that is required to be noncombustible according to Article 3.2.2.57. provides sufficiency of compliance with Sentences 3.1.5.3.(1) and (2) of the Ontario Building Code. Sentence (1) allows a combustible roof covering on a noncombustible building provided that the covering has an A, B or C classification as determined in conformance with CAN/ULC-S107-M87, "Standard Method of Fire Tests for Roof Coverings". The Applicant's proposed roof covering has an A classification. Sentence (2) allows a noncombustible roof under certain conditions if it is constructed above a concrete roof deck. The Applicant's proposed roof deck, however, is steel not concrete.

4. **Provisions of the Ontario Building Code**

Sentence 3.1.5.3.(1) and (2) Combustible Roofing Materials

(1) Combustible roof covering which has an A, B, or C classification determined in conformance with Subsection 3.1.15. Is permitted on a building required to be of noncombustible construction.

(2) Combustible roof sheathing and roof sheathing supports installed above a concrete deck are permitted on a building required to be of noncombustible construction provided

(a) the concrete deck is not less than 50 mm (2 in) thick,
(b) the height of the roof space above the deck is not more than 1,000 mm (3ft 3in),
(c) the roof space is divided into compartments by fire stops in conformance with Article 3.1.11.5.,
(d) openings through the concrete deck other than for noncombustible roof drains and plumbing

piping are protected by masonry or concrete shafts
(i) constructed as fire separations having a fire-resistance rating not less than 1 h, and
(ii) extending from the concrete deck to not less than 150 mm (5 7/8 in) above the adjacent roof sheathing,
(e) the perimeter of the roof is protected by a noncombustible parapet extending from the concrete deck to not less than 150 mm (5 7/8) above the adjacent sheathing, and
(f) exxcept as permitted by Clause (d), the roof space does not contain any building services.

5. **Applicant's Position**

The Applicant submitted that the proposed roof assembly which includes a fire-retardant plywood sheathing and fibreglass batt insulation provides an equivalent level of safety to that intended in the OBC. As he argued, Sentence 3.1.5.11.(5) and Clause 3.1.14.2.(2)(b) allow the use of foam plastic insulation above a roof deck if the building is sprinklered. In his view, the plywood sheathing is less hazardous than the permitted foam plastic insulation because it has been treated with a fire-retardant thereby giving it a maximum flame-spread rating of 25. Moreover, since the proposed air space in the assembly is small, at 25 mm or less, flames will not propagate throughout such a restricted space regardless of the flame-spread rating, the Applicant argued. He indicated that there were test results on wall assemblies to support this position.

As well, since the building is being sprinklered (which allows the roof assembly to be unrated) the resulting ceiling temperature of 295 degrees C combined with an ambient temperature of 22 degrees C for a total temperature of 317 degrees C allows the use of the foamed plastic insulation in the roof assembly. The same principle of sprinkler protection, the Applicant asserted, could also apply to the combustible plywood sheathing proposed for the roof assembly. As he argued, wood not treated with fire retardant protection has an ignition point of between 330 degrees C to 600 degrees C, but since this wood is treated it would not ignite until a much higher temperature. (The proposed plywood is treated throughout, not just surface coated.) In other words, in the event of a fire the sprinkler system would actuate and keep the temperature in the ceiling and roof areas low enough that the combustible elements there, specifically the plywood, would not ignite.

Another advantage of using plywood as a nailing surface instead of the permitted combustible cant strips is that it creates fewer voids in the roof assembly. Such wood strips, if used, also add significantly to the allowable combustible load in a roof assembly, the Applicant noted.

For these reasons, the Applicant argued that the proposed roof assembly provides sufficiency of compliance with Sentences 3.1.5.3.(1) and (2) of the OBC.

6. **Respondent's Position**

The Respondent submitted that the proposed use of combustible plywood, albeit treated with a fire-retardant, in a roof assembly of a building required to be of noncombustible construction does not provide sufficiency of compliance with Sentences 3.1.5.3.(1) and (2) of the OBC. He noted that Sentence 3.1.5.3.(2) specifically allows an exemption to this and permits a combustible roof sheathing under certain conditions. However, he indicated that in the case at hand these conditions were not being met.

The Respondent also noted that the wall assembly tests regarding the propagation of flame in the air space are not relevant because these tests were done on walls at 90 degrees to the horizontal, not at 30 degrees as is the proposed roof.

Lastly, the Respondent pointed out that the plywood is above the roof sprinkler system and is therefore unprotected from above.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed roof assembly that includes fire-retardant plywood sheathing on Z-grits with a 25 mm air space and R19 fibreglass batt insulation mounted on a 38 mm metal decking provides sufficiency of compliance with Sentence 3.1.5.3.(1) and (2) of the Ontario Building Code at the Loblaws Supermarket, 1048 Midland Avenue, Kingston, Ontario.

8. **Reasons**

(i) Class A shingles will be used.

(ii) For Trent treated plywood, when the flame source is removed, the treated wood ceases to char and since it will not support combustion the flame will not spread.

(iii) The treated timber is considered equal or better than the permitted combustible nailing strips and foam insulation.

Dated at Toronto this 26th day in the month of August in the year **1999** for application number **1999-64**

BCC Ruling No. 99-56-712

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-56-712

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 9.25.2.1.(1), (2) and (4), Sentence 9.25.2.3.(1), Article 9.25.3.1., Article 9.25.4.1., Sentence 9.25.4.2.(5) and Articles 9.28.4.2. and 9.28.4.3. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Beth Northrup et al., property owner, Mississauga, Ontario for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, Ontario to determine whether the proposed insulation system and wall assembly composed of compressed, stacked straw bales enclosed by metal lath covered on both sides with 15 mm cement stucco and coated (on the outer surface of the interior only) with a waterproof finish provides sufficiency of compliance with Sentences 9.25.2.1.(1), (2) and (4), Sentence 9.25.2.3.(1), Article 9.25.3.1., Article 9.25.4.1., Sentence 9.25.4.2.(5) and Articles 9.28.4.2. and 9.28.4.3. of the Ontario Building Code at 977 Meadow Wood Road, Mississauga, Ontario.

APPLICANT
Ms. Beth Northrup et al., property owners
Mississauga, Ontario

RESPONDENT
Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL
Mr. Kenneth Peaker (Chair-Designate)
Mr. Fred Barkhouse
Mr. John Guthrie

PLACE
Toronto, Ontario

DATES OF HEARING
August 26 and October 7, 1999

DATE OF RULING
October 7, 1999

APPEARANCES

Mr. Martin Liefhebber, Architect
Martin Liefhebber Architect Inc.
Toronto, Ontario
Agent for the Applicant

Mr. John Straube, P. Eng.
University of Waterloo
Waterloo, Ontario
Independent Expert

Mr. Frank Spagnolo
Manager, Building Engineering & Inspections
City of Mississauga
Designate for the Respondent

RULING

1. **The Applicant**

   Ms. Beth Northrup et al., property owners, Mississauga, Ontario have received a building permit under the *Building Code Act, 1992* to construct a detached, two storey house at 977 Meadow Wood Road, Mississauga, Ontario.

2. **Description of Construction**

   The Applicants are currently constructing a new detached, two storey, Group C - residential dwelling with a building area of 270 m^2 that is to be constructed of combustible material. The floor plan shows the house to be L-shaped. Common areas such as the kitchen, dining room,

living room, family room, library, greenhouse, etc. are to be located on the ground floor. The second floor will contain three separated sleeping areas, each with their own bathroom and each served by their own stairs. The house will also have a finished, partial basement containing a workroom, laundry room, wine cellar and storage space. The basement is to be located under the central area of the dwelling. The house is to be heated by hydronic heating installed in the floor assemblies in the basement, first and second floors. It will also be equipped with four heat recovery ventilators.

The foundation walls of the building, for both the excavated (the basement) and unexcavated areas, are to be made with durisol concrete blocks. The floors are to be poured concrete slabs. Over the basement area, the concrete floor slab will be supported on the durisol block foundation. For the other areas, the poured floors will be slabs on grade. The super-structure of the house is to be post and beam construction. The exterior walls on the ground floor will not be used to support any vertical loading from the structure. These walls are proposed to be constructed of straw bales covered with stucco and are the subject of these proceedings. The walls are designed merely to rest on the poured concrete slabs and act as "fill" between the post and beam structural members.

Specifically, the proposed wall assembly, as described in terms of a horizontal section from the exterior of the building to the interior, is to consist of three coats of cement stucco finish with a total thickness of 15 mm as the exterior cladding. The outermost coating, smoothed to finished texture, will be 3 mm in thickness, while the inner two layers are to be 6 mm each. The stucco is to be applied directly onto a floor to ceiling wire mesh with 25.8 cm^2 openings with a minimum weight of 0.98 kg/m^2 that will be stretched across compressed, stacked 460 mm thick straw bales. The innermost coating is to be embedded by pressure spray onto the mesh/straw fibre face. The wire mesh proposed to enclose the straw bales on their exterior and interior surfaces is to be held tight to the straw by tie wires placed between each course of bales 355mm high and every 915 mm horizontally.

The straw bales themselves are the dead stalks of cereal grain and are described as two-string bales having dimensions of approximately 460 mm wide by 915 mm long and 355 mm high. They are shown as having an RSI-value of 6.55. The wire mesh and three coats of stucco (spray, scratch and skim coats) are also found on the interior of the house, with the smooth last layer of stucco forming the finished wall. The interior wall surface, unlike the exterior, is to be treated (on the outer surface only) with a waterproof finish.

Described vertically, the wall assembly is built of 7 courses of straw bales laid overlapping in a flemish bond. The typical bale wall in the subject structure will be nearly 2.5 m in height. To provide lateral stability for the stacked bales, a system of wall stabilizers will be installed at the top (shown as the "top ladder") and bottom ("sill plate") of the proposed wall assemblies. These stabilizers consist of a pair of parallel pressure treated (bottom only) 2" by 6" boards laid flat and bolted to the concrete floor and ceiling assemblies running along the perimeter of the building. Running perpendicular between the 2" by 6" boards and spaced at 1.22 m on centre will be 2" by 6" wood cross pieces (thus making the top and bottom stabilizers resemble a ladder). (The voids created between the 2" by 6" members will be filled by 2" mineral fibre rigid insulation.) Attached to the top and bottom 2" by 6" stabilizers and spanning the full vertical height of the wall are to be 19 mm diameter bracing wires rated at 590 kg stress and spaced every 1.22 m. Additional lateral strength will be created by a series of 50 mm by 19 mm by 810 mm wood spikes that are to be driven through the middle of the bales. (Similar length bamboo shoots or re-bars may also be used as spikes.)

The construction details at the corners are similar to the typical proposed straw bale wall, except that they are provided with one additional stabilizing feature. At each corner of the structure, a custom bent 1.83 m long, 10 mm diameter reinforcing steel bar, will be placed in between each course of bale so that the bar extends equal amounts into both sections of the walls that form the corner. The corner reinforcement bars will then be secured to the lateral stability spikes.

As the walls are non-structural, the rough openings for the windows and doors are required to be framed in wood and connected at the top and bottom 2" by 6" wall stabilizers. Because the straw bale walls are to be approximately 510 mm thick, the wood framing provided for the doors and windows will be lined with 13 mm plywood to complete the rough openings. For both the headers and sills of the openings, the horizontal framing members run underneath and act to support the plywood. The spaces created between the plywood and the 2" by 6"s are to be insulated with mineral fibre batt insulation.

The electrical services provided in the straw walls will be channelled through noncombustible raceways set 38 mm into the bales. Electrical boxes are to be supported in the walls by fastening them to wooden wedges that will be driven into cavities cut out of the bales.

The exterior side of the straw bale walls will be protected from the elements, especially exposure to excessive moisture due to driving rain or snow, by two design features of the house. The first is the 0.9 m overhang of the roof, which will provide direct protection to the upper portion of the

straw bale walls (which are located on the ground floor only). The proposed roof design of the house is to resemble an english cottage with a thatched roof. It will slope at a 45^0 angle from horizontal and will extend in most areas to the upper portion of the ground floor. The second protective feature is a 710 mm high masonry veneer splash skirt comprised of 93 mm thick blocks capped by a precast coping sill provided around the base of the exterior of the bale walls and constructed directly upon the edge of the concrete block basement foundation wall.

The above described straw bale wall assembly is proposed for a total of roughly 70 % of the entire ground floor perimeter of the house. There is no straw bale wall system proposed anywhere on the second floor. In fact, the intended english cottage-style roof is to comprise most of the second floor walls. The little vertical wall that is found on the second floor is to be built with conventional wall assemblies using mineral wool insulation.

The construction in dispute involves the proposed straw bale wall system.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed insulation system and wall assembly composed of compressed, stacked straw bales enclosed by metal lath covered on both sides with 15 mm cement stucco and coated (on the outer surface of the interior only) with a waterproof finish provides sufficiency of compliance with Sentences 9.25.2.1.(1), (2) and (4), Sentence 9.25.2.3.(1), Article 9.25.3.1., Article 9.25.4.1., Sentence 9.25.4.2.(5) and Articles 9.28.4.2. and 9.28.4.3. of the Ontario Building Code. There are four separate areas of dispute with respect to the proposed wall assembly.

The first involves the intended use of straw bales as the insulation material. Sentences 9.25.2.1.(1) and (2) in general require that insulation be provided between heated and unheated spaces and Sentence (4) requires the insulation valves to conform with Table 9.25.2.1. For the proposed structure, Table 9.25.2.1. requires the exterior straw bale wall system to be insulated with not less than RSI 3.00 insulation. While the RSI value of straw is generally accepted as high, it is often inconsistent in terms of density and therefore difficult to measure with exactness. Further, Sentence 9.25.2.3.(1) states that insulation shall conform to one of the standards listed. To date, straw has not been shown to meet any of the referenced standards.

Section 9.38 is an alternative to the insulation requirements of Section 9.25. There are no referenced standards listed in this Subsection, and as such any evaluation of the straw as an

acceptable insulation material must demonstrate an adequate level of performance to meet Code requirements.

The second dispute relates to the provision of an air barrier in the subject wall assembly. Article 9.25.3.1. stipulates that a thermally insulated wall assembly be provided with a continuous air barrier. This barrier is designed to prevent the passage of air from inside of the building to the exterior and vice versa. It can be placed anywhere in the wall assembly as long as its location does not cause increased moisture condensation in the wall cavity. The Applicant has not provided a typical sheet or panel type of air barrier. At dispute, therefore, is whether the applications, interior and exterior, of cement stucco act as an air barrier and thus provide sufficiency of compliance with Article 9.25.3.1.

Closely related to this issue is the third dispute; the requirement for a vapour barrier found in Article 9.25.4.1. Basically, this provision requires that a vapour barrier be included in a thermally insulated wall assembly. The vapour barrier must be on the warm side of the insulation to prevent the build up of condensation in the wall. The Applicant is proposing to apply, on the interior surface of the straw bale walls, a vapour barrier coating. Sentence 9.25.4.2.(5) of the Code permits such coatings to act as a vapour barrier if its permeance conforms to CAN/CGSB-1.501-M , "Method for Permeance of Coated Wallboard." This standard obviously pertains to coatings applied to gypsum board. The Applicant's wall will be constructed of cement stucco, not gypsum board.

The final issue is the proposed use of stucco as the wall sheathing. Article 9.28.4.2. permits the sheathing beneath stucco to be waived where certain galvanized wire (1.19 mm in diameter) applied horizontally to the framing at vertical intervals of 150 mm or less is used, or where paper-backed welded wire metal lath is installed as per Article 9.28.4.3. However, the Applicant is proposing to use a wire mesh on the interior and exterior wall faces tied together at vertical intervals of 355 mm, the height of the straw bales. Moreover, the proposed wire mesh is not paper-backed. As noted, the Applicant is proposing to apply the stucco directly to the straw face which will be enclosed on both the interior and exterior with wire mesh. At issue is whether the straw face is an appropriate backing for stucco application.

4. **Provisions of the Ontario Building Code**

Article 9.25.2.1. - Required Insulation

(1) All walls, ceilings and floors separating heated space from unheated space, the exterior air or the exterior soil shall be provided with sufficient thermal insulation to prevent moisture condensation on their room side during the winter and to ensure comfortable conditions for the occupants. (See A-9.1.1.1. in Appendix A.)

(2) Insulation shall be provided between heated and unheated spaces and between heated spaces and the exterior, and around the perimeter of concrete slabs-on-ground.

(4) Except as permitted in Sentences (5), (6), (7), (8), (13) and (14) the minimum thermal resistance of insulation shall conform to Table 9.25.2.1.

Article 9.25.2.3. - Insulation Materials

(1) Except as required in Sentence (2), thermal insulation shall conform to the requirements of:

(a) CAN/CGSB-51.20-M, "Thermal Insulation, Polystyrene, Boards and Pipe Covering";

(b) CGSB 51-GP-21M, "Thermal Insulation, Urethane and Isocyanuratem Unfaced";

(c) CAN/CGSB-51.23, "Spray Applied Rigid Polyurethane Cellular Plastic Thermal insulation";

(d) CAN/CGSB-51.25M, "Thermal Insulation, Phenolic, Faced";

(e) CAN/CGSB-51.26-M, "Thermal Insulation, Urethane and Isocyanurate, Board, Faced";

(f) CAN/CGSB-51-GP-27M, "Thermal Insulation, Polystyrene, Loose Fill";

(g) CGSB 51 -GP-60M, "Thermal Insulation, Cellulose Fibre, Loose Fill";

(h) CSA A101, "Thermal Insulation, Mineral Fibre, for Buildings"; or

(i) CAN/CSA-A247-M, "Insulating Fibreboard".

Article 9.25.3.1. - Required Barrier to Air Leakage

(1) Thermally insulated wall, ceiling and floor assemblies shall be constructed so as to include an air barrier system which will provide a continuous barrier to air leakage:
(a) from the interior of the building into wall, floor, attic or roof spaces sufficient to prevent

excessive moisture condensation in such spaces during the winter; and
(b) from the exterior inward sufficient to prevent moisture condensation on the room side during winter. (See Appendix A.)

Article 9.25.4.1. - Required Barrier to Vapour Diffusion

(1) Thermally insulated wall, ceiling and floor assemblies shall be constructed with a vapour shall be constructed with a vapour barrier sufficient to prevent condensation in the wall spaces, floor spaces or attic or roof spaces.

Article 9.25.4.2. - Vapour Barrier Materials

(5) Where a coating is applied to gypsum board to function as the vapour barrier, the permeance of the coating shall be determined in accordance with CAN/CGSB-1.501-M, "Method for Permeance of Coated Wallboard".

Article 9.28.4.2. - No Sheathing Required

(1) Sheathing need not be provided beneath stucco where not less than 1.19 mm (0.047 in) diam galvanized wire is applied horizontally to the framing at vertical intervals not exceeding 150 mm ($5^{7/8}$ in), or where paper-backed welded wire metal lath is used.

Article 9.28.4.3. - Stucco Lath Specifications

(1) Stucco lath shall conform to Table 9.28.4.3. (See Appendix A.)

5. **Applicant's Position**

The Agent for the Applicants indicated that in order to demonstrate the sufficiency of compliance of the proposed wall system, it would be necessary for him to deal with the relevant provisions of the OBC that pertain to a more conventional wall assembly. As a result, he stated that he would present arguments regarding the four identified areas of dispute; straw as insulation, lack of a conventional air barrier, a vapour barrier coating applied to cement stucco and straw as a backing for stucco.

On the issue of straw as insulation, the Agent noted that there are two principal aspects in so far as the Building Code is concerned. The first of these pertains to Sentence 9.25.2.3.(1) of the Code which requires insulation to meet one of the listed standards. He argued that the listed tests were all designed for manufactured, not natural, materials and as a result it would be difficult and perhaps inappropriate to test straw using the referenced criteria. He stated that under the Architectural Graphic Standards, however, non-manufactured materials have been recognized as insulation. As well, the ASHRAE standard, "1977 Fundamentals", lists RSI values for wood, wool, linen, cork, wood ash, saw dust and snow. The Agent noted that it was precisely because straw is a natural and chemical free insulation material that it was deemed suitable for his clients. His goal, he indicated, was to design a home with as clean an environment as possible.

With respect to the other aspect regarding straw as insulation, i.e., determining its RSI value, the Agent asserted that any house fitted with straw as the thermal barrier would not be under insulated. Straw is comprised of roughly 90 per cent air voids, he added, which is the essential idea behind insulation. He claimed that various tests have been conducted to determine the RSI value of straw and the results ranged from a low of RSI 3.00 to a high of RSI 8.82. In particular, tests conducted at the Oak Ridge National Labs and the Technical University of Nova Scotia on full-scale wall assemblies similar to those proposed were found to have RSI values in the range of 4.55 to 5.25. He indicated that they are using an RSI value of 6.55 to determine the Heat Loss Calculations. The Agent noted that Sentences 9.25.2.1.(1), (2) and (4) require only an RSI value of 3.00. This, he argued, was easily met by the proposed 460 mm thick straw bales.

The Agent did acknowledge that the RSI values of straw can be variable. The issue is one of density and the fact that straw bales because of the material itself and the way it is packed usually do not possess uniform consistency. This explains much of the wide range of RSI results, he stated. The minimum density of straw that he would consider using for the proposed house would be 113 kg/m^3, which is consistent with the minimum requirement used by most US codes that contain standards for straw as insulation. Nevertheless, the actual straw used will probably have a considerably higher density, he added.

Regarding the second and third issues, air barrier and vapour barrier, the Agent noted that they are interconnected. He stated that the requirements related to these two items reflect the Building Code's philosophy of preventing the movement of air and moisture through a wall assembly, i.e., the building should be sealed as tightly as possible. The philosophy of his wall assembly is different, however. It is based upon the view that the wall should be able to "breathe" to a degree in order to allow for the passage of moisture in and especially out of the wall cavity. In this light,

the Agent argued that adding an air barrier and vapour barrier would probably do more harm than good.

As a result, the Agent stated that their wall assembly, as proposed, will not contain an air barrier as envisaged under Article 9.25.3.1. of the OBC. While he acknowledged that an air barrier complying with the air leakage characteristics found in Article 9.25.3.2. would probably provide a greater degree of impermeability, he argued that cement stucco will also not allow for too much air movement. Being somewhat more porous, however, is a positive feature of cement stucco since the overall goal of the wall assembly is to allow some movement of moisture through vapour diffusion, while at the same time preventing as much air movement as possible.

In terms of whether cement stucco meets the prescriptive air leakage requirements, the Agent indicated that he was unaware of any available tests to indicate as such. By way of comparison though, he noted that cement board has been tested and has proved to provide quite a high level of impermeability. The Agent then added that in order to achieve a consistent air barrier as intended in the Code it is crucial to ensure that the caulking details are done right.

On the issue of the vapour barrier, the Agent indicated that the principle governing the design of the proposed wall assembly was not vapour tightness as intended in the OBC. Instead, limited moisture in the form of vapour will be allowed in and especially out of the wall. The Agent noted that the very nature of straw would allow for a significant amount of safe moisture storage in the assembly. This ability to safely store certain levels of moisture, he argued, acts as a vital buffer between the deposition and removal of moisture (wetting and drying) giving the wall assembly added time to achieve a safe moisture balance.

Nevertheless, the Agent stated that excessive vapour movement from the interior of the house into the wall would be prevented by a barrier in the form of a paint-applied coating to be provided on the outer surface of the interior wall. This coating, he submitted, will achieve a moderate permeability level of 300 ng/(Pa $\cdot$ s $\cdot$ m^2) and will thus meet the intent of the requirements of Sentence 9.25.4.1. of the OBC. He felt that applying this coating to stucco was not a problem. More importantly, however, he argued that applying such a coating is not inconsistent with the concept of a breathing wall. The exterior side of the wall due to its lack of a vapour barrier will have a higher degree of moisture movement by diffusion. Moreover, the vapour barrier coating will not prevent all moisture from moving in and out of the interior side of the wall, it will simply control too much from getting in. The Agent also noted that the four heat recovery ventilators will prevent too much moisture build up inside the house.

In terms of vapour originating from inside the straw bale wall, the Agent indicated that this will not be a problem. This is because the straw will be treated, which includes allowing it to dry for a period of at least a year, before it is used in the proposed wall assembly. Construction materials such as lumber and concrete block that are considered saturated will also be avoided or allowed to dry. Further, the Agent stated that he intends to take extreme care when constructing the straw bale walls to ensure that it does not get wet. (Allowing the straw to get wet during construction and not reducing its moisture content prior to installation are two significant contributors to past failures of straw walls, he noted.) Also, since straw is comprised of tubular stalks which, as noted, consist of 90 per cent air voids, it does not wick water very well and has poor capillary suction. This works to its advantage, the Agent argued, in that it will not draw water inwards towards the core of the straw bales. Like all cellulose material straw does absorb water, he noted, however, the moisture content can rise to 20 per cent before mould growth occurs.

While limited vapour movement will occur in the straw bale wall assembly, liquid moisture, especially in the form of driving rain or snow, on the other hand, will be discouraged as much as possible, the Agent submitted. To this end, the exterior of the house has been designed with certain features to reduce the exposure of the straw bale walls to the elements. The roof of the house projects 900 mm over the top of the subject walls, thereby providing a generous protective overhang, he argued. The base of the walls are also protected, he noted, by the 710 mm proposed masonry splash skirt. This skirt will protect the straw walls from excessive water penetration by providing a guard against rain splashing and drifting snow. The masonry skirt, he explained, is designed with run off spaces and a 25 mm air gap between it and the bale wall to keep the straw as dry as possible. Again, exceptional attention will be paid to caulking the openings, joints, corners, etc. on the interior and especially the exterior of the house.

Summarizing his arguments on issues two and three therefore, the Agent submitted that the intelligence of the straw bale wall is its simplicity - it basically contains only two materials; straw and stucco. But if forced to comply with Code standards for a typical wall assembly such as air and vapour barriers, the results could be dire. The goal of his wall system, and in fact much of the design of his house, is to minimize wetting and maximize drying. Minimizing the wetting of the wall assembly will be achieved by the interior vapour barrier coating and the heat recovery ventilators and by the exterior design features, the roof overhang and masonry splash skirt. Maximizing drying will occur through the lack of a corresponding vapour barrier coating on the exterior side of the wall, and the fact that the cement stucco used has a higher level of permeability than traditional barriers (200 to 480 ng/(Pa · s ·m^2) and 400 to 800 ng/(Pa · s · m^2) if the stucco mix includes lime) to allow for moisture movement by diffusion. By providing the

proposed combination of design features and wall assembly elements, the Agent argued that a vital balance between wetting and drying has been achieved. By adding or taking away from the combination proposed, the delicate balance of the wall assembly would be threatened.

The final issue in dispute is the appropriateness of straw as a backing for cement stucco. On this point the Agent argued that the attachment of stucco directly to straw is not a problem. The irregularity of the sides of the straw bales provides quite a course mounting surface to allow a strong bond between the fibre face of the straw and the stucco to occur. He noted that the wire mesh to be used to encase both sides of the straw bales is galvanized and complies with Sentence 9.28.4.3.(1), however, he acknowledged that it was not possible to meet the requirements related to the fastening of the wire mesh to the framing, nor will the wire mesh be paper-backed. Nevertheless, the Agent indicated that the inclusion of the proposed wire ties that join the interior and exterior wire meshes together was not necessary for the present non-structural straw bale house, but in doing so met the construction standards for straw bale houses in jurisdictions that are earthquake prone.

The Agent further argued that the proposed stucco clad on the straw bales would provide a level of performance similar to the properties of sheathing required under the OBC. He noted that as with plywood that is fastened to wood studs, the cement stucco applied to the straw is not required to bear any weight and needs only to provide a certain degree of lateral strength. He indicated that cement stucco used in such a way, with wire mesh and applied to straw, would provide more than an adequate degree of stiffness. As a result, he submitted that the proposed stucco cladding attached to straw meets the intent of the sheathing requirements and thereby provides sufficiency of compliance with Article 9.28.4.2.

In conclusion, the Agent explained that it was not his intention to use straw as a way to cut costs. Rather, the use of straw is to allow for the construction of a house of natural materials. Only by doing so will they be able to create as healthy an environment as possible.

Finally, the Agent stated that straw was gaining wider use as a construction material. He submitted a list of seven jurisdictions in Ontario that had previously allowed the use of straw bale in various buildings. He noted that this was only a partial list and that to his knowledge at least 50 building have been constructed in Ontario with straw as one of the materials. Properly treated and installed, straw is a viable construction material, the Agent indicated.

6. **Respondent's Position**

The Respondent submitted that the OBC does not address houses built with straw. They undertook to learn as much about as possible about straw as a construction material in order to assess the project under Section 2.7 "Equivalents" of the Building Code. Nevertheless, they felt it was still not possible to accept the proposal. In their view, there were too many unanswered questions.

In terms of the specific disputes, the Respondent indicated that he would discuss the matters point by point.

Regarding the use of straw as insulation, he noted that they are unsure if straw has been tested according to any of the listed standards in Sentence 9.25.2.3.(1). He indicated that no proof of conformance was offered. In terms of RSI value, the Respondent stated that they do not dispute that the thermal resistance of straw is high. Because of its inconsistency as a material and its consequent variable test results, however, he argued that it is difficult to assess the true RSI value, which, in turn, makes approving a heating system problematic. He suggested that tests be performed by a recognized testing agency in order to determine a more precise RSI value for straw as a insulation material.

On the issue of the air barrier, the Respondent noted that Article 9.25.3.1. requires a continuous air barrier for walls that are provided with thermal insulation. Sentence 9.25.3.2.(1) provides the performance standards required of the air barrier. He indicated that they are unsure how the proposed system provides an air barrier as intended in the OBC and how the straw bale wall will achieve the required performance level.

Their view on the vapour barrier was similar. One is required in thermally insulated walls according to Article 9.25.4.1. The vapour barrier proposed, a paint-applied coating, the Respondent argued, is intended to be used on wallboard. They are unsure how it will perform when coated on stucco and if it will meet the OBC requirements of a vapour barrier.

With respect to the last issue, the Respondent indicated that the exceptions found in Article 9.28.4.2. that permit the sheathing beneath stucco to be waived have not been met in the proposed wire mesh reinforcement system. As a result, their position is that a paper-backed metal lath system conforming to Sentence 9.28.4.3.(1) be used to provide rigidity to the wall in lieu of a recognized sheathing material.

The Respondent concluded by stating that they did not want to prevent the Applicants from building their proposed house. However, they felt the Code offered them little flexibility in terms of accepting such a unique application. Nonetheless, they felt that the hearing has been a learning process for them and that it has increased their knowledge of the proposal, which, in turn, has increased their comfort level regarding the use of straw as a construction material.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed non-structural insulated wall assembly composed of compressed, stacked straw bales enclosed by metal lath and covered on both sides with a 15 mm layer of cement stucco and coated (on the interior surface of the inside only) with a waterproof finish provides sufficiency of compliance with Sentences 9.25.2.1.(1), (2) and (4), Sentence 9.25.2.3.(1), Article 9.25.3.1., Article 9.25.4.1., Sentence 9.25.4.2.(5) and Articles 9.28.4.2. and 9.28.4.3. on condition:

i. That the appointed independent consultant who is a recognized building science expert and a registered professional engineer in the Province of Ontario and that the architect of the project who is a registered professional architect in the Province of Ontario provide their professional stamps on the architectural drawings and details provided to the municipality;
ii. That the independent consultant ensure that the recommendations regarding straw bale construction contained in his report to the Commission are adhered to in the subject building;
iii. That the independent consultant review and approve the as constructed building and submit written confirmation of same with the municipality;
iv. That the proposed straw bale wall assembly be used on the ground floor only of the subject dwelling;
v. That the proposed straw bale wall assembly be used in a non-structural situation only;
vi. That the proposed straw bale wall assembly be constructed with a system of horizontal stabilizers consisting of a top ladder and bottom sill plate connected together with a series of pretension vertical tie down wires;
vii. That the proposed straw bale wall assembly be further constructed with angled re-bars laid flat on each course of bales at the dwelling's corners and that a series of spikes,

having a length of more than twice the height of the bales used, be driven vertically downward into the bale courses;

viii. That the proposed straw bale wall assembly be further constructed with wire mesh installed on both the interior and exterior surface of the straw that spans from top to bottom of the wall and which are fastened to the top ladder and the bottom sill plate and that both wire meshes are tied together by a series of tie backs running horizontally through the straw;

ix. That the window and door units in the proposed straw bale wall assembly be supported with wooden framing members that are attached to the top ladder and bottom sill plate;

x. That the proposed straw intended for use in this dwelling consist of prestressed, two-string bales with a minimum density of 113 kg/m^3 and a minimum RSI value of 3.00 (for Zone 1);

xi. That the proposed straw be treated and dried prior to installation in the subject dwelling and that it be kept dry at all times during construction;

xii. That the proposed dwelling be constructed with a roof projecting 900 mm over the walls of the subject house; and

xiii. That the proposed dwelling be constructed with a 710 mm high masonry splash skirt surrounding the ground floor perimeter of the house and attached to the subject straw and stucco wall assemblies.

8. **Reasons**

With conformance to the above conditions, the Commission is satisfied that the proposed wall assembly will be properly designed by a licenced architect and reviewed, inspected and approved by a certified engineer expertly qualified in this field, that the wall assembly will be used in the appropriate circumstances for the subject house, that the wall assembly will be constructed with adequate vertical and lateral support, that the walls be sufficiently air tight and vapour permeable as required in engineer's report, that the straw will be appropriately treated and handled before and during construction, and that the house itself will be designed to protect the exterior walls from excessive exposure to moisture.

Dated at **Toronto** this **7th** day in the month of **October** in the year **1999** for application number **1999-46**.

BCC Ruling No. 99-55-711

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-55-711

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentences 8.7.4.2.(8) and 8.8.1.2.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Nazzareno D'Angelo, property owner, Concord, Ontario, for the resolution of a dispute with Mr. Tom Reddering, Designated Sewage Inspector, Haliburton, Kawartha, Pine Ridge District Health Unit, Ontario to determine whether the Class 4 sewage system filter bed and mantle proposed to be sited in an area with 1:3 slope provides sufficiency of compliance with Sentence 8.7.4.2.(8), of the Ontario Building Code (OBC) or whether a Class 5 holding tank may be installed when considering Sentence 8.8.1.2.(1) of the OBC at Lot 131, Percy Lake, Harburn Township, Ontario.

APPLICANT

Mr. Nazzareno D'Angelo
Property Owner
Concord, Ontario

RESPONDENT

Mr. Tom Reddering
Designated Sewage Inspector
Haliburton, Kawartha, Pine Ridge District Health Unit

PANEL

Mr. Bryan Whitehead (Chair-Designate)
Mr. Bill Fellner
Mr. Doug Robinson

PLACE

Toronto, Ontario

DATE OF HEARING

August 19, 1999

DATE OF RULING

August 19, 1999

APPEARANCES

Mr. Thomas Grace, Principal, Grace and Associates
Lindsay, Ontario
For the Applicant

Mr. Tom Reddering, Designated Sewage Inspector
Haliburton, Kawartha, Pine Ridge District Health Unit
The Respondent

RULING

1. The Applicant

Mr. Nazzareno D'Angelo, property owner, has applied for a building permit under the *Building Code Act, 1992* to construct either a Class 4 or Class 5 sewage system to serve a seasonal residential dwelling at Lot 131, Percy Lake, Harburn Township, Ontario.

2. Description of Construction

The Applicant is proposing to install either a new Class 4 or Class 5 sewage system to serve a single detached Group C - (seasonal) residential dwelling. The proposed dwelling will contain three bedrooms, 17.5 fixture units and will have a total finished floor area of 111.5 m^2 . The calculated total daily design flow rate will be 1,600 Litres per day.

The Applicant has two sewage system proposals. Option one is a Class 4 system. This proposed system consists of a 3,600 L septic tank which would transmit effluent by gravity disposal to a 1,365 L pump chamber. From there the effluent would be pumped uphill to the filter bed located at the western edge of the lot near the road. The filter bed is to have a minimum contact area of 22.5 m^2 . Two pairs of three distribution lines in the filter bed are to extend in opposite directions horizontally across the slope from a

centre feed distribution box. In order to achieve a relatively level area, extensive engineered regrading of the site is necessary. The required 15 m mantle, proposed to be located directly downhill from the filter bed, would be terraced and supported with retaining walls where necessary. The entire area for which this option is proposed would have an average slope of 1:3.

Option two is a Class 5 holding tank sewage system. The system would consist of a 1,360 L pump chamber equipped with a sewage ejector pump that would pump the effluent uphill to the proposed holding tank, which would also be located at the western edge of the property. At 11,200 L, the tank would accommodate a seven day holding capacity. The proposed tank would also be equipped with an audible and visual alarm activated by a float switch. Some regrading of the site, especially in the area of the holding tank, would also be necessary to install this system.

The lot is described as steeply sloping (ranging from 1:1.8 to 1:3) to the lake, mostly covered with mature trees and is wedge-shaped measuring approximately 76 m in length by 45 m at the road (to the north) and 25 m at the lake (at the south), for a total approximate area of 0.35 ha. The depth of the soil averages roughly 0.6 m. The native soil has a percolation rate of 12 minutes per centimetre.

The water supply to the site will be drawn from the lake.

The construction in dispute involves the installation of either of these two systems on a 1:3 slope.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the Class 4 sewage system filter bed and mantle proposed to be sited in an area with 1:3 slope provides sufficiency of compliance with Sentence 8.7.4.2.(8) of the Ontario Building Code (OBC) or whether a Class 5 holding tank may be installed when considering Sentence 8.8.1.2.(1) of the OBC. Sentence 8.7.4.2.(8) requires that any fill added to a leaching bed must be sloped not steeper than a ratio of 1:4. The average slope on the Applicant's property is 1:2.5 and his Class 4 proposal (option one) would be situated on land regraded to a 1:3 slope. The conditions setting out when the installation of a holding tank is acceptable are regulated in Sentence 8.8.1.2.(1). None of the described conditions pertain to the Applicant's site. Further, steeply sloping property is not one of the criteria listed as grounds to qualify for a holding tank.

4. Provisions of the Ontario Building Code

Sentence 8.7.4.2.(8) Construction Requirements

(8) The sides of the added leaching bed fill shall be sloped to ensure stability, but shall not be steeper than 1 unit vertically to four units horizontally.

Sentence 8.8.1.2.(1) Acceptable Installation

(1) A Class 5 sewage system may be installed in the following circumstances:

(a) where the proposed use of the sewage system is for a temporary operation, excluding seasonal recreation use, not exceeding 12 months in duration,
(b) to permit the extension of an existing single-family dwelling provided that,

(i) the extension will not increase the wastewater load, and
(ii) the building is already served by a Class 5 sewage system,
(c) to remedy an unsafe sewage system where the remediation of the unsafe condition by the installation of a Class 4 sewage system is impracticable,
(d) to upgrade a sewage system on an existing lot or parcel of land, where upgrading through the use of a Class 4 sewage system is not possible due to lot size or clearance limitations, or
(e) as an interim measure for a lot or parcel of land until municipal sewers are available, provided that the municipality undertakes to ensure the continued operation of an approved hauled sewage system until the municipal sewers are available.

5. Applicant's Position

At the outset, the Applicant acknowledged that there were serious difficulties facing both of their proposals.

By way of background, the Applicant stated that the subject property was created through a severance in 1989, at which time it had been approved by the municipality and the HKPR District Health Unit as a building lot. The current owner bought the site in 1998 under the impression that the property could be developed. However, during the Applicant's attempts to apply for a building permit it was subsequently determined that a Class 4 sewage system would be very expensive to install due to the massive re-engineering of the site required and even then would not likely meet the slope restrictions regarding the sides of the imported leaching bed fill.

While the Applicant offered that they recognized the site constraints relating to the steep slope, he asked the Commission to consider their Class 4 proposal with some leniency, especially since they have relatively few alternatives.

Regarding the holding tank, the Applicant argued that this was their preferred choice because it would be far more affordable, would leave more of the lot in its natural state, and would be more suitable to the seasonal use of the building. He admitted that none of the conditions set out in Sentence 8.8.1.2.(1) concerning the acceptable installation of a Class 5 sewage system specifically pertain to his situation. Nevertheless, he indicated that the municipal council is willing to authorize the use of a holding tank for the subject lot if agreements are entered into with the local sewage hauler and the municipality regarding all aspects of the proposed Class 5 system. He submitted a letter supporting this assertion. The Applicant concluded by requesting that the Commission provide an exception to the criteria set out in Sentence 8.8.1.2.(1) of the OBC in order that he may install a holding tank.

6. Respondent's Position

The Respondent submitted that while he sympathized concerning the issue of the slope of the site, neither proposal offered by the Applicant met the appropriate standards in the OBC. T he Class 4 option faced considerable challenges due to the slope, he noted. The leaching bed fill with sides proposed as having a 1:3 slope, he argued, does not meet OBC Sentence 8.7.4.2.(8) and would not be stable. Moreover, as far as the holding tank was concerned, he indicated that it simply did not meet any of the allowable conditions for installation under the Code. For these reasons, the Respondent explained, he refused both of the Applicant's proposals.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed Class 4 filter bed and the proposed Class 5 holding tank intended to service a seasonal residential dwelling both fail to provide sufficiency of compliance with Sentence 8.7.4.2.(8) and Sentence 8.8.1.2. respectively.

8. Reasons

i) The slope in the vicinity of the filter bed is excessive.

ii) The Code is clear in prohibiting new development on a holding tank.

iii) There were no compensating measures proposed.

Dated at Toronto this 19th day in the month of August in the year **1999** for application number **1999-69**

BCC Ruling No. 99-54-710

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-54-710

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 8.4.2.2.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Lillian Hall & Mr. Larry Hall, property owners, Ajax, Ontario, for the resolution of a dispute with Mr. Michael Strachan, Public Health Inspector, Regional Municipality of Durham, Ontario to determine whether the proposed Class 1 and 2 sewage systems to serve a residential dwelling equipped with certain water conservation devices but with an estimated daily sanitary sewage flow of 2,700 litres per day provides sufficiency of compliance with Sentence 8.4.2.2.(1) of the Ontario Building Code at 24 Chalk Lake Road, Scugog, Ontario.

APPLICANT

Ms. Lillian Hall & Mr. Larry Hall
Property Owners
Ajax, Ontario

RESPONDENT

Mr. Michael Strachan
Public Health Inspector
Regional Municipality of Durham

PANEL

Mr. Bryan Whitehead (Chair-Designate)
Mr. Bill Fellner
Mr. Doug Robinson

PLACE

Toronto, Ontario

DATE OF HEARING

August 19, 1999

DATE OF RULING

August 19, 1999

APPEARANCES

Mr. Martin Liefhebber, Architect
Martin Liefhebber Architects Ltd.
Toronto, Ontario
Agent for the Applicant

Mr. Michael Strachan
Public Health Inspector
Regional Municipality of Durham
The Respondent

RULING

1. **The Applicant**

   Ms. Lillian Hall and Mr. Larry Hall, property owners, have applied for a building permit under the Building Code Act, 1992 to install Class 1 and 2 sewage systems at their proposed year-round dwelling at 24 Chalk Road, Scugog, Ontario.

2. **Description of Construction**

   The Applicants are proposing to install a new Class 1 and 2 sewage systems to serve a single detached Group C - residential dwelling. The proposed dwelling will contain two bedrooms, and will have a total finished area of 181.2 m^2.

   The proposed Class 1 system will consist of two composting toilets. The greywater generated by the 13.5 fixture units is to be disposed of in the proposed Class 2 leaching pit. The building is to be equipped with a pressurized water system.

The construction in dispute involves the calculated total daily design flow. The proposed building has an estimated daily design sewage flow of 2,700 litres per day, based on 13.5 fixture units at an assumed 200 L/day per unit with a pressurized water system. The Applicants, however, are proposing to install water conservation devices on as many of the fixture units as possible. The showers and faucets, for example, will be fitted with low flow heads. According to the Applicants' calculations this will reduce the daily sewage flow to roughly 450 L/day.

The Applicants had previously received a building permit for the construction of a Class 4 sewage system equipped with an Ecoflo tertiary treatment unit. This proposal was not pursued by the Applicants since installing this entire system, including the 15 by 7 m mantle, was considered to be destructive to the natural conditions of the site.

The lot is described as sloping (1:10) to the lake, mostly covered with mature trees (the lower third of the property is wetland) and measures approximately 67.8 by 35 m, for a total approximate area of 0.3 ha. The depth to the high groundwater table is roughly 1.1 m. The native soil has a percolation rate ranging between 15 to 30 minutes per centimetre. The site is located in the Oak Ridges Moraine and thus the soil is described as a mixture of sand and silt with bedrock found 80 m or more below the surface.

The water supply to the site will be by a drilled well.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed Class 1 and 2 sewage systems to serve the subject permanent residential dwelling with an estimated daily design flow of 2,700 litres per day but which is equipped with certain water conservation devices provides sufficiency of compliance with Sentence 8.4.2.2.(1) of the Ontario Building Code. This Sentence requires that a greywater system, used in conjunction with a pressurized water system, that discharges into a Class 2 leaching pit be limited to a maximum capacity of 1,000 litres per day. The calculated flow far exceeds this amount. The Applicants have tried to achieve this limit by fitting many of their fixture units with water conservation devices.

4. **Provisions of the Ontario Building Code**

Sentence 8.4.2.2.(1) Maximum Sewage Flow

(1) A Class 2 sewage system shall not be constructed where the daily design greywater flow to the system exceeds 1,000 L/day.

5. **Applicant's Position**

The Applicants submitted that the proposed water conservation measures reduce their actual daily design flow to less than the calculated flow of 2,700 L/day. They indicated that they have proposed numerous devices to ration their water use. Besides low flow faucets and composting toilets they are also proposing to install a Miele dishwasher and a tumbler-type washing machine. The combined effect of all these devices would, they argued, reduce the daily flow to less than 450 L/day.

The Applicants described each fixture unit and indicated the potential water savings they would achieve. For example, since the composting toilets would not be connected to the proposed sewage system this would yield 100% savings. They explained that they derived these figures based on various sources, including the Light Grey Option report by CMHC which provided a break-down of water use per fixture units in a house. The Applicants also indicated that based on the OBC flow rates and estimated duration of use would mean that extremely high water consumption would have to occur (e.g. 55 loads of the dishwasher) to achieve anywhere near the volumes specified in the Code.

The Applicants argued that their derived figure of 450 L/day is a conservative estimate. They indicated that number was based on four people occupying the house when only two will use the residence on an on-going basis.

Lastly, they expressed a willingness to have their proposed system monitored.

6. **Respondent's Position**

The Respondent submitted that the calculated daily flow for the proposed dwelling with 13.5 fixture units is 2,700 L/day. Sentence 8.4.2.2.(1) of the Code, they noted, only allows 1,000 L/day for a leaching pit combined with a pressurized water system. As a result, they noted that the proposal did not conform to the requirements of the Code.

The Respondent also indicated that monitoring would be difficult due to lack of resources and a clear mandate.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the Class 2 sewage system proposed to service a permanent residential dwelling fails to provide sufficiency of compliance with Sentence 8.4.2.2.(1) of the Ontario Building Code.

8. **Reasons**

The total fixture units which would drain to the Class 2 leaching pit would be 13.5. Based on 8.4.1.2.(2) the calculated flow for design purposes would be 2,700 litres per day, which exceeds the 1,000 litres per day permitted under Sentence 8.4.2.2.(1).

Dated at Toronto this 19th day in the month of August in the year **1999** for application number **1999-45**

BCC Ruling No. 99-53-709

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-53-709

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.1.5.4.(5) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. David M. Welton, Assistant Secretary, Oakridge Heights Limited, Oakville, Ontario, for the resolution of a dispute with Mr. Frank Asta, Chief Building Official, City of Oakville, Ontario to determine whether the proposed combustible PVC window units installed in certain suites as a floor to ceiling wall assembly with approximately only 250 mm of non-combustible vertical separation between storeys and constituting openings of roughly 50 to 70 percent aggregate area of the exterior wall face provides sufficiency of compliance with Sentence 3.1.5.4.(5) of the Ontario Building Code at Oakridge Heights, 50 Old Mill Road, Oakville, Ontario.

APPLICANT

Mr. David M. Welton, Assistant Secretary
Oakridge Heights Limited
Oakville, Ontario

RESPONDENT

Mr. Frank Asta
Chief Building Official
City of Oakville

PANEL

Mr. Kenneth Peaker (Chair-Designate)
Mr. Robert De Berardis
Mr. Stewart Smith

PLACE

Toronto, Ontario

DATE OF HEARING

August 5, 1999

DATE OF RULING

August 5, 1999

APPEARANCES

Mr. Peter Colquhoun, Consultant
Arencon Inc.
Mississauga, Ontario
Agent for the Applicant

Mr. Frank Asta, Chief Building Official
City of Oakville
The Respondent

RULING

1. **The Applicant**

   Mr. David M. Welton, Assistant Secretary, Oakridge Heights Limited, has applied for a building permit under *the Building Code Act, 1992* to construct a high rise apartment building known as Oakridge Heights at 50 Old Mill Road, Oakville, Ontario.

2. **Description of Construction**

   The Applicant is proposing to construct a new ten storey (plus two levels of underground parking), Group C - residential apartment building. The structure will have a building area of 4,052.1 m^2. The building is to be of noncombustible construction and will be equipped with a sprinkler system, a fire alarm system and a standpipe and hose system.

   The construction in dispute involves the use of combustible polyvinyl chloride (PVC) window units in certain suites of the subject building, which is required to be noncombustible according to Article 3.2.2.42. of the OBC. These PVC window units have been installed in suite types A1 and A2 on level A, suite types B1 and B2 on level B, suite types 3 and 4 on floors Main to 7

inclusive, suite types 8 and 9 on floors 2 to 7 inclusive, suite types 5 and 6 on floors 8 and 9, and suite types 4 and 5 on floor 10. Specifically, the Applicant wishes to install the window units in the sunrooms/nooks of some suites as floor to ceiling window walls. As a result, the vertical separation of noncombustible material between suites of contiguous storeys will be approximately 250 mm. Further, the sunroom window walls, as an aggregate area of opening in the exterior wall face, will comprise 49.7% in suite types 2 and 3 and 70.7% in suite types 8 and 9.

To provide additional protection to prevent fire from spreading from suite to suite, the Applicant intends to cover the edge of the floor slab with an aluminium panel and will firestop it with a listed firestop system. The same firestopping will also be included at the demising walls between adjacent suites on the same storey.

The design and arrangement of the subject window units is similar to conventional units regarding their framing and glazing with insulated glass. The Applicant intends to install the subject window units because, in his view, they provide superior thermal, moisture and environmental performance and functionality.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed combustible PVC window units, as a floor to ceiling window wall assembly with approximately only 250 mm of noncombustible vertical separation between storeys and constituting openings of roughly 50 to 70% aggregate area of the exterior wall face, provides sufficiency of compliance with Sentence 3.1.5.4.(5) of the Ontario Building Code. Clause (b) of this Sentence requires a separation of 1,000 mm of noncombustible material between windows in exterior walls in contiguous storeys. The proposed separation of noncombustible material between the PVC window units is roughly 250 mm. As well, Clause (c) of Sentence 3.1.5.4.(5) stipulates that only a total of 40% of an exterior wall face of a fire compartment can be used as window openings. In the Applicant's proposed sunrooms/nooks the aggregate area of window opening ranges from approximately 50 to 70%, depending on the suite.

4. **Provisions of the Ontario Building Code**

Sentence 3.1.5.4.(5) Combustible Glazing and Skylights

(5) Combustible window sashes and frames are permitted in a building required to be of noncombustible construction provided

(a) each window in a exterior wall face is an individual unit separated by noncombustible wall construction from every other opening in the wall,
(b) windows in exterior walls in contiguous storeys are separated by not less than 1000 mm (3 ft 3 in) of noncombustible construction, and (c) the aggregate area of openings in an exterior wall face of a fire compartment is not more than 40% of the area of the wall face.

5. **Applicant's Position**

The Applicant submitted that the subject windows provide sufficiency of compliance with Sentence 3.1.5.4.(5) for the following reasons.

Conventional aluminium thermally broken window systems are typically held together with a PVC or thermal vinyl break meaning that the integrity of such window units depend on the same combustible components as the subject windows. He noted that the frames of the proposed window walls are reinforced with formed steel sections inserted into the cavities of the PVC extrusions similar to aluminium window wall frames. Moreover, the use of PVC as the window frame material contributes very little combustible load to a suite when considering its contents, he asserted.

The Applicant also argued that the PVC frames will not adversely affect the flash-over time from one suite to another. As he noted, this is because fire containment in a suite depends on the integrity of the glazing. The glazing, he insisted, would break from radiant heat or thermal shock either prior to or at the time of flash-over. The failure of the glazing therefore would be the principal cause of flash-over from suite-to-suite. This would be the same for conventional aluminium frame windows with thermal breaks (which are not limited in terms of their vertical separation and aggregate opening area). The Applicant noted that the glazing in the subject window units provides standard thermal resistance. He also indicated that the additional firestopping provided vertically and horizontally between units would assist in the prevention of suite-to-suite flash-over.

The Applicant submitted several reports to support his arguments of sufficiency of compliance. He also submitted test results done at Underwriters' Laboratories of Canada in which the PVC window frames were tested for flame spread rating and smoke developed classification in accordance with CAN/ULC-S102.2, "Standard Method of Test for Surface Burning

Characteristics of Floor Coverings, and Miscellaneous Materials and Assemblies." The tests showed that the PVC material had a flame spread rating of between 55 and 65 and a smoke developed classification of between 425 and 475. The Applicant argued that these test results demonstrate that the PVC window frames posed no usually high risk in terms of their combustibility.

The Applicant indicated that the same window units are also proposed for two other high rise buildings (40 and 60 Old Mill Road) as part of the same complex.

6. **Respondent's Position**

The Respondent submitted that he supports the use of the PVC window units but he indicated that he feels it exceeds his jurisdiction under the OBC to allow these relaxations concerning the lack of the 1,000 mm vertical separation and the excess aggregate window opening area. He indicated that he had concerns regarding suite-to-suite spread of fire.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed combustible PVC window units installed in certain suites as a floor to ceiling wall assembly with approximately 250 mm of non-combustible vertical separation between storeys and constituting openings of approximately 50 to 70 percent of the aggregate area of the exterior wall face does not provide sufficiency of compliance with Sentence 3.1.5.4.(5) of the Ontario Building Code at Oakridge Heights, 50 Old Mill Road, Oakville, Ontario.

8. **Reasons**

i) The current reference, Sentence 3.1.5.4.(5) reads:

(a) each window in an exterior wall face is an individual unit separated by noncombustible wall construction from every other opening in the wall,
(b) windows in exterior walls in contiguous storeys are separated by not less than 1000 mm of noncombustible construction, and
(c) the aggregate area of openings in an exterior wall face of a fire compartment is not more than 40% of the area of the wall face.

ii) These minimum code requirements of 3.1.5.4.(5) have not been satisfied and no alternative compliance measures have been proposed.

Dated at Toronto this 5th day in the month of August in the year **1999** for application number **1999-55**

BCC Ruling No. 99-52-708

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-52-708

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.2.2.41 and Sentences 3.2.5.13.(1) and 3.2.5.13.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Clare Wamsteeker, Manager, Physical Plant, Brantwood Residential Development Centre, Brantford, Ontario for the resolution of a dispute with Mr. Doug Ferguson, Chief Building Official, City of Brantford, to determine whether the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with Article 3.2.2.41. and Sentences 3.2.5.13.(1) and (2) of the Ontario Building Code at the Toll Gate Road Group Home, 95 Toll Gate Road, Brantford, Ontario.

APPLICANT

Mr. Clare Wamsteeker, Manager, Physical Plant
Brantwood Residential Development Centre
Brantford, Ontario

RESPONDENT

Mr. Doug Ferguson
Chief Building Official
City of Brantford

PANEL

Mr. Kenneth Peaker (Chair-Designate)
Mr. Robert De Berardis
Mr. Stewart Smith

PLACE

Toronto, Ontario

DATE OF HEARING

August 5, 1999

DATE OF RULING

August 5, 1999

APPEARANCES

Mr. Rick Reichard, Architect/Planner
Snider Reichard March Architects
Waterloo, Ontario
Agent for the Applicant

RULING

1. **The Applicant**

   Mr. Clare Wamsteeker, Manager, Physical Plant, Brantwood Residential Development Centre, Brantford, Ontario, has received a building permit under the Building Code Act, 1992 and is currently constructing a group home known as the Paris Road Group Home, 100 Paris Road, Brantford, Ontario.

2. **Description of Construction**

   The Applicant is currently constructing a one storey (with a partial basement), group home with a building area of 312 m^2 (excluding carport) that is intended to house only 7 residents, who are supervised 24 hours a day by up to 3 or 4 full time staff members working on eight hour shifts. The building is of combustible construction and is classified as having a Group B, Division 3 (care) occupancy under the 1997 Ontario Building Code. The separations between the basement and ground floor and between the bedrooms within the group home will have a 3/4 hour fire-resistance rating.

   The structure will not be equipped with a fire alarm system, but will be supplied with a hard-wired interconnected smoke detection system and a sprinkler system. The Applicant is proposing that this latter system be designed and installed in accordance with the requirements of NFPA

13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height."

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with Article 3.2.2.41. and Sentences 3.2.5.13.(1) and 3.2.5.13.(2) of the Ontario Building Code. Article 3.2.2.41. requires that a B3 occupancy must be sprinklered even though it may be of combustible construction. The dispute therefore centres on the type of sprinkler system that is required.

The NFPA 13R standard stipulates that a sprinkler system be designed and installed for all occupied rooms. The NFPA 13 standard, however, goes further by also requiring sprinklering in unoccupied areas such as closets and concealed spaces such as attics. Sentence 3.2.5.13.(1) states that a required sprinkler system must meet NFPA 13, whereas Sentence 3.2.5.13.(2), provides an exception to Sentence (1) by allowing low rise (four stories or less) residential occupancies to comply with the more relaxed sprinkler standards found in NFPA 13R.

If the subject B3 occupancy, as a low rise structure intended for a maximum of less than 10 people, could also be considered a residential occupancy according to the OBC, then the NFPA 13R standard would be an appropriate requirement for sprinklering.

4. **Provisions of the Ontario Building Code**

Article 3.2.2.41. Group B Division 2 or Division 3, One Storey, Sprinklered

(1) A building classified as Group B, Division 2 or Division 3 is permitted to be of combustible construction or noncombustible construction used singly or in combination, provided

(a) except as permitted by Sentence 3.2.2.7.(1), the building is sprinklered,
(b) it is not more than 1 storey in building height, and (c) it has a building area not more than 500 m^2 (5,380 ft^2). **Article 3.2.5.13. Automatic Sprinkler Systems**

(1) Except as permitted by Sentence (4), if Sentence (2) permits a single exit from a floor area classified as Group B or Group C occupancy, the exit shall be an exterior doorway not more than 1500 mm (4 ft 11 in) above adjacent ground level.

(2) Instead of the requirements of Sentence(1), NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height", is permitted to be used for the design, construction, installation and testing of an automatic sprinkler system installed in a building of residential occupancy that is not more than 4 storeys in building height.

5. **Applicant's Position**

At the outset the Applicant indicated that he had recently been to the Building Code Commission representing a project that was very similar to the one at hand, and since the dispute centred on the same issue he would be making similar arguments as before.

The Applicant submitted that the care occupancy currently under construction should be considered as residential facility under the OBC, thereby allowing the proposed NFPA 13R conforming sprinkler system to be installed. The Applicant argued that the subject group home physically resembles a house from both the exterior, with its small size, and interior, with its homelike floor plans. He noted that the construction techniques are also residential in nature. In his view, it was not the intent of the 1997 OBC to require the more onerous NFPA 13 sprinkler standard for such small buildings of residential character and function. He suggested that smaller facilities (as measured by their floor area or occupant load) in the B3 classification be allowed to comply with NFPA 13R.

Considering that all occupied rooms would be sprinklered (according to NFPA 13R), that fire separations would be provided between floors and bedrooms, that hard-wired interconnected smoke detectors would be installed, and that evacuation would be quick, the Applicant stated that the life safety of the residents would be adequately protected without relying upon the more rigorous NFPA 13 requirements.

Lastly, the Applicant indicated that many safety and accessibility features had been included in the subject home, with some of these being beyond the minimum standards required in the Code.

6. **Respondent's Position**

The Respondent chose not to attend the hearing. The Commission therefore relied upon his written submission.

The Respondent submitted that the subject care home is not a residential facility and thus the sprinkler system should be designed and installed according to NFPA 13. The building at hand, he argued, would contain more than two people who would require assistance to evacuate in an emergency. As a result, the subject building does not meet the criteria found in Article 3.1.2.5. of the 1997 Ontario Building Code that allows a care facility to be considered as having a residential occupancy. Therefore, in the Respondent's view, a care occupancy must conform with NFPA 13 standards for sprinkler design and installation.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with Article 3.2.2.41. and Sentences 3.2.5.13.(1) and (2) of the Ontario Building Code at the Paris Road Group Home, 100 Paris Road, Brantford, Ontario provided a fire alarm system is installed throughout the building.

8. **Reasons**

i) Small residential type building;

ii) Less than 10 persons sleeping and occupying building;

iii) All safety features of B3 occupancy have been provided, other than NFPA 13; and,

iv) Fire separations consisting of 3/4 hour ratings between the basement and main floor and between bedrooms, corridors and living spaces have been provided.

Dated at Toronto this 5th day in the month of August in the year **1999** for application number **1999-49**

BCC Ruling No. 99-51-707

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-51-707

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.2.2.41 and Sentences 3.2.5.13.(1) and 3.2.5.13.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Clare Wamsteeker, Manager, Physical Plant, Brantwood Residential Development Centre, Brantford, Ontario for the resolution of a dispute with Mr. Doug Ferguson, Chief Building Official, City of Brantford, to determine whether the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with Article 3.2.2.41. and Sentences 3.2.5.13.(1) and (2) of the Ontario Building Code at the Paris Road Group Home, 100 Paris Road, Brantford, Ontario.

APPLICANT

Mr. Clare Wamsteeker, Manager, Physical Plant
Brantwood Residential Development Centre
Brantford, Ontario

RESPONDENT

Mr. Doug Ferguson
Chief Building Official
City of Brantford

PANEL

Mr. Kenneth Peaker (Chair-Designate)
Mr. Robert De Berardis
Mr. Stewart Smith

PLACE

Toronto, Ontario

DATE OF HEARING

August 5, 1999

DATE OF RULING

August 5, 1999

APPEARANCES

Mr. Rick Reichard, Architect/Planner
Snider Reichard March Architects
Waterloo, Ontario
Agent for the Applicant

RULING

1. **The Applicant**

   Mr. Clare Wamsteeker, Manager, Physical Plant, Brantwood Residential Development Centre, Brantford, Ontario, has received a building permit under the Building Code Act, 1992 and is currently constructing a group home known as the Paris Road Group Home, 100 Paris Road, Brantford, Ontario.

2. **Description of Construction**

   The Applicant is currently constructing a one storey (with a partial basement), group home with a building area of 312 m^2 (excluding carport) that is intended to house only 7 residents, who are supervised 24 hours a day by up to 3 or 4 full time staff members working on eight hour shifts. The building is of combustible construction and is classified as having a Group B, Division 3 (care) occupancy under the 1997 Ontario Building Code. The separations between the basement and ground floor and between the bedrooms within the group home will have a 3/4 hour fire-resistance rating.

   The structure will not be equipped with a fire alarm system, but will be supplied with a hard-wired interconnected smoke detection system and a sprinkler system. The Applicant is proposing that this latter system be designed and installed in accordance with the requirements of NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height."

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with Article 3.2.2.41. and Sentences 3.2.5.13.(1) and 3.2.5.13.(2) of the Ontario Building Code. Article 3.2.2.41. requires that a B3 occupancy must be sprinklered even though it may be of combustible construction. The dispute therefore centres on the type of sprinkler system that is required.

The NFPA 13R standard stipulates that a sprinkler system be designed and installed for all occupied rooms. The NFPA 13 standard, however, goes further by also requiring sprinklering in unoccupied areas such as closets and concealed spaces such as attics. Sentence 3.2.5.13.(1) states that a required sprinkler system must meet NFPA 13, whereas Sentence 3.2.5.13.(2), provides an exception to Sentence (1) by allowing low rise (four stories or less) residential occupancies to comply with the more relaxed sprinkler standards found in NFPA 13R.

If the subject B3 occupancy, as a low rise structure intended for a maximum of less than 10 people, could also be considered a residential occupancy according to the OBC, then the NFPA 13R standard would be an appropriate requirement for sprinklering.

4. **Provisions of the Ontario Building Code**

Article 3.2.2.41. Group B Division 2 or Division 3, One Storey, Sprinklered

(1) A building classified as Group B, Division 2 or Division 3 is permitted to be of combustible construction or noncombustible construction used singly or in combination, provided

(a) except as permitted by Sentence 3.2.2.7.(1), the building is sprinklered,
(b) it is not more than 1 storey in building height, and (c) it has a building area not more than 500 m^2 (5,380 ft^2). **Article 3.2.5.13. Automatic Sprinkler Systems**

(1) Except as permitted by Sentence (4), if Sentence (2) permits a single exit from a floor area classified as Group B or Group C occupancy, the exit shall be an exterior doorway not more than 1500 mm (4 ft 11 in) above adjacent ground level.

(2) Instead of the requirements of Sentence(1), NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height", is permitted to be used for the design, construction, installation and testing of an automatic sprinkler system installed in a building of residential occupancy that is not more than 4 storeys in building height.

5. **Applicant's Position**

At the outset the Applicant indicated that he had recently been to the Building Code Commission representing a project that was very similar to the one at hand, and since the dispute centred on the same issue he would be making similar arguments as before.

The Applicant submitted that the care occupancy currently under construction should be considered as residential facility under the OBC, thereby allowing the proposed NFPA 13R conforming sprinkler system to be installed. The Applicant argued that the subject group home physically resembles a house from both the exterior, with its small size, and interior, with its homelike floor plans. He noted that the construction techniques are also residential in nature. In his view, it was not the intent of the 1997 OBC to require the more onerous NFPA 13 sprinkler standard for such small buildings of residential character and function. He suggested that smaller facilities (as measured by their floor area or occupant load) in the B3 classification be allowed to comply with NFPA 13R.

Considering that all occupied rooms would be sprinklered (according to NFPA 13R), that fire separations would be provided between floors and bedrooms, that hard-wired interconnected smoke detectors would be installed, and that evacuation would be quick, the Applicant stated that the life safety of the residents would be adequately protected without relying upon the more rigorous NFPA 13 requirements.

Lastly, the Applicant indicated that many safety and accessibility features had been included in the subject home, with some of these being beyond the minimum standards required in the Code.

6. **Respondent's Position**

The Respondent chose not to attend the hearing. The Commission therefore relied upon his written submission.

The Respondent submitted that the subject care home is not a residential facility and thus the sprinkler system should be designed and installed according to NFPA 13. The building at hand, he argued, would contain more than two people who would require assistance to evacuate in an emergency. As a result, the subject building does not meet the criteria found in Article 3.1.2.5. of the 1997 Ontario Building Code that allows a care facility to be considered as having a residential occupancy. Therefore, in the Respondent's view, a care occupancy must conform with NFPA 13 standards for sprinkler design and installation.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with Article 3.2.2.41. and Sentences 3.2.5.13.(1) and (2) of the Ontario Building Code at the Paris Road Group Home, 100 Paris Road, Brantford, Ontario provided a fire alarm system is installed throughout the building.

8. **Reasons**

i) Small residential type building;

ii) Less than 10 persons sleeping and occupying building;

iii) All safety features of B3 occupancy have been provided, other than NFPA 13; and,

iv) Fire separations consisting of 3/4 hour ratings between the basement and main floor and between bedrooms, corridors and living spaces have been provided.

Dated at Toronto this 5th day in the month of August in the year **1999** for application number **1999-48**

BCC Ruling No. 99-50-706

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-50-706

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.4.2.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Martin Kimble, General Manager, Carriage Hills Resort 2 Corp., Barrie, Ontario, for the resolution of a dispute with Mr. Ronald M. Kolbe, Director of Building and Planning Development, Township of Oro-Medonte, Ontario to determine whether the proposed fire alarm system for the entire building, offered in lieu of a required second exit from certain second storey units, provides sufficiency of compliance with Article 3.4.2.1. of the Ontario Building Code at the Carriage Hills Resort, Phase II, Township of Oro-Medonte, Ontario.

APPLICANT

Mr. Martin Kimble, General Manager
Carriage Hills Resort 2 Corp.
Barrie, Ontario

RESPONDENT

Mr. Ronald M. Kolbe
Director of Building and Planning Development
Township of Oro-Medonte

PANEL

Mr. Kenneth Peaker (Chair-Designate)
Mr. Robert De Berardis
Mr. Stewart Smith

PLACE

Toronto, Ontario

DATE OF HEARING

August 5, 1999

DATE OF RULING

August 5, 1999

APPEARANCES

Mr. David Hastings, Associate Director
Beinhaker/Irwin Associates
Toronto, Ontario
The Applicant

Mr. Ronald M. Kolbe, Director of Building
and Planning Development
Township of Oro-Medonte
For the Respondent

RULING

1. **The Applicant**

   Mr. Martin Kimble, General Manager, Carriage Hills Resort 2 Corp., has received a building permit under *the Building Code Act, 1992* to construct two identical three storey residential (time-share) condominiums known as Phase II at the Carriage Hills Resort, Oro-Medonte Township, Ontario.

2. **Description of Construction**

   The Applicant is currently constructing two, three storey Group C - (residential) condominium buildings, each with a building area of 1,313.6 m2. Both buildings are to be constructed of combustible construction and will be equipped with a fire alarm system, but not a sprinkler system. Each building (known as buildings D and E) will house a total of 26 units, with the ground and second floors containing 10 units each and the third floors 6 units a piece. The six third storey units are located in the middle of the linear buildings, leaving both ends of the buildings at two storeys in building height. All condominium units are one storey.

The proposed buildings are the second phase of development of condominiums at the Carriage Hills Resort. The first phase consisted of buildings A, B and C which are two storeys in building height and contain a total of 52 units (16 in both buildings A and B and 20 in building C). This phase was constructed in 1997.

The construction in dispute involves the egress provisions from the two second storey units to be located at the extreme ends of both buildings where the structures are only two storeys in building height. (Of the 52 total units proposed therefore, the egress of only eight [four per building] are in dispute.) For all upper storey units in both buildings the main egress will be provided by means of exterior landings/corridors shared between two units and open exit stairs leading to grade level. As well, for the third storey units and the second floor units directly below them a secondary shared exit facility similar to that provided at the front of the building is to be provided at the rear of the units. However, the four pairs of second storey units located at the ends of both buildings are not provided with a secondary and independent egress route. Instead, they are only provided with a rear balcony.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed fire alarm system, as an early warning device to be installed throughout the entire building, offered in lieu of a required second exit from the subject eight second storey units, provides sufficiency of compliance with Article 3.4.2.1. of the Ontario Building Code. This provision, with certain exceptions, requires that two exits are provided for every floor area intended for occupancy. The proposed structure does not qualify for any of the exceptions contained in Article 3.4.2.1.

4. **Provisions of the Ontario Building Code**

Article 3.4.2.1. Minimum Number of Exits

(1) Except as permitted by Sentences (2) to (4) and (6), every floor area intended for occupancy shall be served by at least 2 exits.

(2) A floor area in a building not more than 2 storeys in building height, is permitted to be served by one exit provided the total occupant load served by the exit is not more than 60, and

(a) in a floor area that is not sprinklered, the floor area and the travel distance are not more than the values in Table 3.4.2.1.A., or

(b) in a floor area that is sprinklered, (i) the travel distance is not more than 25 m (82 ft), and (ii) the floor area is not more than the value in Table 3.4.2.1.B.

(3) Except as permitted by Sentence (4), if Sentence (2) permits a single exit from a floor area classified as Group B or Group C occupancy, the exit shall be an exterior doorway not more than 1500 mm (4 ft 11 in) above adjacent ground level.

(4) A floor area containing only dwelling units having access to exit conforming to Sentences 3.3.4.4.(1) to (4) need not comply with Sentences (1) and (3).

(5) Exits are not required directly from rooftop enclosures that are provided with access to exits in conformance with Sentences 3.3.1.3.(5) and (6).

(6) Every room containing an assembly occupancy serving a hotel, and located in the building containing the hotel, shall be provided with not less than

(a) 3 separate egress doorways from the room where the occupant load is more than 600 persons, and
(b) 4 separate egress doorways from the room where the occupant load is more than 1000 persons.

(7) Each egress doorway in Sentence (6) shall be considered as contributing not more than

(a) one third of the required width where 3 egress doorways are required, and
(b) one fourth of the required width where 4 egress doorways are required.

5. **Applicant's Position**

The Applicant at the outset conceded that secondary, independent exits are required for the subject eight units. Further, he also supported the position of the Housing Development and Buildings Branch that, in general, a passive life safety system such as an exit is preferable to an active system such as a fire alarm. Nevertheless, he indicated that it was not his intention to dispute the requirements of Article 3.2.4.1., instead he argued that the proposed fire alarm system could be viewed as a compensating measure that achieves sufficiency of compliance with Article 3.4.2.1. To support this position, he noted that the first phase of the project was allowed to install a fire alarm system as a compensating measure for the lack of an additional and independent second storey exit. He added that a fire alarm system could be viewed as an alternative compliance measure similar to those found in Part 11 of the OBC.

6. **Respondent's Position**

The Respondent submitted that the proposed single exit second storey units do not comply with Article 3.4.2.1. of the Code. He argued that the principle of a second exit is a clear requirement found not only in this provision but throughout the OBC except under very limited circumstances. In his view, the proposed fire alarm system does not offer enough compensating safety to provide sufficiency of compliance with Article 3.4.2.1. As he noted, fire alarm systems do not address egress requirements and should not be seen as an appropriate mitigating measure. Safety systems that are passive, such as exits, are preferred to active systems such as fire alarms, he argued. This is because a passive system can be relied upon to perform its function in an emergency more so than an active system that may break down or fail.

Moreover, the Respondent rejected the Applicant's argument that the fire alarm system would be a compensating measure above the minimum required Code standards. In fact, he asserted that a fire alarm system would be necessary for the subject building according to the OBC Subsection 3.2.4. As a result, if required, the fire alarm system cannot be offered in lieu of another requirement.

Lastly, the Respondent also turned away the Applicant's proposal that the fire alarm system could be viewed as an alternative measure under Section 11.5. of the Code because, as new construction, none of Part 11 would apply to the subject building. As he pointed out, Part 11 only applies to renovation of existing buildings at least 5 years old.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed fire alarm system for the entire building, offered in lieu of a required second exit from certain second storey units, does not provide sufficiency of compliance with Article 3.4.2.1. of the Ontario Building Code at the Carriage Hills Resort Phase II, Township of Oro-Medonte, Ontario.

8. **Reasons**

i) Part 11 of the Code is not applicable since we are dealing with new construction;

ii) Two exits are required as per 3.4.2.1.; and,

iii) No compensating measures that were deemed to be adequate to provide sufficiency of compliance were offered.

Dated at Toronto this 5th day in the month of August in the year **1999** for application number **1999-41**

BCC Ruling No. 99-49-705

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-49-705

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 8.2.1.6.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Barry Mills, President, 933891 Ontario Ltd., Stroud, Ontario, for the resolution of a dispute with Mr. Ray Hachigian, Inspector & Chief Building Official, Ontario to determine whether the subject piers supporting a second storey balcony as constructed and first storey deck as proposed, with less than 5 m clearance distance to the sewage system distribution pipes, provides sufficiency of compliance with Sentence 8.2.1.6.(2) of the Ontario Building Code at the Green Residence, Flint Island B295, Township of the Archipelago, Ontario.

APPLICANT

Mr. Barry Mills, President
933891 Ontario Ltd., O/A Classic Country Homes & Grill
Stroud, Ontario

RESPONDENT

Mr. Ray Hachigian
Inspector & Chief Building Official
Township of Archipelago

PANEL

Mr. Bryan Whitehead (Chair-Designate)
Mr. Doug Robinson
Mr. Bill Fellner

PLACE

Toronto, Ontario

DATE OF HEARING

July 22, 1999

DATE OF RULING

July 22, 1999

APPEARANCES

Mr. Barry Mills, President
933891 Ontario Ltd., O/A Classic Country Homes & Grill
Toronto, Ontario
The Applicant

Mr. Ray Hachigian
Inspector & Chief Building Official
Township of Archipelago
For the Respondent

RULING

1. **The Applicant**

   Mr. Barry Mills, President, 933891 Ontario Ltd., has received a building permit under *the Building Code Act, 1992* to construct a residence including second storey balconies on April 19, 1999 and an order to comply under *the Building Code Act (BCA), 1992* to provide the required minimum clearance distance between two balcony supporting piers and the distribution pipe in the newly constructed absorption bed at Flint Island B295 PCL 11706, former Township of Conger in the Township of the Archipelago, Ontario.

2. **Description of Construction**

   The property in question is a 4500 square foot Group C - residential occupancy constructed on a 17.2 acre parcel of land and serviced by a drilled well. The sewage system is a newly constructed Class 4 filter bed system consisting of two existing thirty four square metre beds with an additional bed to be added. The building under construction is described as a two storey, single detached structure.

The construction in dispute involves a lower (1st storey) deck and two supporting piers of an upper (2nd storey) balcony at the northeast corner of the building, which do not provide the minimum horizontal clearance distance of 5 m to distribution pipe in the filter bed as required by Sentence 8.2.1.6.(2) of the Ontario Building Code.

On September 21, 1998, the sewage permit was issued and on April 19, 1999 the Applicant was issued a building permit for the residence and an additional accessory sewage system. On May 6, 1999 an Order to Comply was issued requiring compliance with the clearance distance requirements referred to above. It was during an inspection of the proposed work that the clearance distance deficiencies were discovered.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the subject piers supporting the second storey balcony and the 1st storey deck as proposed, with as little as 2.13 m clearance distance from the distribution pipe in the filter bed, provides sufficiency of compliance with Sentence 8.2.1.6.(1) of the Ontario Building Code. This provision requires a minimum horizontal clearance distance of 5 m between a structure and a distribution pipe. With respect to the 1st floor deck, the Applicant committed to placing any additional deck piers a minimum of 2.13 m from the distribution pipe.

4. **Provisions of the Ontario Building Code**

Sentence 8.2.1.6.(2) Clearances for a Class 4 or 5 Sewage System

(2) Except as permitted by Article 3.1.8.17., the maximum area of glass block and wired glass panels not in a door, used in the locations shown in Table 3.1.8.15., shall conform to the Table.

5. **Applicant's Position**

The Applicant submitted that the proposed deck and second storey balcony will not interfere with the operation nor effectiveness of the septic system. He noted that the deck and balcony are sitting on bedrock and the base of the piers are a minimum 2 ft above the filter bed. Accordingly, given that the structures are supported on bedrock above the bed, they are unlikely to have an adverse impact on the operation or the effectiveness of the sewage system. Furthermore, given that the piers are two feet higher than the sewage system, the operation of the sewage system is unlikely to adversely impact on the structure.

The Applicant also argued that despite the proximity (less than half the required distance in the case of the deck: 13' as opposed to 1.5 m in the case of the balcony piers) the bed remains accessible for any repair or maintenance, and the structure can be maintained without affecting the filter bed.

Additionally the Applicant suggested that the existence of the 1st storey deck would keep people off the filter bed and assist in its' functioning.

6. **Respondent's Position**

The Respondent submitted that the subject deck and balcony do not meet the stipulated distance found in Sentence 8.2.1.6.(2). There is no definition of structure in the Regulation however the definition of "building" in Subsection 1.(1) of the Building Code Act (BCA), 1992 appears to reference the structural elements which are infringing on the required setback at issue.

Furthermore, the Respondent argued that because structure is not defined in the OBC, there is no direction to specifically exclude decks from this setback requirement or other exemptions that might render the stipulation not applicable.

The Respondent did not believe that there were issues relating to this situation other than the fact that he did not feel he had any discretion to vary the requirements in this part of the Code.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the existing separation between the piers constructed to support the proposed second floor balconies and the distribution pipe in the existing filter bed, provide sufficiency of compliance with Sentence 8.2.1.6.(2) of the Ontario Building Code.

Further, it is the decision of the Building Code Commission that the proposed first storey raised walkway or deck (0.6 m above grade) supported on the existing piers and two proposed piers no closer than 2.13 metres to the distribution pipe, provide sufficiency of compliance with Sentence 8.7.1.6.(2) of the Ontario Building Code.

8. **Reasons**

i) The existing and proposed piers, constructed as sonotubes filled with concrete, are sufficiently separated from the distribution pipe to have no impact on the performance of the filter bed.

ii) The presence of the raised walkway at least 2.13 metres from the distribution pipe will have no impact on the performance of the filter bed.

iii) The disposal of sewage effluent into filter bed will have no impact on the performance of the piers.

Dated at Toronto this 22nd day in the month of July in the year **1999** for application number **1999-44**

BCC Ruling No. 99-48-704

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-48-704

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.1.8.16. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. George Flumian, Chairman, Building Committee, Villa Marconi Long Term Care Centre, Nepean, Ontario, for the resolution of a dispute with Ms. Terry Dalkowski, Chief Building Official, City of Nepean, Ontario to determine whether the recently constructed upgraded, noncombustible, one hour rated, pressed steel frame with wired glass panels and a 45 minute rated hollow metal door designed to match the existing exit stairwell enclosure provides sufficiency of compliance with Article 3.1.8.16. of the Ontario Building Code at the Villa Marconi Long Term Care Centre, 1026 Baseline Road, Nepean, Ontario.

APPLICANT

Mr. George Flumian, Chairman, Building Committee
Villa Marconi Long Term Care Centre
Nepean, Ontario

RESPONDENT

Ms. Terry Dalkowski
Chief Building Official
City of Nepean

PANEL

Mr. Kenneth Peaker (Chair-Designate)
Mr. James Lischkoff
Mr. Donald Pratt

PLACE

Toronto, Ontario

DATE OF HEARING

July 8, 1999

DATE OF RULING

July 8, 1999

APPEARANCES

Ms. Judy Jeske, Senior Associate
Leber/Rubes Inc.
Ottawa, Ontario
The Applicant

Mr. Frank Bidin
Manager of Permits
City of Nepean
For the Respondent

RULING

1. **The Applicant**

   Mr. George Flumian, Chairman, Building Committee, Villa Marconi Long Term Care Centre, has applied for a building permit under the Building Code Act, 1992 to renovate an existing convent to create a care facility, known as the Villa Marconi Long Term Care Centre, at 1026 Baseline Road, Nepean, Ontario.

2. **Description of Construction**

   The Applicant has recently renovated a portion of an existing 1950s convent building and has changed its use to create a long term care centre with a capacity of 60 beds, 30 each on the second and third floors. The remaining existing portion of the structure (to the west) was previously converted to a community centre, the second floor of which is used as a chapel. The Applicant has also recently constructed an addition onto the east side of the proposed long term care facility to expand the available area for that use.

The structure is described as having two major occupancies; a Group B, Division 2 - (long term care facility) occupancy and a Group A, Division 2 - (community centre/chapel) occupancy. It is three storeys (the community centre is only two) in building height, plus a partial basement and has a total building area of 2,140 m^2, with the community centre being 645 m^2, while the nursing home facility (including new addition) measures 1,495 m^2. The building is considered to be of noncombustible construction and is equipped with a two-stage fire alarm system and is fully sprinklered throughout.

The construction in dispute involves the interior enclosure walls facing the building's central corridors of three exit stairs, two of which are located in the existing renovated portion of the structure, whereas the third is located in the new addition. Specifically, in the case of the existing stair enclosures, the original plain glass and wood frame glazing were replaced with wired glass in pressed steel frames having a one hour fire-resistance rating. The original paired narrow leaf doors were also replaced with single, wider (1,042 mm), hollow metal, 45 minute rated doors equipped with panic hardware. Both the wired glass and steel doors are labelled to indicate their fire-resistance rating.

The design intent of the new enclosure assembly was to match that of the existing original enclosure, especially in terms of the total amount of glazing and its overall configuration. As such, the new enclosures consist almost entirely of glass with each composed of 11 (roughly 40 cm by 95 cm) panes arranged horizontally in five rows containing two panes each, with the topmost row of three panes extending over the door. In the new exit found in the addition, the enclosure was designed in a near exact way, with the exception that the door is slightly wider.

During the partial demolition of the existing building's interior prior to the recent construction, however, the entire enclosure walls were removed.

For all three exits at which this issue has arisen the disputed enclosure assembly occurs on every floor. All of the stairs are required exits which lead directly to the exterior at grade. As a temporary measure, until a decision by the Building Code Commission has been rendered, the Applicant has covered the glazed area of each enclosure with drywall. None of the other wall and floor/ceiling assemblies in the existing and new stairs are in dispute.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the glazed area of the recently constructed exit stair enclosures, designed to match the existing original assembly but

with a greater degree of fire-resistance rating, provides sufficiency of compliance with Article 3.1.8.16. of the Ontario Building Code. Sentence (1) of this provision restricts the aggregate of glazed area in a door to 0.8 m^2, while Sentence (2) limits the aggregate of glazed area not in a door also to 0.8 m^2. The area of wired glass in the Applicant's as built enclosures far exceed the 0.8 m^2 total allowed in Sentence 3.1.8.16.(2).

As much of the subject structure is an existing building that underwent a renovation, Part 11 of the Building Code therefore applied. Since the original intent was to retain much of the interior as possible and nearly all the exterior, the project was originally considered a basic renovation. As well, an analysis of the change of use of the structure found that the Hazard Index at 6 matched the Construction Index of 6. Based on the first proposal, under Compliance Alternative B14, the original enclosure assemblies could have remained in place.

Subsequent demolition, however, removed much of the interior of the building, including the original stair enclosures, and thus went beyond what is considered basic renovation. Apparently at this point there was some confusion or lack of communication between Applicant and Respondent regarding these changes in the building and the corresponding regulatory requirements. The Applicant's plan then was, as discussed, to match and replace the previous non-rated enclosures in terms of glazed area with new 1 hour-rated enclosures. The dispute was only realized by the parties after construction was well under way.

4. **Provisions of the Ontario Building Code**

Article 3.1.8.16. Area Limits for Wired Glass and Glass Block

(1) Except as permitted by Article 3.1.8.17., the maximum area of wired glass in a door used in the locations shown in Table 3.1.8.15. shall conform to the Table. (See Appendix A.)

(2) Except as permitted by Article 3.1.8.17., the maximum area of glass block and wired glass panels not in a door, used in the locations shown in Table 3.1.8.15., shall conform to the Table.

5. **Applicant's Position**

The Applicant acknowledged at the outset that the total glazed area in the subject stair enclosures do not comply with Article 3.1.8.16. of the Code. She submitted, however, that the as constructed situation is "a substantial improvement" over the previous condition which, she added, could have been retained or matched etc. under Part 11 if the renovation had not been so

extensive. As a result, the Applicant indicated that her approach would be to demonstrate sufficiency of compliance with OBC 3.1.8.16. and to argue that the new performance level is better than the previous situation.

In terms of sufficiency of compliance the Applicant argued that the new materials are superior to the original construction, which the Code would have allowed. In fact, she noted that the entire enclosure assembly provides a one hour separation which is much more than the previous non-rated combustible assembly. Further, she also noted that the additional demolition that triggered this issue was done, in part, as a voluntary and pro-active measure to install sprinklering throughout the building. Without the sprinklers and the associated demolition the new wall assembly would have been able to match existing construction. The sprinklering, she noted, enhanced the safety of the building greatly beyond what is required. The sprinklers, acting to suppress a fire, would be especially useful by the enclosures since they would minimize the chance of fire spreading by radiation and thereby keeping the temperature rise in check.

The Applicant also argued that the exit stairs will not be exposed to a high fuel load in the immediate vicinity of the enclosures elements. If smoke does contaminate a stairwell there are two other exits serving the residents' floors, she noted. Moreover, the residents' floor areas are subdivided into three compartments separated by a 1 hour rating each served by an exit stair.

Lastly, the Applicant argued that the extensive glazing has additional health and safety benefits in a nursing home facility. The glazing, for example, enhances visual supervision of persons using the stairs, which is important considering the age of the residents. The extra glazing would be especially useful if a person required assistance in the stairwell. In terms of the overall health of the residents, she noted that the additional glazing would allow more natural light into the corridors, which would be quite beneficial in an institutional environment.

6. **Respondent's Position**

The Respondent submitted that references or arguments regarding the relevance of Part 11 to the subject enclosures were nullified when approximately 90 percent of the interior of the building was demolished, including the enclosures which were replaced by the new wall assemblies. At this point, as he indicated, Article 3.1.8.16. was the only germane criteria and the current as constructed enclosures far exceed the permitted aggregate glazed area. He noted that there are no construction difficulties etc. that would prevent the Applicant from meeting Article 3.1.8.16.

While the Respondent recognizes that the new assemblies provide a greater degree of fire separation than the original situation, he does not view this upgrade as an equivalent under Section 2.7 of the OBC. As he noted, there are no tests established to verify this upgrade, nor is there any history of past performance. Further, he indicated that the Code does not specifically allow sprinklering as a compensating measure for this type of modification to a required exit.

Finally, the Respondent argued that, considering many of the residents will be non-ambulatory and will need assistance, the integrity of the exits from a fire compartmentalization aspect is crucial. In an emergency, staff and fire fighters will need extra time to assist many of the occupants of the building down the exit stairs. For this basic reason they have concerns about the extent of glazing in the enclosures.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the upgraded noncombustible one hour rated pressed steel frame with wired glass panels and one hour rate hollow metal door proposed to match the existing stairwell enclosure does not provide sufficiency of compliance with Article 3.1.8.16. at the Long Term Care Centre, 1026 Baseline Road, Nepean, Ontario.

8. **Reasons**

i) The Applicant was unable to demonstrate to the Building Code Commission that the existing measures provide sufficiency of compliance.

Dated at Toronto this 8th day in the month of July in the year **1999** for application number **1999-42**

BCC Ruling No. 99-47-703

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-47-703

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.2.5.13.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. J. M. O. Grey, Vice-President and Chief Architect, Toronto Dominion Bank, Toronto, Ontario, for the resolution of a dispute with Mr. Dan Mousseau, Chief Building Official, City of Burlington, Ontario to determine whether the bank vault interior, as constructed, without sprinkler protection in a building required to be sprinklered, provides sufficiency of compliance with Sentence 3.2.5.13.(1) of the Ontario Building Code at the Toronto Dominion Bank, Millcroft Shopping Centre, 2000 Appleby Line, Building G, Unit G1, Burlington, Ontario.

APPLICANT

Mr. J. M. O. Grey, Vice-President and Chief Architect
Toronto Dominion Bank
Toronto, Ontario

RESPONDENT

Mr. Dan Mousseau
Chief Building Official
City of Burlington

PANEL

Mr. Kenneth Peaker (Chair-Designate)
Mr. James Lischkoff
Mr. Donald Pratt

PLACE

Toronto, Ontario

DATE OF HEARING

July 8, 1999

DATE OF RULING

July 8, 1999

APPEARANCES

Mr. J. M. O. Grey
Toronto Dominion Bank
Toronto, Ontario
The Applicant

Mr. Brad Swainsbury
Building Inspector
City of Burlington
For the Respondent

RULING

1. **The Applicant**

   Mr. J. M. O. Grey, Vice-President and Chief Architect, Toronto Dominion Bank, has received a building permit under *the Building Code Act, 1992* to construct a Toronto Dominion retail bank branch at the Millcroft Shopping Centre, 2000 Appleby Line, Building G, Unit G1, Burlington, Ontario.

2. **Description of Construction**

   The Applicant has recently constructed a 371.7 m^2, Group E - (retail bank branch outlet) mercantile occupancy for the Toronto Dominion Bank. The bank branch is located within a larger retail plaza that is described as one storey in building height, 2044.6 m2 in building area, and contains Group D and Group E occupancies. The plaza is noncombustible construction and is equipped with a sprinkler system, but is not provided with a fire alarm system.

The construction in dispute involves whether the 2,896 mm by 2,134 mm vault is required to be sprinklered. The Applicants have not currently provided a sprinkler head in the vault interior. The vault, manufactured by Chubb Security Ltd., consists of wall, floor and roof concrete modular panels a minimum of 190 mm thick with a four hour fire resistance rating. The vault is equipped with a smoke detector and a heat detector that are connected to the bank's security system. This system is monitored 24 hours a day.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the bank vault interior, as constructed, without sprinkler protection in a building required to be sprinklered, provides sufficiency of compliance with Sentence 3.2.5.13.(1) of the Ontario Building Code. This provision requires that where a building is to be sprinklered the system must be designed, constructed, installed and tested in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems". The NFPA 13 standard, specifically Subsection 1-6.1, requires that all areas of a building be sprinklered, including rooms and spaces, except where expressly omitted. Bank vaults, however, are not included as one of the exceptions listed in the NFPA 13 standard.

4. **Provisions of the Ontario Building Code**

Article 3.2.5.13.(1) Automatic Sprinkler Systems

(1) Except as permitted by Sentences (2), (3) and (4), an automatic sprinkler system shall be designed, constructed, installed and tested in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems". (See Appendix A.)

5. **Applicant's Position**

The Applicant acknowledged that NFPA 13, as cited in OBC Sentence 3.2.5.13.(1), does require that bank vaults be sprinklered. However, he indicated that it was his intention to argue that the subject unsprinklered vault does provide sufficiency of compliance with OBC 3.2.5.13.(1).

The Applicant noted that, in his view, this issue arose because the NFPA, an American standard, had changed over the last ten to fifteen years with respect to the requirement for sprinkler protection in bank vaults. Canadian building regulations such as the OBC, meanwhile continue to reference the NFPA 13 standard. That the OBC references the NFPA 13 standard is not the

issue, what is, he argued, is that NFPA did not consult with or notify any Canadian financial institutions before making this revision.

Regarding the sufficiency of the unsprinklered vault, the Applicant then argued that the chance of a fire occurring in a vault is very unlikely. Their records which date back to 1962 do not indicate any such occurrence. Moreover, since the vault is built according to Subsection 3.1.5. of the OBC (Noncombustible Construction) and because it is a nearly air tight space, any fire would have little oxygen to fuel itself with. If, on the other hand, a fire were to start outside the vault elsewhere in the building the risk of damage to the contents within the vault is low due to its four hour fire-resistance rating. There have been a few such incidences and in all cases, even when the surrounding building was a total loss, very little damage to the contents occurred. As the Applicant noted, the bank has had a far greater history of loss due to water damage than from fire.

The vaults are also equipped with two early warning devices; a smoke detector, and a heat detector. These devices, connected to the bank's alarm system, will provide adequate notice to the fire department to respond to a fire on the premises, he argued. The Applicant is also proposing to install a sprinkler head outside and above the actual vault itself. He indicated that he is also willing to enhance the suppression system immediately outside the vault door and to change the interior cabinets to ones constructed of metal. The Applicant added that the carpet in the bank is fire retardant.

The Applicant then compared bank vault regulations and construction to that of electrical vaults, which he noted are listed as an excepted space under NFPA 13. He noted that electrical vaults, while also required to be noncombustible and be equipped with smoke detection, are generally built to a lesser standard in terms of thickness of concrete and fire-resistance rating. Further, electrical vaults are also not required to provide heat detection. He argued that bank vaults, being built to a higher standard, should also be exempt from sprinklering.

For these reasons, the Applicant concluded that the as-built unsprinklered vault provides sufficiency of compliance with Sentence 3.2.5.13.(1).

6. **Respondent's Position**

The Respondent submitted that OBC Sentence 3.2.5.13.(1) requires as per NFPA 13 that all spaces in a building required to be sprinklered must be equipped with a sprinkler head. NFPA 13 clearly does not allow this exception.

Regarding the Applicant's arguments concerning sufficiency of compliance the Respondent noted that the vault is loaded with combustible materials and is open during day time operations which in event of fire would allow oxygen to fuel flames. As well, the early detection systems installed in the vault do not provide any suppression to actively fight the fire. The Respondent also argued that the construction and use of the vault does not make it comparable to an electrical vault, therefore the same exemption should not apply. There are numerous penetrations in the subject vault which could possibly allow any fire to spread.

The Respondent indicated that sprinkler technology has advanced to the point that accidental set off rarely occurs. A chemical sprinkler system, for example, could be designed to suit the banks purposes.

For these reasons, the Respondent indicated that he felt that he did not have the authority to allow the disputed construction.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the bank vault interior is required to be installed with sprinkler protection in accordance with Sentence 3.2.5.13.(1) of the Ontario Building Code at the Toronto Dominion Bank, Millcroft Shopping Centre, 2000 Appleby Line, Building G, Unit G1, Burlington, Ontario.

8. **Reasons**

i) Where a building is required to be sprinklered, Sentence 3.2.5.13.(1) of the Ontario Building Code requires that an automatic sprinkler system must be designed, constructed, installed and tested in conformance with NFPA-13-1994 "Standard for the Installation of Sprinkler Systems".

ii) Subsection 1-6.1 of the NFPA-13 states that "a building, where protected by an automatic sprinkler system installation, shall be provided with sprinklers in all areas". The intent of the Standard is to require sprinklers in all rooms and spaces, except where specific sections of NFPA-13 permit the omission of sprinklers. However, bank vaults are not one of the given exceptions.

iii) No sufficiency of compliance was demonstrated by the Applicant that were considered sufficient by the Building Code Commission.

Dated at Toronto this 8th day in the month of July in the year **1999** for application number **1999-40**

BCC Ruling No. 99-46-702

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-46-702

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.3.2.13. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Joe Amorim, J.M.C. Amorim Foods Inc., Hamilton, Ontario, for the resolution of a dispute with Mr. Dan Mousseau, Chief Building Official, City of Burlington, Ontario to determine whether the raised dining platform, as constructed, should be required to conform with Sentences 3.3.2.13.(1) and 3.4.6.4.(7) of the Ontario Building Code at the Swiss Chalet Restaurant, 1220 Brant Street, Burlington, Ontario.

APPLICANT

Mr. Joe Amorim
J.M.C. Amorim Foods Inc.
Hamilton, Ontario

RESPONDENT

Mr. Dan Mousseau
Chief Building Official
City of Burlington

PANEL

Mr. Kenneth Peaker (Chair-Designate)
Mr. James Lischkoff
Mr. Donald Pratt

PLACE

Toronto, Ontario

DATE OF HEARING

July 8, 1999

DATE OF RULING

July 8, 1999

APPEARANCES

Mr. Randy Brown
Randal Brown and Associates Ltd.
Toronto, Ontario
Agent for the Applicant

Mr. Joe Wintar
Manager of Permit and Zoning Administration
City of Burlington
For the Respondent

RULING

1. **The Applicant**

   Mr. Joe Amorim, J.M.C. Amorim Foods Inc., has received a building permit under *the Building Code Act, 1992* to construct a new Swiss Chalet restaurant at 1220 Brant Street, Burlington, Ontario.

2. **Description of Construction**

   The Applicant has recently constructed a single storey, 553.5 m^2 (in building area), Group A, Division 2 occupancy to be used as a 232 seat restaurant. The building is of combustible construction and is equipped with a fire alarm system.

   The construction in dispute involves a raised platform located in the centre of the dining area. There are eight booths (four with four seats and four with two seats each) on the subject raised dining platform containing a total of 24 seats. Half of the booths face to the outside of the platform while the other half face a 1,092 mm wide passageway running across the width of the platform's interior.

The platform measures 3.33 m by 3.86 m for a total area of 12.85 m^2. It is raised by the height of one step, specifically 170 mm. Directly under the oak nosing of the raised platform is a 10 mm in diameter lighting string. At each end of the platform's access passageway 237 mm long handrails are provided. The handrails are fastened to the low perimeter wall of the platform that forms the backing of the end booths. The lowest portion of the handrails are mounted 900 mm from the top of the platform and are set at a 45 degree angle from a horizontal plane.

For the patrons using the 12 seats in the four booths facing the outside of the platform it is necessary to step up onto the platform and slide along the bench-type seat. There is no handrail provided to assist them in getting in and out and up and down the 170 mm height of the platform. While the patrons seated in the interior booths have handrails to assist them in ascending and descending the platform, the handrails do not extend 300 mm at the top and bottom of the step.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the as built raised dining platform complies with Sentences 3.3.2.13.(1) and 3.4.6.4.(7) of the Ontario Building Code. Sentence 3.3.2.13.(1) permits such raised platforms as long as it meets certain requirements, including illumination and handrails on each side. The applicant's handrails, however, do not meet all the requirements for handrails that are located in a stair. Sentence 3.4.6.4.(7), for example, stipulates that a 300 mm extension of the handrail is necessary at the top and bottom of the stair. Such an extension is not proposed. Further, the exterior booths are not provided with any handrails.

4. **Provisions of the Ontario Building Code**

Sentence 3.3.2.13.(1) Risers for Stairs

(1) In a Group A, Division 2 occupancy used for the serving of food and beverages, an interior flight of stairs with fewer than 3 risers is permitted provided it

(a) is not less than 900 mm (2 ft 11 in) wide,
(b) is illuminated at all times that occupants are on the premises, and
(c) has a handrail on each side.

Sentence 3.4.6.4.(7) Handrails

(7) At least one handrail at the side of a stairway or ramp shall extend horizontally not less than 300 mm (11 3/4 in) beyond the top and bottom of the stairway or ramp. (See A-3.4.6.4.(5) in Appendix A.)

5. **Applicant's Position**

The Applicant submitted that the subject platforms are commonly employed as part of the interior design of a restaurant. He indicated that, in his view, the raised dining platform is an architectural element and does not meet the definition of a stair in the OBC. In fact, he argued it should be considered as furniture. As a result, he argued that the disputed provisions of the Code are not relevant since they pertain to stairs or ramps.

Nevertheless, the Applicant did indicate that many of the safety concerns regarding the riser for the interior booths were being addressed. For example, the booth passageway at 1,092 mm in width comfortably exceeds the required 900 mm. The booth is also well lit at all times and has additional lighting on the riser itself. Moreover, a handrail has been provided on both sides of the two "exits" from the platform. The flooring finishes are different between platform and the lower floor making the change in elevation easier to see. Therefore, even if the platform was considered a stair under the OBC it would meet most of the requirements of Sentence 3.3.2.13.(1), the Applicant argued. He indicated that they are also willing to extend the handrail somewhat at the top and bottom of the platform riser by wrapping it around the exterior booth wall, thereby lengthening the handrail and making it more useful and safer. A full 300 mm extension, however, would be a dangerous obstacle in the passageway.

As far as the issue of the exterior booths, the Applicant argued that they should not be considered as a stair. Patrons do not actually step up the riser, in fact they slide into the booth. In doing so they usually use the table and/or the back of the seat as an object to steady themselves. As such, he stated that the requirements of Sentences 3.3.2.13.(1) and 3.4.6.4.(7) were not applicable. Further, the Applicant argued that it was impractical to include some of the required measures in this application.

6. **Respondent's Position**

The Respondent submitted that the subject dining platform should be considered as having a single stair riser. Consequently, the provisions of the OBC relating to stairs apply.

Regarding the step leading to the interior booths, the Respondent acknowledged that the Code, specifically Article 3.3.2.13., allows a single riser stair within a restaurant, but he argued that the handrails must therefore conform to Sentence 3.4.6.4.(7) and be provided with a 300 mm extension at the top and bottom of the stairs. He noted that the Applicant's proposed handrail extension does not meet this requirement. The extension is important, he argued, because it allows the public the opportunity to steady themselves before and after negotiating the stair.

On the issue of the exterior booths, the Respondent indicated that he considers the single riser at this location also a stair. He argued that Sentence 3.4.6.3.(5) of the Code requires every stair to have a landing at the top and bottom. The exterior booth arrangement has no landing area at the top of the stair, he noted.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed raised dining platform does not fall under the definition of a stair and therefore extensions are not required for the handrail and the raised dining platform need not be required to conform with Sentence 3.3.2.13.(1) of the Ontario Building Code at the Swiss Chalet Restaurant, 1220 Brant Street, Burlington, Ontario.

It is also the decision of the Building Code Commission that the exterior booths do not require handrails nor need to conform to OBC 3.3.2.13. at the Swiss Chalet Restaurant, 1220 Brant Street, Burlington, Ontario.

8. **Reasons**

i) Drawing A-102 dated July 6, 1999 and February 15, 1999 indicate that illumination and handrails provide sufficiency of compliance.

ii) The platform is an integral part of the booth and therefore may be considered as a single piece of furniture.

iii) The single step in the exterior booths does not provide access to any other booth or floor areas in the restaurant.

Dated at Toronto this 8th day in the month of July in the year **1999** for application number **1999-33**

BCC Ruling No. 99-45-701

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-45-701

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentences 8.2.1.6.(2) and 11.5.1.1.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Nancy E. Clark and Mr. David A. Clark, property owners, Selby, Ontario, for the resolution of a dispute with Mr. David Cooke, Part VIII Coordinator, Kingston, Frontenac and Lennox and Addington Health Unit, Kingston, Ontario to determine whether the proposed replacement of a failed Class 4 sewage system to be sited near the existing location with less than 30 m to two dug wells is required to comply with Sentence 8.2.1.6.(2) of the Ontario Building Code (OBC), or may be permitted to comply with Sentence 11.5.1.1.(1) of the OBC at the Clark Residence, 2249 County Road 11, Selby, Ontario.

APPLICANT

Ms. Nancy E. Clark and Mr. David A. Clark
Property Owners
Selby, Ontario

RESPONDENT

Mr. David Cooke
Coordinator, Part VIII
Kingston, Frontenac and Lennox and Addington Health Unit

PANEL

Mr. Bryan Whitehead (Chair-Designate)
Mr. Bill Fellner
Mr. Frank Wright

PLACE

Toronto, Ontario

DATE OF HEARING

June 24, 1999

DATE OF RULING

June 24, 1999

APPEARANCES

Ms. Nancy E. Clark and Mr. David A. Clark
Property Owners
Selby, Ontario
The Applicants

Mr. David Cooke, Coordinator, Part VIII
Kingston, Frontenac and Lennox and Addington Health Unit
The Respondent

RULING

1. **The Applicant**

   Ms. Nancy E. Clark and Mr. David A. Clark, property owners, have applied for a building permit under *the Building Code Act, 1992* to install a new, partially raised Class 4 sewage system as a replacement for their existing failed system at 2249 Country Road 11, Selby, Ontario.

2. **Description of Construction**

   The Applicants are proposing to install a new, partially raised Class 4 sewage system as a replacement for their existing failed system at their residence. The building is classified as having a Group C- (single detached dwelling unit) residential occupancy and is described as having 210 m^2 of total finished area, 17.5 fixture units, three bedrooms and a total daily design flow of 1,700 L/d. No work is proposed for the dwelling itself.

   The existing system is approximately forty to fifty years old and is composed of a 3,375 litre tank (750 gallons) septic tank connected to an unknown length and area of clay distribution pipe set in the native soil. The tank itself has been perforated and is currently being used as a

makeshift holding facility, which requires a pump out every seven or eight days. The clay pipe leading from the tank to the bed was no longer functional. Regarding the distribution tiles, which is fed (or should fed) by gravity disposal, no information was provided.

The proposed new replacement sewage system is described as a partially raised Class 4 system with a sand filter bed. It consists of a 4,500 litre septic tank which transmits effluent by gravity to a nearby pump chamber, both of which will be located near the dwelling at the south end of the property. From there the effluent is to be pumped roughly 20 m to the distribution pipe, which is higher in elevation and located at the north end of the site.

The proposed filter bed will be partially raised by 0.3 m due to the high watertable found at 1.4 m below grade. The bed is to contain four runs of 76 mm diameter distribution pipe each 9.15 m in length for a total of 36.6 m. The pipes will be placed at 0.75 m on centre and all runs are to be connected with perpendicular pipe at both ends. The pipes are to be set in a 0.3 m thick layer of crushed stone ranging from 53 to 18 mm in size. The stone layer, measuring 3 by 10 m, will be separated from the raised covering material above by geotextile fabric or building paper. Below the stone layer will be a 0.75 m thick sand filter media composed of imported materials with an approximate T-time of 8 minutes per centimetre. The contact area of the sand filter bed will also be 30 m^2 (3 by 10 m). The total depth of the entire filter bed will be 1.15 m below the existing grade.

The site measures approximately 22 m by 40 m, has a total area of roughly 880 m^2 and is described as a "hamlet lot". It has a seven percent downward slope in a north to south direction. The native soil has a percolation rate in the range of 2.5 to 4 minutes per centimetre. The site is served by a dug well. The neighbouring property immediately to the east is served by a similarly constructed well which is situated roughly only 5 m away from the common lot line.

The issue regarding the failed sewage system and the decision to replace it arose after the Applicants recently bought the subject property. Upon occupancy they immediately discovered that the sewage system was not functioning. After inspection by the local health unit it was determined that the system had not worked for some time, and further, that their well was contaminated. While the well is generally down gradient of the leaching bed, it has not been conclusively determined through, for example, a dye test analysis that there is a causal link between the two. Nevertheless, they decided that the entire system urgently needed to be replaced.

The construction in dispute involves the proposed location of the new raised filter bed and its proximity to the two dug wells, approximately 26 and 21.5 m away on the Applicants' and neighbour's properties respectively. The location of the existing, failed tile field is not precisely known, however, it is most accurately described as being in the centre of the subject property, and despite the fact that the proposed filter bed location would be an improvement over the current situation, i.e., it would be farther away from the wells, due to the constricted lot size, the bed cannot be constructed at the distance required for new system installations. While it is known that the Applicants' well is contaminated (they have been drinking bottled water since they discovered the problem), the water quality of the neighbour's well has not been determined since he is not interested in having it tested.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the new Class 4 sewage system, specifically the sand filter bed, proposed as a replacement for the existing failed system is required to comply with Sentence 8.2.1.6.(2), or may be permitted to comply with Sentence 11.5.1.1.(1) as it refers to Table 11.5.1.1.C. and Compliance Alternative C84.1 of the Ontario Building Code. Sentence 8.2.1.6.(2) of the OBC sets out the requirements for, among other things, the minimum clearance distances between distribution piping (Table 8.2.1.6.B.) and dug wells such as the two in dispute. Table 8.2.1.6.B. stipulates that 30 m is the required distance in this instance. Germane to the subject dispute is the fact that Part 8, as with most other parts of the Code, deals with the standards for new construction.

Sentence 11.5.1.1.(1), on the other hand, states that a compliance alternative may be substituted for the new construction standards found in various parts of the Code, including Part 8, if the Chief Building Official is satisfied that, as is possible in this case, there is a "construction difficulty". The compliance alternative relevant to this dispute is C84.1, which allows the existing clearances to be maintained if the proposed sewage system is the same class as the existing system and if the replacement system does not exceed the capacity of the old system. Sentence 11.5.1.1.(1), as is the case with all of Part 11, deals with construction undertaken on an existing building or sewage system and is intended to provide reasonable standards considering that much of the intended overall construction for the site is already in place.

The Applicants' proposed sand filter bed, although farther away than the existing leaching bed, will still be only 26 m from their well and 21.5 m from the neighbour's well. They applied for a permit for their replacement system on the basis that this lack of clearance distance constitutes a

"construction difficulty" as per Sentence 11.5.1.1.(1). Their application was turned down by the Health Unit because they lacked the adequate setbacks to the subject wells. Neither party raised nor disputed the requirements of Article 8.9.1.2. which prohibits effluent impact on ground water and wells.

4. **Provisions of the Ontario Building Code**

Sentence 8.2.1.6.(2) Clearances for a Class 4 or 5 Sewage System

(2) Except as provided in Sentences 8.2.1.4.(1) and (2), a distribution pipe shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B. and these distances shall be increased when required by Sentence 8.7.4.2.(9).

Sentence 11.5.1.1.(1) Compliance Alternatives

(1) A compliance alternative shown in Tables 11.5.1.1.A., 11.5.1.1.B., 11.5.1.1.C., 11.5.1.1.D/E. or 11.5.1.1.F. may be substituted for a requirement contained in Part 3, 4, 5, 6, 7 or 8 where the chief building official is satisfied that compliance with the requirement is impracticable because,

(a) of structural or construction difficulties, or
(b) it is detrimental to the preservation of a heritage building.

5. **Applicant's Position**

The Applicants submitted that their proposed Class 4 sewage system, as a replacement system, should be allowed to utilize the existing setbacks to the wells under Part 11. They noted that Sentence 11.5.1.1.(1), specifically compliance alternative C84.1, states that existing clearances are acceptable where a sewage system is replaced with another system in the same class and the capacity (as in daily design sewage flow) of the replacement system is also the same.

The Applicants argued that they comply with both of these conditions. In fact, their replacement system will improve the performance level over the current one. Moreover, since no work is proposed for the building, the capacity of the new system will be the same. (They noted the recently approved Ontario Regulation 278/99 clarifies that the "capacity" of a sewage system is determined by calculating the daily design sewage flow.) As a result, the Applicants stated that, in their view, due to their construction difficulty related to setbacks on their property, the Respondent should have authorized the use of compliance alternative C84.1, as per Sentence 11.5.1.1.(1).

The Applicants noted that there are numerous ways that their proposed system will be a major improvement over their existing sewage system. To start with, they are proposing to install a larger septic tank equipped with an effluent filter in the outlet baffle. Together these improvements will be better able to begin the process of separation and allow for greater bacterial action. They are also proposing to construct a sand filter media bed where none existed prior. As well, most importantly, they intend to locate the filter bed farther from the wells than the existing leaching bed.

The Applicants admitted that the quality of the well water was an issue. However, they rejected the Respondent's argument that their own consultant warned them that all affected wells be abandoned. The only well of which work was contemplated and discussed with their consultant was their well, and replacing it with a cased well 6 m deep or more was considered only as an additional safety measure. They stressed that their consultant never indicated to them, as it seemed the Respondent was alleging, that their proposed replacement system would not be possible due to the lack of available clearance distance. In fact, they argued that his advice was exactly the opposite - that their proposal should be allowed under Part 11.

The Applicants also recognized that the impact of the replacement system would be felt by their neighbours as well. Nevertheless, they indicated that their neighbours concurred with their plans and agreed that their proposal would improve the current situation. To this end, they produced letters of support from both of their neighbours immediately adjacent to their property.

Lastly, the Applicants commented that Part 11, in their view, was intended precisely for people in circumstances as they now found themselves. They noted that Eastern Ontario especially has many smaller rural or village/hamlet lots that are serviced by old, ineffective sewage systems. Without recourse to Part 11, they argued, many of these lots could be rendered useless. They expressed hope that the Building Code Commission would consider this in their deliberations. Finally, they reiterated their view that their proposal should be accepted with reduced setbacks under Part 11.

6. **Respondent's Position**

The Respondent submitted that he considers the Applicants' proposal to be a new sewage system installation. Accordingly, he indicated that all minimum clearance distances, including those to the subject wells, must be complied with. He based this view on Article 11.1.1.2. which classifies a sewage system as a building system, and on Article 11.3.1.2. which, as he argued, requires a new building system to comply with "all other Parts of the Code", including Part 8.

To support his view that the proposed system should be considered new, the Respondent described the aspects of the system that are new or different than the existing one. He noted, for example, that the septic tank will be larger and that it is to be equipped with an effluent filter. The pump, necessary to transmit effluent to the raised bed, is also a new feature of this system. As well, the bed itself is completely different - it will be raised and will be composed of new materials imported to the site as the filter media. Even all the distribution pipe is new in the Applicants' proposal. Thus, since none of the current system is being reused, relocated or extended the proposal cannot be considered a basic renovation, the Respondent argued. Further, although technically within the same class system many upgrades and modifications have been proposed, therefore he asserted that this must be viewed as an entirely new system.

The Respondent rejected the idea that compliance alternative C84.1 should be used in this case. The quality of not only the Applicants' well water but also that of their neighbour's was his chief concern and the main reason the application was refused. It is precisely for reasons such as this in an existing situation, he argued, that Sentence 11.5.1.1.(1) allows compliance alternatives to be used only when "the chief building official is satisfied that compliance with the requirement (in this case Table 8.2.1.6.B.) is impractical..." Moreover, the Respondent stated that he does not believe that a lack of clearances constitutes a construction difficulty as intended in OBC 11.5.1.1.(1). Even if he was to allow the Applicants' their requested relaxation which may pollute their well, he indicated that he viewed it as his duty to protect the neighbour's well. In fact, he argued that Part 11 should not be available in circumstances where contamination of another property is a likely hazard.

The Respondent also argued that even if the Commission were to approve the subject proposal based on part 11, other provisions in the Code specifically do not allow contamination of a well. While he acknowledged these provisions (Article 8.9.1.2.) regulate on-going operational concerns and therefore may not apply to the subject dispute, he indicated that when, or if, the proposed sewage system is constructed and if contamination is linked to the system he would possibly rely upon such powers in the future. To avoid this situation, the Respondent indicated that he would be satisfied with the present proposal if a tertiary treatment unit were added or a cased well greater than 6 m deep was built (as the consultant recommended). This, he noted, would protect both wells and would resolve the situation now.

Lastly, the Respondent conceded that the proposal is "a significant improvement over the existing system and it is in the best interests of all parties to install a new system." Nevertheless, without the minimum clearance distances he believes the potential risk of contaminating the

wells is too high. He does not believe the mandate or intent of the OBC or the Building Code Act is to knowingly allow this.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the compliance alternative shown in Table 11.5.1.1.C. (C84.1) may be substituted for the requirement contained in Article 8.2.1.4. with respect to the proposed replacement filter bed.

8. **Reasons**

i) There is an existing septic system which could be repaired under the Code.

ii) The distribution pipes in the proposed filter bed are no closer to the existing dug well on the subject property and adjacent lots than the existing distribution pipe to the existing leaching bed.

iii) The proposed performance level of the proposed sewage system exceeds the performance level of the existing system if it were operating properly.

Dated at Toronto this 24th day in the month of June in the year **1999** for application number **1999-47**

BCC Ruling No. 99-44-700

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-44-700

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentences 8.7.4.2.(9) and 8.7.5.2.(3) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99(the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Debra Ann Alexander, owner, Peterborough, Ontario, for the resolution of a dispute with Mr. Michael Gravel, Chief Building Official, Peterborough County-City Health Unit, Peterborough, Ontario to determine whether a partially raised Class 4 sewage system, expanded as a result of an addition to the existing seasonal residence, with reduced setbacks and an undersized leaching bed provides sufficiency of compliance with Sentences 8.7.4.2.(9) and 8.7.5.2.(3) of the Ontario Building Code at 731 Alexander Drive, R.R. #1, Peterborough, Ontario.

APPLICANT

Ms. Debra Ann Alexander
Owner
Peterborough, Ontario

RESPONDENT

Mr. Michael Gravel
Chief Building Official
Peterborough County-City Health Unit

PANEL

Mr. Bryan Whitehead (Chair-Designate)
Mr. Bill Fellner
Mr. Frank Wright

PLACE

Toronto, Ontario

DATE OF HEARING

June 24, 1999

DATE OF RULING

June 24, 1999

APPEARANCES

Mr. Tom Alexander
Owner
Peterborough, Ontario
Agent for the Applicant

Mr. Brad Clark
Public Health Inspector
Peterborough County-City Health Unit
For the Respondent

RULING

1. **The Applicant**

   Ms. Debra Ann Alexander, owner, has applied for a building permit under

   the Building Code Act, 1992

   to install a new, partially raised, Class 4 sewage system at 731 Alexander Drive, Peterborough, Ontario.

2. **Description of Construction**

   The Applicant is proposing to construct a new partially raised, Class 4 sewage system to serve a renovated single, detached Group C - residential (seasonal) dwelling located on Lake Chemong. The new sewage system is necessary due to the Applicant's intention to renovate the existing cottage residence by constructing a two storey addition, including garage, and by remodelling the existing structure. The new building will be used year round. The proposed addition is to sit

directly over the current location of the leaching bed. The renovated dwelling will contain 4 bedrooms, 24 fixture units and will increase the total finished floor area to approximately 219 m^2 from the existing 84.2 m^2. The total daily design sewage flow rate will be 2,200 l/d.

The Applicant has offered two proposals regarding possible locations of the filter bed sewage system. Option one, their preferred choice, would be to locate the new sewage system between the building and the road (referred to here as the "roadside" location). Option two would be to locate the system between the building and the lake ("lakeside"). For both locations the basic design elements of the proposed sewage system are the same. The new sewage system would consist of a 4,500 L septic tank connected to a partially raised leaching bed containing distribution pipe. Existing soils will be used in either system. The percolation time ranges from 2 to 8 min/cm.

Regarding the roadside location, due to the presence of the high groundwater table found at approximately 1.3 m below grade, the proposed bed will be raised by 0.3 m. The filter bed at this location would be long and narrow with two 19 m runs of distribution pipe (38 m total) placed at 1 m on centre. At the lakeside location a higher groundwater table, at roughly 0.6 m below grade, requires that the proposed bed be raised to a least 0.9 m. At this location the Applicant is proposing to configure the bed with 5 runs of 5.5 m each (27.5 m total) spaced apart 1 m on centre.

The site is described as covered with grass, slightly sloping towards the lake and measures 30.5 m by 43.6 m. The subject dwelling is served by a well water system. The drilled well is located on the front (lakeside) of the property.

The construction in dispute concerns the clearance distances involved in both locations. For the proposed roadside location the required setbacks, because of the raised bed, have been increased to 3.6 m from the lot line and 5.6 m from the building. The renovated building, however, is to be situated approximately 8.8 m from the rear lot line. The Applicant's proposed roadside location would therefore only provide a separation of 2.8 m to the lot line and 5 m to the cottage. Another issue is that the weeping tile around the existing and proposed building is to run directly to the lake.

For the lakeside location the raised bed has increased the setbacks to 16.8 m from the lake as well as 6.8 m from the building. The front of the proposed renovated building will be separated from the lake by 26 m. At this site, the proposed location of the sewage system at 17 m from the

lake would comply with that requirement but would only offer a separation of 5 m to the building. Further, only 17 m would separate the distribution pipe from the existing well.

Also in dispute is the proposed filter loading rate for the roadside location. Considering the size of the proposed leaching bed, at roughly 21 m^2, and considering the daily design flow of 2,200 l/d, the loading rate would exceed 75 L/m^2/day. The basal loading rate would also be excessive. The loading rate for the lakeside proposal is not in dispute.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the raised Class 4 sewage system proposed with reduced clearance distances in either location and an undersized leaching bed area provides sufficiency of compliance with Sentences 8.7.4.2.(9) and 8.7.5.2.(3) respectively of the Ontario Building Code. The first provision requires that the minimum clearance distances permitted in Table 8.2.1.6.B of the Code be increased by twice the height that the leaching bed is raised above the original grade. The effect of this requirement is that in both the Applicant's proposed locations not all setbacks can be met. The latter provision requires that the loading rate at the top of the leaching bed cannot exceed 75 L/m^2/ day. With a daily flow of 2,200 l/d an area of at least 30 m^2 is needed to meet the loading requirement. The Applicant's roadside location does not meet this.

4. **Provisions of the Ontario Building Code**

Sentence 8.7.4.2.(9) Construction Requirements

(9) The distances as set out in Column 2 of Table 8.2.1.6.B. shall be increased by twice the height that the leaching bed is raised above the original grade.

Sentence 8.7.5.2.(3) Loading Requirements

(3) Where the total daily design sanitary sewage flow does not exceed 3000 L, the effective area shall be such that the loading on the surface of the filter medium does not exceed 75 L/m^2 per day.

5. **Applicant's Position**

The Applicant indicated that his preferred location for the sewage system was to the rear of the cottage, near the roadside. This is because from an environmental point of view he felt it was

safer to put the system farther from the Lake. Another problem with the lakeside location is that the well would have to be moved to another location.

The Applicant submitted that his proposed roadside location, while not meeting all required setbacks, meets the intent of the Code, specifically Sentence 8.7.4.2.(9). He argued that because the proposed system would encroach mostly on a road (which is bounded by an open field on the other side) the impact would be minimal. He then submitted letters from property owners on either side and the owner of the road indicating support for the road side location.

The Applicant also acknowledged that the roadside location did not meet the loading requirements. He indicated, however, that their actual use of the building would be less than the estimated 2,200 l/d of daily design flow.

The Applicant, during the hearing, then offered to install a tertiary treatment unit to pretreat the effluent prior to distribution, as a compensating measure for the minor deficiency regarding the setbacks to the road. A shallow buried trench leaching bed was also proposed as the method of disposal.

6. **Respondent's Position**

The Respondent submitted that his refusal was based on insufficient area and a lack of adequate clearance distances provided. As a result he did not view the proposed system as providing sufficiency of compliance with the subject provisions of the OBC. He did indicate, however, that he would be comfortable with the proposed tertiary treatment unit as a compensating measure.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed compensating measure of the installation of a tertiary treatment system with denitrification and a shallow buried trench provides sufficiency of compliance with respect to the minor shortfall in setback required to the property line.

8. **Reasons**

i) There are no land uses on the privately owned road fronting on the property line which will be impacted be the shortfall in setback.

ii) The owner of the road has provided a letter accepting the encroachment on the setback.

iii) The tertiary treatment system will provide improved effluent quality reducing the potential impacts of the effluent disposal.

Dated at Toronto this 24th day in the month of June in the year **1999** for application number **1999-37**

BCC Ruling No. 99-43-699

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-43-699

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 8.2.1.6. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Andre Beaudet, homeowner, Carp, Ontario, for the resolution of a dispute with Mr. R.W.J. Moore, Chief Building Official, Township of West Carleton, Ontario to determine whether the deck, as constructed, with less than 1.5 m setback from the septic tank provides sufficiency of compliance with Article 8.2.1.6. and whether the proposed screened porch situated on the subject deck provides sufficiency of compliance with the same Article of the Ontario Building Code at 128 Greystone Drive, Carp, Ontario.

APPLICANT

Mr. Andre Beaudet
Homeowner
Carp, Ontario

RESPONDENT

Mr. R.W.J. Moore
Chief Building Official
Township of West Carleton

PANEL

Mr. Bryan Whitehead (Chair-Designate)
Mr. Bill Fellner
Mr. Frank Wright

PLACE

Toronto, Ontario

DATE OF HEARING

June 24, 1999

DATE OF RULING

June 24, 1999

APPEARANCES

Mr. Andre Beaudet
Homeowner
Carp, Ontario
The Applicant

Mr. R.W.J. Moore
Chief Building Official
Township of West Carleton
The Respondent

RULING

1. **The Applicant**

   Mr. Andre Beaudet, homeowner, has received an order to comply under *the Building Code Act (BCA), 1992* to provide the required minimum clearance distance between a deck attached to the rear of his residence and the septic tank and he has also applied for a building permit under the BCA to enclose the subject deck with a screened porch at 128 Greystone Drive, Carp, Ontario.

2. **Description of Construction**

   The Applicant's Group C - residential dwelling is currently served by a raised Class 4 sewage system. The building is described as a two storey, single detached structure containing 3 bedrooms, 23.5 fixture units and has a total finished floor area of 234.6 m^2. The calculated total daily design flow is 2,200. Both the building and the sewage system were built in 1991.

   The existing sewage system consists of a 4,500 L septic tank which feeds, by gravity disposal, a leaching bed composed of six runs of 8 m each (spaced 0.75 m apart on centre) for a total of 48

m of distribution pipe. The partially raised disposal bed and surrounding mantle has a total hydraulic footprint of 127.8 m^2 and was constructed with 25 mm crushed stone as the filter media set in and covered with sand fill. The sewage system appears to be functioning well.

The site is a 0.8 hectare "country lot". The soil profile is sand to a depth of 0.9 m and the high water table is located at least 0.9 m below grade. The site is served by a well water system.

The construction in dispute involves an "L-shaped" deck (6.7 m by 3.66 m) connected to the rear of the dwelling. The deck does not provide a minimum of 1.5 m clearance distance to the septic tank servicing the property. The actual distance between the edge of the deck and the septic tank is 0.45 m. (The deck was apparently built sometime after the house and septic system were constructed. There is disagreement between the parties as to whether the deck had been constructed at the time of the final inspection and when the final inspection occurred - either early 1992 or March 93.) The rectangular septic tank measures approximately 2.9 m by 1.65 m, with the width of the tank running parallel to the deck.

In the fall of 1998, the Applicant submitted a building permit application to enclose the deck with an unconditioned screened porch. This proposal is also in dispute. As part of the proposed work the existing deck foundation piers would be replaced with 6 x 6 pressure treated posts to support the weight of the enclosure. It was during an inspection for the proposed work that the clearance distance deficiency was discovered. The application for the porch enclosure was subsequently denied and an Order to Comply was issued regarding the noncompliance with the spatial separation.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the deck, as constructed, with less than 1.5 m clearance distance from the existing septic tank, provides sufficiency of compliance with Sentence 8.2.1.6.(1) of the Ontario Building Code. This provision requires a minimum horizontal clearance distance of 1.5 m between a structure and a treatment unit, such as a septic tank. The Applicant's existing deck, which he is proposing to enclose, is currently situated only 0.45 m from the septic tank.

4. **Provisions of the Ontario Building Code**

Article 8.2.1.6. Clearances for a Class 4 or 5 Sewage System

(1) Except as provided in Sentences 8.2.1.4.(1) and (2), a treatment unit shall not be located closer than the minimum horizontal distances as set out in Table 8.2.1.6.A.

(2) Except as provided in Sentences 8.2.1.4.(1) and (2), a distribution pipe shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B. and these distances shall be increased when required by Sentence 8.7.4.2.(9).

(3) No building shall be constructed closer to any part of a sewage system than the clearances listed in Articles 8.2.1.5. or 8.2.1.6.

5. **Applicant's Position**

The Applicant submitted that the deck as it is currently constructed does not interfere with the operation nor effectiveness of the septic system. He noted that since the development of the property eight years ago, the septic tank has needed servicing only once. Consequently, he argued that the existing configuration meets the intent of Sentence 8.2.1.6.(1) of the OBC regarding clearance distances.

The Applicant noted that when these sewage system were regulated by the Ministry of Environment under the Environmental Protection Act the Ministry circulated a directive dated June 14, 1999 stating that a person should not construct nor renovate a building in relation to a sewage system if it is "likely to affect the operation or effectiveness of the sewage system." He further noted that the letter goes on to indicate that "(c)learly,... a deck, provided that it does not cover the sewage system, will not affect the sewage system." Since the current setback requirements found in the OBC are the same as those under the Environmental Protection Act, he argued that the intent behind the provisions is similar. Therefore, because his deck does not cover the septic tank the Applicant indicated, in his view, that the existing setback of 0.45 m meets the intent of Sentence 8.2.1.6.(1).

The Applicant also argued that despite the proximity of the deck, the tank is still accessible. He argued that there is enough space on his two acre property that the tank could easily be removed and/or serviced without any interference with the deck or the leaching bed. He indicated that he had consulted an area sewage system contractor who assured him that removing the tank would not be a problem.

Lastly, the Applicant stated that he inherited this problem in February of 1992 when they purchased their house. He indicated that the house and deck have not been altered in any way since then.

6. **Respondent's Position**

The Respondent submitted that with only a 0.45 m separation, the subject deck does not meet the stipulated distance found in Sentence 8.2.1.6.(1). The actual clearance distance is less than one third of the required setback, he noted. A deck, the Respondent argued, should appropriately be viewed as a structure under Part 8 of the Code. The foundation for a deck raises similar construction issues as other, larger structures. Moreover, the same replacement and maintenance concerns would be present. He indicated that a quick sampling of other jurisdictions in North America found that 1.5 m seemed to be the minimum clearance to a treatment unit.

Further, the Respondent argued that because structure is not defined in the OBC there is no direction to specifically exclude decks from this setback requirement. He also noted that there are no exemptions that would be applicable to this situation since it should not be considered a renovation under Part 11, nor do the soil conditions warrant it.

As the Respondent noted, the deck was built without a building permit. Had a permit been applied for, it would have been refused. This would have true even under the previous regulations in the Environmental Protection Act. As well, without benefit of design review and inspection, he indicated that he had concerns about the structural adequacy of the existing deck.

Finally, the Respondent indicated that he had serious doubts about whether replacement of the current septic tank would be possible without significant disruption to the deck foundation. In his view, a 1.5 m excavation pit around the perimeter of tank would be necessary. Lastly, he expressed concern about the proposed new foundation piers and the possibility that they may undermine the soil under the tank and the leader pipe from the house.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the separation between the existing septic tank and the existing deck provides sufficiency of compliance with Table 8.2.1.6.A.

With respect to the proposal to construct a screened porch on top of the existing deck and to modify the existing support piers, it is the decision of the Building Code Commission that the

separation between the modified structure and the existing septic system provides sufficiency of compliance with Table 8.2.1.6.A. as long as the design of the support piers is confirmed by a consulting engineer and the engineer certifies that the construction did not negatively affect the performance of the septic tank.

8. **Reasons**

i) The deck and tank have been in co-existence from some six plus years and the presence of the deck has not apparently impacted on the performance of the septic tank.

ii) The septic tank is adequately separated from the foundation of the existing dwelling.

iii) The existing deck and proposed structure will not negatively impact on the maintenance of the tank.

iv) There is sufficient area and accessibility to replace the septic tank 1.5 metres beyond the structure.

v) The engineering certification ensures that the performance of the tank will not be negatively impacted by the construction.

Dated at Toronto this 24th day in the month of June in the year **1999** for application number **1999-36**

BCC Ruling No. 99-42-698

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-42-698

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 4.1.6.2. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. D. Hudgins, Construction Manager, Liza Homes, Richmond Hill, Ontario, for the resolution of a dispute with Mr. G.N. Bilous, Chief Building Official, City of Oshawa, Ontario, to determine whether the structural support system of the first floor of the temporary sales pavilion built to accommodate a live load of 2.4 kPa complies with Article 4.1.6.2. of the Ontario Building Code at the Liza Homes Sales Office, 1180 Harmony Road North, Oshawa, Ontario.

APPLICANT

Mr. D. Hudgins, Construction Manager
Liza Homes
Richmond Hill, Ontario

RESPONDENT

Mr. G.N. Bilous
Chief Building Official
City of Oshawa

PANEL

Mr. Kenneth Peaker, (Chair-Designate)
Mr. Robert De Berardis
Mr. John Guthrie

PLACE

Toronto, Ontario

DATE OF HEARING

June 17, 1999

DATE OF RULING

June 17, 1999

APPEARANCES

Mr. R.W. Bruynson, President
R.W. Bruynson Inc.
Oshawa, Ontario
Agent for the Applicant

Mr. S.K. Lo
Manager, Permit Services Division
City of Oshawa
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. D. Hudgins, Construction Manager, Liza Homes, Richmond Hill, Ontario, has applied for a building permit under *the Building Code Act, 1992* to construct a temporary sales pavilion at 1180 Harmony Road North, Oshawa, Ontario.

2. **Description of Construction**

   The Applicant is proposing to construct a two storey, 161 m^2 (1,733 ft^2) temporary sales pavilion to serve as a model home and office space in which new houses of a residential subdivision will be featured and promoted and where sales will be negotiated. The ground floor of the proposed building will be open to the public for the above uses. It will consist of 145 m^2 (1,560 ft^2) of reception, display and office areas, with a 16 m^2 (172 ft^2) veranda. The second floor will be accessible to employees only and will contain 29.7 m^2 (320 ft^2) of office space and a 8.4 m^2 (90 ft^2) viewing terrace. The building is classified as having a Group D- business (office) occupancy.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed structural integrity of the ground level floor assembly of the subject temporary sales pavilion built to accommodate a live load of 2.4 kPa complies with Article 4.1.6.2. of the Ontario Building Code. This Article provides the appropriate criteria for determining live loads used in the calculation of structural support for occupancies that are not specifically set out in Article 4.1.6.3. Temporary sales pavilions of this nature are not listed in Table 4.1.6.3., and therefore based on the criteria of Article 4.1.6.2. the Applicant is proposing to use 2.4 kPa as the design live load. Article 4.1.6.3., however, does include live load specifications for general office areas. The live load prescribed in Table 4.1.6.3. for the ground floor of an office area is 4.8 kPa.

4. **Provisions of the Ontario Building Code**

Article 4.1.6.2. Uses Not Stipulated

(1) Where the use of an area of floor or roof is not provided for in Article 4.1.6.3., the specified live loads due to the use and occupancy of the area shall be determined from an analysis of the loads resulting from

(a) the weight of the probable assembly of persons,
(b) the weight of the probable accumulation of equipment and furnishings, and
(c) the weight of the probable storage of materials.

5. **Applicant's Position**

The Applicant submitted that by employing a design live load of 2.4 kPa the resulting structural integrity of the ground floor would be more than adequate for the proposed weight of people, furniture and material and would therefore satisfy the requirements of Article 4.1.6.2.

The Applicant argued that classifying the building as an office occupancy is onerous. In his view, the sales pavilion is a specialty use not specifically covered by the Code. He noted that the structure will not be designed nor used in a crowded or cluttered fashion. In fact, in order to achieve a spacious look to demonstrate and emphasize the full sizes of the model rooms, the ground floor will not have an abundance of furniture and materials. As far as the total occupant load, the Applicant argued that it would be relatively low. He indicated that at the most only two

people work on the ground floor at any one time and that personal appointments are set up with prospective buyers. There may also be occasional drop-in customers.

Nevertheless, the Applicant proposed to use a design live load based that employs certain cautious assumptions. For example, based on the total building area, and assuming an occupant load of roughly one person per 2.8 m^2 (30 ft^2) the total ground floor occupant load would be 58 persons. He argued that this occupant load, assuming an average weight of 90.7 kg (200 lbs), would only result in a uniform live load of 0.3 kPa (6.7 psf). Doubling this load to account for any impact factor and doubling it again to account for the furniture would only yield a uniform load of 1.2 kPa (27 psf). As a result, with a design live load of 2.4 kPa (50 psf) an additional safety factor of 86% will be built into the proposed floor assembly to handle any non-uniform loads. This design, he asserted, will be more than sufficient to ensure that the safety of the public is adequately addressed.

Lastly, the Applicant noted that the Respondent supported his position.

6. **Respondent's Position**

The Respondent submitted that since the proposed temporary sales pavilion is classified as a Group D - business (office) occupancy. Article 4.1.6.3. and specifically Table 4.1.6.3. of the OBC are the applicable provisions and not Article 4.1.6.2. As a result, he argued that the proposed live load of 2.4 kPa (50 psf) for the ground floor of the sales office does not comply with the required 4.8 kPa (100 psf) as per Article 4.1.6.3. The Respondent then added that while the Code, in his view, stipulates a 4.8 kPa (100 psf) load, he indicated that for the proposed use, 2.4 kPa (50 psf) should be more than adequate.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the structural support system of the first floor of the temporary sales pavilion designed to accommodate a live load of 2.4 kPa (50 psf) does not comply with Article 4.1.6.2. of the Ontario Building Code at the Liza Homes Sales Office, 1180 Harmony Road North, Oshawa, Ontario.

8. **Reasons**

i) Application does not provide sufficiency of compliance with Subsection 4.1.6. of the Building Code.

ii) The design load for office areas, as stated in Table 4.1.6.3., has been in effect in the Ontario Building Code since 1975.

Dated at Toronto this 17th day in the month of June in the year **1999** for application number **1999-29**

BCC Ruling No. 99-41-697

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-41-697

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992* .

AND IN THE MATTER OF Subsection 9.16.3. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Richard Biffis, Vice President Construction, The Kaitlin Group, Scarborough, Ontario, for the resolution of a dispute with Mr. Stephen Vokes, Chief Building Official, Municipality of Clarington, Ontario, to determine whether a drainage system is required beneath the basement level concrete slab-on-grade as per Subsection 9.16.3. of the Ontario Building Code at the Port of Newcastle Development, Clarington, Ontario.

APPLICANT
Mr. Richard Biffis, Vice President Construction
The Kaitlin Group
Scarborough, Ontario

RESPONDENT
Mr. Stephen Vokes
Chief Building Official
Municipality of Clarington

PANEL
Mr. Kenneth Peaker, (Chair-Designate)
Mr. Robert De Berardis
Mr. John Guthrie

PLACE
Toronto, Ontario

DATE OF HEARING
June 17, 1999

DATE OF RULING
June 17, 1999

APPEARANCES

Mr. R.W. Bruynson, President
R.W. Bruynson Inc.
Oshawa, Ontario
Agent for the Applicant

RULING

1. **The Applicant**

   Mr. Richard Biffis, Vice President Construction, The Kaitlin Group, Scarborough, Ontario, has applied for a building permit under the *Building Code Act, 1992*, to construct a residential subdivision known as the Port of Newcastle development, Clarington, Ontario.

2. **Description of Construction**

   The Applicant is proposing to construct a residential subdivision known as the Port of Newcastle. The individual houses are classified as having a Group C occupancy and are described as two storey with a total floor area of 206 m^2 (2,217 ft^2).

   The construction in dispute involves the drainage below the concrete floor slabs at the basement level. The Applicant is not proposing to install drain pipes (connected to the perimeter weeping tile) under the slabs-on-ground. Instead, the proposed slabs would rest on polyethylene damproofing membranes on top of compacted granular material. A weeping tile drainage system for the foundation wall will be provided at the level of the footing.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the basement slab-on-ground floors constructed without a drainage system below complies with Article 9.16.3.1. of the Ontario Building Code. This provision requires that unless it can be demonstrated as unnecessary drainage or grading shall be used to prevent the ingress of water underneath a floor-on-ground.

4. **Provisions of the Ontario Building Code**

Subsection 9.16.3. - Drainage

9.16.3.1. - Control of Water Ingress

(1) Except as provided in Article 9.16.3.2. or where it can be shown to be unnecessary, ingress of water underneath a floor-on-ground shall be prevented by grading or drainage.

9.16.3.2. - Hydrostatic Pressure

(1) Where groundwater levels may cause hydrostatic pressure beneath a floor-on-ground, the floor-on-ground shall be:

(a) a cast in place concrete slab; and
(b) designed to resist such pressures.

5. **Applicant's Position**

The Applicant submitted that his proposal to construct the proposed slabs-on-ground without a drainage system below complies with Article 9.16.3.1. because such a system, in his view, is only required when ground water problems are anticipated as determined by a soils report or a site inspection. He argued that the need to install a sub-slab drainage system occurs when a water problem has been detected in the soil. He indicated that the Respondent has this reversed, believing that the drainage system is an automatic requirement until the soil is found to be problem free. This, the Applicant argued, places an unnecessarily heavy burden of proof

regarding the soil on the proponent and probably results in many unneeded drainage systems being installed in areas where the soil conditions do not require it

In his view, the intent of the Code is to prevent ingress of water under a slab-on-ground by using a drainage system where necessary. There was no indication of groundwater problems in his soils report or as noted by any site inspection. He argued that the engineering report should be viewed as reliable evidence of the site's condition. He added that the condition of each property would be verified and they would make any necessary adjustments, e.g. providing a sub-slab drainage system if needed, during construction.

With no identifiable groundwater issue, the Applicant concluded by arguing that it made little sense therefore to install a sub-slab drainage system for each property.

6. **Respondent's Position**

The Respondent submitted that a drainage system below the slab-on-ground is required as per Article 9.16.3.1. and thus the proposal does not meet Code. He noted that to date the municipality has not been able to conclusively determine whether the soil conditions would require (or not) that a sub-slab drainage system is necessary. Based on this uncertainty about the soil and considering that OBC 9.16.3.1. states that drainage is required "except... where it can be shown to be unnecessary..." (which he indicated has not been proven), the Respondent argued that his interpretation of this Code provision dictates that in the subject circumstance a sub-slab drainage system is required. As he noted, Article 9.16.3.1., in his view, is drafted in such a way as to require a drainage system until it can be proven unnecessary.

Having made the case for the requirement of the drainage system, the Respondent then argued however that he felt this was an example of an excessive requirement found in the Building Code that goes beyond the minimum standards designed to ensure the intended levels of health, life safety, and property protection and barrier-free accessibility. He indicated that he viewed the sub-slab drainage standards as requirements that enhance comfort and quality of construction but are not minimum housing standards.

Nevertheless, he indicated that they have been enforcing the Code as written because that is their responsibility as a municipal building department.

7. **Commission Ruling**

It is the decision of the Building Code Commission that drainage below a slab-on-ground at the Port of Newcastle development in Clarington may be eliminated provided an engineer reports to the Chief Building Official that drainage is unnecessary, or where groundwater levels may cause hydrostatic pressure beneath a floor-on-ground, the floor-on-ground shall be a cast in place concrete slab and designed to resist such pressures.

8. **Reasons**

(i) Article 9.16.3.1. states "Except as provided in Article 9.16.3.2. or where it can be shown to be unnecessary, egress of water underneath a floor-on-ground shall be provided by grading or drainage".

Dated at **Toronto** this **17th** day in the month of **June** in the year **1999** for application number **1999-28**.

BCC Ruling No. 99-42-698

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-42-698

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 4.1.6.2. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. D. Hudgins, Construction Manager, Liza Homes, Richmond Hill, Ontario, for the resolution of a dispute with Mr. G.N. Bilous, Chief Building Official, City of Oshawa, Ontario, to determine whether the structural support system of the first floor of the temporary sales pavilion built to accommodate a live load of 2.4 kPa complies with Article 4.1.6.2. of the Ontario Building Code at the Liza Homes Sales Office, 1180 Harmony Road North, Oshawa, Ontario.

APPLICANT

Mr. D. Hudgins, Construction Manager
Liza Homes
Richmond Hill, Ontario

RESPONDENT

Mr. G.N. Bilous
Chief Building Official
City of Oshawa

PANEL

Mr. Kenneth Peaker, (Chair-Designate)
Mr. Robert De Berardis
Mr. John Guthrie

PLACE

Toronto, Ontario

DATE OF HEARING

June 17, 1999

DATE OF RULING

June 17, 1999

APPEARANCES

Mr. R.W. Bruynson, President
R.W. Bruynson Inc.
Oshawa, Ontario
Agent for the Applicant

Mr. S.K. Lo
Manager, Permit Services Division
City of Oshawa
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. D. Hudgins, Construction Manager, Liza Homes, Richmond Hill, Ontario, has applied for a building permit under *the Building Code Act, 1992* to construct a temporary sales pavilion at 1180 Harmony Road North, Oshawa, Ontario.

2. **Description of Construction**

   The Applicant is proposing to construct a two storey, 161 m^2 (1,733 ft^2) temporary sales pavilion to serve as a model home and office space in which new houses of a residential subdivision will be featured and promoted and where sales will be negotiated. The ground floor of the proposed building will be open to the public for the above uses. It will consist of 145 m^2 (1,560 ft^2) of reception, display and office areas, with a 16 m^2 (172 ft^2) veranda. The second floor will be accessible to employees only and will contain 29.7 m^2 (320 ft^2) of office space and a 8.4 m^2 (90 ft^2) viewing terrace. The building is classified as having a Group D- business (office) occupancy.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed structural integrity of the ground level floor assembly of the subject temporary sales pavilion built to accommodate a live load of 2.4 kPa complies with Article 4.1.6.2. of the Ontario Building Code. This Article provides the appropriate criteria for determining live loads used in the calculation of structural support for occupancies that are not specifically set out in Article 4.1.6.3. Temporary sales pavilions of this nature are not listed in Table 4.1.6.3., and therefore based on the criteria of Article 4.1.6.2. the Applicant is proposing to use 2.4 kPa as the design live load. Article 4.1.6.3., however, does include live load specifications for general office areas. The live load prescribed in Table 4.1.6.3. for the ground floor of an office area is 4.8 kPa.

4. **Provisions of the Ontario Building Code**

Article 4.1.6.2. Uses Not Stipulated

(1) Where the use of an area of floor or roof is not provided for in Article 4.1.6.3., the specified live loads due to the use and occupancy of the area shall be determined from an analysis of the loads resulting from

(a) the weight of the probable assembly of persons,
(b) the weight of the probable accumulation of equipment and furnishings, and
(c) the weight of the probable storage of materials.

5. **Applicant's Position**

The Applicant submitted that by employing a design live load of 2.4 kPa the resulting structural integrity of the ground floor would be more than adequate for the proposed weight of people, furniture and material and would therefore satisfy the requirements of Article 4.1.6.2.

The Applicant argued that classifying the building as an office occupancy is onerous. In his view, the sales pavilion is a specialty use not specifically covered by the Code. He noted that the structure will not be designed nor used in a crowded or cluttered fashion. In fact, in order to achieve a spacious look to demonstrate and emphasize the full sizes of the model rooms, the ground floor will not have an abundance of furniture and materials. As far as the total occupant load, the Applicant argued that it would be relatively low. He indicated that at the most only two

people work on the ground floor at any one time and that personal appointments are set up with prospective buyers. There may also be occasional drop-in customers.

Nevertheless, the Applicant proposed to use a design live load based that employs certain cautious assumptions. For example, based on the total building area, and assuming an occupant load of roughly one person per 2.8 m^2 (30 ft^2) the total ground floor occupant load would be 58 persons. He argued that this occupant load, assuming an average weight of 90.7 kg (200 lbs), would only result in a uniform live load of 0.3 kPa (6.7 psf). Doubling this load to account for any impact factor and doubling it again to account for the furniture would only yield a uniform load of 1.2 kPa (27 psf). As a result, with a design live load of 2.4 kPa (50 psf) an additional safety factor of 86% will be built into the proposed floor assembly to handle any non-uniform loads. This design, he asserted, will be more than sufficient to ensure that the safety of the public is adequately addressed.

Lastly, the Applicant noted that the Respondent supported his position.

6. **Respondent's Position**

The Respondent submitted that since the proposed temporary sales pavilion is classified as a Group D - business (office) occupancy. Article 4.1.6.3. and specifically Table 4.1.6.3. of the OBC are the applicable provisions and not Article 4.1.6.2. As a result, he argued that the proposed live load of 2.4 kPa (50 psf) for the ground floor of the sales office does not comply with the required 4.8 kPa (100 psf) as per Article 4.1.6.3. The Respondent then added that while the Code, in his view, stipulates a 4.8 kPa (100 psf) load, he indicated that for the proposed use, 2.4 kPa (50 psf) should be more than adequate.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the structural support system of the first floor of the temporary sales pavilion designed to accommodate a live load of 2.4 kPa (50 psf) does not comply with Article 4.1.6.2. of the Ontario Building Code at the Liza Homes Sales Office, 1180 Harmony Road North, Oshawa, Ontario.

8. **Reasons**

i) Application does not provide sufficiency of compliance with Subsection 4.1.6. of the Building Code.

ii) The design load for office areas, as stated in Table 4.1.6.3., has been in effect in the Ontario Building Code since 1975.

Dated at Toronto this 17th day in the month of June in the year **1999** for application number **1999-29**

BCC Ruling No. 99-41-697

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-41-697

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992* .

AND IN THE MATTER OF Subsection 9.16.3. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Richard Biffis, Vice President Construction, The Kaitlin Group, Scarborough, Ontario, for the resolution of a dispute with Mr. Stephen Vokes, Chief Building Official, Municipality of Clarington, Ontario, to determine whether a drainage system is required beneath the basement level concrete slab-on-grade as per Subsection 9.16.3. of the Ontario Building Code at the Port of Newcastle Development, Clarington, Ontario.

APPLICANT
Mr. Richard Biffis, Vice President Construction
The Kaitlin Group
Scarborough, Ontario

RESPONDENT
Mr. Stephen Vokes
Chief Building Official
Municipality of Clarington

PANEL
Mr. Kenneth Peaker, (Chair-Designate)
Mr. Robert De Berardis
Mr. John Guthrie

PLACE
Toronto, Ontario

DATE OF HEARING
June 17, 1999

DATE OF RULING
June 17, 1999

APPEARANCES

Mr. R.W. Bruynson, President
R.W. Bruynson Inc.
Oshawa, Ontario
Agent for the Applicant

RULING

1. **The Applicant**

   Mr. Richard Biffis, Vice President Construction, The Kaitlin Group, Scarborough, Ontario, has applied for a building permit under the *Building Code Act, 1992*, to construct a residential subdivision known as the Port of Newcastle development, Clarington, Ontario.

2. **Description of Construction**

   The Applicant is proposing to construct a residential subdivision known as the Port of Newcastle. The individual houses are classified as having a Group C occupancy and are described as two storey with a total floor area of 206 m^2 (2,217 ft^2).

   The construction in dispute involves the drainage below the concrete floor slabs at the basement level. The Applicant is not proposing to install drain pipes (connected to the perimeter weeping tile) under the slabs-on-ground. Instead, the proposed slabs would rest on polyethylene damproofing membranes on top of compacted granular material. A weeping tile drainage system for the foundation wall will be provided at the level of the footing.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the basement slab-on-ground floors constructed without a drainage system below complies with Article 9.16.3.1. of the Ontario Building Code. This provision requires that unless it can be demonstrated as unnecessary drainage or grading shall be used to prevent the ingress of water underneath a floor-on-ground.

4. **Provisions of the Ontario Building Code**

Subsection 9.16.3. - Drainage

9.16.3.1. - Control of Water Ingress

(1) Except as provided in Article 9.16.3.2. or where it can be shown to be unnecessary, ingress of water underneath a floor-on-ground shall be prevented by grading or drainage.

9.16.3.2. - Hydrostatic Pressure

(1) Where groundwater levels may cause hydrostatic pressure beneath a floor-on-ground, the floor-on-ground shall be:

(a) a cast in place concrete slab; and
(b) designed to resist such pressures.

5. **Applicant's Position**

The Applicant submitted that his proposal to construct the proposed slabs-on-ground without a drainage system below complies with Article 9.16.3.1. because such a system, in his view, is only required when ground water problems are anticipated as determined by a soils report or a site inspection. He argued that the need to install a sub-slab drainage system occurs when a water problem has been detected in the soil. He indicated that the Respondent has this reversed, believing that the drainage system is an automatic requirement until the soil is found to be problem free. This, the Applicant argued, places an unnecessarily heavy burden of proof

regarding the soil on the proponent and probably results in many unneeded drainage systems being installed in areas where the soil conditions do not require it

In his view, the intent of the Code is to prevent ingress of water under a slab-on-ground by using a drainage system where necessary. There was no indication of groundwater problems in his soils report or as noted by any site inspection. He argued that the engineering report should be viewed as reliable evidence of the site's condition. He added that the condition of each property would be verified and they would make any necessary adjustments, e.g. providing a sub-slab drainage system if needed, during construction.

With no identifiable groundwater issue, the Applicant concluded by arguing that it made little sense therefore to install a sub-slab drainage system for each property.

6. **Respondent's Position**

The Respondent submitted that a drainage system below the slab-on-ground is required as per Article 9.16.3.1. and thus the proposal does not meet Code. He noted that to date the municipality has not been able to conclusively determine whether the soil conditions would require (or not) that a sub-slab drainage system is necessary. Based on this uncertainty about the soil and considering that OBC 9.16.3.1. states that drainage is required "except... where it can be shown to be unnecessary..." (which he indicated has not been proven), the Respondent argued that his interpretation of this Code provision dictates that in the subject circumstance a sub-slab drainage system is required. As he noted, Article 9.16.3.1., in his view, is drafted in such a way as to require a drainage system until it can be proven unnecessary.

Having made the case for the requirement of the drainage system, the Respondent then argued however that he felt this was an example of an excessive requirement found in the Building Code that goes beyond the minimum standards designed to ensure the intended levels of health, life safety, and property protection and barrier-free accessibility. He indicated that he viewed the sub-slab drainage standards as requirements that enhance comfort and quality of construction but are not minimum housing standards.

Nevertheless, he indicated that they have been enforcing the Code as written because that is their responsibility as a municipal building department.

7. **Commission Ruling**

It is the decision of the Building Code Commission that drainage below a slab-on-ground at the Port of Newcastle development in Clarington may be eliminated provided an engineer reports to the Chief Building Official that drainage is unnecessary, or where groundwater levels may cause hydrostatic pressure beneath a floor-on-ground, the floor-on-ground shall be a cast in place concrete slab and designed to resist such pressures.

8. **Reasons**

(i) Article 9.16.3.1. states "Except as provided in Article 9.16.3.2. or where it can be shown to be unnecessary, egress of water underneath a floor-on-ground shall be provided by grading or drainage".

Dated at **Toronto** this **17th** day in the month of **June** in the year **1999** for application number **1999-28**.

BCC Ruling No. 99-40-696

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-40-696

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentences 6.2.3.10.(5) and 3.3.3.3.(4) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Ed Applebaum, Principal, Montgomery Sisam Associates Inc., Toronto, Ontario, for the resolution of a dispute with Mr. Steve Franklin, Deputy Chief Building Official, City of Toronto, to determine whether the proposed residential-type ventilation system in the subject B 3 occupancy complies with Sentence 6.2.3.10.(5) of the Ontario Building Code (OBC) and whether the proposed 825 mm (2 ft 8 in) width of corridor doors intended for ambulatory users complies with Sentence 3.3.3.3.(4) of the OBC at the Lafontaine Living Centre, 710 Warden Avenue, Toronto, Ontario.

APPLICANT

Mr. Ed Applebaum, Principal
Montgomery Sisam Associates Inc.
Toronto, Ontario

RESPONDENT

Mr. Steve Franklin
Deputy Chief Building Official
City of Toronto

PANEL

Mr. Kenneth Peaker, (Chair-Designate)
Mr. James Lischkoff
Mr. Fred Barkhouse

PLACE

Toronto, Ontario

DATE OF HEARING

June 3, 1999

DATE OF RULING

June 3, 1999

APPEARANCES

Mr. Jonathan Rubes, Principal
Leber/Rubes Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Art Jammer
Architectural Plan Examiner
City of Toronto
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Ed Applebaum, Principal, Montgomery Sisam Associates Inc., Toronto, Ontario, has applied for a building permit under

   the Building Code Act, 1992

   to construct a senior's residence known as the Lafontaine Living Centre at 710 Warden Avenue in Toronto, Ontario.

2. **Description of Construction**

   The Applicant proposes to construct a new eight storey high-rise senior's residence with a building area of 2,500 m^2. The structure has been classified as having a Group B, Division 3 - (senior's residential facility) care occupancy. The building will be equipped with fire alarm, standpipe and hose and sprinkler systems and will be of noncombustible construction.

Floors two through eight will contain 27 units each, most of which will be one bedroom suites. All units will be equipped with a kitchenette, livingroom and full bathroom. No nursing stations will be located on these floors. Floors above grade are served by exits stairs at each end of the corridor and a central exit stair. Residents are required to be ambulatory and to provide most of their own care. While each suite will have cooking facilities, the building is to be equipped with dining areas on the ground floor as well. This level will also contain other common areas such as the lounges and special purpose rooms.

There are two areas of construction in dispute. The first is the proposed corridor-based supply system as a means of providing make-up air to the individual residential units. The system proposed by the Applicant is the typical method for supplying air in a residential building in which a pressurized corridor forces certain amounts of air under suite entrance doors, which then provides the make-up air for toilet and kitchen exhaust systems. He is not proposing a make-up air supply system normally found in certain institutional uses.

The second area of construction in dispute are certain paired swing doors, of which one set each is intended for the residential floors and is proposed to be located near the centre of each corridor. Each individual door within a pair are approximately 825 mm (2 ft 8 in) in width. The doors will be hinged near the corridor wall and will not have a centre mullion. With both doors open a clear width of 1,650 mm (5 ft 4 in) is provided. The corridors where the subject paired doors are to be installed are roughly 1.8 m (6 ft) across. The installation of the paired doors will create zones on each floor area. The doors will normally be held open but will release when the fire alarm is activated. In the subject building such zones and doors are not required by Code.

3. **Dispute**

There are two issues at dispute between the Applicant and Respondent. The first is whether the proposed residential-type ventilation system in the subject B3 occupancy complies with Sentence 6.2.3.10.(5) of the Ontario Building Code. This provision permits that a residential occupancy may be supplied with make-up air from a public corridor by pressurizing the corridor. At issue is whether the subject suites can be considered as a residential occupancy and therefore be supplied with this type of ventilation system. While the building has an obvious residential aspect within its function, it has been classified under the OBC as a B3 occupancy. B3 occupancies, as care facilities, are not classified as residential occupancies.

The second dispute is whether the proposed corridor doors, intended for use by ambulatory persons, complies with Sentence 3.3.3.3.(4) of the OBC. This sentence requires that paired doors

in a corridor that serves residents or patients be at least 1,100 mm (3 ft 7 in) in width. The Applicant's proposed doors are only 825 mm (2 ft 8 in) in individual width.

4. **Provisions of the Ontario Building Code**

Sentence 6.2.3.10.(5) Interconnection of Systems

(5) Infiltration due to corridor pressurization is permitted into a residential occupancy from a public corridor.

Sentence 3.3.3.3.(4) Corridors

(4) Paired doors in a corridor serving patients or residents shall

(a) swing in opposite directions, the right hand door swinging in the direction of travel, and
(b) be not less than 1 100 mm (3 ft 7 in) wide.

5. **Applicant's Position**

At the outset the Applicant noted that since the B3 classification is new to the 1997 edition of the OBC the present dispute results from the usual clarification of new Code provisions. In that process of clarifying the B3 classification, he argued that the subject building is more similar to a Group C occupancy than an institutional building. Unlike a Group C occupancy, however, this building will be equipped with a sprinkler system. Regarding both issues at dispute, ventilation and corridor door width, the Applicant submitted that, in his interpretation, they meet Code but he also argued that the proposed design of each provides sufficiency of compliance with the level of safety required by the OBC. He indicated that for both issues he would present arguments concerning interpretation and sufficiency of compliance for the disputed OBC provisions.

On the issue of ventilation, the Applicant submitted that Sentence 6.2.3.10.(5) allows make-up air from a pressurized corridor to enter a "residential occupancy". Significantly, what it does not say, he argued, is that this type of ventilation system is restricted to only Group C major occupancies. In other words, it can be used with any or all residential occupancies, and the suites in the subject building meet the definition of residential occupancies in the OBC, he asserted.

In fact, the Applicant noted that the definition of a Group B, Division 3 - care occupancy was somewhat problematic for the Lafontaine Living Centre. This is because the definition of a B3 occupancy does not include a dwelling unit. However, as the Applicant pointed out, the

individual suites within the building clearly meet the definition of a dwelling unit and, in his view, should be considered as such. In the Applicant's interpretation it was possible to reconcile these definitions by considering the residential floors as having dwelling units and therefore a residential occupancy. By taking this approach, a ventilation system conforming to Sentence 6.2.3.10.(5) should be permitted in the subject building.

In terms of providing sufficiency of compliance of the proposed ventilation system represented a safer design from a fire protection point of view than a standard institutional system in which ducts equipped with dampers supplying make-up air would be required in each suite as well as in the corridor. Recognizing that the suites are the most likely location for a fire to occur, the drawback of this system, the Applicant argued, is that if the balancing of pressure between the suites and the corridor was not maintained, or done correctly, nor operated appropriately in a fire, then smoke could possibly enter the duct system from the suite where the fire originated. Once smoke had contaminated this type of ventilation system it could possibly travel from suite to suite. This scenario would be less likely in his proposed ventilation system since the smoke would have no duct in the suite to penetrate and would have to fill the unit entirely before it could possibly leak out underneath an entrance door and then contaminate the corridor and other suites.

Regarding the proposed corridor swing doors, the Applicant noted that they were not required by Code in either a Group C or B3 occupancy. They were being provided because the building owner felt that creating zones on each residential floor was a safer and more practical approach. The Applicant stated that it was his interpretation of 3.3.3.3.(4) that it applied only to cases where the residents were not, or may not, be ambulatory. He conceded that unfortunately the Sentence does not explicitly state this, nevertheless a close examination of the Code does bear out his position, he argued. He noted that Article 3.3.3.4. required that doorways serving "patients or residents" must be 1,050 mm (3 ft 5 in) except as permitted in Sentence 3.3.1.12.(11). This Sentence, specifically Clause (e), allows corridor doors in a B3 occupancy to be 800 mm (2 ft 7 in). This clearly indicates, asserted the Applicant, that it is not the intent of the Code to require 1,100 mm (3 ft 7 in) wide doors to serve ambulatory residents.

Lastly, the Applicant argued that the proposed door width provides sufficiency of compliance for numerous reasons. For example, he noted that while the corridor is only required to be 1,125 mm (3 ft 8 in) in width the proposed corridor will be 1.8 m (6 ft). However, even at this latter width the corridor could not accommodate a pair of 1,100 mm (3 ft 7 in) doors. The alternative would be to remove the doors entirely, which he reiterated are not required but have been proposed as

an additional safety feature. Wider doors would not make sense in this case, he argued, since the entrance doors to the suites are only 800 mm (2 ft 7 in). Residents have their own furniture and because they are ambulatory they are not moved around in beds, therefore the wider doors to the units and in the corridors are not necessary. Moreover, smaller doors are lighter and as a result easier for the elderly to open, he noted. Because the proposed doors have no centre mullion and a clear opening of 1,650 mm (5 ft 4 in), this would greatly exceed paired doors with a centre mullion which have only 1,050 mm (3 ft 5 in) clear opening. Finally, he indicated that the subject doors also meet the OBC barrier-free standards in terms of required width. For these reasons, the Applicant submitted that the paired swing doors also provide sufficiency of compliance with the OBC.

6. **Respondent's Position**

By way of general comments the Respondent offered that in his view, the classification of the subject building as having a B3 occupancy, meant that a certain albeit limited level of care was being provided to the occupants. As a result, the structure should not be considered as having a residential occupancy.

On the first issue, the Respondent submitted that the proposed ventilation system was not permitted in a B3 occupancy. He argued that it is only allowed in a residential occupancy and therefore Sentence 6.2.3.10.(5) does not apply to the proposed care occupancy.

Concerning the issue of the width of the proposed corridor swing doors, the Respondent noted that they are only 825 mm (2 ft 8 in) and not 1,100 mm (3 ft 7 in) as is required, in his view, for a B3 occupancy under Sentence 3.3.3.3.(4).

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed residential type ventilation system in the subject B3 occupancy provide sufficiency of compliance with Sentence 6.2.3.10.(5) of the Ontario Building Code and it is the decision of the Building Code Commission that the proposed 810 mm width of corridor doors intended for ambulatory users provides sufficiency of compliance with Sentence 3.3.3.3.(4) of the Ontario Building Code at the Lafontaine Living Centre, 710 Warden Avenue, Toronto, Ontario.

8. **Reasons**

i) The Building Code Commission is of the opinion that a Group B3 occupancy can include a Group C residential occupancy as defined by the code, provided they meet all of the life safety requirements of a Group B3.

ii) The residents are ambulatory therefore Sentence 3.3.3.3.(4) is not applicable.

Dated at Toronto this 3rd day in the month of June in the year **1999** for application number **1999-32**

BCC Ruling No. 99-39-695

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-39-695

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.3.1.2(3) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Stefan Hensel, Building Projects Coordinator, Hospice at May Court, Ottawa, Ontario, for the resolution of a dispute with Mr. Richard Hewitt, Chief Building Official, City of Ottawa, Ontario, to determine whether the proposed communal gas-fired fireplace located in a lounge area open to the building's internal corridor system complies with Sentence 3.3.1.2.(3) of the Ontario Building Code at the Hospice at May Court, 114 Cameron Avenue, Ottawa, Ontario.

APPLICANT

Mr. Stefan Hensel, Building Projects Coordinator
Hospice at May Court
Ottawa, Ontario

RESPONDENT

Mr. Richard Hewitt
Chief Building Official
City of Ottawa

PANEL

Mr. Kenneth Peaker, (Chair)
Mr. James Lischkoff
Mr. Fred Barkhouse

PLACE

Toronto and Ottawa, Ontario

DATE OF HEARING

June 3, 1999

DATE OF RULING

June 3, 1999

APPEARANCES

Mr. Ralph Weisbrock, Project Architect
Katz Webster Clancey Associates Architects Inc.
Ottawa, Ontario
Agent for the Applicant

Mr. Chris Freeman
Chief Building Code Plan Examiner
City of Ottawa
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Stefan Hansel, Building Projects Coordinator, Hospice at May Court, Ottawa, Ontario, has applied for a building permit under the *Building Code Act, 1992* to renovate a portion of an existing convalescent home known as the May Court Convalescent Home at 114 Cameron Avenue, Ottawa, Ontario.

2. **Description of Construction**

   The Applicant proposes to undertake interior renovations to an existing convalescent home in order that the home may be converted from a facility that once provided post-surgery recuperative care to one that provides care and comfort programs to terminally ill patients on a day basis. The building is classified as having a Group B, Division 3 - care occupancy. It is described as two storeys, having a total building area of 1,850 m^2, and is of combustible construction. The building will be equipped with a standpipe and hose system and a fire alarm system, but not a sprinkler system.

The subject building is composed of two parts which were built at different times. The original structure is an old two storey (plus basement) converted house that is currently being used as the "Club House"and as staff areas. This part of the building is not currently being renovated. The larger, newer (constructed in 1960) portion of the building, where the renovations are proposed, is a single storey (plus basement) care facility that is connected to the south end of the older building.

As a convalescent home the building originally contained nineteen patient rooms, staff areas, offices, kitchen and dining areas surrounding a central courtyard. As part of converting the convalescent home to a day program care facility many of the rooms will be used for other purposes. Most of the bedrooms, for example, will be converted into offices, treatment rooms, activity rooms, and in some cases a new dining area. (Some bedrooms will remain since in the future the facility may offer overnight accommodations as part of its services.) The existing diningroom will be converted to a lounge equipped with a gas-fired direct vent fireplace.

The construction in dispute involves the placement of a gas-fired fireplace in the proposed lounge. The lounge, centrally situated, also acts as one of the main east-west corridors in the building and is an integral part of its internal circulation system. To allows this east-west movement through the lounge large entrances approximately 2.3 m in width are provided in its east and west walls. The entire south wall of the lounge abuts the courtyard. The fireplace is proposed to be located in the centre of the room's north wall.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed gas-fired fireplace located in the future lounge area which is open to the building's internal corridor system and serves as an access to exit provides sufficiency of compliance with Sentence 3.3.1.2.(3) of the Ontario Building Code. This provision prohibits the installation of a fuel-fired appliance in a corridor that serves as an access to exit. Despite that the northern portion of the lounge functions as a room with a fireplace, the southern half of the lounge is considered an access to exit. At issue is whether the lounge should be viewed as an occupancy located within a corridor. If so, then the proposed fireplace would be deemed to be in a corridor.

While the building is more than five years old and Part 11 can apply to most of its renovation, the inclusion of a fuel-fired appliance in the lounge is, according to Article 11.3.1.2., considered as adding a new building system to the subject structure and therefore must comply with the appropriate new construction standards in the OBC.

4. **Provisions of the Ontario Building Code**

Sentence 3.3.1.2. Hazardous Substances, Equipment and Processes

(3) A fuel-fired appliance shall not be installed in a corridor serving as an access to exit.

5. **Applicant's Position**

While he conceded that the lounge area is to be open to the access to exit, the Applicant submitted that the location of the fireplace is at the most remote point in the room from the exit route and would therefore be less likely to block egress. As a result, he argued that the lounge should not be viewed as an occupancy in a corridor. Moreover, if the fireplace was the source of an uncontrolled fire, he asserted, then exiting would originate from the lounge and would likely be dispersed between the six exits accessible from the north-south corridors immediately to the east and west of the lounge. If the lounge fireplace, the Applicant continued, was not the source of an emergency fire then the lounge would still be able to act as an access to exit route.

Fire separating the northern portion of the lounge to enclose the immediate fireplace area in an effort to maintain a continuous corridor separation would not increase safety nor prevent the spread of fire if the subject appliance were to explode which, in his view, would be the most likely cause of any fire associated with such a unit. An explosion would eliminate any fire containment provided by a drywall and stud separation. Such an event would also possibly render the four exits closest to the lounge unusable, nevertheless the abundance of exits in this building mean that the two more distant exits would still allow egress. However, the Applicant submitted that the potential risk from fire or explosion of the proposed fireplace is minimal. The unit is UL listed, AGA certified, CGA approved and is equipped with a safety switch controlling high temperatures. He argued that the fireplace offers much less hazard than a gas-supplied oven.

By way of offering compensating measures to achieve sufficiency of compliance with Sentence 3.3.1.2.(3) the Applicant proposed to install a shut-off valve which located on the gas line to terminate gas flow to the fireplace when the fire alarm is actuated. He also offered to equip the lounge area with a gas detector and additional smoke detectors, both of which would also be interconnected with fire alarm system.

Lastly, the Applicant stressed the importance of the fireplace to the atmosphere of the hospice. He described it as central element in the communal care and comfort for the hospice users. In his view, the benefit of the fireplace to the spirit and ambiance of the hospice outweighed the small

risks involved. The Applicant submitted a letter from the hospice's Executive Director which stated that "when we considered the move into the May Court building, we had to assure our present patients that there would be a fireplace as that was the most important issue for their approval of the move."

6. **Respondent's Position**

The Respondent submitted that since there is no continuous fire separation for the corridor separating the lounge area and its proposed fireplace then he argued the lounge should be considered as an occupancy in a corridor. He submitted a letter from the Ministry of Municipal Affairs and Housing to support this view. Thus, he therefore considers the proposed fireplace as being located in the corridor which is serving as an access to exit. This, he noted, clearly violates Sentence 3.3.1.2.(3) of the OBC. As a result, he indicated that he does not have the authority to accept the fireplace as proposed by the Applicant. However, he did indicate that he sympathized with the atmosphere the Applicant was trying to create with the fireplace.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed communal fireplace located in a lounge area open to its building's internal corridor system provides sufficiency of compliance with Sentence 3.3.1.2.(3) of the Ontario Building Code at the May Court Convalescent Home, 114 Cameron Avenue , Ottawa, Ontario.

8. **Reasons**

i) A minimum of 4 easily accessible exits are available.

ii) The fuel supply to the fire place is shut off by activation of the fire alarm system or loss of power.

iii) The glass enclosure prevents occupants coming in contact with open flame.

iv) A timing device will limit the use of the fire place to day and early evening use.

v) A system will be in place to avoid excessive heat build up in the room.

Dated at Toronto this 3rd day in the month of June in the year **1999** for application number **1999-27**

BCC Ruling No. 99-38-694

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-38-694

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Clause 3.11.3.1.(9)(a) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Peter Lesdow, Principal, Peter Lesdow Architect, Niagara Falls, Ontario, for the resolution of a dispute with Mr. Mel Brown, Chief Building Official, City of Niagara Falls, to determine whether the proposed pool deck width of 1,675 mm (5 ft 6 in) provides sufficiency of compliance with Clause 3.11.3.1.(9)(a) of the Ontario Building Code at the Renaissance Fallsview Hotel, 6455 Buchanan Avenue, Niagara Falls, Ontario.

APPLICANT

Mr. Peter Lesdow, Principal
Peter Lesdow Architect
Niagara Falls, Ontario

RESPONDENT

Mr. Mel Brown
Chief Building Official
City of Niagara Falls

PANEL

Mr. Kenneth Peaker, (Chair-Designate)
Mr. James Lischkoff
Mr. Fred Barkhouse

PLACE

Toronto, Ontario

DATE OF HEARING

June 3, 1999

DATE OF RULING

June 3, 1999

APPEARANCES

Mr. Gunter Sommerfeldt, Associate
Peter Lesdow Architect
Niagara Falls, Ontario
Agent for the Applicant

Mr. Robert Romanuk
Building and Inspections Coordinator
City of Niagara Falls
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Peter Lesdow, Principal, Peter Lesdow Architect, Niagara Falls, Ontario, has received a building permit under the Building Code Act, 1992 to renovate an existing hotel known as the Renaissance Fallsview Hotel, 6455 Buchanan Avenue, Niagara Falls, Ontario.

2. **Description of Construction**

   The Applicant is currently renovating an existing 17 storey hotel, with a building area of 1,647 m2, and classified as having a Group C (hotel) residential occupancy. The building is of noncombustible construction and is equipped with a sprinkler, fire alarm and standpipe and hose system.

   As part of the work, the Applicant is renovating the existing indoor Class B swimming pool area. In particular, three vertical water supply pipes at the south-east corner of the pool were recently covered with a drywall and steel stud wall. The water pipes were installed to supply water to a decorative fountain that flows into the pool and is mounted on the north wall of the pool room.

The construction in dispute relates to the reduced width of the pool deck that would result from the addition of the furred in covering wall. Where the new wall is to be installed, for a total of 4.5 m (14 ft) of the total 42 m (137.8 ft) perimeter of the pool, the pool deck would be reduced. At its narrowest point the pool deck would be reduced to 1,675 mm.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the as constructed pool deck width of 1,675 mm (5 ft 6 in) provides sufficiency of compliance with Clause 3.11.3.1.(9)(a) of the Ontario Building Code. This provision requires that for this type of pool decks must be a minimum of at least 1,800 mm (5 ft 11 in) in width. The pool deck is currently 125 mm narrower than the minimum allowed width.

4. **Provisions of the Ontario Building Code**

Clause 3.11.3.1.(9)(a) Construction Requirements

(9) Except for a modified pool and wave action pool and except as provided in Sentence (11), a public pool shall be surrounded by a hard-surfaced pool deck that shall

(a) except for a pool described in Sentence 3.11.5.1.(1), be not less than 1 800 mm (5 ft 11 in) wide and provide at least 900 mm (2 ft 11 in) width of clear passage,

(i) behind any diving board and its supporting structure, and
(ii) between any column piercing the deck and the edge of the pool or between the column and outer perimeter of the pool deck,

5. **Applicant's Position**

While conceding that the pool deck does not meet the minimum deck width requirements, the Applicant submitted that it does provide sufficiency of compliance with Clause 3.11.3.1.(9)(a). He argued that because the worst of the infraction occurs at the corner of the pool where the diagonal measurement is much greater than 1,800 mm (5 ft in) there is adequate space for rescue operations. As a result, he submitted that the pool deck met the intent of the Ontario Building Code.

Moreover, the Applicant argued that the Code allows columns to exist within 4 ft of the pool edge. These, he noted, reduce deck width to a greater extent than the present situation.

Finally, the Applicant indicated that short of removing the disputed wall little can be done to increase the deck width. He did, however, offer to post a sign at the location noting the narrower deck and to install an addition rescue pole.

6. **Respondent's Position**

The Respondent submitted that the Clause 3.11.3.1.(9)(a) of the OBC requires that pool decks have a minimum width of 1,800 mm (5 ft 11 in). The existing situation, he noted, reduces the clear width of the deck by 125 mm (4 1/2 in). The Respondent argued that the 1,800 mm width was necessary to prevent accidental falling into the pool as users pass each other on the deck surface and it also provides adequate space for rescue operations. As a result, he viewed the 1,800 mm pool deck width as a required minimum. For this reason, the Respondent indicated that he could not accept the reduced the pool deck width.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the pool deck width of 1,675 mm (5 ft 6 in) provide sufficiency of compliance with Sentence 3.11.3.1.(9)(a) of the Ontario Building Code at the Renaissance Fallsview Hotel, 6455 Buchanan Avenue, Niagara Falls, Ontario.

8. **Reasons**

i) The applicant has agreed to provide an additional rescue pole.

ii) Adequate ceiling height, is available for manipulation of the rescue pole.

Dated at Toronto this 3rd day in the month of June in the year **1999** for application number **1999-24**

BCC Ruling No. 99-37-693

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-37-693

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Clause 9.7.1.3.(1)(b) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. John Martini, Site Superintendent, Bayview Wellington Homes, Woodbridge, Ontario, for the resolution of a dispute with Mr. Steve Franklin, Deputy Chief, City of Toronto, Ontario, to determine whether the unobstructed open width portion of the casement windows complies with Clause 9.7.1.3.(1)(b) of the Ontario Building Code at the Bridgeport Drive Subdivision, Toronto, Ontario.

APPLICANT

Mr. John Martini, Site Superintendent
Bayview Wellington Homes
Woodbridge, Ontario

RESPONDENT

Mr. Steve Franklin
Deputy Chief
City of Toronto

PANEL

Mr. Kenneth Peaker, (Chair-Designate)
Mr. James Lischkoff
Mr. Fred Barkhouse

PLACE

Toronto, Ontario

DATE OF HEARING

June 3, 1999

DATE OF RULING

June 3, 1999

APPEARANCES

Mr. John Barkovich, Research and Development Supervisor
Pollard Windows
Burlington, Ontario
Agent for the Applicant

Mr. Paul Meleta
Manager, Inspections Team #3
City of Toronto
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. John Martini, Site Supervisor, Bayview Wellington Homes, Woodbridge, Ontario, has received a building permit under the Building Code Act, 1992 to construct a subdivision of residential dwelling units at Bridgeport Drive, Toronto, Ontario.

2. **Description of Construction**

   The Applicant has recently constructed a subdivision of new two storey townhouse units classified as Group C - residential occupancies. As part of the construction the Applicant installed certain casement windows (known as the Tudor model) manufactured by Pollard Windows Inc. in the bedrooms of the subject townhouse units. The subject windows measure 600 mm (23 5/8 in) in width and are variable heights. In terms of its operation, the hinge, or rotation pins, at the top and bottom of the casement window unit which fasten the window to its frame and upon which it swings slide toward the vertical centre-line of the window opening.

   The construction in dispute relates to the fact that when the subject windows are opened to an angle of 900 as measured from the exterior wall the width of clear opening is reduced to

approximately 356 to 362 mm (14 to 14 3/8 in) due to the shift towards centre of the rotation pins. During opening of the window, while at an angle ranging from 600 to 750, a clear opening width of 380 mm (15 in) is achieved. The height nor the total unobstructed open area of the casement windows are in dispute.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the as built unobstructed open width portion of the window, at 356 mm (14 in), complies with Clause 9.7.1.3.(1)(b) of the Ontario Building Code. This provision requires that no window that is to be used as an alternative access to the exterior have a dimension less than 380 mm (15 in). The Applicant's Tudor casement window, when opened 900, only has a clear, unobstructed opening of 356 mm (14 in). When opened less than 900, however, the minimum clear width of 380 mm (15 in) is provided. Clause 9.7.1.3.(1)(b) is silent on whether the minimum opening dimension is required at 900 as measured from the exterior wall of the building containing the window.

4. **Provisions of the Ontario Building Code**

Article 9.7.1.3(1)(b) Bedroom Windows

(1) Except where a door on the same floor level as the bedroom provides direct access to the exterior, every floor level containing a bedroom in a suite shall be provided with

(a) at least 1 outside window that can be opened from the inside without the use of tools, and

(b) each such window shall provide an individual, unobstructed open portion having a minimum area of 0.35 m2 (3.8 ft2) with no dimension less than 380 mm (15 in).

5. **Applicant's Position**

The Applicant submitted that the subject windows comply with Clause 9.7.1.3.(1)(b) of the OBC. He argued that the windows do provide the minimum clear width of 380 mm (15 in) when opened between 600 and 750. He noted that no where in Clause 9.7.1.3.(1)(b) does it stipulate that the minimum dimension must be achieved with the window open 900. Moreover, the associated OBC Appendix reference does not provide such a specification either. If this is the Code's intent, he suggested, this could be a useful revision in the future.

The Applicant indicated that, in fact, the subject windows provide more than the minimum 380 mm (15 in) when in the almost fully open position. He also noted that the height and the total area requirements were easily met. Therefore, in his view, the performance of the casement windows met the secondary access intent of Clause 9.7.1.3.(1)(b) of the Code.

The Applicant did offer that if the BCC ruled against them they would change their production immediately. Specifically, he indicated that he could replace the hinges on this model to allow for the full 380 mm (15 in).

6. **Respondent's Position**

The Respondent submitted that the casement windows in dispute do not meet the unobstructed opening requirements found in Clause 9.7.1.3.(1)(b). As he noted, this provision requires 380 mm (15 in) and the windows, when fully open, only have a clear width of 356 mm (14 3/8 in). This, he argued, clearly does not meet Code. He indicated that measuring the opening at something less than 900 was not consistent with the principles used in the OBC. He cited the examples of corridors and doors which are not measured in the Code on anything less than 900 with respect to the direction of path of travel.

The Respondent also indicated that he was concerned that the subject windows represented a further reduction in egress window width. He noted that previous versions of the Code had width criteria up to 500 mm (19 3/4 in). As well, he was concerned that the reduced window width may be problematic with respect to accessibility to or from a ladder. Without being able to open the window to 900, he argued, meant that getting out of a house and onto a ladder for occupants escaping a fire or getting into a house from a ladder by a firefighter would be made more difficult.

Because the subject windows cannot provide a minimum of at least 380 mm (15 in) for all dimensions, in his view, therefore they do meet the intent of OBC 9.7.1.3.(1)(b) in terms of ensuring alternate access.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the unobstructed open width portion of the casement windows does not comply with Clause 9.7.1.3.(1)(b) of the Ontario Building Code at the Bridgeport Drive Subdivision, Toronto, Ontario.

8. **Reasons**

(i) The window as constructed does not meet the intent of Clause 9.7.1.3.(1)(b).

(ii) In regards to the intent of the Code with respect to the egress provisions it is likely that in an emergency situation the window will be in its fully open position, and therefore, not meet the minimum requirements of Clause 9.7.1.3.(1)(b).

(iii) In regard to the intent of the Code with respect to the ingress provisions the window sash must be in less than a fully open position, to meet the minimum requirements of the Code, therefore, the sash represents a hazard to the safe positioning of a ladder.

9. **Recommendations**

The Building Code Commission recommends that consideration be given to changing the Code to that of the Article 9.7.1.3. of the 1986 Code.

Dated at Toronto this 3rd day in the month of June in the year **1999** for application number **1999-23**

BCC Ruling No. 99-36-692

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-36-692

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 8.2.1.6. of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Greg Sperry, Owner, Sperry Construction Ltd., 1420 Eastview Drive, Ennismore, Ontario, for the resolution of a dispute with Mr. Ken Currie, Chief Building Official, Township of Smith-Ennismore, Ontario to determine whether the new garage, proposed to be situated with a set back of 150mm from the holding tank, provides sufficiency of compliance with Article 8.2.1.6. of the Ontario Building Code at the Poutney residence, 1434 Eastview Drive, Ennismore, Ontario.

APPLICANT

Mr. Greg Sperry, Owner
Sperry Construction Ltd.
Ennismore, Ontario

RESPONDENT

Mr. Ken Currie
Chief Building Official
Township of Smith-Ennismore

PANEL

Mr. Bryan Whitehead (Chair)
Mr. Bill Fellner
Mr. Frank Wright

PLACE

Toronto, Ontario

DATE OF HEARING

May 27, 1999

DATE OF RULING

May 27, 1999

APPEARANCES

Mr. Greg Sperry, Owner
Sperry Construction Ltd.
Ennismore, Ontario
The Applicant

RULING

1. **The Applicant**

   Mr. Greg Sperry, Sperry Construction Ltd., has applied for a building permit under *the Building Code Act, 1992* to construct a new garage on the Poutney seasonal property at 1434 Eastview Drive, Smith-Ennismore Township, Ontario.

2. **Description of Construction**

   The Applicant proposes to build a one storey, 4.88 m by 6.1 m (16 ft by 20 ft), wood frame 2 car garage with poured concrete foundation walls situated in the south corner of the subject triangular property. The length of the garage would run roughly parallel to and less than a metre from the north-east lot line, while the width of the garage (with the car entrance) would be set on an angle from the street access off Eastview Drive. The nearest corner of the garage face would be 1.66 m (5 ft 6 in) to the street and the far corner would be 5.87 m (19 ft 3 in) away. The existing seasonal dwelling is located approximately in the centre of the subject property, behind and to the north of the proposed garage. To the north of the dwelling is a lake.

   The construction in dispute involves the lack of adequate clearance distance between the north-west wall of the proposed garage and the south-east corner of an existing holding tank. The clearance, as proposed, is only 150 mm (6 in). The 9,000 litre holding tank measuring 2.13 m by

4.14 m (7 ft by 13 ft 7 in) runs lengthwise with the north-south lot line and is set back roughly 1.22 m (4 ft). Between the dwelling and the holding tank 3.05 m (10 ft) clearance is provided.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the new garage, proposed to be situated with a set back of 150 mm from the existing holding tank, provides sufficiency of compliance with Article 8.2.1.6. of the Ontario Building Code. This provision, specifically Table 8.2.1.6.C., requires that a minimum clearance separation of 1.5 m be provided between a holding tank and a structure. The Applicant, with his proposed garage location, is providing only 150 mm, or 0.15 m, clearance to the existing holding tank.

4. **Provisions of the Ontario Building Code**

Article 8.2.1.6.(1)(b) Clearances for a Class 4 or 5 Sewage System

(1) Except as provided in Sentences 8.2.1.4.(1) and (2), a treatment unit shall not be located closer than the minimum horizontal distances as set out in Table 8.2.1.6.A.

(2) Except as provided in Sentences 8.2.1.4.(1) and (2), a distribution pipe shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B. and these distances shall be increased when required by Sentence 8.7.4.2.(9).

(3) No building shall be constructed closer to any part of a sewage system than the clearances listed in Articles 8.2.1.5. or 8.2.1.6.

5. **Applicant's Position**

The Applicant submitted that the proposed garage is sited in the best possible location considering the serious constraints of the site such as the unusual shape of the property and the pre-existing location of the holding tank and the dwelling. He also argued that servicing of the holding tank was quite possible even in the proposed location.

Even though it was installed less than five years ago the Applicant offered to move the holding tank by rotating it so that its length runs parallel to the proposed garage and its rear width runs parallel to the front of the dwelling. This option would provide the required 1.5 m setback between the holding tank and the proposed garage and the dwelling. The drawback of this option however, admitted the Applicant, is that it would not meet the clearance distance required

between the holding tank and the lot line, the distance available would be less than a metre whereas the Code requires 3 m.

The Applicant also offered to change the foundation wall adjacent to the holding tank to one of concrete piers supporting structural beams. The piers, he proposed, could be set back from the corner of the holding tank so that the clearance distances would be met and that no structural problems would result.

6. **Respondent's Position**

The Respondent submitted that the proposed garage location does not meet Article 8.2.1.6. of the OBC. In fact, he argued that a set back of 150 mm is a serious reduction of the required clearance distance of 1.5 m. For this reason, he felt he could not approve the construction of the garage.

The Respondent did acknowledge the extreme site constraints faced by the Applicant. He noted that even the existing holding tank, approved by the Ministry of the Environment, does not meet the current OBC standards for clearance distances.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the 0.15 metre set back from the proposed garage to the existing holding tank provides sufficiency of compliance with Article 8.2.1.6., provided that a consulting engineer design the structural support for the garage to ensure that the supports are a minimum of 1.5 m from the tank.

8. **Reasons**

(i) The holding tank, although not meeting the existing set back requirements to the lot line was installed with the approval of the appropriate agency.

(ii) The proposed garage is to be constructed without a foundation weeper which will negate any opportunity for the discharge of subsurface leakage to the surface.

(iii) The supporting structure for the garage will be a minimum of 1.5. metres from the holding tank.

(iv) Provided the tank is exposed to confirm its location and construction of the garage is undertaken carefully without construction equipment travelling on the tank, the position of the garage close to the tank will not impact on the performance of the tank.

(v) There is an opportunity to access the holding tank location in the event that the tank must be repaired or replaced.

Dated at Toronto this 27th day in the month of May in the year **1999** for application number **1999-39**

BCC Ruling No. 99-35-691

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-35-691

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Clause 8.7.4.2.(1)(b) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Rick Hudson, Owner, Hudson Motorcycles Inc., Tilbury, Ontario, for the resolution of a dispute with Mr. Jim Debinham, Designated Sewage System Inspector, Windsor-Essex County Health Unit, Windsor, Ontario to determine whether, when considering an adequate daily loading rate, the Class 4 sewage system proposed without a 15 m mantle provides sufficiency of compliance with Clause 8.7.4.2.(1)(b) of the Ontario Building Code at Hudson Motorcycles Inc., Part Lot 19, Concession IV, Township of Lakeshore, Essex County, Ontario.

APPLICANT

Mr. Rick Hudson, Owner
Hudson Motorcycles Inc.
Tilbury, Ontario

RESPONDENT

Mr. Jim Debinham, Designated Sewage System Inspector
Windsor-Essex County Health Unit
Windsor, Ontario

PANEL

Mr. Bryan Whitehead (Chair)
Mr. Bill Fellner
Mr. Frank Wright

PLACE

Toronto and Windsor, Ontario

DATE OF HEARING

May 27, 1999

DATE OF RULING

May 27, 1999

APPEARANCES

Mr. Ken Dickson, Owner
Dickson Environmental Consulting
Wallaceburg, Ontario
Agent for the Applicant

Mr. Jim Debinham, Designated Sewage System Inspector
Windsor-Essex County Health Unit
Windsor, Ontario
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Rick Hudson, Owner, Hudson Motorcycles Inc., Wheatley, Ontario, has received a building permit under the *Building Code Act, 1992* to install a new Class 4 sewage system at Part Lot 19, Concession IV, Township of Lakeshore, Essex County, Ontario.

2. **Description of Construction**

   The Applicant is proposing to install a new Class 4 conventional sewage system with a fully raised leaching bed to serve a proposed, 327 m^2, Group E - mercantile (retail) occupancy. The proposed building is to contain six employees and will have less than 20 fixture units (12.5). The calculated total daily design sewage flow rate, based on 75 litres/per day/per employee, is 450 litres per day.

   The proposed new sewage system would consist of a 3,600 litre septic tank (the minimum size allowed under OBC) that would receive effluent from the motorcycle retail operation, which

would then be transmitted to a pump chamber, equipped with float operated high level alarm. The effluent would move through these components of the system by means of gravity disposal. From the pump chamber, however, it would be pumped up into the raised trenches of the disposal bed where it would be time dosed at 262 L/dose.

The fully raised disposal bed, necessary due to the presence of clay at grade, will be set back 5 m from the proposed building and will be constructed of imported sand with a percolation rate ranging from approximately 1 to 8 minutes per centimetre set on scarified native clay. The proposed raised bed is to have an area of 349 m^2 (25.5 m by 13.7 m) and will be 1.5 m in height. With a total hydraulic footprint, or contact area, of 349 m2 and a daily flow rate of 450 L/d, the application, or loading, rate is calculated at roughly 1.29 litres/m^2/day.

Using the T-time of 8 min/cm of the imported fill and the a daily flow rate of 450 L/d, the length of required distribution pipe was calculated to be only 18 m, but will be increased to at least 40 m to meet the minimum length of leaching tile required as per the OBC. The distribution pipe will be laid out in three parallel 15 m trench runs set at depth of 900 mm above the native clay. The trenches will be located 1.6 m apart on centre, while the 1:4 slope surrounding the raised bed will commence at distance of 1 m from the perimeter of the trenches.

The site measures 174.3 m by 103.6 m and is extremely level. The native soil is described as clayey and has a T-time of greater than 50 minutes per centimetre.

The subject dwelling is served by a well water system.

The Construction in dispute is that the Applicant is proposing to construct the subject fully raised leaching bed without a mantle in any direction. The Applicant had previously received a permit for the installation of a raised bed with a 15 m mantle in all directions but is now seeking a revision to that permit to exclude the mantle entirely.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether, when considering an adequate daily loading rate, the Class 4 sewage system proposed without a 15 m mantle provides sufficiency of compliance with Clause 8.7.4.2.(1)(b) of the Ontario Building Code. This provision of the Code requires that a 15 m mantle be constructed in any direction that effluent may move horizontally in the soil. The intent of this requirement is to ensure that the area of

unsaturated soil (to a depth of 250 mm) extends beyond the raised portion of the leaching bed, especially in the direction of gravitational flow.

Since the subject site is considerably flat, it is conceivable that effluent may move, according to the Applicant, in any direction from the distribution pipes. The Applicant has interpreted this to mean that a 15 m mantle is required in all directions. A surrounding mantle was included in the original application. The mantle, however, has been completely excluded from the current proposal since the Applicant deems that the loading requirements of Sentence 8.7.5.2.(2) are being met using only the hydraulic footprint of the raised bed itself.

4. **Provisions of the Ontario Building Code**

Clause 8.7.4.2.(1)(b) Construction Requirements

(1) A leaching bed comprised of absorption trenches may be constructed in leaching bed fill provided that the unsaturated soil complying with Clause 8.7.2.1.(1)(b) extends

(b) for at least 15 m beyond the outer distribution pipes in any direction in which the effluent entering the soil will move horizontally.

5. **Applicant's Position**

The Applicant submitted the proposed leaching bed, without a mantle, provides sufficiency of compliance with Sentence 8.7.4.2.(1) of the Code. He argued that, when considering the small daily design flow rate of 450 L/d for the subject occupancy and the required 40 m minimum length of distribution pipe (although 45 m are being proposed), the approximate application rate of 1.29 litres/m^2/day for just the raised bed alone was already on the low side. Having to provide a mantle in any direction let alone in every direction, in his view, was therefore highly unnecessary. He indicated that the imported fill of the raised bed could more than adequately absorb the effluent produced. The exclusion of the mantle, especially a surrounding mantle, the Applicant noted would allow proponents to considerably reduce the required building materials as well as the overall costs of the project.

The Applicant argued that the Building Code should allow sewage systems to be designed on the basis of application rates and their respective contact areas. By allowing systems to be based on their actual daily flow rates and the true filter medium necessary would allow, he asserted, for more appropriately designed systems that better fit the intended use of the associated occupancy.

It would also prevent the construction of "overbuilt" systems such as the case at hand which, the Applicant argued, resulted from certain "minimum requirement" standards being triggered in the Code.

6. **Respondent's Position**

The Respondent submitted that the subject sewage system proposed without a 15 m mantle simply does not comply with the Code, in particular Clause 8.7.4.2.(1)(b). He argued that a mantle in the direction of flow is a necessary feature of raised bed systems that enables their proper functioning by increasing the contact area. The mantle also provides additional levels of safety in the event that the bed fails. The Respondent noted that a mantle has been a long standing requirement of such raised beds. He indicated that he believed he did not have the authority to allow what, in his view, is a large deviation from the requirements of the Code.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed 4.3 metres of leaching bed fill down gradient of the distribution pipe does not provide sufficiency of compliance with Clause 8.7.4.2.(1)(b).

8. **Reasons**

(i) A 15 m mantle is required as per Clause 8.7.4.2.(1)(b).

(ii) No evidence was provided that the native soil meets the requirements of Subclause 8.7.2.1.(1)(b)(ii).

Dated at Toronto this 27th day in the month of May in the year **1999** for application number **1999-31**

BCC Ruling No. 99-34-690

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-34-690

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 8.2.1.3. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Melvin Dreger, President, 1088416 Ontario Inc., c/o Country Estates Retirement Home, Lindsay, Ontario, for the resolution of a dispute with Mr. Fraser McDonald, Chief Building Official, Township of Ops, Ontario, to determine whether the proposed expansion of the Class 4 sewage system based on current measured daily design sewage flow rates to serve an enlarged nursing home provides sufficiency of compliance with Article 8.2.1.3. of the Ontario Building Code at the Country Estates Retirement Home, 512 Thunderbridge Road, Lindsay, Ontario.

APPLICANT

Mr. Melvin Dreger, President
1088416 Ontario Inc./Country Estates Retirement Home
Lindsay, Ontario

RESPONDENT

Mr. Fraser McDonald
Chief Building Official
Township of Ops

PANEL

Mr. Bryan Whitehead (Chair)
Mr. Bill Fellner
Mr. Frank Wright

PLACE

Toronto, Ontario

DATE OF HEARING

May 27, 1999

DATE OF RULING

May 27, 1999

APPEARANCES

Mr. Melvin Dreger, President
1088416 Ontario Inc.
Lindsay, Ontario
The Applicant

Mr. Fraser McDonald
Chief Building Official
Township of Ops
The Respondent

RULING

1. **The Applicant**

   Mr. Melvin Dreger, President, 1088416 Ontario Inc., Lindsay, Ontario, has applied for a building permit under the *Building Code Act, 1992* to renovate and expand an existing seniors residence, as well as to enlarge the Class 4 sewage system at the Country Estates Retirement Home, 512 Thunderbridge Road, Lindsay, Ontario.

2. **Description of Construction**

   The Applicant is proposing to renovate an existing, 13 occupant, structure with a total finished area of 566.9 m^2 currently classified as a Group C - residential (senior's boarding house) occupancy by adding an additional 223 m^2 of finished area. The building when completed would have a total finished area of roughly 769.9 m^2, approximately 45 fixture units, an increased occupant load of up to 32 persons, and would possibly be classified as either a Group B, Division 2 - care and treatment (nursing/rest home) occupancy, or as a Group B, Division 3 - care (convalescent/residential care facility) occupancy.

As part of the renovation and expansion of the existing facility, the Applicant is also proposing to expand his existing Class 4 sewage system to service the enlarged building. The current system consists of a 4,500 litre septic tank connected to two conventional leaching beds, the smaller of which serves four persons and is located to the north-east of the existing building. This bed is not in dispute. The larger bed, with 220 m (eight runs of 27.5 m) of distribution pipe, is situated to the north-west of the senior's boarding house.

The Applicant has conducted a study measuring the actual water consumption in the existing building and has calculated total daily design sewage flow rate at 230 litres/person/day. (This figure includes a certain safety margin - the actual measured amount was 195 L/p/d.) He has designed his proposed system based on this calculated output.

The proposed enlarged sewage system would consist of an additional 14,000 litre septic tank connected to two new pump chambers with each pump equipped with floatation alarm devices. The effluent would move through these components of the system by means of gravity disposal. From the pump chamber, however, it would be mechanically pumped into the trenches of the disposal beds. Two additional leaching bed areas would be created, one to the north-west of the existing building, and one to the south-west. The new north-west bed would contain 17 runs of 29 m for a total of 493 m of distribution pipe. The south-west bed would be comprised of 12 runs of 29 m for a total of 348 m. Including the existing leaching bed areas, the total expanded area would be 1,061 m (not including the smaller undisputed existing bed).

The new disposal beds will be constructed of imported sand set in trenches 600 mm deep spaced 2 m apart on centre. The percolation rate of the native soil is approximately 40 minutes per centimetre.

The site is described as level and covered with grass. The high groundwater table is located at approximately 600 mm below the surface.

The subject dwelling is served by a well water and cistern system.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed enlargement of the Class 4 sewage system based on current measured daily design sewage flow rates to serve an expanded nursing home provides sufficiency of compliance with Article 8.2.1.3. of the Ontario Building Code. This provision sets out the prescribed daily sewage system design flow

rates for various building occupancies. For Group C - residential occupancies, including boarding houses - the building's current use, the daily design flow rate is 240 L/p/d. However, for both Group B, Division 2 - care and treatment occupancies which includes homes for the aged and nursing homes, and Group B, Division 3 - care occupancies which encompasses convalescent homes and residential care facilities, the daily flow rate is 450 L/p/d. Determining the type of occupancy is normally a crucial first step in designing the required sewage system for any building. The Applicant has, nonetheless, designed his system based on the actual measured daily sewage flow.

4. **Provisions of the Ontario Building Code**

Article 8.2.1.3. Sewage System Design Flows

(1) For residential occupancies, the total daily design sanitary sewage flow shall be at least the value in Column 2 as determined from Table 8.2.1.3.A.

(2) For all other occupancies, the total daily design sanitary sewage flow shall be at least the value in column 2 as determined from Table 8.2.1.3.B.(See Appendix A.)

(3) Where a building contains more than one establishment, the total daily design sanitary sewage flow shall be the sum of the total daily design sanitary sewage flow for each establishment.

(4) Where an occupancy is not listed in Table 8.2.1.3.B., the highest of metered flow data from at least 6 similar establishments shall be acceptable for determining total daily design sanitary sewage flow.

5. **Applicant's Position**

The Applicant submitted that their proposed use does not neatly fit within existing classifications in the OBC. He argued that the proposed structure will function much like the current building, which is a 13 person residential boarding house occupancy, only on a larger scale. In his view, the B2 and B3 occupancies imply that a certain degree of care and treatment will be offered to inhabitants. However, in retirement homes generally and in his operation in particular, the Applicant indicated that the usage is more appropriately described as residential in nature with meals and laundry services provided. This, he argued, is more in keeping with other Group C uses such as hotels, boarding schools and boarding houses.

The Applicant also noted that it was not feasible for him to determine the daily design sewage flow as per Sentence 8.2.1.3.(4) of the OBC, which allows a calculation based on the highest metered flow taken from three similar establishments since historic information from other sources was lacking.

Regarding the prescribed 450 litres per day as set out in the B2 and B3 classifications, the Applicant indicated that he thought it was onerous and does not reflect the type of usage for retirement homes. He argued that even though the occupant load only increases by two to two and a half times, by virtue of the fact that the building is being reclassified from residential to B2 or B3 the required size of the proposed bed increases by six or seven times the size of the existing bed.

The Applicant argued that by basing the design of the system on the actual flow rates a very rationale and appropriately sized sewage system gets built. The measurements show the actual water intake which provides an accurate indicator of the sewage output. This measurement is then increased by five to ten litres to take into consideration food and bottles/tins of liquids consumed by residents that were purchased off-site. He noted that the flow measurement device is hard connected to the plumbing system. As a result, it can provide close, long term monitoring of water intake and the resultant effluent output. The Applicant offered to make these monitoring results available to the local authorities.

Lastly, the Applicant stated that the figure used to calculate the size of the leaching bed already included a safety margin of roughly 30 L/p/d. This cushion would provide room for increased water use by the future residents, or it may allow for more residents, up to 32, to occupy the expanded building and still be within the capacity of the proposed sewage system. He reiterated that even though the building may be expanding, the way the current and future occupants use it will remain the same, including the amount of effluent created. That amount, as it does now, will fall well within the daily design sewage flow for boarding houses.

6. **Respondent's Position**

The Respondent submitted that the proposed expanded senior's residence should be properly classified as a B2 occupancy. As he noted, because some of the residents would require assistance to exit the building in the event of an emergency the proposed occupancy should be seen as a facility providing a degree of care. He argued that it cannot be viewed as a large boarding house. From this classification, the relevant Code provisions are clear. The daily design

sewage flow rate is 450 L/p/d and the proposed enlargement of the sewage system must be sufficient to adequately handle this additional capacity.

The Respondent also indicated that, in his view, the Code did not give him the authority to accept a sewage system designed on the basis of a measurement of current output.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the total daily design sanitary sewage flow for the proposed expanded retirement home, as calculated by Table 8.2.1.3.B, is 14,400 litres per day.

Under Clause (F) of Article 1.1.3.2. (as amended by Regulation 278-99), this proposed system fails the definition of a sewage system. Accordingly, the approval of the system design is the responsibility of the Ministry of Environment.

Dated at Toronto this 27th day in the month of May in the year **1999** for application number **1999-25**

BCC Ruling No. 99-32-688

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-32-688

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentences 4.1.1.3.(1) and 4.1.1.7.(1), Article 3.8.1.3., and Sentences 3.8.2.1.(1) and 9.9.5.5.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Maurizio Bartucci, property owner, 9593 Hwy. 124, Erin, Ontario, for the resolution of a dispute with Mr. Patrick Kraemer, Chief Building Official, Town of Erin, Ontario to determine whether the existing gravel floor is required to comply with Sentences 4.1.1.3.(1) and 4.1.1.7.(1), Article 3.8.1.3., and Sentences 3.8.2.1.(1) and 9.9.5.5.(2) of the Ontario Building Code at Country Garden Concrete, 9593 County Hwy. 124, Erin, Ontario.

APPLICANT

Mr. Maurizio Bartucci
Property Owner
Erin, Ontario

RESPONDENT

Mr. Patrick Kraemer
Chief Building Official
Town of Erin

PANEL

Mr. Kenneth Peaker (Chair)
Mr. James Lischkoff
Mr. Stuart Smith

PLACE

Toronto, Ontario

DATE OF HEARING

May 13, 1999

DATE OF RULING

May 13, 1999

APPEARANCES

Mr. Guy Ironmonger
Tenant
Erin, Ontario
Agent for the Applicant

Mr. Patrick Kraemer
Chief Building Official
Town of Erin
The Respondent

RULING

1. **The Applicant**

   Mr. Maurizio Bartucci, property owner, has applied for a building permit under the *Building Code Act, 1992* to change the use of an existing industrial building to a mercantile occupancy and to also undertake interior renovations at Country Garden Concrete, 9593 Highway 124, Erin, Ontario.

2. **Description of Construction**

   The Applicant is proposing to change the use of an existing industrial building that was formerly used for the storage of farm machinery, septic tank pumping trucks and backhoes to a mainly Group E - mercantile (display, retail and wholesale) occupancy that will be used for the sale of concrete garden products, such as bird baths, fountains, statutes, flower pots, etc. Roughly one fifth of the floor area of the subject building will be considered a Group F - Division 2 (manufacturing) occupancy devoted to the production of the concrete garden products.

The existing building is described as one storey with a building area of 393.6 m^2 and having dimensions of 16.8 m by 23.5 m. The structure has exterior walls composed of 300 mm thick concrete on all four sides. A wood frame supports the corrugated steel roof sheathing. At the long sides of the building the roof framing rests upon the concrete walls, at the gable ends wood studs clad with corrugated metal siding support the roof assembly.

The Applicant is also proposing to renovate the subject building by constructing interior partitions to create specific areas within the building and by cutting an opening in the existing concrete wall at the east end to provide a 925 mm wide door as an additional exit. Among the new spaces created by the proposed interior partitions would be a production area of roughly 72.5 m^2 that would be covered with a wood frame ceiling. The walls for this area would be supported by three 2 by 4 wood stud columns stabilized by eight 300 mm concrete piers set on undisturbed soil placed around the perimeter of the production area. The ceiling of this area would also be supported by two of the same stud columns on the same concrete piers located roughly in the middle of the production area. Identically constructed partition walls would also provide an uncovered 50.1 m^2 storage area, and a small washroom. The total interior area of the building that would be enclosed by the proposed partitions is 128.1 m^2.

The construction in dispute involves the existing gravel floor of the building. The Applicant is not proposing to replace it with a concrete slab on ground, except in the small proposed washroom.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether, considering the proposed change of use and interior renovations, the existing gravel floor is required to comply with Sentences 4.1.1.3.(1) and 4.1.1.7.(1), Article 3.8.1.3., and Sentences 3.8.2.1.(1) and 9.9.5.5.(2) which collectively deal with certain structural, barrier-free, obstruction of means of egress, dampproofing and soil gas control standards. If deemed necessary that the current gravel floor must meet some or all of the referenced standards then a poured structural concrete floor slab may be required.

4. **Provisions of the Ontario Building Code**

Sentence 4.1.1.3.(1) Design Requirements

(1) Buildings and their structural members including formwork and falsework shall be designed to have sufficient structural capacity and structural integrity to resist safely and effectively all loads and effects of loads and influences that may reasonably be expected, having regard to the expected service life of buildings, and shall in any case satisfy the requirements of this Section. (See Appendix A.)

Sentence 4.1.1.7.(1) Stability

(1) Provision shall be made to ensure adequate stability of a structure as a whole, and adequate lateral, torsional and local stability of all structural parts.

Article 3.8.1.3. Barrier-Free Path of Travel

(1) Except as required in Sentence (4) and except as permitted in Subsection 3.8.3., every barrier-free path of travel shall provide an unobstructed width of at least 1 060 mm (3 ft 6 in) for the passage of wheelchairs.

(2) Interior and exterior walking surfaces that are within a barrier-free path of travel shall
(a) have no opening that will permit the passage of a sphere more than 13 mm (? in) in diam,
(b) have any elongated openings oriented approximately perpendicular to the direction of travel,
(c) be stable, firm and slip-resistant,
(d) be bevelled at a maximum slope of 1 in 2 at changes in level not more than 13 mm (? in), and
(e) be provided with sloped floors or ramps at changes in level more than 13 mm (? in).

Sentence 3.8.2.1.(1) Areas Requiring Barrier-Free Path of Travel

(1) Except where essential obstructions in the work area would make a barrier-free path of travel hazardous, and except as provided in Sentences (2), (3) and (4), a barrier-free path of travel from the entrances required by Sentences 3.8.1.2.(1) and (2) to be barrier-free shall be provided throughout the entrance storey and within all normally occupied floor areas served by a passenger type elevator or other platform equipped passenger elevating device.

Sentence 9.9.5.5.(2) Obstructions in the Means of Egress

(2) Except as provided in Sentence (3), no obstructions, such as counter gates, which do not meet the requirements for exit doors, shall be placed in a required means of egress from a floor area or part of a floor area unless an alternate unobstructed means of egress is provided adjacent to and plainly visible from the restricted egress.

5. **Applicant's Position**

The Applicant submitted that the present gravel floor is suitable for the proposed use, that the numerous OBC provisions cited do not apply, and thus a concrete floor is not necessary. The existing gravel floor was never part of the building permit application, therefore he could not understand why any of the disputed provisions would apply. He then dealt with the issues raised by the Respondent one at a time.

Regarding the structural requirements found in Part 4 of the Code, the Applicant provided a letter from an engineer stating that the gravel floor is capable of supporting a uniform load of 4.8 kPa, which he indicated is what is required for this type of use. He then noted that even in the production area the loading will not approach anywhere near 4.8 kPa. The Applicant rejected the idea that a structural concrete floor slab was necessary, after all he noted, the building has stood for several decades without such a floor slab.

On the issue of barrier-free accessibility, the Applicant indicated that he did not believe that Section 3.8 applied to this building. His reading of the disputed barrier-free OBC provisions, especially Article 3.8.1.3., was that no where do they stipulate that a concrete floor is necessary in order to achieve compliance.

Insofar as preventing an obstruction of the means of egress as found in Sentence 9.9.5.5.(2) is concerned, the Applicant argued that the existing gravel floor, while not as perfectly flat as concrete, is quite level. He indicated that the floor would not be a tripping hazard in the event of a quick exit due to an emergency. Further, the Applicant argued that the intent of Sentence 9.9.5.5.(2) was to prevent large objects like a gate from being placed in an egress route.

Lastly, the Applicant indicated that he is satisfied with the current gravel floor. In his view, none of the aforementioned Code provisions apply. A concrete floor would be an unnecessary and wasteful expenditure. The current gravel floor will not reduce the performance level of the building.

6. **Respondent's Position**

The Respondent submitted that the gravel floor is inadequate and that a structural concrete floor slab is necessary for several specific reasons.

He began by stating that according to Part 10 of the OBC the performance level of the building will be reduced due to increased occupant load with people working in the building for long periods of time and also with public access to the structure.

The Respondent continued by arguing that, in his view, enough changes were being made to the building with the interior partitions, one of which supports a ceiling, and the cutting of the exterior concrete wall for a door that OBC Articles 4.1.1.3. "Design Requirements" and 4.1.1.7 "Stability" would apply. He argued that a structural concrete floor would provide the necessary stability and would offset any of proposed changes to the building. The gravel floor, he noted, is not a stable element.

Secondly, the Respondent noted that the non-level and uneven gravel floor could be a problem for able-bodied persons as well. In his view, the gravel floor presents a tripping hazard that could possibly impede a person's means of egress, especially in the event of an emergency. Sentence 9.9.5.5.(2), he argued, specifically prohibits any obstacles in the means of egress and this could also be construed as an uneven gravel floor.

Lastly, the Respondent indicated that it was his belief that a barrier-free accessible path of travel is necessary. In his view, the barrier-free accessibility requirements found in Section 3.8 mandated that a concrete floor was necessary to assist the movement of people in wheelchairs. He expressed concern about the uneven gravel floor and the reduced mobility it would cause. Even if it is not required, he argued that it would certainly provide a higher level of comfort and freedom of movement for disabled persons.

For these reasons, the Respondent concluded by stating that a concrete slab is required in order to maintain the building's performance level.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the existing ground floor is not necessary to comply with Sentences 4.1.1.3.(1) and 4.1.1.7.(1), Article 3.8.1.3., and Sentences 3.8.2.1.(1) and 9.9.5.5.(2) of the Ontario Building Code at Country Garden Concrete 9593 Country Highway 124 Erin, Ontario.

8. **Reasons**

i) According to Article 2.1.1.7. and consideration of Part 11, Section 11.4. (performance level evaluation and compensating construction), there is no reduction in performance with respect to the existing ground floor.

ii) Article 3.8.1.3. does not mandate that a concrete slab-on-grade must be provided.

Dated at Toronto this 13th day in the month of May in the year **1999** for application number **1999-35**

BCC Ruling No. 99-31-687

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-31-687

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.2.8.4.(4)and Clause 3.4.2.5.(1)(b) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Elizabeth Lavery, Facility Manager, Ontario Realty Corporation, 1 Stone Road West, Guelph, Ontario, for the resolution of a dispute with Mr. Bruce Poole, Chief Building Official, City of Guelph, Ontario to determine whether the travel distances on the second to fifth floors ranging from 53 to 56 m, in a structure with interconnected floor space due to the full height atrium, provides sufficiency of compliance with Sentence 3.2.8.4.(4) and Clause 3.4.2.5.(1)(b) of the Ontario Building Code at the OMAFRA Head Office building, Guelph, Ontario.

APPLICANT

Ms. Elizabeth Lavery, Facility Manager
Ontario Realty Corporation
Guelph, Ontario

RESPONDENT

Mr. Bruce Poole
Chief Building Official
Town of Erin

PANEL

Mr. Kenneth Peaker (Chair)
Mr. James Lischkoff
Mr. Stuart Smith

PLACE

Toronto, Ontario

DATE OF HEARING

May 13, 1999

DATE OF RULING

May 13, 1999

APPEARANCES

Mr. Jon Winton, Sr. Associate
Leber/Rubes Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Rob Reynen
Sr. Building Inspector
City of Guelph
The Respondent

RULING

1. **The Applicant**

   Ms. Elizabeth Lavery, Facility Manager, has received a building permit under the *Building Code Act, 1992, to construct a head office building to accommodate the Ontario Ministry of Agriculture, Food and Rural Affairs at 1 Stone Road West, Guelph, Ontario.*

   Ms. Elizabeth Lavery, Facility Manager, Ontario Realty Corporation, 1 Stone Road West, Guelph, Ontario, for the resolution of a dispute with Mr. Bruce Poole, Chief Building Official, City of Guelph, Ontario to determine whether the travel distances on the second to fifth floors ranging from 53 to 56 m, in a structure with interconnected floor space due to the full height atrium, provides sufficiency of compliance with Sentence 3.2.8.4.(4) and Clause 3.4.2.5.(1)(b) of the Ontario Building Code at the OMAFRA Head Office building, Guelph, Ontario.

2. ***Description of Construction***

The Applicant has recently constructed a new, six storey, Group D - business occupancy (office), with a building area of 12,000 m^2. The building will be of noncombustible construction and will be equipped with a sprinkler system, fire alarm system and standpipe and hose system.

An atrium separating the building into north and south wings extends from the ground floor to the fifth. The atrium creates an interconnected floor space. Both wings on floors two to five are served by three exits each, except for the north wing on the second floor which has four exits. The occupant load per floor ranges from 688 persons on the second floor to 479 on the fifth. On each floor the north wing contains a somewhat higher occupant load than the south wing.

The construction in dispute involves the travel distances on the second to fifth floors, which from the most remote areas on these levels ranges from 53 to 56 m (13 to 16 m beyond the permitted distance). The travel distances on all interconnected north wing floors are 53 m. In the south wing the travel distances on the second, third and fourth floors are 55 m, whereas the fifth floor travel distance is 56 m.

Travel distances became an issue when partitions and furniture were installed in the recently completed building. The floor areas had originally be designed and built as open floor areas. The travel distances had been calculated on a straight line basis from the most remote point to the nearest exit. With the furniture and partitions the egress routes were no longer straight and therefore increased beyond the maximum allowed in the OBC.

3. ***Dispute***

The issue at dispute between the Applicant and Respondent is whether the as built travel distances, ranging from 53 to 56 m on floors two to five, in a structure considered to have interconnected floor space due to the atrium, provides sufficiency of compliance with Sentence 3.2.8.4.(4) and Clause 3.4.2.5.(1)(b). This latter provision of the OBC stipulates a maximum travel distance of 40 m to an exit from a floor area that is required to have more than one exit. At issue therefore, are the travel distances that exceed the 40 m maximum by as much as thirty to forty per cent longer than allowed by the OBC.

4. ***Provisions of the Ontario Building Code***

Sentence 3.2.8.4.(4) Exits

(4) Except where exits serving the floor area are at ground level, the increased travel distance to exits permitted by Clause 3.4.2.5.(1)(c) shall not apply to a floor area within an interconnected floor space.

Sentence 3.4.2.5.(1) Location of Exits

(1) Except as permitted by Sentences (2), (3) and 3.3.2.4.(6), if more than one exit is required from a floor area, the exits shall be located so that the travel distance to at least one exit shall be not more than

(a) 25 m (82 ft) in a high hazard industrial occupancy,
(b) 40 m (131 ft 3 in) in a business and personal services occupancy,
(c) 45 m (147 ft 8 in) in a floor area that contains an occupancy other than a high hazard industrial occupancy, provided it is sprinklered,
(d) 105 m (344 ft 6 in) in any floor area, served by a public corridor, in which rooms and suites are not separated from the remainder of the floor area by a fire separation, provided
(i) the public corridor is not less than 9 m (29 ft 6 in) wide,
(ii) the ceiling height in the public corridor is not less than 4 m (13 ft 1 in) above all floor surfaces,
(iii) the building is sprinklered, and
(iv) not more than one half of the required egress doorways from a room or suite open into the public corridor if the room or suite is required to have more than one egress doorway,
(e) except as permitted by Sentence (5), 60 m (196 ft 10 in) in any storage garage that conforms to the requirements of Article 3.2.2.83., and
(f) 30 m (98 ft 5 in) in any floor area other than those referred to in Clauses (a) to (e).

5. ***Applicant's Position***

The Applicant submitted that while the second to fifth floor travel distances do exceed the 40 m maximum allowed in the OBC the actual exit time from the floor areas is not increased and therefore does not constitute a risk to life safety. He indicated that his primary argument to support this assertion and thereby demonstrate sufficiency of compliance is based on a timed exit analysis. The Applicant provided a description of the timed egress analysis employed.

The timed exit analysis was based on the methodology set out in the SFPE Handbook of Fire Protection Engineering, 2nd Edition. The analysis was done for all floors in the OMAFRA building in which the travel distance exceeds 40 m. The study measured how long it would take

to get through a door at the given width, how long it would take to get to that door, etc. A comparative analysis was also performed for a hypothetical floor area that complies with the OBC.

The Applicant indicated that the range of times he calculated it would take to travel across the floor area and to enter the exit stair enclosure was 1.68 minutes on the south wing of the fifth floor which has the lowest occupant load at 198 persons of the disputed floors areas to 2.63 minutes for the second floor of the north wing which has the highest occupant load of 422. The Applicant noted that the queue that would form at the exit door would be the bottleneck in the exit path. The time that it would take to get to the exit door is minor compared to the time it would take to get through the door itself. However, even though the travel distance exceeds the 40 m, since they have provided more than the required exits, this means that the occupants have more exit options and the queues at each door would be less, thereby facilitating quicker exiting.

In comparison, he noted that the travel time for a Code complying structure, in which exit stairs are provided based on the exit requirements of calculated occupant load, is 3.23 minutes. The Applicant argued that this higher time results from the larger and longer queues at these exits because there are less of them than in the OMAFRA building. He noted that even the slowest exit times in the OMAFRA building are significantly lower than that permitted by the OBC.

The Applicant concluded by stating that since the travel distance times are lower than those permitted by the OBC that sufficiency of compliance has been achieved and that the subject building does not pose an increased life safety risk.

6. ***Respondent's Position***

The Respondent indicated that his position was clear. The Code requires that the travel distance in the subject building be limited to 40 m. He noted that in all disputed floor areas the travel distance is exceeded by at least thirty per cent and in at least one case it is forty per cent over the 40 m maximum distance allowed.

The Respondent also indicated that there are no specific provisions in the OBC that would allow him to accept a timed exit analysis or other such studies as an equivalent under the Code to the permitted 40 m travel distance. He noted that they do not have strong objections to the Applicant's arguments.

7. ***Commission Ruling***

It is the decision of the Building Code Commission that the travel distance on the second to fifth floors ranging from 53 to 56 m, in a structure with interconnecting floor space due to the full height atrium provides sufficiency of compliance with Sentence 3.2.8.4.(4) and Clause 3.2.8.5.(1)(b) of the Ontario Building Code at the OMAFRA head office building, 95 Stone Road West, Guelph, Ontario.

8. ***Reasons***

(i) Excess stair capacity provides sufficiency of compliance.

(ii) Timed exit analysis shows time taken for all occupants to exit is no longer and is in fact less than that for a Code complying building.

*Dated at Toronto this 13th day in the month of May in the year **1999** for application number **1999-17***

BCC Ruling No. 99-30-686

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-30-686

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.1.5.22. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99 and 278/99 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Rob Adamson, Architect, Cohos Evamy Partners, Calgary, Alberta, for the resolution of a dispute with Mr. Agris Robezneiks, Chief Building Official, City of Mississauga, Ontario to determine whether the proposed vinyl fabric roof on an aluminium frame to serve as a cover for the garden centre provides sufficiency of compliance with Article 3.1.5.22. of the Ontario Building Code at the Revy Home and Garden, 2933 Eglinton Avenue West, Mississauga, Ontario.

APPLICANT

Mr. Rob Adamson, Architect
Cohos Evamy Partners
Calgary, Alberta

RESPONDENT

Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL

Mr. Kenneth Peaker (Chair)
Mr. James Lischkoff
Mr. Stuart Smith

PLACE

Toronto, Ontario

DATE OF HEARING

May 13, 1999

DATE OF RULING

May 13, 1999

APPEARANCES

Mr. Randy Brown, President
Randall Brown and Assoc. Ltd.
Toronto, Ontario
Agent for the Applicant

Mr. Frank Spagnolo, Mgr.
Engineering and Inspection
City of Mississauga
The Respondent

RULING

1. **The Applicant**

   Mr. Rob Adamson, Architect, has applied for a building permit under the *Building Code Act, 1992* to construct a building and garden supply retail warehouse outlet known as Revy Home and Garden at 2933 Eglinton Avenue West, Mississauga, Ontario.

2. **Description of Construction**

   The Applicant is proposing to construct a new, single storey, Group E - mercantile (retail warehouse) occupancy, with a building area of 10,417 m^2. The building will be of noncombustible construction and will be equipped with an electronically supervised sprinkler system, fire alarm system and standpipe and hose system.

   The Applicant is also proposing to construct a 2,252 m^2 outdoor garden centre abutting the west exterior wall of the main building. The construction in dispute involves the approximately 613 m^2 of the garden centre which is planned as an area (16.8 m by 36.5 m) to be covered by a

temporary roof structure to provide weather protection for occupants as well as the horticultural products. The covering material is a clear flexible vinyl fabric called Frosty 3000 manufactured by Vanagard. It conforms to CAN/ULC S109-M87 "Standard for Flame Tests of Flame-Resistant Fabrics and Films". The fabric is supported by an aluminium frame. The frame would be built at a height of 4.87 m adjacent to the building and 3.35 m at the far end above the finished floor. The Applicant is also proposing to install on the aluminium frame just below the fabric a dry-pipe sprinkler system equipped with close spaced (10 by 10 ft), 165 degree quick response sprinkler heads.

The exterior wall of the store is composed of metal panels insulated with noncombustible mineral wool mounted on top of concrete block to a datum of 8 ft A.F.F. There is 8 ft of metal clad siding with no fire resistance rating above the block that is exposed to the covered area. There are several windows and doors between the building and garden centre. The garden centre is open on the three sides which do not abut the building. Required exiting from the store does not pass through the garden centre.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed vinyl fabric roof on an aluminium frame to serve as a cover for the garden centre at the Revy Home and Garden warehouse store provides sufficiency of compliance with Article 3.1.5.22. of the Ontario Building Code. Specifically, at issue is whether the covered area of the garden centre, at approximately six per cent of the size of the entire building, can be considered as a canopy. If it is deemed not to be a canopy then the exemption provided for combustible canopies attached to noncombustible buildings found in Sentence 3.1.5.22.(1) may not apply to the Revy Home and Garden, thus making the noncombustible requirements of 3.2.2.57. applicable. If not considered a canopy, the Applicant is offering sprinkler protection as a compensating measure to achieve sufficiency of compliance.

If the covering is considered as a tent as per Subsection 3.13.1. then many Code requirements do not apply (although the fabric must still meet the CAN/ULC S-109-M87 standard). As a trade off, however, the Code requires that tents must maintain a spatial separation of 3 m from any building, which is not provided between the covered area and the subject building.

4. **Provisions of the Ontario Building Code**

Article 3.1.5.22. Canopies Having Combustible Elements

(1) Exterior canopies having combustible fabrics or films are permitted on a building required to be of noncombustible construction provided the fabrics and films conform to CAN/ULC-S109-M, "Standard for Flame Tests of Flame-Resistant Fabrics and Films".

(2) Except as permitted in Sentence (3), exterior marquees, not greater than 7.5 m (24 ft 7 in) from ground level to the top of the marquee, having combustible elements other than fabrics or films conforming to Sentence (1), are permitted on a building required to be of noncombustible construction, provided every opening in the exposed wall of the building above the marquee is protected with wired glass in accordance with the Supplementary Guidelines where these openings are within

(a) 4.5 m (14 ft 9 in) horizontally of the marquee, and
(b) 9 m (29 ft 6 in) vertically above the marquee

(3) The protection required by Sentence (2) is permitted to be waived if the building is sprinklered.

5. **Applicant's Position**

The Applicant submitted that even though the covered area is certainly large it can still be considered as a canopy with an occupancy beneath it. As he indicated, there are no maximum dimensions or areas set out in the Code for canopies. As a result, he argued that the exemption for combustible canopies found in Sentence 3.1.5.22.(1) would apply to the subject building. This exemption, he noted, applies to fabrics that meet the CAN/ULC S109-M87 standard, which is the case with the intended fabric. As a canopy with an occupancy below it, NFPA 13 sprinkler protection would be required. Since he is proposing a sprinkler system, it is his view that, as a canopy it would meet the life safety standards intended in Sentence 3.1.5.22.(1).

Alternatively, if considered as a tent, the Applicant argued that the proposed covering would also meet the safety standards found in Subsection 3.13.1. As he noted, a sprinkler system is not required for a tent, therefore, in his opinion, it would be a suitable compensating measure for the 3 m set back required under Sentence 3.13.1.4.(2).

The Applicant then argued that regardless of what the covering is considered to be, it will be a safe area. The primary safety feature, he indicated, was the sprinkler system. He noted that the 75 degree, close spaced, sprinkler heads would provide quick actuation in the event of a fire. He indicated that the material to be used does not soften until approximately double the temperature

at which the sprinklers activate. This fast response would control any fire that occurred in the garden centre and would offer exposure protection to the windows and doors in the store. The Applicant further noted that the fabric has a flame spread rating of less than 25 and a low smoke development classification.

In terms of exiting from the garden centre, the Applicant recognized that there may some debate about whether 30 or 45 m would be required. Nevertheless, since the covered area is served by two exit doors, one on the south side and the other into the building at the east, the actual travel distance from anywhere in the garden centre is less than 15 m. The Applicant also pointed out that the store, with exits placed every 60 m, does not rely on exiting through the garden centre.

Other safety features include fire department access to the south and west sides of the garden centre. As well, a fire hydrant is located within 445 and 85 m of the south and north ends respectively of the garden centre. Finally, the Applicant noted that the fire alarm system from the store, including manual pull stations and audible devices, would be extended into the garden centre, as would the emergency lighting.

For the above reasons, whether the covered area is considered as a canopy, tent or an addition to the building, the Applicant concluded by arguing that the safety features, especially the sprinkler system, will mean that the subject garden centre covering will meet the intended level of life safety required in the OBC.

6. **Respondent's Position**

The Respondent indicated that, in his view, he does not consider the proposed garden centre as a canopy to the main building. He submitted that, at roughly 613 m^2, it is properly considered as an addition to the main building. Consequently, he argued that the exception allowed in 3.1.5.22.(1) is not applicable and that the noncombustible requirements of 3.2.2.57. must be met. The proposed fabric, the Respondent felt, as a combustible material does not meet the Ontario Building Code.

Further, the Respondent expressed concern about the metal clad portion of the abutting wall of the building that faces the covered area. He noted that previous BCC rulings relied upon fire separations with at least a 2 hour fire resistance rating. This level of separation is not present in the subject building.

Lastly, he indicated that he would feel more comfortable if a 3 m separation between the building and the covered area was imposed. In his opinion, this would compensate for the zero fire resistance rating in the higher portion of the abutting wall.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the use of a vinyl fabric roof as a cover for the Garden Centre provides sufficiency of compliance with Sentence 3.1.5.22(1) of the Ontario Building Code at the Revy Home and Garden Centre, 2933 Eglinton Avenue West, Mississauga, Ontario provided that the material cover to be used is Vanagard Frosty 3000-14 and that closely spaced sprinklers be installed at the exit to the existing structure.

8. **Reasons**

(i) The sprinkler system in the tent subject to an adequate design plus the addition of closely spaced sprinklers at the exit to the existing structure provides sufficiency of compliance.

(ii) The Vanagard Frosty 3000-14 meets the CAN/ULC S109-M87 standard and complies with 3.1.5.22.(1).

Dated at Toronto this 13th day in the month of May in the year **1999** for application number **1999-12**

BCC Ruling No. 99-29-685

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-29-685

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.2.2.1.7. and 3.1.8.12. of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Liz Rozenberg, Corporate Director, Facilities, Lakeridge Health Corporation Oshawa, 1 Hospital Court, Oshawa, Ontario, for the resolution of a dispute with Mr. Gerald Bilous, Chief Building Official, City of Oshawa, Ontario to determine whether the proposed sprinkler system to be installed throughout the North Infill portion of the subject building compensates for the lack of a rated roof assembly provided for the North Infill area thereby providing sufficiency of compliance with Article 3.2.2.17., and whether the proposed hold-open devices at the eight doors between the North Infill, the North Wing and the Link area comply with Article 3.1.8.12. of the Ontario Building Code at the Lakeridge Health Corporation Oshawa, 1 Hospital Court, Oshawa, Ontario.

APPLICANT

Ms. Liz Rozenberg, Corporate Director, Facilities
Lakeridge Health Corporation Oshawa
1 Hospital Court
Oshawa, Ontario

RESPONDENT

Mr. Gerald Bilous
Chief Building Official
City of Oshawa

PANEL

Mr. Roy Philippe (Chair)
Ms. Michael Steele
Mr. Kenneth Peaker

PLACE

Toronto, Ontario

DATE OF HEARING

April 29, 1999

DATE OF RULING

April 29, 1999

APPEARANCES

Mr. Leszek Muniak
Larden Muniak Consulting Inc.
Toronto, Ontario
Agent for the Applicant

Ms. Cveta Prgin
Buildings Engineer
City of Oshawa
The Respondent

RULING

1. **The Applicant**

   Ms. Liz Rozenberg, Corporate Director, Facilities, has applied for a building permit under the *Building Code Act, 1992* to construct several additions to the Lakeridge Health Corporation at 1 Hospital Court, Oshawa, Ontario.

2. **Description of Construction**

   The Lakeridge Health Corporation is an existing, nine storey hospital facility that is equipped with a fire alarm system and a standpipe and hose system, but not a full sprinkler system. (A full sprinkler system will be phased in over several years.) The Applicant is proposing to construct

one new wing and two new infill additions onto the subject building. Two of the three additions have disputed areas of construction. These two additions are described below.

The North Infill is an addition intended to fill the space currently existing between the two storey D-Wing to the east, the six storey A-Wing to the south and the nine storey F-Wing to the west. It is proposed as a 1,000 m^2 in building area, two storey high open space that is to contain Group A - Division 2 (food court with subsidiary kitchen) assembly and Group E (retail kiosks) mercantile occupancies. The North Infill will be provided with an electronically supervised sprinkler system built in accordance with NFPA 13 and will be separated from the surrounding non-sprinklered floor areas by a one hour fire separation from the adjoining office occupancies and by a two hour fire separation from the B2 occupancies. The floor will have a minimum fire-resistance rating of two hours, the roof, on the other hand, comprised of glass and steel is proposed by the Applicant to be unrated. The existing roofs on the D, A and F wings have a fire-resistance rating of one hour.

The new North Wing, located north of the existing G-Wing and north west of the existing F-Wing, is two storey (plus two levels below grade), L-shaped addition that is to provide further Group B - Division 2 (hospital) care occupancy space to the existing facility. The North Wing will also be fully sprinklered.

In the southerly portion of the eastern most face of this addition is a small area that links the new North Wing to the new North Infill and to an exit stairwell serving all floors of the existing F-Wing, as well as providing an exit to the exterior. This linking area ("the Link") is to become a major pedestrian circulation route for the expanded hospital, including the multi-layered parking facility to the north. In fact, the North Wing has three sets of double doors (one pair swinging east to west and two pairs swinging north to south) that lead into the Link, two double doors connect the North Infill and the Link, a single door leads from the F-Wing exit stairwell into the Link, and a single double provides access from the Link to the exterior. Of these doors, the two north to south double doors leading from the North Wing to the Link and both double doors leading from the North Infill to the Link are to be equipped with hold-open devices. The other doors served by the Link will not have hold-open devices. The Link will be pressurized, sprinklered and will have a one hour fire separation from adjacent occupancies.

3. **Dispute**

There are two issues at dispute between the Applicant and Respondent. The first is whether the sprinkler system proposed to be installed throughout the North Infill compensates for the unrated

roof assembly proposed for this addition thereby providing sufficiency of compliance with Article 3.2.2.17. of the Ontario Building Code. This provision permits a sprinkler to be installed in lieu of a rated roof assembly provided, among other things, that "the building is sprinklered". If the building in this case is construed to mean the entire hospital structure, which is not fully sprinklered, then the unrated roof may not be allowed. Article 3.2.2.38. which governs the construction of the new additions to the hospital, however, does not specify a rating for the roof assembly.

The second dispute involves the proposed installation of hold-open devices on doors between the North Wing, the North Infill and the Link and whether this complies with Article 3.1.8.12. of the OBC. Article 3.1.8.12. stipulates that hold-open devices can be installed on doors in a fire separation except if the doors are considered as a required exit doors in a building greater than three storeys. Since the two storey North Infill and the two storey North Wing were built without firewalls between the adjoining wings they are considered part of the larger nine storey building. The issue, therefore, revolves around whether the doors leading into the Link from the North Infill, the North Wing and the F-Wing exit stairwell are considered required exit doors.

4. **Provisions of the Ontario Building Code**

Article 3.2.2.17. Sprinklers in Lieu of Roof Rating

(1) The requirements in Articles 3.2.2.20. To 3.2.2.83. For roof assemblies to have a fire-resistance rating are permitted to be waived provided

(a) the building is sprinklered,
(b) the sprinkler system in Clause (a) is electrically supervised in conformance with Sentence 3.2.4.9.(2) and
(c) the operation of the sprinkler system in Clause (a) will cause a signal to be transmitted to the fire department in conformance with Sentence 3.2.4.7.(4).

Article 3.1.8.12. Hold-Open Devices

(2) Except as required by Sentences (3), (5), (6) and (7), a hold-open device permitted by Sentence (1) shall be designed to release by a signal from (a) an automatic sprinkler system,
(b) a heat-actuated device,
(c) fusible link, or

(d) a smoke detector located as described in Appendix B of NFPA 80, "Standard for Fire Doors and Fire Windows".

(3) Except as required by Sentences (4), (5), (6) and (7), a hold-open device permitted by Sentence (1) shall be designed to release upon a signal from a smoke detector located as described in Appendix B of NFPA 80, "Standard for Fire Doors and Fire Windows", if used on
(a) an exit door,
(b) a door opening into a public corridor,
(c) an egress door referred to in Sentence 3.4.2.4.(2),
(d) a door serving
(i) an assembly occupancy,
(ii) a care or detention occupancy, or
(iii) a residential occupancy, or
(e) a door required to function as part of a smoke control system.

(4) Except as required by Sentence (5), (6) and (7), a hold-open device permitted by Sentence (1) shall be designed to release upon a signal from the building fire alarm system if a fire alarm system is provided, except that this requirement does not apply to
(a) a hold-open device on a door located between a corridor used by the public and an adjacent sleeping room in a hospital or nursing home, or
(b) a hold-open device that is designed to release by a heat-actuated device or a fusible link in conformance with Sentence (2).

(5) Sentences (2) and (3) do not apply in a hospital or nursing home to
(a) a door located between a corridor used by the public and an adjacent sleeping room, or
(b) paired doors described in Sentence 3.3.3.3.(4).

(6) A hold-open device on a door in Clause (5)(a) shall be designed to release the door upon a signal from
(a) a smoke detector as required by Sentence 3.2.4.11.(1) for sleeping rooms in Group B occupancies, and
(b) the fire alarm system when an alert signal is initiated within the same fire compartment in Sentence 3.3.3.5.(2).

(7) A hold-open device on a door in Clause (5)(b) shall be designed to release the door upon a signal from the fire alarm system when an alert signal is initiated within the same fire compartment in Sentence 3.3.3.5.(2).

(8) A rolling steel fire door installed as a closure in a fire separation shall be equipped with a hold-open device designed to release the shutter as described in Sentence (2).

5. **Applicant's Position**

Regarding the issue of the unrated roof assembly in the North Infill, the Applicant submitted that proposed electronically supervised sprinkler system built to NFPA 13 standards which covers the entire 1,000 m^2 North Infill area provides sufficiency of compliance with Article 3.2.2.17. of the OBC. He argued that the sprinkler system comprises part of a complete package of protection including suppression and compartmentation which has been provided for the North Infill. As he noted, not only is the North Infill separated from the adjoining occupancies by one and in some cases two hour fire separations, but all connecting spaces have been constructed as pressurized vestibules with one or two hour rated construction. Moreover, the former windows of the F-Wing facing the North Infill have been replaced with wired or tempered glass in metal frames and will be provided with window sprinklers on both sides of the wall. As well, the floors will have a two hour fire-resistance rating.

In conjunction to these compartmentation measures, the roof will be protected by the proposed sprinkler system, which will also serve to protect the space itself, including occupants. In the case of the North Infill, in which the second storey roof level is lower than the surrounding portions of the building, the sprinkler system will also prevent a roof-to-wall fire exposure, the Applicant stated. He noted that a previous BCC decision upheld this argument. The Applicant also argued that sprinkler systems in general have an excellent record of protecting life and property. Moreover, he indicated that it is a well accepted principal in the OBC that certain fire-resistance ratings can be waived if a compensating sprinkler system is installed. As he noted Article 3.2.2.17., "Sprinklers in Lieu of Roof Rating", allows exactly this trade off if the various conditions found in that provision are met.

The Applicant argued that they meet all the conditions of Article 3.2.2.17., except for Clause (1)(a) which deals specifically with requiring the entire building to be sprinklered. Nevertheless, he contended that all of the above measures combined mean that the North Infill would be more than adequately protected. This holds true, the Applicant argued, if a fire were to originate from inside the North Infill or elsewhere in the hospital because the separations would offer protection in both directions. The intent of the Code, he explained, was to require either a one hour fire-resistance rating or sprinkler system for roof assemblies. This building proposes to use both protection measures in different areas to provide complete protection. In their view, sprinkler

protection throughout the entire building is not the only way to meet the intended safety requirements of the Code. To support his position, the Applicant noted that Article 3.2.2.38. does not even specify a rating for roof assemblies, but it does require that the new addition be fully sprinklered. Essentially, he argued that this allows flexibility to use either protection method to achieve roof assembly safety.

On the issue of the hold-open devices, the Applicant acknowledged that the Code does not allow such items on the doors discharging into the Link from the North Infill and the North Wing because they are considered a part of the high-rise component of the hospital and because he believes they are required exit doors. However, he argued that the installation of hold-open devices will ensure that a high level of safety will be maintained. As he pointed out, since the Link area is designed as a high pedestrian traffic zone and with doors that must be constantly opened there will be great temptation to wedge the subject doors open. This would completely defeat the fire separation and pressurization of the Link in the event of a fire. In contrast, hold-open devices, the Applicant stated, would provide the many pedestrian users with the convenience of doors that are nearly always open but would close upon activation of the fire alarm system, thereby maintaining the integrity of the designed fire safety measures.

The Applicant also addressed the egress issue from the F-Wing's exit stairwell which now discharges into the Link before gaining access to the exterior. He noted that there are 13 doors serving the Link, 11 discharge into the Link (in terms of path of exit travel) and two discharge to the exterior. Of the 11 doors, four leading from the North Infill and four leading from the North Wing are proposed to be equipped with hold-open devices. The door from the F-Wing exit stairwell will not have a hold-open device. All eight of the hold-open doors will automatically shut when the fire alarm system is activated, thereby preserving the required fire separation surrounding the exit route and making the Link area an exit lobby in conformance with Article 3.4.4.2., the Applicant argued.

Lastly, the Applicant noted that smoke detectors are proposed inside the Link area adjacent to the eight doors with hold-open devices. Additional smoke detectors will be located on the North Infill and North Wing side of the subject doors. These smoke detectors will be tied into the fire alarm system so that their activation will also cause the hold-open devices to close the doors. In his view, the hold-open devices, by automatically closing in an emergency and by preventing doors wedged open, provide sufficiency of compliance with the life safety intended by the OBC and in fact may be safer.

6. **Respondent's Position**

Concerning the unrated North Infill roof assembly, the Respondent submitted that her interpretation of Article 3.2.2.17. of the Code is that it allows the required roof rating to be substituted with sprinklers on certain conditions described in this provision, including that the building is fully sprinklered. As she noted, the remainder of the existing nine storey building is not sprinklered, meaning that the condition set out in Clause 3.2.2.17.(1)(a) is not met. As a result, she argued that the roof assembly of the North Infill was required to be fire rated.

The Respondent argued that the Code was clear regarding the issue of the proposed hold-open devices. Again, she indicated that the North Infill, although only two storeys itself, was considered as part of the overall nine storey hospital building as is the North Wing. She also noted that doors leading from the North Infill and North Wing to the Link were, in her opinion, considered required exit doors. These factors, she argued, meant that the hold-open devices on the four North Infill-to-Link doors and the four North Wing-to-Link do not comply with Sentence 3.1.8.12.(1) and were therefore not permitted.

She also expressed concern about the F-Wing exit stair exiting through the Link that has many doors discharging into it, most of which are equipped with hold-open devices. In her view, this compromises the safety the occupants of the F-Wing and their ability to exit safely in an emergency situation.

For these reasons, the Respondent indicated that the unrated roof assembly in the North Infill area and the hold-open devices proposed for the subject doors do not provide sufficiency of compliance with Articles 3.2.2.17. and 3.1.8.12. respectively of the OBC.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed additions to the Lakeridge Health Corporation Oshawa provides sufficiency of compliance with Articles 3.2.2.17 and 3.1.8.12 of the Ontario Building Code.

8. **Reasons**

i) Articles 2.1.1.7. and 11.3.2.1. of the Building Code indicate that the requirements of 3.2.2.38. apply only to the new North Infill and the new North Wing additions. The sprinklering of these portions of the building permit the roof assemblies in these areas to be unprotected.

ii) The use of magnetic hold-open devices on the main floor link locations between the new North Infill and new North Wing are permitted as it has been determined that these are access to exits from the floor area.

iii) In addition, the Link as an interconnecting vestibule is sprinklered, and pressurized to limit smoke movement in the event of fire.

iv) The installation of smoke detectors on either side of the access to exit doors at the Link area from the adjacent floor areas add to the level of safety by closing in event of detection of smoke.

Dated at Toronto this 29th day in the month of April in the year **1999** for application number **1999-29**

BCC Ruling No. 99-28-684

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-28-684

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 7.2.5.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Matthew Maciejowski, Senior Project Manager, Cairn Construction Ltd., Toronto, Ontario, for the resolution of a dispute with Mr. Gerry Bilous, Chief Building Official, City of Oshawa, Ontario, to determine whether the fabricated asbestos cement pipe fittings comply with Article 7.2.5.1. of the Ontario Building Code at the Canadian Tire outlet, at 441 Gibb Street, Oshawa, Ontario.

APPLICANT

Mr. Matthew Maciejowski, Senior Project Manager
Cairn Construction Ltd.
Toronto, Ontario

RESPONDENT

Mr. Gerry Bilous
Chief Building Official
City of Oshawa

PANEL

Mr. Roy Philippe (Chair)
Ms. Michael Steele
Mr. Kenneth Peaker

PLACE

Toronto, Ontario

DATE OF HEARING

April 29, 1999

DATE OF RULING

April 29, 1999

APPEARANCES

Mr. Louis Beauregard, President
Logard Inc.
St-Augustin, Quebec
Agent for the Applicant

Mr. Kirk Carter
Plumbing Inspector
City of Oshawa
The Respondent

RULING

1. **The Applicant**

   Mr. Matthew Maciejowski, Senior Project Manager, has received an order under the Building Code Act, 1992 to comply with Article 7.2.5.1. of the Ontario Building Code at the Canadian Tire outlet, 441 Gibb Street, Oshawa, Ontario.

2. **Description of Construction**

   The Applicant is currently constructing a one storey, Group E - mercantile (retail) occupancy, with a building area of 8,064 m^2. The structure is constructed of noncombustible construction and is to be equipped with a sprinkler system and a fire alarm system.

   The construction in dispute involves certain aspects of the plumbing system and the internal rain water leaders, specifically the asbestos-cement pipe fittings manufactured by Logard Inc.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the subject asbestos-cement pipe fittings, as installed, in the Canadian Tire store comply with Article 7.2.5.1. of the Ontario Building Code. This provision indicates that all asbestos-cement pipe fittings used in a building above ground shall conform to one of two standards, one of which is the CSA standard B127.1, "Components for Use in Asbestos-Cement Drain, Waste and Vent Systems". While the subject fittings have been used, and continue to be used, extensively for construction in Ontario, they are currently not approved by CSA in terms of conformance with their B127.1 standard, specifically the bending test portion of that standard. The product is currently being evaluated by CSA, however, the CSA standard itself is in the process of being amended.

4. **Provisions of the Ontario Building Code**

Article 7.2.5.1. Asbestos-Cement Drainage Pipe and Fittings

(1) Except as provided in Sentence (2), asbestos-cement pipe and its fittings for use in a drain, waste or vent system shall conform to

(a) CAN/CGSB-34.22, "Pipe, Asbestos-Cement, Drain", or
(b) CSA B127.1, "Components for Use in Asbestos Cement Drain, Waste and Vent Systems".

(2) Asbestos-cement pipe and fittings used underground either outside a building or under a building shall conform to Sentence (1) or to

(a) CAN/CGSB-34.9, "Pipe, Asbestos-Cement, Sewer",
(b) CAN/CGSB-34.23, "Pipe, Asbestos-Cement, Sewer, House Connection", or
(c) CSA B127.2, "Components for Use in Asbestos-Cement Building Sewer Systems".

5. **Applicant's Position**

The Applicant submitted that while his product does not currently meet CSA standard, he indicated that he has assurances from CSA that it will be able to meet the standard in the near future. Further, he argued that the Logard asbestos-cement pipe fittings have been used for construction in Ontario for many years and continue to be widely installed. The Applicant noted that the bending test portion of the CSA B127.1 standard was the specific issue at dispute regarding the asbestos-cement fittings.

The Applicant provided some background regarding asbestos-cement pipe fittings and the CSA standard. In their view, the problem began as far back as 1977 when the Ontario Plumbing Code

first referenced the CSA B127.1 standard. That standard, they noted, only provided tests for the pipe and not the fittings. Since the fittings were not subject to specific testing they were judged on their performance, which he argued was excellent.

This was the case until 1984 when the Ontario Plumbing Code was updated and amended with the approval of O. Reg. 815/84. Among other things, this regulation amended the provision of the Plumbing Code (which eventually became OBC Article 7.2.5.1) that dealt with testing standards for asbestos-cement pipes. This provision was changed to include the words "and its fittings", thereby requiring that not only the pipe, but also the fittings were to conform to CSA B127.1.

The difficulty with this however, the Applicant noted, was that at the time the CSA standard had not in fact been changed to include tests for asbestos-cement fittings. So in essence manufacturers of asbestos-cement fittings were put in the conundrum of having no standard for the fittings to conform to even though conformance was required by the OBC. It was only in 1990 that CSA changed its B127.1 standard to actually provide tests for fittings, including a bend test. This test, however, is widely regarded as not an effective measure of the product, he argued. It is for this reason that the current CSA B127.1 is being revised.

Lastly, as a result of this rather unconventional situation, the Applicant stated that the manufacturers, designers, contractors and building officials, etc. have had to take a practical approach to the use of asbestos-cement fittings. Part of the approach, he argued, was that municipalities can approve the use of his product as an equivalent under Section 2.7. of the OBC. He noted that all municipalities, with the exception of Oshawa, either have no problems with the subject fittings, or are willing to accept them as an equivalent, and are prepared to wait until the new standard is approved and the product is tested to that more appropriate standard.

6. **Respondent's Position**

The Respondent submitted that the Logard asbestos-cement pipe fitting does not currently meet the CSA B127.1 standard and should therefore not be used in the construction of the subject building. He acknowledged that while other municipalities may be willing to accept the product as an equivalent, Oshawa is not. He indicated that they have had at least two recent experiences of asbestos-cement pipe fitting failures. Even though the failed fittings were not Logard products, the Respondent argued that it is an industry-wide problem.

The Respondent explained that his specific concern with the fittings is that their design does not provide for a smooth bore radius sweep at the joints. Because it is not smooth where the fitting and the pipe join, as liquid passes over this interior lip, friction results. This friction causes undue pressure on the fittings which, due to the nature of their asbestos-cement material, is hardly flexible and will, in extreme cases, cause failure. To compensate for this lack of smoothness inside the fittings extensive, and in the Respondent's view excessive, epoxy caulking must be used on the pipe interior.

The Respondent indicated that when, or if, CSA approval is forthcoming, it should cover this product for use as rain water leaders for storm drainage only. This is due to the fact that rain water does not provide the same extreme fluctuations in terms of hydrostatic pressure as occurs in a sanitary sewage system.

Finally, because the subject product does not currently meet the CSA standard referenced in Article 7.2.5.1., he felt that their use did not comply with the OBC and consequently an order to remove the fittings was issued. The Respondent indicated, however, that there is another standard found in OBC 7.2.5.1., the CAN/CGSB-34.22, to which asbestos-cement products can conform. He allowed that if this standard was relevant, i.e. provides appropriate tests for fittings, and if the Applicant can demonstrate compliance, then he would not object to the use of the subject Logard asbestos-cement fittings in the Canadian Tire Store.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the fabricated asbestos cement pipe fittings do not provide sufficiency of compliance with CSA B.127.1 referenced in 7.2.5.1 of the Ontario Building Code.

8. **Reasons**

i) The CSA B.127.1 standard is presently under review by the technical committee to address certification of fittings.

ii) There is a CAN/CGSB-34.22 standard referenced in Article 7.2.5.1 of the Building Code. The Applicant has stated they will provide evidence to the municipality on conformance with that standard.

Dated at Toronto this 29th day in the month of April in the year **1999** for application number **1999-19**

BCC Ruling No. 99-25-681

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-25-681

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 8.4.1.2.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Mark Keighley, cottage owner, #7-350 Plains Road East, Burlington, Ontario, for the resolution of a dispute with Mr. Tom Reddering, Designated Sewage Inspector, Haliburton, Kawartha, Pine Ridge District Health Unit, Ontario to determine whether a pressurized water system used in conjunction with a Class 2 sewage system provides sufficiency of compliance with Sentence 8.4.1.2.(2) of the Ontario Building Code for an island seasonal recreational building at Lot 24, Concession 8, Plan 537, Sub Lot 25, Guilford Township, Haliburton County, Ontario.

APPLICANT

Mr. Mark Keighley
Cottage Owner
Burlington, Ontario

RESPONDENT

Mr. Tom Reddering
Designated Sewage Inspector
Haliburton, Kawartha, Pine Ridge District Health Unit

PANEL

Mr. Roy Philippe (Chair)
Mr. Doug Robinson
Mr. Bryan Whitehead

PLACE

Toronto, Ontario

DATE OF HEARING

April 15, 1999

DATE OF RULING

April 15, 1999

APPEARANCES

Mr. Mark Keighley
Cottage Owner
Burlington, Ontario
The Applicant

Mr. Tom Reddering
Designated Sewage Inspector
Haliburton, Kawartha, Pine Ridge
District Health Unit
The Respondent

RULING

1. **The Applicant**

   Mr. Mark Keighley, Burlington, Ontario, has applied for a building permit under the *Building Code Act, 1992* to install a Class 2 (leaching pit) sewage system at his seasonal residence located on an island at Lot 24, Concession 8, Plan 537, Sub Lot 25, Township of Guilford, Haliburton County, Ontario.

2. **Description of Construction**

   The Applicant has applied for a building permit for a recently constructed Class 2, leaching pit sewage system at his single, detached, two storey, Group C- seasonal residential dwelling located on Redstone Lake. The building is described as having two bedrooms, 4.5 fixture units and a total finished floor area of 121 m^2. The calculated daily design sewage flow rate is 1,100 litres per day. The Applicants are not contemplating any renovations to the existing structure.

The construction in dispute involves the Applicant's as constructed leaching pit that serves the grey water from the subject dwelling by means of gravity disposal. The cottage, however, is also equipped with a pressurized water system that draws surface water from the nearby lake. (The single toilet in the cottage is a Sun-Mar composting unit. The Applicant has agreed to disconnect the overflow pipe from the unit which is currently connected to the leaching pit.)

The Class 2 system, as installed, consists of a 100 mm diameter pipe running from the dwelling to the pit, approximately 8 m away. The pit is described as a 1 m deep circular hole with a diameter of approximately 2.7 m, for a total volume of roughly 2.7 m^2. A 1 m by 2.5 m rectangular box of concrete block stand in middle of the pit extending slightly higher than the surrounding grade level. The outside of the concrete block is covered in chicken wire to prevent stones from entering the pit. Stones surrounding the concrete block box fill the pit. The pit is covered by plywood, while the surrounding stones are covered with earth that is graded to slope away from the concrete block box.

The site is one of a number of properties on the subject island. The property has a gradual slope towards the lake that varies between five to fifteen per cent and is covered with immature hardwood trees. The soil is described as sandy loam to at least a depth of 1.5 m and has an estimated percolation time of 5 to ten minutes per centimetre. The cottage is situated 50 m from the lake, whereas the leaching pit is set back 59 m from the lake.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the already constructed Class 2 leaching pit provides sufficiency of compliance with Sentence 8.4.1.2.(2) of the Ontario Building Code. This provision prohibits the use of a Class 2 sewage system in conjunction with a pressurized water system. The Applicant's water and sewage systems clearly combine these two methods of drawing and distributing water and disposing of effluent.

4. **Provisions of the Ontario Building Code**

Sentence 8.4.1.2.(2) Application

(2) A Class 2 sewage system shall not be constructed where there is a supply of pressurized water.

5. **Applicant's Position**

The Applicant submitted that while his Class 2 system does not comply with Sentence 8.4.1.2.(2) his sewage system does in fact work well and has done so with previous leaching pits. He argued that the amount of grey water produced by the few (mostly only two) occupants who are there on a seasonal only basis is readily handled by the leaching pit as constructed. He also noted that by disconnecting the overflow pipe from the Sun Mar composting toilet the more hazardous wastes are eliminated from entering the pit.

The Applicant also argued that to install a Class 4 or 5 system would be a heavy financial burden. Moreover, due to the fact that the subject property is located on an island would likely mean that any Class 4 or 5 system would be difficult to service in the future.

Lastly, the Applicant argued that the OBC, as written, does not offer enough flexibility to consider servicing a property such as his that is infrequently used, but is equipped with pressurized water yet produces little effluent. He indicated, however, that it was his understanding that the Ministry of Municipal Affairs and Housing was reviewing this provision with the intention of possibly providing greater flexibility under certain conditions. The Applicant asked that the Commission consider this possible Code amendment when deliberating on his appeal.

6. **Respondent's Position**

The Respondent submitted that Sentence 8.4.1.2.(2) prohibits the use of a Class 2 sewage system in combination with a pressurized water system. Although he sympathized with the Applicants' position, the Code, he noted was quite clear on this restriction. He indicated that he appreciated the Applicant's willingness to disconnect the composting toilet from the leaching pit sewage pipe. He also stated that he agreed with the Applicant the subject dwelling will not yield considerable effluent. Nevertheless, because the prohibition in the Code regarding combining a pressurized water system with a leaching pit is absolute, the Respondent indicated that he had no authority to accept the Applicant's proposal.

Lastly, the Respondent indicated that he felt he had no authority to accept the Applicants' proposal.

7. **Commission Ruling**

It is the decision of the Building Code Commission that a Class 2 system meeting the requirements of 8.4.2.3. of the Building Code provides sufficiency of compliance with Article 8.4.1.2. with a supply of pressurized water.

8. **Reasons**

i) The number of plumbing fixtures is limited and the volume of grey water is estimated to be 600 litres/day or 60% of the total sanitary flow permitted under Article 8.4.2.2.

ii) The system is used only for the treatment and disposal of grey water and services a seasonal residence.

iii) Previous practices under the Environmental Protection Act limited the use of such systems with pressurized water supply to systems with limited number of fixtures, and a review of the Building Code is presently underway.

Dated at Toronto this 15th day in the month of April in the year **1999** for application number **1999-16**

BCC Ruling No. 99-24-680

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-24-680

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 8.8.1.2. and Sentence 8.8.2.2.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mrs. Virginia Hinckley, cottage owner, 83 Lincoln Street, Melrose, Massachusetts, for the resolution of a dispute with Mr. Michael J. Gravel, Chief Building Official, , Peterborough County-City Health Unit, Ontario to determine whether the two proposed 5,000 litre holding tanks to serve a 110 m2 cottage containing 6 bedrooms situated on a 1,538 m2 island provide sufficiency of compliance with Article 8.8.1.2. and Sentence 8.8.2.2.(1) of the Ontario Building Code at Island 15A, Stoney Lake, Township of Burleigh, Peterborough County, Ontario.

APPLICANT

Mrs. Virginia Hinckley
Owner
Melrose, Massachusetts

RESPONDENT

Mr. Michael Gravel
Chief Building Official
Peterborough County-City Health Unit

PANEL

Mr. Roy Philippe (Chair)
Mr. Doug Robinson
Mr. Bryan Whitehead

PLACE

Toronto, Ontario

DATE OF HEARING

April 15, 1999

DATE OF RULING

April 15, 1999

APPEARANCES

Mr. Richard Hinckley
Husband of Owner
Melrose, Massachusetts
Agent for the Applicant

Mr. Michael Gravelr
Director
Peterborough County-City H. U.
The Respondent

RULING

1. **The Applicant**

   Mrs. Virginia Hinckley, cottage owner, Melrose, Massachusetts, has received a building permit under the *Building Code Act, 1992* to install a Class 5 (holding tank) sewage system at her seasonal residence at Island 15A, Stoney Lake, Township of Burleigh, Peterborough County, Ontario.

2. **Description of Construction**

   The Applicants are proposing to install a new Class 5 sewage system at her 19th century single, detached, one and a half storey, Group C- seasonal residential dwelling located on Stoney Lake. The building is described as having six small bedrooms, 4.5 fixture units and a total finished floor area of 190 m^2. The calculated daily design sewage flow rate is 3,000 litres per day. The Applicants are not contemplating any renovations to the existing structure.

The construction in dispute involves the Applicants' proposal to revise the current building permit allowing the installation of a 21,000 litre holding tank and instead installing two fibreglass 5,000 litre holding tanks to serve the grey water from the subject dwelling by means of gravity disposal. The cottage is equipped with a pressurized water system and the 10,000 litre holding tank system is proposed as a replacement for the current Class 2 leaching pit used for grey water disposal. (The two toilets in the cottage are electric incinerator models and will not be connected to the proposed holding tanks.) The Applicants are also proposing to install the two holding tanks mostly below grade 5 m to the north of the cottage. They have begun discussions with a local sewage hauler to enter into a holding tank service agreement.

The site is a 1,538 m^2 island with a very gentle downward slope to the north and is covered with grass and some trees. The soil is described as sandy loam and has a variable depth from zero to 1.5 m in a few areas. Approximately thirty per cent of the island is exposed rock. The cottage is situation on the southern portion of the island, with the shoreline being 1.5 m to the south of the building and 16.8 m to the north. The percolation time of the native soil is 12 minutes per centimetre.

The subject dwelling is served by surface supply water pumped from the lake.

3. **Dispute**

The issue at dispute between the Applicants and Respondent is whether the proposed holding tanks, with a total capacity of 10,000 litres, provides sufficiency of compliance with Sentence 8.8.2.2.(1) of the Ontario Building Code. This provision requires that residential buildings served by holding tanks must have a seven day holding capacity based on the daily design sewage flow rate. When applying this provision to the subject building which has a daily design sewage flow calculated at 3,000 L/d times seven days in accordance with sentence 8.8.2.2.(1) means that a 21,000 litre holding tank is required.

4. **Provisions of the Ontario Building Code**

Article 8.8.1.2. Acceptable Installation

(1) A Class 5 sewage system may be installed in the following circumstances:

(a) where the proposed use of the sewage system is for a temporary operation, excluding seasonal recreational use, not exceeding 12 months in duration,

(b) to permit the extension of an existing single-family dwelling provided that

(i) the extension will not increase the wastewater load, and

(ii) the building is already served by a Class 5 sewage system,

(c) to remedy an unsafe sewage system where the remediation of the unsafe condition by the installation of a Class 4 sewage system is impracticable,

(d) to upgrade a sewage system on an existing lot or parcel of land, where upgrading through the use of a Class 4 sewage system is not possible due to lot size or clearance limitations, or

(e) as an interim measure for a lot or parcel of land until municipal sewers are available, provided that the municipality undertakes to ensure the continued operation of an approved hauled sewage system until the municipal sewers are available.

(2) Where a Class 5 sewage system is installed, a written agreement for the disposal of sanitary sewage from the sewage system shall be entered into with a hauled sewage system operator.

Sentence 8.8.2.2. Sizing of Holding Tanks

(1) All holding tanks used in residential dwellings shall have a minimum 7 day holding capacity based on the total daily design sanitary sewage flow.

5. **Applicant's Position**

The Applicants submitted that the proposed 10,000 litre tank provides sufficiency of compliance with Sentence 8.8.2.2.(1) of the OBC. As they argued, the size of the proposed tank is more than adequate to serve the cottage and its current use. In describing the use of the cottage they indicated that it is not heated nor insulated and is therefore only occupied between late June and early September. They calculate that the cottage is only in use for 270 man days per year and that while it has six bedrooms they are never all in use, except for approximately six weekends during the summer.

The Applicants also argued based on a monitoring of usage that their cottage does not produce anywhere near the estimated 3,000 L/d of sewage flow. As they noted, they are continuing to use their electric incinerator toilets which means they would not contribute any sanitary waste to the holding tanks. Despite having a pressurized water system , the amount of grey water is also

limited because of their current practices of using water such as taking "navy showers", etc. The Applicants estimated, in fact, that their actual water usage is 4,200 litre per month.

Moreover, both the barge and truck belonging to the local sewage hauler are not large enough to pump out the required 21,000 litre tank, the Applicants noted. This would likely require two pump outs per year. As they noted, for this cost they could also get the smaller tanks pumped out twice a year, if in fact they were to reach capacity at all.

Regarding the issue of the placement of the holding tanks, they argued that the larger tank would cause certain problems. The size of the tank, for example would mean that it would either very difficult or very costly to install it below grade at all. Having the tank installed basically on grade would create other problems, such as requiring mechanical pumping of effluent to reach the top of the tank. As well, since the island is situated in the Trent-Severn waterway, for water control purposes the waterway operators sometimes increase the water level to levels higher than nature would create and this high water may cause exposure problems for an unprotected holding tank not submerged below grade. They also added that the larger tank would dominate the limited landscape of the island.

Due to the fact that the island is too small and has very little ground cover, installing a Class 4 system is impossible, the Applicants argued. For this reason they approached the Health Unit with a proposal to install a holding tank suitable to their needs. However, because of the number of bedrooms in their cottage they are required under OBC Table 8.2.1.3.A to provide an excessively large holding tank, they argued. This Table, they noted, does not provide any allowances for seasonal dwellings. It is not their intent to avoid compliance with the regulations but they are looking for a practical application of the rules that takes into consideration their difficulties.

6. **Respondent's Position**

The Respondent submitted that the Code requires that the holding tank for a six bedroom cottage is 21,000 litres based on a daily design sewage flow rate of 3,000 L/d. Although he sympathized with the Applicants' position, the Code, he noted was quite clear on the requirements for the subject holding tank. While he respected the Applicants' arguments regarding limited water usage, he indicated that he could not accept this as an alternative to the larger tank. The Respondent expressed concern that future users or owners of the cottage may have larger occupant loads at the cottage because of the number of bedrooms. For these reasons, he argued that the 21,000 litre holding tank was necessary.

Lastly, the Respondent indicated that he felt he had no authority to accept the Applicants' proposal.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed two 5,000 litre holding tanks to serve a cottage containing 6 bedrooms situated on a 1,538 m^2 island provides sufficiency of compliance with Article 8.8.1.2. of the Building Code provided; a) it serves as a grey water system or, b) the holding capacity is increased to three tanks and 15,000 litres to serve the complete sewage system.

8. **Reasons**

i) The toilets are presently electric and do not contribute to the sewage flow.

ii) Evidence presented indicate that monitored sewage flow is significantly below the daily design flow calculated in Table 8.2.1.3(a).

iii) The cottage is a seasonal occupancy and that only four bedrooms are functionally useable.

iv) The Code presently requires monitoring of levels and contracts for pumping.

Dated at Toronto this 15th day in the month of April in the year **1999** for application number **1999-14**

BCC Ruling No. 99-23-679

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-23-679

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Clause 8.7.3.2.(2)(e) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Robert Hicks, homeowner, RR #2, Kingsville, Ontario, for the resolution of a dispute with Mr. Kevin Carter, Chief Building Official, , Town of Essex, Ontario to determine whether the proposed leaching bed with absorption trenches having only a vertical separation of 300 mm and soil with a percolation rate of 125 minutes per cm provides sufficiency of compliance with Clause 8.7.3.2.(2)(e) of the Ontario Building Code at Part of Lot 18, Concession 6, Town of Essex, Essex County, Ontario.

APPLICANT

Mr. Robert Hicks
Homeowner
Kingsville, Ontario

RESPONDENT

Mr. Kevin Carter
Chief Building Official
Town of Essex

PANEL

Mr. Roy Philippe (Chair)
Mr. Doug Robinson
Mr. Bryan Whitehead

PLACE

Toronto, Ontario

DATE OF HEARING

April 15, 1999

DATE OF RULING

April 15, 1999

APPEARANCES

Mr. Ken Dickson
Dickson Environmental Consulting
Wallaceburg, Ontario
Agent for the Applicant

Mr. Kevin Carter
Chief Building Official
Town of Essex
The Respondent

RULING

1. **The Applicant**

   Mr. Robert Hicks, homeowner, Kingsville, Ontario, has applied for a building permit under the *Building Code Act, 1992* to install a new Class 4 sewage system at Part of Lot 18, Concession 6, Town of Essex, Essex County, Ontario.

2. **Description of Construction**

   The Applicant is proposing to install a new Class 4 sewage system to serve a single, detached Group C - residential dwelling. The proposed dwelling will contain three bedrooms, three bathrooms, have 28 fixture units, and a total finished floor area of 178 m^2. The calculated total daily design sewage flow rate will be 2,000 litres per day. The subject dwelling unit is currently under construction.

   The proposed new sewage system would consist of a 2,300 litres per day DF60FF Whitewater tertiary treatment unit connected directly to the residence that would transmit effluent to a free

access sand filter, which in turn would be connected to a Zabel A300 effluent filter. From there the sewage would flow to a single chamber pump chamber. The effluent would move through these components of the system by means of gravity disposal. From the pump chamber, however, it would be time dosed into the trenches of the disposal bed.

The raised disposal bed and surrounding mantle, set back 5 m from the dwelling, will have a total hydraulic footprint of 762 m^2 and will be constructed of imported sand with a percolation rate of approximately 8 minutes per centimetre set on scarified native clay. With a contact area of 762 m^2 and a daily flow rate of 2,000 L/d, the application, or loading, rate is calculated at roughly 2.6 litres/m^2/day. The proposed raised bed is to have an area of 271 m^2 (24.2 m by 11.2 m) and will be 600 mm in height. Using the T-time of 8 min/cm of the imported fill, the length of distribution pipe was calculated to be 30 m and will be laid out in two parallel 15 m trench runs set at depth of 300 mm above the native clay.

The trenches will be located 2 m apart on centre, while the 1:4 slope surrounding the raised bed will commence at distance of 1 m from all sides of the trenches. The chambers set in the trenches would consist of the pressurized distribution pipe resting on 18 mm to 60 mm washed stone. The trench chambers would be covered with a filter cloth. The surrounding mantle will have a one per cent slope from north to south and as a result it will be 3.1 m in width, except to the south of the raised bed where it will be at least 15 m. A driveway encircling the house and sewage system would act as a berm on the north and east side of the mantle.

The site is described as level and covered with trees and low ground cover. The native soil is ranges from 75 to 200 mm in depth. Beneath it is a deep layer of clay with a percolation rate of at least 125 minutes per centimetre, as confirmed by three test holes.

The subject dwelling is served by a well water system.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed 600 mm raised leaching bed with absorption trenches having a vertical separation of only 300 mm above soil with a percolation rate of at least 125 minutes per centimetre complies with Clause 8.7.3.2.(2)(e) of the Ontario Building Code. This provision requires that the bottom of the trenches of a shallow buried trench leaching bed system must provide a vertical separation of 900 mm above rock or the high ground water table. It is silent, however, on whether this separation applies also between the bottom of a shallow buried trench and soil with a T-time of

more than 125 min/cm. Since the Applicant is proposing only a total of 600 mm of imported fill for the entire raised bed, the subject trenches, at 300 mm above the clay, would not appear to comply if a 900 mm vertical separation is required.

4. **Provisions of the Ontario Building Code**

Clause 8.7.3.2. Absorption Trenches

(2) Absorption trenches constructed as shallow buried trenches shall be

(e) at least 900 mm at all points on the bottom of the absorption trench above the high ground water table or rock, and

5. **Applicant's Position**

The Applicant submitted the proposed leaching bed with a 300 mm vertical separation complies with the construction requirements for absorption trenches as set out in OBC Sentence 8.7.3.2.(2). Clause 8.7.3.2.(2)(e), he argued, does not deal with vertical separation from soil, including that with a T-time of greater than 125 min/cm. The result is that this provision of the Code was not applicable to the proposed sewage system. As the Applicant noted, Sentence (1) of the same OBC Article in dispute clearly specifies that the vertical separation from the bottom of absorption trenches in a conventional Class 4 system (i.e. a non-shallow buried trench system) to soil with a particular T-time must be 900 mm. The fact that the Code is silent on the vertical separation from soil in a shallow buried trench system, the Applicant contended, is proof that one is not required.

Regarding the overall design of his system, the Applicant also argued that the length of distribution pipe, calculated by using the 8 min/cm T-time of the imported sand fill, is also appropriate rather than that of the impermeable clay. Again, as he noted, Clause 8.7.3.2.(2)(e) does not refer to a vertical separation to soil, therefore making the requirement to utilize the least permeable soil when calculating the length of distribution pipe also irrelevant. Moreover, as the Applicant indicated, the size of the leaching bed including mantle, allows for a loading rate of approximately 2.6 L/m^2 per day, which is well under the maximum rate of 6 L/m^2 stipulated in Article 8.7.4.1. At this application rate, there should be no horizontal movement of effluent beyond the bed area.

The Applicant also argued that his proposal made sense when considering the nature of sewage systems equipped with shallow buried trench-type leaching beds. In his view, because such systems are required to provide tertiary treatment units, the nature of filtration in the distribution bed is quite different from conventional Class 4 systems. Whereas the quality of effluent in a conventional, untreated system that reaches the tile bed is poor, in a treated, shallow buried trench system the quality of effluent dosed into the chambers is high. This significant difference means that the beds are required to function much differently. In a conventional Class 4 system, the Applicant argued, the 900 mm vertical separation also includes from soil because that amount of material is required to accomplish much of the actual filtration and treatment. On the other hand, this filtration and treatment is mostly done in the tertiary treatment unit of a shallow buried-type system, making the larger separation unnecessary. As the Applicant indicated, in a shallow buried-type system most of the disposal is done close to the surface and relies upon the plant roots and earthworm channels to move effluent laterally.

6. **Respondent's Position**

The Respondent submitted that the vertical separation is required for the proposed sewage system. In his view, while the Code is not specifically clear on the 900 mm separation from soil, nonetheless that is its intent. As he noted, if vertical separations were not necessary for shallow buried trench-type disposal systems, as the Applicant previously argued, then why does Clause 8.7.3.2.(2)(e) contain any such requirements with respect to the high ground water table and rock? The Respondent argued that the type of clay in the area (described as "bullet proof clay") is essentially like rock and would react as rock. He therefore believes it should be treated the same way under the Code, i.e. provided with a 900 mm separation. The Respondent indicated that separation to soil was perhaps inadvertently omitted in the recent drafting of the Code, but it is a consistent requirement throughout Part 8.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed leaching bed with absorption trenches having a vertical separation of 300 mm above soil with a percolation rate of greater than 125 minutes per centimetre provides sufficiency of compliance with 8.7.3.2.(2)(e) of the Ontario Building Code provided that:

i) A tertiary treatment unit including a sand filter is provided prior to the discharge to the leaching bed;

ii) Scientific calculations on lateral flow through the imported soil are provided to demonstrate that the water level in the leaching bed will be maintained below the trench bottom; and,

iii) The imported soil meets the minimum design requirements established in Item 2.

8. **Reasons**

i) The Building Code is silent on the distance between the bottom of the shallow buried trenches and soil with a percolation rate in excess of 125 minutes.

ii) A tertiary treatment unit is provided and the soil is not considered part of the treatment system.

iii) The use of sufficiently permeable imported sand will ensure proper distribution of the effluent over the entire bed and mantle area, ensuring that the effluent level remains below the trench bottoms.

Dated at Toronto this 15th day in the month of April in the year **1999** for application number **1999-13**

BCC Ruling No. 99-22-678

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-22-678

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.6.2.2.(3) and Clauses 3.2.7.3.(1)(i) and 3.2.7.3.(1)(j) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Tenzin Gyaltsan, 564069 Ontario Inc., 15 King Street West, Village of Newcastle, Ontario, for the resolution of a dispute with Mr. Stephen A. Vokes, Director of Public Works, Municipality of Clarington, Ontario to determine whether the proposed location of a fuel fired appliance and the proposed level of illumination of exit signage complies with Sentences 3.6.2.1.(2) and 3.6.2.2.(3) and Clauses 3.2.7.3.(1)(i) and (j) and Sentence 3.2.7.3.(3) respectively of the Ontario Building Code at the subject retail grocery store, 15 King Street West, Village of Newcastle (Clarington), Ontario.

APPLICANT

Mr. Tenzin Gyaltsan
15 King Street West
Village of Newcastle, Ontario

RESPONDENT

Mr. Stephen Vokes
Director of Public Works
Municipality of Clarington

PANEL

Mr. Roy Philippe (Chair)
Mr. Michael Steele
Mr. Kenneth Peaker

PLACE

Toronto, Ontario

DATE OF HEARING

April 8, 1999

DATE OF RULING

April 8, 1999

APPEARANCES

Mr. James Doubt
J.E. Doubt and Associates
Cobourg, Ontario
Agent for the Applicant

Mr. Gregg Powless
Building/Plumbing Inspector
Municipality of Clarington
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Tenzin Gyaltsan, 564069 Ontario Inc., has applied for a building permit under *Building Code Act, 1992* to construct a new retail grocery store at 15 King Street West, Village of Newcastle (Clarington), Ontario.

2. **Description of Construction**

   The Applicant is currently constructing a new, one storey, Group E - mercantile occupancy (retail grocery store), with a building area of 2,420 m^2. The building will be equipped with a sprinkler and fire alarm system. The structure is provided with four exits, only two of which are readily accessible by the public.

   There are two areas of construction in dispute. The first involves a fuel fired appliance (furnace) and whether it is required to be located in a service room. The Applicant is proposing to install his gas fired furnace suspended from the ceiling of a bulk storage and receiving room at the rear

of the supermarket. The furnace would hang directly above a number of large walk-in freezers and meat and bakery preparation areas. The Applicant does not intend to locate the furnace in a separate room that contains only building service equipment. The original approved drawing showed the furnace unit on the roof, directly above its proposed inside location.

The second involves placement and illumination levels of emergency lighting in the subject grocery store. The Applicant is proposing to install emergency lighting in the large north, south, east, and west aisles at the perimeter of the supermarket, but not in the internal, narrower, intermediate aisles between the shelving units. The Applicant originally submitted, and the permit was based on, drawings stamped by an engineer which showed that the intermediate aisles would also be provided with emergency lighting.

3. **Dispute**

There are two issues at dispute between the Applicant and Respondent. The first is whether the proposed location of the fuel fired furnace, suspended from the ceiling above walk-in freezers and food preparation facilities in a storage and receiving area of the building, complies with Sentences 3.6.2.1.(2) and 3.6.2.2.(3) of the Ontario Building Code. Sentence 3.6.2.1.(2) requires that in a mercantile occupancy in a building of this size fuel-fired appliances should be located in a service room with a one hour fire-resistance rating. Sentence 3.6.2.2.(3) provides an exception to Sentence 3.6.2.1.(2) regarding the requirement for a fire separation provided that the fuel fired appliance does not serve more than one suite, as is the case in the subject grocery store. This exception does not address whether the fuel fired appliance must still be placed in a separate service room.

The second dispute involves the proposed placement of emergency lighting in only the perimeter aisles of the supermarket and the resultant level of illumination provided and whether this complies with Clauses 3.2.7.3.(1)(i) and (j) and Sentence 3.2.7.3.(3) of the OBC. These Clauses require that an average level of emergency lighting not less than 10 1x at floor level shall be provided in principal routes to exits and in internal aisles serving as principal routes to exits. Sentence 3.2.7.3.(3) provides a minimum level of illumination at 1 1x for Sentence (1). If the internal aisles are considered as principal routes to exits then they must be provided with emergency lighting. If they are not considered principal routes then the level of illumination from the large, principal route aisles at the perimeter must be able to provide adequate lighting to be seen from the intermediate aisles.

4. **Provisions of the Ontario Building Code**

Sentence 3.6.2.1. Fire Separations Around Service Rooms

(2) Except as permitted by Article 3.6.2.2., a fuel-fired appliance in a building not containing a Group B or Group F, Division 1 occupancy shall be located in a service room which shall be separated from the remainder of the building by a fire separation having a fire-resistance rating not less than 1 h if the building is more than 2 storeys in building height or more than 400 m^2 (4,310 ft^2) in building area.

Sentence 3.6.2.2. Waiver of Fire Separations

(3) Except for buildings classified as Group B or Group F, Division 1 occupancies, the fire separations required by Sentence 3.6.2.1.(2) need not be provided for fuel-fired appliances that serve not more than one room or suite, provided the appliances are not solid fuel-fired appliances referred to in Sentence 3.6.2.1.(3).

Clauses 3.2.7.3. Emergency Lighting

(1) Emergency lighting shall be provided to an average level of illumination not less than 10 1x (0.9.ft-candles) at floor or tread level in

(i) principal routes providing access to exit in a floor area that is not subdivided into rooms or suites of rooms served by corridors in a business and personal services occupancy, a mercantile occupancy or an industrial occupancy, and

(j) internal corridors or aisles serving as principal routes to exits in a business and personal services occupancy, a mercantile occupancy or an industrial occupancy that is subdivided into rooms or suites of rooms, and is not served by a public corridor.

Sentence 3.2.7.3. Emergency Lighting

(3) The minimum value of the illumination required by Sentences (1) and (2) shall be not less than 1 1x (0.09 ft-candles).

5. **Applicant's Position**

Regarding the first dispute, the Applicant submitted that the proposed location of the furnace complies with Sentences 3.6.2.1.(2) and 3.6.2.2.(3) of the OBC. In his view, the exception concerning the provision of the fire separation found in Sentence 3.6.2.2.(3) is applicable. As he

argued, the subject furnace would serve the entire building, but which contains only one suite. As a result, the one hour fire separation can be waived. As he further argued, if the fire separation is waived there is far less rationale for locating the furnace in a service room solely designated for building services equipment. The project engineer for the subject supermarket submitted that in this experience this is the first time they have been required to treat a furnace in this manner.

Concerning emergency lighting, the Applicant argued that both Clauses 3.2.7.3.(1)(i) and (j) apply only to the principal routes leading to exits. He indicated that the only aisles that should be considered as principal routes to exits in the supermarket are the large perimeter aisles. The internal, intermediate aisles are not principal routes. He insisted that they should be considered only as floor area that accesses the principal routes. As a result, he concluded that emergency lighting should only be provided in the perimeter aisles that serve as principal routes. Lastly, the Applicant indicated that the lighting levels of the principal routes would be sufficient to be visible form the floor area in the intermediate aisles, thereby satisfying Sentence 3.2.7.3.(3)

6. **Respondent's Position**

On the first issue pertaining to the location of the fuel fired furnace, the Respondent submitted that while they recognized the applicability of Sentence 3.6.2.2.(3) that would permit the Applicant to waive the separation requirements, they indicated that, in their view, this same exception does not specifically provide for the placement of furnaces outside of service rooms. In other words, the exception found in Sentence 3.6.2.2.(2) only deals with the fire separation requirements of Sentence 3.6.2.1.(2) and does not affect the requirement of that provision for fuel fired appliances to be located in service rooms. They indicated that the proposed locating of the furnace suspended from the ceiling in storage and receiving area constitutes installation in a service space, not a service room. By placing the furnace unit in a room, even without a fire separation, offers a degree of protection that installation in an open area does not. For this reason, the Respondent felt that the proposed furnace location did not comply with Code.

Regarding the second dispute, the Respondent noted that were willing to accept the engineer stamped drawings that were originally submitted as the emergency lighting plan. They indicated that they had not received an up to date proposal by the Applicant. Nevertheless, the Respondent opposed the idea that emergency lighting is required only in the perimeter aisles which serve as principal routes to exits. They argued that emergency lighting should be provided in the intermediate aisles in accordance with Clause 3.2.7.3.(1)(j) since they form part of the principal routes to exit as well. Finally, they asserted that without emergency lighting in the intermediate

aisles it would be difficult to meet the minimum lighting levels set out in Sentence 3.2.7.3.(3) in certain parts of the floor area.

Finally, the Respondent indicated that they formed their opinions on these issues in consultation with the Housing Development and Buildings Branch and Lumacell Incorporated.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the fuel fired appliance and the proposed level of illumination provides sufficiency of compliance with Sentence 3.6.2.2.(3) and Clauses 3.2.7.3.(1)(i) and 3.2.7.3.(1)(j) of the Ontario Building Code.

8. **Reasons**

i) The provisions of Sentence 3.6.2.2.(3) exempt Group E occupancies from the fire separation requirements of service rooms where the appliance does not serve more than one suit of rooms. The retail grocery store is considered only one suite as defined under Article 1.1.3.2. of the Building Code.

ii) The emergency lighting as proposed provides illumination of the principal routes in access to exits, and the aisles serving the shelves are not considered principal access routes.

iii) Design drawings confirming illumination levels will be submitted.

Dated at Toronto this 8th day in the month of April in the year **1999** for application number **1999-09**

BCC Ruling No. 99-21-677

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-21-677

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 9.8.8.4.(1) and Article 9.8.8.5. of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Rick Lovekin, 1220351 Ontario Ltd., R.R. # 5, 263 Hoskin Road, Cobourg, Ontario, for the resolution of a dispute with Mr. Frank Lukes, Chief Building Official, Town of Cobourg, Ontario to determine whether the modified guard with a total height of 915 mm, consisting of a single steel rail supported by posts located approximately every 1,200 mm constructed upon the original (610 mm in height) historic iron lattice and wood guard, provides sufficiency of compliance with Sentence 9.8.8.4.(1) and Article 9.8.8.5. of the Ontario Building Code at the condominium residences at 18 Chaple Street, Cobourg, Ontario.

APPLICANT

Mr. Rick Lovekin
1220351 Ontario Ltd.
Cobourg, Ontario

RESPONDENT

Mr. Frank Lukes
Chief Building Official
Town of Cobourg

PANEL

Mr. Roy Philippe (Chair)
Mr. Michael Steele
Mr. Kenneth Peaker

PLACE

Toronto, Ontario

DATE OF HEARING

April 8, 1999

DATE OF RULING

April 8, 1999

APPEARANCES

Mr. James Doubt
J.E. Doubt and Associates
Cobourg, Ontario
Agent for the Applicant

Mr. Frank Lukes
Chief Building Official
Town of Cobourg
The Respondent

RULING

1. **The Applicant**

   Mr. Rick Lovekin, 1220351 Ontario Ltd., received a building permit under the *Building Code Act, 1992* to renovate a nineteenth century schoolhouse by converting it into several residential condominium units at 18 Chaple Street, Cobourg, Ontario.

2. **Description of Construction**

   The Applicant has recently renovated a two storey, 1883 Victorian schoolhouse by adding several condominium units. The Group C - residential structure with a building area of 300 m^2, is described as combustible construction and is equipped with a fire alarm system.

   The construction in dispute concerns a guard separating a loft containing a bedroom and a washroom 9 ft above the ground floor in two of the second storey units. The guard consists of two parts, an original historic lower level and a recently added steel post and rail upper level. The lower portion is composed of a wood guard that also acts as a frame for panels of iron lattice

and has a total height of 610 mm. The upper portion, recently added to achieve compliance with the current standards under the OBC, is composed of a single 50 mm diameter steel rail supported at a height of approximately 250 mm above the lower guard by upright posts located roughly every 1,200 mm. The combined total height of both the upper and lower portions of the modified guard is 915 mm. All of the area beneath the horizontal rail and between the vertical posts is open to the floor area below.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the modified historic guard, as constructed, provides sufficiency of compliance with Sentence 9.8.8.4.(1) and Article 9.8.8.5. of the Ontario Building Code. These provisions stipulate that the openings in a required guard cannot exceed 100 mm unless it can be demonstrated that the subject openings do not represent a hazard and that no climbable elements be placed be placed between 100 and 900 mm above the floor respectively. The openings below the horizontal rail and the vertical posts far exceed 100 mm and the iron lattice as well as the top of the lower, original guard could facilitate climbing.

4. **Provisions of the Ontario Building Code**

Sentence 9.8.8.4. Openings in Guards

(1) Except as provided in Sentence (2), openings through any guard which is required by Article 9.8.8.1. shall be of a size which will prevent the passage of a spherical object having a diameter of more than 100 mm (4 in) unless it can be shown that the location and size of openings which exceed this limit do not represent a hazard. (See A-9.8.8.4.(1) and (2) in Appendix A.)

Article 9.8.8.5. Design to Prevent Climbing

(1) Guards required by Article 9.8.8.1. and serving buildings of residential occupancy shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2ft 11 in) above the floor or walking surface protected by the guard will facilitate climbing.

5. **Applicant's Position**

The Applicant submitted that the modified guard does not represent a hazardous situation and therefore complies with the intent of OBC 9.8.8.4.(1) and 9.8.8.5. He argued that the existing lower portion of the guard is a valued historic feature of the building and achieving complete

compliance with the disputed OBC standards would greatly diminish its historic integrity. He noted that the original guard offered protection to the occupants of the building when it was used as an assembly occupancy, specifically a Sunday school. Moreover, the Applicant indicated that the hazard has been reduced by the recent addition of the higher rail and support posts.

The Applicant indicated that the change of occupancy to residential does not represent an increased hazard over the previous use. He further argued that the existing lower portion of the guard should be considered an acceptable compliance alternative under Part 11 and be allowed to remain as is.

The Applicant indicated that the guard has existed to their knowledge without incident for over 100 years. He also stated that the recent purchasers of the two units would be upset if the guards were further modified.

Lastly, the Applicant submitted a letter indicating that the Cobourg Local Architectural Conservation Advisory Committee had recommended this project for a 1999 Ontario Historical Society award.

6. **Respondent's Position**

The Respondent submitted that the modified guard does not achieve the level of safety required by the Code. He indicated that he was concerned about both the large size of the openings in the newer part of the guard and the climbable features of the historic portion of the guard. While he recognized the Applicant's effort to reduce the level of hazard by adding the horizontal rail with vertical posts, these measures are not sufficient to allay his concerns. For these reasons, the Respondent felt he could not accept the modified guard as constructed.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the modified guard as constructed with a total height of 915 mm over the existing guard provides sufficiency of compliance with Sentence 9.8.8.4.(1) and Article 9.8.8.5. of the Building Code provided:

a) the clearance between existing guard and the 50 mm rail extension complies with the maximum size openings of 100 mm.

8. **Reasons**

a) It is the opinion of the Building Code Commission that the safety issue can be addressed by the use of materials that will not adversely affect the architectural significance of the guard.

Dated at Toronto this 8th day in the month of April in the year **1999** for application number **1999-08**

BCC Ruling No. 99-20-676

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-20-676

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.7.4.3.(4) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Frank Macri, Franchise Director, Pizza Nova Take Out Ltd., 2247 Midland Avenue, Toronto, Ontario, for the resolution of a dispute with Mr. Stephen A. Vokes, Chief Building Official, Municipality of Clarington, Ontario to determine whether the proposed 83 m^2 Pizza Nova Take Out franchise should be considered a mercantile occupancy and is therefore adequately served by a single unisex, barrier-free accessible washroom in accordance with Sentence 3.7.4.8.(3) of the Ontario Building Code at the Pizza Nova Take Out, Clarington Centre (Building A), Bowmanville, Ontario.

APPLICANT

Mr. Frank Macri, Franchise Director
Pizza Nova Take Out Ltd.
Toronto, Ontario

RESPONDENT

Mr. Stephen A. Vokes
Chief Building Official
Municipality of Clarington

PANEL

Mr. Roy Philippe (Chair)
Mr. Michael Steele
Mr. Kenneth Peaker

PLACE

Toronto, Ontario

DATE OF HEARING

April 8, 1999

DATE OF RULING

April 8, 1999

APPEARANCES

Mr. David Syrett
Leber/Rubes Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Gregg Powless
Building/Plumbing Inspector
Municipality of Clarington
Designate for the Respondent

RULING

1. **The Applicant**

   Mr. Frank Macri, Franchise Director, has applied for a building permit under the *Building Code Act, 1992* to construct a new Pizza Nova Take Out franchise at Unit No. 112, Clarington Centre (Building A), Bowmanville, Ontario.

2. **Description of Construction**

   The Applicant is proposing to construct a new, 83 m^2 (4.5 m x 18.39 m), Pizza Nova Take Out franchise. The Group E - mercantile occupancy (take out outlet), as described by the Applicant, will be constructed in a leased spaced (Unit No. 112) located in Building A of the Clarington Centre. The Clarington Centre is a new, one storey, retail strip plaza containing numerous Group D - business and Group E - mercantile occupancies, with a building area of 1,187 m^2. The Pizza Nova franchise, as is the case with other tenants in the plaza, will be accessed directly from the outdoors, not from an interior corridor, and will have 1 hour fire separation demising walls

between other occupancies. The plaza is noncombustible construction and is equipped with a monitored sprinkler system, but not a fire alarm system.

In the subject Pizza Nova facility (which represents only 7% of the total building area of the entire plaza) the Applicant is proposing that 72 m^2 of the total area be devoted for food storage, preparation and sales, while 11 m^2 is to be allocated for a customer ordering area that includes a condiment ledge. There is no provision for seating which would encourage patrons to consume food and drink, or otherwise remain in the take out outlet.

The construction in dispute concerns the number and location of washrooms proposed for the franchise. The Applicant is proposing to install a single, barrier-free accessible, washroom that is intended to serve both sexes. No other washrooms will be provided within any of the public spaces of the plaza. As well, the washroom is to be placed at the rear of the take out facility, behind the food storage and preparation areas.

3. **Dispute**

The issue in dispute between the Applicant and Respondent is whether the proposed 83 m^2 fast food outlet can be considered a mercantile occupancy and would therefore be adequately served by a single, unisex barrier-free accessible washroom, in accordance with Sentence 3.7.4.8.(3) of the Ontario Building Code. This provision determines the number of washrooms required per sex for mercantile occupancies. The dispute, however, centres on whether the major occupancy of the Pizza Nova Take Out outlet should be considered an mercantile occupancy or assembly. The washroom requirements are different for these occupancies. If considered an assembly occupancy, i.e. restaurant, then an additional washroom would be required.

Further, the location of the washroom at the rear of the take out facility, beyond food preparation areas, is also at issue. Article 3.7.4.15. stipulates that washrooms should not be located where in order to access them it would be necessary to travel through food preparation areas.

4. **Provisions of the Ontario Building Code**

Sentence 3.7.4.8.(3) Plumbing Fixtures for Mercantile Occupancies

(3) Not more than one water closet to serve both sexes need be provided in a Group E occupancy where

(a) the occupant load is not more than 9 persons, or

(b) where the total area of the occupancy, excluding basements, is not more than 300 m^2 (3,230 ft^2).

Sentence 3.7.4.3.(4) Plumbing Fixtures for Assembly Occupancies

The number of water closets required for dining rooms, restaurants and cafeteria shall conform to Table 3.7.4.3.D.

Sentence 3.7.4.15.(1) Location of Plumbing Fixtures

(1) A room containing a water closet shall be located where

(a) it does not open directly into any room or area where food is intended to be stored, prepared, processed, distributed, served, sold or offered for sale, and

(b) it is not necessary for the public to go through the food preparation areas to gain access to the plumbing fixtures.

5. **Applicant's Position**

The Applicant submitted that the proposed fast food franchise should be considered a mercantile occupancy and that the provisions found under Sentence 3.7.4.8.(4) are the applicable standards. As a result, he argued that a single, unisex washroom, equipped with one water closet and one lavatory is sufficient.

The Applicant based this argument on the fact that very little space of the fast food outlet is being provided for customers and there will be no seating at all. He also referred to Hazard Index Table 11.2.1.1.K. to support his position. As he noted, this Table includes "fast food" outlets as a Group E major occupancy. Moreover, the Applicant also referred to the 1975 version of the OBC that defined a restaurant as "any portion of a building thereof where food is offered for sale for immediate consumption therein..." He indicated that the subject fast food franchise does not meet this definition.

The Pizza Nova outlet cannot be considered a restaurant since the food and drink for sale is not for immediate consumption inside, the Applicant argued. This would also mean that Article 3.1.2.6., which allows a restaurant to be classified as a mercantile occupancy if it has less than 30 persons consuming food and drink, does not apply, since no food and drink will be consumed on the premises. Article 3.7.4.3. does not apply to the subject Pizza Nova outlet since this provision,

Sentences (6) and (7) in particular, refer to the number of "seats" in a restaurant. Without seats this Article does not apply.

Sentence 3.7.4.8.(4) on the other hand, is more appropriate for determining the number of washrooms for a fast food outlet, the Applicant indicated. As he noted, the requirements for complying with this provision are that the occupant load is not more than 9 persons and the total area of the occupancy, excluding basements, is not more than 300 m^2. The proposed Pizza Nova facility meets both of these requirements. As a result, the Applicant concluded, only one washroom is necessary based on the standards for a mercantile occupancy. It is this standard that has applied to their other Ontario locations, he stated.

Lastly, the Applicant noted that the single washroom provided will meet the barrier-free accessibility design criteria found in Article 3.8.3.12.

6. **Respondent's Position**

The Respondent submitted that the proposed Pizza Nova fast food outlet should be considered as a restaurant and would thus be classified as a assembly occupancy. Consequently, In their view, a separate washroom is required for each sex. Moreover, each washroom is required to provide at least one water closet and one lavatory, and both are required to be barrier-free accessible.

The Respondent argued that the fast food outlet should be considered a restaurant because the patrons of the Pizza Nova facility may eat at the condiment ledge in the franchise itself and also in their cars in the parking lot. In fact, they point to Sentence 3.7.4.3.(10) which identify parking lots as extensions of restaurants where take out service is provided. As a result, they would consider the franchise a restaurant, but under Article 3.1.2.6. they would classify it as a mercantile occupancy since they would calculate the number of persons, including those eating in the parking lot, at not more than 30. Nevertheless, as a restaurant Sentence 3.7.4.3.(4) is applicable and it requires that two washrooms, one for each sex, be installed.

The Respondent also noted that both of the two required washrooms should be designed to bee barrier-free accessible, however they indicated that they would be satisfied if the Applicant simply provided another standard size (not barrier-free accessible) washroom.

Finally, the Respondent argued that the proposed location of the washroom, at the rear of the restaurant, does not comply with Sentence 3.7.4.15.(1), which prohibits patrons from travelling through food preparation areas to access plumbing facilities. They also referred to the Food

Premise Regulation made under the Health Protection and Promotion Act which they claim supports their assertion that the washroom is incorrectly placed behind the food preparation areas.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed single unisex barrier free accessible washroom to serve the fast food outlet provides sufficiency of compliance with Sentence 3.7.4.8.(3) of the Ontario Building Code provided that patrons need not go through the food preparation area to gain access to the plumbing fixtures.

8. **Reasons**

i) The fast food outlet is considered a Group E occupancy as no seating is provided for consumption of food.

Dated at Toronto this 8th day in the month of April in the year **1999** for application number **1999-07**

BCC Ruling No. 99-19-675

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-19-675

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.2.2.59 of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. David McConnell, Turner Fleischer Architects Inc., 953A Eglinton Avenue East, Toronto, Ontario, for the resolution of a dispute with Mr. Ed Whitmore, Chief Building Official, Village of Bobcaygeon, Ontario to determine whether the structure, with a proposed total building area of 1,508 m2, that is not equipped with a sprinkler system, provides sufficiency of compliance with Article 3.2.2.59. of the Ontario Building Code at the Valu-Mart, Highway No. 36 and Boyd Street, Bobcaygeon, Ontario.

APPLICANT

Mr. David McConnell
Turner Fleischer Architects Inc.
953A Eglinton Avenue East
Toronto, Ontario

RESPONDENT

Mr. Ed Whitmore
Chief Building Official
Village of Bobcaygeon

PANEL

Mr. Roy Philippe (Chair)
Mr. Robert De Berardis
Mr. James Lischkoff

PLACE

Toronto, Ontario

DATE OF HEARING

March 24, 1999

DATE OF RULING

March 24, 1999

APPEARANCES

Mr. Randy Brown
Randall Brown and Assoc. Ltd.
Willowdale, Ontario
Agent for the Applicant

Mr. Ed Whitmore
Chief Building Official
Village of Bobcaygeon
For the Respondent

RULING

1. **The Applicant**

   Mr. David McConnell, Architect, Turner Fleischer Architects Inc., Ontario, has applied for a building permit under the *Building Code Act, 1992* to construct an addition onto an existing Valu-Mart retail food store at Highway No. 36 and Boyd Street, Bobcaygeon, Ontario.

2. **Description of Construction**

   The Applicant proposes to renovate his existing 860 m^2 (9,257 ft^2), single storey, Group E - Retail occupancy by constructing a 648 m^2 (6,977 ft^2) addition on the facility's northern facade, for a total building area of 1,508 m^2 (16,234 ft^2). The building is of noncombustible construction and the proposed addition will be separated from the existing structure by a four hour firewall. The facility will be equipped with a fire alarm system but not a sprinkler system. The structure is considered to face one street.

The construction in dispute relates to the size of the expanded building and the requirement for the provision of a sprinkler system.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed retail facility, with a building area of 1,508 m^2 (16,234 ft^2), that is not equipped with a sprinkler system, provides sufficiency of compliance with Article 3.2.2.59. of the Ontario Building Code. This provision permits a single storey building that faces one street to be unsprinklered as long as the structure has a maximum building area of 1,500 m^2 (16,100 ft^2). The subject building, including addition, exceeds this limit by 8 m^2 (134 ft^2) and is not proposed to be equipped with a sprinkler system.

4. **Provisions of the Ontario Building Code**

Article 3.2.2.59 Group E, up to 3 Storeys

(1) A building classified as Group E is permitted to conform to Sentence (2) provided

(a) it is not more than 3 storeys in building height, and

(b) it has a building area not more than the value in Table 3.2.2.59.

5. **Applicant's Position**

The Applicant submitted that the proposed structure, including addition, that exceeds the maximum allowed building area for a building of this nature, provides sufficiency of compliance with Article 3.2.2.59. of the OBC. He based this argument on the following reasons:

The area of the building in excess of the maximum allowed, at 8 m^2, he noted, is less than one per cent of the building area of the entire structure. Further, if one were to calculate the inside wall-to-wall area, the actual building area is reduced to 1,454 m^2 (15,653 m^2), which reduces the total area to within the maximum permitted. The Applicant also indicated that only 76 per cent, or 1,139 m2 (12,263 ft2), of the store is open to the public. The backroom space, consisting of food storage and packaging areas, the receiving facility and staff washrooms, is restricted to employees only.

The Applicant also argued that the exit facilities provided in the subject building are well placed on the north, east and west sides of the structure. These exit doors lead directly to the exterior, all at grade level.

In terms of compensating measures, the Applicant noted that Article 3.2.2.59. permits a building of this size and occupancy to be constructed of combustible construction. This building, while only slightly larger than the maximum building area permitted, is of entirely noncombustible construction. As well, smoke detectors connected to the building's fire alarm system will be provided, thus providing early warning in the event of a fire. This detection exceeds the requirements in the OBC for a building of this type, the Applicant stated.

For these reasons, the Applicant concluded that the proposed expanded building meets or exceeds the level of life safety required under Article 3.2.2.59. for the subject building and thereby provides sufficiency of compliance.

6. **Respondent's Position**

The Respondent submitted that the proposed unsprinklered building, with a building area of 1,508 m^2, does not comply with Article 3.2.2.59. While the Respondent recognized that the amount of excess area was minimal, he indicated that the Code requirements clearly stipulate a maximum of 1,500 m^2 for such a building. He also argued that OBC Article 3.2.2.59. does not allow him to waive this requirement when the building is noncombustible construction.

In the Respondent's view, since the subject building is only at the plans review stage, scaling the addition down by 8 m^2 is still quite feasible. This would allow the project to meet the minimum standards as found under Article 3.2.2.59., he noted.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the building area of 1,508 m^2 not equipped with the sprinkler system provides sufficiency of compliance with Article 3.2.2.59 of the Ontario Building Code provided that

i) The Valu-mart store is equipped with heat detection throughout and connected to the fire alarm system,

and

ii) the fire alarm system is connected to a central monitoring station.

8. **Reasons**

i) The building is single storey (plus mezzanine) and separated from the remainder of the plaza complex by a 4 hour firewall which is understood to be in compliance with the code and is significantly less than the total area permitted under Article 3.2.2.59 of the Building Code.

ii) The building faces two streets for fire department access.

iii) Additional detection and connection to a central monitoring station is provided to allow early warning and fire department response.

iv) The building area is marginally exceeded by 8 m^2.

Dated at Toronto this 24th day in the month of March in the year **1999** for application number **1999-11**

BCC Ruling No. 99-18-674

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-18-674

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.6.3.1.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Idwal Richards, President, Pye & Richards Architects Inc., 824 Meath Street, Ottawa, Ontario, for the resolution of a dispute with Mr. Kaz Mosielski, Chief Building Official, City of Kanata, Ontario to determine whether the fire separations not required to have a fire-resistance rating proposed to surround the vertical service shafts and to be constructed of 92 mm steel studs and 12.7 mm gypsum board and sealed at the perimeter and at all penetrations provides sufficiency of compliance with Sentence 3.6.3.1.(1) of the Ontario Building Code at the Kanata Research Park, 309 Legget Drive, Kanata, Ontario.

APPLICANT

Mr. Idwal Richards, President
Pye & Richards Architects Inc.
Ottawa, Ontario

RESPONDENT

Mr. Kaz Mosielski
Chief Building Official
City of Kanata

PANEL

Mr. Roy Philippe (Chair)
Mr. Robert De Berardis
Mr. James Lischkoff

PLACE

Toronto and Ottawa, Ontario

DATE OF HEARING

March 24, 1999

DATE OF RULING

March 24, 1999

APPEARANCES

Mr. Dave Seaborn, Architect
Pye & Richards Architects Inc.
Ottawa, Ontario
Agent for the Applicant

Mr. Tim Stewart
Building Official
City of Kanata
For the Respondent

RULING

1. **The Applicant**

   Mr. Idwal Richards, President, Pye & Richards Architects Inc., has applied for a building permit under the *Building Code Act, 1992* to construct a new, low-rise office building, known as the Kanata Research Building, at 309 Legget Drive, Kanata, Ontario.

2. **Description of Construction**

   The Applicant proposes to construct a new, three storey, Group D - office occupancy with a building area of 2,036 m^2. A portion of the structure will also contain a Group F, Division 3 - low hazard industrial occupancy. The building will be noncombustible construction. It will be equipped with a fire alarm and sprinkler system.

   The construction in dispute concerns the proposed fire separation, which is not required to have a fire-resistance rating, that is to enclose the duct shafts (vertical service space) throughout the three storey building. The Applicant proposes to install an assembly consisting of one layer of

12.7 mm drywall on only one side of 92 mm steel studs. This assembly would be taped and sealed at the perimeter and all penetrations.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed fire separation assembly, that is not required to have a fire-resistance rating, complies with Sentence 3.6.3.1.(1) of the Ontario Building Code. This provision requires that the separation for the vertical service space be determined based on the rating of the floor assembly required for the subject building as found in Table 3.6.3.1. In the building at dispute, since the floor assemblies are permitted to have a rating of less than 45 minutes, Table 3.6.3.1. indicates therefore that the vertical service space is not required to have a fire-resistance rating, in other words it is permitted to be an unrated fire separation. The issue thus centres on whether the proposed assembly for the vertical service space can be considered an unrated separation and whether it would perform as required by the Ontario Building Code.

4. **Provisions of the Ontario Building Code**

Sentence 3.6.3.1. Fire Separations for Vertical Service Spaces

(1) Except as required by Section 3.5., a vertical service space shall be separated from all other portions of each adjacent storey by a fire separation have a fire-resistance rating conforming to Table 3.6.3.1. for the fire-resistance rating required by Subsection 3.2.2. for

(a) the floor assembly above the storey, or

(b) the floor assembly below the storey, if there is no floor assembly above.

5. **Applicant's Position**

The Applicant submitted that the proposed fire separation, with drywall on one side only, provides sufficiency of compliance with Sentence 3.6.3.1.(1) of the OBC. They offered the following arguments to support this view.

At the outset the Applicant indicated that both he and the Respondent agree that the subject noncombustible building is not required to have floor assemblies with a rated fire separation. Referring to Table 3.6.3.1., it follows, he also indicated, that both parties agree that the vertical shaft walls are permitted to be separations without a fire-resistance rating.

In the Applicant's view, as an unrated separation, the subject assembly is required to act as primarily a smoke barrier with minimal ability to withstand fire. In terms of providing a barrier to smoke, he argued that the vertical service shaft constructed with a single layer of drywall on the outside and taped and sealed at the perimeter and at all penetrations is sufficient. Because the proposed separation is considered noncombustible and is continuous and completely sealed, it is entirely adequate to perform this function.

The Applicant also argued that it does act to some degree as a barrier against the spread of fire in accordance with the definition of fire separation found in Article 1.1.3.2. and A-3.1.8.1. (1)(b) of the OBC Appendix, the latter of which requires a separation to stay in place "until some response is initiated." He indicated that an assembly with drywall on one side would likely stay in place for approximately 10 to 15 minutes (even with a fire occurring on the inside of the service shaft), which would be long enough to withstand fire until the sprinklers have activated.

The Applicant offered correspondence from the Canadian Codes Centre and the Ministry's Housing Development and Buildings Branch which indicated that the proposed assembly would comply with the requirements for an unrated separation.

Lastly, the Applicant argued that the construction of the proposed assembly is quite common and is accepted in other municipalities throughout the province.

6. **Respondent's Position**

The Respondent submitted that the proposed vertical service shaft separation assembly does not comply with Sentence 3.6.3.1.(1).

As they argued, since the enclosure around the vertical service space is considered a fire separation, it must meet the definition of fire separation in the OBC, which is an assembly that "acts as a barrier against the spread of fire". The Respondent also point to the OBC Appendix which indicates that a fire separation should perform its function until some response is initiated, i.e., activation of the sprinkler system. To perform its function as a separation until the sprinkler system is activated means that the assembly must remain in place for approximately 15 minutes. In other words, even an unrated separation requires at least some degree of fire-resistance rating. In their view, however, the steel studs of the proposed assembly, when exposed to fire from the inside, would likely fail well before sprinkler activation.

In order therefore to meet the intent of Sentence 3.6.3.1.(1) they argued that the separation requires a layer of drywall on both sides. Only by having drywall on both sides will the separation have some form of protection from fire exposure from both directions and would therefore ensure its integrity. To support this, the Respondent pointed to OBC Sentence 3.1.7.3.(2) and 2.3.5.(1) of the Supplementary Guidelines, which they argued indicate that interior vertical fire separations should be rated for fire exposure from both sides.

The Respondent also raised concern regarding the structural requirements of the shaft walls. They pointed to Sentence 4.1.10.3.(1) which requires the subject walls to be able to withstand the appropriate lateral design loads. They indicated that unless the vertical service walls were protected from fire exposure on both sides, the steel studs would be significantly weaken and would collapse within minutes. The Respondent submitted a letter from a structural engineering consultant supporting this position.

In conclusion, the Respondent argued that any vertical fire separation, including those permitted to be unrated, must act as a barrier to smoke, and to some degree, fire in order to be able to perform as a separation. Moreover, the only way to achieve this is to have a membrane on both sides of the assembly that would provide a greater degree of over all fire-resistance rating for the assembly and would offer more protection to the structural members.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the vertical shaft construction provides sufficiency of compliance with Sentence 3.6.3.1.(1) of the Building Code.

8. **Reasons**

1) The building is noncombustible and sprinklered throughout.

2) The ducts penetrating the shaft are noncombustible.

3) The duct shaft is taped and sealed to act as a smoke barrier.

4) The shaft contains no combustible material.

5) The combination of exterior shaft and duct penetrations provide a barrier to smoke and fire spread consistent with A-3.1.8.1.(1) of the Ontario Building Code Appendix.

Dated at Toronto this 24th day in the month of March in the year **1999** for application number **1999-06**

BCC Ruling No. 99-17-673

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-17-673

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 9.12.2.2.(1) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Bill Koppens, Homeowner, 6596 Highway # 9, Schomberg, Ontario, for the resolution of a dispute with Mr. John Miller, Chief Building Official, Town of New Tecumseth, Ontario to determine whether a portion of a basement foundation wall and the patio retaining walls, as constructed, complies with Sentence 9.12.2.2.(1) and the structural requirements of Part 4 respectively of the Ontario Building Code at the Koppens' residence, 6596 Highway No. 9, Schomberg, Ontario.

APPLICANT

Mr. Bill Koppens
Homeowner
Schomberg, Ontario

RESPONDENT

Mr. John Miller
Chief Building Official
Town of New Tecumseth

PANEL

Mr. Roy Philippe (Chair)
Mr. Robert De Berardis
Mr. James Lischkoff

PLACE

Toronto, Ontario

DATE OF HEARING

March 24, 1999

DATE OF RULING

March 24, 1999

APPEARANCES

Mr. Bill Koppens
Homeowner
Schomberg, Ontario
Agent for the Applicant

Mr. John Miller
Chief Building Official
Town of New Tecumseth
For the Respondent

RULING

1. **The Applicant**

   Mr. Bill Koppens, homeowner, Schomberg, Ontario, was issued an order to comply under the Building Code Act, 1992 regarding certain work undertaken at his residence specifically pertaining to the excavation of soil, insulation installed on a portion of the basement foundation wall, the erection of a patio retaining wall and the enclosure of the patio at 6596 Highway No. 9, Schomberg, Ontario.

2. **Description of Construction**

   As part of other alterations being carried out at the Applicant's single storey, Group C - residential occupancy, an existing enclosed below grade basement entrance was renovated by adding a new enclosed walkout patio.

   The construction in dispute entailed excavating the soil backfilled against the eastern half of the north face of the basement foundation wall so that repair work could be conducted on a portion

of the subject foundation wall, including footings, adjacent to either side of the existing basement door which had been damaged due to frost. The applicant stated that rigid 50 mm (2 in) Styrofoam SM insulation was then extended 915 mm (3 ft) vertically below into the soil on the same plane as the foundation wall.

The work also involved the creation of a basement level concrete slab walkout patio approximately 6.1 m (20 ft) in width at the rear, or north-east corner, of the house that roughly centred around the subject basement door. The applicant stated that styrofoam (50 mm) insulation was also installed horizontally across the width of the patio under the concrete slab extending approximately 1,200 mm (3 ft, 11 in) from the foundation wall.

Retaining walls, much of which exceed 1,000 mm (3 ft, 3 in) in exposed height (1,200 mm at their highest points), were constructed on either side of the subject patio. The new retaining walls have footings 1,200 mm deeper than the previous retaining wall footings. The east retaining wall in particular separates the patio from an adjacent driveway. The trenches for the retaining walls were dug below the level of the footings for the house foundation wall. The exterior of the retaining walls were also lined with 50 mm Styrofoam insulation. The patio was then completely enclosed with a fibreglass roof and steel and glass partition walls. The enclosure is considered unconditioned space.

The above described work was not included in the building permit application nor was it inspected until after it was constructed.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the foundation wall, including the insulation, and the patio retaining walls were built in accordance with Sentence 9.12.2.2.(1) and Part 4 respectively of the Ontario Building Code. Sentence 9.12.2.2.(1) sets out the minimum depth of foundations required in certain types of soils to ensure that, in part, protection from frost is provided. For the subject building the foundation depth required is 1,200 mm. The patio concrete slab, however, is located at approximately the same depth as the footings, thus making the footings potentially vulnerable to frost damage. Frost protection for the footing is therefore required below the patio where the foundation was exposed.

The issue regarding the retaining walls is that since much of the length of the wall is higher than 1 m and is adjacent to access to a building, they are therefore considered designated structures under the OBC. Further, because the trenches for the retaining wall were excavated below the

level of the foundation footing, the wall, as built, extends into the angle of repose of the existing footing. Part 2 of the OBC requires a professional engineer to design work of this nature.

The work on both the foundation and retaining walls were covered before the municipality could inspect the work.

4. **Provisions of the Ontario Building Code**

Sentence 9.12.2.2. Minimum Depth of Foundations

(1) Except as provided in Sentences (4) and (5), the minimum depth of foundations below finished ground level shall conform to Table 9.12.2.2.

5. **Applicant's Position**

The Applicant submitted that work done on the foundation wall and the construction of the two retaining walls complied with Sentence 9.12.2.2.(1) and Part 4 of the OBC.

Regarding the foundation footings, he argued that the reason that patio with its retaining walls was created was to repair frost damage to the basement foundation footings that had occurred due to the previous poorly constructed basement entrance. For this reason, the Applicant stated that he was careful to ensure that the new work would prevent such frost related problems from occurring. The horizontal and vertical insulation placed under the patio slab and extending downward and in front of the footing will more than adequately protect the footing from frost damage, he argued. Further, the glass and steel enclosure will protect the slab and the footings from moisture.

The Applicant submitted letters from a contractor (who visited the site but was not involved in the actual work) and from an engineer known to this contractor that indicated that the insulation method was adequate. The engineer added, however, that the basement must be heated to a minimum temperature of five to six degrees Celsius (45o F) in order so that the soil directly below the basement does not freeze. The Applicant indicated that the engineer had not been professionally retained to inspect the work or approve of its design.

On the subject of the retaining walls, the Applicant also pointed to the letter from the contractor indicating that they were constructed in a manner more than sufficient to meet Code. He submitted photographs of the construction of the retaining walls. The Applicant also added that

under OBC Article 9.15.4.1. the patio slab could be viewed as providing lateral support to both retaining walls from the interior countering the soil pressure outside of the patio walls.

In general, he argued that the performance level of the foundation, including footings, and the retaining wall was not reduced and was, in fact, improved.

Lastly, the Applicant indicated that he believed that the scope of the work done on the patio was covered by the existing building permit. Further, he argued that the inspector had not indicated that he should cease work and that the Order to Comply did not get issued until two weeks later. By which point the work had been completed.

6. **Respondent's Position**

The Respondent submitted that they were unsure as to whether the disputed constructed undertaken complied with the OBC since the work was not included on the building permit and much of it was done without inspection. As he stated, there was nothing in the permit application to indicate that a 6.1 m enclosed patio sided by two roughly 1 m high retaining walls was proposed. He indicated that he had concerns with the method of frost protection and that no underpinning of the existing foundation was done when the retaining walls were built extending into the angle of repose of the foundation. The Respondent indicated that he had been requesting a report from a professional engineer to verify that the foundation and retaining wall work met good engineering practice. He indicated that such a report would still satisfy his concerns.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the patio foundation and retaining wall and a portion of the basement foundation wall as constructed provides sufficiency of compliance with Sentence 9.12.2.2.(1) and the structural requirements of Part 4 of the Building Code provided that:

i) a licensed professional engineer is engaged to review the as constructed conditions and certify that the noted code references are complied with.

8. **Reasons**

i) Although numerous photographs, letters and sketches were presented as evidence, the information was considered incomplete.

ii) ii) The municipality has outlined the willingness to accept an engineers report in correspondence dated December 21, 1998 to satisfy the remaining issues.

Dated at Toronto this 24th day in the month of March in the year **1999** for application number **1998-71**.

BCC Ruling No. 99-16-672

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-16-672

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.7.1.5. and Sentence 3.2.4.5.(1) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Jim Whitehead, General Manager, Facility Development, YMCA of Greater Toronto, Toronto, Ontario, for the resolution of a dispute with Ms. Brenda Campbell, Chief Building Official and Director of Buildin g, City of Brampton, Ontario, to determine whether the fire alarm pull stations, installed at a height of 900 mm in accordance with Article 3.7.1.5., provides sufficiency of compliance with Sentence 3.2.4.5.(1) of the 1990 Ontario Building Code at the Bra mpton YMCA, 20 Union Street, Brampton, Ontario.

APPLICANT

Mr. Jim Whitehead, General Manager, Facility Development
YMCA of Greater Toronto
Toronto, Ontario

RESPONDENT

Ms. Brenda Campbell
Chief Building Official and Director of Building
City of Brampton

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF HEARING

March 11, 1999

DATE OF RULING

March 11, 1999

APPEARANCES

Mr. Peter Colquhoun
Principal, Arencon Inc.
Mississauga, Ontario
Agent for the Applicant

Ms. Lillyan McGinn
Manager, Plans and Permits
City of Brampton
For the Respondent

RULING

1. **The Applicant**

   Mr. Jim Whitehead, General Manager, Facility Development, YMCA of Greater Toronto, Toronto, Ontario, received a building permit under the *Building Code Act, 1992* to construct a YMCA community centre and athletic facility at 20 Union Street, Brampton, Ontario.

2. **Description of Construction**

   The Applicant has recently constructed a two storey (plus basement), Group A - Division 2 YMCA community centre and athletic facility with a building area of 3,018 m^2 (32,473.7 ft^2). The building is of noncombustible construction and is equipped with a sprinkler system, a fire alarm system, but not a standpipe and hose system.

   The construction in dispute is the mounting height of the manual pull stations for the fire alarm system, which were installed by the Applicant at 900 mm. Certain pull stations have also been

equipped with a UL listed tamper-proof cover that makes a loud noise when the cover is lifted. The covered pull stations are located at the main entrance and immediately outside the daycare.

The building is designed to provide barrier-free accessibility.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the manual pull stations, mounted at a height of 900 mm consistent with Article 3.7.1.5. of the 1990 Ontario Building Code, provides sufficiency of compliance with Sentence 3.2.4.5.(1). Article 3.7.1.5. stipulates that the installation of building services and safety devices, including fire alarm pull stations, in a barrier-free path of travel must be mounted at not more than 1,200 mm above the floor. Sentence 3.2.4.5.(1), on the other hand, requires that fire alarm systems, including pull stations, be installed according to CAN/ULC-S524-M91, "Standard for the Installation of Fire Alarm Systems". This standard, specifically in Clause 5.2.1., states that fire alarm pull stations must be placed between 1,200 mm and 1,400 mm above the floor. Located at 900 mm, the subject pull stations meet the Section 3.7 barrier-free requirements but not the referenced standards found in CAN/ULC-S524-M91.

4. **Provisions of the Ontario Building Code**

Article 3.7.1.5. Controls

Except as provided in Article 3.7.3.5., controls for the operation of building services or safety devices, located in a barrier-free path of travel and intended to be operated by the occupant, including manual pull stations, electrical switches, thermostats and intercom switches, shall be accessible to a person in a wheelchair and shall be mounted at not more than 1.2 m (3 ft 11 in) above the floor.

Sentence 3.2.4.5.(1)Installation and Testing of Fire Alarm Systems

(1) Fire alarm and voice communication systems shall be installed in conformance with CAN/ULC-S524-M, "Standard for the Installation of Fire Alarm Systems".

5. **Applicant's Position**

The Applicant submitted that mounting height of the fire alarm pull stations, as installed, meets the intent of Article 3.7.1.5. and therefore provides sufficiency of compliance with the OBC. He

argued that since the building was designed to provide barrier-free accessibility, the provisions of Section 3.7 were applicable. In his view, Article 3.7.1.5. provides a maximum height above which the pull stations may not installed, but it does not indicate a minimum height. This implies that any height less than 1,200 mm is acceptable, as long as the height also meets the criteria of being "accessible to a person in a wheelchair" as well.

To support his assertion, the Applicant pointed to the diagrams in the Illustrated Guide of the current (1997) OBC. The Illustrated Guide, he noted, clearly describes 1,200 mm as a maximum mounting height. Further, the Applicant also pointed out that other building services and safety devices, such as elevator control buttons (e.g., stop and emergency buttons) must be located at the bottom of the elevator control panel and not less than 890 mm above the floor. In other words, the Applicant argued, these vital control buttons must be placed at or around the 900 mm level.

The Applicant cited Article 2.6.2.1., which states that "in the case of a conflict between the provisions of this Code and those of a referenced document, the provisions of this Code shall govern." Because Article 3.7.1.5. is an actual provision within the OBC, whereas the CAN/ULC-S524-M91 is an external standard referenced in the Code, Article 3.7.1.5. should take priority as the guiding requirement.

Lastly, the Applicant indicated that he had sought clarification regarding the appropriate mounting height from the municipality prior to their installation. He indicated his intention to install them at 900 mm. At that time, he was told that the pull stations must not be higher than 1,200 mm, which was consistent with Article 3.7.1.5. The Applicant took this as

confirmation of the proposed height and proceeded to set the pull stations at 900 mm. It was only during a later inspection that the municipality advised him that they were too low.

6. **Respondent's Position**

The Respondent submitted that the pull stations, set at 900 mm, do not conform with the requirements of the OBC. While they recognize that two independent, and largely differing OBC requirements set out standards for pull station mounting heights, the two requirements are consistent in that they both allow a mounting height of 1,200 mm. At this height one can meet both Article 3.7.1.5. and the CAN/ULC-S524-M91 standard. In their view, therefore, 1,200 mm is the only acceptable mounting height in a building and that this mounting height is appropriate for both ambulatory and wheel chair users.

Moreover, the OBC does not contain any other acceptable benchmarks that establish specific minimum mounting heights for safety devices such as fire alarm pull stations, the respondent argued. In other words, no where in the Code does it specifically support a mounting of 900 mm, or anything less than 1,200 mm for that matter. With out a minimum height requirement, such as 1,200 mm, pull stations could be mounted dangerously low. They argued that even mounted at 900 mm, and especially since some of them are equipped with a tamper proof cover, occupants might not recognize the pull stations in the case of an emergency.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the fire alarm pull stations installed at a height of 900 mm in locations described in Article 3.7.1.5. of the Building Code provides sufficiency of compliance with Sentence 3.2.4.5.(1) of the Building Code on the provision that a directional sign is located directly above the pull station at a height of 1,200 to 1,400 mm.

8. **Reasons**

i) The Building Code Article 3.7.1.5. is specific with respect to the maximum mounting distance from the floor level but does not specify a minimum distance. The 900 mm distance is consistent with universal access.

ii) The sprinkler heads in this fully sprinklered building are connected to the fire alarm system via flow switches which provides a level of detection over and above the coverage required for fire alarm systems under Section 3.2.4. of the Building Code.

iii) A directional sign is required above the pull stations at a height consistent with the installation requirements for pull stations not subject to the exemption of Article 3.7.1.5.

iv) The applicant provided evidence that the mounting height of 900 mm is consistent

with research which indicated that this is an acceptable height for ambulatory and wheelchair users, as also evidenced by the C.S.A. B.44 "Safety Code for Elevators" in serving its intended function.

Dated at Toronto this 11th day in the month of March in the year **1999** for application number **1999-05**

BCC Ruling No. 99-15-671

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-15-671

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Sharon Gregory, President, Shardon Building Corporation, Kanata, Ontario, for the resolution of a dispute with Mr. Richard Hewitt, Chief Building Official, City of Ottawa, Ontario, to determine whether the basement level bathrooms, as constructed, with ceiling heights ranging from 1,950 mm (6 ft, 5 in) to 2,075 mm (6 ft, 10 in), provide sufficiency of compliance with Article 9.5.2.1. of the 1990 Ontario Building Code at 387 - 393 Bell Street South, 12 - 24 MacLean Street, and 395 Bell Street South (Units 1 - 13), Ottawa, Ontario.

APPLICANT

Ms. Sharon Gregory, President
Shardon Building Corporation
Kanata, Ontario

RESPONDENT

Mr. Richard Hewitt
Chief Building Official
City of Ottawa

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Michael Steele

PLACE

Toronto and Ottawa, Ontario

DATE OF HEARING

March 11, 1999

DATE OF RULING

March 11, 1999

APPEARANCES

Ms. Judy Jeske, Sr. Associate
Leber/Rubes Inc.
Ottawa, Ontario

Agent for the Applicant

Mr. Neil Dillon, Chief
Building Code Inspections
City of Ottawa
For the Respondent

RULING

1. **The Applicant**

   Ms. Sharon Gregory, President, Shardon Building Corporation, Kanata, Ontario, received a building permit under the Building Code Act, 1992 to construct an eighteen unit residential townhouse condominium project at 387 - 393 Bell Street South, 12 - 24 MacLean Street, and 395 Bell Street South (Units 1 - 13), Ottawa, Ontario.

2. **Description of Construction**

   The Applicant is currently constructing a low-rise, two storey (plus basement), Group C - residential condominium project, with a total of 18 attached units. While the individual units range in size from 39.5 to 46.5 m^2 (425 to 500 ft^2), the entire structure is divided into two parts with building areas of 598 and 269 m^2 (6,434.5 and 2,894.5 ft^2), which are separated by a firewall. The units are of combustible construction and are not equipped with a fire alarm system nor a sprinkler system.

The construction in dispute concerns the ceiling heights in the basement level bathrooms of 14 of the 18 units. A ceiling mounted overhead duct in these units resulted in a lowering of the ceiling height. The reduction of ceiling heights ranges between the affected units. Seven of the units have ceiling heights ranging between 1,950 mm (6 ft 5 in) and 2,037 mm (6 ft 8 1/2 in), while the headroom in the other seven measures between 2,037 mm (6 ft 8 1/2 in) and 2,075 mm (6 ft 10 in). The disputed bathrooms contain a lavatory, water faucet and shower stall. All of the subject units are provided with another three piece bathroom on the second floor.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the as constructed basement level bathroom ceiling heights, which vary between 1,950 mm and 2,075 mm, provide sufficiency of compliance with Article 9.5.2.1. of the 1990 Ontario Building Code. This provision sets out in Table 9.5.2.A. the required heights for rooms or spaces in residential occupancies. For bathrooms, Table 9.5.2.A. stipulates that the minimum height must be 2,100 mm (6 ft 11 in). Nevertheless, this provision appears to deal with bathrooms that are located above grade. Table 9.5.2.A. also describes the necessary height of basement areas. Specifically, it states that 75 per cent of a basement area must be at least 2,100 mm in height and that in areas served by ducts the height can be reduced to 1,950 mm.

At dispute then is whether a below grade bathroom must conform to the required height for bathrooms (2,100 mm), or whether the general height requirements for basement can be applied. If the disputed bathroom ceiling heights are not found to sufficiently comply with Article 9.5.2.1., extensive demolition of the concrete floor slab in the basement may be required.

4. **Provisions of the 1990 Ontario Building Code**

Article 9.5.2.1. Heights of Rooms or Spaces

(1) Heights of rooms or spaces in residential occupancies shall conform to Table 9.5.2.A.

5. **Applicant's Position**

The Applicant submitted that the basement level bathrooms with ceiling heights less than 2,100 mm provide sufficiency of compliance with Table 9.5.2.A. of the OBC. They presented the following arguments as the basis for sufficiency of compliance.

First, units of this size are only required to have one washroom as per the OBC. The bathroom on the second floor of each unit is a full, three piece facility and conforms to all requirements, including ceiling height. The basement level bathrooms are therefore, they argued, provided for convenience purposes. Moreover, the Applicant asserted that the second floor bathrooms would be the primary washrooms since they are closer to the sleeping rooms and living areas within each of the units.

Secondly, ceiling heights of 1,950 mm do not make a room or space unusable. In fact, the Applicant noted that the Code specifically recognizes that basement ceiling heights may need to be reduced in certain areas due to mechanical or structural reasons. The situation of reduced ceiling heights, they pointed out, is not only recognized for new construction in Table 9.5.2.A., but is extended even further under Compliance Alternative C88.1 found in Part 11 of the 1990 OBC. This provision allows a 1,950 mm ceiling height throughout certain renovated dwelling unit types which are more than five years old.

Thirdly, the reduced ceiling height in the bathrooms is not a safety issue. As they argued, if the Code permits a full 25 per cent of a basement area to be reduced in height to 1,950 mm to accommodate ducts and beams in new construction, then the lowered ceiling must be viewed more as an issue of convenience. The disputed ceilings would not cause any more inconvenience than any other area of the basement where the ceiling height may be restricted, the Applicant noted.

The Applicant also offered some background as to how the subject construction dispute arose. In their reading of Table 9.5.2.A. the prescribed ceiling heights for bathrooms appeared to apply to those located above grade only. As a result, their design followed the height requirements for basement areas which, in their view, permitted a reduction to 1,950 mm specifically beneath ducts. The municipality, they claimed, had originally approved the plans on the basis of this height exception. Some time soon after occupancy permits had been issued for the first units to be completed, the municipality then indicated that the basement level ceiling heights should 2,100 mm, consistent with a bathroom located elsewhere in the house. At this time, however, construction had proceeded past this point in the unfinished units.

The Applicant also indicated that they had proceeded in good faith and believed they were complying with the Code. Due to the nature of the problem and lateness of when it was discovered during the job, their options to rectify it were severely limited. They stated that lowering the floor level would be very expensive.

Lastly, the Applicant indicated that most of the units remain to be sold and that the prospective buyers would obviously have the opportunity to inspect the as built condition before purchasing.

6. **Respondent's Position**

The Respondent submitted that the subject basement level bathroom ceilings do not meet the standards set out in Table 9.5.2.A. In their view, a ceiling height of 2,100 mm is required. They indicated, however, that they shared the Applicant's view that one could perhaps interpret Table 9.5.2.A. to read that the 2,100 mm standard applied to above grade washrooms only.

The Respondent noted that the submitted plans showed a basement ceiling height of 2,400 mm (8 ft 0 in), which after the floor slab was poured and the walls framed would leave a 2,100 mm headroom in the basement. They indicated that it was construction circumstances relating to the narrowness of the units that caused the difficulties with the ducts with an enclosing bulkhead being located in the bathrooms, thereby causing a lowering of the ceiling height.

They stated they were aware of at least one purchaser who was concerned about the low bathroom ceiling height.

Nevertheless, the Respondent indicated that they felt the Applicant's arguments concerning sufficiency of compliance did have merit, however, they did not believe that they had the authority to accept the proposal.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed basement bathrooms with a minimum ceiling height of 1950 mm (6 ft 5 in), provides sufficiency of compliance with Article 9.5.2.1. of the Ontario Building Code.

8. **Reasons**

i) Only bathrooms, water closet rooms or laundry areas which are located above grade are required to be 2,100 mm in any area where a person would be normally in a standing position.

ii) For basements, the minimum ceiling height over 75 percent of the basement area is at 2,100 mm, except that the clearance may be reduced to 1,950 mm under beams and ducts. Therefore, 25 per cent of the floor area may be reduced to 1950 mm, and this basement area complies with this condition.

iii) The low ceiling is a result of the location of the duct work above the washroom. The building official indicated that locating the ducts in any other area, would compromise the headroom at stairs and circulation paths.

Dated at Toronto this 11th day in the month of March in the year 1999 for application number **1999-04.**

BCC Ruling No. 99-14-670

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-14-670

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.3.1.3.(8) and Article 3.3.1.4. of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Jim Podd, Director, Campus Development, Lakehead University, Thunder Bay, Ontario, for the resolution of a dispute with Ms. Jennifer Favron, Chief Building Official, City of Thunder Bay, Ontario to determine whether the proposed laboratory and office tenancies should be considered separate suites, and would therefore be required to provide a doorway into a public corridor and to provide a fire separation between the corridor and the suites, including between the second floor corridor and the atrium, in accordance with Sentence 3.3.1.3.(8) and Article 3.3.1.4. respectively of the Ontario Building Code at the Northwestern Ontario Technology Centre, 955 Oliver Road, Thunder Bay, Ontario.

APPLICANT

Mr. Jim Podd, Director, Campus Development
Lakehead University
Thunder Bay, Ontario

RESPONDENT

Ms. Jennifer Favron
Chief Building Official
City of Thunder Bay

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Michael Steele

PLACE

Toronto and Thunder Bay, Ontario

DATE OF HEARING

March 11, 1999

DATE OF RULING

March 11, 1999

APPEARANCES

Mr. Scott Martin, Campus Engineer
Lakehead University
Thunder Bay, Ontario
For the Applicant

Mr. Alan Bygate
Sr. Plans Examiner
City of Thunder Bay
For the Respondent

RULING

1. **The Applicant**

   Mr. Jim Podd, Director, Campus Development, Lakehead University, has applied for a building permit under the *Building Code Act, 1992* to construct a new, three storey office and laboratory facility at the Northwestern Ontario Technology Centre, Lakehead University, 955 Oliver Road, Thunder Bay, Ontario.

2. **Description of Construction**

   The Applicant proposes to construct a new, three storey (plus basement) structure with a building area of 616.4 m^2 (6,632.5 ft^2). Two occupancies are proposed for the building; Group D - business (office) and Group F, Division 3 - low hazard industrial (laboratory). The building is proposed to be of combustible construction and will be equipped with a fire alarm system and a

partial sprinkler system located only in the interconnected floor areas adjacent to the building's atrium, but not a standpipe and hose system.

The concept behind the development of the building is to act as an incubator to allow new businesses to grow and develop under the auspices of the Northwestern Ontario Technology Centre (NOTC). Each business' "incubation" period will last for a period of not more than three years. As owner of the building, the NOTC will provide general reception and administrative services. The NOTC also offers marketing, networking and funding application assistance to the individual business tenants. The actual leased office spaces, however, are under the control of the tenants.

The Applicant's intention regarding the design of the building is to create a working space to foster the growth of innovative and creative new business ventures. As a result, the building, in plan, is roughly shaped like a triangle and a full height atrium is located in the centre of the structure. A public corridor surrounds the atrium on the second floor. The Applicant is proposing that this corridor be open to the atrium and would therefore be considered interconnected floor space. The individual suite doors would open onto this second floor corridor. The two exit stairs serving the second floor are to be located on the same side of the building and would be accessed by the atrium corridor. This is not an issue on the third floor because there the atrium is separated from the floor space by a glass and drywall partition.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the new business ventures, although sharing many services, should be considered separate tenancies within individual suites according to the Ontario Building Code and as a result whether the public corridor located on the second floor is required to be separated from the remainder of thefloor area and from the atrium as per Article 3.3.1.4. This provision requires that in the case of the subject building, with only a required 45 minute separation between floors, but which is not entirely sprinklered, that a fire separation with a fire-resistance rating of 45 minutes be provided between the corridor and the rest of the floor area. This requirement, however, would apply in part in this case if the building was deemed to contain multiple suites. The Applicant is also offering sprinkler protection in the areas considered interconnected floor space, including the second floor open corridor.

4. **Provisions of the Ontario Building Code**

Sentence 3.3.1.3.(8) Means of Egress

(8) Except as permitted by Sentences 3.3.4.4.(6) and (7), each suite in a floor area that contains more than one suite shall have

(a) an exterior exit doorway, or

(b) a doorway

(i) into a public corridor, or

(ii) to an exterior passageway.

Article 3.3.1.4. **Public Corridor Separations**

(1) Except as otherwise required by this Part or permitted by Sentences (2) to (7), a public corridor shall be separated from the remainder of the building by a fire separation having a fire-resistance rating not less than 1 h. (See Appendix A.)

(2) The fire-resistance rating of a fire separation between a public corridor and the remainder of a floor area is permitted to be less than 1 h but not less than 45 min provided the fire-resistance rating by Subsection 3.2. is permitted to be less than 1 h for

(a) the floor assembly above the floor area, or

(b) the floor assembly below the floor area, if there is no floor assembly above.

(3) If a floor area is sprinklered, no fire-resistance rating is required for a fire separation between a public a corridor and the remainder of the floor area provided the corridor does not serve a care or detention occupancy or a residential occupancy. (See A-3.1.8.1.(1)(b) in Appendix A.)

(4) If a floor area is sprinklered, no fire separation is required between a public corridor and the remainder of the floor area provided the public corridor

(a) is more than 5 m (16 ft 5 in) in unobstructed width, and

(b) does not serve

(i) a care or detention occupancy, or

(ii) a residential occupancy.

(5) If a floor are is sprinklered, no fire separation is required between a room or a suite and a public corridor that serves it provided the public corridor complies with Sentence 3.3.1.9.(6).

(6) A floor assembly of a public corridor above a crawl space that conforms to Sentence 3.2.2.9.(2) is not required to be a fire separation.

(7) If a floor are is sprinklered, no fire separation is required between a public corridor and a room containing water closets and lavatories provided the room and the public corridor are separated from the remainder of the floor area by a fire separation that has a fire-resistance rating not less than that required between the public corridor and the remainder of the floor area.

(8) The sprinkler system in Sentences (3), (4), (5) and (7) shall be electrically supervised in conformance with Sentence 3.2.4.9.(2) and, upon operation, shall cause a signal to be transmitted to the fire department in conformance with Sentence 3.2.4.7.(4) when the corridor serves a Group E or Group F, Division 1 or 2 occupancy.

5. **Applicant's Position**

The Applicant submitted that the proposed new business ventures, while carrying their own "business names", are all part of the NOTC operation. The NOTC is the umbrella organization, under which all of the business ventures thrive. In his view, therefore, they all belong to the same organization which has a single tenure in the entire building. As a result, he argued that they conform to the definition of suite as described in the OBC, especially Appendix A.1.1.3.2. He stated that the level of safety of NOTC building occupants is not reduced because the occupants hold different "business names".

The Applicant also noted that they are proposing to sprinkler the interconnected floor areas, including the subject open corridor, which would allow safe egress from the second floor. He argued that this partial sprinkler system would compensate for the lack of fire separations between the businesses and the corridor and the corridor and the atrium.

6. **Chief Building Official's Position**

The Respondent submitted the proposed office areas serving the business ventures should be considered as suites. As they noted, despite the many shared services, the actual space occupied on a floor is entirely controlled in terms of use and access by the individual business ventures.

They also noted that each business is to have its own lease agreement and would pay rent. This is not how a single tenant building would function. In their view, by simply belonging to a larger umbrella organization does not make it possible to waive the requirement for compliance regarding suite and public corridor compliance.

As such, they argued that the public corridor system must be separated from both the adjacent floor areas and the atrium. This would entail closing off the proposed open second floor corridor, they indicated. Further, since the sprinkler system is only covers part of the building the separations must have a fire-resistance rating of at least 45 minutes.

7. **Commission Ruling**

It is the decision of the Building Code Commission that second floor laboratory and office tenancies provide sufficiency of compliance with 3.3.1.3.(8) and Article 3.3.1.4. on the condition that the floor area is sprinklered throughout.

8. **Reasons**

i) The various tenants normally are considered separate suites. However, considering the limited size, intended function and flexibility of the second floor area, the space is considered as only one tenant.

ii) Since these are not considered separate suites as discussed in reason 1, the provisions of 3.2.8.2.(6) permit exiting through the interconnected floor space.

iii) This decision is based on the proposed use as a technology centre which requires shared amenities and services to function effectively.

iv) The floor area is fully sprinklered.

Dated at Toronto this 11th day in the month of March in the year **1999** for application number **1999-03**

BCC Ruling No. 99-13-669

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-13-669

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.3.1.3.(9) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Denise Orlando, Corporate Real

Estate Manager, Data General Corporation, 4400 Computer Drive, Westboro, MA, for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, Ontario to determine whether the proposed single exit public corridor serving two suites, each having access to a second exit, provides sufficiency of compliance with Sentence 3.3.1.3.(9) of the Ontario Building Code at the Data General Corporation, DuPont Building, 7070 Mississauga Road, Mississauga, Ontario.

APPLICANT

Ms. Denise Orlando
Corporate Real Estate Manager
Data General Corporation
Westboro, MA

RESPONDENT

Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL

Mr. Roy Philippe (Chair)
Mr. Kenneth Peaker
Mr. Robert De Berardis

PLACE

Toronto, Ontario

DATE OF HEARING

February 24th, 1999

DATE OF RULING

February 24th, 1999

APPEARANCES

Leszek Muniak, Principal
Larden Muniak Consulting Inc.
Toronto, Ontario
Agent for the Applicant

Frank Spagnolo, Manager
Plans Exam. & Inspection
City of Mississauga
For the Respondent

RULING

1. **The Applicant**

   Ms. Denise Orlando, Corporate Real Estate Manager, Data General Corporation has applied for a building permit under the *Building Code Act, 1992* to renovate a portion of their leased space within an existing low-rise office complex, known as the DuPont Building, 7070 Mississauga Road, Mississauga, Ontario.

2. **Description of Construction**

   The Applicant is proposing to renovate their existing tenant space on the third floor of a Group D - Business occupancy in order to create a self-contained suite that can be sublet to another tenant. The Data General Corporation currently leases a total of approximately 2 434 m^2 (25 836 ft^2) in the subject building. The sublet area (intended for a Apak Systems Ltd.) is to 518 m^2 (5 575 ft^2). Data General's remaining area would be approximately 1 916 m^2(20621 ft^2).

The building itself is described as three storeys in building height, and has a building area of approximately 5 000 m^2 (53 800 ft^2). The building is of noncombustible construction. It is equipped with a smoke control, standpipe and hose, fire alarm and sprinkler systems. The fire alarm and sprinkler systems are electronically supervised, with the former having a signal that transmits to the fire department.

There are five separate atria in the building that extend the full height of the building. Due to these atria, the entire third floor area is considered interconnected floor space. Both the Data General and Apak Systems offices will be arranged with walled offices at the perimeter of the floor area, while open plan office areas will occupy the middle portions of their respective suites. The open plan office areas in both suites face two separate atria that connect to floor areas below.

The construction in dispute involves the creation of a public corridor on the south-east portion of the floor where the two suites are adjacent to each other. The proposed corridor is to be located beside an existing exit stair. Both the Data General and Apak Systems offices are to have an egress door leading to this corridor. Both egress doors will be unlocked during business hours. The subject public corridor is served by two elevators, which are located beyond the suite's egress doors in the direction exit travel. The corridor, as designed, provides only one exit stairway.

Each suite has access to other exit stairs on the floor area, and the Data General office has its own exit stair at the west end of its offices. However, the second egress route to be provided for the Apak Systems office is also in dispute. This proposed exit leads from the north of the Apak Systems suite into a circular public corridor that follows the perimeter of the rotundaatrium. While this public corridor does have access to two exit stairs, both exits are in the same direction away from Apak Systems north egress door. Three separate suites have access to the rotunda corridor.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed design of the sublet space, especially the public corridor serving two suites, that provides only one exit, provides sufficiency of compliance with Sentence 3.3.1.3.(9) of the Ontario Building Code. This provision requires that an egress doorway that opens into a public corridor must have two separate exits in opposite directions from the egress doorway. In the proposed design one public corridor is served by only one exit stair, and the other has both exits in the same direction, therefore both are considered dead end corridors.

Provisions of the Ontario Building Code

Sentence 3.3.1.3.(9) Means of Egress

(9) Except as permitted by this Section and by Sentence 3.4.2.1.(2), at the point where a doorway referred to in Sentence (8) opens onto a public corridor or exterior passageway, it shall be possible to go in opposite directions to each of 2 separate exits.

4. **Applicant's Position**

The Applicant submitted that the proposed layout of the subject sublet space, including the single exit public corridor served by two suites, provides sufficiency of compliance with Sentence 3.3.1.3.(9) of the OBC. He argued that the intent of this provision is to ensure that all suites on a multi-tenanted floor area are provided with two exits each, and in his view both suites meet this requirement.

The Applicant noted that Sentence 3.3.1.3.(9) contains certain exceptions. In particular, he pointed out that where it refers to "this Section" means all of Section 3.3, "Safety Within Floor Areas", of the OBC. He interpreted this to mean that all options within Section 3.3 which provide access to two separate exits serving each suite in a floor area, and therefore consistent with the intent of 3.3.1.3.(9), can stand as exceptions to that Sentence.

The Applicant asserted that Sentence 3.3.1.3.(9) offers protection to those suites on a multi-tenanted floor area that have a single egress door by allowing a choice of exit routes in their only accessible public corridor. Moreover, he added that this provision also protects larger suites that are required to have more than one egress doorway and which may open on the same public corridor. The same principle is evident in Sentence 3.3.1.9.(11), he noted, as it protects suites in buildings with a single public corridor by reducing the potential of creatinglong dead end corridors.

Building on this premise, the Applicant then argued that both suites have access to more than two exits. The Data General and the Apak Systems offices have access to three and two possible exit stairs respectively, not including the proposed single exit public corridor. This number of exits would more than adequately serve the occupant load of the two suites, which he described as approximately 40 for Data General and 20 for Apak Systems. Further, he noted that the travel distances from any area in both suites to an egress door and the travel distance between the egress doors and exit doors are all less than 40 m (131 ft 3 in), thereby complying with the Code.

The Applicant also indicated that not only would the safety of the suites be enhanced by the number of exit options, but the fact that these exit routes would lead to different corridors, not just a single public corridor with two exits, would provide a higher degree of occupant safety as well.

In this way, with both suites having access to at least two separate exits, the Applicant concluded by stating the proposed sublet design, including the single exit public corridor, by utilizing the exceptions allowed in Section 3.3, meets the intent of Sentence 3.3.1.3.(9).

5. **Respondent's Position**

The Respondent submitted that the subject public corridors are both considered dead end corridors due to the fact that the south-east exit is served by only one exit stair and the rotunda exit has both exit stairs in the same direction. This would result, they argued, in the Apak Systems office being served by two public corridors, both of which are considered dead end. In their view, Sentence 3.3.1.3.(9) allows a suite that is required to be served more than one egress to have one of those egress routes through a dead end corridor, but not both. As a result, they held that design of the subject public corridors contravened Sentence 3.3.1.3.(9) of the OBC.

6. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed single exit public corridor serving two suites, each having an access to a second exit does not provide sufficiency of compliance with Sentence 3.3.1.3.(9) of the Ontario Building Code.

7. **Reasons**

No compensative features were proposed to the Commission to consider sufficiency of compliance.

Dated at Toronto this 24th day in the month of February in the year **1999** for application number **1999-02**

BCC Ruling No. 99-12-668

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-12-668

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentences 9.9.9.1.(2) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Jim Hallman, Aberdeen Homes, 42 Chartwell Court, Kitchener, Ontario, for the resolution of a dispute with Mr. Tony Krimmer, Chief Building Official, City of Waterloo, Ontario to determine whether the proposed sprinkler system installed throughout the three storey town homes compensates for the increase in travel distance to an exit door, thereby providing sufficiency of compliance with Sentence 9.9.9.1.(2) of the Ontario Building Code at the Aberdeen Homes - "Catalina" Town House Project, Caroline Street, Waterloo, Ontario.

APPLICANT

Mr. Jim Hallman
Aberdeen Homes
Kitchener, Ontario

RESPONDENT

Mr. Tony Krimmer
Chief Building Official
City of Waterloo

PANEL

Mr. Roy Philippe (Chair)
Mr. Kenneth Peaker
Mr. Robert De Berardis

PLACE

Toronto, Ontario

DATE OF HEARING

February 24th, 1999

DATE OF RULING

February 24th, 1999

APPEARANCES

Mr. James Fryett, Principal
James Fryett Architect
Elora, Ontario
Agent for the Applicant

Mr. Tony Krimmer
Chief Building Official
City of Waterloo
The Respondent

RULING

1. **The Applicant**

   Mr. Jim Hallman, Aberdeen Homes, 42 Chartwell Court, Kitchener, Ontario, has applied for a building permit under the *Building Code Act, 1992* to construct low-rise residential condominiums, known as the "Catalina" townhouse project, on Caroline Street, in Waterloo, Ontario.

2. **Description of Construction**

   The Applicant proposes to construct a group of three storey residential condominium buildings. Each building will contain a block of units. While the buildings have a total area of greater than 600 m^2 , the individual units all have a building area less than 600 m^2. The buildings will be of combustible construction. The units will be equipped with a hard-wired, interconnected smoke alarm system.

In certain units, as part of the proposed construction, the Applicant intends to provide a window on the loft level, or third storey, as an alternate means of egress. The purpose of this is so that occupants on the third storey would not have to travel more than one storey to reach an exit. The subject windows would be designed in accordance with OBC Sentence 9.9.9.1.(2). Specifically, they would have an openable area of at least 1 000 mm (3 ft 3in) in height and 550 mm (21 5/8 in) in width. The windows, designed as dormers, would lead to a gradually sloped (12:1) roof area that is to extend 1 125 mm (3 ft 8 in) from the window. This roof area would be 7 m above grade.

The Applicant is also proposing to sprinkler the stairway in the same units in which the third storey egress window is being provided. The sprinkler heads would be installed on the second and third storeys, but not on the ground nor basement levels.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed sprinkler system compensates for the perceived increase in travel distance and thereby provides sufficiency of compliance with Article 9.9.9.1. of the Ontario Building Code. This provision requires that dwelling units with more than one storey must have exit doors positioned in such a way that so that it is not necessary to travel up or down more than one storey to reach a level served by an exit. Sentences (2) and (3) of this Article provide exceptions that, when complied with, allow the exit route to travel more than one storey. Specifically, Sentence (2) permits an increase in the travel distance if an openable window of a certain size is provided, while Sentence (3) allows the same if a balcony is provided.

Provisions of the Ontario Building Code

Article 9.9.9.1. Travel Limit to Exits or Egress Doors

(1) Except as provided in Sentences (2) and (3), every dwelling unit containing more than 1 storey shall have exits or egress doors located so that it shall not be necessary to travel up or down more than 1 storey to reach a level served by

(a)an egress door to a public corridor, enclosed exit stair or exterior passageway, or

(b) an exit doorway not more than 1 500 mm (4 ft 11 in) above adjacent ground level.

(2) Where a dwelling unit is not located above or below another suite, the travel limit from a floor level in the dwelling unit to an exit or egress door is permitted to exceed 1 storey where the floor level is served by an openable window or door.

(a) providing an unobstructed opening of not less than 1 000 mm (3 ft 3 in) in height and 550 mm (21 5/8 in) in width, and

(b) located so that the sill is not more than

i)1 000 mm (3 ft 3 in) above the floor, and

ii)7 m (23 ft) above adjacent ground level.

(3) The travel limit from a floor level in a dwelling unit to an exit or egress door is permitted to exceed 1 storey where that floor level has direct access to a balcony.

4. **Applicant's Position**

The Applicant submitted the proposed installation of a sprinkler heads would provide sufficiency of compliance with Article 9.9.9.1. of the OBC. In his view, the sprinkler coverage would adequately compensate for the increase in travel distance from one storey to two. As he argued, due to the open concept design of the stairs, the entire exit path of travel would be covered by sprinkler protection.

While the Applicant noted that the third storey openable egress window complied with Sentence 9.9.9.1.(2), he indicated that considering the roof design, it was not practical to meet the balcony requirements of Sentence 9.9.9.1.(3) as well. His proposal does include a relatively flat area on the roof immediately below the egress window where occupants could seek refuge in case of a fire. Nevertheless, this area would not be equipped with a guard and does not constitute a balcony, he conceded. It was for this reason that the sprinkler heads were being provided as a compensating measure in order to provide sufficiency of compliance with Sentence 9.9.9.1.(3).

5. **Respondent's Position**

The Respondent submitted that the proposed design does not meet the Code requirements found in Article 9.9.9.1. since, in his view, the egress route to an exit door from the loft level would necessitate travelling down two storeys. While he agreed that the proposed openable window satisfied the criteria found in Sentence (2), he noted that a balcony as per Sentence (3) was also

required. The Respondent indicated that the subject area of refuge does not comply with Sentence 9.9.9.1.(3) since it is proposed to be located on a sloped area of the second storey roof and that no guard rail has been provided.

The Respondent did, however, indicate that he supported the proposed installation of the sprinkler heads in the exit stair as a compensating measure.

6. **Commission Ruling**

It is the decision of the Building Code Commission that the design of the exit from the loft at the third floor level provides sufficiency of compliance with Article 9.9.9.1.(3) of the Building Code provided that;

1) The building is sprinklered throughout or;

2) (a) The entire building exit to grade level, and the second floor bedroom, below the window perch, are protected by sprinklers; and

(b) Interconnected smoke alarms are provided at all floor levels.

7. **Reasons**

It is the opinion of the Commission the sprinklered building or combination of sprinklers to provide exposure protection and early detection provide an acceptable level of safety from fire at the third floor.

Dated at Toronto this 24th day in the month of February in the year **1999** for application number **1999-01**

BCC Ruling No. 99-11-667

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-11-667

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Clause 3.4.2.5.(1)(d) and Subclause 3.4.2.5.(1)(d)(v) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Peter Paoli, Project Architect, Pellow & Associates Architects Inc., 20 Victoria Street, Toronto, Ontario, for the resolution of a dispute with Mr. Ed Link, Building Commissioner, City of Windsor, to determine whether the intended smoke management system compensates for the proposed increase in travel distance and the elimination of a second exit to certain stores, thereby providing sufficiency of compliance with Clause 3.4.2.5.(1)(d) and Subclause 3.4.2.5.(1)(d)(iv) respectively of the Ontario Building Code at the Devonshire Mall, 3100 Howard Avenue, Windsor, Ontario.

APPLICANT

Mr. Peter Paoli, Project Architect
Pellow & Associates Architects Inc.
Toronto, Ontario

RESPONDENT

Mr. Ed Link
Building Commissioner
City of Windsor

PANEL

Mr. Roy Philippe (Chair)
Mr. Kenneth Peaker
Mr. Robert De Berardis

PLACE

Toronto and Windsor, Ontario

DATE OF HEARING

February 24th, 1999

DATE OF RULING

February 24th, 1999

APPEARANCES

Mr. Jonathan Rubes
Leber/Rubes Inc.
Toronto, Ontario
Agent for the Applicant

Mr. William Jean
Director, Site Development
City of Windsor
For the Respondent

1. **RULING**

   The Applicant

   Mr. Peter Paoli, Project Architect, Pellow & Associates Architects Inc., Toronto, Ontario, has applied for a building permit under the *Building Code Act, 1992* to construct additions onto an existing retail mall known as the Devonshire Mall, 3100 Howard Street, Windsor, Ontario.

2. **Description of Construction**

   The Applicant proposes to renovate the Devonshire Mall by adding two separate additions, totalling 12,259 m^2, to the existing building. The existing noncombustible structure is described as two storeys, with a building area of 76,475 m^2. It is predominantly Group E -Mercantile, however the building also contains Group A1 - Assembly (performing arts), Group A2 - Assembly (general) and Group D - Business occupancies. The building is equipped with a fire alarm, standpipe and hose and sprinkler systems.

The proposed expansion has two phases. Phase one, to be constructed at the south-east corner of the mall, will add a multi-plex theatre facility, containing twelve cinemas. This expansion will also create an outdoor truck loading zone located near the centre of the mall due to the fact that the western wall of the theatre facility is to be set back far enough from the existing building to allow a truck access route. The loading area will be situated at the exit of an existing 6 m wide underground pedestrian egress tunnel. The Applicant proposes to discontinue using the tunnel for exiting purposes, instead it will be used for moving merchandise to certain retail stores within the mall.

The original purpose of the pedestrian exit tunnel was to serve a cluster of retail stores situated in the middle of the mall. These stores form an "island" which is entirely surrounded by a 12 m (9 m wide only on the south end) public corridor that is not fire separated from the floor area. While there are 40 retail stores in the island, just 23 of them have a second exit (only 16 stores are required to do so by Code due to their size) at the rear that connects to a public corridor within the island, which in turn connects to the tunnel entrance located near the middle of the island.

Phase two, to be constructed along much of the west wall of the mall, will add additional retail space facing one of the site's main parking lots. This expansion will cause three of the existing west facing exits to be relocated further west. This relocation will create three areas where the travel distance from the most interior or remote stores to the nearest exit will range from 111 m to 121.5 m in total.

The Applicant is proposing to equip the renovated mall with a smoke management system designed according to NFPA 92B "Smoke Management in Malls, Atria and Large Areas" in which the building will be separated into five smoke protection zones. In the event of a fire,each of the smoke protection zones would operate by forcing smoke to the exterior by two exhaust fans, while providing air to adjacent zones with supply fans. This system would be automatically activated by smoke detection devices located in each zone. Smoke detector actuation would also cause the fire alarm to operate. The system, once constructed, would be tested.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed smoke management system compensates for the elimination of the second means of egress from the 16 retail stores in the island required to have a second exit and the increased travel distance to certain interior areas of the mall, thereby providing sufficiency of compliance with Clause 3.4.2.5.(1)(d) and Subclause 3.4.2.5.(1)(d)(iv) of the Ontario Building Code. These provisions,

while contained in the same Article of the OBC, raise different issues when applied to the proposed expansion phases of the Devonshire Mall.

Clause 3.4.2.5.(1)(d) requires that the travel distance to any part of the floor area of the mall that is served by a non-separated public corridor not exceed 105 m. The phase two relocation of exits at the building's western wall will cause the 105 m limit to be exceeded by a range of 6 m to 16.5 m in three certain areas. The phase one addition also contributes to the travel distance issue for one of the remote areas by relocating an exit at the south-east end of the building farther away.

Subclause 3.4.2.5.(1)(d)(iv) further requires that the rooms or suites which face the subject public corridor and that are required to have a second means of egress only have half of the required egress doorways accessing the corridor. While only 16 stores in the island are required because of their size to have a second means of egress, the termination of the tunnel as a pedestrian exit, as proposed under phase two, means that all occupants from the island area must exit via the 9 m public corridor system in the mall. The second exits provided at the rear of the stores would therefore lead to the interior public corridor of the island and from there to the 9 m wide non-separated public corridors.

4. **Provisions of the Ontario Building Code**

Article 3.4.2.5. Location of Exits

(1) Except as permitted by Sentences (2), (3) and 3.3.2.3.(6), if more than one exit is required from a floor area, the exits shall be located so that the travel distance to at least one exit shall be not more than

(d)105 m (344 ft 6 in) in any floor area, served by a public corridor, in which rooms and suites are not separated from the remainder of the floor area by a fire separation, provided

(iv)not more than one half of the required egress doorways from a room or a suite open into the public corridor if the room or suite is required to have more than one egress doorway.

5. **Applicant's Position**

The Applicant submitted that the proposed smoke management system will provide sufficiency of compliance with the relevant provisions of the OBC since, in their view, it will compensate for the elimination of the second exit for the 16 island stores and the increase in travel distance. The Applicant argued that the approach they were taking in designing their proposed smoke

management system was consistent with the zoned smoke exhaust requirements for interconnected floor spaces found in the OBC. He also noted that similar smoke management systems have been designed and installed in other malls in Ontario, including the Square One Shopping Centre in Mississauga and the Bramalea City Centre in Brampton.

In particular, the Applicant argued that the proposed smoke management system would accomplish two functions. The first would be to provide a way to isolate large areas of the mall to create zones which would control the spread of smoke from contaminating other areas. The Applicant is proposing that the three egress routes from island's interior public corridor would exit into three different smoke control zones. This would assist the 16 stores without a second exit because it would offer a choice of at least two egress routes and would ensure that either exit of any store could access a different smoke control zone. Having the entire occupant load of the island exiting via the mall's public corridors is not a problem in terms of exit capacity, he noted.

The second function the smoke management system would accomplish would be to reduce the travel distance from the remote areas in the interior of the mall to less than 105 m. This would be possible since the structure would be divided into smoke control zones, thereby making the travel distance from any part of the mall to another smoke zone less than 105 m. The Applicant noted, however, that even without a smoke control system, a travel distance which exceeds the required limit by 16 m, adds only 12 seconds more exiting time calculated at a walking pace.

The Applicant offered other advantages of the smoke control system. Specifically, he noted that the smoke detection features, which are not required in shopping centre corridors, will provide early notice of a fire to building staff, occupants and the fire department. The smoke exhaust system will also enhance the safety of the building during an evacuation. Further, he argued that this system is more useful than a concealed tunnel, since most occupants would probably instinctively use the mall's corridor system when exiting. The Applicant also pointed out that the smoke exhaust feature assists during fire fighting activities.

For these reasons, the Applicant concluded that the proposed smoke management systemprovides sufficiency of compliance with the Ontario Building Code.

6. **Respondent's Position**

The Respondent submitted that eliminating the second exit from the 16 island stores and exceeding the travel distance will contravene Clause 3.4.2.5.(1)(d) and Subclause 3.4.2.5.(1)(d)(iv) of the Building Code.

Nevertheless, he noted that he was supportive of the Applicant's proposed smoke control system, however, he indicated that he felt this was beyond his jurisdiction to authorize. The Respondent requested that if the Building Code Commission were to rule that the proposal offered sufficiency of compliance, that they do so on the condition that the system be maintained and tested on an annual basis and that the results be made available to the Chief Building Official or Chief Fire Official of the City of Windsor.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the additions and renovations to Devonshire Mall provides sufficiency of compliance with Clause 3.4.2.5.(i)(d) and Article 3.4.3.2. of the Building Code on the conditions that

i)The intended smoke management system is designed and installed in conformance with NFPA 92B;

ii)Commissioned upon completion of construction to perform as designed; and

iii)Inspected, tested and maintained in accordance with the schedule established in NFPA 92B.

8. **Reasons**

i) The smoke management system is designed to allow more egress time for safe evacuation.

ii) The travel time as a result of the increase in travel distance is estimated to be no more than 15 seconds.

iii) Increased early warning through the installation of smoke detectors in the smoke zones is provided.

iv) The smoke management system is considered a life safety system and required to be inspected and tested according to the NFPA standard.

Dated at Toronto this 24th day in the month of February in the year **1999** for application number **1998-75**

BCC Ruling No. 00-44-666

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-10-666

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 7.1.7.1.(1) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code") and Sentence 3.1.3.1.(1) of the 1995 National Farm Building Code of Canada.

AND IN THE MATTER OF an application by Mr. Thomas Phillips, property owner, Part Lot 18, Concession 1, Township of Carden, Victoria County, Ontario for the resolution of a dispute with Mr. Paul McCubbing, Chief Building Official, Township of Carden, Ontario to determine whether the existing washroom ventilation and the fire stopping in the subject farm building provide comply with Sentence 7.1.7.1.(1) of the Ontario Building Code and Sentence 3.1.3.1.(1) of the National Farm Building Code of Canada respectively at Part Lot 18, Concession 1, Carden Township, Victoria County, Ontario.

APPLICANT
Mr. William Hawryluk, cottage owner
Part Lot 18, Concession 1
Township of Carden, Ontario

RESPONDENT
Mr. Paul McCubbing
Chief Building Official
Township of Carden

PANEL
Mr. Roy Philippe (Chair)
Mr. Kenneth Peaker
Mr. Michael Steele

PLACE
Toronto, Ontario

DATE OF HEARING
April 8, 1999

DATE OF RULING
April 8, 1999

APPEARANCES
Mr. Thomas Phillips
Property owner
TTownship of Carden
The Applicant

Mr. Paul McCubbing
Chief Building Official
Township of Carden
The Respondent

RULING

1. The Applicant

Mr. Thomas Phillips, Owner, Part Lot 18, Concession 1, brought a dispute to the Building Code Commission regarding the ventilation of the washroom and the fire stopping of a farm building into conformity with the relevant requirements of the of the OBC and the NFBCC at Part Lot 18, Concession 1, Carden Township, Ontario.

2. Description of Construction

The construction in dispute was not described.

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3. Dispute

The issues relating to the technical requirements of the Ontario Building Code were not discussed.

4. Provisions of the Ontario Building Code

Sentence 7.1.7.1.(1) Lighting and Ventilation Requirements

(1) Plumbing fixtures shall not be installed in a room that is not lighted and ventilated in accordance with the appropriate requirements in Parts 3 and 9.

Provisions of the National Farm Building Code of Canada

Sentence 3.1.3.1.(1) Location

(1) Fire stops shall be provided at floor, ceiling and roof levels to cut off all concealed draft openings occurring between storeys and between the top storey and roof space, including spaces filled with batt, loose fill or foamed plastic insulation.

5. Applicant's Position

No arguments regarding technical matters were presented by the Applicant.

6. Respondent's Position

No arguments regarding technical matters were presented by the Respondent.

7. Commission Ruling

It is the decision of the Building Code Commission that the application for a hearing lacks jurisdiction under Section 24 of the Building Code Act to hold a hearing in this matter, as the Applicant is not Aan

applicant for a permit or a holder of a permit or a person to whom an order is given@ within the meaning of s 24(1) of the Act.

Dated at Toronto this **8th,** day in the month of **April** in the year **1999** for application number **1999-10.**.

BCC Ruling No. 99-07-663

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-07-663

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.2.2.41 and Sentences 3.2.5.13.(1) and 3.2.5.13.(2) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Clare Wamsteeker, Manager, Physical Plant, Brantwood Residential Development Centre, 25 Bell Lane, Brantford, Ontario for the resolution of a dispute with Mr. Doug Ferguson, Chief Building Official, City of Brantford, to determine whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with Article 3.2.2.41 and Sentences 3.2.5.13.(1) and (2) of the Ontario Building Code at Nelson Street Group Home, 430 Nelson Street, Brantford, Ontario.

APPLICANT

Mr. Clare Wamsteeker, Manager, Physical Plant
Brantwood Residential
Brantford, Ontario

RESPONDENT

Mr. Doug Ferguson
Chief Building Official
City of Brantford

PANEL

Mr. Ross Thomson, Chair-Designate
Mr. Douglas Clancey
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF HEARING

January 27th, 1999

DATE OF RULING

January 27th, 1999

APPEARANCES

Mr. Rick Reichard, Principal
Sneider Reichard March Architects
Waterloo, Ontario
Agent for the Applicant

Mr. Jack Schut
Deputy CBO
City of Brantford
The Respondent

RULING

1. **The Applicant**

   Mr. Clare Wamsteeker, Manager, Physical Plant, Brantwood Residential Development Centre, Brantford, Ontario, has received a building permit under the *Building Code Act, 1992* and is currently constructing a group home known as the Nelson Street Group Home, at 430 Nelson Street, Brantford, Ontario.

2. **Description of Construction**

   The Applicant is currently constructing a one storey (with a partial basement), group home with a building area of 288 m^2 (3,099 ft^2) (excluding garage) that is intended to house only 6 residents as well as up to 3 or 4 full time staff members. The building is of combustible construction and is classified as having a Group B, Division 3 (care) occupancy under the 1997 Ontario Building Code. The separations between the basement and ground floor and between the bedrooms within the group home will have a 3/4 hour fire-resistance rating.

The structure will not be equipped with a fire alarm system, but will be supplied with an interconnected smoke detection system and a sprinkler system. The Applicant is proposing that this latter system be designed and installed in accordance with the requirements of NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height."

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with Article 3.2.2.41. and Sentences 3.2.5.13.(1) and 3.2.5.13.(2) of the Ontario Building Code. Article 3.2.2.41. requires that a B3 occupancy must be sprinklered even though it may be of combustible construction. The dispute therefore centres on the type of sprinkler system that is required.

The NFPA 13R standard stipulates that a sprinkler system be designed and installed for all occupied rooms. The NFPA 13 standard, however, goes further by also requiring sprinklering in unoccupied areas such as closets and concealed spaces such as attics. Sentence 3.2.5.13.(1) states that a required sprinkler system must meet NFPA 13, whereas Sentence 3.2.5.13.(2), provides an exception to Sentence (1) by allowing low rise (four stories or less) residential occupancies to comply with the more relaxed sprinkler standards found in NFPA 13R.

If the subject group home, as a low rise structure intended for a maximum of only 10 people, could also be considered a residential occupancy according to the OBC, then the NFPA 13R standard would be an appropriate requirement for sprinklering.

4. **Provisions of the Ontario Building Code**

Article 3.2.2.41. Group B Division 2 or Division 3, One Storey, Sprinklered

(1) A building classified as Group B, Division 2 or Division 3 is permitted to be of combustible construction or noncombustible construction used singly or in combination, provided

(a) except as permitted by Sentence 3.2.2.7.(1), the building is sprinklered,

(b) it is not more than 1 storey in building height, and

(c) it has a building area not more than 500 m2 (5,380 ft2).

Sentence 3.2.5.13. Automatic Sprinkler Systems

(1) Except as permitted by Sentences (2), (3) and (4), an automatic sprinkler system shall be designated, constructed, installed and tested in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems".

(2) Instead of the requirements of Sentence(1), NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height", is permitted to be used for the design, construction, installation and testing of an automatic sprinkler system installed in a building of residential occupancy that is not more than 4 storeys in building height.

5. **Applicant's Position**

At the outset the Applicant indicated that he had recently been to the Building Code Commission representing a project that was very similar to the one at hand, and since the dispute centred on the same issue he would be making similar arguments as before.

The Applicant submitted that the group home currently under construction should be considered as residential facility under the OBC, thereby allowing the proposed NFPA 13R conforming sprinkler system to be installed. The Applicant argued that the subject group home physically resembles a house from both the exterior, with its small size, and interior, with its homelike floor plans. He noted that the construction techniques are also residential in nature. Moreover, the proposed group home will function like every other family home with the staff acting as parents and residents as children and siblings. In his view, it was not the intent of the 1997 OBC to require the more onerous NFPA 13 sprinkler standard for such small buildings of residential character and function. He suggested that smaller facilities (asmeasured by their floor area or occupant load) in the B3 classification be allowed to comply with NFPA 13R.

Considering that all occupied rooms would be sprinklered (according to NFPA 13R), that fire separations would be provided between floors and bedrooms, that interconnected smoke detectors would be installed, and that evacuation would be quick, the Applicant stated that the life safety of the residents would be adequately protected without relying upon the more rigorous NFPA 13 requirements. Besides, as he argued, the principal difference in terms of protection offered by either sprinkler systems if installed in a such a building is that an NFPA 13 system would protect both occupants and the building, whereas a NFPA 13R system would only protect the occupants. The protection of property, in the Applicant's view, is not worth the additional

expense. As he noted, by employing the NFPA 13 sprinkler standard, the construction costs of these already expensive homes would increase.

The Applicant also pointed out that historically there has been some confusion regarding the appropriate Building Code classification in which to determine construction standards for groups homes. He indicated that this uncertainty continued to the present 1997 version of the OBC. He stated that many like group homes were being constructed across the province with some conforming to NFPA 13, while many others were allowed to use NFPA 13R sprinkler systems. In fact, several recent similar projects in a neighbouring municipalities were allowed to proceed based on NFPA 13R proposed systems.

Lastly, the Applicant indicated that many safety and accessibility features had been included in the subject home, with some of these being beyond the minimum standards required in the Code.

6. **Respondent's Position**

The Respondent submitted that the subject care home is not a residential facility and thus the sprinkler system should be designed and installed according to NFPA 13. As he noted, the 1997 OBC allows a care facility to be considered as having a Group C (residential) major occupancy using the exemption found in Article 3.1.2.5. The building at hand, he argued, did not meet the criteria for this exemption however, since more than two people would require assistance to evacuate in an emergency. Therefore, in the Respondent's view, a care occupancy is not by definition a residential occupancy. Accordingly, a building classified as having a care occupancy does not qualify for any of the exemptions in Article 3.2.5.13. and instead must conform with NFPA 13 standards for sprinkler design and installation.

The Respondent did, however, offer that the Applicant's proposal to utilize the NFPA 13R sprinkler system would provide reasonable protection. Nevertheless, he indicated that he felt it was beyond his authority to permit an NFPA 13R sprinkler system.

7. **Commission Ruling**

It is the decision of the Building Code Commission that a sprinkler system constructed to NFPA 13R provides sufficiency of compliance with 3.2.5.13.(1) and (2) in the B3 occupancy constructed to Article 3.2.2.41 of the Building Code provided that;

i) bedroom fire separations having a 3/4 hour fire resistance rating are provided in accordance with Ontario Building Code requirements,

and

ii) manual initiating devices are in a location easily accessible to supervisory staff to initiate the operation of the interconnected smoke alarms.

8. **Reasons**

i) The single storey building is small in size, with limited occupant load of 6 residents plus full time supervisory staff.

ii) The additional compartmentation and early warning features provide an additional level of safety from fire.

9. **Recommendation**

As these are the second and third cases of a smiliar nature brought before the Commission, the Commission recommends that a code change be considered to review the conditions under which NFPA 13R sprinklers may be used in a B3 occupancy.

Dated at Toronto this 27th day in the month of January in the year **1999** for application number **1998-73**

BCC Ruling No. 99-06-662

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-06-662

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.2.2.41 and Sentences 3.2.5.13.(1) and 3.2.5.13.(2) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Clare Wamsteeker, Manager, Physical Plant, Brantwood Residential Development Centre, 25 Bell Lane, Brantford, Ontario for the resolution of a dispute with Mr. Doug Ferguson, Chief Building Official, City of Brantford, to determine whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with Article 3.2.2.41 and Sentences 3.2.5.13.(1) and (2) of the Ontario Building Code at Nelson Street Group Home, 346 Nelson Street, Brantford, Ontario.

APPLICANT

Mr. Clare Wamsteeker, Manager, Physical Plant
Brantwood Residential
Brantford, Ontario

RESPONDENT

Mr. Doug Ferguson
Chief Building Official
City of Brantford

PANEL

Mr. Ross Thomson, Chair-Designate
Mr. Douglas Clancey
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF HEARING

January 27th, 1999

DATE OF RULING

January 27th, 1999

APPEARANCES

Mr. Rick Reichard, Principal

Sneider Reichard March Architects
Waterloo, Ontario
Agent for the Applicant

Mr. Jack Schut
Deputy CBO
City of Brantford
The Respondent

RULING

1. **The Applicant**

   Mr. Clare Wamsteeker, Manager, Physical Plant, Brantwood Residential Development Centre, Brantford, Ontario, has received a building permit under the *Building Code Act, 1992* and is currently constructing a group home known as the Nelson Street Group Home, at 346 Nelson Street, Brantford, Ontario.

2. **Description of Construction**

   The Applicant is currently constructing a one storey (with a partial basement), group home with a building area of 223 m^2 (2,400 ft^2) (excluding garage) that is intended to house only 6 residents as well as up to 3 or 4 full time staff members. The building is of combustible construction and is classified as having a Group B, Division 3 (care) occupancy under the 1997 Ontario Building Code. The separations between the basement and ground floor and between the bedrooms within the group home will have a 3/4 hour fire-resistance rating.

The structure will not be equipped with a fire alarm system, but will be supplied with an interconnected smoke detection system and a sprinkler system. The Applicant is proposing that this latter system be designed and installed in accordance with the requirements of NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height."

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with Article 3.2.2.41. and Sentences 3.2.5.13.(1) and 3.2.5.13.(2) of the Ontario Building Code. Article 3.2.2.41. requires that a B3 occupancy must be sprinklered even though it may be of combustible construction. The dispute therefore centres on the type of sprinkler system that is required.

The NFPA 13R standard stipulates that a sprinkler system be designed and installed for all occupied rooms. The NFPA 13 standard, however, goes further by also requiring sprinklering in unoccupied areas such as closets and concealed spaces such as attics. Sentence 3.2.5.13.(1) states that a required sprinkler system must meet NFPA 13, whereas Sentence 3.2.5.13.(2), provides an exception to Sentence (1) by allowing low rise (four stories or less) residential occupancies to comply with the more relaxed sprinkler standards found in NFPA 13R.

If the subject group home, as a low rise structure intended for a maximum of only 10 people, could also be considered a residential occupancy according to the OBC, then the NFPA 13R standard would be an appropriate requirement for sprinklering.

4. **Provisions of the Ontario Building Code**

Article 3.2.2.41. Group B Division 2 or Division 3, One Storey, Sprinklered

(1) A building classified as Group B, Division 2 or Division 3 is permitted to be of combustible construction or noncombustible construction used singly or in combination, provided

(a) except as permitted by Sentence 3.2.2.7.(1), the building is sprinklered,

(b) it is not more than 1 storey in building height, and

(c) it has a building area not more than 500 m2 (5,380 ft2).

Sentence 3.2.5.13. Automatic Sprinkler Systems

(1) Except as permitted by Sentences (2), (3) and (4), an automatic sprinkler system shall be designated, constructed, installed and tested in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems".

(2) Instead of the requirements of Sentence(1), NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height", is permitted to be used for the design, construction, installation and testing of an automatic sprinkler system installed in a building of residential occupancy that is not more than 4 storeys in building height.

5. **Applicant's Position**

At the outset the Applicant indicated that he had recently been to the Building Code Commission representing a project that was very similar to the one at hand, and since the dispute centred on the same issue he would be making similar arguments as before.

The Applicant submitted that the group home currently under construction should be considered as residential facility under the OBC, thereby allowing the proposed NFPA 13R conforming sprinkler system to be installed. The Applicant argued that the subject group home physically resembles a house from both the exterior, with its small size, and interior, with its homelike floor plans. He noted that the construction techniques are also residential in nature. Moreover, the proposed group home will function like every other family home with the staff acting as parents and residents as children and siblings. In his view, it was not the intent of the 1997 OBC to require the more onerous NFPA 13 sprinkler standard for such small buildings of residential character and function. He suggested that smaller facilities (asmeasured by their floor area or occupant load) in the B3 classification be allowed to comply with NFPA 13R.

Considering that all occupied rooms would be sprinklered (according to NFPA 13R), that fire separations would be provided between floors and bedrooms, that interconnected smoke detectors would be installed, and that evacuation would be quick, the Applicant stated that the life safety of the residents would be adequately protected without relying upon the more rigorous NFPA 13 requirements. Besides, as he argued, the principal difference in terms of protection offered by either sprinkler systems if installed in a such a building is that an NFPA 13 system would protect both occupants and the building, whereas a NFPA 13R system would only protect the occupants. The protection of property, in the Applicant's view, is not worth the additional

expense. As he noted, by employing the NFPA 13 sprinkler standard, the construction costs of these already expensive homes would increase.

The Applicant also pointed out that historically there has been some confusion regarding the appropriate Building Code classification in which to determine construction standards for groups homes. He indicated that this uncertainty continued to the present 1997 version of the OBC. He stated that many like group homes were being constructed across the province with some conforming to NFPA 13, while many others were allowed to use NFPA 13R sprinkler systems. In fact, several recent similar projects in a neighbouring municipalities were allowed to proceed based on NFPA 13R proposed systems.

Lastly, the Applicant indicated that many safety and accessibility features had been included in the subject home, with some of these being beyond the minimum standards required in the Code.

6. **Respondent's Position**

The Respondent submitted that the subject care home is not a residential facility and thus the sprinkler system should be designed and installed according to NFPA 13. As he noted, the 1997 OBC allows a care facility to be considered as having a Group C (residential) major occupancy using the exemption found in Article 3.1.2.5. The building at hand, he argued, did not meet the criteria for this exemption however, since more than two people would require assistance to evacuate in an emergency. Therefore, in the Respondent's view, a care occupancy is not by definition a residential occupancy. Accordingly, a building classified as having a care occupancy does not qualify for any of the exemptions in Article 3.2.5.13. and instead must conform with NFPA 13 standards for sprinkler design and installation.

The Respondent did, however, offer that the Applicant's proposal to utilize the NFPA 13R sprinkler system would provide reasonable provide. Nevertheless, he indicated that he felt it was beyond his authority to permit the proposed sprinkler system.

7. **Commission Ruling**

It is the decision of the Building Code Commission that a sprinkler system constructed to NFPA 13R provides sufficiency of compliance with 3.2.5.13.(1) and (2) in the B3 occupancy constructed to Article 3.2.2.41 of the Building Code provided that;

i) bedroom fire separations having a 3/4 hour fire resistance rating are provided in accordance with Ontario Building Code requirements,

and

ii) manual initiating devices are in a location easily accessible to supervisory staff to initiate the operation of the interconnected smoke alarms.

8. **Reasons**

i) The single storey building is small in size, with limited occupant load of 6 residents plus full time supervisory staff.

ii) The additional compartmentation and early warning features provide an additional level of safety from fire.

9. **Recommendation**

As these are the second and third cases of a smiliar nature brought before the Commission, the Commission recommends that a code change be considered to review the conditions under which NFPA 13R sprinklers may be used in a B3 occupancy. Dated at Toronto this 27th day in the month of January in the year **1999** for application number **1998-72**

BCC Ruling No. 99-05-661

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-05-661

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.1.8.13. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Satya Saha, Project Manager, C.I.B.C. Development Corporation, Commerce Court West, 18th Floor, Toronto, Ontario for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, Ontario to determine whether the entrance doors, as installed, provides sufficiency of compliance with Article 3.1.8.13. of the Ontario Building Code at 1 City Centre Drive, Unit 105, Mississauga, Ontario.

APPLICANT

Mr. Satya Saha, Project Manager
C.I.B.C. Development Corporation
Toronto, Ontario

RESPONDENT

Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL

Mr. Ross Thomson, Chair-Designate
Mr. Douglas Clancey
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF HEARING

January 27, 1999

DATE OF RULING

January 27, 1999

APPEARANCES

Mr. Mark Langridge, Architect
Roger Du Toit Architects
Toronto, Ontario
Agent for the Applicant

Mr. Frank Spagnolo
Manager, Plans Examination
City of Mississauga

For the Respondent

RULING

1. **The Applicant**

   Mr. Satya Saha, Project Manager, C.I.B.C. Development Corporation has received an order to comply under the *Building Code Act, 1992* to remedy two doors at 1 City Centre Drive, Unit 105, Mississauga, Ontario.

2. **Description of Construction**

   The Applicant recently renovated a ground floor C.I.B.C. branch tenancy located within a

   17 storey building, classified as having a Group D - business occupancy. The structure has a building area of approximately 2,045 m^2 (22,000 ft^2). The building is of noncombustible construction and is equipped with sprinkler, standpipe and hose, and fire alarm systems.

   Part of the renovation included making the two main entry doors at the C.I.B.C. tenancy barrier-free for disabled access. This involved replacing the existing sets of doors (both swing doors within a set were 710 mm (28 in) wide) with a new 915 mm (36 in) glazed entry swing door with

a 505 mm (20 in) wide hinged side light. The previous door configuration, with individual doors only 710 mm wide, meant that barrier-free access was not possible. The new design has a 915 mm wide door and a push-plate activated opening device, thus making disabled access possible.

Public access to the bank is from the building's ground floor lobby through the two main entry doors. The bank has a third exit, but it accessible only by bank staff. One of the exit stairs for the office tower above the bank branch does not exit directly to the exterior of the building. Instead, the subject exit stairs exit through the bank and then through the lobby of the building to the exterior. There are six exits to the exterior from the lobby.

The hardware for the subject main entry doors is the Kawneer Dor-o-matic 1990 Concealed Rod exit device. It contains a latching rod mechanism contained in the door stile, which inserts into the door threshold and the transom/header. This latching mechanism is de-activated during banking hours to allow the barrier-free access push-plates to operate. The door returns automatically to a closed position after each use.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the entrance new doors, as installed, provide sufficiency of compliance with Article 3.1.8.3. of the Ontario Building Code. Article 3.1.8.3. requires all swing-type doors, with certain exceptions, in a fire separation to be equipped with a positive latching mechanism that holds a door when shut in a closed position. While the two main entry doors contain positive latching mechanisms to maintain a closed position after opening, these doors are operated by the Applicant in such a manner that the devices are de-activated during business hours.

4. **Provisions of the Ontario Building Code**

Article 3.1.8.13. Door Latches

(1) Except as permitted by Article 3.3.3.5., a swing-type door in a fire separation shall be equipped with a positive latching mechanism designed to hold the door in the closed position after each use.

5. **Applicant's Position**

The Applicant submitted that the newly installed doors, including the latching mechanism, provides sufficiency of compliance with Article 3.1.8.13. He argued, the subject doors do indeed

have a positive latching mechanism as required by the Code, however, the doors are operated in such a way that the latching device is not employed during certain times. As he indicated, the rationale for using the doors in this fashion was to improve the barrier-free accessibility. This, after all, was the main reason why the original doors were replaced. By not having the latching pin engaged during business hours, this allows the push-plates located both inside and outside of the bank to open the doors when entering and leaving the bank.

The Applicant also noted other features of the door hardware which were recently added to improve accessibility. None of these features are in dispute.

The Applicant indicated that the subject doors are equipped with a self-closing devices. The doors and side light panels, he also noted, have been fitted with full height tamper proof astragal plate which provides a cover for the air gap between the two leaves, thus providing a better seal and therefore maintaining the fire separation.

With respect to the fire separation aspect of this dispute, the Applicant acknowledged that in the event of a fire the opening and closing of the subject two main exit doors in the bank branch could be viewed by some as providing a weak point in the fire separation. Nevertheless, citing OBC Appendix A-3.1.8.1.(1)(b) Barrier to Control Smoke Spread, he argued that the intent of the Code with respect to fire separations, including the one in which the two entry doors are located, is to control the spread of smoke until the sprinkler system activates. If the pressure differential caused by smoke and heat is large enough to push open these doors, in his view, the sprinkler system would have activated by then. In turn, the actuation of the sprinkler system would begin to bring the fire under control thereby reducing the pressure differential and making the holding function of the latching mechanism less critical.

In an effort to make the doors more resistant to a build up of pressure differential in a fire situation, the Applicant offered to increase the tension on the door closing device.

Lastly, the Applicant noted that the Respondent did not object to the subject doors on the original permit application. He indicated that it was only brought to his attention six months after installation had occurred.

6. **Respondent's Position**

The Respondent submitted that although the doors may have positive latching mechanism, since that device is not engaged during business hours, the operation of these doors does not comply

with the Code, specifically Article 3.1.18.3. By using the doors in such a manner, the Applicant, they argued, is allowing the fire separation to be penetrated. The Respondent expressed concern that because one of the main exit stairs of the 16 storey building above leads into the bank, and relies upon the subject doors for exit into the lobby, this would mean that the lobby and the adjacent occupancies would not be provided with an appropriate fire separation. In their view, the doors' latching mechanism should be engaged at all times.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the door installations in question do not comply with Article 3.1.8.13.

8. **Reasons**

i) The latching mechanisms are disengaged during business hours.

ii) There was no empirical evidence presented to show that the existing automatic closing devices would maintain the integrity of the smoke/fire separation during a fire emergency.

Dated at Toronto this 27th day in the month of January in the year **1999** for application number **1998-64**

BCC Ruling No. 99-04-660

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-04-660

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.3.1.11.(3) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr.Jaswant Dass, Owner, Jaswant Dass in Trust, 30 Vice Regent Blvd., Toronto, Ontario, for the resolution of a dispute with Mr. Bruce Ashton, Deputy Chief Building Official, City of Toronto (West District), Ontario to determine whether the movable wall partitions installed as store fronts in numerous business occupancies, and located in their only means of egress, provides sufficiency of compliance with Sentence 3.3.1.11.(3) of the Ontario Building Code at the Woodbine Market Centre, 30 Vice Regent Blvd., Toronto, Ontario.

APPLICANT

Mr. Jaswant Dass, Owner
Jaswant Dass in Trust
Toronto, Ontario

RESPONDENT

Mr.Bruce Ashton
Deputy Chief Building Official
City of Toronto (West District)

PANEL

Mr.Roy Philippe (Chair)
Mr.Ross Thomson
Mr.Larry Glazer

PLACE

Toronto, Ontario

DATE OF HEARING

January 14,1999

DATE OF RULING

January 14, 1999

APPEARANCES

Mr.Sasha Milenov, Principal
Sasha Milenov Architect
Toronto, Ontario
For the Applicant

RULING

1. **The Applicant**

   Mr. Jaswant Dass, Owner, Jaswant Dass in Trust, Toronto, Ontario, has received a building permit under the *Building Code Act, 1992* to construct interior retail units in a one storey mall known as the Woodbine Market Centre at 30 Vice Regent Blvd., Toronto, Ontario.

2. **Description of Construction**

   The Applicant has recently constructed interior booths within a one storey retail plaza structure classified as having a Group E - Mercantile occupancy, with a building area of 4,073 m^2 (43,834.63 ft^2). The building is a combination of combustible and noncombustible construction. It is equipped with a fire alarm system, a standpipe and hose system, and a sprinkler system.

   The subject shopping mall contains several hundred small retail units ranging in size from 6.5 m^2 to 18.5 m^2. The units are separated by 3 m high combustible partitions that extend roughly half way to the 6 m high ceiling. The larger retail tenants as well as some of the smaller ones located near the building's perimeter are provided with two exits from their units, one to the exterior and one to the 3 m wide interior corridors. Many of the smaller tenants in the interior of the building have only one means of exit leading to the interior corridor.

   At the "booth fronts" of all units, where they face the mall's interior corridors, the Applicant is proposing to install foldable horizontally sliding plastic and steel partitions that are manufactured

by Dynaflair Corporation of Canada. While the movable partitions are not provided with swing-type egress doors, they are equipped with a "bi-part" folding door.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed folding wall partitions, which are to be located in the only exit for many of the mall's retail units, provides sufficiency of compliance with Sentence 3.3.1.11.(3) of the Ontario Building Code. This provision allows an exemption regarding the requirement to provide a door that swings open in the direction of travel on the condition that the subject non-swinging door is not located in the only means of egress. For many of the smaller, interior units within the mall, the bi-part door is their only means of egress, if the folding wall is extended across the front of the booth.

4. **Provisions of the Building Code**

Sentence 3.3.1.11. Sliding Doors

(3) Movable partitions used to separate a public corridor from an adjacent business and personal services occupancy or a mercantile occupancy need not conform to Sentence (1) and Sentences 3.3.1.10.(1) and (2) provided the partitions are not located in the only means of egress. (See Appendix A.)

5. **Applicant's Position**

The Applicant submitted that the proposed folding doors provide sufficiency of compliance with Sentence 3.3.1.11.(3) of the OBC. He argued that the subject doors would be appropriate in an emergency or panic situation when the wall is extended across the booth front since the latching mechanism, employing a thumb turn device, is quite simple to operate and the individual tenants would be familiar with their operation. In fact, keys are not necessary for these doors since the entire wall can be moved and locked in place. Nevertheless, as the Applicant indicated, when the wall is fully folded back, as it is during normal business hours which is when most tenants and shoppers are in the units, the entire booth front, open to the corridor, can act as the exit.

In addition, the Applicant argued that since the individual units are small and most often occupied by the actual tenants themselves, this means that any fire would be quickly noticed and those in the retail areas would be familiar with the building and its egress routes.

Lastly, the Applicant indicated that since the structure is equipped with a fire alarm system, a standpipe and hose system and a sprinkler system, the building is quite safe. For these reasons the Applicant believed that sufficiency of compliance with Sentence 3.3.1.11.(3) was achieved.

6. **Respondent's Position**

The Respondent submitted that Sentence 3.3.1.11.(3) of the OBC clearly allows the door swing exception if the non-swing door is not located in the only means of egress. As he noted, in the case of many of the smaller tenancies, the folding egress doors, as part of the larger movable wall partitions, are the only means of egress. In his view, this clearly does not comply with the Code which, as the Respondent indicated, requires that egress doors swing in the direction of travel.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the moveable wall partitions, asbooth fronts, as the only means of egress provides sufficiency of compliance with 3.3.1.11.(3) of the Building Code on the condition that;

a) the booth fronts do not exceed 5 m in length, and,

b) and the total booth floor area is no greater than 25 m^2.

8. **Reasons**

1) The area of the booth is small and limited in occupant load.

2) The screens will be closed only during non-business operations.

Dated at Toronto this 14th day in the month of January in the year **1999** for application number **1998-66**

BCC Ruling No. 99-03-659

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-03-659

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Sentence 9.9.7.2.(2) of the Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Francis Lepine, Developer, El-Pine Homes, 160 Chapel Street, Ottawa, Ontario, for the resolution of a dispute with Mr. Kaz Mosielski, Chief Building Official, City of Kanata, Ontario to determine whether the proposed ground floor elevator lobby, constructed without enclosure, provides sufficiency of compliance with Sentence 9.9.7.2.(2) of the Ontario Building Code at Robson Court condominium buildings, Blocks 10, 11, 13, 14, 15, 16 and 19, Robson Court, Kanata, Ontario.

APPLICANT
Mr. Francis Lepine, Developer
El-Pine Homes
Ottawa, Ontario

RESPONDENT
Mr. Kaz Mosielski
Chief Building Official
City of Kanata

PANEL
Mr. Roy Philippe (Chair)
Mr. Ross Thomson
Mr. Larry Glazer

PLACE
Toronto, Ontario

DATE OF HEARING
January 19, 1999

DATE OF RULING
January 19, 1999

APPEARANCES
Ms. Karen Schad, Director
Carp Ridge Community School
Carp, Ontario
Applicant

RULING

1. The Applicant

Mr. Francis Lepine, Developer, El-Pine Homes, Ottawa, Ontario, has received a building permit under the Building Code Act, 1992 to construct multiple three storey residential condominium buildings at Robson Court, Kanata, Ontario.

2. Description of Construction

The Applicant is currently constructing multiple three storey (not including the basement level) condominiums buildings, classified as having a Group - C occupancy, each with a building area of 578 m2 (6,222 ft2). The subject building blocks each contain residential units, some of which are split level. The basement level for each block is a common underground parking area for the units above. The basements are constructed of noncombustible construction, whereas the three storeys above are combustible construction. The buildings are equipped with a fire alarm system.

Each building block will be equipped with an elevator serving the basement and the first and second storeys. On the basement and ground floor levels the proposed elevator shaft would open into an enclosed vestibule. On the second floor the elevator would open into a public corridor. The Applicant, however, is proposing to construct the ground floor elevator lobby without an enclosure so that the lift would open into a dead-end public corridor. This is not an issue on the second floor corridor because with exit stairs at the rear it is not a dead-end corridor.

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3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed ground floor elevator vestibules, constructed without enclosure, that opens into a dead-end public corridors provides sufficiency of compliance with Sentence 9.9.7.2.(2) of the Ontario Building Code. This provision permits a dead-end corridor in a residential occupancy with conditions that only suite doors can open into the public corridor and that no more than two doors must be passed to access the nearest exit. In the subject building blocks the Applicant is proposing that the elevator shaft open directly into the dead-end public corridor.

4. Provisions of the Ontario Building Code

Sentence 9.9.7.2. Dead End Corridors

(2) Dead-end public corridors in residential occupancies and business and personal services occupancies shall contain only suite door openings arranged so that not more than 2 such doors have to be passed to reach the nearest exit. The area of wired glass in such doors shall not exceed 645 cm2 (100 in2).

5. Applicant's Position

The Applicant submitted that the proposed elevator vestibule design opening into the dead-end public corridor provides sufficiency of compliance with Sentence 9.9.7.2.(2). He argued that such a configuration would be permissible if the building had been reviewed under Part 3 of the OBC. In Part 9, under which the building was reviewed, a dead-end corridor must contain only residential suite doors arranged in such a fashion that no more than two doors can be passed while exiting. Part 3, on the other hand, the Applicant noted, permits dead-end corridors as long as six metres as long as they do not pass rooms that contain fuel fired appliances or are considered hazardous for other reasons.

The Applicant also noted that there are only two residential suite doors on the ground floor, thereby not exceeding the allowed maximum of suite doors to pass in Sentence 9.9.7.2.(2).

As well, the Applicant argued that the elimination of the vestibule enclosure on the ground floor would make the access to the elevator and the corridor itself more consistent with the second floor corridor.

6. Respondent's Position

The Respondent submitted that Sentence 9.9.7.2.(2) permits only residential suite doors to open into a dead-end public corridor. An unenclosed elevator vestibule is not permitted according to this provision of the OBC. As such, they do not feel the proposal provides sufficiency of compliance with Sentence 9.9.7.2.(2).

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed design to open the elevator at the ground floor directly into a dead end corridor provides sufficiency of compliance with Sentence 9.9.7.2.(2) of the Building Code.

8. Reasons

i. The proposed design improves the integrity of the stairwell enclosure by removing the elevator from the enclosure at the first floor level.
ii. The building has only two suites at the first floor served by the dead end corridor, and each suite is served by a second and separate exit as permitted in Sentence 9.9.7.2.1.(b).
iii. This building is equipped with a fire alarm system.

iv. In the opinion of the Building Code Commission the proposal does not reduce the level of safety from fire in this building.

Dated at Toronto this **19th,** day in the month of **January** in the year **1999** for application number **1998-65**.

BCC Ruling No. 99-02-658

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-02-658

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.8.2.1.(3). of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Ted Van, Project Manager, Goldlist Properties Inc., Toronto, Ontario, for the resolution of a dispute with Mr. Yaman Uzumeri, Chief Building Official, City of Toronto, Ontario to determine whether the proposed dwelling unit balconies, which are not intended as areas of refuge, are required to be barrier-free when considering Sentence 3.8.2.1.(3) of the Ontario Building Code at 909 Bay Street, Toronto, Ontario.

APPLICANT

Mr. Ted Van, Project Manager
Goldlist Properties Inc.
Toronto, Ontario

RESPONDENT

Mr. Yaman Uzumeri
Chief Building Official
City of Toronto

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF HEARING

January 12, 1999

DATE OF RULING

January 12, 1999

APPEARANCES

Mr. Allan Larden, Principal
Larden Muniak Consulting Inc.
Toronto, Ontario
For the Applicant

Mr. Wade Tam
Building Engineer
City of Toronto
For the Respondent

RULING

1. **The Applicant**

   Mr. Ted Van, Project Manager, Goldlist Properties Inc., 65 Overlea Blvd., Toronto, Ontario, has applied for a building permit under the *Building Code Act, 1992* to construct a 27 storey, residential condominium building known as Allegro at Opera Place at 909 Bay Street, Toronto, Ontario.

2. **Description of Construction**

   The Applicant is proposing to construct a new 27 storey, Group C - Residential condominium structure, with a building area of 1,169 m^2. The building is to be constructed of noncombustible construction, and will be equipped with a fire alarm system, a standpipe and hose system, but not a sprinkler system.

   The exterior balconies of the subject building are proposed to be built with a curb or upstand at the threshold of the doorway. The balconies are not intended as areas of refuge, therefore the Applicant does not intend to make them barrier-free.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed dwelling unit balconies, which are not intended as areas of refuge, are required to be barrier-free when considering Sentence 3.8.2.1.(3) of the Ontario Building Code. In other words, the issue centres on whether this provision applies only to balconies that are built specifically to meet the barrier-free path of travel fire protection requirements of the 1997 OBC, in particular Article 3.3.1.7., or whether it applies to all dwelling unit balconies, including those in the subject building. If the latter is found to be the interpretation of the Code, modifications to the balconies would be necessary.

4. **Provisions of the Building Code**

Article 3.3.1.7. Protection on Floor Areas With a Barrier-Free Path of Travel

(1) Except as provided in sentences (2) and (3), every floor area above or below the first storey that has a barrier-free path of travel shall

(a) be served by an elevator

(i) conforming to Sentences 3.2.6.9.(4) to (6),

(ii) protected against fire in conformance with Clauses 3.2.6.9.(3)(b) or (c), and

(iii) in a building over 3 storeys in building height, protected against smoke movement so that the hoistway will not contain more than 1% by volume of contaminated air from a fire floor during a period of 2 h after the start of a fire, assuming an outdoor temperature equal to the January design temperature on a 2.5% basis determined in conformance with Subsection 2.5.1., or

(b) be divided into at least 2 zones by fire separations conforming to Sentences (4), (5) and (6) so that

(i) persons with physical disabilities can be accommodated in each zone,

(ii) the travel distance from any point in one zone to a doorway leading to another zone shall be not more than the value for travel distance permitted by Sentence 3.4.2.5.(1) for the occupancy classification of the zone, and

(iii) a barrier-free path of travel is provided to an exit.

(2) In residential occupancies, the requirements of Sentence (1) are waived if a balcony conforming to Sentence (7) is provided for each suite, except for suites on the storey containing the barrier-free entrance described in Article 3.8.1.2.

(3) The requirements of Sentences (1) and (2) are waived when the building is sprinklered.

Sentence 3.8.2.1.(3)Areas requiring Barrier-Free Path of Travel

(3) Where a balcony is provided in a dwelling unit, access shall be provided to the balcony

(a) by a doorway with a clear width of not less than 800 mm (2 ft 7 in) when the door is in the open position, and

such that no projection above the walking surface is more than 13 mm (« in).

5. **Applicant's Position**

The Applicant submitted that Sentence 3.8.2.1.(3) of the OBC is not applicable to all residential unit balconies, it is only meant for balconies which are designed with the intention of satisfying the requirements of Article 3.3.1.7.

In his view, Sentence 3.8.2.1.(3) and Article 3.3.1.7. should be considered together, not in isolation, since the two provisions are integrally linked. As the Applicant noted, Article 3.3.1.7. mandates a requirement for certain fire protection measures on floor areas with a barrier-free path of travel. This provision, however, offers several compliance options. These are; to provide a firefighters' elevator [3.3.1.7.(1)(a)], to subdivide the floor area with fire separations [3.3.1.7.(1)(b), to provide a balcony that can act as a fire refuge [3.3.1.7.(2)], or to sprinkler the building [3.3.1.7.(3)]. Sentence 3.8.2.1.(3), the Applicant argued, simply followsfrom the compliance choice found in Sentence 3.3.1.7.(2) and sets out a specific standard detailing the construction of a balcony that has been designed as a method of conforming to the general requirement for fire protection on floor areas with a barrier-free path travel. He stressed that Sentence 3.8.2.1.(3) should not be viewed as a stand alone requirement dictating the design of balconies that are not intended as barrier-free areas of refuge.

The Applicant argued that his interpretation of Sentence 3.8.2.1.(3) and Article 3.3.1.7. are based on the historical development of these particular Code provisions in both the National Building

Code (NBC) and the OBC. He presented an historical overview of the development of these provisions.

By way of background, the Applicant discussed the lack of clarity in the 1990 versions of the NBC and OBC that surrounded the issue of accessibility to balconies that were intended as areas of refuge. The problem, as the Applicant described it, was that the subject balconies were built large enough to accommodate wheelchairs, but that the curb constructed at the threshold to the balcony did not allow for wheelchair access. The 1995 NBC attempted to address this by modifying its Clause 3.3.1.7.(5)(a) to stipulate that a balcony had to provide "direct barrier-free access from the suite or floor area". While not providing precise construction standards, the Applicant noted that this provision did require that the balconies referred to in that Article had to be accessible.

When Ontario modified its Building Code in 1997, it chose not to amend Article 3.3.1.7., instead, partly due to its attempt to consolidate the barrier-free requirements, Ontario chose to modify Article 3.8.2.1. (found within Section 3.8, Barrier-Free Design) by adding a new Sentence (3). This Sentence also required access to the balcony and, in fact, went further by including precise construction requirements. The obvious intent behind this revision to the OBC, the Applicant argued, was to follow the NBC lead in developing provisions to help clarify Article 3.3.1.7. regarding balcony access, the main difference being that the OBC clarification change was made specifically to the section regarding barrier-free standards. Unfortunately, the Applicant indicated, the OBC change did not cross-reference Article 3.3.1.7. as the NBC change had done.

The Applicant also presented evidence in the form of a statement from the Chair of the 1997 Barrier-Free OBC Committee indicating that the members on that panel did not anticipate that their discussions and considerations of Sentence 3.8.2.1.(3) were intended to apply to balconies that were not designed as areas of refuge.

The Applicant also argued that it was not the intention to amend the OBC to require universal balcony accessibility because a new change of that magnitude would have gone through an extensive consultation process. This issue had no consultation, and was not discovered by Code users until after the 1997 OBC came into effect.

The Applicant asserted that many practical problems would arise if the Respondent's interpretation concerning barrier-free accessibility to all balconies was correct. Specifically, without a curb at the threshold water penetration would likely occur. In turn, this wouldcause

difficulties for condominium owners/tenants and would probably result in lawsuits and/or claims with designers, builders and the New Home Warranty Program. Design solutions to deal with water penetration are problematic and expensive, he indicated.

The 13 mm (1/2 in) allowable difference between interior and exterior grades causes other problems too. Floor finishes, for example, must be restricted to thin materials only, otherwise the 13 mm restriction will be exceeded. As well, considering usual construction tolerances, the Applicant noted that a 13 mm variation between grades is difficult to achieve. Having no sizeable threshold also causes difficulties regarding installation of baseboard heating elements. Finally, if all balconies must meet the standards for accessibility, the Applicant pointed out that smaller balconies would not be possible because they could not accommodate a wheelchair, although many such balconies have been designed and built in Ontario.

Lastly, the Applicant concluded by stating that the Respondent's position was based on a much too literal reading of the OBC. This has led to an interpretation of the Code that ignores the intent behind the said provisions. For the reasons stated above, he believes that the intent of OBC 3.3.1.7. and 3.8.2.1.(3) does not require all balconies, including those in dispute, to be barrier-free, only those that intended as areas of refuge.

6. **Respondent's Position**

The Respondent submitted that all balconies are required to be barrier-free. In his view, the Code is quite clear. Sentence 3.8.2.1.(3) explicitly states that dwelling units that have balconies must have a doorway with a clear width of at least 800 mm (2 ft, 7 in), and that no projection above the walking surface be more than 13 mm. In other words, there can be no curb or upstand at the threshold. He argued that, as an enforcement official, he must rely on the plain meaning of the provisions as set down in the OBC. As a result, he believes that Sentence 3.8.2.1.(3) requires the subject balconies to be barrier-free.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the requirements of Sentence 3.8.2.1.(3) of the Building Code apply only with respect to balconies provided to satisfy Sentence 3.3.1.7.(7) of the Building Code.

8. **Reasons**

1) The introduction of the requirements in Sentence 3.8.2.1.(3) for balcony access was based on the 1995 NBC change series which clearly limits the application of balcony access to Article 3.3.1.7., "Protection on Floor Areas With a Barrier-Free Path of Travel."

2) The application of Sentence 3.8.2.1.(3) to all balconies would be contradictory to Clause 3.8.2.1.(2)(k) which exempts barrier free access within suites of residential occupancy.

3) Editorial changes to Sentence 3.8.2.1.(1) and Sentence 3.3.1.7.(7) are required for clarification purposes.

4) The Commission reviewed Appendix A to the Building Code under Sentence 3.8.2.1.(2) for direction on the intent of the code, which is consistent with the decision.

5) It is the assessment of the Building Code Commission that the intent of the Building Code in reviewing all evidence presented is that Sentence 3.8.2.1.(3) applies only to balconies used as required in Article 3.3.1.7.

Dated at Toronto this 12th day in the month of January in the year **1999** for application number **1998-69.**

BCC Ruling No. 99-01-657

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-01-657

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.8.2.1.(3). of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Tim Gorley, Project Manager, Page + Steele Architects Planners, Toronto, Ontario, for the resolution of a dispute with Mr. Yaman Uzumeri, Chief Building Official, City of Toronto, Ontario to determine whether the proposed dwelling unit balconies, which are not intended as areas of refuge, are required to be barrier-free when considering Sentence 3.8.2.1.(3) of the Ontario Building Code at 550 Queen's Quay West, Toronto, Ontario.

APPLICANT

Mr. Tim Gorley, Project Manager
Page + Steele Architects Planners
Toronto, Ontario

RESPONDENT

Mr. Yaman Uzumeri
Chief Building Official
City of Toronto

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF HEARING

January 12, 1999

DATE OF RULING

January 12, 1999

APPEARANCES

Mr. Allan Larden, Principal
Larden Muniak Consulting Inc.
Toronto, Ontario
For the Applicant

Mr. Wade Tam
Building Engineer
City of Toronto
For the Respondent

RULING

1. **The Applicant**

   Mr. Tim Gorley, Project Manager, Page + Steele Architects Planners, 95 St. Clair Avenue West, Toronto, Ontario, has applied for a building permit under the *Building Code Act, 1992* to construct a 12 storey, residential condominium building at 550 Queens Quay West, Toronto, Ontario.

2. **Description of Construction**

   The Applicant is proposing to construct a new 12 storey, Group C - Residential condominium structure, with a building area of 2,148 m^2. The building is to be constructed of noncombustible construction, and will be equipped with a fire alarm system, a standpipe and hose system, but not a sprinkler system.

   The exterior balconies of the subject building are proposed to be built with a curb or upstand at the threshold of the doorway. The balconies are not intended as areas of refuge, therefore the Applicant does not intend to make them barrier-free.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed dwelling unit balconies, which are not intended as areas of refuge, are required to be barrier-free when considering Sentence 3.8.2.1.(3) of the Ontario Building Code. In other words, the issue centres on whether this provision applies only to balconies that are built specifically to meet the barrier-free path of travel fire protection requirements of the 1997 OBC, in particular Article 3.3.1.7., or whether it applies to all dwelling unit balconies, including those in the subject building. If the latter is found to be the interpretation of the Code, modifications to the balconies would be necessary.

4. **Provisions of the Building Code**

Article 3.3.1.7. Protection on Floor Areas With a Barrier-Free Path of Travel

(1) Except as provided in sentences (2) and (3), every floor area above or below the first storey that has a barrier-free path of travel shall

(a) be served by an elevator

(i) conforming to Sentences 3.2.6.9.(4) to (6),

(ii) protected against fire in conformance with Clauses 3.2.6.9.(3)(b) or (c), and

(iii) in a building over 3 storeys in building height, protected against smoke movement so that the hoistway will not contain more than 1% by volume of contaminated air from a fire floor during a period of 2 h after the start of a fire, assuming an outdoor temperature equal to the January design temperature on a 2.5% basis determined in conformance with Subsection 2.5.1., or

(b) be divided into at least 2 zones by fire separations conforming to Sentences (4), (5) and (6) so that

(i) persons with physical disabilities can be accommodated in each zone,

(ii) the travel distance from any point in one zone to a doorway leading to another zone shall be not more than the value for travel distance permitted by Sentence 3.4.2.5.(1) for the occupancy classification of the zone, and

(iii) a barrier-free path of travel is provided to an exit.

(2) In residential occupancies, the requirements of Sentence (1) are waived if a balcony conforming to Sentence (7) is provided for each suite, except for suites on the storey containing the barrier-free entrance described in Article 3.8.1.2.

(3) The requirements of Sentences (1) and (2) are waived when the building is sprinklered.

Sentence 3.8.2.1.(3)Areas requiring Barrier-Free Path of Travel

(3) Where a balcony is provided in a dwelling unit, access shall be provided to the balcony

(a) by a doorway with a clear width of not less than 800 mm (2 ft 7 in) when the door is in the open position, and

(b) such that no projection above the walking surface is more than 13 mm (« in).

5. **Applicant's Position**

The Applicant submitted that Sentence 3.8.2.1.(3) of the OBC is not applicable to all residential unit balconies, it is only meant for balconies which are designed with the intention of satisfying the requirements of Article 3.3.1.7.

In his view, Sentence 3.8.2.1.(3) and Article 3.3.1.7. should be considered together, not in isolation, since the two provisions are integrally linked. As the Applicant noted, Article 3.3.1.7. mandates a requirement for certain fire protection measures on floor areas with a barrier-free path of travel. This provision, however, offers several compliance options. These are; to provide a firefighters' elevator [3.3.1.7.(1)(a)], to subdivide the floor area with fire separations [3.3.1.7.(1)(b), to provide a balcony that can act as a fire refuge [3.3.1.7.(2)], or to sprinkler the building [3.3.1.7.(3)]. Sentence 3.8.2.1.(3), the Applicant argued, simply followsfrom the compliance choice found in Sentence 3.3.1.7.(2) and sets out a specific standard detailing the construction of a balcony that has been designed as a method of conforming to the general requirement for fire protection on floor areas with a barrier-free path travel. He stressed that Sentence 3.8.2.1.(3) should not be viewed as a stand alone requirement dictating the design of balconies that are not intended as barrier-free areas of refuge.

The Applicant argued that his interpretation of Sentence 3.8.2.1.(3) and Article 3.3.1.7. are based on the historical development of these particular Code provisions in both the National Building

Code (NBC) and the OBC. He presented an historical overview of the development of these provisions.

By way of background, the Applicant discussed the lack of clarity in the 1990 versions of the NBC and OBC that surrounded the issue of accessibility to balconies that were intended as areas of refuge. The problem, as the Applicant described it, was that the subject balconies were built large enough to accommodate wheelchairs, but that the curb constructed at the threshold to the balcony did not allow for wheelchair access. The 1995 NBC attempted to address this by modifying its Clause 3.3.1.7.(5)(a) to stipulate that a balcony had to provide "direct barrier-free access from the suite or floor area". While not providing precise construction standards, the Applicant noted that this provision did require that the balconies referred to in that Article had to be accessible.

When Ontario modified its Building Code in 1997, it chose not to amend Article 3.3.1.7., instead, partly due to its attempt to consolidate the barrier-free requirements, Ontario chose to modify Article 3.8.2.1. (found within Section 3.8, Barrier-Free Design) by adding a new Sentence (3). This Sentence also required access to the balcony and, in fact, went further by including precise construction requirements. The obvious intent behind this revision to the OBC, the Applicant argued, was to follow the NBC lead in developing provisions to help clarify Article 3.3.1.7. regarding balcony access, the main difference being that the OBC clarification change was made specifically to the section regarding barrier-free standards. Unfortunately, the Applicant indicated, the OBC change did not cross-reference Article 3.3.1.7. as the NBC change had done.

The Applicant also presented evidence in the form of a statement from the Chair of the 1997 Barrier-Free OBC Committee indicating that the members on that panel did not anticipate that their discussions and considerations of Sentence 3.8.2.1.(3) were intended to apply to balconies that were not designed as areas of refuge.

The Applicant also argued that it was not the intention to amend the OBC to require universal balcony accessibility because a new change of that magnitude would have gone through an extensive consultation process. This issue had no consultation, and was not discovered by Code users until after the 1997 OBC came into effect.

The Applicant asserted that many practical problems would arise if the Respondent's interpretation concerning barrier-free accessibility to all balconies was correct. Specifically, without a curb at the threshold water penetration would likely occur. In turn, this wouldcause

difficulties for condominium owners/tenants and would probably result in lawsuits and/or claims with designers, builders and the New Home Warranty Program. Design solutions to deal with water penetration are problematic and expensive, he indicated.

The 13 mm (1/2 in) allowable difference between interior and exterior grades causes other problems too. Floor finishes, for example, must be restricted to thin materials only, otherwise the 13 mm restriction will be exceeded. As well, considering usual construction tolerances, the Applicant noted that a 13 mm variation between grades is difficult to achieve. Having no sizeable threshold also causes difficulties regarding installation of baseboard heating elements. Finally, if all balconies must meet the standards for accessibility, the Applicant pointed out that smaller balconies would not be possible because they could not accommodate a wheelchair, although many such balconies have been designed and built in Ontario.

Lastly, the Applicant concluded by stating that the Respondent's position was based on a much too literal reading of the OBC. This has led to an interpretation of the Code that ignores the intent behind the said provisions. For the reasons stated above, he believes that the intent of OBC 3.3.1.7. and 3.8.2.1.(3) does not require all balconies, including those in dispute, to be barrier-free, only those that intended as areas of refuge.

6. **Respondent's Position**

The Respondent submitted that all balconies are required to be barrier-free. In his view, the Code is quite clear. Sentence 3.8.2.1.(3) explicitly states that dwelling units that have balconies must have a doorway with a clear width of at least 800 mm (2 ft, 7 in), and that no projection above the walking surface be more than 13 mm. In other words, there can be no curb or upstand at the threshold. He argued that, as an enforcement official, he must rely on the plain meaning of the provisions as set down in the OBC. As a result, he believes that Sentence 3.8.2.1.(3) requires the subject balconies to be barrier-free.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the requirements of Sentence 3.8.2.1.(3) of the Building Code apply only with respect to balconies provided to satisfy Sentence 3.3.1.7.(7) of the Building Code.

8. **Reasons**

1) The introduction of the requirements in Sentence 3.8.2.1.(3) for balcony access was based on the 1995 NBC change series which clearly limits the application of balcony access to Article 3.3.1.7., "Protection on Floor Areas With a Barrier-Free Path of Travel."

2) The application of Sentence 3.8.2.1.(3) to all balconies would be contradictory to Clause 3.8.2.1.(2)(k) which exempts barrier free access within suites of residential occupancy.

3) Editorial changes to Sentence 3.8.2.1.(1) and Sentence 3.3.1.7.(7) are required for clarification purposes.

4) The Commission reviewed Appendix A to the Building Code under Sentence 3.8.2.1.(2) for direction on the intent of the code, which is consistent with the decision.

5) It is the assessment of the Building Code Commission that the intent of the Building Code in reviewing all evidence presented is that Sentence 3.8.2.1.(3) applies only to balconies used as required in Article 3.3.1.7.

Dated at Toronto this 12th day in the month of January in the year **1999** for application number **1998-68.**

BCC Ruling No. 98-51-656

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-51-656

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.4.4.4.(6). of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Stephen Martin, Project Manager, Colonnade Development Inc., Nepean, Ontario, for the resolution of a dispute with Ms. Terry Dalkowski, Chief Building Official, City of Nepean, Ontario to determine whether the proposed installation of a security desk in a lobby area leading to an exit provides sufficiency of compliance with Sentence 3.4.4.4.(6) of the Ontario Building Code at 9 Auriga Drive, Nepean, Ontario.

APPLICANT

Mr. Stephen Martin, Project Manager
Colonnade Development Incorporated
Nepean, Ontario

RESPONDENT

Ms. Terry Dalkowski
Chief Building Official
City of Nepean

PANEL

Mr. Roy Philippe (Chair)
Mr. Susan Friedrich
Mr. Cliff Youdale

PLACE

Toronto and Ottawa, Ontario

DATE OF HEARING

December 15, 1998

DATE OF RULING

December 15, 1998

APPEARANCES

Mr. Marc Letellier, Principal
Callahan Potter Letellier
Design Consultants Inc.
For the Applicant

Mr. Frank Bidin
Manager of Permits
City of Nepean
For the Respondent

RULING

1. **The Applicant**

   Mr. Stephen Martin, Project Manager, Colonnade Development Incorporated, 1 Antares Drive, Nepean, Ontario , has applied for a building permit under the *Building Code Act, 1992* to renovate the interior of an existing, two storey office building at 9 Auriga Drive Nepean, Ontario.

   1. **Description of Construction**

      The Applicant is proposing to renovate the interior of a two storey structure, classified as having a Group D - Business occupancy, with a building area of 1,420 m^2. The existing building is constructed of noncombustible construction, with non-rated fire separations. The structure is equipped with a fire alarm system, but the building is not sprinklered.

      Currently, the main entrance to the building an existing two storey lobby. A portion of the second floor, including the second storey elevator lobby and its connecting corridor , is open to the two storey lobby. This second floor area is described as a mezzanine within the two storey lobby. There are two rooms with one door each that open directly into the

second floor mezzanine. The remainder of the second floor is separated from the subject lobby by either glass or unrated partitions. An unenclosed stair at the south-east corner of the lobby, located opposite to the elevator, connects to the mezzanine area to the lobby.

Proposed for the ground floor of the lobby is a security control console to be constructed of fire-resistant materials, that would also act as a reception area.

There are two enclosed exit stairs. One stair is located at the west end of the building and it exits directly to the outside. The other exit stairs are located almost adjacent to the open stairs in the lobby. The entrance to the top of these stairs is from the open corridor, or mezzanine, on the second floor. At the bottom of the stairs, the path of egress leads through the south end of the lobby where the ground floor elevator lobby faces the bottom of the open stairs. From there egress is obtained by heading north past the security and reception areas to the centre exit doors.

The Applicant intends to use this front entrance two storey lobby, in conjunction with the enclosed centre stairs, as one of the two required exits from both floors areas.

2. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed installation of the subject security console in the existing two storey exit lobby, provides sufficiency of compliance with Sentence 3.4.4.4.(6) of the Ontario Building Code. Specifically, this provisions requires that exits, including the exit lobby of the subject building, be designed only for exiting. By installing a security desk in the exit lobby, the Applicant would, in effect, be using the lobby as a security area.

3. **Provisions of the Building Code**

Article 3.4.4.4.(6) Integrity of Exits

(6) An exit shall be designed for no purpose other than for exiting, except that an exit is permitted also to be designed to serve as an access to a floor area.

4. **Applicant's Position**

The Applicant submitted that the proposed design of the two storey lobby serving as exit route for the central stairs provides sufficiency of compliance with the relevant provisions

of the OBC. He noted at the outset that the disputed exit shafts and the lobby have remained as they existed prior to the proposed renovation, except for the intended addition of the security area.

The Applicant disputed that fire separations were necessary for the ground floor of the lobby as per OBC 3.4.4.2.(2)(e). He argued that the lobby area, at 69.7 m^2 (750 ft^2) and two storeys in height, is a large "smoke separated" space which, in the unlikely event that a fire were to occur, the second storey portion of the lobby could contain enough smoke that occupants of the building could exit safely. The Applicant did, however, accept the suggestion that a fire separation with a one fire-resistance rating could be constructed on the second floor of the lobby's north wall. This would effectively prevent the spread of smoke in the lobby from entering into areas on the second floor via the mezzanine and would also protect the egress route for the central stairs.

Regarding the issue of the security desk/reception area, or the integrity of the exit, the Applicant argued that since the entire building is occupied by a single tenant, the lobby area acts as the main entrance into the tenant's space. It is here, in clear view of the main entrance, where security is necessary. In his view, this is a more appropriate location, not in a room off one side of the lobby.

The desk itself, which is to be built of fire-resistant materials, he described as a control system equipped with some computer hardware. Overall, there would be very little fire load in this room. Further, as a security area it would be occupied by at least one security staff person 24 hours a day. The Applicant noted that the on-duty security staff would monitor the control panels, as well as operating as the warden responsible for initiating fire emergency and evacuation procedures.

For the above reasons, the Applicant concluded by stating that the proposed installation of a security desk in the building's exit lobby provides sufficiency of compliance with Article 3.4.4.4.(6).

5. **Respondent's Position**

The Respondent submitted that the use of the lobby as a security/reception area does not comply with certain provisions found in OBC Articles 3.4.4.2. and 3.4.4.4. They argued that as the subject lobby is an exit lobby, acting as an egress route for the central stairs, Clause 3.4.4.2.(2)(e) is applicable. This provision states that the lobby must conform to

the requirements for an exit found in Articles 3.4.4.2. and 3.4.4.4. In particular, the Respondent noted that Subclause 3.4.4.2.(2)(e)(ii) expressly requires control and supervision rooms to be separated from the lobby by a non-rated separation. Conversely, they pointed out that if such a room was located in the lobby then it must be an area exempt from a fire-resistance rating requirement, but this is not the case in the subject lobby.

As far as the installation of the security console in the lobby, the Respondent noted that Sentence 3.4.4.4.(6) does not permit anything other than exiting or access to a floor area in an exit lobby. Among the problems caused by this proposal, according to the Respondent, is the increase in fire load from the furniture and computer equipment in the lobby. Another issue is the proposed staffing of the security desk to monitor for possible occurrences of fire, i.e. the proposed "fire watch". As far as they are concerned, the staffing of the security desk to provide a "fire watch" does not exempt the building from the other relevant requirements. Even if they viewed the "fire watch" as an equivalent, the Respondent noted that they do not have the power to bind the Applicant to a continuous provision of such supervision. Because the building is equipped with a fire alarm system that provides early warning to occupants, they disputed that a "fire watch" would make the building safer in terms of fire protection.

6. **Commission Ruling**

It is the decision of the Building Code Commission that the installation of the security desk in the lobby provides sufficiency of compliance with Article 3.4.4.4.(6) of the Building Code provided the lobby is separated at the second floor by a separation having a one hour fire resistance rating along the north wall.

7. **Reasons**

i) The control desk shall be the only furniture permitted in the space.

ii) The control desk is staffed and monitored 24 hours a day.

iii) The Building Code under Article 3.4.4.2.(2)(c) permits occupancies opening onto a lobby.

iv) The lobby is permitted to be used as an exit under Article 3.4.4.2.

v) The fire separation on the second floor improves the exit design.

Dated at Toronto this 15th day in the month of December in the year **1998** for application number **1998-61.**

BCC Ruling No. 98-50-655

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-50-655

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.2.9.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Allan Schutten, President, 1201068 Ontario Inc., Stoney Creek, Ontario, for the resolution of a dispute with Mr. Henry Dekker, Chief Building Official, City of Stoney Creek, Ontario to determine whether the proposed steel shearing and warehouse facility, with an area of 5,870.68 m^2, that is not equipped with a standpipe and hose system, provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code at the Janco Steel Plant, 925 Arvin Avenue, Stoney Creek, Ontario.

APPLICANT

Mr. Allan Schutten, President
1201068 Ontario Inc.
Stoney Creek, Ontario

RESPONDENT

Mr. Henry Dekker
Chief Building Official
City of Stoney Creek

PANEL

Mr. Roy Philippe (Chair)
Mr. Susan Friedrich
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF HEARING

December 15, 1998

DATE OF RULING

December 15, 1998

APPEARANCES

Mr. Nick Vanden Oever, President
Quarrystone Construction Ltd.
Beamsville, Ontario
For the Applicant

Mr. Ned Mijatovic
Plans Examiner
City of Stoney Creek
For the Respondent

RULING

1. **The Applicant**

   Mr. Allan Schutten, President, 1201068 Ontario Ltd., has applied for a building permit under the *Building Code Act, 1992* to construct a new steel shearing and warehouse facility at the Janco Steel Plant, 925 Arvin Avenue, Stoney Creek, Ontario.

2. **Description of Construction**

   The Applicant is proposing to construct a new, one storey steel shearing and warehouse structure with an area of 5,870.68 m^2, which includes 466.26 m^2 of office space. The building is of noncombustible construction and is equipped with a fire alarm system, but not a sprinkler system, nor a standpipe and hose system. The structure is classified as a Group F, Division 3 - Low Hazard Industrial occupancy.

The plant is to be used in the production of rolled steel, specifically plates and coils. It will also be used for the storage of the material produced in the plant, as well as similar material produced elsewhere.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed steel shearing and warehouse facility, with an area of 5,870.68 m2 that is not equipped with a standpipe and hose system, provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code. Specifically, Article 3.2.9.1. requires that a building with an F3 occupancy exceeding 3,000 m^2 must be equipped with a standpipe and hose system. The steel plant proposed is 5,870.68 m^2 in building area. The Applicant has, however, proposed an alternative system of fire protection and detection.

4. **Provisions of the Building Code**

Article 3.2.9.1.

(1) Except as provided in Sentences (4) to (7), a standpipe system shall be installed in every building that

(a) is more than 3 storeys in building height

(b) is more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey, or

(c) is not more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the to storey but has a building area exceeding the area shown in Table3.2.9.1. for the applicable building height if the building is not sprinklered.

5. **Applicant's Position**

The Applicant submitted that a standpipe and hose system may not be appropriate for the proposed building because it will be constructed entirely of noncombustible materials, such as concrete and steel. The material stored in the warehouse, steel coils and plates, is also not combustible. Only the limited material used to space the steel plates and hold the coils in place are combustible, the Applicant noted. Even the handling and shearing equipment, which is

operated by electric motors and a propane-powered tow motor, could only cause a very localized fire.

The Applicant argued, in fact, that the steel plates and coils stored in the plant would be more severely damaged by water used for fire fighting purposes than by the heat created by any localized fire. He was also concerned about accidental breakage of water pipes due to pipe rupture, etc. In fact, the Applicant stated that any uncontrolled introduction of water into the plant's manufacturing and storage areas would be catastrophic and would render the steel worthless.

In terms of providing sufficiency of compliance for the proposed omission of a standpipe and hose system, the Applicant is proposing three compensating measures. The first measure the Applicant intends to provide is a fire alarm system that includes heat detection devices, bells, pull stations and a system monitoring panel that is interconnected to the security system.

The second compensating measure that the Applicant is providing an access route around the entire plant for fire fighting purposes. He also noted that there is an adequate water supply to the site since there are two fire hydrants on the property, one located on each front corner of the lot. As well, there is a local fire hall only 4 to 5 minutes away.

The third measure proposed by the Applicant is a fire suppression system provided by a series of ABC type portable extinguishers ranging in size from a 1/2 lb. to 20 lbs., with one 15 lb. CO_2 fire extinguisher located at the plant's electrical area. The ABC fire extinguishers would be placed in the office area, the plant's overhead door, the shearing machine area, in each crane, in the tow motor, and around the perimeter of the plant at 29 m spaced intervals. He noted that even the areas that had a small potential for fire, such as the motors, are equipped with their own fire extinguishers for additional safety. The staff at the plant would also be trained to check, service and use the fire extinguishers, as well as perform other fire procedures.

The Applicant asserted that their alternative fire safety measures provide sufficiency of compliance with OBC Article 3.2.9.1. In his view, these three compensating measures, the fire alarm system, the fire fighting access routes, and the extinguishers and employee safety plan, compensate for not providing a standpipe and hose system.

6. **Respondent's Position**

The Respondent submitted that as an F3 occupancy with a building area of 5,870.68 m^2, the proposed structure is required to have a standpipe and hose system in accordance with Article 3.2.9.1. of the OBC. He indicated, however, that he does not object to the Applicant's alternative fire protection and detection system. Nevertheless, he stated that he does not have the jurisdiction to allow such a variation from the Building Code.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the Janco Steel Plant building at 925 Arvin Avenue in Stoney Creek provides sufficiency of compliance with Article 3.1.9.1. of the Building Code provided that

i) A fire alarm system conforming to Section 3.2.4. of the Building Code is installed and connected to a central monitoring station.

ii) Fire department access routes are provided around the permiter of all building faces.

iii) Portable extinguishers are installed as proposed.

iv) The exemption of a standpipe and hose system is registered on title for this use only.

8. **Reasons**

i) The fire alarm system will provide early warning and central monitoring will provide notification to the Fire Department which are located within a 4-5 minute response time.

ii) The fire access routes which are not required for a building for this size will facilitate access to the whole building.

iii) A fire safety plan will be provided outlining the responsibilities of trained employees in use of fire extinguishers.

iv) Any change in use requires reconsideration of this exemption, as it is registered on title.

Dated at Toronto this 15th day in the month of December in the year **1998** for application number **1998-60.**

BCC Ruling No. 98-49-654

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-49-654

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Subsection 9.29.2. of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Neil Husband, Homeowner, R.R. # 4, Orangeville, Ontario, for the resolution of a dispute with Mr. Michael Giles, Chief Building Official, County of Dufferin, to determine whether the non-water resistant drywall, as installed, in the main bathroom and the master bedroom ensuite washroom provides sufficiency of compliance with Subsection 9.29.2. of the Ontario Building Code at R.R. # 1 (20 Station Street), Grand Valley (Amaranth Twp), Ontario.

APPLICANT

Mr. Neil Husband
Homeowner
R.R. # 4
Orangeville, Ontario

RESPONDENT
Mr. Michael Giles
Chief Building Official
County of Dufferin

PANEL

Mr. Roy Philippe (Chair)
Mr. Susan Friedrich
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF HEARING

December 15, 1998

DATE OF RULING

December 15, 1998

APPEARANCES

Mr. Neil Husband
Homeowner
Orangeville, Ontario
The Applicant

Mr. Michael A. Giles
Chief Building Official
County of Dufferin, Ontario
The Respondent

RULING

1. **The Applicant**

   Mr. Neil Husband, Homeowner, R.R. # 4, Orangeville, Ontario, is the holder of a building permit issued on August 25, 1998 under the *Building Code Act, 1992* to complete a series of interior and exterior repairs and renovations at R.R. # 1 (20 Station Street), Grand Valley (Amaranth Twp.), Ontario.

2. **Description of Construction**

   The Applicant is the owner of a three storey single-detached dwelling constructed in 1987 of combustible construction. This house has been the subject of a series of interior and exterior finished repairs and renovations, including changes to the main bathroom and master bedroom ensuite washroom. A non-water resistant type of gypsum wallboard was installed in the main bathroom and master bedroom washroom when that house was constructed in approximately 1987. These areas were then finished with a Bar ker product (a completely moisture resistant decorative wall panel).

The repairs that were undertaken in the main bathroom and master bedroom washroom were limited to recaulking of joints and repainting of the walls and the replacement of a small patch of damaged drywall. The gypsum wallboard installed in the main bath room and master bedroom washroom was not replaced with a water resistant gypsum wallboard at the time that repairs were being made to moisture damaged areas.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the repairs that were undertaken in the bathroom areas including keeping the non-water resistant drywall, as installed, in the main bathroom and the master bedroom ensuite washroom provides sufficiency of compliance with Subsection 9.29.2. of the Ontario Building Code at R.R. # 1 (20 Station Street), Grand Valley (Amaranth Twp), Ontario.

4. **Provisions of the Building Code**

Article 9.29.2 Waterproof Wall Finish

9.29.2.1. Where Required

(1) Waterproof finish shall be provided to a height of not less than

(a) 1 800 mm (5 ft 11 in) above the floor in shower stalls

(b) 1 200 mm (3 ft 11 in) above the rims of bathtubs equipped with showers, and

(c) 400 mm (15 3/4 in) above the rims of bathtubs not equipped with showers.

Article 9.29.2.2. Materials

(1) Waterproof finish shall consist of ceramic, plastic or metal tile, sheet vinyl, tempered hardboard, laminated thermosetting decorative sheets or linoleum.

5. **Applicant's Position**

The Applicant submitted that the Ontario Building Code requires that moisture resistant drywall be used where it provides a base for the wall finish around bathtubs and showers. In order to resolve an outstanding dispute with the municipality, the Applicant understood that repairs

would be done to the bathroom to bring it into compliance with the Building Code requirements for new construction. When repairs were done in the main bathroom and in the master bedroom washroom around the bathtubs and showers, however, an acceptable waterproof finish was not achieved because regular gypsum wallboard was maintained rather than replaced with a moisture resistant drywall, the Applicant argued.

6. **Respondent's Position**

The Respondent submitted that the building is over 5 years old, Part 11 of the Ontario Building Code would apply to the work carried out in the subject bathrooms. Notwithstanding, the Respondent stated that the only work performed in the main bathroom was recaulking of the joints and repainting of the walls, and therefore no material alterations were done in the main bathroom areas. He argued that the master bedroom washroom was repaired with a tempered hardboard product that meets the requirements of Part 11.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the drywall backing installed in the main bathroom and master ensuite washroom provides sufficiency of compliance with Article 9.29.2. of the Building Code.

8. **Reasons**

i) The tempered hardboard finish does not require water resistant drywall backing as it is considered a water resistant finish under Article 9.29.2.2.

ii) Water resistant Drywall backing is required where ceramic or plastic tiles are used only under Article 9.29.10.4.

Dated at Toronto this 15th day in the month of December in the year **1998** for application number **1998-57.**

BCC Ruling No. 98-48-653

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-48-653

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.2.9.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Neil Husband, Homeowner, R.R. # 4, Orangeville, Ontario, for the resolution of a dispute with Mr. Michael Giles, Chief Building Official, County of Dufferin, to determine whether the natural and mechanical ventilation systems, as constructed, provide sufficiency of compliance with Subsections 9.32.2. and 9.32.3. respectively of the Ontario Building Code at R.R. # 1 (20 Station Street), Grand Valley (Amaranth Twp), Ontario.

APPLICANT

Mr. Neil Husband
Homeowner
R.R. # 4
Orangeville, Ontario

RESPONDENT

Mr. Michael Giles
Chief Building Official
County of Dufferin

PANEL

Mr. Roy Philippe (Chair)
Mr. Susan Friedrich
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF HEARING

December 15, 1998

DATE OF RULING

December 15, 1998

APPEARANCES

Mr. Neil Husband
Homeowner
Orangeville, Ontario
The Applicant

Mr. Michael A. Giles
Chief Building Official
County of Dufferin, Ontario
The Respondent

RULING

1. **The Applicant**

   Mr. Neil Husband, Homeowner, R.R. # 4, Orangeville, Ontario, is the holder of a building permit issued on August 25, 1998 under the *Building Code Act, 1992* to complete a series of interior and exterior repairs and renovations at R.R. # 1 (20 Station Street), Grand Valley (Amaranth Twp.), Ontario.

2. **Description of Construction**

   The Applicant is the owner of a three storey single-detached dwelling constructed in 1987 of combustible construction. This house has been the subject of a series of proposed renovations and repairs, including structural repairs (foundation, removing exterior cladding replacing wall sheathing, repairing AVB, replacing studs, installing missing tentest, reapplying exterior cladding, installing missing collar ties, etc.) and the upgrading of an existing ventilation system for the entire building. A permit was issued on July 8, 1998, to repair foundation and structural defects, including concerns about the adequacy of ventilation for this dwelling unit.

When the house was constructed, there was apparently no natural or mechanical ventilation in the unfinished basement space.

As part of the renovation, a new 110 CFM exhaust fan has been installed in the main washroom with a switch centrally located and identified as a ventilation fan. There are also two exhaust fans located in the lower powder room and master bedroom ensuite of 50 CFM each. There is also a range hood in the kitchen of 170 CFM.

Doors have been undercut to promote air movement throughout the dwelling unit when the fan system is in use.

There have also been four 102 mm (4 in) by 254 mm (10 in) grills installed between the unfinished basement and crawl space to provide air movement from the heated crawl space.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the natural and mechanical ventilation systems, as constructed, provide sufficiency of compliance with Subsections 9.32.2. and 9.32.3. respectively of the Ontario Building Code at R.R. # 1 (20 Station Street), Grand Valley (Amaranth Twp), Ontario.

4. **Provisions of the Building Code**

Subsection 9.32.1.General

Article 9.32.1.2Mechanical Ventilation for Dwelling Units

(1) Every *dwelling unit* that is supplied with electrical power shall be provided with a mechanical ventilation system in accordance with Subsection 9.32.3.

(See A-9.32.3. in Appendix A.)

Article 9.32.1.3Ventilation of Rooms and Spaces

(1) Except as permitted in Sentence (2), rooms or spaces in *a dwelling unit* shall be ventilated by natural means in accordance with Subsection 9.32.2.

(2) The natural ventilation of rooms or spaces required in Sentence (1) may be provided by mechanical means.

(3) Where a room or space is not provided with natural ventilation as described in Sentence (1), mechanical ventilation shall be provided to exhaust inside air from or to introduce outside air to that room or space at the rate of onehalf air change per hour if the room or space is mechanically cooled in summer, and one air change per hour if it is not.

Subsection 9.32.2. Natural Ventilation

Sentence 9.32.2.1.(1)Natural Ventilation Area

(1) The unobstructed openable ventilation area to the outdoors for rooms and spaces in residential buildings ventilated by natural means shall conform to Table 9.32.3.1.

Article 9.32.2.2.Protection From Weather and Insects

(1) Openings for natural ventilation other than windows shall be constructed to provide protection from the weather and insects.

(2) Screening shall be of rustproof material.

Subsection 9.32.3.Mechanical Ventilation

Sentence 9.32.3.2Required Mechanical Ventilation

(1) The mechanical ventilation system required in Article 9.32.1.2. shall comply with

(a) Part 6, or

(b) this Subsection for a mechanical ventilation system in a Type I, Type II or Type IV *dwelling unit*.

5. **Applicant's Position**

The Applicant submitted that the ventilation system should perform to comply with the requirements of a system serving the entire building under Article 2.1.1.7. of the Ontario Building Code. This is based on the fact that, where an existing building is subject to material alteration or repair, the 1997 OBC is applicable to the design and construction of the extensions

and those parts of the building that are subject to the material alteration or repair. This includes: requiring all rooms or spaces in a dwelling to have either natural or mechanical ventilation; unobstructed openable ventilation in unfinished basement space; protection of naturally ventilated spaces from weather and insects; requiring a heat recovery ventilator; a fresh air exchange rate of 0.3 air changes per hour; a system that resists the growth of micro-organisms.

6. **Respondent's Position**

The Respondent submitted that since this building is over 5 years old, Part 11 of the Ontario Building Code applies to the proposed work in this building. As a result, the proposed total mechanical ventilation capacity of 380 CFM meets the requirements of Part 11 of the Ontario Building Code to provide adequate mechanical ventilation.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the transfer grills from the crawl space and the mechanical ventilation systems as constructed provide sufficiency of compliance with Section 9.32 of the Building Code.

8. **Reasons**

i) The Commission considers the work carried out, including repair of the kitchen exhaust system, subject to Article 11.3.1.1. of the Ontario Building Code

ii) The Building Code requirements at the time of construction permits air transfer from the crawl space to the adjacent basement as noted in Article 9.18.3.5. (1986 OBC).

iii) The additional ventilation fans provided increase the level of performance of the building.

iv) Methods were taken to mitigate moisture entry into the crawl space as part of the repair work carried out, including the installation of the electric heater.

Dated at Toronto this 15th day in the month of December in the year **1998** for application number **1998-56.**

BCC Ruling No. 98-47-652

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-47-652

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Articles 3.1.9.1. and 3.1.9.4. of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. John Rasenberg, President, J. M. R. Mechanical and Electrical Contractors, Exeter, Ontario, for the resolution of a dispute with Mr. Rocky Cerminara, Chief Building Official, City of London, Ontario to determine whether the proposed installation of combustible piping penetrations through fire separations, with a modified system of fire stopping, in a sprinklered building complies with Articles 3.1.9.1. and 3.1.9.4. of the Ontario Building Code at the Student Residence, Fanshawe College, London, Ontario.

APPLICANT

Mr. John Rasenberg
President
J. M. R. Mechanical and Electrical Contractors
Exeter, Ontario

RESPONDENT

Mr. Rocky Cerminara
Chief Building Official
City of London

PANEL

Mr. Roy Philippe (Chair)
Mr. Doug Clancey
Mr. Lawrence Glazer

PLACE

Toronto, Ontario

DATE OF HEARING

December 3, 1998

DATE OF RULING

December 3, 1998

APPEARANCES

Mr. Mike Speziale
Market Manager
IPEX Inc.
For the Applicant

RULING

1. **The Applicant**

   Mr. John Rasenberg, President, J. M. R. Mechanical and Electrical Contractors, has applied for a building permit under the *Building Code Act, 1992* for a portion of the construction of a new, six storey student residence building at Fanshawe Coll ege, London, Ontario.

2. **Description of Construction**

   The Applicant is involved in the construction of a new, Group C - residential (student residence) building. The structure is described as six stories, 13,020 m^2 (140,095.2 ft^2) in area. The building is of noncombustible construction. It is equipped with a sprinkler system, a fire alarm system and a standpipe and hose system.

   As part of the plumbing system, the Applicant is proposing to install combustible pipe throughout the subject sprinklered building, that penetrates fire separations with required fire-resistance ratings, with a modified fire stopping system. Specifically, the Applicant proposes to fill the annular space surrounding the combustible piping with a sealant.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed installation of combustible piping through fire separations, with only the use of a sealant, in the subject building complies with Articles 3.1.9.1. and 3.1.9.4. of the Ontario Building Code. In particular, the dispute centres on the use of fire stop systems as a protective device for combustible pipe and what standards apply to the installation of the proposed fire stopping mechanism.

4. **Provisions of the 1997 Ontario Building Code**

Article 3.1.9.1. Article 3.1.9.4.Combustible Piping Penetrations

(1) Combustible sprinkler piping is permitted to penetrate a fire separation provided the fire compartments on each side of the fire separation are sprinklered.

(2) Reserved

(3) Except as permitted by Sentences (4) to (8), combustible piping shall not be used if any part of that system penetrates

(a) a fire separation required to have a fire-resistance rating, or

(b) a membrane that forms part of an assembly required to have a fire-resistance rating.

(4) Combustible piping is permitted to penetrate a fire separation required to have a fire-resistance rating or a membrane that forms part of an assembly required to have a fire-resistance rating, provided

(a) the piping is sealed at the penetration by a fire stop system that has an F rating not less than the fire-resistance rating required for the fire separation when subjected to the fire test method in CAN4-S115-M, "Standard method of Fire Tests of Firestop Systems", with a pressure differential of 50 Pa (0.007 psi) between the exposed and unexposed sides, with the higher pressure on the exposed side, and

(b) the piping is not located in a vertical shaft.

(5) Combustible drain piping is permitted to penetrate a horizontal fire separation provided it leads directly from a noncombustible water closet through a concrete floor slab.

(6) Combustible piping is permitted on one side of a vertical fire separation provided it is not located in a vertical shaft.

(7) Combustible piping is permitted to penetrate a vertical or horizontal fire separation provided the fire compartments on each side of the fire separation are sprinklered.

(8) Combustible piping not more 25 mm (1 in) in diameter containing chlorine gas is permitted to penetrate a fire separation between a chlorine gas service room built in conjunction with a public pool, and the remainder of the building.

5. **Applicant's Position**

The Applicant submitted that Sentences (5), (6), (7) and (8) of Article 3.1.9.4. provide specific exceptions that permit combustible piping to penetrate a fire separation, but these provisions do not indicate the appropriate standards for fire stopping . In particular, the Applicant noted that Sentence (7) allows combustible piping to penetrate a fire separation with the provision that the fire compartments on both sides of the separation are sprinklered. There is no mention in this Sentence of a requirement to fire stop the combustible pipe penetrations at the separation. It could be argued, he stated, that since the fire compartments were required to be sprinklered, and because sprinklers are engineered systems that are designed to control the propagation of fire either by extinguishment or containment, fire stopping systems, which also act to contain fire, may therefore not be necessary.

The Applicant further stressed this point by discussing Sentences (5), (6) and (8) that also, in his view, seem to allow exceptions to the use of fire stopping systems by way of conforming with other provisions (e.g., penetration of a horizontal separation that directly connects a noncombustible water closet through a concrete floor slab).

Nevertheless, the Applicant agreed that when using combustible piping that penetrates a fire separation, a fire stopping system was required because of other requirements in the OBC. He felt that the Code however was not clear on which standards apply to the necessary fire stopping systems. He noted that no where in Article 3.1.9.4. does it refer to the fire stopping of service penetrations requirements found in Article 3.1.9.1. of the OBC. While Sentence (1) of Article 3.1.9.1. does refer to 3.1.9.4 ., the relationship between the two provisions, seems to be only one way. The Applicant indicated that it would be useful if the Building Code Commission (BCC) provided them with some direction on this point.

The Applicant indicated that it was not their intention to ask the BCC to rule on the sufficiency of compliance of the proposed sealant and whether it would meet the fire stop test requirements found in Clause 3.1.9.1.(1)(b) or Sentence 3.1.9.4.(4), since they were not presenting that evidence to the Commission.

6. **Respondent's Position**

The Respondent party did not attend the hearing, and therefore their written submission, the Building Code Commission's Confirmation of Dispute form, was taken as their only response to this dispute.

On the Confirmation of Dispute form the Respondent submitted that the proposed installation of combustible piping, with the fire stopping system proposed, does not comply with Articles 3.1.9.1. and 3.1.9.4. of the OBC. Their position was that the penetrations of the fire separations by combustible piping should be protected with an approved fire stopping system. While they indicated that they had sympathy for the Applicant's views on the issue, they felt obliged to adhere to the conventional interpretation on the matter, specifically that combustible piping installed under Article 3.1.9.4. must also meet the fire stopping requirements of Article 3.1.9.1.

7. **Commission Ruling**

It is the decision of the Building Code Commission that combustible piping penetrating fire separations as permitted in 3.1.9.4.(7) are required to be fire stopped in accordance with 3.1.9.1. of the Building Code.

8. **Reasons**

i) The combustible piping may penetrate fire separations where compartments on each side of the fire separation are sprinklered, but fire stopping of openings is necessary.

ii) The fire stopping requirements of 3.1.9.1. apply to maintain the integrity of the fire separation.

Dated at Toronto this 3rd day in the month of December in the year **1998** for application number **1998-63.**

BCC Ruling No. 98-46-651

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-46-651

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.4.6.15.(4) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Ronald Gagliardi, President, Venchiarutti Gagliardi Architects Inc.2651 John Street, Unit 1B, Markham, Ontario, for the resolution of a dispute with Mr. Kaz Mosielski, Chief Building Official, City of Kanata, Ontario to determine whether the proposed installation of Electroguard delayed access devices on certain exit doors provides sufficiency of compliance with Sentence 3.4.6.15.(4) of the Ontario Building Code at The Home Depot, 10 frank Highbor Place, Kanata, Ontario.

APPLICANT

Mr. Ronald Gagliardi
President
Venchiaretti Gagliardi Architects Inc.
Kanata, Ontario

RESPONDENT

Mr. Kaz Mosielski
Chief Building Official
City of Kanata

PANEL

Mr. Roy Philippe (Chair)
Mr. Doug Clancey
Mr. Lawrence Glazer

PLACE

Toronto and Ottawa, Ontario

DATE OF HEARING

December 3, 1998

DATE OF RULING

December 3, 1998

APPEARANCES

Ms. Judy Jeske
Leber/Rubes
For the Applicant

Mr. Kaz Mosielski
Chief Building Official
The Respondent

RULING

1. **The Applicant**

   Mr. Ronald Gagliardi, President, Venchiarutti Gagliardi Architects Inc., has received a building permit under the *Building Code Act, 1992* and is currently constructing a new, one storey retail warehouse building to be occupied by The Home Depot at 10 Frank Highbor Place, Kanata, Ontario.

2. **Description of Construction**

   The Home Depot building currently being constructed is one storey, Group E - mercantile occupancy, and is 10,497 m^2 (112,947.72 ft^2) in area. The building is of noncombustible construction. It is equipped with a sprinkler system which is supervised by the fire alarm system. The fire alarm system is monitored and provides direct notification to the local Fire Department.

   The construction of the subject building has reached the stage when finishing details, such as hardware are being installed. The Applicant is proposing to equip the exit doors around the perimeter of the warehouse with Sargent of Canada's electro nically controlled Electroguard delayed egress devices, even though these are not required by the OBC, because of their

potential for reducing theft. These mechanisms are described as an electromagnet built into the crash bar of a panic-style exit device .

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed installation of the subject delayed egress devices provides sufficiency of compliance with Sentence 3.4.6.15.(4) of the Ontario Building Code. Article 3.4.6.15. of the OBC describes the provisions for door release hardware. Specifically, Sentence (4) sets out below the conditions that must be met when installing an electromagnetic locking mechanism that does not include a latching device of some kind. With the particular delayed egress device in dispute, however, a latching mechanism is an integral part of the overall door hardware.

4. **Provisions of the 1997 Ontario Building Code**

Sentence 3.4.6.15.(4) Door Release Hardware

(4) Electromagnetic locks that do not incorporate latches, pins or other similar devices to keep the door in the closed position are permitted to be installed on an exit doors other than doors described in Sentence (5) provided

a)the building is equipped with a fire alarm system conforming to Subsection 3.2.4.,

b)the locking device, and all similar devices in the access to exit leading to the exit door, are installed as ancillary devices to the fire alarm system and release immediately upon activation of

i) the alarm signal where a single stage fire alarm system is installed,

ii) except as provided in Subclause (iii), the alert signal where a 2 stage fire alarm system is installed, or

iii) the alarm signal of a 2 stage fire alarm system installed in a care or detention occupancy

c) the locking device releases immediately upon loss of power to the fire alarm control panel or loss of power to the fire alarm control panel or loss of power controlling the electromagnetic locking mechanism and its associated auxiliary controls,

d) the locking device releases immediately upon actuation of a manually operated switch readily accessible only to authorized personnel and located near the main entrance of the building or in the central alarm and control facility of Sentence 3.2.6.12 .(1).

e) the locking device releases immediately upon a fault being detected in the electrical circuit between the fire alarm control panel and the controller of the locking device,

f) the locking device releases immediately upon the operation of a manual pull station for the fire alarm system located on the wall not more than 600 mm (23 5/8 in) from the door,

g) a legible sign having the words **EMERGENCY EXIT UNLOCKED BY FIRE ALARM** is permanently mounted on the door,

h) the lettering on the sign required in Clause (g) is at least 25 mm (1 in) high with a 5 mm (3/16 in) stroke.

i) upon release, the locking device must be reset manually by the actuation of the switch referred to in Clause (d),

j) the operation of any by-pass switch, where provided for testing of the fire alarm system causes an audible signal and a visual signal to be indicated at the fire alarm annunciator panel and at the monitoring station of Clauses 3.2.4.7.(4)(a), (b) or (c), and

k) emergency lighting is provided at the doors,

5. **Applicant's Position**

The Applicant submitted that the proposed installation of the Electroguard delayed egress devices provides sufficiency of compliance with Sentence 3.4.6.15.(4) of the OBC because it meets the release requirements found in Clauses (b) to (f) of that Sentence. As well, it also complies with Clauses (g) to (k) of Sentence (4), which set out the standards for signage, reset and safety of electromagnetic door hardware. The Applicant also indicated that the delayed egress features of the locking mechanism comply with the requirements found in the NationalBuilding Code. The Electroguard device is ULC listed both as fire exit hardware as well as controlled exit panic hardware.

The Applicant, in describing the Electroguard locking device, noted that a small magnet is located in the bar mechanism which, when armed, or energized, prevents the push pad from

being depressed for 15 seconds. This magnetic locking action is controlled electronically by circuitry contained in the bar. The activation or deactivation of the magnet does not involve the moving of any mechanical pieces such as latches or pins. The latch bolt mechanism, which provides positive locking action, is driven by the push pad itself, not the magnet. The magnet, when armed, simply prevents the bar from being depressed. Any removal of power, the Applicant noted, causes the subject door hardware to revert to a standard panic device (ULC listed), making the locking system fail-safe.

The Applicant noted as well, that the Electroguard device is also equipped with an additional release mechanism that de-energizes the electromagnetic locking assembly after 15 seconds if the panic bar is depressed for more than two seconds continuously . For these reasons, it was the Applicant's position that the electromagnetic lock was a delay device and not a latching mechanism.

By way of comparison, the Applicant claimed that the subject door hardware assembly was similar to that of other exit doors that also include both an electromagnetic lock (typically installed at the top of a door) and positive latching door hardware, but in which the devices are installed in separate locations on the door. They noted that doors with separate latching and electrolocking devices are permitted by the OBC. The Applicant further noted that the Respondent has indicated that they would allow a separate electromagnetic locking device to be installed on a door that is equipped with a latching mechanism. The fact that these two mechanisms are combined within the same panic bar is, in the Applicant's view, the only major difference between the Electroguard door hardware and more conventional doors where the hardware devices are separated.

6. **Respondent's Position**

The Respondent submitted that the proposed installation of the Electroguard electromagnetic locks does not provide sufficiency of compliance with Sentence 3.4.6.15.(4) because this device contains a latching mechanism contrary to the OBC. He argued that the net effect of the latching mechanism would be to keep the door in a closed position and thus would violate the intent behind the "immediate release" clauses in Sentence (4). While the Respondent stated that standard electromagnetic locks can sometimes be found at the top of doors that are installed with separate latching mechanisms located elsewhere on the door, he noted that Sentence 3.4.6.15.(4) specifically prohibits electromagnetic locks that incorporate a latching device. The Respondent also noted that the recently released version of the OBC did not include amendments that would

have permitted these devices. In his view, therefore, the Code still prohibits the use of such devices.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the installation of the Underwriters Laboratory of Canada listed electromagnetic door securing and releasing device provides sufficiency of compliance with Sentence 3.4.6.15.(4) of the Building Code on the exit doors at the Home Depot at 10 Frank Highbor Place, Kanata.

8. **Reasons**

i) The installation will meet the requirements of Article 3.4.6.15.(b) - (k) of the Ontario Building Code.

ii) The device is listed as panic hardware and tested to insure that the electromagnetic device does not interface with the safe operation of the exiting capacity.

iii) The electromagnetic device although incorporated in the hardware operates independently of the exit door hardware. The electro magnetic device is also listed by U.L.C. for that function.

Dated at Toronto this 3rd day in the month of December in the year **1998** for application number **1998-58.**

BCC Ruling No. 98-45-650

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-45-650

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Part 8 and Article 11.4.2.5. of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms.Christine Grant, homeowner, 178 Grandview Road, Nepean, Ontario, for the resolution of a dispute with Ms. Terry Dalkowski, Director of Building City of Nepean, Ontario to determine whether changes to the existing tile field are required as a result of a proposed addition to an existing house in order to achieve sufficiency of compliance with Part 8 and Article 11.4.2.5. of the Ontario Building Code at 178 Grandview Road, Nepean, Ontario.

APPLICANT

Ms. Christine Grant
Homeowner
178 Grandview Road
Nepean, Ontario

RESPONDENT

Ms. Terry Dalkowski
Director of Building
City of Nepean

PANEL

Mr. Roy Philippe (Chair)
Mr. Bryan Whitehead
Mr. Bill Fellner

PLACE

Toronto and Ottawa, Ontario

DATE OF HEARING

November 18, 1998

DATE OF RULING

November 18, 1998

APPEARANCES

Ms. Christine Grant
Homeowner
Nepean, Ontario
The Applicant

Mr. Terry Davidson
Manager, Ottawa-Carleton
Septic System Office
For the Respondent

RULING

1. **The Applicant**

   Ms. Christine Grant, homeowner, has applied for a building permit under the *Building Code Act, 1992* to renovate her existing home by adding a sunroom and a second storey and by remodelling certain existing rooms at 178 Grandview Road, Nepean, Ontario.

2. **Description of Construction**

   The Applicant is proposing to renovate an existing 1 storey, detached, Group C occupancy, dwelling unit which is located near the shore of Lake des Chenes. Her plan is to enlarge her existing house, as well as substantially renovate its interior.In terms of additions to the existing structure, it is the Applicant's intention is to construct a small sunroom located off the kitchen and diningroom and a second floor. The interior renovations consist of transforming the two existing ground floor bedrooms into a family room and storage area. Replacing these would be two new bedrooms built on the second storey. The existing ground floor laundry room would also be moved to the second floor. (A third ground floor bedroom would also be removed.) The renovations, including the addition of a second floor and sunroom, will increase the total finished area in the dwelling to approximately 200 m^2 (2,152 ft^2) from the existing 120.8 m^2 (1,300 ft^2) .

The proposed construction will increase the total fixture units from the current level of 9.5 to 18. The number of bedrooms will be reduced from three to two. The number of people living in the house will not change, it will stay at three.

The Applicant is not proposing any changes or upgrades to her existing sewage system as part of the overall work. The existing system is described as conventional Class 4 sewage treatment facility. It has a 3,600 L (800 gallon) septic tank and transmits effluent to a 91.4 m (300 ft) tile leaching bed by gravity disposal. The leaching bed has six 15 m (50 ft) runs of PVC pipe spaced 0.92 m (3 ft) apart on centre. The pipes are located approximately 60 cm (2 ft) below the surface and are reported to be resting on imported sand and gravel. The existing daily design sanitary sewage flow based on the OBC formula (assuming a 3 bedroom house with less than 20 fixture units) is 1,600 L/day. The septic tank and leaching bed are located at adequate distances from the proposed house.

The soil at the subject site is described as sand and native shale that measures between 60 to 120 cm (2 to 4 ft) in thickness above the bedrock, with the shallower soil located at the south end of the property.

The sewage system, located in the rear or south yard from the house, has a flat leaching bed area that is open and grass covered. It appears to be functioning without problems.

The water supply is piped to the subject residence from a municipal water system.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether changes to the existing on site sewage system are required as a result of a proposed addition to the subject existing house in order to achieve sufficiency of compliance with Part 8 and Article 11.4.2.5. of the Ontario Building Code. Article 11.4.2.5., in particular Sentence (3) cited below, sets out three criteria under which the performance level of an existing building will be considered as reduced due to assumed increases in total daily design sanitary sewage flow. Situations causing a performance level reduction such as construction described in Sentence 11.4.2.5.(3), an increase in occupant load, an increase in total daily design flow, or a change in amount or type of sanitary sewage are dealt with in Sentence 11.4.3.6.(1), which states that the upgrading of the adversely affected system shall comply with Part 8 of the OBC. In the subject application, if the performance level of the building is deemed to be reduced, then upgrading of the existing sewage system in accordance with Part 8 will be required.

4. **Provisions of the 1997 Ontario Building Code**

Article 11.3.2.1. Portion of Extended Buildings

(1) Where an existing building is extended

(a) this Part applies to the existing portion of the building, and

(b) the extended portion of the building shall comply with all other Parts of the Code.

Article 11.4.2.5.Sewage Systems

(3) The performance level of an existing dwelling unit is reduced where proposed construction which,

(a) increases the number of bedrooms in the dwelling unit,

(b) exceeds 15% of the gross area of the dwelling unit, or

(c) adds new plumbing fixtures to the dwelling unit, will result in the total daily design sanitary sewage flow of the dwelling unit, calculated in accordance with Article 8.2.1.3., exceeding the capacity of any component of a sewage system serving the dwelling unit.

Article 11.4.3.5. Sewage System

(1) Where the performance level of an existing building is reduced under

Article 11.4.2.5., upgrading of a sewage system which is adversely affected by the construction, increase in occupant load, increase in the total daily design sanitary sewage flow or change in the amount or type of sanitary sewage shall be required in conformance with Part 8.

5. **Applicant's Position**

The Applicant submitted that the proposed construction will not reduce the performance level of her house regarding its sewage system. She argued that while she was increasing the total finished area of the house and the number of fixture units, the number of occupants and the total daily design flow would not increase. In the Applicant's view, since the total daily design flow was not increasing, then no component of her sewage system would exceed its capacity as is the

case in Sentence 11.4.2.5.(3). In fact, she argued that her sewage system had excess capacity. As a result, she believed that no upgrades to her existing system was necessary.

Regarding the issue of the shallow soil at the site, the Applicant argued that the existing system is functioning satisfactorily, is well maintained through regular pump outs, and shows no sign of future failure. She also indicated that they have retained an engineering firm to design a new sewage system should the current one fail. The Applicant also noted that municipal sanitary sewers are only one kilometre away, and in all likelihood would probably be extended to their area in the next few years.

6. **Respondent's Position**

The Respondent submitted that the proposed construction would add significantly more than 15 % to the area of the building. In his view, therefore, this would have a negative impact on the performance level of the building when considering Sentence 11.4.2.5.(3). This, he argued, meant that the Applicant's sewage system had to be upgraded in accordance with Part 8 of the OBC.

Further, the Respondent noted that the existing system had not been built with a permit when it was installed in 1979, nor did it meet the applicable standards at that time. In particular, he stated that he was concerned about the shallowness of the soil and the possibility that effluent has, or will eventually, travel along the bedrock and pass untreated in to Lake des Chenes.

The Respondent indicated that he offered the Applicant the option of retaining an engineer to ensure the adequacy of the existing system, or to apply for the installation of a new sewage system in conformance with Part 8 of the OBC.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the performance level of the existing dwelling at 178 Grandview Road is not reduced by the proposed expansion from 120.8 m^2 to 250 m^2 and the reduction of one bedroom, and provides sufficiency of compliance with Article 11.4.2.5. of the Building Code.

8. **Reasons**

i) Evidence provided indicates, that the increased area of the dwelling unit will not increase the design sanitary sewage flow as calculated according to Table 8.2.1.3.(a) for the new floor area versus the existing building.

ii) It is the opinion of the Building Code Commission, that the performance level of the building will not be reduced, and according to Article 11.4.3.6., Part 8 does not apply.

iii) There is no increase in occupant load and no change in the type of sanitary sewage.

Dated at Toronto this 18th day in the month of November in the year **1998** for application number **1998-54.**

BCC Ruling No. 98-44-649

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-44-649

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.9.3.4. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. W. K. (Bill) Evans, Manager of Maintenance, Durham District School Board, 710 Bayly Street East, Ajax, Ontario, for the resolution of a dispute with Mr. Paul Allore, Chief Building Official,Town of Ajax, Ontario to determine whether the proposed measures provide sufficiency of compliance with Article 3.9.3.4. of the Ontario Building Code concerning adequate provision for fire fighting at the 15 portable classrooms at Lincoln Avenue Public School, 70 Lincoln Avenue, Ajax, Ontario.

APPLICANT

Mr. W. K. (Bill) Evans
Manager of Maintenance
Durham District School Board
Ajax, Ontario

RESPONDENT

Mr. Paul Allore
Chief Building Official
Town of Ajax

PANEL

Mr. Roy Philippe (Chair)
Mr. Ross Thomson
Mr. Robert De Berardis

PLACE

Toronto, Ontario

DATE OF HEARING

November 5, 1998

DATE OF RULING

November 5, 1998

APPEARANCES

Mr. W. K. (Bill) Evans, Manager
Durham District School Board
Windsor, Ontario
The Applicant

Mr. Jack Mamo
Senior Plans Examiner
Town of Ajax
For the Respondent

RULING

1. **The Applicant**

   Mr. W. K. (Bill) Evans, Manager of Maintenance, Durham District School Board, has been issued an order to comply under the *Building Code Act, 1992* to address deficiencies regarding insufficient hydrant coverage and fire department access for the 15 portable classrooms on the grounds of Lincoln Avenue Public School, at 70 Lincoln Avenue, Ajax, Ontario.

2. **Description of Construction**

   The Applicant constructed, prior to obtaining a building permit, 15 portable classrooms at Lincoln Avenue Public School. Each portable is described as being a combustible, one storey building with an area of 71.4 m^2 (768 ft^2) and is classified as having a Group A - Division 2 (Assembly - School) occupancy. All of the subject portables have two exit doors. Also, each portable is equipped with an interconnected fire alarm system that includes heat detectors and pull stations that connects to every other portable as well as to the school. As well, each portable is supplied with a fire extinguisher

The portables are situated in two groups, one containing 11 portables to the north west of the main school building, while the other group to the north east of the school contains 4 portables. In the larger grouping the portables are arranged mainly in two parallel east-west rows. The smaller group is comprised mostly of a single north-south row. The separation between each portable and from all portables to the school itself exceeds 6 m (19 ft 8 in) and 12 m (39 ft 4 in) respectively. Fire access is provided to the area of the site where the larger grouping of portable classrooms are located by an asphalt apron that surrounds most of the school, which connects to a public street by a large parking lot at the south west end of the site. Access is provided to the smaller group of portables by a level playing field to the south east of the school.

There is no fire hydrant situated within 90 m (295 ft 3 in) of the subject portables.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the recently constructed portable classrooms provide sufficiency of compliance with Article 3.9.3.4. of the OBC concerning the requirement to provide adequate provision for fire fighting. This provision of the 1990 OBC stipulates that where there are more than 12 portables on a school site, the fire fighting requirements regarding streets, access routes and adequate water supply are applicable. Specifically, these provisions would require that the subject group of portables be positioned so that they face a street or access route located not less than 3 m (9 ft 10 in) andnot more than 15 m (49 ft 2 in) away and that adequate water be supplied to the portables for fire fighting purposes, including providing fire hydrants within 90 m (295 ft 3 in). Currently, these provisions are not met at the 15 classroom portables at Lincoln Avenue Public School.

4. **Provisions of the 1990 Ontario Building Code**

Article 3.9.3.4. Provisions for Fire Fighting

(1) The requirements in Articles 3.2.2.6. and 3.2.5.1. to 3.2.5.8. need not be provided where there are not more than 12 portable classrooms on a site and where

(a) the distance between portable classrooms is 6 m (19 ft 8 in) or more, (see A-3.9.3., Case 1 in Appendix A)

(b) the distance between portable classrooms is less than 6 m (19 ft 8 in) and the requirements of Subsection 3.2.3. are applied between the classrooms, (see A-3.9.3., Case 2 in Appendix A)

(c) the portable classrooms are in groups where

(i) the distance between the classrooms is less than 6 m (19 ft 8 in),

(ii) the number of classrooms in a group is not more than 6,

(iii) within a group of classrooms, the facing walls have a fire-resistance rating of 45 min, rated from inside the classrooms, and

(iv) the distance between groups of classrooms is 12 m (39 ft 4 in) or more, (see A-3.9.3., Case 3 in Appendix A)

(d) the portable classrooms are in groups where

(i) the distance between the classrooms is less than 6 m (19 ft 8 in),

(ii) the number of classrooms in a group is not more than 6, and

(iii) the distance between groups of classrooms is 12 m (39 ft 4 in) or more, (see A-3.9.3., Case 4 in Appendix A) or

(e) the portable classrooms are in groups where

(i) the means of egress for each classroom within a group is by a common corridor or passageway

(ii) the number of classrooms in a group is not more than 6, and

(iii) the distance between groups of classrooms is 12 m (39 ft 4 in) or more. (See A-3.9.3., Case 5 in Appendix A).

5. **Applicant's Position**

The Applicant submitted that the construction of the subject portables was necessary due to large increases in local school enrollment. The portables, he argued, while not in fullcompliance with the OBC, are a temporary measure. In fact, he indicated that Lincoln Avenue Public School was being used by the Durham District School Board as a temporary educational facility for some staff and students that are slated to transfer to the new public school on Harkins Drive, which is scheduled to be completed by January 1999. On this basis, the Applicant insisted that the

disputed requirements of Article 3.9.3.4., such as fire routes and water supply that includes a fire hydrant, would not be necessary at the site in less than three months. Nevertheless, the Applicant argued that the existing fire route access is adequate.

The Applicant instead offered certain measures intended to demonstrate sufficiency of compliance with Article 3.9.3.4. until the completion of the Harkins Drive school in 1999:

1) All of the portables have two exit doors, whereas only one is required in the OBC.

2) The distances between all of the portables and the school itself exceeds the requirements in Article 3.9.3.4.

3) The fire alarm system, which connects all of the portables to each other and to the school, provides pull stations and heat detectors, the latter also being beyond Code requirements.

4) All portable classrooms are equipped with fire extinguishers.

5) A comprehensive Fire Safety Plan has been developed and approved by the local Fire Department. This provides for six fire drills per year.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed measures do not provide sufficiency of compliance with Article 3.9.3.4. Specifically, he noted that the 15 portables do not meet the access route and fire hydrant requirements of the OBC. These deficiencies, in his view, should be corrected. While recognizing the Durham District School Board's dilemma concerning increased student enrollment due to the large degree of residential construction in Ajax, the respondent argued, however, that the safety requirements of the OBC cannot be ignored and the implementation thereof delayed. Doing so would reduce public safety and expose many parties to increased risk of liability.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the portable classrooms at the Lincoln Avenue Public School provides sufficiency of compliance with Article 3.9.3.4. of the building code provided that the number of portables on site is reduced to 12 or less by February 28, 1999.

8. **Reasons**

i) The portables are equipped with 2 exits, heat detectors installed in each portable connected to the school fire alarm system on a separate zone and the system is connected to a central monitoring station.

ii) The portables are separated into 2 clusters of less than 12 portables each at least 12.2 m (40 ft) apart and 12.2 m (40 ft) from the school building.

Dated at Toronto this 5th day in the month of November in the year **1998** for application number **1998-53.**

BCC Ruling No. 98-43-648

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-43-648

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.9.3.4. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. W. K. (Bill) Evans, Manager of Maintenance, Durham District School Board, 710 Bayly Street East, Ajax, Ontario, for the resolution of a dispute with Mr. Paul Allore, Chief Building Official, Town of Ajax, Ontario to determine whether the proposed measures provide sufficiency of compliance with Article 3.9.3.4. of the Ontario Building Code concerning adequate provision for fire fighting at the 16 portable classrooms at Exeter High School, 80 Falby Court, Ajax, Ontario.

APPLICANT

Mr. W. K. (Bill) Evans
Manager of Maintenance
Durham District School Board
Ajax, Ontario

RESPONDENT

Mr. Paul Allore
Chief Building Official
Town of Ajax

PANEL

Mr. Roy Philippe (Chair)
Mr. Ross Thomson
Mr. Robert De Berardis

PLACE

Toronto, Ontario

DATE OF HEARING

November 5, 1998

DATE OF RULING

November 5, 1998

APPEARANCES

Mr. W. K. (Bill) Evans, Manager
Durham District School Board
Windsor, Ontario
The Applicant

Mr. Jack Mamo
Senior Plans Examiner
Town of Ajax
For the Respondent

RULING

1. **The Applicant**

   Mr. W. K. (Bill) Evans, Manager of Maintenance, Durham District School Board, has been issued an order to comply under the *Building Code Act, 1992* to address deficiencies regarding insufficient hydrant coverage and fire department access for the 16 portable classrooms on the grounds of Exeter High School, at 80 Falby Court, Ajax, Ontario.

2. **Description of Construction**

   The Applicant constructed, prior to obtaining a building permit, 16 portable classrooms at Exeter High School. Each portable is described as being a combustible, one storey building with an area of 71.4 m^2 (768 ft^2) and is classified as having a Group A - Division 2 (Assembly -School) occupancy. All of the subject portables have two exit doors. Also, each portable is equipped with an interconnected fire alarm system that includes heat detectors and pull stations that connects to every other portable as well as to the school. As well, each portable is supplied with a fire extinguisher

The portables are situated in a single group comprised of up to three irregular rows located to the east of the main school building. The separation between each portable and from all portables to the school itself exceeds 6 m (19 ft 8 in) and 12 m (39 ft 4 in) respectively. Fire access is provided to the area of the site where the portable classrooms are located by a large asphalt apron surrounding the school, which connects to a public street by a large parking lot at the south end of the site.

There is no fire hydrant situated within 90 m (295 ft 3 in) of the subject portables.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the recently constructed portable classrooms provide sufficiency of compliance with Article 3.9.3.4. of the OBC concerning the requirement to provide adequate provision for fire fighting. This provision of the 1990 OBC stipulates that where there are more than 12 portables on a school site, the fire fighting requirements regarding streets, access routes and adequate water supply are applicable. Specifically, these provisions would require that the subject group of portables be positioned so that they face a street or access route located not less than 3 m (9 ft 10 in) and not more than 15 m (49 ft 2 in) away and that adequate water be supplied to the portables for fire fighting purposes, including providing fire hydrants within 90 m (295 ft 3 in). Currently, these provisions are not met at the 16 classroom portables at Exeter High School.

4. **Provisions of the 1990 Ontario Building Code**

Article 3.9.3.4. Provisions for Fire Fighting

(1) The requirements in Articles 3.2.2.6. and 3.2.5.1. to 3.2.5.8. need not be provided where there are not more than 12 portable classrooms on a site and where

(a) the distance between portable classrooms is 6 m (19 ft 8 in) or more, (see A-3.9.3., Case 1 in Appendix A)

(b) the distance between portable classrooms is less than 6 m (19 ft 8 in) and the requirements of Subsection 3.2.3. are applied between the classrooms, (see A-3.9.3., Case 2 in Appendix A)

(c) the portable classrooms are in groups where

(i) the distance between the classrooms is less than 6 m (19 ft 8 in),

(ii) the number of classrooms in a group is not more than 6,

(iii) within a group of classrooms, the facing walls have a fire-resistance rating of 45 min, rated from inside the classrooms, and

(iv) the distance between groups of classrooms is 12 m (39 ft 4 in) or more, (see A-3.9.3., Case 3 in Appendix A)

(d) the portable classrooms are in groups where

(i) the distance between the classrooms is less than 6 m (19 ft 8 in),

(ii) the number of classrooms in a group is not more than 6, and

(iii) the distance between groups of classrooms is 12 m (39 ft 4 in) or more, (see A-3.9.3., Case 4 in Appendix A) or

(e) the portable classrooms are in groups where

(i) the means of egress for each classroom within a group is by a common corridor or passageway

(ii) the number of classrooms in a group is not more than 6, and

(iii) the distance between groups of classrooms is 12 m (39 ft 4 in) or more. (See A-3.9.3., Case 5 in Appendix A).

5. **Applicant's Position**

The Applicant submitted that the construction of the subject portables was necessary due to large increases in local school enrollment. The portables, he argued, while not in full compliance with the OBC, are a temporary measure. In fact, he indicated that the Durham District School Board intended to close this particular high school by June 2000 and relocate its students to two other facilities, both of which will soon be under construction. On this basis, the Applicant insisted that the disputed requirements of Article 3.9.3.4., such as fire routes and water supply that includes a fire hydrant, would not be necessary at the site in lessthan two years.

Nevertheless, the Applicant argued that the existing fire route access is adequate. Regarding the installation of a fire hydrant, he noted that at Exeter High School, the necessary water connection would require installing a pipeline over 300m in length.

The Applicant instead offered certain measures intended to demonstrate sufficiency of compliance with Article 3.9.3.4. until the completion of the other two high schools in 2000:

1) All of the portables have two exit doors, whereas only one is required in the OBC.

2) The distances between all of the portables and the school itself exceeds the requirements in Article 3.9.3.4.

3) The fire alarm system, which connects all of the portables to each other and to the school, provides pull stations and heat detectors, the latter also being beyond Code requirements.

4) All portable classrooms are equipped with fire extinguishers.

5) A comprehensive Fire Safety Plan has been developed and approved by the local Fire Department. This provides for six fire drills per year.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed measures do not provide sufficiency of compliance with Article 3.9.3.4. Specifically, he noted that the 16 portables do not meet the access route and fire hydrant requirements of the OBC. These deficiencies, in his view, should be corrected. While recognizing the Durham District School Board's dilemma concerning increased student enrollment due to the large degree of residential construction in Ajax, the respondent argued, however, that the safety requirements of the OBC cannot be ignored and the implementation thereof delayed. Doing so would reduce public safety and expose many parties to increased risk of liability.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the portable classrooms located at the Exeter High School provides sufficiency of compliance with Article 3.9.3.4. of the building code provided

i) An external wall hydrant on the east side of the building or fire hose cabinets, are available within the existing school building to provide fire fighting to the portable classrooms.

8. **Reasons**

i) The portables are equipped with 2 exits, heat detectors installed in each portable connected to the school fire alarm system on a separate zone and the system is connected to a central monitoring station.

ii) Water supply is being provided from within the existing school for fire fighting at the portable classroom location.

Dated at Toronto this 5th day in the month of November in the year **1998** for application number **1998-52.**

BCC Ruling No. 98-42-647

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-42-647

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.9.3.4. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. W. K. (Bill) Evans, Manager of Maintenance, Durham District School Board, 710 Bayly Street East, Ajax, Ontario, for the resolution of a dispute with Mr. Paul Allore, Chief Building Official, Town of Ajax, Ontario to determine whether the proposed measures provide sufficiency of compliance with Article 3.9.3.4. of the Ontario Building Code concerning adequate provision for fire fighting at the 14 portable classrooms at Cadarackque Public School, 15 Miles Drive, Ajax, Ontario.

APPLICANT

Mr. W. K. (Bill) Evans
Manager of Maintenance
Durham District School Board
Ajax, Ontario

RESPONDENT

Mr. Paul Allore
Chief Building Official
Town of Ajax

PANEL

Mr. Roy Philippe (Chair)
Mr. Ross Thomson
Mr. Robert De Berardis

PLACE

Toronto, Ontario

DATE OF HEARING

November 5, 1998

DATE OF RULING

November 5, 1998

APPEARANCES

Mr. W. K. (Bill) Evans, Manager
Durham District School Board
Windsor, Ontario

The Applicant

Mr. Jack Mamo
Senior Plans Examiner
Town of Ajax
For the Respondent

RULING

The Applicant

Mr. W. K. (Bill) Evans, Manager of Maintenance, Durham District School Board, has been issued an order to comply under the *Building Code Act, 1992* to address deficiencies regarding insufficient hydrant coverage and fire department access for the 14 portable classrooms on the grounds of Cadarackque Public School, at 15 Miles Drive, Ajax, Ontario.

1. **Description of Construction**

The Applicant constructed, prior to obtaining a building permit, 14 portable classrooms at Cadarackque Public School. Each portable is described as being a combustible, one storey building with an area of 71.4 m^2 (768 ft^2) and is classified as having a Group A - Division 2 (Assembly - School) occupancy. All of the subject portables have two exit doors. Also, each portable is equipped with an interconnected fire alarm system that includes heat detectors and

pull stations that connects to every other portable as well as to the school. As well, each portable is supplied with a fire extinguisher.

The portables are situated in a single group comprised of two parallel rows located to the east of the main school building. The separation between each portable and from all portables to the school itself exceeds 6 m (19 ft 8 in) and 12 m (39 ft 4 in) respectively. Fire access is provided to the area of the site where the portable classrooms are located by a 12.2 m (40 ft) asphalt apron at the rear, or east, of the school. In all other directions, the portables are surrounded by a level solid playground area.

There is no fire hydrant situated within 90 m (295 ft 3 in) of the subject portables.

2. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the recently constructed portable classrooms provide sufficiency of compliance with Article 3.9.3.4. of the OBC concerning the requirement to provide adequate provision for fire fighting. This provision of the 1990 OBC stipulates that where there are more than 12 portables on a school site, the fire fighting requirements regarding streets, access routes and adequate water supply are applicable. Specifically, these provisions would require that the subject group of portables be positioned so that they face a street or access route located not less than 3 m (9 ft 10 in) and not more than 15 m (49 ft 2 in) away and that adequate water be supplied to the portables for fire fighting purposes, including providing fire hydrants within 90 m (295 ft 3 in). Currently, these provisions are not met at the 14 classroom portables at Cadarackque Public School.

3. **Provisions of the 1990 Ontario Building Code**

Article 3.9.3.4. Provisions for Fire Fighting

(1) The requirements in Articles 3.2.2.6. and 3.2.5.1. to 3.2.5.8. need not be provided where there are not more than 12 portable classrooms on a site and where

(a) the distance between portable classrooms is 6 m (19 ft 8 in) or more, (see A-3.9.3., Case 1 in Appendix A)

(b) the distance between portable classrooms is less than 6 m (19 ft 8 in) and the requirements of Subsection 3.2.3. are applied between the classrooms, (see A-3.9.3., Case 2 in Appendix A)

(c) the portable classrooms are in groups where

(i) the distance between the classrooms is less than 6 m (19 ft 8 in),

(ii) the number of classrooms in a group is not more than 6,

(iii) within a group of classrooms, the facing walls have a fire-resistance rating of 45 min, rated from inside the classrooms, and

(iv) the distance between groups of classrooms is 12 m (39 ft 4 in) or more, (see A-3.9.3., Case 3 in Appendix A)

(d) the portable classrooms are in groups where

(i) the distance between the classrooms is less than 6 m (19 ft 8 in),

(ii) the number of classrooms in a group is not more than 6, and

(iii) the distance between groups of classrooms is 12 m (39 ft 4 in) or more, (see A-3.9.3., Case 4 in Appendix A) or

(e) the portable classrooms are in groups where

(i) the means of egress for each classroom within a group is by a common corridor or passageway

(ii)the number of classrooms in a group is not more than 6, and

(iii)the distance between groups of classrooms is 12 m (39 ft 4 in) or more. (See A-3.9.3., Case 5 in Appendix A).

4. **Applicant's Position**

The Applicant submitted that the construction of the subject portables was necessary due to large increases in local school enrollment. The portables, he argued, while not in full compliance with the OBC, are a temporary measure. In fact, he indicated that the school superintendent responsible for this area had informed him that several of the 14 portables could be removed by September of 1999 due to a restructuring process that would witness the French Immersion Program currently being offered at Cadarackque Public School being transferred to a different

site. On this basis, the Applicant insisted that the disputedrequirements of Article 3.9.3.4., such as fire routes and water supply that includes a fire hydrant, would not be necessary at the site in less than a year. Nevertheless, the Applicant argued that the existing fire route access is adequate.

The Applicant instead offered certain measures intended to demonstrate sufficiency of compliance with Article 3.9.3.4. until the removal of a few portables in 1999:

1) All of the portables have two exit doors, whereas only one is required in the OBC.

2) The distances between all of the portables and the school itself exceeds the requirements in Article 3.9.3.4.

3) The fire alarm system, which connects all of the portables to each other and to the school, provides pull stations and heat detectors, the latter also being beyond Code requirements.

4) All portable classrooms are equipped with fire extinguishers.

5) A comprehensive Fire Safety Plan has been developed and approved by the local Fire Department. This provides for six fire drills per year.

5. **Chief Building Official's Position**

The Respondent submitted that the proposed measures do not provide sufficiency of compliance with Article 3.9.3.4. Specifically, he noted that the 14 portables do not meet the access route and fire hydrant requirements of the OBC. These deficiencies, in his view, should be corrected. While recognizing the Durham District School Board's dilemma concerning increased student enrollment due to the large degree of residential construction in Ajax, the respondent argued, however, that the safety requirements of the OBC cannot be ignored and the implementation thereof delayed. Doing so would reduce public safety and expose many parties to increased risk of liability.

6. **Commission Ruling**

It is the decision of the Building Code Commission that the portable classrooms at Cadarackque Public School provide sufficiency of compliance with Article 3.9.3.4. of the building code provided that the number of portable classrooms is reduced to 12 on the site by September 1, 1999.

7. **Reasons**

i) The portables are equipped with 2 exits, heat detection installed in each portableconnected to the school fire alarm system on a separate zone and the system is connected to a central monitoring station.

ii) The cluster of portables is within 121.9 m (400 ft) of a hydrant and accessible via asphalt pavement.

Dated at Toronto this 5th day in the month of November in the year **1998** for application number **1998-51.**

BCC Ruling No. 98-41-646

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-41-646

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.2.2.41.and Sentences 3.2.5.13.(1) and (2) of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Deborah Gemmel, Executive Director, Participation House Waterloo Region, 20 Union Lane, Apt. 20, Kitchener, Ontario, for the resolution of a dispute with Mr. James Witmer, Chief Building Official, City of Kitchener, Ontario to determine whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with Article 3.2.2.41 and Sentences 3.2.5.13.(1) and 3.2.5.13.(2) of the Ontario Building Code at Participation House Group Home, 120 Tagge Street, Kitchener, Ontario.

APPLICANT

Ms. Deborah Gemmel
Executive Director
Participation House Waterloo Region
Kitchener, Ontario

RESPONDENT

Mr. Jim Witmer
Chief Building Official
City of Kitchener

PANEL

Mr. Roy Philippe (Chair)
Mr. Ross Thomson
Mr. Robert De Berardis

PLACE

Toronto, Ontario

DATE OF HEARING

November 5, 1998

DATE OF RULING

November 5, 1998

APPEARANCES

Mr. Rick Reichard, Partner
Snider Reichard March Architects
Waterloo, Ontario
Agent for the Applicant

Ms. Lynn Balfour
Deputy CBO
City of Kitchener
For the Respondent RULING

1. **The Applicant**

   Ms. Deborah Gemmel, Executive Director, Participation House Waterloo Region, has applied for a building permit under the *Building Code Act, 1992* to construct a group home known as Participation House Group Home, at 120 Tagge Street, Kitchener, Ontario.

2. **Description of Construction**

   The Applicant is currently constructing a one storey (with full basement), group home with a building area of 293.7 m^2 (3,160.2 ft^2) that is intended to house only 6 residents as well as up to 3 full time staff members. The building is of combustible construction and is classified as having a Group B, Division 3 (care) occupancy under the 1997 Ontario Building Code. The structure will not be equipped with a standpipe and hose system nor a fire alarm system, but will be supplied with an interconnected smoke detection system and a sprinkler system. This latter system will be designed and installed in accordance with the requirements of NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height."

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with Article 3.2.2.41. and Sentences 3.2.5.13.(1) and 3.2.5.13.(2) of the Ontario Building Code. Article 3.2.2.41. requires that a B3 occupancy must be sprinklered even though it may be of combustible construction. The dispute therefore centres on the type of sprinkler system that is required.

The NFPA 13R standard stipulates that a sprinkler system be designed and installed for all occupied rooms. The NFPA 13 standard, however, goes further by also requiring sprinklering in unoccupied areas such as closets and concealed spaces such as attics. Sentence 3.2.5.13.(1) states that a required sprinkler system must meet NFPA 13, whereas Sentence 3.2.5.13.(2), provides an exception to Sentence (1) by allowing low rise (four stories or less) residential occupancies to comply with the more relaxed sprinkler standards found in NFPA 13R.

If the subject group home, as a small structure intended for only a maximum of 9 people, can be considered a residential occupancy as well according to the OBC, it would be allowed to conform to NFPA 13R.

4. **Provisions of the 1997 Ontario Building Code**

Article 3.2.2.41.Group B, Division 2 or Division 3, One Storey, Sprinklered

(1) A building classified as Group B, Division 2 or Division 3 is permitted to be of combustible construction or noncombustible construction used singly or in combination, provided

(a) except as permitted by Sentence 3.2.2.7.(1), the building is sprinklered,

(b) it is not more than 1 storey in building height, and

(c)it has a building area not more than 500 m^2 (5,380 ft^2).

Sentences 3.2.5.13.(1) and (2) Automatic Sprinkler Systems

(1) Except as permitted by Sentences (2), (3) and (4), an automatic sprinkler shall be designed, constructed, installed and tested in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems". (See Appendix A.)

(2) Instead of the requirements of Sentence (1), NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height", is permitted to be used for the design, construction, installation and testing of an automatic sprinkler system installed in a building of residential occupancy that is not more than 4 storeys in building height.

5. **Applicant's Position**

The Applicant submitted that the group home currently under construction should be considered as residential facility under the OBC, thereby allowing the proposed NFPA 13R conforming sprinkler system to be installed. The Applicant argued that the subject group home physically resembles a house from both the exterior, with its small size, and interior, with its homelike floor plans. He noted that the construction techniques are also residential in nature. Moreover, the proposed group home will function like every other family home with the staff acting as parents and residents as children and siblings. In his view, it was not the intent of the 1997 OBC to require the more onerous NFPA 13 sprinkler standard for such small buildings of residential character and function. He suggested that smaller facilities (as measured by their floor area or occupant load) in the B3 classification be allowed to comply with NFPA 13R.

The Applicant also discussed NFPA 101, Life Safety Code, and how according to its criteria the subject group home could be considered, due to the limited number of residents and the full time staffing, as a medium to fast evacuation facility.

Considering that all occupied rooms would sprinklered (according to NFPA 13R), that fireseparations would be provided between floors and bedrooms, that interconnected smoke detectors would be installed, and that evacuation would be quick, the Applicant stated that the life safety of the residents would be adequately protected without relying upon the more rigorous NFPA 13 requirements. Besides, as he argued, the principal difference in terms of protection offered by either sprinkler systems if installed in a such a building is that a NFPA 13 system would protect both occupants and the building, whereas a NFPA 13R system would only protect the occupants. The protection of property, in the Applicant's view, is not worth the additional expense. As he noted, by employing the NFPA 13 sprinkler standard, the construction costs of these already expensive homes would increase significantly.

The Applicant also pointed out that historically there has been some confusion regarding the appropriate Building Code classification in which to determine construction standards for groups homes. He indicated that this uncertainty continued to the present 1997 version of the OBC. He

stated that many like group homes were being constructed across the province with some conforming to NFPA 13, while many others were allowed to use NFPA 13R sprinkler systems. In fact, a recent similar project in a neighbouring municipality was allowed to proceed based on a NFPA 13R proposed system.

Lastly, the Applicant indicated that many safety and accessibility features had been included in the subject home, with some of these being beyond the minimum standards required in the Code.

6. **Chief Building Official's Position**

The Respondent submitted that the subject care home is not a residential facility and thus the sprinkler system should be designed and installed according to NFPA 13. As he noted, the 1997 OBC allows a care facility to be considered as having a Group C (residential) major occupancy using the exemption found in Article 3.1.2.5. The building at hand, he argued, did not meet the criteria for this exemption however, since more than two people would require assistance to evacuate in an emergency. Therefore, in the Respondent's view, a care occupancy is not by definition a residential occupancy. A structure cannot be both a residential and a care occupancy at the same time. These occupancies are mutually exclusive in the OBC. Accordingly, a building classified as having a care occupancy does not qualify for any of the exemptions in Article 3.2.5.13. and instead must conform with NFPA 13 standards for sprinkler design and installation.

As well, the Respondent rejected the Applicant's attempt to use the definition and standards found in NFPA 101, Life Safety Code. NFPA 101 was not used in the design of the building, he noted. In his opinion, the OBC does not allow for the use of NFPA 101 as an equivalent in lieu of OBC standards.

7. **Commission Ruling**

It is the decision of the Building Code Commission that a sprinkler system constructed to NFPA 13R provides sufficiency of compliance with 3.2.5.13.(1) and (2) in the B3 occupancy constructed to 3.2.2.41. of the Building Code provided that

a) corridor and bedroom fire separations having a 3/4 hour fire rating are provided

and

b) manual initiating devices are located in supervised locations to initiate the operation of the interconnected smoke alarms.

Reasons

i)The single storey building is small in size, with limited occupant load of 6 residents and 3 supervisory staff .

ii)The additional compartmentation and early warning features provide an additional level of safety from fire.

Dated at Toronto this 5th day in the month of November in the year **1998** for application number **1998-50.**

BCC Ruling No. 98-40-645

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-40-645

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Clause 3.2.9.1.(2)(b) and Table 3.2.9.A. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Don Little, Vice President, Prestressed Systems Incorporated, 4955 Walker Road, Windsor, Ontario, for the resolution of a dispute with Mr. Shaun Fuerth, Chief Building Official, Township of Sandwich South, Ontario to determine whether the proposed measures, in lieu of a standpipe and hose system, provide sufficiency of compliance with Clause 3.2.9.1.(1)(b) and Table 3.2.9.A. of the Ontario Building Code in the proposed addition at the Precast Concrete Manufacturing Plant, 4955 Walker Road, Windsor, Ontario.

APPLICANT

Mr. Don Little
Vice President
Prestressed Systems Incorporated
Windsor, Ontario

RESPONDENT

Mr. Shaun Fuerth
Chief Building Official
Township of South Sandwich

PANEL

Mr. Roy Philippe (Chair)
Mr. Ross Thomson
Mr. Robert De Berardis

PLACE

Toronto and Windsor, Ontario

DATE OF HEARING

November 5, 1998

DATE OF RULING

November 5, 1998

APPEARANCES

Mr. Don Little, Vice President
Prestressed Systems Incorporated
Windsor, Ontario
The Applicant

Mr. Shaun Fuerth
Chief Building Official
Twp. of Sandwich South
The Respondent

RULING

1. **The Applicant**

   Mr. Don Little, Vice-President, Prestressed Systems Incorporated, applied for a building permit under the *Building Code Act, 1992* to renovate an existing facility by constructing a 418.2 m^2 (4,500 ft^2) addition to the precast concrete manufacturing plant at 4955 Walker Road, Windsor, Ontario.

2. **Description of Construction**

   The Applicant is proposing to construct a 418.2 m^2 (4,500 ft^2), one storey addition onto an existing 3126.6 m^2 (33,642 ft^2) precast concrete manufacturing plant, classified as a Group F, Division 3 (low hazard industrial) facility. The total area of the proposed renovated structure is 3544.8 m^2 (38,142 ft^2).

   The building is considered as facing one street and is constructed of non-combustible construction. The facility does not provide a fire alarm system nor a sprinkler system. The

premises are to be equipped with adequate fire extinguishers. The activity at the renovated building will continue to be the manufacture of precast/prestressed concrete products.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed addition is required to provide a standpipe and hose system in accordance with Clause 3.2.9.1.(1)(b) of the OBC. The total area of the proposed building, at 3,544.8 m^2 (38,142 ft^2), exceeds the maximum allowable building area for an unsprinklered, one storey, building with an F3 occupancy as found in Table 3.2.9.A. The Applicant is proposing, however, certain measures to provide sufficiency of compliance with Clause 3.2.9.1.(1)(b).

4. **Provisions of the 1990 Ontario Building Code**

Clause 3.2.9.1.(1)(b)Standpipe and Hose Systems - Where Required

(1) Except as provided in Article 3.2.9.2., a standpipe and hose system shall be installed in every building that

(b) is greater in building area than the area shown in Table 3.2.9.A. for the applicable building height shown in the Table where the building

(i) is not sprinklered, and

(ii)is not more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey, or

5. **Applicant's Position**

The Applicant submitted that the proposed renovation is needed to make the working environment at the existing facility safer, cleaner and more productive. In his view, the standpipe and hose system is not necessary due to the fact that the proposed addition would increase the building area only slightly beyond the allowed maximum in Article 3.2.9.1. Furthermore, the Applicant argued that the addition is to be built of noncombustible construction to match the existing facility. As well, he noted that the use of the structure will remain as a manufacturing facility for precast/prestressed concrete in which fires are unlikely.

In terms of compensation to demonstrate sufficiency of compliance, the Applicant offered two specific measures:

1)The renovated structure will be equipped with adequate fire extinguishers.

2)The Fire Safety Plan in effect at the operation, which is registered with the municipal fire department, will be revised and updated to include the proposed addition.

6. **Chief Building Official's Position**

The Respondent submitted that with the proposed addition the building would exceed the allowable maximum of 3,000 m^2 (32,300 ft^2) for a one storey building containing this type of occupancy. Thus, in his view, OBC Clause 3.2.9.1. (1) (b) requires that a standpipe and hose system be installed.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the addition to the building at Prestressed Systems Incorporated provides sufficiency of compliance with Clauses 3.2.9.1.(1)(b) and Table 3.2.9.A. provided that:

a) Additional portable extinguishers be provided throughout the building at twice the coverage required for this occupancy.

b)The building use and fire load remain unchanged

c)The security service is extended to include regular patrols within the building during unoccupied periods.

8. **Reasons**

i) The addition is served by two hydrant locations, one on Walker Road and one from Halford Street within approximately 121.9 m (400 ft) of the entrance to the addition.

ii) The fire department indicates that access from Halford St. via a fire hose bridge has been permitted by the property owner of lot 2020.

iii)Additional portable extinguishers are provided.

iv)The limited fuel load and lack of hazardous activities reduce the fire risk.

v)A fire safety plan acceptable to the fire department is in place.

Dated at Toronto this 5th day in the month of November in the year **1998** for application number **1998-49.**

BCC Ruling No. 98-39-644

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-39-644

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentences 3.2.2.12(1) and 3.2.4.16(5) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Jim Gillies, Vice President, Hopewell Development Corporation, 2750, 801-16th Avenue S.W., Calgary, Alberta, for the resolution of a dispute with Ms. Brenda Campbell, Chief Building Official, City of Brampton, Ontario to determine whether post-indicating valves on a looped fire main around the perimeter of an new building are required to be electrically supervised to achieve sufficiency of compliance with Sentences 3.2.2.12(1) and 3.2.4.16(5) of the 1990 Ontario Building Code at 255 Chrysler Drive, Brampton, Ontario.

APPLICANT

Mr. Jim Gillies
Vice President
Hopewell Development Corporation
Calgary, Alberta

RESPONDENT

Ms. Brenda Campbell
Chief Building Official
City of Brampton

PANEL

Mr. Roy Philippe (Chair)
Mr. Kenneth Peaker
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF HEARING

October 21, 1998

DATE OF RULING

October 21, 1998

APPEARANCES

Mr. Allan Larden
Larden Muniak Consulting Inc.,
Toronto, Ontario
Agent for the Applicant

Ms Brenda Campbell
Chief Building Official
City of Brampton
The Respondent

RULING

1. **The Applicant**

   Mr. Jim Gillies, Vice-President, Hopewell Development Corporation, is the holder of a building permit under the *Building Code Act, 1992* to construct a 81,120m^2 (873,175 sq. ft.) distribution warehouse known as the Brampton Distribution Campus, at 255 Chrysler Drive, Brampton, Ontario.

2. **Description of Construction**

   The Applicant has recently completed construction of a one-storey, 81,120m^2 (873,175 sq. ft.) Group F, Division 2 (medium hazard industrial) warehouse. The building is non-combustible and is constructed under the "any height, any area" requirements of the 1990 OBC Article 3.2.2.55. The building is equipped with a hose and standpipe system, but is not required to have a fire alarm system.

The facility is now occupied and used by RJR Nabisco Limited as a warehouse for their products.

The building is fully sprinklered by means of an electrically-supervised sprinkler system. This system is monitored as a requirement for the unrated roof assembly. The monitoring system includes a Simplex TrueAlarm 4100 control panel which monitors all indoor fire protection valves, the pump controller for alarm and trouble, diesel fuel level, low pump room temperature, water flow in the sprinkler system, sprinkler system low pressure, and excess pressure pump power on status.

A fire main loops around the entire facility and supplies water to sprinkler systems in the project by means of eight 250mm (9.75 inch) dia. pipe connections as well as to outside hydrants. Ten divisional control post indicator valves (P.I.V.'s) and one valve in a roadway box are located in the looped fire main outside of the building in order to facilitate maintenance, alteration or repair of the hydrants and sections of the main, should the need arise. P.I.V.'s are not installed in branch es leading to individual sprinkler systems. The water in the looped fire main is pressurized by a fire pump, which is supplied from a 400mm (15.6 inch) City trunk water main.

The project was designed and constructed with an electrically supervised indicated control valve in each sprinkler system riser in the building and with high quality padlocks for the divisional control P.I.V.'s on the looped fire main around the exterior of the building.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the post-indicator valves located in the looped fire main must be electrically supervised.

Subsequent to a site visit by the fire department at substantial completion of construction, City building officials have indicated that they consider that the manually locked P.I.V.'s on the looped fire main do not satisfy the intent of the OBC Sentences 3.2.2.12.(1) and 3.2.4.16.(5) whereby, in respect of a sprinkler system, the movement of a control valve handle must be electrically supervised.

However, based on other indications from City officials, the applicant understands that electrical supervision of non-indicating divisional control valves in the looped fire main would not be necessary since these valves are located in road boxes.

4. **Provisions of the 1990 Ontario Building Code**

Sentence 3.2.2.12(1) Sprinklers in Lieu of Roof Rating

(1) The requirements in Articles 3.2.2.16 to 3.2.2.62. for roof assemblies to have a fire resistance rating are permitted to be waived provided

(a)the building is sprinklered

(b)the sprinkler system in Clause (a) is electrically supervised in conformance with Sentence 3.2.4.16.(5), and

(c)the operation of the sprinkler system in Clause (a) will cause a signal to be transmitted to the fire department in conformance in Sentence 3.2.4.7.(3).

Sentence 3.2.4.16(5) Sprinklers in Lieu of Heat Detectors

(5) The sprinkler system referred to in Sentence (1) shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator for each of the following:

(a) movement of a control valve handle,

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system,

(c) loss of air pressure in a dry pipe system,

(d) loss of air pressure in a pressure tank,

(e) a significant change in water level in any water storage contained used for fire fighting purposes,

(f) loss of electrical power to any automatically starting electrical fire pump, (see Appendix A) and

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

5. **Applicant's Position**

The Applicant submitted that the P.I.V.'s on the Brampton Distribution Campus looped fire main are not on the branch water supply lines feeding individual sprinkler system headers, unlike some other installations where P.I.V.'s have been installed on such branches. Two of these valves would have to be shut in order to cut off water supply for all sprinkler systems.

In the applicant's opinion, review of the OBC, NFPA 13, NFPA 24 and the NFPA Automatic Sprinkler System Handbook and consideration of industry practices support the following conclusions:

1.The looped fire main, including the divisional control P.I.V.'s, is not part of the sprinkler systems; it provides water to the sprinkler system and the hydrants.

2.The divisional control P.I.V.'s located in the looped fire main are not "control valves" for a sprinkler system such as are intended to be governed by the electrical supervision requirements of OBC 3.2.4.16.(5).

3.The installation of padlocked P.I.V.'s in the looped fire main of the Brampton Distribution Campus does not represent a violation of the Ontario Building Code.

6. **Chief Building Official's Position**

The Respondent submitted that the private looped fire main supplies water to the sprinkler systems and as such, becomes an integral part of the sprinkler system. The post indicator valves control water supply to the sprinkler systems.

Sentence 3.2.4.16.(5) states that the sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator for the movement of a control valve handle. Thus the post indicator valves require electrical supervision.

Notwithstanding the commitment of the current owners and their management company to maintain a rigorous maintenance programme, the commitment of future owners/mangers cannot be anticipated. The building has already changed ownership once since occupancy.

It is unreasonable to expect the Fire Department to monitor deviations from required and, therefore, anticipated performance measures.

Other than the manual locking of the valves and the commitment to a high maintenance standard, no additional measures have been introduced which can be considered to provide sufficiency of compliance. The building is not equipped with a fire alarm system.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the post indicating valves on a looped fire main around the perimeter of a new building provides sufficiency of compliance with Sentences 3.2.2.12(1) & 3.2.4.16(5) of the Building Code as installed.

8. **Reasons**

i)Individual dedicated control valves to shut off the water supply to a sprinkler system are required to be electrically supervised in accordance with the Ontario Building Code and are equipped accordingly at the building entrance.

ii)The 10 exterior post indicating valves on the looped mains are installed to facilitate maintenance and shutting off one valve only does not cut off the water supply to a sprinkler system. It requires 2 valves to be closed to isolate any system. In addition, valves are secured with a high quality padlock and weekly inspections are carried out, recorded, and available to the fire department on request.

iii)The loop mains are provided from two feeds from the municipal water supply.

iv)The installation is consistent with industry practices and acceptable to the insurance carrier.

Dated at Toronto this 21st day in the month of October in the year **1998** for application number **1998-48.**

BCC Ruling No. 98-38-643

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-38-643

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Clauses 3.10.2.4.(2)(b) and (c) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Nabil S. Jurdak, Vice President, Secure Max Self Storage, 6300 Northcrest Ste. 10C, Montreal, Quebec, for the resolution of a dispute with Mr. Richard Hewitt, Chief Building Official, City of Ottawa, Ontario to determine whether corridor walls not constructed to be continuous from the floor to the underside of the ceiling in a self-storage facility achieve sufficiency of compliance with Clauses 3.10.2.4.(2)(b) and (c) of the Ontario Building Code at 458 Catherine Street, Ottawa, Ontario.

APPLICANT

Mr. Nabil S. Jurdak
Vice President
Secure Max Self Storage
Montreal, Quebec

RESPONDENT

Mr. Richard Hewitt
Chief Building Official
City of Ottawa

PANEL

Mr. Roy Philippe (Chair)
Mr. Kenneth Peaker
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF HEARING

October 21, 1998

DATE OF RULING

October 21, 1998

APPEARANCES

Mr. Nabil Jurdak
Secure Max Self Storage
Toronto, Ontario
Agent for the Applicant

Mr. Chris Freeman
Chief Building Code Plan Examiner
City of Ottawa
The Respondent

RULING

1. **The Applicant**

   Mr. Nabil S. Jurdak, Vice President, Secure Max Self Storage, has applied for a building permit under the *Building Code Act, 1992* to renovate an existing 3 storey building into a self-service storage building at 458 Catherine Street, Ottawa, Ontario.

2. **Description of Construction**

   The Applicant proposes to convert an existing 3 storey, 4,684 m^2 (50418 sq.ft.) building into a self-service storage facility, classified as Group F, Division 2 - medium hazard industrial occupancy. The building contains both combustible and non-combustible construction. It is equipped with a sprinkler system and a fire alarm system, but does not have a hose and standpipe system.

   Within the storage area of the building, the applicant is proposing that the storage lockers, including the corridor walls, be constructed out of 2286mm (7 ft 6 in) high metal stud gypsum

board or galvanized steel partitions with an open mesh ceiling. The corridor walls are not built continuous from the floor to the underside of the floor above, the ceiling or the roof.

The maximum travel distance would be 15m (49 ft 3 in) from the centerline of the locker door to the nearest exit.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the maximum travel distance exceeds 15m (49 ft 3 in) from inside the rental space, and whether corridor walls must be constructed to be continuous from the floor to the underside of the ceiling in a self-storage facility in order to achieve sufficiency of compliance with Clauses 3.10.2.4(2)(b) and (c) of the Ontario Building Code.

4. **Provisions of the Ontario Building Code**

Clause 3.10.2.4. Safety Requirements Within Floor Areas

(2) A corridor need not be constructed as a public corridor where the travel distance, measured from inside the rental space to the nearest exit, is not more than 15 m (49 ft 3 in) provided that the corridor walls

(b)have no openings other than doors and the doors are of solid construction, and

(c)are continuous from the floor to the underside of the floor above, the ceiling or the roof.

Applicant's Position

The Applicant submitted that the 2286mm (7 ft 6 in) high metal stud gypsum board or galvanized steel partitions are adequate because the building is (or will be) sprinklered, equipped with a central fire alarm system connected to a fire station, and equipped with an intercom and 24 hour camera surveillance. A live-in caretaker will provide surveillance at all times. As well, the building has very low occupancy, with no more than 3 to 5 persons on average on a floor area. The building includes smoke detectors and a smoke exhaust system. There are no dead end corridors. The system has been in use for the last 13 years in 9 similar buildings with excellent results and efficiency.

The mesh ceiling allows surveillance of the contents of locker to identify hazardous or illegal contents.

The applicant submits that the travel distance from the locker entrance to the nearest exit is not more than 15m (49 ft 3 in).

The applicant believes the 2286mm (7 ft 6 in) corridor walls should be acceptable because of the protective measures which are outlined above, and also because of the previous BCC ruling (#94-25-403) on a similar self-service storage building application.

5. **Chief Building Official's Position**

The respondent submitted that the conditions of OBC Clauses 3.10.2.4.(2)(b) and (c) have not been met because the travel distance to the furthest portion of the rental space exceeds 15m, (49 ft 3 in) and the proposed corridor walls terminate short of the floor/ceiling construction above. According to the respondent, in a case such as this proposal where the travel distance is greater than 15m (49 ft 3 in), as measured from inside the rental space to the nearest exit, the Code requires the corridor walls to be constructed as a public corridor in accordance with 3.3.1.4.

6. **Commission Ruling**

It is the decision of the Building Code Commission that the 7.5 foot (2286 mm) high non combustible partitions walls in the self storage and facility provides sufficiency of compliance with Clauses 3.10.2.4(2)(b) & (c) of the building code.

7. **Reasons**

i)The travel distance to an exit from any locker entrance is 15 m (49 ft 3 in) or less.

ii)The building is provided with smoke and heat detection; the building will be sprinklered throughout and is provided with a connection to a central monitoring station.

iii)The control over the building occupancy rests with the building management and not with and the individual lessees.

iv)The partition walls required to be continuous to the underside of the floor slab are not required to have a fire resistance rating.

v)The compartment sizes are limited which will limit the degree of fire involvement.

vi)Smoke exhaust is provided on each floor.

vii)A surveillance system is provided that will control and monitor the amount and type of combustibles in the lockers.

It is the opinion of the building code Commission that with the limited occupant load, the sprinkler protection provided, the limited distance of travel, the control of the building by the owner, the installation of smoke exhaust and the connection of the fire alarm system to a central monitoring station, does not provide a hazard to Life Safety for the occupants.

Dated at Toronto this 21st day in the month of October in the year **1998** for application number **1998-47.** plication number **1998-48.**

BCC Ruling No. 98-36-641

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-36-641

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.7.3.4. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. David Beard, Parishioner, St. George's Anglican Church, Clarksburg, Ontario for the resolution of a dispute with Mr. Douglas Bumstead, Deputy Chief Building Official, Town of Blue Mountain, Ontario to determine whether an exterior ramp constructed as a barrier free path of travel provides sufficiency of compliance with Article 3.7.3.4. of the 1990 Ontario Building Code at St. George's Anglican Church, Marsh Street, Clarksburg, Ontario.

APPLICANT

Mr. David Beard,
St. George's Anglican Church
102 Wards Road, RR # 3
Collingwood, Ontario

RESPONDENT

Mr. Douglas Bumstead
Deputy Chief Building Official
Town of Blue Mountain

PANEL

Mr. Roy Philippe (Chair)
Mr. Kenneth Peaker
Mr. James Lischkoff

PLACE

Toronto, Ontario

DATE OF HEARING

September 10, 1998

DATE OF RULING

September 10, 1998

APPEARANCES

Mr. David Beard
The Applicant

Mr. Mina Tesseris
The Respondent

RULING

1. **The Applicant**

   Mr. David Beard of St. George's Anglican Church has received a correction notice to alter the recently constructed ramp to comply with the requirements of Article 3.7.3.4. of the Ontario Building Code at St George's Anglican Church,Marsh Street, Clarksburg, Ontario.

2. **Description of Construction**

   In 1997, St. George's Anglican Church was expanded through the construction of a 22.6 m^2 addition to the south west portion of the church to facilitate wheel chair access to the church and to provide an accessible washroom. The original specification was to construct a ramp in accordance with Ontario Building Code (OBC) Article 3.7.3.4. However, the lower ramp was constructed at a slope greater than the maximum permitted in the OBC, estimated at 1 in 9.2.

3. **Dispute**

   The issue at dispute between the Applicant and Respondent is whether access to St. George's Anglican Church achieves sufficiency of compliance with the requirements of Article 3.7.3.4. of the Ontario Building Code. This Article requires that the maximum slope for a ramp is 1 in 12,

although the ramp was constructed with the lower portion having a slope of approximately 1 in 9.2.

4. **Provisions of the Ontario Building Code**

Article 3.7.3.4. Ramps

(1) Ramps located in a barrier-free path of travel shall

(a)have a minimum width of 870 mm (2 ft 10 in) between handrails,

(b)have a maximum gradient of 1 in 12, (see Appendix A)

(c)have a level area of at least 1.5 m (4 ft 11 in) by 1.5 m (4 ft 11 in) at the tops and bottom of a ramp and where a door is located in a ramp, so that the level area extends at least 600 mm (23 5/8 in) beyond the latch side of the door opening, except that where the door opens away from the ramp, the area extending beyond the latch side of the door opening may be reduced to 300 mm (11 3/4 in),(see Appendix A).

(d)have a level area at least 1.5 m (4 ft 11 in) long and at least the same width as the ramp

(i)at intervals of not more than 9 m (29 ft 6 in) along its length, and

(ii)where there is an abrupt change in the direction of the ramp,

(e)except as provided in Sentence (2), be equipped with handrails and guards on both sides conforming to Articles 3.4.6.4. and 3.4.6.5, and

(f)be provided with a curb at least 50 mm (2 in) high on any side of the ramp where no solid enclosure or guard is provided.

(2) Where a ramp serves as an aisle way for fixed seating, the requirements for handrails in Clause 3.7.3.4.(1)(e) need not apply.

(3) Floors or walks in a barrier-free path of travel having a slope steeper than 1 in 20 shall be designed as ramps. (See Appendix A.).

5. **Applicant's Position**

The Applicant submitted that this ramp has a double railing on both sides. It is heated by underground piping. Everyone connected with the Church is very pleased with the new ramp which permits an easy and safe entrance for the disabled. During the ramp construction, it was discovered by the contractor that the drawings submitted did not take into consideration the fact that the lower portion of the ramp had to meet the sidewalk to the existing main entrance to the Church sanctuary. With a slope of 1 in 12 as specified in the Code, this would require both sidewalks to be on different levels where they meet. It would make both entrances awkward and dangerous.The contractor was unable to reach Mr. Bumstead on short notice to obtain his approval. The contractor accordingly completed the construction so that both the ramp and the sidewalk entrance way to the Church met on the same level. This increased the gradient, but was necessary due to space restrictions. The accessible entrance and the main church entrance are used only for worship on Sundays and for weddings funerals as required.

6. **Chief Building Official's Position**

The Respondent submitted that the ramp slope of 1 in 9.2 exceeds the allowable maximum slope of 1 in 12 for a barrier free path of travel. The building is an A2 occupancy used as a church and therefore is not subject to the exceptions stated in OBC 3.7.1.1.(1). The Chief Building Official does not have the authority to accept a ramp slope greater than prescribed in the OBC.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the exterior ramp constructed to provide barrier free access of travel provides sufficiency of compliance with

Article 3.7.3.4 of the 1990 Ontario Building Code.

8. **Reasons**

i)The ramp is provided with hand rails on both sides.

ii)Heating is provided on the ramp to keep it free of ice and snow accumulation.

iii)The ramp has been in use since November 1997 by the disabled with no difficulties noted by church members.

iv)The ramp is used normally during church services when greeters are available to provide assistance if necessary.

v)Site limitations have made it difficult to comply in total with the Building Code.

vi)It is the opinion of the Building Code Commission that the ramp does not provide an unsafe condition.

Dated at Toronto this 10th day in the month of September in the year **1998** for application number **1998-43.**

BCC Ruling No. 98-35-640

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-35-640

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.3.1.9.(9) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Mary-Jane Tushingham, Previous Owner, 7365 Martin Grove Road, Woodbridge, Ontario for the resolution of a dispute with Mr. Mani Navabi, Director of Building Standards, City of Vaughan, Ontario to determine whether the proposed design of a residential building achieves sufficiency of compliance with Sentence 3.3.1.9.(9) of the 1990 Ontario Building Code as it relates to the maximum length of a dead end corridor at 7365 Martin Grove Road, Vaughan, Ontario.

APPLICANT

Ms. Mary-Jane Tushingham, Previous Owner
7365 Martin Grove Road
Woodbridge, Ontario

RESPONDENT

Mr. Mani Navabi
Director of Building Standards
City of Vaughan

PANEL

Mr. Roy Philippe (Chair)
Mr. Michael Lio
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF HEARING

August 26, 1998

DATE OF RULING

August 26, 1998

APPEARANCES

Ms. Mary-Jane Tushingham
The Applicant

Mr. Mani Navabi
The Respondent

RULING

1. **The Applicant**

   Ms. Mary-Jane Tushingham, Previous Owner, has applied for a building permit under the *Building Code Act, 1992* for a six storey residential condominium currently under construction at 7365 Martin Grove Road, Woodbridge, Ontario.

2. **Description of Construction**

   The Applicant has applied to construct a six storey, 11,810 m^2 (127,141 sq. ft.) residential condominium for seniors. The building is proposed to be of non-combustible construction with a fire alarm system and standpipe and hose system.

   The applicant is proposing to create a dead end corridor of approximately 7.2 m (23.0 ft. 8 in.) on floors 2 to 6 by extending the corridor approximately 1.0m past the last suite entry, and by placing a door to an exterior balcony at the end of the dead end corridor.

3. **Dispute**

   The issue at dispute between the Applicant and Respondent is whether the proposed design of a residential building achieves sufficiency of compliance with Sentence 3.3.1.9.(9) as it relates to the maximum length of a dead end corridor of the 1990 Ontario Building Code.

4. **Provisions of the 1990 Ontario Building Code**

Sentence 3.3.1.9.(9) Corridors

(9) In a residential occupancy, except for corridors served by a single exit as described in Sentence 3.3.4.4.(7), a dead end public corridor is permitted provided it is not more than 6 m (19 ft 8 in) long.

5. **Applicant's Position**

The Applicant submitted they wish to receive a concession from 3.3.1.9.(9) as the corridor will extend approximately 1.2m (4 ft.) past the last suite entry on floors 2 to 6 on the proposed residential building. This situation places a door to an exterior balcony further than the distance allowable for a corridor having access in a single direction for exiting purposes. This situation and placement of the balcony door is not acceptable to the City of Vaughan.

In correspondence to the City of Vaughan, the applicant states that this situation has arisen because of certain restrictions that have been encountered on site due to plumbing rough-ins happening in advance of drywalling.

At the hearing the applicant proposed additional compensating measures including:

a)a smoke detector in each suite in the dead end,

b)a fire alarm audible device on the common balcony,

c)a zero hour rated fire door with self-closer and latch, between the balcony and the corridor, and

d)the prohibition of furniture and carpeting within the balcony provided within the condominium agreement.

6. **Chief Building Official's Position**

The Respondent submitted that the a portion of the public corridor on the 2nd through 6th floors of this residential senior citizens' building has a dead end length of 7.2 m (23.0 ft. 8 in.).

The Applicant has requested that a 7.0m long dead end corridor be accepted in this building on the above noted floors in contravention with Sentence 3.3.1.9.(9).

7. **Commission Ruling**

It is the decision of the Building Code Commission that the dead end corridor in excess of 6.0m and additional compensating measures presented at the hearing do not provide sufficiency of compliance to the requirements of the Building Code.

8. **Reasons**

1.The proposed dead end corridor measuring 7.2m long exceeds the requirement of 6.0m of Article 3.3.1.9.

2.The additional compensating measures including:

a) a smoke detector in each suite in the dead end,

b) a fire alarm audible device on the common balcony,

c) a zero hour rated fire door with self-closer and latch, between the balcony and the corridor, and

d) the prohibition of furniture and carpeting within the balcony provided within the condominium agreement, in the opinion of the Building Code Commission do not provide sufficiency of compliance.

Dated at Toronto this 26th day in the month of August in the year **1998** for application number **1998-45.**

BCC Ruling No. 98-34-639

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-34-639

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Clause 3.4.3.1.(2)(e) of Regulation 61, as amended by O.Reg.400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Peter Gass, President, BPF Holdings Ltd., 1193 Fisher Street, North Bay, Ontario for the resolution of a dispute with Mr. Brian Horsman, Chief Building Official, City of North Bay, Ontario to determine whether the four subject exit doors at widths ranging from 746 mm (2 ft, 5 « in) to 760 mm (2 ft, 6 in) provides sufficiency of compliance with Clause 3.4.3.1.(2)(e) of the Ontario Building Code at Miss Jersey's Dairy, c/o BPF Holdings, 1193 Fisher Street, North Bay, Ontario.

APPLICANT

Mr. Peter Gass, President,
BPF Holdings Ltd.,
1193 Fisher Street
North Bay, Ontario

RESPONDENT

Mr. Brian Horsman
Chief Building Official
City of North Bay

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Michael Lio

PLACE

Toronto, Ontario

DATE OF HEARING

August 26, 1998

DATE OF RULING

August 26, 1998

APPEARANCES

Mr. Peter Gass
The Applicant

Mr. Brian Horsman
The Respondent

RULING

1. **The Applicant**

   Mr. Peter Gass, President, BPF Holdings Ltd., property owner, has received a final inspection report to alter the exit doors to conform to the original application for a building permit under the *Building Code Act, 1992* to construct a new two storey micro dairy facility at Miss Jersey's Dairy, c/o BPF Holdings, 1193 Fisher Street, North Bay, Ontario.

2. **Description of Construction**

   The Applicant has recently completed construction of a two storey plus basement micro dairy facility with a building area of 4,800 sq. ft. of F3 major occupancy and subsidiary retail outlet. The building is of primarily non-combustible construction. A fire alarm system or standpipe and house system were not required.

   The permit drawings approved by the City of North Bay indicated that the exit doors numbers 112, 115, 117 and 119 were to be 900 mm (3 ft.).

   During the final inspection it was discovered that two exit doors from the basement and two exit doors from the second story were installed that are less than 2 ft. 7 in (790mm) in width (three

doors 2 ft. 5 « in. and one door 2 ft. 6 in. in width) contrary to the minimum requirements of the Building Code.

The basement has an occupant load of 5 persons and contains storage and a mechanical room. The second floor level also has an occupant load of 5 persons and contains storage, a milk testing laboratory, washrooms and a staff room.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the four subject exit doors at widths ranging from 746 mm (2 ft, 5 « in) to 760 mm (2 ft, 6 in) provides sufficiency of compliance with Clause 3.4.3.1.(2)(e) of the 1990 Ontario Building Code.

4. **Provisions of the 1990 Ontario Building Code**

Clause 3.4.3.1.(.2)(e) Exit Width

(2) The required width of an exit shall be not less than

(e)790 mm (2 ft. 7 in.) for doorways not serving patients.

5. **Applicant's Position**

The Applicant submitted that the exit doors meet sufficiency of compliance with the requirements of the 1990 Ontario Building Code because of the minimal occupant load of the floor areas served.

The basement has an occupant load of 5 persons and contains storage and a mechanical room. The second floor level also has an occupant load of 5 persons and contains storage, a milk testing laboratory, washrooms and a staff room.

The exit doors in dispute were originally specified to be 3 ft. (900mm) in width but were not constructed as shown in the plans.

6. **Chief Building Official's Position**

The Respondent submitted that the architect's door schedule shown on drawing number A11 indicates that exit door numbers 112, 115, 117 and 119 shown on drawing number A3 are to be 3 ft. (900mm.) in width which complies with the 1990 Ontario Building Code.

The Chief Building Official was notified by the architect that the exit doors were not constructed in accordance with the plans and asked if the doors could be accepted as installed.

The Chief Building Official told the applicant that the doors could not be accepted as installed because they to not conform to the requirements of the 1990 Ontario Building Code.

7. **Commission Ruling**

It is the decision of the Building Code Commission that exit doors from the building as constructed provide sufficiency of compliance with Clause 3.4.3.1.(2)(e) of the Building Code provided that a fire alarm system conforming to Section 3.2.4. is installed throughout the building.

8. **Reasons**

I)An early warning system is provided to alert occupants of a fire condition.

ii)The occupant load of the basement and 2nd floor is low (approx. 5 persons/floor).

iii)The building is primarily of non-combustible construction.

iv)It is the opinion of the Building Code Commission that the current building use provides an adequate level of safety.

Dated at Toronto this 26th day in the month of August in the year **1998** for application number **1998-42.**

BCC Ruling No. 98-32-637

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-32-637

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.1.5.11. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. John Lambe, President, Better Beef Ltd., Guelph, Ontario for the resolution of a dispute with Mr. Bruce Poole, Chief Building Official, City of Guelph, Ontario to determine whether the subject EPS Thermoplastic Panels on an exterior wall and some interior freezer walls are permitted in a sprinklered building required to be of noncombustible construction when considering Article 3.1.5.11. of the Ontario Building Code at the Better Beef Freezer Warehouse, 180 Watson Parkway South, Guelph, Ontario.

APPLICANT

Mr. John Lambe, President
Better Beef Ltd.
Guelph, Ontario

RESPONDENT

Mr. Bruce Poole
Chief Building Official
City of Guelph

PANEL

Mr. Roy Philippe (Chair)
Mr. Ross Thomson
Mr. Lawrence Glazer

PLACE

Toronto, Ontario

DATE OF HEARING

July 16, 1998

DATE OF RULING

July 16, 1998

APPEARANCES

Mr. Randy Brown, President, Randal Brown and Associates
Toronto (North York), Ontario
Agent for the Applicant

Mr. Rob Reynen, Senior Building Inspector
City of Guelph, Ontario
For the Respondent

RULING

1. **The Applicant**

   Mr. John Lambe, President, Better Beef Ltd., is the holder of a building permit under the *Building Code Act, 1992* to construct a new, two storey, freezer warehouse facility known as the Better Beef Freezer Warehouse at 180 Watson Road, Guelph, Ontario.

2. **Description of Construction**

   The Applicant recently constructed a two storey, 12,278 m^2 (132,111 ft^2) freezer warehouse facility, classified as a Group F, Division 3 - low hazard industrial occupancy. The building is equipped with an electronically supervised sprinkler system, but not a standpipe and hose system nor a fire alarm system. It is constructed of noncombustible construction and is considered to face one street. The building permit was issued under the 1990 version of the Ontario Building Code.

   In order to provide better insulating properties in the subject freezer facility, as part of the construction the Applicant installed 12.2 m (40 ft.) high factory assembled EPS Thermoplastic Panels on an exterior wall and certain interior walls. The subject walls, manufactured by Isowall

Ltd., are composed of expanded polystyrene insulation with a 0.38 mm (0.015 in.) thick sheet steel skin adhered to both sides. The EPS wall assembly does not rely on the rigidity of the insulation for structural support, this is provided independently. Some of the EPS walls installed in the freezer warehouse are 190 mm (7 1/2 in.) thick, while others are 254 mm (10 in.). One interior wall assembly combines 102 mm (4 in.) of 1 hour rated Isoroc with 153 mm (6 in.) of EPS Thermoplastic Panelling.

The insulation component of the EPS panels is combustible. It melts at 205°C (400°F) and when in liquid form has a flash point of approximately 425°C (800°F). The insulation has a flame-spread rating of 115. The panels are to be protected on all interior sides by overhead sprinklers mounted in the ceiling that will activate automatically at 141°C (286°F).

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the installed combustible EPS Thermoplastic Panels on several interior walls and one exterior wall of the Better Beef Freezer Warehouse are permitted in a building required to be of noncombustible construction that is equipped with a sprinkler system. Sentence 3.1.5.11.(6) of the Ontario Building Code permits thermoset foamed plastic insulation on exterior walls of a building required to be of noncombustible construction under certain conditions. The Applicant has installed, however, the thermoplastic, not the thermoset, type of insulation. As well, theyhave used these wall panels on mainly interior walls.

OBC Sentences 3.1.5.11.(3) and (4) permit combustible insulation, including thermoset and thermoplastic, in noncombustible buildings for exterior and interior walls respectively both with the condition that the insulation be protected by either a standard thermal barrier, or that the thermal barrier be tested in conformance with CAN4-S101-M, "Standard Method of Fire Endurance Tests of Building Construction and Materials." If the subject EPS Thermoplastic Panel exterior and interior installations are found to be ineligible regarding the conditions for thermoset plastic insulation found in Sentence 3.1.5.11.(6), the Applicant may be required to provide a thermal barrier as per Sentences 3.1.5.11.(3) and (4). Such thermal barriers, as part of a complete wall assembly, may also need to be appropriately tested.

4. **Provisions of the Ontario Building Code**

Article 3.1.5.11.Combustible Insulation and its Protection

(3) Combustible insulation having a **flame-spread rating** of more than 25 but not more than 500 on any exposed surface or any surface that would be exposed by cutting through the material in any direction, is permitted in the exterior walls of a **building** required to be of **noncombustible construction** provided the insulation is protected from adjacent space in the **building,** other than adjacent concealed spaces within the **attic or roof spaces**, crawl spaces, and wall assemblies, by a thermal barrier as described in Sentence (2), except that in unsprinklered *buildings* more than 18 m (59 ft 1 in) high or in unsprinklered **buildings** regulated by the provisions of Subsection 3.2.6., the insulation is protected by a thermal barrier consisting of

(a)gypsum board not less than 12.7 mm (1/2 in) thick, mechanically fastened to a supporting assembly independent of the insulation and with all joints either braced or taped and filled,

(b)lath and plaster, mechanically fastened to a supporting assembly independent of the insulation,

(c)masonry or concrete not less than 25 mm (1 in) thick, or

(d)any thermal barrier that, when tested in conformance with CAN4-S101-M, "Standard Methods of Fire Endurance Tests of Building Construction and Materials", will not develop an average temperature rise of more than 140øC (252øF) or a maximum temperature rise at any point of more than 180øC (324øF) on its unexposed face within 10 min.

(See also Sentence 3.2.3.7.(3).)

(4) Combustible insulation having a **flame-spread** rating of more than 25 but not more than 500 on any exposed surface or any surface that would be exposed by cutting through the material in any direction, is permitted in the interior walls of a **building** required to be of **noncombustible construction** provided the insulation is protected fromadjacent space in the **building**, other than adjacent concealed spaces within **attic or roof spaces**, crawl spaces, and wall assemblies, by a thermal barrier as described in Sentence (2), except that in unsprinklered **buildings** more than 18 m (59 ft 1 in) high or in unsprinklered **buildings** regulated by the provisions of Subsection 3.2.6., the insulation is protected by a thermal barrier consisting of

(a)Type X gypsum board not less than 15.9 mm (5/8 in) thick conforming to CSA A82.27-M, "Gypsum Board Products", mechanically fastened to a supporting assembly independent of the insulation and with all joints either backed or taped and filled,

(b)non-**loadbearing** masonry or concrete not less than 50 mm (2 in) thick,

(c)**loadbearing** masonry or concrete not less than 75 mm (3 in) thick, or

(d)any thermal barrier that, when tested in conformance with CAN4-S101-M, "Standard Methods of Fire Endurance Tests of Building Construction and Materials", will not develop an average temperature rise of more than 140øC (252øF) or a maximum temperature rise at any point of more than 180øC (324øF) on its unexposed face within 20 min and will remain in place for not less than 40 min.

(6) Thermosetting foamed plastic insulation having a **flame-spread rating** of not more than 500 which forms part of a factory-assembled exterior wall panel that does not incorporate an air space is permitted to be used in a **building** required to be of **noncombustible construction** provided

(a)the foamed plastic is protected on both sides by sheet steel not less than 0.38 mm (0.015 in) thick which will remain in place for not less than 10 min when the wall panel is tested in conformance with CAN4-S101-M, "Standard Methods of Fire Endurance Tests of Building Construction and Materials",

(b)the**flame-spread rating** of the wall panel, determined by subjecting a sample including an assembled joint to the appropriate test described in Subsection 3.1.12., is not more than the **flame-spread rating** permitted for the room or space which it bounds,

(c)the **building** does not contain a Group B or Group C **major occupancy**, and

(d)the **building** is not more than 18 m (59 ft 1 in) high, measured between **grade** and the floor level of the uppermost **storey**.

5. **Applicant's Position**

The Applicant submitted that while EPS thermoplastic is designed differently, it is no more hazardous than thermoset plastic in terms of fire conditions in a fully sprinklered building. As a result, they argued that Sentence 3.1.5.11.(6) and the conditions contained therein were applicable.

In terms of meeting the requirements, or at least the intent, of this provision of the OBC it was their opinion that the automatic sprinkler system would provide adequate fire and life safety

protection for the building and its occupants. The Applicant indicated that the 141^{o} C (286^{o}F) sprinkler heads will activate early enough in the development of a fire that they will prevent the insulation from melting, or will serve to re-solidify it if melting has begun. Testing of the subject wall assembly was, in their view, therefore not necessary.

6. **Chief Building Official's Position**

The Respondent submitted that the EPS Thermoplastic Panels should not be considered under Sentence 3.1.5.11.(6) of the OBC since, as they noted, the insulation in question is not thermoset but thermoplastic. As a result, the Respondent argued that both Sentences 3.1.5.11.(3) and (4) were applicable. These provisions set out requirements for combustible insulation (within a certain flame-spread range), including EPS thermoplastic, for both interior and exterior wall assemblies.

In terms of meeting the specific conditions of Sentences (3) and (4), the Respondent indicated that the 0.38 mm (0.015 in.) sheet steel skin most likely did not meet the thermal barrier requirements. Further, if such a wall assembly could be considered as having a thermal barrier, it would need to undergo relevant testing to prove that the sheet steel was adequate as a thermal barrier. They noted that the installed wall panels had not been properly tested. If the panels were found to have inadequate thermal barriers, the Respondent stated that these would have to be added. Moreover, even assuming the subject wall panels could be subject to the requirements of Sentence 3.1.5.11.(6), they would still need to be tested.

Lastly, the Respondent countered the Applicant's arguments concerning meeting the intent of the OBC by sprinklering the building by pointing out that according to Article 3.2.2.61., under which the building was constructed, sprinklers are required in any case.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the E.P.S. Thermoplastic interior and exterior wall panels do not provide sufficiency of compliance with 3.1.5.11.(6) of the Ontario Building Code.

8. **Reasons**

i)The provisions of 3.1.5.11.(6) are for thermosetting plastic insulation sandwich panels and not thermoplastic insulation.

ii)The 1997 Building Code has a provision for the use of foam plastic panels under 3.1.5.11.(7). No evidence was provided to the Commission that tests prescribed in 3.1.5.11.(7) have been met.

Dated at Toronto this 16th day in the month of July in the year **1998** for application number **1998-32.**

BCC Ruling No. 98-31-636

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-31-636

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.7.1.3. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Dr. William Miletic, President, Wm. Miletic Enterprises Inc., Windsor, Ontario for the resolution of a dispute with Mr. Ed Link, Building Commissioner, City of Windsor, Ontario to determine whether the as constructed barrier-free path of travel at 1,010 mm (3 ft., 4 in.) provides sufficiency of compliance with Article 3.7.1.3. of the Ontario Building Code at Wm. Miletic Enterprises Inc., 1730 Huron Church Road, (B. P. H.) D79594, Windsor, Ontario.

APPLICANT

Dr. William Miletic, President
Wm. Miletic Enterprises Inc.
1730 Huron Church Road
Windsor, Ontario

RESPONDENT

Mr. Ed Link
Building Commissioner
City of Windsor

PANEL

Mr. Roy Philippe (Chair)
Mr. Ross Thomson
Mr. Lawrence Glazer

PLACE

Toronto and Windsor, Ontario

DATE OF HEARING

July 16, 1998

DATE OF RULING

July 16, 1998

APPEARANCES

Mr. Greg Verbeem, Bartlet and Richardes
Windsor, Ontario
Agent for the Applicant

Mr. Daniel Piescic, Assistant Building Commissioner
City of Windsor, Ontario
For the Respondent

RULING

1. **The Applicant**

   Dr. William Miletic, President, Wm. Miletic Enterprises Inc., Windsor has received a correction order under the *Building Code Act, 1992* to alter the recently constructed offices to provide at least one 1,060 mm (3 ft., 6 in.) wide barrier-free path of travel at Wm. Miletic Enterprises Inc., 1730 Huron Church Road, Windsor, Ontario.

2. **Description of Construction**

   In 1994 and 1995 the Applicant renovated the space leased in the subject building to create an office for his dental practice. During construction, it was discovered that the office did not provide a barrier-free path of travel measuring 1,060 mm (3 ft., 6 in.). A correction order was issued on February 5th, 1995.

   The subject office is a one storey, 221.7 m^2 (2,386 ft^2), Group D - Business and Personal Service occupancy. The office design has two parallel corridors leading from the front to the rear, where the barrier-free washroom and two of the rooms with dental chairs are located. Both corridors are measured at 1,010 mm (3 ft., 4 in.) in width.

Since the office space is leased, the renovations completed by the Applicant were interior only. The building is constructed of noncombustible construction.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the as constructed hallways in the subject dental office provides sufficiency of compliance with Sentence 3.7.1.3.(1) of the Ontario Building Code. This provision requires that barrier-free paths of travel for wheelchairs must be at least 1,060 mm (3 ft., 6 in.). The hallways in the Applicant's office are currently measured at 1,010 mm (3 ft., 4 in.).

4. **Provisions of the Ontario Building Code**

Article 3.7.1.3.Barrier-Free Path of Travel

(1) Except as required in Sentence (4) and except as permitted in Subsection 3.7.3., every barrier-free path of travel shall provide an unobstructed width of at least 1,060 mm (3 ft., 6 in.) for the passage of wheelchairs.

5. **Applicant's Position**

The Applicant submitted that while the path of travel does not meet the required width found in the OBC, he argued that only a small portion of the subject hallway is not in compliance. Further, the Applicant argued that moving the walls in the deficient hallways would be difficult due to the design of the patient rooms and the placement of equipment in those rooms. Such construction would be costly and may cause a loss of business.

The Applicant also noted that the deficiency has not caused problems for any of his patients. To support this assertion, he provided a signed statement from his patients who use wheelchairs indicating that the "office was satisfactory in meeting all their special needs." As the Applicant noted, the office's design presents no fire or safety risk since wheelchairs and even stretchers are able to pass through both hallways without obstruction.

As well, because there are two hallways this offers all patients an additional route of egress.

Three proposals were offered by the Applicant as compensating measures to demonstrate sufficiency of compliance. Specifically, he proposed that signs be posted at either end of the deficient corridors indicating the undersized dimensions. He also offered to upgrade the lighting

in the hallways if necessary. As well, an intercom system could be installed to assist staff and wheelchair patients to communicate about moving through the office.

Finally, the Applicant indicated that the deficiency resulted from a change of contractors during construction. It was not his intention to willfully compromise the standards in the Building Code.

6. **Chief Building Official's Position**

The Respondent submitted that the as constructed office does not meet the requirements found in Article 3.7.1.3. of the OBC regarding minimum path of travel widths for wheelchairs. They noted that the hallways are 50 mm (2 in.) too narrow. Windsor, the Respondent indicated, has a pro-active stance on issues concerning barrier-free accessibility.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the existing corridor of 1,010 mm (3 ft., 4 in.) in width does not provide sufficiency of compliance with 3.7.1.3. of the Building Code.

8. **Reasons**

i)The new south wall of the sterilization room in the corridor can be revised to provide the minimum width of 1,060 mm (3 ft., 6 in.).

ii)The width of 1,060 mm (3 ft., 6 in.) is considered minimum to allow independent mobility of handicapped patients.

Dated at Toronto this 16th day in the month of July in the year **1998** for application number **1998-31.** ar **1998** for application number **1998-32.**

BCC Ruling No. 98-30-635

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-30-635

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.2.1.1.(3) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Dennis Farkas and Ms. Barbara Farkas, property and business owners, Sheree Fashions, Port Colbourne, Ontario for the resolution of a dispute with Mr. Ralph Bradley, Chief Building Official, Township of Wainfleet, Ontario to determine whether the proposed mezzanine complies with Sentence 3.2.1.1.(3) of the Ontario Building Code at Sheree Fashions, R. R. # 2, Port Colbourne, Ontario.

APPLICANT

Mr. Dennis Farkas and Ms. Barbara Farkas, owners
Sheree Fashions
Port Colbourne, Ontario

RESPONDENT

Mr. Ralph Bradley
Chief Building Official
Township of Wainfleet

PANEL

Mr. Roy Philippe (Chair)
Mr. Ross Thomson
Mr. Lawrence Glazer

PLACE

Toronto, Ontario

DATE OF HEARING

July 16, 1998

DATE OF RULING

July 16, 1998

APPEARANCES

Mr. Dennis Farkas and Ms. Barbara Farkas, Sheree Fashions
Port Colbourne, Ontario
The Applicant

Mr. Ralph Bradley, Chief Building Official
Township of Wainfleet, Ontario
The Respondent

RULING

1. **The Applicants**

   Mr. Dennis Farkas and Ms. Barbara Farkas, business and property owners, Sheree Fashions, have applied for a building permit under the *Building Code Act, 1992* to construct an intermediate floor area in the recently constructed addition at Sheree Fashions, R. R. # 2, Port Colbourne, Ontario.

2. **Description of Construction**

   The Applicant recently constructed a one storey, 184 m^2 (1,984 ft^2) addition onto a single storey, 91 m^2 (977 ft^2) existing building. Both the existing building and the addition are constructed of combustible construction. The structure is classified as a Group E - mercantile major occupancy. The building is not provided with a standpipe and hose system, a fire alarm system, nor a sprinkler system. The renovated building is to be used as a storage area, office and garage for the Applicant's garment business. The building permit for the addition was issued under the 1990 version of the Ontario Building Code.

   Due to complications that arose during construction of the addition, the Applicant proposed to construct an intermediate floor area between the ground floor and ceiling in the addition. The proposed mezzanine had an area of 132 m^2 (1,426 ft^2), which represented approximately 72 % of

the area of the addition. This included a balcony that extended from the main mezzanine area found over the garage and office spaces completely around the interior of the new addition. Stairs serving the mezzanine would have been accessible only by travelling over the balcony areas. Believing they had approval for this revision, the Applicants proceeded to construct such a mezzanine. An order to comply from the municipality soon followed.

Attempting to rectify this situation, the Applicants redesigned the subject mezzanine so that it covered only the smaller garage and office areas. The area of the proposed modified mezzanine is 69 m^2 (744 ft^2), which comprises roughly 37.5 % of the area of the new addition. The new design has relocated the stairs so that they directly serve the smaller mezzanine. The Applicants also proposed to maintain the existing washroom located at the opposite end of the addition from the office and garage areas. The washroom has an area of 8.5 m^2 (91 ft^2), or 4.6 % of the addition's floor area and had been built as per the plans originally submitted. The spans installed above both the washroom and the garage and office areas (50 x 254 mm (2 x 10 in) s.p.f. beams at 407 mm (16 in) on centre and Nascor I-beams NJ10 joists at 204 mm (8 in) on centre respectively) are capable of supporting substantial live and dead loads.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the modified intermediate floor proposal can be considered as a mezzanine in accordance with Sentences 3.2.1.1.(3) and 3.2.8.2.(1) of the Ontario Building Code. Sentence 3.2.1.1.(3) requires, in particular, that the aggregate of the intermediate floor area be no more than 40 % of the room or storey in which it is located. The total of all intermediate floor space in the addition, at 42.1 %, slightly exceeds the 40% requirement.

4. **Provisions of the Ontario Building Code**

Sentence 3.2.1.1.(3)Exception to Building Height in Storeys

(3) Except as provided in Sentences (4), (5) and (8), a mezzanine should not be considered as a storey in calculating building height provided

(a) the aggregate area of the mezzanine floor is not more than 40 per cent of the area of the room or storey in which it is located,

(b) it is used as an open floor area except as provided in Sentence 3.3.2.11.(2), and

(c) the space above the mezzanine floor has no visual obstructions more than 1,070 mm (3 ft, 6 in) above such floors.

5. **Applicant's Position**

The Applicants submitted that the proposed modified mezzanine meets the 40 % requirement found in Sentence 3.2.1.1.(3). They calculated the space over the office and garage areas as being 37.5 % of the area of the addition. They argued that the area over the washroom should not be considered in the aggregate of mezzanine area, even though the joists may be capable of supporting a certain load. In their view, the washroom area is not contiguous with the what is actually being proposed as the modified mezzanine, the area over the garage and office. Further, the Applicants noted that it is not their intention to use the space over the washroom.

6. **Chief Building Official's Position**

The Respondent submitted that the aggregate of intermediate floor area, including the modified mezzanine and washroom areas is 77.6 m^2 (835 ft^2). As they noted, this figure exceeds the 40 % requirement by 2.1 %, or 4.6 m^2 (50 ft^2). According to the Respondent, the area over the washroom must be included because Sentence 3.2.1.1.(3) stipulates that the 40 %criteria is based on the aggregate calculation. Moreover, they believe that factoring in the space above the washroom in the measurement of mezzanine area is valid due to the construction of the ceiling joists. In their view, it is legitimate to expect that the Applicant will ultimately use the space over the washroom because the joists were constructed to handle such loads. They would like to see the walls of the washroom extended to the underside of the ceiling so that the space over the washroom cannot be used.

7. **Commission Ruling**

It is the decision of the Building Code Commission that a mezzanine(s) conforming to the requirements of 3.2.1.1.(3) of the Building Code is not considered a storey.

Dated at Toronto this 16th day in the month of July in the year **1998** for application number **1998-29.**

BCC Ruling No. 98-29-634

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-29-634

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Articles 8.2.1.3. and Article 8.2.2.3. of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Wendy Leach, home owner, London, Ontario for the resolution of a dispute with Mr. Rocky Cerminara, Chief Building Official, City of London, Ontario to determine whether the existing sewage system with a working capacity of 6,819 Litres/day serving the proposed renovated house with a total finished area of 819.9 m^2 provides sufficiency of compliance with Articles 8.2.1.3. and 8.2.2.3. of the Ontario Building Code at 1880 Kilally Road, London, Ontario.

APPLICANT

Ms. Wendy Leach, home owner
1880 Kilally Road
London, Ontario

RESPONDENT

Mr. Rocky Cerminara
Chief Building Official
City of London

PANEL

Mr. Roy Philippe (Chair)
Mr. Doug Robinson
Mr. Frank Wright

PLACE

Toronto, Ontario

DATE OF HEARING

July 29, 1998

DATE OF RULING

July 29, 1998

APPEARANCES

Mr. Archie Leach
London, Ontario
Agent for the Applicant

Mr. Robert Palin, Director
Upper Thames River Conservation Authority
London, Ontario
For the Respondent

RULING

1. **The Applicant**

   Ms. Wendy Leach, home owner, has applied for a building permit under the *Building Code Act, 1992* to construct an addition on an existing, detached dwelling at 1880 Kilally Road, London, Ontario.

2. **Description of Construction/Site Description**

   The Applicants are proposing to renovate an existing 2 storey, Group C occupancy, dwelling unit with a current finished area of 573.2 m^2 (6,167.6 ft^2). The proposed construction will add a further 246.7 m^2 (2,654.5 ft^2) to the residential structure for a total finished area of 819.9 m^2 (8,822.1 ft^2) . The proposed house will contain five bedrooms and 38.5 fixtures units. The renovation will add a limited number of extra fixture units. The estimated daily design flow is 8,699 L/d.

   Regarding their sewage system, the Applicants are proposing to use the existing one for the renovated house without modification. The existing system is a conventional, gravity-based Class 4 system consisting of a 6,819 litre septic tank with a 232.3 m^2 (2,500 ft^2) leaching bed containing nine absorption trenches, comprising a total of 137.2 linear metres (450 ft). The

trenches themselves are .92 m (3 ft) deep and are filled with 19 mm (3/4 in) stone. The distribution pipe is 3 in. trade size in diameter.

The site is flat. A spring runs across the property. The soils are described as gravel and sand material with some silt. The percolation rate was measured at 2 min/cm. The topsoil is approximately 30 cm (12 in) deep.

3. **Dispute**

The issue at dispute between the Applicant and Respondent concerns whether the existing septic tank with a working capacity of 6,819 L/d serving the proposed renovated house with a total finished area of 819.9 m^2 provides sufficiency of compliance with Sentences 8.2.1.3.(1) and 8.2.2.3.(1) of the Ontario Building Code. Sentence 8.2.1.3.(1) sets out how to determine the design flows of a sewage system. According to the Table found in this provision, the calculated daily design flow for the proposed renovated house would be 8,699 L/d. Sentence 8.2.2.3.(1) stipulates that a septic tank must be designed so that it can accommodate at least twice the calculated daily design flow. This requirement would mean that the septic tank would need to have a capacity of 17,398 litres. The current, and proposed septic tank, has a volume of 6,819 litres.

4. **Provisions of the Ontario Building Code**

Sentence 8.2.1.3.Sewage System Design Flows

(1) For residential occupancies, the total daily design sanitary sewage flow shall be at least the value in Column 2 as determined from Table 8.2.1.3.A. (See Appendix A.)

Sentence 8.2.2.3.Septic Tanks

(1) The minimum working capacity of a septic tank shall not be less than twice the daily design sanitary sewage flow, except that in no case shall the working capacity of the septic tank be less than 3,600 L.

5. **Applicant's Position**

The Applicants submitted that the existing septic tank, as well as the entire sewage system, has functioned without known problems. As they noted, the soil conditions are excellent. The Applicants argued that the existing system has adequate capacity and that the sewage flows will

not change as a result of the renovation because a limited number of additional fixture units are being added.

It was their contention, in fact, that a larger tank may not function properly. They felt that the water may stagnate in the tank and would not flow into the existing leaching bed properly. They feared that this may cause harmful gases to escape, or would at least create a nuisance by the excessive odour.

In their view, the existing system, including the septic tank satisfies the intent of the OBC and would adequately serve the enlarged house.

6. **Respondent's Position**

The Respondent submitted that when considering both Sentences 8.2.1.3.(1) and 8.2.2.3.(1) of the OBC the septic tank for the proposed renovated house should have a working capacity of 17,398 litres. Since the proposal sought to allow an existing system with a 6,819 litres tank to continue to serve the new structure, they refused to issue a building permit. The Respondent also added that the system required under the Building Code would probably be too large to service the proposed house.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the existing septic tank with aworking capacity of 6,819 litres serving the proposed renovated house with an addition of approximately 246.7 m^2 provides sufficiency of compliance with Article 8.2.1.3 of the Building Code provided that additional septic tank capacity of 5,000 litres is provided.

8. **Reasons**

i)The current tank capacity is only subject to modification when Clause 11.4.2.5.(3)(b) of the Building Code applies, because of the size of the addition.

ii)Articles 11.4.3.6. and 8.2.1.3. of the Ontario Building Code contain requirements for residential dwellings with an increase in finished floor area of 246.7 m^2. The design sanitary flow is increased to be 2,467 L/d requiring an additional 4,934 litres of septic tank capacity.

iii)The increased septic tank capacity to accommodate the addition as outlined in Articles 8.2.1.3 and 8.2.2.3. is significant (approx. 83% increase in capacity) and no alternative proposals or

supporting data was presented for consideration by the Commission, other than only a guest room and additional 8 plumbing fictures were to be added and that the existing system is working.

iv)It is the opinion of the Building Code Commission that the increase in septic tank capacity will improve the quality of the septic tank effluent.

Dated at Toronto this 29th day in the month of July in the year **1998** for application number **1998-37.**

BCC Ruling No. 98-28-633

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-28-633

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 8.7.6.1. of Regulation 403, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Roger Howard, Planner, Rice Development Corp., Brampton, Ontario for the resolution of a dispute with Mr. Stephen Barks, Chief Building Official, Town of Innisfil, Ontario to determine whether the proposed residential sewage system which incorporates a recirculation sand filter with a shallow buried trench disposal system is permitted to be installed when considering Article 8.7.6.1. of the Ontario Building Code at Part of Lot 7, Conc. 7, Town of Innisfil, County of Simcoe, Ontario.

APPLICANT

Mr. Roger Howard, Planner
Rice Development Corp.
Brampton, Ontario

RESPONDENT

Mr. Stephen Barks
Chief Building Official
Town of Innisfil

PANEL

Mr. Roy Philippe (Chair)
Mr. Michael Lio
Mr. Frank Wright

PLACE

Toronto, Ontario

DATE OF HEARING

July 9, 1998

DATE OF RULING

July 29, 1998

APPEARANCES

Mr. Jim Firth, Branch Manager, Burnside Development Services
Newmarket, Ontario
Agent for the Applicant

Mr. Stephen Barks, Chief Building Official
Town of Innisfil, Ontario
For the Respondent

RULING

1. **The Applicant**

   Mr. Roger Howard, Planner, Rice Development Corp., has applied for a building permit under the *Building Code Act, 1992* for the construction of a new, detached dwelling unit, including an on-site sewage system at Part of Lot 7, Concession 7, Town of Innisfil, County of Simcoe, Ontario.

2. **Description of Construction/Site Description**

   The Applicant is proposing to construct a 2 storey, Group C occupancy, dwelling unit with a total finished area of 201 m^2 (2,163 ft^2). The proposed residential structure is to contain four bedrooms and twenty fixtures units. The estimated daily design flow is 2,100 litres per day.

   The subject sewage system proposes a conventional septic tank with a buried intermittent sand filter and a shallow buried trench distribution system. The system operates by clarifying the effluent by separating the liquids from the solids, as they pass from the septic tank into the sand filter. This is achieved by use of the screened pump vault found in the pump chamber of the septic tank.

The effluent is to be discharged in timed doses continually throughout the day from the septic tank to the top of the sand filter through a series of 25 mm (1 in.) diameter pressurized pipes. The pipes have perforations every 600 mm (23 5/8 in.) which are covered by an orifice shield that is designed to direct the effluent discharge downwards into the filter. The sand filter itself will be either a plywood or concrete box lined with 30 mm PVC impervious liner, installed below grade and then covered with topsoil and grass. The proposed system is designed so that the quality of effluent after filtration will be less than 10/10 BOD and total suspended solids. From the sand filter, the treated effluent will be collected in the pump basin and discharged in timed intervals to the leaching bed.

The leaching bed will be composed of two shallow buried trenches 20 metres (65 ft., 8 in.) long, placed 1.5 metres (4 ft., 11 in.) apart. The length of trench (40 metres (131 ft., 3 in.)) was arrived at by utilizing the formula of Q/75 where Q is the design sewage flow rate of 2,100 litres per day. The trenches will be approximately 300 mm (12 in.) deep and 300 mm (12 in.) wide. They will employ the chamber system design that uses a horizontally sliced 300 mm (12 in.) diameter pipe with a 25 mm (1 in.) pressurized distribution pipe running the entire length of the chamber. The distribution pipe is perforated every 600 mm (23 5/8 in.), with the perforations oriented upwards.

Both pumps in the proposed system are 1/2 horse power and are equipped with an audio-visual alarm. The timers are programmable to customize for actual water use.

While information was not provided concerning the hydrogeological conditions of the specific site in dispute (Lot 7), material was supplied regarding the larger 24.9 ha property within which the site is situated. The subject property is heavily wooded and the soils are described as variable but can generally be grouped into the following categories; silt and sand materials, silty sand material, clean sand, or sand and gravel material. The estimated percolation rates for these soil categories are; 25 to 35 min/cm approximately for the silt and sand material, 15 to 25 min/cm for the silty sand material the rate is 15 to 25 min/cm, and 60 to 15 min/cm for the clean sand or sand and gravel material. The sand and gravel areas are confined or semi-confined pockets found beneath the till. Underneath the overburden materials is limestone bedrock.

On the lower lying portions of the property there are areas where the ground water table is considered to be high, but for most of the site the water table is encountered at 1.5 metres or lower. The elevated ground water table is not an issue concerning the subject site, however. The water supply for the property is provided by piped municipal service.

The topography of the subject site, as shown on the submitted lot diagrams, is relatively flat in the north east portion. There is a fairly steep slope on the southern half of the lot, while the north western area has a gradual slope. The proposed sewage system would utilize this gradual slope in the north western quadrant, and the shallow buried trenches would be arranged so that they would be level within this slope.

3. **Dispute**

The issue at dispute between the Applicant and Respondent concerns whether the proposed residential sewage system that includes a shallow buried trench distribution system located in the Town of Innisfil may be permitted when considering Article 8.7.6.1. of the Ontario Building Code. This provision permits shallow buried trenches only in three geographic areas of Ontario, specifically the Counties of Essex and Lambton and the Municipality of Chatham-Kent.

4. **Provisions of the Ontario Building Code**

Article 8.7.6.1.Limitation on Installation

(1) Except as provided in Sentence (2), a shallow buried trench shall not be installed.

(2) A shallow buried trench may be installed in the geographic areas of the Counties of Essex and Lambton and the Municipality of Chatham-Kent. (See Appendix A.)

5. **Applicant's Position**

The Applicant submitted that the proposed sewage system will satisfy the construction requirements for shallow buried trench distribution systems found in Article 8.7.6.2. of the OBC. In their view, the proposal will meet the general health and safety standards for sewage systems found in the Code. As such, they argued that the geographic limitation on shallow buried trench distribution systems found in Article 8.7.6.1. of the OBC is unnecessary. In fact, they believe their system, with shallow buried trenches placed in the subject soil, will provide a better level of effluent treatment than required by the OBC.

Shallow buried trenches, as a system of effluent distribution, have a proven track record, the Applicants argued. The technology is not in question, it has been shown to work. As they noted, this system is recognized under the Ontario Building Code.

The Applicant stated that shallow buried trenches have existed since the 1970s and have been proven to work in many jurisdictions with a wide variety of soil types, even those with cold climates. As a result, they argued that their was no technical reason for the geographic limitation of shallow buried trenches. The decision to restrict these systems to the three designated areas was based on politics, and not on the technical competency of the systems, they asserted.

The Applicants also noted that shallow buried trenches have been permitted in many jurisdictions in Ontario outside of the three areas listed in the OBC. As examples, they submitted a recent favourable decision of the Environmental Appeal Board regarding an individual who made application for a sewage system permit under the Environmental Protection Act (EPA). The applicant in that case was seeking to install a shallow buried trench system to serve a single detached dwelling in the Regional Municipality of York. As well, a recent Ministry of Environment Certificate of Approval permitting a shallow buried trench distribution system for a dining/clubhouse facility at a Golf Course in Guelph was presented by the Applicants as further evidence of the Ontario-wide use of these systems. In this case, the subject facility was considered to have a daily design flow of 10,500 L/day and thus was still considered under the jurisdiction of the EPA.

In summation, the Applicants argued that a shallow buried trench system should be allowed at the subject site, and across Ontario. In their view, the environment, home builders and the house buying public would be better served if shallow buried trenches were permitted.

6. **Chief Building Official's Position**

The Respondent submitted that Sentence 8.7.6.1.(2) of the OBC is clear, shallow buried trenches are only permitted in the geographic areas of the Counties of Essex and Lambton and the Municipality of Lambton-Kent. The proposed shallowed buried trench system is not located in any of these areas. They noted though that the shallow buried trench system of sewage disposal does have merit. According to the Respondent, however, approval of such a system is beyond their jurisdiction.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the matter of this dispute is beyond its jurisdiction as described in Section 24(1) of the Building Code Act, 1992.

8. **Reasons**

i)The powers of the Building Code Commission, outlined in Section 24(1) of the Building Code Act, 1992, are limited to resolving issues involving the interpretation of the technical requirements of the Building Code or the sufficiency of compliance with the technical requirements of the Building Code. It is the opinion of the Building Code Commission that the Building Code requirement that limits the installation of shallow buried trenches to the counties of Essex and Lambton and the municipality of Chatham-Kent (Sentence 8.7.6.1.(2)) is not a technical requirement but is an administrative requirement representing a policy decision by the Lieutenant Governor in Council to limit their installation to specific geographic locations.

While the matter of this dispute is beyond the Commission's jurisdiction, in reference to the arguments which were made, it is the Commission's opinion that the equivalency provisions of the Building Code Section 2.7 cannot be applied. Shallow buried trenches are an authorized system in specific locations under the Building Code and Section 9 of the Building Code Act, 1992 permits the use of equivalent systems only where they are not authorized by the Building Code.

ii)It is the opinion of the Building Code Commission that an amendment to the Building Code would be required to permit the installation of shallow buried trenches outside of the specified geographic locations.

Dated at Toronto this 29th day in the month of July in the year **1998** for application number **1998-28.**

BCC Ruling No. 98-27-632

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-27-632

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.1.5.8. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Bob Whitcher, Manager, Manufacturing Engineering, Cambridge, Ontario for the resolution of a dispute with Mr. Larry Simonato, Chief Building Official, City of Cambridge, Ontario to determine whether the installed plywood platforms in eight assembly lines should be considered as finished flooring with concealed spaces underneath and therefore subject to Article 3.1.5.8. of the Ontario Building Code at the Toyota Motor Manufacturing Plant, 1055 Fountain Street North, Cambridge, Ontario.

APPLICANT

Mr. Bob Whitcher, Manager, Manufacturing Engineering
Toyota Motor Manufacturing Canada Inc.
Cambridge, Ontario

RESPONDENT

Mr. Larry Simonato
Chief Building Official
City of Cambridge

PANEL

Mr. Michael Lio (Chair)
Mr. Michael Steele
Mr. Kenneth Peaker

PLACE

Toronto, Ontario

DATE OF HEARING

June 18, 1998

DATE OF RULING

June 18, 1998

APPEARANCES

Mr. Leszek Muniak, Principal, Larden Muniak Consulting Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Dave Carroll, Supervisor of Building Inspectors
City of Cambridge, Ontario
For the Respondent

RULING

1. **The Applicant**

   Mr. Bob Whitcher, Manager, Manufacturing Engineering, holds a building permit under the *Building Code Act, 1992* for the construction of an addition to an automobile manufacturing plant at 1055 Fountain Street North, Cambridge, Ontario.

2. **Description of Construction**

   The Applicant recently constructed a one storey addition to a manufacturing facility that assembles automobiles. With the addition the plant has a building area of 268,000 m^2. The building is constructed of noncombustible construction. It is fully sprinklered and is also equipped with a fire alarm system and a standpipe and hose system. The structure is classified as having a Group F - Division 3 industrial major occupancy. There are also subsidiary office spaces in the plant.

   As part of the recent construction, the Applicant installed a series of plywood platforms at eight assembly lines that serve as adjustable work stations. The platforms were made to be adjustable so that they can be positioned to safe and desirable heights as plant employees perform their

tasks. Five assembly lines have overhead conveyors that has automobiles suspended above as work is performed underneath. Three other lines are slat conveyors in which the automobiles move through the assembly process on a moving floor conveyor.

On four of the overhead assembly lines, a work pit centred under the conveyor runs the length of the assembly line. Some of the subject platforms are located in these pits, which allow for the necessary clearance of the adjustable work stations. Since the conveyors are purchased as prefabricated units, the pits and moveable platforms are useful so that the conveyors can be made more adaptable.

The area where the automobiles are assembled within the plant is open and comprises approximately 41,600 m^2.

3. **Dispute**

The issue at dispute between the Applicant and Respondent concerns whether the as constructed plywood platforms should be considered as finished flooring with concealed spaces underneath and therefore subject to Article 3.1.5.8. of the Ontario Building Code. In a building required to be of noncombustible construction, the recently constructed platforms are wood, not steel. Sentence (2) of Article 3.1.5.8. of the OB. allows a raised combustible floor in a noncombustible building as long as the concealed spaces are fire stopped. Most of the platforms exceed the height of 300 mm permitted in Article 3.1.5.8. (even exceeding 375 mm allowed in the 1997 OBC.) and some are not adequately fire stopped. If the platforms are considered to have concealed spaces beneath, they would be required to be fire stopped so that the maximum area of concealed space is limited to 10 m^2 or less according to Article 3.1.11.3. The concealed spaces would also be required to be sprinklered as per Article 3.2.5.13.

4. **Provisions of the Ontario Building Code**

Sentence 3.1.5.8.(2)Combustible Flooring Elements

(2) Wood members more than 50 mm (2 in) but not more than 300 mm (11 3/4) high applied directly to or set into a noncombustible floor slab are permitted for the support of finished flooring in a building required to be of noncombustible construction provided the concealed spaces are fire stopped in conformance with Sentence 3.1.11.3.(2).

Sentence 3.1.11.3.(2)Fire Stopping Between Nailing and Supporting Elements

(2) In a building required to be of noncombustible construction, fire stops conforming to Article 3.1.11.7. shall be provided in the concealed spaces created by the wood members permitted in Sentence 3.1.5.8.(2) so that the maximum area of a concealed space is not more than 10 m^2 (108 ft^2).

Sentence 3.2.5.13.(1)Automatic Sprinkler Systems

(1) Except as provided in Sentences (2) and (3), where a sprinkler system is required, it shall be designed, constructed, installed and tested in conformance with NFPA 13, "Installation of Sprinkler System".

5. **Applicant's Position**

The Applicant submitted that the plywood platforms should not be considered as having concealed spaces and therefore not subject to Article 3.1.5.8.

On a general level, the Applicant argued that the plywood platforms, as opposed to steel, provide more cushioning and flexibility thereby offering more comfort to assembly line workers. As well, the subject platforms are easier to adjust than similar ones made of steel, thus making them more ergonomically friendly because they can easily accommodate the height differences of the various line employees. The Applicant also indicated that the total floor space occupied by the plywood platforms is 2,865 m^2. They noted that this represents only 6.9% of the 41,600 m^2 assembly floor area.

While recognizing that the potential exists for fire to propagate in the spaces underneath the platforms, they insisted that risk to occupants is limited. The platforms are not part of ameans of egress. Workers can easily get off either side of the platforms onto the concrete floor before the smoke and heat from a potential fire under a platform could cause problems. Since the assembly area is a large, open space evacuation in such a fire could occur in reasonable time.

The Applicant also argued that fire stopping or sprinklering under the platforms is impractical because they are constantly being adjusted up or down depending on the needs of the users.

The Applicant also addressed the specifics of the different types of platforms. The first type, which covers an area of 277 m^2, are described as 1,220 mm by 2,440 mm (4 ft by 8 ft) plywood boxes that are laid side by side to create a linear platform. The boxes are 406 mm high, exceeding both the 1990 and 1997 OBC standards. Handhold slots for moving and relocation are

provided at the perimeter of each box. When positioned side by side, the handhold slots line up from one box to the next. The Applicant argues that these box-type platforms should be allowed because they are similar to wood flooring allowed under Article 3.1.5.8. with the exception that they are slightly higher which does not appreciably increase the associated hazards. They also note that there is no potential fire sources such as motors, cabling, etc. contained in these platforms.

The second type of platform is also a box type and it covers 447 m^2. These boxes are less than 375 mm in height, however, some have a steel framed, prefabricated motor driven conveyor belt beneath. The electric motors below some platforms are the potential ignition points, nevertheless, these have been equipped with a pinch point protection system that provides for metal flaps that cover the space between the edge of the conveyor belt and the box they sit in. These boxes have hinged access hatches to provide quick fire fighting access. The Applicant is recommending that the handhold holes be fire stopped in these platforms.

The last type, at 2,141 m^2, occupies nearly 75 % of the platform area. Located in the concrete pits found at the overhead assembly lines, these platforms are 406 mm high, and contain a similar conveyor mechanism (as described above) underneath. This type of platform is not fire stopped under the walking surface. As the Applicant argued, this platform type does meet the intent of Article 3.1.5.8. since it does provide for some inhibiting of the spread of fire in a concealed space because the pit areas themselves are limited in length. As well, it allows occupants an easy opportunity to dismount onto a concrete floor in an open space which, the Applicant stated, provides an immediate and safe access to a means of egress.

Lastly, the Applicant contended that the plywood platforms installed in the manufacturing facility should be viewed more as an adjustable tool and not as a fixed flooring system and should therefore not be required to fire stop and sprinkler below the plywood platforms.

6. **Chief Building Official's Position**

The Respondent submitted that the installed combustible platforms do not meet the requirements of the OBC, specifically Sentences 3.1.5.8.(2), 3.1.11.3.(2) and 3.2.5.13.(1).

The Respondents argued that there were three aspects of the platforms that were not complying with the Building Code. The first issue is that some of the platforms are too high. Applying the 1990 OBC standards, they noted that the maximum height permitted in Sentence 3.1.5.8.(2) was 300 mm (11 3/4 in). Two of the three platform types exceed this height.

The second issue they raised was that was that none of the platforms were fire stopped in accordance with Sentence 3.1.11.3.(2). The Respondents also added that the maximum area of any single concealed space be limited to 10 m^2 (108 ft^2).

The requirement for sprinklering the concealed spaces found in Sentence 3.2.5.13.(1) was the third issue brought forward by the Respondent. In their view, the platforms should be built to conform with NFPA 13 standards for sprinklering a concealed spaces found in combustible construction. They noted that none of the platforms are currently sprinklered.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the combustible platforms do not provide sufficiency of compliance with the requirements of the Building Code.

8. **Reasons**

i)It is the opinion of the Building Code Commission that the platforms are not considered fixtures and are part of the building.

Dated at Toronto this 18th day in the month of June in the year **1998** for application number **1998-26.**

BCC Ruling No. 98-25-630

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-25-630

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Subclause 3.6.4.2.(25)(b)(ii) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Mohammad Abhary, Vice President, Arya Investments Corp., Toronto, Ontario for the resolution of a dispute with Mr. Gary Bilbous, Chief Building Official, Oshawa, Ontario to determine whether a 428 m^2 retail store in a proposed retail occupancy that is equipped with a single washroom which is handicapped accessible provides sufficiency of compliance with Clause 3.6.4.2.(25)(b) of the Ontario Building Code at Northwoods Mews, 1276 - 1288 Ritson Road North, Oshawa, Ontario.

APPLICANT

Mr. Mohammad Abhary, Vice President
Arya Investments Corp.
Toronto, Ontario

RESPONDENT

Mr. Gary Bilbous
Chief Building Official
City of Oshawa

PANEL

Mr. Roy Philippe (Chair)
Mr. Michael Steele
Mr. Robert DeBerardis

PLACE

Toronto, Ontario

DATE OF HEARING

June 4, 1998

DATE OF RULING

June 4, 1998

APPEARANCES

Mr. Mohammad Abhary, V. P., Arya Investment Corp.
Toronto, Ontario
Agent for the Applicant

Ms. Cveta Prgin, Building Engineer
Oshawa, Ontario
For the Respondent

RULING

1. **The Applicant**

   Mr. Mohammad Abhary, Vice President, Arya Investments Corp. holds a building permit under the *Building Code Act, 1992* for a new multiple store retail plaza at 1276 - 1288 Ritson Road North, Oshawa, Ontario.

2. **Description of Construction**

   The Applicant recently constructed a one storey, 1,294.6 m^2 retail plaza which could contain a maximum of twelve units. Each unit is approximately 107 m^2. Currently some of the units have been combined into larger stores. The building is constructed of noncombustible construction. It is not equipped with a fire alarm system nor a sprinkler system. The structure is classified as having a Group E - mercantile major occupancy.

   One of the retail outlets combines four units for a floor area of roughly 428 m^2 and is leased to a dollar store. This store is equipped with only one washroom for both sexes. This washroom is handicapped accessible. The maximum number of employees in the dollar store at any time is three persons. The other stores are provided with their own washroom facilities.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the current provision of one water closet in a 428 m^2 retail store provides sufficiency of compliance with Clause 3.6.4.2.(25)(b) of the Ontario Building Code. This provision stipulates that a mercantile occupancy under certain conditions can be allowed to have only one water closet. One of the conditions is that the Group E occupancy is less than 300 m^2.

4. Provisions of the Ontario Building Code

Clause 3.6.4.2.(25)Sanitary Facilities

Not more than 1 water closet to serve both sexes need be provided in

(b)a Group E or F occupancy,

(i)having an occupant load not exceeding 9 persons, or

(ii)where the sum of the floor areas, excluding basements, does not exceed 300 m^2 (3230 ft^2).

5. **Applicant's Position**

The Applicant submitted that the current washroom facilities are adequate for the number of employees. He further indicated that the lessor has informed him that at no time has any patron requested to use their washroom. In his view, OBC clause 3.6.4.2.(25) is too onerous for a small sized store.

6. **Chief Building Official's Position**

The Respondent submitted that the as constructed retail plaza with only one water closet does not provide sufficiency of compliance with the Ontario Building Code. They argued that the floor area of the Dollar Store, at 428 m^2, clearly exceeds the 300 m^2 maximum that allows one washroom in Clause 3.6.4.2.(25)(b). As they note, the Applicant freely concedes this point. Further, they calculate that using a rate of 3.7 persons per m^2 for mercantile uses as found in table 3.1.16.A. translates into an occupant load of 115 persons for the Dollar Store, which is obviously far in excess of the 9 persons allowed in Clause 3.6.4.2.(25)(b).

Having not qualified under Clause 3.6.4.2.(25)(b), the Respondents instead indicated that the Dollar Store should be subject to Clause 3.6.4.2.(24)(b). This provision requires that one water closet be provided in a Group E occupancy for each sex where the sum of the floor area is less than 600 m^2.

Finally, the Respondents advised that the plans submitted for a permit showed two washrooms, but only one was constructed.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the 428 m^2 retail store equipped with a single handicapped accessible washroom does not provide sufficiency of compliance with Subclause 3.6.4.2.(25)(b) (ii) of the Building Code.

Reasons

i)No alternative measures were provided for sufficiency of compliance.

ii)No other public washrooms are provided in the building complex.

iii)The occupant load and building area both exceed the requirements of Sentence 3.6.4.2.(25)

Dated at Toronto this 4th day in the month of June in the year **1998** for application number **1998-23.**

BCC Ruling No. 98-24-629

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-24-629

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 9.10.4.1.(2) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Ms. Daniela Lepre, Project Coordinator, Leaside Green Inc., 65 Overlea Blvd., Toronto (East York), Ontario for the resolution of a dispute with Mr. Harold Bratten, Director, Building By-Law and Enforcement, Toronto (East York), Ontario to determine whether the proposed mezzanines, as designed, in sixteen units within the project comply with Sentence 9.10.4.1.(2) of the Ontario Building Code at 15 Overlea Blvd., Toronto (East York), Ontario.

APPLICANT

Ms. Daniela Lepre, Project Coordinator
Leaside Green Inc.
Toronto (East York), Ontario

RESPONDENT

Mr. Harold Bratten
Director, Building By-Law and Enforcement
City of Toronto (East York)

PANEL

Mr. Michael Lio (Chair)
Mr. Kenneth Peaker
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF HEARING

May 21, 1998

DATE OF RULING

May 21, 1998

APPEARANCES

Mr. Blandford Gates, Director
Fliess Gates McGowan Easton Architects Inc.
Toronto, Ontario

The Applicant

Mr. Dean Pheakos, Plans Examiner
Toronto (East York), Ontario
For the Respondent

RULING

1. **The Applicant**

   Ms. Daniela Lepre, Project Coordinator, Leaside Green Inc., has applied for a building permit under the *Building Code Act, 1992* to construct an 82 unit, low rise, residential condominium townhouse project known as Leaside Green, 15 Overlea Blvd, Toronto (East York), Ontario.

2. **Description of Construction**

   The Applicant proposes to construct an 82 unit, low rise, townhouse condominium project. The individual units are clustered together into several larger blocks. The total building area of each of the blocks is less than 600 m^2 (6,460 ft^2). The units are proposed to be constructed of combustible construction, with a 1 hour fire separation between units. The blocks will not equipped with a standpipe and hose system nor a sprinkler system. The individual units are to be provided with a fire alarm and smoke detection system. The buildings are classified as Group C - residential occupancy.

   There are numerous different unit types designed for this project. Each of the blocks are a combination of the different unit designs. Four of the Applicant's unit designs contain

mezzanines on the third floor. In particular, the mezzanines are found in the Ab, C, D and E unit types, accounting for sixteen units in total. These units are combined in the larger blocks with non-mezzanine units. The sizes of the mezzanines ranges from 22.9 m^2 (246 ft^2) to 29.3 m^2 (315 ft^2).

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed mezzanines, as designed, in sixteen units within the project comply with Sentence 9.10.4.1.(2) of the Ontario Building Code. This provision allows a mezzanine to not be considered as a storey under certain conditions. Complying with Sentence 9.10.4.1.(2) is significant for the construction of the blocks containing mezzanine units since if they are instead defined as floors then the units would be considered as having four floors of building height, meaning they would be subject to the construction requirements found in Part 3 of the OBC. The four floor units would therefore be required, for example, to be constructed of non-combustible construction, or if combustible construction is used then the units must be sprinklered and the separations between the four and three floor units must be two hour rated fire walls.

As a result of this dispute, the Applicant elected to submit plans for a permit showing sprinklers throughout the mezzanine units with two hour fire walls. They are now seeking clarification on the mezzanine issue and wish to revise their building permit to delete the sprinklers and fire walls. The municipality has issued a partial building permit for the blocks that do not contain units with mezzanines, or fourth floors.

4. **Provisions of the Ontario Building Code**

Sentence 9.10.4.1(2)Mezzanines not considered as storeys

(2) Mezzanines shall not be considered as storeys for the purpose of determining building height where they occupy an aggregate area not exceeding 40 per cent of the area of the room or the storey in which they are located provided the space above the mezzanine floor has have (sic) no visual obstructions more than 1 070 mm (3 ft 6 in) above such floors.

5. **Applicant's Position**

The Applicant submitted that the proposed mezzanines should not be defined as a fourth storey of building height. In her view, the mezzanines comply with the conditions found in Sentence

9.10.4.1.(2). As the Applicant argued, with the mezzanines ranging in size from 22.9 m^2 (246 ft^2) to 29.3 m^2 (315 ft^2) none exceed 40 % of the third floor areas within their units. She also indicated that the mezzanines have no visual obstructions more than 1 070 mm (3 ft, 6 in). The Applicant argued that the OBC nor the Guide to the OBC provide any direction on how open in terms of design a mezzanine must be in order to qualify as a mezzanine. As a result, she asserted that the mezzanines are not an additional storey, thus the mezzanine units should be subject to the requirements of Part 9 of the Code.

To underscore her view, the Applicant compared the Leaside Green project with a similar one in the former City of Toronto that also had a "fourth level" in some of the units. That project's fourth levels were considered as mezzanines on the third floors. The Applicant also provided two other examples of joined townhouse condominium blocks that were built according to Part 9, but apparently had four levels.

The Applicant also submitted three separate options for providing sufficiency of compliance with the Part 3 provisions of the OBC if the Building Code Commission were to interpret the subject units as having four floors of building height. Nevertheless, the Applicant still maintained that the mezzanines, as designed, should be considered mezzanines.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed mezzanines should be considered as a fourth storey of building height. In their view, the subject mezzanines have a clearly designed floor structure between the third and fourth levels. The mezzanines do not act as intermediate floor levels, nor can they be considered interior balconies. As they indicated, the proposed mezzanines do not meet the OBC definition of mezzanines. From this interpretation that the subject units are four storeys, it is their opinion that the Part 3 provisions of the Code must be applied.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed construction does not demonstrate sufficiency of compliance with the requirements of the Building Code and must conform to the requirements of Part 3.

8. **Reasons**

i)The proposed mezzanine are considered storeys since they are not an intermediate floor assemblies between the floor and ceiling of a storey.

ii)The proposed mezzanines are considered storeys since visual obstructions exist in the space more than 1070 mm (3 ft 6 in) above the mezzanine floors.

Dated at Toronto this 21st day in the month of May in the year **1998** for application number**1998-24**

BCC Ruling No. 98-23-628

BUILDING CODE COMMISSION DECISION ON B.C.C. # 98-23-628

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Articles 9.25.2.1. and 9.25.2.7. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. George Simeonoff, President-Manager, Everstrong Floors and Walls Ltd., 191 King St., Weston, Ontario for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, Ontario to determine whether the studio floor assembly above the garage, as constructed, with a concrete slab including an embedded hydronic heat radiation system but without insulation provides sufficiency of compliance with Articles 9.25.2.1. and 9.25.2.7. of the Ontario Building Code at 1497 Bancroft Drive, City of Mississauga, Ontario.

APPLICANT

Mr. George Simeonoff, President-Manager
Everstrong Floors and Walls Ltd.
Weston, Ontario

RESPONDENT

Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL

Mr. Michael Lio (Chair)
Mr. Kenneth Peaker
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF HEARING

May 21, 1998

DATE OF RULING

May 21, 1998

APPEARANCES

Mr. George Simeonoff, President-Manager
Everstrong Floors and Walls Ltd.
Weston, Ontario

The Applicant

Mr. Roger Hebert, Inspector, HVAC Systems
City of Mississauga, Ontario
The Respondent

RULING

1. **The Applicant**

   Mr. George Simeonoff, President-Manager, Everstrong Floors and Walls Ltd., has been issued an order to comply under the *Building Code Act, 1992* to insulate a concrete floor assembly which separates a garage from a studio above thereby bringing the floor into conformity with Article 9.25.2.7. of the Ontario Building Code at 1497 Bancroft Drive, Mississauga, Ontario.

2. **Description of Construction**

   The building in dispute is a two-storey, single-detached residential structure and is the home of Mr. and Mrs. Peter Miller. It has a building area of 306.7 m^2 (3,300 ft^2).

   The concrete floor assembly in question separates an unheated double car garage from a studio above and is uninsulated. Several loops of hydronic piping are embedded in the underside of the subject floor assembly which provides a certain level of heat in the garage and heat that radiates throughout the floor. (The current owner contends that the average garage temperature is 12.8^{o}C

(55°F)). Within the studio space the concrete floor has been finished with tiles. The rest of the building is heated by a conventional forced air system.

The garage walls are constructed (from exterior to interior) of a stucco coating on 45 mm (1 3/4 in) precast concrete on 38 mm (1 1/2 in) rigid insulation on 9.5 mm (3/8 in) exterior plywood supported by 38 by 135 mm (2 by 6 in) wood framing studs fini shed with 13 mm (1/2 in) gypsum board. The garage has an automatic, steel door.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the subject concrete floor assembly as constructed without insulation provides sufficiency with Articles 9.25.2.1. and 9.25.2.7. of the Ontario Building Code. Article 9.25.2.1. sets out the general requirement that walls, floors and ceilings that separate heated space from non-heated space must be provided with insulation. Article 9.25.2.7., in particular Sentence (1), sets out the specific R values required for the various building elements exposed to unheated space. As Table 9.25.2.A. of Article 9.25.2.7. stipulates, a floor, other than a slab-on-ground, is required to provide insulation of RSI 4.4 (R25).

Since the hydronic tubing on the underside of the concrete slab provides a certain amount of heat in the garage the Applicant considers the garage to be heated space. The municipality on the other hand considers the garage as unheated. As such, they believe that insulation should be installed to bring the disputed floor into conformity with the OBC.

There also appears to be a discrepancy involving the plan review and inspection of the building regarding hydronic heating system. It seems the house was given approval based on the conventional heating system with insulation on the underside of the garage ceiling slab. A separate application was made later for the hydronic heating system. The Applicant contended that the hydronic system substituted for the insulation. The municipality expected that the insulation would be installed along with the hydronic system.

4. **Provisions of the Ontario Building Code**

Article 9.25.2.1. Required Insulation

All walls, ceilings and floors separating heated space from unheated space, the exterior air or the exterior soil shall be provided with sufficient thermal insulation to prevent moisture

condensation on their room side during the winter and to ensure comfortable conditions for the occupants.

Article 9.25.2.7. Minimum Thermal Resistance

(1) Except as permitted in Sentences (2), (3) and (4) the minimum thermal resistance of insulation shall conform to Table 9.25.2.A.

5. **Applicant's Position**

The Applicant submitted that the concrete floor slab should not be required to provide any insulation whatsoever. In his view, the hydronic heating system, which offers not only heating but also a level of insulation between heated and unheated spaces , provides sufficiency of compliance with Articles 9.25.2.1. and 9.25.2.7. Although the Applicant does not consider the garage to be heated space, he did indicate that its average annual temperature was 12.8^{o}C (55^{o}F). He argued this was primarily because of the hydronic heating system, which he also noted contributes to the heating in the studio above. The temperature in the studio above the garage is maintained at a comfortable 21.1 to 23.8^{o}C (70 to 75^{o}F). Further, the tiles in the studio are always appropriately warmed, he claimed.

In the Applicant's opinion, insulation is not necessary because the concrete slab is warm already. It is a source of heat itself, he argued, that does not need insulation. The hydronic heating system acts as a layer of insulation in that serves to mitigate the cooler temperatures of the garage with respect to the heated studio above.

The Applicant noted that the subject building was being constructed as a model to feature "Precast Concrete and Wood Composite Walls" and "Suspended Concrete Composite Floors" with hydronic heat radiators. This demonstration house was given approval by the municipality except for the hydronic system, which required a separate application. As the Applicant noted, hydronic systems are not found within the Code. To keep the projectmoving, it was decided to apply for a conventional forced air heating system. During construction, the Applicant proposed a revision to the heating plan to include the hydronic system. He indicated that nearly eight to ten months past before the municipality objected to the hydronic system and the lack of insulation. By this time the house had been sold and the current occupants were surprised to hear of the municipality's concerns. The Applicant provided a letter from the owners stating that they are very happy with the hydronic heating system.

For these reasons, the Applicant was of the opinion that the R25 insulation was not required on the underside of the garage ceiling.

6. **Chief Building Official's Position**

The Respondent submitted that the subject floor assembly must be provided with R25 insulation as per Table 9.25.2.A. of the Ontario Building Code. In their view, the hydronic system is just a supplementary heating system designed only to temper cold floors. It is not a substitute heating system, they argued. As a result, in the Respondent's opinion the garage is unheated space. Since the garage in their view is not heated it follows then that insulation as per Table 9.25.2.A. is required. Further, they were clearly of the view that the hydronic system cannot act as a replacement to insulation.

Regarding the plans examination and inspection, the Respondent noted that while the hydronic system had been permitted, the requirement for insulation had never been waived. As well, the need for insulation as per the approved drawings was indicated to the contractor several times during construction.

Finally, the Respondent offered the Applicant an alternative method of complying with the provisions of the OBC. They stated that they would be willing to eliminate the insulation requirement if heat loss calculations were conducted on the garage and an approved heating system be designed and provided in the garage that would satisfy the heat loss conditions. In effect, the Applicant would be required to make the garage truly heated space, thus eliminating the need for insulation.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the garage ceiling demonstrates sufficiency of compliance with the requirements of the Building Code.

8. **Reasons**

1)A number of measures have been installed that provide additional energy savings including:

a)RSI 1.76 (R7.5) insulation in the garage walls.

b)RSI 4.84 (R27.5) insulation in the house walls.

c)A high efficiency furnace.

d)A heat recovery ventilator.

2)Insulating the garage ceiling is impractical given the intent of the in-floor hydronic heating system to keep the floor above warm and to supply low grade heat to the garage.

3)The garage ceiling slab is heated with a heating system independent from that of the house.

Dated at Toronto this 21st day in the month of May in the year **1998** for application number **1998-22**

BCC Ruling No. 98-22-627

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-22-627

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 9.40.3.3. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Thomas Phillips, property owner, Part Lot 18, Concession 1, Township of Carden, Victoria County, Ontario for the resolution of a dispute with Mr. Paul McCubbing, Chief Building Official, Township of Car den, Ontario to determine whether the as built floor joists provide sufficiency of compliance with Article 9.40.3.3. of the Ontario Building Code at Part Lot 18, Concession 1, Township of Carden, Victoria County, Ontario.

APPLICANT

Mr. Thomas Phillips, property owner
Part Lot 18, Concession 1
Township of Carden, Ontario

RESPONDENT

Mr. Paul McCubbing
Chief Building Official
Township of Carden

PANEL

Mr. Michael Lio (Chair)
Mr. Kenneth Peaker
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF HEARING

May 21, 1998

DATE OF RULING

May 21, 1998

APPEARANCES

Mr. Thomas Phillips
Property owner
Township of Carden
The Applicant

Mr. Paul McCubbing
Chief Building Official
Township of Carden
The Respondent

RULING

1. **The Applicant**

   Mr. Thomas Phillips, Owner, Part Lot 18, Concession 1, has been issued an order to comply under the *Building Code Act, 1992* to bring a floor joist system of a farm building into conformity with Article 9.40.3.3. of the Ontario Building Code at Part Lot 18, Concession 1, Carden Township, Ontario.

2. **Description of Construction**

   The Applicant's property contains several buildings, including a two storey, 12.2 by 24.4 m (40 by 80 ft) steel arch quonset hut structure that has a building area of 297.4 m^2 (3,200 ft^2). The structure is constructed of combustible construction on the interior with a noncombustible exterior shell. It is classified as a Farm Building under the OBC.

   The quonset hut is divided into two portions, with the front, or southern, half containing a 118.9 m^2 (1,280 ft^2) second storey. The lower floor contains laundry, kitchen and washroom facilities. The upper level is used as an open storage area. The rear portion of the quonset hut is used as a garage.

The second storey floor assembly of the west portion of the quonset hut is constructed of 38 by 235 mm (2 by 10 in) spruce joists at 300 mm (12 in) on centre and includes both strapping and bridging. The east portion of this floor assembly is construc ted of engineered 235 mm (10 in) TJI joists at 300 mm (12 in) on centre. The spans of these two floor assemblies are 4.52 m (14 ft, 10 in) and 5.74 m (18 ft, 10 in) respectively. The latter floor assembly is not in dispute.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the as built floor joists in the western portion of the second storey provides sufficiency of compliance with Article 9.40.3.3. of the Ontario Building Code. This provision stipulates that the building in question may be designed according to Tables 9.40.3.K. to 9.40.3.T. In particular, Tables 9.40.3.M. and 9.40.3.N. set out the standards for floor joist construction for intermittent and continuous loads respectively.

For intermittent loads, applying Table 9.40.3.M. to the building at hand, 38 by 235 mm (2 by 10 in) joists are required, however, Table 9.40.3.N. stipulates that continuous loads in this situation are required to be supported by 38 by 286 mm (2 by 12 in) joists. Further, as a farm building, the Canadian Farm Building Code also applies to this structure. Article 2.2.1.5. of the CFBC requires that floors supporting stored products, as is the case in this building, bedesigned for their loads according to their intended use, but must not be less than 5.0 kPa. If the joists are found to be over spanned additional supports would be required.

The Applicant previously adjusted the spacing of the subject joists from 400 mm (16 in) on centre to their current 300 mm (12 in) on centre. He also added strapping between the joists to improve their stability. This did not resolve the over spanning issue as far as the municipality was concerned. There also seems to be a discrepancy regarding the actual length of span in question. The Applicant contended the spans is 4.52 m (14 ft, 10 in), whereas the Respondent measured it at 4.65 m (15 ft, 3 in) .

4. **Provisions of the Ontario Building Code**

Article 9.40.3.3. Structural Requirements - Spans

In a farm building of low human occupancy, the spans of wood joists, rafters, lintels and beams may conform to the spans shown in Tables 9.40.3.K. to 9.40.3.T. for the live loads shown in the Tables.

5. **Applicant's Position**

The Applicant submitted that the 38 by 235 mm spruce joists with strapping and bridging provides sufficient structural support for the intended load to span 4.52 m. He argued that due to the limited nature of floor to ceiling space on the second floor of the arched quonset hut the floor assembly in question would never be required to support 5.0 kPa of live load. Simply put, there is not enough space above the floor to create 5.0 kPa worth of loading. In fact, the Applicant indicated that the western portion of the second floor would not be used for the storage of farm or agricultural materials. Instead, he indicated that it would be used more as an accessible attic similar to how one might use an attic in a house. Or if his pending rezoning to change the southern half of the subject building to residential gets approved, this area could be used as living quarters.

As a result, the Applicant pointed to Article 9.23.4.1., specifically Tables A-1 and A-2 which show that 38 by 235 mm spruce joists at 300 mm on centre are permitted to span to a maximum of 4.60 m. At 4.52 m, as measured by the Applicant, the span in question is acceptable. The Applicant asserted therefore that no additional support was needed for the floor joists.

6. **Chief Building Official's Position**

The Respondent submitted that the as built floor joist framing does not comply with Article 9.40.3.3. of the Ontario Building Code, specifically Tables 9.40.3.M. or 9.40.3.N. The Respondent rejected the Applicant's proposed use of the second floor space as an attic orfuture living quarters. In fact, the Respondent indicated that the municipality had previously ordered the removal of residential furnishings and appliances from the space. He noted that the current zoning of the building was agricultural not residential, and that the appropriate OBC standards for the current occupancy of the building should be applied.

Allowing that the storage of materials in this space could be considered intermittent and not continuous, the Respondent indicated that the joists must comply with Table 9.40.3.M. Further, he stressed that as a farm building Article 2.2.1.5. of the Canadian Farm Building Code applies, meaning that the minimum design load for this storage area must be at least 5.0 kPa.

When considering the 5.0 kPa loading minimum and applying Table 9.40.3.M., the Respondent determined that 38 by 286 mm (2 by 12 in) joists are required in the subject floor assembly. Since the floor was constructed with only 38 by 235 mm joists, the Respondent was of the view that additional support of the floor assembly was necessary.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the floor system demonstrates sufficiency of compliance with the requirements of the Building Code provided:

i)a kneewall is constructed along the exterior perimeter of the quonset hut between the roof and floor of the second storey; and

ii)floor sheathing is not installed on the floor system between the kneewall and building perimeter; and

iii)an engineer's report, acceptable to the municipality, is carried out verifying the floor system is capable of supporting at least 5 kPa load over the revised storage area.

8. **Reasons**

i)The kneewall will limit the floor area available for storage.

ii)Omitting floor sheathing on the floor area beyond the kneewall will further restrict the ability to store material on the floor system.

iii)Calculations will be produced to verify the floor system is able to support the required minimum loads.

Dated at Toronto this 21st day in the month of May in the year **1998** for application number **1998-21**.

BCC Ruling No. 98-21-626

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-21-626

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Articles 3.2.9.1., 3.13.2.2. and 3.13.2.3. of Regulation 403, as amended by O. Reg. 22/98, 102/98, and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Keith McEwen, President, Keith McEwen Associated Ltd, Guelph, Ontario for the resolution of a dispute with Mr. Bruce Poole, Chief Building Official, City of Guelph, Ontario to determine whether the recently constructed addition of an air-supported structure to an existing single storey office building is required to install a standpipe and hose system, to provide a 1 hour fire resistance-rating on the mezzanine, and to separate the new and existing portions of the building also by a 1 hour rating in accordance with Articles 3.2.9.1., 3.13.2.2. and 3.13.2.3. respectively of the Ontario Building Code at the Guelph Sports Dome, 550 Imperial Road North, Guelph, Ontario.

APPLICANT

Mr. Keith McEwen, President
Keith McEwen Associated Ltd.
Guelph, Ontario

RESPONDENT

Mr. Bruce Poole
Chief Building Official
City of Guelph

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF HEARING

May 6, 1998

DATE OF RULING

May 6, 1998

APPEARANCES

Mr. Jonathan Rubes, President, Leber Rubes Inc.
Toronto, Ontario

Agent for the Applicant

Mr. Paul Moore, Permit and Zoning Administrator
City of Guelph
For the Respondent

RULING

1. **The Applicant**

   Mr. Keith McEwen, President, Keith McEwen Associated Ltd. received a building permit under the *Building Code Act, 1992* to construct an air-supported addition to an existing one storey office building at the Guelph Sports Dome, 550 Imperial Road North, Guelph, Ontario.

2. **Description of Construction**

   The Applicant recently constructed a new air-supported structure, known as the Guelph Sports Dome, as an addition to an existing one storey office building. The addition is intended to accommodate a two-tiered indoor golf range and three soccer fields. The enlarged building, including addition, has a total building area of 3,132.4 m^2 and is one storey in building height, with the highest point measured at 15.24 metres. The occupant load is approximately 160 persons.

The air-supported, fabric-covered, sports dome has a building area of 3,076 m^2. Also included in the recent addition is a 53.5 m^2 air-lock storage area and a 2.9 m^2 air-lock entrance. A 1 hour fire separation was provided where the air-supported addition connects to the existing office building. The addition is constructed of combustible construction. Fire department access is provided on the north side of the addition.

The addition is classified as a Group A, Division 2 - sports/entertainment assembly occupancy. As currently built, the air-supported structure is not equipped with a fire alarm system, a sprinkler system, nor a standpipe and hose system.

The existing office building is also constructed of combustible construction. It has a building area of 187.4 m^2 and has fire department access on its east side. It is classified as a Group D - Business occupancy

The permit application for the air-supported structure was made under the requirements of the 1997 OBC.

3. **Dispute**

There are three issues at dispute between the Applicant and Respondent. The first issue is whether the air-supported structure should be equipped with a standpipe and hose system as per Sentence 3.2.9.1.(1). This provision stipulates that a standpipe and hose system must be installed in a single storey building containing an assembly occupancy that is 2,500 m^2 or larger. Sentence 3.2.9.1.(1) does allow air-supported structures an exemption from this requirement.

The second issue is whether the two-tiered golf driving range, which represents a mezzanineapproximately 4.6 % of the floor area, must be provided with a 1 hour fire-resistance rating. Sentence 3.13.2.2.(5) of the OBC requires that interior mezzanines within air-supported structures must meet the construction requirements found in Subsection 3.2.2., specifically Article 3.2.2.24. This provision states that the mezzanine must be constructed of noncombustible construction, including its supporting members, and have a fire-resistance rating of at least one hour. The noncombustible requirements of this provision also applies to the air-lock facilities, the storage and entrance areas.

The third issue is whether the air-lock vehicle/storage and entrance areas can be attached to the main portion of the air-supported structure without providing a 1 hour fire separation at the connection. Sentence 3.13.2.3.(4) permits an air-supported structure to be connected to another

building if the building is less than 200 m^2 and a 1 hour fire separation is provided at the connection.

4. **Provisions of the Ontario Building Code**

Sentence 3.2.9.1.(1)Where Required

(1) Except as provided in Sentences (4) to (7), a standpipe system shall be installed in every building that

a) is more than 3 storeys in building height,

b)is more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey, or

c)is not more than 14 m (45 ft) 11 in) high measured between grade and the ceiling of the top storey but has a building area exceeding the area shown in Table 3.2.9.1. for the applicable building height if the building is not sprinklered.

Sentence 3.13.2.2.(5)Interior Construction

(5) Interior construction contained within air-supported structures must meet the construction requirements of Articles 3.2.2.20 to 3.2.2.83.

Sentence 3.13.2.3.(4)Connection to Adjacent Building

(4) An air-supported structure is permitted to be attached to another building provided the building to which it is attached.

a)has a building area not more than 200 m (2,150 ft).

b)conforms to the requirements of other Parts of the Code based on the building area of the attached building, and

c)is sprinklered or separated from the air-supported structure by a fire separation having a fire-resistance rating of not less than 1 h.

5. **Applicant's Position**

By way of general comments, the Applicant indicated that the design of the subject air-supported structure complies with all other relevant provisions in Part 3 of the OBC, save for the disputed areas. This includes the clearance from adjacent properties and flammable material and vegetation, structural design and flame-resistance. The Applicant noted that the fabric covering the proposed addition meets the CAN/ULC S-109-M standard and is in fact self-extinguishing, thereby unable to support combustion.

The Applicant also noted that the fire separation between the addition and the existing office area is not at issue since, as a separate building, they concur that a 1 hour fire separation is required. Further, the provision of egress from the sports facility far exceeds the Code requirements, the Applicant contended. This is due to the fact that the exits provided are sufficient for 650 people, although the occupant load is only 160 persons (as calculated by the Respondent) and that the 30 metre travel distance requirements are easily met. The evacuation time would therefore be faster than that required in the Code. Also noted by the Applicant was that there is little visual obstruction in the building that could hide potentially dangerous situations and that the sports facility has on-site staff to supervise in case of an emergency.

Moreover, the life safety of the building is currently being enhanced by the incorporation of an early warning system to detect sudden changes in pressure. This is being done by linking pressure gauges into the 24 hour monitored security system. This is in addition to the already in place emergency power system.

Regarding the first issue, the Applicant submitted that the provision of a standpipe and hose system in the air-supported building would be of questionable value to the responding fire department. They note that the manufacturer of the subject structure recommends that fire fighting activities occur from the exterior using street hydrants. In the case of the subject facility, a hydrant is located directly across the municipal street. The Applicant also noted that the addition has very little combustible load, virtually no sources of ignition, and is supplied with several portable fire extinguishers

On the issue of the construction requirements for the mezzanine, the Applicant recognized that Sentence 3.13.2.2.(3) exempts air-supported structures from most of the construction requirements found in Subsection 3.2.2., with the exception of interior construction, which includes the mezzanine. The Applicant, however, argued that the as built mezzanine provides an acceptable level of life safety without providing the 1 hour fire resistance rating. They described the construction of the mezzanine as being primarily of noncombustible elements. (The

construction of the mezzanine is as follows; 25 oz astro grass is laid on 5/8 in plywood on noncombustible insulation on a 1 in steel deck which is supported by a structure of structural steel.) They also argued that the construction of the mezzanine does not leave the combustible exposed. In their view, this represents a less hazardous situation than combustible finished flooring which is allowed in noncombustible construction, or concealed spaces created by combustible nailing.

Further, the Applicant pointed out that the mezzanine is a stand alone structure that is open on all four sides. This allows excellent visibility of the sports facility thus allowing occupants ample warning time to evacuate. Also, with four open sides occupants would not be trapped on the mezzanine. While the Respondents have assigned the mezzanine an occupant load of 60, in the Applicant's view, since there are only 11 driving stations the actual load is and will be much lower.

The Applicants indicated that previous Building Code Commission have recognized similar construction and occupant use for mezzanines. They discussed as well that the mezzanine complies with the OBC regarding egress, guards and rails, emergency lighting and structural design.

Regarding the connection to the adjacent vehicle/storage air-lock and entrance air-lock, the Applicant is of the opinion that these areas are not separate buildings, but are instead subsidiary elements, part of the overall air-supported structure. It follows, they argued, that Sentence 3.13.2.3.(4) with its 1 hour fire separation requirements does not apply. As the Applicant noted the vehicle air-lock is provided so that a vehicle can enter the building or be stored with other material that relates to the operation of the sports facility while still maintaining operating pressure and the entrance enclosure serves to protect the revolving door lock from the weather. These two areas have no occupancy in and of themselves, they are ancillary to the main area of the sports dome.

The Applicant did not view these connections as part of the interior construction that is required to be noncombustible. Rather, they considered the subject connections as part of the building that is allowed to be exempt from the construction requirements found in Subsection 3.2.3. Besides, construction of an internal fire separation at the vehicle air-lock would provide minimal benefit since the exterior fabric walls of the sports dome area meet those of the vehicle air-lock area without separation. Nevertheless, the Applicant stated that they were willing to finish the interior of the vehicle air-lock with gypsum wallboard.

For the above described reasons, the Applicant is of the opinion that the proposed design of the air-supported structure provides sufficiency of compliance with the relevant provisions of the Building Code.

6. **Chief Building Official's Position**

The Respondent submitted that Subsection 3.2.9. of the OBC is clear in its requirement of a standpipe and hose system. As they note, the building has an assembly occupancy, is a single storey and is greater than 2,500 m^2, which according to Sentence 3.2.9.1.(1) means that a standpipe and hose system is required.

Concerning the mezzanine, the Respondent cited Sentence 3.13.2.2.(5) which refers to the construction requirements of Subsection 3.2.2., which for the subject building means that the mezzanine must be built with noncombustible construction and have a 1 hour fire-resistance rating for the mezzanine and its structural members.

In the Respondent's view, the two ancillary areas, namely the vehicle air-lock and the entrance air-lock, should be treated as separate buildings and must therefore provide a 1 hour fire separation between these two areas and the sports dome area. They argued that the air-lock areas are more appropriately viewed as additions to the sports dome which are both combustible construction and are built with different materials than the sports dome area. The Respondent noted that the air-lock areas could opt for sprinklering as an alternative to providing the 1 hour fire separation.

As a result of the above discussion, the respondent did not believe that the sports dome, as constructed, provides sufficiency of compliance with the applicable OBC provisions.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the air supported structure connected to the single storey office building provides sufficiency of compliance with Articles 3.2.9.1., 3.13.2.2., and 3.13.2.3. of the 1997 Building Code provided that:

i)The occupant load is limited to 160 persons and a sign limiting occupancy is posted in accordance with Sentence 3.1.16.1.(2) of the Building Code.

ii)The interior of the vehicle air-lock is protected with drywall material or equivalent to provide a 45 minute fire-resistance rating and the over head door between the vehicle air-lock and the air-supported structure is of noncombustible construction.

iii)Monitored smoke detection devices are installed within the structure or within the air handling system and connected to the existing security system.

8. **Reasons**

i)This structure is in the same location and is the same approximate size as former air-supported structures on the site and is using the same foundation base.

ii)The main entrance and air-lock will be protected combustible construction having a 3/4 hour fire-resistance rating.

iii)The mezzanine structure is noncombustible.

iv)The building occupant load is limited to 160 persons.

v)Early warning detection is installed and connected to a central monitoring agency.

Dated at Toronto this 6th day in the month of May in the year 1998 for application number 1998-17.

BCC Ruling No. 98-20-625

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-20-625

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Clauses 3.2.8.2.(9)(c), 3.2.8.2.(9)(e) and 3.2.8.2.(9)(f) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Roul Martjak, Senior Clerk of Work, Toronto District School Board (Formerly York Board of Education), Toronto (York), Ontario for the resolution of a dispute with Mr. Bruce Ashton, Chief Building Official, City of Toronto (York), Ontario to determine whether the unenclosed walkway in the proposed two storey school structure provides sufficiency of compliance with Clauses 3.2.8.2.(9)(c), 3.2.8.2.(9)(e) and 3.2.8.2.(9)(f) of the Ontario Building Code at The Clouston Schools, 100 Sidney Belsey Crescent, Toronto (York), Ontario.

APPLICANT

Mr. Roul Martjak, Senior Clerk of Work
Toronto District School Board (York Board of Education)
Toronto (York), Ontario

RESPONDENT

Mr. Bruce Ashton
Chief Building Official
City of Toronto (York)

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF HEARING

May 6, 1998

DATE OF RULING

May 6, 1998

APPEARANCES

Mr. Dave Syrett, Senior Associate, Leber Rubes Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Richard Chiu, Building Plan Examiner
City of Toronto (York)
For the Respondent

RULING

1. **The Applicant**

   Mr. Roul Martjak, Senior Clerk of Work, has applied for a building permit under the *Building Code Act, 1992* to construct a new, two-storey, elementary and middle school at 100 Belsey Crescent, Toronto (York), Ontario.

2. **Description of Construction**

   The Applicant proposes to construct a new, two storey school with two wings, the east wing serving as an elementary school and the west wing as a middle school. The wings are joined by a large general purpose room and a solarium, which includes a second floor walkway linking the two schools. The proposed walkway is unenclosed, thus acting essentially as a second storey bridge spanning the main entrance lobby, or solarium. It also overlooks the adjacent general purpose room. The walkway is necessary because it allows both schools to access the exit stairs provided at the south end of the second floor corridors. Without the walkway, these corridors would otherwise terminate at their southern end.

The bridge itself will be 30 metres long, 4 metres wide, and 3.8 metres above the floor of the solarium. The floor of the bridge is proposed to have a 1 hour fire resistance-rating, as measured from the underside. Each end of the walkway is fire separated from the second floor with a 30 minute rating.

The proposed building has a building area of 5,990 m^2. It is to be built of noncombustible construction, with the exception of the heavy timber proposed for the roof area over the general purpose room and the solarium. The building is equipped with a fire alarm and detection system, an automatic sprinkler system and is considered to face one street. The structure is classified as a Group A, Division 2, school occupancy.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed walkway is allowed to be unenclosed under the 1990 Ontario Building Code, in particular Sentence 3.2.8.2.(9). To elimate dead-end corridors. This provision allows interconnected floor space under certain conditions, one of which is that floor openings adjacent to a corridor must terminate at a fire separation rated at 30 minutes. If the bridge is viewed as a part of the corridor system, then 3.2.8.2.(9) applies and a 30 minute fire separation extending from the floor of the walkway to the underside of the ceiling above must be provided. However, if the bridge can be considered as a mezzanine, then 3.2.8.2.(9) does not apply and no fire separation is required.

4. **Provisions of the Ontario Building Code**

Sentence 3.2.8.2.(9)Interconnected Floor Space in Schools

(c)the portions of the upper floor area that do not terminate at an exterior wall, a firewall or a vertical shaft shall terminate at a vertical fire separation extending from the floor assembly to the underside of the floor or roof assembly above,

(e)where a corridor is located immediately adjacent to the fire separation required in Clause (c), the fire separation shall have a fire-resistance rating of not less than 30 min, and

(f)where a portion of a floor area is not within the interconnected floor space, the required access to exit from this portion of the floor area shall not lead through the interconnected floor space.

Sentence 3.3.1.9.(8)Corridors

A dead end corridor is permitted in an assembly occupancy where there is a second and separate egress doorway from each room or suite not leading into a dead end corridor.

5. **Applicant's Position**

The Applicant submitted that the proposed walkway need not be enclosed and provided with a 30 minute fire separation. In their view, the open bridge provides sufficiency of compliance with the 1990 Ontario Building Code for the following reasons.

The Applicant argued that the corridors in the southern portions of the second floor of each school wing do not truly represent dead-end conditions due to the fact that an alternate exit is available via the proposed bridge for both schools in the event of an emergency. They noted that each wing has two exit stairs and the bridge would allow occupants to travel to exit stairs on the other side of the building if the ones on their side were blocked.

As the Applicant pointed out, it would be unlikely that a fire emergency on the second floor in one wing of the school would affect both the bridge and the other wing at the same time, thereby making the circumstances that could cause a dead-end situation extremely remote. Similarly, an emergency in the solarium or the general purpose room would simply mean that occupants would use either of the two exit stairs provided in their wing. Further, the 30 minute fire separation proposed for each end of the bridge would allow occupants time to use the exits provided in their wing of the building.

The Applicant also noted that the solarium and the general purpose room will have limited combustible fire loads. As well, these two rooms will be separated from the classroom wings by a 30 minute fire separation.

Essentially, the Applicant contended that the bridge could be considered as an open mezzanine within the solarium and general purpose room since, in their opinion, the proposed bridge satisfies Sentence 3.2.1.1.(3) of the OBC regarding mezzanines. To support this assertion the Applicant noted that the bridge, at 120 m^2, is only 12.5 % of the 960 m^2 room in which it is located, will be used as an open floor area, and will be provided with a 1,070 mm guard on both sides.

It follows, the Applicant argued, that an open mezzanine is not subject to the interconnected floor space requirements found in Sentence 3.2.8.2.(9) of the Code, in particular the 30 minute vertical fire separation where a floor opening is adjacent to a corridor. Specifically, they pointed

out that the proposed bridge complies with Clause 3.2.8.2.(1)(c) which permits an open mezzanine not to terminate at a vertical fire separation where every point on the mezzanine is within 25 metres of a point that can allow an occupant to view 60 % of the room, and is not a Group B occupancy.

The Applicant also discussed Sentence 3.3.1.5.(2). which requires that every mezzanine without a vertical fire separation shall have two egress facilities placed in such a manner that at least one be accessible in certain situations. On this point, the contended that the proposed bridge will have better egress than that required under this provision of the OBC.

The Applicant conceded that a strict interpretation of the Code may lead one to believe a 30 minute fire separation is required for the bridge in question. Based on the reasons described above, however, the Applicant is of the belief that proposed walkway provides sufficiency of compliance with the relevant provisions of the Building Code.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed bridge is part of the corridor system of the school and thus OBC 3.2.8.2.(9) applies, making a 30 fire separation at the walkway edges mandatory.

In the Respondent's view, the two second floor corridors at the school's south end have dead-end conditions. As they note, there are no second and separate egress doorways from each room that does not lead into the corridor, as required under Sentence 3.3.1.9.(8). Further, the requirement found in Clause 3.2.8.2.(9)(f) prohibits an access to exit within an interconnected floor space. Assuming that the bridge is a mezzanine, i.e. considered to be part of the first storey, within the solarium and the general purpose room also did not satisfy the Respondent that a second means of egress could be established. They pointed out that as part of the first storey, the bridge cannot serve as a means of exit for corridors on the second floor, unless the penetration between storeys is by means of an exit conforming to Section 3.4, which under Sentence 3.4.4.1.(1) requires a 1 hour separation.

The Respondent submitted a letter from the Applicant's agent stating that the 30 minute fire separation in question would be built in return for the Respondent considering the generalpurpose room and the solarium as a combined space for determining occupant load. At the time, the Respondent noted that the Applicant agreed to considered these two spaces as not serving as an access to exit from either school. In the Respondent's view, the proposal at hand violates these two agreements.

The Respondent also expressed concerns about the proposed unenclosed walkway because they felt that the heavy timber roof assembly and the combustible flooring of the general purpose room represented enough of a combustible load that occupants travelling across the bridge would be exposed to dangerous levels of smoke.

The Respondent rejected the Applicant's argument that the bridge can be viewed as a mezzanine. While admitting that the bridge may have appeared to have met the open mezzanine requirements, it was their belief that it is the intent of the Code that the interconnected floor space requirements of 3.2.8.2.(9) should apply to this situation. They cited the 1997 version of the OBC, claiming that the new Code has made it clearer that the interconnected floor space standards are applicable in this circumstance.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the unenclosed walkway serving as an alternate access to exit from the second floor school building does not provide sufficiency of compliance with Sentence 3.2.8.2.(9).

8. **Reasons**

i)The walkway is a required access to exit from the second storey to eliminate dead-end corridors.

ii)As a corridor it is required to be separated by a fire separation having a 1/2 hour fire resistance rating from the remainder of the building, as required by Sentence 3.2.8.2.(9).

iii)No alternate measures were included to compensate for the life safety hazard of exiting through an interconnected floor space via an open bridge in an elementary school.

Dated at Toronto this 6th day in the month of May in the year 1998 for application number 1998-14.

BCC Ruling No. 98-19-624

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-19-624

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 9.10.14.1 of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. and Mrs. Terry Dingle, homeowners, 47 Walker Avenue, Toronto, Ontario for the resolution of a dispute with Ms. Pam Coburn, Chief Building Official, City of Toronto, Ontario to determine whether the proposed windows, as unprotected openings offset at 1.2 metres in a wall 0.94 metres from the adjacent property line, provide sufficiency of compliance with Article 9.10.14.1. of the Ontario Building Code at 47 Walker Avenue, Toronto, Ontario.

APPLICANT

Mr. and Mrs. Terry Dingle
Homeowners
Toronto, Ontario

RESPONDENT

Ms. Pam Coburn
Chief Building Official
City of Toronto

PANEL

Mr. Roy Philippe (Chair)
Mr. Michael Lio
Mr. Rick Florio

PLACE

Toronto, Ontario

DATE OF HEARING

April 24, 1998

DATE OF RULING

April 24, 1998

APPEARANCES

Mr. Keith Wagland, Principal
Keith H. Wagland Architect
Toronto, Ontario
Agent for the Applicants

Mr. Michael Swann
Building Plan Examiner
City of Toronto
For the Respondent

RULING

1. **The Applicant**

   Mr. and Mrs. Terry Dingle, homeowners, have applied for a building permit under the *Building Code Act, 1992* to add a two-storey addition at 47 Walker Avenue, Toronto, Ontario.

2. **Description of Construction**

   The Applicants propose to renovated an existing semi-detached house and add a two storey addition to the rear of the subject building. The building is constructed of combustible construction and has a building area of approximately 106.9 m^2 (1,150 ft^2). The structure is classified as a Group C, residential occupancy.

   As part of this work, the Applicants proposed to add a strip window on the east side of the new addition. (The subject semi-detached dwelling is attached on its west side.) The dimension of the window are 3.5 m by 0.76 m (11 ft, 6 in by 2 ft, 6 in). It has a total area of 2.04 m^2 (22 ft^2). The east exposing face of the proposed addition is .94 metres (3 ft, 1 and 1/4 in) from the adjacent property. The Applicants propose however to set the window itself, or the actual glazed surface, back from the exposing face within the house by 0.37 m (14 and 5/8 in) so that the window

would be 1.32 m (4 ft, 3 and 7/8) from the property line. The window structure would be supported inside the addition by several gables.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed windows, as unprotected openings, with a limiting distance of .94 metres from the adjacent property line, provides sufficiency of compliance with Article 9.10.14.1. of the Ontario Building Code. This provision allows seven percent of an exposing building face to be unprotected openings where the limiting distance is 1.2 metres (3 ft, 11 in). Where the limiting distance is less than 1.2 metres no unprotected openings are allowed.

4. **Provisions of the Ontario Building Code**

Article 9.10.14.1Maximum Percentage of Unprotected Openings

(1) Except as provided in Sentence (2) and in Articles 9.10.14.3. to 0.10.14.11., the maximum percentage of unprotected openings in an exposing building face shall conform toTable 9.10.14.A. or to Subsection 3.2.3., whichever is the least restrictive for the occupancy being considered.

(2) An opening in an exposing building face not more than 130 cm^2 (20 in^2) shall not be considered an unprotected opening.

5. **Applicant's Position**

The Applicant submitted that since the windows are recessed into the exposing face the actual limiting distance, as measured from the unprotected openings to the property line, is more than 1.2 metres (3 ft, 11 in). At this distance, they argued, the OBC allows seven percent of the exposing building face to be unprotected openings. The Applicants calculated that seven percent of the subject exposing face would be 8.71 m^2 (93.7 ft^2). They noted that this is well in excess of the 2.04 m^2 proposed for the strip windows.

The Applicants also argued that the proposed window, in fact, improves the original situation of unprotected openings in this exposure because they have decided to permanently close off an existing basement window located only 0.9 metres (3 ft, 1 in) from the lot line.

City of Toronto By-Law 438-86 which allows a window within 1.2 metres (3 ft, 11 in) of an adjacent structure in a semi-detached zone was raised by the Applicant. They contended that the Respondent was not adhering to the standards in their own by-laws with respect to the window at issue.

Lastly, the Applicants felt that the inclusion of the window is an important aspect of the renovation because it brings light deep into the house and thus improves the liveability of the addition.

For these reasons, the Applicant argued that the recessed window at issue still meets the intent of the Building Code.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed window does not provide sufficiency of compliance with Article 9.10.14.1. They referred to the definitions of "Exposing Building Face" and "Limiting Distance" in the OBC to make their case. The Respondent noted that the OBC definition for exposing face clearly refers to the exterior wall of a building and not the recessed window strip as proposed and designed by the Applicants. They further noted that the OBC, as it defines limiting distance, is a measurement from the exposing face to a set point. They emphasized that while the point to which the limiting distance is measured can vary from either the property line, the centre of a street, or to an imaginary line between two buildings, etc., the exposing face is a fixed point. The Code does not allow limiting distance calculations to made on variations in the exposing face for recessed windows.

As a result, the Respondent pointed out that the subject exposing face has a limiting distance of less than 1.2 metres (3 ft, 11 in) and thus according to Table 9.10.14.A. is allowed zero percent unprotected openings. As the requirements in the OBC are minimum standards, the Respondent stated that they cannot accept the proposed variation.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed windows demonstrate sufficiency of compliance with the requirements of the Building Code provided that:

a)Wired glass in fixed steel frames is installed in the proposed windows with the unprotected opening limited to no more than 1.12 m^2 (12 ft^2).

8. **Reasons**

i)A portion of the window opening will be protected with wired glass in steel frames.

ii)Windows were removed from the existing building that measured approximately 1.12 m^2 (12 ft^2).

iii)The new window is inset from the exterior wall and is installed at a distance of 1.32 m (4 ft, 3 and 7/8 in) from the property line.

iv)Centrally monitored fire alarms and two portable fire extinguishers have been installed in the home.

Dated at Toronto this 24th day in the month of April in the year 1998 for application number 1998-19.

BCC Ruling No. 98-18-623

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-18-623

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.4.3.7.(1) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the"Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Paul Malin, Senior Fire Protection Engineer, Morrison Hershfield Ltd., 24 Lansing Square, Toronto (North York), Ontario for the resolution of a dispute with Mr. Harold Bratten, Chief Building Official, City of Toronto (East York), Ontario to determine whether the recently installed drop ceiling, at a height averaging 2,088 mm, provides sufficiency of compliance with Sentence 3.4.3.7.(1) of the Ontario Building Code at 1050 Broadview Avenue, Toronto (East York), Ontario.

APPLICANT

Mr. Paul Malin, Senior Fire Protection Engineer
Morrison Hershfield Ltd.
Toronto (North York), Ontario

RESPONDENT

Mr. Harold Bratten
Director of Building and By-Law Enforcement
City of Toronto (East York)

PANEL

Mr. Michael Lio (Chair)
Mr. James Lischkoff
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF HEARING

April 9, 1998

DATE OF RULING

April 9, 1998

APPEARANCES

Mr. Paul Malin, Senior Fire Protection Engineer
Morrison Hershfield Ltd.
Toronto (North York), Ontario
The Applicant

Mr. Douglas Walker
Manager, Building Inspections
City of Toronto (East York)
For the Respondent

RULING

1. **The Applicant**

   Mr. Paul Malin, Senior Fire Protection Engineer, Morrison Hershfield Ltd., has been issued an order under the *Building Code Act, 1992* to raise the subject ceiling to 2,100 mm (6 ft, 11 in) in conformance with Sentence 3.4.3.7.(1) of the Ontario Building Code at 1050 Broadview Avenue, Toronto (East York), Ontario.

2. **Description of Construction**

   The Applicant recently renovated a fifteen storey (plus parking garage) apartment building with a building area of 635 m^2 (6,840 ft^2). The building is constructed of noncombustible construction. It is equipped with a fire alarm system, a standpipe and hose system and an automatic sprinkler system in the garage level only. The building is classified as a Group C, residential occupancy.

The renovation included installing a new drop ceiling in certain portions of the building. The disputed areas where the ceiling heights are less than 2,100 mm (6 ft, 11 in) are the main entrance and the corridor leading to the elevators, the management office and the annunciator panel. In these locations the newly installed drop ceiling averages 2,088 mm (6 ft, 10 1/2 in) in height. In some places the ceiling is as low as 2,075 mm (6 ft, 10 in). As a result, an order to comply was issued on December 5, 1997 to raise the subject ceilings.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the subject ceilings, at a height averaging 2,088 mm (6 ft, 10 1/2 in), provides sufficiency of compliance with Sentence 3.4.3.7.(1) of the Ontario Building Code. This provision requires a headroom clearance of 2,100 mm (6 ft, 11 in). At issue is whether the Applicant will be required to raise the ceiling height in the disputed area as per the order to comply.

4. **Provisions of the Ontario Building Code**

Sentence 3.4.3.7.(1)Headroom Clearance

(1) Except as provided in Sentences (2) to (4), every exit shall have a headroom clearance of not less than 2,100 mm (6 ft, 11 in).

5. **Applicant's Position**

The Applicant submitted that the recently installed drop ceiling at a height slightly lower than that required in Sentence 3.4.3.7.(1) provides sufficiency of compliance. They argued that the variation was only minor and could be viewed as an acceptable construction tolerance.

The Applicant stated that the construction in dispute, as a basic renovation, where no new occupancy nor increase in occupant load is proposed, can be subject to Part 11 of the OBC. In particular, they pointed to Sentence 11.3.2.1.(1) which allows the renovation to match the existing conditions. As well, they noted that compliance alternative C45 (Table 11.2.3.C/Residential) allows existing headroom clearances of not less than 1,980 mm (6 ft 6 in).

Regarding Article 3.4.3.7., the Applicant indicated that the four sentences found within this Article allow for different ceiling heights for different situations such as headroom clearances in exits, on stairs, in doorways and below door closers. They argued that this represents a clear indication that different clearances are allowed in certain traffic areas. As a result, this slight

variation is less significant. Further, the Applicant argued that the OBC headroom clearance standards are based on average population heights. In their view, this means that the standards are somewhat arbitrary in nature and not a precise science.

For these reasons, the Applicant argued that the slightly lower ceiling at issue still meets the intent of the Building Code.

6. **Chief Building Official's Position**

The Respondent submitted that the as built ceiling height does not meet Sentence 3.4.3.7.(1) of the OBC. They noted that the deviation from the required standard was a much as 24 mm (1 in) in some places. They argued that since the construction in dispute is new, it does not fall within the scope of Part 11. The 2,100 mm (6 ft, 11 in) standard found in Sentence 3.4.3.7.(1) applies and, as the Respondent pointed out, the Code does not provide tolerances. As the requirements in the OBC are minimum stand ards, the Respondent stated that they cannot accept this variation.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the construction provides sufficiency of compliance with the requirements of the Building Code.

8. **Reasons**

i)Removing the stairs improves the access to exit through the lobby.

ii)There has been no increase in hazard as occupancy classification and occupant load have not changed.

iii)Evidence submitted indicates the new ceiling has been installed at essentially the same level as the existing ceiling.

iv)Evidence submitted indicates that the new floor level at the elevators which has been extended through to the front doors, is at essentially the same level as the existing floor level at the elevators.

v)Raising the ceiling level is impracticable because of existing services within the ceiling space.

Dated at Toronto this 9th day in the month of April in the year 1998 for application number 1998-15.

BCC Ruling No. 98-16-621

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-16-621

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 9.4.1.1. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Richard Epple, President/Owner, 657602 Ontario Incorporated, 16 Stubbs Court, Tillsonburg, Ontario for the resolution of various disputes with Mr. Douglas Robertson, Chief Building Official, Town of Tillsonburg, Ontario to determine, among other things, whether the subject building is required to meet the structural requirements under Article 9.4.1.1. of the Ontario Building Code at 67 Simcoe Street, Tillsonburg, Ontario.

APPLICANT

Mr. Richard Epple, President/Owner
657602 Ontario Incorporated
Tillsonburg, Ontario

RESPONDENT

Mr. Douglas Robertson
Town of Tillsonburg

PANEL

Mr. Michael Lio (Chair)
Mr. James Lischkoff
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF HEARING

April 9, 1998

DATE OF RULING

April 9, 1998

APPEARANCES

Mr. Richard Epple, President/Owner
657602 Ontario Incorporated
Tillsonburg, Ontario
The Applicant

Mr. Douglas Robertson
Chief Building Official
Town of Tillsonburg
The Respondent

RULING

1. **The Applicant**

   Mr. Richard Epple, President/Owner, 657602 Ontario Incorporated, has applied for a building permit under the *Building Code Act, 1992* to construct a one storey, multi-unit mercantile/business plaza at 67 Simcoe Street, Tillsonburg, Ontario.

2. **Description of Construction**

   The Applicant proposes to construct a one storey mercantile plaza with a building area of 230 m^2 (2,475 ft^2). The building is constructed of noncombustible construction with a block exterior wall and an open web steel joist roof supported by intermediate steel columns. It is equipped with a fire alarm system. The structure is classified as a Group D - business occupancy.

   It is the intention of the Applicant to divide the building into two halves, with one half used as a single unit by a spa and hot tub retail store and the other half used by the Applicant himself. In the Applicant's half, he proposes to use one third of the space to create an office unit for his own business and the other two thirds as a separate unit for a building supply shop also operated by 657602 Ontario Incorporated.

The site on which the building is proposed was previously occupied by a motel. The soil conditions, especially regarding imported topsoil, are unknown.

In terms of spatial separations, the proposed building is considered to face two streets. The distances to the property lines for the remaining two sides of the building are 1.2 m (4 ft) on the south side and 3 m (10 ft 6 in) on the west side.

The Applicant proposes to install two washrooms, one in either half, located at the rear of the building. Wastewater is to be discharged to the existing sanitary sewer located to the east under Pine Street. Fresh water will be drawn from the main at the front end of the lot facing Simcoe Street. Stormwater will be collected through a drain in the centre of the building and discharged to a catch basin under the parking area at the front of the building. Heating and ventilation will be provided by two units located on the roof of the building.

3. **Dispute**

There are various disputes concerning the subject building between the Applicant and Respondent. Initially the Applicant submitted a list of ten disputed areas, however, as some of the issues were beyond the mandate of the Building Code Commission he subsequently withdrew five of the disputed areas. The five remaining items are listed below.

1)Whether the subject building is required to meet the structural requirements under Article 9.4.1.1. of the Ontario Building Code.

2)Whether the soils have been investigated by a qualified person as per Article 4.2.2.3. of the OBC to ensure that their bearing capacity is adequate.

3)Whether the spatial separations conform to Article 9.10.14.1. of the OBC.

4)Whether the plumbing systems for the washrooms, accessibility for barrier free design, roof drainage and separation between units complies with the respective standards in the OBC.

5)Whether all other requirements of the OBC had been met. The Applicant sought clarification as to the precise meaning of this condition applied by the municipality.

4. **Provisions of the Ontario Building Code**

Article 9.4.1.1. Structural Design

(1) Except as provided in Sentence (2) and Sentence 9.23.4.1.(2), Subsections 9.4.2. to 9.4.4. and Subsection 9.40.3., structural members and their connections shall be designed in conformance with Part 4.

(2) Where structural members and their connections conform to the requirements listed elsewhere in this Part, it shall be deemed that the structural design requirements have been met.

Article 4.2.2.3.Reviews

(1) A review shall be carried out by the designer or by another suitably qualified person to ensure that the subsurface conditions are consistent with the design and that construction is carried out in accordance with the design and good engineering practice.

(2) The review required in Sentence (1) shall be carried out

(a) on a continuous basis

(1)During the construction of all deep foundation units with all pertinent information recorded for each unit, and
(ii)During the installation and removal of retaining structures and related backfilling operations, and

(b)as required, unless otherwise directed by the authority having jurisdiction,

(I)In the construction of all shallow foundation units, and
(ii)In excavating, de-watering and other related works.

Article 9.10.14.1. Maximum Percentage of Unprotected Openings

(1) Except as provided in Sentence (2) and in Articles 9.10.14.3. to 9.10.14.11., the maximum percentage of unprotected openings in an exposing building face shall conform to Table 9.10.14.A., or to Subsection 3.2.3., whichever is the least restrictive for the occupancy being considered.

(2) An opening in an exposing building face not more than 130 cm (20 in) shall not be considered an unprotected opening.

5. **Applicant's Position**

The Applicant submitted the following presentations regarding the five issues.

1) The Applicant argued that drawings stamped by an engineer analysing the complete structural design were not necessary for the subject building. He noted, however, that an engineering firm was retained and he submitted a letter from them covering all disputed issues and that stamped drawings were submitted for the structural steel. Regarding other aspects of the structural design, the Applicant noted that his engineer, upon review of the drawings prepared by the Applicant and the structural steel fabricator, stated they were adequate for the construction of the proposed building with two minor additions. (The items added were a pier and footing under the central column and that all pilasters and block work supporting structural steel is to be reinforced with 15 m rebar and filled with concrete.) The Applicant further noted that the engineer would undertake to inspect the structural construction of the building to ensure it meets OBC standards.

2) Regarding the soil adequacy, the Applicant again referred to the engineer's letter. It stated that the building as designed requires soils with a bearing capacity of 2,000 psi. The engineer believes that the soils at the subject site can easily provide this capacity. The Applicant indicated that the engineer would inspect the excavation before the pouring of footings. The Applicant reiterated his engineer's view that confirmation of soil capacity is not required before a building permit can be issued.

3) The Applicant asserted that the spatial separation of the proposed building is adequate. Since the north and east exposures face streets, it is only the south and west exposures where the unprotected openings must be calculated with respect to the limiting distance. The engineering analysis conducted for the Applicant states the west exposure, at 1.2 m (4 ft), is allowed 7% of the exposing wall to be unprotected openings, or up to 14% if both side yards are counted. The Applicant indicated that since he owns the adjacent property to the west he is planning to build a lane between the proposed building and the existing one to the west. This would mean that the unprotected openings would meet OBC standards. At the hearing, the Applicant also stated that he would consider registering on title of the two adjacent properties he owns (the subject one and the one to the west) in order to satisfy the limitingdistance requirements. For the south wall at the rear of the building, the Applicant claimed that the 3 m (10 ft 6 in) distance allows 18% unprotected openings. This will more than suffice for the proposed openings.

4) The Applicant described the plumbing, drainage, heating and ventilation systems. He indicated that they all meet Code standards as proposed.

5) The Applicant reiterated his request for clarification as to what the Tillsonburg Building Department meant with their request that all other OBC requirements be met. In the Applicant's view, his project had been unfairly scrutinized by his local building department with unnecessary requirements being asked of him. Lastly, the Applicant stated that his engineer would review the entire project to ensure Code compliance.

For these reasons, the Applicant argued that his building as designed should be issued a building permit.

6. **Chief Building Official's Position**

The Respondent addressed each one of the issues raised. His response was as follows.

1) The Respondent argued that according to Article 9.4.1.1. structural members and their connections must conform to the requirements of Part 4 of the OBC or the structural requirements found in Part 9, in which case the structural design shall be deemed to have conformed with the OBC's structural requirements. Since the design does not conform to the structural standards found in Part 9, in the Respondent's opinion, based on Article 9.4.1.1., the building must be designed in accordance with Part 4, meaning that the plans submitted must be certified by an engineer or a qualified person. As an example of how the proposed building does not meet the structural standards in Part 9, the Respondent pointed to Sentence 9.15.3.3.(2) which states that where the supported joists exceed 4.9 m (16 ft 1 in), as in the case of the subject building, the footings shall be designed according to Section 4.2. The Respondent noted that the structural steel drawings were not submitted to him until last week. He also indicated that there was a discrepancy between the building size shown on the site plan and the building drawings. He attributed this to the Applicant using engineering drawings from another building.

2) The issue of soil verification was a misunderstanding, the Respondent believed. In his correspondence with the Applicant the Respondent meant to communicate that soil verification may be required if necessary, not that it must be required prior to the issuance of a building permit. As the Respondent explained, the motel that previously occupied the site may have used imported fill during its construction. This was the basis of his soil-related concerns.

3) Concerning spatial separations, the Respondent indicated at the time of the review when the dispute arose that no elevation drawings had been submitted to the municipality. There had been no discussion at that point either regarding the west exposure in terms of registering on title the limiting distances of the buildings. The Respondent indicated that he would accept the

registrations on title. He rejected, however, the engineer's claim that if a lane were constructed between the adjacent existing building own by the Applicant and the one currently proposed that OBC compliance would result. As the Respondent argued, Subsection 9.10.14. dealing with spatial separation measures the limiting distance to the lot line, not the adjacent building. Regarding the south exposure, he noted that the OBC allowed 10 % unprotected openings, and judging from the rough sketches provided by the Applicant, the proposed openings appeared to exceed the allowable limit by one or two per cent.

4) The Respondent also indicated that no drawings were submitted detailing the plumbing, drainage and heating and ventilation systems. Without such plans the Respondent indicated that they could not properly review the plumbing system serving the two proposed washrooms. Nor could they review the drainage system for the roof stormwater. The Respondent indicated that their concern was that the pipes proposed for transporting stormwater to the catch basin pass through air plenums, meaning that they are required to meet the appropriate fire stopping standards in the OBC. The Respondent was also seeking details on how the Applicant proposes to provide adequate fire separations between his office space and his adjacent retail occupancy.

5) The respondent explained that the final issue, requiring the Applicant to comply with all other OBC standards, was a standard message meant to communicate to the Applicant that when the completed drawings or other requirements were submitted there may still be clarifications needed from the Applicant after a review. As the Respondent noted, since certain essential drawings and other information had not yet submitted for this project they felt it was especially prudent to include this message on correspondence with the Applicant.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed construction demonstrates sufficiency of compliance provided:

i)At the discretion of the municipality, a soil investigation will be performed prior to pouring the footing.

ii)Spatial separations comply with the requirements for the Code, and are registered on title of both properties owned by the applicant where limiting distances to the lot line are exceeded.

iii)Additional plumbing, heating and ventilation details are provided as required by the municipality to ensure code compliance.

8. **Reasons**

Additional information was received at the hearing which addressed a number of issues raised at the time of application and included drawings acceptable to the Chief Building Official.Dated at Toronto this 9th day in the month of April in the year 1998 for application number 1998-02.

BCC Ruling No. 98-15-620

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-15-620

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.3.1.12.(3) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Cyril Mayo, Project Coordinator, The Board of Education for the City of London, 951 Leathorne Street, London, Ontario and Mr. Clive Matthews, Manager of Building Services, City of London, 300 Dufferin Avenue, London, Ontario for the resolution of a dispute with Rocky Cerminara, Chief Building Official, City of London, Ontario to determine whether the proposed installation of electromagnetic locking devices on one leaf only of a pair of double egress doors separating two occupancies, a pool and a school, provide sufficiency of compliance with Sentence 3.3.1.12.(3) of the Ontario Building Code at the South London Community Centre and White Oaks/Bradley Public School, 565 Bradley Ave., London, Ontario.

APPLICANTS

Mr. Cyril Mayo, Project Coordinator
The Board of Education for the City of London, and
Mr. Clive Matthews, Manager of Building Services
City of London
London, Ontario

RESPONDENT

Mr. Rocky Cerminara
Chief Building Official
City of London

PANEL

Mr. Ross Thomson (Chair)
Ms. Lesia Beznaczuk
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF HEARING

March 25, 1998

DATE OF RULING

March 25, 1998

APPEARANCES

Mr. Ron Milne, Architect
Tillman Ruth Mocellin Architects
London, Ontario
For the Respondent

Mr. Gary Edwards
Manager, Plans Examination
City of London
Agent for the Applicant

RULING

1. **The Applicant**

   Mr. Cyril Mayo, Project Coordinator, The Board of Education for the City of London and Mr. Clive Matthews, Manager of Building Services, City of London have applied for a building permit under the *Building Code Act, 1992* to renovate an existing school by adding a pool facility and adding a new school facility to the entire structure at the South London Community and Leisure Centre and the White Oaks/Bradley Avenue Public School, 565 Bradley Ave., London, Ontario.

2. **Description of Construction**

The Applicants propose to renovate an existing, two storey school building by adding a two storey addition containing a school and a pool. The pool is also intended to be used as a community pool. The pool addition will add 1,438 m^2 to the building respectively. Together both portions of the addition will add 6,702 m^2 of new building area to the structure. Including the existing building, the proposed structure will have a total building area of 9,412 m^2.The protructure is classified as a Group A - Division 2 building containing two occupancies, a non-residential school and a community centre which includes a pool.

Between the two occupancies, the Applicants are proposing to have free circulation during school hours. After school hours, however, the Applicants wish to separate the school and pool occupancies through the installation of electro-magnetic locking devices on one leaf only of a pair of double egress doors on both the ground and second floors. The subject double egress doors, proposed for the central east-west corridors on both floors, are considered to be in an access to exit.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed separation of the pool and school occupancies by an electromagnetic locking device provides sufficiency of compliance with Sentence 3.3.1.12.(3) of the Ontario Building Code. This provision specifically prohibits a door in an access to exit in a school from being equipped with an electromagnetic locking device.

4. **Provisions of the Ontario Building Code**

Sentence 3.3.1.12.(3)Doors

(3) Except for a door in an elementary or secondary school or a door leading directly from a Group F, Division 1 occupancy, a door in an access to exit is permitted to be equipped with an electromagnetic locking device conforming to Sentence 3.4.6.15.(4).

5. **Applicant's Position**

The Applicants submitted that the subject double egress doors are neither exit doors, nor do they provide access to exit. They contended that the proposed doors could be replaced by a solid wall. They argued, in other words, that the doors should be considered as convenience doors, providing better internal circulation in the building only. To prove this point, the Applicants

pointed to the fact that there are no exit signs, nor way-finding signs to indicate that the subject doors are in fact exit related doors. Further, they argued that unlike exit doors, these doors will remain open most of the time.

The Applicants insisted that the double egress doors are for security purposes, hence the electromagnetic locking device on one door only of the two pairs. The intention of this design is to keep users of the community centre out of the school area after hours.

For these reasons, the Applicants submitted that Sentence 3.3.1.12.(3) does not apply and therefore the proposed installation of the electromagnetic locking device on the subject doors should be allowed.

6. **Chief Building Official's Position**

The Respondent agreed that the doors in dispute, although technically considered access to exit doors, are intended mostly to allow students access to the pool area without going outside. They submitted that their opposition to the installation of electromagnetic locking devices is due mostly to the fact that Sentence 3.3.1.12.(3) of the OBC clearly does not permit such devices on access to exit doors. As a result, they noted that they do not have the authority to deviate from these requirements of the Code.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed installation of an electromagnetic locking device on one leaf of two pairs of the double egress doors provides sufficiency of compliance with the Building Code provided that:

i)Magnetic locks are installed only on access to exit doors from the pool into the school.

ii)A manual over-ride for magnetic locks is provided at the control desk for the pool.

iii)The magnetic locks are connected to, and released by activation of, the fire alarm system.

8. **Reasons**

i)The magnetic locks will only be activated by the school security systems when the school is vacant.

ii)The facility has a centrally monitored fire alarm system.

iii)The facility is protected by an automatic sprinkler system with alarms connected to a central station monitoring system.Dated at Toronto this 25th day in the month of March in the year 1998 for application number 1998-13.

BCC Ruling No. 98-14-619

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-14-619

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Clauses 3.2.2.57.(2)(c) and 3.1.14.2.(2)(a) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Milo Janecek, President, Paramount Construction Ltd., 213 Breithaupt Street, Kitchener, Ontario for the resolution of a dispute with Mr. Jim Witmer, Chief Building Official, City of Kitchener, Ontario to determine whether the roof assembly, as constructed, without a thermal barrier between the foam plastic insulation and the steel roof deck, but including other measures provides sufficiency of compliance with Clauses 3.2.2.57.(2)(c) and 3.1.14.2.(2)(a) of the Ontario Building Code at the Sowa Tool plant, 334 Manitou Drive, Kitchener, Ontario.

APPLICANT

Mr. Milo Janecek, President
Paramount Construction Ltd.
Kitchener, Ontario

RESPONDENT

Mr. Jim Witmer
Chief Building Official
City of Kitchener

PANEL

Mr. Ross Thomson (Chair)
Ms. Lesia Beznaczuk
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF HEARING

March 25, 1998

DATE OF RULING

March 25, 1998

APPEARANCES

Mr. Peter Colquhoun, Consultant
Arencon Inc.
Mississauga, Ontario
Agent for the Applicant

Mr. Jim Witmer
Chief Building Official
City of Kitchener
The Respondent

RULING

1. **The Applicant**

   Mr. Milo Janecek, President, Paramount Construction Ltd., was issued an order to comply under the *Building Code Act, 1992* to install a thermal barrier in the roof assembly at the precision tool sales and warehouse building known as the Sowa Tool plant, Kitchener, Ontario.

2. **Description of Construction**

   The Applicant recently added a 835.7 m^2, one storey addition to an existing precision tool sales and warehouse building. Including the addition, the expanded structure has a total building area of 2,154.1m^2 and is considered to be one storey in building height. The older portion of the building contains a small mezzanine that comprises only 0.036 % of the ground floor area. The existing building is constructed of noncombustible construction, with the exception of a 50 mm (2 in) thick wood deck in the roof assembly of the oldest portion of the existing building.

The recently constructed addition is also built of noncombustible construction. It contains a 25 mm (3 in) thick combustible foam plastic insulation (Roofmate) which is not protected by a thermal barrier between the 40 mm (1.5 in) steel roof deck and the insulation. The roof assembly also contains a vapour barrier above the deck but below the Roofmate insulation, as well as a 25 mm (1 in) insulation board above the Roofmate, and topped off with a 4-ply built-up roof to match the existing. The roof assembly of the addition is supported by steel joists.

The expanded building is equipped with a single-stage fire alarm system that monitors both alarm and supervisory signals and is connected to Sowa Tool's burglar alarm system. The building does not have a sprinkler system nor a standpipe and hose system. It has fire route access on the north, south and west faces of the building. A fire hydrant is located approximately 45 m (150 ft) from the west side of the building. Also, exit lights with emergency power provide lighting for the principal exit routes.

The building is classified as a Group F - Division 3, low hazard industrial occupancy.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the addition, as constructed, without a thermal barrier in the roof assembly, but including other measures, provides sufficiency of compliance with Clause 3.1.14.2.(2)(a) of the Ontario Building Code. Sentence 3.1.14.2.(2) allows a building with a metal roof deck assembly containing a combustible material to waive the conditions of acceptance of CAN/ULC-S126-M provided that certain conditions are met. One of these conditions, found in Clause (a) of Sentence 3.1.14.2.(2), is that the roof assembly contain thermal barrier. The new roof assembly in thesubject addition contains Roofmate, a combustible foam plastic insulation, however, no thermal barrier was installed. The Applicants are proposing other compensating measures, namely greater fire department access routes.

4. **Provisions of the Ontario Building Code**

Clause 3.1.14.2.(2)(a)Metal Roof Deck Assemblies

(2) The requirements of Sentence (1) are waived provided

(a)the combustible material above the roof deck is protected by a thermal barrier conforming to Clause 3.1.5.11.(2)(e) that is located

(i)on its underside, or
(ii)beneath the roof deck,

5. **Applicant's Position**

The Applicant submitted that the building should be considered as a structure conforming to Article 3.2.2.56. of the OBC, instead of Article 3.2.2.57. as has previously been the case. This alternate approach would allow the recently constructed roof assembly to remain, since Article 3.2.2.56. permits one storey, division 3, industrial buildings to be constructed of combustible construction. This would mean that the roof assembly would not have to comply with Article 3.1.14.2. regarding thermal barriers.

The Applicant recognized that in order to use this alternate approach under Article 3.2.2.56. the building must qualify under the conditions of this provision. Considering that the building is one storey, unsprinklered and is 2,154.2 m^2 in building area this means that the building must face three streets. Currently, the building is considered to face two streets and in order to be considered as facing three streets the structure must have 75 % of the perimeter within 15 m of a fire access route. The Applicant noted that the building perimeter, including the addition, is approximately 236.2 m (775 ft) with 159.4 m (523 ft), or 67.5 %, of it within 15 m of a fire department access route. They contended that this extent of fire access routes does comply with Article 3.2.2.56. if an interpolative method is used, i.e. using the known figures in Table 3.2.2.W. to estimate another figure somewhere between those numbers. In this case, the figures relate to building area with respect to the number of streets the building faces.

Specifically, the Applicants argued that if, under Article 3.2.2.56., a building facing 2 streets, i.e. having 50 % of the perimeter within 15 m of a fire route, is allowed to be 2,000 m^2 in building area and if a building facing 3 streets, or having a fire route along 75 % of its perimeter is permitted to be 2,400 m^2, then a structure with a building area of 2,154.2 m^2 should only be required to have a fire route on 59.6 % of the perimeter. In the Applicant's view, the interpolative method offers a sliding scale of perimeter required as fire route depending on building area. On this basis the Sowa Tool warehouse, with 67.5 % of its perimeter as fire route, meets and exceeds the condition of Article 3.2.2.56.

The Applicant also noted that they have also provided other measures in excess of OBC requirements that are intended to improve the safety of the facility. For example, the single-stage, single zone fire alarm system is monitored by an agency with a direct alarm connection to the local fire department. This system will be upgraded in a few months to a ULC listed central

monitoring station. The facility also has an audible carbon monoxide alarm system. Finally, the building is equipped with exit signs even though the occupant load is only 40. The Code requires such signage when the occupant load reaches 150 people.

6. **Chief Building Official's Position**

The Respondent submitted that the thermal barrier required in the roof assembly was not installed as indicated on the permit drawing that were submitted and reviewed. As a result, they issued an order to comply on November 26, 1997. Further, the Respondent rejected the alternate approach of considering the building under Article 3.2.2.56. since the OBC does not permit the interpolation of the percentage of the building perimeter to determine the number of streets for fighting purposes. In their opinion , the structure remains subject to the requirements of Article 3.2.2.57. The Respondent also noted that to date the Applicant has refused to install a sprinkler system, which they feel would compensate for the lack of a thermal barrier.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the roof construction of the one storey addition shows sufficiency of compliance with the Ontario Building Code provided that;

fire deparment access is maintained on the north side of the building as well as on the west and south sides.

8. **Reasons**

a)The owner is allowing only parallel parking adjacent to the building on the north side to maintain fire department access on that side.

b)Additional fire safety measures have been provided, viz;

i)the building is equipped with a single stage fire alarm system that will transmit a signal to the fire department through an off site monitoring station that will be ULC listed as a central station.

ii)exit signs are provided in the building.

Dated at Toronto this 25th day in the month of March in the year 1998 for application number 1998-07.

BCC Ruling No. 98-13-618

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-13-618

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentences 3.3.2.3.(2), 3.3.2.4.(2), 3.3.2.4.(3), 3.3.2.4.(4) and 3.3.2.4.(5) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Cos Orsini, Director, Orsini Bros. Inc., 7389 Lundy's Lane, Niagara Falls, Ontario for the resolution of a dispute with Mr. Mel Brown, Chief Building Official, City of Niagara Falls, Ontario to determine whether the addition of a presidential suite can be defined as a mezzanine under Sentence 3.2.1.1.(4) to allow a single exit in accordance with Article 3.4.2.2. at Niagara Falls Ramada Suites Hotel & Conference Centre, 7389 Lundy's Lane, Niagara Falls, Ontario.

APPLICANT

Mr. Cos Orsini, Director
Orsini Bros. Inc.
Niagara Falls, Ontario

RESPONDENT

Mr. Mel Brown
Chief Building Official
City of Niagara Falls

PANEL

Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF HEARING

March 12, 1998

DATE OF RULING

March 12, 1998

APPEARANCES

Mr. Peter Lesdow, Principal
Peter J. Lesdow Architect
Niagara Falls, Ontario

Agent for the Applicant

Mr. Roger Pigeon
Senior Plans Examiner
City of Niagara Falls
For the Respondent

RULING

1. **The Applicant**

   Mr. Cos Orsini, Director, Orsini Bros. Inc., has applied for a building permit under the *Building Code Act, 1992* to renovate an existing hotel structure by adding a seventh floor presidential suite at the Niagara Falls Ramada Suites Hotel & Conference Centre, Niagara Falls, Ontario.

2. **Description of Construction**

   The Applicant proposes to construct an addition to an existing six storey hotel. The addition will add a seventh level comprising 1,268 ft^2 at the south-east corner of the top of the existing structure. This additional level is intended to be used as a presidential suite catering to high-end clientele. The proposed presidential suite would be accessed by a new flight of stairs to be built off the existing elevator lobby of the sixth floor. The elevators would not be extended to the presidential suite.

The proposed seventh level would be constructed of noncombustible construction, with the floor and load bearing walls of the proposed presidential suite having a 2 hour fire-resistance rating. The roof of the presidential suite is to have a fire-resistance rating of 1 hour, using the ULC #1501 design.

The existing structure has a building area of 68,256 ft^2 and is constructed of noncombustible construction, with floor and load-bearing wall assemblies and exit stairwells having a fire-resistance rating of 2 hours. The doors and frames have a 1.5 hour rating. It is equipped with a standpipe and hose system and a fire alarm system. It is not provided with a sprinkler system. The building is classified as a Group C - residential (hotel) occupancy.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed addition can be considered a mezzanine under Sentence 3.2.1.1.(4) of the Ontario Building Code and thus be subject to the exiting requirements for a mezzanine, specifically OBC Sentence 3.4.2.1.(1). By adding a seventh level, which if defined not as a mezzanine but as a storey having a floor area, the proposed presidential suite would then be required to provide a minimum of two exits. This could only be accomplished by creating an 80 ft long exit path over the top of the existing hotel roof to the north stair, which would have to be raised one storey to the seventh level. Considered as a mezzanine, however, only one exit would be required from the presidential suite.

4. **Provisions of the Ontario Building Code**

Sentence 3.2.1.1.Exceptions to Building Height in Storeys

(4) Except as provided in Sentence (5), a mezzanine shall not be required to be considered as a storey in calculating building height and need not conform to Sentence (3) where the aggregate area of the mezzanine floor does not exceed 10 percent of the area of

(a)the suite in which it is located, where there is more than one suite in the storey, or

(b)the storey in which it is located, in all other cases.

5. **Applicant's Position**

The Applicant submitted that the proposed presidential suite addition should be considered as a mezzanine to the sixth floor. In their opinion, providing a second exit across the top of the

existing sixth floor roof would not be practical. Individuals exiting the presidential suite would have to travel over 80 ft across a sixth storey high roof. This situation itself would be dangerous and would require the hotel to construct either a 3 ft, 6 in guard around the perimeter of the existing roof, a length of 244 ft. Or, in order to avoid the problems of keeping such a path clear in the winter, an 80 ft long enclosed walkway would be necessary.

The Applicant argued that the seventh level addition could be viewed as a mezzanine since the presidential suite at 1267.59 ft^2 comprises only 14.82 % of the 8,548.27 ft^2 of the sixth floor area below. As they noted, this is only 4.82 % in excess of the 10 % allowed for a floor area to be considered a mezzanine.

Regarding the exiting from the presidential suite, the Applicant asserted that the proposed addition would meet the exiting requirements for a mezzanine under Article 3.4.2.2. Further, as a Group C occupancy with only one exit, the proposed floor area at 1,267.59 ft^2 and the proposed travel distance at 52 ft comply with the standards specified in Table 3.4.2.A which allow a maximum floor area of 1,350 ft^2 and a maximum travel distance of 82 ft respectively.

The Applicants also argued that the presidential suite is safe because the stair leading to the access to exit is in clear view for the occupants of the room and is marked with an exit sign. The suite will not be used as an assembly area, therefore the occupant load will be low. As well, this usage, or lack thereof, was made clear by the city when it dealt with the associated minor variance application to increase parking at the hotel due to the new casino operation earlier this year.

The Applicants pointed out that although they are requesting that the presidential suite be considered a mezzanine, they are not seeking relaxations from other Code standards regardingseven storey buildings as regulated under Article 3.2.2.38. They recognize that, as a result of the presidential suite addition, the hotel can no longer be classified under Article 3.2.2.37. The Applicants note, however, that the subject building does in fact conform to the higher standards under Article 3.2.2.38. This is true of the existing building and will also hold for the proposed addition. Nonetheless, the Applicants indicated that because the grade to floor level height of the presidential suite (considering it as a mezzanine) is approximately 55 ft, 5 in which is less than the 59 ft, 1 in criteria for high-rise buildings therefore the additional requirements of Subsection 3.2.6. do not apply. The same also applies for Sentence 3.2.8.4.(1) and Articles 3.2.8.10. and 3.2.9.3.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed presidential suite addition cannot be considered as a mezzanine because it does not conform to the definition of mezzanine. The proposed suite is not an intermediate level between the floor and ceiling of the sixth floor. They indicated that the new floor area protrudes through the existing roof.

The Respondent argued that the Applicant was requesting too many exemptions. For example, the proposed exiting clearly does not meet the Code requirements for a floor area hence the Applicant's mezzanine proposal. However, the presidential suite does not meet the definition nor size allowed to be a mezzanine, thus the Applicant has requested further exemptions from the mezzanine provisions. Finally, they note that the Applicant is also seeking a relaxation of the standards for fire separating exits from the adjacent floor area.

For these reasons, the Respondent felt that the proposal sought variances that went beyond their authority.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the addition of a presidential suite does not provide sufficiency of compliance with Sentences 3.2.1.1.(4) and Article 3.4.2.2. of the Building Code.

8. **Reasons**

i)The presidential suite is considered a storey and not a mezzanine as per Article 1.1.3.2. and Clause 3.2.1.1.(4)(a) of the Building Code.

ii)As a partial seventh floor it is required to have not less than two exits as per Sentence 3.4.2.1.(1) of the Building Code.

iii)It is the opinion of the BCC that the proposed alternative life safety features wereconsidered insufficient to provide sufficiency of compliance.

Dated at Toronto this 12th day in the month of March in the year 1998 for application number 1998-04.

BCC Ruling No. 98-12-617

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-12-617

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentences 3.3.2.3.(2), 3.3.2.4.(2), 3.3.2.4.(3), 3.3.2.4.(4) and 3.3.2.4.(5) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Thomas Phillips, Owner, Part Lot 18, Concession 1, Carden Township, Victoria County, Ontario for the resolution of a dispute with Mr. Paul McCubbing, Chief Building Official, Township of Carden, Ontario to determine whether the existing sewage tank, drain pipe, "Standard" toilet and lack of inspection prior to use comply with Ontario Water Resources Act provisions 5.6.5., 4.8.1.(1), 2.1.5.(2) and 1.8.1.(2) respectively at Part Lot 18, Concession 1, Carden Township, Victoria County, Ontario.

APPLICANT

Mr. Thomas Phillips, Owner
Part Lot 18, Concession 1
Carden Township, Ontario

RESPONDENT

Mr. Paul McCubbing
Chief Building Official
Township of Carden

PANEL

Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF HEARING

March 12, 1998

DATE OF RULING

March 12, 1998

APPEARANCES

Mr. Thomas Phillips
Owner
Carden Township, Ontario
The Applicant

Mr. Paul McCubbing
Chief Building Official
Township of Carden
The Respondent

RULING

1. **The Applicant**

   Mr. Thomas Phillips, Owner, Part Lot 18, Concession 1, has been issued an order to comply under the *Building Code Act, 1992* to bring a concrete sewage tank, a 50 mm (2 in) drainpipe, an antique toilet, in conformity with the appropriate provisions of the Ontario Water Resources Act, and to allow a municipal inspection prior to further use of this water supply system for the subject farm building at Part Lot 18, Concession 1, Carden Township, Ontario.

2. **Description of Construction**

   The Applicant property contains several buildings, including a two storey, 40 by 80 ft Quonset hut structure that has a building area of 3,200 ft^2. This building is divided into two portions, with the front half containing a 1,280 ft^2 second storey. The lower floor contains laundry, kitchen and washroom facilities. The upper level is used as an open storage area. The rear portion of the Quonset hut is used as a garage. The structure is constructed of combustible construction on the interior with a noncombustible exterior shell. It is classified as a Farm Building under the OBC.

There are numerous areas of the as built construction in dispute. The first deals with the sewage tank which is located approximately 4 feet outside of the building and within several feet of the septic system. This system consists of a raised septic tank, as well as a septic bed, and thus relies upon the sewage tank to function. The sewage tank is presently vented through the main stack of the building, which is located 3 feet inside the structure.

Issue two is the slope of the drainage pipe that runs from the plumbing fixtures in the Quonset hut 34 feet under the floor to the sewage tank on the other side of the structure. The pipe only has a fall of 2 3/8 in. And is supported on wooden cross braces beneath the floor.

The third issue is the lack of certification markings on the installed old-style water closet.

The fourth issue was the lack of a municipal inspection prior to the usage of the plumbing system in the Quonset hut.

3. **Dispute**

The issues at dispute between the Applicant and Respondent is whether the as built and installed venting of the sewage tank, slope of the drainage pipe, old-style toilet without certification labels, and usage of the plumbing system in the Quonset hut at the subject property comply with provisions 5.6.5., 4.8.1.(1), 2.1.5.(2) and 1.8.1.(2) of the Ontario WaterResources Act. Unless the Applicant is able to demonstrate compliance with the OWRA provisions, these aspects of the building must be brought into compliance.

The first three issues relate to technical provisions of the OWRA that were incorporated into the OBC in 1993. The last issue, however, is of an administrative and enforcement nature and thus is not covered by the mandate of the Building Code Commission.

4. **Provisions of the Ontario Building Code**

Article 5.6.5. of Regulation 815 states

Where the diameter of an inlet pipe to a sewage tank is,

(a)five inches or larger, the diameter of the vent pipe from the tank shall be at least four inches; and

(b)less than five inches, the diameter of the vent pipe from the tank shall be the greater of,

i)1 1/4 inches, or

ii)one trade size smaller than the inlet pipe.

Sentence 4.8.1.(1) Every fixture drain and every drainage pipe of three inch size or less shall have a minimum grade of 1/4 in. per foot in the direction of flow.

Sentence 2.1.5.(2) The lack of certification markings on a product or plumbing component shall be regarded as evidence that no certification exits.

Sentence 1.8.1.(2) No plumbing that has been constructed, repaired, renewed or altered shall be put into use until it is inspected and found to be in compliance with this Code.

5. **Applicant's Position**

Regarding the first issue the Applicant submitted that since the sewage tank is not in or under his Quonset hut building then Article 5.6.5. of the OWRA does not apply since that Article regulates sewage tanks that are located in or under any building. The Applicant added that this issue is still not covered by the current OBC.

On the issue of the slope of the drainage pipe, the Applicant referenced Sentence 4.8.1.(3) of the OWRA where it allows a slope lesser than 1/4 inch per foot if the lesser grade can be demonstrated to provide a gravity flow rate of at least two feet per second. The Applicantthen produced a calculation known as the manning formula that demonstrated that the subject drainage pipe would produce an adequate flow rate. While he admitted that the as built pipe, with its lesser slope, would not have the same scouring effect as a 1/4 over one foot grade, the subject pipe has functioned effectively for over six years. Anticipating that problems may occur as a result of the too gradual slope, the Applicant installed a cleanout to facilitate the amelioration of any problems if they were to occur.

The Applicant submitted on the issue of the water closet that it was manufactured by "Standard". Unfortunately, since the toilet is old his search to identify the serial number with American Standard was not successful. However, the Applicant added that the water closet has worked without problems for over six years. Lastly, he made known his willingness to temporarily remove some existing flooring to allow for inspection to demonstrate that the existing internal trap, required water seal and flow characteristics are compatible with its use and that the supply fittings meet the CSA standards.

6. **Chief Building Official's Position**

On the first issue the Respondent submitted that the stack vent for the sewage tank does not meet the appropriate requirements.

Regarding the second, they argued that the slope of the drainage pipe was far from adequate. They noted that the fall should be approximately 8 1/2 inches, not the 2 3/4 provided. He believed that the slope should be increased.

The Respondent noted that the verification of the toilet was impossible because the fixture had no certification markings. Without these he was not able to assess many of the other working components of the subject water closet. In his view, a new toilet with clear certification markings should be installed.

7. **Commission Ruling**

It is the decision of the Building Code Commission

i)that the sewage tank in question is not regulated by the Building Code provided it is vented independently of the vent stack servicing the other appliances in the Building.

And

ii)that the toilet provides sufficiency of compliance with requirements for C.S.A. certification under O.W.R.A. 4.8.1.(1).

And

iii)that the 2" drain pipe provides sufficiency of compliance with the requirements for total fall as per O.W.R.A. 4.8.1.(1) provided evidence of compliance is provided through calculations using the Manning formula for this application.

8. **Reasons**

i)The sewage tank that is vented independent of the plumbing system is considered part of the septic system and not subject to the Building Code.

ii)The toilet being used was manufactured prior to the requirement for certification by C.S.A.

iii)Evidence by the Applicant stated that the toilet has been in use for approximately 6 - 7 years and is functioning satisfactory.

iv)There is an exception to the fall requirement for drain lines.

Dated at Toronto this 12th day in the month of March in the year 1998 for application number 1997-81.

BCC Ruling No. 98-11-616

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-11-616

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.3.1.5. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Norman Landry, Construction Manager, The Home Depot, 426 Ellesmere Road, Toronto (Scarborough), Ontario, for the resolution of a dispute with Ms. Terry Dalkowski, Chief Building Official, City of Nepean, Ontario, to determine whether the shade screen adjacent to the existing building can be considered as a temporary structure adjoining that building and thus be subject to Subsection 3.1.6. and not Subsection 3.2.3. of the Ontario Building Code at The Home Depot, 1900 Baseline Road, Nepean, Ontario.

APPLICANT

Mr. Norman Landry, Construction Manager
The Home Depot
Toronto (Scarborough), Ontario

RESPONDENT

Ms. Terry Dalkowski
Chief Building Official
City of Nepean

PANEL

Mr. Roy Philippe (Chair)
Mr. Ross Thomson
Mr. Lawrence Glazer

PLACE

Toronto, Ontario

DATE OF HEARING

Wednesday, March 4th, 1998

DATE OF RULING

Wednesday, March 4th, 1998

APPEARANCES

Mr. Randal Brown, President
Randal Brown and Associates Ltd.
Toronto, Ontario
Agent for the Applicant

RULING

1. **The Applicant**

   The Applicant, Mr. Norman Landry, Construction Manager, The Home Depot, has applied for a building permit under the *Building Code Act, 1992* to construct a shade screen to create a garden centre at The Home Depot, 1900 Baseline Road, Nepean, Ontario .

2. **Description of Construction**

   The Applicant proposes to construct a one storey, 2,612 m2 shade screen to create a garden centre abutting the existing Home Depot building to be used for the sale and display of plant material and agricultural products. The shade screen is proposed to be constructed of a steel structure composed of purlins and arches with a polyethylene cover. The garden centre will abut the main building on one side and a 150 mm (6 in) gap will be maintained between the two structures. The other three sides of the garden centre will be surrounded by a 3.66 metre (12 ft) architectural wrought iron fence. The end portion of the shade screen will not have gables. The garden centre will not be heated.

   The existing Home Depot store will be allowed to have two exits discharging into the garden centre. These exits will be no more than 25% of the required exits and no more than 25% of the required capacity of exits from the Home Depot building. The egress aisles through the garden centre will have a minimum width of 1.1 metre. The garden centre will be provided with a

minimum of two means of egress leading to an open space. The shade screen of the garden centre will be located at least 3 metres, measur ed horizontally, from adjacent buildings on the property or to the property line.

The existing Home Depot building is a single storey, 9,755 m2 structure that is used for the sale and display of home improvement products. The building is of noncombustible construction, including pre-cast concrete exterior walls with a 2 hour fire-resistance rating, except where the existing building meets the garden centre. At this area, the Home Depot structure is provided with a BMEC Authorized sprinkler protected glazed screen with a 2 hour fire-resistance rating, separating it from the garden c entre. The building is equipped with electrically supervised sprinkler and fire alarm systems and there are fire hydrants located adjacent to both the existing building and the garden centre. The sprinkler system and fire alarm system do not extend into the garden centre, however. The exits for the Home Depot structure are located at 60 metre intervals along the perimeter of the building.

The garden centre and existing building are classified as having a Group E - mercantile occupancy.

3. **Dispute**

The issue at dispute between the Applicant and the Respondent is whether the proposed garden centre, with its shade screen, can be considered a separate and temporary structure, such as a tent, and thus be permitted to comply with Subsection 3.1.6. (Tents, Air-Supported Structures and Temporary Structures) of the Ontario Building Code. If the shade screen can be considered as separate and temporary, then the spatial separation requirements of Subsection 3.2.3. (Spatial Separation and Exposure Protecti on of Buildings) apply to the existing Home Depot building, which is located only 150 mm from the garden centre. Further, Sentence 3.1.6.3.(2) requires that all "tents" be located at least 3 metres from an adjacent building.

However, if the shade screen cannot be considered as a temporary and separate structure and is interpreted as a permanent addition to the existing building, other provisions of the OBC, must be applied. These provisions include, but are not limited to Subsection 3.2.2. (Building Size and Construction Relative to Occupancy), Subsection 3.2.4. (Fire Alarm and Detection Systems) and Section 3.4. (Requirements for Exits), then must be applied. As well, depending on this latter interpretation, exiting throug h the garden centre and the increase in travel distance from the Home Depot building are also potential issues.

4. **Provisions of the Building Code**

Sentence 3.1.6.3. Clearance to Other Structures

(1) Except for tents used for camping and other personal uses and except as provided in Sentences (2), (3) and (4), every tent, air-supported structure and temporary structure shall conform to Subsection 3.2.3.

5. **Applicant's Position**

The Applicant submitted that the shade screen, while fitting the definition of a building as found in the Building Code Act since it comprises a roof sheltering an occupancy below, does not have a floor area nor a building area as defined in the OBC because there are no exterior walls. (The Applicant, it appears, does not consider the wrought iron fencing to be a wall.) Based on the openness of the structure and the fact that the shade screens themselves are taken down every winter, the Applicant argues that the garden centre is a temporary structure and is subject to Subsection 3.1.6. of the OBC.

The Applicant also submitted that because the shade screen does not have any exterior walls, it therefore cannot have an exposing building face as defined in the OBC. As such, it is their view that Subsection 3.2.3. is not applicable to the garden centre. They recognize, however, that it does apply to the existing Home Depot building located only 150 mm away. In order

to provide adequate separation between, in their view, what are two distinct buildings, the Applicant is proposing that the Home Depot store meet the OBC standards for a building with a zero metre limiting distance for spatial separation purposes. For a Group E occupancy, Clause 3.2.3.7.(2)(a) requires that the subject exterior wall be of noncombustible construction with a 2 hour fire-resistance rating, and have noncombustible cladding. The Applicant notes that the glazing in the exterior wall of the Home Depot facing the garden centre will provide the required 2 hour resistance rating through the installation of a BMEC Authorized sprinklered window assembly.

Regarding the issue of exiting through the garden centre, the Applicant argues that this is permissible since the structures in question are two separate buildings on the same property and such an egress route is allowed under the OBC. Further, the travel distance within the garden centre can be measured from the exterior wall of the Home Depot.

Finally, the Applicant is proposing that the exit and convenience doors from the Home Depot building into the garden centre will be equipped with close spaced exposure sprinklers on the Home Depot side. The heads will be approximately 2 metres apart and will be connected to the wet ceiling sprinkler system, where the water demand of the close spaced sprinklers will be added. This system is designed to provide a minimum of 3 US gallons per minute per lineal feet of openings.

It is for these reasons that the Applicant believes that the subject garden centre and shade screen is a temporary and separate structure, which is permitted to comply with Subsection 3.1.6. of the OBC and which has provided for adequate spatial separation measures in accordance with Clause 3.2.3.7.(2)(a).

6. **Chief Building Official's Position**

The Respondent offered various possible interpretations of how the proposed garden centre and shade screen could be interpreted under the OBC, including as a temporary structure, a fixed, permanent canopy, as a separate building and as a structure attached to the main Home Depot building. The Respondents were seeking clarification on this matter from the Building Code Commission.

Ultimately, the Respondent submitted that the garden centre could be viewed as a separate and temporary structure, meaning that Subsection 3.1.6. could be applied. However, they did not agree that the 3 metre spatial separation could be waived because there is no exposing building face. The Respondents made comparisons with an open air, multiple storey parking garage and how such a structure can be interpreted as having 100% unprotected openings which therefore requires a 3 metre spatial separation setback.

Lastly, the Respondent noted that a previously Code conforming required exit would now lead directly into the garden centre enclosure and not to an exterior open area.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the temporary and separate structure (shade screen) adjacent to the main building provides sufficiency of compliance with Subsections 3.1.6. and 3.2.3. of the Building Code provided that;

i)Openings facing the shade screen in the main building will be protected by BMEC authorized window assemblies and close spaced sprinklers for doors.

ii)The exterior wall assembly adjacent to the shade screen provides a 2 hr fire separation.

iii)Exiting through the enclosed garden centre fencing will be provided as required under the Building Code.

- **Reasons**

i)The shade screen is considered a temporary structure and subject to the requirements of 3.1.6.

ii)The shade screen area is unheated.

iii)The framing elements for the structure are non combustible.

iv)The shade screen covering will have a flame spread rating of less than 25.

v)The additional sprinkler protection in the main building openings provided additional protection from fire spread.

vi)Fire spread through openings from the exterior is addressed through outside storage provisions in the fire code.

Dated at Toronto this 4th day in the month of March in the year 1998 for application number 1998-09.

BCC Ruling No.. 98-10-615

BUILDING CODE COMMISSION DECISION ON B.C.C. Ruling No. 98-10-615

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Articles 7.2.5.5. and 2.6.4.1. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Bruce Lasby, Operations Administrator, Thomasfield Homes Ltd., 295 Southgate Drive, Guelph, Ontario vs. Mr. Bruce Poole, Chief Building Official, City of Guelph, to determine whether a combination microwave and exterior vented hood fan installed approximately 355 mm (14 in) above the top of a stove burner complies with Article 9.33.2.1. of the Ontario Building Code in various units at 1550 Gordon Street and Lot 67, Plan 856, Hse #56, Guelph, Ontario.

APPLICANT
Mr. Bruce Lasby, Operations Administration
Thomasfield Homes Ltd.
Guelph, Ontario

RESPONDENT
Mr. Bruce Poole
Chief Building Official
City of Guelph, Ontario

PANEL
Mr. Roy Philippe (Chair)
Mr. Ross Thomson
Mr. Lawrence Glazer

PLACE
Toronto, Ontario

DATE OF HEARING
March 4, 1998

DATE OF RULING
March 4, 1998

APPEARANCES
Mr. Bruce Lasby
Thomasfield Homes Ltd.
Guelph, Ontario
The Applicant

Mr. Bruce Poole
Chief Building Official
City of Guelph, Ontario
The Respondent

RULING

1. The Applicant

Mr. Bruce Lasby, Operations Administrator, Thomasfield Homes Ltd., Guelph, Ontario was issued an order under the Building Code Act, 1992 to rectify the installation of microwave units at certain new residential structures at various sites at 1550 Gordon Street and Lot 67, Plan 856, Hse #56, Guelph, Ontario.

2. Description of Construction

The Applicant has constructed numerous new residential units in the City of Guelph. The construction of the subject units includes complete cabinetry in the kitchens, as well as the installation of certain appliances. The Applicant proposes to install combination microwave oven/hood exhaust units above the stove burners, at a minimum height in accordance with the manufacturers specifications.

The appliances in question are described as standard microwave units with integral exhaust fans and lights mounted on the underside. The exhaust fumes are vented through ducting within the fan hood and

are then are expelled to the upper rear of the microwave, at which point they are forced through standard exhaust ducts. The combination microwave/fan appliances project only 25 to 50 mm (1 to 2 in) beyond the face of the cabinetry.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the installation of the subject microwave units complies with Article 9.33.2.1. of the Ontario Building Code. This provision requires that a vertical clearance of not less than 750 mm (2 ft, 6 in) must be provided above stove ranges. The Applicant is installing the microwave units as per the manufacturers instructions. The City is not prepared to accept the installation of the microwave units at less than 600 mm (24 in).

4. Provisions of the Ontario Building Code

Sentence 9.33.2.1. Vertical Clearance

1. Except as provided in Sentence(2), a vertical clearance of not less than 750 mm (2 ft 6 in) shall be provided above the elements or burners of electric-and gas-fired domestic ranges.

5. Applicant's Position

The Applicant submitted that the combination microwave/hood fan units are being installed properly - in accordance with the manufacturers specifications. In fact, they are installing most of the subject appliances at approximately 475 to 500 mm (19 to 20 in) above the burner, at least 125 mm (5 in) higher than the manufacturers' permissible minimum installation.

In their view, the OBC and Article 9.33.2.1. in particular, refer only to the clearance of the combustible cabinets above the surface of the cooktop. They also note that the local area fire departments do not have standards regulating the clearance between stoves and microwaves. This is because, as the Applicant argues, the issue of clearance between these two appliances is set by the manufacturers who have had the installation configurations tested by accredited testing agencies. (The Applicant provided material from UL and CSA which indicated that the cooktop to microwave height should be done in accordance with the manufacturer's installation instructions.) It is not an area that is covered by government regulation. They do point out, however, that the proposed installation of the combination microwave/hood fan units is approved by Ontario Hydro.

The applicant further argues that installing the microwave units at the location required by the Respondent would dangerous since users would be required to remove hot items from an unsafe height. In the case of children, they would handling hot food above their heads.

6. Chief Building Official's Position

The Respondent submitted that the proposed installation of the subject appliances do not conform to OBC Article 9.33.2.1. In their view, the Code is clear in its requirements; 750 mm (30 in) clearance above a range, or with a metal exhaust fan hood which extends 125 mm (5 in) beyond the face of the cabinetry the clearance can then be reduced to 600 mm (24 in), as per Sentence 9.33.2.1.(2). Under no circumstance does the Code allow a reduction of clearance to less than 600 mm (24 in).

The Respondent indicated that they had contacted the CSA and had inquired about the testing conducted on the microwave to cooktop clearance. They noted that the relevant test had only used full radiant heat to simulate the cooking elements. Testing with flame was not done. This discrepancy, the Respondent believes, is serious enough to ignore the manufacturer's installation specifications and rely upon the additional clearance set out in the OBC.

The Respondent also submitted that discussions with the Guelph Fire Prevention Office revealed that a number of fires have occurred in kitchens due cooking accidents or grease build up and are then propagated by the cabinetry. By locating the microwave closer to the cooktop, they argue that there is an increased chance for cooking accidents (fire ignition and scalding) since inadequate working space would be provided. As well, the closer proximity may cause greater grease build up to occur.

They also note that the pending 1997 version of the OBC has been amended to clarify this provision that a 750 mm (30 in) clearance is required to any building finish unless protection measures are provided. But in no case can the clearance be less than 600 mm (24 in).

Lastly, the Respondent recommends that the subject appliance make application to the Building Materials Evaluations Commission to have the product assessed and possibly tested. Otherwise, they feel that the proposed microwave installation represents a potential reduction of current safety standards which may place occupants and property in these residential units at risk.

7. Commission Ruling

It is the decision of the Building Code Commission that the installation of the combination microwave and exterior vented hood fan with clearances above the top of the stove burner installed in accordance with the manufacturers instructions provides sufficiency of compliance with Article 9.33.2.1. of the Ontario Building Code.

8. Reasons

i. The clearances required in Article 9.33.2.1. of the Building Code are clarified in the 1997 Building Code to be specific to framing, finishes and cabinets.
ii. The certification agencies for electrical hazards require installation instructions including clearances to stove burners.
iii. These products have been available for a period of time.

Dated at Toronto this **4th** day in the month of **March,** in the year **1998** for application number **1998-01.**

BCC Ruling No. 98-09-614

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-09-614

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.3.1.5. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Mike Ralph, Property Manager, Ellis Don Construction Ltd., 1390 Prince of Wales Drive, Ottawa, Ontario, for the resolution of a dispute with Ms. Terry Dalkowski, Chief Building Official, City of Nepean, Ontario, to determine whether a standpipe and hose system is required to be installed in accordance with Article 3.2.9.1. of the Ontario Building Code at Brittania 12-Plex Theatre, 3090 Carling Avenue, Nepean, Ontario.

APPLICANT

Mr. Mike Ralph, Property Manager
Ellis Don Construction Ltd.
Ottawa, Ontario

RESPONDENT

Ms. Terry Dalkowski
Chief Building Official
City of Nepean

PANEL

Mr. Michael Lio (Chair)
Mr. Ross Thomson
Mr. Lawrence Glazer

PLACE

Toronto and Ottawa, Ontario

DATE OF HEARING

Wednesday, February, 25th, 1998

DATE OF RULING

Wednesday, February, 25th, 1998

APPEARANCES

Ms. Judy Jeske, Senior Associate
Leber/Rubes Inc.
Ottawa, Ontario
Agent for the Applicant

Ms. Terry Dalkowski
Chief Building Official
City of Nepean
The Respondent

RULING

1. **The Applicant**

   Mr. Mike Ralph, Property Manager, Ellis Don Construction Ltd., has applied for a building permit under the Building Code Act, 1992 to construct a twelve cinema, movie theatre complex, known as the Britannia 12-Plex Theatre at 3090 Carling Avenue, Nepean, Ontario.

2. **Description of Construction**

   The Applicant proposes to construct a two storey (plus mezzanines), multi-theatre, movie complex containing twelve cinemas. The structure has a building area of roughly 6, 350 m2. It is proposed to be circular in shape, with the cinemas located at the p erimeter surrounding a central lobby with three entrances and an intermediate mezzanine level between the first and second storeys. The lobby contains ticket taking areas, concession facilities and ancillary games and party rooms.

   Access to the six larger cinemas, is via the mezzanine level, whereas access to the smaller theatres is obtained directly from the lobby. For all cinemas, access is through entrance

vomitories from either the lobby or mezzanine. The second storey is use d as the common projection level for all cinemas.

The larger cinemas have occupant loads ranging from 300 persons to just over 400 persons. The smaller ones have occupant loads of slightly over 200 persons. The occupant load for the entire building is approximately 3,000 persons.

The building is constructed of noncombustible construction. All of the cinemas are fire separated from the rest of the building, including the projection level by a 1 hour rated fire separation. The common projection level is separated by a two hour fir e separation from the lobby area.

The building is equipped with a sprinkler system and a two-stage fire alarm system. The structure is classified as having Group A - Division 1 - (motion picture theatres) major occupancy.

The Applicant is also proposing that the central lobby of the subject structure, unlike the surrounding cinemas, have no suspended ceiling. It is proposed that the roof structure remain fully exposed to enhance the impression of the size of the lobby. A s a result, the lobby is to have a high ceiling, measured at 16.7 metres above grade. The rest of the building generally has a ceiling height of 14 metres.

3. **Dispute**

The issue at dispute between the Applicant and the Respondent is whether the proposed multi-theatre complex is required to install a standpipe and hose system in accordance with Article 3.2.9.1. of the Ontario Building Code. This provision requires that structures with a ceiling height of more than 14 metres be equipped with a standpipe and hose system. For buildings that have a building area greater than 4,000 m2, as in this case, the OBC standards for standpipe systems further require that 65 mm hose connections for the use of Fire Departments and 38 mm connections with 30 metres of hose be installed as well. In the subject building, most of the height between grade and the ceiling is roughly only 14 metres, however, the lobby area does exceed the p ermitted height.

4. **Provisions of the Building Code**

3.2.9.1. Where Required

(1) Except as provided in Article 3.2.9.2., a standpipe and hose system, shall be installed in every building that

(a) is more than (i) 3 storey in building height, or (ii) 14 m (45 ft 11 in) in height measured between grade and the ceiling of the uppermost storey,(b) is greater in building area than the area shown in Table 3.2.9.A. for the applicable building height shown in the Table where the building (i) is not sprinklered, and (ii) is not more than 14 m (45 m 11 in) high measured between grade and the ceiling of the top storey, or(c) contains more than one storey below grade

5. **Applicant's Position**

In order to provide sufficiency of compliance with Article 3.2.9.1., the Applicant proposed to install a standpipe and hose system for the lobby of the theatre complex only. The proposal calls for the installation of hose connections consisting of 65 mm connections with 38 mm adaptors at each of the three lobby entrances. This would mean that all areas of the lobby would be within 33 metres of one of the three hose connections. In the Applicant's view, the proposal to provide a standpipe and hose system for this area only is justified since if they were to provide a suspended ceiling at a height of 14 metres in the lobby, they would be able to avoid the requirement for a standpipe system altogether.

By way of rationale for this proposal, the Applicant argues that since only the lobby area exceeds 14 metres in height, it should be the only portion of the building to be equipped with a standpipe system. The standpipe connections in the lobby area wil l be placed at each of the three entrances, one of which has a two hour fire resistance rating, thus providing easy access for fire fighters. Since the entrances are equally spaced access to all parts of the lobby may be possible during a fire. The sta ndpipe system in the lobby, the Applicant claims, will therefore act as a supplement to the sprinkler system to combat the spread of fire.

In the cinemas, which, under the proposed partial standpipe system, would not be covered, the Applicant argues that the standpipe system would be less effective. As Fire Department personnel prefer safe staging to prepare for fire attack, entering the ci nemas from the lobby is less desirable than obtaining fire fighting access directly from the exterior, which all of the cinemas have. This exterior access is made possible by the Fire Department access route which completely encircles the building. Again, within the cinemas the sprinkler system would also do much of the fire combatting.

The Applicant also noted that the option of lowering the lobby ceiling has its drawbacks in terms of fire safety as well. They point out that the suspended ceiling would act as a large concealed space not readily accessible for fire fighting. Lowering t he ceiling would also reduce the volume of space within which smoke can accumulate. As well, lowering the ceiling does not reduce the combustible load or potential fire hazards in the lobby area. Further, all interior finishes have a flame spread rating less than the allowed maximum found in the OBC. The combustible load in the lobby, therefore, is relatively low compare d to other single storey, high bay buildings such as warehouses, the Applicant noted.

Finally, the Applicant noted that the theatre staff will be trained in emergency evacuation procedures and first stage fire fighting. The staff will be trained to abandon fire fighting, however, when the fire develops beyond fire stage, which would mean that the reduced diameter hoses would not likely even be used.

It is for these reasons that the Applicant believes that the proposal provides sufficiency of compliance with Article 3.2.9.1. of the OBC.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed ceiling height of 16.7 metres in the lobby area necessitates that the building be equipped with a standpipe and hose system in accordance with 3.2.9.1. As far as the Applicant's sufficiency of compliance proposa l was concerned, the municipality rejected it on the basis that the Building Code does not offer a mechanism that would allow for a relaxation or relief of the requirements for a standpipe and hose system.

Further, the Respondent believed that the Applicant's proposal could not be considered as providing equivalency because no rational nor other evaluations were submitted to establish past performance that might have enabled the municipality to determine wh ether the level of performance would be decreased.

7. **Commission Ruling**

It is the decision of the Building Code Commission that not providing a standpipe and hose system in the theatre complex provides sufficiency of compliance with the requirements of the Building Code.

8. **Reasons**

i) Hose connections consisting of 65 mm connections with 38 mm adapters at each of the three lobby entrances will be provided.

ii) The Building Code requirement for a standpipe and hose system for buildings with grade to ceiling heights more than 14 m, is exceeded only in the lobby (at a height of 17 m). All other areas within the theatre complex do not exceed 14 m in height.

iii) Evidence submitted suggests the proposed lobby ceiling height increases time occupants are not exposed to smoke by approximately 11%.

iv) All cinema areas are separated from the rest of the building by 1 hour fire separations.

v) Exits are provided from the cinemas directly to grade.

vi) The building is fully sprinklered.

vii) The building is equipped with a 2-stage fire alarm system, with all alarm systems connected to a central station.

Dated at Toronto this 25th day in the month of February in the year 1998 for application number 1997-84.

BCC Ruling No. 98-08-613

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-08-613

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.3.1.5. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Peter Hallman, President, Hallman Eldercare (Waterloo) Inc., 230 Gage Avenue, Kitchener, Ontario, for the resolution of a dispute with Mr. Tony Krimmer, Chief Building Official, City of Waterloo, Ontario, to determine whether the proposed distance between openings is permitted under Article 3.2.3.14. of the Ontario Building Code at Terrace on the Square, 100 Caroline Street, Waterloo, Ontario.

APPLICANT

Mr. Peter Hallman, President
Hallman Eldercare (Waterloo) Inc.
Kitchener, Ontario

RESPONDENT

Mr. Tony Krimmer
Chief Building Official
City of Waterloo

PANEL

Mr. Michael Lio (Chair)
Mr. Ross Thomson
Mr. Lawrence Glazer

PLACE

Toronto, Ontario

DATE OF HEARING

Wednesday, February, 25th, 1998

DATE OF RULING

Wednesday, February, 25th, 1998

APPEARANCES

Mr. Robert Dyck
Robert J. Dyck Arch & Engr Inc.
Kitchener, Ontario
Agent for the Applicant

Mr. Mike Mckean
Plans Examiner
City of Waterloo
The Respondent

RULING

1. **The Applicant**

   Mr. Peter Hallman, President, Hallman Eldercare (Waterloo) Inc., applied for a building permit under the Building Code Act, 1992 to construct a low-rise, care home facility known as Terrace on the Square at 100 Caroline Street, Waterloo, Ontario.

2. **Description of Construction**

   The Applicant proposes to construct a four storey (plus basement), multi-unit, care home facility intended for senior citizens. The structure is classified as Group C - residential major occupancy. The building is constructed of combustible construction and has a building area of 1,175 m2. It is equipped with a sprinkler system, a fire alarm system and a standpipe and hose system.

   As part of the design of the subject structure, the Applicant proposes to include "re-entrant corners" on the second, third and fourth floors. A re-entrant corner is defined as when the exterior walls of two adjacent units subtend 90 degrees from one another. In the present

situation, the closest edges of the window openings of the re-entrant corner units are separated by a distance of 1.5 m on the second and third floors and 0.8 m on the fourth floor.

3. **Dispute**

The issue at dispute between the Applicant and the Respondent is whether the proposed separations of 1.5 m and 1.75 m for the re-entrant corner openings comply with the requirements of OBC Article 3.2.3.14. This provision of the OBC sets out the formula for fire compartments facing each other in the same building (i.e., units at re-entrant corners) and is used to calculate the limiting distances for exposing building faces. Article 3.2.3.14. also requires that the exterior wall of each fire compartment facing each other must have a fire-resistance rating at least equal to that of the fire separation between the two fire compartments.

4. **Provisions of the Building Code**

Article 3.2.3.14. Wall Exposed to Another Wall (1) Except as provided in Sentences 3.2.3.13.(1) and 3.2.3.20.(4), where an opening in an exterior wall of a fire compartment is exposed to an opening in the exterior wall of another fire compartment, and the planes of the 2 walls are parallel or at an angle of less than 135o, measured from the exterior of the building, the openings in the 2 fire compartments shall be separated by a distance at least equal to D_o where

D_o = 2D - (0 x D), but in no case less than
90
1 m (3 ft 3 in)

where

D= the greater required limiting distance for the exposing building faces of the 2 fire compartments, and
0= the angle made by the intersecting planes of the exposing building faces of the 2 fire compartments, (in the case where the exterior walls are parallel and face each other, 0 = 0^o).

- **Applicant's Position**

The Applicant submitted that the proposed distances between the unprotected openings complies with Article 3.2.3.14. of the OBC. On the basis that the exposing building face has a maximum area of 10 m2, 18 percent unprotected openings, and that the building is sprinklered they derive a limiting distance less than the 1.5 m and 0.8 m distances proposed. Their calculations, in effect, reduce the

percentage of unprotected openings from 18 to 9 percent because the building is sprinklered. The assumption used in this reduction is that the usual benefit of installing sprinklers, a doubling of openings in accordance with Article 3.2.3.11., can instead be applied towards a reduction in the limiting distance. As such, using 9 percent as the area of unprotected openings, the Applicant calculates the limiting distance in this situation to be 1.35 m.

The Applicant also notes that the proposed distances of 1.5 m and 0.8 m would also meet the standards set out in the 1997 version of the OBC, which adds a provision that allows that the spatial separations in the situation at issue to be waived because the building is sprinklered.

(Sentence 3.2.3.13.(3). It is for these reasons that the Applicant believes that they comply with Article 3.2.3.14. of the OBC.

- **Chief Building Official's Position**

The Respondent initially submitted that the proposed limiting distance does not meet the requirements of Article 3.2.3.14. Table 3.2.3.A stipulates that 2 m is the necessary distance between the proposed openings. In their view, the Code does not allow the assumption made by the Applicant regarding reducing limiting distance. Under Article 3.2.3.11., openings (which are presumably appropriately spaced from one another) are permitted to be increased in size, but nowhere, they argue, does it allow for distances to be reduced. In light of the 1997 Code, the municipality had no objection.

- **Commission Ruling**

It is the decision of the Building Code Commission that the proposed distance between openings demonstrates sufficiency of compliance to the Ontario Building Code.

- **Reasons**

i) The building is fully sprinklered and exposure between fire compartments is minimized. ii) The 1997 edition of the Building Code waives the requirements for spatial separation between different fire compartments having unprotected openings meeting at an angle of less than 135o when the building is fully sprinklered.

iii) The municipality has no objection to accepting compliance under the 1997 Building Code.

Dated at Toronto this 25th day in the month of February in the year 1998 for application number 1997-83.

BCC Ruling No. 98-07-612

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-07-612

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.3.1.5. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Rae Gardner, President, Rae Gardner Construction, R.R. # 2, Port Carling, Ontario, for the resolution of a dispute with Mr. Wib Bethune, Chief Building Official, Humphrey Township, Ontario, to determine whether the guard height and the openings in the guard, as constructed, provide sufficiency of compliance with Sentence 9.8.8.2.(1) and Article 9.8.8.4. of the Ontario Building Code at the Robert Lantos cottage, Township of Humphrey, District of Parry Sound, Ontario.

APPLICANT

Mr. Rae Gardner, President
Rae Gardner Construction
Port Carling, Ontario

RESPONDENT

Mr. Wib Bethune
Chief Building Official
Township of Humphrey

PANEL

Mr. Michael Lio (Chair)
Mr. Ross Thomson
Mr. Lawrence Glazer

PLACE

Toronto, Ontario

DATE OF HEARING

Wednesday, February, 25th, 1998

DATE OF RULING

Wednesday, February, 25th, 1998

APPEARANCES

Mr. Rae Gardner, President
Rae Gardner Construction
Port Carling, Ontario
The Applicant

Mr. Wib Bethune
Chief Building Official
Township of Humphrey
The Respondent

RULING

1. **The Applicant**

   Mr. Rae Gardner, President, Rae Gardner Construction, is the holder of a building permit under the *Building Code Act, 1992* for the construction of a seasonal residential building, known as the Robert Lantos cottage at Part Lot 13, Concession 1, Township of Humphrey, District of Parry Sound, Ontario.

2. **Description of Construction**

   The Applicant has erected two seasonal residential buildings on the subject property; a two storey structure intended for use as a main cottage, and a two storey boathouse built on the water. The structures are classified as Group C - residential major occupancies. Both buildings are constructed of combustible construction.

   On both buildings, the Applicant has constructed guards and railings in various locations. The main cottage building has a large semi-circular shaped deck at the front with stairs and

associated railings leading to grade level. The boathouse has an exterior stair with railings from grade level serving the second floor; the second floor has an enclosed porch/deck area recessed into one corner of the second floor surrounded by a guard. All of the guards and stair railings have been built with natural and therefore irregularly shaped cedar logs.

3. **Dispute**

The issue at dispute between the Applicant and the Respondent is whether the as built guards and railings constructed of natural logs provides sufficiency of compliance with Sentence 9.8.8.2.(1) and Article 9.8.8.4. Respectively, these provisions of the Building Code provide standards for the height of guards around balconies and the spacing of the openings in the guard. The irregular shaped nature of the cedar logs has apparently made compliance with these requirements difficult. In some parts, the guard is only 1,030 mm (40 1/2 in), which is 40 mm (1 1/2 in) too low, whereas the spacing between the pickets varies between 152 mm (6 in) and 114 mm (4 1/2 in), which ranges from 13 mm (1/2 in) to 52 mm (2 in) too wide.

4. **Provisions of the Building Code**

9.8.8.2. - Height of Guards

(1) Except as provided in Sentences (2) to (5), all guards, including those for balconies, shall be at least 1 070 mm (3 ft 6 in) high.

9.8.8.4. Openings in Guards. Openings through a guard on balconies, porches, and decks, an exit stair, or stairs, landing and the floor level around a stairwell in a dwelling unit, shall be of a size so as to prevent the passage of a spherical object having a diameter of 100 mm (4 in) in residential occupancies and 200 mm (7-7/8 in) in other occupancies, unless it can be shown that the location and size of such openings which exceed these limits do not represent a hazard.

5. **Applicant's Position**

The Applicant submitted that the height of the guards and the spacing between the pickets complies with Sentence 9.8.8.2.(1) and Article 9.8.8.4. of the OBC. In their view, the construction material used for the guards, railings and pickets, natural cedar logs, made it difficult to maintain precise and uniform heights and spacings. As a result, they argue that the as built guards and railings are within allowable variations and should be construed as providing sufficiency of compliance with the Building Code.

6. **Chief Building Official's Position**

   The Respondent submitted that the guards and railings, as constructed, do not meet the relevant provisions of the Building Code. They argue that the Building Code is very specific with regard to guard heights and openings through guards and the subject construction does not meet the prescribed standards.

7. **Commission Ruling**

   It is the decision of the Building Code Commission that the guards do not conform to the requirements of the Building Code.

   Guard height should be measured from grade at the base of the landing or deck to the top of the guard.

8. **Reasons**

   i) The boathouse guards do not meet the minimum 1070 mm height as required by the Building Code.

   ii) Openings through guards exceed the maximum size permitted by the Building Code to prevent the passage of a 100 mm diameter spherical object.

   iii) Sufficiency of compliance was not demonstrated.

Dated at Toronto this 25th day in the month of February in the year 1998 for application number 1997-82.

BCC Ruling No. 98-06-611

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-06-611

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Articles 7.2.5.5. and 2.6.4.1. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Richard Gaukel, Vice President, BFC Utilities, 3660 Midland Avenue, Toronto (Scarborough), Ontario vs Mr. E.Y. Uzumeri, Chief Building Official, City of Toronto (North York), to determine whether piping used in the water main or service installation provides sufficiency of compliance with Articles 7.2.5.5. and 2.6.4.1. of the Ontario Building Code at Seneca College of Applied Arts or Technology, 1750 Finch Avenue East, Toronto (North York), Ontario.

APPLICANT

Mr. Richard Gaukel, Vice President
BFC Utilities
Toronto (Scarborough), Ontario

RESPONDENT

Mr. E.Y. Uzumeri
Chief Building Official
City of Toronto (North York), Ontario

PANEL

Mr. Roy Philippe (Chair)
Mr. Michael Steele
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF HEARING

February 12, 1998

DATE OF RULING

February 12, 1998

APPEARANCES

Mr. Richard Gaukel
BFC Utilities
Toronto (Scarborough), On
The Applicant

Mr. Mario Milantoni
Supervisor Buildings
City of Toronto (North York), On
For the Respondent

RULING

1. **The Applicant**

   Mr. Richard Gaukel, Vice President, Support Services, BFC Utilities, Toronto (Scarborough), Ontario has been issued an order under the Building Code Act, 1992 to comply regarding the removal of approximately 700 metres of 200 mm polyethylene pipe used as a water main at the Seneca College of Applied Arts and Technology, 1750 Finch Avenue East, Toronto (North York), Ontario.

2. **Description of Construction**

   The Applicant proposed to install 1,535 metres of PVC pipe to serve as the replacement water main supplying fire hydrants and multiple buildings at the Newham Campus at Seneca College in North York. Prior to installation, discussions occurred between the Applicant and the municipality regarding the possibility of using the subject polyethylene pipe instead. At that point, it was revealed that the parties had differing views about whether the polyethylene pipe complied with the appropriate OBC standards. After 700 metres of PVC pipe had been laid, the

Applicant proposed to use polyethylene pipe for the remainder of the installation. On December 10, 1997, the municipality issued an order to comply with Part 7 of the Ontario Building Code. On January 9, 1998, the Applicant had the subject pipe tested for hydrostatic pressure and leakage to demonstrate its compliance. The test results did not resolve the issue. In the meantime, work continued at the site and the Applicant made an application to the BCC.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the subject pipe meets the standards cited in the Ontario Building Code or meets an acceptable alternate test standard as equivalent. Sentence 7.2.5.5.(1) requires that water pipes be certified to CAN/CSA-B137.1 and that they have a rated working pressure of 1034 kPa (150 psi). A product which does not meet the test standards under Article 7.2.5.5. but which has met other standards can be considered if those alternate tests are shown to be comparable to those described in the OBC. Without demonstrating compliance with the standards set out in the Code or comparable ones, the pipe may have to be replaced.

4. **Provisions of the Ontario Building Code**

Article 2.6.4.1. Alternate Test Standards

The results of tests based on standards other than as described in this Code may be used if the alternate standard provides pipe having comparable performance.

Sentence 7.2.5.5. Polyethylene Water Pipe and Fittings

(1) Polyethylene water pipe and fittings shall be certified to CAN/CSA-B137.1, "Polyethylene Pipe, Tubing and Fittings for Cold Water Pressure Services", Series 160, and shall have a rated working pressure of 1034 kPa (150 psi) or more.

5. **Applicant's Position**

The Applicant submitted that their pipe cannot meet CSA B137.1 since that standard covers only pipes up to 150 mm (6 in) in diameter whereas the subject pipe has a diameter of 200 mm (8 in). Since there is no CSA standard to cover the size range supplied on this project, it is their belief that, under Article 2.6.4.1., other comparable standards may be used. In terms of other standards, they claim that the pipe is certified under the National Sanitation Foundation 61 standard and

meets the American Water Works Association C906 standard for potable water use. The Applicant also notes that the manufacturer is ISO 9001 approved.

The applicant further argues that there is a considerable amount of this product installed in water applications throughout the province. Polyethylene, they note, has an excellent record in water applications, with many years of proven performance.

6. **Chief Building Official's Position**

The Respondent submitted that the installed polyethylene pipe at the Seneca College site does not meet the CSA B137.1 standard. They note that the Series 160, under that standard, is required to have a rated working pressure of 1034 kPa (150 psi). The Respondent argues that the installed pipe has a rated working pressure of only 100 psi. As a result, they believe that the subject pipe does not meet standards set out in the Code, nor does it meet equivalent tests of other standards and testing agencies.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the 8" P.E. piping used in the water main provides sufficiency of compliance with Article 7.2.5.5 of the Building Code.

8. **Reasons**

i) The 700 linear m of piping has been tested to 150 psi in accordance with the Tender Documents.

ii) The product diameter exceeds the maximum size specified for HDPE pipe under C.S.A.B 137.1 (up to 6" in diameter), but is approved the A.W.W.A. C 906 standard for this use.

iii) The working pressure for the system is approximately 70 psi and the product can accommodate the 50% increase for repetitive surges.

iv) The product has been used in other applications without negative impact.

Dated at Toronto this 12th day in the month of February in the year 1998 for application number 1998-05

BCC Ruling No. 98-05-610

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-05-610

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.3.1.5. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Louis Lortie, Project Manager, Conseil des ecoles catholiques de langue francaise d'Ottawa-Carleton, 4000 Labelle Street, Gloucester, Ontario vs. Mr. Kaz Mosielski, Chief Building Official, City of Kanata, to det ermine whether the proposed egress distances, which slightly exceed 15 metres from certain classrooms, provide sufficiency of compliance with Article 3.3.1.5. of the Ontario Building Code at Ecole elementaire Bridlewood, Stonehaven Drive, Kanata, Ontario.

APPLICANT

Mr. Louis Lortie, Project Manager
Conseil des ecoles catholiques de langue francaise
d'Ottawa-Carleton
Gloucester, Ontario

RESPONDENT

Mr. Kaz Mosielski
Chief Building Official
City of Kanata

PANEL

Mr. Roy Philippe (Chair)
Mr. Michael Steele
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF HEARING

February 12, 1998

DATE OF RULING

February 12, 1998

APPEARANCES

Mr. Louis Lortie
Project Manager
Gloucester, Ontario
The Applicant

Mr. Kaz Mosielski
Chief Building Official
City of Kanata
The Respondent

RULING

1. **The Applicant**

   Mr. Louis Lortie, Project Manager, Conseil des ecoles catholiques de langue francaise d'Ottawa-Carleton, has applied for a building permit under the *Building Code Act, 1992* to construct an elementary school at Stonehaven Drive, Kanata, Ontario.

2. **Description of Construction**

   The Applicant proposes to construct a one storey, 16 classroom elementary school with a building area of 4,080 m2. The building is to be constructed of noncombustible construction. It will be equipped with a sprinkler system and a fire alarm system. The total occupant load of the building is projected to be 627 persons. The building is described as having a Group A, Division 2 major occupancy.

   The proposed layout of the structure shows that certain classrooms, specifically C01, C03, C04, C05, C09, C10, C11, C13 and L02, have egress distances slightly exceeding the maximum of 15

m allowed under the OBC. The proposed travel distance from the sub ject classrooms ranges from 15.9 m (C03) to 17.9 m (C13).

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the egress distances, which slightly exceed the 15 m allowed, in a building that is sprinklered, provide sufficiency of compliance with Article 3.3.1.5. of the Ontario Building Code. Se ntence 3.3.1.5.(1) and Table 3.3.1.A. set out that for Group A occupancies the maximum distance to an egress doorway is 15 m.

4. **Provisions of the Ontario Building Code**

Article 3.3.1.5 Egress Facilities

(1) Every room and every suite shall have 2 egress doorways placed in such a manner that one doorway could provide egress from the room or suite as required in Article 3.3.1.3. if the other doorway becomes inaccessible to the occupants due to a fire which might originate in the room or suite.

(a) where the area of the room or suite is more than 15 m2 (161 ft2) and (i) contains a high hazard industrial occupancy, or (ii) is a hazardous room,(b) which is intended for an occupant load of more than 60 persons, (c) where the area of a room or suite, or the distance measured from any point within the room or suite to the nearest egress doorway is more than the values shown in Table 3.3.1.A., or (d) where the room is hazardous classroom having an area more than 100 m2 (1080 ft2) and is in an elementary or secondary school.

5. **Applicant's Position**

The Applicant submitted that the egress distances provide sufficiency of compliance because the excess travel distances are only marginal, ranging from 0.9 m to 2.9 m. They further argue that the pending 1997 version of the OBC relaxes the 15 m travel di stance standard to 25 m if the floor area is sprinklered. The Applicant notes that the proposed school will be sprinklered.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed travel distances exceed those allowed in the current OBC. As they note, in the proposed school 9 of the 16 classrooms exceed the allowed travel

distance of 15 m when measured along the natural travel path. Cons idering the building is to be used as an elementary school they were less willing to be flexible on the excess travel distances.

The municipality recognizes the future Code change, however, they indicate that approving applications on the basis of future OBC provisions is not within their jurisdiction.

The municipality also had some concerns regarding the method of measurement to calculate the travel distance. They requested clarification from the Commission on the best method of measurement.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed egress distance provides sufficiency of compliance with Article 3.3.1.3. of the Building Code.

8. **Reasons**

i) The travel distance is only marginally over the 15 m cited in the Table 3.3.1.A. of the 1990 Ontario Building Code when measured one foot from the perimeters walls and is in compliance when measured in a straight line from the most remote point.

ii) Proposed changes to the 1997 Ontario Building Code gazetted but not in effect at this time would increase the travel distance permitted in this application to 25 m for sprinklered buildings, and the building is sprinklered throughout.

Dated at Toronto this 12th day in the month of February in the year 1998 for application number 1997-80.

BCC Ruling No. 98-04-609

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-04-609

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act,1992*.

AND IN THE MATTER OF Article 3.2.3.1. of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Chris Bretton, President, Bretton Imported Cars, 1201 Fairview Street, Burlington, Ontario vs. Mr. Dan Mousseau, Chief Building Official, City of Burlington, to determine whether the three oversized, overhead door openings proposed for rear of the building, considering the subject limiting distance, are required to be installed with 1.5 hour fire rated doors at Bretton Imported Cars, 1239 Plains Road East, Burlington, Ontario.

APPLICANT

Mr. Chris Bretton, President
Bretton Imported Cars
Burlington, Ontario

RESPONDENT

Mr. Dan Mousseau
Chief Building Official
City of Burlington

PANEL

Mr. Roy Philippe (Chair)
Mr. Michael Steele
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF HEARING

February 12, 1998

DATE OF RULING

February 12, 1998

APPEARANCES

Mr. Larry Hall
Beatty-Hall Construction Ltd.
Hamilton, Ontario
Agent for the Applicant

Mr. Dan Mousseau
Chief Building Official
City of Burlington, Ontario
The Respondent

RULING

1. **The Applicant**

   Mr. Chris Bretton, President, Bretton Imported Cars has applied for a building permit under the *Building Code Act, 1992* to construct a one storey addition to an existing building which is currently used as an automobile showroom at 1239 Plains Road East, Burlington, Ontario.

2. **Description of Construction**

   The Applicant proposes to renovate an existing 300.8 m2, one storey building by adding a 221.6 m2 one storey addition. The total building area of the completed structure will be 522.4 m2. The proposed addition will be constructed of combustible construction and will be open internally to the existing building. The building is not equipped with a sprinkler or standpipe system. The structure is currently being used as an automobile showroom and repair garage and this occupancy is intended to be expanded after the renovation. The building is classified as having an F - 2 (medium hazard industrial) major occupancy.

   The Applicant intends to install three large (3.05 m by 3.05 m) overhead door openings on the rear wall of the new addition for service bays. (The dimensions of the rear wall are 13.72 m in

length and 4.85 m in height.) This wall, however, is located approximately 7.6 m from the rear property line. Abutting the subject property to the rear are the Canadian National Railway lands. The Applicant is proposing that since the property to the rear is a railway, the limiting distance can be calculated differently, meaning that the three proposed overhead doors need not be 1.5 h rated as would be required if 7.6 m was used in the limiting distance calculation.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the limiting distance between the subject addition and the abutting property is 7.6 m, as measured to the property line. Or, assuming the railway property will never be built upon, can the limiting distance be calculated using the centre of railroad property, which would be 21.32 metres. (It is 13.72 m from the rear property line of the Applicant's property to the centre line of the railway lands.) The difference between these two types of calculations has a direct impact on the amount of unprotected openings the Applicant is allowed and what level of fire resistance ratings the closures in the openings must meet. Article 3.2.3.1. and Table 3.2.3. set out the relationship between exposing building faces, limiting distances and amount of unprotected openings.

4. **Provisions of the Ontario Building Code**

Article 3.2.3.1. Limited Distance and Area of Unprotected Openings

(1) Except as provided in Articles 3.2.3.9. to 3.2.3.11, the area of unprotected openings shall not be more than that set forth in Tables 3.2.3.A. or 3.2.3.B. for the limiting distance applicable to the exposing building face under consideration. (See A-3, Fire Fighting Assumptions in Appendix A.)

5. **Applicant's Position**

The Applicant submitted that because of the railway property to the rear of their proposed addition, the limiting distances should be calculated on the centre line of the railway property.

They make this argument on the basis that the railway property will, in all probability, never have a building constructed on it. They argue that this would permit the installation of standard insulated doors rather than 1.5 h fire-rated doors. The Applicant notes that they are willing to put on the title of their property a clause requiring compliance with the OBC with respect to the spatial separation should the use of the adjoining property change from being a railway.

6. **Chief Building Official's Position**

The Respondent submitted that the rear property line should be used as the reference point for the limiting distance calculations for the subject building and a centre point of the abutting CN Rail property. In their view, railway lines are to be treated not as roads, but as regular properties. The reasons for this approach are that rail cars cannot be moved easily and they may contain combustible or hazardous materials. As a result, the common property line between any property and a rail line property should be taken as the reference point.

The Respondents further add that the 1997 edition of the OBC allows parties to vary from the prescribed limiting distance standards with a registration of a limiting distance agreement on tile of both properties. In the case at hand, however, they note that CN Rail has not offered to place such a restriction on their property. The Respondent believes such registration is not appropriate for railway lines.

Finally, they note that the building permit was issued on the understanding that the 1.5 hour fire-rated doors would be installed prior to occupancy and that the application to the BCC was made only after the issuance of the building permit.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the protection of openings in the exterior rear wall facing the property line provides sufficiency of compliance with Section 3.2.3. of the Building Code provided that -

Sentence 3.2.3.1.(8) The required limiting distance for an exposing building face is permitted to be measured to a point beyond the property line that is not the centre line of a street, lane or public thoroughfare if

(a) the owners of the properties on which the limiting distance is measured and the municipality enter into an agreement in which such owners agree that

(i) each owner covenants that, for the benefit of land owned by the other covenants, the owner will not construct a building on his or her property unless the limiting distance for exposing building faces in respect of the proposed construction is measured in accordance with the agreement.

(ii) the covenants contained in the agreement are intended to run with the lands, and the agreement shall be binding on the parties and their respective heirs, executors, administrators, successors and assigns.

(iii) the agreement shall not be amended or deleted from title without the consent of the municipality, and

(iv) they will comply with such other conditions as the municipality considers necessary, including indemnification of the municipality by the other parties, and

(b) the agreement referred to in Clause (a) is registered against the title of the properties to which it applies.

(9) Where an agreement referred to in Sentence (8) is registered against the title of a property, the limiting distance for exposing building faces shall be measured to the point referred to in the agreement.

OR

B) The building is sprinklered throughout.

8. **Reasons**

i) The proposed amendments permit extending limiting distance measurements to adjacent property with the consent of both parties registered on title, while respecting the rights of the parties.

ii) Sprinkler protection would provide additional protection and increase the permitted openings.

Dated at Toronto this 12th day in the month of February in the year 1998 for application number 1997-79.

BCC Ruling No. 98-03-608

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-03-608

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.3.4.4.(3) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Bryan Coleman, President, Shutters Residential Corp., 2301 Haines Road, Suite 208, Mississauga, Ontario, for the resolution of a dispute with Mr. Frank Asta, Chief Building Official, Town of Oakville, Ontario, concerning whether the proposed measures provide sufficiency of compliance in li eu of adequate egress from the fourth storey in accordance with Sentence 3.3.4.4.(3) of the Ontario Building Code at Wyndham Terrace Residences 235, 237 and 239 Church Street, Oakville, Ontario.

APPLICANT

Mr. Bryan Coleman, President
Shutters Residential Corporation
Mississauga, Ontario

RESPONDENT

Mr. Frank Asta
Chief Building Official
Town of Oakville

PANEL

Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, January 15th, 1998

APPEARANCES

Mr. William Hicks
William R. Hicks Architect
Mississauga, Ontario
For the Applicant

Mr. Steve Tomlin, Principal
Hine Reichard Tomlin Inc.
Markham, Ontario
Agent for the Applicant

RULING

1. **The Applicant**

   Mr. Bryan Coleman, President, Shutters Residential Corporation was issued a building permit under the *Building Code Act, 1992* to construct three new, four storey townhouse residential units at Wyndham Terrace Residences, 235, 237 and 239 Church Str eet, Oakville, Ontario.

2. **Description of Construction**

   The Applicant proposes to construct three identical, four storey, attached townhouse residential units. Each unit has a building area of 82 m2 (882 ft2), including the below grade (basement) level. The units are constructed of noncombustible constructio n. Each unit will be equipped with an interconnected smoke detection and fire alarm system and a sprinkler system.

   Since the units are considered to be four storeys, but have only one exit on grade level, the Applicants also propose to create a fire separation between the second and third floors by installing a self-closing and self-latching door. As well, a balcony will be provided from the third floor having a circular stair to the second level terrace. The terrace measures approximately 5.8 m by 5 m and is 3 m above grade.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed measures provide sufficiency of compliance with Sentence 3.3.4.4.(3) of the Ontario Building Code, in lieu of adequate egress from the fourth storey. Sentence 3.3.4.4.(3) o f the Building Code allows a dwelling to have only one exit as long as it is not necessary to travel more than one storey up or down to reach that exit. In the subject building, the fourth floor is three levels above the exit at grade level.

4. **Provisions of the Building Code**

Sentence 3.3.4.4. Egress from Dwelling Units

(3) A single exit is permitted from a dwelling unit provided the exit is an exterior doorway not more than 1.5 m (4 ft 11 in) above adjacent ground level and (a) it is not necessary to travel up or down more than 1 storey to reach the exit door, or

(b) the uppermost floor level opens to a balcony not more than 6 m (19 ft 8 in) above adjacent ground level.

5. **Applicant's Position**

The Applicant submitted that the units, as designed, will provide sufficiency of compliance for the fourth floor egress. The Applicants demonstrate that they are providing several compensating measures to mitigate the fact that the fourth floor is three storeys above the exit, which is not permitted under 3.3.4.4.(3). They are constructing the units of noncombustible construction which is above the Code requirements for this type of building.

The noncombustible construction will provide less fuel for a fire and a higher level of compartmentalization, they note. The floors will provide a minimum one hour fire resistance rating. Further, the individual units are separated from each other and f rom the adjoining three storey buildings by a separation with a two hour fire resistance rating. The Applicants argue that this additional compartmentalization will afford occupants greater time to evacuate.

The units are also to be equipped with a residential sprinkler system. The Applicants note that the addition of sprinklers will provide an effective safety measure. It is anticipated that the sprinklers would certainly contain any fire and would probabl y extinguish one. They would also offer a degree of smoke control. The balconies on each level, save for the basement, would also

provide equivalent smoke control as balconies on high-rise residential buildings consistent with Article 3.2.6.6.

As well, there is a further containment measure, a self closing and self latching door, which has been provided on the second floor. This has the effect of separating the individual units into two fire compartments, preventing smoke migration and thus al lowing extra time for the third and fourth floor occupants to use the balcony and exterior stairs as egress.

The Applicants also point out the units are to be equipped with interconnected smoke detector systems. This system will offer occupants early warning in the event of a fire. This additional time, the Applicants believe, will provide occupants on the upp er floors the opportunity to assess the danger and to evacuate by the exterior stairs, if necessary.

In terms of egress options, the Applicants also argue that the aforementioned balconies and exterior stairs provide a second means of egress for the unit, serving especially the third and fourth floors. The Applicant notes that occupants of the third and fourth floors can access the third floor balcony and then descend the exterior stair. This brings them to an area of refuge, the ground floor terrace. Once on the terrace, occupants have the choice of waiting for the fire department or negotiating the 3 m drop to grade level.

The Applicants provided evacuation data demonstrating favourable egress times for the subject unit in comparison to other structures also governed by these provisions of the Building Code. For example, the evacuation of the proposed units by a disabled p erson would take 2.5 minutes. For a 1,200 m2 unit (the maximum size allowed under Article 3.2.2.36.), the egress time for a disabled person would be 3.1 minutes. For a high-rise building the evacuation time to the exterior by a disabled person would be 7 minutes.

For the reasons discussed above, the Applicant believes that the proposed measures provide sufficiency of compliance with Sentence 3.3.4.4.(3) regarding the fourth floor egress.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed residential units do not comply with Part 9 nor Part 3 of the Building Code. The units do not conform to Sentence 3.3.4.4.(3), in particular. In a four storey structure, they argue, with only one exit at grade level serving that floor, the ground floor, and the third floor, the fourth floor is not adequately served in terms of exits. The Respondent

believes that this situation may cause danger for the units occupants due to the excess travel distance.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed measures for sprinklers, fire alarm, fire separation and egress provide sufficiency of compliance with Sentence 3.3.4.4.(3) of the Building Code, provided that

i) An additional stairway is provided from the 3rd floor balcony to act as an alternate means of egress to the terrace, and

ii) The fire door at the 3rd floor stairway is equipped with a hold open device that will operate to close the door on activation of the fire alarm system.

8. **Reasons**

i) The building is sprinklered throughout.

ii) A fire alarm system with smoke detectors is provided at each floor level.

iii) A fire separation is provided to separate floors 1 & 2 from floors 3 & 4.

iv) The building is of non-combustible construction and adjacent dwelling units are separated by a 2 hr fire separation.

v) Egress from the 4th floor is provided by access to a balcony on the 3rd floor level which has 2 means of access to the terrace.

vi) The rooms on the 4th floor have access to a balcony.

vii) Time based egress analysis indicates that the time to egress is within acceptable limits.

Dated at Toronto this 15th day in the month of January 1998 for application number 1997-77.

BCC Ruling No. 98-02-607

BUILDING CODE COMMISSION DECISION ON B.C.C. #98-02-607

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Subsection 9.32.1. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. and Mrs. Jeff Davie, Property Owners, 939 Queen Street West, Mississauga, Ontario, for the resolution of a dispute with Mr. Andrew Feetham, Chief Building Official, Town of Wasaga Beach, Ontario, concerning whet er the proposed building is required to provide ventilation facilities under Article 9.32.1.2. of the Ontario Building Code at Lot 14, Plan 674, 276-278 Shorelane, Wasaga Beach, Ontario.

APPLICANT

Mr. Jeff Davie and Mrs. Louisa Davie
Property Owners
Mississauga, Ontario

RESPONDENT

Mr. Andrew Feetham
Chief Building Official
Town of Wasaga Beach

PANEL

Mr. Roy Philippe (Chair)
Mr. Michael Lio
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, January 15th, 1998

APPEARANCES

Mrs. Louisa Davie
Property Owner
Mississauga, Ontario
The Applicant

Mr. John Stark, Principal
Stark Ireland Architects Inc.
Mississauga, Ontario
Agent for the Applicant

Mr. Murry Lockhart
Building Inspector
Town of Wasaga Beach
For the Respondent

Mr. Charles Sangster
Building Inspector
Town of Wasaga Beach
For the Respondent

RULING

1. **The Applicant**

   Mr. Jeff Davie and Mrs. Louisa Davie, Property Owners, were issued a building permit under the *Building Code Act, 1992* to demolish an existing cottage and to construct a new residence at Lot 14, Plan 674, 276-278 Shorelane, Town of Wasaga Beach, On tario.

2. **Description of Construction**

   The Applicants are constructing a three storey, residence with a total building area of 185 m2 (2,000 ft2). The building, which is substantially completed, is constructed of combustible construction. The building, however, has not been equipped with ven tilation in accordance with Subsection 9.32.3. of the Building Code.

3. **Dispute**

The issue at dispute between the Applicants and Respondent is whether the subject building is required to provide full heating and ventilation systems. The Applicants believed they were constructing the residence in accordance with Subsection 9.36.2 of t he Building Code, which sets out the requirements for cottage construction. The Respondents, on the other hand, view the structure as a year-round residential dwelling.

4. **Provisions of the Building Code**

9.32.1.2 Mechanical Ventilation for Dwelling Units. Every dwelling unit that is supplied with electrical power shall be provided with a mechanical ventilation system in accordance with Subsection 9.32.3.

9.36.2.1 Exclusions

(1) Except as provided in Article 9.36.3.1. and Subsection 9.10.15., building used or intended to be used as seasonal recreational buildings need not comply with Sections 9.5. to 9.7. and 9.9. to 9.11.

(2) Flooring need not comply with Section 9.30, but tight-fitting floors shall be provided to support the live and dead loads. (3) Except as provided in Sentences (4) and (5), thermal insulation, vapour barrier, air-barrier construction, interior finishes, plumbing, heating, mechanical ventilation, air-conditioning and electrical facilities, need not be provided, but where any o f these are provided, they shall comply with the requirements of this Part.

(4) Where heating and air-conditioning are provided, Articles 9.33.1.3. need not be complied with.

(5) Where thermal insulation is provided, the minimum thermal resistance of insulation in Table 9.25.2.A. need not be provided.

5. **Applicant's Position**

The Applicants submitted that the building is designed to be, and will be used as a seasonal residential building. As a result, they believe that Subsection 9.36.2. (Cottages) of the Building Code applies. In their view, this Subsection clearly exempts cottages from the heating and ventilation requirements found in other provisions of Part 9. Since they are not intending to use

the building on a year-round basis, they feel that providing additional ventilation would be unnecessary and would add additional costs to their cottage construction.

The Applicants also argue that there does not appear to be a municipal by-law (zoning or otherwise) requiring that new dwellings be designed for permanent residential year-round use. Further, they note that the Respondent initially indicated that this is a Building Code issue and not a zoning issue which the Applicants took to mean that the municipality does not dispute their view that the building can be constructed as a seasonal residential structure on the subject land. If this is the case, then as a cottage building, the exemptions of Subsection 9.36.2. are relevant.

6. **Chief Building Official's Position**

The Respondent submitted that, in their opinion, the subject building was designed, and is being built as a full time residential home. They note that the zoning by-laws for the property in question does not permit seasonal recreational uses. Accordingl y, all applicable provisions of Part 9 of the Building Code are relevant for the construction of the subject building, including Sections 9.25 Thermal Insulation and Control of Condensation, 9.32 Ventilation, 9.33 Heating and Air-Conditioning, and 9.38 Thermal Design.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the residential building provides sufficiency of compliance with 9.32.1.2. of the Building Code.

8. **Reasons**

i) The building is a seasonal recreational use facility. ii) The building is provided with openable windows and with mechanical ventilating fans in washroom facilities.

Dated at Toronto this 15th day in the month of January 1998 for application number 1997-76.

BCC Ruling No. 97-63-605

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-63-605

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.3.2.3.(2), 3.3.2.4.(2), 3.3.2.4.(3), 3.3.2.4.(4) and 3.3.2.4.(5) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Ken Wood, Project Architect, Young & Wright Architects Inc., 172 St. George Street, Toronto, Ontario, for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, Ontario, concerning whether the proposed cinema seating design, especially regarding the number of seats per row and aisle configuration, provides sufficiency of compliance with Sentences 3.3.2.3.(2), 3.3.2.4.(2), 3.3.2.4.(3), 3.3.2.4.(4) and 3.3.2.4.(5) of the Ontario Building Code at the AMC 30-Plex Movie Theatre Complex, Highways 400 and 407, Vaughan, Ontario.

APPLICANT

Mr. Ken Wood, Project Architect
Young & Wright Architects Inc.,
Toronto, Ontario,

RESPONDENT

Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL

Ms. Susan Friedrich (Chair)
Ms. Lesia Beznaczuk
Mr. Douglas Clancey

PLACE

Toronto, Ontario

DATE OF HEARING

December 18, 1997 and February 6, 1998

DATE OF RULING

February 17, 1998

APPEARANCES

Mr. Jonathan Rubes
Leber/Rubes Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Mani Navabi
Chief Building Official
City of Vaughan
The Respondent

RULING

1. **The Hearing**

   With the consent of the parties, this application was heard together with two other applications involving the Applicant (the other rulings are 97-61-603 and 97-62-604).

   After the first day of the hearing, the Commission requested the Applicant to provide information concerning a time-based egress analysis of the proposed cinema seating design as well as other egress issues. The hearing resumed on February 6, 1998.

2. **The Applicant**

   Mr. Ken Wood, Project Architect, Young and Wright Architects Inc. has applied for a building permit under the *Building Code Act, 1992* to construct a new movie theatre complex containing

30 individual cinema auditoriums at the AMC 30-Plex Movie Theatre Complex, Highways 400 and 407, Vaughan, Ontario.

3. **Description of Construction**

The Applicant proposes to construct a new movie theatre building complex containing 30 individual cinema auditoriums. The structure is described as 2 storeys in building height and is constructed of noncombustible construction. It is equipped with a sprinkler system and fire alarm system. The building is classified as having a Group A - Division 2 major occupancy.

The Applicant is proposing seating and aisle configurations, as well as egress arrangements that vary from traditional seating layouts. Specifically, the Applicant intends to; 1) configure the seating to allow more than 16 seats per row under certain conditions, 2) base the width of the aisles on the total occupant load served, 3) base the width of the means of egress (doors, stairs and ramps) on the total occupant load served and 4) create dead-end aisles serving seating rows that may exceed 6 m in length also under certain conditions. Collectively, this proposed cinema design is known as the "stadium style".

The proposed cinemas vary in size, with occupant loads ranging from approximately 100 to 550. The total occupant load of the building is projected to be roughly 5,000 persons. All seats in the cinemas are to be fixed. The building housing these cinemas conforms with all other provisions of the Ontario Building Code.

4. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed seating and aisle configurations and egress provisions provide sufficiency of compliance with Sentences 3.3.2.3.(2), 3.3.2.4.(2), (3), (4) and (5) of the Ontario Building Code.

Sentence 3.3.2.3.(2) requires that an aisle be located not more than 7 seats away from any seat. Including the two middle seats in a row this means that a row of seats served by an aisle at either end cannot be more than 16 seats. Article 3.3.2.3. also allows a seating configuration known as "continental seating" in which 100 seats are allowed in a row provided there are egress doorways at both ends of the row and that each doorway serves not more than 3 rows of seats. Sentence (4) of Article 3.3.2.3. also provides for alternative forms of seating than the traditional or continental style provided that the standard of safety is not reduced and the egress time is not increased. The Applicant intends to demonstrate that the stadium style of seating, which in some cases contains

more than 16 seats per row, can conform to the Ontario Building Code under Sentence 3.3.2.3.(4).

A second area of dispute is the egress facilities. This issue involves both the requirements for the width of the aisles in the direction of egress travel (Sentence 3.3.2.4.(3)) and of the width of the aisles at their termination point or means of egress, either a cross aisle, foyer or exit (Sentence 3.3.2.4.(4)). Sentence 3.3.2.4.(3) uses the minimum clear width criteria set out for aisles in Sentence 3.3.2.4.(2) and requires that the width be increased by 25 mm for each metre of distance travelled toward the termination point, as measured from the farthest point of the aisle. Sentence 3.3.2.4.(4) stipulates that the means of egress from an aisle, or aisles, be as wide as the widest aisle, plus 50 per cent of the total width of the other aisles served. The proposal put forth is to base both of these widths on the occupant load, with the aisle widths maintaining at least the minimum standards described in 3.3.2.4.(2). (The minimum clear width standards required in Sentence 3.3.2.4.(2) are 1,100 mm, or 750 mm when serving 60 seats or less, and 900 mm when serving seats on one side only.)

Also at issue is the length of dead-end aisles. Sentence 3.3.2.4.(5) states that dead-end aisles cannot be more than 6 m in length. The subject proposal provides four conditions, including increasing the clear width of a row by a formula of 6.1 mm for each seat beyond 16 seats as necessary to travel to an alternative aisle up to a maximum of 550 mm, which if all conditions were met, would allow the dead-end aisle length to be increased.

5. **Provisions of the Ontario Building Code**

Sentence 3.3.2.3.Fixed Seats

(2) Except as provided in Sentence (3), aisles on the main floor and in balconies shall be located so that there are not more than 7 seats between any seat and the nearest aisle.

Sentence 3.3.2.4.Aisles

(2) The minimum clear width of aisles shall be not less than 1 100 mm (3 ft 7 in), except that the width is permitted to be reduced to not less than

(a) 750 mm (2 ft 6 in) when serving not more than 60 seats, and

(b) 900 mm (2 ft 11 in) when serving seats on 1 side only.

(3) Except in the case of bleacher seats, the minimum clear width of aisles referredto in Sentence (2) shall be measured at the point farthest from an exit, cross aisle or foyer and shall be increased in width 25 mm (1 in) for each metre of distance toward the exit, cross aisle or foyer.

(4) Aisles shall terminate in a cross aisle, foyer or exit, and the width of such cross aisle, foyer or exit shall not be less than the required width of the widest aisle plus 50 per cent of the total required width of the remaining aisles that it serves.

(5) Dead end aisles shall be not more than 6 m (19 ft 8 in) in length.

6. **Applicant's Position**

The Applicant submitted that the proposed stadium style cinema design provides sufficiency of compliance with the above cited Ontario Building Code provisions.

Regarding the number of seats in a row served by an aisle at both ends, the Applicant is proposing that limit may exceed 16 provided that; the minimum clear width of the row is 400 mm, that the number of seats in the row does not exceed 100, that the aisles serving the rows do not exceed a dead-end length of 6 m (except as permitted under their proposal to increase dead-end aisles), and that the travel distance from the most remote seat does not exceed 30 m as measured to a doorway or vomitory. The Applicant argued that stadium style seating provides an equivalent level of safety to, and better egress time than continental style seating. They noted that the maximum travel distances to exits in both seating styles is approximately 30 m, but that the doorway widths in the stadium style are slightly larger per person (6.1 mm compared to 6.07 mm). The Applicants also pointed out that the aisle width required in continental seating would result in an exit factor of 7.3 mm per person. Calculating the aisle widths on the basis of total occupant load as is done in the stadium style would result in wider aisles and would therefore achieve a faster flow rate. As well, they note that the occupant flow in stadium style seating would also be faster due to the formula spacing the seats in the rows which allows for a wider row than the 400 mm called for in continental seating.

For these reasons, the Applicant contends that the stadium style seating configuration complies with Sentence 3.3.2.3.(4) and is therefore an equivalent to the continental style of seating as described in Sentence 3.3.2.3.(3) and provides sufficiency of compliance with Sentence 3.3.2.3.(2).

Concerning the egress facilities, the Applicant argues that by basing the widths of aisles and means of egress on the occupant load, more accurate standards are realized than the arbitrary standards found in Sentences 3.3.2.4.(3) and (4). Using 3.3.2.4.(3), for example, which requires an increase in aisle width of 25 mm per metre distance travelled results in both unnecessarily wide aisles in some circumstances, while in other instances, especially large theatres, it produces aisles that are too narrow. The same is true for the width of the means of egress. The Applicant argues that the current Ontario Building Code standards make confusing distinctions between rooms that have fixed seating or not. By setting the requirements at 6.1 mm per person of occupant load a simplified standard emerges based on the true performancedemanded of the means of egress. It is by using this standard that the Applicant argues that some of the smaller cinemas do not require a second exit door.

On the issue of the dead-end aisles, the Applicant is also proposing that their length may exceed 6 m provided that; the minimum clear width of the row is 400 mm, the width of the row is increased by 6.1 mm for each seat beyond 16 seats as necessary to travel to an alternate aisle up to a maximum of 550 mm, and that the travel distance from the most remote seat does not exceed 30 m as measured to an exit doorway. The Applicant argues that these conditions take into consideration if for some reason an aisle becomes inaccessible, the occupants can travel through any row of seats to reach an alternate aisle. For example, these criteria allow for a wider row, if in that row it is necessary to pass more than 7 seats to reach another aisle. As well, using these standards the maximum width of a row could be as much as 550 mm, which would permit occupants to exit in single file.

The Applicant points out that the total travel distance from the most remote seat will not exceed 30 m. In fact, the proposed egress of these dead-end aisles compares favourably with continental seating since, as they contend, the length of travel is the same or better, the rows and aisles would be wider, and there would be a choice to reach alternative doorways to exit the cinema.

In response to the Commission's request, the Applicant also submitted a time-based egress analysis that measured the length of time it would take to exit the proposed cinemas. This study, consistent with the Applicant's entire proposal, was based on a comparison to continental-style seating, which is an Ontario Building Code complying seating configuration. The study examined the three areas (rows, aisles and doorways) that individuals must travel through to reach the egress doorway. The Applicant's analysis showed that it would take 2.48 minutes to exit from a continental-style cinema, with the aisle being the area with the slowest flow time. For the proposed stadium-style seating, which the Applicant is proposing 100 seats in a row

(although the proposals at hand have a maximum of 35 seats per row), the report demonstrated that the egress time, at 2.05 minutes, would be faster than in continental seating. The area of slowest flow time in stadium seating was the doorway. But as the Applicant noted, even the flow time through this door is faster than in the continental style.

7. **Chief Building Official's Position**

The Respondent submitted that the proposed seating configurations in all of the cinemas are not in accordance with the Ontario Building Code. In particular, they note three main areas in which the proposed seating does not comply with the Ontario Building Code. First, the number of seats in a row is, in some cases, up to 29, which exceeds the maximum of 16 set out in Sentence 3.3.2.3.(2). Secondly, the dead end aisles are between 8 and 11 m long, which extends beyond the maximum of 6 m found in Sentence 3.3.2.4.(5). Thirdly, the aisle widths are not increased by 25 mm per metre towards the exit, cross aisle or foyer as per Sentence 3.3.2.4.(3).

The Respondent presented their own time-based egress analysis for small, medium and largecinemas, making a comparison to both conventional Ontario Building Code complying seating and differently configured continental-style seating. (In their view, the Applicant's egress analysis was too simplistic and that the comparison to the continental style, with its 100 seats in a row was unrealistic.) Their analysis demonstrated that the egress time from small, medium and large cinemas with conventional-style seating would be faster than the proposed seating arrangement. In their analysis of the continental style, the Respondent used a model they felt was more realistic. Instead of 100 seats in a row, which they argued no cinema would have, they created (in the large example) a cinema with 22 rows (exactly the same as the Applicant's large cinema example) each having 26 seats. The same re-configuration was done for medium and small cinemas. Their study found that the flow rate and egress time of the modified continental-style seating was significantly lower than the proposed model presented by the Applicant.

For these reasons the Respondent was of the position that the subject proposal, with its occupant load-based approach, provides alternative measures of Ontario Building Code compliance that reach substantially beyond their jurisdiction. In their view, the stadium-style approach to cinema seating design is an entirely new system of egress from a room with fixed seating that is currently not recognized under the Ontario Building Code. It is therefore their position that they do not have the authority to approve these aspects of this project.

8. **Commission Ruling**

It is the decision of the Building Code Commission that the Applicant's proposal has not demonstrated sufficiency of compliance with Sentences 3.3.2.3.(2), 3.3.2.4.(2), 3.3.2.4.(3), 3.3.2.4.(4) and 3.3.2.4.(5) of the Ontario Building Code.

9. **Reasons**

1)Inconsistent evidence was presented by the Applicant and one of the Respondents with respect to exiting times and flow rates.

2)The information provided did not substantiate the basis for sufficiency of compliance. Convincing evidence was not provided that the proposed cinema design would not result in an increase in egress time.

3)No documentation was presented with respect to real life case studies or examples of similarly constructed theatres comparing flow patterns, flow rates, egress times, etc., that may have assisted the Commission members to assess the inconsistencies in the evidence presented.

4)The issue presented is a significant and complex one, it is the opinion of the Building Code Commission that the issue would be better dealt with as an Ontario Building Code amendment.

Dated at Toronto this 17th day in the month of February in the year 1998 for application number 1997-78.

BCC Ruling No. 97-61-603

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-61-603

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentences 3.3.2.3.(2), 3.3.2.4.(2), 3.3.2.4.(3), 3.3.2.4.(4) and 3.3.2.4.(5) of Regulation 61, as amended by O. Reg. 400/91, 158/93, 160/93, 383/94, 20/95 and 395/96 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. Richard Young, Principal, Young and Wright Architects Inc., 172 St. George Street, Toronto, Ontario, for the resolution of a dispute with Mr. Frank Asta, Chief Building Official, City of Oakville, Ontario, concerning whether the proposed cinema seating design, especially regarding the number of seats per row and aisle configuration, provides sufficiency of compliance with Sentences 3.3.2.3.(2), 3.3.2.4.(2), 3.3.2.4.(3), 3.3.2.4.(4) and 3.3.2.4.(5) of the Ontario Building Code at the AMC 24-Plex Movie Theatre, Oakville, Ontario.

APPLICANT

Mr. Richard Young, Principal
Yonge & Wright Architects Inc.
Toronto, Ontario

RESPONDENT

Mr. Frank Asta
Chief Building Official
City of Oakville

PANEL

Ms. Susan Friedrich (Chair)
Ms. Lesia Beznaczuk
Mr. Douglas Clancey

PLACE

Toronto, Ontario

DATE OF HEARING

December 18, 1997 and February 6, 1998

DATE OF RULING

February 17, 1998

APPEARANCES

Mr. Jonathan Rubes
Leber/Rubes Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Frank Asta
Chief Building Official
City of Oakville
The Respondent

RULING

1. **The Hearing**

   With the consent of the parties, this application was heard together with two other applications involving the Applicant (the other rulings are 97-62-604 and 97-63-605).

   After the first day of the hearing, the Commission requested the Applicant to provide information concerning a time-based egress analysis of the proposed cinema seating design as well as other egress issues. The hearing resumed on February 6, 1998.

2. **The Applicant**

   Mr. Richard Young, Principal, Young and Wright Architects Inc. has applied for a building permit under the *Building Code Act, 1992* to construct a new movie theatre complex containing 24 individual cinema auditoriums at the AMC 24-Plex Movie Theatre, Oakville, Ontario.

3. **Description of Construction**

The Applicant proposes to construct a new movie theatre building complex containing 24 individual cinema auditoriums. The structure is described as 2 storeys in building height and is constructed of noncombustible construction. It is equipped with a sprinkler system and fire alarm system. The building is classified as having a Group A - Division 2 major occupancy.

The Applicant is proposing seating and aisle configurations, as well as egress arrangements that vary from traditional seating layouts. Specifically, the Applicant intends to; 1) configure the seating to allow more than 16 seats per row under certain conditions, 2) base the width of the aisles on the total occupant load served, 3) base the width of the means of egress (doors, stairs and ramps) on the total occupant load served and 4) create dead-end aisles serving seating rows that may exceed 6 m in length also under certain conditions. Collectively, this proposed cinema design is known as the "stadium style".

The proposed cinemas vary in size, with occupant loads ranging from approximately 100 to 550. The total occupant load of the building is projected to be roughly 5,000 persons. All seats in the cinemas are to be fixed. The building housing these cinemas conforms with all other provisions of the Ontario Building Code.

4. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed seatingand aisle configurations and egress provisions provide sufficiency of compliance with Sentences 3.3.2.3.(2), 3.3.2.4.(2), (3), (4) and (5) of the Ontario Building Code.

Sentence 3.3.2.3.(2) requires that an aisle be located not more than 7 seats away from any seat. Including the two middle seats in a row this means that a row of seats served by an aisle at either end cannot be more than 16 seats. Article 3.3.2.3. also allows a seating configuration known as 147;continental seating" in which 100 seats are allowed in a row provided there are egress doorways at both ends of the row and that each doorway serves not more than 3 rows of seats. Sentence (4) of Article 3.3.2.3. also provides for alternative forms of seating than the traditional or continental style provided that the standard of safety is not reduced and the egress time is not increased. The Applicant intends to demonstrate that the stadium style of seating, which in some cases contains more than 16 seats per row, can conform to the Ontario Building Code under Sentence 3.3.2.3.(4).

A second area of dispute is the egress facilities. This issue involves both the requirements for the width of the aisles in the direction of egress travel (Sentence 3.3.2.4.(3)) and of the width of the

aisles at their termination point or means of egress, either a cross aisle, foyer or exit (Sentence 3.3.2.4.(4)). Sentence 3.3.2.4.(3) uses the minimum clear width criteria set out for aisles in Sentence 3.3.2.4.(2) and requires that the width be increased by 25 mm for each metre of distance travelled toward the termination point, as measured from the farthest point of the aisle. Sentence 3.3.2.4.(4) stipulates that the means of egress from an aisle, or aisles, be as wide as the widest aisle, plus 50 per cent of the total width of the other aisles served. The proposal put forth is to base both of these widths on the occupant load, with the aisle widths maintaining at least the minimum standards described in 3.3.2.4.(2). (The minimum clear width standards required in Sentence 3.3.2.4.(2) are 1,100 mm, or 750 mm when serving 60 seats or less, and 900 mm when serving seats on one side only.)

Also at issue is the length of dead-end aisles. Sentence 3.3.2.4.(5) states that dead-end aisles cannot be more than 6 m in length. The subject proposal provides four conditions, including increasing the clear width of a row by a formula of 6.1 mm for each seat beyond 16 seats as necessary to travel to an alternative aisle up to a maximum of 550 mm, which if all conditions were met, would allow the dead-end aisle length to be increased.

5. **Provisions of the Ontario Building Code**

Sentence 3.3.2.3. Fixed Seats

(2) Except as provided in Sentence (3), aisles on the main floor and in balconies shall be located so that there are not more than 7 seats between any seat and the nearest aisle.

Sentence 3.3.2.4.Aisles

(2) The minimum clear width of aisles shall be not less than 1 100 mm (3 ft 7 in), except that the width is permitted to be reduced to not less than

(a) 750 mm (2 ft 6 in) when serving not more than 60 seats, and

(b) 900 mm (2 ft 11 in) when serving seats on 1 side only.

(3) Except in the case of bleacher seats, the minimum clear width of aisles referred to in Sentence (2) shall be measured at the point farthest from an exit, cross aisle or foyer and shall be increased in width 25 mm (1 in) for each metre of distance toward the exit, cross aisle or foyer.

(4) Aisles shall terminate in a cross aisle, foyer or exit, and the width of such cross aisle, foyer or exit shall not be less than the required width of the widest aisle plus 50 per cent of the total required width of the remaining aisles that it serves.

(5) Dead end aisles shall be not more than 6 m (19 ft 8 in) in length.

6. **Applicant's Position**

The Applicant submitted that the proposed stadium style cinema design provides sufficiency of compliance with the above cited Ontario Building Code provisions.

Regarding the number of seats in a row served by an aisle at both ends, the Applicant is proposing that limit may exceed 16 provided that; the minimum clear width of the row is 400 mm, that the number of seats in the row does not exceed 100, that the aisles serving the rows do not exceed a dead-end length of 6 m (except as permitted under their proposal to increase dead-end aisles), and that the travel distance from the most remote seat does not exceed 30 m as measured to a doorway or vomitory. The Applicant argued that stadium style seating provides an equivalent level of safety to, and better egress time than continental style seating. They noted that the maximum travel distances to exits in both seating styles is approximately 30 m, but that the doorway widths in the stadium style are slightly larger per person (6.1 mm compared to 6.07 mm). The Applicants also pointed out that the aisle width required in continental seating would result in an exit factor of 7.3 mm per person. Calculating the aisle widths on the basis of total occupant load as is done in the stadium style would result in wider aisles and would therefore achieve a faster flow rate. As well, they note that the occupant flow in stadium style seating would also be faster due to the formula spacing the seats in the rows which allows for a wider row than the 400 mm called for in continental seating.

For these reasons, the Applicant contends that the stadium style seating configuration complies with Sentence 3.3.2.3.(4) and is therefore an equivalent to the continental style of seating as described in Sentence 3.3.2.3.(3) and provides sufficiency of compliance with Sentence 3.3.2.3.(2).

Concerning the egress facilities, the Applicant argues that by basing the widths of aisles and means of egress on the occupant load, more accurate standards are realized than the arbitrary standards found in Sentences 3.3.2.4.(3) and (4). Using 3.3.2.4.(3), for example, which requires an increase in aisle width of 25 mm per metre distance travelled results in both unnecessarilywide aisles in some circumstances, while in other instances, especially large

theatres, it produces aisles that are too narrow. The same is true for the width of the means of egress. The Applicant argues that the current Ontario Building Code standards make confusing distinctions between rooms that have fixed seating or not. By setting the requirements at 6.1 mm per person of occupant load a simplified standard emerges based on the true performance demanded of the means of egress. It is by using this standard that the Applicant argues that some of the smaller cinemas do not require a second exit door.

On the issue of the dead-end aisles, the Applicant is also proposing that their length may exceed 6 m provided that; the minimum clear width of the row is 400 mm, the width of the row is increased by 6.1 mm for each seat beyond 16 seats as necessary to travel to an alternate aisle up to a maximum of 550 mm, and that the travel distance from the most remote seat does not exceed 30 m as measured to an exit doorway. The Applicant argues that these conditions take into consideration if for some reason an aisle becomes inaccessible, the occupants can travel through any row of seats to reach an alternate aisle. For example, these criteria allow for a wider row, if in that row it is necessary to pass more than 7 seats to reach another aisle. As well, using these standards the maximum width of a row could be as much as 550 mm, which would permit occupants to exit in single file.

The Applicant points out that the total travel distance from the most remote seat will not exceed 30 m. In fact, the proposed egress of these dead-end aisles compares favourably with continental seating since, as they contend, the length of travel is the same or better, the rows and aisles would be wider, and there would be a choice to reach alternative doorways to exit the cinema.

In response to the Commission's request, the Applicant also submitted a time-based egress analysis that measured the length of time it would take to exit the proposed cinemas. This study, consistent with the Applicant's entire proposal, was based on a comparison to continental-style seating, which is an Ontario Building Code complying seating configuration. The study examined the three areas (rows, aisles and doorways) that individuals must travel through to reach the egress doorway. The Applicant's analysis showed that it would take 2.48 minutes to exit from a continental-style cinema, with the aisle being the area with the slowest flow time. For the proposed stadium-style seating, which the Applicant is proposing 100 seats in a row (although the proposals at hand have a maximum of 35 seats per row), the report demonstrated that the egress time, at 2.05 minutes, would be faster than in continental seating. The area of slowest flow time in stadium seating was the doorway. But as the Applicant noted, even the flow time through this door is faster than in the continental style.

7. **Chief Building Official's Position**

The Respondent had two main concerns. The first was the number of seats in a row. They felt that the proposed 100 seats in a row was too many. They wanted the Commission to set down a condition restricting the limit to something far less than 100 seats in a row.

The Respondent's second concern was the proposed travel distance from the most remote seat. They preferred that the travel distance be measured to the egress door leading to the exit and not to a point nearer to the interior of the cinema.

In general, the Respondent submitted that the stadium-style proposal, with its occupant load-based approach, is an entirely new system of egress from a room with fixed seating that is currently not recognized under the Ontario Building Code. It is therefore their position that they do not have the authority to approve these aspects of this project.

8. **Commission Ruling**

It is the decision of the Building Code Commission that the Applicant's proposal has not demonstrated sufficiency of compliance with Sentences 3.3.2.3.(2), 3.3.2.4.(2), 3.3.2.4.(3), 3.3.2.4.(4) and 3.3.2.4.(5) of the Ontario Building Code.

9. **Reasons**

1)Inconsistent evidence was presented by the Applicant and one of the Respondents with respect to exiting times and flow rates.

2)The information provided did not substantiate the basis for sufficiency of compliance. Convincing evidence was not provided that the proposed cinema design would not result in an increase in egress time.

3)No documentation was presented with respect to real life case studies or examples of similarly constructed theatres comparing flow patterns, flow rates, egress times, etc., that may have assisted the Commission members to assess the inconsistencies in the evidence presented.

4)The issue presented is a significant and complex one, it is the opinion of the Building Code Commission that the issue would be better dealt with as an Ontario Building Code amendment.

Dated at Toronto this 17th day in the month of February in the year 1998 for application number 1997-72.

BCC Ruling No. 97-60-602

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-60-602

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.2.3.1.(1) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Cary Green, 1231 Yonge St. Development Ltd., 20 Eglinton Avenue W., Toronto, Ontario, for the resolution of a dispute with Ms. Pam Coburn, Chief Building Official, City of Toronto, Ontario, concerning whether the proposed closely spaced sprinklers designed to protect an unprotected opening area exceeding the permitted limit provide sufficiency of compliance with Sentence 3.2.3.1.(1) of the Ontario Building Code at the Orion Condominium, 1231 Yonge Street, Toronto,Ontario.

APPLICANT

Mr. Cary Green
1231 Yonge St. Development Ltd.,
20 Eglinton Avenue W
Toronto, Ontario,

RESPONDENT

Ms. Pam Coburn
Chief Building Official
City of Toronto

PANEL

Ms. Susan Friedrich (Chair)
Ms. Lesia Beznaczuk
Mr. Douglas Clancey

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, December 18th, 1997

APPEARANCES

Mr. Cary Green
Manager
1231 Yonge St.
Development Ltd
The Applicant

Mr. Jon Winton
Senior Associate
Leber/Rubes Inc.
Agent for the Applicant

Mr. Peter Chan
Building Engineer
City of Toronto
The Respondent

RULING

1. **The Applicant**

   Mr. Cary Green was issued a building permit under the *Building Code Act, 1992* to renovate an existing commercial building and to construct an addition on the subject structure with the intention of convert the building to residential condominiums at The Orion, 1231 Yonge Street, Toronto, Ontario.

2. **Description of Construction**

   The Applicant proposes to build 37 residential condominiums by renovating and converting an existing three storey commercial building and by constructing a new four storey addition to the subject building. The structure is to be a mixed use building with limited Group D (retail) and Group E (commercial) occupancies proposed for the ground floor. The building is constructed of noncombustible construction and has a building area of approximately 1,911 m2 (19,000 ft 2).

The building is equipped with a fire alarm system, a standpipe and hose system, and a sprinkler system in the basement level only.

The Applicant is proposing to maintain the existing east elevation, currently standing 1.574 m from the property line. The unprotected openings proposed for the east elevation will, however, exceed the allowable limits in Article 3.2.3.1. and Table 3.2.3.A. The proposed increase in unprotected openings ranges from approximately four to eight times the permitted percentage limit. In order to provide protection, the Applicant proposes to install closely spaced sprinklers on all windows and doors on the east elevation to reduce the amount of heat transmitted through the openings.

3. **Dispute**

The issue at dispute between the Applicant and the Respondent is whether the proposed closely spaced sprinklers provide sufficiency of compliance with the allowable maximum openings permitted in Sentence 3.2.3.1.(1) and Table 3.2.3.A. Sentence 3.2.3.1.(1) determines that the area of unprotected opening in an exposing building face shall not exceed the standards found in Table 3.2.3.A. This Table sets out the maximum area of an exposing building face that is permitted to be unprotected openings as a percentage of the entire building face. Table 3.2.3.A. uses a formula for determining the percentage of allowable openings which includes the area of the wall, its ratio of height versus length, and the limiting distance to the nearest property line, or centre of a street, lane or public thoroughfare.

4. **Provisions of the Building Code**

Sentence 3.2.3.1. Limiting Distance and Area of Unprotected Openings

(1) Except as provided in Articles 3.2.3.9. to 3.2.3.11, the area of unprotected openings shall not be more than that set forth in Tables 3.2.3.A. or 3.2.3.B. for the limiting distance applicable to the exposing building face under consideration.

5. **Applicant's Position**

The Applicant submitted that the proposed installation of closely spaced sprinklers at all windows and doors on the east elevation provides sufficiency of compliance with Sentence 3.2.3.1.(1). They argue that the water curtain provided by this sprinkler system has proven effective at controlling the spread of fire through openings. Three separate testing agencies (the

British Joint Fire Research Organization, the National Fire Prevention Association, and the National Research Council of Canada) were cited and their research regarding closely spaced sprinklers as a system to protect openings was discussed. Based on this independent analysis, and installation according to the NFPA-13 standards, the Applicant believes that such a sprinkler system would adequately protect the openings.

The Applicant argues that the tests show that the water curtain provided by closely spaced sprinklers significantly reduces the incident radiation passing through the opening. In fact, some tests demonstrated that the sprinkler system prevented combustible material located 3 m from the test opening from igniting. As the Applicant also noted, at this distance, any theoretical building constructed only 3 m away (or 1.426 m from the property line on the adjacent property) would be required to constructed of noncombustible construction, thus further eliminating any chance that a fire may spread from one building to the other.

The Applicant also notes that the adjacent property abutting the subject east elevation is a public transit (subway) right-of-way roughly 39 m wide, the surface of which is designated by municipal by-law as common outdoor space and is being used by another neighbouring property owner to satisfy their municipal zoning requirements for landscaped open space. In fact, the municipality is currently discussing the idea designating the area as a public park. As such, the construction potential of this outdoor space is severely limited, which means that the proposed increase in unprotected openings would have little impact on an adjacent structure since it appears likely that no building would ever be erected.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed window areas on the east exposing face will greatly exceed the maximum permitted openings in the OBC. They argue that the proposed closely spaced sprinklers do not provide sufficiency of compliance with Sentence 3.2.3.1.(1) of the Code. In their opinion, the OBC does not recognize this form of protection because this system of closely spaced sprinklers has not been evaluated nor tested by an accredited testing agency. They argue that the research regarding closely spaced sprinklers referenced by the Applicant is inconclusive and perhaps may not fit the present situation exactly from a testing point of view. As a result, it is their position that the unprotected openings should be designed and built to comply with the Ontario Building Code.

The municipality also recognizes the situation regarding the abutting property. They admit that while construction potential is limited, the Code does not recognize public transit right-of-ways,

nor municipally designated outdoor spaces for the purposes of determining limiting distances. As a result, they recommend that the Applicant reach a covenant with the adjacent owner to limit future construction on the neighbouring property.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed closely spaced sprinkler system designed to protect the window openings does not provide sufficiency of compliance with Sentence 3.2.3.1.(1) and Table 3.2.3.A.

8. **Reasons**

1) No evidence was provided that this specific sprinkler system has been tested for the proposed exterior wall assembly by a recognized testing agency.

2) Other Code complying options are available to the Applicant to provide protection to these enlarged unprotected openings.

Dated at Toronto this 18th day in the month of December in the year 1997 for application number 1997-69.

BCC Ruling No. 97-59-601

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-59-601

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Subsection 9.10.19. and Sentence 3.2.5.8.(2) of "the Ontario Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Rick McConnell, Director, Engineering, Tribunal Developments Inc., 23 Lesmill Road, Ste. 401, North York, Ontario, for the resolution of a dispute with Mr. Jack Tupling, Director of Public Works, Town of Orangeville, Ontario, to determine whether the proposed fire hydrant spacing in relation to the distance to the rear lane garages provides sufficiency of compliance with Subsection 9.10.19 and Sentence 3.2.5.8.(2) of the Ontario Building Code at Montgomery Village, Phases 2 and 3, Orangeville, Ontario.

APPLICANT

Mr. Rick McConnell, Director, Engineering
Tribunal Developments Inc.
North York, Ontario

RESPONDENT

Mr. Jack Tupling
Director of Public Works
Town of Orangeville

PANEL

Ms. Susan Friedrich (Chair)
Ms. Lesia Beznaczuk
Mr. Douglas Clancey

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, December 18th, 1997

APPEARANCES

Rick McConnell, President
Tribunal Developments Inc.
North York, Ontario
The Applicant

Randal Brown, President
Randal Brown & Associates
Willowdale, Ontario
Agent for the Applicant

Mr. Jack Tupling
Director of Public Works
Town of Orangeville
The Respondent

RULING

1. **The Applicant**

   Mr. Rick McConnell, Tribunal Developments Inc., applied for a building permit under the *Building Code Act, 1992* for Montgomery Village 1, Phases 2 and 3, a residential subdivision in Orangeville, Ontario.

2. **Description of Construction**

   Montgomery Village comprises a combination of single-detached dwellings and row houses. Each dwelling may have a detached frame garage abutting the rear lane. The access to the garage is from the rear lane. Side yard set-backs in the zoning by-law allow a minimum separation of 1.8 metres between dwellings. Montgomery Village, Phase I, was the first subdivision of this configuration (public streets and rear lanes) in the Town of Orangeville and the Town developed servicing standards in Phase I which were applied to Phases 2 and 3. The servicing standards

developed for Phase I and implemented by the Applicant included the provision of fire hydrants in the rear public lanes.

3. **Dispute**

The dispute between the Applicant and Respondent is whether fire hydrants are required on both a main street and rear lane in a residential development having a detached garage at the rear of the lots to provide compliance with the Ontario Building Code.

4. **Provisions of the Ontario Building Code**

Subsection 9.10.19.3. Fire Department Access to Buildings

(1) Access for fire department equipment shall be provided to each building by means of a street, provided to each building by means of a street, private roadway or yard.

(2) Where access to a building as required in Sentence (1) is provided by means of a roadway or yard, the design and location of such roadway or yard shall take into account connection with public thoroughfares, weight of fire fighting equipment, width of roadway, radius of curves, overhead clearance, location of fire hydrants, location of fire department connections and vehicular parking.

Sentence 3.2.5.8. Water Supply

(2) Hydrants shall be located within 90 m (295 ft 3 in) horizontally of any portion of a building perimeter which is required to face a street in Subsection 3.2.2.

5. **Applicant's Position**

The Applicant's position is that there are no requirements in Part 9 of the Ontario Building Code for placement of fire hydrants. Sentence 3.2.5.8.(2) of the Ontario Building Code requires a fire hydrant to be located within 90 metres of the building perimeter which is required to face a street. For Part 9 buildings, only the front of the houses is required to face a street for fire department access. Fire hydrants are proposed to be provided so that they are within 90 metre of the front of each house.

The houses in Montgomery Village are provided with detached garages which are located at the rear of the residential lot and are accessed from a rear lane. It is the Applicant's position that the

garages are considered to be part of the same building as a house since it waives the requirements for spatial separation between these two elements in Sentence 9.10.14.14.(4) of the OBC. The Applicant's opinion is that the provision of a fire hydrant within 90 m of the front of the house meets the intent of Sentence 3.2.5.8.(2) of the Ontario Building Code. This would necessitate the fire department pulling hose between houses to reach a garage fire. The Respondent's opinion is that the Municipal By-law of Orangeville requires fire hydrants within 100 m of the garage. However, it should be noted that the By-law only requires water mains to be provided to each lot or block and does not require water mains to be provided to both sides of a lot.

6. **Chief Building Official's Position**

The Respondent took the position that there was no dispute between the Respondent's Chief Building Official and the Applicant concerning the application to the subject property of the Ontario Building Code.

The Director of Public Works for the Town of Orangeville has requested additional fire hydrants in 3 locations in the rear lane. The Public Works Department is of the opinion that access between houses to the detached garages is inadequate for fire fighting purposes and may be obstructed by fences, snow and other material. Therefore fire fighting equipment should be brought in through the rear lanes. In consultation with the Fire Department, the Public Works Department has established the requirements for the location of fire hydrants.

The dispute concerns the standard for municipal services and public streets in a subdivision and does not concern a "building" within the meaning of the *Building Code Act, 1992*.

Municipal water mains and hydrants in public streets and laneways are not "plumbing" within the meaning of the *Building Code Act, 1992*. The installation of municipal water mains and hydrants is regulated under the *Ontario Water Resources Act*, and the Applicant has sought and obtained approval under that Act.

The Respondent submits that, in any event, the Applicant's reference to Sentence 3.2.5.8.(2) of the Ontario Building Code is inappropriate. The buildings under dispute are governed by Part 9 and not Part 3 of the Ontario Building Code.

Finally, there is no basis for concluding that because Section 9.10.14.14.(4) of the Ontario Building Code waives the requirement for limiting distance between a detached garage and the

dwelling unit where both are located on the same property, a detached garage is not to be considered a separate "building" within the meaning of the *Building Code Act, 1992*. The term "building" is defined Section 1 of the Act and not in the Ontario Building Code, which is a regulation. The definition of "building" under the Act clearly includes a detached garage.

7. **Commission Ruling**

It is the decision of the Building Code Commission that under s. 24(1) of the *Building Code Act, 1992*, the Building Code Commission does not have the jurisdiction to determine this dispute.

8. **Reasons**

1) Under s. 24(1) of the *Building Code Act, 1992*, the Building Code Commission has jurisdiction to resolve disputes:

- that are between a chief building official or building inspector and an applicant for, or holder of, a permit or a person to whom an order is given; and

- that concern the interpretation of, or the sufficiency of compliance with, the technical requirements of the Ontario Building Code.

While there appears to be a dispute between the Applicant and the municipality in respect of the fire hydrant spacing, this dispute is not with the municipality's Chief Building Official or building inspector, and it does not relate to the interpretation of, or sufficiency of compliance with, the technical requirements of the Ontario Building Code.

2) The dispute arises on property which is not part of the subject property of the buildings in question. Evidence was provided that the rear laneway in question is a dedicated street.

Dated at Toronto this 18th day in the month of December in the year **1997** for application number **1997-65.**

BCC Ruling No. 97-58-600

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-58-600

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act,1992*.

AND IN THE MATTER OF Sentence 3.2.5.8.(2) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Ms. Elizabeth Sawicki, Manager of Development, NHD Developments Ltd., 3700 Steeles Avenue West, Vaughan, Ontario, for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, Ontario, concerning whether an additional fire hydrant is to be installed to comply with Sentence 3.2.5.8(2) of the Ontario Building Code at Concord Confections, 345 Courtland Avenue, Vaughan, Ontario.

APPLICANT

Ms. Elizabeth Sawicki, Manager of Development
NHD Developments Ltd.,
3700 Steeles Avenue West
Vaughan, Ontario,

RESPONDENT

Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL

Mr. Rick Florio (Chair)
Ms. Lesia Beznaczuk
Mr. Lawrence Glazer

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, December 11th, 1997

APPEARANCES

Ms. Elizabeth Sawicki
Manager of Development
NHD Developments Ltd.,
3700 Steeles Avenue West
The Applicant

David Hine
Fire Protection Engineer
Hine Reichard Tomlin Inc.
Richmond Hill, Ontario
Agent for the Applicant

Mr. Steve Penna
Chief Building Official
City of Vaughan
Agent for the Respondent

RULING

1. **The Applicant**

   Ms. Elizabeth Sawicki, NHD Developments Ltd. was issued a building permit under the *Building Code Act, 1992* to construct Concord Confections, at 345 Courtland Avenue, Vaughan, Ontario.

2. **Description of Construction**

   The structure is a single-storey industrial building with a building area of 12,156 square metres, of non-combustible construction with a sprinkler system and fire alarm. Article 3.2.2.54 of the Ontario Building Code requires the building to face one street and to be constructed of non-combustible materials and mezzanines having a 1 hour fire resistance rating. The roof rating is waived since the building is protected with an electronically supervised sprinkler system.

The north wall which is 100 m, is provided with 3 doors and a wall of glass 43 m wide. The building site is provided with one fire hydrant at the north east corner of the building. As part of the City of Vaughan's plan review, an additional fire hydrant was required at the north west corner of the site. The City requires the entire north elevation to have access openings within 3-15 metres of the street in order to be accessible for fire route requirements under Articles 3.2.5.6 and 3.2.5.7 of the Building Code. Forty-five per cent of the building perimeter is within 3-15 metres of a fire department access route.

3. **Dispute**

The dispute between the Applicant and Respondent is whether an additional fire hydrant is to be installed at the north west corner of the site to comply with Sentence 3.2.5.8.(2) of the Ontario Building Code.

4. **Provisions of the Building Code**

3.2.5.8. Water Supply

(2) Hydrants shall be located within 90 m (295 ft 3 in) horizontally of any portion of a building required to face a street in Subsection 3.2.2.

5. **Applicant's Position**

The Applicant considers that the proposed building configuration as submitted to the City of Vaughan be considered as providing sufficiency of compliance with the requirements of the City of Vaughan. Since a significant portion of the north and east elevation of the building is within 15 m of a street (45% of the entire building perimeter), it can be considered as facing one street for purposes of fire department access.

The access openings are waived for sprinklered buildings under Article 3.2.5.3 of the Building Code. However, Concord Confections which is sprinklered, does have 3 doors on the north wall.

6. **Chief Building Official's Position**

The building faces one street with its principal entrance facing the required fire route. An additional hydrant is required at the end of the fire route or the existing private hydrant could be relocated so as to be within 90 m of the end of the building to comply with Sentence 3.2.5.8.(2).

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed building faces one street and provides sufficiency of compliance with Sentence 3.2.5.8.(2) of the Building Code.

Conditions:

i) The existing paved road on the east side of the building be designated as a fire route, including the required turn-around at the south end.

ii) Any proposed additions as noted on the plans must comply with Code requirements.

8. **Reasons**

a) The principal entrance is located within 90 m of the hydrant.

b) The building is fully sprinklered, and therefore does not require any additional access openings.

c) The paved area along part of the east side complies with the requirements for an access route.

Dated at Toronto this 11th day in the month of December in the year 1997 for application number 1997-70.

BCC Ruling No. 97-57-599

BUILDING CODE COMMISSION DECISION ON B.C.C. 97-57-599

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.4.2.5.(1)(a) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Robert DeGasperis, Vice President, Leasing, Metrus Properties, 30 Floral Parkway, Concord, Ontario, for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, Ontario, concerning whether a travel distance of 38 metres in a building equipped with early suppression fast response sprinklers provides sufficiency of compliance with Clause 3.4.2.5.(1)(a) of the Ontario Building Code at the Sherwin-Williams Facility, 200 Confederation Parkway,Vaughan, Ontario.

APPLICANT

Mr. Robert DeGasperis, Vice President, Leasing
Metrus Properties
30 Floral Parkway
Concord, Ontario

RESPONDENT

Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL

Mr. Rick Florio (Chair)
Ms. Lesia Beznaczuk
Mr. Lawrence Glazer

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, December 11th, 1997

APPEARANCES

Michael McConnell
Vice President,
Operations /Sales
Sherwin-Williams Co.
For the Applicant

Mr. Randy Brown
President
Randal Brown & Assoc. Ltd.
Agent for the Applicant

Mr. Steve Penna
Chief Building Official
City of Vaughan
Agent for the Respondent

RULING

1. **The Applicant**

   Mr. Robert DeGasperis is an individual to whom a building permit was issued under the *Building Code Act, 1992* to construct two warehouses for the storage of aerosol products or combustible and noncombustible paint products at the Sherwin-Williams Facility, 200 Confederation Parkway, Vaughan, Ontario.

2. **Description of Construction**

   The Applicant is proposing to construct a Group F - Division 1 (high hazard industrial occupancy) storage facility. The building is described as a single storey warehouse with a building area of 9,475 m2 (102,000 ft2). It is proposed to erect a firewall in the middle to divide the building into two smaller buildings. The buildings on either side of this firewall are to be

constructed of noncombustible construction. Both buildings will be equipped with a fire alarm system, a standpipe and hose system, and a automatic sprinkler system.

The Applicant is proposing to construct this facility with a maximum travel distance to the exits of 38 m. This represents an increase of 10 m over the allowable maximum set out in the Building Code for this type of structure. To compensate for this additional travel distance, the Applicant is proposing to install an early suppression fast response (ESFR) sprinkler system, instead of the standard sprinkler system required by the Code.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed installation of an ESFR sprinkler system in lieu of standard sprinklers provides sufficiency of compliance with Clause 3.4.2.5.(1)(a) of the Ontario Building Code. This provision requires that the maximum travel distance to an exit be not more than 25 m in a high hazard industrial occupancy. As noted, the Applicant's are proposing a maximum travel distance of 35 m in the subject warehouse.

4. **Provisions of the Building Code**

3.4.2.5. Location of Exits

(1) Except as provided in Sentence (2),(3) and 3.3.2.4.(6), where more than one exit is required from a floor area, such exits shall be located so that the travel distance to not less than one exit as described in Article 3.4.2.4. shall be not more than

(a) 25 m (82 ft) in any Group F, Division 1 occupancy,

5. **Applicant's Position**

The Applicant submitted that the installation of early suppression fast response sprinkler system provides sufficiency of compliance with Clause 3.4.2.5.(1)(a) of the Code. In their view, the upgraded sprinkler system would actuate quicker and would therefore allow occupants additional time to evacuate the building. The Applicant provided calculations indicating that the response time index (RTI) of a standard sprinkler system is 400. This translates into an actuation time of 4.5 minutes. The proposed ESFR sprinklers however have an RTI of 50, which equals an actuation time of .5 minutes. This earlier warning (of four minutes) would more than adequately allow the occupants enough time to travel the additional 10 m to the exits in the event of an

emergency. In fact, the Applicant argues that with an ESFR system, the travel distance to the exit could 304 m farther while still maintaining the same level of safety as is required under the Code.

The Applicant also notes that the proposed occupant load in the facility is only 20 people which would mean very little crowding at exits. As well, the exit capacity far exceeds that which is required for the occupant load. The occupants of the warehouse would all be working on EE classified forklifts, which as the Applicant suggests, would mean that travel to the exits may be by forklift rather than on foot. Finally, it was noted that the ultraviolet detection system would provide quick identification of any fire.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed travel distances do not meet the requirements of Clause 3.4.2.5.(1)(a) of the OBC. The maximum allowable travel distance for an F1 building is not to exceed 25 m. They argue that the Applicant has increased the travel distance so that the facility may accommodate additional rack storage.

7. **Commission Ruling**

It is the decision of the Building Code Commission that a travel distance of 38 m does not provide sufficiency of compliance with Clause 3.4.2.5.(1).

8. **Reasons**

i) The Code does not distinguish between ESFR and regular sprinklers.

ii) The municipality has agreed to allow up to a 5 m additional travel distance (30m in total) in recognition of the increased performance provided by the ESFR sprinklers. iii) The in-rack sprinklering proposed by the Applicant is already a Code requirement.

Dated at Toronto this 11th day in the month of December in the year 1997 for application number 1997-66.

BCC Ruling No. 97-55-597

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-55-597

IN THE MATTER OF Subsection 24 (1) of *the Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.1.8.11.(5) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Duncan McGill, Director of Engineering, 1230 Northshore Boulevard East, Burlington, Ontario, for the resolution of a dispute with Mr. Daniel B. Mousseau, Chief Building Official, City of Burlington, Ontario, concerning self closing devices are required between the corridors and sleeping rooms in accordance with Sentence 3.1.8.11.(5) of the Ontario Building Code at the Joseph Brant Memorial Hospital, 1230 Northshore Boulevard East, Burlington, Ontario.

APPLICANT

Mr. Duncan McGill, Director of Engineering
1230 Northshore Boulevard East
Burlington, Ontario

RESPONDENT

Mr. Daniel B. Mousseau
Chief Building Official
City of Burlington

PANEL

Mr. Rick Florio (Chair)
Ms. Lesia Beznaczuk
Mr. Lawrence Glazer

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, December 11th, 1997

APPEARANCES

Mr.Duncan McGill
Director of Engineering
1230 Northshore Blvd East
Burlington, Ontario
The Applicant

Mr. Trevor Garwood-Jones
Trevor P. Garwood-Jones Architect
Hamilton, Ontario
Agent for the Applicant

Mr. Daniel B. Mousseau
Chief Building Official
City of Burlington
The Respondent

RULING

1. **The Applicant**

   Mr. Duncan McGill was issued a building permit under the *Building Code Act, 1992* to undertake renovations at Joseph Brant Memorial Hospital, 1230 Northshore Boulevard East in Burlington, Ontario.

2. **Description of Construction**

   Joseph Brant Memorial Hospital is a 6 storey building that is partially sprinklered (30%). It is being renovated for long term care including addition of sprinklers as areas are renovated. The 4th floor which is the subject of dispute is presently sprinklered.

3. **Dispute**

The dispute concerns renovations to the south and east wings of the 4th floor and whether self-closing devices are required between the corridors and sleeping rooms in accordance with Sentence 3.1.8.11. (5). of the Ontario Building Code.

4. **Provisions of the Building Code**

3.1.8.11. Self-Closing Devices

(5) Self-Closing devices need not be provided on doors that are located between sleeping rooms or a corridor and adjacent sleeping rooms where the doors are within a fire-compartment described in Sentence 3.3.3.7.(2).

3.3.3.7. Sprinklered Hospitals and Nursing Homes

(2) Except as provided in Sentence (3), floor areas containing patients' sleeping rooms in hospitals and nursing homes shall be divided into not less than 2 fire compartments not more than 1,000 m2 (10,800 ft2) in area.

5. **Applicant's Position**

The Applicant seeks Code exemption for suite door closers under Sentence 3.1.8.11.(5) of the Ontario Building Code. The Applicant interprets the exemption for floor areas divided into not less than 2 fire compartments not more than 1000 square metres in area. This project has been designed with three individual fire compartments of 728,500 and 536 square metres each, with 1-hour fire resistance rated separations between compartments, meeting the requirements of Sentence 3.1.8.11.(5). The exemption is not conditional on sprinklers, however , the project is sprinklered, in conformance with NFPA Standards as designed by the mechanical consultant.

6. **Chief Building Official's Position**

The Respondent's position is that the exemption for self-closing devices only applies to areas described under Sentence 3.3.3.7(2) of the Code which is for fully sprinklered buildings only. The building is only 30% sprinklered.

7. **Commission Ruling**

It is the decision of the Building Code Commission that not providing self-closing devices on fourth floor sleeping room doors provides sufficiency of compliance with Sentence 3.1.8.11.(5)

of the Building Code provided that the entire fourth floor is fully sprinklered within 90 days from January 1, 1998.

8. **Reasons**

i) The level of safety intended by Sentences 3.1.8.11.(5) and 3.3.3.7.(2) will be provided.

Dated at Toronto this 11th day in the month of December in the year 1997 for application number 1997-63.

BCC Ruling No. 97-54-596

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-54-596

IN THE MATTER OF Subsection 24 (1) of *the Building Code Act,1992*.

AND IN THE MATTER OF Clause 3.4.2.5.(1)(f) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Paul Heleno, Project Manager, Eminent Construction Ltd., 4800 Dufferin Street, Toronto, Ontario, for the resolution of a dispute with Mr. Bernie E. Roth, Chief Building Official, City of Scarborough, Ontario, concerning whether the travel distance from the entry door of certain suites to the exit provides sufficiency of compliance with Clause 3.4.2.5.(1)(f) at the Residences at Bamburgh Gate Inc.,1883 McNicholl Avenue, Scarborough, Ontario.

APPLICANT

Mr. Paul Heleno, Project Manager
Eminent Construction Ltd.
4800 Dufferin Street
Toronto, Ontario

RESPONDENT

Mr. Bernie E. Roth
Chief Building Official
City of Scarborough

PANEL

Mr. Roy Philippe (Chair)
Mr. Michael Steele
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF RULING

Wednesday, November 26th, 1997

APPEARANCES

Mr. Randal Brown
President
Randal Brown & Associates
Agent for the Applicant

Mr. Mas Matsuyama
Mgr, Building Inspections
City of Scarborough
The Respondent

Mr. Vishram Bhapkar
Manager, Arch./Struct.Services
City of Scarborough
Agent for the Respondent

RULING

1. **The Applicant**

   Mr. Paul Heleno is a person who was issued a building permit under the *Building Code Act, 1992* to construct a 15 storey residential tower with a mercantile occupancy on the ground floor known as the Residences at Bamburgh Gate, at 1883 McNicholl Avenue, Scarborough,Ontario.

2. **Description of Construction**

   The Applicant proposes to construct a residential condominium tower 15 storeys in building height. The building is constructed of noncombustible construction. It is equipped with a fire alarm system, a voice communication system, a standpipe and hose system, as well as a partial sprinkler system. The structure has a building area of approximately 2,760 m2. The building is classified as having a Group C - residential major occupancy. A certain amount of space on the ground floor has been designated as retail, or Group E - mercantile occupancy.

The Applicant's design for the Suites 1B located on floors 2 through 11 between Grid Lines 11 and 16 creates a travel distance for that unit of 31.82 m as measured from the suite door frame to the exit door frame. (The corridors serving the residential suites of the subject building are separated from the adjacent floor areas by rated fire separations. Therefore, the travel distance may be measured from the entrance doors of the suites.) This exceeds the allowed maximum of 30 m as set out in the OBC. All other suites meet the travel distance requirements.

The firewalls originally proposed that would have allowed the Suites 1B to be in full conformance with the 30 m travel distance requirement were deleted. Instead, the Applicant is intending to provide additional measures to compensate for the excess travel distance. Specifically, these measures include the installation of additional smoke detectors in the corridors in the vicinity of the Suites 1B and providing pressurization in all exit shafts.

3. **Dispute**

The issue at dispute between the Applicant and the Respondent is whether the proposed measures provide sufficiency of compliance with Clause 3.4.2.5.(1)(f) of the OBC. This provision stipulates that the travel distance to an exit on a floor in this type of occupancy must be 30 m or less.

4. **Provisions of the Building Code**

3.4.2.5.(1)(f) Location of Exits

(1) Except as provided in Sentences (2), (3) and 3.3.2.4.(6), where more than one exit is required from a floor area, such exits shall be located so that the travel distance to not less than one exit as described in Article 3.4.2.4. shall be not more than (f) 30 m (98 ft 5 in) in any other occupancy.

5. **Applicant's Position** The Applicant submitted that these two additional measures provide sufficiency of compliance for the additional travel distance involved regarding the Suites 1B. As the Applicant notes, the Code requires that only the fire fighter's elevator be pressurized in this type of occupancy, and yet they have provide complete pressurization for all exits. This measure goes beyond the mandatory standards in the OBC, they argue.

The additional smoke detectors, as noted, will be located in the public corridors in the vicinity of the Suites 1B. In the event of a fire, these detectors will provide additional early warning to the occupants in the Suites 1B.

Lastly, the Applicant points out that the travel distance issue involves only one suite per floor and given the addition of improved smoke control measures and earlier warning through the pressurization of exits and installation of more smoke detectors, the actual travel distance of 31.82 m should be viewed as equivalent to the requirements of the OBC.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed measures do not provide sufficiency of compliance with Clause 3.4.2.5.(1)(f). In their view, the deletion of the original firewall in the corridor has increased the travel distance and the time required to exit. They believe that additional smoke detectors do not provide equivalent protection.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the distance of travel from suite (1B) provides sufficiency of compliance with Clause 3.4.2.5.(1)(f) of the Building Code provided that

i) the grade stairwells are pressurized to limit smoke movement in accordance with measure G of the supplement to the National Building Code where they connect to the building from above and below grade.

ii) two additional smoke detectors are provided on all typical residential floors in the location of the suite not within the travel distance requirements.

iii) the fresh air supply fans are activated by the fire alarm system and powered by a secondary power source.

8. **Reasons**

i) the distance of travel to from the Suite 1B to the exit from the floor level affects only one suite per floor on floors 2 to 11 and exceeds the requirements by only a minimum 6% or 1.82 m.

ii) the additional detection provides increased early warning in a fire conditions.

iii) the pressurization of the stairwells and corridors should allow the occupants more time to evacuate the building.

iv) it is the opinion of the Building Code Commission that these additional measures compensate for the minimal additional egress travel distance of 1.82 m from Suite 1B on floors (2 - 11).

Dated at Toronto this 26th day in the month of November in the year 1997 for application number 1997-67.

BCC Ruling No. 97-52-594

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-52-594

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.4.6.4. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Dennis Meret, Vice President, Village Grove (1995) Inc., 181-13300 Tecumseh Road East, Tecumseh, Ontario, for the resolution of a dispute with Mr. Michael Voegeli, Chief Building Official, Village of St. Clair Beach, Ontario, concerning whether the proposed front door steps are exit stairs requiring handrails under Article 3.4.6.4. of the Ontario Building Code at Jason Court Townhomes Condominiums (south side), 309-395 Jason Court, Village of St. Clair Beach, Ontario.

APPLICANT

Mr. Dennis Meret, Vice President
Village Grove (1995) Inc.
181-13300 Tecumseh Road East
Tecumseh, Ontario

RESPONDENT

Mr. Michael Voegeli
Chief Building Official
Village of St. Clair Beach

PANEL

Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Douglas Clancey

PLACE

Toronto and Windsor, Ontario

DATE OF RULING

Thursday, November 13th, 1997

APPEARANCES

Mr. Vijay Vasantgadkar
Vijay Vasantgadkar
Architect
Windsor, Ontario
Agent for the Applicant

Mr. Dennis Meret, Vice President
Village Grove (1995) Inc.
Tecumseh, Ontario
The Applicant

Mr. Michael Voegeli
Chief Building Official
Village of St. Clair Beach
The Respondent

RULING

1. **The Applicant**

   Mr. Dennis Meret, Vice President, Village Grove (1995) Inc., 181-13300 Tecumseh Road East, Tecumseh, Ontario was issued a building permit under the *Building Code Act, 1992* to construct 17 new low rise residential townhouse condominium at 309-395 Jason Court, Village of St. Clair Beach, Ontario.

2. **Description of Construction**

   The Applicant proposes to construct 17 one storey, two bedroom, townhouse condominiums, as part of a larger residential condominium project. The 17 units are grouped into three buildings, two containing six units and the other with five units. The aggregate size of the buildings, approximately 995 m2, meant they were constructed according to Part 3 of the Building Code.

The buildings are classified as Group C - residential. They are constructed of combustible construction.

As the subject units are a single storey, only two steps are required at the front entrance door. The Applicant proposes to not provide handrails for these stairs. This would be consistent with other buildings in this project that were constructed under Part 9, and were not required to provide handrails.

3. **Dispute**

The issue at dispute between the Applicant and the Respondent is whether the proposed front door steps are exit stairs and should be required to provide handrails under Article 3.4.6.4. of the OBC. Article 3.4.6.4. sets out the requirements for handrails.

It states that every exit ramp or stairway must have a handrail.

4. Provisions of the Building Code

3.4.6.4. Handrails

(1) Every exit ramp or stairway shall have a handrail on atleast one side, and where 1 100 mm (3 ft 7 in) or more in width, shall have handrails on both sides.

5. **Applicant's Position**

The Applicant submitted that the proposed exiting stairs, without a handrail, meets the intent of the Code. It is their interpretation that the subject front door steps are not designated as exit stairs under the OBC and therefore handrails are required. They note that the units in question are only required to provide handrails since the size of the buildings made it necessary to build under Part 3. As a comparison, they point to other townhouses (the north side of Jason Court) also constructed at this site which were built to the standards under Part 9. Despite the fact that the north side units contain three bedrooms, meaning potentially more occupants per unit, and also have only two stairs at the front door, they are not required to have handrails.

In their view, Part 3 of the Building Code is intended for areas used extensively by the general public. Since these are private residential townhouses, the Applicant argues that the Part 3 handrail requirement is not necessary.

Further, they note that from a practical standpoint the subject stairs only contain two steps. The total height, including the step from the landing to grade-level of the unit, is well below the 600 mm height difference allowed under Part 9 of the Code before a railing is required.

6. **Chief Building Official's Position**

The Respondent submitted that the subject exit lacks the required handrails and thus does not meet Article 3.4.6.4. of the Code. In their interpretation, the landing and stairs serving these exit doors should be regarded as exit stairs since they provide a means of egress from the floor area they serve. They feel that the subject stairs are used by the public, as well as the unit's occupants. As a result, they conclude that the full Part 3 standards should apply. This includes the requirements for handrails as well as guards.

The Respondent notes that they do not have the authority to waive or vary from the requirements of the OBC.

7. **Commission Ruling**

It is the decision of the Building Code Commission that front door steps which are part of the exit serving each dwelling unit provide sufficiency of compliance with Articles 3.4.6.4., of the Building Code provided they satisfy the requirements of sentences 9.8.7.1.(2) and 9.8.8.1.(1) of the Building Code.

8. **Reasons**

i) It is the opinion of the Building Code Commission that although the building area requires the building to comply with Part 3 of the Building Code, the degree of safety achieved through Part 9 building requirements for handrails and guards would not be reduced in this application.

ii) Each dwelling unit has it's own exit and does not share individual stairs, or steps.

iii) The difference in elevation between the landing and grade is less than 20".

Dated at Toronto this 13th day in the month of November in the year 1997 for application number 1997-60.

BCC Ruling No. 97-51-593

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-51-593

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.2.9.3. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Richard Laplante, President, Builder's Warehouse, Orleans, Ontario, for the resolution of a dispute with Ms. Elizabeth Hilfrich, Chief Building Official, City of Gloucester, Ontario, to determine whether the proposed measures provides sufficiency of compliance regarding standpipe and hose pressure in accordance with Article 3.2.9.3. of the Ontario Building Code at the Self Serve Warehouse and Kiosk, 3636 Innes Road, Orleans, Ontario.

APPLICANT

Mr. Richard Laplante, President
Builder's Warehouse
Self Serve Warehouse and Kiosk
3636 Innes Road
Orleans, Ontario

RESPONDENT

Ms. Elizabeth Hilfrich
Chief Building Official
City of Gloucester

PANEL

Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Douglas Clancey

PLACE

Toronto and Ottawa, Ontario

DATE OF RULING

Thursday, November 13th, 1997

APPEARANCES

Mr. Peter Kindree
Peter J. Kindree Arch.
Ottawa, Ontario
Agent for the Applicant

Mr. Richard Laplante
President
Orleans, Ontario
The Applicant

Ms. Elizabeth Hilfrich
Chief Building Official
City of Gloucester
The Respondent

RULING

1. **The Applicant**

   Mr. Richard Laplante, President, Builder's Warehouse, Orleans, Ontario is a person to whom a building permit was issued under the Building Code Act, 1992 to construct a new, self-serve warehouse and kiosk, at 3636 Innes Road, Orleans, Ontario.

2. **Description of Construction**

   The Applicant recently constructed a Self-Serve Warehouse and Kiosk facility. The structure is intended for use as a public warehouse building in which individuals store belongings on multi-level racks.

   The building is described as 1 storey in building height and 4076 m2 in roof area, and constructed of noncombustible construction. The structure is classified as having Group F, Division 2 major occupancy. It is equipped with a standpipe and hose system. The pressure in the

standpipe and hose system is, however, 62 kPa (9psi) lower than the 450 kPa (65.3 psi) required under the OBC.

To compensate, the Applicant is proposing to provide an additional fire hydrant adjacent to the building, as well as supplying extra fire extinguishers within the structure.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed measures will provide sufficiency of compliance with Article 3.2.9.3. of the Ontario Building Code. In particular, will the addition of an extra hydrant and fire extinguishers be adequate to compensate for the approximately 14% pressure deficiency in the standpipe and hose system. Sentence 3.2.9.3.(6) of the OBC allows the residual water pressure at the design flow rate at the topmost outlet of a standpipe and hose system to be less than 450 kPa (65.3 psi) if certain conditions, such as sprinklering the building, are met. Since the subject building is not equipped with a sprinkler system, it does not meet these conditions.

4. **Provisions of the Building Code**

Sentence 3.2.9.3.(6) Standpipe and Hose System Design

(6) The residual water pressure at the design flow rate at the topmost outlet of a standpipe and hose system that is required to be installed in a building is permitted to be less than 450 kPa (65.3 psi) provided that

(a) the building is sprinklered in conformance the requirements of Sentence 3.2.5.13.(1), (b) the water supply at the base of the sprinkler riser is capable of meeting the design flow rate and pressure demand of the sprinkler system, including the inside and outside hose allowance, and (c) fire protection equipment is available to deliver, by means of the fire department connection, the full demand flow rate at a residual water pressure of 450 kPa (65.3 psi) at the topmost outlet of the standpipe and hose system.

5. **Applicant's Position**

The Applicant submitted that the proposed measures provide sufficiency of compliance with Article 3.2.9.3. of the OBC. In their view, the addition of an extra fire hydrant and fire extinguishers should be considered as adequate compensation for the 62 kPa (9 psi) shortfall in the standpipe and hose system's pressure.

The note that the Respondent is prepared to accept this alternative.

6. Chief Building Official's Position

The Respondent submitted that the structure, as recently built, does not conform with the requirements of the OBC. It is their opinion that the proposed measures do not comply with the Code, nor can they be considered as equivalents under Section 2.7. The municipality's fire department has indicated that they have no concerns with the Applicant's measures provided that the proposed hydrant is located north-west of the entry kiosk. The fire department believes that by placing the hydrant at this location this would assist them in fire fighting.

The Respondent notes that while they support this proposal, they do not have the authority to approve it.

7. Commission Ruling

It is the decision of the Building Code Commission that building A 3636 Innis Road provides sufficiency of compliance with 3.2.9.3.(6) of the Building Code provided an additional fire hydrant is located on the property to the North West of the entry Kiosk outside the fenced enclosure.

8. **Reasons**

i) The building open on all four sides is one storey in height and access for fire fighting is available from the exterior. ii) The additional hydrant provides additional water supply on the site for internal and external fire fighting purposes. iii) The location of the hydrant is consistent with the pre fire planning needs established by the fire department. iv) A fire department connection is provided to permit the fire department to pressurize the standpipe system from the hydrant on the property.

Dated at Toronto this 13th day in the month of November in the year 1997 for application number 1997-59.

BCC Ruling No. 97-50-592

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-50-592

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 9.8.3.3.(2) and Article 9.8.3.4. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Scott Paris, President, Rosemount Development Ltd., 125 Norfinch Drive, Downsview, Ontario, for the resolution of a dispute with Mr. Bruce Ashton, Chief Building Official, City of York, Ontario, concerning whether the stairs, as constructed, provide sufficiency of compliance with Sentence 9.8.3.3.(2) of the Ontario Building Code (OBC) and whether OBC Article 9.8.3.4. requires that the minimum headroom for stairs in a dwelling unit stipulated in the Building Code must be provided for the full width of the stairs at Weston Mews, 50 Church Street, City of York, Ontario.

APPLICANT

Mr. Scott Paris, President
Rosemount Development Ltd.
125 Norfinch Drive
Downsview, Ontario

RESPONDENT

Mr. Bruce Ashton
Chief Building Official
City of York

PANEL

Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Douglas Clancey

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, November 13th, 1997

APPEARANCES

Mr. Scott Paris, President
Rosemount Development Ltd.
Downsview, Ontario
The Applicant

Mr. Claude Lacombe
E.I. Richmond Architect Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Allister Graham
Manager of Inspections
City of York
For the Respondent

Mr. Sherban Pavelescu
Building Inspector
City of York
For the Respondent

RULING

1. **The Applicant**

   Mr. Scott Paris, President, Rosemount Development Ltd., 125 Norfinch Drive, Downsview, Ontario was recently issued a building permit under the Building Code Act, 1992 to construct 42 new residential townhouses at Weston Mews, 50 Church Street, City of York, Ontario.

2. **Description of Construction**

The Applicant proposes to construct 42 townhouses, grouped into five buildings. The five buildings range in building area from 332 m2 (building no. 4) to 421 m2 (building no. 3). As such, all buildings were built according to Part 9 of the Building Code. The project consists of five different unit types, all of which are three storeys in building height plus a basement level. The units are generally long and narrow, ranging in width from 4.1 m (A and B units) to 6 m (E units). The buildings are constructed of noncombustible construction.

The Applicant constructed the stairs in many units between the ground floor and basement level so that the guard separating the ground floor from the basement stairs projects vertically from the wall within the stair well. The result of this arrangement is that width of the stair has been reduced by the presence of the vertical pickets the top rail of the guard. The stair widths vary between units, but the narrowest identified was 838 mm (2 ft 9 1/8 in).

Further, the Applicant has constructed the stairs in unit types A and B between the ground and second floors with the stringer of the above stairs protruding up to 190 mm (7 1/2 in) into the headroom of the ground to second floor stairs. The obstruction occurs over the convergence point of the winders of the subject stairs.

3. **Dispute**

The issues at dispute between the Applicant and Respondent are whether the stairs, as constructed, provide sufficiency of compliance with Sentence 9.8.3.3.(2) regarding minimum stair width and whether Article 9.8.3.4. requires that the minimum headroom for stairs in a dwelling unit stipulated in the Building Code must be provided for the full width of the stair tread. Sentence 9.8.3.3.(2) states that at least one stair way between floor levels in a dwelling unit shall have a minimum width between wall faces of not less than 860 mm (2 ft 10 in). The stairs of many of the units, measured at 838 mm (2 ft 9 1/8 in), are 22 mm (7/8 in) less than the required minimum width. Article 9.8.3.4. requires that the headroom for stairs in a dwelling unit shall be 1,950 mm (6 ft 5 in) measured vertically from a line drawn through the outer edges of the nosings. Due to the 190 mm (7 1/2 in) headroom obstruction at the convergence point of the winders in certain stairs in the A and B units, the required headroom is not provided over the full width of the stairs.

4. **Provisions of the Building Code**

Sentence 9.8.3.3. Stair Width

(2) At least 1 stairway between each floor level in a dwelling unit shall have a minimum width between wall faces of not less than 860 mm (2 ft 10 in).

Article 9.8.3.4. Headroom. The headroom measured vertically from a line drawn through the outer edges of the nosing shall be at least 1.95 m (6 ft 5 in) for stairs located in dwelling units and 2.05 m (6 ft 9 in) for all other stairs.

5. **Applicant's Position**

The Applicant submitted that regarding the stair width issue, the stairs, as constructed, provide sufficiency of compliance with Sentence 9.8.3.3.(2). They argue that the landing between the ground floor and the basement level is, on average, 920 mm by 1,020 mm where only 860 mm by 860 mm is required under Article 9.8.4.1. Following this argument, the Applicant also notes that the hallway on the ground floor is, on average, 840 mm in width whereas the requirement under OBC 9.5.8.1. allows for hallways as narrow as 710 mm (2 ft 4 in) in dwellings not exceeding 4.3 m (14 ft 1 in). They believe that this additional space on the landing and in the ground floor hall compensates for the 22 mm deficiency in the width of some of the stairs.

Concerning the issue of the stair headroom, the Applicant believes that the stairs, as constructed, meet the intention of Article 9.8.3.4. They note that this provision does not state that the minimum height must be provided for the entire width of the stair tread. As they note, the obstruction in question occurs over the convergence point of the winders where the steps will not likely be used.

6. **Chief Building Official's Position**

The Respondent submitted that the subject stairs do not provide sufficiency of compliance with Sentence 9.8.3.3.(2) due to the vertical pickets and top rail of the guardrail which reduce the stair width. They do not share the Applicant's view that the wider landing and ground floor hall mitigate the stair width deficiency. In their view, Article 9.5.8.1. is not applicable because it deals with hallway widths and the situation at hand is a stairway.

The Respondent's opinion on the headroom dispute is that Article 9.8.3.4. requires a minimum headroom for the full width of the stair tread. In their interpretation of this provision the obstruction below the stringer and above the convergence point of the winders does not comply with OBC 9.8.3.4. They believe the width is measured between wall faces and/or guards. Using this measurement, the headroom is 190 mm (7 1/2 in) less than that required. To illustrate their

point, they reference the Guide and Illustrations - Part of the Ontario Building Code (Page 29)which states that "headroom over winders must be measured over the narrow portion of the stair to ensure compliance with minimum headroom clearances."

7. **Commission Ruling**

It is the decision of the Building Code Commission that the clearance between the wall face and the guard provides sufficiency of compliance with Sentence 9.8.3.3.(2) of the Building Code,

AND

the headroom measured vertically at the outside edge of the stringer at 1765 mm provides sufficiency of compliance with Article 9.8.3.4. of the Building Code.

8. **Reasons**

i) The guard obstruction is minimal as a result of the configuration at the guard (within 3% of the maximum) at limited locations.

ii) This obstruction applies only to the first run of the stair to the basement.

iii) The headroom obstruction occurs only above a small section of the winder. The stair treads at this location are not negotiable.

iv) Illumination is provided within the stair so that the obstruction is clearly visible.

Dated at Toronto this 13th day in the month of November in the year 1997 for application number 1997-58.

BCC Ruling No. 97-49-591

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-49-591

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.4.1.4. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89). AND IN THE MATTER OF an application by Messrs. Theodore H. Miller and Paul Faynwachs, Owners, Paul Faynwachs and Ted Miller In Trust, 150 Metcalfe Street, Suite 1100, Ottawa, Ontario, for the resolution of a dispute with Mr. Les Batson, Chief Building Official, City of Ottawa, Ontario, concerning whether the proposed exit stair provides sufficiency of compliance with Article 3.4.1.4. of the Ontario Building Code at 287 MacLaren Street, Ottawa, Ontario.

APPLICANT
Messrs. Theodore H. Miller and Paul Faynwachs, Owners
Paul Faynwachs and Ted Miller In Trust
150 Metcalfe Street, Suite 1100
Ottawa, Ontario

RESPONDENT
Mr. Les Batson
Chief Building Official
City of Ottawa

PANEL
Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Cliff Youdale

PLACE
Toronto and Ottawa, Ontario

DATE OF RULING
Wednesday, October 29th, 1997

APPEARANCES
Mr. Theodore H. Miller
Paul Faynwachs and Ted Miller
In Trust
150 Metcalfe Street
The Applicant

Mr. Grant Morden
Grant L. Morden Architect
601-100 Gloucester Street
Agent for the Applicant

Mr. Les Batson
Chief Building Official
City of Ottawa
The Respondent

Mr. Chris Freeman
Buildings Department
City of Ottawa
For the Respondent

RULING

1. **The Applicant**

   Mr. Theodore Miller, co-owner, Paul Faynwachs and Ted Miller In Trust, 150 Metcalfe Street, Suite 1100, Ottawa, Ontario was issued a building permit under the Building Code Act, 1992 to convert an existing business occupancy to residential at 287 MacLaren Street, Ottawa, Ontario.

2. **Description of Construction**

   The Applicant intends to convert an existing structure, which is more than five years old and is currently classified as Group D - business and personal services occupancy building, to a Group C - residential occupancy. This change would reduce the occupant load from 190 to 40 persons.

   The building is six storeys in building height and has a building area of 1,910 m2 (20,560 ft2). The structure is constructed of noncombustible construction and is equipped with a standpipe

and hose system and a fire alarm system. The ground floor contains an open air garage/parking area with space for eight vehicles, which is open to the exterior at the front and rear of the building. At the front of the front of the parking area is an electronically-controlled security gate, and at the rear is a 1,829 mm (6 ft) high poured concrete wall.

The Applicant proposes to renovate the reminder of the ground floor to provide a lobby for the new residential occupancy. As part of these plans, an exit facility is provided from the floors above leading directly into the parking area. From this door occupants would then travel roughly 15 m (50 ft) to a manual door equipped with panic hardware located within the motorized gate at the garage's entrance.

3. **Dispute** The issue at dispute between the Applicant and the Respondent is whether the proposed exit provides sufficiency of compliance with any of the exit types permitted under Article 3.4.1.4. of the OBC. This provision sets out the types of exit arrangements from any floor area permitted under the Code. Discharging an exit stair into a parking garage does not correspond with the permitted exit types listed in this Article.
4. **Provisions of the Building Code**

3.4.1.4. Types of Exit

(1) Subject to the requirements of this Section, an exit from any floor area shall be one of the following used singly or in combination

(a) an exterior doorway,
(b) an exterior passageway,
(c) an exterior ramp,
(d) an exterior stairway,
(e) an fire escape (as described in Subsection 3.4.7.),
(f) a horizontal exit,
(g) an interior passageway,
(h) an interior ramp, or
(i) an interior stairway.

5. Applicant's Position

The Applicant submitted that the proposed exiting arrangement meets the intent of the Code. Their proposal was submitted under Part 11 of the Code. The Respondent however has been

preventing them from using the more flexible standards found in Part 11. The Applicant, reduced occupant load will decrease the Hazard Index of the building and as a result they believe that the building should be reviewed under the more relaxed Part 11 standards.

The Applicants also indicated that they addressed the Respondent's concern about the means of egress to the front of the building by adding the manual door with the panic hardware in the security gate.

6. **Chief Building Official's Position**

The Respondent submitted that the subject exit does not meet Article 3.4.1.4. of the Code. In their view, the exit facility proposed does not qualify as an exit because it does not meet the requirements included in the definition of exit. They feel the change in major occupancy from Group D to C, as a Renovation Activity #2, requires an evaluation and upgrade of the deficiencies of the early warning and evacuation systems. As they noted, Table 11.3.1.B. requires an evaluation of the "number of exits in other Parts of the Code" and deficiencies upgraded.

As such, the Respondent indicated to the Applicant that they either rectify the deficiencies in accordance with Part 3 of the OBC. Or, using a compliance alternative under Part 11, in accordance with Subsections 11.2.3. and 11.2.4. to the satisfaction of the Chief Building Official, they are requiring that the exit be redesigned to discharge to the exterior.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the evacuation system for the exit through the open air parking area provides sufficiency of compliance with the Building Code provided that:

i) the portion of the path of travel that leads through the open air parking is not more than 9 m in length measured from the exit door to a point at ground level at the perimeter of the building,

ii) measures are taken to prevent vehicles intended to park in spaces adjacent to the path of exit travel from encroaching on the path of exit travel, and

iii) an alternate path of exit travel not leading through the open air parking is available from the interior side of the door opening onto the path of exit travel through the open air parking area.

8. **Reasons**

i) The conditions are consistent with the proposed building code amendments.

ii) The travel distance to a main thorough fare through the parking area is limited to 9 m.

iii) The path of travel is protected from obstruction by vehicles.

iv) An alternate path of exit, not through the parking area, is provided.

Dated at Toronto this 29th day in the month of October in the year 1997 for application number 1997-57.

BCC Ruling No. 97-48-590

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-48-590

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.2.9.3.(6) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Randy Spiegel, Coordinator, Capital Projects, Associated Hebrew School, North York, Ontario, for the resolution of a dispute with Mr. Yaman Uzumeri, Chief Building Official, City of North York, Ontario, concerning whether the standpipe and hose system provides adequate water pressure to comply with Sentence 3.2.9.3.(6) of the Ontario Building Code at the Associated Hebrew School, Neptune Campus, 18 Neptune Drive, North York, Ontario.

APPLICANT

Mr. Randy Spiegel
Coordinator, Capital Projects
Associated Hebrew School
6100 Leslie Street
North York, Ontario

RESPONDENT

Mr. Yaman Uzumeri
Chief Building Official
City of North York

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF RULING

Wednesday, October 29th, 1997

APPEARANCES

Mr. Dave Kaminker
Leipciger, Kaminker,
Mitelman & Partners Inc.
Agent for the Applicant

Mr. Randy Spiegel
Coordinator, Capital Projects
Associated Hebrew School
The Applicant

Mr. J.T. Cleary
Fire Protection Engineer
City of North York
For the Respondent

RULING

1. **The Applicant**

   Mr. Randy Spiegel, Coordinator of Capital Projects, Associated Hebrew School was issued a building permit under the Building Code Act, 1992 to construct a two storey school in the City of North York, Ontario.

2. **Description of Construction**

   The Applicant presents a two storey, institutional building (with two basement levels), constructed of noncombustible construction. The structure has a total building area of 3,242 m2 (34,900 ft2) and is equipped with a sprinkler system and a standpipe and hose system. The building is classified as a Group A, Division 2 occupancy. It is to be used as a school.

The Applicant proposes that the standpipe and hose system be designed and constructed so that the residual pressure at the topmost fire hose outlet is at least 310 kPa (45 psi) and at the upper basement level at least 413 kPa (60 psi).

3. **Dispute**

The issue at dispute between the Applicant and the Respondent is whether the proposed standpipe and hose system provides adequate water pressure to comply with Sentence 3.2.9.3.(6) of the Ontario Building Code. This provision permits the residual water pressure at the design flow rate at the topmost outlet of a required standpipe and hose system to be less than 450 kPa (65.3 psi) if several conditions are met. (The conditions are noted below.) The Code, however, does not stipulate how much less than 450 kPa the said pressure is allowed to be.

4. Provisions of the Building Code

3.2.9.3. Standpipe and Hose System Design

(6) The residual water pressure at the design flow rate at the topmost outlet of a standpipe and hose system that is required to be installed in a building is permitted to be less than 450 kPa (65.3 psi) provided that

(a) the building is sprinklered in conformance the requirements of Sentence 3.2.5.13.(1),

(b) the water supply at the base of the sprinkler riser is capable of meeting the design flow rate and pressure demand of the sprinkler system, including the inside and outside hose allowance, and

(c) fire protection equipment is available to deliver, by means of the fire department connection, the full demand flow rate at a residual water pressure of 450 kPa (65.3 psi) at the topmost outlet of the standpipe and hose system.

5. Applicant's Position

The Applicant submitted that the standpipe and hose design fully complies with OBC Sentence 3.2.9.3.(6). As they note, the building is fully sprinklered, even though this is not required under the Code. Moreover, the standpipe and hose system is only required, they argue, because of the two storey basement.

In their view, the designed residual pressure of at least 310 kPa (45 psi) at the topmost cabinet on the second floor and 413 kPa (60 psi) at the basement level is satisfactory. The Applicant presented hydraulic calculations to support their claims.

6. Chief Building Official's Position

The Respondent submitted that the proposed design for the standpipe and hose system does not comply with the Code. While they recognize that Sentence 3.2.9.3.(6) does not stipulate a minimum water pressure of 450 kPa (psi), they feel that a pressure of 310 kPa (psi) is too low. The standpipe and hose system is intended for occupants to fight incipient fires, but the Respondents believe that the inadequate pressure makes the system potentially hazardous to individuals who attempt to use it.

They also feel that the sprinkler system is not a mitigating factor since it would not be activated at the time of incipient firefighting by occupants.

7. **Commission Ruling**

It is the decision of the Building Code Commission that standpipe and hose system complies with Sentence 3.2.9.3.(6) of the Building Code.

8. **Reasons**

i) The building is sprinklered in conformance with the requirements of Sentence 3.2.5.13.(1).

ii) The water supply at the base of the sprinkler riser is capable of meeting the design flow rate and pressure demand of the sprinkler system, including the inside and outside hose allowance, and

iii) Fire protection equipment is available to deliver, by means of the fire department connection, the full demand flow rate at a residual water pressure of 450 kPa (65.3 psi) at the topmost outlet of the standpipe and hose system.

iv) The building requires only standpipe and hose in the basements under 3.2.9.1.(b) of the Building Code.

v) The fire safety plan should not contemplate the use of standpipe and hose system by occupants.

Dated at Toronto this 29th day in the month of October in the year 1997 for application number 1997-55.

BCC Ruling No. 97-47-589

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-47-589

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Section 9.25 of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Walter Alley, Homeowner, 9700 Menard Street, Windsor, Ontario, for the resolution of a dispute with Mr. Edward Link, Chief Administrative Officer, City of Windsor, Ontario, concerning whether a renovation enclosing an existing atrium space should comply with Section 9.25 of the Ontario Building Code at 9700 Menard Street, Windsor, Ontario.

APPLICANT

Mr. Walter Alley
Homeowner
9700 Menard Street
Windsor, Ontario

RESPONDENT

Mr. Edward Link
Chief Building Official
City of Windsor

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Cliff Youdale

PLACE

Toronto and Windsor, Ontario

DATE OF RULING

Wednesday, October 29th, 1997

APPEARANCES Mr. Walter Alley
Homeowner
9700 Menard Street
Windsor, Ontario
The Applicant

Mr. Pier De Simone
Building Inspector
City of Windsor
For the Respondent

Mr. Brian Foster
Building Inspector
City of Windsor
The Respondent

RULING

1. **The Applicant**

   Mr. Walter Alley, Homeowner, 9700 Menard Street, is an individual to whom a correction order was issued under the Building Code Act, 1992 to install vapour barrier and insulation in the walls and ceiling of a space formerly used as a external atrium at 9700 Menard Street, Windsor, Ontario.

2. **Description of Construction**

   The Applicant is the owner of a Group C - residential condominium unit at 9700 Menard Street, Windsor, Ontario that was constructed approximately 10 years ago. The condominium complex comprises several buildings, each containing a number of units. The Applicant's unit is one of six in his building. The total building areas of the subject unit and the larger building are 1,525 ft2 and 8,700 ft2 respectively. The unit and the building are one storey in building height and are constructed of combustible construction.

The Applicant's unit, when originally constructed, contained a rectangular open-air, non conditioned, atrium located roughly in the centre of the subject unit. The atrium space measures 90 ft2. It is accessed by two sliding glass doors at opposite ends of the atrium.

Concerned about an alleged leak in the basement at the site of the atrium, the Applicant applied for and received a building permit in July, 1996 to enclose the open space. Accordingly, the Applicant had a roof constructed over the atrium. The construction of the roof was 2 x 6 in. framing members at 18 in. on centre with 3/8 in. spruce sheathing on the roof. The roof was finished with new shingles, patched into the existing roof system. Three 21 x 46 in. velux skylights were also installed in the atrium roof. The construction did not include insulation and vapour barrier in the walls and ceiling. Heating and air conditioning facilities were also not provided in this previously non-conditioned space.

3. **Dispute**

The dispute between the Applicant and Respondent is whether the recent construction to enclose the atrium should comply with Article 9.25.2.4. and Sentence 9.25.2.7.(4). These provisions set out requirements for the location of insulation and minimum standards for thermal resistance for glazed areas. Both provisions provide standards that are concerned with the separation of heated (conditioned) and unheated (non-conditioned) space. Central to this issue is whether the newly enclosed atrium constitutes a conditioned space or not.

4. **Provisions of the Building Code**

Thermal Insulation and Control of Condensation

9.25.2.4. Location of Insulation

Insulation shall be provided between heated and unheated spaces and between heated spaces and the exterior, and around the perimeter of concrete slabs-on-ground.

9.25.2.7. Minimum Thermal Resistance

(4) All glazing that separates heated space from unheated space shall have a thermal resistance of not less than 0.30m2.C/W (1.70 ft2.h.0F/Btu).

5. **Applicant's Position**

The Applicant submitted that the construction to enclose the open-air atrium does not create a conditioned space. In their view, their permit application was simply for a roof to create an enclosed atrium. They note that it was never their intention to use this area as interior, conditioned space. As a result, no heating or air-conditioning facilities were applied for, nor provided to the enclosed space. The covered atrium, they contend, is closed and not in use in the winter.

Moreover, the roof construction was essential the Applicant argues due to the severe water leaking at the atrium area into the basement of his unit. the Applicant notes that the roof construction has stopped the leaks.

6. **Chief Building Official's Position**

The Respondent submitted that by constructing a roof and enclosing the atrium, the area becomes a conditioned space and is therefore required to comply with Article 9.25.2.4. and Sentence 9.25.2.7.(4). In their view, the enclosing of the atrium makes that space "open" to the dwelling. As a result, the provisions of Section 9.25 of the OBC should apply.

Specifically, the Respondent feels that the new atrium roof is now separating a heated space from a non-heated space and is thus required to provide sufficient thermal insulation to prevent moisture condensation, especially in the winter. In addition, they believe that the walls and ceiling of the enclosed atrium, which should be appropriately insulated, are required to have a vapour barrier to prevent the diffusion of water vapour from attic and roof spaces.

The Respondent is also contending that much of the work was carried out without the proper municipal building inspections.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the enclosure of an existing open court provides sufficiency of compliance with Section 9.25 of the Building Code provided the unheated space is ventilated in accordance with Article 9.32 of the Building Code.

8. **Reasons**

i) The Building Code Commission considers the court to be an unconditioned space. The enclosed court (Atrium) is unheated, and the enclosing walls do comply with Section 9.25 for thermal design.

ii) Evidence provided by the owner indicated that the space would be used as an unconditioned space.

Dated at Toronto this 29th day in the month of October in the year 1997 for application number 1997-52.

BCC Ruling No. 97-46-588

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-46-588

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.2.45.(2) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Robert Woodman, President, Robert J. Woodman Architect Inc., 526 Highland Avenue, Ottawa, Ontario, for the resolution of a dispute with Mr. Les Batson, Chief Building Official, City of Ottawa, Ontario, to determine whether the proposed glass paver floor assembly provides sufficiency of compliance with Sentence 3.2.2.45.(2) of the Ontario Building Code at St. Laurent Shopping Centre, 1200 St. Laurent Blvd., Ottawa, Ontario.

APPLICANT

Mr. Robert Woodman, President
Robert J. Woodman Architect Inc.
526 Highland Avenue
Ottawa, Ontario

RESPONDENT

Mr. Les Batson
Chief Building Official
City of Ottawa

PANEL

Mr. Michael Lio (Chair)
Ms. Lesia Beznaczuk
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, October 9th, 1997

APPEARANCES

Robert Woodman, President
Robert J. Woodman Architect Inc.
The Applicant

Judy Jeske, Associate
Leber/Rubes Inc.,
Agent for the Applicant

Eric Esselink
Leber/Rubes Inc.,

RULING

1. **The Applicant** Mr. Robert Woodman is a person who has applied for a building permit under the Building Code Act, 1992 to renovate a retail shopping mall by infilling two existing floor openings by adding a glass paver floor assembly at the St. Laurent Shopping Centre, 1200 St. Laurent Blvd., Ottawa, Ontario.
2. **Description of Construction**

   The St. Laurent Shopping Centre is approximately 81,290 m2 (875,000 ft2) in building area. It is two storeys in building height, with one basement level. It is constructed of noncombustible construction. The floor assemblies have a 2 h fire-resistance rating.

   The Centre has several major occupancies; Group E - mercantile (retail), Group D - businesses and personal services (offices, salons and banks, etc.), Group A, Division 1 - assembly occupancies for viewing performing arts (movie theatres), and Group A, Division 2 - assembly occupancies not elsewhere classified (career training centres).

   The building is equipped with a two-stage fire alarm system. It also has a sprinkler system, a standpipe and hose system, and a smoke control system in the South Court area.

The Applicant proposes to infill two existing openings between floor levels, both are located in the public corridor of the shopping centre's South Court, on either side of the main escalators. The openings are approximately 3 m by 7.5 m (10ft by 25ft) and the Applicant proposes to close these over with a floor assembly constructed of solid glass floor pavers supported by structural steel members. The guards around the existing openings will be removed.

3. **Dispute**

The issue at dispute between the Applicant and the Respondent is whether the glass floor paver assembly provides sufficiency of compliance with Sentence 3.2.2.45.(2) of the Ontario Building Code. Sentence 3.2.2.45.(2) requires that buildings that must comply with this provision must be of noncombustible construction and that the floor assemblies shall be fire separations with a 2 h fire-resistance rating. The subject floor assembly has not been tested against the requirements of CAN 4-S101-M, "Standard Methods for Fire Endurance Tests of Building and Construction Materials" for a two hour fire-resistance rating.

4. **Provisions of the Building Code**

Sentence 3.2.2.45.(2) Mercantile Buildings, up to 6 Storeys

(2) The building shall be of noncombustible construction, and

(a) floor assemblies shall be fire separations with a fire-resistance rating of not less than 2 h, (b) mezzanines shall have a fire-resistance rating of not less than 1 h, (c) roof assemblies shall have a fire-resistance rating of not less than 1 h, and (d) all loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.

5. **Applicant's Position**

The Applicant submitted that the glass and steel floor assembly, in conjunction with additional safety measures, provides sufficiency of compliance with Sentence 3.2.2.45.(2). Under non-fire conditions, they note that the assembly as a whole will be designed to ensure that the structural sufficiency of the floor will meet the requirements for dead and live loads.

They have also designed the assembly to be safe in a fire. The steel members, for example, will be protected with either spray-on fire proofing, boxed gypsum board construction, or intumescent paint. Further, the path of travel on both sides of the subject floor assemblies will be at least 3 m (10 ft) from the glass pavers to the store fronts on either sides. In effect, this would

create aisles on both sides of the infilled areas that would meet the standards under the OBC for kiosks in a public corridor more than 9 m wide. Occupants would therefore have an adequate path of travel in the event of an emergency.

In addition, the Applicants propose several measures to protect the glass paver assemblies. They plan to install close-spaced quick response sprinklers around the infilled areas according to 4-5.3.4 of NFPA 13. The sprinklers surrounding both glass paver assemblies will be separately zoned and electronically supervised by the fire alarm system. In conjunction with the sprinklers, they propose to install noncombustible draft stops as per NFPA 13, as well as additional smoke detectors that are designed to activate the smoke exhaust system. The Applicants are also proposing to install supplementary sprinklers below the glass floor areas to provide continuity of the Centre's sprinkler system. They note that by closing the openings in combination with these measures, occupants and fire fighters on the higher levels may in fact be more protected from fire below than previously.

The Applicants also point to the fact that the South Court area of the mall is equipped with a smoke exhaust system that is intended to reduce the spread of smoke to other parts of the building. This system will reduce smoke accumulation by venting it through the roof, which will enhance visibility and general safety during a fire.

A fire safety plan is currently being developed for the St. Laurent Shopping Centre. This plan will consider the locations and special protection for the glass floor paver assemblies. As well, a floor plan indicating these assemblies will be posted in the appropriate locations.

Finally, the Applicants note that a similar floor assembly was installed in the BCE Place in Toronto.

6. **Chief Building Official's Position**

The respondent submitted that in the absence of test data confirming whether the glass floor paver assembly meets the CAN 4-S101-M standards, it is their belief that they do not possess the authority to approve this proposal. In their view, the infill construction should provide a 2 h fire-resistance rating as per Sentence 3.2.2.45.(2). Further, without any substantiation of the adequacy of the subject assembly, they are still requiring that the areas be provided with appropriate guards according to Clause 3.3.1.17.(1)(c).

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed glass paver floor assembly provides sufficiency of compliance with Articles 3.2.2.45 and 3.3.1.17 of the Building Code provided:

i) quick response sprinklers are installed in accordance with NFPA 13-1991 and

ii) draft stops are installed in accordance with the requirements of the Building Code.

8. **Reasons:**

i) Article 3.2.8.2. allows the first and the storey above or below it to be interconnected by virtue of an unprotected floor opening in a Group E major occupancy provided the interconnected floors are sprinklered.

ii) evidence was provided that the glass paver floor system has been designed specifically as a floor assembly and is capable of supporting required dead and live loads.

iii) the steel structure supporting the glass paver floor assembly will have a 2 hour fire resistance rating.

iv) A smoke exhaust system is installed that will enhance visibility for fire fighting and occupant evacuation.

v) the nature of the floor assembly will be documented as part of the fire safety plan.

vi) floor plans noting the glass block floor assembly will be provided at all exits used for fire fighting.

Dated at Toronto this 9th day in the month of October in the year 1997 for application number 1997-54.

BCC Ruling No. 97-45-587

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-45-587

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.1.5.5. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Galli Tiberini, President, Piazza Woodbridge Residences Inc., 111 Creditstone Road, Concord, Ontario, for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, Ontario, concerning whether the proposed wall assembly, including the Royal Building System exterior cladding, provides sufficiency of compliance with Article 3.1.5.5. of the Ontario Building Code at the Piazza Woodbridge Residences, 53 Woodbridge Avenue, Woodbridge (Vaughan), Ontario.

APPLICANT

Mr. Galli Tiberini, President,
Piazza Woodbridge Residences Inc.
111 Creditstone Road
Concord, Ontario,

RESPONDENT

Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL

Mr. Roy Philippe (Chair)
Ms. Lesia Beznaczuk
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, October 9th, 1997

APPEARANCES

Mr. Galli Tiberini, President
Piazza Woodbridge Residences Inc
The Applicant

Mr. Randy Brown, President
Randal Brown & Assoc
Agent for the Applicant

Mr. Mani Navabi
Chief Building Official
City of Vaughan Respondent
The Respondent

Mr. Steve Penna
Technical Supervisor
City of Vaughan
For the Respondent

RULING

1. **The Applicant**

   Mr. Galli Tiberini is a person who has applied for a building permit under the Building Code Act, 1992 to construct two residential buildings 4 and 6 storeys in height using the 100 mm Royal Building System wall construction, at the Piazza Woodbridge Residences, 53 Woodbridge Avenue, Vaughan (Woodbridge), Ontario.

2. **Description of Construction**

   The Applicant proposes to construct residential condominium buildings, 4 and 6 storeys in building height. Buildings A and B have building areas of 691 m2 and 2,236 m2 respectively. Both buildings are constructed of noncombustible construction. Each building is equipped with a

standpipe and hose system and a fire alarm system. Neither building however contains a sprinkler system, except in the basements.

As part of this renovation, the Applicant is proposing to utilize the 100 mm Royal Building System as the exterior wall/cladding assembly. Similar to pre-cast concrete, this cladding assembly requires that prefabricated wall panels be filled with concrete and attached to the exterior of the building. The casting of the wall panels is done by pouring concrete between two PVC forms held in place by many PVC cross-webs.

There are two proposed exterior wall/cladding assemblies. Assembly #1 on the outside comprises a 100 mm thick concrete panel prefabricated in PVC forms. The exterior of the PVC form is covered with a cementitious coating (a mixture of Type 10 Portland cement and Durock Prep Coat) reinforced with an applied fabric as the final finish. The inside of this assembly is made of 152 mm of thick batt insulation, vapour barrier, and 15.9 mm Type X gypsum wallboard mechanically fastened to steel studs. Assembly #2 is similar to #1 but an additional 50 mm expanded polystyrene rigid insulation is added to the external surface of the concrete panel. The same cementitious coating is applied to the exterior of the insulation.

3. **Dispute**

The issue at dispute between the Applicant and respondent is whether the proposed exterior wall/cladding assemblies provide sufficiency of compliance with Article 3.1.5.5. of the Ontario Building Code. This provision, which applies to a building that must be of noncombustible construction, does not permit an exterior non-loadbearing wall assembly, which includes combustible cladding components, to be used on a six storey building unless three conditions are satisfied.

These conditions, found in Sentence (1), are that the building must be sprinklered, the interior face of the wall assembly is protected by an appropriate thermal barrier, and that the wall assembly meets the test standards for flame spread and heat flux. Sentence (9) however eliminates these restrictions when adequately protected foamed plastic insulation is used in the wall assembly.

4. **Provisions of the Building Code**

Article 3.1.5.5. Combustible Cladding

(1) Except as provided in Sentence (9) or where noncombustible cladding is required by Subsection 3.2.3., an exterior non-loadbearing wall assembly that includes combustible cladding components is permitted to be used in a building required to be of non-combustible construction that is not more than 3 storeys in building height, if not sprinklered, and not more than 6 storeys in building height, if sprinklered, provided the interior surfaces of the wall assembly are protected by a thermal barrier conforming to Sentence 3.1.5.11.(3) and the wall assembly satisfies the criteria of Sentences (5) and (6) when subjected to testing in conformance with Sentences (2) to (4).

(2) The fire testing required by Sentence (1) shall be conducted on a wall assembly that (a) is not less than 5 m (16 ft 5 in) wide and not less than 10 m (32 ft 10 in) high with an opening 2.5 + 0.1 m (8 ft 2 in + 4 in) wide by 1.4. + 0.1 m (4 ft 7 in + 4 in) high, located in the middle of the assembly not more than 3 m (9 ft 10 in) above the lowest edge,

(b) is representative of the exterior wall construction, except for the interior finish, and

(c) incorporates horizontal and vertical joints not more than 3 m (9 ft 10 in) vertically above the opening.

(3) The wall assembly shall be exposed on its exterior face to a flame issuing from the opening that, on a noncombustible wall having a density of not less than 700 kg/m3 (44 lb/ft3) to a depth of 12 mm (1/2 in) from the exposed surface, generates an average heat flux between

(a) 42 and 48 kW/m2 (13,300 and 15,200 Btu/ft2h) measured 0.5 m (19 in) above the opening, and

(b) 25 and 29 kW/m2 (7930 and 9190 Btu/ft2h) measured 1.5. m (4 ft 11 in) above the opening.

(4) The duration of exposure to the flame specified in Sentence (3) shall be not less than 15 min following a 5 min gradual heat flux increase and preceding a 5 min gradual cooldown period after the flame exposure.

(5) Flaming on or in wall assembly shall not spread more than 5 m (16 ft 5 in) above the opening during or following the flame exposure of 25 min.

(6) The heat flux during the flame exposure on a wall assembly shall be not more than 35 kW/m2 (11,100 Btu/ft2h) measured 3.5. m (11 ft 6 in) above the opening.

(7) A wall assembly permitted by Sentence (1) that includes combustible cladding of fire-retardant treated wood shall be tested for fire exposure after the cladding has been subjected to an accelerated weathering test as specified in ASTM D2898, "Test Method for Accelerated Weathering of Fire-Retardant Treated Wood for Fire Testing".

(8) Wood decorative cladding is permitted to be used on exterior canopy fascias of a building required to be of noncombustible construction provided it is fire-retardant treated wood that has been, before testing, conditioned in conformance with ASTM D 2898, "Test Method for Accelerated Weathering of Fire-Retardant Treated Wood for Fire Testing", and the canopy is

(a) a first floor canopy, or

(b) not more than 6 m (19 ft 8 in) above ground level

(9) The requirements in this Article do not apply where foamed plastic insulation is used in an exterior wall assembly of a building and the insulation is protected in conformance with Clause 3.2.3.7.(3)(a).

5. **Applicant's Position**

The Applicant submitted that the proposed wall/cladding assembly provides sufficiency of compliance with Article 3.1.5.5. of the OBC. In their opinion, the fuel content of the PVC in these wall systems presents less of a hazard than the foamed plastic insulation currently allowed in exterior walls under Sentence 3.1.5.5.(9) of the OBC. They argue that the PVC in assemblies #1 and #2 will be protected from both sides. The interior sheet of PVC is protected by the Type X (15.9 mm, 5/8 in) drywall mounted on steel studs. The exterior PVC sheet and polystyrene insulation (in the case of assembly #2) will be protected by the Durock finish which will be applied in accordance with ULC listing EW20 designed for protection of exterior claddings.

The Applicants also hold that assembly #2 meets the requirements of Sentence 3.1.5.5.(9) regarding foamed plastic insulation which is appropriately protected according to Clause 3.2.3.7.(3)(a). As a result, they feel that the requirements of Article 3.1.5.5. should not apply to this assembly.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed wall/cladding assemblies do not provide sufficiency of compliance with Article 3.1.5.5. They argue that all of the conditions set out in Sentence

3.1.5.5.(1) for a building of six storeys to permit combustible elements in an exterior cladding have not been met. The building is not sprinklered and the appropriate testing has not been done. As a result, the PVC forms and webbing used in these assemblies is a combustible component found in a wall assembly that is required to noncombustible since all conditions have not been met.

They disagree with the Applicant's assertion that because of its foamed plastic insulation, assembly #2 is permitted under Sentence 3.1.5.5.(9) to have the aforementioned conditions waived. In their view, the requirements to protect the insulation in an exterior wall assembly found in Clause 3.2.3.7.(3)(a) are only for the foamed plastic insulation found in that assembly and not other combustible materials, i.e. the PVC in the Royal Building System exterior wall construction.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the exterior cladding panel not containing foam plastic on the exterior face must comply with the provisions of Article 3.1.5.5. of the Building Code

AND

It is the decision of the Building Code Commission that the exterior cladding panel with foam plastic on the exterior face must comply with Sentence 3.2.3.7.(3)(a) and if the option of 3.2.3.7.(3)(a)(ii) is selected, a test of the complete assembly is required to demonstrate compliance.

8. **Reasons**

i) The panel not containing foam plastic on the exterior face contains combustible cladding components and thus is subject to Article 3.1.5.5.

ii) Based on evidence provided, the panel containing foam plastic on the exterior face (under the current wording of Clause 3.1.5.5.(a) of the Building Code) is exempt from compliance with Article 3.1.5.5. but requires compliance with Clause 3.2.3.7.(3)(a) of the Building Code.

iii) This decision is specific for this application only.

Dated at Toronto this 9th day in the month of October in the year 1997 for application number 1997-53.

BCC Ruling No. 97-44-586

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-44-586

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992.* AND IN THE MATTER OF Sentence 9.9.9.1.(1), Articles 3.3.4.4., 9.10.19.3. and Subsection 3.2.5. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Harvey Fruitman, Executive Vice President, Torresdale Construction Ltd., City of North York, Ontario, for the resolution of a dispute with Mr. Leo Grelette, Chief Building Official, City of Aurora, Ontario, to determine whether the proposed renovations provide sufficiency of compliance with Sentences 3.2.5.5.(1), 3.2.5.6.(4) and Article 9.10.19.3, Articles 3.3.4.4. and 9.9.9.1., and Sentence 3.2.3.13.(2) and Article 9.9.4.4. of the Ontario Building Code at the Countryland Townhomes, 101 MacDonald Drive, Aurora, Ontario.

APPLICANT

Mr. Harvey Fruitman, Executive Vice President
Torresdale Construction Ltd.
City of North York
4800 Dufferin Street, Suite 200
North York, Ontario

RESPONDENT

Mr. Leo Grelette
Chief Building Official
Town of Aurora

PANEL

Mr. Michael Lio (Chair)
Ms. Lesia Beznaczuk
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, October 9th, 1997

APPEARANCES

Mr. Phillip Marsland
Torresdale Construction
North York, Ontario
The Applicant

Mr. Randal Brown
Randal Brown & Assoc. Ltd.
Willowdale, Ontario
Agent for the Applicant

Mr. Thom Vandenbussche
Senior Building Inspector
Town of Aurora
For the Respondent

RULING

1. **The Applicant**

   Mr. Harvey Fruitman, Executive Vice President, Torresdale Construction is a person to whom a building permit was issued under the Building Code Act, 1992 to renovate existing rental townhouse units into residential condominiums, at Countrylane Townhomes, Aurora, Ontario.

2. **Description of Construction**

   The Countryland Townhomes is a 38,707 m2 (9.565 acres) site, divided into twelve blocks, with a total of 200 rental townhouse units, consisting of 28,182 m2 (303,363.18 ft2) of building area.

   There are three types of townhouse suites; 100 A3 suites, 81 B3 suites, and 19 C3 suites. The approximate sizes of A3, B3 and C3 units are 145 m2 (1,558.32 ft2), 130 m2 (1,398.32 ft2) and 168 m2 (1,803.54 ft2) respectively. All suites are 3 storeys in building height.

The townhouse units are constructed of combustible construction. There are 2 parking spaces provided in the front of all A3 units at grade level. These parking spaces are intended for both the A3 suites as well as the adjoining B3 or C3 units, which are attached to the A3 units on the side opposite to the parking facilities. The subject parking areas are currently covered by a concrete deck and are separated by concrete block walls into garage-like car bays that can accommodate two vehicles. Both the A3 suites and the attached B3 or C3 units have an exit into this open-ended garage area. For the A3 units, this is the only exit currently provided.

The other unit types have an additional exit on their side of the building. The deck space above the parking area, which is attached to the second floor of the A3 suites, is currently used as a series of narrow patios which are abutted by a long, open-air corridor.

The proposed renovation would convert the townhouse units into residential condominiums. The work planned would divide the existing double car bays with 1 h fire separations into single vehicle garages which would also have steel overhead garage doors added to the openings to completely enclose the parking space. Drywall on the ceiling of all garages would be upgraded as well. The narrow patios and the long, external corridors would be replaced by larger patios that would cover the full concrete deck areas. It is proposed that pairs of A3 units share an exterior exit stair that would be accessible from the second storey patio area of both units. To maintain the continuity of the existing outside passageway for the exterior exit stairs, it is also proposed that bi-swinging gates be installed between the patios of the A3 units. This would allow the occupants of each A3 suite the option of choosing between several exit stairs in an emergency. The Applicant is also proposing to install hard-wired smoke detectors in all Countrylane Townhome units.

Countrylane Townhomes are classified as having a Group C - residential major occupancy. Many of the blocks and townhouse units are subject to Part 9 of the Building Code, however some portions of certain blocks exceed 600 m2 in building area and are therefore subject to Part 3.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed renovations provide sufficiency of compliance with Sentences 3.2.5.5.(1), 3.2.5.6.(4) and Article 9.10.19.3., Articles 3.3.4.4. and 9.9.9.1., and Sentence 3.2.3.13.(2) and Article 9.9.4.4. of the Ontario Building Code. The partition of the double bays into single car garages and the placement of

garage doors at their openings blocks the only exterior exit door for the A3 suites. The proposed blocking of this exit creates three issues.

The first issue revolves around whether there is appropriate fire department access. Sentence 3.2.5.5.(1) requires that buildings over 600 m2 in building area provide access routes for fire department vehicles to the principle entrance and to each building face with required access openings. Sentence 3.2.5.4.(6) requires that a portion of a building that is cut off without access from the remainder of the building be not more than 45 m from fire fighting vehicle to the entrance of the remote area. Article 9.10.19.3. provides similar requirements for Part 9 buildings. It reiterates that access for fire fighting equipment shall be provided to each building by a street, private roadway or yard. The blocking of the A3 unit's parking level entrances has meant that the fire department access has been limited, and in the case of some buildings suites are farther than the permitted 45 m.

The second issue regarding the installation of the garage doors is the provision of a means of egress through the construction of a new second storey, shared exterior stairs proposed for the A3 units. Articles 3.3.4.4. and 9.9.9.1. of the OBC set out the egress standards from a dwelling unit in Part 3 and Part 9 buildings respectively. In particular, Article 3.3.4.4 requires that an egress door be provided on the uppermost and lowest storey of a dwelling unit unless certain conditions are met. As well, the "stacked" nature of the townhouses may not satisfy Sentence 9.9.9.1.(2), which requires that the travel distance be not more than one storey if there is no dwelling unit above or below. The proposed exit doorways are also higher than the 1.5 m allowed in both Articles 3.3.4.4. and 9.9.9.1. Also in dispute is Sentence 3.3.4.4.(2) which requires that a dwelling unit's exit door shall open directly into a public access to an exit. The proposal to replace the long corridors fronting the narrow patios with enlarged, connected patios may not be consistent with a public access to an exit.

The third issue is that the proposed new shared exterior egress stairs pass within roughly 1 m of the garage door openings and may result in dangerous exposure to a fire originating in a garage. Sentence 3.2.3.13.(2) requires that openings in the exterior wall of a building located within 3 m horizontally of an unenclosed stair serving that building which may cause a hazard to such stairs shall be protected with wired glass or glass block. Article 9.9.4.4. provides the same standards for Part 9 buildings.

4. **Provisions of the Building Code**

Sentence 3.2.5.5.(1) Access Routes

(1) Every building which is more than 3 storeys in building height or more than 600 m2 (6460 ft2) in building area shall be provided with access routes for fire department vehicles

(a) to the principal entrance, and
(b) to each building face having access openings for fire fighting as required in Articles 3.2.5.1. and 3.2.5.2.

Sentence 3.2.5.6.(4) Location of Access Routes

(4) Where a portion of a building is completely cut off from the remainder of the building so that there is no access to the remainder of the building, the access routes required by Sentence (2) shall be located so that the unobstructed path of travel from the vehicle to one entrance of each such portion is not more than 45 m (147 ft 8 in).

Article 9.10.19.3 Fire Department Access to Buildings

(1) Access for fire department equipment shall be provided to each building by means of a street, private roadway or yard.

(2) Where access to a building as required in Sentence (1) is provided by means of a roadway or yard, the design and location of such roadway or yard shall take into account connection with public thoroughfares, weight of fire fighting equipment, width of roadway, radius of curves, overhead clearance, location of fire hydrants, location of fire department connections and vehicular parking.

Article 3.3.4.4. Egress from Dwelling Units

(1) Single storey dwelling units in apartment buildings need not lead to a public corridor or exterior passageway on the same storey provided the dwelling units are served by private stairways leading directly to a public access to exit on the storey

(a) immediately above, and (b) immediately below. (2) Except as provided in Sentences (3) and (4), every dwelling unit containing more than 1 storey shall have an exit door or an egress door opening directly into a public access to exit from the uppermost storey and from the lowest storey of the dwelling unit so that the floor level of each such storey is served by an exit or egress door located not more than 1.5 m (4 ft 11 in) above or below the floor level.

(3) A single exit is permitted from a dwelling unit provided the exit is an exterior doorway not more than 1.5 m (4 ft 11in) above adjacent ground level and (a) it is not necessary to travel up or down more than 1 storey to reach the exit door, or (b) the uppermost floor level opens to a balcony not more than 6 m (19 ft 8 in) above adjacent ground level.

(4) An a egress door from either the uppermost storey or the lowest storey in a dwelling unit, as required in Sentence (2), need not be provided

(a) where that storey is served by a stairway that

(i) leads to a public access to exit,

(ii) has not direct access to any other storey in the dwelling unit, and

(iii) is separated from the other storeys in the dwelling unit by a fire separation having a fire-resistance rating of not less than 45 min, or

(b) where a smoke alarm conforming to Article 3.2.4.21. is installed

(i) on the uppermost storey of a dwelling unit having not more than 2 storeys above the first storey of the building, or

(ii) on each storey of the dwelling unit provided it is not necessary to travel either more than 18 m (59 ft 1 in), or more than 1 storey up or down to reach the egress door.

(5) In buildings of residential occupancy not more than 3 storeys in building height, a doorway from a dwelling unit is permitted to open directly into an exit stairway provided such dwelling unit has a second and separate means of egress.

(6) A doorway from a dwelling unit may open onto an interior corridor served by a single exit, or an exterior balcony served by a single exit stairway, or an exterior passageway served by a single exit stairway provided each dwelling unit has a second and separate means of egress.

Article 9.9.9.1 Travel Limit to Exits or Egress Doors

(1) Except as provided in Sentences (2) and (3), every dwelling unit containing more than one storey shall have a sufficient number of exits of egress doors so that it shall not be necessary to travel up or down more than 1 storey to reach a level served by

(a) an egress door to a public corridor, enclosed exit stair or exterior passageway, or (b) an exit doorway not more than 1.5 m (4 ft 11 in) above adjacent ground level. Sentence 3.2.3.13.(2) Protection of Exit Facilities (2) Where an unenclosed exterior exit stair or ramp may be exposed to fire from openings in the exterior walls of the building it serves, the openings in the exterior walls of the building shall be protected with wired glass in fixed steel frames or glass block conforming to Article 3.1.8.14. where the openings in the exterior walls of the building are within 3 m (9 ft 10 in) horizontally and

(a) less than 10 m (32 ft 10 in) below the exit stair or ramp, or (b) less than 5 m (16 ft 5 in) above the exit stair or ramp. Article 9.9.4.4. Openings Near Unenclosed Exit Stairs and Ramps.

Where an unenclosed exterior exit stair or ramp provides the only means of egress from a suite, and is exposed to fire from openings in the exterior walls of another fire compartment, the openings in the exterior walls of the building shall be protected with wired glass in fixed steel frames or glass block conforming to Articles 9.10.13.5. and 9.10.13.7. when the openings in the exterior walls of the building are within 3 m (9 ft 10 in) horizontal

5. **Applicant's Position** The Applicant submitted that the proposed renovations provide sufficiency of compliance with the above listed provisions. Regarding the issue of fire department access, for the Part 3 buildings they recognize that the 45 m limit between the entrance of a cutoff unit and a fire department vehicle may not be met. Instead, they rely on Sentence 11.3.5.1.(1). This provision deals with extended buildings and it would allow them to utilize compliance alternative C22.

   This alternative states that for "buildings 6 storeys and less, existing access to existing occupancy is acceptable..." This would permit the Applicant to close over the garage entrances and construct new exit stairs without providing additional measures to compensate for the lesser access. Considering the Part 9 buildings under the same extended buildings provision, the Applicants propose to employ compliance alternative C153 to the same effect. In their view, the extended buildings meet the intent of the OBC, and roughly 90 per cent of the units meet the literal requirements of the Code.

   Since the issue of providing an exit from the A3 suites requires the construction of new exterior exit stairs, the Applicant relies not upon compliance alternatives but new construction provisions in Parts 3 and 9. To address the requirement of providing an exit from the uppermost and lowest floors of the unit found in Sentence 3.3.4.4.(2), the Applicants propose to install a hard-wired 120 volt interconnected smoke alarm on each floor of all dwelling units as per Subclause

3.3.4.4.(4)(b)(i). In their view, this would preclude the necessity for uppermost and lowest floor exits.

For the Part 9 buildings, they argue that egress could be accommodated under Clause 9.9.9.1.(1)(b) or Sentence 9.9.9.1.(2). The first provision allows dwelling units with more than 1 storey to have a sufficient number exits so that it is not necessary to travel up or down more than 1 storey to reach a level served by an exit doorway that is not more than 1.5 m (4 ft 11 in) above the adjacent ground. (The Applicant does admit however that the proposed second level exit door is higher than 1.5 m. This issue is not addressed.) The Applicant also notes that Sentence 9.9.9.1.(2) allows travel distance to be greater than 1 storey if the floor level is served by openable windows. This should afford them some greater flexibility in interpreting the exiting arrangements they have provided. Further, these units will also have the interconnected, hard-wired smoke alarm system.

Concerning the issue of the door opening into an access to exit as required under 3.3.4.4.(2), the Applicants argue that having two dwelling units share an exit stair to the ground level is similar to many exiting arrangements in older buildings. They also argue that the continuity of the exterior passageway will be maintained due to the bi-swinging gates that are proposed to be installed between the patios. This continuity of the passageway will give occupants access to two or more exterior exit stairs. Overall, it is their opinion that the exiting as designed meets the intent of the Code.

The Applicants believe that they have addressed the issue of exposure to the exterior stair as well. They note that the new exiting arrangements would offer occupants many escape options in an emergency, thereby avoiding stairs that may present hazards. The garages will be divided with 1 h fire separations and will have upgraded drywall on the ceilings. The new garage doors, they argue, will also offer some protection. Lastly, they point to the concrete block fire separations between the units and the proposed smoke alarm system which they feel will give the entire site a good level of fire protection.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed renovations did not provide sufficiency of compliance with the provisions discussed and in some instances place the buildings into situations of non-compliance. They reject compliance alternatives C22 and C153 which depends on maintaining the existing access because, in their view, the proposed addition of garage doors blocks off the existing access. While adding garage doors may be deemed to be "extending the

building", the Respondent argues however that this particular extension substantially changes the existing access that the alternative allows as acceptable.

The municipality believes that the exiting requirements have not been satisfied. For the Part 3 buildings, they hold that the proposed second floor door does not open into an access to an exit. In their opinion, the linked patios do not constitute an access to an exit, nor a passageway. In fact, they are concerned that the balconies may support potential obstacles for exiting such as bar-be-ques, furniture and other accessories. In the Part 9 structures the Respondent does not believe that travel distances allowed in Sentence 9.9.9.1.(2) due to openable windows can be considered legitimate due to their contention that as stacked townhouses there are dwelling units above and below other units.

The Respondent also argues that the stairs do not meet the provisions regarding exposure to exterior exit stairs. The creation of the external stairs only serves to add to the non-compliance of the townhouse suites. The result of this proposal would be a reduction in safety due to potential fire exposure. They also feel that the stairs, as external exits, present dangers during inclement weather such as wind, rain and ice. This would be especially an issue for visitors unfamiliar with the stairs and who will often not be able to use the garage entrance.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed renovations provide sufficiency of compliance with Sentence 9.9.9.1.(1), Articles 3.3.4.4., 9.10.19.3. and Subsection 3.2.5.

8. **Reasons**

i) Additional exterior stairways will be provided to improve fire department access and exiting from the 3A dwelling units.

ii) Hard-wired smoke alarms will be provided on every level and interconnected within each dwelling unit.

iii) Garages within each dwelling unit will be separated from each other by construction having a 1 hour fire resistance rating.

iv) Occupant safety is not reduced consistent with the intent of Part 11 of the code.

Dated at Toronto this 9th day in the month of October in the year 1997 for application number 1997-51.

BCC Ruling No. 97-43-585

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-43-585

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.1.4.(1) and 3.2.1.4.(2) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Robert Riddell, Senior Technical Specialist, Algoma Steel Inc., 105 West Street, Sault Ste. Marie, Ontario, for the resolution of a dispute with Mr. Maurice Kukoraitis, Director of Engineering, City of Sault St. Marie, Ontario, concerning whether the floor assemblies above the oil cellar and caster basement provide sufficiency of compliance with Sentences 3.2.1.4.(1) and (2) of the Ontario Building Code (OBC), whether the openings in the said floor assemblies provide sufficiency of compliance with Sentence 3.1.8.1.(2) of the OBC, and whether the number of exits from the caster basement provide sufficiency of compliance with Sentence 3.4.2.1.(2) at the Direct Strip Production Complex, Algoma Steel Inc., 105 West Street, Sault Ste. Marie, Ontario.

APPLICANT

Mr. Robert Riddell, Senior Technical Specialist
Algoma Steel Inc., 105 West Street
Sault Ste. Marie, Ontario

RESPONDENT

Mr. Maurice Kukoraitis, Director of Engineering
City of Sault St. Marie, Ontario

PANEL

Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Demir Delen

PLACE

Toronto and Sault Ste. Marie, Ontario

DATE OF RULING

Wednesday, September 24th, 1997

APPEARANCES

Mr. Robert Riddell
Senior Technical Specialist
Algoma Steel Inc.
The Applicant

Mr. Paul Tavares
Civil/Structural Eng
Hatch Associates
For the Applicant

Mr. Maurice Kukoraitis
Director of Engineering
City of Sault St. Marie
The Respondent

Syl Allard
Plan Examiner
City of Sault Ste. Marie
For the Respondent

RULING

1. **The Applicant**

   Mr. Robert Riddell, Senior Technical Specialist, Algoma Steel Inc, is a person who has been issued an order to comply under the Building Code Act, 1992 to bring the floor assemblies over the oil cellar and the caster basement of a recent addition in conformity with certain provisions of the Ontario Building Code at the Direct Strip Production Complex, Algoma Steel Inc., 105 West Street, Sault Ste. Marie, Ontario.

2. **Description of Construction**

The existing building is a three and four storey industrial structure with an area of approximately 60,380 m2 (650,000 ft2). The addition, constructed between 1996 and 1997, has added another 32,520 m2 (350,000 ft2) to the structure making the current total building area 92,900 m2 (1,000,000 ft2).

The building is constructed of noncombustible construction. It is equipped with a fire alarm system. The building also has a partial sprinkler system, only in the oil cellar of the addition. It does not have a standpipe and hose system.

Within the addition there are two large depressed areas in the main floor. These areas are known as the oil cellar and the caster basement. They are located beneath the addition's major production and processing equipment and are used for servicing the machinery above and the accommodation of ancillary equipment. The floor assemblies above the oil cellar and caster basement are concrete slab supported with unprotected steel beams.

Both the existing building and the addition are considered to have a Group F, Division 3 (low hazard industrial) major occupancy. The structure, including the addition, is used to manufacture steel slabs.

3. **Dispute**

There are three issues at dispute between the Applicant and the Respondent. The first is whether the floor assemblies above the oil cellar and the caster basement provide sufficiency of compliance with Sentences 3.2.1.4.(1) and (2). These provisions of the OBC require that a floor assembly above a basement must be constructed as a fire separation with a fire-resistance rating as determined in Subsection 3.2.2., but not less than 45 min. The supporting elements supporting the subject floor assembly are required to have the same fire-resistance rating as the floor. While the concrete slab floor above the oil cellar and caster basement in the Direct Strip Production Complex may provide the necessary 45 minute rating, the steel supporting beams for these floor assemblies are unprotected and therefore do not have a resistance rating.

The second dispute is whether the openings in the said floor assemblies provide sufficiency of compliance with OBC Sentence 3.1.8.1.(2), which requires that all openings in fire separations must be protected with closures. The openings at the oil cellar and the caster basement do not have closures. There are large numbers of pipes that access the mill stands, and in so doing create many openings between floor levels. As well, the steel production equipment in some

areas of the complex forms part of the floor, and as it moves it periodically exposes the basement.

The last dispute is over whether the number of exits from the caster basement of the Direct Strip Production Complex provide sufficiency of compliance with Sentence 3.4.2.1.(2) of the Code. This provision allows a floor area in a Group F, Division 3 building less than two storeys in height to have a single exit if the area served is less than 200 m2, the travel distance does not exceed 25 m, and the occupant load is less than 60. Currently, the caster basement has only one exit.

4. **Provisions of the Building Code**

3.2.1.4. Floor Assembly over Basement

(1) A floor assembly immediately above a basement shall be constructed as a fire separation having a fire-resistance rating conforming to the requirements for floor assemblies in Articles 3.2.2.16. to 3.2.2.62., but not less than 45 min. (2) All loadbearing walls, columns and arches supporting a floor assembly immediately above a basement shall have a fire-resistance rating not less than that required in Sentence (1) for the floor assembly.

3.1.8.1. Fire Separations and Closures

(2) Openings in fire separations shall be protected with closures, shafts or other means in conformance with Articles 3.1.8.4. to 3.1.8.17. and with Subsections 3.1.9. and 3.2.8.

3.4.2.1. Minimum Number of Exits

(2) In buildings not more than 2 storeys in building height, a floor area is permitted to be served by one exit provided the floor area and the travel distance requirements conform to Table 3.4.2.A. and the total occupant load served by the exit is not more than 60.

5. **Applicant's Position**

The Applicant submitted that the building as constructed provides sufficiency of compliance with the relevant provisions of the OBC. With regard to the first dispute concerning the fire-resistance rating of the floor assemblies, including the supporting structures, the Applicant is of the opinion that hydraulic basements and oil cellars should be considered special structures under the OBC. Article 3.2.2.2. (Special and Unusual Structures) allows buildings that cannot be

classified under Articles 3.2.2.16. to 3.2.2.62 to be constructed in accordance with good fire protection engineering practice as found in the NFPA Fire Protection Handbook. As they feel that the oil cellar and caster basement are special structures which have been built in conformance with NFPA practices, the Applicant believes that these areas should be exempt from the Article 3.2.1.4.

Regarding the openings between the oil cellar and the caster basement and the floor level above them, the Applicant uses the same argument as in the previous issue. Because they feel that these two areas should be classified as special structures, again the OBC provisions concerning protection of openings is not applicable. Without changing the much of the design of the equipment central to the production of steel, it would be difficult to provide closures for all the openings between these lower areas and the floor above. They point out that the oil cellar is sprinklered. They also note that they have blocked some of the openings at issue through the installation of doors as per their "closure agreement" with the city.

Concerning the number of exits from the caster basement, the Applicant again relies on the argument that this space should be considered a special structure. As they point out, since liquid steel is being processed on the west side of the basement, the only available locations to which a fire-rated exit could be built is the existing unrated stairs found in the north and south portions of the east wall. Both stairs do not exit to the exterior but rather to the mill floor as access to exits which affords each set of stairs three separate exit routes. In their opinion, constructing fire-rated stairs that lead directly to the outside in the caster basement would congest the area and would possibly confuse workers and thereby make the situation more dangerous.

6. **Chief Building Official's Position**

The Respondent submitted that the Direct Strip Production Complex does not provide sufficiency of compliance with the aforementioned OBC provisions. They reject the Applicant's position that the oil cellar and caster basement should be viewed as special structures under OBC Article 3.2.2.2. The Respondent also indicated that it was not evident that a complete and adequate assessment of the entire facility according to the NFPA's good fire protection engineering practice had been carried out. Classifying the facility under Article 3.2.2.2. is not appropriate, they argue, since steel mills are specifically described under Article 3.2.2.59. Further, in their opinion, the sprinklering of the oil cellar only serves to alleviate the need for fire containment. It is not an adequate measure compensating the lack of appropriate fire-resistance rating for the subject floor assemblies, including protection of openings.

Regarding egress from the caster basement, the Respondent submitted that two exits must be provided in accordance with Sentence 3.4.2.1.(1). They feel that the exiting arrangement, as constructed, will considerably diminish the level of safety for the occupants on the caster basement level. They also believe the current travel distances are too far, and this heightens the potential danger.

7. **Commission Ruling**

It is the decision of Building Code Commission that the direct strip production complex provides sufficiency of compliance with Sentences 3.2.1.4.(1) & (2), Sentence 3.1.8.1.(2) and Sentence 3.4.2.5.(1) of the building code provided that:

i) the caster basement is sprinklered.

8. **Reasons**

i) The structural steel members supporting the first floor slab are very large in size and do not support the walls or roof assembly and the basement areas are sprinklered.

ii) The openings between the first floor and the main oil cellar and the caster basement are integral part of the process operation.

iii) The occupant load in the main oil cellar and the caster basement is low and only used for servicing as needed. The areas are similar to service spaces in many respects for exiting purposes.

iv) The building is ventilated to provide approximately 12 air changes/hour and would provide smoke venting in a fire emergency in excess of code standards.

v) An in-plant fire brigade with fire fighting equipment is the primary response in emergency. Training in fire safety and emergency evacuation is also provided for workers.

vi) A fire safety plan approved by the Chief Fire Official will be in place for this facility.

Dated at Toronto this 24th day in the month of September in the year 1997 for application number 1997-49.

BCC Ruling No. 97-44-586

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-44-586

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992.* AND IN THE MATTER OF Sentence 9.9.9.1.(1), Articles 3.3.4.4., 9.10.19.3. and Subsection 3.2.5. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Harvey Fruitman, Executive Vice President, Torresdale Construction Ltd., City of North York, Ontario, for the resolution of a dispute with Mr. Leo Grelette, Chief Building Official, City of Aurora, Ontario, to determine whether the proposed renovations provide sufficiency of compliance with Sentences 3.2.5.5.(1), 3.2.5.6.(4) and Article 9.10.19.3, Articles 3.3.4.4. and 9.9.9.1., and Sentence 3.2.3.13.(2) and Article 9.9.4.4. of the Ontario Building Code at the Countryland Townhomes, 101 MacDonald Drive, Aurora, Ontario.

APPLICANT

Mr. Harvey Fruitman, Executive Vice President
Torresdale Construction Ltd.
City of North York
4800 Dufferin Street, Suite 200
North York, Ontario

RESPONDENT

Mr. Leo Grelette
Chief Building Official
Town of Aurora

PANEL

Mr. Michael Lio (Chair)
Ms. Lesia Beznaczuk
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, October 9th, 1997

APPEARANCES

Mr. Phillip Marsland
Torresdale Construction
North York, Ontario
The Applicant

Mr. Randal Brown
Randal Brown & Assoc. Ltd.
Willowdale, Ontario
Agent for the Applicant

Mr. Thom Vandenbussche
Senior Building Inspector
Town of Aurora
For the Respondent

RULING

1. **The Applicant**

   Mr. Harvey Fruitman, Executive Vice President, Torresdale Construction is a person to whom a building permit was issued under the Building Code Act, 1992 to renovate existing rental townhouse units into residential condominiums, at Countrylane Townhomes, Aurora, Ontario.

2. **Description of Construction**

   The Countryland Townhomes is a 38,707 m2 (9.565 acres) site, divided into twelve blocks, with a total of 200 rental townhouse units, consisting of 28,182 m2 (303,363.18 ft2) of building area.

   There are three types of townhouse suites; 100 A3 suites, 81 B3 suites, and 19 C3 suites. The approximate sizes of A3, B3 and C3 units are 145 m2 (1,558.32 ft2), 130 m2 (1,398.32 ft2) and 168 m2 (1,803.54 ft2) respectively. All suites are 3 storeys in building height.

The townhouse units are constructed of combustible construction. There are 2 parking spaces provided in the front of all A3 units at grade level. These parking spaces are intended for both the A3 suites as well as the adjoining B3 or C3 units, which are attached to the A3 units on the side opposite to the parking facilities. The subject parking areas are currently covered by a concrete deck and are separated by concrete block walls into garage-like car bays that can accommodate two vehicles. Both the A3 suites and the attached B3 or C3 units have an exit into this open-ended garage area. For the A3 units, this is the only exit currently provided.

The other unit types have an additional exit on their side of the building. The deck space above the parking area, which is attached to the second floor of the A3 suites, is currently used as a series of narrow patios which are abutted by a long, open-air corridor.

The proposed renovation would convert the townhouse units into residential condominiums. The work planned would divide the existing double car bays with 1 h fire separations into single vehicle garages which would also have steel overhead garage doors added to the openings to completely enclose the parking space. Drywall on the ceiling of all garages would be upgraded as well. The narrow patios and the long, external corridors would be replaced by larger patios that would cover the full concrete deck areas. It is proposed that pairs of A3 units share an exterior exit stair that would be accessible from the second storey patio area of both units. To maintain the continuity of the existing outside passageway for the exterior exit stairs, it is also proposed that bi-swinging gates be installed between the patios of the A3 units. This would allow the occupants of each A3 suite the option of choosing between several exit stairs in an emergency. The Applicant is also proposing to install hard-wired smoke detectors in all Countrylane Townhome units.

Countrylane Townhomes are classified as having a Group C - residential major occupancy. Many of the blocks and townhouse units are subject to Part 9 of the Building Code, however some portions of certain blocks exceed 600 m2 in building area and are therefore subject to Part 3.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed renovations provide sufficiency of compliance with Sentences 3.2.5.5.(1), 3.2.5.6.(4) and Article 9.10.19.3., Articles 3.3.4.4. and 9.9.9.1., and Sentence 3.2.3.13.(2) and Article 9.9.4.4. of the Ontario Building Code. The partition of the double bays into single car garages and the placement of

garage doors at their openings blocks the only exterior exit door for the A3 suites. The proposed blocking of this exit creates three issues.

The first issue revolves around whether there is appropriate fire department access. Sentence 3.2.5.5.(1) requires that buildings over 600 m2 in building area provide access routes for fire department vehicles to the principle entrance and to each building face with required access openings. Sentence 3.2.5.4.(6) requires that a portion of a building that is cut off without access from the remainder of the building be not more than 45 m from fire fighting vehicle to the entrance of the remote area. Article 9.10.19.3. provides similar requirements for Part 9 buildings. It reiterates that access for fire fighting equipment shall be provided to each building by a street, private roadway or yard. The blocking of the A3 unit's parking level entrances has meant that the fire department access has been limited, and in the case of some buildings suites are farther than the permitted 45 m.

The second issue regarding the installation of the garage doors is the provision of a means of egress through the construction of a new second storey, shared exterior stairs proposed for the A3 units. Articles 3.3.4.4. and 9.9.9.1. of the OBC set out the egress standards from a dwelling unit in Part 3 and Part 9 buildings respectively. In particular, Article 3.3.4.4 requires that an egress door be provided on the uppermost and lowest storey of a dwelling unit unless certain conditions are met. As well, the "stacked" nature of the townhouses may not satisfy Sentence 9.9.9.1.(2), which requires that the travel distance be not more than one storey if there is no dwelling unit above or below. The proposed exit doorways are also higher than the 1.5 m allowed in both Articles 3.3.4.4. and 9.9.9.1. Also in dispute is Sentence 3.3.4.4.(2) which requires that a dwelling unit's exit door shall open directly into a public access to an exit. The proposal to replace the long corridors fronting the narrow patios with enlarged, connected patios may not be consistent with a public access to an exit.

The third issue is that the proposed new shared exterior egress stairs pass within roughly 1 m of the garage door openings and may result in dangerous exposure to a fire originating in a garage. Sentence 3.2.3.13.(2) requires that openings in the exterior wall of a building located within 3 m horizontally of an unenclosed stair serving that building which may cause a hazard to such stairs shall be protected with wired glass or glass block. Article 9.9.4.4. provides the same standards for Part 9 buildings.

4. **Provisions of the Building Code**

Sentence 3.2.5.5.(1) Access Routes

(1) Every building which is more than 3 storeys in building height or more than 600 m2 (6460 ft2) in building area shall be provided with access routes for fire department vehicles

(a) to the principal entrance, and
(b) to each building face having access openings for fire fighting as required in Articles 3.2.5.1. and 3.2.5.2.

Sentence 3.2.5.6.(4) Location of Access Routes

(4) Where a portion of a building is completely cut off from the remainder of the building so that there is no access to the remainder of the building, the access routes required by Sentence (2) shall be located so that the unobstructed path of travel from the vehicle to one entrance of each such portion is not more than 45 m (147 ft 8 in).

Article 9.10.19.3 Fire Department Access to Buildings

(1) Access for fire department equipment shall be provided to each building by means of a street, private roadway or yard.

(2) Where access to a building as required in Sentence (1) is provided by means of a roadway or yard, the design and location of such roadway or yard shall take into account connection with public thoroughfares, weight of fire fighting equipment, width of roadway, radius of curves, overhead clearance, location of fire hydrants, location of fire department connections and vehicular parking.

Article 3.3.4.4. Egress from Dwelling Units

(1) Single storey dwelling units in apartment buildings need not lead to a public corridor or exterior passageway on the same storey provided the dwelling units are served by private stairways leading directly to a public access to exit on the storey

(a) immediately above, and (b) immediately below. (2) Except as provided in Sentences (3) and (4), every dwelling unit containing more than 1 storey shall have an exit door or an egress door opening directly into a public access to exit from the uppermost storey and from the lowest storey of the dwelling unit so that the floor level of each such storey is served by an exit or egress door located not more than 1.5 m (4 ft 11 in) above or below the floor level.

(3) A single exit is permitted from a dwelling unit provided the exit is an exterior doorway not more than 1.5 m (4 ft 11in) above adjacent ground level and (a) it is not necessary to travel up or down more than 1 storey to reach the exit door, or (b) the uppermost floor level opens to a balcony not more than 6 m (19 ft 8 in) above adjacent ground level.

(4) An a egress door from either the uppermost storey or the lowest storey in a dwelling unit, as required in Sentence (2), need not be provided

(a) where that storey is served by a stairway that

(i) leads to a public access to exit,

(ii) has not direct access to any other storey in the dwelling unit, and

(iii) is separated from the other storeys in the dwelling unit by a fire separation having a fire-resistance rating of not less than 45 min, or

(b) where a smoke alarm conforming to Article 3.2.4.21. is installed

(i) on the uppermost storey of a dwelling unit having not more than 2 storeys above the first storey of the building, or

(ii) on each storey of the dwelling unit provided it is not necessary to travel either more than 18 m (59 ft 1 in), or more than 1 storey up or down to reach the egress door.

(5) In buildings of residential occupancy not more than 3 storeys in building height, a doorway from a dwelling unit is permitted to open directly into an exit stairway provided such dwelling unit has a second and separate means of egress.

(6) A doorway from a dwelling unit may open onto an interior corridor served by a single exit, or an exterior balcony served by a single exit stairway, or an exterior passageway served by a single exit stairway provided each dwelling unit has a second and separate means of egress.

Article 9.9.9.1 Travel Limit to Exits or Egress Doors

(1) Except as provided in Sentences (2) and (3), every dwelling unit containing more than one storey shall have a sufficient number of exits of egress doors so that it shall not be necessary to travel up or down more than 1 storey to reach a level served by

(a) an egress door to a public corridor, enclosed exit stair or exterior passageway, or (b) an exit doorway not more than 1.5 m (4 ft 11 in) above adjacent ground level. Sentence 3.2.3.13.(2) Protection of Exit Facilities (2) Where an unenclosed exterior exit stair or ramp may be exposed to fire from openings in the exterior walls of the building it serves, the openings in the exterior walls of the building shall be protected with wired glass in fixed steel frames or glass block conforming to Article 3.1.8.14. where the openings in the exterior walls of the building are within 3 m (9 ft 10 in) horizontally and

(a) less than 10 m (32 ft 10 in) below the exit stair or ramp, or (b) less than 5 m (16 ft 5 in) above the exit stair or ramp. Article 9.9.4.4. Openings Near Unenclosed Exit Stairs and Ramps.

Where an unenclosed exterior exit stair or ramp provides the only means of egress from a suite, and is exposed to fire from openings in the exterior walls of another fire compartment, the openings in the exterior walls of the building shall be protected with wired glass in fixed steel frames or glass block conforming to Articles 9.10.13.5. and 9.10.13.7. when the openings in the exterior walls of the building are within 3 m (9 ft 10 in) horizontal

5. **Applicant's Position** The Applicant submitted that the proposed renovations provide sufficiency of compliance with the above listed provisions. Regarding the issue of fire department access, for the Part 3 buildings they recognize that the 45 m limit between the entrance of a cutoff unit and a fire department vehicle may not be met. Instead, they rely on Sentence 11.3.5.1.(1). This provision deals with extended buildings and it would allow them to utilize compliance alternative C22.

   This alternative states that for "buildings 6 storeys and less, existing access to existing occupancy is acceptable..." This would permit the Applicant to close over the garage entrances and construct new exit stairs without providing additional measures to compensate for the lesser access. Considering the Part 9 buildings under the same extended buildings provision, the Applicants propose to employ compliance alternative C153 to the same effect. In their view, the extended buildings meet the intent of the OBC, and roughly 90 per cent of the units meet the literal requirements of the Code.

   Since the issue of providing an exit from the A3 suites requires the construction of new exterior exit stairs, the Applicant relies not upon compliance alternatives but new construction provisions in Parts 3 and 9. To address the requirement of providing an exit from the uppermost and lowest floors of the unit found in Sentence 3.3.4.4.(2), the Applicants propose to install a hard-wired 120 volt interconnected smoke alarm on each floor of all dwelling units as per Subclause

3.3.4.4.(4)(b)(i). In their view, this would preclude the necessity for uppermost and lowest floor exits.

For the Part 9 buildings, they argue that egress could be accommodated under Clause 9.9.9.1.(1)(b) or Sentence 9.9.9.1.(2). The first provision allows dwelling units with more than 1 storey to have a sufficient number exits so that it is not necessary to travel up or down more than 1 storey to reach a level served by an exit doorway that is not more than 1.5 m (4 ft 11 in) above the adjacent ground. (The Applicant does admit however that the proposed second level exit door is higher than 1.5 m. This issue is not addressed.) The Applicant also notes that Sentence 9.9.9.1.(2) allows travel distance to be greater than 1 storey if the floor level is served by openable windows. This should afford them some greater flexibility in interpreting the exiting arrangements they have provided. Further, these units will also have the interconnected, hard-wired smoke alarm system.

Concerning the issue of the door opening into an access to exit as required under 3.3.4.4.(2), the Applicants argue that having two dwelling units share an exit stair to the ground level is similar to many exiting arrangements in older buildings. They also argue that the continuity of the exterior passageway will be maintained due to the bi-swinging gates that are proposed to be installed between the patios. This continuity of the passageway will give occupants access to two or more exterior exit stairs. Overall, it is their opinion that the exiting as designed meets the intent of the Code.

The Applicants believe that they have addressed the issue of exposure to the exterior stair as well. They note that the new exiting arrangements would offer occupants many escape options in an emergency, thereby avoiding stairs that may present hazards. The garages will be divided with 1 h fire separations and will have upgraded drywall on the ceilings. The new garage doors, they argue, will also offer some protection. Lastly, they point to the concrete block fire separations between the units and the proposed smoke alarm system which they feel will give the entire site a good level of fire protection.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed renovations did not provide sufficiency of compliance with the provisions discussed and in some instances place the buildings into situations of non-compliance. They reject compliance alternatives C22 and C153 which depends on maintaining the existing access because, in their view, the proposed addition of garage doors blocks off the existing access. While adding garage doors may be deemed to be "extending the

building", the Respondent argues however that this particular extension substantially changes the existing access that the alternative allows as acceptable.

The municipality believes that the exiting requirements have not been satisfied. For the Part 3 buildings, they hold that the proposed second floor door does not open into an access to an exit. In their opinion, the linked patios do not constitute an access to an exit, nor a passageway. In fact, they are concerned that the balconies may support potential obstacles for exiting such as bar-be-ques, furniture and other accessories. In the Part 9 structures the Respondent does not believe that travel distances allowed in Sentence 9.9.9.1.(2) due to openable windows can be considered legitimate due to their contention that as stacked townhouses there are dwelling units above and below other units.

The Respondent also argues that the stairs do not meet the provisions regarding exposure to exterior exit stairs. The creation of the external stairs only serves to add to the non-compliance of the townhouse suites. The result of this proposal would be a reduction in safety due to potential fire exposure. They also feel that the stairs, as external exits, present dangers during inclement weather such as wind, rain and ice. This would be especially an issue for visitors unfamiliar with the stairs and who will often not be able to use the garage entrance.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed renovations provide sufficiency of compliance with Sentence 9.9.9.1.(1), Articles 3.3.4.4., 9.10.19.3. and Subsection 3.2.5.

8. **Reasons**

i) Additional exterior stairways will be provided to improve fire department access and exiting from the 3A dwelling units.

ii) Hard-wired smoke alarms will be provided on every level and interconnected within each dwelling unit.

iii) Garages within each dwelling unit will be separated from each other by construction having a 1 hour fire resistance rating.

iv) Occupant safety is not reduced consistent with the intent of Part 11 of the code.

Dated at Toronto this 9th day in the month of October in the year 1997 for application number 1997-51.

BCC Ruling No. 97-43-585

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-43-585

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.1.4.(1) and 3.2.1.4.(2) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Robert Riddell, Senior Technical Specialist, Algoma Steel Inc., 105 West Street, Sault Ste. Marie, Ontario, for the resolution of a dispute with Mr. Maurice Kukoraitis, Director of Engineering, City of Sault St. Marie, Ontario, concerning whether the floor assemblies above the oil cellar and caster basement provide sufficiency of compliance with Sentences 3.2.1.4.(1) and (2) of the Ontario Building Code (OBC), whether the openings in the said floor assemblies provide sufficiency of compliance with Sentence 3.1.8.1.(2) of the OBC, and whether the number of exits from the caster basement provide sufficiency of compliance with Sentence 3.4.2.1.(2) at the Direct Strip Production Complex, Algoma Steel Inc., 105 West Street, Sault Ste. Marie, Ontario.

APPLICANT

Mr. Robert Riddell, Senior Technical Specialist
Algoma Steel Inc., 105 West Street
Sault Ste. Marie, Ontario

RESPONDENT

Mr. Maurice Kukoraitis, Director of Engineering
City of Sault St. Marie, Ontario

PANEL

Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Demir Delen

PLACE

Toronto and Sault Ste. Marie, Ontario

DATE OF RULING

Wednesday, September 24th, 1997

APPEARANCES

Mr. Robert Riddell
Senior Technical Specialist
Algoma Steel Inc.
The Applicant

Mr. Paul Tavares
Civil/Structural Eng
Hatch Associates
For the Applicant

Mr. Maurice Kukoraitis
Director of Engineering
City of Sault St. Marie
The Respondent

Syl Allard
Plan Examiner
City of Sault Ste. Marie
For the Respondent

RULING

1. **The Applicant**

   Mr. Robert Riddell, Senior Technical Specialist, Algoma Steel Inc, is a person who has been issued an order to comply under the Building Code Act, 1992 to bring the floor assemblies over the oil cellar and the caster basement of a recent addition in conformity with certain provisions of the Ontario Building Code at the Direct Strip Production Complex, Algoma Steel Inc., 105 West Street, Sault Ste. Marie, Ontario.

2. **Description of Construction**

The existing building is a three and four storey industrial structure with an area of approximately 60,380 m2 (650,000 ft2). The addition, constructed between 1996 and 1997, has added another 32,520 m2 (350,000 ft2) to the structure making the current total building area 92,900 m2 (1,000,000 ft2).

The building is constructed of noncombustible construction. It is equipped with a fire alarm system. The building also has a partial sprinkler system, only in the oil cellar of the addition. It does not have a standpipe and hose system.

Within the addition there are two large depressed areas in the main floor. These areas are known as the oil cellar and the caster basement. They are located beneath the addition's major production and processing equipment and are used for servicing the machinery above and the accommodation of ancillary equipment. The floor assemblies above the oil cellar and caster basement are concrete slab supported with unprotected steel beams.

Both the existing building and the addition are considered to have a Group F, Division 3 (low hazard industrial) major occupancy. The structure, including the addition, is used to manufacture steel slabs.

3. **Dispute**

There are three issues at dispute between the Applicant and the Respondent. The first is whether the floor assemblies above the oil cellar and the caster basement provide sufficiency of compliance with Sentences 3.2.1.4.(1) and (2). These provisions of the OBC require that a floor assembly above a basement must be constructed as a fire separation with a fire-resistance rating as determined in Subsection 3.2.2., but not less than 45 min. The supporting elements supporting the subject floor assembly are required to have the same fire-resistance rating as the floor. While the concrete slab floor above the oil cellar and caster basement in the Direct Strip Production Complex may provide the necessary 45 minute rating, the steel supporting beams for these floor assemblies are unprotected and therefore do not have a resistance rating.

The second dispute is whether the openings in the said floor assemblies provide sufficiency of compliance with OBC Sentence 3.1.8.1.(2), which requires that all openings in fire separations must be protected with closures. The openings at the oil cellar and the caster basement do not have closures. There are large numbers of pipes that access the mill stands, and in so doing create many openings between floor levels. As well, the steel production equipment in some

areas of the complex forms part of the floor, and as it moves it periodically exposes the basement.

The last dispute is over whether the number of exits from the caster basement of the Direct Strip Production Complex provide sufficiency of compliance with Sentence 3.4.2.1.(2) of the Code. This provision allows a floor area in a Group F, Division 3 building less than two storeys in height to have a single exit if the area served is less than 200 m2, the travel distance does not exceed 25 m, and the occupant load is less than 60. Currently, the caster basement has only one exit.

4. **Provisions of the Building Code**

3.2.1.4. Floor Assembly over Basement

(1) A floor assembly immediately above a basement shall be constructed as a fire separation having a fire-resistance rating conforming to the requirements for floor assemblies in Articles 3.2.2.16. to 3.2.2.62., but not less than 45 min. (2) All loadbearing walls, columns and arches supporting a floor assembly immediately above a basement shall have a fire-resistance rating not less than that required in Sentence (1) for the floor assembly.

3.1.8.1. Fire Separations and Closures

(2) Openings in fire separations shall be protected with closures, shafts or other means in conformance with Articles 3.1.8.4. to 3.1.8.17. and with Subsections 3.1.9. and 3.2.8.

3.4.2.1. Minimum Number of Exits

(2) In buildings not more than 2 storeys in building height, a floor area is permitted to be served by one exit provided the floor area and the travel distance requirements conform to Table 3.4.2.A. and the total occupant load served by the exit is not more than 60.

5. **Applicant's Position**

The Applicant submitted that the building as constructed provides sufficiency of compliance with the relevant provisions of the OBC. With regard to the first dispute concerning the fire-resistance rating of the floor assemblies, including the supporting structures, the Applicant is of the opinion that hydraulic basements and oil cellars should be considered special structures under the OBC. Article 3.2.2.2. (Special and Unusual Structures) allows buildings that cannot be

classified under Articles 3.2.2.16. to 3.2.2.62 to be constructed in accordance with good fire protection engineering practice as found in the NFPA Fire Protection Handbook. As they feel that the oil cellar and caster basement are special structures which have been built in conformance with NFPA practices, the Applicant believes that these areas should be exempt from the Article 3.2.1.4.

Regarding the openings between the oil cellar and the caster basement and the floor level above them, the Applicant uses the same argument as in the previous issue. Because they feel that these two areas should be classified as special structures, again the OBC provisions concerning protection of openings is not applicable. Without changing the much of the design of the equipment central to the production of steel, it would be difficult to provide closures for all the openings between these lower areas and the floor above. They point out that the oil cellar is sprinklered. They also note that they have blocked some of the openings at issue through the installation of doors as per their "closure agreement" with the city.

Concerning the number of exits from the caster basement, the Applicant again relies on the argument that this space should be considered a special structure. As they point out, since liquid steel is being processed on the west side of the basement, the only available locations to which a fire-rated exit could be built is the existing unrated stairs found in the north and south portions of the east wall. Both stairs do not exit to the exterior but rather to the mill floor as access to exits which affords each set of stairs three separate exit routes. In their opinion, constructing fire-rated stairs that lead directly to the outside in the caster basement would congest the area and would possibly confuse workers and thereby make the situation more dangerous.

6. **Chief Building Official's Position**

The Respondent submitted that the Direct Strip Production Complex does not provide sufficiency of compliance with the aforementioned OBC provisions. They reject the Applicant's position that the oil cellar and caster basement should be viewed as special structures under OBC Article 3.2.2.2. The Respondent also indicated that it was not evident that a complete and adequate assessment of the entire facility according to the NFPA's good fire protection engineering practice had been carried out. Classifying the facility under Article 3.2.2.2. is not appropriate, they argue, since steel mills are specifically described under Article 3.2.2.59. Further, in their opinion, the sprinklering of the oil cellar only serves to alleviate the need for fire containment. It is not an adequate measure compensating the lack of appropriate fire-resistance rating for the subject floor assemblies, including protection of openings.

Regarding egress from the caster basement, the Respondent submitted that two exits must be provided in accordance with Sentence 3.4.2.1.(1). They feel that the exiting arrangement, as constructed, will considerably diminish the level of safety for the occupants on the caster basement level. They also believe the current travel distances are too far, and this heightens the potential danger.

7. **Commission Ruling**

It is the decision of Building Code Commission that the direct strip production complex provides sufficiency of compliance with Sentences 3.2.1.4.(1) & (2), Sentence 3.1.8.1.(2) and Sentence 3.4.2.5.(1) of the building code provided that:

i) the caster basement is sprinklered.

8. **Reasons**

i) The structural steel members supporting the first floor slab are very large in size and do not support the walls or roof assembly and the basement areas are sprinklered.

ii) The openings between the first floor and the main oil cellar and the caster basement are integral part of the process operation.

iii) The occupant load in the main oil cellar and the caster basement is low and only used for servicing as needed. The areas are similar to service spaces in many respects for exiting purposes.

iv) The building is ventilated to provide approximately 12 air changes/hour and would provide smoke venting in a fire emergency in excess of code standards.

v) An in-plant fire brigade with fire fighting equipment is the primary response in emergency. Training in fire safety and emergency evacuation is also provided for workers.

vi) A fire safety plan approved by the Chief Fire Official will be in place for this facility.

Dated at Toronto this 24th day in the month of September in the year 1997 for application number 1997-49.

BCC Ruling No. 97-42-584

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-42-584

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*. AND IN THE MATTER OF Article 9.8.8.5. of "the Building Code" (Ontario

Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Ms. Gail Fischer-Taylor and Mr. Burns Wattie, Homeowners, 47 Poplar Plains Road, Toronto, Ontario, for the resolution of a dispute with Ms. Pamela Coburn, Chief Building Official, City of Toronto, Ontario, concerning whether the wood guard for the proposed third floor deck provides sufficiency of compliance with Article 9.8.8.5. of the Ontario Building Code at 47 Poplar Plains Road, Toronto, Ontario.

APPLICANT

Ms. Gail Fischer-Taylor and Mr. Burns Wattie
47 Poplar Plains Road
Toronto, Ontario

RESPONDENT

Ms. Pamela Coburn
Chief Building Official
City of Toronto

PANEL

Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

Wednesday, September 24th, 1997

APPEARANCES

Mr. Bob Barboutsis
Building Inspector
City of Toronto
For the Applicant

Mr. Tim Scott
Principal
Natale and Scott Architects
Agent for the Applicant

RULING

1. **The Applicants**

   Ms. Gail Fischer-Taylor and Mr. Burns Wattie are person who were issued a building permit under the *Building Code Act, 1992* to renovate the third floor of their existing residence at 47 Poplar Plains Road, Toronto, Ontario.

2. **Description of Construction** The Applicant's building is described as a semi-detached structure, with a Group C - Residential occupancy. It has a gross floor area of 332.7 m2 (2,581 ft2) and has a building height of three storeys.

   The Applicants recently renovated their house. The work included demolishing a two-storey rear porch, substantial interior renovations of the second and third floors, upgrading windows and doors, adding a new basement entrance, and rebuilding an existing third floor deck.

   The guard around the deck was replaced with a new one that was constructed with 3/4 in. x 1 in. horizontal wood slats, spaced at 1.5 in. on centre. The height of the guard is 1,524 mm (5 ft. 0 in.).

3. **Dispute**

   The issue at dispute between the Applicant and the Respondent is whether the new guard with horizontal wood slats that was built around the third floor deck provides sufficiency of

compliance with Article 9.8.8.5. of the OBC. This provision requires that guards built around balconies, porches and decks be designed so as not to facilitate climbing of the guard.

4. **Provisions of the Building Code**

9.8.8.5. Designs to Prevent Climbing.

Guards around exterior balconies, porches, and decks of buildings of residential occupancy shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2 ft 11 in) above the floor of the balcony, porch or deck will facilitate climbing.

5. **Applicant's Position**

The Applicant submitted that the guard, as designed and constructed, provides sufficiency of compliance with Article 9.8.8.5. In their opinion, the spacing of the slats, with only a 3/4 in. gap between them means that it would not be possible for anyone to gain a foot or handhold.

6. **Chief Building Official's Position**

The Respondent submitted that the guard does not provide sufficiency of compliance because, in their view, the spaces between the slats do facilitate climbing by a child. The City's concern is that the guard's design presents real danger for a serious accident to occur. As they have jurisdiction for enforcement of the building code, they believe that the guard, which they have inspected on several occasions, leaves them open to liability.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the wood guard for the 3rd floor deck does not provide sufficiency of compliance with Article 9.8.8.5. of the Building Code.

8. **Reasons**

i) The guard is required to be altered between 100mm to 900 mm and this can be achieved easily without altering the current design significantly to eliminate the possibility of climbing.

Dated at Toronto this 24th day in the month of September in the year 1997 for application number 1997-46.

BCC Ruling No. 97-41-583

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-41-583

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act,1992.*

AND IN THE MATTER OF Article 3.2.9.1. of "the Building Code"(Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. David Bryer, President, Bryco Construction Management, Guelph, Ontario, for the resolution of a dispute with Mr. Bruce Poole, Chief Building Official, City of Guelph, Ontario, concerning whether the proposed addition is required to a have stand pipe hose system in accordance with Article 3.2.9.1. of the Ontario Building Code at Gunn Metal Stamping Inc., 32 Airpark Place, Guelph, Ontario.

APPLICANT

Mr. David Bryer, President
Bryco Construction Management
201 Alice Street
Guelph, Ontario

RESPONDENT

Mr. Bruce Poole
Chief Building Official
City of Guelph

PANEL

Mr. Roy Philippe (Chair)
Mr. Michael Steele
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, September 11th, 1997

APPEARANCES

Mr. David Bryer
Bryco Construction Mgmt
The Applicant

Mr. Kevin W. Hergott
Tacoma Steckley & Associates Inc.
Agent for the Applicant

Mr. Gary Jansen
Plans Examiner
City of Guelph
For the Respondent

RULING

1. **The Applicant**

   Mr. David Bryer is a person who has applied for a building permit under the Building Code Act, 1992 to construct an addition to the Gunn Metal Stamping plant at 32 Airpark Place, Guelph, Ontario.

2. **Description of Construction**

   The existing building is a single storey manufacturing plant that was constructed in 1989 and is used for metal stamping. It is described as having a Group F, Division 3, low hazard industrial occupancy. The structure is composed of combustible and noncombustible construction. It is not equipped with a sprinkler system, fire alarm system, nor a standpipe and hose system. The area of the existing building is calculated at 1,482.4 m2, or 1,604.8 m2 including the 122.4 m2 waste bin storage area that was constructed in 1996 and is located to the west or rear of the structure.

   The proposed one storey addition would add 1,514.7 m2 to the north building face in order that the metal stamping activities may expand.

3. **Dispute**

The issue at dispute between the Applicant and the Respondent is whether the proposed addition should be equipped with a standpipe and hose system as required under OBC Article 3.2.9.1. The origins of the dispute are found in differing calculations of the area of the existing building. The three-sided, waste bin storage area was not considered as part of the building area by the Applicant. The Respondent, on the other hand, included the subject waste bin enclosure as existing building area.

4. **Provisions of the Building Code**

3.2.9.1. (Standpipe and Hose Systems) Where Required

(1) Except as provided in Article 3.2.9.2., a standpipe and hose system shall be installed in every building that (a) is more than (i) 3 storeys in building height, or (ii) 14 m (45 ft 11 in) in height measured between grade and the ceiling of the uppermost storey, (b) is greater in building area than the area shown in Table 3.2.9.A. for the applicable building height shown in the Table where the building (i) is not sprinklered, and (ii) is not more than 14 m (45 m 11 in) high measured between grade and the ceiling of the top storey, or(c) contains more than one storey below grade.

5. **Applicant's Position**

The Applicant submitted that a standpipe and hose system is not required since the total building area of the enlarged structure would only be 2,996.1 m2. It was their intention was to limit the size of the proposed addition so that the total floor area would be less than the 3,000 m2 threshold, over which a standpipe and hose system would be necessary.

In their view the waste bin storage area constructed in 1996 should not be used when calculating the building's area. They argue that the space is uninhabited and was built simply to lessen the water contamination in the waste bins and to provide a visual screen. They point out that the entire west face of the waste bin storage area is open, while the south exposure has a large opening as well.

The Applicant contends that the comprehensive definition of building within in the Building Code Act (BCA) is too onerous when considering the application of Article 3.2.9.1. and the requirements for standpipe and hose systems. They believe that a fairer definition to use in this

circumstance is building area, which is found in Article 1.1.3.2. of the OBC. This latter definition refers to exterior walls as a benchmark for calculating area. Without any wall on the west exposure of the waste bin area, the Applicant's position is that this space does not meet the definition of a building and should therefore not be considered as part of the building area.

6. **Chief Building Official's Position**

The Respondent submitted that the total area of the expanded plant would be 3,119.5 m2 and that a standpipe and hose system should be installed in the proposed addition in accordance with Article 3.2.9.1. In their view the waste bin storage area should be considered in the building area calculations.

The municipality relied upon the definition found in the BCA, which states that a building is "a structure occupying an area greater than ten square metres consisting of a wall, roof and floor or any of them...". According to this definition, the waste bin space would clearly qualify as a building and thus should be counted in the building area.

They were prepared, however, to consider the waste bin area as an exterior canopy if the Applicant removed all the wall panels.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the addition without a standpipe and hose system provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code.

8. **Reasons**

i) The total building area excluding the bin shelter which is considered an ancillary structure is less than 3000 m2 and is fully open on one side and partially open on a second side.

ii) The shelter is separated from the main building by a metal clad insulated 10 inch block wall and an insulated steel door.

iii) Access to the shelter for fire fighting purposes is provided directly from the exterior.

Dated at Toronto this 11th day in the month of September in the year 1997 for application number 1997-48.

BCC Ruling No. 97-40-582

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-40-582

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 9.9.8.2. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Jeff Zavitz, President, Tavis-Roland (Development) Inc., Waterloo, Ontario, for the resolution of a dispute with Mr. Anthony Krimmer, Chief Building Official, City of Waterloo, Ontario, concerning whether the proposed third floor office space provides sufficiency of compliance with Article 9.9.8.2. of the Ontario Building Code at 10 Regina St. N., Waterloo, Ontario.

APPLICANT

Mr. Jeff Zavitz
President
Tavis-Roland (Development) Inc.,
25 Dupont Street East
Waterloo, Ontario,

RESPONDENT

Mr. Anthony Krimmer
Chief Building Official
City of Waterloo

PANEL>

Mr. Roy Philippe (Chair)
Mr. Michael Steele
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, September 11th, 1997

APPEARANCES

Mr. Mr. Jeff Zavitz
Tavis-Roland (Development) Inc.
The Applicant

Mr. Anthony Krimmer
Chief Building Official
City of Waterloo
The Respondent

RULING

1. **The Applicant**

   Mr. Jeff Zavitz is a person who was issued a building permit under the *Building Code Act, 1992* to construct a three storey, mixed-use structure at 10 Regina Street North, Waterloo, Ontario.

2. **Description of Construction**

   The Applicant intends to construct a three storey, mixed-use building. The proposal indicates that the first floor is to be commercial space and the second and third floors are to be a mix of two, two-storey residential apartment units and one, two-storey Class D office unit located at the south end of the building. The building is described as having multiple occupancies; Group C - residential, Group D - business and personal services, and Group E - mercantile.

   The structure will be composed of combustible construction and has an area of approximately 600 m2 (6,100 ft2). The building will contain with a fire alarm system. It will not be equipped with a sprinkler system.

3. **Dispute** The issue at dispute between the Applicant and Respondent is whether the proposed third floor office space provides sufficiency of compliance with Article 9.9.8.2. of the OBC. This provision requires that Group D occupancies provide not less than two exits from each floor.

The single, two-storey office unit located on the second and third floor of the proposed building has an internal stair between floors, but provides no other stairs. The second floor of this unit is not in dispute since Sentence 9.9.8.2.(2) allows one and two storey buildings to have only one exit where the floor areas, travel distances and occupant loads conform. This provision does not apply to the third floor of the commercial unit. A second exit is required.

4. **Provisions of the Building Code**

9.9.8.2. Number of Required Exits

(1) Except as provided in Sentences (2) and (3) and Subsection 9.9.9., not less than 2 exits shall be provided from every floor area, spaced so that the travel distance to the nearest exit is not more than (a) 40 m (131 ft 3 in) in the case of business and personal services occupancies, (b) 45 m (147 ft 3 in) for all occupancies where the floor area is sprinklered, and (c) 30 m (98 ft 5 in) for all other occupancies. (2) Except as provided in Subsection 9.9.9., a single exit is permitted from each storey in buildings of 1 and 2 storeys in building height provided the floor are and travel distance requirements conform to those required in Article 9.9.7.3. and the total occupant load served by an exit facility does not exceed 60 persons.

5. **Applicant's Position**

The Applicant submitted that while the third floor office unit is not served with a second exit, they believe that the measures they have included provide an increased level of safety that creates sufficiency of compliance with Sentence 9.9.8.2.(1). The chief measure being provided by the Applicant is an interconnected fire alarm system between all units in the building. As well, the stair connecting the second and third floors is 1.1 m (44 in) wide.

The Applicant also notes that Article 9.9.8.2. allows the travel distance to the nearest exit to be up to 40 m in a Group D occupancy. The travel distance from the third floor to the fire-separated, exit stair on the second floor in the subject office space is only 18 m. Further, the occupant load will only be five persons.

The Applicant also makes a comparison with the requirements of Article 9.9.9.1. They point out that the adjacent residential apartment units do not have to provide a second exit. They argue that if Article 9.9.9.1. allows residents, who may be sleeping, in a residential unit to travel down one storey to reach an exit stair, then the same standard could be applied to a low occupancy office unit that operates only during daytime hours.

Sentence (2) of Article 9.9.9.1. further allows that the travel limit from a floor level in a dwelling unit to an exit door may exceed one storey where that floor has an openable window of certain dimensions and a sill not higher than 1 m from the floor and not higher than 7 m from the ground level outside. In the case of the subject office unit, the Applicant notes that the second floor is served by both a french balcony 4 m above the ground level and the fire-separated exit stair.

6. **Chief Building Official's Position**

The Respondent submitted that the third storey, Group D occupancy, with a floor area of 54 m2 is required to have 2 exits in accordance with Sentence 9.9.8.2.(1).

They also submitted that they did not have the jurisdiction to approve the Applicant's measures to provide sufficiency of compliance.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the third floor office space provides sufficiency of compliance with Article 9.9.8.2. of the Ontario Building Code provided that interconnected smoke alarms are installed at each floor level within the two storey office suite near the connecting stair in conformance with Subsection 9.10.18.

8. **Reasons**

i) The size of the 2 storey suite is small (approximately 60 m2) per floor level and the occupant load is low.

ii) The suite is separated from the remainder of the building by a fire separation having a 3/4 hour fire resistance rating.

iii) The travel distance from any point in a suite to an exterior exit door is approximately 18 m.

iv) Additional interconnected smoke detection is provided in the suite.

v) It is the opinion of the Building Code Commission that the two storey suite exit does provides a lesser risk to the occupants of the "D" occupancy than a dwelling unit in a residential occupancy of a similar configuration which would comply with the Ontario Building Code.

Dated at Toronto this 11th day in the month of September in the year 1997 for application number 1997-47.

BCC Ruling No. 97-39-581

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-39-581

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 7.1.6.4.(1) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Jonathan & Donna Dej, Homeowners, 844 Stirling Avenue South, Kitchener, Ontario, for the resolution of a dispute with Mr. Jim Witmer, Chief Building Official, City of Kitchener, Ontario, concerning whether the proposed water and sewage service connections provides sufficiency of compliance with Sentence 7.1.6.4.(1) of the Ontario Building Code at 844 Stirling Avenue South, Kitchener, Ontario.

APPLICANT

Mr. Jonathan Dej & Donna Dej
Homeowners
844 Stirling Avenue South
Kitchener, Ontario,

RESPONDENT

Mr. Jim Witmer
Chief Building Official
City of Kitchener

PANEL

Mr. Roy Philippe (Chair)
Mr. Michael Steele
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, September 11th, 1997

APPEARANCES

Mr. Jonathan & Donna Dej
Homeowners
The Applicant

Mr. John Shannon
Solicitor
Agent for the Applicant

Mr. Jim Witmer
Chief Building Official
City of Kitchener
The Respondent

RULING

1. **The Applicant**

   Mr. Jonathan Dej and Mrs. Donna Dej are persons who applied for a building permit under the *Building Code Act, 1992* to reconfigure their water and sewer services at 844 Stirling Avenue South, Kitchener, Ontario.

2. **Description of Construction**

   The subject building, located at 844 Stirling Avenue South in Kitchener, is a one storey, semi-detached structure. The building is described as having a Group C - residential occupancy. It has a building area of approximately 700 ft2. It is composed of combustible construction. The adjoining building has a similar description. It is located at 846 Stirling Avenue South. Both dwellings were built in 1948.

   The existing water and sewage services at 844 Stirling Avenue South runs from the municipal mains directly into the subject building at the basement level, where both services divert into

two, with one set serving 844 Stirling Avenue South while the other set travels through the party wall and serves 846 Stirling Avenue South.

The Applicant proposes to alter this existing configuration so that the new diversion point of both services to the adjacent property would be in front of and external to 844 Stirling Avenue South. They also propose to cap both existing water and sewage services to 846 Stirling Avenue South within their dwelling.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the proposed water and sewage service connection provide sufficiency of compliance with Sentence 7.1.6.4.(1) of the OBC. This provision requires that piping in a building must connect to the public mains separately from that of another building.

4. **Provisions of the Building Code**

Sentence 7.1.6.4. Separate Services (1) Piping in any building shall be connected to the public services separately from piping of any other building, except that an ancillary building on the same property may be served by the same service.

5. **Applicant's Position**

The Applicant submitted that the proposed new water and sewage configuration, in which the diversion of services to the adjacent property would be located in front and external to their dwelling, provides sufficiency of compliance with Sentence 7.1.6.4.(1). While not creating separate services for both properties, the proposal does eliminate the need to have the piping for 846 Stirling Avenue South running through the Applicant's building.

As a mitigating measure the Applicants are prepared to offer an easement over a portion of their front yard that would allow the owners of the adjacent property to install separate services external to their house.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed water and sewer configuration does not provide sufficiency of compliance with Sentence 7.1.6.4.(1). They contend that the proposed connection is not separate from that of the adjacent property.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed water and sewage service connections provide sufficiency of compliance with Sentence 7.1.6.4.(1) of the Ontario Building Code at 844 Stirling Avenue South, provided that an easement registered on title is available for access to the service connections by 846 Stirling Avenue South.

8. **Reasons:**

i) The external connections provide better access for maintenance to both properties.
ii) No additional loads are being added to the system.
iii) Both parties at 844 and 846 consent to this application.

Dated at Toronto this 11th day in the month of September in the year 1997 for application number 1997-44.

BCC Ruling No. 97-38-580

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-38-580

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence **9.10.14.1.(1)** of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Clare Kielstra, Office Manager, Talbot Homes Ltd., for the resolution of a dispute with Mr. Jim Foster, Chief Building Official, City of St. Thomas, Ontario, to determine whether the unprotected openings on the subject residential addition comply with Sentence 9.10.14.1.(1) of the Ontario Building Code at 12 Spruce Street, St. Thomas, Ontario.

APPLICANT

Mr. Clare Kielstra, Office Manager
Talbot Homes Ltd.
107 Gaylord Road
St. Thomas, Ontario

RESPONDENT

Mr. Jim Foster
Chief Building Official
City of St. Thomas

PANEL

Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, August 21st, 1997

APPEARANCES

Mr. Clare Kielstra, Office Manager
Talbot Homes Ltd
The Applicant

Mr. Jim Foster
Chief Building Official
City of St. Thomas
The Respondent

RULING

1. **The Applicant**

   Mr. Clare Kielstra is a person to whom an order was issued under the *Building Code Act, 1992* to bring a recently constructed addition to an existing dwelling into compliance with the Ontario Building Code at 12 Spruce Street, St. Thomas, Ontario.

2. **Description of Construction**

   The renovation at dispute is a 78 ft2 addition on the east side of an existing dwelling at 12 Spruce Street, St. Thomas, Ontario. The existing building is described as a 1 and a half storey, 1,100 ft2 structure. Both the existing building and the addition are combustible construction. The building is classified as having a Group C - residential occupancy.

   The east-facing exposure of the addition is located 1.23 m (4 ft) from the adjacent property line. This exposing building face contains a window which is calculated to be an unprotected opening of approximately 35 per cent.

3. **Dispute**

   The issue at dispute between the Applicant and Respondent is whether the subject window provides sufficiency of compliance with Sentence 9.10.14.1.(1) of the Building Code. This provision of the OBC, specifically Table 9.10.14.A., requires that an exposing building face with a limiting distance of 1.23 m (4 ft) have a total of 7 per cent unprotected opening or less. As

mentioned, the subject wall has an unprotected opening of 35 per cent. In terms of actual area permissible for this exposing building face as an unprotected opening, the 7 per cent maximum found Table 9.10.14.A. translates into 5.6 ft2. The existing unprotected opening is measured at 38.5 ft2.

4. **Provisions of the Building Code**

9.10.14.1.(1) Maximum Percentage of Unprotected Openings

Except as provided in Sentence (2) and in Articles 9.10.14.3. to 9.10.14.11., the maximum percentage of unprotected openings in an exposing building face shall conform to Table 9.10.14.A. or to Subsection 3.2.3., whichever is the least restrictive for the occupancy being considered.

5. **Applicant's Position**

The Applicant, Mr. Kielstra, was the contractor for the subject renovation. He submitted that while the opening clearly exceeds the allowable limit, it would have been helpful to him if one of the earlier inspections done during construction had revealed this deficiency. Instead, it was only on the final inspection that the city brought this issue to his attention.

The Applicant's clients wish to retain the opening. Installing a fire shutter above the window was deemed by his clients not to be consistent with the design. Accordingly, the Applicant is proposing other options, including installing a single sprinkler in the addition and/or a 45 minute fire-rated door between the existing and new portions of the dwelling.

The Applicant also submitted that the addition is used as a foyer. Furthermore, the town's fire department can provide response within 3-4 minutes.

6. **Chief Building Official's Position**

The Respondent submitted that the maximum allowable unprotected opening for the subject exposing building face is 7 per cent, as described in Table 9.10.14.A. Further, they indicated that the Building Code does not contain provisions that would allow them to accept the proposals offered by the Applicant. The Respondent noted that by installing a sprinkler system in the addition, and/or the 45 minute fire-rated closure, sufficiency of compliance could be achieved.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed unprotected openings provide sufficiency of compliance with Sentence 9.10.14.1.(1) of the Building Code provided:

i) The addition is sprinklered and the sprinkler head is the quick response type.

ii) That a smoke alarm is installed in the addition and in the building in accordance with Article 9.10.18.1. of the Building Code.

8. **Reasons:**

i) The addition is small and is sprinklered.

ii) If the complete building face were considered at the line of the addition as exposed building face, the percentage of unprotected openings would be significantly less.

iii) Evidence provided indicated that the Fire Department response time is good and the fuel load within the addition is limited.

iv) The addition of smoke alarms provides early warning for occupants.

v) It is the opinion of the Building Code Commission that the addition does not create a hazard to the property considering the additional protection provided.

Dated at Toronto this 21st day in the month of August in the year **1997** for application number **1997-45**.

BCC Ruling No. 97-37-579

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-37-579

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence **9.8.5.3.(1)** of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Ms. Elizabeth Peck, 294 Gloucester Avenue, Oakville, Ontario, for the resolution of a dispute with Mr. Ray Hachigian, Chief Building Official, Township of the Archipelago, Ontario, concerning whether the subject stairs containing six winders provides sufficiency of compliance with Sentence 9.8.5.3.(1) of the Ontario Building Code at Cowper Island # B-424, 42R6075, Pt 1, Township of the Archipelago, Ontario.

APPLICANT

Ms. Elizabeth Peck
Homeowner
294 Gloucester Avenue
Oakville, Ontario

RESPONDENT

Mr. Ray Hachigian
Chief Building Official
Township of the Archipelago

PANEL

Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, August 21st, 1997

APPEARANCES

Mr. Gordon Martin
President
Margro Custom Haulage Ltd.
Parry Sound, Ontario
Agent for the Applicant

Mr. Ray Hachigian
Chief Building Official
Township of the Archipelago
For the Respondent

RULING

1. **The Applicant**

   Ms. Elizabeth Peck is a person to whom an order was issued under the Building Code Act, 1992 to bring the stairs in their residence into compliance with Sentence 9.8.5.3.(1) of the Ontario Building Code at Cowper Island, #B-424, 42R6075, Pt 1, Township of the Archipelago, Ontario.

2. **Description of Construction**

   The Applicants recently constructed a two storey, pre-manufactured, log building. Including balcony, the structure has a total of 1,394 ft2. The building is described as a Group C - residential occupancy.

   The stairs between the ground and second floor in the subject building contain a 90 degree, right angle turn turn. The stairs, as built, have a total of six winders, each covering 15 degrees.

3. **Dispute**

   The issue at dispute between the Applicant and Respondent is whether the subject stairs provide sufficiency of compliance with Sentence 9.8.5.3.(1) of the Ontario Building Code. This sentence

requires that winders within dwelling units turn through an angle of not more than 90 degrees and that individual treads turn through an angle of 30 degrees, i.e., only three winders are allowed.

4. **Provisions of the Building Code**

9.8.5.3. Winders

(1) Stairs within dwelling units may contain winders that converge to a centre point provided the winders turn through an angle of not more than 90 degrees and individual treads turn through an angle of 30 degrees.

(2) Only one set of winders described in Sentence (1) shall be permitted between floor levels.

5. **Applicant's Position**

The Applicant submitted that although the subject stairs do contain six winders, in their opinion, the differences are slight and would not mean a reduction in safety. Measured at the centre of the stairs, they noted that the width of the run on each stair, as constructed, is 228 mm. This dimension exceeds the minimum run set out in Sentence 9.8.3.1.(1).

The Applicants are also providing handrails on both sides of the subject stairs and additional stair lighting.

6. **Chief Building Official's Position**

The Respondent submitted that Sentence 9.8.5.3.(1) of the Building Code allows three winders. The stairs as built have six.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the stair containing six winders provides sufficiency of compliance with Sentence 9.8.5.3.(1) of the Ontario Building Code.

8. **Reasons**

i) Handrails are provided on both sides of the stair for greater safety.

ii) Increased lighting is provided within the stairwell.

iii) Stair configuration provides a greater interior stair run than might be achieved through a winder built to Sentence 9.8.5.3.(1) of the Ontario Building Code.

iv) The interior handrail forces users to travel on a wider portion of the stair.

Dated at Toronto this 21st day in the month of August in the year **1997** for application number **1997-43**

BCC Ruling No. 97-36-578

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-36-578

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 9.8.5.2. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Ms. Jane Lovell & Mr. Stuart Button, 32 Waverley Road, Toronto, Ontario, for the resolution of a dispute with Ms. Pam Coburn, Chief Building Official, City of Toronto, Ontario, concerning whether the proposed exterior spiral staircase provides sufficiency of compliance with Article 9.8.5.2. of the Ontario Building Code at 32 Waverley Road, Toronto, Ontario.

APPLICANT

Ms. Jane Lovell & Mr. Stuart Button
Homeowners
32 Waverley Road
Toronto, Ontario

RESPONDENT

Ms. Pam Coburn
Chief Building Official
City of Toronto

PANEL

Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, August 21st, 1997

APPEARANCES

Ms. Jane Lovell & Mr. Stuart Button
Homeowners
32 Waverley Road
Toronto, Ontario
The Applicant

Mr. Michael Swann
Building Plan Examiner
City of Toronto
For the Respondent

RULING

1. **The Applicant**

   Ms. Jane Lovell and Mr. Stuart Button are persons to whom a building permit was issued under the *Building Code Act, 1992* to renovate their existing two storey house at 32 Waverley Road, Toronto, Ontario.

2. **Description of Construction**

   The Applicants renovation added a second storey addition at the rear of their existing two storey house. Attached to the new addition is a second storey deck which is partially cantilevered over the rear wall of the first floor. Including the new addition, the total area of the house is 1,217 ft2. The house is described as having a Group C - residential occupancy.

   The Applicants had proposed to attach an exterior spiral staircase that would connect the rear, second floor deck to an existing grade level deck. The proposed spiral staircase is made of steel and comes as a pre-manufactured kit. The basic components of the kit includes a 3 inch diameter pole, heavy 12 gauge formed steel treads which are welded to a 4 inch steel collar that slide over the pole, a 9 inch diameter base plate to fasten the pole, and a vinyl handrail with railing spandrels. The standard kit designed for a one storey height is equipped with 11 treads.

3. **Dispute**

The issue at dispute between the Applicant and the Respondent is whether the proposed spiral stairs provide sufficiency of compliance with Article 9.8.5.2. of the Ontario Building Code. In particular, the dispute revolves around whether the proposed stairs meets the average run required of 200 mm (7 7/8 inches) (as measured in the middle of the stairs) and the minimum run required of 150 mm (5 7/8 inches).

4. **Provisions of the Building Code**

9.8.5.2. Curved Stairs not in Exits

Except as permitted in Article 9.8.5.3., a curved stair not required as an exit shall have an average run of not less than 200 mm (7 7/8 in) and a minimum run of 150 mm (5 7/8 in) and shall have rises conforming to Article 9.8.3.1.

5. **Applicant's Position**

The Applicants submitted that while the proposed stairs may not meet the provisions for run requirements of Article 9.8.5.2., they have provided additional safety measures to create sufficiency of compliance. For instance, they plan to add non-slip treads, additional lighting, a gate at the second storey entrance to the stairs, and additional balustrades (railing spandrels).

The Applicants also indicate that their house has internal stairs that act as the primary means of egress. Finally, they note that inquiries made to the neighbouring municipality of Scarborough found that its building department would have approved the subject stairs.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed spiral stairs are not permitted under Section 9.8 of the Building Code. They cite Sentence 9.8.2.1.(2) which allows a set of stairs to have a curved and straight portion. They indicate, however, that these stairs are entirely curved from top to bottom.

The Respondent also notes that the run of the subject stairs does not meet Code. In doing so, they have applied Sentence 9.8.3.1.(1) which requires that exterior stairs serving a dwelling unit must have a minimum run of 210 mm (8 1/4 in). The subject stairs, they argue, do not even meet the lesser run requirements found in Article 9.8.5.2.

7. **Commission Ruling**

   It is the decision of the Building Code Commission that the proposed exterior spiral stair does not provide sufficiency of compliance with Article 9.8.5.2. of the Ontario Building Code.

8. **Reasons:**

   i) The run, rise and stair width do not comply with the Ontario Building Code.

   ii) Limited proposals were provided to reduce the hazards associated with travel down the stair.

Dated at Toronto this 21st day in the month of August in the year **1997** for application number **1997-42**.

BCC Ruling No. 97-35-577

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-35-577

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.2.54. "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Mike Jones, Vice President, Exal Aluminium Inc., Pickering, Ontario, for the resolution of a dispute with Mr. Leo Grellette, Chief Building Official, Town of Aurora, Ontario, concerning whether the proposed sprinkler and egress facility upgrades from an interior office mezzanine provide sufficiency of compliance with Article 3.2.2.54. of the Ontario Building Code at 95 Dunning Avenue, Aurora, Ontario.

APPLICANT

Mr. Mike Jones
Vice President
Exal Aluminium Inc.,
1850 Clements Road
Pickering, Ontario,

RESPONDENT

Mr. Leo Grellette
Chief Building Official
Town of Aurora

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Lawrence Glazer

PLACE

Toronto, Ontario

DATE OF RULING

Tuesday, August 12th, 1997

APPEARANCES

Mr. Mike Jones
Exal Aluminium Inc.
Pickering, Ontario
The Applicant

Mr. Peter Colquhoun
Arencon Inc.
Mississauga, Ontario
Agent for the Applicant

Mr. Leo Grellette
Chief Building Official
Town of Aurora
The Respondent

RULING

1. **The Applicant**

   Mr. Mike Jones, Vice President, Exal Aluminium Inc., is a person who is applying for a building permit under the *Building Code Act, 1992* to upgrade the fire safety performance of the aluminium manufacturing plant, especially the two level interior office space at Exal Aluminium Inc., Aurora, Ontario.

2. **Description of Construction**

   Exal Aluminium manufactures extruded aluminium products at their 95 Dunning Avenue location in Aurora, Ontario. The plant was originally constructed in 1960 and has been added to during several phases, the latest being completed in 1995.

   The building is described as a noncombustible, one storey structure, with a total building area of 16,648 m2. There are several mezzanines located in the older areas of the plant that serve as the

lunchroom, change rooms and offices. Some of the existing mezzanine structures are constructed of combustible materials.

The building is equipped with a fire alarm system, a standpipe and hose system and a supervised, automatic sprinkler system that serves the entire plant, except for the older office mezzanine area which is separated from the remainder of the building by a masonry wall. The structure is classified as having a Group F, Division 2 major occupancy.

During the last construction phase a one storey addition (the "95 addition") was added to the south end of the existing building. As this project was nearing completion, a two level mezzanine, composed of combustible construction (wood), was added as office space along the west exterior wall of the plant where the '95 addition intersects with the older building. The upper level of this mezzanine is considered to be enclosed and has an area of roughly 112 m2. The sprinkler system in the plant provides some protection for the new mezzanine. The mezzanine was not detailed in the plans submitted and approved for the '95 addition.

The existing construction of the mezzanine is 2 x 4 wood stud walls, 2 x 12 wood joists and 5/8 inch tongue and groove plywood. The plywood floor is covered by vinyl composition tiles. Both the upper and ground floor levels have an acoustic panel suspended ceiling. (The ceiling space on both levels is used as a return air plenum.) The interior walls of the offices are covered by half inch gypsum board, whereas the exterior mezzanine walls that face into the rest of the plant are sheathed with 7/16 inch aspenite and are covered with a pre-finished metal cladding. The mezzanine floor assembly is supported on load bearing wood stud walls that run from the concrete plant floor to the underside of the floor joists.

The sprinkler system in the plant extends at roof level above the mezzanine area. This system, covering the subject area was installed in 1995, and is designed to meet the requirements for Ordinary Hazard Group 2, including the standards for sprinkler spacing. The system complies with NFPA-13 for the occupancy of the building. Below the acoustic tiles and between the ceiling panels and the wood joists of the new office area sprinklers are also installed. This is also served by the 1995 system and is equipped with an 8 inch fire protection water service. The sprinkler system in the mezzanine is consistent with the combustible concealed spaces requirements of NFPA-13-1991, 4-4.1.7.1.1. and 4-4.1.7.1.2. and it is designed to meet the requirements for a Light Hazard occupancy.

3. **Dispute**

The issue at dispute between the Applicant and the Respondent is whether the proposed fire safety upgrades for the mezzanine provide sufficiency of compliance with the requirements of OBC Article 3.2.2.54. Buildings covered by this provision must be of noncombustible construction, and fully sprinklered, while roof assemblies and mezzanines, including supports, must have a fire-resistance rating of at least 1 h. As currently built, the new mezzanine is neither noncombustible nor does it have a 1 h fire-resistance rating.

4. **Provisions of the Building Code**

Article 3.2.2.54. Industrial Buildings, Division 2, up to 6 Storeys

(1) A building classified as Group F, Division 2 shall conform to Sentence (2) provided the building

(a) is not more than 6 storeys in building height,

(b) if unsprinklered, has a building area not more than the value in Table 3.2.2.V., and

(c) if sprinklered, is not more than twice the area limits of Clause (b).

(2) The building shall be of noncombustible construction, and

(a) floor assemblies shall be fire separations with a fire-resistance rating of not less than 2 h,

(b) mezzanines shall have a fire-resistance rating of not less than 1 hr,

(c) roof assemblies shall have a fire-resistance rating of not less than 1 h, and

(d) all loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.

5. **Applicant's Position**

The Applicants propose several measures to provide a level of safety that, in their view, would be comparable if the mezzanine was made of noncombustible construction and had a fire-resistance rating of 1 h, i.e., if it complied with Article 3.2.2.54.

Primarily they intend to upgrade the sprinkler system within the mezzanine by replacing the existing heads with quick response sprinklers. This would be done for both the above and below ceiling sprinkler heads. The Applicants also propose to increase the number of sprinkler heads, especially in areas of the mezzanine where coverage is inadequate. They also intend to modify the sprinkler piping to maintain a greater level of pressure and to achieve the higher design standards for an Occupancy Hazard Group 1 classification. The underside of the stairs will also be protected with a layer of 5/8 type X gypsum board. The Applicants argue that these measures would offset the presence of nonrated, combustible material found in the mezzanine, as well as providing protection for the plastic piping and wood framing installed in the plenum.

The access to exits and travel distances have also been considered by the Applicant. It is their belief that the mezzanine is not required to have an additional exit. OBC Sentence 3.3.1.5.(2) requires a mezzanine to have a second exit if the occupant load exceeds 60 persons, or the mezzanine area exceeds (in the case of an F2 occupancy) 200 m2 (2,150 ft2), or the distance of travel is greater than 25 m (82 ft). The subject mezzanine, they claim, has an occupancy of 11 persons, an area of 1,202 ft2, and its greatest travel distance is 77 ft. On these grounds, they argue that it complies fully with OBC 3.3.1.5.(2). Despite their assertion, however, the Applicant is proposing to install an additional steel, open egress stair on the mezzanine's east side, in proximity to the north end.

To improve overall safety for the occupants of the plant, the Applicants will also prepare and implement a fire safety plan for the entire building consistent with Section 2.8 of the OFC.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed upgrading measures offered by the Applicant do not provide sufficiency of compliance with Article 3.2.2.54. In particular, they argue that the Code allows sprinklers to be used as a compensating measure to reduce the level fire-resistance rating of roofs, but it does not grant the same relief from the requirements for noncombustible construction, ratings for floors and their supporting structures, and flame spread ratings allowed in concealed spaces used as return air plenums.

The municipality also believes that a second egress is required for the mezzanine because, according to their measurements, the distance of travel from the remotest point on the mezzanine exceeds the limits allowed in Sentence 3.3.1.5.(2). Further, the dead end corridor length of 9 m permitted in the Code is also exceeded in the subject mezzanine.

Finally, the Respondent also notes that the fire safety plan offered by the Applicant is a requirement under the OFC

7. **Commission Ruling**

It is the decision of the Building Code Commission that the combustible interior office construction provides sufficiency of compliance with Article 3.2.2.54 of the Building Code provided the sprinkler protection and egress provisions are provided and smoke detection is provided serving the plenum spaces to shut down the mechanical system and activate the fire alarm system.

8. **Reasons:**

i) The mezzanine is less than 1% of the building floor area.

ii) The wood framing is protected by drywall or other non combustible finishes.

iii) The sprinkler system is being upgraded to ordinary hazardous group 1 with quick response heads.

iv) Improved egress facilities to serve the mezzanine are being provided, including drywall protection to the underside of the existing stair.

v) The installation of smoke detection serving office plenum space will increase early detection and limit fire spread through fan shut down.

Dated at Toronto this 12th day in the month of August in the year **1997** for application number **1997-39**

BCC Ruling No. 97-34-576

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-34-576

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.4.19.(1) "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. John Langley, Project Director, Community Services Department, City of Mississauga, Ontario, for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, Ontario, to determine whether a required fire alarm system should sound in the theatre space of a concert building in accordance with Sentence 3.2.4.19.(1) of the Ontario Building Code at the Mississauga Living Arts Centre, Mississauga, Ontario.

APPLICANT

Mr. John Langley, Project Director
Community Services Department
City of Mississauga
300 City Centre Drive
Mississauga, Ontario,

RESPONDENT

Mr. Agris Robeznieks

Chief Building Official

City of Mississauga

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Lawrence Glazer

PLACE

Toronto, Ontario

DATE OF RULING

Tuesday, August 12th, 1997

APPEARANCES

Mr. John Langley
City of Mississauga
Mississauga, Ontario

The Applicant

Mr. Johnathan Rubes
Leber Rubes Inc.,
Mississauga, Ontario
Toronto, Ontario
Agent for the Applicant

Mr. Norman Collins
Captain Fire Prevention
City of Mississauga
For the Respondent

Mr. Frank Spagnolo
Manager, Building Inspections
City of Mississauga
For the Respondent

RULING

1. **The Applicant**

   Mr. John Langley, Project Director, City of Mississauga is a person to whom a building permit was issued under the *Building Code Act, 1992* to construct a new visual and performing arts centre, known as the Mississauga Living Arts Centre, in Mississauga, Ontario.

2. **Description of Construction**

The Mississauga Living Arts Centre is a multi-purpose facility. Its two principal functions are performing arts and visual arts. For performing arts there are two main theatre spaces, the concert and recital theatres. The concert theatre provides fixed seating for 1,171 persons on three levels and 104 box type seats. The legitimate stage and fly tower of the concert theatre is separated from the auditorium seating area by 1 h fire separation and a proscenium opening that is protected by a fire curtain. The stage and fly tower a equipped with a mechanical smoke exhaust.

The recital theatre contains 400 fixed seats on three levels, however it does not possess a legitimate stage and fly tower. Both the recital and concert theatres are separated from the remainder of the building by 1 h fire separations. As well, both theatres are accessed through sound and light locks.

The visual arts facility in the building includes ceramic, sculpture, glass, wood, welding, digital arts, painting, drawing, fibre arts and print making studios. There are also classrooms, display and exhibition spaces and a gift shop. The ancillary spaces in the building include a restaurant, a kids centre and two levels of underground parking.

The building is described as 3 storeys in height, approximately 7,800 m2 in area, and made of noncombustible construction. The structure is equipped with a sprinkler system and a standpipe and hose system. It also contains a two stage fire alarm system that has a control unit/annunciator panel at the fire department/staff entrance which is located adjacent to the buildings security office. The fire alarm system is also continuously monitored and supervised.

The building is classified as having Group A, Divisions 1 and 2 major occupancies.

3. **Dispute**

The issue at dispute between the Applicant and Respondent is whether the alert signals of the fire alarm system in the Mississauga Living Arts Centre should sound in the subject building's two performing arts spaces, the recital and concert theatres. Sentence 3.2.4.19.(1) of the OBC requires that audible signal appliances must be intelligibly heard throughout the floor area on which they are installed. The sequencing for audible signalling operation is not addressed in this provision. The Applicants are proposing that the first stage alert signals, intended to notify

supervisory staff, not sound in the concert and recital theatres, unless the alarm initiating device is located within either theatre.

4. **Provisions of the Building Code**

Sentence 3.2.4.19.(1) Audibility of Alarm Signals

(1) Audible signal appliances forming part of a required fire alarm system shall be installed in a building so that alert signals, alarm signals and voice messages can be heard intelligibly throughout the floor area in which they are installed.

5. **Applicant's Position**

The Applicant submitted that the proposed alarm sequencing operation provides for consistency with OBC Sentence 3.2.4.19.(1). In their view this provision is not intended to prohibit the proposed sequencing of the two stage fire alarm signalling.

The basic sequencing of the alarm signalling operation, as proposed by the Applicant, is if a fire detection device or manual pull station is activated in any area other than the concert or recital theatres, the first stage alert signal would not sound in either theatre. If a fire detection device or manual pull station in either the concert or recital theatre is activated, the first stage alert signal would sound in the theatre of origin but not the other. In either of these two scenarios the stage/house manager may be called upon to make announcements informing the audience of the alert signal elsewhere in the building or in the other theatre since the alert signal would not be sounding.

The second stage evacuation signal would sound throughout the entire building, including the two theatres, if the evacuation timer in the fire alarm control unit expired, or if an evacuation switch was activated.

The Applicant believes that the above described alarm operation is a logical sequencing in order to prevent unnecessary confusion or panic within either theatre, while at the same time alerting supervisory staff to investigate the origin of the initial alarm and to advise them to prepare for possible evacuation. This method, they argue, also allows for orderly, direct and in-person handling of the emergency instructions only if they are considered necessary. It would also avoid performance disruption.

The Applicant also points to the National Building Code, which they feel supports their position. Provision A-3.2.4.19.(1) of the NBC states that the first stage alert signal of a two stage alarm system may be restricted to a location in the building which is continuously staffed. Their proposed alarm operation sequencing would not be as restrictive as allowed in the NBC, since the alert signal would sound everywhere in the building except the two theatres.

Finally, the Applicant also argues that this sequencing of alarm systems has been installed in other theatres in Ontario recently.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed alarm sequencing does not conform to Sentence 3.2.4.19.(1). In their view the requirements of this provision clearly state that even the first stage alert signals should sound throughout the entire building, including both the concert and recital theatres.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the current design of the 2 stage fire alarm system to sound the alert in all areas, except the concert and recital theatres, unless a fire is detected in these areas, provides sufficiency of compliance with Sentence 3.2.4.19.(1) of the Building Code provided that the automatic initiation of the 2nd stage evacuation signal occurs after 3 minutes, if the first stage signal is not acknowledged.

8. **Reasons**

i) The building operators have indicated that the building will be staffed by security personnel on a 24 hour/7 day basis.

ii) That there will be additional staff during performance periods.

iii) Duties and responsibilities of supervisory staff, including evacuation procedures, will be part of the fire safety plan.

iv) The building is sprinklered throughout and smoke and/or fire separations are provided at studio locations.

Dated at Toronto this 12th day in the month of August in the year **1997** for application number **1997-38**

BCC Ruling No. 97-33-575

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-33-575

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Clause 3.2.2.22.(2)(b) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Steven DaCosta, Extreme Fitness, Markham, Ontario, for the resolution of a dispute with Mr. John Wright, Chief Building Official, Town of Markham, Ontario concerning whether a precast concrete mezzanine using steel HSS sections and steel plate for structural support provides sufficiency of compliance with Clause 3.2.2.22.(2)(b) of the Ontario Building Code at Extreme Fitness, 8281 Yonge Street, Markham, Ontario.

APPLICANT

Mr. Steven DaCosta
Extreme Fitness
8281 Yonge Street
Markham, Ontario,

RESPONDENT

Mr. John Wright
Chief Building Official
Town of Markham

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Lawrence Glazer

PLACE

Toronto, Ontario

DATE OF RULING

Tuesday, August 12th, 1997

APPEARANCES

Mr. Gerald Spring
Gerald Spring Architect Inc.,
Toronto, On
Agent for the Applicant

Larden Muniak Consulting Inc.,
Mr. Les Muniak
For the Applicant

Mr. Tony Boyko
Manager, Building Inspections
Town of Markham
For the Respondent

RULING

1. **The Applicant**

   Mr. Steven DaCosta, Owner, Extreme Fitness, is a person to whom a building permit was issued under the *Building Code Act, 1992* to renovate an existing 2 storey building to create an new health club facility (Extreme Fitness) located on the ground floor of the southerly portion of the structure at 8281 Yonge Street, Markham, Ontario.

2. **Description of Construction**

   The Applicant has renovated an existing 2 storey, 4,059 m2 (43,670 ft2) building to include an new health club, known as Extreme Fitness, in the southern end of the structure. The Extreme Fitness club occupies some 2,415 m2 (26,000 ft2) of the building. The other tenancy in the building, located at the north end, occupies the remaining portion of the structure, including the entire second floor. While relatively small, the second storey has an area of 232 m2 (2,500 ft2), which exceeds 10% of the ground floor area of that tenancy. Separating the two tenancies in this building is a 2 h rated fire separation which extends from the foundation to the roof deck.

Located within the Extreme Fitness portion of the building is a mezzanine measuring 86 m2 (930 ft2). In order to maximize headroom clearance under the mezzanine, the Applicant utilized a flat, pre-cast concrete slab construction with steel HSS sections and steel plate for structural support. The Applicant also proposed to apply a spray-on, mastic-type coating to achieve a greater fire-resistance rating. The purpose of the mezzanine is to provide additional space for exercise equipment.

The building is composed of noncombustible construction. It contains a fire alarm and sprinkler system, both of which are monitored by an independant central station facility. The occupant load in the health club facility is 480 persons. It is served by 7 exits, which have a total aggregate capacity of 1,440 persons.

The Structure is classified as having a Group A, Division 2 major occupancy and faces one street.

3. **Dispute**

The issue at dispute between the Applicant and the Respondent is whether the pre-cast concrete mezzanine as designed, using steel HSS sections and steel plate with spray-on fire-proofing, provides sufficiency of compliance with Clause 3.2.2.22.(2)(b), which requires a 1 h fire-resistance rating.

4. **Provisions of the Building Code**

Clause 3.2.2.22.(2)(b) Assembly Buildings, Division 2, up to 5 Storeys, Any Area

(2) Except as provided in Sentence (3), the building shall be of noncombustible construction, and

(b) mezzanines shall have a fire-resistance rating of not less than 1 h,

5. **Applicant's Position**

The Applicant submitted that the Mezzanine, as designed, provides sufficiency of compliance with the 1 h fire-resistance rating requirement of Clause 3.2.2.22.(2)(b). There are numerous reasons the Applicant uses to support this view.

The nature of the occupancy, as a health club where space is required to carry out exercise activities, means that crowding would not be an issue as in other uses such as nightclubs etc.

covered by Article 3.2.2.22. There is also a low fire load in such a facility. In fact, large portions of the health club, such as the general exercise and aerobics areas, have virtually no fire load. The office areas, testing and consultation rooms would have a fire load comparable to that of a general use office area.

The Applicant also notes that the L-shaped mezzanine is located between two two large adjoining open areas, the general exercise area and the aerobics area. A fire that starts under the mezzanine area would easily be seen by anyone in those spaces, they argue. Further, the entire health club is well served by the seven egress points located on the east, west and south facing walls.

In the event of a fire in the tenancy at the north end of the building, the 2 h rated masonry fire separation would provide significant protection. As well, the Applicant indicates that the activation of the building's sprinkler and fire alarm systems would give occupants adequate notification prior to any collapse of the 2 h fire separation. Within the Extreme Fitness facility itself, the activation of the sprinkler system would most likely extinguish any fire before the structural stability of the mezzanine would be challenged.

Pertaining specifically to the mezzanine floor assembly, the Applicant argues that the application of the flame control mastic coating will provide additional fire-resistance protection to the steel components.

Lastly, it is the Applicant's view that although the Code considers the subject building to be 2 floors, even though the second storey is entirely in the building's other tenancy, which is separated by a 2 h rated fire-separation. The Code, however, does not recognize the mitigating effects of this separation on the spread of fire. Consequently, the 1 h fire-resistance rating for the mezzanine is required through the application of Article 3.2.2.22. Given the circumstances of this building, especially when considering the existence of the 2 h separation, the Applicant feels the higher mezzanine standard could be construed as onerous.

6. **Chief Building Official's Position**

The Respondent submitted that the construction of the mezzanine floor assembly does not meet the requirements of Clause 3.2.2.22.(2)(b). In particular, they point to Article 3.1.7.1. of the OBC which sets out the determination of fire-resistance ratings. It is their concern that while the mastic coating has been tested according to CAN4-S101-M and has been found to contribute to the fire-resistance ratings of certain assemblies, the particular assembly in question has not been

tested and therefore it is impossible to determine the overall rating of the assembly. As well, for the assembly in question it is not possible to apply the mastic coating on all surfaces. This reduces the overall fire-resistancy of the applied coating material.

7. **Commission Ruling**

   It is the decision of the Building Code Commission that the mezzanine provides sufficiency of compliance with Clause 3.2.2.22.(2)(b) of the Building Code.

8. **Reasons:**

   i) The building is sprinklered which is electronically supervised and remotely monitored.

   ii) The mezzanine is relatively small in comparison with the size of the building.

   iii) A partial flame control mastic coating is being applied to the steel structure supporting the mezzanine to provide additional protection.

   iv) The exit capacity for the premises is 3 times what is required based on occupant load.

   v) The 2 hr separation is provided between the health club and adjacent occupancy.

   vi) It is the opinion of the Building Code Commission that the design does not present an increase hazard to life safety from fire.

Dated at Toronto this 12th day in the month of August in the year **1997** for application number **1997-35**

BCC Ruling No. 97-32-574

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-32-574

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 9.10.9.14.(3) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Ms Jill Moir, Grey Condominium Corporation No. 18, Collingwood, Ontario, for the resolution of a dispute with Mr. Mina Tesseris, Chief Building Official, Township of Collingwood, Ontario, whether the roof truss assembly provides sufficiency of compliance with the Ontario Building Code at Chateau Ridge Condominiums (Grey Condominium Corporation No. 18), Collingwood, Ontario.

APPLICANT
Ms Jill Moir
Grey Condominium Corporation
Collingwood, Ontario

RESPONDENT
Mr. Mina Tesseris
Chief Building Official
Township of Collingwood

PANEL
Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Ross Thomson

PLACE
Toronto, Ontario

DATE OF RULING
Tuesday, July 22nd, 1997

APPEARANCES
Mr. David Syrett

Leber Rubes Inc.
Toronto, Ontario
For The Applicant

Mr. Graeme Scott
Halsall Associates Ltd.
Toronto, Ontario

Mr. Mina Tesseris
Chief Building Official
Township of Collingwood
The Respondent

RULING

1. **The Applicant**

   Ms Jill Moir, Grey Condominium Corporation is the holder of a building permit under the *Building Code Act, 1992* to install fire separations at existing 3 storey townhouse condominiums in the Township of Collingwood, Ontario.

2. **Description of Construction**

   There are 6-12 dwelling units in each building. Each building contains upper and lower units in which one dwelling unit is located above another. The design and construction of each building was regulated by Part 9 of the Ontario Building Code as each building is not more than three storeys in height or 600 square metres in building area. Since the building is a condominium, the separation between residential suites is governed by Sentence 9.10.9.14.(3) which requires a fire separation having a fire-resistance rating of not less than 1 hour.

   The buildings are permitted by the Building Code to be of combustible construction. The buildings were constructed of a combination of combustible and non-combustible construction. The roofs are framed using timber trusses spaced 16 inches apart except at dormer locations where the roof has been constructed using conventional lumber framing. The roof trusses span parallel to these vertical fire separations except at the ensuite bath where the fire separation jogs 90 degrees and runs perpendicular to the span of the trusses. This condition exists in 18 upper units.

The vertical fire separations were originally constructed to the underside of the trusses with no fire separations within the attic space. They were recently extended through the attic space to the underside of the wood roof sheathing. This new fire separation is constructed of rated gypsum board on both sides of metal studs and is required by Article 9.10.9.10. to have a 1 hour fire resistance rating. Where the fire separation jogs around the ensuite bath, the timber trusses penetrate this new fire separation

3. **Dispute**

The dispute between the Applicant and Respondent concerns whether the installed wood roof truss penetration of the combustible 1 hour fire separation in the attic space is permitted under the Building Code.

4. **Provisions of the Building Code**

Sentence 9.10.9.14. Separation of Residential Suites

(3) Dwelling units that contain 2 or more storeys including basements shall be separated from the remainder of the building by a fire separation having a fire-resistance rating of not less than 1 hr.

Article 9.10.3.1. Fire-Resistance and Fire-Protection Ratings

Where a fire-resistance rating or a fire-protection rating is required in this Section for an element of a building, such rating shall be determined in conformance with the test methods described in Part 3, or in accordance Chapter 2 of the Supplement to the NBC 1990, or with Tables 9.10.3.A. and 9.10.3.B.

Sentence 9.10.9.10.(1) Concealed Spaces above Fire Separations

(1) Except as provided in Sentence (2), a horizontal service space or other concealed space located above a required vertical fire separation shall be divided at the fire separation by an equivalent fire separation within the space.

Article 9.10.5.1 Permitted Openings in Wall and Ceiling Membranes

(1) Except as permitted in Sentences (2) and (4), a membrane forming part of an assembly required to have a fire-resistance rating shall not be pierced by openings into the assembly unless the assembly has been tested and rated for such openings.

(2) A wall or ceiling membrane forming part of an assembly required to have a fire-resistance rating may be pierced by openings for electrical and similar service outlet boxes provided such outlet boxes are tightly fitted.

5. **Applicant's Position**

The one hour fire separation within the attic space is constructed of rated gypsum board on both sides of wood studs in accordance with Chapter 2, "Fire Performance Ratings" of the Supplement to the National Building Code of Canada, 1990. The engineered wood roof trusses span parallel to the attic fire separation except where the fire separation jogs around the ensuite bathroom. The trusses clear span the length of each dwelling unit and the trusses are spaced at 600 mm on centre. Where members of the truss penetrate the 1 hour fire separation, the gypsum board on both sides of the vertical fire separation has been tightly fitted or firestopped around each member as required by the Building Code.

The Applicant submitted that the issue raised by the Respondent regarding the collapse of the unrated roof trusses may cause premature collapse of the 1 hour fire separation in the attic only applies to firewalls and noncombustible fire separations supporting combustible construction. The requirements for firewalls and combustible construction supported by noncombustible fire separations do not apply to combustible construction supported by combustible fire separations. The Applicant is of the opinion that the Building Code does not prohibit the collapse under fire conditions of a rated vertical fire separation as a result of the collapse of unrated or lesser rated construction supported by it where the rated fire separation and unrated construction are of the same construction type. Furthermore, the Applicant submitted that the roof assembly is not required by the Code to have a fire-resistance rating.

6. **Chief Building Official's Position**

The Chief Building Official submitted that the attic fire separations of the units are required to be constructed as one hour fire separations in accordance with Sentence 9.10.9.10(1). Eighteen of the 27 upper units within the development contain 6 or 7 of the 17 trusses within the attic which penetrate the fire separation. The ceiling of these units has not been constructed as a fire rated separation.

The Respondent also submitted that the fire resistance rating of a fire separation penetrated by wood roof trusses cannot be determined by using Chapter 2, "Fire Performance Ratings" of the Supplement to the NBC 1990 because this document does not assign a time of contribution to

wallboard membranes penetrated by wood roof trusses or any other type of framing members. Approved fire tests are not known to have been conducted on such an assembly. Therefore, the fire resistance rating of the fire separations penetrated by the wood roof trusses is unknown. It is the position of the Respondent that the attic fire separations penetrated by the wood roof trusses have not been constructed in accordance with fire-resistance and fire-protection ratings under Article 9.10.3.1 and therefore do not provide a 1 hour fire resistance rating as required by Sentence 9.10.9.10.(1).

The Respondent indicated that should a fire occur in the attic of one of the units adjacent to the fire separations in question, the roof trusses which penetrate the separation could lose their integrity in as little as 5 minutes and would take the fire separation down along with them.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the protection of penetrations of the 1 hr fire separation by wood trusses provides sufficiency of compliance with 9.10.9.14.(3) of the Building Code.

8. **Reasons:**

i) The penetrations by wood trusses of the fire separations are sealed and the exposed chords are protected for at least 1 foot by fire resistance rated materials.

Dated at Toronto this 22nd day in the month of July in the year **1997** for application number 1997-36

BCC Ruling No. 97-31-573

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-31-573

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.1.4.2.(1) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Norman Pye, Northern Pride Products Inc., Paris, Ontario, for the resolution of a dispute with Mr. Ron Rashleigh, Chief Building Official, Town of Paris, Ontario, concerning whether the wall and ceiling construction containing foamed plastic insulation provides sufficiency of compliance according to Sentence 3.1.4.2.(1) of the Ontario Building Code at Northern Pride Products Inc., 20 Scott Avenue, Paris, Ontario.

APPLICANT
Mr. Norman Pye
Northern Pride Products,
20 Scott Avenue
Paris, Ontario

RESPONDENT
Mr. Ron Rashleigh
Chief Building Official
Town of Paris

PANEL
Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Ross Thomson

PLACE
Toronto, Ontario

DATE OF RULING
Tuesday, July 22nd, 1997

APPEARANCES

Mr. Norman Pye
Northern Pride Products
Paris, Ontario
The Applicant

Mr. Kevin Maloney
Laird Plastics
Mississauga, Ontario

Mr. Ron Rashleigh
Chief Building Official
Town of Paris
The Respondent

RULING

1. **The Applicant**

   Mr. Norman Pye, Northern Pride is the holder of a permit under the *Building Code Act, 1992* to construct a poultry processing plant at 20 Scott Avenue, Paris, Ontario.

2. **Description of Construction**

   The building of Northern Pride Products Inc. is a new one storey processing plant (Group F, Division 2 major occupancy) of non-combustible construction with a building area of 8,960 square feet (832 square metres). The building does not have a fire alarm system, a sprinkler system or a standpipe and hose system. Rigid foamed plastic insulation is used in the construction of the walls and ceilings of the Production Area, Cold Room, Shipping Room and Cooler. "Kemlite Glasboards", a type of fibreglass reinforced plastic panels, are installed over the rigid foamed plastic insulation.

   The construction of the building is regulated by Article 3.2.2.51 of the Building Code. and may be of combustible or noncombustible construction used either singly or in combination, and the roof is not required to have a fire-resistance rating. The building is constructed of masonry loadbearing walls, open web steel joists and steel deck.

3. **Dispute**

The dispute between the Applicant and Respondent concerns whether the wall and ceiling installations meet the requirements of Sentence 3.1.4.2.(1) of the Building Code.

4. **Provisions of the Building Code**

Sentence 3.1.4.2.(1) Protection of Foamed Plastics

(1) Foamed plastics which form part of a wall or ceiling assembly in combustible construction shall be protected from adjacent spaces in the building, other than adjacent concealed spaces within attic or roof spaces, crawl spaces, and wall assemblies, by

(a) one of the interior finishes described in Subsections 9.29.4. to 9.29.9.,

(b) sheet metal mechanically fastened to the supporting assembly independent of the insulation, not less than 0.38 mm (0.015 in) thick and with a melting point not below 650oC (1202oF) provided the building does not contain a Group B or Group C major occupancy, or

(c) any thermal barrier that meets the requirements of Sentence 3.1.5.11.(2). (See Appendix A.)

5. **Applicant's Position**

The Applicant maintained that the plant was approved by Agriculture Canada. Due to the nature of production in the plant which requires surfaces to be non-porous to prevent bacteria, the Applicant indicated that the `glasboard' is a suitable material because it can be easily cleaned. As the plant environment is very wet and damp and there is no hydro in the walls, there is a little chance of a fire hazard. Furthermore, there is a low occupant load of 22.

6. **Chief Building Official's Position**

The wall and ceiling construction include the installation of foam plastic insulation which is not protected from adjacent spaces by a thermal barrier tested in conformance with CAN4-S124-M "Standard Method of Test for the Evaluation of Protective Coverings for Foamed Plastic" as required under the Building Code. The Applicant has installed "Kemlite Glasbord" fibre-glass reinforced plastic panels over the foam plastic insulation. "Kemlite Glasbord" has not been tested to the required standard specified in Sentence 3.1.4.2.(1). An Order to Comply was issued by the Respondent to the Applicant to provide protection between the foamed plastic insulation and the "Kemlite Glasbord" panels in accordance with the requirements of Sentence 3.1.4.2.(1) of the OBC.

7. **Commission Ruling**

   It is the decision of the Building Code Commission that the installation of `Glasbord' CPI over 1-1/2" S.M. board provides sufficiency of the compliance with Article 3.1.4.2. of the Building Code.

8. **Reasons:**

   i) The building is small (i.e) single storey and 8960 sq.ft. and is subdivided into areas no greater than 4500 sq. ft in area by masonry walls and metal doors.

   ii) The distance of travel to exits is less than required by the Building Code.

   iii) The processing area is damp and high pressure hose stations are available which are intended for wash down but could be used for fire fighting purposes.

   iv) Ambient temperature alarms are located in the processing area and storage to which would alert the occupants of a fire when temperatures exceed 45o and 34o F respectively.

   v) The occupant load is low (i.e. 22 persons).

Dated at Toronto this 22nd day in the month of July in the year **1997** for application number **1997-32**

BCC Ruling No. 97-29-571

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-29-571

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Clause 3.1.10.3.(2)(a) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Rupert Bronsdon, President, Lighthouse Point Yacht and Tennis Club Inc., 28 Glenwood Avenue, City of Toronto, Ontario, for the resolution of a dispute with Mr. Bill Plewes, Chief Building Official, Town of Collingwood, concerning whether the proposed termination of a 2 hour firewall on the underside of a reinforced concrete roof slab on one side only provides sufficiency of compliance with Clause 3.1.10.3.(2)(a) of the Ontario Building Code (OBC) and whether the wood trusses in an assembly with drywall applied to each side contributes 5 minutes to the fire-resistance rating at Lighthouse Point Yacht and Tennis Club Inc., Highway # 26 West, Town of Collingwood, Ontario.

APPLICANT

Mr. Rupert Bronsdon, President
Lighthouse Point Yacht and Tennis Club Inc.
28 Glenwood Avenue
Toronto, Ontario

RESPONDENT

Mr. Bill Plewes
Chief Building Official
Town of Collingwood

PANEL

Mr. Roy Philippe, Chair
Mr. Demir Delen
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING
Wednesday, July 9th, 1997

APPEARANCES
Mr. Rupert Bronsdon
President
Lighthouse Point Yacht & Tennis Club Inc.
For the Applicant

Mr. Bill Plewes
Chief Building Official
Town of Collingwood
For the Respondent

RULING

1. **The Applicant**

   Mr. Rupert Bronsdon, President, Lighthouse Point Yacht and Tennis Club Inc., is a person who has applied for a permit under the *Building Code Act, 1992* to construct a new residential structure, known as Phase Three, at the Lighthouse Point Yacht and Tennis Club Inc., Highway # 26 West, Town of Collingwood, Ontario.

2. **Description of Construction**

   The proposed Phase Three project at the Lighthouse Point Yacht and Tennis Club is a three storey structure which will be separated into two buildings by a 2 h firewall. One building will be 753 m2 (8 110 ft2) and the other will be 659 m2 (7 094 ft2), for a total area of 1 412 m2 (15 204 ft2). The Phase Three structure will be made of combustible construction and is classified as having a Group C (residential) major occupancy. The structure does not have a standpipe and hose system nor a sprinkler system. It is equipped with a fire alarm system.

   The Applicant proposes to terminate the 2 h firewall between the two buildings of Phase Three on the underside of the concrete roof slab. The roof slab, however, is present on one side of the firewall only. They do not propose to construct a parapet extending above the roof.

   The Applicant is also proposing to construct wood and drywall truss assemblies for the attic, in which the drywall is applied to the sides of the wood trusses.

3. **Dispute**

The issue under dispute between the Applicant and the Respondent is whether the proposed termination of the firewall on the underside of the concrete roof slab can occur on one side only of the subject firewall. (The municipality is regarding the Phase Three project as Part 9 building, however, Article 9.10.11.3 refers to Subsection 3.1.10. for the requirements for firewalls.) Sentence 3.1.10.3.(2) allows firewalls to terminate on the underside of reinforced concrete roof slabs provided that the same roof slab has a fire-resistance rating of 1 h on both sides of the firewall. The Applicant believes that the firewall and roof slab assembly as designed provides sufficiency of compliance with this provision. As well, both the Applicant and Respondent request clarification whether the wood trusses themselves contribute 5 minutes to the fire-resistance rating of the wood and drywall truss assembly provided in the attic of the Phase Three building.

4. **Provisions of the Building Code**

3.1.10.3. Continuity of Firewalls

(2) A *firewall* is permitted to terminate on the underside of a reinforced concrete roof slab provided
(a) the roof slab on both sides of the *firewall* has a

(i) *fire-resistance rating* of not less than 1 h if the *firewall* is required to have a *fire-resistance rating* of not less than 2 h, or

(ii) *fire-resistance rating* of not less than 2 h if the *firewall* is required to have a *fire-resistance rating* of not less than 4 h, and

(b) there are no concealed spaces within the roof slab in that portion immediately above the *firewall*.

5. **Applicant's Position**

The Applicant submitted that both the proposed firewall and roof truss assemblies provide sufficiency of compliance. Regarding the firewall and roof slab assembly, the Applicant argued that the combination of the 2 h firewall (8 inch semi-solid concrete block) and the 10 inch thick precast concrete roof slab would provide adequate containment and prevent the spread of fire between one building of Phase Three and the other. It is their contention that the proposed design

obviates the need for both the concrete roof slab on the other side of the firewall and a parapet extending above the roof line. The Applicant is concerned with drainage problems if the sloped portion of the roof terminates at a parapet.

The fire-resistance ratings of roof truss assembly are set out in OBC Article 3.1.7.1. (Determination of Ratings), which refers to Chapter 2, "Fire Performance Ratings" of the Supplement to the National Building Code 1990. Subsection 2.3 of the Supplement, in particular Table 2.3.C., indicates that a wood truss assembly has a 5 minute rating. The Applicant believes that this provision supports their assertion regarding the contribution of the wood truss itself to the overall fire-resistance rating of the assembly. When combined with 40 minute rated drywall applied on both sides of the wood truss, they argue that the overall fire-resistance rating of the subject truss assembly is 45 minutes.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed firewall and roof slab design does not provide sufficiency of compliance with the Building Code. In their view, the firewall is allowed to terminate on the underside of a concrete roof slab, but as per 3.1.10.3.(2)(a) this must be done on both sides of the firewall. In addition, because Phase Three is separated by a 2 h firewall, the OBC requires that the concrete roof slab must have a fire-resistance rating of at least 1 h on both sides. Alternatively, the Respondent notes that with a concrete roof slab on one side only, and therefore no possibility to terminate the firewall on both sides, the Applicant must provide a parapet. Such a parapet should extend 150 mm above the roof line in accordance with Clause 3.1.10.4.(1)(a) and would provide the necessary continuity of the firewall.

As the municipality is also seeking clarification on the fire-resistance rating of the roof truss, they did not offer any arguments regarding this issue.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the firewall provides sufficiency of compliance with 3.1.10.3.(2)(a) of the building Code provided that:

a) the cores or the cellular concrete slabs terminating at the firewall are filled with noncombustible materials, and

b) the combustible insulation on the roof of the concrete slab is replaced with noncombustible insulation, the width of the firewall.

It is also the decision of the Building Code Commission that the roof truss detailed protected with 5/8 inch fire-rated drywall does not provide adequate support for the drywall and consequently does not provide sufficiency of compliance with the Building Code, for a 3/4 h fire-rated wall assembly.

8. **Reasons:**

Insufficient evidence was provided for the truss configuration to ensure the fire-rated drywall is mounted in accordance with fire performance ratings found in the NBC Supplement for wall assemblies.

Dated at Toronto this 9th day in the month of July in the year **1997** for application number **1997-29**.

BCC Ruling No. 97-28-570

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-28-570

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.1.16.1. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Paolo Presutti, Director of Construction, Fortinos Supermarkets, 90 Glover Road, City of Hamilton, Ontario, for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, concerning whether the proposed retail supermarket addition should provide washroom facilities based on occupant load in accordance with Sentence 3.1.16.1. of the Ontario Building Code (OBC) at Fortinos Supermarkets Ltd., 3900 Highway # 7, City of Vaughan (Woodbridge), Ontario.

APPLICANT
Mr. Paolo Presutti
Director of Construction
Fortinos Supermarkets Ltd.
90 Glover Road
Hamilton, Ontario

RESPONDENT
Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL
Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Michael Steele

PLACE
Toronto, Ontario

DATE OF RULING
Wednesday, July 9th, 1997

APPEARANCES
Mr. J. Bruce Rankin
Rankin Architects Inc.
Agent for the Applicant

Mr. Steve Penna
Technical Supervisor
City of Vaughan
For the Respondent

RULING

1. **The Applicant**

   Mr. Paolo Presutti, Director of Construction, Fortinos Supermarkets Ltd., is a person who has applied for a permit under the *Building Code Act, 1992* to renovate an existing retail supermarket by constructing a sit down eating area in the building at Fortinos Woodbridge, 3900 Highway # 7, City of Vaughan, Ontario.

2. **Description of Construction**

   The existing Fortinos Woodbridge facility at the City of Vaughan is a one storey building approximately 67 865 ft2 which is made of noncombustible construction. The building is classified as having a Group E (Mercantile) major occupancy. Currently, the structure does not have a standpipe and hose system. It is equipped with a fire alarm and sprinkler system.

   The applicant proposes to expand the existing sit down cafeteria area from 30 to 82 seats. At one point 57 seats were provided in this area but 27 were removed at the request of the municipality. The proposed renovation of this area would not only reinstate the 27 removed seats, but would add 25 new seats.

3. **Dispute**

   The issue under dispute between the Applicant and the Respondent is the number of water closets that must be provided within the renovated supermarket, including the expanded cafeteria area. Determinations of occupant load has a direct bearing on the minimum number of washrooms that must be provided. The Applicant has designed the subject supermarket based on the actual occupant load, which they estimate to be approximately 425 persons, including 82 in

the cafeteria area. The municipality has based its calculations of the occupant load of this building on Article 3.1.16.1., which states that when calculating the number of persons for a mercantile occupancy, the figure to use is 3.7 m2 (39.8 ft2) per person. This has resulted in occupant load determination of 1 162 persons, 85 of which are allocated to the restaurant. The discrepancy between these calculations has resulted in a dispute regarding the number of water closets that should be provided in the building.

4. **Provisions of the Building Code**

3.1.16.1. Occupant Load Determination

(1) The occupant load of a floor area or part of a floor area, or of a building or part of a building not having a floor area, shall be based on
(a) the number of seats in assembly occupancies having fixed seats,

(b) 2 persons per sleeping room or sleeping area in a dwelling unit or suite, and

(c) the number of persons

(i) for which the area is designed, or

(ii) determined from Table 3.1.16.A. for occupancies other than those described in Clauses (a) and (b).

(2) Where a floor area or part thereof has been designed for an occupant load other than that determined from Table 3.1.16.A., a permanent sign indicating that occupant load shall be posted in a conspicuous location.

(3) For the purposes of this Article, mezzanines, tiers and balconies shall be regarded as part of the floor area.

(4) Where a room or group of rooms is intended for 2 or more occupancies at different times, the value to be used from Table 3.1.16.A. shall be the value which gives the greatest number of persons for the occupancies concerned.

(5) In dining, alcoholic beverage and cafeteria space, the maximum occupant load shall be designed by using an area per person of 0.6 m2 (6.5 ft2).

5. **Applicant's Position**

The Applicant submitted that the occupant load for the proposed renovation of the Fortinos Woodbridge should be based on the actual number of people that can realistically use the supermarket. The retail portion of the store is 4 296 m2, which based on a Group E (mercantile) occupancy, using Table 3.1.16.A., results in an occupant load of 1 162 persons. As the Applicant notes, however, this calculation is based on the gross retail floor area and does not subtract space for display units and fixed shelving, which is entirely unusable in terms of occupant load. Even at their busiest time of the year, the Christmas holiday season, the Applicant estimates that roughly 375 to 400 shoppers is the maximum that the facility can accommodate. In fact, only 400 shopping carts are provided. The figure of 400 shoppers includes 57 persons seated in the cafeteria area. (This number was eventually reduced to 30 at the request of the City of Vaughan.)

The Applicant now wishes to reinstate the previously removed 27 cafeteria seats and to further increase the seating capacity of that area by 25, for a total of 82 people. This would raise the total retail area occupant load to 425 persons. It is this number that the Applicant wants to use as the basis for calculating how many water closets to provide. To do this, they are proposing, according to Sentence 3.1.16.1.(2), to post a permanent sign indicating the specific occupant load of the retail floor area.

Stemming from this adjusted occupant load, the Applicant has calculated the water closet requirements as follows. For the public in a Group E occupancy with 343 persons, divided equally for men and women, Sentence 3.6.4.2.(24) indicates that 1 male and 2 female washrooms are required. (The issue of staff washrooms for the mercantile occupancy does not seem to be a matter of dispute since 6 are available on the mezzanine level.) As well, Sentence 3.6.4.2.(16) stipulates that the minimum number of water closets provided in a restaurant with an occupant load of 82 (41 females and 41 males) shall be 2 for each sex. The Applicant is proposing to provide a total of 7 water closets, 4 female and 3 male. On this basis, they believe that the ground floor is adequately served with water closets.

Finally, the Applicant is of the opinion that Clause 3.6.4.2.(24)(a) allows them to consider the staff washrooms as part of those required, even though they are on a different floor, as long as they are made accessible to the public.

6. **Chief Building Official's Position**

The Respondent submitted that the Fortinos Woodbridge, being considered a mercantile building under the OBC, has an occupant load of 1 162 persons. This includes 85 people in the cafeteria. It is their view that the water closets should be provided based on the higher occupant load. Their particular concern is the proposal to enlarge the cafeteria. In their opinion, the cafeteria should be installed with 6 washrooms, 3 for each sex. Sentence 3.6.4.2.(18) states that a cafeteria having more than 40 seats must have separate water closets for staff. This would increase the 2 washrooms per sex required under Sentence 3.6.4.2.(16) to 3 for each.

The 6 washrooms required in the cafeteria, they note, would be in addition to the washrooms required in the rest of the retail space. Furthermore, the municipality does not believe the staff washrooms can be counted as being part of those required because during a site inspection it was discovered that these washrooms were inaccessible due to locked doors separating the staff area on the mezzanine level.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the washroom facilities provide sufficiency of compliance with the requirements of the Building Code provided the washroom facilities on the mezzanine level are made accessible to the public and that permanent marking is provided on the lower level washrooms indicating additional washroom facilities are available on the mezzanine level and instructions on how they may be accessed.

8. **Reasons:**

i) Increasing the seating capacity of the eating area of the supermarket to 85 increases the need for washroom facilities in the supermarket.

ii) Washroom facilities on the mezzanine level that are intended primarily for staff use, can be made available to the public.

iii) The signage may be used to direct accessibility to the mezzanine level washrooms.

Dated at Toronto this 9th day in the month of July in the year **1997** for application number **1997-28**.

BCC Ruling No. 97-27-569

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-27-569

AND IN THE MATTER OF Article 3.2.3.18. and Subsection 3.1.6. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Karl Stennson, Vice President, Sheridan Nurseries Ltd., R.R. #4 - 12302 10th Line, Georgetown, Ontario, for the resolution of a dispute with Mr. John Wright, Director of Building Standards, Town of Markham, concerning whether the proposed polyethylene skylight should be considered a roof according to Article 3.2.3.18. of the Ontario Building Code (OBC) and whether the open-sided sales facility with polyethylene rain shields is a tent under OBC Subsection 3.1.6. at Sheridan Nurseries, 4077 Highway # 7, Town of Markham, Ontario.

APPLICANT
Mr. Karl Stennson
Vice President
Sheridan Nurseries Ltd.
R.R. #4 - 12302 10th Line
Georgetown, Ontario

RESPONDENT
Mr. John Wright
Director of Building Standards
Town of Markham

PANEL
Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Michael Steele

PLACE
Toronto, Ontario

DATE OF RULING
Wednesday, July 9th, 1997

APPEARANCES

Mr. Karl Stennson Vice President
Sheridan Nurseries Ltd.
The Applicant

Mr. Allan Larden
Larden Muniak Consultants
Agent for the Applicant

Mr. John Wright
Director of Building Standards
Town of Markham
The Respondent

Mr. Chris Bird
Manager of Plans Review
Town of Markham
For the Respondent

RULING

1. **The Applicant**

   Mr. Karl Stennson, Vice President, Sheridan Nurseries Ltd., is a person who has applied for a permit under the *Building Code Act, 1992* to renovate an existing, enclosed wood frame building to provide for an expansion of their current retail area and to construct a new open-air, covered sales facility at Sheridan Nurseries Ltd., 4077 Highway # 7, Town of Markham, Ontario.

2. **Description of Construction**

   The existing building at Sheridan Nurseries in Markham is a 30 year old, enclosed, one storey structure that has been used for nursery-related sales and as a greenhouse. The building is 600 m2, which includes a 160 m2 greenhouse. It is composed of combustible construction and is classified as having a Group E (mercantile) major occupancy. Currently, the structure does not have a standpipe and hose, fire alarm, nor a sprinkler system.

   The proposed work at Sheridan Nurseries has two separate components. One of these is the renovation to the above described existing building, while the other is the construction of a new

open-air sales facility. To distinguish between these two aspects of the project, the former shall be known as the enclosed retail building, while the latter shall be called the covered sales facility.

Regarding the enclosed retail building, the Applicant proposes to demolish the existing greenhouse and replace it with a one storey, enclosed addition. The total area of this renovated building would be 1 435 m2 (15 447 ft2). This would include a small office area (382 ft2), a storage area (2 268 ft2), while the rest of the space would be devoted to retail sales. The conventional, solid roof covering the existing building will remain in place. The addition to the enclosed retail building, however, will be covered by a polyethylene roof system manufactured by Westbrook Greenhouse Systems Ltd. The roof assembly is a modular greenhouse system composed of two 6 mm layers of polyethylene sheets, with pressurized air between them to increase rigidity, supported on a steel frame. The walls of the addition will be constructed of aluminum thermowall panels and tempered glass in aluminum frames.

The design of the enclosed retail building will allow for fire route access from 3 streets. As such, it is not necessary that the building be equipped with a standpipe and hose system and a sprinkler system. This is also allows it to be made of unrated combustible construction. The occupant load, based on OBC Table 3.1.16.A., is deemed to be 388 persons. By exceeding 300 persons, according to OBC 3.2.4., a fire alarm and detection system will be installed. The building will also be equipped with portable fire extinguishers. Furthermore, egress from the enclosed sales building will be based on 6.1 mm width per person and the exits will be located so that the maximum distance of travel will be 30 m or less.

The covered sales facility, located roughly 3 m from the enclosed sales building, is an entirely new structure. It is intended that this facility be open air, i.e., constructed without walls. The proposed use of this 1 615 m2 (17 388 ft2) structure is as a seasonal sales area. The roof for the covered sales facility is exactly the same as that described for the addition to enclosed sales building.

This structure, if it were assumed to be a typical mercantile occupancy, the potential occupant load would be 437 persons. Having no walls, egress from the covered sales facility is not a concern. The maximum travel distance from any where inside this structure to beyond the perimeter of the roof will not be more than 30 m.

3. **Dispute**

There are several issues under dispute between the Applicant and the Respondent. The first issue is whether the polyethylene roof assembly for the proposed addition to the enclosed sales building should conform to the requirements of Article 3.2.4.18. of the OBC. This provision states that all buildings shall have a class A, B or C roof, with the exception of tents and air supported structures. The Respondent holds that the polyethylene roof should conform to 3.2.4.18. The municipality is also concerned that the polyethylene roof assembly has not been tested for conformance with the appropriate safety standards (CAN/ULC S-107-M87) as referenced in Sentence 3.2.3.18.(1). The Applicant, on the other hand, believes that this Article is not applicable to polyethylene "skylights".

The second issue is whether the open-sided covered sales facility, with its polyethylene roof membrane, should be governed by the requirements of Subsection 3.1.6., which deal with tents, air-supported and temporary structures. The Respondent believes that the covered sales facility is a tent and that the provisions of 3.1.6. are relevant. They also believe that, according to Article 3.1.6.5., the facility should comply with the requirements of CAN/ULC S-109-M, which sets out standards for flame-resistance of materials found in tents, etc. The Applicant holds that the covered sales facility is not a tent, meaning that 3.1.6. are not relevant.

A third issue, common to both proposed structures, is whether the roof systems demonstrate sufficiency of compliance with the various relevant provisions of the OBC.

4. **Provisions of the Building Code**

3.2.3.18. Roof Coverings

(1) Except as provided in Sentence (2), every building shall have a Class A, B or C roof covering as described in Subsection 3.1.15.

(2) Roof coverings are not required to have a Class A, B or C rating for

(a) tents and air-supported structures, and

(b) buildings of Group A, Division 2 occupancy not more than 2 storeys in building height and not more than 1 000 m2 (10,800 ft2) in building area provided the roof covering is underlaid with noncombustible material.

3.1.6. Tents, Air-Supported Structures and Temporary Structures

3.1.6.1. Means of Egress

Tents, air-supported structures and temporary structures shall conform to Section 3.3 and 3.4.

3.1.6.2. Application

(2) Air-supported structures shall not be used for Groups B, C or Group F, Division 1 major occupancies or for classrooms.

(3) Air-supported structures shall be designed primarily as open floor space without interior walls, mezzanines, intermediate floors or similar construction.

(5) For the purposes of this Subsection, a temporary structure means a building or structure intended to be erected and used for a period of not more than 12 months.

3.1.6.3. Clearance to Other Structures

(1) Except for tents used for camping and other personal uses and except as provided in Sentences (2), (3) and (4), every tent, air-supported structure and temporary structure shall conform to Subsection 3.2.3.

(2) Tents and air-supported structures shall not be erected closer than 3 m (9 ft 10 in) to other structures on the same property except as provided in Sentences (3) and (4), and shall be sufficiently distant from one another to provide an area to be used as a means of emergency egress.

3.1.6.4. Clearance to Flammable Material

The ground enclosed by a tent or air-supported structure and for not less than 3 m (9 ft 10 in) outside of such structure shall be cleared of all flammable material or vegetation that will carry fire.

3.1.6.5. Flame Resistance

Every tent and all tarpaulins and decorative materials used in connection with tents and air-supported structures shall conform to CAN/ULC S-109-M, "Standard for Flame Tests of Flame-Resistant Fabrics and Films".

3.1.6.8. Design of Temporary Structures

(1) Except for tool sheds or similar structures, the structural components of a temporary structure shall be designed in conformance with

(a) Subsection 4.1.6. for the intended use,

(b) Subsection 4.1.7. for snow and rain, and

(c) Subsection 4.1.8. for wind.

5. Applicant's Position

The Applicant submitted that the proposed roof membrane for both the enclosed sales building and the covered sales facility is not a "roof covering". They argue that the classes of roof structures described in Article 3.2.3.18. are intended for typical, permanent roof coverings that have a water-resistant material applied as an additional layer. The CAN/ULC S-107-M standard is designed to test the fire resistance of these water proofing layers, especially the potential for a fire to develop on top of a solid roof covering. Such a situation, the Applicant notes, cannot occur on a polyethylene film. The fire would simply burn through the polyethylene. The Applicant therefore concludes that the referenced roof standard does not apply. In their view, the proposed roof structures are essentially large skylights, and in their experience CAN/ULC S-107-M also does not apply to skylights.

The Applicant holds that permitting the enclosed sales facility under the OBC is a straightforward matter. The Building Code, they argue, allows certain single storey buildings to be built with unrated, combustible construction. The interior flame-spread rating of such a building must not exceed 150. As the Applicant notes, the proposed polyethylene assembly meets both these conditions. Further, because there are no corridors requiring fire-separation from other parts of the floor area, they feel that there would be no limits placed on a combustible skylight (OBC 3.1.13.5.). Indeed, the Applicant notes that the Building Code would allow them to virtually cover the entire roof of a combustible building with acrylic skylights. However, as they point out, acrylic skylights have a higher flame-spread rating, and because they are double glazed they have a greater fire load and consequently a higher fire hazard.

In their opinion then, sufficiency of compliance is not an issue regarding this building. As demonstrated above, they believe the building does comply with the relevant OBC provisions.

The Applicant also submitted that polyethylene, as a material, has been tested under ULC S-102.2 and was found to have a flame-spread rating of less than 25. They also noted that this type of polyethylene-covered greenhouse system has been used previously in Ontario.

The same argument regarding limitlessness of skylights can be applied to the covered sales facility. This structure is classified as a Group E occupancy. The maximum size of a combustible building with such an occupancy is 1 500 m2 (16 100 ft2). The proposed covered sales facility exceeds this limit by 115 m2. This larger capacity is tolerable, the Applicant argues, due to the fact that the covered sales area has no walls, any fire that started would spread slowly because of the small fire load represented by the polyethylene. Such a fire would likely not cause many problems concerning gases or smoke. The polyethylene covering above the fire would burn away quickly and the fire would vent up and out of the facility, or it would vent along the arches of the ceiling and out the open sides. In addition, egress is possible in many locations and the travel distance is less than 30 m. It is for these reasons that the Applicant believes that the covered sales facility does meet the intended level of life safety in the OBC and as such provides sufficiency of compliance.

The open-sided, covered sales facility is not a tent the Applicants also argue. The proposed structure has little in common with a tent. Although to be used seasonally, the covered sales facility has far more permanence. As well, unlike a typical tent, there are no walls. The facility is not air-supported either, the Applicants claim. The pressurized air in between the polyethylene films is not a vital support mechanism for the roof assembly. Based on these arguments, the Applicant is of the opinion that the covered sales facility should not be subject to the requirements of Subsection 3.1.6.

6. Chief Building Official's Position

The Respondent submitted that the proposed enclosed sales building is required to have a class A, B or C roof covering according to Sentence 3.2.3.18.(1) and the CAN/ULC S-107-M87 standards. In their view, the subject polyethylene roofing material had been adequately tested for conformance with the above referenced standard.

Regarding the covered sales facility, the municipality recognized that it was a difficult building to classify, nevertheless they felt that it would be appropriate to consider this structure as a tent and to apply the provisions of 3.1.6. Such a classification would allow the covered sales facility to be located within 3 m of the enclosed sales building. This would also allow the Applicant the opportunity to be released from the requirement to provide sprinklers, they added. Here too, however, they were concerned about the performance of the polyethylene with respect to flame-resistance.

7. Commission Ruling

It is the decision of the Building Code Commission that the polyethylene film covering the

Sheridan Nurseries retail building provides sufficiency of compliance with Article 3.2.3.18 of the Building Code and the covered sales facility using a rain shield of polyethylene film is for the purposes of the application of the Building Code considered a tent and the fabric provides sufficiency of compliance with Article 3.1.6.5 of the Building Code and the tent is subject to the spatial separation requirements of Article 3.1.6.3 of the Building Code.

8. Reasons:

i) The building is used as a garden centre and contains limited fuel load.

ii) Opinion evidence provided by ORTECH on polyethylene flame spread indicates a value of less than 25 as an interior finish.

iii) The test for fabric flammability conducted by ORTECH using standard ASTM D-635 provides data on the limited ability of the film to propagate flame.

iv) The building is permitted to be of combustible construction under the Building Code.

v) The enclosed retail building will satisfy all other Building Code requirements including structural, fire alarm and egress.

vi) The fuel load for the polyethylene film used is approximately 20 times less than for other rigid plastics.

vii) The film will melt away and vent fires under fire conditions.

viii) It is the opinion of the Building Code Commission that the proposed use of polyethylene film in this application does not increase the hazard to life safety from fire.

Dated at Toronto this 9th day in the month of July in the year 1997 for application number 1997-27.

BCC Ruling No. 97-25-567

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-25-567

AND IN THE MATTER OF Sentences 3.4.6.4.(4) and 3.4.6.4.(5) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Marty Koshman, Facilities Manager, Newbridge Networks Corporation, 600 March Road, Kanata, Ontario, for the resolution of a dispute with Mr. Kaz Mosielski, Chief Building Official, City of Kanata, concerning whether the proposed height of the handrails at the landing of the exit stairways provides sufficiency of compliance with Sentences 3.4.6.4.(4) and 3.4.6.4.(5) of the Ontario Building Code (OBC) at 600 March Road, City of Kanata, Ontario.

APPLICANT
Mr. Marty Koshman, Facilities Manager
Newbridge Networks Corporation
600 March Road
Kanata, Ontario

RESPONDENT
Mr. Kaz Mosielski
Chief Building Official
City of Kanata

PANEL
Mr. Michael Lio, Chair
Mr. Douglas Clancey
Mr. Cliff Youdale

PLACE
Ottawa, Ontario

DATE OF RULING
Thursday, July 3rd, 1997

APPEARANCES
Mr. Gordon Krieg
Pye & Richards Architects Inc.
Agent for the Applicant

Mr. Idwal Richards
Pye & Richards Architects Inc.
Agent for the Applicant

Mr. Tim Stewart
Building Inspector
City of Kanata
For the Respondent

Mr. Kaz Mosielski
Chief Building Official
City of Kanata
For the Respondent

RULING

The Applicant

Mr. Marty Koshman, Facilities Manager, Newbridge Networks Corporation, is a person who has received a permit under the *Building Code Act, 1992* to renovate a 3 and 6 storey office building by constructing a 3 and 10 storey addition to the building at Newbridge Networks Corporation, City of Kanata, Ontario.

1. **Description of Construction**

   The Newbridge Networks Corporation office is made of noncombustible construction. The existing building is 3 and 6 storeys and the addition is a 3 and 10 storey structure. The areas of the existing and new portions of the building are 13 082 m2 and 24 250 m2 respectively. The structure has a standpipe and hose system and a fire alarm system. It does not have a sprinkler system. The building is classified as having Group D (office) use as its major occupancy.

2. **Dispute**

The issue under dispute between the Applicant and the Respondent is whether the handrail height at the landings of the exit stairs provides sufficiency of compliance with Sentences 3.4.6.4.(4) and 3.4.6.4.(5). Sentence 3.4.6.4.(4) sets minimum (800 mm [2 ft 7 in]) and maximum (920 mm [3 ft]) heights for handrails on stairs. In addition, Sentence 3.4.6.4.(5) requires that at least one handrail in a stairway be continuous throughout, except where it may be interrupted for a doorway or a newel. The height of the continuous handrails in dispute, as measured to the floor of the landings in the new addition of the Newbridge Networks Corporation building, is 1 070 mm. In the stairways of this addition there are handrails on both the wall side and the open stair side. It is the open stair side that has the continuous handrail.

3. **Provisions of the Building Code**

3.4.6.4. Handrails

(4) Handrails on stairs and ramps shall be not less than 800 mm (2 ft 7 in) and not more than 920 mm (3 ft) high, measured vertically from a line drawn through the outside edges of the stair nosing or from the surface of the ramp, except that handrails not meeting these requirements are permitted provided they are installed in addition to the required handrail.

(5) Except as required in Sentence (9), at least one handrail shall be continuous throughout the length of a stairway including landings except where the handrail is interrupted by doorways or newels at changes in direction. (See Appendix A.)

4. **Applicant's Position**

The Applicant submitted that the handrails as designed and built meet all the requirements and the intent of the relevant provisions of the OBC. The height of the handrails on both sides, as measured on the stairs themselves, is 920 mm (3 ft), which is consistent with Sentence 3.4.6.4.(4). The handrails on the wall side extend horizontally for 300 mm (11 3/4 in) at the top and bottom of the stairs over the landings. This too, they note, is consistent with the Code, in particular, Sentence 3.4.6.4.(7).

Regarding the railing at the open stair side, it is their view that the Code does not stipulate that the continuous railing is required to have a consistent height throughout the length of the stairway. Sentence 3.4.6.4.(5) simply states that at least one handrail should be continuous. As the Code does not specifically require consistency of height for the continuous railing, they

believe that the subject railings satisfy Sentence 3.4.6.4.(5). They note that many other buildings in the area are designed the same way.

5. **Chief Building Official's Position**

The Respondent submitted that the height of the continuous handrail at the landings is inconsistent with the handrail height on the stairs. They believe this discrepancy may cause problems for blind and visually impaired persons using these stairs. In particular, they feel that a handrail height at the landing level not consistent with that of the stairs may mean that such individuals would have difficulty determining the height of the first and last risers in a flight. Indeed, this height inconsistency would not make apparent when the stairs, in relation to the landings, actually begin and end. Since the handrails in the stairways of the addition to the Newbridge Networks Corporation building are not of uniform height, the Respondent is of the view that they contravene Sentences 3.4.6.4.(4) and 3.4.6.4.(5) of the OBC.

6. **Commission Ruling**

It is the decision of the Building Code Commission that the handrail on the stairs complies with the requirements of the Building Code.

7. **Reasons:**

Construction drawings indicate that the handrail would provide sufficient warning to visually impaired individuals of changes in direction and in determining where stairs begin and end.

Dated at Ottawa this 3rd day in the month of July in the year **1997** for application number **1997-34**.

BCC Ruling No. 97-24-566

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-24-566

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.4.6.4.(1) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Rev. Stephen Elliot, Pastor, Kanata Wesleyan Church, 285 First Line Road, Kanata, Ontario, for the resolution of a dispute with Mr. Kaz Mosielski, Chief Building Official, City of Kanata, concerning whether the proposed stairs to chancel platform should be considered as access stairs and thus be required to have the specified handrails according to Sentence 3.4.6.4.(1) of the Ontario Building Code (OBC) at Kanata Wesleyan Church, 285 First Line Road, Kanata, Ontario.

APPLICANT
Rev. Stephen Elliot, Pastor
Kanata Wesleyan Church
285 First Line Road
Kanata, Ontario

RESPONDENT
Mr. Kaz Mosielski
Chief Building Official
City of Kanata

PANEL
Mr. Michael Lio, Chair
Mr. Douglas Clancey
Mr. Cliff Youdale

PLACE
Ottawa, Ontario

DATE OF RULING
Thursday, July 3rd, 1997

APPEARANCES

Rev. Stephen Elliot
Pastor
Kanata Wesleyan Church
For the Applicant

Mr. Kaz Mosielski
Chief Building Official
City of Kanata
For the Respondent

Mr. Harry Toor
Building Official
City of Kanata
For the Respondent

RULING

1. **The Applicant**

   Rev. Stephen Elliot, Pastor, Kanata Wesleyan Church, is a person who has received a permit under the *Building Code Act, 1992* to renovate an existing worship building known as Kanata Wesleyan Church, City of Kanata, Ontario.

2. **Description of Construction**

   The Kanata Wesleyan Church is a two storey building made of combustible construction. The building does not have a sprinkler system, nor a standpipe and hose system. It is equipped with a fire alarm system. The building's area is 644.5 m2 (6 937 ft2). It is classified as having a Group A, Division 2 as its major occupancy.

3. **Dispute**

   The issue under dispute between the Applicant and the Respondent is whether the stairs to the chancel platform should be considered an access to an exit and therefore would require the installation of handrails in accordance with Sentence 3.4.6.4.(1) of the 1990 Ontario Building Code.

4. **Provisions of the Building Code**

3.4.6.4. Handrails

(1) Every *ramp* or stairway shall have a handrail on at least one side, and where 1 100 mm (3 ft 7 in) or more in width, shall have handrails on both sides.

5. **Applicant's Position**

The Applicant submitted that the renovated stairs serving the chancel platform should be considered as "access to exit" and not "exit" stairs. In their opinion, Sentence 3.4.6.4.(1) only applies if the subject stairs are defined as exit stairs. As they point out, if there were an exit located in the chancel area, then they could be considered as exit stairs. However, there is no such exit. The Applicant also argues that traditionally handrails serving chancel or podium areas have not been required in churches and other worship buildings.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed chancel stair renovation is subject to Sentence 3.4.6.4.(1). It is their view that the stairs at issue are exit stairs serving the chancel platform. Even if they were considered as "access to exit" stairs, they argue that handrails would still be necessary. Further, as per Sentence 3.4.6.4.(1), because the stairs are wider than 1 100 mm, two handrails are required.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the stairs demonstrate sufficiency of compliance provided a handrail is installed on one side of each staircase.

8. **Reasons:**

1. The stairs are used primarily during church services by a limited number of people, typically the pastor and musicians.

2. The stairs are well lit by overhead lights and natural light from windows.

3. The stairs contain a limited number of risers.

4. Evidence was presented that stairs serving chancel platforms have historically been built without handrails.

Dated at Ottawa this 3rd day in the month of July in the year **1997** for application number **1997-26**.

BCC Ruling No. 97-23-565

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-23-565

AND IN THE MATTER OF Clause 3.2.2.52.(1)(b), Article 3.2.5.8., Clause 3.2.9.1.(1)(b) and Article 6.2.2.5. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Bill Laurysen, Vice President, Laurysen Kitchens Ltd., 2415 Carp Road, Stittsville, Ontario, for the resolution of a dispute with Mr. Bob Moore, Chief Building Official, Township of West Carleton, concerning whether the constructed addition provides sufficiency of compliance with the requirements for a standpipe and hose system, building sprinklering, adequate water supply and sprinklering in the spray booth area in accordance with Clauses 3.2.9.1.(1)(b), 3.2.2.52.(1)(b) and Articles 3.2.5.8. and 6.2.2.5. respectively of the Ontario Building Code, at Laurysen Kitchens Ltd., 2415 Carp Road, Stittsville, Ontario.

APPLICANT
Mr. Bill Laurysen, Vice President
Laurysen Kitchens
2415 Carp Road
Stittsville, Ontario

RESPONDENT
Mr. Bob Moore
Chief Building Official
Township of West Carleton

PANEL
Mr. Michael Lio, Chair
Mr. Douglas Clancey
Mr. Cliff Youdale

PLACE
Ottawa, Ontario

DATE OF RULING
Thursday, July 3rd, 1997

APPEARANCES

Mr. Jim Gorman
Controller
Laurysen Kitchens Ltd.
The Applicant

Mr. Tom Dunfield
Morrison Hershfield
Agent for the Applicant

Mr. Bob Moore
Chief Building Official
Township of West Carleton
The Respondent

RULING

1. **The Applicant**

   Mr. Bill Laurysen, Vice President, Laurysen Kitchens Ltd., is a person who has applied for a permit under the *Building Code Act, 1992* to renovate and add to an existing kitchen manufacturing and storage facility. The existing building is 1 storey, constructed of noncombustible material and faces three streets. The area of the existing structure was 3 849 m2 (41 427 ft2) before the addition. The building does not have a sprinkler system, a fire alarm system, nor a standpipe and hose system. It is classified as having a Group F, Division 2 major occupancy.

2. **Description of Construction**

   The building addition adds 954 m2 (10 272 ft2) of additional space to the building. Most of this area is devoted to storage. Also part of these renovations is a spray painting booth having an area of 68 m2 (729 ft2). With these additions, the total building area is 4 803 m2 (51 699 ft2).

   The Applicant proposes to sprinkler the new spray booth area. As well, they would provide it with an additional dust collector piping system.

   The proposal also intends to address a previous work order regarding certain fire safety deficiencies, in particular, the lack of a required standpipe and hose system and adequate water

supply at the subject site. This would be accomplished by installing a fire alarm and detection system, self-closure devices on electrical room doors, and portable fire extinguishers throughout the building. The Applicants also propose to fill the on-site swimming pool and connect it to a hydrant for additional on-site water supply. They would also train their employees regarding fire safety.

3. **Dispute**

The issue under dispute between the Applicant and the Respondent is whether the renovations and additions provide sufficiency of compliance with the requirements to provide adequate water supply, a standpipe and hose system, and to sprinkler the spray booth in accordance with provisions 3.2.5.8., 3.2.9.1., and 6.2.2.5. respectively of the 1990 Ontario Building Code (OBC).

4. **Provisions of the Building Code**

3.2.5.8. Water Supply

(1) An adequate water supply for fire fighting shall be provided for every *building*.

(2) Hydrants shall be located within 90 m (295 ft 3 in) horizontally of any portion of a *building* perimeter which is required to face a street in Subsection 3.2.2.

3.2.9.1. (Standpipe and Hose System) Where Required

(1) Except as provided in Article 3.2.9.2., a standpipe and hose system hall (sic) be installed in every *building* that

(a) is more than

(i) 3 *storeys* in *building height*, or

(ii) 14 m (45 ft 11 in) in height measured between *grade* and the ceiling of the uppermost storey,

(b) is greater in *building area* than the area shown in Table 3.2.9.A. for the applicable *building height* shown in the table where the *building*

(i) is not *sprinklered*, and

(ii) is not more than 14 m (45 m [sic] 11 in) high measured between *grade* and the ceiling of the top *storey*, or

(c) contains more than one *storey* below *grade*.

6.2.2.5. Hazardous Gases, Dusts or Liquids

Systems serving spaces that contain hazardous gases, dusts or liquids shall be designed, constructed and installed in conformance with the provisions of the Ontario Fire Code made under the Fire Marshals Act, or in the absence of requirements pertinent to such systems in the Ontario Fire Code, to good engineering practice such as is described in the publications of the National Fire Protection Association and in the National Fire Code of Canada 1990.

5. **Applicant's Position**

The Applicant submitted that since there is no municipal water service to the site, the requirements to provide adequate on-site water supply and a standpipe and hose system are onerous and costly. They estimate that it would cost $187 200 to provide a standpipe system based on 68 000 L of water supply. The Applicant further argues that the alternative measures that they are offering would provide a higher level of fire safety than a standpipe and hose system.

It is the view of the Applicant, as represented by their agents, Morrison Hershfield, that they are improving the fire safety of the plant in several ways. They are proposing that a single-stage, supervised and monitored fire alarm and detection system be installed. This system, they argue, would provide immediate notification to the Township's fire department and early warning to the occupants. As the Applicant points out, for a building of this kind with an occupancy of only 50 people, such an alarm and detection system is not required.

They also propose to sprinkler the spray booth area in accordance with requirements of Ontario's Building and Fire Codes. This area would be provided with suppression protection by 8 sprinkler heads. A dust collector piping system would also be installed in the spray booth area as required by Section 5.10 of the Ontario Fire Code. This would provide spark detection and water spray fire suppression for the spray booth.

Dry chemical, portable fire extinguishers that can be used in multipurpose situations would also be installed throughout the plant's workshop areas.

In order to provide greater on-site water supply, the Applicant proposes to refurbish an unused indoor 200 000 L capacity swimming pool located elsewhere (approximately 47 m from the plant in the office building) on the Laurysen property. A wall hydrant would be connected to this water supply reservoir, and using a flow rate of 3 000 L/min, the Applicant believes this would provide a 1 h water supply.

Automatic closers on electrical service room doors and latches are also proposed by the Applicant to ensure that the room is fire separated from the rest of the plant.

As well, the Applicant intends to upgrade their fire safety plan. The employees at the plant will be given fire emergency training and will also be trained to effectively operate fire extinguishers. This too, they note, is also not required for a building with 100 occupants or less.

The Applicant believes the above measures would provide sufficiency of compliance with the OBC requirements for adequate water supply and a standpipe and hose system.

The Applicants also point out that the subject building is only one storey, with high ceilings, open structure, and it has good unobstructed access to exterior exits. They note that the building has good fire fighting access from three sides and would not be a hazard to other properties in the event of a fire. Furthermore, it is their view that the municipality provides more than sufficient fire fighting service.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed renovations, while providing greater fire safety, still do not bring the building into compliance with Code requirements, especially concerning a standpipe and hose system. The building, they argue, is 2.4 times the maximum area at which a standpipe and hose system is required. Even without an expansion of the building, the original structure (Blocks 1 and 2 at 3 849 m2 [41 427 ft2]) is in need of a standpipe and hose system according to OBC Article 3.2.9.1. In their view, the proposed renovation creates even greater demand for such a system. Indeed, the proposed renovation would bring the building to the maximum size (4 800 m2 [51 700 ft2]) allowed for an unsprinklered structure of this nature. This unsprinklered limit assumes, however, that the building is equipped with adequate water pressure and a standpipe and hose system.

Whether the mezzanine has the appropriate fire resistance rating is also a concern for the Respondent.

Regarding the spray booth, the Respondent demonstrates that it is required to be sprinklered under the OBC and the OFC. Sprinklering this area, therefore, does not create additional fire safety

The Respondent further points out that the fire alarm and detection system would not be as useful as suggested by the Applicant since the municipality does not have the technical and administrative capacity to immediately notify its volunteer fire department.

Finally, the Respondent states that it is beyond the powers afforded to a CBO to judge whether the proposed measures provide sufficiency of compliance with the above referenced Code provisions.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the building addition does not provide sufficiency of compliance with the requirements of the Building Code.

8. **Reasons:**

1. It is the opinion of the Building Code Commission that the proposals that were presented do not provide equivalent levels of life safety or property protection to those provided by the Building Code.

Dated at Ottawa this 3rd day in the month of July in the year **1997** for application number **1997-20**.

BCC Ruling No. 97-22-564

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-22-564

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 9.10.14.1. and Sentence 9.10.14.12.(4) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. John Russo, North York, Ontario, for the resolution of a dispute with Mr. Dave Potter, Chief Building Official, Richmond Hill, Ontario concerning whether the proposed window openings on the west of a 2 storey single-detached house at 68 Ellsworth Avenue, Richmond Hill, Ontario provide sufficiency of compliance with the Ontario Building Code.

APPLICANT
Mr. John Russo
Owner
North York, Ontario

RESPONDENT
Mr. Dave Potter
Chief Building Official
Town of Richmond Hill

PANEL
Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Ross Thomson

PLACE
Toronto, Ontario

DATE OF RULING
Tuesday, July 22nd, 1997

APPEARANCES
Mr. John Russo

Owner North York, Ontario
The Applicant

Mr. Frank Russo
North York, Ontario
For the Applicant

RULING

1. **The Applicant**

   Mr. John Russo has applied for a building permit under the *Building Code Act, 1992* to build a two-storey single-detached house at 68 Ellsworth Ave., Richmond Hill, Ontario.

2. **Description of Construction**

   The proposed two-storey single-detached house is 4338 square feet with unprotected openings amounting to 20.3% of the west building face.

3. **Dispute**

   The dispute between the Applicant and the Respondent concerns whether the proposed window openings on the west side of a 2-storey single-detached house provides sufficiency of compliance with Article 9.10.14.1. and Sentence 9.10.14.12.(4) of the Building Code.

4. **Provisions of the Building Code**

   Article 9.10.14.1. Maximum Percentage of Unprotected Openings

   (1) Except as provided in Sentence (2) and in Articles 9.10.14.3. to 9.10.14.11., the maximum percentage of unprotected openings in an exposing building face shall conform to Table 9.10.14.A. or Subsection 3.2.3., whichever is the least restrictive for the occupancy being considered.

   (2) An opening in an exposing building face not more than 130 cm2 (20 in2) shall not be considered an unprotected opening.

   Sentence 9.10.14.12.(4) Exposing Building Face of Houses

(4) Where the spatial separation between dwelling units on adjoining properties is registered on the titles of both properties, the spatial separation may be calculated as if the dwelling units were constructed on the same property.

5. **Applicant's Position**

The Applicant proposes to build the house with window openings totalling 20.3% of the west side building face instead of the 7.2% permitted by the Building Code. The land on the west side is vacant and is partly under a conservation flood zone. As well, the Applicant deems that there are certain building restrictions on title on the adjacent land which would preclude the erection of any structure.

6. **Chief Building Official's Position**

The Respondent deems that the Town has not been provided with information that Sentence 9.10.14.12.(4) has been satisfied. The Town's records indicate that the adjacent lands are not under a conservation flood zone but are designated as Residential under the Zoning By-law. Furthermore, these lands are not owned by the Town or any other public authority. As a result, Article 9.10.14.1. of the Building Code applies.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed window openings on the west side of a 2 storey single-detached residential dwelling do not provide sufficiency of compliance with Article 9.10.14.1. and Sentence 9.10.14.12.(4) of the Building Code.

8. **Reasons:**

There are a number of options to address the % openings in walls facing property lines such as

i) The use of Sentence 9.10.14.12.(4) of the Building Code, as follows:

(4) Where the spatial separation between dwelling units on adjoining properties is registered on the titles of both properties, the spatial separation may be calculated as if the dwelling units were constructed on the same property.

ii) The protection of openings by closures having a 1 hour fire resistance rating such as fire shutters.

iii) The installation of sprinklers or wired glazing in steel frames as outlined in 9.10.14.6. of the Building Code.

Dated at Toronto this 22nd day in the month of July in the year **1997** for application number **1997-25**

BCC Ruling No. 97-21-563

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-21-563

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.2.1.1.(3) and 3.2.1.1.(4) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Angelo Villardo, Evan Mercury Sales Ltd., Etobicoke, Ontario, for the resolution of a dispute with Mr. Anthony Chow, Chief Building Official, Etobicoke, Ontario concerning whether the proposed extension of the mezzanine onto the parking area of the existing roof should be considered as part of the mezzanine at 5500 Dundas St. W., Etobicoke, Ontario.

APPLICANT
Mr. Angelo Villardo
Evan Mercury Sales Ltd.
Etobicoke, Ontario

RESPONDENT
Mr. Anthoy Chow
Chief Building Official
City of Etobicoke

PANEL
Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Ross Thomson

PLACE
Toronto, Ontario

DATE OF RULING
Thursday, June 19th, 1997

APPEARANCES
Mr. Don Kerr

Don Kerr, Architect Inc.
Oakville, Ontario
For The Applicant

Mr. Angelo Villardo

Mr. Sait Toprak
Chief Building Code Engineer
City of Etobicoke
The Respondent

Mr. Philip Ho
Senior Building Engineer
City of Etobicoke

RULING

1. **The Applicant**

   Mr. Angelo Villardo, Vice-President, Evan Mercury Sales Ltd., Etobicoke was issued a permit under the *Building Code Act, 1992* to extend and add an office to the existing mezzanine at 5500 Dundas Street West, Etobicoke, Ontario.

2. **Description of Construction**

   The existing building is one storey made of non-combustible construction with a building area of 23,000 square feet (2,137 square metres) under a Group F, Division 2 major occupancy. The proposed construction is to add 867 square feet (81 square metres) to the 2,007 square feet (184 square metres) existing mezzanine by extending onto the existing roof of the building.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns whether the proposed extension may be considered as part of a mezzanine under the Building Code.

4. **Provisions of the Building Code**

   Sentence 3.2.1.1.(3) - Mezzanine with Open Floor Area

(3) Except as provided in Sentences (4), (5) and (8), a mezzanine shall not be considered as a storey in calculating the building height provided
(a) the aggregate area of the mezzanine floor is not more than 40 percent of the area of the room or storey in which it is located,

(b) it is used as an open floor area except as provided in Sentence 3.3.2.11.(2), and

(c) the space above the mezzanine floor has no visual obstructions more than 1 070mm (3 ft 6 in) above such floors.

Sentence 3.2.1.1.(4) - Mezzanine with Visual Obstructions

(4) Except as provided in Sentence (5), a mezzanine shall not be required to be considered as a storey in calculating building height and need not conform to Sentence (3) where the aggregate area of the mezzanine floor does not exceed 10 per cent of the area of
(a) the suite in which it is located, where there is more than one suite in the storey, or

(b) the storey in which it is located, in all other cases.

5. **Applicant's Position**

In the proposed addition, the Applicant based the design on Clause 3.2.1.1.(3)(a) of the Building Code where the aggregate area of a mezzanine can be up to 40% of the storey in which it is located. The Applicant deemed that the aggregate area of the existing and new mezzanine area amounts to 2,871 sq. ft. or 12.5% of the total storey.

6. **Chief Building Official's Position**

The Respondent indicated that the mezzanine has a visual obstruction that does not satisfy the requirements of Sentence 3.2.1.1.(3) of the Building Code and therefore Sentence 3.2.1.1.(4) applies. With the addition, the total floor area exceeds 10% of the area of the main floor, thus exceeding the allowable limit under Sentence 3.2.1.1.(4) of the Building Code. Therefore, the addition cannot be considered as part of the mezzanine and must be designed as a second floor.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the approximate 450 sq. ft. addition over the roof provides sufficiency of compliance with the Building Code provided that a fire

separation with wired glazing having a 3/4 hour fire resistance rating separates the new corridor from the existing mezzanine area.

8. **Reasons:**

i) The mezzanine area addition of 450 sq. ft. has direct access to the roof and then to grade.

ii) The mezzanine area addition will have access to the existing mezzanine area and the two exits from that area.

iii) The increased area of 450 sq. ft. represents approximately 2% of the total 1st floor area.

iv) The Commission is of the opinion that this addition does not present an undue risk to life safety from fire due to the additional exit and fire separation.

Dated at Toronto this 19th day in the month of June in the year **1997** for application number **1997-24**

BCC Ruling No. 97-19-561

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-19-561

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 9.25.2.6. and Sentence 9.25.2.7.(1) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Nisio Rizzardo, Manager, Previn Court Homes, 13602 Bramalea Road, Caledon East, Ontario, for the resolution of a dispute with Mr. John Miller, Chief Building Official, Town of New Tecumseth, concerning whether the subject slab-on-ground should be insulated in accordance with Sentence 9.25.2.7.(1) of the Ontario Building Code (OBC) at Lots 81, 92 and 97 of Plan 51M-488 and Lot 52 of Plan 51M-413, Town of New Tecumseth, Ontario.

APPLICANT
Mr. Nisio Rizzardo
Manager
Previn Court Homes
13602 Bramalea Road
Caledon East, Ontario

RESPONDENT
Mr. John Miller
Chief Building Official
Town of New Tecumseth

PANEL
Mr. Roy Philippe, Chair
Mr. Demir Delen
Mr. Lawrence Glazer

PLACE
Toronto, Ontario

DATE OF RULING
Thursday, June 12th, 1997

APPEARANCES
Mr. Nisio Rizzardo
Manager
Previn Court Homes
For the Applicant

Mr. John Miller
Chief Building Official
Town of New Tecumseth
For the Respondent

RULING

1. **The Applicant**

   Mr. Nisio Rizzardo, Manager, Previn Court Homes, is a person who has applied for a permit under the *Building Code Act, 1992* to build residential dwellings with slab-on-ground construction for the basement foundations at Lots 81,92 and 97 of Plan 51M-488 and Lot 52 of Plan 51M-413, Town of New Tecumseth, Ontario.

2. **Description of Construction**

   The proposed single-detached residential buildings are 1 and 2 storeys, and are classified as Group C Residential under the OBC. The subject building areas would range from 1,200 to 1,800 ft2. The proposed structures are to be made of combustible construction.

   Uninsulated concrete slab-on-ground foundations are proposed for the basement area of each building.

3. **Dispute**

   The issue under dispute between the Applicant and the Respondent is whether the proposed concrete slab-on-ground construction should be insulated to a minimum thermal resistance rating of R8 according to Sentence 9.25.2.7.(1) and Table 9.25.2.A. of the 1990 Ontario Building Code.

4. **Provisions of the Building Code**

   9.25.2.6. Insulation around Concrete Slabs-on-Ground

Insulation around concrete slabs-on-ground shall extend not less 600 mm below exterior ground level.

9.25.2.7. Minimum Thermal Resistance

(1) Except as permitted in Sentences (2), (3) and (4) the minimum thermal resistance of insulation shall conform to Table 9.25.2.A.

5. **Applicant's Position**

The Applicant submitted that the proposed concrete slab-on-ground construction proposed for the subject residential dwellings should not be required to conform to the thermal resistance rating specified in Table 9.25.2.A. As they note, the slab-on-ground floor proposed for each type of residential building on all lots will be located 2.4 m (8 ft.) below the exterior grade level. In their opinion, because the subject slabs-on-ground are lower than the 600 mm depth specified in Article 9.25.2.6. no insulation is therefore required.

The applicants also cite Subsection 9.38.3., Thermal Resistance of Assemblies, specifically Article 9.38.3.7., which sets out the alternative requirements for insulation applied to the exterior of a slab-on-ground floor. It states that insulation is required to be applied to the exterior of the slab-on-ground also to a depth of 600 mm. Thus, it is their belief that the OBC does not require the proposed slabs-on-ground to be insulated.

6. **Chief Building Official's Position**

The Respondent submitted that as per Article 9.25.2.1 of the OBC all walls that separate heated space from exterior soil are required to be insulated. They noted that the plans submitted by the applicant show habitable space in the basement levels. As a result, in their opinion, the proposed slabs-on-ground are required to comply with Sentence 9.25.2.7.(1). As such, they are to be built with a thermal resistance rating of R8 according to Table 9.25.2.A.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the non insulated basement floor slabs which are located 2.5 m below ground in the subject buildings comply with the Building Code.

8. **Reasons:**

It is the intent of the Building Code that only the finished concrete floors of the lowest level of a building constructed within 600 mm below exterior ground is required to have thermal insulation.

Dated at Toronto this 12th day in the month of June in the year **1997** for application number **1997-22**.

BCC Ruling No. 97-18-560

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-18-560

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.2.2.44. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. John Ward, Owner, Country Produce Orillia Ltd., P.O. Box 18, 301 Westmount Drive North, Orillia, Ontario, for the resolution of a dispute with Mr. Rick Bullick, Chief Building Official, City of Orillia, concerning whether the subject building is required to be sprinklered in accordance with Article 3.2.2.44. of the Ontario Building Code (OBC) at Country Produce Orillia Ltd., 301 Westmount Drive North, City of Orillia, Ontario.

APPLICANT
Mr. John Ward
Owner
Country Produce Orillia Ltd.
P.O. 18
Orillia, Ontario

RESPONDENT
Mr. Rick Bullick
Chief Building Official
City of Orillia

PANEL
Mr. Roy Philippe, Chair
Mr. Demir Delen
Mr. Lawrence Glazer

PLACE
Toronto, Ontario

DATE OF RULING
Thursday, June 12th, 1997

APPEARANCES
Mr. John Ward, Owner
Country Produce
Orillia Ltd.
The Applicant

Mr. Rod Young
Roderick H. Young
Architect
Agent for the Applicant

Mr. Rick Bullick
Chief Building Official
City of Orillia
The Respondent

RULING

1. **The Applicant**

   Mr. John Ward, Owner, Country Produce Orillia Ltd., is a person who has applied for a permit under the *Building Code Act, 1992* to renovate an existing commercial retail facility by constructing an addition on the east side of the building at Country Produce Orillia Ltd., City of Orillia, Ontario.

2. **Description of Construction**

   The existing retail facility is described as a 1 storey building, facing 2 streets, constructed mostly from noncombustible material. Fifteen percent of the existing building has a combustible roof structure. The building is classified as a Group E, mercantile occupancy under the OBC. The area of the existing building is 1,302 m2. The structure does not have a fire alarm system, a standpipe and hose system, nor a sprinkler system. It is currently being used as a fresh produce retail outlet.

   The applicant proposes to attach a 1 storey, 280 m2 addition to the existing building. The total area of the proposed structure would be 1,582 m2. They are not proposing to include sprinklers throughout the facility as a result of this construction.

3. **Dispute**

The issue under dispute between the Applicant and the Respondent is whether the proposed enlarged building, without sprinklers, provides sufficiency of compliance with Article 3.2.2.44. of the 1990 Ontario Building Code. The renovated building would exceed the allowable floor area for an unsprinklered, 1 storey mercantile building, facing 2 streets by 86 m2. (The area allowable under Article 3.2.2.44. is 1,496 m2, while the renovated structure they are proposing would be 1,582 m2.)

4. **Provisions of the Building Code**

3.2.2.44. Mercantile Buildings, up to 3 Storeys

(1) A building classified as Group E shall conform to Sentence (2) provided the building
(a) is not more than 3 storeys in building height, and

(b) has a building area not more than the value in Table 3.2.2.M.

(2) The building shall be of combustible or non-combustible construction used either singly or in combination, and
(a) floor assemblies shall be fire separations with a fire-resistance rating of not less than 45 min,

(b) mezzanines shall have, if of combustible construction, a fire-resistance rating of not less than 45 min,

(c) roof assemblies shall have a fire-resistance rating of not less than 45 min, except that in buildings not more than 1 storey in building height, the fire-resistance rating is permitted to be waived provided the roof assembly is of noncombustible construction or is constructed as a fire-retardant treated wood roof system conforming to Article 3.1.14.1., and

(i) if unsprinklered, the building area is not more than 1 500 m2 (16,100 ft2), and

(ii) if sprinklered, the building area is not more than 2 400 m2 (25,800 ft2) if facing 1 street,

3 000 m2 (32,300 ft2) if facing 2 streets, or

3 600 m2 (38,800 ft2) if facing 3 streets,

(d) all loadbearing walls, columns and arches supporting as assembly required to have a fire-resistance rating shall have a fire-resistance rating of not less than 45 min or shall be of noncombustible construction, except that such members and assemblies supporting a fire separation shall have a fire-resistance rating not less than that required for the supported assembly.

5. **Applicant's Position**

The Applicant submitted that the proposed renovation of the Country Produce Orillia building should be considered as providing sufficiency of compliance with Article 3.2.2.44. As they note, the combined area of the expanded building will be only 86 m2, or 5.75% over the maximum building area allowed without sprinklers. They also point out that the occupant load is relatively low. In addition, only approximately 60% of the building is open to the public, meaning that the sizeable rear portion of the structure has an even lower occupant load. As well, all exits are at grade enabling quick evacuation and good fire fighting access.

The applicants argue that it is impractical to install a sprinkler system due to construction difficulties and a lack of adequate water supply service. To mitigate the absence of sprinklers, it is proposed that an interconnected smoke detection system be installed in the non-public areas of the building.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed renovation would enlarge the subject building beyond the allowable unsprinklered limit as set out in Article 3.2.2.44. They concur with the applicant regarding their rationale that the expanded Country Produce Orillia structure would provide sufficiency of compliance with the OBC, however, they believe they do not have the authority to accept such a proposal.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the proposed addition provides sufficiency of compliance with Article 3.2.2.44 without sprinklers provided that 1) that interconnected smoke alarms are installed in the staff/support areas of the building, and 2) that work area is separated from the remainder of the building by a 1 hour fire separation through the installation of closures having a 45 min. fire protection rating.

8. **Reasons:**

i) The total area of the building in this category requiring sprinklers is only 87 m2 or approximately 6% above the maximum area.

ii) Increased early warning detection and alarm is provided in the building.

iii) The building is a single storey with no basement with access for fire fighting directly at grade from three access routes.

iv) The addition is non combustible construction.

v) The building is subdivided by separation having a 1 hour fire protection rating.

Dated at Toronto this 12th day in the month of June in the year **1997** for application number **1997-33**.

BCC Ruling No. 97-17-559

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-17-559

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.3.1.1.(8) and Article 3.2.2.57. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. John Van Oostrom, Principal Civil Engineer, DuPont Canada Inc., P.O. Box 3500, Kingston, Ontario, for the resolution of a dispute with Mr. Terry Willing, Chief Building Official, Township of Kingston, concerning whether the subject building is 1 storey in height in accordance with Sentence 3.2.1.1.(8) of the Ontario Building Code (OBC) and whether structural fire resistance under OBC Article 3.2.2.57. should apply to the expansion of the plant at 455 Front Road, Township of Kingston, Ontario.

APPLICANT
Mr. John Van Oostrom
Principal Civil Engineer
DuPont Canada Inc.
P.O. Box 3500
Kingston, Ontario

RESPONDENT
Mr. Terry Willing
Chief Building Official
Township of Kingston

PANEL
Mr. Michael Lio, Chair
Mr. Michael Steele
Mr. Ross Thomson

PLACE
Toronto, Ontario

DATE OF RULING
Wednesday, May 28th, 1997

APPEARANCES
Mr. Don Blachford
Project Manager - Engineering &
Ms. Nina Mankovitz
Sr. Civil Engineer
DuPont Canada Inc.
For the Applicant

Mr. Allan Larden
Larden Muniak Consulting Inc.
Agent for the Applicant

Mr. Paul Nixon
Building Inspector
Township of Kingston

Mr. Robert Kidd
Fire Inspector
Township of Kingston
For the Respondent

RULING

1. **The Applicant**

   Mr. John Van Oostrom, Principal Civil Engineer, DuPont Canada Inc., is a person who has applied for a permit under the *Building Code Act, 1992* to renovate an existing nylon manufacturing plant by constructing an addition on the south-east corner of the building at DuPont Canada Inc., Township of Kingston, Ontario.

2. **Description of Construction**

   The DuPont Canada facility at Kingston has been renovated several times since it was built in 1941. The existing building area is 61,700 m2. Most of this area is 1 storey however the east side is several levels in height. The subject building has a fire alarm system, a standpipe and hose

system, and is partially sprinklered. There is also a fire protection main system that encircles the entire building. This includes 20 hydrants on the inside, around the perimeter and on the roof. The fire alarm system and sprinkler system are monitored 24 hours a day.

The Kingston DuPont plant was renovated in 1992 and 1993 to add a nylon spinning facility. Known as the BCF-93 Addition, the spinning facility was constructed on the south-east corner of the original plant. The BCF-93 Addition was deemed to be a separate building since a fire wall was built between it and the existing structure. It was constructed in accordance with Article 3.2.2.57. which allows unrated noncombustible construction. The 1993 addition included a full sprinkler system (electronically supervised) and a standpipe and hose system.

Since there is generally a low fire load in the BCF-93 Addition, the Township at the time classified it as a Group F, Division 3 low hazard industrial occupancy. There are seven levels in the existing BCF area, however, all levels above the ground floor are service platforms and are nearly unoccupied, except for two people on the second level.

The subject renovation proposes to further expand the BCF-93 Addition. The new area will also be noncombustible construction. All of the fire safety systems will be included in the extended building.

With this new addition, the BCF facility would have a total occupant load of 32 persons (27 on the ground floor, 3 on the second and 2 on all other upper levels combined) and would have fire vehicle access routes on 3 sides, covering 70% of the building's perimeter. A further addition, known as the New Quality Area, is to be constructed simultaneously on the west side of the existing BCF-93 Addition and will provide new shipping and warehousing capacity. This area is not under dispute.

3. **Dispute**

The issue under dispute between the Applicant and the Respondent is whether the proposed addition is to be considered 1 or 4 storeys in building height. Sentence 3.2.1.1.(8) of the 1990 Ontario Building Code provides exceptions when calculating building height in storeys. If the proposed addition does not comply with Sentence 3.2.1.1.(8) and is found to be 4 storeys in building height then the renovation cannot be constructed in accordance with OBC Article 3.2.2.57. Further, the proposal may also exceed the allowable maximum building area under 3.2.2.57.

4. **Provisions of the Building Code**

3.2.1.1. Exceptions to Building Height in Storeys

(8) *Mezzanines*, elevated walkways and platforms in Group F, Division 2 or 3 *major occupancies* need not be considered as *storeys* in calculating *building height* provided

(a) the *building* is of *noncombustible construction*,

(b) except for Clause (c), the *mezzanines*, elevated walkways and platforms are intended solely for periodic service and maintenance, and

(c) where they are intended to be occupied, no *mezzanine*, elevated walkway or platform shall have an *occupant load* more than 4 persons.

3.2.2.57.Industrial Buildings, Division 3, up to 4 Storeys

(1) A *building* classified as Group F, Division 3 shall conform to Sentence (2) provided the *building*

(a) is not more than 4 *storeys* in *building height*

(b) if unsprinklered, has a *building area* not more than the value in Table 3.2.2.57., and

(c) if *sprinklered*, is not more than twice the area limits of Clause (b).

(2) The *building* shall be of *combustible* or *noncombustible construction* used either singly or in combination, and

(a) floor assemblies shall be *fire separations* and, if of *combustible construction*, shall have a *fire-resistance rating* of not less than 45 min,

(b) *mezzanines* shall have, if of *combustible construction*, a *fire-resistance rating* of not less than 45 min,

(c) roof assemblies shall have, if of *combustible construction*, a *fire-resistance rating* of not less than 45 min, except that in *buildings* not more than 1 *storey* in *building height*, the fire-resistancerating of not less than 45 min, except that in *buildings* not more than 1 *storey* in *building height*, the fire-resistance rating is permitted to be waived provided that the roof

assembly is constructed as a *fire-retardant treated wood* roof system conforming to Article 3.1.14.1., and

(i) if unsprinklered, the *building area* is not more than

2 400m2 (25,800 ft2) if facing 1 *street*,

3 000m2 (32,300 ft2) if facing 2 *streets*, or

3 600m2 (38,800 ft2) if facing 3 *streets*, and

(ii) if *sprinklered*, the *building area* is not more than twice the area limits of Subclause (i), (see Article 3.2.2.12. for supervised sprinkler systems) and

(d) all *loadbearing* walls, columns and arches supporting an assembly required to have a *fire-resistance rating* shall have a *fire-resistance rating* of not less than 45 min or shall be of *noncombustible construction*.

5. **Applicant's Position**

The Applicant submitted that the proposed renovation of the BCF area could be considered a 1 storey addition in building height. They believe that the proposal meets the criteria found in Sentence 3.2.1.1.(8). As they note, the BCF area, will be all noncombustible construction. The upper levels will only be used for periodic service and inspections, and the occupant load on the second level will be 2 persons, lower than the 4 allowed.

Even though, as the applicant argues, none of the upper levels need to be regarded as storeys, the applicant is proposing that the renovated BCF facility be considered a 2 storey building. This would allow DuPont some flexibility in the future for staffing the second level. The 4,080m2 area of the extended BCF facility, they note, would still fall well below the 7,200m2 allowed under Article 3.2.2.57. for a 2 storey building facing 2 streets.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed renovation is 4 storeys in building height. As such, the structural fire-resistance provisions under OBC Article 3.2.2.57. do not apply. They point out that 3 of the upper levels are made of solid concrete construction and cover 100% of the building area. As such, they should be viewed as storeys.

Further, they believe the building exceeds its allowable area. Assuming the building faces 3 streets, they calculate (based on full sprinklering) that the maximum area allowed under 3.2.2.57. is 3,600 m2. In their belief, the proposed structure is approximately 13% over the allowable limit.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the building is considered to be a two storey building with multiple level industrial platforms and complies with the requirements of Article 3.2.1.1 of the Building Code.

8. **Reasons:**

1) The building height is necessary for the manufacturing process and equipment.

2) The building is of noncombustible construction.

3) The industrial platforms are intended solely for periodic service and maintenance.

4) The occupant load of no elevated platform exceeds 4 persons.

Dated at Toronto this 28th day in the month of May in the year **1997** for application number **1997-23**.

BCC Ruling No. 97-16-558

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-16-558

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.3.2.13. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89).

AND IN THE MATTER OF an application by Mr. Stephen Roth, General Manager, Waterloo Stage Theatre, 24 King Street North, Waterloo, Ontario, for the resolution of a dispute with Mr. Anthony Krimmer, Chief Building Official, City of Waterloo, concerning whether the performance area is a stage and thus subject to the requirements of Article 3.3.2.13 of the Ontario Building Code, at the Waterloo Stage Theatre, Waterloo, Ontario.

APPLICANT
Mr. Stephen Roth, General Manager
Waterloo Stage Theatre
24 King Street North
Waterloo, Ontario

RESPONDENT
Mr. Anthony Krimmer
Chief Building Official
City of Waterloo

PANEL
Mr. Michael Lio, Chair
Ms. Susan Friedrich
Mr. Ross Thomson

PLACE
Toronto, Ontario

DATE OF RULING
Wednesday, May 28th, 1997

APPEARANCES
Mr. Stephen Roth
General Manager
Waterloo Stage Theatre
The Applicant

Mr. Peter Ciuciura
L. Alan Grinham Architects &
Mr. Johnathan Rubes
Leber Rubes Inc.
Agents for the Applicant

Mr. Anthony Krimmer
Chief Building Official
City of Waterloo
The Respondent

RULING

1. **The Applicant**

   Mr. Stephen Roth, General Manager, Waterloo Stage Theatre, is a person who has applied for a permit under the *Building Code Act, 1992* to renovate an existing 500 seat cinema for live theatre productions. The building is 1 storey with a partial mezzanine at one end that had previously been used as a projection booth and a small basement for mechanical equipment. The building contains a fire alarm system and has sprinklers servicing the stage area.

2. **Description of Construction**

   The proposed renovation would erect a new stage. Across the rear portion of the stage would be a small open mezzanine space. The seating capacity would be reduced to 252. Some modifications are to be made to the existing projection booth to allow for light and sound control.

3. **Dispute**

The issue under dispute between the Applicant and the Respondent is whether the proposed performance area is a stage as defined by the 1990 Ontario Building Code (OBC) and whether the subject area is required to be designed in accordance with OBC Article 3.3.2.13.

4. **Provisions of the Building Code**

3.3.2.13. Stages for Theatrical Performances

1. *Stages* for theatrical performances and ancillary spaces, such as workshops, dressing rooms and storage areas shall be *sprinklered*.
2. A *fire separation* with a *fire-resistance rating* of not less than 1 h shall be provided between every *stage* for theatrical performances and ancillary spaces, such as workshops, dressing rooms and storage areas.
3. Every *stage* for theatrical performances and ancillary spaces, such as workshops, dressing rooms, and storage areas, shall be separated from the seating space by a *fire separation* having a *fire-resistance rating* of not less than 1 h, except for a proscenium opening which shall be protected with

   (a) a sprinkler deluge system conforming to the requirements of paragraph 4-4.20 of NFPA 13 "Standard for the Installation of Sprinkler Systems",
   (b) an unframed fire curtain when the opening is not more than 20 m (65 ft 7 in) wide, or
   (c) a semi-rigid fire curtain when the opening is more than 20 m (65 ft 7 in)

4. Every fire curtain as required by Sentence (3) shall be designed to close

   (a) automatically by heat-actuated devices,
   (b) automatically upon the actuation of the sprinkler system,
   (c) automatically upon the actuation of the fire alarm system, and
   (d) manually by remote control devices located at the curtain control panel and at each side of the *stage*.

5. Not less than 2 vents for the purpose of venting fire and smoke to the outside of a *building* shall be provided above every *stage* designed for theatrical performances and shall

   (a) have an aggregate area of not less than one eighth of the area of the *stage* behind the proscenium opening, and

(b) be arranged to open automatically by means of

(i)heat-actuated devices, or

(ii) actuation of the sprinkler system.

1.1.3.2. Definitions of Words and Phrases

Stage means a space designed primarily for theatrical performances with provision for quick change scenery and overhead lighting, including environmental control for a wide range of lighting and sound effects and which is traditionally, but not necessarily, separated from the audience by a proscenium wall and curtain opening.

5. **Applicant's Position**

The Applicant submitted that the performance area of the Waterloo Stage Theatre does not meet the OBC definition of a stage. Accordingly, they believe the provisions of Article 3.3.2.13. should not apply. This view is based on the fact that while the subject stage does include lighting equipment, it does not contain facilities to provide quick change scenery, especially side stages, a fly tower and accompanying equipment. The lack of these facilities means that ancillary space is limited and any fire would be quite noticeable by the audience. Further, the exit capacity is approximately double the occupant load, the farthest travel distance is 20 m, and the stage is currently sprinklered.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed performance area should be considered a stage under the OBC and therefore should be designed to meet the full requirements of Article 3.3.2.13. As a result the stage should include 1 h rated proscenium opening, either a "fire curtain" or deluge sprinkler system, and a fire and smoke venting system.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the stage provides sufficiency of compliance to the requirements of the Building Code provided:

1. quick response sprinklers are installed over the stage and ancillary areas,
2. smoke detection, connected to an alarm system, is installed over all stage areas including the ancillary room at the rear of the stage and below the mezzanine area, and

3. the area under the stage is sealed such that it cannot be used for storage.

8. **Reasons:**
    1. The theatre, stage and back of the house areas are of limited size.
    2. The theatre has limited seating capacity.
    3. A sprinkler system will be provided.
    4. Adequate exits will be provided.
    5. The maximum travel distance does not exceed 20 m.
    6. There are no provisions for quick change scenery or fly towers, which limits the combustible load on the stage.

Dated at Toronto this 28th day in the month of May in the year **1997** for application number **1997-19**.

BCC Ruling No. 97-14-556

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-14-556

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.3.1.9.(6) and Clause 3.4.2.5.(1)(d) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Greg Gaudette, Property Manager, Shoppers World Company Inc., 1530 Albion Road, Suite 208, Etobicoke, Ontario, for the resolution of a dispute with Mr. Tony Chow, Chief Building Official, City of Etobicoke, concerning whether locating occupancies not exceeding 15% of the public corridor area on the same side as new retail units in an unobstructed 6 metre public corridor, provides sufficiency of compliance with Sentence 3.3.1.9.(6) and Clause 3.4.2.5.(1)(d) of the Ontario Building Code, at Shoppers World Albion, Etobicoke, Ontario.

APPLICANT

Mr. Greg Gaudette, Property Manager
Shoppers World Company Inc.
1530 Albion Road, Suite 208
Etobicoke, Ontario

RESPONDENT

Mr. Tony Chow
Chief Building Official
City of Etobicoke

PANEL

Mr. Roy Philippe, Chair Mr. Rick Florio Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, May 8th, 1997

APPEARANCES

Mr. Greg Gaudette
Property Manager
Shoppers World Company Inc.
The Applicant

Mr. Demir Delen
Morrison Hershfield Ltd
Agent for the Applicant

Mr. Sait Toprak
Chief Building Code Engineer
City of Etobicoke
For the Respondent

RULING

1. **The Applicant**

   Mr. Greg Gaudette, Property Manager, Shoppers World Company Inc., is a person who has applied for a permit under the *Building Code Act, 1992* to renovate an existing shopping mall by constructing additional retail units on one side of a 12.5 m (41 ft) wide public corridor at Shoppers World Albion, Etobicoke, Ontario.

2. **Description of Construction**

   The Shoppers World Albion mall is a noncombustible 1 storey building with a building area of 356,000 sq. ft. (33,073 sq. m.). The subject building has a fire alarm system, an automatic sprinkler system, and a standpipe and hose system.

   The proposed interior renovation is to construct additional retail units on one side of the existing 12.5 metre wide public corridor adjacent to the K-Mart Store at the east end of the shopping centre.

3. **Dispute**

The issue under dispute between the Applicant and the Respondent is whether the proposal meets the intent of Sentence 3.3.1.9. (6) of the 1990 Ontario Building Code (OBC) which requires that occupancies in a public corridor be located in such a manner that there is an unobstructed passage for pedestrian travel of specified widths adjacent and parallel to all rooms and suites that front onto the public corridor, and that the combined area of all occupancies in a public corridor shall not exceed 15% of that area. Also under dispute is whether Clause 3.4.2.5. (1)(d) of the OBC, regarding the location of exits served by a public corridor, may be applied.

4. **Provisions of the Building Code**

3.3.1.9. Corridors

(6) If a public corridor conforming to Clause 3.4.2.5.(1)(d) contains an occupancy, the occupancy shall be located so that there is an unobstructed width for pedestrian travel of not less than 3 m (9 ft 10 in) adjacent and parallel to all rooms and suites that front onto the public corridor and the combined area of all occupancies in a public corridor shall not be more than 15 percent of the area of the public corridor.

3.4.2.5. Location of Exits

(1) Except as provided in Sentences (2), (3) and 3.3.2.4.(6), where more than one exit is required from a floor area, such exits shall be located so that the travel distance to not less than one exit as described in Article 3.4.2.4. shall be not more than
(d) 105 m (344 ft 6 in) in any floor area, served by a public corridor, in which rooms and suites are not separated from the remainder of the floor area by a fire separation, provided
(i) the public corridor has a width of not less than 9 m (29 ft 6 in),

(ii) the ceiling height in the public corridor is not less than 4 m (13 ft 1 in) above all floor surfaces,

(iii) the building is sprinklered, and

(iv) not more than one half of the required egress doorways from a room or suite open into the public corridor when the room or suite is required to have more than one egress doorway.

5. Applicant's Position

The Applicant submitted that the proposed renovation would still leave the subject public corridor in compliance with OBC requirements. Their view, as expressed in the report by Morrison Hershfield consultants, is that the width of the corridor should be calculated as 9 m, since the extra 3.5 m strip immediately adjacent to the K-Mart Store's wall may, according to the Code, be used as retail without contravening any provisions. They further argue that in a corridor of this length (146 m), a 9 m wide corridor is permitted to have additional occupancies provided that these occupancies do not exceed 15% of the area and that they are placed so as to allow for a 3 m unobstructed pedestrian passageway adjacent and parallel to the fronting rooms and suites. (They calculate 15% of the subject public corridor to be 197.1 sq. m.) It is their position that the Code does not prevent them from adding this additional retail area to the area directly abutting the K-Mart wall. In essence, they believe the Code does not prevent them from placing their additional 15% occupancies adjacent to, and beyond the 9 m line, as long as the corridor remains at least 6 m wide to allow for 3 m of unobstructed pedestrian width to serve the retail rooms and suites that face each other on either side of the corridor.

The Applicant also submits that the performance level of the building will not be reduced, including the access to exits. This is because the building contains both an early warning system, and a sprinkler system, and would thereby satisfy the compliance alternatives.

6. **Chief Building Official's Position**

The Respondent submitted that the Code does not intend public corridors to be less than 9 m in width. They calculate that by adding 197.1 sq. m. as additional retail space to the 3.5 m strip directly adjacent to the K-Mart Store the public corridor would be thus reduced to 7.6 m. Their position is that the Code allows some flexibility concerning additional occupancies as long as the corridor is, among other things, at least 9 m wide and that the extra occupancies are located "within" the corridor. In their view, the proposed renovation, by joining the additional occupancies to the one side and not placing them somewhere in the middle of the public corridor, will, in effect, reduce the corridor width.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the minimum unobstructed public corridor width of 9 m must be provided as required to permit a distance of travel 105 m as noted in Clause 3.4.2.5.(1)(d) of the Building Code.

The occupancy permitted in the public corridor must be installed as per 3.3.1.9.(6) of the Building Code.

8. **Reasons:**
   i. A minimum clear width of 9 m is required to permit the 105 m travel distance to be applied.
   ii. The corridor occupancy as permitted in 3.3.1.9.(6) is intended to allow displays, kiosks and other similar obstructions in the centre of a minimum 9 m wide public corridor leaving 3 m of clear space on each side of the public corridor for pedestrian movement.
   iii. The 15% area limit is set to limit and control fire loads in the public corridor. This proposal does not satisfy this principle.
   iv. Other design configurations are available to meet the Building Code requirements.
   v. It is the opinion of the Building Code Commission that the proposal reduces the level of safety for the occupants and the property from fire.

Dated at Toronto this 8th day in the month of May in the year **1997** for application number **1997-16**.

BCC Ruling No. 97-13-555

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-13-555

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.2.5.1.(1) and Sentence 3.2.5.1.(2) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Konstantine Lamberis, 332 Pacific Avenue, Toronto, Ontario, for the resolution of a dispute with Ms Pamela Coburn, Chief Building Official, City of Toronto, concerning whether a stair with a width of 660 mm (2' 2") rather than the required 860 mm (2' 10") provides sufficiency of compliance with Sentence 9.8.3.3.(2) of the Ontario Building Code at 332 Pacific Avenue, Toronto, Ontario.

APPLICANT

Mr. Konstantine Lamberis
Home Owner
332 Pacific Avenue
Toronto, Ontario

RESPONDENT

Ms Pamela Coburn
Chief Building Official
City of Toronto

PANEL

Mr. Roy Philippe, Chair
Mr. Doug Clancey
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, April 24th, 1997

APPEARANCES

Mr. Konstantine Lamberis
Home Owner
332 Pacific Avenue
Toronto, Ontario
The Applicant

RULING

1. **The Applicant**

   Mr. Konstantine Lamberis, Home Owner, 332 Pacific Avenue is a person who has been issued an Order to Comply under the *Building Code Act, 1992* to build a staircase in a single unit house at 332 Pacific Avenue, Toronto, Ontario.

2. **Description of Construction**

   The new stair was constructed to gain access to a newly conducted third floor attic space.

3. **Dispute**

   The issue under dispute between the Applicant and the Respondent is whether the new stair with a 2' 2" width rather the minimum required 2' 10" provides sufficiency of compliance with the Building Code.

4. **Provisions of the Building Code**

   Sentence 9.8.3.3.(2) Stair Width

   At least 1 stairway between each floor level in a dwelling unit shall have a minimum width between wall faces of not less than 860 mm (2' 10").

5. **Applicant's Position**

The Applicant submitted that the renovation of a house to add new stairs to the third floor will improve the means of egress from the second floor, that renovating to change the building from a rooming house to a single family dwelling will not reduce the level of safety, and that the space available in the existing 90 year old victorian house is limited.

6. **Chief Building Official's Position**

The Respondent submitted the stair up to the third floor level must have a minimum width of 2' 10" under Sentence 9.8.3.3.(2) of the Building Code as opposed to the 2' 2" as built.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the existing stair from the 2nd to the 3rd floor having a minimum width of 2' 2" provides sufficiency of compliance with Sentence 9.8.3.3.(2) of the Building Code.

8. **Reasons:**

i) The stair services a small floor area with limited occupant load.

ii) The actual width is approximately 2" less than permitted under Part II.

iii) The third floor will have access to an exterior balcony.

iv) The stair will comply with all other dimensional requirements under the Building Code.

v) The building is being converted from a rooming house to a single family unit increasing the performance level.

Dated at Toronto this 24th day in the month of April in the year **1997** for application number **1997-05**.

BCC Ruling No. 97-12-554

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-12-554

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.2.5.1.(1) and Sentence 3.2.5.1.(2) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. John Bate, President, John Bate & Company Ltd., London, Ontario, for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan concerning whether the fire fighting access requirements of Sentences 3.2.5.1.(1) and Sentence 3.2.5.1.(2) of the Building Code should apply to the Atlas Cold Storage at 316 Aviva Park Drive, Vaughan, Ontario.

APPLICANT

Mr. John Bate
President
John Bate & Co. Ltd.
Toronto, Ontario

RESPONDENT

Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL

Mr. Roy Philippe, Chair
Mr. Rick Florio
Mr. Cliff Youdale

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, May 8th, 1997

APPEARANCES

Mr. John Bate
President
John Bate & Co. Ltd.
Toronto, Ontario
The Applicant

Mr. Steve Penna
Technical Supervisor
City of Vaughan
For the Respondent

RULING

1. **The Applicant**

   Mr. John Bate, President, John Bate & Co. Ltd. is a person who has applied for a permit under the *Building Code Act, 1992* to construct a freezer warehouse at Atlas Cold Storage Vaughan Limited, Vaughan, Ontario.

2. **Description of Construction**

   The subject building is a one storey freezer warehouse of F2 major occupancy with a building area of 5,495 square metres (59,148 sq ft). The unsprinklered building is of non-combustible construction and is to be held at a continuous temperature of (-20 degrees F).

3. **Dispute**

   The issue under dispute between the Applicant and the Respondent is whether the building is required to have access panels for fire fighting purposes adjacent to the fire routes on the east and north sides of the building in accordance with Article 3.2.5.1.

4. **Provisions of the Building Code**

3.2.5.1. Access to Above Grade Storeys

(1) Except for storeys below the first storey, direct access for fire fighting shall be provided from the outdoors to every storey having its floor level less than 25 m (82 ft) above grade by not less than one unobstructed window or access panel for each 15m (49 ft 3 in) of wall in each wall required to face a street in Subsection 3.2.2.

5. **Applicant's Position**

The Applicant submitted that it is impractical to place access panels every 15 metres around the perimeter of the building for fire fighting because: vandals would be able to enter the building; access to the panels would be blocked by contents of the warehouse; openings would increase the risk of vapour entry in the freezer; and, dimensions for the height of the sill imply that windows were presumed to be part of the structure which does not apply to a freezer warehouse.

6. **Chief Building Official's Position**

The Respondent submitted that Article 3.2.5.1. requires access to the first storey of this building for fire fighting purposes every 15 metres along the faces of the building adjacent to the fire route. The Chief Building Official also submitted that the Applicant has not proposed any alternative measures.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the building provides sufficiency of compliance with Sentence 3.2.5.1.(1) and (2) of the Building Code on the conditions that;

i. A fire alarm system conforming to 3.2.4. of the building is installed with fire, heat or smoke detection throughout the freezer and the system shall be designed to notify the fire department as required by 3.2.4.7. of the Building Code.

8. **Reasons:**

i. The fire alarm system and central connection to the fire department will increase notification of a fire condition in the building and reduce fire department response.

ii. Although not conforming to the specific locations for access for fire fighting outlined in 3.2.5.1.(1) and (2) access is available from the exterior on 3 sides and from the loading dock to the south.

iii. The occupant load of the building is low (2 - 6) persons.

iv. The low operating temperatures (-20 degrees F) may have an effect in reducing the development of fire growth.

Dated at Toronto this 8th day in the month of May in the year **1997** for application number **1997-15**.

BCC Ruling No. 97-11-553

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-11-553

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 9.8.5.2. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Ms Fung Ching Chan, Owner, Toronto, Ontario, for the resolution of a dispute with Mr. Bernie Roth, Chief Building Official, City of Scarborough concerning whether a spiral stair which is a secondary exit provides sufficiency of compliance with Article 9.8.5.2. of the Building Code at 196 Carolbreen Square, Scarborough, Ontario.

APPLICANT

Ms Fung Ching Chan
Owner
Scarborough, Ontario

RESPONDENT

Mr. Bernie Roth
Chief Building Official
City of Scarborough

PANEL

Mr. Roy Philippe, Chair
Mr. Doug Clancey
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, April 24th, 1997

APPEARANCES

Ms Fung Ching Chan
Owner
Scarborough, Ontario
The Applicant

Mr. Bernie Roth
Chief Building Official
City of Scarborough
The Respondent

RULING

1. **The Applicant**

   Ms Fung Ching Chang, owner, is a person to whom an Order to Comply was issued under the Building Code Act, 1992 to remove a circular stair, at 196 Carolbreen Square, Scarborough Ontario.

2. **Description of Construction**

   The subject building is a 2 storey house with a building area of 167 square metres (1800 sq ft). A spiral stair with a run less than 150 mm has been installed between the basement and the first floor.

3. **Dispute**

   The dispute between the Applicant and the Respondent concerns sufficiency of compliance with Article 9.8.5.2. of the Ontario Building Code. At issue is whether the run on the spiral stair provides sufficiency of compliance with the Building Code.

4. **Provisions of the Building Code**

   9.8.5.2. Curved Stairs not in Exits

Except as permitted in Article 9.8.5.3., a curved stair not required as an exit shall have an average run of not less than 200 mm (7 7/8 in) and a minimum run of 150 mm (5 7/8 in) and shall have risers conforming to Article 9.8.3.1.

5. **Applicant's Position**

The Applicant submitted that the basement is a walkout basement and has a patio door which serves as the main exit, and that there is an additional exterior stair from the basement to another patio door serving the main floor level. The Applicant further submitted that the stair has been in use for more than one year.

6. **Chief Building Official's Position**

The Respondent submitted that the spiral stair was installed instead of a curved stair as noted on the original permit drawings, and that the spiral stair does not meet the requirements of 9.8.5.2. because the stair run at the narrow end is tapered to significantly less than the minimum required 150 mm. The Respondent further submitted that while there are ample exits from each floor the spiral stair is the only internal connection between the basement and main floor.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the installed spiral stair which is not required as an exit, does not comply with the requirements of Article 9.8.5.2. of the Building Code.

8. **Reasons:**

i) The stair is the only interior communicating stair from this basement to the first floor.

ii) Non complying stair geometry may impose an increased likelihood of injury.

iii)No alternatives were proposed for sufficiency of compliance.

Dated at Toronto this 24th day in the month of April in the year **1997** for application number **1996-68**.

BCC Ruling No. 97-09-551

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-09-551

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 9.10.14.13. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Fred C. DeNure, Owner, 60 Bond Street West, Lindsay, Ontario, for the resolution of a dispute with Mr. Ed O'Connell, Chief Building Official, Town of Lindsay, Lindsay, Ontario concerning whether Article 9.10.14.13. applies to an accessory building located at 60 Bond Street West, Lindsay, Ontario.

APPLICANT

Mr. Fred C. DeNure
Owner
60 Bond Street West
Lindsay, Ontario

RESPONDENT

Mr. Ed O'Connell
Chief Building Official
Town of Lindsay

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, April 10th, 1997

APPEARANCES

Mr. John Carley
John Robert Carley Architect Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Paul Chevrier
Deputy Chief Building Official
Town of Lindsay
For the Respondent

RULING

1. **The Applicant**

   Mr. Fred C. DeNure is a person to whom an Order to Comply has been issued under the Building Code Act, 1992 to rectify an accessory building constructed at 60 Bond Street West, Lindsay, Ontario.

2. **Description of Construction**

   The subject building is a single storey accessory building of approximately 46 square metres (490 sq ft) of combustible construction located at the rear of the residential property which contains a detached residential dwelling.

3. **Dispute**

   The issue under dispute is whether the building is to be considered a separate building, and whether the combustible roof overhang which extends to within .483 metres (1 ft 7 in) of the north lot line is permitted under the Building Code.

4. **Provisions of the Building Code**

   9.10.14.13. Combustible Projections

Except for buildings containing 1 or 2 dwelling units only, combustible projections on the exterior of a wall that are more than 1 m (3 ft 3 in) above ground level, such as balconies, platforms, canopies, eave projections and stairs, and that could expose an adjacent building to fire spread, shall not be permitted within 1.2 m (3 ft 11 in) of a property line or the centreline of a public way, or within 2.4 m (7 ft 10 in) of a combustible projection on another building on the same property.

5. **Applicant's Position**

The Applicant submitted that 9.10.14.13. does not apply to this detached accessory building since it is an accessory building to a 1 or 2 dwelling structure. The Applicant further submitted that many municipalities also use this interpretation and allow accessory structures to have combustible projections closer to the lot line than allowed in 9.10.14.13.

6. **Chief Building Official's Position**

The Chief Building Official submitted that the building does not contain 1 or 2 dwelling units and therefore must comply with 9.10.14.13. and there is a no definition of an accessory building under the Building Code.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the accessory building serving only a dwelling unit provides sufficiency of compliance with Article 9.10.14.13. of the Building Code.

8. **Reasons:**

i) Although not directly attached the building is a subsidiary use to the dwelling unit and may be considered as forming part of the dwelling unit.

ii) It is the opinion of the Building Code Commission that the building does not increase the risk to the property or adjacent property from fire.

Dated at Toronto this 10th day in the month of April in the year **1997** for application number **1997-07**

BCC Ruling No. 97-08-550

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-08-550

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Section 11.3. and Article 3.2.3.15. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Al Carbone, Owner, Kit Kat Bar & Grill, 297 King Street West, Toronto, Ontario, for the resolution of a dispute with Ms Pamela Coburn, Chief Building Official, City of Toronto, Ontario concerning whether i) there is a change in performance level and, ii) a skylight set in a wood frame, prov ides sufficiency of compliance with Section 11.3 and Article 3.2.3.15. of the Ontario Building Code at Kit Kat Bar & Grill, 297 King Street West, Toronto, Ontario.

APPLICANT

Mr. Al Carbone
Kit Kat Bar & Grill
297 King Street West
Toronto, Ontario

RESPONDENT

Ms Pamela Coburn
Chief Building Official
City of Toronto

PANEL

Mr. Roy Philippe (Chair)
Ms. Susan Friedrich
Mr. Ross Thomson

PLACE

Toronto, Ontario

DATE OF RULING

Thursday, April 10th, 1997

APPEARANCES

Mr. Jonathan Rubes
Leber Rubes Inc.
Toronto, Ontario
Agent for the Applicant

Mr. Al Coburn
Kit Kat Bar & Grill
Toronto, Ontario
The Applicant

Mr. Prabhakar Mahant
Building Engineer
City of Toronto
For the Respondent

Mr. Dennis Guerard
City of Toronto
For Respondent

RULING

1. **The Applicant**

   Mr. Al Carbone applied for a permit under the *Building Code Act, 1992* to renovate a restaurant at the Kit Kat Bar and Grill, 297 King Street West, Toronto, Ontario.

2. **Description of Construction**

   The subject building is 3 stories with restaurant uses on the ground floor and in the basement, and a single dwelling unit on the partial second and third floors. The building is approximately 96 square metres of combustible construction with no fire alarm or sprinkler systems.

3. **Dispute**

The issues under dispute are whether:

1- a change in major occupancy has occurred which may among other things, require the provision of a fire alarm and sprinkler system and,

2- wired glass skylights set in wood frames within 5 metres of an exterior wall, are permitted under Section 11.3. and Article 3.2.3.15. of the Building Code.

4. **Provisions of the Building Code**

11.3 Performance Level

3.2.3.15. Wall Exposed to Adjoining Roof

Except as permitted in Sentence 3.2.3.20.(4), where a wall in a building is exposed to a fire hazard from an adjoining roof of a separate unsprinklered fire compartment in the same building, and the exposed wall contains windows within 3 storeys verticall y and 5 m (16 ft 5 in) horizontally of such roof, the roof shall contain no skylights within 5 m (16 ft 5 in) of the exposed wall.

5. **Applicant's Position**

The Applicant submitted that the ground floor renovation to the restaurant was not a change in major occupancy and the hazard index need not be evaluated. The sprinkler protection and added fire separations required from a change in major occupancy are n ot necessary because:

- the occupants on the ground floor will be aware of the fire on the ground floor and have a choice of direction to 2 exists within 15 metres;

- occupants on the ground floor will be notified of a fire in the basement through a fire alarm and heat detection system;

- though not required, occupants of the second and third floor will also be notified of a fire on the ground floor through a fire alarm and detection system; and,

- if the ground floor was much larger and capable of accommodating a much higher occupant load, the building could be classified under a Group E major occupancy and not be required to have sprinkler protection.

6. **Chief Building Official's Position**

The Respondent submitted that based on a 1988 building permit and information from the Applicant in 1996 regarding the use of the building, the front of the building underwent a change in major occupancy from E to A2 and the rear of the building from an F3 to an A2. The Respondent indicated that such changes in major occupancy require the evaluation of the hazard index and the construction index. Based on such an evaluation the building would have a hazard index of 6. The Respondent further submitted that this hazard index would require the building to be of non-combustible construction, with 1 hour fire rated floors, 45 minute rated roofs, and a fire alarm system. Combustible construction is permitted with a 1 hour fire rating where the area is sprinklered. As well, fire resistance rating is not required on the roof and the skylight would only be permitted where the area below is sprinklered.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the existing wood roof assembly with skylights of wired glazing in wood frame provides sufficiency of compliance with Section 11.3 and Article 3.2.3.15. of the Building Code provided that:

i) The exposed openings on the 2nd floor are protected with wired glass in fixed steel frames and;
ii) The fire alarm system is installed in accordance with Subsection 3.2.4. throughout the Building and;
iii) The means of egress from the 2nd and 3rd floor are protected from the first floor restaurant by a 3/4 hour fire separation.

8. **Reasons:**

i) The travel distance to exits on the ground floor is less than 15 m although the code permits 30 m.
ii) The fire alarm system is being extended throughout the building and other life safety systems are being provided.
iii) The building although 3 storeys in height is small in floor area (ie. 42 sq.m. on the 3rd floor).

iv) In the opinion of the Building Code Commission, the wood frame roof assembly with wired glazed skylights does not affect the performance level of the building.

Dated at Toronto this 10th day in the month of April in the year **1997** for application number **1997-06.**

BCC Ruling No. 97-07-549

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-07-549

IN THE MATTER OF Subsection 24 (1) of the*Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.3.7.(2) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Galli Taberini, President, West Sutton Properties, Concord, Ontario, for the resolution of a dispute with Mr. Frank Spagnolo, Chief Building Official, City of Mississauga, Ontario concerning whether the "Royal Building System" consisting of a PVC shell structure filled with concrete, provides sufficiency of compliance with Sentence 3.2.3.7.(2) of the Ontario Building Code at 7345 Danbro Crescent, Mississauga, Ontario.

APPLICANT

Mr. Galli Taberini, President
West Sutton Properties
111 Creditstone Road
Concord, Ontario

RESPONDENT

Mr.Frank Spagnolo
Chief Building Official
City of Mississauga

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

Wednesday, March 26, 1997

APPEARANCES

Mr. Randall Brown
Randal Brown & Associates
Agent for the Applicant

Mr.Ivan Morson
Hannigan Engineering
For the Applicant

Mr.Celeste Iacobelli
Burka Architects Inc.
For the Applicant

Mr.Frank Spagnolo
Chief Building Official
City of Mississauga
The Respondent

Mr.John LaSelva
Plan Examiner
City of Mississauga
For the Respondent

RULING

1. **The Applicant**

   Mr. Galli Taberini, President, West Sutton Properties, is a person who holds a building permit under the Building Code Act, 1992 to construct an industrial building at 7345 Danbro Crescent, Mississauga, Ontario.

2. **Description of Construction**

The subject industrial building has a major occupancy of F2 and a sprinklered building area of 6,364 square metres. The exposed building face has a variety of spatial separations and unprotected openings and is constructed of wall panels which consist of a PVC shell structure fitted together and filled with concrete.

3. **Dispute**

The issue under dispute is whether the PVC wall panels which are required to be of noncombustible construction, and have a fire resistance rating of not less than 2 hours, are permitted under the spatial separation requirements of the Building Code.

4. **Provisions of the Building Code**

Sentence 3.2.3.7.(2) Construction of Exposing Building Face

2. Except as permitted in Article 3.2.3.9., where a limiting distance shown in Table 3.2.3.B. for a Group E, or Group F, Division 1 or 2 occupancy classification is such as to permit an exposing building face to have unprotected openings of
    a. not more than 10 per cent of the exposing building face, the exposing building face shall be of noncombustible construction having a fire-resistance rating of not less than 2 h and be clad with noncombustible construction,
    b. more than 10 per cent but not more than 25 per cent of the exposing building face, the exposing building face shall have a fire-resistance rating of not less than 2 h, and be clad with noncombustible cladding, and
    c. more than 25 per cent but less than 100 per cent of the exposing building face, the exposing building face shall have a fire-resistance rating of not less than 1 h.

5. **Applicant's Position**

The Applicant submitted that the building is to be considered as a 1 storey building with a 10% mezzanine and constructed of combustible construction. The Applicant submitted that Table 3.2.3.1.D of the National Building Code permits a limiting distance of 15 metres in a sprinklered, F2 building with 100% unprotected openings, which would permit the north and south walls of the building. The Applicant further submitted that the 1995 National Building Code permits these walls to have a 1 hour fire separation and combustible exterior cladding and submitted ULC tests indicating that the wall assembly meets a 2 hour fire separation. The Applicant indicated that the project should be considered as an equivalent to the requirements of the 1995

NBC, and that the same spatial separation tables are being proposed for the 1998 Ontario Building Code.

6. **Chief Building Official's Position**

The Chief Building Official submitted that because the mezzanine is designed to be in excess of 10% the building is a non-combustible 2 storey building. The Chief Building Official further submitted that the wall panel is to be constructed from noncombustible materials since the building classification and limiting distance provided requires the cladding to be constructed from noncombustible materials. The Chief Building Official also submitted that the wall panels had not been tested to meet the 2 hours fire resistance rating.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the exterior wall assembly consisting of PVC shell panels, filled with concrete provides sufficiency of compliance with Sentence 3.2.3.7.(2) of the Building Code provided that the building meets the construction requirements of a 1 storey building plus mezzanine as per Article 3.2.2.52 of the Building Code.

8. **Reasons:**

ii. The Commission is of the opinion that in fully sprinklered buildings, where the sprinkler system is supervised and monitored, the sprinkler system will control fire to such an extent that there will be limited radiation through openings in the exterior face and that there is a substantial reduction in the potential for fire to spread within the building.

iii. The building is essentially of non-combustible construction where combustible construction is permitted.

iv. U.L.C. test data was provided as evidence indicating a 2 hour rating on the wall assembly with a full report to be submitted to the municipality.

v. The 1995 National Building Code permits combustible cladding and a 1 hour rated wall.

vi. Proposed changes for the 1997 Ontario Building Code would accept the proposed construction.

Dated at Toronto this 26th day in the month of March in the year 1997 for application number 1997-12

BCC Ruling No. 97-06-548

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-06-548

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Subsection 3.1.6. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. William Isbell, President, Golf Way Developments, Thunder Bay Incorporated, Thunder Bay, Ontario, for the resolution of a dispute with Ms Jennifer Favron, Chief Building Official, City of Thunder Bay, Ontario, concerning whether an air supported structure with a mezzanines and interior partitions, provides sufficiency of compliance with Subsection 3.1.6. of the Ontario Building Code at 141 Northern Avenue, Thunder Bay, Ontario.

APPLICANT

Mr. William Isbell, President
Golf Way Developments Thunder Bay Incorporated
Thunder Bay, Ontario

RESPONDENT

Ms Jennifer Favron
Chief Building Official
City of Thunder Bay

PANEL

Mr. Roy Philippe, Chair
Mr. Demir Delen
Mr. Michael Lio

PLACE

Toronto, Ontario

DATE OF RULING

March 26, 1997

APPEARANCES

Mr. Fred Wood, Architect
Leonard Alfred Wood Architect
The Agent for the Applicant

RULING

1. **The Applicant**

   Mr. William Isbell, President of Golf Way Developments has applied for a building permit under the Building Code Act, 1992 to construct an air-supported structure at 141 Northern Avenue, Thunder Bay, Ontario.

2. **Description of Constrution**

   The subject building is a new 1 storey building with a building area of 8,361 square metres. The air-supported structure with a fabric roof has a mezzanine running the full length of the building. Interior partitions are made of noncombustible construction and an ancillary space which houses washrooms and the entrance lobby are separated from the areas under the roof by a 1 hour fire separation.

3. **Dispute**

   The issue in dispute is whether the building as designed with interior partitions and with an attached ancillary structure meets the requirements for air-supported structures in Subsection 3.1.6. with regards to the mezzanine area, partitions, and spatial separations to the adjacent property.

4. **Provision of the Building Code**

   3.1.6. Tents, Air-supported structures and temporary structures

   3.1.6.2. Application

3. Air-supported structures shall be designed primarily as open floor space without interior walls, mezzanines, intermediate floors or similar construction.

3.1.6.3. Clearance to Other Structures

4. Except for tents used for camping and other personal uses and except as provided in Sentences (2), (3) and (4), every tent, air-supported structure and temporary structure shall conform to Subsection 3.2.3.
5. Tents and air-supported structures shall not be erected closer than 3 m (9 ft 10 in) to other structures on the same property except as provided in Sentences (3) and (4), and shall be sufficiently distant from one another to provide an area to be used as a means of emergency egress.

5. **Applicant's Position**

The Applicant submitted that many of these air-supported structures have been constructed successfully in Ontario and Manitoba and proposes to construct the building in accordance with Article 3.2.2.23. and the proposed revisions to Subsection 3.1.6. of the Ontario Building Code.

Fire alarm system and exits are provided in parts of both the air supported structure and ancillary building.

6. **Chief Building Official's Position**

The Chief Building Official submitted that Sentence 3.1.6.2.(3) of the Building Code states that air-supported structures shall be designed primarily as an open floor space without interior walls, mezzanines, or intermediate floors. In addition, the Chief Building Official submitted that the Building Code does not allow the Chief Building Official to accept interior partitions or apply standards to those partitions or mezzanines.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the air supported structure provides sufficiency of compliance with Subsection 3.1.6. of the Building Code provided:

. The storage garage is separated from the air supported structure by a 1.5 h fire separation;
i. No additional interior walls or mezzanines be constructed, over and above those presently proposed;
ii. Existing mezzanines not be enclosed;

iii. The attached lobby building is sprinklered;

iv. The occupant load is limited to no more than 150; and

v. The travel distance from the mezzanines to an exit is no more than 30 m.

2. **Reasons:**

. The Building Code does not prohibit interior walls or mezzanines in air supported structures but requires that they be designed primarily as open spaces. The proposed structure contains limited interior walls with approximately 5% of its floor area as open mezzanines.

i. The building meets the requirements of Sections 3.3 and 3.4 of the Building Code.

Dated at Toronto, this 26th day, in the month of March, in the year 1997, for application number 1997-11.

BCC Ruling No. 97-05-547

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-05-547

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.2.3.13.(2) 3.3.1.10.(3) and 3.3.3.3.(3) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Mitchell Hall, Associate, Montgomery & Sisan / Kuwabara Payne McKenna Blumberg Architects, Toronto, Ontario, for the resolution of a dispute with Mr. Bernie Roth, Chief Building Official, City of Scarborough, concerning whether i) not providing wired glass in fixed steel frames adjacent to an unenclosed exterior stair, provides sufficiency of compliance with Sentence 3.2.3.13.(2) and, ii) providing doors crossing a corridor with the left hand door swinging in direction of exit travel, provides sufficiency of compliance with Sentences 3.3.1.10.(3) and 3.3.3.3.(3) of the Ontario Building Code at Providence Centre, 3274 St. Clair Avenue East, Scarborough, Ontario.

APPLICANT

Mr. Mitchell Hall, Associate
Montgomery & Sisan Architects
Kuwabara Payne McKenna Blumberg Architects
Toronto, Ontario

RESPONDENT

Mr. Bernie Roth
Chief Building Official
City of Scarborough

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

March 26, 1997

APPEARANCES

Mr. Mitchell Hall
Associate
Montgomery & Sisan / Kuwabara
Payne McKenna Blumberg
The Applicant

Mr. Jonathan M. Rubes, President
Leber/Rubes Inc.
The Agent

Mr.Vishram Bhapkar
Chief Building Official
City of Scarborough
The Respondent

RULING

1. **The Applicant**

   Mr. Mitchell Hall, Associate, Montgomery & Sisan / Kuwabara Payne McKenna Blumberg Architects in joint venture, is the holder of a permit issued under the Building Code Act, 1992 to construct a new 4 storey home for the aged at the Providence Centre, Scarborough, Ontario.

2. **Description of Constrution**

   The proposed construction is a new 4 storey home for the aged made of combustible construction and a basement and building area of 4,825 square metres. The building is fully sprinklered, with a fire alarm system and standpipe and hose system, and is connected to the existing facility by means of a tunnel. The exits from the basement is through two unenclosed exterior stairways.

Paired doors are provided across the corridors to define the zones as required by the Building Code.

3. **Dispute**

The issues in dispute are whether: 1) the requirement of Sentence 3.2.3.13.(2) to protect ground floor windows located beside the unenclosed exterior exit stairs should be applied to this situation; and 2) the swing of the paired doors dividing the corridors may be the reverse of that required by 3.3.1.10.(3) of the Building Code.

4. **Provision of the Building Code**

3.2.3.13. Protection of Exit Facilities

2. Where an unenclosed exterior exit stair or ramp may be exposed to fire from openings in the exterior walls of the building it serves, the openings in the exterior walls of the building shall be protected with wired glass in fixed steel frames or glass block conforming to Article 3.1.8.14. where the openings in the exterior walls of the building are within 3 m (9 ft 10 in) horizontally and
    a. less than 10 m (32 ft 10 in) below the exit stair or ramp, or
    b. less than 5 m (16 ft 5 in) above the exit stair or ramp.

3.3.1.10. Door Swing

3. Where the corridor in Sentence (2) is divided by paired doors which provide access to exit in opposite directions,
    a. the doors shall swing on a vertical axis,
    b. the doors shall swing in opposite directions, and
    c. the right hand door shall swing in the direction of exit travel.

5. **Applicant's Position**

The Applicant submitted that glazing exists within 3 metres of the exterior stair serving the basement but that the basement area will have a low occupant load used by staff only. The Applicant went on to state that the basement has a limited travel distance to the exterior doors, and that if the exterior stairs were enclosed in a lobby area they could have an additional travel distance of up to 15 metres.

Regarding the pair of doors across the corridor, the Applicant submitted that due to the layout of the corridor and the adjacent suites, the more practical design would be to have the left hand door swing in the direction of travel incorporating proper signage and door hardware. The Applicant further submitted that the occupants would be assisted by staff familiar with the door operation when moving occupants from one zone to another.

6. **Chief Building Official's Position**

The Chief Building Official submitted that the glazing on the ground floor is within 3 meters of the exterior exit stair serving the basement and that the Applicant does not want to provide wire glass and steel frames or an equivalent design to the very specific requirements of Sentence 3.3.3.13.(2).

Regarding the issue of the doors swinging across the corridor, the Chief Building Official submitted that the condition occurs on 2 sets of doors per each of the 4 floors for a total of 8 sets, and that the Applicant does not want to revise the design to comply with Sentences 3.3.1.10.(3) and 3.3.3.3.(3) of the Building Code which is very specific in requiring the right hand door to swing in the direction of travel.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that:

ii. The swing on the corridor doors provides sufficiency of compliance with the requirements of the Building Code and;
iii. Not providing wired glass in fixed frames adjacent to the unenclosed exterior stair does not provide sufficiency of compliance with the Building Code.

2. **Reasons:**

ii. The double corridor door system with left hand swing in the direction of travel provides a similar level of performance to that of a pair of doors with the right hand door swinging in the direction of travel.
iii. The corridor doors will be suitably marked to facilitate proper operation.
iv. The doors will be equipped with push bars to facilitate operation.
v. The building is required to have a fire safety plan with designated supervisory staff to assist in the movement of occupants.
vi. Users of the unenclosed exterior stairs may be exposed to fire from the adjacent window without wired glass in fixed frames.

Dated at Toronto, this 26th day, in the month of March, in the year 1997, for application number 1997-04.

BCC Ruling No. 97-04-546

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-04-546

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 2.1.3.1. and Subsection 3.1.10 of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Michael Schuster, General Manager, Rosati Walbridge, Windsor, Ontario, for a resolution of a dispute with Mr. Dave Gibson, Chief Building Official, Gosfield Township North to determine whether a 2 hour fire separation between an existing school and a gymnasium addition provides sufficiency of compliance with Article 3.1.10. of the Ontario Building Code at Gosfield North Public School in Gosfield Township North, Ontario.

APPLICANT

Mr. Michael Schuster
General Manager
Rosati Walbridge
Windsor, Ontario

RESPONDENT

Mr. Dave Gibson
Chief Building Official
Gosfield Township North

PANEL

Mr. Roy Philippe, Chair
Mr. Rick Florio
Mr. Lawrence Glazer

PLACE

Toronto, Ontario

DATE OF RULING

March 11th, 1997

APPEARANCES

Mr. Michael Schuster
General manager
Rosati Walbridge
The Applicant

Mr. Glen Herglotz
AND
Mr. David Travers
Kershaw Travers Gillespie Architects Inc.
Agents for the Applicant

Mr. Dave Gibson
Chief Building Official
Gosfield Township North
The Respondent

RULING

1. **The Applicant**

   Mr. Michael Schuster, General Manager, Rosati Walbridge, is the holder of a permit issued under the Building Code Act, 1992 to construct a gymnasium addition at the Gosfield North Public School, in Gosfield Township North, Ontario.

2. **Description of Constrution**

   The proposed construction is the addition of a gymnasium to an existing school. The addition is one storey, 1,121 square metres (12,062 ft²), unsprinklered, and of combustible construction. The underside of the roof assembly is 5.5.metres above the finished floor. The existing school is 3,406 square metres (36,650 ft²).

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with Article 2.1.3.1. of the Building Code. The issue in dispute is whether a two hour fire separation can be provided in lieu of a firewall between the new addition and the existing school.

4. **Provision of the Building Code**

2.1.3.1. Building Divided by Firewalls

1. Where a firewall divides a building, each portion of the building so divided shall be considered as a separate building, except for the purpose of
    a. gross area determination in Section 2.3,
    b. a fire alarm and detection system in Sentence 3.2.4.2.(1) or Article 9.10.17.1., or
    c. a plumbing system interconnected through a firewall.

5. **Applicant's Position**

The applicant submitted that alternative measures under Part 11 be used to address deficiencies with respect to fire separations, and constructing a 2 hour fire separation between new and existing portions of a building in lieu of a firewall, provides sufficiency of compliance with the Building Code.

6. **Chief Building Official's Position**

The Respondent submitted that there is no authority to accept the use of a 2 hour fire separation in lieu of a firewall as per 2.1.3.(1). The roof extends above 6 metres from the finished floor and has insufficient fire rating, and the addition includes combustible construction.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the 2 hour fire separation provides sufficiency of compliance with Article 2.1.3.1. and 3.1.10. of the Building Code provided that:

i. The closures (doors 3 & 9) in the wall separating the new gym and the existing gym have a 1-1/2 hour fire resistance rating.
ii. That the rooms 102, 103 and 104 are provided with heat detection connected to the fire alarm system and
iii. The proposed 2 hour fire separation is provided.

8. **Reasons:**

. The new wall of the gym except for minor variances at the corridor appear to comply with fire wall construction.

i. Additional detection and compartmentation is provided.

Dated at Toronto, this 11th day, in the month of March, in the year 1997, for application number 1997-09.

BCC Ruling No. 97-03-545

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-03-545

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Subsection 3.1.2. and Sentence 3.1.3.5.(1) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Heinz Vogt, Partner, Stone Kohn McQuire Vogt, Toronto, Ontario, for the resolution of a dispute with Mr. Bruce Ashton, Director of Buildings, City of York, concerning whether the conversion of 11 units in an existing multi-unit apartment building is to be classified under a residential or institutional major occupancy under Subsection 3.1.2. and Sentence 3.1.3.5.(1) of the Ontario Building Code at the Bello Horizonte, 1500 Keele Street, City of York, Ontario.

APPLICANT

Mr. Heinz Vogt Partner Stone Kohn McQuire Vogt Toronto, Ontario

RESPONDENT

Mr. Bruce Ashton Director of Buildings City of York

PANEL

Mr. Roy Philippe, Chair Ms. Susan Friedrich Mr. Michael Lio

PLACE

Toronto, Ontario

DATE OF RULING

February 26th, 1997

APPEARANCES

Mr. Heinz Vogt, Partner
Stone Kohn McQuire Vogt
Toronto, Ontario
The Applicant

Mr. Bruce Ashton
Chief Building Official
City of York
The Respondent
AND
Mr. Allister Graham
Director Buildings
Inspection Services
City of York
For the Respondent

RULING

1. **The Applicant**

   Mr. Heinz Vogt, Partner, Stone Kohn McQuire Vogt Architects is a person who holds a permit under the Building Code Act, 1992 to renovate 11 units of an existing apartment building, at Bello Horizonte, 1500 Keele Street, City of York, Ontario.

2. **Description of Constrution**

   The subject building is a 124 unit apartment building. The proposed construction is to convert 11 existing apartment units into barrier free suites beyond normal barrier free design principles.

3. **Dispute**

   The dispute between the Applicant and the Respondent concerns whether the conversion of the 11 units is to be classified under a residential or institutional major occupancy.

4. **Provision of the Building Code**

   3.1.2.1. Classification of Buildings (excerpts)

1. Except as provided in Articles 3.1.2.3. to 3.1.2.6., every building or part thereof shall be classified according to its major occupancy as belonging to one of the Groups or Divisions described in Table 3.1.2.A.
2. A building intended for use by more than one major occupancy, shall be classified according to all major occupancies for which it is used or intended to be used.

Table 3.1.2.A.

Group	Division	Description of Major Occupancies
B	1	Institutional Occupancies in which persons are under restraint or are incapable of self preservation because of security measures not under their control
B	2	Institutional ocupancies in which persons require supervisory care, medical care or treatment
A	-	Residential Occupancies

Sentence 3.1.3.5.(1) Exceptions for Major Occupancies

3. In a building where the aggregate area of all major occupancies in a particular Group or Division is not more than 10 percent of the floor area of the storey on which they are located, these major occupancies need not be considered as major occupancies for the purposes of Subsection 3.2.2. provided they are not classified as Group F, Division 1 or 2 occupancies.

5. **Applicant's Position**

The Applicant submitted that based on the level of care provided the occupancy is residential. The Applicant submitted: a copy of the Service Agreement between the Participation Apartments and the tenants of the units in dispute; a letter to the City of York outlining how the life safety concerns of the tenants are being addressed through the availability of full time non-medical staff; that 45 minute rated doors would be provided for each unit; that an early warning alarm system to a central location for each of the 11 units would be installed; and, a fire plan which incorporates procedures agreed upon between the fire department, Participation Apartments, and Bello Horizonte would also be instituted. The Applicant further submitted that in accordance with Sentence 3.1.3.5.(1) the conversion of the 11 units represents less than 10% of the total floor area and that no significant change in building classification is justified.

6. **Chief Building Official's Position**

The Respondent submitted that the level of disability of these persons plays an important role in determining the major occupancy of the building and that the proposed type of use is not appropriate in a building having a Residential Occupancy Group C classification. The Respondent submitted that under normal circumstances, disabled persons would reside in a residential building if the building met the requirements for Barrier-Free design under Section 3.7. of the Building Code. However based on and analysis of CAN/CSA B651-95, the Respondent submitted that the level of disabilities of the intended occupants exceed the scope of normal Barrier free design principles and therefore does not belong in a Group C major occupancy. The Respondent indicated that the intended occupants will require full supervisory care which is more according to Institutional rather than Residential occupancies. The Respondent also indicated that Article 3.1.2.5. specifies that convalescent homes and children's custodial homes can be classified as a Group C occupancy where the occupants are ambulatory. Since the proposed tenants are not ambulatory, the proposed use should belong to other than a Group C major occupancy.

The Respondent confirmed that the aggregate area of the second major occupancy does not exceed 10% of the floor area of the storey in which it is located, but that this provision does not exempt the second major occupancies from dealing with the requirements of Sections 3.1., 3.2. and 3.3.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the conversion of 11 units facilities for physically disabled in an existing multi-unit apartment building is to be classified as a residential use under Section 3.12 of the building code provided that the following additional safety measures are included in the buildings,

i. The doors to the converted suites are to have a 3/4 hour fire resistance rating.
ii. Smoke alarms provided in these suites shall be connected to a listed monitoring panel located in the staff office.
iii. Doors to the affected suites shall be gasketted to minimize infiltration of smoke in the event of fire.
iv. The fire safety plan is to be modified to address the additional fire safety needs of specific residents and staff is to be assigned support responsibilities.
v. No additional units will be introduced for this use within the building.

8. **Reasons:**

. Physically disabled residents live independently within these units and direct their own care through the purchase of service.

i. Non-medical support care is provided on a 24 hour basis through a signed service agreement.

ii. Additional life safety measures are included such as compartmentalization, early warning and control of smoke movement.

iii. The residents are cognisant of their surroundings and have the ability to direct their own care.

Dated at Toronto, this 26th day, in the month of February, in the year 1997, for application number 1997-08.

BCC Ruling No. 97-02-544

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-02-544

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.2.1.1.(3) and 3.2.1.1.(4) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Lawrence Carter, Architect, Architecture Incorporated, Waterloo, Ontario, for the resolution of a dispute with Mr. Jim Witmer, Chief Building Official, City of Kitchener, concerning whether adding a mezzanine to an existing building such that the total area of the mezzanine would be 12.5% of the building area complies with Sentences 3.2.1.1.(3) and 3.2.1.1.(4) of the Ontario Building Code at Kuntz Electroplating, 851 Wilson Avenue, Kitchener, Ontario.

APPLICANT

Mr. Lawrence Carter
Architect
Architecture Incorporated
Waterloo, Ontario

RESPONDENT

Mr. Jim Witmer
Chief Building Official
City of Kitchener

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

February 26th, 1997

APPEARANCES

Mr. Lawrence Carter
Architect
Architecture Incorporated
Waterloo, Ontario
The Applicant

Mr. Jim Witmer
Chief Building Official
City of Kitchener
The Respondent

Mr. Michael Seiling
Plan Examiner
City of Kitchener
For the Respondent

RULING

1. **The Applicant**

   Mr. Lawrence Carter, Architecture Incorporated Architect, is a holder of a permit under the Building Code Act, 1992 to construct an addition to join two existing industrial buildings and add a second floor/mezzanine, at Kuntz Electroplating, Kitchener, Ontario.

2. **Description of Constrution**

   The proposed construction is an addition to join two existing one storey industrial buildings with an F3 major occupancy. Plant 1 has an overall building area of 18,112 square metres. The total area of the joined buildings would create an overall building area of 24,241 square metres. The construction also involves an additional mezzanine of 820 square metres. The proposed mezzanine which includes visual obstructions would result in a total mezzanine area of 12.6% of the combined total building area and 9.6% of the Plant 1 area and proposed addition. The

building is a mixture of combustible and non-combustible construction, with the newer areas of non-combustible construction having a sprinkler system and standpipe and hose system.

3. **Dispute**

The dispute between the Applicant and the Respondent concerns sufficiency of compliance with Sentences 3.2.1.1.(3) and 3.2.1.1.(4) of the Ontario Building Code. At issue is whether the construction is to be considered a mezzanine or second storey and therefore whether fire separations and exits are required.

4. **Provision of the Building Code**

Sentence 3.2.1.1. Exceptions to Building Height in Storeys

3. Except as provided in Sentences (4), (5) and (8), a mezzanine shall not be considered as a storey in calculating the building height provided
    a. the aggregate area of the mezzanine floor is not more than 40 per cent of the area of the room or storey in which it is located,
    b. it is used as an open floor area except as provided in Sentence 3.3.2.11.(2), and
    c. the space above the mezzanine floor has no visual obstructions more than 1070 mm (3 ft 6 in) above such floors.
4. Except as provided in Sentence (5), a mezzanine shall not be required to be considered as a storey in calculating building height and need not conform to Sentence (3) where the aggregate area of the mezzanine floor does not exceed 10 per cent of the area of
    a. the suite in which it is located, where there is more than one suite in the storey, or
    b. the storey in which it is located, in all other cases

5. **Applicant's Position**

The Applicant submitted that if Sentences 3.2.1.1.(3) and 3.2.1.1.(4) of the Building Code are not mutually exclusive, the floor area requirements of a mezzanine are not exceeded by the proposed construction. The Applicant further submitted that if the floor area percentages are exclusive and the proposed construction exceeds the 10% floor space limit by 2.5%, then factors such as: non-combustible construction; heat detectors and sprinklering in the metal polishing areas; fire alarm system; low occupant loads; fire hose cabinets; and, trained volunteer Emergency Response Team, all contribute to provide sufficiency of compliance with the technical requirements of the Building Code.

6. **Chief Building Official's Position**

The Respondent submitted that Sentences 3.2.1.1.(3) and (4) are to be considered separately from each other and that unless there is a fire wall provided between Plant 1 and Plant 3 the aggregate area of the mezzanine would be 12.5% of the total combined floor area, and the proposed mezzanine should be considered as a second storey for the purposes of calculating building height and assessing required fire separations and exiting requirements.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the addition of a mezzanine to the existing building to bring the aggregate area of unenclosed and enclosed mezzanines to 12.5% provides sufficiency of compliance with Sentences 3.2.1.1.(3) and 3.2.1.1.(4) of the Building Code, provided that Plant 1 is separated from Plant 3 by a 2 hour rated fire separation.

8. **Reasons:**

iii. The percentage of unenclosed and enclosed mezzanines in Plant 1 is approximately 10%.
iv. Fire emergency procedures with extensive communication systems, early detection and an industrial fire brigade enhance early warning and suppression capabilities.
v. Stand pipe and hose systems are provided through the complex and large portions of the building are sprinklered.
vi. The occupant loads for the mezzanines are low considering storage and automated manufacturing use.

Dated at Toronto, this 26th day, in the month of February, in the year 1997, for application number 1996-61.

BCC Ruling No. 97-01-543

BUILDING CODE COMMISSION DECISION ON B.C.C. #97-01-543

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Articles 9.15.4.3. and 9.14.6.1. of "the Building Code" (Ontario Regulation 583/83)

AND IN THE MATTER OF an application by an application by Mr. Jeff Jacques, Owner, Puslinch, Ontario, for the resolution of a dispute with Mr. David Prentice, Chief Building Official, Township of Puslinch, concerning whether installing a trench and weeping tile around the exterior of a foundation wall provides sufficiency of compliance with Articles 9.15.4.3. and 9.14.6.1. of the Ontario Building Code at the residence of Jeff Jacques, RR # 2, Puslinch, Ontario.

APPLICANT

Mr. Jeff Jacques
Owner
Puslinch, Ontario

RESPONDENT

Mr. David S. Prentice
Chief Building Official
Township of Puslinch

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

February 26th, 1997

APPEARANCES

Mr. Jeff Jacques
Owner
Puslinch, Ontario
The Applicant

Mr. David S. Prentice
Chief Building Official
Township of Puslinch
The Respondent

RULING

1. **The Applicant**

   Mr. Jeff Jacques, Owner, R.R. # 2 is a person who holds a permit under the Building Code Act, 1980 to make interior renovations and add a two storey addition to an existing one storey single unit dwelling at R.R. # 2, Puslinch, Ontario.

2. **Description of Constrution**

   The subject single unit house has a building area of 172 square metres (1,850 sq ft), is of combustible construction and is unsprinklered. Around the foundation a 305 mm (12 in) wide trench has been installed which exposes at least 150 mm of the foundation wall above grade.

3. **Dispute**

   The dispute between the Applicant and the Respondent concerns sufficiency of compliance with Articles 9.15.4.3. and 9.14.6.1. of the Ontario Building Code. At issue is whether the trench designed to expose at least 150 mm of the foundation wall above ground level and drain surface water so that it will not accumulate near the building or adversely affect adjacent properties, provides equal performance to the requirements of the Building Code.

4. **Provision of the Building Code**

9.15.4.3. Extension above Ground Level

Exterior foundation walls shall extend not less than 150 mm (5 7/8 in) above finished ground level.

9.14.6.1. Surface Drainage

The building shall be located and the building site be graded so that water will not accumulate at or near the building and will not accumulate at or near the building and will not adversely affect adjacent properties.

5. **Applicant's Position**

The Applicant submitted that the trench was designed based on an engineering report, and that there has not been a problem in terms of water accumulation or adversely affecting adjacent properties since it was installed in 1984.

6. **Chief Building Official's Position**

The Respondent submitted that the construction was not performed in a manner that provided an extension of exterior foundation walls not less than 150 mm above finished ground level as required by 9.15.4.3. The Respondent further submitted that the proposed remedy does not comply with 9.14.6.1. that requires the site to be graded so that water will not accumulate at or near the building, and in this case the Respondent does not have the authority to accept an equivalent.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the proposal provides sufficiency of compliance with the Building Code provided that a drawing prepared by and bearing the seal of an Architect or Professional Engineer, licensed in Ontario, is provided for the proposed compliance alternative. A letter confirming that based on a site review, that the final installation complies with the sealed drawing is also to be provided by the same Architect or Engineer.

8. **Reasons:**

It appears from information provided by the Applicant that the condition has existed since 1984 and there has been no problems with water accumulation. This may be considered as past performance under Article 9.3.0.4. of the 1983 Building Code.

Dated at Toronto, this 26th day, in the month of February, in the year 1997, for application number 1996-60.

BCC Ruling No. 96-59-542

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-59-542

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 9.9.9.3. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Graeme A. Clark, Carriage Hills Resort Corporation, Horseshoe Valley Road, Barrie, Ontario, for the resolution of a dispute with Mr. Ron Kolbe, Director of Building, Township of Oro/Medonte, Ontario concerning whether providing fire separated balconies at the front and back, and a wide shared exit for each of the 2 upper units in a 4 unit building provides sufficiency of compliance with Article 9.9.9.3. of the Ontario Building Code at Carriage Hills Resort at Horseshoe, R.R. # 1, Horseshoe Valley, Barrie, Ontario.

APPLICANT

Mr. Graeme A. Clark
Carriage Hills Resort Corporation
Barrie, Ontario

RESPONDENT

Mr. Ron Kolbe
Director of Building
Township of Oro/Medonte

PANEL

Mr. Roy Philippe, Chair
Mr. Demir Delen
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

February 13th, 1997

APPEARANCES

Mr. Graeme A. Clark
Carriage Hills
Resort Corporation
Barrie, Ontario
Applicant

Mr. Jeffery Young
Vice President
RN Design Group Inc.
North York, Ontario
Agent for the Applicant

Mr. Ron Kolbe
Director of Building
Township of Oro/Medonte
The Respondent

RULING

1. **The Applicant**

   Mr. Graeme A. Clark, Carriage Hills Resort is the holder of a permit under the Building Code Act, 1992 to construct 2 and 3 storey multi-unit residential buildings at the Carriage Hills Resort at Horseshoe, Barrie, Ontario.

2. **Description of Constrution**

   The proposed buildings are Group C Residential Occupancy, of 2 and 3 storeys and having a building area of approximately 19,000 square feet with firewalls to create buildings of approximately 6300 square feet and therefore classified as Part 9 buildings. The buildings are of combustible construction, and without sprinklers, fire alarm system or standpipe and hose systems.

Each unit is one storey and the egress from the upper storey units is via a balcony or porch at the front of the units which is provided with a single open stair down to grade level. Each unit is provided with a balcony at the rear which does not have access to grade from the upper storeys.

3. **Dispute**

The dispute between the Applicant and the Respondent concerns whether the upper storey units provide a means of egress that complies with the intent of the Building Code.

4. **Provision of the Building Code**

9.9.9.3. Shared Egress Facilities

1. A dwelling unit shall be provided with a second and separate means of egress where an egress door from the dwelling unit opens onto: a) an exit stairway serving more than i suite, b) a public corridor serving more than 1 suite served by a single exit stairway, c) an exterior passageway serving more than one suite and served by a single exit stairway, or d) a balcony serving more than one suite and served by a single exit stairway.

5. **Applicant's Position**

The Applicant submitted that the fire separated balcony for each unit on the 2nd and 3rd floors meets the intent of the Building Code by providing an additional means of egress.

6. **Chief Building Official's Position**

The Respondent submitted that the design of the building means that a second means of egress is required under Article 9.9.9.3. of the Building Code.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the required 2nd means of egress from the dwelling units to balconies that do not lead to grade does not provide sufficiency of compliance with Article 9.9.9.3. of the Building Code.

8. **Reasons:**

i. No access to a public thoroughfare is provided from the balconies.
ii. No additional compensating measures are provided.

Dated at Toronto, this 13th day, in the month of February, in the year 1997, for application number 1996-62.

BCC Ruling No. 96-58-541

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-58-541

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 6.2.2.3. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Mohammed Mohebbi, Project Architect, Plaston Architect Ltd., Scarborough, Ontario, for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, Ontario, concerning whether the ventilation requirements for an automobile showroom and new car delivery area are subject to Article 6.2.2.3. of the Ontario Building Code at the Volvo Villa Flagship, 212 Steeles Avenue West, Vaughan, Ontario.

APPLICANT

Mr. Mohammed Mohebbi
Project Architect
Plaston Architect Ltd.
Scarborough, Ontario

RESPONDENT

Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Steele
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

February 13th, 1997

APPEARANCES

Mr. Mohammed Mohebbi
Project Architect
Plaston Architect Ltd
The Applicant

Mr. Steve Penna
Technical Supervisor
City of Vaughan
The Respondent

RULING

1. **The Applicant**

   Mr. Mohammed Mohebbi, Plaston Architect Ltd., is the holder of a permit under the Building Code Act, 1992 to construct at the "Volvo Villa Flagship" new car dealership at 212 Steeles Avenue West, Vaughan, Ontario.

2. **Description of Constrution**

   The subject building is a 2 storey commercial building with an F2 major occupancy of non-combustible construction and a building area of 1,892 square metres. The car dealership is proposing a showroom area in the basement and on the main floor, and a car delivery area.

3. **Dispute**

   The dispute between the Applicant and the Respondent concerns whether the ventilation requirements of a showroom and car delivery area are to be considered upon the requirements of Section 3.1.16.1. and Sentence 6.2.2.1.(3), or, are to be considered as a storage garage and comply with the ventilation requirements of Section 6.2.2.3. of the Building Code.

4. **Provision of the Building Code**

Sentence 6.2.2.1.(3) Required Ventilation

3. "Except for Group C and Group F occupancies, mechanical ventilation throughout the occupied zone shall be not less than 7.5 L/s (15.9 cfm) per person of outdoor air."

Article 6.2.2.3. Ventilation of Storage and Repair Garages

4. "...an enclosed storage garage shall have a mechanical ventilation system designed to ...(b) provide, during operating hours, a continuous supply of fresh air at a rate equal to not less than 3.9 L/s (8.3 cfm) for each square metre of floor area..."

5. **Applicant's Position**

The Applicant submitted that the mechanical ventilation for the showroom and new car delivery area should be designed based upon the area being a Group E mercantile occupancy. The Applicant further submitted that the areas have air handling units which exceed the requirements for Group E major occupancies

6. **Chief Building Official's Position**

The Respondent submitted that the automobile showrooms and new car delivery area are to be considered as storage garages and required to comply with Article 6.2.2.3. In addition, the Respondent indicated that the Building Code requires a mechanical ventilation system even when vehicles are parked by mechanical means, because of the concern that when vehicles are being parked or stored in a building there is a potential for carbon monoxide contamination within the occupied space.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the ventilation requirements for the automobile showrooms and the new car delivery areas are not subject to the requirements of Article 6.2.2.3. of the Building Code.

8. **Reasons:**

. The showrooms are not considered storage garages and are subject to 6.2.2.1.(3) of the Building Code.

i. The show rooms are intended for display of motor vehicles.

ii. The ventilation air handling systems are provided with CO detectors.

iii. A branch opinion is being prepared to clarify the definition of storage garage and storage of vehicles for display purposes.

Dated at Toronto, this 13th day, in the month of February, in the year 1997, for application number 1997-01.

BCC Ruling No. 96-57-540

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-57-540

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Section 9.8. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Dick Splinter, Vice President, Braebury Homes Corporation, Kingston, Ontario, for the resolution of a dispute with Mr. Kas Mosielski, Chief Building Official, Ontario, concerning whether the proposed combination of straight, winders, and curved stairs provide sufficiency of compliance with Section 9.8. of the Ontario Building Code at Lot # 20, Highmont Court, Kanata, Ontario.

APPLICANT

Mr. Dick Splinter Vice President Braebury Homes Corporation Kingston, Ontario

RESPONDENT

Mr. Kas Mosielski Chief Building Official CITY OF KANATA

PANEL

Mr. Roy Philippe, Chair Mr. Michael Steele Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

February 13th, 1997

APPEARANCES

Mr. Dick Splinter
Vice President

Braebury Homes Corporation
The Applicant

Mr. John Plitz
Plan Examiner
City of Kanata
The Respondent

RULING

1. **The Applicant**

   Mr. Dick Splinter, Braebury Homes Corporation is the holder of a permit under the Building Code Act, 1992 to construct a semi- detached house located on Lot 20, Highmont Court, Kanata, Ontario.

2. **Description of Constrution**

   The subject building is a 2 storey semi-detached house of combustible construction with a building area of 169 square metres (1,816 sq ft). A stair which serves as the only egress for the second floor is comprised of a combination of a straight portion, a winder, and a curved portion.

3. **Dispute**

   The dispute between the Applicant and the Respondent concerns whether the use of a straight portion, a winder, and a curved portion in combination in the same interior stair within a dwelling unit meets the requirements of Section 9.8. of the Building Code.

4. **Provision of the Building Code**

   9.8.2.1.(2) Uniform Treads and Risers

   2. A stairway that is not an exit may contain both a curved and straight portions of stairs in a single flight provided each curved portion conforms to Article 9.8.5.2. and the riser height is uniform throughout the flight.

   9.8.5.3. Winders

3. Stairs within dwelling units may contain winders that converge to a centre point provided the winders turn through an angle of not more than 900 and individual treads turn through an angle of 300.
4. Only one set of winders described in Sentence (1) shall be permitted between floor levels.

5. **Applicant's Position**

The Applicant submitted that the stairs as designed has all three accepted types of stairs - straight, winder and curved, and in every way meet the both the intent and the written Building Code. The Applicant further submitted that the Building Code now allows winders in any stairs.

6. **Chief Building Official's Position**

The Respondent submitted that Article 9.8.2.1.(2) allows a curved and straight stair but does not restrict or permit a combination of straight, curved, and winder stairs in a single flight. The Respondent further submitted that if 2 winders are not permitted as per Sentence 9.8.5.3.(2) , then the proposed layout should also not be permitted as it appears to be more hazardous than Figure 5.4.4.a. from the "Code and Construction Guide".

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the proposed combination of straight, winders, and curved stairs provides sufficiency of compliance with Article 9.8.2.1. of the Ontario Building Code.

8. **Reasons:**

. A stair connecting two floor levels within a dwelling unit is not an exit but an egress facility and Sentence 9.8.2.1.(2) applies.
i. The Building Code Sentence 9.8.2.1.(2) allows a stairway that is not an exit to contain both curved and straight portions.
ii. The curved portion meets the requirements of Article 9.8.5.2. of the Building Code.
iii. The winders in the stair are in compliance with Article 9.8.5.3. of the Building Code.
iv. Section 9.8. does not prohibit the combination of curved, straight and winders in a stair under Sentence 9.8.2.1.(2).
v. The riser height is uniform throughout the flight.,/OL>

Dated at Toronto, this 13th day, in the month of February, in the year 1997, for application number 1996-67.

BCC Ruling No. 96-56-539

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-56-539

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 7.4.2.1. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Ms. L.E. Rosenberg, Executive Director, Oshawa General Hospital, 24 Alma Street, Oshawa, Ontario, for the resolution of a dispute with Mr. Gerald N. Bilous, Chief Building Official, City of Oshawa, Ontario concerning whether connecting floor drains from the below grade levels of a multi-storey parking lot to the sanitary drainage system, without oil interceptors provides sufficiency of compliance with Article 7.4.4.3. of the Ontario Building Code at Oshawa General Hospital Parking Garage, Alexandra Street, Oshawa, Ontario.

APPLICANT

Ms. L.E. Rosenberg
Executive Director
Oshawa General Hospital

RESPONDENT

Mr. Gerald N. Bilous
Chief Building Official
City of Oshawa

PANEL

Mr. Michael Lio, Chair
Ms. Susan Friedrich
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

January 8th, 1997

APPEARANCES

Mr. Ian Sherman
Senior Mechanical Designer
MARS Group Ltd.
Scarborough, Ontario
Agent for the Applicant
AND
Ennio Piccinato
Oshawa General Hospital
For the Applicant

Mr. Jim Hale
Plumbing Inspector
City of Oshawa
For the Respondent

RULING

1. **The Applicant**

   Ms. L.E. Rosenberg is the holder of a permit under the Building Code Act, 1992 to construct a multi-storey parking garage, at the Oshawa General Hospital at Alexandra Street, Oshawa, Ontario.

2. **Description of Constrution**

   The subject building is a parking garage consisting of 4 storeys open and above grade and 2 storeys below grade. The building is approximately 4,716 square metres in foot print area (total of 31,000 square metres) consisting of non-combustible construction with a sprinkler system on the below grade levels. Floor drains for the four above grade storeys will be connected to a storm drain system with oil interceptors and the two below grade storeys will be connected to a sanitary drain system.

3. **Dispute**

The dispute between the Applicant and the Respondent concerns whether Sentence 7.4.4.3.(2) of the Building Code requires an oil interceptor to be provided on the sanitary sewer line that serves the two below grade floors of a parking garage.

4. **Provision of the Building Code**

7.4.4.3.(2) Interceptors

Where the discharge from a fixture may contain oil or gasoline, an oil interceptor shall be installed.

5. **Applicant's Position**

The Applicant submitted that the above grade storeys connected to a storm drainage system are equipped with oil interceptors. The below grade storeys will be drained to a sanitary drainage system that will be connected to a water treatment plant.

6. **Chief Building Official's Position**

The Respondent submitted that the Building Code does not exempt parking garages and that Sentence 7.4.4.3.(2) of the Building Code requires that an oil interceptor be installed before connecting to the sanitary drainage system.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the floor drains in the two levels below grade of the proposed parking garage, connected to the existing sanitary drain system without oil interceptors, provides sufficiency of compliance with Sentence 7.4.4.3.(2) of the Building Code.

8. **Reasons:**
    1. The risk of discharge of oil or gasoline is deemed to be minimal in a parking garage based on the recommendations of the Interceptor Task Force to the Ministry of Municipal Affairs and Housing 1997 Ontario Building Code Proposals: "The consensus of the group is that parking garages not be required to have an oil interceptor".
    2. An oil interceptor is being provided for the floor drains from the upper four floors, connected to the storm drain system.

3. The waste through the sanitary drain system is treated at a waste treatment plant prior to discharge.

Dated at Toronto, this 8th day, in the month of January, in the year 1997, for application number 1996-63.

BCC Ruling No. 96-55-538

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-55-538

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Section 9.5 and Sentence 9.33.1.3 of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF a reference to the Building Code Commission pursuant to an order of the Honourable Justice Gordon Killeen of the Ontario Court (General Division), dated July 4, 1995 concerning whether Section 9.5. of the Building Code applies to; whether the requirements of 9.5. are met; and, whether the required heating provisions of Sentence 9.33.1.3.(1) have been met, at a house at 74 Maitland Street, London, Ontario.

APPLICANT

Mr. R. Cerminara
Chief Building Official
London, Ontario

RESPONDENT

Mr. David McGee
1103118 Ontario Ltd

PANEL

Mr. Michael Lio, Chair
Ms. Susan Friedrich
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

January 8th, 1997

APPEARANCES

Mr. R. Cerminara
Chief Building Official
City of London
For the Applicant

Mr. James P. Barber
Corporation Counsel
City of London
Agent for the Applicant

Mr. David McGee
1103118 Ontario Limited
For the Respondent

REPORT

1. **Order of Ontario Court (General Division)**

   Mr. David McGee (the "Respondent") was issued an order to comply under the Building Code Act, 1992 and applied to the Ontario Court (General Division) under s.25(1) of the Building Code Act, 1992 for a declaration that Section 9.5. of the Building Code does not apply to existing a house at 74 Maitland Street, London, Ontario. In that application, the Honourable Justice Gordon Killeen of the Ontario Court (General Division), on July 4, 1995 referred for a hearing and report on the following 3 questions:

   i. "...the question raised by Mr. McGee about compliance with heating requirements..."
   ii. whether "s. 9.5. of the Building Code apply to the house owned by 1103118 at 74 Maitland Street..."; and,
   iii. "...if s. 9.5. does apply, then has 1103118 complied with its requirements such that a building permit should issue permitting the conversion of 74 Maitland Street to a duplex."

2. **Background**

   The City of London issued an order to comply on March 8, 1995 to Mr. David McGee for undertaking renovations of a house at 74 Maitland Street because the work meant that two

bedrooms would have a lack of adequate heating facilities. The City also refused to issue a building permit for the conversion of the house into two separate units because the floor area requirements of Section 9.5. were not met.

Mr. McGee appealed these actions under s. 25(1)-(2) of the Building Code Act to the Ontario Court (General Division). On July 4, 1995 Justice Gordon Killeen referred certain questions respecting the interpretation of the technical requirements of the Building Code or the sufficiency of compliance with the technical requirements of the Building Code.

As the Applicant in the proceedings before Justice Gordon Killeen had not yet applied to the Building Code Commission, the Chief Building Official applied to the Commission on October 14, 1995.

3. **Description of Construction**

The building which has been renovated is a one storey house which has been converted into a bachelor unit of 17.8 square metres at the front and a two bedroom unit at the back. The 2 two bedrooms in the rear unit have areas of 5.8 square metres and 6.1 square metres.

The original house was heated by a gas space heater, which has been replaced with a new gas fireplace and supplemented with baseboard heaters.

4. **Issue on Reference**

The reference from the Ontario Court (General Division) directed that the Building Code Commission interpret the technical requirements of the Building Code or the sufficiency of compliance with the technical requirements of the Building Code that were raised in the application before the Ontario Court (General Division) pursuant to which the reference was ordered, and in particular to determine:

i. Have the heating requirements of s. 9.33.1.3.(1) been met?
ii. "Does s. 9.5. of the Building Code apply to the house owned by 1103118 at 74 Maitland Street ?
iii. If s. 9.5. does apply, then has 1103118 complied with its requirements such that a building permit should [be] issue[d] permitting the conversion of 74 Maitland Street to a duplex ?" and

5. **Provision of the Building Code**

Clause 11.3.4.1.(1)(b) Reduction in Performance Level

The performance level of a building is reduced where proposed construction will result in...b) the conversion of a suite of a Group C major occupancy into more than one suite of a Group C major occupancy.

Sentence 11.3.4.1.(7)

Where proposed construction will result in a change of major occupancy described in Clauses 1 (a) to (d), additional construction shall be required in order that the building or part of the building subject to the change in major occupancy conforms to the requirements of...Sections 3.6, 3..11, 9.5 and 9.7...as they apply to the new major occupancy that the building or part of the building is to support.

Section 9.5. Compliance Alternative C88

Table 11.2.3.C

C88: "Except as provided in C88.1, the requirements under this Section do not apply"

C88.1: "In detached houses, semi-detached houses, townhouses and row houses containing not more than two dwelling units,

a. minimum room height shall not be less than 1.95 m (6 ft 5 in) over the required floor area and in any location that would normally be used as a means of egress, or
b. minimum room height shall not be less than 2.03 m (6 ft 8 in) over at least 50% of the required floor area, provided that any part of the floor having a clear height of less than 1.4 m (4 ft 7 in) shall not be considered in computing the required floor area.

6. **Applicant's Position**

The Applicant submitted that by virtue of Number C88.1 of Table 11.2.3C, the floor area requirements of Section 9.5. are applicable to renovations under Part 11.

The Applicant further submitted that the two bedrooms off the living room and the bathroom at the rear were not equipped with heating facilities capable of maintaining an indoor air temperature of 220 C, that there is no evidence of any ductwork or central heating in the rooms, and that the gas fireplace serves only the room or space in which it is located and not other rooms.

7. **Respondent's Position**

The Respondent submitted that the bedrooms in the rear unit were existing bedrooms that should not have to be altered to conform to Part 9 of the Building Code.

The Respondent further submitted that the house was originally heated with a gas space heater and that a new gas fireplace with some baseboard heaters should be more than adequate an improvement, and submitted 2 affidavits from tenants that the rooms were being maintained at a temperature above 220 C.

The Respondent further submitted an affidavit from a professional architect concurring with the applicant's position that the room dimensions and heating requirements meet the Building Code.

8. **Findings and Conclusions**

It is the decision of the Building Code Commission that:

. Section 9.5. of the Building Code does not apply to the renovation of the house owned by 1103118 at 74 Maitland Street.

i. The question of heating system compliance is no longer applicable.

9. **Reasons:**

. Article 11.3.4.1. of the Building Code requires conformance to Section 9.5., however Sentence 11.2.3.1.(2) indicates that a compliance alternative to a requirement in Part 9 may be substituted. Compliance Alternative C88 indicates that the requirements of Section 9.5. do not apply except for the requirements of Article 9.5.2.1. which deal only with minimum ceiling heights as detailed in compliance alternative C88.1.

i. Since the court's referral to the Commission the Respondent has installed baseboard heaters. Accordingly the parties have agreed that the Commission need not deal with this issue.

Dated at Toronto, this 8th day, in the month of January, in the year 1997, for application number 1996-69.

BCC Ruling No. 96-54-537

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-54-537

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 9.8.3.1.(1) and Article 9.8.5.2. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Herbert M. Green, Chairman, River Oaks Homes Inc., North York, Ontario, for the resolution of a dispute with Mr. Frank Asta, Chief Building Official, Town of Oakville, Ontario concerning whether a secondary spiral stair which has a rise exceeding 200 mm provides sufficiency of compliance with Sentence 9.8.3.1.(1) and Article 9.8.5.2. of the Ontario Building Code at the River Oaks Subdivision, Oakville, Ontario.

APPLICANT

Mr. Herbert M. Green
Chairman
River Oaks Homes Inc.
North York, Ontario

RESPONDENT

Mr. Frank Asta
Chief Building Official
Town of Oakville

PANEL

Mr. Demir Delen, Chair
Mr. Michael Steele
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

December 12th, 1996

APPEARANCES

Mr. Herbert M. Green
Chairman
River Oaks Homes Inc.
Oakville, Ontario
The Applicant

Mr. Don Pugh
River Oaks Homes
AND
Dale and Larry Shipway
Shipway Stairs
AND
Randy Guthrie
Architect
For the Applicant

Mr. Frank Asta
Chief Building Official
Town of Oakville
The Respondent

RULING

1. **The Applicant**

   Mr. Herbert M. Green, Chairman, River Oaks Homes Inc. is a person to whom an order to Comply was issued under the Building Code Act, 1992 to construct a single unit house as part of the River Oaks subdivision, Oakville, Ontario.

2. **Description of Constrution**

The subject building is a single unit house 2 stories high with a living area of 208 square metres (2,235 square feet). A spiral stair serves a second floor loft office which has an area of less than 20 square metres. The proposed spiral stair has rise and run dimensions that do not comply with Article 9.8.5.2. The building contains a primary staircase that complies with the Building Code requirements.

3. **Dispute**

The dispute between the Applicant and the Respondent concerns sufficiency of compliance with Sentence 9.8.3.1.(1) and Article 9.8.5.2. of the Ontario Building Code. At issue is whether the rise and run of the spiral stairs provide sufficiency of compliance with the Building Code.

4. **Provision of the Building Code**

Sentence 9.8.3.1.(1) Rise and Run of Stairs

1. Except for stairs to areas used only as service rooms, interior stairs within dwelling units and exterior stairs serving dwelling units shall have a maximum rise of 200 mm (7- 7/8 in), a minimum run of 210 mm (8-1/4 in) and a minimum tread width of 235 mm (9-1/4 in).

Sentence 9.8.5.2. Curved Stairs not in Exits

Except as permitted in Article 9.8.5.3., a curved stair not required as an exit shall have an average run of not less than 200 mm (7 7/8 in) and a minimum run of 150 mm (5 7/8 in) and shall have risers conforming to Article 9.8.3.1.

5. **Applicant's Position**

The Applicant submitted that the Building Code does not adequately address the installation of spiral stairs in either a primary or secondary application and that the stairs as installed are unable to meet the sections specified. The Applicant further submitted that the stairs do not pose a life safety risk, that the egress requirements are for the second floor are met by the primary stairs, that the rise of the stairs are necessary to accommodate tread width and headroom, that the spiral stairs have been successfully used in many applications, that other building standards specifically allow spiral stairs even in exits, and that the stairs are largely an architectural feature.

6. **Chief Building Official's Position**

The Respondent submitted that the stair does not comply with the Building Code and would be unsafe.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that the proposed stair provides sufficiency of compliance with Article 9.8.5.2. of the Building Code provided a gate with a latching device, swinging away from the stair is installed at the top of the landing.

8. **Reasons:**
   a. An October 1977 Building Code Newsletter published by the Ministry of Consumer and Commercial Relations reports an earlier Building Code Commission decision allowing a spiral staircase as a second stair in a dwelling where the main stair complies with the Code. The OBC had similar provisions at that time.
   b. Proposed amendments to the Building Code regarding live/work units exempts stairs to mezzanines not more than 20 square metres in area from the rise and run dimensional requirements.
   c. Evidence was provided that spiral stairs are allowed as the only means of egress in several U.S. Codes.

Dated at Toronto, this 12th day, in the month of December, in the year 1996, for application number 1996-65.

BCC Ruling No. 96-53-536

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-53-536

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 11.3.4.1. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Peter Nobre, Director of Leasing, First London East Developments Inc., North York, Ontario, for the resolution of a dispute with Mr. R. Cerminara, Chief Building Official, City of London, concerning whether or not a change of occupancy from an office use to a fitness club use complied with the requirements of Article 11.3.4.1. of the Ontario Building Code at Nautilus Fitness Club, Argyle Mall, 1925 Dundas Street East, London, Ontario.

APPLICANT

Mr. Peter Nobre
Director of Leasing
First London East Developments Inc.
259 Yorkland Rd., Suite 300
North York, Ontario

RESPONDENT

Mr. R. Cerminara
Chief Building Official
City of London

PANEL

Mr. Michael Lio, Chair
Ms. Susan Friedrich
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

January 8th, 1997

APPEARANCES

Mr. Peter Nobre
Director of Leasing
First London
East Developments Inc.
North York, Ontario
The Applicant
AND
Mr. David Syrett
Associate
Leber/Rubes
Agent for the Applicant

Mr. R. Cerminara
Chief Building Official
City of London
For the Respondent
AND
Mr. Gary Edwards
City of London
For the Respondent

RULING

1. **The Applicant**

   Mr. Peter Nobre, Director of Leasing, First London East Developments Inc., is a person who holds a permit under the Building Code Act, 1992 to renovate a former office space to create a fitness club at the Argyle Mall at 1925 Dundas Street East in London, Ontario.

2. **Description of Constrution**

The subject building is a two storey fully sprinklered shopping centre with a building area footprint of 26,950 square metres. The second storey is 1,395 square metres which is made up of 1,210 square metres of leasable space and 185 square metres for building services. The former use of the second storey was office space and the new use is a fitness club. The existing floor assembly between the fitness club and the existing retail shops on the first floor is concrete filled metal deck supported by structural steel. An unrated lay-in ceiling tile is suspended from this deck. The building does not currently have a fire alarm and detection system.

3. **Dispute**

The dispute between the Applicant and the Respondent concerns sufficiency of compliance with Sentence 11.3.4.1.(4) of the Ontario Building Code. At issue is whether a rated fire separation is required between the major occupancy of the mall and the fitness club on the second floor.

4. **Provision of the Building Code**

Sentence 11.3.4.1.(4) Reduction in Performance Level

4. Except as provided in Sentence (5), where a major occupancy of all or part of an existing building is changed to another major occupancy and the hazard index of the new major occupancy is greater than the construction index of the existing building, upgrading of early warning and evacuation systems and additional upgrading shall be required in conformance with Part 11 of the Building Code so that the construction index of the building is increased to at least equal the hazard index of the new major occupancy that the building is to support.

5. **Applicant's Position**

The Application submitted that the work should qualify as a basic renovation because there is no change in major occupancy. The occupancy will not be an increase in hazard or occupant load. At the same time, the renovation will involve a improvement of the exit facilities, the building is fully sprinklered and the work is common industry practise. A Code complying fire alarm system will be installed for the whole building, and the applicant is willing to install smoke detectors on the retail stores under the fitness club as leases are renewed.

6. **Chief Building Official's Position**

The Respondent submitted that under the proposed renovations to the buildings, it was discovered that no fire separation existed, and that the municipality has included all fitness clubs under A2 occupancies. The Respondent further submitted that the sprinklers should not be used to waive the need for fire separations and that at least a 1 hour fire separation should be applied to between the major occupancies.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the change of occupancy provides sufficiency of compliance with Sentence 11.3.4.1.(4) of the Building Code provided:

iv. a fire alarm system that complies with the Building Code is installed.
v. additional fire detection is provided in the eight retail stores below the fitness club and,
vi. a fire separation providing a 1 hour fire resistance rating is installed between the first and second floors within 5 years.

2. **Reasons:**

iv. the provision of the fire alarm system substantially improves the performance level of the building.
v. additional detection allows for early warning and evacuation in the event of a fire
vi. the applicant agreed to provide a rated fire separation at the ceiling of the main floor to be completed within 5 years. The rated separation enhances life safety and property protection of the fitness club occupancy.
vii. There is no increase in fire load and no increase in occupant load due to the change of occupancy.

Dated at Toronto, this 8th day, in the month of January, in the year 1997, for application number 1996-59.

BCC Ruling No. 96-52-535

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-52-535

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 6.2.3.11.(2) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Pat Carrozzi, Project Manager, Ontario Realty Corporation, 720 Bay Street, Toronto, Ontario, for the resolution of a dispute with Mr. Les Batson, Chief Building Official, City of Ottawa, Ontario, concerning whether the circulation of return air from students' bedrooms to a mechanical room where it is mixed with fresh air and recirculated back to the suites provides sufficiency of compliance with Sentence 6.2.3.11.(2) under the Building Code at Centre Jules-Leger, 281 Lanark, Avenue, Ottawa, Ontario.

APPLICANT

Mr. Pat Carrozzi
Project Manager
Ontario Realty Corporation
720 Bay Street, 4th Floor
Toronto, Ontario

RESPONDENT

Mr. Les Batson
Chief Building Official
City of Ottawa

PANEL

Mr. Demir Delen, Chair
Mr. Michael Steele
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

December 12th, 1996

APPEARANCES

Mr. Pat Carrozzi
Project Manager
Ontario Realty
Corporation
Toronto, Ontario
The Applicant

Mr. Kenneth J. Hazell
President
Clemann Large Patterson
AND
Mr. David J. Bryden
Architect
Bryden Martel Architects Inc.
Ottawa, Ontario
For the Applicant

RULING

1. **The Applicant**

   Mr. Pat Carrozzi, Project Manager, Ontario Realty Corporation is the holder of a permit under the Building Code Act, 1992 to renovate a school to create a residential dormitory of 30 rooms, at the Centre Jules-Leger at 281 Lanark Avenue, Ottawa, Ontario.

2. **Description of Constrution**

   The subject building is a teaching centre with a building area of 8,405 square metres. The area under dispute is the renovation of a 2 storey former library wing with an area of 754 square

metres which is being renovated into a dormitory of 30 rooms to accommodate approximately 53 students.

3. **Dispute**

The dispute between the Applicant and the Respondent concerns sufficiency of compliance with Sentence 6.2.3.11.(2) of the Ontario Building Code. At issue is whether the recirculation of return air from the students' bedrooms to the mechanical room where it is mixed with fresh air from the exterior, then brought back into the furnace and recirculated back to the bedrooms provides sufficiency of compliance with the Building Code.

4. **Provision of the Building Code**

Sentence 6.2.3.11. Interconnection of Systems

2. In a residential occupancy, air from one suite shall not be circulated to any other suite nor to a public corridor or public stairway.

5. **Applicant's Position**

The Applicant submitted that the intent of the Building Code is to prevent the spread of smoke and odours between separate, self contained dwelling units of separate tenancies and that the proposed renovation is to create dormitory rooms used solely for sleeping and studying. The use of the rooms are not for self- contained suites as there are shared kitchenette and washroom facilities. The Applicant further submitted that the air handling systems will shut down immediately on the initiation of the fire alarm system and that each room is provided with a heat detector connected to the fire alarm system.

6. **Chief Building Official's Position**

The Respondent submitted that the intent of the Building Code is to prevent contamination of residential suites from smoke and odours generated in adjacent suites and also to protect the integrity of the public exit corridor so that the occupants have a reasonable time to exit the building. The Respondent further submitted that Sentence 6.2.3.11.(3) is applicable to all occupancies. including residential occupancies.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the design of the HVAC system provides sufficiency of compliance with Sentence 6.2.3.11.(2) of the Building Code.

8. **Reasons:**

    b. The operation of the facility is under a single tenancy and individual sleeping rooms are not considered as suites.
    c. 24 hour supervision will be provided by at least 2 staff members.
    d. Duct type smoke detectors are provided in the return air ducts.
    e. Additional compartmentalization of the floor area between sleeping rooms and corridors, provide an increased level of protection.

Dated at Toronto, this 12th day, in the month of December, in the year 1996, for application number 1996-58

BCC Ruling No. 96-51-534

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-51-534

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.2.4.4.(2)(b) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Art Welter, Manager, Devan Properties Ltd., Toronto, Ontario, for the resolution of a dispute with Mr. L.D. Simonato, Chief Building Official, City of Cambridge, Ontario, to determine whether Fire alarm signals which are not activated simultaneously but which activate in other portions of a commercial mall within no more than 5 minutes provides sufficiency of compliance with Subsection 3.2.4. of the Ontario Building Code at Cambridge Centre, 355 Hespeler Road, Cambridge, Ontario.

APPLICANT

Mr. Art Welter
Devan Properties Ltd
Toronto, Ontario

RESPONDENT

Mr. L.D. Simonato
Chief Building Official
City of Cambridge

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Steele
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

November 21st, 1996

APPEARANCES

Mr. Art Welter
Manager
Devan Properties Ltd
The Applicant
AND
Mr. Ian Joffe
Hammerschlag & Joffe Inc.
AND
Mr. Eldin Rostum
Petroff Partners
Architects
For the Applicant

Mr. Larry Simonato
City of Cambridge
The Respondent
AND
Mr. David Carrol
City of Cambridge
For the Respondent

RULING

1. **The Applicant**

   Mr. Art Welter, Development Manager, for Devan Properties Ltd. is the holder of a permit under the Building Code Act, 1992 to provide a two stage fire alarm system in a shopping mall known as the "Cambridge Centre" located at 355 Hespeler Road, Cambridge, Ontario.

2. **Description of Constrution**

The subject building is a shopping mall of non-combustible construction with a gross floor area of 46,451 square metres (500,00 sq.ft.) consisting of 2 "anchor" tenants and a mall. The mall has a fire alarm system and the two anchor tenants have separate fire alarm systems all interconnected to act as a single system. The two stage system is intended to operate such that alarm signals activated in anchor tenants or the mall only operate in the portion of the building in which the alarm was originated and thereafter in the rest of the complex within 5 minutes if not acknowledged or an alarm initiating device is activated.

3. **Dispute**

The dispute is whether the sequence of operation of the fire alarm system, which is as follows, complies with the Building Code:

- alert signals in the mall or any anchor store will indicate a trouble signal in other panels;
- alarm signals in the mall or any anchor store will initiate alert signals in other areas;
- the mall or the anchor stores will go to alarm signals if alert signals are not acknowledged within 5 minutes or when a second stage device is activated.

4. **Provision of the Building Code**

Sentence 3.2.4.4.(2) Description of Fire Alarm Systems

2. A 2 stage fire alarm system shall
    a. cause an alert signal to sound upon the operation of any manual pull station or fire detector,
    b. except for Group B, Division 2 major occupancies, automatically cause an alarm signal to sound if the alert signal is not acknowledged within 5 min of its initiation,
    c. have each manual pull station equipped so that the use of a key or other similar device causes an alarm signal to sound and continue to sound upon the removal of the key or similar device from the manual pull station, and

2. **Applicant's Position**

The Applicant submitted that based on the past performance of this type of two stage fire alarm system in numerous existing facilities, the system provides sufficiency of compliance with subsection 3.2.4. of the Building Code. The Applicant further submitted that the alarm system enables the fire department to know where the fire originated, provides back-up in the case of major emergencies that may disable one panel.

3. **Chief Building Official's Position**

The Respondent submitted that: the operation of the alert signal will sound in one component of the building only, not throughout the total building; after the first 5 minutes the alarm signal will be sounded in that component only; once this happens an alert signal will be sent to the remaining parts of the building; and, after a further 5 minutes the alarm signal will sound in the total building. In total this system would initiate a total evacuation after 10 minutes in the total building unless the alarm signal is manually activated. Sentence 3.2.4.19.(1) states that when the alarm signal is sounded it shall be heard throughout the total floor area in which it is installed.

4. **Commission Ruling:**

It is the decision of the Building Code Commission that the two stage fire alarm system provides sufficiency of compliance with subsection 3.2.4. of the Building Code.

5. **Reasons:**

ii. The building Fire alarm system is consistent with industry practice for buildings of this type and size.
iii. The definition of alarm or alert signal is not limited to activation throughout the building.
iv. The activation of the alert signal in a specific zone will cause a trouble signal in the adjacent zones.
v. The building fire alarm system is monitored by a central monitoring station.

Dated at Toronto, this 21st day, in the month of November, in the year 1996, for application number 1996-56

BCC Ruling No. 96-50-533

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-50-533

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.4.19.(1) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Greg Nevison, Vice President, OMNI South Inc., City of Scarborough, Ontario, for the resolution of a dispute with Mr. Bernie E. Roth, Chief Building Official, City of Scarborough, Ontario, to determine whether the audibility of the fire alarm system complies with Sentence 3.2.4.19.(1) of the Ontario Building Code at OMNI - Phase I, 115 Omni Drive, Scarborough, Ontario.

APPLICANT

Mr. Greg Nevison
OMNI South Inc.
Toronto, Ontario

RESPONDENT

Mr. Bernie E. Roth
Chief Building Official
City of Scarborough

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Steele
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

November 21st, 1996

APPEARANCES

Mr. Emilio Tesolin
Project Manager
OMNI South Inc.
AND
Mr. Randal Brown
President
Randal Brown & Assoc.
For the Applicant

Mr. Bernie Roth
Chief Building Official
City of Scarborough
The Respondent
AND
Mr. Vish Bhapkar
City of Scarborough
AND
Mr. Andy Everingham
City of Scarborough
For the Respondent

RULING

1. **The Applicant**

   Mr. Greg Nevison, Vice President, OMNI South Inc. is the holder of a permit under the Building Code Act, 1992 to construct a multiple unit apartment building at 115 OMNI Drive, in Scarborough, Ontario.

2. **Description of Constrution**

   The subject building is a 26 storey residential building of non- combustible construction and building area of 1,020 square metres. The building is provided with a fire alarm and detection

system, a voice communication system, an automatic sprinkler system, and a standpipe and hose system.

3. **Dispute**

The dispute between the Applicant and the Respondent concerns sufficiency of compliance with Sentence 3.2.4.19.(1) of the Ontario Building Code. At issue is whether the fire alarm system provides high enough audibility levels in all areas of the building suites to be heard intelligibly.

4. **Provision of the Building Code**

Sentence 3.2.4.19.(1) Audibility of Alarm signals

1. Audible signal appliances forming part of a required fire alarm system shall be installed in a building so that alert signals, alarm signals and voice messages can be heard intelligibly throughout the floor area in which they are installed.

5. **Applicant's Position**

The Applicant submitted that the approved electrical drawings indicated that the fire alarm devices shall be sufficiently loud to be heard above normal noise levels in the area being served, and that the alarm complies with 3.2.4. of the Building Code. The Applicant pointed out that there are no numerical values of sound pressure levels in the Building Code to define acceptable audibility levels. Audible signalling appliances are installed in corridors and in all residential suites.

6. **Chief Building Official's Position**

The Respondent submitted that Sentence 3.2.4.19.(1) requires that the fire alarm system be intelligibly heard in all areas. Audibility limits must be based on good engineering practice, to perform the intended function of a fire alarm system; and that Sentence 3.2.4.19. of the 1995 National Building Code, opinion of the Office of the Fire Marshall and Section 6.3. of the N.F.P.A. 72-1993 recommend minimum sound levels of 75dBA, 65dBA and 70dBA respectively. The Respondent recommended that a dBA of 65 or 15dBA above ambient whichever is the greater be the criteria for audibility. The fire alarm system does not satisfy this requirement in some portions of the building.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the audibility of the fire alarm system provides sufficiency of compliance with 3.2.4.19.(1) provided that a professional engineer licensed in Ontario certifies under seal to the Building Department that alarm signals and voice messages can be heard intelligibly throughout the floor area in which they are installed.

8. **Reasons:**
    1. The Building Code and the referenced documents do not provide criteria for sound pressure levels.
    2. Each residential suite and public corridors are provided with audible signal appliances.
    3. The proposals for audibility criteria are presently being circulated for public comment by the Housing Development and Buildings Branch.

Dated at Toronto, this 21st day, in the month of November, in the year 1996, for application number 1996-53.

BCC Ruling No. 96-49-532

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-49-532

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 9.30.6.3. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Michael Cowie, President, Self Stor Inc., North York, Ontario, for the resolution of a dispute with Mr. Yaman Uzumeri, Building Commissioner, City of North York, Ontario, to determine whether the configuration of the corridors and travel distance for a proposed self storage building provides sufficiency of compliance with Sentence 3.10.2.4.(2) of the Ontario Building Code at 150 Bermondsey Road, North York, Ontario.

APPLICANT

Mr. Michael Cowie Self Stor Inc., North York, Ontario

RESPONDENT

Mr. Yaman Uzumeri Building Commercial City of North York

PANEL

Mr. Roy Philippe, Chair Ms. Susan Friedrich Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

November 21st, 1996

APPEARANCES

Mr. Michael Cowie
& Mr. Mark Cowie

Self Stor Inc.
North York, Ontario
The Applicant
AND
Mr. David Hine
Morrison Hershfield Ltd
Agent for the Applicant

Mr. Mario Angellucci
City of North York
For the Respondent
AND
Mr. Melvin Ramkissoon
City of North York
For the Respondent

RULING

1. **The Applicant**

   Mr. Michael Cowie, Principal, Self Stor Inc. is a person who has applied for a building permit under the Building Code Act, 1992 to provide a self storage facility at 150 Bermondsey Road in North York, Ontario.

2. **Description of Constrution**

   The subject building is a greater than 5 year old 2 storey industrial building which is proposed to be renovated into a self storage facility. The building area is 3840 square metres, faces 3 streets and is a mix of combustible and non-combustible construction. Travel distance to exits is 35 metres. The individual storage spaces are constructed of steel panels and doors which are 3.06 metres high and are covered by wire mesh. The ceiling is 4 metres high.

3. **Dispute**

   The dispute between the Applicant and the Respondent concerns sufficiency of compliance with Sentence 3.10.2.4.(2) of the Ontario Building Code. At issue is whether the proposed public corridor provides sufficiency of compliance with the Building Code.

4. **Provision of the Building Code**

Sentence 3.10.2.4.(2) Safety Requirements within floor areas

2. A corridor need not be constructed as a public corridor where the travel distance, measured from inside the rental space to the nearest exit, is not more than 15 m (49 ft 3 in) provided that the corridor walls
    a. are of noncombustible construction,
    b. have no openings other than doors and the doors are of solid construction, and
    c. are continuous from the floor to the underside of the floor above, the ceiling or the roof.

5. **Applicant's Position**

The Applicant submitted that the proposed construction provides sufficiency of compliance with the Building Code by:

- being made largely of non-combustible construction;
- facing 3 streets;
- having sheet steel walls and doors both on the front and between storage lockers;
- the installation of a sprinkler system, smoke detectors and a monitored fire alarm system;
- having fire safety plans in place which include limitations on the substances being stored in the building.

The Applicant further submitted that when compared to other major occupancies (eg. F2) the proposed construction would meet the requirements of the Building Code.

2. **Chief Building Official's Position**

The Respondent submitted that a separated corridor provides benefits such as:

- smoke containment;
- the minimisation of fire spread; and,
- assistance in fire fighting because of the increased ability to locate the origin of a fire.

The Respondent further submitted the potential difficulty exists in controlling the substances being stored in the building.

3. **Commission Ruling:**

It is the decision of the Building Code Commission that the building provided sufficiency of compliance with Sentence 3.10.2.4.(2) of the Building Code provided that

. Smoke detectors are provided in the public corridor spaces connected to the fire alarm system

i. The Fire alarm system is connected to a central monitoring station and

ii. The building is compartmentalized by a minimum of 3 additional zones of approximate equal size by fire separations complete with closures with self closing devices

2. **Reasons:**

. The majority of the building is of non-combustible construction.

i. 24 gauge sheet steel walls 3.06 metres (10 ft.) in height are provided between each storage unit.

ii. Additional smoke detection is provided in the public corridor system connected to the fire alarm system.

iii. The fire alarm system is monitored by a central monitoring station.

iv. Additional containment through compartmentalization will be provided.

v. Evidence provided indicated a low occupant load.

vi. Sources of ignition are limited. No electrical power is provided directly to each unit and a no smoking policy is in place.

vii. Storage of hazardous materials (i.e. flammable liquid) is restricted by lease agreement.

viii. The fire safety plan is to be posted at each unit.

ix. The building is supervised by staff and monitored by a security system.

x. The storage height is limited by wire mesh ceiling not to impede sprinkler operation.

Dated at Toronto, this 21st day, in the month of November, in the year 1996, for application number 1996-55.

BCC Ruling No. 96-48-531

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-48-531

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 9.30.6.3. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Virgil Marques, President, V.Marques Construction Ltd., Kingston, Ontario, for the resolution of a dispute with Mr. Terry Willing, Chief Building Official, Township of Kingston, Toronto, concerning whether the installation of the ceramic tile provides sufficiency of compliance with Article 9.30.6.3. of the Building Code at 798 Marsh Crescent, Kingston, Ontario.

APPLICANT

Mr. Virgil Marques
President
V. Marques Construction Ltd
R.R. # 3
1579 Centennial Drive
Kingston, Ontario

RESPONDENT

Mr. Terry Willing
Chief Building Official
Township of Kingston

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Michael Lio

PLACE

Toronto, Ontario

DATE OF RULING

November 13th, 1996

APPEARANCES

Mr. Virgil Marques
President
V. Marques Construction Ltd
Kingston, Ontario
The Applicant

RULING

1. **The Applicant**

   Mr. Virgil Marques, President, V. Marques Construction Limited is the holder of a permit under the Building Code Act, 1992 for construction at a one storey house at 798 Marsh Crescent, Kingston, Ontario.

2. **Description of Constrution**

   The subject building has a kitchen floor which has been built with ceramic tile over 9.52mm (3/8 in) plywood, screwed on 15.9mm (5/8 in) plywood, and glued on the 38mm x 235mm (2 in x 10 in) joists at 400mm (16 in) o.c..

3. **Dispute**

   The dispute between the Applicant and the Respondent concerns sufficiency of compliance with Article 9.30.6.3. of the Ontario Building Code. At issue is whether the use of adhesive at the junction of the 15.9mm (5/8 in) plywood and floor joists, the screwing of the 2 layers of plywood, and the 2 rows of bridging will stiffen the assembly and provide a level of performance equal to the requirements of the Building Code.

4. **Provision of the Building Code**

Article 9.30.6.3. Reinforcement for Panel-Type Wood Sheathing

1. When ceramic floor tiles are set on panel-type wood sheathing, one of the following assemblies for reinforcing the floor assembly shall be used
    a. 20 mm (13/16in) thick plywood or waferboard with all edges supported by at least 38 mm by 38 mm (2 in by 2 in) blocking with floor joists spaced not more than 400 mm (16 in) o.c., with 6 mm (1/4 in) underlay,
    b. sheathing thickness which conforms to Table 9.23.14.A. and having an underlay consisting of 15.9 mm (5/8 in) plywood or waferboard with offsetting joints. A 4 mm (5/32 in) gap shall be provided between sheets, or
    c. sub-floor sheathing reinforced with close spaced 38 mm by 38 mm (2 in by 2 in) blocking at spacings at least half that of the floor joist spacing.

5. **Applicant's Position**

The Applicant submitted that the past performance of installing ceramic tile in this manner (glue on every floor joist and screws every 89mm) provides a level of performance that would be achieved by conforming with the requirements of the Building Code.

6. **Chief Building Official's Position**

The Respondent submitted the top layer should have been the 15.9mm (5/8 in) plywood.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the kitchen floor beneath ceramic tile provides sufficiency of compliance with the requirements of Article 9.30.6.3. of the Building Code provided 38 mm by 38 mm blocking is installed, at spacings at least half that of the floor joist spacing, under no less than 70% of the kitchen floor area.

8. **Reasons:**
    i. Closely spaced blocking installed beneath the floor and subfloor gluing to the floor joists enhance the stiffness of the floor system.
    ii. The subfloor is a tongue and groove variety providing significant edge support.
    iii. Subfloor and underlay have been screwed together in a 150mm x 150mm fastening pattern improving the load sharing characteristics of the floor system.
    iv. Evidence was provided that a written warranty could be made available to the homeowner from the ceramic tile installer.

v. The applicant stated that this method of ceramic tile floor construction has demonstrated acceptable past performance.

Dated at Toronto, this 13th day, in the month of November, in the year 1996, for application number 1996-54.

BCC Ruling No. 96-47-530

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-47-530

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 9.8.3.1. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Alex & Mrs. Lynda Brooks, Owners, Bracebridge, Ontario, for the resolution of a dispute with Mr. Randy Gardner, Chief Building Official, Town of Bracebridge, concerning whether the spiral staircase that provides sufficiency of compliance with Articles 9.8.3.1. of the Building Code at 3 South Muskoka Drive, Bracebridge, Ontario.

APPLICANT

Mr. Alex & Mrs. Linda Brooks
Owners
3 South Muskoka Drive
Bracebridge, Ontario

RESPONDENT

Mr. Randy Gardner
Chief Building Official
Town of Bracebridge

PANEL

Mr. Roy Philippe, Chair
Mr. Demir Delen
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

October 31st, 1996

APPEARANCES

Mr. Alex Brooks
Owner
3 South Muskoka Drive
Bracebridge, Ontario
The Applicant

RULING

1. **The Applicant**

   Mr. Alex & Mrs. Linda Brooks, Owners, are a holder of a permit under the Building Code Act, 1992 to renovate a building at 3 South Muskoka Drive, Bracebridge, Ontario.

2. **Description of Constrution**

   The subject building is a 2 1/2 storey house of approximately 130 square metres. Spiral stairs located at the top of the stairs to the second floor allow access to a loft in the attic.

3. **Dispute**

   The dispute between the Applicant and the Respondent concerns sufficiency of compliance with the Building Code. The spiral stairs which lead from the second floor to the loft have a tread 610 mm wide, a rise of 210 mm, and an average run of 152 mm (0 mm to 305 mm).

4. **Provision of the Building Code**

   Article 9.8.3.1. Rise and Run of Stairs

   1. "...stairs serving dwelling units shall have a maximum rise of 200 mm (7 7/8 in), a minimum run of 210 mm (8 1/4 in) and a minimum tread width of 235 mm (9 1/4 in).

   "

   Article 9.8.5.2. Curved Stairs not in Exits

"Except as permitted in Article 9.8.5.3., a curved stair not required as an exit shall have an average run of not less than 200 mm (7 7/8 in) and a minimum run of 150 mm (5 7/8 in) and shall have risers conforming to Article 9.8.3.1."

5. **Applicant's Position**

The Applicant submitted that: the intent of Article 9.8.3.1. of the Building Code was to provide minimum standards for bedroom and other living space, and that the loft area will be a limited use study area; that the structural changes required to meet the Building Code would be cost prohibitive and unattractive; and, that the other Building Code deficiencies in the building are being met.

6. **Chief Building Official's Position**

The Respondent submitted that the spiral staircase is within the dwelling unit and does not meet the requirements for stairs in Article 9.8.3.1. or 9.8.5.2.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the existing circular stair to the attic loft provides sufficiency of compliance with Article 9.8.3.1. of the Building Code.

8. **Reasons:**

The Building has existed since 1988, and compliance alternative C.97 indicates that existing curved or spiral stairs are acceptable.

Dated at Toronto, this 31th day, in the month of October, in the year 1996, for application number 1996-52.

BCC Ruling No. 96-46-529

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-46-529

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 11.3.4.1.(4) of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Nick Dimitrakakis, President, 1142907 Ontario Ltd., Toronto, Ontario, for the resolution of a dispute with Ms. Cathie MacDonald, Deputy Chief Building Official, City Hall, Toronto, concerning whether providing sprinkler protection for the basement and ground floor and not upgrading second floor/ceiling assembly for the proposed increase in ground floor restaurant seating from 30 to 49 (eg. change of major occupancy from Group E to Group A-2) provides sufficiency of compliance with Sentence 11.3.4.1.(4) of the Building Code at 1402 Queen Street West, Toronto, Ontario.

APPLICANT

Mr. Nick Dimitrakakis
President
1142907 Ontario Ltd
19 Treadway Blvd
Toronto, Ontario

RESPONDENT

Ms. Cathie MacDonald
Deputy Chief Building Official
City of Toronto

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Michael Lio

PLACE

Toronto, Ontario

DATE OF RULING

November 13th, 1996

APPEARANCES

Mr. & Mrs. Dimitrakakis
The Applicant
AND
Mr. George Papadopoulos
AND
Mr. David Syrett
Associate
Leber/Rubes
Toronto, Ontario<
Agent for the Applicant

Mr. Al Jasinevicius
Building Code/ Plan Examiner
City of Toronto
For the Respondent

RULING

1. **The Applicant**

   Mr. Nick Dimitrakakis, President, 1142907 Ontario Ltd. is a person who has applied for a building permit under the Building Code Act, 1992 to increase the ground floor seating provided in a restaurant at 1402 Queen Street, Toronto, Ontario.

2. **Description of Constrution**

   The subject building is 3 stories high with a ground floor of 370 square metres currently used as a restaurant with a maximum occupant load of 30. The second and third floors are each 129 square metres and contain a total of 7 apartment units. The partial basement contains a hot water boiler. The building is of mixed combustible and non-combustible construction and is not

sprinklered. The floor and roof assemblies are generally lath and plaster on the underside of wood joists. The ceiling between the first and second floor consists of lath and plaster with a suspended ceiling of painted gypsum board and lay-in tile. The ceiling in the basement is a combination of exposed wood floor joists in some areas and damaged gypsum board.

3. **Dispute**

The dispute between the Applicant and the Respondent concerns sufficiency of compliance with Sentence 11.3.4.1.(4) of the Ontario Building Code. At issue is whether providing sprinkler protection for the basement and ground floor and not upgrading the second floor/ceiling assembly for the proposed increase in ground floor seating from 30 to 49 provides an equivalent level of performance to that intended by the Building Code.

4. **Provision of the Building Code**

Sentence 11.3.4.1.(4) Reduction in Performance Level

4. Except as provided in Sentence (5), where a major occupancy of all or part of an existing building is changed to another major occupancy and the hazard index of the new major occupancy is greater than the construction index of the existing building, upgrading of early warning and evacuation systems and additional upgrading shall be required in conformance with Tables 11.3.1.A., 11.3.1.B., 11.3.1.C. and 11.4.2.A. so that the construction index of the building is increased to at least equal the hazard index of the new major occupancy that the building is to support.

5. **Applicant's Position**

The Applicant submitted the following rationale as to why increasing the occupancy load from 30 to 49 does not warrant sprinklers in the basement and ground floor and further upgrading of the of the second floor rating:

The floor between the basement and ground level will be upgraded to provide a 1 hour fire separation.

There are three exterior exit doors at ground level from the ground floor. Two of the exits have less than 15 metre travel distance and lead directly from the seating area in the restaurant to the street.

The partial basement and ground floor do not share exit facilities.

The subject building is closer in size to buildings which have a hazard index of 3 or 4 rather than 6. The building index will be 4 once the proposed work is completed.

The fire separation between the restaurant and the residential use is for the benefit of the residential use and according to 9.5.2.6.(3) of the Ontario Fire Code, an existing membrane of lath and plaster is deemed to meet the required 1 hour fire separation. Fire rated tiles with hold down clips will be installed in place of the suspended ceiling in the restaurant. A 2 hour fire rated ceiling could be provided between the restaurant and residential occupancies.

The building has been upgraded for compliance with the residential retrofit requirements of section 9.5 of the Fire Code. The building has a recently installed fire alarm and detection system and emergency lighting.

The building faces three fire department access routes as opposed to the minimum one required by the Building Code.

A sign indicating maximum occupant load of 49 will be posted in a conspicuous location.

6. **Chief Building Official's Position**

The Respondent submitted that under the proposal, the building is to be classified as a group A-2 major occupancy. The proposed major occupancy has an assessed hazard index of 6, and the existing building has a construction index of 5 at best, but is more likely to be 4 or 3. To equal the hazard index the building is required to be upgraded by:

- providing a 1 hour fire resistance rating for the first and second floor assemblies, and;
- providing a sprinkler system in the basement and on the first floors.

The Respondent acknowledges that there is a large gap between the two major occupancies. The city has many properties that fall within this gap and expect to make proposals to the Ministry on the 1997 Building Code Amendments regarding sprinklers.

2. **Commission Ruling:**

It is the decision of the Building Code Commission that the Building provides sufficiency of compliance with Sentence 11.3.4.1.(4) of the Building Code for the proposed increase in seating from 30 to 49 in the ground floor restaurant provided that

iv. The fire separation between the basement and first floor has a 1 hour rating and the fire separation between the first and second floor has a 2 hour rating and

v. The solid core wood door between the kitchen and restaurant is equipped with a listed self closing device.

2. **Reasons:**

iv. Fire Department access is provided on 3 sides.

v. Two exits are provided from the dining hall with travel distance of 15m in lieu of 30m required by the Building Code.

vi. The supervised fire alarm system provided exceeds the Building Code requirements as additional thermal detection is provided at the dinning hall.

vii. The subject building is closer in size to buildings which have a hazard index of 3 or 4.

viii. The partial basement and ground floor do not share exits with the 2nd and 3rd floors above.

ix. The degree of compartmentation has been increased within the building.

Dated at Toronto, this 13th day, in the month of November, in the year 1996, for application number 1996-50.

BCC Ruling No. 96-45-528

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-45-528

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Articles 3.2.1.5., 3.2.2.2., 3.2.2.61., 3.4.2.1., & 3.4.4.1., and Sentences 3.2.1.1.(8), 3.2.2.11.(2), 3.2.8.2.(3) & 3.4.2.5.(1) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. H.G. Oliver, Manager Utilities & Projects, Regional Municipality of Durham, Whitby, Ontario, for the resolution of a dispute with Mr. Frank Hull, Chief Building Official, Town of Ajax, concerning whether i) the building may be considered a Special and Unusual Structure under Article 3.2.2.61. rather than Article 3.2.2.2.; ii) whether the below grade process area is more than one storey in accordance with Sentence 3.2.1.1.(8); iii) whether the complete floor areas in the building are required to be protected by an automatic sprinkler system in accordance with Article 3.2.1.5., and Sentences 3.2.2.11.(2), 3.4.2.5.(1), 3.2.8.2.(3); and iv) whether the exits in the below grade process floor areas sufficiently comply with the separation of exits and travel distance requirements in Articles 3.4.2.1., 3.4.4.1. and Sentence 3.4.2.5.(1) of the Ontario Building Code at the Ajax Water Supply Plant, 75 Lake Driveway East, Ajax, Ontario.

APPLICANT

Mr. H.G. Oliver Manager, Utilities & Projects
Regional Municipality of Durham
105 Consumers Drive
Whitby, Ontario

RESPONDENT

Mr. Frank Hull
Chief Building Official
Town of Ajax

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

October 15th, 1996

APPEARANCES

Mr. Richard Hum
Senior Project Manager
Simcoe Eng. Group Ltd
1815 Ironstone Manor
Pickering, Ontario
For the Applicant

Mr. Tim Moore
Chief Building Official
Town of Pickering
Pickering Civic
Agent for the Respondent

RULING

1. **The Applicant**

   Mr. H.G. Oliver, Manager, Utilities & Projects, Regional Municipality of Durham is the holder of a permit under the Building Code Act, 1992 to construct a water processing facility and subsidiary administrative offices at 75 Lake Driveway East, Ajax, Ontario.

2. **Description of Constrution**

The subject building is a new 163 ML/d water supply plant. The facility can be divided into two areas, the process area and the administration area. The process area of the plant has a 7,097 m² building area and 10,249 m² floor area. The administration portion of the plant is 788 m² in building area and 1,665 m² in floor area.

Innovative landscaping and building design driven by the Environmental Assessment process resulted in:

- The entire roof and walls of the west end of the plant, of what would have normally been the superstructure, being bermed and buried. The design invites the public to walk on top and participate in leisurely activity in the area of the plant.
- Further adding to the uniqueness of the building is the fact that as one moves progressively towards the easterly part of the plant, the plant superstructure progressively becomes more exposed. Windows have been designed on a portion of the exposed superstructure to allow the public a view into the water plant.
- The entire eastern wall of the plant is exposed.
- The administration building is totally exposed.

The building is provided with a standpipe and hose system, and a fire alarm and detection system. The smoke detectors that are provided are in excess of the Building Code. Sprinkler protection is provided in selected areas of the process area of the plant and in the administration building. A central supervised fire alarm panel is provided.

The following applies to the process area of the plant:

- Occupancy
  - Typically unmanned
  - The occasional guided public tour may be held
- Construction
  - Totally noncombustible concrete wall and roof construction throughout
  - Open tanks are full of water
  - Pipes carry water or noncombustible water treatment chemicals
  - The only combustible load is the insulation on the electrical wiring
  - The risk of fire is extremely low

The Administration area of the plant can be best described as follows:

- Occupancy
  - Offices
  - Maximum expected occupant load: 10
- Construction
  - Totally noncombustible concrete construction throughout

3. **Dispute**

The dispute between the Applicant and the Respondent concerns sufficiency of compliance with Articles 3.2.1.5., 3.2.2.2., 3.2.2.61., 3.4.2.1., & 3.4.4.1., and Sentences 3.2.1.1.(8), 3.2.2.11.(2), 3.2.8.2.(3) & 3.4.2.5.(1) the Building Code. The subject areas under dispute are as follows: i) the classification of the building; ii) the interpretation of the below grade process areas as storeys; iii) the requirement for sprinklering the building in its entirety; and, iv) the requirement for providing exits from every below grade process level.

4. **Provision of the Building Code**

Sentence 3.2.2.61. Industrial Buildings, Division 3, up to 6 Storeys

1. A building classified as Group F, Division 3 shall conform to Sentence (2) provided the building
   a. is not more than 6 storeys in building height,
   b. if unsprinklered, has a building area not more than the value in Table 3.2.2.Z., and
   c. if sprinklered, is not more than twice the area limits of Clause (b).
2. The building shall be of noncombustible construction, and
   . floor assemblies shall be fire separations with a fire- resistance rating of not less than 1 h,
   a. mezzanines shall have a fire-resistance rating of not less than 1 hr,
   b. roof assemblies shall have a fire-resistance rating of not less than 1 h, and
   c. all loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.

Article 3.2.2.2.nbsp;nbsp;nbsp;nbsp;nbsp; Special and Unusual Structures

Structures which cannot be identified with the descriptions of buildings in Articles 3.2.2.16. to 3.2.2.62. shall be protected against fire spread and collapse in conformance with good fire protection engineering practice, such as described in the NFPA Fire Protection Handbook, Sixteenth Edition.

Sentence 3.2.1.1.(8).nbsp;nbsp;nbsp;nbsp;nbsp; Exceptions to Building Height in Storeys

3. Mezzanines, elevated walkways and platforms in Group F, Division 2 or 3 major occupancies need not be considered as storeys in calculating building height provided
    - the building is of noncombustible construction
    - except for Clause (c), the mezzanines, elevated walkways and platforms are intended solely for periodic service and maintenance, and
    - where they are intended to be occupied, no mezzanine, elevated walkways or platform shall have an occupant load more than 4 persons.

Article 3.2.1.5.nbsp;nbsp;nbsp;nbsp;nbsp; Fire Containment in Basements

4. Except as provided in Sentences (2) and 3.2.2.11.(2), basements shall be sprinklered or shall be subdivided into fire compartments not more than 600 m? (6460 ft?) in area by a fire separation having a fire-resistance rating not less than that required for the floor assembly immediately above the basement.
5. An open-air storey need not conform to Sentence (1).

Sentence 3.2.2.11.(2)nbsp;nbsp;nbsp;nbsp;nbsp; Storeys Below Ground

6. Where a building or portion thereof is erected entirely below the adjoining finished ground level and extends more than 1 storey below such ground level, the following minimum precautions against fire spread and collapse shall be taken:
    - except as provided in Sentence (3), basements shall be sprinklered,
    - floor assemblies below such ground level shall be constructed as a
        i. fire separation with a fire-resistance rating of not less than 3 h where the basements are occupied by Group E or Group F, Division 1 or 2 occupancies, and
        ii. fire separation with a fire-resistance rating of not less than 2 h where the basements are occupied by any other occupancy, and
    - all loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the construction that they support.

Sentence 3.4.2.5.(1)nbsp;nbsp;nbsp;nbsp;nbsp; Location of Exits

7. Except as provided in Sentences (2), (3) and 3.3.2.4.(6), where more than one exit is required from a floor area, such exits shall be located so that the travel distance to not less than one exit as described in Article 3.4.2.4. shall be not more than
    - 25 m (82 ft) in any Group F, Division 1 occupancy,
    - 45 m (147 ft 8 in) in any sprinklered floor area that contains an occupancy other than Group F, Division 1
    - 40 m (131 ft 3 in) in any Group D occupancy,
    - 105 m (344 ft 6 in) in any floor area, served by a public corridor, in which rooms and suites are not separated from the remainder of the floor area by a fire separation, provided
        i. the public corridor has a width of not less than 9 m (29 ft 6 in)
        ii. the ceiling height in the public corridor is not less than 4 m (13 ft 1 in) above all floor surfaces,
        iii. the building is sprinklered, and
        iv. not more than one half of the required egress doorways from a room or suite open into the public corridor when the room or suite is required to have more than one egress doorway,
    - 60 m (196 ft 10 in) in any storage garage that conforms to the requirements of Article 3.2.2.60., and
    - 30 m (98 ft 5 in) in any other occupancy.

Sentence 3.2.8.2.(3)nbsp;nbsp;nbsp;nbsp;nbsp; Exceptions to Special Protection

8. Where a closure in an opening in a fire separation would disrupt the nature of a manufacturing process, such as a continuous flow of material from storey to storey, the closure for the opening is permitted to be omitted provided precautions are taken to offset the resulting hazard. (See Appendix A.).

Article 3.4.2.1.nbsp;nbsp;nbsp;nbsp;nbsp; Minimum Number of Exits

9. Except as provided in Sentences (2) to (4), and (6), every floor area as regulated in Article 3.4.1.1. shall be served by not less than 2 exits.

Article 3.4.4.1.nbsp;nbsp;nbsp;nbsp;nbsp; Fire-Resistance Rating of Exit Separations

10. Except as provided in Article 3.4.4.3 and Sentences(2), 3.3.5.5.(3) and 3.4.4.2(2), every exit shall be separated from each adjacent floor area by a fire separation having a fire-

resistance rating not less than that required for the floor assembly above the floor area and, where there is no floor assembly above, not less than that required by Subsection 3.2.2. for the floor assembly below, but in no case shall the fire-resistance rating be less than 45 min.

11. The fire-resistance rating for the fire separation in Sentence(1) need not be more than 2 h.
12. Where an exit stair in an assembly hall or theatre serves more than one balcony level, the exit stair shall be separated from the remainder of the building in conformance with Sentence(1).

Applicant's Position

The Applicant submitted the following information to support their position:

13. The Building Code, Sentence 3.2.2.11.(2) requires "Where a building or portion thereof is erected entirely below the adjoining finished ground level and extends more than 1 storey below such ground level, the following precautions against fire spread and collapse shall be taken:
    - except as provided in Sentence (3), basements shall be sprinklered..."

      The Building Code, Clause 3.2.2.62.(2)(a) requires "...floor assemblies shall be fire separations with a fire-resistance rating of not less than 2h, except that such floor assemblies are permitted to be reduced to fire separations with a fire-resistance rating of not less than 1 h in a storage garage with all storeys constructed as open-air storeys, ..."

Municipality's Position

The municipality advised that the entire plant should be sprinklered because the building includes multiple basement levels below grade and because there are unprotected equipment access openings at each basement level in the low lift pumping area.

Applicant's Position

Sprinklering is not required for the following reasons:

14. The landscaping grade changes depending where one is located in the plant and, therefore, the number of stories below grade also changes.

15. The berming of the superstructure at the western portion of the plant is no different than that of an exposed superstructure having a non-combustible roof and non- combustible walls with no windows. Room Nos. 8304 & 8305 at Elev. 83.5 m level. as such, can be considered to be the second floor of the plant. Exterior fire exits are provided at this level.
16. The 77.725 m elevation level can, therefore, be considered the ground floor.
17. The majority of the plant has only one basement level below the ground floor. Depending where one is in the plant, the first and only basement level can be encountered at the 70.8 m or 71.4 m, or 73.15 m, or 74.875 m elevation levels. In area, the above-mentioned floors make up 25.8% of the total basement footprint.
18. Only in the low lift pumping area of the plant is there multiple service levels. They are at the 73.15 m, 69.875 m and 66.6 m elevation levels. These levels are connected by two open staircases and have equipment access openings in each floor level to allow installation and removal of equipment. The low lift pumping area house large low lift pumps and small miscellaneous pumps. The small miscellaneous pumps have motors mounted on them. Otherwise all motors and electrical starters are housed at the ground floor level (Elev.77.725). There is no combustible load other than the insulation on the electrical wiring in the service levels. The Building Code, Sentence 3.2.8.2.(3) and A-3.2.8.2(3) allow non- sprinklering of the equipment access openings if the remainder of the facility is unsprinklered.

The entire low lift pumping area is designed to facilitate the production of drinking quality water. Equipment and piping must be readily accessible in the event of breakdown. The production of water cannot stop. Intermediate service levels were designed into the facility to provide an operator practical access to pumps and piping off high ceilings.

19. The Building Code, Clause 3.4.2.5.(1)(b) allows a 45 m travel distance between exits in any sprinklered floor area that contains an occupancy other than Group F, Division 1. The corridor for Room 8305 and 8304 at the Elev 83.5 m level house three stair exits (Nos. 3, 4, grid 1/D).

Municipality's Position

The municipality contends that the definition of sprinklered floor area requires the entire plant to be sprinklered, including the area above the filters, because the definition of floor area "means the space on any storey of a building between exterior walls and required firewalls..".

Applicant's Position

Sprinklering is required only in the corridor and not in the rest of the plant for the following reasons:

20. The intent of the Building Code is to ensure that all things that are combustible within firewalls and exterior walls do not catch on fire and hinder egress. The entire water plant including the corridor wall in question are non combustible. Open tanks of water on the other side of the corridor wall cannot catch on fire. If there is nothing to catch on fire there will be no egress hinderance. As such, sprinklering the entire plant would provide no practical benefit.
21. The only combustible load in the plant is the insulation on the electrical wiring.
22. Simcoe decided to sprinkler only the corridors in order to meet the allowable 45 m travel distance between exits.
23. One hour fire separations will be provided between sprinklered and non sprinklered areas.
24. The Building Code, Sentence 3.4.4.1.(10 requires ".. every exit shall be separated from each adjacent floor area by a fire separation having a fire-resistance rating not less than that required for the floor assembly above the floor area and, where there is no floor assembly above, not less than that required by Subsection 3.2.2. for the floor assembly below, but in no case shall the fire-resistance rating be less than 45 min."

Municipality's Position

The municipality advises that both Stair Nos.8 and 9 in the low lift area are required exits and should be enclosed and lead directly outdoors.

Applicant's Position

The Applicant understands that the intent of enclosing the staircases is to provide protected egress for people and a protected means for the fire department to enter the basement to fight fires. The Applicant believes that enclosing these stairs are not required because of the following reasons:

25. Two alternate accessible enclosed stairway exits are already provided in the basement level.
26. It is the Applicant's opinion that enclosing the stairs does not provide additional life safety due to the noncombustible nature of the construction and the extremely low risk.

In order to accommodate this request, major structural modifications are required.

27. The Applicant requested the building be reclassified from a F- 3 occupancy structure to that of a Special and Unusual Structure as per Article 3.2.2.2. of the Building Code.

Municipality's Position

The municipality's position is that because a portion of this building includes administrative offices, it therefore, cannot be considered a special and unusual structure in its entirety.

Applicant's Position

The Applicant's position is that, unlike some of the F-3 examples given in Appendix to the Building Code (A-3.1.2.A.), the water plant is a special and unusual structure because of the following reasons:

28. There typically is only one water plant in any City. The facility is designed for a 50 year life span, and, unlike factories or office towers, water plants are not built on a periodic basis.
29. The design of the building is unusual.
30. The landscaping and berming features are extremely unusual.
31. Fire protection measures in the administration area have been provided in accordance with the Building Code.
32. The entire plant is constructed of non-combustible materials.
33. The risk is extremely low because water cannot catch on fire.
34. NFPA 820 Standard for Fire Protection in Wastewater Treatment and Collection Facilities was prepared specifically for a wastewater treatment plant. "The need to develop NFPA 820 was based on fire or explosion incidents that, while infrequent, are relatively severe when they occur". The standard was developed for wastewater treatment plants because, unlike water plants, there are different fire and explosion hazards to consider. The following is a description of some typical wastewater treatment plant processes and the associated fire and explosion hazards that must be taken into account.
35. Prior to entering the plant pumping station, raw sewage is screened for rags and large objects before being pumped to primary clarifies. Settling of organic particles occur in the clarifies. Downstream liquid stream processes can include having the sewage enter aeration tanks, final clarifies and polishing filters before entering a water stream.

Raw sewage cannot catch on fire or cause an explosion unless gasoline, for eg. has been spilled by accident into the sewer and has reached the sewage plant in an undiluted state. To prevent this occurrence, NFPA 820 recommends sewage pumping stations be designed to have a physically separated wet well and dry well. All pumping equipment is located in the dry well. The separation prevents open sparks which may originate from equipment from coming into contact with the gasoline vapours in the sewage wet well. Raw sewage pumping stations typically have many stories below grade. In raw sewage pumping station drywells, NFPA 820 Table 2, Item 17, makes no special distinction for multi-level basements and recommends fire extinguishers, and not sprinklers, be provided as the minimum fire protection measure in dry well areas. Raw sewage pumping stations are typically constructed from non combustible building materials. The only combustible load would be the insulation on wiring. Risk of fire is extremely low.

36. Anaerobic sludge digesters are used to stabilize sewage sludge. A by-product of the process is explosive digester gas.
37. Dewatering of digested sewage sludge is a common process that is used to reduce the volume of sludge to be transported off site to landfill. Dewatering of sludge can make the sludge dry enough so that it is combustible. The NFPA in Quincy, Mass, advise that, unlike wastewater plants, there is no fire protection standard for water treatment plants. The American Water Works Association in Denver, Colorado, which is a North American association devoted to the advancement of water treatment and distribution, recommends the use of fire extinguishers and central alarm monitoring systems in large water plants. It is quite likely that no fire protection standard for a water treatment plant was developed because the risk is extremely low compared to some processes in a wastewater plant.
38. The Town has, in the very recent past, followed NFPA 820 and allowed the use of portable fire extinguishers as the only means of physical fire protection in a raw sewage pumping station which is currently under construction. In many ways, a raw sewage pumping station is similar to that of a water plant low lift pumping station. The difference is that, in a water treatment plant, all of the processes are housed under one roof. The Applicant advised that the municipality should consider applying NFPA 820 fire protection measures used for a raw sewage pumping station to the Ajax plant low lift pumping station. In such a case, only fire extinguishers would be required. The municipality's requirement to install sprinklers over and above the fire protection measures already designed into the Ajax Water Plant does not make sense because it

imposes a higher standard for fire protection for a water treatment plant than that for a "more hazardous" wastewater treatment plant.

5. **Chief Building Official's Position**

The Respondent submitted the following comments with respect to the specific areas of dispute:

0. Classification as a Special and Unusual Structure

This would appear to be an F-3 building for which design criteria is identified in 3.2.2.61. and therefore the designation as a special and unusual structure need not be applied. Inasmuch as more than 15% of the building floor area is assigned to occupancy by persons in administrative offices, it would not appear to be appropriate to consider this a special and unusual structure in entirety, and in any event there would not appear to be any recognized definitive alternate standard against which we could review this building.

1. Below grade storeys

The process floors would not appear to be exempt from the requirements of storeys under 3.2.1.1.(8) in that they are below the first storey and are therefore not within the context of building height to which this exemption refers. Below grade levels are inherently more potentially hazardous than comparably designed above grade facilities, therefore the acceptance of the entire below grade complex as one storey with interstitial mezzanines or platforms under this sentence would not appear to be appropriate.

2. Sprinklering

The requirement for sprinklering the complete floor areas in this building is due severally to:

- the process areas being contained in basements (3.2.1.5.)
- storeys being constructed below ground (3.2.2.11.(2))
- the travel distance to exits exceeding 30m (3.4.2.5.(1)), and
- openings contained in the 2 hr. floors between process storeys (3.2.8.2.(3)).

The below grade process areas are not provided with any sprinkler protection, and there is no alternate means of containment proposed between floor levels. The applicant has proposed to sprinkler only those portions of the building outside of the process areas where the travel distance of 30m is exceeded (and the administration area, to provide for

the interconnected floor space). The boundaries of the sprinklered areas include interior unrated partition walls, which condition does not constitute the sprinklering of the floor area where the travel distance is exceeded.

3. Exits

The below grade process floor areas at levels 66,600 and 69.875 are not provided with any separated exits (3.4.2.1., 3.4.4.1.). Persons occupying these areas will not have available to them at this level any protected means of egress should any unforeseen fire-related circumstances arise. Levels 73.150 and 77.725 are not provided with exits within applicable maximum travel distance limitations (3.4.2.5.(1)).

6. **Commission Ruling:**

It is the decision of the Building Code Commission that the building provides sufficiency of compliance with the requirements of the Building Code provided; the installed fire alarm system is connected to the fire department as per Sentence 3.2.4.7.(3) of the Building Code.

7. **Reasons:**
    0. The building can be considered a Special and Unusual Structure as per Building Code Article 3.2.2.2.
    1. The design of the building incorporates unusual berming features, complex design features with subsidiary administrative areas.
    2. The building is non-combustible construction containing very limited fuel load.
    3. The water treatment plant has a very low occupant load.
    4. Enclosed exits are well distributed around the perimeter of the treatment plant.
    5. The administrative areas of the building are sprinklered and separated from the chemical facilities by a 2 hour fire rated wall.
    6. The viewing and operators galleries are sprinklered and separated from the rest of the treatment plant by a 1 hour fire separation.
    7. Public tours of the facility will be supervised and limited in frequency, in the number of participants, and to certain areas of the building.
    8. Evidence provided indicates that NPFA 820, Standard for Fire Protection in Wastewater Treatment and Collection Facilities does not require sprinklering for facilities that pose more of a fire hazard than water treatment plants.
    9. Additional early warning of fire in the form of smoke and heat detectors have been provided.

10. Floor levels within the below grade areas are considered similar to work platforms as described in Sentence 3.2.1.1.(8).
11. Evidence provided suggests that no known water treatment plants in Ontario or Canada have been sprinklered.
12. Although a comprehensive risk analysis has not taken place, evidence provided by the Housing Development and Buildings Branch suggests that since 1983 there have been only a limited number of fires with low fire losses, no deaths and no injuries in water treatment plants due in large measures to low combustible content and non-combustible wall finishes.
13. The Housing Development and Buildings Branch intends to lead a task group to study the issue of the application of the Building Code to Water and Sewage Treatement Plants.

Dated at Toronto, this 15th day, in the month of October, in the year 1996, for application number 1996-48.

BCC Ruling No. 96-44-527

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-44-527

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Articles 3.5.4.3., 6.2.3.2., and Sentence 3.1.5.14.(1) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Ms. Gabrielle McMillan, Manager of Finance and Administration, Canadian Mental Health Association, Windsor-Essex County Branch, Windsor, Ontario, for the resolution of a dispute with Mr. Edward Link, Chief Building Official, City of Windsor, concerning whether the ceiling plenum consisting of a 1 ?" wood roof deck, sprinkler system and smoke detectors provide sufficiency of compliance with Articles 3.5.4.3. 6.2.3.2., and Sentence 3.1.5.14.(1) of the Building Code at the Canadian Mental Health Association, Windsor-Essex County Branch, 1400 Windsor Avenue, Windsor, Ontario.

APPLICANT

Ms. Gabrielle McMillan
Manager of Finance and Administration
Canadian Mental Health Association
Windsor-Essex County Branch
Windsor, Ontario

RESPONDENT

Mr. Edward Link
Chief Building Official
City of Windsor

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

September 26th, 1996

APPEARANCES

Mr. Randi Glos
Architect
Randi Glos Architect
Windsor, Ontario
Agent Representing Applicant

RULING

1. **The Applicant**

   Ms. Gabrielle McMillan, Canadian Mental Health Association is the holder of a permit under the Building Code Act, 1992 to renovate a one storey office (i.e Group D) building at 1400 Windsor Drive, Windsor, Ontario.

2. **Description of Constrution**

   The subject building is a one storey fully sprinklered Group D occupancy with a building area of approximately 2453 m² (26,406 ft²). It is built with a combination of combustible and noncombustible construction.

   The sprinkler system is electrically supervised and the fire alarm system will transmit directly to the local fire department in the event of a fire.

   A wood roof deck ceiling return-air plenum which consists of 1346 m² (14,486 ft²) will be sprinklered on both above and below the suspended ceiling in accordance with NFPA 13 standard.

The Applicant proposes to install additional smoke detectors within the return-air plenum that will shut down the air handling system when activated.

3. **Dispute**

The dispute between the Applicant and the Respondent concerns sufficiency of compliance with the Building Code. At issue is whether the ceiling plenum consisting of combustible material (1 ?" wood roof deck), sprinkler system and the smoke detectors provide an equivalent level of performance to that intended by the Building Code.

4. **Provision of the Building Code**

Article 3.5.4.3. Plenum Requirements

1. The concealed space between the ceiling and floor or ceiling and roof used as a plenum need not conform to Sentence 3.1.5.14.(1) and Article 6.2.3.2. provided
    a. all materials within the ceiling space have a flame- spread rating of not more than 25 and a smoke developed classification of not more than 50, except for
        i. tubing for pneumatic controls,
        ii. optical fibre cables and electrical wires and cables that exhibit a flame-spread of not more than 1.5 m (4 ft 11 in), a smoke density of not more than 0.5 at peak optical density and a smoke density not more than 0.15 at average optical density when tested in conformance with the Flame and Smoke Test in the Appendix to CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables" (FT6 Rating),
        iii. optical fibre cables and electrical wires and cables that are located in totally enclosed noncombustible raceways (see A- 3.1.4.3.(1)(b)(i) in Appendix A) and
        iv. single conductor electrical wires and cables that exhibit a vertical char of not more than 1.5 m (4 ft 11 in) when tested in conformance with the Vertical Flame Test - Cables in Cabletrough in Clause 4.11.4. of CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables" (FT4 Rating), and
    b. the supports for the ceiling membrane are of noncombustible material having a melting point not below 760?C (1400?F).
2. When the concealed space referred to in Sentence (1) is used as a return-air plenum and incorporates a ceiling membrane that forms part of the required fire-resistance rating of

the assembly, every opening through the membrane shall be protected by a fire stop flap which shall

a. stop the flow of air into the concealed space in the event of a fire,
b. be supported in a manner that will maintain the integrity of the ceiling membrane for the duration of time required to provide the required fire-resistance rating, and
c. conform to CAN4-S112.2-M, "Standard Method of Fire Test of Ceiling Firestop Flap Assemblies".

3. Asbestos paper shall not be exposed in supply and return-air systems.

Sentence 3.1.5.14. Combustible Ducts

4. Except as permitted by Sentence 3.5.4.3.(1), combustible ducts, including plenums and duct connectors, are permitted to be used in a building required to be of noncombustible construction provided such ducts and duct connectors

a. are used only in horizontal runs, and
b. are Class 1 conforming to Article 6.2.3.2.

Article 6.2.3.2. Materials in Air Duct Systems

3. Except as provided in Sentences (2) to (4) and in Article 3.5.4.3., all ducts, duct connectors, associated fittings and plenums used in air duct systems shall be constructed of steel, aluminum alloy, copper, clay, asbestos-cement or similar noncombustible material.
4. Ducts, associated fittings and plenums may contain limited amounts of combustible material provided they

a. conform to the appropriate requirements for Class 1 duct materials in CAN/ULC-S110-M, "Standard Methods of Test for Air Ducts",
b. conform to Article 3.1.5.14. and Subsection 3.1.9.,
c. are not used in vertical runs serving more than 2 storeys, and
d. are not used in air duct systems in which the air temperature may exceed 120?C (248?F).

5. Duct sealants shall have a flame-spread rating of not more than 25 and a smoke developed classification of not more than 50.
6. Duct connectors that contain combustible materials and that are used between ducts and air outlet units shall

. conform to the appropriate requirements for Class 1 air duct materials in CAN/ULC-S110-M, "Standard Methods of Test for Air Ducts",

a. be limited to 4 m (13 ft 1 in) in length,

b. be used only in horizontal runs, and

c. not penetrate required fire separations.

7. Materials in Sentences (1) to (4) which when used in a location where they may be subjected to excessive moisture shall have no appreciable loss of strength when wet and shall be corrosion-resistant.

5. **Applicant's Position**

The Applicant submitted that the intent of Article 3.5.4.3. of the Building Code is to prevent the spread of fire and smoke throughout the building as a result of a fire in the ceiling plenum.

The Applicant submitted that the sprinkler system and smoke detectors provide an equivalent level of performance that meets the intent of the Building Code.

The Applicant submitted that in Sentence 3.1.13.6.(2) and Sentence 3.1.13.7.(2) of the Building Code where a building is sprinklered, the requirements for flame spread rating and smoke development classification is considered to be met.

The Applicant submitted that the installation of smoke detectors to shutdown the air handling systems would provide an additional level of safety.

6. **Chief Building Official's Position**

he Respondent submitted that the ceiling and the roof deck for the existing building at 1400 Windsor Avenue is being used as a return air plenum for a new HVAC system.

The Respondent submitted that Article 3.5.4.3. specifically states that a concealed space between the ceiling and the roof in a building used as a plenum need not conform to Sentence 3.1.5.14.(1) and Article 6.2.3.2. provided that all materials in the space have a flame spread rating of not more than 25 and a smoke development classification of not more than 50.

The Respondent submitted that there is exposed wood decking in the ceiling space at 1400 Windsor Avenue. This material exceeds both these limits. The Building Code does not allow for trade offs such as sprinklers and/or smoke detectors in ceiling spaces to permit these spaces to be used as plenums where there are materials in the space which exceed these limitations.

The Respondent submitted that Article 2.7.2.2. of the Building Code does not allow for equivalents to be used in lieu of a prescribed Part 3 building system.

The Respondent did not attend the hearing.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the wood roof deck exposed to the plenum space provides sufficiency of compliance with Articles 3.5.4.3. and 6.2.3.2. and Sentence 3.1.5.14.(1) of the Ontario Building Code provided the plenum is sprinklered and equipped with smoke detectors that would shut down the HVAC systems and activate the building's fire alarm system.

8. **Reasons:**
    1. The Building is classified as Group D occupancy and is less than 30,000 sq. ft in building area, faces onto two streets and is one storey in building height.
    2. The addition of sprinklers in the plenum space significantly reduces the risk of fire spread.
    3. The installation of smoke detectors that upon activation shut down the HVAC systems significantly reduce the possibility of smoke spread in the event of fire.

Dated at Toronto, this 26th day, in the month of Sebtember, in the year 1996, for application number 1996-43.

BCC Ruling No. 96-43-526

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-43-526

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 7.2.2.3.(3) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Don Duncan, CEO, YMCA - YWCA of Guelph, for the resolution of a dispute with Mr. Bruce Poole, Chief Building Official, City of Guelph, to determine whether not sloping the floor and locating the drain so that water from one head will flow over the area that serves another head in a group shower facility provides sufficiency of compliance with Sentence 7.2.2.3.(3) of the Building Code at the YMCA-YWCA of Guelph, 130 Woodland Glen Drive, Guelph, Ontario.

APPLICANT

Mr. Don Duncan, CEO YMCA-YWCA of Guelph
130 Woodland Glen Drive
Guelph, Ontario

RESPONDENT

Mr. Bruce Poole
Chief Building Official
City of Guelph

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

October 15th, 1996

APPEARANCES

Mr. David McAuley
Architect
J. David McAuley Architect Inc.
Guelph, Ontario
Agent Representing Applicant

Mr. John D. Peacock
Chief Plumbing Inspector
Corporation of City of Guelph
For the Respondent

RULING

1. **The Applicant**

   Mr. Don Duncan, CEO of YMCA-YWCA of Guelph, is the holder of a permit under the Building Code Act, 1992 to construct a YMCA-YWCA building at 130 Woodland Glen Drive, Guelph, Ontario.

2. **Description of Constrution**

   The building in question is a single storey, Group A, Division 2 assembly occupancy.

   At issue is whether the present arrangement of shower heads, combined with the sloping of the floor meets the requirements of Sentence 7.2.2.3.(3) of the Building Code.

3. **Dispute**

   The dispute between the Applicant and the Respondence concerns sufficiency of compliance with Article 7.2.2.3.(3) of the Building Code. At issue is the location of the drains and slope of the floor that would prohibit the water from one head from flowing over the area that serves another head in a group shower facility

4. **Provision of the Building Code**

   Sentence 7.2.2.3.(3) Showers

   3. Where two or more shower heads are served by a shower drain, the floor shall be sloped and the drain located so that water from one head cannot flow over the area that serves another head.

5. **Applicant's Position**

   The Applicant submitted that the height of the shower heads for the spray pattern makes it impossible to control flow from any head to a specific drain especially when bodies splash water randomly. The Applicant submitted that this would require full height partitioning & one floor drain per head. The intent of Sentence 7.2.2.3.(3) of the Building Code is with respect to safety & the ability to clean & disinfect surfaces.

6. **Chief Building Official's Position**

   The Respondent submitted that more than two shower heads are served by one shower drain and the floors are improperly sloped to prevent water from one head flowing over the area that serves another head.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that the shower heads do not comply with the provisions of Sentence 7.2.2.3.(3) of the Building Code in the following locations:

   Room 213 heads 2, 4, 8
   Room 217 heads 1 or 2 and 3 or 4

8. **Reasons:**

   Evidence presented indicates that the heads identified have spray patterns so that water from one head can flow over the area that serves another head in the group showers. Solutions may include elimination of shower heads, changing spray patterns or the installation of other devices or equipment to direct flow.

Dated at Toronto, this 15th day, in the month of October, in the year 1996, for application number 1996-46.

BCC Ruling No. 96-42-525

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-42-525

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 9.10.14.12.(3) and Article 9.10.14.5. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Robert Root, Owner, Peterborough, Ontario, for the resolution of a dispute with Mr. Jeff Chalmers, Chief Building Official, City of Peterborough, concerning whether the windows that result from the conversion of a second floor balcony to a sunroom addition provides sufficiency of compliance with Sentence 9.10.14.12.(3) and Article 9.10.14.5. of the Ontario Building Code at 426 Park Street North, Peterborough, Ontario.

APPLICANT

Mr. Robert Root
Owner
426 Park Street North
Peterborough, Ontario

RESPONDENT

Mr. Jeff Chalmers
Chief Building Official
City of Peterborough

PANEL

Mr. Roy Philippe, Chair
Mr. Demir Delen
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

October 31st, 1996

APPEARANCES

Mr. Robert Root
Peterborough, Ontario
The Applicant

Ken Guthrie, Building Inspector
City of Peterborough
Agent for the Respondent

RULING

1. **The Applicant**

   Mr. Robert Root, Owner, is a holder of a permit under the Building Code Act, 1992 to construct a sunroom addition to a single family dwelling (i.e. house) at 426 Park Street North, Peterborough, Ontario.

2. **Description of Constrution**

   The subject building is a 2 storey home, and the proposed construction is the addition of a sunroom enclosure on the top of an existing second storey balcony.

   The windows in the subject exposing building face are approximately 18 ft² in area.

3. **Dispute**

   The dispute between the Applicant and the Respondent concerns sufficiency of compliance with the technical requirements of Sentence 9.10.14.12.(3) and Article 9.10.14.5. of the Building Code. At issue is whether the windows in the proposed conversion of a second floor balcony to a sunroom addition may be permitted at a limiting distance of 0.96m from the property line, as opposed to the required 1.2 m.

4. **Provision of the Building Code**

Sentence 9.10.14.12.(3) Exposing Building Face of Houses

"Glazed areas in the exposing building face referred to in sentence (1) shall not be permitted if the limiting distance is less than 1.2 m (3 ft 11 in) and shall be limited in conformance with the requirements for glazed areas in Table 9.10.14.A. where the limiting distance is 1.2 m (3 ft 11 in) or greater."

Article 9.10.14.5. Openings in Walls Having a Limiting Distance Less than 1.2 m

"Openings in a wall having a limiting distance of less than 1.2 m (3 ft 11 in) shall be protected by closures, of other than wired glass or glass block, whose fire protection rating is in conformance with fire-resistance rating required for the wall. (See Table 9.10.13.A.)"

5. **Applicant's Position**

The Applicant submitted that the intent of Sentence 9.10.14.12.(3) & Article 9.10.14.5. of the Building Code can be accommodated because: there is a driveway and lawn between the adjacent buildings; the nature of the building and lot makes it unlikely that additions will occur on the adjacent property; and the proposed limiting distance is very close to the required 1.2 m.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed construction does not comply with Article 9.10.14.1 and Table 9.10.14.A. which do not permit unprotected openings and that the openings would be permitted if they were protected with closures in accordance with the Building Code.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the window opening of approximately 18 sq.ft. provides sufficiency of compliance with the requirements of Sentence 9.10.14.12.(3) of the Building Code on the provision that the existing windows in the basement area in the exposed building face are closed by material having a 3/4 hour fire resistance rating.

8. **Reasons:**

The Building Code allows transfer of existing areas of unprotected openings on the same exposing building face to be closed and transferred as permitted in Part 11 of the Building Code.

Dated at Toronto, this 31st day, in the month of October, in the year 1996, for application number 1996-49.

BCC Ruling No. 96-41-524

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-41-524

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Subsection 3.2.3., in particular Articles 3.2.3.1., 3.2.3.5., 3.2.3.6., 3.2.3.7., and 3.2.3.8. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Harvey Forde, President, Wesley-Robins Retirement Village Inc., Welland, Ontario, for the resolution of a dispute with Mr. Mike Mantesso, Chief Building Official, City of Welland, concerning whether the spatial separation and the percentage of window openings in the west face of Block A at Wesley-Robins Retirement Village provides sufficiency of compliance with Articles 3.2.3.1., 3.2.3.5., 3.2.3.6., 3.2.3.7., and 3.2.3.8. of the Ontario Building Code at 242 First Avenue North, Welland, Ontario.

APPLICANT

Mr. Harvey Forde, President
Wesley-Robins Retirement Village Inc.
Welland, Ontario

RESPONDENT

Mr. Mike Mantesso
Chief Building Official
City of Welland

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

September 26th, 1996

APPEARANCES

Mr. Kenneth J. Issac, Architect
Victor J. Heinrichs
Mr. Robert H. Reilly, Solicitor
For the Applicant

Mr. Mike Mantesso
Chief Building Official
City of Welland
The Respondent

RULING

1. **The Applicant**

   Mr. Harvey Forde, Wesley-Robins Retirement Village Inc. is an Applicant for a permit under the Building Code Act, 1992 to construct a three storey building (i.e. Block A) that forms part of a retirement village at 242 First Avenue North, Welland, Ontario.

2. **Description of Constrution**

   The Applicant is proposing to construct a three storey residential building that forms part of a retirement village adjacent to an existing Church. A severance is proposed that will create a new property line between the Church and the residential building. As a result of the proximity of the new property line the windows on the west wall of the new residence are restricted to the amounts permitted in Table 3.2.3.A. of the Building Code.

   The Church does not have any unprotected openings in its adjacent wall and the proposed residential building is to be sprinklered.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with Articles 3.2.3.1., 3.2.3.5., 3.2.3.6., 3.2.3.7., and 3.2.3.8. of the Building Code. At issue is the spatial separation and percentage of window openings in the west Exposing Building Face of Block A at the Wesley-Robins Retirement Village.

4. **Provision of the Building Code**

Article 3.2.3.1. Limited Distance and Area of Unprotected Openings

1. Except as provided in Articles 3.2.3.9. to 3.2.3.11, the area of unprotected openings shall not be more than that set forth in Tables 3.2.3.A. or 3.2.3.B. for the limiting distance applicable to the exposing building face under consideration. (See A-3, Fire Fighting Assumptions in Appendix A.)
2. The area of the unprotected openings in an exposing building face shall be the aggregate area of unprotected openings expressed as a percentage of the area of the exposing building face in Tables 3.2.3.A. and 3.2.3.B. (See Sentence 3.2.3.2.(1).)
3. For the purposes of determining the type of construction and cladding and the fire-resistance rating of an exterior wall, the exposing building face shall be taken as the projection of the exterior wall onto a vertical plane located so that no portion of the exterior wall of the building or of a fire compartment, if the fire compartment complies with the requirements of Sentence 3.2.3.2.(1), is between the vertical plane and the line to which the limiting distance is measured and, for these purposes, the area of unprotected openings shall be determined from Table 3.2.3.A. or Table 3.2.3.B.
4. For the purposes of determining the actual percentage of unprotected openings permitted in an exterior wall, the location of the exposing building face is permitted to be taken at a vertical plane located so that there are no unprotected openings between the vertical plane and the line to which the limiting distance is measured. (See Appendix A.)
5. Where fire fighting facilities cannot reach the building within 10 min of the alarm being received, the limiting distance shall be doubled.

Article 3.2.3.5. Wall with Limiting Distance Less Than 1.2 m

Openings in every wall that has a limiting distance of less than 1.2 m (3 ft 11 in) shall be protected by closures, of other than wired glass or glass block, whose fire-protection rating is in accordance with Table 3.1.8.A. for the fire-resistance rating required for the wall.

Article 3.2.3.6. Combustible Projection Restrictions

Except for buildings containing 1 or 2 dwelling units only, combustible projections on the exterior of a wall that are more than 1 m (3 ft 3 in) above ground level, such as balconies, platforms, canopies, eave projections and stairs, and that could expose an adjacent building to fire spread, shall not be permitted within 1.2 m (3 ft 11 in) of a property line or the centre line of a public way, or within 2.4. m (7 ft 10 in) of a combustible projection on another building on the same property.

Article 3.2.3.7. Construction of Exposing Building Face

6. Except as permitted in Articles 3.2.3.9. and 3.2.3.10., where a limiting distance shown in Table 3.2.3.A. for a Group A, B, C, D or Group F, Division 3 occupancy classification is such as to permit an exposing building face to have unprotected openings of
    a. not more than 10 percent of the exposing building face, the exposing building face shall be of noncombustible construction having a fire-resistance rating of not less than 1 h and be clad with noncombustible cladding,
    b. more than 10 percent but not more than 25 percent of the exposing building face, the exposing building face shall have a fire-resistance rating of not less than 1 h and be clad with noncombustible cladding, and
    c. more than 25 percent but less than 100 percent of the exposing building face, the exposing building face shall have a fire-resistance rating of not less than 45 min.
7. Except as permitted in Article 3.2.3.9., where a limiting distance shown in Table 3.2.3.B. for a Group E, or Group F, Division 1 or 2 occupancy classification is such as to permit an exposing building face to have unprotected openings of
    a. not more than 10 percent of the exposing building face, the exposing building face shall be of noncombustible construction having a fire-resistance rating of not less than 2 h and be clad with noncombustible cladding,
    b. more than 10 percent but not more than 25 percent of the exposing building face, the exposing building face shall have a fire-resistance rating of not less than 2 h, and be clad with noncombustible cladding, and
    c. more than 25 percent but less than 100 percent of the exposing building face, the exposing building face shall have a fire-resistance rating of not less than 1 h.
8. In addition to the requirements of Sentences (1) and (2), where foamed plastic insulation is used in an exterior wall of a building more than 3 storeys in building height
    a. the insulation shall be protected on the exterior surface by
        i. concrete or masonry not less than 25 mm (1 in) thick, or

ii. noncombustible material that will remain in place for not less than 15 min when tested in conformance with CAN4-S101-M, "Standard Methods of Fire Endurance Tests of Building Construction and Materials", or

iii. the wall assembly shall conform to Article 3.1.5.5. where the protection in Clause (a) is not provided. (See Appendix A.)

Article 3.2.3.8. Protection of Structural Members

2. Structural members, such as beams, columns and arches placed wholly or partly outside an exterior face of a building and 3 m (9 ft 10 in) or more from the property line or centre line of a public thoroughfare need not be protected from exterior fires.
3. Structural members in Sentence (1) that are less than 3 m (9 ft 10 in) from the property line or centre line of a public thoroughfare shall be protected from exterior fire by fire protection having a fire-resistance rating not less than that required for their protection from inside fires in conformance with Articles 3.2.2.16. to 3.2.2.62., or by fire protection having a fire-resistance rating of not less than 1 h, whichever is the greater.
4. Structural members of heavy timber construction such as beams, columns and arches placed wholly or partly outside an exterior face of a building and 3 m (9 ft 10 in) or more from the property line or centre line of a public thoroughfare need not be covered with noncombustible cladding.

5. **Applicant's Position**

The Applicant submitted the following information and rationale concerning the acceptance of the spatial separation and percentage of window openings in the west face of Block A:

The Wesley United Church is on a parcel of land that is considerably larger in area than the church requires. Almost all of the land was given to the Church by Clarence and Clarice Robins.

Mr. Robins died some years ago and Mrs. Clarice Robins died in 1992 after making a will leaving the bulk of her substantial estate to the Church on condition that a senior citizen residence be built upon the Church lands.

The Church proceeded to incorporate a non-share capital charitable corporation, (Westley-Robins Retirement Village Inc.) to build and operate the retirement community. The members of

the corporation are the members of the Church plus such other persons (such as the executor of Clarice Robins' estate) as are admitted to membership in the corporation.

The Church and the corporation decided to sever the property of the retirement complex from the Church property so that any mortgage financing could be done by the corporation on its own property without involving the Church. The consent to sever has been granted but the deed has not yet been registered.

The registration of the deed will result in a new boundary line being created between the Church property and the retirement complex. It is this new boundary line that creates a problem for the retirement complex in that it greatly restricts the area of unprotected openings (windows) in the west wall of Building A. If the boundary between the two properties did not exist, the limitation on the area of unprotected openings would not apply to those parts of the west wall of Building A which do not directly face the Church building.

Unprotected openings near boundaries are limited presumably because with separate and distinct ownerships on each side of the boundary, neither owner could control the use on the opposite side of the boundary.

In this case, however the members of one body are the members of the other and each draw their officers, directors, elders and trustees from the same pool of members. Also, neither body can dispose of its property without the consent of the United Church of Canada.

The zoning for each property is site-specific and will be the subject of a single site plan agreement covering both properties so that neither the use of the properties not any change in, or addition to any building or additional buildings can be made or erected without an amendment to the site plan agreement and/or zoning by-law which requires the approval of the City of Welland.

The creation of the new boundary will not increase the danger from fire in the future on the south side of the Church since the land there (parts 6, 15 and 4 on Plan 59R9550) are subject to a permanent easement for vehicular and pedestrian traffic and because of this nothing can be built upon it. Each of the property owners also has an easement for parking in areas designated for that on the other's property.

There is little danger of fire crossing from the Church to Building A and vice versa because the Church building will have no unprotected openings in its easternmost wall. Building A is to be sprinklered.

There should be no increase in fire danger in the future for that part of the property north of the church building because as pointed out above, it cannot be built upon without an amendment to the site plan agreement or zoning by-law or both and those amendments would require the approval of the City of Welland. The City would take such things as spatial separation into consideration on deciding whether to grant such approval.

The Chief Building Official expressed some reservations over the City's ability to control future separation problems even though its approval would be required to any site plan or zoning by-law amendment. To solve this the municipality has suggested that the site plan agreement contain the following two paragraphs and our clients are agreeable to their inclusion:

i. "The owners agree to construct the exterior wall on the west face of Block A in accordance with the spatial separation requirements of the Ontario Building Code or the Ontario Building Code Commission".
ii. "The owners also agree not to construct any future buildings or building additions facing the west face of Block A unless the spatial separation requirements are met for both buildings as if they were constructed on the same property.

The chance of either of the two properties being used for something other than their present and intended uses is so remote as to be virtually non-existent. Even if the corporation ceases to exist, it is written into its Letters Patent of Incorporation as amended that, after payment of debts, all its property and assets are to become vested in the United Church of Canada or a charitable organization for the purpose of operating a seniors residence in Welland.

For these reasons the Applicant respectfully requested that the Commission grant relief from the limitations of Subsection 3.2.3. of the Building Code.

6. **Chief Building Official's Position**

The Respondent submitted that the west exposing building face of Block A is approximately 2.5 m or less to a property line (depending on which fire compartment is considered). The west exposing building face contains a significant amount of glazing that is not permitted by the Building Code.

The Respondent stated that he supported the proposal due to the following reasons:

. The subject building is fully sprinklered.

i. The east face of the existing Church is constructed of solid masonry.
ii. The chances of another building being constructed on the property is remote.
iii. The applicant has agreed to register the aforementioned clauses on the title of the property.

The Respondent does not have the authority to accept a deviation from the Building Code and the proposal does not fall within the scope of Section 2.7 of the Building Code.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the spatial separation of the residential building provides sufficiency of compliance with Articles 3.2.3.1., 3.2.3.5., 3.2.3.6, 3.2.3.7., and 3.2.3.8. of the Building Code, provided that the control of construction on the adjacent lands and where an exposure hazard exists is through limitations included in the site plan agreement and registered on title of both properties.

8. **Reasons:**

. The residential building is sprinklered throughout.
i. Evidence was presented that the exposed building facing of the Church on the adjacent property is constructed as a 2 hour fire wall.
ii. If the two properties were considered as one, and no severance had taken place the exposure hazards would not exist.
iii. It is the opinion of the Building Code Commission that the siting of the building does not present a fire exposure hazard.

Dated at Toronto, this 26th day, in the month of September, in the year 1996, for application number 1996-47.

BCC Ruling No. 96-40-523

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-40-523

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.2.3.14.(1) & (2) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. John Hunt, Project Director, 741501 Ontario Limited, Toronto, for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, concerning whether the bevelled side of a bay window is a wall or exposing building face of a fire compartment and if the portion of the exterior wall between such windows in each suite requires a fire resistance rating at least equal to the rating required for the interior demising wall, as described in Sentences 3.2.3.14.(1) & (2) of the Ontario Building Code at the Emerald Gate Townhomes, 151 Towngate Drive, Thornhill, Ontario

APPLICANT

Mr. John Hunt
Project Director
741501 Ontario Limited
Toronto, Ontario

RESPONDENT

Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Michael Lio

PLACE

Toronto, Ontario

DATE OF RULING

September 11th, 1996

APPEARANCES

Mr. Allan Larden
Architect
Larden Muniak Consulting Inc.
Toronto, Ontario
Agent Representing Applicant

Mr. Mani Navabi, Chief Building Official
AND
Mr. Steve Penna, Plan Review Supervisor
City of Vaughan
The Respondent

RULING

1. **The Applicant**

   The Applicant is a holder of a permit under the Building Code Act, 1992 to construct seven townhouse buildings known as the Emerald Gate Townhomes at 151 Towngate Drive, Thornhill, Ontario,

2. **Description of Constrution**

   The project consists of 7 separate buildings of which 6 are linked by a single level underground garage. Two of the buildings have a 45 degree angled exterior wall and bay type window assembly on either side of a 2 hour fire separation. One building has this exterior configuration occurring in two locations and the other has it occurring in three locations. A total of ten dwelling units are affected.

The municipality is requiring the exterior wall of each compartment within the calculated distance "Do" to have the same fire resistance rating as the 2 hour fire separation between dwelling units.

3. **Dispute**

The dispute between the Applicant and the Respondent concerns sufficiency of compliance with the technical requirements of Sentences 3.2.3.14.(1) & (2) of the Building Code. At issue is whether the bevelled side of a bay window is a wall or exposing building face of a fire compartment and if the portion of the exterior wall between such windows in each suite requires a fire resistance rating at least equal to the rating required for the interior demising wall.

4. **Provision of the Building Code**

Sentences 3.2.3.14.(1) & (2) Wall Exposed to Another Wall

1. Except as provided in Sentences 3.2.3.13.(1) and 3.2.3.20.(4), where an opening in an exterior wall of a fire compartment is exposed to an opening in the exterior wall of another fire compartment, and the planes of the 2 walls are parallel or at an angle of less than 135?, measured from the exterior of the building, the openings in the 2 fire compartments shall be separated by a distance at least equal to D? where

2. D? = 2D - (?/90 x D), but in no case less than
3. 1 m (3 ft 3 in)

where

D = the greater required limiting distance for the exposing building faces of the 2 fire compartments, and

? = the angle made by the intersecting planes of the exposing building faces of the 2 fire compartments, (in the case where the exterior walls are parallel and face each other, ? = 0?).

4. The exterior wall of each fire compartment in Sentence (1) within the distance, D?, shall have a fire-resistance rating not less than that required for the interior vertical fire separation between the compartment and the remainder of the building.

5. **Applicant's Position**

The Applicant submitted the following rationale as to why the bay windows of adjacent suites (not separated by a firewall) may be found acceptable under the Building Code:

The requirements of the Article 3.2.4.14. of the Building Code originally applied only to the exterior walls of fire compartments that met at a firewall. The requirement was extended to walls of separate fire compartments (not necessarily separated by a firewall) in the 1983 Building Code (based on changes made in the 1980 National Building Code).

Depending on the design specifics and variable code interpretation, this change has at times proved problematical for design of multi- unit residential buildings and inquiries have been made through a committee of the Ontario Association of Architects to the Canadian Code Centre (CCC). The CCC has indicated that there is no record of why the requirement was extended to walls of adjacent fire compartments meeting at a fire separation; it is presumed that the rationale implicit in the requirement for firewalls was extended to these other situations.

For the case at hand, the exterior walls of the two dwelling units are in the same plane. The bay windows (which extend as projections of the floor from floor to ceiling) are, in effect, "bumps" in the exterior exposing building face of the two dwelling units. These "bumps" do not extend from the full height of the dwelling unit; they project from the walls of the second and third floors of the dwelling units but not from the first storey or the attic gable. The Applicant regards these "bumps" as minor articulations in the exterior of each dwelling unit.

The Applicant submitted that the building could be designed with the completed glazed exterior walls of adjacent fire compartments meeting at an angle of 135 degrees. The glazed openings of one fire compartment could be no more than 3 or 4 inches from the glazed opening of the adjacent fire compartment and there would be no restriction on the proximity of the glazing or the amount of glazing. A fire plume emanating from one compartment in the vicinity of the exterior angle between walls would be immediately in front of windows of the adjacent compartment.

The Applicant submitted that the design of the Emerald Gate Townhomes separates the glazing of adjacent units (measured at the point where there is mutual exposure) at least 5 feet. The total projected width of the mutual exposure (glazing to glazing, measured at right angles to the brick face of the building between the window units) is some 13 inches. This is a less hazardous situation than is permitted by the lack of any restriction in the code of the vertical separation of windows, storey to storey, where a fire plume emanating from a window opening in the lower storey may be directly exposed to the upper storey window.

The Applicant submitted that on the basis of the 135 degree angle between the plane of the face brick and each of the bevelled sides of the bay windows, there should be no impact on the rating of the wall behind the face brick between the bay windows.

The Applicant further submitted that if the bevelled sides of the Emerald Gate Townhome bay windows which oppose one another across the end of the demising wall were to be window openings governed by Sentence 9.10.12.4.(1) of the Building Code; the as-built situation would be straight forwardly acceptable.

The scale of the building, the relationship of windows and storeys to grade and the general configuration of the dwelling units of the Emerald Gate Townhome project are entirely consistent with buildings one may evaluate under Part 9 of the Code.

The Applicant submitted that information provided by the City of Vaughan Fire Department demonstrated that in the event of a fire the time for smoke detector activation will be some 92 seconds and that, at most, a 1.5 minute evacuation time would be required for a dwelling unit. Flashover, according to the model used by the Fire Department would occur some 667 seconds (11 minutes) after the start of a fire, which is well beyond the time required for smoke alarm activation and evacuation of the dwelling unit. The Fire Department response time of 4 minutes plus evacuation time would still be expected to be well within the time limit for flash over in a dwelling unit. Occupants of both the unit containing the fire and adjacent units would, therefore, be expected to be evacuated before flashover occurred.

The Applicant submitted that it is most unlikely that there will be any hazard of fire exposure from one bay window to an adjacent bay window prior to flashover.

The Applicant submitted that with automatic detection of fire in a suite, and a 4 minute response time be the Fire Department, it is expected that fire suppression activities could begin in a time frame which would prevent any involvement of a neighbouring dwelling unit due to fire exposure from the bevelled edge of the bay window in an adjacent compartment containing fire.

The Applicant submitted that on this basis, the bay window certainly does not represent a fire hazard to life safety or a significant hazard in respect of potential for property damage of a neighbouring unit.

6. **Chief Building Official's Position**

The Respondent submitted that Sentences 3.2.3.14.(1) and (2) of the Building Code requires that the exterior wall of each fire compartment within the calculated distance "Do" have the same fire resistance rating as the 2 hour fire separation between the dwelling units.

The Respondent submitted that the two townhouse buildings in question are classified under Article 3.2.2.34. of the Building Code. The floor assemblies are required to be constructed as fire separations with a fire resistance rating of 45 minutes. Sentence 3.3.4.2.(2) of the Building Code waives this requirement if the distance between the lowest floor and the uppermost floor is not greater than 6 m (19ft 8 in). This height is exceeded in six of the buildings in this development.

The Respondent submitted that he agreed to waive the required 45 minute fire resistance rating of the floors within each dwelling unit, if the units were separated from one another by a concrete block fire separation with a 2 hour fire resistance rating.

The Respondent submitted that an inspection on August 26, 1996 confirmed that the angle of the windows and wall is actually 45 degrees and the distance between the openings is 1.23 m (4 ft 1/2 in).

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the bevelled sides of the bay windows in separate fire compartments provide sufficiency of compliance with Sentence 3.2.3.14.(1) of the Building Code provided exterior walls between such windows have a one hour fire resistance rating.

8. **Reasons:**

i. For similar buildings under Part 9 of the Building Code, Article 9.10.12.4 permits window openings in walls that meet at an external angle of less than 135 degrees where the horizontal distance from one opening in one wall to another opening in another wall exceeds 1.2 m (3' 11").

ii. The dwelling units are separated from each other at common walls by masonry partitions having a 2 hour fire resistance rating.

iii. The bay window configuration applies to a limited number of dwelling units within the complex.

d) The local fire department analysis indicates that the times for detection, evacuation, and fire department response are well below time for flashover to occur.

e) No evidence was provided by either party of significant incidence of fire spread with this window configuration.

Dated at Toronto, this 11th day, in the month of September, in the year 1996, for application number 1996-44.

BCC Ruling No. 96-39-522

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-39-522

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 9.8.3.1.(1) and Article 9.8.5.2. of "the Building Code" (Ontario Regulation 419/89 as amended by Ont. Reg. 183/88, 581/88, 11/89 and 115/89)

AND IN THE MATTER OF an application by Mr. Dominic D'Eri for the resolution of a dispute with Ms. Pamela Coburn, Chief Building Official, City of Toronto concerning whether the width of the interior stairway provides sufficiency of compliance with Sentence 9.8.3.3.(2). of the Ontario Building Code at 49 Poulette Street, Toronto, Ontario.

APPLICANT
Mr. Dominic D'Eri
Owner
Toronto, Ontario

RESPONDENT
Ms. Pamela Coburn
Chief Building Official
City of Toronto

PANEL
Mr. Roy Philippe (Chair)
Mr. Rick Florio
Mr. Lawrence Glazer

PLACE
Toronto, Ontario

DATE OF RULING
Tuesday, March 11th, 1997

APPEARANCES

Mr. Dominic D'Eri
Owner
The Applicant

Mr. Theodore Arvanntis
Dicris General Contractors
Agent for Applicant

RULING

1. **The Applicant**

   Mr. Dominic D'Eri, Owner, is a person to whom an order to comply has been issued under the *Building Code Act, 1992* to construct a single unit residential building at 49 Poulette Street, Toronto, Ontario.

2. **Description of Construction**

   The subject building is a 3 storey single unit residential house of combustible construction and a building area of 195 square metres (2,094 sq ft). A single exit stair extending from the basement to the third floor is provided at the south-west corner of the building.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Sentence 9.8.3.3.(2) of the Building Code. At issue is the proposed use of a stair which varies in width from 760 mm to 785 mm, as opposed to the stair shown on the approved set of drawings which has a code complying width of 836.6 mm (2 ft 10 in).

4. **Provisions of the Building Code**

   9.8.3.3.(2) Stair Width

   (2) At least 1 stairway between each floor level in a dwelling unit shall have a minimum width between wall faces of not less than 860 mm (2 ft 10 in)."

5. **Applicant's Position**

The applicant stated that the building was redesigned to provide for a thicker exterior wall but that the outside dimensions were not adjusted resulting in the interior stair being 51 to 102 mm (2 to 3 in) narrower. The Applicant further submitted that the stairs are within a single family dwelling and have worked sufficiently for a period of time.

6. **Chief Building Official's Position**

The Respondent submitted that the interior stair leading from the basement to the third floor varies in width from 760 mm to 785 mm and varies from Sentence 9.8.3.3.(2) and the approved permit plans. The Respondent further submitted that because the construction was for a new building the stairs could have and should have provided the minimum required width of 860 mm.

7. **Commission Ruling**

It is the decision of the Building Code Commission that the width of the interior stair ranging from 760 mm to 785 mm does not provide sufficiency of compliance with Sentence 9.8.3.3.(2) of the Building Code.

8. **Reasons:**

The Applicant did not provide persuasive evidence in support of sufficiency of compliance with the Building Code.

Dated at Toronto this **11th** day in the month of **March** in the year **1997** for application number **1996-42.**

BCC Ruling No. 96-38-521

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-38-521

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 6.2.4.6. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Charles Byrne, President, Charles Byrne Construction, Utterson, Ontario, for the resolution of a dispute with Mr. Gerald J. Keyes, Chief Building Official, Town of Huntsville, concerning whether the warm air supply system which is installed above the ceiling instead of in the concrete slab-on-ground provides sufficiency of compliance with Article 6.2.4.6. of the Ontario Building Code at Lot 22, Crestview Drive, Huntsville, Ontario.

APPLICANT
Mr. Charles Byrne
President
Charles Byrne Construction
Utterson, Ontario

RESPONDENT
Mr. Gerald J. Keyes
Chief Building Official
Town of Huntsville

PANEL
Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Michael Steele

PLACE
Toronto, Ontario

DATE OF RULING

September 26th, 1996

APPEARANCES

Mr. Charles Byrne
President
Charles Byrne Construction
Utterson, Ontario
The Applicant

Mr. Gerald J. Keyes
Chief Building Official
Town of Huntsville
The Respondent

RULING

1. **The Applicant**

   Mr. Charles Byrne, Charles Byrne Construction, is the holder of a permit under the *Building Code Act, 1992* to construct a one storey single family dwelling (i.e. house) on Lot 22, Crestview Drive, Huntsville, Ontario.

2. **Description of Construction**

   The subject building is a one storey house with a slab-on-ground foundation. The warm-air supply outlets of the forced air heating system are installed with the main ducts located under the ceiling and the insulated branch lines in the attic space.

3. **Dispute**

   The dispute between the Applicant and the Respondent concerns sufficiency of compliance with Article 6.2.4.6. of the Building Code. At issue is whether the warm air supply system may be installed above the ceiling instead of in the concrete slab-on-ground.

4. **Provisions of the Building Code**

   Article 6.2.4.6. Concrete Slabs-on-Grade

   Warm-air supply systems for residential buildings built on concrete slabs-on-ground shall be installed in the slab and shall be of the perimeter loop type or radial perimeter type.

5. **Applicant's Position**

The Applicant submitted that the heating system for the house is a forced air gas system that blows heat from the ceiling level rather than the floor level. The supply vents are located over the windows.

The Applicant submitted that due to ground conditions at the site during construction it was not possible to install ducting in the slab-on-ground. Therefore, numerous insulating procedures were employed to super insulate the house.

The Applicant submitted that the home is insulated under the concrete slab and along the sides of the slab 1.22 m (4 ft) out from the perimeter of the building. The walls contain R21 insulation and the ceiling has an R60 blown cellulose blanket.

The Applicant stated that the heating system is designed for the minimum thermal insulation valves identified in the Building Code.

6. **Chief Building Official's Position**

The Respondent submitted that although the current installation does not conform to Article 6.2.4.6. of the Building Code it is his opinion that the installation meets the intent of the Building Code.

The Respondent states that the increased level of insulation in the attic and under the slab compensates for supply air vents being installed in the ceiling.

7. **Commission Ruling**

It is the decision of the Building Code Commission that providing warm air supply at the ceiling instead of at the concrete slab-on-ground demonstrates sufficiency of compliance with Article 6.2.4.6. of the Building Code provided supplementary baseboard heating is installed beneath windows in each bedroom and bathroom with a total capacity not to exceed 10% of the total heat loss of the building.

8. **Reasons:**

i) Insulation levels in the attic and floor slab significantly exceed those required by the Building Code.

ii) An open concept (living, dining, kitchen) plan has been used.

iii) Evidence was presented that the furnace capacity is well in excess of the building's heat loss.

iv) Supply registers have been provided over windows.

Dated at Toronto this **26th** day in the month of **September** in the year **1996** for application number **1996-41**.

BCC Ruling No. 96-37-520

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-37-520

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.8.2.(6) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. W.E. (Ted) Wilson, Project Architect, Totten Sims Hubicki Associates, Cobourg for the resolution of a dispute with Mr. Jeff Chalmers, Chief Building Official, City of Peterborough, concerning whether not sprinklering the interconnected floor space designated as student lounge due to the precedent of non-sprinklered interconnected floor space in the existing building provides sufficiency of compliance with Sentence 3.2.8.2.(6) of the Building Code at the Sir Sandford Fleming College, 599 Brealey Drive, Peterborough, Ontario.

APPLICANT

Mr. W.E. (Ted) Wilson
Project Architect
Totten Sims Hubicki Associates
Cobourg, Ontario

RESPONDENT

Mr. Jeff Chalmers
Chief Building Official
The City of Peterborough
Peterborough, Ontario

PANEL

Mr. Roy Philippe, Chair
Mr. Rick Florio
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

August 1st, 1996

APPEARANCES

Mr. W.E. (Ted) Wilson, Project Architect
Totten Sims Hubicki Associates
Cobourg, Ontario
AND
Mr. Frank Dalley, Physical Resources Officer
Sir Sandford Fleming College
The Applicants

Mr. Jeff Chalmers
Chief Building Official
AND
Mr. Robert J. (Bob) Waldron
Building Inspector/Plans Examiner
The City of Peterborough
The Respondents

RULING

1. **The Applicant**

   Mr. W.E. (Ted) Wilson, Project Architect, Totten Sims Hubicki Associates, Cobourg, is an applicant for a permit under the Building Code Act, 1992 to convert a former indoor swimming pool to a student lounge at the Sir Sandford Fleming College, 599 Brealey Drive, Peterborough, Ontario.

2. **Description of Constrution**

   The subject of the dispute is the new student centre at Sir Sandford Fleming College. The building is classified as an Assembly Occupancy, Division 2 (i.e. A-2). The college is 3 storeys in building height and includes a basement. The building area is 9982 m^2 (107,445 ft^2). The

building is of noncombustible construction, and contains a fire alarm system and a standpipe and hose system. The building is not protected by a automatic sprinkler system.

The area being renovated was formerly a indoor swimming pool which is proposed to be a student lounge. The bottom of the pool is being lowered to the level of the basement, creating a 2 storey lounge comprising the basement and lounge level. The two levels of the lounge are proposed to be connected by open stairs with no fire separation between the upper and lower floor areas. However, a 1 hour fire separation is proposed between the interconnected floor space and the remainder of the building.

3. **Dispute**

The dispute between the Applicant and Respondent concerns the sufficiency of compliance with the technical requirements of Sentence 3.2.8.2.(6) of the Building Code. At issue is whether the interconnected floor space designated as student lounge need be protected by an automatic sprinkler system.

4. **Provision of the Building Code**

Sentence 3.2.8.2.(6) Exceptions to Special Protection

6. An interconnected floor space need not conform to the requirements of Articles 3.2.8.3. to 3.2.8.11. provided
    a. the interconnected floor space consists of the first storey, and the storey next above or below it, but not both,
    b. the interconnected floor space is sprinklered, and
    c. the interconnected floor space contains only Group A, Division 1 or 2, Group D, Group E, or Group F, Division 3 major occupancies.

5. **Applicant's Position**

The Applicant submitted that the interconnected floor space designated as Student Lounge should be considered as not requiring sprinklering based on the precedent of non-sprinklered interconnected floor space in the existing building.

6. **Chief Building Official's Position**

The Respondent submitted that the Applicant is proposing an unsprinklered interconnected floor space consisting of the basement and the storey above, and proposes to separate the

interconnected floor space from the remainder of the building by a 1 hour fire separation in lieu of sprinklers.

The Respondent submitted that the interconnected floor space must be sprinklered, for the following reasons:

vi. Sentence 3.2.8.2.(6) of the Building Code requires a interconnected floor space to be sprinklered,
vii. the proposed 1 hour fire separation between the lounge and the remainder of the building does not provide relief from having to sprinkler the interconnected floor space. It provides relief from having to sprinkler the entire storey; and,
viii. although both levels of the lounge are served by adequate exits, they cannot be viewed as providing relief from the requirements for the interconnected floor spaces.

The Respondent submitted that the existing building contains what appears to be an unsprinklered interconnected floor space, consisting of the cafeteria and the floor next above it. The cafeteria is separated from the remainder of the storey by a fire separation. The Respondent further submitted that at the time this may have been viewed as one storey and one fire compartment on different levels, which would be consistent with the buildings split level design.

2. **Commission Ruling:**

It is the decision of the Building Code Commission that not sprinklering the interconnected floor space designated as a student lounge does not provide sufficiency of compliance with Sentence 3.2.8.2.(6) of the Building Code.

3. **Reasons:**

vi. No proposed alternatives other than a 1 hour vertical fire separation were provided to allow the Commission to consider sufficiency of compliance.
vii. The construction does create an interconnected floor space and the provisions of Sentence 3.2.8.2.(6) of the Building Code apply.

Dated at Toronto, this 1st day, in the month of August, in the year 1996, for application number 1996-40.

BCC Ruling No. 96-36-519

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-36-519

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.4.2.1.(1), 3.4.4.1.(1), 3.4.4.2.(2) & 3.5.3.1.(1) and Clause 3.4.4.2.(2)(b) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Gary McCluskie, Architect, A.J. Diamond, Donald Schmitt and Company, Architects, Toronto for the resolution of a dispute with Mr. Palle D. Hansen, Chief Building Official, The Corporation of the City of York, concerning three issues: i) Interpretation of the technical requirements of Sentences 3.4.2.1.(1), 3.4.4.1.(1), and 3.4.4.2.(2). At issue is the proposed use of Stair No. 1 as an exit through a lobby, to provide one of the required exits to serve the basement and second floor, in addition to the ground floor. ii) Sufficiency of compliance with the technical requirements of Clause 3.4.4.2.(2)(b). At issue is the maximum path of travel of 16.45 m from the entry into the lobby at the second floor level to the exterior exit door at ground level. iii) Sufficiency of compliance with the technical requirements of Sentence 3.5.3.1.(1) and Table 3.5.3.A. At issue is the use of unlabelled elevator doors on the ground floor and second floor entrances into the elevator car.

APPLICANT

Mr. Gary McCluskie
Architect
A.J. Diamond, Donald Schmitt and Company
Architects
Toronto, Ontario

RESPONDENT

Mr. Palle D. Hansen
Chief Building Official
City of York

PANEL

Mr. Roy Philippe, Chair
Mr. Rick Florio
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

August 23, 1996

APPEARANCES

Mr. Peter Colquhoun
Ashton, Director
Consultant in Fire
Safety and Codes
ARENCON INC.
Mississauga, Ontario
For the Applicant

Mr. Bruce
Admin. & Plans Examination
City of York
For the Respondent

RULING

1. **The Applicant**

   Mr. Gary McCluskie, Architect, A.J. Diamond, Donald Schmitt and Company, Architects, is an applicant for a permit under the Building Code Act, 1992 to construct a new two storey library building at the corner of Oakwood Avenue and Holland Park Avenue, City of York, Ontario.

2. **Description of Constrution**

The proposed building is a new library (Group A, Division 2), for the City of York. The building is two storeys is building height with one basement. The building area is approximately 505 m?.

The ground floor and second floor accommodate the library collection and library functions. The basement has a multipurpose room, two small classrooms, public washrooms and service spaces. The multipurpose room and classrooms may be used as part of the library programming or for community functions and activities. One passenger elevator serves the basement, ground and second floors.

Construction is proposed to be of noncombustible construction and the building will be protected by a supervised automatic sprinkler system and a fire alarm system. The fire alarm system is designed to transmit a signal to the fire department on activation of an alarm initiating device.

The ground floor (first storey) and second floor are an interconnected floor space conforming to Sentence 3.2.8.2.(6) of the Building Code.

The lobby at the front of the building adjacent to the main entrance incorporates Stair No. 1 which provides one of the required exits from each of the second floor, the ground floor and the basement.

The path of travel to the outdoors from the basement is approximately 11 m. The path of travel from the entry into the lobby at the second floor level down Stair No. 1 to the outdoors at the ground floor level is approximately 16.75 m.

The elevator doors opening into the ground floor and second floors are within an interconnected floor space conforming to Sentence 3.2.8.2.(6) of the Building Code. The elevator doors on the ground floor and second floor are proposed to contain wired glass in the steel elevator door frame.

3. **Dispute**

The subject dispute involves the following three issues:

i. Interpretation of the technical requirements of Sentences 3.4.2.1.(1), 3.4.4.1.(1), and 3.4.4.2.(2) of the Building Code. At issue is the proposed use of Stair No. 1 as an exit through a lobby, to provide one of the required exits to serve the basement and second floor, in addition to the ground floor.

ii. Sufficiency of compliance with the technical requirements of Clause 3.4.4.2.(2)(b) of the Building Code. At issue is the maximum path of travel of 16.45 m from the entry into the lobby at the second floor level to the exterior exit door at ground level.

iii. Sufficiency of compliance with the technical requirements of Sentence 3.5.3.1.(1) and Table 3.5.3.A. of the Building Code. At issue is the use of unlabelled elevator doors on the ground floor and second floor entrances into the elevator car.

4. **Provision of the Building Code**

Sentence 3.4.2.1.(1) Minimum Number of Exits

1. Except as provided in Sentences (2) to (4), and (6), every floor area as regulated in Article 3.4.1.1. shall be served by not less than 2 exits.

Sentence 3.4.4.1.(1) Fire-Resistance Rating of Exit Separations

2. Except as provided in Article 3.4.4.3. and Sentences (2), 3.3.5.5.(3) and 3.4.4.2.(2), every exit shall be separated from each adjacent floor area by a fire separation having a fire resistance rating not less than that required for the floor assembly above the floor area and, where there is no floor assembly above, not less than that required by Subsection 3.2.2. for the floor assembly below, but in no case shall the fire resistance rating be less than 45 min.

Sentence 3.4.4.2.(2) Exits Through Lobbies

ii. Not more than 1 exit from a floor area is permitted to lead through a lobby provided

a. the lobby floor is not more than 4.5 m (14 ft 9 in) above grade,
b. the path of travel through the lobby to the outdoors is not more than 15 m (49 ft 3 in),
c. the adjacent rooms or premises having direct access to the lobby do not contain a Group C or F occupancy,
d. except as required in Clause (g), the lobby is not located within an interconnected floor space other than as described in Sentence 3.2.8.2.(6),
e. the lobby conforms to the requirements for exits, except that

i. rooms other than service rooms and storage rooms may open onto the lobby,

ii. the fire separation between the lobby and a room used for the sole purpose of control and supervision of the building need not have a fire resistance rating, and

iii. the fire separation between the lobby and adjacent occupancies that are permitted to open onto the lobby need not have a fire- resistance rating when the lobby and adjacent occupancies are sprinklered,

f. the fire separation required in Sentence 3.4.4.1.(1) shall be maintained between the exit and the lobby, and

g. that if the exit serves a hotel, the lobby is not located within an interconnected floor space.

Sentence 3.5.3.1.(1) Fire Separations for Vertical Service Spaces

8. Except as provided in Sentence (2), every vertical service space shall be separated from each adjacent floor area by a fire separation having fire-resistance rating conforming to Table 3.5.3.A. for the fire-resistance rating required for the floor assembly above, conforming to that required by Subsection 3.2.2. for the floor assembly below.

5. **Applicant's Position**

Issue 1: Stair No. 1, Exit Through a Lobby

The Applicant submitted that the exit through the lobby complies with the technical requirements of Sentences 3.4.4.1.(1) and 3.4.4.2.(2) as an exit through a lobby serving the basement, ground floor and second floors of the Oakwood Library.

Stair No. 2 is a conventional enclosed exit stair, separated from the remainder of the building by a 45 min fire separation, discharging directly to the outdoors at the ground level at the rear of the building.

Stair No.1 is contained within a lobby which provides the second exit from each storey (basement, ground and second floors) and discharges to the outdoors at the ground level at the front of the building adjacent to the main entrance. The Applicant submitted that the requirements of Sentence 3.4.4.2.(2) of the Building Code have been met.

The Applicant submitted that the lobby is used solely for access to, and egress from, the basement, ground and second floors. There is no furniture or equipment located in the lobby, and no fire load.

Issue 2: Path of Travel Through the Lobby

The Applicant submitted that the path of travel through the lobby provides sufficiency of compliance with the technical requirements of Clause 3.4.4.2.(2)(b) of the Building Code based on the design of a shallower sloped, safer stair.

The Applicant submitted the following to support his position:

The path of travel through the lobby from the second floor to the outdoors at the ground floor level is approximately 16.45 m, which exceeds the 15 m permitted by Clause 3.4.4.2.92)(b) of the Building Code.

The 15 m limit on the path of travel through a lobby is intended to limit the exposure of occupants to hazards in an occupancy adjacent to the lobby under emergency evacuation conditions. Stair No. 1 has a rise of 158 mm and a run of 250 mm exclusive of nosing. These dimensions provide a shallower sloped stair than that based on the maximum riser height and the minimum run permitted by the Building Code. A stair design for Stair No. 1 based on the minimum run of 230 mm and maximum rise of 200 mm permitted by Sentences 3.4.6.7.(1) and (2) would result in reduction of the maximum path of travel through the lobby to the outdoors at ground level that does not exceed 15 m in compliance with Clause 3.4.4.2.(2)(b) of the Building Code.

However, research has shown that stairs with a shallow slope provide a safer path of travel. This research has led to changes in the 1995 National BuildIng Code of Canada to require shallower maximum slopes for exit stairs (i.e. minimum run of 280 mm and maximum rise of 180 mm).

Stair No. 1 is the main means for the public to access the basement and the second floor of the library. A shallower slope of stair with lower risers and wider treads are proposed to provide a comfortable stair for use by the public in this relaxed library setting. A stair with a shallower slope provides a safer, more efficient stair for normal occupant use and for emergency evacuation.

The increase in path of travel through the lobby of 1.45 m (over the 15 m permitted by Clause 3.4.4.2.(2)(b)) represents an insignificant increase in the time required for occupant evacuation (approximately 1 second), which will be offset by an increase in safety for users of the Stair No. 1.

Issue 3: Wired Glass in Nonlabelled Doors

The Applicant submitted that the use of Wired Glass in nonlabelled elevator doors at the ground and second floor level provides sufficiency of compliance with the technical requirements of Clause 3.2.2.21.(2)(a) and Sentence 3.2.8.2.(6) of the Building Code and that the elevator shaft in this building is not considered as a vertical service space.

The Applicant submitted that the elevator doors on the ground floor ad second floor will contain wired glass in a steel elevator door. Each pane of wired glass will not exceed 0.84 m? in accordance with the area limitations in Clause 3.1.8.14.(2) of the Building Code. The elevator manufacturers who have submitted bids for the project, have advised the architects that they cannot provide labelled elevator doors containing wired glass as they have not tested such doors.

The Applicant submitted that the elevator doors opening into the ground floor and second floors are within an interconnected floor space conforming to Sentence 3.2.8.2.(6) of the Building Code. The Applicant proposed to consider the elevator shaft below the ground floor slab, as part of the ground floor fire compartment, separated from the remainder of the basement by a 45 min fire separation - the same as is required between the basement and the ground floor. As the ground floor and the second floor are interconnected, they can be considered the same fire compartment, including the elevator shaft. The elevator shaft, in this approach, is not considered as a vertical space.

The Applicant further submitted that in other situations where supervision and security concerns, such as rapid transit stations, elevators are permitted to be enclosed by either 1 h fire separations, or wired glass assemblies.

6. **Chief Building Official's Position**

The Respondent submitted the following information to support the municipalities position:

Reference to Sentence 3.4.2.1.(1)

Since the occupant load of each of the floor areas exceeds 60 persons, two exits are required to serve each floor area. Exceptions referenced in the Sentence do not apply for this project.

Reference to Sentence 3.4.4.2.(1)

The basic principle of this Sentence is that any required exit serving a floor area, other than the first storey, must not lead through a lobby. An exit means that part of a means of egress that leads from the floor area it serves, to a separate building, an open public thoroughfare, or an exterior open space protected from fire exposure from the building and having access to an open public thoroughfare.

This Sentence also provides a direct indication that a "lobby" is considered as part of the first floor area since an exit serving the first floor is permitted to lead through a lobby. Lobby has the meaning of "entrance hall" or " passageway" which serves to provide a common area for access to or from a building. It is not the intent of the Code to treat an exit stair, (stairway), which extends through all floor levels of the building as a "lobby".

Reference to Sentence 3.4.4.2.(2)

This Sentence provides the exception to the preceding Sentence to permit one exit from a floor level, in addition to an exit serving the first storey, to lead through a lobby. The Clauses contained in the Sentence provide specific requirements that the lobby must meet in order to maintain the integrity of any exit leading through it. It is clear that the "exit" and the "lobby" are separate entities, each with specific requirements related to their purpose.

Reference to Clause 3.4.4.2.(2)(a)

The floor of the lobby is permitted to be a maximum of 4.5 m above grade. This clause provides for the relationship between the floor level at which point one normally leaves the floor area to gain the protection of an exit enclosure, and the level outside of the building presumed to be safe and clear of the building. This Clause also clearly states that this exception does not apply to below grade levels.

Reference to Clause 3.4.4.2.(2)(b)

The path of travel for a person exiting the building is limited to 15 m. This Clause provides for an acceptable distance in which a person exiting a floor area is doing so through a lobby which provides a reduced level of protection from that for the exit enclosure.

Reference to Clause 3.4.4.2.(2)(d)

In the case of a library use building, a lobby through which an exit leads is not permitted to be located within an interconnected floor space except where the interconnected floor space meets the limitations of Sentence 3.2.8.2.(6). Clause (a) of Sentence 3.2.8.2.(6) provides specific requirements which limit the interconnected floor space to not more than two storeys, one of which must consist of the first storey. It is clear that the interconnection of floor levels is not to include all the levels of the subject building. The proposed lobby concept would not comply with the interconnected floor space requirements.

Reference to Clause 3.4.4.2.(2)(e)

This Clause requires that the lobby provide a level of design conforming to that of an exit with exceptions to permit specific low hazard ancillary uses within the lobby as long as the lobby and adjacent ancillary uses are sprinklered. This Clause further supports the contention that a lobby is not an exit, but can be used to provide for the continuation of an exit under very specific and restrictive conditions.

National Building Code 1995 - Appendix A-3.4.4.2.(2)(e)

Requirements for Lobby. If an exit is permitted to lead through a lobby, the lobby must provide a level of protection approaching that of the exit. As well as meeting the width and height requirements for exits, the lobby must be separated from the remainder of the building by a fire separation having a fire resistance rating at least equal to that required for the exit, unless one of the exceptions in this Clause applied.

Reference to Clause 3.4.4.2.(2)(f)

This Clause serves to maintain the minimum standards for the fire protection of exits as contained in Sentence 3.4.4.1.(1). This Clause also provides for a clear distinction between "exit" and a "lobby".

Exit Requirements - Reference to Article 3.4.4.1.

This Article provides basic requirements for fire resistance ratings for exit separations. This Article also applies to all exits. Sentence (1) of the Article provides an exception for the requirement for a fire separation having a fire resistance rating between the lobby serving an exit, ("a lobby is to conform to the requirements for exits") and each adjacent floor area. If read

correctly, this Sentence permits the relaxation of the requirements for fire resistance ratings for fire separations between the lobby, which serves as an exit, and specifically permitted ancillary occupancies, (rooms used for the sole purpose of control and supervision of the building). The last portion of the Sentence clearly indicates the need to maintain a minimum fire resistance rating between the exit and the lobby as further referenced in Clause 3.4.4.2.(2)(f). The Building Code draws a clear distinction between a "lobby" and an "exit", with a higher level of fire protection being required to ensure the integrity of the exit facility.

National Building Code - Guidelines for the Application of Part 3 - Protection of Exit Facilities

The fundamental need to protect an exit facility is to ensure that it will not be invaded by fire products of combustion during the time that it is being used for the excavation of the building occupants and its availability for fire fighters attempting to suppress the fire and assisting occupants to evacuate the building. As a result of a minimum standard established for the protection of exits, it is not acceptable to have an exit stair open to adjacent storeys.

Elevator Shaft

Sentence 3.2.8.1.(2) of the Building Code clearly identifies a specific concern regarding penetrations of floor assemblies by exits and vertical service spaces.

Vertical service spaces are described as shafts for mechanical and electrical services that pass from floor to floor including hoistways for elevators. The elevator shaft is required to be protected from the effects of a fire in the adjacent library stacks floor areas, which could potentially contribute a considerable fire load. Likewise, the adjacent floor areas are to be protected from a fire in the service space. Sentence 3.5.3.1.(1) and Table 3.5.3.A. specifically require a minimum 45 minute fire resistance rated elevator shaft even though the fire resistance rating of the floor assembly which it penetrates is zero. The Building Code, under Subsection 3.1.8. requires all fire separations to be continuous and any openings within the fire separation are to provide a proven level of protection of the opening in order to maintain the continuity. The use of unlabelled elevator doors serving the first and second storeys is not consistent with the Code requirements.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that:

i. The current design of the proposed exit Stair No. 1 does not comply with the requirements of Sentences 3.4.2.1.(1), 3.4.4.1.(1), and 3.4.4.2.(2) of the Building Code without the required fire separations.

ii. An exit enclosure for Stair No. 1 conforming to Sentence 3.1.8.14.(2) of the Building Code provides sufficiency of compliance with the required 45 minute fire separation.

iii. The use of unlabelled elevator doors containing wired glazing on the ground floor and second floor located within the interconnected floor space provides sufficiency of compliance with Sentence 3.5.3.1.(1) and Table 3.5.3.A. of the Building Code.

8. **Reasons:**

i. The argument that a lobby is part of the exit which leads into it, and as such, need not be separated from the exit shaft is in the opinion of the Building Code Commission not in accordance with the required fire resistance rating of the exit enclosure that must be provided between the lobby and the exit shaft.

ii. The principal of protection from fire exposure when entering an exit stair is clearly enunciated in Sentence 3.4.4.1.(1) of the Building Code.

iii. It is the opinion of the Building Code Commission that the use of wired glazing other than the area limitations in Table 3.1.8.B. of the Building Code provided an acceptable level of safety since travel distance from any point on the second floor and basement to the exterior is less than 45 m.

Dated at Toronto, this 23rd day, in the month of August, in the year 1996, for application number 1996-39.

BCC Ruling No. 96-35-518

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-35-518

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.3.1.1.(2) and Clause 3.3.1.14.(1)(c) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Patrick Chan, President, Kingsberg Far East Ltd., Markham for the resolution of a dispute with Mr. John Wright, Chief Building Official, Town of Markham, concerning whether the proposed ground floor market style retail outlet with no fire separations between units nor between units and circulation routes where the corridor widths are less than 5 m wide provide sufficiency of compliance with Sentence 3.3.1.1.(2) and Clause 3.3.1.4.(1)(c) of the Building Code at the New Century Plaza, 398 Ferrier Street, Markham, Ontario.

APPLICANT

Mr. Patrick Chan
President
Kingsberg Far East Ltd.
Markham, Ontario

RESPONDENT

Mr. John Wright
Chief Building Official
Town of Markham

PANEL

Mr. Roy Philippe, Chair
Mr. Rick Florio
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

August 23rd, 1996

APPEARANCES

Mr. David Syrett
Leber/Rubes Inc.
Toronto, Ontario
For the Applicant

Mr. Chee Tung
Structural Engineer
Town of Markham
For the Respondent

RULING

1. **The Applicant**

   Mr. Patrick Chan, President, Kingsberg Far East Ltd., Markham is the holder of a permit under the Building Code Act, 1992 to construct a two storey addition to an existing two storey commercial building that will contain 114 market style shops on the ground floor at the New Century Plaza, 398 Ferrier Street, Ontario.

2. **Description of Constrution**

   The subject building is a 4,574 m² two storey addition to an existing 1,630 m² two storey Group A, Division 2 building. The addition consists of a ground floor "market style" retail occupancy (Group E) and two levels of Group F, Division 3 open-air parking with the uppermost level being on the roof of the building.

   A two hour fire separation is proposed between the existing two storey building and the proposed addition. Egress for the existing two storey building will be completely independent of the new addition.

The proposed two storey addition will be fully sprinklered and the expanded building will have one fire alarm system.

The fire department access will be provided on all four sides of the building. Access route required by the Building Code will be provided only to the principal building entrance since the building is sprinklered.

Twelve exterior exit doors will be provided at ground level, each having a width of 915 mm. This amounts to a aggregate exit width of 10,980 mm providing exit capacity for 1,800 persons, or 2.3 times the Building Code required exit capacity.

The proposed design also includes the following:

i. The retail shops will be accessible from the circulation aisles, i.e., no rear service corridors.
ii. Shops will not exceed 200 m? or a depth of 25 m and therefore require only one egress doorway as provided in Sentence 3.3.1.5.(1) of the Building Code.
iii. Travel distance from anywhere on the main floor to at least one exit door will not exceed 45 m as required in Sentence 3.4.2.5.(1)(b) of the Building Code.
iv. At the point where a retail shop opens into a circulation aisle, it will be possible to travel in opposite directions to separate exits as required in Sentence 3.3.1.9.(9) of the Building Code.
v. The demising wall between retail shops will be a (i.e., unrated 13 mm gypsum board on both sides of metal studs, joints filled with tape and compound) fire separation continuous from the concrete floor slab to underside of the ceiling.
vi. Circulation aisles will range in unobstructed width from 3.96 m (13 ft) to 4.88 m (16 ft) wide.
vii. Circulation aisles will not be fire separated from the retail shops. Instead, security closures separating the shops from circulation aisles will permit each shop to be visible. Sliding or rolling security screen permitted by Sentence 3.3.1.11.(3) of the Building Code will be provided in lieu of a swinging egress door.
viii. Smoke detection, connected to the fire alarm system, will be spaced not more than 10 m apart in the circulation aisles.
ix. Circulation aisles will be clearly identified as access to exit routes by the use of directional exit signs at each change in direction and by emergency lighting providing at

least a average illumination of 10 lx floor level as required in Articles 3.4.5.1. ad 3.2.7.3. of the Building Code.

x. Building Security and operation for all occupants is provided by building owners so that all floor areas are controlled as if they are occupied by only one tenant.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with Sentence 3.3.1.1.(2) and Clause 3.3.1.4.(1)(c) the Building Code. At issue is the proposed ground floor market style retail layout with no fire separation between units nor between units and circulation routes where the corridor widths are 5 m or less in width.

4. **Provision of the Building Code**

Article 1.1.3.2. Definition of Suite

Suite means a single room or series of rooms of complementary use, operated under single tenancy, and includes dwelling units, individual guest rooms in motels, hotels, boarding houses, rooming houses and dormitories as well as individual stores and individual or complementary rooms for business and personal services occupancies.

Sentence 3.3.1.1.(2) Separations of Suites

1. Except as permitted by Sentence (2), each suite in other than business and personal services by a fire separation having a fire-resistance rating of not less than 1 h, except that a fire resistance rating of not less than 45 min is permitted where the fire-resistance rating of the floor assembly is not required in Subsection 3.2.2. to be more than 45 min. (See also Subsection 3.3.3. for institutional occupancies, Article 3.3.4.2. for residential occupancies and Article 3.1.8.7. for fire dampers.)
2. In sprinklered buildings, suites of business and personal services occupancy and mercantile occupancy that are served by public corridors conforming with Clause 3.3.1.4.(1)(c) are not required to be separated from each other by fire separations.

Clause 3.3.1.4.(1)(c) Public Corridor Separations

3. Except as otherwise required in this Part, public corridors shall be separated from the remainder of the building by a fire separation having a fire-resistance rating of not less than 1 hour except that

a. the fire-resistance rating need not be more than 45 min when the fire resistance rating of the floor assembly is not required to be more than 45 min,
b. no fire-resistance rating is required when the floor area is sprinklered and the corridor does not serve an institutional occupancy or a residential occupancy,
c. no fire separation is required in a sprinklered floor area where,
    i. the corridor is more than 5 m in unobstructed width, and
    ii. the corridor does not serve an institutional occupancy or a residential occupancy,
d. a floor assembly above a crawl space that is not considered a basement in Sentence 3.2.2.5.(2) is not required to be a fire separation, and
e. no fire separation is required in a sprinklered floor area where an occupancy in the corridor conforms to the requirements of Sentence 3.3.1.9.(6).

5. **Applicant's Position**

The Applicant proposed that the main floor market style layout be considered equivalent to a department store or exhibition hall rather than each retail shop being a separate suite.

The Applicant submitted that increasing the proposed circulation isles (that range from 3.96 to 4.88 m) to more than 5 m would not be economically viable and constructing unrated fire separations between the shops and circulation isles would defeat the market style concept that is proposed for the ground floor.

The Building Code requires a 1 hour fire separation between shops because the circulation aisles will not exceed 5 m in unobstructed width. No fire separation is required by the Code where the corridor exceeds 5 m in width. A fire separation, continuous from the floor slab to underside of the ceiling, consisting of a layer of unrated 13 mm gypsum board on both sides of metal studs is proposed in this case. The joints will be filled with tape and compound.

The Applicant submitted that it is reasonable to consider the proposed market style retail floor similar to a department store or other indoor market style layout (i.e. St. Lawrence Market) because the proposed retail shops can not operate independently in terms of building systems and security as could be the case in conventional multiple suite floor areas such as those found in office and residential buildings.

The Applicant submitted that each retail shop is a condominium and therefore separately owned, however, the operations and security for the retail floor area will be similar to a department store. The circulation aisles will be more clearly defined in this case by the circulation aisles compared

to a department store layout which will reduce the likelihood that access to exit routes could become partially obstructed. The market style layout will in some ways be better than a department store, merchandising layouts and circulation aisles can not be changed or obstructed.

Furthermore, the Applicant submitted that the proposed conditions provide sufficiency of compliance with the Building Code for the suite and corridor separation provided:

. proposed aggregate exit width of 10,890 mm for ground floor, provides 2.3 times the Building Code required aggregate exit width of 4,776 mm;

i. smoke detection, connected to the fire alarm system will be spaces not more that 10 m apart in the circulation isles;

ii. several choices in direction of exit travel in parts of the circulation route compared to conventional shopping mall where there may only be a choice of two directions of exit travel; and,

iii. a signed fire truck route be provided on all four sides of the expanded building.

6. **Chief Building Official's Position**

The Respondent submitted that the ground floor retail area will contain a undetermined number of Group E condominium units. In the opinion of the Respondent, each condominium unit is by definition a suite and must therefore conform to all applicable requirements of the Building Code.

The Respondent submitted that Sentence 3.3.1.3.(8) requires each suite to have an exterior exit door or a doorway into a public corridor or to an exterior passageway. Therefore, the aisles between suites on the subject floor area must be designed as public corridors conforming to the requirements of Section 3.3 of the Building Code.

The Respondent submitted that in sprinklered buildings where Group E suites are served by a public corridor greater than 5.0 m in width, no fire separation is required between the suites (Sentence 3.3.1.1.(2)) and furthermore, no fire separation is required between the suite and the corridor (Clause 3.3.1.4.(1)(b)).

Furthermore, the Respondent submitted that the public corridors proposed by the Applicant range in width from 4.0 m to 4.8 m. Therefore, the Building Code requires suites to be separated from each other by 1 hour fire separations (Sentence 3.3.1.1.(1)) and be separated from the public corridors by at least a nonrated fire separation (Clause 3.3.1.4.(1)(b)).

The Respondent submitted that the Applicant is proposing to eliminate the fire separation between suites and to eliminate the fire separation between the suites and the public corridor. Therefore, the proposal does not comply with the Building Code.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that not providing fire separations between units, and units and circulation routes on the ground floor of a market style retail mall where the corridor widths are less than 5 m provides sufficiency of compliance with Sentence 3.3.1.1.(2) and Clause 3.3.1.4.(1)(c) of the Building Code provided:

. The travel distance from any point in a suite to an exit does not exceed 45 metres.

i. The common areas operate as a market style retail space operated by a condominium management.

ii. The aisle location, spacing and exit widths that have been provided are maintained.

iii. Security closures separating units from the circulation corridors permit the interior of the stores to be visible.

8. **Reasons:**

. The exit capacity has been designed to accommodate 2.3 times the Building Code required width.

i. The aisles or access to exits provide several choices in direction of exit travel in parts of the circulation route compared with conventional shopping malls.

ii. Smoke detectors connected to the fire alarm system spaced not more than 10 m apart are provided in the corridors.

iii. Fire access routes are provided on all four sides of the building.

Dated at Toronto, this 23rd day, in the month of August, in the year 1996, for application number 1996-38.

BCC Ruling No. 96-34-517

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-34-517

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.2.3.7.(2)(b) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Ms. Elizabeth Sawicki, Manager of Development, NHD Development Limited, Woodbridge, for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, concerning whether lateral support clips and the supports of the lateral clip for a precast concrete wall are required to have a 2 hour fire resistance rating in accordance with Clause 3.2.3.7.(2)(b) of the Ontario Building Code at Cooper Automotive, 336 Courtland Avenue, Vaughan, Ontario.

APPLICANT

Ms. Elizabeth Sawicki
Manager of Development
NHD Developments Limited
Woodbridge, Ontario

RESPONDENT

Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Michael Lio

PLACE

Toronto, Ontario

DATE OF RULING

September 11th, 1996

APPEARANCES

Mr. David Hine Project Manager
Morrison Hershfield Limited
North York, Ontario
Agent Representing Applicant

Mr. Mani Navabi, Chief Building Official
AND
Mr. Steve Penna, Plans Review Supervisor
City of Vaughan
The Respondent

RULING

1. **The Applicant**

   Ms. Elizabeth Sawicki, NHD Developments Limited is the holder of a permit under the Building Code Act, 1992 to construct a one storey Medium Hazard Industrial Occupancy (i.e. Group F, Division 2) at 336 Courtland Avenue, Vaughan, Ontario.

2. **Description of Constrution**

   The subject building has a building area of 19,500 m² comprising a single 17,900 m² storey warehouse and a 1,600 m² office component having a 1,250 m² mezzanine.

   The building is designed in accordance to Article 3.2.2.55. of the Building Code which requires noncombustible construction, an automatic sprinkler system, the mezzanine floor to have 1.5 hour fire resistance rating, and the roof to have a 1.5 hour fire resistance rating.

   The exterior walls of the warehouse are constructed of precast panels, each having a inherent 2 hour fire resistance rating.

The north wall of the building has a length of 155.75 m and a height of 9.25 m. The limiting distance, measured to the property line is 8 m. The percentage of unprotected openings is 22.4.

Structural clips at the top of the wall provide lateral support to the exterior wall. The protection of the lateral support clips are the subject of the dispute.

3. **Dispute**

The dispute between the Applicant and Respondent concerns an interpretation of the technical requirements of Clause 3.2.3.7.(2)(b) of the Building Code. At issue is whether the lateral support clips and the supports of lateral clips for the precast concrete wall are required to have a 2 hour fire resistance rating.

4. **Provision of the Building Code**

Clause 3.2.3.7.(2)(b) Construction of Exposing Building Face

2. Except as permitted in Article 3.2.3.9., where a limiting distance shown in Table 3.2.3.B. for a Group E, or Group F, Division 1 or 2 occupancy classification is such as to permit an exposing building face to have unprotected openings of

(b) more than 10 per cent but not more than 25 per cent of the exposing building face shall have a fire resistance rating of not less than 2 h, and be clad with noncombustible cladding.

5. **Applicant's Position**

The Applicant submitted that the lateral supports for the precast wall assemblies at 336 Courtland Avenue simply provides lateral stability to the precast wall. The Applicant submitted the following concerning the fire rating of the lateral supports and their supporting structure:

ii. In a sprinklered building, the Building Code waives the requirement for the fire resistance rating of the roof. The fire resistance rating of the structure providing the lateral support to a precast wall structure is not referenced in the Building Code as requiring a rating.

The lateral connectors and supports are located on the roof. The precast wall is self supporting in that it can bear its own weight. In the event of a fire, the sprinkler system will activate and cool the structure and lateral supports for the duration of the fire.

As part of the acceptance testing for sprinklers, the sprinklers must reduce the average ceiling temperature to less than 500 degrees F after 5 minutes of activation.

The yield temperature of steel is significantly reduced when exposed to temperatures above 1100 degrees F. Since this temperature will not fail while the sprinkler system remains in operation.

Since the Building Code acknowledges that the roof of a sprinklered building will not collapse, all structural elements are protected, especially those above the sprinklers. The need to rate the lateral connectors and the supporting structure is not required.

iii. The lateral connectors are located on the roof of the building, outside of the building and will not be exposed to a fire occurring within the building.

The need to rate the lateral connectors, since they are on the outside of the building is not required by the Building Code.

iv. Should the temperature at the ceiling be elevated to such a level that the lateral connectors begin to fail, the fire has grown to such a size that it overtaxes the sprinkler system.

The sprinkler system in the subject building has been designed based on the commodities stored within the facility and is anticipated to contain, control or extinguish a fire. The Building Code expects the sprinkler system designed to NFPA 13 to achieve the above goal.

To anticipate failure of the sprinkler system is not a reasonable expectation. If the sprinklers were not to achieve their goals, the structural steel in the building would be exposed to temperatures resulting in structural failure. Since the structure has failed, the heat energy will no longer be only radiating horizontally to the adjacent buildings, but also will radiate upwards. The impact on the adjacent properties will reduce significantly. In radiating upwards, the concern to the adjacent property is proportionately reduced.

The Applicant summarized the above by submitting that the need to protect the lateral supports of the exterior wall is neither a Building Code requirement nor is it necessary in a fully sprinklered building.

2. **Chief Building Official's Position**

The Respondent submitted that the north elevation of the subject building requires a 2 hour fire resistance rating in accordance with Clause 3.2.3.7.(2)(b) of the Building Code. The north elevation wall is constructed of precast concrete panels laterally supported by a structural angle clip at the top of the wall which is supported by the structural frame of the building. As a result the angle clip and supporting structure is required to be rated to a 2 hour fire resistance rating.

The Respondent submitted that the Building Action Newsletter of April 1994 produced by the Housing Development and Buildings Branch, Ministry of Municipal Affairs and Housing states that "if the exterior walls are required to have a fire resistance rating (as for spatial separation) the bracing angles must be protected for the same fire resistance rating as the walls.

The Respondent also submitted that a letter from the Code Development and Technical Training Section of the Housing Development and Buildings Branch, Ministry of Municipal Affairs and Housing to Mr. David Hine of Morrison Hershfield, states that "where the roof provides lateral support for an exterior wall required by Article 3.2.3.7. to have a fire resistance rating, Article 3.2.3.7. does not require the roof to have a fire resistance rating." Clearly, this interpretation does not address the issue of rating the supporting structural steel columns and angle clips.

The Respondent stated that the structural frame (i.e. the columns supporting the portion of the roof providing support for the lateral clips) must have a 2 hour fire resistance rating equivalent to the subject exposing building face.

3. **Commission Ruling:**

It is the decision of the Building Code Commission that lateral support clips and the supports of the lateral clips required for the wall having a 2 hour fire resistance rating for exposure protection does not require a 2 hour fire resistance rating in accordance with Clause 3.2.3.7.(2)(b) of the Building Code.

4. **Reasons:**

ii. It is the opinion of the Building Code Commission that the Building Code does not have any provision requiring lateral support connectors to be rated when a wall is required to have a fire resistance rating for spatial separation purposes.

iii. The building is equipped with a supervised sprinkler system and the fire resistance rating of the roof assembly is waived.

iv. In addition the openings in the exterior wall are less than the maximum permitted.

Dated at Toronto, this 11th day, in the month of September, in the year 1996, for application number 1996-37.

BCC Ruling No. 96-33-516

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-33-516

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 9.9.4.2.(1) and Article 9.10.14.11. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Ms. Sandra Nadalini Gunn, Director, 1034177 Ontario Ltd., Woodbridge, for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, concerning whether the separation of exits from the basement and the construction of the south exposing building face provide sufficiency of compliance with Sentence 9.9.4.2.(1) and Article 9.10.14.11. of the Ontario Building Code at 7930 Kipling Avenue, Woodbridge, Ontario.

APPLICANT

Ms. Sandra Nadalini Gunn, Director
1034177 Ontario Ltd.

RESPONDENT

Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Michael Lio

PLACE

Toronto, Ontario

DATE OF RULING

September 11th, 1996

APPEARANCES

Ms. Sandra Nadalini Gunn, Director
1034177 Ontario Ltd.
The Applicant

Mr. Mani Navabi
Chief Building Official
City of Vaughan
The Respondent

Mr. Steve Penna
Supervisor of Plan Review
City of Vaughan
For the Respondent

RULING

1. **The Applicant**

   Ms. Sandra Gunn, 1034177 Ontario Ltd. is the holder of a permit under the Building Code Act, 1992 to construct a single family dwelling (i.e. house) at 7930 Kipling Avenue, Woodbridge, Ontario.

2. **Description of Constrution**

   The subject building is a three storey house with an attached garage.

   Upon completion of the house, the Applicant applied for and received a zoning by-law amendment to permit the use of an office on the first floor. No additional construction was proposed for the office use.

   The Respondent issued a deficiency letter to the Applicant requiring the following remedial work be under taken:

i. Existing window openings in the south elevation of the building must be closed in with similar face brick.

ii. Existing exits from the basement are to be protected by a 30 minute fire separation. (Existing exit into garage will be allowed if a clear path to the main door through the garage is maintained.)

3. **Dispute**

The dispute between the Applicant and the Respondent concerns sufficiency of compliance with Sentence 9.9.4.2.(1) and Article 9.10.14.11. of the Building Code. At issue is whether the stairway from the basement need be constructed as an exit and if the existing window openings in the south exposing building face must be closed in with similar face brick.

4. **Provision of the Building Code**

`Sentence 9.9.4.2.(1) Fire Separation for Exits`

1. Except as provided in Sentence (5) and Article 9.9.8.5., every exit other than an exit doorway, shall be separated from each adjacent floor area or from another exit by a fire separation having a fire-resistance rating not less than that required for the floor assembly above the floor area. (See Article 9.10.9.10.)

Article 9.10.14.11. Construction of Exposing Building Face

Except as permitted in Articles 9.10.14.12. to 9.10.14.16., each exposing building face and any exterior wall located above an exposing building face that encloses an attic or roof space shall be constructed in conformance with Table 9.10.14.B. and Subsection 9.10.8.

Table 9.10.14.B.
Forming Part of Article 9.10.14.11

Minimum Construction Requirements for Exposing Building Faces				
Occupancy Classification of Building	Maximum Precentage of Uprotected Openings Premitted	Minimum Required Fire-Resistance Rating	Type of Construction Required	Type of Cladding Required
Residental, business and	Not more than 10	1h	Noncombustible	Noncombustible

personal services, and low hazard industrial	More than 10 but not more than 25	1h	Combustible or noncombustible	Noncombustible
	More than 25 but not more than 100	45min	Combustible or noncombustible	Combustible or Noncombustible
Mercantile and medium hazard industrial	Not more than 10	2h	Noncombustible	Noncombustible
	More than 10 but not more than 25	2h	Combustible or Noncombustible	Noncombustible
	More than 25 but not more than 100	1h	Combustible or Noncombustible	Combustible or Noncombustible
Column 1	Column 2	Column 3	Column 4	Column5

5. **Applicant's Position**

The Applicant submitted that when the first building permit was issued, it was for residential use and the amount of windows on the south side of the building was not a problem.

The Applicant submitted that since the zoning by-law was amended to a allow the operation of a business in 40% of the building, the windows in the residential area must be enclosed. There is only one 5' x 6' window in the commercial floor on the south side of the building. All other windows are for residential use. The Applicant submitted that the windows should be allowed for light and ventilation purposes.

The Applicant submitted that there are two stair ways in the basement, one in the front and one in the back. The back stair way is already enclosed so the front exit is the one in question. The Applicant proposed to install a fire rated door at the bottom of the front stair case and drywall both stair cases on the underside with two sheets of 5/8" fire rated drywall which should provide a 2 hour fire resistance rating.

The Applicant submitted that the rezoning By-law and the Site Plan Agreement were finalized after the entire building was fully constructed.

In summary the Applicant submitted that the professional office that is set up in their household is by appointment only. There are no line ups and it is not a walk in retail outlet. The office area in the home is very minimal compared to the residential occupancy. With all the advertising in

the media promoting working at home, the items that are being disputed should be of minor concern. There are many households operating businesses out of their own homes which permit small businesses to survive.

6. **Chief Building Officials Position**

The Respondent submitted that a building permit was issued to construct a single family dwelling on October 1, 1993. On November 28, 1994 a letter of credit release inspection was conducted by the area building inspector which revealed that the first floor was being used as an office. On August 28, 1995 a permit application was submitted by the owner to allow the office in the first floor. No construction was proposed. On November 7, 1995 a deficiency letter was issued to the owner requiring certain upgrades to the building to allow the use of an office on the first floor.

The Respondent submitted that a 30 minute fire separation is required around the easterly exit stair leading directly to the outdoors. Also, the existing openings in the south elevation must be closed to have a 1 hour fire resistance rating and be constructed of noncombustible construction and clad with noncombustible cladding in accordance with Table 9.10.14.B. of the Building Code.

The Respondent submitted that since this is an existing building constructed of combustible construction it would be impractical to re-construct the exterior wall with noncombustible materials. Therefore, it was decided that since this wall was clad with 4" face brick it would be allowed to be of combustible construction provided all existing openings on the south wall were closed in with similar face brick.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the exits from the basement provide sufficiency of compliance with Sentence 9.9.4.2.(1) of the Building Code and it is the opinion of the Building Code Commission that the requirements of Article 9.10.14.11. to the exposing building face are not applicable.

8. **Reasons:**

. Evaluation under Part 10 of the Building Code does not require evaluation of spatial separations.

i. There are 2 non-conforming exists from the basement level, which are well separated leading through separate fire compartments on the 1st floor level to the exterior. The building is of a size where only one exit is required.

ii. The building is equipped with smoke alarms and heat detection which are monitored.

iii. The building is operated by a single tenancy.

Dated at Toronto, this 11th day, in the month of September, in the year 1996, for application number 1996-35.

BCC Ruling No. 96-32-515

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-32-515

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OFArticle 3.3.1.17. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Doug Clancey, Partner, Katz Webster Clancey Associates, Ottawa for the resolution of a dispute with Mr. Les Batson, Chief Building Official, City of Ottawa, concerning whether the height of the existing balustrade and the provision of a temporary canvas awning attached to the inner side of the openings of an existing balustrade will provides sufficiency of compliance with the requirements in Article 3.3.1.17. of the Building Code at the Chateau Laurier Hotel, 1 Rideau Street, Ottawa, Ontario.

APPLICANT

Mr. Doug Clancey, Partner
Katz Webster Clancey Associates
Ottawa, Ontario

RESPONDENT

Mr. Les Batson, P. Eng.
Chief Building Official
City of Ottawa

PANEL

Mr. Roy Philippe, Chair
Ms. Lesia Beznaczuk
Mr. Demir Delen

PLACE

Novotel Hotel
The Daly Boardroom

33 Nicholas Street
Ottawa, Ontario
K1N 2M7

DATE OF RULING

June 14, 1996

APPEARANCES

Mr. Doug Clancey, Partner
Katz Webster Clancey Associates
Ottawa, Ontario
The Applicant

Mr. Chris Freeman & Mr. Neil Dillon
City of Ottawa
For the Respondent

RULING

1. **The Applicant**

   The Applicant, Mr. Doug Clancey, Partner, Katz Webster Clancey Associates, Ottawa is the holder of a permit under the Building Code Act, 1992 to convert an existing terrace into an outdoor dining area at the Chateau Laurier Hotel, 1 Rideau Street, Ottawa, Ontario.

2. **Description of Constrution**

   The Canadian Pacific Hotels and Resorts (i.e. Chateau Laurier Hotel) proposes to provide access from an existing restaurant to an open air terrace for the purposes of outside dining.

   The open air terrace is approximately one storey above ground level. The open side of the terrace is protected by an existing granite balustrade that is 39 3/4" - 40" high. The top is approximately 16" wide and openings in the guard vary from 7" to 12 1/2".

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.3.1.17. of the Building Code. At issue is the height of the existing balustrade and the provision of a temporary canvas awning attached to the inner side of the openings of an existing balustrade to meet the opening requirements for guards in the Building Code.

4. **Provision of the Building Code**

Article 3.3.1.17. Guards

1. A guard not less than 1070 mm (3 ft 6 in) high shall be provided
    a. around each roof to which access is provided for other than maintenance,
    b. at openings into smoke shafts described in Subsection 3.2.6. that are less than 1070 mm (3 ft 6 in) above the floor, and
    c. at each raised floor, mezzanine, balcony, gallery and other locations where the difference in floor elevations is more than 600 mm (235/8 in).
2. The height of guards on stairs used by the public but not forming part of a required exit shall be not less than 920 mm (3 ft) measured vertically to the top of the guard from a line drawn through the outside edges of the stair nosings and shall be not less 1070 mm than (3 ft 6 in) around landings.
3. Except as provided in Sentence 3.3.2.8.(4), the size of any opening through a required guard serving a room, stairway or space to which the public is admitted or serving an exterior balcony shall be such as to prevent the passage of a spherical object having a diameter of 100 mm (4 in) in residential occupancies, day care centres, nurseries or other similar type occupancies where children may be present and 200 mm (77/8 in) in other occupancies, unless it can be shown that the location and size of openings that exceed these limits do not present a hazardous condition.

5. **Applicant's Position**

The Applicant submitted that the Chateau Laurier Hotel is a heritage structure. The owners wish to use an existing terrace as a summer dining terrace. The terrace is quite small and will accommodate approximately 30 patrons. New access doors are being provided from an existing restaurant to the terrace.

The Applicant submitted that there is an existing granite guard (i.e. balustrade) protecting the open side of the terrace. The guard is approximately 40" high and has openings as large as 12 1/2".

The Applicant proposed that in keeping with the heritage character of the hotel, the openings in the guard be covered with a temporary coloured canvas awning attached to the inner side. The awning would be removed at the end of the outdoor dining season. The terrace would not be used during other seasons and the doors to the terrace would be locked.

The Applicant submitted that the existing height of the guard is adequate given the large width of its top.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed construction is regulated under Part 11 of the Building Code in accordance with Article 2.1.1.6. Article 11.1.1.3. of the Building Code states that "where an existing building is subject to material alteration...the Building Code is applicable only to those parts of the building that are subject to the material alteration...". The Respondent submitted that in this case the alterations to allow for the installation of the new doors providing access to the terrace are clearly regulated. Additionally, the proposed installation of a canvass barrier behind the existing guardrail may be considered construction and, as such, regulated by the Building Code.

The Respondent submitted that although the canvass barrier may address the issue with respect to the openings in the guard they are concerned with the temporary nature of the installation. Given the seasonal use of the terrace, each spring the Hotel would be responsible to install the canvass barrier. The Respondent submitted that except for Restricted Permits which are issued for a specified time and subject to renewal/reapplication, approvals for building permits and occupancy permits are based on permanent solutions.

The Respondent also submitted that they have reservations concerning the guard height falling 2" short of the required 42" height set out in Sentence 3.3.1.17.(1) of the Building Code. Part 11 of the Building Code does not provide a listed Compliance Alternative for these Part 3 requirements.

The Respondent submitted that they do not have the authority to approve the installation requested by the Applicant.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that providing a temporary canvas applied to the inner side of the openings of an existing balustrade on an outside dinning terrace provides sufficiency of compliance with Article 3.3.1.7. of the Building Code provided that the canvas is in place when the terrace is occupied.

8. **Reasons:**
    i. Evidence provided by the applicant demonstrated structural sufficiency required by Part 4 of the Building Code.
    ii. The existing 16" guard cap provided on the balustrade which is 40" in height compensates for the 2" deficiency from the Building Code height requirement.
    iii. The small size of the terrace limits the occupant load.

Dated at Toronto, this 14th day, in the month of June, in the year 1996, for application number 1996-32

BCC Ruling No. 96-31-514

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-31-514

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.9.3.7. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Jeff Kistner, Manager HVAC & Electrical, Ontario Electrical Construction Company Ltd., Toronto for the resolution of a dispute with Mr. Dennis Y. Perlin, Chief Building Official (Acting), City of Toronto, concerning whether the use of gas fired sealed combustion heaters mounted within 4.2 metres of an egress doorway in a portable classroom without a 1.5 hour fire separation between the appliance and the classroom provides sufficiency of compliance with Article 3.9.3.7. of the Building Code at the North Preparatory School Portable, 1100 Spadina Road, Toronto, Ontario.

APPLICANT

Mr. Jeff Kistner Manager HVAC & Electrical
Ontario Electrical Construction Company Ltd.
Toronto, Ontario

RESPONDENT

Mr. Dennis Y. Perlin
Chief Building Official (Acting)
City of Toronto

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

June 25, 1996

APPEARANCES

Mr. R.T. Tamblyn, P.Eng.
Engineering Interface Ltd.
For the Applicant

Mr. George Vrachas, Manager
Plan Examiner
City of Toronto
For the Respondent

RULING

1. **The Applicant**

   Mr. Jeff Kistner, Manager HVAC & Electrical, Ontario Electrical Construction Company Ltd., Toronto is the recipient of an order to comply under the Building Code Act, 1992 concerning the installation of six gas fired heating appliances installed in each of two portable classrooms at the North Preparatory School, 1100 Spadina Road, Toronto, Ontario.

2. **Description of Constrution**

   The subject buildings are two existing portable classrooms. They each have a building area of approximately 71 m² (768 ft²).

   The Applicant replaced existing electric baseboard heaters with new natural gas sealed combustion heaters.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.9.3.7. of the Building Code. At issue is the use of gas fired sealed combustion heaters mounted within 4.2 metres of an egress doorway in a portable classroom without a 1.5 hour fire separation between the appliance and the classroom.

4. **Provision of the Building Code**

Article 3.9.3.7. Fuel-Fired Appliances

1. Except as provided in Sentence (2), where a portable classroom contains a fuel-fired appliance, the appliance shall be separated from the remainder of the classroom by a fire separation having a fire-resistance rating of not less than
    a. 1.5 h where the horizontal distance between portable classrooms is 1.5 m (4 ft 11 in) or less, and
    b. 45 min where the horizontal distance between portable classrooms is more than 1.5 m (4 ft 11 in) but less than 6 m (19 ft 4 in).
2. Where the horizontal distance between portable classrooms is 6 m (19 ft 4 in) or more, a fuel-fired appliance need not be separated from the remainder of the classroom by a fire-separation provided
    a. there is not more than 1 appliance per portable classroom, and
    b. the appliance is located not less than 4.5 m (14 ft 9 in) from an egress doorway or an exit from the portable classroom.

5. **Applicant's Position**

The Applicant submitted that a building permit was issued by the Respondent on August 15, 1995 to permit the installation of gas fired baseboard heating units in two portable classrooms at the North Preparatory School. The subject portable classrooms are approximately 10 feet apart.

The Applicant submitted that an order to comply was issued on April 19, 1996 requiring removal of the gas fired baseboard heating units by May 15, 1996.

The Applicant submitted that they wish to use gas fired sealed combustion heaters in lieu of the various types of electrical heat used in the Metro Toronto School Board portables. The features of the unit include:

- fire and gas monitor protection
- sealed combustion with no open flame to ignite a combustible gas
- regular maintenance
- dramatic saving in energy cost
- mounting will be more than 4.2 m from an exit
- maximum exit distance is 4.5 m
- certification by CSA and CGA

Also, the Applicant stated that gas detectors and smoke alarms are provided in the classroom portables.

The Applicant submitted that open flame type gas fired units are used in other school classrooms and residences where children are present and exit distances are longer and where regular maintenance is not necessarily present.

The Applicant further submitted that they realize that gas fired appliances may be used if located in closets with appropriate fire resistance ratings. However, the closet requires to much space and destroys the economics. The Applicant requested the Commission approve the use of the baseboard heaters installed in the portables at the North Preparatory School.

Alternatively, the Applicant requested the Commission permit the use of one "hi boy" unit instead of the gas baseboard units.

6. **Chief Building Official's Position**

The Respondent submitted that the Applicant has installed six fuel (gas) fired heating appliances in each of two portable classrooms in contravention of Article 3.9.3.7. of the Building Code.

The Respondent submitted that there is more than one appliance in each portable. A total of six per portable have been installed. Also, an appliance is located closer than 4.5 m from the exit doorways from the portable in each of the two units.

The Respondent further submitted that the Applicant does not wish to construct a fire separation between the appliance and the remainder of the classroom.

Also, the Respondent expressed concern that the exhaust cup (outlet) is hot and appears to be a hazard to children.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the installation of the fuel fired appliances installed in the portable classrooms does not comply with Article 3.9.3.7. of the Building Code.

8. **Reasons:**

. The distance between the portable classrooms is less than 6 m.

i. These systems have not been used extensively in portable classrooms.

ii. It is the opinion of the Building Code Commission that alternatives presented did not demonstrate sufficiency of compliance with the Building Code.

iii. It is the opinion of the Building Code Commission that this issue should be reviewed through the Building Code amendment process to consider this technology for use in portable classrooms.

Dated at Toronto, this 25th day, in the month of June, in the year 1996, for application number 1996-31

BCC Ruling No. 96-30-513

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-30-513

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.4.19. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Peter R. Thompson, Director of Facilities Management, Ottawa Civic Hospital, Ottawa for the resolution of a dispute with Mr. Les Batson, Chief Building Official, City of Ottawa, concerning whether providing strobe lights in the Intensive Care Unit, Operating Rooms and Post Anaesthesia Care Units to visually indicate the activation of the fire alarm system in lieu of audible devices provides sufficiency of compliance with the requirements in Article 3.2.4.19. of the Building Code at the Ottawa Civic Hospital, Building #4, Level 2 and 3, 1053 Carling Avenue, Ottawa, Ontario.

APPLICANT

Mr. Peter R. Thompson
Director of Facilities Management
Ottawa Civic Hospital

RESPONDENT

Mr. Les Batson
Chief Building Official
City of Ottawa

PANEL

Mr. Roy Philippe, Chair
Ms. Lesia Beznaczuk
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

June 14, 1996

APPEARANCES

Mr. Peter Thompson, Director of Facilities Management
Mr. Charles Montgomery, Fire Prevention &
Disaster Planning Officer
AND
Dr. Roy McIntyre Head, I.C.U.
Ottawa Civic Hospital
For the Applicant

Mr. Chris Freeman
AND
Mr. Neil Dillon
City of Ottawa
For the Respondent

RULING

1. **The Applicant**

   Mr. Peter Thompson, Director of Facilities Management, Ottawa Civic Hospital is the holder of a permit under the Building Code Act, 1992 to renovate the Post Anaesthesia Care Unit at the Ottawa Civic Hospital, Building #4, Level 2 and 3, 1053 Carling Avenue, Ottawa, Ontario.

2. **Description of Constrution**

   The Ottawa Civic Hospital is a 700 bed tertiary/quaternary care teaching hospital which provides specialty care in Neurosurgery, Vascular Surgery, Cardiac Care and disease of the Endocrine systems.

   The hospital recently completed a renovation to the Post Anaesthesia Care Unit, which included an upgrade to the Fire Alarm System.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.2.4.19. of the Building Code. At issue is whether strobe lights may be provided in the Intensive Care Unit, Operating Rooms and Post Anaesthesia Care Units to visually indicate the activation of the fire alarm system in lieu of audible devices such as bells or chimes.

4. **Provision of the Building Code**

Article 3.2.4.19. Audibility of Alarm Signals

1. Audible signal appliances forming part of a required fire alarm system shall be installed in a building so that alert signals, alarm signals and voice messages can be heard intelligibly throughout the floor area in which they are installed.
2. If a fire alarm system is required, audible signal appliances shall be located in a service space referred to in Sentence 3.2.1.1.(7) and shall be connected to the fire alarm system.

5. **Applicant's Position**

The Applicant submitted that the population of patients that are served by the hospital, includes cerebral aneurism repairs, cerebral tumour surgery, aggressive head and neck surgery (usually cancer related), high risk vascular surgery etc.

The Applicant submitted that common to all of these problems is the very real risk of post operative haemorrhage and/or stroke - the risk of which is directly affected by the patient's blood pressure, particularly intra-cranial blood pressure.

The Applicant submitted that when the new fire alarm sounds, the natural startle reflex of the patient causes an immediate rise in blood pressure, resulting in a situation in which the upgraded fire alarm system designed to make the environment safer, actually presents a very real life safety risk.

The Applicant submitted that speaker volumes have been lowered as a trial, however, the hospital has been unable to reach a satisfactory situation.

The Applicant appealed to the Building Code Commission for their endorsement of their proposal to substitute strobe lights in lieu of bells/chimes in the areas affected which include, Operating Rooms, Post Anaesthesia Care Units and Intensive Care Unit areas. Bells and chimes will remain in support areas where they do not pose a hazard to the patient population.

The Applicant proposed to situate the strobe lights throughout the affected areas. Audible warning devices would be provided at the nursing stations. The nose level of the devices would be to an effective level agreed upon with the City of Ottawa building department.

6. **Chief Building Official's Position**

The Respondent submitted that Sentence 3.2.4.4.(2) of the Building Code requires an alarm signal to sound upon the activation of the second stage of the manual pull station of the fire alarm system. Sentence 3.2.4.19.(1) of the Building Code requires alarm signals to be heard intelligibly throughout the floor area in which the signal devices are located.

The Respondent further submitted that while they understand the concerns raised, the municipality does not have the authority to allow the audible devices (i.e. bells/chimes) to be disconnected from the fire alarm system.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that providing strobe lights conforming to U.L.C. S526-M87 in the Intensive Care Unit, Operating Rooms and Post Anaesthesia Care Units to visually indicate the activation of the fire alarm system in lieu of audible signalling devices provides sufficiency of compliance with Article 3.2.4.19. of the Building Code.

8. **Reasons:**
   i. The audible signals will be sounded at continually staffed locations.
   ii. Staff working in these areas are trained to recognize the fire alarm visual signals and take appropriate action for the safety of the patients.
   iii. Evidence indicated that an audible signal could have a detrimental impact on the health of patients at the subject locations.

Dated at Toronto, this 14th day, in the month of June, in the year 1996, for application number 1996-30.

BCC Ruling No. 96-29-512

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-29-512

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Subsection 3.1.6. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Anthony Auciello, President, Cachet Estate Homes Inc. & Cachet Development Inc., Thornhill for the resolution of a dispute with Mr. David Potter, Chief Building Official, Town of Richmond Hill, concerning whether a tent to be used as a new home sales office and display area should be considered a temporary structure in accordance with the requirements of Subsection 3.1.6. of the Ontario Building Code at the Cachet Estate Homes, Bayview Hill, Sales Pavilion, 259 Boake Trail, Thornhill, Ontario.

APPLICANT

Mr. Anthony Auciello, President
Cachet Estate Homes Inc.
AND
Cachet Development Inc.,BR> Thornhill, Ontario

RESPONDENT

Mr. David Potter
Chief Building Official
Town of Richmond Hill

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

June 12, 1996

APPEARANCES

Mr. Desi Auciello, Solicitor
Auciello, Franschman
Barristers and Solicitors
For the Applicant

Mr. David Finbow, Manager
Plans Examination and Compliance
Town of Richmond Hill
For the Respondent

RULING

1. **The Applicant**

   Mr. Anthony Auciello, President, Cachet Estate Homes Inc., is an applicant for a permit under the Building Code Act, 1992 to erect a temporary tent intended for use as a sales office for real estate development located at 259 Boake Trail, Thornhill, Ontario.

2. **Description of Constrution**

   The subject structure is a temporary tent to be used as a sales office for real estate. The Applicant proposes to construct a 5/8" thick plywood floor on 2x10 @ 24" o.c. Interior walls are proposed to be constructed to a height of approximately 8 feet, containing electrical wire with drywall finish on one side. The interior walls are to be constructed to within 24" of the outside fabric shin. The main entrance and rear exit doors are mounted in full frames with hardware.

   There are numerous display areas proposed inside the structure that are typical of those found in traditional builders sales pavilions.

3. **Dispute**

The dispute between the Applicant and Respondent concerns an interpretation of Section 3.1.6. of the Building Code. At issue is whether a tent to be used as a new home sales office and display area should be considered a temporary structure in accordance with the requirements of Subsection 3.1.6.

4. **Provision of the Building Code**

Subsection 3.1.6. Tents, Air-Supported Structures and Temporary Structures

3.1.6.1. Means of Egress

Tents, air-supported structures and temporary structures shall conform to Sections 3.3. and 3.4.

3.1.6.2. Application

1. Reserved
2. Air-supported structures shall not be used for Groups B, C or Group F, Division 1 major occupancies or for classrooms.
3. Air-supported structures shall be designed primarily as open floor space without interior walls, mezzanines, intermediate floors or similar construction.
4. A tent used for camping or personal use and not more than 30 m^2 (323 ft^2) in ground area is exempt from requiring a building permit and is exempt from compliance with this Code.
5. For the purposes of this Subsection, a temporary structure means a building or structure intended to be erected and used for a period of not more than 12 months.

3.1.6.3. Clearance to Other Structures

6. Except for tents used for camping and other personal uses and except as provided in Sentences (2),(3) and (4), every tent, air-supported structure and temporary structure shall conform to Subsection 3.2.3.
7. Tents and air-supported structures shall not be erected closer than 3 m (9 ft 10 in) to other structures on the same property except as provided in Sentences (3) and (4), and shall be sufficiently distant from one another to provide an area to be used as a means of emergency egress.

8. Tents and air-supported structures not occupied by the public need not be separated from one another and are permitted to be erected less than 3 m (9 ft 10 in) from other structures on the same property where such closer spacing does not create a hazard to the public.
9. Tents not more than 120 m² (1290 ft²) in ground area, located on fair grounds or similar open spaces, need not be separated from one another provided such closer spacing does not create a hazard to the public.

3.1.6.4. Clearance to Flammable Material

The ground enclosed by a tent or air-supported structure and for not less than 3 m (9 ft 10 in) outside of such a structure shall be cleared of all flammable material or vegetation that will carry fire.

3.1.6.5. Flame Resistance

Every tent and all tarpaulins and decorative materials used in connection with tents and air-supported structures shall conform to CAN/ULC S-109-M, "Standard for Flame tests of Flame-Resistant Fabrics and Films".

3.1.6.6. Reserved

3.1.6.7. Design of Framing and Support

The supporting framing structure and anchorage system of all tents more than 225 m² (2420 ft²) in ground area shall be designed by a professional engineer.

3.1.6.8. Design of temporary Structures

10. Except for tool sheds or similar structures, the structural components of a temporary structure shall be designed in conformance with
    a. Subsection 4.1.6. for the intended use,
    b. Subsection 4.1.7. for the snow and rain, and
    c. Subsection 4.1.8. for wind.

5. **Applicant's Position**

The Applicant submitted that the structure is a temporary tent complying with Subsection 3.1.6. of the Building Code.

The Applicant stated that the structure was erected in May and will be removed no later than the end of September 1996.

The Applicant stated that except for snow load design the tent meets the requirements for temporary structures in Article 3.1.6.8. of the Building Code.

6. **Chief Building Official's Position**

The Respondent submitted that the use and interior construction proposed by the Applicant was not contemplated under the tent, air- supported structure and temporary structure provisions in Subsection 3.1.6. of the Building Code.

The Respondent stated that the structure does not comply with Subsection 4.1.6. for the intended use, nor Subsection 4.1.7. with respect to snow and ice loading.

The Respondent submitted that the structure does not qualify as a tent due to the interior walls, floor and corridors and the construction requirements in Article 3.1.6.8. of the Building Code for temporary buildings must apply.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the new sales office and display area provides sufficiency of compliance with Subsection 3.1.6. of the Building Code provided the occupancy period is limited to a time when snow loading under Subsection 4.1.7. would not be applicable.

8. **Reason:**

Evidence was provided to demonstrate that the provisions of Subsection 4.1.7. and 4.1.8. have been addressed for wind and rain.

Dated at Toronto, this 12th day, in the month of June, in the year 1996, for application number 1996-29.

BCC Ruling No. 96-28-511

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-28-511

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OFF Sentence 3.2.3.7.(2) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Mark Kane, General Manager Eastern Canada, Carpenter Co., Vaughan for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, concerning whether a wall adjacent to a CNR right of way may be constructed of metal panels on a steel frame in lieu of providing a 2 hour fire resistant rating in accordance with Sentence 3.2.3.7.(2) of the Building Code at the Carpenter Co., 500 Hanlan Road, Vaughan, Ontario.

APPLICANT

Mr. Mark Kane
General Manager Eastern Canada
Carpenter Co.
Vaughan, Ontario

RESPONDENT

Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

June 25, 1996

APPEARANCES

Mr. Thomas E. Brown, President
Thomas E. Brown Architect Inc.
For the Applicant

Mr. Steven Penna
Technical Supervisor
City of Vaughan
For the Respondent

RULING

1. **The Applicant**

   Mr. Mark Kane, General Manager Eastern Canada, Carpenter Co., Vaughan is an applicant for a permit under the Building Code Act, 1992 to construct an addition to an existing medium hazard industrial occupancy located at 500 Hanlan Road, Vaughan, Ontario.

2. **Description of Constrution**

   The proposed addition is a one storey noncombustible building classified as a Medium Hazard Industrial Occupancy (i.e. Group F, Division 2). The building is provided with a sprinkler system, fire alarm system and standpipe and hose system. The building area is as follows:

Existing	25,612 m² (275,697 ft²)
Addition	5,070 m² (54,525 ft²)
Total	30,682 m² (330,272 ft²)

   The exposing building face of the addition that faces the CNR right-of-way has a variable height of 10 to 10.5 metres and is 67.8 metres long. The limiting distance from the wall in question to the property line is 15.25 metres. The wall is proposed to be constructed of metal panels on a steel frame.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentence 3.2.3.7.(2) of the Building Code. At issue is whether a wall adjacent to a CNR right of way may be constructed of metal panels on a steel frame in lieu of providing a 2 hour fire resistant rating.

4. **Provision of the Building Code**

Article 3.2.3.7.(2) Construction of Exposing Building Face

2. Except as permitted in Article 3.2.3.9., where a limiting distance shown in Table 3.2.3.B. for a Group E, or Group F, Division 1 or 2 occupancy classification is such as to permit an exposing building face to have unprotected openings of

b. not more than 10 per cent of the exposing building face, the exposing building face shall be of noncombustible construction having a fire-resistance rating of not less than 2 h and be clad with noncombustible cladding,
c. more than 10 per cent but not more than 25 per cent of the exposing building face, the exposing building face shall have a fire-resistance rating of not less than 2 h, and be clad with noncombustible cladding, and
d. more than 25 per cent but less than 100 per cent of the exposing building face, the exposing building face shall have a fire-resistance rating of not less than 1 h.

2. **Applicant's Position**

The Applicant submitted that the north wall of the addition is proposed as a non-combustible, metal panelled wall on a steel frame. The adjacent property is a CNR right of way and the nearest rail line is 29 metres from the building.

The Applicant submitted that the existing building faces the same CNR right of way. The wall in dispute is in the same plane as the existing wall which was not required to have a 2 hour fire resistance rating. The existing wall is 265 metres long.

The Applicant submitted that the CNR have confirmed they are not going to build on the right of way. The Applicant objects to the requirement of providing a 2 hour fire resistance rating.

3. **Chief Building Official's Position**

The Respondent submitted that the north wall of the addition is approximately 15 metres from the property line. Therefore, the north exterior wall of this addition requires a 2 hour fire resistance rating and be clad with non-combustible cladding in accordance with Clause 3.2.3.7.(2)(b) of the Building Code.

The Respondent further submitted that the CNR right of way is not a street by definition under Article 1.1.3.2. and therefore Clause 3.2.3.9.(2) of the Building Code is not applicable.

4. **Commission Ruling:**

It is the decision of the Building Code Commission that providing a wall of metal panels on a steel frame in lieu of providing a 2 hour fire resistant rating adjacent to a C.N.R. right of way does not provide sufficiency of compliance with Sentence 3.2.3.7.(2) of the Building Code.

5. **Reasons:**

ii. No alternatives were offered to provide sufficiency of compliance.
iii. The adjacent property is not considered a street for the purposes of Article 3.2.3.9. of the Building Code.

Dated at Toronto, this 25th day, in the month of June, in the year 1996, for application number 1996-28

BCC Ruling No. 96-27-510

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-27-510

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Articles 3.2.2.52. and 3.5.2.7. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. J. Nemeth, Project Manager, Magna, Aurora for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, concerning whether not sprinklering a non-combustible addition to be used for the shelter of scrap metal provides sufficiency of compliance with the requirements in Article 3.2.2.52. of the Building Code at the Rollstamp, 90 Snidercroft Road, Concord, Ontario.

APPLICANT

Mr. J. Nemeth, Project Manager
Magna,BR> 455 Magna Drive
Aurora, Ontario

RESPONDENT

Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

July 9, 1996

APPEARANCES

Mr. J. Nemeth
Project Manager
Magna
Aurora, Ontario
The Applicant

Mr. Steve Penna
Technical Supervisor
City of Vaughan
For the Respondent

RULING

1. **The Applicant**

   Mr. J. Nemeth, Project Manager, Magna, 455 Magna Drive, Aurora is the holder of a permit under the Building Code Act, 1992 to construct an addition to an existing industrial building for the purposes of sheltering scrap metal at 455 Magna Drive, Aurora, Ontario.

2. **Description of Constrution**

   The subject building is a one storey Medium Hazard Industrial Occupancy (i.e. Group F, Division 2) with a building area of 7702 m² (82906 ft²) used for the manufacturing of automobile parts. The building is also provided with a fire alarm system and an automatic sprinkler system.

   The Applicant proposes to construct an unsprinklered 223 m² (2400 ft²) addition for the storage of scrap metal. The addition is partially open to the outdoors. There is a 2 hour fire separation between the existing building and the scrap metal storage addition.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.2.2.52. of the Building Code. At issue is whether the

proposed non-combustible addition being used for the shelter of scrap metal requires sprinkler protection.

4. **Provision of the Building Code**

Article 3.2.2.52. Industrial Buildings, Division 2 up to 4 Storeys

1. A building classified as Group F, Division 2 shall conform to Sentence (2) provided the building
   a. is not more than 4 storeys in building height,
   b. if unsprinklered, has a building area not more than the value in Table 3.2.2.T., and
   c. if sprinklered, is not more than twice the area limits of Clause (b).

No. of Storeys	Unsprinklered Maximum Area, m² (ft²)		
	Facing 1 Street	Facing 2Streets	Facing 3 Streets
1	3 200 (34 200)	4 000 (43 000)	4 800 (51 000)
2	1 600 (17 200)	2 000 (21 500)	2 400 (25 800)
3	1 070 (11 500)	1 340 (14 400)	1 600 (17 200)
4	800 (8 610)	1 000 (10 800)	1 200 (12 900)
Column 1	2	3	4

2. The building shall be of combustible or non-combustible construction used either singly or in combination, and
   a. floor assemblies shall be fire separations with fire-resistance rating of not less than 45 min,
   b. mezzanines shall have, if of combustible construction, a fire-resistance rating of not less than 45 min,
   c. roof assemblies shall have, if of combustible construction, a fire-resistance rating of not less than 45 min, except that in buildings not more than 1 storey in building height, the fire-resistance rating is permitted to be waived provided that the roof assembly is constructed as a fire-retardant treated wood roof system conforming to Article 3.1.14.1., and
      i. if unsprinklered, the building area is not more than

1600 m2 (17,100 ft²) if facing 1 street
2000 m² (21,5000 ft²) if facing 2 streets, or
2400 m² (25,800 ft²) if facing 3 streets, and

ii. if sprinklered, the building area is not more than twice the area limits of Subclause (i) (see Article 3.2.2.12. for supervised sprinkler systems), and

d. all loadbearing walls, columns and arches supporting as assembly required to have a fire resistance rating shall have a fire-resistance rating of not less than 45 min or shall be of noncombustible construction, except that such members and assemblies supporting a fire separation shall have a fire-resistance rating not less than that required for the supported assembly.

5. **Applicant's Position**

The Applicant submitted that the buildings sprinkler system need not be extended to the addition. The addition is used only for the temporary storage of scrap metal from the manufacturing process and is open to the outdoors.

The Applicant stated that the addition is structurally independent of the existing building. The Applicant stated that there is good fire fighting access to the addition.

The Applicant proposed to install heat detection devices connected to the fire alarm system in lieu of sprinklering the addition.

6. **Chief Building Official's Position**

The Respondent submitted that Article 3.2.2.52. of the Building Code requires the existing building to be protected by a sprinkler system. Therefore, the 223 m² addition must also be protected by a sprinkler system.

The Respondent submitted that in accordance with Sentence 3.2.5.13.(1) of the Building Code the installation of a sprinkler system must comply with NFPA 13.

The Respondent also submitted that NFPA 13, Sentence 1-6.1 states "a building, when protected by a automatic sprinkler system installation, shall be provided with sprinklers in all areas".

The Respondent stated that NFPA 13 does not require a sprinkler system for a canopy over noncombustible storage. The Respondent stated that this structure could not be considered a canopy due to it being enclosed on three sides.

The Respondent also stated that the building permit was issued subject to the addition being protected by a sprinkler system.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the unsprinklered shelter open on one side for noncombustible scrap metal storage provides sufficiency of compliance with Article 3.2.2.52. of the Building Code and the exceptions provided for sprinkler protection of exterior roofs or canopies in NFPA 13 provided that a 2 hour separation is provided between the existing building and shelter, and heat detectors connected to the fire alarm system are provided in the shelter.

8. **Reasons:**
   i. The enclosure is used only for noncombustible scrap metal storage.
   ii. The shelter is open on one face and access for fire fighting purposes is provided by a fire route along the open face of the shelter.
   iii. The shelter is separated by a 2 hour fire separation from the existing building.
   iv. Additional heat detection for early warning is provided in the shelter connected to the fire alarm system.
   v. It is the opinion of the Building Code Commission that the noncombustible storage shelter with one side open for noncombustible storage does not create an unsafe fire risk.

Dated at Toronto, this 9th day, in the month of July, in the year 1996, for application number 1996-34.

BCC Ruling No. 96-26-509

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-26-509

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.8.5.2.(2) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Chuck Lunau, General Manager, W.A. Stephenson Construction Managers Inc., Richmond Hill for the resolution of a dispute with Mr. Don Warner, Chief Building Official, Township of Brock, concerning whether the proposed "TD" sign on the east side of the building provides sufficiency of compliance with the requirements in Sentence 3.8.5.2.(2) of the Building Code at the Toronto Dominion Bank, 370 Simcoe Street, Beaverton, Ontario.

APPLICANT

Mr. Chuck Lunau, General Manager
W.A. Stephenson Construction Managers Inc.
Richmond Hill, Ontario

RESPONDENT

Mr. Don Warner
Chief Building Official
Township of Brock

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

July 9th, 1996

APPEARANCES

Mr. George Kotsilidis, Manager
Real Estate Operations
Toronto Dominion Bank
For the Applicant

RULING

1. **The Applicant**

   Mr. Chuck Lunau, General Manager, W.A. Stephenson Construction Managers Inc., Richmond Hill is the holder of a permit under the Building Code Act, 1992 to construct a one storey building for use by the Toronto Dominion Bank at 370 Simcoe Street, Beaverton, Ontario.

2. **Description of Constrution**

   The subject building is a one storey noncombustible Group D occupancy having a building area of 337.4 m² (3,631.8 ft²).

   The Applicant proposed to install an illuminated "TD" logo sign on the east face of the building. The sign will be located near the top at the south end of the east exterior wall. The sign will project 127 mm (5 inches) from the wall face and the sign bottom will be about 3.2 m (10 ft 5 in) above the surface of a side walk.

   There is a 0.9 m (3 ft) wide concrete side walk along the east side of the subject building. The side walk abuts the private lane of the Post Office building located on the adjacent property. Also, there is a continuous handrail that projects 76 mm (3 in) from the wall face of the bank building.

   At the entrance to the private lane, the separation between the bank building and the adjacent postal building is 3.8 m (12 ft 6 1/4 in). The dimension between the edge of the sidewalk and the west face of the postal building is 2.9 m (9 ft 6 1/4 in). The top of the sidewalk is at the same elevation as the top of the private lane.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentence 3.8.5.2.(2) of the Building Code. At issue is the proposed installation of the illuminated "TD" logo sign on the east side of the building adjacent to a private lane.

4. **Provision of the Building Code**

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5. Sentence 3.8.5.2.(2)          Clearance for Exterior Signs
6.
7. (2)  Except as provided hereinafter, no sign face shall be
   erected
8.      within 600 mm (23 5/8 in) of the vehicular travelled
   portion of a
9.      private lane or roadway, or of a motor vehicle parking area
   unless
10.       the minimum vertical distance between grade and the bottom
   of the
        overhanging sign face is at least 4.25 m (13 ft 11 in).
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11. **Applicant's Position**

The Applicant submitted that the proposed installation of the illuminated "TD" logo sign on the east side of the building adjacent to a private lane sufficiently complied with the Building Code.

The Applicant submitted that the sign is necessary to identify the bank for people approaching from the east. Also, there is a sidewalk and a handrail on the east side of the building that will help protect the sign from vehicles using the lane. The handrail projects 76 mm (3 in) and the sign depth is 127 mm (5 in).

The Applicant proposed to raise the height of the sign to not less than 12 ft to the bottom of the sign. The Applicant stated that the cube vans that use the lane way are approximately 9 ft high.

The Applicant stated that the Toronto Dominion Bank has a right of way agreement for the use of the sidewalk. They have agreed to keep the sidewalk free of snow and ice.

12. **Chief Building Official's Position**

The Respondent submitted that the sign face will be less than 600 mm (23 5/8 in) from a private lane and less than 4.25 m (13 ft 11in) to the bottom of the sign and does not conform to Sentence 3.8.5.2.(2) of the Building Code.

The Respondent submitted that the building next to the bank is a post office which has a large cube van delivering mail to the rear of the building. The van would be very close to the building. The ice and snow build-up in the winter could cause the van to tilt enough to damage or remove the sign.

The Respondent declined to attend the hearing.

13. **Commission Ruling:**

It is the decision of the Building Code Commission that the "TD" logo sign on the east side of the building does not comply with Sentence 3.8.5.2.(2) of the Building Code.

14. **Reasons:**

i. No commitment was provided that the height of vehicles using the private lane will be permanently restricted as identified in Sentence 3.8.5.2.(3) of the Building Code.

ii. No proposal was presented to limit the vehicular travelled portion of the right of way to meet the requirements of the Building Code.

Dated at Toronto, this 9th day, in the month of July, in the year 1996, for application number 1996-33.

BCC Ruling No. 96-25-508

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-25-508

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 9.10.14.12.(4) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Ms. Jacqueline Mills, Home Owner, Toronto for the resolution of a dispute with Mr. Dennis Perlin, Chief Building Official, City of Toronto, concerning whether extending the limiting distance for the south wall of the building to the south side of a right of way on the adjacent property to maximize the permitted percentage of unprotected openings or glazed areas provides sufficiency of compliance with Sentence 9.10.14.12.(4) of the Building Code, at 1 Jean Street, Toronto, Ontario.

APPLICANT

Ms. Jacqueline Mills
1 Jean Street
Toronto, Ontario

RESPONDENT

Mr. Dennis T. Perlin
Chief Building Official
City of Toronto

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

July 9, 1996

APPEARANCES

Ms. Jacqueline Mills
AND
Mr. James Musgrove
Toronto, Ontario
The Applicant

Mr. Cesar Ramires
Building Plan Examiner
City of Toronto
For the Respondent

RULING

1. **The Applicant**

   Ms. Jacqueline Mills, Home Owner, 1 Jean Street, Toronto is an applicant for a permit under the Building Code Act, 1992 to construct interior alterations and a 2nd floor addition to a single family dwelling (i.e. house) at 1 Jean Street, Toronto, Ontario.

2. **Description of Constrution**

   The subject building is a three storey detached house located 0.3 m (1 ft) from the south property line. There is a 4.6 m (15 ft) right of way adjacent to the south property line to be used only for the passage of automobiles.

   The right of way is registered of the titles of both properties. The Applicant proposed that the spatial separation be extended to the south side of the right of way on the adjacent property.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentence 9.10.14.12.(4) of the Building Code.

At issue is the determination of whether the limiting distance for the south wall of the building may be measured to the south side of the right of way on the adjacent property to maximize the permitted percentage of unprotected openings or glazed areas in the exterior wall.

4. **Provision of the Building Code**

5. Sentence 9.10.14.12.(4) Exposing Building Face of Houses

6.

7. (4) Where the spatial separation between dwelling units on adjoining

8. properties is registered on the titles of both properties, the

9. spatial separation may be calculated as if the dwelling units

were constructed on the same property.

10. **Applicant's Position**

The Applicant submitted that the property includes a registered right of way over the adjacent property. The right of way is registered on the titles of both properties as well as other neighbouring properties.

The Applicant stated that two additional bedroom windows are proposed to be installed on the 3rd storey. Also, a window of comparable size will be removed on the 1st storey. The window to be removed is set-back further than the proposed windows.

The Applicant stated that in order for the window openings to be permitted a limiting distance of 6 ft. 7 in. is required.

The Applicant submitted that the spatial separation should extend to the south side of the right of way on the adjacent property. Although, the Applicant stated that if the limiting distance was permitted to extend to the centre line of the right of way it would permit the installation of the proposed windows.

11. **Chief Building Official's Position**

The Respondent submitted that Sentence 9.10.14.12.(4) of the Building Code requires the limiting distance for the purposes of spatial separation to be registered on title. Titles of adjacent

property and the subject property indicate the use of the right of way exclusively for access purposes and not for limiting distance or spatial separation purposes.

The Respondent stated that if the limiting distance was shifted onto the neighbouring property (i.e. right of way) it would reduce the limiting distance to the rear of their properties.

12. **Commission Ruling:**

It is the decision of the Building Code Commission that providing a limiting distance of 7 ft. 0 in. from the south face of the building into the right of way provides sufficiency of compliance with Sentence 9.10.14.12.(4) of the Building Code.

13. **Reasons:**

i. A dedicated 15 ft. right of way is registered on the title of the adjacent properties to the south of the subject property.

ii. Existing windows on the exposing building face of approximately equivalent size to the new proposed windows will be blocked off and therefore there will be no significant increase in the percentage of glazed openings.

Dated at Toronto, this 9th day, in the month of July, in the year 1996, for application number 1996-24

BCC Ruling No. 96-24-507

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-24-507

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.9.1. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. H. Sinke, Project Co- ordinator, Abcott Construction Ltd. vs. Mr. Doug Ferguson, Chief Building Official, City of Brantford, concerning whether not providing a standpipe and hose system in a low hazard industrial occupancy where compensating fire protection is provided in the form of fire extinguishers and a fire safety program provides sufficiency of compliance with Article 3.2.9.1. of the Building Code at the Namasco Blanking Centre, 546 Elgin Street, Brantford, Ontario.

APPLICANT

Mr. H. Sinke
Project Co-ordinator
Abcott Construction Ltd.
Brantford, Ontario

RESPONDENT

Mr. Doug Ferguson
Chief Building Official
City of Brantford

PANEL

Mr. Roy Philippe, Chair
Mr. Rick Florio
Ms. Lesia Beznaczuk

PLACE

Toronto, Ontario

DATE OF RULING

May 30th, 1996

APPEARANCES

Mr. R.W. Phillips
Project Engineer
J.H. Cohoon Eng.Ltd.
For the Applicant

Mr. H. Sinke
Project Co-ordinator
Abcott Const. Ltd
The Applicant

Mr. Doug Ferguson
Chief Building Official
City of Brantford
The Respondent

RULING

1. **The Applicant**

   Mr. H. Sinke, Project Co-ordinator, Abcott Construction Ltd. is an applicant for a permit under the Building Code Act, 1992 to construct an addition for coil storage and steel processing at the Namasco Blanking Centre, 546 Elgin Street, Brantford, Ontario.

2. **Description of Constrution**

   The existing one storey building and proposed addition will be utilized for coil storage and steel processing. The building is classified as a Low Hazard Industrial Occupancy (i.e. F-3).

   The building is not sprinklered nor does it have a fire alarm system. The building area of the complete building will be 7656 m² (i.e. 4084 m² existing and 3572 m² proposed).

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.2.9.1. of the Building Code. At issue is a proposal to provide compensating fire protection measures in the form of fire extinguishers and a fire safety program in lieu of providing a standpipe and hose system.

4. **Provision of the Building Code**

Article 3.2.9.1. Standpipe and Hose Systems Where Required

1. Except as provided in Article 3.2.9.2., a standpipe and hose system shall be installed in every building that
    a. is more than
        i. 3 storeys in building height, or
        ii. 14 m (45 ft 11 in) in height measured between grade and the ceiling of the uppermost storey,
    b. is greater in building area than the area shown in Table 3.2.8.A. for the applicable building area shown on the Table where the building
        i. is not sprinklered, and
        ii. is not more than 14 m (45 m 11 in) high measured between grade and the ceiling of the top storey, or
    c. contains more than one storey below grade

5. **Applicant's Position**

The Applicant submitted that during the design process for the original building, the general contractor at that time applied for an exemption to the requirement for the standpipe and hose system on the basis of a previous BCC Ruling (i.e. 87-8-193).

The Applicant respectfully requested that the previous Ruling be extended to the proposed addition. The Applicant submitted the following information to support their application:

- The building is of noncombustible construction.
- The activity in this building is cold steel processing which does not create a likelihood of fire.
- The premises are equipped and/or will be equipped with adequate fire extinguishers.
- A fire safety committee has been organized and is operating in this facility.

The Applicant proposed to provide a fire access route and private hydrant(s) along the east face of the building as a compensating measure.

6. **Chief Building Official's Position**

The Respondent submitted that the existing 4,084 m² building was granted an exemption from the requirement to install a standpipe and hose system by the former Chief Building Official. This exemption was granted on the basis of BCC Ruling number 87-8-193 which involved a 5,120 m² building.

The Respondent submitted that an addition is now proposed to bring the total area of the building to 7,660 m². This building is now well beyond the scope of the building governed by Ruling 87-8-193.

The Respondent further submitted that Article 3.2.9.1. of the Building Code requires that a standpipe and hose system be installed in a one storey F-3 occupancy greater than 3,000 m² in building area and the total area of the building with the addition will be in excess of twice that area.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the building provides sufficiency of compliance with Article 3.2.9.1. of the Building Code provided a fire department access route and private hydrant(s) are installed along the east face of the building parallel to Plant Farm Road.

8. **Reasons:**

. The building contains a low fire load.
i. Additional fire extinguishers will be provided.
ii. A fire safety committee is in place and operational.
iii. No further additions to the building are contemplated.
iv. Additional fire department access and hydrant(s) will enhance fire fighting capability.
v. The installation of the hydrant(s) and access routes will require fire department pre-fire planning for the facility.

Dated at Toronto, this 30th day, in the month of May, in the year 1996, for application number 1996-25

BCC Ruling No. 96-23-506

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-23-506

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Articles 9.10.14.1. and 9.10.14.12. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Robert Dunlop, Home Owner, Toronto vs. Mr. Dennis Y. Perlin, Chief Building Official, City of Toronto, concerning whether the installation of a sliding glass door in the subject exposing building face complies with Articles 9.10.14.1 and 9.10.14.12. of the Building Code at 222 Rosedale Heights Drive, Toronto, Ontario.

APPLICANT

Mr. Robert Dunlop
Home Owner
222 Rosedale Heights Drive
Toronto, Ontario

RESPONDENT

Mr. Dennis Y. Perlin
Chief Building Official
City of Toronto

PANEL

Mr. Roy Philippe, Chair
Mr. Rick Florio
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

August 1st, 1996

APPEARANCES

Mr. Robert Dunlop
Home Owner
222 Rosedale Heights Drive
Toronto, Ontario
The Applicant

RULING

1. **The Applicant**

   Mr. Robert Dunlop, Home Owner, 222 Rosedale Heights Drive, Toronto is an Applicant for a permit under the Building Code Act, 1992 to renovate a kitchen in a two storey single family dwelling at 222 Rosedale Heights Drive, Toronto, Ontario.

2. **Description of Constrution**

   The subject building is a single family two storey brick house.

   The Applicant proposed to renovate the kitchen and install a sliding glass door in the rear, solid masonry wall of the house.

   The subject exposing building face is angled toward the side property line (e.g. approximately 45 degree to the line). The distance from the property line to the closest part of the glazed area is 2.1 m (6' 7"). The size of the proposed patio door is 6' 10" x 3' 6" (i.e. 2.2 m^2 or 23.9 ft^2).

3. **Dispute**

   The dispute between the Applicant and Respondent concerns an interpretation of the technical requirements of Articles 9.10.14.1. and 9.10.14.12 of the Building Code. At issue is whether the glazed area of the proposed sliding glass door in the subject exposing building face complies with the Spatial Separation requirements in the Building Code.

4. **Provision of the Building Code**

Article 9.10.14.1. Maximum Percentage of Unprotected Openings

1. Except as provided in Sentence (2) and in Articles 9.10.14.3. to 9.10.14.11., the maximum percentage of unprotected openings in an exposing building face shall conform to Table 9.10.14.A. or to Subsection 3.2.3., whichever is the least restrictive for the occupancy being considered.
2. An opening in an exposing building face not more than 130 cm2 (20 in²) shall not be considered an unprotected opening.

Article 9.10.14.12.

3. For the purposes of application of this Article
    a. the exposing building face may be divided into any number of portions and the fire resistance rating, type of cladding and glazed area limitations may be determined individually for each portion based on the limiting distance for each portion so divided,
    b. the exposing building face may be taken as the projection of the exterior wall onto a vertical plane located so that no portion of the exterior wall of the building is between the vertical plane and the line to which the limiting distance is established in Clause (a), and
    c. for the purpose of determining the actual percentage of glazed areas permitted in an exterior wall, the glazed area shall be projected onto the vertical plane established in clause (b).
4. Except as required in Article 9.10.14.3., in buildings containing only dwelling units in which there is no dwelling unit above another dwelling unit, the requirements of Article 9.10.14.11. do not apply provided that the exposing building face has a fire resistance rating of not less than 45 min where the limiting distance is less than 1.2 m (3 ft 11 in), and when the limiting distance is less than 0.6 m (23 5/8"), the exposing building face is clad with noncombustible cladding.
5. Glazed areas in the exposing building face referred to in Sentence (1) shall be permitted if the limiting distance is less than 1.2 m (3 ft 11 in) and shall be limited in conformance with the requirements for glazed areas in Table 9.10.14.A. where the limiting distance is 1.2 m (3 ft 11 in) or greater.

6. Where the spatial separation between dwelling units on adjoining properties is registered on the titles of both properties, the spatial separation may be calculated as if the dwelling units were constructed on the same property.

5. **Applicant's Position**

The Applicant submitted that the dispute revolves around a building permit for a kitchen renovation which included the installation of a sliding glass door in the rear, solid masonry wall of a home built in 1927.

The Applicant submitted that:

a. the building code is somewhat more restrictive for buildings whose walls are not parallel to the lot line, but more importantly,
b. the lot line in question is the side lot line for the applicant however, it is the rear lot line for the house on the adjoining lots. The City of Toronto Zoning By-law prohibits a building to be constructed closer than 7.5 m to the rear lot line of the adjacent properties.

The Applicant submitted that the according to the National Research Council Commentary on Part 9 of the National Building Code, the original calculations on which the requirements for spatial separation were based were for distances between buildings. A building permit however, only regulates the property on which it was issued, and not on the adjacent properties. The calculated distances were therefore halved, and measured to the property line.

The Applicant submitted that while it is perfectly reasonable for the Building Code to be written in this manner, it is not applicable in this circumstance.

The Applicant submitted that spatial separations are required to reduce thermal radiation and radiation intensity varies inversely as the square from the distance of the source (i.e. if the distance is doubled, the radiation intensity will only be 25%) there will always be more than sufficient spatial separation in this instance. Therefore, the Applicant contends that compliance with the Building Code is being met and a fire door is not required.

Furthermore, the Applicant submitted that the house in question has a fire detection system connected to a central station. The fire department response time should be less than the National Building Code assumption of 15 to 20 minutes.

6. **Chief Building Official's Position**

The Respondent submitted the Applicant proposes to add a new unprotected opening in an existing wall facing a property line. Unprotected openings in the same wall already exist less than 1.2 metres to the property line.

The Respondent lacks the authority to deviate from the Building Code.

The Respondent declined to appear before the Building Code Commission at the hearing.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the installation of a sliding glass door in the subject exposing building face provides sufficiency of compliance with Articles 9.10.14.1. and 9.10.14.12. of the Building Code considering the location and angle of the property line.

8. **Reasons:**

. The building is provided with hard wired smoke alarms connected to a central monitoring station.

i. The property line is irregular and it is the opinion of the Building Code Commission that the opening does not create an undue hazard.

ii. If only the first storey is considered the subject opening would satisfy the Building Code.

Dated at Toronto, this 1st day, in the month of August, in the year 1996, for application number 1996-36.

BCC Ruling No. 96-22-505

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-22-505

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.1.5.15.(1) and Clause 3.1.5.2.(1)(h) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Tony Romanin, Senior Project Manager, Eminent Construction, Downsview for the resolution of a dispute with Mr. Yaman Uzumeri, Chief Building Official, City of North York, concerning whether the use of PVC for the termination kit, 100 mm (4 inch) Tee and the 50 mm (2 inch) "Y" and cap for the condensation trap assembly may be considered minor combustible components in accordance with Sentence 3.4.6.15.(1) and Clause 3.1.5.2.(1)(h) of the Building Code, at Grandview at Northtown, 88 Grandview Way, North York, Ontario.

APPLICANT

Mr. Tony Romanin
Senior Project Manager
Eminent Construction
Downsview, Ontario

RESPONDENT

Mr. Yaman Uzumeri
Chief Building Official
City of North York

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

May 16th, 1996

APPEARANCES

Mr. Randal Brown, President
Randal Brown & Associates Ltd.
For the Applicant

Mr. Dan Musabay
City of North York
For the Respondent

RULING

1. **The Applicant**

   Mr. Tony Romanin, Eminent Construction, Downsview is the holder of a permit under the Building Code Act, 1992 to construct a 12 storey residential apartment building at Grandview at Northtown, 88 Grandview Way, North York, Ontario.

2. **Description of Constrution**

   The subject structure is a 12 storey residential (i.e. Group C) apartment building of noncombustible construction. The building is provided with a fire alarm system and a standpipe and hose system.

   P.V.C. materials are used for the termination kit, 100 mm (4 inch) Tee and the 50 mm (2 inch) "Y" and cap for the condensation trap assembly for the hot water tank to be installed in each suite.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns an interpretation of the technical requirements of Sentence 3.1.5.15.(1) and Clause 3.1.5.2.(1)(h) of the Building Code. At issue is

whether the use of PVC for the termination kit, 100 mm (4 inch) Tee and the 50 mm (2 inch) "Y" and cap for the condensation trap assembly of the water tank to be installed in each suite may be considered minor combustible components.

4. **Provision of the Building Code**

Sentence 3.1.5.15.(1) Combustible Piping Materials

1. Except as permitted in Clause 3.1.5.2.(1)(e), Sentence (2) and Article 3.1.5.20., combustible totally enclosed raceways, piping and tubing and associated adhesives are permitted to be used in a building required to be of noncombustible construction provided they
    a. have a flame-spread rating of not more than 25, except when concealed in a wall or a concrete floor slab, and
    b. when used in buildings described in Subsection 3.2.6., have a smoke developed classification of not more than 50, except when concealed in a wall or a concrete floor slab.

Clause 3.1.5.2.(1)(h)

2. The following minor combustible components are permitted in a building required to be of noncombustible construction:

    (h) similar minor components.

5. **Applicant's Position**

The Applicant submitted that the dispute involves the use of P.V.C. pipe for the termination kit and condensation trap for the hot water units.

The Applicant submitted that a 100 mm (4 inch) P.V.C. pipe is used in the exterior wall for the termination kit. Also, the 100 mm (4 inch) "T" and the 50 mm (2 inch) "Y" and cap for the condensation trap assembly are constructed of P.V.C.

It is the Applicant's contention that these are minor combustible components in the building.

6. **Chief Building Official's Position**

The Respondent submitted that the P.V.C. materials used for the termination kit and two fittings for the hot water tank to be installed in each unit do not comply with the Building Code.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the use of P.V.C. material for the termination kit, 100 mm (4 inch) Tee and the 50 mm (2 inch) "Y" and cap for the condensation trap assembly is considered a minor combustible component in accordance with Clause 3.1.5.2.(1)(h) and provides sufficiency of compliance with Sentence 3.1.5.15.(1) of the Building Code.

8. **Reasons:**
   i. i) The exposed P.V.C. components are limited and are located in dwelling units that are separated from each other by a 1 hour fire separation.
   ii. The materials meet the flame spread requirements in Clause 3.1.5.15.(1)(a) of the Building Code.
   iii. The termination kit will be limited to not more than 500 mm (20 inches). Most of the 100 mm (4 inch) diameter P.V.C. pipe will be enclosed in the exterior wall which is of noncombustible construction.
   iv. Much of the condensation trap will be filled with water.
   v. CPVC fittings for the appliance are not available in North America

Dated at Toronto, this 16th day, in the month of May, in the year 1996, for application number 1996-21.

BCC Ruling No. 96-21-504

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-21-504

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.3.20. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Peter Pijet, Manager, Concordia Club, Kitchener for the resolution of a dispute with Mr. Jim Witmer, Chief Building Official, City of Kitchener, concerning whether a walkway between a temporary festival tent and a permanent kitchen facility located in an adjacent structure may be used as a serving area in accordance with Article 3.2.3.20. and Sentence 3.1.6.3.(2) of the Building Code, at the Concordia Club, 429 Ottawa Street South, Kitchener, Ontario.

APPLICANT

Mr. Peter Pijet, Manager
Concordia Club
Kitchener, Ontario

RESPONDENT

Mr. James A. Witmer
Chief Building Official
City of Kitchener

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

June 25, 1996

APPEARANCES

Mr. Yulun Sze, Partner
Sze Straka Engineers
For the Applicant

Mr. James A. Witmer
Chief Building Official
City of Kitchener
The Respondent

RULING

1. **The Applicant**

   Mr. Peter Pijet, Manager, Concordia Club, Kitchener is an applicant for a permit under the Building Code Act, 1992 to erect a temporary festival tent having three links to ancillary buildings (i.e. new washroom facility, festival hall and kitchen building) at the Concordia Club, 429 Ottawa Street South, Kitchener, Ontario.

2. **Description of Constrution**

   The subject building is the Concordia Club Oktoberfest Festival tent. The Festival tent has a building area of 3779.5 m^2 (40,683.5 ft^2) and is classified as an Assembly Occupancy, Division 2 (A-2). The tent and ancillary buildings are provided with a fire alarm system interconnected with the Concordia Club building.

   A series of links join the tent to ancillary buildings (i.e. washrooms, permanent club building and kitchen facility). These links are permanent structures with 1 hour wall and roof assemblies and 45 minute closures. The links are intended to provide spatial separation between the various buildings, while permitting utility for staff and comfort for the patrons.

   The Applicant proposes to use the link between the festival tent and the kitchen area to serve food to patrons in the tent. The kitchen facility building and the link have a building area of 29 m^2 (312 ft^2) and 43 m^2 (463 ft^2) respectively. The proposed servery link will be separated from

the tent with another 1 hour assembly and the opening for the serving counter is equipped with a rated shutter, with a fusible link connected to an interconnected smoke alarm.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.2.3.20. and Sentence 3.1.6.3.(2) of the Building Code. At issue is whether a walkway between a temporary festival tent and a permanent kitchen facility may be used as a serving area for patrons in the tent.

4. **Provision of the Building Code**

Article 3.2.3.20. Walkway Between Buildings

1. Except as provided in Sentence 3.2.3.21.(2), where buildings are connected by a walkway, each building shall be separated from the walkway by a fire separation with a fire-resistance rating of not less than 45 min.
2. Except as provided in Sentence (3), a walkway connected to a building required to be of non-combustible construction shall also be of noncombustible construction.
3. A walkway connected to a building required to be of noncombustible construction is permitted to be of heavy timber construction provided
    a. not less than 50 per cent of the area of any enclosing perimeter walls is open to the outdoors, and
    b. the walkway is at ground level.
4. A walkway of noncombustible construction used only as a pedestrian thoroughfare and that is not required as an exit, need not conform to the requirements of Articles 3.2.3.14. and 3.2.3.15.

Sentence 3.1.6.3.(2) Clearance to Other Structures

2. Tents and air-supported structures shall not be erected closer than 3 m (9ft 10 in) to other structures on the same property except as provided in Sentences (3) and (4), and shall be sufficiently distant from one another to provide an area to be used as a means of emergency egress.

5. **Applicant's Position**

The Applicant submitted that the area of dispute is the building link between the festival tent and the permanent kitchen facility. At present there are three links in total.

The Applicant submitted that the two links serving the washroom facility and festival hall are used as required exits from the tent. The link between the temporary festival tent and kitchen building is not a required exit.

The Applicant submitted that the owners propose to place a serving counter across the opening at the tent/link face. Patrons would pass by this counter, cafeteria style, to receive there meals from serving staff. Within the link and adjacent to the counter would be placed steam tables, constantly replenished by other staff coming from the kitchen. Food is not cooked in the serving area. Beverage and food tickets are purchased elsewhere in the tent. The menu consists of 8 items and the tent can accommodate 3,000 patrons.

The Applicant submitted that prior to the new kitchen link being constructed there had been an existing structure in place that did not conform to any standards. This structure was used as a serving area between the kitchen and festival tent without any separation between the two.

6. **Chief Building Official's Position**

The Respondent submitted that at the time of building permit application the applicant indicated his desire to use the walkway for a thorough-fare for staff persons to carry food from the kitchen to serving tables. The Applicant later decided to use the walkway as a serving area.

The Respondent submitted that Article 3.2.3.20. of the Building Code permits the temporary tent to be considered a separate building if a noncombustible walkway structure is constructed connecting the tent to the permanent kitchen building. The minimum length of the walkway would need to be 3.0 metres to ensure compliance with Sentence 3.1.6.3.(2) of the Building Code.

The Respondent submitted that once the walkway becomes an occupied floor area the kitchen facilities must be considered "one building". This being the fact then the required minimum 3.0 metre clearance between the tent and the adjacent building has not been provided which is in contravention of Sentence 3.1.6.3.(2) of the Building Code.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that using the link connected to the kitchen as a servery area provides sufficiency of compliance with Sentence 3.1.6.3.(2) and Article 3.2.3.20. of the Building Code provided that the roof assembly of the servery provides a 45 minute fire resistance rating.

8. **Reasons:**

   i. The kitchen and servery building is fire separated from the tent structure.
   ii. An interconnected fire alarm system has been provided for the tent and ancillary buildings that includes pull stations within the tent and a connection to the fire department.
   iii. The kitchen and servery building adjacent to the tent does not impede emergency egress from the tent.
   iv. It is the opinion of the Building Code Commission that considering the evidence submitted with respect to the additional safeguards provided, the kitchen and servery building adjacent to the tent does not create a hazard to the public.

Dated at Toronto, this 25th day, in the month of June, in the year 1996, for application number 1996-20.

BCC Ruling No. 96-20-503

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-20-503

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.4.6.15.(1) and 3.4.6.15.(4) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Bruce Barnett, North York Public Library for the resolution of a dispute with Mr. Yaman Uzumeri, Chief Building Official, City of North York, concerning whether electromagnetic locking devices on two exit doors must release immediately upon activation of door release hardware in accordance with Sentences 3.4.6.15.(1) and 3.4.6.15.(4) of the Building Code at the Downsview Regional Library, 2793 Keele Street, North York, Ontario.

APPLICANT

Mr. Bruce Barnett
Plant and Facilities Manager
North York Public Library
North York, Ontario

RESPONDENT

Mr. Yaman Uzumeri
Chief Building Official
City of North York

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Steele
Mr. Michael Lio

PLACE

Toronto, Ontario

DATE OF RULING

June 12th, 1996

APPEARANCES

Mr. Richard Kowalski, Architect
Makrimichalos Cugini Architects
Toronto, Ontario
For the Applicant

Mr. Melvin Ramkissoon
Construction Plan Examiner
City of North York
For the Respondent

RULING

1. **The Applicant**

   Mr. Bruce Barnett, Plant and Facilities Manager, North York Public Library is an applicant for a permit under the Building Code Act, 1992 to construct alterations and an addition to the Downsview Regional Library, 2793 Keele Street, North York, Ontario.

2. **Description of Constrution**

   The subject library is a one storey noncombustible building with a building area of approximately 1,176 m². The building is classified as an Assembly Occupancy, Division 2 (i.e. A-2). The building is provided with a fire alarm and detection system, but is not provided with neither an automatic sprinkler system nor a standpipe and hose system.

   Electromagnetic locking devices (EMLD) are proposed on three doors, two of which are exit doors equipped with panic type hardware. One of the subject exit doors is an exterior door and the other is a door providing access to an exit shaft.

3. **Dispute**

The dispute between the Applicant and Respondent concerns an interpretation of Sentences 3.4.6.15.(1) and 3.4.6.15.(4) of the Building Code. At issue is whether electromagnetic locking devices on two exit doors must release immediately upon activation of door release hardware.

4. **Provision of the Building Code**

Sentence 3.4.6.15.(1) Door Release Hardware

1. If a door is equipped with a latching mechanism, a device that will release the latch and allow the door to swing wide open when a force of not more than 90 N (20 lb) is applied to the device in the direction of exit travel shall be installed on
    a. every exit door from a floor area containing a Group A occupancy having an occupant load of more than 100 persons,
    b. every door leading to an exit lobby from an exit stair shaft, and every exterior door leading from an exit stair shaft in buildings having an occupant load of more than 100 persons, and
    c. every exit door from a floor area containing a Group F, Division 1 Occupancy.

Sentence 3.4.6.15.(4)

4. An electromagnetic locking device that does not incorporate latches, pins or other similar devices to keep the door in the closed position is permitted to be installed on an exit door, other than an exit door serving an elementary or secondary school or leading directly from Group F, Division 1 occupancy
    a. if the building is equipped with a fire alarm system conforming to Subsection 3.2.4.,
    b. if the locking device is installed as an ancillary device to the fire alarm system and releases immediately
        i. upon activation of the fire alarm signal,

        (i.1) where the exit door serves a hotel, upon activation of the alert signal where a two stage fire alarm system is installed or upon activation of the alarm signal where a single stage fire alarm system is installed,

        ii. in the event of a power failure or ground fault, and
        iii. upon actuation of a manually operated switch accessible only to authorized personnel,

c. if a manual pull station for the fire alarm system is located on the wall not more than 600 mm (235/8 in) from the door,
d. if, upon its release, the locking device must be actuation of the switch referred to in Subclause (b)(iii),
e. if a legible sign having the words EMERGENCY EXIT UNLOCKED BY FIRE ALARM is permanently mounted on the door, and
f. if the lettering on the sign required in Clause (e) is at least 25 mm (1 in) high with a 5 mm (3/16 in) stroke. (See Appendix A.)

5. **Applicant's Position**

The Applicant submitted that the proposed installation of electromagnetic locking devices in the desired locations conforms with Sentence 3.4.6.15.(4) of the Building Code.

The Applicant submitted that the buildings security system would be compromised if the electromagnetic locking devices release immediately upon activation of the door release hardware. Also, the level of safety intended by the Building Code is not compromised because the EMLD's are deactivated upon activation of the building's fire alarm system.

The Applicant stated that activation of the door release hardware does not include a 15 second time delay to deactivate the EMLD.

6. **Chief Building Official's Position**

The Respondent submitted that Sentence 3.4.6.15.(1) of the Building Code requires exit doors to open when door release hardware is activated.

The Respondent submitted that Sentence 3.4.6.15.(4) of the Building Code permits an electromagnetic locking device on exit doors provided the electromagnetic locking device is immediately deactivated when the door release hardware is activated. This is due to the independence of Sentence 3.4.6.15.(1) & (4). Therefore, conformance with both requirements is required.

The Respondent submitted that Section 813 of the BOCA National Building Code recognized special locking arrangements for security purposes, but these arrangements are not permitted in assembly occupancies due to higher occupant loads and the greater possibility of mass panic. The Occupant load of the subject building is 350 people as determined by NFPA 101.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that providing electromagnetic locking devices (EMLD's) on the required exit doors equipped with panic type hardware in the library building does not provide sufficiency of compliance with Sentence 3.4.6.15.(1) of the Building Code.

8. **Reasons:**

   i. No additional compensating features have been provided to enhance the provision for life safety.

   ii. The position of the Housing Development and Buildings Branch, Ministry of Municipal Affairs and Housing is that EMLD's installed on the required exit doors of the library equipped with panic type hardware must not negate the normal operation of the panic hardware on those doors, i.e. operation that will allow the doors to swing wide open immediately when a force of not more than 90 N (20 lb) is applied to the panic hardware in the direction of exit travel.

   iii. The Housing Development and Buildings Branch, Ministry of Municipal Affairs and Housing submitted that the entire Article 3.4.6.15. will be reviewed for the next edition of the Building Code and it is not expected that the philosophy regarding the use of EMLD's will change.

Dated at Toronto, this 12th day, in the month of June, in the year 1996, for application number 1996-17.

BCC Ruling No. 96-19-502

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-19-502

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.3.1.2.(1), 3.3.1.10.(1) and 3.4.2.5.(2) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code")..

AND IN THE MATTER OF an application by Mr. William Pacey, Vice- President, National Store Planning, Shoppers Drug Mart, Willowdale vs. Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, concerning whether the aerosol storage cage in Shoppers Drug Mart's Mississauga Distribution Centre should comply with the provisions of Sentence 3.3.1.2.(1) or be considered a Group F, Division 1 Occupancy having to meet the fire separation, travel distance and door swing requirements in Sentences 3.3.1.10.(1) and 3.4.2.5.(2) of the Building Code at 6941 Kennedy Road, Mississauga, Ontario.

APPLICANT

Mr. William Pacey, Vice-President
National Store Planning
Shoppers Drug Mart
Willowdale, Ontario

RESPONDENT

Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL

Mr. Roy Philippe, Chair
Mr. Rick Florio
Ms. Lesia Beznaczuk

PLACE

Toronto, Ontario

DATE OF RULING

May 30th, 1996

APPEARANCES

Mr. David Hine
Morrison Hershfield Limited
For the Applicant

Mr. Frank Spagnolo, Manager
Building and Inspection
City of Mississauga
For the Respondent

RULING

1. **The Applicant**

   Mr. William Pacey, Vice-President, National Store Planning, Shoppers Drug Mart, Mississauga is the holder of a permit under the Building Code Act, 1992 to construct a Distribution Centre for Shoppers Drug Mart at 6941 Kennedy Road, Mississauga, Ontario.

2. **Description of Constrution**

   The Shoppers Drug Mart's Distribution Centre is a single storey noncombustible building having a building area of approximately 48,724 m² (524,467 ft²) which is classified as a Group F Division 2 major occupancy. The building is used as a warehouse storing the typical products sold in Shopper Drug Mart retail outlets.

   A corner of the warehouse comprising approximately 1.1% of the floor area is allocated for the storage of Level 2 and Level 3 aerosol products such as deodorants, hair sprays, antiperspirants, etc. This area is separated from the remainder of the floor area by a chain link fence.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentences 3.3.1.2.(1), 3.3.1.10.(1) and 3.4.2.5.(2) of the Building Code. At issue is whether the aerosol storage cage in Shoppers Drug Mart's Mississauga Distribution Centre should comply with the provisions of Sentence 3.3.1.2.(1) or be considered a Group F, Division 1 Occupancy having to meet the fire separation, travel distance and door swing requirements of Sentences 3.3.1.10.(1) and 3.4.2.5.(2) of the Building Code.

4. **Provision of the Building Code**

Sentence 3.3.1.2.(1) Definitions of Words and Phrases

1. Where hazardous substances are used in connection with the activities of any occupancy other than as provided in Subsection 3.3.5. for a Group F, Division 1 occupancy, the storage, handling and use of such substances shall be in conformance with the provisions of the Ontario Fire Code made under the Fire Marshals Act, or in the absence of requirements pertinent to specific substances in the Ontario Fire Code, to good engineering practice such as is described in the publications of the National Fire Code of Canada 1990. (See Appendix A.) (See also Articles 3.1.1.19. and 6.2.2.5.)

Sentence 3.3.1.10.(1) Door Swing

2. Except as provided in Article 3.3.1.11., every door that opens into a corridor or other facility providing access to exit from a suite or room not located within a suite shall swing on a vertical axis and in the direction of exit travel where the room or suite is used or intended for
    a. an occupant load of more than 60 persons,
    b. a Group F, Division 1 occupancy, or
    c. a hazardous classroom in an elementary or secondary school.

Sentence 3.4.2.5.(2) Location of Exits

2. Except for a Group F, Division 1 occupancy, Sentence (1) need not apply if exits are placed along the perimeter of the floor area and are not more than 60 m (196 ft 10 in) apart, measured along the perimeter, provided each main aisle in the floor area leads directly to an exit.

5. **Applicant's Position**

The Applicant submitted that the building was designed and constructed to comply with the provisions of Article 3.2.2.55. of the Building Code for construction requirements and Sentence 3.4.2.5.(2) for the location of exits. This sentence is an exemption from complying with the travel distance requirements of the Code if the exits are placed along the perimeter of the floor and are not more than 60 m apart, measured along the perimeter, provided each main aisle in the floor area leads directly to an exit. This exemption applies to all occupancy classifications except for a Group F Division 1 occupancy.

The Applicant submitted that in the design of the Shoppers Drug Mart Distribution Centre, because it was impossible to comply with the travel distance requirements due to the very large size of the building, exits were placed along the perimeter of the floor area at 60 m intervals since the building was classified as a Group F, Division 2 warehouse.

The Applicant submitted that Table 3.1.2.A. of the Code refers to Appendix A for examples of major occupancy classifications. There is nothing in the Appendix under Group F Division 1 which indicates that an aerosol products storage area would constitute an F1 occupancy.

The Applicant submitted that the three aisles inside the aerosol storage cage each have sliding gates at both ends. The occupant load of the cage is only 1 or 2 employees, at certain times. The City of Mississauga indicated that "the doors leading from the area do not meet 3.3.1.10.(1) of the OBC".

Since there is no Group F Division 1 occupancy or an elementary or a secondary school involved and the occupant load is less than 60 persons the Applicant does not think that this Article is applicable. The Applicant, however, submitted that they agreed to install doors in the sliding gates, which will swing on a vertical axis in the direction of exit travel when pressure is applied. This complies with the requirements of Sentence 3.3.1.11.(1).

For structural rigidity of the sliding chain link fence gates, there will be a 2 inch high horizontal bar at the threshold of the swinging doors that will be located within the sliding gate. The Respondent has objected to this 2 inch bar at the threshold of the egress doors from the aerosol storage cage.

The Applicant submitted that he is not aware of any Regulation or Standard that prohibits such a horizontal member at the threshold of a swinging door located inside a sliding partition other than barrier-free requirements, if applicable.

The Applicant summarized it's position, as follows:

i. The aerosol storage cage in Shoppers Drug Mart's Distribution Centre is not a Group F, Division 1 occupancy. The indoor aerosol storage cage complies with the requirements of Sentence 3.3.1.2.(1) of the Building Code.
ii. The 25 m travel distance indicated in Clause 3.4.2.5.(1)(a) does not apply. The exits comply with Sentence 3.4.2.5.(2) of the Building Code.
iii. The door that swings on the vertical axis when a pressure is applied, which contains a horizontal member at the threshold and is installed on the sliding chain link gate for the aerosol storage cage, complies with Sentence 3.3.1.11.(1) of the Building Code.

Alternatively, considering the very limited number of employees that are in the cage temporarily and the familiarity with the surroundings, the Applicant requested the Building Code Commission consider the sufficiency of compliance of the aerosol storage cage with respect to the technical requirements of Sections 3.3. and 3.4 of the Building Code.

2. **Chief Building Official's Position**

The Respondent submitted that the subject of the dispute was with respect to the travel distance and door swing requirements of the aerosol storage area in the warehouse building.

The Respondent submitted that due to the quality and type of material products being stored in this warehouse building, this area should be classified as a Group F, Division 1 occupancy. Therefore, the travel distance and door swing should comply with the requirements of the Building Code for Group F, Division 1 occupancy from this chain link fenced area, in the case of an emergency situation.

3. **Commission Ruling:**

It is the decision of the Building Code Commission that the aerosol storage area provides sufficiency of compliance with the provisions of Sentences 3.3.1.2.(1), 3.3.1.10.(1) and 3.4.2.5.(2) of the Building Code provided the area meets all of the requirements of N.F.P.A. 30B for such use.

4. **Reasons:**
   i. The storage height is limited to 15 feet.

ii. Additional sprinkler protection is provided in accordance with N.F.P.A. 231 and is extended 20 feet beyond the segregated area.

iii. The proposed doors within the gates provided from the caged area allow for safe egress from the room.

iv. All openings in the fencing will be provided with self closing or automatic closing gates.

v. The occupant load of the storage area is limited.

Dated at Toronto, this 30th day, in the month of May, in the year 1996, for application number 1996-23. in the year 1996, for application number 1996-19.

BCC Ruling No. 96-18-501

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-18-501

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Subsection 3.11.9. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Russell Flatt, Paramount Canada's Wonderland, Vaughan for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, concerning whether sufficient water closets and shower heads are provided for an outdoor wave action pool in accordance with Subsection 3.11.9. of the Building Code, at the Splash Works, Paramount Canada's Wonderland, Vaughan, Ontario.

APPLICANT

Mr. Russell Flatt
Paramount Canada's Wonderland
Vaughan, Ontario

RESPONDENT

Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

May 16th, 1996

APPEARANCES

Mr. Randal Brown, President
Randal Brown & Associates Limited
For the Applicant

Mr. Mani Navabi
Chief Building Official
The Respondent

RULING

1. **The Applicant**

   Mr. Russell Flatt, Paramount Canada's Wonderland is the holder of a permit under the Building Code Act, 1992 to construct an outdoor wave action pool and ancillary buildings at the Splash Works, Paramount Canada's Wonderland, Vaughan, Ontario.

2. **Description of Constrution**

   The subject project involves the construction of an outdoor wave action pool and ancillary buildings as an expansion of the existing waterpark currently consisting of a number of water slides/receiving basins, washrooms, change rooms and shower facilities.

   The 2880 m² outdoor wave pool is an Assembly, Division 3 (i.e. A-3) occupancy.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Subsection 3.11.9. of the Building Code. At issue is whether sufficient water closets and shower heads are provided for the wave action pool.

4. **Provision of the Building Code**

   Subsection 3.11.9. Dressing Rooms, Locker Facilities, and Plumbing Facilities for the Public Pools

1. Except as otherwise permitted in Sentences (2) and (3), every public pool shall be equipped with dressing rooms, locker rooms, shower heads, water closets, urinals, lavatories and drinking fountains which shall be designed, constructed and equipped to comply with Sentences (4) to (14).
2. Where a Class A pool is installed on the premises of a recreational camp, dressing rooms, locker rooms, shower heads, water closets, urinals, lavatories and drinking fountains are not required if
    a. dressing, water closet and shower facilities are conveniently available for bathers elsewhere on the premises, and
    b. foot sprays are provided in accordance with Sentence 3.11.3.1.(16).
3. Where a Class B pool is installed, dressing rooms, locker rooms, shower heads, lavatories, water closets, drinking fountains and urinals are not required if
    a. dressing, water closet and shower facilities are conveniently available elsewhere on the premises for bathers when the pool is open for use, and
    b. foot sprays are provided in accordance with sentence 3.11.3.1.(16).
4. The minimum number of water closets, urinals and lavatories shall be determined from Article 3.6.4.2. and Table 3.6.4.D. for an occupant load based on
    1. the formula in sentence 3.1.16.3.(1) for all public pools, except a wave action pool, or
    2. the formula in Sentence 3.1.16.3.(2) for a wave action pool.
5. A minimum of one shower head shall be provided for every 40 bathers.
6. Where dressing and locker rooms, water closets and urinals are provided in conjunction with a public pool, they shall be located in such a manner that bathers, after using them, shall pass through or by a shower area to reach the pool deck.
7. All shower heads shall be supplied with portable water at a pressure of at least 140 Kpa (20.3 psi).
8. The shower water system shall have one or more tempering devices capable of being adjusted to ensure that water supplied to shower heads does not exceed 400C (1040F).
9. Floors in washrooms, shower areas and passageways used by bathers shall slope to waste drains at not less than 1 per cent and shall be of hard surfaced materials that do not become slippery when wet.
10. Joints between floors and walls shall be covered in areas described in Sentence (9) and in dressing and locker rooms.
11. Hose bibs shall be provided in safe locations convenient for flushing down the walls and floors in washrooms, shower areas and passageways used by bathers.

12. Partitions or walls shall be provided to ensure privacy of dressing rooms, washrooms and shower areas.
13. The bottom of interior partitions in dressing rooms and washrooms shall be between 250 mm (97/8 in) and 350 mm (133/4 in) above the floor.
14. Dressing and locker room floors shall have non-slip surfaces that permit convenient and thorough cleaning and disinfecting.

5. **Applicant's Position**

The Applicant submitted that for the purpose of occupancy and provision of shower facilities the project is being considered an addition to the existing Splash Works facility. The analogy used is an addition to an existing building. The Applicant submitted that alternatively, the project could have been viewed as a stand- alone facility, but more washrooms and locker facilities would be required in the vicinity of the wave action pool.

The Applicant submitted the following summary of their position:

Occupancy Calculations:

Total Wave Pool Occupancy - 1,944 people; calculated using the formula in Sentence 3.1.16.3.(2) of the Building Code. The total projected occupancy for the balance of the waterpark is 3000 people (using park data from 1994 provided by Paramount Canada's Wonderland).

Total Water Park Site Occupancy: 4,944 people (Wave pool plus balance of site)

Washrooms:

The washrooms are sized based on the total estimated occupancy of the site, including the addition. Including the existing WCs (28 stalls, 14 per sex) and the new WCs (12 stalls, 6 per sex) the requirements of Table 3.6.4.D. of the Building Code are met. Based on the total occupancy of 4,944 people (2,472 per sex), 38 toilets (19 per sex) are required.

Shower Facility Calculations:

A public pool is defined in Part 1 of the Building Code as a "structure, basin or tank containing or intending to contain artificial body of water for swimming, water sport, water recreation or entertainment" but specifically excluding "pools that serve only as receiving basins for persons at the bottom of waterslides".

The Building Code states in Section 3.11.9.1.(5) that one shower head is required for every 40 bathers in a "public pool". As the pools serving the waterslides on the site are not public pools as defined by the Building Code, it is the Applicant's opinion that no showers are required for these pools. Therefore, the number of showers required for the total site should be based on the occupancy of the wave pool alone. Using this logic the Applicant determined the number of showers required to be 48 (1944 persons/40 bathers per shower head). This was provided on the original permit set, with 12 heads (6 per sex) shown on the new facility and plus the 36 in the existing facility (18 per sex).

The Applicant noted that the Waterpark differs from a stand-alone Waterpark in that it serves as only one activity in a larger facility and people therefore will stay in the Waterpark for a short period of time only and not all day as they would in a stand alone Waterpark. There are a large number of additional washrooms located throughout the rest of the park for public use.

6. **Chief Building Officials Position**

The Respondent submitted that the occupant load for the wave action pool is 1944 people. The Applicant requires 10 water closets per sex in accordance with Sentence 3.6.4.2.(15) and Table 3.6.4.D. and located in accordance with Sentences 3.11.9.1.(1) and (6) of the Building Code. The Applicant requires 48 shower heads on the wave action pool area.

The Respondent submitted that the applicant is only providing 6 water closets per sex in the immediate area of the wave action pool.

The distance between the existing washroom and shower facilities and the new facilities is approximately 210 m. Further, the distance from the new facilities to the edge of the wave action pool is approximately 75 m. Therefore, a bather may have to travel over 300 m to use a washroom.

The Respondent stated that this is a public health issue.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the additional 20 water closets and 48 showers are required by Article 3.11.9.1. of the Ontario Building Code. Furthermore, it is the decision of the Building Code Commision that providing no fewer than 12 water closets and 32 shower heads in the vicinity of the wave action pool with the remainding 8 water closets and 16

shower heads added to the existing facility at the entrance to the water park demonstrates sufficiency of compliance with the Article 3.11.9.1. of the Ontario Building Code.

8. **Reasons:**
   i. The wave action pool increases the occupant load of the water park by 1944 persons.
   ii. It is the opinion of the BCC that splitting the additional requirements for showers and water closets between the main entry and the site of the wave pool satisfies the intent of the Building Code for these facilities for bathers.

Dated at Toronto, this 16th day, in the month of May, in the year 1996, for application number 1996-19.

BCC Ruling No. 96-17-500

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-17-500

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.1.8.12. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Michael Murawnik, Building Manager, Standard Life, Ottawa for the resolution of a dispute with Mr. Les Batson, Chief Building Official, City of Ottawa, concerning whether the use of electromagnetic hold-open devices to permit doors to remain open on a constant basis in the north and east tower lobby enclosure will provide sufficiency of compliance with Article 3.1.8.12. of the Building Code, at the Canada Post Place, 750 Heron Road, Ottawa, Ontario.

APPLICANT

Mr. Michael Murawnik
Building Manager
Standard Life
Ottawa, Ontario

RESPONDENT

Mr.Les Batson
Chief Building Official
City of Ottawa

PANEL

Mr. Roy Philippe, Chair
Ms. Lesia Beznaczuk
Mr. Demir Delen

PLACE

Novotel Hotel
The Daly Boardroom
33 Nicholas Street
Ottawa, Ontario

DATE OF RULING

June 14, 1996

APPEARANCES

Mr. Roger F. Poulin
Architect/Client Agent
Roger F. Poulin, Architect/Architecte
For the Applicant

Mr. Chris Freeman
Mr. Neil Dillon
City of Ottawa
For the Respondent

RULING

1. **The Applicant**

   Mr. Michael Murawnik, Building Manager, Standard Life, Ottawa is an applicant for a permit under the Building Code Act, 1992 to install electromagnetic hold-open device on certain doors to permit them to remain open at all times during normal working hours at the Canada Post Place, 750 Heron Road, Ottawa, Ontario.

2. **Description of Constrution**

   The subject building is a noncombustible building consisting of a 10 storey east tower and a 12 storey north tower linked by a two storey section. The building area is 60,385 m². The building is provided with a fire alarm and detection system, automatic sprinkler system, and a standpipe and hose system. Canada Post Corporation is the only tenant of this building. The subject doors that are proposed to be equipped with electromagnetic hold-open devices are identified as follows:

i. The double doors leading down the main corridor, from the North Tower to the East Tower, on the Ground Floor.
ii. The double doors leading down the main corridor, from the East Tower to the North Tower, on the Ground Floor.
iii. The double doors leading down the main corridor, from the East Tower to the North Tower, on the 1st Floor.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.1.8.12. of the Building Code. At issue is whether doors in the north and east lobby enclosure may be equipped with electromagnetic hold-open devices to permit them to remain open on a constant basis.

4. **Provision of the Building Code**

Article 3.1.8.12. Hold-Open Devices

1. Listed hold-open devices are permitted on doors in required fire separations, other than exit doors in a building more than 3 storeys in building height and doors in a vestibules required in Article 3.3.5.8., provided they are designed to release the door in conformance with sentences (2) to (4).
2. Except as provided in Sentences (3) and (4), hold-open devices permitted in Sentence (1) shall be designed to release
    a. upon a signal from a smoke detector located as described in Appendix B of NFPA 80, "Fire Doors and Windows", or from a smoke detector as required in Sentence 3.2.4.12.(1) for sleeping rooms in Group B occupancies, except that hold-open devices on doors other than exit doors, doors opening into public corridor and egress doors referred to in Sentence 3.4.2.4.(2) are permitted to be released by a sprinkler system or a heat-actuated device provided the door does not serve a group A, Group B or Group C occupancy and is not required to function as part of a smoke control system, and
    b. upon a signal from the building fire alarm system where a fire alarm system is provided, except that this requirement does not apply to a hold-open device that is designed to release by a heat-activated device in conformance with Clause (a).

3. In Group F, Division 2 and 3 occupancies, the hold-open devices in Sentence (1) are permitted to be designed to release upon a signal from a smoke detector located as described in Appendix B of NFPA 80, "Fire Doors and Windows".
4. In hospitals and nursing homes, a hold open-device on a door located between a corridor used by the public and an adjacent sleeping room shall be designed to release the door upon a signal from the fire alarm system when an alert signal is initiated within the same zone in Sentence 3.3.3.6.(6) or the same fire compartment in Sentence 3.3.3.7.(2).

5. **Applicant's Position**

The Applicant submitted that the owner/client and the tenant (Canada Post) have requested magnetic hold-open devices be installed on doors in the north and east lobby enclosure. The electromagnetic locking devices would be tied into the fire alarm system, connected to a smoke detection system and would release upon any power failure.

The Applicant submitted that the traffic between both towers is very high and has caused the replacement of hardware as well as doors due to overuse. The doors open within the two storey lobby space at one end and a 5 metre lobby at the other. The City of Ottawa considers the doors to be exit doors.

6. **Chief Building Officials Position**

The Respondent considers the door in question to be exit doors.

The Respondent submitted that Sentence 3.1.8.12.(1) prohibits the installation of hold-open devices on exit doors in buildings more than 3 storeys in building height. Exit doorways are identified in Article 3.4.4.4. as permitted openings in exit fire separations and furthermore Article 3.4.4.2. requires exit lobbies to conform to the requirements for exits, except as otherwise permitted.

The Respondent submitted that they are sympathetic to the concerns with respect to the maintenance of the door hardware, but it is not within their authority to permit the installation of the hold-open devices.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that providing electromagnetic hold- open devices on the doors to the exit lobbies in the north and east exit towers provide sufficiency of

compliance with Article 3.1.8.12. of the Building Code provided the magnetic hold-open devices are installed in accordance with Clauses 3.1.8.12.(2)(a)&(b) of the Building Code.

8. **Reasons:**
   - . Evidence was provided that the lobbies are pressurized limiting smoke movement into this area.
   - i. The stairwells are separated from the lobby area by doors having a fire resistance rating as required by the Building Code.
   - ii. Both towers are sprinklered throughout.
   - iii. Evidence was provide that the stairwells are protected from smoke movement in accordance with Method "A" for high buildings.
   - iv. Evidence was provided that the high usage of these doors has a detrimental impact on the ability to continue to function as proper closures.

Dated at Toronto, this 14th day, in the month of June, in the year 1996, for application number 1996-18.

BCC Ruling No. 96-16-499

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-16-499

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.3.1.7.(1) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Ms. Gloria Taylor, Clerk Administrator, The Corporation of the Town of Paris, Paris for the resolution of a dispute with Mr. Ron Rashleigh, Chief Building Official, Town of Paris, concerning whether the installation of a fire alarm system, implementation of a fire safety plan and a fire department response time of not more than three minutes will provide sufficiency of compliance with the requirement to provide a fire-fighters elevator or divide the floor area into 2 zones in accordance with Sentence 3.3.1.7.(1) of the Building Code, at the Paris Library, 12 William Street, Paris Ontario.

APPLICANT

Ms. Gloria Taylor
Clerk Administrator
Town of Paris

RESPONDENT

Mr. Ron Rashleigh
Chief Building Official
Town of Paris

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

May 21st, 1996

APPEARANCES

Mr. Bruce Rankin
Project Manager
Rankin Architect Inc.
For the Applicant.

Mr. Ron Rashleigh
Chief Building Official
Town of Paris
The Respondent

RULING

1. **The Applicant**

   Ms. Gloria Taylor, Clerk Administrator, Town of Paris is the holder of a permit under the Building Code Act, 1992 to construct a two storey addition to the public library at 12 William Street, Paris, Ontario.

2. **Description of Constrution**

   The subject building is a two storey noncombustible addition to an existing public library. An elevator serves both the existing and new addition.

   The building area of the existing portion (i.e. 231.4 m^2) and the addition (i.e. 226.4 m^2) is 457.8 m^2. A complete fire alarm system is installed throughout the building.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentence 3.3.1.7.(1) of the Building Code. At issue is the installation of a fire alarm system, provision of a fire safety plan and a fire department response time of three

minutes in lieu of providing a fire-fighters elevator or dividing the floor area into 2 zones by fire separations.

4. **Provision of the Building Code**

Sentence 3.3.1.7.(1) Protection on Floor Areas with a Barrier-Free Path of Travel

1. Except as provided in Sentences (2) and (3), where a barrier- free path of travel is provided above or below the first storey in a building, every floor area having access shall
    a. be served by an elevator conforming to Sentences 3.2.6.9.(4) to (6), protected against fire in conformance with Clauses 3.2.6.9.(3)(b) or (c) and, in a building over 3 storeys in building height, protected against smoke movement in conformance with Sentence 3.2.6.2.(4) or
    b. be divided into not less than 2 zones by fire separations conforming to Sentences 3.3.3.6.(8) and (9) so that
        i. persons with physical disabilities can be accommodated in each zone,
        ii. the travel distance from any point in one zone to a doorway leading to another zone shall be not more than the value for travel distance permitted by Sentence 3.4.2.5.(1) for the occupancy classification of the zone, and
        iii. a barrier-free path of travel is provided to an exit.

5. **Applicant's Position**

The Applicant submitted that based on the following Sentence 3.3.1.7.(1) of the Building Code should not be applied to this building:

- The building area of 457.84 m² is less than half the 1,000 m² permitted in Sentence 3.2.2.21.(1) of the Building Code.
- The travel distance of 14 m is less than one half of the 30 m allowed under Clause 3.4.2.5.(1)(f) of the Building Code.
- The total occupant load of the entire building is never expected to exceed a maximum of 50 persons.
- The existing 92 year old building was completely brought up to current Building Code standards during the project.
- The addition is constructed of noncombustible construction.
- A complete fire alarm system, although not required by Article 3.2.4.1. is installed throughout the building.

- The fire safety plan requires two staff to jointly search the building for occupants in the event of a fire alarm. Trials show that this can be accomplished in two minutes.
- The fire department can respond within thee minutes of an alarm and remove disabled occupants without the use of the elevator.

6. **Chief Building Official's Position**

The Respondent submitted that a two storey addition to the original library includes an elevator serving both the existing and new addition. The elevator permits barrier free access thereby requiring the provision of protection on floor areas in accordance with Clauses 3.3.1.7.(1)(a) or (b) of the Building Code.

The Respondent submitted that the municipality does not have the authority to permit a condition that deviates from the Building Code. The use of equivalents regulated by Section 2.7 of the Building Code is not applicable.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the current design of the library addition provides sufficiency of compliance with the provisions of Sentence 3.3.1.7.(1) of the Building Code.

8. **Reasons:**

. A fire alarm system is provided for the building in excess of the Building Code requirements of Section 3.2.4.

i. The fire alarm system is monitored to notify the fire department in accordance with article 3.2.4.7. of the Building Code.

ii. A fire safety plan has been prepared designating supervisory staff and outlining the responsibilities for the safety of the physically challenged until the fire department arrives.

iii. The Applicant stated that the exit stairwell design permits the stairwell enclosure to be used as an area of refuge at all levels without impacting on the exiting.

iv. The fire department response time has been measured and will be less than 3 minutes in a fire emergency.

v. The building is small in size with a limited occupant load.

Dated at Toronto, this 21st day, in the month of May, in the year 1996, for application number 1996-16.

BCC Ruling No. 96-15-498

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-15-498

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 9.9.9.1. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Rob Gollanek, The Daniels Corporation, Toronto for the resolution of a dispute with Mr. John C. Wright, Chief Building Official, Town of Markham, concerning whether an openable roof window installed on a pitched roof provides sufficiency of compliance with the requirements in Article 9.9.9.1. of the Building Code, at the Reesor's Marmill Townhouse Project, Markham, Ontario.

APPLICANT

Mr. Rob Gollanek
Estimator
The Daniels Corporation

RESPONDENT

Mr. John C. Wright
Chief Building Official
Town of Markham

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

May 16th, 1996

APPEARANCES

Mr. Randal Brown
President
Randal Brown & Associates Ltd.
For the Applicant.

Mr. Chris Bird
Manager, Plan Review
Town of Markham
For the Respondent

RULING

1. **The Applicant**

   Mr. Rob Gollanek, Estimator, The Daniels Corporation, Toronto is the holder of a permit under the Building Code Act, 1992 to construct a residential townhouse development containing 47 dwelling units situated in nine blocks known as Reesor's Marmill Townhouse Project, Markham, Ontario.

2. **Description of Constrution**

   The subject project is a residential townhouse development containing 47 dwelling units situated in nine blocks. The blocks contain between three and eight single family dwelling units that range in height between two and three storeys.

   The portion of the project that is the subject of this dispute are those units that offer third floor bedrooms, family rooms or dens. The applicant is proposing to use skylights in the roof to satisfy the egress requirements for an openable window from the third storey.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 9.9.9.1. of the Building Code. At issue is whether an openable

roof window installed on a pitched roof satisfies the egress requirements for an openable window from the third storey.

4. **Provision of the Building Code**

Article 9.9.9.1. Travel Limit to Exits or Egress Doors

1. Except as provided in Sentences (2) and (3), every dwelling unit containing more than one storey shall have a sufficient number of exits or egress doors so that it shall not be necessary to travel up or down more than 1 storey to reach a level served by
    a. an egress door to a public corridor, enclosed exit stair or exterior passageway, or
    b. an exit doorway not more than 1.5 m (4 ft 11 in) above adjacent ground level.
2. Where there is no dwelling unit above or below another dwelling unit, the travel limit from a floor level in a dwelling unit to an exit or egress door may exceed 1 storey where that floor level is served by an openable window providing an unobstructed opening of not less than 1 m (3 ft 3 in) in height and 0.55 m (21 5/8 in) in width, located so that the sill is not more than 1 m (3 ft 3 in) above the floor and not more than 7 m (23 ft) above adjacent ground level.
3. The travel limit from a floor level in a dwelling unit to an exit or egress door may exceed 1 storey where that floor level has direct access to a balcony.

5. **Applicant's Position**

The Applicant submitted that an openable roof window installed on a pitched roof satisfied the egress requirements for an openable window from the third storey.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed use of skylights to satisfy the egress requirements of an openable window from the third floor does not comply with the Building Code. The Respondent submitted that the positioning of the skylights makes egress or rescue from the floor area hazardous to both occupants and fire fighters.

The Respondent submitted that the skylights are located at the rear of the units and open onto the third storey roof which has a 9 in 12 slope. Typically the bottom edge of the proposed skylight is located approximately 2 m (6'-6") horizontally back from the edge of the roof, approximately 2.4 m (8'-0") up the slope of the roof and between 6.83 m and 7.28 m vertically above the finished grade measured at the rear wall of the subject unit. In addition, the skylights are positioned near a

proposed roof valley making them not immediately adjacent to the edge of the roof or ground below.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that the openable roof window on the pitched and gabled roof does not provide sufficiency of compliance with Article 9.9.9.1. of the Building Code.

8. **Reasons:**
   i. The steepness of the roof and the roof and gable configuration limit the accessibility to the roof window by fire department apparatus.
   ii. It is the opinion of the Building Code Commission that the proposal does not achieve the level of occupant safety intended by the Ontario Building Code.

Dated at Toronto, this 16th day, in the month of May, in the year 1996, for application number 1996-15.

BCC Ruling No. 96-14-497

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-14-497

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.3.2.4.(4) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by the Rev. James Woolley, Incumbent, The Incumbent and Church Wardens of St. Thomas a Becket Anglican Church, Mississauga for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, concerning whether the width of aisles for the addition to the existing church building provides sufficiency of compliance with Sentence 3.3.2.4.(4) of the Building Code at the St. Thomas a Becket Anglican Church, 3535 South Common Court, Mississauga, Ontario.

APPLICANT

The Rev. James Wooley, Incumbent
The Incumbent and Church Wardens of
St. Thomas a Becket Anglican Church

RESPONDENT

Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

May 21st, 1996

APPEARANCES

Mr. Murray Ross, Principal
Brown Beck & Ross Architect
For the Applicant.

Mr. Frank Spagnolo
City of Mississauga
For the Respondent

RULING

1. **The Applicant**

   The Rev. James Woolley, The Incumbent and Church Wardens of St. Thomas a Becket Anglican Church is the holder of a permit under the Building Code Act, 1992 to construct an addition consisting of a new worship space for the St. Thomas a Becket Anglican Church, 3535 South Common Court, Mississauga, Ontario.

2. **Description of Constrution**

   The subject project is a one storey addition consisting of a new worship space, plus new entrance, foyer, and ancillary rooms to be added to the existing church building which is shared by the Anglican and Presbyterian congregations.

   The building is classified as a Group A, Division 2 (i.e. church) occupancy. The addition is of combustible construction with an area of 462 m^2 giving a total building area of 1579 m^2. The new worship space is provided with fixed bench seating designed for a capacity of 295 people.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentence 3.3.2.4.(4) of the Building Code. At issue is the width of aisles in the new worship space.

4. **Provision of the Building Code**

Sentence 3.3.2.4.(4) Aisles

Aisles shall terminate in a cross aisle, foyer or exit, and the width of such cross aisle, foyer or exit shall be not less than the required width of the widest aisle plus 50 per cent of the total required width of the remaining aisles that it serves.

5. **Applicant's Position**

The Applicant submitted that the subject of this dispute is the seating, aisles and exits from the worship area.

The Applicant submitted that the exit capacity of the worship area is more than adequate for the occupant load, and that the safety of persons using this space will not be diminished by a fixed seating layout instead of an approved non-fixed seating of indeterminate layout.

The Applicant submitted that the aisle with and exit locations provide adequate compliance with the Building Code.

The Applicant submitted that Sentence 3.3.2.4.(4) of the Building Code is not appropriately applicable to worship spaces where members regularly use the facility and are familiar with the exits. This Sentence is clearly intended for theatres and cinemas rather than spaces regularly used by same persons.

The Applicant submitted that applying Sentence 3.3.2.4.(4) to worship area reduces the seating capacity and negatively affects the liturgical practices of the users.

The Applicant further submitted that they have designed and built many places of worship similar in plan to the current application, and never experienced this Sentence being applied or interpreted in this way.

6. **Chief Building Official's Position**

The Respondent submitted that the reason for nonacceptance of the applicant's proposal is that the cross aisles and exit widths provided by the Applicant do not comply with Sentence 3.3.2.4.(4) of the Building Code.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that the width of the aisles for the addition to the existing church provides sufficiency of compliance with Sentence 3.3.2.4.(4) of the Building Code.

8. **Reasons:**
   1. The design provides for 5 exits from the room with exiting capacity for 862 persons, well above the occupant load of 295 and the exits are well distributed.
   2. The required width of aisles based on exiting capacity determinations is maintained to required exits from the room and provide an acceptable level of safety from this area.
   3. The provision of fixed seating does not increase the risk for the space over non fixed seating.

Dated at Toronto, this 21st day, in the month of May, in the year 1996, for application number 1996-12.

BCC Ruling No. 96-13-496

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-13-496

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 2.1.1.11. and Subclause 6.2.1.1.(1)(a)(v) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Fred Schiedel, President, Schiedel Construction Incorporated, Cambridge for the resolution of a dispute with Mr. Bruce Poole, Chief Building Official, City of Guelph, concerning whether ducts in a return air plenum for a commercial building need be insulated and sealed in accordance with Article 2.1.1.11. and Subclause 6.2.1.1.(1)(a)(v) of the Building Code, at Olympic Honda, 995 Woodlawn Road West, Guelph, Ontario.

APPLICANT

Mr. Fred Schiedel, President
Schiedel Construction Incorporated

RESPONDENT

Mr. Bruce Poole
Chief Building Official
City of Guelph

PANEL

Mr. Roy Philippe, Chair
Mr. Demir Delen
Mr. Kenneth Bacon

PLACE

Toronto, Ontario

DATE OF RULING

April 23rd, 1996

APPEARANCES

Mr. Fred Schiedel Schiedel Construction Incorporated
The Applicant
AND
Mr. Rolland Jonker
O.C.A. Architect Inc.
AND
Mr. Michael Luzar
Michaels Engineering Consultants
For the Applicant.

Mr. Robert Reynen
City of Guelph
For the Respondent

RULING

1. **The Applicant**

   Mr. Fred Schiedel, President, Schiedel Construction Incorporated is the holder of a permit under the Building Code Act, 1992 to construct a two storey building to be used as an automobile dealership at 995 Woodlawn Road West, Guelph, Ontario.

2. **Description of Constrution**

   The subject building is an unsprinklered two storey noncombustible building. The building area is 1158 m². The building does not contain a fire alarm system nor a standpipe and hose system. Air handling ducts are located within a conditioned return air plenum in the office and showroom area. The ducts do not meet the insulation, sealing and leakage test requirements of ASHRAE/IES 90.1-1989, "Energy Efficient Design of New Buildings Except Lowrise Residential Buildings".

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 2.1.1.11. and Subclause 6.2.1.1.(1)(a)(v) of the Building Code. At issue is whether ducts in a return air plenum for a commercial building need be insulated and sealed in accordance with the requirements of ASHRAE/IES 90.1-1989, "Energy Efficient Design of New Buildings Except Lowrise Residential Buildings".

4. **Provision of the Building Code**

Article 2.1.1.11. Energy Efficiency

Except for buildings of residential occupancy within the scope of Part 9, farm buildings and areas of buildings intended primarily for manufacturing or commercial or industrial processing, the energy efficiency of all buildings shall be designed to good engineering practice such as described in ASHRAE/IES 90.1-1989, "Energy Efficient Design of New Buildings Except Lowrise Residential Buildings" and the "Guidelines for the Interpretation of ASHRAE/IES 90.1-1989" issued by the Ontario Buildings Branch of the Ministry of Housing.

Subclause 6.2.1.1.(1)(a)(v) Good Engineering Practice

1. Heating, ventilating and air-conditioning systems, including related mechanical refrigeration systems, shall be designed, constructed and installed to conform to good engineering practice appropriate to the circumstances such as described in
    a. the ASHRAE Handbooks as follows:

    (v) ASHRAE/IES 90.1-1989, "Energy Efficient Design of New Buildings Except Lowrise Residential Buildings".

5. **Applicant's Position**

The Applicant submitted that insulating and sealing the ducts in the conditioned return air plenum will not alter the energy required to condition this space.

The Applicant submitted that the intent of ASHRAE/IES 90.1 is to provide an energy efficient design of the building. The Applicant submitted that although there would be a decrease in temperature to the duct, the system now acts as a heat exchanger. There is a transfer of energy occurring at the duct/plenum interface, not a loss of energy.

The Applicant submitted that based on a cost approach, the amount of energy needed with or without the insulation would be insignificant. This analysis is based on the plenum being part of the system.

The Applicant submitted that on a cost analysis basis, the cost required to install the insulation will not pay for itself in a practical amount of time, if ever.

6. **Chief Building Official's Position**

The Respondent submitted that the Applicant proposed to use exception (b) of Article 9.4.8.3. of ASHRAE/IES 90.1 - 1989 to show that air handling ducts in a return air plenum do not need to be thermally insulated in accordance with Table 9-2.

The Respondent submitted that he does not accept the Applicant's proposal because uninsulated ducts in a ceiling plenum carrying air that has a supply air to ambient air temperature difference of over 15 degrees F will increase energy costs. This is inaccordance with interpretation IC 90.1-1989-7 of ASHRAE/IES 90.1 - 1989 dated April 15, 1992.

The Respondent does not accept the Applicant's proposal because Sentence 9.4.8.4.(b) of ASHRAE/IES 90.1 - 1989 requires that supply ductwork operating at static pressures from 0.25 to 2.0 in water column be sealed accordingly.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the building project provides sufficiency of compliance with Articles 2.1.1.11. and Subclause 6.2.1.1.(1)(a)(v) of the Building Code.

8. **Reasons:**
   i. Exception (b) of Article 9.4.8.3. of ASHRAE/IES 90.1 - 1989 permits uninsulated ducts where it can be shown that the heat gain to or heat loss from ducts without insulation will not increase energy costs.
   ii. In this application the supply ducts are considered to be located within the conditioned space which they serve.

Dated at Toronto, this 23rd day, in the month of April, in the year 1996, for application number 1996-10.

BCC Ruling No. 96-12-495

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-12-495

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.2.1.1.(2) and 3.2.1.1.(4) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Bob Brown, Supervisor of Corporate Development, City of Brampton for the resolution of a dispute with Mr. Percy Hornblow, Chief Building Official, City of Brampton, concerning whether a building containing four hockey rinks is to be classified as a single storey building with a mezzanine or whether it should be classified as a two storey building in accordance with Sentence 3.2.1.1.(2) and 3.2.1.1.(4) of the Ontario Building Code, at Brampton Southwest Recreation Centre - Phase 1, 500 Ray Lawson Boulevard, Brampton, Ontario.

APPLICANT

Mr. Bob Brown
Supervisor of Corporate Development & Capital
Projects
City of Brampton

RESPONDENT

Mr. Percy Hornblow
Chief Building Official
City of Brampton

PANEL

Mr. Roy Philippe, Chair
Mr. Demir Delen
Mr. Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

April 16th, 1996

APPEARANCES

Mr. Leszek Muniak
Larden Muniak Consulting Inc.
For the Applicant

Ms. Brenda Campbell
Manager of Plans and Permits
City of Brampton
For the Respondent

RULING

1. **The Applicant**

   Mr. Bob Brown, Supervisor of Corporate Development is an applicant for a permit under the Building Code Act, 1992 to construct a building containing four hockey rinks at 500 Ray Lawson Boulevard, Brampton, Ontario.

2. **Description of Constrution**

   The subject building is intended to be a Group A, Division 3 major occupancy (i.e. arena) with a variety of subsidiary occupancies.

   The buildings will contain four hockey rinks, each of which will be provided with change rooms for the players, referee rooms, public washrooms and snack bars on the main level. The second level will contain a restaurant and a viewing gallery for Rink 1 and 2. Rink 3 and 4 will not have viewing galleries associated within the rinks but will have a viewing area from the restaurant on the second level. Rinks 1 and 2 will also have viewing areas from the restaurant.

   The area of the open viewing galleries for Rinks 1 and 2 is approximately 530 m^2. The area of the upper lobby, restaurant, associated kitchen and administrative offices is approximately 780

m?. The area to the west of the viewing galleries, including a corridor which functions as an access to exit to the systems rooms and a mechanical room, is approximately 315 m².

The total building area of the structure is approximately 9239 m². The total of the second level, excluding the viewing galleries, is approximately 1050 m². The building will be fully sprinklered.

In addition to the second level, there are two roof top mechanical spaces which do not contribute to the overall height of the building in storeys. A third mechanical room is located on the west side of the building. This mechanical room has an area of 107 m?. This mechanical room is included in the 1050 m? second level area.

3. **Dispute**

The dispute between the Applicant and Respondent an interpretation of the technical requirements of Sentence 3.2.1.1.(2) and 3.2.1.1.(4) of the Building Code. At issue is whether a building containing four hockey rinks is to be classified as a single storey building with a mezzanine or whether it should be classified as a two storey building.

4. **Provision of the Building Code**

Sentence 3.2.1.1.(2) Exceptions to Building Height in Storeys

2. Space under tiers of seats in buildings of the arena type shall not be considered as adding to the building height provided such space is used only for a purpose incidental to the major occupancy of the building, such as for dressing rooms or concession stands.

Sentence 3.2.1.1.(4)

4. Except as provided in Sentence (5), a mezzanine shall not be required to be considered as a storey in calculating building height and need not conform to Sentence (3) where the aggregate area of the mezzanine floor does not exceed 10 per cent of the area of
    a. the suite in which it is located, where there is more than one suite in the storey, or
    b. the storey in which it is located, in all other cases.

5. **Applicant's Position**

The following information was submitted by the Applicant:

The original design of the building included a mezzanine which was approximately 9.9% of the first floor area. This second level discounted the viewing gallery seating and access to seating areas serving Rinks 1 and 2. In addition, in the original design, three roof top mechanical rooms were included. Two of the roof top mechanical rooms had areas of approximately 317 m². The third floor roof top mechanical room, because of its equipment, had a much larger area. During the course of design, the third or westernmost roof top mechanical room configuration was changed to permit the equipment to be installed vertically instead of horizontally. This required the mechanical room to extend above the roof for air intake purposes and below the roof for equipment installation. Initially, this equipment room was installed partially below the roof level but approximately 2 m above the floor surface of the second level. Further revisions to the equipment resulted in the mechanical room being dropped to the same level of the building with a large portion of the mechanical room extending through the roof in order to provide equipment height and air intake openings. Its area finalized at 107 m².

This change in the mechanical room resulted in the building being classified as a two storey building because the area contributed by the mechanical room as an additional area to the second level rendered the total second level area at approximately 11.4%. Without the mechanical room, the area of the second level is 10.2% of the first storey.

In addition, the building department was unwilling to allow the deduction of the walking surface which serve the viewing gallery seating in accordance with Sentence 3.2.1.1.(2). The position of the building department was that only the seating areas may be deducted, whereas the horizontal walking surfaces must be considered as contributing to the overall height of the building. This change brought the total area of the second floor to approximately 11.7% of the overall area of the first storey.

Conclusion: This type of building contains a second level of which less than 10% will be used as public access in order to watch events occurring on the hockey rinks below. The spaces which will only periodically be occupied by, at most, two or three individuals in a service capacity do not constitute any detriment to life safety of the overall building occupants or to fire fighters should a fire occur.

It is the opinion of the Applicant that the design as proposed, including full sprinklering of all arena spaces and all public amenity spaces throughout the entire building, along with the 2 h fire resistance rated enclosure for the mechanical room from the second floor where the Building Code only requires a 1 h fire resistance rated enclosure, and the full sprinklering of the

mechanical room, provides sufficiency of compliance with the life safety intent to the Building Code.

6. **Chief Building Official's Position**

The Respondent submitted that the aggregate area of the mezzanine is 1752.9 m? or 18.97% of the storey in which it is located.

The Respondent submitted that the definition of the floor area in the building code excludes exits, vertical service spaces and their enclosing assemblies. The exclusion of these spaces results in a mezzanine area of 1619.6 m? or 17.5% of the floor area.

The Respondent submitted that the exclusion of the service room and corridors still results in a mezzanine area slightly greater that the minimum 10% permitted.

The Respondent further submitted that the municipality's decision not to support the Applicant's proposal was based on the following factors:

- The building will be under three separate tenancies making a coordinated fire safety plan difficult.
- Provision for exiting. The minimum of two exits is provided from the restaurant/arcade area, one of which leads through a lobby. The occupant load of the restaurant/arcade is 300. The exit through the lobby also serves as on of the two exits provided for the viewing galleries of the 2 arenas (combined occupant load of 500).

2. **Commission Ruling:**

t is the decision of the Building Code Commission that the building provides sufficiency of compliance with Article 3.2.2.26. of the Building Code as a single storey with mezzanine.

3. **Reasons:**

ii. The sprinkler densities exceed those required by the building hazard classification.
iii. In addition the 1 hour fire separation provides sufficient structural integrity from fire for evacuation purposes.
iv. The mezzanine area does not significantly exceed 10% of the total floor area.

Dated at Toronto, this 16th day, in the month of April, in the year 1996, for application number 1996-07.

BCC Ruling No. 96-11-494

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-11-494

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.4.6.15.(1) and Clause 3.4.6.15.(4)(c) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Ron Villeneuve, Vice- President, Cosmic Adventures Inc., Gloucester for the resolution of a dispute with Ms. Elizabeth Hilfrich, Chief Building Official, City of Gloucester, concerning: i) whether electromagnetic locking devices on five exit doors must release immediately upon activation of door release hardware in accordance with Sentence 3.4.6.15.(1) of the Building Code; and, ii) whether the installation of two manual pull stations for a fire alarm system incorporating electromagnetic locking devices beyond the maximum allowance of 600 mm from the door will provide sufficiency of compliance with Clause 3.4.6.15.(4)(c) of the Building Code, at Cosmic Adventures Inc., 1373 Ogilvie Road, Gloucester, Ontario.

APPLICANT

Mr. Ron Villeneuve
Vice-President
Cosmic Adventures Inc.
Gloucester, Ontario

RESPONDENT

Ms. Elizabeth Hilfrich
Chief Building Official
City of Gloucester

PANEL

Mr. Roy Philippe, Chair
Mr. Demir Delen
Mr. Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

April 16th, 1996

APPEARANCES

Mr. Ron Villeneuve
Cosmic Adventures Inc.
Gloucester, Ontario
The Applicant

RULING

1. **The Applicant**

   Mr. Ron Villeneuve, Vice-President is the recipient of an order to comply under the Building Code Act, 1992 requiring: i) deactivation of electromagnetic locking devices on five exit doors equipped with panic type hardware when a force of not more than 90 N is applied to the panic hardware; and, ii) relocation of manual pull stations for the fire alarm system within 600 mm of the two gates equipped with electromagnetic locking devices.

2. **Description of Constrution**

   The subject building is a two storey noncombustible building with a building area of 2,531 m². The building has two tenants. Methot Mermaid Pools occupies 975 m² of the ground floor and 197 m² of the second floor. Cosmic Adventure Indoor Play centre occupies 1,556 m? of the ground floor and 337 m² of the second floor. A two hour fire separation is provided between the two tenants. The building is provided with a fire alarm and detection system and a sprinkler system, but not a standpipe and hose system.

   The main function of the Cosmic Adventure Indoor Play Centre is to provide supervised recreation and learning for children of all ages. To provide security against unauthorized entry and exit, electromagnetic locking devices have been installed on all exit doors of the tenant space.

3. **Dispute**

The dispute between the Applicant and Respondent concerns an interpretation of Sentence 3.4.6.15.(1) and sufficiency of compliance with the technical requirements of Clause 3.4.6.15.(4)(c) of the Building Code. At issue is: i) whether electromagnetic locking devices on five exit doors must release immediately upon activation of door release hardware; and, ii) whether the installation of two manual pull stations for a fire alarm system incorporating electromagnetic locking devices may be located beyond the maximum allowance of 600 mm from the door.

4. **Provision of the Building Code**

Sentence 3.4.6.15.(1) Door Release Hardware

1. If a door is equipped with a latching mechanism, a device that will release the latch and allow the door to swing wide open when a force of not more than 90 N (20 lb) is applied to the device in the direction of exit travel shall be installed on
    a. every exit door from a floor area containing a Group A occupancy having an occupant load of more than 100 persons,
    b. every door leading to an exit lobby from an exit stair shaft, and every exterior door leading from an exit stair shaft in buildings having an occupant load of more than 100 persons, and
    c. every exit door from a floor area containing a Group F, Division 1 Occupancy.

Clause 3.4.6.15.(4)(c)

4. An electromagnetic locking device that does not incorporate latches, pins or other similar devices to keep the door in the closed position is permitted to be installed on an exit door, other than an exit door serving an elementary or secondary school or leading directly from Group F, Division 1 occupancy

    (c) if a manual pull station for the fire alarm system is located on the wall not more than 600 mm (23 5/8 in) from the door.

5. **Applicant's Position**

i. Concerning sufficiency of compliance with Clause 3.4.6.15.(4)(c):

The Applicant requested permission to relocate two pull stations for the fire alarm system, beyond the maximum allowance of 600 mm from the door. This would only apply to the electromagnetic locking devices installed at the reception desk exit gates. The Applicant submitted that the gates and walls that separate the inside area from the outside area are only 900 mm high and the staff have problems keeping children from hopping over them at the best of times let alone if there was an emergency. The new placement would put the devices 1 metre away on the inside face of the counter, near the public address system of the emergency control centre. This area is manned during all hours of operation by trained personnel.

The Applicant submitted that the requirements of the Building Code locates the fire alarm pull station within easy reach of the average, inquisitive, impatient and excited 5 or 6 year old. The Applicant further submitted that in a test conducted on site, a dummy pull station was activated five times over a weekend despite increased awareness of the problem by staff.

The Applicant submitted that the reason for the appeal is simply a desire to reduce the possibility of accidental or malicious false alarm while providing maximum protection to our guests.

ii. Concerning an interpretation of Sentence 3.4.6.15.(1):

The Applicant submitted that if the panic type hardware is required to immediately disengage the electromagnetic locking devices it would be tantamount to having no egress security what so ever and invites the opportunity of a child wandering out unnoticed or even worse may create fertile ground for an abduction.

The Applicant submitted that they have taken the added precaution of installing an electromagnetic locking device de-activation keypad or a push button at each electromagnetic locking device location and in the event of an emergency a trained staff member would be responsible for releasing them should all other safe guards fail.

The Applicant also requested consideration to use a fifteen second time delay in the panic hardware to allow staff time to respond to the door in question.

2. **Chief Building Official's Position**

The Respondent submitted that Sentence 3.4.6.15.(1) of the building code requires exit doors to open when door release hardware is activated.

The Respondent submitted that Clause 3.4.6.15.(4)(c) of the building code requires a pull station to be located within 600 mm of a door equipped with an electromagnetic locking device.

The Respondent further submitted that the Applicant's proposals do not comply with the building code.

3. **Commission Ruling:**
   i. It is the decision of the Building Code Commission that the installation of electromagnetic locking devices (EMLD) on required exit doors equipped with release hardware (i.e. panic type hardware) provides sufficiency of compliance with Article 3.4.6.15. of the Building Code provided that:
      a. A force of not more than 90 N applied to the door opening hardware initiates an irreversible process that will release the locking device within 15 seconds and will not relock until the door has been opened.
      b. A deactivation key pad is installed at every door with EMLD which will release the EMLD immediately.
      c. A legible sign is permanently mounted on the exit door to indicate that the locking device will release within 15 seconds of applying pressure to the door release hardware.
      d. The EMLD is installed as an ancillary device to the fire alarm system and the installation, activation and resetting shall comply with the requirements of Sentence 3.4.6.15.(4) of the Building Code.
      e. Emergency lighting is installed in accordance with the Building Code at the exit doors with EMLD's to illuminate door signage.
      f. The EMLD's are not connected before a Fire Safety Plan is approved by the Chief Fire Official which identifies the installation of the EMLD's.
      g. All EMLD's will be capable of being released immediately from the emergency control centre which is continuously attended.
   ii. In addition, it is the decision of the Building Code Commission that the relocation of two pull stations to the reception desk exit gates at one metre away on the inside face of the counter of the emergency control centre provides sufficiency of compliance with Clause 3.4.6.15.(4)(c) provided the location is continuously attended.
4. **Reason:**

It is the opinion of the Building Code Commission that the conditions imposed above provide sufficient safeguards with respect to life safety recognizing the security needs of this particular use.

Dated at Toronto, this 19th day, in the month of April, in the year 1996, for application number 1996-08.

BCC Ruling No. 96-10-493

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-10-493

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 7.4.2.1. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Ross A. Smith, President, Aon Inc. for the resolution of a dispute with Mr. Jeffrey Chalmers, Chief Building Official, City of Peterborough concerning whether the floor drains in a three level open air parking garage can be connected to the storm drainage system, at King Street Parkade, King Street and Louis Street, Peterborough, Ontario.

APPLICANT

Mr. Ross A. Smith
Aon Inc.
Peterborough, Ontario

RESPONDENT

Mr. Jeffrey Chalmers
Chief Building Official
City of Peterborough

PANEL

Mr. Roy Philippe
Ms. Lesia Beznaczuk
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

April 15th, 1996

APPEARANCES

Mr. William P. Lett
Architect (Partner)
Lett/Smith Architects
For the Applicant

Mr. Jeffrey Chalmers
Chief Building Official
AND
Mr. Stephen Gould
Plumbing Inspector
City of Peterborough
The Respondents

RULING

1. **The Applicant**

   Mr. Ross A. Smith, President is an applicant for a permit under the Building Code Act, 1992 to construct a three level open-air parking garage of approximately 6624 m? per floor, at King Street Parkade, King Street and Louis Street, Peterborough, Ontario.

2. **Description of Constrution**

   The subject building is a non-combustible two storey open-air parking garage of approximately 6624 m? in building area. The third level is an open roof deck that is used for parking vehicles.

   Hose bibs have been provided for the washing down of all floor levels. The designer proposed to connect all floor drains directly to an existing storm drainage system. The site is presently being used as a surface parking lot that drains to the storm system.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 7.4.2.1. of the Building Code. At issue is the fact that a surface parking lot, or the open roof deck of a parking garage may be drained to a storm system while the covered floors of a parking garage must be connected to a sanitary drainage system.

4. **Provision of the Building Code**

Article 7.4.2.1. Connections to Sanitary Drainage Systems

1. Every fixture shall be directly connected to a sanitary drainage system, except that
    a. drinking fountains may be
        i. indirectly connected to a sanitary drainage system, or
        ii. connected to a storm drainage system provided that where the system is subject to backflow, a check valve is installed in the fountain waste pipe,
    b. laundry plumbing appliances may be indirectly connected to a sanitary drainage system,
    c. fixtures or plumbing appliances, other than floor drains, that discharge only clear water waste may be connected to a storm drainage system,
    d. the following devices shall be indirectly connected to a drainage system
        i. a device for the display, storage, preparation or processing of food or drink,
        ii. a sterilizer,
        iii. a device that uses water as a cooling or heating medium,
        iv. a water operated device,
        v. a water treatment device, or
        vi. a drain or overflow from a water system or a heating system,
    e. fixtures that have a hydraulic load of not more than 1 1/2 fixture units may be connected to a vertical section of a circuit vent provided
        i. the fixtures are located in the same storey as the fixtures served by the vent pipes,
        ii. not more than 2 fixtures are connected to the vent pipe, and
        iii. where 2 fixtures are not connected to the vent pipe, the connection is by means of a double sanitary TY fitting,
    f. fixtures that have a hydraulic load of not more than 1 1/2 fixture units may be connected to the vertical section of a yoke vent provided
        i. not more than 2 fixtures are connected to the vent pipe, and
        ii. where 2 fixtures are connected to the vent pipe, the connection is by means of a double sanitary TY fitting, and
    g. fixtures may be connected to a vent stack provided
        i. the total hydraulic load of the connected fixtures does not exceed 8 fixture units,

ii. at least 1 fixture is connected to a vertical portion of the vent stack and upstream of any other fixtures,

iii. no other fixture is connected down-stream of a water closet, and

iv. all fixtures are located in the lowest storey served by the vent stack.

2. The connection of a soil or waste pipe to a nominally horizontal soil or waste pipe or to a nominally horizontal offset in a soil or waste stack shall be respectively at least 1.5 m (4 ft 11 in) measured horizontally from the bottom of a soil or waste stack or from the bottom of the upper vertical section of the soil or waste stack that
   a. receives a discharge of 30 or more fixture units, and
   b. receives a discharge from fixtures located on 2 or more storeys.
3. No other fixture shall be connected to a lead bend or stub that serves a water closet.

5. **Applicant's Position**

The Applicant proposed to connect the floor drains from each of the three levels directly to an existing storm drainage system. The Applicant submitted that at issue is whether there is any difference in the waste water generated on the lower two floors (i.e. Levels P1 & P2) from that generated at the roof deck (Level 3).

The Applicant submitted that the intent of the Building Code would be met if all the garage floors were connected to the storm drainage system.

6. **Chief Building Official's Position**

The Respondent submitted that Sentence 7.4.2.1.(1) of the Building Code states that every fixture shall be directly connected to a sanitary drainage system. Fixture is defined in Article 1.1.3.2. and the definition includes floor drains. Clause (c) of 7.4.2.1.(1) allows for fixtures other than floor drains to discharge clear water waste to a storm drainage system. Clear water waste is also defined in Article 1.1.3.2.

The Respondent submitted that the reason for non-acceptance of the applicants proposal is that the drains serving the first and second floor of the parking garage are floor drains and therefore must be connected to the sanitary drainage system. The Respondent also submitted that it is questionable whether or not the discharge through these drains could be considered as clear water waste.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that floor drains in the three level open air parking garage connected to the storm drain system provides sufficiency of compliance with Article 7.4.2.1.(1)(c) of the Building Code.

8. **Reasons:**

There is little difference between the waste water generated on the lower two parking floors and the waste water generated on the roof.

The parking garage will not be used for other purposes other than storage of automobiles.

Dated at Toronto, this 15th day, in the month of April, in the year 1996, for application number 1996-11

BCC Ruling No. 96-09-492

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-09-492

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.3.1.1. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Larry Balaban, Vice- President Real Estate, Chapters Inc. for the resolution of a dispute with Mr. Antonio W. Chow, Chief Building Official, City of Etobicoke, concerning whether a fire separation is required between two warehousing areas, in accordance with Article 3.3.1.1. of the Building Code, at 90 Ronson Drive, Etobicoke, Ontario.

APPLICANT

Mr. Larry Balaban
Vice-President Real Estate
Chapters Inc.
Rexdale, Ontario

RESPONDENT

Mr. Antonio W. Chow
Chief Building Official
City of Etobicoke

PANEL

Mr. Roy Philippe
Ms. Lesia Beznaczuk
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

April 15th, 1996

APPEARANCES

Mr. Larry Balaban
V.P. Real Estate
Charters Inc. AND
Ms. Louise Trudell-Kruithof
V.P. Engineering
PPL Professional Services Inc.
For the Applicant

Mr. Antonio W. Chow
Chief Building Official
AND
Mr. Robert Sumi
Building Engineer
City of Etobicoke
The Respondent

RULING

1. **The Applicant**

   Mr. Larry Balaban, Vice-President Real Estate is the holder of a permit under the Building Code Act, 1992 to construct alterations to an existing office space and warehouse storage area at 90 Ronson Drive, Etobicoke, Ontario.

2. **Description of Constrution**

   The subject building is a sprinklered one storey noncombustible warehouse with subsidiary office space that is classified as a Medium Hazard Industrial Occupancy (Group F, Division 2). The building area is 7710 m^2.

   The Applicant proposed to enlarge their office space and construct a new wall separating the expanded office area from the warehouse storage area.

There is an existing wire fence separating the warehouse area from an adjoining warehouse space operated by another tenant. The municipal building department have issued an order to comply requesting the applicant erect a 1 hour fire separation between the two tenancies.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.3.1.1. of the Building Code. At issue is whether the existing chain link fence separating two tenants within a warehouse area must be replaced with a 1 hour fire separation.

4. **Provision of the Building Code**

Sentence 3.3.1.1. Separation of Suites

1. Except as permitted by Sentence (2), each suite in other than business and personal services occupancies shall be separated from adjoining suites by a fire separation having a fire- resistance rating of not less than 1 h, except that a fire- resistance rating of not less than 45 min is permitted where the fire resistance rating of the floor assembly in not required in Subsection 3.2.2. to be more than 45 min. (See also Subsection 3.3.3. for institutional occupancies, Article 3.3.4.2. for residential occupancies and Articles 3.1.8.7. for fire dampers.)
2. In sprinklered buildings, suites of business and personal services occupancy and mercantile occupancy that are served by public corridors conforming with Clause 3.3.1.4.(1)(c) are not required to be separated from each other by fire separations.

5. **Applicant's Position**

The Applicant submitted that the chain link fence that separates the two tenants has been in place since 1990. The Applicant also submitted that the building is fully sprinklered and that Compliance Alternative F27 in Table 11.2.3.F. of the Building Code permits non rated separations where the building is sprinklered.

6. **Chief Building Official's Position**

The Respondent submitted that two tenants in the warehouse area are separated by a chain link fence. Article 3.3.1.1. of the Building Code requires a minimum 45 minute fire separation between suites of industrial occupancy. The Respondent submitted that a chain link fence

provides neither a fire rating nor a fire separation. In sprinklered buildings, only suites of business and personal services and mercantile occupancies served by public corridors conforming with Clause 3.3.1.4.(1)(c) of the Building Code are exempt from requiring a fire separation from each other.

The Respondent submitted that a drawing forming part of the building permit application clearly identifies a rated demising wall (ULC W407) between the two tenants that satisfies Article 3.3.1.1. of the Building Code.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that a chain link fence does not provide sufficiency of compliance with the required fire separation between the two warehouse tenancies conforming to Article 3.3.1.1. of the Ontario Building Code.

8. **Reasons:**
   1. The compliance alternative F27 in Table 11.2.3.F. of the Building Code permits non rated separations where a building is sprinklered at public corridors separations, but not to required fire separations between suites.
   2. No evidence could be provided that a permit was ever issued for the installation of the chain link fence nor the date of the installation. The fence does impact on the egress requirements and would have been considered a material alteration for permit purposes.
   3. No confirmation could be provided by the applicant as to when the building would be restored to a single tenancy.

Dated at Toronto, this 15th day, in the month of April, in the year 1996, for application number 1996-09.

BCC Ruling No. 96-08-491

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-08-491

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 7.1.6.1.(1), 7.1.6.2.(1) and 7.1.6.4.(1) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Grant McBain, Vice President, Landwood Building Corporation for the resolution of a dispute with Mr. Yaman Uzumeri, Chief Building Official, City of North York, concerning whether a new building sewer is permitted to be connected to an existing private sewer which is currently serving other buildings, at 2050 Victoria Park Avenue, North York, Ontario.

APPLICANT

Mr. Grant McBain
Landwood Building Corporation
Markham, Ontario

RESPONDENT

Mr. Yaman Uzumeri
Chief Building Official
City of North York

PANEL

Mr. Roy Philippe
Ms. Lesia Beznaczuk
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

April 15th, 1996

APPEARANCES

Mr. Grant McBain,BR>Landwood Building Corporation
Markham, Ontario
The Applicant

Mr. D. Musabay, P.Eng.
Director of Mechanical Inspections
AND
Mr. Mario Milantoni
Supervisor of Plumbing Inspections
City of North York
For the Respondent

RULING

1. **The Applicant**

   Mr. Grant McBain, Vice President is an applicant for a permit under the Building Code Act, 1992 to connect a new building sewer to an existing private sewer at 2050 Victoria Park Avenue, North York, Ontario.

2. **Description of Constrution**

   The subject property is currently being occupied by a Sunoco gas station. There is an operating septic tank at the rear of the property. A one inch copper water service pipe was installed around 1975 with connection to a water main directly in front of the property on the west side of Victoria Park Avenue. Surface water flows overland to Victoria Park Avenue in accordance with a North York municipal by-law. The existing storm and sanitary sewers on the property were designed and built at the same time as the high-rise building at 21 Welsford Gardens, approximately 1965. There is a registered easement for both the storm and sanitary sewers to service the two commercial properties which front onto Victoria Park Avenue.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentences 7.1.6.1.(1), 7.1.6.2.(1) and 7.1.6.4.(1) of the Building Code. At issue is whether a new building sewer is permitted to be connected to an existing private sewer which is currently serving other buildings.

4. **Provision of the Building Code**

Sentence 7.1.6.1.(1) Sanitary Drainage Systems

1. Every sanitary drainage system shall be connected to a public sanitary sewer, a public combined sewer or a private sewage disposal system.

Sentence 7.1.6.2.(1) Storm Drainage Systems

2. Every storm drainage system shall be connected to a public storm sewage works, a public combined sewage works or a designated storm water disposal location but shall not be connected to a sanitary sewage works.

Sentence 7.1.6.4.(1) Separate Services

3. Piping in any building shall be connected to the public services separately from piping of any other building, except that an ancillary building on the same property may be serviced by the same service.

5. **Applicant's Position**

The Applicant submitted that the subject property is currently serviced by a septic system. The Applicant proposed to service the property with private storm and sanitary sewers which were installed in 1965.

The Applicant submitted that the existing storm and sanitary sewer are of sufficient capacity, depth and orientation to service the subject property.

Both the existing storm sewer and sanitary sewer are located within a 30 foot wide registered easement.

6. **Chief Building Official's Position**

The Respondent submitted that the Applicant proposed to service the new property by an existing private storm and sanitary sewer that is already servicing an apartment building and a commercial plaza.

The Respondent submitted that the proposal contravenes the Building Code. A direct connection is required from each property to the public sewer.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that the use of existing private sewers provide sufficiency of compliance with the requirement to connect to a public sewer in accordance with sentences 7.1.6.1.(1) and 7.1.6.2.(1) of the Building Code subject to engineering analysis that sufficient capacity exists in the private sewer system.

8. **Reasons:**
   1. A registered easement exists with both storm and sanitary sewers to permit the connection
   2. The private storm and sanitory sewers which serve 21 Welsford Gardens were designed in 1965 to service this commercial property which fronts onto Victoria Park Avenue.
   3. According to the consultants reports, both storm and sanitary sewers appear to be of sufficient capacity, depth and orientation to serve this property.

Dated at Toronto, this 15th day, in the month of April, in the year 1996, for application number 1996-06.

BCC Ruling No. 96-07-490

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-07-490

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.2.8.2.(6)(c) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Les Cam, Parks and Recreation Department, City of Mississauga for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga to determine whether an interconnected floor space in a Group A, Division 3 occupancy will provide sufficiency of compliance with the requirements provided for Group A, Division 1 & 2 occupancies in accordance with Clause 3.2.8.2.(6)(c) of the Ontario Building Code, at Four Rinks Arena, Matheson Blvd., Mississauga Ontario.

APPLICANT

Mr. Les Cam
Parks and Recreation Department
City of Mississauga

RESPONDENT

Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL

Mr. Rick Florio
Ms. Susan Friedrich
Mr. Michael Lio

PLACE

Mississauga, Ontario

DATE OF RULING

March 28th, 1996

APPEARANCES

Mr. Leszek Muniak
Larden Muniak Consulting Inc.
Toronto, Ontario
For the Applicant

Mr. Frank Spagnolo, Manager
Building and Inspection
City of Mississauga
For the Respondent

RULING

1. **The Applicant**

   Mr. Les Cam, Parks and Recreation Department, City of Mississauga is an applicant for a permit under the Building Code Act, 1992 to construct a two storey complex of 12,000 m? containing one Olympic size rink, three professional size rinks, a licensed restaurant, snack bar, skills arcade, shop and toddler play area.

2. **Description of Constrution**

   The Four Rinks Arena is protected by automatic sprinklers throughout and is classified as a Group A, Division 3 occupancy. This two storey complex has a building area of 12,000 m². It containing four rinks, a licensed restaurant, snack bar, skills arcade, shop and toddler play area.

   The four rinks occupy the ground floor level and are arranged in quadrants with a lobby bisecting the complex for public access. Directly above the ground floor level is the second level lobby.

   In accordance with Article 3.2.2.27. of the Building Code fire separations would be required, as follows:

   - horizontal floor assembly, 2h fire resistance rating, second level lobby

- vertical wall assembly utilizing glazing and automatic sprinklers, meeting the horizontal separation, 2h fire resistance rating, second level lobby/overview of rinks since visual openings are desired to each rink.

The applicant is proposing the installation of tempered glazing and sprinklers on one side of the glazing in lieu of a 2 hour fire separation.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Clause 3.2.8.2.(6)(c) of the Building Code. At issue is whether an interconnected floor space is permitted in this Group A, Division 3 occupancy without conforming to the requirements of Articles 3.2.8.3. to Article 3.2.8.11. of the Building Code.

4. **Provision of the Building Code**

Sentence 3.2.8.2.(6) Exceptions to Special Protection

6. An interconnected floor space need not conform to the requirements of Articles 3.2.8.3. to 3.2.8.11. provided
   a. the interconnected floor space consists of the first storey, and the storey next above it, but not both,
   b. the interconnected floor space is sprinklered, and
   c. the interconnected floor space contains only Group A, Division 1 or 2, Group D, Group E, or Group F, Division 3 major occupancies.

2. **Applicant's Position**

The Applicant submitted that consideration should be given by the BCC to permit an interconnected floor space in this arena complex without the necessity of full compliance with interconnected floor space requirements of Articles 3.2.8.3. to 3.2.8.11. of the Building Code.

The Applicant submitted that an interconnected floor space is permitted for Group A, Division 1 & 2 occupancies in accordance with Sentence 3.2.8.2.(6) of the Building Code.

The Applicant submitted an analysis of occupant load, mobility of persons, fuel load and construction requirements to demonstrate that no greater hazard exists to occupants in this Group A, Division 3 arena by way of an interconnected floor space than would exist in a Group A, Division 1 or 2 occupancy where an interconnected floor space is permitted.

The Applicant also submitted that a revision included in the 1995 National Building Code permits Group A, Division 3 major occupancies to be contained in a building in which the first storey and the storey above it are interconnected.

3. **Chief Building Official's Position**

The Respondent submitted that an interconnected floor space is being proposed between level 1 and 2 in a Group A, Division 3 occupancy. The Building Code clearly does not permit an interconnected floor space in a Group A, Division 3 major occupancy without conforming to the requirements of Article 3.2.8.3. to 3.2.8.11.

The Respondent also submitted that the Applicant did not propose any additional measures to demonstrate sufficiency of compliance with the Building Code.

4. **Commission Ruling:**

It is the decision of the Building Code Commission that installing tempered glazing with sprinklers on one side of the glazing (on the second storey) provides sufficiency of compliance with the requirements of Sentence 3.2.8.2.(6) of the Building Code provided a fire safety plan is implemented to prohibit use of the second storey by the public when non-skating events are scheduled in the rinks of the ground floor of the building.

5. **Reasons:**
    6. Fire separations without fire resistance ratings are provided at the first floor level to act as a smoke barrier.
    7. The proposed separation at the second floor level provides increased time to evacuate the second floor level under fire conditions.
    8. The fire safety plan provides enhanced life safety.
    9. The 1995 National Building Code allows interconnected floor spaces in A-3 major occupancies.

Dated at Toronto, this 28th day, in the month of March, in the year 1996, for application number 1996-14.

BCC Ruling No. 96-06-489

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-06-489

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 1.1.3.2. for the definition of a storage garage, Article 3.3.5.7. and Sentence 3.3.5.5.(4) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by John Colussi and Associates Ltd., Concord, for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, concerning whether a building used to renovate mobile homes and trailers (i.e. install upholstery, plumbing, air conditioning, beds, seats, tables, etc.) must comply with the storage garage requirements in Article 3.3.5.7. and Sentence 3.3.5.5.(4) of the Building Code, at Westdale Enterprises, 351 Spinnaker Way, Unit No. 1, Concord, Ontario.

APPLICANT

John Colussi and Associates Ltd.
Concord, Ontario

RESPONDENT

Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL

Mr. Roy Philippe
Mr. Demir Delen
Mr. Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

February 13th, 1996

APPEARANCES

Mr. John Colussi
John Colussi and Associates Ltd.
The Applicant

Mr. Clark Sheridan
AND
Ms. Maggie Sheridan
Westdale Enterprises

Mr. Mani Navabi
Chief Building Official
City of Vaughan
The Respondent

RULING

1. **The Applicant**

   Mr. John Colussi, John Colussi and Associates Ltd. is an applicant for a building permit under the Building Code Act, 1992 to construct interior partitions, offices and washrooms at Westdale Enterprises, 351 Spinnaker Way, Unit No. 1, Concord, Ontario.

2. **Description of Constrution**

   The subject building is a fully sprinklered single storey structure facing two streets. It has a building area of 2,880 m? and contains four units. The building is classified as a Medium Hazard Industrial Occupancy (i.e. Group F, Division 2) under Article 3.2.2.51. of the Building Code.

   The Applicant occupies one of the four units (i.e. 1394 m?) in the building. The Applicant proposes to construct interior partitions, offices and washrooms.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 1.1.3.2. for the definition of a storage garage, Article 3.3.5.7. and Sentence 3.3.5.5.(4) of the Building Code. At issue is whether a building used to renovate mobile homes and trailers must comply with the fire separation and ventilation requirements for storage garages.

4. **Provision of the Building Code**

Article 1.1.3.2.Article 1.1.3.2. Definition of Storage Garages

Storage garage means a building or part there of intended for the storage or parking of motor vehicles and which contains no provision for the repair or servicing of such vehicles.

Article 3.3.5.7. Storage Garage Separation

A storage garage shall be separated from other occupancies by a fire separation with a fire-resistance rating of not less than 1.5 h

Sentence 3.3.5.5.(4) Repair and Storage Garages

Every garage shall be provided with natural or mechanical ventilation in conformance with the requirements of Subsection 6.2.2. to prevent excessive accumulation of carbon monoxide, exhaust fumes or flammable and toxic vapours.

5. **Applicant's Position**

The Applicant submitted that the use of the facility is to renovate mobile homes and trailers. The nature of the work is limited to the installation of upholstery, plumbing, air conditioning, and beds, seats and tables.

The Applicant submitted that there is absolutely no mechanical repairs done on the mobile homes or trailers, nor any type of painting. The Applicant submitted that the motor homes are driven in and parked. The majority of the motor homes do not have engines in them, they are totally stripped elsewhere and brought to this location for refurbishment.

6. **Chief Building Official's Position**

The Respondent submitted that a 1 1/2 hour fire separation is required between the office and the showroom in accordance with Article 3.3.5.7. of the Building Code. Furthermore, a mechanical ventilation system in accordance with Sentences 6.2.2.3.(1) and (4) is required in the storage garage. Sentence 6.2.2.3.(4) may not be applicable if the applicant can prove that the vehicles are not parked by mechanical means.

The Respondent submitted that since the operator of the business is not repairing any mechanical systems on the vehicles, the space was considered to be a storage garage rather than a repair garage.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the classification of the intended occupancy is Group F, Division 2 (i.e. Medium Hazard Industrial Occupancy), but by nature of the infrequent operation or movement of mobile homes is not considered as a storage nor repair garage and the requirements of Articles 3.3.5.7. and 3.3.5.5. of the Building Code do not apply.

8. **Reasons:**
   i. No mechanical repair or servicing is performed on the mobile homes.
   ii. No painting or body work will be carried out.
   iii. Movement of mobile homes in or out of the premises is very infrequent in the order of 2 to 3 per week and batteries are normally disconnected.
   iv. The occupant load is extremely low and by nature of the restoration time for the mobile homes a limited number of the public are present at any time.

Dated at Toronto, this 13th day, in the month of February, in the year 1996, for application number 1996-05.

BCC Ruling No. 96-05-488

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-05-488

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Articles 9.8.4.1., 9.8.5.2. and 9.8.5.3. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Bazz Van Willigen, Vice President, Monarch Construction for the resolution of a dispute with Mr. Jim Witmer, Chief Building Official, City of Kitchener, concerning whether the interior stair conforms to Article 9.8.4.1., 9.8.5.2 and 9.8.5.3. of the Building Code, being the Rosemere Model, Lot 58, 83 Windrush Trail, Kitchener, Ontario.

APPLICANT

Mr. Bazz Van Willigen
Monarch Construction
Kitchener, Ontario

RESPONDENT

Mr. Jim Witmer
Chief Building Official
City of Kitchener

PANEL

Mr. Roy Philippe
Mr. Delen Demir
Mr. Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

February 13th, 1996

APPEARANCES

Mr. Wayne Cassidy
Cassidy & Co. Architectural Technologists Inc.
AND
Mr. Jerry Vernhout, Vice President
Monarch Construction Limited
For the Applicant

Mr. Jim Whitmer
Chief Building Official
City of Kitchener
The Respondent

RULING

1. **The Applicant**

   Mr. Bazz Van Willigen, Vice President is the holder of a permit under the Building Code Act, 1992 to construct a single family dwelling (i.e. house) at Lot 58, 83 Windrush Trail, Kitchener, Ontario.

2. **Description of Constrution**

   The subject building is a two storey single family dwelling (i.e. house). The stairs connecting the main floor and the second storey is the subject of the dispute.

   The stairs contain an intermediate portion (i.e. landing or large tread) between the floor levels where the stairs have a 45 degree change in direction. The Applicant contends that the stair is designed as a curved stair. The respondent states that the landing does not meet the requirements for landings.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Articles 9.8.4.1. 9.8.5.2. and 9.8.5.3. of the Building Code. At issue is whether the intermediate portion of the stair design is a landing or curved portion of the stair.

4. **Provision of the Building Code**

Article 9.8.4.1. Dimensions of Landings

Landings shall be at least as wide and as long as the width of stairs in which they occur, except that the length of landing for exterior stairs serving not more than 1 dwelling unit need not exceed 900 mm (2 ft 11 in), and the length of landing for all other stairs in a straight run need not exceed 1100 mm (3ft 7 in).

Article 9.8.5.2. Curved Stairs not in Exits

Except as permitted in Article 9.8.5.3., a curved stair not required as an exit shall have an average run of not less than 200 mm (77/8 in) and a minimum run of 150 mm (57/8 in) and shall have risers conforming to Article 9.8.3.1.

Article 9.8.5.3. Winders

1. Stairs within dwelling units may contain winders that converge to a centre point provided the winders turn through an angle of not more than 90§and individual treads turn through an angle of 30§.
2. Only one set of winders described in Sentence (1) shall be permitted between floor levels.

5. **Applicant's Position**

The Applicant submitted that the stairs comply with Article 9.8.5.2. of the Building Code. The Applicant submitted that the stair is designed as a curved stair and in no way compromises the intent of the Building Code or public safety. This stair has been used many times on a number of Monarch Construction sites.

6. **Chief Building Official's Position**

The Respondent submitted that the existing stair configuration does not meet the requirements for landings in Article 9.8.4.1. The landing length is not as wide as the width of the stairs, nor does it comply with the requirements of Article 9.8.2.1. for uniform treads and risers. The large intermediate portion is not uniform in its design for the entire run of the stairs.

The Respondent questioned the applicability of Article 9.8.5.2. for these stairs.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that the existing stair configuration provides sufficiency of compliance with Articles 9.8.4.1., 9.8.5.2. and 9.8.5.3. of the Building Code.

8. **Reason:**

   Information on past performance where the design has been used in Ontario indicates no adverse effect on safety with respect to movement up and down the stairs.

Dated at Toronto, this 13th day, in the month of February, in the year 1996, for application number 1996-04.

BCC Ruling No. 96-04-487

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-04-487

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.7.3.4.(1)(e) & (f) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Peter Hryhorchuk, Plummer Memorial Public Hospital, for the resolution of a dispute with Mr. Joe LaRue, Chief Building Official, City of Sault Ste. Marie, concerning whether the guard and handrail on an exterior barrier free access ramp provides sufficiency of compliance with Clause 3.7.3.4.(1)(e) & (f) of the Building Code, at the Oncology Unit, Plummer Memorial Public Hospital, 969 Queen Street East, Sault Ste. Marie, Ontario.

APPLICANT

Mr. Peter Hryhorchuk
Plummer Memorial Public Hospital
Sault Ste. Marie, Ontario

RESPONDENT

Mr. Joe LaRue
Chief Building Official
City of Sault Ste. Marie

PANEL

Mr. Roy Philippe
Mr. Demir Delen
Mr. Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

February 13th, 1996

RULING

1. **The Applicant**

   Mr. Peter Hryhorchuk, Plummer Memorial Public Hospital is an applicant for a permit under the Building Code Act, 1992 to construct a new exterior barrier free ramp that serves a newly enclosed secondary entrance to the Oncology Unit, 969 Queen Street East, Sault Ste. Marie, Ontario.

2. **Description of Constrution**

   The Applicant proposes to construct an 1100 mm wide exterior concrete side walk where the gradient of 1:17 requires the side walk to be considered a ramp. The grade adjacent to both sides of the ramp is 100 mm below the ramp surface.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Clause 3.7.3.4.(1)(e) & (f) of the Building Code. At issue is whether the barrier free guard and handrail requirements for ramps need be applied to the access provided for patience visiting the Oncology Unit of Plummer Memorial Hospital.

4. **Provision of the Building Code**

   Clause 3.7.3.4.(1)(e) Ramps

   1. Ramps located in a barrier-free path of travel shall
      a. have a minimum width of 870 mm (2 ft 10 in) between handrails,
      b. have a maximum gradient of 1 in 12,
      c. have a level area of at least 1.5 m (4 ft 11 in) by 1.5 m (4 ft 11 in) at top and bottom of a ramp and where a door is located in a ramp, so that the level area extends at least 600 mm (23 5/8 in) beyond the latch side of the door opening, except that where the door opens away from the ramp, the area extending beyond the latch side of the door opening may be reduced to 300 mm (11 3/4 in),
      d. have a level area at least 1.5 m (4 ft 11 in) long and at least the same width as the ramp

i. at intervals of not more than 9 m (29 ft 6 in) along its length, and
ii. where there is an abrupt change in the direction of the ramp,

e. except as provided in Sentence (2), be equipped with handrails and guards on both sides conforming to Articles 3.4.6.4. and 3.4.6.5., and
f. be provided with a curb at least 50 mm (2 in) high on any side of the ramp where no solid enclosure or guard is provided.

5. **Applicant's Position**

The Applicant submitted that this is an exterior side walk in a landscaped area where the gradient 1:17 requires the ramp definition to apply. The grade adjacent to the ramp on both sides is within 100 mm of the ramp surface.

The Applicant submitted that the requirement under Clause 3.7.3.4.(1)(e) of the Building Code for a guard on an exterior barrier free ramp where no hazard exists, seems unnecessary.

The Applicant proposed to provide a 920 mm high handrail on both sides of the ramp in lieu of a 1070 mm high guard. The Applicant submitted that this arrangement meets the intent of the Barrier Free Access requirements.

6. **Chief Building Official's Position**

The Respondent submitted that there are two Building Code issues. The first is the matter of Clause 3.7.3.4.(1)(e) which requires a guard on both sides of the barrier free ramp regardless of the difference in elevation from the ramp surface to the adjacent ground. The second issue relates to the mounting height of the handrail and the minimum height of the guard. Sentence 3.7.3.4.(1)(e) requires the handrail and guard on the Barrier Free Ramp to conform to Articles 3.4.6.4. and 3.4.6.5. which requires the minimum height of the guard to be 1070 mm while the handrail cannot be higher than 920 mm.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the handrails on both sides of the ramp located at 920 mm in height designed as a guard provides sufficiency of compliance with Clause 3.7.3.4.(1)(e) & (f) of the Building Code.

8. **Reasons:**

i. A horizontal rail at not more than 50 mm above the ramp has been provided which would prevent the front wheels of a wheel chair from turning off the ramp.
ii. The differential elevation between the existing grade and the ramp is less than 100 mm.
iii. Providing a handrail at 920 mm is considered adequate for the intended purpose.

Dated at Toronto, this 13th day, in the month of February, in the year 1996, for application number 1996-03.

BCC Ruling No. 96-03-486

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-03-486

IN THE MATTER OF Subsection 24 (1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.2.44. and Sentence 3.2.2.12.(1) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. David Rechtsman, Wild Oak Bay Home Corporation, for the resolution of a dispute with Mr. Harold Bratten, Chief Building Official, Borough of East York, concerning whether a sprinkler system is required in a greenhouse addition to an existing mercantile occupancy in accordance with Article 3.2.2.44. and Sentence 3.2.2.12.(1) of the Building Code, at 1400 O'Connor Drive, East York, Ontario.

APPLICANT

Mr. David Rechtsman
Concord, Ontario

RESPONDENT

Mr. Harold Bratten
Chief Building Official
Borough of East York

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

January 24th, 1996

RULING

1. **The Applicant**

   Mr. David Rechtsman, Wild Oak Bay Home Corporation is the is the holder of a permit under the Building Code Act, 1992 to construct a greenhouse addition to an existing mercantile occupancy at 1400 O'Connor Drive, East York, Ontario.

2. **Description of Construction**

   The subject building is a 562 m greenhouse addition to an existing mercantile building.

   The existing building consists of a 1,161 m one storey masonry building with an unrated wood roof assembly supported on fire proofed structural steel. The existing building has undergone alterations and three additions were added to it totalling 929 m, t hus making the total building area (new and existing) 2090 m. Both the existing building and additions are protected by a supervised sprinkler system.

   The greenhouse is separated from the existing building by a 250 mm (10 inch) thick masonry wall. Access is provided from the existing building into the greenhouse. The construction of the greenhouse provides complete ease of egress from the greenhouse in the event of a fire. The greenhouse structure consists of steel non-fireproofed framing, 4 mm tempered glass roof and sides. The sides, when not used, will be closed by a rolled down canvas. The greenhouse is separated from the main building by a 250 m m (10 inch) thick concrete block wall. There are no permanent exterior nor interior walls in the greenhouse.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.2.2.44. and Sentence

3.2.2.12.(1) of the Building Code. At issue is whether a sprinkler system is required in a greenhouse addition to an existing mercantile occupancy.

4. **Provisions of the Building Code**

Sentence 3.2.2.12.(1) Sprinklers in Lieu of Roof Rating

(1) The requirements in Articles 3.2.2.16. to 3.2.2.62. for roof assemblies to have a fire-resistance rating are permitted to be waived provided

(a) the building is sprinklered,

(b) the sprinkler system in Clause (a) is electrically supervised in conformance with sentence 3.2.4.16.(5), and

(c) the operation of the sprinkler system in Clause (a) will cause a signal to be transmitted to the fire department in conformance with Sentence 3.2.4.7.(3).

Article 3.2.2.44. Mercantile Buildings, up to 3 Storeys

(1) A building classified as Group E shall conform to Sentence (2) provided the building

(a) is not more than 3 storeys in building height, and

(b) has a building area not more than the value in Table 3.2.2.M.

(2) The building shall be of combustible or non-combustible construction used either singly or in combination, and

(a) floor assemblies shall be fire separations with a fire-resistance rating of not less than 45 min,

(b) mezzanines shall have, if of combustible construction, a fire-resistance rating of not less than 45 min,

(c) roof assemblies shall have a fire-resistance rating of not less than 45 min, except that in buildings not more than 1 storey in

building height, the fire-resistance rating is permitted to be waived provided the roof assembly is of non-combustible cons truction or is constructed as a fire-retardant treated wood roof system conforming to Article 3.1.14.1., and

(i) if unsprinklered, the building area is not more than 1 500 m2 (16,100 ft2), and

(ii) if sprinklered, the building area is not more than;

2 400 m2 (25,800 ft2) if facing 1 street, 3 000 m2 (32,300 ft2) if facing 2 streets, or
3 600 m2 (38,800 ft2) if facing 3 streets,

TABLE 3.2.2.M.

Forming Part of Sentence 3.2.2.44.(1)

No. of Storeys	Unsprinklered Maximum Area, m² (ft²)		
	Facing 1 Street	Facing 2 Streets	Facing 3 Streets
1	1 500 (16,100)	1 500 (16,100)	1 500 (16,000)
2	1 200 (12,900)	1 500 (16,100)	1 500 (16,100)
3	800 (8,610)	1000 (10,800)	1 200 (12, 900)
Sprinklered Maximum Area,m² (ft²)			
1	4 800 (51,700)	6 000 (64,600)	7 200 (77,500)
2	2 400 (25,800)	3 000 (32,300)	3 600 (38,800)
3	1 600 (17,200)	2 000 (21,500)	2 400 (25,800)
Column 1	2	3	4

(d) all loadbearing walls, columns and arches supporting an assembly required to have a fire-resistance rating shall have a fire

resistance rating of not less than 45 min or shall be of non-combustible construction, except that such members and assemblies supporting a fire separation shall have a fire-resistance rating not less than that required for the supported assembly.

5. **Applicant's Position**

The Applicant submitted that the requirement to sprinkler the greenhouse is excessive and should not be required in this instance for the following reasons:

1) The main building is of concrete block and steel construction and is fully sprinklered in compliance with the Building Code.

2) The greenhouse is accessory and subordinate to the Occupant's main use and the volume of people will be far less than in the main building.

3) The building/greenhouse arrangement was not contemplated when the subject Building Code regulation was being developed.

4) The purpose of the greenhouse is to provide an area of protective covering for plants and therefore the goods offered for sale to the public are non-combustible.

5) The greenhouse is separated from the building by a 10" concrete block wall.

6) The nature of the greenhouse construction allows complete ease of access/egress to the public in the event the need to exit the greenhouse should ever arise.

7) There is such a degree of sufficiency of compliance with the Building Code that sprinklering the greenhouse should not be a requirement in this instance.

6. **Chief Building Official's Position**

The Respondent submitted that Article 3.2.2.44. and Sentence 3.2.2.12.(1) require mercantile buildings in excess of 1500 m (16,100 ft) to be sprinklered and that the sprinkler system may be substituted in lieu of a fire rated roof assembly.

The Respondent submitted that the existing 1,161 m (12,500 ft) one storey, masonry building has an unrated wood roof assembly supported on structural steel fire proofed by sprayed-on fire proofing. The existing building has undergone alterations and three new additions were added to it totalling 929 m (10,000 ft)and making the total building area (new and existing) 2090 m (22,500 ft). Both the existing building and the additions are prot ected by a supervised sprinkler system.

The Respondent submitted that a permit was issued for a sprinklered 562 m (6,048 ft) greenhouse structure to be placed immediately to the west of the main building with its gables flashed against the main building.

The Respondent submitted that the Applicant does not wish to sprinkler the greenhouse structure.

7. Commission Ruling

It is the decision of the Building Code Commission that not providing sprinklering for the greenhouse provides sufficiency of compliance with the Building Code provided

a) an annual permit be obtained as required if the structure was temporary in nature, reconfirming its use for the display and sale of horticultural products; and

b) combustible storage be limited and considered as outdoor public storage under the Fire Code for exposure hazard.

It is also the decision of the Building Code Commission that the tempered glass used on the sloping roof does not provide sufficiency of compliance with the Building Code.

8. **Reasons:**

1) The unheated structure is used seasonally.

2) The structure is non-combustible construction.

3) The unenclosed greenhouse provides unlimited means of egress.

4) The existing building is sprinklered and is separated from the greenhouse by masonry walls.

5) Fire-spread through unprotected openings is addressed through the combustible storage provisions of the Fire Code.

6) The proposed structure of mercantile use is not a low human occupancy building as described in CAN/CGSB-12.20-M89 Structural Design of Glass for Buildings as referenced in Part 4 of the Building Code.

7) CAN/CGSB-12.20-M89 does not permit the use of tempered glass alone for sloped glazing and skylights since no restraining system is provided to prevent glass particles from falling in the event of glass breakage.

Dated at Toronto this **24th** day in the month of **January** in the year **1996** for application number **1995-67**

BCC Ruling No. 96-02-485

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-02-485

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Subsection 9.8.8. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Stan Sukunda, Owner & Builder, for the resolution of a dispute with Mr. Harold Bratten, Chief Building Official, Borough of East York, concerning whether the height of the guard on the 2nd floor balcony; guard on top of the retaining wall and openings of the guard around interior stairwell provide sufficiency of compliance with Subsection 9.8.8. of the Building Code, at 55 Glenwood Crescent, East York, Ontario.

APPLICANT

Mr. Stan Sukunda
Concord, Ontario

RESPONDENT

Mr. Harold Bratten
Chief Building Official
Borough of East York

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

January 24th, 1996

RULING

1. **The Applicant**

   Mr. Stan Sukunda, Owner & Builder is the recipient of an order to comply under the Building Code Act, 1992 requiring the guards on the 2nd floor balcony, front porch over the driveway and on top of the retaining wall to conform with the requirements of Subsection 9.8.8. of the Building Code at 55 Glenwood Crescent, East York, Ontario.

2. **Description of Constrution**

   The subject building is a single family dwelling (i.e. house). The height of guards on the second floor balcony and the front porch over the driveway are 990 mm (39 inches) high instead of 1070 mm (42 inches) as required, and the guards on top of the retaining walls vary from 500 mm (20 inches) to 736 mm (29 inches) instead of 900 mm (35 inches). The openings in guards around the stairwell are greater than the maximum 100 mm (4 inches) diameter.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Subsection 9.8.8. of the Building Code. At issue is the height of the guard on the 2nd floor balcony; guard on top of retaining wall and the openings of the guard around interior stairwell.

4. **Provision of the Building Code**

   Subsection 9.8.8. Guards

   Subsection9.8.8.1. Required Guards

   1. Every exterior landing, porch, deck and every balcony, mezzanine, gallery, raised walkway and roof to which access is provided for other than for maintenance purposes, shall be protected by guards on all open sides where the difference in elevation between adjacent levels exceeds 600 mm (23 in).
   2. Every exterior stair with more than 6 risers shall be protected with guards on all open sides where the difference in elevation between the adjacent ground level and the stair exceeds 600 mm (23 in).

3. When an interior stair has more than 2 risers, the sides of the stair and the landing or floor level around the stair well shall be enclosed by walls or be protected by guards, except that a stair to an unfinished basement in a dwelling unit may have 1 unprotected side.

Subsection9.8.8.2. Height of Guards

4. Except as provided in Sentences (2) to (5), all guards, including those for balconies, shall be at least 1 070 mm (3 ft 6 in) high.
5. Guards for porches, decks, landings and balconies serving not more than one dwelling unit and which are not more than 1.8 m (5 ft 11 in) above the finished ground level are permitted to be a minimum of 900 mm (2 ft 11 in) high.
6. Except as provided in Sentence (4), guards for stairs shall be not less than 900 mm (2 ft 11 in) high measured vertically from a line drawn through the outside edges of the stair nosings, and 1 070 mm (3 ft 6 in) in height at landings.
7. Guards for stairs within dwelling units and stairs serving not more than one dwelling unit shall be not less 800 mm (2 ft 7 in) measured vertically above a line drawn through the outside edges of stair nosings, and not less than 900 mm (2 ft 11 in) above landings.
8. All required guards within dwelling units other than those described in Sentence (4) shall be not less than 900 mm (2 ft 11 in) high.

Subsection9.8.8.3. Guards for Floors and Ramps in Garages

Except for floors of garages referred in Section 9.35, a continuous curb not less than 150 mm (5 in) in height and a guard not less than 1 070 mm (3 ft 6 in) above the floor level shall be provided at every opening through a garage floor and around the perimeter of such floor and ramps where the exterior walls are omitted and where the top floor is 600 mm (23 in) or more above an adjacent ground or floor level.

Subsection9.8.8.4. Openings in Guards

Openings through a guard on balconies, porches, and decks, an exit stair, or stairs, landings and the floor level around a stairwell in a dwelling unit, shall be of a size so as to prevent the passage of a spherical object having diameter of 100 mm (4 in) in residential occupancies and 200 mm (7 in) in other occupancies, unless it can be shown that the location and size of such openings which exceed theses limits do not represent a hazard.

Subsection9.8.8.5. Design to Prevent Climbing

Guards around exterior balconies, porches, and decks of buildings of residential occupancy shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2 ft 11 in) above the floor of the balcony, porch or deck will facilitate climbing.

Subsection9.8.8.6. Guards for ramps

Guards for ramps including vehicular ramps shall conform to the requirements for guards for stairs in Article 9.8.8.2. and 9.8.8.4.

5. **Applicant's Position**

The Applicant submitted that the balcony guard on the second floor is the shape of a half moon and that there is no way the same shape could be maintained if the guard height is increased.

The Applicant submitted that he agreed to increase the height of the guard over the garage, but felt the height of the guard on the retaining wall which varies from 500 mm (20 inches) to 736 mm (29 inches) is high enough to prevent someone from falling.

The Applicant also submitted that the openings of the guard around the interior stair well are 3 inches between the square portion of the spindles and 4 ¬ inches between the round part of the spindles.

6. **Chief Building Official's Position**

The Respondent submitted that the second floor exterior balcony and the first floor guard over the garage measures 990 mm (3ft. 3 in.) above the floor rather than the requisite 1070 mm (3 ft. 6 in.).

The Respondent submitted that the spindles in the interior second floor guard are spaced up to 4 inches apart rather than the required 100 mm (4 inches).

The Respondent also submitted that the guards on top of the retaining wall beside the driveway range from 20 inches to 29 inches in height instead of the required 35 inches (900 mm).

7. **Commission Ruling:**

It is the decision of the Building Code Commission that:

a. Openings in the guard rail around the interior stairwell in excess of 100 mm do not provide sufficiency of compliance with Article 9.8.8.4. of the Building Code.
b. The height of the guard rail on the 2nd floor exterior balcony less than 1070 mm does not provide sufficiency of compliance with the Building Code.
c. The height of the guard rails on top of the retaining wall where less than 1070 mm does not provide sufficiency of compliance with the Building Code where the height of the retaining wall exceeds 1 metre as identified in Articles 4.4.3.1. and 2.1.2.1. of the Building Code.

8. **Reason:**

The guard height and openings through guards do not comply with the Building Code and no alternatives were provided to consider sufficiency of compliance.

Dated at Toronto, this 24th day, in the month of January, in the year 1996, for application number 1996-01.

BCC Ruling No. 96-01-484

BUILDING CODE COMMISSION DECISION ON B.C.C. #96-01-484

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 9.10.14.12.(2) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Malcolm B. Thomas, Homeowner, for the resolution of a dispute with Mr. Harold Bratten, Chief Building Official, Borough of East York, concerning whether applying an intumescent fire retardant paint to combustible cladding on an existing north exposing building face will provide sufficiency of compliance with the requirements for non-combustible cladding in Sentence 9.10.14.12.(2) of the Building Code, at 10 Rutherglen Road, Toronto, Ontario.

APPLICANT

Mr. Malcolm B. Thomas
Toronto, Ontario

RESPONDENT

Mr. Harold Bratten
Chief Building Official
Borough of East York

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

January 24th, 1996

RULING

1. **The Applicant**

   Mr. Malcolm B. Thomas, Homeowner is the holder of a permit under the Building Code Act, 1992 to construct a second storey addition to a single family dwelling at 10 Rutherglen Road, Toronto, Ontario.

2. **Description of Constrution**

   The subject building is a second storey wood frame addition to a single family dwelling that is located approximately 450 mm (1' 6") from the property line.

   The existing first storey cladding consists of brick veneer. The exposing building face on the new second storey is clad with 7/16" Abitibi stucco board with 3/4"x 4"x 6" and 8" battens over the joints.

   The construction of the exposing building face has the required fire resistance rating, but does not have noncombustible cladding.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentence 9.10.14.12.(2) of the Building Code. At issue is whether applying an intumescent fire retardant paint to combustible cladding on the second storey exposing building face will provide sufficiency of compliance with the requirement for noncombustible cladding.

4. **Provision of the Building Code**

   Sentence 9.10.14.12.(2) Exposing Building Face of Houses

   2. Except as required in Article 9.10.14.3., in buildings containing only dwelling units in which there is no dwelling unit above another dwelling unit the requirements of Article 9.10.14.11. do not apply provided that the exposing building face has a fire-resistance rating of not less than 45 minutes where the limiting distance is less than 1.2 m (3 ft 11

in) and when the limiting distance is less than 0.6 m (23 5/8"in), the exposing building face is clad with noncombustible material.

5. **Applicant's Position**

The Applicant submitted that the construction of subject exposing building face has the required fire resistance rating, but does not have noncombustible cladding.

The Applicant proposed to paint the exterior of the second storey with intumescent fire retardant paint.

The Applicant submitted that the requirement for noncombustible cladding was unknown to him until five weeks after the start of construction and about eight weeks after the permit was issued. If the municipality would have advised him of this when the permit was issued he would not have spent part of the construction budget on the wrong material. The Applicant estimated that it would cost about $3000.00 to rectify the situation.

The Applicant submitted that the regulation should be based on the distance between neighbouring buildings and not the distance from the lot line. The north exposing building face is separated from the building on the adjacent property by approximately 3 m.

6. **Chief Building Official's Position**

The Respondent submitted that he does not have the authority under the Building Code Act to accept the combustible cladding consisting of stucco board.

Sentence 9.10.14.12.(2) of the Building Code clearly requires the north exposing building space to be clad with noncombustible material.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that applying intumescent fire retardant paint to combustible cladding on the north exposing building face of the second floor addition in combination with other site specific safety provisions demonstrates sufficiency of compliance with the Building Code.

8. **Reasons:**

b. The building is in close proximity to a fire station.

c. The building is separated from the adjacent building by a distance of approximately 3.92 m (9' 7").
d. The building is located 457 mm (18") from the property line.
e. Evidence was submitted describing the intumescent paint product, including surface preparation and application.
f. No evidence was provided to suggest that the application of intumescent paint alone to a combustible material would change its characteristics to meet the definition of a non-combustible material in accordance with the Building Code.
g. The general use of intumescent paint as a means of complying with the cladding requirements of the spatial separation provisions of the Building Code should be referred to the Building Materials Evaluation Commission for consideration.

Dated at Toronto, this 24th day, in the month of January, in the year 1996, for application number 1995-65.

BCC Ruling No. 95-63-483

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-63-483

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.2.9.3.(1) and 3.2.9.3.(7) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. David Cole, Helmer Stranks Cole Architects Inc., Ottawa for the resolution of a dispute with Mr. Les Batson, Chief Building Official, City of Ottawa, concerning the determination of the term discharge pressure in Sentence 3.2.9.3.(7) of the Building Code, at Conservation Co-op, 140 Mann Avenue, Ottawa, Ontario.

APPLICANT

Helmer Stranks Cole Architects Inc.
Ottawa, Ontario

RESPONDENT

Mr. Les Batson
Chief Building Official
City of Ottawa

PANEL

Mr. Roy Philippe, Chair
Mr. Sang Shim
Mr. Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

December 21st, 1995

RULING

1. **The Applicant**

   Mr. David Cole, Helmer Stranks Cole Architects Inc. is the recipient of an order to comply under the Building Code Act, 1992 to provide a listed fire pump and controller for the standpipe and hose system being installed at the Conservation Co-op, Ottawa, Ontario.

2. **Description of Constrution**

   he subject building is a 4 storey residential occupancy with a building area of 2260 m².

   The Applicant is proposing to install an unlisted fire pump on the west wing basement service corridor of the building. The fire pump has a required discharge pressure of less than 280 kpa (40.6 psig).

3. **Dispute**

   The dispute between the Applicant and Respondent concerns an interpretation of the technical requirements of Sentence 3.2.9.3.(1) and 3.2.9.3.(7) of the Building Code. At issue is the determination of the term discharge pressure in Sentence 3.2.9.3.(7).

4. **Provision of the Building Code**

   Sentence 3.2.9.3.(1) & (7) Standpipe and Hose System Design

   1. Except as provided in Sentences (2) to (10), and Articles 3.2.9.4. to 3.2.9.7., where standpipe and hose systems are required, the design, construction, installation and testing of such standpipe and hose systems shall be in conformance with NFPA 14, "Installation of Standpipe and Hose Systems".

   7. Pumps required to have a discharge pressure greater than 280 kPa (40.6 psi) (gauge) and their controllers shall be listed and labelled.

5. **Applicant's Position**

   The Applicant submitted that Sentence 3.2.9.3.(7) states that "Pumps required to have a discharge pressure greater than 280 kpa (40.6 psi) gauge and their controllers shall be listed and labelled.

The Applicant submitted that it is their understanding that this clause exists because UL/ULC only commence listing of fire pumps at 40 psi. Similarly NFPA 20 Centrifugal Fire Pumps only rates pump capacities from 40 psi.

The Applicant submitted that the Respondent is confusing the "pump discharge pressure" with the "system discharge pressure". The Applicant submitted that the discharge of the pump, when installed, will be higher than 40 psi. It must in fact be higher than 65 psi in order to deliver 65 psi to the fire hose cabinets. If this was the correct interpretation of "pump discharge pressure" then Clause 3.2.9.3.(7) of the Building Code is superfluous as all fire pumps would have to operate with a discharge pressure higher than 65 psi (including jockey pumps).There would also be no reason for ULC to commence listing of fire pumps at 40 psi.

The Applicant submitted that the "pump discharge pressure" refers to the pump performance only i.e. how much pressure the pump must provide to deliver 65 psi to the fire hose cabinets.

6. **Chief Building Official's Position**

The Respondent submitted that in accordance with Sentence 3.2.9.3.(7) of the Building Code, a fire pump registering a discharge pressure greater than 280 kpa (40.6 psi) gauge, must be listed. The discharge pressure indicated on the gauge of the installed pump ranges from 60 psi (City pressure) to 95 psi (pump running). Therefore, the fire pump and its controller must be listed and labelled for this use.

7. **Commission Ruling:**

t is the interpretation of the Building Code Commission that the discharge pressure in Sentence 3.2.9.3.(7) refers to differential rated pressure (i.e. difference between suction and discharge pressure of the pump) and if such value exceeds 40.6 psig determined through hydraulic calculations on the system reflecting the municipal water supply pressure the pump and controllers shall be listed and labelled.

Dated at Toronto, this 21st day, in the month of December, in the year 1995, for application number 1995-68.

BCC Ruling No. 95-62-482

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-62-482

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.9.2.(1) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. George Chelwick, Project Manager, Casino Windsor Ltd., Windsor, for the resolution of a dispute with Mr. Ed Link, Chief Building Official, City of Windsor to determine whether the building configuration and the provision of a voluntary sprinkler system will provide sufficiency of compliance in lieu of a standpipe and hose system for the Windsor Casino Parking Garage, Windsor, Ontario.

APPLICANT

Casino Windsor Limited
Windsor, Ontario

RESPONDENT

Mr. Ed Link
Chief Building Official
City of Windsor

PANEL

Mr. Roy Philippe, Chair
Mr. Sang Shim
Mr. Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

December 21st, 1995

APPEARANCES

Mr. David Hine
Morrison Hershfield Limited
North York, Ontario
For the Applicant

Mr. Hung Yip, P. Eng.
Building Official
City of Windsor
For the Respondent

RULING

1. **The Applicant**

   Mr. George Chelwick, Project Manager, Casino Windsor Limited is an applicant for a permit under the Building Code Act, 1992 to construct a four storey parking garage with two basement levels and one occupiable roof for the Windsor Casino, Windsor, Ontario.

2. **Description of Constrution**

   The subject building is a free standing parking garage for the Windsor Casino. The building is four storeys in building height, with two basement levels and one occupiable roof. The building area is approximately 14,000 m² on all levels except the fourth storey and roof which has an area of approximately 10,800 m². As the building area is 14,000 m², the building cannot be classified to Article 3.2.2.60. nor 3.2.2.61. It is required to be constructed to Article 3.2.2.62.

   The height of the building, measured from the roof is approximately 12.8 m. The building will be constructed of non combustible materials.

   The above grade portion of the building is open air such that at least 25 percent of the building perimeter walls are open to the exterior. All four streets about the perimeter of the building can be used as fire routes.

   The above grade sprinkler system is voluntary. The building is equipped with a fire alarm system.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentence 3.2.9.1.(1) of the Building Code. At issue is whether the voluntary sprinkler system and the building configuration provides sufficiency of compliance in lieu of the standpipe and hose system requirements.

4. **Provision of the Building Code**

Sentence 3.2.9.2.(1) Exceptions to the Requirement for Standpipe and Hose Systems

A standpipe need not be installed in a storage garage conforming to Article 3.2.2.60. provided the building is not more than 15 m high.

5. **Applicant's Position**

The Applicant submitted that sufficiency of compliance with the standpipe and hose system has been achieved by the following:

- The Building Code waives the standpipe and hose system in an open air parking garage conforming to Article 3.2.2.60. provided the building is not more than 15 m high. This Article limits the building area to 10,000 m², regardless of sprinkler protection. This is the only section in the Building Code where sprinkler protection is not recognized as a method of doubling the building area when classifying a building to the requirements of Section 3.2.2.

  Article 3.2.2.60. "Industrial Buildings, Division 3, Storage Garages up to 22 m High" requires the garage to be constructed as follows:

  - noncombustible construction
  - not more than 22 m measured from grade to the ceiling level of the top storey,
  - not more than 10,000 m² in building area, and
  - all areas of the building be within 60 m of an exterior wall opening.

  This Article does not recognize the benefits of sprinklers. All other building types (including high hazard occupancies), permit the building area to be doubled. In review of this Article with the National Research Council and the Housing Development and

Buildings Branch, there is no record as to why sprinkler protection on this type of building was not considered.

The parking garage has an area of 14,000 m². The height of the building is approximately 12.8 m when measured from the roof to grade. Therefore the proposed garage would comply with Article 3.2.3.60. where sprinkler protection is recognized as a method of doubling building area.

- The building is equipped with fire department access routes that are superior to those required by the Building Code. The building is only required to face one street such that the principal entrance be within 15 m of the fire route. All four sides of the building are within 15 m of a fire route. Should the fire department be required to use fire hoses, the department is not limited to a particular building facade.
- The garage is considered "open air" as at least 25 percent of the building perimeter is open to the exterior. For nonsprinklered buildings, the Building Code in Sentence 3.2.5.1.(1) requires that access openings be provided every 15 m of wall in each wall required to face a street in Subsection 3.2.2.

  Fire department access to all floors exceeds the access opening requirements. All floors and all building faces have unlimited access openings.

- The building Code does not require the open air floors to be rated in a building subject to the construction requirements of Article 3.2.2.60. The above grade floors of the parking garage will be designed to achieve a rating of at least 1 hour.
- The open air configuration allows the fire fighters unlimited methods of approach, from any direction, without the boundary layer of heat and smoke impacting on their fire fighting procedures. The smoke will vent to the exterior on the side of the building.
- The Life Safety Code (NFPA 101) does not require a standpipe and hose system in an open air garage.
- The Building Code waives the standpipe system in sprinklered buildings up to 3 storeys in building height or 14 m in height measured between grade and the upper most storey. There is no limitation to the building area and the building need not be open air. As such it is possible to construct a fully enclosed 3 storey building with an unlimited area, without a standpipe system.

The free standing Windsor Casino parking garage is open air and faces four streets for purposes of fire department access. The parking garage is less than 14 m high, yet is 4 storeys in building height.

- **Chief Building Official's Position**

The Respondent submitted that he cannot concur or accept the Applicant's proposal. Sentence 3.2.9.1.(1) of the Building Code states that "a standpipe and hose system shall be installed in every building that is more than 3 storeys in building height". The proposed storage garage exceeds three storeys. The exemption of the standpipe and hose system in Sentence 3.2.9.2.(1) is not applicable in this case as the storage garage does not fall under Article 3.2.2.60. of the Building Code for open air storage garages.

- **Commission Ruling:**

It is the decision of the Building Code Commission that the provision of a voluntary sprinkler system to N.F.P.A. 13 provides sufficiency of compliance with Article 3.2.9.1. of the Building Code for standpipe and hose systems in storeys at and below grade.

- **Reasons:**

1. The building has a voluntary sprinkler system.
2. The building is accessible from 4 streets with fire department access openings at all levels above grade.
3. The building is used as an open air parking garage.
4. The building exceeds the floor area requirements but is within the height requirements for the standpipe and hose system exception in Sentence 3.2.9.2.(1) of the Building Code.
5. Security and monitoring system are being included as part of the Casino operations.
6. The Life Safety Code (N.F.P.A. 101) does not require a standpipe and hose system in an open air parking garage.

Dated at Toronto, this 21st day, in the month of December, in the year 1995, for application number 1995-69.

BCC Ruling No. 95-61-481

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-61-481

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.11.8.1.(15) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. John Tomkin, Bracebridge Camping & Trailer Park, Bracebridge for the resolution of a dispute with Mr. Randy Gardner, Chief Building Official, Town of Bracebridge, concerning whether reducing the flow of the recirculation system to 3 litres per second (l/s) when the pool is being used and then increasing the flow rate of three times the pool volume in 24 hours in lieu of providing two or more drains will provide sufficiency of compliance with Sentence 3.11.8.1.(15) of the Building Code, at Bracebridge Camping and Trailer Park, R.R. #4 (Beaumont Drive), Bracebridge, Ontario.

APPLICANT

Bracebridge Camping & Trailer Park
Bracebridge, Ontario

RESPONDENT

Mr. Randy Gardner
Chief Building Official
Town of Bracebridge

PANEL

Mr. Roy Philippe, Chair
Mr. Sang Shim
Mr. Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

December 21st, 1995

APPEARANCES

Mr. John Tomkin
Bracebridge Camping & Trailer Park
Bracebridge, Ontario
The Applicant

Mr. Michael Gooch
Building Inspector
Town of Bracebridge
For the Respondent

RULING

1. **The Applicant**

   Mr. John Tomkin, Bracebridge Camping & Trailer Park is the holder of a permit under the Building Code Act, 1992 to construct a public pool at the Bracebridge Camping & Trailer Park, Bracebridge, Ontario.

2. **Description of Constrution**

   The subject public pool is a Class B pool with a water volume of 26,500 US gallons (102025 litres). It is provided with a Hayward circulation kit consisting of a 24 inch sand filter and a 1« HP pump.

   The public pool has a constant water depth of 4 feet (1.22 m) and is provided with only one main drain. The circulation system flow rate is more than 3 l/s.

   The pool is completely installed, backfilled, raked and ready for sod or grass seed.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentence 3.11.8.1.(15) of the Building Code. The Applicant proposes to reduce the flow rate of the recirculation system to 3 l/s when the pool is being used and then increase the flow rate to three times the pool volume in 24 hours in lieu of providing two or more drains.

4. **Provision of the Building Code**

Sentence 3.11.8.1.(15) Recirculation and Vacuum Systems

15. Except as provided in Sentence 3.11.6.1.(7) for a modified pool, where a public pool has a recirculation system flow rate of more than 3 l/s (0.66 gal/s), the pool shall
    a. be provided with two or more main drains separated by not less than 1.2 m (3 ft 11 in), and
    b. be capable of being emptied through the drains in twelve hours or less.

5. **Applicant's Position**

The Applicant proposed to reduce the flow rate to meet the maximum permitted rate of 3 l/s during the day when the pool is in use, and increase the flow to a maximum of 4 l/s during off-time use.

The Applicant submitted that the flow rate of 3 l/s for 11 hours and 4 l/s for 13 hours would result in the volume of water in the pool being exchanged three times during a 24 hour period, which is required by the Building Code.

The Applicant submitted that this proposal would address the potential danger of someone's hair or other portion of their body being sucked into the main drain causing bodily harm.

The Applicant provided calculations showing the amount of water filtered over various times at various rates. The sum total of the maximum flow rate for 11 hours and the maximum flow rate for 13 hours is within a few litres of the volume of the pool, 102,025 litres by three.

6. **Chief Building Officials Position**

The Respondent submitted that the public pool has been constructed with only one main drain and the recirculation system flow rate is more than 3 l/s. It is approximately 3.5 l/s.

The Respondent submitted that he cannot accept the proposal submitted by the Applicant because it does not comply with Sentence 3.11.8.1.(15) of the Building Code. The reduction of the flow rate by moving valves and observing the flow meter appears to allow a great deal of human error where life safety is concerned.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that reducing the flow rates during operating hours to 3 l/s and increasing the flow rate during periods when the pool is closed and secured to approximately 4 l/s does not provide sufficiency of compliance with Sentence 3.11.8.1.(15) of the Building Code.

8. **Reasons:**

15. Unattended use may occur during off hours when velocities in excess of the Building Code requirements for main drains are present.
16. Acceptance of a reduced flow to 3 l/s does not satisfy the recirculation system requirements of Sentence 3.11.8.1.(5) of the Building Code.
17. Proposed Building Code amendments by the Public Pool Task Force exceed present Building Code values as noted below:
    i. Sentence 3.11.8.1.(5) - Increase the turnover for a Class B pool from 3 to 4 times the pool's water volume every 24 hours (from 8 to 6 hours).
    ii. Sentence 3.11.8.1.(15) - Eliminate one main drain requirement for a recirculation system of 3 l/s, so each public pool has to be provided with at least 2 main drains.

Dated at Toronto, this 21th day, in the month of December, in the year 1995, for application number 1995-66.

BCC Ruling No. 95-60-480

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-60-480

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.7.3.10 of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Mel Hinde, President, Dunleavy Cordun Associates Inc. for the resolution of a dispute with Mr. Les Batson, Chief Building Official, City of Ottawa, concerning whether two semi-recessed, vanity mounted lavatories installed in the barrier free washroom provides sufficiency of compliance with Article 3.7.3.10. of the Building Code, at Tower "C" Place De Ville, 330 Sparks Street, Ottawa, Ontario.

APPLICANT

Dunleavy Cordun Associates Inc.
Markham, Ontario

RESPONDENT

Mr. Les Batson
Chief Building Official
City of Ottawa

PANEL

Mr. Michael Lio, Chair
Mr. Kenneth Bacon
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

December 12th, 1995

APPEARANCES

Mr. Mel Hinde
Mr. Jonathan Matt
Dunleavy Cordum Associates Inc.
Markham, Ontario
As Applicant

RULING

1. **The Applicant**

   Mr. Mel Hinde, Dunleavy Cordun Associates Inc. is an applicant for a permit under the Building Code Act, 1992 to install two semi- recessed barrier free vanity mounted lavatories in the ground floor public washrooms in Tower "C" Place De Ville, 330 Sparks Street, Ottawa, Ontario.

2. **Description of Constrution**

   The public washroom on the ground floor of Tower "C" Place De Ville were provided with two semi-recessed barrier free vanity mounted lavatories.

   A clearance of 680-690 mm has been provided beneath the bottom of the lavatories and 240-245 mm in the front, whereas, the Building Code requires 710 mm and 260 mm respectively.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.7.3.10. of the Building Code. At issue is whether the two semi-recessed, vanity mounted lavatories installed in the barrier free washroom provides sufficiency of compliance with the Building Code.

4. **Provision of the Building Code**

   Article 3.7.3.10. Lavatories

   1. Barrier-free washrooms shall
      a. be provided with a lavatory which shall

i. be located so that the distance between the centreline of the fixture and the side wall is not less than 460 mm (18 in),
ii. have a clearance of at least 710 mm (2 ft 4 in) beneath the bottom of the lavatory to a point at least 260 mm (10¬ in) in from the front,
iii. have insulated waste outlet and hot water supply pipes to prevent burns or have water supply temperature limited to a maximum of 43§C (109§F),
iv. have faucet handles of the lever type that are not spring-loaded, and are located so that the distance from the centreline of the faucet to the edge of the basin or, where the basin is mounted in a vanity, to the front edge of the vanity, is not more than 485 mm (19 in),
v. have no shelves or other projections located above it so as to create a hazard, and
vi. be mounted so that the top of the lavatory or, where the lavatory is in a vanity, the top of the vanity is not more than 840 mm (2 ft 9 in) above the finished floor,

b. have soap and towel dispensers that are
i. located to be accessible to persons in wheelchairs and so that the dispensing height is not more than 1 200 mm (3 ft 11 in) above the floor, and
ii. operable with a single hand, and

c. have dispensing or hand-operated washroom accessories, except those located in toilet stalls or described in Clauses (a) or (b), mounted so that the dispensing height is between 900 mm (2 ft 11 in) and 1 200 mm (3 ft 11 in) above the floor.

5. **Applicant's Position**

The Applicant submitted that the two dimensions of the semi- recessed lavatory, from finished floor to the underside of the lavatory and from the front edge of the vanity fascia to the front edge of the lavatory, differ from the dimensions stated in the Building Code by 20 mm and 15 mm respectively. The lavatory, however, has been tested and conforms to C.S.A. Standards for barrier free as well as National Building Code Standards. The unit is on display in Access Place in Toronto and has been specified and installed in many projects throughout the Province.

The Applicant submitted that since the lavatory conforms to the National Building Code and C.S.A. Standards, and meets all other Building Code requirements for barrier free, it should be permitted to remain installed at this location and be deemed as barrier free.

6. **Chief Building Officials Position**

   The Respondent submitted that the two lavatories have been installed with clearances less than that required by Subclause 3.7.3.10(1)(a)(iii) of the Building Code. A clearance of 680-690 mm has been provided beneath the bottom of the lavatories and 240- 245 mm, measured in from the front, whereas, the Building Code requires 710 mm and 260 mm respectively.

   The Respondent submitted that the Industry continues to use barrier-free lavatories that are identified as meeting both the C.S.A. Standards and the National Building Code, but, fail to comply with the Building Code Regulations. These regulations are very clear with respect to the required clearances due to the sensitivity of barrier-free design, consistent enforcement of the regulations is important.

   The Respondent submitted that although he is sympathetic to the problem, he does not have the authority to accept a deviation from the prescriptive requirements of the Building Code.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that the two semi-recessed vanity mounted lavatories installed in a barrier free washroom do not comply with Article 3.7.3.10. of the Building Code.

8. **Reasons:**
   1. According to product literature the lavatory fails to meet one or both of the Building Code requirements for a clearance of at least 710 mm beneath the bottom and a height from the top of the lavatory to finished floor of no more than 840 mm.
   2. The Applicant was unable to demonstrate sufficiency of compliance with the Building Code.

Dated at Toronto, this 12th day, in the month of December, in the year 1995, for application number 1995-57.

BCC Ruling No. 95-59-479

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-59-479

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Articles 9.7.1.2., 9.32.2.1. and 9.10.14.1. and Part 11 (Required Light & Ventilation) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Ted Batcher, Batcher, Wasserman Barrister, Solicitor & Notaries for the resolution of a dispute with Mr. Michael Nixon, Chief Building Official, City of Toronto, concerning whether: i) residential occupancies conform to the light and ventilation requirements; and, ii) the north exposing building face complies with the spatial separation provisions in the Building Code, at 266 Christie Street, Toronto, Ontario.

APPLICANT

Batcher, Wasserman Barrister
Solicitor & Notaries
North York, Ontario

RESPONDENT

Mr. Michael Nixon
Chief Building Official
City of Toronto

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

December 5th, 1995

APPEARANCES

Mr. G. Di Marco
First Union
For the Applicant
ANDMr. Ted Batcher
Batcher, Wasserman Barrister
Solicitor & Notaries
As Applicant

Mr. Aston G. Wong
Building Engineer
City of Toronto
For the Respondent

RULING

1. **The Applicant**

   Mr. Ted Batcher, Batcher, Wasserman Barrister, Solicitor & Notaries is the holder of a permit under the Building Code Act, 1992 to renovate an existing three storey building to accommodate a retail store and five dwelling units at 266 Christie Street, Toronto, Ontario.

2. **Description of Constrution**

   The Applicant proposes to convert an existing three storey building from a laundry shop with four dwelling units to a retail store with five dwelling units.

   The north exposing building face has a limiting distance of 0.25 m (10 inches).

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Articles 9.7.1.2., 9.32.2.1. and 9.10.14.1. and Part 11 (Required Light

and Ventilation) of the Building Code. At issue is whether: i) residential occupancies conform to the light and ventilation requirements; and, ii) the north exposing building face complies with the spatial separation provisions in the Building Code, at 266 Christie Street, Toronto, Ontario.

4. **Provision of the Building Code**

Article 9.7.1.2. Minimum Window Areas

1. Except as required in Article 9.7.1.3., the minimum window glass area for rooms in buildings of residential occupancy or which are used for sleeping shall conform to Table 9.7.1.A.
2. The unobstructed glass area of a door or skylight is considered equivalent to that of a window.

Article 9.10.14.1. Maximum Percentage of Unprotected Openings

3. Except as provided in Sentence (2) and in Articles 9.10.14.3. to 9.10.14.11., the maximum percentage of unprotected openings in an exposing building face shall conform to Table 9.10.14.A. or to Subsection 3.2.3., whichever is the least restrictive for the occupancy being considered.
4. An opening in an exposing building face not more than 130 cm^2 (20 in^2) shall not be considered an unprotected opening.

Article 9.32.2.1. Natural Ventilation Area

5. The unobstructed openable ventilation area to the outdoors for rooms and spaces in residential buildings ventilated by natural means shall conform to Table 9.32.2.A.
6. Where a vestibule opens directly off a living or dining room within a dwelling unit, ventilation to the outdoors for such rooms may be through the vestibule.

Part 11 C93

g. Where windows are not used as a means of egress and where they do not conflict with ventilation requirements, the minimum glass areas as shown in Table 9.7.1.A. may be reduced by 50%, and
h. an existing room converted to an interior room created by an addition shall not require a window, provided there is an opening in a dividing wall to an adjoining room where the

adjoining room has a minimum of 5% window area of the combined floor areas, and provided the required ventilation for the combined room is maintained.

5. **Applicant's Position**

The Applicant submitted that the building has been renovated to include a retail store and five dwelling units. Openings were provided in the north side of building to permit ventilation and some light in accordance with the Building Code.

It is the Applicant's opinion that the building complies with the Building Code with respect to the light, ventilation and spatial separation requirements.

6. **Chief Building Official's Position**

The Respondent submitted that with the exception of the second floor bedrooms at the east and west ends of the building, the rooms in the residential occupancies do not conform with the light and ventilation requirements of the Building Code. The third floor dwelling units have similar problems, but roof skylights are proposed.

The Respondent submitted that the proposed window openings open onto a balcony which is recessed into the north exposing building face. The north wall has a limiting distance of 0.25m. (10 in.)

The Respondent also submitted that in the event of a fire, flames from the recessed areas could be directed onto an adjacent building built at the property line. Also, a building constructed at the north property line would certainly block off the already poor lighting and ventilation provided at the balconies. He also added that the Applicant was advised that unprotected openings were not permitted in the north and south walls.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that providing unobstructed glass areas in doors in the recessed balconies and skylights at the third floor level provide sufficiency of compliance with Articles 9.7.1.2., 9.32.2.1 and 9.10.14.1. provided the glass area meets the total area as outlined in Table 9.7.1.A. of the Building Code.

8. **Reasons:**
    0. Glazing which has been proposed will be installed more than 1.2 m from the property line and does not project towards the property line.

1. Proposed unobstructed openable areas meet minimum requirements for natural ventilation.
2. Proposed windows meet minimum area requirements.
3. A limited number of suites are affected.

Dated at Toronto, this 5th day, in the month of December, in the year 1995, for application number 1995-44.

BCC Ruling No. 95-58-478

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-58-478

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Articles 9.9.9.3., 9.9.2.6. & 9.9.4.5. and Sentence 9.9.9.1.(3) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Ms. Jill Moir, Administrator, Grey Condominium Corporation No. 18, Collingwood for the resolution of a dispute with Mr. Bernard A. Fransen, Chief Building Official, Township of Collingwood, concerning whether the proposed renovations to improve the egress conditions in five existing 3-storey residential buildings will provide sufficiency of compliance with the Building Code, at "Chateau Ridge Condominium", Grey Condominium Corporation No. 18, Collingwood, Ontario.

APPLICANT

Ms. Jill Moir, Administrator
Grey Condominium Corporation No. 18
Collingwood, Ontario

RESPONDENT

Mr. Bernard A. Fransen
Chief Building Official
Township of Collingwood

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

December 5th, 1995

APPEARANCES

Mr. David Syrett, Associate
Leber/Rubes Inc.
AND
Mr. Jay Leedale
Halsall Associates Limited
For the Applicant

Mr. Bernard A. Fransen
Chief Building Official
Township of Collingwood
The Respondent

RULING

1. **The Applicant**

   Ms. Jill Moir, Grey Condominium Corporation No. 18, Collingwood is the holder of permit under the Building Code Act, 1992 for remedial work to five existing 3-Storey residential buildings, at "Chateau Ridge Condominium, Grey Condominium Corporation No. 18, Collingwood, Ontario.

2. **Description of Constrution**

   The five buildings were constructed in 1986-1987 and occupied soon after construction was completed. The Condominium Corporation authorized an independent consulting engineering firm to inspect and report on the condition of the five new buildings with respect to the Building Code after construction was completed.

   In January 1995 the Condominium Corporation retained the services of the same firm to inspect and evaluate the five buildings in terms of the life safety retrofit legislation in Section 9.5 of the Ontario Fire Code (O. Reg 627/92). The consultant's findings indicate deficiencies with respect

to the retrofit legislation and the Building Code applicable (1983) at the time of original construction.

The following applies to the subject buildings:

- Three storey building height
- Two storey dwelling units located above one another
- Building area: Block A - 499 sq m
- Block B - 499 sq m
- Block C - 399 sq m
- Block D - 584 sq m
- Block E - 300 sq m/399 sq m (divided by firewall).
- Mixed combustible and noncombustible construction
- Smoke alarm in each unit
- Total of 54 dwelling units
- Eight unit models (ie., A, A1, B, B1, AE, A1E, C and C1)
- Managed by Blue Mountain Resorts and made available to the public on nightly, week-end and weekly basis.

The following construction is proposed for the subject buildings:

- Install a fire alarm and detection system rather than providing a second and separate exit for second storey dwelling units that share an interior stair. Install a fire alarm and detection system rather than providing a third storey exterior balcony for Unit A1E.
- Replace the fire door and frame to the maid's closet that opens into the interior exit stair rather than relocate the hydro circuit panel and eliminate closet. Thermal detection will also be installed in the closet.
- Protect unprotected stair window, exposed to unprotected suite window with wired glass in hardwood frame rather than a steel frame.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Articles 9.9.9.3, 9.9.2.6. & 9.9.4.5. and Sentence 9.9.9.1.(3) of the Building Code. At issue is whether the proposed renovations to improve the egress conditions in five existing 3-storey residential buildings will provide sufficiency of compliance with the Building Code.

4. **Provision of the Building Code**

Article 9.9.9.3. Shared Egress Facilities

1. A dwelling unit shall be provided with a second and separate means of egress where an egress door from the dwelling unit opens onto
    a. an exit stairway serving more than 1 suite,
    b. a public corridor serving more than one suite served by a single exit stairway,
    c. an exterior passageway serving more than one suite and served by a single exit stairway, or
    d. a balcony serving more than one suite and served by a single exit stairway.

Article 9.9.2.6. Ancillary Rooms

Ancillary rooms such as storage rooms, washrooms, toilet rooms, laundry rooms and service rooms shall not open directly into an exit.

Article 9.9.4.5. Openings in Exterior Walls of Exits

Openings in the exterior wall of an exit shall be protected with wired glass or glass block installed in accordance with Articles 9.10.13.5. and 9.10.13.7., where openings may be exposed to the hazard of a fire in another fire compartment of the same building.

Sentence 9.9.9.1.(3) Travel Unit to Exits or Egress Doors

- The travel limit from a floor level in a dwelling unit to an exit or egress door may exceed 1 storey where that floor level has direct access to a balcony.

5. **Applicant's Position**

The Applicant submitted that the Permit application has been made for proposed construction that will improve the level of fire safety in the existing buildings.

The Applicant submitted that the 1983 edition of the Building Code was in force at the time of the original permit. Although the requirements have not changed, the references have.

The Applicant submitted the following information concerning the matter in dispute:

i. Article 9.9.9.3. Shared Egress Facility

The Applicant submitted that second storey units A1, B1 and C1 have an entrance door into a shared interior exit stair. These units do not have a separate and second means of egress. Units A1 and C1 have an exterior balcony on the second storey, however, this condition does not comply with Article 9.9.9.3. of the Building Code.

Since it is not feasible to provide a second exit for the second storey units, a ULC listed fire alarm and detection system will be installed in accordance with CAN/ULC - S524 - M, "Standard for the Installation of Fire Alarm Systems". This will not be a Building Code conforming fire alarm system requiring manual pull stations. Rather, the proposed system is a measure to compensate for egress deficiencies:

- Single-stage, single-zone fire alarm control equipment in a location best suited for responding resort staff and fire department (e.g., linen closet nearest access route).
- Fire alarm system for each of the five buildings will be monitored at the Blue Mountain Resort switchboard.
- Rate of rise thermal detection connected to the fire alarm system will be installed inside each dwelling unit and cleaning staff closet.
- Smoke detection connected to fire alarm system at top of each exit stair shaft.
- Alarm bell or horn in each dwelling unit and exit stair shaft.
- System operation will be such that activation of any automatic devices in the system will case all alarm signalling devices on the system to sound.

ii. Article 9.9.9.1. Travel Limit to Exit or Egress Doors

It is necessary to travel from the third storey down more than one storey to reach the exterior entrance/exit door of unit A1E. All other units comply with Article 9.9.9.1.

The Applicant submitted that it is not feasible to install an exterior balcony for the third storey of this unit.

The Applicant submitted that sufficiency of compliance is achieved due to the fire alarm and detection system being installed, an exterior balcony at the second floor, and an existing unrated enclosure between the second storey and the stairs leading down to the exterior door.

iii. Article 9.9.2.6. Ancillary Rooms

The Applicant submitted that a maid's closet containing linen and an electrical circuit breaker panel are located in the typical interior exit stair serving four dwelling units.

The existing door is 32 mm thick wood in 20 mm thick wood door frames. The doors have self-latching devices but not self-closing devices.

Some of the maid's closets contain a janitor sink. The janitor sink will be removed which means the Building Code requirement for ventilation will not be applicable.

Fire stopping deficiencies between the closet and the remainder of the building will be upgraded to comply with the Building Code.

The existing doors will be replaced with a labelled 3/4 hour frame complete with self-closing and self-latching devices.

A thermal detector connected to the new fire alarm system will be installed in each closet.

iv. Article 9.9.4.5. Openings in Exterior Walls of Exits

The Applicant submitted that an unrated window in the exterior wall of the typical exit stair serving 4 units is at right angles and within 3 m of unprotected unit windows.

The Applicant proposed to protect the exit windows with wired glass in accordance with the requirements above except that hardwood frames and glazing stops will be used instead of steel.

The Applicant submitted that the proposed frames and glazing stops of hardwood rather than steel are considered reasonable given the existing combustible construction in which they will be installed, the limited building height of three storeys, the limited number of dwelling units (four), and the proposed fire alarm and detection system that will provide early warning of an emergency.

2. **Chief Building Official's Position**

The Respondent submitted that the buildings must be upgraded for compliance with the Building Code that applied at the time of original permit application and construction rather than the retrofit legislation in the Fire Code.

The Respondent also submitted that the existing buildings will not be brought into compliance with the egress requirements of the Building Code as the result of the proposed renovations and the Respondent does not have the authority to issue a building permit based on the proposed equivalencies.

It is the Respondent's opinion that each of the suites or dwelling units contained in the structure normally referred to as Chateau Ridge requires a second exit. Furthermore, the Respondent is not prepared to issue a permit for equivalency measures without first having received confirmation from the Building Code Commission that an alternate proposal to provide adequate fire safety does not compromise the safety of the building.

3. **Commission Ruling:**

It is the decision of the Building Code Commission that sufficiency of compliance with the requirements of Articles 9.9.9.3., 9.9.2.6., 9.9.4.5. and Sentence 9.9.9.1.(3) of the Building Code is obtained provided:

1. a ULC listed fire alarm and detection system, installed in accordance with CAN/ULC - S524-M "Standard for the Installation of Fire Alarm Systems" is provided in all dwelling unit blocks with pull stations at each exit from a stairwell to the exterior. Fire alarm systems shall be monitored through a central monitoring station as required under Sentence 3.2.4.7.(3) of the Building Code.
2. smoke detectors are installed in all electrical and maids closets within the stairwell enclosures and at the top of each stairwell enclosure and rate of rise heat detectors within each dwelling unit are installed.
3. a second means of egress or an accessible exterior balcony is provided for all two storey dwelling units where more than one storey must be traversed to reach an exit.
4. openings in exterior walls of exits are protected with wired glass, mounted in hardwood frames with glazing stops.
5. 45 minute rated fire doors with self closing devices must be installed for each maids closet that opens within the stairwell enclosures.

4. **Reasons:**
    0. The buildings provide for limited occupant loads and limited travel distance.
    1. An early warning and evacuation system will be provided to enhance life safety.
    2. Balconies provide an open space for emergency egress.

Dated at Toronto, this 5th day, in the month of December, in the year 1995, for application number 1995-62.

BCC Ruling No. 95-57-477

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-57-477

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.4.16.(5) and Article 3.2.2.12. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Joseph O'Reiley, Ford Motor Company of Canada for the resolution of a dispute with Mr. Frank Asta, Chief Building Official, Town of Oakville, concerning whether locked open outside post indicator valves controlling the water supply for a sprinkler system must be electrically supervised in order to obtain a roof rating waiver under Article 3.2.2.12. of the Building Code, at Ford Motor Company of Canada, Truck Body Shop, 1 Canadian Road, Oakville, Ontario.

APPLICANT

Mr. Joseph O'Reiley
Ford Motor Company of Canada
Oakville, Ontario

RESPONDENT

Mr. Frank Asta
Chief Building Official
Town of Oakville

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

November 21st, 1995

APPEARANCES

Mr. Leszek Muniak
Principal
Larden Muniak Consulting Inc.
For the Applicant

Mr. Frank Asta
Chief Building Official
Town of Oakville
The Respondent

RULING

1. **The Applicant**

   Mr. Joseph O'Reiley, Ford Motor Company of Canada is the holder of a permit under the Building Code Act, 1992 to construct a Truck Body Shop at the Ford Motor Company of Canada, 1 Canadian Road, Oakville, Ontario.

2. **Description of Constrution**

   The proposed body shop building is fully sprinklered Low Hazard Industrial (i.e. Group F, Division 3) occupancy. The building is one storey in height and is provided with a standpipe and hose system, and fire alarm system.

   An underground water main circles the building and supplies the individual sprinkler zones. Each sprinkler system is individually controlled by an underground gate valve with a post indicator (PIV) located outside the building about 12 m (40 ft) away from the building wall. All 31 of the outside PIV's are locked fully open.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentence 3.2.4.16.(5) and Article 3.2.2.12. of the Building Code. At issue is whether locked open outside post indicator valves controlling the water supply for a sprinkler system must be electrically supervised in order to obtain a roof rating waiver under Article 3.2.2.12. of the Building Code.

4. **Provision of the Building Code**

Article 3.2.2.12. Sprinklers in lieu of Roof Rating

1. The requirements in Articles 3.2.2.16. to 3.2.2.62. for the roof assemblies to have a fire-resistance rating are permitted to be waived provided
    a. the building is sprinklered,
    b. the sprinkler system in Clause (a) is electrically supervised in conformance with Sentence 3.2.4.16.(5), and
    c. the operation of the sprinkler system in Clause (a) will cause a signal to be transmitted to the fire department in conformance with Sentence 3.2.4.7.(3).

Sentence 3.2.4.16.(5) Sprinklers in Lieu of Heat Detectors

5. The sprinkler system referred to in Sentence (1) shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator for each of the following:
    a. movement of a control valve handle,
    b. loss of excess water pressure required to prevent false alarms in a wet pipe system,
    c. loss of air pressure in a dry pipe system,
    d. loss of air pressure in a pressure tank,
    e. a significant change in water level in any water storage container used for fire fighting purposes,
    f. loss of electrical power to any automatically starting electrical fire pump, and
    g. a temperature approaching the freezing point in any dry pipe valve used for fire fighting purposes.

5. **Applicant's Position**

The Applicant submitted that the outside PIV's are locked fully open with breakable locks, and are inspected weekly. Inspection records are kept.

The Applicant submitted that sufficiency of compliance with Clause 3.2.4.16.(5)(a) of the Building Code has been achieved for the following reasons:

a. Installation of sprinkler systems for compliance with the Building Code is governed by NFPA 13. The building is required to be sprinklered, and complies with NFPA 13 which offers four options to ensure that valves are open and locking is one of them.
b. NFPA does not mandate electrical supervision of valves in existing, large spread plants, due to the cost of such a system.
c. Ford Motor Company of Canada operates its own fire response crew 24 hours per day, 365 days per year, and it is this team that would be the first to respond to any fire emergency. Any information regarding closed valves would be relayed to the Oakville Fire Department upon their arrival.
d. The intent of the Building Code and the NFPA 13 is to ensure valves are open to sprinkler systems, so that early control of any fire is achieved. With all valves open, each sprinkler system is ready to operate at all times.
e. Watchmen make regular rounds and also inspect valves to ensure that they are open.

The Applicant also submitted that locking PIV's open meets the intent of the Building Code, and provides the necessary level of safety to the occupants. Therefore, the roof rating waiver allowable when supervised sprinkler systems are installed should be permitted.

2. **Chief Building Official's Position**

The Respondent submitted that all valves controlling water supplies to the sprinkler system must be electrically supervised in accordance with Sentence 3.2.4.16.(5) in order for the roof rating to be waived under Article 3.2.2.12. of the Building Code.

3. **Commission Ruling:**

It is the decision of the Building Code Commission that providing locked open outside post indicator valves in lieu of electrical supervision of the water control valves to the sprinkler system does not provide sufficiency of compliance with Clause 3.2.2.12.(1)(b) of the Building Code to waive the fire resistance rating of the roof assembly.

4. **Reasons:**
    1. The Building Code requires the specific condition of electrical supervision to waive the roof assembly.

2. Limited security and inspection procedures were not persuasive in accessing the increased reliability of the system through alternative supervision

Dated at Toronto, this 21st day, in the month of November, in the year 1995, for application number 1995-59.

BCC Ruling No. 95-56-476

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-56-476

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.2.8.2.(6)(c) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Les Cam, Parks and Recreation Department, City of Mississauga for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga to determine whether an interconnected floor space in a Group A, Division 3 occupancy will provide sufficiency of compliance with the requirements provided for Group A, Division 1 & 2 occupancies in accordance with Clause 3.2.8.2.(6)(c) of the Ontario Building Code, at Four Rinks Arena, Matheson Blvd., Mississauga Ontario.

APPLICANT

Mr. Les Cam
Parks and Recreation Department
City of Mississauga

RESPONDENT

Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

November 21st, 1995

APPEARANCES

Mr. Leszek Muniak
Larden Muniak Consulting Inc.
Toronto, Ontario
For the Applicant

Mr. Frank Spagnolo, Manager
Building and Inspection
City of Mississauga
For the Respondent

RULING

1. **The Applicant**

   Mr. Les Cam, Parks and Recreation Department, City of Mississauga is an applicant for a permit under the Building Code Act, 1992 to construct a two storey complex of 12,000 m? containing one Olympic size rink, three professional size rinks, a licensed restaurant, snack bar, skills arcade, shop and toddler play area.

2. **Description of Constrution**

   The Four Rinks Arena is protected by automatic sprinklers throughout and is classified as a Group A, Division 3 occupancy. This two storey complex has a building area of 12,000 m?. It containing four rinks, a licensed restaurant, snack bar, skills arcade, shop and toddler play area. The four rinks occupy the ground floor level and are arranged in quadrants with a lobby bisecting the complex for public access. Directly above the ground floor level is the second level lobby. In accordance with Article 3.2.2.27. of the Building Code fire separations would be required, as follows:

   - horizontal floor assembly, 2h fire resistance rating, second level lobby

- vertical wall assembly utilizing glazing and automatic sprinklers, meeting the horizontal separation, 2h fire resistance rating, second level lobby/overview of rinks since visual openings are desired to each rink.

The Applicant is proposing an interconnected floor space for this Group A, Division 3 occupancy contrary to Clause 3.2.8.2.(6)(c) of the Building Code.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Clause 3.2.8.2.(6)(c) of the Building Code. At issue is whether an interconnected floor space is permitted in this Group A, Division 3 occupancy without conforming to the requirements of Articles 3.2.8.3. to Article 3.2.8.11. of the Building Code.

4. **Provision of the Building Code**

Sentence 3.2.8.2.(6) Exceptions to Special Protection

6. An interconnected floor space need not conform to the requirements of Articles 3.2.8.3. to 3.2.8.11. provided
   a. the interconnected floor space consists of the first storey, and the storey next above it, but not both,
   b. the interconnected floor space is sprinklered, and
   c. the interconnected floor space contains only Group A, Division 1 or 2, Group D, Group E, or Group F, Division 3 major occupancies.

2. **Applicant's Position**

The Applicant submitted that consideration should be given by the BCC to permit an interconnected floor space in this arena complex without the necessity of full compliance with interconnected floor space requirements of Articles 3.2.8.3. to 3.2.8.11. of the Building Code.

The Applicant submitted that an interconnected floor space is permitted for Group A, Division 1 & 2 occupancies in accordance with Sentence 3.2.8.2.(6) of the Building Code.

The Applicant submitted an analysis of occupant load, mobility of persons, fuel load and construction requirements to demonstrate that no greater hazard exists to occupants in this Group A, Division 3 arena by way of an interconnected floor space than would exist in a Group A, Division 1 or 2 occupancy where an interconnected floor space is permitted.

The Applicant also submitted that a revision included in the 1995 National Building Code permits Group A, Division 3 major occupancies to be contained in a building in which the first storey and the storey above it are interconnected.

3. **Chief Building Official's Position**

The Respondent submitted that an interconnected floor space is being proposed between level 1 and 2 in a Group A, Division 3 occupancy. The Building Code clearly does not permit an interconnected floor space in a Group A, Division 3 major occupancy without conforming to the requirements of Article 3.2.8.3. to 3.2.8.11.

The Respondent also submitted that the Applicant did not propose any additional measures to demonstrate sufficiency of compliance with the Building Code.

4. **Commission Ruling:**

It is the decision of the Building Code Commission that the interconnected floor space in an Assembly, Division 3 (i.e. A-3) major occupancy provides sufficiency of compliance with Sentence 3.2.8.2.(6) of the Building Code subject to a fire separation being provided between the viewing galleries and the rinks consisting of wired glass in fixed steel frames of unlimited area or a window sprinkler assembly authorized by the Building Materials Evaluation Commission (BMEC).

5. **Reasons:**
    6. Fire separations without fire resistance ratings are provided at the first floor level to act as a smoke barrier.
    7. The fire separation at the 2nd floor level provides increased time to evacuate the 2nd floor level under fire conditions.
    8. Changes to the National Building Code 1995 edition will be extended to address interconnected floor spaces in A-3 major occupancies.

Dated at Toronto, this 21th day, in the month of November, in the year 1995, for application number 1995-64.

BCC Ruling No. 95-55-475

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-55-475

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.1.11.2.(1) and (2) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. A. Braekevelt, Superintendent of Operations, Lambton County Roman Catholic Separate School Board for the resolution of a dispute with Mr. Jacques Skutt, Chief Building Official, City of Sarnia, concerning whether the proposed exterior cavity wall construction details will provide sufficiency of compliance with Sentences 3.1.11.2.(1) and (2) [firestopping wall assemblies] of the Building Code, at St. Francois Xavier Secondary School, 901 Rapids Parkway, Sarnia, St. Anne Elementary School, 1000 Rapids Parkway, Sarnia and St. Christopher Secondary School, 1001 Rapids Parkway, Sarnia, Ontario.

APPLICANT

Lambton County Roman Catholic
Separate School Board
Sarnia, Ontario

RESPONDENT

Mr. Jacques Skutt
Chief Building Official
City of Sarnia

PANEL

Mr. Roy Philippe, Chair
Mr. Demir Delen
Mr. Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

November 14th, 1995

APPEARANCES

Mr. David Syrett
Leber/Rubes Inc.
Sarnia, Ontario
AND
Mr. Douglas Snyder
Mekinda Snyder
Partnership Inc.
Oakville, Ontario
For the Applicant

Mr. Jacques Skutt
Chief Building Official
City of Sarnia
AND
Ms. Valerie M'Garry
Solicitor
City of Sarnia
For the Respondent

RULING

1. **The Applicant**

   Mr. A. Braekevelt, Lambton County Roman Catholic Separate School Board is the holder of a permit under the Building Code Act, 1992 to construct three new school buildings, as follows:

   - St. Francois Xavier Secondary School, 901 Rapids Parkway, Sarnia;
   - St. Anne Elementary School, 1000 Rapids Parkway, Sarnia; and,
   - St. Christopher Secondary school, 1001 Rapids Parkway, Sarnia.

2. **Description of Constrution**

The following applies to the school buildings being constructed by the Lambton County Roman Catholic Separate School Board:

St. Francois Xavier Secondary School	two storey	32,659 m²
St. Anne Elementary School	one storey	32,376 m²
St. Christopher Secondary School	two storey	58,680 m²

The subject schools will be sprinklered and of noncombustible construction. Each building will have a fire alarm and detection system.

The exterior wall construction includes the following, starting from the interior of the building:

- concrete masonry
- sprayed polyurethane insulation (flame spread rating greater than 25)
- air space ranging 25 mm - 40 mm
- face brick

The exterior wall cavity is not firestopped.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentences 3.1.11.2.(1) and (2) of the Building Code. At issue is whether the construction of the proposed exterior cavity wall requires firestopping.

4. **Provision of the Building Code**

Sentences 3.1.11.2.(1) and (2) Fire Stopping in Wall Assemblies

1. Except as permitted in Sentence (2), fire stops conforming to Article 3.1.11.7. shall be provided to block off concealed spaces within a wall assembly
    a. at every floor level,

b. at every ceiling level where the ceiling forms part of an assembly required to have a fire-resistance rating, and
c. so that the maximum horizontal dimension is not more than 20 m (65 ft 7 in) and the maximum vertical dimension is not more 3 m (9 ft 10 in).

2. Fire stops conforming to Sentence (1) are not required provided
   a. the wall space is filled with insulation,
   b. the exposed construction materials and any insulation within the wall space are noncombustible, or
   c. the exposed construction materials and any insulation within the wall space have a flame-spread rating of not more than 25 on any exposed surface or on any surface that would be exposed by cutting through the material in any direction and fire stops are installed so that the vertical distance between them does not exceed 10 m (32 ft 10 in).

5. **Applicant's Position**

The Applicant submitted that sprayed polyurethane insulation with a flame-spread rating of more than 25 is proposed for the wall cavity between the concrete masonry and exterior face brick. No firestopping of the exterior wall cavity is intended. The Applicant submitted that the proposed exterior wall assembly can be considered to provide sufficiency of compliance with the provision to firestop the concealed space between the insulation and the face brick on the basis that:

0. The concrete masonry wall can be considered the exterior wall assembly with the insulation, air space and exterior face brick considered cladding only.
1. The fire cannot spread from floor to floor through the wall cavity since there is a continuous, unpenetrated concrete block wall.
2. Firestopping of the cavity would defeat the purpose of the rain screen principle which is not the intent of the Building Code.
3. Building Code Commission Decision #88-6-217 for the cavity wall designed in accordance with the rain screen principle was that firestopping of the wall cavity is not required or intended by the Building Code.

6. **Chief Building Official's Position**

The Respondent submitted that Subsection 3.11.2. of the Building Code clearly requires that concealed spaces within a wall assembly that contains a material with a flame spread rating greater that 25 be firestopped.

The Respondent further submitted that based on the nature of the occupancy, the toxicity of the proposed insulation in a fire condition and its flame spread rating characteristics, it would be inappropriate to waive the firestopping requirements.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the proposed exterior cavity wall construction details do not provide sufficiency of compliance with Sentences 3.1.11.2.(1)&(2) of the Building Code for fire stopping in cavity wall assemblies.

8. **Reasons:**
   - Products are available with flame spread ratings of 25 that will satisfy the provisions of the Building Code which do not impact on the rain screen principle.
   - i. The cavity air space in the wall detail exceeds 25 mm in dimension.
   - ii. No test data was presented concerning fire spread for combustible insulation in wall cavities having an air space exceeding 25 mm in dimension.

Dated at Toronto, this 14th day, in the month of November, in the year 1995, for application number 1995-61.

BCC Ruling No. 95-54-474

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-54-474

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.5.4.3. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Peter brown, Project Manager of Pratt & Whitney Canada Inc. for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, concerning whether the FT4 cables and smoke detectors that would shut down the HVAC units installed within the air-return plenum space in an office extension in lieu of FT6 cables will provide sufficiency of compliance with Article 3.5.4.3. of the Building Code, at Pratt & Whitney, Mississauga Plant, 1801 Courtney Park Drive, Mississauga, Ontario.

APPLICANT

Mr. Peter Brown
Pratt & Whitney Canada Inc.
Longueuil, Quebec

RESPONDENT

Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL

Mr. Roy Philippe, Chair
Mr. Demir Delen
Mr. Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

November 14th, 1995

APPEARANCES

Mr. Leszek Muniak, Principal
Larden Muniak Consulting Inc.
Toronto, Ontario
For the Applicant

Mr. Barclay Steen
Manager of Mechanical Engineering & Inspection
City of Mississauga
For the Respondent

RULING

1. **The Applicant**

   Mr. Peter Brown, Pratt & Whitney Canada Inc., is the holder of a permit under the Building Code Act, 1992 to construct an addition to an existing second floor office space at Pratt & Whitney, Mississauga Plant, 1801 Courtney Park Drive, Ontario.

2. **Description of Constrution**

   The subject building functions as a manufacturing, assembly and testing repair facility for aircraft engines and components. It is classified as a Group F, Division 2 major occupancy. The building is a two storey, fully sprinklered structure, facing 3 streets.

   At the east end of the manufacturing plant exists an office space that has undergone an expansion. Additional area has been added to the second floor of the office space.

   The ceiling return-air plenum system in the new expansion space has been equipped with FT4 cable.

   The office expansion area has 3 HVAC units which re-circulate air within its own confined space. Air is not re-circulated beyond the smoke compartment.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.5.4.3. of the Building Code. At issue is whether FT4 cables and smoke detectors that would shut down the HVAC units may be installed within the air-return plenum space in the office extension in lieu of FT6 cables.

4. **Provision of the Building Code**

Article 3.5.4.3. Plenum Requirements

1. The concealed space between the ceiling and floor or ceiling and roof used as a plenum need not conform to Sentence 3.1.5.14.(1) and Article 6.2.3.2. provided
    a. all materials within the ceiling space have a flame- spread rating of not more than 25 and a smoke developed classification of not more than 50, except for
        i. tubing for pneumatic controls,
        ii. ptical fibre cables and electrical wires and cables that exhibit a flame-spread of not more than 1.5m (4 ft 11 in), a smoke density of not more than 0.5 at peak optical density and a smoke density not more than 0.15 at average optical density when tested in conformance with the Flame and Smoke Test in the Appendix to CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables" (FT6 Rating),
        iii. optical fibre cables and electrical wires and cables that are located in totally enclosed noncombustible race-ways, and
        iv. single conductor electrical wires and cables that exhibit a vertical char of not more than 1.5 m (4 ft 11 in) when tested in conformance with the Vertical Flame Test - Cables in Cabletrough in Clause 4.11.4. of CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables" (FT4 Rating), and
    b. the supports for the ceiling membrane are of noncombustible material having a melting point not below 7600C (14000F).
2. When the concealed space referred to in Sentence (1) is used as a return-air plenum and incorporates a ceiling membrane that forms part of the required fire-resistance rating of the assembly, every opening through the membrane shall be protected by a fire stop flap which shall
    a. stop the flow of air into the concealed space in the event of a fire,

b. be supported in a manner that will maintain the integrity of the ceiling membrane for the duration of time required to provide the required fire-resistance rating, and
c. conform to CAN4-S112.2-M, "Standard Method of Fire Test of Ceiling Firestop Flap Assemblies".

3. Asbestos paper shall not be exposed in supply and return-air systems.

5. **Applicant's Position**

The Applicant submitted that sufficiency of compliance would be achieved as follows:

- smoke detectors would be installed within the plenum space for each of the three HVAC units; and,
- the HVAC units will be interconnected, therefore, the shut down of one will cause all systems to shut down. Once a smoke detector is activated, the air system no longer functions as a return-air plenum.

The Applicant also submitted that the Building Code would permit an FT4 classification of cable in a ceiling space which is not used as a return-air plenum

6. **Chief Building Official's Position**

The Respondent submitted that a second storey office addition has been constructed over an existing shop area which has also been renovated to create office space. FT4 cables have been installed in the ceiling spaces of both storeys which are used as return air plenums.

The Respondent submitted that Article 3.5.4.3. of the Building Code allows only single conductor wires and cable to have an FT4 rating. All other exposed cables require an FT6 rating.

The Respondent submitted that there is approximately 100,000 lineal feet of FT4 cable installed at this project contrary to Article 3.5.4.3. The Building Code does not provide for the installation of smoke detectors as an alternate to FT6 rated cable.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the installation of FT4 cable in the plenum space provides sufficiency of compliance with Article 3.5.4.3. of the Building Code provided duct type smoke detectors connected to the fire alarm system are installed within the return air space which will shut down all the H.V.A.C. units within the second floor addition on activation.

8. **Reasons:**
    . The air handling system serves only the second floor addition.
    i. The building is sprinklered.
    ii. Evidence indicates only 25% of the communications cable are not enclosed in a conduit or metallic raceway.

Dated at Toronto, this 14th day, in the month of November, in the year 1995, for application number 1995-63.

BCC Ruling No. 95-53-473

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-53-473

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.2.2.52.(1)(b) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Jack McGee, President, Jack McGee Holdings Ltd. for the resolution of a dispute with Mr. Jeff Chalmers, Chief Building Official, City of Peterborough, concerning whether increasing the allowable unsprinklered building area of 2,400 m² (25,800 ft²) by 142 m² (1529 ft²) and providing fire access routes to all four sides of the existing building and proposed addition will provide sufficiency of compliance with the sprinklering provisions in Clause 3.2.2.52.(1)(b) of the Building Code, at Jack McGee Chevrolet-Oldsmobile-Cadillac Ltd., 1053 Clonsilla Avenue, Peterborough, Ontario.

APPLICANT

Mr. Jack McGee, President
Jack McGee Holdings Ltd.
Peterborough, Ontario

RESPONDENT

Mr. Jeff Chalmers
Chief Building Official
City of Peterborough

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Kenneth Bacon

PLACE

Toronto, Ontario

DATE OF RULING

November 10th, 1995

APPEARANCES

Mr. Gordon W. Gilbert, Project Architect
M.B. Finney Limited
AND
Mr. Barry Whitnell
Westmont Engineering Construction Co. Ltd.
For the Applicant

Mr. Ken Guthrie
City of Peterborough
For the Respondent

RULING

1. **The Applicant**

   Mr. Jack McGee, President, Jack McGee Holdings Ltd. is the applicant for a permit under the Building Code Act, 1992 to construct a vehicle showroom addition to the existing automobile dealership building, at Jack McGee Chevrolet-Oldsmobile-Cadillac Ltd., 1053 Clonsilla Avenue, Peterborough, Ontario.

2. **Description of Constrution**

   The existing building is a two storey building of combustible construction with a building area of 2235 m² (24,059 ft²). A single storey addition of 304 m² (3,270 ft²) is proposed at the south-west corner, resulting in a combined building area of 2,539 m² (27,329 ft²). The proposed new addition is of combustible construction, and fire access routes are provided to all four sides of the building. Most of the main floor is used for functions related to car servicing and body work. The showroom occupies only about 17% of the main floor. The second floor is used for parts storage and offices.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Clause 3.2.2.52.(1)(b) of the Building Code. At issue is whether increasing the allowable unsprinklered building area of 2,400 m² (25,800 ft²) by 142 m² (1,529 ft²) i.e. 6 percent and providing fire access routes to all four sides of the existing building and proposed addition will negate the need to provide an automatic sprinkler system.

4. **Provision of the Building Code**

Clause 3.2.2.52.(1)(b) Industrial Buildings, Division 2, up to 4 Storeys

1. A building classified as Group F, Division 2 shall conform to Sentence (2) provided the building
    a. is not more than 4 storeys in building height,
    b. if unsprinklered, has a building area not more than the value in Table 3.2.2.T., and
    c. if sprinklered, is not more than twice the area limits of Clause (b).

5. **Applicant's Position**

The Applicant submitted that the proposed vehicle showroom addition of 3,151 ft² when added to the existing dealership building of 2235 m² (24,059 ft²), slightly exceeds the 2,400 m² (25,800 ft²) of maximum allowable building area for an unsprinklered building facing 3 streets.

The Applicant submitted that the new combustible construction conforms to the existing building construction. The proposed new showroom area when added to the existing building area exceeds the maximum allowable building area by 142 m² (1,529 ft²) for a two storey unsprinklered building facing three streets. Except for a 1.5 m (5 ft) grass perimeter strip, asphalt paving covers the entire site permitting fire access routes on all four sides of the building.

The Building Code does not give credit for buildings facing "four streets", an advantage the Applicant submitted should be considered for the proposed 27,329 ft² building.

6. **Chief Building Official's Position**

The Respondent submitted that the proposed addition results in a building area greater than permitted by the Article 3.2.2.52. of the Building Code for a building of combustible construction.

The Respondent submitted that the Building Code provides solutions such as reducing building area by constructing a firewall, or doubling allowable building area by sprinkling the building.

The applicant wishes to increase allowable building area by providing fire access routes so the building can be considered to face 4 streets. The Building Code does not give credit for facing more than 3 streets.

The Respondent also submitted that only one face on the building perimeter is within 90 m of a hydrant. Therefore, the building does not meet the requirement to be considered to face 3 streets. It is the position of the Respondent that the building only faces one street.

The Respondent stated that the municipality supports the Applicant's position provided an additional hydrant is installed making the building face 3 streets.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that the proposed addition provides sufficiency of compliance with Article 3.2.2.52. of the Building Code for buildings facing three streets, provided an additional fire hydrant is installed in accordance with Article 3.2.5.8. of the Building Code.

8. **Reasons:**
   1. The proposed addition is small accounting for less than 15% of the total building area.
   2. The building has been provided with a number of fire separations between areas within the building.
   3. Approximately 40% of the existing building is of non-combustible construction.
   4. Fire access routes have been provided around the entire perimeter of the building.

Dated at Toronto, this 10th day, in the month of November, in the year 1995, for application number 1995-54.

BCC Ruling No. 95-52-472

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-52-472

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Articles 3.3.3.9. & 3.2.4.12. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Ms. Mary Welsh, Darlington Court Development Inc. for the resolution of a dispute with Mr. Doug Ferguson, Chief Building Official, City of Brantford, concerning whether not providing smoke detectors and sprinkler heads in the prisoner cell areas and prisoner holding areas, and not providing sprinklers in the prisoner elevator shafts provide sufficiency of compliance with Articles 3.3.3.9. and 3.2.4.12. of the Ontario Building Code, at Ontario Court of Justice (Provincial Division), 44 Queen Street, Brantford, Ontario.

APPLICANT

Darlington Court Developments Inc.
Brantford, Ontario.

RESPONDENT

Mr. Doug Ferguson
Chief Building Official
City of Brantford

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Mr. Kenneth Bacon

PLACE

Toronto, Ontario

DATE OF RULING

November 10th, 1995

APPEARANCES

Mr. Robin K.F. Ng, Principal
Ng Chee Architects
AND
Mr. Jim Farnworth, Inspector
Brantford Police Service
For the Applicant

Mr. Doug Ferguson
Chief Building Official
AND
Mr. Jack Schut
Deputy Chief Building Official
City of Brantford
The Respondent

RULING

1. **The Applicant**

   Ms. Mary Welsh, Owner, Darling Court Developments Inc., is the holder of a permit under the Building Code Act, 1992 to construct a two storey courthouse building at 44 Queen Street, Brantford, Ontario.

2. **Description of Constrution**

   The subject building is a newly constructed two storey courthouse with a partial basement. It is of noncombustible construction and has a building area of 1,468 m? (15,801 ft?) and is provided with a fire alarm system. Prisoners' areas are located on the main floor of the building. An elevator is provided within these areas to transport prisoners to and from the courtrooms on the second floor. Automatic sprinklers and smoke detectors are installed in the detention areas.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Articles 3.3.3.9. and 3.2.4.12. of the Building Code. At issue is whether not providing smoke detectors and sprinkler heads in the prisoner cell areas and prisoner holding areas, and not sprinklering the prisoner elevator shafts provide sufficiency of compliance with the Building Code, at Ontario Court Justice (Provincial Division), 44 Queen Street, Brantford, Ontario.

4. **Provision of the Building Code**

Articles 3.2.4.12. Smoke Detectors

1. Where a fire alarm system is required, smoke detectors shall be installed in
    a. every sleeping room and corridor in portions of buildings classified as Group B major occupancy,
    b. every room in a contained use area and corridors serving those rooms
    c. every corridor in portions of buildings classified as Group A, Division 1 major occupancy,
    d. every public corridor in portions of buildings classified as Group C major occupancy,
    e. every exit stair shaft, and
    f. every corridor serving classrooms in elementary and secondary schools.

Articles 3.3.3.9. Contained Use Areas

2. A contained use area shall conform to Sentences (2) to (5).
3. A contained use area shall be separated from the remainder of the building by a fire separation having a fire-resistance rating of not less than 1 h.
4. Except as permitting in Sentence (5), a contained use area shall be sprinklered.
5. The actuation of the sprinkler system required by Sentence (3) shall initiate an alert signal or an alarm signal on the fire alarm system.
6. A contained use area is not required to be sprinklered as required by Sentence (3) if
    a. the building is designed so that during a period of 2 h after the start of a fire in the contained use area, other fire compartments will not contain more than 1 per cent by volume of contaminated air from the contained use area.
    b. the building is designed so that during a period of 2 h after the start of a fire in another part of the building, the contained use area will not contain more than 1 per cent by volume of contaminated air from the other part of the building,

c. all doors are designed to be remotely released in conformance with Sentence 3.3.1.12.(2), and
d. the contained use area does not contain any rooms lined with combustible padding.

5. **Applicant's Position**

The Applicant submitted the following comments to support the removal of the sprinkler heads and heat/smoke detectors:

1. The detention cells at 44 Queen Street are not used for the overnight lodging of prisoners. All prisoners in custody will be under active visual observation, either personally or video, monitoring by Court Security Special Constables employed and trained by the Brantford Police Service.
2. The placement of sprinkler heads and heat/smoke detectors in detention cells within the physical reach of prisoners pose a very real physical threat to prisoners and security staff.

   Tamper-proof sprinkler heads and heat/smoke detectors are not a reality. The Brantford Police Service has actual experience in this matter. During the construction of the police headquarters, so called "tamper-proof" units were installed contrary to their wishes in the detention cells. Within two months, they were removed. Prisoners had removed wafer-like pieces from the sprinkler and used them in attempts to slash their wrists.

3. The placement of sprinkler heads and heat/smoke detectors in the detention cells at 44 Queen Street will lead to unnecessary inconvenience and down time in the Courts. Our security personnel will take every precaution to ensure that prisoners in custody are not in possession of cigarettes, matches, etc.; however, there will not doubt be times when due to the number of prisoners in custody, even the most rigid precautions will be circumvented.

   Should that lead to the setting off of the fire alarms and sprinkler systems, the entire building will be subject to evacuation, thus disrupting court proceedings. All prisoners will be returned to their detention areas until the source and nature of the alarm is determined.

   The Brantford Fire Department will be inconvenienced by having to respond to the alarm. The downtown area will be disrupted while emergency vehicles respond to the alarm. During this time, Court proceedings will be recessed until the prisoners are secured and

the clean up of any water is completed. This will undoubtedly, result in the adjournment of matters scheduled for hearings and the backlogging of future court dates.

6. **Chief Building Official's Position**

   The Respondent submitted that smoke detectors and sprinklers are required in contained use areas in accordance with Articles 3.3.3.9. and 3.2.4.12 of the Building Code.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that not providing smoke detectors and sprinkler heads in the prisoner cells, prisoners holding areas and prisoner elevator shaft does not provide sufficiency of compliance with the provisions of the Building Code.

8. **Reasons:**
   1. The Building Code, Article 3.3.3.9. provides alternatives for deleting sprinklers in contained use areas.
   2. The Applicant provided no design alternatives to be considered by the Commission that could provide sufficiency of compliance.
   3. Design alternatives to the currently installed fire alarm system exist to minimize the impact of false alarms.

Dated at Toronto, this 10th day, in the month of November, in the year 1995, for application number 1995-60.

BCC Ruling No. 95-51-471

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-51-471

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.9.1.(1) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Mario Fatica, IPCF Properties Inc. for the resolution of a dispute with Mr. Frank Asta, Chief Building Official, Town of Oakville, concerning whether the sprinklered retail store and unsprinklered open air basement parking area provides sufficiency of compliance with the requirements for a fully sprinklered building, thereby eliminating the requirement to provide a standpipe and hose system in the basement parking garage at 173 Lakeshore Road West, Oakville, Ontario.

APPLICANT

IPCF Properties Inc.
Oakville, Ontario

RESPONDENT

Mr. Frank Asta
Chief Building Official
Town of Oakville

PANEL

Mr. Roy Philippe, Chair
Mr. Remus Tsang
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

October 26th, 1995

APPEARANCES

Mr. Dave Johnson
Fire Protection Technologist
Randal Brown & Associates Ltd.
Willowdale, Ontario
For the Applicant

Mr. Frank Asta
Chief Building Official
Town of Oakville
The Respondent

RULING

1. **The Applicant**

   Mr. Mario Fatica, IPCF Properties Inc. is an applicant for a permit under the Building Code Act, 1992 to construct a one storey retail food store (i.e. Loblaws) with a basement parking garage at 173 Lakeshore Road West, Oakville, Ontario.

2. **Description of Constrution**

   The subject building is to be used as a retail food store (i.e. Loblaws). The building is one storey in building height and has a building area of 5,378.0 m² (57,896.6 ft²).

   The basement of the building will be used as an underground parking garage. The ground floor of the building will be used as the food store. The food store will contain three separate mezzanines.

   The following factors apply to the subject building:

   - retail store is fully sprinklered
   - underground basement is not sprinklered
   - building faces two streets for fire department access (i.e. 50% of building perimeter)
   - basement underground parking garage is a Group F, Division 3 occupancy

- ground floor retail store is a Group E occupancy
- noncombustible construction (i.e. subsection 3.1.5.) will be used for this facility
- fire alarm system with an annunciator will be provided

3. **Dispute**

The dispute between the Applicant and Respondent concerns an interpretation of the technical requirements of Sentence 3.2.9.1.(1) of the Building Code. At issue is whether the sprinklered retail store and unsprinklered open air basement parking area provides sufficiency of compliance with the requirements for a fully sprinklered building, thereby eliminating the requirement to provide a standpipe and hose system in the basement parking garage.

4. **Provision of the Building Code**

Article 3.2.9.1. Requirement for Standpipe and Hose Systems

Except as provided in Article 3.2.9.2., a standpipe and hose system shall be installed in every building that:

a. is more than
   i. 3 storeys in building height, or
   ii. 14 m in height measured between grade and the ceiling of the uppermost storey,
b. is greater in building area than the area shown in Table 3.2.9.A. for the applicable building height shown in the Table where the building
   i. is not sprinklered, and
   ii. is not more than 14 m high measured between grade and the ceiling of the top storey, or
c. contains more than one storey below grade.

5. **Applicant's Position**

The Applicant submitted that the parking garage is classified as a basement, but also meets the requirements for an open air storey under the Building Code. The first storey retail potion of the building is required to be provided with an automatic sprinkler system to meet the construction requirements in Article 3.2.2.44. of the Building Code.

The Applicant submitted that Sentence 3.2.1.5.(2) of the Building Code permits open air storeys to be unsprinklered regardless of whether it is a basement, an above grade storey or within a sprinklered building.

The Applicant submitted that due to the first storey being sprinklered, Subclause 3.2.9.1. (1)(b)(i) waives the requirement for a standpipe and hose system for the storey. Furthermore, the Applicant submitted that Clause 3.2.9.1.(1)(c) waives the requirement for a standpipe and hose system in the basement level.

6. **Chief Building Official's Position**

The Respondent submitted that the basement parking garage is required to be provided with a standpipe and hose system.

The Respondent submitted that the building referenced in Article 3.2.9.1. consists of both the first storey and basement level. Therefore, since the entire building is not sprinklered a standpipe and hose system is required.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that providing a standpipe and hose system only in the basement open air parking garage provides sufficiency of compliance with Article 3.2.9.1. of the Building Code.

8. **Reasons:**
   . The entire building cannot be considered fully sprinklered and therefore the exception of Clause 3.2.9.1.(1)(b) does not apply.
   i. The first floor retail use is sprinklered.

Dated at Toronto, this 26th day, in the month of October, in the year 1995, for application number 1995-45.

BCC Ruling No. 95-50-470

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-50-470

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.3.4. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Fanshawe College, London for the resolution of a dispute with Mr. Jim Foster, Chief Building Official, City of St. Thomas, concerning whether providing a fully sprinklered building with a 1 hour fire separation between the high school and college in lieu of a party wall (i.e. firewall) provides sufficiency of compliance with Article 3.2.3.4. of the Building Code, at Fanshawe College St. Thomas, Elgin Campus, Bill Martyn Parkway, St. Thomas, Ontario.

APPLICANT

Fanshawe College
London, Ontario

RESPONDENT

Mr. Bob Brown
Chief Building Official
City of St. Thomas

PANEL

Mr. Roy Philippe, Chair
Mr. Remus Tsang
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

October 26th, 1995

APPEARANCES

Mr. L.A. Lex Bullock, Lawyer
Siskind, Cromarty, Ivery & Dowler
London, Ontario
AND
Eric Esselink
Leber/Rubes Inc.
For the Applicant

Mr. Bob Brown
Chief Building Official
City of St. Thomas
The Respondent

RULING

1. **The Applicant**

   Mr. Harry Cavender, Fanshawe College, London is the applicant for a permit under the Building Code Act, 1992 to construct a new College building as an addition to an existing high school that would permit the shared utilization of various rooms and facilities at Bill Martyn Parkway, St. Thomas, Ontario.

2. **Description of Constrution**

   The subject building is a new campus facility for Fanshawe College. The new one storey facility is proposed to be connected to the existing St. Joseph's High School. The proposed connection will traverse a property line. The properties on both sides of the property line will be separately owned by the college and the high school.

   The proposed connection of the college and high school facilities is intended to cost effectively facilitate sharing of a library- resource centre and cafeteria spaces.

   The following matters apply to the existing building and the proposed addition:

   i. Existing St. Joseph's High School
      - building height of one storey

- sprinklered
- noncombustible construction
- building area: 7520 m²
- building faces one street for fire department access
- roof assembly is not rated per sprinkler waiver in Article 3.2.2.12.
- equipped with a single stage fire alarm and detection system
- sprinklers provide primary means of fire detection and suppression
- construction completed in 1993
- major occupancy: Group A, Division 2 assembly occupancy
- construction classification: Article 3.2.2.22.

ii. New Fanshawe College Expansion:

- building height of one storey
- fully sprinklered
- noncombustible construction
- building area of expansion: 3868 m²
- building faces one street for fire department access
- roof assembly is not rated per sprinkler waiver in Article 3.2.2.12.
- fire alarm system in high school expanded to serve college (i.e. single system throughout)
- sprinklers provide primary means of fire detection and suppression
- major occupancy: Group A, Division 2 assembly occupancy
- construction classification: Article 3.2.2.22.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.2.3.4. of the Building Code. At issue is whether providing a fully sprinklered building with a 1 hour fire separation between the high school and college in lieu of a party wall (i.e. fire wall) provides sufficiency of compliance with the Building Code.

4. **Provision of the Building Code**

Article 3.2.3.4. Party Wall

Every wall that is a party wall shall be constructed as a firewall.

5. **Applicant's Position**

The Applicant submitted that the college and high school can be treated as a single building. The applicant proposes to address life safety and property concerns in reviewing the high school and college as separate suites under the Building Code. A 1 hour fire separation is proposed between the college and high school spaces.

The Applicant submitted that the Building Code does not prohibit a single building from traversing a property line. Also, the Building Code does not require a building to be separated by a firewall into two buildings solely for the reason of traversing a property line.

The Applicant submitted that Subsection 3.2.3 "Spatial Separation and Exposure Protection of Buildings" addresses exposure requirements for separate buildings and separate fire compartments where such separate buildings or separate fire compartments present an external fire exposure to a separate building or separate fire compartment. The exposure requirements apply to separate buildings and separate fire compartments that may be located on the same property or may be located on separate properties. The exposure requirements apply to external fire exposure. This Subsection does not require an internal fire separation or an internal fire separation constructed as a firewall, to be constructed at a property line where a single building traverses a property line.

The Applicant submitted that Article 3.2.3.4 Party Wall, states, "Every wall that is a party wall shall be constructed as a firewall". Party wall is defined as, "...a wall jointly owned and used by 2 parties under easement agreement or by right in law, and erected at or upon a line separating 2 parcels of land each of which is, or is capable of being, a separate real-estate entity." The requirement and the definition, do not require a party wall/firewall to be constructed at a property line where a single building traverses a property line.

The Applicant submitted that Subsection 3.1.10 "Firewalls", specifies that a firewall must meet depending on the major occupancy of the buildings. This Subsection does not require that a firewall be constructed where a single building traverses a property line.

The Applicant submitted that the college and high school are considered separate suites within a single building of shared ownership. The suites will be separated by a 1 hour fire separation in accordance with Article 3.3.1.1. The Building Code does not require that the fire separation proposed between suites follow the property line.

The Applicant summarized his position that the expanded building, including the 3 year old existing high school can be reviewed under the requirements of the Building Code as a single

building. The building will comply with the Building Code in all respects as a single building. A fire separation will be provided between the college and high school in conformance with the requirements of the Building Code to separate suites.

6. **Chief Building Officials Position**

   The Respondent submitted that Subsection 3.2.3 "Spatial Separation and Exposure Protection of Buildings" and Subsection 3.1.10 "Firewalls", requires the structure to be fire separated into two separate buildings by a firewall along the property line. The reason that this is required is that the structure traverses a property line and that the properties on either side of the property line are separately owned by the high school and college.

   The Respondent concurred that in concept a 1 hour fire separation in a fully sprinklered building as proposed by the Applicant, sufficiently complies with the Building Code. However, the Respondent's position is that sufficiency of compliance must be determined by the Building Code Commission.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that providing a 1 hour fire separation between the fully sprinklered high school and Fanshawe College provides sufficiency of compliance with Article 3.2.3.4. of the Building Code.

8. **Reasons:**
   1. Both buildings are designed as an Assembly Occupancy Division 2 (A-2) and will be operational as one complex.
   2. Both parties will enter into an agreement with respect to the management, maintenance, and the conditions of future sale of either property.

Dated at Toronto, this 26th day, in the month of October, in the year 1995, for application number 1995-55.

BCC Ruling No. 95-49-469

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-49-469

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.4.2.1.(1) & 3.4.7.1.(1) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Celanese Canada Inc., Kingston for the resolution of a dispute with Mr. Dave Thompson, Chief Building Official, Township of Ernestown, concerning whether the one rated exit and a caged ladder will provide sufficiency of compliance with Sentences 3.4.2.1.(1) & 3.4.7.1.(1) of the Building Code, at Solid State Polymerization Structure for PET Resin Expansion Project, Millhaven Plant, Highway # 33, Kingston, Ontario.

APPLICANT

Celanese Canada Inc.
Kingston, Ontario

RESPONDENT

Mr. Dave Thompson
Chief Building Official
Township of Ernestown

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

October 19th, 1995

APPEARANCES

Mr. Marc J. Simpson
AND
Mr. Mickey Hazard
Celanese Canada Inc.

AND

Mr. John Weylie
AND
Mr. Joe Rose
Kilborn Inc.
For the Applicant

Mr. Andre R. Gravelle
Building Inspector
Township of Ernestown
For the Respondent

RULING

1. **The Applicant**

   Mr. Marc J. Simpson, Packaging Resins Manufacturing Manager, Celanese Canada Inc. is the holder of a permit under the Building Code Act, 1992 to construct an eight storey Solid State Polymerization Structure, Millhaven, Ontario.

2. **Description of Constrution**

   The subject building is an 8 storey building classified as a Medium Hazard Industrial Occupancy (Group F, Division 2) having a building area of 278.7 m² (3,000 ft²).

   The applicant proposes to install one rated (code complying exit from each floor area) and a second exit by means of a caged ladder for emergency purposes, since the building will not normally be occupied.

The building will be used for a gravity type flow process, with periodic monitoring and maintenance.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentences 3.4.2.1.(1) & 3.4.7.1.(1) of the Building Code. At issue is whether the one rated exit and a caged ladder will provide sufficiency of compliance with the exiting requirements of the Building Code.

4. **Provision of the Building Code**

Sentence 3.4.2.1.(1) Minimum Number of Exits

1. Except as provided in Sentences (2) to (4), and (6), every floor area as regulated in Article 3.4.1.1. shall be served by not less than 2 exits.

Sentence 3.4.7.1.(1) Scope

2. Except as provided in Sentence (2), fire escapes shall not be erected on buildings.

5. **Applicant's Position**

The Applicant submitted that the Building Code would require 2 rated exits per floor in an occupied structure. One rated exit is provided adjacent to the elevator shaft on northwest corner. Since the structure is an unoccupied process area, the second exit is provided by means of a caged ladder for emergency exit.

The Applicant also submitted that sufficiency of compliance for two exits per floor is achieved in this unoccupied structure by providing a fully rated exit in the northwest corner and an emergency exit in the form of a caged ladder on the south end of the west wall.

6. **Chief Building Officials Position**

The Respondent submitted that each floor area is required to be served by two exits. One exit stair is located beside the elevator on the north side of the building. The other in dispute is an exterior fire escape located on the southwest corner of the building which does not constitute as a proper exit for a new building.

The Respondent also submitted that the reasons for non- acceptance of the Applicant's proposal are as follows:

a. A fire escape on a new buildings is not permitted and therefore can not be considered a required exit.
b. This ladder type fire escape extends up to 8 floors and is exposed to all weather conditions, thus putting any person who is forced to use it in a life threatening situation.
c. This is a multi-million dollar construction project. Constructing a required separate second exit would not be expensive to the overall project when this company's policy is "safety first".

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the provision of a ladder does not comply with the Building Code for exit requirements.

8. **Reason:**

The structure is considered a building; each level is a storey for exit purposes. A ladder is not deemed an acceptable second means of egress.

Dated at Toronto, this 19th day, in the month of October, in the year 1995, for application number 1995-41.

BCC Ruling No. 95-48-468

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-48-468

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Articles 1.1.3.2., 2.2.1.1. and 9.8.4.1. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Ms. Dawn Daniel for the resolution of a dispute with Mr. John Wright, Chief Building Official, Town of Markham, concerning whether the close proximity of an exit door to the property line (i.e. 0.55 m) affords adequate access to a public thoroughfare and if the relationship between the exterior grade and the interior landing requires steps that may obstruct the landing, in accordance with Article 1.1.3.2. and Articles 2.2.1.1. and 9.8.4.1. of the Building Code, at 16 Lavron Court, Markham, Ontario.

APPLICANT

Ms. Dawn Daniel, Owner
Markham, Ontario

RESPONDENT

Mr. John Wright
Chief Building Official
Town of Markham

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

October 19th, 1995

APPEARANCES

Ms. Dawn Daniel, Owner
Markham, Ontario
The Applicant

Mr. John Wright
Chief Building Official
Town of Markham

RULING

1. **The Applicant**

   Ms. Dawn Daniel is an applicant for a permit under the Building Code Act, 1992 to install a side entrance door to serve an accessory apartment located in the basement of the applicant's house.

2. **Description of Constrution**

   The subject doorway in dispute was installed to serve an accessory apartment located in the basement of the applicant's dwelling.

   The side entrance is located on a wall within 0.6 m of the property line. There is a 1.1 metre (43 inch) maintenance easement between the subject doorway and the adjacent house.

   The threshold of the door is less than 150 mm above the exterior grade and about 0.5 m above the interior landing level. The doorway constitutes the required exit from an accessory apartment located in the basement.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns an interpretation of the technical requirements of Article 1.1.3.2. and Articles 2.2.1.1. and 9.8.4.1. of the Building Code. At issue

is whether the disputed door satisfies the definition of exit, and if the relationship between the exterior grade and the interior landing requires steps that may obstruct the landing.

4. **Provision of the Building Code**

Article 1.1.3.2. Definition of Exits

Exit means that part of a means of egress, including doorways, that leads from the floor area it serves, to a separate building, an open public thorough-fare, or an exterior open space protected from the exposure from the building and having access to an open public thoroughfare.

Article 2.2.1.1. Characteristics of Materials, Appliances, Systems and Equipment

All materials, appliances, systems and equipment installed to meet the requirements of this Code shall possess the necessary characteristics to perform their intended functions when installed in a building.

Article 9.8.4.1. Dimensions of Landings

Landings shall be at least as wide and as long as the width of stairs in which they occur, except that the length of landing for exterior stairs serving not more than 1 dwelling unit need not exceed 900 mm (2 ft 1 in), and the length of landing for all other stairs in a straight run need not exceed 1 100 mm (3 ft 7 in).

5. **Applicant's Position**

The Applicant submitted that the Town of Markham will not allow the side entrance door to serve the accessory basement apartment.

The Applicant submitted that there is a registered easement of 1.1 m (43") between the houses with the property line at 0.55 m (21?") from each house.

6. **Chief Building Officials Position**

The Respondent submitted that the doorway in dispute was installed without a building permit to serve an accessory apartment located in the basement of the Applicant's dwelling. The apartment was established without a building permit. The Applicant has been convicted for construction without a building permit and has made an application for a permit authorizing the disputed door.

The Respondent submitted that the application for a permit was denied primarily on the grounds that the disputed doorway is dysfunctional.

The Respondent submitted that if the Commission rejects this reason, the following particulars contravene the Building Code:

i. the disputed doorway does not satisfy the definition of exit; and,
ii. the relationship between the exterior grade and the interior landing requires steps that obstruct the landing in violation of Article 9.8.4.1.

Article 2.2.1.1. Characteristics of Materials, Appliances, Systems and Equipment

The Respondent considered the doorway to be a system or equipment in the context of Article 2.2.1.1.

The Respondent submitted that the intended function of a doorway is to facilitate the movement of people and things between the spaces it connects. Where a door is a component of an exit system it must also perform that function.

The Respondent submitted that to perform its intended function, a door/doorway must:

iii. be wide enough to accommodate the people and things moving through it (i.e. Article 9.6.3.1. of the Building Code requires that the subject door be at least 760 mm wide); and,
iv. lead to and from a space having the same width.

The doorway in dispute is situated in a wall located 580 mm from the property line. An easement facilitating maintenance of the wall does not provide for trespassing over the adjacent property. The willingness of the abutting neighbour to tolerate such trespass can not be assumed. The easement does not prevent the erection of a fence along the boundary.

The limited proximity of the door to the property line and the absence of any permanent right of access beyond the property line renders this door dysfunctional.

Accordingly, the doorway does not possess the necessary characteristics to perform its intended function and is not permitted by Article 2.2.1.1.

Article 1.1.3.1. Definitions of Words and Phrases

The Respondent submitted that the disputed doorway is a required exit from the basement apartment. All options involving shared egress or egress windows are impractical and are not proposed.

If the disputed doorway is considered a required exit, it must (by definition) lead to an open public thoroughfare, or an exterior open space protected from fire exposure from the building and have access to an open public thoroughfare. The Respondent submitted that a strip of land, less than the width of the exit door does not satisfy this definition.

Article 9.8.4.1. Dimensions of Landings

The Respondent submitted that the relationship between the exterior grade and the interior landing requires 2 treads that reduce the landing dimensions to approximately half that required by Article 9.8.4.1. This is a significant safety deficiency.

7. **Commission Ruling:**
    1. It is the decision of the Building Code Commission that the exit system including the exterior access to a public thoroughfare cannot be less than the required exit as noted in Article 2.2.1.1. of the Building Code.
    2. It is also the decision of the Building Code Commission that if the width of the exterior access is not less than the minimum unobstructed dimension specified in compliance alternative C121.1(c) of Article 11.2.3.1. for access to a secondary exit from a dwelling unit which leads through another dwelling unit, the access route provides sufficiency of compliance with the Building Code.

The access to the first floor main exit must be maintained free of obstruction at all times.

The exterior access to the public thoroughfare from the secondary exit must be maintained free of obstruction at all times.

8. **Reason:**

The building is greater than 5 years old and Part 11 compliance alternative may be applied, as per 2.1.1.6 of the Building Code.

Dated at Toronto, this 19th day, in the month of October, in the year 1995, for application number 1995-49.

BCC Ruling No. 95-47-467

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-47-467

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.3.1. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Louis Aldrovandi, President, Aldrovandi Equipment Limited for the resolution of a dispute with Mr. Mani Navabi, Chief Building Official, City of Vaughan, concerning whether a canopy structure over a parking lot at the rear of an existing industrial building can be considered a covered vehicle passageway under Article 3.2.3.19. and not be subjected to the spatial separation requirements in Article 3.2.3.1. of the Building Code, at Aldrovandi Equipment Limited, 191 Vinyl Court, Vaughan, Ontario.

APPLICANT

Mr. Louis Aldrovandi, President
Aldrovandi Equipment Ltd.
Woodbridge, Ontario

RESPONDENT

Mr. Mani Navabi
Chief Building Official
City of Vaughan

PANEL

Mr. Roy Philippe, Chair
Ms. Susan Friedrich
Mr. Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

October 19th, 1995

APPEARANCES

Mr. Brian Atkins, Principal
Atkins Architect
Thornhill, Ontario
For the Applicant

Mr. Steven Penna
Technical Supervisor
AND
Mr. Davis Chiang
Plans Examiner
City of Vaughan
For the Respondent

RULING

1. **The Applicant**

   Mr. Louis Aldrovandi, President, Aldrovandi Equipment Ltd. is the applicant for a permit under the Building Code Act, 1992 for a canopy structure over a parking lot at the rear of an existing industrial building.

2. **Description of Constrution**

   The subject building addition is a canopy structure (i.e. roof but no enclosing walls) covering an area of 1055 m² at rear of an existing industrial building.

   The structure abuts the Canadian Pacific Railway (CPR) main line right of way and is 2.12 m from the property line.

   The Applicant contends that the structure is considered a covered vehicle passageway under Article 3.2.3.19. of the Building Code.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.2.3.1. of the Building Code. At issue is whether a canopy structure over a parking lot at the rear of an existing industrial building can be considered a covered vehicle passageway under Article 3.2.3.19. and not be subjected to the spatial separation requirements in Article 3.2.3.1. of the Building Code, at Aldrovandi Equipment Ltd., 191 Vinyl Court, Vaughan, Ontario.

4. **Provision of the Building Code**

Article 3.2.3.1. Limiting Distance and Area of Unprotected Openings

1. Except as provided in Articles 3.2.3.9. to 3.2.3.11, the area of unprotected openings shall not be more than that set forth in Tables 3.2.3.A. or 3.2.3.B. for the limiting distance applicable to the exposing building face under consideration.
2. The area of the unprotected openings in an exposing building face shall be the aggregate area of unprotected openings expressed as a percentage of the area of the exposing building face in Tables 3.2.3.A. and 3.2.3.B.
3. For the purposes of determining the type of construction and cladding and the fire-resistance rating of an exterior wall, the exposing building face shall be taken as the projection of the exterior wall onto a vertical plane located so that no portion of the exterior wall of the building or of a fire compartment, if the fire compartment complies with the requirements of Sentence 3.2.3.2.(1), is between the vertical plane and the line to which the limiting distance is measured and, for these purposes, the area of unprotected openings shall be determined from Table 3.2.3.A. or Table 3.2.3.B.
4. For the purposes of determining the actual percentage of unprotected openings permitted in an exterior wall, the location of the exposing building face is permitted to be taken at a vertical plane located so that there are no unprotected openings between the vertical plane and the line to which the limiting distance is measured.
5. Where fire fighting facilities cannot reach the building within 10 min of the alarm being received, the limiting distance shall be doubled.

Article 3.2.3.19. Covered Vehicular Passageway

6. A covered vehicular passageway shall
    a. be of noncombustible construction when constructed below grade, and

b. be separated from every building or part of a building adjoining it by a fire separation having a fire-resistance rating of not less than 1.5 h where it is designed as a receiving or shipping area.

5. **Applicant's Position**

The Applicant submitted that the structure is a covered vehicle passageway under Article 3.2.3.19. of the Building Code and therefore is not subject to the spatial separation requirements in Article 3.2.3.1.

The Applicant submitted that the structure abuts a main line CPR railway right of way and is 2.12 m from the property line.

6. **Chief Building Officials Position**

The Respondent submitted that Article 3.2.3.19. (i.e. Covered Vehicular Passageway) of the Building Code does not waive the requirement for an exterior spatial separation and exposure protection for the building.

The Respondent also submitted that a railway right of way is not considered a "street" by definition in Subsection 1.1.3. (i.e. Definitions of Words and Phrases) of the Building Code.

The Respondent submitted that the Committee of Adjustment the minimum rear yard setback of 2.12 m subject to the following conditions:

i. That the variance be site specific to the existing canopy and that the canopy not be enclosed to the satisfaction of the Building Standards Department; and,
ii. That if a Building Permit is not issued, based upon the decision of the Committee of Adjustment within twelve (12) months of the date this decision becomes final and binding, the said decision shall expire and shall be deemed to have been annulled and rescinded by the Committee.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the proposed canopy structure provides sufficiency of compliance with Article 3.2.3.19 and 3.2.3.1. of the Building Code provided that

. it is separated from the existing building by a fire separation having 1? hour fire resistance rating
a. no enclosing wall on the south face

b. space to be used for vehicular storage only.

8. **Reasons:**

0. The existing building is separated by a wall having a 1? hour fire resistance rating.

1. The area is used only for vehicular storage.

2. There is no proposed exposing building wall and the area is unenclosed on three faces.

Dated at Toronto, this 19th day, in the month of October, in the year 1995, for application number 1995-48

BCC Ruling No. 95-46-466

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-46-466

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.3.9.(2), Clause 3.4.2.5.(1)(f) and Article 3.2.2.12. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Sentence 3.2.3.9.(2), Clause 3.4.2.5.(1)(f) and Article 3.2.2.12. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

APPLICANT

Mr. R.D. Funnell, P.Eng.
City Engineer
City of Guelph

RESPONDENT

Mr. Bruce Poole
Chief Building Official
City of Guelph

PANEL

Mr. Roy Philippe, Chair
Mr. Sang Shim
Ms. Lesia Beznaczuk

PLACE

Toronto, Ontario

DATE OF RULING

October 5th, 1995

APPEARANCES

Mr. Steven Tomlin
Morrison Hershield Limited
AND
Mr. Charles A. Bennett
R. Cave & Associates Engineering Ltd.
For the Applicant

Mr. Bruce Poole
Chief Building Official
Mr. Paul Moore
Senior Plans Examiner
City of Guelph
For the Respondent

RULING

1. **The Applicant**

   Mr. R.D. Funnell, City Engineer is the applicant for a permit under the Building Code Act, 1992 to construct a compost building at 333 Watson Road, Guelph, Ontario.

2. **Description of Constrution**

   The plant is a one storey structure of non combustible construction. The plant floor is poured concrete on grade. The walls are a combination of concrete and lined insulated metal panel cladding. The concrete portion of the wall extends 150 mm above grade. The lined insulated metal cladding panel on structural steel extends above the concrete portion of the wall approximately 6 m above the floor level. The roof is a metal roof on structural steel and slopes upwards from the 6 m to a height of 8 m at its peak.

   The plant is divided into two areas. The Primary Compost area and the Secondary Compost area. Between the two areas is transition point called the Discharge Pit.

   The plant will be protected with a fire alarm system conforming to the Building Code Subsection 3.2.4.

Dry pipe sprinkler systems designed to NFPA 13 "Standard for the Installation of Sprinkler Systems" will protect the Secondary Compost area only. The Primary Compost area will have a wetting design to automatically activate once a day.

A 50 mm water line will be provided along the west wall with 8 hose bibs.

The Primary Compost area is divided into 11 compartments of 3 m in height each extending from column 12 to column line 22. The two exterior compartments and centre compartment contain 48 fan units supplying air to the compost from below. The remaining compartments are compost areas having 600 mm of gravel on top of the concrete floor. The 3 m high walls separating these compartments are 300 mm thick poured concrete.

The Secondary Compost area is protected by dry pipe sprinkler systems. The area is open with no compartments. The compost is divided into an east and west area with a 10 m open space in the middle.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentence 3.2.3.9.(2), Clause 3.4.2.5.(1)(f) and Article 3.2.2.12. of the Building Code. There are three areas of dispute for this facility. The areas of dispute are:

i. East Exposing Building Face

The east exposing building face has a limiting distance permitting 23% maximum unprotected openings as calculated by the Guelph Building Department. Clause 3.2.3.7.(2)(b) requires the exterior wall to be constructed with a 2 hour fire-resistance rating and to be clad with non combustible cladding. The non combustible cladding proposed for the building does not have a fire-resistance rating. The limiting distance was measured from the building face to the property line.

ii. Travel Distance to an Exit

Most areas in the building exceed the maximum travel distance requirement of 30 m for an unsprinklered building.

iii. Considering the Plant Equivalent to a Fully Sprinklered Facility

The building is classified by Article 3.2.2.54. as a Medium Hazard Industrial Occupancy (Group F, Division 2). The construction requirements of the Sentence for an unsprinklered building are:

- non combustible construction
- roof shall have a one hour fire resistance rating

4. **Provision of the Building Code**

Sentence 3.2.3.9.(2) Unlimited Unprotected Openings

2. The exposing building face of a storey that faces a street and is at the same level as the street is permitted to have unlimited unprotected openings if the limiting distance is not less than 9 m.

Clause 3.4.2.5.(1)(f) Location of Exits

3. Except as provided in Sentence (2), (3) and 3.3.2.4.(6), where more than one exit is required from a floor area, such exits shall be located so that the travel distance to not less than one exit as described in Article 3.4.2.4. shall not be more than

(f) 30 m in any other occupancy.

Article 3.2.2.12. Sprinklers in Lieu of Roof Rating

4. The requirements on Articles 3.2.2.16. to 3.2.2.62. for roof assemblies to have a fire-resistance rating are permitted to be waived provided
   a. the building is sprinklered
   b. the sprinkler system in Clause (a) is electrically supervised in conformance with 3.2.4.16.(5), and
   c. the operation of the sprinkler system in Clause (a) will cause a signal to be transmitted to the fire department in conformance with Sentence 3.2.4.7.(3).

2. **Applicant's Position**

The Applicant submitted that through the process of the wetting system in the Primary Compost area and the dry pipe sprinkler systems protecting the Secondary Compost area, the Compost Plant be considered the equivalent to a fully sprinklered building. The Applicant submitted that sufficiency of compliance is met through the following:

- non combustible construction
- limited ignition sources
- 50% moisture content of the compost making ignition extremely difficult
- roof height being between 3 m to 5 m above the upper portion of the compost
- automatic detection for controlling the temperature of the compost
- manual suppression source through the hose outlets
- daily wetting of the compost (the wetting system can also be manually operated)

The Applicant submitted that collectively these meet the intent of the Building Code to provide a building which meets the life safety standards of our society. The systems provide sufficiency of compliance to be considered equivalent to a fully sprinklered building, thereby waiving the one hour fire resistance rating for the roof and its supporting structure.

The Applicant submitted that a timed exit analysis demonstrates that the occupant in the most remote portion of the building may reach the exterior of the building within 1.3 minutes.

The Applicant also submitted that an access road will be designed to support the weight of a fire fighting vehicle conforming to Article 3.2.5.7. of the Building Code. This access road will be open at all times for access by the fire department vehicles and therefore may be considered a street for the application of Sentence 3.2.3.9.(2) permitting unlimited unprotected openings in the east exposed building face. Therefore, the east exterior building face does not require a fire resistance rating.

The Applicant summarized his position by stating the design of the Compost Plant meets the intent of the Building Code and its level of life safety.

2. **Chief Building Officials Position**

The Respondent submitted that the building has been classified as a Medium Hazard Industrial Occupancy (Group F, Division 2). As an unsprinklered building facing one street, the construction requirements of the building shall conform to Sentence 3.2.2.54. of the Building Code. Therefore, the roof assembly requires a 1 hour fire-resistance rating and all loadbearing walls and columns must have the same rating as required for the supported assembly.

The Respondent submitted that the travel distance to an exit shall not exceed 30 m. Most areas in the building exceed the 30 m travel distance requirement.

The Respondent submitted that the exposing building face of the east elevation may have a maximum of 23% unprotected openings, for an unsprinklered building. The remaining 77% must have a 2 hour fire- resistance rating. No rating is proposed by the Applicant.

The Respondent submitted that a stand pipe and hose system is required if the building is not sprinklered.

3. **Commission Ruling:**

It is the decision of the Building Code Commission that the Primary Compost area wetting system does not provide sufficiency of compliance with the sprinklering requirements of the Building Code. The Commission further rules that upon the provision of a sprinkler system throughout the building in accordance with the Building Code requirements, the following provide sufficiency of compliance with Sentence 3.2.3.9.(2) and Article 3.4.2.5.:

0. The non-rated east exposing building face of non-combustible construction.
1. The travel distance to an exit within the Primary Compost area.

4. **Reasons:**

0. The wetting system does not comply with NFPA 13.
1. Internal subdivision of combustible material within the 8 compartmentized channels separated by 3 m high, 300 mm thick concrete walls contains potential fire spread and provides protection for the east exterior wall.
2. The compost material is wetted at 50% moisture content by weight at all times by a wetting system in the primary area.
3. Limited occupant load (i.e. 2 staff present only).
4. Exit travel time study indicates 1.3 minutes.

Dated at Toronto, this 5th day, in the month of October, in the year 1995, for application number 1995-46.

BCC Ruling No. 95-45-465

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-45-465

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.3.2.5.(1)(a) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 355/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Ken Mann, Superintendent of Business and Finance, Bruce County Board of Education for the resolution of a dispute with Mr. Dan Finlay, Chief Building Official, Township of Amabel, concerning whether a central open area of the corridor system that includes a recessed hexagon pit with fixed benches is required to be separated from the aisle space that surrounds all 6 sides by a 45 minute fire separation, at the Amabel-Sauble Community School, 555 Sauble Falls Pkwy, Sauble Beach, Ontario.

APPLICANT

The Bruce County Board of Education
Chesley, Ontario

RESPONDENT

Mr. Dan Finlay
Chief Building Official
Township of Amabel

PANEL

Mr. Roy Philippe, Chair
Mr. Sang Shim
Ms. Lesia Beznaczuk

PLACE

Toronto, Ontario

DATE OF RULING

October 5th, 1995

APPEARANCES

Mr. Donald White, Architect
Erdmann W. Knaack, Architect
For the Applicant

Mr. Dan Finlay
Chief Building Official
Township of Amabel
The Respondent

RULING

1. **The Applicant**

   The Bruce County Board of Education is the holder of a permit under the Building Code Act, 1992 to construct a new school (i.e. Amabel-Sauble Community School) at 555 Sauble Falls Parkway, Sauble Beach, Ontario.

2. **Description of Constrution**

   The Amabel-Sauble Community School is a one storey assembly occupancy (i.e. Group A, Division 2) that is provided with a fire alarm system.

   The building contains a two hour fire wall that divides the school into building areas of 1764 m? and 1994 m? respectively.

   The school has a central open pit area in the corridor system. This area consists of a recessed hexagon pit with three risers from the top to the bottom. At the edge of the pit on the level of the corridor fixed benches are to be installed.

   The fixed benches do not reduce the required unobstructed width of the corridor. The fixed benches are intended to provide seating for short periods of time for the students or staff congregating between classes, at recess or lunch hour.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Clause 3.3.2.5.(1)(a) of the Building Code. At issue is whether a central open area of the corridor system that includes a recessed hexagon pit with fixed benches is required to be separated from the aisle space that surrounds all 6 sides by a 45 minute fire separation.

4. **Provision of the Building Code**

Clause 3.3.2.5.(1)(a) Corridors

1. Corridors used by the public in assembly occupancies as access to exits shall be separated from the remainder of the building by a fire separation having a fire-resistance rating of not less than 1 h, except that
    a. the fire-resistance rating need not be more than 45 min if the fire-resistance rating of the floor assembly is not required to be more than 45 min

5. **Applicant's Position**

There is a central open area of the corridor system that has a recessed hexagon pit surrounded by fixed benches with access aisles spaces on all six sides.

The Applicant submitted that the fixed benches in this central pit area provide seating for short periods of time for students and/or staff congregating between classes, at recess or lunch hour. These benches do not reduce the required unobstructed width of the corridor (i.e. 10 feet wide corridor is maintained around all six sides of the pit benches). The Respondent also submitted that the benches act as a safety barrier to the three steps into the pit which would be a potential hazard if the benches were removed.

The Applicant submitted that the Bruce County Board of Education wishes to have the fixed benches included in the construction of the pit area without a 45 minute fire separation between the pit area and the corridor.

6. **Chief Building Officials Position**

The Respondent submitted that the pit area is being designed as an assembly area with the provision of fixed benches. As this is part of the corridor system of the school, no other occupancy is allowed. The pit area shall be enclosed by a 45 minute fire separation, with doors having self-closing devices.

The Respondent submitted that an alternative would be to remove the fixed benches from this area.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that the central open area of the corridor system that includes a recessed hexagon pit with fixed benches provides sufficiency of compliance with the requirements of the Building Code as this space is not considered an assembly occupancy, subject to the following conditions:

   1. The open pit area is used as a temporary overflow space only (i.e. students and/or staff congregating between classes, at recess or lunch hour).
   2. No furniture or furnishings are permitted to be used in this area.

8. **Reasons:**
   1. The required exit width is not reduced by the open pit area.
   2. The travel distance from the open pit to the exits meets the Building Code requirements.
   3. The design intent is that this open area forms part of the corridor system, and is not intended for use as an assembly occupancy.

Dated at Toronto, this 5th day, in the month of October, in the year 1995, for application number 1995-43.

BCC Ruling No. 95-44-464

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-44-464

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 6.2.2.6. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Daniel Chew, Chairman/Elder, Calvary Bible-Presbyterian Church for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, concerning whether the residential cook top stove and exhaust system used once a month for cooking classes, where the products are precooked provides sufficiency of compliance with Article 6.2.2.6. of the Building Code, at 3065 Ridgeway Drive, Mississauga, Ontario.

APPLICANT

Calvary Bible-Presbyterian Church
Mississauga, Ontario

RESPONDENT

Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL

Mr. Roy Philippe, Chair
Mr. Sang Shim
Ms. Lesia Beznaczuk

PLACE

Toronto, Ontario

DATE OF RULING

October 5th, 1995

APPEARANCES

Ms. Christina Kokosky, Architect
Christina Kokosky Architect
For the Applicant

Mr. Greg Phelps, Acting Chief Inspector
Fire and Emergency Services
AND
Fire and Emergency Services
Manager, Build. & Inspect.
City of Mississauga
For the Respondent

RULING

1. **The Applicant**

   Mr. Daniel Chew, Calvary Bible-Presbyterian Church is an applicant for a permit under the Building Code Act, 1992 to install a residential cook top and exhaust system in the kitchenette area of the recreation hall of the Church at 3065 Ridgeway Drive, Mississauga, Ontario.

2. **Description of Constrution**

   The subject Church includes an area where household cooking equipment will been installed for the purpose of conducting cooking demonstrations. The stove will also be used for warming foods, and coffee and tea preparation. Commercial type cooking will not be permitted.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 6.2.2.6. of the Building Code. At issue is whether the requirements of NFPA-96, "Installation of Equipment for the Removal of Smoke and Grease-Laden Vapours from Commercial Cooking Equipment" need be applied to the residential cooking equipment being used for the purpose of conducting cooking demonstrations.

4. **Provision of the Building Code**

Article 6.2.2.6. Commercial Cooking Equipment

Systems for the ventilation of restaurant and other commercial cooking equipment shall be designed, constructed and installed to conform to NFPA-96, "Installation of Equipment for the Removal of Smoke and Grease-Laden Vapours from Commercial Cooking Equipment", except as required by Sentences 3.5.3.1.(1) and Article 3.5.4.2.

5. **Applicant's Position**

The Applicant submitted that residential cooking equipment is being proposed for the purpose of conducting cooking demonstrations.

The Applicant submitted that the proposal to use a residential cook top and exhaust was turned down on the basis that grease laden vapours produced by the proposed use would create a hazard of significant measure to warrant the use of a commercial exhaust system employing a fire suppression system. It is the Applicant's position that the production of grease vapours would be so minimal as to render an insignificant threat to fire safety for the following reasons:

a. The maximum frequency of cooking classes would be once a month.
b. Precooked products would be used for the cooking classes.
c. The cooking process would be confined to demonstration purposes of the precooked food and for very small quantity.
d. Cooking classes would be limited to demonstration only by a qualified individual experienced in the preparation and processes involved with the particular demonstration.
e. Attendance to the classes is anticipated to be at most 20 people.
f. No commercial type cooking will be permitted.
g. Food quantities will be restricted to samples which will only be warmed on site and not prepared on site.
h. With the exception of coffee and tea preparation, cooking for assembly of people will not occur.
i. A sign will be posted restricting cooking to: demonstration purposes of precooked food only, warming foods, coffee and tea preparation.

6. **Chief Building Officials Position**

The Respondent submitted that the installation of cooking for the preparation of meals in industrial, commercial or institutional applications requires an exhaust system designed in conformance with NFPA-96.

The Respondent submitted that there have been many formal interpretations issued by the National Fire Protection Association (NFPA) to clarify the scope of NFPA-96. These interpretations confirm that NFPA-96 is applicable to these types of installations and that the Authority Having Jurisdiction should be consulted.

The Respondent also submitted that in similar circumstances over the years it has been found that, once installed, demand as well as the variety of food preparation increases generating a more significant hazard.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the residential cook top and exhaust system shows sufficiency of compliance with the Building Code provided that:

1. No commercial type cooking is permitted.
2. No more than 20 people are present within the demonstration area at any one time.
3. Use of the stove is restricted to occasional cooking demonstration only attended by trained personnel at all times.
4. A sign will be posted restricting cooking to demonstration purposes of precooked food only warming foods, coffee and tea preparation.
5. Demonstrations are carried out by persons trained in the use of the cooking equipment and fire extinguishers.
6. Fire extinguishers must be located where clearly visible.
7. The stove will be electric.
8. No other stoves or cooking ovens are permitted within the demonstration area.
9. The sprinkler protection in the area must be maintained.

8. **Reasons:**

0. The stove is a residential - type stove.
1. Limited smoke or grease-laden vapours will be produced by the preparation of meals.
2. Cooking is for demonstrations only and is not continuous as in most commercial applications.
3. Only trained personnel will operate the equipment.
4. The area is sprinklered and portable extinguishers will be provided.

Dated at Toronto, this 5th day, in the month of October, in the year 1995, for application number 1995-38.

BCC Ruling No. 95-43-463

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-43-463

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.3.1. of Revised Regulation of Ontario 1990,Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Nick Sampogna, 928773 Ontario Ltd. for the resolution of a dispute with Mr. Bernie Roth, Chief Building Official, City of Scarborough concerning whether extending the limiting distance required for the west exposing building face onto an adjoining parcel of vacant land to permit the use of unprotected window openings will provide sufficiency of compliance with Article 3.2.3.1. of the Ontario Building Code, at Glen Park Co-Operative Inc., 2495 Eglinton Avenue East, Scarborough, Ontario.

APPLICANT

Mr. Nick Sampogna, President
928773 Ontario Ltd.

RESPONDENT

Mr. Bernie Roth
Chief Building Official
City of Scarborough

PANEL

Roy Philippe, Chair
Michael Lio
Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

September 19, 1995

APPEARANCES

Mr. Stephen Bernatt, Architect
Stephen Bernatt Architect
For the Applicant

Mr. Vish Bhapkar
Manager, Architectural/Structural
City of Scarborough
The Respondent

RULING

1. **The Applicant**

   Mr. Nick Sampogna, 928773 Ontario Inc., is the holder of a permit under the Building Code Act, 1992 to construct a 9 storey building comprising retail commercial occupancy on the ground floor and residential occupancy on the 2nd to 9th floors, at Glen Park Co-Operative Inc., 2495 Eglinton Avenue East, Scarborough, Ontario.

2. **Description of Constrution**

   The project is a 9 storey building comprising retail commercial occupancy on the ground floor and residential occupancy on the 2nd to 9th floors .

   The west exposing building face of the building has a limiting distance of 2050 mm for the first storey (Group E - Retail) and 50 mm for the upper storeys (Group C - Residential).

   A building permit was granted for the subject building on the basis that a Building Materials Evaluation Commission (BMEC) approved Window Sprinkler System would be used on the west exposing building face.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical interpretation of Article 3.2.3.1. of the Building Code. At issue is whether the limiting

distance required for the west exposing building face may be extended onto an adjoining parcel of vacant land to permit the use of unprotected window openings.

4. **Provision of the Building Code**

Subsection 3.2.3. Spatial Separation and Exposure Protection of Buildings

Article 3.2.3.1. Limiting Distance and Area of Unprotected Openings

1. Except as provided in Articles 3.2.3.9. to 3.2.3.11, the area of unprotected openings shall not be more than that set forth in Tables 3.2.3.A. or 3.2.3.B. for the limiting distance applicable to the exposing building face under consideration.
2. The area of the unprotected openings in an exposing building face shall be the aggregate area of unprotected openings expressed as a percentage of the area of the exposing building face in Tables 3.2.3.A. and 3.2.3.B.(Sentence 3.2.3.2.(1).)
3. For the purposes of determining the type of construction and cladding and the fire-resistance rating of an exterior wall, the exposing building face shall be taken as the projection of the exterior wall onto a vertical plane located so that no portion of the exterior wall of the building or of a fire compartment, if the fire compartment complies with the requirements of Sentence 3.2.3.2.(1), is between the vertical plane and the line to which the limiting distance is measured and, for these purposes, the area of unprotected openings shall be determined from Table 3.2.3.A. or Table 3.2.3.B.
4. For the purposes of determining the actual percentage of unprotected openings permitted in an exterior wall, the location of the exposing building face is permitted to be taken at a vertical plane located so that there are no unprotected openings between the vertical plane and the line to which the limiting distance is measured.
5. Where fire fighting facilities cannot reach the building within 10 min of the alarm being received, the limiting distance shall be doubled.

5. **Applicant's Position**

The Applicant submitted that there is an open space to the west of the subject property that establishes sufficient distance from adjacent townhouses to permit unprotected window openings in the nine storey building.

The Applicant proposed to use the adjoining property to increase the limiting distance from the west exposing building face.

6. **Chief Building Officials Position**

   The Respondent submitted that a building permit was issued on the basis of a Building Materials Evaluation Commission (BMEC) approved Window Sprinkler System being used for the window openings in the west exposed building face. The applicant is now proposing to delete this system and use an adjoining property to increase the limiting distance, since at the present time this parcel of land is vacant.

   The Respondent does not agree with the Applicants proposal since the definition of limiting distance requires the distance to be measured to the property line (not to infringe on adjoining property owners rights). The Respondent submitted that when a building permit application is processed, the Building Code is applied to the building under that application. The Building Code cannot control what is or is likely to be built on adjoining land in the future. The adjoining owner has the right to measure the limiting distance to the property line and construct any future building accordingly.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that not providing protected window openings on the west building face does not comply with the requirements of the Building Code.

8. **Reason:**

   No evidence was provided that the adjacent property owner was prepared to enter into an agreement with the applicant, registering on title of both properties the existing spatial separation between buildings and thereby allowing the spatial separation to be calculated as if the buildings were constructed on the same property.

Dated at Toronto, this 19th day, in the month of September, in the year 1995, for application number 1995-39.

BCC Ruling No. 95-42-462

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-42-462

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.2.44. of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Jim Vecia, Roseland Foods for the resolution of a dispute with Mr. Dan Mousseau, Chief Building Official, City of Burlington concerning whether not providing a sprinkler system for the addition to one of 6 units in an existing unsprinklered mercantile strip plaza will provide sufficiency of compliance with Article 3.2.2.44. of the Ontario Building Code, at Roseland Foods, 3015 New St., Burlington, Ontario.

APPLICANT

Mr. Jim Vecia, Owner
Roseland Foods

RESPONDENT

Mr. Dan Mousseau
Chief Building Official
City of Burlington

PANEL

Roy Philippe, Chair
Michael Lio
Michael Steele

PLACE

Toronto, Ontario

DATE OF RULING

September 19, 1995

APPEARANCES

Mr. Nick DeFilippis, President
DeFilippis Design
For the Applicant

Mr. Donald Intini
Building Technologist
City of Burlington
The Respondent

RULING

1. **The Applicant**

   Mr. Jim Vecia, Roseland Foods is the holder of a permit under the Building Code Act,1992 to construct a 81 m² (871.9 ft²) addition to a 507.1 m² (5458.6 ft²) suite in an existing strip plaza at, Roseland Foods, 3015 New St., Burlington, Ontario.

2. **Description of Constrution**

   The subject building is a one storey unsprinklered combustible mercantile strip plaza that contains 6 suites located between two existing fire walls.

   The building area (i.e. between existing firewalls) is 1710 m² (18406.9 ft²). The construction of an unsprinklered 81 m² (871.9 ft²) storage addition is proposed for the 507.1 m² (5458.6 ft²) Roseland Foods suite.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical interpretation of Article 3.2.2.44. of the Building Code. At issue is whether not providing a sprinkler system for the addition to one of 6 units in an existing unsprinklered mercantile strip plaza will provide sufficiency of compliance with Article 3.2.2.44. of the Ontario Building Code

4. **Provision of the Building Code**

Article 3.2.2.44. Mercantile Buildings, up to 3 Storeys

1. A building classified as Group E shall conform to Sentence (2) provided the building
   a. is not more than 3 storeys in building height, and
   b. has a building area not more than the value in Table 3.2.2.M.
2. The building shall be of combustible or noncombustible construction used either singly or in combination, and
   a. floor assemblies shall be fire separations with a fire-resistance rating of not less than 45 min,
   b. mezzanines shall have, if of combustible construction, a fire-resistance rating of not less than 45 min,
   c. roof assemblies shall have a fire resistance rating of not less than 45 min,except that in buildings not more than 1 storey in building height, the fire-resistance rating is permitted to be waived provided the roof assembly is of noncombustible construction or is constructed as a fire-retardant treated wood roof system conforming to Article 3.1.14.1., and
      i. if unsprinklered, the building area is not more than 1 500 m² (16,100 ft²), and
      ii. if sprinklered, the building area is not more than
      iii. 2 400 m² (25,800 ft²) if facing 1 street,
      iv. 3 000 m² (32,300 ft²) if facing 2 streets, or
      v. 3 600 m² (38,800 ft²) if facing 3 streets,
   d. all loadbearing walls, columns and arches supporting an assembly required to have a fire-resistance rating shall have a fire-resistance rating of not less than 45 min or shall be of noncombustible construction, except that such

      members and assemblies supporting a fire separation shall have a fire-resistance rating not less than that required for supported assembly.

5. **Applicant's Position**

The Applicant submitted that the requirements to sprinkler the new proposed addition are excessive and should not be required since the existing building construction does not conform to Article 3.2.2.44. of the Building Code.

The Applicant also submitted that creating a smaller building area by constructing a firewall between the existing suite (i.e. Roseland Foods) and the proposed addition is not feasible.

6. **Chief Building Officials Position**

   The Respondent submitted that the Building Code requirement for a sprinkler system is quite clear. Also, the Building Code does not provide any exception to the requirements for a sprinkler system in this case.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that not providing a sprinkler system in the addition to one of six units in the existing unsprinklered mercantile strip plaza will provide sufficiency of compliance with Article 3.2.2.44. of the Building Code provided that the addition is separated from the existing building by a 2 hour fire separation.

8. **Reasons:**
   1. The addition is only 81 m² or approx. 5% of the building area.
   2. Access is provided for fire-fighting purposes to 2 faces of the building.
   3. Existing occupancies are separated by 200 mm (8") concrete block party walls.

Dated at Toronto, this 19th day, in the month of September, in the year 1995, for application number 1995-40.

BCC Ruling No. 95-41-461

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-41-461

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 9.32.3.1. of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Orchardview Village Inc., Grimsby for the resolution of a dispute with Mr. John Schonewille, Chief Building Official, Town of Grimsby concerning whether the dwelling units should be categorized as "Type III" which requires the mechanical ventilation system to be designed under Part 6 of the Building Code, at Orchardview Townhomes, 165 Mainstreet East, Grimsby, Ontario.

APPLICANT

Orchardview Village Inc.

RESPONDENT

Mr. John Schonewille
Chief Building Official
Town of Grimsby

PANEL

Roy Philippe, Chair
Michael Lio
Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

August 22, 1995

APPEARANCES

Mr. Gerry Brogan, President
Rescom Air Systems
For the Applicant

Mr. John Schonewille
Chief Building Official
Town of Grimsby
The Respondent

RULING

1. **The Applicant**

   Orchardview Village Inc. is the holder of a permit under the Building Code Act, 1992 to construct a 16 unit residential townhouse condominium, at Orchardview Townhomes, 165 Main Street East, Grimsby, Ontario.

2. **Description of Constrution**

   The building under dispute is a 16 unit townhouse condominium with self-contained heating and mechanical ventilation systems. Each unit has a fan assisted combustion gas furnace utilizing a Type "B" vent assembly and a direct vent water heater.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical interpretation of Article 9.32.3.1. of the Building Code. At issue is whether the dwelling units should be categorized as "Type III" which requires the mechanical ventilation system to be designed under Part 6 of the Building Code.

4. **Provision of the Building Code**

   Article 9.32.3.1. General

   1. For the purposes of this Subsection a non-solid fuel-fired appliance shall be classified as

a. direct vented whereby the combustion air is supplied directly from the outdoors to the combustion chamber via a sealed passageway, and the products of combustion are exhausted directly outdoors through an independent sealed vent,
b. mechanically vented induced draft whereby combustion air is supplied from within the building envelope and the products of combustion are positively conveyed to the outdoors by means of a dedicated sealed vent, or
c. atural draft whereby combustion air is supplied from within the building envelope and the products of combustion are conveyed to the outdoors through a chimney or Type B vent.

2. For the purposes of this Subsection a dwelling unit shall be categorized as
   a. Type I when
      i. all fuel-fired combustion appliances located in the dwelling unit are direct vented or except for fireplaces, are mechanically vented induced draft, and
      ii. the dwelling unit does not contain a solid fuel- fired combustion appliance,
   b. Type II when a solid fuel-fired combustion appliance is installed in a Type I dwelling unit,
   c. Type III when a mechanically vented induced draft non- solid fuel-fired fire-place or a natural draft appliance is present, or
   d. Type IV when electric space heating is present.

5. **Applicant's Position**

The Applicant submitted that the initial submission for a permit was for a mid efficient furnace with sidewall venting and a direct vent water heater. During 1994 the use of sidewall vent material was discontinued because of problems. At additional expense the builder elected to use a Type "B" vent system for the furnace and still keep the direct vent water heater. The Applicant submitted that this falls within the category of a Type I house since the furnace is a positive venting induced draft type, and the hot water tank is direct vented.

The Applicant submitted that none of these appliances are classified as natural draft. The Applicant also submitted that connecting a mechanically vented induced draft furnace to a Type "B" vent does not change the furnace to a natural draft. It does not have a draft diverter which negates the possibility of spillage.

The Applicant submitted that the furnace is listed by the manufacturer with Canadian Gas Association (CGA) as Type I category using a Type "B" vent. The Applicant also submitted that

the gas utilities have verified the equipment, installation, listing, manufacturers and Code requirements.

6. **Chief Building Officials Position**

The Respondent submitted that Building Code classifies a non-solid fuel-fired furnace utilizing a Type "B" vent for conveying products of combustion as a natural draft appliance and therefore, the dwelling is categorized as Type III. The mechanical ventilation system of a Type III dwelling must be designed and installed in accordance with Part 6 of the Building Code.

The Respondent submitted that in order to determine the design criteria for a residential mechanical ventilation system the fuel-fired appliances must be classified as either direct vented, mechanically vented induced draft or natural draft as defined in Sentence 9.32.3.1.(1) of the Building Code. Once all the appliances are classified, the dwelling unit type must be categorized as per Sentence 9.32.3.1.(2). (i.e. Type I, II, III or IV).

The mechanical ventilation system shall be designed under Part 6 of the Building Code, however, in a Type I, II and IV dwelling unit, Subsection 9.32.3. may be used.

The Respondent also submitted that the furnace installation in all units at the subject property utilizes a Type "B" vent to convey the products of combustion to the outdoors. This installation classifies the furnace as a natural draft appliance based on Sentence 9.32.3.1.(1)(c). The presence of a natural draft appliance categorizes the dwelling units as Type III as per Sentence 9.32.3.1.(2)(c), therefore, the mechanical ventilation system shall be designed under Part 6 of the Building Code.

The Respondent submitted that the initial submission for a building permit was based on a mechanically vented induced draft furnace with sidewall venting and a direct vent water heater. These appliance classes would categorize the dwelling units as Type I and permit a Part 9 mechanical ventilation design. The contractor took the liberty of changing this installation to one incorporating a Type "B" vent without prior written authorization of the Chief Building Official.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the dwelling units are categorized as Type III dwellings as defined in Article 9.32.3.1. of the Building Code which requires the mechanical ventilation system to be designed under Part 6 of the Building Code.

8. **Reason:**

   The installed Type "B" vent is not considered a dedicated sealed vent that positively conveys products of combustion to the outdoors.

Dated at Toronto, this 22th day, in the month of August, in the year 1995, for application number 1995-37.

BCC Ruling No. 95-40-460

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-40-460

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.9.1. of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Peter Clewes, Wallman, Clewes, Bergman Architects Ltd. for the resolution of a dispute with Mr. John Wright, Chief Building Official, Town of Markham concerning whether providing a standpipe and hose system for the two basement levels only and not throughout the two storey building will provide sufficiency of compliance with the technical interpretation of Article 3.2.9.1. of the Building Code, at the Pacific Mall, 4300 Steeles Avenue East, Markham, Ontario.

APPLICANT

Wallman, Clewes, Bergman Architects Ltd.

RESPONDENT

Mr. John Wright
Chief Building Official
Town of Markham

PANEL

Roy Philippe, Chair
Michael Lio
Demir Delen

PLACE

Toronto, Ontario

DATE OF RULING

August 22, 1995

APPEARANCES

Mr. David Syrett, Associate
Leber/Rubes Inc.
For the Applicant

Mr. Chris Bird, Manager
Plans Review
Town of Markham
For the Respondent

RULING

1. **The Applicant**

   Mr. Peter Clewes, Wallman, Clewes, Bergman Architect Ltd. is an applicant for a permit under the Building Code Act, 1992 to construct a two storey mixed use commercial building at 4300 Steeles Avenue East, Markham, Ontario.

2. **Description of Constrution**

   The applicant is proposing to construct a two storey mixed use commercial building. The proposed building has a building area of 15,600 m². The main and second floors will be interconnected. The main floor will contain a market style retail layout and the 7,200 m² second floor will contain restaurants. The two basement levels will contain parking and small storage and service rooms.

   Each unit on the main floor will face a circulation aisle either 3 m or 5 m wide and at least one 2-1/2 m cross aisle, with no fire separation between units nor between units and circulation and cross aisles (i.e. similar to a department store). Each unit location has been sold as a condominium.

   Partitions between units will range from 2.4 to 3 m in height. A security grill will be provided between units and circulation aisles permitting a view into units after business hours. The top of the unit will either be open or have an egg-crate type ceiling.

   The entire building perimeter will face fire access routes, although the Building Code requires only 50 percent of this building perimeter to face a fire route.

The fully sprinklered building will have a fire alarm and detection system, emergency lighting system, and smoke exhaust system for the ground floor. The fire alarm system will be monitored by an independent central station. The sprinkler system will be designed to function as part of the required fire detection system. A standpipe and hose system is proposed for the two basement levels.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical interpretation of Article 3.2.9.1. of the Building Code. At issue is the installation of a standpipe and hose system in the two basement levels only and not throughout the two storey building.

4. **Provision of the Building Code**

Article 3.2.9.1. Requirement for Standpipe and Hose Systems

Except as provided in Article 3.2.9.2., a standpipe and hose system shall be installed in every building that:

a. is more than
   i. 3 storeys in building height, or
   ii. 14 m in height measured between grade and the ceiling of the uppermost storey,
b. is greater in building area than the area shown in Table 3.2.9.A. for the applicable building height shown in the Table where the building
   i. is not sprinklered, and
   ii. is not more than 14 m high measured between grade and the ceiling of the top storey, or
c. contains more than one storey below grade.

5. **Applicant's Position**

The Applicant submitted that Subclause 3.2.9.1.(1)(b)(ii) of the 1990 edition of the Building Code (O.Reg. 413/90) requires a standpipe and hose system in every basement of a building that has more than one storey below grade. Based on the 1990 Building Code, a standpipe system would only be required in the two basement levels of the building.

The Applicant submitted that Clause 3.2.9.1.(1)(c) of the 1993 Building Code (O.Reg. 158/93) requires a standpipe and hose system to be installed in every building that contains more than one storey below grade. Based on the 1993 Building Code, a standpipe and hose system would be required throughout the proposed building.

The Applicant submitted a letter dated February 3, 1994 by the Housing Development and Building Branch, Ministry of Housing that clarifies the interpretation of Article 3.2.9.1. with respect to the requirements of a standpipe and hose system in the basement. The Ministry confirmed that the wording in the Article 3.2.9.1. of the current edition was an oversight they intended to correct in the next edition of the Code. Also, the Applicant submitted that the Office of the Fire Marshall of Ontario agreed with this interpretation and has no objection to the original wording being reinstated. Therefore, the Respondent maintained that it was never the Code writers intention that a standpipe and hose system be installed in storeys above grade as a result of being required below grade.

The Applicant submitted that despite the wording in the current edition of the Building Code, a standpipe and hose system should not be required for the first and second storeys of the fully sprinklered two storey building.

6. **Chief Building Officials Position**

The Respondent submitted that the language of the Building Code is quite clear. Clause 3.2.9.1.(1)(c) states that a standpipe and hose is required for every building that contains more than one storey below grade. Since the Pacific Mall building contains more than one storey below grade, a standpipe and hose system must be provided throughout the entire building.

The Respondent also submitted that the Pacific Mall building was the subject of a previous Building Code Commission Hearing. It is not clear what value if any, was placed on the existence of a standpipe and hose system in leading the Commission to decision # 94-14-392 rendered on May 31, 1994.

The Respondent submitted that in the aforementioned Ruling the Commission permitted the retail floor areas to remain open and uninterrupted by fire separations presumably on the basis of the floor area being sprinklered and for the reasons given. The Fire Department has serious concerns about their ability to be able to control and fight a fire within such a large open area (202 m by 93 m) with high ceilings (up to 10 m) and no internal means of connecting hoses. As a result of this concern, the Fire Department inserted a clause in the site plan agreement, executed

by the owner (Pacific Mall Developments Inc.) and the Town of Markham, to provide a standpipe and hose system throughout the building. Through this agreement the owner agreed to provide such a system.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that providing a standpipe and hose system for the two basement levels only provides sufficiency of compliance with Article 3.2.9.1. of the Building Code.

8. **Reason:**

   The Housing Development and Buildings Branch, Ministry of Municipal Affairs and Housing confirmed that the present wording in Article 3.2.9.1. of the Building Code is an editorial oversight and will be corrected to reflect the wording in Article 3.2.9.1. of the Revised Regulation of Ontario 1990, Regulation 61.

Dated at Toronto, this 24th day, in the month of August, in the year 1995, for application number 1995-34.

BCC Ruling No. 95-39-459

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-39-459

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Articles 3.4.2.1. & 3.4.4.1. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Don Duncan, C.E.O., Guelph YMCA-YWCA for the resolution of a dispute with Mr. Bruce Poole, Chief Building Official, City of Guelph, concerning whether the means of egress from the gymnasium and exercise space provides sufficiency of compliance with the Building Code, Re: Article 3.4.2.1., Minimum Number of Exits; and, Article 3.4.4.1., Fire-Resistance Rating of Exit Separations, at 130 Woodland Glen Drive, Guelph, Ontario.

APPLICANT

Guelph YMCA-YWCA
Guelph, Ontario

RESPONDENT

Mr. Bruce Poole
Chief Building Official
City of Guelph

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

August 3rd, 1995

APPEARANCES

Mr. David McAuley, Architect
J. David McAuley Architect Inc.
AND
Brian McCulloch, Associate
James Fryett Architect
Guelph, Ontario
For the Applicant

Mr. Robert Reynen
Senior Building Inspector
AND
Mr. Bradley S. Coutts, City Prosecutor
City of Guelph
For the Respondent

RULING

1. **The Applicant**

   Mr. Don Duncan, C.E.O., Guelph YMCA-YWCA is the holder of a permit under the Building Code Act, 1992 to construct a YMCA-YWCA comprising a childcare area, recreation area and gymnasium with an interconnected floor space at 130 Woodland Glen Drive., Guelph, Ontario.

2. **Description of Constrution**

   The portion of the project subject to the dispute is a basement gymnasium with an interconnected floor space at ground level. The second floor (i.e. ground level) is one large open exercise area that is interconnected with the gymnasium below.

   The space is sprinklered and has direct exit to grade from the upper (ground) floor level and lower (basement) floor level. It also has two open stairs between the floor levels (one at each end).

3. **Dispute**

The dispute between the Applicant and Respondent concerns whether the means of egress from the gymnasium and exercise space provides sufficiency of compliance with the Building Code. At issue is whether the an open stair between the floor areas may be used as an exit.

4. **Provision of the Building Code**

Article 3.4.2.1. Minimum Number of Exits

1. Except as provided in Sentences (2) to (4), and (6), every floor area as regulated in Article 3.4.1.1. shall be served by not less than 2 exits.
2. In building not more than 2 storeys in building height, a floor area is permitted to be served by one exit provided the floor area and travel distance requirements conform to Table 3.4.2.A. and the total occupant load served by the exit is not more than 60.
3. Except as provided in Sentence (4), where a single exit is permitted in Sentence (2) from a floor area classified as Group B or Group C occupancy, the exit shall be an exterior doorway not more than 1.5 m (4 ft 11 in) above adjacent ground level.
4. A floor area containing only dwelling units having access to exit conforming to Sentences 3.3.4.4.(1) to (4) need not comply with Sentence (1).
5. Exits are not required directly from roof top-enclosures that are provided with access to exit in conformance with Sentences 3.3.1.3.(5) and (6).
6. Every room containing an assembly occupancy serving a hotel, and located in the building containing the hotel, shall be provided with not less than
    a. 3 separate egress doorways from the room where the occupant load is more than 600 persons, and
    b. 4 separate egress doorways from the room where the occupant load is more than 1000 persons.
7. Each egress doorway in Sentence (6) shall be considered as contributing not more than
    a. one third of the required width where 3 egress doorways are required, and
    b. one fourth of the required width where 4 egress doorways are required.

Article 3.4.4.1. Fire-Resistance Rating of Exit Separations

8. Except as provided in Article 3.4.4.3. and Sentences (2), 3.3.5.5.(3) and 3.4.4.2.(2), every exit shall be separated from each adjacent floor area by a fire- separation having a fire-resistance rating not less than that required for the floor assembly above the floor area and, where there is no floor assembly above, not less than that required by Subsection

3.2.2. for the floor assembly below, but in no case shall the fire-resistance rating be less than 45 min.

9. The fire-resistance rating of the fire separation in Sentence (1) need not be more than 2 h.
10. Where an exit stair in an assembly hall or theatre serves more than one balcony level, the exit stair shall be separated from the remainder of the building in conformance with Sentence (1).

5. **Applicant's Position**

The Applicant submitted that the gymnasium and overlooking exercise equipment area is one large open floor space that is supervised by staff. The floor levels are completely open separated only by railings.

The Applicant also submitted that the Building Department is asking for an exit stair with a fire separation and an additional exterior door. This would obstruct supervision and provide security concerns. The Applicant submitted that adequate means of egress are provided via the two interconnecting stairs between the floor levels.

6. **Chief Building Officials Position**

The Respondent submitted that the gymnasium is located in the basement floor area. Article 3.4.2.1. requires every floor area to be served by not less than 2 exits except for exemptions with respect to size of floor area, travel distance, and maximum occupant load.

The Respondent submitted that the basement floor area is 733 m², exceeds 15 m travel distance, and has an occupant load exceeding 60 persons. Therefore two exits are required.

The Respondent submitted that Article 3.4.4.1. requires an exit to be separated from each of the floor areas with a ½ hr rated fire separation.

The Respondent also submitted that the reason for non-acceptance of the Applicant's proposal is that it does not comply with the Building Code.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the current exit design from the basement gymnasium does not provide sufficiency of compliance with Article 3.4.2.1. and Article 3.4.4.1. of the Building Code.

8. **Reasons:**
    1. The floor area of the basement gymnasium required that a minimum of 2 exits must be provided.
    2. If any exit is required through the first floor, the exit from the basement gymnasium must be separated by fire separation as required by Article 3.4.4.1.

Dated at Toronto, this 3rd day, in the month of August, in the year 1995, for application number 1995-36.

BCC Ruling No. 95-38-458

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-38-458

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 4.3.6.1., Article 3.2.2.44., and Sentences 3.2.2.12.(1) and 3.2.5.13.(1) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by the Wellington County Roman Catholic Separate School Board for the resolution of a dispute with Mr. Bruce Poole, Chief Building Official, City of Guelph, concerning the following two issues: (1) whether the glass on the roof of a greenhouse addition must comply with CAN\CGSB-12.20-M, "Structural Design of Glass for Buildings" in accordance with Article 4.3.6.1. of the Building Code; and (2) whether a sprinkler system is required in a greenhouse addition to an existing mercantile occupancy in accordance with Article 3.2.2.44. and Sentences 3.2.2.12.(1) and 3.2.5.13.(1) of the Building Code, at 265 Edinburgh Road North, Guelph, Ontario.

APPLICANT

Wellington County
Roman Catholic Separate School Board
Guelph, Ontario

RESPONDENT

Mr. Bruce Poole
Chief Building Official
City of Guelph

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

August 3rd, 1995

APPEARANCES

Mr. Earl Reinink
AND
Mr. Evert H. Langendoen
Westbrook Greenhouse Systems Ltd.
Grimsby, Ontario
For the Applicant

Mr. Robert Reynen
Senior Building Inspector
AND
Mr. Bradley S. Coutts, City Prosecutor
City of Guelph
For the Respondent

RULING

1. **The Applicant**

   The majority of the subject building is leased by White Rose Craft and Nursery Sales Limited from the Wellington County Roman Catholic Separate School Board for retailing purposes. A building permit (No. 95-00232) has been issued under the Building Code Act, 1992 to construct a greenhouse type addition to an existing building at 265 Edinburgh Road North, Guelph, Ontario.

2. **Description of Constrution**

   The existing 3035 m² single storey masonry building contains two occupancies. White Rose Craft and Nursery Sales Limited occupies 2480 m² and the Wellington County Roman Catholic Separate School Board occupies 55 m² for the storage of maintenance equipment. The building is protected by a fire alarm and sprinklering system.

The Applicant has constructed a new unsprinklered 562 m² greenhouse addition with the gables flashed to the main building. The proposed new addition is required to be sprinklered in accordance with the NFPA-13 standard. This is based on the general Size and Occupancy requirements for fire safety regulated by Article 3.2.2.44. of the Building Code. The greenhouse is separated from the existing building by a 250 mm (10 inch) thick concrete block wall. Direct access is provided from the existing building into the greenhouse. The construction of the greenhouse provides complete ease of egress from the greenhouse in the event of a fire. The greenhouse has a tempered glass roof and except for three 12' sections, there are no permanent exterior nor interior walls.

3. **Dispute**

The dispute between the Applicant and Respondent concerns the technical interpretation of Article 4.3.6.1. of the Building Code, and sufficiency of compliance with the technical interpretation of Article 3.2.2.44. and Sentences 3.2.2.12.(1) and 3.2.5.13.(1) of the Building Code. At issue is the determination of the following two matters: (1) whether the glass on the greenhouse roof must comply with CAN\CGSB-12.20-M, "Structural Design of Glass for Buildings"; and (2) whether a sprinkler system is required in a greenhouse addition to an existing mercantile occupancy.

4. **Provision of the Building Code**

Article 4.3.6.1. Glass

Glass shall be designed in conformance with CAN\CGSB-12.20-M, "Structural Design of Glass for Buildings".

Article 3.2.2.44. Mercantile Buildings, up to 3 Storeys

1. A building classified as Group E shall conform to Sentence (2) provided the building
    a. is not more than 3 storeys in building height, and
    b. has a building area not more than the value in Table 3.2.2.M.
2. The building shall be of combustible or noncombustible construction used either singly or in combination, and
    a. floor assemblies shall be fire separations with a fire-resistance rating of not less than 45 min,

b. mezzanines shall have, if of combustible construction, a fire-resistance rating of not less than 45 min,
c. roof assemblies shall have a fire resistance rating of not less than 45 min, except that in buildings not more than 1 storey in building height, the fire- resistance rating is permitted to be waived provided the roof assembly is of noncombustible construction or is constructed as a fire-retardant treated wood roof system conforming to Article 3.1.14.1., and
    i. if unsprinklered, the building area is not more than 1 500 m² (16,100 ft²), and
    ii. if sprinklered, the building area is not more than 2 400 m² (25,800 ft²) if facing 1 street, 3 000 m? (32,300 ft²) if facing 2 streets, or 3 600 m² (38,800 ft²) if facing 3 streets,
d. all loadbearing walls, columns and arches supporting an assembly required to have a fire-resistance rating shall have a fire-resistance rating of not less than 45 min or shall be of noncombustible construction, except that such members and assemblies supporting a fire separation shall have a fire-resistance rating not less than that required for supported assembly.

Sentence 3.2.2.12.(1) Sprinklers in Lieu of Roof Rating

3. The requirements in Articles 3.2.2.16. to 3.2.2.62. for roof assemblies to have a fire-resistance rating are permitted to be waived provided
    a. the building is sprinklered,
    b. the sprinkler system in Clause (a) is electrically supervised in conformance with Sentence 3.2.4.16.(5), and
    c. the operation of the sprinkler system in Clause (a) will cause a signal to be transmitted to the fire department in conformance with Sentence 3.2.4.7.(3).

Sentence 3.2.5.13.(1) Automatic Sprinkler System

4. Except as provided in Sentences (2) and (3), where a sprinkler system is required, it shall be designed, constructed, installed and tested in conformance with NFPA 13, "Installation of Sprinkler Systems".

5. **Applicant's Position**

The Applicant submitted that Appendix A of CAN\CGSB-12.20-M references the Commentary on Glass Design in Chapter 4 of the Supplement to the National Building Code 1990. The

commentary states that "Where special circumstances such as sloped or overhead glazing give rise to unusual hazards, such as increased risk of injury to occupants of the general public, the provision of safety glass may be required." The Applicant stated that it always accepted this as a requirement, thus the glass installed on this project is 4 mm tempered glass (e.g. manufactured labelled safety glass). The Applicant submitted that CAN\CGSB-12.20-M does not cover greenhouses. The subject Standard states that it is not intended to be used for glass employed in greenhouses. The Applicant further submitted that there is much precedence for this by the acceptance of similar projects by other building departments throughout the Province. The Applicant submitted that the requirement to sprinkler the greenhouse is excessive and should not be required in this instance for the following reasons:

1. The main building is fully sprinklered in compliance with the Building Code.
2. The greenhouse is accessory and subordinate to the Occupant's main use and the volume of people will be far less than in the main building.
3. The building/greenhouse arrangement was not contemplated when the subject Building Code regulation was being developed.
4. The purpose of the greenhouse is to provide an area of protective covering for plants and therefore the goods offered for sale to the public are non-combustible.
5. The nature of the greenhouse construction allows complete ease of access/egress to the public in the event the need to exit the greenhouse should ever arise.
6. The greenhouse is composed of a tempered glass roof. Except for three 12'- 0' sections, there are no permanent exterior nor interior walls.
7. The structure will not be used year round. Sprinkler or any other systems will be frozen over the winter months and will be affected by the elements.

6. **Chief Building Officials Position**

The Respondent submitted that Article 4.3.6.1. of the Building Code requires compliance with CAN/CGSB-12.20-M89. The Standard requires protection for the public such as laminated glass, wired glass or other measures. The Supplement of the National Building Code also requires safety glass for public protection. The Respondent submitted that the reason for not accepting the Applicant's proposal is that the CAN/CGSB-12.20-M89 Standard only exempts greenhouses not occupied by the public. This facility is used as a retail area and may have a high occupant load. The Respondent addressed the requirement to sprinkler the greenhouse addition as follows:

1. The building is required to be sprinklered in conformance Article 3.2.2.44. The greenhouse is an extension of the main building and therefore must be sprinklered due to

the total building area and the waiving of fire protection of the roof assembly as set out in Article 3.2.2.44. and Sentence 3.2.2.12.(1) respectively.

2. NFPA 13 requires sprinkler protection below noncombustible canopies that contain combustible storage.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that not providing sprinklering for the greenhouse provides sufficiency of compliance with the Building Code provided

a. an annual permit be obtained as required if the structure was temporary in nature, reconfirming its use for the display and sale of horticultural products; and
b. combustible storage be limited and considered as outdoor public storage under the Fire Code for exposure hazard.

It is also the decision of the Building Code Commission that the tempered glass used on the sloping roof does not provide sufficiency of compliance with the Building Code.

8. **Reasons:**

0. The unheated structure is used seasonally.
1. The structure is non-combustible construction.
2. The unenclosed greenhouse provides unlimited means of egress.
3. The existing building is sprinklered and is separated from the greenhouse by masonry walls.
4. Fire-spread through unprotected openings is addressed through the combustible storage provisions of the Fire Code.
5. The proposed structure of mercantile use is not a low human occupancy building as described in CAN/CGSB-12.20 -M89 Structural Design of Glass for Buildings as referenced in Part 4 of the Building Code.
6. CAN/CGSB-12.20-M89 does not permit the use of tempered glass alone for sloped glazing and skylights since no restraining system is provided to prevent glass particles from falling in the event of glass breakage.

Dated at Toronto, this 3rd day, in the month of August, in the year 1995, for application number 1995-34.

BCC Ruling No. 95-37-457

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-37-457

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.1.5.1. & Clause 3.1.5.15.(1)(a) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Van Con General Contractors Ltd. for the resolution of a dispute with Mr. Bruce Poole, Chief Building Official, City of Guelph, concerning whether the use of combustible pipe traps (i.e. ABS material) servicing basins and sinks in a 6 storey noncombustible residential building will provide sufficiency of compliance with the flame spread rating requirements of the Building Code, at Parkside Place, 72 Woodlawn Rd. East, Guelph, Ontario.

APPLICANT

Van Con General Contractors Ltd.
Guelph, Ontario

RESPONDENT

Mr. Bruce Poole
Chief Building Official
City of Guelph

PANEL

Mr. Roy Philippe, Chair
Mr. Michael Lio
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

August 3rd, 1995

APPEARANCES

Mr. Mike Fischer, Project Manager
Van Con General Contractors Ltd.
The Applicant

Mr. Brian McCulloch, Associate
James Fryett Architect
Elora, Ontario
For the Applicant

Mr. Robert Reynen
Senior Building Inspector
AND
Mr. Bradley S. Coutts, City Prosecutor City of Guelph
For the Respondent

RULING

1. **The Applicant**

   Van Con General Contractors Ltd. is the holder of a permit under the Building Code Act, 1992 to construct a 6 storey noncombustible residential building containing 39 apartment units, at Parkside Place, 72 Woodlawn Rd. East, Guelph, Ontario.

2. **Description of Constrution**

   The structure is a six storey building of non-combustible construction and is designed under Article 3.2.2.37 of the Building Code. Each floor has a maximum of seven two bedroom suites, and is served by two exit stairs. The building has a zoned single stage fire alarm system. Fire detection devices are located in common areas and individual suites. The individual suite air handlers are interlocked to shut down upon activation of the fire detection devices. The garbage and storage areas of the building are sprinklered. The water supply booster pump and emergency/exit lights are powered by a diesel generator. Three sides of the building are accessible to fire department vehicles.

The building plumbing system has been constructed of PVC materials incorporating special fire-stop devices ("doughnuts") at fire separations, and of cast-iron or copper materials with fire stops at fire separations. Where these materials are used together, the PVC is enclosed in a fire resistant wall assembly. The construction of the plumbing system meets with the approval of the local building department. The use of "ABS" piping is limited to only the kitchen and bathroom trap assemblies in each of the 39 unit apartments.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical interpretation of Article 3.1.5.1. & Clause 3.1.5.15.(1)(a) of the Building Code. At issue is the determination of whether the use of combustible pipe traps (i.e. ABS material) servicing basins and sinks in a 6 storey noncombustible residential building will provide sufficiency of compliance with the flame spread rating requirements of the Building Code.

4. **Provision of the Building Code**

Article 3.1.5.1. Noncombustible Materials

Except as permitted in Articles 3.1.5.2. to 3.1.5.21., 3.1.13.4. and 3.2.2.13., where a building or part of a building is required to be of noncombustible construction, the construction shall be made from noncombustible materials.

Clause 3.1.5.15.(1)(a) Combustible Piping Materials

1. Except as permitted in Clause 3.1.5.2.(1)(e), Sentence (2) and Article 3.1.5.20., combustible totally enclosed raceways, piping and tubing and associated adhesives are permitted to be used in a building required to be of noncombustible construction provided they
    a. have a flame-spread rating of not more than 25, except when concealed in a wall or a concrete floor slab.

5. **Applicant's Position**

The Applicant submitted that the "ABS" plumbing trap material be retained since:

1. The amount of combustible "ABS" material is limited to a very small portion of the overall plumbing system.

2. The combustible "ABS" material is minor in comparison to other materials and contents of the apartment.
3. The traps are typically filled or partially filled with water.

6. **Chief Building Officials Position**

The Respondent submitted that all kitchen sink, washroom basin and laundry tub traps and associated piping connecting the fixtures to the DWV system are "ABS" material.

The Respondent also submitted that in accordance with Article 3.2.2.37. of the Building Code the building must be of noncombustible construction. Subsection 3.1.5. regulates the use of combustible materials in buildings required to be noncombustible construction. Clause 3.1.5.15.(1)(a) permits combustible piping to be used in a building required to be of noncombustible construction if it has a flame spread rating not more than 25. "ABS" piping has a flame spread rating of 165-230.

The Respondent submitted that the Applicant's proposal does not comply with the Building Code.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the use of "ABS" traps in piping in a non-combustible six storey building does not provide sufficiency of compliance with the Building Code.

8. **Reasons:**
    1. No evidence was provided that the "ABS" piping provides a flame-spread of 25 as required by Clause 3.1.5.15.(1)(a) of the Building Code.
    2. The "ABS" traps are not considered as minor components as described in 3.1.5.2.(1)(h) of the Building Code.

Dated at Toronto, this 3rd day, in the month of August, in the year 1995, for application number 1995-33.

BCC Ruling No. 95-36-456

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-36-456

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.4.6.15.(4)(c) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Russel Metals Inc., Mississauga for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, concerning whether the location of a manual pull station for a fire alarm system incorporating electromagnetic locking devices will provide sufficiency of compliance with Clause 3.4.6.15.(4)(c) of the Building Code, at Suite 210, 1900 Minnesota Court, Mississauga, Ontario.

APPLICANT

Russel Metals Inc.
Mississauga, Ontario

RESPONDENT

Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL

Mr. Roy Philippe, Chair
Mr. Rick Florio
Ms. Lesia Beznaczuk

PLACE

Toronto, Ontario

DATE OF RULING

July 18th, 1995

APPEARANCES

Mr. Jim Patskoli
Russell Metals Inc.
For the Applicant AND
Mr. Frank Spagnolo, Manager
Buildings Eng. & Inspections AND
Mr. Roy Chalk, Chief Inspector
City of Mississauga
For the Respondent

RULING

1. **The Applicant**

   Mr. Carl Quenneville is the holder of a permit under the Building Code Act, 1992 to construct alterations to suite 210 at 1900 Minnesota Court, Mississauga, Ontario.

2. **Description of Constrution**

   The project is located in a two storey fully sprinklered office building in which a glass wall and doors were built, closing in the leased area from a "common" area. The location and geometry of this wall is such that the manual pull station, serving the required exit which is equipped with an electromagnetic locking device, is actually located 1500 mm from the exit, whereas, the Building Code requires such a pull station to be located not more than 600 mm from the door.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical interpretation of clause 3.4.6.15.(4)(c) of the Building Code. At issue is the determination of whether a manual pull station for a fire alarm system incorporating electromagnetic locking devices, located 1500 mm from an exit will provide sufficiency of compliance with the Building Code.

4. **Provision of the Building Code**

   Clause 3.4.6.15.(4)(c) Door Release Hardware

4. An electromagnetic locking device that does not incorporate latches, pins or other similar devices to keep the door in the closed position is permitted to be installed on an exit door, other than an exit door serving an elementary or secondary school or leading directly from a Group F, Division 1 occupancy
    a. if a manual pull station for the fire alarm system is located on the wall not more than 600 mm (23¾ in) from the door

5. **Applicant's Position**

The Applicant submitted that the subject space was leased effective August, 1994. Substantial expenditures were undertaken by Russel Metals to build out the space including the installation of a glass wall and doors of 16' feet closing our space from the common area.

The Applicant also submitted that the fire alarm pull station nearest to our front door is mounted at where the glass wall meets the nearest partition, being approximately 1,500 mm (59") from the door jamb. This distance extends by 900 mm the above quoted regulations.

The Applicant submitted that the ambient area adjacent to the door is unobstructed by any walls or furniture, in keeping with the open concept plan which utilizes the full glass wall and doors. Consequently, the Applicant does not feel a safety hazard is created by the subject non-conformance. Further, the cost to rectify the subject non-conformance would be very significant.

6. **Chief Building Officials Position**

The Respondent submitted that Clause 3.4.6.15.(4)(c) of the Building Code states "an Electromagnetic lock can be installed, if a manual pull station for the fire alarm system is located on the wall not more than 600 mm, from the door". The present pull station is located 1500 mm from the door and therefore, doors do not meet the Building Code for easy access in an emergency. The Respondent stated that the 1500 mm distance is too far away from the door for a person to reach in a panic situation.

7. **Commission Ruling:**

It is the decision of the Building Code Commission that the location of the manual pull station to release the electromagnetic locking device provides sufficiency of compliance with the Building Code, subject to the following conditions:

4. The signage required under Clause 3.4.6.15.(4)(e) shall also indicate the location of the pull station. The size of the signage shall be in conformance with Clause 3.4.6.15.(4)(f) of the Building Code.
5. Emergency lighting be provided to illuminate the area where the pull station is located.
6. Emergency procedures be reviewed and or amended to ensure occupants are aware of the action necessary to exit the floor area.
7. The space between the doors and the pull station shall remain unobstructed at all times.

8. **Reasons:**
    0. The building is protected by an automatic sprinkler system.
    1. The occupancy is a Business and Personal Service Occupancy "Group D".
    2. The doors are not secured during the normal operating hours.
    3. Staff are aware of the method used to release the door after regular business hours.

Dated at Toronto, this 18th day, in the month of July, in the year 1995, for application number 1995-31.

BCC Ruling No. 95-35-455

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-35-455

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.2.9.1.(1)(b) and Article 1.1.3.2. for the definition of Building Area of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93, 383/94 and 20/95 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Mark Twardowski, Project Coordinator, Simcoe County Board of Education for the resolution of a dispute with Mr. Gord Allison, Chief Building Official, City of Barrie, concerning whether not providing a standpipe and hose system to serve three new Junior Kindergarten additions provides sufficiency of compliance with the standpipe and hose system requirements in Clause 3.2.9.1.(1)(b) of the Building Code, at Andrew Hunter Public School, Lampman Lane, Assikinack Public School, 226 Little Ave. and Cundles Heights Public School, Cundles St., Barrie, Ontario.

APPLICANT

Simcoe County Board of Education
Midhurst, Ontario

RESPONDENT

Mr. Gord Allison
Chief Building Official
City of Barrie

PANEL

Mr. Roy Philippe, Chair
Mr. Rick Florio
Ms. Lesia Beznaczuk

PLACE

Toronto, Ontario

DATE OF RULING

July 18th, 1995

APPEARANCES

Mr. Michael McKnight, Architect
Michael W. McKnight Architect Inc.
AND
Mr. Allen Larden
Larden Muniak Consulting Inc.
For the Applicant

Mr. Doug Durham, Plans Examiner
City of Barrie
For the Respondent

RULING

1. **The Applicant**

   Mr. Mark Twardowski is an applicant for a permit under the Building Code Act, 1992 to construct a Junior Kindergarten addition to three separate public schools, being Andrew Hunter Public School, Assikinack Public School and Cundles Heights Public School.

2. **Description of Constrution**

   he three existing public schools are non-combustible buildings, one storey in building height, unsprinklered and do not contain a standpipe and hose system. Documentation provided by the Applicant indicated the following "building areas":

   Andrew Hunter
   Existing Building 37,339.6 ft²
   New Addition 3,938.7 ft²
   Total 41,278.3 ft²
   New Addition as Percentage of Old: 10.5%
   Assikinack
   Existing Building 25,960.7 ft²

Existing Attached	Portables	3,943.4 ft²
		29,904.1 ft²
New Addition		2,907.3 ft²
Total		32,811.4 ft²

New Addition as Percentage of Old: 9.7%

Cundles Heights

Existing Building	38,338.8 ft²
New Addition	2,505.7 ft²
Total	40,844.5 ft²

New Addition as Percentage of Old: 6.5%

3. **Dispute**

The dispute between the Applicant and Respondent concerns the technical interpretation of Article 1.1.3.2. for the definition of "building area" and sufficiency of compliance with the technical requirements of Clause 3.2.9.1.(1)(b) of the Building Code. At issue is the requirement to provide a standpipe and hose system for the proposed Junior Kindergarten additions to three separate Public Schools. Table 3.2.9.A. which forms part of Sentence 3.2.9.1.(1) of the Building Code requires a standpipe and hose system for one storey assembly "A" occupancies over 2500 m² (26,900 ft²) in "building area".

4. **Provision of the Building Code**

Article 1.1.3.2. Definitions of Words and Phrases "Building area" means the greatest horizontal area of a building above grade within the outside surface of exterior walls or within the outside surface of exterior walls and the centre line of firewalls.

Clause 3.2.9.1.(1)(b) Standpipe and Hose Systems

1. Except as provided in Article 3.2.9.2., a standpipe and hose system shall be installed in every building that

(b) is greater in building area than the area shown in Table 3.2.9.A. for the applicable building height shown in the Table where the building

i. is not sprinklered, and

ii. is not more than 14 m (45 m 11 in) high measured between grade and the ceiling of the top storey.

5. **Applicant's Position**

The Applicant submitted that the Respondent is requiring a standpipe and hose system to be provided only for the new Junior Kindergarten additions in each of the affected schools. This is based on the Respondent's interpretation of Subsection 3.2.9. of the Building Code that "building area" is the sum of the existing school and the addition.

The Applicant submitted that in accordance with Article 2.1.1.7. (existing buildings), the "building area" described in Subsection 3.2.9. should be the addition area, not the combined area.

The Applicant also submitted that even if "building area" is determined to be the combined area, the inclusion of a standpipe and hose system that serves only the addition does not improve the fire fighting or life safety standards of the building. The Applicant submitted that it would represent a possible danger to fire fighting and for fire fighters. A fire crew attending an alarm at the school may be lulled into a false sense of security seeing a siamese connection for a standpipe, and believing the entire school is protected.

6. **Chief Building Officials Position**

The Respondent submitted that the "building area" for each of the schools, once extended, exceeds the maximum "building area" limits shown in Table 3.2.9.A. for a Group A building. This requires a standpipe and hose system to be installed in the addition. The Respondent submitted that the options for construction are as follows:

a. construct a firewall;
b. sprinkler the addition; or,
c. install a standpipe and hose system in the addition.

The Respondent further submitted that increasing the "building area" without providing a standpipe and hose system may decrease the performance level of the existing building and is contrary to Article 11.3.1.1. of the Building Code. Also, Article 2.1.1.7. permits the Applicant to restrict the installation of the standpipe and hose system to the addition only, but does not allow the applicant to consider only the floor area of the addition in determining the application of Subsection 3.2.9. of the Building Code.

7. **Commission Ruling:**

   It is the decision of the Building Code Commission that not providing standpipe and hose systems in the Junior Kindergarten additions shows sufficiency of compliance with the Building Code.

8. **Reasons:**
   0. The additions are easily accessible by the fire department.
   1. Fire fighting would be conducted by the fire department using their own equipment.
   2. The additions are less than 15% of the gross floor area.
   3. Evacuation time is minimal since exiting directly to the exterior is provided from each of the additions.
   4. The buildings are of noncombustible construction.

Dated at Toronto, this 18th day, in the month of July, in the year 1995, for application number 1995-32.

BCC Ruling No. 95-34-454

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-34-454

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.2.44. & Sentence 3.2.2.12.(1) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. A. Howard Tishman, Manager, Keysite Equities, North York for the resolution of a dispute with Mr. J.D. LaRue, Chief Building Official, City of Sault Ste. Marie, concerning whether a sprinkler system is required in a greenhouse addition to an existing mercantile occupancy, at White Rose, 43 Black Road, Sault Ste. Marie, Ontario.

APPLICANT

Keysite Equities
North York, Ontario

RESPONDENT

Mr. J.D. LaRue
Chief Building Official
City of Sault Ste. Marie
Sault Ste. Marie, Ontario

PANEL

Mr. Michael Lio, Chair
Mr. Demir Delen
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

June 28th, 1995

APPEARANCES

Mr. David Ellis, Architect
David Ellis Architect Inc.
Sault Ste. Marie, Ontario
For the Applicant

Mr. A. Howard Tishman
Keysite Equities
The Applicant

RULING

1. **The Applicant**

   Mr. A. Howard Tishman, Manager, Keysite Equities is the holder of a permit under the Building Code Act, 1992 to construct alterations and additions (including a greenhouse) to an existing mercantile occupancy, at White Rose, 43 Black Road, Sault Ste. Marie, Ontario.

2. **Description of Constrution**

   The existing 2174 m² single storey masonry building was built around 1975 with an unrated structural steel roof assembly which was protected by a sprinklering system conforming to Article 3.2.2.12. of the Building Code. The Applicant wishes to construct two new additions to the existing building and an unsprinklered 883 m² greenhouse structure with the gables flashed to the main building. The proposed new additions are required to be sprinklered in accordance with the NFPA-13 standard. This is based on the general Size and Occupancy requirements for fire safety regulated by Article 3.2.2.44. of the Building Code. The greenhouse is separated from the existing building by a 250 mm (10 inch) thick concrete block wall covered inside by steel studs with 1/2" gypsum board finish. Access is provided from the existing building into the greenhouse. The construction of the greenhouse provides complete ease of egress from the greenhouse in the event of a fire. The greenhouse has a tempered green canopy and except for three 12' sections, there are no permanent exterior nor interior walls.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.2.2.44. & Sentence 3.2.2.12.(1) of the Building Code. At issue is whether a sprinkler system is required in a greenhouse addition to an existing mercantile occupancy.

4. **Provision of the Building Code**

Article 3.2.2.44. Mercantile Buildings, up to 3 Storeys

1. A building classified as Group E shall conform to Sentence (2) provided the building
    a. is not more than 3 storeys in building height, and
    b. as a building area not more than the value in Table 3.2.2.M.
2. The building shall be of combustible or noncombustible construction used either singly or in combination, and
    a. floor assemblies shall be fire separations with a fire-resistance rating of not less than 45 min,
    b. mezzanines shall have, if of combustible construction, a fire-resistance rating of not less than 45 min,
    c. roof assemblies shall have a fire resistance rating of not less than 45 min, except that in buildings not more than 1 storey in building height, the fire-resistance rating is permitted to be waived provided the roof assembly is of noncombustible construction or is constructed as a fire-retardant treated wood roof system conforming to Article 3.1.14.1., and
        i. if unsprinklered, the building area is not more than 1 500 m? (16,100 ft?), and
        ii. if sprinklered, the building area is not more than 2 400 m? (25,800 ft?) if facing 1 street, 3 000 m? (32,300 ft?) if facing 2 streets, or 3 600 m? (38,800 ft?) if facing 3 streets,
    d. all loadbearing walls, columns and arches supporting an assembly required to have a fire- resistance rating shall have a fire-resistance rating of not less than 45 min or shall be of noncombustible construction, except that such members and assemblies supporting a fire separation shall have a fire-resistance rating not less than that required for supported assembly.

Sentence 3.2.2.12.(1) Sprinklers in Lieu of Roof Rating

3. The requirements in Articles 3.2.2.16. to 3.2.2.62. for roof assemblies to have a fire-resistance rating are permitted to be waived provided
    a. the building is sprinklered,
    b. the sprinkler system in Clause (a) is electrically supervised in conformance with Sentence 3.2.4.16.(5), and
    c. the operation of the sprinkler system in Clause (a) will cause a signal to be transmitted to the fire department in conformance with Sentence 3.2.4.7.(3).

5. **Applicant's Position**

The Applicant submitted that the requirement to sprinkler the greenhouse is excessive and should not be required in this instance for the following reasons:

1. The main building is of concrete block and steel construction and is fully sprinklered in compliance with the Building Code.
2. The greenhouse is accessory and subordinate to the Occupant's main use and the volume of people will be far less than in the main building.
3. The building/greenhouse arrangement was not contemplated when the subject Building Code regulation was being developed.
4. The purpose of the greenhouse is to provide an area of protective covering for plants and therefore the goods offered for sale to the public are non-combustible.
5. The greenhouse is separated from the building by a 10" concrete block wall covered inside by 3 ?" steel studs to which is applied ?" gypsum board.
6. The nature of the greenhouse construction allows complete ease of access/egress to the public in the event the need to exit the greenhouse should ever arise.
7. The greenhouse is composed of a tempered glass canopy. Except for three 12'- 0' sections, there are no permanent exterior nor interior walls.
8. The structure will not be used year round. Sprinkler or any other systems will be frozen over the winter months and will be affected by the elements.
9. There is such a degree of sufficiency of compliance with the Building Code that sprinklering the greenhouse should not be a requirement in this instance.

6. **Chief Building Officials Position**

The Respondent submitted that Article 3.2.2.44 and Sentence 3.2.2.12.(1) require mercantile buildings in excess of 16,100 ft² (1500 m²) to be sprinklered and that a supervised sprinkler system may be substituted in lieu of a fire rated roof assembly.

The Respondent also submitted that the existing 23,400 ft². (2174 m²) single storey, masonry building has an unrated structural steel roof assembly. It is undergoing alterations and the construction of two additions totalling 4,300 ft². (404 m²). Both additions and the existing building will be protected by a supervised sprinkler system. An unsprinklered 9,500 ft². (883 m²) greenhouse structure is being placed immediately adjacent to the main building with the gables flashed to the main building.

The Respondent submitted that the dispute arises out of the interpretation that the greenhouse is an extension of the main building and therefore must be sprinklered due to the total building area and the waiving of fire protection of the roof assembly as set out in Article 3.2.2.44. and Sentence 3.2.2.12.(1) respectively.

7. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that the greenhouse structure shows sufficiency of compliance to the Building Code provided it is used only for the display and sale of horticultural products.

8. **Reasons:**
   1. The unheated structure is used seasonally and not in winter.
   2. The structure is non combustible in construction.
   3. The unenclosed greenhouse provides unlimited means of egress.
   4. The existing building is sprinklered and separated from the greenhouse by a 250 mm (10") masonry wall covered inside by steel studs with ?" gypsum board finish.

Dated at Toronto, this 28th day, in the month of June, in the year 1995, for application number 1995-30

BCC Ruling No. 95-33-453

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-33-453

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.1.3.3. and Sentence 2.1.3.1.(1) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Bryce Eldridge, Superintendent of Plant & Planning, York Region Roman Catholic Separate School Board, Aurora for the resolution of a dispute with Mr. Stephen Willdig, Chief Building Official, Region of York, Town of Georgina, concerning whether the provision of a sprinkler system and a 1 hour fire separation between the public pool and the remainder of the facility will provide sufficiency of compliance with the provision of a two hour firewall and thereby permit the remainder of the facility (i.e. all other portions than the leisure pool) to be developed under the classification of an A-2 occupancy, at Sutton Multi-Use Facility, Black River Road, Sutton, Ontario.

APPLICANT

York Region Roman Catholic
Separate School Board
Aurora, Ontario

RESPONDENT

Mr. Michael Lio, Chair
Chief Building Official
Town of Georgina

PANEL

Mr. Michael Lio, Chair
Mr. Demir Delen
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

June 28th, 1995

APPEARANCES

Mr. Laird Robertson
Project Architect
C.A. Ventin Architect Ltd.
Simcoe, Ontario
For the Applicant

Mr. Scott Simpson
Building Inspector
Town of Georgina
For the Respondent

RULING

1. **The Applicant**

   Mr. Bryce Eldridge, Superintendent of Plant & Planning, York Region Roman Catholic Separate School Board, Aurora is an applicant for a permit under the Building Code Act, 1992 to construct a two storey multi-use building comprising two elementary schools, public library resource centre, child care facility and public pool.

2. **Description of Constrution**

   The public pool portion of the facility is classified as a Group A, Division 3, A-3 major occupancy and the remainder of the facility (i.e. two elementary schools, public library resource centre and child care facility) is classified as a Group A, Division 2, A-2 major occupancy. The leisure pool's building area consists of more than 10% of the entire ground floor building area.

   Article 3.2.2.27. (i.e. A-3, any height, any area) of the Building Code requires the public pool floor assembly to be constructed as a fire separation with a two hour fire resistance rating.

The remainder of the building has been designed to meet Article 3.2.2.22. (i.e. A-2, up to 5 storeys, any area) of the Building Code. The floor assemblies are required to be constructed as a fire separation with not less than a one hour fire resistance rating.

Article 3.1.3.3. of the Building Code states that where there are two major occupancies the requirements of the most restrictive (i.e. Article 3.2.2.27.) apply to the entire building. This would require the floor assemblies to be constructed as fire separations with a two hour fire resistance rating.

If a firewall with a two hour fire resistance rating was constructed between the public pool and the remainder of the building, a one hour fire resistance rating would be permitted for the floor assemblies in the entire two storey school.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.1.3.3. and Sentence 2.1.3.1.(1) of the Building Code. At issue is whether the provision of a sprinkler system and a 1 hour fire separation between the public pool and the remainder of the facility will provide sufficiency of compliance with the provision of a two hour firewall and thereby permit the remainder of the facility (i.e. all other portions than the leisure pool) to be developed under the classification of an A-2 occupancy.

4. **Provision of the Building Code**

Article 3.1.3.3. Construction Requirements

Except as provided in Articles 3.1.3.4. and 3.1.3.5., in any building containing more than 1 major occupancy, the requirements of Subsection 3.2.2. for the most restricted major occupancy contained shall apply to the whole building.

Sentence 2.1.3.1.(1) Building Divided by Firewalls

1. Where a firewall divides a building, each portion of the building so divided shall be considered as a separate building, except for the purpose of
    a. gross area determination in Section 2.3,
    b. a fire alarm and detection system in Sentence 3.2.4.2.(1) or Article 9.10.17.1., or
    c. a plumbing system interconnected through a firewall.

5. **Applicant's Position**

The Applicant submitted that in order to construct the floor assemblies as one hour fire separations a 2 hour firewall must be provided between the public pool (A-3 occupancy) and the remainder of the facility (A-2 occupancy).

The respondent submitted that the Chief Building Official was requested to permit a 1 hour fire separation between the public pool and the remainder of the facility and the inclusion of sprinkler system within the entire multi-use facility, (including the public pool) as an equivalent to the provision of a 2 hour firewall.

The Respondent submitted that the chlorination system for the public pool is a liquid type and not the traditional gaseous chlorine under pressure.

The Applicant submitted that providing a 1 hour fire separation between the two occupancies and sprinklering both sides of the fire separation is equivalent to providing a 2 hour firewall. Therefore, the remainder of the facility (i.e. all other portions than the public pool) should be permitted to be developed under the classification of an A-2 occupancy.

6. **Chief Building Officials Position**

The Respondent submitted that the public pool portion of the facility is an A-3 type occupancy and the remainder of the facility (two elementary schools, public library and a child care facility) is classified as an A-2 type occupancy. The public pool's building area constituted more than 10% of the entire ground floor building area.

The Respondent submitted that the proposal does not comply with the Building Code. Article 3.1.3.3. states that except as provided in Articles 3.1.3.4. and 3.1.3.5. in any building containing more than 1 major occupancy, the requirements of Subsection 3.2.2. for the most restricted major occupancy contained shall apply to the whole building.

The Respondent submitted that Articles 3.1.3.4. and 3.1.3.5. describe the requirements for major occupancies with relation to the entire building. Article 3.1.3.5. gives relief from the requirements of Subsection 3.2.2. provided the occupancy is less than 10% of the aggregate area of the building.

The Respondent also submitted that the area in question (i.e. containing the public pool) is more than 10% of the aggregate area and therefore must be considered a major occupancy and must be

taken into consideration with regards to Subsection 3.2.2., building size and construction relative to occupancy.

The Respondent does not have the authority to permit a deviation from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that providing a fire separation with a 1 hour fire resistance rating with a sprinkler system provided on both sides of the separation between the A-2 and A-3 occupancies provides sufficiency of compliance with the Building Code.

8. **Reasons:**
    1. A liquid-type chlorination system to be used in the pool poses less of a fire hazard than the traditional pressurized chlorination system used in pools classified as A-3 occupancy.
    2. A sprinkler system has been provided on both sides of the 1 hour fire separation between the A-2 and A-3 occupancies.
    3. With respect to the pool area, the maximum allowable floor area percentage limit used to establish a major occupancy is exceeded by 5%.

Dated at Toronto, this 28th day, in the month of June, in the year 1995, for application number 1995-29.

BCC Ruling No. 95-32-452

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-32-452

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.5.16.(2) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Ms. R.J. Ross, Manager, Rockwood Mall for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, concerning whether the 60 m distance from the fire department connection to a hydrant provides sufficiency of compliance with Sentence 3.2.5.16.(2) of the Ontario Building Code, at 4141 Dixie Road, Phase II #1, Mississauga, Ontario.

APPLICANT

Rockwood Mall
North York, Ontario

RESPONDENT

Mr. Agris Robeznieks
Chief Building Official
City of Mississauga
Mississauga, Ontario

PANEL

Mr. Michael Lio, Chair
Mr. Demir Delen
Ms. Susan Friedrich

PLACE

Toronto, Ontario

DATE OF RULING

June 28th, 1995

APPEARANCES

Mr. Ludovit Hudec, Principal
LH Consultants Ltd.
North York, Ontario
For the Applicant

Mr. R.A. Chalk
Chief Fire Inspector

AND

Mr. Frank Spagnolo
Building Eng. & Inspection
City of Mississauga
For the Respondent

RULING

1. **The Applicant**

   Ms. R.J. Ross, Manager, Rockwood Mall is the holder of a permit under the Building Code Act, 1992 to renovate an existing tenant space at the Rockwood Mall, 4141 Dixie Road, Phase II, Mississauga, Ontario.

2. **Description of Constrution**

   The Rockwood Mall has been is existence for approximately 20 years old. A change in occupancy to a tenant space resulted in an alteration of the existing sprinkler system.

   An existing fire department connection for the sprinkler system is situated on the north face of the building approximately 60 m from the existing fire hydrant near the north east corner of the building.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentence 3.2.5.16.(2) of the Building Code. At issue is whether the 60 m distance from the fire department connection to a hydrant provides sufficiency of compliance with the Building Code.

4. **Provision of the Building Code**

Sentence 3.2.5.16.(2) Fire Department Connections

2. Fire department connections for sprinkler systems shall be located so that the distance from a fire department connection to a hydrant is not more than 45 m (147 ft 8 in) and is unobstructed.

5. **Applicant's Position**

In 1994, a new tenant, "CLUB BIZ", (video equipment store) moved into the building. During the process of Building Permit Application for new tenant's improvement, there were revisions done to the existing sprinkler system. The building department requested the Applicant confirm the location of the hydrant which apparently does not comply with the Building Code.

The Applicant submitted that there was no alteration or expansion of the existing siamese connection.

The Applicant submitted that the present situation is safe, and that the 60 m distance between the fire hydrant and sprinkler siamese connection will not cause any undue hardship for the local fire department.

6. **Chief Building Officials Position**

The Respondent stated that the building was previously occupied by a retail lumber supply.

The Respondent submitted that the inadequacy of the existing sprinkler system required the system to be upgraded and split into two systems. The sprinkler density needed to be increased to cover the new use. The Respondent reported that the siamese connection was reworked to feed a header with 2 new alarm check valves. The only part of the sprinkler system that was not changed was the physical location of the siamese connection on the exterior of the building.

The Respondent submitted that the new sprinkler system must conform to NFPA-13 and the Building Code requirements. This requires the fire department connection to be within 45 m of a fire hydrant.

The Respondent stated that the existing fire hydrant is 60 m from the siamese connection. This is an increase of 33% over the maximum allowable 45 m required by the Building Code.

7. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that the existing 60 m distance between the fire department connection and the fire hydrant provides sufficiency of compliance with the Building Code.

8. **Reasons:**
   2. The existing sprinkler system was voluntarily upgraded by the building owner within the subject tenant premises.
   3. No changes were made to the existing siamese connection or fire hydrant.
   4. There was no change in occupancy classification and no increase in occupant load.
   5. The existing fire safety performance of the building has been improved by the modifications.

Dated at Toronto, this 28th day, in the month of June, in the year 1995, for application number 1995-25.

BCC Ruling No. 95-31-451

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-31-451

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.5.13. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Mander Gardiner, Plant Manager, Leeds & Grenville County Board of Education, Brockville for the resolution of a dispute with Mr. Randall Wilkinson, Chief Building Official, Town of Kemptville, concerning whether not providing sprinkler protection in the attic space of a new four classroom addition to an existing elementary school provides sufficiency of compliance with Article 3.2.5.13. of the Building Code, at Abbott Road, Kemptville, Ontario.

APPLICANT

Leeds & Grenville County
Board of Education
Brockville, Ontario

RESPONDENT

Mr. Randall Wilkinson
Chief Building Official
Town of Kemptville
Kemptville, Ontario

PANEL

Mr. Michael Lio, Chair
Mr. Rick Florio
Mr. Kenneth Bacon

PLACE

Toronto, Ontario

DATE OF RULING

June 20th, 1995

APPEARANCES

Mr. Robert Woodman, Architect
Robert J. Woodman Architect Inc.
Ottawa, Ontario
For the Applicant

RULING

1. **The Applicant**

   Mr. Mander Gardiner, Plant Manager, Leeds & Grenville County Board of Education is the holder of a permit under the Building Code Act, 1992 to construct a new four classroom addition to an existing elementary school without providing a sprinkler system.

2. **Description of Constrution**

   The subject one storey building is an addition of four classrooms (450 m^2) to the existing (3400 m^2) South Branch Elementary School located at Part Lot 26, Concession 3, Oxford-on-Rideau Township, Town of Kemptville. The proposed new addition is required to be fully sprinklered in accordance with NFPA-13, including the newly added attic space. The proposed addition does not change the fire safety requirements determined for the original building in accordance with Subsection 3.2.2. of the Building Code.

   In May of 1992, the Leeds Grenville County Board of Education constructed a 3,400 m^2 elementary school. The school was designed to be fully sprinklered and included a horizontal 3/4 hour fire separation at the ceiling level throughout the school. The attic space was compartmentized and not sprinklered. This matter was considered by the Building Code Commission on August 20th, 1992 and subject to specific conditions was deemed to provide sufficiency of compliance with the Building Code.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.2.5.13. of the Building Code. At issue is whether not providing sprinkler protection in the attic space of a new four classroom addition to an existing elementary school provides sufficiency of compliance with the Building Code, at Abbott Road, Kemptville, Ontario.

4. **Provision of the Building Code**

Article 3.2.5.13. Automatic Sprinkler Systems

1. Except as provided in Sentences (2) and (3), where a sprinkler system is required, it shall be designed, constructed, installed and tested in conformance with NFPA 13, "Installation of Sprinkler Systems".
2. Where a building contains fewer than 9 sprinklers, the water supply for such sprinklers is permitted to be supplied from the domestic water system for the building provided the required flow and pressure for the sprinklers can be met by the domestic system.
3. Where a water supply serves both a sprinkler system and a system serving other equipment, control valves shall be provided so that either system can be shut off independently.
4. Open grid and translucent ceilings located below sprinkler systems shall be installed in conformance with NFPA 13, "Installation of Sprinkler Systems", paragraphs 4-4.14 and 4-4.15.
5. Where a sprinkler system has one or more electrically supervised control valves in order to meet the requirements of this Article, each valve shall be equipped with an electrically supervised switch for transmitting a signal for individual annunciation in the event of movement of the valve handle and the same annunciator panel may be utilized for supervision of valves in both the sprinkler and the standpipe systems.

5. **Applicant's Position**

The Applicant submitted that the Building Code Commission has ruled that the construction methods used in the existing elementary school provide sufficiency of compliance with respect to the requirement to sprinkler the attic spaces.

The Board of Education is constructing a four classroom addition to the school. The addition represents 11% of total area. The Applicant stated that he is seeking an extension of the previous Building Code Commission decision.

The addition does not affect the size, occupancy nor the fire safety requirements determined under Section 3.2 of the Building Code respecting this building.

6. **Chief Building Officials Position**

The Respondent submitted that Article 3.2.5.13. requires the sprinkler system to be installed in conformance with NFPA-13. Article 4.4.4.1. of NFPA-13 requires concealed spaces such as attics to be sprinklered.

The Respondent also submitted that the previous Building Code Commission ruling does not apply to the new addition.

The respondent does not have the authority to permit a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that the school addition shows sufficiency of compliance with the Building Code provided;

1. The attic for the addition is unheated and contains no mechanical or electrical services;
2. A continuous fire separation is provided with a minimum 45 minute fire resistance rating separating the building from the attic space;
3. The building's fire alarm system extends into the attic of the building addition;
4. The building's sprinkler system serves the floor area and extends into mechanical spaces;
5. A fire separation with a two hour fire resistance rating is provided between the attic of the addition and the attic of the existing building; and,
6. All aspects of the Building Code Commission decision #92-10-344 apply to the building addition.

8. **Reasons:**
    1. The floor area of the entire building is fully sprinklered and is less than 4800 m².
    2. Adequate exiting and travel distances are provided.
    3. The addition does not compromise existing life safety or property protection.

Dated at Toronto, this 20th day, in the month of June, in the year 1995, for application number 1995-27.

BCC Ruling No. 95-30-450

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-30-450

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 7.2.6.7.(3) and Article 1.1.3.2. for the definition of Water Distribution System of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Bruce Mason, President, Lincoln Mechanical Contractors Ltd., St. Catharines for the resolution of a dispute with Mr. John Fisher, Chief Building Official, City of St. Catharines, concerning whether a 150 mm (6 inch) galvanized steel pipe to convey potable water is part of the water distribution system and subject to Sentence 7.2.6.7.(3) of the Building Code, at the Ministry of Transportation, 301 St. Paul Street (160 King Street), St. Catharines, Ontario.

APPLICANT

Lincoln Mechanical Contractors Ltd.
St. Catharines, Ontario

RESPONDENT

Mr. John Fisher
Chief Building Official
City of St. Catharines

PANEL

Mr. Michael Lio, Chair
Mr. Rick Florio
Mr. Kenneth Bacon

PLACE

Toronto, Ontario

DATE OF RULING

June 20th, 1995

APPEARANCES

Mr. Robert Silberstein
Vice-President
Niagara Mechanical Contractors
Weston, Ontario AND
Mr. Gunnar Heissler
Chief Operating Officer
The ECE Group Ltd.
For the Applicant

RULING

1. **The Applicant**

   Mr. Bruce Mason, President, Lincoln Mechanical Contractors Ltd. is the holder of a permit under the Building Code Act, 1992 to install plumbing in an eleven storey fully sprinklered office building that includes a 150 mm (6 inch) galvanized steel pipe to convey potable water to the building at 301 St. Paul Street (160 King Street), St. Catharines, Ontario.

2. **Description of Constrution**

   The subject building is an eleven storey fully sprinklered high- rise office building. A portion of the sprinklered ground floor consists of office areas, loading docks and truck maneuvering bays. The building also includes a city and inter-city bus terminal comprised of a donut shop, waiting area, ticket office and washrooms located between two bus lanes and a service lane.

   Plumbing Permit Number P94-0625 was issued on December 2, 1994, to install plumbing in the building.

   A 150 mm (6 inch) galvanized steel pipe is installed in the potable water main starting from the building entry point to the suction side of the domestic cold water booster pumps.

   Copper piping is used from the domestic cold water booster pump discharge to the building water distribution system. The 150 mm (6 inch) galvanized pipe with Victaulic couplings

(between the two point described above) is installed exposed with the building and it is accessible.

3. **Dispute**

The dispute between the Applicant and Respondent concerns the technical interpretation of Article 1.1.3.2. for the definition of Water Distribution System, and Sentence 7.2.6.7.(3) of the Building Code. At issue is whether a 150 mm (6 inch) galvanized steel pipe to convey potable water is part of the water distribution system and subject to the Building Code.

4. **Provision of the Building Code**

Article 1.1.3.2. Definition of Words and Phrases

Water Distribution System means an assembly of pipes, fittings, valves and appurtenances that conveys water from the water service pipe or private water supply system to water supply outlets, fixtures, plumbing appliances and devices.

Sentence 7.2.6.7.(3) Steel Pipe

3. Galvanized steel pipe shall not be used in a water distribution system except
    a. in buildings of industrial occupancy, or
    b. for the repair of existing galvanized steel piping systems.

5. **Applicant's Position**

The Applicant submitted that the pipe in question is not a water distribution system in that it is situated prior to the meter and pumps and there is no branch piping running from it. Hence it does not come under Article 7.2.6.7. and the galvanized material should be acceptable.

The Applicant submitted that the pipe in question is completely accessible and therefore the intent of the provision is not contravened.

The Applicant referred to the Building Code which states that galvanized steel piping shall not be used in a water distribution system. The Applicant contends that this is not a water distribution system. There are no branch tees installed throughout the galvanized piping line. All branch tees for water distribution are after the discharge of the pump, which is copper piping.

The Applicant submitted that Niagara Mechanical Contractors would be willing to provide a reasonable extended warranty for the galvanized piping which is currently installed.

The Applicant also stated that other municipalities have accepted this on the basis of the equivalent provisions in Section 2.7 of the Building Code.

6. **Chief Building Officials Position**

The Respondent submitted that the applicant has installed a 150 mm (6 inch) galvanized steel pipe to convey potable water from the outside wall of the building to the suction side of the domestic water booster pump. The length of this pipe is approximately 125 feet.

The Respondent submitted that Sentence 7.2.6.7.(3) of the Building Code states that:

"Galvanized steel pipe shall not be used in a water distribution system except

c. in buildings of industrial occupancy or,
d. for the repair of existing galvanized steel piping systems".

The Respondent stated that the applicant does not wish to remove the galvanized steel pipe and replace it with pipe of an acceptable material and he was issued an inspection report on March 20, 1995, advising him of this matter. The Respondent submitted that Sentence 7.2.6.7.(1) of the Building Code states that welded and seamless steel pipe shall not be used in a plumbing system, except as follows:

"Galvanized steel pipe may be used in a drainage system or a venting system above ground inside a building". (Sentence 7.2.6.7.(2))

AND:

"Galvanized steel pipe shall not be used in a water distribution system except:

e. in buildings of industrial occupancy, or
f. for the repair of existing galvanized steel piping systems". (Sentence 7.2.6.7.(3))

The Respondent submitted that the installed galvanized steel pipe has been designed to carry potable water from the outside wall of the building to the suction side of the domestic water

booster pump. This pipe would be considered plumbing since it is part of a water system which by definition is considered plumbing, which means,

"a drainage system, a venting system and a water system or parts thereof".

The Respondent submitted that the pipe is part of a water system and not part of a drainage system or venting system. A drainage system is a system of pipes used to convey sewage and clear water waste to a main sewer. A venting system is a system of pipes that connects a drainage system to open air for circulation. Since this galvanized steel pipe is neither a drainage system nor a venting system the exception to permit the use of galvanized steel pipe does not apply.

The Respondent submitted that the galvanized steel pipe is designed to transport potable water from the outside wall of the building, that is the water service pipe, to the suction side of the domestic water booster pump, a plumbing appliance. By definition, this would be considered part of the water distribution system since water distribution system means,

"an assembly of pipes, fittings, valves and appurtenances that convey water from the water service pipe or private water supply system to water supply outlets, fixtures, plumbing appliances and devices".

This pipe conveys potable water from the water service pipe which means,

"a pipe on the (private) property that conveys potable water from a waterworks or private water source to the inside of the building",

and to a plumbing appliance, that is the booster pump. Therefore, the pipe would be considered part of the water distribution system.

The Respondent reported that the major occupancy of this building, as classified under the Building Code, is Business and Personal Service (Group D) and not industrial (Group F). Therefore, the exception to permit the use of galvanized steel pipe in an industrial occupancy would not apply.

This building is a new building and there is no existing piping. Therefore, the exception to permit the use of galvanized steel pipe to repair existing galvanized steel piping would also not apply.

In conclusion, the Respondent stated that this galvanized steel pipe:

. is considered plumbing, since it is part of a water system,
i. is not part of a drainage system,
ii. is not part of a venting system,
iii. is part of a water distribution system,
iv. is not located in an industrial occupancy, and
v. is not being used to repair existing galvanized steel pipe.

Therefore, Sentence 7.2.6.7.(1) of the Plumbing Regulations in Part 7 of the Building Code does not permit galvanized steel pipe to be used as part of the water distribution system. The galvanized steel pipe must be removed and replaced with an acceptable material.

2. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that the water service pipe conforms to the requirements of the Building Code.

3. **Reasons:**
    0. The pipe is installed before the water meter and is considered a water service pipe. It contains no branches and is not considered part of the water distribution system.
    1. The water service pipe is 6" in diameter with a sufficiently slow flow not making it susceptible to restricted flow from corrosion.
    2. The water service pipe is accessible across its entire length.
    3. Evidence presented suggests that large diameter galvanized pipe has been used in other municipalities on the basis of past performance.

Dated at Toronto, this 20th day, in the month of June, in the year 1995, for application number 1995-28.

BCC Ruling No. 95-29-449

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-29-449

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 6.2.2.6. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Lew King, Co-owner, Alternatives Natural Food Market for the resolution of a dispute with Mr. Frank Asta, Chief Building Official, Town of Oakville, concerning whether the exhaust system for cooking equipment used for the purpose of customer and staff demonstrations at Kerr Centre provides sufficiency of compliance with Article 6.2.2.6. of the Building Code, at 579 Kerr Street, Oakville, Ontario.

APPLICANT

Alternatives Natural Food Market
Oakville, Ontario

RESPONDENT

Mr. Frank Asta
Chief Building Official
Town of Oakville

PANEL

Mr. Michael Lio, Chair
Mr. Rick Florio
Mr. Kenneth Bacon

PLACE

Toronto, Ontario

DATE OF RULING

June 20th, 1995

APPEARANCES

Mr. Lew King, Co-owner
Alternatives Natural Food Market
The Applicant

Mr. John Peters
Chief Fire Prevention Officer
Town of Oakville
For the Respondent

RULING

1. **The Applicant**

   Mr. Lew King, Co-owner, Alternatives Natural Food Market received an order to comply under the Building Code Act, 1992 to provide an exhaust system for the cooking equipment used for customer and staff demonstrations in conformance with NFPA-96 at the Kerr Centre, 579 Kerr Street, Oakville, Ontario.

2. **Description of Constrution**

   The subject building includes an area where household cooking equipment has been installed for the purpose of conducting cooking demonstrations. Food is not prepared for any other purpose.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 6.2.2.6. of the Building Code. At issue is whether the requirements of NFPA-96, "Installation of Equipment for the Removal of Smoke and Grease-Laden Vapours from Commercial Cooking Equipment" need be applied to the household cooking equipment being used for the purpose of customer and staff demonstrations.

4. **Provision of the Building Code**

   Article 6.2.2.6. Commercial Cooking Equipment

Systems for the ventilation of restaurant and other commercial cooking equipment shall be designed, constructed and installed to conform to NFPA-96, "Installation of Equipment for the Removal of Smoke and Grease-Laden Vapours from Commercial Cooking Equipment", except as required by Sentences 3.5.3.1.(1) and Article 3.5.4.2.

5. **Applicant's Position**

The Applicant submitted that household cooking equipment has been installed for the purpose of conducting cooking demonstrations. All demonstrations are done with recipes that only serve 4 - 6 people (i.e. mass quantities are not served). The recipes are very low in fat and are meat free (e.g. no hamburgers, fries, etc.). Therefore, no smoke is produced and vapours are not grease laden.

The applicant stated that the demonstration premises are supervised, locked when not in use and provided with fire extinguishers. The cooking equipment is also provided with a down draft system that exhausts outdoors.

The applicant submitted that there are many examples of similar demonstration set-ups used throughout the Province for trade shows, exhibits and promotions.

6. **Chief Building Officials Position**

The Respondent submitted that the cooking equipment is used to prepare meals. Therefore, the stove requires a commercial hood and suppression system in conformance to NFPA-96. The Respondent stated that the municipality is concerned about the safety of the people watching the cooking demonstration.

The Respondent also stated that daycare facilities in the Town of Oakville that have stove top cooking equipment are required to comply with NFPA-80.

The Respondent does not have the authority to permit a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that the residential stove and down-draft system shows sufficiency of compliance with the Building Code provided that:

1. No more than 20 people are present within the demonstration area at any one time.
2. Use of the stove is restricted to occasional cooking demonstration only attended by trained personnel at all times.
3. Demonstrations are carried out by persons trained in the use of the cooking equipment and fire extinguishers.
4. Fire extinguishers must be located where clearly visible.
5. The gas line to the stove must be locked off when the stove is not in use for cooking demonstrations.
6. No other stoves or cooking ovens are permitted within the demonstration area.

8. **Reasons:**
    1. The stove is a residential - type stove.
    2. No smoke or grease-laden vapours will be produced by the preparation of meals.
    3. Cooking is for demonstrations only and is not continuous as in most commercial applications.
    4. Only trained personnel will operate the equipment.

Dated at Toronto, this 20th day, in the month of June, in the year 1995, for application number 1995-26.

BCC Ruling No. 95-28-448

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-28-448

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.4.6.15.(3) and 3.4.6.15.(4) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Normand D. Tremblay, President/Owner, Loeb St. Laurent for the resolution of a dispute with Ms. Elizabeth Hilfrich, Chief Building Official, City of Gloucester, concerning whether a partial fire alarm system that only satisfies the specific requirements for three electromagnetic locking devices installed on exit doors at Loeb St. Laurent shows sufficiency of compliance with the Building Code.

APPLICANT

Loeb St. Laurent
Gloucester, Ontario

RESPONDENT

Ms. Elizabeth Hilfrich
Chief Building Official
City of Gloucester

PANEL

Mr. Roy Philippe, Chair
Ms. Lesia Beznaczuk
Mr. Remus Tsang

PLACE

Ottawa, Ontario

DATE OF RULING

May 30th, 1995

APPEARANCES

Mr. Norman Tremblay, Owner
Loeb St. Laurent
Gloucester, Ontario
The Applicant

Mr. John Justa
Building Inspector
City of Gloucester
Gloucester, Ontario
For the Respondent

RULING

1. **The Applicant**

   Mr. Normand D. Tremblay, Loeb St. Laurent is the holder of a permit under the Building Code Act, 1992 to alter the front vestibule and one exit at the front of Loeb St. Laurent, 1021 St. Laurent Blvd., Gloucester, Ontario.

2. **Description of Constrution**

   The subject building is a one storey grocery store (i.e. Mercantile, Group E major occupancy). The building area is approximately 2393 m² (25759 ft²). The building is sprinklered, but does not have a fire alarm system that complies with Subsection 3.2.4. of the Building Code.

   Electromagnetic locking devices have been installed on three exit doors of the store. The Applicant would like to install a fire alarm that only satisfies the specific requirements for electromagnetic locking devices. The applicant does not want to install a complete fire alarm system in accordance with the installation and testing requirements in Article 3.2.4.5. of the Building Code.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentences 3.4.6.15.(3) and 3.4.6.15.(4) of the Building Code. At issue is whether a partial fire alarm system that only satisfies the specific requirements for three electromagnetic locking devices installed on exit doors at Loeb St. Laurent shows sufficiency of compliance with the Building Code.

4. **Provision of the Building Code**

Sentences 3.4.6.15.(3) & 3.4.6.15.(4) Door Release Hardware

3. Locking, latching and other fastening devices on any required exit door shall be each that the door can be readily opened from the inside without requiring keys, special devices or specialized knowledge of the door opening mechanism, except that this requirement does not apply to locking, latching and other fastening devices described in Sentence (4) or to doors designed to be remotely released in conformance with Article 3.3.1.12. serving a contained use are or an impeded egress zone.
4. An electromagnetic locking device that does not incorporate latches, pins or other similar devices to keep the door in the closed position is permitted to be installed on an exit door, other than an exit door serving an elementary or secondary school or leading directly from a Group F, division 1 occupancy
    a. if the building is equipped with a fire alarm system conforming to Subsection 3.2.4.,
    b. if the locking device is installed as an ancillary device to the fire alarm system and releases immediately
        i. upon activation of the fire alarm signal,
            - where the exit door serves a hotel, upon activation of the alert signal where a two stage fire alarm system is installed or upon activation of the alarm signal where a single stage fire alarm system is installed,
        ii. in the event of a power failure or ground fault, and
        iii. upon actuation of a manually-operated switch accessible only to authorized personnel,
    c. if a manual pull station for the fire alarm system is located on the wall not more than 600 mm (23 5/8 in) from the door,
    d. if, upon its release, the locking device must be reactivated manually by the actuation of the switch referred to in Subclause (b) (iii),

e. if a legible sign having the words EMERGENCY EXIT UNLOCKED BY FIRE ALARM is permanently mounted on the door, and
f. if the lettering on the sign required in Clause (e) is at least 25 mm (1 in) high with a 5 mm (3/16 in) stroke.

5. **Applicant's Position**

The Applicant submitted he was requested to either remove the electromagnetic locking devices on the exit doors or modify them to conform with the provisions of Article 3.4.6.15. of the Building Code. This article states that such devices are to be installed as an ancillary device to a fire alarm system.

The Applicant submitted that the store was built in 1968 and does not have a fire alarm system that complies with the Building Code. The Applicant is prepared to install a fire alarm system that will satisfy the specific requirements for electromagnetic locking devices. The Applicant submitted that the Respondent is requiring the fire alarm system to be installed and testing in conformance with Article 3.2.4.5. (i.e. CAN/ULC-S524 and S537) of the Building Code. This would mean a complete fire alarm system throughout the entire store. The applicant requested that he be exempted from installing a full fire alarm system due to the following reasons:

3. The cost of such an elaborate system is at least four times more expensive than what is actually needed for the electromagnetic locking devices, and he cannot afford it.
4. The provision of a partial fire alarm system that only satisfies the specific requirements for three electromagnetic locking devices insalled on the exit doors shows sufficiency of compliance with the Building Code.
5. The building has a sprinkler system plus a comprehensive fire detection system monitored 24 hours day by a security company.

6. **Chief Building Officials Position**

The Respondent submitted that a permit was obtained to alter the front vestibule and one exit at the front of a one storey (Group E) grocery store. The store is sprinklered, but does not have a fire alarm system. An Electromagnetic Locking Device (EMLD) was installed on the front exit and on two rear exits that are not part of the building permit. The EMLD's were not shown on the original documents submitted with the building permit application.

The Respondent submitted that the building is not provided with a fire alarm system conforming to Subsection 3.2.4. as required in Clause 3.4.6.15.(4)(a) of the Building Code. Also the

release/reset features required by Clause 3.4.6.15.(4)(b) of the Building Code are not provided. Therefore the EMLDs are not permitted to be installed in the building.

The Respondent does not have the authority to permit a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

In favour of the Respondent. It is the decision of the Building Code Commission that the electromagnetic locking devices on three (3) required exit doors do not demonstrate sufficiency of compliance with the Building Code.

8. **Reasons:**

- Sentence 3.4.6.15.(4) permits electromagnetic locking devices on required exit doors only in buildings equipped with a fire alarm system conforming to Subsection 3.2.4. of the Building Code.

- Insufficient evidence was provided that the existing security system can function as an acceptable fire alarm system.

Dated at Toronto, this 30th day, in the month of May, in the year 1995, for application number 1995-23.

BCC Ruling No. 95-27-447

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-27-447

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Subsection 3.2.3. and Article 3.2.3.1. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Arnold Kimmel, Owner, Kareeka Holdings Ltd. for the resolution of a dispute with Mr. Andre St. Amour, Chief Building Official, City of Cornwall, concerning whether the area of unprotected openings in the north exposing building face of the new Speedy Muffler King building shows sufficiency of compliance with the Building Code, at 708 Fourteenth Street West, Cornwall, Ontario.

APPLICANT

Kareeka Holdings Ltd.
Ottawa, Ontario

RESPONDENT

Mr. Andre St. Amour
Chief Building Official
City of Cornwall

PANEL

Mr. Roy Philippe, Chair
Ms. Lesia Beznaczuk
Mr. Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

May 30th, 1995

APPEARANCES

Mr. Arnold Kimmel, Owner
Kareeka Holdings Ltd.
Cornwall, Ontario
For the Applicant

RULING

1. **The Applicant**

   Mr. Arnold Kimmel, Owner, Kareeka Holdings Ltd. is the holder of a permit under the Building Code Act, 1992 to construct a new Speedy Muffler King building, at 708 Fourteenth Street West, Cornwall, Ontario.

2. **Description of Constrution**

   The proposed building is a Speedy Muffler King shop (Group F, Division 2), the north face of which is set back 8.37 m from the property line. The allowable percentage of unprotected openings in the north exposing building face is 22% whereas the actual percentage is calculated to be 29%. The exposing building face is constructed of masonry and allegedly complies with the fire-resistance rating requirements for spatial separation.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the sufficiency of compliance with the technical requirements of Subsection 3.2.3. and Article 3.2.3.1. of the Building Code. At issue is whether the area of unprotected openings for the north exposing building face of the new Speedy Muffler King building shows sufficiency of compliance with the Building Code.

4. **Provision of the Building Code**

   Subsection 3.2.3. Spatial Separation and Exposure Protection of Buildings

   Article 3.2.3.1. Limiting Distance and Area of Unprotected Openings

1. Except as provided in Articles 3.2.3.9. to 3.2.3.11, the area of unprotected openings shall not be more than that set forth in Tables 3.2.3.A. or 3.2.3.B. for the limiting distance applicable to the exposing building face under consideration.
2. The area of the unprotected openings in an exposing building face shall be the aggregate area of unprotected openings expressed as a percentage of the area of the exposing building face in Tables 3.2.3.A. and 3.2.3.B.(Sentence 3.2.3.2.(1).)
3. For the purposes of determining the type of construction and cladding and the fire-resistance rating of an exterior wall, the exposing building face shall be taken as the projection of the exterior wall onto a vertical plane located so that no portion of the exterior wall of the building or of a fire compartment, if the fire compartment complies with the requirements of Sentence 3.2.3.2.(1), is between the vertical plane and the line to which the limiting distance is measured and, for these purposes, the area of unprotected openings shall be determined from Table 3.2.3.A. or Table 3.2.3.B.
4. For the purposes of determining the actual percentage of unprotected openings permitted in an exterior wall, the location of the exposing building face is permitted to be taken at a vertical plane located so that there are no unprotected openings between the vertical plane and the line to which the limiting distance is measured.
5. Where fire fighting facilities cannot reach the building within 10 min of the alarm being received, the limiting distance shall be doubled.

5. **Applicant's Position**

The Applicant submitted that the subject building is a muffler repair shop. The large service bay doors result in the percentage of openings in the north exposing building face that is relatively high. The Applicant submitted that the exposing face is constructed of masonry and complies with requirements for fire resistance rating, but the maximum permitted area of unprotected openings is 22% as opposed to an actual area of 29%. The Applicant requested relief from the Building Code with respect to the additional 7% area of unprotected openings. The building is set back 8.37 m from the property line and approximately 50 m to an adjacent hotel.

The Applicant submitted that if his application is rejected, a fire-rated shutter will be provided to the exterior of the building to close off one of the standard doors. This will in effect reduce the area of unprotected openings to less than 22% of the exposing building face.

6. **Chief Building Officials Position**

The Respondent submitted that the building drawings indicated that the north exposing building face contains unprotected openings in excess of 22%. This is the maximum allowed in Article 3.2.3.1. of the Building Code. Therefore, the proposed 29% of unprotected openings in north exposing building face does not comply with the Building Code.

The Respondent does not have the authority to permit a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

In favour of the Respondent. It is the decision of the Building Code Commission that the unprotected openings in the north building face do not comply with the requirements of Subsection 3.2.3 and Article 3.2.3.1. of the Building Code.

8. **Reasons:**

Aggregate area of unprotected openings in the north face (29%) exceeds the percentage allowed by Table 3.2.3.B. of the Building Code.

Dated at Toronto, this 30th day, in the month of May, in the year 1995, for application number 1995-17.

BCC Ruling No. 95-26-446

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-26-446

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.3.2.8.(1)(c) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Greg Graham, Palladium Corporation for the resolution of a dispute with Mr. John Harkness, Chief Building Official, City of Kanata, concerning whether the upper tier seating design that does not provide 660 mm high guards between rows of fixed seats shows sufficiency of compliance with the Building Code at the Ottawa Palladium, 1000 Palladium Drive, Kanata, Ontario.

APPLICANT

Palladium Corporation
Nepean, Ontario

RESPONDENT

Mr. John Harkness
Chief Building Official
City of Kanata

PANEL

Mr. Roy Philippe, Chair
Ms. Lesia Beznaczuk
Mr. Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

May 30th, 1995

APPEARANCES

Mr. Jonathan Rubes, Principal
Leber/Rubes Inc.
Consulting Engineers
Toronto, Ontario
AND
Mr. Jake Pauls
Consulting Services in
Building Use & Safety
Maryland, USA
For the Applicant

RULING

1. **The Applicant**

   Mr. Greg Graham, Palladium Corporation is the holder of a permit under the Building Code Act, 1992 to construct a new National Hockey League (NHL) hockey arena for the Ottawa Senators at 1000 Palladium Drive, Kanata, Ontario.

2. **Description of Constrution**

   The Ottawa Palladium is a new NHL hockey arena for the Ottawa Senators. The facility will seat approximately 19,000 people and will have three tiers of seating.

   The facility includes an upper tier of fixed seats where the rise between rows is approximately 600 mm. The Applicant does not wish to provide guards between these rows of fixed seats. Clause 3.3.2.8.(1)(c) of the Building Code requires a 660 mm high guard to be provided where the seating is arranged in successive tiers and the height between platforms is more than 450 mm.

   The seating configuration in the Palladium has been designed in accordance with NFPA 101 "Life Safety Code". This includes the use of sophisticated smoke management systems to enhance the level of safety and maintain smoke protected routes during evacuation of the building. The NFPA 101 requires handrails in the aisles of this seating section that are not required by the Building Code.

3. **Dispute**

The dispute between the Applicant and Respondent concerns the sufficiency of compliance with the technical requirements of Clause 3.3.2.8.(1)(c) of the Building Code. At issue is whether the upper tier seating design that does not provide 660 mm high guards between rows of fixed seats shows sufficiency of compliance with the Building Code.

4. **Provision of the Building Code**

Clause 3.3.2.8.(1)(c) Guards

1. Except as required in Sentence (2) to (4) for bleacher seats, guards shall be installed in outdoor and indoor places of assembly with fixed seating so that:

(c) where the seating is arranged in successive tiers and the height of rise between platforms
is more than 450 mm, the height of guards is not less than 660 mm along the entire row of
seats at the edge of the platform.

5. **Applicant's Position**

The Applicant submitted that Clause 3.3.2.8.(1)(c) of the Building Code is not applicable to rows of fixed seats. It was suggested that this requirement was originally intended for a platform of loose seats. Such a platform created isolated seating areas which in more recent designs have been replaced by private boxes.

The Applicant submitted that even if Clause 3.3.2.8.(1)(c) of the Building Code is considered applicable to fixed rows of seats, the proposed design provides an equivalent level of performance:

1. The seating configuration has been designed in accordance with NFPA 101 "Life Safety Code" that does not require guards in fixed seating rows.
2. Typically trip and fall related injuries occur on stairs. Although handrails are not required by the Building Code in seating aisles and steps, handrails will be provided in aisles in this tier of seating.
3. Past experience supports the conclusion that tiers of fixed seats perform acceptably without guards located between rows.

6. **Chief Building Officials Position**

   The Respondent submitted that the proposed upper tier seating has successive seating risers of 597 mm that will not have guards in the rows nor will the seat back extend more than 600 mm above the floor of the row behind.

   The Respondent submitted that records and reports indicate that there does not appear to have been any accidents or injuries in similar seating tiers without guards. The proposed seating has been designed in accordance with NFPA 101 Life Safety Code.

   The Respondent does not have the authority to permit a condition that deviates form the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that the upper seating design, that does not provide 660 mm high guards between rows of fixed seating, shows sufficiency of compliance with the Building Code.

8. **Reasons:**
   1. Seating has been designed to NFPA 101 "Life Safety Code" and includes such safety features as handrails in seating aisles, which exceeds the Building Code requirements.
   2. Evidence based on past studies supports the acceptability without guards located between rows.
   3. Evidence presented indicates that trip and fall related injuries usually occur on stairs rather than within seat rows.

Dated at Toronto, this 30th day, in the month of May, in the year 1995, for application number 1995-24.

BCC Ruling No. 95-25-445

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-25-445

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.2.2.52.(2)(a) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Jim Shier, Ontario Store Fixtures for the resolution of a dispute with Mr. Yaman Uzumeri, Chief Building Official, City of North York, concerning whether the provision of a 1 hour vertical fire separation between a Group F, Division 2 and Group D occupancy provides sufficiency of compliance with the requirement to provide a 45 minute fire resistance rating for the adjoining interconnected second floor of the Group D occupancy at Ontario Store Fixtures, 650 Barmac Drive, North York, Ontario.

APPLICANT

Ontario Store Fixtures
North York, Ontario

RESPONDENT

Mr. Yaman Uzumeri
Chief Building Official
City of North York

PANEL

Mr. Roy Philippe, Chair
Mr. Demir Delen
Mr. Michael Lio

PLACE

Toronto, Ontario

DATE OF RULING

May 18th, 1995

APPEARANCES

Mr. Leszek Muniak, Principal
Larden Muniak Consulting Inc.
Toronto, Ontario
For the Applicant

Mr. Yudistir Ramkissoon
Construction Examiner
City of North York
For the Respondent

RULING

1. **The Applicant**

   Mr. Jim Shier, Ontario Store Fixtures is the holder of a permit under the Building Code Act, 1992 to construct an interconnected second floor assembly in the Group D portion of an existing building used primarily for wood cutting and assembly operations at Ontario Store Fixtures, 650 Barmac Drive, North York, Ontario.

2. **Description of Constrution**

   The project is a 4,000 m² fully sprinklered, noncombustible building classified as a Group F, Division 2, major occupancy. The north portion of the building consists of a two storey, interconnected office space representing approximately 2,600 m² or 65% of the building area. The north portion of the building is a one storey structure used primarily for wood cutting and assembly operations, classified as a Group F, Division 2 occupancy. The Group D portion of the building is separated from the Group F, Division 2 portion by a 1 hour vertical fire separation rising tight to the underside of the metal deck roof.

   The Applicant constructed a non rated interconnected second floor assembly in the Group D portion of the building.

3. **Dispute**

The dispute between the Applicant and Respondent concerns the sufficiency of compliance with the technical requirements of Clause 3.2.2.52.(2)(a) of the Building Code. At issue is whether the provision of a 1 hour vertical fire separation between the Group F, Division 2 and Group D occupancies provides sufficiency of compliance with the requirement to provide a 45 minute fire resistance rating for the adjoining interconnected second floor of the Group D occupancy.

4. **Provision of the Building Code**

Clause 3.2.2.52.(2)(a): Industrial Buildings, Division 2, up to 4 Storeys

2. The building shall be of combustible or noncombustible construction used either singly or in combination, and

b. floor assemblies shall be fire separations with a fire-resistance rating of not less than 45 min,

2. **Applicant's Position**

The Applicant submitted that the North York Building Department is requiring the second floor assembly to have a 45 minute fire-resistance rating in conformance with Clause 3.2.2.52.(2)(a) for a Group F, Division 2 major occupancy, and Article 3.1.3.3. respecting construction requirements for the most restrictive major occupancy. The Applicant submitted that sufficiency of compliance with Clause 3.2.2.52.(2)(a) of the Building Code has been achieved, for the following reasons:

2. The vertical fire separation is equivalent in rating to the floor assembly rating if the floor was designed to Group F, Division 2 requirements.
3. Since the Group D portion of the building is separated from the Group F, Division 2 portion by a 1 hour rated vertical fire separation, a fire occurring in the Group F, Division 2 portion of the building will not immediately threaten the structural integrity of the non-rated second floor assembly in the Group D portion of the building.
4. In sprinklered Group D buildings up to three storeys in building height, facing a minimum of one street and having a building area of not more than 4,800 m², noncombustible floor assemblies may be used.

The Applicant summarized that the City of North York Building Department maintains the opinion that a 45 minute fire-resistance rating must be applied to the underside of the second

floor assembly in consideration of the construction requirements for the most restrictive major occupancy (i.e. Group F, Division 2).

It is the Applicant's opinion that the 1 hour vertical fire separation between the two adjoining occupancies provides a reasonable level of safety to the occupants within the Group D portion of the building from an ensuing fire in the Group F, Division 2 portion of the building, and therefore sufficiency of compliance is achieved with a non-rated floor assembly in the Group D portion.

2. **Chief Building Officials Position**

The Respondent submitted that the ground floor of the subject building is classified as Group D and Group F, Division 2 major occupancy. For construction requirements the building falls under Article 3.2.2.40 and 3.2.2.52. of the Building Code.

Sentence 3.1.3.1.(2) and Article 3.1.3.3. require the most restrictive major occupancy contained in a building to be applied to the whole building. The most restrictive of the two major occupancy is Group F, Division 2. Clause 3.2.2.52.(2)(a) requires the floor assembly to be constructed as a fire separation with a fire resistance rating of not less than 45 minutes.The Respondent does not have the authority to permit a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

3. **Commission Ruling:**

In favour of the Respondent. It is the decision of the Building Code Commission that not providing the 45 minute fire resistance rating on the second floor does not comply with the Building Code.

4. **Reasons:**
    2. The Medium Hazard Industrial Occupancy (F-2) requirements apply throughout the building since no fire wall is provided to treat the Business and Personal Service Occupancy (D) and F-2 occupancy as separate buildings.
    3. Sentence 3.1.3.1.(2) and Article 3.1.3.3. require the most restrictive major occupancy contained in a building to be applied to the whole building. The most restrictive of the two major occupancy is Group F, Division 2. Clause 3.2.2.52.(2)(a) requires the floor assembly to be constructed as a fire separation with a fire resistance rating of not less than 45 minutes.

Dated at Toronto, this 18th day, in the month of May, in the year 1995, for application number 1995-20.

BCC Ruling No. 95-24-444

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-24-444

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 9.9.6.8. of the Revised Regulation of Ontario 1990,Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Ms. Joy McCormack, Muskoka Women's Advocacy Group for the resolution of a dispute with Mr. Randy Gardner, Chief Building Official, Town of Bracebridge, concerning whether the electromagnetic locking devices on two exterior doors sufficiently comply with Article 9.9.6.8. of the Building Code, at "Muskoka Interval House", 43 Mary Street, Bracebridge, Ontario.

APPLICANT

Muskoka Women's Advocacy Group
Bracebridge, Ontario

RESPONDENT

Mr. Randy Gardner
Chief Building Official
Town of Bracebridge

PANEL

Mr. Roy Philippe, Chair
Mr. Demir Delen
Mr. Michael Lio

PLACE

Toronto, Ontario

DATE OF RULING

May 18th, 1995

APPEARANCES

Mr. Michael Gooch
Building Inspector
Town of Bracebridge
For the Respondent

RULING

1. **The Applicant**

   Ms. Joy McCormack, Muskoka Women's Advocacy Group is the holder of a permit under the Building Code Act, 1992 to construct a Part 9 building, classified as a Group C major occupancy to be used as a battered women's shelter, "Muskoka Interval House", 43 Mary Street, Bracebridge, Ontario.

2. **Description of Constrution**

   The subject building was designed and built as a single family dwelling (i.e. house). It is being used as a shelter for battered women. The building has 10 sleeping rooms with an occupant load of 20. In-house supervision is provided 24 hours a day.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the sufficiency of compliance with the technical requirements of Article 9.9.6.8. of the Building Code. At issue is whether the electromagnetic locking devices on two exterior doors sufficiently comply with the Building Code.

4. **Provision of the Building Code**

   Article 9.9.6.8.: Door Opening Mechanism

   Exit doors and doors to suites, including exterior doors to dwelling units, shall be openable from the inside without requiring keys, special devices or specialized knowledge of the door opening mechanism.

5. **Applicant's Position**

The Applicant submitted that the operating procedures for this shelter for battered women provides that only staff members may open from the interior, any of the five exterior doors. The doors in contention (i.e. the 'front door' and the 'basement door') are equipped with electrically operated unlocking devices activated by touch-keys, the fire alarm system, and a power failure.

The applicant submitted that two of the exterior doors, door D31 (i.e. the east exit door) and door D43 (i.e. the west exit door) are equipped with door release hardware conforming with Article 3.4.6.15. The Building Department has accepted this arrangement as an equivalent with respect to these two doors complying with Article 9.9.6.8. of the Building Code.

It is the Applicant's position that:

1. the east exit door and the west exit door are the required exits to the exterior,
2. the east exit door and the west exit door are the only required exits to the exterior,
3. the front door and the basement door are not required exits to the exterior,
4. the required exit doors comply with Article 9.9.6.8.
5. the front door and the basement door are not required to comply with Article 9.9.6.8., and
6. in addition to the above, the intent of the Building Code with respect to door release hardware on doors that are not required exits is found in Sentence 3.4.6.15.(3).

6. **Chief Building Officials Position**

The Respondent submitted that Article 9.9.6.8. requires that all exterior doors to dwelling units be openable without the use of keys, special devices or specialized knowledge. The latches that have been installed are electromagnetic, using pins or latches that can be opened with a touch key. They can be programmed or wired to not open on power failure or on the activation of the fire alarm. The Building Department has not been provided with the specifications for the latches. These latches do not comply with Article 9.9.6.8. or Sentence 3.4.6.15.(4).

The Respondent does not have the authority to permit a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that the subject exterior doors from the building provide sufficiency of compliance with the Building Code.

8. **Reasons:**

1. Two exits that comply with the Building Code have been provided from every floor area.
2. Twenty four hour supervision is provided by staff.
3. Emergency procedures on exiting the building are included in the fire safety plan.
4. All residents are oriented on fire emergency procedures.
5. The building has limited public access.

Dated at Toronto, this 18th day, in the month of May, in the year 1995, for application number 1995-22.

BCC Ruling No. 95-23-443

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-23-443

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 10.2.1.1., Sentence 3.1.2.1.(1) and Article 1.1.3.2. for the definition of Business and Personal Services Occupancy, Mercantile Occupancy and Assembly Occupancy, Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Davis Thompson, Owner, 773978 Ontario Inc. for the resolution of a dispute with Mr. Edward Stechishen, Chief Building Official, Town of Deep River, concerning whether a Group D or E major occupancy classification is more appropriate for the proposed Teen Activity Centre (TAC) than a Group A-2 classification, thereby eliminating the need to upgrade the vertical fire separation between TAC and the adjacent Drug Store at 7 Champlain St., Deep River, Ontario.

APPLICANT

73978 Ontario Inc.
Deep River, Ontario

RESPONDENT

Mr. Edward Stechishen
Chief Building Official
Town of Deep River

PANEL

Mr. Roy Philippe, Chair
Mr. Demir Delen
Mr. Michael Lio

PLACE

Toronto, Ontario

DATE OF RULING

May 18th, 1995

APPEARANCES

Mr. David Earle, Chairman
Teen Activity Centre
Deep River, Ontario
For the Applicant

RULING

1. **The Applicant**

   Mr. Davis Thompson, Owner, 773978 Ontario Inc. received an Order to Comply under the Building Code Act, 1992 requiring the fire resistance rating of the vertical fire separation between a Teen Activity Centre (TAC) and an adjacent Drug Store at 7 Champlain St., Deep River, Ontario.

2. **Description of Constrution**

   The subject one storey building originally contained a drug store and an adjoining shoe store. The wall separating these premises is constructed with two layers of drywall. The Applicant proposed to change the use of the shoe store portion of the building to a Teen Activity Centre. The building area is 528 m² (5684 ft²). The area of the proposed Teen Activity Centre is 125 m ² (1346 ft²). The building is of combustible construction, unsprinklered and does not contain a fire alarm system.

3. **Dispute**

   The dispute between the Applicant and Respondent concern an interpretation of Article 10.2.1.1., Sentence 3.1.2.1.(1) and Article 1.1.3.2. (i.e. the definition of Business and Personal Services Occupancy, Mercantile Occupancy and Assembly Occupancy) of the Building Code. At issue is whether a Group D or E major occupancy classification is more appropriate for the proposed Teen Activity Centre (TAC) than a Group A-2 classification, thereby eliminating the need to upgrade the vertical fire separation between TAC and the adjacent Drug Store.

4. **Provision of the Building Code**

10.2.1.1. Classification of Major Occupancy

Every existing building or part thereof shall be classified according to its major occupancy in accordance with the requirements of Subsection 3.1.2.

3.1.2.1. Classification of Buildings

1. Except as provided in Articles 3.1.2.3. to 3.1.2.6., every building or part thereof shall be classified according to its major occupancy as belonging to one of the Groups or Divisions described in Table 3.1.2.A.

1.1.3.2. Definitions of Words and Phrases

Assembly Occupancy means the occupancy or the use of a building, or part thereof, by a gathering of persons for civic, political, travel, religious, social, educational, recreational or like purposes, or for the consumption of food or drink.

Business and Personal Services Occupancy (D) means the occupancy or use of a building or part thereof for the transaction of business or the rendering or receiving of professional or personal services.

Mercantile Occupancy (E) means the occupancy or use of a building or part thereof for the displaying or selling of retail goods, wares of merchandise.

5. **Applicant's Position**

he Applicant submitted that Group D or E occupancy classification is more appropriate than a Group A occupancy because of the nature of the activities and the number of occupants that will use the Teen Activity Centre.

The Applicant submitted that the function of the building is primarily a preventative crisis centre with an adult always on duty. The occupant load is never more than 15 persons and is usually less than 10. The applicant noted that although restaurants are classified Group A-2, restaurants with an occupancy load less than 30 are classified Group E. TAC would accept a less than 30 occupancy requirement. Furthermore, there is no smoking, no drinking, no drugs and no cooking permitted at the centre.

The Applicant submitted that the building has exits front and back. The fire hazard has not increased from the previous use as a shoe store.

The Applicant referred to Appendix A-3.1.2.A (Major Occupancy) with respect to the TAC premises and submitted that the appropriate classification may be ambiguous. In some ways the Group A-2 occupancy classification would seem appropriate since people do assemble there. However, all of the Group A-2 examples in the appendix are for large assembly areas such as schools, dance halls, lecture halls etc. The TAC premises is approximately 1300 ft² and there are seldom more than a dozen people present.

The TAC is used for teen age counselling and discussion groups concerning pregnancy issues, drug abuse, referrals to other agencies and Young Drivers of Canada. The small floor area, the presence of a staff person and because the major purpose of TAC is to help troubled teens, the closest identified classification is a Business & Personal Services occupancy.

TAC will be employing a full time social worker to organize programs for teens and preteens. Part of the space will be used as an office by the new employee.

6. **Chief Building Officials Position**

The Respondent submitted that the required 1.5 h fire separation between the space used by TAC and the Drug Store has not been provided. A Group A-2 occupancy classification is applicable since teenagers congregate in the building to socialize.

The space was formerly a shoe store (i.e. Group E, mercantile occupancy). The result is a change of use from Group E to Group A-2 with an adjoining Group E occupancy (i.e. drug store) sharing a common fire separation.

The Respondent submitted that the main concern is the provision of the required 1.5 hour fire separation between TAC and the drug store.

The Respondent submitted that an integrated operation such as TAC should be judged by the most stringent requirement (i.e. a gathering of persons for recreational or like purposes) which is Group A-2.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that a Business and Personal Service Occupancy (Group D) classification of the Teen Activity Centre complies with the Building Code provided the occupant load does not exceed 30 persons.

8. **Reason:**

The use as described by the applicant is more consistent with the rendering or receiving of personal services, such as counselling, crisis intervention, and other related referral services with a staff person present at all times.

Dated at Toronto, this 18th day, in the month of May, in the year 1995, for application number 1995-21

BCC Ruling No. 95-22-442

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-22-442

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 2.1.2.1.(1)(a) and Sections 4.1 and 4.3 of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93,160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Thomas Feeley, Gwillimbury Homes for the resolution of a dispute with Mr. Bernie Roth, Chief Building Official, City of Scarborough, concerning whether a retaining wall comprised of an engineered system of concrete blocks, known as Risi Stones, anchored by means of woven polymeric geotextile material into cement stabilized soil shows sufficiency of compliance with the Building Code at 4 Mason Road, Scarborough, Ontario.

APPLICANT

Gwillimbury Homes
Scarborough, Ontario

RESPONDENT

Mr. Bernie Roth
Chief Building Official
City of Scarborough

PANEL

Mr. Michael Lio, Panel Chair
Mr. Rick Florio
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

May 4th, 1995

APPEARANCES

Mr. George Tott, Consulting Engineer
Geotasco Inc.
Willowdale, Ontario
For the Applicant

Mr. Prakash Parikh
Senior Structural Engineer
City of Scarborough
For the Respondent

RULING

1. **The Applicant**

   Mr. Thomas Feeley, Gwillimbury Homes is an applicant for a permit under the Building Code Act, 1992 to construct a retaining wall along the rear portion of the access to the garage of unit #1 and along the south side of the same driveway against a pedestrian walkway for a townhouse project at 4 Mason Road, Scarborough, Ontario.

2. **Description of Constrution**

   The applicant proposed to replace an existing timber retaining wall with an engineered system of concrete blocks known as Risi Stones which are anchored by means of woven polymeric geotextile material into cement stabilized soil.

   The height of the retaining wall varies from 1.6 m (5.25 ft.) to 2.3 m (7 ft. 9 in.).

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the sufficiency of compliance with the technical requirements of Clause 2.1.2.1.(1)(a) and Sections 4.1 and 4.3 of the Building Code. At issue is the use of a woven polymeric geotextile material (i.e. Risigrid) as a structural tieback component of the retaining wall.

4. **Provision of the Building Code**

Clause 2.1.2.1.(1)(a) Designated Structures

1. Part 4 applies to the following designated structures:
    a. a retaining wall exceeding 1 m (3 ft. 3 in.) in exposed height adjacent to
        i. public property,
        ii. access to a building, or
        iii. private property to which the public is admitted,

Other Provisions of the Building Code: Section 4.1, Structural Loads and Procedures and Section 4.3, Design Requirements for Structural Materials.

5. **Applicant's Position**

The Applicant submitted calculations and supporting documentation to verify the acceptability of the engineered retaining wall.

The Applicant submitted that a building material not specifically covered by the Building Code is not a "prohibitive material". The use of a woven polymeric geotextile material (i.e. Risigrid) as a structural component of the retaining wall meets good engineering practice.

Furthermore, the Applicant submitted that geotextiles have been used for the past decade in similar applications.

6. **Chief Building Officials Position**

The Respondent submitted that the retaining wall was a "Designated Structure" subject to Part 4 of the Building Code. A critical component of the design is the use of a polyvinylchloride coated fabric (i.e. Risigrid) as a structural tieback material. The Respondent stated that it's use was not specifically authorized under the Building Code or by any of the reference standards.

The Respondent submitted that Section 4.1 of the Building Code requires structural members to be designed having regard to expected service life. Furthermore, Section 4.3 of the Building Code provides design requirements for structural materials. The Respondent submitted that the applicant should provide a CCMC evaluation or BMEC authorization indicating an equivalent level of performance to Sections 4.1 and 4.3 of the Building Code.

7. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that the proposed retaining walls show sufficiency of compliance with the technical requirements of the Building Code provided the applicant submits a final sealed and signed report by a Professional Engineer licensed under the Professional Engineers Act (Ontario) to the municipality detailing all calculations, field inspection reports and a list of projects utilizing the retaining wall system in Ontario.

8. **Reasons:**
   1. The reinforced earth retaining wall system is not a new concept and has been utilized across Ontario in various forms and is recognized by the Canadian Geotechnical Society as detailed in the Canadian Foundation Engineering Manual.
   2. A licensed Professional Engineer provided engineering services (i.e. calculations & inspections) in accordance with the Professional Engineers Act (Ontario).
   3. An independent licensed consulting engineer's testimony confirmed the suitability of the retaining wall system.

Dated at Toronto, this 4th day, in the month of May, in the year 1995, for application number 1995-18.

BCC Ruling No. 95-21-441

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-21-441

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.11.3.1.(4) & 3.11.5.1.(1) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Steve Ruffini, Design Technician, City of Cambridge for the resolution of a dispute with Mr. Larry Simonato, Chief Building Official, City of Cambridge, concerning whether the proposed ramp to be installed in the George Hancock Memorial Pool with a slope of 1 in 12 and a width of 8.83 m, sufficiently complies with the technical requirements of the Building Code.

APPLICANT

City of Cambridge
Cambridge, Ontario

RESPONDENT

Mr. Larry Simonato
Chief Building Official
City of Cambridge

PANEL

Mr. Michael Lio, Panel Chair
Mr. Sang Shim
Mr. Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

May 4th, 1995

APPEARANCES

Mr. Bernhard G. Gall, President
Acapulco
Kitchener, Ontario
For the Applicant

Mr. David Carroll
Supervisor of Building Inspectors
City of Cambridge
For the Respondent

RULING

1. **The Applicant**

   The City of Cambridge is an applicant for a permit under the Building Code Act, 1992 to renovate an existing outdoor public swimming pool at First (1st) Avenue and Glen Morris Street, Cambridge, Ontario.

2. **Description of Constrution**

   The project is a renovation of an existing outdoor public swimming pool which includes the installation of a barrier free ramp and a "beach entry" ramp. The pool is 15.2 m by 30.5 m (50' by 100') and it has a maximum depth of 3.25 m (10' 8"). The proposed ramp has a slope of 1 in 12 and a width of 8.83 m. The ramp entry into the pool is separated from the lap pool by a 0.3 m (1') wide concrete wall 16.5 m (54') long. The wide entry ramp into the pool is provided with:

   a. a trench skimmer along the shallow end, facilitating proper recirculation and disinfection of the pool water;
   b. water depth marking on the deck; and,
   c. delineation markings showing changes in slopes on the pool bottom.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the sufficiency of compliance with the technical requirements of Sentences 3.11.3.1.(4) & 3.11.5.1.(1) of the Building Code. At issue is a request to install a "beach entry" ramp with a slope of 1 in 12 and a width of 8.83 m in the George Hancock Memorial Pool.

4. **Provision of the Building Code**

Sentence 3.11.3.1.(4): Construction Requirements

4. Except for a modified pool, wave action pool, a pool for therapeutic use and a pool described in Sentence 3.11.5.1.(1), a public pool shall be constructed to have a water depth of not less than 750 mm (2 ft 6 in).

Sentence 3.11.5.1.(1): Ramps into Pools

5. Notwithstanding Sentences 3.11.3.1.(4) and (7) and Clause 3.11.3.1.(8)(a), where a public pool is constructed in a building containing a Group B, Division 2, major occupancy, and has a water depth not exceeding 1.5 m (4 ft 11 in) and a water surface area not exceeding 100 m^2 (1080 ft^2), the pool deck contiguous to not more than 50 per cent of the total perimeter of the pool may be replaced by one or more ramps that will permit a bather seated in a wheelchair to enter the water with or without the wheelchair.

2. **Applicant's Position**

The Applicant submitted that the allowable maximum ramp width is not defined in the Building Code, therefore the proposed ramp with a slope of 1 in 12 and a width of 8.83 m provides adequate compliance with the intent of the Building Code. The applicant submitted that the wide ramp entry into the pool is valid for the following reasons:

. the ramp entry into the pool is separated from the lap pool by a 0.3 m (1') wide concrete wall 16.5 m (54') long;

a. a trench skimmer along the shallow end, facilitating proper recirculation and disinfection of the pool water;

b. water depth marking on the deck; and

c. delineation markings showing changes in slopes on the pool bottom.

2. **Chief Building Officials Position**

The Respondent submitted that the project is a renovation of an existing outdoor public swimming pool which includes the installation of a barrier free ramp and a "beach entry" ramp.

The Respondent submitted that it appears the design contravenes Sentence 3.11.3.1.(4) and 3.11.5.1.(1) of the Building Code.

The Respondent does not have the authority to permit a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

3. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that the proposed installation of a barrier free ramp and "beach entry" ramp in the existing public pool shows sufficiency of compliance with the technical requirements of the Building Code provided a guard is installed as per the Building Code height requirement along the unprotected pool deck extending from the 0 to 750 mm water depth.

4. **Reason:**

   The minimum pool depth requirement of 750 mm is intended to prevent injury to pool users when jumping into the pool. Installing a guard on the pool deck meets this intent.

   The Housing Development and Buildings Branch of the Ministry of Housing is considering an amendment to the Building Code to address this issue.

Dated at Toronto, this 4th day, in the month of May, in the year 1995, for application number 1995-19.

BCC Ruling No. 95-20-440

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-20-440

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Section 9.37 & Subsection 9.23.13. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Martin Lane Lemcke, House Owner, Owen Sound for the resolution of a dispute with Mr. Stan Dolphin, Chief Building Official, Township of Arran, County of Bruce, concerning whether the construction of a single family dwelling (i.e. house) is in accordance with the log construction requirements of Section 9.37 and the roof and ceiling framing requirements of Subsection 9.23.13. of the Building Code, at RR # 2 Allen Ford, Township of Arran, County of Bruce,Ontario.

APPLICANT

Mr. Martin Lane Lemcke
Owen Sound, Ontario

RESPONDENT

Mr. Stan Dolphin
Chief Building Official
Township of Arran, County of Bruce

PANEL

Mr. Michael Lio, Panel Chair
Mr. Rick Florio
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

May 4th, 1995

APPEARANCES

Mr. Don Tedford, Building Inspector
Township of Arran, County of Bruce
For the Respondent

RULING

1. **The Applicant**

   Mr. Martin Lane Lemcke, House Owner, Owen Sound is an applicant for a permit under the Building Code Act, 1992 to construct a single family dwelling (i.e. house) with an attached garage.

2. **Description of Constrution**

   The subject building is a raised bungalow (i.e. house) with an attached garage. The structural framing consists of a combination log-type and wood frame construction.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the sufficiency of compliance with the technical requirements of Section 9.37 and Subsection 9.23.13. of the Building Code. At issue is whether the construction of a single family dwelling (i.e. house) is in accordance with the log construction requirements of Section 9.37 and the roof and ceiling framing requirements of Subsection 9.23.13. of the Building Code.

4. **Provision of the Building Code**

   Section 9.37 Log Construction

   Subsection 9.23.13. Roof and Ceiling Framing

5. **Applicant's Position**

   The Applicant submitted that the building sufficiently complies with the log construction and roof and ceiling framing requirements in the Building Code.

6. **Chief Building Officials Position**

   The Respondent submitted that the log construction and roof and ceiling framing was unacceptable due to the following reasons:

   a. Site inspections by the municipality indicate that the construction does not conform to the Building Code (e.g. log joint detail, lumber species, framing deficiencies, etc.).
   b. Reports from two consulting companies confirm that the building construction does not comply with the structural requirements of the Building Code.

7. **Commission Ruling:**

   In favour of the Respondent. It is the decision of the Building Code Commission that the log building currently under construction does not comply with the technical requirements of the Building Code. The Applicant must seek structural engineering services of a Professional Engineer licensed under the Professional Engineers Act (Ontario) to certify that the construction conforms to the Building Code.

8. **Reason:**

   The engineering report submitted indicates the house structure built to-date does not comply with the Building Code.

Dated at Toronto, this 4th day, in the month of May, in the year 1995, for application number 1995-14.

BCC Ruling No. 95-19-439

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-19-439

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.3.7. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Lorie Pella, Vanbots Construction Corporation for the resolution of a dispute with Mr. Terry Willing, Chief Building Official, Township of Kingston, concerning sufficiency of compliance with the construction and fire resistance rating requirements for the west exposing building face at the No Frills Store, 1030 Coverdale Drive, Kingston, Ontario.

APPLICANT

Vanbots Construction Corporation
Markham, Ontario

RESPONDENT

Mr. Terry Willing
Chief Building Official
Township of Kingston

PANEL

Mr. Demir Delen, Panel Chair
Mr. Michael Lio
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

April 25th, 1995

APPEARANCES

Mr. Yousef Tadros, Architect
Y.T. Architectural Services Inc.
North York, Ontario
For the Applicant

RULING

1. **The Applicant**

   Mr. Lorie Pella, Vanbots Construction Corporation is an applicant for a permit under the Building Code Act, 1992 to construct a No Frills grocery store at 1030 Coverdale Drive, Kingston, Ontario.

2. **Description of Constrution**

   The proposed building is a one storey sprinklered grocery store designed in conformance with Article 3.2.2.44. of the Building Code. The building area is 3010 m².

   The western portion of the proposed store is adjacent to a large storm water retention area. The limiting distance requires the west exposing building face to have a two hour fire resistance rating.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the sufficiency of compliance with the technical requirements of Article 3.2.3.7. of the Building Code. At issue is a request to shift a portion of the required limiting distance to the abutting storm water retention pond by registering an agreement on the title of both properties that limits future construction. This would eliminate the need of a fire resistance rating for the west exposing building face.

4. **Provision of the Building Code**

   Article 3.2.3.7.: Construction of Exposing Building Face

1. Except as permitted in Articles 3.2.3.9. and 3.2.3.10., where a limiting distance shown in Table 3.2.3.A. for a Group A, B, C, D or Group F, Division 3 occupancy classification is such as to permit an exposing building face to have unprotected openings of
    a. not more than 10 per cent of the exposing building face, the exposing building face shall be of noncombustible construction having a fire-resistance rating of not less than 1 h and be clad with noncombustible cladding,
    b. more than 10 per cent but not more than 25 per cent of the exposing building face, the exposing building face shall have a fire-resistance rating of not less than 1 h and be clad with noncombustible cladding, and
    c. more than 25 per cent but less than 100 per cent of the exposing building face, the exposing building face shall have a fire-resistance rating of not less than 45 min.
2. Except as permitted in Article 3.2.3.9., where a limiting distance shown in Table 3.2.3.B. for a Group E, or Group F, Division 1 or 2 occupancy classification is such as to permit an exposing building face to have unprotected openings of
    a. not more than 10 per cent of the exposing building face, the exposing building face shall be of noncombustible construction having a fire-resistance rating of not less than 2 h and be clad with noncombustible cladding,
    b. more than 10 per cent but not more than 25 per cent of the exposing building face, the exposing building face shall have a fire-resistance rating of not less than 2 h, and be clad with noncombustible cladding, and
    c. more than 25 per cent but less than 100 per cent of the exposing building face, the exposing building face shall have a fire-resistance rating of not less than 1 h.
3. In addition to the requirements of Sentences (1) and (2), where foamed plastic insulation is used in an exterior wall of a building more than 3 storeys in building height
    a. the insulation shall be protected on the exterior surface by
        i. concrete or masonry not less than 25 mm (1 in) thick, or
        ii. noncombustible material that will remain in place for not less than 15 min when tested in conformance with CAN4-S101-M, "Standard Methods of Fire Endurance Tests of Building Construction and Materials", or
    b. the wall assembly shall conform to Article 3.1.5.5. where the protection in Clause (a) is not provided.

5. **Applicant's Position**

The Applicant submitted that the property adjacent to the west face of the building will serve as a water retention pond for the No Frills Store and surrounding residential properties. The property is not intended for future development.

The Applicant submitted that the Township of Kingston municipal Council passed the following resolution on March 21, 1995:

That the Council of the Corporation of the Township of Kingston approve the request submitted by Mr. Joseph Tadros, Architect on behalf of No Frills store, 130 Coverdale Drive in order to permit a shift of the requirement for spatial separtion to the abutting storm water pond as detailed in a report of the Chief Building Official dated March 7, 1995.

The applicant has agreed to cover the cost of preparation and registration of an agreement to carry out the intent of Council's resolution.

6. **Chief Building Officials Position**

The Respondent submitted that the location of the building with respect to the property line separating the No Frills property from the storm water retention pond requires the west wall of the store to have a two hour fire resistance rating.

The Respondent submitted that the municipality has agreed to shifting a portion of the limiting distance to the abutting property and registration of an agreement on title is eminent. This would eliminate the need of a fire resistance rating for the west exposing building face.

The Respondent does not have the authority to permit a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that shifting the limiting distance to the abutting storm water retention pond provides sufficiency of compliance with the Building Code requirements.

8. **Reason:**

The adjacent property is owned by the Township. Council agreed to enter into an agreement to limit future construction within the shifted limiting distance area and register it on title.

Dated at Toronto, this 25th day, in the month of April, in the year 1995, for application number 1995-11.

BCC Ruling No. 95-18-438

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-18-438

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 6.2.3.11.(2) & 9.9.4.2.(4) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Peter Szpular, Owner, Guelph for the resolution of a dispute with Mr. Bruce Poole, Chief Building Official, City of Guelph, concerning whether the proposed installation for a gas fired forced air heating system to heat 4 apartment units and circulate air to 4 suites, the public corridor and a common exit stair will provide sufficiency of compliance with the requirements of the Building Code, at 250 Alma Street North, Guelph, Ontario.

APPLICANT

Mr. Peter Szpular, Owner
Guelph, Ontario

RESPONDENT

Mr. Bruce Poole
Chief Building Official
City of Guelph

PANEL

Mr. Demir Delen, Panel Chair
Mr. Michael Lio
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

April 25th, 1995

APPEARANCES

Mr. Ben Kooh
Al Dunn Heating & A/C
Waterloo, Ontario
For the Applicant

Mr. John Bosyj
HVAC Inspector/Plans Examiner
City of Guelph
For the Respondent

RULING

1. **The Applicant**

   Mr. Peter Szpular, Owner received an Order to Comply under the Building Code Act,1992 prohibiting the use of a gas fired forced air heating system to heat 4 apartment units and circulate air to 4 suites, the public corridor and a common exit stair, at 250 Alma Street North, Guelph, Ontario.

2. **Description of Constrution**

   The existing 4 unit apartment building was originally heated by electrical baseboard heaters. The baseboard heating system was changed to a gas fired forced air system that heats 4 apartment units and circulates air to 4 suites, the public corridor and a common exit stair.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the sufficiency of compliance with the technical requirements of Sentences 6.2.3.11.(2) & 9.9.4.2.(4) of the Building Code. At issue is whether the proposed installation for a gas fired forced air heating system to heat 4 Apartment units and circulate air to 4 suites, the public corridor and a common exit stair provides sufficiency of compliance with the Building Code.

4. **Provision of the Building Code**

   Sentence 6.2.3.11.(2): Interconnection of Systems

2. In a residential occupancy, air from one suite shall not be circulated to any other suite nor to a public corridor or public stairway.

Sentence 9.9.4.2.(4): Fire Separation for Exits

4. A fire separation that separates an exit from the remainder of the building shall have no openings except those for electrical wiring, noncombustible conduit and noncombustible piping that serve only the exit and for standpipes, sprinkler piping, exit door-ways and wired glass and glass block permitted in Article 9.9.4.3.

5. **Applicant's Position**

The Applicant submitted that Compliance Alternatives C80, C147, and C148 of Part 11 of the Building Code should be applied to this subject building.

The applicant submitted that smoke detectors would be installed in the supply and return air duct system serving the entire building. Activation of the smoke detectors would turn off the fuel supply and electrical power to the heating system.

6. **Chief Building Officials Position**

The Respondent submitted that the applicant's proposal is unsatisfactory because the building is not considered a heritage building nor are there any structural or construction difficulties which would prevent the applicant from complying with the Building Code. Furthermore, the proposal to match existing under Subsection 11.3.2. of the Building Code cannot be used in this case because the entire heating system is being replaced.

The respondent does not have the authority to permit a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that the existing forced air heating system serving dwelling units provides sufficiency of compliance with the Building Code subject to the following conditions:

4. The smoke alarms in the dwelling units will be interconnected.
5. Duct smoke detectors will be installed in the supply and return air system which would turn off the fuel supply and electrical power to the heating system upon activation.

6. Fire dampers with a 45 min fire protection rating will be installed where the ducts pierce fire separations required to have a fire resistance ratings.
7. High efficiency air cleaners will be installed at the source.

8. **Reason:**

The system as described, including the above conditions, will exceed the requirements of the compliance alternatives in Part 11 of the Building Code.

Dated at Toronto, this 25th day, in the month of April, in the year 1995, for application number 1995-07.

BCC Ruling No. 95-17-437

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-17-437

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.2.55. or 3.2.3.20. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Elie Ghazel, Engineering Manager, Lear Seating Canada Ltd. for the resolution of a dispute with Mr. Frank Asta, Chief Building Official, Town of Oakville, concerning whether the walkway and two trailers attached to an existing sprinklered building must be also protected by a sprinkler system or whether a noncombustible walkway separated from the building by not less than a 45 min. fire separation must be constructed in accordance with the requirements of the Building Code, at 2700 Bristol Circle, Oakville, Ontario.

APPLICANT

Lear Seating Canada Ltd.
Oakville, Ontario

RESPONDENT

Mr. Frank Asta
Chief Building Official
Town of Oakville

PANEL

Mr. Demir Delen, Panel Chair
Mr. Michael Lio
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

April 25th, 1995

APPEARANCES

Mr. Elie Ghazel
Engineering Manager
Lear Seating Canada Ltd.
Oakville, Ontario
For the Applicant

Mr. Frank Asta
Chief Building Official
Town of Oakville
For the Respondent

RULING

1. **The Applicant**

   Mr. Elie Ghazel, Lear Seating Canada Ltd. is an applicant for a permit under the Building Code Act, 1992 to connect two locker and dressing room trailers to an existing sprinklered building, at 2700 Bristol Circle, Oakville, Ontario.

2. **Description of Constrution**

   The existing building is approximately 8450 m² (91,000 square feet) in building area. It is classified as a medium hazard industrial occupancy, and according to Article 3.2.2.55. or 3.2.3.20. of the Building Code it must be of non-combustible construction, fully sprinklered with the floor assemblies having a three hour fire resistance rating.

   The applicant has connected two trailer units to the existing building by an enclosed combustible walkway 8' wide by 38' in length. The trailers are intended to be used by employees for locker storage and change rooms.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the sufficiency of compliance with the technical requirements of Article 3.2.2.55. or 3.2.3.20. of the Building Code. At issue is the

determination of whether the walkway and two trailers attached to the existing sprinklered building must be also protected by a sprinkler system or whether a non combustible walkway separated from the building by not less than 45 min. fire separation must be constructed.

4. **Provision of the Building Code**

Article 3.2.2.55.: Industrial Buildings, Division 2, Any Height, Any Area, Sprinklered

1. A building classified as Group F, Division 2 shall conform to Sentence (2) provided the building
    a. is not limited in building height,
    b. is sprinklered, and
    c. is not limited in building area.
2. The building shall be of noncombustible construction, and
    a. floor assemblies shall be fire separations with a fire-resistance rating of not less than 3 h,
    b. mezzanines shall have a fire-resistance rating of not less than 1.5 h,
    c. roof assemblies shall have a fire-resistance rating of not less than 1.5 h, (see Article 3.2.2.12. for supervised sprinkler systems) and (d)all loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.

Article 3.2.3.20.: Walkway between Buildings

3. Except as provided in Sentence 3.2.3.21.(2), where buildings are connected by a walkway, each building shall be separated from the walkway by a fire separation with a fire-resistance rating of not less than 45 min.
4. Except as provided in Sentence (3), a walkway connected to a building required to be of noncombustible construction shall also be of noncombustible construction.
5. A walkway connected to a building required to be of noncombustible construction is permitted to be of heavy timber construction provided
    a. not less than 50 per cent of the area of any enclosing perimeter walls is open to the outdoors, and
    b. the walkway is at ground level.
6. A walkway of noncombustible construction used only as a pedestrian thoroughfare and that is not required as an exit, need not conform to the requirements of Articles 3.2.3.14. and 3.2.3.15.

5. **Applicant's Position**

   The Applicant submitted that the trailers are intended for temporary use and are only required until June 30, 1995. Therefore, an alteration to the existing sprinkler system should not be required.

6. **Chief Building Officials Position**

   The Respondent submitted that where an addition is proposed to an existing building,the addition shall be designed in accordance with the requirements of the entire building. Therefore, the trailer addition must be sprinklered.

   The respondent does not have the authority to permit a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that the existing temporary combustible walkway from the trailers to the main building provides sufficiency of compliance with the Building Code.

8. **Reasons:**
   a. The connecting walkway is temporary. A $10,000 bond has been placed with the municipality to demolish it by June 30, 1995.
   b. The area of the walkway relative to the building is very small; approximately 0.3% of the building area.
   c. There are no unprotected openings at the building's wall facing the walkway.
   d. The walkway is separated from the building by steel doors having self closing devices.
   e. The building has 24 hr security with mandatory 1 hr frequency inspections along the entire facility. The plant is also in operation 24 hrs.

Dated at Toronto, this 25th day, in the month of April, in the year 1995, for application number 1995-15.

BCC Ruling No. 95-16-436

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-16-436

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.2.9.1.(1)(a) and Sentence 3.2.9.4.(1) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Denny Cybalski, Cyden Investments Inc., for the resolution of a dispute with Mr. Anthony Krimmer, Chief Building Official, City of Waterloo, concerning whether a standpipe and hose system is required for the retail units at 255 King Street North, Waterloo, Ontario.

APPLICANT

Cyden Investments Inc.
Waterloo, Ontario

RESPONDENT

Mr. Anthony Krimmer
Chief Building Official
City of Waterloo

PANEL

Mr. Demir Delen, Panel Chair
Mr. Remus Tsang
Mr. Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

April 11th, 1995

APPEARANCES

Mr. Andrew M. Bousfield, Principal
Andrew Bousfield Architects
Suite 422
77 Mowat Avenue
Toronto, Ontario
For the Respondent

RULING

1. **The Applicant**

   Mr. Denny Cybalski, Cyden Investment Inc. is an applicant for a permit under the Building Code Act, 1992 to construct a four storey building for office and retail use at 255 King Street North, Waterloo, Ontario.

2. **Description of Constrution**

   The subject building is a four storey building designed for restaurant, office and retail use. The first storey is designed for restaurant and retail use while the upper three storeys are to be used for offices.

   The building faces 3 streets and is fully sprinklered. The subject ground floor area is 1022 m². There are two fire hose cabinets on the ground floor level.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the sufficiency of compliance with the technical requirements of Clause 3.2.9.1.(1)(a) and Sentence 3.2.9.4.(1) of the Building Code. At issue is whether additional fire hose cabinets are required to protect the ground floor retail units.

4. **Provision of the Building Code**

   Clause 3.2.9.1.(1)(a): Standpipe and Hose Systems

1. Except as provided in Article 3.2.9.2., a standpipe and hose system shall be installed in every building that
    a. is more than
        i. 3 storeys in building height, or
        ii. 14 m in height measured between grade and the ceiling of the uppermost storey,

Sentence 3.2.9.4.(1): Hose Stations and Cabinets

2. Hose stations shall be located
    a. so that every portion of the building can be reached by a hose stream and is within 3 m (9 ft 10 in) of a nozzle attached to not more than 30 m (98 ft 5 in) of hose,
    b. not more than 5 m (16 ft 5 in) from every required exit serving a floor area, except
        i. for the first storey, or
        ii. where additional hose stations are required to achieve full coverage of the floor area, and
    c. in a conspicuous location where they are not likely to be obstructed.

5. **Applicant's Position**

The Applicant stated that the ground floor area is provided with two fire hose cabinets.

The Applicant submitted that the ground floor retail units in question are provided with adequate provision for fire fighting without the need for additional fire hose cabinets due to the following:

i. The building is fully sprinklered.
ii. The building is provided with a fire alarm system.
iii. The ground floor is directly accessible by a fire route that conforms to Clauses 3.2.5.6.(2)(b)&(c) of the Building Code.
iv. The building is located within 1 kilometre of a constantly attended fire hall.

6. **Chief Building Officials Position**

The Respondent submitted that fire hose cabinets are required in conformance with Subsection 3.2.9. of the Building Code.

The Respondent submitted that the second, third and fourth floors are protected by the required number of fire hose cabinets. The owner does not wish to provide additional fire hose cabinets that are accessible by each suite on the first floor retail level.

7. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that not providing additional fire hose cabinets on the ground floor provides sufficiency of compliance with the Building Code.

8. **Reasons:**

   . The building is fully sprinklered.

   a. Only a portion of the ground floor is not reachable by a 30 m fire hose from the hose stations.

   b. Each retail unit has direct access from the exterior for firefighting capabilities.

   c. The ground floor is highly compartmentalized and separated from the floor above by a 2 hour rated fire separation.

   d. The area affected is very small compared to unsprinklered allowable areas identified in Table 3.2.9.A.

Dated at Toronto, this 11th day, in the month of April, in the year 1995, for application number 1995-12.

BCC Ruling No. 95-15-435

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-15-435

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.3.1.4.(1)(b), Articles 3.1.8.11. & 3.1.8.13. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. David Markowitz, Markio Designs Inc. for the resolution of a dispute with Mr. Michael Nixon, Chief Building Official, City of Toronto, concerning whether proper door closure hardware is required for the fire separation between Unit #267 and the adjacent public corridor at CAPEZIO, Hazelton Lanes, 87 Avenue Rd., Toronto, Ontario.

APPLICANT

Markio Designs Inc.
Toronto, Ontario

RESPONDENT

Mr. Michael Nixon
Chief Building Official
City of Toronto

PANEL

Mr. Demir Delen, Panel Chair
Mr. Remus Tsang
Mr. Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

April 11th, 1995

APPEARANCES

Mr. A. Jasinevicius
Area Manager of Inspections
City of Toronto
For the Respondent

RULING

1. **The Applicant**

   Mr. David Markowitz, Markio Designs Inc. is the holder of a permit under the Building Code Act, 1992 to complete renovations to the CAPEZIO retail store at Hazelton Lanes, 87 Avenue Road, Toronto, Ontario.

2. **Description of Constrution**

   The CAPEZIO retail store (i.e. unit #267) was renovated by the owner. The unit is located in a six storey mixed use commercial building. The unit is situated at the corner of three major cross aisles on the upper level of a two storey interconnected floor space, which is separated from the residential floors by a fire separation with a 2 hour fire resistance rating.

   Over 90% of the subject storefront faces the interconnected floor space. Entrance to the store is designed to remain open during the day. A glass bi-focal door is used to secure the entrance when the store is closed.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the technical interpretation of Clause 3.3.1.4.(1)(b), Articles 3.1.8.11. & 3.1.8.13. of the Building Code. At issue is whether proper door closure hardware is required for the fire separation between Unit #267 and the adjacent public corridor.

4. **Provision of the Building Code**

   Clause 3.3.1.4.(1)(b): Public Corridor Separations

1. Except as otherwise required in this Part, public corridors shall be separated from the remainder of the building by a fire separation having a fire-resistance rating of not less than 1 h except that

   (b> no fire-resistance rating is required when the floor area is sprinklered and the corridor does not serve an institutional occupancy or a residential occupancy,

Article 3.1.8.11.: Self-Closing Devices

2. Except as provided in Sentences (2) to (5), every door in a fire separation shall be equipped with a self-closing device designed to return the door to the closed position after each use.
3. Self-closing devices need not be provided on doors to freight elevators and dumbwaiters.
4. In a building that is not more than 3 storeys in building height, except for doors from hazardous classrooms in elementary and secondary schools, self-closing devices need not be provided on doors that are located between a corridor providing access to exit from classrooms and the adjacent classrooms.
5. In a building that is not more than 3 storeys in building height, except for doors located in a dead-end portion of a corridor or in a corridor which serves a hotel, self-closing devices need not be provided on doors that are located between a public corridor and adjacent rooms or suites of Group D occupancy.
6. Self-closing devices need not be provided on doors that are located between sleeping rooms or a corridor and adjacent sleeping rooms where the doors are within a fire-compartment described in Sentence 3.3.3.7.(2).

Article 3.1.8.13.: Door Latches

Except as permitted in Subsection 3.3.3., every swing-type door in a fire separation shall be equipped with a positive latching mechanism designed to hold the door in the closed position after each use.

5. **Applicant's Position**

The Applicant submitted that the CAPEZIO unit represents a grey area with respect to the requirement to install proper door closure hardware for the fire separation between the unit and adjacent public corridor. There is only a 0.3 metre intrusion of the store front into the 5 metre wide public corridor. Over 90% of the store front falls outside of the 5 metre width.

The applicant submitted that the following points make Unit #267 consistent with the life safety standards intended in the Building Code:

i. The unit is on the corner and faces out towards a large 2 storey atrium;
ii. There are three cross aisles in front of the store and an approved sprinkler system with a public corridor adjacent to the store; and,
iii. The large atrium next to the store would act as a reservoir of space for smoke to gather and exhaust through its special exhaust system.

6. **Chief Building Officials Position**

The Respondent submitted that proper door closure hardware is required for the fire separation between Unit #267 and the adjacent public corridor.

The Respondent submitted that public corridors are required to be constructed as fire separations when the floor area is sprinklered and the public corridor is less than 5 metres wide. Since the public corridor walls are required to be fire separations, the doors must be equipped with self closing and latching devices. The Respondent submitted that hold open devices are an option that would permit the doors to be maintained in the open position during business hours.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that not providing self closing devices for the storefront door serving unit # 267 provides sufficiency of compliance with the technical requirements of the Building Code.

8. **Reasons:**

. Over 90% of the storefront faces a large atrium space with a dedicated exhaust system. The remaining portion of the storefront is only 0.3 m less than the required 5 m corridor width.
a. The municipality has permitted the stores facing the atrium to have doors without self closing devices.

Dated at Toronto, this 11th day, in the month of April, in the year 1995, for application number 1995-09.

BCC Ruling No. 95-14-434

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-14-434

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.2.5.13.(1) and Sentence 3.3.5.5.(8) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Ian Sunderland, PCL Constructors Eastern Inc. for the resolution of a dispute with Mr. John Fisher, Chief Building Official, City of St. Catharines, concerning whether sprinkler protection is required for the bus lanes drive through portion of a city and inter-city bus terminal attached to an eleven storey fully sprinklered high-rise office building at 301 St. Paul Street (10 King St.), St. Catharines, Ontario.

APPLICANT

PCL Constructors Eastern Inc.
Mississauga, Ontario

RESPONDENT

Mr. John Fisher
Chief Building Official
City of St. Catharines

PANEL

Mr. Demir Delen, Panel Chair
Mr. Remus Tsang
Mr. Kenneth Bacon

PLACE

Toronto, Ontario

DATE OF RULING

April 6th, 1995

APPEARANCES

Mr. Paul F. Svastal, Project Manager
Paul & Douglas Automatic Sprinklers Ltd.
Mississauga, Ontario
For the Applicant

RULING

1. **The Applicant**

   Mr. Ian Sunderland, PCL Constructors Eastern Inc. is the holder of a permit under the Building Code Act, 1992 to construct an eleven storey fully sprinklered office building that includes a city and inter-city bus terminal at 301 St. Paul Street (160 King St.), St. Catharines, Ontario.

2. **Description of Constrution**

   The subject building is an eleven storey fully sprinklered high-rise office building. A portion of the sprinklered ground floor consists of office areas, loading docks and truck maneourvering bays. The building also includes a city and inter-city bus terminal comprised of a donut shop, waiting area, ticket office and washrooms located between two bus lanes and a service lane. The bus terminal is an integral part of the building in that it is surrounded by the eleven storey office building.

   The bus terminal area consists of two open-end covered bus lanes and a service lane that are not sprinklered. The designer has based his sprinkler design on "Measure A" Fully Sprinklered Building, as detailed in Chapter Three of the Supplement to the National Building Code of Canada 1990, to satisfy the required smoke control measures as indicated in Subsection 3.2.6. of the Building Code.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the technical interpretation of Sentences 3.3.5.5.(8) and 3.2.5.13.(1) of the Building Code. At issue is whether sprinkler protection is required for the bus lanes drive through portion of a city and inter-city bus terminal attached to an eleven storey fully sprinklered high-rise office building.

4. **Provision of the Building Code**

Sentence 3.3.5.5.(8): Repair and Storage Garages

8. Except for open-air storeys, every storey of a storage garage or repair garage located below grade shall be sprinklered.

Sentence 3.2.5.13.(1): Automatic Sprinkler System

9. Except as provided in Sentence (2) and (3), where a sprinkler system is required, it shall be designed, constructed, installed and tested in conformance with NFPA 13, "Installation of Sprinkler Systems".

5. **Applicant's Position**

The Applicant submitted that sprinkler protection was not provided for the bus lanes and service lane because the Building Code does not require this protection and there are numerous identical projects that are not protected by a sprinkler system.

The Applicant submitted that the open-end covered bus lanes and service lane are considered an open-air storey and meet the 25% perimeter wall unenclosed criteria defined in Part 1 of the Building Code. In addition, the Applicant indicated that NFPA 13, 4-4.1.7.6. waives the required sprinklering where exterior roofs or canopies are constructed with non-combustible construction and no combustibles are stored or handled under the roofs or canopies.

6. **Chief Building Officials Position**

The Respondent submitted that the building will not be considered fully sprinklered unless the bus lanes are sprinklered. If the sprinklers over the bus lanes are omitted from the design, then the "Measure A" design will need to be re-evaluated.

The Respondent submits that the intent of Sentence 3.3.5.5.(8) of the Building Code is to address storage garages or repair garages not bus terminals. In a storage garage vehicles are parked and the engines are shut off. There is movement of vehicles only when the vehicles are entering and exiting the garage. The only movement of people consists of people going to and from the vehicles and few people, if any, will be sitting in an idling vehicle.

In addition, the first floor of this building is not an open air storey because less than 25% of the perimeter wall of this storey is open to the out doors in a manner that will provide cross ventilation.

The Respondent further submitted that the bus terminal operation will be quite different from the operation of a storage garage. The buses will be stopped for a few minutes at a time with their engines running and then they depart and are replaced by other buses.

The St. Catharines Transit Commission anticipates that the engines on the buses will never be turned off. The buses are diesel powered. Diesel engines are more efficient when kept running. People will be moving to and from constantly as they seek out their bus and people will be sitting in the idling buses as they wait for their bus to depart.

The Respondent reported that the Applicant wishes to use the exception for sprinklers provided for in N.F.P.A. 13, Sentence 4-4.1.7.5. "Spaces under Ground Floors, Exterior Docks and Platforms", which states:

"Exception: Sprinklers shall be permitted to be omitted when all of the following conditions prevail;

. The space is not accessible for storage purposes and is protected against accumulation of wind-borne debris;
a. The space contains no equipment such as steam pipes, electric wiring, or conveyors;
b. The floor over the space is of tight construction;
c. No combustible or flammable liquids or materials that under fire conditions may convert into combustible or flammable liquids are processed, handled, or stored on the floor above the space".

The Respondent submitted that this exception is not available to the Applicant in this case for the following reasons:

4. In the context of the NFPA, the term space is used as the most general term to describe an area of a building. When the NFPA seeks to describe a particular type of space (i.e. a space for which a particular function can be described) a more specific term is employed, such as "compartment", "floor area", or "small room". "Space" is employed to denote an area of a building which people enter rarely if at all.

The exception itself supports this interpretation of the term "space". The exception requires that the space be inaccessible for storage and that it contain no equipment such as steam pipes, electrical wiring, or conveyors. This implies an empty area or void in a building. The term does not imply an area in which people are present and activities are carried out.

It is clear that the term " Concealed Space" as it appears in Section 4-4.1.7.1. refers to "spaces" as areas in which human activity will take place.

5. The Respondent submitted that its interpretation of the exception is supported by the title of the Sentence in which the exception appears. "Exception: Spaces under Ground Floors, Exterior docks and Platforms". It is highly unlikely that any activity is going to take place underneath a loading dock or a platform.
6. The Respondent submitted that this section was intended to address situations such as:
    a. A space is created between the ground floor of a building and the ground itself for the location of duct work and plumbing.
    b. A space is created under an exterior loading dock.
    c. A space is created under a platform. (For example, in a retail store where there is an area which is essentially a raised area of the floor where the management offices of the store are housed... a grocery store. The area between the floor of the platform and the floor of the building is the space contemplated by this exception).
7. The Respondent submitted that the reference in the exception to the exterior loading dock indicates that the exception is intended to be read narrowly. Without this exception a dock which extends out from a building and is exposed to the weather, would be required to be sprinklered.
8. The area that the Applicant contends is a space will contain electrical wiring so the exception cannot apply.
9. The bus lanes are at grade. There is no space under the ground floor which is the floor of the bus lanes.

The Respondent noted that the Applicant proposes to sprinkler the truck maneourvering bay located to the south of the service lane which seems to be the same sort of area as the bus lanes.

The Respondent submitted that not sprinklering the bus lanes will compromise the safety of the occupants of the office tower in that the smoke control measures as required in the Building

Code have not been provided. The potential of a fire in the bus lanes is far greater than in any other part of the building since there will be twelve buses each carrying approximately 100 gallons of diesel fuel moving in and out of this confined area every 15 minutes.

None of the alternative smoke control measures required by Section 3.2.6 of the Building Code have been employed in the design of this building, therefore smoke from a fire in the bus lanes may penetrate the office tower.

In conclusion, the Respondent submitted that the Building Code requires the two bus lanes, the service lane and the platform area to be sprinklered in order to comply with 3.2.6. "Additional Requirements of High Buildings".

2. **Commission Ruling:**

   In favour of the Respondent. It is the decision of the Building Code Commission that Sentence 3.3.5.5.(8) is not applicable to the Bus Terminal.

3. **Reasons:**

   Sprinkler protection is required because of "Measure A" high rise requirements. NFPA-13, Article 4-4.1.7.5 is not relevant to this issue. NFPA Sentence 4-4.1.7.6.1 applies without the exception because combustibles will be handled in the Bus Terminal.

Dated at Toronto, this 6th day, in the month of April, in the year 1995, for application number 1995-08.

BCC Ruling No. 95-13-433

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-13-433

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.3.5.7. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Ross Smith, AON Builders Inc. for the resolution of a dispute with Mr. A. Jeffrey Chalmers, Chief Building Official, City of Peterborough, concerning whether the construction between the garages and the dwelling units may conform to Sentence 9.10.9.16.(3) of the Building Code instead of the required 1.5 hour fire separation at River Park Village Condominiums, 1121 Armour Road, Peterborough, Ontario.

APPLICANT

AON Builders Inc.
Peterborough, Ontario

RESPONDENT

Mr. A. Jeffrey Chalmers
Chief Building Official
City of Peterborough

PANEL

Mr. Demir Delen, Panel Chair
Mr. Remus Tsang
Mr. Kenneth Bacon

PLACE

Toronto, Ontario

DATE OF RULING

April 6th, 1995

APPEARANCES

Mr. William P. Lett, Architect
Lett/Smith Architects
Toronto, Ontario
For the Applicant

RULING

1. **The Applicant**

   Mr. Ross Smith, AON Builders Inc. is the holder of a permit under the Building Code Act, 1992 to construct six multi residential condominium townhouse buildings at River Park Village Condominiums, 1121 Armour Road, Peterborough, Ontario.

2. **Description of Constrution**

   The River Park Village Condominiums is a multi residential townhouse project comprising six buildings. The project includes two 6 unit rowhouses, three 7 unit rowhouses and one 8 unit rowhouse. The buildings range in building area from 1100 m² to 1492 m².

   Each dwelling unit is served by it's own two car garage. There is no dwelling unit above another dwelling unit.

   The building is designed to conform to the requirements of Article 3.2.2.34. of the Building Code. This permits the building to be combustible construction and unsprinklered, provided the building area does not exceed 1800 m². All six buildings fall within this limit.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical interpretation of Article 3.3.5.7. of the Building Code. At issue is whether the construction between the garages and the dwelling units may conform to Sentence 9.10.9.16.(3) of the Building Code instead of the required 1.5 hour fire separation.

4. **Provision of the Building Code**

   Article 3.3.5.7.: Storage Garage Separation.

A storage garage shall be separated from other occupancies by a fire separation with a fire-resistance rating of not less than 1.5 h.

5. **Applicant's Position**

The applicant submitted that Article 3.3.5.7. of the Building Code was written for the purposes of multi-car parking garages. In this case each dwelling unit is served by it's own garage. Overall conditions are similar to the provisions on Part 9 (i.e. Article 9.10.9.16. and 9.10.13.15.).

During the hearing the applicant indicated that he would provide a fire separation with a 1 hour fire resistance rating between each individual garage and the dwelling unit.

6. **Chief Building Officials Position**

The respondent submitted that the buildings are regulated by Part 3 of the Building Code. Accordingly, Article 3.3.5.7. applies.

The respondent does not have the authority to permit a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that providing a fire separation with 1 hour fire resistance rating between each garage and the attached dwelling unit provides sufficiency of compliance with Article 3.3.5.7. of the Building Code.

8. **Reason:**

The layout and construction of the blocks of townhouses lend themselves more to the application of Part 9 of the Building Code. However their building areas were substantially larger than Part 9 limits.

Dated at Toronto, this 6th day, in the month of April, in the year 1995, for application number 1995-13.

BCC Ruling No. 95-11-431

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-11-431

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Section 9.22., specifically, Articles 9.22.1.4. & 9.22.7.1. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Gary Sharp, Post Harvest Developments Inc. for the resolution of a dispute with Mr. John Harkness, Chief Building Official, City of Kanata, concerning whether a high mass radiant masonry heater provides sufficiency of compliance with the Building Code, at 1423 Houston Crescent, (Lot 9, Plan 4M-549), Kanata, Ontario.

APPLICANT

Post Harvest Developments Inc.
Ottawa, Ontario

RESPONDENT

Mr. John Harkness
Chief Building Official
City of Kanata

PANEL

PLACE

Toronto, Ontario

DATE OF RULING

March 13th, 1995

APPEARANCES

Mr. Gary Sharp, Director
AND
Mr. Richard Davies
Post Harvest Developments Inc.
For the Applicant

Mr. John Plitz
Plans Examiner
City of Kanata
For the Respondent

RULING

1. **The Applicant**

   Mr. Gary Sharp, Post Harvest Developments Inc. is the holder of a permit under the Building Code Act, 1992 to construct a single family dwelling (i.e. house) at 1423 Houston Crescent (Lot 9, Plan 4M-849), Kanata, Ontario.

2. **Description of Constrution**

   A pre-manufactured, site assembled high thermal mass masonry heater is proposed to be constructed in the subject house. The heater is completely different internally than a conventional masonry fireplace. The core of the heater is built of pre-cast, interlocking components that form the firebox and heat transfer passages. Also, combustion air is not provided from outdoors, the throat of the fireplace does not contain a damper and there are numerous 90 degree turns in the combustion chamber.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical interpretation of Section 9.22., specifically, Articles 9.22.1.4. & 9.22.7.1. of the Building Code. At issue is whether the high mass radiant masonry heater provides sufficiency of compliance with the masonry fireplace provisions in the Building Code.

4. **Provision of the Building Code**

   Section 9.22. Fireplaces

Article 9.22.1.4. Combustion Air

1. Except as permitted in Article 9.22.1.5. and 9.22.1.6., every fireplace, including a factory-built fireplace, shall have a supply of combustion air from outdoors in accordance with Sentence (2) to (12).
2. The combustion air shall be supplied by a noncombustible and corrosion-resistant supply duct.
3. The combustion air shall be supplied by a noncombustible and corrosion-resistant supply duct.
4. The supply duct shall have
    a. a diameter of at least 100 mm (4 in) or an equivalent area,
    b. an exterior intake for entry of air from the outdoors, and
    c. an interior outlet for providing air for the fire chamber.
5. The supply duct shall contain a tight-fitting damper that shall be located close to the interior outlet and be operable from the room containing the fireplace.
6. The operating mechanism shall clearly indicate the actual position of the damper.
7. The interior outlet shall,
    a. be located as close as possible to the opening in the face of the fireplace.
    b. be designed to prevent embers from entering the supply duct, and
    c. where it is placed inside the fire chamber, be located at the front centre of the fire chamber hearth and be equipped with a noncombustible hood.
8. The exterior intake shall be protected against the entry of rain and direct wind and have an insect screen of corrosion-resistant material.
9. Where the exterior intake is located above the level of the fire chamber hearth, the interior outlet shall be located at a level at or below the level of the hearth.
10. Where the interior outlet is located in the fire chamber and the exterior intake is located at or below the level of the fire chamber hearth, the supply duct shall be installed with a minimum clearance from combustible material of 50 mm (2 in) for a distance of 1 m (3 ft 3 in) measured from the outlet.
11. Where the interior outlet is located in the fire chamber hearth and the exterior intake is located above the level of the fire chamber hearth, the supply duct shall be installed with a minimum clearance from combustible material of,
    a. 50 mm (2 in) for a distance of 1 m (3 ft 3 in) measured from the outlet, and
    b. 25 mm (1 in) for the remainder of the supply duct to the intake.
12. The exterior intake shall be located to avoid being blocked by snow or fallen leaves.

13. Where the supply duct is exposed to a heated space, the duct shall be insulated to provide a thermal resistance of not less than RSI 1.4 (R 8).

Article 9.22.7.1. Slope of Smoke Chamber

The sides of the smoke chamber connecting a fireplace throat with a flue shall not be sloped at an angle greater than 45° to the vertical.

5. **Applicant's Position**

The applicant submitted that masonry heaters are not addressed by the Building Code. The internal operation of a high thermal mass masonry heater is completely different than a conventional fireplace. Masonry heaters take advantage of tonnes of mass in the form of bricks or stone to store and later release the heat they produce.

The applicant stated that although the masonry heater design does not comply with some of the prescriptive requirements for fireplaces in Section 9.22, test data and past experience indicate sufficiency of compliance with the performance level intended for conventional fireplaces in the Building Code.

6. **Chief Building Officials Position**

The respondent submitted the following comments concerning the installation of a high thermal mass masonry heater:

a. The combustion air supply duct does not satisfy Article 9.22.1.4. of the Building Code. The supply duct does not provide a tight fitting damper as required and its location does not prevent embers from entering the supply duct.
b. The smoke chamber does not satisfy Article 9.22.7.1. of the Building Code. The sides of the smoke chamber connecting the throat with the flue exceeds the 45 degrees to the vertical maximum.

   The schematic drawing and assembly manual clearly indicates that the flue gasses, once in the secondary chamber, must make numerous 90 degree turns before entering the chimney.

c. Draft: The respondent questioned whether the down draft design would provide sufficient draft to start a fire or to exhaust gases when the fire is in its final burning stages.

d. Creosote: There may be creosote that does not get fully consumed and therefore is deposited in the secondary combustion chamber, side flue collection manifolds and lower manifold under the hearth.
e. Maintenance: The collection manifold appears to be fully enclosed with no access for visual inspection or ability to perform regular maintenance. This may lead to inefficient operation of the heater.
f. Design Criteria: The respondent questioned the design criteria of the flue size, chimney height, etc. The applicant did not provide evidence of approval by any recognized testing agencies or design standards such as CAN/CSA A-405-M87 "Design and Construction of Masonry Chimneys and Fireplaces".
g. The information provided by the applicant indicates that the heater produces hotter fires and retains more heat than conventional masonry fireplaces. Therefore, caution must be taken with respect to clearance from combustibles.

7. **Commission Ruling:**

In favour of the Respondent. It is the decision of the Building Code Commission that this pre-manufactured, site assembled, high thermal mass masonry heater does not conform to the present requirements of the Building Code.

8. **Reasons:**

. The Building Code does not address engineered, pre-manufactured, site assembled high thermal mass masonry heaters.
a. The documentation provided by the applicant is insufficient for the Commission to formulate conclusions regarding sufficiency of compliance with the Building Code.
b. An application to the Building Materials Evaluation Commission is recommended.

Dated at Toronto, this 13th day, in the month of March, in the year 1995, for application number 1995-01.

BCC Ruling No. 95-10-430

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-10-430

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 9.35.2.1. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. James McLellan, Owner/Builder for the resolution of a dispute with Mr. John Fisher, Chief Building Official, City of St. Catharines concerning whether enclosing more than 60% of the carport perimeter with 6 mil poly and an overhead door requires the carport to be considered a garage in accordance with Article 9.35.2.1. of the Building Code, at 29 Victoria Street, St. Catharines, Ontario.

APPLICANT

Mr. James McLellan, Owner/Builder
St. Catharines, Ontario

RESPONDENT

Mr. John Fisher
Chief Building Official
City of St. Catharines

PANEL

Mr. Michael Lio, Panel Chair
Mr. Remus Tsang
Mr. Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

March 13th, 1995

APPEARANCES

Mr. James McLellan, Owner/Builder
St. Catharines, Ontario
For the Applicant

Mr. John Fisher
Chief Building Official
City of St. Catharines
For the Respondent

RULING

1. **The Applicant**

   Mr. James McLellan, Owner/Builder is the holder of a permit under the Building Code Act, 1992 to construct an attached carport on the south east side of an existing one storey dwelling at 29 Victoria Street, St. Catharines, Ontario.

2. **Description of Constrution**

   A building permit was issued in 1993 to construct an attached carport, 4.3 m (14 ft.) wide and 7.3 m (24 ft.) long, on the south east side of an existing one storey house. The plans that formed the basis of the building permit issuance showed the carport open at both ends and one side. Approval was given during construction to install an overhead door that increased the enclosed perimeter to 50%. The carport was then further enclosed by the owner with 6 mil poly. This increased the enclosed perimeter from 50% to 68%.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the technical interpretation of Article 9.35.2.1. of the Building Code. At issue is whether enclosing more than 60% of the carport perimeter with 6 mil poly and an overhead door requires the carport to be considered as a garage.

4. **Provision of the Building Code**

   Article 9.35.2.1. Roofed Enclosure Considered as Garage

Where a roofed enclosure used for the storage or parking of a car or cars has more than 60 per cent of the total perimeter enclosed by walls, doors or windows, the enclosure shall be considered a garage.

5. **Applicant's Position**

The applicant submitted that the rear wall of the carport is temporarily closed off during the winter months with a roll down sheet of 6 mil poly to prevent snow accumulation and damage.

The applicant does not consider this to be a violation of the Building Code.

The Building Code states that a carport perimeter cannot be enclosed in by more than 60% with walls, doors or windows. The applicant submitted that a wall is a permanent structure composed of wood framing, sheathing and exterior cladding.

6. **Chief Building Officials Position**

The respondent submitted that enclosing part of the carport perimeter with 6 mil poly is considered a material alteration since Clause 9.10.9.16.(3)(a)&(b) and Sentence 9.10.13.15.(1)&(2) of the Building Code require the following to ensure the safety of the occupants of the dwelling:

- the construction between the garage and the dwelling must provide as effective barrier to gas and exhaust fumes and
- every door between the garage and dwelling unit must be tight-fitting and weatherstripped to provide an effective barrier against the passage of gases and exhaust fumes and must be fitted with a self-closing device and
- a doorway between an attached or built-in garage and a dwelling unit must not be located in a room intended for sleeping.

The gas-tight barrier between a dwelling unit and an attached garage is intended to provide reasonable protection from carbon monoxide and gasoline fumes from entering the dwelling unit. Carbon monoxide is a colourless odourless gas that is highly poisonous when inhaled.

The applicant submitted that making a material alteration to a building is by definition, performing construction and Subsection 8 (1) of the building Code Act states that "No person shall construct - unless a building permit has been issued therefore by the Chief Building Official". To date no building permit has been applied for nor issued.

On January 11, 1995, an inspection of the site revealed that the rear wall of the carport was enclosed with 6 mil poly. This increases the percentage of the perimeter that is enclosed from 50% to 68%.

According to Funk and Wagnalls Canadian College Dictionary, a wall is "a continuous structure designed to enclose an area". The poly is designed to enclose an area to keep the snow and wind out, to act as a wall. This wall of poly, which is designed to keep the snow and wind out will keep the poisonous carbon monoxide in.

The applicant states that the 6 mil poly installed at the west end of the carport is only in place during the winter months, December to March. This is not a valid reason for not requiring the wall between the garage and the dwelling and to be constructed as a barrier to gas or exhaust fumes. There is always the possibility of the build up of carbon monoxide and it could seep into the dwelling even if the wall was only in place one day a year.

7. **Commission Ruling:**

In favour of the Respondent. It is the decision of the Building Code Commission that enclosing more than 60% of the carport perimeter with 6 mil poly and an overhead door constitutes a garage in accordance with Article 9.35.2.1. of the Building Code.

A free standing snow screen may be installed no closer than 450 mm (18") from the rear of the carport.

8. **Reason:**

The installation of 6 mil poly on the rear wall of the carport limits the ventilation of the space and would require conformance to Article 9.10.13.15. and Article 9.10.9.16. of the Building Code.

Dated at Toronto, this 13th day, in the month of March, in the year 1995, for application number 1994-16.

BCC Ruling No. 95-09-429

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-09-429

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 9.8.3.1. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. & Mrs. D. Wright, Owners for the resolution of a dispute with Mr. Randy Gardner, Chief Building Official, Town of Bracebridge, concerning whether the proposed additional handrail on one side of a stairway and improved lighting condition will provide sufficiency of compliance with the maximum rise requirements in Article 9.8.3.1. of the Building Code, at Wright Residence, 1 Moreland Court, Bracebridge, Ontario.

APPLICANT

Mr. & Mrs. D. Wright, Owners
Bracebridge, Ontario

RESPONDENT

Mr. Randy Gardner
Chief Building Official
Town of Bracebridge

PANEL

Mr. Michael Lio, Panel Chair
Mr. Remus Tsang
Mr. Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

March 13th, 1995

APPEARANCES

Mr. John O'Byrne
Bracebridge, Ontario
For the Applicant

Mr. Mike Gooch
Building Inspector
Town of Bracebridge
For the Respondent

RULING

1. **The Applicant**

   Mr. & Mrs. D. Wright are holders of a permit under the Building Code Act, 1992 to construct a single family dwelling (i.e. house), 1 Moreland Court, Bracebridge, Ontario.

2. **Description of Constrution**

   The rise of the wood stairs connecting the first and second floor of the subject house exceeds the maximum 200 mm height. The actual rise of the staircase in question is 208 mm.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical interpretation of Article 9.8.3.1. of the Building Code. At issue is whether the proposed additional handrail and improved lighting condition will provide sufficiency of compliance with the maximum stair rise requirement of 200 mm.

4. **Provision of the Building Code**

   Article 9.8.3.1. Rise and Run of Stairs

   1. Except for stairs to areas used only as service rooms, interior stairs within dwelling units and exterior stairs serving dwelling units shall have a maximum rise of 200 mm (7E in), a minimum run of 210 mm (8¼ in) and a minimum tread width of 235 mm (9¼ in).

2. Except for stairs serving not more than 1 dwelling unit, interior stairs not contained within dwelling units and exterior stairs for buildings shall have a rise of not more than 200 mm (7E in) and not less than 125 mm (4E in).
3. Stairs referred to in Sentence (2) shall have a minimum run of not less than 230 mm (9 in), or not more than 355 mm (14 in) and a tread width of not less than 250 mm (9E in).

5. **Applicant's Position**

The applicant submitted that the rise of the staircase in question is 208 mm and not 200 mm. Therefore, the Chief Building Official determined the stairs deficient and will not issue an occupancy permit.

The applicant stated that a set of stairs built to meet the rise and run requirements of the Building Code would not fit into it's intended location in the house. The problem arose from the fact that the basement stairs were already in place. The placement of the lower basement stairway made it impossible to construct the upper stairway with the required rise and headroom.

The applicant submitted that the stairs are structurally sound and have been in use for two and one half years without any mishap or injury.

The applicant proposed that if the following work was under taken the stairway would sufficiently comply with the Building Code:

a. addition of a handrail on the wall side of the stairs;
b. improve the lighting in the area of the stairway by adding fixtures on the wall of the of the stairs; and,
c. bevel the top corner of each tread nosing.

6. **Chief Building Officials Position**

The respondent submitted that the rise of the stairs is approximately 8 mm in excess of the maximum permitted rise of 200 mm.

The respondent does not have the authority to accept a deviation from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that the stair shows sufficiency of compliance with the Building Code provided handrails are installed on both

sides of the stair and improved lighting is provided of at least 100 Watts (incandescent) or equivalent on each run and to be activated in accordance with Sentence 9.34.2.3.(2) of the Building Code.

8. **Reason:**

It is the opinion of the Building Code Commission that a small deviation (4%) in the maximum riser height can be compensated by installing an additional handrail on the wall side of the stair and by improving the lighting for the stairway.

Dated at Toronto, this 13th day, in the month of March, in the year 1995, for application number 1995-06.

BCC Ruling No. 95-08-428

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-08-428

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 4.1.1.4., Sentences 4.1.10.5.(1) and 4.1.10.5.(2) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Robert Fallowfield, Aluma Systems Canada Inc. for the resolution of a dispute with Mr. Michael Nixon, Chief Building Official, City of Toronto, concerning whether horizontal bracing members are required to resist horizontal live loads for temporary grandstand structures at the Exhibition Grounds, Toronto, Ontario.

APPLICANT

Aluma Systems Canada Inc.
Concord, Ontario

RESPONDENT

Mr. Michael Nixon
Chief Building Official
City of Toronto

PANEL

Mr. Demir Delen, Panel Chair
Mr. Remus Tsang
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

February 28th, 1995

APPEARANCES

Mr. Robert Fallowfield
Aluma Systems Canada Inc.
For the Applicant

Mr. Bill Chiang
Building Engineer
AND
Mr. Lance Cumberbatch
Zoning Building Plan Examiner
City of Toronto
For the Respondent

RULING

1. **The Applicant**

   Mr. Robert Fallowfield, Aluma Systems Canada Inc. is the applicant for a permit under the Building Code Act, 1992 to erect temporary grandstand structures for the Molson Indy at the Exhibition Grounds, Toronto, Ontario.

2. **Description of Constrution**

   The subject structure is a modular steel temporary grandstand to be erected on the Exhibition Grounds in the City of Toronto for the viewing of the annual Molson Indy Races. The grandstand is approximately 82.3 m (270 ft) long by 20.9 m (68.7 ft) wide. It has 33 rows of bleachers and seating capacity for 5044 people.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the technical interpretation of Article 4.1.1.4., Sentences 4.1.10.5.(1) & 4.1.10.5.(2) of the Building Code. At issue is whether horizontal bracing members are required to resist horizontal live loads for temporary grandstand structures at the Exhibition Grounds, Toronto, Ontario.

4. **Provision of the Building Code**

Article 4.1.1.4. Design Basis

1. Buildings and their structural members shall be designed by one of the following methods,
    a. standard design procedures and practices provided by this Part and any standards and specifications referred to therein, except in cases of conflict the provisions of the Building Code shall govern; or
    b. one of the following three bases of design,
        i. analysis based on generally established theory,
        ii. evaluation of a given full-scale structure or a prototype by a loading test,
        iii. studies of model analogues, provided the design is carried out by a person qualified in the specific method applied and provided the design ensures a level of safety and performance at least equivalent to that provided for or implicit in design carried out by the methods referred to in Clause (a).
2. Communications towers, dish antennas and their supporting structures shall conform to CAN3-S37, "Antennas, Towers, and Antenna Supporting Structures".

Sentences 4.1.10.5.(1) & 4.1.10.5.(2)Resonances and Sway Forces

3. Where the fundamental vibration frequency of a structural system supporting an assembly occupancy used for rhythmic activities, such as dancing, concerts, jumping exercises or gymnastics, is less than 6 Hz, the effects of resonance shall be investigated by means of a dynamic analysis.
4. The floor assembly and other structural elements that support fixed seats in any building used for assembly occupancies to accommodate large numbers of people at one time, such as grandstands, stadia and theatre balconies, shall be designed to resist a horizontal force equal to at least 0.3 kN (70 lb) for each metre length of seats acting parallel to each row of seats, and at least 0.15 kN (35 lb) for each metre length of seat acting at right angles to each row of seats, assuming such forces to be acting independently of each other.

5. **Applicant's Position**

The applicant submitted that all vertical bays of the grandstand are designed independently to resist the sway and wind loads identified in the Building Code.

The Building Code specifies the vertical and lateral loads for which these grandstand structures must be capable of resisting. Those loads are dead load of the structure, 100 psf vertical live load due to people, horizontal wind load and horizontal sway load.

The vertical legs of the grandstands are braced with vertical diagonal bracing in every bay, eliminating the need to carry load horizontally across a bay.

The grandstand structures will be erected with sufficient vertical bracing in every bay to meet the Building Code. Therefore, the bracing required by the City of Toronto Building Department is not necessary.

6. **Chief Building Officials Position**

The respondent submitted that the proposed bleacher/grandstand structure has a natural frequency in the sway mode of 1HZ to 3HZ, therefore the dynamic behaviour of the proposed structure is a factor in its design. Dynamic behaviour is influenced by the stiffness rather than the strength of the structure. The applicant's structural analysis does not address this issue of dynamic behaviour as required in Sentence 4.1.10.5.(1) of the Building Code.

Inadequate horizontal bracing is proposed. This could result in the deterioration of the bleacher/grandstand structure due to the severe forces created through the dynamic sway when people begin to move. Research by Professor Jim Dickie of the University of Manchester found that the sway characteristic of the rear frames deteriorates as the height of the bleachers/grandstand increases.

An alternative to this is to make the frames sufficiently rigid through the use of vertical bracing. This however causes uneven loading in the supporting legs which in turn brings a risk of differential settlement. The settlement problem can be avoided through the use of foundations that have been designed for these forces but due to the temporary nature of the structure the owners of the site may not permit such a large undertaking.

In addition to the question of dynamic behaviour, it was found that the applicant failed to submit with their computer analysis sufficient supporting documentation. The documentation is required to explain the concept/theory behind both the software and modelling used in analysing the frames. This information is required to see if the requirements of Article 4.1.1.4. of the Building Code are met.

7. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that appropriately designed diagonal vertical bracing at every bent in both directions to resist the loads identified in Article 4.1.10.5., complies with the Building Code requirements provided proper foundations are designed as per Part 4.

8. **Reason:**

   Horizontal bracing is not specifically required by the Building Code as long as the structure is shown to resist the applicable loading by analysis based on generally established theory.

Dated at Toronto, this 28th day, in the month of February, in the year 1995, for application number 1995-03.

BCC Ruling No. 95-07-427

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-07-427

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.4.6.15.(1). 3.4.6.15.(3) & 3.4.6.15.(4) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Stephen Lim, Cederland Properties, Market Village for the resolution of a dispute with Mr. John Wright, Chief Building Official, Town of Markham, concerning whether electromagnetic locking devices on egress doors required to be equipped with door release hardware complies with the technical interpretation of the Building Code, at 4394 Steeles Avenue East, Markham, Ontario.

APPLICANT

Cederland Properties, Market Village
Markham, Ontario

RESPONDENT

Mr. John Wright
Chief Building Official
Town of Markham

PANEL

Mr. Demir Delen, Panel Chair
Mr. Remus Tsang
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

February 28th, 1995

APPEARANCES

Mr. David Syrett, Associate
Leber/Rubes Inc.
Toronto, Ontario
For the Applicant

Mr. Chris Bird
Manager Plans Review
Town of Markham
For the Respondent

RULING

1. **The Applicant**

   Mr. Stephen Lim, Cederland Properties, Market Village is the applicant for a permit under the Building Code Act, 1992 to install electromagnetic locking devices on access to exit and exit doors required to be equipped with door release devices, at 4394 Steeles Avenue East, Markham, Ontario.

2. **Description of Construction**

   The applicant proposed to construct a private club within a section of an existing two storey building. The total floor area of the club is approximately 1860 m². The ground floor lounge is 360 m² and open to the public. The second floor of the club is for private functions.

   The building is fully sprinklered and has a single stage fire alarm system and emergency lighting system. The club is classified as a Group A, Division 2 occupancy. The occupant load for the club is in excess of 100 persons.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the technical interpretation of Sentence 3.3.1.12.(1), and Sentences 3.4.6.15.(1), 3.4.6.15.(3) & 3.4.6.15.(4) of the Building

Code. At issue is whether the proposed electromagnetic locking devices are permitted on access to exit and exit doors required to be equipped with door release devices.

4. **Provision of the Building Code**

Sentence 3.3.1.12.(1): Doors

(1) Every door that opens into or is located within a public corridor or other facility that provides access to exit from a suite shall

a. be not less than 800 mm (2 ft 7 in) wide where there is only one door leaf
b. have no single leaf in any multiple leaf door less than 600 mm (23D in) wide
c. not open onto a step, and
d. be readily openable in travelling to an exit without requiring keys, special devices or specialized knowledge of the door opening mechanism, except as permitted in Sentences (2) and (3).

Sentence 3.4.6.15.(1): Door Release Hardware

(1) If a door is equipped with a latching mechanism, a device that will release the latch and allow the door to swing wide open when a force of not more than 90 N (20 lb) is applied to the device in the direction of exit travel shall be installed on

e. every exit door from a floor area containing a Group A occupancy having an occupant load of more than 100 persons,
f. every door leading to an exit lobby from an exit stair shaft, and every exterior door leading from an exit stair shaft in buildings having an occupant load of more than 100 persons, and
g. every exit door from a floor area containing a Group F, Division 1 occupancy.

(3) Locking, latching and other fastening devices on any required exit door shall be such that the door can be readily opened from the inside without requiring keys, special devices or specialized knowledge of the door opening mechanism, except that this requirement does not apply to locking, latching and other fastening devices described in Sentence (4) or to doors designed to be remotely released in conformance with Article 3.3.1.12. serving a contained use area or an impeded egress zone.

(4) An electromagnetic locking device that does not incorporate latches, pins or other similar devices to keep the door in the closed position is permitted to be installed on an exit door, other than an exit door serving an elementary or secondary school or leading directly from a Group F, Division 1 occupancy

h. if the building is equipped with a fire alarm system conforming to Subsection 3.2.4.,
i. if the locking device is installed as an ancillary device to the fire alarm system and releases immediately
    I. upon activation of the fire alarm signal,
        i. where the exit door serves a hotel, upon activation of the alert signal where a two stage fire alarm system is installed or upon activation of the alarm signal where a single stage fire alarm system is installed,
    II. in the event of a power failure or ground fault, and
    III. upon actuation of a manually-operated switch accessible only to authorized personnel,
j. if a manual pull station for the fire alarm system is located on the wall not more than 600 mm (23% in) from the door,
k. if, upon its release, the locking device must be reactivated manually by the actuation of the switch referred to in Subclause (b)(iii),
l. if a legible sign having the words EMERGENCY EXIT UNLOCKED BY FIRE ALARM is permanently mounted on the door, and
m. if the lettering on the sign required in Clause (e) is at least 25 mm (1 in) high with a 5 mm (3/16 in) stroke.

5. **Applicant's Position**

The applicant submitted that Sentences 3.3.1.12.(3) and 3.4.6.15.(1) of the Building Code do not prohibit an electromagnetic locking device on a door having a release device required by Sentence 3.4.6.15.(1).

The applicant submitted that Building Code Commission decision No. 91-10-320 made on August 29, 1991 clearly states that electromagnetic locking devices are permitted on doors required to have door release hardware. Item 1 in Attachment "A" of the Ruling states "in the first instance all doors shall comply to Code conforming locking, latching, releasing and/or any other required hardware, however, in addition electromagnetic locking devices are permitted to be installed as per Code requirements and these do not negate other locking, latching or release hardware as required elsewhere in the Code."

The NFPA 101 Committee commentary on 5-2.1.7.4. of NFPA 101 "Life Safety Code" states that it is the intent of the Code to allow the use of electromagnetic locking devices where door release hardware is required.

Evacuation in a fire emergency is generally prompted by an alarm signal or verbal instruction. So by the time evacuees arrive at the egress doors equipped with panic hardware, the electromagnetic locking devices will already be disengaged so that only the mechanical latching mechanism is holding the door in the closed position. It is therefore the opinion of Leber/Rubes Inc. that the electromagnetic locking devices complying with the Code do not compromise the level of safety intended by the door release requirements of Sentence 3.4.6.15.(1) of the Code.

Based on the above, it seems clear that the Building Code Commission and the National Fire Protection Association (U.S.) do not view the electromagnetic locking devices in conjunction with door release hardware as a threat to life safety.

6. **Chief Building Officials Position**

The respondent submitted that a building permit cannot be issued for a condition that contravenes the Building Code. It is the respondents opinion that the installation of an electromagnetic locking device on a door required by Sentence 3.4.6.15.(1) to have door release hardware contravenes the Building Code. The door release requirements of Sentence 3.4.6.15.(1) supersede the electromagnetic locking device provisions of Sentence 3.4.6.15.(4).

Furthermore, Sentences 3.3.1.12.(1) and 3.4.6.15.(3) set out the general requirements for latching, locking and releasing of egress and exit doors. The respondent submitted that the allowance for electromagmetic locking devices referred to in Sentence 3.4.6.15.(3) applies to those doors that do not require door release hardware.

If electromagnetic locking devices were permitted on doors required to be equipped with door release hardware, then Sentence 3.4.6.15.(1) would contain specific references to Sentence 3.4.6.15.(4). As it does not, it is the respondent's opinion that electromagnetic locking devices are not permitted on doors required to be equipped with door release hardware.

The intent of providing door release hardware in these locations is to allow the unimpeded and immediate evacuation of high occupant loads where panic and crushing against egress doors is possible. Electromagnetic locking devices have the potential for delaying egress.

7. **Commission Ruling:**

   In favour of the Respondent. It is the decision of the Building Code Commission that the installation of electromagnetic locking devices on egress doors required to be equipped with release hardware does not comply with the requirements of the Building Code.

8. **Reasons:**
   a. Sentences 3.4.6.15.(1) and 3.4.6.15(4) operate independently. One does not preclude the requirements of the other. Allowing an electromagnetic locking device on such doors will defeat the purpose of installing a release hardware.
   b. Security concerns in such doors can be handled by other means or in combination with the door opening time delay features and signage provisions in Sentence 3.4.6.15.(6) provided the door release hardware identified in Sentence 3.4.6.15.(1) will release the magnetic locking devices installed on any access to exit and exit doors.

Dated at Toronto, this 28th day, in the month of February, in the year 1995, for application number 1995-02.

BCC Ruling No. 95-06-426

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-06-426

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.2.9.3.(9) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. John W. Bate, John Bate & Co. Ltd. for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, concerning whether an automatic dry standpipe and hose system in a frozen space (-26 deg C) and other areas, sufficiently complies with the technical interpretation of Sentence 3.2.9.3.(9) of the Building Code, at Conestoga Cold Storage, 2660 Meadowpine Blvd., Mississauga, Ontario.

APPLICANT

John Bate & Company Ltd.
London, Ontario

RESPONDENT

Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL

Mr. Demir Delen, Panel Chair
Mr. Remus Tsang
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

February 28th, 1995

APPEARANCES

Mr. John Bate
John Bate & Company Ltd

AND
Mr. Frank Van De Peer

Total Fire Systems
For the Applicant

Mr. Frank Spagnolo
Manager, Building Engineering & Inspection
City of Mississauga

AND

Mr. Dan DeLuca, Plans Examiner
Mississauga Fire & Emergency Services
For the Respondent

RULING

1. **The Applicant**

   Mr. John W. Bate, John Bate & Company. Ltd. is the holder of a permit under the Building Code Act, 1992 to construct a cold storage facility at 2660 Meadowpine Blvd., Mississauga, Ontario.

2. **Description of Constrution**

   The building comprises a two storey office and one storey cold storage facility. A firewall divides the building area into 2357.35 m² and
   3403.68 m² spaces. An automatic dry standpipe and hose system is proposed in the cold storage area.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentence 3.2.9.3.(9) of the Building Code. At issue is whether the automatic dry standpipe and hose system proposed for the frozen space (-26 deg C) and other areas, sufficiently complies with the Building Code.

4. **Provision of the Building Code**

Sentence 3.2.9.3.(9): Standpipe and Hose System Design

(9) Where freezing of piping may occur, a dry standpipe system may be provided and so arranged through the use of listed devices to

a. automatically admit water to the system by opening of a hose valve, and
b. transmit a signal to an attended location.

5. **Applicant's Position**

The applicant proposed to use an automatic - dry system, normally filled with pressurized air that is arranged through the use of devices such as a dry pipe valve to automatically emit water into the system piping upon opening of a hose valve at a hose cabinet.

The City of Mississauga insists the applicant use a semiautomatic - dry system known as a pre-action system such that an electric pull station located in or at the fire hose station be activated in order to trip a deluge valve back at the riser. This also requires the user to manually turn a valve in the hose cabinet in order to have water at the hose. This involves two (2) actions to activate the system, a) pull the electric device in the hose cabinet, and b) open the valve.

The "pre-action" system is much more expensive than the auto-dry system.

The applicant submitted that Building Code Article 2.6.2.1. states that "in the case of a conflict between the provisions of this Code and those of a referenced document the provision of this Code shall govern". This means that NFPA 14 which is the reference document for Article 3.2.9.3., cannot overrule the provisions of that Article.

Sentence 9 of Article 3.2.9.3. sets the rules for standpipe systems "where freezing of piping may occur". It calls for the standpipe to "automatically emit water to the system by opening of a hose valve and transmitting a signal to an attended location". The system proposed by the applicant will conform to Sentence 3.2.9.3.(9).

In the applicant's opinion the pre-action system being required by the City of Mississauga has flaws, not the least of which, is the fact that a fire alarm pull station resides in each fire hose cabinet that will not necessarily be connected to the fire alarm system. The applicant is installing a fire alarm system in this building even though the Building Code does not require it. A person unfamiliar with this system seeing a pull station at the hose cabinet may think he is activating the fire alarm system when in effect he is activating the standpipe system.

6. **Chief Building Officials Position**

At the commencement of the hearing the Respondent raised a concern regarding one of the Building Code Commission panel member's hearing the dispute because of his involvement in a similar issue six years ago. The Respondent did not elaborate any further on the nature of these concerns.

The respondent stated that the use of a differential dry pipe sprinkler valve is not acceptable due to the following concerns:

1. NFPA - 14, which is referenced within Article 3.2.9.3. does not permit dry class 2 or 3 standpipe systems.
2. The National Fire Code of Canada does not permit dry standpipe systems for Class 2 and 3 service.
3. The 1.5 and 2.5 inch hose valves within the fire hose cabinets do not perform well in maintaining a seal against high air pressures.
4. There is no design criteria nor regulations with respect to the maximum volumes and trip times permitted.

   The system's volume has been estimated at 500 USGAL and the flow area of an 1.5 inch hose is estimated to be equivalent to a single flowing sprinkler head. What is considered an acceptable time to deliver water from the valve to the nozzle.

5. Typically a pressure of 40 - 50 psi will be maintained in the dry system to prevent tripping.

   The discharge of the air pressure along with the built up rust and scale deposits could create a hazard to personnel.

7. **Commission Ruling:**

The panel considered the representations of the respondent concerning the prior involvement of a Building Code Commission panel member in a similar issue and determined that the issues as presented by the Respondent would not raise a reasonable apprehension of bias on the part of the Building Code Commission panel. The panel therefore decided to continue with the hearing.

n favour of the Applicant. It is the decision of the Building Code Commission that the proposed automatic dry standpipe system complies with Sentence 3.2.9.3.(9) of the Building Code.

8. **Reasons:**
   . Sentence 3.2.9.3.(1) excepts sentence 3.2.9.3.(9) from the requirements of NFPA - 14.
   a. The proposed system complies with sentence 3.2.9.3.(9) of the Building Code.

Dated at Toronto, this 28th day, in the month of February, in the year 1995, for application number 1995-04.

BCC Ruling No. 95-05-425

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-05-425

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.4.2.3., Sentences 3.4.4.1.(1) & 3.4.4.2.(2) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Michael Moxan, Dunlop Farrow Inc. Architects for the resolution of a dispute with Mr. Mel Brown, Chief Building Official, City of Niagara Falls, concerning whether the proposed utilization of an open stair, descending from the Second Floor through a two storey high lobby to the Ground Floor level, as a required egress facility, sufficiently complies with the technical interpretation of the Building Code, at 4342 Queen Street, Niagara Falls, Ontario.

APPLICANT

Dunlop Farrow Inc. Architects
Toronto, Ontario

RESPONDENT

Mr. Mel Brown
Chief Building Official
City of Niagara Falls

PANEL

Mr. Demir Delen, Panel Chair
Mr. Rick Florio
Mr. Kenneth Bacon

PLACE

Toronto, Ontario

DATE OF RULING

February 9th, 1995

APPEARANCES

Mr. Allan E. Larden, Principal
Larden Muniak Consulting Inc.
Toronto, Ontario

Mr. Michael Moxan, Partner
Dunlop Farrow Inc. Architects
Toronto, Ontario
For the Applicant

Mr. Roger Pigeon
Senior Plan Examiner
City of Niagara Falls
For the Respondent

RULING

1. **The Applicant**

   Mr. Michael Moxan, Dunlop Farrow Inc. Architects is the holder of a permit under the Building Code Act, 1992 to construct a new six storey Group D office building at 4342 Queen Street, Niagara Falls, Ontario.

2. **Description of Constrution**

   The subject building is a six storey Group D occupancy.

   The building height is 20.52 m from the ground floor level to the sixth floor level. It has a building area of approximately 2,800 m² and is fully sprinklered with an electrically supervised sprinkler system connected to the fire department by a central station facility. Article 3.2.2.41. of the Building Code requires the building to be of noncombustible construction and structural assemblies must have a 1 hour fire resistance rating. The building structure is reinforced concrete.

The second floor is open to the ground floor lobby. The second floor is provided with two enclosed exit stairs in the central core of the building and one exterior exit stair leading from an open-air patio/play area for a day care facility.

There is also an open stair which descends from the second floor corridor to the ground floor lobby. The stair ends at the ground floor level approximately 3 m from the doors leading to the exterior.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.4.2.3., Sentences 3.4.4.1.(1) & 3.4.4.2.(2) of the Building Code. At issue is whether the proposed utilization of an open stair, descending from the second floor through a two storey high lobby to the ground floor level, as a required egress facility sufficiently complies with the Building Code.

4. **Provision of the Building Code**

Article 3.4.2.3.: Distance Between Exits

1. Except where a floor area is divided by a fire separation so that it is necessary to pass through it to travel from one exit to another exit, the least distance between 2 required exits from a floor area shall be
    a. one half the maximum diagonal dimension of the floor area, but need not be more than 9 m (29 ft 6 in) for a floor area having a public corridor, or
    b. one half the maximum diagonal dimension of the floor area, but not less than 9 m (29 ft 6 in) for all other floor areas.
2. The minimum distance between exits referred to in Sentence (1) shall be the shortest distance that smoke would have to travel between the required exits, assuming that the smoke will not penetrate an intervening fire separation.

Sentence 3.4.4.1.(1): Fire-Resistance Rating of Exit Separations

Except as provided in Article 3.4.4.3. and Sentences (2), 3.3.5.5.(3) and 3.4.4.2.(2), every exit shall be separated from each adjacent floor area by a fire separation having a fire-resistance rating not less than that required for the floor assembly above the floor area and, where there is

no floor assembly above, not less than that required by Subsection 3.2.2. for the floor assembly below, but in no case shall the fire resistance rating be less than 45 min.

Sentence 3.4.4.2.(2): Exits Through Lobbies

Not more than 1 exit from a floor area is permitted to lead through a lobby provided

c. the lobby floor is not more that 4.5 m (14 ft 9 in) above grade,
d. the path of travel through the lobby to the outdoors is not more than 15 m (49 ft. 3 in),
e. he adjacent rooms or premises having direct access to the lobby do not contain a Group C or F occupancy,
f. except as required in Clause (g), the lobby is not located within an interconnected floor space other than as described in Sentence 3.2.8.2.(6),
g. the lobby conforms to the requirements for exits, except that
    i. rooms other than service rooms and storage rooms may open onto the lobby,
    ii. the fire separation between the lobby and a room used for the sole purpose of control and supervision of the building need not have a fire-resistance rating, and
    iii. the fire separation between the lobby and adjacent occupancies that are permitted to open onto the lobby need not have a fire-resistance rating when the lobby and adjacent occupancies are sprinklered,
h. the fire separation required in Sentence 3.4.4.1.(1) shall be maintained between the exit and the lobby, and
i. hat if the exit serves a hotel, the lobby is not located within an interconnected floor space.

5. **Applicant's Position**

The applicant submitted that incorporating the subject unenclosed stairs as contributing to the required means of egress and exit capacity from the second floor, demonstrates sufficiency of compliance with the level of safety intended by the Building Code on the bases described below:

. Building Code 3.4.2.3. Distance Between Exits
    . Although Article 3.4.2.3. of the Building Code restricts the proximity of exits serving one floor based on their serving the entire floor area, the city draws an analogy between the upper lobby space and meeting room area on the one hand, and the floor area on the other hand in respect of this Code concept.

      Doors will be provided in the fire separation between the corridor and adjacent office space to provide access to enclosed stair No. 2 for meeting room occupants

and to enclosed stair No. 1 or unenclosed stair No. 3 for office occupants. Directional exit signage will be provided to clearly indicate that this path of travel constitutes access to an exit; signage will be provided within the office space to guide persons utilizing this route to enclosed stair No. 2. This will satisfy the application of Article 3.4.2.3. of the Building Code with respect to the meeting room area.

a. Building Code 3.4.4.1.(1). Fire Separation of Exits

. The requirement for fire separation of exit stairs from the adjacent storeys which they serve is based on concern that fire will spread into an exit and affect the ability of persons in storeys above or below to use that exit. The separation also preserves the floor-to-floor fire separation between storeys.

These concerns do not apply in respect of the two-storey-high lobby at 4342 Queen Street stair. Unenclosed stair No. 3 serves only the second floor and the second floor is already within the same fire compartment as the ground floor.

a. The total travel time required to leave a meeting room, traverse unenclosed stair No. 3 and then leave the building is considerably less than the maximum travel time the Code would permit for all occupants to gain access to an enclosed exit.

b. Building Code 3.4.4.2.(2). Egress Through Lobby

. The prohibition against more than one exit from a floor area leading through a lobby is intended to apply to storeys above or below the lobby where there is a chance that the lobby could become affected by the fire and persons seeking to leave the building from such other storeys could have to leave the protection of the enclosed exit stair to cross the lobby floor. This concept does not apply in this case, persons utilizing unenclosed stair No. 3 are not in ignorance of lobby conditions once they commence using stair No. 3. They are in the same fire compartment to begin with.

a. It is incidental that persons utilizing enclosed stair No. 2 to leave the second floor meeting room area enter into an enclosed exit stair shaft which then opens to the lobby below. Enclosed stair No. 1 is designed in respect of the lobby to conform to Sentence 3.4.4.2.(2) of the Building Code to satisfy the level of safety the Code demands for the basement and for the storeys above the second floor. Again, the second floor occupants who access enclosed stair No. 1 are already in the same fire compartment as the lobby before they enter the stair.

In establishing sufficiency of compliance for the design of the two storey lobby and egress from the Second Floor, the following general factors were also presented for consideration:

c. The building is fully sprinklered with an electrically-supervised sprinkler system, activation of which causes the fire alarm to sound and a signal to be sent to the fire department through an independent central station facility.
d. The fire alarm system will be automatically activated by sprinkler flow and by smoke detectors required in stair shafts and re-circulating air-handling systems.
e. The lobby is separated from the adjacent ground and second floor areas by an unrated fire separation which will be expected to restrict smoke spread from a fire originating elsewhere in the ground or second floors.
f. The lobby is essentially sterile space, as far as fire load is concerned. There is no occupancy designed for the corridor which would entail a fire load of any consequence. Wall and ceiling finishes conform to Code requirements for noncombustible construction.
g. The lobby has a clear height from the finished ground floor level to the ceiling of the second floor of some 7.7 m (25.25 ft), the resultant volume of the lobby will provide a large reservoir in which the smoke from an incipient fire not yet fully extinguished by the sprinkler system will be considerably diluted, unlike what may be expected in the narrower confines of a typical public corridor or even the interior of an exit stair shaft into which smoke may migrate during a fire.

6. **Chief Building Officials Position**

The respondent submitted that Sentence 3.4.4.1.(1) of the Building Code requires every exit to be separated from an adjacent floor area by a fire separation. The open stair descending from the second floor through a two storey high lobby to the ground floor level is not fire separated. Therefore, it must be considered a convenience stair and not a required exit.

Sentence 3.4.4.2.(2) of the Building Code states that only one required exit can lead through a lobby. If the open stair was considered to be a required exit, there would be two exits leading through the lobby.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that the egress system from the second floor of the building provides sufficiency of compliance with the technical requirements of the Building Code, subject to the following conditions:

. An egress door to office area # 228 will be introduced opposite to bridge # 215, at the fire separation of corridor # 213.

a. An exit sign will be installed above the aforementioned egress door, and an unobstructed path of travel 1100 mm wide will be maintained, with appropriate signage leading occupants to
stair # 2.

b. The use of the lobby for temporary exhibits which might increase the fire load will be addressed in the Fire Safety Plan.

8. **Reasons:**

. Stair # 3 is the most direct and familiar egress route from the second floor.

a. The performance level for exiting the second floor will be increased by using stair # 3 since the total evacuation time would be reduced when compared to the Building Code conforming situation for stair # 4.

Dated at Toronto, this 9th day, in the month of February, in the year 1995, for application number 199-05.

BCC Ruling No. 95-04-424

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-04-424

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Subclause 3.2.9.1.(1)(b)(i) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by the Corporation of the City of Ottawa for the resolution of a dispute with Mr. Norman A. Douglas, Chief Building Official, City of Ottawa, concerning whether a stand pipe and hose system is required in an addition comprising a library, community rooms and gymnasium at St. Laurent Park, at 714-716 Morin Street, Ottawa, Ontario.

APPLICANT

Corporation of the City of Ottawa

RESPONDENT

Mr. Norman A. Douglas
Chief Building Official
City of Ottawa

PANEL

Mr. Michael Lio, Panel Chair
Mr. Remus Tsang
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

January 26th, 1995

APPEARANCES

Mr. Steven M. Tomlin
Fire Protection Consultant
Morrison Hershfield Limited
North York, Ontario
For the Applicant

RULING

1. **The Applicant**

   The Corporation of the City of Ottawa is the holder of a permit under the Building Code Act, 1992 to construct an addition comprising a library, community rooms and gymnasium at St. Laurent Park, at 714-716 Morin Street, Ottawa, Ontario.

2. **Description of Constrution**

   The project includes two existing buildings; a swimming pool building and an arena building which have building areas of 1,195 m? and 2,260 m? respectively. Both buildings have a major occupancy of Group A Division 3 and have been in existence for more than five years. These buildings are not equipped with a sprinkler or standpipe system.

   The proposed construction would incorporate the two existing structures into a new facility which will include a library, community rooms and gymnasium. The addition will be separated from the existing buildings by a 1 hour fire separation. The area of the proposed addition is 3,874 m². Therefore, the new facility will have a total building area of 7,329 m².

   In lieu of providing a fire resistance rating for the roof an automatic sprinkler system is to be installed in the addition.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Subclause 3.2.9.1.(1)(b)(i) of the Building Code. At issue is whether or not a standpipe and hose system is required in the addition to the pool and arena buildings.

4. **Provision of the Building Code**

   Subclause 3.2.9.1.(1)(b)(i): Standpipe and Hose Systems

(1) Except as provided in Article 3.2.9.2., a standpipe and hose system hall be installed in every building that

(b) is greater in building area than the area shown in Table 3.2.9.A. for the applicable building height shown in the Table where the building

i. is not sprinklered, and
ii. is not more than 14 m (45 m 11 in) high measured between grade and the ceiling of the top storey, or

5. **Applicant's Position**

The applicant submitted that the literal intent of the Building Code had been achieved with regard to the requirements for a standpipe and hose system at the subject property.

Sentence 11.3.5.1.(1) of the Building Code indicates that renovations (i.e. extended buildings) which result in an increase in occupant load of more than 15% reduce the performance level of the existing building. Since the addition will increase the occupant load of the existing building by more than 15% the performance level of the existing building is reduced. Part 11 recognizes the hazard posed by the extension and proposes specific remedies to offset this hazard which does not include a stand pipe and hose system.

Article 11.3.3.22. of the Building Code provides a specific means for restoring the performance level of the existing buildings which includes evaluating and upgrading the ealy warning evacuation system for the whole building including:

- access to exit widths
- exit widths
- exit signs
- lighting of exits, lighting of access to exits and emergency lighting
- fire alarm systems
- travel distance and number of exits

These upgrades are intended to ensure that the performance level of the existing buildings is maintained and therefore compliance with the literal intent of Part 11 is achieved.

The applicant submitted that the new addition is required to comply with the other parts of the Building Code as indicated in Article 11.3.5.1. Part 3 of the Building Code requires that the roof

of the whole building have a fire resistance rating. However, based on Sentence 2.1.1.7.(1), this requirement only applies to the addition. In lieu of a fire resistance rating, an automatic sprinkler system will be installed in the addition as permitted by Article 3.2.2.12.

Under the provisions of Part 3 a standpipe and hose system is required in the whole building on the basis that the whole building is not sprinklered. However, based on Sentence 2.1.1.7.(1), Part 3 only applies to the addition. Therefore, since the addition is sprinklered a standpipe and hose system is not required in the addition as per Sentence 3.2.9.1.(1).

The applicant submitted that a fire originating in the addition will be controlled or extinguished by the sprinkler system in the addition. This coupled with the proposed 1 hour fire separation located between the old and new construction, and fire department accessibility leads us to believe that there would be no additional benefits by installing a standpipe and hose system in the addition.

6. **Chief Building Officials Position**

The respondent submitted that Subclause 3.2.9.1.(1)(b)(i) clearly sets out the basis for exemption for the installation of a standpipe and hose system; that is the entire building must be sprinklered.

The respondent does not dispute the application of Part 11 to the construction undertaken in the existing building and that Part 11 does not require the installation of a standpipe and hose system.

The respondent submitted that the addition must comply with Part 3 requirements. Therefore, either the new construction shall have both a sprinkler and standpipe system or the sprinkler system must be extended into the existing buildings. Alternatively, firewalls could be constructed in order to down size one building into several separate ones.

However, in this case, since the addition is fire separated from the existing building the partial sprinkler system could be considered as providing sufficiency of compliance with the technical requirements of the Building Code as determined by the Building Code Commission in accordance with s.24(1)(b) of the Building Code Act, 1993.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that not providing a standpipe and hose system in the addition comprising a library, community rooms and gymnasium conforms to the requirements of the Building Code.

8. **Reasons:**
   . Since the new building will be sprinklered a standpipe and hose system is not required by Part 3 of the Building Code.
   A. The existing building has been upgraded to comply with the early warning and evacuation requirements of Part 11 of the Building Code.
   B. The new building does not reduce the level of safety of the existing building.

Dated at Toronto, this 26th day, in the month of January, in the year 1995, for application number 1994-57.

BCC Ruling No. 95-03-423

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-03-423

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 9.21.4.5. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Guy Ealey for the resolution of a dispute with Mr. Eric Buchholz, Chief Building Official, Town of Penetanguishene, concerning whether an exterior masonry fire place and chimney required bracing below the roof line to provide lateral stability in compliance with Article 9.21.4.5. of the Building Code, at 230 Church Street, Part lots 110 and 111, Plan 70, Penetanguishene, Ontario.

APPLICANT

Mr. Guy Ealey
Box 629
Penetanguishene, Ontario

RESPONDENT

Mr. Eric Buchholz
Chief Building Official
Town of Penetanguishene

PANEL

Mr. Michael Lio, Panel Chair
Mr. Remus Tsang
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

January 11th, 1995

APPEARANCES

Mr. Gary E. French, Barrister and Solicitor
Mr. Tony Hope and Mr. Guy Ealey
For the Applicant

Mr. Eric Buchholz, Chief Building Official
Town of Penetanguishene
Respondent

RULING

1. **The Applicant**

   Mr. Guy Ealey is the holder of a permit under the Building Code Act, 1992 to construct an exterior masonry fireplace and chimney on the gable end of a single family residence (i.e. House) at 230 Church Street, Penetanguishene, Ontario.

2. **Description of Constrution**

   The masonry chimney had a basement solid fuel fireplace and ground floor gas fired fireplace.

   The chimney extended approximately 22 feet above the top of the foundation wall and protruded about 3.5 feet above the roof line. Its plan dimensions were 5 ft. 4 in. by 2 ft. The chimney consisted of 13 concrete block courses above the concrete foundation and continued above with one wythe of common brick.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 9.21.4.5. of the Building Code. At issue is whether the exterior masonry fireplace and chimney required bracing below the roof line to provide lateral stability.

4. **Provision of the Building Code**

   Article 9.21.4.5.: Lateral Stability

Chimneys shall be braced when necessary to provide lateral stability.

5. **Applicant's Position**

   The applicant stated that lateral supports or ties to the house structure were not necessary.

   The applicant submitted that the chimney started to lean away from the house due to a footing failure or because the footings were excavated and left exposed all winter.

6. **Chief Building Officials Position**

   The respondent stated that the chimney required lateral support.

   The respondent noted that the chimney separated from the exterior wall of the house by approximately 1 inch at the top.

   The respondent issued an "Order to Comply" under the Building Code Act requiring the provision of adequate lateral support for the chimney.

7. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that the chimney's lateral bracing provided showed sufficiency of compliance with the Building Code.

8. **Reason:**

   Evidence submitted at the hearing indicated that the chimney was laterally restrained by soil, the basement fireplace hearth, the main floor gas fireplace hearth and by the roof overhang framing.

Dated at Toronto, this 11th day, in the month of January, in the year 1995, for application number 1994-55.

BCC Ruling No. 95-02-422

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-02-422

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.11.3.1.(19) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Ron Barry, Works & Environment Department, City of Scarborough for the resolution of a dispute with Mr. Bernie Roth, Chief Building Official, City of Scarborough, concerning whether the colour of the pool tiles sufficiently comply with Sentence 3.11.3.1.(19) of the Building Code.

APPLICANT

Mr. Ron Barry
Senior Project Manager
Works & Environment Department
City of Scarborough

RESPONDENT

Mr. Bernie Roth
Chief Building Official
City of Scarborough

PANEL

Mr. Michael Lio, Panel Chair
Mr. Remus Tsang
Mr. Sang Shim

PLACE

Scarborough, Ontario

DATE OF RULING

January 11th, 1995

APPEARANCES

Mr. Roderick Robbie, President
Mr. Arun Sane, Partner
Robbie/Young + Wright Architects Inc.

AND

Mr. Bernhard Gall, President
Waterforms Canada Limited
For the Applicant

Mr. Bernie Roth, Chief Building Official
Mr. Paul Meleta, Building Official

AND

Mr. Louis Mangoff, Solicitor
City of Scarborough
For the Respondent

RULING

1. **The Applicant**

   Mr. Ron Barry, Works & Environment Department, City of Scarborough is the holder of a permit under the Building Code Act, 1992 to construct a public pool with light blue tiles at the Agincourt Recreation Centre, 31 Glenwatford Drive, Scarborough, Ontario.

2. **Description of Constrution**

   The Agincourt Recreation Centre Pool is a public pool with a large water slide. The deepest portion of the pool is 2050 mm in depth.

   The pool has been finished in a medium blue tile with dark blue decorative squares in a pattern for accent.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Sentence 3.11.3.1.(19) of the Building Code. At issue is colour of the existing medium blue tiles in the submerged portion of the public pool.

4. **Provision of the Building Code**

Sentence 3.11.3.1. Pool and Pool Deck Design and
Construction Requirements

(19) Except for markings for safety or competition purposes, submerged surfaces in public pools shall be finished white or light in colour.

5. **Applicant's Position**

The applicant submitted that the blue tile does not effect the clarity of the pool bottom and therefore falls within the definition of "light colour" described in Sentence 3.11.3.1.(19) of the Building Code.

6. **Chief Building Officials Position**

The respondent submitted that Sentence 3.11.3.1.(19) of the Building Code states that "submerged surfaces in public pools shall be finished white or light in colour". However, the sides and bottom of the pool are finished in a mid-blue coloured tile.

Portions of the bottom and sides of the pool are difficult to see from certain locations along the perimeter of the pool. This poses a potential unsafe condition. Also, visibility of the bottom of the pool will be further reduced by the agitation water caused by users of the pool.

The respondent stated that the colour of the pool tiles darkened significantly when the pool was filled with water. Lighting levels must be increased so that the bottom of the pool is visible from anywhere on the pool deck.

7. **Commission Ruling:**

In favour of the Respondent. It is the decision of the Building Code Commission that the pool tile and pool lighting do not comply with the Building Code.

8. **Reason:**

   The existing colour of the pool tile and pool lighting do not provide sufficient visibility to adequately discern an object on the bottom of the pool from any point on the pool deck.

Dated at Toronto, this 11th day, in the month of January, in the year 1995, for application number 1994-56.

BCC Ruling No. 95-01-421

BUILDING CODE COMMISSION DECISION ON B.C.C. #95-01-421

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.2.5.7.(1)(c) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Vince Killen, St. Joseph's Hospital and Health Centre for the resolution of a dispute with Mr. A. Jeffrey Chalmers, Chief Building Official, City of Peterborough, concerning whether the proposed new canopy to be located over the fire access route at the outpatient entrance on the Rogers Street side of St. Joseph's Hospital and Health Centre, sufficiently complies with Clause 3.2.5.7.(1)(c) of the Building Code.

APPLICANT

St. Joseph's Hospital & Health Centre
Peterborough, Ontario

RESPONDENT

Mr. A. Jeffrey Chalmers
Chief Building Official
City of Peterborough

PANEL

Mr. Michael Lio, Panel Chair
Mr. Remus Tsang
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

January 26th, 1995

APPEARANCES

Mr. Robert Sampson
Project Architect
Dunlop Farrow Inc. Architects
For the Applicant

Mr. A. Jeffrey Chalmers
Chief Building Official
City of Peterborough
Respondent

RULING

1. **The Applicant**

   Mr. Vince Killen, St. Joseph's Hospital and Health Centre is an applicant for a permit under the Building Code Act, 1992 to construct a new canopy to be located over the fire access route at the outpatient entrance on the Rogers Street side of St. Joseph's Hospital and Health Centre, 384 Rogers Street, Peterborough, Ontario.

2. **Description of Constrution**

   The proposed entrance canopy is to be located over the fire access route at the outpatient entrance from Rogers Street. The canopy will have an overhead clearance of 4.27 metres (14' 0") and cover approximately one half the width of the fire access route.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Clause 3.2.5.7.(1)(c) of the Building Code. At issue is the determination of whether the 4.27 metre over head clearance of the proposed new canopy sufficiently complies with the Building Code.

4. **Provision of the Building Code**

   Clause 3.2.5.7.(1)(c): Access Route Design

1. A portion of roadway or yard provided as a required access route for fire department use shall

   (c) have an overhead clearance of not less than 5 m (16 ft 5 in).

5. **Applicant's Position**

The applicant stated that the purpose of the canopy is to provide shelter from the elements for patients entering or leaving the building. The applicant submitted that the canopy should be as low as possible to provide better protection from inclement weather. Also, the reduced canopy height avoided obstructing the second floor windows above the canopy.

The applicant stated that the City of Peterborough Fire Chief has accepted the 4.27 m clearance. Fire fighting equipment cannot exceed this height due to limitations of existing clearances provided at bridges, overhead wiring and traffic signals in the area.

6. **Chief Building Officials Position**

The respondent stated that the proposed canopy is over a required fire access route and accordingly must have an overhead clearance of not less than 5 m (16' 5"). The proposed canopy will have a vertical clearance of 4.27 m (14' 0").

The canopy is a new freestanding structure, therefore Subsections 11.2.3. and 11.2.4. of the Building Code do not apply.

The respondent submitted that there is no construction difficulty with raising the canopy other than blocking view from the upper windows.

The respondent does not have the authority to accept a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that providing a vertical clearance of 4.27 m (14' 0") for the proposed canopy over the fire access route shows sufficiency of compliance with the Building Code provided signage indicating the clear height is visible on approach to the canopy.

8. **Reasons:**
    A. The proposed canopy does not affect fire fighting capability. Two means of access are available on the fire access route with the canopy at the terminus.
    B. The local fire department has accepted the 4.27 m (14' 0") clear height. Evidence was presented that current and future fire fighting vehicles would clear the proposed canopy height.

Dated at Toronto, this 26th day, in the month of January, in the year 1995, for application number 1994-58.

BCC Ruling No. 94-41-420

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-41-420

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.2.9.1.(1)(b) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Mr. John Havlik, Santasalo North America Inc. for the resolution of a dispute with Mr. Larry Simonato, Chief Building Official, City of Cambridge, concerning sufficiency of compliance with the stand pipe and hose system requirements in Clause 3.2.9.1.(1)(b) of the Building Code.

APPLICANT

Mr. John Havlik, Vice President
Santasalo North America Inc.
Cambridge, Ontario

RESPONDENT

Mr. Larry Simonato
Chief Building Official
City of Cambridge

PANEL

Sarah Maman, Chair
Michael Lio
Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

December 2, 1994

APPEARANCES

Mr. Fred Schiedel, President
Schiedel Construction Inc.
For the Applicant

RULING

1. **The Applicant**

   Santasalo North America Inc. is the holder of a permit under the Building Code Act, 1992 to construct a cold steel fabricating and steel material storage addition at 1615 Bishop Street North, Cambridge, Ontario.

2. **Description of Constrution**

   A building permit was issued on September 15, 1994 to construct a cold steel fabricating and steel material storage addition. When the permit was issued a stand pipe and hose system was required as part of the plans review.

   The building area of the new addition is 470 m². The existing building area is 2943 m², with a combined area of 3,413 m².

   The building was classified as a Low Hazard Industrial Occupancy (F-3). It was designed in accordance with Article 3.2.2.59. of the Building Code.

   The building is of non-combustible construction, 1 storey in building height, unsprinklered and faces 1 street.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Clause 3.2.9.1.(1)(b) of the Building Code. At issue is the requirement to provide a standpipe and hose system in the proposed addition. Table 3.2.9.A. which forms part of Sentence 3.2.9.1.(1) of the Building Code requires a standpipe and hose system for one storey F-3 occupancies over 3000 m².

4. **Provision of the Building Code**

Clause 3.2.9.1.(1)(b) Standpipe and Hose Systems

1. Except as provided in Article 3.2.9.2., a standpipe and hose system shall be installed in every building that

   (b) is greater in building area than the area shown in Table 3.2.9.A. for the applicable building height shown in the Table where the building

   i. is not sprinklered, and
   ii. is not more than 14 m (45 m 11 in) high measured between grade and the ceiling of the top storey.

5. **Applicant's Position**

The applicant stated that the level of safety required by the Building Code is met without the provision of a standpipe and hose system for the following reasons:

1. The building is used for cold steel processing and steel material storage with little combustible loads;
2. Construction is non-combustible;
3. A.B.C. fire extinguishers are located throughout the building;
4. The Cambridge Fire Department is located on the adjacent property and the water testing/training gun can cover a portion of the existing building; and,
5. There is good driveway access all around the building with a fire hydrant in front of the building.

6. **Chief Building Officials Position**

The respondent stated that the existing building area plus the new addition building area is 3413 m². Clause 3.2.9.1.(1)(b) of the Building Code requires a stand pipe and hose system for the addition because the maximum building area is greater than 3000 m².

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that not providing standpipe and hose system in the new addition shows sufficiency of compliance with the Building Code.

8. **Reasons:**

1. The existing building and new addition are used for cold steel processing and the combustible loading is minuscule.
2. The building is located next door to a constantly attended fire hall.

Dated at Toronto, this 2nd day, in the month of December, in the year 1994, for application number 1994-53.

BCC Ruling No. 94-40-419

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-40-419

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 9.23.17.3. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF a reference to the Building Code Commission pursuant to an order of the Honourable Madame Justice Eberhard of the Ontario Court (General Division), dated November 24, 1994 concerning whether sheathing paper is required behind masonry veneer on a garage attached to a house at 80 Smallman Drive, Town of Wasaga Beach.

APPLICANT

Mr. Brian James Dyce
Mr. James E. Dyce
Wasaga Beach, Ontario

RESPONDENT

Corporation of the
Town of Wasaga Beach

PANEL

Sarah Maman, Chair
Michael Lio
Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

December 2, 1994

APPEARANCES

Mr. James E. Dyce
Wasaga Beach, Ontario
For the Applicant

Mr. Thomas P. Merrifield, Solicitor
Bellamy, Besse, Augaitis & Merrifield
Collingwood, Ontario
For the Respondent

REPORT

1. **Order of Ontario Court (General Division)**

   Brian James Dyce (the "Applicant") applied to the Ontario Court (General Division) under s.25(1) of the Building Code Act, 1992 requesting certain relief, including an order setting aside three orders of the Town of Wasaga Beach (the "Respondent") issued under the Building Code Act, 1992 against 80 Smallman Drive, Wasaga Beach. In that application, the Honourable Madam Justice Eberhard of the Ontario Court (General Division), on consent of the parties, on November 24, 1994 made the following order:

   i. This court orders that the question respecting the interpretation of the technical requirements of the Building Code or the sufficiency of compliance with the technical requirements of the Building Code as raised in this application, namely whether sheathing paper is required on the garage walls beneath the masonry veneer on the dwelling being erected at 80 Smallman Drive, in the Town of Wasaga Beach, be referred to the Building Code Commission for a hearing pursuant to subsection 25(5) of the Building Code Act, 1992.
   ii. This court orders that the Building Code Commission, following the hearing, shall report back to the parties and this Court.
   iii. This Court orders that this application be adjourned sine die, returnable on 7 days notice by either party.

2. **Background**

Mr. Brian James Dyce and Mr. James E. Dyce are the holders of a building permit to construct a single family dwelling (i.e. house) with an attached garage under the Building Code Act, 1992 at 80 Smallman Drive, Wasaga Beach, Ontario.

3. **Description of Construction**

The building under construction is a single family dwelling (i.e. house) with an attached garage. The building is frame construction consisting of wood studs which are sheathed on the outside face with waferboard. The exterior finished cladding consists of masonry veneer. The wall studs of the unheated attached garage are exposed to the inside garage space.

4. **Issue on Reference**

The reference from the Ontario Court (General Division) directed that the Building Code Commission interpret the technical requirements of the Building Code or the sufficiency of compliance with the technical requirements of the Building Code that were raised in the application before the Ontario Court (General Division) pursuant to which the reference was ordered, and in particular to determine whether sheathing paper is required on the garage walls beneath the masonry veneer on the dwelling erected at 80 Smallman Drive in the Town of Wasaga Beach.

5. **Provision of the Building Code**

`Article 9.23.17.3.  Sheathing Paper`

1. Except as provided in Sentences (3) and (6), not less than 1 layer of sheathing paper shall be applied beneath siding, stucco or masonry veneer.
2. Sheathing paper required in Sentence (1) shall be applied so that joints are lapped at least 100 mm (4 in), and if applied horizontally, the upper sheets shall overlap the lower sheets.
3. Sheathing paper required in Sentence (1) shall be applied so that joints are lapped at least 100 mm (4 in), and if applied horizontally, the upper sheets shall overlap the lower sheets.
4. Except as provided in Sentence (6), where no sheathing is used with masonry veneer or other siding, not less than 2 layers of sheathing paper shall be applied beneath the veneer or siding.

5. All joints in the sheathing paper required in Sentence (3) shall occur over framing, and the paper shall be fastened to the framing with roofing nails or staples spaced not more than 150 mm (5? in) along the edges of the outer layer of sheathing paper.
6. Wall sheathing may be used in lieu of 1 layer of sheathing paper required in Sentence (3), and the thickness need not conform to Table 9.23.16.A.
7. Sheathing paper may be omitted beneath siding when the joints in the siding are formed to effectively prevent the passage of wind and rain in conformance with Sentence (7) or (9) as applicable.
8. Siding consisting of sheets of plywood, hardboard, waferboard or asbestos cement is considered to meet the requirements Sentence (6) provided the siding is applied so that all edges are directly supported by framing and the vertical joints between adjacent sheets covered with battens or shiplapped or otherwise matched to provide weather tight joints.
9. Vertical joints between sheets described in Sentence (7) shall be caulked.
10. Metal siding consisting of sheets of metal is considered to meet the requirements of Sentence (7) where the joints between sheets are of the locked seam type.

6. **Applicant's Position**

The Applicant submitted that the purpose of the sheathing paper is to prevent drafts and the entry of wind driven rain into the wall cavity. Building Code development history shows that the sheathing paper requirement in the Building Code was a response to the practice of using board lumber sheathing with horizontal joints every 6 to 8 inches. This type of construction was particularly vulnerable to the passage of wind and rain.

The Applicant said that with the advent of panel type sheathing the situation is quite different. Sheathing paper is not required at all if particle board or plywood sheets are used as siding and installed with all edges supported and joints between adjoining panels caulked.

Concerning the 21" wide wall located to the left of the garage door opening, the caulking requirement would be irrelevant since there are no adjoining panels. Sheathing paper would not make any difference since the waferboard covers this area in one continuous sheet.

As the wall separating the alcove and the garage is comprised of more than one sheet of waferboard and is not protected by sheathing paper, it does not present a problem concerning the intent of the Building Code. Both sides of the wall are unconditioned spaces. The possibility of drafts from the alcove to the unheated garage should not be a concern nor is there a likelihood of

rain entry from either side since both have a roof enclosure. The Applicant questioned what purpose sheathing paper serves in this location.

7. **Respondent's Position**

The Respondent stated that the dispute centres around whether sheathing paper is required on garage walls, beneath the masonry veneer on this structure. The provisions of the Building Code, and in particular Article 9.23.17.3. specifically requires sheathing paper.

The Respondent stated that by not providing the sheathing paper any wind driven rain on the waferboard will not be redirected over the flashing to the weep holes. Further accumulation of moisture at the base of the wall could adversely affect the structural integrity of the wall system.

The Applicant was advised of this before he proceeded with the bricking of exterior walls in the garage, he has refused to comply with the request of the Building Department.

8. **Findings and Conclusions**

It is the decision of the Building Code Commission that not installing sheathing paper beneath the brick veneer on the garage attached to a house at 80 Smallman Drive does not comply with the Building Code.

9. **Reasons:**

The intent of the sheathing paper beneath brick veneer as part of wood frame wall assemblies is to:

0. provide protection of the wall assembly from weather, primarily wind and wind-driven rain, and
1. provide means for directing water that penetrates the brick veneer rain screen over the flashing which is required at the base of the wall to direct water to the outside.

Two layers of sheathing paper are deemed to fulfil these requirements.

The Building Code requires two layers of sheathing paper beneath brick veneer. One layer of sheathing can substitute for one layer of sheathing paper (as illustrated). Given the requirement that sheathing paper directs wind-driven rain over installed flashing, sheathing paper is normally installed over the sheathing.

In some instances, where no rain screen is part of the wall system, that is, where the exterior wall finish functions as a weather barrier, sheathing paper is not required. Acceptable exterior finishes in this case include siding where joints in the siding are formed to effectively prevent the passage of wind and rain. This may include sheets of plywood, hardboard, waferboard, or asbestos board provided the siding is applied so that all edges are directly supported by framing and the vertical joints are caulked and covered with battens or they are ship lapped or matched to provide weather tight joints. Metal siding with locked seam joints can also be used without sheathing paper.

Brick veneer is not considered a weather tight exterior finish. Therefore, the wall must be protected from weather with two layers of sheathing paper or a layer of sheathing paper and a layer of sheathing.

The Applicant made two proposals which are examined below:

2. The proposal to caulk and /or seal the joints in the sheathing in lieu of installing a layer of sheathing paper may provide protection from weather. However, the bottom of wall flashing as installed fails to meet the intent of the Code with respect to water transmission to weep holes installed in the brick veneer. Further, flashing must be installed as per article 9.20.13.7. beneath brick veneer. This is not acceptable.
3. Installing sheathing paper on the inside of the face of the wall sheathing may provide additional protection from the weather. However, adequate water transmission to the flashing is not assured in this circumstance. This is not acceptable.

Dated at Toronto, this 9th day, in the month of December, in the year 1994, for application number 1994-42.

BCC Ruling No. 94-39-418

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-39-418

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Section 3.7. and particularly Article 3.7.2.3. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by The TDL Group Ltd. for the resolution of a dispute with Mr. Denis A. Petry, Chief Building Official, City of Cornwall, concerning the barrier-free access and washroom requirements for a drive-thru restaurant.

APPLICANT

Mr. Robert W. Main
Development, Special Projects
The TDL Group Ltd.
Oakville, Ontario

RESPONDENT

Mr. Denis A. Petry
Chief Building Official
City of Cornwall

PANEL

Sarah Maman, Chair
Michael Lio
Rick Florio

PLACE

Toronto, Ontario

DATE OF RULING

December 2, 1994

APPEARANCES

Lynda J. Townsend
Barrister and Solicitor

Jon Winton
Leber/Rubes Inc.
For the Applicant

RULING

1. **The Applicant**

   The TDL Group Ltd. is the holder of a permit under the Building Code Act, 1992 to construct a Tim Hortons drive-thru restaurant that includes direct entry into the building to purchase goods at 851 Pitt Street, Cornwall, Ontario.

2. **Description of Constrution**

   The subject building is classified as a Group E Major Occupancy in accordance with Article 3.1.2.5. of the Building Code.

   The building supports a drive-thru type operation and also contains facilities to permit direct entry into the building to purchase goods.

   The building will not be provided with a barrier-free washroom designed to meet the barrier-free requirements.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the interpretation of the technical requirements of Section 3.7. and particularly Article 3.7.2.3. of the Building Code. At issue is the determination of whether a barrier-free washroom is required.

4. **Provision of the Building Code**

   `Article 3.7.2.3.  Washrooms Required to be Barrier-Free`

1. Except where other barrier-free washrooms are provided on the same floor level within 45 m (147 ft 8 in) and except within suites of residential occupancy and buildings exempted in Clauses 3.7.1.1.(1)(a), (b) and (c), in buildings where a washroom is required in accordance with Subsection 3.6.4., a barrier-free path of travel shall be provided to a barrier- free washroom designed to accommodate disabled persons in conformance with the appropriate requirements in Articles 3.7.3.8. to 3.7.3.11.
2. Except as permitted in Sentence (3), where washrooms in excess of those required by Subsection 3.6.4. are provided in a storey to which a barrier-free path of travel is required in conformance with Article 3.7.2.1., these washrooms shall be designed to accommodate disabled persons in conformance with the appropriate requirements in Articles 3.7.3.8. to 3.7.3.11.
3. Washrooms need not conform to the requirements in Sentence (2) provided
    a. they are located within suites of residential occupancy,
    b. other barrier-free washrooms are provided on the same floor level within 45 m (147 ft 8 in), or
    c. they are located in an individual suite having an area of less than 300 m?(3230ft?) in buildings where such suite is completely cut off from the remainder of the building so that there is no access to the remainder of the building.

5. **Applicant's Position**

This drive-thru facility is a satellite to the main facility across the street in a shopping mall. It is intended that the main facility will have public washrooms and seating. The drive-thru facility is intended primarily to serve people in vehicles.

The applicant admitted that the Building Code did not exempt them from the barrier-free access washroom requirements.

The applicant stated that physically challenged people do not have to leave their vehicles in order to purchase goods and the washroom is for employees only. Therefore, the provisions of a barrier-free access and a barrier-free washroom are not needed.

Also, health and safety standards can not be enhanced to a level that would safely permit a physically challenged individual from working in this drive-thru take out facility.

6. **Chief Building Officials Position**

The respondent did not object to the applicants position; however, he expressed a concern about the over 300 ft. distance between the main restaurant and the drive-in facility.

The respondent does not have the authority to accept a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 of the Building Code is not applicable.

7. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that not providing a barrier-free washroom shows sufficiency of compliance with the Building Code.

8. **Condition**

   The public pedestrian access into this facility must be removed.

9. **Reasons:**
   1. The nature of the operations cannot safely accommodate physically challenged individuals.
   2. Members of the public will not be allowed access inside the building.

Dated at Toronto, this 2nd day, in the month of December, in the year 1994, for application number 1994-54.

BCC Ruling No. 94-42-417

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-42-417

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Articles 3.3.1.13., 3.4.2.5. & 3.4.4.1. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by The President of the Lethbridge Stake, The Church of Jesus Christ of Latter-day Saints for the resolution of a dispute with Mr. Henry N. Dekker, Chief Building Official, City of Stoney Creek, concerning the determination of whether the means of egress provided for the attic service room must comply with Articles 3.3.1.13., 3.4.2.5. & 3.4.4.1. of the Building Code.

APPLICANT

The President of the Lethbridge Stake
The Church of Jesus Christ of Latter-day Saints
Lethbridge, Alberta

RESPONDENT

Mr. Henry N. Dekker
Chief Building Official
City of Stoney Creek

PANEL

Sarah Maman, Chair
Mr. David Lam
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

December 15, 1994

APPEARANCES

Mr. Greg Sather, Associate
Mr. Trevor P. Garwood-Jones, Partner
Trevor P. Garwood-Jones Architect Inc
Hamilton, Ontario
For the Applicant

Mr. Ned Mijatovic, Plan Examiner
Mr. Collin Potter, Plan Examiner
City of Stoney Creek
For the Respondent

RULING

1. **The Applicant**

   The President of the Lethbridge Stake, The Church of Jesus Christ of Latter-day Saints is the holder of a permit under the Building Code Act, 1992 to construct a one storey church at 345-351 Highway No. 8, Stoney Creek, Ontario.

2. **Description of Constrution**

   The building is designated as an assembly occupancy, Division 2 (A-2) single storey structure, facing three streets. Construction is combustible wood frame with brick face. The building area is 1083 m² (11,657 sq. ft.). The attic service area is 183.9 m² (1980 sq. ft.) and contains 10 residential type gas fired furnaces.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the interpretation of the technical requirements of Articles 3.3.1.13., 3.4.2.5. & 3.4.4.1. of the Building Code. At issue is the determination of whether the means of egress provided for the attic service room complies with the Building Code.

4. **Provision of the Building Code**

   Article 3.3.1.13. Ramps, Stairways and Passages

1. Except as provided in Sentence (2), Articles 3.3.4.8. and 3.3.1.14., ramps, stairways and passageways used by the public as access to exit shall conform with the requirements in Subsection 3.4.6.
2. Ramps and stairways that do not conform to the requirements of Sentence (1) are permitted to service rooms and service spaces and are permitted in industrial occupancies, provided the ramps and stairways are intended only for occasional use for servicing equipment and machinery.

Article 3.4.2.5. Location of Exits

3. Except as provided in Sentences (2), (3) and 3.3.2.4.(6), where more than one exit is required from a floor area, such exits shall be located so that the travel distance to not less than one exit as described in Article 3.4.2.4. shall be not more than
    a. 25 m (82 ft) in any Group F, Division 1 occupancy,
    b. 45 m (147 ft 8 in) in any sprinklered floor area that contains an occupancy other than Group F, Division 1,
    c. 40 m (131 ft 3 in) in any Group D occupancy
    d. 105 m (344 ft 6 in) in any floor area, served by a public corridor, in which rooms and suites are not separated from the remainder of the floor area by a fire separation, provided
        i. the public corridor has a width of not less than 9 m (29 ft 6 in),
        ii. the ceiling height in the public corridor is not less than 4 m (13 ft 1 in) above all floor surfaces,
        iii. the building is sprinklered, and
        iv. not more than one half of the required egress doorways from a room or suite open into the public corridor when the room or suite is required to have more than one egress doorway.
    e. 60 m (196 ft 10 in) in any storage garage that conforms to the requirements of Article 3.2.2.60., and
    f. 30 m (98 ft 5 in) in any other occupancy.
4. Except for a Group F, Division 1 occupancy, Sentence (1) need not apply if exits are placed along the perimeter of the floor area and are not more than 60 m (196 ft 10 in) apart, measured along the perimeter, provided each main aisle in the floor area leads directly to an exit.
5. Where more than one exit is required, every exit shall be considered as contributing not more than one half the required exit width.
6. Exits shall be located and arranged so that they are clearly visible or their locations are clearly indicated and they are accessible at all times.

Article 3.4.4.1. Fire-Resistance Rating of Exit Separations

7. Except as provided in Article 3.4.4.3. and Sentences (2), 3.3.5.5.(3) and 3.4.4.2.(2), every exit shall be separated from each adjacent floor area by a fire separation having a fire-resistance rating not less than that required for the floor assembly above the floor area and, where there is no floor assembly above, not less than that required by Subsection 3.2.2. for the floor assembly below, but in no case shall the fire-resistance rating be less than 45 min.
8. The fire-resistance rating of the fire separation in Sentence (1) need not be more than 2 h.
9. Where an exit stair in an assembly hall or theatre serves more than one balcony level, the exit stair shall be separated from the remainder of the building in conformance with Sentence (1).

5. **Applicant's Position**

The Applicant stated that, (a) the space is not a 'Floor Area', it is a roof top enslosure as per Sentence 3.2.1.1.(1), and (b) the space is a Service Room and therefore, has no occupancy. Further, Sentence 3.1.1.13.(2) states that the stairways do not have to comply with Subsection 3.4.6. regarding access to exits. The Applicant said that spiral stair and ladders are positioned so the maximum travel distance is 120 ft. to the exit doors.

6. **Chief Building Officials Position**

The Respondent's reasons for non-acceptance is "The proposed Attic Plan is a defined Floor Area requiring adequate exit facilities to be provided in order to comply with the Building Code requirement pertaining to exiting and fire protection for the occupants."

The respondent stated that Sentence 3.3.1.13.(2) provides substantial relief from the requirements of Subsection 3.4.6. only. The requirements for fire separations for exits (OBC 3.4.4.1.) and maximum travel distance (OBC 3.4.2.5.) are not addressed and are still required.

The Building Code only permits ladders in a below ground service room situation as noted in Sentence 3.3.1.3.(10), and also prohibits spiral stairs in exits as noted in Article 3.3.1.15.

The respondent submitted that exit facilities from the floor area must still comply with the requirements for exits found in Article 3.4.1.1. of the Building Code.

It is for these reasons that the Respondent does not support the applicant's position.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that the use of a spiral stair and fixed ladders to provide means of egress from the service rooms shows sufficiency of compliance with the Building Code provided that additional fixed ladders are installed so that the maximum travel distance from any part of the service rooms to an exit does not exceed 30 m.

8. **Reason:**
    a. The building is being considered an one storey building, with a service area containing the building's heating equipment above.
    b. Since the service area will not be accessible to the public, the spiral stair and the fixed ladders are considered adequate for egress purposes.
    c. The maximum travel distance from any point of the service area to the exit doors on the main level will not exceed 30 m. This would not cause a significant increase in the time required to exit the building.
    d. The service area is separated from the main floor by a 1 hr fire separation.
    e. The service area will be provided with heat detectors connected to a supervised fire alarm system.
    f. Emergency lighting will be provided in the service area.

Dated at Toronto, this 15th day, in the month of December, in the year 1994, for application number 1994-51.

BCC Ruling No. 94-38-416

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-38-416

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 9.9.4.4. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93, 160/93 and 355/94 (the "Building Code").

AND IN THE MATTER OF an application by Ms. Martha Krenek, Landlord for the resolution of a dispute with Mr. Michael L. Nixon, Chief Building Official, City of Toronto, concerning whether protection of openings near an unenclosed exit stair are required as specified in Article 9.9.4.4. of the Building Code.

APPLICANT

Ms. Martha Krenek, Landlord
Toronto, Ontario

RESPONDENT

Mr. Michael L. Nixon
Chief Building Official
City of Toronto

PANEL

Sarah Maman, Chair
Mr. David Lam
Mr. Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

December 15, 1994

RULING

1. **The Applicant**

   Ms. Martha Krenek, Landlord is the holder of a permit under the Building Code Act, 1992 to convert a single family dwelling (i.e semi-detached house) into two dwelling units, one above the other, at 1368 Davenport Road, Toronto, Ontario.

2. **Description of Constrution**

   The applicant proposes to convert a single family dwelling (i.e. house) into two dwelling units, one above the other. The building is more than 5 years old.

   The plans indicate only one means of egress out of the basement apartment. This is provided by an exterior door at the basement level served by an stairway leading to the finished ground level.

   Directly above the exterior basement exit is a window opening in the exterior wall of the unit above. The vertical distance between the window above and the exit below is less than 5 m.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 9.9.4.4. of the Building Code. At issue is whether the window above the unenclosed exit stair requires protection with wired glass in fixed steel frames or glass block conforming to Articles 9.10.13.5. and 9.10.13.7.

4. **Provision of the Building Code**

   Article 9.9.4.4. Openings Near Unenclosed Exit Stairs and Ramps

   Where an unenclosed exterior exit stair or ramp provides the only means of egress from a suite, and is exposed to fire from openings in the exterior walls of another fire compartment, the openings in the exterior walls of the building shall be protected with wired glass in fixed steel frames or glass block conforming to Articles 9.10.13.5. and 9.10.13.7. when the openings in the exterior walls of the building are within 3 m (9 ft 10 in) horizontally and less than 10 m (32 ft 10 in) below or less than 5 m (16 ft 5 in) above the exit stair or ramp.

5. **Applicant's Position**

The applicant submitted that the level of safety intended by the Building Code is being maintained due to an additional escape window provided from a bedroom at the rear of the basement apartment.

The window has an area of 12 square feet with an individual unobstructed opening of 6 square feet and no dimension less than 2 feet. The window sill is 4 feet above the floor and 3 feet 6 inches below the adjacent ground level.

The applicant proposes to provide fixed steps to reach the window in the window well to facilitate egress from the dwelling unit.

6. **Chief Building Officials Position**

The respondent submitted that in accordance with Article 9.9.4.4. of the Building Code the subject window must be protected with wired glass in fixed steel frames or glass block. This is due to the basement apartment not having another adequate means of egress and the window being very close to the unenclosed exit stair.

The respondent also submitted that the proposal to use the rear bedroom window as a separate means of egress does not comply with Article 9.9.2.4. of the Building Code.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that the living room window on the first floor conforms to the Building Code, provided that the bedroom window in the basement meets the following criteria:

a. The sill height is not more than 1 m (3'-3") above or below adjacent ground level;
b. the window can be opened from the inside without the use of tools;
c. the window has an individual unobstructed open portion having a minimum area of 0.38 m sq. (4.1 sq. ft.) with no dimension less than 460 mm (18");
d. the sill height does not exceed 900 mm (2'11") above the floor or fixed steps;
e. where the window opens into a window well, a clearance of not less than 1 m (3'-3") shall be provided in front of the window; and,
f. smoke alarms are installed in every dwelling unit and in common areas in conformance with Subsection 9.10.18. and are interconnected.

8. **Reason:**

Since the proposed bedroom escape window will conform to Compliance Alternative C121.1 in Part 11 of the Building Code, the bedroom window can be considered as a second means of egress and thereby eliminate the need for glass or wired glass block on the first floor living room window.

Dated at Toronto, this 15th day, in the month of December, in the year 1994, for application number 1994-43.

BCC Ruling No. 94-37-415

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-37-415

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.3.5.7. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Thomasfield Homes Ltd. for the resolution of a dispute with Mr. Tony Krimmer, Chief Building Official, City of Waterloo.

APPLICANT

Alan MacDonald
Operations Manager
Thomasfield Homes Ltd.
Guelph, Ontario

RESPONDENT

Mr. Tony Krimmer
Chief Building Official
City of Waterloo

PANEL

Sarah Maman, Chair
Demir Delen
Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

November 22, 1994

APPEARANCES

Mr. Jim Fryett, Principal
James Fryett Architect
Guelph, Ontario

AND

Mr. Brian McCulloch
James Fryett Architect
Guelph, Ontario
For the Applicant

RULING

1. **The Applicant**

   Thomasfield Homes Ltd. is the holder of a permit under the Building Code Act, 1992 to construct a multi residential condominium townhouse building at Westhill Condominiums, Baker Street, Waterloo, Ontario.

2. **Description of Constrution**

   The Westhill Condominiums is a multi residential townhouse project with a building area of 641 m?. Each dwelling unit is served by it's own storage garage. There is no dwelling unit above another dwelling unit.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with the technical requirements of Article 3.3.5.7. of the Building Code. At issue is the determination of whether the construction between the garages and the dwelling units may conform to Sentence 9.10.9.16.(3) of the Building Code instead of the required 1.5 hour fire separation.

4. **Provision of the Building Code**

   Article 3.3.5.7.: Storage Garage Separation

A storage garage shall be separated from other occupancies by a fire separation with a fire-resistance rating of not less than 1.5 h.

5. **Applicant's Position**

   The applicant stated that the Building Area is 641 m?. Each garage serves only one dwelling. Overall conditions are similar to the provisions on Part 9 (i.e. Article 9.10.9.16. and 9.10.13.15.).

6. **Chief Building Officials Position**

   The respondent stated that if the construction between the garages and the dwelling units were in accordance with Sentence 9.10.9.16.(3) the intent of the Code for this multi tenant residential building would be met.

   The respondent does not have the authority to permit a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that using Sentence 9.10.9.16.(3) for the construction between the individual garages and the individual dwelling units shows sufficiency of compliance with the Building Code.

8. **Reasons:**
   a. Sentence 9.10.9.16.(3) better addresses the proposed building design. Each garage only serves one unit rather than a multi-car garage as envisioned in Part 3 building.
   b. The building is slightly larger than the Part 9 area limits.

Dated at Toronto, this 22nd day, in the month of November, in the year 1994, for application number 1994-45.

BCC Ruling No. 94-36-414

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-36-414

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 9.21.4.4. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Pietro Alaimo for the resolution of a dispute with Mr. P.D. Hansen, Chief Building Official, City of York.

APPLICANT

Mr. Pietro Alaimo, Owner
Toronto, Ontario

RESPONDENT

Mr. P.D. Hansen
Chief Building Official
City of York

PANEL

Sarah Maman, Chair
Demir Delen
Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

November 22, 1994

APPEARANCES

Mr. Brian Haley
Assistant City Solicitor
City of York
For the Respondent

RULING

1. **The Applicant**

   Mr. Pietro Alaimo is the holder of a permit under the Building Code Act, 1992 to construct a two storey single family dwelling (i.e. house) at 46 Snider Avenue, City of York, Ontario.

2. **Description of Constrution**

   The applicant proposed to construct a two storey house within 3 m of a chimney on the adjacent property.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the interpretation of the technical requirements of Article 9.21.4.4. of the Building Code. At issue is the determination of whether the building may be constructed within 3m of an existing chimney on the adjacent property.

4. **Provision of the Building Code**

   Article 9.21.4.4.: Height of Chimney Flues.

   A chimney flue shall extend not less than 900 mm (2 ft 11 in) above the highest point at which the chimney comes in contact with the roof, and not less than 600 mm (23? in) above the highest roof surface or structure within 3m (9 ft 10 in) of the chimney.

5. **Applicant's Position**

   The applicant stated that prior to May of 1992, he owned a two storey brick and frame residential dwelling on the subject property.

   On May 4, 1992 he was granted a demolition permit and was assured the corresponding building permit would be issued forthwith. After effecting the demolition of the existing dwelling house,

Mr. Alaimo proceeded to construct the footings for the proposed house. He was advised on June 3, 1992, that the building department had taken theposition that two existing chimneys on an adjacent property caused the proposed house to be in contravention of the Building Code.

The building department then suggested that the problem could be solved if Mr. Alaimo agreed to extend the chimney belonging to the adjacent property owner to a height which would cause it to be at least 3 m away from the roof of the proposed house. Unfortunately, Mr. Alaimo was not able to secure the consent of the neighbour to extend the chimneys.

6. **Chief Building Officials Position**

The respondent stated that an application for a building permit was made in May, 1992 for a two storey house. The respondent refused to issue the permit unless the plans were changed to provide adequate clearance to the existing chimney on the neighbouring property. An alternative was to extend the chimneys or convert the existing furnace on the neighbouring house to a high efficiency furnace. However, this would only address one chimney since the other is a fireplace chimney.

The owner cancelled his application for a permit in April 1993. A new application was made on June 30, 1994 and a permit was issued August 5, 1994. The plans showed that part of the second floor was recessed at two locations to provide the 3 m clearance required by the building department.

The respondent argued that Article 9.21.4.4. applies not only to the new construction but to the existing two chimneys on an adjacent property. In other words, the applicant's dwelling must be designed to ensure that the proper clearances as per Article 9.21.4.4. between the existing chimneys and the applicant's dwelling are maintained.

The respondent also felt he had a common Law duty of care which extends to neighbouring properties.

The respondent said that he considers Common Law to be applicable Law under Subsection 8(2) of the Building Code Act, 1992.

The respondent stated that the owner was issued a stop work order as he proceeded to construct the second story without the recesses as shown on the permit plans.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that the two storey dwelling under construction at 46 Snider Ave., City of York, complies with Article 9.21.4.4. of the Building Code.

8. **Reasons:**
    a. Article 9.21.4.4. applies only to the proposed construction on the applicant's property and is not applicable to existing chimneys on adjacent properties.
    b. The Code does not address any adverse effect to adjacent properties in this matter of chimney flues such as the Code does in the matters of surface drainage and groundwater levels.
    c. Should there be cause for concern after construction of the new building with regards to life safety and the protection of property of the adjacent buildings, other legislation is available.

Dated at Toronto, this 22nd day, in the month of November, in the year 1994, for application number 1994-48.

BCC Ruling No. 94-35-413

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-35-413

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.3.1.4.(1) and the definitions of Suite and Public Corridor in Article 1.1.3.2. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by MDS Health Group Ltd. for the resolution of a dispute with Ms. Elizabeth Hilfrich, Chief Building Official, City of Gloucester.

APPLICANT

MDS Health Group Ltd.

RESPONDENT

Ms. Elizabeth Hilfrich
Chief Building Official
City of Gloucester

Sarah Maman, Chair
Demir Delen
Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

November 10, 1994

APPEARANCES

Mr. Allan E. Larden, Principal
Larden Muniak Consulting Inc.
Toronto, Ontario

Mr. Peter R. Osgood
Project Supervisor
MDS Laboratories
Etobicoke, Ontario

For the Applicant

RULING

1. **The Applicant**

   MDS Health Group Ltd. is the applicant for a permit under the Building Code Act, 1992 to construct a medical clinic in the central portion of a new single storey noncombustible commercial structure, being Unit 2, 1224 Place D'Orleans Drive, Gloucester, Ontario.

2. **Description of Constrution**

   The applicant proposed to construct a clinic comprising five medical practices and a common waiting area. The clinic would occupy the central portion (i.e. 585 m?) of a new single storey noncombustible commercial structure.

   MDS Health Group Ltd. have sublet the clinic space to five groups of doctors or individual doctors. The clinic is designed as a grouping of five medical practices around a common waiting area. The reception areas of each of the five component practices are open directly to the common waiting area.

   The individual medical practices share cleaning expenses and are jointly responsible for furnishing and maintaining the common area as well as jointly leasing the security system for the unit.

   The buildings size and Group D occupancy imposes no requirement for a fire alarm system.

3. **Dispute**

The dispute between the Applicant and Respondent concerning sufficiency of compliance with the technical requirements of Sentence 3.3.1.4.(1) and the definitions of Suite and Public Corridor in Article 1.1.3.2. of the Building Code. At issue is the determination of whether the walls of the common waiting area serving five medical practices are required to be constructed as a 45 minute fire separation.

4. **Provision of the Building Code**

Sentence 3.3.1.4.(1): Public Corridor Separations

1. Except as otherwise required in this Part, public corridors shall be separated from the remainder of the building by a fire separation having a fire-resistance rating of not less than 1 h except that
    a. the fire resistance rating need not be more than 45 min when the fire-resistance rating of the floor assembly is not required to be more than 45 min,
    b. no fire-resistance rating is required when the floor area is sprinklered and the corridor does not serve an institutional occupancy or a residential occupancy,
    c. no fire separation is required in a sprinklered floor area where,
        i. the corridor is more than 5 m (16 ft 5 in) in unobstructed width, and
        ii. the corridor does not serve an institutional occupancy or a residential occupancy,
    d. a floor assembly above a crawl space that is not considered a basement in Sentence 3.2.2.5.(2) is not required to be a fire separation, and
    e. no fire separation is required in a sprinklered floor area where an occupancy in the corridor conforms to the requirements of Sentence 3.3.1.9.(6).

Article 1.1.3.2.: Definitions

Suite: means a single room or series of rooms of complementary use, operated under a single tenancy, and includes dwelling units, individual guest rooms in motels, hotels, boarding houses, rooming houses and dormitories as well as individual or complementary rooms for business and personal services occupancies.

Public Corridor: means a corridor that provides access to exit from more than 1 suite.

5. **Applicant's Position**

The applicant stated that the design of Unit 2, 1224 Place D'Orleans Drive in Gloucester, Ontario, incorporating walls between the Common Area and the remainder of Unit 2 which are not fire separations demonstrates sufficiency of compliance with the level of safety intended by the Building Code on the following bases:

1. Due to the joint use of the Common Area by the five component medical practices, and the ability to apprehend an incipient fire or smoke hazard due to visually open reception facilities and glazed doors, occupants will have an enhanced ability to apprehend a fire than would be the case with an opaque, rated fire separation.
2. Travel distance from any point in the unit is within 23 m of an exit door. This compares favourably with the allowance in Clause 3.3.2.5.(1)(c) of the Building Code whereby corridors used by the public in assembly occupancies need not be fire separated where travel distance measured from any point in the floor area does not exceed the travel distance limit imposed for the occupancy.
3. A single zone, single stage fire alarm system utilizing automatic smoke detectors will be installed. The fire alarm system will incorporated the following features:
    i. single smoke detectors in each of the five medical suites except that Suite 600, due to its larger size and elongated plan, would have two smoke detectors. These smoke detectors will be installed in the circulation areas of each suite so that smoke arising from the more remote portions of the suite will be expected to be intercepted prior to its impingement on the egress doors from the suite into the Common Area. Smoke detectors will also be installed in accordance with the spacing criterion in ULC S524, "Standard for the Installation of Fire Alarm Systems", in the Common Area,
    ii. a pull station at each exterior exit door,
    iii. a control panel incorporating electrical supervision capability and an emergency power supply,
    iv. audible signal appliances installed so that alarm signals may be heard throughout Unit 2, and
    v. associated wiring.

This fire alarm system with automatic smoke detection will provide the very significant benefit of early detection and warning of a potential fire arising in a suite, remotely from potential occupants of the Common Area or other suites. It is expected that this would constitute a superior situation in terms of life safety than would be provided for Unit 2 with the provision of a

45 min rated partition between the Common Area and the remainder of the unit and no alarm system with automatic early warning smoke detection devices.

The Applicant respectfully requested the Building Code Commission consider the merits of this submission and rule on its acceptance.

6. **Chief Building Officials Position**

The respondent stated that the space is being divided into several suites each of which is being individually sublet. These suites are being served by a public corridor containing waiting areas.

Section 3.3.1.4.(1) specifies that a public corridor shall be separated from the remainder of the floor area by a fire separation. The submitted plans do not indicate the required fire separation.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that not constructing walls in the common area as a fire separation shows sufficiency of compliance with the Building Code for the following reasons:

1. The common functions of the medical clinic including the burglar alarm system and the waiting area shared by the laboratory and medical practices.
2. The fire alarm system will provide prompt detection and notification to the occupant of a fire condition.
3. The maximum travel distance is 23 m.

Dated at Toronto, this 10th day, in the month of November, in the year 199*, for application number 1994-50.

BCC Ruling No. 94-34-412

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-34-412

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 11.3.4.1.(1)(a), and Sentences 11.1.1.3.(1), 11.3.4.1.(3) and 11.3.4.1.(7) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Page & Steele Architects for the resolution of a dispute with Mr. Michael Nixon, Chief Building Official, City of Toronto.

APPLICANT

Mr. Steve Steinowicz, Architect
Page & Steele Architects
Toronto, Ontario

RESPONDENT

Mr. Michael Nixon
Chief Building Official
City of Toronto

PANEL

Sarah Maman, Chair
Demir Delen
Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

November 22, 1994

APPEARANCES

Mr. Allan E. Larden
Larden Muniak Consulting Inc.
Toronto, Ontario
for the Applicant

Mr. Peter Sectakof
Building Engineer
City of Toronto
For the Respondent

RULING

1. **The Applicant**

   Page & Steele Architects is the applicant for a permit under the Building Code Act, 1992 to convert floors 1 to 4 of an existing fifteen storey reinforced concrete building from office to residential apartment use at 50 Holly Street, Toronto.

2. **Description of Constrution**

   The building in question (i.e. 50/60 Holly Street) is an existing fifteen storey, reinforced concrete building. It originally contained four storeys of Group D occupancy on Floors 1 to 4, a fifth floor mechanical level and residential rental apartments on Floors 6 to 15.

   50/60 Holly Street is a single building. "50 Holly Street" is the address of Floors 1 to 4, "60 Holly Street" is the address of Floors 6 to 15. There is a separate main entrance and lobby for each address.

   Floors 1 to 4 are being converted from office to residential apartment use.

   The existing building configuration is such that Floor 1 to 4 are served by one set of elevators, access to which is gained from the street at the 50 Holly Street lobby. The upper residential portion of the building and the fifth floor mechanical level are serviced by a complete separate set of elevators in a separate shaft, access to which is provided from the street through 60 Holly Street lobby. There is no common floor above Floor 1 that is accessible from both these banks of

elevators. On this basis, it is not possible to transfer out of one elevator shaft, cross the floor area, and get into the other elevator shaft on the same level above the first storey.

3. **Dispute**

The dispute between the Applicant and Respondent concerns the interpretation of the technical requirements of Clause 11.3.4.1.(1)(a), and Sentences 11.1.1.3.(1), 11.3.4.1.(3) and 11.3.4.1.(7) of the Building Code. At issue is the determination of whether to provide emergency power for low-rise elevators extending to the 4th storey.

4. **Provision of the Building Code**

Sentence 11.1.1.3.(1): Alteration or Repair

Except as provided in Sentence (2), where an existing building is subject to material alteration or repair, the Building Code is applicable only to those parts of the building that are subject to the material alteration or repair.

Clause 11.3.4.1.(1)(a): Reduction in Preformance Level

The preformance level of a building is reduced where proposed construction will result in the change of the major occupancy of all or part of an existing building to another major occupancy of a greater hazard.

Sentence 11.3.4.1.(3): Reduction in Performance Level

Where a major occupancy of all or part of an existing building is changed to another major occupancy and the hazard index of the new major occupancy is equal to or less than the construction index of the existing building, and where the early warning and evacuation systems requirements of other Parts of the Code for the new major occupancy exceed those of the existing systems, upgrading of those systems shall be required in conformance with the applicable requirements of Tables 11.3.1.A., 11.3.1.B. and 11.4.2.A.

Sentence 11.3.4.1.(7): Reduction in Performance Level

Where proposed construction will result in a change of major occupancy described in Clauses (1)(a) to (d), additional construction shall be required in order that the building or part of the building subject to the change of major occupancy conforms to the requirements of Subsection

3.2.6., Sections 3.6., 3.11. 9.5 and 9.7, Subsection 9.10.16., Sections 9.31 and 9.32, and Subsections 9.34.1., 9.34.2. and 9.34.3. as they apply to the new major occupancy that the building or part of the building is to support.

5. **Applicant's Position**

The applicant stated that there is no requirement under the Building Code to upgrade the elevators serving Floors 1 to 4 with emergency power.

It is the applicant's position that Sentence 11.1.1.3.(1) of the Building Code indicates the extent to which Code requirements which would apply to new construction may be imposed on existing building fabric where renovation occurs.

Subsection 11.3.4. of the Building Code provides for upgrading certain aspects of building fabric where there is a change in performance level of the building as a result of construction. The two aspects of construction which could engender a reduction in performance level are an increase in occupant load or a change in major occupancy.

A change to residential occupancy from office occupancy is considered to be a reduction in performance level and on this basis the requirements of Subsection 11.3.4. of the Building Code apply. This requires the Hazard Index (H.I.) of the proposed residential occupancy be compared to the Construction Index (C.I.) of the existing building.

Table 11.4.1.H. of the Building Code indicates that a high-rise apartment building has an H.I. of 7 and Table 11.4.1.A. indicates a C.I. of 7 for noncombustible construction providing a 2 hour fire-resistance rating for floor assemblies (such as would be expected with a 200 mm reinforced concrete floor slabs in 50/60 Holly Street).

Since the H.I. for the new residential use equals the C.I. for the existing construction, Sentence 11.3.4.1.(3) requires upgrading of early warning and evacuation systems to at east match new construction requirements. Specifically, Tables 11.3.1.A., 11.3.1.B., and 11.4.2.A. are referenced. None of these tables require the addition of emergency power for a fire fighters elevator or any other upgrading beyond early warning and excavation.

6. **Chief Building Officials Position**

The respondent stated that there is an increase in hazard by changing from an office to a residential occupancy.

Therefore, Sentence 11.3.4.1.(7) of the Building Code is applicable and an emergency power supply must be provided to the fire fighters' elevator serving Floors 1 to 4.

The building is considered one large high rise building, not two buildings. There must be continuity of fire fighters' elevators for all floors. Continuity for all floors must also be maintained for the emergency power supply.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that not providing emergency power to the elevators serving levels 1-4 complies with Sentence 11.3.4.1.(7) of the Building Code.

8. **Reason**

Since the renovation and change of occupancy occured on levels 1-4 only and not in the high rise portion, i.e. the portion of the building greater than 18 m, the high rise requirements in Section 3.2.6. are not applicable.

Dated at Toronto, this 22nd day, in the month of November, in the year 1994, for application number 1994-44.

BCC Ruling No. 94-33-411

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-33-411

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.2.7.9.(4) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by by Memorial Gardens Canada Limited for the resolution of a dispute with Mr. Antonio Chow, Chief Building Official, City of Etobicoke.

APPLICANT

Memorial Gardens Canada Limited
2 Jane Street
Toronto, Ontario

RESPONDENT

Mr. Antonio Chow
Chief Building Official
City of Etobicoke

PANEL

Sarah Maman, Chair
Rick Florio
Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

September 19, 1994

APPEARANCES

Mr. Demir Delen
Fire Protection Manager
Morrison Hershfield Limited
for the Applicant

Mr. Robert Webb
Chief, Fire Prevention
City of Etobicoke
for the Respondent

RULING

1. **The Applicant**

   Memorial Gardens Canada Limited is the holder of a permit under the Building Code Act, 1992 to provide an Emergency Generator for water supply for fire fighting at the Glendale Memorial Gardens Mausoleum, 1810 Albion Road, Etobicoke, Ontario.

2. **Description of Constrution**

   The applicant is proposing to construct a two storey addition on top of an existing mausoleum. This will increase the building height to four storeys. The building is of noncombustible construction.

   The new addition will be separated from the existing building by a 2 hour fire separation. The first and second storeys are interconnected floor spaces. The new third and fourth storeys will also be interconnected.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Sentence 3.2.7.9.(4). of the Building Code. At issue is the need to provide an Emergency Generator for water supply for fire fighting.

4. **Provision of the Building Code**

   Sentence 3.2.7.9.(4). Emergency Power for Building Services

(4) An emergency power supply capable of operating under a full load for not less than 30 min shall be provided by emergency generator for water supply for fire fighting in conformance with Article 3.2.5.8. when the supply is dependent on electrical power supplied to the building and the building is not within the scope of Subsection 3.2.6.

5. **Applicant's Position**

The applicant stated that the design and the fire protection systems of the Mausoleum at the Glendale Memorial Gardens provide a performance level intended by the Building Code. The applicant respectfully requested the Building Code Commission rule on the sufficiency of compliance with the technical requirements of the Building Code for the following reasons:

1. The Mausoleum is a special use not envisioned by the Code, has a supervised intermittent occupancy and has a low hazard classification under NFPA-101 Life Safety Code. This classification suggests that lesser requirements than the Code, may be applicable.
2. The discharge pressure available at the topmost outlet of the standpipe and hose system without a booster pump is 50 psi, which is sufficient for such an occupancy of low hazard classification and contents of negligible fuel load and heat release rate. However, a fire pump is provided to boost the pressure so that a residual pressure of 65.3 psi is available at the required flow in the highest and most remote outlet. A fire department connection is also provided, although not required by the Code, to deliver the demand flow rate at the residual pressure of 65.3 psi if for any reason the power supply to the fire pump is not available during fire fighting operations. The static pressure available at the hydrant in front of the building is 68 psi. The City of Etobicoke has a reliable power supply and the fire department apparatus has a pumping capability to the topmost outlet of the standpipe system which is located 12 metres above ground.

   Hence, the water supply is not dependent on electrical power. Therefore, an emergency generator to supply emergency power to the fire pump is not required by NFPA-20 and the Building Code since the Code only requires emergency power when "the supply is dependent on electrical power supplied to the building".

3. The grid of smoke detectors which are above and beyond the Code requirements provide an excellent early warning and detection system for evacuation and early start of fire fighting operations.

6. **Chief Building Officials Position**

The respondent stated that the building requires a sprinkler system (per subsection 3.2.8.) and a stand pipe and hose system (per subsection 3.2.9.).

Due to the uniqueness of the building occupancy, the Chief Building Official has waived the requirement for sprinklers subject to the installation of a standpipe and hose system that conform to the Building Code.

The standpipe and hose system is required to be equipped with a water pump. In order to ensure an adequate water supply for fire fighting, Sentence 3.2.7.9.(4) of the Building Code requires an emergency power supply for the fire pump servicing the stand pipe and hose system.

The Fire Department provided information that unsatisfactory water pressure occurs frequently in the water mains within this area.

7. **Commission Ruling:**

n favour of the Applicant. It is the decision of the Building Code Commission that not providing emergency power for the standpipe fire pump shows sufficiency of compliance with the Building Code provided that the flame spread rating of the carpeting is not more than 25.

8. **Reasons:**
    1. The Mausoleum has a low combustible loading.
    2. A fire department siamese pumper connection has been installed on the standpipe system.
    3. The fire alarm system which includes smoke detectors is supervised.
    4. The fire safety plan will be designed to take into account that the standpipe system is not connected to an emergency power supply.

Dated at Toronto, this 19th day, in the month of September, in the year 1994, for application number 1994-33.

BCC Ruling No. 94-30-408

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-30-408

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Articles 9.25.4.9. and 9.25.4.10. of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Minto Development Inc. for the resolution of a dispute with Mr. John Harkness, Chief Building Official, City of Kanata.

APPLICANT

Minto Construction Inc.

RESPONDENT

Mr. John Harkness
Chief Building Official
City of Kanata

PANEL

Sarah Maman, Chair
Michael Lio
David Lam

PLACE

Ottawa, Ontario

DATE OF RULING

August 24, 1994

APPEARANCES

Mr. Regis Trudel
Senior Vice-President
Minto Developments Inc.
for the applicant

RULING

1. **The Applicant**

   Minto Developments Inc. are holders of a permit under the Building Code Act, 1992 to construct a single family dwelling (i.e. house) at 58 Wheaton Ave., City of Kanata.

2. **Description of Constrution**

   The applicant is constructing a two storey house with a full basement at 58 Wheaton Ave., Kanata, Ontario.

   The interior surface of foundation walls enclosing heated space are covered with insulation and vapour barrier extending from the underside of the subfloor to the finished floor level of the basement. The framing material, insulation and vapour barrier is installed tight against the foundation wall, floor slab below and floor framing above to reduce air circulation.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Articles 9.25.4.9. and 9.25.4.10. of the Building Code. At issue is the requirement to extend the insulation and vapour barrier from the underside of the subfloor to the finished floor level of the basement. The applicant proposes to terminate the insulation and vapour barrier not more than 380 mm (15 inches) above the finished floor level of the basement.

4. **Provision of the Building Code**

   Article 9.25.4.9. Extent of Insulation for Foundation Walls

   1. Except as permitted in Sentence (3), foundation walls enclosing heated space shall be insulated from the underside of the subfloor to the finished floor level of the basement.
   2. The insulation required by Sentence (1) may be provided by a system installed
      a. on the interior of the foundation wall,

b. on the exterior face of the foundation wall, or
c. partially on the interior and partially on the exterior, provided the thermal performance of the system is equivalent to that permitted in Clause (a) or (b).

3. Where the number of degree days for individual locations is 5000 or more, the insulation required in Sentence (1) shall extend from the underside of the subfloor and may terminate within not more than 380 mm (15 inches) above the finished floor level of the basement.
4. If a foundation wall is constructed of hollow masonry units, one or more of the following shall be used to control convection in the core spaces,
   a. filling the core spaces,
   b. at least one row of semi-solid blocks at or below grade,

      or

   c. other similar methods.

Article 9.25.4.10. Protection for Insulation Installed on the Inside Face of Foundation Walls

5. Insulation to be installed on the inside face of foundation walls below ground level shall be protected from moisture by a moisture barrier or shall be inherently impermeable to moisture and, if such insulation is of the batt-type it shall be protected from moisture by a moisture barrier and a vapour barrier.
6. Insulation on the inside of foundation walls described in Sentence (1) shall be installed tightly against the foundation wall and shall be sealed at the top and at the bottom to reduce air circulation.

5. **Applicant's Position**

The applicant stated that the full height basement insulation requirements of the Building Code have led to severe moisture problems in the basement.

Condensing moisture has accumulated at the base of the wall and seeped onto the basement floor. This has caused severe mold and mildew. Also, this build-up of moisture resulted in the deterioration of the associated building materials (i.e. insulation, wood framing and gypsum board).

The applicant proposed to terminate the insulation and vapour barrier not more than 380 mm (15 inches) above the finished basement slab to provide greater air circulation.

The applicant stated that their proposal would provide sufficiency of compliance with the energy objectives of the Building Code.

6. **Chief Building Officials Position**

The respondent stated that the Building Code clearly requires thermal insulation of basement walls to extend from the underside of the subfloor to the finished floor level of the basement.

Where the number of degree days is 5000 or more, the Building Code permits the thermal insulation of basement walls to terminate 380 mm (15 inches) above the finished floor level of the basement. The subject building is not in such an area. The 380 mm space allows heat loss through the foundation to prevent frost heaving and has the benefit of allowing moisture in the concrete to evaporate.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that terminating the insulation and vapour barrier not more than 380 mm (15 inches) above the finished basement floor slab shows sufficiency of compliance with the Building Code provided that the insulation is affixed in such a manner that it will not slip out of place.

8. **Reasons:**

This Type III house has been provided with a heat recovery ventilator which provides at least the equivalent energy benefit as a full height insulated basement.

Dated at Toronto, this 24th day, in the month of August, in the year 1994, for application number 1994-39.

BCC Ruling No. 94-29-407

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-29-407

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.2.2.55. of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Lear Seating Canada for the resolution of a dispute with Mr. Frank Asta, Chief Building Official, Town of Oakville.

APPLICANT

Lear Seating Canada
2700 Bristol Circle
Oakville, Ontario

RESPONDENT

Mr. Frank Asta
Chief Building Official
Town of Oakville

PANEL

Sarah Maman, Chair
Rick Florio
Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

September 19, 1994

APPEARANCES

Elie Ghazal, Engineering Manager
Lear Seating Canada
for the Applicant

Mr. John Peters
Chief Fire Prevention Officer
Town of Oakville
for the Respondent

RULING

1. **The Applicant**

   Lear Seating Canada is the holder of a permit under the Building Code Act, 1992 to construct a new truck shelter addition at Lear Seating Canada, 2700 Bristol Circle, Oakville, Ontario.

2. **Description of Constrution**

   The applicant is proposing to construct an addition to shelter not more than two transport trailers from the whether during the loading and unloading of material.

   The proposed addition is to be located at the loading dock area of an existing one storey building. The west side of the addition abuts the loading doors, the north and south exterior walls are clad with steel siding and the east side is open to the exterior with steel siding extending down to the underside of the roof structure.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Article 3.2.2.55. of the Building Code. At issue is the need to provide a sprinkler system for the new truck shelter addition.

4. **Provision of the Building Code**

   Article 3.2.2.55. Industrial Buildings, Division 2, Any Height, Any Area, Sprinklered

   1. A building classified as Group F, Division 2 shall conform to Sentence (2) provided the building

a. is not limited in building height,
b. is sprinklered, and
c. is not limited in building area.

5. **Applicant's Position**

The applicant stated that sprinklers need not be provided in the addition because the shelter is not an enclosed area, no flammable or hazardous materials will be stored inside, the tractor will protrude outside the building.

6. **Chief Building Officials Position**

The respondent stated that the Building Code clearing requires a sprinkler system in the proposed addition.

The respondent does not have the authority to accept a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

In favour of the Respondent. It is the decision of the Building Code Commission that not providing sprinkler protection in the addition does not comply with the Building Code.

8. **Reasons:**

If a fire should originate in the truck shelter, no provisions have been made to halt the spread of fire to the main building.

Dated at Toronto, this 19th day, in the month of September, in the year 1994, for application number 1994-38.

BCC Ruling No. 94-28-406

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-28-406

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 9.14.2.1.(2.1)(c) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Van Akker Homes (London) Ltd. for the resolution of a dispute with Mr. R. Cerminara, Chief Building Official, City of London.

APPLICANT

Van Akker Homes (London) Ltd.

RESPONDENT

Mr. R. Cerminara
Chief Building Official
City of London

PANEL

Sarah Maman, Chair
Demir Delen
Michael Lio

PLACE

Toronto, Ontario

DATE OF RULING

September 30, 1994

APPEARANCES

Mr. John Hewitt, Technical Sales
Mr. Paul Hewgill, Sales Manager
Terrafix Geosynthetics Inc.
for the Applicant

RULING

1. **The Applicant**

   Van Akker Homes (London) Ltd. is the holder of a permit under the Building Code Act, 1992 to construct a single family dwelling (i.e. house) at 495 Palmtree Avenue, London, Ontario.

2. **Description of Constrution**

   The applicant has constructed a single family dwelling (i.e. house) with a basement foundation. HITEK 20 Cordrain material is used as a drainage layer on below grade foundation walls.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Clause 9.14.2.1.(2.1)(c) of the Building Code. At issue is the use of HITEK 20 Cordrain as a drainage layer on below grade foundation walls in accordance with Section 9.14.

4. **Provision of the Building Code**

   Sentence 9.14.2.1.(2.1): Foundation Wall Drainage

   (2.1) The drainage layer required in Sentence (2) shall be provided by

   a. not less than 19 mm mineral fibre insulation with a density of not less than 57 kg/m3;
   b. not less than 100 mm of free drainage granular material; or,
   c. a system which can be shown to provide equivalent performance to that provided by the materials described in Clauses (a) or (b).

5. **Applicant's Position**

   The applicant stated that HITEK 20 Cordrain has been properly evaluated and in fact accepted as meeting Clause 9.14.2.1.(2.1)(c) and other Building Code provisions intended to keep basements dry.

6. **Chief Building Officials Position**

   The respondent stated that there was insufficient information to determine if the product provided equivalent performance to the materials specified in Clause 9.14.2.1.(2.1)(a) & (b). The material should be evaluated by the Canadian Construction Materials Centre.

7. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that the use of HITEK 20 Cordrain as a drainage layer on below grade foundation walls shows sufficiency of compliance with the Building Code.

8. **Conditin:**

   The foundation walls shall be dampproofed or waterproofed in accordance with Section 9.13 of the Building Code.

9. **Reasons:**

   The "Demonstration of Full Height Basement Insulation Construction Methods" report prepared for the Ontario Home Builders' Association by Buchan, Lawton, Parent Limited tested a similar product and found it provided equivalent performance as 19 mm mineral fibre insulation and 100 mm of free drainage granular material.

Dated at Toronto, this 30th day, in the month of September, in the year 1994, for application number 1994-37.

BCC Ruling No. 94-27-405

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-27-405

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Articles 9.10.14.11. & 9.10.14.12 of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Ms. Rosa Degasperis for the resolution of a dispute with Mr. John Wright, Chief Building Official, Town of Markham.

APPLICANT

Ms. Rosa Degasperis

RESPONDENT

Mr. John Wright
Chief Building Official
Town of Markham

PANEL

Sarah Maman, Chair
Demir Delen
Remus Tsang

PLACE

Toronto, Ontario

DATE OF RULING

November 10, 1994

APPEARANCES

Mr. Tom McRae
Shibley Righton
Barristers & Solicitors
For the applicant

RULING

1. **The Applicant**

   Ms. Rosa Degasperis is the holder of a permit under the Building Code Act, 1992 to construct a single family dwelling (i.e. house) at 11 Mulberry Mews, Thornhill, Ontario.

2. **Description of Constrution**

   The applicant constructed a detached single family dwelling (i.e. house) on property adjoining an Ontario Hydro Easement. The limiting distance between the north exposing building face of the dwelling and the adjacent property line is 0.33 m.

   The building was not constructed in accordance with the building permit drawings. The limiting distance between the building and the boundary separating the subject property and the Hydro Easement does not permit the existing glazed openings.

   There are no buildings or structures currently erected on the Hydro Easement.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Article 9.10.14.11. & 9.10.14.12 of the Building Code. At issue is the need to provide the required spatial separation between the subject building and any building that may in future be erected on the Hydro Easement.

4. **Provision of the Building Code**

   Article 9.10.14.11. & 9.10.14.12.:

   9.10.14.11. Construction of Exposing Building Face.

Except as permitted in Articles 9.10.14.12. to 9.10.14.16, each exposing building face and any exterior wall located above an exposing building face that encloses an attic or roof space shall be constructed in conformance with Table 9.10.14.B. and Subsection 9.10.8.

9.10.14.12. Exposing Building Face of Houses

1. For the purposes of application of this Article
    a. the exposing building face may be divided into any number of portions and the fire-resistance rating, type of cladding and glazed area limitations may be determined individually for each portion based on the limiting distance for each portion so divided,
    b. the exposing building face shall be taken as the projection of the exterior wall onto a vertical plane located so that no portion of the exterior wall of the building is between the vertical place and the line to which the limiting distance is established in Clause (a), and
    c. for the purpose of determining the actual percentage of glazed areas permitted in an exterior wall, the glazed area shall be projected onto the vertical plane established in Clause (b).
2. Except as required in Article 9.10.14.3., in building containing only dwelling units in which there is no dwelling unit above another dwelling unit, the requirements of Article 9.10.14.11. do not apply provided that the exposing building face has a fire-resistance rating of not less than 45 min where the limiting distance is less than 1.2 m (3 ft 11 in), and when the limiting distance is less than 0.6 m (23? in), the exposing building face is clad with noncombustible material.
3. Glazed areas in the exposing building face referred to in Sentence (1) shall not be permitted if the limiting distance is less than 1.2 m (3 ft 11 in) and shall be limited in conformance with the requirements for glazed areas in Table 9.10.14.A. where the limiting distance is 1.2 m (3 ft 11 in) or greater.
4. Where the spatial separation between dwelling units on adjoining properties is registered on the titles of both properties, the spatial separation may be calculated as if the dwelling units were constructed on the same property.

5. **Applicant's Position**

The applicant stated that the detached dwelling was not constructed in accordance with building permit drawings in that there is insufficient limiting distance between the exposing building face of the north exterior wall and the north boundary of the lot.

Pursuant to Section 9.10.14.12.(4) of the Building Code, the Applicant proposed to remedy the deficiency by entering into an agreement with the adjoining land owner which will be registered on title to the Applicant's property, and the adjoining lands to the north, that will ensure the required spatial separation.

6. **Chief Building Officials Position**

The respondent stated that although Sentence 9.10.14.12.(4) of the Building Code is not entirely applicable to the situation at hand, it does provide the basis for achieving sufficiency of compliance.

The respondent agreed with the proposal provided the adjacent land owner allowed a restrictive covenant to be imposed on his property that "guarantees the minimum spatial separation required by the Building Code".

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that entering into a restrictive covenant agreement registered on title for both properties as per the November 3, 1994 survey conducted by Helmut Piller, Ontario Land Surveyor (reference # 94-20-4886-01) shows sufficiency of compliance with the Building Code.

8. **Reasons:**

The property overlooks a main hydro corridor on provincially owned land and the likelihood of any future construction on this land is remote.

Dated at Toronto, this 10th day, in the month of November, in the year 1994, for application number 1994-46.

BCC Ruling No. 94-26-404

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-26-404

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 9.8.7.1.(2) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Braebury Homes for the resolution of a dispute with Mr. Terry Willing, Chief Building Official, Town of Kingston.

APPLICANT

Mr. Peter Splinter, President
Braebury Homes

RESPONDENT

Mr. Terry Willing
Chief Building Official
Town of Kingston

PANEL

Sarah Maman, Chair
Demir Delen
Michael Lio

PLACE

Toronto, Ontario

DATE OF RULING

September 30, 1994

APPEARANCES

Mr. John Wayne Cole, President
The Furniture Place
Kingston, Ontario
for the Applicant

RULING

1. **The Applicant**

   Braebury Homes is the holder of a permit under the Building Code Act, 1992 to construct a single family dwelling (i.e. house) at 1375 Braken Wood Drive, Kingston, Ontario.

2. **Description of Constrution**

   The applicant is constructing a house at 1375 Braken Wood Drive, Kingston, Ontario. The 14 riser stairway between the first and second floor consists of 2 risers leading to a landing, a 90 degree change in direction and 12 risers from the landing to the upper floor. The bottom two risers of the stairway do not have a handrail.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Sentence 9.8.7.1.(2) of the Building Code. At issue is the need to provide a handrail on the bottom two risers of the stairway between the first and second floors of the house.

4. **Provision of the Building Code**

   Sentence 9.8.7.1.(2): Required Handrails

   (2) Handrails are not required for stairs within dwelling units having not more than 2 risers, or for exterior stairs having not more than 3 risers and serving not more than one dwelling unit.

5. **Applicant's Position**

   The applicant stated that handrail is not required on a 2 riser set of stairs. The landing between floors creates two sets of stairs. (i.e. two riser stair and ten riser stair).

6. **Chief Building Officials Position**

The respondent stated that he could not accept the proposal that the Building Code intended to exempt the bottom 2 risers of every stairway from providing a handrail.

7. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that not providing a handrail on the bottom two risers shows sufficiency of compliance with the Building Code.

8. **Reasons:**

   The stairway between the first and second floors of the house consists of 12 risers, a landing and two risers at the bottom with a 90 degree change in direction. The elimination of a handrail for the bottom two risers would not compromise the safety of those using this stairway.

Dated at Toronto, this 30th day, in the month of September, in the year 1994, for application number 1994-35.

BCC Ruling No. 94-25-403

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-25-403

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.10.2.4.(2)(c) of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Antoine Chalhoub Architect for the resolution of a dispute with Mr. Norm Douglas, Chief Building Official, City of Ottawa.

APPLICANT

Antoine Chalhoub Architect

RESPONDENT

Mr. Norm Douglas
Chief Building Official
City of Ottawa

PANEL

Sarah Maman, Chair
Demir Delen
Kenneth Bacon

PLACE

Toronto, Ontario

DATE OF RULING

August 29, 1994

APPEARANCES

Mr. Antoine Chalhoub
Antoine Chalhoub Architect
for the applicant

RULING

1. **The Applicant**

   Antoine Chalhoub Architect is the applicant for a permit under the Building Code Act, 1992 to construct a four storey self service storage building at 2720 Queensview Drive, Ottawa, Ontario.

2. **Description of Constrution**

   The proposed structure is a four storey self service storage building of noncombustible construction designed in accordnace with Article 3.2.2.52. of the Building Code. The building faces two streets and has a building area of 1985 m?. It is fully sprinklered, equipped with a fire alarm system and 24 hour surveillance cameras on each floor.

   The upper two floors of the building are used as an open space with 7 feet high metal partitions for self storage lockers. The corridor walls are not built continuous from the floor to the underside of the floor above, the ceiling or the roof.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Clause 3.10.2.4.(2)(c) of the Building Code. At issue is the requirement to construct the public corridor walls continuously from the floor to the underside of the floor above, the ceiling or the roof.

   The applicant contended that 7 feet high metal partitions are adequate because the building is sprinklered, equipped with a fire alarm system connected to the fire station, cameras provide 24 hour surveillance, and smoke exhaust system.

4. **Provision of the Building Code**

   Sentence 3.10.2.4.(2) Safety Requirements Within Floor Areas For Self-Storage Buildings

(2) A corridor need not be constructed as a public corridor where the travel distance, measured from inside the rental space to the nearest exit, is not more than 15 m provided that the corridor walls

a. are of noncombustible construction,
b. have no openings other than doors and the doors are of solid construction, and
c. are continuous from the underside of the floor above, the ceiling or the roof.

5. **Applicant's Position**

The applicant stated that the design of the upper two storeys showed sufficiency of compliance with the Building Code.

The entire building is sprinklered and there is never more than 3 - 5 persons on a floor area. The fire protection system (i.e. cameras, smoke detectors, heat detectors and sprinklers) are connected directly to the fire station and a smoke exhaust system has been provided.

This system has been used for more than 8 years in six similar buildings with excellent results and efficiency.

6. **Chief Building Officials Position**

The respondent stated that the Building Code states that the corridor need not be constructed as a public corridor where the travel distance measured from the rental space to the nearest exit is not more than 15 m provided that the corridor walls are continuous from the floor to the underside of the floor above, the ceiling or the roof.

The respondent said he did not have the authority to accept the proposal even though the building has a low occupant load, suppression system, central fire alarm system and 24 hour surveillance.

The use of equivalents regulated by Section 2.7 of the Building Code is not applicable.

7. **Commission Ruling:**

In favour of the Applicant . It is the decision of the Building Code Commission that 7 ft. high noncombustible partition walls in the public corridors in this sprinklered building shows sufficiency of compliance with the Building Code.

8. **Reasons:**

1. The travel distance to an exit from anywhere in the floor area is 15 m or less.
2. There are no dead end public corridors.
3. By providing an automatic sprinkler system the size of the fire and thereby the amount of smoke produced will be controlled.
4. The ultimate control over the building including its use and occupancy rests with the building management and not with the individual lessees.

Dated at Toronto, this 29th day, in the month of August, in the year 1994, for application number 1994-34.

BCC Ruling No. 94-24-402

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-24-402

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.7.1.2. of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Désirée Custom Made Drapes for the resolution of a dispute with Mr. Brian Horseman, Chief Building Official, City of North Bay.

APPLICANT

Désirée Custom Made Drapes

RESPONDENT

Mr. Brian Horseman
Chief Building Official
City of North Bay

PANEL

Sarah Maman, Chair
Demir Delen
Kenneth Bacon

PLACE

Toronto, Ontario

DATE OF RULING

August 29, 1994

APPEARANCES

Joan Moreau, Owner
Désirée Custom Made Drapes
for the applicant

RULING

1. **The Applicant**

   Désirée Custom Made Drapes is the holder of permit under the Building Code Act, 1992 to construct a front and rear addition to an existing building at 1132 Cassells Street, North Bay, Ontario.

2. **Description of Constrution**

   On September 28th, 1994 a building permit was issued to construct an addition to the front of an existing house.

   The front addition was for personal service occupancy and included a new entrance. The new entry provided access to a split level landing with stairs leading to the basement and first floor. The Building Department deemed the first floor to be the entrance storey since the new entrance only provided access onto the landing.

   The Building Department agreed to permit a ramp providing barrier free access through a proposed rear addition.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns an interpretation of Article 3.7.1.2. of the Building Code. The purpose of the hearing was to determine whether the new main entrance to D,sir,e Custom Drapes satisfies the Barrier Free Design requirements of Section 3.7 of the Building Code.

4. **Provision of the Building Code**

   Article 3.7.1.2. Entrances

   1. Except as required in Sentence (2), every building in Article 3.7.1.1. shall have at least one entrance intended for general use by the public or the occupants designed in

conformance with Article 3.7.3.3. and opening to the outdoors at sidewalk level or a ramp conforming to Article 3.7.3.4. leading to a sidewalk.

2. Where a suite of Group A, D or E occupancy is contained on the first storey to which a barrier-free path of travel is provided, and is completely separated from the remainder of the building so that three is no access to the remainder of the building, such suite shall have at least one barrier-free entrance in conformance with Sentence (1).

5. **Applicant's Position**

The applicant stated that the entrance to the front addition complied with the Barrier Free Design requirements of s. 3.7 of the Building Code.

The applicant said that a wheelchair can enter through the main entrance door and come into the store without any difficulty. Once inside there are doorbells accessible to all customers to ring for service.

A wheelchair can easily turn around and exit the landing area. From the entrance landing a person can view the entire showroom and displays. All samples, books, displays and fabric can be brought to the customer.

A shop at home service is also offered where appointments are made and samples are taken to the customers home.

The applicant disputed the provision of a ramp at the rear addition. Besides being an insurmountable expense, it would never be used. Also, persons using the ramp would have to travel through private living quarters to access the store. With a maximum gradient of 1 in 12, over forty feet would be required for the ramp. This would eliminate the customer parking area.

6. **Chief Building Officials Position**

The respondent stated that he does not have the authority to omit, exclude or deviate from the Building Code. Article 3.7.2.1. of the Building Code clearly requires barrier free access be provided to the entrance storey.

The use of equivalents regulated by Section 2.7 of the Building Code is not applicable.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that the new main entrance to D,sir,e Custom Drapes shows sufficiency of compliance with the Building Code.

8. **Reasons:**
    1. The nature and size of the business is such that most of the business is conducted at the customers' home. This location is incidental to the main operation.
    2. The major use of this building is residential (i.e. the owner lives on site).
    3. The merchandise on display can be adequately viewed at the entrance landing which is accessible.

Dated at Toronto, this 29th day, in the month of August, in the year 1994, for application number 1994-31.

BCC Ruling No. 94-23-401

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-23-401

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Article 3.1.2.1. and Article 1.1.3.2. for the definition of Medium Hazard Industrial Occupancy and Mercantile Occupancy, Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by I.H.I.W. Corporation for the resolution of a dispute with Mr. Gordon Cuthbertson, Chief Building Official, City of Thunder Bay.

APPLICANT

I.H.I.W. Corporation

RESPONDENT

Mr. Gordon Cuthbertson
Chief Building Official
City of Thunder Bay

PANEL

Sarah Maman, Chair
Demir Delen
Kenneth Bacon

PLACE

Toronto, Ontario

DATE OF RULING

August 29, 1994

APPEARANCES

Mr. Levino Tittaferrante, President
I.H.I.W. Corporation
for the applicant

RULING

1. **The Applicant**

   I.H.I.W. Corporation is the applicant for a permit under the Building Code Act, 1992 to change the use of a building from a door and door hardware supply and warehouse facility to a furniture store at 1156 Alloy Drive, Thunder Bay, Ontario

2. **Description of Constrution**

   The existing 25,000 sq. ft. (2,323 m?) one storey building was constructed in 1992 as a Group F Division 2 (F-2) major occupancy. It was designed to the requirements of Article 3.2.2.52. of the Building Code for industrial buildings, division 2, up to 4 storeys in building height. The building is not sprinklered.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the interpretation of Article 3.1.2.1. and Article 1.1.3.2. (i.e. the definition of Medium Hazard Industrial Occupancy and Mercantile Occupancy) of the Building Code. At issue is whether the existing F-2 classification of the building is applicable to the proposed use as a furniture store.

   If the building remains classified as a Group F Division 2 major occupancy it does not require a sprinkler system. However, if the building is classified as a Group E major occupancy, sprinklers are required.

4. **Provision of the Building Code**

   Article 1.1.3.2. Definitions of Words and Phrases

   Industrial Occupancy means the occupancy or use of a building or part thereof for the assembling, fabricating, manufacturing, processing, repairing or storing goods and materials.

Medium Hazard Industrial Occupancy (F-2) means an industrial occupancy in which the combustible content is more than 50 kg/m? or 1200 MJ/m? of floor area and not classified as high hazard industrial occupancy.

Mercantile Occupancy (E) means the occupancy or use of a building or part thereof for the displaying or selling of retail goods, wares of merchandise.

Article 3.1.2.1. Classification of Buildings

1. Except as provided in Article 3.1.2.3. to 3.1.2.6., every building or part thereof shall be classified according to its major occupancy as belonging to one of the Groups or Divisions described in Table 3.1.2.A.
2. A building intended for use by more than one major occupancy, shall be classified according to all major occupancies for which it is used or intended to be used.

5. **Applicant's Position**

The applicant stated that Part 3 of the Building Code does not specifically name furniture stores in the Group E classification.

The existing building was classified as a Group F-2 and used as a hardware store.

The applicant stated that the building department used Part 11 definition for determining Group E. He said that if he could use Part 11 of the Building Code he could match existing since the hazard index does not increase.

Also sited was the fact that other furniture stores in Thunder Bay are not sprinklered.

The applicant stated that the F-2 classification applied to the new use and occupancy of the building. Since it is intended to sell furniture from prototypes displayed in the showroom, the building should not be considered as a Group E, but rather a Group F occupancy. The applicant felt that in a Group E occupancy furniture is sold directly from the showroom floor.

6. **Chief Building Officials Position**

The respondent stated that the intended use of the building as a retail furniture store would indicate that the building be classified as a Group E occupancy.

Therefore, the provision of the Building Code in dispute is Article 3.2.2.44. for a Group E, Mercantile occupancy. It requires the building to be sprinklered.

Part 11 of the Building Code could not be used to address concerns related to this project because the original building was built in 1992 (i.e. it is less than 5 years old).

Existing unsprinklered furniture stores referred to by the applicant were designed as Group E occupancies. The buildings met the requirements for unsprinklered buildings in accordance with Articles 3.2.2.43. and 3.2.2.44. of the Building Code.

7. **Commission Ruling:**

In favour of the Respondent. It is the decision of the Building Code Commission that the occupancy classification for the 25,000 sq.ft. one storey furniture store be an "E" mercantile occupancy.

8. **Reasons:**

It is the intent of the Building Code that Group "E" mercantile occupancies be buildings and/or parts of buildings where the public can enter to view and/or purchase goods while Group "F-2" storage occupancies be buildings or parts of buildings where the general public is not permitted to enter.

Dated at Toronto, this 29th day, in the month of August, in the year 1994, for application number 1994-27.

BCC Ruling No. 94-22-400

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-22-400

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 3.7.1.2.(1) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Brown Bay Developments for the resolution of a dispute with Mr. John Wright, Chief Building Official, Town of Markham.

APPLICANT

Brown Bay Developments

RESPONDENT

Mr. John Wright
Chief Building Official
Town of Markham

PANEL

Sarah Maman, Chair
Remus Tsang
Michael Wong

PLACE

Markham, Ontario

DATE OF RULING

September 29, 1994

APPEARANCES

Mr. Michael Ostreicher, Secretary/Treasurer
1002398 Ontario Limited
for the applicant

Mr. Anthony Boyko
Manager, Building Inspection
Town of Markham
for the respondent

NOTE

The hearing was adjourned on August 18th, 1994 pending a site visit of the outdoor deck and was reconvened on September 29th, 1994.

RULING

1. **The Applicant**

   Brown Bay Development is the holder of a permit under the Building Code Act, 1992 to construct an outdoor deck to be used as a patio for customers of Bentley's Seafood Restaurant, 8220 Bayview Avenue, Thornhill, Ontario.

2. **Description of Constrution**

   The applicant constructed a raised uncovered exterior platform (patio) in the parking lot in front of an existing twenty year old restaurant. The structure is comprised of an open floor area and is not attached to the existing building. The platform is accessible by a stair containing three risers. The structure serves as an outdoor patio for the restaurant.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Sentence 3.7.1.2.(1) of the Building Code. At issue is the need to provide a barrier-free entrance to subject platform.

4. **Provision of the Building Code**

   Sentence 3.7.1.2(1) Entrances:

Except as required in Sentence(2), every building in Article 3.7.1.1. shall have at least one entrance intended for general use by the public or the occupants designed in conformance with Article 3.7.3.3. and opening to the outdoors at sidewalk level or to a ramp conforming to Article 3.7.3.4 leading to a sidewalk.

5. **Applicant's Position**

The applicant stated that the structure in question is a seasonal outdoor deck built in the parking lot in front of an existing twenty-two year old restaurant.

The plaza in question, located at 8220 Bayview Ave., is over twenty years old and does not provide barrier free access.

When the structure was built, the fact that the restaurant itself has no barrier free access nor does it have handicapped washroom facilities, lead the owners to believe that no barrier free access was necessary for the deck as it was merely an addition to the existing restaurant to be used in the summer months only.

Access to the walkway of the mall is difficult due to the high curb in the parking lot, while the entrance to the restaurant itself is at least twelve inches above the walkway.

It is the position of the owners that they in no way sought to circumvent the Building Code, however in this case where a seasonal structure has been added to an existing restaurant that does not provide barrier free access or handicapped washroom facilities, it appears unreasonable that the structure alone would require barrier free access.

The deck is part of the restaurant and is used exclusively for dining. When the Liquor Licensing Board issued the restaurant's liquor license it took into account the existing washroom facilities in determining the customer load for the deck rather than issuing a separate license.

Should the owners be required to modify the deck, it will require the use of an additional four parking spots, and the expenditure of thousands of dollars to make the necessary changes.

6. **Chief Building Officials Position**

The respondent stated that people electing to sit on the platform area must do so by using a stair containing 3 risers. The platform was newly constructed and therefore must comply with Part 3

of the Building Code. Specifically the platform/building requires at least one entrance at the sidewalk level or a ramp conforming to Article 3.7.3.4. leading to a sidewalk.

7. **Commission Ruling:**

   n favour of the Respondent. It is the decision of the Building Code Commission that not providing a barrier free entrance to the patio on the platform does not comply with the Building Code.

8. **Reasons:**
   1. A site visit indicated that access is available to the walkway of the mall.
   2. The patio is new construction and requires barrier-free access.

Dated at Toronto, this 29st day, in the month of September, in the year 1994, for application number 1994-30.

BCC Ruling No. 94-21-399

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-21-399

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.7.3.4.(1)(e) of the Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Truscan Realty Ltd. for the resolution of a dispute with Mr. Norman Douglas, Chief Building Official, City of Ottawa.

APPLICANT

Truscan Realty Ltd.

RESPONDENT

Mr. Norman Douglas
Chief Building Official
City of Ottawa

PANEL

Sarah Maman, Chair
Remus Tsang
Michael Wong

PLACE

Toronto, Ontario

DATE OF RULING

August 18, 1994

APPEARANCES

Mr. Leonard Koffman, Architect
for the applicant

RULING

1. **The Applicant**

   Truscan Realty Ltd. is an applicant for a permit under the Building Code Act, 1992 to construct a series of concrete ramps in a barrier-free path of travel along an existing exterior walkway providing access to various commercial tenants, "Towngate" Shopping Centre, 2446 Bank Street, Ottawa, Ontario.

2. **Description of Constrution**

   The applicant is proposing to replace approximately one third the width of five existing concrete stairways with ramps to provide a barrier-free path of travel along an existing open-air exterior walkway. The walkway provides access to several tenants of the "Towngate" Shopping Centre.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the technical interpretation of Clause 3.7.3.4.(1)(e) of the Building Code. At issue is the requirement to provide guards and handrails on both sides of the ramps.

4. **Provision of the Building Code**

   Clause 3.7.3.4.(1)(e) Ramps

   Ramps located in a barrier-free path of travel shall:

   (e) except as provided in Sentence (2), be equipped with handrails and guards on both sides conforming to Articles 3.4.6.4. and 3.4.6.5.

5. **Applicant's Position**

   The applicant requested that handrails not be required for the subject ramps. The ramps serve to overcome a grading problem resulting from land settlement adjacent to the exterior walkway. Barrier-free access was originally provided via curb cuts from the parking area, but due to soil

settlement this is no longer possible. The proposed ramps replace the curb cuts. It was the feeling of the applicant that guards and handrails on both sides of the ramps would be an intrusion in the walkway that may be hazardous to the general public.

6. **Chief Building Officials Position**

   The respondent stated that Sentence 3.7.3.4.(3) of the Building Code requires "Floors or walks in a barrier-free path of travel having a slope steeper than 1 in 20" to be designed as ramps. Since the subject exterior walkway forms part of the barrier-free path of travel from the exterior parking area to the building entrances, the ramps must comply with Sentence 3.7.3.4.(3). This would then require the provision of handrails and guards in accordance with Clause 3.7.3.4.(1)(e) of the Building Code.

7. **Commission Ruling:**

   In favour of the Respondent. It is the decision of the Building Code Commission that the absence of guards and handrails on both sides of the ramps does not comply with the Ontario Building Code.

8. **Reasons:**

   Not providing the guards and handrails may:

   a. cause undue hardships to those that rely on their use to access the individual stores, and
   b. the difference in grade between the stairs and the ramps may be hazardous to the general public if no barrier is provided.

Dated at Toronto, this 18st day, in the month of August, in the year 1994, for application number 1994-32.

BCC Ruling No. 94-20-398

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-19-398

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Clause 3.2.9.1.(1)(b) and Table 3.2.9.A. of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by M-Con Products Inc. for the resolution of a dispute with Mr. Robert Moore, Chief Building Official, Township of West Carleton.

APPLICANT

M-Con Products Inc.

RESPONDENT

Mr. Robert Moore
Chief Building Official
Township of West Carleton

PANEL

Sarah Maman, Chair
Rick Florio
David Lam

DATE OF RULING

July 21st, 1994

APPEARANCES

Mr. Kevin Wheaton
J. Stuart Hall & Associates Ltd.

RULING

1. **The Applicant**

   M-Con Products Inc. is an applicant for a permit under the Building Code Act, 1992 to construct an addition to a precast concrete plant at 2150 Richardson Side Road, Carp, Ontario.

2. **Description of Constrution**

   The applicant is proposing to construct a 890 m? (9,581 ft?) addition to an existing 3058 m? (32,917 ft?) precast concrete plant.

   The existing building is a single storey structure of combustible and non combustible construction. The building is classified as a Group F, Division 3 (F-3) major occupancy. It is not sprinklered and faces 3 streets. There is no municipal water supply to the site.

   Documentation provided by the Chief Building Official indicates the building was erected in three phases:

   - **1988 Phase 1** 1943 m²
   - **Phase 2** 515 m²
   - **Phase 3** 600 m²
   - **1994 Phase 4 (proposed)** 890 m²
   - **Total** 3948 m²

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Clause 3.2.9.1.(1)(b) and Table 3.2.9.A. of the Building Code. At issue is the requirement to provide a standpipe and hose system in the proposed addition. Table 3.2.9.A. which forms part of Sentence 3.2.9.1.(1) requires a standpipe and hose system for one storey F-3 occupancies over 3000 m?.

4. **Provision of the Building Code**

   Sentence 3.2.9.1.(1) Requirement for Standpipe and Hose Systems

   Except as provided in Article 3.2.9.2., a standpipe and hose system shall be installed in every building that:

a. is more than
    i. 3 storeys in building height, or
    ii. 14 m in height measured between grade and the ceiling of the uppermost storey,
b. is greater in building area than the area shown in Table 3.2.9.A. for the applicable building height shown in the Table where the building
    i. is not sprinklered, and
    ii. is not more than 14 m high measured between grade and the ceiling of the top storey, or
c. contains more than one storey below grade.

Table 3.2.9.A.

5. **Applicant's Position**

The applicant stated that the level of safety required by the Building Code is met without the provision of a standpipe and hose system for the following reasons:

0. The building is a precast concrete plant with minimal combustible load;
1. Construction is non-combustible;
2. The owner does not intend to increase the number of workers in the building;
3. The maximum travel distances in the existing building and the addition comply with the Building Code;
4. The building is visited annually by a fire inspector;
5. The shop floor and the mezzanine are provided with fire extinguishers as per the Building Code. The extinguishers are checked two or three times each year.
6. The building is one storey in height, as the mezzanine complies with Sentence 3.2.1.1.(4) of the Building Code.
7. The Building Official agrees that the proposal is reasonable.

6. **Chief Building Officials Position**

The respondent stated the provision of fire extinguishers does not provide an alternative means of fire suppression. Fire extinguishers are required by Article 3.2.5.17. of the Building Code regardless of whether a standpipe and hose system is provided. Furthermore, Sentence 3.2.9.4.(7) requires a listed fire extinguisher to be located in each hose cabinet.

The respondent does not have the authority to issue a building permit for a condition that deviates from the Building Code. The use of equivalents regulated by Section 2.7 of the Building Code is not applicable.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that not providing a standpipe and hose system shows sufficiency of compliance with the Building Code provided:

0. Double the required number of fire extinguishers is provided in the new addition; and,
1. All plant personnel are trained in the proper use of fire extinguishers and a refresher course is given annually.

8. **Reasons:**

0. The building is of noncombustible construction occupied by a precast products manufacturer where the fire load is low.
1. The building is situated in a rural area with no water supply. It is standard procedure for the fire department to respond to a fire with their own water supply.

Dated at Toronto, this 21st day, in the month of July, in the year 1994, for application number 1994-21.

BCC Ruling No. 94-19-397

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-19-397

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentences 3.1.11.2.(1)&(2) of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Bradscot Northern Construction for the resolution of a dispute with Mr. Ivan Wilson, Chief Building Official, Township of Mariposa.

APPLICANT

Bradscot Northern Construction

RESPONDENT

Mr. Ivan Wilson
Deputy Chief Building Official
Township of Mariposa

PANEL

Sarah Maman, Chair
Rick Florio
David Lam

PLACE

Toronto, Ontario

DATE OF RULING

July 21st, 1994

APPEARANCES

Mr. Gary Chu
Dow Chemical Canada Inc.,

For the applicant

Mr. Fraser MacDonald
Chief Building Official
Township of Ops

RULING

1. **The Applicant**

   Bradscot Northern Construction are holders of a permit under the Building Code Act, 1992 to construct an elementary school in the hamlet of Little Britain, Township of Mariposa.

2. **Description of Constrution**

   The applicant is constructing an elementary school which is classified as a Group A, Division 2 major occupancy. The exterior wall of the building is comprised of 190 mm concrete block, 90 mm styrofoam Cavitymate insulation, 20 mm air space and 100 mm of brick veneer.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Sentences 3.1.11.2.(1)&(2) of the Building Code. At issue is the requirement to fire stop the 20 mm concealed space in the exterior wall assembly.

4. **Provision of the Building Code**

   Sentences 3.1.11.2.(1)&(2) Fire Stopping in Wall Assemblies (1) Except as permitted in Sentence (2), fire stops conforming to Article 3.1.11.7. shall be provided to block off spaces within a wall assembly: (a) at every floor level; (b) at every ceiling level where the ceiling forms part of an assembly required to have a fire-resistance rating; and, (c) so that the maximum horizontal dimension is not more than 20 m and the maximum vertical dimension is not more than 3 m. (2) Fire Stopping conforming to Sentence (1) are not required provided: (a) the wall space is filled with insulation; (b) the exposed construction materials and any insulation within the wall space are noncombustible; or, (c) the exposed construction materials and any insulation

within the wall space have a flame-spread rating of not more than 25 on any exposed surface or on any surface that would be exposed by cutting through the material in any direction and fire stops are installed so that the vertical distance between them does not exceed 10 m.

5. **Applicant's Position**

The applicant provided the following information to demonstrate sufficiency of compliance with the fire stopping requirements for concealed spaces within the wall assembly: (1) Sentence 3.1.11.2.(2) of the National Building Code of Canada (NBCC) was amended January 1993 by an additional exception to the fire stopping requirement: "(d) the insulated wall assembly contains not more than one concealed air space, and the horizontal thickness of that air space is not more than 25 mm."; (2) The Building Code Commission ruled in favour of a similar application on December 20, 1993 (i.e. R93-21-377); (3) The Flame Spread Classification determined by CAN/ULC S102.2- M88 is ineffective for fire stopping requirements because field conditions differ from the test and poor reproducibility of test results; and, (4) Research indicates that ventilation in the concealed space influences the spread of fire. Therefore, the concealed space must have an adequate supply of oxygen for combustion. The critical width of the concealed space was said to be approximately 25 mm.

6. **Chief Building Officials Position**

The respondent stated that the Building Code clearly requires fire stopping in the wall assembly. Concern was expressed about the potential spread of fire within the wall cavity and the difficulty this could present to fire fighters trying to extinguish the fire.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that insulation in excess of a 25 flame spread rating within the wall space of a building with no fire stopping, provided that there is only one concealed air space that is not more than 25mm thick, shows sufficiency of compliance with the Building Code.

8. **Reasons:**

1. Tests conducted at the National Research Council indicated that the thickness of the air space is the critical factor in determining flame spread in a wall cavity. 2. An emergency amendment to the fire stopping requirement in the National Building Code was approved in 1993, based on the

tests conducted at the National Research Council. 3. The building is a one storey school, occupied by well trained staff who would immediately react to any fire condition.

Dated at Toronto, this 21st day, in the month of July, in the year 1994, for application number 1994-29.

BCC Ruling No. 94-18-396

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-18-396

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.* AND IN THE MATTER OF Sentence 3.2.9.1.(1) and Table 3.2.9.A. of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Nelson Steel Co. Ltd., Division of Samuel Manu-Tec Inc. for the resolution of a dispute with Mr. D. H. Ferguson, Chief Building Official, Regional Municipality of Haldimand-Norfolk.

APPLICANT

Nelson Steel Co. Ltd., Division of Samuel
Manu-Tec Inc.

RESPONDENT

Mr. D. H. Ferguson
Chief Building Official
The Regional Municipality of Haldimand-Norfolk

PANEL

Sarah Maman, Chair
Rick Florio
David Lam

PLACE

Toronto, Ontario

DATE OF RULING

July 21st, 1994

APPEARANCES

Mr. James Barclay, President
Barclay Construction Hamilton Limited,
for the Applicant

Al Mattiussi, Vice-President
Nelson Steel Co. Ltd.,
for the Applicant

RULING

1. **The Applicant**

   Nelson Steel Co. Ltd. are applicants for a permit under the Building Code Act, 1992 to construct a pickling line and storage area addition to an existing coil steel processing plant, located at 19 Hawk Street, City of Nanticoke, Ontario.

2. **Description of Construction**

   The applicant is proposing to construct a 7,158 m? pickling line and storage area addition to an existing coiled steel processing plant and office. The building is of non-combustible construction and is not sprinklered.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Sentence 3.2.9.1.(1) and Table 3.2.9.A. of the Building Code. At issue is the requirement to provide a standpipe and hose system in the proposed pickling line and storage area addition.

4. **Provision of the Building Code**

   Sentence 3.2.9.1.(1) Requirement for Standpipe and Hose Systems Except as provided in Article 3.2.9.2., a standpipe and hose system shall be installed in every building that:

   (a) is more than
   (i) 3 storeys in building height, or
   (ii) 14 m in height measured between grade and the ceiling of the uppermost storey,

(b) is greater in building area than the area shown in Table 3.2.9.A. for the applicable building height shown in the Table where the building

(i) is not sprinklered, and
(ii) is not more than 14 m high measured between grade and the ceiling of the top storey, or (c) contains more than one storey below grade.

Table 3.2.9.A.

5. **Applicant's Position**

The applicant stated that the only risk of fire in the pickling plant is from an oil or hydraulic fire and extinguishment with water would further spread a fire and endanger personnel. Also, since the steel coil storage area is non-combustible without wood pallets, packaging or other combustible materials the standpipe and hose system is not necessary.

In order to provide equivalent level of performance, the applicant proposes the use of fire extinguishers and proper training of the staff to deal with fire situations.

6. **Chief Building Officials Position**

The respondent stated that the Building Code clearly requires a stand pipe and hose system in the proposed addition.

The respondent does not have the authority to issue a building permit for a condition that deviates from the Building Code. The use of equivalents regulated by Section 2.7 of the Building Code is not applicable.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that not providing a wet standpipe and hose system shows sufficiency of compliance with the Building Code, subject to a dry standpipe system being provided with the following features:

1. The siamese pumper connection is located within 45 m of a hydrant.

2. A plaque be installed over the siamese connection clearly identifying that the siamese connection is for a dry standpipe system in the new addition.

3. The location of hose stations shall comply with Section 3.2.9. of the Building Code; however, hose lines shall not be provided.

8. **Reasons:**

1. The dry standpipe system is intended to be used by fire department personnel only in the event that internal fire fighting is required.

2. The process and storage areas have a low combustible loading.

3. Plant personnel will be trained in the use of fire extinguishers that will be installed in the new addition, in numbers that exceed Fire Code requirements.

Dated at Toronto, this 21st day, in the month of July, in the year 1994, for application number 1994-25.

BCC Ruling No. 94-17-395

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-17-395

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*. AND IN THE MATTER OF Article 9.4.4.4. and Sentence 4.1.1.3.(1) of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Herbert and Almut Didszun for the resolution of a dispute with Bernie Roth, Chief Building Official, City of Scarborough.

APPLICANT

Herbert and Almut Didszun

RESPONDENT Mr. Bernie Roth
Chief Building Official
City of Scarborough

PANEL

Sarah Maman, Chair
Remus Tsang
Michael Wong

PLACE

Markham, Ontario

DATE OF RULING

September 29, 1994

APPEARANCES

Vish Bhapkar, Manager
Architectural/Structural Plans
Examination Section

City of Scarborough
for the Respondent

ADJOURNMENTS The hearing was adjourned on July 7th, 1994 pending the reconciliation of two geotechnical reports or a site specific soil analysis, and was reconvened on August 18th, 1994.

The hearing was adjourned on August 18th, 1994 due to an unsigned report being submitted by the Applicant's agent as evidence. The hearing was reconvened on September 29th, 1994.

RULING

1. **The Applicant**

   Herbert and Almut Didszun are applicants for a permit under the Building Code Act, 1992 to reconstruct a fire damaged house on existing masonry foundation walls, located near the crest of the Scarborough Bluffs at 7 Springbank Avenue, Scarborough, Ontario.

2. **Description of Construction**

   The applicant is proposing to reconstruct a two storey single family dwelling that was destroyed by fire. The new dwelling is to be reconstructed on the existing foundation with no additional excavation. An independent structural review found the existing foundation to be satisfactory. The site is situated near the edge of the Bluff which is approximately 53 metres (174 ft.) above the present Lake Ontario shore line.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the interpretation of the technical requirements of Article 9.4.4.4. and Sentence 4.1.1.3.(1) of the Building Code. At issue is the close proximity of the dwelling to the edge of the bluff with respect to slope instability, potential ground loss and building movement.

4. **Provision of the Building Code**

   Article 9.4.4.4. Soil Movement

Where a foundation is located in an area in which soil movement caused by changes in soil moisture content is known to occur to the extent that it will cause significant damage to a building, measures shall be taken to minimize the affect of such movement on the building.

Sentence 4.1.1.3.(1) Design Requirements

Buildings and their structural members including formwork and falsework shall be designed to have sufficient structural capacity and structural integrity to resist safely and effectively all loads and effects of loads and influences that may reasonably be expected, having regard to the expected service life of building, and shall in any case satisfy the requirements of this Section.

5. **Applicant's Position**

The applicant submitted geotechnical reports that showed the soil erosion effects on the proposed dwelling would not create an unsafe condition within the present and foreseeable future.

6. **Chief Building Officials Position**

The respondent stated that the geotechnical reports submitted by the applicant do not adequately address the following:

(a) The existing foundation is located in a high risk zone with respect to slope instability, potential ground loss and building movement;

(b) The proposed work would contravene Sentence 4.1.1.3.(1) and Article 9.4.4.4. of the Building Code; and,

(c) The reconstructed building would be structurally inadequate and lead to a potentially unsafe condition.

Furthermore, the respondent said the conclusions in the geotechnical report are qualified by an emphasis placed on the preliminary nature of the report and assumptions relied on to arrive at these conclusions.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that based on the documentation submitted that the reconstruction of the new house on the existing foundation shows sufficiency of compliance with the Building Code.

8. Conditions:

(1) The following reports shall be registered on the title of the subject property:

i) Solmers International, Geotechnical Review, Slope at 7 Springbank Avenue, Scarborough, Ontario, File SI0 941117, dated June 13, 1994. Report signed by M. Bernardi, P.Eng.

ii) Sarafinchin Associates Ltd., Slope Review 7 Springbank Avenue, Scarborough, Ontario, Project T1208/R1, dated March 4, 1994. Report signed by Larry Galimanis, P.Eng. and Murray Sarafinchin, M.A.Sc., P.Eng.

iii) Jagger Hims Limited, Addendum Report, Review of Geotechnical Reports, Slope at 7 Springbank Avenue, Scarborough, Ontario, File 94578.00, dated September 9th, 1994. Report signed by Andrew G. Hims, P.Eng.

(2) Adequate precautions shall be taken so that no further deterioration of slope stability occurs. This included: i) All heavy equipment, trucks, storage supplies and the like, used in demolition and construction operations must be kept a distance of at least 25 metres from the crest of the embankment. This will reduce overloading of the crest of the slope.

ii) Excavation operations will be kept to a minimum and will be carried out manually.

iii) All compaction operations are to be carried out with hand-operated equipment without vibration to reduce the risk of soil disturbance at the crest of the slope.

iv) The site must be well drained at all times. Surface water run-off resulting from rain, snow melt, etc., must be diverted away from the crest of the slope towards the street. A series of french drains, strategically placed across the site, may be required.

v) New filtered weeping tiles are to be installed at the perimeter of the house.

vi) The existing septic system is to be relocated to the north of the structure or drainage to be adequately diverted to the municipal sewer system.

vii) The crest of the slope where water erosion occurred during firefighting operations, must be reinstated to its previous configuration prior to the commencement of any construction. Backfilling operations in this sensitive area must be carried out carefully, with a series of conveyors to reduce the potential for disturbance. The backfill material must be free-draining.

(3) A professional geotechnical engineer shall be engaged to conduct a field review to ensure the aforementioned condition number (2) is met.

9. Reasons:

(1) The proposed reconstructed house will be identical to the one destroyed by fire. (2) Adequate precautions will be taken to ensure no further slope instability occurs.

Dated at Toronto this 29th day in the month of September in the year 1994 for application number 1994-22.

BCC Ruling No. 94-16-394

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-16-394

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992.*

AND IN THE MATTER OF Sentence 9.19.1.3.(2) of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by David and Cathy Porco for the resolution of a dispute with Ted Marecak, Chief Building Official, Township of Pittsburgh.

APPLICANT

David and Cathy Porco

RESPONDENT

Mr. Ted Marecak
Chief Building Official
Township of Pittsburgh

PANEL

Sarah Maman, Chair
Remus Tsang
Sang Shim

PLACE

Toronto, Ontario

DATE OF RULING

July 7th, 1994

RULING

1. **The Applicant**

David and Cathy Porco are the holders of a permit under the *Building Code Act, 1992* to construct a cottage at 2609 Tiller Lane, R.R.# 2, Kingston, Ontario.

2. **Description of Construction**

The applicant constructed a summer cottage with a cathedral ceiling. The ceiling construction consists of 38mm x 235mm roof joists spaced 600mm on center. The applicant installed Heatlok R240, site manufactured spray-in-place rigid cellular plastic thermal insulation to the under side of the roof sheathing. A ventilation space was not provided between the insulation and the roof sheathing.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with Sentence 9.19.1.3.(2) of the Building Code. At issue is the lack of a ventilated space between the underside of the roof sheathing and the top of the insulation throughout the joist space.

4. **Provision of the Building Code**

Sentence 9.19.1.3.(2) Cross Purlins

Cross purlins required by Sentence (1) may be omitted where the roof slope is 1 to 6 or steeper provided the roof framing members run in the same direction as the roof slope and a minimum clearance of 75 mm is maintained between the underside of the roof sheathing and the top of the insulation throughout the length of the roof joist.

5. **Applicant's Position**

The applicant stated that it is normal procedure for insulation installers to spray Heatlok R240 directly to the underside of roof sheathing without providing an air space for ventilation. This product was designed to be sprayed directly to clean surfaces and once cured forms a permanent airtight seal. Sentence 9.19.1.3.(2) of the Building Code was written for the purpose of addressing conventional fibreglass insulation. It did not take into account technological advances in building materials such as Heatlok R240.

6. **Chief Building Officials Position**

The respondent stated that the Building Code clearing requires a minimum clearance of 75 mm between the underside of the roof sheathing and the top of the insulation.

The respondent does not have the authority to accept a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

In favour of the APPLICANT. It is the decision of the Building Code Commission that the material used in the manner constructed shows sufficiency of compliance with the Building Code provided that:

(a) Two coats of vapour barrier paint are applied to the under side of the ceiling.

(b) All penetrations in the ceiling membrane such as for light fixtures must be adequately sealed off.

(c) Sufficient humidity control fans should be provided in the ceiling space which will activate automatically when the relative humidity exceeds 40%.

(d) An exhaust fan controlled by a dehumidistat should be installed on the ceiling in the area near the bathroom or kitchen.

Dated at Toronto this 7th day in the month of July in the year 1994 for application number 1994-24.

BCC Ruling No. 94-15-393

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-15-393

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*. AND IN THE MATTER OF Article 3.4.6.2. of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Reimer Construction Limited for the resolution of a dispute with Mr. Daniel Mousseau, Chief Building Official, City of Burlington.

APPLICANT

Reimer Construction Ltd.

RESPONDENT

Mr. Daniel Mousseau
Chief Building Official
City of Burlington

PANEL

Sarah Maman, Chair
Remus Tsang
Sang Shim

PLACE

Toronto, Ontario

APPEARANCES

Mr. Rudy K. Reimer
Reimer Construction Limited for applicant

Mr. Dave Robinson, Building Inspector,
City of Burlington for respondent

Mr. Joe Wintar, Building Engineer,
City of Burlington for respondent

DATE OF RULING

July 7th, 1994

RULING

1. **The Applicant**

   Reimer Construction Limited is the holder of a permit under the *Building Code Act, 1992* to construct alterations to a fifth floor office space at Reimer Corporate Tower, 5420 North Service Road, Burlington, Ontario.

2. **Description of Construction**

   The applicant constructed alterations to approximately half of the fifth level (i.e. 13,000 square feet) to accommodate a Data Centre operation for Commcorp Financial Group (Division of the Canadian Imperial Bank of Commerce). The Data Centre computer room occupies approximately 3,100 square feet. It was designed to have a 14 inch high raised computer floor however, during construction a 12 inch raised floor was installed. The result was a two step riser for the flight of stairs serving the printer room.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Article 3.4.6.2. of the Building Code. At issue is an interior flight of stairs with only two risers serving a 12 inch raised floor in the printer room.

4. **Provision of the Building Code**

   Article 3.4.6.2. Minimum Number of Risers

   Every flight of interior stairs shall have at least 3 risers.

5. **Applicant's Position**

The applicant provided the following reasons for requesting the two riser stairs be permitted in lieu of constructing a ramp:

(a) The printer room has been strategically designed with equipment laid out in the most feasible, workable configuration for the customer, taking into consideration the floor loading requirements. If a ramp was installed it would be completely blocked by a printer machine making the ramp inaccessible and non-functional.

(b) The printer room has 75 foot candle lighting level. The room and stairs are visible and quite lit up. There is controlled access to the computer facility and it is manned by two full time operators per eight hour shift. Due to security reasons no public nor other employees are permitted in this area.

(c) The two riser stair does not serve a designated primary or secondary exit. It provides access to a convenience entrance for the office.

6. **Chief Building Officials Position**

The respondent stated that the Building Code clearing requires at least three risers for every flight of interior stairs. The stairs serving the printer room have only two risers.

7. **Commission Ruling:**

In favour of the APPLICANT. It is the decision of the Building Code Commission that the two riser stair to the printer room shows sufficiency of compliance with the Building Code provided that:

(a) Illuminating nosing is installed on each step, and

(b) A conspicuous sign stating "WATCH YOUR STEP" with an arrow and having not less than 60 mm high lettering is mounted permanently on the wall 1500 mm above the raised floor.

8. **Reasons:**

(a) The entire Data Centre has controlled access and only a few employees will have access to the printer room,

(b) Adequate warning will be provided to alert occupants to the presence of this stair.

(c) This stair is not a required means of egress.

Dated at Toronto this 7th day in the month of July in the year 1994 for application number 1994-23.

BCC Ruling No. 94-14-392

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-14-392

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*. AND IN THE MATTER OF Article 3.3.1.1. and Clause 3.3.1.4.(1)(c) of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Peter Clewes, Wallman, Clewes, Bergman Architects Ltd. for the resolution of a dispute with Mr. John Wright, Chief Building Official, Town of Markham.

APPLICANT

Wallman, Clewes, Bergman Architects Ltd.

RESPONDENT

Mr. John Wright
Chief Building Official
Town of Markham

PANEL

Sarah Maman, Chair
Demir Delen
Kenneth Bacon

PLACE

Toronto, Ontario

APPEARANCES

Mr. Jonathan Rubes, P. Eng.
Leber/Rubes Inc. for applicant
Mr. Chris Bird, Manager, Plans Review
Town of Markham for respondent

DATE OF RULING

May 31st, 1994

RULING

1. **The Applicant**

   Mr. Peter Clewes, Wallman, Clewes, Bergman Architect Ltd. is an applicant for a permit under the Building Code Act, 1992 to construct a two storey mixed use commercial building at the northeast corner of Kennedy Road and Steeles Avenue East, Markham, Ontario.

2. **Description of Construction**

   The applicant is proposing to construct a two storey mixed use commercial building. The main floor will contain a market style retail layout and the second floor will contain restaurants. Each unit on the main floor will face a circulation aisle either 3 m or 5 m wide and at least one 2-1/2 m cross aisle, with no fire separation between units nor between units and circulation and cross aisles (i.e. similar to a department store). Each unit location has been sold as a condominium.

   The proposed building has a building area of 15,600 m2. The main and second floors will be interconnected as permitted by the Building Code.

   The entire building perimeter will face fire access routes, although the Building Code requires only 50 percent of this building perimeter to face a fire route.

   A single-stage fire alarm system will be installed. The fire alarm system will be monitored by an independent central station. The sprinkler system will be designed to function as part of the required fire detection system.

   An automatically activated smoke exhaust system will be provided for the main floor, although not required by the Building Code.

   Partitions between units will range from 2.4 to 3 m high. A security grill will be provided between units and circulation aisles permitting a view into units after business hours. The top of the unit will either be open or have an egg-crate type ceiling.

3. **Dispute**

The dispute between the Applicant and Respondent concerns sufficiency of compliance with Article 3.3.1.1. and Clause 3.3.1.4.(1)(c) the Building Code. At issue is the proposed ground floor market style retail layout with no fire separation between kunits nor between units and circulation routes where the corridor widths are 5 m or less in width.

4. **Provision of the Building Code**

Article 1.1.3.2. Definition of Suite

Suite means a single room or series of rooms of complementary use, operated under single tenancy, and includes dwelling units, individual guest rooms in motels, hotels, boarding houses, rooming houses and dormitories as well as individual stores and individual or complementary rooms for business and personal services occupancies.

Clause 3.3.1.4.(1)(c) Public Corridor Separations

(1) Except as otherwise required in this Part, public corridors shall be separated from the remainder of the building by a fire separation having a fire-resistance rating of not less than 1 hour except that (a) the fire-resistance rating need not be more than 45 min when the fire resistance rating of the floor assembly is not required to be more than 45 min, (b) no fire-resistance rating is required when the floor area is sprinklered and the corridor does not serve an institutional occupancy or a residential occupancy, (c) no fire separation is required in a sprinklered floor area where, (i) the corridor is more than 5 m in unobstructed width, and (ii) the corridor does not serve an institutional occupancy or a residential occupancy,(d) a floor assembly above a crawl space that is not considered a basement in Sentence 3.2.2.5.(2) is not required to be a fire separation, and (e) no fire separation is required in a sprinklered floor area where an occupancy in the corridor conforms to the requirements of Sentence 3.3.1.9.(6).

5. **Applicant's Position**

The applicant stated that it is reasonable to consider the proposed market style retail floor to be similar to a department store or other indoor market style layout.

The applicant said that the inherent level of safety in the building design (i.e. high ceiling and large floor area), the proposed smoke exhaust system, egress layout and evacuation time based on the results of the ASETBX simulation will provide a level of safety commensurate with that required by the Building Code.

6. **Chief Building Officials Position**

The respondent stated that each condominium unit is a suite and therefore subject to the applicable Building Code requirements.

The applicant proposes an arrangement of suites separated by aisles varying in width from 2.5 m to 5.0 m. The respondent considers these isles to be public corridors subject to Section 3.3 of the Building Code.

The respondent said that no fire separation is provided between units nor between units and the public corridor as required by the Building Code.

The respondent does not have the authority to issue a building permit for a condition that deviates from the Building Code and the use of equivalents regulated by Section 2.7 is not applicable.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that not providing fire separations between units, and units and circulation routes where the width is 5 m or less shows sufficiency of compliance provided:

i) The height of the partition walls between units does not exceed 3 m.

ii) Security closures separating units from the circulation corridors permit the interior of each unit area to be visible and will not exceed 3 m in height.

iii) Cross aisles that have been provided are maintained.

8. **Reasons:**

1. The egress layout using aisles and cross aisles exceeds the requirements of the Building Code.

2. The exit capacity has been designed to accommodate two times the occupant load permitted by the Building Code.

3. The high ceiling with the smoke exhaust system enhances the level of safety.

Dated at Toronto this 31st day in the month of May in the year 1994 for application number 1994-20.

BCC Ruling No. 94-13-391

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-13-391

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*. AND IN THE MATTER OF Clause 9.9.9.3.(1)(a) of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Douglas Hardie Architect Inc. for the resolution of a dispute with Mr. Norman Douglas, Chief Building Official, City of Ottawa.

APPLICANT

Douglas Hardie Architect Inc.

RESPONDENT

Mr. Norman Douglas
Chief Building Official
City of Ottawa

PANEL

Sarah Maman, Chair
Demir Delen
Kenneth Bacon

PLACE

Toronto, Ontario

APPEARANCES

Mr. Franco Marino, President
Dimar Construction for applicant

DATE OF RULING

May 31st, 1994

RULING

1. **The Applicant**

   Douglas Hardie Architect Inc. is the Applicant for a permit under the Building Code Act, 1992 to construct an addition to an existing apartment building, located at 450 MacLaren Street and 334 Kent Street, Ottawa, Ontario.

2. **Description of Construction**

   The applicant is proposing to construct a two storey dwelling unit on top of an existing one storey portion of a renovated three storey apartment building. The only means of egress from the proposed dwelling unit is an exterior stair leading to ground. The stair is connected to existing decks serving other dwelling units. There are 6 unprotected openings that are exposed to the exterior stair.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Clause 9.9.9.3.(1)(a) of the Building Code. At issue is the proposed use of a second storey balcony as a second and separate means of egress for the proposed single dwelling unit addition to the existing building.

   The existing building was recently renovated into a 10 unit apartment building under the provisions of Part 11 of the Building Code. The second exit for four of these apartments is provided by using their balcony as an area of refuge. The Applicant is requesting that this principle be extended to the addition for the new proposed 2 storey dwelling unit.

4. **Provision of the Building Code**

   Sentence 9.9.9.3.(1) Shared Egress Facilities

   (1) A dwelling unit shall be provided with a second and separate means of egress where an egress door from the dwelling unit opens onto (a) an exit stairway serving more than 1 suite, (b) a public corridor serving more than one suite served by a single exit stairway, (c) an exterior passageway serving more than one suite and served by a single exit stairway, or (d) a balcony serving more than one suite and served by a single exit stairway.

5. **Applicant's Position**

   The Applicant stated that proposed dwelling unit addition is to a building with considerable heritage character which was recently renovated into an apartment building under the provisions of Part 11 of the Building Code. The renovation left the exterior virtually untouched preserving the character of the building. As part of the renovation the second exit for 4 apartments was provided by the use of their balcony as an area of refuge.

   The Applicant requested that this principle be extended to the proposed 2 storey dwelling unit addition which is designed to maintain the character of the building. The second exit from the unit would be provided by using a balcony as an area of refuge.

6. **Chief Building Officials Position**

   The respondent stated that the applicant has applied for a building permit to construct a dwelling unit addition served by a shared exterior exit stair and second floor balcony as an area of refuge.

   Sentence 2.1.1.6.(2) of the Building Code allows for the application of Part 11 provisions to additions that have been in existence less than 5 years where the building has existed for at least 5 years. If the addition qualified under this provision the egress facilities proposed for the dwelling unit would satisfy the requirements of Part 11.

   Furthermore, the respondent stated that although they were sympathetic to heritage concerns they do not have the authority to accept the proposal given that the addition is not existing and is thereby regulated by Part 9 in accordance with Article 2.1.1.3. of the Building Code.

7. **Commission Ruling:**

   In favour of the Respondent. It is the decision of the Building Code Commission that the existing arrangement for the proposed two storey dwelling addition does not show sufficiency of compliance.

8. **Reason:**

   The exterior stair is exposed by unprotected openings.

Dated at Toronto this 31st day in the month of May in the year 1994 for application number 1994-18.

BCC Ruling No. 94-12-390

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-12-390

IN THE MATTER OF Subsection 24(1) of the Building Code Act, 1992. AND IN THE MATTER OF Clause 3.3.4.2.(2)(c) of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Reg. 400/91 (the "Building Code").

AND IN THE MATTER OF an application by 819636 Ontario Inc. for the resolution of a dispute with Mr. Ray Newman, Chief Building Official, Town of Ajax.

APPLICANT

819636 Ontario Inc.

RESPONDENT

Mr. Ray Newman
Chief Building Official
Town of Ajax

PANEL

Sarah Maman, Chair
Demir Delen
Kenneth Bacon

PLACE Toronto, Ontario

APPEARANCES

Mr. Stephen Bernatt, President
Stephen Bernatt Architect Inc. for applicant

DATE OF RULING

May 31st, 1994

RULING

1. **The Applicant**

   The applicant, 819636 Ontario Inc. is the holder of a permit issued under s.5(1) of the Building Code Act, R.S.O. 1990, Chap. B13 to construct a residential apartment building at 132 Kingston Road West, Ajax, Ontario.

2. **Description of Construction**

   The applicant constructed a 10 storey residential apartment building containing 86 suites. The 1st, 2nd, 3rd and 4th floors of the building contain 2 storey suites, with entrances on 1st and 3rd levels. The building was designed under Article 3.2.2.38. of the Building Code and is not sprinklered.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Clause 3.3.4.2.(2)(c) the Building Code. At issue is the fire resistance rating of the corridor/suite wall of the two storey units.

   The fire separation between the public corridors and the adjacent 2 storey suites was constructed to have a 1 hour fire resistance rating. According to Clause 3.3.4.2.(2)(c), a 2 hour fire resistance rating is required for unsprinklered buildings more than 6 storeys in building height.

4. **Provision of the Building Code**

   Sentence 3.3.4.2.(2) Fire Separations

   Floor assemblies within a dwelling unit need not be constructed as fire separations provided the distance between the lowest floor level and the uppermost floor level within the dwelling unit is not more than 6 m and provided that the dwelling unit is separated from the remainder of the building by a fire separation having a fire resistance rating of not less than
   (a) 45 min where the building is sprinklered and is not more than 3 storeys in building height,
   (b) 1 h where the building is sprinklered or is not more than 6 storeys in building height, and
   (c) 2 h where the building is not sprinklered and is more than 6 storeys in building height.

5. **Applicant's Position**

A total of 9 two storey suites exist on levels 1 to 4 of the 10 storey building. The corridor/suite wall of the two storey units is constructed as a 1 h fire separation and a building permit was issued on that basis and is now occupied.

The fire separation between the 2 storey units and the corridor consists of 2 layers of 16 mm type X gypsum board on one side of 92 mm metal studs at 600 mm o.c., with one layer of 16 mm type X gypsum board on the other side. The cavity is filled with fibreglass insulation.

The Chief Building Official is now requiring a 2 h fire separation for the corridor/suite wall in question.

The Applicant feels there is no increase in hazard by having 2 storey dwelling units on floors 1 to 4 of a 10 storey building compared to having the same situation in a 6 storey building, since floors above the 4th floor are 2 h rated fire separations.

6. **Chief Building Official's Position**

A building permit and occupancy permit were issued by the Town of Ajax based on plans that showed a 1 h fire separation for the corridor/suite wall separating the two storey units on levels 1 to 4.

It was later brought to the attention of the Chief Building Official that a 2 h fire separation was required by the Building Code. An order to comply was issued under s.12(2) of the Building Code Act requiring a 2 hour fire separation between the public corridor and suite.

The Chief Building Official agrees with the Applicant's submission.

7. **Commission Ruling:**

In favour of the Applicant. It is the decision of the Building Code Commission that the 1 hour rated fire separation between the corridor and 2 storey suites on levels 1 to 4 provides sufficiency of compliance with the Building Code provisions in this particular situation.

8. **Reasons:**

i) There is no increased hazard by compartmentalizing the 2 storey units on floors 1 to 4 by a 1 h separation in a 10 storey building, provided the floors above the 4th storey are 2 h rated fire separations. ii) Building complies with all other provisions of the Ontario Building Code.

Dated at Toronto this 31st day in the month of May in the year 1994 for application number 1994-14.

BCC Ruling No. 94-11-389

BUILDING CODE COMMISSION DECISION ON B.C.C. # 94-11-389

IN THE MATTER OF Subsection 24(1) of the Building Code Act, 1992.

AND IN THE MATTER OF Clause 9.14.2.1.(2.1)(c) of Revised Regulations of Ontario 1990, Regulation 61, as amended by O.Reg. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Anthony Gubbels for the resolution of a dispute with Mr. R. Cerminara, Chief Building Official, City of London.

APPLICANT

Mr. Anthony Gubbels

RESPONDENT

Mr. R. Cerminara
Chief Building Official
City of London

PANEL

Sarah Maman, Chair
Michael Lio
David Lam

PLACE

Toronto, Ontario

APPEARANCES

Mr. Robert Platts, P.Eng., Technical
Consultant, Big "O" Inc. for applicant

DATE OF RULING

May 24th, 1994

RULING

1. **The Applicant**

   The Applicant, Mr. Anthony Gubbels is the holder of a permit issued under s.8(1) of the Building Code Act, 1992 to construct a single family dwelling at 300 Dufferin Avenue, London, Ontario.

2. **Description of Construction**

   The applicant is proposing to construct a single family house with a basement foundation.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns sufficiency of compliance with Clause 9.14.2.1.(2.1)(c) of the Building Code. Also at issue is the proposed use of a System Platon membrane as both dampproofing in accordance with Section 9.13 and as a drainage layer in accordance with Section 9.14.

4. **Provision of the Building Code**

   Sentence 9.14.2.1.(2.1) Foundation Wall Drainage (2.1) The drainage layer required in Sentence (2) shall be provided by (a) not less than 19 mm mineral fibre insulation with a density of not less than 57 kg/m3; (b) not less than 100 mm of free drainage granular material; or, (c) a system which can be shown to provide equivalent performance to that provided by the materials described in Clauses (a) or (b).

5. **Applicant's Position**

   The applicant stated that System Platon has been well and properly presented, evaluated and in fact accepted as meeting Clause 9.14.2.1.(2.1)(c) and other Building Code provisions intended to keep basements dry. Reference was made to the following evaluations: (a) CCMC 12266-R of 26 July 1991; (b) BMEC 91-6-154 of 13 November 1991; and, (c) Housing Development and Buildings Branch Opinion of 11 February 1994.

6. **Chief Building Officials Position**

The respondent stated that there was insufficient information to determine if the product provided equivalent performance to the materials specified in Clause 9.14.2.1.(2.1)(a)&(b). The respondent said that he could not determine whether the Building Materials Evaluation Commission authorization (No. 91-6-154) of the Platon System as a dampproofing membrane applied when the product is used as a drainage layer.

7. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that the use of System Platon shows sufficiency of compliance with the Building Code as a dampproofing and drainage layer system.

8. **Reason:**

   Based on the information provided, System Platon has been determined to provide equivalent performance to materials specified in Clause 9.14.2.1.(2.1)(a) and (b).

Dated at Toronto this 24th day in the month of May in the year 1994 for application number 1994-15.

BCC Ruling No. 94-10-388

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-10-388

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Sentence 3.1.5.11.(5) of Revised Regulations of Ontario 1990, Regulation 61, as amended by O.Reg. 400/91 (the"Building Code").

AND IN THE MATTER OF an application by Stoney Creek Non-Profit Housing Corporation for the resolution of a dispute with Mr. Henry Dekker, Chief Building Official, City of Stoney Creek.

APPLICANT

Stoney Creek Non-Profit Housing Corporation

RESPONDENT

Mr. Henry Dekker
Chief Building Official
City of Stoney Creek

PANEL

Sarah Maman, Chair
Michael Lio
David Lam

PLACE

Toronto, Ontario

APPEARANCES

Ms. Cynthia Zahoruk
Lorne Haverty Ltd. Architect for applicant

Mr. Robert Milligan, Supervisor of Inspections
and Mr. Collin Potter, Plans Examiner, City of Stoney Creek for respondent

DATE OF RULING

May 24th, 1994

RULING

1. **The Applicant**

   The Applicant, Stoney Creek Non-Profit Housing Corporation is the holder of a permit under s.5(1) of the *Building Code Act, R.S.O. 1990*, Chap. B13 to construct a residential apartment building at 971 Queenston Road, Stoney Creek, Ontario.

2. **Description of Construction**

   A building permit was issued on November 2, 1992 to constructed a 7 storey noncombustible residential apartment building containing 93 suites. The building was designed under Article 3.2.2.38. of the Building Code and is not sprinklered.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns the interpretation of Sentence 3.1.5.11.(5) of the Building Code. The portion of the building that is subject to the dispute is a sloping roof top enclosure which contains a mechanical room and a sheltered attic space which contains anchors for the window cleaning system.

   At issue is the 4 inch thick foamed plastic insulation having a flame spread rating of 100 applied to the floor of this enclosure, excluding the floor of the mechanical room, to insulate the ceiling of the heated space below the floor.

   An order to comply was issued on January 13, 1994 requiring the removal of the foamed plastic insulation.

4. **Provision of the Building Code**

   Sentence 3.1.5.11.(5) Combustible Insulation and its Protection (5) Combustible insulation, including foamed plastics, installed above roof decks, outside of foundation walls below ground level and beneath concrete slabs-on-ground is permitted to be used in a building required to be of noncombustible construction.

5. **Applicant's Position**

   The applicant stated that the combustible insulation should be allowed to remain in place without the protection outlined in any other part of Article 3.1.5.11. since Sentence 3.1.5.11.(5) allows combustible insulation above the roof deck.

6. **Chief Building Officials Position**

   The respondent stated that Sentence 3.1.5.11.(5) of the Building Code is only intended to apply to a flat roof surface which is exposed to the elements. In this building, the attic or roof space includes an enclosed mechanical room. Anyone attempting access to exit could be exposed to excessive smoke development if a fire occurred in the mechanical room area. The appropriate Building Code references are Sentence 3.1.5.11.(2) and 3.1.13.8.(1)(b).

7. **Commission Ruling:**

   In favour of the Respondent. It is the decision of the Building Code Commission that the present construction does not comply with the Building Code.

8. **Reasons:**

   1. The surface on which the foam plastic is resting on should be considered a floor assembly, since the space in question is enclosed and provides access to the mechanical room. The sloping metal deck should be considered the roof assembly.

   2. The present code does not address the use of combustible insulation having a flame spread rating greater than 25, but not more than 500 on the top of a floor of an assembly. It is our opinion that the use of foam plastic having a flame spread rating of 100 on the top of a floor assembly protected in accordance with 3.1.5.11.(3) provides a comparable level of risk as when the foam plastic is used on an exterior wall.

Dated at Toronto this 24th day in the month of May in the year 1994 for application number 1994-10.

BCC Ruling No. 94-09-387

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-09-387

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 3.1.5.11.(6) of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Claudio Cavalieri, Project Manager, Internorth Construction Company Limited for the resolution of a dispute with Mr. Alan Evans, Chief Building Official, City of Brampton.

APPLICANT

Internorth Construction Company Limited

RESPONDENT

Mr. Alan Evans
Chief Building Official
City of Brampton

PANEL

Sarah Maman, Chair
Sang Shim
Rick Florio

PLACE

Toronto, Ontario

APPEARANCES

Mr. W. Strand, President
Zer-O-Loc Enterprises Limited for applicant

Mr. Len Exley, P. Eng.
Zer-O-Loc Enterprises Limited for applicant

Mr. John W. Jones, P.Eng.
Internorth Construction Company Limited for applicant

Ms. Brenda Campbell, Supervisor of Plans and
Permits, City of Brampton for respondent

Mr. Danny Hui, Building Code Advisor,
Ministry of Housing.

DATE OF RULING

April 25th, 1994

RULING

1. **The Applicant**

   The Applicant, Mr. Claudio Cavalieri, Internorth Construction Company Limited is the holder of a permit issued under the *Building Code Act, 1992* to construct a building at 107 Walker Road, Brampton, Ontario.

2. **Description of Construction**

   A building permit was issued on November 18, 1993 to construct a cold-storage warehouse and office building at 107 Walker Drive, Brampton, Ontario. The building is classified as Group F Division 2 and is designed according to Article 3.2.2.53 of the Building Code. The building is required to be noncombustible construction.

   1. **Dispute**

      The dispute between the Applicant and Respondent concerns sufficiency of compliance with Sentence 3.1.5.11.(6) of the Building Code. The applicant used Zer-O-Loc Panels on the exterior walls of the building. These factory assembled exterior wall panels use expanded polystyrene insulation material rather than thermosetting plastic material required by Sentence 3.1.5.11.(6) of the Building Code.

2. **Provision of the Building Code**

Sentence 3.1.5.11.(6) Thermosetting Foamed Plastic Insulation (6) Thermosetting foamed plastic insulation having a flame-spread rating of not more than 500 which forms part of a factory-assembled exterior wall panel that does not incorporate an air space is permitted to be used in a building required to be of noncombustible construction provided:

(a) the foamed plastic is protected on both sides by sheet steel not less than 0.38 mm thick which will remain in place for not less than 10 minutes when the wall panel is tested in conformance with CAN4-S101-M, Standard Methods of Fire Endurance Tests of Building Construction and Materials,

(b) the flame spread rating of the wall panel, determined by subjecting a sample including an assembled joint to the appropriate test described in Subsection 3.1.12., is not more than the flame-spread rating permitted for the room or space which it bounds,

(c) the building does not contain a Group B or Group C major occupancy, and

(d) the building is not more than 18 m high, measured between grade and the floor of the uppermost storey.

3. **Applicant's Position**

The applicant stated that the use of Zer-O-Loc panel system complies with Sentence 3.1.5.11.(6) of the Building Code except that the insulation is not thermosetting. The applicant provided information indicating that expanded polystyrene foamed plastics used as the core of an exterior wall panel system in a fully sprinklered building does not create a greater fire hazard than a thermosetting foamed plastic wall panel system.

4. **Chief Building Officials Position**

The respondent stated that the use of Zer-0-Loc panels does not meet all the conditions in Sentence 3.1.5.11.(6) of the Building Code. In order to accept the installation of the Zer-O-Loc panels under Section 9 of the Building Code Act and Section 2.7 of the Building Code the Chief Building Official must be satisfied that it will provide the level of performance that would be achieved by conformance with the requirements of the building code. The respondent stated that the information submitted did not provide assurance of this.

5. **Commission Ruling:**

   In favour of the Applicant. It is the decision of the Building Code Commission that the use of expanded polystyrene insulation material which forms part of a factory-assembled exterior wall panel that does not incorporate an air space is acceptable in a building required to be of noncombustible construction.

6. **Reasons:**

   1. The building will be fully sprinklered so that any fire involving the melted polystyrene will be controlled. 2. The panels conform to Clauses (a),(b),(c) and (d) of Sentence 3.1.5.11.(6) of the Ontario Building Code. 3. The expanded polystyrene has a flamespread rating of less than 150.

Dated at Toronto this 25th day in the month of April in the year 1994 for application number 1994-13.

BCC Ruling No. 94-08-386

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-08-386

IN THE MATTER OF Subsection 24(1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 3.1.6.3.(2) of Revised Regulation of Ontario 1990, Regulation 61, as amended by O.Regs. 400/91, 158/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Ian Farley, Secretary- Treasurer, Royal City Tennis Club Corporation for the resolution of a dispute with Mr. Ron Lefneski, Chief Building Official, City of Guelph.

APPLICANT

Royal City Tennis Club Corporation

RESPONDENT

Mr. Ron Lefneski
Chief Building Official
City of Guelph

PANEL

Sarah Maman, Chair
Sang Shim
Rick Florio

PLACE

Toronto, Ontario

APPEARANCES

Mr. Ian Farley, Secretary-Treasurer
Royal City Tennis Club Corporation
For the applicant

Mr. James E. Fryett, Architect,
James Fryett Architect for Applicant
Mr. Gordon Dalziel, Airstruc Technology Inc.
For the applicant

Mr. Paul Moore, Senior Plans Examiner,
City of Guelph for the respondent

Mr. Danny Hui, Building Code Advisor,
Ministry of Housing.

B>DATE OF RULING

April 25th, 1994

RULING

1. The Applicant

The Applicant, Mr. Ian Farley, Royal City Tennis Club Corporation has applied for a permit under the Building Code Act, 1992 to construct a building at 70 Municipal Street, Guelph, Ontario.

2. Description of Construction

The applicant is proposing to construct a year round tennis facility comprising a clubhouse facility attached to an air- supported structure covering six tennis courts.

3. Dispute

The dispute between the Applicant and Respondent concerns sufficiency of compliance with Sentence 3.1.6.3.(2) of the Building Code. At issue is the separation between the clubhouse and the air-supported structure. Sentence 3.1.6.3.(2) of the Building Code does not permit the air-supported structure to be erected closer than 3 metres to the clubhouse. In addition, the buildings must be sufficiently distance from one another to provide an area to be used as a means of emergency egress.

4. Provision of the Building Code

Sentence 3.1.6.3.(2) Clearance to Other Structures

(2) Tents and air-supported structures shall not be erected closer than 3 metres to other structures on the same property except as provided in Sentence (3) and (4), and shall be sufficiently distant from one another to provide an area to be used as a means of emergency egress.

5. Applicant's Position

The proposed construction of the clubhouse facility and attached air-supported structure does not appear to comply with the requirements of Article 3.1.6.3.(2) of the Building Code. The following compensating safety features are proposed in lieu of the required 3 metre distance separation:

i. The clubhouse will be fully sprinklered in accordance with NFPA-13 and be non-combustible construction.
ii. Window sprinklers authorized by the Building Materials Evaluation Commission (BMEC) shall be installed on all perimeter windows of the clubhouse which are adjacent to the air-supported structure.
iii. An audible warning device shall be installed to warn occupants of a collapse of the air-supported structure.
iv. The air-supported structure and clubhouse will conform to the Building Code in all other aspects.
v. Occupancy for the air-supported structure and clubhouse shall be limited to only tennis functions. The occupant load shall be as follows:

Air-supported Structure

Total Maximum occupant load 48
Normal average occupant load 18

Clubhouse

Total Maximum occupant load 80
Normal average occupant load 18

The following reasons were given by the applicant in support of their request for approval:

i. The structure does not create a hazard to the public due to the following:
    a. Non-combustible construction of the clubhouse;
    b. Fully sprinklered clubhouse; and,

c. Air-supported structure and clubhouse have low fire load, low occupancy load, portable fire extinguishers as per code, exits as per code, and fire access and hydrant as per code.

ii. The Building Code Commission has ruled in favour of the applicant, with respect to the same issue, on at least two other occasions.

iii. The City of Guelph Building Department does not oppose this application.

6. Chief Building Officials Position

The respondent stated that Sentence 3.1.6.3.(2) of the Building Code specifically prohibits any structure to be located within 3 metres of an air-supported structure. The respondent said the building department was aware that there have been several previous rulings on a similar issue, but it was their understanding that previous Building Code Commission rulings are site specific. Also their interpretation of Section 2.7 of the Building Code did not provide authority to accept this system as an equivalent.

7. Commission Ruling:

In favour of the Applicant. It is the decision of the Building Code Commission that having no spatial separation between the clubhouse and the air-supported structure shows sufficiency of compliance.

8. Reason:

The clubhouse will be separated from the air-supported structure by a fire separation and all openings will be protected. In this manner fire containment will be achieved.

Dated at Toronto this 25th day in the month of April in the year 1994 for application number 1994-09.

BCC Ruling No. 94-07-385

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-07-385

IN THE MATTER OF Subsection 24(1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 9.10.14.1. of the O. Reg. 419/86, as amended by O.Reg. 183/88, 581/88, 114/89 and 115/89 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Dominic Di Paola for the resolution of a dispute with Mr. Michael Nixon, Chief Building Official, City of Toronto.

APPLICANT

- Mr. Dominic Di Paola

RESPONDENT

- Mr. Michael Nixon
  Chief Building Official
  City of Toronto

PANEL

- Sarah Maman, Chair
- Michael Lio
- David Lam

PLACE Toronto, Ontario

APPEARANCES

- Mr. Edward Ofosu-Barko, Building Engineer,
  City of Toronto, for Respondent

DATE OF RULING May 24th, 1994

RULING

1. The Applicant

The Applicant, Mr. Dominic Di Paola, is the holder of a permit issued under s.5(1) of the Building Code Act, R.S.O. 1980, Chap. 51 to construct an addition to a single family house at 303 Evelyn Avenue, Toronto, Ontario.

2. Description of Construction

The applicant constructed a two storey addition to a single family house. The limiting distance of the north exposing building face is 1.2 metres from the property line.

3. Dispute

The dispute between the Applicant and Respondent concerns the interpretation of Article 9.10.14.1. of the Building Code. At issue is the percentage of unprotected openings in the north exposing building face of the addition. Table 9.10.14.A. identifies the maximum percentage of unprotected openings in an exposing building face with a limiting distance of 1.2 metres to be 7 percent.

The drawings that formed the basis of permit issuance did not indicate any openings on the north elevation of the addition. An order to comply was issued on June 15, 1993 by the City of Toronto requiring compliance with the drawings.

4. Provision of the Building Code

Article 9.10.14.1., Maximum Percentage of Unprotected Openings

Except as provided in Articles 9.10.14.2. to 9.10.14.7., the maximum percentage of unprotected openings in an exposing building face shall conform to Table 9.10.14.A. or to Subsection 3.2.3., which is the least restrictive for the occupancy being considered. The area of an exposing building face shall be calculated as the total area of exterior wall facing in 1 direction on any side of a building measured from the finished ground to the uppermost ceiling, except that where a building is divided by fire separations into fire compartments, the area of exposing building face may be calculated for each fire compartment provided such separations have not less than a 2 h fire-resistance rating in the case of mercantile and medium hazard industrial occupancies and 3/4 h for other occupancies.

5. Applicant's Position

The applicant wishes to provide more than 7 percent unprotected openings on the north exposing building face. No supporting documentation or design justification for exceeding the 7 percent criteria was submitted for consideration.

6. Chief Building Officials Position

The plans accompanying the application for a building permit indicated no openings on the north elevation of the addition. The building permit was issued on July 31, 1990.

The respondent stated that the percentage of unprotected openings on the north elevation does not comply with Building Code requirements. The applicant was advised of solutions to reduce the area of unprotected openings.

7. Commission Ruling:

In favour of the Respondent. It is the decision of the Building Code Commission that the amount of unprotected openings on the north elevation does not comply with the Building Code.

8. Reason:

The Applicant has not proposed any alternative method to permit the amount of unprotected opening on the north elevation to exceed 7%, as calculated using Table 9.10.14.A.

Dated at Toronto this 24th day in the month of May in the year 1994 for application number 1994-06.

BCC Ruling No. 94-06-384

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-06-384

IN THE MATTER OF Subsection 24(1) of the Building Code Act, 1992.

AND IN THE MATTER OF Articles 9.9.2.7. and 3.7.1.2. of Ontario Regulation 413/90 as amended by O.Regs. 400/91, 159/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Gordon Mason, President, Masfal Construction Limited for the resolution of a dispute with Mr. Jeff Chalmers, Chief Building Official, City of Peterborough.

APPLICANT

- Mr. Gordon Mason, President
  Masfal Construction Limited

RESPONDENT

- Mr. Jeff Chalmers
  Chief Building Official
  City of Peterborough

PANEL

- Sarah Maman, Chair
- Demir Delen
- Remus Tsang

PLACE Toronto, Ontario

APPEARANCES

- Mr. Gordon Mason, President
  Masfal Construction Limited for applicant

- Mr. Jeff Chalmers, Chief Building Official
  and Mr. Robert Waldron, Building Inspector,
  City of Peterborough for respondent

DATE OF RULING March 29th, 1994

RULING

1. The Applicant

The Applicant, Mr. Gordon Mason, is the holder of a permit issued under the Building Code Act, 1992 to renovate a building at 166 Brock Street and 441 George Street North, Peterborough, Ontario.

2. Description of Construction

The Applicant extensively renovated the interior of two existing 100 year old two storey buildings located at 166 Brock Street and 441 George Street North. The first storey of each building was used as a mercantile occupancy and the second storey for apartments. There was no proposed change of occupancy. The proposed construction falls under Part 9 of the Building Code.

3. Dispute

The dispute between the Applicant and Respondent concerns an interpretation of Section 3.7 Barrier-Free Design of the Building Code. During the process of extensively renovating the interior of the buildings the Applicant reconstructed the store fronts in one building and replaced the doors in the second and did not provide barrier free access to some units on the first storey.

4. Provision of the Building Code

Article 9.9.2.7. Barrier-Free Path of Travel

"(1) Except as provided in Sentence (3), every building shall be designed to provide for a barrier-free path of travel in conformance with Section 3.7.
(2) Where the barrier-free path of travel required in Sentence (1) is provided to any storey above the first storey, the requirements in Article 3.3.1.7. shall apply.

(3) The barrier-free path of travel described in Sentence (1) need not be provided for houses including semi-detached houses, duplexes, triplexes, town houses, row houses and boarding, or rooming houses with fewer than 8 boarders or roomers."

Article 3.7.1.2. Entrances

"(1) Except as required in Sentence (2), every building in Article 3.7.1.1. shall have at least one entrance intended for general use by the public or the occupants designed in conformance with Article 3.7.3.3. and opening to the outdoors at sidewalk level or to a ramp conforming to Article 3.7.3.4. leading to a sidewalk.
(2) Where a suite of Group A, D or E occupancy is contained on the first storey of a building or on a storey to which a barrier-free path of travel is provided, and is completely separated from the remainder of the building so that there is no access to the remainder of the building, such suite shall have at least one barrier-free entrance in conformance with Sentence (1)."

5. Applicant's Position

The applicant did not provide barrier free access in accordance with Section 3.7 of the Building Code for the following reasons:

1. The stores did not have barrier free access prior to the renovation;
2. The floors in the units where barrier free access was not provided were left in place as originally constructed and are not level with the sidewalk; and,
3. The existing store fronts are directly against the sidewalk and offer no opportunity to facilitate barrier free access.

6. Chief Building Officials Position

The respondent stated that the existing exterior door\frame assembly and porch were removed and reconstructed at the rear entrance to 166 Brock Street. This was part of the major "gut renovation" project which required vacant possession of the building. The accessibility of this entrance was further reduced as a result of lowering the lot grade.

At 441 George Street North, the store fronts were completely reconstructed as part of another "gut renovation" project. The respondent stated that the door sill heights at entrances could have been coordinated with the City sidewalk reconstruction.

7. Commission Ruling:

In favour of the Applicant. It is the decision of the Building Code Commission that the units on the first storey of 166 Brock Street and 441 George Street North that have not been provided with barrier free access complies with the Building Code.

8. Reasons:

1. In the case of 166 Brock Street only the doors were replaced, but the size of the openings and the door frames did not change. There was always an elevation difference between the finished ground and the floor level. As a result there was no substantial change to the exterior to require barrier free access.
2. In the case of 441 George Street North, in order to provide barrier free access to the two mercantile units in question, not only would the store fronts need to be renovated, but the floor would have to be lowered; however, lowering of the floor was not part of the proposed construction.

Dated at Toronto this 29th day in the month of March in the year 1994 for application number 1994-05.

BCC Ruling No. 94-05-383

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-05-383

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, 1992*.

AND IN THE MATTER OF Article 9.10.14.11. of Ontario Regulation 413/90 as amended by O.Regs. 400/91, 159/93 and 160/93 (the "Building Code").

AND IN THE MATTER OF an application by Mr. Robert Sherwood for the resolution of a dispute with Mr. Ken Hunter, Chief Building Official, Town of Goderich.

APPLICANT

Mr. Robert Sherwood, President
Sherwood Developments

RESPONDENT

Mr. Ken Hunter
Chief Building Official
Town of Goderich

PANEL

Sarah Maman, Chair
Demir Delen
Remus Tsang

PLACE

Toronto, Ontario

APPEARANCES

Mr. Robert Ritz, Principal, R. Ritz Architect for applicant

Mr. Fred Pellow, Building Inspector, Town of Goderich for respondent

DATE OF RULING

March 29th, 1994

RULING

1. **The Applicant**

   The Applicant, Mr. Robert Sherwood, is the holder of a permit issued under the Building Code Act, 1992 to construct a building at 52 East Street, Goderich, Ontario.

2. **Description of Construction**

   The Applicant constructed a two storey building intended for first storey business and personal service occupancy and second storey residential occupancy. Both exterior side walls of the building have a limiting distance of zero. The drawings that formed the basis of permit issuance indicated that the exterior side walls would be constructed of concrete block with steel furring and steel cladding. This was later changed to wood studs and vinyl cladding without prior notification or approval of the Chief Building Official.

3. **Dispute**

   The dispute between the Applicant and Respondent concerns an interpretation of the technical requirements of the Building Code. The Applicant proposed to move the location of both side property lines to the centre line of the exterior concrete block walls by means of a legal agreement, easement or severance, thereby eliminating the need for noncombustible cladding on the firewall.

4. **Provision of the Building Code**

   Article 9.10.14.11. Construction of Exposing Building Face

   "Except as permitted in Articles 9.10.14.12. to 9.10.14.16., each exposing building face and any exterior wall located above an exposing building face that encloses an attic or roof space shall be constructed in conformance with Table 9.10.14.B. and Subsection 9.10.8."

5. **Applicant's Position**

The applicant submits that a Party Wall/Firewall constructed on a property line with deeded joint use by both property owners can have combustible cladding on its exterior face.

6. **Chief Building Officials Position**

The respondent submits that the proposal to move the property lines to the centre of the concrete block exterior walls and not remove the combustible cladding does not comply with Article 9.10.14.11. Also, the Chief Building Official did not authorize a change to the drawings that formed the basis on which the permit was issued (BCA ss.8(12)).

7. **Commission Ruling**

In favour of the Respondent. It is the decision of the Building Code Commission that the construction requirements of the exposing building face of a firewall erected at or upon a line separating 2 parcels of land at 52 East Street, Goderich, Ontario does not comply with Article 9.10.14.11.

8. **Reason**

The exposing building face contains combustible cladding.

Dated at Toronto this 29th day in the month of March in the year 1994 for application number 1994-07.

BCC Ruling No. 94-04-382

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-04-382

IN THE MATTER OF BUT NOT LIMITED TO:

Ontario Building Code, O. Reg. 413/90

PART 3,

Sentence 3.3.1.9.(8)

Requirement for a dead end corridor serving an assembly occupancy.

COMMISSION RULING:

In favour of the APPLICANT.

Regarding the question concerning the dead end portion of a second storey public corridor, approximately 4.5 m long, providing access to exit from a proposed private school classroom served by only one egress door, located at 7077 Kennedy Road, Suite 208, Markham, Ontario.

It is the decision of the Building Code Commission that providing smoke detectors in the public corridor connected to the fire alarm annunciator panel provides sufficiency of compliance.

REASONS:

1. The building is provided with a supervised sprinkler system.
2. The smoke detectors will provide early warning of any fire condition in the public corridor.
3. The occupant load will be limited to 19 people including 4 supervisory staff and the maximum occupant load will be posted.
4. The travel distance from the suite door to the exit is not more than 3 metres.

Dated at Toronto this 22nd day in the month of February in the year 1994 for application number 1994-04.

BCC Ruling No. 94-03-381

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-03-381

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, as amended

PART 3,

Clause 3.2.4.8.(1)(h) and Article 3.2.4.16.

Requirements for annunciator zone indication when sprinklers are used in lieu of heat detectors.

COMMISSION RULING:

In favour of the APPLICANT.

Regarding the question concerning annunciator zone indication of sprinklers being used in lieu of heat detectors at Residence St. Louis, 879 Hiawatha Park Road, Gloucester, a 4 storey nursing home having an approximate building area of 4500 metres squared.

It is the decision of the Building Code Commission that the provision of 2 sprinkler zones per floor shows sufficiency of compliance.

REASONS:

1. The smoke detectors in the patient occupied areas are part of an addressable fire alarm system so that prompt identification of the exact fire location has been provided.
2. There are two fully staffed nursing stations on each floor level where patient occupied areas are located.

Dated at Toronto this 22nd day in the month of February in the year 1994 for application number 1994-03.

BCC Ruling No. 94-02-380

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-02-380

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O. Reg, 413/90

PART 3,

Clause 3.2.9.1.(1)

Requirement for standpipe and hose systems.

COMMISSION RULING:

In favour of the APPLICANT.

Regarding the question of whether a standpipe and hose system is required throughout the proposed Bata Shoe Museum located at 327 Bloor Street West in Toronto, being a building three storeys in height with two basement levels, or only in its two basement levels.

It is the decision of the Building Code Commission that a standpipe and hose system is only required on the two basement levels.

REASON:

Sentence 3.2.9.1.(1) of the Ontario Building Code, O. Reg. 413/90 clearly indicates that the standpipe and hose system is only required on the two basement levels.

Dated at Toronto this 22nd day in the month of February in the year 1994 for application number 1994-02.

BCC Ruling No. 94-01-379

BUILDING CODE COMMISSION DECISION ON B.C.C. #94-01-379

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 419/86 as amended

PART 3,

Clauses 3.2.2.26.(2)(b)

Requirement for the fire resistance rating of mezzanines.

COMMISSION RULING:

In favour of the Applicant.

Regarding the fire resistance rating of two mezzanines in a sprinklered mechanical penthouse of the Timmins District Hospital, 700 Ross Avenue East, Timmins, Ontario.

It is the decision of the Building Code Commission that this matter of two poured concrete on metal pan platforms supported by steel supports located in the mechanical penthouse of a sprinklered hospital and used to store or access mechanical and electrical equipment shows sufficiency of compliance.

REASONS:

1. These platforms are intended solely for periodic service and maintenance of equipment; and,
2. The exposed steel supports are protected by an electrically supervised sprinkler system to the local fire department.

Dated at Toronto this 19th day in the month of January in the year 1994 for application number 1994-01.

BCC Ruling No. 93-22-378

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-22-378

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90, as amended

PART 9,

Article 9.29.2.1.

Requirement for waterproof wall finish.

COMMISSION RULING:

In favour of the Respondent.

Regarding the minimum height of waterproof finish required above the rim of a whirlpool tub on a vertical wall 6 inches from the rim, at 61 Raymar Place, Oakville, Ontario.

It is the decision of the Building Code Commission that providing only waterproofing material 4 inches above the whirlpool tub on the vertical wall does not comply with the Ontario Building Code.

REASON:

The existing waterproofing material along the vertical and horizontal does not provide sufficient waterproofing protection.

Dated at Toronto this 20 day in the month of December in the year 1993 for application number A93-24-380.

BCC Ruling No. 93-21-377

BUILDING CODE COMMISSION DECISION ONB.C.C.#93-21-377

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90, as amended

PART 3,

Sentence 3.1.11.2.(1)

Requirements for fire stopping in wall assemblies.

COMMISSION RULING:

In favour of the Applicant.

Regarding the fire stopping in wall assemblies where the insulation within the wall space has a flame-spread rating greater than 25 at Providence Tower, 7900 McLaughlin Road South, Part of East Half of Lot 15, Concession 2, West of Hurontario Street, Brampton, Ontario.

It is the decision of the Building Code Commission that insulation in excess of a 25 flame spread rating within the wall space of a non-combustible building with no fire stopping, provided that there is only one concealed air space that is no more than 25 mm thick, shows sufficiency of compliance with the Ontario Building Code.

REASONS:

1. Test data indicates that the thickness of the air space in the wall cavity is the critical factor to predicting the spread of fire vertically.
2. The foam plastic insulation will be sandwiched between 2 layers of masonry.
3. The National Building Code have permitted this proposal in an interim Code change.

Dated at Toronto this 20 day in the month of December in the year 1993 for application number A93-23-379.

BCC Ruling No. 93-20-376

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-20-376

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90, as amended

PART 9,

Article 9.10.14.1. and Sentence 9.10.14.12.(4).

Maximum percentage of unprotected openings where the spatial separation between dwelling units on adjoining properties is registered on the titles of both properties.

COMMISSION RULING:

In favour of the applicant.

Regarding the registration of a line 2.4 metres south of the property line into a service easement for a length of 17.8 metres on the title of abutting properties to permit an increase in the maximum permitted area of unprotected openings for a Business and Personal Service Occupancy, being Unit 14, Centrepointe Chambers, Block 5, Registered Plan 4M-825, City of Nepean, Regional Municipality of Ottawa Carleton, Ontario.

It is the decision of the Building Code Commission that this matter of increasing the maximum area of unprotected openings by registering a line 2.4 metres south into a service easement for a length of 17.8 metres meets the intent of the Ontario Building Code.

REASONS:

1. This new limiting distance line will be registered on the titles of both properties.
2. The Ontario Building Code already permits this for residential occupancies and there is no reason this principle could not be extended to a Group D Business Occupancy.

Dated at Toronto this 20 day in the month of December in the year 1993 for application number A93-22-378.

BCC Ruling No. 93-19-375

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-19-375

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90, as amended

PART 3,

Clause 3.4.2.3.(1)(a)

Minimum distance between two required exits on a floor area.

COMMISSION RULING:

In favour of the respondent.

Regarding a double swing door in a public corridor separating two exits located at 142-144 Clarence Street, Ottawa, Ontario.

It is the decision of the Building Code Commission that this matter of the deletion of the double swing door in the public corridor does not comply with Sentence 3.4.2.3.(1) of the Ontario Building Code.

REASONS:

The low occupant load is not a consideration in this matter.

Dated at Toronto this 20 day in the month of December in the year 1993 for application number A93-21-377.

BCC Ruling No. 93-18-374

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-18-374

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PART,

Sentence 6.2.3.11.(2)

Prohibiting the circulation of air from one suite to any other suite or to a public corridor or public stairway in a residential occupancy.

COMMISSION RULING:

In favour of the applicant.

Regarding the H.V.A.C. design for the bedrooms on the second and third storey of Covenant House, 20 Gerrard Street East, Toronto

It is the decision of the Building Code Commission that this matter of the recirculating H.V.A.C. system for the bedrooms on the second and third storeys of Covenant House, a support centre for street youth; shows sufficiency of compliance.

CONDITION:

The return air plenum must be separated from the corridor by at least a 3/4 h. fire separation.

REASONS:

1. The building is fully sprinklered and the alarms will be supervised to a central station.
2. The building will be under the strict supervision of Covenant staff, 24 hours per day, who will have unrestricted access to all bedrooms.
3. Duct-type smoke detectors will be provided that will automatically shut off the H.V.A.C. system in the event the fire alarm system is activated.
4. None of the bedrooms have kitchen or washroom facilities.

Dated at Toronto this 01 day in the month of November in the year 1993 for application number A93-20-376.

BCC Ruling No. 93-17-373

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-17-373

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PART,

Clause 9.14.2.1.(2.1)(c) and 9.25.4.9.(2)(c) Foundation Drainage Layer and Insulation of Foundation Walls

COMMISSION RULING:

In favour of the applicant.

Regarding the foundation drainage layer and insulation of foundation walls of a single family residence located on Lot #26, Winder Woods, London, Ontario.

It is the decision of the Building Code Commission that this matter of the use of Styrofoam * PERIMATE * an exterior basement insulation drainage product manufactured by Dow Chemical used to comply with the foundation drainage layer and insulation of foundation wall requirements shows equivalency of performance as outlined in Clauses 9.14.2.1.(2.1)(c) and 9.25.4.9.(2)(c).

REASONS:

1. A series of small scale tests were conducted to compare the drainage performance of mineral fibre insulation and Styrofoam * PERIMATE *. The results indicated that Styrofoam * PERIMATE * provided equivalent drainage performance.
2. Full scale soak tests were conducted on two full height basements insulated with Styrofoam * PERIMATE *. The basements did not leak after a 48 hour soaker hose test.
3. Thermal resistance tests were conducted on Styrofoam * PERIMATE * in accordance with ASTM C-518-85 and C-177-85 to determine the typical R-value. The R-value of 2.5 inch thick Styrofoam * PERIMATE * was found to be greater than 12 which complies with Table 9.25.2.A. of the Ontario Building Code.
4. If this product will be used as a composite insulation system an insulation overlap of at least 2 times the foundation wall thickness will be provided.

Dated at Toronto this 01 day in the month of November in the year 1993 for application number A93-19-375.

BCC Ruling No. 93-16-372

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-16-372

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PART,

Sentence 3.1.6.2.(3) Air-Supported Structures

COMMISSION RULING:

In favour of the applicant.

Regarding an air-supported structure for a golf driving range, 150 Burncrest Road, Markham, Ontario.

It is the decision of the Building Code Commission that this matter of an air-supported golf driving range containing a non- combustible mezzanine occupying under 5% of the floor area shows sufficiency of compliance if the features in the "Reasons" are provided.

REASONS:

1. The mezzanine will be used as a golf driving range and will allow an open view of the floor area below.
2. A continuous horizontal structural member will be installed not less than 4.5 m above the length of the platform walkway to support the roof fabric in case of collapse.
3. The maximum travel distance from any point on the platform to an exit is 30 m.
4. An audible warning device will warn occupants of a collapse of the fabric.

Dated at Toronto this 01 day in the month of November in the year 1993 for application number A93-16-372.

BCC Ruling No. 93-15-371

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-15-371

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PARTS,

Sentence 3.2.8.2.(6) and Clause 3.3.1.4.(1)(c)

Second floor public corridor open to adjacent ground floor space.

COMMISSION RULING:

In favour of the Applicant.

Regarding Building A, 1550 South Gateway Road, Mississauga, Ontario.

It is the decision of the Building Code Commission that this matter of the 2nd floor corridor design which is a minimum of 2 metres in width, open to a two level interconnected floor space and separated from the tenant areas by a non-rated fire separation has sufficiency of compliance.

REASONS:

1. The tenant areas on the second level are separated from the public corridor by a non-rated fire separation.
2. The travel distance from any point in the public corridor to the exit stair is 45 metres.
3. The building is protected by a central station supervised sprinkler system.
4. The present corridor arrangement provides sufficient exiting capacity.

Dated at Toronto this 21 day in the month of October in the year 1993 for application number 93-15-371.

BCC Ruling No. 93-14-370

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-14-370

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PART,

3.2.7.9. Emergency power for building services, water supply for fire fighting.

COMMISSION RULING:

In favour of the respondent.

Regarding Westwood Court Apartment Building, 246 Westwood Road, Guelph, Ontario.

It is the decision of the Building Code Commission that this matter of a newly constructed 4 storey apartment building with standpipe and booster pump shall require an emergency generator for the booster pump capable of providing the required load for a minimum of 30 minutes.

REASONS:

Since hose cabinets have been provided in this building, there is a reasonable expectation on the part of any user of the firehose lines that the required pressure be available. Since the required pressure can only be provided by the booster pump powered by the building's electrical supply which could be interrupted by a fire condition, the booster pump must be connected to an emergency generator.

Dated at Toronto this 21 day in the month of October in the year 1993 for application number 93-14-370.

BCC Ruling No. 93-13-369

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-13-369

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PART,

3.2.7.9. Emergency power for building services, water supply for fire fighting.

COMMISSION RULING:

In favour of the respondent.

Regarding Taylor Evans Public School, 271 Stephanie Drive, Guelph, Ontario.

It is the decision of the Building Code Commission that this matter of a newly constructed 2 storey school with standpipe and booster pump shall require an emergency generator for the booster pump capable of providing the required load for a minimum of 30 minutes.

REASONS:

Since hose cabinets have been provided in this building, there is a reasonable expectation on the part of any user of the firehose lines that the required pressure be available. Since the required pressure can only be provided by the booster pump powered by the building's electrical supply which could be interrupted by a fire condition, the booster pump must be connected to an emergency generator.

Dated at Toronto this 21 day in the month of October in the year 1993 for application number 93-13-369.

BCC Ruling No. 93-12-368

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-12-368

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PARTS, Sentence 3.1.6.3.(2)

COMMISSION RULING:

In favour of the Respondent.

Regarding The Fitness Institute, Ste. 901, Atria II, 2235 Sheppard Avenue East, North York, Ontario.

It is the decision of the Building Code Commission that this matter of spatial seperation for air supported structure does not meet the Code.

REASONS:

Air supported structure shall not be erected closer than 3 m to other structures.

DATED at Toronto this 10th day in the month of August in the year 1993 for application # 93-12-368 on behalf of the BUILDING CODE COMMISSION.

BCC Ruling No. 93-10-366

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-10-366

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PARTS, Sentence 3.2.2.22.(4)

COMMISSION RULING:

In favour of the Applicant.

Regarding St. James High School, 57 Victoria Road North, Guelph.

It is the decision of the Building Code Commission that there is sufficiency of compliance provided that the proposed horizontal extension of 1 hour fire protection to the roof structure from the south wall of the mezzanine and extended for a total of 13.650 m and that the fire protection be returned up to the underside of the roof deck at the north edge of the protection.

REASONS:

The requirement of a 6 m spatial seperation above the main floor as per the Code is met only beyond the north edge of the main floor bleachers.

DATED at Toronto this 10th day in the month of August in the year 1993 for application # 93-10-366 on behalf of the BUILDING CODE COMMISSION:

BCC Ruling No. 93-9-365

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-9-365

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

SENTENCE, 3.4.4.4.(7)

COMMISSION RULING:

In favour of the Respondent.

Regarding 301 Fruitland Road, Stoney Creek, Ontario.

It is the decision of the Building Code Commission that the door from the Bell Canada equipment room shall not open directly into the exit.

REASONS:

1. The Bell Canada equipment room is deemed to be a service room.
2. The existing security system and the proposed additional security system does not provide sufficiency of compliance.

BCC Ruling No. 93-8-364

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-8-364

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

SENTENCE, 3.7.2.3.(1)

COMMISSION RULING:

In favour of the Applicant.

Regarding Suite 505, 6299 Airport Road, Mississauga, Ontario.

It is the decision of the Building Code Commission that there is no need for a barrier free washroom in this suite.

REASONS:

1. This existing building was built prior to the introduction of barrier-free design requirements in the Ontario Building Code
2. None of the entrances to this building comply with the barrier-free entrance design requirements of Section 3.7. of the current Code.

BCC Ruling No. 93-7-363

BUILDING CODE COMMISSION DECISION ON B.C.C. #93--7-363

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PART,

3.2.5.13.(1) Sprinkler Protection in High Pile Storage of Flammable Liquids

COMMISSION RULING:

In favour of the Applicant.

Regarding Flammable Goods Warehouse, BASF Canada Inc., 10 Craig Street, Brantford, Ontario.

It is the decision of the Building Code Commission that this single storey 27,279 sq. ft. flammable liquids warehouse protected by an AFFF sprinkler system with storage up to 28 ft. shows sufficiency of compliance.

REASONS:

1. The ceiling sprinkler density is double that required for rack storage of flammable liquids stored to a height of 25 ft. as per NFPA 30.
2. The travel distance to an exist is 75 ft.
3. There is a watchman on duty 24 hours a day at the guardhouse who makes hourly rounds.
4. The sprinkler system is supervised to the fire department and the guardhouse.
5. The plant operates 24 hours a day.
6. The warehouse is divided into two sections by a parapetted 4 hr. fire separation with 3 hr. fire protection rated closures on all openings.
7. The paid full-time fire department have the expertise to fight a fire at the warehouse and are equipped with AFFF.

BCC Ruling No. 93-6-362

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-6-362

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PART,

3.1.2.1. Classification of Buildings.

COMMISSION RULING:

In favour of the Respondent.

Regarding Furniture Gallery, 175 Dieppe Road, St. Catharines, Ontario.

It is the decision of the Building Code Commission that the occupancy classification for the new 3841 sq. ft. addition to a 16,365 sq. ft. existing building be an "E" mercantile occupancy.

REASONS:

1. It is the intent of the Code that Group "E" mercantile occupancies be buildings and/or parts of buildings where the public can enter to view and/or purchase goods while Group "F-3" storage occupancies be buildings or parts of buildings where the general public is not permitted to enter.
2. This building and the addition will be used as a showroom for furniture samples and orders will be taken from the general public.
3. Since the area open to the public exceeds 10 percent of the total floor area, Group "E" becomes a major occupancy.

BCC Ruling No. 93-5-361

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-5-361

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PARTS,

3.4.6.15.(4) Electro Magnetic Locks

COMMISSION RULING:

In favour of the Applicant.

Regarding Hammerson Canada Inc., 201 City Centre Drive, Mississauga, Ontario.

It is the decision of the Building Code Commission that the requirements of the Code are met in the matter of electromagnetic locking devices that conform to the Code and providing there is compliance to the following:

1.
    a. U.L.C. Standards require that the fire alarm system continue to detect alarm conditions and operate normally under a single ground fault condition such as the common trouble circuits, and
    b. if the electromagnetic locking devices have been designed to immediately release only if there is a double ground fault on the fire alarm detection circuit equivalent to the operation of detection device that would cause the fire alarm system to activate, this design will be considered to have sufficiency of compliance.

REASONS:

While the Code is a minimum requirement, the above maintains security at the highest degree without jeopardizing life safety of the occupants by providing fail safe requirements.

RECOMMENDATION:

That the Ontario Buildings Branch assemble a meeting of all concerned parties to review and amend the Code requirements for all electromagnetic locking devices.

BCC Ruling No. 93-4-360

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-4-360

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PARTS,

3.4.6.15.(4) Electro Magnetic Locks

COMMISSION RULING:

In favour of the Applicant.

Regarding Bank of Canada, Toronto Agency Operation Centre, 5990 Explorer Drive, Mississauga, Ontario.

It is the decision of the Building Code Commission that the requirements of the Code are met in the matter of electromagnetic locking devices that conform to the Code and providing there is compliance to the following:

1.
    a. All electromagnetic locking devices shall be designed and installed to operate as per the requirements of "Lighting and Emergency Power Supply" of the Code, and
    b. the electromagnetic locking devices shall fail safe open on a failure of the primary building power supply, the emergency building power supply and the emergency power to the fire alarm panel where provided, and
    c. can only be reset manually or remotely by authorized personnel, and
2.
    a. U.L.C. Standards require that the fire alarm system continue to detect alarm conditions and operate normally under a single ground fault condition such as the common trouble circuits, and
    b. if the electromagnetic locking devices have been designed to immediately release only if there is a double ground fault on the fire alarm detection circuit equivalent to the operation of detection device that would cause the fire alarm system to activate, this design will be considered to have sufficiency of compliance.

3. The manual station for the fire alarm system located on the wall not more than 600mm (23 5/8 in.) from the door, shall be so installed that in addition to activating the fire alarm system, this pull station shall release the electromagnetic locking device on the adjacent door, and
4. where there is a "two stage single or multi zone" fire alarm system locking devices need not be released on the first stage "alert", from the two stage fire alarm system, and
5. where there is a "two stage single or multi zone" fire alarm system locking devices within and those leading from the zone of activation to the exit(s) shall release immediately on the second stage "alarm" of the two stage fire alarm system, and
6. authorized personnel shall be able to release the locking devices on any door(s) from a location within or adjacent to the zone of activation by a manually operated switch.

REASONS:

i. Highly trained security personnel will be constantly on duty to investigate any first stage alarm.
ii. This building is a highly secured building not open to the public.

RECOMMENDATION:

That the Ontario Buildings Branch assemble a meeting of all concerned parties to review and amend the Code requirements for all electromagnetic locking devices.

BCC Ruling No. 93-3-359

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-3-359

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PARTS,

3.4.6.15.(4) Electro Magnetic Locks

COMMISSION RULING:

In favour of the Applicant.

Regarding General Motors of Canada, Chassis Plan (South Plant), 800 Park Street South, Oshawa, Ontario.

It is the decision of the Building Code Commission that the requirements of the Code are met in the matter of electromagnetic locking devices that conform to the Code and providing there is compliance to the following:

1. The red manual pull station to the fire alarm system located on the wall not more than 600 mm (23 5/8 in.) from the door, shall be so installed that in addition to activating the fire alarm system, this pull station shall release the electromagnetic locking device on the adjacent door, and this does not restrict the addition of other security release switches where desired, and
2. where there is a "two stage single or multi zone" fire alarm system, locking devices need not be released on the first stage "alert" from the two stage fire alarm system, and
3. where there is a "two stage single or multi zone" fire alarm system, locking devices within those leading from the zone of activation to the exit(s) shall release immediately on the second stage "alarm" of the two stage fire alarm system, and
4. authorized personnel shall be able to release the locking devices on any door(s) from a location within or adjacent to the zone of activation by a manually operated switch, and
5.
    a. All electromagnetic locking devices shall be designed and installed to operate as per the requirements of "Lighting and Emergency Power Supply" of the Code, and

   b. the electromagnetic locking devices shall fail safe open on a failure of the primary building power supply, the emergency building power supply and the emergency power to the fire alarm panel where provided, and
   c. the electromagnetic locking devices can only be reset manually or remotely by authorized personnel, and

6.
   a. U.L.C. Standards require that the fire alarm system continue to detect alarm conditions and operate normally under a single ground fault condition such as the common trouble circuits, and
   b. if the electromagnetic locking devices have been designed to immediately release only if there is a double ground fault on the fire alarm detection circuit equivalent to the operation of detection device that would cause the fire alarm system to activate, this design will be considered to have sufficiency of compliance.

7. Signage is only required for the required red manual pull stations on electromagnetic locked exit doors and does not prohibit the addition of other signs where desired.

REASONS:

1. The electromagnetic locking devices will only be installed on the doors to two small office areas which will only operate after normal office hours and on the door to the autogate that leads via a bridge to the parking area and is not a required exit.
2. All building occupants are trained in the use of fire and security pull stations, and
3. There is sufficient security personnel that would be available to investigate any first stage fire alarm signal.

RECOMMENDATION:

That the Ontario Buildings Branch should assemble a meeting of all concerned parties to review and amend the Code requirements for all electromagnetic locking devices.

BCC Ruling No. 93-2-358

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-2-358

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PARTS,

9.5.1. and 3 and 4 and 5 and 9.7.1.2.
Room/Space Dimensions and Minimum Glass Areas

COMMISSION RULING:

In favour of the Respondent.

Regarding Oxford Court Condominiums, 245 Elgin Street West, Cobourg, Ontario.

It is the decision of the Building Code Commission that this matter of natural lighting in the living/dining areas does not comply with the Code.

REASONS:

The glass area is less than 10 percent of the area served.

BCC Ruling No. 93-1-357

BUILDING CODE COMMISSION DECISION ON B.C.C. #93-1-357

IN THE MATTER OF BUT NOT LIMITED TO: Ontario Building Code, O/Reg. 413/90 as amended

PARTS, 11.2.2.1. and 3.2.9.3.
New Building Systems and F.H.C. water supply

COMMISSION RULING:

In favour of the Respondent

Regarding Ottawa Hunt & Golf Club, 3811 Bowesville Road, Ottawa, Ontario.

It is the decision of the Building Code Commission that this matter of extending standpipe and F.H.C. system to serve the new additional rooms and floor areas shall require a fire pump and generator to meet the requirements of the Code. Measures shall also be taken to prevent backflow into the potable water supply system. A siamese connection and supervision be added to the standpipe system.

REASONS:

The new construction is required to comply with Part 3 of the Ontario Building Code.

Ontario

Ruling No. 07-42-1171
Application No. B-2007-37

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.4.6.5.(8) of Regulation 403/97 ,as amended, (the Building Code).

AND IN THE MATTER OF an application by Mostafa Ahanchi, Mitchell C. Smith Architects, for resolution of a dispute with Brenda Campbell, Chief Building Official, City of Brampton, to determine whether the proposed guard, serving exterior exit stairs in a Group F, Division 2 industrial occupancy building and having been designed with horizontal members which will be located between 140 mm and 900 mm above the level being protected, provides sufficiency of compliance with Sentence 3.4.6.5.(8) of the Building Code at Costco Wholesale Canada Ltd., 8495 Goreway Drive, City of Brampton, Ontario.

APPLICANT	Mostafa Ahanchi Mitchell C. Smith Architects Bellevue, Washington
RESPONDENT	Brenda Campbell Chief Building Official City of Brampton, Ontario
PANEL	Tony Chow, Chair Gerry Egberts Yaman Uzumeri
PLACE	Toronto, Ontario
DATE OF HEARING	November 22, 2007
DATE OF RULING	November 22, 2007
APPEARANCES	Randy Brown Randal Brown Architect Ltd., Toronto, Ontario **Agent for the Applicant** Lillyan McGinn Manager of Plans and Permits City of Brampton, Ontario **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Comply under the *Building Code Act*, *1992*, to remedy certain alleged code deficiencies at Costco Wholesale Canada Ltd., 8495 Goreway Drive, City of Brampton, Ontario.

The subject building is an existing Group F, Division 2 medium hazard industrial warehouse facility. The building is one storey in building height and has a building area of 33, 183 m^2. It is comprised of non-combustible construction material and is equipped with sprinkler and fire alarm systems but not a standpipe and hose system.

The existing warehouse has been extended at either end of the building and as a result, a total of twelve new exterior exit stairs were constructed. These exterior exit stairs have been equipped with guards that contain horizontal members between 140 mm and 900 mm above the level being protected.

The construction in dispute relates to the design of these guards installed for the twelve new exterior exit stairs. Specifically, the issue in dispute is whether the as-installed guards facilitate climbing.

2. Provisions of the Building Code in Dispute

3.4.6.5. Guards

(8) Unless it can be shown that the location and size of openings do not present a hazard, a *guard* shall be designed so that no member, attachment or opening located between 140 mm (5½ in) and 900 mm (2 ft 11 in) above the level being protected by the *guard* will facilitate climbing.

3. Applicant's Position

The Agent for the Applicant described the building as a Group F, Division 2 warehouse facility that was originally constructed in 1995 and informed the Commission that an addition to the building was constructed in 2006. He advised that the warehouse depot is a secure facility which is not open to the public. He indicated that there is a security booth located at the main entrance as well as high perimeter fencing which prevents unauthorized access to the site. In addition, he explained that the facility's security measures include exterior grounds patrols which are maintained around the clock, 365 days per year.

In addition, the Agent reported that the doors located on the landing that is protected by the subject guards only open from the inside and that there is no access from the outside. The doors are equipped with a panic set on the inside of the door. He claimed that there is limited use of these doors, which means that there is limited use of the exterior exit stairs.

The Agent stated that the issue before the Commission relates to climbability of the guards protecting twelve exterior exit stairs. He indicated that there is not an issue with the existing exterior stairs and added that the guards were designed and installed to match the existing guards. He stressed that the existing guards have served the existing stairs since 1995 and to date there have been no injuries related to the existing guards.

The Agent reported that, prior to 1997, the Building Code did not include provisions relating to the climbability of guards in industrial occupancies. He further reported that Sentence

3.4.6.5.(8), the provision in dispute, was introduced in the 1997 edition of the Building Code. He maintained that the intent of this provision was to require guards to be designed so that they are not climbable, unless it can be shown that the location and size of openings do not present a hazard to children. He argued that this code change was aimed at children, who are more likely to attempt to climb a guard, and for occupancies such as churches or shopping malls. In addition, he referred to the proposed Code change document for the 1997 edition of the Building Code, specifically referencing the reason for the proposed change, which indicated that the limits were being placed on the construction of guards to make them safer for children.

The Agent advised that based on the type of occupancy of the building, it is his belief that sufficiency of compliance with the intent of the Code has been achieved. He stated that the building is a warehouse depot that is not open to the public and that children would not be present at the site. He claimed that if the Code intended to ensure that guards could not be climbed at all that the Code would have been more explicit in its wording. He maintained that the as-installed guards do not present a hazard to children since children would not be present at the facility.

In summary, the Agent indicated that the real issue in dispute is not whether the guard facilitates climbing but rather whether or not it presents a hazard. He maintained that the occupancy of this specific building and the security measures that are in place adequately address the hazard associated with guard climability. In his opinion, the Agent argued that sufficiency of compliance has been achieved in this instance.

4. Respondent's Position

The Designate for the Respondent submitted that the subject guards include horizontal members between 140 mm and 900 mm above the level being protected by the guard and therefore, the guards do not comply with Sentence 3.4.6.5.(8) of the Building Code.

The Designate asserted that Sentence 3.4.6.5.(8) is not written in such a way so as to only apply to premises where the general public or children have access. She maintained that this Sentence applies to all occupancies. In support of this argument, she advised that Sentence 3.4.6.5.(6) which permits spacing of guards in industrial occupancies to be 200 mm apart. It is her opinion that the Building Code already anticipates the absence of children in industrial occupancies and as such, Sentence 3.4.6.5.(8) is intended to apply to all occupancies, including industrial occupancies.

The Designate submitted that the building permit for the existing guards was issued under the 1990 edition of the Building Code, which did not address the issue of climbability of guards and therefore the existing guards with horizontal members were in compliance with the 1990 Building Code. She indicated that regardless of the configuration of the existing guards or any previous Code requirements that pertained to design and/or configuration of guards, the design, construction and configuration of the subject guards must conform to the Building Code that was in effect at the time the permit was issued.

In response to the Agent for the Applicant's argument that a hazard does not exist since children will not be present at the site, the Designate maintained that there are many factors that contribute to the degree of hazard, such as the frequency of use of the stairs, exposure to weather conditions, and who uses the area.

In summation, the Designate declared that Sentence 3.4.6.5.(8) of the Building Code specifically speaks to a requirement for guards to not facilitate climbing, unless it can be shown that the location and size of openings do not present a hazard. She reiterated that it is the opinion of the

municipality that the subject guards facilitate climbing and further that the municipality is not convinced that the subject guards do not present a hazard. Therefore, the subject guards do not comply with the requirements of the Building Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed guard, serving exterior exit stairs in a Group F, Division 2 industrial occupancy building and having been designed with horizontal members which will be located between 140 mm and 900 mm above the level being protected provides sufficiency of compliance with Sentence 3.4.6.5.(8) of the Building Code at Costco Wholesale Canada Ltd., 8495 Goreway Drive, City of Brampton, Ontario, on condition that:

a) Notices shall be permanently and prominently posted in the vicinity of the subject exterior exit stairs advising staff and personnel that the guards in these areas are not to be climbed.

6. Reasons

i) The subject building is a medium hazard industrial occupancy that serves as a distribution centre, which is not open to the public. The site is owned and occupied by Costco Wholesale Canada Ltd. and there are no other tenants located on the site.

ii) The Commission was advised that the depot has been constructed as a secure facility. A security booth located at the main entrance combined with a high perimeter fence prevents unauthorized access to the site. Exterior grounds patrols are conducted around the clock every day of the year. In addition, all staff are required to be participate in health and safety training.

iii) The doors leading to the stairs where the subject guards are located are not the main entrance doors. They are required exits and only open from the inside. There is no handle to open the door from the outside. Occupants of the building would enter the building through the main entrance doors.

iv) In the opinion of the Commission, the controlled access to the facility, the infrequent use of the stairs and the additional security measures in place at this facility along with adherence to the above noted condition provide sufficiency of compliance with Sentence 3.4.6.5.(8) of the Building Code.

Dated at Toronto this **22nd** day in the month of **November** in the year **2007** for application number **2007-37.**

Tony Chow, Chair

Gerry Egberts

Yaman Uzumeri

Ruling No. 07-41-1170
Application No. 2007-39

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.9.4.4.(1) and Part 11 of Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by Luc Lavoie, Design & Drafting, for the resolution of a dispute with Julia Tuff, Chief Building Official, Township of Russell, to determine whether the proposed relocation and subsequent renovation of the exterior, unenclosed exit stair, with adjacent unprotected openings, in an existing building with mixed-use occupancy, provides sufficiency of compliance with Sentence 9.9.4.4.(1) when considering Part 11 of the Building Code at 1047 Notre Dame, Township of Russell, Ontario.

APPLICANT	Luc Lavoie Design & Drafting Embrun, ON
RESPONDENT	Julia Tuff Chief Building Official Township of Russell
PANEL	Tony Chow, Chair Mina Tesseris Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	November 8, 2007
DATE OF RULING	November 8, 2007
APPEARANCES	Luc Lavoie Design & Drafting Embrun, ON **The Applicant** Charles Bray Building Inspector Township of Russell **Designate for the Respondent**

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the proposed relocation and subsequent renovation of the exterior, unenclosed exit stair, with adjacent unprotected openings, in an existing building with mixed-use occupancy, provides sufficiency of compliance with Sentence 9.9.4.4.(1) when considering Part 11 of the Building Code at 1047 Notre Dame, Township of Russell, Ontario, on condition that:

a) The window located on the ground level below the subject stair shall be protected with wired glass in a fixed steel frame or glass block conforming to Articles 9.10.13.5. and 9.10.13.7. of the Building Code.

b) The smoke alarms which have been installed in the two apartment units shall be interconnected so that the activation of the alarm in one unit will cause the alarm in the adjacent unit to sound.

c) The entrance to the dwelling unit, located at the top of the subject stair, shall be protected with a closure providing a minimum fire resistance rating of 20 minutes.

Reasons

i) The existing building contained two separate, relatively small, dwelling units and the renovation did not result in a substantial change to the floor area of the building.

ii) The use of the building has not changed nor has the hazard index for the building been reduced as a result of the renovations.

iii) The building included an exit stair that served the two dwelling units which has been relocated to the other side of the building. In the opinion of the Commission, with adherence to the above noted conditions, the performance level of the relocated stair at least maintains an equivalent level of performance as the original stair.

iv) The interconnection of the smoke alarms, as detailed in Condition b) above, will provide early warning to the dwelling unit occupants in the event of a fire.

Dated at Toronto this **8th** day in the month of **November** in the year **2007** for application number **2007-39.**

Tony Chow, Chair

Gary Burtch

Mina Tesseris

Ontario

Ruling No. 07-40-1169
Application No. 2007-36

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Section 5.6 of Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by Dr. Si & Wendy Lowry, homeowners, for resolution of a dispute with Mike Diver, Chief Building Official, Township of Oro-Medonte, to determine whether a proposed roof projection of 600 mm provides sufficiency of compliance with Section 5.6 of the Building Code at 3901 – 10th Line North, Township of Oro-Medonte, Ontario.

APPLICANT	Dr. Si & Wendy Lowry Homeowners Orillia, ON
RESPONDENT	Mike Diver Chief Building Official Township of Oro-Medonte
PANEL	Tony Chow, Chair. Gary Burtch Mina Tesseris
PLACE	Toronto, Ontario
DATE OF HEARING	November 8, 2007
DATE OF RULING	November 8, 2007
APPEARANCES	Dr. Si Lowry Orillia, ON **Applicant** Jack Steenhof Steenhof Building Services **Agent for the Applicant**

Note: The Respondent opted not to participate at the hearing and instead relied on written evidence submitted prior to the hearing.

RULING

1. Particulars of Dispute

The Applicant has received a permit under the *Building Code Act*, *1992* and is constructing a one storey, residential dwelling at 3901 – 10th Line North, Township of Oro-Medonte, Ontario.

The subject building is a one storey, Group C, detached single family dwelling unit. The dwelling has a building area of approximately 220m^2 containing a "breeze-way" area of approximately 22m^2 and a garage having an area of 63m^2. The subject dwelling will be constructed of combustible construction materials.

The dwelling is described as a timber frame house, having been constructed using post and beam members for structural integrity. The exterior walls of the dwelling have been infilled with non-structural straw bales between the post and beam members.

The wall assembly has been constructed using compressed, stacked straw bales with a plastic polypropylene mesh installed on both the interior and exterior surface. The plastic mesh will be stitched to the straw bales using polypropylene twine. Three layers of stucco, a base coat, a scratch coat and a finish coat, will be applied directly to the plastic mesh on both the interior and exterior surfaces of the straw bales. The outermost coat will be smoothed to a finished texture. A coat of water based casein paint will be applied to the interior walls whereas the exterior surface of the straw bale assembly will include a water repellent paint on top of the three layers of stucco.

The construction at dispute between the parties relates to the roof overhang at two locations in the house, specifically, the north walls of the master suite/bedroom and the dining room area. The roof construction consists of the timber frame trusses and structural insulated panels supported by structural posts and beams.

The issue in dispute as presented to the Commission pertains to the roof overhang on the north side of the dwelling and whether a 600 mm roof overhang will provide sufficient protection of the exterior wall from precipitation.

2. Provisions of the Building Code in Dispute

Section 5.6. Precipitation

5.6.1. Protection from Precipitation

5.6.1.1. Required Protection from Precipitation

(1) Except as provided in Sentence (2), where a building component or assembly is exposed to precipitation, the component or assembly shall,
(a) minimize ingress of precipitation into the component or assembly, and
(b) prevent ingress of precipitation into interior space.

(2) Protection from ingress of precipitation is not required where it can be shown that such ingress will not adversely affect any of,
(a) the health or safety of building users,
(b) the intended use of the building, or
(c) the operation of building services.

5.6.1.2. Protective Material and Component Properties

(1) Except as provided in Sentence (2), where western cedar shakes or shingles are installed to provide the required protection from precipitation,
(a) shakes shall be not less than No.1 or Handsplit grade, and
(b) shingles shall be not less than No. 2 grade.

(2) Where western cedar shakes or shingles are installed as undercoursing to provide required protection from precipitation on vertical assemblies, they shall be not less than No. 3 grade.

(3) Except as provided in Sentence (4), where eastern white cedar shingles are installed to provide the required protection from precipitation, they shall be not less less than B (clear) grade.

(4) Where eastern white shingles are installed as undercoursing to provide the required protection from precipitation on vertical assemblies, they shall be not less than C grade.

5.6.1.3. Installation of Protective Materials

(1) Where a material applied to a sloped or horizontal assembly is installed to provide required protection from precipitation and its installation is covered in the scope of one of the following standards, installation shall conform to the requirements of the respective standard:

(a) CAN/CGSB-37.51-M, “Application of Hot Applied Rubberized Asphalt for Roofing and Waterproofing”,
(b) CGSB 37-GP-55M, “Application of Sheet Applied Flexible Polyvinyl Chloride Roofing Membrane”,
(c) CAN3-A123.51-M, “Asphalt Shingle Application on Roof Slopes 1:3 and Steeper”, or
(d) CAN3-A123.52-M, “Asphalt Shingle Application on Roof Slopes 1:6 to less than 1:3”.

(2) Where masonry applied to vertical assemblies is installed to provide required protection from precipitation, installation shall conform to the requirements of CSA A371, “Masonry Construction for Buildings”.

(3) Where protective materials are applied to assemblies to provide the required protection from precipitation, the materials shall be installed so as to shed precipitation or otherwise minimize its entry into the assembly and prevent its penetration through the assembly.

5.6.2. Sealing, Drainage, Accumulation and Disposal

5.6.2.1. Sealing and Drainage

(1) Except as provided in Sentence (2), materials, components, assemblies, joints in materials, junctions between components and junctions between assemblies exposed to precipitation shall be,
(a) sealed to prevent ingress of precipitation, or

(b) drained to direct precipitation to the exterior.

(2) Sealing or drainage are not required where it can be shown that the omission of sealing and drainage will not adversely affect any of,
(a) the health or safety of building users,
(b) the intended use of the building, or
(c) the operation of building services.

5.6.2.2. Accumulation and Disposal

(1) Where water, snow or ice can accumulate on a building, provision shall be made to minimize the likelihood of hazardous conditions arising from such accumulation.

(2) Where precipitation can accumulate on sloped or horizontal assemblies, provision shall be made for drainage conforming with Section 7.4.

(3) Where downspouts are provided and are not connected to a sewer, provisions shall be made to,
(a) divert the water from the building, and
(b) prevent soil erosion.

(4) Junctions between vertical assemblies, and sloped or horizontal assemblies, shall be designed and constructed to minimize the flow of water from the sloped or horizontal assembly onto the vertical assembly.

5.6.2.3. Solar Collector Systems

(1) A solar collector system is permitted to be installed above roofing materials conforming to Table 5.10.1.1.

3. Applicant's Position

The Applicant submitted that he was aware that straw bale construction is not prescribed by the Building Code and as such, he prepared an alternative solution package based on the applicable objective and functional statements of the Building Code.

The Applicant suggested that the Chief Building Official reviewed the package but indicated that he must comply with all of the conditions contained within a previous Building Code Commission ruling from 1999, which included a condition that the dwelling be constructed with a roof projecting 900 mm over the walls of the house. The Applicant argued that those conditions were site specific to that specific construction project and were not necessarily applicable to his project.

The Applicant advised that he tried to work with the Chief Building Official to address his concern regarding a 900 mm roof overhang. However, he added that the Code does not prescriptively require a roof overhang of 900 mm and inferred that this requirement relates back to the 1999 Building Code Commission ruling.

The Applicant suggested that the applicable objective and functional statements of the Building Code indicate that where exterior wall assemblies are exposed to precipitation, they are required to resist the ingress of precipitation, water or moisture from the exterior so that the structural integrity of the wall is maintained. He added that other objectives include limiting the probability

that a person will be exposed to an unacceptable risk of injury due to structural failure caused by damage or deterioration of building elements and that occupants of the building are not exposed to an unacceptable risk of illness due to moisture, inadequate air quality or thermal comfort.

The Applicant indicated that he had hired professional engineering consultants, who have had experience in straw bale construction, to assist in the design and construction of this dwelling. He stated that his consultants are of the opinion that a roof overhang of 600 mm is sufficient and will provide the wall in question with adequate protection from precipitation.

In describing the north wall that is at issue in this dispute, the Applicant stated that the north wall has been constructed on top of an ICF wall. He added that there will be eavestroughing and that the upper portion of the wall in question is adequately protected by a sealed soffit. It is his opinion and, indeed, the opinion of his professional consultants that a 600 mm roof overhang will meet the performance level required by the Building Code. In addition, he declared that his construction project needs to comply with the intent and objectives of the Building Code and not with any previous ruling of the Building Code Commission.

In summary, the Applicant indicated that it his belief that the design and construction of this dwelling unit provides the same level of performance as is required by the Building Code. He re-iterated that he has consulted with professional engineers, who have a background in building science and strawbale construction, and has provided documents to both the Chief Building Official and the Commission to support his claim that an overhang of 600 mm will provide the north wall with sufficient protection from precipitation.

4. Respondent's Position

As noted above, the Respondent did not appear at the hearing to provide oral testimony, instead choosing to rely on the written submissions provided to the Commission prior to the hearing.

It is the position of the Respondent that straw bale construction is not prescribed in the Building Code. He submitted that he reviewed the Applicant's proposal and in order to issue the building permit, had imposed a condition which required that a 900 mm overhang be provided for the protection of the upper portion of the wall.

The Respondent is of the opinion that an overhang of not less than 900 mm should be provided in order to ensure that the wall is adequately protected from precipitation. Further, it his is opinion that this condition is not unreasonable given the fact that the wall assembly is comprised of straw bale construction.

In the opinion of the Respondent, a minimum 900 mm roof overhang must be provided at the north side of the house in order to meet the requirements of the Building Code related to protection of the exterior wall from precipitation.

5. Commission Ruling

It is the Decision of the Building Code Commission that a proposed roof projection of 600 mm provides sufficiency of compliance with Section 5.6 of the Building Code at 3901 – 10th Line North, Township of Oro-Medonte, Ontario.

6. Reasons

i) The Commission was presented with documentation prepared by a professional engineer who has expertise in building science and straw bale construction in support of the proposed roof projection. The documentation concluded that the roof projection provides the wall below with sufficient level of protection against precipitation.

ii) The north wall of the dwelling unit, which is the wall in question, is one storey in height and has limited straw bale infill included in its design. When considering the height of the wall in relation to the length of roof overhang that has been proposed, it is the opinion of the Commission that the proposed roof projection will provide a sufficient level of protection against precipitation

iii) The soffit line will be horizontal and below the junction of the box beam and the straw bale assembly.

iv) The straw bale/box beam junction line has been reinforced with metal lathe and plaster.

v) The Commission was advised that plaster will be applied to the face of straw bale and box beam above the soffit line prior to the installation of the soffit.

Dated at Toronto this **8th** day in the month of **November** in the year **2007** for application number **2007-36.**

Tony Chow, Chair

Gary Burtch

Mina Tesseris

Ontario

Ruling No. 07-39-1168
Application No. 2007-35

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 9.10.12.3. and 9.10.15.4. of Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by Dick Splinter, Braebury Homes, for resolution of a dispute with Terry Willing, Chief Building Official, City of Kingston, to determine whether the proposal to include unprotected openings in the exposing building faces in multiple units of a two storey townhouse building, where there are limiting distances of less than 1.2 m between fire compartments of the same property, provides sufficiency of compliance with Articles 9.10.12.3. and 9.10.15.4. of the Building Code at Blocks 88 and 90, Crossfield Avenue, City of Kingston, Ontario.

APPLICANT	Dick Splinter Braebury Homes Kingston, ON
RESPONDENT	Terry Willing Chief Building Official City of Kingston
PANEL	Tony Chow, Chair Gary Burtch Mina Tesseris
PLACE	Toronto, Ontario
DATE OF HEARING	November 8, 2007
DATE OF RULING	November 8, 2007
APPEARANCES	Dick Splinter Braebury Homes Kingston, ON **The Applicant** Steve Murphy Deputy Chief Building Official City of Kingston **Designate for the Respondent** Lisa Capener-Hunt Building Official City of Kingston **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received a permit under the *Building Code Act*, *1992* and is constructing a two storey building that is to be comprised of four, two storey townhouses.

The subject building is described as having a Group C, residential major occupancy that will be two storeys in building height. The building area is 264 m^2 and the building will be comprised of combustible construction material. The subject building is not equipped with a sprinkler system, a fire alarm system or a standpipe and hose system.

The Applicant is of the opinion that the townhouse units are units within the same building, therefore, he has cited Article 9.10.12.3. of the Building Code as allowing unprotected openings provided they are more than 1.2 m apart.

It is the opinion of the Respondent that the townhouse units are individual units within separate buildings, therefore, he has cited Article 9.10.15.4. of the Building Code which does not permit glazed openings within 1.2 of the limiting distance line in an exposing building face unless the opening is protected.

The design of this building is based on the 2006 edition of the Building Code. The drawings submitted to the Commission with the Application for Hearing did not include the line to which "limiting distance" would be measured.

The matter in dispute between the parties appears to relate to the spatial separation between houses and glazed openings in exposing building faces. However, based on the information submitted by both parties, the specifics of the dispute were not entirely clear to the Commission. It was particularly unclear whether this building has been designed as one building on one lot with four units or four buildings on four separate lots. The design assumption behind this project is an important matter that needs to be clarified in order for the Commission to fully comprehend the specific issue in dispute.

2. Provisions of the Building Code in Dispute

9.10.12.3. Exterior Walls Meeting at an Angle

(1) Except as provided in Article 9.9.4.5., where exterior walls of a *building* meet at an external angle of less than 135°, the horizontal distance from an opening in one wall to an opening in the other wall shall be not less than 1 200 mm where the openings are in different *fire compartments*.

(2) The exterior wall of each *fire compartment* referred to in Sentence (1) within the 1 200 mm distance, shall have a *fire-resistance rating* not less than that required for the interior vertical *fire separation* between the compartment and the remainder of the *building*.

9.10.15.4. Glazed Openings in Exposing Building Face

(1) Except as provided in Sentences (3) to (5), the maximum area of glazed openings in an exposing building face shall,

(a) conform to Table 9.10.15.4.,
(b) conform to Subsection 3.2.3., or

(c) be equal to or less than the limiting distance squared.

(2) Where the exposing building face is divided into individual portions as described in Subclause 9.10.15.2.(1)(b)(iii),

(a) the maximum glazed area of each individual portion shall be determined in accordance with Sentence (1),
(b) the maximum aggregate glazed area for the entire exposing building face shall be the sum of the individual maximum glazed areas determined from Clause (a), and
(c) except as required in Sentence (4), the maximum aggregate glazed area determined in Clause (b) is permitted to be distributed anywhere on the exposing building face.

(3) The limits on area of glazed openings shall not apply to the exposing building face of a dwelling unit facing a detached garage or accessory building where,

(a) the detached garage or accessory building serves only one dwelling unit,
(b) the detached garage or accessory building is located on the same property as that dwelling unit, and
(c) the dwelling unit served by the detached garage or accessory building is the only major occupancy on the property.

(4) Except as permitted in Sentence (5), openings in a wall having a limiting distance of less than 1.2 m shall be protected by closures, of other than wired glass or glass block, whose fire-protection rating is in conformance with the fire-resistance rating required for the wall.

(5) An opening in an exposing building face not more than 130 cm^2 shall not be considered an unprotected opening.

Table 9.10.15.4.
Maximum Area of Glazed Openings in Exterior Walls of Buildings Containing Only Dwelling Units
Forming Part of Sentence 9.10.15.4.(1)

Column 1	2	3		4	5		6	7	8		9	10		11	12		13	14	15
Maximum Total Area of Exposing Building Face, m^2	Maximum Aggregate Area of Glazed Openings, % of Exposing Building Face Area															
	Limiting Distance, m															
	Less than 1.2	1.2	1.5	2	2.5	3	4	6	8	10	12	16	20	25		
10	0	8	12	21	33	55	96	100	—	—	—	—	—	—		
15	0	8	10	17	25	37	67	100	—	—	—	—	—	—		
20	0	8	10	15	21	30	53	100	—	—	—	—	—	—		
25	0	8	9	13	19	26	45	100	—	—	—	—	—	—		
30	0	7	9	12	17	23	39	88	100	—	—	—	—	—		
40	0	7	8	11	15	20	32	69	100	—	—	—	—	—		
50	0	7	8	10	14	18	28	57	100	—	—	—	—	—		
100	0	7	8	9	11	13	18	34	56	84	100	—	—	—		
Over 100	0	7	7	8	9	10	12	19	28	40	55	92	100	—		

3. Applicant's Position

The Applicant submitted that the dispute relates to whether unprotected openings are allowed within 1.2 m of the centre line of separate fire compartments. He suggested that by virtue of Article 9.10.12.3. of the Building Code, it would be permissible to have unprotected openings provided the openings were 1.2 m apart.

The Applicant further submitted that Article 9.10.15.4. provides three ways in which to comply with this provision. Clause 9.10.15.4.(1)(b) requires conformance to Subsection 3.2.3. He submitted that by virtue of Sentence 3.2.3.14.(1) unprotected openings are permitted if the wall faces intersect at an angle of 135^{o} or greater and added that the design of the subject building meets this criteria. In addition, he stated that Sentences 9.10.15.2.(4) and 9.10.15.2.(5) allows the relocation of the line to which limiting distance is measured and further stated that this option was offered to the municipality in of hopes resolving this issue.

The Applicant suggested that the line to which limiting distance is measured can be relocated so as to meet the requirements of the Building Code. Therefore, he believes that there is nothing for the Commission to rule on. He claimed that the municipality is not willing to look beyond Article 9.10.15.4. of the Code and that is why this matter is before the Commission.

When questioned as to the design of this project, the Applicant indicated that it has been designed as one building with four individual units and therefore the party walls provide the property line. Under this assumption, the Applicant believes that the proposal to include unprotected openings in the exposing building face not only sufficiently complies with the requirements of the Building Code but fully complies with the requirements of the Building Code. This, in his opinion, is especially true if, by virtue of the Sentences 9.10.15.2.(4) and 9.10.15.2.(5), the line to which limiting distances is measured is relocated.

The Applicant agreed that the parties to this dispute are not in agreement as to the basic design assumptions of this building and as such it is not clear which specific provisions of the Code would be applicable to this project.

4. Respondent's Position

The Designate for the Respondent submitted that the spatial separation between houses is not in compliance with the Building Code, as Article 9.10.15.4. does not permit glazed openings within 1.2 m of the limiting distance line in an exposing building face unless those openings are protected as per Sentence 9.10.15.4.(4) of the Code.

The Designate cited Article 1.4.1.2. of the Building Code as providing definitions for exposing building face and for limiting distance. She indicated that the Code defines limiting distance as the distance from an exposing building face to an imaginary line between fire compartments on the same property. She further indicated that exposing building face is defined as that part of the exterior wall that faces one direction and is located between ground level and the ceiling of its top storey, or, where the building is divided into fire compartments, the exterior wall of a fire compartment that faces one direction.

The Designate maintained that, in reviewing the plans submitted for this project, the municipality is of the opinion that the project includes four separate houses (buildings) joined by firewalls. She further maintained that, while this project is currently owned by one entity with individual dwelling units being rented out to tenants, it is entirely possible that the dwelling units could be sold off to separate owners. In fact, she indicated that the municipal planning department has already received an application to permit these buildings to be separated and the units sold off

individually. Therefore, it is the opinion of the municipality that this property should be designed and constructed as four individual buildings on four separate properties.

When questioned, the Designate agreed that the matter at issue between the parties really pertains to the basic design assumptions for the building and that the parties are not in agreement as to the design assumptions.

5. Commission Ruling

It is the Decision of the Building Code Commission that, under Clause 24(1)(a) of the *Building Code Act,* 1992, the Commission does not have the jurisdiction to render a ruling in respect of a disagreement regarding which technical requirements would be applicable.

6. Reasons

i) The jurisdiction of the Building Code Commission under s. 24(3) of the *Building Code Act, 1992*, is to "determine a dispute identified in Clause 24(1)(a)." The dispute identified in s. 24(1)(a) is one "concerning sufficiency of compliance with the technical requirements of the Building Code."

ii) The jurisdiction of the Commission under s. 24(3) of the Act relates to the determination of "a dispute", and is accordingly limited to a dispute about a particular technical requirement that has been identified by the parties.

iii) During the course of the hearing it became apparent that the parties are not in agreement with respect to the basic design assumptions for this building. Consequently, the parties were not in agreement as to which provision of the Building Code was applicable to the subject property.

iv) As a result of the inconsistent design assumptions expressed by the parties and the lack of agreement between the parties as to which provision of the Building Code was in dispute, it is not possible for the Commission to render a ruling in respect of which technical requirement is applicable.

Dated at Toronto this **8th** day in the month of **November** in the year **2007** for application number **2007-35.**

Tony Chow, Chair

Gary Burtch

Mina Tesseris

Ontario

Ruling No. 07-38-1167
Application No. 2007-03

BUILDING CODE COMMISSION

IN THE MATTER OF Clause 24(1)(a) of the *Building Code Act*, S.O. 1992, c. 23, as amended ("Act").

AND IN THE MATTER OF Part 8 of the O. Reg 403/97, as amended, ("Building Code").

AND IN THE MATTER OF an application by 1527102 Ontario Ltd., for resolution of a dispute with Robin Williams, Medical Officer of Health, Niagara Region Public Health, to determine whether the proposed construction of seven (7) individual Class 4 sewage systems to service seven (7) individual residential dwellings provides sufficiency of compliance with Sentences 8.2.1.2.(1), 8.2.1.2.(3), Clauses 8.7.3.2.(2)(e), 8.7.4.2.(1)(b), 8.9.1.2.(1)(c) and Subclause 8.7.2.1.(1)(b)(i) of the Building Code at Lots 1-7, Plan 327, Niagara Township, Ontario**.**

APPLICANT	1527102 Ontario Ltd
RESPONDENT	Robin Williams Medical Officer of Health Niagara Region Public Health
PANEL	Eric Gunnell, Chair-Designate
PLACE	Toronto, Ontario
DATES OF HEARING	October 22, 2007, November 15, 2007, December 13, 2007
DATE OF RULING	December 13, 2007
APPEARANCES	Gerry Dignard Canadian Shield Consultants Agency Inc., - and – Alex Kosopov **Agents for the Applicant** Alphie Wolf Public Health Inspector Niagara Region Public Health - and – Bill Hunter Manager, Health, Protection and Promotion Niagara Region Public Health **Designates for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for seven (7) permits under the *Building Code Act*, *1992*, to construct seven (7) individual Class 4 sewage systems to service seven (7) individual residential dwellings at 16006 Niagara River Parkway (Lots 1-7, Plan 327), Town of Niagara-on-the-Lake, Ontario**.**

The subject buildings are described as residential dwelling units, each having a total finished area of 371 m^2 and two storeys in building height. Each building will contain five bedrooms with 34.5 fixture units and the water supply will be provided by the municipal water supply. The total daily design flow of each lot has been calculated at 4 300 L/day. The sewage systems proposed to service each of these seven lots will consist of a 10 000 L septic tank connected to two 4 400 L tertiary treatment units.

The Parties identified Sentences 8.2.1.2.(1), 8.2.1.2.(3), Clauses 8.7.3.2.(2)(e), 8.7.4.2.(1)(b), 8.9.1.2.(1)(c) and Subclause 8.7.2.1.(1)(b)(i) as being the technical provisions of the Building Code that were in dispute.

The hearing commenced on October 22, 2007 and was adjourned until November 15, 2007. The hearing resumed on November 15, 2007 and was further adjourned until December 13, 2007.

At the resumption of the hearing on December 13, 2007, the parties informed the Commission that the disputes relating to Sentences 8.2.1.2.(1), 8.2.1.2.(3), Clauses 8.7.3.2.(2)(e), 8.7.4.2.(1)(b), and Subclause 8.7.2.1.(1)(b)(i) of the Building Code had been resolved.

The only dispute remaining concerned the requirement that the Applicant provide, in respect of each of the permit applications, a hydrogeological analysis in accordance with Guideline B7, procedure D54 technical Guideline for Individual On-Site Sewage Systems: Water Quality Impact Risk Assessment ("Hydrogeological Reports"), and that a peer review of the analysis be completed and submitted to ensure that the report meets Ministry of Environment Policy D54.

2. Provisions of the Building Code in Dispute

While certain technical requirements of the Building Code were initially identified by the Parties as being in dispute, during the course of the hearing the Parties resolved all disputes relating to these requirements.

3. Applicant's Position

The Agent for the Applicant submitted that the applications for the permits at issue in this matter complied with all of the applicable requirements of the Act and the Building Code. He further submitted that the Respondent had not identified a provision of the Act or the Building Code which authorized the Respondent to require that the Hydrogeological Reports be provided and, in particular, the neither s. 18 of the Act nor Clause 8.9.1.2.(1)(c) of the Building Code provided this authority.

The Agent submitted that any dispute about the Respondent's right under other legislation to require the Hydrogeological Reports would not be a dispute that is within the jurisdiction of the Building Code Commission. The Agent requested that the Commission direct the Respondent to issue the building permits.

4. Respondent's Position

The Designate for the Respondent expressed concerns over the potential impact from the construction of seven "estate" dwellings with individual private sewage systems on little more than two acres, and took the position that the Hydrogeological Reports were necessary to ensure that there is no adverse effect to the groundwater.

The Designate submitted that, given these concerns, Clause 8.9.1.2.(1)(c) of the Building Code was relevant to the applications, and that the Hyrdrogeological Reports were necessary to evaluate compliance with Clause 8.9.1.2.(1)(c). The Commission noted that Section 8.9 of the Building Code applies to the operation and maintenance of existing sewage systems and, as a result, Clause 8.9.1.2.(1)(c) would accordingly apply to existing sewage systems. The Designate for the Respondent accepted that Clause 8.9.1.2.(1)(c) applied to the maintenance and operation of existing sewage systems, rather than the design or construction of new sewage systems, and indicated that it no longer relied on this Clause in regard to the Hydrogeological Reports.

5. Commission Ruling

It is the Decision of the Building Code Commission that, under Clause 24 (1)(a) of the *Building Code Act, 1992*, the Commission does not have the jurisdiction to render a ruling in respect of disputes concerning the powers of a Chief Building Official under the Act or other legislation to require that the Applicant provide the Hydrogeological Reports or to direct the Respondent to issue building permits.

6. Reasons

i) The jurisdiction of the Commission under s. 24(3) of the *Act* is to "determine a dispute identified in clause 24(1)(a)." The dispute identified in s. 24(1)(a) is one "concerning the sufficiency of compliance with the technical requirements of the Building Code."

ii) The jurisdiction of the Commission under s. 24(3) of the *Act* relates to the determination of "a dispute", and is accordingly limited to a dispute about a particular technical requirement that has been identified by the parties.

iii) In the course of the hearing, the Applicant and Respondent resolved all of the disputes concerning sufficiency of compliance with the technical requirements of the Building Code that had been identified as being in dispute. Therefore, there was no basis for the Commission to render a ruling concerning the sufficiency of compliance with the technical requirements of the Building Code.

iv) Disputes concerning compliance with the *Act* or other legislation are not disputes which are identified in Clause 24(1)(a) of the *Act*. Therefore, the Commission does not have the jurisdiction to determine disputes concerning compliance with the *Act* or other legislation.

v) The Commission's jurisdiction under Clause 24(1)(a) of the *Act* to "determine" disputes is limited to ruling on the sufficiency of compliance with the technical requirement of the Building Code that are the subject of the dispute. This jurisdiction does not include directing the chief building official to issue a building permit.

Dated at Toronto this **13th** day in the month of **December** in the year **2007** for application number **2007-03.**

Eric Gunnell, Chair-Designate

Ontario

Ruling No. 07-36-1165
Application No. 2007-33

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.1.8.5.(2), 3.1.8.13.(1), 3.3.2.3.(10), Articles 3.3.1.12., and 3.4.6.15. of the Regulation 403/97 ,as amended, (the Building Code).

AND IN THE MATTER OF an application by David Golych, Ingersoll Rand Security Technologies, for the resolution of a dispute with Gord Allison, Chief Building Official, City of Barrie, to determine whether the installation of the Von Duprin less bottom rod fire exit devices on doors which are required to be fire-protected provide sufficiency of compliance with Sentences 3.1.8.5.(2), 3.1.8.13.(1), 3.3.2.3.(10), Articles 3.3.1.12., and 3.4.6.15. of the 1997 Building Code at the Royal Court Medical Building, 5 Quarry Ridge Road, City of Barrie, Ontario.

APPLICANT	David Golych Ingersoll Rand Security Technologies Mississauga, ON
RESPONDENT	Gord Allison Chief Building Official City of Barrie
PANEL	Leslie Morgan, Vice-Chair Yaman Uzumeri Doug Clancey
PLACE	Toronto, Ontario
DATE OF HEARING	October 18, 2007
DATE OF RULING	October 18, 2007
APPEARANCES	David Golych Ingersoll Rand Security Technologies Mississauga, ON **The Applicant** Rod Larmer Manager of Inspections City of Barrie **Designate for the Respondent**

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the installation of the Von Duprin less bottom rod fire exit devices on doors which are required to be fire-protected provides sufficiency of compliance with Sentences 3.1.8.5.(2), 3.1.8.13.(1), 3.3.2.6.(1), Articles 3.3.1.12. and 3.4.6.15. of the Building Code at the Royal Court Medical Building, 5 Quarry Ridge Road, City of Barrie, Ontario, on condition that:

a) The fire safety plan shall include drawings indicating the location of the doors that are equipped with the Von Duprin less bottom rod fire exit devices, and

b) A notice is to be permanently mounted at the annunciator panel indicating that doors equipped with Von Duprin less bottom rod fire exit devices are located at the walkway connecting the two buildings.

Reasons

i) In the opinion of the Commission, the subject doors achieve the level of fire protection required by the Code as was evidenced by the testing documentation that was provided.

ii) In the opinion of the Commission, the occupant load of the subject building is relatively low and further, the life safety of the occupants of the building is not compromised by the installation of the auxiliary fire latch.

iii) The subject doors provide access to a ground level walkway connecting two buildings. Further, the subject doors are located in an access to exit and there are other means of egress from both buildings and the walkway.

iv) There are glazed areas located adjacent to the subject doors which are equipped with the auxiliary fire latch. In the event of a fire situation, emergency response personnel can obtain access to the building or walkway through the glazed openings.

Dated at Toronto this **18** day in the month of **October** in the year **2007** for application number **B-2007-33.**

Leslie Morgan, Chair

Yaman Uzumeri

Doug Clancey

Ontario

Ruling No. 07-35-1164
Application No. B-2007-28

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Subsection 2.1.1 and Article 1.1.3.2., Article 3.2.2.45. and 9.1.1.1. of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Rod Male, Stafford Homes Ltd., for resolution of a dispute with Ann Borooah, Chief Building Official, City of Toronto, to determine whether the proposed construction of a Group C residential townhouse block provides sufficiency of compliance with Subsection 2.1.1. as a three storey building when considering the definition of "grade" as outlined in Article 1.1.3.2., Article 3.2.2.45. and 9.1.1.1. of the Building Code at 347 Royal York Road, City of Toronto, Ontario.

APPLICANT	Rod Male Stafford Homes Ltd Toronto, ON
RESPONDENT	Ann Borooah Chief Building Official City of Toronto
PANEL	Leslie Morgan, Vice-Chair Yaman Uzumeri Doug Clancey
PLACE	Toronto, Ontario
DATE OF HEARING	October 18, 2007
DATE OF RULING	October 18, 2007
APPEARANCES	Leszek Muniak Larden Muniak Consulting Inc. Toronto, ON **Agent for the Applicant** Sait Toprak Manager, Plans Review City of Toronto **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received a permit under the *Building Code Act*, *1992*, and is constructing four townhouse buildings at 347 Royal York Road, City of Toronto, Ontario.

The project consists of four separate Group C residential buildings. Each building contains nine or ten individual townhouse units. The buildings are to be comprised of combustible construction material and will not be equipped with a standpipe and hose system or a fire alarm system. The Applicant is proposing that a sprinkler system not be installed.

There are a number of issues which are germane to the matter at dispute between the parties. The core issue relates to whether the buildings are required to be equipped with a sprinkler system. If the buildings are considered to be four storeys in building height, Part 3 of the Building Code would be applicable and sprinklering would be a requirement for the buildings. If the buildings are considered to be three storeys in building height, Part 9 of the Building Code would be applicable and the buildings would not require sprinklering. Therefore, the height of the building is at issue, the Applicant has described the buildings as three storeys with a basement while the Respondent believes the buildings are four storeys in building height. In determining the height of the building, the Applicant is proposing to surround the basement level of the buildings with 900 mm high planters which will act as grade. Consequently, the definition of "grade" as defined in the Building Code is relevant to the dispute between the parties.

The dispute before the Commission is to determine whether the 900 mm high planters that the Applicant is proposing to construct around the buildings can be considered grade for the purposes of determining building height and the first storey of the subject residential townhouse buildings. Once the dispute regarding the height of the buildings has been resolved, it will be apparent whether the buildings fall under Part 3 or Part 9 of the Building Code and thus the issue of whether the buildings are required to be sprinklered or not will be resolved as well.

2. Provisions of the Building Code in Dispute

1.1.3.2. Defined Terms

(1) The words and terms in italics in this Code have the following meaning for the purposes of this Code, and where indicated, the following meaning for the purposes of the Act as well.

Grade means the average level of proposed or finished ground adjoining a building at all exterior walls.

2.1.1. Buildings

See Subsection 2.1.1. of the Building Code.

3.2.2.45. Group C, up to 4 Storeys, Sprinklered

(1) A building classified as Group C is permitted to conform to Sentence (2) provided
- (a) except as permitted by Sentence 3.2.2.7.(1), the building is sprinklered,
- (b) it is not more than 4 storeys in building height, and
- (c) it has a building area not more than
  - (i) 7 200 m2 (77,500 ft2) if 1 storey in building height,

(ii) 3 600 m2 (38,800 ft2) if 2 storeys in building height,
(iii) 2 400 m2 (25,800 ft2) if 3 storeys in building height, or
(iv) 1 800 m2 (19,400 ft2) if 4 storeys in building height.

(2) The building referred to in Sentence (1) is permitted to be of combustible construction or noncombustible construction used singly or in combination, and
(a) except as permitted by Sentences (3) and (4), floor assemblies shall be fire separations with a fire-resistance rating not less than 1 h,
(b) mezzanines shall have a fire-resistance rating not less than 1 h, and
(c) loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly.

(3) In a building that contains dwelling units that have more than 1 storey, subject to the requirements of Sentence 3.3.4.2.(2), the floor assemblies, including floors over basements, which are entirely contained within these dwelling units, shall have a fire-resistance rating not less than 1 h but need not be constructed as fire separations.

(4) In a building in which there is no dwelling unit above another dwelling unit, the fire-resistance rating for floor assemblies entirely within the dwelling unit is waived.

9.1.1.1. Scope

(1) The scope of this Part shall be as described in Section 2.1. (See Section 9.36. regarding application to seasonally and intermittently occupied buildings.)

3. Applicant's Position

The Agent for the Applicant stated that the project consists of four separate residential townhouse buildings, with each building containing nine or ten individual freehold townhouse suites.

The Agent explained that the basement level of the buildings were intended to have been almost fully enclosed, however, as a result of encountering drainage problems, it became necessary to raise the basement levels approximately one metre. He indicated that the basement level of each building has been surrounded by 900 mm high planters and that, in his opinion, these planters act as grade. Further, he stated that as the ceiling of the lowest storey of each of the residential townhouse buildings is less than 1.8 m above the surrounding planters (grade), the lowest storey of each building is considered a basement.

The Agent advised that the Code defines grade as "average level of proposed or finished ground adjoining a building at all exterior walls". However, he indicated that the Code does not define proposed or finished ground nor does it define the width of the adjoining ground. In the absence of that definition, he contended that the proposed planters, with their maximum available width, are permitted to be considered as finished ground adjoining the subject buildings at all exterior walls. He explained that the dispute arose as a result of an internal policy and the claim of the municipality that the planters do not have sufficient width to act as grade. In response to questions regarding the depth of the planters, he indicated that the dimensions vary in depth between 600 mm and 1.5 m from face of the building to the edge of planter.

The Agent indicated that the buildings face at least two streets and that numerous fire hydrants are located within the vicinity of the buildings. He also indicated that the distance from street

level to the uppermost balcony does not exceed 7 m which in his opinion does not impede fire fighter access. He stated that it is his belief that the subject proposal allows fire fighters access to the building, addresses the exiting requirements, and achieves the required level of life safety intended by the Building Code.

In conclusion, he reiterated that the subject residential townhouse buildings are considered to be three storey buildings with one basement level. As such he indicated that Part 9 of the Building Code applies to the subject buildings and therefore the buildings are not required to be sprinklered.

4. Respondent's Position

The Designate for the Respondent described the residential townhouse buildings as consisting of four separate Group C residential buildings, each containing nine or ten individual freehold townhouse units. Each building is surrounded by 900 mm high discontinuous planter boxes of varying width. He submitted that based on the 1997 Building Code and the municipality's understanding of grade, each building was reviewed as a Part 3 four storey combustible building that would require the installation of sprinklers. He advised that the building permits were approved and issued based on the buildings being designed as four storey buildings, which included the installation of a sprinkler system and a fire alarm system.

The Designate advised that the municipality has established a policy for determining grade, which excludes superficially altering the ground level around the building by means of planters and/or exterior steps. In an effort to ensure some permanence of established grade/ground levels utilized in determining building height and number of storeys, he advised that the City had a policy of requiring a minimum of 2100 mm horizontal dimension of ground surface around the building face. He explained that this minimum dimension was deemed necessary in order to permit rescue ladders to service egress openings from upper floors.

The Designate maintained that the planters surrounding the subject buildings are not continuous; do not provide a level of permanence or an adequate surface for egress around the building. He suggested that, in his opinion, the use of superficial ground levels created by planters was never the intent of the definition of grade. He further suggested that accepting the use of planters as a means of raising the grade adjoining the building, for the purposes of determining the first storey, may also impact other Articles that mention "ground" or "adjacent ground level".

In summary, the Designate declared that the narrow planters which artificially build up grade cannot be considered as "proposed or finished ground" as referred to in the definition of grade. Therefore, the buildings are considered to be four storey buildings and as such are required to be equipped with a sprinkler system and fire alarm system.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed construction of a Group C residential townhouse block does not provide sufficiency of compliance with Subsection 2.1.1. as a three storey building when considering the definition of "grade" as outlined in Article 1.1.3.2., Article 3.2.2.45. and 9.1.1.1. of the Building Code at 347 Royal York Road, City of Toronto, Ontario.

6. Reasons

i) In the opinion of the Commission, the use of 900 mm high planters to act as grade for the purposes of determining building height and the first storey of the subject residential townhouse buildings does not achieve the level of safety intended by the Building Code.

ii) The Commission was advised that the dimensions of the planters vary in depth between 600 mm and 1.5 m from face of the building to the edge of planter. It is the opinion of the Commission that this does not provide adequate level ground area for the provision of fire fighting operations, such as allowing the use of ladders and the deployment of fire fighters.

Dated at Toronto this **18th** day in the month of **October** in the year **2007** for application number **2007-28.**

Leslie Morgan, Chair Designate

Yaman Uzumeri

Doug Clancey

Ontario

Ruling No. 07-34-1163
Application No. 2007-30

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.2.9.2.(1) and Clause 3.2.9.2.(9)(b) when considering Sentence 3.6.3.1.(1) of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Rudi Spallacci, Spallacci Contracting Ltd., for the resolution of a dispute with John Spolnik, Chief Building Official, City of Hamilton, to determine whether the vertical and horizontal piping for the proposed standpipe system which would not be protected with a two-hour fire rated separation provides sufficiency of compliance with Sentence 3.2.9.2.(1) and Clause 3.2.9.2.(9)(b) when considering Sentence 3.6.3.1.(1) of the Building Code at 260-280 King Street East, City of Hamilton, Ontario.

APPLICANT	Rudi Spallacci Spallacci Contracting Ltd., Hamilton, ON
RESPONDENT	Mr. John Spolnik Chief Building Official City of Hamilton
PANEL	Tony Chow, Chair Yaman Uzumeri Marina Huissoon
PLACE	Toronto, Ontario
DATE OF HEARING	September 20, 2007
DATE OF RULING	September 20, 2007
APPEARANCES	Lorne Haverty Lorne Haverty Ltd Architect Hamilton, ON **Agent for the Applicant** Dio Ortiz Chief Building Engineer City of Hamilton **Designate for the Respondent**

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the vertical and horizontal piping for the proposed standpipe system which would not be protected with a two-hour fire rated separation provides sufficiency of compliance with Sentence 3.2.9.2.(1) and Clause 3.2.9.2.(9)(b) when considering Sentence 3.6.3.1.(1) of the Building Code at 260-280 King Street, East, City of Hamilton, Ontario, on condition that:

a) The vertical portion of the standpipe system piping, which is separated by a fire separation having a fire resistance rating of one hour provided on the unit side of the enclosure, shall also be provided with a fire separation having a fire resistance rating of one hour on the corridor side of the enclosure.

b) Any horizontal portions of the standpipe system piping which run through unsprinklered floor areas shall be provided with a fire separation having a fire resistance rating of one hour.

Reasons

i) Article 3.2.9.2. of the Building Code outlines the requirements for a required standpipe system. Sentence 3.2.9.2.(1) states “except as otherwise provided in this Subsection, if a standpipe system is required, the design, construction, installation and testing of a required standpipe system shall be in conformance with NFPA 14, “Standard for the Installation of Standpipe and Hose Systems”.

Sentence 3.2.9.2.(9) of the Code requires standpipe risers to be located in an exit shaft or a service space. This provision of the Building Code supersedes any related requirements contained in the referenced NFPA Standard.

ii) In the opinion of the Commission, provided that the vertical portions of the piping are separated from all other portions of each adjacent storey by a fire separation having a fire resistance rating equivalent to that which is outlined in Table 3.6.3.1. of the Code and adherence to the above noted condition sufficiency of compliance with the provisions of the Code will be achieved.

iii) Adherence to the above noted conditions will, in the opinion of the Commission, achieve sufficiency of compliance with the provisions of the Code.

Dated at Toronto this **20th** day in the month of **September** in the year **2007** for application number **B-2007-30.**

Tony Chow, Chair

Yaman Uzumeri

Marina Huissoon

Ruling No. 07-33-1162
Application No. 2007-29

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.2.9.2.(1) and Clause 3.2.9.2.(9)(b) when considering Sentence 3.6.3.1.(1) of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Greg Fraleigh, Famleigh Management, for the resolution of a dispute with John Spolnik, Chief Building Official, City of Hamilton, to determine whether the vertical and horizontal piping for the proposed standpipe system which would not be protected with a two-hour fire rated separation provides sufficiency of compliance with Sentence 3.2.9.2.(1) and Clause 3.2.9.2.(9)(b) when considering Sentence 3.6.3.1.(1) of the Building Code at 174 Mountain Park, City of Hamilton, Ontario.

APPLICANT	Greg Fraleigh, Famleigh Management Waterdown, ON
RESPONDENT	Mr. John Spolnik Chief Building Official City of Hamilton
PANEL	Tony Chow, Chair Yaman Uzumeri Marina Huissoon
PLACE	Toronto, Ontario
DATE OF HEARING	September 20, 2007
DATE OF RULING	September 20, 2007
APPEARANCES	Lorne Haverty Lorne Haverty Ltd Architect Hamilton, ON **Agent for the Applicant** Lisa Simmons Building Engineer City of Hamilton **Designate for the Respondent**

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the vertical and horizontal piping for the proposed standpipe system which would not be protected with a two-hour fire rated separation provides sufficiency of compliance with Sentence 3.2.9.2.(1) and Clause 3.2.9.2.(9)(b) when considering Sentence 3.6.3.1.(1) of the Building Code at 174 Mountain Park, City of Hamilton, Ontario, on condition that:

a) The vertical portion of the standpipe system piping, which is separated by a by a fire separation having a fire resistance rating of one hour provided on the unit side of the enclosure, shall also be provided with a fire separation having a fire resistance rating of one hour on the corridor side of the enclosure.

b) The horizontal portion of the piping for the standpipe system which runs along the ceiling of the eleventh floor and the floor to the penthouse shall be provided with a fire separation having a fire resistance rating of one hour.

Reasons

i) Article 3.2.9.2. of the Building Code outlines the requirements for a required standpipe system. Sentence 3.2.9.2.(1) states “except as otherwise provided in this Subsection, if a standpipe system is required, the design, construction, installation and testing of a required standpipe system shall be in conformance with NFPA 14, “Standard for the Installation of Standpipe and Hose Systems”.

Sentence 3.2.9.2.(9) of the Code requires standpipe risers to be located in an exit shaft or a service space. This provision of the Building Code supersedes any related requirements contained in the referenced NFPA Standard.

ii) In the opinion of the Commission, provided that the vertical portions of the piping are separated from all other portions of each adjacent storey by a fire separation having a fire resistance rating equivalent to that which is outlined in Table 3.6.3.1. of the Code and adherence to the above noted condition sufficiency of compliance with the provisions of the Code will be achieved.

iii) The basement level of the subject building, through which horizontal piping runs, is sprinklered.

iv) Adherence to the above noted conditions will, in the opinion of the Commission, achieve sufficiency of compliance with the provisions of the Code.

Dated at Toronto this **20th** day in the month of **September** in the year **2007** for application number **B-2007-29.**

Tony Chow, Chair

Yaman Uzumeri

Marina Huissoon

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Ontario

Ruling No. 07-31-1160
Application No. 2007-15

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, *S.O. 1992*, c. 23, as amended.

AND IN THE MATTER OF Articles 8.7.3.2. and 8.2.1.6. of the Regulation 403,as amended, (the Building Code).

AND IN THE MATTER OF an application by Ted Antkow, Homeowner, for the resolution of a dispute with Bill Goodale, Chief Building Official, Sewage Systems, Township of Tiny, to determine whether the proposal to relocate the existing leaching bed and install a new 3 600 litre septic tank intended to remedy an Unsafe Order issued in respect of the existing Class 4 sewage system does not provide sufficiency of compliance with Articles 8.2.1.6. and 8.7.3.2. when considering Part 11 of the Building Code at 305 Concession 11 W, Township of Tiny, Ontario.

APPLICANT	Ted Antkow Homeowner Mississauga, ON
RESPONDENT	Mr. Bill Goodale Chief Building Official C. C. Tatham & Associates Ltd.
PANEL	Judy Beauchamp, Vice-Chair Jim Wilkinson Eric Gunnell
PLACE	Toronto, Ontario
DATE OF HEARING	September 6, 2007
DATE OF RULING	September 6, 2007
APPEARANCES	Ted Antkow Homeowner Mississauga, ON **The Applicant** Bill Goodale Chief Building Official C. C. Tatham & Associates Ltd, ON **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Unsafe Order under the *Building Code Act*, *1992*, requiring that a building permit be obtained and that the existing sewage system be replaced at 305 Concession 11 W, Township of Tiny, Ontario.

The subject building is described as a one and a half storey, two bedroom, seasonal cottage, having a building area of approximately 64 m^2. The dwelling is served by a private dug well and has a total of 7.5 plumbing fixture units. The total daily design flow rate for this residential building is 1 000 litres per day. The site is described as sloping from east to west and the existing native soil, which is described as sand, provides a percolation time of approximately five to ten minutes per centimetre.

The construction in dispute relates to the proposal by the Applicant to upgrade the existing Class 4 sewage system by relocating the existing leaching bed and replacing the existing septic tank with a new 3 600 litre septic tank. The subject sewage system has been in existence for approximately 40-45 years. The existing sewage system consists of an 1 800 litre septic tank connected to an inground leaching bed. The absorption trenches of the leaching bed consist of two runs of three metre distribution pipe.

The issue at dispute pertains to whether the Applicant's proposal to replace the existing septic tank and relocate the leaching bed addresses the unsafe situation and provides sufficiency of compliance with Articles 8.2.1.6. and 8.7.3.2. when considering Part 11 of the Building Code.

2. Provisions of the Building Code in Dispute

8.2.1.6. Clearances for a Class 4 or 5 Sewage System

(1) Except as provided in Sentences 8.2.1.4.(1) and (2), a treatment unit shall not be located closer than the minimum horizontal distances as set out in Table 8.2.1.6.A.

(2) Except as provided in Sentences 8.2.1.4.(1) and (2), a distribution pipe shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B. and these distances shall be increased when required by Sentence 8.7.4.2.(9).

(3) Except as provided in Sentences 8.2.1.4.(1) and (2), a holding tank shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.C.

8.7.3.2. Absorption Trenches

(1) Except as provided in Sentence (2), absorption trenches shall be,
- (a) approximately the same length and not more than 30 m in length, 8.7.3.3.
- (b) at least 500 mm and not more than 1 000 mm in width,
- (c) at least 300 mm and not more than 900 mm in depth,
- (d) centred at least 1 600 mm apart,
- (e) at least 900 mm at all points on the bottom of the absorption trench, or 900 mm from the surface of a filter bed above the high ground water table, rock or soil with a percolation time greater than 50 minutes, and
- (f) backfilled, after the installation of the distribution pipe with leaching bed fill,

so as to ensure that after the leaching bed fill settles, the surface of the leaching bed will not form any depressions.

(2) Absorption trenches constructed as shallow buried trenches shall be
- (a) approximately the same length and not more than 30 m in length,
- (b) at least 300 mm and not more than 600 mm in width,
- (c) at least 300 mm and not more than 600 mm in depth,
- (d) centred at least 1 600 mm apart,
- (e) at least 900 mm at all points on the bottom of the absorption trench above the high ground water table or rock, and
- (f) backfilled, after the installation of the distribution pipe with leaching bed fill, so as to ensure that after the leaching bed fill settles, the surface of the leaching bed will not form any depressions.

Part 11 – Renovation

(Please see Part 11 of the Building Code)

3. Applicant's Position

The Applicant provided the Building Code Commission (the "Commission") with a brief overview of the existing sewage system and outlined the history of the dispute between the parties. He stated that the subject building is a seasonal family dwelling that has been in existence for approximately 55 years.

The Applicant reported that he was proposing to install a new septic tank and would be willing to relocate the existing leaching bed, if necessary. He indicated that typical lot sizes in the area are 15 m (50 ft.) wide by 38 m (125 ft.) deep. He added that relocating one part of the sewage system in order to meet the minimum setback requirements to the adjacent lake would negatively impact the minimum setback requirements to his well, five adjacent neighbouring wells, the structure and the property line.

The Applicant advised that it is his belief that this proposal meets the intent of Part 11 of the Building Code. He stated that by replacing the septic tank and relocating the leaching bed, he is improving the performance level of the existing sewage system.

In response to questions regarding the depth to the groundwater table, the Applicant advised that when he was requested to excavate as part of the inspection process, he noted that the depth was approximately 700 mm to the groundwater table.

The Applicant asserted that he is putting forth his best effort to remedy the situation. He maintained that he complies with the requirements of Article 8.7.3.2. He noted that Sentence 8.2.1.4.(1) states "unless it can be shown to be unnecessary, where the percolation time is 10 minutes or greater, the location of all components within a sewage system shall be in conformance with the clearances listed in Articles 8.2.1.5. or 8.2.1.6." He indicated that this Code reference clearly indicates that there is some room for leniency regarding the minimum clearance distances.

In summation, the Applicant declared that he believes the evidence presented to the Commission supports his claim that he meets the provisions of Articles 8.2.1.6. and 8.7.3.2., especially when considering Part 11 of the Building Code, and as such the Commission should find for sufficiency of compliance in this matter.

4. Respondent's Position

The Respondent reported that this matter has been on-going for four years. He stated that, in his opinion, both the existing situation and the proposal put forth by the Applicant are unsafe. He asserted that as the Chief Building Official for Sewage Systems for the Township of Tiny, it is his duty to prevent the contamination of the groundwater from any new or existing sewage systems.

The Respondent maintained that the existing sewage system, in his opinion, is unsafe. Further, he added that the proposal of the Applicant to install a new septic tank and possibly relocate the leaching bed does not address the concerns outlined in the Unsafe Order. As such, it is his opinion that the proposed solution still results in an unsafe condition.

In response to questions regarding depth to the groundwater table, the Respondent indicated that he believed the depth to the high groundwater table to be about 500 mm. He added that a site inspection also revealed the depth to the standing water table to be approximately 600 mm. He added that the distribution pipe is approximately 400 mm above the standing water table and 100 mm above the high water table. In addition, the Respondent noted that the location of the existing distribution pipe provides less than the minimum clearance distance to five surrounding wells.

The Respondent maintained that the Applicant's proposal does not address the concerns outlined in the Unsafe Order that has been issued. He reiterated that the Applicant's proposal does not meet the minimum requirements stipulated in Sentences 8.2.1.6.(1) and 8.2.1.6.(2) of the Building Code with respect to clearance distances nor does the proposal meet the requirements of Clause 8.7.3.1.(1)(b) for minimum length of distribution pipe. He claimed that the sewage system has not been maintained and operated in accordance with Section 8.9 of the Building Code.

The Respondent summarized his position by reiterating that it is his duty, as Chief Building Official of Sewage Systems, to enforce the Building Code and to ensure the health and safety of the public. He declared that neither the existing sewage system nor the proposed sewage system meet the requirements of the Building Code and do not remedy the issues raised in the Unsafe Order.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposal to relocate the existing tile bed and install a new 3 600 litre septic tank intended to remedy an Unsafe Order issued in respect of the existing Class 4 sewage system does not provide sufficiency of compliance with Articles 8.2.1.6. and 8.7.3.2. when considering Part 11 of the Building Code at 305 Concession 11 W, Tiny Township, Ontario.

6. Reasons

i) The proposal does not remedy the concerns identified in the Unsafe Order nor does it provide sufficiency of compliance with Clause 8.7.3.2.(1)(e) of the Building Code, which requires absorption trenches to be located so that the bottom of the trench is not less than 900 mm above the high groundwater table, rock or soil with a percolation time greater than 50 minutes per centimetre.

ii) The Commission recognizes that the subject sewage system has been in existence for at least five years and therefore Part 11 of the Building Code applies in this instance. However, even when considering the compliance alternatives outlined in Part 11 of the Code, in the opinion of the Commission the health and safety concerns identified by the Respondent in the Unsafe Order that was issued have not been addressed.

Dated at Toronto this **6th** day in the month of **September** in the year **2007** for application number **2007-15.**

Judy Beauchamp, Vice Chair

Jim Wilkinson

Eric Gunnell

Ontario

Ruling No. 07-30-1159
Application No. 2007-27

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 3.2.9.2, of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Paul Svastal, Paul & Douglas Sprinklers Ltd., for the resolution of a dispute with Mike Leonard, Chief Building Official, City of Oshawa, to determine whether the proposed standpipe and hose system, where the hose valves in the fire hose cabinets will be pressure restricting valves and where 75 mm (3 in) drain risers will not be installed, provides sufficiency of compliance with Article 3.2.9.2. of the Building Code at Durham Consolidated Courthouse, 150 Bond Street East, City of Oshawa, Ontario.

APPLICANT	Paul Svastal Paul & Douglas Sprinklers Ltd. Mississauga, ON
RESPONDENT	Mike Leonard Chief Building Official City of Oshawa
PANEL	Tony Chow, Chair Gerry Egberts Mina Tesseris
PLACE	Toronto, Ontario
DATE OF HEARING	August 23, 2007
DATE OF RULING	August 23, 2007
APPEARANCES	Douglas Svatsal Mississauga, ON **The Applicant** S.K. Lo Manager, Building Permits Services City of Oshawa **Designate for the Respondent**

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the proposed standpipe and hose system, where the hose valves in the fire hose cabinets will be pressure restricting valves and where 75 mm (3 in) drain risers will not be installed, does not provide sufficiency of compliance with Article 3.2.9.2. of the Building Code at Durham Consolidated Courthouse, 150 Bond Street East, City of Oshawa, Ontario.

Reasons

i) Sentence 3.2.9.2.(1) of the Building Code requires that, where a standpipe system is required, the design, construction, installation and testing of the system be in conformance with NFPA 14, "Standard for the Installation of Standpipe and Hose Systems."

The Code does not contain a specific provision regarding drain risers and therefore the requirements outlined in NFPA 14 regarding drain risers apply.

NFPA 14 states that "A permanently installed 3-in. (76-mm) drain riser shall be provided adjacent to each standpipe equipped with pressure-regulating devices to facilitate tests of each device."

NFPA 14 also defines a "pressure-regulating device" as "a device designed for the purposes of reducing, regulating, controlling, or restricting water pressure. Examples include pressure-reducing valves, pressure control valves, and pressure-restricting devices."

ii) The subject valve is a "pressure-restricting device" which is a form of "pressure-regulating device" and therefore a drain riser is required as per the requirements of Sentence 3.2.9.2.(1) of the Building Code and NFPA 14.

Dated at Toronto this **23** day in the month of **August** in the year **2007** for application number **B-2007-27.**

Tony Chow, Chair

Gerry Egberts

Mina Tesseris

Ontario

Ruling No. 07-29-1158
Application No. 2007-24

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 9.8.4.1.(1), 9.8.7.6.(1), 9.8.4.1.(1) and 9.8.4.2.(2) of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Rudy Sawatzky, Victoria Meadows Townhomes Inc., for the resolution of a dispute with Rolf Wiens, Chief Building Official, to determine whether the as-installed interior stair, where the structural post for the handrail projects more than 100 mm into the required width of the stairway and similarly projects into the width of the landing at the bottom of the stair, provide sufficiency of compliance with Sentences 9.8.4.1.(1) and 9.8.7.6.(1) of the Building Code and further whether the door that swings outward over a 325 mm exterior step serving a second storey balcony provides sufficiency of compliance with Sentences 9.8.4.1.(1) and 9.8.4.2.(2) of the Building Code at Unit #2, 175 Queen Street, Town of Niagara-on-the-Lake, Ontario.

APPLICANT	Rudy Sawatzky Victoria Meadows Townhomes Inc. St. Catharines, ON
RESPONDENT	Rolf Wiens Chief Building Official Town of Niagara-on-the-Lake
PANEL	Tony Chow, Chair Mina Tesseris Gary Egberts
PLACE	Toronto, Ontario
DATE OF HEARING	August 23, 2007
DATE OF RULING	August 23, 2007
APPEARANCES	Deborah McMahon Grey Forest Homes Ltd., St. Catharines, ON **Agent for the Applicant**
	Keegan Gennings Building Inspector Town of Niagara-on-the-Lake, ON **Designate for the Respondent**

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the as-installed interior stair, where the structural post for the handrail projects into the width of the landing at the bottom of the stair, provides sufficiency of compliance with 9.8.4.2.(2), Sentence 9.8.4.1.(1), and 9.8.7.6.(1) of the Building Code at Unit #2, 175 Queen Street, Town of Niagara-on-the-Lake, Ontario.

Further, it is the Decision of the Building Code Commission that the door that swings outward over a 325 mm exterior step serving a second storey balcony does not provide sufficiency of compliance with Sentences 9.8.4.2.(1) of the Building Code at Unit #2, 175 Queen Street, Town of Niagara-on-the-Lake, Ontario.

Reasons

i) Sentence 9.8.4.2.(2) requires a landing to be provided at the top and bottom of each flight of interior stairs, except as provided in Sentence 9.8.4.2.(3). In the opinion of the Commission, the finished floor area at the bottom of the stairway shall be considered the landing.

ii) Sentence 9.8.3.3.(2) of the Code requires at least one stairway between floor levels in a dwelling unit to have a minimum width of 860 mm. Further, Sentence 9.8.4.1.(1) of the Code requires that landings shall be at least as wide and as long as the width of the stairs in which they occur. The width of landing and the width of stair when measured perpendicular to the run of the stair provides a minimum width of 860 mm as required by the Code.

iii) Sentence 9.8.7.6.(1) requires that handrails and constructions below handrails shall not project more than 100 mm into the required width of a stairway. The Commission was advised that the minimum required width for the stairway between the floor levels was not at issue.

iv) Sentence 9.8.4.2.(1) requires a door that swings towards a stair, the full arc of its swing shall be over a landing. It is the view of the Commission that the door, which swings outward over a 325 mm exterior step and onto a balcony, poses a safety hazard.

v) There were no acceptable compensating measures offered for the Commission to consider sufficiency of compliance with Sentence 9.8.4.2.(1).

Dated at Toronto this **23** day in the month of **August** in the year **2007** for application number **2007-24.**

Tony Chow, Chair

Mina Tesseris

Gary Egberts

Ruling No. 07-28-1157
Application No. 2007-23

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 3.2.5.1. of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Robert Mayhew, Southlake Regional Health Centre, for the resolution of a dispute with Ron Tremblay, Chief Building Official, Town of Newmarket, to determine whether the proposed compensating measures offered in lieu of the openings required by Article 3.2.5.1., when considering the provisions of Article 3.2.5.5., in a six storey, Group F, Division 3 storage garage, provide sufficiency of compliance with the Building Code at 596 Davis Drive, Town of Newmarket, Ontario.

APPLICANT	Robert Mayhew Southlake Regional Health Newmarket, ON
RESPONDENT	Ron Tremblay Chief Building Official Town of Newmarket
PANEL	Tony Chow, Chair Alison Churchill Prabhakar Mahant
PLACE	Toronto, Ontario
DATE OF HEARING	August 16, 2007
DATE OF RULING	August 16, 2007
APPEARANCES	Lind Nyman Parkin Architects Ltd. Toronto, ON **Agent for the Applicant** David Potter Assistant Director Town of Newmarket **Designate for the Respondent**

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the proposed compensating measures offered in lieu of the openings required by Article 3.2.5.1., in a six storey, Group F, Division 3 storage garage, does not provide sufficiency of compliance with the Building Code at 596 Davis Drive, Town of Newmarket, Ontario.

Reasons

i) Sentence 3.2.2.10.(1) of the Building Code requires that every building shall face a street located in conformance with the requirements of Articles 3.2.5.5. and 3.2.5.6. In this instance, the west face of the subject building faces Prospect Street which serves as the required fire department access route.

ii) Article 3.2.5.1. of the Building Code requires that every storey, that is not sprinklered and whose floor level is less than 25 m above grade, be provided with direct access for fire fighting by at least one unobstructed window or access panel for each 15 m of wall in each wall required to face a street by Subsection 3.2.2. The subject building does not have an access panel every 15 m as required by Article 3.2.5.1.

iii) The compensating measures proposed, including the installation of sprinklers in the elevator lobbies, the provision of a fire alarm system and the increased fire resistance rating of the floor assemblies; do not offset the lack of direct access openings for fire fighting as required by Sentence 3.2.5.1.(1) of the Code.

Dated at Toronto this **16th** day in the month of **August** in the year **2007** for application number **2007-23.**

Tony Chow, Chair

Alison Churchill

Prabhakar Mahant

Ontario

Ruling No. 07-26-1155
Application No. 2007-20

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 3.3.1.17. of Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by Marvin Litvack, York Region Condominium Corporation No 6.22, for the resolution of a dispute with Leo Grellette, Chief Building Official, City of Vaughan, to determine whether the existing guards, serving exterior balconies of three residential units located within a 16 storey Group C residential condominium building, and being 1041 mm, 1032 mm and 930 mm in height respectively for Units 704, 1408, and 1702, provide sufficiency of compliance with Article 3.3.1.17. of the Building Code at 7460 Bathurst Street, City of Vaughan, Ontario.

APPLICANT	Marvin Litvack York Region Condominium Corporation No 6.22 City of Vaughan, ON
RESPONDENT	Leo Grellette Chief Building Official City of Vaughan, ON
PANEL	Leslie Morgan, Vice-Chair Rick Florio Marina Huissoon
PLACE	Toronto, Ontario
DATE OF HEARING	July 5, 2007
DATE OF RULING	July 5, 2007
APPEARANCES	Tom Bourdignon Andrejs Management Inc. Woodbridge, ON **Agent for the Applicant** Leo Grellette Chief Building Official City of Vaughan, ON **The Respondent**

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the existing guards, serving exterior balconies of three residential units located within a 16 storey Group C residential condominium building, and being 1041 mm, 1032 mm and 930 mm in height respectively for Units 704, 1408, and 1702, does not provide sufficiency of compliance with Article 3.3.1.17. of the Building Code at 7460 Bathurst Street, City of Vaughan, Ontario.

Reasons

i) The repairs undertaken to refurbish the concrete cover of the balcony walking surfaces negatively impacted the height of the guard for the balconies. The Building Code establishes a minimum set of construction requirements, as set out in Article 3.3.1.17., requiring that a guard not less than 1070 mm (3 ft 6 in) high be provided for balconies where there is a difference of more than 600 mm between levels.

ii) In this instance, the repairs undertaken resulted in guard heights which are less than 1070 mm, which is the minimum height required by the Code. Moreover, the personal finishes (carpeting and decking) that have been added to the walking surface of the balconies by unit residents further exacerbates an already non-compliant condition. The Commission does not consider carpeting and decking that cover the entire walking surface of the balcony to be a removable furnishing, and is not like a chair, as argued by the applicant.

iii) Part 11 of the Building Code does not offer any compliance alternatives for guard heights in the subject 16 storey residential building.

iv) In the opinion of the Commission, the deviations from the minimum guard height of 1070 mm are beyond what could be considered within acceptable tolerance limits.

v) No compensating measures were offered to offset the lack of compliance with the minimum set of construction requirements prescribed the Code.

Dated at Toronto this **5th** day in the month of **July** in the year **2007** for application number **2007-20.**

Leslie Morgan, Vice-Chair

Rick Florio

Marina Huissoon

Ontario

Ruling No. 07-25-1154
Application No. 2007-11

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 9.10.18.1., 9.10.18.3., 9.10.18.4., and 9.33.4.3. of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Shirley Taliano, Homeowner, for the resolution of a dispute with Rolf Wiens Chief Building Official, Town of Niagara-on-the-Lake, to determine whether the as-installed 12 volt alarm system, consisting of smoke alarms and carbon monoxide detectors, where the smoke alarms, conforming to CAN/ULC-S553-02 and NFPA 72, are connected to a 30 watt siren located in the basement of a Group C residential dwelling, provides sufficiency of compliance with Articles 9.10.18.1., 9.10.18.3., 9.10.18.4., and 9.33.4.3. of the Building Code at 270 Niagara Boulevard, Town of Niagara-on-the-Lake, Ontario.

APPLICANT	Shirley Taliano Homeowner Niagara-on-the-Lake, ON
RESPONDENT	Rolf Wiens Chief Building Official Town of Niagara-on-the-Lake
PANEL	Leslie Morgan, Vice-Chair Rick Florio Marina Huissoon
PLACE	Toronto, Ontario
DATE OF HEARING	July 5, 2007
DATE OF RULING	July 5, 2007
APPEARANCES	Shirley Taliano Homeowner Niagara-on-the-Lake, ON **Agent for the Applicant** Keegan Gennings Building Inspector Town of Niagara-on-the-Lake **Designate for the Respondent**

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the as-installed 12 volt alarm system, which includes smoke alarms on each level of the residence, carbon monoxide detectors, and a 30 watt siren (located in the basement) in a Group C residential dwelling provides sufficiency of compliance with Articles 9.10.18.3. and 9.10.18.4. of the Building Code at 270 Niagara Boulevard, Town of Niagara-on-the-Lake, Ontario, on condition that:

a) The sound pressure level in the sleeping rooms from the audible signal device(s) is not less than 75 dBA when any intervening doors between the device(s) and the sleeping rooms are closed.

Further, it is the Decision of the Building Code Commission that the smoke alarms and carbon monoxide detectors that have been installed do not provide sufficiency of compliance with Articles 9.10.8.1. and 9.33.4.3. of the Building Code at 270 Niagara Boulevard, Town of Niagara-on-the-Lake, Ontario.

Reasons

i) Article 9.10.18.4. of the Building Code sets out the requirements for interconnection of smoke alarms. Specifically, it stipulates that, when more than one smoke alarm is required in a dwelling unit, the smoke alarms are to be wired so that the activation of one alarm will cause alarms within the unit to sound. Adherence to the above noted condition will ensure that a sufficient sound pressure level is achieved throughout the building. Therefore, in the opinion of the Commission, the intent of the Building Code has been met regarding interconnection of smoke alarms, provided that it can be demonstrated that the alarm signal sound pressure level is not less than 75 dBA in the bedrooms, when any intervening doors between the device and the bedrooms are closed.

ii) The building is a single family dwelling unit of limited building area, which in the opinion of the Commission aids in allowing the transmission of sound from the alarm siren, which is interconnected to all smoke alarms and carbon monoxide detectors, to be audible throughout the entire dwelling.

iii) Article 9.10.18.3. of the Building Code sets out the requirements for power supply to smoke alarms. Sentence 9.10.18.3.(1) requires that smoke alarms be installed by permanent connections to an electrical circuit that has no disconnect switch between the overcurrent circuit device and the smoke alarm. The subject alarms are connected to, and derive their power from, the building security panel. The panel includes a power supply transformer which converts the building's 120 V supply to 12 V for the security/alarm panel. The alarm system is also equipped with a back up power supply, consisting of batteries designed to provide 4 hours of stand-by power plus 15 minutes of alarm. The Commission heard evidence which indicated that the subject alarm system has been installed and has passed the electrical inspection and that no issues were identified regarding the functionality of the system. The alarm system appears to meet the requirements of the Electrical Safety Code, therefore, in the opinion of the Commission, the as-installed system meets the intent of the Building Code for reliability of the system.

iv) Articles 9.10.18.1. and 9.33.4.3. of the Building Code set out the standards to which smoke alarms and carbon monoxide detectors must conform. The Commission was not presented with evidence to suggest that the alarm/detection devices installed conform to the standards listed within the Code for such devices nor was the Commission presented with evidence indicating to what standard the devices have been tested. It is the opinion of the Commission that sufficiency of compliance has not been achieved in this regard.

Dated at Toronto this **5th** day in the month of **July** in the year **2007** for application number **2007-11.**

Leslie Morgan, Vice-Chair

Rick Florio

Marina Huissoon

Ontario

Ruling No. 07-24-1153
Application No. 2007-13

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Parts 5 and 9 of Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Mika Jantunen, homeowner, for resolution of a dispute with Michael Diver, Chief Building Official, Township of Oro-Medonte to determine whether the proposed insulation system and wall assembly, composed of compressed, stacked straw bales, provides sufficiency of compliance with Parts 5 and 9 of the Building Code at 5745 3rd Line N, Township of Oro-Medonte, Ontario.

APPLICANT	Mika Jantunen Homeowner Barrie, Ontario
RESPONDENT	Michael Diver Chief Building Official Township of Oro-Medonte
PANEL	Tony Chow, Chair Gerry Egberts Neal Barkhurst
PLACE	Toronto, Ontario
DATE OF HEARING	June 7, 2007
DATE OF RULING	June 7, 2007
APPEARANCES	Mika Jantunen Homeowner Barrie, Ontario **The Applicant** Michael Diver Chief Building Official Township of Oro-Medonte **The Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, to construct a two storey residential dwelling at 5745 3rd Line N, Township of Oro-Medonte, Ontario.

The subject dwelling, will have a building area of approximately 130 m^2, and will be constructed using combustible material. The floor of the first storey of the structure will be supported by slab on grade, as the dwelling will not include a basement level. The floor plan shows the dwelling to be rectangular in shape with the first storey containing the main living area, including kitchen, bathroom, living room and a bedroom. The second storey, containing an open concept loft, is only partially finished with the remainder of the area being open to the storey below. The roof of the dwelling projects 1.8 m beyond the north and south walls and 1.2 m beyond the gable ends (east and west walls) of the subject dwelling.

The dwelling will be framed using post and beam members for the structural integrity of the building. The exterior walls of the dwelling are proposed to be "filled in" with compressed, stacked straw bales between the structural post and beam members.

The proposed wall assembly will be constructed using compressed, stacked straw bales with a plastic polypropylene mesh installed on both the interior and exterior surface. The plastic mesh will be stitched to the straw bales using polypropylene twine. Three layers of stucco, a base coat, a scratch coat and a finish coat, will be applied directly to the plastic mesh on both the interior and exterior surfaces of the straw bales. The outermost coat will be smoothed to a finished texture. A coat of water based casein paint will be applied to the interior walls whereas the exterior surface of the straw bale assembly will include a water repellent paint on top of the three layers of stucco.

The issue at dispute between the parties involves whether the Applicant's proposal to use a compressed, stacked straw bale wall assembly in the construction of a new two storey, Group C – residential dwelling provides sufficiency of compliance with the Building Code. In particular, whether the proposed straw bale wall system will sufficiently comply with the provisions pertaining to environmental separators, such as thermal insulation, dampproofing, flashing, air barriers, vapour barriers and interior and exterior finishes.

2. Provisions of the Building Code in Dispute

Part 5 - Wind, Water and Vapour Protection

(Please see Part 5 of the Building Code)

Part 9 - Housing and Small Buildings

(Please see Part 9 of the Building Code)

3. Applicant's Position

At the commencement of the hearing, the Applicant submitted that he was unclear as to the technical provisions of the Code that were in dispute by the municipality. He claimed that his building permit has not been approved because the Chief Building Official is "not comfortable with straw bale construction". He further claimed that the municipality would only permit him to

construct a one storey building using straw bale construction provided that he complied with the conditions listed in a previous Building Code Commission ruling, issued in 1999 for a property in Mississauga. He maintained that he is unclear as to why the Chief Building Official would permit the use of straw bale as in-fill insulation in the construction of a one storey dwelling but not a two storey dwelling.

The Applicant stated that he has tried to address what he believes may be the provisions of the Code that are in dispute. He agreed that, as the use of straw bales is not prescribed by the Building Code, the building is required to be designed to Part 4 of the Code. He advised that he has engaged a professional engineer for the structural design of the building and therefore he believes that the building will be in conformance with Part 4 of the Building Code. He submitted that he believes that all other building systems and components will be in compliance with the respective provisions of Part 9 of the Code. He indicated that it his assumption that the main areas of concern regarding his proposed construction pertain to wind, water and vapour protection.

In this regard, the Applicant, with the assistance of his consultants, addressed the areas of Code pertaining to thermal insulation, dampproofing, flashing, air barriers, vapour barriers, exterior finishes and interior finishes.

The Applicant submitted that Section 9.13. of the Code outlines the provisions for dampproofing, however, he suggested that, as set out in Article 9.13.1.1., these provisions only apply to foundation walls below ground level of buildings. He further suggested that, since the proposed dwelling does not include a basement, dampproofing is not an issue. Similarly, he advised that the flashing installed on the subject dwelling will comply with Subsection 9.27.3. of the Code.

With respect to thermal insulation, the Applicant argued that, since the municipality would approve the use of straw bales as in-fill insulation for a one storey building, there is no difference in the thermal resistance value of straw bales used as insulation for a second storey. Further, he reported that the thermal resistance value attributed to compressed straw bales exceeds the minimum values required by the Building Code. He elaborated by saying that Table 9.25.2.1. of the Code requires a minimum thermal resistance of 3.00 RSI (R17) for the exterior walls of the subject dwelling. He declared that compressed straw bales provide a thermal resistance between 6.16 RSI (R35) and 7.04 RSI (R40), which not only exceeds the minimum requirements of the 1997 Building Code but also exceeds the minimum required by the 2006 Building Code.

The Applicant and his consultants addressed the Code requirements pertaining to air barriers, vapour barriers, exterior finishes and interior finishes. He maintained that a straw bale wall assembly, while not the same as a conventional wall assembly, provides an equivalent level of performance. He stated that layers of stucco and paint applied to the straw bales serve to provide the requisite air and vapour control outlined in the Building Code. He stressed that straw bale walls allow for a significant amount of safe moisture storage within the assembly.

It was the submission of the Applicant that the composition of the straw bale wall assembly, with the various finishes as described, meets the intent of the Building Code. He added that the roof projection of the dwelling provides additional protection for the exterior walls and will assist in preventing water from entering the wall assembly from the outside.

In summary, the Applicant reiterated that it is his belief that the proposed straw bale wall assembly will sufficiently comply with the intent of the prescriptive Part 9 requirements of the Building Code.

4. Respondent's Position

The Respondent submitted that straw bale construction, such as is proposed by the Applicant, is not prescribed in the Building Code. He further submitted that in reviewing the proposal he looked to a previous ruling of the Building Code Commission for guidance. As such, he indicated that he advised the Applicant that he would accept the proposed construction provided that the Applicant adhered to all of the conditions listed in the previous ruling. He pointed out that the subject proposal contemplates construction of a two storey dwelling and that the previous BCC ruling included a condition that limited the construction to a one storey building.

In response to questions regarding which specific provisions of the Building Code were in dispute, the Respondent advised that the issues in dispute pertained to environmental separators. He confirmed that there was no issue regarding structural integrity of the building as the structure has been designed by a professional engineer in accordance with Part 4 of the Building Code.

The Respondent indicated that the Building Code does not address the use of straw bale construction and he was unable to accept the proposal as providing an equivalent level of performance as would be achieved by complying with the prescriptive requirements of the Code. He stressed that he is particularly concerned with protection against wind, water and vapour especially for the second storey of the dwelling.

In summation, the Respondent reiterated that as the Code does not address straw bale construction, he looked to the previous ruling of the Commission for guidance. He indicated that, as the Applicant would not agree to abide by the conditions associated with the previous ruling, he was unable to accept the proposal as, in his opinion, the proposal does not comply with the Building Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed insulation system and wall assembly composed of compressed, stacked straw bales provides sufficiency of compliance with Parts 5 and 9 of the Building Code at 5745 3rd Line N., Township of Oro-Medonte, Ontario, on condition that:

a) A professional engineer, registered in the Province of Ontario, who has expertise in building science and in straw bale construction, shall provide his or her professional stamp on the drawings and details provided to the municipality and he or she shall oversee the construction of the subject building.

b) The stucco finish applied to the exterior of the subject building shall be not less than 200 mm (7⅞ inches) above finished ground level.

c) The flashing installed for the subject building shall comply with the requirements outlined in Subsection 9.27.3. of the Building Code.

d) The caulking provided for the subject building shall comply with requirements outlined in Subsection 9.27.4. of the Building Code.

e) The stucco used for the subject building shall comply with the requirements outlined in Subsection 9.28. of the Building Code, with the exception of Article 9.28.4.1., whereby, a 44 x 49 mm plastic polypropylene mesh (known as Cintoflex C) may be used as stucco lath for the subject building.

6. Reasons

i) The proposed straw bale wall assembly is being used as an insulation system only. The straw bale wall assembly is not being used to structurally support the subject building. Furthermore, the Commission heard evidence at the hearing that the municipality did not have an issue with respect to structural adequacy of the subject building as the drawings submitted had been stamped by a professional engineer licensed in the Province of Ontario.

ii) Based on evidence presented at the hearing and the condition requiring a review by a professional engineer having expertise in building science, the Commission is satisfied that sufficiency of compliance with the requirements outlined in Part 5 of the Building Code will be achieved.

iii) The Commission notes that the municipality would have accepted the proposed use of straw bale construction based upon a previous ruling and conditions issued by the Building Code Commission. However, in this instance the Applicant's proposal included, among other things, using straw bale construction of a second storey and using an alternative to wire mesh as stucco lath. Based on the evidence heard by the Commission regarding the design of the proposed building on the subjects of thermal insulation, dampproofing, flashing, air barriers, vapour barriers, interior and exterior finishes, the Commission is satisfied that the construction proposed will meet the intent of the Building Code in respect to these requirements.

iv) The Commission heard evidence indicating that the thermal resistance values attributed to the compressed straw bales exceed the minimum thermal resistance values outlined in the Building Code.

v) In the opinion of the Commission, the roof projection of the subject dwelling provides sufficient overhang so as to provide protection to the first and second storeys of the dwelling.

Dated at Toronto this **7th** day in the month of **June** in the year **2007** for application number **2007-13.**

Tony Chow, Chair

Gerry Egberts

Neal Barkhurst

Ruling No. 07-23-1152
Application No. 2007-10

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 3.1.8.3., 3.2.3.6., 3.3.5.6., Sentences 3.2.5.16.(2) and 3.3.4.2.(4) of the Regulation 403/97,as amended, (the Building Code).

AND IN THE MATTER OF an application by Randy Wilson, Randy Wilson Architect Inc., for the resolution of a dispute with Rocky Cerminara, City of London, to determine whether the proposed construction of a Group B, Division 3 care occupancy, where the proximity of the nearest fire hydrant is approximately 90 m from the building, the fire resistance rating of the fire separation between the single car storage garage and the remainder of the building is less than 1. 5 h, combustible eave projections will extend to within 1.2 m from the property line and where the fire separation does not extend to the underside of the roof deck, provides sufficiency of compliance with Articles 3.1.8.3., 3.2.3.6., 3.3.5.6., Sentences 3.2.5.16.(2) and 3.3.4.2.(4) of the Building Code at 586 Creston Avenue, City of London, Ontario.

APPLICANT	Randy Wilson Randy Wilson Architect London, ON
RESPONDENT	Rocky Cerminara Chief Building Official City of London
PANEL	Tony Chow, Chair Gerry Egberts Neal Barkhurst
PLACE	Toronto, Ontario
DATE OF HEARING	June 7, 2007
DATE OF RULING	June 7, 2007
APPEARANCES	Gary Edwards Code Advisor Ilderton, ON **Agent for the Applicant** Doug Thatcher Building Inspector City of London **Agent for the Respondent**

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the proposed construction of a Group B, Division 3 care occupancy, where the proximity of the nearest fire hydrant is greater than 45 m but less than 90 m from the building provides sufficiency of compliance with Sentence 3.2.5.16.(2) of the Building Code at 586 Creston Avenue, City of London, Ontario, on condition that:

a) The fire alarm system that has been installed shall be connected to a monitoring system so that the fire department is notified in the event of an alarm signal being initiated.

Further, it is the Decision of the Building Code Commission that the combustible eave projections that will extend to less than 1.2 m from the property line and the vertical fire separation, between the garage and the Group B, Division 3 occupancy, that does not extend to the underside of the roof deck, do not provide sufficiency of compliance with Articles 3.1.8.3., 3.2.3.6., and Sentence 3.3.4.2.(4) of the Building Code at 586 Creston Avenue, City of London, Ontario.

Reasons

i) The subject building is reasonably small in size and the fire station is relatively close in proximity to the subject building. Additionally, the building will have 24 hour, on-site supervision and with adherence to the above noted condition, the fire alarm system will be connected to an external monitoring system. Furthermore, if the subject building were less than 186 m^2 in size, a connection to the fire department would not be required. In the opinion of the Commission sufficiency of compliance with the requirements of the Building Code will be achieved.

ii) It is the opinion of the Commission that the level of protection offered by the proposed non-combustible, perforated soffit cladding and the additional fire stopping are not effective means to prevent migration of a fire into the attic space and therefore sufficiency of compliance would not be achieved.

iii) Article 3.3.5.6. of the Building Code requires a storage garage to be separated from other occupancies by a fire separation having a fire resistance rating of not less than 1.5 h. The Commission heard evidence that the walls between the garage and the care occupancy of the subject building provide the requisite 1.5 h fire resistance rating. However, this vertical fire separation does not extend to the underside of the roof deck as required by Article 3.1.8.3. of the Code. The Commission is not satisfied that the proposal to provide a horizontal 1 h ceiling membrane on the garage side only will adequately address the lack of continuity of the fire separation and therefore, sufficiency of compliance would not be achieved.

Dated at Toronto this **7th** day in the month of **June** in the year **2007** for application number **2007-10.**

Tony Chow, Chair

Gerry Egberts

Neal Barkhurst

Ontario

Ruling No. 07-22-1151
Application No. P-2007-17

BUILDING CODE COMMISSION

IN THE MATTER OF Clause 24(1)(b) of the *Building Code Act*, S.O. 1992, c. 23 ("Act").

AND IN THE MATTER OF Subsections 8(2.2) and 8(2.3) of the Act and Division C, Article 1.3.1.3. of Ontario Regulation 350/06, as amended ("Building Code").

AND IN THE MATTER OF an application for a permit by Donovan Wood on behalf of Ravenda Homes Ltd. under subsection 8(1) of the Act for the construction of a five unit townhouse block at 26 Bluegrass Crescent (Block 7 – Units 26 - 34), City of St. Catharines, Ontario.

AND IN THE MATTER OF a dispute between Ravenda Homes Ltd. and Sandra Korakis, Chief Building Official, City of St. Catharines, involving whether the Chief Building Official complied with the requirements under Subsections 8(2.2) and 8(2.3) of the Act and Division C, Sentence 1.3.1.3.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 1.3.1.3. of the Building Code regarding 26 Bluegrass Crescent (Block 7 – Units 26 – 34), City of St. Catharines, Ontario.

APPLICANT	John Ravenda Ravenda Homes Ltd. Welland, Ontario
RESPONDENT	Sandra Korakis Chief Building Official City of St. Catharines
PANEL	Ed Link, Chair Designate
PLACE	Toronto, Ontario
DATE OF APPLICATION	May 10, 2007
DATE OF HEARING	May 14, 2007
DATE OF RULING	June 1, 2007
APPEARANCES	John Ravenda and Donovan Wood Ravenda Homes Ltd. **The Applicants** Sandra Korakis (by telephone conference) Chief Building Official City of St. Catharines **The Respondent**

RULING

1. Particulars of Dispute

The Applicant applied for a permit under subsection 8(1) of the Act to construct a one storey, five unit townhouse block at 26 Bluegrass Crescent, City of St. Catharines, Ontario.

The dispute between the parties involves whether the Chief Building Official (the Respondent) complied with subsections 8(2.2) and 8(2.3) of the Act and Division C, Sentence 1.3.1.3.(1) of the Building Code.

2. Provisions of the Act and Building Code in Dispute

Act: subsections 8(2.2) and (2.3)

Decision

(2.2) When an application for a permit contains the prescribed information, the chief building official is required to determine within the period prescribed by regulation whether to issue the permit or to refuse to issue it.

Same, reasons for refusal

(2.3) If the chief building official refuses to issue the permit, he or she shall inform the applicant of all of the reasons for the refusal of the permit and shall do so within the period prescribed by regulation.

Building Code:

Division C, Article 1.3.1.3. Period Within Which a Permit is Issued or Refused

(1) Subject to Sentences (2) and (3), if an application for a permit under subsection 8 (1) of the Act that meets the requirements of Sentence (5) is submitted to a *chief building official*, the *chief building official* shall, within the time period set out in Column 3 of Table 1.3.1.3. corresponding to the class of *building* described in Column 2 of Table 1.3.1.3. for which the application is made,

(a) issue the permit, or

(b) refuse to issue the permit and provide in writing all of the reasons for the refusal.

Table 1.3.1.3.
Period Within Which Permit Shall be Issued or Refused

Forming Part of Article 1.3.1.3.

Column 1	Column 2	Column 3
Row Number	Class of *Building*	Time Period
1	(a) A detached house, semi-detached house, townhouse, or row house where no *dwelling unit* is located above another *dwelling unit*. (b) A detached structure that serves a *building* described in Clause (a) and does not exceed 50 m^2 in *building area*. (c) A tent to which Section 3.14. of Division B applies. (d) A sign to which Section 3.15. of Division B applies.	10 days
2	(a) *Buildings* described in Clause 1.1.2.4.(1)(a), (b) or (c) of Division A, other than *buildings* described in Column 2 of any of Rows 1 and 4 of this Table. (b) *Farm buildings* that do not exceed 600 m^2 in *building area*.	15 days
3	(a) *Buildings* described in Clause 1.1.2.2.(1)(a), or (b) of Division A, other than *buildings* described in Column 2 of any of Rows 1 and 4 of this Table. (b) *Farm buildings* exceeding 600 m^2 in *building area*.	20 days
4	(a) *Post-disaster buildings*. (b) *Buildings* to which Subsection 3.2.6. of Division B or any provision in Articles 3.2.8.3. to 3.2.8.11. of Division B applies.	30 days

3. Applicant's Position

The Applicant stated that, on April 25, 2007, a permit application was submitted to the City of St. Catharines Building Department along with a cheque for the payment of the fees required to be paid when a permit application is made. He advised that the permit application proposed the construction of a one storey, five unit townhouse block at 26 Bluegrass Crescent. In his Application for Hearing to the Building Code Commission, he submitted that the Respondent neither issued the permit nor refused to issue the permit and provide all reasons for the refusal within the prescribed time frame.

The Applicant advised that on April 30, 2007, he received a letter from the Chief Building Official stating that an initial review of the permit application revealed that the requisite Ministry of Transportation (MTO) permit expired on April 19, 2007. He further advised that this letter indicated that since the MTO permit had expired, the building permit application was being considered incomplete by the municipality and that the time frame for reviewing the permit application would not commence until such time as a current MTO permit was provided.

The Applicant stated that a call was placed to MTO requesting clarification regarding the effective date of the MTO permit. He added that a representative of MTO was requested to contact the Chief Building Official in order to clarify issues regarding the expiration of MTO permits. He reported that it is his understanding that a representative of MTO spoke with the municipality to clarify these issues. He further reported that MTO considers "construction" to be started on a site when grading or site servicing has begun. He added that grading and servicing of this block has already begun and therefore the MTO permit should be considered a valid permit.

The Applicant explained that on May 9, 2007, an employee of Ravenda Homes Ltd. went to the City's offices to pick up the anticipated building permit. It was then that a letter, dated May 2, 2007, detailing the reasons the City was unable to issue the building permit was handed to him. The Applicant denied having received a copy of the May 2, 2007 letter of refusal prior to the copy that was hand delivered to his employee on May 9, 2007.

The Applicant asserted that the City of St. Catharines has not upheld the spirit of the Building Code in respect of the prescribed time frames for issuing building permits. He contended that the City of St. Catharines is abusing its power and he further contended that he is being treated unfairly by the City.

The Applicant stated that the reasons for not issuing his building permit are unreasonable and that it is inexcusable that the City waited until the very last minute to advise him that the permit was not going to be issued. He reiterated that prior to May 9, 2007 he did not receive any communication from the City regarding his permit other than the April 30, 2007 letter regarding the MTO issue.

In summary, the Applicant argued that City of St. Catharines is not meeting the intent or spirit of the Building Code in respect of the time frame provisions for permit processing and that he and his company are being unfairly treated by the City.

4. Respondent's Position

The Respondent participated in the hearing by way of teleconference and submitted that a permit application from the Applicant was received on April 25, 2007. She confirmed that the application included the required fees and that the permit application was subject to the ten day time period outlined in Table 1.3.1.3. of the Code. She affirmed that, in accordance with Division C, Sentence 1.3.1.3.(6) of the Code, the time period for making a determination regarding the issuance of a building permit began on April 26, 2007.

With respect to the issues regarding the expiration of the MTO permits, the Respondent advised that she spoke with a representative of MTO seeking clarification of the expiration dates of the MTO permits. She reported that after receiving clarification that MTO considers "construction" to be started on a site if grading or site servicing has commenced and she proceeded to process the permit application review based on the original date of submission. She explained that a letter, dated May 7, 2007, was sent to the Applicant confirming this and advising that the permit application would be processed accordingly.

The Respondent reported that the permit application was reviewed almost immediately and it became apparent the City would be unable to issue the building permit. She advised that a letter, dated May 2, 2007, detailing the reasons for refusal to issue the building permit was mailed to the Applicant on May 3, 2007. She asserted that the municipality has met its obligation with respect to the legislated time frame for processing permit applications. When questioned as to whether the letter of refusal had been faxed to the Applicant, the Respondent disclosed that the letter was sent by regular mail only. However, she added, a copy of the May 2, 2007 letter of refusal was hand delivered to an agent of Ravenda Homes Ltd. on May 9, 2007.

In summation, the Respondent asserted that the City of St. Catharines has met its obligation with respect to the legislated time frame with respect to permit processing in this instance. She reiterated that the time period for making a determination regarding the Applicant's building permit application began on April 26, 2007. She declared that the Code specifies that the time period does not include Saturdays, holidays and all other days that the offices are not open for business, therefore, the applicable time period, in this instance, ended on May 9, 2007. She asserted that the letter detailing reasons for non-issuance of the building permit was sent to the Applicant via regular mail on May 3, 2007 and, as such, the municipality has fully complied with the time frames prescribed by the Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the Respondent has complied with the requirements of Subsections 8(2.2) and 8(2.3) of the *Building Code Act, 1992* and Division C, Sentence 1.3.1.3.(1) of the Building Code. Under these subsections, the Respondent is required to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal, within the applicable time period set out in Table 1.3.1.3. of the Building Code.

6. Reasons

i) Division C, Sentence 1.3.1.3.(6) of Division C of the Building Code specifies when the time periods set out in Table 1.3.1.3. commence:

The time period described in Sentences (1) to (3) shall begin on the day following the later of

(a) the day on which an application meeting the requirements of Sentence (5) is submitted to the chief building official, and

(b) the day on which payment is made of all fees that are required, under a by-law, regulation or resolution made under Clause 7 (1) (c) of the Act, to be paid when the application is made.

The parties agreed that the permit applications were submitted to the City of St. Catharines on April 25, 2007.

As a result, it is April 26, 2007 (the day following the day on which an application meeting the requirements of Sentence (5) is submitted) that the applicable time period set out in Table 1.3.1.3. commenced in this case.

ii) The parties agreed that the construction proposed under the application in question is subject to the ten day time period set out in Column 3 of Row 1 in Table 1.3.1.3. Sentence 1.3.1.3.(7) provides that the time periods described in Column 3 of Table 1.3.1.3. do not include Saturdays, holidays and all other days when the offices of a principal authority are not open for the transaction of business with the public.

In the present case, the applicable ten day time period ended on May 9, 2007. The Respondent was required to issue or refuse to issue permits in respect of the Applicant's permit applications by that date.

iii) The Respondent hand delivered a letter, dated May 2, 2007, which detailed the reasons for refusing to issue the building permit to an employee of Ravenda Homes Ltd. on May 9, 2007. It is the opinion of the Commission, that the Respondent met its obligation with respect to the requirements of Division C, Article 1.3.1.3. of the Building Code.

The Respondent submitted that the letter detailing the reasons for not issuing the building permit was mailed to the Applicant on May 3, 2007. The Applicant submitted that this letter was not received by him until approximately 4:30 p.m. on May 9, 2007, when it was hand delivered to an employee of Ravenda Homes Ltd.

iii) The Commission notes that neither the Building Code nor the *Building Code Act, 1992* makes reference to a specific time of day by which the Respondent must inform the Applicant of its decision to issue or refuse to issue a building permit. Subsection

8(2.3) of the *Building Code Act* simply states that if the Chief Building Official refused to issue the permit, he or she inform the applicant of all of the reasons for the refusal of the permit and shall do so within the period prescribed by regulation.

iv) Division C, Sentence 1.3.1.3.(1) of the Code requires the Chief Building Official to, within ten days of receipt of a building permit application meeting the requirements of Sentence 1.3.1.3.(5) of the Code, either issue the permit or provide all written reasons as to why the permit cannot be issued (emphasis added).

Under Subsection 8(2) of the *Building Code Act, 1992*, a Chief Building Official shall issue a permit unless certain reasons prevent him/her from doing so. In this instance, the Respondent, within the prescribed ten day time frame, identified reasons for refusal of the permit and informed the Applicant of those reasons, thereby complying with Subsection 8(2.3) of the *Building Code Act, 1992.*

The Commission does not have the authority to make a determination on the validity, legality or reasonableness of the reasons for refusal of a permit identified by the municipality.

Dated at Toronto this **1st** day in the month of **June** in the year **2007** for application number **P-2007-17.**

Ed Link, Chair Designate

Ontario

Ruling No. 07-21-1150
Application No. P-2007-12

BUILDING CODE COMMISSION

IN THE MATTER OF Clause 24(1)(b) of the *Building Code Act*, S.O. 1992, c. 23 ("Act").

AND IN THE MATTER OF Subsections 8(2.2) and 8(2.3) of the Act and Division C, Article 1.3.1.3. of Ontario Regulation 350/06, as amended ("Building Code").

AND IN THE MATTER OF an application for a permit by Donovan Wood on behalf of Ravenda Homes Ltd. under subsection 8(1) of the Act for the construction of a seven unit townhouse block at 19 Bluegrass Crescent (Block 3 – Units 32 – 38), City of St. Catharines, Ontario.

AND IN THE MATTER OF a dispute between Ravenda Homes Ltd. and Sandra Korakis, Chief Building Official, City of St. Catharines, involving whether the Chief Building Official complied with the requirements under Subsections 8(2.2) and 8(2.3) of the Act and Division C, Sentence 1.3.1.3.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 1.3.1.3. of the Building Code regarding 19 Bluegrass Crescent (Block 3 – Units 32 – 38), City of St. Catharines, Ontario.

APPLICANT	John Ravenda Ravenda Homes Ltd. Welland, Ontario
RESPONDENT	Sandra Korakis Chief Building Official City of St. Catharines
PANEL	Ed Link, Chair Designate
PLACE	Toronto, Ontario
DATE OF APPLICATION	April 20, 2007
DATE OF HEARING	April 27, 2007 (adjourned at request of Applicant and on consent of Respondent) Reconvened: May 14, 2007
DATE OF RULING	June 1, 2007
APPEARANCES	John Ravenda and Donovan Wood Ravenda Homes Ltd. **The Applicants** Sandra Korakis (by telephone conference) Chief Building Official City of St. Catharines **The Respondent**

RULING

1. Particulars of Dispute

The Applicant applied for a permit under subsection 8(1) of the Act to construct a one storey, seven unit townhouse block at 19 Bluegrass Crescent, City of St. Catharines, Ontario.

The dispute between the parties involves whether the Chief Building Official (the Respondent) complied with subsections 8(2.2) and 8(2.3) of the Act and Division C, Sentence 1.3.1.3.(1) of the Building Code.

Pursuant to Division C, Article 2.2.1.3. of the Building Code, the Building Code Commission convened a hearing within five days of receipt of this application. On the day of hearing, the Applicant requested an adjournment to attend to an urgent personal matter. After having received consent to adjourn the hearing from the Respondent, the Commission granted the request for adjournment and agreed to reschedule the hearing to the earliest, mutually convenient date.

2. Provisions of the Act and Building Code in Dispute

Act: subsections 8(2.2) and (2.3)

Decision

(2.2) When an application for a permit contains the prescribed information, the chief building official is required to determine within the period prescribed by regulation whether to issue the permit or to refuse to issue it.

Same, reasons for refusal

(2.3) If the chief building official refuses to issue the permit, he or she shall inform the applicant of all of the reasons for the refusal of the permit and shall do so within the period prescribed by regulation.

Building Code:

Division C, Article 1.3.1.3. Period Within Which a Permit is Issued or Refused

(1) Subject to Sentences (2) and (3), if an application for a permit under subsection 8 (1) of the Act that meets the requirements of Sentence (5) is submitted to a *chief building official*, the *chief building official* shall, within the time period set out in Column 3 of Table 1.3.1.3. corresponding to the class of *building* described in Column 2 of Table 1.3.1.3. for which the application is made,

(a) issue the permit, or

(b) refuse to issue the permit and provide in writing all of the reasons for the refusal.

Table 1.3.1.3.
Period Within Which Permit Shall be Issued or Refused

Forming Part of Article 1.3.1.3.

Column 1	Column 2	Column 3
Row Number	Class of *Building*	Time Period
1	(a) A detached house, semi-detached house, townhouse, or row house where no *dwelling unit* is located above another *dwelling unit*. (b) A detached structure that serves a *building* described in Clause (a) and does not exceed 50 m^2 in *building area*. (c) A tent to which Section 3.14. of Division B applies. (d) A sign to which Section 3.15. of Division B applies.	10 days
2	(a) *Buildings* described in Clause 1.1.2.4.(1)(a), (b) or (c) of Division A, other than *buildings* described in Column 2 of any of Rows 1 and 4 of this Table. (b) *Farm buildings* that do not exceed 600 m^2 in *building area*.	15 days
3	(a) *Buildings* described in Clause 1.1.2.2.(1)(a), or (b) of Division A, other than *buildings* described in Column 2 of any of Rows 1 and 4 of this Table. (b) *Farm buildings* exceeding 600 m^2 in *building area*.	20 days
4	(a) *Post-disaster buildings*. (b) *Buildings* to which Subsection 3.2.6. of Division B or any provision in Articles 3.2.8.3. to 3.2.8.11. of Division B applies.	30 days

3. Applicant's Position

The Applicant stated that, on April 3, 2007, a permit application was submitted to the City of St. Catharines Building Department along with a cheque for the payment of the fees required to be paid when a permit application is made. He advised that the permit application proposed the construction of a one storey, seven unit townhouse block at 19 Bluegrass Crescent. In his Application for Hearing to the Building Code Commission, he submitted that the Respondent neither issued the permit nor refused to issue the permit and provide all reasons for the refusal within the prescribed time frame.

The Applicant advised that the municipality initially expressed some concern regarding the expiration of the requisite Ministry of Transportation (MTO) permit. He further advised that after discussion with the Ministry of Transportation and the City of St. Catharines, the issue regarding the MTO permit was resolved as the City accepted May 5, 2007 as being the expiry date of the MTO permit.

The Applicant acknowledged that, at 4:06 p.m. on April 18, 2007, a faxed letter was received which detailed the reasons the City was unable to issue the building permit. He noted, however, that his office was closed for business and therefore, he did not, in fact, receive the letter of refusal until the following day. He asserted that the City of St. Catharines has not upheld the spirit of the Building Code in respect of the prescribed time frames for issuing building permits. It was his contention that the City ought to have brought the issues outlined in the April 18, 2007 letter to his attention before the "eleventh hour on the tenth day". The permit, he stated, should be issued within ten days.

In summary, the Applicant argued that City of St. Catharines is not meeting the intent or spirit of the Building Code in respect of the time frame provisions for permit processing and staff are abusing their powers under the *Building Code Act.* He reiterated that it is his belief that the City has not met its obligation with respect to the legislated permit processing time frames for this permit application.

4. Respondent's Position

The Respondent participated in the hearing by way of teleconference and submitted that a permit application from the Applicant was received on April 3, 2007. She confirmed that the application included the required fees and that the permit application was subject to the ten day time period outlined in Table 1.3.1.3. of the Code. She affirmed that, in accordance with Division C, Sentence 1.3.1.3.(6) of the Code, the time period for making a determination regarding the issuance of a building permit began on April 4, 2007.

The Respondent claimed that the MTO permit was not included with the application for permit but conceded that, on April 18, 2007, the MTO permit, dated November 3, 2006, was hand delivered to the City's offices. She reported that, upon receipt of the MTO permit, it was noted that the expiry date on the MTO permit read April 19, 2007. She went on to say that after a discussion with the Applicant it was agreed that, since there was a statement on the MTO permit reading "Construction must be started within six (6) months of date of issue or this permit shall be void", May 3, 2007 would be the date of expiry for the MTO permit.

The Respondent maintained that the review of the permit application was completed on April 18, 2007. She advised that a letter outlining the reasons for refusing to issue the building permit was faxed to the Applicant, just after 4:00 p.m., on April 18, 2007.

In summation, the Respondent asserted that the City of St. Catharines has met its obligation with respect to the legislated time frame for permit processing in this instance. She reiterated that the time period for making a determination regarding the Applicant's building permit application began on April 4, 2007. She declared that the Code specifies that the time period does not include Saturdays, holidays and all other days that the offices are not open for business, therefore, the applicable time period, in this instance, ended on April 18, 2007 (municipal offices were not open for business on April 16, 2007 – Good Friday). She asserted that the letter detailing reasons for non-issuance of the building permit was sent to the Applicant via fax on April 18, 2007 and, as such, the municipality has fully complied with the time frames prescribed by the Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the Respondent has complied with the requirements of Subsections 8(2.2) and 8(2.3) of the *Building Code Act, 1992* and Division C, Sentence 1.3.1.3.(1) of the Building Code. Under these subsections, the Respondent is required to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal, within the applicable time period set out in Table 1.3.1.3. of the Building Code.

6. Reasons

i) Division C, Sentence 1.3.1.3.(6) of Division C of the Building Code specifies when the time periods set out in Table 1.3.1.3. commence:

The time period described in Sentences (1) to (3) shall begin on the day following the later of

(a) the day on which an application meeting the requirements of Sentence (5) is submitted to the chief building official, and

(b) the day on which payment is made of all fees that are required, under a by-law, regulation or resolution made under Clause 7 (1) (c) of the Act, to be paid when the application is made.

The parties agreed that the permit applications were submitted to the City of St. Catharines on April 3, 2007. As a result, it is April 4, 2007 (the day following the day on which an application meeting the requirements of Sentence (5) is submitted) that the applicable time period set out in Table 1.3.1.3. commenced in this case.

ii) The parties agreed that the construction proposed under the application in question is subject to the ten day time period set out in Column 3 of Row 1 in Table 1.3.1.3. of Division C. Sentence 1.3.1.3.(7) provides that the time periods described in Column 3 of Table 1.3.1.3. do not include Saturdays, holidays and all other days when the offices of a principal authority are not open for the transaction of business with the public.

In the present case, the applicable ten day time period ended on April 18, 2007. The Respondent was required to issue or refuse to issue a permit in respect of the Applicant's permit application by that date.

iii) On April 18, 2007, the Respondent faxed a letter to the Applicant which detailed the reasons for refusing to issue the building permit. It is the opinion of the Commission, that the Respondent met its obligation with respect to the requirements of Division C, Article 1.3.1.3. of the Building Code. The Commission notes that neither the Building Code nor the *Building Code Act, 1992* makes reference to a specific time of day by which the Respondent must inform the Application of its decision to issue or refuse to issue a building permit. Subsection 8(2.3) of the *Building Code Act, 1992* simply states that if the Chief Building Official refused to issue the permit, he or she is to inform the applicant, in writing, of all of the reasons for the refusal of the permit and shall do so within the period prescribed by regulation.

iv) Division C, Sentence 1.3.1.3.(1) of the Code requires the Chief Building Official to, within ten days of receipt of a building permit application meeting the requirements of Sentence 1.3.1.3.(5) of the Code, either issue the permit or provide all written reasons as to why the permit cannot be issued (emphasis added). In this instance, the Respondent, within the prescribed ten day time frame, identified reasons for refusal of the permit and informed the Applicant of those reasons, thereby complying with Subsection 8(2.3) of the *Building Code Act, 1992.*

The Commission does not have the authority to make a determination on the validity, legality or reasonableness of the reasons for refusal of a permit identified by the municipality.

Dated at Toronto this **1st** day in the month of **June** in the year **2007** for application number **P-2007-12.**

Ed Link, Chair Designate

Ruling No. 07-20-1149
Application No. 2007-09

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Clauses 3.2.2.24.(2)(b) and 3.2.2.24.(2)(c) of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Ralph Aprile, Durham College/University of Ontario Institute of Technology for the resolution of a dispute with Mike Leonard, Chief Building Official, City of Oshawa, to determine whether the proposed construction of a running track, which will be suspended from the roof trusses above the gymnasium of a Group A, Division 2 occupancy, where no fire resistance rating will be provided for the supporting tension rods, the roof trusses or the running track floor assembly provides sufficiency of compliance with Clauses 3.2.2.24.(2)(b) and 3.2.2.24.(2)(c) of the Building Code at the Athletic, Fitness & Health Centre for Durham College/UOIT, 21 Avenue of Champions, City of Oshawa, Ontario.

APPLICANT	Ralph Aprile Durham College/University of Ontario Institute of Technology Oshawa, ON
RESPONDENT	Mike Leonard Chief Building Official City of Oshawa
PANEL	Leslie Morgan, Vice Chair Alison Churchill Gerry Egberts
PLACE	Toronto, Ontario
DATE OF HEARING	May 10, 2007
DATE OF RULING	May 10, 2007
APPEARANCES	Demir Delen Morrison Hershfield Ltd., Toronto, ON **Agent for the Applicant** S.K. (Kwan) Lo Manager, Building Permits City of Oshawa **Agent for the Respondent**

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the proposed construction of a running track, which will be suspended from the roof trusses above the gymnasium of a Group A, Division 2 occupancy, where no fire resistance rating will be provided for the supporting tension rods, the roof trusses or the running track floor assembly does not provide sufficiency of compliance with Clauses 3.2.2.24.(2)(b) and 3.2.2.24.(2)(c) of the Building Code at the Athletic, Fitness & Health Centre for Durham College/UOIT, 21 Avenue of Champions, City of Oshawa, Ontario.

Reasons

i) In the opinion of the Commission, the track level is an intermediate floor assembly between the floor and ceiling of the gymnasium and is, therefore, considered to be a "mezzanine" as defined by the Code. This floor area, in the opinion of the Commission, is not comparable to a walkway between buildings. Furthermore, in the opinion of the Commission the intended use of the running track constitutes an "occupancy". Clauses 3.2.2.24.(2)(b) and (c) require that the mezzanine and its supporting structure be provided with a fire resistance rating of not less than 1 hour in this instance.

ii) The exits provided from the running track level to the exterior of the building would be required in order to meet the travel distance requirements prescribed by the Code. Therefore, the Commission does not consider that feature to be a compensating measure. Furthermore, the Commission notes that the exits from the gymnasium floor are situated beneath the running track mezzanine and, as such, the access to these exits could be compromised in the event of the collapse of the running track if not adequately protected.

iii) The bleachers for the gymnasium are located below the track and in the opinion of the Commission provide a significant fuel load.

iv) Article 3.2.2.17. allows the requirements for roof assemblies to have a fire resistance ratings to be waived provided the building is equipped with an electrically supervised sprinkler system. As such, the sprinkler system, despite the increase in water density noted by the Applicant, is a Code requirement and is not considered to be sufficient compensation for the lack of fire resistance rating for the mezzanine and supporting structure.

v) The proposed compensating features, specifically increased sprinkler density, provision of smoke detectors under the mezzanine, and signage regarding the restriction of access to the running track when the gymnasium is used for convocation or concert purposes, in the opinion of the Commission, do not provide sufficient compensation to waive the requirements for fire resistance rating of the mezzanine and supporting structure.

Dated at Toronto this **10th** day in the month of **May** in the year **2007** for application number **B-2007-09.**

Leslie Morgan, Vice Chair

Alison Churchill

Gerry Egberts

Ontario

Ruling No. 07-19-1148
Application No. 2007-07

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.11.3.1.(9) of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Geoff Boole, Candarel, for the resolution of a dispute with Arlene Gregoire, Chief Building Official, City of Ottawa, to determine whether the design of a proposed pool, which will be surrounded on three sides only by a hard-surfaced pool deck, in a 6 storey mixed use building, provides sufficiency of compliance with Sentence 3.11.3.1.(9) of the Building Code at Amica at Westboro Park, 491 Richmond Road, City of Ottawa, Ontario.

APPLICANT	Geoff Boole Candarel Ottawa, ON
RESPONDENT	Arlene Gregoire Chief Building Official City of Ottawa
PANEL	Leslie Morgan, Vice Chair Alison Churchill Gerry Egberts
PLACE	Toronto, Ontario
DATE OF HEARING	May 24, 2007
DATE OF RULING	May 24, 2007
APPEARANCES	Judy Jeske Morrison Hershfield Ltd. Ottawa, ON **Agent for the Applicant**
	Arlene Gregoire Chief Building Official City of Ottawa **The Respondent**

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the design of a proposed pool, which will be surrounded on three sides only by a hard-surfaced pool deck, in a 6 storey mixed use building, provides sufficiency of compliance with Sentence 3.11.3.1.(9) of the Building Code at Amica at Westboro Park, 491 Richmond Road, City of Ottawa, Ontario, on condition that:

a) A hand grip (e.g., rail or recessed grip) shall be provided just above the water level along the side of the pool where no deck is provided, including above the integral seating.

b) Two life rings and two rescue poles shall be provided in the pool area.

Reasons

i) The subject pool is approximately 50 m^2 in area and has a depth of approximately 1.2 m at its deepest point. In the opinion of the Commission, the performance level of this small, shallow pool, with a hard-surfaced pool deck on three sides only, is not significantly different from the performance level of the shallow end of a conventional size pool, with access from a hard-surfaced pool deck on three sides, with the fourth side bounded by a deep end.

ii) It is the opinion of the Commission, that the proposed design of the subject pool meets the intent of the Code with respect to facilitating emergency response to persons in distress. Access to the far side of the subject pool, having a pool deck on three sides only, is comparable to access to the centre of a larger conventional pool with a pool deck on all four sides. In addition, the shallow depth of the subject pool facilitates self-rescue and the stepped entrance to the pool provides enhanced emergency egress from the pool when compared to the conventional pool ladder.

iii) Access to the subject pool area is through the “wellness centre”, and the Commission heard evidence indicating that the wellness centre is always staffed when in operation. Furthermore, the Commission heard evidence that residents of the Group B, Division 3 occupancy would be accompanied by an escort when accessing the pool area.

Dated at Toronto this **24th** day in the month of **May** in the year **2007** for application number **2007-07.**

Leslie Morgan, Vice Chair

Alison Churchill

Gerry Egberts

Ontario

Ruling No. 07-18-1147
Application No. 2007-01

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Clause 8.7.3.2.(1)(e) of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Allen & Stacey Trayling, Homeowners, for the resolution of a dispute with Terry Davidson, Director of Regulations, Ottawa Septic Systems Office, to determine whether the repairs undertaken, consisting of raising the tile bed and replacing existing fill and natural mantle, on an existing Class 4 sewage system provides sufficiency of compliance with Clause 8.7.3.2.(1)(e) of the Building Code at 3034 Navan Road, City of Ottawa, Ontario.

APPLICANT	Allen & Stacey Trayling Homeowners Ottawa, ON
RESPONDENT	Terry Davidson Director of Regulations Ottawa Septic Systems Office
PANEL	Judy Beauchamp, Vice-Chair Jim Wilkinson Eric Gunnell
PLACE	Toronto, Ontario
DATE OF HEARING	April 19, 2007
DATE OF RULING	April 19, 2007

APPEARANCES

Allen & Stacey Trayling
Homeowners
Ottawa, ON
The Applicant

Terry Davidson
Director of Regulations
Ottawa Septic Systems Office
The Respondent

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the proposal to install a Class 5 sewage system to serve a one and a half storey visitor centre and office provides sufficiency of compliance with Article 8.8.1.2. of the Building Code at Glengarry Pioneer Museum, 1645 County Road 30, Township of North Glengarry, Ontario, on condition that:

a) In addition to the Building Code requirements for installation of a Class 5 sewage system, the access extension from the holding tank to grade shall be permanently water-tight and frost resistant.

b) An engineer shall certify that the proper hold-down procedures to avoid buoyancy have been followed.

Reasons

i) The Glengarry Pioneer Museum is a historical facility that is unique in its use, site, operation and geological conditions, which include a high watertable and the potential for flooding.

ii) While the Commission acknowledges the municipality's position that the installation of a Class 5 sewage system is prohibited by the Building Code, the Commission is satisfied that, as a result of the combination of unique site features, including operation of the museum and the site's high watertable and potential for flooding, the installation of a Class 5 sewage system is appropriate for the preservation of this heritage site and sufficiency of compliance with the code, in this instance, will be achieved.

iii) The museum will continue to provide portable washroom facilities to the public.

iv) The number of plumbing fixtures that will be served by the Class 5 sewage system is relatively low. The washroom facilities that will be served by the Class 5 sewage system are for the use of employees and physically disabled patrons only.

v) The Glengarry Pioneer Museum is primarily a seasonal operation that is only open to the public between May and September.

Dated at Toronto this **19th** day in the month of **April** in the year **2007** for application number **S-2007-05.**

Judy Beauchamp, Vice-Chair

Jim Wilkinson

Eric Gunnell

Dated at Toronto this **19** day in the month of **April** in the year **2007** for application number **2007-01.**

Judy Beauchamp, Vice-Chair

Jim Wilkinson

Eric Gunnell

Ontario

Ruling No. 07-17-1146
Application No. 2007-01

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Clause 8.7.3.2.(1)(e) of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Allen & Stacey Trayling, Homeowners, for the resolution of a dispute with Terry Davidson, Director of Regulations, Ottawa Septic Systems Office, to determine whether the repairs undertaken, consisting of raising the tile bed and replacing existing fill and natural mantle, on an existing Class 4 sewage system provides sufficiency of compliance with Clause 8.7.3.2.(1)(e) of the Building Code at 3034 Navan Road, City of Ottawa, Ontario.

APPLICANT	Allen & Stacey Trayling Homeowners Ottawa, ON
RESPONDENT	Terry Davidson Director of Regulations Ottawa Septic Systems Office
PANEL	Judy Beauchamp, Vice-Chair Jim Wilkinson Eric Gunnell
PLACE	Toronto, Ontario
DATE OF HEARING	April 19, 2007
DATE OF RULING	April 19, 2007

APPEARANCES

Allen & Stacey Trayling
Homeowners
Ottawa, ON
The Applicant

Terry Davidson
Director of Regulations
Ottawa Septic Systems Office
The Respondent

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the work undertaken, consisting of raising the tile bed and replacing existing fill and natural mantle, on an existing Class 4 sewage system does not provide sufficiency of compliance with Clause 8.7.3.2.(1)(e) of the Building Code at 3034 Navan Road, City of Ottawa, Ontario.

Reasons

i) In the opinion of the Commission the work undertaken constitutes the replacement of an existing sewage system. Therefore, Sentence 11.3.1.2.(1) of the Building Code applies. Sentence 11.3.1.2.(1) requires that the design and construction of the sewage system comply with Part 8 of the Code.

ii) The as-constructed sewage system does not provide sufficiency of compliance with the requirements of the Part 8 of the Code. The Commission heard evidence to suggest that the bed does not provide the requisite 900 mm separation from the watertable. Further, no mantle has been constructed while the Code requires a mantle in this instance.

Dated at Toronto this **19th** day in the month of **April** in the year **2007** for application number **S-2007-01.**

Judy Beauchamp, Vice-Chair

Jim Wilkinson

Eric Gunnell

Ruling No. 07-15-1144
Application No. 2007-06

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 3.8.1.3. and 3.8.2.1. of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Neil Cooper, Cooper Gordon Ltd., for the resolution of a dispute with Hardy Bromberg, Chief Building Official, City of Cambridge, to determine whether the proposal to omit a barrier-free path of travel to the kitchen, service stations and cash counter areas in a one storey, Group A, Division 2 occupancy provides sufficiency of compliance with Articles 3.8.1.3. and 3.8.2.1. of the Building Code at Cora's Breakfast and Lunch, 561 Hespeler Road, Unit 15, City of Cambridge, Ontario.

APPLICANT	Neil Cooper Cooper Gordon Ltd., Etobicoke, ON
RESPONDENT	Hardy Bromberg Chief Building Official City of Cambridge
PANEL	Tony Chow, Chair Gary Burtch Doug Clancey
PLACE	Toronto, Ontario
DATE OF HEARING	April 12, 2007
DATE OF RULING	April 12, 2007
APPEARANCES	Line Laurin Line Laurin Architect St-Bruno, Quebec **Agent for the Applicant**
	Hardy Bromberg Chief Building Official City of Cambridge **The Respondent**

RULING

Commission Ruling

It is the Decision of the Building Code Commission that the proposal to omit a barrier-free path of travel to the kitchen, service stations and cash counter areas in a one storey, Group A, Division 2 occupancy does not provide sufficiency of compliance with Articles 3.8.1.3. and 3.8.2.1. of the Building Code at Cora's Breakfast and Lunch, 561 Hespeler Road, Unit 15, City of Cambridge, Ontario.

Reasons

i) Sentence 3.8.1.3.(1) states that a barrier-free path of travel shall provide an unobstructed width of at least 1 060 mm for the passage of wheelchairs. Further, Sentence 3.8.2.1.(1) of the Building Code requires that a barrier-free path of travel be provided throughout the entrance storey and within all normally occupied floor areas.

ii) Sentence 3.8.2.1.(1) provides an exception where essential obstructions in the work area would make a barrier-free path of travel hazardous. It is the opinion of the Commission, that the kitchen, service stations and cash counter areas do not have essential obstructions which would make a barrier-free path of travel hazardous.

iii) Sentence 3.8.2.1.(2), and 3.8.2.1.(3) exempts certain areas from being provided with a barrier-free path of travel. In the opinion of the Commission, the kitchen, service stations and cash counter areas of the subject building are not included in the listed exceptions outlined in Sentences 3.8.2.1.(2), and 3.8.2.1.(3).

iv) While the Commission recognizes that the areas in question are not "public" areas, the intent of the Code is to provide a path of travel that will not unduly impede access to all normally occupied floor areas. It is conceivable that persons, other than the general public, e.g. an employee or inspector may require access to the areas subject to this dispute.

Dated at Toronto this **12th** day in the month of **April** in the year **2007** for application number **2007-06.**

Tony Chow, Chair

Gary Burtch

Doug Clancey

Ontario

Ruling No. 07-05-1134
Application No. P-2007-04

BUILDING CODE COMMISSION

IN THE MATTER OF Clause 24(1)(b) of the *Building Code Act*, S.O. 1992, c. 23 ("Act").

AND IN THE MATTER OF Subsections 8(2.2) and 8(2.3) of the Act and Sentence 2.4.1.1.B.(1) of O. Reg. 403/97 ("Building Code").

AND IN THE MATTER OF an application for a permit by 1527102 Ontario Limited under subsection 8(1) of the Act for the construction of seven (7) individual Class 4 sewage systems at 16006 Niagara River Parkway, (Lots 1-7, Plan 327), Town of Niagara-on-the-Lake, Ontario.

AND IN THE MATTER OF a dispute between 1527102 Ontario Limited and Robin Williams, Medical Officer of Health of Niagara Region Public Health, involving whether the Medical Officer of Health complied with the requirements under Subsections 8(2.2) and 8(2.3) of the Act and Sentence 2.4.1.1B.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 2.4.1.1B. of the Building Code regarding 16006 Niagara River Parkway (Lots 1-7, Plan 327) Town of Niagara-on-the-Lake, Ontario.

APPLICANT	Deborah McMahon 1527102 Ontario Limited
RESPONDENT	Robin Williams Medical Officer of Health Town of Niagara-on-the-Lake
PANEL	Tony Chow, Chair Judy Beauchamp Marina Huissoon
PLACE	Toronto, Ontario
DATE OF HEARING	January 29, 2007
DATE OF RULING	January 29, 2007
APPEARANCES	Gerry Dignard Canadian Shield Consultant Agency Inc. St. Charles, Ontario **Agent for the Applicant** Alphie Wolf Public Health Inspector Niagara Public Health - and - Bill Hunter Manager, Health, Protection and Promotion **Designates for the Respondent**

RULING

1. Particulars of Dispute

The Applicant applied for a permit under subsection 8(1) of the Act to construct seven (7) individual Class 4 sewage systems to service seven (7) residential dwellings at 16006 Niagara River Parkway (Lots 1-7, Plan 327), Town of Niagara-on-the-Lake, Ontario.

The dispute between the parties involves whether the Medical Officer of Health (the Respondent) complied with subsections 8(2.2) and 8(2.3) of the Act and Sentence 2.4.1.1B.(1) when considering the provisions of Sentence 2.4.1.1B.(5) of the Building Code.

2. Provisions of the Act and Building Code in Dispute

Act: subsections 8(2.2) and (2.3)

Decision

(2.2) When an application for a permit contains the prescribed information, the chief building official is required to determine within the period prescribed by regulation whether to issue the permit or to refuse to issue it.

Same, reasons for refusal

(2.3) If the chief building official refuses to issue the permit, he or she shall inform the applicant of all of the reasons for the refusal of the permit and shall do so within the period prescribed by regulation.

Building Code:

2.4.1.1B. Period Within Which a Permit is Issued or Refused

(1) Subject to Sentences (2) and (3), if an application for a permit under Subsection 8 (1) of the Act that meets the requirements of Sentence (5) is submitted after December 31, 2005 to a *chief building official*, the *chief building official* shall, within the time period set out in Column 3 of Table 2.4.1.1B. corresponding to the class of *building* described in Column 2 of Table 2.4.1.1B. for which the application is made:

(a) issue the permit, or

(b) refuse to issue the permit and provide in writing all of the reasons for the refusal.

TABLE 2.4.1.1B.

Period Within Which Permit Shall be Issued or Refused Forming Part of Article 2.4.1.1B.

Row Number	Class of *Building*	Time period
1	(a) A detached house, semi-detached house, townhouse, or row house where no *dwelling unit* is located above another *dwelling unit.* (b) A detached structure that serves a *building* described in Clause (a) and does not exceed 50 m^2 in *building area*. (c) A tent to which Section 3.13. applies. (d) A sign to which Section 3.14. applies.	10 days
2	(a) *Buildings* described in Clauses 2.1.1.3.(1)(a), (b) and (c), other than *buildings* described in Column 2 of any of Rows 1 and 4 of this Table. (b) *Farm buildings* that do not exceed 600 m^2 in *building area*.	15 days
3	(a) *Buildings* described in Clause 2.1.1.2.(1)(a) or (b), other than *buildings* described in Column 2 of any of Rows 1 and 4 of this Table. (b) *Farm buildings* exceeding 600 m^2 in *building area*.	20 days
4	(a) *Post-disaster buildings*. (b) *Buildings* to which Subsection 3.2.6. or any provision in Articles 3.2.8.3. to 3.2.8.11. applies.	30 days
Column 1	Column 2	Column 3

(5) The requirements for an application referred to in Sentence (1) for a permit under Subsection 8(1) of the Act are:

(a) that the application be made in the form described in Sentence 2.4.1.1A.(2),
(b) that the application be signed by a person described in Clause 2.4.1.1A.(1)(a) or (b),
(c) that all applicable fields on the application form and required schedules are completed,
(d) that all attachments indicated as being attached to the application are submitted with the application, and
(e) that the application be accompanied by the types and quantities of plans and specifications that are prescribed by the applicable by-law, resolution or regulation made under Clause 7(1)(b) of the Act.

3. Applicant's Position

The Agent for the Applicant outlined the timeline in respect of the permit applications. He stated that on March 7, 2006 seven sewage system permit applications were submitted to Niagara Region Public Health, along with a cheque for the payment of the fees required to be paid when a permit application is made. He advised that the permits were being sought for the construction of seven individual Class 4 sewage systems on seven separate residential lots. He claimed that the Respondent had neither issued the permits nor refused to issue the permits and provide all reasons for the refusal within the prescribed time frame.

The Agent submitted that the cheque for the fees was cashed on April 13, 2006. He further advised that during this timeline, the health unit had some concerns with respect to whether the lots in question were, in fact, registered, conveyable lots. The Agent confirmed that the lots in question are, in fact, registered and referenced a November 18, 2002 letter, which was included in his submission.

The Agent affirmed that, in his opinion, the applications for permit contained all of the requirements prescribed in Sentence 2.4.1.1B.(5) as of March 7, 2006. He made reference to the Health Unit's request that a hydrogeological report be submitted as part of the application process and declared that, in his opinion, this is not a requirement contemplated by Sentence 2.4.1.1B.(5) of the Code. He indicated that he had requested the Health Unit to furnish him with a copy of the by-law which makes reference to the requirement for a hydrogeological report. He advised that to date he has not received a copy of the by-law and believes that there is no authority for the Health Unit to request a hydrogeological report.

In summation, the Agent reiterated that it his belief that the permit applications met the requirements outlined in Sentence 2.4.1.1B.(5) of the Code on March 7, 2006 and, therefore, the Public Health Unit was required to make a determination on the subject permits within ten days. Additionally, he stated that, in his opinion, a hydrogeological report is not warranted in this instance.

4. Respondent's Position

The Designate for the Respondent concurred that seven permit applications, along with the applicable fees, were received by the Niagara Public Health department on March 7, 2006. He advised that, upon initial review of applications, it was unclear whether the lots were appropriately registered as separate deeded lots and further advised that a letter was sent requesting that this matter be clarified. He agreed that the Public Health Unit is now satisfied that the subject lots are indeed lots of record.

The Designate explained that the Agent for the Applicant was verbally advised that a hydrogeological report would be required even after the planning matters had been resolved. He further explained that the Niagara Public Health department still considers the permit applications to be "incomplete" even as of the date of the hearing because the hydrogeological report has not been submitted.

The Designate advised that the permit applications meet the requirements outlined in Sentence 2.4.1.1B.(5) of the Building Code with the exception of Clause 2.4.1.1B.(5)(e). He maintained that the request for a hydrogeological report is relevant under Clause 2.4.1.1B.(5)(e). When questioned as to whether the applicable by-law specifies a requirement for a hydrogeological report, the Designate responded that the by-law does not specifically reference a hydrogeological report.

In summary, the Designate declared that, in his opinion, the Public Health department is legally entitled to request a hydrogeological report under the *Building Code Act, 1992*. He further declared that, in the absence of the hydrogeological report, the permit applications are incomplete. Therefore, he concluded that the applicable time period for processing building permits has not yet commenced.

5. Commission Ruling

It is the Decision of the Building Code Commission that the Respondent did not comply with the requirements of Subsections 8(2.2) and 8(2.3) of the *Building Code Act, 1992* and Sentence 2.4.1.1B.(1) of the Building Code. Under these subsections, the Respondent is required to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal, within the applicable time period set out in Table 2.4.1.1B. of the Building Code.

Further, pursuant to subsection 24.-(3.1) of the *Building Code Act, 1992*, the Building Code Commission Orders the Respondent to comply with subsection 8(2.2) and 8(2.3.) of the *Building Code Act, 1992* and Article 2.4.1.1B. of the Building Code for properties located at Lots 1-7, Plan 327, Town of Niagara-on-the-Lake.

6. Reasons

i) Sentence 2.4.1.1B.(6) of the Building Code specifies when the time periods set out in Table 2.4.1.1B. commence:

The time period described in Sentences (1) to (3) shall begin on the day following the later of

(a) the day on which an application meeting the requirements of Sentence (5) is submitted to the chief building official, and

(b) the day on which payment is made of all fees that are required, under a by-law, regulation or resolution made under Clause 7(1)(c) of the Act, to be paid when the application is made.

The parties agreed that the permit applications were submitted to the Town on March 7, 2006. Based on the evidence presented, the Commission finds that, on March 7, 2006, the permit applications met the requirements prescribed in Sentence 2.4.1.1B.(5) of the Building Code.

As a result, it is March 8, 2006 (the day following the day on which an application meeting the requirements of Sentence (5)) that the applicable time period set out in Table 2.4.1.1B. commenced in this case.

ii) The parties agreed that the construction proposed under the applications in question was subject to the ten day time period set out in Column 3 of Row 2 in Table 2.4.1.1B.

Sentence 2.4.1.1B.(7) provides that the time periods described in Column 3 of Table 2.4.1.1B. do not include Saturdays, holidays and all other days when the offices of a principal authority are not open for the transaction of business with the public.

In the present case, the applicable ten day time period ended on March 22, 2006. The Respondent was required to issue or refuse to issue permits in respect of the Applicant's permit applications by that date. If the permits were refused, the Respondent was to provide in writing all reasons for refusal.

iii) The Commission notes that, pursuant to s. 8(2.2.) of the *Building Code Act, 1992*, where an application for a permit contains the prescribed information, the service level duties of, in this case, the Medical Officer of Health are triggered. The "prescribed information" is set out in Clauses 2.4.1.1B.(5)(a) to (e) of the Building Code. Upon receipt of an application for permit containing the prescribed information, the Medical Officer of Health is obligated, by virtue of Sentence 2.4.1.1B.(1), to, within the time period set out in Sentence 2.4.1.1B.(3) and Column 3 of Table 2.4.1.1B., either issue the permit or refuse to issue the permit and provide in writing all reasons for the refusal.

Furthermore, the Commission notes that if non-compliance with applicable law, including the *Planning Act*, was in question, this could have been a reason for refusing to issue the permits. All reasons ought to have been communicated to the

Applicant in writing within the prescribed time period.

iv) Clause 2.4.1.1B.(5)(e) of the Building Code states that the application be accompanied by the types and quantities of plans and specifications that are prescribed by the applicable by-law, regulation or resolution made under Clause 7(1)(c) of the Act. The Commission notes that evidence was presented which indicated that the applicable by-law did not specifically require a hyrdrogeological report as part of an application for approval of a septic permit. Therefore, in the opinion of the Commission, the absence of a hydrogeological report at the time of application does not support the Respondent's position that the permit applications were "incomplete". While, in the opinion of Niagara Public Health, a hydrogeological is required, that requirement ought to have been communicated to the Applicant, in writing, within the prescribed time period, as a reason for refusing to issue the permits.

The Commission notes that the validity, legality or reasonableness of the reasons for refusal of a permit identified in writing by the municipality is not within the mandate of the Commission to determine as part of this service level appeal.

Dated at Toronto this **29th** day in the month of **January** in the year **2007** for application number **P-2007-04.**

Tony Chow, Chair

Judy Beauchamp

Marina Huissoon

Ontario

Ruling No. 07-02-1131
Application No. 2006-57

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.8.8.1.(1) of the Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Roger Ball, EBD Financial Planners Inc., for resolution of a dispute with Ann Borooah, Chief Building Official, City of Toronto, to determine whether the as-installed guard, without a locking device, situated on a portion of the stationary platform serving an automated elevating device in the garage of a single family dwelling, provides sufficiency of compliance with Sentence 9.8.8.1.(1) of the Building Code at 1840 Lakeshore Boulevard East, City of Toronto, Ontario.

APPLICANT	Roger Ball EBD Financial Planners Inc. Toronto, ON
RESPONDENT	Ann Borooah Chief Building Official City of Toronto
PANEL	Tony Chow, Chair Alison Churchill Mina Tesseris
PLACE	Toronto, Ontario
DATE OF HEARING	January 18, 2007
DATE OF RULING	January 18, 2007
APPEARANCES	Roger Ball EBD Financial Planners Inc. Toronto, ON **The Applicant** Martin Elksnitis Building Inspector **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Remedy Unsafe Building under the *Building Code Act*, *1992*, to remedy certain alleged deficiencies at 1840 Lakeshore Boulevard East, City of Toronto, Ontario.

The subject building is a Group C residential dwelling. It is the garage of this residential dwelling that is the central location for the subject dispute. The garage is one storey in building height and has a 1.8 m deep "pit" below grade. The garage is approximately 20 m^2 in area and is comprised of combustible construction material.

The single car garage is equipped with a car elevating device which allows for occupants of the dwelling unit to park more than one vehicle within the garage. In the centre of the garage there is a below grade pit within which the automated platform operates. A stationary platform is located at the rear of the garage. A car is driven into the garage and onto the automated platform. Occupants of the vehicle then exit the vehicle and proceed to the stationary platform located at the rear of the garage. Once the occupants are safely on the stationary platform, a key is used to activate the elevating device and the vehicle is lowered into the below grade pit. A second platform, located directly above the first platform, simultaneously lowers into place. Once the first platform has reached the bottom of the pit, the second platform is level with the garage floor and is available for a second car to be parked in the garage.

When the platform is in motion and not level with the garage floor, there is a difference in elevation of more than 600 mm. In accordance with Sentence 9.8.8.1.(1) of the Building Code, where there is a difference in elevation of more than 600 mm between adjacent surfaces, every surface shall be protected by a guard.

The Applicant has installed a guard, which is approximately 1.2 m in both height and width, to protect a triangular area of the stationary platform. The switch for operating the elevating device is located within the triangular area of the stationary platform. The switch is spring loaded and a key is required to be turned and a button pushed in order to operate the elevating device. The guard is located at the rear of the garage, with the hinge side of the swinging guard located on the west wall of the garage and the latch side of the guard being located on the south wall. The guard swings toward the platform and away from the elevating device.

The issue at dispute between the Applicant and the Respondent is whether the as-installed guard, without a locking device, situated on a portion of the stationary platform sufficiently complies with the requirements of the Building Code.

2. Provisions of the Building Code in Dispute

9.8.8.1. Required Guards

(1) Except for the edges of floor pits in *repair garages* and loading docks, every surface to which access is provided for other than maintenance purposes, including but not limited to exterior landings, porches, decks, balconies, *mezzanines*, galleries, raised *walkways* and roofs, shall be protected by a *guard* on each side which is not protected by a wall and where there is a difference in elevation to adjacent surfaces of more than 600 mm.

3. Applicant's Position

The Applicant referred to pictures included in his submission and described the car elevating device as having two platforms which move up and down simultaneously. He informed the Commission that it takes approximately 45 seconds to elevate the platform from the below grade pit level to the level of the garage floor. In describing the daily use of the elevating device, he stated that the elevating device is used an average of three to four times a day and therefore the platform is in motion approximately two to three minutes per day.

The Applicant stated that the garage is a single car garage and quite narrow. He further stated that it is necessary to park a car on an angle so as to allow sufficient room to exit the vehicle. He advised that he is not seeking a waiver to the requirements of the Building Code but added that he feels the solution needs to be practical as well as safe.

The Applicant briefly recounted how he has attempted, without success, to resolve the matter with the City and provided a brief overview of his previous hearing with the Building Code Commission. He advised that his proposal to relocate the switch, ruled by the Commission as providing sufficiency of compliance with the Building Code at his previous hearing, was not practical. He claimed that with the operating switch located outside of the garage and the doors of the garage having to be closed in order for the elevating device to operate, it was difficult to determine which vehicle was at grade and furthermore it was difficult to determine when the elevating device had completed its cycle. He stated that his proposal to relocate the operating switch to the exterior of the garage did not include having to interconnect the switch with the swing door as well as the overhead garage door. This condition, however, was imposed by the Commission in its ruling.

The Applicant stated that the moveable guard, which he has installed, provides a triangular shaped area on the stationary platform from which the spring loaded key switch is operated. He described the guard as being a 1.2 m high by 1.2 m wide chain link gate that swings toward the platform. He explained that the angle of the guard is necessary so as to allow the driver to exit the vehicle and walk to the guarded area of the platform without having to exit the garage. He informed the Commission that, in his opinion, there is very little risk of injury to anyone operating the elevating device.

The Applicant declared that, in his opinion, the City's request that a keyed locking device be added to the as-installed guard is not warranted. He advised that he sees no material difference between what he has installed and a guard that is equipped with a keyed locking device. He maintained that the guard that he has installed provides the safety required by the Building Code while maintaining the functionality of the garage and elevating device.

In summation, the Applicant argued that the as-installed guard meets the intent of the Building Code with respect to life safety concerns while still maintaining the functionality of the design and intended use of the elevating device and garage. He reiterated his position that the addition of a keyed locking device on the guard does not provide any additional safety. He stated that he could add a padlock to the guard if there is a need to do so but submitted that he sees no need for this additional feature as he believes that the as-installed guard meets the intent of the Building Code.

4. Respondent's Position

The Designate for the Respondent submitted that an Order to Remedy Unsafe Building was issued to the Applicant in January 2006. The Order indicated that, pursuant to Sentence 9.8.8.1.(1) of the Building Code, guards were required to be provided within the single car garage. He stated that when the car elevating device is not level with the garage floor, the difference in elevation is greater than 600 mm, therefore, in his opinion, a guard is required along the edge of the stationary platform to prevent injury from falls.

The Designate recounted that the Applicant appealed to the Building Code Commission for a sufficiency of compliance ruling. He advised that the Commission's ruling was in favour of the Applicant but that the ruling (06-24-1094) required the Applicant to interconnect the key switch with the swing door as well as the overhead garage door, so as to prevent the elevating platform from being operated unless both doors are closed.

The Designate claimed that the Applicant did not comply with the condition included as part of previous ruling but instead installed the guard that is the subject of this hearing. He advised that the City had approved a similar guard system as providing compliance with the requirements of 9.8.8.1. of the Code, he noted however that a locking device formed part of the guard system that the City had approved as complying with the Building Code.

The Designate indicated that on November 23, 2006, the subject guard was inspected and it was noted that a locking device had not been installed as part of this guard. He advised that in his opinion the as-installed guard requires a locking device in order to achieve compliance with Sentence 9.8.8.1.(1) of the Building Code. He suggested that the as-installed guard would be acceptable if a keyed locking device was installed as part of the guard system.

In summation, the Designate reiterated that the as-installed guard without a locking device does not comply with the requirements of Sentence 9.8.8.1.(1) of the Building Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the as-installed guard, without a locking device, situated on a portion of the stationary platform serving an automated elevating device in the garage of a single family dwelling, does not provide sufficiency of compliance with Sentence 9.8.8.1.(1) of the Building Code at 1840 Lakeshore Boulevard East, City of Toronto, Ontario.

6. Reasons

i) The requirements for guards as outlined in Sentence 9.8.8.1.(1) of the Building Code are based on the premise that, where there is a difference in elevation of 600 mm or more between two surfaces, a guard shall be provided to minimize the risk of injury to persons as a result of tripping, slipping or falling. In the opinion of the Commission, a locking device will serve to ensure that the as-installed guard is secure when the automated elevating device is in operation. Furthermore, a locking device will serve to ensure that access to the unprotected portion of the platform is restricted and controlled.

Dated at Toronto this **18th** day in the month of **January** in the year **2007** for application number **2006-57.**

Tony Chow, Chair

Alison Churchill

Mina Tesseris

Ontario

Ruling No. 08-38-1212
Application No. 2008-34

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF with Sentence 3.7.4.2.(2) and Table 3.7.4.3. A. of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by The Shaw House Corporation for the resolution of a dispute with Ann Borooah, Chief Building Official and Executive Director, City of Toronto, to determine whether the proposed revised design of a multi-use building with Group C and Group A Division 2 occupancies, where the Group A Division 2 occupancy will be served by one barrier-free washroom and one additional washroom and where both washrooms are intended to serve both sexes, provides sufficiency of compliance with Sentence 3.7.4.2.(2) and Table 3.7.4.3. A. of the 1997 Building Code at The Shaw House on 108 Lakeshore Avenue, Toronto, Ontario.

APPLICANT	Marty Crowder The Shaw House Corporation Homeowner Toronto, ON
RESPONDENT	Ann Borooah Chief Building Official City of Toronto
PANEL	Tony Chow, Chair Gary Burtch Susan Friedrich
PLACE	Toronto, Ontario
DATE OF HEARING	December 11, 2008
DATE OF RULING	December 11, 2008
APPEARANCES	Ellen Vera Allen Ellen Vera Allen Architect Toronto, ON **Agent for the Applicant** Diane Byam Grannum Zoning Building Code Examiner City of Toronto **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant applied for a permit under the *Building Code Act*, *1992*, to renovate the first storey of an existing residential building where the existing four bed-sitting rooms were converted into two single bedroom suites containing their own kitchen and washroom at The Shaw House on 108 Lakeshore Avenue, Toronto, Ontario.

The subject building is two storeys in building height, of combustible construction, and has been subject to renovation work requiring a building permit from the municipality. Prior to the proposed renovation, the first storey of the building contained four single bedroom suites called bed-sitting rooms or bedsits, which were served by a common living/dining/kitchen area and the second storey contained two dwelling units. Each of the bedsits on the first floor contained individual washroom facilities, with the common living/dining/kitchen area being served by a separate washroom.

As part of the renovation proposal, the four bedsits were converted into two single bedroom suites, each containing their own kitchen and washroom. The former combined living/dining/kitchen common area was converted into a “common area”. The building permit obtained by the Applicant initially showed two barrier-free washrooms serving the common area. One of the washrooms existed prior to the proposed work, and although not fully compliant with the barrier-free design requirements of the Code, the Respondent accepted it as such because the new washroom facility being proposed, as per the drawings submitted by the Applicant, was in full conformance with the barrier-free design requirements of the Code.

Subsequent to the issuance of the permit, a revision was applied for by the Applicant in respect of the proposed new barrier–free washroom. The revised application proposed to modify the layout of the new washroom in a manner that the Respondent believes no longer makes it compliant with the barrier-free design requirements of the Code.

Therefore, the dispute before the Commission is whether the proposed revised design of the multi-use building with Group C and A2 occupancies, where the A2 occupancy will be served by one barrier-free washroom and one additional washroom and where both washrooms are intended to serve both sexes, provides sufficiency of compliance with Sentence 3.7.4.2.(2) and Table 3.7.4.3.A. of the 1997 Building Code at The Shaw House on 108 Lakeshore Avenue, Toronto, Ontario

2. Provisions of the Building Code in Dispute

3.7.4.2. Plumbing Fixtures, General

(2) Except as provided in this Subsection, water closets shall be provided for each sex assuming that the *occupant load* is equally divided between males and females, unless the proportion of each sex expected in the *building* can be determined with reasonable accuracy.

Table 3.7.4.3.A.
Water Closets for Assembly Occupancies

Forming Part of Sentence 3.7.4.3.(1)

Number of Persons of Each Sex	Minimum Number of Water Closets for Each Sex
1 - 25	1
26 - 50	2 3 plus 1 for each additional increment of 50 persons of each sex in excess of 50
Column 1	2

3. Applicant's Position

The Agent for the Applicant submitted that the common area will be served by two washrooms and therefore it will be in compliance with the requirements of the Code in terms of the minimum number of water closets for each sex.

Further, the Agent maintained that the existing washroom is considered to be "accessible", thereby, providing compliance with the barrier-free washroom requirements of the Code. The Agent also submitted that since signs have not been posted on either of the washrooms, the "accessible" and non-accessible washroom can be used by either males or females and therefore a second barrier-free washroom is not required.

The Agent reported that she disagreed with the Respondent's position that since the Code requires separate washrooms for each sex, it then implies that two barrier-free washrooms are required, one designated for females and one designated for males. The Agent argued that since the two washrooms are single washrooms, they are in fact unisex and do not need to be designated male or female. Further, the Agent reported that the common area was previously served by one accessible washroom, which was quite adequate for the facility when used for community purposes.

However, in response to questions, the Agent later advised that the Applicant would provide one code compliant barrier-free washroom and further agreed that it was the 1997 Building Code that was applicable in this matter.

4. Respondent's Position

The Designate for the Respondent submitted that the washrooms subject to this dispute serve the common area on the first floor of the subject building. The Designate reported that the original permit application indicated that the occupant load for the first floor is 36 persons, 6 of which are assigned to the Group C occupancy, based on 2 persons per sleeping area, therefore, the occupant load served by the washrooms in question is 30 persons.

The Designate explained that Sentence 3.7.4.2.(2) of the Code requires that washrooms be allocated on the assumption that there are equal numbers of males and females, therefore, implying that unisex washrooms do not meet this Code requirement. Referring to Table 3.7.4.3.A of the Code, the Designate stated that as the common area has an occupant load of 30 persons

the Code would require one water closet/sex.

The Designate contended that, by virtue of Article 3.8.2.3. of the Code, barrier-free washrooms are required to be provided in all floor areas with a barrier-free path of travel, therefore, in this case both washrooms are required to be barrier-free. In addition, the Designate noted that as the subject property is a senior citizen's facility, it would appear to be even more important that a barrier-free washroom serving each sex be provided.

The Designate for the Respondent submitted that the approved permit for the renovation work at the subject building provided for one-barrier-free washroom in addition to the existing accessible washroom, which although not fully compliant with the barrier-free design requirements of the Code, was considered acceptable, however, the requested revision does not comply with the Code. The Designate added that there were no physical constraints preventing the construction of a new barrier-free washroom as per the plans that were initially proposed and approved by the municipality.

In response to questions, the Designate agreed that the 1997 Building Code was applicable in this matter.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed revised design of a multi-use building with Group C and A2 occupancies, where the A2 occupancy will be served by one barrier-free washroom and one additional washroom and where both washrooms are intended to serve both sexes provides sufficiency of compliance with Sentence 3.7.4.2.(2) and Table 3.7.4.3. A. of the 1997 Building Code at The Shaw House on 108 Lakeshore Avenue, Toronto, Ontario on condition that:

a) The original, existing accessible washroom shall be modified in order to meet all requirements for a barrier-free washroom as per Article 3.8.3.12 of the 1997 Building Code.

6. Reasons

i) The Commission was advised that the Applicant will provide one code compliant barrier-free washroom.

ii) Both parties agree that the 1997 Building Code is applicable in this matter. Therefore, as per Article 3.7.4.3. and Table 3.7.4.3.A. of the 1997 Code, the minimum number of water closets required for each sex is one. It is the Commission's opinion that one washroom, modified to meet the barrier-free requirements, provides sufficiency of compliance with Sentence 3.7.4.2.(2) and Table 3.7.4.3. A. of the Building Code.

iii) The Code does not require either the newly constructed washroom or the modified barrier-free washroom to be designated for male or female.

Dated at Toronto this **11th** day in the month of **December** in the year **2008** for application number **2008-34.**

Tony Chow, Chair

Gary Burtch

Susan Friedrich

Ontario

Ruling No. 08-37-1211
Application No. 2008-30

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 9.8.8.3.(2) and 9.8.8.3.(4) of Regulation 350/06 ,as amended, (the Building Code).

AND IN THE MATTER OF an application by Michelle Baily, for the resolution of a dispute with Ken Jones, Chief Building Official, Township of Minden Hills, to determine whether the as installed guards, having been constructed to a height of 754 mm, serving two sets of stairs in a two storey, seasonal residential dwelling, provide sufficiency of compliance with Sentences 9.8.8.3 (2) and 9.8.8.3 (4) of the 2006 Building Code at 1048 Pilgrim Lane, Minden, Ontario.

APPLICANT	Michelle Baily Homeowner Toronto, ON
RESPONDENT	Ken Jones Chief Building Official City of
PANEL	Tony Chow, Chair Gary Burtch Susan Friedrich
PLACE	Toronto, Ontario
DATE OF HEARING	December 11, 2008
DATE OF RULING	December 11, 2008
APPEARANCES	Michelle Baily Homeowner Toronto, ON **Applicant** Colin McKnight Building Inspector Township of Minden Hills, ON **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Comply under the *Building Code Act*, *1992*, to remedy certain alleged code deficiencies at 1048 Pilgrim Lane, Minden, Ontario.

The subject building is a two storey residential occupancy that is intended to be used on a seasonal basis. It is of combustible construction and measures 98. 84 m² in building area.

The construction in dispute involves the height of the guard provided for two sets of interior stairs. The interior stairs in question serve the first and second storeys and the first and basement storeys. The height of the as constructed guards protecting both sets of stairs is 754 mm. An Order to Comply has been issued by the municipality requiring remedial action from the Applicant which is to increase the height of the disputed guards.

2. Provisions of the Building Code in Dispute

9.8.8.3 (2) All *guards* within *dwelling units* shall be not less than 900 mm high.

9.8.8.3 (4) *Guards* for flights of steps, except in required *exit* stairs, shall be not less than 900 mm high.

3. Applicant's Position

The Applicant submitted that the building in question is a seasonal two storey residential dwelling, which the Applicant and her family use. She reported that the guards in question serve the staircase from the basement level to the first floor and from the first floor to the second storey.

The Applicant stated that the contractor hired to construct the subject guards inadvertently built the guards to the wrong height. The Applicant advised that the guards installed on the horizontal floor areas of the dwelling are compliant and in fact, exceed the minimum height requirement of the Code by 178 mm (7 inches). However, the guards serving the two sets of stairs were built to a height of 754 mm, below the minimum 900 mm height required by the Building Code.

The Applicant argued that the note provided in Appendix A to the Building Code suggests that a height lower than the required height can be permitted in a dwelling unit because the occupants are expected to be familiar with the potential hazards and additionally, pushing and jostling is unlikely to occur in such a setting. The Applicant also argued that the as-built guards have sufficient structural strength to resist the load likely to be imposed by the users of the stairs.

The Applicant submitted that to replace the installed guards on both staircases would be quite costly and would therefore prefer to find an alternative measure to remedy the situation. The Applicant proposed to install a length of 2x4 directly over the existing handrail. In response to questions the Applicant advised the Commission that a space of approximately 50 mm (2 inches) will be maintained between the length of the 2x4 and the existing handrail to achieve the minimum guard height required by the Code.

4. Respondent's Position

The Designate for the Respondent submitted that the guards on the two sets of interior stairs in the subject two storey seasonal residential dwelling have been constructed to a height of 754 mm. The Designate stated that the guards in question do not conform to the minimum prescribed height requirement of 900 mm and therefore, do not provide the minimum level of safety anticipated by the Code.

In response to the Applicant's argument regarding the note provided in Appendix A to the Building Code, the Designate stated that in his opinion, the commentary provided in the Appendix provides an explanation for the height reduction permitted for guards within dwelling units from 1070 mm to 900 mm. However, he believed that it was not intended to support a further reduction of a guard height to less than 900 mm as suggested by the Applicant.

The Designate explained that he was sympathetic to the Applicant's position and was open to the discussion of an alternate solution in order to resolve the dispute.

5. Commission Ruling

It is the Decision of the Building Code Commission that the as installed guards, having been constructed to a height of 754 mm, serving two sets of stairs in a two storey, seasonal residential dwelling, provide sufficiency of compliance with Sentences 9.8.8.3 (2) and 9.8.8.3 (4) of the 2006 Building Code at 1048 Pilgrim Lane, Minden, Ontario.

6. Reasons

i) Sentence 9.8.8.3 (2) of the Building Code states, "All *guards* within *dwelling units* shall be not less than 900 mm high" and Sentence 9.8.8.3.(4) states, **"***Guards* for flights of steps, except in required *exit* stairs, shall be not less than 900 mm high".

The subject guards have been constructed to a height of 754 mm, however, the Applicant has proposed to install a length of 2x4 directly over the existing handrail. The Commission was advised that a space of approximately 50 mm (2 inches) will be maintained between the length of the 2x4 and the existing handrail. The combination of the 50 mm space and the width of the 2x4 will provide additional height to the existing guards, achieving the minimum guard height required by the Code. Therefore, it is the Commission's opinion that the as-installed guards along with the compensating measure proposed by the Applicant, will result in guards that sufficiently comply with the Code.

ii) Although climbability of the installed guards was not initially part of the subject dispute, the issue of climbability was raised in relation to the proposed modified guards.

Sentence 9.8.8.6. (1) states:*Guards* required by Article 9.8.8.1., except those in *industrial occupancies* and where it can be shown that the location and size of openings do not represent a hazard, shall be designed so that no member, attachment or opening will facilitate climbing.

The location of the space created between the existing handrail and the length of 2x4 will be at the top of the guard, and in the opinion of the Commission, the location of this opening does not facilitate climbing or present a hazard.

Dated at Toronto this **11th** day in the month of **December** in the year **2008** for application number **2008-30.**

Tony Chow, Chair

Gary Burtch

Susan Friedrich

Ontario

Ruling No. 08-36-1210
Application No. S2008-31

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Part 8 and Part 11 of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Ted Antkow, Homeowner, for resolution of a dispute with Bill Goodale, Chief Building Official, C.C. Tatham & Associates Ltd., to determine whether the proposed repair of an existing Class 4 sewage system provides sufficiency of compliance with Part 8., when considering Part 11 of the Building Code at 305 Concession 11 W, Tiny Township, Ontario.

APPLICANT	Ted Antkow Homeowner Mississauga, ON
RESPONDENT	Bill Goodale Chief Building Official C.C. Tatham & Associates Ltd
PANEL	Judy Beauchamp, Vice Chair
PLACE	Toronto, Ontario
DATE OF HEARING	November 20, 2008
DATE OF RULING	November 20, 2008
APPEARANCES	Ted Antkow Mississauga, ON **The Applicant** Bill Goodale Chief Building Official C.C. Tatham & Associates **The Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Unsafe Order under the *Building Code Act*, *1992*, requiring that a building permit be obtained and that the existing sewage system be replaced at 305 Concession 11 W, Township of Tiny, Ontario.

The subject building is described as a one and a half storey, two bedroom, seasonal cottage, having a building area of approximately 64 m^2. The dwelling is served by a private dug well and has a total of 7.5 plumbing fixture units.

The construction in dispute relates to the proposal by the Applicant to upgrade the existing Class 4 sewage system by relocating the existing tile bed and replacing the existing septic tank with a new 3 000 litre septic tank. The existing system consists of a 1, 800 litre septic tank connected to a leaching bed. The subject sewage system has been in existence for approximately 40-45 years.

The issue at dispute pertains to whether the Applicant's proposal to replace the existing septic tank and relocate the tile bed addresses the unsafe situation and provides sufficiency of compliance with Part 8 when considering Part 11 of the Building Code. Both parties, however, were not in agreement regarding the scope of the technical provisions applicable to this matter.

Further, prior to the hearing, the Respondent raised an objection to the subject application before the Building Code Commission. The Respondent questioned whether the contents of the application to the Commission were in any material way different from the Applicant's two previous applications heard by the Commission and whether the Commission could hear a third Application submitted by the Applicant regarding, in his opinion, the same matter.

Therefore, at the outset of the hearing, the presiding Member determined that the issue of whether the Commission had the jurisdiction to make a determination in this matter would need to be addressed prior to holding a hearing regarding sufficiency of compliance with the technical provisions of the Building Code. As a result, what followed were preliminary questions and answers where the parties spoke to the issue of jurisdiction.

2. Provisions of the Building Code in Dispute

Part 8 – Sewage Systems

(Please see Part 8 of the Building Code)

Part 11 – Renovation

(Please see Part 11 of the Building Code)

Both parties were not in agreement as to which technical provisions of the Building Code are in dispute.

3. Applicant's Position

In response to questions, the Applicant submitted that he had applied for a new building permit since his previous application and hearing before the Building Code Commission. He stated that that he had submitted a new building permit application in response to an Unsafe Order and

subsequently received a letter of rejection from the Respondent. However, upon answering further questions from the Commission, the Applicant conceded that the letter addressed to the Respondent, dated June 17, 2008, which he considered to be a building permit application, was not submitted using the proper form, nor was it accompanied with drawings or plans for the proposed new construction of the septic system and there were no permit fees submitted with the letter.

In response to further questions from the Commission, the Applicant stated that he had not received a new Order under the *Building Code Act* since his previous application and hearing before the Commission. However, in a later submission after the Respondent stated that a new Unsafe Order, dated July 7, 2008, had been issued to the Applicant, the Applicant clarified that he did not determine this Order to be new, as it was virtually the same as the Order dated November 28, 2005, in that the new Order contained virtually the same wording and content as the previous Order.

In summary, the Applicant explained that he believed his current application before the Commission was different from his previous applications, in that he wanted to address the issues of health and safety with respect to Part 11 of the Building Code, which he believed were two areas that he did not address in his previous hearings before the Commission.

4. Respondent's Position

Prior to the commencement of the hearing the Respondent raised an objection to the subject application before the Building Code Commission. The Respondent questioned whether the contents of the Application to the Commission were in any material way different from the Applicant's two previous applications heard by the Commission and whether the Commission could hear a third Application submitted by the Applicant regarding, in his opinion, the same matter.

In response to questions, the Respondent submitted that no new building permit application had been made by the Applicant since the previous application and hearing before the Commission. However, the Respondent acknowledged receipt of the letter dated June 17, 2008, which the Applicant referred to in his statement to the Commission. However, the Respondent stated that the subject letter was not deemed a new building permit application, as it was not submitted on the required form; it was not accompanied with the required drawings and/or documentation of the proposed construction as per the Building Code Act, and it was not submitted with the required building permit fee.

In response to further questions, the Respondent advised that a new Order dated July 7, 2008 had been issued to the Applicant and he agreed that the content of the new Order was virtually the same as the previous Order dated November 28, 2005 and that it contained no new information.

In summary, the Respondent stated that the subject application before the Commission was the Applicant's third application and that two previous Commission rulings determined that the Applicant's proposal did not provide sufficiency of compliance with the Building Code. Further, the Respondent argued that the Applicant's June 17, 2008 letter is not a new building permit application nor does it provide any substantially new information or address all of the provisions in the Building Code that are of concern. As a result, the Respondent maintained that the subject application before the Commission is indeed not a new application and therefore, does not require a new hearing.

5. Commission Ruling

It is the Decision of the Building Code Commission that, under subsection 24(1) of the *Building Code Act, 1992*, the Commission does not have the jurisdiction to make a determination on the issues raised in relation to the matter at 305 Concession 11 W, Tiny Township, Ontario.

6. Reasons

i) Section 24 of the *Building Code Act, 1992* sets out the jurisdiction of the Building Code Commission and subsection 24(4) of the Act indicates that a decision of the Commission is final. The Commission does not have a policy, nor does the legislation provide for, re-examination or reconsideration of matters that have been decided upon after a full and fair hearing.

ii) The Commission was advised that since the previous Application and Ruling of the Building Code Commission, the Applicant has not applied for a new building permit application regarding this matter, nor has the Applicant submitted any substantially new design information for the repair of the existing septic system. Although the Commission was advised that a new Order has been issued to the Applicant, both parties agree that the new Order is not substantially different, neither in its wording or content than the previous Order issued to the Applicant, which was disputed in a previous Commission hearing.

iii) As there is no substantial difference between this Application and the previous Application to the Building Code Commission, it is the opinion of the Commission that the subject application is an appeal of the earlier Building Code Commission's Decision.

iv) Further, it is the opinion of the Commission that since the Act indicates that a decision of the Commission is final, allowing the Applicant to proceed with this Application would not give the previous decision of the Commission the finality required by section 24. As well, allowing the Applicant to proceed with this application could also result in duplicitous proceedings before the Commission and could potentially result in inconstant rulings between different panels of the Commission.

Dated at Toronto this **5th** day in the month of **December** in the year **2008** for application number **S-2008-31.**

Judy Beauchamp, Chair-Designate

Ruling No. 08-34-1208
Application No. S-2008-29

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 8.9.1.2. and Table 8.2.1.3.B of Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by Will Jaques, CAO, Municipality of West Perth, for the resolution of a dispute with Bob McLean, Chief Building Official, Municipality of West Perth, to determine whether the total daily design sanitary sewage flow for a proposed Class 4 Sewage System serving a Group A, Division 2 major occupancy, having been calculated for an "Assembly Hall with food service provided" with a daily design sanitary sewage flow of 36L per seat, sufficiently complies with Article 8.2.1.3. and Table 8.2.1.3. B of the Building Code at 6708 Perth Line 344, Con, 9 N. Pl. Lot 28, Brodhagen, Ontario.

APPLICANT	Will Jaques Municipality of West Perth Mitchell, ON
RESPONDENT	Bob McLean Chief Building Official Municipality of West Perth
PANEL	Judy Beauchamp, Chair-Designate Jim Wilkinson Eric Gunnell
PLACE	Toronto, Ontario
DATE OF HEARING	November 20, 2008
DATE OF RULING	November 20, 2008
APPEARANCES	Nick Aroutzidis NA Engineering Associates Inc., Stratford, ON **Agent for the Applicant** Bob McLean Chief Building Official Municipality of West Perth **The Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, to construct a new onsite sewage treatment system to service a "community centre" at 6708 Perth Line, # 44, Con. 9 N. P1. Lot 28, Brodhagen, Ontario.

The subject building is a new one storey building having a total finished area of approximately 700 m^2 that will include 105 fixture units. The facility is described as a community hall and has been classified as having a Group A, Division 2 major occupancy.

The construction in dispute relates to the design capacity of a new sewage system proposed to serve the community hall. The Building Code regulates "sewage systems" that have a design capacity of less than 10,000 litres per day. The *Ontario Water Resources Act* regulates systems where the design capacity is greater than 10,000 per day as such a system would be considered a "sewage works". One aspect of the dispute before the Commission is whether the subject Class 4 sewage system falls under the *Building Code Act* or the *Ontario Water Resources Act.*

Sentence 8.2.1.3.(2) of the Building Code specifies for all occupancies, other than residential occupancies, the total daily design sanitary sewage flow shall be at least the value in Column 2 of Table 8.2.1.3.B. Table 8.2.1.3.B. of the Code lists various types of establishments and assigns a specific volume to be used to calculate the total daily design sanitary sewage for each establishment.

The Applicant contends that the subject facility is an "Assembly Hall establishment with food service provided" as listed in Table 8.2.1.3.B. of the Building Code with a daily design sanitary sewage flow of 36L per seat resulting in a total daily design sewage flow of less than 10, 000 L/day, and as such is regulated under the Building Code.

The Respondent contends the subject facility is a "Restaurant" or a "bar and cocktail lounge" both of which result in a daily design sewage flow rate of 125L per seat, which results in a total daily design sewage flow greater than 10, 000L/day and therefore, falls under *the Ontario Water Resources Act.*

The dispute between the parties has a couple of inter-related components, one related to whether the proposed system is considered a "sewage system" or a "sewage works" and consequently, whether the Building Code or the *Ontario Water Resources Act* is the governing legislation. Also at issue, is which daily design sanitary sewage flow rate listed in Table 8.2.1.3.B. is to be used when calculating the design capacity of the subject sewage system.

2. Provisions of the Building Code in Dispute

8.2.1.3. Sewage System Design Flows

(1) For *residential occupancies*, the total daily design *sanitary sewage* flow shall be at least the value in Column 2 as determined from Table 8.2.1.3.A.

(2) For all other *occupancies*, the total daily design *sanitary sewage* flow shall be at least the value in Column 2 as determined from Table 8.2.1.3.B.

(3) Where a *building* contains more than one establishment, the total daily design *sanitary sewage* flow shall be the sum of the total daily design *sanitary sewage* flow for each establishment.

(4) Where an *occupancy* is not listed in Table 8.2.1.3.B., the highest of metered flow data from at least 3 similar establishments shall be acceptable for determining total daily design *sanitary sewage* flow.

Table 8.2.1.3.B.
Other Occupancies

Forming Part of Sentence 8.2.1.3.(2)

Column 1	Column 2
Establishments[(1)]	Volume, litres
Airports, Bus Terminals, Train Stations, Dock/Port Facilities (Food Services excluded)	
a) Per passenger, and	20
b) Per employee per 8 hour shift	40
Assembly Hall - per seat	
a) No food service, or	8
b) Food service provided	36
Food Service Operations	
a) Restaurant (not 24 hour), per seat	125
b) Restaurant (24 hour), per seat	200
c) Restaurant on controlled access highway, per seat	400
d) Paper service restaurant, per seat	60
e) Donut shop, per seat	400
f) Bar and cocktail lounge, per seat	125
g) Drive-in restaurant per parking space	60
h) Take-out restaurant (no seating area)	

Notes to Table 8.2.1.3.B.:
[(1)]The *occupant load* shall be calculated using Subsection 3.1.17.

[(2)]Flea markets open more than 3 days per week shall be assessed using the volumes stated under the heading “Stores”.

[(3)]Where multiple calculations of *sanitary sewage* volume is permitted the calculation resulting in the highest flow shall be used in determining the design daily *sanitary sewage* flow.

[(4)]The number of fuel outlets is considered the maximum number of gas nozzles that could be in use at the same time.

3. Applicant’s Position

The Agent for the Applicant submitted that there are two issues at dispute between the Applicant and the Respondent: the first is whether the subject building can be designed for a capacity of 264 people and the second issue is whether the total daily design sanitary sewage flow for the proposed sewage system serving the community centre should be calculated for an “Assembly Hall with food service provided” with a daily design sanitary sewage flow of 36L per seat or a “Bar and Cocktail Lounge” with a total daily design sewage flow of 125 L/seat.

The Agent stated that it is the Respondent’s position that the total daily design sanitary sewage

flow for the sewage system should be calculated for a “Bar and Cocktail Lounge” using a rate of 125 L/seat.

The Agent argued that the subject building could not be deemed a “Bar and Cocktail Lounge”, as the community centre is not a licensed establishment and therefore, would not be serving alcohol on a continual basis. The Agent stated that the community centre would in fact, only operate for a few hours each day with the exception of occasional events such as a wedding or a ‘buck and doe’.

The Agent explained that the proposed new building is approximately 700 m² and is being built to replace a building on the same site that was destroyed by a fire. The Agent maintained that the previous building was a two storey building, approximately 940 m² and although larger, was served by a smaller septic system without incident.

The Agent stated that the proposed community centre is an unlicensed facility; however, event-specific liquor licenses may be acquired for weddings or ‘buck and doe’ events. He maintained that the proposed use of the building is similar to a number of other facilities in the surrounding townships, which have septic systems that were designed based on a similar daily design sewage flow rate as is being proposed by the Applicant.

The Agent argued that Clause 3.1.17.1.(1)(c) of the Building Code allows the occupancy of a building to be “based on the number of persons for which the area is designed”. Therefore, the total daily design sanitary sewage flow could be calculated for 264 people, as this is the maximum capacity for the building being proposed by the owner.

The Agent explained that the occupant load of 264 people was based on the historic use of the building. The Agent reported that in the past 3 years an average of 60 events per year were held at the previous community hall and of those 60 events; only 10 acquired a license to serve alcohol. The Agent maintained that none of the 10 acquired liquor licenses were for more than 200 people; therefore an occupant load of 264 people was reasonable.

The Agent reported that in calculating the total daily design sewage flow for the sewage system, the following criteria were used:

1. In calculating the occupant load, the occupancy was described as “dining, alcoholic beverage and cafeteria space” and an area of 1.1 m² per person was used. The number of occupants was calculated to be 264 persons.
2. In using Table 8.2.1.3.B, the occupancy was classified as an “Assembly Hall with food provided” and 36L per person was used, which results in a total daily design sewage flow of 9, 504 L/day.

As a result, the Agent maintained that the proposed sewage system has a design capacity that is equal to or less than 10, 000 liters per day and therefore, is considered a “sewage system” under the Building Code Act and not a “sewage works” subject to the Ontario Water resources Act (OWRA).

In summary, the Agent asserted that a total daily design sewage flow of 9, 504 L/day is appropriate for their facility and therefore the proposal sufficiently complies with the Code.

4. Respondent’s Position

The Respondent submitted that the proposed system was not a “sewage system” as defined by the Building Code but rather a “sewage works” subject to the Ontario Water Resources Act (OWRA), and therefore, the permit for construction of this system must be obtained from the

Ministry of Environment (MOE) which administers OWRA.

The Respondent maintained that the method by which the Applicant calculated the total daily design sewage flow is not accurate. Adding, that in his opinion, the Applicant was attempting to find relief from having to apply to MOE for approval of the sewage works by selecting an establishment with a “low” volume sanitary sewage and combining that value with a reduced occupant load to determine a total sewage design capacity that was less than 10 000 L/day.

The Respondent contended that the Architect designed the subject Assembly Occupancy based on 1.10 m² per person for use as a “dining, alcoholic beverage and cafeteria” with an occupant load of 264 persons, however, neglected to give any value to the seating capacity for the meeting room shown in the plans and drawings submitted for the subject building.

The Respondent reported that he calculated the total daily design sewage flow for the subject sewage system to be 35 000 L/day. The Respondent submitted that this total was calculated using the following criteria:

1. There are 5 water closets for each sex being proposed by the applicant, plus one accessible washroom.
2. Sentence 3.7.4.3.(4) of the Code states that the number of water closets required for dining rooms, restaurant and cafeteria shall conform to Table 3.7.4.3.D, which permits an occupancy of 166 to 195 persons for each sex. Therefore the total occupant capacity is 390 persons, which is consistent with the possible occupant design of 410 persons identified in the design matrix. The occupant capacity would include both the main hall and the meeting room.
3. Article 3.7.4.3 of the Code permits a maximum occupant load of 280 persons.
4. Using Table 8.2.1.3.B, the occupancy can be classified as either “Restaurant (not 24 hour)” or “Bar and Cocktail Lounge”, both of which have a flow rate of 125 L per seat. Therefore, when using an occupant load of 280 people, multiplied by a flow rate of 125 L/seat, the resulting total daily design flow is 35 000L/day.

The Respondent argued that in using Table 8.2.1.3.B of the Code, the occupancy of the facility should be deemed either “Restaurant” or “Bar and Cocktail Lounge” with 125 L/seat for a more accurate calculation of the total daily design sewage flow. He contended that the kitchen in the subject facility was designed for full course meal preparation and service as provided at wedding receptions or banquets and is comparable to a restaurant operation. As well, “buck and doe” events with little or no food service can be compared to a bar and cocktail facility. He stated that even a total daily design sewage flow calculation based on an occupant load of 264 people, as proposed by the Applicant, multiplied by 125 L/seat would result in a total daily design sewage flow of 33 000 L/day, far greater than the 10, 000 L/day capacity for a “sewage system” regulated by the Building Code.

In conclusion, the Respondent maintained that a true evaluation of the occupancy of the subject building and assessment of the total daily design sewage flow clearly indicates that the proposed system is a “sewage work” regulated under OWRA.

5. Commission Ruling

It is the Decision of the Building Code Commission that the total daily design sanitary sewage flow for a proposed Class 4 Sewage System serving a Group A, Division 2 major occupancy, having been calculated for an “Assembly Hall with food service provided” with a daily design sanitary sewage flow of 36L per seat sufficiently complies with Article 8.2.1.3. and Table 8.2.1.3. B of the Building Code at 6708 Perth Line 344, Con, 9 N. Pl. Lot 28, Brodhagen, Ontario on condition that:

a) The occupant load shall be limited to a maximum of 264 seats.

6. Reasons

i) Subsection 24(1) of the *Building Code Act, 1992* provides the Building Code Commission (BCC) with the jurisdiction to resolve disputes between a permit applicant, permit holder or a person to whom an order has been issued and the chief building official, a registered code agency or inspector concerning the sufficiency of compliance with the technical requirements of the Building Code.

The *Ontario Water Resources Act,* Section 53 determines whether the *Act* or the Ontario Building Code is applicable to a particular case by stating "This section does not apply to a sewage system that is subject to the *Building Code Act, 1992"*

A sewage system, as defined by the Building Code, requires that the sewage system has a design capacity of 10,000 litres per day or less. Design capacity, as defined in Article 1.4.1.2. of Division A of the Building Code, means that the total daily design sanitary sewage flow must be determined in accordance with Article 8.2.1.3 of Division B.

ii) Sentence 8.2.1.3.(2) of Division B of the Building Code states that the total daily design flow for all occupancies, other than residential occupancies, shall be determined in accordance with Table 8.2.1.3.B.

iii) The Commission heard detailed evidence and testimony describing the use of the community hall and was further advised that the subject property is municipally owned and zoned institutional. It is the Commission's opinion that the subject facility as described is an "Assembly Hall establishment with food service provided" as listed in Table 8.2.1.3.B of the Building Code with a daily design sanitary sewage flow of 36L per seat.

iv) The Commission was advised that the maximum occupant load for the subject building shall be 264 seats. Therefore, the calculated flow as determined from Table 8.2.1.3.B combined with the reported occupant load of the subject facility results in a total daily flow that is less than 10,000 litres per day.

v) It is the Commission's opinion that the proposed Class 4 Sewage System serving a Group A, Division 2 major occupancy, is a sewage system that is subject to the *Building Code Act,* and further sufficiently complies with Article 8.2.1.3. and Table 8.2.1.3. B of the Building Code.

Dated at Toronto this **20th** day in the month of **November** in the year **2008** for application number **2008-29.**

Judy Beauchamp, Chair-Designate

Jim Wilkinson

Eric Gunnell

Ontario

Ruling No. 08-33-1207
Application No. P-2008-33

BUILDING CODE COMMISSION

IN THE MATTER OF Clause 24(1)(b) of the *Building Code Act*, S.O. 1992, c. 23 ("Act").

AND IN THE MATTER OF Subsections 8(2.2) and 8(2.3) of the Act and Division C, Article 1.3.1.3. of Ontario Regulation 350/06, as amended ("Building Code").

AND IN THE MATTER OF a dispute between Alain McCann, President of 1582790 Ontario Ltd. and Guido Mazza, Chief Building Official for the City of Greater Sudbury, involving whether the Chief Building Official complied with the requirements of Subsections 8(2.2) and 8(2.3) of the *Building Code Act, 1992* and Division C, Sentence 1.3.1.3.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 1.3.1.3. of the Building Code regarding PCL38027 PT4 of SR2622 and PCL10264 PT5 of SR2622, CONC 3 Lot 11, Township of Neelon, Fourth Ave., Sudbury, Ontario.

APPLICANT	Alain McCann President 1582790 Ontario Ltd Sudbury, ON
RESPONDENT	Guido Mazza Chief Building Official City of Greater Sudbury Sudbury, ON
PANEL	Yaman Uzumeri, Chair-Designate
PLACE	Toronto, Ontario
DATE OF HEARING	October 17, 2008
DATE OF RULING	October 17, 2008
APPEARANCES	Alain McCann President 1582790 Ontario Ltd. Sudbury, ON **The Applicant** Guido Mazza Chief Building Official City of Greater Sudbury Sudbury, ON **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant applied for two building permits under subsection 8(1) of the Act to construct two single storey duplex dwellings.

The dispute between the parties involves whether the Chief Building Official (the Respondent) complied with subsections 8(2.2) and 8(2.3) of the Act and Division C, Sentence 1.3.1.3.(1) of the Building Code.

2. Provisions of the Act and Building Code in Dispute

Act: subsections 8(2.2) and (2.3)

Decision

(2.2) When an application for a permit contains the prescribed information, the chief building official is required to determine within the period prescribed by regulation whether to issue the permit or to refuse to issue it.

Same, reasons for refusal

(2.3) If the chief building official refuses to issue the permit, he or she shall inform the applicant of all of the reasons for the refusal of the permit and shall do so within the period prescribed by regulation.

Building Code:

Division C, Article 1.3.1.3. Period Within Which a Permit is Issued or Refused

(1) Subject to Sentences (2) and (3), if an application for a permit under subsection 8 (1) of the Act that meets the requirements of Sentence (5) is submitted to a *chief building official*, the *chief building official* shall, within the time period set out in Column 3 of Table 1.3.1.3. corresponding to the class of *building* described in Column 2 of Table 1.3.1.3. for which the application is made,

(a) issue the permit, or

(b) refuse to issue the permit and provide in writing all of the reasons for the refusal.

Table 1.3.1.3.
Period Within Which Permit Shall be Issued or Refused

Forming Part of Article 1.3.1.3.

Column 1	Column 2	Column 3
Row Number	Class of *Building*	Time Period
1	(a) A detached house, semi-detached house, townhouse, or row house where no *dwelling unit* is located above another *dwelling unit*. (b) A detached structure that serves a *building* described in Clause (a) and does not exceed 50 m^2 in *building area*. (c) A tent to which Section 3.14. of Division B applies. (d) A sign to which Section 3.15. of Division B applies.	10 days
2	(a) *Buildings* described in Clause 1.1.2.4.(1)(a), (b) or (c) of Division A, other than *buildings* described in Column 2 of any of Rows 1 and 4 of this Table. (b) *Farm buildings* that do not exceed 600 m^2 in *building area*.	15 days
3	(a) *Buildings* described in Clause 1.1.2.2.(1)(a), or (b) of Division A, other than *buildings* described in Column 2 of any of Rows 1 and 4 of this Table. (b) *Farm buildings* exceeding 600 m^2 in *building area*.	20 days
4	(a) *Post-disaster buildings*. (b) *Buildings* to which Subsection 3.2.6. of Division B or any provision in Articles 3.2.8.3. to 3.2.8.11. of Division B applies.	30 days

3. Applicant's Position

The Applicant submitted that two building permit applications were submitted to the City of Greater Sudbury on August 19, 2008 with a cheque for the permit fees. The Applicant stated that the applications, including all fees, drawings and appropriate forms were submitted and accepted by the City Clerk at that time.

The Applicant informed the Commission that the permit application proposed the construction of two duplex dwellings and therefore, there was a 15 day time frame for the Respondent to either refuse the permit application with reasons or to issue the permit.

The Applicant maintained that he had not received a written determination from the Respondent regarding his application for the building permits. He conceded that he had received a letter dated August 29, 2008 from the Supervisor of Development Engineering of the City of Greater Sudbury, which provided comments regarding the lot grading plan. The Applicant advised that this letter was not from the Chief Building Official, did not mention the refusal to issue building permits and as such, did not deem the August 29, 2008 letter to be the written refusal for the permits.

The Applicant asserted that the time frame for the Respondent to respond to the permit application was 15 days and that the Respondent had neither issued the building permit nor refused to issue the building permit within this specified time frame.

4. Respondent's Position

The Respondent participated in the hearing by way of teleconference and submitted that two permit applications from the Applicant were received on August 19, 2008.

The Respondent confirmed that the subject building permit applications included a cheque for the permit fees. The Respondent also maintained that at the time of paying for a permit, an

applicant is given a form which verifies his/her payment and offers a summary of the information in the computer system obtained from the standardized application form. The Respondent stated that at this time, a check list of items requiring approval and/or submission prior to a building permit being issued is given to the permit applicant. The Respondent submitted that one of the required approvals to be completed prior to issuing the subject building permits was the "Sudbury Roads & Drainage" section.

The Respondent explained that the comments for the City of Greater Sudbury "Roads & Drainage" section are provided by the "Development Engineering Section". Its role is to provide comments on such areas as: compliance on grading, storm water management, connections to existing sewer and water infrastructure, as well as roads for the proposed development among other things.

The Respondent stated that as per Division C, Article 1.3.1.3. of the 2006 Building Code, the City of Greater Sudbury had 15 business days to make a determination on the Applicant's building permit applications and in this case that date would be September 9, 2008.

The Respondent submitted that the City of Greater Sudbury Roads & Drainage section reviewed the Applicant's two building permit applications and did not approve the submissions. The Respondent reported that the Applicant was advised by way of a letter dated August 29, 2008 of the deficiencies. The Respondent maintained that the response to the Applicant was thus given within 8 working days.

The Respondent added that on September 30, 2008, the Applicant had subsequently made a second submission to the Roads & Drainage section through the building permit process. This new submission was reviewed by the Roads & Drainage section and was also deemed unacceptable. The Respondent reported that the Applicant was informed by way of a letter dated October 10, 2008 which included reasons for the deficiencies, which was again provided within 8 working days. The Respondent stated that the clearance for the Road & Drainage section is deemed to be "Applicable Law" and as such, the permits can not be issued until the proposed construction is deemed acceptable by the Development Engineering Section.

In summation, the Respondent asserted that the City of Greater Sudbury had met its obligation with respect to the legislated time frame for permit processing. He reiterated that the time period for making a determination regarding the Applicant's building permit application was 15 days and that the time frame began on August 19, 2008 and ended on August 29, 2008 with the letter from the Development Engineering Section. He asserted that the letter detailing the reason for non-issuance of the building permit was sent to the Applicant on August 29, 2008, 8 working days from the time the permit applications were made. Therefore, the municipality had fully complied with the time frames prescribed by the Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the Respondent has not complied with the requirements of Subsections 8(2.2) and 8(2.3) of the *Building Code Act, 1992* and Division C, Sentence 1.3.1.3.(1) of the Building Code. Under these subsections, the Respondent is required to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal, within the applicable time period set out in Table 1.3.1.3. of the Building Code.

6. Reasons

i) Division C, Sentence 1.3.1.3.(6) of the Building Code specifies when the time periods

set out in Table 1.3.1.3. commence:

The time period described in Sentences (1) to (3) shall begin on the day following the later of

(a) the day on which an application meeting the requirements of Sentence (5) is submitted to the chief building official, and

(b) the day on which payment is made of all fees that are required, under a by-law, regulation or resolution made under Clause 7 (1) (c) of the Act, to be paid when the application is made.

The parties agreed that two permit applications were submitted to the City of Greater Sudbury on August 19, 2008.

As a result, it is August 20, 2008 (the day following the day on which an application meeting the requirements of Sentence (5) is submitted) that the applicable time period set out in Table 1.3.1.3. commenced in this case.

ii) The construction proposed under the building permit applications in question are subject to the fifteen day time period set out in Column 3 of Row 2 in Table 1.3.1.3. of Division C. Sentence 1.3.1.3.(7) provides that the time periods described in Column 3 of Table 1.3.1.3. do not include Saturdays, holidays and all other days when the offices of a principal authority are not open for the transaction of business with the public.

In the present case, the applicable fifteen day time period ended on September 10, 2008. The Respondent was required to issue or refuse to issue the permits in respect of the Applicant's permit applications by that date.

iii) The Respondent submitted that a letter detailing the reasons for not issuing the building permits was mailed to the Applicant on August 29, 2008. The letter was signed by Robert Webb P.Eng., Supervisor of Development Engineering of the City of Greater Sudbury. The Applicant agreed that he received the subject letter dated August 29, 2008 before the fifteen day timeframe but disputed whether the letter provided in writing all the reasons for refusing to issue the permits, as required by Article 1.3.1.3 of Division C of the Building Code.

iv) Division C, Sentence 1.3.1.3.(1) of the Code requires the Chief Building Official to, within fifteen days of receipt of a building permit application meeting the requirements of Sentence 1.3.1.3.(5) of the Code, either issue the permit or <u>provide all written reasons as to why the permit cannot be issued</u> (emphasis added).

Under Subsection 8(2) of the *Building Code Act, 1992*, a Chief Building Official shall issue a permit unless certain reasons prevent him/her from doing so. It is the Commission's opinion that the subject letter dated August 29, 2008 did not state the permits were refused, nor did the subject letter provide the Applicant the reasons as to why the permits could not be issued. The subject letter, dated August 29, 2008, sent to the Applicant by the Development Engineering section of the City of Greater Grand Sudbury stated, "The Development Engineering section has reviewed the Lot grading Plan submitted to us for review and wish to provide the following comments…" The subject letter: did not reference either building permit applications made by the Applicant, did not state that the permit applications were being denied, and further did not provide the reasons for refusal of the permit applications.

Dated at Toronto this **17th** day in the month of October in the year **2008** for application number **P-2008-33.**

Yaman Uzumeri, Chair Designate

Ontario

Ruling No. 08-32-1206
Application No. 2008-28

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF with Articles 9.8.8.5. of Regulation 403/97 and Article 9.8.8.6. of Regulation 350/06 as amended, (the Building Code).

AND IN THE MATTER OF an application by Jerry Skubel, Jerry Skubel Construction, for the resolution of a dispute with Rolf Weins, Chief Building Official, Town of Niagara-on-the-Lake, to determine whether the guards installed to serve the newly constructed rear deck and front entrance landing of a residential building, where the new guards have been designed to replicate the existing guards provide sufficiency of compliance with Articles 9.8.8.5. of the 1997 Building Code or Article 9.8.8.6. of the 2006 Building Code, at 428 Queens St., Niagara on the Lake, Ontario.

APPLICANT	Jerry Skubel Jerry Skubel Construction Toronto, ON
RESPONDENT	Rolf Weins Chief Building Official Town of Niagara-on-the-Lake
	Keegan Gennings Deputy Chief Building Official Town of Niagara-on-the-Lake **Designate for the Respondent**
PANEL	Tony Chow, Chair Rick Florio Neal Barkhurst
PLACE	Toronto, Ontario
DATE OF HEARING	October 9, 2008
DATE OF RULING	October 9, 2008
APPEARANCES	Keegan Gennings Deputy Chief Building Official Town of Niagara-on-the-Lake **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant applied for two building permits under the 1997 Building Code and one building permit under the 2006 Building Code to renovate and construct an addition to an existing residential dwelling.

The subject building is a Group C, 2 ½ storey residential dwelling, approximately 214 m² in area which was built in 1893.

The construction in dispute involves the design of the installed guards, which were built to serve the newly constructed rear deck and front entrance landing of the subject building. The guards are required guard under the Building Code, as the difference in grade is in excess of 600 mm. The new guards have been designed to replicate the existing guards located on the upper balconies of the home. The guard is composed mostly of vertical wooden members; however sections of the guard are constructed with numerous joined diagonal members forming a lattice type design.

It is the opinion of the Respondent that the lattice or "x" design which forms part of the guard, contravenes both Articles 9.8.8.5. of the 1997 Building Code and Article 9.8.8.6. of the 2006 Building Code. It is the Applicant's objective to preserve the original detail in the restoration work undertaken of their historical home.

2. Provisions of the Building Code in Dispute

9.8.8.5. Design to Prevent Climbing (1997 Building Code)

(1) *Guards* required by Article 9.8.8.1. and serving *buildings of residential occupancy* shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2ft 11 in) above the floor or walking surface protected by the *guard* will facilitate climbing.

9.8.8.6. Design to Prevent Climbing (2006 Building Code)

(1) *Guards* required by Article 9.8.8.1., except those in *industrial occupancies* and where it can be shown that the location and size of openings do not represent a hazard, shall be designed so that no member, attachment or opening will facilitate climbing.

(2) *Guards* shall be deemed to comply with Sentence (1) where any elements protruding from the vertical and located within the area between 140 mm and 900 mm above the floor or walking surface protected by the *guard*,

(a) are located more than 450 mm horizontally and vertically from each other,

(b) provide not more than 15 mm horizontal offset,

(c) do not provide a toe-space more than 45 mm horizontally and 20 mm vertically, or

(d) present more than a 1-in-2 slope on the offset.

3. Applicant's Position

The Agent for the Applicant advised that the subject building was constructed in 1893. The Agent stated that the current owners, who use the home as their own private dwelling, have taken great care to preserve the original detail of the home in all the restoration and new

construction work that has taken place. The Agent explained that the newly installed guards serving the rear deck and the front entrance of the home are at the center of this dispute.

The Agent, pointing to photos, explained that the newly constructed guards were designed with a lattice or “x” design forming part of the guard, where the “x” pattern alternates with segments of vertical members. The guards were designed in this manner in order to replicate the design of the existing guards located on the upper balconies of the home. The Agent also added that the small sections of guard that contain the “x” pattern, not only provide a consistent design with the existing guards but also added visual appeal.

Although the Agent conceded that the newly installed guards were not in compliance with the Code, he submitted that his clients felt it would greatly spoil the look to have to add Plexiglas panels over the lattice inserts or to remove the lattice panels altogether.

In response to questions, the Agent stated that the rear deck and front entrance landing and stairs were newly constructed and that previously no other deck or landing had existed in its place. The Agent, also in response to questions, stated that the home was not designated a “heritage building” as it was just outside the boundary for the designation.

4. Respondent’s Position

The Designate for the Respondent submitted that there were three building permits issued for the subject property, one of which was under the 2006 Building Code and the other two were issued under the 1997 Building Code and therefore, both Codes were applicable to the dispute at hand. The Designate also pointed out that the technical requirements of Article 9.8.8.5. of the 1997 Building Code and Article 9.8.8.6. of the 2006 Building Code regarding the design of guards “to prevent climbing” were virtually the same.

The Designate submitted that the guards in dispute formed part of the railing system at the rear deck and front deck of the subject home. In response to questions the Designate indicated the deck floors were approximately 889 mm above grade. The Designate stated the new guards were designed to match the original existing guards of the home. In his opinion the “x” design in the panel inserts of the guards create openings that could enable children in gaining a foothold and therefore, facilitate climbing.

The Designate submitted that the “x” pattern created openings that were located between 100 mm and 900 mm above the walking surface of the deck and that the size of the openings were approximately 95 mm by 222 mm. Therefore, it was his opinion that the subject design could facilitate climbing and did not comply with either Article 9.8.8.5. of the 1997 Building Code or Article 9.8.8.6. of the 2006 Building Code.

Further, the Designate maintained that as the rear deck and front deck of the subject home were newly constructed and were not part of the existing building, he did not believe Article 11.3.3.1 of the 1997 and 2006 Building Code, Basic Renovation, was applicable in this case.

5. Commission Ruling

It is the Decision of the Building Code Commission that the guards, installed to serve the newly constructed rear deck and front entrance landing where the new guards have been designed to replicate the existing guards, do not provide sufficiency of compliance with Articles 9.8.8.5. of the 1997 Building Code or Article 9.8.8.6. of the 2006 Building Code, at 428 Queens St., Niagara-on the-Lake, Ontario

6. Reasons

i) Clause 9.8.8.1.(1)(a) of the 2006 Building Code and Sentence 9.8.8.1.(1) of the 1997 Building Code both require that exterior landings, porches, balconies etc… be protected by a guard on each side that is not protected by a wall where there is a difference in elevation of more than 600 mm between the walking surface and the adjacent surface. Therefore, as there is a difference in elevation of more than 600 mm between the walking surface of both the rear deck and the front entrance landing and the adjacent surface, the subject guards are required guards as per the Building Code.

ii) The Commission heard testimony that the rear deck and the front entrance landing, where the subject guards are located, were not existing structures but rather were newly constructed and added to the existing building. Therefore, Article 11.3.3.1 of the 1997 and 2006 Building Code, Basic Renovation, is not applicable in this case.

iii) Clause 11.3.2.1.(1)(b) in the 1997 and in the 2006 Building Code states, “Where an existing *building* is extended… b) the extended portion of the *building* shall comply with all other Parts”. Therefore, by virtue of Clause 11.3.2.1.(1)(b), Article 9.8.8.5. of the 1997 Building Code or Article 9.8.8.6. of the 2006 Building Code is applicable in this case.

iv) The Building Code sets out the minimum construction requirements. The subject guards do not provide sufficiency of compliance with Article 9.8.8.5 of the 1997 Code or Article 9.8.8.6 of the 2006 Building Code. The Applicant did not offer any compensating measures to offset the deviation from the Code requirement.

Dated at Toronto this **9th** day in the month of **October** in the year **2008** for application number **2008-28.**

Tony Chow, Chair

Rick Florio

Neal Barkhurst

Ontario

Ruling No. 08-31-1205
Application No. 2008-24

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF with Clause 3.3.2.2.(8)(b) of Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by Daniel Cayouette, Conseil Scolaire De district Catholique Centre for the resolution of a dispute with Mike Mantesso, Chief Building Official, City of Welland, to determine whether the proposal to include the administrative offices and library spaces within the same fire compartment as the cafetorium, which has an occupant load greater than 200 persons, provides sufficiency of compliance with Clause 3.3.2.2.(8)(b) of Division B of the 2006 Building Code at Ecole Secondaire Catholique Jean Vanier, 620 River Road, Welland, Ontario.

APPLICANT	Daniel Cayouette Conseil Scolaire De district Catholique Centre-SUD North York, ON
RESPONDENT	Mike Mantesso Chief Building Official City of Welland
PANEL	Tony Chow, Chair Rick Florio Neal Barkhurst
PLACE	Toronto, Ontario
DATE OF HEARING	October 9, 2008
DATE OF RULING	October 9, 2008
APPEARANCES	Glen Good Glen Good Consultants Toronto, ON **Agent for the Applicant** Mike Mantesso Chief Building Official City of Welland **The Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, to construct a Secondary School at 620 River Road, Welland, Ontario.

The subject building is a one storey building having a Group A, Division 2 major occupancy and a building area of approximately 5450 m². The subject building is comprised of non-combustible construction and is equipped with both a fire alarm system and a sprinkler system.

The construction in dispute involves whether the proposal to include administrative offices and library spaces within the same fire compartment as the cafetorium, which has an occupant load greater than 200 persons provides sufficiency of compliance with Clause 3.3.2.2.(8)(b) of Division B of the 2006 Building Code.

2. Provisions of the Building Code in Dispute

3.3.2.2. Fire Separations

(8) Except as required in Sentence (9), in an elementary or secondary school, where the *occupant load* of a room exceeds 200 persons, the room and any ancillary rooms of a complementary use shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than,

(b) 30 min where the *building* is *sprinklered*.

3. Applicant's Position

The Agent for the Applicant submitted that the nature of the dispute is centered around Clause 3.3.2.2.(8)(b) of Division B of the Building Code. He reported the main issue being disputed is how to define the word "room" as it relates to the proposed secondary school design.

The Agent explained that the Architect has designed a large cafetorium where the occupant load is expected to be greater than 200 persons however; this space will not be defined by continuous enclosing walls. Rather, the cafetorium will open into the main entrance foyer, main circulation corridor, small chapel, washrooms, administrative offices and library. The intent of this configuration is to provide an unobstructed flow and use of the spaces for the students, staff and faculty.

The Agent maintained that for security and privacy purposes only, some of the library and administrative office spaces have been enclosed with non-fire rated partitions. The Agent put forth the argument that all the above-stated rooms could be considered ancillary to each other and to the cafetorium and therefore, would not be required to be separated from the cafetorium by a fire separation having a rating of not less that 30 minutes.

The Agent confirmed that the Chief Building Official has permitted all of the stated spaces, except for the administrative offices and library to be included as part of the cafetorium's fire compartment that would be defined by a 30 minute fire separation. The Agent submitted that the Applicant was requesting the Commission to consider the inclusion of the administrative offices and library into the cafetorium's fire compartment as illustrated in the Main Floor Plan drawing (see Exhibit 1).

The Agent stated that although the Applicant has chosen to enclose the administrative offices and library space, Sentence 3.3.1.9.(5) would permit these occupancies to be within the main corridor space. Based on this premise, he suggested that if these areas were left unenclosed they would automatically connect to the cafetorium space and therefore, by default be considered part of the same room, resulting in a large unenclosed room similar to the configuration being proposed.

The Agent reported, that the proposed floor plan clearly indicates that the occupants in the cafetorium, chapel, administrative offices and library have easy access to numerous egress and exiting facilities including the main entrance doors. Further, the Agent advised that the distance from any point in the floor area to an exit when measured along the path of travel does not exceed 45 m, as per Article 3.3.2.5. The strategic placement of the administrative office also offers a high level of supervision and the capability to monitor the activities and the congregating of students in the over all floor area being discussed. The Applicant suggests that all these factors provide sufficiency of compliance with the Building Code and meet the intent of the Objectives and Functional Statements by minimizing the exposure to personal injury in the event of a fire or other type of emergency.

4. Respondent's Position

The Respondent confirmed that much of the subject dispute revolves around the term "room" and whether or not the administrative and library spaces can be included in the same fire compartment as the cafetorium.

The Respondent submitted that the architect has designed the cafetorium as a room with an occupant load of over 200 persons and therefore, as per Clause 3.3.2.2.(8)(b) of Division B of the Building Code, a 30 minute fire separation is required.

The Respondent submitted that he does not agree that the library, administrative offices and associated corridors can be considered ancillary to the cafetorium, as he is not of the opinion that these spaces provide a supportive or complementary use to the cafetorium. He further explained that these rooms will be used at different times of day and at night and further; the library and administrative offices support the entire building and not specifically the cafetorium.

The Respondent agreed with the Agent's statement that the distance from any point in the floor area to an exit measured along the path of travel does not exceed 45 m, as per Article 3.3.2.5. However, he maintained that the library space and administrative offices were not, in his opinion, ancillary to the cafetorium and therefore, the cafeteria must be separated from the remainder of the building by a fire separation having a fire-resistance rating of 30 minutes in order to comply with the Clause 3.3.2.2.(8)(b) of the Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposal to include the administrative offices and library spaces within the same fire compartment as the cafetorium, which has an occupant load greater than 200 persons does not provide sufficiency of compliance with Clause 3.3.2.2.(8)(b) of Division B of the Ontario Building Code at Ecole Secondaire Catholique Jean Vanier, 620 River Road, Welland, Ontario.

6. Reasons

i) Clause 3.3.2.2.(8)(b) of the Building Code states, “Except as required in Sentence (9), in an elementary or secondary school, where the *occupant load* of a room exceeds 200 persons, the room and any ancillary rooms of a complementary use shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than…(b) 30 min where the *building* is *sprinklered*.”

Sentence 1.4.1.1.(1) of the Building Code states, “Definitions of words and phrases used in this Code that are not included in the list of definitions in Articles 1.4.1.2. and 1.4.1.3. and are not defined in another provision of this Code shall have the meanings that are commonly assigned to them in the context in which they are used, taking into account the specialized use of terms by the various trades and professions to which the terminology applies”.

The Canadian Oxford Dictionary defines “ancillary” as: 1 (of a person, activity, or service) providing essential support to a central service or industry. 2. associated secondary. It is the Commission’s opinion that the library and suite of administrative offices are not ancillary to the cafetrorium. Therefore, the proposal to include the administrative and library spaces in the same fire compartment as the cafetorium does not provide sufficiency of compliance with Clause 3.3.2.2.(8)(b) of the Building Code.

iii) The intent of Sentence 3.3.2.2.(8) is to reduce the probability of fire spreading from one part of the building to the high occupant room which could lead to harm to persons. The proposed design of this secondary school includes a large cafetorium with an occupant load greater than 200 persons. Therefore, it is the Commission’s opinion that the proposed design of this secondary school does not meet thee intent of Sentence 3.3.2.2.2(8) of the Building Code, and further, that the cafeteria be separated from the remainder of the building by a fire separation having a fire-resistance rating of 30 minutes.

iv) The Building Code sets out the minimum construction requirements. The Applicant did not offer any compensating measures to offset the deviation from the Code requirement.

Dated at Toronto this **9th** day in the month of **October** in the year **2008** for application number **2008-24.**

Tony Chow, Chair

Rick Florio

Neal Barkhurst

Ontario

Ruling No. 08-29-1203
Application No. 2008-19

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 7.1.5.4 and 7.1.5.5. of Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by Steve Schaefer, SCS Consulting Group Ltd., for the resolution of a dispute with John Wright, Chief Building Official, Town of Markham, to determine whether the proposed system of piping to be built in conformance with Article 7.1.5.5. of the Building Code, which includes connections to multiple buildings on a single property that will be serviced by a single connection between the private sewer and the public sanitary sewer and two connections between the private water supply and the public water supply, sufficiently complies with Article 7.1.5.4. of the 2006 Building Code at Boxgrove East Commercial Campus, Copper Creek Drive, and Markham By-pass, Markham Ontario.

APPLICANT	Steve Schaefer SCS Consulting Group Ltd. Markham, ON
RESPONDENT	John Wright Chief Building Official Town of Markham
PANEL	Prabhakar Mahant, Chair-Designate Yaman Uzumeri Mina Tesseris
PLACE	Toronto, Ontario
DATE OF HEARING	September 18, 2008 (Adjourned to November 13, 2008)
DATE OF RULING	November 13, 2008
APPEARANCES	Steve Schaefer SCS Consulting Group Ltd. Markham, ON **Applicant**

Mike Lio
Lio & Associates
Toronto, ON
Agent for the Applicant

John Wright
Chief Building Official
Town of Markham
Respondent

Chris Bird
Manager of Plans Review
Town of Markham
Designate for the Respondent

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, to construct a retail complex at Boxgrove East Commercial Campus, Markham, Ontario.

The retail complex includes ten buildings in total on a single property. The largest building measures approximately 18 593 m² in floor area and nine additional smaller buildings ranging in size from 3344 m² to 464 m².

The construction in dispute involves whether the proposed system of piping to be built in conformance with Article 7.1.5.5. of the Building Code, which includes connections to multiple buildings on a single property that will be serviced by a single connection between the private sewer and the public sanitary sewer and two connections between the private water supply and the public water supply, sufficiently complies with Article 7.1.5.4. of the 2006 Building Code.

2. Provisions of the Building Code in Dispute

7.1.5.4. Separate Services

(1) Piping in any *building* shall be connected to the public services separately from piping of any other *building*, except that an ancillary *building* on the same property may be served by the same service.

7.1.5.5. Private Sewers and Private Water Supply

(1) *Private sewers* and *private water supply* pipes shall be installed according to MOE, "Guidelines for the Design of Sanitary Sewage Systems, Guidelines for the Design of Storm Sewer Systems, Guidelines for the Design of Water Distribution Systems and Guidelines for Servicing in Areas Subject to Adverse Conditions".

3. Applicant's Position

The Agent for the Applicant submitted that Sentence 7.1.5.4.(1) of the 2006 Building Code requires piping in any building to connect to the public sewer and water supply separately from the piping of any other building with the exception of an ancillary building located on the same property. The Agent explained that there are ten buildings in total proposed for the subject

property, which consist of one main building measuring approximately 18 593 m² in floor area, and nine other smaller buildings, ranging in size from 3344 m² to 464 m². The Agent argued that as per the Oxford definition, the nine smaller buildings can be considered ancillary to the main building in the retail complex, as the smaller buildings are deemed to be additional to or supplementary to the main building.

The Agent explained that the subject buildings would be connected separately to a shared private water service pipe, sanitary building sewer and storm sewer, which in turn would be connected to the municipal service. He argued that Sentence 2.1.2.1.(1) and Appendix II of the National Plumbing Code, permits multiple buildings to be connected to a public service using a shared connection within the same property line. He asserted that the intent of these code provisions ensures that each property owner is responsible for the repair of his/her own sewers and water services.

The Agent also submitted that Appendix A for Sentence 7.1.5.4.(1) of the 2006 Building Code suggests that a combined connection from buildings on adjacent properties is permitted provided there is an agreement with the municipality registered on title. The Agent maintained that the intent of Sentence 7.1.5.4(1) is to minimize the impact of damage if a sewage backup occurs or if a problem arises as a result of servicing or repair of water or sewage mains across property lines. He contended that these provisions intend to ensure that each property owner will be responsible for the repair of his/her own sewers and water services. The Agent argued that the ten buildings subject to this dispute all reside on one single property under a common ownership and therefore, their common connection to the municipal service does not contravene the intention of the Building Code.

Further, the Agent stated that the proposed retail complex ownership will be governed by a lease agreement, which will be registered on title and will clearly state that: a) all common services and buildings will be maintained under the Lessor's single ownership and b) the owner will be responsible for the repairs and maintenance of the services to each building within the site. In addition, the Agent advised that the site plan agreement will include language stipulating that the owner of the property shall be responsible for the maintenance and repair of the shared water, sewer and storm services located on the subject property. Therefore, the Agent argued, by entering into the lease agreement, the Lessees will acknowledge and accept the configuration of the service system.

The Agent also submitted that Sentence 7.1.5.5.(1) of the Ontario Building Code introduces the concept of private sewers and private water supply which permits systems that conform to the guideline set out by the Ministry of Environment (MOE), ensuring the private system is of sufficient capacity, depth and orientation to serve a given property. He stated that in fact, the proposed private water service pipe, sanitary building sewer and storm building sewer are of sufficient capacity, depth and orientation to service the subject property and further, conform to the MOE Guidelines for the design of private systems as referenced in 7.1.5.5.(1) of the Code. In addition, the Agent suggested that further clarity regarding the relationship between Building Code Articles 7.1.5.4 and 7.1.5.5. would be useful in addressing the situation in dispute.

Providing examples, the Agent stated that common connection of multiple buildings on a single property is accepted by municipalities across Ontario and have demonstrated past performance. The Agent asserted that multiple service connections from buildings on a single property are inefficient; add significantly to infrastructure costs, while not measurably improving the protection available to the building occupants. He further argued that a shared connection is more desirable from an environmental point of view, as there is less piping, fewer connections, and fewer maintenance issues and consolidated metering. Therefore, the Agent asserted that a single connection to municipal services for multiple buildings on a single property provides sufficiency of compliance with the Building Code.

4. Respondent's Position

The Respondent submitted that the subject development consists of ten individual buildings located on a single lot and the proposal to connect the water, sanitary and storm piping, serving each of the buildings to a private water, sanitary and storm facility does not comply with Sentence 7.1.5.4.(1) of the 2006 Ontario Building Code, as the water, sanitary and storm piping of each building is not connected to the public (municipal) service separately from every other building as required by Sentence 7.1.5.4.(1).

Although the Respondent acknowledged that Sentence 7.1.5.4.(1) permits ancillary buildings to be interconnected with the main building it serves, he stated that in his opinion, the subject buildings were not ancillary to one another.

The Respondent stated that although Sentence 7.1.5.5.(1) of Division B references guidelines for the installation of private sewers and private water supply pipes, there is no provision in the Code that over-rides the requirement of Sentence 7.1.5.4.(1) of the Code. Further, the Respondent argued that the Appendix note to Sentence 7.1.5.4.(1) does not apply to the proposed design at dispute, as all the buildings in the proposal are situated on a single property. Further, the Respondent maintained that in his opinion, the agreements or contracts contemplated in the Appendix note for Sentence 7.1.5.4.(1), can not amend a statutory requirement.

However, the Respondent also submitted that the municipality was not averse to the subject proposal and that they also recognized that compliance with Article 7.1.5.4. of the Code would, in many cases, be impractical, wasteful and unnecessary. He further added that although service to one building may be impacted by an interruption in the service to another building, provided the buildings and the shared services are maintained under a single ownership or are managed under the terms of a condominium plan, such sharing of services could be considered to sufficiently comply with the Building Code. The Respondent added that a Code amendment permitting such designs in these circumstances would be supported by the municipality.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed system of piping to be built in conformance with Article 7.1.5.5. of the Building Code, which includes connections to multiple buildings on a single property that will be serviced by a single connection between the private sewer and the public sanitary sewer and two connections between the private water supply and the public water supply, sufficiently complies with Article 7.1.5.4. of the 2006 Building Code at Boxgrove East Commercial Campus, Copper Creek Drive, and Markham By-pass, Markham Ontario.

6. Reasons

i) Article 7.1.5.5. of the 2006 Building Code states, "*Private sewers* and *private water supply* pipes shall be installed according to MOE, "Guidelines for the Design of Sanitary Sewage Systems, Guidelines for the Design of Storm Sewer Systems, Guidelines for the Design of Water Distribution Systems and Guidelines for Servicing in Areas Subject to Adverse Conditions". The Commission was advised that the water service pipe, sanitary sewer and storm sewer are of sufficiently capacity, depth and orientation to service the subject property and also conform to the MOE Guidelines, thereby fully complying with Article 7.1.5.5 of the Building Code.

ii) The Commission was advised that the site plan agreement will include language stipulating that the owner of the property shall be responsible for the maintenance and repair of the shared water, sewer and storm services located on the subject property.

iii) The Commission was advised that the lease agreement, governing the retail complex, will clearly state that the owner shall be responsible for the repairs and maintenance of the shared water, sewer and storm services located on the subject property and that the lease agreement shall be registered on title.

iv) The Commission heard evidence and testimony that the common connection of multiple buildings on a single property is accepted by municipalities across Ontario and has demonstrated satisfactory past performance.

v) It is the Commission's opinion, when considering the above measures, that the intent of Article 7.1.5.4. has been satisfied.

Dated at Toronto this **13th day** in the month of **November** in the year **2008** for application number **2008-19.**

Prabhakar Mahant, Chair-Designate

Yaman Uzumeri

Mina Tesseris

Ontario

Ruling No. 08-28-1202
Application No. 2008-15

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 9.23.10.4.(1) of Division B, of Regulation 350/06, as amended, the 2006 Building Code.

AND IN THE MATTER OF an application by Nathan Patry, Patry Inc. Development, for the resolution of a dispute with Jim Foster, Chief Building Official, City of St. Thomas, to determine whether the as-installed wood stud walls, where butt jointed studs have been used in a non-load bearing wall on the 2nd and 3rd storey public corridors of a 3 storey residential building, provide sufficiency of compliance with Sentence 9.23.10.4.(1) of Division B of the 2006 Building Code at 268 – 274 Talbot Street, St. Thomas, Ontario

APPLICANT	Nathan Patry Patry Inc. Development St. Thomas, ON
RESPONDENT	Jim Foster Chief Building Official City of St. Thomas
PANEL	Tony Chow, Chair Leslie Morgan Alison Orr
PLACE	Toronto, Ontario
DATE OF HEARING	July 24, 2008
DATE OF RULING	August 13, 2008
APPEARANCES	Nathan Patry (by teleconference) Patry Inc. Development St. Thomas, ON **The Applicant** Jim Foster (by teleconference) Chief Building Official City of St. Thomas **The Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Comply under the *Building Code Act*, *1992*, to remedy certain alleged code deficiencies at 268 – 274 Talbot Street, St. Thomas, Ontario.

The subject building is a 3 storey, residential building of combustible construction with a building area of 836 m², which the Applicant has received a permit to renovate.

The construction in dispute relates to the continuity of the wood studs used to construct the non-load bearing public corridor walls on the second and third floors of the subject building. Sentence 9.23.10.4.(1) of the Building Code requires wall studs to be continuous for the full storey height except at openings and shall not be spliced except by finger-jointing with a structural adhesive.The Applicant in this case has installed the wood stud walls using butt jointed studs. The Respondent believes the as-constructed wood stud walls do not comply with this Code requirement.

2. Provisions of the Building Code in Dispute

9.23.10.4. Continuity of Studs

(1) Wall studs shall be continuous for the full *storey* height except at openings and shall not be spliced except by finger-jointing with a structural adhesive.

3. Applicant's Position

The Applicant submitted that during a similar project in the past a spliced 2 by 4 wall had been constructed due to the availability of material on site and the fact that the wall was non-load bearing. The Applicant further explained that on his engineer's advice and stamped letter, wood blocks with a construction adhesive were used to make the studs continuous and in this circumstance, it had been accepted and approved by the municipality. The Applicant contended that during the subject renovation, he similarly constructed the wall as was done previously expecting the municipality's approval.

The Applicant argued that he had submitted to the Respondent an engineered stamped letter verifying the structural adequacy of the wood stud walls, where butt jointed studs were used in the non-load bearing public corridor walls on the second and third floors of the subject building.

The Applicant advised the Commission that the subject walls have been built to the specification of Wall Number W4a, as described in Supplementary Standard SB-3 of the Building Code and that the W8b wall assemblies originally indicated on the original permit drawings submitted to the Municipality had since been substituted for W8b wall assemblies.

The Applicant argued that based on the engineer's stamped drawings, it was his opinion that the as-constructed butt jointed wood stud wall sufficiently complied with Article 9.23.10.4 of the Building Code.

4. Respondent's Position

The Respondent submitted that the as-constructed wood stud walls did not comply with Article 9.23.10.4 of the Building Code as they were not continuous for the full storey height. He further submitted that the as-constructed walls do not fully correspond to any of the wall assemblies

listed in the Supplementary Standards in Volume 2 of the Building Code.

The Respondent maintained that the as built wall assemblies were contrary to the plans for which a permit had been issued. He argued that the public corridor walls were in his opinion, considered to be an untested assembly and as such, was concerned about the fire resistance rating and STC rating for soundproofing of the public corridors.

5. Commission Ruling

It is the Decision of the Building Code Commission that the as-installed wood stud walls, where butt jointed studs have been used in a non-load bearing wall on the 2nd and 3rd storey public corridors of a 3 storey residential building, provide sufficiency of compliance with Sentence 9.23.10.4.(1) of Division B of the 2006 Building Code at 268 – 274 Talbot Street, St.Thomas, Ontario.

6. Reasons

i) The Commission was presented with evidence and testimony that the subject walls have been built to the specification of Wall Number W4a, as described in Supplementary Standard SB-3 of the Building Code and that the W4a wall assemblies have been substituted for the W8b wall assemblies indicated on the original permit drawings submitted to the Municipality.

ii) The Commission heard that the subject walls are non-load bearing walls and that butt jointed studs have been used to make up a very short length to obtain the required wall height.

iii) A drawing submitted under seal by a professional engineering consultant confirmed that the structural integrity of the butt jointed wood studs used in the subject wall assemblies provide the equivalent performance level as continuous wood studs required by Sentence 9.23.10.4.(1) of the Building Code.

Dated at Toronto this **13th** day in the month of **August** in the year **2008** for application number **2008-15.**

Tony Chow, Chair

Leslie Morgan

Alison Orr

Ruling No. 08-27-1201
Application No. 2008-17

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 7.2.5.9. of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Aaron Kwinter, 1357308 Ontario Ltd., for the resolution of a dispute with Edward Tipping, Chief Building Official, City of Toronto, to determine whether the as-installed CPVC SCH 80 distribution piping, used in a drainage application in a food processing plant, as an alternative to ABS and PVC piping, provides sufficiency of compliance with Article 7.2.5.9. of the 1997 Building Code at 283 Horner Ave., Toronto, Ontario.

APPLICANT	Aaron Kwinter 1357308 Ontario Ltd. Toronto, ON
RESPONDENT	Edward Tipping Chief Building Official City of Toronto
PANEL	Tony Chow, Chair Ed Link Marina Huissoon
PLACE	Toronto, Ontario
DATE OF HEARING	August 7, 2008
DATE OF RULING	August 7, 2008
APPEARANCES	Robert McNeil McNeil Engineering & Construction Inc., Acton, ON **Agent for the Applicant** Mike Moore Plan Examiner City of Toronto **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an order to comply under the *Building Code Act*, *1992*, to remedy to certain alleged code at 283 Horner Ave., Toronto, Ontario.

The subject building is an existing, single storey, sprinklered non-combustible building. The building is classified as a Group F, Division 3, Industrial Occupancy and is currently used as a food processing plant.

The construction in dispute involves the installation of CPVC Sch 80 pressure pipe and fittings in an underground sanitary drainage system. Article 7.2.5.9. of the Building Code, lists the acceptable certified CPVC pipe, fittings and solvent cements to be used in hot and cold water supply services. However, the Code does not list the subject piping for use in a sanitary drainage system.

Article 7.2.5.9. of the Code lists the types of plastic pipe fittings and solvent cement that can be used in a drainage system. The issue at dispute between parties is whether the installation of the CPVC Sch 80 pipe as an alternative to the ABS PVC prescribed by Article 7.2.5.9. of the Code sufficiently complies with Article 7.2.5.9. of the Code.

2. Provisions of the Building Code in Dispute

7.2.5.9. Plastic Pipe, Fittings and Solvent Cement Used Underground

(1) Plastic pipe, fittings and solvent cement used underground outside a building or under a building in a drainage system shall be certified to

- (a) CAN/CSA-B181.1, "ABS Drain, Waste, and Vent Pipe and Pipe Fittings",
- (b) CAN/CSA-B181.2, "PVC Drain, Waste, and Vent Pipe and Pipe Fittings",
- (c) CAN/CSA-B182.1, "Plastic Drain and Sewer Pipe and Pipe Fittings",
- (d) CAN/CSA-B182.2, "PVC Sewer Pipe and Fittings, (PSM Type)",
- (e) CAN/CSA-B182.4, "Profile (Ribbed) PVC Sewer Pipe and Fittings",
- (f) CAN/CSA-B182.6, "Profile Polyethylene Sewer Pipe and Fittings",
- (g) CAN/CSA-B137.2, "PVC Injection-Moulded Gasketed Fittings for Pressure Applications", or
- (h) CAN/CSA-B137.3, "Rigid Poly (Vinyl Chloride) (PVC) Pipe for Pressure Applications".

(2) Except as permitted in Clauses (g) and (h), plastic pipe used as described in Sentence (1) shall have a stiffness equal or greater than 320 kPa (46.4 psi).

3. Applicant's Position

The Agent for the Applicant stated that the subject building was being used as an egg processing plant and that CPVC Sch 80 pressure piping had been installed in an underground drainage application within the building to convey sanitary sewage from the building to the municipal sewer.

The Agent submitted that the Sch 80 piping was in fact, an equivalent if not more durable material than PVC and ABS piping permitted by the Code. The Agent contended that the installed CPVC piping meets the minimum requirements of the Code and that it can adequately handle high temperature wash water, harsh cleaning chemicals and the forces from frequent thermal cycling. The Agent also added that the subject piping was more costly in comparison the

alternatives permitted by the Code and further, because of its performance; the subject piping has been approved and installed in other food processing plants in similar applications.

In support of claims that the subject piping provided reliable long-term performance, the Agent submitted a letter from the manufacturer of the Sch 80 CPVC piping, which supported the suitability of the subject piping being used in this application, as well as a material data sheet from the pipe manufacturer.

The Agent reiterated his belief the as-installed piping provides an equivalent level of performance to the types of piping permitted by the Code. In summary, he stated that sufficiency of compliance had been achieved.

4. Respondent's Position

The Respondent submitted that Article 7.2.5.9. of the 1997 Building Code only permits CPVC piping to be used in hot and cold water supply services but it is not certified for use in a drainage system. The Respondent maintained that without proof of certification for use in a drainage system, CPVC pipe and fittings shall not be installed according to Sentence 7.2.1.4 (2) of the Building Code.

Further, the Respondent argued that the Appendix in the Code and Guide for Plumbing 1997, while not an official part of the Code, provides a Summary of Pipe and Fittings Applications (A-7.2.5. to 7.2.7), which indicates that CPVC water piping is not permitted for use in a Drainage System or Venting System.

The Respondent submitted that the Sentence 7.4.4.1(1) of the Building Code requires sewage or waste to be treated before being discharged into the drainage system to prevent damage to drainage piping and that the subject plumbing system has not been designed accordingly.

In summary, the Respondent maintained that the design, installation and construction of such piping must be in conformance with the Code. He reiterated his belief that the as-installed piping has not been certified for use in a drainage application and therefore, the subject drainage system does not comply with the Code requirements.

5. Commission Ruling

It is the Decision of the Building Code Commission that the as-installed CPVC SCH 80 distribution piping, used in a drainage application in a food processing plant, as an alternative to ABS and PVC piping, does not provide sufficiency of compliance with Article 7.2.5.9. of the 1997 Building Code at 283 Horner Ave., Toronto, Ontario.

6. Reasons

i) Article 7.2.5.9. of the Building Code lists the types of plastic pipe, fittings and solvent cement permitted to be used under the building in a drainage system. CPVC is not listed as a type of piping to be used in an underground drainage system application.

ii) The Guide to the 1997 Building Code, 7.2.5 to 7.2.7, "Summary of Pipe and Fittings Applications" table, although not strictly part of the Building Code, provides a guide for users to assist in complying with the Code requirements. This Guide explicitly states that CPVC is not permitted in an underground drainage system application.

Dated at Toronto this **7th** day in the month of **August** in the year **2008** for application number **2008-17.**

Tony Chow, Chair

Ed Link

Marina Huissoon

Ontario

Ruling No. 08-26-1200
Application No. 2007-46

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF s. 8.-(1) of the Building Code Act, regulation 403 as amended, (the 1997 Building Code).

AND IN THE MATTER OF an application by Lorraine Fernicola, Homeowner, for the resolution of a dispute with David Eidsness, Chief Building Official, Town of Gravenhurst, to determine whether the as-constructed "fishing deck" can be considered a "building" that provides sufficiency of compliance with the definition of "building" as outlined in the *Building Code Act*, at 1011 Goldfinch Court, Gravenhurst, Ontario.

APPLICANT	Lorraine Fernicola Homeowner Woodbridge, ON
RESPONDENT	David Eidsness Chief Building Official Town of Gravenhurst
PANEL	Tony Chow, Chair Ed Link Marina Huissoon
PLACE	Toronto, Ontario
DATE OF HEARING	June 19, 2008
DATE OF RULING	June 19, 2008
APPEARANCES	Lorraine Fernicola Homeowner Woodbridge, ON **The Applicant** Bobbi Lovring Town of Gravenhurst **Designate for the Respondent** Michel Cormier Town of Gravenhurst **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Comply under the *Building Code Act*, *1992*, to obtain a permit for the construction of a "fishing deck" at 1011 Goldfinch Court, Gravenhurst, Ontario.

The primary contention between the parties is with respect to the determination of whether the as-constructed "fishing deck" can be considered a "building" as defined by the *Building Code Act*, and further, whether the construction of the "fishing deck" requires a building permit as per s. 8.-(1) of the *Building Code Act*.

2. Provisions of the Building Code in Dispute

No provisions of the Building Code are in dispute.

3. Applicant's Position

The Applicant submitted that the subject "fishing deck" was an existing raised deck that was built in 1981. She stated that some of the deck's wooden boards had rotted over time and therefore, were in need of replacement for safety reasons. She also submitted that she did not believe the wooden deck was a "building", nor did she believe that a building permit was required for the replacement of the rotted wooden boards.

The Applicant described the deck as having an area of approximately 10 feet by 4 feet with 4 steps leading up to it. Further, she explained that the deck extends over a large rock and is approximately 3 to 4 feet above the water, and is located approximately 100 m from the house.

The Applicant maintained that no changes in design, size or structure of the existing deck were made. She submitted that some of the floor boards and some areas of the railing were replaced for safety reasons. She added that the deck's concrete base and steel I-beams were not replaced but were painted for a newer appearance.

The Applicant maintained that as the deck was in existence, and given that only some rotten boards were replaced to make the deck safer, a building permit was not required. Further, she believes the fishing deck cannot be considered a "building".

In response to questioning the Applicant agreed that there was no technical provision of the Building Code currently at dispute between the parties.

4. Respondent's Position

The Respondent submitted that an inspection of the subject property in August 2007 revealed a deck had been constructed at the rear of the property on the water front.

The Respondent submitted that the construction in question was comprised of floor joists, floor decking, stairs without a handrail and guards around the main deck surrounding the floor system with posts. The Respondent maintained that the deck formed a structure greater than 10 square meters in building area as defined by the *Building Code Act*. However, the Respondent stated that no building permit had been obtained by the Applicant. As a result, the Applicant was issued

an Order to Comply for contravention of subsection 8(1) of the *Building Code Act* and was ordered to apply for and obtain a building permit by September 14, 2007.

The Respondent explained that the deck was an existing structure and that material alteration or repair of the deck had taken place. The Respondent maintained that the deck comprised of a floor system greater than 10 m² and therefore, was a "building" as defined by the *Building Code Act* and further, a building permit for the repair or alteration of the deck structure was required.

In response to questioning, the Respondent agreed that there was no technical provision of the Building Code currently at dispute between the parties.

5. Commission Ruling

It is the Decision of the Building Code Commission that, under clause 24(1)(a) of the *Building Code Act, 1992*, the Commission does not have the jurisdiction to make a determination on the issues raised in relation to the matter at 1011 Goldfinch Court, Gravenhurst, Ontario.

6. Reasons

i) Subsection 24(1) of the *Building Code Act, 1992* provides the Building Code Commission (BCC) with the jurisdiction to resolve disputes between a permit applicant, permit holder or a person to whom an order has been issued and the chief building official, a registered code agency or inspector concerning the **sufficiency of compliance with the technical requirements of the Building Code** (emphasis added).

While an Order to Comply has been issued by the municipality to the Applicant, it is an Order which requires the Applicant to obtain a building permit as per subsection 8(1) of the *Building Code Act*. Further, both parties agreed that there were no technical requirements of the Building Code currently at dispute.

ii) The Commission acknowledges that there is a dispute between the Chief Building Official and the Applicant; however, the Commission, as noted above, has a very narrow jurisdiction outlined in subsection 24(1) of the *Act.* Disputes concerning compliance with subsection 8(1) of the *Building Code Act* are not disputes which are identified in subsection 24(1). Therefore, the Commission does not have the jurisdiction to make a determination in this matter.

Dated at Toronto this 7th day in the month of August in the year 2008 for application number 2007-46.

Tony Chow, Chair

Ed Link

Marina Huissoon

Ruling No. 08-24-1198
Application No. 2008-21

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF with Sentence 9.19.1.1.(1) of the Regulation 350/06, as amended, (the 2006 Building Code).

AND IN THE MATTER OF an application by Michael & Connie Pun for the resolution of a dispute with Ann Borooah, Chief Building Official, City of Toronto, to determine whether the proposal to install a roof assembly, where medium density, closed-cell spray polyurethane foam will be installed to insulate the roof, and where no vents will be installed in the roof assembly, provides sufficiency of compliance with Sentence 9.19.1.1.(1) of Division B of the 2006 Building Code at 12 Highland Crescent, Toronto, Ontario.

APPLICANT	Michael & Connie Pun Homeowners Toronto, ON
RESPONDENT	Ann Borooah Chief Building Official City of Toronto
PANEL	Tony Chow, Chair Leslie Morgan Alison Orr
PLACE	Toronto, Ontario
DATE OF HEARING	July 24, 2008
DATE OF RULING	July 24, 2008
APPEARANCES	Cathy Garrido Altius Architecture Inc., Toronto, ON **Agent for the Applicant** Andrew Wild Senior Building Inspector City of Toronto **Designate for the Respondent**

RULING

1. Particulars of Dispute

The subject building is a three storey building, Group C, Residential Occupancy (i.e. single detached dwelling) of combustible construction.

The Applicant has received a building permit under the *Building Code* Act to renovate an existing residential dwelling and is proposing to insulate the third floor attic roof by filling the void space between the roof joists and roof sheathing with medium density, closed-cell spray polyurethane foam without providing any roof venting.

The construction in dispute involves whether the proposal to install an un-vented roof assembly, using a medium density, closed-cell spray polyurethane foam to insulate the roof, provides sufficiency of compliance with Sentence 9.19.1.1.(1) of Division B of the 2006 Building Code at 12 Highland Crescent, Toronto, Ontario.

2. Provisions of the Building Code in Dispute

9.19.1.1. Required Venting

(1) Except where it can be shown to be unnecessary, where insulation is installed between a ceiling and the underside of the roof sheathing, a space shall be provided between the insulation and the sheathing, and vents shall be installed to permit the movement of air from the space to the exterior.

3. Applicant's Position

The Agent for the Applicant stated that the subject home was built 90 years ago and the home was currently undergoing renovations. The Agent submitted that venting was originally planned to be provided when insulating the existing roof in the attic space, part of which is a cathedral ceiling. However, due to site conditions and new spray foam technology, the Agent explained, an un-vented roof assembly was proposed instead.

The Agent asserted that Sentence 9.19.9.9.(1) of the Building Code allows for an un-vented roof assembly when venting "can be shown to be unnecessary" and that this was in fact the case in this circumstance. The Agent argued that a 2 lb, medium density, closed-cell spray polyurethane foam, applied to the void space between the roof joists and roof sheathing, provides an air and vapour barrier and therefore, venting is not required. However, she added that a 6 mil poly vapour barrier and ½ in gypsum board would also be installed. The Agent also informed the Commission that there was a warranty agreement in place with the shingle manufacturer and that the medium density, closed-cell polyurethane foam spray installation would not void the shingle warranty.

Further, the Agent submitted that the subject polyurethane foam spray meets the material standard, CAN/ULC S705.1-01, "Standard for Thermal Insulation Spray Applied Rigid Polyurethane Foam, Medium Density, Material Specification" and is listed in CCMC Evaluation Number 12380-R, which confirms that the product's physical properties and durability are suitable for this application.

In addressing some of the Respondent's concerns regarding the application of the spray foam, the Agent stated that the product must be installed in accordance with the instructions provided by the manufacturer along with the CAN/ULC-S705.2, "Standard for Thermal Insulation Spray

Applied Rigid Polyurethane Foam-Medium Density-Application", which outlines how the subject polyurethane product should be applied onsite. The Agent added that, in accordance with the Application Standard, the installers must be trained and licensed to apply the product in order to ensure that no air spaces will be trapped in the roof assembly. Further, the Agent informed the Commission that the licensed installer would conduct density, adhesion and cohesion substrate verifications and keep a daily work record, including the results of testing in accordance with the Standard, which the Respondent could request to review. The Agent also added that inspections could also be conducted by a third party organization under an independent quality assurance program delivery agent used by CUFCA, the Canadian Urethane Foam Contractors Association Inc.

The Agent also presented a "Branch Opinion" dated May 1997 regarding Section 9.19. of the Ontario Building Code, issued by the Ministry of Municipal Affairs and Housing, which stated, "It is the opinion of the Housing Development & Buildings Branch that, where a roof assembly is filled with rigid insulation (no gaps or empty spaces in between), Subsection 9.19 of the OBC need not apply". The Agent maintained that with a licensed installer the subject foam spray would provide a continuous air barrier.

The Agent concluded that given the above, along with the building science and technology documentation submitted to the Commission, the proposal to install a roof assembly, where medium density, closed-cell spray polyurethane foam will be installed to insulate the roof, and where no vents will be installed in the roof assembly, provides sufficiency of compliance with Sentence 9.19.1.1.(1) of the Building Code, as venting has been shown to be unnecessary in this circumstance.

4. Respondent's Position

The Respondent submitted that the performance level required, in order to omit the ventilation space, can not be obtained when the application of the medium density, closed-cell spray polyurethane foam is performed onsite in an uncontrolled environment. To substantiate this claim, the Respondent submitted a letter, SCH-11, 2307 dated January 27, 2006 received from the National Research Council of Canada (NRC), which expresses this same opinion.

Further, the Respondent submitted a letter dated April 3, 2006 received by the Town of Oakville from the Ministry of Municipal Affairs and Housing, Building and Development Branch, which advises that the insulation installer must prove without doubt to the Authority having jurisdiction, that the installation of the product forms a perfect seal within the assembly, and additionally provide a warranty agreement from the roof shingle manufacturer. The Respondent stated that he was concerned with the application of the product on existing buildings. He stated that, in this case, as the existing structure is old, there are spaces and natural gaps in the rafters. Therefore, it can not be guaranteed to be clean and free of defects. Further, he expressed concerns regarding the overhead application of the spray foam insulation specifically that it was not compatible with the factory application and that gravity could affect its distribution.

The Respondent stated that as a result of the lack of ventilation, the building materials within the roof assembly (i.e. roof sheathing, roof shingles, and roof rafters) may not perform as intended. He concluded that in his opinion, the indoor air quality may be affected if moisture becomes trapped in the assembly and is not able to dry out. He further argued that any trapped moisture would cause the existing roof structure to deteriorate over time.

The Respondent stated that it was his opinion that there is insufficient evidence for this application to justify omitting the air space to satisfy the roof ventilation requirement set out in Sentence 9.19.1.1. (1) of the Building Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposal to install a roof assembly, where medium density, closed-cell spray polyurethane foam will be installed to insulate the roof, and where no vents will be installed in the roof assembly, provides sufficiency of compliance with Sentence 9.19.1.1.(1) of Division B of the 2006 Building Code at 12 Highland Crescent, Toronto, Ontario on condition that:

a) a membrane shall be installed on the warm side of the roof so as to serve as both an air and vapour barrier, and

b) test reports conducted in accordance with Clause 4.3.10 of CAN/ULC-S705.2-05 shall be submitted to the Chief Building Official.

6. Reasons

i) Sentence 9.19.1(1) of the Building Code states, “Except where it can be shown to be unnecessary, where insulation is installed between a ceiling and the underside of the roof sheathing, a space shall be provided between the insulation and the sheathing, and vents shall be installed to permit the movement of air from the space to the exterior”. It is the Commission’s opinion, based on the evidence and testimony presented, that venting in the subject roof assembly has been shown to be unnecessary.

ii) Sentence 9.25.2.5 of Division B of the Building Code requires that spray-applied polyurethane insulation be installed in accordance with CAN/ULC-S705.2-05. The Commission heard that the closed-cell spray polyurethane foam will be installed in accordance with CAN/ULC-S705.2-05 Standard for thermal insulation as referenced by the Code.

iii) CAN/ULC-S705.2-05 Standard requires a licensed installer to perform the application of the subject foam spray. The licensed installer must have successfully completed a training course approved by the manufacturer and the designated Certification Organization. The Commission was advised that in accordance with CAN/ULC-S705.2-05, a licensed installer trained to spray the subject foam insulation would be performing the installation to ensure that no air spaces will be trapped in the roof assembly.

iv) Further, the Commission was advised that a continuous vapour barrier (6 mil poly vapour barrier) would be provided as per Subsection 9.25.4 of the Building Code.

Dated at Toronto this **24th** day in the month of **July** in the year **2008** for application number **2008-21.**

Tony Chow, Chair

Leslie Morgan

Alison Orr

Ontario

Ruling No. 08-23-1197
Application No. 2008-20

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 9.30.6.3. of the Regulation 403, as amended, (the 1997 Ontario Building Code).

AND IN THE MATTER OF an application by Lou Bada, Foxstar Group Ltd., for resolution of dispute with Leo Grellette, Chief Building Official, City of Vaughan, to determine whether the as-installed ceramic tile flooring, where the ceramic tile has been applied directly to the subfloor with a scratch coat adhesive mortar (thin-set method), on a subfloor of 15.5 mm softwood plywood conforming to CSA 0151 or 15 mm OSB subfloor conforming to CSA 0325 with a reduced joist spacing of 300 mm (12 in.) on centre below the tiled areas, sufficiently complies with Article 9.30.6.3. of the 1997 Ontario Building Code at 32 Emily Anna Street, Vaughan, Ontario.

APPLICANT	Lou Bada Foxstar Group Ltd., Concord, ON
RESPONDENT	Leo Grellette Chief Building Official City of Vaughan
PANEL	Tony Chow, Chair Leslie Morgan Alison Orr
PLACE	Toronto, Ontario
DATE OF HEARING	July 24, 2008
DATE OF RULING	July 24, 2008
APPEARANCES	Lou Bada Foxstar Group Ltd. Concord, ON **The Applicant** Allan Larden Larden Muniak Consulting Inc., Toronto, ON **Agent for the Applicant** Leo Grellette Chief Building Official City of Vaughan **The Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for and received a building permit to construct a two storey detached dwelling, with a building area of 154 m² at 32 Emily Anna Street in Vaughan, Ontario.

The construction in dispute involves the method used for the installation of the ceramic tile in the subject building. The floor areas where ceramic tile has been installed, have been constructed as follows:

- All floor joists supporting the subfloor beneath the ceramic tile were spaced at 12” on center
- The subfloor beneath the ceramic consisted of either 15.5 mm softwood plywood conforming to CSA 0151 or 15 mm OSB subfloor conforming to CSA 0325
- Ceramic tile was applied directly to the subfloor with a scratch coat of adhesive (thin-set method)

Sentence 9.30.6.3.(1) of the 1997 Building Code provides a choice of assemblies to reinforce a floor assembly that supports ceramic tiles set on panel-type wood sheathing. The Applicant has proposed a compliance equivalency in accordance with Section 2.7. of the 1997 Code, which permits materials, systems and building designs other than those authorized under the Code as long as the level of performance is maintained or exceeded. The Applicant claims that the as-installed assembly is equal to or better than the assemblies permitted in the Code. The Chief Building Official has refused to accept the proposed equivalency.

As a result, the Applicant has applied to the Building Code Commission to resolve the issue of whether the as-constructed ceramic tile installation demonstrates sufficiency of compliance with the technical requirements of Sentence 9.30.6.3.(1)

2. Provisions of the Building Code in Dispute

9.30.6.3. Reinforcement for Panel-Type Wood Sheathing

(1) Except as permitted in Article 9.30.6.4., when ceramic floor tiles are set on panel-type wood sheathing, one of the following assemblies for reinforcing the floor assembly shall be used:

(a) 20 mm thick plywood or waferboard with all edges supported by at least 38 mm by 38 mm blocking with floor joists spaced not more than 400 mm o.c., with 6 mm underlay,

(b) sheathing with a thickness that conforms to Table 9.23.14.5.A. or a rating that complies to Table 9.23.14.5.B. and has an underlay consisting of 15.9 mm plywood or waferboard with offsetting joints, with a 4 mm gap between the sheets, or

(c) subfloor sheathing reinforced with close spaced 38 mm by 38 mm blocking at spacings at least half that of the floor joist spacing.

3. Applicant's Position

The Agent for the Applicant claimed that it is common practice in the residential construction industry to apply ceramic tile directly to subfloor sheathing, typically 15.9 mm or even 19 mm plywood or OSB is installed as the subfloor sheathing. He also explained that in these circumstances, the floor joist spacing is reduced to 300 mm (12 in.) when 15 mm OSB or plywood is used, and 400 mm (16 in.) floor joist spacing when 18.5 mm or 19 mm OSB or plywood is used.

However, the Agent reported that the ceramic tile at 32 Emily Anna Street has been installed as follows:

- Ceramic tile was applied directly to the subfloor with a scratch coat of adhesive (thin-set method)
- Subfloor was 15 mm OSB sub-floor conforming to CSA 0325 or 15.5 mm or 15.5 mm softwood plywood conforming to CSA 0151
- The joist spacing below all ceramic tile areas was 12 in. on center

The Agent explained that the thin-set tile installation method that has been used for the subject property does not include an underlay. Instead ceramic tiles are applied directly to the subfloor. In addition, the joists are spaced closer than what is required in the Code

The Agent maintained that the various descriptions of floor assemblies that are acceptable for the installation of ceramic tile flooring outlined in the 1997 Building Code relate to providing and adequately stiff support for the tile without allowing excessive deflection. Therefore, the Agent argued, that if a structural analysis can demonstrate that the floor assembly used to support ceramic tile at the subject property will deflect no more than any of the assemblies prescribed by the Code, then equivalency to the requirements of the Code will have been achieved.

Referring to a February 13, 2007 structural analysis report, prepared by Quaile Engineering Ltd., the Agent asserted that Quaile's analysis concluded that that the strength and stiffness of the floor system installed at 32 Emily Anna Street, Vaughan, is equivalent to, or better than, the waferboard/underlay assembly described in the Code for ceramic tile installation. Therefore, on this basis, the Agent argued, that the subject as-constructed floor assembly demonstrates sufficiency of compliance with Article 9.30.6.3 of the 1997 Building Code.

4. Respondent's Position

The Respondent submitted that the subject ceramic tile installation, does not meet the prescriptive requirements of Sentence 9.30.6.3.(1) of the 1997 Building Code. The Respondent maintained that the Code provides for a choice of assemblies to reinforce a floor assembly that supports ceramic tiles set on panel-type wood sheathing. The Respondent submitted that the proposal by the Applicant does not meet the specific requirements of the 1997 Building Code as set out in Article 9.30.6.3.

5. Commission Ruling

It is the Decision of the Building Code Commission that the as-installed ceramic tile flooring, where the ceramic tile has been applied directly to the subfloor with a scratch coat adhesive mortar (thin-set method), on a subfloor of 15.5 mm softwood plywood conforming to CSA 0151 or 15 mm OSB subfloor conforming to CSA 0325 with a reduced joist spacing of 300 mm (12 in.) on centre below the tiled areas, sufficiently complies with Article 9.30.6.3. of the 1997 Ontario Building Code at 32 Emily Anna Street, Vaughan, Ontario.

6. Reasons

i) Clause 9.30.6.3.(1)(a) of the Building Code requires that the floor joists be spaced not more than 400 mm (16 in.) on centre. The structural design of the floor assembly supporting the ceramic tiles in this building was designed to have floor joists spaced to 400 mm (16 in). The Commission heard that the areas where ceramic tiles have been installed using a thin-set method, have a reduced floor joist spacing of 300 mm (12 in.) on centre.

ii) The Commission was presented with evidence and testimony that Quaile Engineering Ltd., an independent third party and professional engineering consulting firm, compared and analyzed the structural performance of the subject floor assembly with that of the three prescribed options in the Building Code. The Quaile Engineering documentation, submitted as part of application, concluded that the subject floor assembly provides strength and stiffness that is equivalent to, or better than the floor assemblies prescribed by the Code for ceramic tile application.

Dated at Toronto this **24th** day in the month of **July** in the year **2008** for application number **2008-20.**

Tony Chow, Chair

Leslie Morgan

Alison Orr

Ontario

Ruling No. 08-21-1195
Application No. 2008-18

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF with Sentences 3.3.1.17.(4) and 3.3.1.17.(5) of Division B, of Regulation 350/06, as amended (the Building Code).

AND IN THE MATTER OF an application by Robert Hann, The Beddlington Home Corporation for the resolution of a dispute with Mike Leonard, Chief Building Official, City of Oshawa, to determine whether the as-installed guard, serving a truck loading ramp retaining wall, consisting of pipe railing with openings greater than 100 mm, provides sufficiency of compliance with Sentences 3.3.1.17.(4) and 3.3.1.17.(5) of Division B of the Building Code at Shoppers Drug Mart, Lake Vista Square Shopping Centre, 199 Wentworth St. West, Oshawa, Ontario.

APPLICANT	Robert Hann The Beddlington Home Corporation Oshawa, Ontario
RESPONDENT	Mike Leonard Chief Building Official City of Oshawa
PANEL	Tony Chow, Chair Mina Tesseris Gerry Egberts
PLACE	Toronto, Ontario
DATE OF HEARING	July 10, 2008
DATE OF RULING	July 10, 2008
APPEARANCES	Robert Hann The Beddlington Home Corporation Oshawa, ON **The Applicant** John Foote Building Inspector City of Oshawa **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Comply under the *Building Code Act*, *1992*, to remedy certain alleged code deficiencies at Shoppers Drug Mart, Lake Vista Square, Shopping Centre, 199 Wentworth St. West, Oshawa, Ontario.

The subject building is a one storey, non-combustible building with fire alarm and sprinkler system and has a building area of 1579 m².

The construction in dispute involves the as-constructed guards comprised of pipe railing located along a retaining wall of a truck loading ramp and the east exit stairs located at a vehicular ramp at the subject building. The pipe railing has been constructed with openings greater than 100 mm. An Order to Comply has been issued to the Applicant indicating that the guards do not comply with Sentences 3.3.1.17.(4) and (5) of Division B, of the Building Code, which state in part: Openings through any *guard* that serves a *building* of other than *industrial occupancy*, shall be of a size that, will prevent the passage of a sphere having a diameter more than 100 mm unless it can be shown that the location and size of openings that exceed these limits do not represent a hazard.

2. Provisions of the Building Code in Dispute

3.3.1.17. Guards

(4) Openings through any *guard* that is not required by Sentence (1) and that serves a *building* of other than *industrial occupancy*, shall be of a size that,

(a) will prevent the passage of a sphere having a diameter more than 100 mm, or

(b) will permit the passage of a sphere having a diameter more than 200 mm unless it can be shown that the location and size of openings that exceed these limits do not represent a hazard.

(5) Unless it can be shown that the location and size of openings do not present a hazard, a *guard* shall be designed so that no member, attachment or opening located between 140 mm and 900 mm above the level protected by the *guard* will facilitate climbing.

3. Applicant's Position

The Applicant submitted that the retaining wall was approximately 203 mm thick and had been constructed with a slope having a height of 381 mm at its lowest point and then increasing to a height of 762 mm. The Applicant maintained that the loading ramp retaining wall is not part of a walkway ramp and there is no attractant for any public member to be at the back of the building. On the contrary, he advised, garbage rooms were located in this area and the smell would also be a deterrent for anyone to want to "hang out". The Applicant maintained that this area was only used by truck drivers delivering goods and by employees receiving the shipments and therefore it was unlikely for members of the public to be in this area of the building.

The Applicant contended that numerous other buildings, including another Shoppers Drug Mart in the area, have the very same guards installed at their truck loading ramps and emergency stairways. The Applicant submitted that as the guards were located at the back of a commercial building in the "loading dock" area, the guards can be considered to meet the code requirements for an industrial building. The Applicant argued that installing a mesh or pickets having a

maximum opening of 100 mm along the retaining wall of the truck loading ramp would only prevent one from falling forward over the retaining wall but not from falling backwards from the side the person used to climb onto the wall, therefore, in this situation guards with an opening of less than 100 mm would not be effective. The Applicant added that he did not disagree with mesh or pickets being installed to serve the east exit stair location and would comply with this request.

In response to questions the Applicant clarified the location of the retaining wall in relation to the location of the building.

4. Respondent's Position

The Respondent submitted that the guard at the top of the retaining wall and the guards installed at the emergency exit door do not comply with the Code. The Respondent advised that the openings in the installed guards would allow the passage of a sphere having a diameter of more than 100 mm, as the openings in the guard were in fact 609 mm.

The Respondent stated that although the guards in question were located at the back of the building, there was a possibility for children to be in the area and that they could get hurt. Further, the Respondent argued that one of the exit stairs was one of the required emergency exit. It was the Respondent's opinion that the as-installed guards facilitated climbing and presented a hazard therefore, they d0 not comply with the Code.

5. Commission Ruling

It is the decision of the Building Code Commission that the as-installed guard, serving a truck loading ramp retaining wall, consisting of pipe railing with openings greater than 100 mm, provides sufficiency of compliance with Sentences 3.3.1.17.(4) and 3.3.1.17.(5) of Division B of the Building Code at Shoppers Drug Mart, Lake Vista Square Shopping Centre, 199 Wentworth St. West, Oshawa, Ontario**.**

It is also the decision of the Building Code Commission that the as-installed guard serving the east exit stairs located at the vehicular ramp, consisting of pipe railing with openings greater than 100 mm, does not provide sufficiency of compliance with Sentences 3.3.1.17.(4) and 3.3.1.17.(5) of Division B of the Building Code at Shoppers Drug Mart, Lake Vista Square Shopping Centre, 199 Wentworth St. West, Oshawa, Ontario**.**

6. Reasons

i) Sentences 3.3.1.17(4) and 3.3.1.17(5) of the Building Code limit the size and location of openings in a required guard. In the opinion of the Commission, the retaining wall is not part of the subject building and further, is not a designated structure as defined under the Building Code; therefore the as-installed guard is not a required guard.

ii) The as-installed guard serving the east exit stairs, located at the vehicular ramp for the building, is a required guard. This guard is therefore required to comply with Sentences 3.3.1.17(4) and 3.3.1.17.(5) of the Code. The as-installed guard includes openings greater than 100 mm and consists of horizontal members that could facilitate climbing. The Commission was not convinced that the size and location of the openings did not present a hazard.

Dated at Toronto this **10th** day in the month of **July** in the year **2008** for application number **2008-18.**

Tony Chow, Chair

Mina Tesseris

Gerry Egberts

Ontario

Ruling No. 08-20-1194
Application No. 2008-13

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF with Sentence 1.2.1.1.(1) of Division B, and Sentence 3.1.9.1.(1) of Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by Jeffrey T. Birchmeier, Kellogg Company for the resolution of a dispute with Ted Marecak, Chief Building Official, City of Belleville, to determine whether the alternative solution proposed, as per Article 1.2.1.1. of Division A, for six firestop systems which are identified in the Morrison Hershfield report as Numbers 2, 4, 6, 7, 8, and 9, which have not been tested to ULC-S115-95 “Fire Tests of Firestop Systems” provides sufficiency of compliance with Sentence 3.1.9.1.(1) of Division B of the 2006 Building Code, at 501 College Street East, Belleville, Ontario.

APPLICANT	Jeffrey T. Birchmeier Kellogg Company Battle Creek, Michigan
RESPONDENT	Ted Marecak Chief Building Official City of Belleville
PANEL	Tony Chow, Chair Mina Tesseris Gerry Egberts
PLACE	Toronto, Ontario
DATE OF HEARING	July 10, 2008
DATE OF RULING	July 10, 2008
APPEARANCES	Dana Scherf Morrison Hershfield Ottawa, ON **Agent for the Applicant**
	Ted Marecak Chief Building Official City of Belleville **The Respondent**

RULING

1. Particulars of Dispute

The subject building is a Group F, Division 2 manufacturing plant with a building area of approximately 19, 000 m² and is 1 storey in building height. The building is of non-combustible construction and is sprinklered.

The Building Code stipulates that where more than one exit is required, the exits be either located within the specified travel distance or alternatively, except for high hazard industrial occupancies, be placed along the perimeter of the floor area not more than 60 m apart. In this case, the Architect has chosen the latter option. Exterior exit doors are provided on all sides of the building along the perimeter, except that on the west side an exit corridor has been created between the manufacturing plant and the mechanical areas that lead to an exterior exit door. The exit corridor is provided with a 2 h rated fire separation.

The dispute between the two parties involves the firestopping of service penetrations and construction joints in the above mentioned exit corridor and the mechanical room space over the corridor. Sentence 3.1.9.1.(1) of Division B of the Building Code states that where building service items penetrate a fire separation or a membrane of a rated assembly, a firestop system tested in accordance with ULC-S115, “Fire Tests for Firestop Systems” ,must be provided. The subject firestop systems have not been tested in accordance with ULC-S115. Instead, the Applicant has proposed an alternative solution in the form of Engineering Judgments (EJ’s) that are produced by the manufacturer of the subject firestop systems. An “Engineering Judgment” is a design prepared by the manufacturer for a specific application on a given project that has not been tested and consequently not listed. The EJ’s in question were prepared based on other tested designs that are considered comparable to the actual field applications in the subject building.

Initially, the Applicant sought a ruling for 9 proposed firestop systems. During the course of the hearing the parties agreed that 3 out of the 9 proposed firestop, namely Numbers 1, 3, and 5 identified in the Morrison Hershfield report, did not need to be dealt with by the Commission, as firestop system Number 1 was no longer in dispute and firestop systems Number 3 and 5 did not fall within the parameters of Article 3.1.9.1. of the Building Code. As a result of this, the Commission will only rule on the sufficiency of compliance of the six firestop systems.

Therefore, the dispute before the Commission is whether the alternative solution proposed, as per Article 1.2.1.1. of Division A, for six firestop systems which are identified in the Morrison Hershfield report as Numbers 2, 4, 6, 7, 8, and 9, and which have not been tested to ULC-S115-95 “Fire Tests of Firestop Systems” provides sufficiency of compliance with Sentence 3.1.9.1.(1) of Division B of the 2006 Building Code, at 501 College Street East, Belleville, Ontario.

2. Provisions of the Building Code in Dispute

Division A, Article 1.2.1.1 Compliance with Division B

(1) *Compliance with Division B shall be achieved,*
(a) by complying with the applicable acceptable solutions in Division B, or
(b) by using alternative solutions that will achieve the level of performance required by the applicable acceptable solutions in respect of the objectives and functional statements attributed to the applicable acceptable solutions in Supplementary Standard SA-1.

(2) *For the purposes of Clause (1)(b), the level of performance in respect of a functional statement refers to the performance of the functional statement as it relates to the objective with which it is associated in Supplementary Standard SA-1.*

Division B, Article 3.1.9.1. Fire Stopping of Service Penetrations

(1) *Except as required by Sentence (2), piping, tubing, ducts, chimneys, optical fibre cables, electrical wires and cables, totally enclosed noncombustible raceways, electrical outlet boxes and other similar building services that penetrate a fire separation or a membrane forming part of an assembly required to have a fire-resistance rating, shall be,*
(a) sealed by a fire stop system that, when subjected to the fire test method in ULC-S115, "Fire Tests for Fire Stop Systems", has an F rating not less than the fire-protection rating required for closures in the fire separation in conformance with Table 3.1.8.4., or
(b) tightly fitted.

3. Applicant's Position

The Agent for the Applicant advised that Morrison Hershfield, an independent, engineering consulting firm, was retained to develop an alternative solution for the firestop systems that will achieve an equivalent level of performance as required by the applicable acceptable solution. The Agent submitted a report (Exhibit 1), which included an analysis of the proposed firestop systems, to the Commission for review. The Agent advised that the proposed alternative solution is in the form of Engineering Judgments prepared by the manufacturer of the firestop system.

The Agent stated that the report outlined the alternative solution for each type of service penetration and explained that the performance level of various features of the Engineering Judgments (EJ's) firestop systems were compared to the performance level of the firestop systems tested in accordance with ULC S-115, "Fire Tests of Firestop Systems", as required by the Code.

The Agent explained that the EJ's were analyzed and found satisfactory based on a variety of factors including: the application of the objective and functional statements of the Code attributed to the acceptable solution, a comparison between the EJ's and referenced tested firestop systems, and a comparison of the Code referenced ULC Standard with the applicable ASTM Standard.

The Agent declared that Morrison Hershfield's analysis of the key features of fire tests and the method of evaluation for firestop systems demonstrated that the alternate test standard, ASTM-814 Standard (2006 Edition), achieves the equivalent performance level established by ULC-S115, which is referenced in the Code.

The Agent stated that the proposed alternative designs for the subject firestop systems were derived from tested and listed designs which are considered comparable to the firestop systems being proposed. Further, the Agent explained that where there were minor deviations, compensating measures were provided for the variances.

The Agent pointed out that the prescriptive requirements of the Building Code, in this instance, would require that the firestop systems achieve and F rating of 1.5 hours and that, in fact, the six firestop systems in question achieve an F rating of 2 hours.

The Agent noted that the Building Code permits alternative solutions that will achieve the same performance level as the applicable acceptable solution in Division B. In addition, she reported that Morrison Hershfield's analysis and evaluation found that the proposed firestop systems achieve the level of performance required by the applicable Division B solution. In conclusion, she indicated that since the firestop systems are considered to slow the spread of fire and collapse and minimize damage to the building and injuries to persons, therefore compliance with the intent of the Building Code has been achieved..

4. Respondent's Position

The Respondent advised that the proposed alternative solution related to the firestopping of service penetrations and for construction joints and further advised the Commission that the as-constructed conditions varied from the listed firestop systems available on the market.

The Respondent explained that listed firestop systems in compliance with the Code are available for most of the applications involved. Therefore, using "Engineering Judgments" to propose alternative systems is not justified. Further, the Respondent advised that the "Best Practice Guide on Fire Stops and Fire Blocks and their impact on Sound Transmission" published by the National Research Council Canada notes in part that *It is important for users to realize that Engineering Judgments are not intended as substitutes for listed fire stop systems, where they exist; but are intended for use where a specific field application, for which there is no listed fire stop system, is encountered, or where all of the requirements for a listed system cannot be practically met in a field application*. Therefore, on this basis, the Respondent explained that the alternative solutions for those applications where listed firestop designs are available were deemed to be unacceptable.

In addition, the Respondent declared that exit facilities in buildings are provided with special considerations due to their important role in life safety. In this instance, the Respondent maintained that the level of protection to the building occupants and to fire and rescue crews within the exit corridor would be reduced by the acceptance of untested firestops and would thereby, contravene Division A sentence 1.2.1.1.(1)(b).

In summary, the Respondent reiterated that there are listed firestop systems available for most of the applications involved and using untested firestop systems will reduce the performance level of the building. He stated that, after reviewing the contents of the report submitted by the Applicant, it is his opinion that the proposed alternative solution does not achieve the same level of performance required by the prescriptive requirements of the Building Code and consequently was found to be unacceptable.

5. Commission Ruling

It is the decision of the Building Code Commission that the alternative solution proposed, as per Article 1.2.1.1. of Division A, for six firestop systems which are identified in the Morrison Hershfield report as Numbers 2, 4, 6, 7, 8, and 9, which have not been tested to ULC-S115-95 “Fire Tests of Firestop Systems” provides sufficiency of compliance with Sentence 3.1.9.1.(1) of Division B of the 2006 Building Code, at 501 College Street East, Belleville, Ontario.

6. Reasons

i) Sentence 2.1.1.2.(2) of Division C of the Building Code states, “The results of tests or evaluations based on test standards other than as described in this Code may be used …if the alternate test standards provide comparable results”. Evidence and testimony presented by Morrison Hershfield, an independent third party and professional engineering consulting firm, provided an analysis of the key features of the fire tests and method of evaluation of firestop systems and concluded that the alternate test standard, ASTM-814 Standard (2006 Edition), achieves the equivalent performance level established by ULC-S115, referenced in the 2006 Building Code.

ii) Further, the Commission heard that the proposed alternative designs for the subject firestop systems are derived from tested designs which are considered comparable to the subject firestop systems. Where there are minor deviations, compensating measures have been provided for the variances.

iii) Sentence 3.1.9.1.(1) of Division B of the Code requires firestop systems to achieve an appropriate F rating when subject to the fire test method in ULC-S115. The prescriptive requirements of the Building Code, in this instance, would require that the firestop systems achieve and F rating of 1.5 hours. The Commission was informed that the six firestop systems in question, achieve and F rating of 2 hours, which exceeds the minimum 1.5 hour F rating that would be required.

iv) Article 1.2.1.1. of Division A of the Building Code requires that compliance with Division B be achieved either through compliance with the applicable acceptable solutions in Division B or through an alternative solution that will achieve the same level of performance as required by the applicable acceptable solution in respect of the objectives and functional statements attributed to the applicable acceptable solution in Supplementary Standard SA-1. Morrison Hershfield’s analysis and evaluation concludes that the proposed firestop systems meets the performance level of the applicable Division B solution since the firestop systems are considered to slow fire spread and collapse in order to minimize building damage and injuries to persons to the equivalent performance level of Division B.

Dated at Toronto this **10th** day in the month of **July** in the year **2008** for application number **2008-13.**

Tony Chow, Chair

Mina Tesseris

Gerry Egberts

Ontario

Ruling No. 08-17-1191
Application No. 2008-08

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 8.2.1.3.(4) and Table 8.2.1.3.B. of Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by David Morrissay, Hamilton Wentworth Catholic District School Board for the resolution of a dispute with John Spolnik, Chief Building Official, City of Hamilton, to determine whether the existing Class 4 sewage system, which is proposed to serve an existing elementary school and the addition of a new, unattached, 4-classroom portable building, provides sufficiency of compliance with Sentence 8.2.1.3.(4) and Table 8.2.1.3.B. of the Ontario Building Code at Our Lady of Assumption Elementary School, 55 Highway # 20 East, Stoney Creek, ON.

APPLICANT	David Morrissay, Hamilton Wentworth Catholic District School Board, Hamilton, ON
RESPONDENT	John Spolnik Chief Building Official City of Hamilton
PANEL	Judy Beauchamp, Vice-Chair Jim Wilkinson Eric Gunnell
PLACE	Toronto, Ontario
DATE OF HEARING	May 8, 2008
DATE OF RULING	May 8, 2008
APPEARANCES	David Hine Hine Reichard Tomlin Inc. Markham, ON **Agent for the Applicant** Lisa Simmons Building Engineer City of Hamilton **Designate for the Respondent**

RULING

1. Particulars of Dispute

The subject building is an existing Group A, Division 2, elementary school. The Applicant has applied for a permit to locate a new, unattached, 4-classroom portable building on the existing school's property. The issue at dispute relates to the existing sewage system currently servicing the elementary school.

The existing Class 4 sewage system was constructed in 1962. It is an absorption trench type system with 1525 m of distribution pipe and a 28 640 L septic tank.

The dispute before the Commission relates to the calculation of the total daily design sanitary sewage flow generated by the school. The total daily design sanitary sewage flow determines the legislation under which the treatment system is governed. The Building Code regulates *sewage systems* that have a design capacity equal to or less than 10 000 litres per day. Systems with greater capacities are considered *sewage works* and regulated under the *Ontario Water Resources Act* (OWRA) under the purview of the Ministry of Environment (MOE).

In this case, the Applicant is proposing to calculate the daily design sanitary sewage flow using a rate of 14 L/day per person, based on delivered water usage and comparison results of 39 other school's water usage, instead of 30 L/day, which is the required daily design sanitary sewage flow rate for "schools" specified by Table 8.2.1.3.B. of the Building Code. The Respondent's position is that the sanitary sewage flow calculation based on 30 L/day, as required by the Code, would place the design capacity of the sewage system at greater than 10 000 L/day, which would therefore, place the system under the jurisdiction of the Ministry of Environment (MOE).

2. Provisions of the Building Code in Dispute

8.2.1.3. Sewage System Design Flows

(4) Where an *occupancy* is not listed in Table 8.2.1.3.B., the highest of metered flow data from at least 3 similar establishments shall be acceptable for determining total daily design *sanitary sewage* flow.

Table 8.2.1.3.B.
Other Occupancies

Forming Part of Sentence 8.2.1.3.(2)

Column 1	Column 2
Establishments(1)	Volume, litres
Schools - per student	
a) Day school,	30
b) With showers,	30
c) With cafeteria, and	30
d) Per non-teaching employee per 8 hour shift	50

Notes to Table 8.2.1.3.B.:

(1)The *occupant load* shall be calculated using Subsection 3.1.17.

(2)Flea markets open more than 3 days per week shall be assessed using the volumes stated under the heading “Stores”.

(3)Where multiple calculations of *sanitary sewage* volume is permitted the calculation resulting in the highest flow shall be used in determining the design daily *sanitary sewage* flow.

(4)The number of fuel outlets is considered the maximum number of gas nozzles that could be in use at the same time.

3. Applicant’s Position

The Agent submitted that Our Lady of the Assumption school, as of September 2007, had a student population of 398 and a staff of 30 people resulting in a total occupant load of 428 persons. The Agent conceded that based on the Building Code daily design sanitary sewage flow rate of 30 L per student/day and 50 L per non-teaching staff/day that the resulting total water usage would be over 10 000L/day. However, the Agent argued that the Code’s information on water usage per person was based on information gathered in the 1970’s and since then, technology advancements concerning water consumption have changed. The Agent contended that water is no longer considered an inexpensive resource and as a result, efficient water use appliances have been created such as low flow toilets and automatic faucets. When considering that the majority of water usage at this school is from toilet/urinal/lavatory use, the Agent maintained that the water saving initiatives along with actual water usage data should be taken into consideration when calculating the daily design sanitary sewage flow.

The Agent noted that Sentence 8.2.1.3.(4) of the Code states, “where an occupancy is not listed in Table 8.2.1.3.B, the highest of metered flow data from at least 3 similar establishment shall be accepted for determining the total daily design sewage flow.” The Agent submitted that although the “schools” are listed in Table 8.2.1.3.B., the table is not an accurate reflection of the actual water usage of schools. The Agent presented a report where 39 schools within the Hamilton-Wentworth Catholic District School Board were evaluated from the 2006 to 2008 school year, where the average water consumption per person was determined to be 13 L/day. The Agent further argued that as Our Lady of the Assumption was not connected to the municipal water system, water had to be delivered to the building. As such, records of water delivery to date were kept; the Agent pointed out that the records indicate that the actual water usage of the school is approximately 30 000 L/week, which then averages out to approximately 14 L day/person. As a result, the Agent maintained that based on both the study of 39 schools within the same Board and the actual water usage confirmed by water delivery reports, the total capacity of the sewage system serving the subject school was not greater than 10, 000 L/day.

Further, the Agent maintained that there had been no observable operating problems since with the existing sewage system with the 428 persons occupying the school since September 2007.

4. Respondent’s Position

The Designate for the Respondent submitted that the Applicant has proposed to use a daily design sanitary sewage flow rate of 14L/day per person instead of the minimum required daily design sewage flow of 30L/day per person as specified by Table 8.2.1.3.B. of the Building Code.

The Designate maintained that by using the rate specified in Table 8.2.1.3.B., the design capacity of the existing on-site sewage system was approximated at greater than 10, 000L/day, placing the system under the jurisdiction of MOE.

The Designate argued that although the Agent's report indicates actual water usage to be estimated at 14 L per person/day, the Building Code requires the daily design sanitary sewage flow for to be at least the value in the Table 8.2.1.3.B. She agreed that Sentence 8.2.1.3.(4) permits using metered flow data from similar establishments where an occupancy is not listed in Table 8.2.1.3.B. However, in this case "schools" are listed in Table 8.2.1.3.B.

Further, the Designate submitted that a secondary issue was the occupant load. The Designate noted that the current occupant load of the school was 428 persons, but that in the previous school year it was 394 persons, thus, under Sentence 11.4.2.5.(2) of the Building Code, a review of an existing on-site sewage system is required. The Designate also pointed out that even if there was no increase in occupant load, Sentence 11.4.2.5.(1). of the Building Code would still require a review of the existing sewage system.

In summation, the Designate reiterated that, in her opinion, the Ministry of Environment had jurisdiction over this matter and that the issue was clearly defined by the Code; the daily design flow should be calculated as per the Code provisions. As such, the daily design flow would be greater than 10, 000 L/day and therefore, the Municipality does not have jurisdiction to approve the design capacity for the system.

5. Commission Ruling

It is the decision of the Building Code Commission (the "Commission") that the Commission does not have the jurisdiction to make a determination on the issues raised in relation to the matter at Our Lady of Assumption Elementary School, 55 Highway # 20 East, Stoney Creek, Ontario.

6. Reasons

1. Subsection 24(1) of the *Building Code Act, 1992* provides the Commission with the jurisdiction to resolve disputes between a permit applicant, permit holder, or a person to whom an order has been issued and the chief building official, a registered code agency or inspector, concerning the sufficiency of compliance with the technical requirements of the Building Code.

   The *Ontario Water Resources Act, R.S.O 1990,* Section 53(6) determines whether the *Building Code Act, 1992* is applicable to a particular case by stating "This section does not apply, to a sewage system that is subject to the *Building Code Act, 1992"*

   While the Commission recognizes that there is a disagreement between the parties regarding the total daily design flow of the sewage system, the Commission does not have the jurisdiction to determine this disagreement.

2. A sewage system, as defined by the Building Code, requires that the sewage system has a design capacity of 10 000 litres per day, or less. Design capacity, as defined in Article 1.4.1.2. of Division A of the Building Code, means the total daily design sanitary sewage flow determined in accordance with Article 8.2.1.3. of Division B of the Building Code.

3. Sentence 8.2.1.3.(2) states that the total daily design flow for all occupancies, other than residential occupancies, shall be determined in accordance with Table 8.2.1.3.B. The calculated daily design sewage flow from Table 8.2.1.3.B combined with the reported enrolment of the subject school results in a flow in excess of 10 000 litres per day.

4. Sentence 8.2.1.3.(4) states, where an occupancy is not listed in Table 8.2.1.3.B., the

highest metered flow data from at least three similar establishments shall be acceptable for determining the total daily design sanitary sewage flow. Table 8.2.1.3.B. includes a reference on how to determine the total daily design sanitary sewage flow for a school. Therefore, it is the Commission's opinion that in this case, Table 8.2.1.3.B does apply.

Dated at Toronto this **8th** day in the month of **May** in the year **2008** for application number **2008-08.**

Judy Beauchamp, Vice-Chair

Jim Wilkinson

Eric Gunnell

Ontario

Ruling No. 08-16-1190
Application No. 2008-06

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 11.4.2.5 (3) of the Regulation 403 as amended, (the Building Code).

AND IN THE MATTER OF an application by Ugo Mio, Homeowner for the resolution of a dispute with Ed Vanderwindt, Chief Building Official, Haldimand County, to determine whether the proposal to construct an addition to a one storey, two bedroom, seasonal cottage, which will increase the size of the existing cottage by 29.5%, and that will be served by the existing Class 5 sewage system with a 9000L capacity, provides sufficiency of compliance with Sentence 11.4.2.5 (3) of Division B of the 2006 Building Code at 501 Haldimand Road 17, Dunnville, ON.

APPLICANT	Ugo Mio Homeowner Hamilton, ON
RESPONDENT	Ed Vanderwindt Chief Building Official Haldimand County
PANEL	Judy Beauchamp, Vice-Chair Jim Wilkinson Eric Gunnell
PLACE	Toronto, Ontario
DATE OF HEARING	May 8, 2008
DATE OF RULING	May 8, 2008
APPEARANCES	Ugo Mio Homeowner Hamilton, ON **The Applicant** Ed Vanderwindt Chief Building Official Haldimand County **The Respondent** Gord Reichelt, Building Inspector Haldimand County **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has proposed to construct an addition to a one storey, two bedroom, seasonal cottage, which will increase the size of the existing cottage by 29.5%, and that will be served by the existing Class 5 sewage system with a 9000L capacity, provides sufficiency of compliance with Sentence 11.4.2.5 (3) of Division B of the 2006 Building Code at 501 Haldimand Road 17, Dunnville, ON.

2. Provisions of the Building Code in Dispute

11.4.2.5. Sewage Systems

(3) The *performance level* of an existing *dwelling unit* is reduced where *proposed construction* that,

(a) increases the number of bedrooms in the *dwelling unit*,

(b) exceeds 15% of the finished area of the *dwelling unit*, or

(c) adds new *plumbing fixtures to the dwelling unit*,

will result in the total daily design *sanitary sewage* flow of the *dwelling unit*, calculated in accordance with Article 8.2.1.3., exceeding the capacity of any component of a *sewage system* serving the *dwelling unit*.

3. Applicant's Position

The Applicant submitted that the proposed construction to the cottage involves increasing the living space. The Applicant advised the Commission that the proposed addition would increase the total finished area of the dwelling from 53 m² to 68.7 m², resulting in an increase of approximately 29%. However, the Applicant argued that the proposed construction did not include the addition of bedrooms or plumbing fixtures and therefore would not result in any additional strain to the existing sewage system. The Applicant maintained that the addition proposed was mainly to accommodate a large closet and widen the two existing bedrooms, thereby creating a more comfortable environment. He reiterated that the occupant load, number of bedrooms and fixtures would remain the same and therefore, it was his opinion that there is no adverse effect on the existing holding tank.

4. Respondent's Position

The Respondent submitted that prior to the commencement of the new 2006 Building Code an addition resulting in a finished area greater than 15% would be allowed by upgrading the holding tank to compensate for the reduction in sewage system performance. However, this option was removed in the 2006 Building Code. The Respondent further submitted that under Division B of the 2006 Building Code, the Applicant's proposed addition would increase the finished area of the dwelling unit by 29.5%, thereby exceeding the 15% prescribed by Sentence 11.4.2.5.(3) of the Building Code and further, reducing the performance level of the sewage system.

5. Commission Ruling

It is the decision of the Building Code Commission that the proposal to construct an addition to a one storey, two bedroom, seasonal cottage, which will increase the size of the existing cottage by 29.5%, and that will be served by the existing Class 5 sewage system with a 9000L capacity, provides sufficiency of compliance with Sentence 11.4.2.5 (3) of Division B, of the 2006 Building Code at 501 Haldimand Road 17, Dunnville, Ontario.

6. Reasons

i) Sentence 11.4.1.1.(1) of Division B, of the 2006 Ontario Building Code requires that the performance level of the building (in this case, the subject sewage system) after construction, not to be less than the performance level of the building prior to construction. Further, the Building Code sets the conditions under which the performance level of a dwelling unit is reduced and mandates the upgrade of the sewage system when necessary.

ii) Sentence 11.4.2.5.(3), Division B, of the Building Code lists three conditions, which must trigger a review of the performance level of the sewage system. The three conditions are as follows:

- 11.4.2.5.(3)(a) increase in the number of bedrooms in the dwelling unit,
- 11.4.2.5.(3)(b) exceed 15% of the finished area of the dwelling unit, or
- 11.4.2.5.(3)(c) adds new plumbing fixtures to the dwelling unit…

In this case, the proposed construction results in an extension of more than 15% of the finished area of the dwelling unit. As such, a review of the performance level of the sewage system is required. However, the need to upgrade the sewage system is conditional upon whether the capacity of the sewage system will be exceeded. Therefore, the total daily design sanitary sewage flow must be calculated in accordance with Article 8.2.1.3. of Division B, of the Building Code.

iii) Using Table 8.2.1.3.(A) of Division B, of the Building Code, the total daily design sanitary sewage flow for the subject dwelling, having two bedrooms, 7.5 fixture units, and a proposed finished building area of 70 m², is 1100 L/day. Further, the holding tank required to service this dwelling should have a holding capacity of not less than 7 days, which is 7700 L. As the Building Code does not allow a Class 5 sewage system with a capacity of less than 9000 L, and as the current Class 5 sewage system is 9000 L, it is the Commission's opinion that the existing Class 5 Sewage System sufficiently complies with Sentence 11.4.2.5 (3) of the Building Code.

Dated at Toronto this **8th** day in the month of **May** in the year **2008** for application number **2008-06.**

Judy Beauchamp, Vice-Chair

Jim Wilkinson

Eric Gunnell

Ontario

Ruling No. 08-12-1186
Application No. 2008-03

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.6.3.1.(2) of Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Tony Battista, The Residence at the Accolade Inc., for the resolution of a dispute with Steve Franklin, Chief Building Official, City of Toronto, to determine whether the proposed design of water supply piping between the City's water main and a 34 storey, residential building, where two water supply lines would connect to either side of a valve in the city water main, provides sufficiency of compliance with Sentence 3.2.9.7.(4). of the 1997 Ontario Building Code at the Accolade Tower located at 1250 Eglinton Avenue East, Toronto, Ontario.

APPLICANT	Tony Battista The Residence at the Accolade Inc., Toronto, ON
RESPONDENT	Steve Franklin Chief Building Official City of Toronto
PANEL	Tony Chow, Chair Marina Huissoon Susan Friedrich
PLACE	Toronto, Ontario
DATE OF HEARING	March 20, 2008
DATE OF RULING	April 18, 2008
APPEARANCES	Tony Battista The Residence at the Accolade Inc., Toronto, ON **Applicant** Allan Larden Larden Muniak Consulting Inc., Toronto, ON **Agent for the Applicant**

Steve Mann
Engineering Consultant
Al Underhill & Associates Ltd.
Richmond Hill, ON
Designate for the Applicant

Kamal Assaad
Building Engineer
City of Toronto
Designate for the Respondent

Ron Arnold
Toronto Fire Services Plans Examiner
City of Toronto
Designate for the Respondent

RULING

1. Particulars of Dispute

The Applicant has received a permit under the *Building Code Act*, *1992*, to construct a residential condominium building at the Accolade Tower, 1250 Eglinton Avenue East, Toronto, Ontario.

The subject building is a Group C, 34 storey condominium with a height that exceeds 84 m. The proposed building is of non-combustible construction and is equipped with a fire alarm and a standpipe system. A sprinkler system is also installed but only in required areas.

The construction in dispute involves the design of the water supply piping between the City water main and the subject building. The Applicant is proposing to have two water supply lines connect to either side of a valve in the city water main. However, once connected to the city main, the two water supply lines will join into a single 200 mm diameter private fire service main, at or on the property line which will continue approximately 500 m to the building, where it will then supply water for both the sprinkler and the standpipe and hose systems. Therefore, the dispute before the Commission is whether the proposed design provides sufficiency of compliance with Sentence 3.2.9.7.(4). of the 1997 Ontario Building Code.

2. Provisions of the Building Code in Dispute

3.2.9.7. Water Supply for 65 mm Hose Connections

(4) If the *building* is 84 m (275 ft 7 in) or more high, measured between *grade* and the ceiling level of the top *storey*, the building shall be served by not less than two sources of water supply from a public water system.

3. Applicant's Position

The Agent for the Applicant submitted that the design of the water supply to the subject condominium development consists of the installation of a new 300 mm diameter valve and chamber onto the city's water main, having two 200 mm diameter water main connections installed on either side of the new valve. The two 200 mm supply lines leading into the site, also having been provided with valves, would then join into a single 200 mm diameter water main that would serve the subject building.

The Agent stated that the Respondent is of the position on the matter is that the two water supply connections from the city's water main should continue from the public water source connection all the way to the subject building. The Agent stated that in his opinion, a careful reading of Sentence 3.2.9.7.(4) of the Building Code, suggests that the Respondent's position is not founded.

The Agent argued that the most important words in the Code requirement are, "…two sources…from…" The Agent argued that Sentence 3.2.9.7.(4) is referring to the "sources" of water supply "from" a public water system, and not the configuration of distribution piping which extends away from the source of water supply. Further, suggesting that the "sources" relates to the actual point of connection, and not to the piping extending to a building from such points of connection. The Agent maintained that the proposed configuration of the water supply piping where there are two pipes, one connected on either side of a valve in the city's water main, provides two sources of water supply from a public system, therefore complying with Sentence

3.2.9.7.(4) of the Code.

The Agent suggested that the intent of this provision of the Code is to limit the probability that the building will be without water when there is a need for firefighting. The proposed provision of a valve in the public water main between the two branches which feed the subject building provides a degree of back-up or safeguard of water supply in the event of interruption of water due to maintenance or other events affecting the city water main. The Agent maintained that if such a disruption should occur on one side of the valve, that valve can be shut off, and the valve in the 200 mm feed to the building may also be shut off, leaving the other side of the main available to supply water to the building.

The Agent reported that due to the location of the site, the building faces only one street and therefore, can only connect to one city water main. The Agent also argued that if a second water supply pipe was required from the city's water main all the way to the building, due to the constraints of available space on the subject building site, it would have to be located adjacent to the first water main. As such, the construction of two water mains side-by-side would not be advisable, as a break in one water main could cause an adjacent water main to fail by washing out its foundation.

The Agent pointed out that in most buildings the two sources of water supply required by the Code converge into one main at some point. The Agent maintained that the Code does not prescribe where the convergence of the water supply piping should occur beyond the connections to the public water supply, and therefore, it was his opinion that the proposed design of the water supply piping sufficiently complies with Sentence 3.2.9.7.(4) of the Code.

4. Respondent's Position

The Designate for the Respondent submitted that the subject building is a new 34 storey condominium tower that has no access from the north, south, or west side of the building to the city's water main; the building's only access is from the east side of the site, which services the area of construction.

The Designate argued that since the building is greater than 84 m high, the Code requires the building to be served by two independent water sources. The Designate reported that the Applicant's proposal and drawings submitted to the municipality show only one water supply line leading to the building, and therefore do not comply with Sentence 3.2.9.7.(4) of the Code.

The Designate reported the municipality's position is that the Code is explicit: two private water mains should extend from the city's water main all the way to the building wall. He stated that they do not believe that two private water mains leading from the public water supply, which then converge into one private water main approximately 200 m away from the building, provides the building with the two separate required sources of water supply prescribed by the Code.

The Designate further stated that the municipality sought the opinion of the Building and Development Branch of the Ministry of Municipal Affairs and Housing and the local Toronto Fire Services department on this matter, and that they were both of the same opinion that two separate sources of water supply from a public water system would need to lead all they way to the building, in order to comply with Sentence 3.2.9.7.(4) of the Code.

5. Commission Ruling

It is the decision of the Building Code Commission that the proposed design of water supply piping between the City's water main and a 34 storey, residential building, where two water supply lines would connect to either side of a valve in the city water main, does not provide sufficiency of compliance with Sentence 3.2.9.7.(4). of the 1997 Ontario Building Code at the Accolade Tower located at 1250 Eglinton Avenue East, Toronto, Ontario.

6. Reasons

i) Sentence 3.2.9.7.(4) of the 1997 Building Code requires that a building which is 84m or more high must be served by not less than two sources of water supply from a public water system. It is the Commission's opinion, that as the subject building is more than 84 m high, the building requires two separate water supply lines to the building. Therefore, the proposal to join two water supply lines leading to the building into a single 200 mm diameter water main before reaching the building, does not provide sufficiency of compliance with the Building Code.

ii) Appendix 3.2.5.7 of the 1997 Ontario Building Code states that "an adequate water supply for fire fighting should be an immediately available and accessible water supply with sufficient volume and /or flow …" Therefore, it is the Commission's opinion that providing two sources of water supply to the building would limit the probability that the building would be without water during fire fighting, should one of the sources be disrupted or fail.

Dated at Toronto this **18th** day in the month of **April** in the year **2008** for application number **2008-03.**

Tony Chow, Chair

Marina Huissoon

Susan Friedrich

Ontario

Ruling No. 08-11-1185
Application No. 2007-52

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.6.3.1.(2) of the Regulation 403/97, as amended, the Building Code.

AND IN THE MATTER OF an application by Kathy O'Neill, Montford Hospital, for the resolution of a dispute with Arlene Gregoire, Chief Building Official, City of Nepean, to determine whether the proposal to terminate the fire separation for the vertical service space at the underside of the fourth storey roof, in an addition to a Group B, Division 2 care and treatment occupancy, provides sufficiency of compliance with Sentence 3.6.3.1.(2) of the 1997 Building Code at Montfort Hospital, 713 Montreal Street, City of Ottawa, Ontario.

APPLICANT	Kathy O'Neill Montfort Hospital Ottawa, ON
RESPONDENT	Arlene Gregoire Chief Building Official City of Ottawa
PANEL	Tony Chow, Chair Marina Huissoon Susan Friedrich
PLACE	Toronto, Ontario
DATE OF HEARING	March 20, 2008
DATE OF RULING	March 20, 2008
APPEARANCES	David Syrett Leber/Rubes Inc., Toronto, ON **Agent for the Applicant** Norm Allen Program Manager City of Nepean **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an order to comply under the *Building Code Act*, *1992*, and is constructing two new additions to an existing Group B, Division 2 major occupancy building at Montfort Hospital, 713 Montreal Street, City of Ottawa, Ontario.

The existing hospital is 6 storeys in building height, which includes the original 6 storey building built in 1953, a 4 storey link built in 1988 and a 4 storey addition built in 1992. The existing hospital is an acute-care facility. The new hospital expansion currently under construction includes a 4 storey addition on the west side and a 6 storey addition on the east side of the existing building. The existing hospital and new additions are equipped with a sprinkler system.

The construction in dispute involves three rooftop enclosures located on the roof of the 4 storey west addition. The approximate floor areas of the rooftop enclosures are 430 m², 250 m², and 360 m². The rooftop enclosures contain air-handling units and fans to service parts of the building.

The dispute revolves around the required fire separation for the vertical service spaces. Sentence 3.6.3.1.(2) of the 1997 Building Code requires vertical service spaces that do not extend through the roof of a building to be enclosed at the top with construction having a fire resistance rating not less than that required for the vertical service space walls. The vertical service spaces, air duct shafts in this case, associated with the air handling units in the rooftop enclosures are separated from each storey of the building by a 1 hour fire separation; however, they are not fire separated from the rooftop enclosure. The Respondent's position is that vertical fire separations for the vertical service spaces are required to terminate at the underside of the roof of the rooftop enclosure. The Applicant's position is that the vertical fire separations for the vertical service spaces are required to terminate at the underside of the 4th storey roof, which supports the rooftop enclosure.

2. Provisions of the Building Code in Dispute

3.6.3.1. Fire Separations for Vertical Service Spaces

(2) A *vertical service space* that does not extend through the roof of a *building* shall be enclosed at the top with construction having a *fire-resistance rating* not less than that required for the *vertical service space* walls.

3. Applicant's Position

The Agent for the Applicant submitted that the subject rooftop enclosures contain only air handling units that include fan equipment but do not contain any fuel fired appliances, storage rooms or any normally occupied spaces. He further submitted that the vertical service spaces associated with the air handling units were separated from each storey of the building by a 1 hour fire separation but were not fire separated from the rooftop enclosures. The Agent stated that it was the Applicant's position that the vertical fire separations for the vertical service spaces are required to terminate at the underside of the 4th storey roof and not the underside of the roof of the rooftop enclosure as per their understanding of Sentence 3.6.3.1.(2) of the Building Code and therefore, were in compliance with the Code.

The Agent advised that both the architectural drawings and mechanical drawings submitted for the building permit application indicated that the vertical fire separations would terminate at the underside of the 4th storey of the building.

He further explained that the floor assemblies in the addition would be constructed as fire separations have a fire-resistance rating not less than 2 hours, as required by Sentence 3.2.2.38.(2) of the Building Code; therefore, the vertical service spaces would also be separated from all other portions of each adjacent storey by a fire separation having a fire resistance rating of not less than 1 hour in accordance with Sentence 3.6.3.1.(1) of the Code. The Agent maintained that the purpose of the vertical fire separations for the vertical service spaces was to maintain the continuity of the required fire separation between storeys of the building. He argued that since the Code does not require a fire separation between the three rooftop enclosures and the remainder of the building, there was no requirement to separate the vertical service spaces from the roof top enclosures.

The Agent submitted that it was the Applicant's view that the vertical service spaces extend to the underside of the roof of the building as required by Sentence 3.6.3.1.(2) of the Code. The Agent argued that the Code does not require a rooftop enclosure for elevator machinery, a stairway, or a service room used for no other purpose than for service to the building to be considered a storey in calculating building height, as such, a rooftop enclosure should not be considered a storey for the application of Sentences 3.6.3.1.(1) and (2). As a result, he reasoned, the three rooftop enclosures are considered to be above the roof of the building.

The Agent submitted that as per Sentences 3.2.2.14.(1) and (2), a rooftop enclosure for a service room is required to be constructed in accordance with the construction type required by Subsection 3.2.2. but it is not required to have a fire resistance rating if the enclosure is not more than one storey high. Accordingly, he argued, the three rooftop enclosures were of non-combustible construction as they were not more than one storey high. The Agent contended that as per Sentence 3.6.2.2.(2) of the Code, a fire separation was not required between the rooftop appliance and the building it serves.

Further, the Agent maintained that according to Sentence 3.6.2.2.(5) of the Code, a service room was not required to be separated from the building if it contained a limited quantity of service equipment and the service equipment did not constitute a fire hazard. On this basis, the Agent argued that the Code does not require a fire separation between the subject rooftop enclosures and the remainder of the 4 storey addition and therefore, sufficiently complied with the Code.

In addition, the Agent advised that a reinforced 800 mm concrete structural roof slab would be provided for the subject addition, which not only supported the rooftop enclosures but would also inherently have a fire-resistance rating of 1 to 2 hours.

In response to questions, the Agent advised that the elevator shaft and the elevator machine room located next to one of the rooftop enclosures was separated from the subject enclosure by a 2 hour fire separation.

4. Respondent's Position

The Designate for the Respondent submitted that Sentence 3.6.3.1.(2) of the Building Code is very clear in this matter as it states that a vertical service space that does not extend through the roof of a building shall be enclosed at the top with construction having a fire-resistance rating not less than that required for the vertical service space walls, in this case, a 1 hour fire separation.

The Designate argued that the top of the three vertical service space shafts do not terminate at the underside of the roof, which in this case it is considered to be the roof of the rooftop enclosures and further, the vertical service spaces are not enclosed at the top with construction having a fire-resistance rating not less than that required of the vertical service space walls. Therefore, it is the Designee's position that the proposal to terminate the fire separation for the vertical service space at the underside of the 4th storey roof does not comply with Sentence 3.6.3.1.(2) of the Building Code.

The Designate agreed that Sentence 3.2.1.1.(1) of the Building Code states that the rooftop enclosures were not to be considered as a storey in calculation building height but maintained that this Sentence only applied to Section 3.2. Building Fire Safety of the Building Code and not Section 3.6. as was the case at hand.

The Designate maintained that the municipality's opinion was that the vertical service spaces must extend to the roof of the building, which in this case is the roof of the rooftop enclosures; otherwise the vertical service spaces must be enclosed at the top with a vertical fire separation of 1 hour. Further, the Designate submitted that this approach was in keeping with other recently constructed buildings in the municipality.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposal to terminate the fire separation for the vertical service spaces at the underside of the fourth storey roof, in an addition to a Group B, Division 2 care and treatment occupancy, provides sufficiency of compliance with Sentence 3.6.3.1.(2) of the 1997 Building Code at Montfort Hospital, 713 Montreal Street City of Ottawa, Ontario.

6. Reasons

i) As per Sentence 3.2.1.1. (1) of the Building Code, a roof-top enclosure provided for elevator machinery, a stairway or a *service room* used for no purpose other than for service to the *building*, shall not be considered as a *storey* in calculating the *building height*. Therefore, the proposed addition is considered to be 4 storeys in height in that part of the building. The rooftop enclosures are not considered in the calculation of building height.

ii) The roof assembly in this building is not required to have a fire resistance rating as per Article 3.2.2.38 of the Building Code, under which this building is classified.

iii) Further, the three roof top enclosures, containing only air handling equipment, are not required to be fire separated from the rest of the building as per Sentence 3.2.2.14. (2) of the Building Code which states, **"**A roof-top enclosure for elevator machinery or for a *service room*, not more than one *storey* high, is not required to have a *fire-resistance rating".* Therefore, it is the Commission's opinion that the vertical service spaces, used only for the building's air handling equipment, which will be separated from each storey of the building by a 1 hour fire separation, are not required to be fire separated from the rooftop enclosures.

iv) Sentence 3.6.3.1.(2) of the Code states, "A *vertical service space* that does not extend through the roof of a *building* shall be enclosed at the top with construction having a *fire-resistance rating* not less than that required for the *vertical service space* walls." Since the vertical service spaces could terminate at the roof

assembly if the rooftop enclosures did not exist, it is the Commission's opinion that the same level of performance will be achieved for the above stated reasons.

v) The elevator shaft and the elevator machine room located next to one of the roof top enclosures is separated from the subject enclosure by a 2 hour fire separation.

Dated at Toronto this **20th** day in the month of **March** in the year **2008** for application number **2007-52.**

Tony Chow, Chair

Marina Huissoon

Susan Friedrich

Ontario

Ruling No. 08-06-1180
Application No. B- 2007-49

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 7.4.8.2., Sentences 7.3.3.11.(1), 7.3.6.1.(1), 7.3.7.1.(1), 7.4.7.1.(2), Clause 7.5.7.1.(1)(a), Subclauses 7.5.5.3.(1)(a)(ii), 7.5.7.1.(1)(d)(iii), and Table 7.4.10.3.A.of the Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Fathy El-Kasir, Homeowner, for the resolution of a dispute with Robert Waldron, Chief Building Official, City of Peterborough, to determine whether the plumbing system which has been installed to provide service to an additional washroom on the second floor of a two storey, Group C, residential dwelling provides sufficiency of compliance with Article 7.4.8.2., Sentences 7.3.3.11.(1), 7.3.6.1.(1), 7.3.7.1.(1), 7.4.7.1.(2), Clause 7.5.7.1.(1)(a), Subclauses 7.5.5.3.(1)(a)(ii), 7.5.7.1.(1)(d)(iii), and Table 7.4.10.3.A. of the Building Code at 79 Facendi Drive, City of Peterborough, Ontario.

APPLICANT	Fathy El-Kasir Homeowner Peterborough, ON
RESPONDENT	Robert Waldron Chief Building Official City of Peterborough
PANEL	Tony Chow, Chair Gerry Egberts Prabhakar Mahant
PLACE	Toronto, Ontario
DATE OF HEARING	February 7, 2008
DATE OF RULING	February 7, 2008
APPEARANCES	Mr. Fathy El-Kasir and Mrs. El-Kasir Homeowner Peterborough, ON **The Applicants** Mr. Robert Waldron Chief Building Official City of Peterborough **The Respondent**

Dean Findlay
Deputy Chief Building Official

And

George Drumm
Senior Plumbing Inspector
City of Peterborough
Designates for the Respondent

RULING

1. Particulars of Dispute

The subject building is an existing two storey, Group C, residential dwelling of combustible construction. The dispute involves the construction of a drainage, waste and vent system, installed to provide service to a new washroom in the second storey addition of a residential dwelling at 79 Facendi Drive, City of Peterborough, Ontario.

The Applicant received an Order to Comply under the *Building Code Act*, *1992*, to remedy certain alleged code contraventions. The Applicant also received an Order Not to Cover or Enclose the drainage, waste and venting system installed within the second storey addition of the subject building, and its connections to the existing drainage, waste and venting system in the home.

The dispute initially brought before the Commission pertained to whether the as-installed drainage piping for the new additional washroom, which discharges into the existing plumbing system, provides sufficiency of compliance with Clause 7.5.7.1.(1)(a), Subclause 7.5.5.3.(1)(a)(ii), Table 7.4.10.3.A, Sentence 7.4.8.2.(1), Sentences 7.3.3.11.(1), 7.3.6.1.(1), 7.3.7.1.(1), 7.4.7.1.(2), and Clause 7.5.7.1.(1)(d)(iii) of the 1997 Ontario Building Code.

At the outset of the hearing, the Applicant requested that the matter be reviewed under the 2006 Building Code for sufficiency of compliance. As the Respondent had no objections to this request, the Commission reviewed the matter under the 2006 Building Code.

It was also at the hearing that Clause 7.5.7.1.(1)(a), Subclause 7.5.5.3.(1)(a)(ii) and Table 7.4.10.3.A of the 1997 Building Code were withdrawn from the dispute upon mutual agreement between the Applicant and Respondent.

2. Provisions of the Building Code in Dispute

The following is a list of the 1997 Code provisions in dispute along with the corresponding 2006 Code references, under which the Commission reviewed the matter.

1997 Building Code

7.4.8.2. Length of Fixture Outlet Pipe

(1) Except as provided in Sentence 7.4.5.1.(3) the *developed length* of every *fixture outlet pipe* shall not exceed 900 mm (2 ft 11 in).

2006 Building Code

7.4.8.2. Length of Fixture Outlet Pipes

(1) Except for *fixture outlet pipes* installed in conformance with Sentence 7.4.5.1.(3), the *developed length* of every *fixture outlet pipe* shall not exceed 1 200 mm.

1997 Building Code

7.3.3.11. Copper Tube

(1) Types M and DWV copper tube shall not be bent.

2006 Building Code

7.3.3.10. Copper Tube

(1) Types M and DWV copper tube shall not be bent.

1997 Building Code

7.3.6.1. Tests and Inspection of Drainage or Venting Systems

(1) Except in the case of an external *leader*, after a section of *drainage system* or a *venting system* has been roughed in, and before any *fixture* is installed or piping is covered, a water or an air test shall be conducted.

2006 Building Code

7.3.6.1. Tests and Inspection of Drainage or Venting Systems

(1) Except in the case of an external *leader*, after a section of *drainage system* or a *venting system* has been roughed in, and before any *fixture* is installed or piping is covered, a water or an air test shall be conducted.

1997 Building Code

7.3.7.1. Application of Tests

(1) After a section of a *potable water system* has been completed, and before it is placed in operation, a water test or an air test shall be conducted.

2006 Building Code

7.3.7.1. Application of Tests

(1) After a section of a *potable water system* has been completed, and before it is placed in operation, a water test or an air test shall be conducted.

1997 Building Code

7.4.7.1. Cleanouts for Drainage Systems

(2) A *cleanout* fitting shall be provided on the upstream side and directly over every running *trap*.

2006 Building Code

7.4.7.1. Cleanouts for Drainage Systems

(2) A *cleanout* fitting shall be provided on the upstream side and directly over every running *trap*.

1997 Building Code

7.5.7.1. Sizes for Wet Vents

(1) Where 2 or 3 *fixtures* are installed in a *plumbing system*, any one of the *fixtures* may be *wet vented* by one or both of the other *fixtures* if

d) at least one of the *wet venting fixtures* is drained through a vertical *continuous waste and vent* and the *waste pipe* serving as a *wet vent* is at least,

(iii) 2 in. *size*, where the *wet vented trap* is of 3, 4 or 6

2006 Building Code

7.5.8.1. Hydraulic Loads Draining to Wet Vents

(1) The hydraulic load that drains to a *wet vent* shall conform to Table 7.5.8.1.

(2) When determining the *size* of a *wet vent*, the hydraulic load from the most downstream *fixture* or symmetrically connected *fixtures* shall not be included.

Table 7.5.8.1.
Maximum Permitted Hydraulic Loads Drained to a Wet Vent

Forming Part of Articles 7.5.2.1. and 7.5.8.1.

Column 1	2	3
Size of *Wet Vent*, in.	Maximum Hydraulic Load, *Fixture Units*	
	Not Serving Water Closets	Serving Not More Than Two Water Closets
		Fixtures Other Than Water Closets
1 ½	2	N/A
2	4	3
3	12	8
4	36	14
5	N/A	18
6	N/A	23

3. Applicant's Position

At the outset of the hearing, the Applicant requested that the matter be reviewed under the 2006 Building Code for sufficiency of compliance. As the Respondent had no objections to this request, the Commission agreed to review the matter under the applicable provisions of the 2006 Building Code.

The Applicant submitted that the Type M copper pipe used in the installation of the subject plumbing system was slightly bent using a half inch spring bending tool to accommodate a 2x8 floor joist. The Applicant maintained that that the pipe was bent using an appropriate tool causing no damage to the piping and that there had not been any leaks or breakage of the pipe since its installation. Further, the Applicant stated that it was common trade practice to slightly bend a Type M copper pipe whenever cold and hot water pipes are located in the same vertical plane. He argued that provided the pipes are not damaged this installation should be acceptable.

The Applicant also submitted that the developed length of the washing machine's discharge piping, which is approximately 1400 mm, is only a minor deviation from the Code's required 1200 mm length and should therefore, be considered sufficient. The Applicant argued that using a 1.5 inch ABS wet vent to serve one water closet is more than adequate, as the Code allows a 2 inch wet vent to be used to serve two water closets. The Applicant also argued that a cleanout for the laundry tub's running trap is not necessary in this particular case, as a snake can easily be inserted through the pipe by removing the washing machine hose and therefore, it is possible to clean out the trap if required.

In support of his arguments, the Applicant submitted that he had tested the plumbing system. The Applicant explained that the bathtub and vanity sink were filled with water simultaneously

and then discharged simultaneously while at the same time the lavatory was flushed. The Applicant claimed that no air bubbles were visible in either the vanity or bathtub during this test and further, the volume of water inside the P-Trap of the vanity was 250 ml before and after the lavatory was flushed. The Applicant maintained that this test confirmed that there was no siphon effect, and therefore, proved not only that the plumbing system was adequately vented but that it was also in perfect working order and did not present a threat to the public's health or safety. However, the Applicant admitted that the plumbing inspector was not present at the time of testing. During the course of the hearing, both the Respondent and Applicant agreed to repeat the tests in accordance to the requirements of the Code.

In summary, the Applicant stated that he recognized that there were deviations from the Code in the installed plumbing system but that they were very minor in nature and should therefore be allowed on the grounds that they do not present a threat to the public's health and/or safety. Further, the Applicant requested the Commission to make a ruling based on whether the Applicant's plumbing installation indeed posed a threat to public health and safety, to which the presiding members at the hearing clarified that the Commission was a tribunal in which only sufficiency of compliance with the technical requirements of the Building Code could be addressed.

4. Respondent's Position

The Respondent submitted that upon inspection of the subject plumbing system multiple Code contraventions became apparent. As a result, the Applicant was given a time frame and directed to correct the deficiencies. He was directed to contact the municipality for a re-inspection once the deficiencies had been corrected. He was further advised that if these matters were not addressed, an Order under the *Building Code* Act would be issued.

An Order to Comply was issued on March 13, 2007 listing nine Code contraventions related to the installed plumbing system. Upon responding to questions and based on the most recent inspection of the plumbing system to date, the Respondent agreed that six of the listed Code contraventions were still in dispute, namely: Sentence 7.4.8.2.(1), Sentences 7.3.3.11.(1), 7.3.6.1.(1), 7.3.7.1.(1), 7.4.7.1.(2), and Clause 7.5.7.1.(1)(d)(iii) of the 1997 Ontario Building Code.

The Respondent submitted that under the requirements of the Code, the installed water closet wet vent must be 2 inches and therefore, the Applicant's installation of a1 ½ inch wet vent was not sufficient. The Respondent stated that upon inspection it was observed that the length of the laundry tub fixture outlet pipe was in excess of 1400 mm, which was over the required maximum length of 1200 mm as prescribed by the Code and therefore, in contravention of the Code. In addition, the Respondent maintained that the Type M copper pipe had been bent in several places, and as this type of pipe was very thin, it could easily be damaged by bending it. It was his opinion that the Code is implicit that this type of piping not be bent because of how easily it can be damaged.

Further, the Respondent stated that an inspection of the as-installed laundry tub running trap revealed that it did not have a cleanout as required by the Code, therefore, a proper drain and vent was required. In addition, the Respondent stated that he could not support the tests or the results the Applicant had described, as an inspector had not been present to witness the tests. Therefore, it was his opinion that neither the drainage or venting piping nor the potable water system had been tested in accordance with the Building Code.

5. Commission Ruling No. 08-06-1180, (B-2007-49)

It is the Decision of the Building Code Commission that the plumbing system which has been installed to provide service to an additional washroom on the second floor of a two storey, Group C, residential dwelling does not provide sufficiency of compliance with Clause 7.5.7.1.(1)(a), Subclause 7.5.5.3.(1)(a)(ii), Table 7.4.10.3.A, Sentence 7.4.8.2.(1), Sentences 7.3.3.11.(1), 7.3.6.1.(1), 7.3.7.1.(1), 7.4.7.1.(2), and Clause 7.5.7.1.(1)(d)(iii),. of the 1997 Building Code at 79 Facendi Drive, City of Peterborough, Ontario.

6. Reasons

i) It is the Commission's opinion that the 1997 Ontario Building Code is applicable to this application. However, at the outset of the hearing the Applicant requested that the matter be reviewed under the 2006 Ontario Building Code for sufficiency of compliance. As the Respondent had no objections to this request, the Commission reviewed the matter under the 2006 Building Code.

ii) At the hearing, Clause 7.5.7.1.(1)(a) and Subclause 7.5.5.3.(1)(a)(ii) and Table 7.4.10.3.A of the 1997 Building Code were withdrawn from the dispute upon mutual agreement between the Applicant and Respondent. Therefore, the Commission will not rule on these items.

iii) Sentence 7.4.8.2.(1) of the 1997 Code stipulates that the developed length of every fixture outlet pipe shall not exceed 900 mm. In the 2006 Building Code, Sentence 7.4.8.2.(1) states that the developed length of every fixture outlet pipe shall not exceed 1 200 mm. The developed length of the already built laundry tub fixture outlet pipe is 1 400 mm, which exceeds the maximum length permitted by the Code.

iv) Sentence 7.3.3.11.(1) of the 1997 Code referenced as Sentence 7.3.3.10.(1) in the 2006 Building Code, both identically state, "Types M and DWV copper tube shall not be bent". The Code is explicit that type M copper tube shall not be bent. The Commission was advised that the Type M copper tube had been "slightly bent" in the subject plumbing system installation. Therefore, the Commission has determined that sufficiency of compliance with the requirement of the 1997 or the 2006 Building Code has not been achieved.

v) Sentence 7.3.6.1.(1) of the 1997 Code, referenced as Sentence 7.3.6.1.(1) in the 2006 Code, both equivalently state, "Except in the case of an external *leader*, after a section of *drainage system* or a *venting system* has been roughed in, and before any *fixture* is installed or piping is covered, a water or an air test shall be conducted." The Commission was advised that the building inspector was not present during the time when the tests were conducted and therefore, could not verify the results. The Commission was further advised that the tests would be redone in accordance with the Code requirements. Therefore, the Commission will not rule on this item.

vi) Sentence 7.3.7.1.(1) of the 1997 Code and referenced as Sentence 7.3.7.1.(1) in the 2006 Code, both require that a water test or an air test be conducted after a section of a *potable water system* has been completed, and before it is placed in operation. The Commission was advised that the building

inspector was not present during the time when the tests were conducted and therefore, could not verify the results. The Commission was further advised that the tests would be redone in accordance with the Code requirements. Therefore, the Commission will not rule on this item.

vii) Sentence 7.4.7.1.(2) in the 1997 Code and Sentence 7.4.7.1.(2) in the 2006 Code both state, “A *cleanout* fitting shall be provided on the upstream side and directly over every running *trap*”. The subject plumbing system does not include a cleanout trap directly over every running trap. The Code is specific in this requirement; the Commission finds that sufficiency of compliance with the Code is not achieved.

viii) Subclause 7.5.7.1.(1)(d)(iii) of the 1997 Code, referenced as Sentence 7.5.8.1.(1) in the 2006 Code, states that the hydraulic load that drains to a *wet vent* shall conform to Table 7.5.8.1. By virtue of Table 7.5.8.1., the minimum size of a wet vent serving not more than two water closets, and up to three fixtures other than water closets, is 2 inches in size. The subject plumbing system having a 1 ½ inch wet vent installed to serve one fixture, which is a water closet, does not meet the minimum requirement of the Code.

ix) There were no acceptable compensating measures offered by the Applicant, therefore, it remains that the subject installed plumbing system does not provide sufficiency of compliance with the Ontario Building Code, which is a minimum set of construction requirements.

Dated at Toronto this **7th** day in the month of **February** in the year **2008** for application number **2007-49.**

Tony Chow, Chair

Gerry Egberts

Prabhakar Mahant

Ontario

Ruling No. 08-07-1181
Application No. B-2007-50

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 3.2.9.4.(2) of the Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by Al Cook, Greater Essex County District School Board for the resolution of a dispute with William Jean, A/Chief Building Official, City of Windsor, to determine whether the proposal to remove the fire hoses from the fire hose cabinets of a Group A, Division 2 assembly occupancy provides sufficiency of compliance with Sentence 3.2.9.4.(2) of the Building Code at 1800 Liberty Street and 1601 Norfolk Street, City of Windsor, Ontario.

APPLICANT	Al Cook Greater Essex County District School Board Windsor, ON
RESPONDENT	William Jean A/Chief Building Official City of Windsor
PANEL	Tony Chow, Chair Gerry Egberts Prabhakar Mahant
PLACE	Toronto, Ontario
DATE OF HEARING	February 7, 2008
DATE OF RULING	February 7, 2008
APPEARANCES	Al Cook Greater Essex County District School board Windsor, ON **The Applicant** David Hine Hine Reichard Tomlin Inc. Markham, ON **Agent for the Applicant** William Jean A/Chief Building Official City of Windsor **The Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, to remove the existing 38 mm diameter fire hose stations of the standpipe systems in two schools in the City of Windsor, Massey Secondary School at 1800 Liberty Street and Glenwood Public School at 1601 Norfolk Avenue.

The subject buildings are Group A, Division 2 Major Occupancies, Massey Secondary School is three storeys in building height and approximately 1500 m² in building area. Glenwood Public School is two storeys in building height and approximately 2000 m² in building area. Both schools are of combustible and non-combustible construction, have a standpipe and hose system with fire hose cabinets, a fire alarm, but neither school is sprinklered.

The construction in dispute involves whether the proposal to remove the fire hoses from the fire hose cabinets of a Group A, Division 2 assembly occupancy provides sufficiency of compliance with Sentence 3.2.9.4.(2) of the Building Code at 1800 Liberty Street and 1601 Norfolk Street, City of Windsor, Ontario**.**

2. Provisions of the Building Code in Dispute

3.2.9.4. Hose Stations

(2) Each hose station shall be equipped with a hose rack filled with not more than 30 m of 38 mm diam fire hose and the hose rack and fire hose shall be,

(a) *listed*, or

(b) approved by the Factory Mutual Research Corporation.

3. Applicant's Position

The Agent for the Applicant submitted a report titled, "Evaluation of the Effectiveness of Fire Hoses in Assembly Buildings", which was prepared for the Greater Essex District School Board by Hine Reichard Tomlin Inc. for the Commission's review.

The Agent submitted that the School Board had partnered with the University of Windsor to fund the report, as both organizations had similar goals with respect to this matter and similar building occupancies. The report was intended to be used as the rationale to support the removal of fire hoses from fire hose cabinets in assembly occupancy buildings.

The Agent argued that fire hose cabinets without a fire hose, provide the equivalent level of safety, to that of a fire hose cabinet with a fire hose. In fact, he argued that buildings without fire hoses would perform better than buildings equipped with fire hoses. The Agent explained that the presence of a fire hose in a fire hose cabinet suggests that it is there to be used. However, in the schools, the role of teachers and administrators is to get the students out of the building, quickly and safely. The Agent stated that the Board of Education does not train its staff or occupants in the operation or use of fire hoses and further the Fire Safety Plans in place for these buildings do not advise occupants to use the fire hoses. The Agent maintained that most importantly, the use of a fire hose by an untrained individual could increase the potential for fire growth and injury to the user and/or other occupants of the building.

Further, the Agent argued that Fire Department Personnel do not rely on the fire hoses within

the fire hose cabinets as they are considered untrustworthy. Rather, the Agent explained that firefighters carry their own lengths of reliable fire hose, as these hoses are tested regularly and maintained properly. Further, the Commission was told that firefighters disconnect the fire hose supplied in a fire hose cabinet and then connect their own more reliable hose to the hose valve. The Agent argued that the common practice of having firefighters disconnect the existing fire hose and then connecting their own hose to the hose valve adds valuable time in an emergency situation and delays firefighting efforts.

In addition, the Agent declared that in older buildings the standard for the standpipe system vary significantly, therefore the water supply from a standpipe system in a small building is very unpredictable and thus responding firefighters often use the hose lines directly from the fire trucks. The Agent further claimed that firefighters often use charged hoses from the fire trucks in small buildings, up to three storeys in building height, as the location of the fire hose cabinets is less predictable and so rather than wasting valuable time, firefighters will opt to use the charged hoses from their trucks.

Further, the Agent presented that other Canadian Building Codes such as: the 2006 International Building Code, 1997 Alberta Building Code, and the 1998 British Columbia Building Code, require the design and installation of a standpipe system to be in conformance with NFPA 14, and although they require hose connections to be provided, they do not specifically require the need to provide a fire hose. Therefore, the proposal to eliminate fire hoses from fire hose cabinets is consistent with other Canadian legislation.

In summary, the Agent maintained that, for the following reasons, the removal of the fire hoses from the fire cabinets achieves a performance level equal to compliance with Section 3.2.5. of the Ontario Building Code:

- The time it takes to disconnect an existing hose increases the time for fire suppression
- Having a fire hose in the cabinet is a temptation for an untrained occupant to use the hose, which could cause injury
- In responding to fires in small buildings, firefighters generally use hoses connected to the pumper trucks
- The location of fire hose cabinets in older buildings is unpredictable

Therefore, the Agent concluded that buildings without fire hoses will perform better than a building equipped with a fire hose.

4. Respondent’s Position

The Respondent submitted that on September 25, 2007, a building permit application along with a report from Hine Reichard Tomlin Inc. were received by the City of Windsor’s Building Department for the removal of the fire hoses from the fire hose cabinets at 1800 Liberty Street and 1601 Norfolk Street. On October 4, 2007, the building department refused the permit applications.

The Respondent explained that the reason for denying the building permit was that Sentence 3.2.9.4.(2) of the Ontario Building Code was explicit, in that it states that each hose station shall be equipped with a hose rack filled with not more than 30 m of 38 mm diameter hose.

The Respondent indicated that in theory, the municipality concurred with the report by Hine Reichard Tomlin, however, the code provision is explicit and therefore, the buildings must be equipped with hoses.

5. Commission Ruling

It is the Decision of the Building Code Commission the proposal to remove the fire hoses from the fire hose cabinets of a Group A, Division 2 assembly occupancy does not provide sufficiency of compliance with Sentence 3.2.9.4.(2) of the Building Code at 1800 Liberty Street and 1601 Norfolk Street, City of Windsor, Ontario.

6. Reasons

i) By virtue of the provision outlined in Article 3.2.9.1. of the Building Code, the subject buildings are required to be equipped with a standpipe system.

ii) Sentence 3.2.9.4.(2) of the Ontario Building Code requires that each hose station be equipped with a hose rack filled with not more than 30 m of 38 mm diameter fire hose. In the opinion of the Commission, this provision of the Code is explicit.

iii) The subject buildings are not sprinklered.

iv) There were no compensating measures offered that were adequate to provide sufficiency of compliance with the Code.

Dated at Toronto this **7th** day in the month of **February** in the year **2008** for application number **2007-50.**

Tony Chow, Chair

Gerry Egberts

Prabhakar Mahant

Ontario

Ruling No. 08-05-1179
Application No. B-2007-48

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 6.2.1.4. of the Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Krista Wells, Homeowner for a resolution of a dispute with Philip Gerrard, Chief Building Official, Municipality of North Grenville, to determine whether the as-installed ground source heat pump/geothermal system provides sufficiency of compliance with Article 6.2.1.4. of the Building Code at 14 Kimberley Road, Township of North Grenville, Ontario.

APPLICANT	Krista Wells Homeowner Kemptville, ON
RESPONDENT	Philip Gerrard Chief Building Official Municipality of North Grenville
PANEL	Tony Chow, Chair Gerry Egberts Prabhakar Mahant
PLACE	Toronto, Ontario
DATE OF HEARING	February 7, 2008
DATE OF RULING	February 7, 2008
APPEARANCES	Krista Wells Homeowner Kemptville, ON **The Applicant** Philip Gerrard Chief Building Official Municipality of North Grenville **The Respondent** Randy Wilkinson Building Inspector Municipality of North Grenville **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Comply under the *Building Code Act*, *1992*, which required the Applicant to submit a permit fee, a hygrogeological report from an engineer, and further requested that a building permit be obtained at 14 Kimberley Road, Township of North Grenville, Ontario.

The subject building is a Group C major occupancy, single detached home that is approximately 232 m² in size.

The construction in dispute relates to whether the installation of a horizontal, closed-loop, ground source heat pump/hydro geothermal system, used to replace an existing oil furnace, provides sufficiency of compliance with Article 6.2.1.5.(3) of the 1997 Building Code at 14 Kimberley Road, Township of North Grenville, Ontario.

2. Provisions of the Building Code in Dispute

6.2.1.5. Installation Standards

(3) The design and installation of ground and water source heat pumps shall conform to CAN/CSA-C445-M, "Design and Installation of Earth Energy Heat Pump Systems for Residential and Other Small Buildings" where

(a) the maximum standard rated output is 35 kW (119,000 Btu/h) per *dwelling unit* for residential applications, or

(b) small *building* applications serve a heated floor space area not greater than 1 400 m² (15,100 ft^2).

3. Applicant's Position

The Applicant stated that in June of 2006, the TSSA conducted an inspection of the oil furnace at her home. As a result of this inspection, the existing oil furnace was deemed an "Immediate Hazard". She subsequently decided not to replace the oil furnace and instead opted to install a new horizontal, closed-loop, ground source heat pump.

The Applicant claimed that upon inquiring on how to apply for the permit, she was advised by the Designate for the Respondent that an application form along with the installer's information, the type of heating unit, heating fluid type, sketch of pipe layout, pipe specifications from the manufacturer, the Material Safety Data Sheet regarding the heating fluid, and information on the lot and septic system would be required. The Applicant maintained that in fact all of the above required information was submitted to the municipality on July 20, 2006 when the application for a permit was made but admitted that the permit fee had not been submitted with the application.

According to the Applicant, on July 26, 2006, during a visit to the municipal office, she was verbally informed that the permit was denied because the heating fluid proposed, known as Ancool 100 was "toxic" based on the Material Safety Data Sheet she had submitted. The Applicant argued that according to the Ministry of Environment, Ancool 100, also known as denatured alcohol, was a standard industry fluid currently used for ground source heat pumps. Further, in response to questioning, the Applicant maintained that the installed heating system was not only running very well and efficiently but also advised the Commission that her system was equipped with a pressurized closed loop system that would automatically shut down, should the system encounter a leak or break in the line.

The Applicant explained that during a subsequent discussion with the installer of the heating system, she was advised that water could be used as an alternative heat transfer fluid in the heating system. Further, she was told that the Designate for the Respondent had agreed to this solution. However, upon visiting the municipal office on July 31, 2006, assuming that her proposal had been accepted, the Applicant was advised that the proposal did not meet the Ontario Building Code. The Applicant claimed that after various attempts to contact the Respondent, in order to receive a more detailed explanation as to why the permit had been denied, the Respondent informed the Applicant that the proposal did not meet the requirements of the CAN/CSA –C448.2-02 Standard.

The Applicant argued that the contractor had met the requirements for installation under the CAN/CSA –C448.2-02 Standard and further, since the closed-loop ground source heating system did not involve ground water, well extraction and had no contamination issues, the requirement for a hydrogeological report was not necessary.

The Applicant explained that after various conversations with different professionals, reaching no resolution with the municipality, and with winter approaching, she consented to the installation of the closed-loop ground source heat pump. As a result, on November 16, 2006, the Applicant received an Order to Comply for installing the ground source heat pump without a permit. The Order required the Applicant to provide a hydrogeological engineer report, to remit permit fees, and to obtain a building permit.

The Applicant informed the Commission that in an effort to comply with the Order she solicited the assistance of W.B. Beatty and Associates Ltd. to obtain a hydrogeological report, which outlined the geology and groundwater resources in the Kemptville area, and then submitted the report to the municipality on December 19, 2006.

The Applicant claimed that without being informed, the municipality had contracted Gorrell Resource Investigations to conduct a peer review of the hydrogeological report and then later invoiced her for the cost of having the peer review completed. The Applicant further submitted that on January 15, 2007, she received a letter from the Designate to the Respondent stating that a construction permit could not be issued for the following reasons: non payment of fees, the hydrogeology report was found to be unsatisfactory and not in accordance with the CAN/CSA –C448.2-02 Standard, a performance deposit agreement needed to be completed, and a site plan, drawn to scale, showing the location of all proposed piping and equipment relative to the lot lines, the septic system and the utilities was required.

The Applicant submitted that in a further attempt to acquire a satisfactory hydrogeology report, she contacted the Ministry of Environment but was later informed that no record of a hydrogeology report could be found for her subdivision. The Applicant also informed the Commission that on March 15, 2007 she received a copy of a hydrogeological report of North Grenville Township, which was provided to her legal representative by the Designate of the Respondent. The applicant questioned the need for her to obtain this report if the municipality already had a copy. However, being advised that the required hydrogeological report should contain specific information outlined in the CAN/CSA Standard, the Applicant explained that in a continued effort to obtain a hydrogeological report that would satisfy the municipality, she contacted an environmental engineer in the Kemptville area. The engineer informed the Applicant that he was not aware of what relevant information would be needed in such a report that had not already been provided in the original report.

In summary the Applicant explained that she was seeking a resolution to obtain a building permit for the as-installed ground source heat pump and maintained that despite her many attempts to satisfy the municipality that the installed ground source heat pump complies with the Code, her permit has been denied.

4. Respondent's Position

The Respondent submitted that the Applicant applied for a building permit to install a ground source heat pump system, in accordance with Article 6.2.1.4. of the 2006 Ontario Building Code on July 20, 2006. Therefore, the design and installation of the system would need to comply with the CAN/CSA –C448.2-02 Standard.

As a result, the Applicant was later advised that a hydrogeological report was required in support of the permit application. Further, the proposed heating fluid, Ancool 100, for the ground source heat pump contained hazardous ingredients and the proposal of the use of water as a heat transfer fluid would be insufficient as water would freeze.

The Respondent confirmed that a hydrogeological report was submitted by the Applicant and peer reviewed by the municipality's consultant, who indicated that the report did not satisfy the requirements of the CAN/CSA –C448.2-02 Standard and further that the report contained errors. It was on this basis that the permit was not issued. The Respondent also explained that the municipality had the authority to apply costs for the peer review of the hydrogeologcal report under Municipal Bylaw 14-98., Section 3.11, which states, "The Chief Building Official may require and Engineer's report or soils investigation be conducted at the applicant's expense for any stage of construction, renovation or demolition". Further, the Commission heard that the Applicant was advised by letter on Feb 5, 2007 that the engineer's hydrogeological report should address specific sections of the CAN/CSA Standard and these specific requirements were outlined in the municipality's letter.

The Respondent also informed the Commission that the "rough sketch" submitted with the permit application on July 20, 2006 was not considered to be a required site plan due to its lack of detailed information such as; being drawn to scale, location of all piping and equipment relative to lot lines, septic system, neighbouring wells and utilities. Further, the Respondent argued that contrary to the Applicant's submission, the installer had failed to provide a site plan to the municipality. The Respondent contended that the Applicant's application for a permit was still considered incomplete as the Applicant had also failed to pay a $500.00 Performance Deposit, as originally communicated to the Applicant in the letter of January 15, 2007.

The Respondent stated that as the Applicant's contractor proceeded to install the ground source heat pump without a permit or inspections, the municipality then laid charges against both the Applicant and the contractor. The Commission heard that the contractor plead guilty to the charges and stipulated to a fine and that charges against the Applicant were still pending.

In response to questions, the Respondent conceded to have the Commission review the dispute under the 1997 Building Code. Therefore, by virtue of Sentence 6.2.1.5.(3), CAN/CSA-C445-M would be the applicable Standard. However, the Respondent maintained that the safety of the system was the major concern, in particular the heat transfer fluid known as Ancool 100, contained hazardous ingredients and if there were to be a break in the heating system's line, it could potentially contaminate the ground water and the Applicant's well.

In summary, the Respondent stated that under the *Building Code Act*, he could not issue a permit after an installation has taken place, as he would need to verify that the installation complied with the Code. Further the Respondent stated that to inspect the system to determine if it was in compliance with the Code, the system would need to be partially uncovered at the Applicant's expense.

5. Commission Ruling

It is the Decision of the Building Code Commission that the as-installed ground source heat pump/geothermal system provides sufficiency of compliance with Article 6.2.1.5.(3) of the 1997 Ontario Building Code at 14 Kimberley Road, Township of North Grenville, Ontario, on condition that:

a) A suitably qualified person shall inspect and verify that the as-installed components of the closed-loop ground source heat pump/hydro geothermal system conform to the National Standard of Canada, CAN/SCA-C445-M standard. The Chief Building Official shall be notified and may be present to witness this inspection.

b) A suitably qualified person shall verify that the closed-loop ground source heat pump/hydro geothermal has been designed and installed in accordance with Article 6.2.1.1, *Good Engineering Practice*, of the 1997 Ontario Building Code. The Chief Building Official shall be notified and may be present to witness this inspection.

6. Reasons

i) It is the opinion of the Commission that since the application for the permit was made on July 20, 2006, the 1997 Ontario Building Code is applicable to the installation of the subject system. As a result, the 1997 Building Code references CAN/SCA-C445-M Standard, *"Design and Installation of Earth Energy Heat Pump Systems for Residential and Other Small Buildings"* as the applicable standard for the design and installation of the ground source heat pump.

ii) In the opinion of the Commission, neither the Building Code nor the CAN/CSA C445-M Standard specifically requires that a hydrogeological report be provided. However, the Commission was advised that the Applicant did provide a hydrogeological report as requested by the municipality.

Dated at Toronto this **7th** day in the month of **February** in the year **2008** for application number **2007-48.**

Tony Chow, Chair

Gerry Egberts

Prabhakar Mahant

Ontario

Ruling No. 08-03-1177
Application No. 2007-26

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Articles 3.4.4.1., 3.4.4.3., Sentences 3.3.1.3.(8), 3.3.1.3.(9), 3.3.1.4.(1), 3.3.1.14.(1) and 3.3.4.4.(7) as amended, (the Building Code).

AND IN THE MATTER OF an application Scott Sutherland, Maple Crossing Developments Inc., for the resolution of a dispute with Terry Kay, Chief Building Official, Town of Milton, to determine whether the omission of the fire rated shutter between the tenant balconies and the exterior passageway in the design of the exit and egress system provides sufficiency of compliance with Articles 3.4.4.1., 3.4.4.3., Sentences 3.3.1.3.(8), 3.3.1.3.(9), 3.3.1.4.(1), 3.3.1.14.(1) and 3.3.4.4.(7) of the Building Code at Buildings 1, 2, 3, 4, and 5, Maple Crossing Condominiums, 1479 Maple Avenue, Town of Milton, Ontario

APPLICANT	Scott Sutherland Maple Crossing Developments Inc., Burlington, ON
RESPONDENT	Terry Kay Chief Building Official Town of Milton
PANEL	Tony Chow, Chair Alison Orr Mina Tesseris
PLACE	Toronto, Ontario
DATE OF HEARING	January 24, 2008
DATE OF RULING	January 24, 2008
APPEARANCES	Randy Brown Randal Brown Architect Ltd., Toronto, ON **Agent for the Applicant** John Branant Plans Examiner Town of Milton **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received a permit under the *Building Code Act*, *1992*, to construct 5 separate, 4 storey, Group C residential buildings at 1, 2, 3, 4, and 5, Maple Crossing Condominiums, 1479 Maple Avenue, Town of Milton, Ontario.

The subject buildings are of combustible construction and are equipped with a sprinkler system, a standpipe and hose system and a fire alarm system. Each building has between 48 and 56 residential units with a total of 264 units. All suites within each building are provided with a single exit doorway opening onto a public corridor.

Sentence 3.3.1.3.(8) of the 1997 Building Code requires each suite in a floor area that serves more than one suite to have an exterior exit doorway or a doorway into a public corridor or in to an exterior passageway. Sentence 3.3.1.3.(9) requires that where a doorway referred to in Sentence (8) opens onto a public corridor or exterior passageway, it shall be possible to go in opposite directions to each of two separate exits. “Exit”, as defined by the Code, is that part of a means of egress that leads from the floor area it serves to an exterior open space protected from fire exposure from the building and having access to an open public thoroughfare.

The construction in dispute involves the exit and egress system provided for each suite in each building. More specifically, the dispute involves whether a fire rated shutter between the tenant balconies and the exterior passageway in the design of the exit and egress system is required. Each suite, in the subject buildings, has a doorway that exits onto a public corridor; the corridor is served by a fully enclosed exit stair in one direction. In the opposite direction, the public corridor ends at an unrated exterior passageway. Evacuees must travel through the unrated exterior passageway to reach an enclosed exit stair. The exterior passageway is adjacent to tenant occupied balconies and is separated from the balconies by an open guard. The Applicant wishes the Commission to consider the exterior passageways as one of the two required means of egress from the dwelling units. The Respondent is of the opinion that as the exterior passageways include tenant occupied space containing combustible materials and content, and as they are not separated from the rest of the building as required by Sentence 3.4.4.1.(1), the proposed exterior passageways, without a fire rated shutter between the tenant balconies and the exterior passageway, can not be considered equivalent to a sprinklered and fire separated internal public corridor.

2. Provisions of the Building Code in Dispute

3.3.1.3. Means of Egress

(8) Except as permitted by Sentences 3.3.4.4.(6) and (7), each suite in a floor area that contains more than one suite shall have
- (a) an exterior exit doorway, or
- (b) a doorway
  - (i) into a public corridor, or
  - (ii) to an exterior passageway.

(9) Except as permitted by this Section and by Sentence 3.4.2.1.(2), at the point where a doorway referred to in Sentence (8) opens onto a public corridor or exterior passageway, it shall be possible to go in opposite directions to each of 2 separate exits.

3.3.1.4. Public Corridor Separations

(1) Except as otherwise required by this Part or permitted by Sentences (2) to (7), a *public corridor* shall be separated from the remainder of the *building* by a *fire separation* having a *fire-resistance rating* not less than 1 h. (See Appendix A.)

(2) The *fire-resistance rating* of a *fire separation* between a *public corridor* and the remainder of a *floor area* is permitted to be less than 1 h but not less than 45 min provided the *fire-resistance rating* required by Subsection 3.2.2. is permitted to be less than 1 h for

(a) the floor assembly above the *floor area*, or
(b) the floor assembly below the *floor area*, if there is no floor assembly above.

(3) If a *floor area* is *sprinklered*, no *fire-resistance rating* is required for a *fire separation* between a *public*

3.3.1.14. Exterior Passageways

(1) An exterior passageway leading to a required *exit* shall conform to the requirements of Section 3.4. for exterior *exit* passageways.

3.4.4.1. Fire-Resistance Rating of Exit Separations

(1) Except as permitted by Sentences (2), (4), 3.3.5.4.(3), 3.4.4.2.(2) and 3.4.4.3.(1), every exit shall be separated from the remainder of the building by a fire separation having a fire-resistance rating not less than that required by Subsection 3.2.2., but not less than 45 min, for
(a) the floor assembly above the storey, or
(b) the floor assembly below the storey, if there is no floor assembly above.

(2) The fire-resistance rating of the fire separation referred to in Sentence (1) need not be more than 2 h.

(3) If an exit stair in an assembly hall or theatre serves more than one balcony level, the exit stair shall be separated from the remainder of the building in conformance with Sentence(1).

(4) The path of exit travel may lead from an exit door or exit enclosure through open air parking that is located below a roof or floor assembly that is part of the building served by the exit door or exit enclosure where
(a) the portion of the path of exit travel that leads through the open air parking is not more than 9 m (29 ft 6 in) in length measured from the exit door to a point at ground level at the perimeter of the building,
(b) measures are taken to prevent vehicles intended to park in spaces adjacent to the path of exit travel from encroaching on the path of exit travel, and
(c) an alternate means of egress not leading through the open air parking is available from the interior side of the door opening onto the path of exit travel through the open air parking area.

3.4.4.3. Exterior Passageway Exceptions

(1) The requirements of Sentences 3.4.4.1.(1) and 3.2.3.12.(1) and (3) do not apply to an exterior *exit* passageway provided
(a) not less than 50% of the exterior side is open to the outdoors, and

(b) an *exit* stair is provided at each end of the passageway.

3.4.4.4. Integrity of Exits

(1) A *fire separation* that separates an *exit* from the remainder of the *building* shall have no openings except for

(a) standpipe and sprinkler piping,
(b) electrical wires and cables, totally enclosed *noncombustible* raceways and *noncombustible* piping that serve only the *exit*,
(c) openings required by the provisions of Subsection 3.2.6.,
(d) *exit* doorways, and
(e) wired glass and glass block permitted by Article 3.1.8.14.

(2) *Exits* within scissors stairs and other contiguous *exit* stairways shall be separated from each other by a smoke-tight *fire separation* having a *fire-resistance rating* not less than that required for the floor assembly through which they pass.

(3) *Fire separations* separating contiguous stairs described in Sentence (2) shall not be pierced by doorways, ductwork, piping or any other openings that affect the continuity of the separation.

(4) A fuel-fired *appliance* shall not be installed in an *exit*.

(5) An *exit* shall not be used as a *plenum* for a heating, ventilating or air-conditioning system.

(6) An *exit* shall be designed for no purpose other than for exiting, except that an *exit* is permitted also to be designed to serve as an access to a *floor area*.

(7) A *service room* shall not open directly into an *exit*.

(8) Storage rooms, washrooms, toilet rooms, laundry rooms and similar ancillary rooms shall not open directly into an *exit*.

(9) *Service spaces* referred to in Sentence 3.2.1.1.(7) shall not open directly into an *exit*.

(10) In elementary and secondary schools, an *exit* shall be designed so that it does not serve as an access from one portion of a *floor area* to another portion of the same *floor area*.

3. Applicant's Position

The Agent submitted that the design concept for the exiting of occupants from each suite of the subject buildings is in dispute. The Agent explained that each suite accesses a public corridor that in one direction leads to an enclosed exit stair and in the other direction leads to an exterior passageway, which is more than 50% open to the exterior on one side and which then leads to an enclosed exit stair.

The Agent contended that the Building Code equates an open exterior passageway that is 50% open to the exterior, not fire separated from the remainder of the floor area, and has an exit stair at each end, to a 1 h fire separated public corridor. In other words, the Agent maintained that under the Building Code, an exterior passageway which opens to the exterior with an exit stair at each end and which is not fire separated from the remainder of the floor as per Article 3.4.4.3., can be viewed as equivalent to a 1 h fire separated corridor.

The Agent argued that Sentence 3.3.4.4.(7) of the Code permits a dwelling unit which has a second and separate means of egress to have one means of egress from the dwelling unit passing through an exterior balcony or exterior passageway served by a single exit stairway.

The Agent advised that individual balconies or terraces are not intended to be considered a means of egress from the suites to the open passageway. He submitted that Sentence 3.3.1.5.(1) of the Code requires a minimum of two egress doorways from a room or suite however, this Sentence provides dwelling units with an exception to this requirement. Therefore, he stated that only one egress doorway is required for dwelling units. The means of egress being proposed is via the egress door of the suite, which in one direction leads to an enclosed public corridor and then to an enclosed exit stair and in the other direction leads to the enclosed public corridor, which then leads to an exterior passageway, and finally to an enclosed exit stair.

The Agent stated that Sentence 3.3.1.8.(8) of the Building Code requires suites in a floor area containing more than one suite (such as this building) to have either an exterior exit doorway or a doorway which opens into a public corridor or to an exterior passageway and that Sentence 3.3.1.14.(1) states that an exterior passageway leading to a required exit shall conform to the requirements of Section 3.4 for exterior exit passageways. The Agent submitted that although the term “exterior passageway” is not defined in the Code, Article 1.1.3.2. defines a “public corridor” as a corridor that provides access to more than one suite. Therefore, as the corridors at Maple Crossing provide access to more than one suit, it is his belief that they are considered public corridors. Further, the Agent advised that it was his opinion that a portion of a public corridor can contain an exterior passageway.

The Agent maintained that the subject exit design meets the requirements of Sentence 3.3.1.3.(9) of the Code which requires that where a doorway opens onto a public corridor or exterior passageway, it shall be possible for an individual to travel in opposite directions to each of two separate exits. The Agent argued that the subject egress design from the suites at Maple Crossing allows an individual to travel in opposite directions to two separate exits i.e. one can enter the public corridor and from there can travel to an enclosed exit stair or one can choose to travel via the exterior passageway, which leads to an enclosed exit stair.

The Agent submitted that the enclosed portions of the public corridor have a fire separation with a fire resistance rating of 1 hour with the doors having a 20 minute fire protection rating and self-closing devices in accordance with Sentence 3.3.1.4.(1) of the Building Code. The Agent acknowledged that although the exterior passageway is 50% open to the exterior, the passageway does not have an exit stair at each end as required by Article 3.4.4.3. of the Code. However, in the Agent’s opinion, the subject design, which includes an enclosed exit stair in the centre of the exterior passageway and access to an enclosed 1 hour fire rated public corridor leading to an enclosed exit stair, meets the intent of the Code for this portion of the means of egress. In fact, he argued, the subject design exceeds the Code requirement as the Code permits open stairs at either end of an exterior exit passageway, which could cause the stairs to be potentially exposed to fire from adjacent storeys or suites. Further, the Agent argued that smoke containment considerations are mitigated by the provision of a portion of the corridor being exterior and a portion being interior since the exterior passageway is open to the outside, smoke accumulation would be reduced.

The Agent acknowledged the Respondent’s concerns regarding the potential for combustibles and/or ignition sources to accumulate on the balconies adjacent to the exterior passageway, which could then potentially present a hazard to the occupants using the exterior passageway for exiting during a fire. To address this concern, the omission of the fire rated shutter between the tenant balconies and the exterior passageway in the design of the exit and egress system the Agent offered the following compensating measures:

- The condominium documents would prohibit any sources of ignition including barbeques and type of vegetation from being present on balconies
- The balconies would be protected by automatic sprinklers, and
- Ventilation ductwork from the suite would be extended to the exterior of the passageway using fire rated ductwork

In summary, the Agent maintained that the subject egress system can be considered a combination of a public corridor and exterior passageway with those portions of the enclosed public corridor meeting the requirements of a 1hour fire separated public corridor and those portions exterior being considered equivalent to an exterior exit passageway. In both cases, he maintained, the enclosed exit stairs are provided within the required travel distances such that no dead end conditions exist and an occupant is always provided with the choice of two directions of travel. For all these reasons, the Agent contended the proposed design without a fire rated shutter between the tenant balconies and the exterior passageway, provides sufficiency of compliance with the egress and exiting requirements of the Building Code.

4. Respondent's Position

The Respondent submitted that the Building Code requires a public corridor to be served by exit stairs at each end and that Clause 3.3.1.3.(8)(b) of the Code requires one to choose either a doorway into a public corridor or a doorway into an exterior passageway (emphasis added) not a combination of both.

The Respondent advised that each suite at Maple Crossing has a door opening into a public corridor; however, the corridor is only served by a fully enclosed exit stair in one direction and not in the opposite direction as required by the Code. The Respondent argued that in the other direction, the public corridor ends at an unrated exterior passageway where evacuees must travel thorough the unrated exterior passageway then through an elevator lobby to reach an enclosed exit stair. Further the Respondent argued that the exterior passageway is shared by tenant occupied patios that could contain combustibles and ignition sources, which is a concern as the tenant patios are only separated from the exterior passageway by an open railing. The Respondent maintained that as the exterior passageways are not separated from the remainder of the building as required by Sentence 3.4.4.1.(1) of the Building Code, they cannot be considered equivalent to the sprinklered and fire separated internal public corridor. The Respondent indicated that he believed the level of life safety for an occupant would be reduced by the proposed egress system. The Respondent stated that is was his view the proposed egress design requires the occupants to pass through an area of relatively greater hazard before they could reach the exit.

The Respondent advised that to resolve this issue, it was the Municipality's position that the exterior passageways be sprinklered and fire rated shutters be installed from the floor to the underside of the slab immediately adjacent to the open guards/handrails so that if activated in a fire event, the shutters would fire separate the suites and the patios from the exterior passageways. In combination with sprinklering the passageway and ducting the HVAC and vent/exhaust system systems in fire separated duct shafts, it was the Respondent's opinion that these measures would provide sufficiency of compliance with the Code. Further, the Respondent maintained that the applicant had agreed to these measures and that the building permits were issued on this basis.

In summary, the Respondent submitted that it was his position that the proposed exterior passageways, which include tenant occupied space that would likely contain combustible materials, if not separated from the rest of the building as required by Sentence 3.4.4.1.(1) of the Code, could not be considered equivalent to a sprinklered and fire separated internal public

corridor.

5. Commission Ruling

It is the Decision of the Building Code Commission that the omission of the fire rated shutter between the tenant balconies and the exterior passageway in the design of the exit and egress system provides sufficiency of compliance with Articles 3.4.4.1., 3.4.4.3., Sentences 3.3.1.3.(8), 3.3.1.3.(9), 3.3.1.4.(1), 3.3.1.14.(1) and 3.3.4.4.(7) of the Building Code at Buildings 1, 2, 3, 4, and 5, Maple Crossing Condominiums, 1479 Maple Avenue, Town of Milton, Ontario on condition that:

a) Automatic sprinklers shall be installed on the side wall of each balcony, in the recycling rooms, garbage rooms and resident storage rooms as well as, the exterior passageway in accordance with the standards set out by the National Fire Protection Association (NFPA) 13R-1999, *Standards for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height,*

b) The recycling rooms, garbage rooms and the resident storage rooms shall be equipped with doors, having self-closing devices and latches, which provide a minimum fire protection rating of 45 minutes. Further, the recycling rooms, garbage rooms and the resident storage rooms will be separated by a minimum 1 hour fire separation,

c) The bathroom exhaust fans, which discharge onto the exterior passageway, shall be equipped with a listed fire damper,

d) Exit signs shall be placed throughout the public corridor and exterior passageway in the proposed exit and egress system, clearly showing the direction of exit travel, and

e) The doors at each end of each exterior passageway shall have a minimum fire protection rating of 45 minutes.

6. Reasons

i) In the opinion of the Commission, the omission of the fire rated shutter with the implementation of the above-mentioned compensating measures, provides sufficiency of compliance with the Building Code requirements.

ii) The enclosed exit stairs are within the required travel distances such that no dead end conditions exist and occupants are always provided with the choice of two directions of travel.

iii) The exterior passageway, as it is more than 50% open, would reduce smoke accumulation in the means of egress.

Dated at Toronto this **24th** day in the month of **January** in the year **2008** for application number **2007-26.**

Tony Chow, Chair

Alison Orr

Mina Tesseris

Ruling No. 08-02-1176
Application No. S-2007-44

Ontario

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentences 8.2.1.6.(1), 8.2.1.6.(2), Tables 8.2.1.6.A. and 8.2.1.6.B. of the Regulation 403, as amended, (the Building Code).

AND IN THE MATTER OF an application by Jason Kalbe, Kalbe Contracting for the resolution of a dispute with Robin Allen, Chief Building Official, North Bay Mattawa Conservation Authority, to determine whether the proposed construction of a Class 4 sewage system providing a clearance distance of 12 m from the leaching bed to the lake provides sufficiency of compliance with Division B, Sentences 8.2.1.6.(1), 8.2.1.6.(2), Tables 8.2.1.6.A. and 8.2.1.6.B. of the Building Code at 811-117 Water Access on McMichael Island in Salmon Lake Lot 27, Concession 3, Seguin Township, Ontario.

APPLICANT	Jason Kalbe Kalbe Contracting Parry Sound, ON
RESPONDENT	Robin Allen Chief Building Official North Bay Mattawa Conservation Authority
PANEL	Judy Beauchamp, Vice-Chair
PLACE	Toronto, Ontario
DATE OF HEARING	January 17, 2008
DATE OF RULING	January 17, 2008
APPEARANCES	Jason Kalbe Kalbe Contracting Parry Sound, ON **The Applicant** Robin Allen Chief Building Official North Bay Mattawa Conservation Authority **The Respondent** Rick Brier Building Inspector North Bay Mattawa Conservation Authority **The Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a building permit under the *Building Code Act*, *1992*, and is proposing to construct a Class 4 sewage system having a clearance distance of 12 m from the leaching bed to the lake. The issue is whether the clearance distance from the leaching bed provides sufficiency of compliance with Division B, Sentences 8.2.1.6.(1) and 8.2.1.6.(2), Tables 8.2.1.6.A. and 8.2.1.6.B. of the Building Code at 811-117 Water Access on McMichael Island in Salmon Lake Lot 27, Concession 3, Seguin Township Ontario.

The subject island is currently vacant, with no existing structures, buildings or sewage disposal systems. However, the installation of the Class 4 sewage system at issue is proposed to serve a seasonal one bedroom cottage, 99 m² in size, and containing 7.5 fixture units with a total daily design sewage flow of 750 L/day.

The construction in dispute involves the proposed installation of a Class 4 sewage system meeting the minimum clearances as set out in the Ontario Building Code, Division B Tables 8.2.1.6.A and 8.2.1.6.B. Specifically, the dispute revolves around the clearance distance of the distribution pipe to the lake. Article 8.2.1.6. of the Code sets out the minimum horizontal clearance distances for all components of a sewage system. By virtue of Table 8.2.1.6.B., a minimum clearance distance of 15 m from the distribution piping to the lake must be provided, By virtue of Table 8.2.1.6.A, a minimum clearance distance of 15 m from the treatment unit to the lake must be provided. Therefore, the issue in dispute is whether a reduced clearance distance of 12 m to the lake provides sufficiency of compliance with Sentences 8.2.1.6.(1), 8.2.1.6.(2), Tables 8.2.1.6.A. and 8.2.1.6.B. of the Building Code.

2. Provisions of the Building Code in Dispute

8.2.1.6. Clearances for a Class 4 or 5 Sewage System

(1) Except as provided in Sentences 8.2.1.4.(1) and (2), a *treatment unit* shall not be located closer than the minimum horizontal distances as set out in Table 8.2.1.6.A.

Table 8.2.1.6.A.
Minimum Clearances for Treatment Units

Forming Part of Sentence 8.2.1.6.(1)

Column 1	Column 2
Object	Minimum Clearance, m
Structure	1.5
Well	15
Lake	15
Pond	15
Reservoir	15
River	15
Spring	15
Stream	15
Property Line	3

(2) Except as provided in Sentences 8.2.1.4.(1) and (2), a *distribution pipe* shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B. and these distances shall be increased when required by Sentence 8.7.4.2.(9).

Table 8.2.1.6.B.
Minimum Clearances for Distribution Piping

Forming Part of Sentence 8.2.1.6.(2)

Column 1	Column 2
Object	Minimum Clearance, m
Structure	5
Well with a watertight casing to a depth of 6 m	15
Any other well	30
Lake	15
Pond	15
Reservoir	15
River	15
Spring not used as a source of *potable* water	15
Stream	15
Property Line	3

(3) Except as provided in Sentences 8.2.1.4.(1) and (2), a *holding tank* shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.C.

3. Applicant's Position

The Applicant submitted in his application, referenced in Exhibit 1, that he would like the Building Code Commission to consider an alternative solution to achieve sufficiency of compliance with the Building Code's requirements. Included in the application submitted to the Commission, was a proposal to increase the leaching bed area, as illustrated in a previous application and approval to the Ministry of Environment, Certificate of Approval #FOLY-43-86. The Certificate of Approval from the Ministry explained what requirements would need to be met in order to install the Class 4 sewage system on the island. These requirements included: transporting sand fill to the island to create a level mantle that would stretch across the entire island north to south and extending at least 15.24 meters from the easterly end of the property. Further, the mantle would have to be .30 m to .60 m thick, and on top of the mantle, a filter system would be constructed having a dimension of 2.13 m wide by 7.92 m long from east to west.

The Applicant stated that he proposed to install an imported mantle and use the existing excavated soils to create a lined channel that would direct the effluent to the mantle area. He also proposed to pump out the treatment unit once a year by means of a contract. He suggested that this, in his opinion, would minimize the risk of malfunction of the sewage system and would limit the probability that the public would be exposed to an unacceptable risk of illness due to unsanitary conditions caused by exposure to human or domestic waste.

In addition, the Applicant also offered to add a tertiary treatment unit and to import clay soil as compensating measures in order to provide sufficiency of compliance with the Code requirements. The Applicant, upon being questioned, also confirmed that a 12 m clearance distance to the lake could be maintained on the property in three directions.

In summary, the Applicant stated that his main objective was to protect the environment, while providing a safe and efficient sewage system for his client and asked the Commission to consider the above alternatives and compensating measures for the proposed installation of the Class 4 sewage system.

4. Respondent's Position

The Respondent submitted that the Applicant's proposal to install the Class 4 sewage system does not meet the minimum clearance distance requirements from the leaching bed to the lake as required by Sentences 8.2.1.6.(1) and 8.2.1.6.(2), Tables 8.2.1.6.A. and 8.2.1.6.B. for a Class 4 sewage system.

The Respondent maintained that the Code requires a minimum clearance distance from the leaching bed to the lake was 15 m and that the Applicant's proposed design fell short by 3 m and with the fluctuating water levels and the island width, the minimum clearance of 15 m wouldn't be achieved. In addition, the Respondent's written submission to the Commission claimed that the applicant had not provided any acceptable alternative solutions.

In summary, the Respondent's advised that his main concern was that the minimum setback as required by Sentences 8.2.1.6.(1) and 8.2.1.6.(2), Tables 8.2.1.6.A. and 8.2.1.6.B. for a Class 4 sewage system could not be met.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed construction of a Class 4 sewage system providing a clearance distance of 12 m from the leaching bed to the lake provides sufficiency of compliance with Division B, Sentences 8.2.1.6.(1), 8.2.1.6.(2), Tables 8.2.1.6.A. and 8.2.1.6.B. of the Building Code at 811-117 Water Access on McMichael Island in Salmon Lake Lot 27, Concession 3, Seguin Township, Ontario, on condition that:

a) The leaching bed system as identified in the application to the Building Code Commission dated August 20, 2007 and on the owner's copy of the Certificate of Approval, # FOLY-43-66, issued by the Ministry of the Environment, August 13, 1996 be used in conjunction with a tertiary treatment system as proposed by the Applicant.

b) A minimum mantle length of 12 m shall be maintained in three directions from the filter bed. Specifically, the mantle shall provide a minimum12 m clearance from the filter bed to the lake in the north, east and south directions, as shown in the application to the Building Code Commission and as referenced above.

6. Reasons

i) In the opinion of the Commission, the combination of the tertiary treatment unit, as proposed by the Applicant, and the raised leaching bed, will allow for the enhanced treatment of effluent and will sufficiently comply with the intent of the Code.

ii) The nature of the underlying soil and design of the mantle, which will maintain a minimum clearance distance of 12 m from the leaching bed to the lake in the north, east and south directions, combined with the use of a tertiary treatment unit, provides sufficiency of compliance with Division B, Sentences 8.2.1.6.(1), 8.2.1.6.(2) and meets the intent of the Building Code.

Ontario

Ruling No. 09-22-1234
Application No. 2009-27

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 9.8.8.6. of Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by Douglas Ghent, for the resolution of a dispute with Doug Robertson, Chief Building Official, Township of Wilmot, to determine whether the as-installed guard, serving the flight of steps from the main floor to the lower level of a residential dwelling provides sufficiency of compliance with Article 9.8.8.6. of Division B of the Building Code at 2312 Snyder's Road East, RR # 2, Petersburg, Ontario.

APPLICANT	Douglas Ghent Homeowner Petersberg, ON
RESPONDENT	Doug Robertson Chief Building Official Township of Wilmot
PANEL	Prabhakar Mahant, Chair-Designate Mina Tesseris Doug Clancey
PLACE	Toronto, Ontario
DATE OF HEARING	October 22, 2009
DATE OF RULING	October 22, 2009
APPEARANCES	Douglas Ghent Homeowner Petersberg, ON **The Applicant** Doug Robertson Chief Building Official Township of Wilmot **The Respondent**

RULING

1. Particulars of Dispute

The subject building is a one storey, single dwelling unit. The construction in dispute involves the construction of a new flight of steps between the basement and the first storey of the subject building. At dispute is whether the as constructed guard complies with Article 9.8.8.6. of Division B of the Building Code.

The subject guard in dispute is comprised of metal spindles with decorative projections located on every other spindle. The guard has been installed with an alternating pattern where the first spindle has one decorative metal projection located at a height of 444.5 mm above the floor surface, the second spindle has no projections and the third spindle has two metal projections, one located at a height of 228.5 mm and the second located at a height of 648 mm above the floor surface.

Article 9.8.8.6. requires guards to be designed so that no member, attachment or opening will facilitate climbing. The Appendix note to Article 9.8.8.6. of the Code prohibits guards that are constructed with horizontal or near-horizontal members between balusters such that a ladder effect is achieved.

The issue at dispute is whether the as-installed guard sufficiently complies with Article 9.8.8.6. of the Code.

2. Provisions of the Building Code in Dispute

9.8.8.6. Design to Prevent Climbing

(1) *Guards* required by Article 9.8.8.1., except those in *industrial occupancies* and where it can be shown that the location and size of openings do not represent a hazard, shall be designed so that no member, attachment or opening will facilitate climbing.

(2) *Guards* shall be deemed to comply with Sentence (1) where any elements protruding from the vertical and located within the area between 140 mm and 900 mm above the floor or walking surface protected by the *guard*,

(a) are located more than 450 mm horizontally and vertically from each other,

(b) provide not more than 15 mm horizontal offset,

(c) do not provide a toe-space more than 45 mm horizontally and 20 mm vertically, or

(d) present more than a 1-in-2 slope on the offset

3. Applicant's Position

The Applicant submitted that he believed the design of the as-installed guards sufficiently complied with Sentence 9.8.8.6.(1) of the Code in that they were designed so that they were not easy to climb. The Applicant described the guards using accompanying photographs. He explained that the decorative attachment, at its widest point, protrudes 25.4 mm horizontally from either side of the spindle. As a result, the Applicant argued that the decorative attachments on the guards are not large enough for a child to gain a foothold and therefore, do not make the guards easy to climb. Further, the Applicant argued that when the size of the attachments and location of the attachments are taken into consideration, a ladder effect is not created.

The Applicant also argued that he sufficiently complied with Sentence 9.8.8.6.(2) of the Building Code. He explained that there was a dispute with the Chief Building Official as to whether all the conditions as outlined in Clauses a), b), c) and d) of Sentence 9.8.8.6.(2) were required to be met in order to comply with this Sentence of the Code. The Applicant stated that it was his position that as long as the design of the guards met one of the conditions outlined in Clause a), b), c) or d) of Sentence 9.8.8.6.(2), the guards should be deemed to comply with the Building Code. In his case, the Applicant argued, the guards met condition (d) because the decorative attachments on the spindles present more than a 1-in-2 slope on the offset and therefore by complying with this condition, the guards comply with the Code. In support of his position, the applicant submitted a copy of the National Research Council of Canada's interpretation of the 2005 National Building Code provision 9.8.8.6., in which they interpreted the "or" between Clauses (c) and (d) of Sentence 9.8.8.6.(2) to be read between all four clauses of the Sentence.

In summary, the Applicant reiterated that it is his belief the as-installed guards do not facilitate climbing and therefore, comply with the Code.

4. Respondent's Position

The Respondent submitted that in his opinion, the subject guards are climbable and do not comply Article 9.8.8.6. He argued that Sentence 9.8.8.6.(1) of this article indicates all guards must be designed so that no member or attachment or opening will facilitate climbing. He further stated, it was his opinion the guards do facilitate climbing as they do not meet all the requirements outlined in Sentence 9.8.8.6.(2). As all the clauses in Sentence 2 are separated by an "or" instead of an "and", the Respondent stated it was his belief that all the clauses outlined in Sentence (2) must be complied with in order to accomplish Sentence (1). The Respondent argued that conformance with only one of the Clauses in Sentence (2), would result in the design of guards that are easily climbable and further, would contradict Sentence (1).

The Respondent submitted that the projections on the spindles located as they are, could in fact create a ladder effect if a child were to step on the 228.5 mm projection first, then climb to the 444.5 mm projection and finally, step up to the projection at 648 mm. He described the projections to be nearly flat and therefore, could easily create a toe hold for climbing. The Respondent further submitted that the Municipality disagreed with National Research Council's interpretation of the 9.8.8.6. of the 2005 National Building Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the as-installed guard, serving the flight of steps from the main floor to the lower level of a residential dwelling provides sufficiency of compliance with Article 9.8.8.6. of the 2006 Building Code at 2312 Snyder's Road East, RR # 2, Petersburg, Ontario.

6. Reasons

i) Sentence 9.8.8.6.(1) of Division B of the Building Code states, "Guards required by Article 9.8.8.1., except those in industrial occupancies and where it can be shown that the location and size of openings do not represent a hazard, shall be designed so that no member, attachment or opening will facilitate climbing."
It is the Commission's opinion that the as-installed guard does not facilitate climbing and therefore, provides sufficiency of compliance with Article 9.8.8.6. of the Code.

ii) The Commission is in agreement with the National Research Council of Canada's interpretation of the National Building Code 2005 provision 9.8.8.6., in which they interpret the "or" between Clauses (c) and (d) of Sentence 9.8.8.6.(2) to be read between all four clauses in this Sentence.

iii) Sentence 9.8.8.6.(2) of Division B of the Building Code states, "Guards shall be deemed to comply with Sentence (1) where any elements protruding from the vertical and located within the area between 140 mm and 900 mm above the floor or walking surface protected by the guard,

(a) are located more than 450 mm horizontally and vertically from each other,

(b) provide not more than 15 mm horizontal offset,

(c) do not provide a toe-space more than 45 mm horizontally and 20 mm vertically, or

(d) present more than a 1-in-2 slope on the offset.

The as-installed guard meets the requirements set out in Clauses 9.8.8.6.(2)(b) and (d). Therefore, since at least one of the requirements set out in Sentence 9.8.8.6.(2) is met, the guard provides sufficiency of compliance with Article 9.8.8.6.

Dated at Toronto this **22nd** day in the month of **October** in the year **2009** for application number **B-2009-27.**

Prabhakar Mahant, Chair-Designate

Mina Tesseris

Doug Clancey

Ontario

Ruling No. 09-20-1232
Application No. B2009-23

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF with Article 3.1.8.18. of the Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by Cyril Tahtadjian, Cyncorp Developments Inc., for the resolution of a dispute with Agris Robeznieks, Chief Building Official, City of Mississauga, to determine whether the alternative solution, where glazed openings, provided with combustible frames that are proposed to be protected by window sprinklers, provides sufficiency of compliance with Article 3.1.8.18. of Division B of the 2006 Building Code at Streetsville Professional Building, 100 Queen Street South, City of Mississauga, Ontario.

APPLICANT	Cyril Tahtadjian Cyncorp Developments Inc., Mississauga, ON
RESPONDENT	Agris Robeznieks Chief Building Official City of Mississauga
PANEL	Tony Chow, Chair Marina Huissoon Ed Link
PLACE	Toronto, Ontario
DATE OF HEARING	September 17, 2009
DATE OF RULING	September 17, 2009
APPEARANCES	Cyril Tahtadjian Cyncorp Developments Inc., Mississauga, ON **The Applicant** Frank Spagnolo Manager Plan Examination Serivces City of Mississauga **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, to construct a professional office building at 100 Queen Street South, City of Mississauga, Ontario.
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The subject building is a two storey, Group D occupancy building with a building area of 360 m². The building is of non-combustible construction and is equipped with a fire alarm and sprinkler system.

The construction in dispute involves the alternative solution proposed by the Applicant to protect two glazed openings, one on each storey of the south building face of the subject building, which backs onto a public park. The Code provides options for calculating the maximum aggregate area of unprotected openings in an exposing building face. In this case, the maximum percentage of unprotected openings permitted by the Code has been exceeded. As a result, the Applicant is proposing an alternative solution which involves protecting the glazed openings using a sprinkler protected window system. Article 3.1.18.18. of the Code permits the use of sprinkler protected glazed wall assemblies provided the wall assembly is constructed in accordance with the requirements of the ULC/ORD C263.1 “Sprinkler-Protected Window Systems”. The sprinkler protected window system being proposed will use combustible framing comprised of fiberglass and resin. However, the manufacturer’s requirements for the proposed window sprinkler specify that the window frames be made of non-combustible material. Therefore, the issue at dispute is whether the alternative solution offered complies with the Code.

2. Provisions of the Building Code in Dispute

3.1.8.18. Sprinkler Protected Glazed Wall Assembly

(1) A sprinkler protected glazed wall assembly shall be constructed in accordance with the requirements of ULC/ORD C263.1, “Sprinkler-Protected Windows Systems”.

(2) A sprinkler protected glazed wall assembly shall not be installed in,

(a) fire separations requiring a fire resistance rating of more than 2 hours,

(b) a firewall,

(c) a high hazard industrial occupancy, or

(d) any part of an exit serving,

(i) a floor area subject to the requirements of Subsection 3.2.6.,

(ii) a care and detention occupancy, or

(iii) a residential occupancy.

(3) Where a sprinkler protected glazed wall assembly is installed in an exit fire separation permitted in Sentence (2),

(a) the building shall be sprinklered, and

(b) the exits protected with the sprinkler protected glazed wall assemblies shall not comprise more than one half of the required number of exits from any floor *area*.

3. Applicant's Position

The Applicant submitted that he intended to build a commercial building containing professional offices that would aesthetically conform to the historical appearance of the streetscape. He explained that the building was situated on a corner which faced two municipal streets and that the south building face was adjacent to a municipally owned park. He advised it would likely always be maintained as a park and that there was no expectation of buildings being constructed in the park in future.

The Applicant went on to describe that the south building face was located approximately 1.5 to 1.7 m to the property line (limiting distance) and that one window on each floor of the south building face was beyond the maximum area for unprotected openings permitted by the Building Code. As a result, an alternative solution to protect the glazed openings using a sprinkler protected window system was offered. However, the sprinkler protected window system being proposed would use combustible framing comprised of fiberglass and resin, although the manufacture's requirements for the proposed window sprinkler would require the window frames to be made of non-combustible material.

The Applicant explained that due to the visual exposure of the south building face from the dedicated park and the importance of the heritage nature of the neighbourhood, fibreglass window frames were proposed, instead of fire rated steel frames. Steel frames, the Applicant reasoned, besides being inconsistent with the streetscape's aesthetic appeal, would also be thermally inefficient.

In support of his arguments, the Applicant submitted a third party Professional Engineer's stamped letter, which supported the alternative solution regarding the installation of the fibreglass frames for the subject sprinklered window systems. The professional opinion of the engineer was that the alternative solution would provide the required exposure protection of the south building face and further that sufficiency of compliance with the Building Code requirements would be achieved.

Further the Applicant contended that Sentence 3.1.5.4.(5) of the Building Code permits combustible window frames and sashes to be used in a building required to be of non-combustible construction, provided certain conditions are met. The Applicant also added that not only would the two subject windows be sprinklered but that in fact, the entire building, which was of non-combustible construction, would also be sprinklered even though it was not required by the Code.

In response to questions the Applicant conceded that one of the reasons for sprinklering the entire building was so that the maximum aggregate area of unprotected openings could be increased as permitted by the Building Code.

In summary, the Applicant stated that he believes the proposal to protect the glazed openings using a sprinkler protected wall assembly provides sufficiency of compliance with the Code.

4. Respondent's Position

The Respondent submitted that the approved plans indicated metal frames would be used for the two sprinklered window systems being proposed on the south building face. After the permit was issued, the Respondent stated that the Applicant submitted an alternative solution to replace the metal frames with combustible frames comprised of fibreglass and resin.

The Respondent argued that the third party professional engineer's proposal to use TYCO Model WS-K-5-6 window sprinklers to protect the unprotected openings on the south exterior wall of the subject building requires non-combustible window frames and further, that the use of combustible frames for the windows is not in compliance with the manufacturer's design criteria or ULC/ORD-C263.1, "Sprinkler-Protected Windows Systems" requirements.

The Respondent advised that the design criteria for the subject sprinklers requires a non-combustible frame with a standard EPDM rubber gasket seal and that the proposed use of fibreglass and resin frames deviate from ULC/ORD-C263.1. As a result, the Respondent argued, if the window frame is changed to a combustible material, it is considered a non-listed assembly and therefore, would contravene the manufacture's design criteria and further, would no longer comply with the ULC standard referenced by Article 3.1.8.18. of the Building Code.

In response to questions, the Respondent advised the Commission that there were three fire compartments in the building: the first floor, the second floor, and the garage. The Respondent also advised that the windows located on the second floor exceeded the maximum area permitted by the Code for unprotected openings by 0.8% and 0.6% on the first floor.

5. Commission Ruling

It is the Decision of the Building Code Commission that the alternative solution, where glazed openings, provided with combustible frames that are proposed to be protected by window sprinklers, does not provide sufficiency of compliance with Article 3.1.8.18. of Division B of the Building Code at Streetsville Professional Building, 100 Queen Street South, City of Mississauga, Ontario.

6. Reasons

i) Sentence 3.1.8.18 states, "A sprinkler protected glazed wall assembly shall be constructed in accordance with the requirements of ULC/ORD C263.1, "Sprinkler-Protected Windows Systems". The subject Building Code ~~A~~article in dispute refers to compliance with a standard. It is not within the Building Code Commission's mandate to interpret or modify the requirements of a test standard referenced by the Building Code.

ii) ULC/ORD C263.1, "Sprinkler-Protected Windows Systems" provides guidelines on the installation of a sprinkler protected window system. Appendix A4.7 of the Standard states, "Glazing and frames must be installed in accordance with the sprinkler Manufacturer's Listing, glazing and framing Manufacturer's installation instructions and good engineering/architectural practice". The manufacturer's installation instruction for the proposed sprinkler model requires that the framing supporting the glazing be of noncombustible material. The proposed framing is of combustible material comprised of fiberglass and resin.

iii) It is the Commission's opinion, that the applicant's alternative solution lacked sufficient test data and evidence to support the argument that the proposed sprinkler protected window system with combustible frames will perform equivalently to a sprinkler protected window system with noncombustible framing as prescribed by the sprinkler manufacturer's installation instructions.

Dated at Toronto this **17th** day in the month of **September** in the year **2009** for application number **B-2009-23.**

Tony Chow, Chair

Ed Link

Marina Huissoon

Ontario

Ruling No. 09-11-1223
Application No. 2009-09

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF with Article 3.2.3.12. of the Regulation 403/97, as amended, (the Building Code).

AND IN THE MATTER OF an application by Michael Paquette, Kasian Architecture Ontario Inc., for the resolution of a dispute with Ted Marecak, Chief Building Official, City of Belleville, for the resolution of a dispute regarding the proposal to increase the sprinkler density within fire compartments that contain unprotected openings, which are exposed to the unprotected openings of adjacent exit stair enclosures located on floors 2, 3, 4 and 5 of an existing seven storey, Group B, Division 2 major occupancy building, provides sufficiency of compliance with Article 3.2.3.12. of the 1997 Building Code at Quinte Health Care-Belleville General, 265 Dundas Street East, Belleville, Ontario.

APPLICANT	Michael Paquette Kasian Architecture Ontario Inc Toronto, ON
RESPONDENT	Ted Marecak Chief Building Official City of Belleville
PANEL	Prabhakar Mahant, Vice-Chair Yaman Uzumeri Gerry Egberts
PLACE	Toronto, Ontario
DATE OF HEARING	June 18, 2009
DATE OF RULING	June 18, 2009
APPEARANCES	Leszek Muniak Larden Muniak Consultant Toronto, ON **Agent for the Applicant** Ted Marecak Chief Building Official City of Belleville

The Respondent

RULING

1. Particulars of Dispute

The Applicant has received a permit under the *Building Code Act*, *1992*, and is currently constructing a 6 storey addition at Quinte Health Care-Belleville General, 265 Dundas Street East, Belleville, Ontario.

The subject building is a Group B, Division 2, Care and Treatment major occupancy. The existing building was constructed in 1947 with additions added in 1969 and 1971. The building is 7 storeys in building height with a roof top mechanical penthouse and is considered to be a high building, which is required to comply with the Building Code requirements of Subsection 3.2.6. Currently, a new 6 storey addition on the east side of the existing hospital is being constructed. The new addition has a building area of approximately 3, 077 m². Including the latest addition, the building will have a total building area of approximately 27 500 m². The new addition contains patient rooms, clinics, treatment areas, ICU, support services, offices and a loading dock.

The construction in dispute involves the two main exit stair shafts, which serve the new 6 storey addition. Each exit stair shaft contains a translucent panel, which is exposed to the unprotected openings of adjacent fire compartments on levels 2, 3, 4 and 5 of the addition. Specifically, the patient sleeping rooms have unprotected openings within 3 m of the unprotected openings in the exit stair enclosures.

Article 3.2.3.12. of the Building Code requires that where the plane of an exterior wall of an exit enclosure forms an angle less than 135° with the plane of an exterior wall of the building it serves, and the exit enclosure and the exterior wall have openings that are not protected and are within 3 m apart horizontally and the exterior wall opening is less than 10 m below or less than 2 m above the exit enclosure opening, one of the openings is required to be protected by either glass block, wired glass or a closure.

In lieu of protecting one of the openings with either glass block, wired glass or a closure, the Applicant is proposing a “compliance equivalency” which is to increase the design density of the required sprinkler system serving the fire compartments from a light hazard sprinkler system to an ordinary hazard (Group 1) sprinkler system. It is the Applicant’s position the proposal to increase the design flow density of the required sprinkler system will enable the sprinkler system to extinguish a fire rather than control it, thus eliminating any radiation created by a fire originating from the fire compartment and maintaining the integrity of the exit enclosures.

It is the Respondent’s position that sprinklers are not one of the permissible means of protecting openings, which are not protected in fire compartments and that are adjacent to, and within specified distances of openings that are not protected in exit enclosures. Further, it is the Respondent’s position that the proposal is not substantiated by documented evidence to support the claim that increasing the design density of sprinkler flow would result in a timely extinguishment of a fire and therefore, maintain the integrity of the exit enclosure.

2. Provisions of the Building Code in Dispute

3.2.3.13. Protection of Exit Facilities

(1) Except as required by Sentence (3) and as permitted by Sentence 3.4.4.3.(1), if the plane of an exterior wall of an *exit* enclosure forms an angle less than 135° with the plane of an exterior wall of the *building* it serves, and an opening in the exterior wall of the *exit* enclosure could be exposed to fire from an opening in the exterior wall of the *building*, the opening in either the exterior wall of the *exit* or the exterior wall of the *building* shall be protected in conformance with the requirements of Sentence (4) where the opening in the exterior wall of the *building* is within 3 m (9 ft 10 in) horizontally and,

(a) less than 10 m (32 ft 10 in) below an opening in the exterior wall of the *exit*, or

(b) less than 2 m (6ft 7in) above an opening in the exterior wall of the *exit*

(2) If an unenclosed exterior *exit* stair or ramp could be exposed to fire from an opening in the exterior wall of the *building* it serves, the opening in the exterior wall of the *building* shall be protected in conformance with the requirements of Sentence (4) where the opening in the exterior wall of the *building* is within 3 m horizontally and,

(a) less than 10 m below the *exit* stair or ramp, or

(b) less than 5 m above the *exit* stair or ramp.

(3) Except as permitted by Sentence 3.4.4.3.(1), if an exterior *exit* door in one *fire compartment* is within 3 m horizontally of an opening in another *fire compartment* and the exterior walls of these *fire compartments* intersect at an exterior angle of less than 135°, the opening shall be protected in conformance with the requirements of Sentence (4).

(4) The opening protection referred to in Sentences (1) to (3) shall consist of,

(a) glass block conforming to the requirements of Article 3.1.8.14.,

(b) a wired glass assembly conforming to Supplementary Standard SB-2, or

(c) a *closure* conforming to the requirements of Subsection 3.1.8. and Articles 3.2.3.1. and 3.2.3.14.

3. Applicant's Position

The Agent maintained that the proposed compensating measure to increase the design density of the sprinkler system serving the fire compartments containing unprotected openings which are adjacent to unprotected openings within an exit stair enclosure, from a light hazard occupancy sprinkler system to an ordinary hazard (Group 1) sprinkler system, would provide sufficiency of compliance and meet the intent of the Building Code.

The Agent submitted that a light hazard sprinkler system is designed to "control" the spread of fire, where as the increased sprinkler density of an ordinary hazard group 1 sprinkler system is designed to "extinguish" a fire. As a result, the Agent claimed that the amount of the water released by the ordinary hazard group 1 sprinkler system will extinguish the fire, thereby, eliminating radiation and maintaining the integrity of the exit enclosures.

The Agent concluded that the installation of an ordinary hazard group 1 sprinkler system within the fire compartments that have unprotected openings within 3m of the unprotected openings in the exit enclosure provides the level of life safety required by the Code. He stated that an ordinary group 1 system will extinguish the fire and eliminate radiation before it compromises the exit enclosure, which in turn, achieves sufficiency of compliance with the Building Code.

4. Respondent's Position

The Respondent submitted that the Applicant's proposal to increase the sprinkler density within the fire compartments that contain unprotected openings, to compensate for the exposure to the adjacent unprotected opening in the exit stair shaft, is not one of the permitted options identified in Sentence 3.2.3.12.(4) of the Code to protect the subject exit stair enclosures.

The Respondent asserted that there has been no documented evidence to support the claim that an increase in the sprinkler density from a light hazard occupancy sprinkler system to an ordinary hazard (Group 1) sprinkler system within the fire compartments that are adjacent to the unprotected opening in the exit stair enclosure, will be sufficient to maintain the integrity of the exit stair enclosure.

The Respondent maintained that Building Code affords exit enclosures extra protection as they serve a vital role in occupant safety and that this is even more critical in a care and treatment occupancy such as the subject building, where evacuation in the case of an emergency will take and extended amount of time. The Respondent argued that to rely on an unproven theory that an increase in sprinkler density would achieve the same level of protection as compliance with the Code is unreasonable.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposal to increase the sprinkler density within fire compartments that contain unprotected openings, which are exposed to the unprotected openings of adjacent exit stair enclosures located on floors 2, 3, 4 and 5 of an existing seven storey, Group B, Division 2 major occupancy building, does not provide sufficiency of compliance with Article 3.2.3.12. of the 1997 Building Code at Quinte Health Care-Belleville General, 265 Dundas Street East, Belleville, Ontario.

6. Reasons

i) Article 3.2.3.12. of the 1997 Building Code requires that where the plane of an exterior wall of an exit enclosure forms an angle less than 135° with the plane of an exterior wall of the building it serves, and the exit enclosure and the exterior wall have openings that are not protected and within 3 m apart horizontally, and the exterior wall opening is less than 10 m below or less than 2 m above the exit enclosure opening, one of the openings is required to be protected by glass block, wired glass or a closure.

   Based on the evidence and testimony, the Commission was not convinced that the proposal to increase the design density of the sprinklers from "light hazard" to "ordinary hazard" as defined in NFPA 13, would provide the equivalent performance level that would be achieved by conformance with the requirements of Article 3.2.3.12. of the Building Code and thereby, maintain the integrity of the exit enclosures.

ii) Based on the evidence and testimony of the parties, it is the Commission's opinion that there is no construction barriers that would impede the implementation of one of the options listed in Sentence 3.2.3.12.(4) of the Building Code.

iii) As the subject building is a hospital, there is an additional level of safety concern for the occupants exiting the building,

Dated at Toronto this **18th** day in the month of **June** in the year **2009** for application number **2009-09**

Prabhakar Mahant, Vice-Chair

Yaman Uzumeri

Gerry Egberts

Ontario

Ruling No. 09-10-1222
Application No. 2009-07

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 3.1.2.1 and 3.2.2.6. of Regulation 403/06, as amended, the Building Code.

AND IN THE MATTER OF an application by James Doubt, J.E. Doubt Associates Inc., for the resolution of a dispute with Ted Marecak, Chief Building Official, City of Belleville, to determine whether the proposal to classify the accessories display area and the all terrain vehicle, motorcycle and small engine equipment showroom, which will form part of a new addition to the existing motor vehicle sales and service building, as a Group F, Division 2 major occupancy, provides sufficiency of compliance with Article 3.1.2.1 and 3.2.2.6. of the Building Code at West City Honda, 670 Dundas Street West, R.R.2, Belleville, Ontario.

APPLICANT	James Doubt J.E. Doubt Associates Inc Coburg, ON
RESPONDENT	Ted Marecak Chief Building Official City of Belleville
PANEL	Tony Chow, Chair Alison Orr Mina Tesseris
PLACE	Toronto, Ontario
DATE OF HEARING	June 4, 2009
DATE OF RULING	June 4, 2009
APPEARANCES	Jon Winton Leber / Rubes Inc. Toronto, ON **Agent for the Applicant** Brett Forestell Deputy Chief Building Official City of Belleville, ON **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, to construct an addition to an existing vehicle dealership at West City Honda, 670 Dundas Street West, R.R.2, Belleville, Ontario.

The existing building is a 1267 m², single storey, and is comprised of a service area, offices and a car showroom. The one storey addition is intended to extend the building horizontally by 733 m² in building area. The building addition will contain a service area, sales office, accessory display area, and a vehicle showroom for such items as all terrain vehicles, motorcycles and small engine equipment. The accessory and display area is expected to occupy approximately 674m² of the total floor area.

The building is comprised of noncombustible construction and is not equipped with a sprinkler system, standpipe system or a fire alarm system but is equipped with a monitored security system incorporating fire detection devices.

The dispute centers on the major occupancy classification of the addition. Both the Applicant and the Respondent agree that the proposed addition will contain more than one major occupancy and further, agree that the proposed addition will contain Group F, Division 2 and Group D occupancies. However, the Applicant's position is that the accessory display area and showroom should be classified as a Group F, Division 2 major occupancy, while it is the Respondent's position that the subject area should be classified as a Group E major occupancy.

2. Provisions of the Building Code in Dispute

3.1.2.1. Classification of Buildings

(1) Except as permitted by Articles 3.1.2.3. to 3.1.2.6., every *building* or part of it shall be classified according to its *major occupancy* as belonging to one of the Groups or Divisions described in Table 3.1.2.1.

(2) A *building* intended for use by more than one *major occupancy* shall be classified according to all *major occupancies* for which it is used or intended to be used.

3.2.2.6. Multiple Major Occupancies

(1) Except as permitted by Articles 3.2.2.7. and 3.2.2.8., in a *building* containing more than one *major occupancy*, the requirements of this Subsection for the most restricted *major occupancy* contained shall apply to the whole *building*.

3. Applicant's Position

It is the Applicant's position that the building contains a combination of Group D and Group F, Division 2 major occupancies and that the Group D portion of the building includes the sales/administrative office portions of the building and that the Group F, Division 2 portion of the building includes the vehicle showroom, accessories display area and vehicle service shops.

The Agent for the Applicant stated that the principal concern to the Applicant, with respect to classifying the showroom and accessory display spaces as a Group F, Division 2 major occupancy or E major occupancy, is that a Group F Division 2 classification would not require the building to be sprinklered as a result of its increased building area.

The Agent submitted that the vehicle showroom and accessory display area is not a mercantile,

Group E major occupancy, as mercantile occupancies contain substantial quantities of retail goods, displayed in high density arrangements with moderately high occupant loads. On the contrary, motor vehicle showrooms do not have the same high fire loads or high occupant load characteristics as mercantile occupancies and therefore, do not require same levels of fire protection.

The Agent submitted that based on Sentence 3.1.17.1.(1) of the Building Code using 3.7 m^2/person as per Table 3.1.17.1., the occupant load of the building showroom and accessory display area would be 182 persons for a mercantile occupancy. The Agent claimed that although the Building Code does not provide an occupant load factor for automobile showrooms 182 person occupant load is excessive for the intended use and that an occupant load of 72 persons for a showroom is more realistic based on the office occupant load factor of 9.3 m^2/person, as purchases require the assistance of a sales person and sales offices are provided for a limited quantity of staff.

The Agent argued that a Group F, Division 2 occupancy for the showroom and display areas is a reasonable classification as contents are displayed in a manner that is not representative of the high combustible loads of a retail or department store. The showroom will contain samples of vehicles, power equipment and accessories that are available for purchase with accessory displays are expected to carry a limited quantity of apparel, for example: jackets, shirts, helmets, and gloves.

The Agent submitted that the sample vehicles and equipment displayed are in new condition, stationary, contain no fuel, have disconnected batteries to reduce spark ignition potential and are not operated within the showroom. As a result, the risk of fire in the vehicle showroom is considered to be less that of a storage garage (F-3 occupancy) or a repair garage (F-2 occupancy), where vehicles are under individual control, in operation, contain fuel, may be in poor condition or may be undergoing service.

The Agent argued that as per Appendix note A-3.1.2.1.(1) of the 2005 National Building Code of Canada includes “salesrooms” as both Group F, Division 2 and 3 major occupancies rather than Group E mercantile and therefore, an automobile dealer’s showroom is consistent with this use.

The Agent further argued that the Ontario Office of Fire Marshal’s standard fire incident reporting system used to collect fire incident data utilizes the alphabetical occupancy classification system of the Ontario Building Code and specifically, identifies “motor vehicle sales” and “motor vehicle parts, accessory sales” as Group F industrial occupancies rather than Group E mercantile occupancy.

In summary, the Agent stated that it was the Applicant’s position that neither the building addition nor the existing building are required to be sprinklered because the showroom and display areas are classified as a Group F, Division 2 major occupancy.

4. Respondent’s Position

The Designate for the Respondent submitted that Article 3.1.2.1. of the Ontario Building Code states, “a *building* intended for use by more than one *major occupancy* shall be classified according to all *major occupancies* for which it is used or intended to be used”. He stated that the proposed addition to the building is to be used by Honda Power Products for the sales and servicing of products such as: motorcycles, all terrain vehicles, marine, lawn and garden power equipment, generators, water pumps and snow blowers. The Designate described the existing building’s uses are motor vehicle sales, parts and apparel sales and motor vehicle repair garage.

He therefore, claimed that the subject building would contain Group F, Division 2, Group D and Group E, major occupancies.

The Designate explained that when determining the classification of the building according to Sentence 3.1.2.1.(1) of Division B of the Building Code, the corresponding Appendix note was also referenced and reviewed. The Appendix advised that “to ensure correct classification, refer to the definitions for each occupancy in Part 1, of Division A”.

The Designate stated that when reviewing the occupancy definitions for Group D, Group E, and Group F2 in the Building Code, it was evident that the extended building would contain all of the above occupancies, including Group E, mercantile occupancy. The Designate referring to Division A of the Building Code, stated that mercantile occupancy is defined as “the occupancy or use of a building or part of a building for the displaying or selling of retail goods, wares or merchandise”, and as such, the use of the accessories display area and the small engine showroom are considered a Group E, mercantile occupancy.

Further, the Designate argued that as per Sentence 3.2.2.6.(1) of Division B of the Building Code which states, “Except as permitted by Articles 3.2.2.7. and 3.2.2.8., in a *building* containing more than one *major occupancy*, the requirements of this Subsection for the most restricted *major occupancy* contained shall apply to the whole *building*” that when determining the building size and construction relative to occupancy, the Group E building classification is the most restricted major occupancy and would therefore, require the building to be sprinklered.

The Designate also pointed out that although the 2005 National Building Code of Canada included the term “salesroom” as both a Group F, Division 2 and 3 major occupancy the Ontario Building Code listed “salesroom” as a group F, Division 2 or 3 major occupancy until 1997, when it was removed from the list. The Designated concluded that the removal of this term from the Group F, Division 2 or 3 occupancy category was intentional for the purpose of more accurately reflecting the many possible combination of uses that could be applicable to a “salesroom” occupancy.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposal to classify the accessories display area and the all terrain vehicle, motorcycle and small engine equipment showroom, which will form part of a new addition to the existing motor vehicle sales and service building, as a Group F, Division 2 major occupancy, does not provide sufficiency of compliance with Article 3.1.2.1 and 3.2.2.6. of the Building Code at West City Honda, 670 Dundas Street West, R.R.2, Belleville, Ontario.

6. Reasons

i) Article 3.1.2.1. of Division B of the Building Code states, “(1) every *building* or part of it shall be classified according to its *major occupancy* as belonging to one of the Groups or Divisions described in Table 3.1.2.1.” and “(2) A *building* intended for use by more than one *major occupancy* shall be classified according to all *major occupancies* for which it is used or intended to be used”.

   The Commission heard that the parties were in agreement that the proposed addition will contain more than one major occupancy and further, agreed that the proposed addition would contain Group F, Division 2 and Group D occupancies. However, the parties were not in agreement that the display area and showroom be classified as a Group E major occupancy.

Division A, Part 1 of the Building Code defines Mercantile occupancy as “the occupancy or use of a building or part of a building for the displaying or selling of retail goods, wares or merchandise”.

Based on the evidence, drawings and testimony of the parties and the definition of a “mercantile occupancy” as described in the Building Code, it is the Commission’s opinion that the proposed building addition will contain a Group E major occupancy where merchandise will be displayed and sold.

ii) Sentence 3.2.2.6.(1) of Division B of the Building Code states, “Except as permitted by Articles 3.2.2.7. and 3.2.2.8., in a *building* containing more than one *major occupancy*, the requirements of this Subsection for the most restricted *major occupancy* contained shall apply to the whole *building”.* In this case, the most restricted major occupancy contained in the building is the Group E major occupancy and therefore, the construction requirements for a Group E major occupancy apply to the building.

Dated at Toronto this **4th** day in the month of **June** in the year **2009** for application number **2009-07.**

Tony Chow, Chair

Alison Orr

Mina Tesseris

Ontario

Ruling No. 09-08-1220
Application No. P-2009-12

BUILDING CODE COMMISSION

IN THE MATTER OF Clause 24(1)(b) of the *Building Code Act*, S.O. 1992, c. 23 ("Act").

AND IN THE MATTER OF Subsections 8(2.2) and 8(2.3) of the Act and Division C, Article 1.3.1.3. of Ontario Regulation 350/06, as amended ("Building Code").

AND IN THE MATTER OF a dispute between Sherrie McTaggart, Home Owner, and Ed Podniewicz, Chief Building Official for the Municipality of North Perth to determine whether the Chief Building Official complied with the requirements of Subsections 8(2.2) and 8(2.3) of the *Building Code Act, 1992* and Division C, Sentence 1.3.1.3.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 1.3.1.3. of the Building Code regarding 199 Main Street, Atwood, Ontario.

APPLICANT	Sherrie McTaggart Owner Atwood, Ontario
RESPONDENT	Ed Podniewicz Chief Building Official Municipality of North Perth Listowel, Ontario
PANEL	Tony Chow, Chair
PLACE	Toronto, Ontario
DATE OF HEARING	May 19, 2009
DATE OF RULING	May 19, 2009
APPEARANCES	Sherrie McTaggart via teleconference Owner Atwood, Ontario **The Applicant** Ed Podniewicz via teleconference Chief Building Official Municipality of North Perth Listowel, Ontario **The Respondent**

RULING

1. Particulars of Dispute

The Applicant applied for a building permit under subsection 8(1) of the Act to renovate “one room” of an existing two storey, 934.4 m², commercial/residential building.

The dispute between the parties involves whether the Chief Building Official (the Respondent) complied with subsections 8(2.2) and 8(2.3) of the Act and Division C, Sentence 1.3.1.3.(1) of the Building Code. Specifically, whether the Chief Building Official issued or refused to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal, within the time period prescribed in Table 1.3.1.3. of Division C of the Building Code.

2. Provisions of the Act and Building Code in Dispute

Act: subsections 8(2.2) and (2.3)

Decision

(2.2) When an application for a permit contains the prescribed information, the chief building official is required to determine within the period prescribed by regulation whether to issue the permit or to refuse to issue it.

Same, reasons for refusal

(2.3) If the chief building official refuses to issue the permit, he or she shall inform the applicant of all of the reasons for the refusal of the permit and shall do so within the period prescribed by regulation.

Building Code: Sentences 1.3.1.3. (1) and (5)

Division C, Article 1.3.1.3. Period Within Which a Permit is Issued or Refused

(1) Subject to Sentences (2) and (3), if an application for a permit under subsection 8 (1) of the Act that meets the requirements of Sentence (5) is submitted to a *chief building official*, the *chief building official* shall, within the time period set out in Column 3 of Table 1.3.1.3. corresponding to the class of *building* described in Column 2 of Table 1.3.1.3. for which the application is made,

(a) issue the permit, or

(b) refuse to issue the permit and provide in writing all of the reasons for the refusal.

(5) The requirements for an application referred to in Sentence (1) for a permit under subsection 8 (1) of the Act are,

(a) that the application be made in the form described in Sentence 1.3.1.2.(2),

(b) that the application be signed by a person described in Clause 1.3.1.2.(1)(a) or (b),

(c) that all applicable fields on the application form and required schedules are completed,

(d) that all attachments indicated as being attached to the application are submitted with the application, and

(e) that the application be accompanied by the types and quantities of plans and specifications that are prescribed by the applicable by-law, resolution or regulation made under clause 7 (1) (b) of the Act.

Table 1.3.1.3.
Period Within Which Permit Shall be Issued or Refused

Forming Part of Article 1.3.1.3.

Column 1	Column 2	Column 3
Row Number	Class of *Building*	Time Period
1	(a) A detached house, semi-detached house, townhouse, or row house where no *dwelling unit* is located above another *dwelling unit*. (b) A detached structure that serves a *building* described in Clause (a) and does not exceed 50 m^2 in *building area*. (c) A tent to which Section 3.14. of Division B applies. (d) A sign to which Section 3.15. of Division B applies.	10 days
2	(a) *Buildings* described in Clause 1.1.2.4.(1)(a), (b) or (c) of Division A, other than *buildings* described in Column 2 of any of Rows 1 and 4 of this Table. (b) *Farm buildings* that do not exceed 600 m^2 in *building area*.	15 days
3	(a) *Buildings* described in Clause 1.1.2.2.(1)(a), or (b) of Division A, other than *buildings* described in Column 2 of any of Rows 1 and 4 of this Table. (b) *Farm buildings* exceeding 600 m^2 in *building area*.	20 days
4	(a) *Post-disaster buildings*. (b) *Buildings* to which Subsection 3.2.6. of Division B or any provision in Articles 3.2.8.3. to 3.2.8.11. of Division B applies.	30 days

3. Applicant's Position

The Applicant participated in the hearing by way of teleconference and advised the Commission that that a building permit application was submitted to the Municipality of North Perth on May 10, 2007. The Applicant stated that the application, including all appropriate documentation, was submitted to the municipality at that time.

The Applicant informed the Commission that the permit application proposed the renovation of one room with an area of 65 m², located on the second floor of a two storey commercial/residential building, and as such, there was a 15 day time frame for the Respondent to either refuse the permit application with reasons or to issue the permit.

The Applicant maintained that to date, she had not received a determination from the Respondent regarding her application for the building permit. The Applicant asserted that the time frame for the Respondent to respond to the permit application was 15 days and that the Respondent had neither issued the building permit nor refused to issue the building permit with reasons.

In response to questions, the Applicant explained that to date the permit fee had not been paid as a result of a long standing disagreement regarding the amount of the permit fee. The Applicant stated that the fee the Municipality was requesting was unreasonable, as it included charges for a Class 5 sewage system permit and a building permit based on 126.8 m². She explained that she disagreed with the permit fee charge being based on 126.8 m² because she was only planning to renovate one room with an area of 65 m² at this time and was not planning

to renovate the entire upper floor of her building. The Applicant also added that it was her understanding that within the year, her building would be connected to the Municipal sewer line; therefore, a permit to replace or upgrade her existing Class 5 sewage system, which was working perfectly well, was unnecessary. As a result, the Applicant informed the Commission that she had offered to pay the permit fee based on a calculation of 65 m² less the permit fee for the sewage system but that it was not accepted by the Municipality.

In response to questions, the Applicant and Respondent agreed to an amount for the permit fee.

4. Respondent's Position

The Respondent participated in the hearing by way of teleconference and submitted that the subject building permit application was made on May 10, 2007 but that the permit application was incomplete.

The Respondent explained that a building permit application was originally submitted by the Applicant on December 5, 2006 to perform a "commercial/residential" alteration/repair. He stated that he and the Property Standards Officer attended the subject building site along with the applicant, as the plan and supplementary documents submitted by the applicant with the permit application did not provide adequate information to issue a building permit.

The Respondent submitted that following this initial site inspection, a plan review summary was prepared and faxed to the Applicant on January 3, 2007, which outlined the items that would need to be addressed to enable the issuance of a building permit. Some of the outstanding items related to fire protection, occupant safety and the capacity of the existing sewage system. The Respondent maintained that the required time period being 15 days, as prescribed in Table 1.3.1.3. of the Building Code had never commenced, as the application was not deemed complete as per Subsections 8(2)(e) and (f) of the *Building Code Act* and further, permit fees had not been received. The Respondent explained that further disputes with Applicant ensued with respect to the requirements of the Building Code and as a result, the Applicant withdrew the permit application. The Respondent informed the Commission that the Municipality later discovered that renovations at the subject building had been undertaken without a building permit and as a result, a Stop Work Order and an Order to Comply were issued to the Applicant.

The Respondent explained that the issuance of these Orders prompted the Applicant to submit a new building permit application on May 10, 2007 to renovate one room at the subject building. The Respondent maintained that the plans and specifications that are prescribed by the applicable by-law, By Law No. 66-2005 did not accompany the submission of the new permit application. Consequently, on May 15, 2007, a letter detailing the information outstanding in order to process the permit application was faxed to the Applicant. The Respondent stated that as with the initial application the Applicant disputed the permit fees and the requirements that needed to be addressed in the Building Code to enable the issuance of the building permit. Therefore, in his opinion, the Respondent claimed that the time frame to issue or refuse to issue the permit as outlined in Article 1.3.1.3. of Division C of the Building Code did not commence.

In summary, the Respondent reiterated that it was the Municipality of North Perth's position that they had not failed to meet the prescribed time frame set out in Division C, Article 1.3.1.3. of the Building Code due to the fact that a complete application with fees had never been received and further, that every attempt had been made to resolve the dispute to enable the issuance of a Building Permit.

5. Commission Ruling

It is the Decision of the Building Code Commission that, when considering the provisions of Division C, Article 1.3.1.3. of the Building Code, the Respondent was not required to comply with the prescribed time period related to subsection 8(2.2), 8(2.3) of the *Building Code Act,* regarding 199 Main Street, Atwood, Ontario.

6. Reasons

i) Subsection 8(2.2) of the *Building Code Act* states that when an application for a permit contains the prescribed information, the chief building official is required to determine within the period prescribed by the Building Code whether to issue the permit or to refuse to issue it.

ii) Sentence 1.3.1.3.(6) of the Building Code specifies when the time periods set out in Table 1.3.1.3 for a chief building official to issue or refuse a permit commences. It states, "The time period described in Sentences (1) to (3) shall begin on the day following the later of

(a) the day on which an application meeting the requirements of Sentence (5) is submitted to the chief building official, and

(b) the day on which payment is made of all fees that are required, under a by-law, regulation or resolution made under Clause 7(1)(c) of the Act, to be paid when the application is made."

The parties agreed that a permit application was submitted to the Municipality of North Perth on May 10, 2007.

iii) Sentence 1.3.1.3.(5) of the Building Code states, **"**The requirements for an application referred to in Sentence (1) for a permit under subsection 8(1) of the Act are,

(a) that the application be made in the form described in Sentence 1.3.1.2.(2),

(b) that the application be signed by a person described in Clause 1.3.1.2.(1)(a) or (b),

(c) that all applicable fields on the application form and required schedules are completed,

(d) that all attachments indicated as being attached to the application are submitted with the application, and

(e) that the application be accompanied by the types and quantities of plans and specifications that are prescribed by the applicable by-law, resolution or regulation made under clause 7 (1) (b) of the Act.

Based on the evidence presented, the Commission finds that the permit application submitted on May 10, 2007 did not meet all the requirements prescribed in Division C, Sentence 1.3.1.3.(5) of the Building Code. Specifically, the Commission was not convinced the applicant met the requirements outlined in Clause 1.3.3.1.(5)(e).

iv) Further, the Commission was advised that as a result of a disagreement between the parties regarding the amount of the building permit application fee, to this date, the required fee has not been paid or accepted. However, during the course of the hearing, the parties agreed to the amount of the fee that is to be paid.

v) Therefore, the Commission finds that since the requirements of Clauses 1.3.1.3.(6)(a) and (b) of the Building Code have not been satisfied, the timeframe set out in Table 1.3.1.3. for the chief building official to determine whether to issue a permit or refuse to issue a permit, did not commence in this case.

Dated at Toronto this **19th** day in the month of May in the year **2009** for application number **P-2009-12.**

Tony Chow, Chair

Ontario

Ruling No. 09-05-1217
Application No. 2009-03

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 3.3.1.15. and Article 9.8.4.4. of Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by Carlos & Victoria Pimentel, Homeowners, for the resolution of a dispute with Ann Borooah, Chief Building Official, City of Toronto, to determine whether that the as-installed prefabricated steel spiral staircase serving a mezzanine of a residential dwelling provides sufficiency of compliance with Articles 3.3.1.15. and 9.8.4.4. of the 2006 Building Code at 347 Sorauren Avenue, Suite 216, Toronto, Ontario.

APPLICANT	Carlos & Victoria Pimentel Homeowners Toronto, ON
RESPONDENT	Ann Borooah Chief Building Official City of Toronto
PANEL	Yaman Uzumeri, Chair-Designate Gerry Egberts Marina Huissoon
PLACE	Toronto, Ontario
DATE OF HEARING	April 9, 2009
DATE OF RULING	April 9, 2009
APPEARANCES	Geoffrey Kendal Geoffrey Kendal Architects Toronto, ON **Agent for the Applicant**
	Sam Sarkhosh Building Inspector City of Toronto **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an Order to Comply under the *Building Code Act*, *1992*, to remedy certain alleged code deficiencies at 347 Sorauren Avenue, Suite 216, Toronto, Ontario.

The subject building was an existing industrial building, which was renovated and turned into a residential complex. The building is 2 storeys in building height with 22 dwelling units located on the second floor and 26 dwelling units on the first floor. The floor area of each floor is approximately 2500 m².

The dwelling unit which is the subject of this dispute has an area of 61 m². A mezzanine having a floor area of approximately 18 m² has been constructed within the dwelling unit without a building permit. The mezzanine is currently being used as a bedroom. A steel spiral staircase has been installed to serve the mezzanine; it is the only means of access to the mezzanine.

The construction in dispute involves the installation of the steel spiral staircase serving the mezzanine. In particular, the Respondent is of the opinion that the steel spiral staircase does not comply with Articles 3.3.1.15. and 9.8.4.4 of the Building Code.

The size of the subject building dictates that the stairs be designed in accordance with the provisions of Part 3 of the Building Code. Article 3.3.1.15. of the Building Code permits the use of curved and spiral stairs provided the specifications for the rise and run are met. Article 3.3.4.7 cross references Section 9.8 for the requirements for stairs, handrails and guards within a dwelling unit. Article 9.8.4.4. provides the dimensional requirements for angled treads. The subject steel staircase is a spiral staircase with angled treads that has been installed within a residential dwelling. The stairs are not considered a required exit stair. The Applicant is of the opinion that the spiral stairs do not pose a hazard and therefore, meet the intent of the Building Code.

2. Provisions of the Building Code in Dispute

3.3.1.15. Curved or Spiral Stairs

(1) A curved or spiral stair is permitted in a stairway not required as an *exit* provided the stair has,

(a) treads with,

(i) a minimum run not less than 150 mm, and

(ii) an average run not less than 200 mm, and

(b) risers in conformance with Sentence 3.4.6.7.(2).

9.8.4.4. Dimensions for Angled Treads

(1) Angled treads in required *exit* stairs shall comply with Article 3.4.6.8.

(2) Except as provided in Article 9.8.4.5., angled treads in other than required *exit* stairs shall have an average run of not less than 200 mm and a minimum run of 150 mm.

(3) The depth of an angled tread shall be not less than its run at any point and not more than its run plus 25 mm.

3. Applicant's Position

The Applicant explained that six years prior, the subject spiral staircase was chosen due to the limited living space available in the 61 m² loft style dwelling unit. In particular, the Applicant pointed out that a straight run of stairs would have reduced the usable living space in what he considered to be, an already small unit. Further, it was his belief that the spiral staircase was now a centerpiece in the unit and an architectural feature of the loft.

The Applicant submitted that the as-installed spiral staircase does not pose a life safety risk. He argued that the staircase has already been in place and in use for six years by him, his wife, five year old daughter, and visitors without issue or incident. The Applicant submitted that as the 18 m² mezzanine is very small, there are never more than two or three people on the mezzanine level at any one time. The mezzanine also has an open concept design so that any sign of smoke or fire could easily be detected. The Applicant also suggested that since the mezzanine is not very high from the first level, in the event of an emergency requiring escape or evacuation, a person could climb over the guard rail and jump down to the main level without injury. Alternatively, he argued, a person could use either of the two large windows accessible from the mezzanine which exit out onto a flat roof and therefore, could also be used as an area of refuge and escape.

The Applicant also added that the unit was also equipped with 10 sprinkler heads, a smoke detector and a carbon monoxide detector. The Applicant submitted photos and dimensional specifications of the steel spiral staircase in support of his position.

The Applicant conceded that the installed prefabricated steel spiral staircase does not strictly comply with the requirements of the Code; however, he is of the opinion that the staircase does not pose a hazard and therefore, complies with the intent of the Code.

4. Respondent's Position

The Respondent maintained that the Building Code is very clear on the issue in dispute. He submitted that Articles 3.3.1.15. and 9.8.4.4. are applicable to the subject stairs, and added that the minimum and average tread runs were not in compliance. In addition, he stated that Sentence 9.8.2.1.(2), of the Code requires that at least one stair between each floor level within a dwelling unit must have a minimum stair width of not less than 860 mm and that the subject stairs were in fact the only stairs serving the mezzanine and they did not meet the minimum specified stair width required by the Code. The Respondent also added that it was his position that the installed spiral staircase presented a tripping hazard and further, posed a life safety risk.

5. Commission Ruling # 09-05-1217, BCC Application # B-2009-03

It is the Decision of the Building Code Commission that the as-installed prefabricated steel spiral staircase serving a mezzanine of a residential dwelling does not provide sufficiency of compliance with Articles 3.3.1.15 and 9.8.4.4. of the 2006 Building Code at 347 Sorauren Avenue, Suite 216, Toronto, Ontario

6. Reasons

i) The Building Code permits the use of curved or spiral stairs provided the dimensional requirements outlined in the Code are met. The size of the subject

building dictates that it be designed to the provisions of Part 3 of the Building Code. Sentence 3.3.1.15.(1) of the Building Code stipulates that the stair treads are required to have a minimum run not less than 150 mm, an average run not less than 200 mm and a minimum rise of 125 mm and a maximum rise of 200 mm. The Commission was advised that the subject stair treads do not comply with this requirement as the minimum run of the stair treads are 102 mm.

ii) Article 3.3.4.7 cross references Section 9.8 for the requirements for stairs, handrails and guards within a dwelling unit. Similar to Sentence 3.3.1.15.(1), Article 9.8.4.4. also requires angled treads to have a minimum run of 150 mm and an average run of not less than 200 mm. As stated above, the minimum run requirement for angled treads within a dwelling unit have not been met.

iii) The Building Code is a set of minimum set of construction requirements for buildings with the primary purpose of promoting public safety. One of the objectives associated with Article 9.8.4.4. of the Code is to limit the probability that as a result of design or construction, a person will be exposed to an unacceptable risk of injury due to hazards caused by tripping. In this case, the Commission was not convinced that the stair treads did not present a tripping hazard as per objective statement 3.1 of the Building Code.

iv) In addition, the Commission notes that as per Sentence 9.8.2.1.(2), the Code requires that at least 1 stair between each floor level within a dwelling unit must have a minimum stair width of not less than 860 mm. The Commission was advised that the subject spiral staircase was the only stair serving the mezzanine and that the stair width was 762 mm. Therefore, the existing stair width is less than the minimum stair width required by the Code.

Dated at Toronto this **9th** day in the month of **April** in the year **2009** for application number **2009-03.**

Yaman Uzumeri, Chair-Designate

Gerry Egberts

Marina Huissoon

Ontario

Ruling No. 09-03-1215
Application No. B-2009-01

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF with Sentences 3.3.1.3.(9) and 3.3.1.4.(1) of Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by Fernando Fabiani, Fabiani Architect Ltd., for the resolution of a dispute with Mike Leonard, Chief Building Official, City of Oshawa, to determine whether the proposed egress system for the ground floor level of a four storey building containing Group B, Division 3 and Group C major occupancies, where one of the required means of egress from the suites passes through a public corridor into a "corridor used by the public" or “common area” leading to an exit, provides sufficiency of compliance with Division B, Sentence 3.3.1.3.(9) and 3.3.1.4.(1) of the 2006 Building Code at 1255 Bloor Street East, Oshawa, Ontario

APPLICANT	Fernando Fabiani, Fabiani Architect Ltd Burlington, ON
RESPONDENT	Mike Leonard Chief Building Official City of Oshawa
PANEL	Leslie Morgan, Vice-Chair Rick Florio Neal Barkhurst
PLACE	Toronto, Ontario
DATE OF HEARING	March 19, 2009
DATE OF RULING	March 19, 2009
APPEARANCES	Fernando Fabiani, Fabiani Architect Ltd Burlington, ON **The Applicant** Cveta Prgin Building Engineer City of Oshawa **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for a permit under the *Building Code Act*, *1992*, to construct a retirement home with both Group B, Division 3, and Group C occupancies at 1255 Bloor Street East, Oshawa, Ontario.

The proposed building is 4 storeys in building height, 1695 m² in building area, comprised of non-combustible construction, containing both Group B, Division 3 and Group C occupancies, and is equipped with a sprinkler system, fire alarm system, and a standpipe and hose system.

Sentence 3.3.1.9.(9) of the Building Code requires that at the point where a doorway referred to in Sentence (8) opens onto a public corridor or exterior passageway, it shall be possible to go in opposite directions to each of 2 separate exits.

Sentence 3.3.1.4.(1) of the Code states that a public corridor shall be separated from the remainder of the storey by a fire separation.

The construction in dispute involves the means of egress from the suites on the ground floor of the subject building. The Applicant proposes to provide two means of egress from the doorway of each suite, where one of the required means of egress will pass through a public corridor into a “corridor used by the public” which contains an occupancy that then leads to an exit. The subject “corridor used by the public” that is part of the path of travel for exiting, contains a common area for the residents which includes a dining area. One of the required exits from the ground floor suites will require residents to travel through the ground floor common area to an exit door. Therefore, the dispute before the Commission is to determine whether the proposed egress design sufficiently complies with the Code requirements for “means of egress” and “public corridor separations”.

2. Provisions of the Building Code in Dispute

3.3.1.3. Means of Egress

(9) Except as permitted by this Section and by Sentence 3.4.2.1.(2), at the point where a doorway referred to in Sentence (8) opens onto a *public corridor* or exterior passageway, it shall be possible to go in opposite directions to each of 2 separate *exits*.

3.3.1.4. Public Corridor Separations

(1) Except as otherwise required by this Part or as permitted by Sentence (4), a *public corridor* shall be separated from the remainder of the *storey* by a *fire separation*.

3. Applicant’s Position

The Applicant submitted that the proposed retirement home does not provide care for its occupants but provides supervision only. He explained that the building is comprised of both Group C and Group B, Division 3 occupancies and further, that only the 4th floor of the building would contain the Group B, Division 3 occupancy. The Applicant advised that the ground floor of the building contains a common dining area for the occupants. The dining area has been located on the ground level close to the front entrance of the building. The Applicant submitted that an

occupant exiting from a suite on the ground floor would be able to travel in opposite directions to each of two exits. The Applicant explained that one of the means of egress proposed would allow occupants to travel through a public corridor into a common area, in this case a ground floor dining area, to an exit door.

The Applicant argued that Sentence 3.3.1.3.(9) of the Code requires that upon exiting from a suite onto a public corridor, it shall be possible to go in opposite directions to each of two separate exits and that the subject design meets this requirement. He stressed that the Code does not say that both directions for exiting need to be by public corridor only. Further, the Applicant argued that Sentence 3.3.1.9.(5) of the Code states that a corridor used by the public is allowed to contain an occupancy.

The Applicant submitted that if the corridor width were to be considered to be very wide bound by gridlines 2 and 25, referring to the drawings submitted to the municipality and Commission, then the requisite fire separation requirements are met.

The Applicant advised that the corridors have been designed to meet the Code requirements for corridors including: maintaining the minimum unobstructed width, having smoke detectors, emergency lighting, meeting flame spread ratings, maximum travel distances, having no dead-end portions and no fuel fired appliances in the corridor.

4. Respondent's Position

The Respondent submitted that the ground floor residential suites is served by a public corridor that passes through a common area (dining hall) to an exit door and that there is no fire separation proposed between the public corridor and the common area.
The Respondent argued that Sentence 3.3.1.(9) of the Code requires that two separate exits are provided at each end of a public corridor and that in this case, the proposed public corridor leads to another occupancy; not to an exit.

Further, the Respondent argued that Sentence 3.3.1.4.(1) of the Code states that a public corridor is required to be fire separated from the remainder of the building, however, in the subject design the proposed 2400 mm wide public corridor is not fire separated from the common area.

The Respondent advised that the total floor area of the common area is approximately 400 m², which is more than 23% of the ground floor area and the occupant load of the common area is approximately 108 persons.

The Respondent maintained that in her opinion, the subject egress design from the ground floor suites did not achieve compliance with the Building Code.

5. Commission Ruling

It is the Decision of the Building Code Commission that the proposed egress system for the ground floor level of a four storey building containing Group B, Division 3 and Group C major occupancies, where one of the required means of egress from the suites passes through a public corridor onto a "corridor used by the public" or “common area” leading to an exit, provides sufficiency of compliance with Division B, Sentence 3.3.1.3.(9) and 3.3.1.4.(1) of the 2006 Building Code at 1255 Bloor Street East, Oshawa, Ontario

Reasons

i) It is the Commission's opinion that the ground floor area in question is comparable to the design of a Group B, Division 2 occupancy nursing home or hospital regulated under Article 3.3.3.5. of the Building Code. Although the ground floor area of the subject building contains a Group C major occupancy and no care is provided on this floor, the proposed design of the floor area is comparable for the following reasons:

a) Sentence 3.3.3.5.(2) requires a floor area containing patients' or residents' sleeping rooms in a hospital or nursing home to be divided into no fewer than 2 fire compartments, each not more than 1 000 m^2 in area. In this building the fire compartments on the ground floor containing residential suites are not more than 1000 m^2.

b) Sentence 3.3.3.5.(4) requires that the fire-resistance rating of the fire separation between the fire compartments must not be less than 1 h. In this building the fire separations between the fire compartments on the ground floor area are not less than 1 hour.

c) Sentence 3.3.3.5.(9) requires walls between patient's or resident's sleeping rooms and the remainder of the floor area to be constructed as fire separations but are not required to have a fire resistance rating unless it is required by other provisions of Part 3 of the Code. In this case, the resident's suites are separated from the common areas by a 1 hour fire separation.

ii) The Commission was advised that the corridors on the ground floor area have been designed to meet the minimum Code requirements for corridors, which include but are not limited to: minimum unobstructed width, smoke detectors, emergency lighting levels, flame spread ratings, maximum travel distances, no dead-end portions and no fuel fired appliances.

iii) Sentence 3.3.1.9.(5) of the Building Code states, "If a corridor contains an occupancy, the *occupancy* shall not reduce the unobstructed width of the corridor to less than its required width". Therefore, the Code permits occupancies in corridors provided the corridors are designed appropriately. Occupancies in the ground floor corridors of this building do not reduce the unobstructed width to less than 1100 mm.

iv) The dining area on the ground floor, which forms part of the corridor used by the public, is a subsidiary occupancy to the Group C occupancy use and is not required to be separated from the adjacent occupancies or corridor.

v) The dining area is only for the use for the residents of the facility and their guests.

Dated at Toronto this **19th** day in the month of **March** in the year **2009** for application number **2009-01.**

Leslie Morgan, Vice-Chair

Rick Florio

Neal Barkhurst

Ontario

Ruling No. 09-02-1214
Application No. 2008-37

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Clauses 3.1.5.16.(1)(b) when considering 3.1.5.2.(1)(h) of Regulation 350/06, as amended, (the Building Code).

AND IN THE MATTER OF an application by Murray Jackson, Quinte Gardens Retirement Residence, for resolution of a dispute with Ted Marecak, Chief Building Official, City of Belleville, to determine whether the installation of PVC P-traps and fixture drains installed in a high-rise building containing a Group B3 care occupancy and Group C residential occupancy provides sufficiency of compliance with Clause 3.1.5.16.(1)(b) when considering Clause 3.1.5.2.(1)(h) of the 2006 Building Code at Quinte Gardens Retirement Residence, 30 College Street West, Belleville, Ontario.

APPLICANT	Murray Jackson Quinte Gardens Retirement Residence Belleville, ON
RESPONDENT	Ted Marecak Chief Building Official City of Belleville
PANEL	Leslie Morgan, Vice-Chair Alison Orr Yaman Uzumeri
PLACE	Toronto, Ontario
DATE OF HEARING	February 5, 2009
DATE OF RULING	February 5, 2009
APPEARANCES	Dominic Janusz Atira Engineering Kingston, ON **Agent for the Applicant** Kevin Kehoe Building Inspector City of Belleville **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has received an order to comply under the *Building Code Act*, *1992*, to remedy certain alleged code deficiencies at Quinte Gardens Retirement Residence at 30 College Street West, Belleville, Ontario.

The Quinte Gardens Retirement Residence is a seven storey non-combustible high-rise building containing a Group B Division 3 care occupancy on the second storey and Group C residential suites on the remaining storeys. As the floor level of the top storey of the subject building is more than 18 m above grade, the subject building is classified as a high building as per Clause 3.2.6.1.(1) (d) of the Code and is subject to the additional requirements for high buildings outlined in Subsection 3.2.6. of the Code.

The construction in dispute centers on the installation of PVC-P-traps and partial fixture drains below the sinks and lavatories within the residential suites, dining areas, pool and associated change rooms, laundry and other common areas of the subject high-rise building.

Clause 3.1.5.16.(1)(b) of the Code permits the use of combustible piping and tubing and associated adhesives provided they have a flame-spread rating of not more than 25 and, if used in a building described in Subsection 3.2.6., a smoke developed classification of not more than 50.

Article 3.1.5.2. of the Code provides a list of minor combustible components that would be permitted to be used in a building required to be of non-combustible construction.

Both the Applicant and Respondent agree that the PVC P-traps and partial fixture drains below the sinks and lavatories do not meet the Smoke Developed Classification required by Clause 3.1.15.16.(1)(b) of Division B of the Building Code. However, it is the Applicant's view that the proposed PVC P-traps and partial fixture drains are minor combustible components that are permitted by Clause 3.1.5.2.(1)(h) of Division B of the Building Code. The Respondent is not in agreement with this position.

2. Provisions of the Building Code in Dispute

3.1.5.16. Combustible Piping Materials

(1) Except as permitted by Clause 3.1.5.2.(1)(d) , Sentences (2) and (3), and Article 3.1.5.22., *combustible* piping and tubing and associated adhesives are permitted to be used in a *building* required to be of *noncombustible construction* provided that, except when concealed in a wall or concrete floor slab, they,

(a) have a *flame-spread rating* not more than 25, and

(b) if used in a *building* described in Subsection 3.2.6., have a smoke developed classification not more than 50.

3.1.5.2. Minor Combustible Components

(1) The following minor *combustible* components are permitted in a *building* required to be of *noncombustible construction*:

(a) paint,

(b) mastics and caulking materials applied to provide flexible seals between the major components of exterior wall construction,

(c) fire stop materials conforming to Sentence 3.1.9.1.(1) and Article 3.1.11.7.,

(d) tubing for pneumatic controls provided it has an outside diameter not more than 10 mm,

(e) adhesives, *vapour barriers* and sheathing papers,

(f) electrical outlet and junction boxes,

(g) wood blocking within wall assemblies intended for the attachment of handrails, fixtures, and similar items mounted on the surface of the wall, and

(h) similar minor components.

3. Applicant's Position

The Agent for the Applicant submitted that the building's waste and vent piping is non-combustible being comprised of cast iron and copper with the exception of the PVC P-Traps and partial fixture drains installed below the sinks and lavatories within the residential suites, dining areas, pool and associated change rooms, laundry and other common areas of the subject building.

The Agent argued that the Code allows combustible fixtures in a bathroom such as a vanity comprised of compressed wood, which would contribute more significantly to fire spread than the installed PVC P-Traps and partial fixture drains. The Agent maintained that the subject components could be considered "minor" as they could be deemed to insignificantly contribute to fire growth and spread, when considering other combustible materials in residential rooms and bathrooms, thus meeting the intent of the Code. Further, the Agent stated that the subject PVC components met the required flame spread rating. He conceded that the PVC P-Traps and partial fixture drains exceeded the smoke developed classification of 50 required by Article 3.1.5.16. of the Code but submitted that the classification was close to 50.

The Agent stated that the installed PVC P-Traps and partial fixture drains could be considered to be minor combustible components as per Clause 3.1.5.2.(1)(h) of the Building Code. The Agent argued that since the building was fire stopped at each floor and since the combustible components were contained within the residential suites, which are both sprinklered and separated from each other by one hour fire rated separations and do not penetrate through any unit or space to any other unit or space, the subject combustible components do not present a hazard and thus sufficiently comply with Sentence 3.1.5.16.(1) when considering Article 3.1.5.2 of the Code.

4. Respondent's Position

The Designate for the Respondent submitted that the PVC P-traps and partial fixture drains installed in all areas of the building do not meet the required smoke developed classification required by Clause 3.1.5.16.(1)(b) of Division B of the Code and that they have a smoke developed classification that is more than 50.

In addition, the Designate disputed the Applicant's position that the PVC P-traps and fixture drains could be considered "minor combustible components" as per Clause 3.1.5.2.(1)(h). The Designate maintained that Clause 3.1.5.2.(1)(h) is not contained in the list of exceptions to the general rule for non-combustible materials required by 3.1.5.16.(1).

The Designate also pointed out that other combustible piping, which conforms to Sentence 3.1.5.16.(1) of the Code is available from the same piping manufacturer.

5. Commission Ruling

It is the Decision of the Building Code Commission that the installation of PVC P-traps and fixture drains installed in a high-rise building containing a Group B3 care occupancy and Group C residential occupancy do not provide sufficiency of compliance with Clause 3.1.5.16.(1)(b) when considering Clause 3.1.5.2.(1)(h) of the 2006 Building Code at Quinte Gardens Retirement Residence, 30 College St West Belleville, Ontario.

6. Reasons

i) Sentence 3.1.5.16.(1) of the Building Code permits the use of combustible piping and tubing to be used in a building required to be of noncombustible construction provided that they have a flame-spread rating not more than 25 and, if used in a building described in Subsection 3.2.6., have a smoke developed classification not more than 50. Both the Applicant and Respondent agree that Clause 3.1.5.16.(1)(b) is applicable in this case and further, both parties agree that the PVC P-traps and fixture drains have a smoke developed classification that is more than 50, and therefore, does not comply with this Code requirement.

ii) Sentence 3.1.5.2.(1) of the Building Code lists minor combustible components which are permitted in a building that is required to be of noncombustible construction. Clause 3.1.5.2.(1)(h) permits minor combustible components similar to those listed elsewhere in Sentence 3.1.5.2.(1). It is the Commission's opinion that the subject PVC P-traps and fixture drains were not demonstrated to be similar to those listed in Sentence 3.1.5.2.(1) of the Code and, as such, the subject components are not considered to be minor combustible components.

iii) The Commission was advised that noncombustible and combustible piping materials, suitable for traps and fixture drains, which meet the minimum flame spread and smoke development classification prescribed by the Code are available.

iv) The Building Code is a minimum set of construction requirements. The Commission was not presented with any alternative measures that could compensate for non-compliance with the Building Code.

Dated at Toronto this **5th** day in the month of **February** in the year **2009** for application number **2008-37.**

Leslie Morgan, Chair-Designate

Alison Orr

Yaman Uzumeri

Dated at Toronto this **17th** day in the month of **January** in the year **2008** for application number **2007-44.**

Judy Beauchamp, Vice-Chair

BUILDING CODE COMMISSION
DECISIONS BY REFERENCE TO ARTICLES/SENTENCES IN THE ONTARIO BUILDING CODE
2007-2009

EDITORS NOTE: The references in column 1 are to the numbered parts/article/section in the building legislation (o. Reg. 350/06 or, as noted, 403/97) at the time of the decision.

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Part 5 of the Building Code	07-24-1153	7-Jun-07	Determine whether the proposed insulation system and wall assembly, composed of compressed, stacked straw bales, provides sufficiency of compliance with Parts 5 and 9 of the Building Code	Sufficiency of Compliance found with condition(s)
Section 5.6 of the Building Code	07-40-1169	8-Nov-07	Determine whether a proposed roof projection of 600 mm provides sufficiency of compliance with Section 5.6 of the Building Code	Sufficiency of Compliance found with condition(s)
Part 8 of the Building Code	08-36-1210	20-Nov-08	Determine whether the proposed repair of an existing Class 4 sewage system provides sufficiency of compliance with Part 8., when considering Part 11 of the Building Code	No Jurisdiction
Part 9 of the Building Code	07-24-1153	7-Jun-07	Determine whether the proposed insulation system and wall assembly, composed of compressed, stacked straw bales, provides sufficiency of compliance with Parts 5 and 9 of the Building Code	Sufficiency of Compliance found with condition(s)
Part 11 of the Building Code	08-36-1210	20-Nov-08	Determine whether the proposed repair of an existing Class 4 sewage system provides sufficiency of compliance with Part 8., when considering Part 11 of the Building Code	No Jurisdiction

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Article 1.1.3.2 of the Building Code.	07-35-1164	18-Oct-07	Determine whether the proposed construction of a Group C residential townhouse block provides sufficiency of compliance with Subsection 2.1.1. as a three storey building when considering the definition of "grade" as outlined in Article 1.1.3.2., Article 3.2.2.45. and 9.1.1.1. of the Building Code	Sufficiency of Compliance not found
Division C, Sentence 1.3.1.3.(1) of the Building Code	07-21-1150	1-Jun-07	Whether the Chief Building Official complied with the requirements under Subsections 8(2.2) and 8(2.3) of the Act and Division C, Sentence 1.3.1.3.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 1.3.1.3. of the Building Code	Chief Building Official complied
Division C, Sentence 1.3.1.3.(1) of the Building Code	07-21-1150	1-Jun-07	Whether the Chief Building Official complied with the requirements under Subsections 8(2.2) and 8(2.3) of the Act and Division C, Sentence 1.3.1.3.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 1.3.1.3. of the Building Code	Chief Building Official complied
Sentence 1.3.1.3.(1) of the Building Code	09-08-1220	19-May-09	Determine whether the Chief Building Official complied with the requirements of Subsections 8(2.2) and 8(2.3) of the *Building Code Act, 1992* and Division C, Sentence 1.3.1.3.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 1.3.1.3. of the Building Code	Chief Building Official complied
Division C, Sentence 1.3.1.3.(1) of the Building Code	08-33-1207	17-Oct-08	Whether the Chief Building Official complied with the requirements of Subsections 8(2.2) and 8(2.3) of the *Building Code Act, 1992* and Division C, Sentence 1.3.1.3.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 1.3.1.3. of the Building Code	Chief Building Official did not comply

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Article 3.1.2.1 of the Building Code	09-10-1222	4-Jun-09	Determine whether the proposal to classify the accessories display area and the all terrain vehicle, motorcycle and small engine equipment showroom, which will form part of a new addition to the existing motor vehicle sales and service building, as a Group F, Division 2 major occupancy, provides sufficiency of compliance with Article 3.1.2.1 and 3.2.2.6. of the Building Code	Sufficiency of Compliance not found
Sentence 3.1.5.2.(1)(h) of the 2006 Building Code	09-02-1214	5-Feb-09	Determine whether the installation of PVC P-traps and fixture drains installed in a high-rise building containing a Group B3 care occupancy and Group C residential occupancy provides sufficiency of compliance with Clause 3.1.5.16.(1)(b) when considering Clause 3.1.5.2.(1)(h) of the 2006 Building Code	Sufficiency of Compliance not found
Sentences 3.1.8.13.(1) of the 1997 Building Code	07-36-1165	18-Oct-07	Determine whether the installation of the Von Duprin less bottom rod fire exit devices on doors which are required to be fire-protected provide sufficiency of compliance with Sentences 3.1.8.5.(2), 3.1.8.13.(1), 3.3.2.3.(10), Articles 3.3.1.12., and 3.4.6.15. of the 1997 Building Code	Sufficiency of Compliance found
Article 3.1.8.18 of Division B of the 2006 Building Code	09-20-1232	17-Sep-09	Determine whether the alternative solution, where glazed openings, provided with combustible frames that are proposed to be protected by window sprinklers, provides sufficiency of compliance with Article 3.1.8.18. of Division B of the 2006 Building Code	Sufficiency of Compliance not found

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Article 3.1.8.3. of the Building Code	07-23-1152	7-Jun-07	Determine whether the proposed construction of a Group B, Division 3 care occupancy, where the proximity of the nearest fire hydrant is approximately 90 m from the building, the fire resistance rating of the fire separation between the single car storage garage and the remainder of the building is less than 1. 5 h, combustible eave projections will extend to within 1.2 m from the property line and where the fire separation does not extend to the underside of the roof deck, provides sufficiency of compliance with Articles 3.1.8.3., 3.2.3.6., 3.3.5.6., Sentences 3.2.5.16.(2) and 3.3.4.2.(4) of the Building Code	Sufficiency of Compliance not found
Sentence 3.1.8.5.(2) of the 1997 Building Code	07-36-1165	18-Oct-07	Determine whether the installation of the Von Duprin less bottom rod fire exit devices on doors which are required to be fire-protected provide sufficiency of compliance with Sentences 3.1.8.5.(2), 3.1.8.13.(1), 3.3.2.3.(10), Articles 3.3.1.12., and 3.4.6.15. of the 1997 Building Code	Sufficiency of Compliance found
Sentence 3.1.9.1.(1) of Division B of the 2006 Building Code	08-20-1194	10-Jul-08	Determine whether the alternative solution proposed, as per Article 1.2.1.1. of Division A, for six firestop systems which are identified in the Morrison Hershfield report as Numbers 2, 4, 6, 7, 8, and 9, which have not been tested to ULC-S115-95 “Fire Tests of Firestop Systems” provides sufficiency of compliance with Sentence 3.1.9.1.(1) of Division B of the 2006 Building Code	Sufficiency of Compliance found
Sentence 3.11.3.1.(9) of the Building Code	07-19-1148	24-May-07	Determine whether the design of a proposed pool, which will be surrounded on three sides only by a hard-surfaced pool deck, in a 6 storey mixed use building, provides sufficiency of compliance with Sentence 3.11.3.1.(9) of the Building Code	Sufficiency of Compliance found
Sentence 3.2.2.24.(2)(c) of the Building Code	07-20-1149	10-May-07	Determine whether the proposed construction of a running track, which will be suspended from the roof trusses above the gymnasium of a Group A, Division 2 occupancy, where no fire resistance rating will be provided for the supporting tension rods, the roof trusses or the running track floor assembly provides sufficiency of compliance with Clauses 3.2.2.24.(2)(b) and 3.2.2.24.(2)(c) of the Building Code	Sufficiency of Compliance not found

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Article 3.2.2.45. of the Building Code	07-35-1164	18-Oct-07	Determine whether the proposed construction of a Group C residential townhouse block provides sufficiency of compliance with Subsection 2.1.1. as a three storey building when considering the definition of “grade” as outlined in Article 1.1.3.2., Article 3.2.2.45. and 9.1.1.1. of the Building Code	Sufficiency of Compliance not found
Article 3.2.2.6. of the Building Code	09-10-1222	4-Jun-09	Determine whether the proposal to classify the accessories display area and the all terrain vehicle, motorcycle and small engine equipment showroom, which will form part of a new addition to the existing motor vehicle sales and service building, as a Group F, Division 2 major occupancy, provides sufficiency of compliance with Article 3.1.2.1 and 3.2.2.6. of the Building Code	Sufficiency of Compliance not found
Article 3.2.3.12. of the 1997 Building Code	09-11-1223	18-Jun-09	Proposal to increase the sprinkler density within fire compartments that contain unprotected openings, which are exposed to the unprotected openings of adjacent exit stair enclosures located on floors 2, 3, 4 and 5 of an existing seven storey, Group B, Division 2 major occupancy building, provides sufficiency of compliance with Article 3.2.3.12. of the 1997 Building Code	Sufficiency of Compliance not found
Article 3.2.3.6 of the Building Code.	07-23-1152	7-Jun-07	Determine whether the remainder of the building is less than 1. 5 h, combustible eave projections will extend to within 1.2 m from the property line and where the fire separation does not extend to the underside of the roof deck, provides sufficiency of compliance with Article3.2.3.6. of the Building Code	Sufficiency of Compliance not found

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence 3.2.5.16.(2) of the Building Code	07-23-1152	7-Jun-07	Determine whether the proposed construction of a Group B, Division 3 care occupancy, where the proximity of the nearest fire hydrant is approximately 90 m from the building, the fire resistance rating of the fire separation between the single car storage garage provides sufficiency of compliance with Sentence 3.2.5.16.(2) of the Building Code	Sufficiency of Compliance found
Article 3.2.5.5 of the Building Code	07-28-1157	16-Aug-07	Determine whether the proposed compensating measures offered in lieu of the openings required by Article 3.2.5.1., when considering the provisions of Article 3.2.5.5., in a six storey, Group F, Division 3 storage garage, provide sufficiency of compliance with the Building Code	Sufficiency of Compliance not found
Article 3.2.9.2. the Building Code	07-30-1159	23-Aug-07	Determine whether the proposed standpipe and hose system, where the hose valves in the fire hose cabinets will be pressure restricting valves and where 75 mm (3 in) drain risers will not be installed, provides sufficiency of compliance with Article 3.2.9.2. of the Building Code	Sufficiency of Compliance not found
Sentence 3.2.9.2.(1) the Building Code	07-34-1163	20-Sep-07	Determine whether the vertical and horizontal piping for the proposed standpipe system which would not be protected with a two-hour fire rated separation provides sufficiency of compliance with Sentence 3.2.9.2.(1) and Clause 3.2.9.2.(9)(b) when considering Sentence 3.6.3.1.(1) of the Building Code	Sufficiency of Compliance found with condition(s)
Sentence 3.2.9.2.(9)(b) the Building Code	07-34-1163	20-Sep-07	Determine whether the vertical and horizontal piping for the proposed standpipe system which would not be protected with a two-hour fire rated separation provides sufficiency of compliance with Sentence 3.2.9.2.(1) and Clause 3.2.9.2.(9)(b) when considering Sentence 3.6.3.1.(1) of the Building Code	Sufficiency of Compliance found with condition(s)

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence 3.2.9.4.(2) the Building Code	08-07-1181	7-Feb-08	Determine whether the proposal to remove the fire hoses from the fire hose cabinets of a Group A, Division 2 assembly occupancy provides sufficiency of compliance with Sentence 3.2.9.4.(2) of the Building Code	Sufficiency of Compliance not found
Sentence 3.2.9.7.(4) the 1997 Building Code	08-12-1186	18-Apr-08	Determine whether the proposed design of water supply piping between the City's water main and a 34 storey, residential building, where two water supply lines would connect to either side of a valve in the city water main, provides sufficiency of compliance with Sentence 3.2.9.7.(4). of the 1997 Ontario Building Code	Sufficiency of Compliance not found
Article 3.3.1.12 the 1997 Building Code.	07-36-1165	18-Oct-07	Determine whether the installation of the Von Duprin less bottom rod fire exit devices on doors which are required to be fire-protected provide sufficiency of compliance with Sentences 3.1.8.5.(2), 3.1.8.13.(1), 3.3.2.3.(10), Articles 3.3.1.12., and 3.4.6.15. of the 1997 Building Code	Sufficiency of Compliance found with condition(s)
Sentence 3.3.1.14.(1) the Building Code	08-03-1177	24-Jan-08	Determine whether the omission of the fire rated shutter between the tenant balconies and the exterior passageway in the design of the exit and egress system provides sufficiency of compliance with Articles 3.4.4.1., 3.4.4.3., Sentences 3.3.1.3.(8), 3.3.1.3.(9), 3.3.1.4.(1), 3.3.1.14.(1) and 3.3.4.4.(7) of the Building Code	Sufficiency of Compliance found with condition(s)
Article 3.3.1.15. the Building Code	09-05-1217	9-Apr-09	Determine whether that the as-installed prefabricated steel spiral staircase serving a mezzanine of a residential dwelling provides sufficiency of compliance with Articles 3.3.1.15. and 9.8.4.4. of the 2006 Building Code	Sufficiency of Compliance not found
Article 3.3.1.17. the Building Code	07-26-1155	5-Jul-07	Determine whether the existing guards, serving exterior balconies of three residential units located within a 16 storey Group C residential condominium building, and being 1041 mm, 1032 mm and 930 mm in height respectively for Units 704, 1408, and 1702, provide sufficiency of compliance with Article 3.3.1.17. of the Building Code	Sufficiency of Compliance not found

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence 3.3.1.17.(4) the Building Code	08-21-1195	10-Jul-08	Determine whether the as-installed guard, serving a truck loading ramp retaining wall, consisting of pipe railing with openings greater than 100 mm, provides sufficiency of compliance with Sentences 3.3.1.17.(4) and 3.3.1.17.(5) of Division B of the Building Code	Sufficiency of Compliance found
Sentence 3.3.1.17.(5) the Building Code	08-21-1195	10-Jul-08	Determine whether the as-installed guard, serving the east exit stairs located at the vehicular ramp, consisting of pipe railing with openings greater than 100 mm, provides sufficiency of compliance with Sentences 3.3.1.17.(4) and 3.3.1.17.(5) of Division B of the Building Code	Sufficiency of Compliance not found
Sentence 3.3.1.3.(8) the Building Code	08-03-1177	24-Jan-08	Determine whether the omission of the fire rated shutter between the tenant balconies and the exterior passageway in the design of the exit and egress system provides sufficiency of compliance with Articles 3.4.4.1., 3.4.4.3., Sentences 3.3.1.3.(8), 3.3.1.3.(9), 3.3.1.4.(1), 3.3.1.14.(1) and 3.3.4.4.(7) of the Building Code	Sufficiency of Compliance found with condition(s)
Sentence 3.3.1.3.(9) the Building Code	09-03-1215	19-Mar-09	Determine whether the proposed egress system for the ground floor level of a four storey building containing Group B, Division 3 and Group C major occupancies, where one of the required means of egress from the suites passes through a public corridor into a "corridor used by the public" or “common area” leading to an exit, provides sufficiency of compliance with Division B, Sentence 3.3.1.3.(9) and 3.3.1.4.(1) of the 2006 Building Code	Sufficiency of Compliance found
Sentence 3.3.1.3.(9) the Building Code	08-03-1177	24-Jan-08	Determine whether the omission of the fire rated shutter between the tenant balconies and the exterior passageway in the design of the exit and egress system provides sufficiency of compliance with Articles 3.4.4.1., 3.4.4.3., Sentences 3.3.1.3.(8), 3.3.1.3.(9), 3.3.1.4.(1), 3.3.1.14.(1) and 3.3.4.4.(7) of the Building Code	Sufficiency of Compliance found with condition(s)

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence 3.3.1.4.(1) the Building Code	09-03-1215	19-Mar-09	Determine whether the proposed egress system for the ground floor level of a four storey building containing Group B, Division 3 and Group C major occupancies, where one of the required means of egress from the suites passes through a public corridor into a "corridor used by the public" or “common area” leading to an exit, provides sufficiency of compliance with Division B, Sentence 3.3.1.3.(9) and 3.3.1.4.(1) of the 2006 Building Code	Sufficiency of Compliance found
Sentence 3.3.1.4.(1) the Building Code	08-03-1177	24-Jan-08	Determine whether the omission of the fire rated shutter between the tenant balconies and the exterior passageway in the design of the exit and egress system provides sufficiency of compliance with Articles 3.4.4.1., 3.4.4.3., Sentences 3.3.1.3.(8), 3.3.1.3.(9), 3.3.1.4.(1), 3.3.1.14.(1) and 3.3.4.4.(7) of the Building Code	Sufficiency of Compliance found with condition(s)
Sentence 3.3.2.2.(8)(b) the Building Code	08-31-1205	9-Oct-08	Determine whether the proposal to include the administrative offices and library spaces within the same fire compartment as the cafetorium, which has an occupant load greater than 200 persons, provides sufficiency of compliance with Clause 3.3.2.2.(8)(b) of Division B of the 2006 Building Code	Sufficiency of Compliance not found
Sentence 3.3.2.3.(10) the 1997 Building Code	07-36-1165	18-Oct-07	Determine whether the installation of the Von Duprin less bottom rod fire exit devices on doors which are required to be fire-protected provide sufficiency of compliance with Sentences 3.1.8.5.(2), 3.1.8.13.(1), 3.3.2.3.(10), Articles 3.3.1.12., and 3.4.6.15. of the 1997 Building Code	Sufficiency of Compliance found with condition(s)

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence 3.3.4.2.(4) the Building Code	07-23-1152	7-Jun-07	Determine whether the, combustible eave projections will extend to within 1.2 m from the property line and where the fire separation does not extend to the underside of the roof deck, provides sufficiency of compliance with Article 3.3.4.2.(4) of the Building Code	Sufficiency of Compliance not found
Sentence 3.3.4.4.(7) the Building Code	08-03-1177	24-Jan-08	Determine whether the omission of the fire rated shutter between the tenant balconies and the exterior passageway in the design of the exit and egress system provides sufficiency of compliance with Articles 3.4.4.1., 3.4.4.3., Sentences 3.3.1.3.(8), 3.3.1.3.(9), 3.3.1.4.(1), 3.3.1.14.(1) and 3.3.4.4.(7) of the Building Code	Sufficiency of Compliance found with condition(s)
Article 3.3.5.6. the Building Code	07-23-1152	7-Jun-07	Determine whether the proposed construction of a Group B, Division 3 care occupancy, where the proximity of the nearest fire hydrant is approximately 90 m from the building, the fire resistance rating of the fire separation between the single car storage garage and the remainder of the building is less than 1. 5 h, provides sufficiency of compliance with Articles 3.1.8.3., 3.2.3.6., 3.3.5.6., Sentences 3.2.5.16.(2) and 3.3.4.2.(4) of the Building Code	Sufficiency of Compliance found
Article 3.4.4.1. the Building Code	08-03-1177	24-Jan-08	Determine whether the omission of the fire rated shutter between the tenant balconies and the exterior passageway in the design of the exit and egress system provides sufficiency of compliance with Articles 3.4.4.1., 3.4.4.3., Sentences 3.3.1.3.(8), 3.3.1.3.(9), 3.3.1.4.(1), 3.3.1.14.(1) and 3.3.4.4.(7) of the Building Code	Sufficiency of Compliance found with condition(s)

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Article 3.4.4.3. the Building Code	08-03-1177	24-Jan-08	Determine whether the omission of the fire rated shutter between the tenant balconies and the exterior passageway in the design of the exit and egress system provides sufficiency of compliance with Articles 3.4.4.1., 3.4.4.3., Sentences 3.3.1.3.(8), 3.3.1.3.(9), 3.3.1.4.(1), 3.3.1.14.(1) and 3.3.4.4.(7) of the Building Code	Sufficiency of Compliance found with condition(s)
Article 3.4.6.15. the 1997 Building Code	07-36-1165	18-Oct-07	Determine whether the installation of the Von Duprin less bottom rod fire exit devices on doors which are required to be fire-protected provide sufficiency of compliance with Sentences 3.1.8.5.(2), 3.1.8.13.(1), 3.3.2.3.(10), Articles 3.3.1.12., and 3.4.6.15. of the 1997 Building Code	Sufficiency of Compliance found with condition(s)
Sentence 3.4.6.5.(8) the Building Code	07-42-1171	22-Nov-07	Determine whether the proposed guard, serving exterior exit stairs in a Group F, Division 2 industrial occupancy building and having been designed with horizontal members which will be located between 140 mm and 900 mm above the level being protected, provides sufficiency of compliance with Sentence 3.4.6.5.(8) of the Building Code	Sufficiency of Compliance found with condition(s)
Sentence 3.6.3.1.(1) the Building Code	07-34-1163	20-Sep-07	Determine whether the vertical and horizontal piping for the proposed standpipe system which would not be protected with a two-hour fire rated separation provides sufficiency of compliance with Sentence 3.2.9.2.(1) and Clause 3.2.9.2.(9)(b) when considering Sentence 3.6.3.1.(1) of the Building Code	Sufficiency of Compliance found with condition(s)
Sentence 3.6.3.1.(1) the Building Code	07-33-1162	20-Sep-07	Determine whether the vertical and horizontal piping for the proposed standpipe system which would not be protected with a two-hour fire rated separation provides sufficiency of compliance with Sentence 3.2.9.2.(1) and Clause 3.2.9.2.(9)(b) when considering Sentence 3.6.3.1.(1) of the Building Code	Sufficiency of Compliance found with condition(s)
Sentence 3.6.3.1.(2) the 1997 Building Code	08-11-1185	20-Mar-08	Determine whether the proposal to terminate the fire separation for the vertical service space at the underside of the fourth storey roof, in an addition to a Group B, Division 2 care and treatment occupancy, provides sufficiency of compliance with Sentence 3.6.3.1.(2) of the 1997 Building Code	Sufficiency of Compliance found

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence 3.7.4.2.(2) the 1997 Building Code	08-38-1212	11-Dec-08	Determine whether the proposed revised design of a multi-use building with Group C and Group A Division 2 occupancies, where the Group A Division 2 occupancy will be served by one barrier-free washroom and one additional washroom and where both washrooms are intended to serve both sexes, provides sufficiency of compliance with Sentence 3.7.4.2.(2) and Table 3.7.4.3. A. of the 1997 Building Code	Sufficiency of Compliance found with condition(s)
Table 3.7.4.3. A. the 1997 Building Code	08-38-1212	11-Dec-08	Determine whether the proposed revised design of a multi-use building with Group C and Group A Division 2 occupancies, where the Group A Division 2 occupancy will be served by one barrier-free washroom and one additional washroom and where both washrooms are intended to serve both sexes, provides sufficiency of compliance with Sentence 3.7.4.2.(2) and Table 3.7.4.3. A. of the 1997 Building Code	Sufficiency of Compliance found with condition(s)
Article 6.2.1.4. the 1997 Building Code	08-05-1179	7-Feb-08	Determine whether the as-installed ground source heat pump/geothermal system provides sufficiency of compliance with Article 6.2.1.4. of the Building Code	Sufficiency of Compliance found with condition(s)
Article 7.1.5.4. the Building Code	08-29-1203	13-Nov-08	Determine whether the proposed system of piping to be built in conformance with Article 7.1.5.5. of the Building Code, which includes connections to multiple buildings on a single property that will be serviced by a single connection between the private sewer and the public sanitary sewer and two connections between the private water supply and the public water supply, sufficiently complies with Article 7.1.5.4. of the 2006 Building Code	Sufficiency of Compliance found
Article 7.2.5.9. the 1997 Building Code	08-27-1201	7-Aug-08	Determine whether the as-installed CPVC SCH 80 distribution piping, used in a drainage application in a food processing plant, as an alternative to ABS and PVC piping, provides sufficiency of compliance with Article 7.2.5.9. of the 1997 Building Code	Sufficiency of Compliance not found

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence 7.3.3.11.(1) the Building Code	08-06-1180	7-Feb-08	Determine whether the plumbing system which has been installed to provide service to an additional washroom on the second floor of a two storey, Group C, residential dwelling provides sufficiency of compliance with Article 7.4.8.2., Sentences 7.3.3.11.(1), 7.3.6.1.(1), 7.3.7.1.(1), 7.4.7.1.(2), Clause 7.5.7.1.(1)(a), Subclauses 7.5.5.3.(1)(a)(ii), 7.5.7.1.(1)(d)(iii), and Table 7.4.10.3.A. of the Building Code	Sufficiency of Compliance not found
Sentence 7.3.6.1.(1) the Building Code	08-06-1180	7-Feb-08	Determine whether the plumbing system which has been installed to provide service to an additional washroom on the second floor of a two storey, Group C, residential dwelling provides sufficiency of compliance with Article 7.4.8.2., Sentences 7.3.3.11.(1), 7.3.6.1.(1), 7.3.7.1.(1), 7.4.7.1.(2), Clause 7.5.7.1.(1)(a), Subclauses 7.5.5.3.(1)(a)(ii), 7.5.7.1.(1)(d)(iii), and Table 7.4.10.3.A. of the Building Code	Sufficiency of Compliance not found
Sentence 7.3.7.1.(1) the Building Code	08-06-1180	7-Feb-08	Determine whether the plumbing system which has been installed to provide service to an additional washroom on the second floor of a two storey, Group C, residential dwelling provides sufficiency of compliance with Article 7.4.8.2., Sentences 7.3.3.11.(1), 7.3.6.1.(1), 7.3.7.1.(1), 7.4.7.1.(2), Clause 7.5.7.1.(1)(a), Subclauses 7.5.5.3.(1)(a)(ii), 7.5.7.1.(1)(d)(iii), and Table 7.4.10.3.A. of the Building Code	Sufficiency of Compliance not found
Table 7.4.10.3.A. the Building Code	08-06-1180	7-Feb-08	Determine whether the plumbing system which has been installed to provide service to an additional washroom on the second floor of a two storey, Group C, residential dwelling provides sufficiency of compliance with Article 7.4.8.2., Sentences 7.3.3.11.(1), 7.3.6.1.(1), 7.3.7.1.(1), 7.4.7.1.(2), Clause 7.5.7.1.(1)(a), Subclauses 7.5.5.3.(1)(a)(ii), 7.5.7.1.(1)(d)(iii), and Table 7.4.10.3.A. of the Building Code	Sufficiency of Compliance not found

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence 7.4.7.1.(2) the Building Code	08-06-1180	7-Feb-08	Determine whether the plumbing system which has been installed to provide service to an additional washroom on the second floor of a two storey, Group C, residential dwelling provides sufficiency of compliance with Article 7.4.8.2., Sentences 7.3.3.11.(1), 7.3.6.1.(1), 7.3.7.1.(1), 7.4.7.1.(2), Clause 7.5.7.1.(1)(a), Subclauses 7.5.5.3.(1)(a)(ii), 7.5.7.1.(1)(d)(iii), and Table 7.4.10.3.A. of the Building Code	Sufficiency of Compliance not found
Article 7.4.8.2. the Building Code	08-06-1180	7-Feb-08	Determine whether the plumbing system which has been installed to provide service to an additional washroom on the second floor of a two storey, Group C, residential dwelling provides sufficiency of compliance with Article 7.4.8.2., Sentences 7.3.3.11.(1), 7.3.6.1.(1), 7.3.7.1.(1), 7.4.7.1.(2), Clause 7.5.7.1.(1)(a), Subclauses 7.5.5.3.(1)(a)(ii), 7.5.7.1.(1)(d)(iii), and Table 7.4.10.3.A. of the Building Code	Sufficiency of Compliance not found
Sentence 7.5.5.3.(1)(a)(ii) the Building Code	08-06-1180	7-Feb-08	Determine whether the plumbing system which has been installed to provide service to an additional washroom on the second floor of a two storey, Group C, residential dwelling provides sufficiency of compliance with Article 7.4.8.2., Sentences 7.3.3.11.(1), 7.3.6.1.(1), 7.3.7.1.(1), 7.4.7.1.(2), Clause 7.5.7.1.(1)(a), Subclauses 7.5.5.3.(1)(a)(ii), 7.5.7.1.(1)(d)(iii), and Table 7.4.10.3.A. of the Building Code	Sufficiency of Compliance not found
Sentence 7.5.7.1.(1)(a) the Building Code	08-06-1180	7-Feb-08	Determine whether the plumbing system which has been installed to provide service to an additional washroom on the second floor of a two storey, Group C, residential dwelling provides sufficiency of compliance with Article 7.4.8.2., Sentences 7.3.3.11.(1), 7.3.6.1.(1), 7.3.7.1.(1), 7.4.7.1.(2), Clause 7.5.7.1.(1)(a), Subclauses 7.5.5.3.(1)(a)(ii), 7.5.7.1.(1)(d)(iii), and Table 7.4.10.3.A. of the Building Code	Sufficiency of Compliance not found

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence7.5.7.1.(1)(d)(iii) the Building Code	08-06-1180	7-Feb-08	Determine whether the plumbing system which has been installed to provide service to an additional washroom on the second floor of a two storey, Group C, residential dwelling provides sufficiency of compliance with Article 7.4.8.2., Sentences 7.3.3.11.(1), 7.3.6.1.(1), 7.3.7.1.(1), 7.4.7.1.(2), Clause 7.5.7.1.(1)(a), Subclauses 7.5.5.3.(1)(a)(ii), 7.5.7.1.(1)(d)(iii), and Table 7.4.10.3.A. of the Building Code	Sufficiency of Compliance not found
Sentence 8.2.1.2.(1) of the Building Code	07-38-1167	13-Dec-07	Determine whether the proposed construction of seven (7) individual Class 4 sewage systems to service seven (7) individual residential dwellings provides sufficiency of compliance with Sentences 8.2.1.2.(1), 8.2.1.2.(3), Clauses 8.7.3.2.(2)(e), 8.7.4.2.(1)(b), 8.9.1.2.(1)(c) and Subclause 8.7.2.1.(1)(b)(i) of the Building Code	No Jurisdiction
Sentence 8.2.1.2.(3) of the Building Code	07-38-1167	13-Dec-07	Determine whether the proposed construction of seven (7) individual Class 4 sewage systems to service seven (7) individual residential dwellings provides sufficiency of compliance with Sentences 8.2.1.2.(1), 8.2.1.2.(3), Clauses 8.7.3.2.(2)(e), 8.7.4.2.(1)(b), 8.9.1.2.(1)(c) and Subclause 8.7.2.1.(1)(b)(i) of the Building Code	No Jurisdiction
Sentence 8.2.1.3. of the Building Code	08-34-1208	20-Nov-08	Determine whether the total daily design sanitary sewage flow for a proposed Class 4 Sewage System serving a Group A, Division 2 major occupancy, having been calculated for an “Assembly Hall with food service provided” with a daily design sanitary sewage flow of 36L per seat, sufficiently complies with Article 8.2.1.3. and Table 8.2.1.3. B of the Building Code	Sufficiency of Compliance found with condition(s)
Table 8.2.1.3. B of the Building Code	08-34-1208	20-Nov-08	Determine whether the total daily design sanitary sewage flow for a proposed Class 4 Sewage System serving a Group A, Division 2 major occupancy, having been calculated for an “Assembly Hall with food service provided” with a daily design sanitary sewage flow of 36L per seat, sufficiently complies with Article 8.2.1.3. and Table 8.2.1.3. B of the Building Code	Sufficiency of Compliance found with condition(s)

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence 8.2.1.3.(4) of the Building Code	08-17-1191	8-May-08	Determine whether the existing Class 4 sewage system, which is proposed to serve an existing elementary school and the addition of a new, unattached, 4-classroom portable building, provides sufficiency of compliance with Sentence 8.2.1.3.(4) and Table 8.2.1.3.B. of the Ontario Building Code	No Jurisdiction
Table 8.2.1.3.B. of the Building Code	08-17-1191	8-May-08	Determine whether the existing Class 4 sewage system, which is proposed to serve an existing elementary school and the addition of a new, unattached, 4-classroom portable building, provides sufficiency of compliance with Sentence 8.2.1.3.(4) and Table 8.2.1.3.B. of the Ontario Building Code	No Jurisdiction
Sentence 8.2.1.6. of the Building Code	07-31-1160	6-Sep-07	Determine whether the proposal to relocate the existing leaching bed and install a new 3 600 litre septic tank intended to remedy an Unsafe Order issued in respect of the existing Class 4 sewage system does not provide sufficiency of compliance with Articles 8.2.1.6. and 8.7.3.2. when considering Part 11 of the Building Code	Sufficiency of Compliance not found
Sentence 8.2.1.6.(1) of the Building Code	08-02-1176	17-Jan-08	Determine whether the proposed construction of a Class 4 sewage system providing a clearance distance of 12 m from the leaching bed to the lake provides sufficiency of compliance with Division B, Sentences 8.2.1.6.(1), 8.2.1.6.(2), Tables 8.2.1.6.A. and 8.2.1.6.B. of the Building Code	Sufficiency of Compliance found with condition(s)
Sentence 8.2.1.6.(2) of the Building Code	08-02-1176	17-Jan-08	Determine whether the proposed construction of a Class 4 sewage system providing a clearance distance of 12 m from the leaching bed to the lake provides sufficiency of compliance with Division B, Sentences 8.2.1.6.(1), 8.2.1.6.(2), Tables 8.2.1.6.A. and 8.2.1.6.B. of the Building Code	Sufficiency of Compliance found with condition(s)

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Table 8.2.1.6.A. of the Building Code	08-02-1176	17-Jan-08	Determine whether the proposed construction of a Class 4 sewage system providing a clearance distance of 12 m from the leaching bed to the lake provides sufficiency of compliance with Division B, Sentences 8.2.1.6.(1), 8.2.1.6.(2), Tables 8.2.1.6.A. and 8.2.1.6.B. of the Building Code	Sufficiency of Compliance found with condition(s)
Table 8.2.1.6.B. of the Building Code	08-02-1176	17-Jan-08	Determine whether the proposed construction of a Class 4 sewage system providing a clearance distance of 12 m from the leaching bed to the lake provides sufficiency of compliance with Division B, Sentences 8.2.1.6.(1), 8.2.1.6.(2), Tables 8.2.1.6.A. and 8.2.1.6.B. of the Building Code	Sufficiency of Compliance found with condition(s)
Sentence 8.7.2.1.(1)(b)(i) of the Building Code	07-38-1167	13-Dec-07	Determine whether the proposed construction of seven (7) individual Class 4 sewage systems to service seven (7) individual residential dwellings provides sufficiency of compliance with Sentences 8.2.1.2.(1), 8.2.1.2.(3), Clauses 8.7.3.2.(2)(e), 8.7.4.2.(1)(b), 8.9.1.2.(1)(c) and Subclause 8.7.2.1.(1)(b)(i) of the Building Code	No Jurisdiction
8.7.3.2. of the Building Code	07-31-1160	6-Sep-07	Determine whether the proposal to relocate the existing leaching bed and install a new 3 600 litre septic tank intended to remedy an Unsafe Order issued in respect of the existing Class 4 sewage system does not provide sufficiency of compliance with Articles 8.2.1.6. and 8.7.3.2. when considering Part 11 of the Building Code	Sufficiency of Compliance not found
Sentence 8.7.3.2.(1)(e) of the Building Code	07-18-1147	19-Apr-07	Determine whether the repairs undertaken, consisting of raising the tile bed and replacing existing fill and natural mantle, on an existing Class 4 sewage system provides sufficiency of compliance with Clause 8.7.3.2.(1)(e) of the Building Code	Sufficiency of Compliance found with condition(s)

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence 8.7.3.2.(1)(e) of the Building Code	07-17-1146	19-Apr-07	Determine whether the repairs undertaken, consisting of raising the tile bed and replacing existing fill and natural mantle, on an existing Class 4 sewage system provides sufficiency of compliance with Clause 8.7.3.2.(1)(e) of the Building Code	Sufficiency of Compliance not found
Sentence 8.7.3.2.(2)(e) of the Building Code	07-38-1167	13-Dec-07	Determine whether the proposed construction of seven (7) individual Class 4 sewage systems to service seven (7) individual residential dwellings provides sufficiency of compliance with Sentences 8.2.1.2.(1), 8.2.1.2.(3), Clauses 8.7.3.2.(2)(e), 8.7.4.2.(1)(b), 8.9.1.2.(1)(c) and Subclause 8.7.2.1.(1)(b)(i) of the Building Code	No Jurisdiction
Sentence 8.7.4.2.(1)(b) of the Building Code	07-38-1167	13-Dec-07	Determine whether the proposed construction of seven (7) individual Class 4 sewage systems to service seven (7) individual residential dwellings provides sufficiency of compliance with Sentences 8.2.1.2.(1), 8.2.1.2.(3), Clauses 8.7.3.2.(2)(e), 8.7.4.2.(1)(b), 8.9.1.2.(1)(c) and Subclause 8.7.2.1.(1)(b)(i) of the Building Code	No Jurisdiction
Sentence 8.9.1.2.(1) (c) of the Building Code	07-38-1167	13-Dec-07	Determine whether the proposed construction of seven (7) individual Class 4 sewage systems to service seven (7) individual residential dwellings provides sufficiency of compliance with Sentences 8.2.1.2.(1), 8.2.1.2.(3), Clauses 8.7.3.2.(2)(e), 8.7.4.2.(1)(b), 8.9.1.2.(1)(c) and Subclause 8.7.2.1.(1)(b)(i) of the Building Code	No Jurisdiction
Sentence 9.1.1.1. of the Building Code	07-35-1164	18-Oct-07	Determine whether the proposed construction of a Group C residential townhouse block provides sufficiency of compliance with Subsection 2.1.1. as a three storey building when considering the definition of “grade” as outlined in Article 1.1.3.2., Article 3.2.2.45. and 9.1.1.1. of the Building Code	Sufficiency of Compliance not found

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence 9.8.4.1.(1) of the Building Code	07-29-1158	23-Aug-07	Determine whether the as-installed interior stair, where the structural post for the handrail projects more than 100 mm into the required width of the stairway and similarly projects into the width of the landing at the bottom of the stair, provide sufficiency of compliance with Sentences 9.8.4.1.(1) and 9.8.7.6.(1) of the Building Code and further whether the door that swings outward over a 325 mm exterior step serving a second storey balcony provides sufficiency of compliance with Sentences 9.8.4.1.(1) and 9.8.4.2.(2) of the Building Code	Sufficiency of Compliance found
Sentence 9.8.4.2.(2) of the Building Code	07-29-1158	23-Aug-07	Determine whether the as-installed interior stair, where the structural post for the handrail projects more than 100 mm into the required width of the stairway and similarly projects into the width of the landing at the bottom of the stair, provide sufficiency of compliance with Sentences 9.8.4.1.(1) and 9.8.7.6.(1) of the Building Code and further whether the door that swings outward over a 325 mm exterior step serving a second storey balcony provides sufficiency of compliance with Sentences 9.8.4.1.(1) and 9.8.4.2.(2) of the Building Code	Sufficiency of Compliance not found
Sentence 9.8.4.4. of the Building Code	09-05-1217	9-Apr-09	Determine whether that the as-installed prefabricated steel spiral staircase serving a mezzanine of a residential dwelling provides sufficiency of compliance with Articles 3.3.1.15. and 9.8.4.4. of the 2006 Building Code	Sufficiency of Compliance not found
Sentence 9.8.8.3 (2) of the Building Code	08-37-1211	11-Dec-08	Determine whether the as installed guards, having been constructed to a height of 754 mm, serving two sets of stairs in a two storey, seasonal residential dwelling, provide sufficiency of compliance with Sentences 9.8.8.3 (2) and 9.8.8.3 (4) of the 2006 Building Code	Sufficiency of Compliance found
Sentence 9.8.8.3 (4) of the Building Code	08-37-1211	11-Dec-08	Determine whether the as installed guards, having been constructed to a height of 754 mm, serving two sets of stairs in a two storey, seasonal residential dwelling, provide sufficiency of compliance with Sentences 9.8.8.3 (2) and 9.8.8.3 (4) of the 2006 Building Code	Sufficiency of Compliance found

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence 9.8.8.5. of the 1997 Building Code	08-32-1206	9-Oct-08	Determine whether the guards installed to serve the newly constructed rear deck and front entrance landing of a residential building, where the new guards have been designed to replicate the existing guards provide sufficiency of compliance with Articles 9.8.8.5. of the 1997 Building Code or Article 9.8.8.6. of the 2006 Building Code	Sufficiency of Compliance not found
Sentence 9.8.8.6. of the 1997 Building Code	08-32-1206	9-Oct-08	Determine whether the guards installed to serve the newly constructed rear deck and front entrance landing of a residential building, where the new guards have been designed to replicate the existing guards provide sufficiency of compliance with Articles 9.8.8.5. of the 1997 Building Code or Article 9.8.8.6. of the 2006 Building Code	Sufficiency of Compliance not found
Sentence 9.8.8.6. of the Building Code	09-22-1234	22-Oct-09	Determine whether the as-installed guard, serving the flight of steps from the main floor to the lower level of a residential dwelling provides sufficiency of compliance with Article 9.8.8.6. of Division B of the Building Code	Sufficiency of Compliance found
Sentence 9.9.4.4.(1) of the Building Code	07-41-1170	8-Nov-07	Determine whether the proposed relocation and subsequent renovation of the exterior, unenclosed exit stair, with adjacent unprotected openings, in an existing building with mixed-use occupancy, provides sufficiency of compliance with Sentence 9.9.4.4.(1) when considering Part 11 of the Building Code	Sufficiency of Compliance found
Sentence 9.10.12.3. of the Building Code	07-39-1168	8-Nov-07	Determine whether the proposal to include unprotected openings in the exposing building faces in multiple units of a two storey townhouse building, where there are limiting distances of less than 1.2 m between fire compartments of the same property, provides sufficiency of compliance with Articles 9.10.12.3. and 9.10.15.4. of the Building Code	No Jurisdiction

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence 9.10.15.4. of the Building Code	07-39-1168	8-Nov-07	Determine whether the proposal to include unprotected openings in the exposing building faces in multiple units of a two storey townhouse building, where there are limiting distances of less than 1.2 m between fire compartments of the same property, provides sufficiency of compliance with Articles 9.10.12.3. and 9.10.15.4. of the Building Code	No Jurisdiction
Sentence 9.10.18.1. of the Building Code	07-25-1154	5-Jul-07	Determine whether the as-installed 12 volt alarm system, consisting of smoke alarms and carbon monoxide detectors, where the smoke alarms, conforming to CAN/ULC-S553-02 and NFPA 72, are connected to a 30 watt siren located in the basement of a Group C residential dwelling, provides sufficiency of compliance with Articles 9.10.18.1., 9.10.18.3., 9.10.18.4., and 9.33.4.3. of the Building Code	Sufficiency of Compliance not found
Sentence 9.10.18.3. of the Building Code	07-25-1154	5-Jul-07	Determine whether the as-installed 12 volt alarm system, consisting of smoke alarms and carbon monoxide detectors, where the smoke alarms, conforming to CAN/ULC-S553-02 and NFPA 72, are connected to a 30 watt siren located in the basement of a Group C residential dwelling, provides sufficiency of compliance with Articles 9.10.18.1., 9.10.18.3., 9.10.18.4., and 9.33.4.3. of the Building Code	Sufficiency of Compliance found
Sentence 9.10.18.4. of the Building Code	07-25-1154	5-Jul-07	Determine whether the as-installed 12 volt alarm system, consisting of smoke alarms and carbon monoxide detectors, where the smoke alarms, conforming to CAN/ULC-S553-02 and NFPA 72, are connected to a 30 watt siren located in the basement of a Group C residential dwelling, provides sufficiency of compliance with Articles 9.10.18.1., 9.10.18.3., 9.10.18.4., and 9.33.4.3. of the Building Code	Sufficiency of Compliance found
Sentence 9.19.1.1.(1) of the Building Code	08-24-1198	24-Jul-08	Determine whether the proposal to install a roof assembly, where medium density, closed-cell spray polyurethane foam will be installed to insulate the roof, and where no vents will be installed in the roof assembly, provides sufficiency of compliance with Sentence 9.19.1.1.(1) of Division B of the 2006 Building Code	Sufficiency of Compliance found with condition(s)

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
Sentence 9.23.10.4.(1) of the Building Code	08-28-1202	13-Aug-08	Determine whether the as-installed wood stud walls, where butt jointed studs have been used in a non-load bearing wall on the 2nd and 3rd storey public corridors of a 3 storey residential building, provide sufficiency of compliance with Sentence 9.23.10.4.(1) of Division B of the 2006 Building Code	Sufficiency of Compliance found
Sentence 9.30.6.3. of the 1997 Building Code	08-23-1197	24-Jul-08	Determine whether the as- installed ceramic tile flooring, where the ceramic tile has been applied directly to the subfloor with a scratch coat adhesive mortar (thin-set method), on a subfloor of 15.5 mm softwood plywood conforming to CSA 0151 or 15 mm OSB subfloor conforming to CSA 0325 with a reduced joist spacing of 300 mm (12 in.) on centre below the tiled areas, sufficiently complies with Article 9.30.6.3. of the 1997 Ontario Building Code	Sufficiency of Compliance found
Sentence 9.33.4.3 of the 1997 Building Code	07-25-1154	5-Jul-07	Determine whether the as-installed 12 volt alarm system, consisting of smoke alarms and carbon monoxide detectors, where the smoke alarms, conforming to CAN/ULC-S553-02 and NFPA 72, are connected to a 30 watt siren located in the basement of a Group C residential dwelling, provides sufficiency of compliance with Articles 9.10.18.1., 9.10.18.3., 9.10.18.4., and 9.33.4.3. of the Building Code	Sufficiency of Compliance not found
Sentence 11.4.2.5 (3) of the Building Code	08-16-1190	8-May-08	Determine whether the proposal to construct an addition to a one storey, two bedroom, seasonal cottage, which will increase the size of the existing cottage by 29.5%, and that will be served by the existing Class 5 sewage system with a 9000L capacity, provides sufficiency of compliance with Sentence 11.4.2.5 (3) of Division B of the 2006 Building Code	Sufficiency of Compliance found

BUILDING CODE COMMISSION
DECISIONS BY REFERENCE TO SECTIONS OF THE BUILDING CODE ACT
2007-2009

EDITORS NOTE: The references in column 1 are to references or numbered sections in the Building Code Act at the time of the decision.

BUILDING CODE ACT REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
"Building" of the Act	08-26-1200	19-Jun-08	Determine whether the as-constructed "fishing deck" can be considered a "building" that provides sufficiency of compliance with the definition of "building" as outlined in the *Building Code Act*,	No Jurisdiction
8(2.2) of the Act	09-08-1220	19-May-09	Determine whether the Chief Building Official complied with the requirements of Subsections 8(2.2) and 8(2.3) of the *Building Code Act, 1992* and Division C, Sentence 1.3.1.3.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 1.3.1.3. of the Building Code	Chief Building Official complied
8(2.2) of the Act	08-33-1207	17-Oct-08	Whether the Chief Building Official complied with the requirements of Subsections 8(2.2) and 8(2.3) of the *Building Code Act, 1992* and Division C, Sentence 1.3.1.3.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 1.3.1.3. of the Building Code	Chief Building Official did not comply

BUILDING CODE REFERENCE	BCC RULING NO.	DATE OF RULING	SHORT DESCRIPTION	DISPOSITION
8(2.2) of the Act	07-21-1150	1-Jun-07	Whether the Chief Building Official complied with the requirements under Subsections 8(2.2) and 8(2.3) of the Act and Division C, Sentence 1.3.1.3.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 1.3.1.3. of the Building Code	Chief Building Official complied
8(2.3)	09-08-1220	19-May-09	Determine whether the Chief Building Official complied with the requirements of Subsections 8(2.2) and 8(2.3) of the *Building Code Act, 1992* and Division C, Sentence 1.3.1.3.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 1.3.1.3. of the Building Code	Chief Building Official complied
8(2.3)	07-21-1150	1-Jun-07	Whether the Chief Building Official complied with the requirements under Subsections 8(2.2) and 8(2.3) of the Act and Division C, Sentence 1.3.1.3.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 1.3.1.3. of the Building Code	Chief Building Official complied
8(2.3)	08-33-1207	17-Oct-08	Whether the Chief Building Official complied with the requirements of Subsections 8(2.2) and 8(2.3) of the Building Code Act, 1992 and Division C, Sentence 1.3.1.3.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 1.3.1.3. of the Building Code	Chief Building Official did not comply

BUILDING CODE COMMISSION
DECISIONS BY STATUTORY REFERENCE
UNDER THE 1997-2006 & 2007 BUILDING CODES (REGULATIONS 403/97 & 350/06)

EDITORS NOTE: The statutory references in column 1 are to the so-numbered article/section in the building regulation at the time of the decision (O. reg. 403/97). The statutory references in column 1A are to the comparable article/section in the 2007 Building Code (O. reg. 350/06, as amended).

PART 1

1	1A	2	3	4	5	6
Statutory Reference 403/97	**Statutory Reference 350/06**	**BCC File No.**	**Year**	**Date**	**Short Description from Style**	**LAST APP. AMEND. TO 403/97**
1.1.3.1.	Div. A 1.4.1.1	01-53-846	2001	25-Oct-01	Determine whether the ground floor amenity space (exercise room, swimming pool, change room and lounge), that is not proposed to be sprinklered, in a building containing a Group C major occupancy, provides sufficiency of compliance with s 3.2.2.6., 3.2.2.23. and s 3.2.2.7.(1) and 3.2.2.8.(1)	283/01
1.1.3.1.(1)	Div. A 1.4.1.1.	05-01-1015		13-Jan-05	Determine whether the storage structure, referred to by the Applicant as a tent, provides sufficiency of compliance with Sentences 1.1.3.1.(1) and 2.1.1.3.(1), Subsection 3.13.1. and Sentence 9.1.1.4.(1)	
1.1.3.2.	Div. A. 1.4.1.2.	05-15-1029		21-Apr-05	Determine whether the installation of a septic field remediation technology known as the White KnightTM into an existing septic tank provides sufficiency of compliance with the Building Code when considering Part 11 and the definition of “septic tank” as outlined in Article 1.1.3.2.	
1.1.3.2.	Div. A. 1.4.1.2	01-53-846	2001	25-Oct-01	Determine whether the ground floor amenity space (exercise room, swimming pool, change room and lounge), that is not proposed to be sprinklered, in a building containing a Group C major occupancy, provides sufficiency of compliance with s 3.2.2.6., 3.2.2.23. and s 3.2.2.7.(1) and 3.2.2.8.(1)	283/01

1.1.3.2.	Div. A. 1.4.1.2	03-52-950	2003	1-Mar-04	Determine whether the proposed replacement of a Class 4 sewage system that is located on a “lot or parcel of land” that is serviced by additional Class 4 systems complies with the definition of sewage system in 1.1.3.2. of the Ontario Building Code, when considering that the lot is located adjacent to two lots that are all under the same ownership	220/02
1.1.3.2.(1)	Div. A. 1.4.1.2.	06-02-1072		12-Jan-06	Determine whether the 4th level “loft” design in a residential townhouse development provides sufficiency of compliance with the definition of “mezzanine” contained in Sentence 1.1.3.2.(1) and with the provisions of Sentence 9.10.4.1.(2)	
1.1.3.2.	Div. A. 1.4.1.2.	05-06-1020		17-Feb-05	Determine whether the lower floor of the subject building qualifies as a ground floor when considering the definitions for “grade” and “first storey” as specified in Article 1.1.3.2.	
1.1.3.2.(1)	Div. A. 1.4.1.2.	04-34-989		5-Aug-4	Determine whether the existing outdoor portable metal containers that are used for public storage are considered to be “buildings” under Section 1.-(1) of the *Building Code Act, 1992*	220/02
1.1.3.2.	Div. A. 1.4.1.2	99-74-730	1999	9-Dec-99	Determine whether the proposed live/work units measuring 146.7 m2 in area, excluding stairs and unfinished basements, comply with the definition of live/work units provided in 1.1.3.2	278/99
1.1.3.2.	Div. A. 1.4.1.2	00-23-755	2000	25-May-00	Determine whether the intended use of the proposed building, as a home for ambulatory individuals with disabilities, complies with the definition of "Residential Occupancy" as set out in 1.1.3.2	205/00
1.1.3.2.	Div. A. 1.4.1.2	99-60-716	1999	23-Sep-99	Determine whether the proposed new arena built adjoining to the existing retail mall as one, albeit expanded, building constructed on two properties complies with 3.2.3.4. of the Ontario Building Code (OBC), and if so, whether the proposed design, without the provision of a fire separation with a two hour fire resistance rating complete with closures or special interconnected floor space fire safety measures, provides sufficiency of compliance with 3.2.8.1.(1)	278/99
1.1.3.2.	Div. A. 1.4.1.2	99-62-718	1999	21-Oct-99	Determine whether the definition of "exit" as set out in 1.1.3.2. and 3.4.4.1.(1)	278/99
1.1.3.2.	Div. A. 1.4.1.2	00-38-770	2000	10-Aug-00	Determine whether the proposed elevated platform should be considered a stage and must therefore comply with 3.3.2.12.	205/00

PART 2

1	1A	2	3	4	5	6
Statutory Reference 403/97	**Statutory Reference 350/06**	**BCC File No.**	**Year**	**Date**	**Short Description from Style**	**LAST APP. AMEND. TO 403/97**
Part 2	Div. B Part 3	02-12-867	2002	21-Mar-02	Determine whether the proposed renovation and repair of an existing residential structure provide sufficiency of compliance with the relevant provisions of Parts 2 and 11	283/01
2.1.1.7.	Div. B 1.2.2.1	00-27-759	2000	21-Sep-00	Determine whether the subject commercially-used log house, which was disassembled, rebuilt at another location and provided with a barrier-free path of travel, is required to provide barrier-free accessibility in the proposed new washroom when considering 2.1.1.7.(2) and 9.5.2.1	205/00
2.1.1.11		00-31-763	2000	29-Jun-00	Determine whether the proposed fabric material roof, which is not considered as a Class A, B or C roof covering, provides sufficiency of compliance with 3.1.15.2.(1)	205/00
2.4.1.1.(5)	Div. C. 1.3.1.1.(5)	04-09-964		4-Mar-04	Determine whether the existing enclosed canopy, intended for use as an indoor and outdoor patio, which is attached to the wall of an existing Group A, Division 2 occupancy, provides sufficiency of compliance with Sentence 2.4.1.1.(5)	
2.4.1.1B.(1), Table 2.4.4.1B.	Div C. 1.3.1.3 Table 1.3.1.3.	06-48-1118		21-Nov-06	Whether the Chief Building Official complied with the requirements under Subsections 8(2.2) and 8(2.3) of the Act and Sentence 2.4.1.1B.(1) of the Building Code to issue or refuse to issue the permit and, in the case of a refusal to issue the permit, to provide in writing all of the reasons for the refusal within the time period set out in Table 2.4.4.1B.	
2.6.2.1.		00-28-760	2000	14-Jun-00	Determine whether the proposed installation of a single fan unit providing 24 L/s exhaust on a continuous basis to serve a bathroom with two fixtures requiring ventilation provides sufficiency of compliance with 6.2.3.9.(12)	205/00
2.7.2.1.		02-30-885	2002	3-Oct-02	Determine whether the proposed drip irrigation leaching bed sewage system provides sufficiency of compliance with Part 8 when considering s 2.7.2.1. and 2.7.2.2.	283/01
2.7.2.2.		02-30-885	2002	3-Oct-02	Determine whether the proposed drip irrigation leaching bed sewage system provides sufficiency of compliance with Part 8 when considering s 2.7.2.1. and 2.7.2.2.	02-30-885

PART 3

1		2	3	4	5	6
Statutory Reference 403/97	**Statutory Reference 350/06**	**BCC File No.**	**Year**	**Date**	**Short Description from Style**	**LAST APP. AMEND. TO 403/97**
3.1.2.1.	Div. B 3.1.2.1.	00-48-780	2000	7-Sep-00	Determine whether, due to the consideration of the building as an existing structure and proposed construction of two additions, the classification of the entire structure as per 3.1.2.1.	205/00
3.1.2.1.	Div. B 3.1.2.1.	00-52-784	2000	19-Oct-00	Determine whether the restaurant and fixed seat grandstand areas of the proposed new racetrack facility can be considered as sharing the same major occupancy in accordance with s 3.1.2.1. and 3.1.3.1.	205/00
3.1.2.5.	Div. B 3.1.2.5.	00-23-755	2000	25-May-00	Determine whether the intended use of the proposed building, as a home for ambulatory individuals with disabilities, complies with the definition of “Residential Occupancy” as set out in 1.1.3.2	205/00
3.1.3.1.	Div. B 3.1.3.1.	00-52-784	2000	19-Oct-00	Determine whether the restaurant and fixed seat grandstand areas of the proposed new racetrack facility can be considered as sharing the same major occupancy in accordance with s 3.1.2.1. and 3.1.3.1.	205/00
3.1.3.2.(2) 3.1.3.2.(4)	Div. B 3.1.3.2.(2) 3.1.3.2.(4)	05-13-1027		14-Apr-05	Determine whether the proposed public use self-storage facility, having a Group F, Division 2, medium hazard industrial occupancy can be located in the basement level of a building currently designated for Group C, residential occupancy and Group E, retail purposes, provides sufficiency of compliance with Sentences 3.1.3.2.(2) and 3.1.3.2.(4)	

3.1.5.1.	Div. B 3.1.5.1.(1)	00-24-756	2000	25-May-00	Determine whether the proposed roof assembly, which is to be constructed with fibreglass reinforced polymer panels, provides sufficiency of compliance with 3.1.5.1.(1)	205/00

3.1.5.3.	Div. B 3.1.5.3.	99-57-713	1999	26-Aug-99	Determine whether the proposed roof assembly that includes fireretardant plywood sheathing on Z-girts with a 25 mm air space and R19 fibreglass batt insulation mounted on a 38 mm metal decking provides sufficiency of compliance with 3.1.5.3.(1) and (20)	278/99
3.1.5.3.	Div. B 3.1.5.3.	00-05-737	2000	3-Feb-00	Determine whether the proposed roof assembly that includes fireretardant plywood sheathing on Z-girts with a 25 mm air space and RSI 3.25 mineral fibre insulation mounted on a 38 mm decking provides sufficiency of compliance with 3.1.5.3.(2)	597/99
3.1.5.3.	Div. B 3.1.5.3.	02-22-877	2002	1-Aug-02	Determine whether the proposed natural gas fireplaces to be located in the Fireplace Lounges, which constitute extensions of public corridors leading to exits in sites 1 and 3, provide sufficiency of compliance with 3.3.1.2.(3), and whether the proposed use of glued-laminated heavy timber beams and purlins as well as plywood sheathing for attachment of copper roofing in the construction of the roof assembly of the fireplace lounge in site 3, provides sufficiency of compliance with s 3.2.2.43.(2), 3.2.2.16.(1) and 3.1.5.3.(2)	283/01

3.1.5.5.	Div. B 3.1.5.5.	02-11-866	2002	14-Mar-02	Determine whether the combustible wood screen cladding proposed on the exterior of the north, east and south faces of a parking structure provides sufficiency of compliance with 3.1.5.5.(1), (2) and (3)	283/01
3.1.5.5.	Div. B 3.1.5.5.	02-11-866	2002	14-Mar-02	Determine whether the combustible wood screen cladding proposed on the exterior of the north, east and south faces of a parking structure provides sufficiency of compliance with 3.1.5.5.(1), (2) and (3)	283/01

3.1.5.7.	Div. B 3.1.5.7.	03-28-926	2003	3-Jul-03	Determine whether the proposed manufactured mouldings intended for use in a building required to be of non-combustible construction provide sufficiency of compliance with 3.1.5.7.	220/02

3.1.5.11.(3)	Div. B. 3.1.5.12.(3)	04-51-1006		17-Jan-05	Determine whether the proposed exterior wall system that incorporates foamed plastic insulation and exterior cladding in an exterior wall of a Group C (Part 3) major occupancy building provides sufficiency of compliance with Sentences 3.2.3.7.(1) and 3.1.5.11.(3)	

3.1.5.12.	Div. B 3.1.5.11	00-56-788	2000	16-Nov-00	Determine whether the proposed partition walls and corridor configuration provide sufficiency of compliance with s 3.1.5.12.(3), 3.2.2.24.(2), 3.3.1.1.(1), and 3.3.1.4.(3)	205/00

3.1.5.16.	Div. B 3.1.5.13	00-35-767	2000	27-Jul-00	Determine whether the proposed sprinklering of certain bathrooms, offered as a compensating measure in lieu of meeting the required flame-spread rating and smoke developed classification with respect to the as-installed whirlpool bathtubs, provides sufficiency of compliance with s 3.1.5.16., 3.1.13.3. and 3.1.13.7.(1)	205/00

3.1.5.22.	Div. B 3.1.5.23	99-30-686	1999	13-May-99	Determine whether the proposed vinyl fabric roof on an aluminium frame to serve as a cover for the garden centre provides sufficiency of compliance with 3.1.5.22	278/99
3.1.5.22.	Div. B 3.1.5.23	00-39-771	2000	10-Aug-00	Determine whether the as-constructed building, which does not provide protection on a floor area with a barrier-free path of travel, which has a combustible canopy and which does not offer a separate heat detection system, provides sufficiency of compliance with 3.3.1.7., 3.1.5.22.(2) and 3.2.4.11.(2)(b) respectively	205/00

3.1.7.3.	Div. B 3.1.7.3.	02-10-865	2002	14-Mar-02	Determine whether the two hour fire separation between proposed A2 and existing F3 occupancies, that is penetrated by roof trusses (supported by the structural members of the separation), provides sufficiency of compliance with 3.1.7.3.(2) and s 3.1.8.1.(1)(a) and (b)	283/01

3.1.8.1.	Div. B 3.1.8.1.	02-10-865	2002	14-Mar-02	Determine whether the two hour fire separation between proposed A2 and existing F3 occupancies, that is penetrated by roof trusses (supported by the structural members of the separation), provides sufficiency of compliance with 3.1.7.3.(2) and s 3.1.8.1.(1)(a) and (b)	283/01
3.1.8.1	Div. B 3.1.8.1	00-61-793	2000	14-Dec-00	Determine whether the main arena seating bowl, in particular the number of seats, row widths, vomitory and aisle width, exits and access to exits and the smoke protection system, designed based on NFPA 101, "Life Safety Code" and NFPA 92B "Smoke Management Systems in malls atria, and large areas," provides sufficiency of compliance with s 3.3.2.3, 3.3.2.4, 3.4.3.4, 3.1.8.1, and 3.2.5.13(1)	205/00

3.1.8.7	Div. B 3.1.8.7	01-52-845	2001	25-Oct-01	Determine whether the compensating measures offered in a multi-tenant building containing Group F, Division 2 and Group D occupancies where the dedicated fume hood ductwork traversesthe2-hour fire separations between floors ,will provide sufficiency of compliance with s 3.1.8.7. and 3.1.8.8.	283/01

3.1.8.8.	Div. B 3.1.8.8.	01-52-845	2001	25-Oct-01	Determine whether the compensating measures offered in a multi-tenant building containing Group F, Division 2 and Group D occupancies where the dedicated fume hood ductwork traversesthe2-hour fire separations between floors ,will provide sufficiency of compliance with s 3.1.8.7. and 3.1.8.8.	283/01

3.1.8.12.	Div. B 3.1.8.12.	99-29-685	1999	29-Apr-99	Determine whether the proposed sprinkler system to be installed throughout the North Infill portion of the subject building compensates for the lack of a rated roof assembly provided for the North Infill area thereby providing sufficiency of compliance with 3.2.2.17., and whether the proposed hold-open devices at the eight doors between the North Infill, the North Wing and the Link area comply with 3.1.8.12.	122/98
3.1.8.12.	Div. B	01-44-837	2001	27-Sep-01	Determine whether the distance from the rear of the dressing room area to an exit (in excess of 45 m) and the doors to the ice resurfacing room, that are not equipped with self-closing devices activated by a smoke detector, provide sufficiency of compliance with 3.4.2.5.(1)(c) and 3.1.8.12.(3)	205/00

3.1.8.13.	Div. B 3.1.8.13.	99-05-661	1999	27-Jan-99	Determine whether the entrance doors, as installed, provides sufficiency of compliance with 3.1.8.13.	395/96

3.1.8.16.	Div. B 3.1.8.16.	99-61-717	1999	23-Sep-99	Determine whether the proposed four wired glass panels, none of which exceed 0.8 m2 ,but which have an aggregate area of 1.9 m2 , as part of a wall assembly providing a 3/4 hour fire-resistance rating complies with 3.1.8.16	395/96
3.1.8.16.	Div. B 3.1.8.16.	99-48-704	1999	8-Jul-99	Determine whether the recently constructed upgraded, noncombustible, one hour rated, pressed steel frame with wired glass panels and a 45 minute rated hollow metal door designed to match the existing exit stairwell enclosure provides sufficiency of compliance with 3.1.8.16	395/96

3.1.9.1.	Div. B 3.1.9.1.	98-47-652	1998	3-Dec-98	Determine whether the proposed installation of combustible piping penetrations through fire separations, with a modified system of fire stopping, in a sprinklered building complies with s 3.1.9.1. and 3.1.9.4	122/98
3.1.9.4.	Div. B 3.1.9.4.	98-47-652	1998	3-Dec-98	Determine whether the proposed installation of combustible piping penetrations through fire separations, with a modified system of fire stopping, in a sprinklered building complies with s 3.1.9.1. and 3.1.9.4	122/98
3.1.10.	Div. B 3.1.10.	00-15-747	2000	29-Mar-00	Determine the applicability and/or compliance with s 3.2.8.1.(3) and 3.2.8.2.(6) of the Ontario Building Code (OBC) regarding the proposed main floor interconnected floor space, whether the proposed design of the second floor corridor complies with OBC 3.3.3.3.(1), and whether the proposed connection to the adjacent existing building provides sufficiency of compliance with OBC Subsection 3.1.10. or 3.2.3.1.(1)(b) and 3.2.3.7.(1)	597/99
3.1.10.5.	3.1.10.5.	05-03-1017		19-Jan-05	Determine whether the size and positioning of openings in the as-constructed firewalls provide sufficiency of compliance with Article 3.1.10.5.	
3.1.11.7.	Div. B 3.1.11.7.	02-04-859	2002	16-Jul-02	Determine whether the proposed foam plastic insulation and metal cladding system provides sufficiency of compliance with s 3.2.3.7.(7) and (8) when considering s 3.1.11.7. (1) and (2)	283/01
3.1.13.7.	Div. B 3.1.13.7.	00-35-767	2000	27-Jul-00	Determine whether the proposed sprinklering of certain bathrooms, offered as a compensating measure in lieu of meeting the required flame-spread rating and smoke developed classification with respect to the as-installed whirlpool bathtubs, provides sufficiency of compliance with s 3.1.5.16., 3.1.13.3. and 3.1.13.7.(1)	205/00
3.1.15.	Div. B 3.1.15	02-18-873	2002	20-Jun-02	Determine whether the proposed fabric material roof which is not considered as a Class A, B or C roof covering, provides sufficiency of compliance with Section 3.1.15.	283/01
3.1.15.2.	Div. B 3.1.15.2.	00-31-763	2000	29-Jun-00	Determine whether the proposed fabric material roof, which is not considered as a Class A, B or C roof covering, provides sufficiency of compliance with 3.1.15.2.(1)	205/00
3.2.1.1.	Div. B 3.2.1.1.	02-28-883	2002	26-Sep-02	Determine whether the elevated floor assembly having an area of 563.5 m2 in a Group F, Division 2 building is considered to be a mezzanine which must comply with the provisions of s 3.2.2.67.(2)(c) and (d) or whether it can be considered a service platform in conformance with the provisions of 3.2.1.1.(8)	283/01

3.2.1.1.	Div. B 3.2.1.1.	99-60-716	1999	23-Sep-99	Determine whether the proposed new arena built adjoining to the existing retail mall as one, albeit expanded, building constructed on two properties complies with 3.2.3.4. of the Ontario Building Code (OBC), and if so, whether the proposed design, without the provision of a fire separation with a two hour fire resistance rating complete with closures or special interconnected floor space fire safety measures, provides sufficiency of compliance with 3.2.8.1.(1)	278/99
3.2.1.1.	Div. B 3.2.1.1.	01-04-797	2001	8-Feb-01	Determine whether the proposed mezzanine, upper mezzanine and grid iron areas intended for a live performance teaching facility, in conjunction with certain additional protective measures, provides sufficiency of compliance with 3.2.2.24., s 3.2.1.1.(3),(4) and (5), 3.2.8.2.(1), 3.4.2.2. and 3.4.2.5.(1)(c)	205/00
3.2.1.1.	Div. B 3.2.1.1.	02-43-898	2002	12-Dec-02	Determine whether the viewing walkway, having an area of 207 m2, is a mezzanine which provides sufficiency of compliance with s 3.2.1.1.(4), 3.3.1.5.(2), (3) and (4) of the Ontario Building Code or whether it is considered to be a storey which must be meet the construction requirements for a storey in a building having a Group F, Division 3 occupancy classification	283/01

3.2.2.4.	Div. B 3.2.2.4.	01-59-852	2001	6-Dec-01	Determine whether the proposed 56.6 m2 addition to an existing multiple occupancy (A2 and C) building, which is intended to be unsprinklered and constructed using combustible construction, provides sufficiency of compliance with s 3.2.2.4.(2), 3.2.2.5.(1), 3.2.2.6.(1), 3.2.2.24. and 11.2.1.2.(1)	283/01

3.2.2.5.	Div. B 3.2.2.5.	01-59-852	2001	6-Dec-01	Determine whether the proposed 56.6 m2 addition to an existing multiple occupancy (A2 and C) building, which is intended to be unsprinklered and constructed using combustible construction, provides sufficiency of compliance with s 3.2.2.4.(2), 3.2.2.5.(1), 3.2.2.6.(1), 3.2.2.24. and 11.2.1.2.(1)	283/01

3.2.2.6.	Div. B 3.2.2.6.	01-59-852	2001	6-Dec-01	Determine whether the proposed 56.6 m2 addition to an existing multiple occupancy (A2 and C) building, which is intended to be unsprinklered and constructed using combustible construction, provides sufficiency of compliance with s 3.2.2.4.(2), 3.2.2.5.(1), 3.2.2.6.(1), 3.2.2.24. and 11.2.1.2.(1)	283/01

3.2.2.6.	Div. B 3.2.2.6.	01-53-846	2001	25-Oct-01	Determine whether the ground floor amenity space (exercise room, swimming pool, change room and lounge), that is not proposed to be sprinklered, in a building containing a Group C major occupancy, provides sufficiency of compliance with s 3.2.2.6., 3.2.2.23. and s 3.2.2.7.(1) and 3.2.2.8.(1)	283/01

3.2.2.7.	Div. B 3.2.2.7.	01-53-846	2001	25-Oct-01	Determine whether the ground floor amenity space (exercise room, swimming pool, change room and lounge), that is not proposed to be sprinklered, in a building containing a Group C major occupancy, provides sufficiency of compliance with s 3.2.2.6., 3.2.2.23. and s 3.2.2.7.(1) and 3.2.2.8.(1)	283/01

3.2.2.8.	Div. B 3.2.2.8.	01-53-846	2001	25-Oct-01	Determine whether the ground floor amenity space (exercise room, swimming pool, change room and lounge), that is not proposed to be sprinklered, in a building containing a Group C major occupancy, provides sufficiency of compliance with s 3.2.2.6., 3.2.2.23. and s 3.2.2.7.(1) and 3.2.2.8.(1)	283/01

3.2.2.9.	Div. B 3.2.2.9.	02-13-868	2002	23-May-02	Determine whether the proposed additions that include crawl space areas which contain mechanical rooms housing HVAC equipment venting to the exterior is permitted to be governed by the construction requirements of 3.2.2.28.	283/01
3.2.2.9.	Div. B 3.2.2.9.	02-26-881	2002	12-Sep-02	Determine whether the subsurface (future basement) level of a proposed research facility, which will be unoccupied, unsprinklered and provided with limited access until such time as a use for the area has been determined, provides sufficiency of compliance with s 3.2.2.9.(1) and 3.4.2.1.(1) and s 3.2.2.52. and 3.2.2.77	283/01

3.2.2.10.	Div. B 3.2.2.10.	00-36-768	2000	27-Jul-00	Determine whether the new sprinklered facility separated from an existing building by a firewall, but which is proposed to be constructed without facing a street for fire fighting purposes or a fire access route, provides sufficiency of compliance with s 3.2.2.10.(1) and (2), 3.2.5.4.(1), and 3.2.5.5.	205/00

3.2.2.16.	Div. B 3.2.2.16.	02-22-877	2002	1-Aug-02	Determine whether the proposed natural gas fireplaces to be located in the Fireplace Lounges, which constitute extensions of public corridors leading to exits in sites 1 and 3, provide sufficiency of compliance with 3.3.1.2.(3), and whether the proposed use of glued-laminated heavy timber beams and purlins as well as plywood sheathing for attachment of copper roofing in the construction of the roof assembly of the fireplace lounge in site 3, provides sufficiency of compliance with s 3.2.2.43.(2), 3.2.2.16.(1) and 3.1.5.3.(2)	283/01

3.2.2.17.	Div. B 3.2.2.17.	99-29-685	1999	29-Apr-99	Determine whether the proposed sprinkler system to be installed throughout the North Infill portion of the subject building compensates for the lack of a rated roof assembly provided for the North Infill area thereby providing sufficiency of compliance with 3.2.2.17., and whether the proposed hold-open devices at the eight doors between the North Infill, the North Wing and the Link area comply with 3.1.8.12.	122/98

3.2.2.23	Div. B 3.2.2.23	01-53-846	2001	25-Oct-01	Determine whether the ground floor amenity space (exercise room, swimming pool, change room and lounge), that is not proposed to be sprinklered, in a building containing a Group C major occupancy, provides sufficiency of compliance with s 3.2.2.6., 3.2.2.23. and s 3.2.2.7.(1) and 3.2.2.8.(1)	283/01

3.2.2.24.	Div. B 3.2.2.23	01-59-852	2001	6-Dec-01	Determine whether the proposed 56.6 m2 addition to an existing multiple occupancy (A2 and C) building, which is intended to be unsprinklered and constructed using combustible construction, provides sufficiency of compliance with s 3.2.2.4.(2), 3.2.2.5.(1), 3.2.2.6.(1), 3.2.2.24. and 11.2.1.2.(1)	283/01
3.2.2.24.	Div. B 3.2.2.23	01-04-797	2001	8-Feb-01	Determine whether the proposed mezzanine, upper mezzanine and grid iron areas intended for a live performance teaching facility, in conjunction with certain additional protective measures, provides sufficiency of compliance with 3.2.2.24., s 3.2.1.1.(3),(4) and (5), 3.2.8.2.(1), 3.4.2.2. and 3.4.2.5.(1)(c)	205/00
3.2.2.24	Div. B 3.2.2.23	00-56-788	2000	16-Nov-00	Determine whether the proposed partition walls and corridor configuration provide sufficiency of compliance with s 3.1.5.12.(3), 3.2.2.24.(2), 3.3.1.1.(1), and 3.3.1.4.(3)	205/00
3.2.2.24.	Div. B 3.2.2.23	02-21-876	2002	1-Aug-02	Determine whether the proposed compensating measures offered in a building containing A2 and D occupancies and having exposing building faces with unprotected openings less than 10% of the exposing building face and which includes elements of combustible construction, provides sufficiency of compliance with 3.2.2.24. and 3.2.3.7.(1)	283/01

3.2.2.26.	Div. B 3.2.2.26	03-50-948	2003	20-Nov-03	Determine whether the proposed temporary air-supported structure, which has a Group A, Division 2 occupancy, that is not equipped with a sprinkler system or a standpipe and hose system, provides sufficiency of compliance with s 3.2.2.26. and 3.2.9.1., when considering 3.13.2.2.(3)	220/02

3.2.2.28.	Div. B 3.2.2.28.	02-13-868	2002	23-May-02	Determine whether the proposed additions that include crawl space areas which contain mechanical rooms housing HVAC equipment venting to the exterior is permitted to be governed by the construction requirements of 3.2.2.28.	283/01

3.2.2.35.	Div. B 3.2.2.35	03-07-905	2003	23-Jan-03	Determine whether the two proposed, unsprinklered grandstand buildings, which will include Group D and Group A, Division 2 occupancies beneath a Group A, Division 4 major occupancy, provide sufficiency of compliance with 3.2.2.35.(4)	283/01
3.2.2.35.	Div. B 3.2.2.35.	99-75-731	1999	9-Dec-99	Determine whether the noncombustible bleachers, with a calculated minimum fire-resistance rating of 1.36 hours, offered in lieu of sprinklering the spaces below, provides sufficiency of compliance with 3.2.2.35.(4)	278/99

3.2.2.37	Div. B 3.2.2.37	01-37-830	2001	16-Aug-01	Determine whether the proposed 82.15 m2 , unsprinklered classroom addition to the existing unsprinklered detention occupancy, provides sufficiency of compliance with 3.2.2.37	205/00

3.2.2.40.	Div. B 3.2.2.40.	01-23-816	2001	10-May-01	Determine whether the 72 m2 (775 ft2) addition to the existing unsprinklered care and treatment occupancy that is also proposed to be unsprinklered provides sufficiency of compliance with 3.2.2.40	205/00
3.2.2.40.	Div. B 3.2.2.40.	99-67-723	1999	4-Nov-99	Determine whether the proposed sprinkler system, designed according to NFPA 13R, and intended for use in a Group B, Division 3 occupancy provides sufficiency of compliance with 3.2.2.40. and 3.2.5.13.(1)	278/99
3.2.2.41	Div. B 3.2.2.40.	99-71-727	1999	2-Dec-99	Determine whether the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with 3.2.2.41. and s 3.2.5.13.(1) and (2)	278/99
3.2.2.41	Div. B 3.2.2.40.	99-52-708	1999	5-Aug-99	Determine whether the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with 3.2.2.41. and s 3.2.5.13.(1) and (2)	278/99
3.2.2.41	Div. B 3.2.2.40.	99-07-663	1999	27-Jan-99	Determine whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with 3.2.2.41 and s 3.2.5.13.(1) and (2)	395/96
3.2.2.41	Div. B 3.2.2.40.	99-51-707	1999	5-Aug-99	Determine whether the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with 3.2.2.41. and s 3.2.5.13.(1) and (2)	278/99
3.2.2.41	Div. B 3.2.2.40.	99-06-662	1999	27-Jan-99	Determine whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with 3.2.2.41 and s 3.2.5.13.(1) and (2)	395/96
3.2.2.41	Div. B 3.2.2.40.	98-41-646	1998	5-Nov-98	Determine whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with 3.2.2.41 and s 3.2.5.13.(1) and 3.2.5.13.(2)	122/98

3.2.2.28.	Div. B 3.2.2.28.	02-13-868	2002	23-May-02	Determine whether the proposed additions that include crawl space areas which contain mechanical rooms housing HVAC equipment venting to the exterior is permitted to be governed by the construction requirements of 3.2.2.28.	283/01

3.2.2.43	Div. B 3.2.2.43	02-22-877	2002	1-Aug-02	Determine whether the proposed natural gas fireplaces to be located in the Fireplace Lounges, which constitute extensions of public corridors leading to exits in sites 1 and 3, provide sufficiency of compliance with 3.3.1.2.(3), and whether the proposed use of glued-laminated heavy timber beams and purlins as well as plywood sheathing for attachment of copper roofing in the construction of the roof assembly of the fireplace lounge in site 3, provides sufficiency of compliance with s 3.2.2.43.(2), 3.2.2.16.(1) and 3.1.5.3.(2)	283/01

3.2.2.45.	Div. B. 3.2.2.45.	06-05-1075		19-Jan-06	Whether the existing Group C residential condominium building consisting of a below grade parking garage and four levels of residential suites, where a close proximity sprinkler system is proposed to compensate for the deficient fire resistance rating of the exterior load bearing walls, provides sufficiency of compliance with Section 3.2.2.45.	

3.2.2.52.	Div. B 3.2.2.52.	02-26-881	2002	12-Sep-02	Determine whether the subsurface (future basement) level of a proposed research facility, which will be unoccupied, unsprinklered and provided with limited access until such time as a use for the area has been determined, provides sufficiency of compliance with s 3.2.2.9.(1) and 3.4.2.1.(1) and s 3.2.2.52. and 3.2.2.77	283/01

3.2.2.59	Div. B 3.2.2.59	99-19-675	1999	24-Mar-99	Determine whether the structure, with a proposed total building area of 1,508 m2, that is not equipped with a sprinkler system, provides sufficiency of compliance with 3.2.2.59	122/98

3.2.2.67	3.2.2.67.	05-07-1021		3-Feb-05	Determine whether the proposed automated storage and retrieval system that serves as structural support for the building in addition to support for the racking system components provides sufficiency of compliance with Article 3.2.2.67., Clause 3.4.2.5.(1)(c) and Sentence 3.4.4.1.(1)	220/02
3.2.2.67.	Div. B 3.2.2.67.	02-28-883	2002	26-Sep-02	Determine whether the elevated floor assembly having an area of 563.5 m2 in a Group F, Division 2 building is considered to be a mezzanine which must comply with the provisions of s 3.2.2.67.(2)(c) and (d) or whether it can be considered a service platform in conformance with the provisions of 3.2.1.1.(8)	283/01

3.2.2.75.	Div. B 3.2.2.75.	99-63-720	1999	21-Oct-99	Determine whether the proposed addition, currently being constructed with fire separations having a 45 minute fire-resistance rating and that will result in a completed structure with a total building area of 5,198.9 m2, provides sufficiency of compliance with 3.2.2.75.	278/99

3.2.2.77.	Div. B 3.2.2.77.	02-26-881	2002	12-Sep-02	Determine whether the subsurface (future basement) level of a proposed research facility, which will be unoccupied, unsprinklered and provided with limited access until such time as a use for the area has been determined, provides sufficiency of compliance with s 3.2.2.9.(1) and 3.4.2.1.(1) and s 3.2.2.52. and 3.2.2.77	283/01

3.2.3.1.	Div. B 3.2.3.1.	00-15-747	2000	29-Mar-00	Determine the applicability and/or compliance with s 3.2.8.1.(3) and 3.2.8.2.(6) of the Ontario Building Code (OBC) regarding the proposed main floor interconnected floor space, whether the proposed design of the second floor corridor complies with OBC 3.3.3.3.(1), and whether the proposed connection to the adjacent existing building provides sufficiency of compliance with OBC Subsection 3.1.10. or 3.2.3.1.(1)(b) and 3.2.3.7.(1)	597/99

3.2.3.	Div. B 3.2.3.	00-21-753	2000	11-May-00	Determine whether the new supermarket, proposed to be constructed adjoining to an existing retail mall as one enlarged building built on two properties complies with s 3.2.3.1.(8), 3.2.3.7.(4), 3.2.3.12.(1), 3.2.3.12.(3), 3.2.3.13.(3) and 3.3.1.4.(4)	205/00

3.2.3.4.		99-60-716	1999	23-Sep-99	Determine whether the proposed new arena built adjoining to the existing retail mall as one, albeit expanded, building constructed on two properties complies with 3.2.3.4. of the Ontario Building Code (OBC), and if so, whether the proposed design, without the provision of a fire separation with a two hour fire resistance rating complete with closures or special interconnected floor space fire safety measures, provides sufficiency of compliance with 3.2.8.1.(1)	278/99

3.2.3.7.(1)	Div. B 3.2.3.7.(1)	04-51-1006		17-Jan-05	Determine whether the proposed exterior wall system that incorporates foamed plastic insulation and exterior cladding in an exterior wall of a Group C (Part 3) major occupancy building provides sufficiency of compliance with Sentences 3.2.3.7.(1) and 3.1.5.11.(3)	
3.2.3.7.	Div. B 3.2.3.7.	02-21-876	2002	1-Aug-02	Determine whether the proposed compensating measures offered in a building containing A2 and D occupancies and having exposing building faces with unprotected openings less than 10% of the exposing building face and which includes elements of combustible construction, provides sufficiency of compliance with 3.2.2.24. and 3.2.3.7.(1)	283/01
3.2.3.7.	Div. B 3.2.3.7.	02-04-859	2002	16-Jul-02	Determine whether the proposed foam plastic insulation and metal cladding system provides sufficiency of compliance with s 3.2.3.7.(7) and (8) when considering s 3.1.11.7. (1) and (2)	283/01
3.2.3.7.	Div. B 3.2.3.7.	00-15-747	2000	29-Mar-00	Determine the applicability and/or compliance with s 3.2.8.1.(3) and 3.2.8.2.(6) of the Ontario Building Code (OBC) regarding the proposed main floor interconnected floor space, whether the proposed design of the second floor corridor complies with OBC 3.3.3.3.(1), and whether the proposed connection to the adjacent existing building provides sufficiency of compliance with OBC Subsection 3.1.10. or 3.2.3.1.(1)(b) and 3.2.3.7.(1)	597/99

3.2.3.12.	Div. B 3.2.3.13.	99-62-718	1999	21-Oct-99	Determine whether the definition of "exit" as set out in 1.1.3.2. and 3.4.4.1.(1)	99-62-718

3.2.3.13.	Div. B 3.2.3.14.	00-13-745	2000	5-Oct-00	Determine whether the proposed construction of exterior walls and location of windows provides sufficiency of compliance with 3.2.3.13	205/00

3.2.3.18.	Div. B 3.2.3.19	00-15-747	2000	29-Mar-00	Determine the applicability and/or compliance with s 3.2.8.1.(3) and 3.2.8.2.(6) of the Ontario Building Code (OBC) regarding the proposed main floor interconnected floor space, whether the proposed design of the second floor corridor complies with OBC 3.3.3.3.(1), and whether the proposed connection to the adjacent existing building provides sufficiency of compliance with OBC Subsection 3.1.10. or 3.2.3.1.(1)(b) and 3.2.3.7.(1)	597/99

3.2.4.3.	Div. B 3.2.4.3.	01-18-811	2001	12-Apr-01	Determine whether the four storey building, that is to contain a Group B, Division 3 occupancy on the first and second floors and a Group C occupancy on the third and fourth floors and that is proposed to be equipped with a single stage fire alarm system, complies with s 3.2.4.3.(1)(b), (c) and (e)	205/00
3.2.4.5.	Div. B 3.2.4.3.	99-16-672	1999	11-Mar-99	Determine whether the fire alarm pull stations, installed at a height of 900 mm in accordance with 3.7.1.5., provides sufficiency of compliance with 3.2.4.5.(1)	395/96
3.2.4.8.	Div. B 3.2.4.3.	00-39-771	2000	10-Aug-00	Determine whether the as-constructed building, which does not provide protection on a floor area with a barrier-free path of travel, which has a combustible canopy and which does not offer a separate heat detection system, provides sufficiency of compliance with 3.3.1.7., 3.1.5.22.(2) and 3.2.4.11.(2)(b) respectively	205/00
3.2.4.11.	Div. B 3.2.4.3.	00-39-771	2000	10-Aug-00	Determine whether the as-constructed building, which does not provide protection on a floor area with a barrier-free path of travel, which has a combustible canopy and which does not offer a separate heat detection system, provides sufficiency of compliance with 3.3.1.7., 3.1.5.22.(2) and 3.2.4.11.(2)(b) respectively	205/00
3.2.4.16.	Div. B 3.2.4.3.	00-39-771	2000	10-Aug-00	Determine whether the as-constructed building, which does not provide protection on a floor area with a barrier-free path of travel, which has a combustible canopy and which does not offer a separate heat detection system, provides sufficiency of compliance with 3.3.1.7., 3.1.5.22.(2) and 3.2.4.11.(2)(b) respectively	205/00
3.2.4.19	Div. B 3.2.4.3.	01-43-836	2001	28-Feb-01	Determine whether the direct supervision of patients at all times in lieu of providing visual signal devices where sound booths will be used provides sufficiency of compliance with s 3.2.4.19.(7) and 3.2.4.20.(1)	283/01
3.2.4.19.	Div. B 3.2.4.3.	02-34-889	2002	17-Oct-02	Determine whether the proposed use of Class B wiring for line isolator modules located inside a residential suite and designed to isolate a signal circuit during an alarm condition only, complies with 3.2.4.19.(10)	283/01

3.2.4.20.	Div. B 3.2.4.20.	02-16-871	2002	20-Jun-02	Determine whether the use of unlisted, alpha-numeric display devices forming part of the call station located in the nursing stations provides sufficiency of compliance with 3.2.4.20.(2)	283/01
3.2.4.20.	Div. B 3.2.4.20.	01-43-836	2001	28-Feb-01	Determine whether the direct supervision of patients at all times in lieu of providing visual signal devices where sound booths will be used provides sufficiency of compliance with s 3.2.4.19.(7) and 3.2.4.20.(1)	283/01
3.2.5.4.	Div. B 3.2.5.4.	00-36-768	2000	27-Jul-00	Determine whether the new sprinklered facility separated from an existing building by a firewall, but which is proposed to be constructed without facing a street for fire fighting purposes or a fire access route, provides sufficiency of compliance with s 3.2.2.10.(1) and (2), 3.2.5.4.(1), and 3.2.5.5.	205/00
3.2.5.5.	Div. B 3.2.5.5.	00-36-768	2000	27-Jul-00	Determine whether the new sprinklered facility separated from an existing building by a firewall, but which is proposed to be constructed without facing a street for fire fighting purposes or a fire access route, provides sufficiency of compliance with s 3.2.2.10.(1) and (2), 3.2.5.4.(1), and 3.2.5.5.	205/00
3.2.5.5.	Div. B 3.2.5.5.	01-01-794	2001	11-Jan-01	Determine whether the location of the existing hydrant proposed to serve the needs of the expanded school facility provides sufficiency of compliance with s 3.2.5.5.(2)(b) and (c)	205/00
3.2.5.7.(1) and 3.2.5.7.(2)	Div. B 3.2.5.7.(1) and (2)	04-55-1010		2-Dec-04	Determine whether the proposed location of a dry hydrant will provide sufficiency of compliance with Sentences 3.2.5.7.(1) and 3.2.5.7.(2) of the Ontario Building Code for a 929 m2 one storey sawmill	220/02
3.2.5.13.	Div. B 3.2.5.13.	99-71-727	1999	2-Dec-99	Determine whether the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with 3.2.2.41. and s 3.2.5.13.(1) and (2)	278/99
3.2.5.13	Div. B 3.2.5.13.	00-61-793	2000	14-Dec-00	Determine whether the main arena seating bowl, in particular the number of seats, row widths, vomitory and aisle width, exits and access to exits and the smoke protection system, designed based on NFPA 101, "Life Safety Code" and NFPA 92B "Smoke Management Systems in malls atria, and large areas," provides sufficiency of compliance with s 3.3.2.3, 3.3.2.4, 3.4.3.4, 3.1.8.1, and 3.2.5.13(1)	205/00
3.2.5.13.	Div. B 3.2.5.13.	99-52-708	1999	5-Aug-99	Determine whether the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with 3.2.2.41. and s 3.2.5.13.(1) and (2)	278/99
3.2.5.13.	Div. B 3.2.5.13.	99-07-663	1999	27-Jan-99	Determine whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with 3.2.2.41 and s 3.2.5.13.(1) and (2)	395/96

3.2.5.13.	Div. B 3.2.5.13.	99-06-662	1999	27-Jan-99	Determine whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with 3.2.2.41 and s 3.2.5.13.(1) and (2)	395/96
3.2.5.13.	Div. B 3.2.5.13.	01-36-829	2001	2-Aug-01	Determine whether the proposed sprinkler system, designed in conformance with NFPA 13, with the exception of the attic area which would conform to NFPA 13R (exempt from sprinklering), provides sufficiency of compliance with 3.2.5.13.(1)	205/00
3.2.5.13.	Div. B 3.2.5.13.	00-06-738	2000	17-Feb-00	Determine whether the proposed sprinklering of the residential portion of the new fire station (a facility not required to be sprinklered) with a sprinkler system designed in accordance with NFPA 13R provides sufficiency of compliance with 3.2.5.13.(1)	597/99
3.2.5.13.	Div. B 3.2.5.13.	99-63-719	1999	21-Oct-99	Determine whether the 1.4 m exterior canopy, which has not been provided with sprinkler protection for the area beneath the canopy, provides sufficiency of compliance with 3.2.5.13.(1)	395/96
3.2.5.13.	Div. B 3.2.5.13.	99-47-703	1999	8-Jul-99	Determine whether the bank vault interior, as constructed, without sprinkler protection in a building required to be sprinklered, provides sufficiency of compliance with 3.2.5.13.(1)	278/99
3.2.5.13.	Div. B 3.2.5.13.	00-02-734	2000	13-Jan-00	Determine whether the proposed sprinkler system, designed according to NFPA 13R, and intended for use in a Group B, Division 3 occupancy provides sufficiency of compliance with 3.2.2.40. and 3.2.5.13.(1	597/99
3.2.5.13	Div. B 3.2.5.13.	99-67-723	1999	4-Nov-99	Determine whether the proposed sprinkler system, designed according to NFPA 13R, and intended for use in a Group B, Division 3 occupancy provides sufficiency of compliance with 3.2.2.40. and 3.2.5.13.(1)	278/99
3.2.5.13.	Div. B 3.2.5.13.	99-51-707	1999	5-Aug-99	Determine whether the proposed sprinkler system, designed according to NFPA 13R, provides sufficiency of compliance with 3.2.2.41. and s 3.2.5.13.(1) and (2)	278/99
3.2.5.13.	Div. B 3.2.5.13.	98-41-646	1998	5-Nov-98	Determine whether a sprinkler system constructed to the NFPA 13R standard achieves sufficiency of compliance with 3.2.2.41 and s 3.2.5.13.(1) and 3.2.5.13.(2)	122/98

3.2.5.13.	Div. B 3.2.5.13.	01-14-807	2001	29-Mar-01	Determine whether the building's proposed power system, that includes two independent supply connections to two separate street substations and one on-site co-generation plant, offered in lieu of a power supply system conforming with 3.2.7.5. of the Ontario Building Code (OBC) provides sufficiency of compliance with s 3.2.7.4.(1) and 3.2.7.9.(4)	205/00
3.2.5.13.	Div. B 3.2.5.13.	01-16-809	2001	29-Mar-01	Determine whether the building's proposed power system, that includes two independent supply connections to two power supply system conforming with 3.2.7.5. of the Ontario Building Code (OBC) provides sufficiency of compliance with s 3.2.7.4.(1) and 3.2.7.9.(4)	205/00
3.2.7.1.	Div. B 3.2.7.1..	03-01-899	2003	16-Jan-03	Determine whether the egress lighting, which is not proposed to be illuminated for 24 hours of each day, complies with 3.2.7.1.(1)	283/01
3.2.7.3.	Div. B 3.2.7.3.	99-22-678	1999	8-Apr-99	Determine whether the proposed location of a fuel fired appliance and the proposed level of illumination of exit signage complies with s 3.6.2.1.(2) and 3.6.2.2.(3) and s 3.2.7.3.(1)(i) and (j) and 3.2.7.3.(3) respectively	122/98
3.2.7.4.	Div. B 3.2.7.4..	01-16-809	2001	29-Mar-01	Determine whether the building's proposed power system, that includes two independent supply connections to two power supply system conforming with 3.2.7.5. of the Ontario Building Code (OBC) provides sufficiency of compliance with s 3.2.7.4.(1) and 3.2.7.9.(4)	205/00
3.2.7.4.	Div. B 3.2.7.4.	01-14-807	2001	29-Mar-01	Determine whether the building's proposed power system, that includes two independent supply connections to two separate street substations and one on-site co-generation plant, offered in lieu of a power supply system conforming with 3.2.7.5. of the Ontario Building Code (OBC) provides sufficiency of compliance with s 3.2.7.4.(1) and 3.2.7.9.(4)	205/00
3.2.7.5.	Div. B 3.2.7.5.	01-16-809	2001	29-Mar-01	Determine whether the building's proposed power system, that includes two independent supply connections to two power supply system conforming with 3.2.7.5. of the Ontario Building Code (OBC) provides sufficiency of compliance with s 3.2.7.4.(1) and 3.2.7.9.(4)	205/00

3.2.7.5.	Div. B 3.2.7.5.	01-14-807	2001	29-Mar-01	Determine whether the building's proposed power system, that includes two independent supply connections to two separate street substations and one on-site co-generation plant, offered in lieu of a power supply system conforming with 3.2.7.5. of the Ontario Building Code (OBC) provides sufficiency of compliance with s 3.2.7.4.(1) and 3.2.7.9.(4)	205/00

3.2.7.9.	Div. B 3.2.7.9.	01-16-809	2001	29-Mar-01	Determine whether the building's proposed power system, that includes two independent supply connections to two power supply system conforming with 3.2.7.5. of the Ontario Building Code (OBC) provides sufficiency of compliance with s 3.2.7.4.(1) and 3.2.7.9.(4)	205/00
3.2.7.9.	Div. B 3.2.7.9.	01-14-807	2001	29-Mar-01	Determine whether the building's proposed power system, that includes two independent supply connections to two separate street substations and one on-site co-generation plant, offered in lieu of a power supply system conforming with 3.2.7.5. of the Ontario Building Code (OBC) provides sufficiency of compliance with s 3.2.7.4.(1) and 3.2.7.9.(4)	205/00

3.2.8.1.	Div. B 3.2.8.1.	00-19-751	2000	27-Apr-00	to determine; (1) whether the proposed second storey partitions located in the interconnected floor space between the first and second floors complies with 3.2.8.1.(5) of the Ontario Building Code (OBC), (2) whether the proposed second and third floor travel distances provide sufficiency of compliance with 3.4.2.5.(1)(c) and 3.3.2.5.(4), (3) whether the building should be considered as having one or two suites and thereby provide either a 30 minute or one hour separation as per s 3.3.2.2.(8) or 3.3.1.1.(1), (4) whether the proposed close-spaced sprinklers on both sides of the unrated fire separations on the first floor provide sufficiency of compliance with either s 3.3.2.2.(8) or 3.3.1.1.(1), and (5) whether the proposed installation of a sprinkler activated mechanical exhaust system in lieu of roof mounted gravity vents provides sufficiency of compliance with 3.3.2.12.(5)	597/99
3.2.8.1.	Div. B 3.2.8.1.	99-60-716	1999	23-Sep-99	Determine whether the proposed new arena built adjoining to the existing retail mall as one, albeit expanded, building constructed on two properties complies with 3.2.3.4. of the Ontario Building Code (OBC), and if so, whether the proposed design, without the provision of a fire separation with a two hour fire resistance rating complete with closures or special interconnected floor space fire safety measures, provides sufficiency of compliance with 3.2.8.1.(1)	278/99

3.2.8.2.	Div. B 3.2.8.2.	02-15-870	2002	6-Jun-02	Determine whether the 6.75 m2 light well opening interconnecting Levels 3, 4 and 5 and which does not include a stairway, escalator or moving walkway, but will be equipped with additional fire safety features, provides sufficiency of compliance with s 3.2.8.2.(5) and (6)	283/01
3.2.8.2.	Div. B 3.2.8.2.	01-04-797	2001	8-Feb-01	Determine whether the proposed mezzanine, upper mezzanine and grid iron areas intended for a live performance teaching facility, in conjunction with certain additional protective measures, provides sufficiency of compliance with 3.2.2.24., s 3.2.1.1.(3),(4) and (5), 3.2.8.2.(1), 3.4.2.2. and 3.4.2.5.(1)(c)	205/00
3.2.8.2.	Div. B 3.2.8.2.	00-15-747	2000	29-Mar-00	Determine the applicability and/or compliance with s 3.2.8.1.(3) and 3.2.8.2.(6) of the Ontario Building Code (OBC) regarding the proposed main floor interconnected floor space, whether the proposed design of the second floor corridor complies with OBC 3.3.3.3.(1), and whether the proposed connection to the adjacent existing building provides sufficiency of compliance with OBC Subsection 3.1.10. or 3.2.3.1.(1)(b) and 3.2.3.7.(1)	597/99

3.2.8.4.	Div. B 3.2.8.4.	00-22-754	2000	18-May-00	Determine whether the 45 m travel distances in the existing portions of the building, which are not to be protected by a 2 hour rated wall at the proposed atrium, provide sufficiency of compliance with 3.2.8.4.(4)	205/00
3.2.8.4.	Div. B 3.2.8.4.	99-31-687	1999	13-May-99	Determine whether the travel distances on the second to fifth floors ranging from 53 to 56 m, in a structure with interconnected floor space due to the full height atrium, provides sufficiency of compliance with 3.2.8.4.(4) and 3.4.2.5.(1)(b)	122/98

3.2.9.1.	3.2.9.1.	04-53-1008		18-Nov-04	Determine whether the proposed 6,524 m2 addition to an existing 5,870 m2 steel shearing and warehouse facility that has been designed without a standpipe and hose system provides sufficiency of compliance with Article 3.2.9.1.	220/02
3.2.9.1.	Div. B 3.2.9.1.	01-31-824	2001	5-Jul-01	Determine whether the enlarged manufacturing and warehouse facility with a total building area of 27, 221 m2 that is not equipped with a standpipe and hose system provides sufficiency of compliance with 3.2.9.1.	205/00
3.2.9.1.	Div. B 3.2.9.1.	03-50-948	2003	20-Nov-03	Determine whether the proposed temporary air-supported structure, which has a Group A, Division 2 occupancy, that is not equipped with a sprinkler system or a standpipe and hose system, provides sufficiency of compliance with s 3.2.2.26. and 3.2.9.1., when considering 3.13.2.2.(3)	220/02

3.2.9.1.	Div. B 3.2.9.1.	01-30-823	2001	5-Jun-01	Determine whether the as-constructed infill addition that joins together two previously separate structures thereby creating a building having an area of 2, 229 m2 (23,984 ft2), and that is not equipped with a standpipe and hose system, provides sufficiency of compliance with 3.2.9.1.	205/00
3.2.9.1.	Div. B 3.2.9.1.	00-41-773	2000	24-Aug-00	Determine whether the specified compensating measures, offered in lieu of a standpipe and hose system, provide sufficiency of compliance with 3.2.9.1.	205/00
3.2.9.1.	Div. B 3.2.9.1.	99-60-716a	1999	22-Apr-99	Determine whether the proposed expanded steel manufacturing facility with a total building area of 22,135 m2 (238,267 ft2), that is not equipped with a standpipe and hose system, provides sufficiency of compliance with 3.2.9.1	122/98
3.2.9.1.	Div. B 3.2.9.1.	98-50-655	1998	15-Dec-98	Determine whether the proposed steel shearing and warehouse facility, with an area of 5,870.68 m2, that is not equipped with a standpipe and hose system, provides sufficiency of compliance with 3.2.9.1.	122/98
3.2.9.1.	Div. B 3.2.9.1.	98-48-653	1998	15-Dec-98	Determine whether the natural and mechanical ventilation systems, as constructed, provide sufficiency of compliance with Subsections 9.32.2. and 9.32.3. respectively	122/98
3.2.9.1.	Div. B 3.2.9.1.	01-51-844	2001	25-Oct-01	Determine whether the compensating measures offered in lieu of standpipe and hose systems in buildings containing Group F, Division 2, Group F, Division 3 and Group D occupancies provide sufficiency of compliance with 3.2.9.1.(1)	283/01
3.2.9.1.	Div. B 3.2.9.1.	00-16-748	2000	13-Apr-00	Determine whether the various proposed compensating construction measures, offered in lieu of a standpipe and hose system, provide sufficiency of compliance with 3.2.9.1.(1	205/00
3.2.9.1.	Div. B 3.2.9.1.	00-04-736	2000	3-Feb-00	Determine whether the church, proposed without a standpipe and hose system, but with a dome measuring approximately 18.3 m in height to the ceiling, provides sufficiency of compliance with 3.2.9.1.(1)	597/99

3.3.1.1.	3.3.1.1.	05-34-1048		4-Aug-05	Determine whether the proposed metal screen storage cubicles with wire-mesh roofs in a self-service storage facility located in the basement of a multiple occupancy building provides sufficiency of compliance with Articles 3.3.1.1. and 3.3.1.4., when considering Article 3.3.4.3.	
3.3.1.1.	3.3.1.1.	05-04-1018		20-Jan-05	Determine whether the as-constructed demising walls between Unit 18 and 18A and between Unit 18/Unit 18A and Unit 15 in the one storey portion Group E retail plaza, with Group D business and personal service occupancies, provides sufficiency of compliance with Article 3.3.1.1.	220/02
3.3.1.1.	Div. B 3.3.1.1.	00-56-788	2000	16-Nov-00	Determine whether the proposed partition walls and corridor configuration provide sufficiency of compliance with s 3.1.5.12.(3), 3.2.2.24.(2), 3.3.1.1.(1), and 3.3.1.4.(3)	205/00

3.3.1.1.	Div. B 3.3.1.1.	00-19-751	2000	27-Apr-00	to determine; (1) whether the proposed second storey partitions located in the interconnected floor space between the first and second floors complies with 3.2.8.1.(5) of the Ontario Building Code (OBC), (2) whether the proposed second and third floor travel distances provide sufficiency of compliance with 3.4.2.5.(1)(c) and 3.3.2.5.(4), (3) whether the building should be considered as having one or two suites and thereby provide either a 30 minute or one hour separation as per s 3.3.2.2.(8) or 3.3.1.1.(1), (4) whether the proposed close-spaced sprinklers on both sides of the unrated fire separations on the first floor provide sufficiency of compliance with either s 3.3.2.2.(8) or 3.3.1.1.(1), and (5) whether the proposed installation of a sprinkler activated mechanical exhaust system in lieu of roof mounted gravity vents provides sufficiency of compliance with 3.3.2.12.(5)	597/99

3.3.1.2	Div. B 3.3.1.2	99-39-695	1999	3-Jun-99	Determine whether the proposed communal gas-fired fireplace located in a lounge area open to the building's internal corridor system complies with 3.3.1.2.(3)	278/99
3.3.1.2.	Div. B 3.3.1.2	02-41-896	2002	4-Dec-02	Determine whether the as-installed natural gas fireplace that is located in the main lobby of a children's learning centre provides sufficiency of compliance with 3.3.1.2.(3)	283/01
3.3.1.2.	Div. B 3.3.1.2	02-22-877	2002	1-Aug-02	Determine whether the proposed natural gas fireplaces to be located in the Fireplace Lounges, which constitute extensions of public corridors leading to exits in sites 1 and 3, provide sufficiency of compliance with 3.3.1.2.(3), and whether the proposed use of glued-laminated heavy timber beams and purlins as well as plywood sheathing for attachment of copper roofing in the construction of the roof assembly of the fireplace lounge in site 3, provides sufficiency of compliance with s 3.2.2.43.(2), 3.2.2.16.(1) and 3.1.5.3.(2)	283/01

3.3.1.3.	Div. B 3.3.1.3.	99-14-670	1999	11-Mar-99	Determine whether the proposed laboratory and office tenancies should be considered separate suites, and would therefore be required to provide a doorway into a public corridor and to provide a fire separation between the corridor and the suites, including between the second floor corridor and the atrium, in accordance with 3.3.1.3.(8) and 3.3.1.4. respectively	122/98
3.3.1.3.	Div. B 3.3.1.3.	99-13-669	1999	24-Feb-99	Determine whether the proposed single exit public corridor serving two suites, each having access to a second exit, provides sufficiency of compliance with 3.3.1.3.(9)	122/98

3.3.1.4.	3.3.1.4.	05-34-1048		4-Aug-05	Determine whether the proposed metal screen storage cubicles with wire-mesh roofs in a self-service storage facility located in the basement of a multiple occupancy building provides sufficiency of compliance with Articles 3.3.1.1. and 3.3.1.4., when considering Article 3.3.4.3.	
3.3.1.4.	Div. B 3.3.1.4.	99-14-670	1999	11-Mar-99	Determine whether the proposed laboratory and office tenancies should be considered separate suites, and would therefore be required to provide a doorway into a public corridor and to provide a fire separation between the corridor and the suites, including between the second floor corridor and the atrium, in accordance with 3.3.1.3.(8) and 3.3.1.4. respectively	122/98
3.3.1.4.	Div. B 3.3.1.4.	00-56-788	2000	16-Nov-00	Determine whether the proposed partition walls and corridor configuration provide sufficiency of compliance with s 3.1.5.12.(3), 3.2.2.24.(2), 3.3.1.1.(1), and 3.3.1.4.(3)	205/00
3.3.1.4.	Div. B 3.3.1.4.	00-56-788	2000	16-Nov-00	Determine whether the proposed partition walls and corridor configuration provide sufficiency of compliance with s 3.1.5.12.(3), 3.2.2.24.(2), 3.3.1.1.(1), and 3.3.1.4.(3)	205/00
3.3.1.5.	Div. B 3.3.1.5.	02-43-898	2002	12-Dec-02	Determine whether the viewing walkway, having an area of 207 m2, is a mezzanine which provides sufficiency of compliance with s 3.2.1.1.(4), 3.3.1.5.(2), (3) and (4) of the Ontario Building Code or whether it is considered to be a storey which must be meet the construction requirements for a storey in a building having a Group F, Division 3 occupancy classification	3.3.1.5.
3.3.1.5.	Div. B 3.3.1.5.	99-66-722	1999	4-Nov-99	Determine whether the second storey sound and lighting booth, as constructed, with a pull-down ladder and a lockable access hatch provides sufficiency of compliance with 3.4.1.1. and 3.3.1.5	278/99
3.3.1.7	Div. B 3.3.1.7	00-39-771	2000	10-Aug-00	Determine whether the as-constructed building, which does not provide protection on a floor area with a barrier-free path of travel, which has a combustible canopy and which does not offer a separate heat detection system, provides sufficiency of compliance with 3.3.1.7., 3.1.5.22.(2) and 3.2.4.11.(2)(b) respectively	205/00
3.3.1.8.	Div. B 3.3.1.8.	01-22-815	2001	10-May-01	Determine whether the proposed construction of a new mezzanine (in an existing building), that is to have a minimum headroom clearance of 1,975 mm (6', 6") under the open web steel joists located at 1,975 mm (6', 6") on centre, provides sufficiency of compliance with s 3.3.1.8. and 3.4.3.6.	205/00
3.3.1.10.	Div. B 3.3.1.10.	00-09-741	2000	2-Mar-00	Determine whether the as-installed roll down security door that is closed only during non-business hours provides sufficiency of compliance with s 3.3.1.10.(1) and 3.3.1.12.(2	597/99

3.3.1.10.	Div. B 3.3.1.10.	00-09-741	2000	2-Mar-00	Determine whether the as-installed roll down security door that is closed only during non-business hours provides sufficiency of compliance with s 3.3.1.10.(1) and 3.3.1.12.(2	597/99
3.3.1.10.	Div. B 3.3.1.10.	02-07-862	2002	14-Feb-02	Determine whether the proposed inward swinging double doors would provide sufficiency of compliance with 3.3.1.10.(2)(a) when considering Subsection 3.1.16.	283/01
3.3.1.11.	Div. B 3.3.1.11.	99-04-660	1999	14-Jan-99	Determine whether the movable wall partitions installed as store fronts in numerous business occupancies, and located in their only means of egress, provides sufficiency of compliance with 3.3.1.11.(3)	122/98
3.3.1.12.	Div. B 3.3.1.12.	00-09-741	2000	2-Mar-00	Determine whether the as-installed roll down security door that is closed only during non-business hours provides sufficiency of compliance with s 3.3.1.10.(1) and 3.3.1.12.(2	597/99
3.3.1.15.	Div. B 3.3.1.15.	00-25-757	2000	25-May-00	Determine whether the eighteen sets of as-built spiral stairs, which are not required exit stairs and are measured at 780 mm in width and 50 mm and 160 mm in minimum and average tread depth respectively, are required to comply with 9.8.3.3.(2) and s 3.3.1.15 and 9.8.5.2	205/00
3.3.1.17.	Div. B 3.3.1.17.	01-38-831	2001	30-Aug-01	Determine whether the as-installed guard, surrounding a 3rd floor opening, and being 15 to 30 mm lower in height than the required 1,070 mm, provides sufficiency of compliance with 3.3.1.17.(1)	205/00
3.3.1.17.	Div. B 3.3.1.17.	00-29-761	2000	14-Jun-00	Determine whether the as-built handrail that projects 100 mm into the required 750 mm minimum width of a landing where a door swings into an exit stair complies with 3.4.3.5.(3	205/00
3.3.1.17.	Div. B 3.3.1.17.	00-01-733	2000	13-Jan-00	Determine whether the operation of the building compensates for the as-built guards constructed mainly with panels consisting of 50 by 50 mm welded wire mesh and thereby provides sufficiency of compliance with 3.3.1.17.(5)	597/99
3.3.1.17.	Div. B 3.3.1.17.	00-20-752	2000	11-May-00	Determine whether the as-built guards constructed mainly with panels consisting of 50 by 50 mm wire mesh provides sufficiency of compliance with s 3.3.1.17.(5) and 3.4.6.5.(8)	205/00

3.3.2.2.	Div. B 3.3.2.2.	00-19-751	2000	27-Apr-00	to determine; (1) whether the proposed second storey partitions located in the interconnected floor space between the first and second floors complies with 3.2.8.1.(5) of the Ontario Building Code (OBC), (2) whether the proposed second and third floor travel distances provide sufficiency of compliance with 3.4.2.5.(1)(c) and 3.3.2.5.(4), (3) whether the building should be considered as having one or two suites and thereby provide either a 30 minute or one hour separation as per s 3.3.2.2.(8) or 3.3.1.1.(1), (4) whether the proposed close-spaced sprinklers on both sides of the unrated fire separations on the first floor provide sufficiency of compliance with either s 3.3.2.2.(8) or 3.3.1.1.(1), and (5) whether the proposed installation of a sprinkler activated mechanical exhaust system in lieu of roof mounted gravity vents provides sufficiency of compliance with 3.3.2.12.(5)	597/99

3.3.2.3	Div. B 3.3.2.3.	05-23-1037		7-Jun-05	Determine whether the proposed main arena seating bowl, in particular the seat configuration, row width, vomitory and aisle widths, exit capacity/width, fire separation of main entry/exit “open stair”, designed in accordance with NFPA 101-2000, “Life Safety Code” and NFPA 92B, “Smoke Management Systems in Malls, Atria and Large Areas”, provides sufficiency of compliance with Articles 3.3.2.3., 3.3.2.4.. 3.4.3.4. and 3.4.4.1.	
3.3.2.3.	Div. B 3.3.2.3	00-61-793	2000	14-Dec-00	Determine whether the main arena seating bowl, in particular the number of seats, row widths, vomitory and aisle width, exits and access to exits and the smoke protection system, designed based on NFPA 101, "Life Safety Code" and NFPA 92B "Smoke Management Systems in malls atria, and large areas," provides sufficiency of compliance with s 3.3.2.3, 3.3.2.4, 3.4.3.4, 3.1.8.1, and 3.2.5.13(1)	205/00

3.3.2.4.	Div. B 3.3.2.4.	05-23-1037		7-Jun-05	Determine whether the proposed main arena seating bowl, in particular the seat configuration, row width, vomitory and aisle widths, exit capacity/width, fire separation of main entry/exit “open stair”, designed in accordance with NFPA 101-2000, “Life Safety Code” and NFPA 92B, “Smoke Management Systems in Malls, Atria and Large Areas”, provides sufficiency of compliance with Articles 3.3.2.3., 3.3.2.4.. 3.4.3.4. and 3.4.4.1.	
3.3.2.4	Div. B 3.3.2.4	00-61-793	2000	14-Dec-00	Determine whether the main arena seating bowl, in particular the number of seats, row widths, vomitory and aisle width, exits and access to exits and the smoke protection system, designed based on NFPA 101, "Life Safety Code" and NFPA 92B "Smoke Management Systems in malls atria, and large areas," provides sufficiency of compliance with s 3.3.2.3, 3.3.2.4, 3.4.3.4, 3.1.8.1, and 3.2.5.13(1)	205/00

3.3.2.5.	Div. B 3.3.2.5.	00-19-751	2000	27-Apr-00	to determine; (1) whether the proposed second storey partitions located in the interconnected floor space between the first and second floors complies with 3.2.8.1.(5) of the Ontario Building Code (OBC), (2) whether the proposed second and third floor travel distances provide sufficiency of compliance with 3.4.2.5.(1)(c) and 3.3.2.5.(4), (3) whether the building should be considered as having one or two suites and thereby provide either a 30 minute or one hour separation as per s 3.3.2.2.(8) or 3.3.1.1.(1), (4) whether the proposed close-spaced sprinklers on both sides of the unrated fire separations on the first floor provide sufficiency of compliance with either s 3.3.2.2.(8) or 3.3.1.1.(1), and (5) whether the proposed installation of a sprinkler activated mechanical exhaust system in lieu of roof mounted gravity vents provides sufficiency of compliance with 3.3.2.12.(5)	597/99

3.3.2.8.(1)(c)	Div. B 3.3.2.8.(1)(c)	04-32-987		22-Ju-04	Determine whether the omission of continuous guards between constructed rows of successive fixed seating provides sufficiency of compliance with Clause 3.3.2.8.(1)(c)	

3.3.2.12	Div. B 3.3.2.12	00-38-770	2000	10-Aug-00	Determine whether the proposed elevated platform should be considered a stage and must therefore comply with 3.3.2.12.	205/00
3.3.2.12.	Div. B 3.3.2.12	00-19-751	2000	27-Apr-00	to determine; (1) whether the proposed second storey partitions located in the interconnected floor space between the first and second floors complies with 3.2.8.1.(5) of the Ontario Building Code (OBC), (2) whether the proposed second and third floor travel distances provide sufficiency of compliance with 3.4.2.5.(1)(c) and 3.3.2.5.(4), (3) whether the building should be considered as having one or two suites and thereby provide either a 30 minute or one hour separation as per s 3.3.2.2.(8) or 3.3.1.1.(1), (4) whether the proposed close-spaced sprinklers on both sides of the unrated fire separations on the first floor provide sufficiency of compliance with either s 3.3.2.2.(8) or 3.3.1.1.(1), and (5) whether the proposed installation of a sprinkler activated mechanical exhaust system in lieu of roof mounted gravity vents provides sufficiency of compliance with 3.3.2.12.(5)	597/99
3.3.2.12	Div. B 3.3.2.12	00-38-770	2000	10-Aug-00	Determine whether the proposed elevated platform should be considered a stage and must therefore comply with 3.3.2.12.	205/00

3.3.2.13	. Div. B 3.3.2.13	99-46-702	1999	17-Jul-99	Determine whether the raised dining platform, as constructed, should be required to conform with s 3.3.2.13.(1) and 3.4.6.4.(7)	278/99

3.3.3.2.	Div. B 3.3.3.2.	00–47-779	2000	7-Sep-00	Determine whether the proposed renovation and conversion of an existing, detached building containing a Group C occupancy to a Group B, Division 3 care facility is required to comply with s 3.3.3.3.(3) and 3.3.3.4.(1), s 3.4.3.1.(2)(d), (c) and 3.8.3.3.(5)(b) and 3.3.3.2.(2)	205/00

3.3.3.3.	Div. B 3.3.3.3.	01-32-825	2001	5-Jul-01	Determine whether the proposed corridor design provides sufficiency of compliance with 3.3.3.3.(1)	205/00
3.3.3.3.	Div. B 3.3.3.3.	00-15-747	2000	29-Mar-00	Determine the applicability and/or compliance with s 3.2.8.1.(3) and 3.2.8.2.(6) of the Ontario Building Code (OBC) regarding the proposed main floor interconnected floor space, whether the proposed design of the second floor corridor complies with OBC 3.3.3.3.(1), and whether the proposed connection to the adjacent existing building provides sufficiency of compliance with OBC Subsection 3.1.10. or 3.2.3.1.(1)(b) and 3.2.3.7.(1)	597/99

3.3.3.3.	Div. B 3.3.3.3.	00–47-779	2000	7-Sep-00	Determine whether the proposed renovation and conversion of an existing, detached building containing a Group C occupancy to a Group B, Division 3 care facility is required to comply with s 3.3.3.3.(3) and 3.3.3.4.(1), s 3.4.3.1.(2)(d), (c) and 3.8.3.3.(5)(b) and 3.3.3.2.(2)	205/00
3.3.3.3.	Div. B 3.3.3.3.	99-40-696	1999	3-Jun-99	Determine whether the proposed residential-type ventilation system in the subject B 3 occupancy complies with 6.2.3.10.(5) of the Ontario Building Code (OBC) and whether the proposed 825 mm (2 ft 8 in) width of corridor doors intended for ambulatory users complies with 3.3.3.3.(4)	278/99
3.3.3.4.	Div. B 3.3.3.4.	00–47-779	2000	7-Sep-00	Determine whether the proposed renovation and conversion of an existing, detached building containing a Group C occupancy to a Group B, Division 3 care facility is required to comply with s 3.3.3.3.(3) and 3.3.3.4.(1), s 3.4.3.1.(2)(d), (c) and 3.8.3.3.(5)(b) and 3.3.3.2.(2)	205/00
3.3.5.6	Div. B 3.3.5.6.	04-04-1000		20-Dec-04	Determine whether the proposed compactor and scrap bin area in the basement level (former Eaton=s basement retail area) provides sufficiency of compliance with Articles 3.3.5.6 and 3.6.2.6	
3.3.5.6.	Div. B 3.3.5.6.	01-57-850	2001	8-Nov-01	Determine whether the “trucking area”(used for loading/unloading) in an industrial building is considered as a “storage garage” and therefore required to be separated from the adjacent warehouse area by a fire separation having a fire-resistance rating of 1.5 hours in accordance with 3.3.5.6	283/01
3.4.2.1.	Div. B 3.4.2.1.	99-50-706	1999	5-Aug-99	Determine whether the proposed fire alarm system for the entire building, offered in lieu of a required second exit from certain second storey units, provides sufficiency of compliance with 3.4.2.1.	278/99
3.4.2.2.	Div. B 3.4.2.2.	01-04-797	2001	8-Feb-01	Determine whether the proposed mezzanine, upper mezzanine and grid iron areas intended for a live performance teaching facility, in conjunction with certain additional protective measures, provides sufficiency of compliance with 3.2.2.24., s 3.2.1.1.(3),(4) and (5), 3.2.8.2.(1), 3.4.2.2. and 3.4.2.5.(1)(c)	205/00
3.4.2.2.	Div. B 3.4.2.2.	01-04-797	2001	8-Feb-01	Determine whether the proposed mezzanine, upper mezzanine and grid iron areas intended for a live performance teaching facility, in conjunction with certain additional protective measures, provides sufficiency of compliance with 3.2.2.24., s 3.2.1.1.(3),(4) and (5), 3.2.8.2.(1), 3.4.2.2. and 3.4.2.5.(1)(c)	205/00

3.4.2.5.	Div. B 3.4.2.5.	01-04-797	2001	8-Feb-01	Determine whether the proposed mezzanine, upper mezzanine and grid iron areas intended for a live performance teaching facility, in conjunction with certain additional protective measures, provides sufficiency of compliance with 3.2.2.24., s 3.2.1.1.(3),(4) and (5), 3.2.8.2.(1), 3.4.2.2. and 3.4.2.5.(1)(c)	205/00
3.4.2.5.	Div. B 3.4.2.5.	01-04-797	2001	8-Feb-01	Determine whether the proposed mezzanine, upper mezzanine and grid iron areas intended for a live performance teaching facility, in conjunction with certain additional protective measures, provides sufficiency of compliance with 3.2.2.24., s 3.2.1.1.(3),(4) and (5), 3.2.8.2.(1), 3.4.2.2. and 3.4.2.5.(1)(c)	205/00
3.4.2.5.	Div. B 3.4.2.5.	01-44-837	2001	27-Sep-01	Determine whether the distance from the rear of the dressing room area to an exit (in excess of 45 m) and the doors to the ice resurfacing room, that are not equipped with self-closing devices activated by a smoke detector, provide sufficiency of compliance with 3.4.2.5.(1)(c) and 3.1.8.12.(3)	205/00
3.4.2.5.	Div. B 3.4.2.5.	01-10-803	2001	15-Mar-01	Determine whether the proposed access to exit corridor, designed using a combination of the parameters outlined in 3.4.2.5.(1)(d) and 3.4.2.5.(2)	205/00
3.4.2.5.	Div. B 3.4.2.5.	00-19-751	2000	27-Apr-00	to determine; (1) whether the proposed second storey partitions located in the interconnected floor space between the first and second floors complies with 3.2.8.1.(5) of the Ontario Building Code (OBC), (2) whether the proposed second and third floor travel distances provide sufficiency of compliance with 3.4.2.5.(1)(c) and 3.3.2.5.(4), (3) whether the building should be considered as having one or two suites and thereby provide either a 30 minute or one hour separation as per s 3.3.2.2.(8) or 3.3.1.1.(1), (4) whether the proposed close-spaced sprinklers on both sides of the unrated fire separations on the first floor provide sufficiency of compliance with either s 3.3.2.2.(8) or 3.3.1.1.(1), and (5) whether the proposed installation of a sprinkler activated mechanical exhaust system in lieu of roof mounted gravity vents provides sufficiency of compliance with 3.3.2.12.(5)	597/99
3.4.2.5.	Div. B 3.4.2.5.	99-31-687	1999	13-May-99	Determine whether the travel distances on the second to fifth floors ranging from 53 to 56 m, in a structure with interconnected floor space due to the full height atrium, provides sufficiency of compliance with 3.2.8.4.(4) and 3.4.2.5.(1)(b)	122/98
3.4.2.5.	Div. B 3.4.2.5.	99-11-667	1999	24-Feb-99	Determine whether the intended smoke management system compensates for the proposed increase in travel distance and the elimination of a second exit to certain stores, thereby providing sufficiency of compliance with 3.4.2.5.(1)(d) and Sub 3.4.2.5.(1)(d)(iv) respectively	122/98

3.4.2.5.	Div. B 3.4.2.5.	01-45-838	2001	27-Sep-01	Determine whether the proposed main aisles in a Group F, Division 2 industrial building, which include several direction changes, lead through doors in interior partitions, and which lead to the exit doors located at 60 metre intervals around the perimeter of the building, provide sufficiency of compliance with 3.4.2.5.(2)	283/01
3.4.2.5.(1)(c)	Div. B 3.4.2.5.(1)(c)	05-07-1021		3-Feb-05	Determine whether the proposed automated storage and retrieval system that serves as structural support for the building in addition to support for the racking system components provides sufficiency of compliance with Article 3.2.2.67., Clause 3.4.2.5.(1)(c) and Sentence 3.4.4.1.(1)	

3.4.3.1.	Div. B 3.4.3.2	99-65-721	1999	4-Nov-99	Determine whether the stair lift, with a width of 1,220 mm when in operation, proposed to be located in an existing exit stair that is 1,675 mm wide provides sufficiency of compliance with 3.4.3.5.(1) and 3.4.3.1.(2)(b)	278/99
3.4.3.1.	Div. B 3.4.3.1. 3.4.3.2	00–47-779	2000	7-Sep-00	Determine whether the proposed renovation and conversion of an existing, detached building containing a Group C occupancy to a Group B, Division 3 care facility is required to comply with s 3.3.3.3.(3) and 3.3.3.4.(1), s 3.4.3.1.(2)(d), (c) and 3.8.3.3.(5)(b) and 3.3.3.2.(2)	205/00

3.4.3.4.	Div. B 3.4.3.2	05-23-1037		7-Ju-05	Determine whether the proposed main arena seating bowl, in particular the seat configuration, row width, vomitory and aisle widths, exit capacity/width, fire separation of main entry/exit “open stair”, designed in accordance with NFPA 101-2000, “Life Safety Code” and NFPA 92B, “Smoke Management Systems in Malls, Atria and Large Areas”, provides sufficiency of compliance with Articles 3.3.2.3., 3.3.2.4.. 3.4.3.4. and 3.4.4.1.	

3.4.3.4	Div. B 3.4.3.2	00-61-793	2000	14-Dec-00	Determine whether the main arena seating bowl, in particular the number of seats, row widths, vomitory and aisle width, exits and access to exits and the smoke protection system, designed based on NFPA 101, "Life Safety Code" and NFPA 92B "Smoke Management Systems in malls atria, and large areas," provides sufficiency of compliance with s 3.3.2.3, 3.3.2.4, 3.4.3.4, 3.1.8.1, and 3.2.5.13(1)	205/00

3.4.3.5.	Div. B 3.4.3.4	99-65-721	1999	4-Nov-99	Determine whether the stair lift, with a width of 1,220 mm when in operation, proposed to be located in an existing exit stair that is 1,675 mm wide provides sufficiency of compliance with 3.4.3.5.(1) and 3.4.3.1.(2)(b)	278/99
3.4.3.5.	Div. B 3.4.3.4	00-29-761	2000	14-Jun-00	Determine whether the as-built handrail that projects 100 mm into the required 750 mm minimum width of a landing where a door swings into an exit stair complies with 3.4.3.5.(3)	205/00

3.4.3.6.	Div. B 3.4.3.5.	01-22-815	2001	10-May-01	Determine whether the proposed construction of a new mezzanine (in an existing building), that is to have a minimum headroom clearance of 1,975 mm (6', 6") under the open web steel joists located at 1,975 mm (6', 6") on centre, provides sufficiency of compliance with s 3.3.1.8. and 3.4.3.6.	205/00

3.4.4.1.	Div. B 3.4.4.1.	05-23-1037		7-Jun-05	Determine whether the proposed main arena seating bowl, in particular the seat configuration, row width, vomitory and aisle widths, exit capacity/width, fire separation of main entry/exit “open stair”, designed in accordance with NFPA 101-2000, “Life Safety Code” and NFPA 92B, “Smoke Management Systems in Malls, Atria and Large Areas”, provides sufficiency of compliance with Articles 3.3.2.3., 3.3.2.4.. 3.4.3.4. and 3.4.4.1.	
3.4.4.1.	Div. B 3.4.4.1.	99-62-718	1999	21-Oct-99	Determine whether the definition of "exit" as set out in 1.1.3.2. and 3.4.4.1.(1)	99-62-718
3.4.4.1.(1)	Div. B 3.4.4.1.(1)	05-07-1021		3-Feb-05	Determine whether the proposed automated storage and retrieval system that serves as structural support for the building in addition to support for the racking system components provides sufficiency of compliance with Article 3.2.2.67., Clause 3.4.2.5.(1)(c) and Sentence 3.4.4.1.(1)	220/02
3.4.1.1.	Div. B 3.4.1.1.	99-66-722	1999	4-Nov-99	Determine whether the second storey sound and lighting booth, as constructed, with a pull-down ladder and a lockable access hatch provides sufficiency of compliance with 3.4.1.1. and 3.3.1.5	278/99

3.4.4.3.	Div. B 3.4.4.3.	99-62-718	1999	21-Oct-99	Determine whether the definition of "exit" as set out in 1.1.3.2. and 3.4.4.1.(1)	99-62-718

3.4.4.4.	Div. B 3.4.4.4.	01-35-828	2001	2-Aug-01	Determine whether the exit stair, which contains an opening for an elevator that is proposed to have a pressurized elevator shaft, provides sufficiency of compliance with 3.4.4.4.	205/00
3.4.4.4.	Div. B 3.4.4.4.	01-29-822	2001	21-Jun-01	Determine whether the retrofit elevator, installed to permit barrier-free accessibility throughout the existing two storey building, and proposed without separation in a lobby containing an exit stair, provides sufficiency of compliance with 3.4.4.4.(6)	205/00
3.4.4.4.	Div. B 3.4.4.4.	98-51-656	1998	15-Dec-98	Determine whether the proposed installation of a securitydesk in a lobby area leading to an exit provides sufficiency of compliance with 3.4.4.4.(6)	122/98

3.4.6.3.(2)	Div. B 3.4.6.3.(2)	04-33-988		5-Aug-04	Determine whether the as-constructed landing serving a flight of stairs in a Group A, Division 2 occupancy provides sufficiency of compliance with Sentence 3.4.6.3.(2)	

3.4.6.5.	Div. B 3.4.6.5.	00-20-752	2000	11-May-00	Determine whether the as-built guards constructed mainly with panels consisting of 50 by 50 mm wire mesh provides sufficiency of compliance with s 3.3.1.17.(5) and 3.4.6.5.(8)	205/00

3.4.6.7.	Div. B 3.4.6.7.	01-55-848	2001	8-Nov-01	Determine whether the as-constructed stairs that provide access to a mezzanine level in an industrial occupancy and having a minimum run of 229 mm (9 in), provide sufficiency of compliance with 3.4.6.7.(1)	283/01
3.4.6.15.	Div. B 3.4.6.15.	98-46-651	1998	3-Dec-98	Determine whether the proposed installation of Electroguard delayed access devices on certain exit doors provides sufficiency of compliance with 3.4.6.15.(4)	122/98
3.6.2.2.	Div. B 3.6.2.1 (9) & (10)	99-22-678	1999	8-Apr-99	Determine whether the proposed location of a fuel fired appliance and the proposed level of illumination of exit signage complies with s 3.6.2.1.(2) and 3.6.2.2.(3) and s 3.2.7.3.(1)(i) and (j) and 3.2.7.3.(3) respectively	122/98
3.6.2.6	Div. B 3.6.2.4.	04-04-1000		20-Dec-04	Determine whether the proposed compactor and scrap bin area in the basement level (former Eaton=s basement retail area) provides sufficiency of compliance with Articles 3.3.5.6 and 3.6.2.6	
3.6.3.1.	Div. B 3.6.3.1.	99-18-674	1999	24-Mar-99	Determine whether the fire separations not required to have a fire-resistance rating proposed to surround the vertical service shafts and to be constructed of 92 mm steel studs and 12.7 mm gypsum board and sealed at the perimeter and at all penetrations provides sufficiency of compliance with 3.6.3.1.(1)	122/98
3.6.3.3.	Div. B 3.6.3.3.	00-49-781	2000	21-Sep-00	Determine whether the linen chute, which is proposed to extend from the basement to the second floor only and not up and through the roof, provides sufficiency of compliance with 3.6.3.3.(3)	205/00
		99-16-672	1999	11-Mar-99	Determine whether the fire alarm pull stations, installed at a height of 900 mm in accordance with 3.7.1.5., provides sufficiency of compliance with 3.2.4.5.(1)	395/96
3.7.2.1.	Div. B 3.7.2.1.	01-11-804	2001	15-Mar-01	Determine whether the proposed design of the original Verona Suite plan, that includes a windowless, enclosed “study” room, complies with s 3.7.2.1.(1) and 9.7.1.2.(1	205/00
3.7.4.1.	Div. B 3.7.4.1.	00-44-776	2000	24-Aug-00	Determine whether the proposed substitution of two water closets with a proprietary composting toilet system to serve a one-classroom portable school with an adequate water supply provides sufficiency of compliance with 3.7.4.1.(2) and Part 8	205/00

3.7.4.1.	Div. B 3.7.4.1.	03-34-932	2003	28-Aug-03	Determine whether the proposed addition to a Group F, Division 3 occupancy that will not be equipped with water closets, but is located 250 metres away from an adjacent building on the same property that contains water closets, provides sufficiency of compliance with 3.7.4.1.(3)	220/02
3.7.4.3.	Div. B 3.7.4.3.	99-20-676	1999	8-Apr-99	Determine whether the proposed 83 m2 Pizza Nova Take Out franchise should be considered a mercantile occupancy and is therefore adequately served by a single unisex, barrier-free accessible washroom in accordance with 3.7.4.8.(3).	122/98
3.8.	Div. B 3.8.	02-27-882	2002	12-Sep-02	Determine whether the proposed retail kiosk, located in a mall corridor, is required to provide barrier-free accessibility in accordance with the provisions of s 3.8.1.3.(1) and 3.8.2.1.(1)	283/01
3.8.	Div. B 3.8.	02-20-875	2002	1-Aug-02	Determine whether the conversion of a century home into a six room inn, where no renovation to the existing entranceways is contemplated, is required to provide barrier-free access in accordance with 9.5.2.1.(1) and Section 3.8. when considering Part 11 and s 11.4.2.3.(1) and 11.4.3.4.(2)	283/01
3.8.1.1.	Div. B 3.8.1.1.	04-04-959		22-Jan-04	Determine whether the as-constructed Group C occupancy that is constructed as a three-storey residential house that includes a total of four separate suites, and which does not provide barrier-free access to the Ground Floor, complies with Article 3.8.1.1.	
3.8.1.1.	Div. B 3.8.1.1.	01-40-833	2001	30-Aug-01	Determine whether the proposed security gate house, that has not been designed for barrier-free access, provides sufficiency of compliance with s 9.5.2.1., 3.8.1.1., 3.8.1.2. and 3.8.2.3.	205/00
3.8.1.1.	Div. B 3.8.1.1.	01-20-813	2001	26-Apr-01	Determine whether the proposed seasonal-use sleeping cabins are required to be barrier-free accessible, when considering 9.5.2.1. and 3.8.1.1.(1)(c)	205/00
3.8.1.2.	Div. B 3.8.1.2.	01-40-833	2001	30-Aug-01	Determine whether the proposed security gate house, that has not been designed for barrier-free access, provides sufficiency of compliance with s 9.5.2.1., 3.8.1.1., 3.8.1.2. and 3.8.2.3.	205/00
3.8.1.3.	Div. B 3.8.1.3.	00-10-742	2000	2-Mar-00	Determine whether the proposed 3 m by 4.5 m kiosk structure, located in a 9 m wide public corridor, is required to provide barrier-free accessibility in accordance with s 3.8.1.3.(1) and 3.8.2.1.(1)	597/99

3.8.1.3.	Div. B 3.8.1.3.	99-32-688	1999	13-May-99	Determine whether the existing gravel floor is required to comply with s 4.1.1.3.(1) and 4.1.1.7.(1), 3.8.1.3., and s 3.8.2.1.(1) and 9.9.5.5.(2)	278/99

3.8.2.1.	Div. B 3.8.2.1.	99-32-688	1999	13-May-99	Determine whether the existing gravel floor is required to comply with s 4.1.1.3.(1) and 4.1.1.7.(1), 3.8.1.3., and s 3.8.2.1.(1) and 9.9.5.5.(2)	278/99
3.8.2.1.	Div. B 3.8.2.1.	00-10-742	2000	2-Mar-00	Determine whether the proposed 3 m by 4.5 m kiosk structure, located in a 9 m wide public corridor, is required to provide barrier-free accessibility in accordance with s 3.8.1.3.(1) and 3.8.2.1.(1)	597/99
3.8.2.1.	Div. B 3.8.2.1.	00-37-769	2000	27-Jul-00	Determine whether 3.8.2.1.(2)(k) of the Ontario Building Code, which permits an exemption from the requirement to provide barrier-free accessibility "within" residential suites, also applies to the design of the interior side of the egress doorways proposed for the units in the Sheraton Fallsview Hotel, Stanley Avenue and Livingstone Street, Niagara Falls, Ontario.	205/00
3.8.2.1.	Div. B 3.8.2.1.	00-17-749	2000	13-Apr-00	an application by Mr. Emanuel Vommero, owner, Vommero Enterprises, Niagara Falls, Ontario, for the resolution of a dispute with Mr. Mel Brown, Chief Building Official, City of Niagara Falls, Ontario, to interpret whether 3.8.2.1.(2)(k)	597/99
3.8.2.1.	Div. B 3.8.2.1.	99-02-658	1999	12-Jan-99	Determine whether the proposed dwelling unit balconies, which are not intended as areas of refuge, are required to be barrier-free when considering 3.8.2.1.(3)	122/98
3.8.2.1.	Div. B 3.8.2.1.	99-01-657	1999	12-Jan-99	Determine whether the proposed dwelling unit balconies, which are not intended as areas of refuge, are required to be barrier-free when considering 3.8.2.1.(3) of	122/98

3.8.2.3.	Div. B 3.8.2.3.	01-40-833	2001	30-Aug-01	Determine whether the proposed security gate house, that has not been designed for barrier-free access, provides sufficiency of compliance with s 9.5.2.1., 3.8.1.1., 3.8.1.2. and 3.8.2.3.	205/00
3.8.2.3.	Div. B 3.8.2.3.	99-59-715	1999	23-Sep-99	Determine whether the proposed change of use to a Group A, Division 2 (restaurant) occupancy, that is not provided with barrier-free a accessible washroom nor a separate washroom shared between employees only, is required to comply with s 3.8.2.3.(1) and 3.7.4.3.(7) respectively	278/99

3.8.3.3.	Div. B 3.8.3.3.	01-25-818	2001	10-Jun-01	Determine whether the as-installed paired corridor doors containing vision panels and which form part of the fire separation, are held open by magnetic hold open devices and are considered part of the barrier-free path of travel, provide sufficiency of compliance with 3.8.3.3.(14)	205/00
3.8.3.3.	Div. B 3.8.3.3.	03-22-920	2003	15-May-03	Determine whether 24 hour per day staffing at the subject group homes offered in lieu of automatic door openers provides sufficiency of compliance with 3.8.3.3.(5)	283/01
3.8.3.3.	Div. B 3.8.3.3.	00–47-779	2000	7-Sep-00	Determine whether the proposed renovation and conversion of an existing, detached building containing a Group C occupancy to a Group B, Division 3 care facility is required to comply with s 3.3.3.3.(3) and 3.3.3.4.(1), s 3.4.3.1.(2)(d), (c) and 3.8.3.3.(5)(b) and 3.3.3.2.(2)	205/00
3.8.3.3.	Div. B 3.8.3.3.	00-17-749	2000	13-Apr-00	an application by Mr. Emanuel Vommero, owner, Vommero Enterprises, Niagara Falls, Ontario, for the resolution of a dispute with Mr. Mel Brown, Chief Building Official, City of Niagara Falls, Ontario, to interpret whether 3.8.2.1.(2)(k)	597/99

3.8.3.4.	Div. B 3.8.3.4.	99-72-728	1999	2-Dec-99	Determine whether the as built guard, installed on the exterior barrier-free ramp with a maximum height of 865 mm and which includes a lower, parallel rail 660 mm above the ramp surface, provides sufficiency of compliance with Sub s 3.8.3.4.(1)(f)(i) and (ii) respectively	278/99

3.11.3.1.	Div. B	02-37-892	2002	7-Nov-02	Determine whether the compensating measures offered where the slope of the bottom of the pool exceeds 8% at a water depth of 1,350 mm or less, provide sufficiency of compliance with 3.11.3.1.(6)(a) and 3.11.3.1. (7)	283/01
3.11.3.1.	3.11.3.1.	02-37-892	2002	7-Nov-02	Determine whether the compensating measures offered where the slope of the bottom of the pool exceeds 8% at a water depth of 1,350 mm or less, provide sufficiency of compliance with 3.11.3.1.(6)(a) and 3.11.3.1. (7)	283/01

3.11.3.1.	Div. B 3.11.3.1.	02-02-857	2002	17-Jan-02	Determine whether the removal of the interior and exterior bridges, which form part of the continuous pool deck and facilitate the crossing of a 1752.6 mm (5 ft 9 in) portion of a seasonally divided pool, provides sufficiency of compliance with 3.11.3.1.(9)(a)	283/01
3.11.3.1.	Div. B 3.11.3.1.	99-38-694	1999	3-Jun-99	Determine whether the proposed pool deck width of 1,675 mm (5 ft 6 in) provides sufficiency of compliance with 3.11.3.1.(9)(a)	122/98

3.13.1.	Div. B 3.14.1.	05-01-1015		13-Jan-05	Determine whether the storage structure, referred to by the Applicant as a tent, provides sufficiency of compliance with Sentences 1.1.3.1.(1) and 2.1.1.3.(1), Subsection 3.13.1. and Sentence 9.1.1.4.(1)	220/02
3.13.2.2.	Div. B 3.14.2.2.	03-50-948	2003	20-Nov-03	Determine whether the proposed temporary air-supported structure, which has a Group A, Division 2 occupancy, that is not equipped with a sprinkler system or a standpipe and hose system, provides sufficiency of compliance with s 3.2.2.26. and 3.2.9.1., when considering 3.13.2.2.(3)	220/02
3.13.2.2.	Div. B 3.14.2.2.	03-50-948	2003	20-Nov-03	Determine whether the proposed temporary air-supported structure, which has a Group A, Division 2 occupancy, that is not equipped with a sprinkler system or a standpipe and hose system, provides sufficiency of compliance with s 3.2.2.26. and 3.2.9.1., when considering 3.13.2.2.(3)	220/02

PART 4

1	1A	2	3	4	5	6
Statutory Reference 403/97	**Statutory Reference 350/06**	**BCC File No.**	**Year**	**Date**	**Short Description from Style**	**LAST APP. AMEND. TO 403/97**
Part 4	Div. B Part 4	06-13-1083		23-Mar-06	Determine whether the proposed use of a composite lumber product, referred to as Life Long Decking System, for the exterior walking surface of the proposed deck serving a residential dwelling provides sufficiency of compliance with Parts 4 and 9	
4.1.1.3.(1)	Div. B 4.1.3.1.(1)	05-26-1040		7-Ju-05	Determine whether the proposed use of "Panelcraft™ Honeycomb Roof System" honeycomb sandwich panels in a sunroom provides sufficiency of compliance with Sentence 4.1.1.3.(1)	4.1.1.3.(1)
4.1.1.3.		99-32-688	1999	13-May-99	Determine whether the existing gravel floor is required to comply with s 4.1.1.3.(1) and 4.1.1.7.(1), 3.8.1.3., and s 3.8.2.1.(1) and 9.9.5.5.(2)	278/99
4.1.1.7.		99-32-688	1999	13-May-99	Determine whether the existing gravel floor is required to comply with s 4.1.1.3.(1) and 4.1.1.7.(1), 3.8.1.3., and s 3.8.2.1.(1) and 9.9.5.5.(2)	278/99
4.1.6.2.		99-42-698	1999	17-Jun-99	Determine whether the structural support system of the first floor of the temporary sales pavilion built to accommodate a live load of 2.4 kPa complies with 4.1.6.2.	278/99
4.1.7.3.		00-03-735	2000	1-Feb-00	Determine whether the proposed roof, designed to delay the run off of rainwater but which is engineered to support either snow or rain load but not both, complies with 4.1.7.3.(3)	597/99
4.1.10.1.	Div. B 4.1.5.15.	04-27-982		17-Jun-04	Determine whether the as-constructed exterior deck serving a Group C occupancy, which is comprised of a composite material referred to as "Life-Long Decking" that is manufactured by Brite Manufacturing Inc., will provide sufficiency of compliance with Articles 9.8.8.8. and 4.1.10.1.	220/02
4.1.10.1.	Div. B 4.1.5.15.	00-54-786	2000	2-Nov-00	Determine whether the proposed guard comprised mainly of 35 mm diameter acrylic rods complies with s 9.8.8.8. and 4.1.10.1. and whether the irregular curved stair provides sufficiency of compliance with 9.8.2.1.(1)	205/00

4.1.10.8.	Div. B 4.4.4.1.	02-05-860	2002	24-Jan-02	Determine whether the omission of a roof anchoring system, where window washing and maintenance is intended to be carried out from ladders with grade level access and where equipment is positioned to permit rooftop maintenance without approaching the parapet, provides sufficiency of compliance with 4.1.10.8	283/01

PART 6

1	1A	2	3	4	5	6
Statutory Reference 403/97	**Statutory Reference 350/06**	**BCC File No.**	**Year**	**Date**	**Short Description from Style**	**LAST APP. AMEND. TO 403/97**
6.2.3.2.	Div. B 6.2.3.2.	03-54-952	2003	4-Dec-03	Determine whether the as installed vertical exhaust shafts serving a residential high rise building which extend three storeys in height, and which are constructed using paper-lined gypsum shaftboard liners, comply with the intent of 6.2.3.2.(1) of the Ontario Building Code (OBC) or, in the alternative, whether these same shafts provide sufficiency of compliance with 6.2.3.2.(2)	220/02
6.2.3.2.	Div. B 6.2.3.2.	01-07-800	2001	15-Feb-01	Determine whether the proposed air distribution system that is comprised of under-slab combustible duct piping provides sufficiency of compliance with 6.2.3.2.	205/00
6.2.3.9.	Div. B 6.2.3.8.	00-28-760	2000	14-Jun-00	Determine whether the proposed installation of a single fan unit providing 24 L/s exhaust on a continuous basis to serve a bathroom with two fixtures requiring ventilation provides sufficiency of compliance with 6.2.3.9.(12)	205/00
6.2.3.10.	Div. B 6.2.3.9.	00–46-778	2000	7-Sep-00	Determine whether the ventilation and exhaust system that proposes to provide supply air from the corridors to the resident rooms and to exhaust from the resident washrooms provides sufficiency of compliance with 6.2.3.10.(3)	205/00
6.2.3.10.	Div. B 6.2.3.11.	99-40-696	1999	3-Jun-99	Determine whether the proposed residential-type ventilation system in the subject B 3 occupancy complies with 6.2.3.10.(5) of the Ontario Building Code (OBC) and whether the proposed 825 mm (2 ft 8 in) width of corridor doors intended for ambulatory users complies with 3.3.3.3.(4)	278/99

6.2.4.3.	Div. B 6.2.4.3.	02-36-891	2002	7-Nov-02	Determine whether the insulation used to wrap the attic duct work provides sufficiency of compliance with s 9.25.2.3.(1), 9.33.1.1.(1) and 6.2.4.3.(1) and whether the as-constructed wall assembly complies with the air barrier and vapour barrier requirements of 9.25.3.1.(1), 9.25.3.2.(1), 9.25.3.3.(1) and 9.25.4.1.(1) when considering s 5.4.1.1.(2) and 5.5.1.1.(2).	283/01

6.2.5.2.	Div. B 6.2.5.2.	01-08-801	2001	22-Feb-01	Determine whether the as-installed fuel fired appliances, a portion of each having been situated within 3 m of exterior walls of the same building which contain openings, provide sufficiency of compliance with 6.2.5.2.(1)(c)	205/00

PART 7

1	1A	2	3	4	5	6
Statutory Reference 403/97	**Statutory Reference 350/06**	**BCC File No.**	**Year**	**Date**	**Short Description from Style**	**LAST APP. AMEND. TO 403/97**
7.1.6.1.	Div. B 7.1.5.1.	00-26-758	2000	1-Jun-00	Determine whether proposed Class 1 (composting and incinerating toilet) and Class 2 (greywater system) systems in lieu of a Class 4 septic system to serve a newly built seasonal dwelling, complies with 8.1.2.1.(1) when considering s 7.1.6.1.(1) and 9.31.4.1.(1), and a subsequent proposal to include a different type of a Class 1 system (flush unit/composting toilet), a Class 2 system and a Class 3 system provides sufficiency of compliance with s 8.2.1.5.(1) and 8.2.1.4.(2)	205/00
7.1.6.4.	Div. B 7.1.5.4.	03-26-924	2003	19-Jun-03	Determine whether the proposed combined water main and combined sanitary main serving the two subject buildings provides sufficiency of compliance with 7.1.6.4.	220/02
7.1.6.4.	Div. B 7.1.5.4.	01-06-799	2001	15-Feb-01	Determine whether the proposed stacked townhouse units, with property lines occurring on both horizontal and vertical planes between them, comply with the requirements of s 9.10.11.1.(1), 7.1.6.4.(1) and 7.1.7.2.(1)	205/00
7.1.7.1.	Div. B 7.1.6.1.	99-10-666	1999	8-Apr-99	Determine whether the existing washroom ventilation and the fire stopping in the subject farm building provide comply with 7.1.7.1.(1) of the Ontario Building Code and 3.1.3.1.(1)	395/96
7.1.7.2.	Div. B 7.1.6.2.	01-06-799	2001	15-Feb-01	Determine whether the proposed stacked townhouse units, with property lines occurring on both horizontal and vertical planes between them, comply with the requirements of s 9.10.11.1.(1), 7.1.6.4.(1) and 7.1.7.2.(1)	205/00
7.2.2.5.	Div. B 7.2.2.6.	03-33-931	2003	28-Aug-03	Determine whether the as-installed fixture drainage outlets in the lavatories of a Group C occupancy comply with 7.2.2.5.(1)	220/02

7.2.5.1.	Div. B 7.2.5.1.	99-28-684	1999	29-Apr-99	Determine whether the fabricated asbestos cement pipe fittings comply with 7.2.5.1.	122/98
7.2.5.9.(1)	Div. B 7.2.5.10.	05-09-1023		19-Apr-05	Determine whether the proposed use of high density polyethylene pipe to convey sanitary sewage from a Group B, Division 2 care facility to the municipal sewer main provides sufficiency of compliance with Sentence 7.2.5.9.(1)	
7.4.6.3.	Div. B 7.4.6.3.	00-42-774	2000	24-Aug-00	Determine whether the asinstalled sanitary drainage system that includes a sump pit and pumps provides sufficiency of compliance with 7.4.6.3.	205/00
7.5.4.4.	Div. B 7.5.5.3.	00-07-739	2000	17-Feb-00	Determine whether the as-constructed acid vents serving plumbing fixtures of more than one laboratory room comply with 7.5.4.4.(1)	597/99
7.6.4.2.	Div. B 7.6.4.2.	01-09-802	2001	15-Mar-01	Determine whether the 13.25 litre water closets, proposed to be installed in the washrooms of the new hotel addition, provide sufficiency of compliance with 7.6.4.2.(3)	205/00

PART 8

1	1A	2	3	4	5	6
Statutory Reference 403/97	**Statutory Reference 350/06**	**BCC File No.**	**Year**	**Date**	**Short Description from Style**	**LAST APP. AMEND. TO 403/97**
Part 8	Part 8	05-45-1059		6-Oct-05	Determine whether the proposed home effluent pasteurization system provides sufficiency of compliance with Part 8 of	
8.1.2.1.	Div. B 8.1.2.1.	02-29-884	2002	3-Oct-02	Determine whether the as-installed Class 1 (composting toilet) and Class 2 (greywater pit) systems which serve a seasonal dwelling in lieu of a Class 4 system provide sufficiency of compliance with 8.1.2.1.(1)	283/01
8.1.2.1.	Div. B 8.1.2.1.	00-26-758	2000	1-Jun-00	Determine whether proposed Class 1 (composting and incinerating toilet) and Class 2 (greywater system) systems in lieu of a Class 4 septic system to serve a newly built seasonal dwelling, complies with 8.1.2.1.(1) when considering s 7.1.6.1.(1) and 9.31.4.1.(1), and a subsequent proposal to include a different type of a Class 1 system (flush unit/composting toilet), a Class 2 system and a Class 3 system provides sufficiency of compliance with s 8.2.1.5.(1) and 8.2.1.4.(2)	205/00
8.2.1.3.	Div. B 8.2.1.3.	99-34-690	1999	27-May-99	Determine whether the proposed expansion of the Class 4 sewage system based on current measured daily design sewage flow rates to serve an enlarged nursing home provides sufficiency of compliance with 8.2.1.3	278/99
8.2.1.3.	Div. B 8.2.1.3.	98-29-634	1998	29-Jul-98	Determine whether the existing sewage system with a working capacity of 6,819 Litres/day serving the proposed renovated house with a total finished area of 819.9 m2 provides sufficiency of compliance with s 8.2.1.3. and 8.2.2.3.	122/98
8.2.1.3.	Div. B 8.2.1.3.	02-31-886	2002	3-Oct-02	Determine whether the enlargement of the existing septic system to accommodate a proposed daily design flow rate of 8,000 L/day to service a warehouse addition provides sufficiency of compliance with 8.2.1.3.(2) and Table 8.2.1.3.B.	283/01
8.2.1.3.	Div. B 8.2.1.3.	01-17-810	2001	12-Apr-01	Determine whether the proposed self-service gas bar with a drive-through window, at 6783 Guelph Line, Part Lot 10, Concession 4 N.S., R.R. # 2, Milton, Ontario, should be considered as a "service station" in accordance with 8.2.1.3.(2) and Table 8.2.1.3.B.	205/00

8.2.1.3.	Div. B 8.2.1.3.	99-76-732	1999	16-Dec-99	Determine whether the type of occupancy, proposed as a drive through restaurant, is permitted to comply with 8.2.1.3.(4)	597/99
8.2.1.3.	Div. B 8.2.1.3.	01-19-812	2001	12-Apr-01	Determine whether the proposed Sobeys IGA supermarket that is to contain a delicatessen, a bakery, and a meat department is a listed occupancy under Table 8.2.1.3.B. (forming part of 8.2.1.3.(2)), or whether it is permitted to comply with 8.2.1.3.(4)	205/00

8.2.1.4.	Div. B 8.2.1.4.	05-10-1024		10-Mar-05	Determine whether the proposed Class 4 sewage system will provide sufficiency of compliance with Article 8.2.1.4., Sentences 8.2.1.6.(2), 8.7.4.2.(9) and Table 8.2.1.6.B	
8.2.1.4.	Div. B 8.2.1.4.	00-59-791	2000	7-Dec-00	Determine whether the construction of a deck, extending 2.13 m over a portion of an existing septic tank and the stairs serving the deck situated within 1.06 m of the existing filter bed, provide sufficiency of compliance with s 8.2.1.6.(1) and (2)	205/00

8.2.1.6. Table 8.2.1.6.B	Div. B 8.2.1.6. and Table 8.2.1.6. B	05-10-1024		10-Mar-05	Determine whether the proposed Class 4 sewage system will provide sufficiency of compliance with Article 8.2.1.4., Sentences 8.2.1.6.(2), 8.7.4.2.(9) and Table 8.2.1.6.B	
8.2.1.6.	Div. B 8.2.1.6.	00-59-791	2000	7-Dec-00	Determine whether the construction of a deck, extending 2.13 m over a portion of an existing septic tank and the stairs serving the deck situated within 1.06 m of the existing filter bed, provide sufficiency of compliance with s 8.2.1.6.(1) and (2)	205/00
8.2.1.6.	Div. B 8.2.1.6.	99-43-699	1999	24-Jun-99	Determine whether the deck, as constructed, with less than 1.5 m setback from the septic tank provides sufficiency of compliance with 8.2.1.6. and whether the proposed screened porch situated on the subject deck provides sufficiency of compliance with the same of the Ontario Building Code at 128 Greystone Drive, Carp, Ontario	278/99
8.2.1.6.	Div. B 8.2.1.6.	99-36-692	1999	27-May-99	Determine whether the new garage, proposed to be situated with a set back of 150mm from the holding tank, provides sufficiency of compliance with 8.2.1.6	122/98
8.2.1.6.	Div. B 8.2.1.6.	00-11-743	2000	16-Mar-00	Determine whether the as-constructed sewage system, with a clearance of only 0.76 m between the nearest point of the septic tank and the foundation wall of the building, provides sufficiency of compliance with 8.2.1.6.(1)	597/99
8.2.1.6.	Div. B 8.2.1.6.	01-42-835	2001	13-Sep-01	Determine whether the proposed sewage system with a portion of the distribution pipes located approximately 1 m to 2.2 m from the support posts of a proposed deck, provides sufficiency of compliance with 8.2.1.6.(2)	283/01
8.2.1.6.	Div. B 8.2.1.6.	99-49-705	1999	22-Jul-99	Determine whether the subject piers supporting a second storey balcony as constructed and first storey deck as proposed, with less than 5 m clearance distance to the sewage system distribution pipes, provides sufficiency of compliance with 8.2.1.6.(2)	122/98

8.2.1.6.	Div. B 8.2.1.6.	99-45-701	1999	24-Jun-99	Determine whether the proposed replacement of a failed Class 4 sewage system to be sited near the existing location with less than 30 m to two dug wells is required to comply with 8.2.1.6.(2)	278/99
8.2.1.6.	Div. B 8.2.1.6.	01-41-834	2001	13-Sep-01	Determine whether the as-installed holding tank, located approximately 7 m (20 ft) from an existing well, provides sufficiency of compliance with 8.2.1.6.(3) and Table 8.2.1.6.C.	205/00

8.2.2.3.	Div. B 8.2.2.3.	00-34-766	2000	13-Jul-00	Determine whether the working capacity of an existing gravity fed septic tank provides sufficiency of compliance with 8.2.2.3.(1)(a)	205/00
8.2.2.3.	Div. B 8.2.2.3.	98-29-634	1998	29-Jul-98	Determine whether the existing sewage system with a working capacity of 6,819 Litres/day serving the proposed renovated house with a total finished area of 819.9 m2 provides sufficiency of compliance with s 8.2.1.3. and 8.2.2.3.	122/98

8.4.1.2.	Div. B 8.4.1.2.	99-25-681	1999	15-Apr-99	Determine whether a pressurized water system used in conjunction with a Class 2 sewage system provides sufficiency of compliance with 8.4.1.2.(2)	122/98

8.4.2.2.	Div. B 8.4.2.2.	99-54-710	1999	19-Aug-99	Determine whether the proposed Class 1 and 2 sewage systems to serve a residential dwelling equipped with certain water conservation devices but with an estimated daily sanitary sewage flow of 2,700 litres per day provides sufficiency of compliance with 8.4.2.2.(1	278/99
8.6.2.2.	Div. B 8.4.2.2.	00-32-764	2000	13-Jun-00	Determine whether the as-built sewage system consisting of two consecutive 4,500 L septic tanks equipped with an effluent filter (and offered as primary and secondary treatment units) and an in-ground disposal bed at R.R. # 1 Petrolia, 5072 Petrolia Line, Petrolia, Ontario provides sufficiency of compliance with 8.6.2.2.	205/00
8.6.2.2.	Div. B 8.4.2.2.	00-33-765	2000	13-Jul-00	Determine whether the proposed Whitewater treatment system discharging to the proposed shallow buried trench sewage system designed to be buried in shallow sand fill provides sufficiency of compliance with 8.6.2.2.(2) and Table 8.6.2.2.A.	205/00

8.7.2.1.	Div. B 8.7.2.1.	00-60-792	2000	7-Dec-00	Determine whether the proposed sewage system, which includes terraced distribution pipe runs, provides sufficiency of compliance with 8.7.2.1.(1)(a)	205/00

8.7.3.2.	Div. B 8.7.3.2.	99-23-679	1999	15-Apr-99	Determine whether the proposed leaching bed with absorption trenches having only a vertical separation of 300 mm and soil with a percolation rate of 125 minutes per cm provides sufficiency of compliance with 8.7.3.2.(2)(e)	122/98

8.7.4.1. 8.7.4.2	Div. B 8.7.4.1. 8.7.4.2	05-14-1028		21-Apr-05	Determine whether the existing Class 4 sewage system fails to comply with Articles 8.7.4.1., 8.7.4.2. and Clause 8.9.1.2.(1)(c)	
8.7.4.2.(9)	Div. B 8.7.4.2.(11)	05-10-1024		10-Mar-05	Determine whether the proposed Class 4 sewage system will provide sufficiency of compliance with Article 8.2.1.4., Sentences 8.2.1.6.(2), 8.7.4.2.(9) and Table 8.2.1.6.B	
8.7.4.2.	Div. B 8.7.4.2.	99-35-691	1999	27-May-99	Determine whether, when considering an adequate daily loading rate, the Class 4 sewage system proposed without a 15 m mantle provides sufficiency of compliance with 8.7.4.2.(1)(b)	122/98
8.7.4.2.	Div. B 8.7.4.2.	99-55-711	1999	19-Aug-99	Determine whether the Class 4 sewage system filter bed and mantle proposed to be sited in an area with 1:3 slope provides sufficiency of compliance with 8.7.4.2.(8)	278/99
8.7.4.2.	Div. B 8.7.4.2.	99-44-700	1999	24-Jun-99	Determine whether a partially raised Class 4 sewage system, expanded as a result of an addition to the existing seasonal residence, with reduced setbacks and an undersized leaching bed provides sufficiency of compliance with s 8.7.4.2.(9) and 8.7.5.2.(3)	99-44-700

8.7.5.2.	Div. B 8.7.5.2.	99-44-700	1999	24-Jun-99	Determine whether a partially raised Class 4 sewage system, expanded as a result of an addition to the existing seasonal residence, with reduced setbacks and an undersized leaching bed provides sufficiency of compliance with s 8.7.4.2.(9) and 8.7.5.2.(3)	278/99

8.8.1.2.	Div. B 8.8.1.2.	05-11-1025		10-Mar-05	Determine whether the proposed installation of a Class 5 sewage system (holding tank) provides sufficiency of compliance with Article 8.8.1.2.	
8.8.1.2.	Div. B 8.8.1.2.	99-55-711	1999	19-Aug-99	Determine whether the Class 4 sewage system filter bed and mantle proposed to be sited in an area with 1:3 slope provides sufficiency of compliance with 8.7.4.2.(8)	278/99
8.8.1.2.	Div. B 8.8.1.2.	99-24-680	1999	15-Apr-99	Determine whether the two proposed 5,000 litre holding tanks to serve a 110 m2 cottage containing 6 bedrooms situated on a 1,538 m2 island provide sufficiency of compliance with 8.8.1.2. and 8.8.2.2.(1)	122/98
8.8.1.2.	Div. B 8.8.1.2.	02-14-869	2002	6-Jun-02	Determine whether the proposed installation of a Class 5 sewage system (holding tank) to serve a new cottage where the installation of a Code compliant Class 4 system is not possible, provides sufficiency of compliance with 8.8.1.2.(1)	283/01

8.8.2.2.	Div. B 8.8.2.2.	99-24-680	1999	15-Apr-99	Determine whether the two proposed 5,000 litre holding tanks to serve a 110 m2 cottage containing 6 bedrooms situated on a 1,538 m2 island provide sufficiency of compliance with 8.8.1.2. and 8.8.2.2.(1)	122/98

8.9.1.2.(1)(c)	Div. B 8.9.1.2.(1)(c)	05-14-1028		21-Apr-05	Determine whether the existing Class 4 sewage system fails to comply with Articles 8.7.4.1., 8.7.4.2. and Clause 8.9.1.2.(1)(c)	

PART 9

1	1A	2	3	4	5	6
Statutory Reference 403/97	**Statutory Reference 350/06**	**BCC File No.**	**Year**	**Date**	**Short Description from Style**	**LAST APP. AMEND. TO 403/97**
Part 9	Div. B Part 9	06-13-1083		23-Mar-06	Determine whether the proposed use of a composite lumber product, referred to as Life Long Decking System, for the exterior walking surface of the proposed deck serving a residential dwelling provides sufficiency of compliance with Parts 4 and 9	
9.1.1.4.(1)	Div. B 9.1.1.4.(1)	05-01-1015		13-Jan-05	Determine whether the storage structure, referred to by the Applicant as a tent, provides sufficiency of compliance with Sentences 1.1.3.1.(1) and 2.1.1.3.(1), Subsection 3.13.1. and Sentence 9.1.1.4.(1)	
9.3.2.1.	Div. B 9.3.2.1.	01-27-820	2001	7-Jun-01	Determine whether the materials used in the construction of a rain porch addition to the building known as KYO Zen Art's Centre meet the requirements of 9.3.2.1.	205/00
9.5.2.1.	Div. B 9.5.2.1.	99-15-671	1999	11-Mar-99	Determine whether the basement level bathrooms, as constructed, with ceiling heights ranging from 1,950 mm (6 ft, 5 in) to 2,075 mm (6 ft, 10 in), provide sufficiency of compliance with 9.5.2.1. of the 1990 Ontario Building Code at 387 393 Bell Street South, 12 - 24 MacLean Street, and 395 Bell Street South (Units 1 - 13), Ottawa, Ontario.	395/96
9.5.2.1.	Div. B 9.5.2.1.	01-20-813	2001	26-Apr-01	Determine whether the proposed seasonal-use sleeping cabins are required to be barrier-free accessible, when considering 9.5.2.1. and 3.8.1.1.(1)(c)	205/00
9.5.2.1.	Div. B 9.5.2.1.	02-20-875	2002	1-Aug-02	Determine whether the conversion of a century home into a six room inn, where no renovation to the existing entranceways is contemplated, is required to provide barrier-free access in accordance with 9.5.2.1.(1) and Section 3.8. when considering Part 11 and s 11.4.2.3.(1) and 11.4.3.4.(2)	283/01
9.5.2.1.	Div. B 9.5.2.1.	02-20-875	2002	1-Aug-02	Determine whether the conversion of a century home into a six room inn, where no renovation to the existing entranceways is contemplated, is required to provide barrier-free access in accordance with 9.5.2.1.(1) and Section 3.8. when considering Part 11 and s 11.4.2.3.(1) and 11.4.3.4.(2)	283/01
9.5.2.1.	Div. B 9.5.2.1.	01-40-833	2001	30-Aug-01	Determine whether the proposed security gate house, that has not been designed for barrier-free access, provides sufficiency of compliance with s 9.5.2.1., 3.8.1.1., 3.8.1.2. and 3.8.2.3.	205/00

9.5.2.1.	Div. B 9.5.2.1.	00-27-759	2000	21-Sep-00	Determine whether the subject commercially-used log house, which was disassembled, rebuilt at another location and provided with a barrier-free path of travel, is required to provide barrier-free accessibility in the proposed new washroom when considering 2.1.1.7.(2) and 9.5.2.1	00-27-759

9.7.1.2.	Div. B 9.7.1.2.	01-11-804	2001	15-Mar-01	Determine whether the proposed design of the original Verona Suite plan, that includes a windowless, enclosed “study” room, complies with s 3.7.2.1.(1) and 9.7.1.2.(1	205/00

9.7.1.3.	Div. B 9.7.1.3.	99-37-693	1999	3-Jun-99	Determine whether the unobstructed open width portion of the casement windows complies with 9.7.1.3.(1)(b)	122/98

9.8.2.1.	Div. B 9.8.4.1.	00-12-744	2000	29-Mar-00	Determine whether the as-constructed three separate and irregular stairs provide sufficiency of compliance with s 9.8.2.1.(1) and 9.8.3.1.(1) and 9.8.5.2	395/96
9.8.2.1.	Div. B 9.8.4.1.	00-12-744	2000	29-Mar-00	Determine whether the as-constructed three separate and irregular stairs provide sufficiency of compliance with s 9.8.2.1.(1) and 9.8.3.1.(1) and 9.8.5.2	395/96
9.8.2.1.	Div. B 9.8.4.1.	00-54-786	2000	2-Nov-00	Determine whether the proposed guard comprised mainly of 35 mm diameter acrylic rods complies with s 9.8.8.8. and 4.1.10.1. and whether the irregular curved stair provides sufficiency of compliance with 9.8.2.1.(1)	205/00
9.8.2.1.	Div. B 9.8.4.1.	00-40-772	2000	24-Aug-00	Determine whether the as-built stairs, handrails and guards provide sufficiency of compliance with s 9.8.2.1.(1), 9.8.3.1.(1) and 9.8.3.3.(2), 9.8.5.2., s 9.8.5.3.(1) and (2), 9.8.7.1.(1)(a), s 9.8.7.2. and 9.8.7.6., 9.8.8.2.(5) and 9.8.8.4.	400/91

9.8.3.1.	Div. B 9.8.4.2. &.5	00-12-744	2000	29-Mar-00	Determine whether the as-constructed three separate and irregular stairs provide sufficiency of compliance with s 9.8.2.1.(1) and 9.8.3.1.(1) and 9.8.5.2	395/96
9.8.3.1.	Div. B 9.8.4.2. &.5	00-12-744	2000	29-Mar-00	Determine whether the as-constructed three separate and irregular stairs provide sufficiency of compliance with s 9.8.2.1.(1) and 9.8.3.1.(1) and 9.8.5.2	395/96

9.8.3.1.	Div. B 9.8.4.2. &.5	00-40-772	2000	24-Aug-00	Determine whether the as-built stairs, handrails and guards provide sufficiency of compliance with s 9.8.2.1.(1), 9.8.3.1.(1) and 9.8.3.3.(2), 9.8.5.2., s 9.8.5.3.(1) and (2), 9.8.7.1.(1)(a), s 9.8.7.2. and 9.8.7.6., 9.8.8.2.(5) and 9.8.8.4.	400/91

9.8.3.3.	Div. B 9.8.2.1.	00-40-772	2000	24-Aug-00	Determine whether the as-built stairs, handrails and guards provide sufficiency of compliance with s 9.8.2.1.(1), 9.8.3.1.(1) and 9.8.3.3.(2), 9.8.5.2., s 9.8.5.3.(1) and (2), 9.8.7.1.(1)(a), s 9.8.7.2. and 9.8.7.6., 9.8.8.2.(5) and 9.8.8.4.	400/91
9.8.3.3.	Div. B 9.8.2.1.	99-68-724	1999	18-Nov-99	Determine whether the as constructed single stair serving a second storey loft measuring 813 mm in width between wall faces provides sufficiency of compliance with 9.8.3.3.(2)	278/99
9.8.3.3.	Div. B 9.8.2.1.	00-25-757	2000	25-May-00	Determine whether the eighteen sets of as-built spiral stairs, which are not required exit stairs and are measured at 780 mm in width and 50 mm and 160 mm in minimum and average tread depth respectively, are required to comply with 9.8.3.3.(2) and s 3.3.1.15 and 9.8.5.2	205/00
9.8.3.3.	Div. B 9.8.2.1.	00-58-790	2000	30-Nov-00	Determine whether the as-built exterior concrete stairs and landings, having widths ranging from 814 mm to 850 mm, provide sufficiency of compliance with s 9.8.3.3., 9.8.4.1. and 9.9.3.2.	205/00

9.8.4.1.	Div. B 9.8.6.3.	00-58-790	2000	30-Nov-00	Determine whether the as-built exterior concrete stairs and landings, having widths ranging from 814 mm to 850 mm, provide sufficiency of compliance with s 9.8.3.3., 9.8.4.1. and 9.9.3.2.	205/00
9.8.4.1.	Div. B 9.8.6.3.	00-18-750	2000	14-Jun-00	Determine whether the as-built landings that are not as long as the width of the stairs they serve provide sufficiency of compliance with 9.8.4.1.(1)	205/00
9.8.4.1.	Div. B 9.8.6.3.	00-14-746	2000	29-Mar-00	Determine whether the as-built stair landing that measures 1093 by 915 mm and serves a stair 1093 mm in width, the lack of a second handrail in a 1093 mm wide stair and the absence of a railing at the lower flight (comprised of two risers) in the stair between the ground and second floor provide sufficiency of compliance with s 9.8.4.1.(1), 9.8.7.1.(1) and 9.8.7.2.(2) respectively	597/99

9.8.5.2.(1)	Div. B 9.8.4.4.	05-51-1065		3-Nov-05	Determine whether the as-installed spiral staircase having a minimum run of 82.5 mm provides sufficiency of compliance with Sentence 9.8.5.2.(1)	
9.8.5.2.(1)	Div. B 9.8.4.4.	05-43-1057		22-Sep-05	Determine whether the as-constructed spiral stairs having a minimum run of less than 150 mm provides sufficiency of compliance with Sentence 9.8.5.2.(1)	
9.8.5.2.	Div. B 9.8.4.4.	00-25-757	2000	25-May-00	Determine whether the eighteen sets of as-built spiral stairs, which are not required exit stairs and are measured at 780 mm in width and 50 mm and 160 mm in minimum and average tread depth respectively, are required to comply with 9.8.3.3.(2) and s 3.3.1.15 and 9.8.5.2	205/00
9.8.5.2.	Div. B 9.8.4.4.	00-12-744	2000	29-Mar-00	Determine whether the as-constructed three separate and irregular stairs provide sufficiency of compliance - 9.8.2.1.(1) and 9.8.3.1.(1) and 9.8.5.2	395/96
9.8.5.3.	Div. B 9.8.4.5.	00-40-772	2000	24-Aug-00	Determine whether the as-built stairs, handrails and guards provide sufficiency of compliance with s 9.8.2.1.(1), 9.8.3.1.(1) and 9.8.3.3.(2), 9.8.5.2., s 9.8.5.3.(1) and (2), 9.8.7.1.(1)(a), s 9.8.7.2. and 9.8.7.6., 9.8.8.2.(5) and 9.8.8.4.	400/91
9.8.7.1.	Div. B 9.8.7.1.	00-40-772	2000	24-Aug-00	Determine whether the as-built stairs, handrails and guards provide sufficiency of compliance with s 9.8.2.1.(1), 9.8.3.1.(1) and 9.8.3.3.(2), 9.8.5.2., s 9.8.5.3.(1) and (2), 9.8.7.1.(1)(a), s 9.8.7.2. and 9.8.7.6., 9.8.8.2.(5) and 9.8.8.4.	400/91
9.8.7.2.	Div. B 9.8.7.2.	00-40-772	2000	24-Aug-00	Determine whether the as-built stairs, handrails and guards provide sufficiency of compliance with s 9.8.2.1.(1), 9.8.3.1.(1) and 9.8.3.3.(2), 9.8.5.2., s 9.8.5.3.(1) and (2), 9.8.7.1.(1)(a), s 9.8.7.2. and 9.8.7.6., 9.8.8.2.(5) and 9.8.8.4.	400/91
9.8.7.6.	Div. B 9.8.7.6.	00-40-772	2000	24-Aug-00	Determine whether the as-built stairs, handrails and guards provide sufficiency of compliance with s 9.8.2.1.(1), 9.8.3.1.(1) and 9.8.3.3.(2), 9.8.5.2., s 9.8.5.3.(1) and (2), 9.8.7.1.(1)(a), s 9.8.7.2. and 9.8.7.6., 9.8.8.2.(5) and 9.8.8.4.	400/91
9.8.8.1.(1)	Div. B 9.8.8.1.(1)	06-24-1094		22-Jun-06	Determine whether the 0.6 m wide stationary platform located at the rear of the garage, within which an automated platform operates, having been constructed without guards provides sufficiency of compliance with Sentence 9.8.8.1.(1)	
9.8.8.2.	Div. B 9.8.8.3.	03-16-914	2003	1-May-03	Determine whether the as-built stair guard constructed to a height of 819.2 mm as measured vertically above the stair nosings and built in accordance with 9.8.8.2.(4) of the Ontario Building Code (OBC) complies with the intent of OBC 9.8.8.5. to reduce the likelihood of climbing, and whether the same guard with semi-circular elements measured at 698.5 mm above the stair nosings provides sufficiency of compliance with 9.8.8.5.	283/01

9.8.8.2.	Div. B 9.8.8.3.	00-40-772	2000	24-Aug-00	Determine whether the as-built stairs, handrails and guards provide sufficiency of compliance with s 9.8.2.1.(1), 9.8.3.1.(1) and 9.8.3.3.(2), 9.8.5.2., s 9.8.5.3.(1) and (2), 9.8.7.1.(1)(a), s 9.8.7.2. and 9.8.7.6., 9.8.8.2.(5) and 9.8.8.4.	400/91

9.8.8.4.	Div. B 9.8.8.5.	00-40-772	2000	24-Aug-00	Determine whether the as-built stairs, handrails and guards provide sufficiency of compliance with s 9.8.2.1.(1), 9.8.3.1.(1) and 9.8.3.3.(2), 9.8.5.2., s 9.8.5.3.(1) and (2), 9.8.7.1.(1)(a), s 9.8.7.2. and 9.8.7.6., 9.8.8.2.(5) and 9.8.8.4.	400/91
9.8.8.4.	Div. B 9.8.8.5.	99-21-677	1999	8-Apr-99	Determine whether the modified guard with a total height of 915 mm, consisting of a single steel rail supported by posts located approximately every 1,200 mm constructed upon the original (610 mm in height) historic iron lattice and wood guard, provides sufficiency of compliance with 9.8.8.4.(1) and 9.8.8.5.	122/98
9.8.8.4.	Div. B 9.8.8.5.	00-08-740	2000	17-Feb-00	Determine whether the as-installed ornamental metal guards and rails, that include pickets ranging in thickness from 13 to 31 mm and sections of scroll pattern, and that have triangular openings (large enough to insert a spherical object 100 mm in diameter) formed by the stair tread and riser and the bottom cord of the railing provides sufficiency of compliance with 9.8.8.5. and 9.8.8.4.(1) respectively	597/99

9.8.8.5	Div. B .9.8.8.6.	05-22-1036		7-Jun-05	Determine whether the as-constructed guardrail, consisting of metal pickets with decorative elements at their mid-points, around the main stairs in a one storey, Group C building provides sufficiency of compliance with Sentence 9.8.8.5.(1)	
9.8.8.5	Div. B 9.8.8.6.	02-40-895	2002	21-Nov-02	Determine whether the 800 mm non-climbable zone required for guards in 9.8.8.5. of the Ontario Building Code may be measured directly from the level of the walking surface to a height of 800 mm and, if so, whether the as-installed guard, having pickets with horizontal cross members at approximately 787 mm above the walking surface, provides sufficiency of compliance with 9.8.8.5.	283/01
9.8.8.5.	Div. B 9.8.8.6.	01-62-855	2001	13-Dec-01	Determine whether the proposed interior and exterior guards to be comprised of wrought iron balusters containing sections of ornamental floral design and scroll patterns within the area between 100 mm and 900 mm above the walking surface, provide sufficiency of compliance with 9.8.8.	283/01
9.8.8.5.	Div. B 9.8.8.6.	00-51-783	2000	19-Oct-00	Determine whether the as-built guards, comprised mainly of an ornamental floral design, provide sufficiency of compliance with 9.8.8.5.	205/00
9.8.8.5.	Div. B 9.8.8.6.	02-03-858	2002	17-Jan-02	Determine whether the as-installed design of the vertical steel pickets, which includes ornamental “birdcages” and “rosettes” set at a spacing of 55.5 mm (2 3/16 in) for a guard on a horizontal surface and slightly less for a guard serving a stair, complies with the intent of 9.8.8.5.(1)	283/01

9.8.8.5.	Div. B 9.8.8.6.	01-56-849	2001	8-Nov-01	Determine whether the as-installed guard on an exterior deck having a horizontal member located at 165 mm above the walking surface, provides sufficiency of compliance with 9.8.8.5.(1)	283/01
9.8.8.5.	Div. B 9.8.8.6.	01-54-847	2001	25-Oct-01	Determine whether the as-installed guard serving these second floor balconies and having a horizontal member located at approximately 150 mm to 160 mm above the floor level, provides sufficiency of compliance with 9.8.8.5.(1)	283/01
9.8.8.5.	Div. B 9.8.8.6.	00-08-740	2000	17-Feb-00	Determine whether the as-installed ornamental metal guards and rails, that include pickets ranging in thickness from 13 to 31 mm and sections of scroll pattern, and that have triangular openings (large enough to insert a spherical object 100 mm in diameter) formed by the stair tread and riser and the bottom cord of the railing provides sufficiency of compliance with 9.8.8.5. and 9.8.8.4.(1) respectively	597/99
9.8.8.5.	Div. B 9.8.8.6.	99-73-729	1999	2-Dec-99	Determine whether a guard with a bottom rail, measured at more than 100 mm to its top, complies with requirements of 9.8.8.5.(1)	278/99
9.8.8.5.	Div. B 9.8.8.6.	99-69-725	1999	18-Nov-99	Determine whether the as constructed guard, consisting of numerous joined diagonal members, provides sufficiency of compliance with 9.8.8.5.(1)	278/99
9.8.8.5.	Div. B 9.8.8.6.	99-21-677	1999	8-Apr-99	Determine whether the modified guard with a total height of 915 mm, consisting of a single steel rail supported by posts located approximately every 1,200 mm constructed upon the original (610 mm in height) historic iron lattice and wood guard, provides sufficiency of compliance with 9.8.8.4.(1) and 9.8.8.5.	122/98

9.8.8.7	Div. B 9.8.8.7.	00-45-777	2000	7-Sep-00	Determine whether the as-built guard provides sufficiency of compliance with s 9.8.8.7. and 9.8.8.8.	115/89

9.8.8.8.	Div. B 9.8.8.2.	04-27-982		7-Jun-04	Determine whether the as-constructed exterior deck serving a Group C occupancy, which is comprised of a composite material referred to as “Life-Long Decking” that is manufactured by Brite Manufacturing Inc., will provide sufficiency of compliance with Articles 9.8.8.8. and 4.1.10.1.	220/02
9.8.8.8.	Div. B 9.8.8.2.	00-54-786	2000	2-Nov-00	Determine whether the proposed guard comprised mainly of 35 mm diameter acrylic rods complies with s 9.8.8.8. and 4.1.10.1. and whether the irregular curved stair provides sufficiency of compliance with 9.8.2.1.(1)	205/00
9.8.8.8	Div. B 9.8.8.2..	00-45-777	2000	7-Sep-00	Determine whether the as-built guard provides sufficiency of compliance with s 9.8.8.7. and 9.8.8.8.	115/89

9.8.9.1.(1)	Div. B 9.8.9.2.	03-49-947	2003	20-Nov-03	Determine whether the as-built exterior concrete front entrance stairs, which have more than two risers and two treads and are supported by concrete patio stones, provide sufficiency of compliance with 9.8.9.1.(1)	220/02
9.9.3.2.	Div. B 9.9.3.2.	00-58-790	2000	30-Nov-00	Determine whether the as-built exterior concrete stairs and landings, having widths ranging from 814 mm to 850 mm, provide sufficiency of compliance with s 9.8.3.3., 9.8.4.1. and 9.9.3.2.	205/00
9.9.5.5.	Div. B 9.9.5.5.	99-32-688	1999	13-May-99	Determine whether the existing gravel floor is required to comply with s 4.1.1.3.(1) and 4.1.1.7.(1), 3.8.1.3., and s 3.8.2.1.(1) and 9.9.5.5.(2)	278/99
9.9.7.2.(2)	Div. B 9.9.7.3.(2)	99-03-659	1999	19-Jan-99	Determine whether the proposed ground floor elevator lobby, constructed without enclosure, provides sufficiency of compliance with 9.9.7.2.(2)	122/98
9.9.9.1.(1)(a) 9.9.9.1.(2)	Div. B 9.9.9.1.	05-44-1058		22-Sep-05	Determine whether the construction of a third floor loft area, which includes open stairwells from the second floor to the third floor loft area, provides sufficiency of compliance with Clause 9.9.9.1.(1)(a) and Sentence 9.9.9.1.(2)	
9.10.4.1.(2)	Div. B 9.10.4.1.(2)	06-02-1072		12-Jan-06	Determine whether the 4th level “loft” design in a residential townhouse development provides sufficiency of compliance with the definition of “mezzanine” contained in Sentence 1.1.3.2.(1) and with the provisions of Sentence 9.10.4.1.(2)	
9.10.9.11	. Div. B 9.10.9.11	02-33-888	2002	17-Oct-02	Determine whether the existing use of the subject building would require a firewall to separate the residential occupancy from the horse stable when considering 1.2.1.2. of the National Farm Building Code or whether, in the alternative, the proposed fire separation between the two uses will provide sufficiency of compliance with 9.10.9.11.(2)	283/01
9.10.11.1.	Div. B 9.10.11.1.	01-06-799	2001	15-Feb-01	Determine whether the proposed stacked townhouse units, with property lines occurring on both horizontal and vertical planes between them, comply with the requirements of s 9.10.11.1.(1), 7.1.6.4.(1) and 7.1.7.2.(1)	205/00
9.10.14.1	Div. B 9.10.14.4.	05-08-1022		4-Apr-05	Determine whether the proposed direct vent fireplace sidewall terminations, constructed of type 304 stainless steel and located in walls having a limiting distance ranging from 0.55 m to 1.2 m provides sufficiency of compliance with Articles 9.10.14.1. and 9.10.14.5.	

9.10.14.5.	Div. B 3.2.3.5.	05-08-1022		4-Apr-05	Determine whether the proposed direct vent fireplace sidewall terminations, constructed of type 304 stainless steel and located in walls having a limiting distance ranging from 0.55 m to 1.2 m provides sufficiency of compliance with Articles 9.10.14.1. and 9.10.14.5.	

9.10.14.12.	Div. B 9.10.15.5	00-30-762	2000	29-Jun-00	Determine whether the existing exposing building face that does not offer a fire-resistance rating of 45 minutes and is clad with combustible siding, but which has been built with a zero metre limiting distance, provides sufficiency of compliance with 9.10.14.12.(5)	205/00

9.10.19.3.	Div. B 9.10.20.3.	02-01-856	2002	17-Jan-02	Determine whether the proposed fire access route, when considering the addition of a firewall between units within a residential townhouse block, creating “buildings” having an area of less than 600 m2, complies with the access route requirements of 9.10.19.3.	283/01
9.10.21.2.	Div. B 9.10.22.2.	03-04-902	2003	16-Jan-03	Determine whether the as installed upper kitchen cabinet valance, situated at the front edge of the underside of the cabinet approximately 360 mm above the counter surface and adjacent to the range/stove opening, provides sufficiency of compliance with s 9.10.21.2. and 9.10.21.3.	283/01
9.10.21.3.	Div. B 9.10.22.3.	03-04-902	2003	16-Jan-03	Determine whether the as installed upper kitchen cabinet valance, situated at the front edge of the underside of the cabinet approximately 360 mm above the counter surface and adjacent to the range/stove opening, provides sufficiency of compliance with s 9.10.21.2. and 9.10.21.3.	283/01
9.12.2.2.	Div. B 9.12.2.2.	01-33-826	2001	19-Jul-01	Determine whether the shallow (450 to 500 mm), insulated garage footings and foundations provide sufficiency of compliance with 9.12.2.2.	205/00
9.12.2.2.	Div. B 9.12.2.2.	99-17-673	1999	24-Mar-99	Determine whether a portion of a basement foundation wall and the patio retaining walls, as constructed, complies with 9.12.2.2.(1) and the structural requirements of Part 4 respectively	122/98
9.14.2.1.	Div. B 9.14.2.1.	03-27-925	2003	4-Nov-03		220/02
9.15.4.6.	Div. B 9.15.4.9.	03-27-925	2003	4-Nov-03		220/02
9.16.3.	Div. B 9.16.3.	99-41-697	1999	17-Jun-99	Determine whether a drainage system is required beneath the basement level concrete slab-on-grade as per Subsection 9.16.3.	278/99

9.16.4.4.	Div. B 9.16.4.3.	02-39-894	2002	21-Feb-03	Determine whether the as-constructed basement concrete floor slab which varies in thickness from 64 mm to 89 mm provides sufficiency of compliance with 9.16.4.4.	283/01
9.20.8.3.	Div. B 9.20.8.3.	03-27-925	2003	4-Nov-03		220/02
9.21.	Div. B 9.21.	01-34-827	2001	19-Jul-01	Determine whether the proposed radiant thermal mass brick heating unit, having a Finnish design, provides sufficiency of compliance with Sections 9.21. and 9.22.	205/00
9.22.	Div. B 9.22.	01-34-827	2001	19-Jul-01	Determine whether the proposed radiant thermal mass brick heating unit, having a Finnish design, provides sufficiency of compliance with Sections 9.21. and 9.22.	205/00
9.23	. Div. B 9.23	01-03-796	2001	8-Feb-01	Determine whether the various identified alleged deficiencies provide sufficiency of compliance with the relevant provisions of the Ontario Building Code	205/00
9.23.2.2.	Div. B 9.23.2.2.	03-27-925	2003	4-Nov-03		220/02
9.23.2.3.	Div. B 9.23.2.3.	03-27-925	2003	4-Nov-03		220/02
9.23.5.1.	Div. B 9.23.5.1.	03-27-925	2003	4-Nov-03		220/02

9.23.7.2.	Div. B 9.23.7.2.	03-27-925	2003	4-Nov-03		220/02
9.23.17.5..		03-08-906	2003	20-Feb-03	Determine whether the proposed seasonal boathouse clad with horizontally installed bevelled wood siding and mounted directly onto the framing without the use of a sheathing membrane provides sufficiency of compliance with 9.23.17.6.	283/01
9.23.17.6.	Div. B 9.27.3.6.	03-08-906	2003	20-Feb-03	Determine whether the proposed seasonal boathouse clad with horizontally installed bevelled wood siding and mounted directly onto the framing without the use of a sheathing membrane provides sufficiency of compliance with 9.23.17.6.	283/01
9.25.2.1.	Div. B 9.25.2.1.	99-56-712	1999	7-Oct-99	Determine whether the proposed insulation system and wall assembly composed of compressed, stacked straw bales enclosed by metal lath covered on both sides with 15 mm cement stucco and coated (on the outer surface of the interior only) with a waterproof finish provides sufficiency of compliance with s 9.25.2.1.(1), (2) and (4), 9.25.2.3.(1), 9.25.3.1., 9.25.4.1., 9.25.4.2.(5) and s 9.28.4.2. and 9.28.4.3.	278/99
9.25.2.3.	Div. B 9.25.2.2.	99-56-712	1999	7-Oct-99	Determine whether the proposed insulation system and wall assembly composed of compressed, stacked straw bales enclosed by metal lath covered on both sides with 15 mm cement stucco and coated (on the outer surface of the interior only) with a waterproof finish provides sufficiency of compliance with s 9.25.2.1.(1), (2) and (4), 9.25.2.3.(1), 9.25.3.1., 9.25.4.1., 9.25.4.2.(5) and s 9.28.4.2. and 9.28.4.3.	278/99
9.25.2.3.	Div. B 9.25.2.2.	02-36-891	2002	7-Nov-02	Determine whether the insulation used to wrap the attic duct work provides sufficiency of compliance with s 9.25.2.3.(1), 9.33.1.1.(1) and 6.2.4.3.(1) and whether the as-constructed wall assembly complies with the air barrier and vapour barrier requirements of 9.25.3.1.(1), 9.25.3.2.(1), 9.25.3.3.(1) and 9.25.4.1.(1) when considering s 5.4.1.1.(2) and 5.5.1.1.(2).	283/01

9.25.3.1.	Div. B 9.25.3.1.	02-36-891	2002	7-Nov-02	Determine whether the insulation used to wrap the attic duct work provides sufficiency of compliance with s 9.25.2.3.(1), 9.33.1.1.(1) and 6.2.4.3.(1) and whether the as-constructed wall assembly complies with the air barrier and vapour barrier requirements of 9.25.3.1.(1), 9.25.3.2.(1), 9.25.3.3.(1) and 9.25.4.1.(1) when considering s 5.4.1.1.(2) and 5.5.1.1.(2).	283/01
9.25.3.1.	Div. B 9.25.3.1.	99-56-712	1999	7-Oct-99	Determine whether the proposed insulation system and wall assembly composed of compressed, stacked straw bales enclosed by metal lath covered on both sides with 15 mm cement stucco and coated (on the outer surface of the interior only) with a waterproof finish provides sufficiency of compliance with s 9.25.2.1.(1), (2) and (4), 9.25.2.3.(1), 9.25.3.1., 9.25.4.1., 9.25.4.2.(5) and s 9.28.4.2. and 9.28.4.3.	278/99
9.25.3.2.	Div. B 9.25.3.2.	02-36-891	2002	7-Nov-02	Determine whether the insulation used to wrap the attic duct work provides sufficiency of compliance with s 9.25.2.3.(1), 9.33.1.1.(1) and 6.2.4.3.(1) and whether the as-constructed wall assembly complies with the air barrier and vapour barrier requirements of 9.25.3.1.(1), 9.25.3.2.(1), 9.25.3.3.(1) and 9.25.4.1.(1) when considering s 5.4.1.1.(2) and 5.5.1.1.(2).	283/01
9.25.4.1.	Div. B 9.25.4.1.	05-05-1019		20-Jan-05	Determine whether the as-constructed ICF wall system in a 167.2 m2 Group C dwelling, where no vapour barrier is provided, will provide sufficiency of compliance with Article 9.25.4.1.	
9.25.4.1	. Div. B 9.25.4.1	99-56-712	1999	7-Oct-99	Determine whether the proposed insulation system and wall assembly composed of compressed, stacked straw bales enclosed by metal lath covered on both sides with 15 mm cement stucco and coated (on the outer surface of the interior only) with a waterproof finish provides sufficiency of compliance with s 9.25.2.1.(1), (2) and (4), 9.25.2.3.(1), 9.25.3.1., 9.25.4.1., 9.25.4.2.(5) and s 9.28.4.2. and 9.28.4.3.	278/99
9.25.4.2.	Div. B 9.25.4.2.	99-56-712	1999	7-Oct-99	Determine whether the proposed insulation system and wall assembly composed of compressed, stacked straw bales enclosed by metal lath covered on both sides with 15 mm cement stucco and coated (on the outer surface of the interior only) with a waterproof finish provides sufficiency of compliance with s 9.25.2.1.(1), (2) and (4), 9.25.2.3.(1), 9.25.3.1., 9.25.4.1., 9.25.4.2.(5) and s 9.28.4.2. and 9.28.4.3.	278/99
9.26.5.1.	Div. B 9.26.5.1.	01-12-805	2001	26-Apr-01	Determine whether the as-built roofs with a slope of 7 ½/12 that was not constructed with eave protection, except one layer of 15 lb building paper, provides sufficiency of compliance with 9.26.5.2	205/00

9.26.5.2.	Div. B 9.26.5.2.	01-12-805	2001	26-Apr-01	Determine whether the as-built roofs with a slope of 7 ½/12 that was not constructed with eave protection, except one layer of 15 lb building paper, provides sufficiency of compliance with 9.26.5.2	205/00
9.27.3.2.	Div. B 9.27.3.8.	03-27-925	2003	4-Nov-03		220/02
9.28.4.3.	Div. B 9.28.4.3.	99-56-712	1999	7-Oct-99	Determine whether the proposed insulation system and wall assembly composed of compressed, stacked straw bales enclosed by metal lath covered on both sides with 15 mm cement stucco and coated (on the outer surface of the interior only) with a waterproof finish provides sufficiency of compliance with s 9.25.2.1.(1), (2) and (4), 9.25.2.3.(1), 9.25.3.1., 9.25.4.1., 9.25.4.2.(5) and s 9.28.4.2. and 9.28.4.3.	278/99
9.29.2.	Div. B 9.29.2.	98-49-654	1998	15-Dec-98	Determine whether the non-water resistant drywall, as installed, in the main bathroom and the master bedroom ensuite washroom provides sufficiency of compliance with Subsection 9.29.2	122/98
9.30.1.2	Div. B 9.30.1.2	02-25-880	2002	8-Aug-02	Determine whether the prefinished hardwood flooring proposed for the kitchen of a single detached residential building provides sufficiency of compliance with 9.30.1.2.	283/01
9.30.1.2	Div. B 9.30.1.2	02-24-879	2002	8-Aug-02	Determine whether the prefinished hardwood flooring proposed for the kitchen of a single detached residential building provides sufficiency of compliance with 9.30.1.2.	283/01
9.31.4.1.	Div. B 9.31.4.1.	02-29-884	2002	3-Oct-02	Determine whether the as-installed Class 1 (composting toilet) and Class 2 (greywater pit) systems which serve a seasonal dwelling in lieu of a Class 4 system provide sufficiency of compliance with 8.1.2.1.(1)	283/01
9.31.4.1.	Div. B 9.31.4.1.	00-26-758	2000	1-Jun-00	Determine whether proposed Class 1 (composting and incinerating toilet) and Class 2 (greywater system) systems in lieu of a Class 4 septic system to serve a newly built seasonal dwelling, complies with 8.1.2.1.(1) when considering s 7.1.6.1.(1) and 9.31.4.1.(1), and a subsequent proposal to include a different type of a Class 1 system (flush unit/composting toilet), a Class 2 system and a Class 3 system provides sufficiency of compliance with s 8.2.1.5.(1) and 8.2.1.4.(2)	205/00

9.33.1.1.	Div. B 9.33.1.1.	02-36-891	2002	7-Nov-02	Determine whether the insulation used to wrap the attic duct work provides sufficiency of compliance with s 9.25.2.3.(1), 9.33.1.1.(1) and 6.2.4.3.(1) and whether the as-constructed wall assembly complies with the air barrier and vapour barrier requirements of 9.25.3.1.(1), 9.25.3.2.(1), 9.25.3.3.(1) and 9.25.4.1.(1) when considering s 5.4.1.1.(2) and 5.5.1.1.(2).	283/01

9.36.2.1.	Div. B 9.36.2.1.	03-08-906	2003	20-Feb-03	Determine whether the proposed seasonal boathouse clad with horizontally installed bevelled wood siding and mounted directly onto the framing without the use of a sheathing membrane provides sufficiency of compliance with 9.23.17.6.	283/01

1	1A	2	3	4	5	6
Statutory Reference 403/97	**Statutory Reference 350/06**	**BCC File No.**	**Year**	**Date**	**Short Description from Style**	**LAST APP. AMEND. TO 403/97**
Part 11	Div. B Part 11	05-15-1029		21-Apr-05	Determine whether the installation of a septic field remediation technology known as the White KnightTM into an existing septic tank provides sufficiency of compliance with the Building Code when considering Part 11 and the definition of “septic tank” as outlined in Article 1.1.3.2.	
11.3.1.1.	Div. B 11.3.1.1.	02-19-874	2002	4-Sep-02	Determine whether the repair of an existing Class 4 septic system, specifically with respect to the grain size of the imported sand filter material being used, provides sufficiency of compliance with the provisions of 11.3.1.1.	283/01
11.3.1.1.	Div. B 11.3.1.1.	01-26-819	2001	7-Jun-01	Determine whether the work undertaken on ting house constitutes repair or renovation in accordance with s 11.3.1.1. and 11.3.3.1.(1)	205/00
11.3.3.1.	Div. B 11.3.3.1.	01-26-819	2001	7-Jun-01	Determine whether the work undertaken on ting house constitutes repair or renovation in accordance with s 11.3.1.1. and 11.3.3.1.(1)	205/00
11.3.3.1.	Div. B 11.3.3.1.	01-47-840	2001	27-Sep-01	Determine whether the construction of a replacement deck provides sufficiency of compliance with 11.3.3.1.(1)	283/01
11.4.1.1.	Div. B 11.4.1.1.	02-38-893	2002	21-Nov-02	Determine whether the compensating construction offered in an existing, 2 storey, 14 unit apartment building where the length of dead-end corridors exceeds the permitted maximum, provides sufficiency of compliance with 3.3.4.4.(1)(a) of the 1983 Ontario Building Code when considering 11.4.1.1.(1) and 11.5.2.1	283/01
11.4.1.1.	Div. B 11.4.1.1.	01-49-842	2001	11-Oct-01	Determine whether the use of the existing septic system on a property where the reconstruction of a single detached residential dwelling is proposed due to the destruction of existing dwelling by a house fire, provides sufficiency of compliance with s 11.4.1.1., 11.4.2.5. and 11.4.3.6.	283/01

11.4.2.3.	Div. B 11.4.2.3.	03-06-904	2003	23-Jan-03	Determine whether the existing floor assembly, which will separate a proposed bus terminal below from the existing parking garage above, will provide sufficiency of compliance with 11.4.2.3.(4)	283/01
11.4.2.3.	Div. B 11.4.2.3.	02-20-875	2002	1-Aug-02	Determine whether the conversion of a century home into a six room inn, where no renovation to the existing entranceways is contemplated, is required to provide barrier-free access in accordance with 9.5.2.1.(1) and Section 3.8. when considering Part 11 and s 11.4.2.3.(1) and 11.4.3.4.(2)	283/01

11.4.2.5.	Div. B 11.4.2.5.	01-49-842	2001	11-Oct-01	Determine whether the use of the existing septic system on a property where the reconstruction of a single detached residential dwelling is proposed due to the destruction of existing dwelling by a house fire, provides sufficiency of compliance with s 11.4.1.1., 11.4.2.5. and 11.4.3.6.	283/01

11.4.2.5.	Div. B 11.4.2.5.	98-45-650	1998	18-Nov-98	Determine whether changes to the existing tile field are required as a result of a proposed addition to an existing house in order to achieve sufficiency of compliance with Part 8 and 11.4.2.5.	122/98
11.4.2.5.	Div. B 11.4.2.5.	00-43-775	2000	24-Aug-00	Determine whether the performance level of the existing sewage system, when considering the proposed renovation that will increase the number of bedrooms and the total finished area by more than 15%, provides sufficiency of compliance with s 11.4.2.5.(3) and 11.4.3.6.(1)	205/00
11.4.2.5.	Div. B 11.4.2.5.	01-48-841	2001	11-Oct-01	Determine whether the performance level of the existing septic system, when considering a proposed second storey addition that will include a three piece ensuite bathroom, provides sufficiency of compliance with s 11.4.2.5.(3) and 11.4.3.6.(1)	283/01

11.4.3.4.	Div. B 11.4.3.4.	02-20-875	2002	1-Aug-02	Determine whether the conversion of a century home into a six room inn, where no renovation to the existing entranceways is contemplated, is required to provide barrier-free access in accordance with 9.5.2.1.(1) and Section 3.8. when considering Part 11 and s 11.4.2.3.(1) and 11.4.3.4.(2)	283/01

11.4.3.6.	Div. B 11.4.3.6.	00-43-775	2000	24-Aug-00	Determine whether the performance level of the existing sewage system, when considering the proposed renovation that will increase the number of bedrooms and the total finished area by more than 15%, provides sufficiency of compliance with s 11.4.2.5.(3) and 11.4.3.6.(1)	205/00

11.4.3.6.	Div. B 11.4.3.6.	01-49-842	2001	11-Oct-01	Determine whether the use of the existing septic system on a property where the reconstruction of a single detached residential dwelling is proposed due to the destruction of existing dwelling by a house fire, provides sufficiency of compliance with s 11.4.1.1., 11.4.2.5. and 11.4.3.6.	283/01
11.4.3.6.	Div. B 11.4.3.6.	01-48-841	2001	11-Oct-01	Determine whether the performance level of the existing septic system, when considering a proposed second storey addition that will include a three piece ensuite bathroom, provides sufficiency of compliance with s 11.4.2.5.(3) and 11.4.3.6.(1)	283/01

11.5.1.1.	Div. B 11.5.1.1.	99-45-701	1999	24-Jun-99	Determine whether the proposed replacement of a failed Class 4 sewage system to be sited near the existing location with less than 30 m to two dug wells is required to comply with 8.2.1.6.(2)	278/99

11.5.2.1	Div. B 11.5.1.1	02-38-893	2002	21-Nov-02	Determine whether the compensating construction offered in an existing, 2 storey, 14 unit apartment building where the length of dead-end corridors exceeds the permitted maximum, provides sufficiency of compliance with 3.3.4.4.(1)(a) of the 1983 Ontario Building Code when considering 11.4.1.1.(1) and 11.5.2.1	283/01

Part 11	Div. B Part 11	01-03-796	2001	8-Feb-01	Determine whether the various identified alleged deficiencies provide sufficiency of compliance with the relevant provisions of the Ontario Building Code	205/00
Part 11	Div. B Part 11	02-12-867	2002	21-Mar-02	Determine whether the proposed renovation and repair of an existing residential structure provide sufficiency of compliance with the relevant provisions of Parts 2 and 11	283/01

PART 12

1	1A	2	3	4	5	6
Statutory Reference 403/97	**Statutory Reference 350/06**	**BCC File No.**	**Year**	**Date**	**Short Description from Style**	**LAST APP. AMEND. TO 403/97**
12.1.1.1.		02-17-872	2002	20-Jun-02	Determine whether the proposed new senior's residence, when considering the date that the building permit application was substantially complete, is permitted to be built to the construction requirements of the 1990 Ontario Building Code (OBC) in accordance with 12.1.1.1.(1)(b)	283/01

DECISIONS OF THE BUILDING MATERIALS EVALUATION COMMISSION

2006

AUTHORIZATION NUMBER	PRODUCT	APPLICANT	CATEGORY	DATE OF AUTHORIZATION
BMEC-06-08-328	The Romakowski System	Thermoenergy Building Inc.	Exterior Wall and Roof System	July 27, 2006
BMEC-06-07-327	Roof and Wall Panels	Four Season Solar Products Inc.	Sunroom Panel	July 27, 2006
BMEC-06-06-326	PHIX Cartridge System	Green Turtle Technologies Inc.	Plumbing	June 29, 2006
BMEC-06-05-325	SC series	Camino Modular Systems Inc.	Access Floor System	June 29, 2006
BMEC-06-04-324	WC Series	Camino Modular Systems Inc.	Access Floor System	June 29, 2006
BMEC-06-03-323	CanyonRock™	GAF Materials Corp	Interior Finish	April 27, 2006
BMEC-06-02-322	Maxliner™ Systems	Maxliner™, LLC	Plumbing Systems	February 23, 2006
BMEC-06-01-321	Shelf and Rack Storage Systems	Store-Rite Systems Inc.	Shelf and Rack Storage System	January 26, 2006

2005

BMEC-05-16-320	Calhoun Super Structure Membranes	Calhoun Super Structure Ltd.	Roof Covering Material	November 24, 2005
BMEC-05-15-319	Temo Roof Panels	Temo Inc.	Sunroom Roof Panel	November 24, 2005
BMEC-05-14-318	The PowerShield Membranes	Harnois Industries Inc.	Roof Covering Material	November 24, 2005

BMEC-05-13-317	Shelf and Rack Storage System	Metalsistems Canda Inc.	Shelf and Rack Storage System	September 29, 2005
BMEC-05-12-316	XL Shelter Membrane	All Cover Portable Systems / XL Shelters	Roof Covering Material	September 29, 2005
BMEC-05-11-315	Shelf and Rack Storage System	Arencon	Shelf and Rack Storage System	September 29, 2005
BMEC-05-10-314	Cayuga (washed) High Performance Bedding™	Dufferin Aggregates	Granular Material	September 29, 2005
BMEC-05-09-313	Shelf and Rack Storage System	Rack Net-Works	Shelf and Rack Storage System	August 25, 2005
BMEC-05-08-312	Envirotech Membrane	Storage Systems Construction Corp.	Roof Covering Material	July 28, 2005
BMEC-05-07-311	Home Slicker™	Benjamen Obdyke Incorporated	Building Membrane	July 28, 2005
BMEC-05-06-310	Delta® Drainwrap	Cosella-Dorken Products inc.	Building Membrane	July 28, 2005
BMEC-05-05-309	AQUASAFE® Multipurpose Residential Sprinkler System	Uponor Canada Inc.	Sprinkler Systems	May 26, 2005
BMEC-05-04-308	Shelf and Rack Storage System	Equipement Boni	Shelf and Rack Storage System	May 26, 2005
BMEC-05-03-307	Aquarobic Area Bed System	Aquarobic Canada	Absorption System	May 26, 2005
BMEC-05-02-306	PanelCraft™ Roof System	CraftBilt Materials Ltd.	Sunroom Roof Panels	April 28, 2005
BMEC-05-01-305	Shelf and Rack Storage System	Metalsistems®	Shelf and Rack Storage System	April 28, 2005

2004

BMEC-04-12-304	Shelf and Rack Storage System	HK Systems	Shelf and Rack Storage System	November 25, 2004

BMEC-04-11-303	Pavilion Membranes	Pavillion Fabrication/Del-Scott Co.	Roof Covering Material	November 25, 2004
BMEC-04-10-302	Bio-Microbic Area Bed	Bio Microbics Inc.	Sewage	November 25, 2004
BMEC-04-09-301	Luna Technologies International Inc.	LUNAplast	Signage	September 30, 2004
BMEC-04-08-300	Bradyglo High Performance Photo- luminescent Exit Signs	Brady Canada	Signage	September 30, 2004
BMEC-04-07-299	Envirochamber™	Hancor Inc.	Sewage Systems	July 29, 2004
BMEC-04-06-298	SafeSIGNS	Enviromate Products	Signage	June 24, 2004
BMEC-04-05-297	Wall and Roof Sheathing	Insulspan	Panels	April 29, 2004
BMEC-04-04-296	Terminator™Drainfield Chamber	Beaver Plastics	Sewage Systems	March 25, 2004
BMEC-04-03-295	Cover-All Membranes	Cover-All Building Systems	Roof Covering Material	MARCH 25, 2004
BMEC-04-02-294	Falcon Waterfree Technologies	Falcon Waterfree Technologies	Plumbing Fixture	JANUARY 29, 2004
BMEC-04-01-293	Super Foam Roof Panels	Patio Enclosures Inc.	Sunroom Roof Panels	JANUARY 29, 2004 **Amended** September 29, 2005

2003

BMEC-03-13-292	Shelf and Rack Storage System	REB Storage Systems International	Shelf and Rack Storage Systems	NOVEMBER 27, 2003
BMEC-03-12-291	Glo Brite® Photo luminescent Exit Signs	Jessup Manufacturing Company	Signage	NOVEMBER 27, 2003 **amended** May 27, 2004
BMEC-03-11-290	Shelf and Rack Storage System	Phoenix Rack Storage Systems	Shelf and Rack Storage Systems	OCTOBER 30, 2003

BMEC-03-10-289	Trap Guard™ Floor Drains	Proset Systems	Plumbing Fixture	OCTOBER 30, 2003, a**mended** October 27, 2005
BMEC-03-09-288	Nexus™ Floor Systems	Haworth Ltd.	Floor Panels	September 30, 2003, **amended** October 30, 2003 **amended** October 30, 2004
BMEC-03-08-287	Structural Insulated Panels	Lifestyle Sunrooms	Sunroom Roof Panels	September 30, 2003 **revised** April 28, 2005
BMEC-03-07-286	Commerical Drainwater Heat Recovery Systems	Renewability Energy Inc.	Plumbing	AUGUST 30, 2003 **amended** October 30, 2004
BMEC-03-06-285	Shelf and Rack Storage System	Concept Storage Solutions	Shelf and Rack Storage Systems	JULY 31, 2003
BMEC-03-05-284	Shelf and Rack Storage System	Rack Net-Works	Shelf and Rack Storage Systems	JULY 31, 2003
BMEC-03-03-282	Pipe Shield:Pipe Rehab Process	Bradley Mechanical Services	Plumbing	APRIL 24, 2003
BMEC-03-02-281	Trimroc™ Interior Mouldings	Canamould Extrustions Inc.	Millwork	JANUARY 30, 2003
BMEC-03-01-280	HydraTank N² Sprinkler System	Potter Electric Signal Co.	Sprinkler System	JANUARY 30, 2003

2002

BMEC-02-08-279	HPB™(High Performance Bedding)	Dufferin Aggregates	Granular Material	DECEMBER 5, 2002

BMEC-02-07-278	The Waterless No Flush™ Urinal	Matrix Environmental Partners Inc.	Plumbing Fixture	OCTOBER 31, 2002
BMEC-02-06-277	Royal PVC DWV Starter Fittings	Royal Pipe Systems	Drainage System	OCTOBER 31, 2002
BMEC-02-05-276	Plenum-Gard®, Riser-Gard® and Resi-Gard® Raceways	Carlon, Lamson & Sessions Inc.	Cable Management System	OCTOBER 31, 2002
BMEC-02-04-275	BIODIFFUSER™ Bio 2 and Bio 3 Chamber Systems	PSA, Inc	Sewage System	July 25, 2002 **Amended** January 29, 2004 **Amended** April 28, 2005
BMEC-02-03-274	Shelf and Rack Storage System	Concept Storage Solutions	Shelf and Rack Storage System	June 27, 2002

BMEC-02-02-273	IPEX Single and Double PVC Apartment Fittings	IPEX Inc.	Drainage System	May 30, 2002
BMEC-02-01-272	Shelf and Rack Storage System	EAGLE STEEL INC.	Shelf and Rack Storage System	February 28, 2002

2001

BMEC-01-19-271	EZ Flow Drainage System	Ring Industrial Group	Surface Drainage OBC Part 8	November 29, 2001 **Amended** MARCH 25, 2004
BMEC-01-18-270	EZ Flow Drainage System	Ring Industrial Group	Subsurface Drainage OBC Part 9	October 25, 2001
BMEC-01-17-269	TRI-FLEX®	Flexia Corporation	Roof Underlayment	August 30, 2001
BMEC-01-16-268	PROPRESS™	Viega NA	Plumbing Systems	August 30, 2001
BMEC-01-15-267	Vertical Rolling Grilles	ALUMATEK	Security Grille	August 30, 2001
BMEC-01-14-266	Noweco Singulair® Alternate	Norweco Equipment Company	Absorption System	August 02, 2001

	Tertiary Discharge Area Bed			**Amended May 26, 2005**
BMEC-01-13-265	Shelf and Rack Storage System	ECONO-RACK GROUP LTD.	Self contained structural system	July 26, 2001 **Amended November 27, 2003**
BMEC-01-12-264	Shelf and Rack Storage System	NORTH AMERICAN STEEL EQUIPMENT COMPANY LTD.	Self contained structural system	July 26, 2001 **Amended July 27, 2006**
BMEC-01-11-263	CENTRAL MODEL WS WINDOW SPRINKLER	TYCO FIRE PRODUCTS	Sprinkler-protected window	July 26, 2001
BMEC-01-10-262	Vinyl Deck Railing System™	ROYAL GROUP TECHNOLIGIES LIMITED	Railing material	July 26, 2001
BMEC-01-09-261	Corrugated Fibreboard Building Envelope System	DURAKIT SHELTERS INC.	Corrugated structural fibreboard	July 26, 2001

BMEC-01-08-260	Alternate Tertiary Discharge System	DELTA ENVIRONMENTAL PRODUCTS, INC	Absorption system	July 26, 2001 **Amended July 27, 2006**
BMEC-01-07-259	SURE-VENT® AND SURE-VENT II® AIR ADMITTANCE VALVE	OATEY CANADA INC.	Vent pipe	June 28, 2001
BMEC-01-06-258	Architectural Moulding With a Foam Plastic Core	DRIANGLE INC.	Architectural moulding	May 24, 2001
BMEC-01-05-257	Horizontal Cavity Shaftwall System	GEORGIA-PACIFIC CANADA, INC.	Metal duct enclosures or ceiling membranes	May 24, 2001
BMEC-01-04-256	CULTURED STONE®	Cultured Stone A Division of Owens Corning Inc.	Noncombustible Stone	January 25, 2001
BMEC-01-03-255	Shelf and Rack Storage System	Auto-Stak Systems (Canada) Inc.	Self Contained Structural System	January 25, 2001
BMEC-01-02-254	Shelf and Rack Storage System	ECONO-RACK GROUP LTD.	Self contained structural system	April 26, 2001

BMEC-01-01-253	Infiltrator Equalizer® 36 Chambers	Infiltrator Systems Inc.	Infiltrator Chamber	January 25, 2001 **Amended** August 26, 2004 **Amended** July 28, 2005

2000

BMEC-00-12-252	Pipe restoration System	RIKOS Ltd.	Metal Water Pipe Repair	November 30, 2000
BMEC-00-11-251	Mainline Fullport Backwater Valve	MAINLINE BACKFLOW PRODUCTS INC.	Wastewater Valve	September 28, 2000
BMEC-00-10-250	Siteline (S-700 or Silensia) Patio Door with sealed dual pane 3mm glass	Dashwood Industries Ltd	Sliding Patio Doors	September 28, 2000
BMEC-00-09-249	Andersen SKS Skylights with Fiberglass Sash & Condensate Channel	Dashwood Industries Ltd	Drainage System	October 26, 2000
BMEC-00-08-248	EZ-Deck© Flooring System	Imperial Building Products	Flooring System	July 25, 2002
BMEC-00-07-247	Material Handling Platform System	CRISPLANT INC.	Shelf and Rack Storage System	April 27, 2000
BMEC-00-06-246	Material Handling Platform System	RAPISTAN DEMAG CORPORATION	Shelf and Rack Storage System	April 27, 2000
BMEC-00-05-245	Royal Titan Garage™ Models 1A & 2A	Royal Building Systems (Cdn) Ltd	Prefab Garage	March 30, 2000
BMEC-00-04-244	Therma-Tru Fiberglass Door Panels	Therma-True Fiberglass Door Panels	Exterior Doors	March 30, 2000
BMEC-00-03-243	JETVAC INC. Engineered Water Collection Vacuum System	JETVAC INC.	Vacuum Water Collection system	February 24, 2000
BMEC-00-02-242	K-Joist™ longitudinal steel reinforced wood joists	Sprucewood Products, a division of 855856 Ontario Limited	Wood-frame Construction	January 27, 2000

BMEC-00-01-241	Clearstream Alternate Tertiary Discharge System	Clearstream Wastewater System	Sewage Systems	January 27, 2000 **Amended:** July 27th , 2000 **Amended:** February 28, 2002 **Amended:** June 27, 2002

1999

BMEC-99-12-240	Enviro-Shake™	Wellington Polymer Technology Inc.	Roofing Material	December 14, 1999 **Amended:** November 29, 2001
BMEC-99-08-236	Waterloo Biofilter® Area Bed System	Waterloo Biofilter Systems Inc.	Sewage Systems	April 29, 1999 **Amended:** August 30, 2001 **A Resolution of the BMEC dated February 28, 2002 which amended this authorization was quashed by an order of the Divisional Court dated June 18, 2002.**
BMEC-99-07-235	Ecoflo® ST-650 Biofilter System	EcoFlo-Ontario	Sewage Systems	April 29, 1999 **Amended:** October 26, 2000 **A Resolution of the BMEC dated February 28, 2002 which amended this authorization was quashed by an order of the Divisional Court dated June 18, 2002.**
BMEC-99-06-234	Self-contained structural shelf and rack storage facility	Warehouse Equipment Inc.	Shelf and Rack Storage Systems	March 25, 1997
BMEC-99-05-233	SHELF AND RACK STORAGE SYSTEM	Civelec Consultants Inc.	Shelf and Rack Storage Systems	March 25, 1999

BMEC-99-03-231	The Formadrain Process	Formadrain, Inc.	Plumbing Process	February 25, 1999
BMEC-99-02-230	Scapewell Window Well System	The Bilco Company	Egress System	February 25, 1999
BMEC-99-01-229	Infiltrator Equalizer 24 Chambers	Infiltrator Systems Inc.	Sewage Systems	January 19, 1999 **Amended** July 28, 2005

1998

BMEC-98-05-228	Royal Building System™	Royal Concrete Encased Technologies Inc.	Wall System	July 23, 1998
BMEC-98-04-227	Leak-Bye Foundation Drainage System	Leak-Bye Inc.	Foundation	April 30, 1998
BMEC-98-01-224-A	STUDOR Air Admittance Valve	Studor Inc.	Ventilation	February 26, 1998 **Amended:** August 27, 1998

1997

BMEC-97-14-223	FORM-A-DRAIN™	Certainteed Corporation Pipe & Plastic Group	Foundation	October 30, 1997
BMEC-97-13-222	Access Floor Panels System	Interface Architecturral Resources Inc.	Access Floor Panels	June 26, 1997
BMEC-97-12-221	Asphalt Shingles	Cerainteed Corporation	Roof Coverings	July 31, 1997 **Revised:** September 8, 1997
BMEC-97-11-220	TUFF-N-DRI® Waterproofing System	Koch Materials Company	Water and Damp Proofing	July 31, 1997
BMEC-97-10-219	Asphalt Shingles	Certainteed Corporation	Roof Coverings	July 31, 1997 **Revised:** September 8, 1997
BMEC-97-09-218	Window sprinkler assembly system	Paul & Douglas Sprinklers Ltd.	Windows Sprinkler Systems	May 29, 1997
BMEC-97-08-217	Central Emergency Power Supply Systems	Emergi-Life Ltd.	Emergency Power Supply	July 31, 1997

BMEC-97-07-216	Central Emergency Power Supply Systems	Lumacell Inc.	Emergency Power Supply	July 31, 1997 **Amended:** October 26, 2000
BMEC-97-06-215	Central Emergency Power Supply Systems	Edwards/Dual-Life	Emergency Power Supply	July 31, 1997
BMEC-97-05-214	ECHO™ Design System	Indoor Air Technologies Inc.	Drainage Layer Systems	July 31, 1997
BMEC-97-04-213	NORBEC & NOREX Composite Panels	Systems Norbec Inc.	Foam Composite Panels	June 26, 1997
BMEC-97-03-212	Self-contained structural shelf and rack storage facility	Planiform (1983) Inc.	Shelf and Rack Storage Systems	May 29, 1997
BMEC-97-02-211	Schluter®-DITRA	Schluter®-Systems (Canada) Inc.	Moisture Resistant Backing	April 04, 1997

1996

BMEC-97-01-210	Self-contained structural shelf and rack storage facility	Space Aid MFG.	Shelf and Rack Storage Systems	January 30, 1997
BMEC-96-10-209	Self-contained structural shelf and rack storage facility	Frazier Industrial Corporation Ltd.	Shelf and Rack Storage Systems	November 27. 1996
BMEC-96-09-208	PHS-5 Ventless Hoods	Giles Enterprises Inc.	Ventless Hoods	September 20, 1996
BMEC-96-08-207	PO-VH & OVH-10 Ventless Hoods	Giles Enterprises Inc.	Ventless Hoods	September 20, 1996
BMEC-96-07-206	Free standing ventless hoods	Giles Enterprises Inc.	Ventless Hoods	September 20, 1996
BMEC-96-06-205	Electric Deep Fat Fryers with an Integral Ventless Hood	Giles Enterprises Inc.	Cooking Equipment	September 20, 1996
BMEC-96-05-204	Natural Gas Emergency Standby Power (ESP)	Consumers Gas CO.	Emergency Power Supply	June 20, 1996
BMEC-96-04-203	Window sprinkler assembly system	Robert B. Williams	Windows Sprinkler Systems	June 20, 1996
BMEC-96-03-202	Self-contained structural shelf and rack storage facility	Alltype Metal Stampings Ltd.	Shelf and Rack Storage Systems	June 20, 1996
BMEC-96-01-200	Window sprinkler assembly system	MBECO Engineering Ltd.	Windows Sprinkler Systems	June 20, 1996

1995

BMEC-95-14-199	Self-contained structural shelf and rack storage facility	E-Z-Rect Manufacturing Ltd.	Shelf and Rack Storage Systems	November 30, 1995
BMEC-95-13-198	Window sprinkler assembly system	Life Safety Systems	Windows Sprinkler Systems	November 30, 1995 **Amended:** June 20, 1996
BMEC-95-12-197	Isowall Insulated Panel System	Isowall Ltd.	Wall Assembly	November 30, 1995 **Amended:** January 25, 1996
BMEC-95-11-196	Window sprinkler assembly system	Larden Muniak Consulting Inc.	Windows Sprinkler Systems	October 18, 1995
BMEC-95-10-195	Self-contained structural shelf and rack storage facility	Triple-A Manufacturing Co. Ltd.	Shelf and Rack Storage Systems	October 18, 1995
BMEC-95-09-194	Self-contained structural shelf and rack storage facility	Beaver Materials Handling Co. Ltd.	Shelf and Rack Storage Systems	August 24, 1995
BMEC-95-08-193	Self-contained structural shelf and rack storage facility	Pacific Westeel	Shelf and Rack Storage Systems	August 24, 1995 **Amended:** April 27, 2000
BMEC-95-07-192	Zer-O-Loc insulated panel system	Zer-O-Loc Enterprises Ltd.	Wall Assembly	August 24, 1995
BMEC-95-06-191	U-Haul self-storage facility	U-Haul International	Self Storage Facilities	July 27, 1995
BMEC-95-05-190	XPA PlumbBetter® System	Ipex Inc.	Plumbing	June 29, 1995 **Amended** **April 27, 2006**
BMEC-95-04-189	FORM-A-DRAIN™	Unique Building Systems	Foundation	June 29, 1995
BMEC-95-03-188	ProSet Stack Stub-in coupling combination firestop	Proset Systems Inc.	Plumbing	June 29, 1995
BMEC-95-02-187	Self-contained structural shelf and rack storage facility	Enrack Systems Inc.	Shelf and Rack Storage Systems	June 29, 1995
BMEC-95-01-186	Window sprinkler assembly system	Vipond Automatic Sprinkler Co. Ltd.	Windows Sprinkler Systems	February 13, 1995

1994

BMEC-94-06-185	Coldmatic Insulation Panel System	Coldmatic Building Systems	Wall Assembly	December 16, 1994
BMEC-94-05-184	CASTONE	CASTONE INDUSTRIES INC.	Cladding	December 16, 1994
BMEC-94-04-183	Waterproofing membrane	Rub-R-Wall Canada Ltd.	Water and Damp Proofing	December 16, 1994 **Amended:** May 30, 2002
BMEC-94-03-182	Murad exterior commercial sign and frame system	Murad Communications Inc.	Signage Materials	November 1, 1994
BMEC-94-02-181	Pre-Fabricated Log Homes	Canadian Cedar Log Ltd.	Pre-Fabricated Log Homes	September 1, 1994
BMEC-94-01-180	Pre-Fabricated Log Homes	Pan-Abode International Ltd.	Pre-Fabricated Log Homes	September 1, 1994

1993

BMEC-93-13-178	Window sprinkler assembly system	Arencon Inc.	Windows Sprinkler Systems	December 1, 1993
BMEC-93-12-177	A window sprinkler assembly system	Honeywell Ltd.	Exhaust Systems	January 20, 1994
BMEC-93-09-174	Forbo Stamoid F4452 flexible material	Cielok Outdoor Ltd.	Signage Materials	February 8, 1994
BMEC-93-07-172	BLUE STUFF	Pennkote Ltd.	Water and Damp Proofing	December 1, 1993
BMEC-93-05-170	Therm-O-Comfort wall insulation system	Therm-O-Comfort Co. Ltd.	Wall Assembly	May 11, 1993
BMEC-93-04-169	Window sprinkler assembly system	Morrison Hershfield Ltd.	Windows Sprinkler Systems	May 11, 1993
BMEC-93-03-168	Window sprinkler assembly system	Disano Sprinkler Design	Windows Sprinkler Systems	May 11, 1993
BMEC-93-02-167	Window sprinkler assembly system	United Fire Protection Systems Inc.	Windows Sprinkler Systems	May 11, 1993

BMEC-93-01-166	Benolec Wall Insulation System	Les Entreprises Benolec Ltee	Wall Assembly	May 11, 1993 **Amended:** May 30, 2002

1992

BMEC-92-09-165	Window sprinkler assembly system	L.P. Enginneering Inc.	Windows Sprinkler Systems	March 29, 1993
BMEC-92-08-164	BASF EX-R2802 and ISO 17 isocyanurate	BASF Canada Inc.	Insulation	March 29, 1993
BMEC-92-07-163	Henny PennyR, Models 500P and 500CP self-contained electric deep fat pressure fryers	Henny Penny Corporation	Cooking Equipment	July 20, 1993
BMEC-92-06-162	BPB Canada Inc. Gypsum Shaftwall Assembly	BPB North America services Inc.	Wall Assembly	October 22, 1992 **Amended** July 28, 2005
BMEC-92-05-161	Enviro-Shield wall insulation system	Ermo-Cell (1983) Ltd.	Wall Assembly	October 22, 1992
BMEC-92-04-160	Window sprinkler assembly system	M. P. Sprinkler Systems Ingineering Inc.	Windows Sprinkler Systems	October 22, 1992
BMEC-92-03-157	Window sprinkler assembly system	Civelec Consultants Inc.	Windows Sprinkler Systems	October 22, 1992

1991

BMEC-91-08-156	Self-contained structural shelf and rack storage facility	M & P Tool Products Inc.	Shelf and Rack Storage Systems	October 22, 1992
BMEC-91-07-155	CHEXIT CX98 & CX99	Von Duprin Inc.	Panic Hardware Devices	October 22, 1992
BMEC-91-06-154	Platon damp proofing membrane system	Big "O" Inc.	Water and Damp Proofing	December 1, 1993

BMEC-91-04-152	Sparlock Interlocking	Produits Sparbeton Ltee Sparlock	Concrete Block Systems	November 14, 1991
BMEC-91-03-151 Amendment to Authorization	Window sprinkler assembly system	Novus Fire Protection Consulting Ltd.	Windows Sprinkler Systems	June 28, 1991 **Amendeded:** July 31, 1997 October 26, 2000
BMEC-91-02-150	DONN Woodloc, Woodcor WL-1000, WC-1000 access floor panels	CGC Interiors, Division of CGC Inc.	Access Floor Panels	May 7, 1991
BMEC-91-01-149	Self-contained structural shelf and rack storage facility	Superrack-Cresswell Roll Rorming Inc.	Shelf and Rack Storage Systems	April 24, 1991

1990

BMEC-90-20-148	Series 600 access floor panels	Tate Access Floors Inc.	Access Floor Panels	February 20, 1991
BMEC-90-19-147	Pabco grease duct enclosures	PabCo, Dev. of Fiberboard Corp	Cooking Equipment	February 10, 1991
BMEC-90-18-146	Access Floor Panels	C-Tec Inc.	Access Floor Panels	February 20, 1991
BMEC-90-17-145	1000/CR & 600/GC access floor panels	Camino Systems Inc.	Access Floor Panels	February 20, 1991
BMEC-90-16-144	Concrete Roof Tile System	Vande Hey-Releigh Manufacturing Inc.	Roofing Systems	February 20, 1990 **Amended:** October 22, 1992
BMEC-90-15-143	Self-contained structural shelf and rack storage facility	Metalware Corp.	Shelf and Rack Storage Systems	February 20, 1991
BMEC-90-14-142	A.S.P. #250 access floor panels	A.S.P. Access Floors Inc.	Access Floor Panels	February 20, 1991
BMEC-90-13-141	Window sprinkler assembly system	H.H. Angus & Associates Ltd.	Windows Sprinkler Systems	October 29, 1990
BMEC-90-12-140	Self-contained structural shelf and rack storage facility	Store-Rite Systems Inc.	Shelf and Rack Storage Systems	September 19, 1990
BMEC-90-11-139	Self-contained structural shelf and rack storage facility	Enrack Systems Inc.	Shelf and Rack Storage Systems	September 19, 1990
BMEC-90-10-138	FLEXWATT	Flex Watt Corp.	Radiant Heating Panels	September 19, 1990
BMEC-90-09-137	Tabletop cooking gas-fired appliance	Horace	Cooking Equipment	September 19, 1990

BMEC-90-08-136	Self-contained structural shelf and rack storage facility	Pacific Westeel	Shelf and Rack Storage Systems	August 17, 1990
BMEC-90-07-135	TECTUM I, II and/or III structural roof deck panels	Tectum Inc.	Roofing Systems	September 19, 1990 **Amended:** November 13, 1991
BMEC-90-06-134	Window sprinkler assembly system	Applied Fire Technology Inc.	Windows Sprinkler Systems	July 25, 1990
BMEC-90-05-133	ST1 and ST2 TECO Sill-Ty Sill Plate Anchors	Teco Canada Sill Plate Anchors	Anchor Straps	July 25, 1990
BMEC-90-04-132	Concrete Roof Tile System	Monier Roof Tile	Roofing Systems	July 25, 1990
BMEC-90-03-131	Window sprinkler assembly system	Locke Mackinnon Domingo Gibson	Windows Sprinkler Systems	May 10, 1990
BMEC-90-02-130	Self-contained structural shelf and rack storage facility	All-Type Matel stampins Ltd.	Shelf and Rack Storage Systems	May 10, 1990 **Amended:** September 19, 1990

1989

BMEC-89-11-128	Clay Roof Tile System	Sereni Sergio	Roofing Systems	March 21, 1990
BMEC-89-10-127	Refratco (Flameguard) Flue Liner	Refratco Inc.	Chimney Liners	January 31, 1990
BMEC-89-09-126	Window sprinkler assembly system	Merber Corp.	Windows Sprinkler Systems	December 21, 1989
BMEC-89-07-124	GANG-LAM LVL	Gang-Nail Systems Inc.	Laminated Lumber	September 27, 1989
BMEC-89-06-123	GNI-Beam	Gang-Nail Systems Inc.	Wood beams	September 21, 1989
BMEC-89-05-122	Goldseal-Icynene 50 TM	ARK-Seal Inc.	Insulation	August 17, 1990 **Amended:** November 13, 1991
BMEC-89-01-118	Horizontal cavity shaft wall system	Canadian Gypsum Co.	Wall Assembly	May 10, 1989

1988

BMEC-88-10-117	Window sprinkler assembly system	F. Verri & Associates Inc.	Windows Sprinkler Systems	May 10, 1989
BMEC-88-09-116	Self-contained structural shelf and rack storage facility	E-Z-Rect Manufacturing Ltd.	Shelf and Rack Storage Systems	May 10, 1989
BMEC-88-08-115	Kitchen exhaust and filtration system	Spring Air Systems Inc.	Exhaust Systems	May 10, 1989
BMEC-88-06-113	Clay tile exterior wall system	NSP Inc.	Wall Assembly	December 7, 1988
BMEC-88-05-112	Window sprinkler assembly system	Leber/Rubes Inc.	Windows Sprinkler Systems	December 7, 1988
BMEC-88-02-109	Window sprinkler assembly system	Randal Brown and Associates Ltd.	Windows Sprinkler Systems	December 7, 1988
BMEC-88-01-108	Parallam	Macmillan Blodedel Ltd.	Laminated Lumber	December 7, 1988

1987

BMEC-87-09-106	Cembonit B7 Fibre Corrugated Roofing	Dansk Eternit-Fabrik	Roofing Systems	December 9, 1987
BMEC-87-08-105	Exterior Vinyl Cladding	Vinyl Council OF Canada	Cladding	July 4, 1988
BMEC-87-06-103	Katech Roofing Panel System	Steel Tile Co.	Roofing Systems	September 10, 1987
BMEC-87-03-100	Insulock Building System	Canadian Insulock Corporation	Concrere Form	August 12, 1987
BMEC-87-02-099	Goldseal-Icynene 50 TM	Mr. Ragui Ghali	Insulation	July 25, 1990
BMEC-87-01-098	Haener Interlocking Blocks	Dr. Juan Haener	Masonry	August 12, 1987

1986

BMEC-86-05-095	Nascor wall system	Nascor Incorporated	Wall Assembly	November 7, 1986
BMEC-86-04-094	Forrer dry block	Forrer Chemical	Water and Damp Proofing	April 23, 1987

BMEC-86-02-092	Decrabond Roofing System	A.H.I. Roffing	Roofing Systems	November 7, 1986

1985

BMEC-85-11-089	Gerard Roofing System	Gerard Roofing Systems (N. Z.) Ltd.	Roofing Systems	November 7, 1986
BMEC-85-07-085	Window sprinkler assembly system	Rolf Jensen & Associates Ltd.	Windows Sprinkler Systems	March 15, 1986 **Amended:** December 7, 1988
BMEC-85-05-083	Galvanized steel anchor straps	Cresent Engineering Ltd.	Anchor Straps	November 7, 1986
BMEC-85-04-082	SOLID/FLUE chimney liner	American Chimney Lining Systems	Chimney Liners	October 16, 1985
BMEC-85-03-081	Kitchen exhaust and filtration system	Leslie Bros. (1966) Ltd.	Exhaust Systems	May 21, 1985 **Amended:** November 7, 1986
BMEC-85-02-080	BASECLAD EBWI and GLASCLAD	Fiberglas Canada Inc.	Insulation & Sheathing	October 16, 1985
BMEC-85-01-079	Laumans Clay Roof tile system	A. Laumans	Roofing Systems	May 21, 1985

1984

BMEC-84-11-077	Styrofoam Foundation Coating	Dow Chemical Canada Inc.	Foundation	October 16, 1985
BMEC-84-10-076	Self-contained structural shelf and rack storage facility	Redirack Industries Ltd.	Shelf and Rack Storage Systems	October 16. 1985 **Amended:** September 19, 1990
BMEC-84-09-075	Kitchen exhaust and filtration system	Engineered Air	Exhaust Systems	May 21, 1985 **Amended:** November 7, 1986
BMEC-84-08-074	Oriented strand board	Pelican Spruce Mills Ltd.	Strand Board	October 16, 1985
BMEC-84-05-071	Jeka Clay or Pantiles Roof tile system	Jeka Dakpannen	Roofing Systems	December 13, 1984
BMEC-84-02-068	Model SC-liner	James A. Ryder Mamufacturing Ltd.	Chimney Liners	May 3, 1984

1983

BMEC-83-06-065	"Z-Flex" flexible stainless steel liner	Z-FLEX Chimney Liner	Chimney Liners	March 22, 1984
BMEC-83-05-064	Isoren S4 Thermostucco (scratch coat) and Isoren F acrylic finishing coat	Alvise De Buzzaccarini	Insulation	March 22, 1984
BMEC-83-02-061	Sparfil wall system II	Sparfil International Inc.	Wall Assembly	December 13, 1984 **Amended:** October 29, 1990

1982

BMEC-82-18-056	DCP High Temp Flue chimney liner	Doughty Concrete Products Ltd.	Chimney Liners	Arpil 14, 1983
BMEC-82-17-055	Temprite HRK series Kitchen Heat Reclaim Systems	Temperite Industries Ltd	Exhaust Systems	April 14, 1983 **Amended:** November 7, 1986
BMEC-82-16-054	Self-contained structural shelf and rack storage facility	Triple-A Manufacturing Co. Ltd	Shelf and Rack Storage Systems	October 20, 1983 **Amended:** September 19, 1990
BMEC-82-12-050	Iso-Karen chimney liner	ISO-KAREN APS	Chimney Liners	November 17, 1982
BMEC-82-11-049	Kitchen Eshaust Duct Damper	Ministry of Government Services	Exhaust Systems	September 9, 1982
BMEC-82-10-048	Kitchen Exhaust, Heat Recovery	Kilmer Environmental Inc.	Exhaust Systems	September 9, 1982 **Amended:** August 12, 1987
BMEC-82-09-047	Chimney liner	National Supaflu Systems Inc.	Chimney Liners	October 16, 1985
BMEC-82-08-046	Marley Concrete Roof Tile system	Marley Roof Tiles Ltd.	Roofing Systems	July 8, 1982 **Amended:** April 14, 1983
BMEC-82-05-043	Kitchen Exhaust Heat Reclaim Systems	Longhill Combustion Products Ltd.	Exhaust Systems	May 13, 1982 **Amended:** November 7, 1986

BMEC-82-04-042	Alucobond Exterior/Interior Cladding	Consolidated Aluminum	Cladding	July 8, 1982
BMEC-82-03-041	Kitchen Exhaust Heat Reclaim Systems	K. D. H. Iidustries Ltd.	Exhaust Systems	May 13, 1982 **Amended:** November 7, 1986
BMEC-82-02-040	Systems 111 Kitchen Exhaust and Heat Reclaim System	Paterson Aire Systems	Exhaust Systems	May 13, 1982 **Amended:** November 7, 1986

1981

BMEC-81-08-038	Kitchen Exhaust Heat Reclaim Systems	Garland Commercial Renges Ltd	Exhaust Systems	February 11, 1982 **Amended:** November 7, 1986
BMEC-81-07-037	Tectonic Thermal Insulation	Condecor Products Ltd.	Insulation	September 10, 1981
BMEC-81-01-031	Kitchen Exhaust Pollution Abatement and Heat Reclaim	Circul-Aire (Eastern) Inc.	Exhaust Systems	June 11, 1981 **Amended:** November 7, 1986

1980

BMEC-80-04-026	Kitchen Exhaust Heat Reclaim Systems	Garland Commercial Ranges Ltd.	Exhaust Systems	November 7, 1986
BMEC-80-02-024	Roof Covering	Reichhold Ltd.	Roofing Systems	September 11, 1980
BMEC-80-01-023	Double Wall Construction	John Hix, Architect	Insulation	September 11, 1980

1979

BMEC-79-06-021	Flame Retardant Coating	American Vamag Co. Inc.	Fire Retardant Coating	December 13, 1979
BMEC-79-04-019	Kitchen exhaust air heat reclaim system	Gaylord Ventilations of Canada Inc.	Exhaust Systems	November 8, 1979 **Amended:** November 7, 1986
BMEC-79-02-017	Wood-Tek Flame Retardant Coating	Wood-Tek Ltd.	Fire Retardant Coating	August 9, 1979

1978

BMEC-78-07-015	Surewall® Surface Bonding Cement	W.R.Bonsal Co.	Cement	May 1, 1980

BMEC-78-05-013	Kitchen exhaust air heat reclaim system	Gaylord Ventilations of Canada Inc.	Exhaust Systems	April 19, 1979 **Amended:** November 7, 1986
BMEC-78-04-012	CA/90 Ductless Fan	Rush-Hampton Industries	Exhaust Systems	December 14, 1979 **Amended:** July 12, 1979

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Ontario
Building Materials Evaluation Commission
Commission d'évaluation des matériaux de construction

Date of Authorization	July 27, 2006
BMEC Authorization Number	06-08-328
BMEC Application	A2006-13

AUTHORIZATION REPORT – The Romakowski System

1. Applicant

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K7S 3G8

Tel: 613 623-8083
Fax: 613 623-7660

2. Manufacturing

Romakowski GmbH & Co. KG
Herdweg 341
D-86647 Butternwiesen
Germany

3. Description

Themoenergy Building Inc.'s, Romakowski GmbH System: Exterior Wall and Roof Systems (the "Romakowski System") are factory assembled, modular wall and roof panels consisting of a polyurethane foam core not less than 40 mm thick, faced with steel skins not less that 0.38 mm on the interior surface, and not less than 0.38 mm on the exterior surface.

The factory assembled metal panels have a polyurethane form core sandwiched between steel metal sheets. There is no air space between the insulation and the steel sheets. The steel sheets are pre-finished and are used as the exterior cladding, and interior finish of the building, and the panels have a double tongue and groove joint, or an overlapping joint that creates a labyrinth effect when connecting the panels to one another.

The Romakowski System is typically used in the construction of combustible commercial and industrial buildings.

4. Authorization Requested

The applicant sought a Building Materials Evaluation Commission ("BMEC") authorization for the use of the Romakowski System as innovative exterior walls and roofs in the construction of combustible Part 3 and Part 9 buildings.

5. Assessment

Reports and assessments provided by the Applicant show that if the Romakowski Roof and Wall Panels are designed, performance tested and installed in accordance with the limitations in the manufacturer's instructions, and the specific terms and conditions stated in this Authorization, the level of performance required by the Building Code will be provided.

The reports submitted, and reviewed, but were not limited to:

1. German – Rosenheim, Test Results, Project 104 19357/1, dated November 25, 1997.

2. German – Rosenhiem, Test Results, Project 104 19357/3, dated November 25, 1997.

3. Quality Control Manual – Gutegemeinschaft Bauelemente aus Stahlblech e.V., "Guidelines for the implementation of monitoring inspection in accordance with the building products directives A section 1 and RAL-GZ 617 for Structural components in sheet steel", edition August 2002.

4. Manufacturer's Literature "Industrial Building Construction.

5. Manufacturer's Literature "Construction of Cooling and Deep-freeze Stores".

6. Manufacturer's Literature "Architectural Design".

7. Manufacturer's Literature "Roof Panels".

8. German Institute For Structural Engineering, Note of Authorization – Z-10.4-151 "ROMA rapid-assembly insulating panel P-ST, M-ST and D-ST, dated December 3, 2004

9. Letter Report, Hine Reichard Tomlin Inc. "Panel Characteristics", dated June 22, 2006.

10. Letter Report, Hine Reichard Tomlin Inc. "Panel Characteristics", dated July 11, 2006.

11. Manufacturer's Drawing Details: F233-7, F240-3, F014-1, F015-1, F016-1, F017-1, F018-1, F019-1, D010-5, D024-2, D103-1, D104-2, D105-2, D106-3, D107-1, D108-3.

12. Drawings:

a) Data Sheet-1 Span Table Guide
b) Data Sheet-2 Roof Panel Type D-St Characteristics and Spans
c) Data Sheet-3 Wall Panel Type M-St and P-St Characteristics.
d) Data Sheet-4 Wall Panel Type M-St-Span Table
e) Data Sheet-5 Wall Panel Type P-St Span Table
f) Detail-1, Section Thru' Floor and Wall Connection (Option 1)
g) Detail-2, Section Thru' Floor and Wall Connection (Option 2)
h) Detail-2, Section Thru' Wall and Roof Connection
i) Detail-3, Section Thru' Roof Ridge
j) Detail-4, Section Joint between Roof Panel
k) Detail-5, Section Thru' Window
l) Detail-6, Wall Corner In Plan.

6. Authorization

The Romakowski System is authorized for use as innovative exterior walls and roofs in the construction of combustible Part 3 and Part 9 buildings; all other requirements pertaining to the installation of the Romakowski System shall be subject to the requirements of the Building Code, and are subject to the following terms and conditions.

Note: If a conflict arises between the provisions of this authorization, or the manufacturer's installation instruction, then the most restrictive provision shall apply.

A. Specific Terms & Conditions

1. This authorization is valid only for Themoenergy Building Inc.'s Romakowski System.

2. The structural design and general review of the Romakowski System shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act*, (Ontario); the Professional Engineer shall provide the chief building official with documents certifying that the design and installation conforms with Part 4 of the Building Code, and with this authorization.

3. The Romakowski System shall not be used in the construction of Group B "Care and Detention" occupancies, as they are defined in the Building Code.

4. The Romakowski System shall not be used in the construction of Group C "Residential" occupancies, as they are defined in the Building Code.

5. The Romakowski System is permitted for use in combustible construction only.

6. The Romakowski System is deemed to have met the requirements of Clauses 9.10.16.10.(1)(b) and 3.1.4.2.(1)(a) of the Building Code.

7. The Romakowski System wall panels shall not be constructed as structural elements of the building.

8. The Romakowski System shall be fastened to the supporting structure in accordance with the manufacturer's installation instructions.

9. For the purposes of spatial separations, Romakowski System shall not be used in an assembly required to be of noncombustible construction.

10. The Romakowski System, specifically the roof panels, shall be designed using a maximum allowable deflection limit of not less than L /180.

11. The Romakowski System, wall model series P-St and M-St, and Roof model series D-St are permitted for use when clad with steel having a minimum thickness of .38 mm

12. Documentation shall be submitted, as a part of the building permit application package, confirming that the design meets the requirements of Part 5 "Wind, Water and Vapour Protection" of the Building Code, where required for the specific building classification.

13. The Romakowski System shall not be used to support, or suspend appliances, fixtures, or equipment.

14. If the Romakowski Systems incorporate an opening within the panel(s), or is modified to accommodate a penetration within the panel, then additional information (e.g. testing, analysis, details…) demonstrating that the modified roof and or wall panel conforms to the Building Code shall be submitted to the chief building official for review.

B. General Conditions

1. The use of the Romakowsi Systems as described in the specific terms and conditions set out in 6.A. must comply with the *Building Code Act, 1992* (the "Act") as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6.A. above; or

(b) the occurrence of any of the events described in conditions 6.B.4.(a) and (b)(ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Part 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Act, or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 27 day of July 2006.

BUILDING MATERIALS EVALUATION COMMISSION

Edward Link, P. Eng.
Vice-Chair, BMEC

777 Bay Street, 2nd Floor
Toronto, Ontario, M5G 2E5

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Ontario
Building Materials Evaluation Commission
Commission d'évaluation des matériaux de construction

Date of Authorization	June 29, 2006
BMEC Authorization Number	06-06-326
BMEC Application	BMEC A2006-07

AUTHORIZATION REPORT – PHIX Cartridge System

1. Applicant

Green Turtle Technologies Inc.
12 Madison Avenue
Toronto, Ontario
M5R 2S6

Tel: 416 966-9400
Fax: 416 966-3449
Web: www.greenturtletech.com

2. Manufacturing

Information supplied to the BMEC, but withheld at the request of the Applicant.

3. Description

The PHIX Cartridge System (the "PHIX Cartridge") is designed for acid neutralization.

The PHIX Cartridge has four main components, the Manifold, Internal Skelton, the Treatment Chamber, and the Solid Collection Chamber, and is constructed out of 100% polypropylene.

The Manifold houses the PHIX Cartridge's three main connections: threads to the sink drainage outlet, and threads into the Treatment Chamber. The Internal Skelton directs the flow of the wastewater from the sink drainage outlet through the centre pipe into the Solid Collection Chamber for solids removal. The PHIX Media contained within the Treatment Chamber will neutralize the acidic wastewater based on the retention time required to complete the neutralization reaction. The neutralized wastewater will be channelled through a woven filter and exits the Manifold into the regular plumbing drainage system.

4. Authorization Requested

The Applicant sought a Building Materials Evaluation Commission ("BMEC") authorization for the use of the PHIX Cartridge as an engineered acidic wastewater neutralizing system that connects directly to an under the sink plumbing drainage system.

5. Assessment

Reports and assessment provided by the applicant demonstrate that if the PHIX Cartridge System is constructed, installed, operated, maintained and monitored in accordance with the limitations of the manufacturer specifications and conditions stated in this authorization, a level of performance equivalent to that required by the Building Code will be provided.

The following reports were submitted, and reviewed:

1. PHIX™ Neutralization Systems: Cartridge System "Technical Manual 2005, Version 1"

2. Material Safety Data Sheet – PHIX Media 3000, dated June 12, 2002.

3. Material Safety Data Sheet – PHIX Media 2000, dated January 12, 2005.

4. PHIX™ Neutralization Systems: Cartridge System "Owner's Manual, Green Turtle, Version 1".

5. Test Data and Test Analysis "Neutralization Testing with the PHIX Cartridge Unit".

6. Test Data and Test Analysis "Flow test of the PHIX Cartridge Unit"

7. Letter Approval: City of Chicago "PHIX Cartridge Systems and PHIX gravity System", dated February 23, 2005.

6. The PHIX Cartridge is authorized for use as an alternative means of acid neutralization in a plumbing system, as required by Articles 7.4.4.4. "Neutralization and Dilution Tanks", 7.5.4.4. "Venting of Corrosive Drain Piping", and Sentence 7.5.4.2.(6) of the Building Code; all other requirements pertaining to the installation and construction are subject to the requirements of the Building Code and are subject to the following terms and conditions

Note: If a conflict arises between this document and the provisions of the documents listed below, the most restrictive provision shall apply.

A. Specific Terms and Conditions

1. This authorization is valid only for Green Turtle Technologies.

2. This authorization is valid for the use of the PHIX Cartridge, for use with media 2000, and 3000.

3. The design of that portion of the plumbing system, pertaining to where the PHIX Cartridge is installed shall be performed by a professional engineer, as defined in the Building Code, and who is trained and experienced in the area of acid neutralization.

4. The documents associated with the PHIX Cartridge shall be stored in a safe and accessible location on-site, in the same room, and contain a minimum of the following information:

    a) The Green Turtle's contact information,
    b) Maintenance Schedule
    c) Material Safety Data Sheet,
    d) Warranty,
    e) Owners Manual,
    f) Emergency Contact Information, and
    g) A list of the chemicals, for the specific location, that the PHIX Cartridge was designed to neutralize.

5. The PHIX Cartridge shall be installed as per the manufacturer's installation instructions.

6. The PHIX Cartridge shall only be installed if a maintenance schedule, specific to the location and use, has been developed.

7. Copies of the PHIX Cartridge maintenance schedule and the on-site documents as listed in 6.A.4., shall be submitted to the chief building official, to form a part of the permit application package.

8. Documentation shall be submitted to the chief building official confirming that the wastewater from the PHIX Cartridge will comply with the local sewage by-law, and/or related applicable law listed in Article 1.1.3.3. "Applicable Law" of the Building Code.

9. The PHIX Cartridge shall be supported by a metal bracket that is fixed to the floor and raised up to the bottom of the unit, removing any loading that may be applied to the pipe, PHIX Cartridge, or the sink.

10. A trap is not permitted between the sink and the PHIX Cartridge.

11. The PHIX Cartridge shall only be used for under the sink laboratory applications.

12. The PHIX Cartridge shall only be installed where polypropylene pipes and fittings are permitted for use.

13. A vent is not permitted between the sink and the PHIX Cartridge.

14. A sticker containing the following information, posted in a conspicuous location, on a contrasting background, directly above the sinks(s) where PHIX Cartridge(s) has been installed shall include:

    a) Green Turtle's contact information,
    b) The following statement: "Warning: do not dispose of grease, organic waste, fats, oils, or any material for which the acid neutralization media was not designed in this sink", and
    c) PHIX Cartridge installed under the sink.

15. The aggregate design discharge through any PHIX Cartridge shall not exceed 21 litres per minute.

16. The PHIX Cartridge shall not be installed in connection with other appliances (e.g. dishwasher).

B. General Conditions

1. The use of the PHIX Cartridge and as described in the specific terms and conditions set out in 6.A. must comply with the *Building Code Act, 1992* (the "Act") as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

    (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6.A. above; or

    (b) the occurrence of any of the events described in conditions 6.B.4.(a) and (b)(ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        (i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Part 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Act any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 29 day of June 2006.

BUILDING MATERIALS EVALUATION COMMISSION

Edward Link, P. Eng.
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Ontario
Building Materials Evaluation Commission
Commission d'évaluation des matériaux de construction

Date of Authorization	July 27, 2006
BMEC Authorization Number	06-07-327
BMEC Application	A2006-12

AUTHORIZATION REPORT – Roof and Wall Panels

1. Applicant

Four Season Solar Products, LLC
5005 Veterans Memorial Hwy
Holbrook, NY
USA, 117741

Tel: 631 563 4000
Fax: 631 218 9076
Web: www.fourseasonssunrooms.com

2. Manufacturing

Four Season Solar Products, LLC
5005 Veterans Memorial Hwy
Holbrook, NY
USA, 117741

3. Description

Four Seasons Solar Products, LLC's Structural Insulated Panel System (the "Roof and Wall Panels") may be used in the construction of unheated additions to residential occupancy buildings.

Components	**Roof Panel Size: 108 mm (4 ¼")**
Aluminum	0.6 mm
Expanded Polystyrene Foam	16 kg/m^3
OSB (interior) plus Blazeguard®1	11 mm
Aluminum	0.6 mm
Adhesive Type	Ashland or Rohm and Haas
Deflection Criteria	L / 180

Components	**Wall Panel Size: 76 mm (3")**
Aluminum	0.6 mm
Expanded Polystyrene Foam	16 kg/m^3
OSB (interior) plus Blazeguard®	11 mm
Aluminum	0.6 mm
Adhesive Type	Ashland or Rohm and Haas

Note 1: The Blazeguard® coating is applied to the interior surface of the 11 mm OSB.

4. Authorization Requested

The Applicant sought a Building Materials Evaluation Commission (the "BMEC") Authorization for the use of the Roof and Wall Panels for unheated additions, which may be an addition to a residential occupancy building that is subject to the requirements of Part 9 of the Building Code.

5. Assessment

Reports and assessments provided by the Applicant show that if the Roof and Wall Panels are designed, performance tested and installed in accordance with the limitations in the manufacturer's instructions, and the specific terms and conditions stated in this Authorization, the level of performance required by the Building Code will be provided.

The reports submitted, and reviewed, but were not limited to:

1. Letter Report, Hannigan Engineering Limited "Structural Review for Sandwich Panels for Four Seasons Solar Products, LLC Sunroom Project Number S5228.

2. Quality Control Manual.

3. Protective Covering for Foam Plastic Test Report.

4. Blazeguard Product Specification.

5. TJC Test Report TT 50125-A "Sandwich Panel Tess Patio Roof Panels without Mullins", dated 27, 2003.

6. TJC Report TT 50125-A "Engineering Analysis of the Patio Roof without the Mullins", dated June27, 2003.

7. TJC Test Report TT 50125-B "Sandwich Panels Test Patio Roof Panels with Mullins" , dated June 27, 2003.

8. TJC Test Report TT 50125-B "Engineering Analysis of Patio Roof Panels with Mullins", dated June 27, 2003.

9. TJC Test Report TT 50125-C, "Sandwich Panels Test Laminated Wall Panels" dated June 27, 2003.

10. TJC Test Report TT 50125-C, "Engineering Analysis of Patio Wall Panels", dated June 27, 2003.

11. TJC Test Report TT 50125-D "Sandwich Panel Test Laminated Wall Panels with Hardboard Surface" dated June 27, 2003.

12. TJC Test Report TT 50125—D "Engineering Analysis of Patio Wall Panels with Hardboard Surface" dated June 27, 2003.

13. Engineering Chart, “Sun and Shade Straight Eave” Back-up Calculations.

14. Standard Drawings for Sun and Shade Straight Eave.

15. ICC-ES Evaluation Report ER-4590P.

16. Standard Drawing for Sun and Shade Cathedral Room.

17. Tremco Tremsil 600 Product Specification.

18. Installation Manual Sun and Shade Straight Eave.

19. Installation Manual Sun and Shade Cathedral.

20. Engineering Summary Charts, July 13, 2006.

21. Die Drawings:
    a) 4” Adjustable Ridge Male
    b) 4” Roof H (Mullin)
    c) 4” Fixed Ridge
    d) 4” Ridge (Ledger)
    e) 4” Fascia
    f) 4” Adjustable Ridge Female Window Sill
    g) Sill
    h) Utility H
    i) Standard H

6. Authorization

The Roof and Wall Panels are authorized for use in unheated additions, which may be an addition to a building of residential occupancy; all other requirements pertaining to the installation of the Four Season Roof and Wall Panels shall be subject to the requirements of the Building Code, and are subject to the following terms and conditions:

Note: If a conflict arises between the provisions of this authorization, or the manufacturer’s installation instruction, then the most restrictive provision shall apply.

A. Specific Terms & Condition

1. This authorization is valid only for Four Season Solar Products, LLC

2. The structural design and general review of the Roof and Wall Panels shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act*, (Ontario); the Professional Engineer shall provide the chief building official with documents certifying that the design and installation conforms with this authorization.

3. The structural system supporting the authorized Roof and Wall Panels shall have sufficient structural capacity as required by the Building Code.

4. The maximum allowable deflection of the Roof Panels as an expressed ratio of the clear span shall be L /180.

5. The use of the Roof and Wall Panels shall be limited to residential occupancy buildings that are subject to the requirements of Part 9 of the Building Code.

6. As the Roof and Wall Panels are used in unheated additions, the system need not meet the following Building Code requirements:

   (a) Subsection 9.25.2. “Thermal Insulation” and Section 9.38. “Thermal Design”,

   (b) Subsection 9.25.3. “Air Barrier Systems”, and

   (c) Subsection 9.25.4. “Vapour Barriers”.

7. The Roof and Wall Panels shall not be used where an assembly is required to have a fire resistance rating.

8. The Roof and Wall Panels shall be identified by a permanent stamp, sticker or mark indicating the manufacturer’s name or trademark.

9. If the Roof and Wall Panels incorporate an opening within the panel, or is modified to accommodate a penetration within the panel, then additional testing demonstrating that the modified roof and or wall panel conforms to the Building Code shall be submitted to the chief building official for review.

B. General Conditions

1. The use of the Roof and Wall Panels and as described in the specific terms and conditions set out in 6.A. must comply with the *Building Code Act, 1992* (the “Act”) as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6.A. above; or

(b) the occurrence of any of the events described in conditions 6.B.4.(a) and (b)(ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Part 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Act any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 27 day of July 2006.

BUILDING MATERIALS EVALUATION COMMISSION

Edward Link, P. Eng.
Vice-Chair, BMEC

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G 2E5
Tel: 416 585 - 4234 / Fax: 416 585 - 7531
www.obc.mah.gov.on.ca

Date of Authorization	June 29, 2006
BMEC Authorization	06-05-325
BMEC Application	# A2006-02

Authorization Report - Camino Modular Floor System: SC Series

1. Applicant

Camino Modular Systems Inc.
89 Carlingview Drive
Toronto, Ontario
M9W 5E4

Tel: 416 675-2400
Fax: 416 675-2424
Web: www.camino-access-floors.com

2. Manufacturing Facilities

89 Carlingview Drive
Toronto, Ontario
M9W 5E4

3. Description

The Camino Modular Floor System SC Series (the "Camino SC System") used in office type occupancies consist of a 600 mm x 600 mm panel (610 mm x 610 mm), which are made up of a nominal 25 mm thick high density composite core, encased with galvanized steel sheets that are structurally bonded with a thermosetting adhesive to both faces.

The panels are supported by adjustable steel pedestals. Each panel is bolted to the pedestals by means of a screw type fastener, or alternatively, for a computer room application, the panels are supported on four sides by a bolted stringer system.

A 0.607 mm thick gauge galvanized steel channel, nominally 15 mm x 12.7 mm x 600 mm, is attached in the field to any edge that is cut, ensuring that the Camino SC System core is not exposed.

4. Authorization requested

The applicant sought a Building Materials Evaluation Commission (BMEC) authorization for the Camino SC System as an equivalent to the requirements of Sentence 3.1.5.8.(2). "Combustible Flooring Elements" of the Building Code.

5. Assessment

Reports and assessments provided by the applicant show that if the Camino SC System is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this authorization, the level of performance required by the Building Code will be provided.

The following is a list of the documents submitted, and reviewed, but not limited to:

1. Bodycoat Materials Testing Canada Inc. “CAN/ULC-S102.2 Surface Burning Characteristics of Access Flooring System”“, report number 05-02-988, December 22, 2005.

2. Camino Modular Systems Quality Assurance, Section 10270.

3. Underwriters’ Laboratories of Canada, File R16957, “Report on the Floor Panels under the Listing Program”, dated September 7, 2005.

4. BMEC Authorization File #90-17-145.

5. Camino Modular Systems, Manufacturer’s Specifications:

    (a) Bolted Stringer System for Steel Clad Access Floor Panel,
    (b) Heavy Duty Bolted Stringer Systems for Steel Clad Access Floor Panel
    (c) Low Profile Pedestal
    (d) Cornerlock System for Steel Clad Access Floor Panel
    (e) Snap on Stringer System for Steel Clad Access Floor Panel

6. Camino Modular Systems, Manufacturer’s Drawings:

    (a) Bridging Detail
    (b) Plenum Divider
    (c) Wall Mounted Handrail
    (d) Floor Mounted Handrail
    (e) Standard Ramp

7. Manufacturer’s Literature “SC Series”

8. Report prepared by Leber Rubes “Access Floor Panel: Camino Modular Systems, Inc. SC1000 / 1250 / 1300 / 1500 / 2000”, dated March 14, 2006.

9. Test Results, Bodycote Materials Testing Canada, Inc. “CAN/ULC–S102.2 Surface Burning Characteristic of “Assess Flooring System””, dated December 22, 2005.

10. Letter Report prepared by Leber Rubes, file number 2005-643, dated April 25, 2006.

6. Authorization

The Camino SC System is authorized for use in noncombustible construction, as an access floor panel system, as required by Sentence 3.1.5.8.(2). “Combustible Flooring Elements” of the Building Code; all other requirements pertaining to the design, installation and construction are subject to the regulations of the Building Code, and to the following terms and conditions:

Note: If a conflict arises between the provisions of this authorization, or the manufacturer’s installation instruction, then the most restrictive provision shall apply.

A. Specific Terms & Condition

1. This authorization is valid only for the Camino Modular Systems, Inc.,

2. This authorization is valid only for Camino SC System model numbers SC 1000, SC 1250, SC 1300, SC 1500, and SC 2000.

3. The space under the Camino SC System shall not be used for storage.

4. The Camino SC System shall not be designed to carry a uniform live load greater than 16 kPa.

5. The subfloor, in which the Camino SC System will be installed, shall be sufficiently constructed or deemed sufficient to carry the load of the Camino SC System.

6. The Camino SC System shall be installed as per “Camino Modular Systems Quality Assurance, SC Series with High Density Composite Core, Section 10270".

7. The Camino SC System shall be installed on a noncombustible, floor slab or subfloor.

8. Fibre optic cables and electrical wires located in the space under the Camino SC System shall not be considered as being protected against exposure to fire.

9. Where the Camino SC System is cut during field installations the exposed edge shall be:

    a) substantially covered by an electrical devise box protruding through the floor panel,

    b) positioned to abut interior construction surfaces and separated from the underfloor space by a continuous steel support channel, and

    c) covered by an overlapping channel, having a nominal 25 gauge cold rolled G40 steel with a galvanized coating, which substantially covers the cut edge of the panel.

10. If the space below the Camino SC Floor System is used as a plenum, then:

    a) except for optical fibre cables, electrical wires, and cables, then all materials within that space shall have a flame-spread rating of not more than 25 and a smoke developed classification of not more than 50,

    b) optical fibre cables, electrical wires, and cables shall exhibit a flame spread not more than 1.5 m, a smoke density not more than 0.5 at peak optical density and a smoke density not more than 0.15 at average optical density when tested in conformance with the Flame and Smoke Test in the Appendix to CAN/CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables" (i.e., FT6 Rating), and

    c) in addition to being noncombustible, all metal supports shall have a melting point not below 760 C^0.

B. General Conditions

1. The use of the Camino SC System as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of

    (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

    (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        (i) the material, system or building design that is the subject matter of this Authorization;

        (ii) the address of the applicant specified in Part 1 of this Authorization; or,

        (iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system BMEC may, after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 29 day of June 2006.

BUILDING MATERIALS EVALUATION COMMISSION

Edward Link, P. Eng.
Vice-Chair, BMEC

Building Materials Evaluation Commission
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Toronto, Ontario, M5G 2E5
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Date of Authorization	June 29, 2006
BMEC Authorization	06-04-324
BMEC Application	# A2006-01

Authorization Report - Camino Modular Floor System: WC Series

1. Applicant

Camino Modular Systems Inc.
89 Carlingview Drive
Toronto, Ontario
M9W 5E4

Tel: 416 675-2400
Fax: 416 675-2424
Web: www.camino-access-floors.com

2. Manufacturing Facilities

89 Carlingview Drive
Toronto, Ontario
M9W 5E4

3. Description

The Camino Modular Floor System WC Series (the "Camino WC System") used in office type occupancies consist of a 600 mm x 600 mm panel (610 mm x 610 mm), which are made up of a nominal 25 mm thick high density composite core, encased with galvanized steel sheets that are structurally bonded with a thermosetting adhesive to both faces.

The panels are supported by adjustable steel pedestals. Each panel is bolted to the pedestals by means of a screw type fastener, or alternatively, for a computer room application, the panels are supported on four sides by a bolted stringer system.

A 0.607 mm thick gauge galvanized steel channel, nominally 15 mm x 12.7 mm x 600 mm, is attached in the field to any edge that is cut, ensuring that the Camino WC System core is not exposed.

4. Authorization requested

The applicant sought a Building Materials Evaluation Commission (BMEC) authorization for the Camino WC System as an equivalent to the requirements of Sentence 3.1.5.8.(2). "Combustible Flooring Elements" of the Building Code.

5. Assessment

Reports and assessments provided by the applicant show that if the Camino WC System is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this authorization, the level of performance required by the Building Code will be provided.

The following is a list of the documents submitted, and reviewed, but not limited to:

1. Bodycoat Materials Testing Canada Inc. “CAN/ULC-S102.2 Surface Burning Characteristics of Access Flooring System”“, report number 05-02-988, December 22, 2005.

2. Camino Modular Systems Quality Assurance, Section 10270.

3. Underwriters’ Laboratories of Canada, File R16957, “Report on the Floor Panels under the Listing Program”, dated September 7, 2005.

4. BMEC Authorization File #90-17-145.

5. Camino Modular Systems, Manufacturer’s Specifications:

    (a) Bolted Stringer System for Steel Clad Access Floor Panel,
    (b) Heavy Duty Bolted Stringer Systems for Steel Clad Access Floor Panel
    (c) Low Profile Pedestal
    (d) Cornerlock System for Steel Clad Access Floor Panel
    (e) Snap on Stringer System for Steel Clad Access Floor Panel

6. Camino Modular Systems, Manufacturer’s Drawings:

    (a) Bridging Detail
    (b) Plenum Divider
    (c) Wall Mounted Handrail
    (d) Floor Mounted Handrail
    (e) Standard Ramp

7. Manufacturer’s Literature “C Series”

8. Report prepared by Leber Rubes “Access Floor Panel: Camino Modular Systems, Inc. SC1000 / 1250 / 1300 / 1500 / 2000”, dated March 14, 2006.

9. Test Results, Bodycote Materials Testing Canada, Inc. “CAN/ULC–S102.2 Surface Burning Characteristic of “Assess Flooring System””, dated December 22, 2005.

10. Letter Report prepared by Leber Rubes, file number 2005-643, dated April 25, 2006.

6. Authorization

The Camino WC System is authorized for use in noncombustible construction, as an access floor panel system, as required by Sentence 3.1.5.8.(2). “Combustible Flooring Elements” of the Building Code; all other requirements pertaining to the design, installation and construction are subject to the regulations of the Building Code, and to the following terms and conditions:

Note: If a conflict arises between the provisions of this authorization, or the manufacturer’s installation instruction, then the most restrictive provision shall apply.

A. Specific Terms & Condition

1. This authorization is valid only for the Camino Modular Systems, Inc.,

2. This authorization is valid only for Camino WC System model numbers WC 1000, WC1250, and WC1500.

3. The space under the Camino WC System shall not be used for storage.

4. The Camino WC System shall not be designed to carry a uniform live load greater than 16 kPa.

5. The subfloor, in which the Camino WC System will be installed, shall be sufficiently constructed or deemed sufficient to carry the load of the Camino WC System.

6. The Camino WC System shall be installed as per “Camino Modular Systems Quality Assurance, WC Series with High Density Composite Core, Section 10270".

7. The Camino WC System shall be installed on a noncombustible, floor slab or subfloor.

8. Fibre optic cables and electrical wires located in the space under the Camino WC System shall not be considered as being protected against exposure to fire.

9. Where the Camino WC System is cut during field installations the exposed edge shall be:

    a) substantially covered by an electrical devise box protruding through the floor panel,

    b) positioned to abut interior construction surfaces and separated from the underfloor space by a continuous steel support channel, and

    c) covered by an overlapping channel, having a nominal 25 gauge cold rolled G40 steel with a galvanized coating, which substantially covers the cut edge of the panel.

10. If the space below the Camino WC Floor System is used as a plenum, then:

    a) except for optical fibre cables, electrical wires, and cables, then all materials within that space shall have a flame-spread rating of not more than 25 and a smoke developed classification of not more than 50,

    b) optical fibre cables, electrical wires, and cables shall exhibit a flame spread not more than 1.5 m, a smoke density not more than 0.5 at peak optical density and a smoke density not more than 0.15 at average optical density when tested in conformance with the Flame and Smoke Test in the Appendix to CAN/CSA C22.2 No. 0.3, "Test Methods for Electrical Wires and Cables" (i.e., FT6 Rating), and

    c) in addition to being noncombustible, all metal supports shall have a melting point not below 760 C^0.

B. General Conditions

1. The use of the Camino WC System as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of

    (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

    (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        (i) the material, system or building design that is the subject matter of this Authorization;

        (ii) the address of the applicant specified in Part 1 of this Authorization; or,

        (iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system BMEC may, after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 29 day of June 2006.

BUILDING MATERIALS EVALUATION COMMISSION

Edward Link, P. Eng.
Vice-Chair, BMEC

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G 2E5
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www.obc.mah.gov.on.ca

Date of Authorization	April 27, 2006
BMEC Authorization	06-03-323
BMEC Application	# A2005-22

Authorization Report - CanyonRock™

1. Applicant

GAF Material Corporation
1361 Alps Road
Wayne, New Jersey
07470, USA

Tel: 973 872-4355
Fax: 973 682-5964
Web: www.gaf.com

2. Manufacturing Facilities

ICOT Ceramic Co Ltd
Dalan Industry District
Guanyao, Nanhai

Foshan City, Guangdong, China

3. Description

The CanyonRock™ Premium Decorative Stone (CanyonRock™) is a manufactured cementitious product that is designed and cast to simulate the appearance of natural stone in both colour and texture. CanyonRock™ products are manufactured in various shapes and sizes with irregular surfaces, which mimic those of natural stone. CanyonRock™ is made from a mix of Portland cement, light weight aggregates, air entrainment, and other admixtures. The surface of the CanyonRock™ has a water repellant coating.

4. Authorization Requested

The applicant sought a Building Materials Evaluation Commission (BMEC) authorization for the CanyonRock™ as an interior wall finish for use as a building material similar to those listed in Article 3.1.13.1. “Interior Finish Description” and in Section 9.29. “Interior Wall and Ceiling Finishes” of the Building Code; or as an acceptable material for use around fireplace openings as permitted by Sentence 9.22.9.1.(1) “Clearance of Combustible Materials” of the Building Code.

5. Assessment

Reports and assessments provided by the applicant show that if CanyonRock™ System is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this authorization, the level of performance required by the Building Code will be provided.

The following is a list of the documents submitted, and reviewed, but are not limited to:

1. Test results ASTM C567 “Standard Test Method for Density of Structural Lightweight Concrete”.

2. Test results ASTM C67 “Standard Test Method Sampling and Testing Brick and Structural Clay Tile”.

3. Test results ASTM C39 “Standard Test Method for Compressive Strength in Cylindrical Concrete Specimens.”

4. Test results ASTM C348 “Standard Test Method for Flexural Strength of Hydraulic-Cement Mortars.”

5. Test results ASTM C190 “Standard Test Method for Tensile Strength of Hydraulic-Cement Mortars.”

6. Test results ASTM C482 “Standard Test Method for Bond Strength of Ceramic Tile to Portland Cement.”

7. Test results ASTM C1364 “Standard Specification for Architectural Cast Stone.”

8. Test results ASTM C518 “Standard Test Method for Steady State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.”

9. Test results, Design Pressures, DCBCCO TAS 202 (Negative pressure only).

10. Test results, Large Missile Impact Test, TAS 201 ASTM E1886 and ASTM E1996.

11. Test results, Cyclic Load Test, TAS 203, ASTM E1886 and ASTM E1996.

12. Test results, Underwriters Laboratories Inc. ASTM E84, UL 723.

13. Test results, Underwriters Laboratories Canada S102 “Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies”

14. Test results, Underwriters Laboratories Canada, Non Combustibility Test S114 “Standard Method of Fire Test for Determination of non-Combustibility in Building Materials .

15. Manufacturer's Literature.
16. CanyonRock™ Installation Instructions, copyright © 2005.

17. Installation Drawings ST101 and ST102, issued 06/01/05.

18. Quality Control Manual for CanyonRock™, dated June 2005.

19. Correspondence, Underwriters' Laboratories of Canada, File R22143, dated March 9, 2006.

6. Authorization

The use of the CanyonRock™ is authorized as an acceptable interior wall finish for use as a building material similar to those listed in Article 3.1.13.1. "Interior Finish Description" and Section 9.29. "Interior Wall and Ceiling Finishes" of the Building Code; or as an acceptable material for use around fireplace openings as permitted by Sentence 9.22.9.1.(1) "Clearance of Combustible Materials", all other requirements pertaining to the design, installation and construction are subject to the regulations of the Building Code, and to the following terms and conditions:

Note: Although this authorization is specific to the interior use of the CanyonRock™ it does not preclude the exterior use of this product, where an alternative approval is obtained.

A. Specific Terms & Conditions

1. This authorization is valid only for GAF Material Corporation.

2. Subject to the specific terms and conditions, the CanyonRock™ is permitted for use with interior wall applications.

3. The CanyonRock™ is permitted to be installed on vertical surfaces.

4. The material, design and installation shall be in accordance with CanyonRock™ Installation Instructions, copyright © 2005.

5. Subject to the approval of the chief building official, the building's structure shall be sufficiently supported to transfer the design weight of the CanyonRock™ assembly.

6. The CanyonRock™ shall not be load bearing.

7. The CanyonRock™ is considered to be noncombustible for the purposes of 9.22.9.1. “Clearance of Combustible Materials”, and permitted to be installed around fire place openings.

8. The CanyonRock™ shall not be installed in locations that are susceptible to moisture penetration, such as, but not limited to bathrooms, pools, or spa enclosures.

B. General Conditions

1. The use of CanyonRock™ as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 27 day of April 2006.

BUILDING MATERIALS EVALUATION COMMISSION

Edward Link, P. Eng.
Vice-Chair, BMEC

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G 2E5
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Date of Authorization	February 23, 2006
BMEC Authorization	06-02-322
BMEC Application	# A2005-23

Authorization Report - MaxLiner™ System

1. Applicant

MaxLiner™, LLC
450 College Drive
Martinsville, VA
24112, USA

Tel: 276 656-1225
Fax: 276 656-0419
Web: www.maxlinerusa.com

2. Manufacturing Facilities

450 College Drive
Martinsville, VA
24112, USA

3. Description

The MaxLiner™ Non-destructive Pipe Rehabilitation System (the "MaxLiner™ System") is intended for the rehabilitation of clay, poly vinyl chloride (PVC), and cast iron drainage pipes.

The MaxLiner™ System is an inversion system that allows the repair of drainage pipes by relining them in place. A custom designed liner tube made from either Max LinerTube™, Max FlexLiner™ or Max WovoLiner™, which is selected based on the existing pipe conditions, is impregnated with epoxy/resin, and is inverted through the existing pipes. The MaxLiner™ System may be installed by inserting the liner through basement drains, property line clean outs, small excavations, or roof drains.

The MaxLiner™ System can repair pipes from 75 mm (3") to 250 mm (10") in diameter, with lengths up to 60 m (200'), having a maximum bend up to 90^0.

Upon completion, the performance level of the restored pipe is not less than that which existed prior to the MaxLiner™ System being installed.

4. Authorization requested

The applicant sought a Building Materials Evaluation Commission (BMEC) authorization for the MaxLiner™ System as an alternative to repairing clay, PVC, and cast iron drainage pipes in existing buildings, as required by Article 7.1.2.2. “Alteration or Repair”, and Section 7.2. “Materials and Equipment” of the Building Code”, as amended or remade from time to time.

5. Assessment

Reports and assessments provided by the applicant show that if the MaxLiner™ System is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this authorization, the level of performance required by the Building Code will be provided.

The following is a list of the documents submitted, and reviewed, but are not limited to:

1. MaxLiner™ promotional DVD “Trench less Pipeline Rehabilitation”, May 2004.

2. MaxLiner™ “Liner Technical Data”.

3. MaxLiner™ “Specification for Lateral Relining Using the MaxLiner™ Systems”.

4. MaxLiner™ “Static Tests”, Deutsche Abwasser Reinigungs-Gesellschaft GmbH.

5. MaxLiner™ “Static Calculations”, Prof. Ing.-Buro Siebert, Hamburg, Deutsche Abwasser Reinigungs-Gesellschaft GmbH.

6. MaxLiner™ “Influence on Ground Water After Sealing Repair”, Ruhr-Universitat Bochum Prof. Ing.-Buro Siebert.

7. MaxLiner™ “Environmental Protection” Hygiene-Insitut Gelsenkirchen.

8. MaxLiner™ “Pressure Tests on Renovated Pipes”, Ruhr-Universitat Bochum Prof. Ing.-Buro Siebert.

9. MaxLiner™ “Mechanical and Chemical Resistence of Repaired Sewers”, Oesterreichisches Bauinstitut, Wein.

10. MaxLiner™ “Influence on Ground Water, Pressure Tests”, Hygiene-Insitut Gelsenkirchen.

11. MaxLiner™ “Stiffness and Elasticity”, Deutsche Abwasser Reinigungs-Gesellschaft GmbH.

12. MaxLiner™ “Quality Certification, Gutezeichen Kanalbau Gruppe S”, Guegemeinschaft.

13. MaxLiner™ “Hamburger Test, Abrasion Test”, Prof. Ing.-Buro Siebert, Hamburg.

14. NSF International “MaxLiner” Listing, May 2002, July 2003

15. IAPMO Research and Testing, Inc. “Certificate of Listing, October 2005.

16. Approval, Report No. 04-218, State of Rhode Island and Providence Plantations.

17. Approval, Case No. 1102-03, City of Philadelphia.

18. Approval, Commonwealth of Massachusetts.

19. Approval, No 1515-PA, Michigan Department of Consumer & Industry Services.

20. MaxLiner™ “Installation Responsibilities and Procedures” 2001 manual.

21. MaxLiner™ “Maintenance Instructions for the Max LinerGun™”.

22. MaxLiner™ “Recommendation for the Safe and Hygienic Use of Epoxy Products”.

23. MaxLiner™ “Curing Log”

24. MaxLiner™ “Checklist for Renovation of Residential Lateral Using the MaxLiner™ System.”

25. MaxLiner™ “Quality Assurance Manual for MaxLiner™, LLC”, issued 09-23-2000.

26. Manufacturer’s Marketing Literature.

27. “Specification for Lateral Reconstruction of Sanitary Sewers by MaxLiner”

28. “Structural Calculation Inliner Type: RS HouseLiner, DN 150, 250", June 2001, Prof. Ing.-Buro Siebert.

29. Certificate “Development, Manufacture, and Distribution of Woolen Felts and Needled Felts for All Application in Industry, Production and Commerce”, December 2000.

30. Certificate, Vantico Ltd, CH-4002 Basel, registration number 10652-03, December 22, 2001.

6. Authorization

The use of the MaxLiner™ System is authorized as an alternative to repairing clay, PVC, and cast iron drainage pipes in existing buildings as required by Article 7.1.2.2. "Alteration or Repair", and Section 7.2. "Materials and Equipment" of the Building Code; all other requirements pertaining to the design, installation and construction are subject to the regulations of the Building Code, and to the following terms and conditions:

A. Specific Terms & Conditions

1. This authorization is valid only for MaxLiner™, LLC.

2. The MaxLiner™ System shall be installed by installers who are trained and approved by MaxLiner™, LLC.

3. The MaxLiner™ System may be used in single drainage pipe segments up to 60 m (200') in length.

4. The MaxLiner™ System may be used in pipes with bends up to 90 degrees.

5. Except as permitted in 6.A.6. of this authorization, the MaxLiner™ System shall only be used in pipe of 100 mm (4") to 200 mm (8") in diameter, having no side connection less than 100 mm (4") or greater than 200 mm (8") in diameter.

6. The MaxLiner™ System is permitted to be used in pipe of 75 mm (3"), and 250 mm (10") in diameter where there are no side connections.

7. The MaxLiner™ System shall not be installed in pipe that penetrates a fire separation.

8. The MaxLiner™ System shall not be used in a water supply system.

9. Materials, design and installation shall be in accordance with:

   (a) "Specification for Lateral Reconstruction of Sanitary Sewers by MaxLiner™, and

   (b) "Checklist for Renovation of Residential Lateral Using the MaxLiner™ System".

10. The MaxLiner™ System shall include a warranty certificate.

11. Non-removable stickers or labels, recording the following information, shall be posted in conspicuous locations at the cleanout(s) nearest to the repaired pipes:

(a) identifying MaxLiner™ System has treated the pipe(s),

(b) MaxLiner™ contact information,

©) a warning that the pipe has been coated with a liner, and

(d) a warning not to torch, not to solder, and to use pressure fittings only.

B. General Conditions

1. The use of the MaxLiner™ System as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

(b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(I) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Part 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(I) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

©) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 23 day of February 2006.

BUILDING MATERIALS EVALUATION COMMISSION

_____

Edward Link, P.Eng.
Vice-Chair, BMEC

Building Materials Evaluation Commission
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Date of Authorization	January 26, 2006
BMEC Authorization	# 06-01-321
BMEC Application	# A2005-21

Authorization Report: Store-Rite Shelf and Rack Storage System

1. Applicant

Store-Rite Systems Inc.
6908 Invader Crescent
Mississauga, Ontario
L5T 2B5

Tel: 905 670 5121
Fax: 905 670 5920
Web: www.stor-rite.com

2. Manufacturing Facilities

Store-Rite Systems Inc.
6908 Invader Crescent
Mississauga, Ontario
L5T 2B5

3. Description

The Store-Rite shelf and rack storage system (the "shelf and rack storage system") is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the Building Code, as amended or remade from time to time and are not subject to mezzanine or interconnected floor space rules.

4. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

5. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Building Code.

6. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for

Use and Occupancy

2.1 Except as where more restrictively provided for in 3.4. and 3.5. of this authorization, the shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III and IV commodities as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions; where the shelf and storage system incorporates the storage of rubber tires, such storage shall conform to the requirements of Subsection 3.3.1. “Indoor Tire Storage” of the Ontario Fire Code, Ontario Regulation 338/97, as amended or remade from time to time (the “OFC”),

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Building Code.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the OFC.

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be of noncombustible construction, and be designed in accordance with Part 4 of the Building Code.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) (i) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(ii) open construction consisting of steel grating or open steel floor planking.

(b) Deck and walkway levels in a structure used for the storage of Group A, B, and C plastic, as defined in NFPA 13-1999, and rubber tires, shall be constructed of steel decking as required in (a) (i) above.

3.4 The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m except that where the maximum height exceeds 18 m but does not exceed 24 m, the following provisions shall apply:

(a) a fire alarm system shall be installed with:

(i) pull stations located at all exit doors including exit doors serving elevated decks and walkways; and

(ii) smoke detectors located, at the ceiling of all rooms and areas containing the shelf and rack system, within exit stair enclosures at the top, and at every third level of elevated deck or walkway; and

(b) the fire alarm system required by (a) above, shall be designed to notify the fire department upon activation; and

(c) the shelf and rack storage system shall be used only for the storage of Class I, II, III and IV commodities as defined in NFPA 13 -1999 as amended.

3.5 Where Class I, II, I II and IV commodities and Group A, B, C, plastics and rubber tires as defined in NFPA 13-1999 are stored, the maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 7 m.

3.6 Lighting levels of walkways and platforms shall conform to the Building Code.

3.7 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2). and 3.2.7.4.(1). respectively of the Building Code.

3.8 Guards and toe boards shall be installed in accordance with the Building Code.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs 4.3 and 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA 71-1998, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA 72-1990, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph 2.1, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 -1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the Building Code.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the OFC.

4.10. Regardless of the occupant load, the requirements of Section 2.8 “Emergency Planning” of the OFC shall apply.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Building Code except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than four platform levels, the highest of which may not be more than 12 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m^2 in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m:

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a “time-based egress analysis” undertaken and sealed by a Professional Engineer or Architect as defined in the Building Code using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time.

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where:

H_p = Horizontal travel distance on the shelf and rack storage (m)
V_p = Vertical travel distance on the shelf and rack storage (m)
H_m = Horizontal travel distance on the main floor (m)
N_{lg} = Number of lift gates in the means of egress
N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2) of the Building Code, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a “positive lock” when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the Fire Safety Plan, as required by 4.10. of this Authorization, shall mark the lift gates such that they are readily identifiable as part of the egress route.

5.8 Where ‘at-level’ conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two ‘at-level’ conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the ‘at-level’ cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each ‘at-level’ conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the ‘at-level’ cross-over and all inserts shall be sized to support loads required in Part 4 of the Building Code,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each ‘at-level’ cross-over, and

(e) stairs approaching ‘at-level’ conveyor cross-overs shall be marked in accordance with the Fire Safety Plan, as required by 4.10 of this Authorization, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the Store-Rite shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (BCA) and, except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the terms and conditions set out in Section A. above; or

(b) the occurrence of any of the events described in Sections B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this authorization; or,

      (iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section A 1.1 of this authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section A. above; or

   (d) any Building Code provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 26 day of January 2006.

BUILDING MATERIALS EVALUATION COMMISSION

_____

Douglas Joy
Acting Chair, Building Materials Evaluation Commission

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
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Date of Authorization	November 24, 2005
BMEC Authorization	# 05-16-320
BMEC Application	# A2005-12

AUTHORIZATION REPORT - Calhoun Super Structure Membranes

1. Applicant

Calhoun Super Structure Ltd.
RR#2, Box 129
Chesley, Ontario
N0G 1L0

Tel: (519) 363-3037
Fax: (519) 363-2354
Web: www.calhoun.on.ca

2. Manufacturing Facilities

Calhoun Super Structure Ltd.
RR#2, Box 129
Chesley, Ontario
N0G 1L0

Fabrene Inc.
240 Dupont Road
North Bay, Ontario, P1B 5G6

Akita Covers
14625-122nd Avenue
Edmonton, Alberta, T5L 2W4

3. Description

The Calhoun Super Structure Building System is a non pressurized building, wherein the structure is composed of a steel framework to support the Calhoun Super Structure Membranes, which are tensioned to provide a weather barrier.

The steel frame structure of the Calhoun Super Structure Building System shall be designed and constructed in accordance with the Building Code. The steel framework is a series of in-line clear span frames, with or without end walls. The frame pieces are modular and are used in different arrangements to make a variety of profiles.

The Calhoun Super Structure Membranes are made of Fabrene RTGSW9W9 and Fabrene P708. The Calhoun Super Structure Membranes pieces are custom-sized and the edges reinforced for each building as per Calhoun Super Structure building system specifications.

The Calhoun Super Structure Membranes meet the requirements of a Class A material under ASTM E 84 Surface Burning Characteristics and satisfies the flammability requirements set out in CAN/ULC-S109 and NFPA 701-1999.

4. Authorization requested

The Applicant sought a Building Materials Evaluation Commission (the "BMEC") Authorization for the Calhoun Super Structure Membranes for use as roof coverings, only when used in conjunction with an unheated Calhoun Super Structure Building System, as defined in this Authorization, in lieu of the requirements of Sentence 3.1.15.1.(1). "Roof Covering Classification" of the Building Code.

5. Assessment

Reports and assessments provided by the Applicant show that if the Calhoun Super Structure Membranes are designed, performance tested and installed in accordance with the limitations in the manufacturer's instructions, and the specific terms and conditions stated in this Authorization, the level of performance required by the Building Code will be provided.

The reports submitted and reviewed included, but were not limited to:

1. Bodycote Materials Testing Canada Inc. "NFPA 701-1999 Test 1 and Test 2 Flame Resistant Test of Woven Polyethylene Fabric", dated January 14, 2002.

2. Bodycote Materials Testing Canada Inc. "NFPA 701-2004 Test Method 2 - Flame Propagation of "RTGSW9W9" dated July 11, 2005.

3. Bodycote Materials Testing Canada Inc. "CAN/ULC-S109 Flame Resistant Test of Woven Polyethylene Fabric", dated January 14, 2002.

4. Bodycote Materials Testing Canada Inc. "ASTM E 84 Surface Burning Characteristics of 'Product P7081830' Woven Polyolefin" dated August 24, 2004.

5. Bodycote Materials Testing Canada Inc. "CAN/ULC-S102.2 Surface Burning Characteristics of 'Product P7081830' Woven Polyolefin'" dated August 24, 2004.

6. Intertek "CAN/ULC-S102.2-03 Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials and Assemblies" dated July 7, 2005.

7. Bodycote Materials Testing Canada Inc."California Administrative Code Tile 19 Fire Resistance of 'P7081830' Woven Polyolefin.

8. Bodycote Materials Testing Canada Inc. "NFPA 701-1989 Large Scale Flame Resistance of M747 Woven Polyethylene Fabric", dated February 10, 2000.

9. Bodycote Materials Testing Canada Inc. "CAN/ULC-S109 Large-Flame Resistance of M747 Woven Polyethylene Fabric" dated February 10, 2000.

10. Bodycote Materials Testing Canada Inc. “ASTM E 84 Surface Burning Characteristics of Fabrene ‘M747' fabric” dated April 19, 2000.

11. Bodycote Materials Testing Canada Inc. “CAN/ULC-S102.2 Surface Burning Characteristics of Fabrene ‘M747' fabric” dated November 16, 2001.

12. Fabrene industrial Synthetic Fabric, Type P708 Specification Sheet and Fabrene Industrial Synthetic Fabric Type RTGSW9W9 (formerly M747) Specifications Sheets.

13. Canadian Commission on Building and Fire Code “Faxes Messages re: Fabric Covered Buildings for Cover-All Building Systems” dated February 15, 2002.

14. Proposed Change to the National Building Code (NBC) Document Application, by MSMA (Membrane Structures Manufactures Association), proposing a change to the NBC 1995 Article 3.1.15. “Roof Covering”.

15. Canadian General Standards Board “Certificate of Registration for Fabrene Inc. ISO 9001 - 2000", dated 2003/10/22.

16. Canadian Welding Bureau “Letter of Validation for Wellington manufacturing Inc.”, dated March 2, 2004 to March 2, 2006 and Steel Specifications Sheets for the Supporting Steels Frames.

17. Calhoun Super Structures Ltd. “Cover Letter and Site Specific Drawings for Susan Robinson Hay and Equipment Shed in Oshawa, Ontario” dated August 25, 2005.

18. Fabrene Quality Control Manual, dated 2003-06-04.

19. Akita Covers Ltd. Product Manual.

20. Calhoun Super Structure Manuals.

21. Calhoun Super Structure Engineer Reports.

6. Authorization

The Calhoun Super Structure Membranes are authorized for use as a roof coverings, only when used in conjunction with an unheated Calhoun Super Structure Building System, in lieu of the requirements of Sentence 3.1.15.1.(1) “Roof Covering Classification” of the Building Code; all other requirements pertaining to the installation and construction are subject to the requirements of the Building Code, and are subject to the following terms and conditions:

Note: This Authorization is not intended to be used as an equivalent to CAN/ULC-S107-M87 where roof coverings are permitted to be used in the construction of traditional roofing systems Class A, B, and C as determined by CAN/ULC-S107-M87.

A. Specific Terms & Conditions

1. This Authorization is valid only for the use of the Calhoun Super Structure Membranes, Fabrene RTGSW9W9 and Fabrene P708 when they are used in conjunction with a Calhoun Super Structure Building System.

2. In addition to the requirements of Article 2.3.1.1. of the Building Code, the structural design shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act*, (Ontario) and who is experienced in the specific method applied.

3. When the Calhoun Super Structure Membranes are installed in conjunction with a Calhoun Super Structure Building System together they shall be constructed as per the requirements of Subsection 3.2.2. of the Building Code.

4. The Calhoun Super Structure Membranes used in the construction of Calhoun Super Structure Building System must be designed as structural members for snow and wind loads in accordance with the Building Code.

5. When the Calhoun Super Structure Membranes, used in the construction of a Calhoun Super Structure Building System, are designed without an end wall(s) additional wind loads shall be considered, such as internal pressure.

6. The Calhoun Super Structure Membranes are authorized for use only in buildings that are permitted to be of combustible construction.

7. Except as permitted by Article 3.2.2.17. of the Building Code, the Calhoun Super Structure Membranes shall not be used where the assembly is required to have a fire-resistance rating.

8. The Calhoun Super Structure Membranes are authorized for use in unheated building applications, when the Calhoun Super Structure Membranes are used in conjunction with a Calhoun Super Structure Building System.

9. The requirements of Article 2.1.1.11. of the Building Code need not be considered, when the Calhoun Super Structure Membranes are used in the construction of the Calhoun Super Structure Building System, for buildings that consumes energy at a rate less than 3.5 Btu/h•ft^2 under peak conditions.

10. The Calhoun Super Structure Membranes shall not be used in a building more than 1 storey in building height.

11. The Calhoun Super Structure Membranes shall not be used in the construction of Calhoun Super Structure Building System where the major occupancy is Group A, B, C, D, E or F Division 1, as defined by the Building Code.

12. The Calhoun Super Structure Membranes shall meet the following standards:

    a. CAN/ULC-S109-M87 "Standard for Flame Test of Flame-Resistant Fabrics and Films",

    b. NFPA 701-1999 or NFPA 701-2004 "Methods of Fire Test for Flame Propagation of Textiles and Films" Test 2, and

    c. CAN/ULC-S102.2-M2003 "Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials and Assemblies."

13. The Calhoun Super Structure Membranes shall not have a flame spread rating more than 25, as specified in CAN/ULC-S102.2-M2003.

14. The Calhoun Super Structure Membranes shall be installed by installers who are approved by Calhoun Super Structure Ltd.

15. The Calhoun Super Structure Membranes shall be installed as per the Calhoun Super Structure Building System Installation Manuals, and are subject to the products' limitations as specified by the manufacturer.

16. The Calhoun Super Structure Membranes shall be identified by a permanent mark that indicates the manufacturer's name and registered trademark.

17. The Calhoun Super Structure Membranes used in the construction of Calhoun Super Structure Building System, shall have the spatial separation determined in accordance with the Building Code, where the roof membrane becomes a part of the exposing building face.

B. General Conditions

1. The use of the Calhoun Super Structure Membranes must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

   (d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 24 day of November 2005.

BUILDING MATERIALS EVALUATION COMMISSION

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Edward Link, P.Eng.
Vice-Chair, BMEC

Building Materials Evaluation Commission
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Toronto, Ontario, M5G2E5
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Date of Authorization	November 24, 2005
BMEC Authorization	# 05-15-319
BMEC Application	# A2005-11

AUTHORIZATION REPORT- Temo Roof Panels

1. Applicant

Temo Inc.
20400 Hall Road
Clinton Township, Michigan
USA, 48038

Tel: (586) 286-0410
Fax: (586) 226-1706
Web: www.temosunrooms.com

2. Manufacturing Facilities

Temo, Inc.
20400 Hall Road
Clinton Township, Michigan
USA, 48038

3. Description

The Temo Roof Panels may be used in the construction of unheated sunroom additions to residential occupancy buildings. The Temo Roof Panels were evaluated only as roof panels, and not as a decking surface.

TEMO ROOF PANELS			
Components	**Panel Size**		
	76 mm (3") panel	**108 mm (4.25") panel**	**153 mm (6") panel**
Aluminum	0.81 mm	0.81 mm	0.81 mm
OSB (top)	11.11 mm	11.11 mm	11.11 mm
Polystyrene Foam	76.2 mm	107.95	152.4 mm
OSB (bottom)	11.11 mm or 22.22 mm	11.11 mm or 22.22 mm	11.11 mm or 22.22 mm
Aluminum	0.81 mm	0.81 mm	0.81 mm
Adhesive Type	Ashland, or Rohm and Haas Note 1.	Ashland or Rohm and Haas Note 1.	Ashland, or Rohm and Haas Note 1.
Deflection Criteria	L/180	L/180	L/180

Note 1. The choice of adhesive may determine the span length of the panel.

The Temo Roof Panel components are laminated together using structural adhesives from either Ashland, or Rohm and Haas. The choice of adhesive may determine the span length of the panel. A solid wood member, 38 mm (2") wide and with a height cut-to-fit, extends around the perimeter of the Temo Roof Panels.

The Temo Roof Panels include a standing seam, also known as a metal cleat, to prevent water infiltration, and to maintain a continuous thermal barrier. In addition, the Temo Roof Panels may incorporate the use of a spline, to provide support.

4. Authorization requested

The Applicant sought a Building Materials Evaluation Commission (the "BMEC") Authorization for the use of the Temo Roof Panels for an unheated sunroom, which may be an addition to a residential occupancy building that are subject to the requirements of Part 9 of the Building Code.

5. Assessment

Reports and assessments provided by the Applicant show that if the Temo Roof Panels are designed, performance tested and installed in accordance with the limitations in the manufacturer's instructions, and the specific terms and conditions stated in this Authorization, the level of performance required by the Building Code will be provided.

The reports submitted, and reviewed, but were not limited to:

1. International Conference of Building Officials Evaluation Services "Quality Control and Procedural Manual for Foam Core Patio Roof and Wall Panels", TEMO, dated January 1, 2000.

2. Terrapin Testing Inc,, Report Number TT 59926-A, TEMO, Inc. "Sandwich Panel Tests, Patio Roof Panels", dated October 3, 2000.

3. TJC and Associates, Inc., Report Number TTJCAA 59926-A, TEMO, Inc. "Engineering Analysis of Patio Roof Panels", dated October 3, 2000.

4. Terrapin Testing Inc., Report Number TT 59926-B, TEMO, Inc. "Sandwich Panel Tests, Patio Roof Panels", dated October 3, 2000.

5. Terrapin Testing Inc., Report Number TT 50218-G, TEMO, Inc. "Sandwich Panel Tests, Patio Roof Panels", dated December 17, 2002.

6. TJC and Associates, Inc. Report Number TJCAA 50218-G TEMO, Inc. "Engineering Analysis of Patio Roof Panels", dated December 17, 2002.

7. Terrapin Testing Inc., Report Number TT 50218-H, TEMO, Inc. "Sandwich Panel Tests, Patio Roof Panels", dated December 17, 2002.

8. TJC and Associates, Inc. Report Number TJCAA 50218-H TEMO, Inc. “Engineering Analysis of Patio Roof Panels”, dated December 17, 2002.

9. TJC and Associates, Inc. Report Number TJCAA 59967-B TEMO, Inc. “Engineering Analysis of Patio Roof Panels”, dated October 3, 2000.

10. ES Report™ ESR-1023, issued March 1, 2004.

11. ES Report™ ESR-1140, issued January 1, 2004.

12. Hannigan Engineering Limited, Letter Report re: Structural Review for Sandwich Panels for TEMO’s Sunroom, Project Number S5076, dated July 6, 2005.

13. Shop Drawings, Typical Installers Layout Sketches, dated June 28, 2005.

14. C.I. Professional Services, Test Report for TEMO, Report No. 97-C.I-361., dated January 17, 1997.

15. TECO, PFS Test Report #94-70 “Transverse Load, Density of Core Material and Tensile Load Tests”, For TEMO, Inc. dated February 28, 1995.

16. TECO, PFS Test Report #95-63 “Transverse Load, Density of Core Material and Tensile Load Tests”, For TEMO, Inc. dated January 1, 1996.

17. TECO, PFS Test Report #95-66 “Transverse Load Tests, For TEMO, Inc. dated January 22, 1995.

18. TECO, PFS Test Report #95-75 “Transverse Load, Density of Core Material, Tensile Load Tests, Metal Tension and Concentrated Load Tests”, For TEMO, Inc. dated January 22, 1996.

19. Underwriter Laboratories Inc., File R15225, Project 94NK11688, dated June 14, 1994.

20. ICBO Evaluation Service, Inc., TEMO Evaluation Report PFC-5176, dated June 1, 1998.

21. Omega Point Laboratories, Project Number 15274-112390 “UBC 26-3: Room Fire Test Standard For Interior of Foam Plastic Systems”, dated October 22, 2002.

22. Omega Point Laboratories, Project Number 15274-112390 “UBC 26-3: (Formerly UBC 17-5) Room Fire Test Standard For Interior of Foam Plastic Systems”, dated May 3, 1996.

23. Omega Point Laboratories, Report Number 15274-112432, ASTM E84-00a “Surface Burning Characteristics” dated October 16, 2002.

24. Omega Point Laboratories, Report Number 15274-100222, ASTM D1929 “Ignition Properties of Plastics” dated July 15, 1996.

25. Temo Roof Span Charts, dated March 13, 2005.

26. Temo Roof Span Charts, dated October 14, 2005.

27. Temo Roof Span Maximum Charts, dated November 11, 2005.

28. Intertek Testing Services, Report Number 3084194 “Standard Fire Test Program conducted on Two Composite Panels” dated October 6, 2005.

29. Terrapin Testing Inc., Report Number TT 50504-C, TEMO, Inc. “Laminate Sandwich Panel Tests Patio Roof Panels”, September 2, 2005.

30. Temo Sunrooms Inc. “Span Calculations: 76 mm panel, 108 mm panel, and 153 mm panel” dated November 1, 2005.

6. Authorization

The Temo Roof Panels are authorized for use as an innovative roof system designed for use in unheated sunrooms, which may be in an addition to a building of residential occupancy; all other requirements pertaining to the installation of the Temo Roof Panels shall be subject to the requirements of the Building Code, and are subject to the following terms and conditions.

A. Specific Terms & Conditions

1. This authorization is valid only for Temo Sunrooms Inc.

2. The structural design and general review of the Temo Roof Panels shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act*, (Ontario); the Professional Engineer shall provide the chief building official with a document certifying that the installation conforms with this authorization.

3. The structural system supporting the authorized Temo Roof Panels shall have sufficient structural capacity as required by the Building Code.

4. The maximum allowable deflection of the Temo Roof Panels as an expressed ratio of the clear span shall be L/180.

5. As the Temo Roof Panels are used in unheated sunroom additions, the system need not meet the following Building Code requirements:

   (a) Subsection 9.25.2. “Thermal Insulation”, and Section 9.38. “Thermal Design”,

   (b) Subsection 9.25.3. “Air Barrier Systems”, and

   (c) Subsection 9.25.4. “Vapour Barriers”.

6. The use of the Temo Roof Panels shall be limited to residential occupancy buildings that are subject to the requirements of Part 9 of the Building Code.

7. The Temo Roof Panels shall not be used where the roof assembly is required to have a fire resistance rating.

8. The Temo Roof Panels shall incorporate the use of a metal cleat on the interior and the exterior side, having a minimum thickness of 0.38 mm (0.015").

9. The Temo Roof Panels shall be identified by a permanent stamp, sticker or mark indicating the manufacturer’s name or trademark.

10. If the Temo Roof Panels incorporate an opening within the panel, or is modified to accommodate a penetration within the panel, then additional testing demonstrating that the modified roof panel conforms to the Building Code shall be submitted to the chief building official for review.

B. GENERAL CONDITIONS

1. The use of the Temo Roof Panels must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (BCA) and, except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the terms and conditions set out in Section A. above; or

   (b) the occurrence of any of the events described in Sections B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this authorization; or,

      (iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section A 1.1 of this authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section A. above; or

   (d) any Building Code provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 24 day of November 2005.

BUILDING MATERIALS EVALUATION COMMISSION

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Edward Link, P.Eng.
Vice-Chair, BMEC

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
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Date of Authorization	November 24, 2005
BMEC Authorization	# 05-14-318
BMEC Application	# A2005-08

AUTHORIZATION REPORT- The PowerShield Membranes

1. Applicant

Harnois Industries Inc.
1044 Principale St-Thomas
(Joliette), QC
J0K 3L0

Tel: (450) 756-1041
Fax: (450) 756-8389
Web: www.harnois.com

2. Manufacturing Facilities

Harnois Industries Inc.
1044 Principale St-Thomas
(Joliette), QC
J0K 3L0

Fabrene Inc.
240 Dupont Road
P.O Box 4040
North Bay, Ontario
P1B 5G6

3. Description

The Harnois MegaDome Building System is a non pressurized building, wherein the structure is composed of a steel framework to support the PowerShield Membranes, which are tensioned to provide a weather barrier.

The steel framework is a series of in-line clear span frames, with or without end walls. The frame pieces are modular and are used in different arrangements to make a variety of profiles. The steel frame structure of the Harnois MegaDome Building System shall be designed and constructed in accordance with the Building Code.

The PowerShield Membranes are made of a flame resistant woven polyolefin material: Fabrene M747, or Fabrene Type RTGSW9W9. The PowerShield Membranes pieces are custom-sized and the edges reinforced for each building as per Harnois Industries Inc. specifications.

The PowerShield Membranes meet the requirements of a Class A material under ASTM E 84 Surface Burning Characteristics and satisfies the flammability requirements set out in CAN/ULC-S109 and NFPA 701-2004.

4. Authorization requested

The Applicant sought a Building Materials Evaluation Commission (the "BMEC") Authorization for the PowerShield Membranes for use as a roof covering, only when used in conjunction with an unheated Harnois MegaDome Building System, as defined in this Authorization, in lieu of the requirements of Sentence 3.1.15.1.(1). "Roof Covering Classification" of the Building Code.

5. Assessment

Reports and assessments provided by the Applicant show that if the PowerShield Membranes are designed, performance tested and installed in accordance with the limitations in the manufacturer's instructions, and the specific terms and conditions stated in this Authorization, the level of performance required by the Building Code will be provided.

The reports submitted and reviewed, but were not limited to:

1. Manufacturer's Information, Harnois MegaDome Building System.
2. Harnois MegaDome Building System PowerShield Designation.
3. Harnois MegaDome Building System Polyethylene and Polyefin Designation.
4. Harnois MegaDome Building System Snow Accumulation .
5. Les Industries Harnois QC, Canada "Physical Test on Fabrene Material".
6. Harnois MegaDome BMEC "Non Conformity Report".
7. NFPA 101 "Life Safety Code" Section 11.9.
8. NFPA 5000 "Building Construction and Safety Code™", Chapter 32, 2003 edition.
9. "International Building Code" Chapter 31, 2003 edition.
10. "The BOCA National Building Code" Section 3103.0., 1999 edition.
11. "Standard Building Code©" Chapter 31, 1997 edition.
12. "Uniform Building Code™" Volume 1, Section 3111, 1997 edition.
13. Harnois MegaDome Building System "Compliance with Part 5".
14. Bodycote Test Results CAN/ULC-S109 "Large-Flame Resistence of M747 Woven Polyethylene".

15. Bodycote Test Results CAN/ULC-S102 “Surface Burning Characteristics of M747".

16. Bodycote “ASTM E 84 Surface Burning Characteristics of Fabrene “M747" Fabric”.

17. Harnois Mega Dome Building System “Calculations”.

18. Letter of Validation, Canadian Welding Bureau.

19. Harnois MegaDome Building System “Quality Control”.

20. Harnois MegaDome Building System, Harnois R&D’ Dept.” Testing.

21. Manufacturer’s Information “GatorShield Tough”.

22. ASTM Designation A653/ A653M - 99 “Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process”.

23. Harnois “Steel Structure Warranty Certificate”.

24. Harnois “Poly PowerShield Warranty Certificate”.

25. Demo Booklet of Structural Engineering Calculations for Structures Used for Industrial Purposes”.

26. Demo Booklet of Structural Engineering Calculations for Structures Used for Agricultural Purposes.

27. Manual For SAFI 3D Structural Software Program.

28. Bodycote Materials Testing Canada Inc. NFPA 701-2004, July 11, 2005.

29. Harnois Engineer’s Letter, dated May 18, 2005.

30. Intertek Flame Spreads Test Program, CAN/ULC-S102.2-03, Report Number 3079762, July 15, 2005.

31. Harnois Engineer’s Letter, dated October 18, 2005.

32. Harnois MegaDome’s Worksheet, submitted October 18, 2005.

33. Harnois MegaDome HP-30 @ 4-0" “Demo Booklet”, submitted October 18, 2005.

34. Harnois MegaDome HP-80 @ 8-0" “Demo Booklet”, submitted October 18, 2005.

35. Example / Sample Calculations:

(a) Agricultural Application
(b) Megadome 125
(c) Stoneledge Farm
(d) Industrial Cold Storage Application
(e) Regina Equestrian Centre
(f) Megadome 125 - wind on end

6. Authorization

The PowerShield Membranes are authorized for use as roof coverings, only when used in conjunction with an unheated Harnois MegaDome Building System, in lieu of the requirements of Sentence 3.1.15.1.(1) "Roof Covering Classification" of the Building Code; all other requirements pertaining to the installation and construction are subject to the requirements of the Building Code, and are subject to the following terms and conditions:

Note: This Authorization is not intended to be used as an equivalent to CAN/ULC-S107-M87 where roof coverings are permitted to be used in the construction of traditional roofing systems Class A, B, and C as determined by CAN/ULC-S107-M87.

A. Specific Terms & Conditions

1. This Authorization is valid only for the use of the PowerShield Membranes, Fabrene M747, or Fabrene Type RTGSW9W9, when they are used in conjunction with a Harnois Mega Dome Building System.

2. In addition to the requirements of Article 2.3.1.1. of the Building Code, the structural design shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act*, (Ontario) and who is experienced in the specific method applied.

3. When the PowerShield Membranes are installed in conjunction with a Harnois MegaDome Building System together they shall be constructed as per the requirements of Subsection 3.2.2. of the Building Code.

4. The PowerShield Membranes used in the construction of a Harnois MegaDome Building System must be designed as structural members for snow and wind loads in accordance with the Building Code.

5. When the PowerShield Membranes, used in the construction of a Harnois MegaDome Building System, are designed without an end wall(s) additional wind loads shall be considered, such as internal pressure.

6. The PowerShield Membranes are authorized for use only in buildings that are permitted to be of combustible construction.

7. Except as permitted by Article 3.2.2.17. of the Building Code, the PowerShield Membranes shall not be used where the assembly is required to have a fire-resistance rating.

8. The PowerShield Membranes are authorized for use in unheated building applications, when the PowerShield Membranes are used in conjunction with the Harnois MegaDome Building System.

9. When the PowerShield Membranes are used in the construction of Harnois MegaDome Building System, which consumes energy at a rate less than 3.5 $Btu/h \bullet ft^2$ under peak conditions, the requirements of Article 2.1.1.11. of the Building Code need not be considered.

10. The PowerShield Membranes shall not be used in a building more than 1 storey in building height.

11. The PowerShield Membranes shall not be used in the construction of Harnois MegaDome Building System where the major occupancy is Group A1, A2, B, C, D, E or F Division 1, as defined by the Building Code.

12. The PowerShield Membranes shall meet the following standards:

    a. CAN/ULC-S109-M87 “Standard for Flame Test of Flame-Resistant Fabrics and Films”,

    b. NFPA 701-2004 “Methods of Fire Tests for Flame Propagation of Textiles and Films” Test 2, and

    c. CAN/ULC-S102.2-03 “Standard Test Method for Surface Burning Characteristics of Building Materials.”

13. The PowerShield Membranes shall not have a flame spread rating more than 25, as specified in CAN/ULC-S102.2-M2003.

14. The PowerShield Membranes shall be installed by installers who are approved by Les Industries Harnois Inc.

15. The PowerShield Membranes shall be installed as per the Harnois MegaDome Building Installation Manuals, and are subject to the products’ limitations as specified by the manufacturer.

16. The PowerShield Membranes shall be identified by a permanent mark that indicates the manufacturer’s name and registered trademark.

17. The PowerShield Membranes used in the construction of Harnois MegaDome Building Systems, shall have the spatial separation determined in accordance with the Building Code, where the roof membrane becomes a part of the exposing building face.

B. General Conditions

1. The use of the PowerShield Membranes must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 24 day of November 2005.

BUILDING MATERIALS EVALUATION COMMISSION

_____

Edward Link, P.Eng.
Vice-Chair, BMEC

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
www.obc.mah.gov.on.ca

Date of Authorization	September 29, 2005
BMEC Authorization	05-13-317
BMEC Application	# A2005-19

Authorization Report - Shelf and Rack Storage Systems

1. Applicant

Metalsistem Canada Inc.
Storage and Display Solutions
55 West Beaver Creek Road, Unit 7
Richmond Hill, Ontario

Tel: (905) 886-9449
Fax: (905) 886-6890

2. Manufacturing Facilities

Metalsistem SPA.
Rovereto (TN)
Vial Dell'Industratria
Italy, 2

3. Description

The "Super 4, 5, 6," shelf and rack storage systems are self contained structural systems within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment. Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the Building Code, as amended or remade from time to time and are not subject to mezzanine or interconnected floor space rules.

4. Authorization Requested

The applicant sought authorization for the use of "Super 4, 5, 6" storage systems, as innovative shelf and rack storage systems designed for material handling, storage and distribution in warehouse facilities.

5. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack systems are used in accordance with the limitations and conditions stated in this authorization, they will provide the level of performance that would be achieved by conformance with the Building Code.

6. Authorization

The shelf and rack storage systems are authorized for use within a building as a self contained structural systems for material handling, storage and distribution, subject to the following terms and conditions:

Note: The BMEC did not evaluate the Metalsistem “Super 6 Series Mezzanines”, as the requirements for mezzanines may be found in the Building Code

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for Metalsistem® Canada.

Use and Occupancy

2.1 Except as required by 3.4. of this authorization, the shelf and rack storage systems shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III and IV commodities as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions.

2.2 The shelf and rack storage systems are not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Building Code.

2.3 The shelf and rack storage systems shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time (OFC).

General

3.1 The structural components of the entire shelf and rack storage systems, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be of noncombustible construction, and be designed in accordance with Part 4 of the Building Code.

3.2 The design and general review of the rack and storage systems shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(b) open construction consisting of steel grating or open steel floor planking.

3.4 The maximum height of the shelf and rack storage systems from the floor supporting the shelf and rack system to the topmost portion of the “Super 4" shelf and rack system shall not exceed 7 m , and 10 m when installing the “Super 5, and 6" shelf and rack system.

3.5 Lighting levels of walkways and platforms shall conform to the Building Code.

3.6 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2). and 3.2.7.4.(1). respectively of the Building Code.

3.7 Guards and toe boards shall be installed in accordance with the Building Code.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage systems are exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs 4.3 and 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA 71-1998, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA 72-1990, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage systems are to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph 2.1, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 -1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the Building Code.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the OFC.

4.10. Regardless of the occupant load, the requirements of Section 2.8 “Emergency Planning” of the OFC shall apply.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Building Code except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than three platform levels, the highest of which may not be more than 9 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m² in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m:

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a "time-based egress analysis" undertaken and sealed by a Professional Engineer or Architect as defined in the Building Code using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time.

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where:

H_p = Horizontal travel distance on the shelf and rack storage (m)

V_p = Vertical travel distance on the shelf and rack storage (m)

H_m = Horizontal travel distance on the main floor (m)

N_{lg} = Number of lift gates in the means of egress

N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2). of the Building Code, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a “positive lock” when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the Fire Safety Plan, as required by 4.10. of this Authorization, shall mark the lift gates such that they are readily identifiable as part of the egress route.

5.8 Where ‘at-level’ conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two ‘at-level’ conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the ‘at-level’ cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each 'at-level' conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the 'at-level' cross-over and all inserts shall be sized to support loads required in Part 4 of the Building Code,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each 'at-level' cross-over, and

(e) stairs approaching 'at-level' conveyor cross-overs shall be marked in accordance with the Fire Safety Plan, as required by 4.10 of this Authorization, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (BCA) and, except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the terms and conditions set out in Section A. above; or

   (b) the occurrence of any of the events described in Sections B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this authorization; or,

      (iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section A 1.1 of this authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section A. above; or

(d) any Building Code provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 29 day of September 2005.

BUILDING MATERIALS EVALUATION COMMISSION

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Edward Link, Vice-Chair

Building Materials Evaluation Commission
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Toronto, Ontario, M5G2E5
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Date of Authorization	September 29, 2005
BMEC Authorization	# 05-12-316
BMEC Application	# A2005-16

AUTHORIZATION REPORT - XLShelter Membrane

1. Applicant

All Cover Portable Systems/XLShelters
4664 Ontario Street
Beamsville, Ontario
N0G 1L0

Tel: (800) 282-1239
Fax: (905) 563-6367
Web: www.xlshelter.com

2. Manufacturing Facilities

Inland Plastics Ltd.
Box 2199
Drumheller, Alberta
T0J 0Y0

Layfield Geosynthetics and Industrial Fabrics Ltd.
11120 Silversmith Place
Richmond, British Columbia
V7A 5E4

3. Description

The XLShelter Building System is a non pressurized building, wherein the structure is composed of a steel framework to support the XLShelter Membrane which is tensioned to provide a weather barrier.

The steel framework is a series of in-line clear span frames, with end walls. The frame pieces are modular and are used in different arrangements to make a variety of profiles. The steel frame structure of the XLShelter Building System shall be designed and constructed in accordance with the Building Code.

The XLShelter Membrane is a flame resistant woven polyolefin material, FRU88X-6, 4 mil. The XLShelter Membrane pieces are custom-sized and the edges reinforced for each building as per XLShelter Building System specifications.

The XLShelter Membrane meets the requirements of a Class A material under ASTM E 84 Surface Burning Characteristics and satisfies the flammability requirements set out in CAN/ULC-S109 and NFPA 701-1996.

4. Authorization requested

The Applicant sought a Building Materials Evaluation Commission (the "BMEC") Authorization for the XLShelter Membrane for use as a roof covering, when used in conjunction with an unheated XLShelter Building System, as defined in this Authorization, in lieu of the requirements of Sentence 3.1.15.1.(1). "Roof Covering Classification" of the Building Code.

5. Assessment

Reports and assessments provided by the Applicant show that if the XLShelter Membrane is designed, performance tested and installed in accordance with the limitations in the manufacturer's instructions, and the specific terms and conditions stated in this Authorization, the level of performance required by the Building Code will be provided.

The reports submitted and reviewed included, but were not limited to:

1. Inland Plastics Ltd. P2004-4 LDPE (Low Density) - FR, Manufacturer's Information, dated 2001.

2. Armorkote Membrane Structure Fabrics, FRU88X-6 data Sheet, Layfield Geosynthetics and Industrial Fabrics Ltd.

3. Inland Plastics Warranty.

4. All Cover Building Systems "Certified Engineering Drawings".

5. All Cover Building Systems "XLShelter Steel Framing Systems".

6. All Cover Building Systems "XLShelter Membranes as Roof Covering".

7. All Cover Building Cover Warranty.

8. Intertape Polymer Group "Manufacturing Quality Control - Certificate of Registration: ISO 9001-2000" .

9. International Building Code, Chapter 31 "Special Constructions".

10. ASTM D 5034, Standard Test Method for Breaking Stength and Elongation of Textile Fabric, re-approved in 2001.

11. ASTM D 5035, Standard Test Method for Breaking Force and Elongation of Textile Fabric, re-approved in 2003.

12. ASTM D 3786 - 01, Standard Test Method for Hydraulic Bursting Strength of Textile Fabrics.

13. ASTM D 2136 - 02 , Standard Test Method for Coated Fabrics - Low Temperature Bend.

14. ASTM D 2261, Tearing Strength of Fabric by the Tongue Procedure, re-approved in 2002.

15. CAN/CGSB-37.54-95 “Polyvinyl Chloride Roofing and Waterproofing Membrane”, dated May 1995.

16. Birdair, Technical Specifications and Fabric Characteristics.

17. All Cover / XL Shelter Building Systems, Assembly Instruction, 2005.

18. NFPA 701-1989 “Large Scale Flame Resistance of FRU88X-6 Fabric”, dated June 2000.

19. ASTM E 84 “Surface Burning Characteristics of FRU88X-6", dated June 2000.

20. Office of State Fire Marshal, California Department of Forestry and Fire Protection Office of the State Fire Marshal, “Registered Flame Resistant Product”.

21. CAN/ULC-S109 “Flame Resistance of FRU88X-6 Fabric”, dated June 2000.

22. Rowan Williams Davies and Irwin Inc. / Inland Plastic, Static Coefficient of Friction Tests Nova Shield Fabric, dated March 2004.

23. Bodycote Materials Testing Ortech Laboratories / Layfield Group, “NFPA 701-1989 Large Scale Flame Resistance of FRU88X-6 Fabric”, dated June 2000.

24. Bodycote Materials Testing Ortech Laboratories / Layfield Group ASTM E 84, “Surface Burning Characteristics of FRU88X-6 Fabric”, dated June 2000.

25. Inland Plastics Ltd. Material Safety Data Sheet, dated 2001.

26. Live Load Case Study for XLShelter Membranes, dated August 31, 2005.

27. Bodycote Materials Testing Canada Inc. “NFPA 701-1996 Test 1 and Test 2 Flame Resistance of FRU88X-6”, dated September 6, 2001.

28. Acceptance by other Jurisdictions:

(a) Development Services Commission, Markham, Ontario: Non Housing Building Permit, dated 2004.
(b) Building Permit issued by the City of North Bay, 2004.
(c) Building Permit (04-122264), Toronto Urban Development Services.
(d) Certified Plan (02-55028), Toronto Urban Development Services.
(e) Permit (Project# 05-000745 TS) issued by the City of St. Catharines.
(f) Permit (Project# 05-000770 TS) issued by the City of St. Catharines.

6. Authorization

The XLShelter Membrane is authorized for use as a roof covering, only when used in conjunction with an unheated XLShelter Building, in lieu of the requirements of Sentence 3.1.15.1.(1) "Roof Covering Classification" of the Building Code; all other requirements pertaining to the installation and construction are subject to the requirements of the Building Code, and are subject to the following terms and conditions:

Note: this Authorization is not intended to be used as an equivalent to CAN/ULC-S107-M87 where roof coverings are permitted to be used in the construction of traditional roofing systems Class A, B, and C as determined by CAN/ULC-S107-M87.

A. Specific Terms & Conditions

1. This Authorization is valid only for the use of the XLShelter Membrane FRU88X-6, when it is used in conjunction with an XLShelter Building System.

2. In addition to the requirements of Article 2.3.1.1. of the Building Code, the structural design shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act*, (Ontario) experienced in the specific method applied.

3. When the XLShelter Membrane is installed in conjunction with an XLShelter Building System, together they shall be constructed as per the requirements of Subsection 3.2.2. of the Building Code.

4. The XLShelter Membrane used in the construction of an XLShelter Building System must be designed in accordance with Subsections 4.1.7. and 4.1.8. of the Building Code.

5. The XLShelter Membrane is authorized for use only in buildings that are permitted to be of combustible construction.

6. Except as permitted by Article 3.2.2.17. of the Building Code, the XLShelter Membrane shall not be used where the assembly is required to have a fire-resistance rating.

7. The XLShelter Membrane is authorized for use in unheated building applications, when the XLShelter Membrane is used in conjunction with an XLShelter Building System.

8. The requirements of Article 2.1.1.11. of the Building Code need not be considered, when the XLShelter Membrane is used in conjunction with an XLShelter Building System, for buildings that consume energy at a rate less than 3.5 Btu/h•ft^2 under peak conditions.

9. The XLShelter Membrane shall not be used in a building more than 1 storey in building height.

10. The XLShelter Membrane shall not be used in the construction of the XLShelter Building System where the major occupancy is Group A, B, C, D, E or F Division 1, as defined by the Building Code.

11. The XLShelter Membrane shall meet the following standards:

    a. CAN/ULC-S109-M87 “Standard for Flame Tests of Flame-Resistant Fabrics and Films”,

    b. NFPA 701-1996 “Standard Methods of Fire Tests for Flame-Resistance of Textiles and Films”, Test 1 and Test 2, and

    c. CAN/ULC-S102.2-M2003 “Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials and Assemblies.”

12. The XLShelter Membrane shall not have a flame spread rating more than 25, as specified in CAN/ULC-S102.2-M2003.

13. The XLShelter Membrane shall be installed by installers who are approved by All Cover Portable Systems/XLShelters.

14. The XLShelter Membrane shall be installed as per the XLShelter Building System Installation Manuals, and are subject to the product’s limitations as specified by the manufacturer.

15. The XLShelter Membrane shall be identified by a permanent mark that indicates the manufacturer’s name and registered trademark.

16. The XLShelter Membrane used in the construction of XLShelter Building System, shall have the spatial separation determined in accordance with the Building Code, where the roof membrane becomes a part of the exposing building face.

B. General Conditions

1. The use of the XLShelter Membrane must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 29 day of September 2005.

BUILDING MATERIALS EVALUATION COMMISSION

_____

Edward Link, Vice-Chair

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
www.obc.mah.gov.on.ca

Date of Authorization	September 29, 2005
BMEC Authorization	# 05-11-315
BMEC Application	# A2005-13

Authorization Report: Arencon - Shelf and Rack Storage System

1. Applicant

Arencon
1551 Caterpillar Road
Suite 103
Mississauga, Ontario
L4X 2Z6

Tel: (905) 615 -1774
Fax: (905) 615 -9351

2. Manufacturing Facilities

1551 Caterpillar Road
Suite 103
Mississauga, Ontario
L4X 2Z6

3. Description

The Arencon shelf and rack storage system (the "shelf and rack storage system") is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the Building Code, as amended or remade from time to time and are not subject to mezzanine or interconnected floor space rules.

4. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

5. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Building Code.

6. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for Arencon.

Use and Occupancy

2.1 Except as where more restrictively provided for in 3.4. and 3.5. of this authorization, the shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III and IV commodities as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions; where the shelf and storage system incorporates the storage of rubber tires, such storage shall conform to the requirements of Subsection 3.3.1. “Indoor Tire Storage” of the Ontario Fire Code, Ontario Regulation 338/97, as amended or remade from time to time (the “OFC”),

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Building Code.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the OFC.

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be of noncombustible construction, and be designed in accordance with Part 4 of the Building Code.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) (i) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(ii) open construction consisting of steel grating or open steel floor planking.

(b) Deck and walkway levels in structure use for the storage of Group A, B, and C plastic, as defined in NFPA 13-1999, and rubber tires, shall be constructed of steel decking as required in (a) above.

3.4 The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m except that where the maximum height exceeds 18 m but does not exceed 24 m, the following provisions shall apply:

(a) a fire alarm system shall be installed with:

(i) pull stations located at all exit doors including exit doors serving elevated decks and walkways; and

(ii) smoke detectors located, at the ceiling of all rooms and areas containing the shelf and rack system, within exit stair enclosures at the top, and at every third level of elevated deck or walkway; and

(b) the fire alarm system required by (a) above, shall be designed to notify the fire department upon activation; and

(c) the shelf and rack storage system shall be used only for the storage of Class I, II, III and IV commodities as defined in NFPA 13 -1999 as amended.

3.5 Where Class I, II, I II and IV commodities and Group A, B, C, plastics and rubber tires as defined in NFPA 13-1999 are stored, the maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 7 m.

3.6 Lighting levels of walkways and platforms shall conform to the Building Code.

3.7 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2). and 3.2.7.4.(1). respectively of the Building Code.

3.8 Guards and toe boards shall be installed in accordance with the Building Code.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs 4.3 and 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA 71-1998, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA 72-1990, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph 2.1, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 -1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the Building Code.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the OFC.

4.10. Regardless of the occupant load, the requirements of Section 2.8 "Emergency Planning" of the OFC shall apply.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Building Code except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than four platform levels, the highest of which may not be more than 12 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m² in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m:

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a "time-based egress analysis" undertaken and sealed by a Professional Engineer or Architect as defined in the Building Code using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time.

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where:
- H_p = Horizontal travel distance on the shelf and rack storage (m)
- V_p = Vertical travel distance on the shelf and rack storage (m)
- H_m = Horizontal travel distance on the main floor (m)
- N_{lg} = Number of lift gates in the means of egress
- N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2) of the Building Code, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a "positive lock" when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the Fire Safety Plan, as required by 4.10. of this Authorization, shall mark the lift gates such that they are readily identifiable as part of the egress route.

5.8 Where 'at-level' conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two 'at-level' conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the 'at-level' cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each 'at-level' conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the 'at-level' cross-over and all inserts shall be sized to support loads required in Part 4 of the Building Code,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each 'at-level' cross-over, and

(e) stairs approaching 'at-level' conveyor cross-overs shall be marked in accordance with the Fire Safety Plan, as required by 4.10 of this Authorization, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (BCA) and, except as specifically authorized herein, with the Building Code.
2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the terms and conditions set out in Section A. above; or

   (b) the occurrence of any of the events described in Sections B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this authorization; or,

      (iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section A 1.1 of this authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section A. above; or

   (d) any Building Code provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 29 day of September 2005.

BUILDING MATERIALS EVALUATION COMMISSION

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Edward Link, Vice-Chair

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
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Date of Authorization	September 29, 2005
BMEC Authorization	# 05-10-314
BMEC Application	# A2004-12

AUTHORIZATION REPORT- Cayuga (washed) High Performance Bedding™

1. Applicant

Dufferin Aggregates.
2300 Steeles Avenue West, Suite 400
Concord, Ontario
L4K 5X6

Tel: (905) 761-7500
Fax: (905) 761 7505

2. Manufacturing Facilities

Cayuga Quarry
511 Hwy#3 RR#4
Cayuga, Ontario, N0A 1E0

3. Description

The Dufferin Aggregates Cayuga (washed) High Performance Bedding™ (the "Cayuga (washed) HPB™") is a limestone aggregate non-uniformly graded gravel offering a 9.5 mm top size. The Cayaga (washed) HPB™ is a crushed, washed, and graded aggregate; and is manufactured at the Cayuga Quarry.

4. Authorization requested

The applicant sought an Authorization for the use of the Cayuga (washed) HPB™ as an acceptable alternative that satisfies the granular material requirements for applications beneath floors, and on the top and sides of drain pipes and tile as it is required by the provisions of the Building Code, as amended (the "Building Code").

The applicant requested an equivalent to the requirements of Sentences 9.14.2.1.(2), 9.14.3.3.(4), and 9.16.2.1.(1) of the Building Code.

5. Assessment

Reports and assessments provided by the applicant demonstrate that if the Cayuga (washed) HPB™ is manufactured, stored, installed, maintained and monitored in accordance with the limitations of the manufacturer's specifications and the conditions stated in this Authorization, a level of performance equivalent to that required by Sentences 9.14.2.1.(2), 9.14.3.3.(4), and 9.16.2.1.(1) of the Building Code will be provided.

The reports submitted and reviewed, but were not limited to:

1. Manufacturer's literature "HPB - High Performance Bedding"

2. Peto MacCallum Ltd. Consulting Engineers, re: Oringinal Rpert: Comparative Evaluation of Pipe Bedding Stones for Acceptance by the City of Mississauga , Revised Report: Comparative Evaluation of Granular Materials for acceptance by the Ontario Building Code, Ref #.:8TE088(R), issued April 10, 1988, and revised on October 28, 2004.

3. Portable Demonstration Model Images.

4. Application to the Building Materials Evaluation Commission, submitted by Dufferin Aggregates, March 11, 2002.

5. Dufferin Aggregates Power Point Presentation, March 27, 2002.

6. Application to the Building Materials Evaluation Commission, submitted by Dufferin Aggregates, June 23, 2003.

7. Peto MacCallum Ltd. Re: Flow Rate/Permeability Testing of High Performance Bedding (H.P.B) , ref# 03TE061A, materials from Acton Quarry, dated September 11, 2003.

8. Decision of the Building Materials Evaluation Commission, submitted by Dufferin Aggregates, November 5, 2003.

9. Application for "OACETT Honours Awards 2002 - 2003"

10. Building Materials Evaluation Commission Authorization #02-08-279.

11. Dufferin Aggregates Quality Control Manual: Aberfolye Pit.

12. Dufferin Aggregates Quality Control Manual: Acton Quarry.

13. Dufferin Aggregates Quality Control Manual: Cayuga Quarry.

14. Dufferin Aggregates Quality Control Manual: Mill Creek Pit.

15. Dufferin Aggregates Quality Control Manual: Milton Quarry.

16. ASTM Standard D 75 - 97 “Standard Practice for Sampling Aggregates.

17. Peto MacCallum Ltd. Consulting Engineers, re: Partial Report - Comparative Evaluation of Granular Material, revised February 14, 2005,ref # 03TE61B.

18. Peto MacCallum Ltd. Consulting Engineers, “Comparative Evaluation of Granular Materials”, revised October 28, 2004, ref # 0TE088(R).

19. Letter of recommendation, Unilock, dated May 16, 2002.

20. Letter of recommendation, Mid-North Excavating, dated June 11, 2002.

21. Letter of recommendation, Maxwell Excavating Limited, dated July 23, 2001.

22. Letter of Approval, Regional Municipality of Peel, Public Works, dated August 24, 1994.

23. Letter of Approval, City of Mississauga, Department of Transportation and Works, dated August 17, 1994.

24. Dufferin Aggregates submission, June 24, 2005.

25. Dufferin Aggregates submission, July 28, 2005.

26. Peto MacCallum Ltd. Consulting Engineers letter re: BMEC Application A2004-12: Dufferin Aggregates” dated January 3, 2005, ref # 03TE061B.

27. Dufferin Aggregates Quality Control Lab Manual from all Dufferin Aggregate Sites and Cayuga Materials.

6. Authorization

The Dufferin Aggregates Cayuga (washed) HPB™ is authorized for use as a granular material as referenced in Sentences 9.14.2.1.(2), 9.14.3.3.(4) and 9.16.2.1.(1) of the Building Code, when the Cayuga (washed) HPB™ is manufactured, stored, installed, maintained and monitored in accordance with the limitations of the manufacturer's specifications and recommendations; and the following terms and conditions:

A. Specific Terms and Conditions

1. This authorization is valid only for Dufferin Aggregates Cayuga (washed) HPB™ manufactured at the facilities referenced in Section 2. of this Authorization.

2. The Cayuga (washed) HPB™ shall be manufactured and stored as per Dufferin Aggregates Quality Control Manuals.

3. The Cayuga (washed) HPB™ shall be a well graded material that does has not more than 15% passing a #4 sieve, and not more than 10% passing a #8 sieve.

4. The Cayuga (washed) HPB™ is authorized for use as a granular material as referenced in Sentences 9.14.2.1.(2) and 9.14.3.3.(4) of the Building Code.

5. The Cayuga (washed) HPB™ is authorized for use as a granular material as referenced in Sentence 9.16.2.1.(1) of the Building Code.

6. When the Cayuga (washed) HPB™ is used on the top and sides of a drain tile or pipe, the drain tile or pipe shall be wrapped in a geo-textile material.

7. A signed copy of the quarry ticket, for each shipment received shall be kept with the on-site construction documents, and upon request produced to the authority having jurisdiction.

8. The Dufferin Aggregates quarry ticket, as required by 6.A.7. of this authorization, must indicate the following minimum information:

   (a) Name of the Quarry
   (b) Date,
   (c) Ticket number,
   (d) Gross and net amount of the HPB™ product,
   (e) Name of the product “Cayuga (washed) HPB™”, and
   (f) BMEC Authorization #.

9. The Cayuga (washed) HPB™ is not authorized for applications pertaining to Part 8 “Sewage Systems” of the Building Code.

10. The Cayuga (washed) HPB™ is not authorized for use when designed, or installed in combination with other aggregates.

B. General Conditions

1. The use of the Dufferin Aggregates Cayuga (washed) HPB™ as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act,* 1992 (the “BCA”) as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

(b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

i. the material, system or building design that is the subject matter of this Authorization;

ii. the address of the Applicant specified in Part 1 of this Authorization; or,

iii. the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

i. does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

ii. provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 29 day of September 2005.

BUILDING MATERIALS EVALUATION COMMISSION

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Edward Link, Vice-Chair

Building Materials Evaluation Commission
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Date of Authorization	August 25, 2005
BMEC Authorization	# 05-09-313
BMEC Application	# A2005-14

Authorization Report: Rack Net-Works - Shelf and Rack Storage System

1. Applicant

2005840 Ontario Inc.
o/a Rack Net-Works
1403 Malibou Terrace
Mississauga, Ontario
L5J 4B9

Tel: (905) 361-7676
Fax: (416) 352-1437

2. Manufacturing Facilities

Rack Net-Works
1403 Malibou Terrace
Mississauga, Ontario
L5J 4B9

3. Description

The Rack Net-Works shelf and rack storage system (the "shelf and rack storage system") is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the Building Code, as amended or remade from time to time and are not subject to mezzanine or interconnected floor space rules.

4. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

5. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Building Code.

6. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for Rack Net-Works.

Use and Occupancy

2.1 Except as where more restrictively provided for in 3.4. and 3.5. of this authorization, the shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III and IV commodities as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions; where the shelf and storage system incorporates the storage of rubber tires, such storage shall conform to the requirements of Subsection 3.3.1. “Indoor Tire Storage” of the Ontario Fire Code, Ontario Regulation 338/97, as amended or remade from time to time (the “OFC”),

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Building Code.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the OFC.

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be of noncombustible construction, and be designed in accordance with Part 4 of the Building Code.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(b) open construction consisting of steel grating or open steel floor planking.

3.4 The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m except that where the maximum height exceeds 18 m but does not exceed 24 m, the following provisions shall apply:

(a) a fire alarm system shall be installed with:

(i) pull stations located at all exit doors including exit doors serving elevated decks and walkways; and

(ii) smoke detectors located, at the ceiling of all rooms and areas containing the shelf and rack system, within exit stair enclosures at the top, and at every third level of elevated deck or walkway; and

(b) the fire alarm system required by (a) above, shall be designed to notify the fire department upon activation; and

(c) the shelf and rack storage system shall be used only for the storage of Class I, II, III and IV commodities as defined in NFPA 13 -1999 as amended.

3.5 Where Class I, II, I II and IV commodities and Group A, B, C, plastics and rubber tires as defined in NFPA 13-1999 are stored, the maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 7 m.

3.6 Lighting levels of walkways and platforms shall conform to the Building Code.

3.7 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2). and 3.2.7.4.(1). respectively of the Building Code.

3.8 Guards and toe boards shall be installed in accordance with the Building Code.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs 4.3 and 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA 71-1998, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA 72-1990, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph 2.1, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 -1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the Building Code.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the OFC.

4.10. Regardless of the occupant load, the requirements of Section 2.8 "Emergency Planning" of the OFC shall apply.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Building Code except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than four platform levels, the highest of which may not be more than 12 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m² in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m:

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a "time-based egress analysis" undertaken and sealed by a Professional Engineer or Architect as defined in the Building Code using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time.

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where:

H_p = Horizontal travel distance on the shelf and rack storage (m)

V_p = Vertical travel distance on the shelf and rack storage (m)

H_m = Horizontal travel distance on the main floor (m)

N_{lg} = Number of lift gates in the means of egress

N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2) of the Building Code, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a “positive lock” when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the required Fire Safety Plan, as required by 4.10. of this Authorization, shall mark the lift gates such that they are readily identifiable as part of the egress route.

5.8 Where ‘at-level’ conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two ‘at-level’ conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the ‘at-level’ cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each ‘at-level’ conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the ‘at-level’ cross-over and all inserts shall be sized to support loads required in Part 4 of the Building Code,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each ‘at-level’ cross-over, and

(e) stairs approaching ‘at-level’ conveyor cross-overs shall be marked in accordance with the required Fire Safety Plan, as required by 4.10 of this Authorization, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (BCA) and, except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the terms and conditions set out in Section A. above; or

   (b) the occurrence of any of the events described in Sections B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this authorization; or,

      (iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section A 1.1 of this authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section A. above; or

   (d) any Building Code provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 25 day of August 2005.

BUILDING MATERIALS EVALUATION COMMISSION

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Edward Link, Vice-Chair

Building Materials Evaluation Commission
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Date of Authorization	July 28, 2005
BMEC Authorization	05-08-312
BMEC Application	# A2005-09

AUTHORIZATION REPORT- The Envirotech Membrane

1. Applicant

Storage Systems Construction Corp.
20 Shamrock Rock, Unit #8
Erin, Ontario
N08 1T0

Tel: (519) 833-0054
Fax: (519) 363-0085

2. Manufacturing Facilities

Storage Systems Construction Corp.
20 Shamrock Rock, Unit #8
Erin, Ontario
N08 1T0

PGI Fabrene
240 Dupont Road
North Bay, Ontario
P1B 5G6

3. Description

The Storage Systems Construction Corp.'s building system is a non pressurized building, wherein the structure is composed of a steel framework to support the Envirotech Membrane, which is tensioned to provide a weather barrier.

The steel frame structure of the Storage Systems Construction Corp.'s building system shall be designed and constructed in accordance with the Building Code. The steel framework is a series of in-line clear span frames, with end walls. The frame pieces are modular and are used in different arrangements to make a variety of profiles.

The Envirotech Membrane is made of two flame resistant woven polyolefin materials, Type P708. The Envirotech Membrane pieces are custom-sized and the edges reinforced for each building as per Storage Systems Construction Corp.'s building system specifications.

The Envirotech Membrane meets the requirements of a Class A material under ASTM E 84 Surface Burning Characteristics and satisfies the flammability requirements set out in CAN/ULC-S109 and NFPA 701-1999.

4. Authorization requested

The Applicant sought a Building Materials Evaluation Commission (the "BMEC") Authorization for the Envirotech Membrane for use as a roof covering, only when used in conjunction with an unheated Storage Systems Construction Corp.'s building system, as defined in this Authorization, in lieu of the requirements of Sentence 3.1.15.1.(1). "Roof Covering Classification" of the Building Code.

5. Assessment

Reports and assessments provided by the Applicant show that if the Envirotech Membrane is designed, performance tested and installed in accordance with the limitations in the manufacturer's instructions, and the specific terms and conditions stated in this Authorization, the level of performance required by the Building Code will be provided.

The reports submitted and reviewed, but were not limited to:

1. Storage Systems Construction Corp. "Envirotech Structures" Fabric Arch Storage Buildings: Specifications - High Profile 60'.

2. Storage Systems Construction Corp. "Envirotech Structures" Fabric Arch Storage Buildings: Specifications - Standard Profile 50'/60'/70'/80'/100'/.

3. Storage Systems Construction Corp. Envirotech Fabric/Arch Storage Building Warranty.

4. Certificate of Authorization: Storage Systems Construction Corp.

5. Triodem Laboratory Report: Neutral Salt Stray Test (ASTM B117).

6. Fabrene Industrial Synthetic Fabrics: Type P708 - Specifications.

7. PGI Fabrene "Quality Assurance Manual".

8. Fabrene Inc. Certificate of Registration ISO 9001: 2000.

9. NFPA 701 "Standard Methods of Fire Tests for Flame Propagation of Textiles and Films", 2004 Edition.

10. Bodycote Material Testing Report 04-020657 (B): ASTM E84 "Surface Burning Characteristics", Product P7081830.

11. Bodycote Test Results 01-02-827(B) CAN/ULC-S109 "Large-Flame Resistence of M747 Woven Polyethylene".

12. Bodycote Test Results 04-02-657(A) CAN/ULC-S102 "Surface Burning Characteristics of M747".

13. Bodycote Test Results 01-02-827(A) NFPA 701-1999 Test 1 and Test 2 “Flame Resistance Test of Woven Polyethylene Fabric”.

14. “International Building Code” Chapter 31, 2003 edition.

15. Storage Systems Construction Corp. “Snow Load Calculations”, May 12, 2005.

16. Acceptance by Other Jurisdictions:

    (a) The Corporation of the Township of Wilmot
    (b) Ministry of Transportation, Ontario

17. Contracts and Awards:

    (a) SSCC 115-703 Drawing L01
    (b) Goulais River
    (c) 106-704 Drawing L01
    (d) SSB-059321
    (e) 104-704 Drawing L01
    (f) SSB-059280
    (e) SSCC 102-704

6. Authorization

The Envirotech Membrane is authorized for use as a roof covering, only when used in conjunction with an unheated Storage Systems Construction Corp.’s building system, in lieu of the requirements of Sentence 3.1.15.1.(1) “Roof Covering Classification” of the Building Code; all other requirements pertaining to the installation and construction are subject to the requirements of the Building Code, and are subject to the following terms and conditions:

Note: this Authorization is not intended to be used as an equivalent to CAN/ULC-S107-M87 where roof coverings are permitted to be used in the construction of traditional roofing systems Class A, B, and C as determined by CAN/ULC-S107-M87.

A. Specific Terms & Conditions

1. This Authorization is valid only for the use of the Envirotech Membrane, Type P708 when it is used in conjunction with a Storage Systems Construction Corp.’s building system.

2. In addition to the requirements of Article 2.3.1.1. of the Building Code, the structural design shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act*, (Ontario) and who is experienced in the specific method applied.

3. When the Envirotech Membrane is installed in conjunction with a Storage Systems Construction Corp.'s building system together they shall be constructed as per the requirements of Subsection 3.2.2. of the Building Code.

4. The Envirotech Membrane used in the construction of Storage Systems Construction Corp.'s building system must be designed in accordance with Subsections 4.1.7., and 4.1.8. of the Building Code.

5. The Envirotech Membrane is authorized for use in combustible construction only.

6. Except as permitted by Article 3.2.2.17. of the Building Code, the Envirotech Membrane shall not be used where the assembly is required to have a fire-resistance rating.

7. The Envirotech Membrane is authorized for use in unheated building applications, when the Envirotech Membrane is used in conjunction with a Storage Systems Construction Corp.'s building system.

8. The requirements of Article 2.1.1.11. of the Building Code need not be considered, when the Envirotech Membrane is used in the construction of the Storage Systems Construction Corp.'s building system, for buildings that consumes energy at a rate less than 3.5 Btu/h•ft^2 under peak conditions.

9. The Envirotech Membrane shall not be used in a building more than 1 storey in building height.

10. The Envirotech Membrane shall not be used in the construction of Storage Systems Construction Corp.'s building system where the major occupancy is Group A, B, C, D, E or F Division 1, as defined by the Building Code.

11. The Envirotech Membrane shall meet the following standards:

    a. CAN/ULC-S109-M87 "Standard for Flame Test of Flame-Resistant Fabrics and Films",

    b. NFPA 701-1999 "Methods of Fire Test for Flame Propagation of Textiles and Films" Test 2, and

    c. CAN/ULC-S102.2-M2003 "Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials and Assemblies."

12. The Envirotech Membrane shall not have a flame spread rating more than 25, as specified in CAN/ULC-S102.2-M2003.

13. The Envirotech Membrane shall be installed by installers who are approved by Storage Systems Construction Corp.

14. The Envirotech Membrane shall be installed as per the Storage Systems Construction Corp.'s building system Installation Manuals, and are subject to the products' limitation as specified by the manufacturer.

15. The Envirotech Membrane shall be identified by a permanent mark that indicates the manufacturer's name and registered trademark.

16. The Envirotech Membrane used in the construction of Storage Systems Construction Corp.'s building system, shall have the spatial separation determined in accordance with Subsections 3.2.3. or 9.10.14. of the Building Code, where the roof membrane becomes a part of the exposing building face.

B. General Conditions

1. The use of the Envirotech Membrane must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary

Dated at Toronto this 28 day of July 2005.

BUILDING MATERIALS EVALUATION COMMISSION

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Judy Beauchamp, Member

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Date of Authorization	July 28, 2005
BMEC Authorization	05-07-311
BMEC Application	# A2005-07

Authorization Report: Home Slicker™

1. Applicant

Benjamin Obdyke Incorporated
199 Precision Drive
Horsham, PA
19044, USA

Tel: (215) 672-7200
Fax: (215) 672-5204
Web: www.benjaminobdyke.com

2. Manufacturing Facilities

Colbond
1301 Sand Hill Road
Enka, NC
28728, USA

3. Description

The Home Slicker™ is a 6.35 mm (0.25 inches) thick non-absorbent 3-dimensional matrix, which is composed of extruded Nylon 6 filaments randomly oriented to form an open drainage material with a sinusoidal-shaped cross section.

The Home Slicker™ is mechanically fastened to create an additional optional layer between the cladding and the sheathing membrane.

The primary application of the Home Slicker™ is as an optional additional component of a cladding system. Home Slicker™ would be installed to increase performance in regard to the redirection of potential penetrating water and to the ventilation drying of exterior cladding.

4. Authorization Requested

The Applicant sought authorization for the use the Home Slicker™ as an optional additional layer of a cladding system within the scope of Part 9 of the Building Code.

5. Assessment

Reports and assessments provided by the applicant show that if Home Slicker™ is designed, performance tested, installed and maintained in accordance with the limitations in the manufacturer's instructions and the conditions stated in this authorization, the level of performance required by the Building Code will be provided.

The reports submitted and reviewed, but were not limited to the following:

1. Code Compliance Report, prepared by Morrison Hershfield, November 2, 2004.

2. Colbond, Inc. Quality Control/Assurance Manual “Home Slicker & Cedar Breather” Products Manufactured for Benjamin Obdyke Inc.

3. Nova Scotia Home Builder Association “ Builder/Renovator Alert Halifax Regional Municipality”, October 7, 2005.

4. Bodycote Materials Testing Canada “Thickness, Density and Compressive Properties of Home Slicker Rainscreen”, February 25, 2002.

5. Precision Geosynthetic Laboratories “Verification of Material Properties”, April 30, 2002.

6. SGS US Testing Co. “ASTM D4632 and ASTM D433", October 14, 2003.

7. Bodycote Materials Testing Canada “ASTM E 84 Surface Burning Characteristics “Home Slicker™” Sheathing Material”, March 11, 2002.

8. Precision Geosynthetic Laboratories “ASTM D4716", February 27, 2002.

9. Architectural Testing “Performance Test Report”, July 16, 2004.

10. Bodycote Materials Testing Canada “Air Flow Characteristics of a Typical Exterior Wall Cavity Created using Home Slicker®”, July 2, 2002.

11. Certianteed “Report: Wind Loading Test”, January 23, 2003.

12. SGS US Testing Co. “ASTM E-732", December 5, 2002.

13. NRC/CNRC Client Report “Thermal Properties Determination of Home Slicker Drainage Plane Matte and An Air Layer of the Same Thickness in Both Horizontal and Vertical Positions” March 17, 2004.

14. Architectural Testing “Performance Test Report”, October 1, 2004.

15. Manufacturer’s Information “Home Slicker™: How Exterior Walls Stay Dry on the Inside.”

16. Manufacturer’s Information “Home Slicker™: How Exterior Walls Stay Dry on the Inside - Application and Architectural Drawings.”

17. Engineering Letter, CertianTeed Corporation, January 23, 2003.

18. SGS® U.S. Testing Company Inc., Test Report 173140-6, December 5, 2002.

6. Authorization

The Home Slicker™ is authorized as part of an optional additional layer in a cladding system within the scope of Part 9 of the Building Code; all other requirements pertaining to the construction and installation are subject to the requirements of the Building Code, and are subject to the following specific terms and conditions of this Authorization:

A. Specific Terms and Conditions

1. This Authorization is valid only for Benjamin Obdyke Incorporated.

2. The Home Slicker™shall only used be in conjunction with those cladding materials listed in Articles 9.27.1.1. and 9.27.1.2. of the Building Code.

3. The Home Slicker™ was not evaluated for use with propriety wall assemblies such as exterior insulation and finish systems (EIFS), or insulated concrete form (ICFs), above or below grade.

4. The Home Slicker™shall be installed as per the manufacturer's installation instructions, as they apply to those claddings listed in Articles 9.27.1.1. and 9.27.1.2. of the Building Code.

5. The Home Slicker™ shall not be used in a wall assembly, when the assembly is required to be of noncombustible construction.

B. General Conditions

1. The use of the Home Slicker™ must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (the "BCA") and, except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the terms and conditions set out in Section A. above; or

   (b) the occurrence of any of the events described in Sections B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this authorization; or,

(iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section A 1.1 of this authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section A. above; or

(d) any Building Code provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 28 day of July 2005.

BUILDING MATERIALS EVALUATION COMMISSION

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Judy Beauchamp, Member

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
www.obc.mah.gov.on.ca

Date of Authorization	July 28, 2005
BMEC Authorization	05-06-310
BMEC Application	#A2004-04

Authorization Report: Delta® Drainwrap

1. Applicant

Cosella-Dorken Products Inc.
4655 Delta Way
Beamsville, Ontario
L0R 1B4

Tel: (905) 563-3255
Fax: (905) 563-5582
Web: www.cosella-dorken.com

2. Manufacturing Facilities

Cosella-Dorken Products Inc.
4655 Delta Way
Beamsville, Ontario
L0R 1B4

3. Description

The Delta® Drainwrap is a 0.6 mm thick high-density polyethylene sheet product with dimpled profile having an overall thickness of about 7 mm. The dimples are located 41 mm on centre, in rows half that distance apart. Each dimple provides an approximate 6 mm high space on its convex side, and is connected in four directions to adjacent dimples by channels approximately 3 mm high.

The Delta® Drainwrap sheet may be overlapped with dimples and channels on one sheet interlocking with the corresponding portions on the other sheet. When installed as spacing between siding and sheathing, the product creates a continuous uninterrupted series of ventilation passageways on both sides.

The Delta® Drainwrap is intended to be used as a ventilated exterior wall cladding spacer and as a ventilating spacer for wall assemblies. The Delta® Drainwrap is not intended to replace the need for application of an air or vapour barrier.

4. Authorization Requested

The applicant sought authorization for the use the Delta® Drainwrap as an alternative to "Breathable Type Sheathing Paper" as required in Sentence 9.23.17.1.(1) of the Building Code.

5. Assessment

Reports and assessments provided by the applicant show that if Delta® Drainwrap is designed, performance tested, installed and maintained in accordance with the limitations in the manufacturer's instructions and the conditions stated in this authorization, the level of performance required by the Building Code will be provided.

The reports submitted and reviewed, but were not limited to the following:

1. University of Waterloo, Building Engineer Group “Delta® Drainwrap System: Drying & Drainage Study” April 2005.

2. Oak Ridge National Laboratory “Hygrothermal Performance Report”.

3. Larden Muniak Letter Report “Equivalency of Delta® Drainwrap System to Sheathing Membranes Regulated by OBC 9.23.17.1".

4. Cosella-Dorken Products Inc., Delta® Structure Drain Product Drawings.

5. Delta®-Structure Drain - Installation Guidelines and Drawings.

6. Manufacturer’s Information “Self Adhesive Flashing”.

7. Delta® - Drainwrap Product Warranty.

8. University of Waterloo, Building Engineer Group letter re: Delta DrainWrap, dated June 13, 2005.

6. Authorization

The Delta® Drainwrap is authorized for use in lieu of sheathing paper as it is required by Sentence 9.23.17.1.(1) of the Building Code; all other requirements pertaining to the construction and installation are subject to the requirements of the Building Code, and are subject to the following specific terms and conditions of this Authorization:

A. Specific Terms and Conditions

1. This Authorization is valid only for Cosella Dorken Products Inc.

2. The Delta® Drainwrap shall only used be in conjunction with those cladding materials listed in Articles 9.27.1.1. and 9.27.1.2. of the Building Code.

3. The Delta® Drainwrap was not evaluated for use with propriety wall assemblies such as exterior insulation and finish systems (EIFS), or insulated concrete forms (ICFs), above or below grade.

4. The Delta® Drainwrap shall be installed as per the manufacturer’s installation instructions, as they apply to those claddings listed in Articles 9.27.1.1. and 9.27.1.2. of the Building Code.

5. The Delta® Drainwrap shall not be used in a wall assembly, when required to be of noncombustible construction.

6. A wall assembly incorporating the Delta® Drainwrap shall utilize a vapour barrier having a permeance not greater than 15 ng/(pa•s•m^2).

7. Details illustrating the method in which the Delta® Drainwrap will be installed to resist the migration and penetration of water behind the Delta® Drainwrap and around openings (e.g. windows, doors, vent stacks...) shall be submitted to the authority having jurisdiction for review and approval.

8. Details illustrating the method in which the Delta® Drainwrap will be installed ensuring that good ventilation –clear and continuous openings at the top and bottom– and drainage is provided shall be submitted to the authority having jurisdiction for review and approval.

9. Cladding shall be installed in such a manner so as to maintain its integrity as well as the required drainage on both sides of the Delta® Drainwrap, and be attached securely to the building.

B. General Conditions

1. The use of the Delta® Drainwrap must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (the "BCA") and, except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the terms and conditions set out in Section A. above; or

   (b) the occurrence of any of the events described in Sections B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this authorization; or,

      (iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section A 1.1 of this authorization.

   (b) the use of the material, system or building design authorized herein;

(i) does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section A. above; or

(d) any Building Code provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 28 day of July 2005.

BUILDING MATERIALS EVALUATION COMMISSION

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Judy Beauchamp, Member

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
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Date of Authorization	May 26, 2005
BMEC Authorization	05-05-309
BMEC Application	# A2005-05

Authorization Report: AQUASAFE® Multipurpose Residential Sprinkler System

1. Applicant

Uponor Canada Inc.
655 Park Street
Regina, Sask
S4N 5N1

Tel: (306) 791-3356
Fax: (306) 721-3088
Web: www.WIRSBO.ca

2. Manufacturing Facilities

Uponor Canada Inc.
79 McIlveen Drive
St. John, New Brunswick
E2J 4Y6

3. Description

The AQUASAFE® Multipurpose Residential Sprinkler System (the "Aquasafe Network System") is a network sprinkler system designed in accordance with NFPA 13D " Installation of Sprinkler Systems in One and Two Family Dwelling Units and Manufactured Homes."

The AQUASAFE® Network System is a combination of a sprinkler system and a domestic potable water system.

The AQUASAFE® Network System utilizes "Aquapex", which is a crosslinked polyethylene plastic tubing, Reliable® residential sprinkler heads, a stainless steel multiport fitting, and a distribution manifold. All of the components are approved by CSA and/or ULC for use in a network system and a potable water system.

4. Authorization Requested

The Applicant sought authorization for the use the AQUASAFE® Network System to be installed in one and two family dwellings and manufactured homes within the scope of Part 9 of the Building Code, as a network system that combines a sprinkler system and a potable water system.

5. Assessment

Reports and assessments provided by the applicant show that if AQUASAFE® Network System is designed, performance tested, installed and maintained in accordance with the limitations in the manufacturer's instructions and the conditions stated in this authorization, the level of performance required by the Building Code will be provided.

Reports submitted and reviewed, but are not limited to the following:

1. Aquapex Installation Guide.
2. UL Listing EX6181, dated May 30, 2003.
3. CSA Certificate (10007033) of Compliance, issues November 21 2002.
4. AQUASAFE® Fire Safety Design Information Form.
5. Sample Engineering Calculations.
6. Sample Engineering Drawings, January 14, 2005 and April 11, 2005.
7. Reliable Sprinkler Manufacturer's Information.
8. AQUASAFE® Residential Fire Safety Installation Guide, Multipurpose System.
9. AQUASAFE®, Fire Safety, Hydraulic Sample Calculations.
10. AQUASAFE® Installation Acceptance Sample Form.
11. Partial Decision for Ruling 04-42-997 of the Building Code Commission (BCC A2004-47).
12. Proposed Changes to the National Plumbing Code.
13. Partial References from NFPA 13D "Installation of Sprinkler Systems in One and Two Family Dwelling Units and Manufactured Homes".
14. AQUASAFE® Manufacturer's Information.
15. Technical Background Information Memo, dated September 13, 2005, regarding BCC Application A2004-47.
16. Revised Manufacturer's Maintenance Instructions.
17. AQUASAFE® Flow Test Verification Sample Form.
18. AQUASAFE® Sample Installation Drawings.
19. AQUASAFE® Technical Submission.

6. Authorization

The AQUASAFE® Network System is authorized for use in one and two family dwellings and manufactured homes within the scope of Part 9 of the Building Code, as a network system that combines a sprinkler system and a potable water system, all other requirements pertaining to the construction and installation are subject to the requirements of the Building Code, and are subject to the following specific terms and conditions of this Authorization:

A. Specific Terms and Conditions

1. This Authorization is valid only for Uponor Canada Inc.

2. The AQUASAFE® Network System must be designed and installed in accordance with NFPA 13D “Installation of Sprinkler Systems in One and Two Family Dwelling Units and Manufactured Homes”.

3. All materials and components that form a part of the AQUASAFE® Network System shall be suitable for a potable water supply.

4. The AQUASAFE® Network System may be designed so that the number of sprinkler heads may exceed the number permitted in Sentence 3.2.5.13.(4) of the Building Code.

5. The AQUASAFE® Network System requires the installation of a backflow preventor, as required by Sentences 7.6.2.3.(4) of the Building Code, only at the point(s) of connection to a non potable system.

6. The Aquapex piping system must be designed to meet the flow requirements for the most demanding location in the system.

7. The AQUASAFE® Network System shall be designed using Reliable® residential sprinkler heads, models RFC43 CCP, FI RES 49 CCP, FI Recessed HSW and/or F1 Res 49 Recessed Pendent/F1.

8. The AQUASAFE® Network System shall be installed by installers who are trained and authorized by Uponor Canada Inc. personnel.

9. Uponor Canada Inc. shall provide the homeowner with a copy of the maintenance and inspection instructions.

10. Uponor Canada Inc. shall provide the authority having jurisdiction a copy of the “Flow Test Verification”.

11. Uponor Canada Inc. shall provide the homeowner with a copy of the “Flow Test Verification”.

12. Uponor Canada Inc. shall provide the homeowner with a notice advising that any alteration or addition to the AQUASAFE® Network System will require re-evaluation from Uponor Canada Inc. and re-approval from the authority having jurisdiction.

13. The AQUASAFE® Network System shall have a permanent sticker(s) or sign(s), posted in a conspicuous location at the building control valve–as defined by the Building Code– indicating at minimum, the following information:

    (a) do not remove this sign,

    (b) this is a network system, combining the fire protection and potable water system,

    (c) turning off the building control valve will render the sprinkler system inoperable, and

    (d) water softeners, tannin removers, iron filters or ancillary appliances shall not be added to this system without a review of the sprinkler system by a fire protection specialist.

B. General Conditions

1. The use of the AQUASAFE® Network System must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (the "BCA") and, except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

    (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the terms and conditions set out in Section A. above; or

    (b) the occurrence of any of the events described in Sections B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        (i) the material, system or building design that is the subject matter of this Authorization;

        (ii) the address of the applicant specified in Section 1 of this authorization; or,

        (iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section A 1.1 of this authorization.

    (b) the use of the material, system or building design authorized herein;

(i) does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section A. above; or

(d) any Building Code provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 26 day of May 2005.

BUILDING MATERIALS EVALUATION COMMISSION

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Edward Link, Vice Chair

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
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Date of Authorization	May 26, 2005
BMEC Authorization	05-04-308
BMEC Application	# A2005-10

Authorization Report: Equipement Boni - Shelf and Rack Storage System

1. Applicant

Equipement Boni
1299 Marie-Victorin Blvd
St-Bruno, Quebec
J3V 6B7

Tel: (450) 653-1299
Fax: (450) 653-5391
Web: www.equipementboni.com

2. Manufacturing Facilities

Equipement Boni
1299 Marie-Victorin Blvd
St-Bruno, Quebec
J3V 6B7

Etalex
8501 Jarry Est
Anjou, Quebec
H1J 1H7

3. Description

The Equipement Boni shelf and rack storage system (the "shelf and rack storage system") is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the Building Code, as amended or remade from time to time and are not subject to mezzanine or interconnected floor space rules.

4. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

5. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Building Code.

Reports submitted and reviewed, but were not limited to:

1. Equipement Boni Sample Working Drawings.

2. Testing of Pallet Racks "Etalex Inc., G.N. Johnston Equipement Co Inc.", dated May 1999.

3. Final Report "Essais De Compression Sur Montants M Etalliques Boni Inc." University of Quebec, dated February 2002.

4. Equipement Boni Sample Calculations.

5. Equipement Boni Steel Storage Rack Safety Manual.

6. Equipement Boni Quality Control Drawings.

6. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for Equipement Boni.

Use and Occupancy

2.1 Except as where more restrictively provided for in 3.4. and 3.5. of this authorization, the shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III and IV commodities as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions; where the shelf and storage system incorporates the storage of rubber tires, such storage shall conform to the requirements of Subsection 3.3.1. "Indoor Tire Storage" of the Ontario Fire Code, Ontario Regulation 338/97, as amended or remade from time to time (the "OFC"),

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Building Code.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the OFC.

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be of noncombustible construction, and be designed in accordance with Part 4 of the Building Code.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization.
The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(b) open construction consisting of steel grating or open steel floor planking.

3.4 The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m except that where the maximum height exceeds 18 m but does not exceed 24 m, the following provisions shall apply:

(a) a fire alarm system shall be installed with:

(i) pull stations located at all exit doors including exit doors serving elevated decks and walkways; and

(ii) smoke detectors located, at the ceiling of all rooms and areas containing the shelf and rack system, within exit stair enclosures at the top, and at every third level of elevated deck or walkway; and

(b) the fire alarm system required by (a) above, shall be designed to notify the fire department upon activation; and

(c) the shelf and rack storage system shall be used only for the storage of Class I, II, III and IV commodities as defined in NFPA 13 -1999 as amended.

3.5 Where Class I, II, I II and IV commodities and Group A, B, C, plastics and rubber tires as defined in NFPA 13-1999 are stored, the maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 7 m.

3.6 Lighting levels of walkways and platforms shall conform to the Building Code.

3.7 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2). and 3.2.7.4.(1). respectively of the Building Code.

3.8 Guards and toe boards shall be installed in accordance with the Building Code.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs 4.3 and 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA 71-1998, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA 72-1990, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph 2.1, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 -1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the Building Code.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the OFC.

4.10. Regardless of the occupant load, the requirements of Section 2.8 “Emergency Planning” of the OFC shall apply.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Building Code except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than four platform levels, the highest of which may not be more than 12 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m^2 in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m:

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a "time-based egress analysis" undertaken and sealed by a Professional Engineer or Architect as defined in the Building Code using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time.

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where:

H_p = Horizontal travel distance on the shelf and rack storage (m)
V_p = Vertical travel distance on the shelf and rack storage (m)
H_m = Horizontal travel distance on the main floor (m)
N_{lg} = Number of lift gates in the means of egress
N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2). of the Building Code, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a “positive lock” when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the required Fire Safety Plan, as required by 4.10. of this Authorization, shall mark the lift gates such that they are readily identifiable as part of the egress route.

5.8 Where ‘at-level’ conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two ‘at-level’ conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the ‘at-level’ cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each 'at-level' conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the 'at-level' cross-over and all inserts shall be sized to support loads required in Part 4 of the Building Code,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each 'at-level' cross-over, and

(e) stairs approaching 'at-level' conveyor cross-overs shall be marked in accordance with the required Fire Safety Plan, as required by 4.10 of this Authorization, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (BCA) and, except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the terms and conditions set out in Section A. above; or

   (b) the occurrence of any of the events described in Sections B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this authorization; or,

      (iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section A 1.1 of this authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section A. above; or

(d) any Building Code provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 26 day of May 2005.

BUILDING MATERIALS EVALUATION COMMISSION

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Edward Link, Vice-Chair

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
www.obc.mah.gov.on.ca

Date of Authorization	May 26, 2005
BMEC Authorization	05-03-307
BMEC Application	A2005-02

AUTHORIZATION REPORT- The Aquarobic Area Bed System

1. Applicant

Aquarobic Canada.
P.O. Box 149
Utterson, Ontario
P0B 1M0

Tel: (800) 452-0144
Fax: (705) 788-9204
Web: www.aquarobic-canada.com

2. Manufacturing Facilities

Aquarobic International Inc.
206 Wyck Street
Winchester, Virginia,
22601, USA

3. Description

The Aquarobic Area Bed System is primarily comprised of a tertiary treatment unit, an effluent filter, a dosing tank and an area bed.

The tertiary treatment units permitted for use with this system are referenced in the Supplementary Guidelines to the Building Code, as amended, as meeting tertiary quality effluent criteria and include models MicroMini-28, MicoMini-45, MiniPlant-70 and MiniPlant-85.

An effluent filter is required downstream of the treatment unit. The specification of the effluent filter may vary depending on the Area Bed System design, and the filter models specified for use with the Aquarobic Area Bed may be located in section 6.A.4. of this authorization.

The effluent is the pumped into a dosing tank and it is time dosed to the area bed.

An area bed is comprised of two parts; the stone layer and the sand layer. The sand layer of an area bed is sized in consideration of the soil it rests on, and under certain conditions, it may be required to be laterally extended. This lateral sand layer extension is known as the mantle.

The effluent is sent to the stone layer, by pressure from a pump, via a forcemain. Effluent is initially pumped from the treatment unit into the dosing tank. From the dosing tank, the forcemain terminates at a header or distribution box. From the header or distribution box, the effluent is sent to a series of perforated distribution pipes that run through the stone layer.

4. Authorization requested

The applicant sought an Authorization for an Area Bed System as an equivalent to a other Class 4 sewage systems as referenced in Section 8.7. “Leaching Beds” of the Building Code.

5. Assessment

Reports and assessments provided by the applicant show that if the Area Bed is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations, the Building Code and the specific terms and conditions stated in this authorization, the level of performance required by the Building Code will be provided.

The following is a list of the documents submitted, and reviewed, but are not limited to:

1. NSF International Evaluation Report.
2. NSFI Testing Results.
3. Ruling of the Minister of Municipal Affairs and Housing: No 04SG-08, revised August 12, 2004.
4. Letter of Approval, Ministry of the Environment, September 15, 1980.
5. Manufacturer’s Information: API,50 Micron Spin Filter.
6. Operation and Maintenance Manual, Aquarobic
7. Service Contact, Aquarobic
8. Area Bed Component Drawings, dated December 2004, February 2003.
9. Area Bed System Description, Aquarobic.
10. Treatment Unit Approvals, Aquarobic.
11. Gunnell Engineering Report, May 17, 2005 AGAT Laboratories Certificate of Analysis.

6. Authorization

The Aquarobic Area Bed System is authorized as an equivalent to other Class 4 sewage systems as referenced to in Section 8.7. “Leaching Beds” of the Building Code; all other requirements pertaining to the design, installation and construction are subject to the regulations of the Building Code, and to the following terms and conditions:

A. Specific Terms & Conditions

1.0. Definitions

A word or phase used in this Authorization has the following meaning for the purposes of this Authorization:

Area Bed means the part of a leaching bed comprised of a stone layer and the underlying unsaturated sand layer intended to further treat and distribute the effluent, and does not include the area referred to as the mantle.

Contact Area means the area of infiltrative surface, directly below the area bed, required to absorb the treated effluent into the underlying native soil, but does not include the area where the mantle, if required, comes into contact with the native soil.

Extended Contact Area means the area of the sand bed, as extended, and mantle, where required, to meet the necessary lateral extension such that the effluent is absorbed into the underlying soil

Infiltrative Surface means the area of interface where effluent migrates downward from the sand layer of the area bed and, if necessary, the mantle and passes into the native soil or leaching bed fill.

Mantle means the lateral extension of the area bed using imported leaching bed fill having a T time of 15 min/cm or less, but does not include the area referred to as the area bed, necessary to provide an area of hydraulic catchment in any direction in which the effluent entering the leaching bed fill will move horizontally such that effluent is treated and absorbed.

Raised or Partially Raised Area Bed means a sewage system in which any part of the leaching bed is above the natural ground elevation.

Uniform Distribution means the even dispersal of effluent throughout all areas of an area bed and adjoining mantle, if required, as it migrates down from the stone layer to the underlying sand layer to either the native soil or mantle comprised of imported soil.

Vertical Separation means the depth of unsaturated soil below a leaching bed as measured from the bottom of the absorption trench or the bottom of the stone layer to a limiting surface such as high ground water table, rock or soil with a percolation time greater than 50 min/cm.

2.0 Installation Requirements

2.1. This Authorization is valid only for Aquarobic Canada.

2.2. Only Aquarobic Canada manufacturer trained and authorized agents or employees shall install, maintain and service the Area Bed System.

2.3. The Aquarobic Area Bed System shall be installed as per the manufacturer's installation instructions.

2.4. The Service and Maintenance Agreement prescribed by Sentence 8.9.2.3.(2) of the Building Code requires that the persons authorized by the manufacturer to service and maintain Area Bed System and who have entered into the agreement with the person operating the treatment unit, and shall:

2.4.1. conduct and record at least once during every six month period, an inspection and servicing as specified by the manufacturer of the Bio-Microbics treatment unit in the "Aquarobic Operation and Maintenance Manual"; and provide a copy to the person operating the Area Bed System;

2.4.2. provide a copy of the "Aquarobic Operation and Maintenance Manual" revised August 2003, to the person operating the Area Bed System and to the authority having jurisdiction at the time of the permit application;

2.4.3. conduct sampling and testing in accordance with the requirements of Clauses 8.9.2.4.(1)(a) and (b) of the Building Code;

2.4.3.1. once during the first 12 months after the Area Bed is put into use, and

2.4.3.2. thereafter, once during every 48 month period after the previous sampling has been completed,

2.4.4. promptly submit the sampling test results to the person operating the Aquarobic Area Bed System, and

2.5. Aquarobic Canada shall retain records of the sampling test results for each Area Bed System received pursuant to the terms and conditions set out in 2.4. above, for a period of 10 years and shall promptly forward copies of those records to a chief building official upon request.

3.0 System Requirements

3.1. All pipe connections in the system (i.e. pretreatment chamber, treatment units, accessory treatment units, tanks, pumps and filters) where incorporated, shall be flexible and watertight.

3.2. The Aquarobic treatment units used in the system shall use the daily design sewage flows as referenced in Table 3.2.1. “Daily Design Flow”:

Table 3.2.1.
Daily Design Flow

Treatment Unit Models	**Flow Range** **measured in Litres**
#54291-6: MicroMini-28	750 to 2800
#54291-6: MicroMini-45	2800 to 4500
#54291-15: MiniPlant-70	4500 to 7000
#54291-15: MiniPlant-85	7000 to 8500
Column 1	Column 2

3.3. A single chamber dosing tank;

3.3.1. shall be provided to receive the effluent from the treatment unit,

3.3.2. be sized at 1.5 times the daily design flow, and

3.3.3. in equal pumped volumes over a 24 hour period, time dose the effluent to the area bed.

4.0. Design

4.1. The Aquarobic Canada treatment units shall be fitted with an API 50 micron Spin Filter, model 4E40 on the discharge line of the treatment units.

4.2. An absorption system comprised of a stone layer overlying a sand layer and having a total minimum depth of 500 mm, and:

4.2.1. the stone layer shall be a minimum depth of 200 mm, and

4.2.2. the sand layer shall be a minimum depth of 250 mm and have a percolation time of 6 to 10 min/cm.

4.3. The stone layer required by 4.2. above, shall have a minimum area as specified by the manufacturer but not less than:

4.3.1. where the total daily design sanitary sewage flow does not exceed 3000 L, the area shall be such that the loading on the surface of the stone layer does not exceed 75 L/m² per day, or

4.3.2. where the total daily design sanitary sewage flow exceeds 3000 L, the area shall be such that the loading on the surface of the stone layer does not exceed 50 L/m² per day.

4.4. The stone layer required by the terms and conditions set out in 4.2. above, shall be protected with a permeable geo-textile fabric in such a manner so as to prevent soil or leaching bed fill from entering the stone.

4.5. The bottom of the stone layer shall be at all points vertically separated at least 600 mm from the high ground water table, rock or soil with a T time of 6 or less, or greater than 50 min/cm; except:

4.5.1. where the underlying soil has a T time of between 6 and 50 min/cm, the bottom of the stone layer at all points may be reduced to 450 mm to rock, high water table, and soil having a T time of 50 min/cm.

4.6. The effluent shall be evenly distributed over the stone layer to within 600 mm of the perimeter edge of the stone layer using distribution pipes in accordance with the Building Code Appendix A-8.7.5.3.(2); or other means that achieves even distribution to within 600 mm of the perimeter edge of the stone layer.

4.7. The sand layer shall have a minimum area that is the greater of;

4.7.1. the area of the stone layer required by the terms and conditions set out in 4.3. above,

4.7.2. where the sand layer is installed in soil having a T time of 15 min/cm or less, the loading rate at the base of the area bed, shall be calculated using the formula A = QT/850 (L/m^2/day), or

4.7.3. where the sand layer is installed in or on soil having a T time of greater than 15 min/cm, that the sand layer be extended using imported leaching bed fill having a T time of not more than 15 min/cm; the construction of the extended sand layer, including the area bed and mantle shall:

4.7.3.1. be to a depth of at least 250 mm,

4.7.3.2. extend at least 15 m beyond the perimeter of the treatment unit, or distribution pipes if utilized, in any direction that the effluent entering the soil will move horizontally, and

4.7.3.3. be calculated using the formula A = QT/400 or by using the example calculations as they are provided, in Table 4.7.3.3. “Combined Area Bed and Mantle Loading Rates”

Where:

A is the area of contact in m² between the base of the sand layer and the underlying native soil,

Q is the total daily design sanitary sewage flow in litres, and

T is the percolation time of the underlying native soil in min/cm to a maximum of 50.

Table 4.7.3.3.
Combined Area Bed and Mantle Loading Rates Example Calculations

Loading Rate A = QT/400	
T of the native soil.	Loading rate (L/m^2/day)
≤ 15	27
20	20
30	13
40	10
≥50	8
Column 1	Column 2

4.8. Any Area Bed System that must be raised to meet the vertical separation distances required by the terms and conditions set out in 4.5. of this Authorization, shall meet the mantle requirements of the terms and conditions set out in 4.7., regardless of the T time of the native soil.

B. General Conditions

1. The use of the Aquarobic Canada Area Bed System, and as described in the specific terms and conditions set out in 6.A. must comply with the *Building Code Act, 1992* (the "Act") as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6.A. above; or

   (b) the occurrence of any of the events described in conditions 6.B.4.(a) and (b)(ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the Act any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

   (d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 26 day of May 2005.

BUILDING MATERIALS EVALUATION COMMISSION

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Edward Link, Vice-Chair

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
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Date of Authorization	April 28, 2005
BMEC Authorization	05-02-306
BMEC Application	# A2003-21

AUTHORIZATION REPORT- PanelCraft™ Roof System

1. Applicant

Craft-Bilt Materials Ltd.
140 Steelcase Road West
Markham, Ontario
L3R 3J9

Tel: (905) 475-9492
(800) 668-6430
Fax: (905) 475-0685
www.cbm.on.ca

2. Manufacturing Facilities

Craft-Bilt Manufacturing Co.
53 Souderton-Hatfield Pike
Souderton, Pennsylvania
USA, 18964

3. Description

PanelCraft™'s structural insulated roof panel system may be used in the construction of heated and unheated sunroom additions to residential occupancy buildings.

The factory assembled structural insulated panel is comprised of a 76 mm (3") or 115 mm (4-1/2") or 152 mm (6") thick polystyrene core, two 0.6 mm (0.031") thick aluminium skins adhered to a Type II polystyrene core, having a nominal density of 24.028 kg/m^3.

The adhesive used in the panels is a moisture curing, one part, 100% solid, non-volatile, Type II urethane adhesive. The panels are 915 mm (3'-0") wide, and they are available in lengths varying from 2.4 m (7'-9") to 5.7 m (18'-0").

On site, a pre-decorated 11 mm (1/2") thick gypsum board is mechanically fastened, with a metal trim clip, to the interior side of the panel to form the PanelCraft™' Roof System.

4. Authorization requested

The Applicant sought a Building Materials Evaluation Commission (the "BMEC") Authorization for the use of the PanelCraft™ Roof System, in heated and unheated sunroom additions, which may be an addition to a residential occupancy buildings that are subject to the requirements of Part 9 of the Building Code.

5. Assessment

Reports and assessments provided by the Applicant show that if the PanelCraft™ Roof System is designed, performance tested and installed in accordance with the limitations in the manufacturer's instructions, and the specific terms and conditions stated in this Authorization, the level of performance required by the Building Code will be provided.

The reports submitted, and reviewed, but were not limited to:

1. Craft-Bilt Materials Ltd. Roof Installation Guide, dated February 20, 2004.

2. Alan Zeegen Associates: documentation and drawings, dated May 2002, February 2004, May 2004.

3. Craft-Bilt Materials Ltd. Quality Control Manual.

4. National Evaluation Services, Inc., Report #NER-619, "PanelCraft™ Building Panels: Honeycomb and Polystyrene Sandwich Panels" issued October 1, 2001.

5. Buchan, Lawton, Parent Ltd Consulting Engineers, submissions dated: April 5, 2004, November 2003, and May 2004.

6. Craft-Bilt Materials Ltd. Manufacturer's Literature.

7. Canadian Building Digest CBD - 9 "Vapour Barrier in Home Construction"

8. Buchan, Lawton, Parent Ltd Consulting Engineers, Construction Drawings and Details "Polystyrene Core Panel with Pre-decorated Gypsum Covers Isometric" Drawing SA1.

6. Authorization

The PanelCraft™ Roof System is authorized for use as an innovative roof system designed for use in an acceptable heated or unheated sunroom addition, which may be in an addition to a building of residential occupancy; all other requirements pertaining to the installation of the PanelCraft™' Roof System shall be subject to the requirements of the Building Code, and are subject to the following terms and conditions.

A. Specific Terms & Conditions

1. This authorization is valid only for Craft-Bilt Materials Ltd.

2. The structural design and general review of the PanelCraft™ Roof System shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act*, (Ontario); the Professional Engineer shall provide the chief building official with a document certifying that the installation conforms with this authorization.

3. The structural system supporting the authorized PanelCraft™ Roof System shall have sufficient structural capacity as required by the Building Code.

4. The maximum allowable deflection of the PanelCraft™ Roof System, as an expressed ratio of the clear span shall be L/240.

5. The 152 mm (6") PanelCraft™ Roof System is deemed to be in conformance with the thermal requirements of Subsection 9.25.2. of the Building Code.

6. Where the PanelCraft™ Roof System is used in unheated sunroom additions, the system need not meet the following Building Code requirements:

   (a) Subsection 9.25.2. “Thermal Insulation”, and Section 9.38. “Thermal Design”,

   (b) Subsection 9.25.3. “Air Barrier Systems”, and

   (c) Subsection 9.25.4. “Vapour Barriers”.

7. The use of the PanelCraft™ Roof System shall be limited to residential occupancy buildings that are subject to the requirements of Part 9 of the Building Code.

8. The PanelCraft™ Roof System shall not be used where the roof assembly is required to have a fire resistance rating.

9. The PanelCraft™ Roof System shall incorporate the use of a metal trim having a minimum thickness of 0.38 mm (0.015") when securing the pre-decorated gypsum board sheathing.

10. The PanelCraft™ Roof System shall be identified by a permanent stamp, sticker or mark indicating the manufacturer’s name or trademark.

11. If the PanelCraft™ Roof System incorporates an opening within the panel, or is modified to accommodate a penetration within the panel, then additional testing demonstrating that the modified roof panel conforms to the Building Code shall be submitted to the chief building official for review.

B. General Conditions

1. The use of the PanelCraft™ Roof System comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been mended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 28 day of April 2005.

BUILDING MATERIALS EVALUATION COMMISSION

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Edward Link, Vice-Chair

Building Materials Evaluation Commission
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Tel: 416: 585. 4234 / Fax: 416. 585. 7531
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Date of Authorization	April 28, 2005
BMEC Authorization	05-01-305
BMEC Application	# A2005-01

Authorization Report - Shelf and Rack Storage Systems

1. Applicant

Metalsistem Canada Inc.
Storage and Display Solutions
55 West Beaver Creek Road, Unit 7
Richmond Hill, Ontario
L4B 1J5

Tel: (905) 886-9449
Fax: (905) 886-6890

2. Manufacturing Facilities

Metalsistem SPA.
Rovereto (TN)
Vial Dell'Industratria
Italy, 2

3. Description

The "Super 3" and the Unirack" shelf and rack storage systems are self contained structural systems within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment. Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the Building Code, as amended or remade from time to time and are not subject to mezzanine or interconnected floor space rules.

4. Authorization Requested

The applicant sought authorization for the use of "Super 3" and the Unirack" storage systems, as innovative shelf and rack storage systems designed for material handling, storage and distribution in warehouse facilities.

5. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack systems are used in accordance with the limitations and conditions stated in this authorization, they will provide the level of performance that would be achieved by conformance with the Building Code.

6. Authorization

The shelf and rack storage systems are authorized for use within a building as a self contained structural systems for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for Metalsistem® Canada.

Use and Occupancy

2.1 Except as required by 3.4. of this authorization, the shelf and rack storage systems shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III and IV commodities as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions.

2.2 The shelf and rack storage systems are not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Building Code.

2.3 The shelf and rack storage systems shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time (OFC).

General

3.1 The structural components of the entire shelf and rack storage systems, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be of noncombustible construction, and be designed in accordance with Part 4 of the Building Code.

3.2 The design and general review of the rack and storage systems shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(b) open construction consisting of steel grating or open steel floor planking.

3.4 The maximum height of the shelf and rack storage systems from the floor supporting the shelf and rack system to the topmost portion of the “Super 3" shelf and rack system shall not exceed 5 m, and 8 m when installing the “Unirack” shelf and rack system.

3.5 Lighting levels of walkways and platforms shall conform to the Building Code.

3.6 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2). and 3.2.7.4.(1). respectively of the Building Code.

3.7 Guards and toe boards shall be installed in accordance with the Building Code.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage systems are exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs 4.3 and 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA 71-1998, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA 72-1990, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage systems are to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph 2.1, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 -1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the Building Code.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the OFC.

4.10. Regardless of the occupant load, the requirements of Section 2.8 “Emergency Planning” of the OFC shall apply.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Building Code except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than two platform levels, the highest of which may not be more than 6 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m² in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m:

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a "time-based egress analysis" undertaken and sealed by a Professional Engineer or Architect as defined in the Building Code using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time.

(b) the Total Egress Time shall be calculated using the following formula;

$$\textit{Total Egress Time} = (H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5 \text{ (in seconds)}$$

where: H_p = Horizontal travel distance on the shelf and rack storage (m)
V_p = Vertical travel distance on the shelf and rack storage (m)
H_m = Horizontal travel distance on the main floor (m)
N_{lg} = Number of lift gates in the means of egress
N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2). of the Building Code, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a "positive lock" when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the required Fire Safety Plan, as required by 4.10. of this Authorization, shall mark the lift gates such that they are readily identifiable as part of the egress route.

5.8 Where ‘at-level’ conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two ‘at-level’ conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the ‘at-level’ cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each ‘at-level’ conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the ‘at-level’ cross-over and all inserts shall be sized to support loads required in Part 4 of the Building Code,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each ‘at-level’ cross-over, and

(e) stairs approaching ‘at-level’ conveyor cross-overs shall be marked in accordance with the required Fire Safety Plan, as required by 4.10 of this Authorization, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (BCA) and, except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the terms and conditions set out in Section A. above; or

(b) the occurrence of any of the events described in Sections B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this authorization; or,

(iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section A 1.1 of this authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section A. above; or

(d) any Building Code provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 28 day of April 2005.

BUILDING MATERIALS EVALUATION COMMISSION

_____

Edward Link, Vice-Chair

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
www.obc.mah.gov.on.ca

Date of Authorization	November 25, 2004
BMEC Authorization	# 04-12-304
BMEC Application	# A2004-13

HK Systems: Shelf and Rack Storage System

1. Applicant

HK Systems
2855 S. James Drive
New Berlin, Wisconsin
USA, 53151

Tel: (262) 860-6696
Fax: (262) 860-7011

P.O. Box 1512
Milwaukee, Wisconsin
USA, 53201-1512

2. Manufacturing Facilities

Indiana Bridge - Midwest Steel Inc.
1810 South Macedonia
Muncie, Indiana
USA, 47302

3. Description

The shelf and rack storage system is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment. Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the Building Code, as amended or remade from time to time and are not subject to mezzanine or interconnected floor space rules.

4. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

5. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Building Code.

6. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for HK Systems.

Use and Occupancy

2.1 Except as required by 3.4. of this authorization, the shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III and IV commodities as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions.

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Building Code.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time (OFC).

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be of noncombustible construction, and be designed in accordance with Part 4 of the Building Code.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(b) open construction consisting of steel grating or open steel floor planking.

3.4 The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m except that where the maximum height exceeds 18 m but does not exceed 24 m, the following provisions shall apply:

(a) a fire alarm system shall be installed with:

(i) pull stations located at all exit doors including exit doors serving elevated decks and walkways; and

(ii) smoke detectors located, at the ceiling of all rooms and areas containing the shelf and rack system, within exit stair enclosures at the top, and at every third level of elevated deck or walkway; and

(b) the fire alarm system required by (a) above, shall be designed to notify the fire department upon activation; and

(c) the shelf and rack storage system shall be used only for the storage of Class I, II, III and IV commodities as defined in NFPA 13 -1999 as amended.

3.5 Lighting levels of walkways and platforms shall conform to the Building Code.

3.6 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2). and 3.2.7.4.(1). respectively of the Building Code.

3.7 Guards and toe boards shall be installed in accordance with the Building Code.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs 4.3 and 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA 71-1998, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA 72-1990, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph 2.1, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 -1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the Building Code.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the OFC.

4.10. Regardless of the occupant load, the requirements of Section 2.8 “Emergency Planning” of the OFC shall apply.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Building Code except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than four platform levels, the highest of which may not be more than 12 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m^2 in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m:

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a "time-based egress analysis" undertaken and sealed by a Professional Engineer or Architect as defined in the Building Code using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time.

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where:
- H_p = Horizontal travel distance on the shelf and rack storage (m)
- V_p = Vertical travel distance on the shelf and rack storage (m)
- H_m = Horizontal travel distance on the main floor (m)
- N_{lg} = Number of lift gates in the means of egress
- N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2). of the Building Code, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a “positive lock” when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the required Fire Safety Plan, as required by 4.10. of this Authorization, shall mark the lift gates such that they are readily identifiable as part of the egress route.

5.8 Where ‘at-level’ conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two ‘at-level’ conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the ‘at-level’ cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each ‘at-level’ conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the ‘at-level’ cross-over and all inserts shall be sized to support loads required in Part 4 of the Building Code,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each ‘at-level’ cross-over, and

(e) stairs approaching ‘at-level’ conveyor cross-overs shall be marked in accordance with the required Fire Safety Plan, as required by 4.10 of this Authorization, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (BCA) and, except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the terms and conditions set out in Section A. above; or

(b) the occurrence of any of the events described in Sections B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this authorization; or,

(iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section A 1.1 of this authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section A. above; or

(d) any Building Code provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 25 day of November 2004.

BUILDING MATERIALS EVALUATION COMMISSION

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Edward Link, Vice-Chair

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Date of Authorization	November 25, 2004
BMEC Authorization	# 04-11-303
BMEC Application	# A2004-08

AUTHORIZATION REPORT- Pavilion Membranes

1. Applicant

Del-Scott-Co. / Pavilion Fabrication & Sales
Suite 305, 3-11 Bellerose Drive
St. Albert, Alberta
T8N 5C9

Tel: (780) 460-1726
Fax: (780) 460-1736
www.del-scott-co.com

2. Manufacturing Facilities

Intertape Polymer Group
50 Abbey Avenue
P.O. Box 868
Truro, Nova Scotia
B2N 5G6

Fabrene Inc.
240 Dupont Road
P.O. Box 4040
North Bay, Ontario
P1B 9B4

3. Description

The Pavilion Building System is a non pressurized building, wherein the structure is composed of a steel framework to support the Pavilion Membranes, which are tensioned to provide a weather barrier.

The steel frame structure of the Pavilion Building System shall be designed and constructed in accordance with the Building Code. The steel framework is a series of in-line clear span frames, with end walls. The frame pieces are modular and are used in different arrangements to make a variety of profiles, such as the Low Profile Texan, the Chalet and the Everest.

The Pavilion Membrane is on of two flame resistant woven polyolefin materials, Spiderweave FRU88X-6 (4 mil), or Spiderweave, P708. The Pavilion Membranes pieces are custom-sized and the edges reinforced for each building as per Pavilion specifications.

The Pavilion Membranes meet the requirements of a Class A material under ASTM E 84 Surface Burning Characteristics and satisfies the flammability requirements set out in CAN/ULC-S109 and NFPA 701-1996.

4. Authorization requested

The Applicant sought a Building Materials Evaluation Commission (BMEC) Authorization for the Pavilion Membranes for use as a roof covering, only when used in conjunction with a Pavilion Building System, as defined in this Authorization, in lieu of the requirements of Sentence 3.1.15.1.(1). “Roof Covering Classification” of the Building Code.

5. Assessment

Reports and assessments provided by the Applicant show that if the Pavilion Membranes are designed, performance tested and installed in accordance with the limitations in the manufacturer's instructions, and the specific terms and conditions stated in this Authorization, the level of performance required by the Building Code will be provided.

The reports submitted and reviewed, but were not limited to:

1. Office of State Fire Marshall, California Department of Forestry and Fire Protection Registration.

2. Bodycote Materials Testing Ortech Laboratory “NFPA 701-1989 Large Scale Flame Resistance of FRU88X-6 Fabric”, dated June 20, 2000.

3. Bodycote Materials Testing Ortech Laboratory “NFPA 701-1996 Test 1 and Test 2 Flame Resistance of FRU88X-6 Fabric”, dated September 6, 2001.

4. Bodycote Materials Testing Ortech Laboratory “CAN/ULC-S109 Flame Resistance of FRU88X-6 Fabric”, dated June 20, 2000.

5. Bodycote Materials Testing Ortech Laboratory “ASTM E 84 Surface Burning Characteristics of FRU88X-6 Fabric”, dated June 27, 2000.

6. Underwriters’ Laboratories of Canada “Report on Surface Burning Characteristics of Plastic Materials”, dated March 29, 1999.

7. “Draft Final Report Static Coefficient of Friction Tests, Nova Shield Fabrics”, project number 04-1284, dated March 22, 2004.

8. Atlas Material Testing Solutions “Hemispherical Spectral Reflection and near Normal/Hemispherical Spectral Transmittance Test Report”, Report No. 16909-0, dated April 11, 2003.

9. Bulletin, Building Approvals Department, Permits Section, City of Richmond, BC, “Temporary Tents” Permits-28, revised 2004-01-23.

10. Pavilion “Case Study” prepared for the Building Material Evaluation Commission, dated June 2004.

11. Nova-Shield™ Specification Sheet FRU88X-6 (4 mil).

12. Pavilion’s Installation Manuals, by Del-Scott-Co Inc.

13. Pavilion’s Warranty.

14. Quality Assurance Manual, Issue Number 3, dated October 20, 2003.

15. Pavilion’s Manufacturer’s Information.

16. Nova-Shield™ Manufacturer’s Information.

17. Excerpts from the Uniform Building Code 1985 ed.

18. Excerpts from the International Building Code 2003.

19. Pavilion Report “Supplementary Information” September 17, 2004.

20. Pavilion Report “Supplementary Information” June 30, 2004.

21. Pavilion Report “Supplementary Information” June 24, 2004.

22. Fabrene Industrial Fabric, type P708, dated September 14, 2004.

23. Bodycote Testing Materials Canada “ASTM E 84 Surface Burning Characteristics of FRU88X-6 Fabric”, dated August 24, 2004.

24. Fabrene Inc. Materials Testing Lab ASTM 1682, Tensile - Grab Test, dated November 11, 2004.

6. Authorization

The Pavilion Membranes are authorized for use as a roof covering, only when used in conjunction with a Pavilion Building System, in lieu of the requirements of Sentence 3.1.15.1.(1) “Roof Covering Classification” of the Building Code; all other requirements pertaining to the installation and construction are subject to the requirements of the Building Code and are subject to the following terms and conditions:

Note: this Authorization is not intended to be used as an equivalent to CAN/ULC-S107-M87 where roof coverings are permitted to be used in the construction of traditional roofing systems Class A, B, and C as determined by CAN/ULC-S107-M87.

A. Specific Terms & Conditions

1. This Authorization is valid only for the use of the Pavilion Membranes, Spiderweave FRU88X-6, or Spiderweave P708, when it is used in conjunction with a Pavilion Building System.

2. In addition to the requirements of Article 2.3.1.1. of the Building Code, the structural design shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act*, (Ontario) and who is qualified in the specific method applied.

3. When the Pavilion Membranes are installed in conjunction with a Pavilion Building System, together they shall be constructed as per the requirements of Subsection 3.2.2. of the Building Code.

4. Except as permitted by Article 3.2.2.17. of the Building Code, the Pavilion Membranes shall not be used where the assembly is required to have a fire-resistance rating.

5. The Pavilion Membranes are authorized for use in combustible construction only.

6. The Pavilion Membranes shall not be used in a building more than 1 storey in building height.

7. The Pavilion Membranes shall not be used in the construction of Pavilion Building Systems where the major occupancy is Group B, C, or F Division 1, as defined by the Building Code.

8. The Pavilion Membranes shall meet the following standards:

   a. CAN/ULC-S109-M87 “Standard for Flame Test of Flame-Resistant Fabrics and Films”,

   b. NFPA 701-1999 “Methods of Fire Test for Flame Propagation of Textiles and Films” Test 2, and

   c. CAN/ULC-S102.2-M88 “Standard Test Method for Surface Burning Characteristics of Building Materials.”

9. The Pavilion Membranes shall be installed by Pavilion Building Systems’ approved installers.

10. The Pavilion Membranes shall be installed as per the Pavilion Building Systems Installation Manuals, and is subject to the products’ limitation as specified by the manufacturer.

11. The Pavilion Membranes shall be identified by a permanent mark that indicates the manufacturer's name and registered trademark.

12. The Pavilion Membranes shall not have a flame spread rating more than 25, as specified in CAN/ULC-S102.2-M88.

13. The Pavilion Membranes used in the construction of Pavilion Building Systems, shall have the spatial separation determined in accordance with Subsections 3.2.3. or 9.10.14. of the Building Code, where the roof membrane becomes a part of the exposing building face.

B. General Conditions

1. The use of the Pavilion Membranes must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 25 day of November 2004.

BUILDING MATERIALS EVALUATION COMMISSION

_____

Edward Link, Vice-Chair

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
www.obc.mah.gov.on.ca

Date of Authorization	November 25, 2004
BMEC Authorization	BMEC # 04-10-302
BMEC Application	#A2003-24

AUTHORIZATION REPORT- The Bio-Microbic Area Bed

1. Applicant

Bio-Microbics Inc.
8450 Cole Parkway
Shawnee, Kansas
USA 66227

Tel: (913) 422-0707
Fax: (913) 422-0808
Web: www.biomicrobics.com

2. Manufacturing Facilities

Bio-Microbics Inc.
8450 Cole Parkway
Shawnee, Kansas
USA 66227

3. Description

The Bio-Microbics Inc. Area Bed System is primarily comprised of a tertiary treatment unit, an effluent filter and an area bed.

The tertiary treatment units permitted for use with this system are referenced in the Supplementary Guidelines to the Building Code, as amended, as meeting tertiary quality effluent criteria and include models MicroFAST® 0.5., MicroFAST® 0.75, MicroFAST® 0.9, and MicroFAST® 1.5.

An effluent filter is required downstream of the treatment unit. The specification of the effluent filter may vary depending on the Area Bed System design, and the filter models specified for use with the Bio-Microbics Inc. Area Bed may be located in section 6.A.4. of this authorization.

An area bed is comprised of two parts; the stone layer and the sand layer. The sand layer of an area bed is sized in consideration of the soil it rests on, and under certain conditions, it may be required to be laterally extended. This lateral sand layer extension is known as the mantle. The effluent is sent to the stone layer, either by gravity or pressure from a pump, via a pipe. This pipe leads from the treatment unit and terminates at the distribution box or header. From the distribution box or header, the effluent is sent to a series of perforated distribution pipes that run through the stone layer.

4. Authorization requested

The applicant sought an Authorization for an Area Bed System as an equivalent to a other Class 4 sewage systems as referenced in Section 8.7. “Leaching Beds” of the Building Code.

5. Assessment

Reports and assessments provided by the applicant show that if the Area Bed is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations, the Building Code and the specific terms and conditions stated in this authorization, the level of performance required by the Building Code will be provided.

The following is a list of the documents submitted, and reviewed, but are not limited to:

1. Ruling of the Minster of Municipal Affairs and Housing # 03-SG-05, dated July 16, 2003.

2. Supplementary Guidelines to the Ontario Building Code 1997, SG-5 Approved Sewage Treatment Units.

3. Technical Specifications - SIM/TEC Filter - STF-100/100A2 effluent filter assembly.

4. Engineering Analysis, re: GAG Sim /Tech Filter, dated 4/12/97.

5. Test Data re: GAG Sim /Tech Filter, dated April 10, 1997.

6. British Columbia Ministry of Health Services, re: Submerged Media Fixed Film Protocol, dated August 14, 2003.

7. Bio-Microbics “Quality Control Manual”

8. NSF Certification.

9. Massachusetts Alternative Septic System Test Center, Micro FAST, Model 0.5 “Technology Fact Sheet - Interim Finding”, 7/6/01.

10. Florida OWNERS Project Phase 1 - Test Data.

11. Florida OWNERS Project Phase 2 - Test Data.

12. Site Detail: Washington Stat “Effluent Discharged to Drip Irrigation Dispersal System”

13. Pinnacle Environmental Technologies Inc., Drawings dated October 2003, February 2003 and January 2004.

14. SIM/TECH manufacturer information, including sample STF-100 and STF-100A2.

15. "Bio-Microbics Service Manual" revised August 2003.

6. Authorization

The Bio-Microbics Inc. Area Bed System is authorized as an equivalent to other Class 4 sewage systems as referenced to in Section 8.7. "Leaching Beds" of the Building Code; all other requirements pertaining to the design, installation and construction are subject to the regulations of the Building Code, and to the following terms and conditions:

A. Specific Terms & Conditions

1.0. Definitions

A word or phase used in this Authorization has the following meaning for the purposes of this Authorization:

Area Bed means the part of a leaching bed comprised of a stone layer and the underlying unsaturated sand layer intended to further treat and distribute the effluent, and does not include the area referred to as the mantle.

Contact Area means the area of infiltrative surface, directly below the area bed, required to absorb the treated effluent into the underlying native soil, but does not include the area where the mantle, if required, comes into contact with the native soil.

Extended Contact Area means the area of the sand bed, as extended, and mantle, where required, to meet the necessary lateral extension such that the effluent is absorbed into the underlying soil

Infiltrative Surface means the area of interface where effluent migrates downward from the sand layer of the area bed and, if necessary, the mantle and passes into the native soil or leaching bed fill.

Mantle means the lateral extension of the area bed using imported leaching bed fill having a T time of 15 min/cm or less, but does not include the area referred to as the area bed, necessary to provide an area of hydraulic catchment in any direction in which the effluent entering the leaching bed fill will move horizontally such that effluent is treated and absorbed.

Raised or Partially Raised Area Bed means a sewage system in which any part of the leaching bed is above the natural ground elevation.

Uniform Distribution means the even dispersal of effluent throughout all areas of an area bed and adjoining mantle, if required, as it migrates down from the stone layer to the underlying sand layer to either the native soil or mantle comprised of imported soil.

Vertical Separation means the depth of unsaturated soil below a leaching bed as measured from the bottom of the absorption trench or the bottom of the stone layer to a limiting surface such as high ground water table, rock or soil with a percolation time greater than 50 min/cm.

2.0 Installation Requirements

2.1. This Authorization is valid only for Bio-Microbics Inc.

2.2. Only Bio-Microbics Inc. manufacturer trained and authorized agents or employees shall install, maintain and service the Area Bed System.

2.3. The Bio-Microbic Inc. Area Bed System shall be installed as per the manufacturer's installation instructions.

2.4. The Service and Maintenance Agreement prescribed by Sentence 8.9.2.3.(2) of the Building Code requires that the persons authorized by the manufacturer to service and maintain Area Bed System and who have entered into the agreement with the person operating the treatment unit, and shall:

2.4.1. conduct and record at least once during every six month period, an inspection and servicing as specified by the manufacturer of the Bio-Microbics treatment unit in the "Bio-Microbics Service Manual" revised August 2003; and provide a copy to the person operating the Area Bed System;

2.4.2. provide a copy of the "Bio-Microbics Service Manual" revised August 2003, to the person operating the Area Bed System and to the authority having jurisdiction at the time of the permit application;

2.4.3. conduct sampling and testing in accordance with the requirements of Clauses 8.9.2.4.(1)(a) and (b) of the Building Code;

2.4.3.1. once during the first 12 months after the Area Bed is put into use, and

2.4.3.2. thereafter, once during every 48 month period after the previous sampling has been completed,

2.4.4. promptly submit the sampling test results to the person operating the System and Bio-Microbics Inc. treatment unit, and

2.5. Bio-Microbics Inc. shall retain records of the sampling test results for each Area Bed System received pursuant to the terms and conditions set out in 2.4. above, for a period of 10 years and shall promptly forward copies of those records to a chief building official upon request.

3.0 System Requirements

3.1. All pipe connections in the system (i.e. pretreatment chamber, treatment units, accessory treatment units, tanks, pumps and filters) where incorporated, shall be flexible and watertight.

3.2. The Bio-Microbic treatment units used in the system shall use the daily design sewage flows as referenced in Table 3.2.1. “Daily Design Flow”:

Table 3.2.1.
Daily Design Flow

Treatment Unit Models	**Flow Range** **measured in Litres**
MicroFAST® 0.5	1300 to 1900
MicroFAST® 0.75	1900 to 2850
MicroFAST® 0.9	1900 to 3400
MicroFAST® 1.5	2850 to 5700
Column 1	Column 2

4.0. Design

4.1. The Bio-Microbic treatment unit shall be fitted with a bottomless sand filter or a BK-2000 filter, except

4.1.2. where the distribution of the effluent to the Area Bed is pressurized, a GAG Sim/Tech 100 micron, pressure filter model number STF-100 and STF-100AZ, or a 100 micron Vortex filter shall be used.

4.2. An absorption system comprised of a stone layer overlying a sand layer and having a total minimum depth of 500 mm, and:

4.2.1. the stone layer shall be a minimum depth of 200 mm, and

4.2.2. the sand layer shall be a minimum depth of 250 mm.

4.3. The stone layer required by 4.2. above, shall have a minimum area as specified by the manufacturer but not less than:

4.3.1. where the total daily design sanitary sewage flow does not exceed 3000 L, the area shall be such that the loading on the surface of the stone layer does not exceed 75 L/m² per day, or

4.3.2. where the total daily design sanitary sewage flow exceeds 3 000 L, the area shall be such that the loading on the surface of the stone layer does not exceed 50 L/m² per day.

4.4. The stone layer required by the terms and conditions set out in 4.2. above, shall be protected with a permeable geo-textile fabric in such a manner so as to prevent soil or leaching bed fill from entering the stone.

4.5. The bottom of the stone layer shall be at all points vertically separated at least 600 mm from the high ground water table, rock or soil with a T time of 6 or less, or greater than 50 min/cm; except:

4.5.1. where the underlying soil has a T time of between 6 and 50 min/cm, the bottom of the stone layer at all points may be reduced to 450 mm to rock, high water table, and soil having a T time of 50 min/cm.

4.6. The effluent shall be evenly distributed over the stone layer to within 600 mm of the perimeter edge of the stone layer using distribution pipes in accordance with the Building Code Appendix A-8.7.5.3.(2); or other means that achieves even distribution to within 600 mm of the perimeter edge of the stone layer.

4.7. The sand layer shall have a minimum area that is the greater of;

4.7.1. the area of the stone layer required by the terms and conditions set out in 4.3. above,

4.7.2. where the sand layer is installed in soil having a T time of 15 min/cm or less, the loading rate at the base of the area bed, shall be calculated using the formula A = QT/850 (L/m^2/day), or

4.7.3. where the sand layer is installed in or on soil having a T time of greater than 15 min/cm, that the sand layer be extended using imported leaching bed fill having a T time of not more than 15 min/cm; the construction of the extended sand layer, including the area bed and mantel shall:

4.7.3.1. be to a depth of at least 250 mm,

4.7.3.2. extend at least 15 m beyond the perimeter of the treatment unit, or distribution pipes if utilized, in any direction that the effluent entering the soil will move horizontally, and

4.7.3.3. be calculated using the formula A = QT/400 or by using the example calculations as they are provided, in Table 4.7.3.3. “Combined Area Bed and Mantle Loading Rates”

Where:

A is the area of contact in m² between the base of the sand layer and the underlying native soil,

Q is the total daily design sanitary sewage flow in litres, and

T is the percolation time of the underlying native soil in min/cm to a maximum of 50.

Table 4.7.3.3.
Combined Area Bed and Mantle Loading Rates Example Calculations

Loading Rate A = QT/400	
T of the native soil.	Loading rate (L/m^2/day)
≤ 15	27
20	20
30	13
40	10
≥50	8
Column 1	Column 2

4.8. Any Area Bed System that must be raised to meet the vertical separation distances required by the terms and conditions set out in 4.5. of this Authorization, shall meet the mantle requirements of the terms and conditions set out in 4.7., regardless of the T time of the native soil.

B. General Conditions

1. The use of the Bio Microbics' Inc. Area Bed System, and as described in the specific terms and conditions set out in 6.A. must comply with the *Building Code Act, 1992* (the "Act") as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6.A. above; or

(b) the occurrence of any of the events described in conditions 6.B.4.(a) and (b)(ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Part 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Act any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 25 day of November 2004.

BUILDING MATERIALS EVALUATION COMMISSION

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Edward Link, Vice-Chair

Building Materials Evaluation Commission
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Toronto, Ontario, M5G 2E5
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Date of Authorization	September 30, 2004
BMEC Authorization	# 04-09-301
BMEC Application	A2004-10

AUTHORIZATION REPORT - LUNAplast™ Photoluminescent Exit Signs

1. Applicant

Luna Technologies International Inc.
61A Fawcett Road
Coquitlam, British Columbia
V3K 6V2

Tel: (604) 526-5890
Fax: (604) 526-8995
Web: www.lunaplast.com

2. Manufacturing Facilities

Luna Technologies International Inc.
61A Fawcett Road
Coquitlam, British Columbia
V3K 6V2

3. Description

The LUNAplast™ Photoluminescent Exit Sign ("Luna Sign") is a directional exit sign.

The Luna Sign consists of a photoluminesecnt background and opaque letters spelling the word "EXIT" or "SORTIE". Opaque directional indicators are optional and are included at one or both sides of the "EXIT" and "SORTIE" legend.

The LUNA 5000 Series consists of a single photoluminescent panel consisting of a rigid poly vinyl chloride (PVC) sheet, blended with strontium oxide photoluminescent pigment that emits light continuously through the absorption of at least 54 lux (5 foot-candles) of ambient illumination.

The Luna 5000 series denotes mounting options. The wall mounted bracket, 5000W Luna Sign consists of a photoluminescent placard, silk screened with the word "EXIT" or "SORTIE"; the flag mounted bracket, 5000F1 and 5000F2 Luna Sign consists of one or two photoluminescent placards, silk screened with the word "EXIT" or "SORTIE, for a single sided or double side application; the ceiling mounted bracket, 5000C1 and 5000C2 Luna Sign consists of photoluminescent placards silk screened with the word "EXIT" or "SORTIE" for a single sided or double side applications.

All authorized Luna Signs have red letters and a photoluminescent background.

4. Authorization Requested

The Applicant sought a Building Materials Evaluation Commission ("BMEC") authorization for the Luna Signs as a means of egress identification under Subsections 3.4.5. "Exit Signs" or 9.9.10. "Signage" with conditions and limitations, equivalent to the requirements of Building Code, as amended.

5. Assessment

Reports and assessments provided by the applicant show that if the Luna Signs are designed, performance tested and installed in accordance with the manufacturer's instructions and limitations, all other requirements of the Building Code, and the specific terms and conditions stated in this authorization, that the level of performance required by the Building Code will be provided.

The following is a list of the documents submitted, and reviewed, but is not limited to:

1. Manufacturer's Information "Introducing the LUNAplast™ UL-924 Sign".

2. LUNAplast™ Exit Sign Label.

3. LUNAplast™ Installation Instructions, revised September 10, 2004.

4. Underwriter Laboratories Inc. "Procedures and Report Materials", dated 2004/04/05.

5. Underwriter Laboratories Inc. "Online Certification Directory" FWBX.E226940, dated 7/20/2004.

6. Material Safety Data Sheet "PVC Based Photoluminescent Vinyl Foam", Dated August 2001.

7. Underwriter Laboratories Inc. "Follow up Services Test Results for Exit Signs" March 11, 2004.

8. Underwriter Laboratories Inc. "Follow Up Procedure" revised 2003/01/30.

9. Excerpts from NFPA 101 "Life Safety Code" , 2000 Edition.

10. Energy Star Approval, April 20, 2004.

11. City of Vancouver Approval, May 21, 2004.

12. Transport Canada Approval "Safety and Security", June 29, 1998.

13. State of Indiana Approval, September 12, 2002.

14. National Research Council Summary of Report No. PO-1796, June 24, 1998

15. Report "A Field Study on Photoluminescent Signage Used to Guide Building Occupants to Exit in Complete Darkness", Proulx, Creak and Kyle.

16. SAE Paper "ISS Emergency Egress "A System for Crewmember Pathway Indication", 2001-01-2184.

6. Authorization

The Luna Signs are authorized for use as a means of egress identification under Subsections 3.4.5. "Exit Signs" or 9.9.10. "Signage", all other requirements pertaining to the installation are subject to the requirements of the Building Code, and subject to the following terms and conditions:

A. Specific Terms & Conditions

1. This Authorization is valid only for the Luna Signs model numbers described in Table 6.A.1. "Exit Signs",

Table 6.A.1.
Exit Signs

Model Number	Description	Single / Double Sided
5000W	wall mounted with red letters and a photoluminescent background	single sided
5000F1	flag mounted with red letters and a photoluminescent background	single sided
5000F2	flag mounted with red letters and a photoluminescent background	double sided (2 placards)
5000C1	ceiling mounted with red letters and a photoluminescent background	single sided
5000C2	ceiling mounted with red letters and a photoluminescent background	double sided (2 placards)
Column 1	Column 2	Column 3

2. The Luna SORTIE Sign, shall only be installed adjacent to an approved Luna Sign, as it is described in Table 6.A.1. “Exit Signs” of this Authorization.

3. Except as permitted by Specific Term and Condition 6.A.4., the Luna Signs are not required to be provided with an emergency power supply as described in Sentence 3.2.7.4.(1) of the Building Code.

4. Approved models of the Luna Signs may be installed in a building under the scope of Subsection 3.2.6. “Additional Requirements for High Buildings” of the Building Code if they are illuminated directly by a lighting fixture providing 54 lux (5 ft candles) of unfiltered fluorescent illumination and having a power source conforming to Subclause 3.2.7.4.(1)(b)(i) of the Building Code.

5. Except as provided by Specific Term and Condition 6.A.4., approved models of the Luna Signs may be substituted for exits signs as described in Subsections 3.4.5. “Exit Signs” or 9.9.10. “Signage” of the Building Code.

6. The Luna Signs require a minimum of 54 lux (5 ft candles) of constant and continuous external unfiltered fluorescent, lighting to illuminate the face(s) of the signs at all times.

7. The Luna Signs shall be located so that the listed legible viewing distance of the sign is not greater than 22.3 m (75 ft).

8. The Luna Signs shall have the following markings:

   a. Luna,

   b. a UL/ULC listing label,

   c. Model number,

   d. Legible viewing distance, and

   e. “CAUTION: a minimum 5 foot-candle of external un-filtered fluorescent illumination must be present on the sign face at all times of building occupancy.”

9. The Luna Signs shall be installed as per the manufacturer’s instructions.

10. The Luna Signs are authorized for indoor applications only.

11. The Luna Signs shall not be exposed to direct sunlight.

12. The Luna Signs shall not be exposed to temperatures outside the range of 10^0 to 40^0 C (50^0 to 104^0 F).

13. The Luna Signs shall be cleaned with a damp cloth or as otherwise recommended by the manufacturer.

B. General Conditions

1. The use of the Luna Signs as described in Specific Terms and Conditions 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (BCA) and except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in A. above; or

   (b) the occurrence of any of the events described in Conditions 6.B.4.(a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      I. the material, system or building design that is the subject matter of this Authorization;

      ii. the address of the applicant specified in Part 1 of this Authorization; or,

      iii. the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      i. does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

      ii. provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 30th day of September 2004.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

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Date of Authorization	September 30, 2004
BMEC Authorization	# 04-08-300
BMEC Application	A2004-09

AUTHORIZATION REPORT - Bradyglo™ High Performance Photoluminescent Exit Signs

1. Applicant

Brady Canada Inc.
56 Leek Crescent
Richmond Hill, Ontario
L4B 1H1

Tel: (800) 263-6179
Fax: (800) 387-4935
Web: www.bradyid.com

2. Manufacturing Facilities

Jessup Manufacturing Company
2815 West Route 120
McHenry, Illinos 60050
United States

3. Description

Brady B-355 BRADYGLO™ High Performance Photoluminescent Exit Signs ("Brady Signs") are directional exit signs, and they are available framed or frameless. The Brady Signs have a photoluminescent panel consisting of a rigid PVC sheet blended with strontium oxide photoluminescent pigment that emits light continuous through the absorption of at least 54 lux (5 foot-candles) of ambient illumination.

The framed Brady Sign consist of a photoluminescent placard inside a frame, which is provided with knockouts spelling the words "EXIT" or "SORTIE and optional directional indicator knockouts. The framed Brady Sign is available in single and double sided, with a mounting bracket or wall mounted. The frame for the Brady Sign is powder coated steel.

The frameless placard consists of a photoluminesecnt background and opaque letters spelling the word "EXIT" or "SORTIE". Opaque directional indicators are optional and are included at one or both sides of the "EXIT" and "SORTIE" legend. The substrate material is semi-rigid PVC, it is provided with holes for mechanical mounting to the surface.

4. Authorization Requested

The Applicant sought a Building Materials Evaluation Commission ("BMEC") authorization for the Brady Signs as a means of egress identification under Subsections 3.4.5. "Exit Signs" or 9.9.10. "Signage" with conditions and limitations, equivalent to the requirements of Building Code, as amended and remade from time to time.

5. Assessment

Reports and assessments provided by the applicant show that if the Brady Signs are designed, performance tested and installed in accordance with the manufacturer's instructions and limitations, all other requirements of the Building Code, and the specific terms and conditions stated in this authorization, that the level of performance required by the Building Code will be provided.

The following is a list of the documents submitted, and reviewed, but is not limited to:

1. Report from Sarah Maman P. Eng “Fire, Life Safety and Security Institute”, dated June 24, 2004.

2. Brady B-355 BRADYGLO™ High Performance Photoluminescent Exit Sign Installation Instructions.

3. Brady B-355 BRADYGLO™ High Performance Photoluminescent , Technical Data Sheets TDS No. B-355.

4. ICC ES Legacy Report (ER-6153) Brady B-355 BRADYGLO™ High Performance Photoluminescent

5. Brady B-355 BRADYGLO™ High Performance Photoluminescent, UL and ULC certificates.

6. Jessup Manufacturing Company ISO 9002 Certificate.

7. Brady B-355 BRADYGLO™ High Performance Photoluminescent, Manufacture Information.

8. Brady B-355 BRADYGLO™ High Performance Photoluminescent, Product Information.

9. CAN/CSA-C860-96 “Performance of Internally Lighted Exit Signs” Performance of Electrical Products.

10. ULC/ORD-C924-02 “Photoluminescent And Self-Luminous Exit Signs”.

11. UL 924 “Emergency Lighting and Power Equipment”.

12. ULC letter September 7, 2004, re: Brady Photoluminescent Exit Sign.

6. Authorization

The Brady Signs are authorized for use as a means of egress identification under Subsections 3.4.5. “Exit Signs” or 9.9.10. “Signage”, all other requirements pertaining to the installation are subject to the requirements of the Building Code, and subject to the following terms and conditions:

A. Specific Terms & Conditions

1. This Authorization is valid only for the Brady Signs model numbers described in Table 6.A.1. “Exit Signs”,

   Table 6.A.1.
   Exit Signs

Model Number	Frame Colour	Single / Double Sided
90885	Red	Single Sided Wallmount
90839	Red	Single Sided with Bracket
90840	Red	Double Sided with Bracket
87807	Frameless Red Letters	Single Sided Wallmount
98452	Framelss Red Reflective Letter	Single Sided Wallmount
Column 1	Column 2	Column 3

2. The SORTIE Sign, model number 98451, shall only be installed adjacent to an approved Brady Sign, as it is described in Table 6.A.1. “Exit Signs” of this Authorization.

3. Except as permitted by Specific Term and Condition 6.A.4., the Brady Signs are not required to be provided with an emergency power supply as described in Sentence 3.2.7.4.(1) of the Building Code.

4. Approved models of the Brady Signs may be installed in a building under the scope of Subsection 3.2.6. “Additional Requirements for High Buildings” of the Building Code if they are illuminated directly by a lighting fixture providing 54 lux (5 ft candles) of unfiltered fluorescent illumination and having a power source conforming to Subclause 3.2.7.4.(1)(b)(i) of the Building Code.

5. Except as provided by Specific Term and Condition 6.A.4., approved models of the Brady Signs may be substituted for exits signs as described in Subsections 3.4.5. “Exit Signs” or 9.9.10. “Signage” of the Building Code.

6. The Brady Signs require a minimum of 54 lux (5 ft candles) of constant and continuous external unfiltered fluorescent, lighting to illuminate the face(s) of the signs at all times.

7. The Brady Signs shall be located so that the listed legible viewing distance of model numbers 90885, 90839, 90840, 87807, 98452, and 98451 is not greater than 15.2 m (50 ft).

8. The Brady Signs shall have the following markings:

   a. Brady Canada Inc.

   b. a UL/ULC listing label,

   c. Model number,

   d. Legible viewing distance, and

   e. "CAUTION: a minimum 5 foot-candle external un-filtered fluorescent illumination must be present on the sign face at all times of building's occupancy."

9. The Brady Signs shall be installed as per the manufacturer's instructions.

10. The Brady Signs are authorized for indoor applications only.

11. The Brady Signs shall not be exposed to direct sunlight.

12. The Brady Signs shall not be exposed to temperatures outside the range of 10^0 to 40^0 C (50^0 to 104^0 F).

13. The Brady Signs shall be cleaned with a damp cloth or as otherwise recommended by the manufacturer.

B. General Conditions

1. The use of the Brady Signs as described in Specific Terms and Conditions 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (BCA) and except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in A. above; or

(b) the occurrence of any of the events described in Conditions B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

I. the material, system or building design that is the subject matter of this Authorization;

ii. the address of the applicant specified in Part 1 of this Authorization; or,

iii. the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

I. does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

ii. provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 30th day of September 2004.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
www.obc.mah.gov.on.ca

Date of Authorization	July 29, 2004
BMEC Authorization	BMEC # 04-07-299
BMEC Application	#A2004-07

AUTHORIZATION REPORT: Hancor Envirochambers™

1. Applicant

Hancor Inc.
2490 Route 139
St. Nicephone, Quebec
J2A 4H7

Tel: (819) 472-8228
Fax: (819) 472-4343

2. Manufacturing Facilities

Vantage Product
960 Almon Road
Conington, GA, 30014

Carson Industries
1675 Industrial Drive
Napoleon Drive, OH, 43545

Ft. Wayne Plastics
510 Sumpter Drive
Ft. Wayne, IN, 46804

3. Description

Hancor Envirochambers™: Narrow, Standard, Hi-capacity (the "Hancor Chambers") are intended for use in a sewage system in lieu of absorption trenches constructed of stone and distribution pipe.

The Narrow chamber has a bottom width of 380 mm and a height of 292 mm, the Standard chamber has a bottom width of 850 mm and a height of 300 mm and the Hi-capacity chamber has a bottom width of 850 mm and a height of 450 mm.

The Hancor Chambers are formed from injection moulded high density polyolefin and are connected end-to-end using overlapping dowels with pilot hole connections.

The sidewall louvers are set at a 30 degree angle to help prevent soil intrusion and the Hancor Chambers are closed at the ends of the trenches with snap-on end plates.

4. Authorization requested

The applicant sought authorization for use of the Hancor Chambers as an alternative to the construction of absorption trenches as required by Section 8.7 of the 1997 Ontario Building Code, as amended (the "Building Code"). The applicant requested that the Hancor Chambers be used to replace stone and distribution pipe in absorption trenches and filter beds that are:

(a) gravity fed,
(b) "dosed" (non-pressurized distribution system), and
(c) pressurized.

Note: For the purposes of this authorization, "dosed" means a system in which effluent is pumped to the leaching bed, either through the use of a pump or siphon, but the effluent is not pressurized within the leaching bed.

5. Assessment

Reports and assessments provided by the applicant show that if the Hancor Chambers are designed, performance tested, installed and maintained in accordance with the limitations in the manufacturer's instructions, and the conditions stated in this authorization, a level of performance will be provided as required by the Building Code for absorption trenches in soil, in leaching bed fill or in a filter bed, whether gravity fed, pressurized or "dosed".

Listed below are the reports that were submitted and reviewed, but are not limited to:

1. Hancor Envirochamber™ "Trench Length Reductions and Warranty Periods" by State.

2. Manufacturer Information " EnviroChamber™, On -Site Wastewater Management Systems."

3. Envirochamber™ Units Septic Leach Field System, Trench Design Installation Instruction.

4. Hancor Envirochamber™ Unit Specifications Data Sheet.

5. Envirochamber™ units and Accessories Sheet.

6. Table Comparison to Similar BMEC Approved Material (Narrow Chamber Comparison).

7. TTL Associates Inc. - Reports Verifying Dimension and Volume Capacity of Hancor Enviro- Chambers™.

8. Certificate of Listing, IAPMO Research and Testing Inc. - dated August 2003.

9. International Association of Plumbing and Mechanical Official, "Material and Property Standards for Plastic Leaching Chambers" IAPMO 63-99.

10. Quality Control Information.

11. Letters of Approvals:

    a. Department of Environment and Natural Resources, South Dakota, US, April 25, 2002.
    b. Department of Health, Ohio, US, May 30, 2002.
    c. Department of Health, State of New York, US, June 26, 2002.
    d. Department of Environment and Natural Resources, North Carolina, US, October 8, 1995
    e. Department of Commerce, Wisconsin, US, April 4, 2002.
    f. Texas Natural Resource Conservation Commission, October 2, 1997.
    g. Cabinet for Human Resources, Kentucky, US, July 7, 1995.
    h. Department of Environmental Protection, Massachusetts, US, April 24, 2002.

6. Authorization

The Hancor Chambers are authorized for use in sewage systems within the scope of Part 8 of the Building Code, as an alternative to stone and distribution pipes in absorption trenches and in filter beds, when installed in accordance with the manufacturer's recommendations, all other requirements pertaining to the installation and construction are subject to the requirements of the Building Code, and to the Specific Terms and Conditions of this Authorization:

A. Specific Terms & Conditions

1. This authorization is valid only for Hancor Chambers: Narrow, Standard, Hi-capacity.

2. The Hancor Chambers shall be manufactured to AASHTO Standard H-10 loading.

3. When the Hancor Chambers are installed in lieu of distribution piping and stone, the length of the chamber system must equal the required lengths of distribution pipe specified in Articles 8.7.3.1. and 8.7.5.3 of the Building Code.

4. When the Hancor Chambers are installed in lieu of distribution piping and stone, the leaching beds must satisfy the general construction requirements specified in Articles 8.7.2.1., 8.7.4.2. and 8.7.5.3 of the Building Code.

5. The minimum clearance distances required by Article 8.2.1.6. of the Building Code for distribution piping shall be met by the Hancor Chambers.

6. When installed in lieu of distribution piping and stone in absorption trenches, the trenches for the Hancor Chambers shall be:

   (a) approximately the same length and not more than 30 m in length,

   (b) a minimum width of 500 mm,

   (c) at least 600 mm and not more than 900 mm in depth,

   (d) centred at least 1600 mm,

   (e) at least 900 mm at all points on the bottom of the trench, above the high ground water table, rock or soil with a percolation time greater than 50 minutes,

   (f) backfilled, after installation of the Hancor Chambers, with leaching bed fill, so as to ensure that after the leaching bed fill settles, the surface of the leaching bed will not form any depressions, and

   (g) backfilled with a soil that does not contain heavy clay, silt or debris, and is manually compacted along the sides of the chamber to provide lateral support.

7. When installed in lieu of distribution piping and stone in filter beds, the lines of the Hancor Chambers shall be evenly spaced over the surface of the filter medium to which the sewage effluent is applied, and the filter bed shall meet the following requirements:

   (a) the filter medium shall meet the requirements of Subsection 8.7.5. of the Building Code,

   (b) the surface of the filter bed shall be at least 900 mm above the high ground water table, rock or soil with a percolation time greater than 50 minutes per centimetre as per Clause 8.7.3.2.(1)(e) of the Building Code.

8. When used in gravity fed conditions, the Hancor Chambers shall be installed in compliance with all the above-stated Specific Terms and Conditions and be:

   (a) installed level over the length of the trench,

   (b) securely connected, chamber to chamber, using the built-in latch,

   (c) free of structural damage and used full length (not cut),

   (d) equipped with end caps installed on both ends, and

   (e) equipped with a built-in splash plate at the inlet end of each chamber line, to prevent soil scouring.

9. Where the sewage effluent is "dosed" to the leaching bed by pumps or a siphon, the Hancor Chambers shall be installed to comply with all the above-stated Specific Terms and Conditions and:

   (a) the effluent is pumped to a header line or distribution box prior to entering the chambers, and

   (b) a volume of effluent within the range of 3.5 - 8.0 litres per metre of Hancor Chambers, must be pumped within a time period not exceeding 15 minutes, to meet the requirements of Sentence 8.6.1.3.(4) of the Building Code.

10. Where the sewage effluent is distributed through a pressurized system, the Hancor Chambers shall be installed:

   (a) to comply with Specific Terms and Conditions numbers 1. through 9. above, and

   (b) with a minimum 1½ (38 mm) diameter pipe extending over the entire length of each trench, and such pipe:

      I. being specified by the manufacturer as acceptable for pressurized installations,

      ii. having minimum 6 mm diameter orifices, spaced over its length to ensure even distribution of effluent,

      iii. being supported in a manner as to ensure self-draining and prevent freezing of its contents,

iv. having clean-outs installed at the downstream end of each chamber line, to allow the system to be serviced, and

v. receiving effluent from a treatment unit equipped with an effluent filter on the outlet, such effluent filter to be installed and sized in accordance with the manufacturer's recommendations.

B. General Conditions

1. The use of the Hancor Chambers System must comply with the *Building Code Act, 1992* (the Act") as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      I. the material, system or building design that is the subject matter of this Authorization;

      ii. the address of the applicant specified in Part 1 of this Authorization; or,

      iii. the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      I. does not comply with the Act or any relevant legislation as they may be amended or re-enacted from time to time; or

      ii. provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 29th day of July 2004.

BUILDING MATERIALS EVALUATION COMMISSION

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Ed Link, Vice-Chair

Building Materials Evaluation Commission
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www.obc.mah.gov.on.ca

Date of Authorization	JUNE 24, 2004
BMEC Authorization	BMEC # 04-06-298
BMEC Application	#A2004-02

AUTHORIZATION REPORT - SafeSIGN Photoluminescent EXIT Signs

1. Applicant

Enviromate Products Corporation
P.O Box 1025
135 West Beaver Creek Road.
Richmond Hill, Ontario
L4B 4R9

Tel: (905) 709-5772
Fax: (905) 709 5702

2. Manufacturing Facilities

Irotex Co.
F.L. Crystal Blvd.
1-44 No. 1 Hsin Y.
Road Sec. 4 P.O. Box 26-460
Taipei, Taiwan

3. Description

The Photoluminescent EXIT Signs (the “Exit Signs”) are provided with pre-drilled holes for a mechanical surface mount, or the Exit Signs may also be mounted onto a wall or ceiling using the manufactured recommended aluminium mounting bracket.

Each letter that spells the word EXIT on the approved sign shall be 15.2 cm (6") high, with a stroke width of 2.3 cm (0.9") wide.

The Flush Mount (FL) series Exit Signs consist of sign placards with a photoluminescent background with red letters or photoluminescent letters with red background spelling the word “EXIT”. Red or photoluminescent directional indicators matching the colour scheme are available to be placed at each side of the Exit Sign. The substrate material is sheet aluminum, and the photoluminescent pigment is applied to the substrate using a heat fusion process to ensure the permanent bonding of the two materials.

The Box Frame (BX) series Exit Signs are similar to the FL series, the BX series consists of a sign placard with photoluminescent background with red letters or photoluminescent letters with red background spelling the word “EXIT”.

The BX2 series Exit Signs are similar to the BX Series Exit Signs except they incorporate field-securable aluminum directional indicators on the face of the Exit Sign. The directional arrows are secured to the sign face by bending the manufacturer supplied aluminium tabs, as recommenced by the manufacturer.

4. Authorization Requested

The Applicant sought a Building Materials Evaluation Commission (a "BMEC") authorization for the Exit Signs as a means of egress identification under Subsections 3.4.5. "Exit Signs" or 9.9.10. "Signage" with conditions and limitations, equivalent to the requirements of 1997 Ontario Building Code, as amended and remade from time to time (the "OBC").

5. Assessment

Reports and assessments provided by the applicant show that if the Exit Signs are designed, performance tested and installed in accordance with the manufacturer's instructions and limitations, all other requirements of the OBC, and the specific terms and conditions stated in this authorization, that the level of performance required by the OBC will be provided.

The following is a list of the documents submitted, and reviewed, but is not limited to:

1. Underwriter Laboratories of Canada Listing, reference SA12703/02NK21104, Dated October 25, 2002.

2. Underwriter Laboratories of Canada "Notice of Project Completion", reference SA12703/02NK21104, Dated July 19, 2002.

3. Underwriter Laboratories of Canada "Report on Exit Sign, Self Luminous and Photo luminescent certificated for Canada", reference SA12703/02NK21104, dated October 25, 2002.

4. MB Research Laboratories, "Dermal Toxicity Testing", reference 00-8327.02, dated May 3, 2000.

5. SGS U.S. Testing Company, "Certifying Duration of the Photoluminescent", reference 140074, dated April 27, 2000.

6. DL Laboratories, Torontex Corporation, "Certifying the Washability and Self-extinguishing Properties", reference DL-12669A, dated April 07, 2000.

7. SafeSIGN Photoluminescent specification Data:

    (a) 75' Flush Mount Exit Sign
    (b) 75' Box Frame Exit Sign
    (c) 75' Flush Mount SORTIE Sign
    (d) 50' Box Frame Exit Sign
    (e) 50' Box Frame Exit Sign

8. SafeSIGN Warranty, "SafeSIGN ULC-924 Approved Photoluminescent EXIT Signs."

9. CIEMS “Certifying the Absence of Radioactivity”, reference 5000530642, dated March 24, 2000.

10. Approvals by other jurisdictions:

    (a) New York City MEA Acceptance
    (b) New York City Proposed Changes to the Building Code
    (c) Life Safety Code - NFPA 101
    (d) Nova Scotia Environment & Labour
    (e) Saskatchewan Corrections & Public Safety
    (f) Government of the Northwest Territories

11. Construction Innovation, Volume 4, Number 4, Fall 1999, National Research Council, “Photoluminescent material holds potential as an alternative to emergency lighting research finds.”

12. UL Laboratories, Testing Laboratories - UL Question Corner “Are Photoluminescent exit signs Listed or Classified?”

13. Installation Manuals, “Installation Instruction for SafeSIGN ULC-ORD-924-02-compliant photoluminescent EXIT Signs (FL and BX)”, dated 2004.

14. Quality Control Manuals: Irotex Corporations Quality Control policies.

15. Underwriter’s Laboratories of Canada Factory Inspection Invoices, September 13, 2003.

16. Underwriter’s Laboratories of Canada letter, reference file SA12703, dated May 10, 2004.

6. Authorization

The Exit Signs are authorized for use as a means of egress identification under Subsections 3.4.5. “Exit Signs” or 9.9.10. “Signage”, all other requirements are subject to the regulations of the OBC, and subject to the following terms and conditions:

A. Specific Terms & Conditions

1. This Authorization is valid only for the Exit Sign model numbers described in Table 6.A.1.1. “Exit Signs” below.

Table 6.A.1.1.
Exit Signs

ULC Model Numbers	UL Model Numbers	Model Series	Background Colour (1)	Letter Colour (1)
UC01A3120	U01A3120	FL	RED	LUMINOUS
UC02A3120	U02A3120	FL	LUMINOUS	RED
UC01A3720	U01A3720	BX	RED	LUMINOUS
UC02A3720	U02A3720	BX	LUMINOUS	RED
UC04A3720	U04A3720	BX2	RED	LUMINOUS
C01AR	C01AR	FL	RED	LUMINOUS
C02AR	C02AR	FL	LUMINOUS	RED
Column 1	Column 2	Column 3	Column 4	Column 5

(1) using Columns 4 and 5 will distinguish the colour convention of any one sign.

2. The SORTIE Signs model numbers UF01A4620 and UF02A4620 shall only be installed adjacent to approved Exit Signs, as they are described in Table 6.A.1.1. ”Exit Signs” of this authorization.

3. The Exit Signs are not required to be provided with an emergency power supplied as described in Sentence 3.2.7.4.(1) of the OBC.

4. Except as provided by Specific Term and Condition 6.A.5., approved models of the Exit Signs may be substituted for exits signs as described in Subsections 3.4.5. “Exit Signs” or 9.9.10. “Signage” of the OBC.

5. Approved models of the Exit Signs may be installed in a building under the scope of Subsection 3.2.6. “Additional Requirements for High Buildings” of the OBC only if they are illuminated directly by a lighting fixture providing 54 lux (5 ft candles), which is measured on the sign face, of unfiltered fluorescent illumination and having a power source conforming to Subclause 3.2.7.4.(1)(b)(i) of the OBC.

6. The Exit Signs require a minimum of 54 lux (5 ft candles) of constant and continuous external unfiltered fluorescent, lighting to illuminate the face(s) of the sign at all times.

7. The Exit Signs shall be located so that the listed legible viewing distance of:

   (a) Model numbers U04A3720 and UC02A4620 is not greater than 15.2 m (50 ft), or

   (b) Model numbers U01A3120, U02A3120, U01A3720 N, U01A3720 R, U01A3720 L, U02A3720 N, U02A3720 R; and U02A3720 L, UC01A3120, UC02A3120, UC01A3720 N, UC01A3720 R, UC01A3720 L, UC02A3720 N, UC02A3720 R, UC02A3720 L is not greater than 22.7 m (75 ft).

8. The Exit Signs shall have the following markings:

   a. Name of the manufacturer,

   b. UL/ULC 924,

   d. Model number,

   e. Legible viewing distance, and

   f. "CAUTION: minimum 5 foot-candle external un-filtered florescent illumination must be present on the sign face at all time of the buildings occupancy."

9. The Exit Signs shall be installed as per the manufacturer's instructions.

10. The Exit Signs are authorized for indoor applications only.

11. The Exit Signs shall not be exposed to direct sunlight.

12. The Exit Signs shall not be exposed to temperatures outside the range of 10^0 to 40^0 C (50^0 to 104^0 F).

13. The Exit Signs shall be cleaned with a damp cloth or as otherwise recommended by the manufacturer.

B. General Conditions

1. The use of the Exit Signs as described in Specific Terms and Conditions 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (BCA) and except as specifically authorized herein, with the OBC.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in A. above; or

   (b) the occurrence of any of the events described in Conditions B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      I. the material, system or building design that is the subject matter of this Authorization;
      ii. the address of the applicant specified in Part 1 of this Authorization; or,
      iii. the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      I. does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or
      ii. provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

   (d) any OBC provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 24th day of June 2004.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

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Date of Authorization	APRIL 29, 2004
BMEC Authorization	BMEC # 04-05-297
BMEC Application	#A 2003-23

AUTHORIZATION REPORT- INSULSPAN™: Wall and Roof Sheathing Panels

1. Applicant

Insulspan
P.O. Box 38
9012 East US 223
Blissfield, Michigan
U.S.A 49228

Tel: (517) 486-4844
Fax: (517) 486-2056

2. Manufacturing Facilities

Insulspan
245 Jipon Street
Blissfield, Michigan
U.S.A 49228

3. Description

The Insulspan™, Wall and Roof Sheathing Panels (the "sheathing panels") are comprised of two sheets of 11.1 mm (7/16") oriented strand board (OSB) placed on the interior and exterior side of a modified expanded polystyrene (MEPS) foam core. The sheathing panels are bonded together with an adhesive under pressure into a sandwich configuration. The panels may be used as a sheathing material for wall and / or roof construction in buildings subject to the requirements of Part 9 of the Ontario Building Code.

The sheathing panels shall be installed over framing members spaced not greater than 600 mm (23-5/8") o.c.

The sheathing panels are intended for use as an exterior, non-loadbearing, nonstructural wall or roof sheathing material for use in a building envelope system. The sheathing panels are factory constructed and do not incorporate any vertical load bearing members and the bottom of panel is continuously supported.

The sheathing panels are available in widths sizes from 1220 mm to 2440 mm (4' to 8') with lengths up to 7315 mm (24'); and with MEPS thickness of 60 mm (3-5/8"), 111 mm (5-5/8"), 168 mm (7-3/8"), 238 mm (9-3/8") and 270 mm (11-3/8").

4. Authorization requested

The applicant sought a Building Materials Evaluation Commission (the "BMEC") authorization for the sheathing panels as an alternative to a wall, and roof sheathing material as required by Subsections 9.23.15. "Roof Sheathing", and 9.23.16. "Wall Sheathing" of 1997 Ontario Building Code, as amended (the "OBC").

5. Assessment

Reports and assessments provided by the applicant show that if the sheathing panels are designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this authorization, the level of performance required by the OBC will be provided.

The reports submitted, and reviewed were, but are not limited to:

1. Morrison Hershfield Report to the Building Materials Evaluation Commission, March 17, 2003.

2. PFS, TECO "PSF Test Report #95-07 Water Vapour Transmission (Permanence) of OSB ab EPS Sandwich Panels" prepared for Insulspan™, Inc July31, 1995.

3. Southwest Research Institute "Fire Performance Evaluation od a Load-bearing Floor/Ceiing Panel System in Accordance with ASTM E119-98 "Standard Test for Methods for Fire Tests of Building Construction and Materials" SwRI Project No.01-2305-311, June 1999.

4. National Evaluation Report No. NER-520, re-issued January 1, 2001.

5. National Evaluation Report No. NER-520, re-issued November 1, 2002.

6. Notes to the Designer and the Installer (4/30/03); S-1(Ont.) Double OSB Spline (4/29/03); S-3 (Ont.) Interior Wall - Plan detail (4/29/03); P-2 (Ont.) Insulspan™ Rim Detail (4/29/03); C-2 (Ont.) Outside Corner (4/29/03); R-2 (Ont.) Eave Detail (4/29/03); R-3 (Ont.) Ridge Detail (4/29/03); R-8 (Ont.) Valley Overlay (4/29/03); W-X SIP Wall Section (5/01/03)

7. Insulspan™ Quality Procedure, "EPS Specification", ISO Doc. ID: PP 6.7, Rev #9/22/99.

8. Insulspan™ "Installation Guideline for SIP Sheathing in Ontario: Forming a Part of the Registered Insulation™ Builders Program."

9. Engineering Report: Buchan, Lawton, Parent Ltd. re: "Thermal Resistance of the Insulspan™: Structural Insulated Panels", March 14, 2003.

10. Great Lake Insulspan™ Limited Warranty, Insulspan™ Building Panels.

11. Insulspan™ “Short Form Residential Specification”.

12. Insulspan™ “Master Guide Specification”.

13. Insulspan™ Manufacturer’s Information “The SIP Advantage” copyright 2000.

6. Authorization

Use of the Insulspan™ Wall and Roof Sheathing Panels are authorized as an alternative to a wall and roof sheathing material as required by Subsections 9.23.15. “Roof Sheathing”, and 9.23.16. “Wall Sheathing”, all other requirements pertaining to the installation are subject to the requirements of Part 9 and all other Parts of the OBC, and subject to the following terms and conditions:

A. Specific Terms & Conditions

1.0. General

1.1. This authorization is valid only for Insulspan™ wall and / or roof panels for use as sheathing only, in non-loadbearing applications.

1.2. The sheathing panels shall serve as an exterior sheathing material that is attached to the outside of the framing members spaced not greater than 600 mm (24") o.c. as specified by Sentence 9.23.1.1.(1). of the OBC.

1.3. The framing around openings such as, but not limited to doors, windows or dormers shall meet the requirements of OBC Subsections 9.23.12. “Framing Over Openings” and 9.23.13. “Roof and Ceiling Framing”, or Part 4 of the OBC.

1.4. The fasteners, attachments of the sheathing panels to the framing, and the framing around openings in the sheathing panels shall be designed in accordance with the requirements of Part 4 of the Ontario Building Code, the review shall be carried out by a Professional Engineers as defined in the Professional Engineers Act (Ontario); and the design calculations should be submitted to the Chief Building Official for review.

1.5. The sheathing panels may be used only where combustible construction is permitted.

1.6. The sheathing panels shall not be used where the wall and / or the roof assembly is required to have a fire resistance rating.

1.7. The sheathing panels shall be shipped, site handled, and stored as per the requirements of the manufacturer and as specified in the "Insulspan™ Installation Guideline for SIP Sheathing in Ontario."

1.8. The sheathing panels shall be identified by a permanent stamp or mark indicating the manufacturer's name or trademark.

1.9. The sheathing panels shall be modified or otherwise altered according to the manufacturer's instructions and as per the "Insulspan™ Installation Guideline for SIP Sheathing in Ontario."

1.10. As per the requirements of "Insulspan™ Installation Guideline for SIP Sheathing in Ontario", the sheathing panels shall be fastened to each other with a 75 mm (3") non-structural, non-loadbearing spline that fits into precut grooves; and the sheathing panels shall be sealed with an expanding foam which is compatible with all components of the panel and the adjacent materials.

2.0. Building Envelope and Thermal Requirements:

2.1. The sheathing panels shall meet the thermal requirement of Subsection 9.25.2. "Thermal Insulation" or Section 9.38. "Thermal Design" of the OBC.

2.2. Assemblies incorporating the sheathing panels shall have an air barrier installed as per the requirements of Subsection 9.25.3. "Air Barrier Systems" of the OBC.

2.3. Assemblies incorporating the sheathing panels shall have a vapour barrier installed as per the requirements of Subsection 9.25.4. "Vapour Barriers" of the OBC.

3.0. Walls:

3.1. The sheathing panels shall be covered with an exterior cladding material.

3.2. The cladding material shall be installed such that it conforms to the requirements Section 9.27. "Cladding" of the OBC.

3.3. The sheathing panels shall not be used in conjunction with stucco cladding.

4.0. Roofs:

4.1. The roofing system shall be vented as per the requirements of Subsection 9.19.1. "Venting" of the OBC.

4.2. The sheathing panels shall be covered with an approved roofing material as specified in Article 9.26.2.1. "Roofing Materials" of the OBC.

B. General Conditions

1. The use of the sheathing panels as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* (the "*Act*") as amended or re-enacted from time to time and except as specifically authorized herein, with the OBC.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *Act* or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

   (d) any OBC provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 29th day of April 2004.

BUILDING MATERIALS EVALUATION COMMISSION

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Tony Chow, Vice-Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **MARCH 25, 2004**
BMEC AUTHORIZATION **BMEC # 04-04-296**
BMEC APPLICATION **#A2003-19**

BEAVER PLASTIC LTD.
The Terminator™

1. Applicant

Beaver Plastic Ltd.
12150- 160 Street
Edmonton, Alberta
T5V 1H5

Tel: (888) 453-5961
Fax: (780) 453-3955

2. Manufacturing Facilities

Beaver Plastic Ltd.
12150- 160 Street
Edmonton, Alberta
T5V 1H5

3. Description

The Terminator™ Insulated Chamber System (the Terminator™) is intended for use in a sewage system in lieu of absorption trenches constructed of stone and distribution pipe. The Terminator™ is made of gas permeable structural expanded polystyrene (EPS) insulation.

The Terminator™: Type A has an actual bottom width of 530 mm (20.8") and an actual height of 230 mm (9.0"). The thickness of the EPS insulation varies, ranging from 41 mm to 76 mm (1.6" to 3.0"). The Terminator™ does not have openings in the top or the sides.

4. Authorization Requested

The Applicant sought authorization for use of the Terminator™ as an alternative to the construction of stone and distribution pipe in as required by Section 8.7 of the 1997 Ontario Building Code, as amended (the “OBC”). The Applicant requested that the Terminator™ be used to replace stone and distribution pipe in absorption trenches and filter beds that are:

i. gravity fed,

ii. “dosed” (non-pressurized distribution system) and,

iii. pressurized.

Note: For the purposes of this authorization, “dosed” means a system in which effluent is pumped to the leaching bed either by pump or siphon, but the effluent is not pressurized within the leaching bed.

5. Assessment

Reports and assessments provided by the applicant show that if the Terminator™ is designed, performance tested, installed and maintained in accordance with the limitations in the manufacturer's instructions and the conditions stated in this authorization, a level of performance will be provided as required by the OBC, for absorption trenches in soil, in leaching bed fill or in a filter bed, whether gravity fed, pressurized or “dosed”.

Reports that were submitted and reviewed but not limited to:

1. Geothermal Analysis of the Terminator™ and Conventional Sewage Effluent Chambers, dated February 8, 2002.

2. AASHTO H-10 Testing Certification from EBA Engineering Constants Ltd

3. Manufacturer’s Literature

4. Installation Instruction dated March 3, 2003

5. Terminator™: Beaver Plastic Quality Control Manual

6. Product Approval Letters:

    - Province of Alberta
    - Province of Saskatchewan
    - Province of Manitoba
    - Yukon Territory

6. Authorization

The use of the Terminator™ is authorized in sewage systems within the scope of Part 8 of the OBC, as an alternative to stone and distribution pipes in absorption trenches and in filter beds, when installed in accordance with the manufacturer's recommendations, all other requirement pertaining to the installation of the Terminator™shall conform to the requirements of the OBC and is subject to the following Specific Terms and Conditions of this Authorization:

A. Specific Terms and Conditions

1. This Authorization is valid only for the Terminator™: Type A.

2. The Terminator™ shall be manufactured to AASHTO Standard H-10 for loading.

3. The length of the Terminator™ chamber shall be calculated such that every metre of distribution piping and stone, as specified in Articles 8.7.3.1. and 8.7.5.3., is equivalent to 1.2 m of Terminator™ chamber.

4. When the Terminator™ is installed in lieu of distribution piping and stone, the leaching beds must satisfy the general construction requirements specified in Articles 8.7.2.1., 8.7.4.2. and 8.7.5.3.

5. The minimum clearance distances required by Article 8.2.1.6. for distribution piping shall be met by the Terminator™.

6. When installed in lieu of distribution piping and stone in absorption trenches, the trenches for the Terminator™ shall be:

   (a) approximately the same length and not more than 30 m in length,

   (b) a minimum width of 500 mm,

   (c) at least 600 mm and not more than 900 mm in depth,

   (d) centred at least 1600 mm,

   (e) at least 900 mm at all points on the bottom of the trench, above the high ground water table, rock or soil with a percolation time greater than 50 minutes, and

(f) backfilled, after installation of the Terminator™, with leaching bed fill, so as to ensure that after the leaching bed fill settles, the surface of the leaching bed will not form any depressions.

(g) backfilled with a soil that does not contain heavy clay, silt or debris, and is manually compacted along the sides of the chamber to provide lateral support.

8. When installed in lieu of distribution piping and stone in filter beds, the lines of Terminator™ shall be evenly spaced over the surface of the filter medium to which the sewage effluent is applied, and the filter bed shall meet the following requirements:

   (a) the filter medium shall meet the requirements of Subsection 8.7.5. of the OBC,

   (b) the surface of the filter bed shall be at least 900 mm above the high ground water table, rock or soil with a percolation time greater than 50 minutes per centimetre as per Clause 8.7.3.2.(1)(e) of OBC.

9. When used in gravity fed conditions, the Terminator™ shall be installed in compliance with all the above-stated Specific Terms and Conditions and be:

   (a) installed level over the length of the trench,

   (b) securely connected, chamber to chamber, using the built-in latch,

   (c) free of structural damage and used full length (not cut),

   (d) equipped with end caps installed on both ends, and

   (e) equipped with a built-in splash plate at the inlet end of each chamber line, to prevent soil scouring.

10. Where the sewage effluent is "dosed" to the leaching bed by pumps or a siphon, the Terminator™ shall be installed to comply with all the above-stated Specific Terms and Conditions and:

    (a) the effluent is pumped to a header line or distribution box prior to entering the chambers, and,

    (b) a volume of effluent within the range of 3.5 - 8.0 litres per metre of Terminator™ , must be pumped within a time period not exceeding 15

minutes, to meet the requirements of Sentence 8.6.1.3.(4).

11. Where the sewage effluent is distributed through a pressurized system, the Terminator™ shall be installed:

    (a) to comply with Specific Terms and Conditions numbers 1. through 9. above, and,

    (b) with a minimum 1½ (38 mm) diameter pipe extending over the entire length of each trench, and such pipe:

        i. being specified by the manufacturer as acceptable for pressurized installations,

        ii. having minimum 6 mm diameter orifices, spaced over its length to ensure even distribution of effluent,

        iii. being supported in a manner as to ensure self-draining and prevent freezing of its contents,

        iv. having clean-outs installed at the downstream end of each chamber line, to allow the system to be serviced, and,

        v. receiving effluent from a treatment unit equipped with an effluent filter on the outlet, such effluent filter to be installed and sized in accordance with the manufacturer's recommendations.

B. General Conditions

1. The use of the Terminator™ must comply with the *Building Code Act, 1992 (the "Act")* as amended or re-enacted from time to time and except as specifically authorized herein, with the OBC as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

    (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

(b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

i. the material, system or building design that is the subject matter of this Authorization;

ii. the address of the applicant specified in Part 1 of this Authorization; or,

iii. the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

i. does not comply with the *Act* or any relevant legislation as they may be amended or re-enacted from time to time; or

ii. provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any OBC provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 25th day of March 2004.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**MARCH 25, 2004**
BMEC AUTHORIZATION	**BMEC # 04-03-295**
BMEC APPLICATION	**#A2003-15**

COVER-ALL BUILDING SYSTEMS
Cover-All Membranes

1. Applicant

Cover-All Building Systems
3815 Wanuskewin Road
Saskatoon, Saskatchewan
S7P 1A4

Tel: (306) 657-2888
(877) 615-4776
Fax: (306) 664-7979

2. Manufacturing Facilities

Cover-All Building Systems
3815 Wanuskewin Road
Saskatoon, Saskatchewan
S7P 1A4

3. Description

The Cover-All Building System is a non pressurized building wherein the structure is composed of a steel framework to support the Cover-All Membranes, which are tensioned to provide a weather barrier.

The Cover-All Building System consists of a Vipersteel® clear span truss system, series TAS, IAS, LBS and TBS, covered with the Cover-All Membrane, a flexible roof covering of either a polyolefin, which has the product name Duraweave® FR, or a 1.09 mm (43 mil) Poly Vinyl Chloride (PVC).

The Cover-All Membranes meet both CAN/ULC-S109-M87 “Standard of Flame Tests of Flame-Resistant Fabrics and Films”; and NFPA 701-1997 “Method of Fire Test for Flame-Resistant Textiles and Films” standards.

4. Authorization requested

The Applicant sought a Building Materials Evaluation Commission (BMEC) Authorization for the Cover-All Membranes for use as a roof covering, only when used in conjunction with a Cover-All Building System, as defined in this Authorization, in lieu of the requirements of Sentence 3.1.15.1.(1). “Roof Covering Classification” of the 1997 Ontario Building Code, as amended or remade from time to time (OBC).

5. Assessment

Reports and assessments provided by the Applicant show that if the Cover-All Membranes are designed, performance tested and installed in accordance with the manufacturer's instructions and limitations, and the specific terms and conditions stated in this Authorization, the level of performance required by the OBC will be provided.

Reports submitted, and reviewed but not limited to:

1. Cover-All Building Systems Detail Drawings, June 26, 2003 “Rated Exterior Wall Details.”

2. 2000 International Building Code, Chapter 31 “Special Construction” Section 3101.

3. Building Officials and Code Administrator International, Inc. Copyright 1998, Section 3103.0 “Membrane Structures.”

4. Standard Building Code 1999, Chapter 31 “Special Construction.”

5. 1997 Uniform Building Code Appendix Chapter 31, Division 11 “Membrane Structures.”

6. Letter of Guidance, Saskatchewan Municipal Affairs and Housing, February 15, 2002.

7. Manufacturer Information:

   (a) Capital District Salt
   (b) Empire Polo And Event Centre
   (c) Kingdom Projects Inc.
   (d) New Era Technologies
   (e) Rocky Mountain Log Homes
   (f) Seward’s Ship’s Drydock
   (g) CENEC VCL
   (h) Crescent School
   (i) Cover-All Building Systems Manufacturing Facility

8. Factory Mutual Research of America.

9. Ferrari, March 2002, “Full Scale Fire Test on Composite Membrane for Textiles Structures”, SP Method 3305, Swedish National Testing Institute.

10. Cover-All Building Systems Report on Energy Compliance, July 15, 2003.

11. Cover-All Building Systems Membrane Specifications, July 15, 2003.

12. Cover-All Building Systems Steel Specification, July 15, 2003.

13. Canadian Welding Bureau Letter of Validation.

14. Cover-All Building Systems Series Structural Evaluations, July 15, 2003.

15. Cover-All Building Systems Series Building Details, July 15, 2003.

16. Cover-All Building Systems Installation Manuals, revised February 2004.

17. Cover-All Building Systems Owner Maintenance and Conditions Warranty Manual, dated 07/03, revised February 2004.

18. Cover-All Building Systems Quality Management System Quality Manual, revised July 7, 2003.

19. BMEC Presentation by Cover-All Building Systems, July 31, 2003.

20. Manufacturer Information "Commercial Building Solutions", Cover-All Building Systems.

21. Manufacturer Information "The Industrial Building Solution", Cover-All Building Systems.

22. Manufacturer Information "The Tool of Choice for Road Safety: Cover-All Salt and Sand Storage Facilities", Cover-All Building Systems.

23. Correspondence to the BMEC dated July 15, 2003.

24. "Space Heating and Lighting Performance of a Titan Building", SRC Publication No. 11664-1C03, July 2003.

25. Intertek "Membrane - Covered Frame Structure Titan / Pinnacle Hurricane Testing", January 26, 2004.

26. "Ontario Snow Accumulation Study on Fabric Membrane Cover", Cover-All Building Systems, February 2004.

6. Authorization

The Cover-All Membranes are authorized for use as a roof covering, only when used in conjunction with a Cover-All Building System, in lieu of the requirements of Sentence 3.1.15.1.(1) "Roof Covering Classification" of the OBC;

all other requirements pertaining to the installation and construction are subject to the requirements of the OBC and subject to the following terms and conditions:

This Authorization is not intended to be used as an equivalent to CAN/ULC-S107-M87 where roof coverings are permitted to be used in the construction of traditional roofing systems Class A, B, and C as determined by CAN/ULC-S107-M87.

A. Specific Terms & Conditions

1. This Authorization is valid only for the use of Duraweave® FR and 1.09 mm (43 mil) PVC (the "Cover-All Membranes"), when they are used in conjunction with a Cover-All Building System.

2. In addition to the requirements of Article 2.3.1.1. of the OBC, the structural design shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act*, (Ontario).

3. The Cover-All Membranes installed in conjunction with the building system, shall be constructed as per the requirements of Subsection 3.2.2. of the OBC.

4. Except as permitted in Article 3.2.2.17. of the OBC, the Cover-All Membranes shall not be used where the assembly is required to have a fire-resistance rating.

5. The Cover-All Membranes are authorized for use in combustible construction only.

6. The Cover-All Membranes shall not be used in a building more than 1 storey in building height.

7. The Cover-All Membranes shall not be used in the construction of Cover-All buildings where the major occupancy is Group B, C, or F Division 1, as defined by the OBC.

8. The Cover-All Membranes shall meet the following standards:

    a. CAN/ULC-S109-M87 "Standard for Flame Test of Flame-Resistant Fabrics and Films",

    b. NFPA 701-1997 "Methods of Fire Test for Flame Resistant Textiles and Films", and

    c. CAN/ULC-S102.2-M88 "Standard Test Method for Surface Burning Characteristics of Building Materials."

9. The Cover-All Membrane shall be installed by Cover-All Building Systems' approved installers.

10. The Cover-All Membranes shall be installed as per the Cover-All Building Systems Installation Manuals.

11. The Cover-All Membranes shall be identified by a permanent mark that indicates the manufacturer's name and registered trademark.

12. The Cover-All Membranes shall not have a flame spread rating more than 25.

13. The Cover-All Membranes, used in the construction of Cover-All buildings, shall have the spatial separation determined in accordance with Subsection 3.2.3. or Subsection 9.10.14. of the OBC, where the roof membrane becomes a part of the exposing building face.

B. General Conditions

1. The use of the Cover-All Membranes as described in A. Specific Terms and Conditions 1. must comply with the *Building Code Act, 1992 (BCA)* as amended or re-enacted from time to time and except as specifically authorized herein, with the OBC.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in A. above; or

   (b) the occurrence of any of the events described in Conditions 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      i. the material, system or building design that is the subject matter of this Authorization;

      ii. the address of the applicant specified in Part 1 of this Authorization; or,

iii. the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

i. does not comply with the *BCA* or any relevant legislation as they may be amended or re-enacted from time to time; or

ii. provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any OBC provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 25th day of March 2004.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **January 29, 2004**
BMEC AUTHORIZATION **# 04-02-294**
BMEC APPLICATION **BMEC # A2003-20**

FALCON WATERFREE TECHNOLOGIES
Falcon Waterfree Urinal System

1. Applicant

Falcon Waterfree Technologies
10900 Wilshire Blvd #1500
Los Angles, CA
U.S.A., 90024

(310) 209-7314
(310) 209-7260

2. Manufacturing Facilities

Falcon Waterfree Technologies LLC
Manufacturing and Warehouse Facility
4470 44th Street
Grand Rapids, MI
U.S.A., 49512

3. Description

The Falcon Waterfree Technologies' Waterfree Urinals (the "Waterfree Urinal") are plumbing fixtures designed to be used in a washroom in lieu of a conventional water-fed urinal.

The Falcon Waterfree Urinal System has three models of waterfree urinals, two vitreous china models, F1000 and F2000; and one acrylic model, F-2000A. Each urinal has a integral trap with a liquid seal and outlet assembly for a connection to the sanitary sewer or drainage system. The plumbing fixture is designed to receive and convey only liquid waste through a trap seal and into the gravity drainage system without the use of water for such function. The integral trap consists of a patented sealtrap cartidge filled with the recommended volume of a proprietary sealant called Falcon ANER 01538. The differences between the urinals are aesthetic only.

The Falcon Waterfree Urinal System is comprised of five components: 1. the urinal body 2. the trap, or patented sealed cartridge 3. the housing for the trap 4. the unicoupler, and 5. the Falcon ANER 01538 trap seal.

4. Authorization Requested

The Applicant sought authorization for the use of their product as a waterfree urinal system in buildings of all types of construction wherever conventional urinals, as described in Article 7.6.4.2. “Plumbing Fixtures” of the 1997 Ontario Building Code, as amended or remade from time to time (the “OBC”), would be permitted to be installed under the of the OBC.

5. Assessment

Reports and assessments provided by the applicant show that if the Falcon Waterfree Urinal System is designed, performance tested and maintained in accordance with the manufacturer’s limitations and instructions stated in this authorization, the level of performance required by the OBC for conventional urinals will be provided:

Reports submitted and reviewed include but are not limited to:

1 Technical Background Information Memo relating BMEC A2003-20, Falcon Waterfree Urinal System dated November 23, 2003.

2 CSA Certificate of Compliance.

3 ICC Report for the International Plumbing Code.

4 IAPMO Listing for the Uniform Plumbing Code.

5 US State Approvals:

- (a) State of Arizona Approval
- (b) State of Massachusetts Approval
- (c) State of Rhode Island Approval
- (d) State of Connecticut Approval
- (e) State of Michigan Approval
- (f) State of Wisconsin
- (g) State of North Carolina Approval
- (h) State of Vermont Approval
- (I) State of Maryland Approval

6. LGA German Government.

7. BRANZ New Zealand Building Code.

8. WRC Great Britain.

9. NSF International.

10. SGS US Testing.

11. Professional letter of Correspondence regarding waterless urinals:

    (a) Dr. Charles Gerbra letter on Sanitary Condistions of Waterfree Urinals
    (b) UCLA Research Study on Public Health Aspects of Waterless Urinals
    (c) University of Texas Health Science Center Review of Waterless Urinals
    (d) Medical University of South Carolina Review of Waterfree Urinals
    (e) SCS Engineers Report on Hygiene of Waterfree Urinals
    (f) Edward Schnieder, MD, USC letter on Public Health aspects of Waterfree Urinals

12. Pacific Northwest National Laboratory ammonia Odor Testing.

13. UCLA Research Study on Odor Evaluation of Waterfree Urinals.

14. Parametrix Professional Engineering Report on Waterless Urinals.

15. California Institute of Technology report on Effectiveness of Trap Seal for Waterless Urinals.

16. ANSI Z124.9 Standard for Waterless Urinals (Plastic).

17. IAPMO IGC 161-2000 For Waterless Urinals (Vitreous China).

18. SGS US Testing Results.

19. IAPMO Testing Results.

20. National Standard Plumbing Code which Allows Waterless Urinals.

21. UCLA Study on Pipe Clogging.

22. Virginia Tech Study on Pipe Corrosion.

23. UCLA Study on Pipe Corrosion.

24. US Federal Government Approval and Product Endorsement.

25. Manufacturer's Product and Installation Information:

    (a) F 1000 Product and Installation Instruction
    (b) F 2000 Product and Installation Instruction
    (c) F 2000A Product and Installation Instruction

26. Manufacturer's cleaning and Cartridge Change Instructions.

6. Authorization

The Falcon Waterfree Urinal System is authorized for use as a urinal in all locations, in buildings of all types of construction wherever a conventional urinal, as described in Article 7.6.4.2. “Plumbing Fixtures” of the OBC, would be permitted to be installed, and subject to the following specific terms and conditions:

A. Specific Terms and Conditions

1. This Authorization is valid only for Falcon Waterfree Technologies for the Falcon Waterfree Urinal models, F1000 and F2000; and F-2000A.

2. A copy of the maintenance instructions for Falcon Waterfree Urinals, patented sealed cartridge and Falcon ANER 01538 trap sealant and shall be submitted along with this Authorization when applying for a building permit.

3. A permanent sign, located in a conspicuous location, indicating the maintenance schedules, as they are referenced in A.2. of this Authorization, shall be posted in each room that a Waterfree Urinal is installed.

4. The Waterfree Urinals must be marked to indicate that they conform to the following standards:

(a)	vitreous china models	CSA/ASME A112.19.2.2M
(b)	acrylic model	CSA/ANSI Z124.9

5. The Waterfree Urinal shall be installed in accordance with the manufacturer’s instructions.

6. The manufacturer shall provide training for the proper use, operation and maintenance of the device.

7. The plumbing system that the Waterfree Urinal forms a part of shall be designed as per Section 7.5. “Venting” of the OBC.

8. The Waterfree Urinal shall be connected to a drain waste pipe that is designed as per Subsections 7.4.9. “Size of Drain Pipes” and 7.4.10. “Hydraulic Loads” of the OBC.

9. The Waterfree Urinal is considered to have satisfied the requirements of Subsection 7.2.3. “Traps and Interceptors” of the OBC when:

   (a) installed with an patented sealed cartridge as described Part 3 of this Authorization, and

(b) used in conjunction with the manufacturer's trap seal liquid, Falcon ANER 01538, or other similar liquids approved by the manufacturer.

10. Double trapping of the Waterfree Urinal is not permitted.

11. The Waterfree Urinal shall conform to the flame spread and smoke development requirements of the OBC.

B. General Conditions

1. The use of Waterfree Urinal System as described in 6.A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992 (BCA)* as amended or re-enacted from time to time and except as specifically authorized herein, with the OBC.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in A. above; or

   (b) the occurrence of any of the events described in Conditions B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      i. the material, system or building design that is the subject matter of this Authorization;

      ii. the address of the applicant specified in Part 1 of this Authorization; or,

      iii. the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

i. does not comply with the *BCA* or any relevant legislation as they may be amended or re-enacted from time to time; or

ii. provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any OBC provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 29th day of January 2004.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

Building Materials Evaluation Commission
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Date of Authorization	January 29, 2004
BMEC Authorization	BMEC #04-01-293
BMEC Application	#A2003-07
Date of Revision	September 29, 2005

* Denotes September 29, 2005 revision

AUTHORIZATION REPORT- Super Foam Roof Panels Assembly

1. Applicant

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2. Manufacturing Facilities

Patio Enclosures, Inc.
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3. Description

The Patio Enclosure, Inc. Super Foam Roof Panels (the "roof panels") may be used in the construction of sunroom additions to residential occupancy buildings. The panels are a nominal 76 mm (3") or 152 mm (6") thick laminated roof panels joined with aluminum I-beams for the use on roofs of patio enclosures.

* The factory assembled roof panel consists of a 0.6 mm (0.025") thick aluminum skins on the top and bottom, one layer of 11 mm (7/16") Oriented Strand Board (OSB) on the bottom which is bonded to a 24 kg/m^3 (1.5 pcf) foam core pre-formed expanded polystyrene (EPS). The roof panel is installed by fitting the panel between the flanges of a 6063-T6 extruded aluminum I-beam at 900 mm (36") o.c. Variations on the roof panels may exist where the manufacturer installs skylights or glass roof panels.

The adhesive, Dow 795, is applied in a continuous bead along the inside and the top and bottom of the aluminum I-beam. The roof panel is then fitted between the top and bottom flanges of the aluminum I-beam providing a continuous bearing surface along the length of the panel. The roof panels are fastened through the top flanges of the aluminum I-beam with #8 Tek screws at 600 mm (24") o.c. On the bottom flange the roof panels are fastened with #8 Tek screws at the hanger and header location.

4. Authorization requested

The applicant sought authorization for the use of the innovative roof panels as an acceptable roof system for roofs of patio enclosures, as the panels are described in Part 3 "Description" of this authorization, as an acceptable system permitted to be used in conjunction with 1997 Ontario Building Code, as amended (OBC).

5. Assessment

Reports and assessments provided by the applicant show that if the roof panel is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this authorization, the level of performance required by the OBC will be provided.

Reports submitted, and reviewed, but not limited to:

1. BOCA International Evaluation Report #21.65. published February, 2002

2. Quality Control Procedural Manual for Patio Enclosures Inc. “Super foam Roof Panels,” Research Report No. 165, dated October 16, 2001.

3. Commercial Testing Company, Report #78757-R, dated May 21, 1991, “Standard Test Method for Surface Burning Characteristics of Building Materials” ASTM E84.

4. Omega Point Laboratories UBC 17-15 “Room Fire Test Standard for Interior of Foam Plastic”, Project number 12480-93841, July 1, 1992.

5. Omega Point Laboratories UBC 17-15 “Room Fire Test Standard for Interior of Foam Plastic”, Project number 12480-93842, July 1, 1992.

6. Terrapin Testing Inc. Report No. TT 50017-A, dated November 2000.

7. Terrapin Testing Inc. Report No. TJCAA 50017-B, dated November 7, 2000.

8. TJC and Associates Engineering Analysis TJCAA 50017-A, November 7, 2000.

9. JC and Associates Engineering Analysis TJCAA 50017-B, November 7, 2000

10. Intertek Testing Services, June 27, 2001, Project No. 491-8248.

11. PEI Roof Span Charts.

12. Construction Drawings.

13. Roof Sealing Procedure.

14. Dow Corning® 795 Silicone Building Sealant product Information.

15. AAS/CA5 Roof Installation, 6/15/02.

16. Patio Enclosures, Inc. “Recommended Practice for the Attachment of 3 Tab shingles to PEI Super Foam roof Systems.”

17. Patio Enclosures, Inc. “Transverse Load Roof Panel Test” 6/27/95.

18. Patio Enclosures, Inc. “Transverse Load Roof Panel Test” 6/29/95.

19. Patio Enclosures, Inc. “Transverse Load Roof Panel Test” 6/30/95.

20. Intertek Testing Servi8ses, Re; Project 491-8248(a), March 14, 2002.

21. Air Permanence of Building Materials - CMHS Technical Research Series 98-109

6. Authorization

The roof panels are authorized for use as an innovative system designed for use as an acceptable roof system for patio enclosures; all other requirements pertaining to the installation of the roof panels shall be subject to the requirements of Part 9 and all other Parts of the OBC; and subject to the following terms and conditions:

A. Specific Terms & Conditions

1. This authorization is valid only for Patio Enclosures, Inc.

2. The structural design and general review of the roof panels shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act*, (Ontario). The Professional Engineer shall provide the chief building official with a document certifying that the installation conforms with this authorization.

3. The structural system supporting the Authorized roof panels shall have sufficient structural capacity as required OBC.

4. The roof panels shall be limited to residential occupancy buildings that are subject to the requirements Part 9 of the OBC.

5. The roof panels shall not be used where the roof assembly is required to have a fire resistance rating.

6. The 152 mm (6") roof panels are deemed to be in conformance with the thermal requirement of Subsection 9.25.2. “Thermal Insulation.”

7. The roof panels need not have an air barrier, in addition to the aluminum skin, installed as per the requirements of Subsection 9.25.3. “Air Barrier Systems” of the OBC; and to prevent water infiltration, the exterior roof panels shall be caulked to form a continuous seal.

8. The roof panels need not have a vapour barrier, in addition to the aluminum skin, installed in conformance with the requirements of Subsection 9.25.4. “Vapour Barriers” of the OBC; and to maintain the vapour barrier, except for the fascia connection, the interior roof panels shall be caulked to form a continuous seal.

9. The panels shall be installed as per the requirements of ICBO Evaluations Services Inc. issued May 1, 2003.

10. The sheathing panels shall be identified by a permanent stamp, sticker or mark indicating the manufacturer’s name or trademark.

11. If the roof panel incorporates an opening within the panel, or is modified to accommodate a penetration within the panel, then additional testing demonstrating that the modified roof panels conform to the OBC shall be submitted to the chief building official for review.

B. General Conditions

1. The use of the roof panels as described in A. Specific Terms and Conditions 1. must comply with the *Building Code Act, 1992 (BCA)* as amended or re-enacted from time to time and except as specifically authorized herein, with the OBC

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in A. above; or

   (b) the occurrence of any of the events described in Conditions B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *BCA* or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

   (d) any OBC provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 29th day of January 2004.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **November 27, 2003**
BMEC AUTHORIZATION **# 03-13-292**
BMEC APPLICATION **BMEC #A2003-18**

REB STORAGE SYSTEMS INTERNATIONAL
Shelf and Rack Storage System

1. Applicant

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2. Manufacturing Facilities

Power Storage Products
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3. Description

The shelf and rack storage system is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment. Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the 1997 Ontario Building Code, as amended or remade from time to time (OBC) and are not subject to mezzanine or interconnected floor space rules.

4. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

5. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the OBC.

6. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for REB Storage Systems International.

Use and Occupancy

2.1 Except as required by 3.4. of this authorization, the shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III and IV commodities as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions.

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the OBC.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time (OFC).

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be of noncombustible construction, and be designed in accordance with Part 4 of the OBC.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(b) open construction consisting of steel grating or open steel floor planking.

3.4 The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m except that where the maximum height exceeds 18 m but does not exceed 24 m, the following provisions shall apply:

(a) a fire alarm system shall be installed with:

(i) pull stations located at all exit doors including exit doors serving elevated decks and walkways; and

(ii) smoke detectors located, at the ceiling of all rooms and areas containing the shelf and rack system, within exit stair enclosures at the top, and at every third level of elevated deck or walkway; and

(b) the fire alarm system required by (a) above, shall be designed to notify the fire department upon activation; and

(c) the shelf and rack storage system shall be used only for the storage of Class I, II, III and IV commodities as defined in NFPA 13 -1999 as amended.

3.5 Lighting levels of walkways and platforms shall conform to the OBC.

3.6 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2). and 3.2.7.4.(1). respectively of the OBC.

3.7 Guards and toe boards shall be installed in accordance with the OBC.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs 4.3 and 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA 71-1998, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA 72-1990, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph 2.1, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 -1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the OBC.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the OFC.

4.10. Regardless of the occupant load, the requirements of Section 2.8 “Emergency Planning” of the OFC shall apply.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the OBC except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than four platform levels, the highest of which may not be more than 12 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m² in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m:

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a “time-based egress analysis” undertaken and sealed by a Professional Engineer or Architect as defined in the OBC using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time.

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where:

H_p = Horizontal travel distance on the shelf and rack storage (m)
V_p = Vertical travel distance on the shelf and rack storage (m)
H_m = Horizontal travel distance on the main floor (m)
N_{lg} = Number of lift gates in the means of egress
N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the OBC shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2). of the OBC, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a “positive lock” when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the required Fire Safety Plan, as required by 4.10. of this Authorization, shall mark the lift gates such that they are readily identifiable as part of the egress route.

5.8 Where ‘at-level’ conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two ‘at-level’ conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the ‘at-level’ cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each ‘at-level’ conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the ‘at-level’ cross-over and all inserts shall be sized to support loads required in Part 4 of the OBC,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each ‘at-level’ cross-over, and

(e) stairs approaching ‘at-level’ conveyor cross-overs shall be marked in accordance with the required Fire Safety Plan, as required by 4.10 of this Authorization, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time *(BCA)* and, except as specifically authorized herein, with the OBC.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the terms and conditions set out in Section A. above; or

   (b) the occurrence of any of the events described in Sections B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this authorization; or,

      (iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section A 1.1 of this authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *BCA* or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section A. above; or

   (d) any OBC provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 27th day of November 2003.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**November 27, 2003**
BMEC AUTHORIZATION	**BMEC # 03-12-291**
BMEC APPLICATION	**#A2003-16**
DATE OF AMENDMENT	**May 27, 2004**

* denotes amendment

JESSUP MANUFACTURING COMPANY
Glo Brite® Photoluminescent Exit Signs

1. Applicant

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2. Manufacturing Facilities

Jessup Manufacturing Company
2815 West Route 120
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3. Description

The Glo Brite® Exit Signs (the "Exit Signs") 7000 series, model numbers 7011, 7011-B, 7012-B, 7310, 7210, 7211, 7013, 7013-B, and 7014-B, are Exit Signs that are available in both framed and frameless styles. The Exit Signs have a photoluminescent panel consisting of a rigid Poly Vinyl Chloride (PVC) sheet blended with a strontium oxide photoluminescent pigment that emits light through the absorption of at least 54 lux (5 foot candles) of ambient illumination. The reported legible viewing distance of the Exit Sign is 15.2 m (50 ft).

The framed Exit Sign consists of a photoluminescent placard inside a red powdered coated frame. The frame is provided with the word "EXIT" or "SORTIE" and optional directional indicator knockouts. The framed Exit Sign is available in single or double sided and may be ceiling or wall mounted.

The frameless Exit Sign consists of a photoluminescent background and opaque letters spelling the word "EXIT" or "SORTIE" in red only. Opaque directional indicators are optional and may be included at one or both sides of the exit sign. The substrate material is a semi-rigid PVC and it is mechanically mounted to the surface. The frameless Exit Sign may be ceiling or wall mounted.

4. Authorization Requested

The applicant sought a Building Materials Evaluation Commission (BMEC) authorization for the Exit Signs, series 7000 as a means of egress identification under Subsection 3.4.5. “Exit Signs”, with conditions and limitations, equivalent to the requirements of 1997 Ontario Building Code, as amended and remade from time to time (OBC).

5. Assessment

Reports and assessments provided by the applicant show that if the Exit Signs are designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this authorization, the level of performance required by the OBC will be provided.

Reports submitted, and reviewed, but not limited are to:

1. Fire, Life Safety, & Security Institute, Inc , Project number 2003-25, July 17, 2003.

2. Glo Brite® Photo-Luminescent Exit Signs Manufacturer Information, Jessup 2002

3. Glo Brite® Photo-Luminescent Exit Signs Installation Instructions.

4. The International Certification Network Certificate, Quality Management System, ISO 9002-1994, Registration number DE-81368-02.

5. “Photo-Luminescent and Self-Luminous Exit Signs” ULC/ORD-C924-02.

6. CAN/CSA-C860-96 “Performance of Internally Lighted Exit Signs.”

7. UL 924 “Emergency Lighting and Power Equipment” Supplement SG - Photo-Luminescent Exit Signs”, July 11, 2001.

8. UL Report Project 02SC1174, File E230912, “Photo-Luminescent Exit Sign” Jessup Manufacturing Company, Mc Henry Illinois Copyright 2002.

9. Glo Brite® Photo-Luminescent Exit Signs, UL and ULC Certifications.

10. International Building Code, 2002 Edition.

11. NFPA 101 “Life Safety Code,” 2000 Edition.

12. NFPA 1, “Uniform Fire Code,” 200 and 2003 Editions.

13. NFPA 5000, “Building Construction and Safety Code,” 2003 Edition.

14. ICC ES Legacy Report (ER-6040) “Glo Brite® Photo-Luminescent Exit Signs”, Reissued March 1, 2003.

15. Letter of Approval from the Office of the Fire Marshall in the State of Indiana, April 19, 2002.

16. ULC correspondence re. File E230912, dated September 23, 2003.

17. Material Safety Data Sheet, LOC 20126/7/8.

18. ULC correspondence re. BMEC A2003-16, dated November 18, 2003.

6. Authorization

The Exit Signs series 7000, model number 7011, 7011-B, 7012-B, 7310, 7210, 7211, 7013, 7013-B, and 7014-B are authorized for use as a means of egress identification under Subsection 3.4.5. “Exit Signs”, all other requirements pertaining to the installation are subject to the requirements of the OBC, and subject to the following terms and conditions:

A. Specific Terms & Conditions

1. This Authorization is valid only for Exit Signs model numbers 7011, 7011-B, 7012-B, 7310, 7210, 7211, 7013, 7013-B, and 7014-B .

2. Sortie Signs, model numbers 7211, 7013, 7013-B, and 7014-B, shall only be installed adjacent to Exit Signs, model numbers 7011, 7011-B, 7012-B, 7310, and 7210.

3. The Exit Signs are not required to be provided with an emergency power supply as described in Sentence 3.2.7.4.(1). of the OBC.

* 4. The Exit Signs require a minimum of 54 lux (5 ft candles) of constant and continuous external non-filtered fluorescence, mercury vapour or metal halide lighting to illuminate the face(s) of the signs at all times.

5. The Exit Signs may only be used in buildings that are not required to have an emergency power supply greater than 1 h, for emergency lighting as described in the Article 3.2.7.4 of the OBC.

6. The Exit Signs shall be located so that the legible viewing distance of 15.2 m (50 ft) is not exceeded.

7. The Exit Signs shall have the following markings:

   a. Name of the manufacturer,

   b. UL/ULC 924,

   c. Expiration date,

   d. Model number,

   e. Legible viewing distance, and

   f. "CAUTION: minimum 5 foot candle external non-filtered florescent, mercury vapour or metal halide illumination must be continuously present on the face(s) of this sign."

8. The Exit Signs shall be installed as per the manufacturer's instructions.

9. The Exit Signs are authorized for interior applications only.

10. The Exit Signs shall not be exposed to direct sunlight.

11. The Exit Signs shall not be exposed to temperatures outside the range of 10^0 to 40^0 C (50^0 to 104^0 F).

12. The Exit Signs shall be cleaned with a damp cloth or as otherwise recommended by the manufacturer.

B. General Conditions

1. The use of the Exit Signs as described in Specific Terms and Conditions 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time *(BCA)* and except as specifically authorized herein, with the OBC.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in A. above; or

(b) the occurrence of any of the events described in Conditions B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

i. the material, system or building design that is the subject matter of this Authorization;

ii. the address of the applicant specified in Part 1 of this Authorization; or,

iii. the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

i. does not comply with the *BCA* or any relevant legislation as they may be amended or re-enacted from time to time; or

ii. provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any OBC provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto on this 27th day of May 2004.

BUILDING MATERIALS EVALUATION COMMISSION

per: Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **October 30, 2003**
BMEC REFERENCE **BMEC # 03-11-290**
BMEC APPLICATION **BMEC #A2003-17**

PHOENIX RACK AND STORAGE SYSTEM
Shelf and Rack Storage System

1. Applicant

Phoenix Rack and Storage Systems Inc.
181 Rue Barr Street
St. Laurent, Quebec
H4T 1W6

Tel: (514) 735-5431
Fax: (514) 735-8558

2. Manufacturing Facilities

Phoenix Rack and Storage Systems Inc.
181 Rue Barr Street
St. Laurent, Quebec
H4T 1W6

3. Description

The shelf and rack storage system is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment. Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the 1997 Ontario Building Code, as amended (OBC) and are not subject to mezzanine or interconnected floor space rules.

4. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

5. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the OBC.

6. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for Phoenix Rack and Storage Systems Inc.

Use and Occupancy

2.1 Except as where more restrictively provided for in 3.4. and 3.5. in the following, the shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, II and IV commodities, Group A, B, C plastics and rubber tires as defined in NFPA-13-1999, and not for production, manufacturing, assembly/disassembly or ancillary administrative functions; where the shelf and rack storage system incorporates the storage of rubber tires, such storage shall conform to the requirements of Subsection 3.3.1. “Indoor Tire Storage” of the Ontario Fire Code, Ontario Regulation 388/97, as amended or remade from time to time

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the OBC, as amended or remade from time to time.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time.

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be of noncombustible construction, and be designed in accordance with Part 4 of the OBC as remade from time to time.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(b) open construction consisting of steel grating or open steel floor planking.

3.4 The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m except that where the maximum height exceeds 18 m but does not exceed 24 m, the following provisions shall apply:

(a) a fire alarm system shall be installed with:

(i) pull stations located at all exit doors including exit doors serving elevated decks and walkways; and

(ii) smoke detectors located, at the ceiling of all rooms and areas containing the shelf and rack system, within exit stair enclosures at the top, and at every third level of elevated deck or walkway; and

(b) the fire alarm system required by (a) above, shall be designed to notify the fire department upon activation; and

(c) the shelf and rack storage system shall be used only for the storage of Classes I, II and III commodities as defined in NFPA 13 -1999 as amended.

3.5. Where Class I, II, III, and IV commodities and Group A, B, C, plastics and rubber tires as defined in NFPA 13-1999 are stored, the maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 7 m.

3.6 Lighting levels of walkways and platforms shall conform to the OBC as amended or remade from time to time.

3.7 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2) and 3.2.7.4.(1) respectively of the OBC as amended or remade from time to time.

3.8 Guards and toe boards shall be installed in accordance with the OBC as amended or remade from time to time.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs A 4.3 and A 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA-72, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph A 2.1, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 - 1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the OBC.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time.

4.10 Regardless of the occupant load, the requirements of Section 2.8. “Emergency Planning” of the Ontario Fire Code, Ontario Regulation 388/97, as amended or remade from time to time, shall apply.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the OBC except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than four platform levels, the highest of which may not be more than 12 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m^2 in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m:

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a "time-based egress analysis" undertaken and sealed by a Professional Engineer or Architect as defined in the OBC using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time.

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where:

H_p = Horizontal travel distance on the shelf and rack storage (m)

V_p = Vertical travel distance on the shelf and rack storage (m)

H_m = Horizontal travel distance on the main floor (m)

N_{lg} = Number of lift gates in the means of egress

N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the OBC shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2) of the OBC, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a “positive lock” when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the required Fire Safety Plan, as required by 4.10 of this Authorization, shall mark the lift gates such that they are readily identifiable as part of the egress route.

5.8 Where ‘at-level’ conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two ‘at-level’ conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the ‘at-level’ cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each ‘at-level’ conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the ‘at-level’ cross-over and all inserts shall be sized to support loads required in Part 4 of the OBC,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each ‘at-level’ cross-over, and

(e) stairs approaching 'at-level' conveyor cross-overs shall be marked in accordance with the required Fire Safety Plan, as required by 4.10 of this Authorization, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 6. A. above; or

   (b) the occurrence of any of the events described in Sections 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

      (iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section 6 A 1.1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 6. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

Dated at Toronto on this 30th day of October 2003.

BUILDING MATERIALS EVALUATION COMMISSION

per: Rashmi Nathwani, Chair

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
www.obc.mah.gov.on.ca

Date of Authorization	October 30, 2003
BMEC Authorization	BMEC #03-10-289
BMEC Application	#A2003-14
BMEC Application	A2005-20
Date of Amendment	October 27, 2005

* Denoted October 27, 2005 Amendment

AUTHORIZATION REPORT: Trap Guard™ Valve

1. Applicant

Proset Systems, Inc.
1355 Capital Circle
Lawrenceville, Georgia
30043, USA

Tel: (770) 339 -1782
Fax: (770) 339 -1784
Web: www.trapguard.com

2. Manufacturing Facilities

Proset Plastics, Inc.
1355 Capital Circle
Lawrenceville, Georgia
30043, USA

Proset Plastics, Inc.
519 Honeysuckle Road
Spartanburg, South Carolina
29303, USA

3. Description

The Proset Systems, Inc. Trap Guard™ Valve is made of a soft, flexible elastomeric PVC material molded to a ridge PVC fitting in the shape of a duck's bill, open at the top with a special curl closure at the bottom.

The Trap Guard™ Valve is used inside of an approved floor drain fixture. The smooth flexible Trap Guard™ Valve surface allows wastewater to open and adequately discharge the fixture through its interior and close after the wastewater discharges to prevent possible sewer gas emissions.

4. Authorization requested

The applicant sought a Building Materials Evaluation Commission (BMEC) authorization for the Trap Guard™ Valve as an equally effective means of providing a trap seal primer, with limitations, equivalent to the requirements of 1997 Ontario Building Code, Sentence 7.4.5.5.(1).

5. Assessment

Reports and assessments provided by the applicant show that if the Trap Guard™ Valve is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this authorization, the level of performance required by the 1997 Ontario Building ode will be provided.

The reports submitted, and reviewed, but were not limited to:

1. Southern Building Code Congress International, Report Number 2218, copyrighted 2002.

2. Curney & Ivey Engineering Inc. Test Report, January 19, 2002, Subject Engineering Report 22007, Testing of Trap Guard."

3. Intertek Testing Services, Issued January 31, 2003, Revised March 26, 2003, Listing Report Number 478-3031903-01/03 " A Model " Proset Systems, Inc. Trap Guard™ Floor Drain."

4. Installation Instructions.

5. Letter of Approval, City of Philadelphia, July 3, 2003.

6. Letter of Approval, City of Winnipeg, July 21, 2003.

* 7. Forest Mechanical Inc., Engineer's letter, dated August 18, 2005.

6. Authorization

The Trap Guard™ Valve is authorized for use as an equally effective means of providing a trap seal primer, all other requirements pertaining to the installation are subject to the requirements of the 1997 Ontario Building Code; and subject to the following terms and conditions:

A. Specific Terms & Conditions

1. This Authorization is valid only for Proset Systems, Inc. Trap Guard™ Valve, for 2", 3" and 4" diameter floor drain sizes.

2. The Proset Systems, Inc. Trap Guard™ Valve shall be installed flush with the finished floor.

3. If a Proset Systems, Inc. Trap Guard™ Valve is installed, then it shall not reduce the flow through a pipe by more than 10 percent.

4. The strainer which covers the Proset Systems, Inc. Trap Guard™ Valve shall have the following label “Trap Guard™ Protection Inside”; the label shall be:

   (a) permanently attached,

   (b) waterproof,

   (c) adhered in a manner that it does not obstruct the strainer’s flow, and

   (d) installed on a contrasting background.

5. The Proset Systems, Inc. Trap Guard™ Valve shall be accessible by removing the strainer top.

6. The Proset Systems, Inc. Trap Guard™ Valve shall not be installed in systems where the water temperature discharge is greater than 93.3^0 C (200^0 F) or higher.

* 7. The Proset Systems, Inc. Trap Guard™ Valve may be installed in a floor drain system that complies with CSA B 79, or floor drains installed in conformance with the Building Code.

8. The Proset Systems, Inc. Trap Guard™ Valve shall not be installed where the discharge sewage or waste may damage or impair the fitting.

B. General Conditions

1. The use of the Proset Systems, Inc. Trap Guard™ Valve as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      i. the material, system or building design that is the subject matter of this Authorization;

      ii. the address of the applicant specified in Part 1 of this Authorization; or,

      iii. the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      i. does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      ii. provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

   (d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

Dated at Toronto this 27 day of October 2005.

BUILDING MATERIALS EVALUATION COMMISSION

_____

Edward Link, Vice-Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**September 25, 2003**
BMEC AUTHORIZATION	**BMEC # 03-09-288**
BMEC APPLICATION	**#A 2003-09**
DATE OF AMENDMENT	**October 30, 2003**
* Denotes the new product name	
DATE OF AMENDMENT	**October 30, 2004**
** Denotes amendment	

**** HAWORTH LTD**
*** Nexus™ Floor System**

1. Applicant

** Haworth Ltd
10 Smed Lane SE
Calgary, Alberta
T2C 4T5

Tel: (403) 203 - 6000
Fax: (403) 203 - 6016

2. Manufacturing Facilities

** Haworth Ltd
10 Smed Lane SE
Calgary, Alberta
T2C 4T5

3. Description

The Haworth Ltd Nexus™ Floor System consists of steel encapsulated fibreboard panels supported on pedestals that are positioned by means of interlocking plastic webbing. The system functions as a low-profile raised floor system providing access for electrical and telecommunications accessories, primarily in commercial offices interiors.

4. Authorization requested

The applicant sought a Building Materials Evaluation Commission (BMEC) authorization for the Nexus™ Floor System where the plastic webbing would be considered, with limitations, equivalent to the requirements of OBC Sentence 3.1.5.8.(2). “Combustible Flooring Elements.”

5. Assessment

Reports and assessments provided by the applicant show that if the Nexus™ Floor System is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this authorization, the level of performance required by the OBC will be provided. Reports submitted, and reviewed:

1. SMED International Specifications, Constructive Solutions “Section 102070 Cellular Access Floor”, 05/2002.

2. Letter correspondence, May 12, 2003, Gage-Babcock & Associates.

3. Equivalency Report, February 13, 2002, City of Vancouver.

4. City of Winnipeg, December 17, 2002, “The Use of The Nexus Cellular Access Floor System in Buildings Required to be Constructed of Noncombustible Construction.”

5. ES Report, PFS-5657, ICBO Evlation Services, Inc “ The Nexus Low-Profile Accessible Floor”, September 1, 2001.

6. NES, Report No. NER-566, December 1, 2001, “Nexus Access Floor System.”

7. ISO 9001:2000 Certificate of Registration, 2001/03/07, Certificate No. 01696.

8. The Nexus™ Cellular Access Floor System Installation Instructions.

9. Structural Tests:

(a)	ITS 484-1668	Inform Loading and Pedestal Axial-Loading Tests
(b)	ITS 484-1488	Concentrated Load Test Report, R1
(c)	ITS 484-1488	Concentrated Load Test Report, R2
(d)	SGS 135072	Load/Deflection and Permanent Set Test Report
(e)	SWL 918354	Rolling Load Test report
(f)	SWL 918368	Rolling Load Test report
(g)	RAD-2522	Adhesive Tests
(h)	RAD-2707	Adhesive Tests

10. Flammability Tests:

(a)	ITS 3007701	Panels- Surface Burning Test Report, CAN/ULC-S102-M.
(b)	ITS 483-8088	Webbing - Surface Burning Test Report, CAN/ULC-S102-M.
(c)	HAI/OPL 15486	Heat Release Comparison of Webbing with Wood Sleepers (ASTM E1354)

(d)	SGS 128680-R2	Critical Radiant Flux test Report (ASTM E648)
(e)	ITS 491-7994	Top of Floor Fire Simulation Test Report (ICBO-ES AC151 Annex 1)
(f)	SGS 136917-1	Smoke Density Test - Webbing (ASTM D2843)
(g)	SGS 136917-1	Rate of Burning Test - Webbing (ASTM D635)
(h)	SGS 109299-1	Ignition Properties of Plastic Test - Webbing (ASTM D1929)
(I)	UL R13520	Mineral Fibre Batt

11. Electrical Equivalency, ESA 10-19-0, Ontario ESA Bulletin - Ground Computer Room Flooring, July 2002.

12. SMED International, Quality Assurance Manual, 12/13/2002.

13. SGS Test Report No:178461, August 5, 2003.

6. Authorization

Use of the Haworth Ltd. Nexus™ Floor System is authorized for use as an access floor system incorporating plastic webbing and is considered, with limitations, equivalent to the requirements of OBC Sentence 3.1.5.8.(2); all other requirements pertaining to the installation are subject to the requirements of the OBC, and are subject to the following terms and conditions:

A. Specific Terms & Conditions

1. This authorization is valid only for the Haworth Ltd. Nexus™ Floor System.

2. The Nexus™ Floor System shall only be installed in Group D, occupancies as it is defined in the OBC.

3. The space under the Nexus™ Floor system shall be subdivided into areas not larger than 10 m^2, and shall be fired stopped as per the requirements of OBC Sentence 3.1.11.3.(2).

4. The space under the Nexus™ Floor System shall not be used for storage.

5. The space under the Nexus™ Floor System shall not be used for air handling or as a plenum.

6. The Nexus™ Floor System shall not be designed to carry a uniform live load greater than 16 kPa.

7. The Nexus™ Cellular System shall be installed as per the prescribed “Nexus™ Installation Instructions, October 2001.”

8. The Nexus™ Floor System shall be installed on a noncombustible, floor or subfloor that is smooth, clean, dry, and flat with a maximum allowable deviation of 10 mm per 3000 mm horizontal run and with no discontinuities in the surface.

9. Fibre optic cables and electrical wires located in the space under the Nexus™ Floor System shall not be considered as being protected against exposure to fire.

10. Where the Nexus™ Floor System is cut during field installations the exposed edge shall be:

    (a) substantially covered by an electrical devise box protruding through the floor panel, or

    (b) positioned to abut interior construction surfaces and separated from the underfloor space by a continuous steel support channel, or

    (c) covered by an overlapping steel channel, minimum 30 gauge, which substantially covers the cut edge of the panel.

B. General Conditions

1. The use of the Haworth Ltd. Nexus™ Floor System as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the OBC as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

    (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

    (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        i. the material, system or building design that is the subject matter of this Authorization;

ii. the address of the applicant specified in Part 1 of this Authorization; or,

iii. the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

i. does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

ii. provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any OBC provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

Amended at Toronto on this 30th day of October 2004.

BUILDING MATERIALS EVALUATION COMMISSION

per: Rashmi Nathwani, Chair

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
www.obc.mah.gov.on.ca

Date of Authorization	September 25, 2003
BMEC Authorization	BMEC # 03-08-287
BMEC Application	#A2003-03
Date of Revision	April 28, 2005

* Denotes April 28, 2005 revision

AUTHORIZATION REPORT- LIFESTYLE SUNROOMS: Structural Insulated Panels

1. Applicant

Lifestyle Sunrooms Inc.
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Ajax, Ontario
L1S 1S3

Tel: (905) 686-9607
Fax: (905) 686-4798

2. Manufacturing Facilities

Lifestyle Sunrooms Inc.
239 Station Street
Ajax, Ontario
L1S 1S3

Tel: (905) 686-9607
Fax: (905) 686-4798

3. Description

* The Lifestyle Sunroom's structural insulated panels may be used in the construction of unheated sunroom additions to residential occupancy buildings. The structural insulated panels are available in two different panel thicknesses. The nominal overall thickness of the panels are 76 mm (3") and 146 mm (5-3/4"). The panels are constructed in accordance with the assemblies noted in the table below. All components are secured together by a structural adhesive.

Lifestyle Sunrooms		
Component	**76 mm (3") Panel**	**146 mm (5-3/4") Panel**
Aluminum Sheathing	0.8 mm (0.032")	0.8 mm (0.032")
Polystyrene Core	60 mm (2-3/8")	127 mm (5")
Hardboard	3 mm (1/8")	3 mm (1/8")
Oriented Strand Board	11 mm (7/16")	11 mm (7/16")
Aluminum Sheathing	0.8 mm (0.032")	0.8 mm (0.032")

Both sides of the panel are covered with a 0.8 mm (0.032“) embossed aluminum skin. The structural adhesive, Mor-Ad, is used in the construction of the panels and it is moisture cured. The panels are provided in lengths from 2133 mm (7'-0“) to 3658 mm (12'-0") long for the 76 mm (3") thick panels, and in lengths from 2133 mm (7'-0“) to 4572 mm (15'-0") feet for the 146 mm (5-3/4") panels. The OSB and hardboard are located on one side of the panel between the foam core and the aluminum sheathing. The panel shall be installed so that the OSB and hardboard are located on the interior side of the Lifestyle Sunroom.

4. Authorization requested

The applicant sought authorization for the use of the Lifestyle Sunroom as an unheated sunroom, which may be an addition to a residential occupancy building that is subject to requirements of Part 9 of the 1997 Ontario Building Code, as amended (OBC).

5. Assessment

Reports and assessments provided by the applicant show that if the Lifestyle Sunroom panel is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations; and the specific terms and conditions stated in this authorization, the level of performance required by the OBC will be provided.

Reports submitted, and reviewed:

1. Lifestyle Sunrooms manufacturer information.

2. Thyssen Krupp "Certified Aluminum Chemical and Mechanical Analysis", August 20, 2003.

3. National Evaluation Services Report, report No. NER-451 "Mor-Ad Structural Adhesives" reissued June 1, 2002.

4. International Conference of Building Officials Evaluation Service Inc, ER-5831 "Mor-Ad Structural Adhesives", September 1, 1999.

5. ASTM E1354-94 "Test method for Heat and Visible Smoke release Rates for Materials and Products Using on Oxygen Consumption Calorimeter" Project No. 15504-99521, March 14, 1996.

6. Technical Bulletin Structural Board Association "Oriented Strand Board Fire Performance"

7. Technical Bulletin Structural Board Association "Surface Flammability of OSB (Flame Spread Study)"

8. Engineer Stamp Manufacturer drawing, May 22, 2001, "Typical 3" Foam Protected Roof End Cross Section."

9. Intertek Testing Services Project No. 491-8154" CAN4-S124-M Report", February 28, 2001.

10. Trow Consulting Engineers Ltd. Reports "Load Testing of Sandwich Roof Panels Manufactured by Lifestyle Sunrooms, Ajax Ontario" revised February 18, 2003.

11. Trow Consulting Engineers Ltd. Reports "Load Testing of Sandwich Roof Panels Manufactured by Lifestyle Sunrooms, Ajax Ontario, Panels Without the Bottom Aluminum Layer" revised February 20, 2002.

12. Trow Consulting Engineers Ltd. Reports "Load Testing of Sandwich Roof Panels Manufactured by Lifestyle Sunrooms, Ajax Ontario" revised March 18, 2003.

13. Trow Consulting Engineers Ltd. correspondence "Lifestyle Sunrooms panels Compressive Creep of the Polystyrene Foam Core", March 18, 2003.

15. City of Toronto correspondence re: Lifestyle Sunrooms OBC Approval for Roof Panels, March 25, 2003.

16. Quality Control Documentation.

17. Excerpt of the Minutes of Meeting, Toronto Urban Development Services, February 2, 2003.

18. Trow Consulting Engineers Ltd. correspondence "Sample Deflection Calculations for the Lifestyles Sunrooms Roof Panels", July 7, 2003.

6. Authorization

The Lifestyle Sunroom panels are authorized for use in the construction of unheated sunrooms, which may be an addition to a residential occupancy building, all other requirements pertaining to the installation are subject to the requirements of Part 9 of the OBC, and subject to the following terms and conditions:

A. Specific Terms & Conditions

1. This authorization is valid only for Lifestyle Sunrooms Inc. (Lifestyle Sunrooms).

2. The structural design and general review of the Lifestyle Sunrooms shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act*, (Ontario). The Professional Engineer shall provide the chief building official with a document certifying that the installation conforms with this authorization.

3. The Lifestyle Sunrooms shall be limited to residential occupancies subject to the requirements of Part 9 of the OBC.

4. The panels shall not be used where the wall and / or roof assemblies are required to have a fire resistance rating.

5. The Lifestyle Sunroom shall be supported on a foundation designed and constructed in accordance with the requirements of Part 9 or Part 4 of the OBC.

6. The Lifestyle Sunrooms shall only be used in the construction of unheated spaces.

7. The panels need not meet the following OBC requirements:

   (a) Subsection 9.25.2. “Thermal Insulation” and Section 9.38. “Thermal Design”

   (b) Subsection 9.25.3. “Air Barrier Systems”

   (c) Subsection 9.25.4. “Vapour Barriers”

8. The wall panels shall not support the load of the roof panels; the roof panels shall be attached to a structural frame.

B. General Conditions

1. The use of the Lifestyle Sunroom Panels as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or
   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or
      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

   (d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

BUILDING MATERIALS EVALUATION COMMISSION
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**AUGUST 31, 2003**
BMEC AUTHORIZATION	**BMEC # 03-07-286**
BMEC APPLICATION	**#A2003-08**
DATE OF AMENDMENT	**OCTOBER 30, 2004**

* Denotes October 30, 2004 amended information

RenewABILITY Energy Inc.
Commercial Drainwater Heat Recovery Systems

1. Applicant

* Renewability Energy Inc.
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N2V 1Z7

Tel: (519) 885-0283
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2. Manufacturing Facilities

* Renewability Energy Inc.
2-60 Baffin Place
Waterloo, Ontario
N2V 1Z7

3. Description

RenewABILITY Energy Inc. has two types of Commercial Drainwater Heat Recovery Systems (Heat Recovery System), which are the gravity fed systems and the pumped systems. Both Heat Recovery Systems consist of a heat exchanger which transfers waste heat from the grey drainwater to the colder potable water stream. Required venting is installed onto the heat exchanger on-site and the diverted drainwater flow is returned to the standard drain system.

Gravity System: The Heat Recovery System has a flow splitting manifold, which is designed to maintain an engineered cross sectional area as the drainwater flows thought it.

Pumped System: The Heat Recovery System also consists of a tank, a pump and a pressurized flow splitting manifold. The tank gathers grey drainwater and then pumps it into the pressurized manifold which feeds the vertical heat exchanger.

4. Authorization requested

The applicant sought a Building Materials Evaluation Commission (BMEC) authorization for the Heat Recovery System as an innovative system designed for use as a wastewater heat recovery system on drainage pipes that are installed in commercial buildings and convey wastewater that is free from solids and does not contain sewage derived from sanitary units.

5. Assessment

Reports and assessments provided by the applicant show that if the Heat Recovery System is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this authorization, the level of performance required by the OBC will be provided.

Reports submitted, and reviewed:

1. Letter correspondence dated March 12, 2003, from the Code Development and Training Section of the Ministry of Municipal Affairs and Housing.

2. GFX Floor Mounted System Installation Documentation, dated April 2003.

3. Pumped System Installation Documentation, dated February 2003.

4. Correspondence dated March 13, 2003, from the City of Kitchener.

5. Correspondence dated April 7, 2003, from the City of Toronto.

6. Correspondence dated February 6, 2003 from the Alberta Government.

7. Natural Resources Canada, CANMET Energy Technology Centre “Energy Credits for the Use of the Drainwater Heat Recovery System for Houses.”

8. F.E.M.P. United States Department of Energy “Heat Recovery from Wastewater Using Gravity-Film Heat Exchangers.”

9. UL Notice of Authorization and Testing, ”Notice of Authorization to Apply the UL Mark”, March 8, 2001.

10. United States Department of Energy ”New technologies Keeps Companies and Consumers in Hot Water”, April 2000.

11. Oak Ridge National Laboratory “United States Department of Energy: GFX Evaluation”, August 24, 2000.

12. Installation Instruction for GFX Multiple-Pipe Gravity Fed Systems for Wall Mounted Units."

13. Doucette Industries, Quality Manual.

6. Authorization

Use of the Heat Recovery System is authorized for use as an innovative system designed for use as a wastewater heat recovery system on drainage pipes that are installed in commercial buildings and convey wastewater that is free from solids and does not contain sewage derived from sanitary units; all other requirements pertaining to the installation of the Heat Recovery System shall conform to the requirements of Part 7 and all other Parts of the 1997 Ontario Building Code as amended (OBC), and subject to the following terms and conditions:

A. Specific Terms & Conditions

1. This authorization is valid only for the RenewABILITY Energy Inc. Commercial Drainwater Heat Recovery System.

2. The design and general review of the Heat Recovery System shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act*, (Ontario); the Professional Engineer shall provide the chief building official with a document certifying that the installation conforms with this authorization.

3. The Commercial Drainwater Heat Recovery System shall not be considered in contravention to OBC Article 7.4.9.1. when used on drain pipes that carry wastewater from showers, dishwashers, clothes washers or other similar applications where the wastewater is free of solids and shall not contain sewage derived from sanitary units.

4. In addition to the to the related standards and requirements as outlined in Subsection 7.2.7. and Article 7.2.9.2. of the OBC, the Heat Recovery System shall conform to the following standards:

   (a) the copper drainpipe shall conform to ASTM B306, and

   (b) the copper freshwater pipe shall be type L tube conforming to ASTM B88.

5. The drainage system shall be provided with cleanouts that will permit the cleaning of the Heat Recovery System and the entire drainage system.

6. In addition to the requirements of the *Building Code Act, 1992,* RenewABILITY Energy Inc. shall supply the owner and Chief Building Official with the following:

(a) detailed mechanical drawings and documents denoting the installation of the Heat Recovery System with respect to possible future renovation and retrofit of the system, and

(b) the necessary manuals and documents outlining maintenance responsibilities and defining the system's maintenance protocol.

7. Permanently located on the Heat Recovery System in a minimum of 3 separate locations, and one on the upstream portion of the drainage system in a conspicuous location, shall be a mark or label indicating a minimum of the following information:

(a) Commercial Drainwater Heat Recovery System,

(b) Contact Information: company name, and telephone number, and

(c) "Not approved for solids or sanitary unit discharge"

8. The Heat Recovery Systems shall not be enclosed in a wall, floor, or ceiling assembly, and shall be readily accessible for maintenance inspection.

B. General Conditions

1. The use of the Renewability Energy Inc. Commercial Drainwater Heat Recovery System as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

(b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

i. the material, system or building design that is the subject matter of this Authorization;

ii. the address of the applicant specified in Part 1 of this Authorization; or,

iii. the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

i. does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

ii. provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

Amended at Toronto on this 30th day of October 2004

BUILDING MATERIALS EVALUATION COMMISSION

per: Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **JULY 31, 2003**
BMEC AUTHORIZATION **03-06-285**
BMEC APPLICATION **BMEC #A2003-12**

Concept Storage Solutions
Shelf and Rack Storage System

1. Applicant

Concept Storage Solutions
231 Millway Avenue, Unit #20
Concord, Ontario
L4K 3W7

Tel: (905) 660 -7848
Fax: (905) 660 -7849

2. Manufacturing Facilities

Concept Storage Solutions
231 Millway Avenue, Unit #20
Concord, Ontario
L4K 3W7

3. Description

The shelf and rack storage system is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment. Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the 1997 Ontario Building Code, as amended (OBC) and are not subject to mezzanine or interconnected floor space rules.

4. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

5. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the OBC.

6. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for Concept Storage Solutions.

Use and Occupancy

2.1 Except as required by 6.A.3.4. of this authorization, the shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III and IV commodities as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions.

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the OBC, as amended or remade from time to time.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time.

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be of noncombustible construction, and be designed in accordance with Part 4 of the OBC as remade from time to time.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(b) open construction consisting of steel grating or open steel floor planking.

3.4 The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m except that where the maximum height exceeds 18 m but does not exceed 24 m, the following provisions shall apply:

(a) a fire alarm system shall be installed with:

(i) pull stations located at all exit doors including exit doors serving elevated decks and walkways; and

(ii) smoke detectors located, at the ceiling of all rooms and areas containing the shelf and rack system, within exit stair enclosures at the top, and at every third level of elevated deck or walkway; and

(b) the fire alarm system required by (a) above, shall be designed to notify the fire department upon activation; and

(c) the shelf and rack storage system shall be used only for the storage of Classes I, II and III commodities as defined in NFPA 13 -1999 as amended.

3.5 Lighting levels of walkways and platforms shall conform to the OBC as remade from time to time.

3.6 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2) and 3.2.7.4.(1) respectively of the OBC as remade from time to time.

3.7 Guards and toe boards shall be installed in accordance with the OBC as remade from time to time.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs A 4.3 and A 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA-72, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph A 2.1 or clause c) of paragraph 3.4. above, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 - 1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the OBC.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the OBC except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than four platform levels, the highest of which may not be more than 12 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m^2 in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m:

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a “time-based egress analysis” undertaken and sealed by a Professional Engineer or Architect as defined in the OBC using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time.

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where:

H_p = Horizontal travel distance on the shelf and rack storage (m)
V_p = Vertical travel distance on the shelf and rack storage (m)
H_m = Horizontal travel distance on the main floor (m)
N_{lg} = Number of lift gates in the means of egress
N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the OBC shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2) of the OBC, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a “positive lock” when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the lift-gate shall be marked in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that it is readily identifiable as part of the egress route.

5.8 Where ‘at-level’ conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two ‘at-level’ conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the ‘at-level’ cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each ‘at-level’ conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the ‘at-level’ cross-over and all inserts shall be sized to support loads required in Part 4 of the OBC,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each ‘at-level’ cross-over, and

(e) stairs approaching ‘at-level’ conveyor cross-overs shall be marked in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 6. A. above; or

(b) the occurrence of any of the events described in Sections 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section 6 A 1.1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 6. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

Dated at Toronto this 31st day of July, 2003.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **JULY 31, 2003**
BMEC AUTHORIZATION **BMEC # 03-05-284**
BMEC APPLICATION **BMEC #A2003-11**

Rack Net-Works
Shelf and Rack Storage System

1. Applicant

Rack Net-Works
2005840 Ontario Inc.
1403 Malibou Terrace
Mississauga, Ontario
L5J 4B9

Tel: (905) 855-8704
Fax: (905) 855 8714

2. Manufacturing Facilities

Rack Net-Works
2005840 Ontario Inc.
1403 Malibou Terrace
Mississauga, Ontario
L5J 4B9

3. Description

The shelf and rack storage system is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment. Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the 1997 Ontario Building Code as amended (OBC) and are not subject to mezzanine or interconnected floor space rules.

4. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

5. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the OBC.

6. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for Rack Net-Works.

Use and Occupancy

2.1 Except as required by 6.A.3.4. of this authorization, the shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III, and IV commodities as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions.

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the OBC, as remade from time to time.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time.

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be of noncombustible construction, and be designed in accordance with Part 4 of the OBC as remade from time to time.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(b) open construction consisting of steel grating or open steel floor planking.

3.4 The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m except that where the maximum height exceeds 18 m but does not exceed 24 m, the following provisions shall apply:

(a) a fire alarm system shall be installed with:

(i) pull stations located at all exit doors including exit doors serving elevated decks and walkways; and

(ii) smoke detectors located, at the ceiling of all rooms and areas containing the shelf and rack system, within exit stair enclosures at the top, and at every third level of elevated deck or walkway; and

(b) the fire alarm system required by (a) above, shall be designed to notify the fire department upon activation; and

(c) the shelf and rack storage system shall be used only for the storage of Classes I, II and III commodities as defined in NFPA 13 -1999 as amended.

3.5 Lighting levels of walkways and platforms shall conform to the OBC, as remade from time to time.

3.6 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2) and 3.2.7.4.(1) respectively of the OBC as remade from time to time.

3.7 Guards and toe boards shall be installed in accordance with the OBC as remade from time to time.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs A 4.3 and A 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA-72, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph A 2.1 or clause c) of paragraph 3.4. above, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 - 1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the OBC.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the OBC except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than four platform levels, the highest of which may not be more than 12 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m^2 in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m:

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a “time-based egress analysis” undertaken and sealed by a Professional Engineer or Architect as defined in the OBC using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time.

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where:

H_p = Horizontal travel distance on the shelf and rack storage (m)

V_p = Vertical travel distance on the shelf and rack storage (m)

H_m = Horizontal travel distance on the main floor (m)

N_{lg} = Number of lift gates in the means of egress

N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the OBC shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2) of the OBC main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a “positive lock” when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the lift-gate shall be marked in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that it is readily identifiable as part of the egress route.

5.8 Where ‘at-level’ conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two ‘at-level’ conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the ‘at-level’ cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each ‘at-level’ conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the ‘at-level’ cross-over and all inserts shall be sized to support loads required in Part 4 of the OBC,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each ‘at-level’ cross-over, and

(e) stairs approaching ‘at-level’ conveyor cross-overs shall be marked in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 6. A. above; or

(b) the occurrence of any of the events described in Sections 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section 6 A 1.1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 6. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

at Toronto this 31st day of July 2003.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Rashmi Nathwani, Chairman

BUILDING MATERIALS EVALUATION COMMISSION
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **APRIL 24, 2003**
BMEC AUTHORIZATION **BMEC # 03-03-282**
BMEC APPLICATION **#A2003-05**

PIPE SHIELD
Non-destructive Pipe Rehabilitation Process

1. Applicant

Bradley Mechanical Services
1105 Britannia Road East
Mississauga, Ontario
L4W 3X1

Tel: (905) 670-7481
Fax: (905) 670-7483

2. Manufacturing Facilities

Bradley Mechanical Services
1105 Britannia Road East
Mississauga, Ontario
L4W 3X1

3. Description

The Bradley Mechanical Services Pipe Shield Non-destructive Pipe Rehabilitation Process (The "Pipe Shield Process) is intended for the rehabilitation of metallic potable water pipes. The Pipe Shield Process repairs pipes one-half inch (½") in diameter to four inches (4") in diameter. The Pipe Shield Process, using existing access points along the water line riser, cleans the pipes with air pressure and a garnet abrasive grit. After removing the abrasive grit from the cleaned pipes, air pressure is used to test the lines for leaks and a video bora scope is employed to visually examine the cleaned surfaces. Air pressure is again utilized to apply the AquataPoxy™ A-61 and /or Pipe Shield AN500™, a non-toxic, two-component epoxy. Upon completion, the performance level of the restored pipe is not less than that which existed prior to the Pipe Shield Process.

4. Authorization requested

The applicant sought a Building Materials Evaluation Commission (BMEC) authorization for the Pipe Shield Process as an alternative to repairing metal water pipes in existing buildings, as required by Article 7.1.2.2. "Alteration or Repair", and Section 7.2. "Materials and Equipment" of Ontario Regulation 403/97 (the "Ontario Building Code"), as amended or remade from time to time.

5. Assessment

Reports and assessments provided by the applicant show that if the Pipe Shield Process is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this authorization, the level of performance required by the Ontario Building Code will be provided.

Reports submitted, and reviewed:

1. Pipe Shield “Pipe Shield Technology Description and Installations Procedures”, February 20, 2003.

2. Pipe Shield “Equipment Schedule For Small Commercial Applications”, November 28, 2002.

3. Raven Lining System “AquataPoxy™ A-61" copyright 2002.

4. Material Safety data Sheet for AquataPoxy™ A-61.

5. NSF International Certification correspondence, February 20, 2003.

6. Pipe Shield “Outline of the Pipe Shield Training Program”, February 18, 2003.

7. Pipe Shield “Usage and Limitations”, February 19, 2003.

8. Pipe Shield “Epoxy Lining Production Report Form”

9. Pipe Shield Non Removable Warning Labels.

10. Pipe Shield and Bradley Mechanical Services Warranty Certificate.

11. Pipe Shield ”Employee Safety Handbook”

12. Bradley Mechanical Services LTD “Quality Management Manual”

13. Bradley Mechanical Services LTD (BMS) “Quality Management System: Forms/List.”

14. EnvirSense “Fact Sheet from the Navy Pollution Prevention Conference on the Restoration of Drinking Water Piping with Nontoxic Epoxy Linings”, June 6, 1995.

15. NSF International: Internet Data Sheets Providing Information with Respect to the Organization, Accreditations, Services, Water Distribution Systems, Certification Process, Products and Service Listings.

16. Manufacturer Information “Pipe Shield.”

6. Authorization

Use of the Pipe Shield Process is authorized as an alternative to traditional metal water pipe repair and/or replacement, subject to the following:

A. Specific Terms & Conditions

1. This authorization is valid only for Bradley Mechanical Services.

2. Only manufacturer trained and approved installation personnel shall perform the Pipe Shield Process in accordance with the Pipe Shield Installation, Training & Quality Assurance Manual.

3. The manufacturer shall provide field training to all installers and such training will be delivered by an experienced technician approved by Bradley Mechanical Services.

4. The Pipe Shield Process shall only be used on pipe of one-half inch (½") in diameter to four inches (4") in diameter and in single pipe segments up to one thousand feet (1000 ft) in length.

5. The Pipe Shield Process shall not be used in fire protection systems, such as standpipe and sprinkler systems.

6. The AquataPoxy™ A-61 and /or Pipe Shield AN500™, non-toxic, two-component epoxy shall be certified to the ANSI/NSF-61-2002 standard.

7. The thickness of the epoxy coating shall be determined by the epoxy manufacturer process instructions. The reduction in pipe diameter from the coating should be considered minimal and not essential for the flows in the pipes.

8. The curing process shall be supervised at all times by Bradley Mechanical Services personnel in accordance with the “Pipe Shield Technology Description and Installation Procedures.”

7. All materials and including the two-component epoxy equipment used in the Pipe Shield Process shall be supplied by Bradley Mechanical Services and shall be handled in accordance with the manufacturer’s specifications.

8. Trained and authorized Bradley Mechanical Services personnel in accordance with the Pipe Shield Instruction Manual shall, upon completion of the work or segment of the work, perform a visual inspection using a video bora scope to ensure the continuity and integrity of the applied lining.

9. The Pipe Shield Process shall include a warranty certificate that includes "The Pipe Shield Epoxy Lining Production Report."

10. Non-removable stickers or labels recording the following information shall be applied near the water shut off valve on each riser treated;

    (a) a name and telephone label - identifying Bradley Mechanical Services as having treated the pipe and including the phone number to call for information,

    (b) a warning - that the pipe has been coated with an epoxy lining, and

    (c) warning - not to torch, not to solder and to use pressure fittings only.

B. General Conditions

1. The use of the Pipe Shield Process as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

    (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

    (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        (I) the material, system or building design that is the subject matter of this Authorization;
        (ii) the address of the applicant specified in Part 1 of this Authorization; or,
        (iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(I) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

at Toronto this 24th day of April 2003.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**JANUARY 30, 2003**
BMEC REFERENCE	**BMEC # 03-02-281**
BMEC APPLICATION	**BMEC # A 2002-15**

Trimroc™ Interior Mouldings

1. Applicant

Canamould Extrusion Inc.
101A Roytec Road
Woodbridge, Ontario
L4L 849

Tel: (905) 264-4436
Fax: (905) 264-4437

2. Manufacturing Facilities

Canamould Extrusion Inc.
101A Roytec Road
Woodbridge, Ontario
L4L 849

3. Description

The Trimroc™ Interior Mouldings are constructed from a Type 2 expanded polystyrene substrate, a 3 mm thick cementitious base coat, a glass fibre reinforcing mesh, and a 1 mm thick gypsum top coat. Trimroc™Interior Mouldings are fully adhered in place with drywall compound to an interior noncombustible substrate. The Trimroc™ Interior Mouldings are used for interior decorative wall and ceiling trim-work.

4. Authorization Requested

The applicant sought Authorization for the use of their product Trimroc™ Interior Mouldings, as an equivalent to combustible millwork as it is permitted in Article 3.1.5.7. of the 1997 Ontario Building Code as amended, for use in buildings required to be constructed of noncombustible construction.

5. Assessment

Reports, assessments and information provided by the applicant indicate that if the Trimroc™ Interior Mouldings are designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and with the specific terms and conditions stated in this Authorization, that the level of performance required by the 1997 Ontario Building Code as amended will be provided.
Reports, assessments and information reviewed:

1. Technical Background Information Memo relating to the Trimroc™ Interior Mouldings: Canamould Extrusion Inc., dated July 18, 2002.

2. ASTM E84, Standard Test Method for Surface Burning Characteristics of Building Materials.

3. ASTM E84, test results from Underwriters' Laboratories of Canada, Standard Test Method for Surface Burning Characteristics of Building Materials, Job No. 02NK17800, dated September 10, 2002.

4. UL 1715, Fire Test of Interior Finishes Material.

5. UL 1715, test results from Underwriters' Laboratories of Canada, Fire Test of Interior Finishes Material, Application No. 02NK27412, dated September 10, 2002.

6. BOCA Commentary: Reference 2603.9.

7. Video Tape: UL 1715 “Canamould Extrusion Inc.” dated, July 10, 2002.

8. Trimroc™ Interior Mouldings "Installation Guide", copyright 2001, CGC Inc.

9. Canamould Extrustions Inc. "Quality Control Manual for Trimroc™ Interior Products"

6. Authorizations

The Canamould Extrusion Inc.: Trimroc™ Interior Mouldings are authorized for use as a combustible millwork in buildings constructed of noncombustible construction wherever combustible millwork as described in Article 3.1.5.7. of the 1997 Ontario Building Code as amended would be permitted to be installed.

A. Specific Terms and Conditions

1. This Authorization is valid only for Canamould Extrusion Inc.: Trimroc™ Interior Moulding (Trimroc™).

2. The Trimroc™ mouldings shall be marked "Trimroc FR" in large print and at regular interval on the back of the moulding.

3. The Trimroc™ mouldings shall be permitted for interior use in buildings required to be constructed of noncombustible construction as referenced in Part 3 of the 1997 Ontario Building Code as amended.

4. The use of Trimroc™ mouldings shall be limited to the maximum dimensions of 150 mm (6") crown mouldings at ceilings, 100 mm (4") chair rails, 100 mm (4") baseboards, 120 mm (4-3/4") door casings, and 660 mm (26") diameter ceiling centres.

5. Drywall compound shall be applied at inside corners, outside corners and butt joints between adjacent lengths of mouldings to maintain the continuity of the protective covering.

6. The Trimroc™ mouldings shall not constitute more than 10% of the aggregate area of the wall and ceiling areas of a room or space in which they are installed. This area includes the area of doors and other openings in the walls. The Trimroc™ shall be uniformly distributed throughout the room or space.

7. The Trimroc™ mouldings shall be fully adhered, to an acceptable substrate material as referenced in 6. A. 9. of this Authorization, with a continuous coat of drywall compound that is applied directly to the full width of the bonding surface of the Trimroc™ moulding.

8. The Trimroc™ mouldings shall be installed in accordance with Canamould Extrusion Inc. "Installation Guide."

9. The Trimroc™ mouldings shall be applied to one of the following substrates: gypsum board, plaster, concrete, masonry or cement board.

6. B. General Conditions

1. The use of Canamould Extrusion Inc. Trimroc™ Interior Mouldings as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      i. the material, system or building design that is the subject matter of this Authorization;

      ii. the address of the applicant specified in Part 1 of this Authorization; or,

iii. the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

i. does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

ii. provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

at Toronto this 30th day of January 2003.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**JANUARY 30, 2003**
BMEC REFERENCE	**BMEC # 03-01-280**
BMEC APPLICATION	**BMEC # A 2002-12**

POTTER ELECTRIC SIGNAL COMPANY.
HydraTank N_2 System

1. Applicant

Potter Electric Signal Company
2081 Craig Road
St. Louis, Missouri
63146
USA

Tel: (314) 878-4321
Fax: (314) 878-7264

2. Manufacturing Facilities

Potter Electric Signal Company
2081 Craig Road
St. Louis, Missouri
63146
USA

3. Description

The Potter Electric Signal Co. HydraTank N_2 System is a self contained water supply system for use in a fire sprinkler system designed in accordance with NFPA 13D 2002 "Standard for Installation of Sprinkler Systems for One and Two Family Dwellings." The Potter Electric Signal Co. HydraTank N_2 System may be used where there is no reliable water supply, or the water supply is inadequate to meet the demand of the sprinkler system.

The Potter Electric Signal Co. HydraTank N_2 System consists of one or more filament wound composite water tanks, to store the water necessary to meet the demands of the sprinkler system; one or more nitrogen cylinders, to supply the pressure required to discharge the water into the system; a locked cabinet to securely store the nitrogen cylinders; UL listed pressure regulators, to maintain the systems's operating pressure; and a status and trouble alarm panel to supervise and indicate: water levels, nitrogen pressure, the battery condition, and AC power.

4. Authorization Requested

The applicant sought authorization for the use of a non-metallic filament wound composite water tank, tested and approved as per ASNI/NSF 44 "Residential Cation Exchange Water Softener" for use in the Potter Electric Signal Co. HydraTank N_2 System as it is described in Part 3 "Description" of this Authorization, as an acceptable material (i.e. water supply source) permitted to be used in accordance with Sentence 3.2.5.13.(3) of the 1997 Ontario Building Code as amended.

5. Assessment

Reports and assessments provided by the applicant show that if the non-metallic filament wound composite water tank forming a part of the Potter Electric Signal Co. HydraTank N_2 System, is designed, performance tested and installed in accordance with the manufacturer's instruction and limitations and in conformance with the specific terms and conditions stated in this authorization, the level of performance required by the 1997 Ontario Building Code as amended will be provided.

Reports, assessments and information reviewed:

1. Technical Background Information Memo relating to the Potter Electric Signal Co. HydraTank, BMEC A2002-12, dated September 24, 2002.

2. HydraTank Parts list.

3. ISO 9002: 1994 Certificate, dated August 12, 2001.

4. Certificate of Compliance, No. 201559 (107788) CSA Certificate for Power Supplies, dated November 9, 1999.

5. UL ZJCZ7.E11368 "Flexible Cord Certified for Canada", dated June 11, 2002.

6. UL ZJCZ7.Guide Info "Flexible Cord Certified for Canada", dated June 11, 2002.

7. UL NKPZ7.Guide Info "Float-And Pressure Operated Certified For Canada", dated June 6, 2002.

8. NKPZ8.E42816 "Motor Controllers Float and Pressure-Operated Certified For Canada - Component", dated June 11, 2002.

9. ZDUZ2.E52496 "Water Softeners and Demineralizes - Components" dated June 11, 2002.

10. ANSI/NSF Standard 044 "Residential Cation Exchange Water Softeners", dated March 30, 2001.

11. Potter Electric Signal Co. Technical Assembly Drawings No. 1119390-30-B, 1119380-30-C, 1119340-4-A, 1119330-30-C, 1119280-30-C, 11192261-04-D, 1119261-05-D, 1119240-30-E, 1119250-30-A, 1119215-30-B, AND 216-30-A.

12. Manufacturer Information regarding Wiki PM 01.01 "Bourdon Tube Pressure Gauges."

13. Manufacturer Information regarding Barksdale "Level Switches."

14. Manufacturer Information regarding Vibra-Seal® "ASME Saftey Valves."

15. Manufacturer Information regarding Teflon® "Hose" and "Application."

16. Park Tank Specifications.

17. HydraTank System PSI and gas calculator spread sheets.

18. Manufacturer's Information relating to control devices, hose and check, safety, ball valves.

19. Spread sheets provided to assist in the determination of the system's nitrogen requirements.

20. Letter correspondence regarding BMEC A2002-12 Potter Electric Signal Co., HydraTank, dated October 30, 2002.

21. Letter correspondence regarding Jurisdiction and the Technical Standards and Safety Authority (TSSA), dated October 24, 2002.

22. Email correspondence regarding Technical Interpretation and NFPA 13D, dated July 29, 2002.

23. Potter Electric Signal Co. HydraTank Installation, Operation and Instructional Manual, Manual #5403529-Rev P, dated 5-02.

24. Potter Electric Signal Co. HydraTank manufacturer's information, Document #S119320, "Assembly Procedures."

25. Potter Electric Signal Co. HydraTank manufacturer's information, Document #S119261, "Assembly Procedures."

26. Potter Electric Signal Co. HydraTank manufacturer's information, Document #S119240, "Assembly Procedures."

27. Potter Electric Signal Co. HydraTank manufacturer's information, Document #S119280, "Assembly Procedures."

28. Potter Electric Signal Co. HydraTank manufacturer's information, Document #S119210, "Assembly Procedures."

6. Authorization

The Potter Electric Signal Co. HydraTank N_2 System is authorized for use in a fire suppression system as a water storage system that satisfies the water storage supply requirements of NFPA 13D "Standard for Installation of Sprinkler Systems for One and Two Family Dwellings" which is incorporated by reference Sentence 3.2.5.13.(3) of the 1997 Ontario Building Code as amended, by incorporating the use of a non-metallic filament wound composite water tank in the design of the Potter Electric Signal Co. HydraTank N_2 System. The non-metallic filament wound composite water tank used in the design Potter Electric Signal Co. HydraTank N_2 System is authorized subject to the following terms and conditions:

A. Specific Terms and Conditions:

1. This authorization is valid only for Potter Electric Signal Co. HydraTank N_2 System.

2. Notwithstanding the requirements of sections 5.1.3. and 6.2.3. of NFPA 13D, the design of the Potter Electric Signal Co. HydraTank N_2 System shall be in conformance with NFPA 13D, 2002 "Standard for Installation of Sprinkler Systems for One and Two Family Dwellings."

3. The design and general review of the Potter Electric Signal Co. HydraTank N_2 System shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act,* (Ontario); the Professional Engineer shall provide the chief building official with a document certifying that the installation conforms with this authorization.

4. The composite fibreglass water storage tank shall be tested and approved in accordance with ANSI/NSF 44 "Residential Cation Exchange Water Softeners."

5. The tank(s) shall be marked in a conspicuous location indicating the review and evaluation by ANSI/NSF.

6. The water storage tanks used in Potter Electric Signal Co. HydraTank N_2 System shall have the following properties; the tanks shall be:

   (a) made of a wound fibreglass reinforced epoxy laminate,

   (b) rated for a minimum pressure of 1235 Kpa (150 psi) at a temperature of 48.8 °C (120 °F),

   (c) capable of offering a supply range between 100 gal. (378.5 L) to 464 gal. (1756 L) capacity, and

   (d) made of moulded thermoset plastic or fibreglass at the base.

7. The water tank liner used in Potter Electric Signal Co. HydraTank N_2 System shall have the following properties; the tank liner shall be:

   (a) seamless,

   (b) free from fibrous materials, and

   (c) resistance to regenerating chemicals.

8. The Potter Electric Signal Co. HydraTank N_2 System shall be designed and installed in accordance with the requirements the "Installation, Operation and Instructional Manual", (Manual #5403529-Rev P, dated 5-02) for the Potter Electric Signal Co. HydraTank N_2 System.

9. When the HydraTank N_2 System is installed in a building, the system:

   (a) shall be located in building that is fully sprinklered, or

   (b) when located in a building that is partially sprinklered shall be:

      (i) located in a room separated from the remainder of the building, and

      (ii) the room shall be sprinklered.

6. B. General Conditions

1. The use of Potter Electric Signal Co.'s HydraTank N_2 System as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      i. the material, system or building design that is the subject matter of this Authorization;

      ii. the address of the applicant specified in Part 1 of this Authorization; or,

      iii. the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      i. does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      ii. provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

   (d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

at Toronto this 30th day of January 2003.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)

DATE OF AUTHORIZATION **DECEMBER 5, 2002**
BMEC AUTHORIZATION **BMEC # 02-08-279**
BMEC APPLICATION **#A2002-03**

HPB™
(High Performance Bedding)

1. Applicant

Dufferin Aggregates.
3300 Hwy #7, Suite 400
Concord, Ontario
L4K 4M3

Tel: (905) 761-7500
Fax: (905) 761-5905

2. Manufacturing Facilities

Milton Quarry
9410 Dublin Line, PO Box 68
Milton, Ontario
L9T 2Y3

Aberfoyle Quarry Pit
RR #3 Country Road #46
Guelph, Ontario
N1H 6H9

3. Description

The Dufferin Aggregates HPB™: High Performance Bedding (HPB™) is a limestone aggregate and gravel offering a 9.5 mm top size. The HPB™ is a crushed, washed, and graded aggregate; and is manufactured at the Milton Quarry and the Aberfoyle Quarry Pit.

4. Authorization requested

The applicant sought Authorization for the use of the HPB™ as an acceptable alternative that satisfies the granular material requirements for applications beneath floors, and on the top and sides of drain pipes and tile as it is required by the provisions of the 1997 Ontario Building Code as amended.

The applicant requested an equivalent to the requirement of the Sentences 9.14.2.1.(2) , 9.14.3.3.(4) and 9.16.2.1.(1) of the 1997 Ontario Building Code as amended.

5. Assessment

Reports and assessments provided by the applicant demonstrate that if the HPB™ is manufactured, stored, installed, maintained and monitored in accordance with the limitations of the manufacturer's specifications and the conditions stated in this Authorization, a level of performance equivalent to that required by the Sentences 9.14.2.1.(2), 9.14.3.3.(4) and 9.16.2.1.(1) of the 1997 Ontario Building Code as amended will be provided.

Reports submitted and reviewed:

1. Manufacturer's literature "You've got the look."

2. Manufacturer's literature "Our Environment is Counting On You."

3. 5 x 7 colour photo of HPB™ with mechanical systems.

3. Ontario Association of Certified Engineering Technicians and Technologist Outstanding Technical Achievement Certificate, dated May 8, 1996.

4. Letter of recommendation, Unilock, dated May 16, 2002.

5. Letter of recommendation, Mid-North Excavating, dated June 11, 2002.

6. Letter of recommendation, Maxwell Excavating Limited, dated July 23, 2001.

7. Letter of recommendation, Marshall, Macklin, Manahan, Consulting Engineers, Surveyors, Planners, dated November 29, 1994.

8. Letter of Approval, City of Mississauga, Department of Transportation and Works, dated August 17, 1994.

9. Letter of Approval, Regional Municipality of Peel, Public Works, dated August 24, 1994.

10. Letter of recommendation, Bert Contracting, dated October 18, 2000.

11. Technical Background Information Memo (TBI) relating to H.P.B.™ (High Performance Bedding), dated March 26, 2002.

12. Peto MacCallum Ltd.: Consulting Engineers, "Comparative Evaluation of Pipe Bedding Stones for Acceptance by the City of Mississauga", dated April 1998, Ref # per copy 8TE088.

13. Manufacturer Literature: HPB™: High Performance Bedding.

14. User Guide for Dufferin Aggregates: Quaility System Manual, ISO 9002:94, Guide 25, dated February 28, 2002.

6. Authorization

The Dufferin Aggregates HPB™: High Performance Bedding (HPB™) is authorized for use as a granular material as referenced in Sentences 9.14.2.1.(2) 9.14.3.3.(4) and 9.16.2.1.(1) of the 1997 Ontario Building Code as amended, when the HPB™ is manufactured, stored, installed, maintained and monitored in accordance with the limitations of the manufacturer's specifications and recommendations; and the following terms and conditions:

A. Specific Terms and Conditions

1. This authorization is valid only for Dufferin Aggregates HPB™: High Performance Bedding (HPB™) manufactured at the facilities referenced in Part 2. of this Authorization.

2. The HPB™ shall be manufactured and stored as per Dufferin Aggregates Quality Control Manuals, dated February 28, 2002.

3. When the HPB™ is used on the top and sides of drain tile or pipes, a geo-textile material shall be installed as per Sentence 9.14.3.3.(3) of the 1997 Ontario Building Code as amended.

4. A signed copy of the quarry ticket, for each shipment received shall be kept with the on-site construction documents, and upon request produced to the Authority Having Jurisdiction; and the Dufferin Aggregates quarry ticket should indicate the following minimum information:

   (a) Name of the Quarry,
   (b) Date,
   (c) Ticket number,
   (d) Gross and net amount of the HPB™ product, and
   (e) Name of the product.

5. The HPB™ is not authorized for applications pertaining to Part 8 “Sewage Systems” of the 1997 Ontario Building Code as amended.

6. The HPB™ is not authorized for use when designed, or installed in combination with other aggregates.

B. General Conditions

1. The use of the Dufferin Aggregates HPB™ (High Performance Bedding) as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      i. the material, system or building design that is the subject matter of this Authorization;

      ii. the address of the applicant specified in Part 1 of this Authorization; or,

      iii. the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      i. does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      ii. provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

   (d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

at Toronto this 5th day of December 2002.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**OCTOBER 31, 2002**
BMEC AUTHORIZATION	**BMEC # 02-07-278**
BMEC APPLICATION	**# A2002-13**

The Waterless No Flush™ Urinal

1. Applicant

Matrix Environmental Partners Inc.
3-331 Trowers Road
Woodbridge, Ontario
L4L 6A2

(905) 850-8080
(905) 850-9100

2. Manufacturing Facilities

Fibreall Industries
92 North Port Road
Port Perry, Ontario
L9L 1B2

3. Description

Matrix Environmental's Waterless No Flush™ Urinal (The "Waterless Urinal") is a plumbing fixture designed to be used in a washroom lieu of a conventional urinal.

The Waterless Urinal is comprised of 5 parts: 1. Urinal Body: the urinal body is gel-coated using a polymer gel-coat, the body is re-enforced with a chopped strand fibreglass mat. Waterless Co. Model numbers 2003, 2003B, 2004 and 2004B: Kalahari and Sonora. 2. The Trap: the removable trap is made of low density polyethylene with white concentrate and fits into the urinal body to accept the urine. Waterless Co. part number 3001: EcoTrap®. 3. The Trap Retainer: the trap retainer is a 4"x 2" ABS reduced coupling, the removable trap fits into the trap retainer. Canplas model number 3025. 4. The Elbow Outlet: the elbow outlet is a 2" ABS 90^0 elbow, that fits into the trap retainer and allows the urine to flow to the drain. Canplas model number 2452. 5. The Trap Seal: the trap seal is a specifically formalized trap seal liquid with a specific gravity lower than urine, approximately 0.9 litres of this liquid is used in the trap. The trade name for this liquid is Blueseal®, Waterless part number 1114.

4. Authorization Requested

The applicant sought authorization for the use of their product as a waterless urinal in buildings of all types of construction wherever conventional urinals, as described in Article 7.6.4.2. of the 1997 Ontario Building Code (OBC), would be permitted to be installed under the of the OBC.

5. Assessment

Reports and assessments provided by the applicant show that if the Matrix Environmental Waterless No Flush™ Urinal is designed, performance tested and maintained in accordance with the manufacturer's limitations and instructions stated in this authorization, the level of performance required by the OBC for conventional urinals will be provided:

Reports submitted and reviewed:

1. Technical Background Information Memo (TBI) relating to the The Waterless No Flush™ Urinal, dated September 23, 2002.

2. Reference Drawing, "The Waterless No Flush™ Urinal."

3. Reference Drawing, "EcoTrap®."

4. Water Matrix Inc. Specifications No Flush™ Urinal, Sonora™ Model#2004, dated June 2002.

5. Water Matrix Inc. Specifications No Flush™ Urinal, Sonora™ Model#2004B, dated June 2002.

6. Water Matrix Inc. Specifications No Flush™ Urinal, Kalahari™ Model#2003, dated June 2002.

7. Water Matrix Inc. Specifications No Flush™ Urinal, Kalahari™ Model#2003B, dated June 2002.

8. Water Matrix™ Kalahara™No Flush™ Urinal, Installation Instructions.

9. Water Matrix™ Sonora™ No Flush™ Urinal, Installation Instructions.

10. Water Matrix™"Waterless No Flush™ Urinals Maintenance Instructions: Blue Seal® Refill."

11. Water Matrix™"Waterless No Flush™ Urinals Maintenance Instructions: EcoTrap® Exchange."

12. Production Flow Chart: Fibreglass Waterless Del Nar Urinal: dated 8/1/98.

13. Waterless Co. " Urine, No-Flush Urinals, and Sanitation: A Review", dated 10/24/94.

14. List of Standards and Listings: Waterless No-Flush™ Urinals.

15. American National Standard, ANSI Z124.9 1994, excerpt "For Plastic Urinal Fixtures."

16. Canadian Standards Association (C.S.A.)"Certificate of Compliance #1087090 (LM 103698-1) for ANSI Z124.9, dated March 30, 2001.

17. C.S.A. "Description and Test Report", dated March 30, 2001.

18. 1996 National Standards Plumbing Code, Section 7.5 "Urinals."

19. IAPMO Research and Testing, Inc, Classified Marking, accepted June 2000.

20. Letters of Approval:

    (a) New York State, Department of Environmental Conservation, dated 03/25/95.
    (b) California Energy Commission, dated December 21, 1993.
    (c) Washington Suburban Sanitary Commission, dated February 2, 1994.
    (d) City and County of Honolulu, Department of Planning and Permitting, dated April 26, 1999.
    (e) Texas Natural Resources Conservation Commission, dated January 21, 1999.
    (f) Seattle-King County Department of Public Health, dated August 25, 1994.
    (g) Whatcom County Planning and Development Services, dated October 10, 1994.
    (h) State of Wisconsin, Department of Industry, Labor and Human Relations, dated February 10, 1995.
    (i) State of Maine, Department of Human Services, February 22, 1995.
    (j) State of Utah, Department of Commerce, Division of Occupational & Professional Licencing, dated April 27, 1995.
    (k) The Commonwealth of Massachusetts, Division of Registration, dated March 13, 1997.

(l) Oregon, Department of Consumer and Business Affairs, dated May 5, 1994.
(m) Michigan Department of Consumer & Industry Services, dated 12, 2000.
(n) State of Maryland, Department of Labor, Licensing and Regulation, dated December 20, 1999.
(o) State of Michigan, Department of Consumer & Industry Services, dated July 14, 2000.
(p) City of Las Vegas, Department of Building and Safety, dated May 20, 1994.
(q) County of San Diego, Department of Health Services, dated May 18, 1994.
(r) Bellingham Fire Department, Building Services Division, November 22, 1994.
(s) Snohomish County, Planning and Development Services, dated January 20, 1996.
(t) City of Toronto, Department of Works & Emergency Service, dated September 25, 2002.

20. SGS Testing Company, Report No. TS97-0229R, Revised July 31, 1997.

21. Report prepared by Owen Ayres & Associates, Inc. “An Evaluation of the Hydraulic Performance of a Waterless Urinal”, dated December 8, 1994.

22. Report of Test #602687-1R, “ The Review of EPA Discharge Criteria for ‘Blue Seal’ Liquid for ‘Waterless Urinals’” revised March 23, 1993.

23. Material Safety Data Sheet for Blue Seal®.

24. Municipal Letter: City of Aurora, CO, USA, Department of Water Supply and Treatment, dated March 28, 1995.

25. Municipal Letter: Cobb County Water System.

26. Record of Environmental Consideration (REC), Installation of Waterless Urinals, Fort Huachuca, Arizona, dated April 22, 1997.

27. Vancouver Island Technology Park: Green Building Plan.

6. Authorization

The Waterless No Flush™ Urinal is authorized for use as a urinal in all locations, in buildings of all types of construction wherever a conventional urinal, as described in Article 7.6.4.2. of the OBC, would be permitted to be installed.

A. Specific Terms and Conditions

1. This authorization is valid only for Matrix Environmental Partners Inc.: The Waterless No Flush™ Urinal.

2. A copy of the maintenance instructions for the Blueseal® Refill and the Ecotrap® Exchange shall be submitted along with this BMEC Authorization when applying for a building permit.

3. A permanent sign in a conspicuous location indicating the maintenance schedules, as they are referenced in 6.A.2. of this Authorization, shall be posted in each room that a Waterless Urinal is installed.

4. The Waterless No Flush™ Urinal must be marked indicating that it conforms to ANSI.Z124.

5. The Waterless No Flush™ Urinal shall be installed in accordance with the manufacturer's instructions.

6. The manufacturer shall provide training of the proper use, operation and maintenance of the device.

7. The plumbing system that the Waterless No Flush™ Urinal forms a part of shall be designed as per section 7.5. "Venting" of the OBC.

8. The Waterless No Flush™ Urinal shall be connected to a drain waste pipe that is designed as per Subsections 7.4.9. and 7.4.10. of the OBC.

9. The Waterless No Flush™ Urinal is considered to have satisfied the requirements of Subsection 7.2.3. of the OBC when:

   (a) installed with an EcoTrap® as described Part 3 of this Authorization, and

   (b) used in conjunction with the manufacturer's trap seal liquid, as it is specified in 6.A.11. of this authorization,

10. Double trapping of the Waterless No Flush™ Urinal is not permitted.

11. The Waterless No Flush™ Urinal shall be used in conjunction with the manufacturer's Blueseal®, or other similar liquids approved by the manufacturer.

12. The Waterless No Flush™ Urinal shall conform to the flame spread and smoke development requirements of the OBC.

B. General Conditions

1. The use of The Waterless No Flush™ Urinal as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      i. the material, system or building design that is the subject matter of this Authorization;

      ii. the address of the applicant specified in Part 1 of this Authorization; or,

      iii. the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      i. does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      ii. provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

at Toronto this 31st day of October 2002.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)

DATE OF AUTHORIZATION **OCTOBER 31, 2002**
BMEC AUTHORIZATION **BMEC # 02-06-277**
BMEC APPLICATION **#A2002-11**

Royal PVC DWV Starter Fittings

1. Applicant

Royal Pipe Systems
131 Regalcrest Court
Woodbridge, Ontario
Canada
L4L 8P3

Tel: (905) 856-7550
Fax: (905) 856-4367

2. Manufacturing Facilities

Royal Pipe Systems
56400 Mound Road
Shelby, Twp
MI, USA
48316

3. Description

The Royal PVC DWV Starter Fitting consists of a one piece, molded drain waste vent (DWV) for connecting three drains to one pipe, through a single fitting. The Royal PVC DWV Starter Fitting is designed for use in stack drainage applications where multiple fittings are required to connect a series of plumbing fixtures. The starter fitting consists of a 3" (75 mm) wye toilet drain connection and incorporates two 1 ½" (38 mm) shower/bath outlets at 45º from the centre of the fitting.

The Royal PVC DWV Starter Fitting is designed to reduce the connection of multiple fittings to connect different fixtures required on stack assemblies within limited spaces.

4. Authorization requested

The applicant sought authorization for the use of the Royal PVC DWV Starter Fitting as part of a drainage system to replace multiple fittings in a stack DWV system referred to in Articles 7.2.4.5. and 7.2.4.1. of the 1997 Ontario Building Code as amended.

5. Assessment

Reports and assessments provided by the applicant demonstrate that if the Royal PVC DWV Starter Fitting is constructed, installed, operated, maintained and monitored in accordance with the limitations of the manufacturer's specifications and the conditions stated in this authorization, a level of performance equivalent to that required by the 1997 Ontario Building Code as amended will be provided.

Reports assessments, information submitted, and reviewed:

1. Technical Background Information Memo relating to Royal PVC DWV Starter Fitting, dated September 23, 2002.

2. CSA Certificate of Compliance for Royal Pipe Systems “PVC DWV Starter Fitting”, issued June 27, 2002.

3. Shop Drawings, Reference Job #6505 “Two Cavity 3" Manifold PVC”, dated October 10, 2002.

4. ASTM International: Designation F610/F610M-00a “Standard Test Method for Evaluating the Quality of Molded Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings by Heat Reversion Technique.

5. ASTM International: Designation D2122-98 “Standard Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings”

6. Royal Pipe Systems PVC DWV Starter Fitting “Quality Control Procedure”, dated August 14, 2002.

7. Installation Manual “Royal Pipe Systems PVC DWV Starter Fitting.”

8. Manufacturer’s Literature, ”Show and Tell: The Next Generation of Fire Protection Royal Pipe Systems.”

9. Letter Report ULC, re: PVC Fittings Designated as “PVC DWV Starter Fitting,” dated October 24, 2002.

6. Authorization

The Royal PVC DWV Starter Fitting is authorized for use in a drainage system for a multi storey building using a modified stack configuration as referenced in Articles 7.2.4.5. and 7.2.4.1. of the 1997 Ontario Building Code as amended, all other requirements pertaining to the installation of the Royal PVC DWV Starter Fitting shall conform to the requirements of the 1997 Ontario Building Code as amended, and is subject to the following terms and conditions:

A. Specific Terms and Conditions

1. This authorization is valid only for Royal PVC DWV Starter Fitting.

2. The Royal PVC DWV Starter Fitting shall be a moulded assembled unit and shall not be site assembled.

3. The Royal PVC DWV Starter Fitting is permitted in a single configuration as a specially designed device or system.

4. The Royal PVC DWV Starter Fitting shall meet the smoke and flame spread requirements of the 1997 Ontario Building Code as amended.

5. The Royal PVC DWV Starter Fitting shall not be installed within a supply or return air plenum.

6. The Royal PVC DWV Starter Fitting must be provided with a clean-out above the flood level rim of the highest fixture it serves.

7. The Royal PVC DWV Starter Fitting shall be installed as per CSA B181.2, "PVC Drain, Waste, and Vent Pipe and Pipe Fittings."

8. The Royal PVC DWV Starter Fitting shall be marked, and certified to CSA B181.2, "PVC Drain, Waste, and Vent Pipe and Pipe Fittings" as a molded assembled unit.

B. General Conditions

1. The use of the Royal PVC DWV Starter Fitting must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the OBC as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the Specific Terms and Conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Specific Terms and Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this authorization;

      (ii) the address of the applicant specified in Part 1 of this authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the applicant, or the material, system or building design that is the subject matter of this authorization, has failed to comply with any of the Specific Terms and Conditions set out in this Authorization; or

   (d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

at Toronto this 31st day of October 2002.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Rashmi Nathwani,, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **OCTOBER 31, 2002**
BMEC AUTHORIZATION **BMEC # 02-05-276**
BMEC APPLICATION **# A2002-09**

Plenum-Gard®, Riser-Gard® and Resi-Gard® Raceways

1. Applicant

Carlon, Lamson & Sessions Inc.
25701 Science Park Drive

Cleveland, Ohio
USA
44122

Tel: (216) 766-6645

Fax: (216) 831-0438

2. Manufacturing Facilities

Lamson & Sessions
4395 Pasadena Fwy and Tenneco Rd
PO Box 5664, Pasadena, TX
USA
77508

Pyramid Industries, Lamson & Sessions
1422 Irwin Drive
PO Box 8439, Erie, PA
USA
16505

3. Description

Carlon, Lamson & Sessions Inc.™ Plenum-Gard®, Riser-Gard®, Resi-Gard raceways are used in the voluntary protection and management of fibre optics and communication cables. The raceways are flexible, pliable, nonmetallic and marked in conformance with ULC/ORD-C2024-02.

4. Authorization Requested

The applicant sought authorization for the use of their product as a cable management system in all locations, in buildings of all types of construction where cables would be permitted to be installed under the Ontario Electrical Safety Code, 23rd Edition 2002 without conduit protection. These raceways are intended to better organize cables in all spaces in buildings to facilitate the removal of cables.

5. Assessment

Reports and assessments provided by the applicant show that if the Plenum-Gard®, Riser-Gard®, Resi-Gard™Raceways are designed, performance tested and maintained in accordance with the limitations of the manufacturer's instructions; and they meet the level of performance required by the Ontario Building Code in locations where electrical wires and cables are required to meet FT-6, FT-4, and FT-1 ratings.

Reports submitted and reviewed:

1. Technical Background Information Memo relating to the Carlon, Lamson & Sessions Inc. Plenum-Gard®, Riser-Gard® and Resi-Gard™ Raceways, Dated July 18, 2002.

2. Manufacturer's Literature: "Carlon® Flexible Raceway Systems" (Plenum-Gard® and Riser-Gard®).

3. Manufacturer's Literature: "Carlon® Structured Cable Management Systems" (Resi-Gard®).

4. ULC/ORD-C2024-02 " Standard Method of Fire Tests for Optical Fibre Cable Raceways."

5. Installation Manual for Resi-Guard®:Carlon® Structured Cable Management Systems Handbook.

6. Lamson & Sessions Pasadena, Ca. Plant Quality Manual, revised September 2002

7. Pyramid Industries Quality Manual ISO 9002, revised September 2002

8. Certification: Underwriter Laboratories Inc, File E-151168, Project 02ME10205, dated May 28, 2002, Filing Category "Optical Fibre/Communication Cable Raceways (QAZM)."

9. Interpretation letter from ULc dated, September 18, 2002.

6. Authorization

The Plenum-Gard®, Riser-Gard®, Resi-Gard™raceways ("the raceways") are authorized for use as a cable management system in all locations, in buildings of all types of construction where cables would be permitted to be installed under the Ontario Electrical Safety Code, 23rd Edition 2002 without conduit protection.

A. Specific Terms and Conditions

1. This authorization is valid only for flexible nonmetallic raceways and associated fittings manufactured by Carlon, Lamson & Sessions Inc. and identified as follows:

    (a) Plenum-Gard® raceway and fittings for optical fibre and communications cables marked OFCR-FT-6,

    (b) Riser-Gard® raceway and fittings for optical fibre and communications cables marked OFCR-FT-4, and

    (c) Resi-Gard™raceway and fittings for optical fibre and communications cables marked OFCR-FT-1

2. The raceways and fittings shall be:

    (a) Tested and certified in conformance with ULC/ORD-C2024-02 "Standard Method of Fire Tests for Optical Fibre Cable Raceway", and

    (b) Marked in conformance with ULC/ORD-C2024-02 as follows:

        (i) Raceways complying with FT-6 requirements shall be marked with "Plenum-OFCR FT-6",

        (ii) Raceways complying with FT-4 requirements shall be marked with "Riser-OFCR FT-4", and

        (iii) Raceways complying with FT-1 requirements shall be marked with "General-OFCR FT-1".

3. In addition to the other conditions listed herein, the raceways may be used only in the following locations:

    (a) Plenum-Gard® may be used in all locations in buildings, including concealed spaces used as plenums, where an FT-6, FT-4 or FT-1 rating for cables or raceways is required,

    (b) Riser-Gard® may be used in all locations in buildings where an FT-4 or FT-1 rating for cables or raceways is required, and

    (c) Resi-Gard™may be used in all locations in buildings where an FT-1 rating for cables or raceways is required.

4. The raceways shall be used to contain only cables conforming to Section 56 (Optical Fiber Cables) and Section 60 (Electrical Communications Cables) in CSA C22.1-02 – Ontario Electrical Safety Code, 23rd Ed, 2002, Part 1.

5. The raceways shall be used to contain cables only where a raceway or conduit is not required for protection of cables by CSA C22.1-02 – Ontario Electrical Safety Code, 23rd Ed, 2002, Part 1.

6. The raceways shall not be used to contain cables for fire alarm and voice communications systems as described in Subsection 3.2.4 of the Ontario Building Code as amended.

7. The raceways shall comply with Sentence 3.1.9.2.(1) and 3.1.9.3.(2) of the Ontario Building Code as amended when they penetrate fire separations.

B. General Conditions

1. The use of Carlon, Lamson & Sessions Inc. raceways as described in 6. A. Specific Terms and Conditions No. 1. must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      i. the material, system or building design that is the subject matter of this Authorization;

      ii. the address of the applicant specified in Part 1 of this Authorization; or,

      iii. the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

i. does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

ii. provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

Dated at Toronto this 31st day of October 2002.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**July 25, 2002**
BMEC AUTHORIZATION	**BMEC# 02-04-275**
BMEC APPLICATION	**#A2002-07**
DATE OF AMENDMENT	**January 29, 2004**
BMEC APPLICATION	**#A2003-10**

* Denotes amendment

BIODIFFUSER™
Bio 2 and Bio 3 Chamber Systems

1. Applicant

PSA, Inc
P.O Box 3000
Hillard, Ohio
USA
43026

Tel: (614) 658-0254
Fax: (614) 658-0204

2. Manufacturing Facilities

Carson Industries, Inc
1675 Industrial Drive
Napoleon, Ohio
USA
43545

3. Description

BioDiffuser™: Bio 2 and Bio 3 Chamber Systems ("BioDiffuser™ Chambers") are intended for use in a sewage system in lieu of absorption trenches constructed of stone and distribution pipe. The BioDiffuser™ Chambers are formed from injection moulded polyolefin and are connected end-to-end using a built-in latch. The Bio 2 model chambers have an actual bottom width of 381 mm and an actual height of 302.3 mm. The Bio 3 model chambers have an actual bottom width of 558 mm and an actual height of 302.3 mm. The side walls of both models are louvered and extend to a height of 239.4 mm, of which 57% is open. The BioDiffuser™ Chambers are closed at the ends of a trench with snap-on end plates.

4. Authorization Requested

The applicant sought authorization for use of the BioDiffuser™ Chambers as an alternative to the construction of stone and distribution pipe in as required by Section 8.7 of the Ontario Building Code. The applicant requested that the BioDiffuser™ Chambers be used to replace stone and distribution pipe in absorption trenches and filter beds that are:

i. gravity fed,

ii. “dosed” (non-pressurized distribution system) and,

iii. pressurized.

Note: For the purposes of this authorization, “dosed” means a system in which effluent is pumped to the leaching bed either by pump or siphon, but the effluent is not pressurized within the leaching bed.

5. Assessment

Reports and assessments provided by the applicant show that if the BioDiffuser™ Chambers are designed, performance tested, installed and maintained in accordance with the limitations in the manufacturer's instructions and the conditions stated in this authorization, a level of performance will be provided as required by the Ontario Building Code 1997, for absorption trenches in soil, in leaching bed fill or in a filter bed, whether gravity fed, pressurized or “dosed”.

Reports submitted and reviewed:

1. International Association of Plumbing and Mechanical Officials, “Materials and Property Standards for Plastic Leaching Chambers”, IAPMO PS 63-99a.

2. Certificate of Listing, IAPMO Research and Testing, Inc. dated June 2002.

3. ADS: Products Notes: Product Note 3.121A: Re: BioDiffuser™: Bio 2 and Bio 3 Chamber, Installation Guidelines, dated August 10, 2000.

4. BioDiffuser™: Bio 2 and Bio 3 Leaching Bed Chamber Drawings.

5. BioDiffuser™: Bio 2 and Bio 3 Leaching Bed Chamber Specifications Data Sheet.

6. Letter of approval from the Illinois Department of Public Health, dated March 5, 2001.

7. Letter of approval from the State of Maine: Department of Human Services, Division of Health Engineering, dated March 9, 2001.

8. Letter of approval from the State of New Hampshire: Department of Environmental Services, dated April 5, 2001.

9. Letter of approval from the Ohio Department of Health, dated September 21, 2000.

10. Letter of approval from the State of New York: Department of Health, dated January 8, 2001.

11. Letter of approval from the State of Washington: Department of Health, dated April 6, 2001.

12. Letter of approval from the Commonwealth of Kentucky: Cabinet for Health Services, Department for Public Health, dated February 19, 2001.

13. Letter of approval from the State of Oklahoma: Department of Environmental Quality, dated November 29, 2000.

14. Letter of approval from the Florida Department of Health, dated July 17, 2001.

15. Letter of approval from the State of Tennessee: Department of Environment and Conservation, dated October 9, 2001.

16. Letter of approval from the Commonwealth of Massachusetts: Department of Environmental Protection, dated March 3, 2001.

17. Technical Background Information Memo relating to the BioDiffuser™ Chambers, dated June 17, 2002.

6. Authorization

The use of the BioDiffuser™ Chambers is authorized in sewage systems within the scope of Part 8 of the 1997 Ontario Building Code, as an alternative to stone and distribution pipes in absorption trenches and in filter beds, when installed in accordance with the manufacturer's recommendations and the Specific Terms and Conditions of this Authorization.

A. Specific Terms and Conditions

1. This Authorization is valid only for BioDiffuser™: Bio 2 and Bio 3 Chamber Systems.

2. The BioDiffuser™shall be manufactured to AASHTO Standard H-10 loading.

3. When the BioDiffuser™ Chambers are installed in lieu of distribution piping and stone, the length of the chamber system must equal the required lengths of distribution pipe specified in Articles 8.7.3.1. and 8.7.5.3.

4. When the BioDiffuser™ Chambers are installed in lieu of distribution piping and stone, the leaching beds must satisfy the general construction requirements specified in Articles 8.7.2.1., 8.7.4.2. and 8.7.5.3.

* 5. Reserved

6. The minimum clearance distances required by Article 8.2.1.6. for distribution piping shall be met by the BioDiffuser™ Chamber Systems.

* 7. When installed in lieu of distribution piping and stone in absorption trenches, the trenches for the BioDiffuser™ Chambers shall be:

   (a) approximately the same length and not more than 30 m in length,

   (b) a minimum width of 500 mm,

   (c) at least 600 mm and not more than 900 mm in depth,

   (d) centred at least 1600 mm,

   (e) at least 900 mm at all points on the bottom of the trench, above the high ground water table, rock or soil with a percolation time greater than 50 minutes, and

   (f) backfilled, after installation of the BioDiffuser™ Chambers, with leaching bed fill, so as to ensure that after the leaching bed fill settles, the surface of the leaching bed will not form any depressions.

_____(g) backfilled with a soil that does not contain heavy clay, silt or debris, and is manually compacted along the sides of the chamber to provide lateral support.

8. When installed in lieu of distribution piping and stone in filter beds, the lines of BioDiffuser™ Chambers shall be evenly spaced over the surface of the filter medium to which the sewage effluent is applied, and the filter bed shall meet the following requirements:

   (a) the filter medium shall meet the requirements of Subsection 8.7.5. of the 1997 Ontario Building Code,

   (b) the surface of the filter bed shall be at least 900 mm above the high ground water table, rock or soil with a percolation time greater than 50 minutes per centimetre as per Clause 8.7.3.2.(1)(e) of 1997 Ontario Building Code.

9. When used in gravity fed conditions, the BioDiffuser™ Chambers shall be installed in compliance with all the above-stated Specific Terms and Conditions and be:

   (a) installed level over the length of the trench,

   (b) securely connected, chamber to chamber, using the built-in latch,

   (c) free of structural damage and used full length (not cut),

   (d) equipped with end caps installed on both ends, and

   (e) equipped with a built-in splash plate at the inlet end of each chamber line, to prevent soil scouring.

10. Where the sewage effluent is “dosed” to the leaching bed by pumps or a siphon, the BioDiffuser™ Chambers shall be installed to comply with all the above-stated Specific Terms and Conditions and:

   (a) the effluent is pumped to a header line or distribution box prior to entering the chambers, and,

   (b) a volume of effluent within the range of 3.5 - 8.0 litres per metre of BioDiffuser™ Chambers , must be pumped within a time period not exceeding 15 minutes, to meet the requirements of Sentence 8.6.1.3.(4).

11. Where the sewage effluent is distributed through a pressurized system, the BioDiffuser™ Chambers shall be installed:

(a) to comply with Specific Terms and Conditions numbers 1. through 9. above, and,

(b) with a minimum 1½ (38 mm) diameter pipe extending over the entire length of each trench, and such pipe:

i. being specified by the manufacturer as acceptable for pressurized installations,

ii. having minimum 6 mm diameter orifices, spaced over its length to ensure even distribution of effluent,

iii. being supported in a manner as to ensure self-draining and prevent freezing of its contents,

iv. having clean-outs installed at the downstream end of each chamber line, to allow the system to be serviced, and,

v. receiving effluent from a treatment unit equipped with an effluent filter on the outlet, such effluent filter to be installed and sized in accordance with the manufacturer's recommendations.

B. General Conditions

1. The use of the BioDiffuser™ Chamber Systems must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

(b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      i. the material, system or building design that is the subject matter of this Authorization;

      ii. the address of the applicant specified in Part 1 of this Authorization; or,

      iii. the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      i. does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      ii. provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

   (d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

Dated at Toronto this 29th day of January 2004.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **June 27, 2002**
BMEC REFERENCE **BMEC # 02-03-274**
BMEC APPLICATION **# A2002-06**

Concept Storage Solutions
Shelf and Rack Storage System

1. Applicant

Concept Storage Solutions
231 Millway Avenue, Unit #20
Concord, Ontario
L4K 3W7

Tel: (905) 660 -7848
Fax: (905) 660 -7849

2. Manufacturing Facilities

Concept Storage Solutions
231 Millway Avenue, Unit #20
Concord, Ontario
L4K 3W7

3. Description

The shelf and rack storage system is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment. Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the Ontario Building Code and are not subject to mezzanine or interconnected floor space rules.

4. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

5. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

6. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for Concept Storage Solutions.

Use and Occupancy

2.1 The shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III, and IV commodities as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions.

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time.

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be designed in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(b) open construction consisting of steel grating or open steel floor planking.

3.4 The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m

3.5 Lighting levels of walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

3.6 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2) and 3.2.7.4.(1) respectively of the Ontario Building Code, as amended or remade from time to time.

3.7 Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs A 4.3 and A 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA-72, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph A 2.1 or clause c) of paragraph 3.4. above, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 - 1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the Ontario Building Code.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Ontario Building Code as amended, except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than four platform levels, the highest of which may not be more than 12 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m² in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m :

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a "time-based egress analysis" undertaken and sealed by a Professional Engineer or Architect as defined in the Ontario Building Code, using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time.

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where: H_p = Horizontal travel distance on the shelf and rack storage (m)

V_p = Vertical travel distance on the shelf and rack storage (m)

H_m = Horizontal travel distance on the main floor (m)
N_{lg} = Number of lift gates in the means of egress
N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Ontario Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2) of the Ontario Building Code, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a "positive lock" when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the lift-gate shall be marked in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that it is readily identifiable as part of the egress route.

5.8 Where 'at-level' conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two 'at-level' conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the 'at-level' cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each 'at-level' conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the 'at-level' cross-over and all inserts shall be sized to support loads required in Part 4 of the OBC,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each 'at-level' cross-over, and

(e) stairs approaching 'at-level' conveyor cross-overs shall be marked in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 6. A. above; or

   (b) the occurrence of any of the events described in Sections 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

      (iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section 6 A 1.1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 6. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

Dated at Toronto this 27th day of June 2002.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)

DATE OF AUTHORIZATION	**May 30, 2002**
BMEC AUTHORIZATION	**BMEC # 02-02-273**
BMEC APPLICATION	**#A2002-04**

IPEX Single and Double PVC Apartment Fittings

1. Applicant

IPEX Inc.
Port of Montreal Building
Wing 3, 1st Floor, Cite du Havre
Montreal, Quebec
Canada
H3C 3R5

Tel: (514) 861-7221
Fax: (514) 861-9502

2. Manufacturing Facilities

IPEX Inc.
6810 Invader Crescent
Mississauga, Ontario
Canada
L5T 2B6

3. Description

The IPEX: Single PVC Apartment Fitting consists of: a 3"(75 mm) spigot and hub main fitting tee pipe, a 3" (75 mm) sanitary tee (hub), and two 1½" (150 mm) side inlets (hubs) at a 90^0 angle between each other. These side inlets are located above the sanitary tee branch and oriented 45^0 offset with reference to the sanitary tee.

The IPEX: Double PVC Apartment Fitting consists of: a 3"(75 mm) spigot and hub main fitting tee pipe, two diametrically opposite 3" (75 mm) sanitary tees (hub), four 1½" (150 mm) side inlets (hubs) at a 90^0 angle between each other. These side inlets are located above the sanitary tee branch and oriented 45^0 offset with reference to the sanitary tee.

4. Authorization requested

The applicant sought authorization for the use of the IPEX: Single and Double PVC Apartment Fittings as part of a drainage system for a multi storey apartment building using a modified stack configuration as referred to in Articles 7.2.4.5. and 7.2.4.1. of the 1997 Ontario Building Code as amended.

5. Assessment

Reports and assessments provided by the applicant demonstrate that if the IPEX: Single and Double PVC Apartment Fittings are constructed, installed, operated, maintained and monitored in accordance with the limitations of the manufacturer's specifications and the conditions stated in this authorization, a level of performance equivalent to that required by the 1997 Ontario Building Code as amended will be provided.

Reports assessments, information submitted, and reviewed:

1. Technical Background Information Memo relating to IPEX: Single and Double PVC Apartment Fittings, dated May 6, 2002.

2. CSA Certificate of Compliance for both single and double PVC Apartment fittings, issued January 19, 2001.

3. Minutes of Plumbing Officials' Association of British Colombia meeting of September 6, 2001.

4. Approval letter from the Regional Municipality of Halifax Plumbing Inspector, dated August 14, 2001.

5. Approval correspondence from the City of Winnipeg, Manitoba dated September 05, 2001.

6. CSA correspondence, dated January 12, 2001.

7. IPEX: Quality Control Manual of the final assembly, single fitting.

8. IPEX: Quality Control Manual of the final assembly, double fitting.

9. Installation Manual.

10. National Building Code of Canada, specific references.

6. Authorization

The IPEX: Single and Double PVC Apartment Fittings are authorized for use in a drainage system for a multi storey apartment building using a modified stack configuration as referenced in Articles 7.2.4.5. and 7.2.4.1. of the 1997 Ontario Building Code as amended, all other requirements pertaining to the installation of the IPEX: Single and Double PVC Apartment Fittings shall conform to the requirements of the 1997 Ontario Building Code as amended, and are subject to the following terms and conditions:

A. Specific Terms and Conditions

1. This authorization is valid only for IPEX's: Single and Double PVC Apartment Fittings ("the IPEX Fittings").

2. The IPEX Fittings shall be a factory assembled unit and shall not be site assembled.

3. The IPEX Fittings is permitted in single and double configurations as a specially designed device or system.

4. The IPEX Fittings shall meet the smoke and flame spread requirements of the 1997 Ontario Building Code as amended.

5. The IPEX Fittings shall not be used for modified stack venting in a high-rise building.

6. The IPEX Fittings shall not be installed within a supply or return air plenum.

7. The IPEX Fittings must be provided with a clean-out above the flood level rim of the highest fixture that the IPEX Fittings serves.

8. The IPEX Fittings shall be installed as per CSA B181.2, "PVC Drain, Waste, and Vent Pipe and Pipe Fittings."

9. The IPEX Fittings shall be marked, and certified to CSA B181.2, "PVC Drain, Waste, and Vent Pipe and Pipe Fittings" as single factory assembled unit.

B. General Conditions

1. The use of the IPEX: Single and Double PVC Apartment Fittings must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the OBC as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the Specific Terms and Conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Specific Terms and Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this authorization;

      (ii) the address of the applicant specified in Part 1 of this authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

(c) the applicant, or the material, system or building design that is the subject matter of this authorization, has failed to comply with any of the Specific Terms and Conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

5. Where the Commission receives additional information concerning the material, system or building design authorized herein, the Commission may review this Authorization and the Commission may after the review amend or revoke this Authorization as in the opinion of the Commission may be necessary.

Dated at Toronto this 30th day of May 2002.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Rashmi Nathwani, Chairman

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **February 28, 2002**
BMEC REFERENCE **02-01-272**
BMEC Application **BMEC #A2002-01**

EAGLE STEEL INC.
Shelf and Rack Storage System

1. Applicant

Eagle Steel Inc.
1870 Gage Court
Mississauga, Ontario
L5S 1S1

Tel: (905) 672-7010
Fax: (905) 672-7513

2. Manufacturing Facilities

Eagle Steel Inc.
1870 Gage Court
Mississauga, Ontario
L5S 1S1

3. Description

The shelf and rack storage system is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment. Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the Ontario Building Code and are not subject to mezzanine or interconnected floor space rules.

4. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

5. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

6. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for Eagle Steel Inc.

Use and Occupancy

2.1 The shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III, and IV commodities as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions.

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time.

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be designed in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(b) open construction consisting of steel grating or open steel floor planking.

3.4 The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m

3.5 Lighting levels of walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

3.6 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2) and 3.2.7.4.(1) respectively of the Ontario Building Code, as amended or remade from time to time.

3.7 Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs A 4.3 and A 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA-72, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph A 2.1 or clause c) of paragraph 3.4. above, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 - 1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the Ontario Building Code.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Ontario Building Code as amended, except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than four platform levels, the highest of which may not be more than 12 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m² in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m :

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a "time-based egress analysis" undertaken and sealed by a Professional Engineer or Architect as defined in the Ontario Building Code, using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time.

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where:

H_p = Horizontal travel distance on the shelf and rack storage (m)

V_p = Vertical travel distance on the shelf and rack storage (m)

H_m = Horizontal travel distance on the main floor (m)

N_{lg} = Number of lift gates in the means of egress

N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Ontario Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2) of the Ontario Building Code, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a “positive lock” when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the lift-gate shall be marked in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that it is readily identifiable as part of the egress route.

5.8 Where ‘at-level’ conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two ‘at-level’ conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the ‘at-level’ cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each ‘at-level’ conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the ‘at-level’ cross-over and all inserts shall be sized to support loads required in Part 4 of the OBC,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each ‘at-level’ cross-over, and

(e) stairs approaching 'at-level' conveyor cross-overs shall be marked in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 6. A. above; or

   (b) the occurrence of any of the events described in Sections 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

      (iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section 6 A 1.1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 6. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Amended at Toronto this 28th day of February 2002.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Rashmi Nathwani,, Chairman

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**NOVEMBER 29, 2001**
BMEC REFERENCE	**BMEC # 01-19-271**
BMEC APPLICATION #	**BMEC # A2001- 11**
BMEC AMENDMENT	**MARCH 25, 2004**
BMEC APPLICATION #	**BMEC # A2004- 01**

* denotes draft changes

EZ Flow Drainage System

1. Applicant

Ring Industrial Group
65 Industrial Park Road
Oakland, Tennessee
USA, 38060

Tel: (877) 368 - 8294
Fax: (901) 465 - 1181

2. Manufacturing Facilities

EZ Flow
2175 Old Hendersonville Highway
Brevard, North Carolina
USA, 28712

EZ Flow
5050 Duncanville Road
Dallas, Texas
USA, 75236

EZ Flow
5840 US Highway 1 South
St. Augustine, Florida
USA, 32086

3. Description

The EZ Flow Drainage System is a subsurface drainage product which may replace stone, with a geo-synthetic aggregate. The EZ Flow Drainage System consists of a basic EZ Flow drain cylindrical bundle with 100 mm (4") pipe plus one or more cylindrical bundles of aggregate tubes (without pipe). The EZ Flow Drainage System is provided in prefabricated 3.0 m (10 foot) pipe and aggregate bundle lengths. The EZ Flow Drainage System is intended for use in a sewage system in lieu of the stone / distribution pipe arrangements within an absorption trench or filter bed.

4. Authorization Requested

The applicant sought authorization for use of the EZ Flow Drainage System as an alternative to the construction of absorption trenches as required by Section 8.7 of the Ontario Building Code. The applicant requested that the EZ Flow Drainage System be used to replace stone and distribution pipe in absorption trenches and filter beds that are:

(a) gravity fed, and
(b) “dosed” (non-pressurized distribution system)

Note: For the purposes of this authorization, “dosed” means a system in which effluent is pumped to the leaching bed either by pump or siphon, but the effluent is not pressurized within the leaching bed.

5. Assessment

Reports, assessments and information provided by the applicant indicate that if the EZ Flow Drainage System is designed and installed in accordance with the manufacturer's instructions and limitations, and the specific terms and conditions stated in this authorization, it will provide a level of performance that would be achieved by the conformance with the OBC.

Reports, assessments and information reviewed included the following:

1. Technical Background Information (TBI) Memo relating to EZ Flow Drainage System, dated 27 June 2001.

2. Video Tape: "EZ Flow : Generic Drainage Systems."

3. Alternative to gravel approval letter from the Ministry of Health and Ministry Responsible for Seniors in the Province of British Columbia, dated 24 April 1998.

4. Alternative to gravel approval letter from the Department of Insurance in the State of North Carolina, dated 17 February 1988.

5. Compliance Report Listing, Southern Building Code Congress International, Inc., No. 8971, date issued 12 January 2001.

6. Limited Usage approval letter, State of North Carolina, Department of Transportation, dated 23 May 1990.

7. Approval Letter, United States Department of Agriculture, State of Georgia.

8. Alternative to gravel approval letter from the Department of Insurance in the State of North Carolina, dated 21 January 1994.

9. "Building Codes Division Ruling on Acceptability of Material, Design or Method of Construction", Ruling No. 94-31, Oregon State Plumbing Speciality Code (OSPSC).

10. Instructions for the installation of EZ Flow Drainage System 1203H, 1006H, 1003H, 1006V, 1006T, 1003T, 1003V, and 1002V in the State of Alabama.

11. Instructions for Sizing EZ Flow Drainage Systems in the State of Alabama.

12. Technical Article "Comparison of EZ Flow Installations to a 3' Gravel Trench", dated 18 January 2001.

13. Instructions for the installation of EZ Flow Drainage Systems 1203H, and 1003H in the State of Florida.

14. Product specifications for geo-foam particles.

15. Product specifications for polystyrene aggregate.

16. Polyethylene drain pipe specifications.

17. Manufacturer's Information: Product Note 3.106, "Standard Pipe Perforations", dated January 2000.

18. Manufacturer's study "Report on Evaluation of Seven Year Old Eee Zzz Lay Effluent Drainfield Systems Installed in Two Feet Wide Trenches in Clay Soils (Class IV) in The State of Texas."

19. American Society of Agricultural Engineers, Paper No. 91-2578, "Sediment Retention Efficiencies of Sediment Basin Filtered Outlets.", dated 1991.

20. Retrospective Study "Survey and Study of Installed Expanded Polystyrene (Esp) Aggregate Onsite Sewage Treatment and Disposal Systems in Georgia: 1998 Thur 1998."

21. "Hydraulic Conductivity: an Evaluation of Drainage Media in Controlled Conditions" delivered 17 July 2001, prepared Donald Oderkirk, P.Eng, BPI, pllc, Memphis Tennessee.

22. "Determination of Hydraulic Conductivity of a Gravel System at the Trench Bottom", dated October 08, 2001.

* 23. BMEC Application A2004-01 "Amendment to BMEC #01-19-271 to Include EZ 1401P for Standard and Shallow Buried Trenches in Septic Fields."

* 24. "In-Ground Dispersal of Wastewater Effluent: The Science of Getting Water into the Ground" Kevin White, February 23, 2003.

* 25. Survey and Study of Installed Expanded Polystyrene (EPS) Aggregate Onsite Sewage Treatment and Disposal Systems in Georgia: 1989 thru 1998" presented by Sam Robertson 2000.

* 26. Assessment of Hardened EPS, Geosynthetic Systems Under Various Soil Conditions in Alabama" Kevin White, June 28, 2001.

6. Authorization

The use of the EZ Flow Drainage System is authorized in sewage systems within the scope of Part 8 of the Ontario Building Code 1997, as an alternative to stone and distribution pipes in absorption trenches and in filter beds, when installed in accordance with the manufacturer's recommendations and the Specific Terms and Conditions of this Authorization.

A. Specific Terms and Conditions

1. This authorization is valid only for EZ Flow Drainage System produced by Ring Industrial Group.

2. This authorization is valid only for the EZ Flow Drainage Product designated:

   (a) 1202H, 300 mm (12") diameter, where two cylindrical bundles of the product shall be installed side by side, in a 600 mm (24") wide trench, one cylindrical bundle shall be of solid aggregate fill (without pipe) and the other cylindrical bundle (with pipe) shall be of aggregate and drainage tile, or

   (b) 1003T, 250 mm (10") diameter, where three cylindrical bundles are installed in a triangular configuration, with two solid aggregate fill cylindrical bundles (without pipe) side by side on the bottom, and an aggregate and drainage tile cylindrical bundle (with pipe) which shall be placed on top of the two cylindrical aggregate bundles to form a triangle, in a 600 mm (24") wide trench.

* (c) 1401P, 350 mm (14") diameter, where one cylindrical bundle is installed in trench not more than 600 mm (24") wide.

3. The drainage tile shall comply with ASTM F405.

4. The EZ Flow Drainage System shall be stored in UV protective plastic film bags, and the UVI (Ultra Violet Inhibitor) treated shipping bags shall serve to protect the product from UV degradation prior to installation.

5. The EZ Flow Drainage System shall be covered by a two (2) year manufacturer warranty.

6. When the EZ Flow Drainage System is installed in lieu of distribution piping and stone, the length of this installation shall equal the required lengths of distribution pipe specified in Article 8.7.3.1.

7. A barrier cover shall be placed over the top of the EZ Flow Drainage System prior to backfilling, and the barrier cover shall be a permeable filtration fabric of the type recommended by the manufacturer.

8. The EZ Flow Drainage System shall be covered with a minimum of 150 mm (6") of backfill as per Sentence 8.7.2.1(2) of the OBC.

* 8.1. The EZ Flow 1401P may be used in shallow buried trench installations provided that the total trench depth to the finished grade is not greater than 600 mm (24").

9. When the EZ Flow Drainage System is installed in lieu of distribution piping and stone, the leaching beds shall satisfy the general construction requirements specified in Section 8.7. of the OBC.

10. The minimum clearance distances required by Article 8.2.1.6. for distribution piping shall be met by the EZ Flow Drainage System.

11. When installed in lieu of distribution piping and stone in filter beds, the cylindrical bundles of the EZ Flow Drainage System shall be placed side by side to cover the surface of the filter medium to which the sewage effluent is applied, and the maximum spacing between the cylindrical bundles (with pipe) shall not be greater than 1.2 m (3.9').

12. When used in gravity fed conditions, the EZ Flow Drainage System shall be:

(a) installed such that all joints between EZ Flow components and where the EZ Flow product joins other pipes are to be securely connected, and

(b) free of structural damage and used full length (not cut),

13. Where the sewage effluent is “dosed” to the leaching bed by pumps or a siphon, the EZ Flow Drainage System shall:

(a) pump the effluent into a header line or distribution box to achieve uniform distribution over the entire absorption bed or trenches and,

(b) comply with the requirements of Sentence 8.6.1.3.(4) of the OBC.

B. GENERAL CONDITIONS

1. The use of the EZ Flow Drainage System must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the OBC as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:
(a) the failure of the applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the Specific Terms and Conditions set out in 6. A. above; or

(b) the occurrence of any of the events described in Specific Terms and Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this authorization;

(ii) the address of the applicant specified in Part 1 of this authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the applicant, or the material, system or building design that is the subject matter of this authorization, has failed to comply with any of the Specific Terms and Conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 25th day of March 2004.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **OCTOBER 25, 2001**
BMEC REFERENCE **BMEC # 01-18-270**
BMEC APPLICATION # **BMEC # A2001- 11**

EZ Flow Drainage System

1. Applicant

Ring Industrial Group
65 Industrial Park Road
Oakland, Tennessee
USA, 38060

Tel: (877) 368 - 8294
Fax: (901) 465 - 1181

2. Manufacturing Facilities

EZ Flow
2175 Old Hendersonville Highway
Brevard, North Carolina
USA, 28712

EZ Flow
5050 Duncanville Road
Dallas, Texas
USA, 75236

EZ Flow
5480 US 1 South
St. Augustine, Florida
USA, 32086

3. Description

The EZ Flow Drainage System is a subsurface drainage product which may replace crushed stone, with a geo-synthetic aggregate. The EZ Flow Drainage System consists of a 100 mm (4")diameter prefabricated flexible pipe surrounded by 100 mm (4") of an expanded polystyrene aggregate which is held together with a polyethylene netting. The total diameter of the EZ Flow Drainage System referred to within this Authorization is 300 mm (12"). The EZ Flow Drainage System is provided in prefabricated 3.0 m (10 foot) pipe and aggregate bundle lengths.

4. Authorization Requested

The applicant sought authorization for the use of EZ Flow Drainage System as an equivalent to the level of performance required by Part 9: Subsection 9.14.2., Subsection 9.14.3., and Subsection 9.16.3. of the 1997 Ontario Building Code (OBC) as amended.

5. Assessment

Reports, assessments and information provided by the applicant indicate that if the EZ Flow Drainage System is designed and installed in accordance with the manufacturer's instructions and limitations, and the specific terms and conditions stated in this authorization, it will provide a level of performance that would be achieved by the conformance with the OBC.

Reports, assessments and information reviewed included the following:

1. Technical Background Information (TBI) Memo relating to EZ Flow Drainage System, dated 27 June 2001.

2. Video Tape: "EZ Flow : Generic Drainage Systems."

3. Alternative to gravel approval letter from the Ministry of Health and Ministry Responsible for Seniors in the Province of British Columbia, dated 24 April 1998.

4. Alternative to gravel approval letter from the Department of Insurance in the State of North Carolina, dated 17 February 1988.

5. Compliance Report Listing, Southern Building Code Congress International, Inc., No. 8971, date issued 12 January 2001.

6. Limited Usage approval letter, State of North Carolina, Department of Transportation, dated 23 May 1990.

7. Approval Letter, United States Department of Agriculture, State of Georgia.

8. Alternative to gravel approval letter from the Department of Insurance in the State of North Carolina, dated 21 January 1994

9. "Building Codes Division Ruling on Acceptability of Material, Design or Method of Construction", Ruling No. 94-31, Oregon State Plumbing Speciality Code (OSPSC).

10. Instructions for the installation of EZ Flow Drainage System 1203H, 1006H, 1003H, 1006V, 1006T, 1003T, 1003V, and 1002V in the State of Alabama.

11. Instructions for Sizing EZ Flow Drainage Systems in the State of Alabama.

12. Technical Article "Comparison of EZ Flow Installations to a 3' Gravel Trench", dated 18 January 2001.

13. Instructions for the installation of EZ Flow Drainage Systems 1203H, and 1003H in the State of Florida.

14. Product specifications for geo-foam particles.

15. Product specifications for polystyrene aggregate.

16. Polyethylene drain pipe specifications.

17. Manufacturer's Information: Product Note 3.106, "Standard Pipe Perforations", dated January 2000.

18. Manufacturer's study "Report on Evaluation of Seven Year Old Eee Zzz Lay Effluent Drainfield Systems Installed in Two Feet Wide Trenches in Clay Soils (Class IV) in The State of Texas."

19. American Society of Agricultural Engineers, Paper No. 91-2578, "Sediment Retention Efficiencies of Sediment Basin Filtered Outlets.", dated 1991.

20. Retrospective Study "Survey and Study of Installed Expanded Polystyrene (Esp) Aggregate Onsite Sewage Treatment and Disposal Systems in Georgia: 1998 Thur 1998."

21. "Hydraulic Conductivity: an Evaluation of Drainage Media in Controlled Conditions" delivered 17 July 2001, prepared Donald Oderkirk, P.Eng, BPI, pllc, Memphis Tennessee.

6. Authorization

The EZ Flow Drainage System may replace crushed stone and drainage tile around the foundation of a building as described in Part 9 of the OBC subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This authorization is valid only for the 300 mm (12") diameter EZ Flow Drainage System.

2. The drainage tile shall comply with ASTM F405.

3. The top most surface of the 100 mm (4") drainage tile portion of the EZ Flow Drainage System shall not be higher than the underside of the floor slab or crawl space.

4. The EZ Flow Drainage System shall be placed directly adjacent to the footings, and assembled in accordance with the manufacturer's recommendations.

5. The EZ Flow Drainage System shall be stored in BOMARK 100, Inc. UVI (Ultra Violet Inhibitor) treated bags prior to installation to protect the product from UV degradation.

6. The EZ Flow Drainage System shall be covered by a two (2) year manufacturer warranty.

7. A barrier cover shall be placed over the top of the EZ Flow Drainage System prior to backfilling, and the barrier cover shall be a permeable filtration fabric of the type recommended by the manufacturer.

8. The EZ Flow Drainage System shall be placed on well compacted or undisturbed soil.

9. The EZ Flow Drainage System shall be covered with a minimum of 150 mm (6") of well compacted backfill.

10. The perimeter of the footing shall be free of water at the time of the installation.

11. The EZ Flow Drainage System shall be installed to drain water away from the footings and foundations of the building.

B. GENERAL CONDITIONS

1. The use of the EZ Flow Drainage System must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the OBC as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the Specific Terms and Conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Specific Terms and Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this authorization;

(ii) the address of the applicant specified in Part 1 of this authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the applicant, or the material, system or building design that is the subject matter of this authorization, has failed to comply with any of the Specific Terms and Conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 25th day of October 2001.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **August 30, 2001**
BMEC AUTHORIZATION **BMEC # 01-17-269**
BMEC APPLICATION **# A 2001-17**

TRI-FLEX® 30
Flexia Corporation

1. Applicant

Flexia Corporation
369 Elgin Street
Brantford, Ontario
N3S 7P5

Tel: (519) 759 - 2500
Fax: (519) 759 - 6950

2. Manufacturing Facilities

Flexia Corporation
369 Elgin Street
Brantford, Ontario
N3S 7P5

Flexia Corporation
19680-94A Avenue
Langley, British Colombia
V1M 3B7

3. Description

The Tri-Flex ® 30 is a roof underlayment manufactured by Flexia Corporation. Tri-Flex ® 30 is a 85 g/m^2 spun bonded polypropylene consisting of a structural core with a thin layer of polypropylene on both sides, it has a composite weight of 132 g/m^2. Tri-Flex ® 30 is designed for use as an alternative underlayment beneath roofing systems where No. 15 and No. 30 roof felts are currently used. Tri-Flex ® 30 membrane roofing underlayment can be applied directly to a nailable structural roof deck and is mechanically fastened using plastic cap underlayment nails or staples.

4. Authorization requested

The applicant sought authorization for the use of the Tri-Flex ® 30 Roof Underlayment as an alternative to the material requirements described in the 1997 Ontario Building Code as amended Subsection 9.26.2. ”Roofing Materials”.

5. Assessment

Reports and assessments provided by the applicant indicate that if the Tri-Flex ® 30 Roof Underlayment is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations, and the specific terms and conditions stated in this authorization, the level of performance required by the Ontario Building Code will be provided.

Reports, assessments and information reviewed included the following:

1. CSA: A123.3-98: " Asphalt Saturated Organic Roofing Felt", dated December 1998.

2. ITS: Intertek Testing Services "Report of Product Evaluation Conducted on Tri-Flex ® 30 High Tech Roofing Underlayment", Report # 488-1029 (CSA), dated April 15, 1999, revised May 10, 2000 and revised July 7, 2000.

3. ICBO Evaluation Service, Inc., Evaluation Report, ER-5843, Issued September 1, 2000, Filing Category "Roof Covering and Roof Deck Construction - Underlayment".

4. BOCA International Evaluation Report, Research Report 21.49, "Section 07310 - Shingles", printed April 2001.

5. Underwriters Laboratories Inc., File R20507, Project 00NK40745, dated January 3, 2001, "Report on 'Prepared Roof Covering Accessory' under the Classification Program".

6. Flexia Corporation manufacturer's information, "Tri-Flex ® 30: Installation Guide".

7. ITS: Intertek Testing Services "Quality Control Manual for Tri-Flex ® 30 Roof Underlayment", dated May 2000.

8. SBCCI, Report Number 2048 " Roof Covering and Roof Deck Construction", Copyrighted 2000.

9. Technical Background Information Memo relating to Tri-Flex ® 30 Roof Underlayment dated 26 July 2001.

6. Authorization

The Tri-Flex ® 30 Roof Underlayment is authorized as an alternative to the material requirements described in the Subsection 9.26.2. "Roofing Materials" of the 1997 Ontario Building Code as amended. All other requirements pertaining to the installation of the Tri-Flex ® 30 Roof Underlayment shall conform to the requirements of the 1997 Ontario Building Code as amended, and subject to the following terms and conditions:

A. Specific Terms and Conditions

1. This Authorization is valid only for Flexia Corporation.

2. The Tri-Flex ® 30 Roof Underlayment may be used as a roof underlayment material beneath shingles, tiles or other roofing materials as permitted in Article 9.26.6.1. "Materials."

3. The Tri-Flex ® 30 Roof Underlayment shall not be used in applications where hot asphalt is applied.

4. The Tri-Flex ® 30 Roof Underlayment shall not be used as a vapour barrier.

5. The Tri-Flex ® 30 Roof Underlayment shall not be used beneath wood shingles or shakes as described in Subsections 9.26.9 and 9.26.10 of the 1997 Ontario Building Code as amended.

6. The Tri-Flex ® 30 underlayment shall not be used in roofing applications such as but not limited to cathedral ceilings and others roofing applications with roof slopes as described in Sentence 9.19.1.2.(2) of the 1997 Ontario Building Code as amended.

7. The Tri-Flex ® 30 Roof Underlayment may be permitted for use as an eave protection material according to Article 9.26.5.2. only when installed in accordance with "The Tri-Flex ® 30 High Tech Roof Underlayment Installation Guide": where two layers of the Tri-Flex ® 30 Roof Underlayment are solidly cemented together, lapped 480 mm at any butt joints between solidly cemented layers, and applied in sufficient courses to meet the requirements of Sentence 9.26.5.1.(1) of the 1997 Ontario Building Code as amended.

8. The Tri-Flex ® 30 Roof Underlayment shall be installed in accordance with the "Tri-Flex ® 30 High Tech Roofing Underlayment Installation Guide" and subject to the Specific Terms and Conditions of this authorization.

B. General Conditions

1. The use of the Tri-Flex ® 30 Roof Underlayment shall comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Part 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto on this 30th day of August 2001

BUILDING MATERIALS EVALUATION COMMISSION

per: Rashmi Nathwani, Chairman

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **August 30, 2001**
BMEC AUTHORIZATION **BMEC # 01-16-268**
BMEC Application **# A 2001-16**

PRO*PRESS*™

1. Applicant

Viega NA
Plumbing and Heating Systems
17545 Daleview Drive
Lakewood, Ohio
U.S.A.
44107

Tel: (216) 228-5224
Fax: (216) 228-9574

2. Manufacturing Facilities

Viega
Franz Viegener II
Ennester Weg 9
Attendorn, Germany
57439

3. Description

The Pro*Press*™ System is designed and manufactured by Viega Inc. It is a copper joining technology without the use of traditional practice of soldering. This system utilizes 12.7 mm to 50.8 mm (½" to 2") copper or bronze fittings having an elastomeric seal incorporated within the socket's fitting. The fitting is designed to be pressed with the use of a special design power tool (i.e. electro-hydraulic crimping tool fitted with interchangeable crimping jaws) under substantial pressure to form a watertight sealed joint. In addition, this special tool must be maintained and calibrated in order to perform as suggested by the manufacturer.

The manufacturer has stated that, the fittings are rated for 1479 Kpa (200 psi) and tested to 4135 Kpa (600 psi) of pressure at temperatures between -17 ^{0}C to 121 ^{0}C (0 ^{0}F - 250 ^{0}F); and they can resist all forces normally encountered in a plumbing system.

4. Authorization Requested

The applicant sought authorization for the use of the Viega Pro*Press*™ System in lieu of traditional practice of soldering pipes in a hot and cold water plumbing system as required by Article 7.2.7.6. "Solder-Joint Water Fittings" and Article 7.3.2.7. "Mechanical Joints" of the 1997 Ontario Building Code as amended (OBC).

5. Assessment

Reports and assessments provided by the applicant indicate that if the Viega Pro*Press*™ System is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations, and the specific terms and conditions stated in this authorization, the level of performance required by the 1997 Ontario Building Code as amended will be provided.

Reports, assessments and information reviewed included the following:

1. Viega / Rigid manufacturer's information "Turn off Your Torch, Toss out Your Solder, Introducing A Better Way to Join Copper", dated 1999 Ridgid Tool Company.

2. Viega / Rigid manufacturer's information "Product Catalogue: A Better Way to Join Copper", dated 2000 Ridgid Tool Company.

3. Technical Background Information Memo relating to Viega Pro*Press*™ System dated 23 July 2001.

4. CSA International Certificate of Compliance, Compliance #1116260, Project #1116260, Master Contract # 205817, issued to: Viega NA: Plumbing and Heating Systems, 17545 Daleview Drive, Lakewood, OH, 44107 issued January 2, 2001.

5. CSA International Certificate Record, file #2058170000, submitted by: Viega NA: Plumbing and Heating Systems, 17545 Daleview Drive, Lakewood, OH, 44107, dated January 2, 2001.

6. CSA International Supplement to Certificate Record, file #1116260, Project #1116260, Master Contract # 205817, issued to: Viega NA: Plumbing and Heating Systems, 17545 Daleview Drive, Lakewood, OH, 44107 issued January 2, 2001.

7. IAPMO Research and Testing, Inc., Certificate of Listing, accepted January 2001, file # 3965, Applicant: Viega, Franz Viegener II, Ennester Weg 9, Attendorn, Germany, 57439.

8. NSF International Report, Issuance date 23 September 1999, client: Viega, Franz Viegener II, Ennester Weg 9, Attendorn, Germany, 57439.

9. Viega / Rigid manufacturer's information "Ridgid: CT 400."

10. Viega / Rigid manufacturer's information "Pro*Press*™ Components."

11. Viega / Rigid specification "COPPER TUBING AND FITTINGS: Section #15125", dated 08/29/01

6. Authorization

The Viega Pro*Press*™ System is authorized in lieu of the traditional practice of soldering pipes in a hot and cold plumbing system as required by Article 7.2.7.6. “Solder-Joint Water Fittings” and Article 7.3.2.7. “Mechanical Joints” of the 1997 Ontario Building Code as amended. All other requirements pertaining to the installation of the Viega Pro*Press*™ System shall conform to the requirements of the 1997 Ontario Building Code as amended, and subject to the following terms and conditions:

A. Specific Terms and Conditions

1. This authorization is valid only for the Viega Pro*Press*™ System.

2. The Viega Pro*Press*™ System shall only be used in hot and cold water plumbing systems in above ground applications.

3. The Viega Pro*Press*™ System shall not be used in a fire protection system.

4. The Viega Pro*Press*™ System shall only be used in conjunction with:

   (a) Ridged CT 400 electro-hydraulic crimping tool, and

   (b) Viega Pro*Press*™ Jaw Sets sizes: ½", 3/4", 1", 1 1/4", 1 ½" and 2".

5. Each fitting shall be permanently marked with the manufacturer’s name and the nominal size.

4. The Viega Pro*Press*™ System shall only be used with 12.7 mm to 50.8 mm (½" to 2") copper or bronze tubing.

6. The Viega Pro*Press*™ System elastomeric seal, (an EPDM o-ring) shall be made of a non-toxic synthetic rubber that meets the requirements of ASTM D2000.

7. The Viega Pro*Press*™ System copper fittings shall comply with the material requirements of ANSI/ASME B16.22 and the chemical components requirements ASTM B88.

8. The Viega Pro*Press*™ System shall comply with NSF 61.

9. Fittings used in the Viega Pro*Press*™ System shall be manufactured by Viega, Franz Viegener II, Ennester Weg 9, Attendorn, Germany, 57439; and distributed by an authorized dealer(s).

10. Viega Pro*Press*™ System fittings shall not be used with oils or lubricants, and shall be kept protected and free from moisture, damage, and dirt.

11. Viega Pro*Press*™ System connection shall be made in accordance with the manufacturer’s installation instructions:

(a) the tubing shall be fully inserted into the fitting and the tubing marked at the shoulder of the fitting,

(b) the fitting alignment shall be checked against the mark on the tubing to assure the tubing is fully inserted in the fitting, and

(c) the joint shall be pressed using the tool(s) referred to in Specific Term and Condition # 4.

B. General Conditions

1. The use of the Viega Pro*Press*™ System shall comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

(b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Part 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto on this 30th day of August 2001

BUILDING MATERIALS EVALUATION COMMISSION

per: Rashmi Nathwani, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **August 30, 2001**
BMEC REFERENCE **BMEC # 01-15-267**
BMEC APPLICATION # **BMEC # A2001- 14**

ALUMATEK
Vertical Rolling Grilles

1. Applicant

Alumatek
National Headquarters
680 West 200 North
North Salt Lake, Utah
USA, 84054

Tel: (800) 647 -7049
Fax: (866) 936 -1941

2. Manufacturing Facilities

Alumatek
National Headquarters
680 West 200 North
North Salt Lake, Utah
USA, 84054

3. Description

The Alumatek vertical rolling grille is a vertical rolling security grille with guide channels on both sides of the opening and a lock at the bottom of the door. The vertical rolling grille will be opened and closed electronically. In the event of a power failure the vertical grille can be opened mechanically through the use of an emergency release device. When the emergency release device is activated torsion springs will open the grille to a preset height.

4. Authorization Requested

The applicant sought authorization for the use of their product as an equivalent means of egress presently permitted by Sentence 3.3.1.11.(3) and F3 (low hazard Industrial) of the 1997 Ontario Building Code as amended.

5. Assessment

Reports, assessments and information provided by the applicant indicate that if the Alumatek Vertical Rolling Grille, was performance tested and installed in accordance with the manufacturer's instructions and limitations and with the Specific Terms and

Conditions stated in this Authorization, the level of performance required by the 1997 Ontario Building Code as amended will be provided.

Reports, assessments and information reviewed included the following:

1. Rolling Grille Installation Instructions.

2. Quality Control Manufacturing Measures and Rolling Grille Check List.

3. National Fire Protection Association (NFPA) 101 "Life Safety Code", Section 5-21.4. "Swing and Force to Open".

4. BOCA National Building Code / 1999, "Means of Egress", Section 1017.5.

5. 1998 California Building Code, Section 1003.3.1.

6. International Building Code 2000.

7. Alumatek instructional video tape.

6. Authorization

The Alumatek vertical rolling grille is authorized subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This authorization is valid only for Alumatek Inc.

2. The Alumatek vertical rolling grille shall remain in the full open position during the period of occupancy by the general public.

3. The Alumatek vertical rolling grille shall only be installed in sprinklered occupancies.

4. Not more than half of the means of egress shall be equipped with the Alumatek vertical rolling grilles.

5. The Alumatek vertical rolling grille shall only be installed for use in Group D (Business and Personal Service), E (Mercantile), and F3 (Low Hazard Industrial) occupancies.

6. The Alumatek vertical rolling grille shall only be used in interior applications, and in applications where the grille will not be exposed to moisture.

7. The maximum width of a Alumatek vertical rolling grille shall not exceed 9.2 m.

8. The emergency release device shall be located in an accessible location not exceeding 1000 mm from either of the vertical rolling grille door jambs.

9. Adjacent to the emergency release device there shall be a readily visible, permanently mounted, durable:

   (a) sign in letters at least 25 mm high on a contrasting background that reads, "EMERGENCY RELEASE DEVICE SHALL NOT BE VISUALLY OBSTRUCTED", and

   (b) directional sign (an arrow) which will prominently indicate the location of the emergency release device.

10. Adjacent to the emergency release device there shall be a readily visible, permanently mounted, durable sign in letters at least 25 mm high on a contrasting background that reads "TO OPEN DOOR, PULL LEVER.'"

11. On the bottom rail of the Alumatek vertical rolling grille there shall be a readily visible, permanently mounted, durable sign in letters at least 25 mm high on a contrasting background that reads " THIS DOOR TO REMAIN IN THE FULL OPEN POSITION DURING THE PERIOD OF OCCUPANCY BY THE GENERAL PUBLIC."

12. On the opposite door jamb to that of the emergency release device there shall be a readily visible, permanently mounted, durable sign in letters at least 25 mm high on a contrasting background that reads "EMERGENCY RELEASE DEVICE IS LOCATED ON THE OPPOSITE SIDE OF THE DOOR."

13. Alumatek vertical rolling grille and the emergency release device shall be annually inspected and tested; and written records of these inspections and tests after they are made shall be kept for a period of not less than 2 years.

14. When in the open position the Alumatek vertical rolling grille shall have a minimum preset height of 2100 mm.

15. All staff shall be trained and be familiar with the location, operation, and use of the Alumatek vertical rolling grille and the emergency release device.

16. The Alumatek vertical rolling grille shall be installed as per the manufacturer's instructions "Rolling Grille Installation Instructions."

17. The Alumatek vertical rolling grille shall be installed and assembled as per the quality control manufacturing measures and "Alumatek Rolling Grille Check List."

18. The emergency release device (EDR) shall be installed as per the manufacturer's instructions "Lift-Master: Emergency Egress Device Modification Flush or Extended Handle 'Installation Instructions'."

B. General Conditions

1. The use of the Alumatek vertical rolling grille shall comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

   (d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 30th day of August 2001

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
www.obc.mah.gov.on.ca

Date of Authorization	August 2, 2001
BMEC Authorization	BMEC # 01-14-266
BMEC Application	A2001-04
BMEC Application	A2005-04
Date of Amendment	May 26, 2005

AUTHORIZATION REPORT- NORWECO Singulair® Alternate Tertiary Discharge Area Bed System

1. Applicant

Norweco Equipment Company
220 Republic Street
Norwalk, Ohio
USA
44857-1196

Tel: (419) 668 - 4471
Fax: (419) 663 - 5440
Web: www.Norweco.com

2. Manufacturing Facilities

Norweco Equipment Company
220 Republic Street
Norwalk, Ohio
USA
44857-1196

3. Description

The Norweco Singulair® Alternate Tertiary Discharge Area Bed System (the " Norweco Area Bed") is primarily comprised of a tertiary treatment unit, an effluent filter and an area bed.

The tertiary treatment units permitted for use with this system are referenced in the Supplementary Guidelines to the Building Code, as amended, as meeting tertiary quality effluent criteria and include models 960-500-2000, 960-750-3000, 960-1000-4000, 960-1250-4750, and 960-1500-5700.

An effluent filter is required downstream of the treatment unit. The specification of the effluent filter may vary depending on the Area Bed System design, and the filter models specified for use with the Norweco Area Bed may be located in section 6.A.4. of this authorization.

An area bed is comprised of two parts; the stone layer and the sand layer.

The sand layer of an area bed is sized in consideration of the soil it rests on, and under certain conditions, it may be required to be laterally extended. This lateral sand layer extension is known as the mantle. The effluent is sent to the stone layer, either by gravity or pressure from a pump, via a pipe. This pipe leads from the treatment unit and terminates at the distribution box or header. From the distribution box or header, the effluent is sent to a series of perforated distribution pipes that run through the stone layer.

4. Authorization requested

The applicant sought an Authorization for an Norweco Area Bed System as an equivalent to a other Class 4 sewage systems as referenced in Section 8.7. “Leaching Beds” of the Building Code.

5. Assessment

Reports and assessments provided by the applicant show that if the Norweco Area Bed is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations, the Building Code and the specific terms and conditions stated in this authorization, the level of performance required by the Building Code will be provided.

Reports submitted and reviewed:

1. NORWECO Singulair® Systems Owners Manual, Models 960-500, 960-750, 960-1000, 960-1250 or 960-1500 Treatment Unit, which incorporates a schedule of required maintenance to be conducted on the system every six (6) months.

2. Technical Background Information Memo relating to NORWECO Singulair® Systems dated February 19, 2001 and February 27, 2001.

3. CAN/CSA-B66-00 - Prefabricated Septic Tanks and Sewage Holding Tanks, Plumbing Products and Materials - a National Standard of Canada.

4. State of Washington Singulair® Model 960 Performance Evaluation Summary Report.

5. NSF Wastewater Technology Report, Singulair® Model 960, dated April 1996.

6. NSF Wastewater Technology Report, Singulair® Model 960 Supplemental Report, dated March 1997.

7. CSA International Certificates of Compliance.

8. NSF International Official Listing.

9. Singulair® Model 960 Installation Manual.

10. Singulair® Model 960 Service Manual.

11. Application A2005-05: Amendment to Norweco, January 31, 2005 to the Building Materials Evaluation Commission.

12. Van Harten Surveying Inc.'s Report, April 27, 2005, ref.16220-05.

6. Authorization

The Norweco Area Bed System is authorized as an equivalent to other Class 4 sewage systems as referenced to in Section 8.7. "Leaching Beds" of the Building Code; all other requirements pertaining to the design, installation and construction are subject to the regulations of the Building Code, and to the following terms and conditions:

A. Specific Terms & Conditions

1.0. Definitions

A word or phase used in this Authorization has the following meaning for the purposes of this Authorization:

Area Bed means the part of a leaching bed comprised of a stone layer and the underlying unsaturated sand layer intended to further treat and distribute the effluent, and does not include the area referred to as the mantle.

Contact Area means the area of infiltrative surface, directly below the area bed, required to absorb the treated effluent into the underlying native soil, but does not include the area where the mantle, if required, comes into contact with the native soil.

Extended Contact Area means the area of the sand bed, as extended, and mantle, where required, to meet the necessary lateral extension such that the effluent is absorbed into the underlying soil

Infiltrative Surface means the area of interface where effluent migrates downward from the sand layer of the area bed and, if necessary, the mantle and passes into the native soil or leaching bed fill.

Mantle means the lateral extension of the area bed using imported leaching bed fill having a T time of 15 min/cm or less, but does not include the area referred to as the area bed, necessary to provide an area of hydraulic catchment in any direction in which the effluent entering the leaching bed fill will move horizontally such that effluent is treated and absorbed.

Raised or Partially Raised Area Bed means a sewage system in which any part of the leaching bed is above the natural ground elevation.

Uniform Distribution means the even dispersal of effluent throughout all areas of an area bed and adjoining mantle, if required, as it migrates down from the stone layer to the underlying sand layer to either the native soil or mantle comprised of imported soil.

Vertical Separation means the depth of unsaturated soil below a leaching bed as measured from the bottom of the absorption trench or the bottom of the stone layer to a limiting surface such as high ground water table, rock or soil with a percolation time greater than 50 min/cm.

2.0 Installation Requirements

2.1. This Authorization is valid only for Norweco Inc.

2.2. Only Norweco manufacturer trained and authorized agents or employees shall install, maintain and service the Area Bed System.

2.3. The Norweco Area Bed System shall be installed as per the manufacturer's installation instructions.

2.4. The Service and Maintenance Agreement prescribed by Sentence 8.9.2.3.(2) of the Building Code requires that the persons authorized by the manufacturer to service and maintain Area Bed System and who have entered into the agreement with the person operating the treatment unit, and shall:

2.4.1. conduct and record at least once during every six month period, an inspection and servicing as specified by the manufacturer of the Norweco treatment unit in the "Continuing Maintenance Manual"; and provide a copy to the person operating the Area Bed System;

2.4.2. provide a copy of the "Continuing Maintenance Manual" to the person operating the Area Bed System and to the authority having jurisdiction at the time of the permit application;

2.4.3. conduct sampling and testing in accordance with the requirements of Clauses 8.9.2.4.(1)(a) and (b) of the Building Code;

2.4.3.1. once during the first 12 months after the Area Bed is put into use, and

2.4.3.2. thereafter, once during every 48 month period after the previous sampling has been completed,

2.4.4. promptly submit the sampling test results to the person operating the system and Norweco treatment unit, and

2.5. Norweco Inc. shall retain records of the sampling test results for each Area Bed System received pursuant to the terms and conditions set out in 2.4. above, for a period of 10 years and shall promptly forward copies of those records to a chief building official upon request.

3.0 System Requirements

3.1. All pipe connections in the system (i.e. pretreatment chamber, treatment units, accessory treatment units, tanks, pumps and filters) where incorporated, shall be flexible and watertight.

3.2. The Norweco treatment units used in the system shall use the daily design sewage flows as referenced in Table 3.2.1. "Daily Design Flow":

Table 3.2.1.
Daily Design Flow

Treatment Unit Models	**Flow Range** **measured in Litres**
960-500-1000	1100 to 2000
960-750-3000	2000 to 3000
960-1000-4000	3000 to 4000
960-1250-4750	4000 to 4750
960-1500-5700	4750 to 5700
Column 1	Column 2

4.0. Design

4.1. The Norweco treatment unit shall be fitted with a bottomless sand filter, or a Singulair® Bio-Kinetic Filter.

4.2. An absorption system comprised of a stone layer overlying a sand layer and having a total minimum depth of 500 mm, and:

4.2.1. the stone layer shall be a minimum depth of 200 mm, and

4.2.2. the sand layer shall be a minimum depth of 250 mm and have a percolation time of 6 to 10 min/cm.

4.3. The stone layer required by 4.2. above, shall have a minimum area as specified by the manufacturer but not less than:

4.3.1. where the total daily design sanitary sewage flow does not exceed 3000 L, the area shall be such that the loading on the surface of the stone layer does not exceed 75 L/m² per day, or

4.3.2. where the total daily design sanitary sewage flow exceeds 3000 L, the area shall be such that the loading on the surface of the stone layer does not exceed 50 L/m² per day.

4.4. The stone layer required by the terms and conditions set out in 4.2. above, shall be protected with a permeable geo-textile fabric in such a manner so as to prevent soil or leaching bed fill from entering the stone.

4.5. The bottom of the stone layer shall be at all points vertically separated at least 600 mm from the high ground water table, rock or soil with a T time of 6 or less, or greater than 50 min/cm; except:

4.5.1. where the underlying soil has a T time of between 6 and 50 min/cm, the bottom of the stone layer at all points may be reduced to 450 mm to rock, high water table, and soil having a T time of 50 min/cm.

4.6. The effluent shall be evenly distributed over the stone layer to within 600 mm of the perimeter edge of the stone layer using distribution pipes in accordance with the Building Code Appendix A-8.7.5.3.(2); or other means that achieve even distribution to within 600 mm of the perimeter edge of the stone layer.

4.7. The sand layer shall have a minimum area that is the greater of;

4.7.1. the area of the stone layer required by the terms and conditions set out in 4.3. above,

4.7.2. where the sand layer is installed in soil having a T time of 15 min/cm or less, the loading rate at the base of the area bed, shall be calculated using the formula $A = QT/850$ ($L/m^2/day$), or

4.7.3. where the sand layer is installed in or on soil having a T time of greater than 15 min/cm, that the sand layer be extended using imported leaching bed fill having a T time of not more than 15 min/cm; the construction of the extended sand layer, including the area bed and mantle shall:

4.7.3.1. be to a depth of at least 250 mm,

4.7.3.2. extend at least 15 m beyond the distribution pipes in any direction that the effluent entering the soil will move horizontally, and

4.7.3.3. be calculated using the formula A = QT/400 or by using the example calculations as they are provided, in Table 4.7.3.3. “Combined Area Bed and Mantle Loading Rates”

Where:

A is the area of contact in m^2 between the base of the sand layer and the underlying native soil,

Q is the total daily design sanitary sewage flow in litres, and

T is the percolation time of the underlying native soil in min/cm to a maximum of 50.

Table 4.7.3.3.
Combined Area Bed and Mantle Loading Rates Example Calculations

Loading Rate A = QT/400	
T of the native soil.	Loading rate (L/m^2/day)
≤ 15	27
20	20
30	13
40	10
≥50	8
Column 1	Column 2

4.8. Any Area Bed System that must be raised to meet the vertical separation distances required by the terms and conditions set out in 4.5. of this Authorization, shall meet the mantle requirements of the terms and conditions set out in 4.7., regardless of the T time of the native soil.

B. General Conditions

1. The use of the Norweco Area Bed System, and as described in the specific terms and conditions set out in 6.A. must comply with the *Building Code Act, 1992* (the “Act”) as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6.A. above; or

   (b) the occurrence of any of the events described in conditions 6.B.4.(a) and (b)(ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the Act any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

   (d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 26 day of May 2005.

BUILDING MATERIALS EVALUATION COMMISSION

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Edward Link, Vice-Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **July 26, 2001**
BMEC REFERENCE **BMEC # 01-13-265**
BMEC APPLICATION **# 2001-12**

DATE OF AMENDMENT **November 27, 2003**
* Denotes November 27, 2003 amendments

ECONO-RACK GROUP LTD.
Shelf and Rack Storage System

1. Applicant

* Econo-Rack Group Ltd.
2655 North Sheridan Way, Suite 230
Mississauga, Ontario
L5K 2P8

Tel: (905) 403-0101
Fax: (905) 403-1510

2. Manufacturing Facilities

Econo-Rack Group Ltd.
2655 North Sheridan Way, Suite 230
Mississauga, Ontario
L5K 2P8

2. Description

The shelf and rack storage system is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment. Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the Ontario Building Code and are not subject to mezzanine or interconnected floor space rules.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code. Reports reviewed by the Commission include:

Reports on Consolidated Authorization (October 17th, 2000 and January 11, 2001) - Larden Muniak Consulting Inc.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for the ECONO-RACK GROUP LTD. Shelf and Rack Storage System as manufactured and marketed by:

ECONO-RACK STORAGE EQUIPMENT LTD.
1770 Britannia Road East
Mississauga, Ontario
L4W 1J3

PACIFIC WESTEEL RACKING INC
3191 Mainway
Burlington, Ontario
L7M 1A6

INTERNATIONAL STORAGE SYSTEMS
6200 Dixie Road, Unit 102
Mississauga, Ontario, L5T 2E1

* GLOBAL STORAGE SYSTEMS INC.
3556 Lakeshore Road
Blasdell, New York 14219

* ENRACK SYSTEMS INC.
132 Adams Road
Branford, Ontario
N3S 7V2

* KONSTANT PRODUCTS
5300 Golf Road
Skokie, IL
60077

ALLTYPE STORAGE SYSTEMS INC
349 Arvin Ave.
Stoney Creek, Ontario
L8E 2M6

AMRACK EQUIPMENT LTD
3101 Hawhorne Road
Ottawa, Ontario
K1G 3V8

* WAREHOUSE SYSTEMS INC.
701 Millway Avuenue,
Unit #3, 4, 5
Vaughan, Ontario
L4K 3S7

* LC DYNAMIX INC.
2295 Dunwin Drive, Unit #4 and 5
Mississauga, Ontario
L5L 3S4

1.2 This Authorization is the successor of:

BMEC Authorization # 95-08-193 held by PACIFIC WESTEEL RACKING INC.;
BMEC Authorization # 90-08-136 held by PACIFIC WESTEEL RACKING INC.;
BMEC Authorization # 96-03-202 held by ALTYPE METAL STAMPINGS LTD.
BMEC Authorization # 90-02-130 held by ALTYPE METAL STAMPINGS LTD.
BMEC Authorization # 90-08-139 held by ENRACK SYSTEMS INC.
BMEC Authorization # 95-02-187 held by ENRACK SYSTEMS INC., INTERNATIONAL STORAGE SYSTEMS INC. and ECONO-RACK STORAGE EQUIPMENT LTD.;
BMEC Authorization # 01-02-254 held by ECONO-RACK STORAGE EQUIPMENT LTD.;
BMEC Authorization # 01-03-255 held by AUTOSTAK SYSTEMS CANADA.

Use and Occupancy

2.1 Except where more restrictively provided in paragraph A 3.4. below, the shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III, and IV commodities, Group A, B, C plastics and rubber tires as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions. Where the shelf and rack storage system incorporate the storage of rubber tires, such storage shall conform to the requirements to Subsection 3.3.1. “Indoor Tire Storage” of the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time.

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time.

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be designed in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) (i) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(ii) open construction consisting of steel grating or open steel floor planking,

(b) deck and walkway levels in structures used for the storage of Group A, B and C plastic, as defined in NFPA 13-1999, and rubber tires, shall be constructed of steel decking as required in (a) above.

3.4. The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system, supporting Class I, II, III, and IV commodities, Group A, B, C plastics and rubber tires as defined in NFPA 13-1999 shall not exceed 7 m.

3.5 Lighting levels of walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

3.6 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2) and 3.2.7.4.(1) respectively of the Ontario Building Code, as amended or remade from time to time.

3.7 Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs A 4.3 and A 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA-72, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the self and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph A 2.1, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 - 1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the Ontario Building Code.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Ontario Building Code as amended, except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than two levels; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m² in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m :

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a "time-based egress analysis" undertaken and sealed by a Professional Engineer or Architect as defined in the Ontario Building Code, using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time

(b) the Total Egress Time shall be calculated using the following formula;

$$\textit{Total Egress Time} = (H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5 \textit{ (in seconds)}$$

where:
H_p = Horizontal travel distance on the shelf and rack storage (m)
V_p = Vertical travel distance on the shelf and rack storage (m)
H_m = Horizontal travel distance on the main floor (m)
N_{lg} = Number of lift gates in the means of egress
N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Ontario Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2) of the Ontario Building Code, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a "positive lock" when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the lift-gate shall be marked in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that it is readily identifiable as part of the egress route.

5.8 Where 'at-level' conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two 'at-level' conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the 'at-level' cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each 'at-level' conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the 'at-level' cross-over and all inserts shall be sized to support loads required in Part 4 of the OBC,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each 'at-level' cross-over, and

(e) stairs approaching 'at-level' conveyor cross-overs shall be marked in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 5. A. above; or

(b) the occurrence of any of the events described in Sections 5. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section 5 A 1.1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 5. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 27th day of November 2003.

BUILDING MATERIALS EVALUATION COMMISSION

Tony Chow, Vice-Chair

777 Bay Street, 2nd Floor
Toronto, Ontario, M5G 2E5

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Web: www.obc.mah.gov.on.

Ontario
Building Materials Evaluation Commission
Commission d'évaluation des matériaux de construction

Date of Authorization	July 26, 2006
BMEC Authorization Number	01-12-264
BMEC Application	A2001-15
BMEC Application Number	A2006-14
Date of Amendment	July 27, 2006

AUTHORIZATION REPORT – Shelf And Rack Storage System

1. Applicant

North American Steel Equipment
Company Ltd.
300 Hopkins Street
Whitby, Ontario, L1N 2B9

Tel: 905 668-3300
Fax: 905 668-5477
Web: www.northamericansteel.ca

2. Manufacturing

North American Steel
Company Ltd.
300 Hopkins Street
Whitby, Ontario, L1N 2B9

3. Description

The North American Steel Equipment Company Ltd. (North American Steel) shelf and rack storage system (the "shelf and rack storage system") is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the Building Code, as amended or remade from time to time and are not subject to mezzanine or interconnected floor space rules.

4. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

5. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Building Code.

6. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for North American Steel Equipment Company Ltd.

Use and Occupancy

2.1 Except as where more restrictively provided for in 3.4 and 3.5 of this authorization, the shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III and IV commodities as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions; where the shelf and storage system incorporates the storage of rubber tires, such storage shall conform to the requirements of Subsection 3.3.1. “Indoor Tire Storage” of the Ontario Fire Code, Ontario Regulation 338/97, as amended or remade from time to time (the “OFC”),

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Building Code.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the OFC.

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be of noncombustible construction, and be designed in accordance with Part 4 of the Building Code.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act* (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) (i) solid construction consisting of steel plate or steel decking with a top substrate that forms a serviceable floor area, or

(ii) open construction consisting of steel grating or open steel floor planking.

(b) Deck and walkway levels in a structure used for the storage of Group A, B, and C plastic, as defined in NFPA 13-1999, and rubber tires, shall be constructed of steel decking as required in (a) (i) above.

3.4 The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m except that where the maximum height exceeds 18 m but does not exceed 24 m, the following provisions shall apply:

(a) a fire alarm system shall be installed with:

(i) pull stations located at all exit doors including exit doors serving elevated decks and walkways; and

(ii) smoke detectors located, at the ceiling of all rooms and areas containing the shelf and rack system, within exit stair enclosures at the top, and at every third level of elevated deck or walkway; and

(b) the fire alarm system required by (a) above, shall be designed to notify the fire department upon activation; and

(c) the shelf and rack storage system shall be used only for the storage of Class I, II, III and IV commodities as defined in NFPA 13 -1999 as amended.

3.5 Where Class I, II, III and IV commodities and Group A, B, C, plastics and rubber tires as defined in NFPA 13-1999 are stored, the maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 7 m.

3.6 Lighting levels of walkways and platforms shall conform to the Building Code.

3.7 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2). and 3.2.7.4.(1). respectively of the Building Code.

3.8 Guards and toe boards shall be installed in accordance with the Building Code.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;

(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;

(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;

(e) a significant change in water level in any water storage container used for fire fighting purposes;

(f) loss of electrical power to any automatically starting electrical fire pump; and,

(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs 4.3 and 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA 71-1998, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA 72-1990, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall be permanently mounted at or near the sprinkler control valve and shall describe:

(a) the Commodity Class applicable and as referenced in paragraph 2.1, and

(b) the sprinkler design criteria used for each shelf and rack storage system.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 -1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the Building Code.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the OFC.

4.10. Regardless of the occupant load, the requirements of Section 2.8 “Emergency Planning” of the OFC shall apply.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Building Code except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than four platform levels, the highest of which may not be more than 12 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m^2 in area;

(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,

(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m:

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a “time-based egress analysis” undertaken and sealed by a Professional Engineer or Architect as defined in the Building Code using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal

along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time.

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

Where: H_p = Horizontal travel distance on the shelf and rack storage (m)
V_p = Vertical travel distance on the shelf and rack storage (m)
H_m = Horizontal travel distance on the main floor (m)
N_{lg} = Number of lift gates in the means of egress
N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm. This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2) of the Building Code, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a “positive lock” when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the Fire Safety Plan, as required by 4.10. of this Authorization, shall mark the lift gates such that they are readily identifiable as part of the egress route.

5.8 Where ‘at-level’ conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two ‘at-level’ conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the ‘at-level’ cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each ‘at-level’ conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the ‘at-level’ cross-over and all inserts shall be sized to support loads required in Part 4 of the Building Code,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each ‘at-level’ cross-over, and

(e) stairs approaching ‘at-level’ conveyor cross-overs shall be marked in accordance with the Fire Safety Plan, as required by 4.10 of this Authorization, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the North American Steel Equipment Company Ltd shelf and rack storage system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time (BCA) and, except as specifically authorized herein, with the Building Code.
2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the terms and conditions set out in Section A. above; or
   (b) the occurrence of any of the events described in Sections B. 4. (a) and (b) (ii) below;

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this authorization; or,

      (iii) the ownership of the Applicant specified in Section 1 or of the companies specified in Section A 1.1 of this authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the BCA or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section A. above; or

   (d) any Building Code provision relevant to this authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 27 day of July 2006.

BUILDING MATERIALS EVALUATION COMMISSION

Edward Link, P. Eng.
Vice-Chair, BMEC

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **July 26, 2001**
BMEC REFERENCE **BMEC # 01-11-263**
BMEC APPLICATION # **BMEC # A2001- 13**

TYCO FIRE PRODUCTS
CENTRAL MODEL WS WINDOW SPRINKLER

1. Applicant

Tyco Fire Products
1467 Elmwood Avenue
Cranston, Rhode Island
USA 02910

Tel: (401) 781-8220
Fax: (401) 781-8868

2. Manufacturing Facilities

Tyco Fire Products
451 North Cannon Avenue
Lansdale, Pennsylvania
USA 19446

3. Description

The Central Model WS Window Sprinkler system is a sprinkler-protected window system consisting of a window assembly and a sprinkler system designed to protect the window assembly by spraying water on the glazing. The window assembly consists of fixed non operable glazing installed in metal frames. The glazing may incorporate vertical mullions or butt joints without mullions. Windows assemblies with horizontal mullions are not eligible for sprinkler protection. Maximum dimension of sprinkler-protected window assemblies, along with details of the frames and glazing materials to be used, are indicated in individual listings.

4. Authorization Requested

The applicant sought authorization for the use of Central Model WS Window Sprinkler system manufactured by Tyco Fire Products as a 2 hour fire resistance rating equivalent to the level of performance required in Subsection 3.1.7. of the 1997 Ontario Building Code (OBC) as amended.

5. Assessment

Reports, assessments and information provided by the applicant indicate that if the Central Model WS Window Sprinkler system is designed and installed in accordance with the manufacturer's instructions and limitations; the Underwriters Laboratories of Canada Listing, ULC/ORD-C263.1-99; and the Specific Terms and Conditions stated in this Authorization, then the level of performance required by the OBC will be provided.

Reports, assessments and information reviewed included the following:

1. Canadian Construction Materials Centre (CCMC), Evaluation Report 12752-R: Issued 24 June 1996, Revised 07 January 1997.

2. Ruling of The Minster of Municipal Affairs and Housing: No. 97-01-49(12572)R.

3. Manufacturer's information Central WS 3-0: Model WS™ Specific Application Window Sprinklers™.

4. Underwriters Laboratories Inc. File Ex683, project 95NK26512, dated 07 February 1996, "Report on Automatic Sprinklers, Central Sprinklers Corp., Lansdale, Pennsylvania."

5. Underwriters Laboratories Inc. File Ex683, project 94NK27353, dated 22 August 1995, "Report on Special Service Investigation on Automatic Sprinklers Used on Windows, for Central Sprinklers Corp., Lansdale, Pennsylvania."

6. Underwriters Laboratories of Canada listed classification titled " Window Sprinklers" Guide No. 2257.

7. Underwriters Laboratories of Canada, certification Bulletin No. 99-33, dated 25 October 1999.

8. Underwriters Laboratories of Canada, ULC/ORD-C263.1-99 "Window - Protected Window Systems". First Edition October 1999.

9. Technical Background Information (TBI) Memo relating to Central Model WS Window Sprinkler system dated 27 June 2001.

6. Authorization

The Central Model WS Window Sprinkler system is authorized subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This authorization is valid only for Central Model WS Window Sprinkler system.

2. The design and general review of the Central Model WS Window Sprinkler system shall be in accordance with ULC/ORD-C263.1-99, Appendix A, Installation Guidelines.

3. The design and general review of the Central Model WS Window Sprinkler system shall be carried out by a Professional Engineer as defined in the *Professional Engineers Act*, (Ontario). The Professional Engineer shall provide the chief building official with a document certifying that the installation conforms with this authorization.

4. The Central Model WS Window Sprinkler system shall incorporate ULC Listed sprinkler heads: model WS 3-01, 5.6 K-factor - Quick Response, SIN C3388 - Horizontal Sidewall and SIN C3488 Pendant Vertical Sidewall.

5. The Central Model WS Window Sprinkler system shall not be used in a fire wall.

6. The Central Model WS Window Sprinkler system shall not be used in High Hazard Industrial Occupancies, Group F, Division 1.

7. The Central Model WS Window Sprinkler system shall not be used on any part of an exit serving a floor area subject to the requirements of OBC Subsection 3.2.6.

8. The Central Model WS Window Sprinkler system shall not be used on any part of an exit serving Care and Detention Occupancies, Group B; or Residential Occupancies, Group C.

9. Where the Central Model WS Window Sprinkler system is used to provide fire-resistance rating of exit fire separations:

    (a) the building shall be sprinklered, and

    (b) the exits with a Central Model WS Window Sprinkler system shall not comprise more than one half of the required number of exits from any floor area.

B. GENERAL CONDITIONS

1. The use of the Central Model WS Window Sprinkler system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the OBC as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the Specific Terms and Conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Specific Terms and Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this authorization;

      (ii) the address of the applicant specified in Part 1 of this authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the applicant, or the material, system or building design that is the subject matter of this authorization, has failed to comply with any of the Specific Terms and Conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto on this 26th day of July 2001

BUILDING MATERIALS EVALUATION COMMISSION

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per: Rashmi Nathwani, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **July 26, 2001**
BMEC REFERENCE **BMEC # 01-10-262**
BMEC APPLICATION **# A 2001-07**

ROYAL GROUP TECHNOLIGIES LIMITED
Vinyl Deck Railing System ™

1. Applicant

Royal Group Technologies Ltd
1 Royal Gate Boulevard
Woodbridge, Ontario
L4L 8Z7

Tel: (905) 264-0698
Fax: (905) 264-0699

2. Manufacturing Facilities

Prince Plastics Limited
5770 Highway #7
Woodbridge, Ontario
L4L 3A2

3. Description

The Royal Vinyl Deck Railing System™ is composed of extruded PVC posts, rails and pickets. The posts and rails are PVC extrusions, reinforced with galvanized cold-formed steel. The posts are bolted to the existing deck substructure. The assembled railing section is fastened to the posts. The extruded components are available in white or tan.

4. Authorization Requested

The applicant sought authorization for the use of the Royal Vinyl Deck Railing System™, an innovative railing material for exterior applications, for surfaces that are not greater than 1 800 mm above the finished grade, as required by Sentence 9.8.8.2.(2) and as required by Article 9.8.8.8 “Construction of Guards” of the Ontario Building Code (OBC).

5. Assessment

Reports and assessments provided by the applicant show that if the Royal Vinyl Deck Railing System™ is designed, performance tested and maintained in accordance with the limitations the manufacturer's instructions and conditions stated in this authorization, the level of the performance required by Article 9.8.8.8 “Construction of Guards” of the OBC will be provided.

Reports and Assessments reviewed included the following:

1. Prince Plastics Limited: Quality Procedure Manual, “Section 10.0 Inspection and Testing.”

2. Royal Plastics Inc.: “Technical Data Sheet, Royal 8007/8100 Compounds.”

3. Prince Plastic Limited: “Quality Procedure Manual, Section 10.0 Inspection and Testing.”

4. Prince Plastic Limited: “Quality Procedure Manual, Section 13.0 Control of Nonconforming Products.”

5. Royal Outdoor Products: “Vinyl Deck Stair Railing Kit Assembly Instructions.”

6. Royal Outdoor Products: “Vinyl Deck Railing Kit Assembly Instructions.”

7. Ortech Corporation: Evaluation of the “Royal Deck” System.

8. Technical Background Information Memo relating to Royal Vinyl Deck Railing System ™ dated 29 March 2001.

9. Bodycote Materials Testing Ortech Laboratories: Evaluation of Railing Systems. Report No. 99-06-M174.

10. BOCA International Evaluation Report: Research Report 96.64. Evaluation Subject: Brock Deck™ and Triple Crown Fence.

6. Authorization

The Royal Vinyl Deck Railing System ™ is authorized for use as an exterior rail subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This Authorization is valid only for the Royal Vinyl Deck Railing System™ and does not include the Royal Vinyl Deck System.

2. This authorization is valid only for Royal Vinyl Deck Railing System™ for buildings constructed under Part 9 of the Ontario Building Code.

3. The railing system shall not be used for surfaces that are greater than 1800 mm above the finished grade.

4. The railing system shall be attached to a deck structure as recommended by the manufacturer and shall be designed in conformance with Part 9 of the OBC.

5. The PVC incorporated in the railing system shall meet ASTM G26.

B. General Conditions

1. The use of the Royal Vinyl Deck Railing System ™ shall comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the OBC as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Part 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto on this 26th day of July 2001

BUILDING MATERIALS EVALUATION COMMISSION

per: Rashmi Nathwani, Chairman

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**July 26, 2001**
BMEC REFERENCE	**BMEC # 01-09-261**
BMEC APPLICATION #	**BMEC # A 2001-03**

DURAKIT SHELTERS INC.
Corrugated Fibreboard Building Envelope System

1. Applicant

DuraKit Shelters Inc.
2785 Hwy 27
P.O. Box 200
Bond Head, Ontario
L0G 1B0

Tel: (905) 953 - 8976
Fax: (905) 953 - 8945

2. Manufacturing Facilities

DuraKit Shelters Inc.
2785 Hwy 27
P.O. Box 200
Bond Head, Ontario
L0G 1B0

3. Description

The DuraKit Shelters Inc. corrugated fibreboard building envelope system, is a high strength corrugated structural fibreboard and building envelope system.

4. Authorization Requested

The applicant sought authorization for the use of the DuraKit Shelters Inc. corrugated fibreboard building envelope system as a wall and roof assembly system acceptable under Section 9.4 "Structural Requirements" of the 1997 Ontario Building Code as amended.

5. Assessment

Reports and assessments provided by the applicant indicate that if the DuraKit Shelter structural fibreboard and building envelope system is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations, and the specific terms and conditions stated in this authorization, the level of performance required by the Ontario Building Code will be provided.

Reports, assessments and information reviewed included the following:

1. "Full Scale Testing of DuraKit Shelter Subjected to Static- Equivalent Wind Loads" testing and report by the University of Western Ontario.

2. "Load Criteria, Material Testing and Component testing of DuraKit Shelter" testing and report by the University of Western Ontario.

3. "Finite Element Analysis of DuraKit Shelter" testing and report by the University of Western Ontario.

4. "A Study of Material Properties a Triple Corrugated Board" testing and report by the University of Western Ontario.

5. Compressive Test: Testing by Norampac Testing and Technical Services of Toronto, Ontario.

6. "Water Penetration" ASTM E 457-86: Testing by Bodycote Ortech.

7. "Air Leakage" ASTM E 283-91: Testing by Bodycote Ortech.

8. "Water Vapour Transmission" ASTM E 96-00: Testing by Bodycote Ortech.

9. "Surface Burning Characteristics of Fire Retardant Coatings" ULC-CAN-S102-M88 and UL 723: Testing by underwriters' Laboratory of Canada - interior finish only.

10. "Surface Burning Characteristics of Coated Paperboard Panel" ASTM E 84: Testing performed by Bodycote Ortech.

11. Performance Tests Conducted on One Vertical Sliding Window S-3450/4450 Series" CAN/CSA A440-M90: Testing by AIRS-INS.

12. "Door Test" CAN/CGSB-82.5-M88: testing and report by Inchcape Testing Services / Warnock Hersey.

13. "Impact Testing on an Entrance Door" ASTM F476-8: testing and report by Inchcape Testing Services.

14. "Water Vapour Transmission" ASTM E 96-94: Testing performed by Bodycote Ortech.

15. Sealant/Joints CAN/CGSB-19.13-M87.

16. "Full Scale Dynamic Testing of DuraKit Cardboard Shelter Using A Shake Table Device" testing and report by the University of Western Ontario.

17. Site visit: 01 June 2001.

18. Installation video tapes: "The Instant House" duration 10 minutes, and "The Instant House" duration 12 minutes.

6. Authorization

The DuraKit Shelters Inc. is a high strength corrugated structural fibreboard and building envelope system. The system may be used for wall and roof assemblies as described under Section 9.4 "Structural Requirements" of the 1997 Ontario Building Code. All other requirements pertaining to the construction of the DuraKit shelter shall conform to the requirements of the 1997 Ontario Building Code as amended, and subject to the following terms and conditions.

A. SPECIFIC TERMS AND CONDITIONS:

1. This authorization is valid only for DuraKit Shelter Inc.

2. This authorization is valid only for this tested model:

    a. Model name: 16' x 20' Test House Layout, 21 June 2001
    Model size: 4.9 m x 6.0 m (16' x 20')
    Total number of windows: three (3)
    Window size: 600 x 900 mm (24" x 36")
    Total number of doors: one (1)
    Door size: 800 x 2030 mm (32" x 80")
    Window/door configuration: One opening per side

3. The design and general review of the floor wall connection shall be carried out by a Professional Engineer as defined in the Professional Engineers Act, (Ontario). The Professional Engineer shall provide the chief building official with a document certifying that the installation conforms with this authorization.

4. The DuraKit shelter shall not be assembled, installed or located in areas where the ground snow load exceeds 2.25 kPa as per Sentence 2.5.1.1.(1) and Table 2.5.1.1. Column 10. To calculate the roof loading limitations, multiply the ground snow load by 0.8 and add a minimum rain load of 0.4 kPa.

5. The DuraKit shelter shall be assembled and installed as per the "Instant House" Installation Manual dated May 2001.

6. The DuraKit shelter shall be installed and assembled as per the "Instant House" Quality Control Manual dated January 2001.

7. The high strength corrugated fibre board used to construct the DuraKit shelters shall be provided by Norampac.

8. The Norampac high strength fibre board shall be (Grammage is a measurement

of weight in pounds per 1000 sq.ft. of paper) :

a.	Exterior	Grammage (lbs) 90 26 69 26 69 26 90 Flute Size A A C
b.	Interior	Grammage (lbs) 90 26 69 26 69 26 42/42 10 oz Poly Layer Between the 42/42 Layer Flute Size A A C
c.	Stud	Grammage (lbs) 69 26 69 Flute Size C

9. The maximum corrugated fibre board panel size permitted is:
   a. 1.2 m x 2.4 m for standard wall sections, and
   b. 520 mm (short leaf) x 600 mm (long leaf) x 2 400 mm for corner sections.

10. Sealants used in the installation and assembly of the DuraKit shelter must be Spectrem® 1 Ultra Low Modulus Silicone Joint Sealant conforming to CAN/CGSB-19.13-M87.

11. Windows installed in the DuraKit high strength corrugated structural fibreboard shall be:
   a. limited to one per 1 200 mm panel,
   b. a minimum dimension of 300 mm from the intersection of the ceiling,
   c. centred on the 1 200 mm panel, having a minimum of 220 mm from the edge of the 1 200 mm panel.
   d. incorporate a 38 x 89 mm wood frame, and
   e. located as per the size and configurations set out in Specific Terms and Conditions # 2 of this authorization.

12. Doors installed in the DuraKit high strength corrugated structural fibreboard shall be:
   a. limited to one per 1 200 mm panel,
   b. a minimum dimension of 300 mm from the intersection of the ceiling,
   d. centred on the 1 200 mm panel,
   e. incorporate a 38 x 89 mm wood frame, and
   f. located as per the size and configurations set out in Specific Terms and Conditions # 2 of this authorization.

13. A 38 x 89 mm wood top plate shall be installed around the perimeter of the panels.

14. 38 x 89 mm wood framing members must be installed 1200 mm o.c. at the connection of every 1200 mm panel.

15. The Durakit panel joints and the interlocking top and bottom track shall be staggered. The joint cap base shall not be located where two wall panels

intersect along the same plane.

16. Electrical devices such as, but not limited to smoke alarms, outlets, receptacles, switches and fixtures shall be surface mounted on the high strength corrugated structural fibreboard system and be reinforced as required.

17. Additional loads such as, but not limited to shelves, cabinets, and fans which may be located on the walls, roofs and ceilings that the system has not been designed or tested for shall have reinforcements added which comply with the requirements of the 1997 Ontario Building Code as amended.

18. Only DuraKit authorized personnel shall install and assemble the system.

19. Individuals/ installers must have completed the following requirements to be considered DuraKit authorized personnel:
    a. undergo "On Site" training and supervision sessions from DuraKit authorized personnel,
    b. successfully install and assemble two complete units, and
    c. be listed with DuraKit Shelters Inc. as authorized personnel.

B. GENERAL CONDITIONS

1. The use of the DuraKit shelter system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and except as specifically authorized herein, with the OBC as amended or remade from time to time.

2. A copy of this authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The applicant named in Part 1 hereof shall promptly notify the BMEC of:

    (a) the failure of the applicant, or of the material, system or building design that is the subject matter of this authorization, to comply with any of the terms and conditions set out in 6. A. above; or

    (b) the occurrence of any of the events described in Conditions 6. B. 4. below.

4. The BMEC may amend or revoke this authorization where it determines that:

    (a) any change has been made to:

        (i) the material, system or building design that is the subject matter of this Authorization;

        (ii) the address of the applicant specified in Part 1 of this

Authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the applicant, or the material, system or building design that is the subject matter of this authorization, has failed to comply with any of the terms and conditions set out in this authorization; or

(d) any Ontario Building Code provision relevant to this authorization has been amended or remade.

Dated at Toronto on this 26th day of July 2001

BUILDING MATERIALS EVALUATION COMMISSION

per: Rashmi Nathwani, Chairman

777 Bay Street, 2nd Floor
Toronto, Ontario, M5G 2E5

Tel: 416 585 4234
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Web: www.obc.mah.gov.on.

Ontario
Building Materials Evaluation Commission
Commission d'évaluation des matériaux de construction

Date of Authorization	July 26, 2001
BMEC Authorization Number	BMEC 01-08-260
BMEC Application	A2000-19
BMEC Application Number	A 2006-15
Date of Amendment	July 27, 2006

AUTHORIZATION REPORT – The Whitewater Area Bed System

1. Applicant

Delta Environmental Products
P.O. Box 969
Denham Springs, LA
USA, 70727

Tel: 800 219-9183
Fax: 225 664-9467

2. Manufacturing

Delta Environmental Products, Inc.
8285 Florida Blvd
Denham Springs, LA, USA, 70726

Canwest Tanks & Ecological Systems.
11975 Old Yale Road Surrey
BC, V3W 3X4

3. Description

The Whitewater Area Bed System primarily consists of a pre-treatment tank, a tertiary treatment unit, an effluent filter and an area bed.

Delta Environmental Products Inc.'s tertiary treatment units permitted for use with this system are referenced in the Supplementary Guidelines to the Building Code, as amended, as meeting tertiary quality effluent criteria, and include models FD 50 FF, DF 60 FF, DF 75 FF, DF 100 FF, DF 150 FF and DF 150 x 2.

An effluent filter is required downstream of the treatment unit. The specification of the effluent filter may vary depending on the area bed system design, and the filter models permitted for use with this Area Bed are located in Section 4.1. of this authorization.

The area bed is comprised of two parts: the stone layer and the sand layer. The sand layer of an area bed is sized in consideration of the soil it rests on, and under certain conditions it may be required to be laterally extended. This lateral sand extension is known as the mantle.

The effluent is sent to the stone layer, either by gravity or by a pump, via a pipe. This pipe leads from the treatment unit and terminates at the distribution box or header. From the distribution box or header, the effluent is sent to a series of perforated distribution pipes that run through the stone layer.

4. Authorization Requested

The applicant seeks to have the Whitewater Area Bed System, which incorporates a treatment unit designed so that the effluent meets the tertiary effluent quality criteria referenced in Table 8.6.2.2.A. of the Building Code, authorized for use as a Class 4 System that is connected to an absorption system other than the leaching bed as referred to in Article 8.6.1.2. of the Building Code.

5. Assessment

Reports and assessment provided by the applicant demonstrate that if the Whitewater Area Bed System is constructed, installed, operated, maintained and monitored in accordance with the limitations of the manufacturer specifications and conditions stated in this authorization, a level of performance equivalent to that required of a class 4 sewage systems will be provided.

The following reports were submitted and reviewed are:

1. Whitewater Systems Owners Manual, Models DF 50, DF 60, DF 75, DF100 or DF 150.

2. Technical Background Information Memo relating to Canwest Tanks & Ecological Systems dated September 18, 2000.

3. CAN/CSA-B66-00 - Prefabricated Septic Tanks and Sewage Holding Tanks, Plumbing Products and Materials - a National Standard of Canada.

4. Operations, Specifications & Test Data on the Free Access Sand Filter - July 1999, including a February 16, 1998, NSF International Report on the Delta Environmental Products Inc. DF-40M and Free Access Sand Filter. Tested under the provisions of ANSI/NSF Standard 40.

5. The “Supplemental (Canadian Version) Owner’s / Operator’s Manual” dated September 1999, which incorporates a schedule of required maintenance to be conducted on the system every six (6), twelve (12) and twenty four (24) months.

6. NSF International Report on the evaluation of Delta products Inc., model DF 40- Wastewater Treatment System.

7. Whitewater Installation Operation and Maintenance Manuals.

8. Whitewater Service / Maintenance Agreement.

9. Whitewater Inspection Work Order.

10. Whitewater Treatment Units Pre-treatment Sizes, dated July 17, 2006.

11. Sample Drawings, Gunnell Engineering Ltd, dated July 7, 2006.

6. Authorization

A. The Area Bed System is authorized as an equivalent to other Class 4 sewage systems as referenced to in Section 8.7. “Leaching Beds” of the Building Code; all other requirements pertaining to the design, installation and construction are subject to the regulations of the Building Code, and to the following terms and conditions.

1.0. Definitions

A word or phase used in this Authorization has the following meaning for the purposes of this Authorization:

Area Bed means the part of a leaching bed comprised of a stone layer and the underlying unsaturated sand layer intended to further treat and distribute the effluent, and does not include the area referred to as the mantle.

Contact Area means the area of infiltrative surface, directly below the area bed, required to absorb the treated effluent into the underlying native soil, but does not include the area where the mantle, if required, comes into contact with the native soil.

Extended Contact Area means the area of the sand bed, as extended, and mantle, where required, to meet the necessary lateral extension such that the effluent is absorbed into the underlying soil

Infiltrative Surface means the area of interface where effluent migrates downward from the sand layer of the area bed and, if necessary, the mantle and passes into the native soil or leaching bed fill.

Mantle means the lateral extension of the area bed using imported leaching bed fill having a T time of 15 min/cm or less, but does not include the area referred to as the area bed, necessary to provide an area of hydraulic catchments in any direction in which the effluent entering the leaching bed fill will move horizontally such that effluent is treated and absorbed.

Raised or Partially Raised Area Bed means a sewage system in which any part of the area bed is above the natural ground elevation.

Uniform Distribution means the even dispersal of effluent throughout all areas of an area bed and adjoining mantle, if required, as it migrates down from the stone layer to the underlying sand layer to either the native soil or mantle comprised of imported soil.

Vertical Separation means the depth of unsaturated soil below a leaching bed as measured from the bottom of the absorption trench or the bottom of the stone layer to a limiting surface such as high ground water table, rock or soil with a percolation time greater than 50 min/cm.

2.0 Installation Requirements

2.1. This Authorization is valid only for Delta Environmental Products Inc.

2.2. Only Delta Environmental Products Inc. manufacturer trained and authorized agents or employees shall install, maintain and service the area bed system.

2.3. The Area Bed System shall be installed as per the manufacturer's installation instructions.

2.4. The Service and Maintenance Agreement prescribed by Sentence 8.9.2.3.(2) of the Building Code requires that the persons authorized by the manufacturer to service and maintain Area Bed System and who have entered into the agreement with the person operating the treatment unit, and shall:

2.4.1. conduct and record at least once during every twelve month period, an inspection and servicing as specified by the manufacturer of the Delta treatment unit, and provide a copy to the person operating the Area Bed System;

2.4.2. provide a copy of the Delta Environmental Products operation and maintenance manual revised, to the person operating the Area Bed System and to the authority having jurisdiction at the time of the permit application;

2.4.3. conduct sampling and testing in accordance with the requirements of Clauses 8.9.2.4.(1)(a) and (b) of the Building Code;

2.4.3.1. once during the first 12 months after the Area Bed is put into use, and

2.4.3.2. thereafter, once during every 48 month period after the previous sampling has been completed.

2.4.4. promptly submit the sampling test results to the person operating the Area Bed System.

2.5. Delta Environmental Products Inc. shall retain records of the sampling test results for each Area Bed System received pursuant to the terms and conditions set out in 2.4. above, for a period of 10 years and shall promptly forward copies of those records to a chief building official upon request.

3.0 System Requirements

3.1. All pipe connections in the system (i.e. treatment units, accessory treatment units, tanks, pumps and filters) where incorporated, shall be flexible and watertight.

3.2. The Delta Environmental Products Inc. treatment units used in the system shall use the daily design flows as referenced in Table 3.2.1. "Daily Design Flow",

Table 3.2.1.
Daily Design Flow

Treatment Unit Models	**Flow Range** measured in Litres	**Minimum Pre-treatment Tank Size** measured in Litres
DF 50	850 to 1900	1140
DF 60	1900 to 2300	1140
DF 75	2300 to 2900	1360
DF 100	2900 to 3800	1810
DF 150	3800 to 5700	3400
DF 150 x 2	5700 to 10 000	6800
Column 1	Column 2	Column 3

4.0. Design

4.1. The Area Bed System treatment units shall be fitted with an a bottomless sand filter or a BK-2000 filter, except

4.1.1. where the distribution of the effluent to the area bed is pressurized, GAG Sim/Tech 100 micron pressure filter, model number STF-100 and STF-100AZ, or a 100 micron Vortex filter shall be used.

4.2. An absorption system comprised of a stone layer overlying a sand layer and having a total minimum depth of 500 mm, and:

4.2.1. the stone layer shall be a minimum depth of 200 mm, and

4.2.2. the sand layer shall be a minimum depth of 250 mm and have a percolation time of 6 to10 min/cm.

4.3. The stone layer required by 4.2. above, shall have a minimum area as specified by the manufacturer but not less than:

4.3.1. where the total daily design sanitary sewage flow does not exceed 3000 L, the area shall be such that the loading on the surface of the stone layer does not exceed 75 L/m² per day, or

4.3.2. where the total daily design sanitary sewage flow exceeds 3000 L, the area shall be such that the loading on the surface of the stone layer does not exceed 50 L/m² per day.

4.4. The stone layer shall be rectangular in shape, with the long dimension parallel to the site contours.

4.5. The stone layer required by the terms and conditions set out in 4.2. above, shall be protected with a permeable geo-textile fabric in such a manner so as to prevent soil or leaching bed fill from entering the stone.

4.6. The bottom of the stone layer shall be at all points vertically separated at least 600 mm from the high ground water table, rock or soil with a T time of 6 or less, or greater than 50 min/cm; except:

4.6.1. where the underlying soil has a T time of between 6 and 50 min/cm, the bottom of the stone layer at all points may be reduced to 450 mm to rock, high water table, and soil having a T time of 50 min/cm.

4.7. The effluent shall be evenly distributed over the stone layer to within 600 mm of the perimeter edge of the stone layer using distribution pipes in accordance with the Building Code Appendix A-8.7.5.3.(2); or other means that achieves even distribution to within 600 mm of the perimeter edge of the stone layer.

4.8. The sand layer shall have a minimum area that is the greater of;

4.8.1. the area of the stone layer required by the terms and conditions set out in 4.4. above,

4.8.2. where the sand layer is installed in soil having a T time of 15 min/cm or less, the loading rate at the base of the area bed, shall be calculated using the formula A = QT/850 (L/m^2/day), or

4.8.3. where the sand layer is installed in or on soil having a T time of greater than 15 min/cm, that the sand layer be extended using imported leaching bed fill having a T time of not more than 15 min/cm, the construction of the extended sand layer, including the area bed and mantle shall:

4.8.3.1. be of a depth of at least 250 mm,

4.8.3.2. extend at least 15 m beyond the perimeter of the treatment unit, or distribution pipes if utilized, in any direction that the effluent entering the soil will move horizontally,

4.8.3.3. be calculated using the formula A = QT/400 or by using the example calculations as they are provided, in Table 4.8.3.3. "Combined Area Bed and Mantle Loading Rates", and

4.8.3.4. be rectangular in shape.

Where:

A is the area of contact in m^2 between the base of the sand layer and the underlying native soil,
Q is the total daily design sanitary sewage flow in litres, and
T is the percolation time of the underlying native soil in min/cm to a maximum of 50.

Table 4.8.3.3.

Combined Area Bed and Mantle Loading Rates Example Calculations

Loading Rate A = QT/400	
T of the native soil.	Loading rate ($L/m^2/day$)
≤ 15	27
20	20
30	13
40	10
≥50	8
Column 1	Column 2

4.9. Any Area Bed System that must be raised to meet the vertical separation distances required by the terms and conditions set out in 4.6. of this Authorization, shall meet the mantle requirements of the terms and conditions set out in 4.8., regardless of the T time of the native soil.

B.General Conditions

1. The use of the Area Bed System and as described in the specific terms and conditions set out in 6.A. must comply with the *Building Code Act, 1992* (the "Act") as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6.A. above; or

   (b) the occurrence of any of the events described in conditions 6.B.4.(a) and (b)(ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the Act any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 27 day of July 2006.

BUILDING MATERIALS EVALUATION COMMISSION

_____

Edward Link, P. Eng.
Vice-Chair, BMEC

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION June 28, 2001 BMEC REFERENCE BMEC # 01-07-259 BMEC APPLICATION # BMEC #A 2001-10

OATEY CANADA INC. SURE-VENT® AND SURE-VENT II® AIR ADMITTANCE VALVE

1. Applicant

2. Manufacturing Facilities

Oatey Canada 218 Wilkinson Road, Unit 3 Brampton, Ontario L6T 4M4

Tel: (905) 451-1312
Fax: (905) 451-1314

3. Description

Cherne Industries Inc. 5700 Lincoln Drive Minneapolis , MN 55436 Oatey Canada Inc. Sure-Vent® and Sure-Vent II®, Air Admittance Valve (AAV) is intended for use as an alternative measure to a vent pipe that extends to the open air. These valves open under a negative pressure within the drainage system allowing air to enter the venting system to maintain trap seals. The valves close by gravity under no pressure differential (no flow) or under positive pressure to prevent the leakage of sewer gases through the valve. The Oatey AAV Sure-Vent® comes in two models: Model 39007 and Model 39009. The Oatey AAV Sure-Vent II® comes in five models: Model 39015,

Model 39016, 39017, Model 39018, and Model 39019.

4. Authorization Requested

The applicant sought authorization for the use of their product as an alternative to extending a vent pipe to open air as presently required by the OBC.

5. Assessment

Reports and assessments provided by the applicant show that if the Oatey Sure-Vent® and Sure-Vent II® are designed, performance tested and maintained in accordance with the limitations the manufacturer's instructions and conditions stated in this authorization, the level of the performance required by the OBC for individual venting, duel venting, wet venting or circuit venting for fixtures located on the same floor level will be provided.
Reports submitted and reviewed:

1. Oatey Canada Inc. Sure-Vent® and Sure-Vent II®, Air Admittance Valve, manufacturer's information.
2. Technical Background Information Memo (TBI) relating to Oatey Canada Inc. Sure-Vent® and Sure-Vent II® Air Admittance Valve dated 15 May 2001.
3. Alternative approval letter, Department of Commerce, State of Wisconsin dated 20 February 2001.
4. Approval Letter, Allegheny County Health Department, Pittsburgh, PA dated 31 January 2001.
5. National Listing, Sure-Vent® and Sure-Vent II® Models:

(a) NSF Plumbing and Related Products Listing NSF Standard 14 Directory to ANSI/ASSE 1051-96.

(b) IAPMO Classified Listing to ANSI/ASSE 1051-96, Uniform Plumbing Code Section 301.2.

(c) National Evaluation Service (NES) listing to NSF Standard 14 and ANSI/ASSE 1051-96. NES listing indicates compliance with the

1997 International Plumbing Code, with 1999 Accumulative Supplement, as referenced by the 1999 BOCA National Building Code and the CABO One and Two Family Dwelling Code.

(d) Southern Building Code Congress International (SBCCI) Public Safety Testing and Evaluation Services, Inc. listing to NSF Standard 14 and ANSI/ASSE 1051-96. Reference to CRT Laboratories Test Report No. 11836a-R1, indicating Sure-Vent® compliance to ASSE 1050-91, is also included within the text of the report.

6. ASSE 1050-91Compliance Documentation:

(a) ASSE Seal Control Board Certificates:
i. Sure-Vent® Original Certificate dated 11 November 1997, and
ii. Sure-Vent® Renewal Certificate dated 15 November 2000.

(b) Compliance Reports, Sure-Vent® models:
i. CRT Laboratories, report number 11836a-R1, and
ii. SGS US Testing Company Inc., report numbers TS97-0363-1R & 2R.
7. ANSI 1998 / ASSE 1996 1051, Compliance Documentation:

(a) ASSE Seal Control Board Certificates:
i. Sure-Vent® Original Certificate dated 11 November 1997,
ii. Sure-Vent® Renewal Certificate dated 15 November 2000, and
iii. Sure-Vent II® Original Certificate dated 13 June 2000.

(b) Compliance Reports, Sure-Vent® models:

i. CRT Laboratories, report number 11836a-R1,
ii. NSF International, project number NCO9441, and
iii. SGS US Testing Company Inc., report numbers TS97-0363-3R & 4R.

(c) Compliance Report, Sure-Vent II® models:

i. NSF International, project number 20330, and
ii. NSF International, project number 20333.

6. Authorization

The use of Oatey Sure-Vent®, size 2" (50 mm), and Sure-Vent II ®, sizes

1 ½" (38 mm) and 2" (50 mm), are authorized for use within a plumbing system as an alternative where there is no other means of connecting to the traditional venting system and where there is no danger of back pressure presenting a problem.

A. SPECIFIC TERMS AND CONDITIONS:

1. Vent system utilizing Oatey AAV shall conform to performance standards for "Fixture and Branch Air Admittance Valves" ANSI/ASSE 1051-90 (rev. 1996).
2. The PVC material used in the Oatey AAV shall conform to ASTM D2665-00.
3. The ABS material used in the Oatey AAV shall conform to ASTM D2661-97.
4. The Oatey AAV shall be installed in accordance with the manufacturer's installation instructions. In case of a conflict between the manufacturer's installation instructions and the OBC requirements, the provisions of the Code shall govern.
5. The manufacturer shall supply instructions on the proper and safe installation of the Oatey AAV. Such instructions shall include a reference requiring that the installation be made in accordance with the Specific Terms and Conditions listed in this BMEC Authorization. Such instructions shall include detail drawings and must remain on site.
6. The Oatey AAV shall be installed after the drain waste and vents (DWV)

have been tested as required by OBC Articles 7.3.6.4 and/or 7.3.6.5 and prior to the final test as required in Article 7.3.6.6. so as to establish that an adequate seal under positive pressure is achieved.

7. Individual, dual, wet and circuit vents shall be permitted to terminate with a connection to a Oatey AAV. When more than three fixtures connect to the horizontal branch a relief vent is required.
8. The Oatey AAV shall not be used on a vent stack or stack vent.
9. The Oatey AAV shall only vent fixtures that are located on the same floor level and connect to a horizontal branch line.
10. The horizontal branch drain shall connect to the building drain or the stack not more than 4 storeys (as defined in Part 7 of the OBC) from the top of the stack.
11. The horizontal branch that is circuit vented shall be provided with a relief vent that shall connect to a vent stack, stack vent, header or extend outdoors to open air.
12. The Oatey AAV's shall not be used as relief vents.
13. The relief vent shall connect to the horizontal branch drain between the stack or building drain and the most downstream fixture drain connected to the horizontal branch drain. The relief vent shall be sized in accordance with Article 7.5.2.2 of the OBC. The relief vent may be a wet vent if it is 2" (50 mm) size or greater and not more than one fixture having a maximum of 1½ fixture units is

drained into it.
14. The Oatey AAV shall be located 6" (150 mm) above the flood level rim of the fixture being vented where possible, and in case of a single fixture, as high as possible but not less than 4" (100 mm) above the weir of the fixture trap.
15. The Oatey AAV shall be located within the maximum developed length permitted as per Article 7.5.5.3 of the OBC.
16. The Oatey AAV shall be located in an area that is accessible for inspection, service, repair and/or replacement. For the purpose of this authorization, concealment in walls and/or floor spaces without removable grills or access panels is not considered accessible.
17. The Oatey AAV shall not be located in an attic space.
18. The Oatey AAV shall be located within a ventilated space that allows air to

enter the valve.

19. The Oatey AAV shall be rated for the size of the vent to which the valve is connected.
20. Each plumbing system shall have a minimum of one 3" (75 mm) stack which shall be extended outdoors to the open air as per Sentence 7.5.6.2.(2) of the OBC.
21. The Oatey AAV shall not be used for corrosive or acid waste systems, grease and oil interceptors installations or any other special waste systems.
22. The Oatey AAV shall not be used for any closed system such as a sewage ejector, or a manhole located inside the building.
23. The Oatey AAV shall not be located in spaces utilized as supply or return air plenums.
24. When the Oatey AAV is located in an area where freezing conditions may occur protection of the Oatey AAV shall be done in accordance with the manufacturer's installation instructions.
25. The Oatey AAV must be installed as close to true vertical as possible, but not more than 15^{o} off the true vertical.

8. General Conditions

1. The use of the Sure-Vent® and Sure-Vent II® must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the OBC as amended or remade from time to time.
2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.
3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

(a) the failure of the applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

(b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Part 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto on this 28th day of June 2001

BUILDING MATERIALS EVALUATION COMMISSION

per: Rashmi Nathwani, Chairman

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **May 24, 2001**
BMEC REFERENCE **BMEC # 01-06-258**
BMEC APPLICATION **BMEC # A 2001- 09**

DRIANGLE INC.
Architectural Moulding With a Foam Plastic Core

1. Applicant

Driangle Inc.
60 Wildcat Road
North York, Ontario
M3J 2V4

Tel: 416. 663. 4835
Fax: 416. 663. 9414

2. Manufacturing Facilities

Driangle Inc.
60 Wildcat Road
North York, Ontario
M3J 2V4

3. Description

The architectural moulding consists of a foam plastic core surfaced with a protective coating of **Fiberglas** mesh, the Driangle Inc. proprietary basecoat and the Driangle Inc. proprietary topcoat. These architectural mouldings come in various sizes and shapes, which are fastened in place with **Sheetrock 90** adhesive to the interior gypsum board surfaces.

4. Authorization Requested

The applicant sought Authorization for the use of the Driangle Inc. architectural moulding with a foam plastic core, as an equivalent to combustible millwork as permitted by Article 3.1.5.7. of the Ontario Building Code, for use in buildings required to be constructed of noncombustible construction.

5. Assessment

Reports, assessments and information provided by the applicant indicate that if the Driangle Inc. architectural moulding with a foam plastic core is designed, performance tested and installed in accordance with the manufacturer's instructions
and limitations and with the specific terms and conditions stated in this Authorization, the level of performance required by the Ontario Building Code will be provided.

Reports, assessments and information reviewed included the following:

1. ASTM E84, Standard Test Method for Surface Burning Characteristic of Building Materials.

2. ASTM E84, Test results from Underwriters' Laboratories of Canada, Standard Test Method for Surface Burning Characteristic of Building Materials.

3. UL 1715, Fire Test of Interior Finishes Material.

4. UL 1715, Test results from Underwriters' Laboratories of Canada, Fire Test of Interior Finishes Material.

5. BOCA Commentary 803.3.1. and BOCA 2603.9.

6. Video Tape: Driangle, Room Burn, 35456, C1019, 01 February 2001

6. Authorization

The Driangle Inc. architectural moulding with a foam plastic core is authorized subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The architectural foam plastic moulding shall be limited to use as crown mouldings at ceilings and as chair rails on walls in buildings required to be constructed of noncombustible construction by Part 3 of the Ontario Building Code.

2. The architectural foam plastic moulding shall be fastened in place with **Sheetrock 90** adhesive to a gypsum board substrate finished in place. The gypsum board substrate shall be continuous behind the architectural foam plastic moulding.

3. Each moulding shall be surfaced on the exposed side with an application of **Fiberglas** mesh. The surfacing shall be applied as per the applicant's instructions, with the proprietary basecoat and the proprietary topcoat.

4. Individual mouldings may not be longer than 2440 mm. For longer lengths the mouldings are to be connected together with **Fiberglas** mesh tape and the proprietary joint compound. All corners and ends are to be treated with **Fiberglas** mesh and the proprietary joint compound, to maintain a continuous seal.

5. The mouldings shall not constitute more than 10% of the aggregate area of the wall and ceiling areas of a room or space in which they are installed. This area includes the area of doors and other openings in the walls. The trim shall be uniformly distributed throughout the room or space.

6. The mouldings shall be installed in accordance with the Driangle's Inc. installation instructions.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the company specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto 24th day of May 2001

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **May 24, 2001**
BMEC REFERENCE **BMEC # 01-05-257**
BMEC APPLICATION # **BMEC # A 2001-08**

GEORGIA-PACIFIC CANADA, INC.
Horizontal Cavity Shaftwall System

1. Applicant

Georgia-Pacific Canada, Inc.
350 Argyle Street North
Caledonia, ON
N3W 1M2

Tel: 770. 987. 5190 X 207
Fax: 770. 981. 6356

2. Manufacturing Facilities

Georgia-Pacific Canada, Inc.
350 Argyle Street North
Caledonia, ON
N3W 1M2

122 Old Dover Road
Newington, New Hampshire
USA
03801

3. Description

Georgia-Pacific Canada, Inc. horizontal cavity shaft wall system, is gypsum board with steel studs, channels and runners forming an assembly having a 2 hour fire-resistance rating for metal duct enclosures or ceiling membranes.

4. Authorization Requested

The applicant sought authorization for the use of the Georgia-Pacific Canada Inc. horizontal cavity shaft wall system as an assembly having a 2 hour fire-resistance rating for metal duct enclosures or ceiling membranes.

5. Assessment

Reports and assessments provided by the applicant show that if the Georgia-Pacific Canada Inc. horizontal cavity shaft wall system is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this Authorization, the level of performance required by the Ontario Building Code will be provided.

Reports submitted and reviewed include the following:

1. Test Report WH1-495-PSH-0196 & 0197.

2. Installation Instructions.

3. ICBO ES ER No. 2541.

4. ULC Label Program.

5. ITS/WHI Label Program.

6. Authorization

The applicant's design has been tested by an approved and recognized testing and inspecting agency. However, as outlined in Section 2.3. of the Ontario Building Code this type of installation is required to be designed and reviewed by an architect or a professional engineer experienced in the design of the structural or mechanical systems for building listed in Ontario Building Code Sentence 2.3.1.1.(1).

The Georgia-Pacific Canada, Inc. horizontal cavity shaftwall system is authorized for use as an assembly having a 2 hour fire-resistance rating for metal duct enclosures or ceiling membranes subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This system shall be constructed as a non-load bearing assembly. This system shall be supported by construction having a fire-resistance rating of not less than what is required for the horizontal cavity shaftwall system.

2. The maximum span for this system shall be 2.18 m and the maximum of 2 hour fire-resistance rating from either side as determined on the basis of test results with ASTM E-119 and CAN4-S101 by Warnock Hersey International Inc.: File No. WH1-495-PSH-0196 and 0197, Job No., 50611-C7-043170, date tested 5th and 6th January 1993.

3. This horizontal cavity shaftwall system consists of at least 25.4 mm thick Fireguard Shaft Liner ™ (Type X shaftliner) and 12.7 mm Fireguard gypsum board. The liner and panels shall be fitted and fastened with C-T studs, steel runners, drywall screws, anchors, trim and sealant as per manufacturer's recommendations.

4. The manufacturer's detail drawings are contained in the 03/ 97 publication by G-P Gypsum Corporation, **"2-HR. USES FOR HORIZONTAL MEMBRANES"**.

5. Any and all the above data, details and tests shall be made available to any and all parties responsible for the design, detail, construction, installation and inspection of each installation.

B. GENERAL CONDITIONS

1. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

2. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

3 The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 24th day of May, 2001.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **January 25, 2001**
BMEC REFERENCE **BMEC 01-04-256**
BMEC APPLICATION **BMEC #A 2000-24**

CULTURED STONE®

1. Applicant

Cultured Stone
A Division of Owens Corning Inc.
P.O. Box 270
Napa, CA
94559-0270

Tel: 800-255-1727
Fax: 707-255-5572

2. Manufacturing Facilities

Cultured Stone
A Division of Owens Corning Inc.
P.O. Box 270
Napa, CA
94550-0270

3. Description

Cultured Stone® is a manufactured light-weight, noncombustible stone intended for setting in cementitious stucco and providing an alternative finish coat or stone dash in both exterior and interior finish applications.

4. Authorization Requested

The applicant sought authorization for the use of Cultured Stone® as an alternative finish veneer or "dash coat" acceptable under Section 9.28. of the Ontario Building Code.

5. Assessment

Reports reviewed include the following:

1. National Evaluation Service, Report No. NER-358, Reissued May 1, 1996.

2. SPEC -DATA® 2000 and MANU-SPEC® 2000 - Reports of the Construction Specifications Institute.

3. TEI Consulting Engineers - Freeze Thaw Test - Jan. 16, 1989.

4. City of Los Angeles, General Approval - Research Report: RR 23744 - May 1, 1995.

5. Texas Department of Insurance - Product Evaluation Report EC-21 - March 4, 1996.

6. Intertek Testing Services NA Ltd. - Combustibility Testing in accordance with ULC/CAN4 S114-M80 - January 25, 2000.

7. TEI Consulting Engineers - Unit Weight Determination - January 16, 1989.

8. TEI Consulting Engineers - Compressive Strength Test - April 18, 1989.

9. TEI Consulting Engineers - Flexural Strength Test - April 18, 1989.

10. TEI Consulting Engineers - Tensile Strength Test - April 25, 1989.

11. TEI Consulting Engineers - Water Absorption Test(ASTM C-140) - August 6, 1990.

12. TEI Consulting Engineers - Shear Bond Test Between Scratch Coat and Type S Mortar - April 25, 1989.

13. TEI Consulting Engineers - Shear Bond Strength Test Between Cultured Stone and Concrete - April 25, 1989.

14. TEI Consulting Engineers - Shear Bond Test Between Mortar and Metal Lath - April 18, 1989.

15. TEI Consulting Engineers - Transverse Load Test on Cultured Stone Panel - November 8, 1990.

16. TEI Consulting Engineers - Effflorescence Test on Cultured Stone - August 11, 1990.

17. TEI Consulting Engineers - Water Absorption Test - August 30, 1988.

18. GEOSCIENCE LTD - Thermal Conductivity - December 2, 1994.

19. Underwriters Laboratories Inc. Report on Floor Protectors and Wall Shields - File MH11019 - June 24, 1980.

20. Intertek Testing Services NA Ltd. - Water Tightness Test on Cultured Stone Veneer Wall Mock-ups - February 7, 2000.

21. Basic Flashing Procedures.

22. Cultured Stone Manufacturer's Installation Instructions - Owens Corning 2/99 9000

A84E.

21. Tech Data Sheet.

22. Cultured Stone Product Selection Guide.

21. Cultured Stone Design Solutions Book.

6. Authorization

Cultured Stone® is authorized as an alternative finish coat or stone dash under Subsection 9.28.6. of the Ontario Building Code for both exterior and interior finish applications, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This Authorization is valid only for Cultured Stone®, a Division of Owens Corning Inc.

2. When used as an exterior finish coat attached to wood-frame construction, Cultured Stone® may only be installed to a maximum height of 10 m above grade.

3. Cultured Stone® shall not be used below grade and in locations subject to continuous usage under water.

4. Cultured Stone® shall be installed in accordance with the Cultured Stone® Manufacturer's Installation Instructions:

    a) Owens Corning 2/99 9000 A84E,

    b) SPEC-DATA® 2000 # 04720, and

    c) MANU-SPEC® 2000 # 04700.

5. Notwithstanding Condition 4. above:

    a) not less than 2 base coats of stucco shall be applied and the Cultured Stone® shall be applied into the outer base coat layer,

    b) individual Cultured Stones shall not exceed:

        i) 75 mm in thickness, and

ii) 750 mm in its longest dimension.

B. GENERAL CONDITIONS

1. The use of Cultured Stone® must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1a. hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 6. A. above; or

   (b) the occurrence of any of the events described in Sections 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1a. of this Authorization; or,

      (iii) the ownership of the applicant specified in Section 1a. of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 6. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 25th day of January, 2001.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **January 25, 2001**
BMEC REFERENCE **BMEC 01-03-255**
BMEC Application # **# 2000-25**

Shelf and Rack Storage System

1a. Applicant

Auto-Stak Systems (Canada) Inc.
38A Bigwin Road, Unit 7
Hamilton, Ontario
L8W 3R4

Tel: (905) 318-0880
Fax: (905) 575-9859

1b. Manufacturing Facilities

Auto-Stak Systems (Canada) Inc.
38A Bigwin Road, Unit 7
Hamilton, Ontario
L8W 3R4

2. Description

The shelf and rack storage system is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment. Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the Ontario Building Code and are not subject to mezzanine or interconnected floor space rules.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for the AUTO-STAK SYSTEMS (CANADA) INC. Shelf and Rack Storage System.

Use and Occupancy

2.1 Except where more restrictively provided in 11.(c) below, the shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III, and IV commodities as defined in NFPA 231C-1998 as amended, and not for production, manufacturing, assembling /disassembling or ancillary administrative functions.

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time.

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be designed in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) solid construction consisting of steel plate or steel roof decking with a top substrate that forms a serviceable floor area, or

(b) open construction consisting of steel grating or open steel floor planking.

3.4 The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m except that where the maximum height exceeds 18 m but does not exceed 24 m, the following provisions shall apply:

(a) a fire alarm system shall be installed with:

(i) pull stations located at all exit doors including exit doors serving elevated decks and walkways; and

(ii) smoke detectors located, at the ceiling of all rooms and areas containing the shelf and rack system, within exit stair enclosures at the top, and at every third level of elevated deck or walkway; and

(b) the fire alarm system required by (a) above, shall be designed to notify the fire department upon activation; and

(c) the shelf and rack storage system shall be used only for the storage of Classes I, II and III commodities as defined in NFPA 231C-1998 as amended.

3.5 Lighting levels of walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

3.6 Emergency lighting (shall be provided) on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2) and 3.2.7.4.(1) respectively of the Ontario Building Code, as amended or remade from time to time.

3.7 Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1996 and NFPA 231C-1998 as amended or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1996 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;
(b) loss of excess water pressure required to prevent false alarms in a wetpipe system;
(c) loss of air pressure in a dry pipe system;

(d) loss of air pressure in a pressure tank;
(e) a significant change in water level in any water storage container used for fire fighting purposes;
(f) loss of electrical power to any automatically starting electrical fire pump; and,
(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs 4.3 and 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA-72, “Standard for the Installation, Maintenance, and Use of Protective Signaling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the self and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the Commodity Class referenced in A.22. above and the sprinkler design criteria used for each shelf and rack storage system. This sign or signs shall be permanently mounted, at or near the sprinkler control valve.

4.7 A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage system has more than 4 elevated platforms or walkway levels, or the building is more than 14 m (45 ft.) in height.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the Ontario Building Code.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Ontario Building Code as amended, except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than four platform levels, the highest of which may not be more than 12 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m² in area;
(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,
(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m :

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a "time-based egress analysis" undertaken and sealed by a Professional Engineer or Architect as defined in the Ontario Building Code, using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A.16. above) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time $=(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where:
- H_p = Horizontal travel distance on the shelf and rack storage (m)
- V_p = Vertical travel distance on the shelf and rack storage (m)
- H_m = Horizontal travel distance on the main floor (m)
- N_{lg} = Number of lift gates in the means of egress
- N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Ontario Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2) of the Ontario Building Code, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a "positive lock" when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the lift-gate shall be marked in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that it is readily identifiable as part of the egress route.

5.8 Where 'at-level' conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two 'at-level' conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the 'at-level' cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each 'at-level' conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the 'at-level' cross-over and all inserts shall be sized to support loads required in Part 4 of the OBC,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each 'at-level' cross-over, and

(e) stairs approaching 'at-level' conveyor cross-overs shall be marked in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1a. hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 5. A. above; or

(b) the occurrence of any of the events described in Sections 5. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1a. of this Authorization; or,

(iii) the ownership of the applicant specified in Section 1a. of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 5. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 25th day of January, 2001.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **April 26, 2001**
BMEC REFERENCE **BMEC 01-02-254**
BMEC Application **# 2000-22**

ECONO-RACK GROUP LTD.
Shelf and Rack Storage System

1a. Applicant

ECONO-RACK GROUP LTD.
1770 Britannia Road East
Mississauga, Ontario
L4W 1J3

Tel: (905) 670-6660
Fax: (905) 670-6664

1b. Manufacturing Facilities

1770 Britannia Road East
Mississauga, Ontario
L4W 1J3

2. Description

The shelf and rack storage system is a self contained structural system within a building, having one or more elevated platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment. Shelf and rack storage systems are not considered to be mezzanines or interconnected floor spaces as defined by the Ontario Building Code and are not subject to mezzanine or interconnected floor space rules.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code. Reports reviewed by the Commission include:

Reports on Consolidated Authorization (October 17th, 2000 and January 11, 2001) - Larden Muniak Consulting Inc.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1.1 This Authorization is valid only for the ECONO-RACK GROUP LTD. Shelf and Rack Storage System as manufactured and marketed by:

ECONO-RACK STORAGE EQUIPMENT LTD.
1770 Britannia Road East
Mississauga, Ontario
L4W 1J3

PACIFIC WESTEEL RACKING INC
3191 Mainway
Burlington, Ontario
L7M 1A6

ENRACK SYSTEMS INC.
170 Ambassador Drive, Unit 3
Mississauga, Ontario
L5T 2H9

INTERNATIONAL
STORAGE SYSTEMS INC.
6200 Dixie Road, Unit 102
Mississauga, Ontario, L5T 2E1

WAREHOUSE SYSTEMS INC.
871 Edgeley Blvd.
Concord, Ontario
L4K 3Y2

ALLTYPE STORAGE SYSTEMS INC
349 Arvin Ave.
Stoney Creek, Ontario
L8E 2M6

GLOBAL STORAGE SYSTEMS INC.
S3231 Lakeshore Road
Blasdell, New York
142219

LOGIX CONVEYOR & PALLETIZING SYSTEMS INC.
2295 Dunwin Drive
Mississauga Ontario
L5L 3S4

1.2 This Authorization is the successor of:

BMEC Authorization # 95-08-193 held by PACIFIC WESTEEL RACKING INC.;
BMEC Authorization # 90-08-136 held by PACIFIC WESTEEL RACKING INC.;
BMEC Authorization # 96-03-202 held by ALTYPE METAL STAMPINGS LTD.
BMEC Authorization # 90-02-130 held by ALTYPE METAL STAMPINGS LTD.
BMEC Authorization # 95-02-187 held by enRACK SYSTEMS INC.
BMEC Authorization # 90-08-139 held by enRACK SYSTEMS INC.
BMEC Authorization # 95-02-187 held by INTERNATIONAL STORAGE SYSTEMS INC.
BMEC Authorization # 99-10-238 held by ECONO-RACK STORAGE EQUIPMENT LTD.;

Use and Occupancy

2.1 Except where more restrictively provided in paragraph A 3.4 below, the shelf and rack storage system shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III, and IV commodities as defined in NFPA 13-1999, and not for production, manufacturing, assembling / disassembling or ancillary administrative functions.

2.2 The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

2.3 The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time.

General

3.1 The structural components of the entire shelf and rack storage system, including posts, beams, decks, walkways, connections and their supports such as concrete slabs, separate foundations or similar, shall be designed in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

3.2 The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

3.3 Platform and walkway levels shall be of:

(a) solid construction consisting of steel plate or steel roof decking with a top substrate that forms a serviceable floor area, or

(b) open construction consisting of steel grating or open steel floor planking.

3.4 The maximum height of the shelf and rack storage system from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m except that where the maximum height exceeds 18 m but does not exceed 24 m, the following provisions shall apply:

(a) a fire alarm system shall be installed with:

(i) pull stations located at all exit doors including exit doors serving elevated decks and walkways; and

(ii) smoke detectors located, at the ceiling of all rooms and areas containing the shelf and rack system, within exit stair enclosures at the top, and at every third level of elevated deck or walkway; and

(b) the fire alarm system required by (a) above, shall be designed to notify the fire department upon activation; and

(c) the shelf and rack storage system shall be used only for the storage of Classes I, II and III commodities as defined in NFPA 13-1999 as amended.

3.5 Lighting levels of walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

3.6 Emergency lighting on walkways, platforms, unenclosed egress stairs and exits providing means of egress, shall be provided to not less than the level and duration of illumination prescribed in Sentences 3.2.7.3.(2) and 3.2.7.4.(1) respectively of the Ontario Building Code, as amended or remade from time to time.

3.7 Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

Fire Safety

4.1 An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility system including the top level and shall be in conformance with NFPA 13-1999 or the appropriate NFPA Standard for the most severe hazard to which the storage system is exposed. This shall include sprinkler protection under all platforms and walkways.

4.2 Except where the platforms or walkways are of open construction, any openings for egress stairs shall be protected by non-combustible draft stops as specified in NFPA 13-1999 (minimum 450 mm below the floors above).

4.3 The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system, to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;
(b) loss of excess water pressure required to prevent false alarms in a wet pipe system;
(c) loss of air pressure in a dry pipe system;
(d) loss of air pressure in a pressure tank;
(e) a significant change in water level in any water storage container used for fire fighting purposes;
(f) loss of electrical power to any automatically starting electrical fire pump; and,
(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

4.4 The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

4.5 The notification to the person controlling the building and the fire department referred to in paragraphs A 4.3 and A 4.4 above, shall be provided by way of:

(a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signalling Systems for Central Station Service", as amended;

(b) a proprietary control centre conforming to Chapter 4 of NFPA-72, “Standard for the Installation, Maintenance, and Use of Protective Signalling Systems”, as amended;

(c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

(d) if the above mentioned facilities are not available in the municipality in which the self and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

4.6 A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe: a) the Commodity Class applicable and as referenced in paragraph A 2.1 or clause c) of paragraph 3.4 above, and b) the sprinkler design criteria used for each shelf and rack storage system. This sign or signs shall be permanently mounted at or near the sprinkler control valve.

4.7 A hose connection system shall be installed in accordance with Chapter 5-15.5 of NFPA 13 - 1999.

4.8 Where an enclosed exit stair is required, the standpipe and hose system shall be located not more than 5 m from the enclosed exit and installed in accordance with the Ontario Building Code.

4.9 Every platform or walkway level of the shelf and rack storage system shall be provided with fire extinguishers, installed in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time.

Exits

5.1 Each walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Ontario Building Code as amended, except as follows:

(a) access to exit may be provided from an elevated platform level by means of open unenclosed stairs for shelf and rack storage systems comprising not more than four platform levels, the highest of which may not be more than 12 m above the main floor; and,

(b) any single platform or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform or walkway does not exceed 200 m² in area;
(ii) travel distance on the platform or walkway to the level below, including the travel distance along the single unenclosed egress stair, does not exceed 25 m; and,
(iii) the platform or walkway below is provided with two separate egress stairs or exits.

5.2 The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs, shall not exceed 45 m. The maximum travel distance on an elevated platform to an enclosed exit serving that platform shall not exceed 45 m.

5.3 The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if this travel distance exceeds 45 m :

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a “time-based egress analysis” undertaken and sealed by a Professional Engineer or Architect as defined in the Ontario Building Code, using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A 5.6 below) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time

(b) the Total Egress Time shall be calculated using the following formula;

$$\textit{Total Egress Time} = (H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5 \textit{ (in seconds)}$$

where:

H_p = Horizontal travel distance on the shelf and rack storage (m)
V_p = Vertical travel distance on the shelf and rack storage (m)
H_m = Horizontal travel distance on the main floor (m)
N_{lg} = Number of lift gates in the means of egress
N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Ontario Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

5.4 Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated platform or walkway shall not exceed 9 m where the platform or walkway is required to be provided with at least 2 egress facilities.

5.5 Aisles serving the shelf and rack storage system shall have clear-aisle widths of not less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within the aisle or walkway.

5.6 Where exits are provided to comply with Sentence 3.4.2.5.(2) of the Ontario Building Code, main aisles serving the shelf and rack storage system on the ground floor (leading from egress stairs directly to an exit) shall be clearly demarcated and have a minimum unobstructed, clear-aisle width of 2.4 m.

5.7 Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a "positive lock" when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the lift-gate shall be marked in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that it is readily identifiable as part of the egress route.

5.8 Where 'at-level' conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two 'at-level' conveyor cross-overs may be within a single egress route,

(b) handrails spaced not more than 1 m apart and parallel to the direction of egress shall be provided on both sides of the 'at-level' cross-over,

(c) flat, metal inserts shall be placed between each roller over the required egress width at each 'at-level' conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails serving the 'at-level' cross-over and all inserts shall be sized to support loads required in Part 4 of the OBC,

(d) a clearly identified and easily accessible switch that will stop the conveyor shall be located at each 'at-level' cross-over, and

(e) stairs approaching 'at-level' conveyor cross-overs shall be marked in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that they are readily identifiable as part of the egress route.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1a. hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 5. A. above; or

(b) the occurrence of any of the events described in Sections 5. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1a. of this Authorization; or,

(iii) the ownership of the Applicant specified in Section 1a. or of the companies specified in Section 5 A 1.1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 5. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 26th day of April, 2001.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
www.obc.mah.gov.on.ca

Date of Authorization	January 25, 2001
BMEC Authorization	BMEC # 01-01-253
Bmec Application	# A2000-20
Date of Amendment	August 26, 2004
BMEC Application	#A2004-06

* denotes August 26, 2004 new or amended term
** denotes July 28, 2005 revisions

AUTHORIZATION REPORT- Equalizer® 36 Chamber System

1. Applicant

Infiltrator Systems Inc.
4 Business Park Road
P.O. Box 768
Old Saybrook
CT 06475 USA

Tel: (860) 388-6639
Fax: (860) 388-6810
http://www.infiltratorsystems.com

2. Manufacturing Facilities

Infiltrator Systems Inc.
1315 Enterprise Dr.
Winchester, KY 40391 USA

1750 West 2450 South
Ogden, UT 84401 USA

3. Description

Infiltrator Equalizer® 36 Chambers are intended for use in a sewage system in lieu of absorption trenches constructed of stone and distribution pipe.

* The Infiltrator Equalizer® 36 Chambers are formed from injection molded polyolefin and connected end to end using a built-in latch. Chambers have a minimum bottom width of 570 mm and a minimum height of 320 mm. The louvered sidewalls have a minimum area of 0.65 m^2/m of length. The Equalizer® 36 Chamber is available in two length sizes: 2.54 m (8.33 ft), and 1.22 m (4 ft) with the latter referred to as the Quick 4 Equalizer® 36, and for the purposes of this Authorization both chamber lengths are referred to as the "Infiltrator Equalizer® 36 Chamber". The Equalizer® 36 Chambers are closed at the ends of a trench with snap-on end plates.

4. Authorization requested

The applicant sought authorization for use of the Equalizer® 36 Chamber System as an alternative to the construction of absorption trenches as required by Section 8.7 of the Building Code. The applicant requested that the Equalizer® 36 Chamber System be used to replace stone and distribution pipe in absorption trenches and filter beds that are:

i) gravity fed,
ii) "dosed" (non-pressurized distribution system), and
iii) pressurized.

Note: For the purposes of this authorization, "dosed" means a system in which effluent is pumped to the leaching bed either by pump or siphon, but the effluent is not pressurized within the leaching bed.

5. Assessment

Reports and assessments provided by the applicant show that if Infiltrator Equalizer® 36 Chambers are designed, performance tested, installed and maintained in accordance with the limitations in the manufacturer's instructions and the conditions stated in this authorization, a level of performance will be provided as required by the Building Code, for absorption trenches in soil, in leaching bed fill or in a filter bed, whether gravity fed, pressurized or "dosed".

Reports submitted and reviewed:

1. Infiltrator Systems Inc. - Environmental Onsite Wastewater Solutions (Promotional Brochure).

2. Final Report: Infiltrator Florida Side-by-Side Test Site - Nodarse & Associates (Geotechnical, Environmental Geotechnics & Material Engineers) - November 3, 1997.

3. Septic Installation Instructions For Equalizer® 36 Chambers.

4. Equalizer® 36 Detail Sheet.

5. Infiltrator Systems Inc. Aggregate-Free Chamber Systems Performance Research Summary - June 8, 2000.

6. The Longevity of Onsite Systems in Maine (Donald C. Hoxie and Stephen P. Dix) - Proceedings of the 2000 NOWRA Conference.

7. Request to Revise Application - November 16, 2000.

* 8. "Footprint Comparison Between Proposed Infiltrator Equalizer 36 Chamber and Conventional Leaching Bed in Ontario", Ontario Rural Wastewater Centre, March 2004.

* 9. Certificate of Registration, ISO 9001-2000, issued March 16, 2004.

* 10. Infiltrator Systems Inc, "Septic System Installation Instructions"

* 11. Excerpt from the EPA Onsite Wastewater Treatment System Manual.

6. Authorization

The use of the Infiltrator Equalizer® 36 Chamber System is authorized in sewage systems within the scope of Part 8 of the Building Code, as an alternative to stone and distribution pipes in absorption trenches and in filter beds, when installed in accordance with the manufacturer's recommendations and the Specific Terms and Conditions of this Authorization.

A. Specific Terms & Conditions

* 1. Except as permitted by Condition 2. below, when the Infiltrator Equalizer® 36 Chamber System is installed in lieu of distribution piping and stone, the length of the chamber system shall satisfy the requirements of Article 8.7.3.1. of the Building Code.

* 2. Except as provided by Condition 2.(a) below, when the Infiltrator Equalizer® 36 Chamber System is installed in lieu of distribution piping and stone in an absorption type trench leaching bed, the length of the chamber specified in Sentence 8.7.3.1.(2) of the Building Code, is permitted to be reduced such that it is calculated based on the formlua L = QT/300, where

L the total length of the Infiltrator Equalizer® 36 Chamber
Q the total daily design sanitary sewage flow
T the design percolation time

(a) A reduction to the chamber length is not permitted when,

(i) installed in soils with a percolation time of 6 min/cm or less,

(ii) combined with any other reduction, or

(iii) the width of the chamber bottom is less than 500 mm (20").

3. When the Infiltrator Equalizer® 36 Chamber System is installed in lieu of distribution piping and stone, the leaching beds must satisfy the general construction requirements specified in Articles 8.7.2.1., 8.7.4.2. and 8.7.5.3.

4. The minimum clearance distances required by Article 8.2.1.6. for distribution piping shall be met by the Infiltrator Equalizer® 36 Chamber System.

5. When installed in lieu of absorption trenches, the trenches for the Infiltrator Equalizer® 36 Chamber System shall be:

   a) approximately the same length and not more than 30 m in length,
   b) at least 600 mm and not more than 900 mm in depth,
** c) except as provided by 5.f, centred at least 1600 mm apart,
   d) at least 900 mm at all points on the bottom of the trench, above the high ground water table, rock or soil with a percolation time greater than 50 minutes, and
   e) backfilled, after installation of the Infiltrator Equalizer® 36 Chamber System, with leaching bed fill, so as to ensure that after the leaching bed fill settles, the surface of the leaching bed will not form any depressions.
* f) centred at least 2400 mm apart when the Infiltrator Equalizer® 36 Chamber is installed as an in-ground system at a reduced length, as it is permitted by Condition 2. of this Authorization.

6. When installed in lieu of distribution piping and stone in filter beds, the lines of Infiltrator Equalizer® 36 Chambers shall be evenly spaced over the surface of the filter medium to which the sewage effluent is applied, and the filter bed shall meet the following requirements:

   a) the filter medium shall have a minimum depth of 750 mm below the bottom of the Equalizer® 36 Chambers and shall be clean sand comprised of particles ranging in size between the limits of:

      i) an effective size of .25 mm with a uniformity coefficient not less than 3.5,
      ii) an effective size of 2.5 mm with a uniformity coefficient not greater than 1.5, and
      iii) having a uniformity coefficient not greater than 4.5.

   b) the surface of the filter bed shall be at least 900 mm above the high ground water table, rock or soil with a percolation time greater than 50 minutes.

   c) the other construction requirements of Sentences 8.7.5.3.(1) and (4) - (6).

7. When used in gravity fed conditions, the Infiltrator Equalizer® 36 Chamber System shall be installed in compliance with all the above-stated Specific Terms and Conditions and be:

   a) installed level over the length of the trench,

   b) securely connected, chamber to chamber, using the built-in latch,

   c) free of structural damage and used full length (not cut),

   d) equipped with end caps installed on both ends, and

   e) equipped with a built-in splash plate at the inlet end of each chamber line, to prevent soil scouring.

** 8. Where the sewage effluent is "dosed" to the leaching bed by pumps or a siphon to meet the requirements of 8.6.1.3.(1) (total trench length of 150 m or more), the Infiltrator Equalizer® 36 Chambers shall be installed to comply with all the above-stated Specific Terms and Conditions and:

   a) the effluent is pumped to a header line or distribution box prior to entering the chambers,

   b) a volume of effluent within the range of 3.5 - 8.0 litres per metre of Infiltrator Equalizer® 36 Chamber, must be pumped within a time period not exceeding 15 minutes, to meet the requirements of Sentence 8.6.1.3.(4)., and

** c) when the length of the Infiltrator Equalizer® 36 Chamber is reduced, as permitted by Condition 2. of this Authorization, the distribution pipe shall be installed in the chamber, according to the manufacturer's recommendations, and extended the total length of the trench.

9. Where the sewage effluent is distributed through a pressurized system, the Infiltrator Equalizer® 36 Chambers shall be installed:

   a) to comply with Specific Terms and Conditions numbers 1. through 6. above, and,

   b) with a minimum 1½ inch diameter pipe extending over the entire length of each trench, and such pipe:

      i) being specified by the manufacturer as acceptable for pressurized installations,

ii) having minimum 6 mm diameter orifices, spaced over its length to ensure even distribution of effluent,
iii) being supported in a manner as to ensure self-draining and prevent freezing of its contents,
iii) having clean-outs installed at the downstream end of each chamber line, to allow the system to be serviced, and
iv) receiving effluent from a treatment unit equipped with an effluent filter on the outlet, such effluent filter to be installed and sized in accordance with the manufacturer's recommendations.

B. General Conditions

1. The use of the Infiltrator Equalizer® 36 Chambers must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Building as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or
(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Building Code provision relevant to this Authorization has been amended or remade.

As Amended at Toronto this 26th day of August 2004.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **NOVEMBER 30, 2000**
BMEC AUTHORIZATION **BMEC # 00-12-252**
BMEC APPLICATION **# A2000-21**

RIKOS Ltd.

RIKOS non-destructive pipe restoration Process

1. Applicant

RIKOS Ltd.
5418 Yonge Street,
Suite 120
Toronto, Ont.
M2N 6X4

Tel: (416) 410-3815
Fax: (416) 223-1566

2. Manufacturing Facilities

RIKOS Ltd.
5418 Yonge Street,
Suite 120
Toronto, Ontario
M2N 6X4

3. Description

The RIKOS® non-destructive pipe restoration Process is intended for the rehabilitation of metallic potable water pipes. The RIKOS® non-destructive pipe restoration Process repairs pipes one-half inch in diameter to four inches in diameter. The RIKOS® non-destructive pipe restoration Process using existing access points along the water line riser, cleans the pipes with air pressure and sand. After removing the abrasive from the cleaned pipes, air pressure is used to test the lines for leaks and a fibrescope is employed to visually examine the cleaned surfaces. Air pressure is again employed to apply a non-toxic, two-component epoxy resin. Upon completion, the performance level of the restored pipe is not less than that which existed prior to the RIKOS® non-destructive pipe restoration Process.

4. Authorization requested

The applicant seeks a Building Materials Evaluation Commission (BMEC) authorization for the RIKOS® non-destructive pipe restoration Process as an alternative to repairing metal water pipes in existing buildings, as required by Article 7.1.2.2. - Alteration or Repair, and Section 7.2. - Materials and Equipment of Ontario Regulation 403/97, as amended or remade from time to time (the Ontario Building Code).

5. Assessment

Reports and assessments provided by the applicant show that if the RIKOS® non-destructive pipe restoration Process is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this authorization, the level of performance required by the Ontario Building Code will be provided.

Reports submitted and reviewed:

1. Installation procedure including the Equipment List and Material Safety Data Sheet - RIKOS® Installation Manual (Revised 20/11/00)

2. Outline of the RIKOS® Training Program

3. Usage and limitation of the RIKOS® non-destructive pipe restoration Process

4. The RIKOS® Quality Assurance Manual and Checklist (Revised 20/11/00)

5. "Report on epoxy usage in drinking water system components"

6. The RIKOS® Service Agreement Warranty dated November 21, 2000.

6. Authorization

Use of the RIKOS® non-destructive pipe restoration Process is authorized as an alternative to traditional metal water pipe repair and/or replacement, subject to the following:

A. Specific Terms & Conditions

1) Only manufacturer trained and approved installation personnel shall perform the RIKOS® non-destructive pipe restoration Process according to the Material Safety Data Sheets supplied, the RIKOS® Installation Manual and the RIKOS® Quality Assurance Manual and Procedures.

2) The manufacturer shall provide field training to all installers and such training will be delivered by an experienced technician approved by RIKOS® and in accordance with the RIKOS® Training Manual.

3) The RIKOS® non-destructive pipe restoration Process shall only be used on pipe of ½ inch to 4 inches in diameter and in single pipe segments from ten to one thousand feet in length.

4) The RIKOS® non-destructive pipe restoration Process shall not be used in fire protection systems such as standpipe and sprinkler systems.

5) The non-toxic, two-component epoxy resin shall meet the ANSI / NSF-61-2000 standard as determined by a Standards Council of Canada accredited laboratory, and be an epoxy that is appropriate to the application and applied in accordance with the manufacturer instructions.

   (i) The thickness of the epoxy coating shall be determined by the epoxy manufacturer process instructions. The reduction in pipe diameter from the coating should be considered minimal and not essential for the flows in the pipes.

(ii) The curing process shall be supervised at all times by RIKOS personnel in accordance with the instructions of the epoxy manufacturer.

(iii) All materials and including the two-component epoxy resin equipment used in the RIKOS non-destructive pipe restoration Process, shall be supplied by RIKOS® and shall be handled in accordance with the manufacturer's specifications.

6) Trained and authorized RIKOS® personnel in accordance with the RIKOS® Instruction Manual shall, upon completion of the work or segment of the work, perform a Fiberscopic Inspection to ensure the continuity and integrity of the applied lining.

7) The RIKOS® non-destructive pipe restoration Process shall include an installation guarantee as provided for in the RIKOS® Service Agreement Warranty.

8) Non-removable stickers or labels recording the following information shall be applied to each riser treated;

(i) a *name and telephone* label - identifying RIKOS as having treated the pipe and including the phone number to call for information,

(ii) a *warning* - that the pipe has been coated with an epoxy resin, and

(iii) a *warning* - not to torch, not to solder and to use pressure fittings only

B. General Conditions

1. The use of the RIKOS® non-destructive pipe restoration Process must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1a. hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 5. A. above; or

(b) the occurrence of any of the events described in Sections 5. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1a. of this Authorization; or,

(iii) the ownership of the applicant specified in Section 1a. of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 5. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 30th day of November, 2000.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **SEPTEMBER 28TH, 2000**
BMEC REFERENCE **BMEC 00-11-251**
BMEC APPLICATION **# A 2000-16**

MAINLINE FULLPORT BACKWATER VALVE
(MAINLINE BACKFLOW PRODUCTS INC.)

1. Applicant

MAINLINE BACKFLOW
PRODUCTS INC.
12530-128 Street,
Edmonton, Alberta
T5L 1C9

Tel: (780) 413-7204
Fax: (780) 457-1210

2. Manufacturing Facilities

MAINLINE BACKFLOW
PRODUCTS INC.
12530-128 Street,
Edmonton, Alberta
T5L 1C9

3. Description

The Mainline Fullport Backwater Valve is a wastewater valve designed to operate in the normally open position, allowing therefore, unobstructed sewage flow and venting of the plumbing system. Under backflow conditions the valve closes to protect the building from sewer backup.

4. Authorization Requested

The applicant sought authorization for the use of the MAINLINE FULLPORT BACKWATER VALVE in the building drain.

5. Assessment

Reports reviewed include the following:

1. "MAINLINE PROTECTION - The Ultimate Backflow Protection" - description of the Mainline Backwater Valve.

2. Special Change to NPC 95, Article 4.6.4., adopted in October, 1998.

3. Canadian Standards Association (CSA) Certificate of Compliance # LM 109421-1, certifying the MAINLINE FULLPORT BACKWATER VALVE to comply with CSA Standard CAN/CSA-B181.1-M90 - ABS Drain, Waste and Vent Pipe and Pipe Fittings.

4. Numerous letters from Provincial and municipal jurisdictions endorsing the MAINLINE FULLPORT BACKWATER VALVE system in the building drain.

5. The MAINLINE FULLPORT BACKWATER VALVE "INSTALLATION" and "BUILDING OWNER MAINTENANCE" Instructions (2 pages).

6. Authorization

The MAINLINE FULLPORT BACKWATER VALVE is authorized for use in a building drain subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This Authorization is valid only for the MAINLINE FULLPORT BACKWATER VALVE manufactured in compliance with Canadian Standards Association (CSA) Certificate of Compliance # LM 109421-1.

2. The MAINLINE FULLPORT BACKWATER VALVE shall be installed according to the manufacturer's installation instructions, which requires, among other things, that all valves (in new or retrofit applications) be installed on a minimum 2% grade.

3. Each MAINLINE FULLPORT BACKWATER VALVE shall serve not more than one dwelling unit or occupancy in a building.

4. The Applicant named in Part 1 of this Authorization shall provide a copy of the MAINLINE FULLPORT BACKWATER VALVE "INSTALLATION" and "BUILDING OWNER MAINTENANCE" instructions with each valve sold, in addition to the Installation and Maintenance Instructions injected on the top of every valve.

5. This Authorization is valid only for MAINLINE FULLPORT BACKWATER VALVE installations in buildings constructed under Part 9 of the Ontario Building Code.

B. GENERAL CONDITIONS

1. The use of the MAINLINE FULLPORT BACKWATER VALVE must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   (b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Part 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 28th day of September, 2000.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **September 28, 2000**
BMEC REFERENCE **BMEC 00-10-250**
BMEC APPLICATION **# A 2000-17**

DASHWOOD INDUSTRIES LTD
Siteline (S-700 or Silensia) Patio Door with sealed dual pane 3mm glass

1. Applicant

Dashwood Industries Ltd
Highway # 4
Centralia, ON
N0M 1K0

Tel: (519) 228-2055
Fax: (519) 228-2091

2. Manufacturing Facilities

Dashwood Industries Ltd.
Highway # 4
Centralia, ON
N0M 1K0

3. Description

The applicant manufactures patio doors with glass composed of a sealed unit of 3 mm tempered glass + air space + 3 mm tempered glass and having an overall thickness of 23 mm and a maximum area of 1.98 m^2. The 3 mm sealed, dual pane patio door glass is used in a line of sliding doors referred to as Siteline, S-700 and/or Silensia.

4. Authorization Requested

The applicant sought authorization from the BMEC recognizing that the use of 3mm dual pane patio door glass in a line of sliding patio doors referred to as Siteline, S-700 and/or Silensia, provided an equivalent (or better) level of performance (structural strength) as required by Table 9.6.6.1. of the Ontario Building Code.

5. Assessment

Reports and assessments provided by the applicant demonstrate that the Siteline, S-700 and/or Silensia patio doors with sealed units of 3 mm tempered glass, equal or exceed the requirements of the CAN/CGSB 12.20-M, “Structural Design of Glass for Buildings” and other significant door properties.

Reports and Assessments reviewed included the following:

1. AIR-INS inc. - Report A1-01192-A of 10/01/96

2. Performance Test Data for PH Tech Patio Door system.

3. Letter dated June 26th, 2000 from Gary Burrows, P. Eng. certifying to the correctness of the submitted documents.

4. Sample Quality Manual from supplier Trulite Industries.

5. Supplemental Report from AIR-INS inc. dated September 7, 2000.

6. Authorization

The use of Dashwood Industries Ltd. 3mm dual pane patio door glass in a line of sliding doors referred to as Siteline, S-700 and/or Silensia is authorized as providing a level of performance that is equivalent to that required by Sentence 4.3.6.1.(1) of the OBC, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. Use of the Dashwood Industries Ltd. 3 mm, dual pane patio door glass must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. This Authorization is valid only for the Dashwood Industries Ltd. Siteline, S-700 and/or Silensia patio door models having maximum glass areas of 1.98 m^2.

B. GENERAL CONDITIONS

1. The Applicant named in Section 1. hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 6. A. above; or

(b) the occurrence of any of the events described in Sections 6. B. 2. (a) and (b) (ii) below.

2. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant or manufacturer specified in Sections 1. or 2. respectively of this Authorization; or,

(iii) the ownership of the applicant specified in Section 1. of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 28th day of September , 2000.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **OCTOBER 26, 2000**
BMEC REFERENCE **BMEC 00-09-249**
BMEC APPLICATION **# A 2000-06**

DASHWOOD® an Andersen® company
Andersen SKS Skylights with Fiberglass Sash & Condensate Channel

1. Applicant

Dashwood Industries Ltd
Highway # 4
Centralia, ON
N0M 1K0

Tel: (519) 228-2067
Fax: (519) 228-2089

2. Manufacturing Facilities

Dashwood Industries Ltd.
Highway # 4
Centralia, ON
N0M 1K0

3. Description

The DASHWOOD® an Andersen® company SKS skylight models SKS 1638, SKS 1646, SKS 2427, SKS 2438, SKS 2446, SKS 2457, SKS 2472, SKS 2838, SKS 2846, SKS 2857, SKS 2872 and SKS 4446, are fabricated with a pultruded fibreglass-reinforced plastic composite sash attached to a wood frame. Drainage of water condensate is to a condensation channel where the water is held until it evaporates due to convection currents in the living space.

4. Authorization Requested

The applicant sought authorization for the use of DASHWOOD® an Andersen® company fiberglass skylight models SKS 1638, SKS 1646, SKS 2427, SKS 2438, SKS 2446, SKS 2457, SKS 2472, SKS 2838, SKS 2846, SKS 2857, SKS 2872 and SKS 4446, available in high performance (HP) tempered glass, HP tempered laminated glass, HP tempered with Sun2 coating and HP tempered laminated glass with Sun2 coating.

5. Assessment

Reports and Assessments reviewed included the following:

1. Letter from Mr. Gary Burrows, P.Eng, dated February 8, 2000.
2. Drawings
3. Specifications for Fiberglass Lineals
4. "Benefits of Fiberglass" dated January 2, 2000.
5. NWWDA Structural Test Reports rendered to Andersen Corporation dated September 9, 1998.
6. Thermal and Condensation Test Reports dated June 23, 1998.
7. Thermal and Condensation Test Reports (Skylight) dated August 31, 1999.
8. Solar Heat Gain Coefficient Test Reports dated June 23, 1998.
9. Site Installation Manuals - revised August 13, 1998.
10. Quality System Documents.
11. Anderson Roof Window Catalogue
12. Evaporation Calculations - Engineering Report No. ARC-CP02 prepared by Aspen Research Corporation dated June 22, 2000 and revised July 28, 2000.
13. AAMA 310 - 97 "Voluntary Specification for Reinforced Thermoplastic Fenestration Exterior Profile Extrusions" (Pg 1-10).
14. AAMA 1600 - 90 "Voluntary Specification for Skylights" (Pg 1- 6).
15. NWDMA I.S 7 - 87 "Industry Standard - Skylight / Roof windows" (8 pgs).
16. Letter and attachments of October 23, 2000 from Mark Mikkelson, Codes/Regulatory, Andersen Corporation, Bayport, Minnesota.

6. Authorization

The DASHWOOD® an Andersen® company SKS skylight models described above are authorized as providing a level of performance equivalent to that which would be achieved by conformance with Article 9.7.7.1. of the OBC, when designed, manufactured, installed and maintained in accordance with the manufacturer's recommendations and the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This Authorization is valid only for the DASHWOOD® an Andersen® company SKS skylight models described in Section 3. above**.**

B. GENERAL CONDITIONS

1. The use of the DASHWOOD® an Andersen® company SKS skylight models listed herein must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1. hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 6. A. above; or

   (b) the occurrence of any of the events described in Sections 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 26th day of October, 2000.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **MAY 25TH, 2000**
BMEC REFERENCE **BMEC #00-08-248**
BMEC APPLICATION **#A2000-05**

DATE OF AMENDMENT **July 25, 2002**

*** denotes amended clause July 25, 2002**

EZ-Deck® Flooring System

1. Applicant

* Imperial Building Products
2305 8th Street
Nisku, Alberta
T9E 7Z3

Tel: (780) 955-7374
Fax: (780) 955-7170

2. Manufacturing Facilities

* Imperial Building Products
2305 8th Street
Nisku, Alberta
T9E 7Z3

3. Description

The EZ-Deck® flooring system is a glass fiber, thermosetting polyester composite material that is factory formed into prefinished flooring and trim components for exterior applications as an alternative to a combustible flooring system.

4. Authorization Requested

The applicant sought authorization for the use of the EZ-Deck ® flooring system, an innovative pultruded flooring material for exterior applications.

5. Assessment

Reports and Assessments reviewed included the following:

1. Installation Guide, Rev. 3.00 10/97.

2. Research Report No. 95-38, BOCA Evaluation Services, Inc.

3. Alberta Research Council Proposal # 685-96-24. Evaluation of Composite Decking Materials PL96-7, dated April 1996. APA Test Method S-2.

4. Alberta Research Council Proposal # 685-96-24. Evaluation of Composite Decking Materials PL96-7, Addendum, dated August 30, 1996. APA Test Method S-2.

5. Alberta Research Council Proposal # 685-96-36, File # PL96-17, Wind Lift Evaluation of Composite Decking Materials, dated April 17, 1996.

6. Alberta Research Council Report # PL94-63, Flexural Testing of FRP Decking Profile According to ASTM D790, dated September 12, 1994.

7. Alberta Research Council Reference No. PL96-7, dated May 24, 1996.

8. Inchcape Testing Services Warnock Hersey. Report No. 7305, dated April 1996, which includes testing of the E-ZDeck material in accordance with ASTM E84-90.

9. Inchcape Testing Services Warnock Hersey. Report No. 7305B, dated April 1996, which includes testing of the E-ZDeck material in accordance with ASTM D635 and D1929.

10. Inchcape Testing Services Warnock Hersey. Report No. 484-9264, dated May 3, 1996, which includes testing of the E-ZDeck material in accordance with ASTM D3679-91 and 1000 hours of QUV weathering in accordance with ASTM G53.

11. Alberta Research Council Reference No. PL96-16, dated April9, 1996, which includes testing of the E-ZDeck material in accordance with ASTM D256 and E831.

12. Alberta Research Council Addendum to report issued April 9, 1996 and September 16, 1996.

13. Alberta Research Council Reference No. PL96-34, dated July 16, 1996, which includes testing of Pressure treated Pine and Douglas Fir solid sawn lumber in accordance with ASTM D256.

14. Alberta Research Council Reference No. PL96-34, dated June 27, 1996, which includes testing of Pressure treated Pine and Douglas Fir solid sawn lumber in accordance with ASTM D256.

15. Alberta Research Council Reference No. PL96-22, dated May 24, 1996, which tested the E-ZDeck composite deck rail system in accordance with Paragraph 1710.3.1. of the BOCA National Code.

16. Pultronex Corporation, Quality Policy Manual for the Quality System used at 2305 - 8th Street, Nisku, Alberta, dated October 11, 1996 and signed by representatives of Pultronex Corporation and the third-party inspection agency, Inchcape Testing Services.

6. Authorization

The EZ-Deck® flooring system is authorized for use as an exterior floor deck subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of the EZ-Deck® flooring system must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. This Authorization is valid only for the Pultronex Corporation EZ-Deck® flooring system and does not include the guard/railing system.

4. This authorization is valid only for EZ-Deck® flooring system applications in buildings constructed under Part 9 of the Ontario Building Code.

5. The EZ-Deck® flooring system shall have a maximum span of 610 mm (24") between the subfloor joists that support it.

6. Quality control shall be maintained in accordance with the Quality Policy Manual dated October 11, 1996 for the Quality System used at 2305 - 8th Street, Nisku, Alberta and audited by a third-party accredited quality control agency.

B. GENERAL CONDITIONS

1. The Applicant named in Section 1a. hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 5. A. above; or

   (b) the occurrence of any of the events described in Sections 5. B. 2. (a) and (b) (ii) below.

2. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1a. of this Authorization; or,

      (iii) the ownership of the applicant specified in Section 1a. of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ.

   (c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 5. A. above; or

   (d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 25th day of May, 2000.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **April 27, 2000**
BMEC REFERENCE **BMEC 00-07-247**
BMEC Application **# 2000-10**

CRISPLANT INC.
Material Handling Platform System

1a. Applicant

CRISPLANT INC.,
7495 New Technology Way
Frederick MD, USA
21703-9401

Tel: (301) 624-1874
Fax: (301) 662-0449

1b. Manufacturing Facilities

CRISPLANT INC.,
7495 New Technology Way
Frederick MD, USA
21703-9401

2. Description

The shelf and rack storage ('pick' module) system is a self contained structural facility within a building, having one or more solid intermediate platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural facility for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. This Authorization is valid only for Crisplant Inc. Material Handling Platform Systems.

4. Deck and walkway levels shall be constructed of:

   (a) solid steel plate;
   (b) steel roof decking with a top substrate that forms a serviceable floor area;
   (c) open steel grating; or
   (d) open steel floor planking.

5. The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

6. The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

7. An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility including the top level and shall be in conformance with NFPA 13-1994 and NFPA 231C-1995 as amended or the appropriate NFPA Standard for the most severe hazard to which the storage facility is exposed. Additionally, sprinkler protection shall be provided under decks and walkways.

8. Except where the deck is of open steel grating, any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles (minimum 450 mm below the floors above) and close spaced sprinklers as per paragraph A.7. above.

9. A sprinkler system located in a cold storage or freezer environment shall be designed to address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

10. The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building for each of the following:

    (a) movement of a control valve handle;
    (b) loss of excess water pressure required to prevent false alarms in a wetpipe system;
    (c) loss of air pressure in a dry pipe system;
    (d) loss of air pressure in a pressure tank;
    (e) a significant change in water level in any water storage container used for fire fighting purposes;
    (f) loss of electrical power to any automatically starting electrical fire pump; and,
    (g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

11. The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

12. The notification to the person controlling the building and the fire department referred to in paragraphs A.10 and A.11 above, shall be provided by way of:

    (a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;

    (b) a proprietary control centre conforming to Chapter 4 of NFPA-72, “Standard for the Installation, Maintenance, and Use of Protective Signaling Systems”, as amended;

    (c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

    (d) if the above mentioned facilities are not available in the municipality in which the self and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

13. The maximum height of the shelf and rack storage facility from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m.

14. Each deck, walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Ontario Building Code as amended, except as follows:

    (a) access to exit may be provided from a platform level by means of open unenclosed stairs for shelf and rack storage facilities comprising not more than three platform levels, the highest of which may not be more than 9 m above the main floor; and,

(b) any single platform, deck or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform, deck or walkway does not exceed 200 m² in area;
(ii) travel distance on the platform, deck or walkway to the level below, including the travel distance along the single unenclosed egress stair does not exceed 25 m; and,
(iii) the platform, deck or walkway below is provided with two separate egress stairs or exits.

15. The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs shall not exceed 45 m. Where an enclosed exit serves an elevated platform, the maximum travel distance on the elevated platform to the enclosed exit shall not exceed 45 m.

16. Where required exits are provided to comply with Sentence 3.4.2.5.(2) of the Ontario Building Code, main aisles serving the shelf and rack storage on the ground floor shall be a minimum 2.4 m wide, clearly demarcated and spaced not more than 60m on centre.

17. The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if the travel distance exceeds 45 m :

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a "time-based egress analysis" undertaken and sealed by a Professional Engineer as defined in the Professional Engineers Act (Ontario) using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A.16. above) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where: H_p = Horizontal travel distance on the shelf and rack storage (m)
V_p = Vertical travel distance on the shelf and rack storage (m)
H_m = Horizontal travel distance on the main floor (m)
N_{lg} = Number of lift gates in the means of egress
N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Ontario Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

18. Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a "positive lock" when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the lift-gate shall be painted in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that it is readily identifiable as part of the egress route.

19. Where 'at-level' conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two 'at-level' conveyor cross-overs may be within a single egress route,

(b) flat, metal inserts shall be placed between each roller over the required egress width at each ‘at-level’ conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails leading over the conveyor that the cross-over serves and all inserts shall be sized to support loads required in Part 4 of the OBC,

(c) the shelf and rack storage system design shall provide at each ‘at-level’ cross-over, a clearly identified and easily accessible switch that will stop the conveyor that the conveyor cross-over serves, and

(d) stairs approaching ‘at-level’ conveyor cross-overs referred to in (a) above, shall be painted in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that they are readily identifiable as part of the egress route.

20. Fire extinguishers shall be installed on every platform or walkway level of the shelf and rack storage system in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time.

21. Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated deck or walkway shall not exceed 9 m where the deck or walkway is required to be provided with at least 2 egress facilities.

22. The clear aisle width in the ‘pick modules’ shall not be less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

23. The shelf and rack storage facility is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

24. The shelf and rack storage facility shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III, and IV commodities as defined in NFPA 231C-1995 as amended, and not for production, assembling/disassembling, manufacturing, or ancillary administrative functions.

25. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and the sprinkler design criteria used for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the sprinkler control valve.

26. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time.

27. A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage facility height is more than 14 m (45 ft.) in height or where there are more than 3 elevated platforms of walkway level.

28. Where a standpipe and hose system is required, 65 mm (2 1/2 in.) diameter hose connections shall be provided, except that 38 mm (1 1/2 in.) hose connections are permitted in the shelf and rack storage facilities which:

    (a) do not exceed 6 levels including the floor level; and,

    (b) do not exceed 3,716 m^2 (40,000 ft^2) in the sum total of all levels of the shelf and rack storage facility.

29. Lighting levels of decks, walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

30. Emergency lighting shall be provided on walkways, decks, platforms, unenclosed egress stairs and exits providing means of egress, to not less than the average level of illumination prescribed in Sentence 3.2.7.3.(2) of the Ontario Building Code, as amended or remade from time to time.

31. Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The Applicant named in Section 1a. hereof shall promptly notify the BMEC of:

    (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 5. A. above; or

    (b) the occurrence of any of the events described in Sections 5. B. 2. (a) and (b) (ii) below.

2. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        (i) the material, system or building design that is the subject matter of this Authorization;

        (ii) the address of the applicant specified in Section 1a. of this Authorization; or,

        (iii) the ownership of the applicant specified in Section 1a. of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 5. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 27th day of April, 2000.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **April 27, 2000**
BMEC REFERENCE **BMEC 00-06-246**
BMEC Application **# 2000-09**

RAPISTAN DEMAG CORPORATION
Material Handling Platform System

1a. Applicant

RAPISTAN DEMAG CORPORATION
507 Plymouth Avenue N.E.
Grand Rapids, MI
49505-6098

Tel: (616) 913-5139
Fax: (616) 336-5881

1b. Manufacturing Facilities

RAPISTAN DEMAG CORPORATION
507 Plymouth Avenue N.E.
Grand Rapids, MI
49505-6098

2. Description

The shelf and rack storage ('pick' module) system is a self contained structural facility within a building, having one or more solid intermediate platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural facility for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. This Authorization is valid only for Rapistan Demag Corporation Material Handling Platform Systems.

4. Deck and walkway levels shall be constructed of:

   (a) solid steel plate;
   (b) steel roof decking with a top substrate that forms a serviceable floor area;
   (c) open steel grating; or
   (d) open steel floor planking.

5. The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

6. The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

7. An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility including the top level and shall be in conformance with NFPA 13-1994 and NFPA 231C-1995 as amended or the appropriate NFPA Standard for the most severe hazard to which the storage facility is exposed. Additionally, sprinkler protection shall be provided under decks and walkways.

8. Except where the deck is of open steel grating, any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles (minimum 450 mm below the floors above) and close spaced sprinklers as per paragraph A.7. above.

9. A sprinkler system located in a cold storage or freezer environment shall be designed to address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

10. The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building for each of the following:

    (a) movement of a control valve handle;
    (b) loss of excess water pressure required to prevent false alarms in a wetpipe system;
    (c) loss of air pressure in a dry pipe system;
    (d) loss of air pressure in a pressure tank;
    (e) a significant change in water level in any water storage container used for fire fighting purposes;
    (f) loss of electrical power to any automatically starting electrical fire pump; and,
    (g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

11. The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

12. The notification to the person controlling the building and the fire department referred to in paragraphs A.10 and A.11 above, shall be provided by way of:

    (a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;

    (b) a proprietary control centre conforming to Chapter 4 of NFPA-72, “Standard for the Installation, Maintenance, and Use of Protective Signaling Systems”, as amended;

    (c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or

    (d) if the above mentioned facilities are not available in the municipality in which the self and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

13. The maximum height of the shelf and rack storage facility from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m.

14. Each deck, walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Ontario Building Code as amended, except as follows:

    (a) access to exit may be provided from a platform level by means of open unenclosed stairs for shelf and rack storage facilities comprising not more than three platform levels, the highest of which may not be more than 9 m above the main floor; and,

(b) any single platform, deck or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform, deck or walkway does not exceed 200 m² in area;
(ii) travel distance on the platform, deck or walkway to the level below, including the travel distance along the single unenclosed egress stair does not exceed 25 m; and,
(iii) the platform, deck or walkway below is provided with two separate egress stairs or exits.

15. The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs shall not exceed 45 m. Where an enclosed exit serves an elevated platform, the maximum travel distance on the elevated platform to the enclosed exit shall not exceed 45 m.

16. Where required exits are provided to comply with Sentence 3.4.2.5.(2) of the Ontario Building Code, main aisles serving the shelf and rack storage on the ground floor shall be a minimum 2.4 m wide, clearly demarcated and spaced not more than 60m on centre.

17. The maximum travel distance from the bottom of an unenclosed stair to an exit along a main aisle on the ground floor level shall not exceed 45 m, *except* that if the travel distance exceeds 45 m :

(a) an egress system serving the shelf and rack storage shall be designed on the basis of a "time-based egress analysis" undertaken and sealed by a Professional Engineer as defined in the Professional Engineers Act (Ontario) using the following criteria:

(i) occupant egress speed of 1 m/sec shall be used for horizontal egress routes within the shelf and rack storage,

(ii) occupant egress speed of 0.6 m/sec shall be used for vertical egress routes within the shelf and rack storage, measured on the diagonal along the nosing of the stairs,

(iii) occupant egress speed of 1.3 m/sec shall be used for horizontal egress routes along a main aisle (see paragraph A.16. above) on the ground floor level,

(iv) each lift-gate shall be accorded an egress time of 10 seconds,

(v) each 'at-level' conveyor cross-over shall be accorded a time of 5 seconds,

(vi) a Safety Factor of 1.5 shall be used in calculating the Total Egress Time

(b) the Total Egress Time shall be calculated using the following formula;

Total Egress Time = $(H_p + V_p/0.6 + H_m/1.3 + 10N_{lg} + 5N_{lc}) * 1.5$ *(in seconds)*

where: H_p = Horizontal travel distance on the shelf and rack storage (m)
V_p = Vertical travel distance on the shelf and rack storage (m)
H_m = Horizontal travel distance on the main floor (m)
N_{lg} = Number of lift gates in the means of egress
N_{lc} = Number of 'at-level' cross overs in the means of egress

(c) the Total Egress Time from any point in the shelf and rack storage system shall be a maximum of 4 minutes,

(d) a fire alarm system complying with Subsection 3.2.4. of the Ontario Building Code shall be installed in the building and there shall be smoke detectors under all solid decking and walkways,

(e) in addition to required pull stations, the shelf and rack storage system design shall provide for clearly identified and easily accessible pull stations at egress stairs, conveyor cross-overs or lift-gates located along egress paths, and

(f) the occupant load on each level of the shelf and rack storage system shall not exceed ten (10) persons per egress stair.

18. Where lift-gates are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two lift-gates may be within a single egress route,

(b) each lift-gate shall be equipped with a "positive lock" when open,

(c) when a lift-gate is open, it shall be designed to automatically stop the conveyor belt that it serves, and

(d) the lift-gate shall be painted in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that it is readily identifiable as part of the egress route.

19. Where 'at-level' conveyor cross-overs are incorporated along egress routes in the shelf and rack storage system design:

(a) a maximum of two 'at-level' conveyor cross-overs may be within a single egress route,

(b) flat, metal inserts shall be placed between each roller over the required egress width at each ‘at-level’ conveyor cross-over to provide a walking surface. At least two, minimum 100 mm wide inserts shall be arranged symmetrically between the handrails leading over the conveyor that the cross-over serves and all inserts shall be sized to support loads required in Part 4 of the OBC,

(c) the shelf and rack storage system design shall provide at each ‘at-level’ cross-over, a clearly identified and easily accessible switch that will stop the conveyor that the conveyor cross-over serves, and

(d) stairs approaching ‘at-level’ conveyor cross-overs referred to in (a) above, shall be painted in accordance with the Fire Safety Plan as required by the Ontario Fire Code, such that they are readily identifiable as part of the egress route.

20. Fire extinguishers shall be installed on every platform or walkway level of the shelf and rack storage system in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time.

21. Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated deck or walkway shall not exceed 9 m where the deck or walkway is required to be provided with at least 2 egress facilities.

22. The clear aisle width in the ‘pick modules’ shall not be less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

23. The shelf and rack storage facility is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

24. The shelf and rack storage facility shall be used only for the storage, accessing, retrieval, packing and distribution of Class I, II, III, and IV commodities as defined in NFPA 231C-1995 as amended, and not for production, assembling/disassembling, manufacturing, or ancillary administrative functions.

25. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and the sprinkler design criteria used for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the sprinkler control valve.

26. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code, Ontario Regulation 388/97 as amended or remade from time to time.

27. A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage facility height is more than 14 m (45 ft.) in height or where there are more than 3 elevated platforms of walkway level.

28. Where a standpipe and hose system is required, 65 mm (2 1/2 in.) diameter hose connections shall be provided, except that 38 mm (1 1/2 in.) hose connections are permitted in the shelf and rack storage facilities which:

    (a) do not exceed 6 levels including the floor level; and,

    (b) do not exceed 3,716 m^2 (40,000 ft^2) in the sum total of all levels of the shelf and rack storage facility.

29. Lighting levels of decks, walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

30. Emergency lighting shall be provided on walkways, decks, platforms, unenclosed egress stairs and exits providing means of egress, to not less than the average level of illumination prescribed in Sentence 3.2.7.3.(2) of the Ontario Building Code, as amended or remade from time to time.

31. Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The Applicant named in Section 1a. hereof shall promptly notify the BMEC of:

    (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 5. A. above; or

    (b) the occurrence of any of the events described in Sections 5. B. 2. (a) and (b) (ii) below.

2. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        (i) the material, system or building design that is the subject matter of this Authorization;

        (ii) the address of the applicant specified in Section 1a. of this Authorization; or,

        (iii) the ownership of the applicant specified in Section 1a. of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 5. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 27th day of April, 2000.

BUILDING MATERIALS EVALUATION COMMISSION

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Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **March 30, 2000**
BMEC REFERENCE **BMEC # 00-05-245**
BMEC APPLICATION # **BMEC # A 1999-18**

ROYAL BUILDING SYSTEMS (Cdn) Limited

Royal Titan Garage™ Models 1A & 2A

1. Applicant

Royal Building Systems (Cdn) Ltd
1 Royal Gate Blvd.
Woodbridge, ON
L4L 8Z7

Tel: (905) 264-0698
Fax: (905) 264-0699

2. Manufacturing Facilities

Royal Building Systems (Cdn) Ltd
1 Royal Gate Blvd
Woodbridge, ON
L4L 8Z7

3. Description

Royal Titan Garage™ Models 1A and 2A are pre-engineered free-standing buildings of combustible construction that are sold as self-contained building packages to be erected on a concrete slab foundation or a concrete strip footing foundation. Both models use the unfilled rigid polymer forms manufactured using Royalloy™ B Material and reinforced with structural steel components. Royal Titan Models 1A and 2A are designed to be used as a vehicular garage or a shed-type storage building and not intended for habitation.

4. Authorization Requested

Royal Building Systems (Cdn) Limited seeks to have the Royal Titan Garage™ Models 1A and 2A authorized for use as pre-engineered, free-standing buildings of combustible construction under Sections 9.4. and 9.35. of Ontario Regulation 403/97 (the "Ontario Building Code").

5. Assessment

Reports and assessments provided by the Applicant demonstrate that if the self-contained, pre-engineered and free-standing buildings of combustible construction (Royal Titan Garage™ Models 1A and 2A) are constructed, installed and maintained in accordance with the limitations of the manufacturer's specifications and the conditions stated in this Authorization, a level of performance equivalent to that required by the Ontario Building Code under Sections 9.4. Structural Requirements and 9.35. Garages and Carports, will be provided.

Reports submitted and reviewed:

1. ISO 9001 Certificate

2. Assembly Manual for Royal Titan Garage ™ Model 1A, including the Limited Ten-Year Warranty

3. Assembly Manual for Royal Titan Garage ™ Model 2A, including the Limited Ten-Year Warranty

4. Structural Review and Drawings for Model 1A as prepared by Hannigan Engineering Limited and dated August 23rd, 1999.

5. Structural Review and Drawings for Model 2A as prepared by Hannigan Engineering Limited and dated August 23rd, 1999.

6. BOCA International Evaluation Report No. 99-9 and printed October, 1999

7. CCMC Evaluation Report 12536-R dated June 24th, 1999 of "The Royal Building System™"

8. Duracon® Coatings Data Sheet

9. Performance Data for Climaseal® coating

10. Performance Data for JS500® finishes

11. Trow Consulting Engineers Ltd. Report T94 -17, Flexural Testing of Cored Roof Elements, dated November 28th, 1994

12. Trow Consulting Engineers Ltd. Report T94 -14, Roof-to-Ridge-Beam Connection Tests Under Static and Cyclic Loading, dated September 7th, 1994

13. Flexural Properties of 100mm Wall Elements (Unfilled) - 5 pages

14. Mechanical Properties of S66-C Roof Assembly - 3 pages

15. Royal Building Systems (Cdn) Limited - Quality Procedure Manual - Section 10.0 (A) Inspection and Testing (Extrusion) - 4 pages

6. Authorization

The Royal Titan Garage™ Models 1A and 2A are authorized as providing a level of performance equivalent to that required under Section 9.4 and Subsection 9.35 of the OBC, when manufactured, installed and maintained in accordance with the limitations of the manufacturer's specifications and the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The Royal Titan Garage™ Models 1A and 2A shall be used only where the following design loads are not exceeded:

   (a) Specified roof live load of 1.44 kPa, due to snow and rain, and

   (b) Reference wind pressure of 0.58 kPa (for 1 in 30 year occurrence),

2. The foundation of the Royal Titan Garage™ Models 1A and 2A shall be designed, on an individual basis, to conform with Sections 9.12 and 9.15 of the Ontario Building Code for each specific building site. Wood mud sills as noted in Subsection 9.35.3.3. of the Ontario Building Code, are not permitted.

3. The Installation Manual shall require that the bottom face of the aluminum sill track ('Aluminium Track Kit') shall be covered by a full, unbroken coat of silicone to prevent the formation of a corrosion cell between the Aluminum and the concrete.

4. The Installation Manual shall specify that the exterior roof and walls of the Royal Titan Garage™ Models 1A and 2A shall not be painted and shall only be covered with manufacturer approved shingle or cladding products.

B. GENERAL CONDITIONS

1. The use of the Royal Titan Garage™ Models 1A & 2A must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1. hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorisation, to comply with any of the terms and conditions set out in Section 6. A. above; or

   (b) the occurrence of any of the events described in Sections 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorisation, has failed to comply with any of the terms and conditions set out in Section 6. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this March 30th, 2000.

BUILDING MATERIALS EVALUATION COMMISSION

per: Rashmi Nathwani, Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION	MARCH 30, 2000
BMEC REFERENCE	BMEC 00-04-244
BMEC APPLICATION #	BMEC A1999-17

THERMA-TRU

Therma-Tru Fiberglass Door Panels

1. Applicant

Therma-Tru Fiberglass Door Panels
108 Mutzfeld Road
Butler, IN
46721 USA

Tel: (219) 868-5811
Fax: (219) 868-5190

2. Manufacturing Facilities

Therma-Tru Fiberglass Door Panels
108 Mutzfeld Road
Butler, IN
46721 USA

3. Description

Therma-Tru's three lines of fibreglass door panels (Classic-Craft, Fiber-Classic and Smooth-Star) are composed of two fiberglass skins attached to a foamed-in-place polyurethane core and wood stiles. Rails are manufactured from a rot-resistant and machineable wood/plastic composite material.

4. Authorization Requested

The applicant sought to have its line of innovative fiberglass door panels authorized as equivalent to that required by Part 9 of Ontario Regulation 403/97 (the "Ontario Building Code") for use as exterior doors.

5. Assessment

Reports and assessments provided by the applicant show that if Therma-Tru's three lines of fibreglass door panels are used in accordance with the limitations and conditions stated in this authorization, they will provide a level of performance that is at least equivalent to that required in Subsection 9.6.5. of the Ontario Building Code.

Reports submitted and reviewed:

1. Product Manual - Door System Specifications issued Dec 99.

2. Technical Manuals including:

   - SHOP 3 Door Preparation (pages 1-7) issued Oct 94

   - ARCH 2 Architectural Details (pages 1-13) issued Oct 94

   - PERF 1 Air Infiltration (page 1) issued Oct 94

   - PERF 2 Resistance to Water Penetration (page 2) issued Oct 94

   - PERF 3 Thermal Transmittance (pages 3-5) issued Oct 94

   - PERF 4 Sound Transmittance (page 6) issued Oct 94

   - PERF 5 Forced Entry Resistance (page 7) issued Oct 94

   - PERF 6 Insulated Glass Performance (page 8) issued Oct 94

   - PERF 8 Structural Wind Load (pages 11-12)

   - SITE 1 Installation Instructions (pages 1-8)

3. Catalog No. MAFL99 (pages 1-100)

4. Thermal Performance Test Report No: NCTL-110-4157-1 dated January 16, 1992, of National Certified Testing Laboratories (pages 1-4, summary and attachment).

5. Structural Performance Test Report No: NCTL-110-4157-5 dated December 20, 1991, of National Certified Testing Laboratories (pages 1-2).

6. Sound Transmission Loss Test RAL™-TL83-182 dated August 4, 1983, of Riverbank Acoustical Laboratories (pages 1-2)

7. Structural Performance Test Report No: NCTL-210-1752-1S,2S,3S dated August 14, 1995, of National Certified Testing Laboratories (pages 1-6).

8. Forced Entry Resistance Test Report No: NCTL-210-1752-1F,2F,3F dated August 14, 1995, of National Certified Testing Laboratories (pages 1-4).

9. Door Impact Test in accordance with ASTM F-476 Section 18 Grade 10 dated February 24, 2000, Intertek Testing Services (pages 1-4).

6. Authorization

The use of Therma-Tru's three lines of fibreglass door panels, namely the Classic-Craft, Fiber-Classic and Smooth-Star models are authorized as providing an equivalent exterior door to that required in Subsection 9.6.5. of the Ontario Building Code:

A. SPECIFIC TERMS AND CONDITIONS:

1. This authorization shall only apply to Therma-Tru's three lines of fibreglass door panels, namely the Classic-Craft, Fiber-Classic and Smooth-Star models.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the company specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 30th day of March, 2000.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Rashmi Nathwani, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **February 24th 2000**
BMEC REFERENCE **BMEC 00-03-243**
BMEC APPLICATION # **BMEC # A2000-01**

JETVAC INC.
Engineered Water Collection Vacuum System

1. Applicant

JETVAC Inc.
333 Wyecroft Road
Unit 11B
Oakville, Ontario
L6K 2H2

Tel: 905) 842-9540
Fax: (905) 842-9542

2. Manufacturing Facilities

JETVAC Inc.
333 Wyecroft Road
Unit 11B
Oakville, Ontario
L6K 2H2

3. Description

The **JETVAC INC. Engineered Water Collection Vacuum System** is comprised of a vacuum generating unit (vacuum pumps and control module); vacuum valves and timers which control opening of the valves; and collection boxes/interceptors which receive water draining from the refrigerated food displays. Using the vacuum generating unit and multiple collection points, the **JETVAC INC. Engineered Water Collection Vacuum System** accumulates condensate, washdown and misting water from refrigerated food displays, moves it overhead to a collection tank, then discharges it to the sanitary drain system.

- Each refrigerated food display drains by gravity to a collection box / interceptor via a drain pipe having a water trap.

- Each refrigerated food display drain is equipped with and served by a dedicated vacuum make-up air opening located between the trap and the collection box/interceptor and terminating below the bottom level of the food display.

- One collection box/interceptor may serve up to eight refrigerated food displays and each collection box/interceptor is equipped with a triggering device causing the vacuum valve (which isolates it from the vacuum piping) to open when the water level in the collection box/interceptor reaches a set point.

- As the vacuum valve opens, water is drawn out by vacuum and transferred overhead (maximum vertical rise of 24 feet) to the collection tank. From the collection tank, the waste water is pumped through an indirect connection to the sanitary drain system.

4. Authorization Requested

The applicant sought authorization for the **JETVAC INC. Engineered Water Collection Vacuum System** as providing a level of performance equivalent to that required by Subclause 7.4.2.1.(1)(d)(i) of the Ontario Building Code, 1997 (the OBC).

5. Assessment

Reports and assessments provided by the applicant demonstrate that:

1) The indirect connection to the sanitary drain system at the discharge from the vacuum pumps of the **JETVAC INC. Engineered Water Collection Vacuum System** provides an equivalent level of performance to the prescribed individual food display connections required by Subclause 7.4.2.1.(1)(d)(i) of the OBC, in protecting the food in the displays from possible contamination caused by the sanitary drainage system.

2) The make-up air opening in the drain pipe exiting each refrigerated display ensures, that should the vacuum system fail, waste water from a display or from other displays, will exit to the floor and not back up into the food displays.

3) The make-up air opening is not a vent pipe for the purpose of Sentence 7.5.5.5.(1) of the OBC.

Accordingly, if the **JETVAC INC. Engineered Water Collection Vacuum System** as described in Section 3 above is designed, manufactured, installed and maintained in accordance with the limitations and conditions stated in this Authorization, it will provide a level of performance equivalent to that which would be achieved by conformance with Subclause 7.4.2.1.(1)(d)(i) of the OBC.

Reports submitted and reviewed:

1. Quality Control Manual relating to Vacuum Collection System Components

2. Description and Specification of System

3. Quality Control Manual

4. Installation Guide

5. JETVAC Vacuum System - Maintenance Manual

6. Authorization

The **JETVAC INC. Engineered Water Collection Vacuum System** as described above, is authorized as providing a level of performance equivalent to that which would be achieved by conformance with Subclause 7.4.2.1.(1)(d)(i) of the OBC, when designed, manufactured, installed and maintained in accordance with the manufacturer's recommendations and the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This Authorization is valid only for the **JETVAC Inc. Engineered Water Collection Vacuum System**.

2. The **JETVAC Inc. Engineered Water Collection Vacuum System** shall only be installed to collect condensate, washdown and misting water from refrigerated food displays.

3. The connection to the sanitary drainage system shall be made by terminating the **JETVAC Inc. Engineered Water Collection Vacuum System** discharge, a minimum of 25 mm above the flood level rim of the fixture that is directly connected to the sanitary system.

B. GENERAL CONDITIONS

1. The use of JETVAC Inc. Engineered Water Collection Vacuum System must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1. hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 6. A. above; or

(b) the occurrence of any of the events described in Sections 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 6. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 24th day of February 2000

BUILDING MATERIALS EVALUATION COMMISSION

per: Rashmi Nathwani,Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **January 27th 2000**
BMEC REFERENCE **BMEC 00-02-242**
BMEC APPLICATION # **BMEC A1999-19**

SPRUCEWOOD PRODUCTS
K-Joist™ Steel Reinforced 2X8 Wood Joist

1. Applicant

Sprucewood Products, a division of
855856 Ontario Limited
80 Morrow Road
Barrie, Ontario
L4N 3V8

Tel: (705) 728-7567
Fax: (705) 728-1973
Mobile: (416) 616-8305

2. Manufacturing Facilities

Sprucewood Products
80 Morrow Road
Barrie, Ontario
L4N 3V8

3. Description

K-Joist™ longitudinal steel reinforced wood joists are composite joists made up of No. 2 or better 2X8 lumber and four sheet steel strips (1" X 14 gauge grade A steel with a minimum tensile strength of 45 ksi) that are glued (epoxied) into routed grooves in the top and the bottom edges. The strips are embedded in at least 64% of the joist length and centred on the joist.

4. Authorization Requested

The applicant sought authorization for the use of K-Joist™ longitudinal steel reinforced 2X8 wood joists in standard wood-frame construction in accordance with Clauses 4.1.1.3. (i) and 4.3.1.1. (i) and Article 9.23.4.2. of the Ontario Building Code, 1997.

5. Assessment

Reports and assessments provided by the applicant show that if K-Joist™ longitudinal steel reinforced 2X8 wood joists are manufactured and installed in accordance with the limitations and conditions stated in this authorization, they will provide the level of performance equivalent to that which would be achieved by conformance with Article 9.23.4.2. of the Ontario Building Code, 1997.

Reports submitted and reviewed:

1. Letter dated October 4, 1999, summarizing the Evaluation conducted by Quaile Engineering Ltd. on the 2x8 K-Joist.

2. Report No. 94-43-1: STRUCTURAL TESTS OF REINFORCED WOOD JOISTS, Quaile Engineering Ltd., October 13, 1995.

3. Report No. 96-160-1: PERFORMANCE TESTS OF K-JOIST AND CONVENTIONAL WOOD JOIST FLOORS, Quaile Engineering Ltd., November 12, 1996.

4. United States Patent, Patent Number 5,497,595, March 12, 1996.

5. Canadian Intellectual Property Office (CIPO), Patent # 2,156,453

6. Installation Guide for K-Joists, Sprucewood Products, November 1999.

7. Quality Control Manual for K-Joists, Sprucewood Products, November 1999.

6. Authorization

The Sprucewood Products longitudinal steel reinforced 2X8 wood joists (K-Joist™) are authorized for use as floor joists in standard wood frame building construction when designed, manufactured and installed in accordance with the manufacturer's recommendations and the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. K-Joist™ longitudinal steel reinforced wood joists are only authorized for use as floor joists in Part 9 buildings.

2. K-Joist™ longitudinal steel reinforced wood joists shall be used in conjunction with the load tables provided by the manufacturer bearing the seal of a professional engineer licenced in the province of Ontario.

3. K-Joist™ longitudinal steel reinforced wood joists shall be installed in accordance with standard requirements for conventional dimension lumber as required in Part 9 of the Ontario Building Code, including end restraint, bridging, sheathing, and bearing.

4. K-Joist™ longitudinal steel reinforced wood joists shall be painted or marked in a permanent manner for the purpose of clearly identifying them as containing metal.

5. K-Joist™ longitudinal steel reinforced wood joists shall not be used in exposed or wet conditions.

6. K-Joist™ longitudinal steel reinforced wood joists shall not be used for lintels, trimmers for openings, beams or headers.

7. K-Joist™ longitudinal steel reinforced wood joists shall not be used to support concentrated loads.

8. K-Joist™ longitudinal steel reinforced wood joists shall not be used in applications requiring a rated assembly or a fire separation.

9. The Applicant named in Part 1. of this Authorization shall perform all quality control measures in accordance with the "Quality Control Manual for K-Joists" submitted with the application and dated November 1999.

B. General Conditions

1. The use of K-Joist™ longitudinal steel reinforced 2X8 wood joists must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1. hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in Section 6. A. above; or

(b) the occurrence of any of the events described in Sections 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in Section 6. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 27th day of January 2000

BUILDING MATERIALS EVALUATION COMMISSION

per: Antonio Chow, Vice-Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
CONSOLIDATED - AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**January 27, 2000**
BMEC AUTHORIZATION	**BMEC # 00-01-241**
BMEC Application	**# A 1999-11**
BMEC AMENDMENT	**July 27, 2000**
BMEC Application	**# A 2000-11**
BMEC AMENDMENT	**February 28, 2002**
BMEC Application	**# AR 2001-18**
BMEC AMENDMENT	**June 27, 2002**

*** Denotes a new or amended clause**

CLEARSTREAM ALTERNATE TERTIARY DISCHARGE SYSTEM

1. Applicant / Manufacturer

Clearstream Wastewater Systems
P.O. 9337
Beaumont, Texas
USA 77709

Ph: (409) 755-1550 X 7
Fax: (409) 755-6500

2. Manufacturing Facilities

Clearstream Wastewater Systems
P.O. 9337
Beaumont, Texas
USA 77709

3.* Description

The Clearstream - Alternate Tertiary Discharge System consists of a septic tank connected to a 500N, 600N, 750N, 1000N or 1500N Model Clearstream Treatment Unit referenced in the Supplementary Guidelines to the Ontario Building Code 1997 as meeting the tertiary effluent quality criteria and which deliver effluent to an absorption system other than a leaching bed as referenced in Article 8.6.1.2. of the Ontario Building Code ("OBC").

The system requires influent sewage pretreatment in a standard two-compartment septic tank equipped with an effluent filter to screen out particles larger than 3.2 mm. Effluent from the septic tank flows to the Clearstream Treatment Unit, then passes through either a free access sand filter, a Model CS -1100 Effluent Filter or other filter that at minimum screens out particles larger than 100 microns. The filtered effluent then flows to an absorption system consisting of a layer of stone overlying a layer of sand as described in the Specific Terms and Conditions below. All below ground structures meet the 'General Requirements for All Tanks' as specified in the "CAN/CSA-B66-M90" Standard.

4. Authorization requested

The Applicant seeks to have the Clearstream - Alternate Tertiary Discharge System, incorporating a treatment unit meeting the tertiary effluent quality criteria referenced in Table 8.6.2.2.A. of the OBC, authorized for use as a Class 4 System connected to an absorption system other than the leaching bed referred to in Article 8.6.1.2. of the OBC.

5. Assessment

The Clearstream - Alternate Tertiary Discharge System incorporates a treatment unit meeting the tertiary effluent quality criteria referenced in Column 3 of Table 8.6.2.2.A. of the OBC, connected to an absorption system other than a leaching bed as referred to in Article 8.6.1.2. of the OBC. Reports and assessments provided, demonstrate that if constructed, installed, operated, maintained and monitored in accordance with the manufacturer's specifications and the conditions stated in this Authorization, the Clearstream - Alternate Tertiary Discharge System will provide a level of performance equivalent to that of a Class 4 Sewage System. .
Reports submitted and reviewed:

1. Clearstream Systems Owners Manual, Models 500N, 600N, 750N, 1000N, 1500N.

2. Branch Opinion letters relating to Ecoflo, ® ST-650 Biofilter System dated June 5th, 1998 and Waterloo Biofilter System, dated September 21, 1998.

3. CAN/CSA-B66-M90 - Prefabricated Septic Tanks and Sewage Holding Tanks, Plumbing Products and Materials - a National Standard of Canada.

4. Universal Laboratory, Inc., Garland, Texas, Test # 17158 dated 5-8-92.

5. Letter approving Models 500N, 600N, 750N, 1000N and 1500N from the Municipal Engineer, City of Colwood, File 6.1.2(a) dated May 19, 1995.

6. Letter approving Models 500N, 600N, 750N, 1000N and 1500N from Environmental Health Protection Services, Ministry of Health, Province of British Columbia dated October 6, 1994.

7. Gast Oilless and Lubricated Compressors Report.

8. Report of NSF International on Evaluation of Clearstream Wastewater Systems, Inc. (Model 500N) under provisions of NSF Standard No. 40 and dated August, 1991.

9. Universal Laboratory, Inc., Garland, Texas, Test # 24341 dated 6-6-97 and Certification of test by D. Greenfield, P.Eng., dated August 17th, 1999.

10. ASTM D 4021-92 Standard Specification for Glass-Fiber-Reinforced Polyester Underground Petroleum Storage Tanks.

11. NSF International Evaluation Report of Clearstream Wastewater Systems, Inc. Model 500N and Clearstream Wastewater Systems, Inc. Model 500N with a Clearstream Model 1100 Effluent Filter, under the provisions of ANSI/NSF Standard 40 and dated October 1999.

* 12. NSF International Evaluation Report of Clearstream Wastewater Systems, Inc. Model 500N and Clearstream Wastewater Systems, Inc. Model 500N with a Clearstream Model 1100 Effluent Filter, under the provisions of ANSI/NSF Standard 40 and dated November 1999.

* 13. The '*Continuing Maintenance Manual*' which lists the maintenance items to be conducted on the Clearstream - Alternate Tertiary Discharge System every six (6) months.

6. Authorization

* The Clearstream - Alternate Tertiary Discharge System incorporating;

1) a septic tank,
2) a Clearstream Treatment Unit approved in the Supplementary Guidelines to the Ontario Building Code 1997 as meeting the tertiary effluent quality criteria in Table 8.6.2.2.A. of the OBC, and
3) a free-access sand filter or a Model CS -1100 Effluent Filter or another filter that at minimum screens out particles larger than 100 microns;

is authorized for use as a Class 4 sewage system that may be connected to an absorption system other than a leaching bed as required by Article 8.6.1.2. of the OBC, when designed, installed, operated, maintained and monitored in accordance with the manufacturer's recommendations and the following terms and conditions:

A. Specific Terms and Conditions

1. Only manufacturer trained and authorized agents or employees shall install, maintain or service the Clearstream - Alternate Tertiary Discharge System.

* 2. The Service and Maintenance Agreement prescribed by Sentence 8.9.2.3.(2) of the OBC shall require that the persons authorized by the Manufacturer to service and maintain the Clearstream - Alternate Tertiary Discharge System, and who have entered into the agreement with the person operating the treatment unit, shall:

(a) conduct and record at least once during every six month period, an inspection and servicing as specified by the manufacturer of the Clearstream Treatment Unit in the "*Continuing Maintenance Manual*" copyrighted 07/00,

(b) provide a copy of the "*Continuing Maintenance Manual*" and a copy of each service record prepared in compliance with (a) above, to the person operating the Clearstream - Alternate Tertiary Discharge System, and

(c) conduct sampling and testing in accordance with the requirements of Clauses 8.9.2.4.(1)(a) and (b) of the OBC;

i) once during the first 12 months after the Clearstream - Alternate Tertiary Discharge System is put into use, and

ii) thereafter, once during every 48 month period after the previous sampling has been completed,

(d) promptly submit the sampling test results to the person operating the Clearstream - Alternate Tertiary Discharge System and to the Applicant / Manufacturer named in Part 1 of this Authorization, and

(e) promptly notify the chief building official in writing, if this maintenance agreement is terminated or access to permit any of the maintenance or monitoring requirements of this Authorization is denied by the person operating the Clearstream - Alternate Tertiary Discharge System.

3. The Applicant named in Part 1 of this Authorization shall retain records of the sampling test results for each Clearstream - Alternate Tertiary Discharge System received pursuant to Condition A. 2. (c) above, for a period of 10 years and shall promptly forward copies of those records to the chief building official upon request of the chief building official.

4. The Clearstream - Alternate Tertiary Discharge System shall only receive effluent from a septic tank or other treatment unit that:

   a) is fitted with an effluent filter, the model and type as recommended by the manufacturer, provided that at minimum, such filter will screen out particles larger than 3.2 mm, and

   b) has frost resistant and watertight maintenance ports accessible at grade.

* 5. All pipe connections joining the Clearstream - Alternate Tertiary Discharge System components, i.e., treatment units, accessory treatment units, tanks, pumps and filters where incorporated, shall be flexible and watertight. Where a pump is incorporated in a tank, the tank shall be made watertight.

* 6. Clearstream Treatment Units Models as detailed in the manufacturer's technical data sheets and listed as providing tertiary treatment in the Supplementary Guidelines to the Ontario Building Code 1997, shall be used in the Clearstream - Alternate Tertiary Discharge System in accordance with the following daily design sewage flows (DDSF):

500N	-	DDSF of 850 L to 1900 L
600N	-	DDSF of 1900 L to 2280 L
750N	-	DDSF of 2280 L to 2850 L
1000N	-	DDSF of 2850 L to 3800 L
1500N	-	DDSF of 3800 L to 5700 L"

7. All components of the Clearstream - Alternate Tertiary Discharge System shall be waterproof and shall be insulated to manufacturer specifications. When components are totally or partially underground they shall be concrete, fibreglass-reinforced polyester or polyethylene structures that meet the Strength Test requirements of CAN/CSA-B66-M90 for Prefabricated Septic Tanks and Sewage Holding Tanks, and resist soil mineral degradation.

* 8. Effluent exiting either the free access sand filter, the Model CS -1100 Effluent Filter or other 100 micron filter identified in Part 3 above, shall be evenly distributed over an absorption system comprised of a stone layer overlying an unsaturated sand layer and having a total minimum depth of 500 mm, and:

   a) the stone layer shall be a minimum 200 mm in depth and be comprised of stone meeting the requirements of either Subclause 8.7.3.3.(1)(b)(i) or (ii) of the OBC, and

   b) the sand layer shall be a minimum 250 mm in depth and have a percolation time of six to 10 minutes per centimetre, provided that where the underlying native soil has a percolation time of less than six minutes per centimetre, the water table shall be a minimum of 600 mm below the bottom of the stone layer required in (a) above.

9. The stone layer required by Condition A. 8. (a) above, shall have a minimum area as specified by the manufacturer but be not less than the following:

   a) where the total daily design sanitary sewage flow does not exceed 3 000 L, the area shall be such that the loading on the surface of the stone layer does not exceed 75 L/m² per day or

   b) where the total daily design sanitary sewage flow exceeds 3 000 L, the area shall be such that the loading on the surface of the stone layer does not exceed 50 L/m² per day.

10. The stone layer required by Condition A. 8. (a) above, shall be protected with a permeable geo-textile fabric in such a manner so as to prevent soil or leaching bed fill from entering the stone.

11. The sand layer required by Condition A.8. (b) above:

   a) shall have a minimum area that is the greater of;

      i) the area of the stone layer required by Condition A. 9. above, and

      ii) the area calculated on the basis of the following formula:

         $A = QT/850$

         where:

         A is the area of contact in m² between the base of the sand layer and the underlying native soil,

         Q is the total daily design sanitary sewage flow in litres,

         T is the percolation time of the underlying native soil in min/cm to a maximum of 50, and

   b) in raised absorption systems, shall extend at least 15 m beyond the perimeter of the distribution pipes, in any direction which the effluent entering the soil will move horizontally.

* 12. Effluent exiting either the free access sand filter, the Model CS -1100 Effluent Filter or other 100 micron filter shall be evenly distributed by means of a header connecting to distribution pipes within the stone layer required by Condition A. 8. (a) above and the distribution pipes shall:

   a) be spaced evenly and not greater than 1.2 m apart over the area required by Condition A. 9 above,

b) comply with the requirements of Clauses 8.7.3.3.(1)(a)-(d) and Sentences 8.7.3.3.(3)-(4) of the OBC, and

c) comply with the requirements of Article 8.2.1.6. of the OBC.

* 13. The absorption system required by Condition A. 8. above shall comply with the requirements of Subsection 8.7.2. of the OBC that apply to leaching beds.

B. General Conditions

1. The use of the Clearstream - Alternate Tertiary Discharge System must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

* 3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

(b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

* 4. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Part 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Amended at Toronto on this 27th day of July 2000

BUILDING MATERIALS EVALUATION COMMISSION

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**DECEMBER 14, 1999**
BMEC REFERENCE	**BMEC 99-12-240**
BMEC APPLICATION	**# A1999-10**
Date of Amendment	**November 29, 2001**

- **Denotes a new or amened clause November 29, 2001**

ENVIRO-SHAKE™
A COMPOSITE CELLULOSIC FIBRE AND POLYMER SIMULATED CEDAR SHAKE ROOFING MATERIAL

1. Applicant

* Wellington Polymer Technology Inc.
650 Riverview Drive, Unit 1
PO Box 1462
Chatham, Ontario
N7M 5W8

Tel: (519) 767-2372
Fax: (519) 767-9302

2. Manufacturing Facilities

* Wellington Polymer Technology Inc.
650 Riverview Drive, Unit 1
PO Box 1462
Chatham, Ontario
N7M 5W8

3. Description

ENVIRO-SHAKE™ roofing shingles are manufactured from cellulosic fibres, post-industrial polyethylene and polypropylene polymers, post-industrial rubber elastomers and stabilizing additives blended in a proprietary formulation and reformed to a fibre reinforced product resembling tapersawn cedar shingles in appearance .

4. Authorization Requested

The applicant sought authorization for the use of *ENVIRO-SHAKE*™ shingles as a roofing material on roof slopes of 1:3 and steeper.

5. Assessment

Reports and assessments provided by the applicant show that if *ENVIRO-SHAKE*™ roofing shingles are manufactured in accordance with the limitations and conditions stated in this authorization, they will provide the level of performance equivalent to that which would be achieved by conformance with Article 9.26.2.1. of the Ontario Building Code.

Reports submitted and reviewed:

1. Application information dated May 12, 1999 which included:
   - the Expanded Application with supporting documentation
   - CAN/ULC-107 Standard Test
   - Installation Manual
   - Quality Control Sheet

2. WPTI Supplemental Submission dated August 12th, 1999 including the results of tests conducted by Cambridge Materials Testing Limited, Underwriters' Laboratory of Canada and a further report on the UV tests done by Mobil Chemicals in New Jersey.

3. WPTI - Supplemental Submission dated August 31, 1999 regarding Ultra Violet Exposure Tests.

4. Quality Control Programme for *Enviro-Shake*™ " dated November 30, 1999.

6. Authorization

ENVIRO-SHAKE™ roofing shingles as described in Section 3. **Description** above, are authorized as a roofing material as required by Article 9.26.2.1. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The Applicant named in Section 1. above, shall undertake testing of representative samples of *Enviro-Shake*™ roofing shingles in accordance with the "Quality Control Programme for *Enviro-Shake*™ - the simulated cedar shake" dated November 30th, 1999 which includes tests for compliance with the following standards:

   a) Water absorption in accordance with ASTM D570-95 Standard,

   b) Impact testing in accordance with ASTM D2794-93 Standard,

c) Wind Resistance in accordance with ASTM D3161 Standard,

d) Freeze/Thaw Resistance in accordance with ASTM C666 Standard,

e) Tear Strength/Nail Head Resistance in accordance with ASTM D1037 Standard, and

f) Ultra Violet Exposure Test in accordance with ASTM G-53 Standard

2. A professional Engineer having a Certificate of Authorization under the *Professional Engineers Act* and engaged by the Applicant named in Section 1. shall annually certify that sampling and testing in respect of the standards referenced in Section 6. 1. A. a) to f) above, has been undertaken in accordance with the "Quality Control Programme for *Enviro-Shake*™ - the simulated cedar shake" dated November 30th, 1999 and that the results demonstrate compliance with these standards.

3. The Applicant named in Section 1. above, shall retain records of the testing required by 6. A. 1. & 2. above for a period of not less than 10 years.

B. GENERAL CONDITIONS:

1. The use of *ENVIRO-SHAKE*™ shingles must comply with the Building Code Act, 1992, as amended or re-enacted from time to time and, except as specifically authorized herein with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be kept and maintained on the site of the construction with the building permit.

3. The Applicant named in Section 1. hereof shall promptly notify the BMEC of:

   (a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorisation, to comply with any of the terms and conditions set out in Section 6. A. above; or

   (b) the occurrence of any of the events described in Sections 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization;

or,

(iii) the ownership of the applicant specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorisation, has failed to comply with any of the terms and conditions set out in Section 6. A. above; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 14th day of December 1999.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Rashmi Nathwani, Chairman

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**APRIL 29, 1999**
BMEC AUTHORIZATION	**BMEC # 99-08-236**
BMEC APPLICATION	**# A1998-07**
DATE OF AMENDMENT	**OCTOBER 25, 2001**

* **Denotes a new or amended clause October 25,2001**

A Resolution of the BMEC dated February 28, 2002 which amended this authorization was quashed by an order of the Divisional Court dated June 18, 2002.

WATERLOO BIOFILTER® AREA BED SYSTEM
WATERLOO BIOFILTER SYSTEMS INC.

1. Applicant

* Waterloo Biofilter Systems Inc.
143 Dennis Street
PO Box 400
Rockwood, Ontario
N0B 2K0

2. Manufacturing Facilities

* Waterloo Biofilter Systems Inc.
143 Dennis Street
PO Box 400
Rockwood, Ontario
N0B 2K0

3. Description

The Waterloo Biofilter® Area Bed System consists of a septic tank connected to a Waterloo Biofilter® treatment unit referenced in the Supplementary Guidelines to the 1997 Ontario Building Code, which delivers effluent to an absorption system other than a leaching bed as referred to in Article 8.6.1.2. of the Ontario Building Code ("OBC"). The system requires pretreatment of raw sewage with a standard two-compartment septic tank equipped with an effluent filter to screen out particles larger than 3.2 mm. Effluent from the septic tank overflows by gravity to a pump tank (pump vault in retrofit applications) providing demand or timed dosing to a biofilter treatment unit enclosed in an insulated-as-needed, waterproof, concrete or reinforced polyester or polyethylene structure with access hatches and screened vents.

An internal distribution system sprays the effluent over modules of plastic foam pieces (a patented biofilter medium) sized according to a maximum loading of 750 L daily design flow, per cubic metre of filter medium. The treated effluent is either

pumped to an absorption system or flows by gravity to an absorption system beneath the treatment unit. The absorption system is a layer of stone overlying a layer of sand.

4. Authorization requested

The applicant seeks to have the Waterloo Biofilter® Area Bed System, which incorporates a treatment unit designed so that the effluent meets the tertiary effluent quality criteria referenced in Table 8.6.2.2.A. of the OBC, authorized for use as a Class 4 System that is connected to an absorption system other than the leaching bed as referred to in Article 8.6.1.2. of the OBC.

5. Assessment

The Waterloo Biofilter® Area Bed System incorporates a treatment unit designed so that the effluent meets the tertiary effluent quality criteria referenced in Column 3 of Table 8.6.2.2.A. of the OBC and this treatment unit is connected to an absorption system other than a leaching bed as referred to in Article 8.6.1.2. of the OBC. Reports and assessments provided by the applicant demonstrate that if the Waterloo Biofilter® Area Bed System is constructed, installed, operated, maintained and monitored in accordance with the limitations of the manufacturer's specifications and the conditions stated in this Authorization, a level of performance equivalent to that required of a Class 4 Sewage System will be provided.

Reports submitted and reviewed:

1. Anti-Septic Solution. Cottage Life Magazine, July / August 1994.

2. Waterloo Biofilter™ System is New Technology Ready for Transfer. WCGR Newsletter, Spring 1994.

3. Alternative Septic Systems. Journal of Light Construction, January 1997.

4. On-Site Wastewater Treatment Using Unsaturated Absorbent Biofilters. Journal of Environmental Quality, Vol. 24, no. 1. January-February 1995.

5. Sewage and Leachate Wastewater Treatment Using the Absorbent Waterloo Biofilter. Site Characterization and Design of On-Site Septic Systems, ASTM STP 1324, 1997. Page 261-282

6. Potable Water Treatment and Reuse of Domestic Wastewater in the CMHC Toronto 'Healthy House'. Site Characterization and Design of On-Site Septic Systems, ASTM STP 1324, 1997. Page 176-187.

7. Cost-Effective Sewage and Leachate Wastewater Treatment Using the

Absorbent Waterloo Biofilter™. Korean Research Society of Rural Environmental Seminar, Seoul National University, June 27, 1997.

8. Communal-Size Sewage and Leachate Treatment Using Waterloo Biofilters in Process Trains. Environmental Science and Engineering, January 1998.

9. Removal of VOCs From Landfill Leachate Using Absorbent Aerobic Biofiltration. American Chemical Society, Ninth Annual Symposium on Emerging Technologies in Hazardous Waste Management, Pittsburgh, September 15-17, 1997.

6. Authorization

The Waterloo Biofilter® Area Bed System which incorporates the Waterloo Biofilter® treatment unit, is authorized for use as a Class 4 sewage system that may be connected to an absorption system other than a leaching bed as referred to in Article 8.6.1.2. of the OBC, when designed, installed, operated, maintained and monitored in accordance with the manufacturer's recommendations and the following terms and conditions:

A. Specific Terms and Conditions

1. Only manufacturer trained and authorized agents or employees shall install, maintain or service the Waterloo Biofilter® Area Bed System.

2. The Service and Maintenance Agreement prescribed by Sentence 8.9.2.3.(2) of the OBC shall require that the persons authorized by the manufacturer to service and maintain the Waterloo Biofilter® Area Bed System, and who have entered into the agreement with the person operating the treatment unit, shall:

   a) conduct an annual maintenance service as specified by the manufacturer of the Waterloo Biofilter® Area Bed System, at least once during every twelve month period after the sewage system is put into use,

   b) conduct sampling and testing in accordance with the requirements of Clauses 8.9.2.4.(1)(a) and (b) of the OBC;

      i) once during the first 12 months after the Waterloo Biofilter® Area Bed System is put into use, and

      ii) thereafter, once during every 48 month period after the previous sampling has been completed,

   c) promptly submit the sampling test results to the person operating

the Waterloo Biofilter® Area Bed System and to the Applicant and Manufacturer named in Parts 1. and 2. respectively, of this Authorization, and

d) promptly notify the chief building official in writing, if this maintenance agreement is terminated or access to permit any of the maintenance or monitoring requirements of this Authorization is denied by the person operating the Waterloo Biofilter® Area Bed System.

3. The Manufacturer named in Part 2. of this Authorization shall retain the records of the sampling test results for each Waterloo Biofilter® Area Bed System received pursuant to Condition A. 2. (c) above for a period of 10 years and shall promptly forward copies of those records to the chief building official upon request of the chief building official.

4. The Waterloo Biofilter® Area Bed System shall only receive effluent from a septic tank or other treatment unit that:

a) is fitted with an effluent filter as recommended by the manufacturer, provided that at minimum such filter will screen out particles larger than 3.2 mm, and

b) has frost resistant and watertight maintenance ports accessible at grade.

5. All pipe connections joining the Waterloo Biofilter® treatment unit to accessory treatment units, tanks and pumps where incorporated, shall be flexible and watertight. Where a pump is incorporated in a tank, the tank shall be made watertight.

6. Only the Waterloo Biofilter® patented plastic foam medium may be used in the Waterloo Biofilter® Area Bed System. The internal distribution system shall spray the received effluent evenly over modules of the plastic foam medium, designed to a maximum loading rate of 750 L daily design flow per cubic metre of biofilter medium.

7. The Waterloo Biofilter® Area Bed System Enclosure shall be designed to be waterproof, insulated to the manufacturer's specifications and provide air and access to the enclosed biofilter medium. When such enclosures are totally or partially underground, the enclosure shall be concrete, fibreglass-reinforced polyester or polyethylene structures that:

    a) meet the Strength Test requirements of CAN/CSA-B66-M90 for Prefabricated Septic Tanks and Sewage Holding Tanks, and

    b) resist water infiltration and soil mineral degradation.

8. Effluent exiting the biofilter medium shall be evenly distributed over an absorption system comprised of a stone layer overlying an unsaturated sand layer and having a total minimum depth of 500 mm, and:

    a) the stone layer shall be a minimum 200 mm in depth and comprised of stone meeting the requirements of either Subclause 8.7.3.3.(1)(b)(i) or (ii), and

    b) the sand layer shall be a minimum 250 mm in depth and have a percolation time of six to 10 minutes per centimetre, provided that where the underlying native soil has a percolation time of less than six minutes per centimetre, the water table shall be a minimum of 600 mm below the bottom of the stone layer required in (a) above.

9. The stone layer required by Condition A. 8. (a) above, shall have a minimum area as specified by the manufacturer but be not less than the following:

    a) where the total daily design sanitary sewage flow does not exceed 3 000 L, the area shall be such that the loading on the surface of the stone layer does not exceed 75 L/m² per day, or

    b) where the total daily design sanitary sewage flow exceeds 3 000 L, the area shall be such that the loading on the surface of the stone layer does not exceed 50 L/m² per day.

10. The stone layer required by Condition A. 8. (a) above, shall be protected with a permeable geo-textile fabric covering all areas beyond the confines of the Waterloo Biofilter® Area Bed System Enclosure, in such a manner so as to prevent soil or leaching bed fill from entering the stone.

11. The sand layer required by Condition A.8. (b) above:

    a) shall have a minimum area that is the greater of;

        I) the area of the stone layer required by Condition A. 9. above, and

ii) the area calculated on the basis of the following formula:

$A = QT/850$

where:

A is the area of contact in m^2 between the base of the sand layer and the underlying native soil,
Q is the total daily design sanitary sewage flow in litres,
T is the percolation time of the underlying native soil in min/cm to a maximum of 50, and

b) in raised absorption systems shall extend at least 15 m beyond the perimeter of the Waterloo Biofilter® Area Bed System Enclosure and distribution pipes where utilized, in any direction which the effluent entering the soil will move horizontally.

12. Where the effluent exiting the biofilter medium, is pumped to an absorption system located other than beneath the biofilter, the effluent shall be evenly distributed by means of a header connecting to distribution pipes within the stone layer required by Condition A. 8. (a) above and the distribution pipes shall:

a) be spaced evenly and not greater than 1.2 m apart over the area required by Condition A. 9. above, and

b) comply with the requirements of Clauses 8.7.3.3.(1)(a)-(d) and Sentences 8.7.3.3.(3)-(4).

13. For purposes of determining the clearance distances prescribed by Article 8.2.1.6., where the absorption system required by Condition A. 8. above is:

a) directly beneath and in contact with the biofilter medium, the perimeter of the Waterloo Biofilter® Area Bed System Enclosure, shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B. and these clearances shall be increased by twice the height that the stone layer stone layer required by Condition A. 8. (a) above, is raised above the original grade, or

b) located other than beneath the biofilter medium and the biofilter effluent is pumped and distributed in accordance with Condition A. 12. above, no distribution pipe shall be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B. and these clearances shall be increased by twice the height that the stone layer required by Condition A. 8. (a) above is raised above the original grade.

14. No part of the absorption system required by Condition A. 8. above shall:

a) be located in an area that has an average slope that exceeds one unit vertically to four units horizontally,
b) be located in an area that is subject to flooding that may be expected to damage or impair the operation of the absorption system, or
c) be covered with any material having a hydraulic conductivity less than 0.01 m/day, other than the Waterloo Biofilter® Area Bed System Enclosure,
d) be sloped steeper than one unit vertically to four horizontally, or
e) be located in soil or leaching bed fill having a percolation time less than one minute or greater than 50 minutes.

15. The absorption system required by Condition A. 8. above shall be designed to be protected from compaction or any stress or pressure that may result in the impairment of the system function or the smearing of the soil or leaching bed fill.

16. All above-ground backfill and leaching bed fill added to the Waterloo Biofilter® Area Bed System installation shall be stabilized against erosion.

B. General Conditions

1. The use of the Waterloo Biofilter® area bed System must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;
(ii) the address of the applicant specified in Section 1 of this

Authorization; or,

(iii) the ownership of the company specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 29th day of April, 1999

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
CONSOLIDATED
AUTHORIZATION REPORT

DATE OF AUTHORIZATION APRIL 29, 1999

BMEC AUTHORIZATION BMEC # 99-07-235

BMEC APPLICATION # A1998-03

DATE OF AMENDMENT OCTOBER 26, 2000 BMEC APPLICATION # A 2000-12

*** denotes a new or amended clause**

A Resolution of the BMEC dated February 28, 2002 which amended this authorization was quashed by an order of the Divisional Court dated June 18, 2002.

Ecoflo® ST-650 Biofilter SystemECOFLO-ONTARIO

1. Applicant

2. Manufacturing Facilities

Ecoflo-Ontario, a division of Premier Tech G*Met Environmental Technologies, 1, avenue Premier, 2450 Lancaster Road, Unit 27, C.P. 3500, Ottawa, ON Rivière-du Loup, PQ K2B 5N3 G5R 4C9

3. Description

The Ecoflo® ST-650 Biofilter System consists of a septic tank connected to an Ecoflo® ST-650 Biofilter treatment unit referenced in the Supplementary Guidelines to the 1997 Ontario Building Code, which delivers effluent to an absorption system other than a leaching bed as referred to in Article 8.6.1.2. of the Ontario Building Code (“OBC”). The

Ecoflo® ST-650 Biofilter treatment unit is a 7,500 L fibreglass shell, 4,000 mm long by 2,200 mm wide by 1,340 mm in height, with an open bottom. The shell is a fibreglass reinforced polyester containing 35% glass fibres (type 292ct) and 65% resin (type AK2631) having a minimum thickness of 1/8" over all of the shell surface. The treatment unit receives effluent by gravity or pump, from a standard two-compartment septic tank equipped with an effluent filter to screen out particles larger than 3.2 mm. An internal distribution system consisting of a gravity-fed, fibreglass tipping cradle and four corrugated and perforated plates, distribute the effluent uniformly over a patented peat-based filter medium referred to as Premier Tech PFB-150 Peat. The Premier Tech PFB-150 Peat is confined within the Ecoflo® ST-650 Biofilter shell and has a minimum volume of 3.125 m^3. The system has a device to sample the effluent at the bottom of the peat bed. The shell is installed above an absorption system comprised of a layer of crushed stone over a layer of sand.

4. Authorization requested

The applicant seeks to have the Ecoflo® ST-650 Biofilter System, which incorporates a treatment unit designed so that the effluent meets the tertiary quality criteria referenced in Table 8.6.2.2.A. of the OBC, authorized for use as a Class 4 System that is connected to an absorption system other than the leaching bed as referred to in Article 8.6.1.2. of the OBC.

5. Assessment

The Ecoflo® ST-650 Biofilter System incorporates a treatment unit meeting the tertiary quality criteria referenced in Column 3 of Table 8.6.2.2.A. of the OBC and this treatment unit is connected to an absorption system other than a leaching bed as referred to in Article 8.6.1.2. of the OBC. Reports and assessments provided by the applicant demonstrate that if the Ecoflo® ST-650 Biofilter System is constructed, installed, operated, maintained and monitored in accordance with the limitations of the manufacturer's specifications and the conditions stated in this authorization, a level of performance equivalent to that required of a Class 4 Sewage System will be provided.

Reports submitted and reviewed:

1. Installation and Sampling -A compendium of the sampling and analyses conducted to assess the performance of Premier Tech Ltd.’s peat-based biofiltration technology for the period 1989-1997.
2. Letter of February 9, 1998 from the Assistant Director of the Approvals Branch of the Ministry of the Environment, classifying the Ecoflo® Biofiltration

Treatment Unit as an acceptable Class 6 sewage system as defined in Ontario Regulation 358 (Sewage Systems), under the Environmental Protection Act.

3. Development of a Biofilter Using an Organic Medium for On-site Wastewater Treatment -Paper by Talbot, Bélanger, Pelletier, Laliberté and Arcand (Water Quality International, Singapore '96).

4. Planning Guide for Installation - Premier Tech Ltd. Dated 1997-04-15.

5. Owner's Manual Ontario for Ecoflo® ST-650 Biofilter - Premier Tech Environment - Edition 1.0 : 1998-01-26.

6. Installation Guide for the Ecoflo® ST-650 Biofilter - Premier Tech Environment, Installation Guide ONT ST-650, Version 1.0: 1998-01-26 and Edition 1.0: 1998-02-20 as revised by letter of November 27, 1998.

7. Pennsylvania Department of Environmental Protection - letter of February 25, 1998 advising of the Department's interim guidance provisions for the Ecoflo® Biofilter.

8. State of Alabama Department of Public Health - letter of March 9, 1998, extending until March 9, 1999 the conditional variance from the Onsite Sewage Disposal Rules, for the Ecoflo® ST-650 Biofilter.

9. Arizona Department of Environmental Quality, Certificate of Product Approval for the Ecoflo Peat-Based Biofilter subject to conditions -Certificate dated July 27, 1998.

10. Florida Department of Health - letter of March 17, 1998 granting the Premier Tech Ecoflo® ST-650 Biofilter approval as an engineer-designed performance-based OSTDS, under the Florida Administrative Code.

11. Gouvernement du Québec, Regulation O.C. 995-95, dated 19 July 1995, amending the Regulation respecting waste water disposal systems for isolated dwellings to permit a "PEAT MOSS BIOFILTRATION SYSTEM".

12. Ministry of Municipal Affairs and Housing -letter dated June 5, 1998 from the Housing Development & Buildings Branch, providing an opinion that if the Ecoflo® ST-650 Biofilter System is installed in accordance with the manufacturer's instructions and the conditions stated in the letter, that an equivalent level of performance to a "Class 4" system as described in the Ontario Building Code will be provided.

6. Authorization

The Ecoflo® ST-650 Biofilter System which incorporates the Ecoflo® ST-650 Biofilter treatment unit, is authorized for use as a Class 4 sewage system that may be connected to an absorption system other than the leaching bed as referred to in Article 8.6.1.2. of the OBC, when the system is designed, installed, operated, maintained and monitored in accordance with the manufacturer's recommendations (Premier Tech Environment - Installation Guide ONT ST-650, Version 1.0: 1998-01-26 and Edition 1.0: 1998-02-20 as revised by letter dated November 27, 1998) and the following terms and conditions:

A. Specific Terms and Conditions

1. Only manufacturer trained and authorized agents or employees shall install, maintain or service the Ecoflo® ST-650 Biofilter System.
2. The Service and Maintenance Agreement prescribed by Sentence 8.9.2.3.(2) of the OBC shall require that the persons authorized by the manufacturer to service and maintain the Ecoflo® ST-650 Biofilter System, and who have entered into the agreement with the person operating the treatment unit, shall:
a) conduct an annual maintenance service as specified by the manufacturer of the Ecoflo® ST-650 Biofilter System, at least once during every twelve month period after the sewage system is put into use,
b) conduct sampling and testing in accordance with the requirements of Clauses 8.9.2.4.(1)(a) and (b) of the OBC;
i) initially, once during the first 12 months after the Ecoflo® ST-650 Biofilter System is put into use, and
ii) thereafter, once during every 48 month period after the previous sampling has been completed,
c) promptly submit the sampling test results to the person operating the Ecoflo® ST-650 Biofilter System and to the Applicant and Manufacturer named in Parts 1. and 2. respectively, of this Authorization, and
d) promptly notify the chief building official in writing, if this maintenance agreement is terminated or access to permit any of the maintenance or monitoring requirements of this Authorization is denied by the person operating the Ecoflo® ST-650 Biofilter System.
3. The Manufacturer named in Part 2. of this Authorization shall retain the records of the sampling test results for each Ecoflo® ST-650 Biofilter System received pursuant to Condition A. 2. (c) above for a period of 10 years and shall promptly forward copies of those records to the chief building official upon request of the chief building official.
4. The Ecoflo® ST-650 Biofilter System shall only receive effluent from a septic tank or other treatment unit that:
a) is fitted with an effluent filter as recommended by the manufacturer, provided that at minimum such filter will screen out particles larger than 3.2 mm, and
b) has frost resistant and watertight maintenance ports accessible at grade.
5. All pipe connections joining the Ecoflo® ST-650 Biofilter System to accessory treatment units and pumps where incorporated, shall be flexible and watertight. Where a pump is incorporated in a tank, the tank shall be made watertight.
6. The Ecoflo® ST-650 Biofilter shell:
a) shall have a minimum thickness of 1/8" over all of its surface,
b) shall meet the Strength Test requirements of CAN/CSA-B66-M90 for Prefabricated Septic Tanks and Sewage Holding Tanks, and
c) shall be resistant to water infiltration and soil mineral degradation.
7. Only Premier Tech PFB-150 Peat may be used in the Ecoflo® ST-650 Biofilter System. The Premier Tech PFB-150 Peat biofilter medium;
i) shall be confined within the Ecoflo® ST-650 Biofilter shell,

ii) shall have a minimum volume of 3.125 cubic metres, and
iii) shall be replaced in its entirety, after eight years of service.

* 8. Effluent exiting the biofilter medium shall be evenly distributed over an absorption system comprised of a stone layer overlying an unsaturated sand layer and having a total minimum depth of 500 mm, and:

a) the stone layer shall be a minimum 200 mm in depth and comprised of stone meeting the requirements of either Subclause 8.7.3.3.(1)(b)(i) or (ii) of the OBC, and

b) the sand layer shall be a minimum 250 mm in depth and have a percolation time of six to 10 minutes per centimetre, provided that where the underlying native soil has a percolation time of less than six minutes per centimetre, the water table shall be a minimum of 600 mm below the bottom of the stone layer required in (a) above.

9. The stone layer required by Condition A. 8. (a) above, shall have a minimum area as specified by the manufacturer, but be not less than the following:

a) where the total daily design sanitary sewage flow does not exceed 3 000 L, the area shall be such that the loading on the surface of the stone layer does not exceed 75 L/m² per day, or

b) where the total daily design sanitary sewage flow exceeds 3 000 L, the area shall be such that the loading on the surface of the stone layer does not exceed 50 L/m² per day.

10. The stone layer required by Condition A. 8. (a) above, shall be protected with a permeable geo-textile fabric covering all areas beyond the confines of the Ecoflo® ST-650 Biofilter shell in such a manner so as to prevent soil or leaching bed fill from entering the stone.

11-1. Where the effluent exiting the biofilter medium is pumped to an absorption system located other than beneath the biofilter, the effluent shall be evenly distributed by means of a header connecting to distribution pipes within the stone layer required by Condition A. 8. (a) above and the distribution pipes shall:

a) be spaced evenly and not greater than 1.2 m apart over the area required by Condition A. 9. above, and

b) comply with the requirements of Clauses 8.7.3.3.(1)(a)-(d) and Sentences 8.7.3.3.(3)-(4).

*11-2. For purposes of determining the clearance distances prescribed by Article 8.2.1.6., where the absorption system required by Condition A. 8. above is:

a) directly beneath and in contact with the biofilter medium, the perimeter of the Ecoflo® ST-650 Biofilter Shell, shall not be located closer than the minimum horizontal distances set out in Table 8.2.1.6.B. and these clearances shall be increased by twice the height that the stone layer required by Condition A. 8. (a) above, is raised above the original grade, or

b) located other than beneath the biofilter medium and the biofilter effluent is pumped and distributed in accordance with Condition A. 11-1. above, no distribution pipe shall be located closer than the minimum horizontal distances set out in Table 8.2.1.6. B. and these clearances shall be increased by twice the

height that the stone layer required by Condition A. 8. (a) above is raised above the original grade.
12. The sand layer required by Condition A. 8. b) above, shall:
a) have a minimum area that is the greater of;
i) the area of the stone layer required by Condition A. 9. above, and
ii) the area calculated on the basis of the following formula:

$$A = QT/850$$

where:

A is the area of contact in m^2 between the base of the sand layer and the underlying native soil, Q is the total daily design sanitary sewage flow in litres, T is the percolation time of the underlying native soil in min/cm to a maximum of 50, and

b) in raised absorption systems extend at least 15 m beyond the perimeter of the Ecoflo® ST-650 Biofilter shell, in any direction which the effluent entering the soil will move horizontally.
*13. The absorption system required by Condition A. 8. above shall comply with the requirements of Subsection 8.7.2. of the OBC that apply to leaching beds.

B. General Conditions

1. The use of the Ecoflo® ST-650 Biofilter System shall comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.
2. A copy of this Authorization shall be included with an application for a building permit and shall be maintained on the site of the construction with the building permit.
* 3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

(b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and

(b) (ii) below.

*4. The BMEC may amend or revoke this Authorization where it determines that:
(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Part 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

As amended at Toronto this 26th day of October, 2000

BUILDING MATERIALS EVALUATION COMMISSION

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**March 25, 1999**
BMEC REFERENCE	**BMEC 99-06-234**
BMEC APPLICATION	**BMEC # A1999-05**

SHELF AND RACK STORAGE SYSTEM
Warehouse Equipment Inc.,

1. Applicant

Warehouse Equipment Inc.,
2500 York Road
Elk Grove
Illinois, USA
60007

2. Description

The shelf and rack storage system is a self contained structural system within a building, having one or more solid intermediate platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This Authorization is valid only for Warehouse Equipment Inc.

2. Deck and walkway levels in structures used for the storage of Class I, II, III and IV commodities, shall be constructed of:

   (a) steel roof decking with a top substrate that forms a serviceable floor area;
   (b) open steel grating; or,
   (c) open steel floor planking.

   Deck and walkway levels in structures used for the storage of Group A, B, and C plastics as defined in NFPA 231C-1995, and rubber tires, shall be constructed of steel roof decking as required in (a) above.

3. The structural design of the entire shelf and rack storage system support structure, including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar, shall be in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

4. The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

5. An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage system in conformance with NFPA 13-1994, NFPA 231C-1995 and NFPA 231D-1994, as amended, or the appropriate NFPA Standard for the most severe hazard to which the storage facility is exposed.

6. Except where the deck is of open steel grating, any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per Condition A.5 of this Authorization.

7. A sprinkler system located in a cold storage or freezer environment shall be designed to address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

8. The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building, for each of the following:

   (a) movement of a control valve handle;
   (b) loss of excess water pressure required to prevent false alarms in a wet pipe system;
   (c) loss of air pressure in a dry pipe system;
   (d) loss of air pressure in a pressure tank;
   (e) a significant change in water level in any water storage container used for fire fighting purposes;
   (f) loss of electrical power to any automatically starting electrical fire pump; and,
   (g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

9. The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

10. The notification to the person controlling the building and the fire department referred to in Conditions A.8 and A.9 of this Authorization shall be provided by way of:

   (a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;
   (b) a proprietary control centre conforming to Chapter 4 of NFPA-72, Standard for the Installation, Maintenance, and Use of Protective Signaling Systems", as amended;
   (c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or,
   (d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

11. The maximum height of the shelf and rack storage system, from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m.

12. Each deck, walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Ontario Building Code (i.e. fire separations having a fire resistance rating, etc.) as amended, except as follows:

   (a) access to exit may be provided from a platform level by means of open unenclosed stairs for shelf and rack storage facilities comprising not more than three platform levels, the highest of which may not be more than 9 m above the main floor; and,

12. cont'd...

    (b) any single platform, deck or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

        (i) platform, deck or walkway does not exceed 200 m² in area;
        (ii) travel distance on the platform, deck or walkway to the level below, including the travel distance along the single unenclosed egress stair does not exceed 25 m; and,
        (iii) the platform, deck or walkway below is provided with two separate egress stairs or exits.

13. The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs shall not exceed 45 m. The maximum travel distance from the bottom of an unenclosed stair to an exit on the main floor level shall not exceed 45 m. The maximum travel distance to an enclosed exit on an elevated platform shall not exceed 45 m.

14. Fire extinguishers shall be installed on every platform or walkway level of the shelf and rack storage system in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time.

15. Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated deck or walkway, shall not exceed 9 m where the deck or walkway is required to be provided with at least 2 egress facilities.

16. The clear aisle width shall not be less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

17. The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

18. The shelf and rack storage system may, except as otherwise specifically stated herein, be used for the storage of Class I, II, III, and IV commodities and Group A, B and C plastics, as defined in NFPA 231C-1995, and rubber tires, subject to the limitations of Condition A.17 of this Authorization, and shall;

    (a) conform to the indoor storage requirements of Part 3 of the Ontario Fire Code or, in the absence of requirements in the Ontario Fire Code, to Part 3 of the National Fire Code, as amended and remade from time to time, and

    (b) not be used for the manufacturing, production, wrapping or assembly of materials.

19. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and the sprinkler design criteria used for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the sprinkler control valve.

20. The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code O. Reg. 388/97 as amended or remade from time to time.

21. A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage system height is more than 14 m (45 ft.) in height or where there are more than 3 elevated platforms of walkway level.

22. Where a standpipe and hose system is required, 63.5 mm (2 1/2 in.) diameter hose connections shall be provided, except that 38.1 mm (1 1/2 in.) hose connections are permitted in the shelf and rack storage systems which:

    (a) do not exceed 6 levels including the floor level; and,
    (b) do not exceed 3,716 m^2 (40,000 ft^2) in the sum total of all levels of the shelf and rack storage system.

23. Lighting levels of decks, walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

24. Emergency lighting shall be provided on walkways, decks, platforms, unenclosed egress stairs and exits providing means of egress to not less than the average level of illumination prescribed in Sentence 3.2.7.3.(2) of the Ontario Building Code, as amended or remade from time to time.

25. Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 25th day of March, 1999.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **March 25, 1999**
BMEC REFERENCE **BMEC 99-05-233**
BMEC APPLICATION **BMEC # A1999-04**

SHELF AND RACK STORAGE SYSTEM
CIVELEC CONSULTANTS INC.

1. Applicant

Civelec Consultants Inc.
3900 Cote Vertu
Suite 200
St. Laurent, Quebec
H4R 1V4

2. Description

The shelf and rack storage system is a self contained structural system within a building, having one or more solid intermediate platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural system for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This Authorization is valid only for Civelec Consultants Inc.

2. Deck and walkway levels in structures used for the storage of Class I, II, III and IV commodities, shall be constructed of:

   (a) steel roof decking with a top substrate that forms a serviceable floor area;
   (b) open steel grating; or,
   (c) open steel floor planking.

   Deck and walkway levels in structures used for the storage of Group A, B, and C plastics, as defined in NFPA 231C-1995, and rubber tires, shall be constructed of steel roof decking as required in (a) above.

3. The structural design of the entire shelf and rack storage system support structure, including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar, shall be in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

4. The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

5. An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage system in conformance with NFPA 13-1994, NFPA 231C-1995 and NFPA 231D-1994, as amended, or the appropriate NFPA Standard for the most severe hazard to which the storage facility is exposed.

6. Except where the deck is of open steel grating, any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per Condition A.5 of this Authorization.

7. A sprinkler system located in a cold storage or freezer environment shall be designed to address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

8. The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building, for each of the following:

   (a) movement of a control valve handle;
   (b) loss of excess water pressure required to prevent false alarms in a wet pipe system;
   (c) loss of air pressure in a dry pipe system;
   (d) loss of air pressure in a pressure tank;
   (e) a significant change in water level in any water storage container used for fire fighting purposes;
   (f) loss of electrical power to any automatically starting electrical fire pump; and,
   (g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

9. The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

10. The notification to the person controlling the building and the fire department referred to in Conditions A.8 and A.9 of this Authorization shall be provided by way of:

   (a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;
   (b) a proprietary control centre conforming to Chapter 4 of NFPA-72, Standard for the Installation, Maintenance, and Use of Protective Signaling Systems", as amended;
   (c) a central station conforming to ULC/ORD-C693-1994, “Central Station Fire Protective Signalling Systems and Services”; or,
   (d) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

11. The maximum height of the shelf and rack storage system, from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m.

12. Each deck, walkway or platform level shall be provided with not less than two exit stair shafts that conform to all requirements for exits as stated in the Ontario Building Code (i.e. fire separations having a fire resistance rating, etc.) as amended, except as follows:

   (a) access to exit may be provided from a platform level by means of open unenclosed stairs for shelf and rack storage facilities comprising not more than three platform levels, the highest of which may not be more than 9 m above the main floor; and,

12. cont'd...

(b) any single platform, deck or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform, deck or walkway does not exceed 200 m² in area;
(ii) travel distance on the platform, deck or walkway to the level below, including the travel distance along the single unenclosed egress stair does not exceed 25 m; and,
(iii) the platform, deck or walkway below is provided with two separate egress stairs or exits.)

13. The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs shall not exceed 45 m. The maximum travel distance from the bottom of an unenclosed stair to an exit on the main floor level shall not exceed 45 m. The maximum travel distance to an enclosed exit on an elevated platform shall not exceed 45 m.

14. Fire extinguishers shall be installed on every platform or walkway level of the shelf and rack storage system in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time.

15. Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated deck or walkway, shall not exceed 9 m where the deck or walkway is required to be provided with at least 2 egress facilities.

16. The clear aisle width shall not be less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

17. The shelf and rack storage system is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

18. The shelf and rack storage system may, except as otherwise specifically stated herein, be used for the storage of Class I, II, III, and IV commodities and Group A, B and C plastics, as defined in NFPA 231C-1995, and rubber tires, subject to the limitations of Condition A.17 of this Authorization, and shall;

(a) conform to the indoor storage requirements of Part 3 of the Ontario Fire Code or, in the absence of requirements in the Ontario Fire Code, to Part 3 of the National Fire Code, as amended and remade from time to time, and

(b) not be used for the manufacturing, production, wrapping or assembly of materials.

19. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and the sprinkler design criteria used for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the sprinkler control valve.

20. The shelf and rack storage system shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code O. Reg. 388/97 as amended or remade from time to time.

21. A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage system height is more than 14 m (45 ft.) in height or where there are more than 3 elevated platforms of walkway level.

22. Where a standpipe and hose system is required, 63.5 mm (2 1/2 in.) diameter hose connections shall be provided, except that 38.1 mm (1 1/2 in.) hose connections are permitted in the shelf and rack storage systems which:

    (a) do not exceed 6 levels including the floor level; and,
    (b) do not exceed 3,716 m^2 (40,000 ft^2) in the sum total of all levels of the shelf and rack storage system.

23. Lighting levels of decks, walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

24. Emergency lighting shall be provided on walkways, decks, platforms, unenclosed egress stairs and exits providing means of egress to not less than the average level of illumination prescribed in Sentence 3.2.7.3.(2) of the Ontario Building Code, as amended or remade from time to time.

25. Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 25th day of March, 1999.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**FEBRUARY 25, 1999**
BMEC AUTHORIZATION	**BMEC # 99-03-231**
BMEC APPLICATION	**# A1998-06**

FORMADRAIN® INC.
FORMADRAIN® PROCESS

1. Applicant

FORMADRAIN® INC.
8600 Rue Jarry,
Anjou, Québec
H1J 1X7

Tel: (514) 352-2000
Fax: (514) 352-2747

2. Manufacturing Facilities

FORMADRAIN® INC.
8600 Rue Jarry,
Anjou, Québec
H1J 1X7

3. Description

The Formadrain® Process is intended for the rehabilitation of underground pipes other than potable water pipes. The Formadrain® Process repairs pipes of all sizes and shapes using existing access points, so no digging is required. The Formadrain® Process consists of impregnating (wetting) a bidirectional woven fibreglass tissue with a predetermined epoxy resin. The impregnating tissue is rolled on a pneumatic tube (a thermomandrel) corresponding in length with the length of pipe to be repaired. The thermomandrel is slipped inside the pipe needing repair (concrete, clay, brick, PVC, etc.) from a nearby access, generally a manhole.

4. Authorization requested

The applicant seeks a Building Materials Evaluation Commission (BMEC) authorization for the Formadrain® Process as an alternative to repairing existing pipes as required by Article 7.1.2.2. - Alteration or Repair, and Section 7.2. - Materials and Equipment.

5. Assessment

Reports and assessments provided by the applicant show that if the Formadrain® Process of underground conduit rehabilitation is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this authorization, the level of performance required by the Ontario Building Code will be provided.

Reports submitted and reviewed:

1. Installation procedure, including the Material Safety Data Sheet

2. Typical specifications, including laboratory data

3. Usage and limitation of the Formadrain® Process

6. Authorization

Use of the Formadrain® Process of underground conduit rehabilitation in drainage systems is authorized as an alternative to traditional pipe repair and/or replacement, subject to the following:

A. Specific Terms & Conditions

1) The Formadrain® underground conduit rehabilitation process shall be performed in accordance with the manufacturer's installation instructions.

2) Only manufacturer trained and approved installation personnel shall conduct the work in accordance with the instructions on the proper and safe installation of the Formadrain® Process, having regard to the Material Safety Data Sheets which will be supplied. All work shall be undertaken only in well-ventilated areas where no smoking is permitted while manipulating the resin.

3) The manufacturer shall provide field training to all installers and such training will be delivered by an experienced technician approved by Formadrain® Inc.- Drainmar Group Division.

4) The Formadrain® Process shall only be used in accordance with the following limitations:

a) rehabilitation of underground drainage pipes excluding potable water systems,
b) maximum diameter of the drainage pipe that can be rehabilitated is 1525 mm (60 inches),
c) minimum diameter of the drainage pipe that can be rehabilitated is 75 mm (3 inches),
d) maximum angle that can be rehabilitated is 45^{o},
e) major leaks must be sealed before installing the Formadrain® liner,
f) flows have to be blocked and pumped.

5) All materials used in the Formadrain® Process, including the balanced bidirectionally woven fibreglass tissue, the two-component epoxy resin, polythene and thermomandrel, shall be supplied by Formadrain® Inc. and shall be handled in accordance with the manufacturer's specifications.

6) Before using the Formadrain® Process, the pipes shall be thoroughly cleaned by the removal of roots, protruding laterals and exposed armatures reamed to prevent perforating the insertion kit. Major infiltrations must be grouted.

7) CCTV video inspections by a qualified person, shall be performed before the rehabilitation process starts and after the work is completed.

8) Preparation of the thermomandrel shall be in complete compliance with the specification provided by the manufacturer, and the composite (fibreglass and resins) shall be prepared in a shop under total quality control.

9) The thickness of the impregnating tissue shall be established considering the data supplied for the pipe to be lined and the number of layers shall determine the mechanical capacity. The reduction in pipe diameter from the lining shall be considered minimal and not essential for the flows in the pipes.

10) The pot life (pre-curing time) of the mixed resin is 4 hours at 20^{o} C and it may vary widely depending on ambient temperatures. During the transportation the wetted composite material shall be protected from exposure to sun and/or rain.

11) Each insertion of the insertion kit shall be done in accordance with the manufacturer's recommendation and every insertion shall overlap the previous one by a minimum of 6 inches.

12) The curing process shall be supervised at all times by a technician that will maintain the suggested pressure differential at 1 psi. Curing shall be done using a high pressure steam boiler and air compressor to set the impregnated membrane against the conduit wall.

13) The curing time is predetermined by the manufacturer based on the diameter and length of pipe being rehabilitated. Actual times shall not exceed by 25%, nor be less than 25% of the predetermined times.

B. General Conditions

1. A copy of this Authorization shall be included with an application for a building permit and shall be maintained on the site of the construction, with the building permit.

2. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

      (iii) the ownership of the company specified in Section 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the Building Code Act, 1992 or any relevant legislation as may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 25th day of February, 1999

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**FEBRUARY 25, 1999**
BMEC AUTHORIZATION	**BMEC # 99-02-230**
BMEC APPLICATION	**#A1998-04**

THE BILCO COMPANY
SCAPEWEL® WINDOW WELL SYSTEM

1. Applicant

The Bilco Company
P.O. Box 1203
New Haven, CT 06505
U.S.A.

Tel: (203) 934-6363
Fax: (203) 933-8478

2. Manufacturing Facilities

KSQ Manufacturing
Strotherfield
Winfield, Kansas
U.S.A. 67156

3. Description

The Scapewel® Window Well is a terraced window well egress system, manufactured in widths of 42" to 66" and heights of 48" for the two-tier model and 62" for the three-tier model. It is a component of a system permitting emergency escape from habitable below-grade building space. Modular structural panels snap together and are manufactured of high density polyethylene plastic and rigid polyurethane foam. Mounting flanges attach to the foundation wall or to metal window bucks. Clear, polycarbonate covers, attached with metal clips, are custom fitted for each size of well to prevent water, snow and leaves from filling the well. The clips release from the inside by lightly pushing up on the cover.

4. Authorization requested

The applicant sought to have the Scapewel® Window Well, when installed in conjunction with appropriately designed windows, authorized as permitting a means of emergency egress from habitable below-grade building space, at least equivalent to that required by Parts 9 and 11 of the Ontario Building Code.

5. Assessment

Reports and assessments provided by the applicant show that if the Scapewel® Window Well System is used in conjunction with appropriately designed windows; is manufactured and installed in accordance with the limitations of the manufacturer's instructions and the terms and conditions stated in this authorization, a level of performance for a means of emergency egress from habitable below-grade building space, will be provided that is at least equivalent to that required in Article 9.7.1.4. and Compliance Alternative C122 of the Ontario Building Code.

Reports submitted and reviewed:

1. Product Description, Usage, Limitations and Brochures

2. Installation Manual For The Scapewel® Window Well System, including:

   - Assembly and Installation Instructions, and

   - Installation Standards

3. Hauser Laboratories Report of the "horizontal load test" and "vertical load test" on the Scapewel® System - Test Report No. L5-0565.RP2

4. Report of the Phillips Chemical Company dated January 15, 1997, on the testing of the Scapewel® panels undergoing 22 days of freeze/thaw temperature cycles.

5. Reports on the compliance of the Scapewel® System with:
   - the 1994 Edition of the Uniform Building Code,
   - the 1997 revisions to the CABO One & Two Family Dwelling Code, and
   - Section 1013 First Draft edition of the International Building Code

6. Wisconsin Department of Commerce, Material Approval 970094-0 for the RM BASE CO. Scapewel® Window Well System.

7. Quality Control Standards Used In The Manufacturing Process for the Scapewel® Window Well System

6. Authorization

The use of the Scapewel® Window Well System is authorized as providing an equivalent means of window well egress from habitable below-grade building space as required in Article 9.7.1.4. and Compliance Alternative C122 of the Ontario Building Code:

- when used in conjunction with appropriately designed windows,
- when manufactured in accordance with the manufacturer's Quality Control Standards,
- when installed in accordance with the Applicant's instructions, and,
- subject to the following terms and conditions.

A. Specific Terms and Conditions

1. In Part 9 construction, the windows used in conjunction with the Scapewel® Window Well System must comply in all respects with the requirements of Articles 9.7.1.3 and 9.7.1.4.

2. In Part 11 buildings, the windows used in conjunction with the Scapewel® Window Well System must comply with the requirements of Compliance Alternative C122, except for the clearance requirement of not less than 1 000 mm (3 ft 3 in) in front of the window.

3. The Scapewel® Window Well System must be attached in accordance with the manufacturer's installation manual, to the building it serves and it is deemed to be part of the building when calculating required setbacks.

4. The Scapewel® Window Well System must be backfilled in accordance with the manufacturer's installation manual, to ensure that free-draining stone surrounds the well and connects to the subdrain system.

5. The Scapewel® Window Well System must be installed with an integral polycarbonate cover conforming to CAN/CGSB-63.14-M.

6. No part of the Scapewel® Window Well System shall be located closer than 1 500 mm (5 ft) to the edge of a driveway.

7. No exhaust or discharge outlet from the building shall be placed within 1 000 mm (3 ft 3 in) in any direction, of the Scapewel® Window Well System.

8. A copy of this authorization and the manufacturer's installation manual must accompany each application for a building permit.

B. General Conditions

1. The use of the Scapewel® Window Well System must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be maintained on the site of the construction, with the building permit.

3. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

      (iii) the ownership of the company specified in Section 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the Building Code Act, 1992 or any relevant legislation as may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ; or

   (c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 25th day of February, 1999

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chair

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
www.obc.mah.gov.on.ca

Date of Authorization	January 19, 1999
BMEC Authorization	BMEC # 99-01-229
BMEC Application	# A1998-02

* denotes July 28, 2005 revision

AUTHORIZATION REPORT - Infiltrator Systems Inc. Equalizer 24 Chamber System

1. Applicant

Infiltrator Systems Inc.
4 Business Park Road
P.O.Box 768
Old Saybrook,
CT 06475 USA

Tel: (860) 388-6639
Fax: (860) 388-6810

2. Manufacturing Facilities

Infiltrator Systems Inc.
1315 Enterprise Dr.
Winchester, KY 40391 USA

Infiltrator Systems Inc.
1750 West 2450 South
Ogden, UT 84401 USA

3. Description

Infiltrator Equalizer 24 Chambers are intended for use in a sewage system in lieu of absorption trenches constructed of stone and distribution pipe. The Infiltrator Equalizer 24 Chambers are formed from injection molded polyolefin and connected end too end using a built-in latch. Chambers have a minimum bottom width of 380 mm and a minimum height of 280 mm. The louvered sidewalls have a minimum area of 0.61 m^2/m of length.

* The Equalizer 24 Chamber is available in two length sizes: 2.54 m (8.33 ft) and 1.22 m (4 ft) with the latter referred to as the Quick4 Equalizer 24 , and for the purposes of this authorization both chamber lengths are referred to a the “Infiltrator Equalizer 24 Chamber”. The Equalizer 24 Chambers are closed at the ends of a trench with snap-on end plates.

4. Authorization requested

The applicant sought authorization for use of the Equalizer 24 Chamber System as an alternative to the construction of absorption trenches as required by Section 8.7 of the Ontario Building Code. The applicant requested that the Equalizer 24 Chamber System be used to replace stone and distribution pipe in absorption trenches and filter beds that are:

i) gravity fed,
ii) "dosed" (non-pressurized distribution system), and,
iii) pressurized.

Note: For the purposes of this authorization, "dosed" means a system in which effluent is pumped to the leaching bed either by pump or siphon but the effluent is not pressurized within the leaching bed.

5. Assessment

Reports and assessments provided by the applicant show that if Infiltrator Equalizer 24 Chambers are designed, performance tested, installed and maintained in accordance with the limitations of the manufacturer's instructions and the conditions stated in this authorization, a level of performance will be provided as required by the Ontario Building Code 1997, for absorption trenches (in soil, leaching bed fill or a filter bed), whether gravity fed, pressurized or "dosed".

Reports submitted and reviewed:

1. Predicting Life for Wastewater Absorption Systems - Paper by Keys, Tyler and Converse (ASAE 1998).

2. Final Report: Infiltrator Florida Side-by-Side Test Site - Nodarse & Associates (Geotechnical, Environmental Geotechnics & Material Engineers)

3. Nova Scotia Department of the Environment, Technical Guidelines for use of Infiltrator Plastic Leaching Chambers - 5/5/98.

4. Infiltration as Affected by Compaction, Fines and Contact Area of Gravel. R.S.Amerson, E.J.Tyler, J.C.Converse

5. Field Measurement of Unsaturated Hydraulic Conductivity by Infiltration Through Artificial Crusts.
J. Bouma, D.L.Millel, F.P.Hole, C.R.Amermay

6. Soil Column and Model Absorption Results.
On-site Wastewater Disposal Systems, Final Report, December 1986.

7. A Review of the Field Performance of Chamber Leaching Systems
Stephen P. Dix, P.E. and Randy May

8. Subsurface Wastewater Disposal Systems Designed in Maine by The Site Evaluation Method: System Design, Land Use Trends, and Failure Rates.
Donald C. Hoxie, P.E.; Albert Frick, C.S.S.; Jay Hardcastle, S.E.

9. Study of Gravel and Chamber Drainfield Performance in Georgia.
Johnny Saxon, Richard Crumley

10. Evaluating Innovative Systems - A Field Study Utilizing Leaching Chamber Design. Shawn A. Ricklefs

11. Ontario Building Code Requirements Effecting Infiltrator Chambers - Paper prepared by Gary Sharp, P.Eng.

12. Wastewater Quality and Trench System Design Effects on Soil Acceptance Rates. (Proceedings of the Eighth National Symposium on Individual and Small Community Sewage Systems-March 1998)
Ted L. Louden, Geoffrey S. Salthouse and Delbert L. Mokma

6. Authorization

The use of the Infiltrator Equalizer 24 Chamber System is authorized in sewage systems that are within the scope of Part 8 of the Ontario Building Code 1997, as an alternative to stone and distribution pipes in absorption trenches and in filter beds, when installed in accordance with the manufacturer's recommendations and the Specific Terms and Conditions of this Authorization.

A. Specific Terms and Conditions

1. When the Infiltrator Equalizer 24 Chamber System is installed in lieu of distribution piping and stone, the length of the chamber system must equal the required lengths of distribution pipe specified in Articles 8.7.3.1 and 8.7.5.3.

2. When the Infiltrator Equalizer 24 Chamber System is installed in lieu of distribution piping and stone, the leaching beds must meet the general construction requirements specified in Articles 8.7.2.1, 8.7.4.2 and 8.7.5.3.

3. The minimum clearance distances required by Article 8.2.1.6. for distribution piping, must be met by the Infiltrator Equalizer 24 Chamber System.

4. When installed in lieu of absorption trenches, the trenches for the Infiltrator Equalizer 24 Chamber System shall be:

a) approximately the same length and not more than 30 m in length,
b) approximately 500 mm in width,
c) at least 600 mm and not more than 900 mm in depth, to bottom of trench,
d) centred at least 1600 mm apart,
e) at least 900 mm at all points on the bottom of the trench, above the high ground water table, rock or soil with a percolation time greater than 50 minutes, and
f) backfilled, after installation of the Infiltrator Equalizer 24 Chamber System, with leaching bed fill, so as to ensure that after the leaching bed fill settles, the surface of the leaching bed will not form any depressions.

5. When installed in lieu of distribution piping and stone in filter beds, the lines of Infiltrator Equalizer 24 Chambers shall be evenly spaced over the surface of the filter medium to which the sewage effluent is applied, and the filter bed shall meet the following requirements:

   a) the filter medium shall have a minimum depth of 750 mm below the bottom of the Equalizer 24 Chambers and shall be clean sand comprised of particles ranging in size between the limits of:

      i) an effective size of .25 mm with a uniformity coefficient not less than 3.5,
      ii) an effective size of 2.5 mm with a uniformity coefficient not less than 1.5, and
      iii) having a uniformity coefficient not greater than 4.5.

   b) the surface of the filter bed shall be at least 900 mm above the high ground water table, rock or soil with a percolation time greater than 50 minutes.

   c) the other construction requirements of Sentences 8.7.5.3.(1) and (4) to (6).

6. When used in gravity fed conditions, the Infiltrator Equalizer 24 Chamber System must be installed in compliance with the above-stated Specific Terms and Conditions 1. through 5., and be:

   a) installed level over the length of the trench,
   b) securely connected, chamber to chamber, using the built-in latch,
   c) free of structural damage and used full length (not cut),
   d) equipped with end caps installed on both ends, and
   e) equipped with a built-in splash plate at the inlet end of each chamber line, to prevent soil scouring.

7. Where the sewage effluent is “dosed” to the leaching bed by pumps or a siphon, the Infiltrator Equalizer 24 Chambers must be installed to comply with the above-stated Specific Terms and Conditions 1. through 6., and:

a) the effluent is pumped to a header line or distribution box prior to entering the chambers, and,
b) a volume of effluent within the range of 3.5 - 8.0 litres per metre of Infiltrator Equalizer 24 Chamber, must be pumped within a time period not exceeding 15 minutes, to meet the requirements of Sentence 8.6.1.3.(4).

8. Where the sewage effluent is distributed through a pressurized system, the Infiltrator Equalizer 24 Chambers must be installed:

a) to comply with Specific Terms and Conditions numbers 1. through 5. above, and,
b) with a minimum 1½ inch diameter pipe extending over the entire length of each trench, and such pipe:

i) being specified by the manufacturer as acceptable for pressurized installations,
ii) having minimum 6 mm diameter orifices, spaced over its length to ensure even distribution of effluent,
iii) being supported in a manner so as to ensure self-draining and prevent freezing of its contents,
iii) having clean-outs installed at the downstream end of each chamber line, to allow the system to be serviced, and
iv) receiving effluent from a treatment unit equipped with an effluent filter on the outlet, such effluent filter to be installed and sized in accordance with the manufacturer's recommendations.

B. General Conditions

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;
(ii) the address of the applicant specified in Section 1 of this Authorization; or,
(iii) the ownership of the company specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 19th day of January, 1999

BUILDING MATERIALS EVALUATION COMMISSION

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per: Antonio Chow, Vice-Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	July 23, 1998
BMEC REFERENCE	BMEC # 98-05-228
BMEC APPLICATION #	BMEC #A1997-21

ROYAL CONCRETE ENCASED TECHNOLOGIES INC. (ROYCET)
Royal Building System

1. Applicant

Royal Concrete Encased Technologies Inc.
3901 Highway #7
Suite 400
Woodbridge, ON
L4L 8L5

Tel: (905) 851-3331
FAX: (905) 851-2001

2. Manufacturing Facilities

Royal Building Systems
(Canada) Ltd.
1 Royal Gate Boulevard
Woodbridge, ON
L4L 8Z7

Tel: (905) 264-0701
FAX: (905) 264-0702

3. Description

The Royal Building System ™ (RBS) uses a rigid polymer form consisting of a PVC-based compound filled with concrete and polyurethane insulation. The RBS is installed by connecting a series of forms and filling the forms with concrete and insulation. The original form remains as the finished surface of the wall assembly on the interior and exterior of the wall. This authorization pertains to the 200 mm RBS wall system only. The 200 mm wall system consists of a 150 mm concrete section with 50 mm of polyurethane insulation on the exterior side of the wall, contained within a PVC form.

4. Authorization Requested

The applicant requested an authorization for the use of the 200 mm RBS as an exterior combustible cladding system in non-loadbearing walls in industrial (Group F, Divisions 2 and 3) and mercantile (Group E) single storey sprinklered buildings of noncombustible construction.

5. Assessment

The Royal Building System is tested and evaluated as follows:

(a) CAN/ULC: S102-M88, Standard Method of Test for Characteristics of Building Materials and Assemblies
S127M, Standard Corner Wall Method of Test for Non-Melting Building Materials

(b) ASTM: D4329, G53, D1925, D2244, Light and Water Weathering

6. Authorization

The use of the Royal Building System™ is authorized in single-storey buildings of noncombustible construction and classified as Group E, Group F, Division 2 or Group F, Division 3, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The building is sprinklered in accordance with NFPA 13, NFPA 231 or NFPA 231C.

2. The sprinkler system is designed for potential storage conditions by a professional engineer.

3. The sprinkler system is electrically supervised.

4. The RBS is only used as a non-loadbearing assembly.

5. The flame spread rating of the foamed plastic insulation used in this building system has a flame spread rating of less than 500.

6. The limiting distance of the building shall be calculated in accordance with Table 3.2.3.1.A. for Group F, Division 3 occupancy or Table 3.2.3.1.B. for Group E occupancy and Group F, Division 2 occupancy, forming Part of Article 3.2.3.1 of the Ontario Building Code 1997, and based on:

   a) 25% unprotected openings in the exposing building face if the actual unprotected opening is between 0 and 25%; or

   b) the actual percentage of unprotected openings in the exposing building face if the percentage of unprotected openings is greater than 25%.

7. The area of an exposing building face shall be calculated as the total area of exterior wall facing in one direction on any side of a building measured from the finished ground level to the uppermost ceiling.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (I) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

      (iii) the ownership of the company specified in Section 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (I) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ; or

   (c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this August 4, 1998.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Tony Chow, Vice-Chairman

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**April 30, 1998**
BMEC REFERENCE	**BMEC #98-04-227**
BMEC APPLICATION #	**BMEC #A1998-01**

Leak-Bye Inc.
Leak-Bye Interior Foundation Drainage System

1. Applicant

Leak-Bye Inc.
RR3
Mount Forest, ON
N0G 2L0

Tel: 1-800-393-5325
FAX: 519-323-4793

2. Manufacturing Facilities

Gravenhurst Plastics Limited
225 Edward Street
Gravenhurst, ON
P1P 1K8

Tel: 705-687-3610
FAX:

3. Description

The Leak-Bye Interior Foundation Drainage System consists of a 14 inch wide corrugated polyethylene plastic strip complete with a "V" groove centrally cut along the length of the strip. It is used in conjunction with an approved sheathing breather membrane or house-wrap. The plastic strip is to be folded at the groove such that it can be placed on the inside of the foundation wall at the footing. The Leak-Bye strip is secured to the footing prior to the pouring of the basement wall.

The intent of the system is to redirect any water which may penetrate the foundation wall, down between the wall and the breather membrane, to the corrugated strip. The corrugations allow passage of the water past the floor to the gravel bed below and possibly a secondary weeping tile located under the floor slab.

4. Authorization Requested

The applicant requested an authorization for the use of the Leak-Bye Interior Foundation Drainage System as an equivalent or alternative to a drainage layer required under Article 9.14.2.1. of the Ontario Building Code.

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5. Assessment

The Leak-Bye Interior Drainage System is tested and evaluated, as follows:

The "Side Water Inflow Drainage Test" conducted by ORTECH Corp. shows there is more than adequate flow characteristics.

A professional engineer's opinion from Rymell Building Sciences concludes that the Leak-Bye Interior Foundation Drainage System should perform as a drainage layer as required by the Ontario Building Code, if installed as per the manufacturer's direction for both the Leak-Bye strip and the breather membrane.

6. Authorization

The use of the Leak-Bye Interior Drainage System is authorized as a compliance alternative for retrofit applications subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This Authorization covers only construction under Part 11 of the Ontario Building Code.

2. The Leak-Bye Interior Drainage System is not intended to act as a means of controlling soil gases under Article 9.13.1.3 of the OBC.

3. The Leak-Bye Interior Drainage System shall not be installed in areas where there is potential infiltration of soil gases. However, it may be used in conjunction with other means such as negative pressure systems.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(I) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the company specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(I) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

3/...

Dated at Toronto this 30th day of April, 1998

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
CONSOLIDATED AUTHORIZATION REPORT

DATE OF AUTHORIZATION **February 26, 1998**
BMEC REFERENCE **BMEC #98-01-224 A**
BMEC APPLICATION # **BMEC A1997-06**
*** Denotes a new or amended clause** **Amended August 27, 1998**

STUDOR Air Admittance Valve (Mini-Vent and Maxi-Vent)

1. Applicant

Studor Inc.
2030 Main Street
DUNEDIN, Florida
34698

2. Manufacturing Facilities

Mini-Vent D-Rep Plastics, Inc.
11345A 53rd Street North
CLEARWATER, Florida 34620

Maxi-Vent MPC-D G Plastics
Steenweg Op Mol 177
B2300 TURNHOUT, Belgium

Recess Box: Midtech, Inc. of America
924 West First Street
MCPHERSON, Kansas 67460

3. Description

Studor Air Admittance Valve (AAV) is intended for use as an alternative measure to a vent pipe that extends to the open air. These valves open under a negative pressure within the drainage system allowing air to enter the venting system to maintain trap seals. The valves close by gravity under no pressure differential (no flow) or under positive pressure to prevent the leakage of sewer gases through the valve. The Studor AAV comes in two models, the Mini-Vent which will accommodate 1 ¼" and 1½" pipe sizes, and the Maxi-Vent which will accommodate 2", 3" and 4" pipe sizes.

4. Authorization Requested

The applicant sought authorization for the use of their product as an alternative to extending a vent pipe to open air as presently required by the OBC.

5. Assessment

Reports and assessments provided by the applicant show that if the Studor AAV's are designed, performance tested and maintained in accordance with the limitations

the manufacturer's instructions and conditions stated in this authorization, the level of the performance required by the Ontario Building Code for individual venting, duel venting, wet venting or circuit venting for fixtures located on the same floor level will be provided.

Reports submitted and reviewed:

1. United States Testing Company Inc. Report # TS93-0515.1 dated 9/10/93
   Evaluation of Studor Air Admittance Valves for Compliance with ASSE 1050-91.

2. United States Testing Company Inc. Report #TS93-0515.2R revised date 2/13/95
   Testing of Studor Air Admittance Valves as type A and Type B in accordance with ANSI/ASSE 1051-1992.

3. SGS United States Testing Company Inc. Report #TS96-0247R dated 5/17/96
   Evaluation of Studor Air Admittance Valves to ANSI/ASSE 1051-1992.

4. Research Report #92-46, Boca
   Evaluation Services Inc. Studor Mini-Vents and Maxi-Vent Air Admittance Valve dated January 1993

5. Engineering Reports dated November 30/92, December 15, 1992 and June 1, 1994 prepared by J.B. Engineering and Code Consulting, P.C.

   Since these reports include figures (1 through 13) and illustrate piping arrangements in plumbing systems that could comply with different Plumbing Codes in the United States and not in compliance with venting requirements in the Ontario Building Code Part 7, Section 7.5 the figures shall not be used as an approved piping arrangement and articles 7.5.2.1; 7.5.2.2; 7.5.5.3; 7.5.7.1, 7.5.7.2 and this authorization must govern the location and the sizes of the Studor Air Admittance Valve

6. Authorization

* The use of Studor Mini-Vent AAV's sizes 1¼" and 1½", and Maxi-Vent AAV's sizes 2", 3" and 4" is authorized for use within a plumbing system as an alternative where there is no other reasonable means of connecting to the traditional venting system and where there is no danger of back pressure presenting a problem.

A. SPECIFIC TERMS AND CONDITIONS:

1) Vent system utilizing Studor AAV shall conform to performance standards for "Fixture and Branch Air Admittance Valves" ANSI/ASSE 1051/90 (rev. 1996).

* 2) All PVC and ABS materials used in the Studor AAV shall conform to ASTM D2665-96 and ASTM 2661, respectively.

3) The Studor AAV shall be installed in accordance with the manufacturer's installation instructions. In case of a conflict between the manufacturer's installation instructions and the Ontario Building Code requirements, the provisions of the Code shall govern.

4) The manufacturer shall supply instructions on the proper and safe installation of the AAV. Such instructions shall include detail drawings and must remain on site.

5) The documents submitted for permit approval shall contain the design and layout of the entire drainage and venting systems. This includes, but not limited to plan views, riser diagrams, all pipe sizes, fixture units and information on the locations and sizes of all Studor AAV's.

6) The AAV shall be installed after the drain waste and vents (DWV) have been tested as required by articles 7.3.6.4 and/or 7.3.6.5 and prior to the final test as required in article 7.3.6.6. so as to establish that an adequate seal under positive pressure is achieved.

7) Individual, dual, wet and circuit vents shall be permitted to terminate with a connection to a Studor AAV. When more than three fixtures connect to the horizontal branch a relief vent is required.

8) The AAV shall not be used on a vent stack or stack vent.

9) When the Studor AAV is used on a 4" vent the inner lip of the gasket must be cut off.

10) The AAV shall only vent fixtures that are located on the same floor level and connect to a horizontal branch line.

11) The horizontal branch drain shall connect to the building drain or the stack not more than 4 stories (as defined in Part 7) from the top of the stack.

12) The horizontal branch that is circuit vented shall be provided with a relief vent that shall connect to a vent stack, stack vent, header or extend outdoors to open air.

13) Studor AAV's cannot be used as relief vents.

14) The relief vent shall connect to the horizontal branch drain between the stack or building drain and the most downstream fixture drain connected to the horizontal branch drain. The relief vent shall be sized in accordance with section 7.5.2.2 of the O.B.C. The relief vent may be a wet vent if it is 2" size or greater and not more than one fixture having a maximum of 1½ fixture units is drained into it.

15) The AAV shall be located 6" (150 mm) above the flood level rim of the fixture being vented where possible, and in case of a single fixture, as high as possible but not less than 4" (100 mm) above the weir of the fixture trap.

16) The AAV shall be located within the maximum developed length permitted as per article 7.5.5.3 O.B.C.

17) The AAV shall be located in an area that is accessible for inspection, service, repair and/or replacement. For the purpose of this approval, concealment in walls and/or floor spaces without removable grills or access panels is not considered accessible.

18) The AAV shall not be located in an attic space.

19) The AAV shall be located within a ventilated space that allows air to enter the valve.

20) The AAV shall be rated for the size of the vent to which the valve is connected. The Mini-Vents sized 1¼" and 1½" shall be installed on vent pipes of 1¼" and 1½" nominal sizes. The Maxi-Vents sizes 2", 3" and 4" shall be installed on vent pipes of 2", 3" and 4" nominal pipe sizes.

21) Each plumbing system shall have a minimum of one 3" stack which shall be extended outdoors to the open air as per sentence 7.5.6.2.(2) O.B.C.

22) AAV shall not be used for corrosive or acid waste systems, grease and oil interceptors installations or any other special waste systems.

23) The AAV shall not be used for any closed system such as a sewage ejector, or a manhole located inside the building.

24) The AAV shall not be located in spaces utilized as supply or return air plenums.

25) When the AAV is located in an area where freezing conditions may occur protection of the AAV shall be done in accordance with the manufacturers installation instructions.

26) A label of 2" x 2" (50mm x 50mm) in size shall be placed on hydro panel, stating the following: "<u>These premises have an air admittance valve installed</u>

in the Plumbing System".

27) This authorization is based on O.B.C. Part 7 requirements. All matters relating to combustible construction requirements apply as per Part 3 of the O.B.C.

28) The AAV must be installed as close to true vertical as possible, but not more than 15° off the true vertical.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the company specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 27th day of August, 1998

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**October 30, 1997**
BMEC REFERENCE	**BMEC 97-14-223**
BMEC APPLICATION #	**BMEC 1997-19**

CertainTeed FORM-A-DRAIN™ permanent foundation footing form and foundation drain system

1. Applicant

CertainTeed Corporation
Pipe and Plastics Group
750 East Swedesford Road
P.O. Box 860
Valley Forge, Pennsylvania
U.S.A. 19482

2. Manufacturing Facilities

CertainTeed Corporation
Pipe and Plastics Group
McPherson, Kansas Plant
500 West, 1st Street
McPherson, Kansas
U.S.A. 67460

3. Description

CertainTeed FORM-A-DRAIN™ functions as both a permanent foundation footing form and foundation drain system.

The system components are manufactured from polyvinyl chloride (PVC) compound. The FORM-A-DRAIN™ system consists of 3.66 m (12') long extruded drainage channels, called "lineals", with sizes of 55 mm by 150 mm (2.25" by 6") and 55 mm by 205 mm (2.25" by 8"). The lineals may have factory applied geo-textile fabric applied on the side of the slots. They are manufactured as hollow rectangular tubes with a solid intermediate web which stiffens the section and creates upper and lower chambers of equal size.

The lineals have slots in the exterior vertical face to allow the entrance of ground water. The water passes through the system to outlet fittings which provide the connection of the FORM-A-DRAIN™ to an approved drainage disposal area.

The FORM-A-DRAIN™ system components includes couplings, corners, drain outlets, spacer straps and grade stakes.

4. Authorization Requested

The applicant sought authorization for the use of an innovative permanent foundation footing form and foundation drain system as an equivalent to the drainage provisions contained in Sentence 9.14.3.1.(1) and Article 9.14.3.2. of Regulation 61 of Revised Regulations of Ontario 1990 (the "Ontario Building Code").

5. Assessment

Test results and assessments provided by the Applicant show that if the CertainTeed FORM-A-DRAIN™ system is used in accordance with the limitations and conditions stated in this authorization, it will provide equivalent performance with the following:

* Ontario Building Code, Sentence 9.14.3.1.(1) and Article 9.14.3.2.

6. Authorization

The use of CertainTeed FORM-A-DRAIN™ permanent foundation footing form and foundation drain system is authorized in respect of the drainage material standards and minimum drain tile size contained in Sentence 9.14.3.1.(1) and Article 9.14.3.2. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1) The Applicant (i.e. CertainTeed Corporation) shall provide the user of this Authorization with complete instructions on the proper installation of the FORM-A-DRAIN™ system.

2) The FORM-A-DRAIN™ system shall be installed in accordance with this Authorization and the manufacturer's specifications (titled "Form-A-Drain Installation Guide", Code No. 40-95-04, dated 1994), which shall be available at the job site at all times. If a conflict arises between the manufacturer's installation instructions and this Authorization, the most restrictive provision shall apply.

3) The FORM-A-DRAIN™ system shall be installed in accordance with Sentences 9.14.3.3.(1) and 9.14.3.3.(4) of the Ontario Building Code, as amended or remade from time to time.

4) The slotted vertical face of the FORM-A-DRAIN™ system lineals shall be installed facing away from the footings. The lineals shall be inserted firmly into the accessory couplings to obtain a snug fit. Where the ends of lineals are cut to fit the layout, they shall be cut square and all burrs removed.

5) Drainage outlets shall be installed with the 100 mm (4 inch) diameter outlet located at the bottom. A 100 mm (4 inch) diameter PVC pipe shall be used to connect the outlets to each other or to the drainage pipe that discharges to an approved area.

6) The complete FORM-A-DRAIN™ system shall be levelled and reinforced with stakes spaced at a maximum distance of 1.5 m (5 ft.) on center, prior to the placing of concrete.

7) The maximum number of outlet fittings per side of any lineal shall be limited to one outlet per 0.9 m (3' 0") length of lineal.

8) The use of FORM-A-DRAIN™ as a permanent footing form is limited to applications

where the required footing depth is not less 150 mm (6 inch).

9) Any system components that are damaged during placement of backfill shall be removed and replaced with new components.

10) This Authorization is valid only for FORM-A-DRAIN™ manufactured by CertainTeed Corporation.

11) The use of FORM-A-DRAIN™ must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the manufacturing facilities specified in Section 2 of this Authorization;

(iii) the ownership of the manufacturing facilities specified in Section 2 of this Authorization; or

(iv) the address of the Applicant specified in Section 1 of this Authorization;

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Oliver Drerup, Vice-Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION June 26, 1997
BMEC REFERENCE BMEC 97-13-222

C-Tec® Brand Tec-Cor II™ Access Floor Panels

1. Applicant

Interface Architectural Resources Inc.
3422 Lousma Drive
GRAND RAPIDS, MICHIGAN
49548, USA

2. Description

C-Tec® Brand Tec-Cor II™ access floor panels consist of 600 mm or 24 inches square panels constructed of 25.4 mm (1") thick high density particleboard core panels, structurally bonded to 0.61 mm (24 gauge) thick, electro-galvanized steel top sheets and 0.76 mm (22 gauge) thick electro-galvanized steel bottom sheets, permanently and structurally hemmed together and supported on an electro-galvanized steel framing system to create a raised floor.

3. Authorization Requested

The applicant sought authorization for the use of C-Tec® Brand Tec-Cor II™ access floor panels system, to create a raised floor, in buildings required to be of noncombustible construction.

4. Assessment

Reports and assessments provided by the applicant show that if C-Tec® Brand Tec-Cor II™ access floor panels systems are manufactured, installed and maintained in accordance with the manufacturer's "Installation and Maintenance Technical Manual" and the limitations and conditions stated in this authorization, they will provide the level of performance equivalent to that which would be achieved by conforming with Article 3.1.5.1. of the Ontario Building Code.

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5. Authorization

C-Tec® Brand Tec-Cor II™ Access Floor Panels System, manufactured by Interface Architectural Resources Inc., are authorized for use as a raised floor system in a building required to be of noncombustible construction by Subsection 3.2.2. and as regulated by Article 3.1.5.1. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1) The use of C-Tec® Brand Tec-Cor II™ Access Floor Panels System must comply with the Building Code Act, 1992, as amended or re-enacted from time to time and, except as specifically authorized herein with the Ontario Building Code as amended or remade from time to time.

2) A copy of this Authorization and the manufacturer's "Installation and Maintenance Technical Manual" shall be kept and maintained on the site of the construction and made available to an inspector or chief building official appointed under the Building Code Act.

3) Each floor panel must be listed by the Underwriters' Laboratories of Canada (ULC) and be identified with a label as described in Guide 40 U8.6-¾ of List of Equipment and Materials, Volume II, Building Materials.

   The label to show that the panels are classified as to their surface burning characteristics in accordance with CAN/ULC-S102.2-M88, "Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering and Miscellaneous Materials and Assemblies". The finished panels have a flame-spread rating and smoke developed classification of 0. The core material has a flame-spread rating of 95 and a smoke developed classification of 205.

4) Finished floor coverings shall comply with the Ontario Building Code.

5) The panels shall be installed without field fabrication. If field fabrication is proposed, the manufacturer shall submit, to the inspector or the chief building official, the method and documentation from ULC showing that surface burning characteristics, identified in paragraph 5.A.3), will not be adversely affected.

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6) A C-Tec® Brand Tec-Cor II™ Access Floor Panels System may be installed without fire stopping within the raised floor cavity which may be of any height recommended by the Applicant identified in Section 1. of this Authorization.

7) A C-Tec® Brand Tec-Cor II™ Access Floor Panels System shall be supported by a noncombustible structural floor. The system's capacity to carry uniformly distributed loads and concentrated loads shall be identified on the shop drawings; a copy of which shall be filed with the chief building official.

8) Installation of the C-Tec® Brand Tec-Cor II™ Access Floor Panels System shall not be commenced until the sub-floor is clean and dry, the room has controlled temperature of 4.4º C (40º F) or above and is protected from the weather.

9) All construction debris shall be removed, from the space below the access panels, as work progresses. The space below the access panels shall be used as a service space only; it shall not be used for storage space or any other occupancy.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Section 1 of this Authorization.

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(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 26th day of June, 1997.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION July 31, 1997
BMEC REFERENCE BMEC 97-12-221
* Revised September 8, 1997

ASPHALT SHINGLES MADE FROM GLASS FELT AND SURFACED WITH MINERAL GRANULES

1. Applicant

CertainTeed Corporation
1400 Union Meeting Road
P.O. Box 1100
BLUE BELL, PA
19422 USA

2. Description

Asphalt shingles, designated as CertainTeed 20, manufactured to the requirements of ASTM D 3462 - 97, “Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules” and CAN/ULC Standard S107-M87, "Standard Method of Fire Tests of Roof Coverings".

3. Authorization Requested

The applicant sought authorization for the use of CertainTeed 20 as a roofing material on roof slopes 1:6 to less than 1:3 and 1:3 and steeper.

4. Assessment

Reports and assessments provided by the applicant show that if CertainTeed 20 asphalt shingles made from glass felt and surfaced with mineral granules are manufactured in accordance with the limitations and conditions stated in this authorization, they will provide the level of performance equivalent to that which would be achieved by conformance with Article 9.26.2.1. of the Ontario Building Code.

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5. Authorization

CertainTeed 20 asphalt shingles made from glass felt and surfaced with mineral granules, manufactured by CertainTeed Corporation, are authorized for use as a roofing material as required by the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1) The use of CertainTeed 20 asphalt shingles made from glass felt and surfaced with mineral granules must comply with the Building Code Act, 1992, as amended or re-enacted from time to time and, except as specifically authorized herein with the Ontario Building Code as amended or remade from time to time.

2) A copy of this Authorization shall be kept and maintained on the site of the construction with the building permit.

3) The application of CertainTeed 20 is permitted on roof slopes 1:6 to less than 1:3 and 1:3 and steeper provided the installation complies with one of the installation methods identified at Section 9.26 of the Ontario Building Code.

*4) CertainTeed 20 asphalt shingles made from glass felt and surfaced with mineral granules must be manufactured in accordance with the requirements of ASTM D 3462 - 97, “Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules" and CAN/ULC Standard S107-M87, "Standard Method of Fire Tests of Roof Coverings". In addition, they must comply with CAN/CSA Standard A123.5-M90, “Asphalt Shingles made from Glass Felt and Surfaced with Mineral Granules”, except for individual shingle minimum mass per unit area and net average mass per unit area of finished shingles; with composition as stated in the documentation supporting the application.

*5) The net average mass of finished shingles shall be not less than 4101 g/m^2.

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B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Section 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ; or

   (c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 31st day of July, 1997.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION July 31, 1997
BMEC REFERENCE BMEC 97-11-220

TUFF-N-DRI® Waterproofing System for Below Ground Exterior Foundation Walls of Solid Concrete or Unit Masonry

1. Applicant

Koch Materials Company
P.O. Box 2155
800 Irving Wick Drive
HEATH, OHIO
43056 USA

2. Description

Tuff-N-Dri® waterproofing membrane is a spray-applied foundation waterproofing material composed of polymer-modified asphalt in a water carrier that cures to a monolithic, elastomeric membrane. Tuff-N-Dri® is applied to a minimum thickness of 63 mils (40 mils when dry) on the exterior of below-ground portion of foundation walls of solid concrete or unit masonry .

3. Authorization Requested

The applicant sought authorization for the use of an innovative waterproofing system as an equivalent to waterproofing provisions for unit masonry and solid concrete foundation walls which are specified at Article 9.13.1.3. and Subsections 9.13.2. and 9.13.3. of the Ontario Building Code.

4. Assessment

Test results and assessments provided by the Applicant show that if Tuff-N-Dri® is handled, stored and applied in accordance with the manufacturer's instructions and the limitations and conditions stated in this authorization, it will provide a level of performance equivalent with the waterproofing requirements of Article 9.13.1.3. and Subsections 9.13.2. and 9.13.3. of the Ontario Building Code.

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5. Authorization

The use of Tuff-N-Dri® Waterproofing System for below ground exterior foundation walls of solid concrete or unit masonry is authorized in respect of the waterproofing provisions contained in Article 9.13.1.3., and Subsections 9.13.2. and 9.13.3. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1) Application shall only be by Koch Materials selected contractors. The selected contractors' personnel shall carry qualification-identification-cards issued by the Applicant.

2) Application shall be as per Tuff-N-Dri® exterior foundation waterproofing system detailed application instructions dated 4/1/96.

3) Footings shall be clean and free of dirt, sand, soil or any other substance that would prevent full adhesion of the membrane. Footings must be dry and free of any visible water. Any water present must be removed and the footing dried.

4) Foundation wall surfaces to be waterproofed shall be clean, smooth, firm, free of dust, mud, loose mortar, wires, fins, metal projections or any other substances which might prevent placement and bonding of a continuous membrane.

5) On solid concrete foundation walls, form ties shall be removed at least flush with the concrete surface. Form tie holes and other patching shall be carried out as specified in CSA A438-M84, "Concrete Construction for Housing and Small Buildings" or Sentence 9.13.3.1.(2) of the Ontario Building Code. Tuff-N-Dri® may be applied, upon removal of the forms, on green concrete.

6) i) Unit masonry foundation walls may be parged, below ground level, with not less than 6 mm of mortar conforming to Subsection 9.20.3 of the Ontario Building Code. The parging need not be coved over the footing. The mortar must be dry <u>BEFORE</u> Tuff-N-Dri® is applied.

ii) When unit masonry foundation walls are not parged, mortar joints must be struck (made flush) and filled in order to ensure a void free surface. Patching and repairs may be done with mortar or a non-shrinking grout.

7) The Tuff-N-Dri® membrane shall be applied so that the wet film thickness is not less than 63 mil (1.6 mm) and cured film thickness is not less than 40 mils (1.0 mm). Tuff-N-Dri® <u>MUST NOT</u> be applied over standing water, a water film, ice or snow.

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8) Tuff-N-Dri® shall only be applied when the ambient air temperature and foundation wall surface temperature are above minus 6.7°C (20° F) The temperature of the sprayed material must be between 43.3°C (110°F) and 71.1°C (160°F).

9) Following application, the membrane shall not be exposed to direct sunlight for more than 15 days.

10) Warm-N-Dri®, drainage and insulation board identified in Evaluation Report Nº 12737-L issued by the Canadian Materials Construction Centre may be applied as the membrane begins to cure. A signal that the membrane is beginning to cure is when it changes from brown to black in colour.

11) Backfill shall be placed in a manner which does not damage the foundation wall, the waterproofing membrane or the drainage and insulation board when provided.

12) When the backfill material contains angular stone or sharp objects, Warm-N-Dri® drainage and insulation board **shall** be provided over Tuff-N-Dri®, as a protection board. The crushed stone or other coarse clean granular material identified at Sentence 9.14.3.3.(4) of the Ontario Building Code does not require a protection board

13) Koch Materials shall provide the user of this authorization with complete instructions on the proper installation of Tuff-N-Dri® and Warm-N-Dri® The instructions shall include, but not be limited to the proper storage and handling of, the proper application of, and the health risks (i.e., the breathing of solvent vapours and the risks associated with eye and skin contact) and hazards associated with the use of Tuff-N-Dri® and Warm-N-Dri® and any other safety precautions needed for the proper installation of Tuff-N-Dri® and Warm-N-Dri®.

14) Tuff-N-Dri® shall be installed in accordance with this authorization and the manufacturer's installation instructions. If a conflict arises between the manufacturer's installation instructions and this authorization, the most restrictive provision shall apply.

15) A copy of this Authorization shall be maintained on the site of the construction.

16) This Authorization is valid only for Tuff-N-Dri® marketed by the Applicant specified in Section 1 herein.

17) The use of Tuff-N-Dri® must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

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B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   a) any change has been made to:

      i) the material, system or building design that is the subject matter of this Authorization;

      ii) the address of the manufacturing facilities specified in Section 2 of this Authorization;

      iii) the ownership of the manufacturing facilities specified in Section 2 of this Authorization; or

      iv) the address of the Applicant specified in Section 1 of this Authorization;

   b) the use of the material, system or building design authorized herein;

      i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

      ii) provides an unsatisfactory level of performance, in situ; or

   c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 31st day of July, 1997.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION July 31, 1997
BMEC REFERENCE BMEC 97-10-219
* Revised September 8, 1997

ASPHALT SHINGLES MADE FROM GLASS FELT AND SURFACED WITH MINERAL GRANULES

1. Applicant

CertainTeed Corporation
1400 Union Meeting Road
P.O.Box 1100
BLUE BELL, PA
19422 U.S.A.

2. Description

* Asphalt shingles, designated as CertainTeed XT™25, CertainTeed XT™30, New Horizon Shangle®, Classic Horizon Shangle®, Landmark25™, Landmark(Landmark 30), Landmark XL (Landmark 40), Independence Shangle®, Carriage House Shangle®, and Grand Manor Shangle®, all manufactured to the requirements of CAN/CSA Standard A 123.5-M90, "Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules" and CAN/ULC Standard S 107-M87, "Standard Method of Fire Tests of Roof Coverings".

3. Authorization Requested

* The applicant sought authorization for the use of the CertainTeed XT™25, CertainTeed XT™30, New Horizon Shangle®, Classic Horizon Shangle®, Landmark25™, Landmark(Landmark 30), Landmark XL (Landmark 40), Independence Shangle®, Carriage House Shangle®, and Grand Manor Shangle® as roofing materials on roof slopes 1:6 to less than 1:3 and 1:3 and steeper.

4. Assessment

* Reports and assessments provided by the applicant show that if the CertainTeed XT™25, CertainTeed XT™30, New Horizon Shangle®, Classic Horizon Shangle®, Landmark25™, Landmark(Landmark 30), Landmark XL (Landmark 40), Independence Shangle®, Carriage House Shangle®, and Grand Manor Shangle® asphalt shingles made from glass felt and surfaced with mineral granules are manufactured in accordance with the limitations and conditions stated in this authorization, they will provide the level of performance equivalent to that which would be achieved by conformance with Article 9.26.2.1. of the Ontario Building Code.

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5. Authorization

* The CertainTeed XT™25, CertainTeed XT™30, New Horizon Shangle®, Classic Horizon Shangle®, Landmark25™, Landmark(Landmark 30), Landmark XL (Landmark 40), Independence Shangle®, Carriage House Shangle®, and Grand Manor Shangle®, asphalt shingles made from glass felt and surfaced with mineral granules, manufactured by CertainTeed Corporation, are authorized for use as roofing materials as required by the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

*1) The use of CertainTeed XT™25, CertainTeed XT™30, New Horizon Shangle®, Classic Horizon Shangle®, Landmark25™, Landmark(Landmark 30), Landmark XL (Landmark 40), Independence Shangle®, Carriage House Shangle®, and Grand Manor Shangle®, asphalt shingles made from glass felt and surfaced with mineral granules must comply with the Building Code Act, 1992, as amended or re-enacted from time to time and, except as specifically authorized herein with the Ontario Building Code as amended or remade from time to time.

2) A copy of this Authorization shall be kept and maintained on the site of the construction with the building permit.

*3) The application of CertainTeed XT™25, CertainTeed XT™30, New Horizon Shangle®, Classic Horizon Shangle®, Landmark25™, Landmark(Landmark 30), Landmark XL (Landmark 40), Independence Shangle®, Carriage House Shangle®, and Grand Manor Shangle® is permitted on roof slopes 1:6 to less than 1:3 and 1:3 and steeper provided the installation complies with one of the installation methods identified at Section 9.26 of the Ontario Building Code.

*4) CertainTeed XT™25, CertainTeed XT™30, New Horizon Shangle®, Classic Horizon Shangle®, Landmark25™, Landmark(Landmark 30), Landmark XL (Landmark 40), Independence Shangle®, Carriage House Shangle®, and Grand Manor Shangle®, asphalt shingles made from glass felt and surfaced with mineral granules must be manufactured in accordance with the requirements of CAN/CSA Standard A123.5-M90, "Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules" and CAN/ULC Standard S107-M87, "Standard Method of Fire Tests of Roof Coverings".

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

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(iii) the ownership of the applicant specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 31st day of July, 1997.

BUILDING MATERIALS EVALUATION COMMISSION

per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION May 29, 1997
BMEC REFERENCE BMEC 97-09-218

WINDOW SPRINKLER SYSTEM

1. Applicant

Paul & Douglas Sprinklers Ltd.
1576 Bonhill Road
SCARBOROUGH, ON
L5T 1C7

2. Description

A window sprinkler assembly system to provide a two-hour fire-resistance rated separation in a wall to consist of tempered or heat-strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick-response action.

3. Authorization Requested

The applicant sought authorization for the use of an innovative window sprinkler system designed for new buildings where fire resistant ratings are required, but glazing is preferred. The window sprinkler is not for use in exits or firewalls.

4. Assessment

Reports and assessments provided by the applicant show that if the window sprinkler system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The window sprinkler system is authorized for use within new buildings where fire resistant ratings are required, but glazing is preferred, except in exits or firewalls, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer licensed in Ontario under the Professional Engineers Act and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).

2. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.

3. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited Model FR-1/Q-60, 12.7 mm (1/2 in.) orifice, 74°C (165°F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.

4. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in.) minimum thickness. The maximum glazing shall be 2134 mm (7 ft. 0 in.) wide by 2844 mm (9 ft. 4 in.) high and minimum 6 mm (1/4 in.) thick.

5. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hour fire resistance rating provided,

   (a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

   (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

6. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.

7. This window sprinkler system shall not be used in exits nor firewalls as defined in the Ontario Building Code.

8. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.

9. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.

10. Where the water supply is from a standpipe system conforming to the Code, the fire department connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".

11. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in.) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

WARNING

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   a) any change has been made to:

      i) the material, system or building design that is the subject matter of this Authorization;

      ii) the address of the applicant specified in Section 1 of this Authorization; or,

      iii) the ownership of the applicant specified in Section 1 of this Authorization.

   b) the use of the material, system or building design authorized herein;

      i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

      ii) provides an unsatisfactory level of performance, in situ; or

   c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 29th day of May, 1997.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION July 31, 1997
BMEC REFERENCE BMEC 97-08-217

BATTERY- CENTRAL EMERGENCY POWER SUPPLY SYSTEMS FOR BUILDINGS

1. Applicant

Emergi-Lite Limited
a division of Kaufel Group Limited
24 Vulcan Street
REXDALE, ON
M9W 4M9

2. Manufacturing Facilities

Emergi-Lite Limited
a division of Kaufel Group Ltd.
1800 Hymus Boulevard
DORVAL, QC
H9P 2N6

3. Description

The central emergency power supply systems consist of a charger and storage battery in a cabinet providing D.C. output or when an integral inverter is included, A.C. output. A storage battery may be a group of individual batteries or cells operating as a unit.

4. Authorization Requested

The applicant sought authorization for the use of D.C. and A.C. output central emergency power supply systems to provide continuous and emergency power supply, separate from the electrical supply for the building, for emergency lighting systems not regulated by CSA Standard C22.2 No. 141-M1985, " Unit Equipment for Emergency Lighting", exit signs, fire alarm and detection systems and ancillary devices such as ventilation and pressure modification devices, voice communication systems and other Ontario Building Code regulated devices such as electromagnetic locking devices, all of which are not required by Article 3.2.7.9. of the Ontario Building Code, to be powered in emergency situations, by a generator set driven by an engine.

5. Assessment

Reports and assessments provided by the applicant show that if the central emergency power supply systems are designed, performance tested and maintained in accordance with the manufacturer's instructions, the limitations and conditions stated in this authorization, the level of performance required by the Ontario Building Code for a battery power source will be provided.

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6. Authorization

The use of Emergi-Lite's 24, 32, 36, 48 and 120 volts CH Series D.C. output systems and CHIN Series A.C. (IPS or HID) Single Phase Inverter Systems are authorized for use within a building as a battery source central emergency power supply system, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of central emergency power supply systems must comply with the Building Code Act, 1992, as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. When a central emergency power supply system is proposed, a copy of this Authorization shall be included with the application for a building permit and shall be posted and maintained on the site of the construction, together with the building permit.

3. This Authorization is valid only for Emergi-Lite Limited a division of Kaufel Group Limited and only applies to central emergency power supply systems in which the rated output current exceeds 30 amperes or the nominal voltage at the output exceeds 30 volts; and, used for supplying emergency electrical power to emergency lighting systems not regulated by CSA Standard C22.2 No. 141-M1985, "Unit Equipment for Emergency Lighting", exit signs, fire alarm and detection systems and ancillary devices such as ventilation and pressure modification devices, voice communication systems and other Ontario Building Code regulated devices such as electromagnetic locking devices, all of which are not required by Article 3.2.7.9. of the Ontario Building Code, to be powered in emergency situations, by a generator set driven by an engine.

4. The cabinet for the central emergency power supply system shall:
   a) when a service room is required by the Ontario Building Code; be located in a service room separated from the remainder of the building by a fire separation having a fire-resistance rating conforming to the Ontario Building Code,
   b) be constructed so that it can be secured and installed without field fabrication;
   c) be located to provide adequate working space and access for maintaining and repairing the central emergency power system without encumbering other equipment in the service room or interference from other equipment in the service room; and,
   d) not contain automotive batteries.

5. The service room containing the cabinet shall be equipped with unit equipment for emergency lighting conforming CSA Standard C22.2 No. 141-M85.

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6. The normal electrical supply for the central emergency power supply system shall be controlled by automatic transfer equipment which energize the emergency power supply upon failure of the normal current supply. The automatic transfer equipment shall only be accessible to authorized persons.

7. The design and review of each installation by Emergi-Lite Limited, for a central emergency power supply system identified in Section 6 of this Authorization, shall be carried out by a Professional Engineer as defined in the Professional Engineers Act of Ontario. The Professional Engineer shall provide the Chief Building Official with a document certifying that the central emergency power supply system:

   a) Complies with The Canadian Electrical Code, current at the time of building permit issuance; and, without limiting the generality of the foregoing shall include specific reference to Section 26, Lightning Protection, Rules 26-540 to 26-554, Storage Batteries 46-202, Battery Capacity, 46-204, Automatic Transfer Equipment; and, 46-210, Voltage Drop of Remote Lamps, of Part I.

   b) Is listed to CSA C22.2-No.107.1-M91, "Standard for Commercial and Industrial Power Supplies"

   c) Has been tested at the factory and demonstrated the capacity to supply and maintain, the emergency power supply required by the Ontario Building Code to an output voltage which will not be less than 91% of nominal for the time period of 30, 60 or 120 minutes.

   d) Has a charging means to maintain the battery in a charged condition automatically.

   e) Is located in a ventilated room where the ambient temperature will not exceed the system's design temperatures for reliable operation.

   f) Was performance tested after installation and found to be capable of operating at 100% of its stated kilowatt rating for 30, 60 or 120 minutes as required by the Ontario Building Code.

   g Will not be adversely affected by the operation of a suppression system.

   h) Is electrically supervised to indicate an audible and visible trouble signal at the fire alarm annunciator panel or where the building does not have one, at the device referenced at Sentence 3.2.4.8.(3) of the Ontario Building Code, for each of the following:

      i) movement of the output disconnect switch internal to the cabinet,
      ii) a temperature greater than 10° C above or below the safe operating temperature of the system has been reached,

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iii) a battery supply less than 91% of nominal,
iv) a charger failure,
v) a low electrolyte level alarm for wet batteries,
vi) a problem identified by the supervisory system of the central emergency power supply; and,
vii) a ground leakage problem in the case of D.C. systems.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

a) any change has been made to:

i) the material, system or building design that is the subject matter of this Authorization;

ii) the address of the applicant specified in Section 1 of this Authorization; or,

iii) the ownership of the applicant specified in Section 1 of this Authorization.

b) the use of the material, system or building design authorized herein;

i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

ii) provides an unsatisfactory level of performance, in situ; or

c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 31st day of July, 1997.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **July 31, 1997**
BMEC REFERENCE **BMEC 97-07-216**

BATTERY- CENTRAL EMERGENCY POWER SUPPLY SYSTEMS FOR BUILDINGS

1. Applicant

Lumacell Inc
a division of Kaufel Group Limited
120 Nashdene Road
SCARBOROUGH, ON
M1V 2W3

2. Manufacturing Facilities

Lumacell Inc.
a division of Kaufel Group Ltd.
120 Nashdene Road
SCARBOROUGH, ON
M1V 2W3

3. Description

The central emergency power supply systems consist of a charger and storage battery in a cabinet providing D.C. output or when an integral inverter is included, A.C. output. A storage battery may be a group of individual batteries or cells operating as a unit.

4. Authorization Requested

The applicant sought authorization for the use of D.C. and A.C. output central emergency power supply systems to provide continuous and emergency power supply, separate from the electrical supply for the building, for emergency lighting systems not regulated by CSA Standard C22.2 No. 141-M1985, " Unit Equipment for Emergency Lighting", exit signs, fire alarm and detection systems and ancillary devices such as ventilation and pressure modification devices, voice communication systems and other Ontario Building Code regulated devices such as electromagnetic locking devices, all of which are not required by Article 3.2.7.9. of the Ontario Building Code, to be powered in emergency situations, by a generator set driven by an engine.

5. Assessment

Reports and assessments provided by the applicant show that if the central emergency power supply systems are designed, performance tested and maintained in accordance with the manufacturer's instructions, the limitations and conditions stated in this authorization, the level of performance required by the Ontario Building Code for a battery power source will be provided.

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6. Authorization

The use of Lumacell's L.M. and L.S. Series with 36, 48 and 120 volts D.C. output and R.S.N.V. Series with 120, 277 and 347 volts A.C. output are authorized for use within a building as a battery source central emergency power supply system, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of central emergency power supply systems must comply with the Building Code Act, 1992, as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. When a central emergency power supply system is proposed, a copy of this Authorization shall be included with the application for a building permit and shall be posted and maintained on the site of the construction, together with the building permit.

3. This Authorization is valid only for Lumacell Inc., a division of Kaufel Group Limited and only applies to central emergency power supply systems in which the rated output current exceeds 30 amperes or the nominal voltage at the output exceeds 30 volts; and, used for supplying emergency electrical power to emergency lighting systems not regulated by CSA Standard C22.2 No. 141-M1985, “Unit Equipment for Emergency Lighting”, exit signs, fire alarm and detection systems and ancillary devices such as ventilation and pressure modification devices, voice communication systems and other Ontario Building Code regulated devices such as electromagnetic locking devices, all of which are not required by Article 3.2.7.9 of the Ontario Building Code, to be powered in emergency situations, by a generator set driven by an engine.

4. The cabinet for the central emergency power supply system shall:
   a) when a service room is required by the Ontario Building Code; be located in a service room, separated from the remainder of the building by a fire separation having a fire-resistance rating conforming to the Ontario Building Code,
   b) be constructed so that it can be secured and installed without field fabrication;
   c) be located to provide adequate working space and access for maintaining and repairing the central emergency power system without encumbering other equipment in the service room or interference from other equipment in the service room; and,
   d) not contain automotive batteries.

5. The room containing the cabinet shall be equipped with unit equipment for emergency lighting conforming CSA Standard C22.2 No. 141-M85.

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6. The normal electrical supply for the central emergency power supply system shall be controlled by automatic transfer equipment which energize the emergency power supply upon failure of the normal current supply. The automatic transfer equipment shall only be accessible to authorized persons.

7. The design and review of each installation by Lumacell Inc., for a central emergency power supply system identified in Section 6 of this authorization, shall be carried out by a Professional Engineer as defined in the Professional Engineers Act of Ontario. The Professional Engineer shall provide the Chief Building Official with a document certifying that the central emergency power supply system:

   a) Complies with The Canadian Electrical Code, current at the time of building permit issuance; and, without limiting the generality of the foregoing shall include specific reference to Section 26, lightning protection, Rules 26-540 to 26-554, Storage Batteries 46-202, Battery Capacity, 46-204, Automatic Transfer Equipment; and, 46-210, Voltage Drop of Remote Lamps, of Part I.

   b) Is listed to CSA C22.2-No.107.1-M91, "Standard for Commercial and Industrial Power Supplies"

   c) Has been tested at the factory and demonstrated the capacity to supply and maintain, the emergency power supply required by the Ontario Building Code to an output voltage which will not be less than 91% of nominal for the time period of 30, 60 or 120 minutes.

   d) Has a charging means to maintain the battery in a charged condition automatically.

   e) Is located in a ventilated room where the ambient temperature will not exceed the system's design temperature range for reliable operation.

   f) Was performance tested after installation and found to be capable of operating at 100% of its stated kilowatt rating for 30, 60 or 120 minutes as required by the Ontario Building Code.

   g) Will not be adversely affected by the operation of a suppression system.

   h) Is electrically supervised to indicate an audible and visible trouble signal at the fire alarm annunciator panel or where the building does not have one, at the device referenced at Sentence 3.2.4.8.(3) of the Ontario Building Code, for each of the following:

      i) movement of an output disconnect switch internal to the cabinet,
      ii) a temperature greater than 10° C above or below the safe operating temperature of the system has been reached,

4/...

iii) a battery supply less than 91% of nominal,
iv) a charger failure,
v) a low electrolyte level alarm for wet batteries,
vi) a problem identified by the supervisory system of the central emergency power supply; and,
vii) a ground leakage problem in the case of D.C. systems.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

a) any change has been made to:

i) the material, system or building design that is the subject matter of this Authorization;

ii) the address of the applicant specified in Section 1 of this Authorization; or,

iii) the ownership of the applicant specified in Section 1 of this Authorization.

b) the use of the material, system or building design authorized herein;

i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

ii) provides an unsatisfactory level of performance, in situ; or

c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 31st day of July, 1997.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION July 31, 1997
BMEC REFERENCE BMEC 97-06-215

BATTERY- CENTRAL EMERGENCY POWER SUPPLY SYSTEMS FOR BUILDINGS

1. Applicant

Edwards/Dual-Lite
625 6th Street East
OWEN SOUND, ON
N4K 5P8

2. Description

The central emergency power supply systems consist of a cabinet enclosing a charger, battery system and an integral inverter, providing continuous AC output. A storage battery may be a group of individual batteries or cells operating as a unit.

3. Authorization Requested

The applicant sought authorization for the use of its Spectron ILS Integrated Life Safety System AC output central emergency power supply systems to provide continuous and emergency power supply, separate from the electrical supply for the building, for emergency lighting systems not regulated by CSA Standard C22.2 No. 141-M1985, " Unit Equipment for Emergency Lighting", exit signs, fire alarm and detection systems and ancillary devices such as ventilation and pressure modification devices, voice communication systems and other Ontario Building Code regulated devices such as electromagnetic locking devices, all of which are not required by Article 3.2.7.9. of the Ontario Building Code, to be powered in emergency situations, by a generator set driven by an engine.

4. Assessment

Reports and assessments provided by the applicant show that if the central emergency power supply systems are designed, performance tested and maintained in accordance with the manufacturer's instructions, the limitations and conditions stated in this authorization, the level of performance required by the Ontario Building Code for a battery power source will be provided.

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5. Authorization

The use of Edwards/Dual-Lite Spectron ILS AC Inverter Systems in sizes from 1.25 to 15 KW are authorized for use within a building as a battery source central emergency power supply system, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of central emergency power supply systems must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. When a central emergency power supply system is proposed, a copy of this Authorization shall be included with the application for a building permit and shall be posted and maintained on the site of the construction, together with the building permit.

3. This Authorization is valid only for Edwards/Dual-Lite and only applies to central emergency power supply systems in which the rated output current exceeds 30 amperes or the nominal voltage at the output exceeds 30 volts; and, used for supplying emergency electrical power to emergency lighting systems not regulated by CSA Standard C22.2 No. 141-M1985, "Unit Equipment for Emergency Lighting", exit signs, fire alarm and detection systems and ancillary devices such as ventilation and pressure modification devices, voice communication systems and other Ontario Building Code regulated devices such as electromagnetic locking devices, all of which are not required by Article 3.2.7.9. of the Ontario Building Code, to be powered in emergency situations, by a generator set driven by an engine.

4. The cabinet for the central emergency power supply system shall:
   a) when a service room is required by the Ontario Building Code; be located in a service room, separated from the remainder of the building by a fire separation having a fire-resistance rating conforming to the Ontario Building Code,
   b) be constructed so that it can be secured and installed without field fabrication,
   c) be located to provide adequate working space and access for maintaining and repairing the central emergency power supply system without encumbering other equipment in the service room or interference from other equipment in the service room; and,
   d) not contain automotive batteries.

5. The room containing the cabinet shall be equipped with unit equipment for emergency lighting conforming CSA Standard C22.2 No. 141-M85.

6. The normal electrical supply for the central emergency power supply system shall be controlled by automatic transfer equipment which energizes the emergency system upon failure of the normal current supply. The automatic transfer equipment shall only be accessible to authorized persons.

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7. The design and review of each installation of an Edwards/Dual-Lite central emergency power supply system identified in Section 5 of this authorization, shall be carried out by a Professional Engineer as defined in the Professional Engineers Act of Ontario. The Professional Engineer shall provide the Chief Building Official with a document certifying that the central emergency power supply system:

   a) Complies with the Canadian Electrical Code, current at the time of building permit issuance; and, without limiting the generality of the foregoing shall include specific reference to Section 26 Lightning Protection, Rules 26-540 to 26-554, Storage Batteries, 46-202, Battery Capacity 46-204 , Automatic Transfer Equipment and 46-210 Voltage Drop of Remote Lamps, of Part I.

   b) Is listed to CSA C22.2-No.107.1-M91, "Standard for Commercial and Industrial Power Supplies".

   c) Has been tested at the factory and demonstrated the capacity to supply and maintain, the emergency power supply required by the Ontario Building Code to an output voltage which will not be less than 91% of nominal for the time period of 30, 60 or 120 minutes.

   d) Has a charging means to maintain the batteries in a charged condition automatically.

   e) Is located in ventilated room where the ambient temperature will not exceed the system's design temperature range for reliable operation.

   f) Was performance tested after installation and found to be capable of operating at 100% of its stated kilowatt rating for 30, 60 or 120 minutes as required by the Ontario Building Code.

   g) Will not be adversely affected by the operation of a suppression system.

   h) Is electrically supervised to indicate an audible and visible trouble signal at the fire alarm annunciator panel or where the building does not have one, at the device referenced at Sentence 3.2.4.8.(3) of the Ontario Building Code, for each of the following:

      i) movement of the output disconnect switch internal to the cabinet,
      ii) a temperature greater than 10° C above or below the safe operating temperature of the system has been reached,
      iii) a battery supply less than 91% of nominal,
      iv) a charger failure,
      v) a low electrolyte alarm for wet batteries; and,
      vi) a problem identified by the supervisory system of the central emergency power supply.

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B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

    a) any change has been made to:

        i) the material, system or building design that is the subject matter of this Authorization;

        ii) the address of the applicant specified in Section 1 of this Authorization; or,

        iii) the ownership of the applicant specified in Section 1 of this Authorization.

    b) the use of the material, system or building design authorized herein;

        i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

        ii) provides an unsatisfactory level of performance, in situ; or

    c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 31st day of July, 1997.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION July 31, 1997
BMEC REFERENCE BMEC 97-05-214

ENCLOSURE CONDITIONED HOUSING (ECHO™) DESIGN

1. Applicant

Indoor Air Technologies Inc.
2344 Haddington Crescent
P.O. Box 22038, Sub 32
OTTAWA, ON
K1V 0W2

2. Description

The Enclosure Conditioned Housing (ECHO™) DESIGN is comprised of ventilated, depressurized, drained and insulated foundation perimeter walls and may include a ventilated, depressurized and drained subfloor floor system above a concrete slab on ground. It is constructed in situ, the sealed wall/floor spaces are ventilated and depressurized by a low flow exhaust fan, regulated by the ECHO™ control panel.

The design provides interior foundation wall drainage and cavity dehumification ventilation.

3. Authorization Requested

The applicant sought authorization for the use of the ECHO ™ design as an innovative means to provide an alternative to the materials serving as a drainage layer and installed adjacent to the exterior surface of a foundation wall.

4. Assessment

Reports and assessments provided by the applicant show that if the ECHO™ design is installed, tested and commissioned in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code as an alternative for exterior foundation drainage layer described at Sentence 9.14.2.1.(2.1).

5. Authorization

The ECHO™ design is authorized for use within a building as a basement finishing system comprising foundation wall drainage and insulation as required by the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

2/...

A. SPECIFIC TERMS AND CONDITIONS:

1) The use of the ECHO™ design must comply with the Building Code Act, 1992, as amended or re-enacted from time to time and, except as specifically authorized herein with the Ontario Building Code as amended or remade from time to time.

2) A copy of this Authorization shall be included with an application for a permit and shall be kept and maintained on the site of the construction with the building permit. A copy of the Illustrated Construction Plans, which form the basis for the design will be furnished to the Chief Building Official.

3) Construction of an ECHO™ design shall be by Indoor Air Technologies Inc. or its licensed contractors only and shall be in accordance with the "Illustrated Construction Plans" supplied by the applicant.

4) On completion, Indoor Air Technologies Inc. or its licensed contractor shall test and balance the ECHO™ design, complete the commissionning certificate, provide a copy to the owner(s) and forward a copy to the Chief Building Official. The commissioning certificate to attest the design provides depressurisation throughout by at least 1Pa by a continuous duty blower exhausting to the outside at a rate of no more than 40 l/s (85 CFM).

5) Indoor Air Technologies Inc. or its licenced contractor shall provide written operating instructions and a demonstration on the operation of the ECHO™ design to the building owner(s).

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Section 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ; or

3/...

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 31st day of July, 1997.

BUILDING MATERIALS EVALUATION COMMISSION

per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION June 26, 1997
BMEC REFERENCE BMEC 97-04-213

Systèmes Norbec Inc., NORBEC modified and NOREX Thermosetting Foam Composite Panels for Interior Walls and Ceilings in Noncombustible Construction

1. Applicant

Systèmes Norbec Inc.
97 de Vaudreuil
BOUCHERVILLE, QUÉBEC
J4B 1K7

2. Manufacturing Facilities

Systèmes Norbec Inc.
97 de Vaudreuil
BOUCHERVILLE, QUÉBEC
J4B 1K7

3. Description

The NORBEC modified and the NOREX panels manufactured by Systèmes Norbec Inc. consist of a thermosetting polyurethane foam core not greater than 127 mm thick (5 inch) faced with a minimum 0.61 mm thick (0.024 inch or 24 gauge) plain or painted galvanized steel or Galvalume facings. The facing sheets are bonded to the foam plastic core while it is foamed in place, without incorporating an air space. Adjoining finished panels are attached together by means of cam-locking devices incorporated into the foam core. For the NORBEC modified panels, the male and female joint edges are formed core material incorporating a 75 mm wide galvanized steel strip mechanical joint fastened by # 8 X 19 mm (3/4 inch) white tek screws at 200 mm (8 inches) interval in each panel face. The NOREX panels joints have a roll-formed inter-locking geometry, without the 75 mm wide galvanized steel strip. The thicknesses of the panels range from 76 mm (3 inches) to 127 mm (5 inches). All panels are a maximum 1194 mm (47 inches) wide.

4. Authorization Requested

The applicant sought authorization for the use of an innovative interior non loadbearing wall and ceiling system containing thermosetting foamed plastic insulation for cold rooms, walk-in freezers, atmospheric controlled rooms and clean rooms in buildings required to be of noncombustible construction provided the building is sprinklered and the wall assembly satisfies the performance criteria for exterior walls in Clause 3.1.5.11.(6)(a) of Regulation 61 of Revised Regulations of Ontario 1990 (the "Ontario Building Code").

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5. Assessment

The NORBEC modified and NOREX panels are tested, evaluated and listed for thicknesses from 76 mm (3 inches) up to 127 mm (5 inches), as follows:

(a) Surface Burning Characteristics:

	CAN/ULC - S102	
	Flame Spread	Smoke Developed
Model		
NOREX Panel	20	460 - 5 30
NORBEC modified panel	20	460 - 5 30
Core Material Only	320/410	over 500

(b)

CAN/ULC-S101-M89 "Standard Methods of Fire Endurance Tests of Building Construction and Materials".

The Test results showed compliance with the performance criteria for exterior walls in Clause 3.1.5.11.(6)(a) of the Ontario Building Code.

(c) CAN/ULC-S126 "Standards Method of Test for Fire Spread under Roof-Deck Assemblies".

The assemblies are designated as roof deck construction No. C39 and is included in the series of roof deck construction using metallic decks contained in the listings published by Underwriters' Laboratories of Canada.

6. Authorization

The use of the NORBEC modified and NOREX thermosetting foamed plastic insulation panels for not more than 127 mm (5 inches) thick walls is authorized in respect of interior non loadbearing walls and ceilings in noncombustible construction described in Subsection 3.1.5. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. Specific Terms and Conditions:

1) A **monitored** automatic sprinkler system shall be installed throughout the building, including individual cold storage units, in accordance with the most current edition of NFPA - 13 "Installation of Sprinkler Systems". Additionally, the sprinkler system located inside the storage unit shall be designed to operate in a cold storage or freezer environment. The design shall address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

2) The flame spread rating of the wall panel, determined by subjecting a sample, including an assembled joint, to the appropriate test described in Subsection 3.1.12. of the Ontario Building Code, as amended or remade from time to time, shall be not more than the flame spread rating permitted for the room or space which it bounds.

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3) The building shall contain only mercantile occupancy (E) or cold storage facilities of Medium Hazard Industrial Occupancy (F-2) or Low Hazard Industrial Occupancy (F-3) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

4) The building shall be not more than 18 m high, measured between grade and the floor level of the uppermost storey.

5) The ceiling panels shall be supported at not more than 3050 mm. (10 feet) o.c.

6) The panels shall be listed, as defined in the Ontario Building Code as amended or remade from time to time, to show that the wall panel will remain in place for not less than 10 min when the wall panel is tested in conformance with CAN4-S101-M, "Standard Methods of Fire Endurance Tests of Building Construction and Materials".

7) This Authorization is valid only for Systèmes Norbec Inc. for its NORBEC modified and NOREX thermosetting foamed insulation panels manufactured by the Applicant specified in Section 1 herein at the manufacturing facilities specified in Section 2 herein.

8) The panels shall be installed in accordance with the manufacturers specifications and the installation shall be approved by the manufacturer.

9) The use of Systèmes Norbec Inc. NORBEC modified and NOREX panels must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the manufacturing facilities specified in Section 2 of this Authorization;

      (iii) the ownership of the manufacturing facilities specified in Section 2 of this Authorization; or

      (iv) the address of the Applicant specified in Section 1 of this Authorization;

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 26th day of June, 1997.

BUILDING MATERIALS EVALUATION COMMISSION

per Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **May 29, 1997**
BMEC REFERENCE **BMEC 97-03-212**

SHELF AND RACK STORAGE SYSTEM

1. Applicant

Planiform (1983) Inc.
2333 Vimont Street
MONTRÉAL, QUÉBEC
H1V 3R1

2. Description

The shelf and rack storage system is a self contained structural facility within a building, having one or more solid intermediate platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural facility for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

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3. This Authorization is valid only for Planiform (1983) Inc.

4. Deck and walkway levels shall be constructed of:

   (a) solid-closed surface steel planking;
   (b) steel roof decking with a top substrate that forms a serviceable floor area;
   (c) open steel grating; or,
   (d) open steel floor planking.

5. The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

6. The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

7. An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility including the top level and shall be in conformance with NFPA 13-1991 and NFPA 231C-1991 as amended or the appropriate NFPA Standard for the most severe hazard to which the storage facility is exposed. Additionally, sprinkler protection shall be provided under decks and walkways.

8. Except where the deck is of open steel grating, any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph A.7. of this Authorization.

9. A sprinkler system located in a cold storage or freezer environment shall be designed to address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

10. The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building for each of the following:

    (a) movement of a control valve handle;
    (b) loss of excess water pressure required to prevent false alarms in a wet pipe system;
    (c) loss of air pressure in a dry pipe system;
    (d) loss of air pressure in a pressure tank;
    (e) a significant change in water level in any water storage container used for fire fighting purposes;
    (f) loss of electrical power to any automatically starting electrical fire pump; and,
    (g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

11. The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

...3/

12. The notification to the person controlling the building and the fire department referred to in paragraphs A.10 and A.11 of this Authorization shall be provided by way of:

    (a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;
    (b) a proprietary control centre conforming to Chapter 9 of NFPA-72, Standard for the Installation, Maintenance, and Use of Protective Signaling Systems", as amended; or,
    (c) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

13. The maximum height of the shelf and rack storage facility from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m.

14. Each deck, walkway or platform level shall be provided with not less than two **exit** stair shafts that conform to all requirements for exits as stated in the Ontario Building Code (i.e. fire separations having a fire resistance rating, etc.) as amended, except as follows:

    (a) access to exit may be provided from a platform level by means of open unenclosed stairs for shelf and rack storage facilities comprising not more than three platform levels, the highest of which may not be more than 9 m above the main floor; and,
    (b) any single platform, deck or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

        (i) platform, deck or walkway does not exceed 200 m² in area;
        (ii) travel distance on the platform, deck or walkway to the level below, including the travel distance along the single unenclosed egress stair does not exceed 25 m; and,
        (iii) the platform, deck or walkway below is provided with two separate egress stairs or **exits**.

15. The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs shall not exceed 45 m. The maximum travel distance from the bottom of an unenclosed stair to an exit on the main floor level shall not exceed 45 m. The maximum travel distance to an enclosed exit on an elevated platform shall not exceed 45 m.

16. Fire extinguishers shall be installed on every platform or walkway level of the shelf and rack storage system in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time. The maximum travel distance to a fire extinguisher shall not exceed 23 m.

17. Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated deck or walkway shall not exceed 9 m where the deck or walkway is required to be provided with at least 2 egress facilities.

18. The clear aisle width shall not be less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

19. The shelf and rack storage facility is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

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20. The shelf and rack storage facilities shall be used only for storage of Class I, II, III, and IV commodities as defined in NFPA 231C-1991, as amended and not for manufacturing, production, wrapping or assembly.

21. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and the sprinkler design criteria used for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the sprinkler control valve.

22. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code O. Reg. 454/90 as amended or remade from time to time.

23. A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage facility height is more than 14 m (45 ft.) in height or where there are more than 3 elevated platforms of walkway level.

24. Where a standpipe and hose system is required, 63.5 mm (2 1/2 in.) diameter hose connections shall be provided, except that 38.1 mm (1 1/2 in.) hose connections are permitted in the shelf and rack storage facilities which:

    (a) do not exceed 6 levels including the floor level; and,
    (b) do not exceed 3,716 m^2 (40,000 ft^2) in the sum total of all levels of the shelf and rack storage facility.

25. Lighting levels of decks, walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

26. Emergency lighting shall be provided on walkways, decks, platforms, unenclosed egress stairs and exits providing means of egress to not less than the average level of illumination prescribed in Sentence 3.2.7.3.(2) of the Ontario Building Code, as amended or remade from time to time.

27. Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        (i) the material, system or building design that is the subject matter of this Authorization;

        (ii) the address of the applicant specified in Section 1 of this Authorization; or,

        (iii) the ownership of the applicant specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 29th day of May, 1997.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
CONSOLIDATED - AUTHORIZATION REPORT

DATE OF AUTHORIZATION	**April 4, 1997**
BMEC REFERENCE	**BMEC 97-02-211**
BMEC APPLICATION #	**BMEC #A1997-03**
BMEC AMENDMENT	**January 25, 2001**
BMEC APPLICATION	**BMEC #A2001-02**

*** Denotes a new or amended clause**

Schlüter®-DITRA
a polyethylene membrane bonded to substrates for the installation of ceramic tiles

1.* **Applicant**

Schlüter®-Systems (Canada) Inc.
5626 Thimens Blvd
St-Laurent, Québec
H4R 2K9

Tel: 1-800-667-8746
Fax: (514) 336-2410

2.* **Manufacturing Facilities**

Corsella-Dorken
4655 Delta Way
Beamsville, ON
L0R 1B4

Tel: (905) 563-3255
Fax: (905) 563-5582

3.* **Description**

Schlüter®-DITRA matting is a polyethylene membrane formed in a square cut-back grid design with an anchoring fleece laminated to its underside, providing a mechanical bond to the thin-set mortar and the tile.

4. ***Authorization Requested***

The applicant sought authorization for the use of Schlüter-DITRA as a moisture resistant backing, satisfying the requirements of Article 9.29.10.4 of the Ontario Building Code for the application of wall tile finish and as an equivalent to Subsection 9.30.6. for ceramic tile application to floors.

5. **Assessment**

a) Reports and assessments provided by the applicant show that if Schlüter-DITRA is installed in accordance with the manufacturer's instructions and the limitations and conditions stated in this authorization, it will provide a level of performance required by Article 9.29.10.4. and equivalent to the requirements of Subsection 9.30.6. of the Ontario Building Code.

b) Supporting letter from Picco Engineering.

6. **Authorization**

Schlüter®-DITRA is authorized for the application of ceramic tiles to concrete floors, gypsum based screeds, plywood or stranboard subfloors, masonry walls and interior wall finishes described in Section 9.29. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. Specific Terms and Conditions:

1) Substrates must be levelled-straight, thoroughly sponge cleaned and free of moisture before Schlüter®-DITRA is applied. Contact-inhibiting surfaces have to be removed, scarified or treated to permit adhesion. For application over gypsum screeds, the residual moisture shall not exceed 2.0% by volume and the mortar screed must be hardened to the point that it can be walked upon prior to the installation of ceramic tiles.

2)* Schlüter®-DITRA matting must be installed with the fleece side bedded to concrete, 15.5 mm (5/8") thick plywood or stranboard, with edges supported and joist support at 400 mm (16") maximum and 18.5 mm (3/4") tongue and grooved plywood with joist support at 480 mm (19.2") maximum, with an ANSI A 118.4 thin-set mortar layer applied with a 4.5 mm (3/16") X 6 mm (1/4") V-notched trowel. For installations on joist supports at 600 mm (24") maximum, apply an additional underlay of 10 mm (3/8") plywood (CSA 121) over the required subfloor with off-setting joints. Individual strips, as well as adjacent sheets are butt jointed. The strips must be protected against heavy mechanical loads prior to installation of tile.

3) Schlüter®-DITRA is able to adequately bridge cracks of up to 3 mm (⅛") in the substrate.

4) Ceramic tiles are applied to Schlüter®-DITRA using the thin-set method.

5) Ceramic tiles must not be less than 10 cm x 10 cm (4" x 4") in size for floor installations.

6) This Authorization is valid only for Schlüter®-DITRA manufactured by the Applicant specified in Section 1 herein at the manufacturing facilities specified in Section 2 herein.

7) The use of Schlüter®-DITRA must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

B. GENERAL CONDITIONS

1.* A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

2.* The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

(a) the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

(b) the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

3.* The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Part 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Part 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ.

(c) the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

(d) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Amended at Toronto this 25th day of January, 2001

BUILDING MATERIALS EVALUATION COMMISSION

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **January 30, 1997**
BMEC REFERENCE **BMEC 97-01-210**

SHELF AND RACK STORAGE SYSTEM

1. Applicant

Space Aid Mfg.
A division of M&P Tool Products Inc.
43 Regan Road
BRAMPTON, ON
L7A 1B3

2. Description

The shelf and rack storage system is a self contained structural facility within a building, having one or more solid intermediate platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural facility for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

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3. This Authorization is valid only for Space Aid Mfg. a division of M&P Tool Products Inc.

4. Deck and walkway levels shall be constructed of:

   (a) solid-closed surface steel planking;
   (b) steel roof decking with a top substrate that forms a serviceable floor area;
   (c) open steel grating; or,
   (d) open steel floor planking.

5. The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

6. The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

7. An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility including the top level and shall be in conformance with NFPA 13-1991 and NFPA 231C-1991 as amended or the appropriate NFPA Standard for the most severe hazard to which the storage facility is exposed. Additionally, sprinkler protection shall be provided under decks and walkways.

8. Except where the deck is of open steel grating, any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph A.7. of this Authorization.

9. A sprinkler system located in a cold storage or freezer environment shall be designed to address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

10. The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building for each of the following:

    (a) movement of a control valve handle;
    (b) loss of excess water pressure required to prevent false alarms in a wet pipe system;
    (c) loss of air pressure in a dry pipe system;
    (d) loss of air pressure in a pressure tank;
    (e) a significant change in water level in any water storage container used for fire fighting purposes;
    (f) loss of electrical power to any automatically starting electrical fire pump; and,
    (g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

11. The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

...3/

12. The notification to the person controlling the building and the fire department referred to in paragraphs A.10 and A.11 of this Authorization shall be provided by way of:

    (a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;
    (b) a proprietary control centre conforming to Chapter 9 of NFPA-72, Standard for the Installation, Maintenance, and Use of Protective Signaling Systems", as amended; or,
    (c) if the above mentioned facilities are not available in the municipality in which the shelf and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

13. The maximum height of the shelf and rack storage facility from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m.

14. Each deck, walkway or platform level shall be provided with not less than two **exit** stair shafts that conform to all requirements for exits as stated in the Ontario Building Code (i.e. fire separations having a fire resistance rating, etc.) as amended, except as follows:

    (a) access to exit may be provided from a platform level by means of open unenclosed stairs for shelf and rack storage facilities comprising not more than three platform levels, the highest of which may not be more than 9 m above the main floor; and,
    (b) any single platform, deck or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

        (i) platform, deck or walkway does not exceed 200 m² in area;
        (ii) travel distance on the platform, deck or walkway to the level below, including the travel distance along the single unenclosed egress stair does not exceed 25 m; and,
        (iii) the platform, deck or walkway below is provided with two separate egress stairs or **exits**.

15. The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs shall not exceed 45 m. The maximum travel distance from the bottom of an unenclosed stair to an exit on the main floor level shall not exceed 45 m. The maximum travel distance to an enclosed exit on an elevated platform shall not exceed 45 m.

16. Fire extinguishers shall be installed on every platform or walkway level of the shelf and rack storage system in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time. The maximum travel distance to a fire extinguisher shall not exceed 23 m.

17. Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated deck or walkway shall not exceed 9 m where the deck or walkway is required to be provided with at least 2 egress facilities.

18. The clear aisle width shall not be less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

19. The shelf and rack storage facility is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

...4/

20. The shelf and rack storage facilities shall be used only for storage of Class I, II, III, and IV commodities as defined in NFPA 231C-1991, as amended and not for manufacturing, production, wrapping or assembly.

21. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and the sprinkler design criteria used for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the sprinkler control valve.

22. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code O. Reg. 454/90 as amended or remade from time to time.

23. A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage facility height is more than 14 m (45 ft.) in height or where there are more than 3 elevated platforms of walkway level.

24. Where a standpipe and hose system is required, 63.5 mm (2 1/2 in.) diameter hose connections shall be provided, except that 38.1 mm (1 1/2 in.) hose connections are permitted in the shelf and rack storage facilities which:

    (a) do not exceed 6 levels including the floor level; and,
    (b) do not exceed 3,716 m^2 (40,000 ft^2) in the sum total of all levels of the shelf and rack storage facility.

25. Lighting levels of decks, walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

26. Emergency lighting shall be provided on walkways, decks, platforms, unenclosed egress stairs and exits providing means of egress to not less than the average level of illumination prescribed in Sentence 3.2.7.3.(2) of the Ontario Building Code, as amended or remade from time to time.

27. Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        (i) the material, system or building design that is the subject matter of this Authorization;

        (ii) the address of the applicant specified in Section 1 of this Authorization; or,

        (iii) the ownership of the applicant specified in Section 1 of this Authorization.

...5/

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 30th day of January, 1997.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION November 27, 1996
BMEC REFERENCE BMEC 96-10-209

SHELF AND RACK STORAGE SYSTEM

1. Applicant

Frazier Industrial Corporation Ltd.
1670 Bonhill Road
Mississauge, Ontario
L5T 1C8

2. Description

The shelf and rack storage system is a self contained structural facility within a building, having one or more solid intermediate platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural facility for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

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3. This Authorization is valid only for the Sentinel Pallet Rack from Frazier Industrial Corporation Ltd.

4. Deck and walkway levels shall be constructed of:

   (a) solid-closed surface steel planking;
   (b) steel roof decking with minimum 16 mm (5/8 in) maximum 19 mm (3/4 in) thick tongue and groove solid wood or plywood; or,
   (c) open steel grating.

5. The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

6. The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

7. An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility including the top level and shall be in conformance with NFPA 13-1991 and NFPA 231C-1991 as amended or the appropriate NFPA Standard for the most severe hazard to which the storage facility is exposed. Additionally, sprinkler protection shall be provided under decks and walkways.

8. Except where the deck is of open steel grating, any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph A.7. of this Authorization.

9. A sprinkler systems located in a cold storage or freezer environment shall be designed to address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

10. The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building for each of the following:

    (a) movement of a control valve handle;
    (b) loss of excess water pressure required to prevent false alarms in a wetpipe system;
    (c) loss of air pressure in a dry pipe system;
    (d) loss of air pressure in a pressure tank;
    (e) a significant change in water level in any water storage container used for fire fighting purposes;
    (f) loss of electrical power to any automatically starting electrical fire pump; and,
    (g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

11. The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

…3/

12. The notification to the person controlling the building and the fire department referred to in paragraphs A.10 and A.11 of this Authorization shall be provided by way of:

    (a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;
    (b) a proprietary control centre conforming to Chapter 9 of NFPA-72, Standard for the Installation, Maintenance, and Use of Protective Signaling Systems", as amended; or,
    (c) if the above mentioned facilities are not available in the municipality in which the self and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

13. The maximum height of the shelf and rack storage facility from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m.

14. Each deck, walkway or platform level shall be provided with not less than two **exit** stair shafts that conform to all requirements for exits as stated in the Ontario Building Code (i.e. fire separations having a fire resistance rating, etc.) as amended, except as follows:

    (a) access to exit may be provided from a platform level by means of open unenclosed stairs for shelf and rack storage facilities comprising not more than three platform levels, the highest of which may not be more than 9 m above the main floor; and,
    (b) any single platform, deck or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

        (i) platform, deck or walkway does not exceed 200 m² in area;
        (ii) travel distance on the platform, deck or walkway to the level below, including the travel distance along the single unenclosed egress stair does not exceed 25 m; and,
        (iii) the platform, deck or walkway below is provided with two separate egress stairs or **exits**.

15. The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs shall not exceed 45 m. The maximum travel distance from the bottom of an unenclosed stair to an exit on the main floor level shall not exceed 45 m. The maximum travel distance to an enclosed exit on an elevated platform shall not exceed 45 m.

16. Fire extinguishers shall be installed on every platform or walkway level of the shelf and rack storage system in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time. The maximum travel distance to a fire extinguisher shall not exceed 23 m.

17. Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated deck or walkway shall not exceed 9 m where the deck or walkway is required to be provided with at least 2 egress facilities.

18. The clear aisle width shall not be less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

19. The shelf and rack storage facility is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

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20. The shelf and rack storage facilities shall be used only for storage of Class I, II, III, and IV commodities as defined in NFPA 231C-1991, as amended and not for manufacturing, production, wrapping or assembly.

21. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and the sprinkler design criteria used for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the sprinkler control valve.

22. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code O. Reg. 454/90 as amended or remade from time to time.

23. A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage facility height is more than 14 m (45 ft.) in height or where there are more than 3 elevated platforms of walkway level.

24. Where a standpipe and hose system is required, 63.5 mm (2 1/2 in.) diameter hose connections shall be provided, except that 38.1 mm (1 1/2 in.) hose connections are permitted in the shelf and rack storage facilities which:

    (a) do not exceed 6 levels including the floor level; and,
    (b) do not exceed 3,716 m² (40,000 ft²) in the sum total of all levels of the shelf and rack storage facility.

25. Lighting levels of decks, walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

26. Emergency lighting shall be provided on walkways, decks, platforms, unenclosed egress stairs and exits providing means of egress to not less than the average level of illumination prescribed in Sentence 3.2.7.3.(2) of the Ontario Building Code, as amended or remade from time to time.

27. Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        (i) the material, system or building design that is the subject matter of this Authorization;

        (ii) the address of the applicant specified in Section 1 of this Authorization; or,

        (iii) the ownership of the applicant specified in Section 1 of this Authorization.

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(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 27th day of November, 1996.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Oliver Drerup, Vice-Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION September 20, 1996
BMEC REFERENCE BMEC 96-09-208

Giles Enterprises Inc., Model FHS-5 Wall Hung or Ceiling Mounted Recirculating Ventless Hoods for Deep Fat Fryers, Griddles and Ovens

1. Applicant

Giles Enterprises Inc.
2750 Gunter Park Drive W.
Montgomery, Alabama
U.S.A., 36109

Tel: (334) 272-3528
FAX: (334) 272-3561

2. Manufacturing Facilities

Giles Enterprises Inc.
2750 Gunter Park Drive W.
Montgomery, Alabama
U.S.A., 36109

Tel: (334) 272-3528
FAX: (334) 272-3561

3. Description

Giles Enterprises Model FHS-5 is a wall hung or ceiling mounted recirculating ventless hood designed for use over deep fat fryers, griddles and ovens. The hood is designed to remove smoke and grease produced by those commercial-type cooking ovens. Filtered air is circulated into the room after passing through a three-part filtering system consisting of a baffle filter, an electrostatic precipitator and a charcoal filter.

Model FHS-5 is for use over electrical appliances only. The hoods are fabricated from 18 gauge (1.22 mm) stainless steel.

The units are designed with interlocks that shut off the power to the appliance being used with the hood if the filters are dirty, missing, damaged, or if the capture rate is less than designed.

Model FHS-5 is prepiped for site installation of an Ansul R102 fire suppression system. Installation must be preformed by an authorized Ansul distributor in accordance with the system listing.

4. Authorization Requested

The applicant sought authorization for the use of an innovative wall hung or ceiling mounted recirculating ventless hood for the removal of grease and smoke produced by deep fat fryers, griddles and ovens as an equivalent to the requirement that commercial cooking equipment be designed, constructed and installed to conform to NFPA 96-1991, "Installation of Equipment for the Removal of Smoke and Grease-Laden Vapours from Commercial Cooking Equipment" (i.e. exhaust to the outside) in Article 6.2.2.6. of Regulation 61 of Revised Regulations of Ontario 1990 (the "Ontario Building Code").

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5. Assessment

Giles Enterprises Model FSH-5 is tested, evaluated and listed, as follows:

(a) **ULC:** C710, Ductless Hood for Commercial and Institutional Cooking Equipment

(b) **UL:** UL 710, Standard for Exhaust for Commercial Cooking Equipment
UL 197, Standard for Commercial Electric Cooking Appliances
UL 197A, Standard for Commercial Electric Cooking Appliances, Exhaust Hoods for Commercial Cooking Equipment, and Vending Machines, and Ventilating Equipment for Commercial Cooking Appliances.

(c) **NFS:** Standard 2 - Food Equipment

(d) **CSA:** Canadian Electrical Code, C22.2.1

6. Authorization

The use of Model FHS-5 is authorized in respect of the requirement that commercial cooking equipment be designed, constructed and installed to conform to NFPA 96-1991, "Installation of Equipment for the Removal of Smoke and Grease-Laden Vapours from Commercial Cooking Equipment" (i.e. exhaust to the outside) in Article 6.2.2.6. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. Specific Terms and Conditions:

1) The installation shall comply with this Authorization, the manufacturer's published instructions, NFPA 96-1994, and except where specifically provided in this Authorization the Ontario Building Code. Where a conflict exists between this Authorization, the manufacturer's published instructions and NFPA 96-1994, the most restrictive requirement shall apply.

2) This Authorization covers the hood only. Recognition of the cooking equipment used in conjunction with the hood is beyond the scope of this report. Model FSH-5 shall only be used over deep fat fryers, griddles and ovens identified in the manufacture's installation manual.

3) Model FSH-5 shall be mounted with the bottom of the skirt 175.26 cm (69 inches) from the floor and requires a minimum ceiling height of 289.56 cm (114 inches). The appliances being used with the hood require a minimum side overhang of 15.24 cm (6 inches) and minimum front overhang of 38.1 cm (15 inches). The sides and back of the hood must be 60.96 cm (24 inches) from combustibles and the top of the hood 25.4 cm (10 inches) from combustibles. The appliances shall be centred under the sprinkler nozzles.

4) (a) Each unit shall be permanently labelled with the manufacturer's name or trademark, model number and current listing of Canadian Standard Association (CSA) and Underwriters Laboratories Canada (ULC); Underwriters Laboratories Inc. (UL) and, NSF International (NFS).

(b) Each unit shall be installed and maintained in compliance with those listing requirements of CSA, ULC, UL and NFS.

5) (a) Each unit shall be maintained on a minimum service contract of at least once every six months to include checking and testing all fail safe components and replacing as needed the filter unit.

(b) The fire extinguisher shall be inspected and recharged annually. Hydrostatic testing requirements for portable fire extinguishers shall apply, in accordance with NFPA 10.

(c) Evidence shall be recorded in a log book signed and dated by the owner (or agent) of the unit and service contractor, to witness the following requirements:

i) Satisfactory operation and maintenance as per this AUTHORIZATION of each such unit; and,

ii) Annual inspection and recharging of the fire extinguisher.

6) (a) This unit is limited to one installation within one space unless there is conformance to the NFPA 96-1991 Standard for exhaust to the outside and make-up air.

(b) This unit shall only be installed in areas where the surrounding walls, ceilings and floors are finished with durable materials suitable for cleaning by washing.

7) Each unit when operated shall be maintained in a clean working order used only by trained personnel. Cleaning of the unit shall be done daily.

8) (a) Adequate general exhaust and supply ventilation shall be provided to prevent a build-up of smoke, odours and all cooking fumes, and

b) A portable code conforming extinguisher of at least 40 BC, shall be installed adjacent to each unit.

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9) This Authorization is valid only for Giles Enterprises Model FSH-5 manufactured by the Applicant specified in Section 1 herein at the manufacturing facilities specified in Section 2 herein.

10) The use of Giles Enterprises Model FSH-5 must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the manufacturing facilities specified in Section 2 of this Authorization;

(iii) the ownership of the manufacturing facilities specified in Section 2 of this Authorization; or

(iv) the address of the Applicant specified in Section 1 of this Authorization;

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 20th day of September, 1996.

BUILDING MATERIALS EVALUATION COMMISSION

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per Scott Richardson, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION September 20, 1996
BMEC REFERENCE BMEC 96-08-207

Giles Enterprises Inc.
Wall Hung, Ceiling Mounted or Direct Mounted Recirculating Ventless Hoods for Pizza, Convection and Rotisserie Ovens Models PO-VH and OVH-10

1. Applicant

Giles Enterprises Inc.
2750 Gunter Park Drive W.
Montgomery, Alabama
U.S.A., 36109

Tel: (334) 272-3528
FAX: (334) 272-3561

2. Manufacturing Facilities

Giles Enterprises Inc.
2750 Gunter Park Drive W.
Montgomery, Alabama
U.S.A., 36109

Tel: (334) 272-3528
FAX: (334) 272-3561

3. Description

Giles Enterprises Models PO-VH and OVH-10 are wall hung, ceiling mounted or direct mounted recirculating ventless hoods designed for use over pizza ovens, convection ovens and rotisserie ovens. The hoods are designed to remove smoke and grease produced by those commercial-type cooking ovens. Filtered air is circulated into the room after passing through a three-part filtering system consisting of a baffle filter, an electrostatic precipitator and a charcoal filter.

Giles Enterprises Models PO-VH and OVH-10 are for use over electrical appliances only. The hoods are fabricated from 18 gauge (1.22 mm) stainless steel.

The units are designed with interlocks that shut off the power to the appliance being used with the hood if the filters are dirty, missing, damaged, or if the capture rate is less than designed.

4. Authorization Requested

The applicant sought authorization for the use of an innovative wall hung, ceiling mounted or direct mounted recirculating ventless hood for the removal of grease and smoke produced by commercial pizza, convection or rotisserie ovens as an equivalent to requirement that commercial cooking equipment be designed, constructed and installed to conform to NFPA 96-1991, "Installation of Equipment for the Removal of Smoke and Grease-Laden Vapours from Commercial Cooking Equipment" (i.e. exhaust to the outside) in Article 6.2.2.6. of Regulation 61 of Revised Regulations of Ontario 1990 (the "Ontario Building Code").

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5. Assessment

Giles Enterprises Models PO-VH and OVH-10 are tested, evaluated and listed, as follows:

(a) **ULC:** C710, Ductless Hood for Commercial and Institutional Cooking Equipment

(b) **UL:** UL 710, Standard for Exhaust for Commercial Cooking Equipment

(c) **NFS:** Standard 2 - Food Equipment

(d) **CSA:** Canadian Electrical Code, C22.2.1

6. Authorization

The use of Models PO-VH and OVH-10 are authorized in respect of the requirement that commercial cooking equipment be designed, constructed and installed to conform to NFPA 96-1991, "Installation of Equipment for the Removal of Smoke and Grease-Laden Vapours from Commercial Cooking Equipment" (i.e. exhaust to the outside) in Article 6.2.2.6. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. Specific Terms and Conditions:

1) The installation shall comply with this Authorization, the manufacturer's published instructions, NFPA 96-1994, and except where specifically provided in this Authorization the Ontario Building Code. Where a conflict exists between this Authorization, the manufacturer's published instructions and NFPA 96-1994, the most restrictive requirement shall apply.

2) This Authorization covers the hood only. Recognition of the cooking equipment used in conjunction with the hood is beyond the scope of this report. Models PO-VH and OVH-10 shall only be used with those pizza, convection or rotisserie ovens listed in the manufacturer's installation manual.

3) Model PO-VH when used for pizza ovens and convection ovens: Skirt size shall be a maximum of 2.67 m^2 (28.7 ft^2); maximum of 50 KW, with a maximum clearance to cooking surface of 76.2 cm (30 inches).

4) Model OVH-10 when used for pizza ovens and convection ovens: Skirt size shall be a maximum of 0.93 m^2 (10 ft^2); maximum of 11.5 KW, with a maximum clearance to cooking surface of 76.2 cm (30 inches).

5) Model PO-VH and OVH-10 when used for rotisserie ovens: Maximum rotisserie dimensions of 86.36 cm (34 inches) wide, 63.5 cm (25 inches) deep and 93.9 cm (37 inches) high, maximum of 6 KW, with a maximum clearance to cooking surface of 15.24 cm (6 inches).

6) (a) Each unit shall be permanently labelled with the manufacturer's name or trademark, model number and current listing of Canadian Standard Association (CSA) and Underwriters Laboratories Canada (ULC); Underwriters Laboratories Inc. (UL) and, NSF International (NFS).

(b) Each unit shall be installed and maintained in compliance with those listing requirements of CSA, ULC, UL and NFS.

7) (a) Each unit shall be maintained on a minimum service contract of at least once every six months to include checking and testing all fail safe components and replacing as needed the filter unit.

(b) The fire extinguisher shall be inspected and recharged annually. Hydrostatic testing requirements for portable fire extinguishers shall apply, in accordance with NFPA 10.

(c) Evidence shall be recorded in a log book signed and dated by the owner (or agent) of the unit and service contractor, to witness the following requirements:

i) Satisfactory operation and maintenance as per this AUTHORIZATION of each such unit; and,

ii) Annual inspection and recharging of the fire extinguisher.

8) (a) This unit is limited to one installation within one space unless there is conformance to the NFPA 96-1991 Standard for exhaust to the outside and make-up air.

(b) This unit shall only be installed in areas where the surrounding walls, ceilings and floors are finished with durable materials suitable for cleaning by washing.

9) Each unit when operated shall be maintained in a clean working order used only by trained personnel. Cleaning of the unit shall be done daily.

10) (a) Adequate general exhaust and supply ventilation shall be provided to prevent a build-up of smoke, odours and all cooking fumes, and

b) A portable code conforming extinguisher of at least 40 BC, shall be installed adjacent to each unit.

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11) This Authorization is valid only for Giles Enterprises Models OVH-10 and PO-VH manufactured by the Applicant specified in Section 1 herein at the manufacturing facilities specified in Section 2 herein.

12) The use of Giles Enterprises Models OVH-10 and PO-VH must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

B. GENERAL CONDITIONS

1) The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the manufacturing facilities specified in Section 2 of this Authorization;

(iii) the ownership of the manufacturing facilities specified in Section 2 of this Authorization; or

(iv) the address of the Applicant specified in Section 1 of this Authorization;

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 20th day of September, 1996.

BUILDING MATERIALS EVALUATION COMMISSION

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per Scott Richardson, Chair

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION September 20, 1996
BMEC REFERENCE BMEC 96-07-206

Giles Enterprises Inc.
Free Standing Recirculating Ventless Hoods
Models FSH-2 AND FSH-2a

1. Applicant

Giles Enterprises Inc.
2750 Gunter Park Drive W.
Montgomery, Alabama
U.S.A., 36109

Tel: (334) 272-3528
FAX: (334) 272-3561

2. Manufacturing Facilities

Giles Enterprises Inc.
2750 Gunter Park Drive W.
Montgomery, Alabama
U.S.A., 36109

Tel: (334) 272-3528
FAX: (334) 272-3561

3. Description

Giles Enterprises Models FSH-2 and FSH-2a are free standing recirculating ventless hoods designed for use with specific deep-fat fryers. The hoods are designed to remove smoke and grease produced by specified commercial-type cooking equipment. Filtered air is circulated into the room after passing through a three-part filtering system consisting of a baffle filter, an electrostatic precipitator and a charcoal filter.

Deep-fat fryers used with these hoods shall be electrically heated. The fryers shall be limited to a maximum input of 20 KW, maximum cooking surface of 2451.61 cm^2 (380 in^2), maximum fry tank capacity of 50 kg (110.2 lb) of shortening and maximum distance from the cooking surface to appliance nozzle of 1143 mm (45 inches).

The hoods are fabricated from 18 gauge (1.22 mm) stainless steel. They have two fire suppression systems, one dry chemical agent and one wet. The nozzle of the dry chemical is located over the cooking surface and the wet system is for the plenum area of the hood. The fire suppression system is activated automatically or manually using a remote pull station.

The units are designed with interlocks that shut off the power to the appliance being used with the hood if the filters are dirty, missing, damaged, or if the capture rate is less than designed or if the fire suppression system is activated or discharged.

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4. Authorization Requested

The applicant sought authorization for the use of an innovative free standing recirculating ventless hood for the removal of grease and smoke produced by specified commercial cooking equipment as an equivalent to requirement that commercial cooking equipment be designed, constructed and installed to conform to NFPA 96-1991, "Installation of Equipment for the Removal of Smoke and Grease-Laden Vapours from Commercial Cooking Equipment" (i.e. exhaust to the outside) in Article 6.2.2.6. of Regulation 61 of Revised Regulations of Ontario 1990 (the "Ontario Building Code").

5. Assessment

Giles Enterprises Models FSH-2 and FSH-2a are tested, evaluated and listed, as follows:

(a) **ULC:** C710, Ductless Hood for Commercial and Institutional Cooking Equipment, ULC/ORD-C1254.6-1995, Testing of Restaurant Cooking Area Fire Extinguishing System Unit

(b) **UL:** UL 197, Standard for Commercial Electric Cooking Appliances

(c) **NFS:** Standard 2 - Food Equipment

6. Authorization

The use of Models FSH-2 and FSH-2a are authorized in respect of the requirement that commercial cooking equipment be designed, constructed and installed to conform to NFPA 96-1991, "Installation of Equipment for the Removal of Smoke and Grease-Laden Vapours from Commercial Cooking Equipment" (i.e. exhaust to the outside) in Article 6.2.2.6. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. Specific Terms and Conditions:

1) The installation shall comply with this Authorization, the manufacturer's published instructions, NFPA 96-1994, and except where specifically provided in this Authorization the Ontario Building Code. Where a conflict exists between this Authorization, the manufacturer's published instructions and NFPA 96-1994, the most restrictive requirement shall apply.

2) This Authorization covers the hood only. Recognition of the cooking equipment used in conjunction with the hood is beyond the scope of this report. Models FHS-2 and FHS-2a shall only be used with those electric deep-fat fryers listed in the manufacturer's installation manual.

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3) Every portion of the hood shall be installed with a clearance to combustible construction of 457 mm (18 inches) and the appliance is to be centred beneath the nozzle.

4) (a) Each unit shall be permanently labelled with the manufacturer's name or trademark, model number and current listing of Canadian Standard Association (CSA) and Underwriters Laboratories Canada (ULC); Underwriters Laboratories Inc. (UL) and, NSF International (NFS).

(b) Each unit shall be installed and maintained in compliance with those listing requirements of CSA, ULC, UL and NFS.

5) (a) Each unit shall be maintained on a minimum service contract of at least once every six months to include checking and testing all fail safe components and replacing as needed the filter unit.

(b) The fire extinguisher shall be inspected and recharged annually. Hydrostatic testing requirements for portable fire extinguishers shall apply, in accordance with NFPA 10.

(c) Evidence shall be recorded in a log book signed and dated by the owner (or agent) of the unit and service contractor, to witness the following requirements:

i) Satisfactory operation and maintenance as per this AUTHORIZATION of each such unit; and,

ii) Annual inspection and recharging of the fire extinguisher.

6) (a) This unit is limited to one installation within one space unless there is conformance to the NFPA 96-1991 Standard for exhaust to the outside and make-up air.

(b) This unit shall only be installed in areas where the surrounding walls, ceilings and floors are finished with durable materials suitable for cleaning by washing.

7) Each unit when operated shall be maintained in a clean working order used only by trained personnel. Cleaning of the unit shall be done daily.

8) (a) Adequate general exhaust and supply ventilation shall be provided to prevent a build-up of smoke, odours and all cooking fumes, and

b) A portable code conforming extinguisher of at least 40 BC, shall be installed adjacent to each unit.

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9) This Authorization is valid only for Giles Enterprises Models FSH-2 and FHS-2a manufactured by the Applicant specified in Section 1 herein at the manufacturing facilities specified in Section 2 herein.

10) The use of Giles Enterprises Models FSH-2 and FSH-2a must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

B. GENERAL CONDITIONS

1) The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the manufacturing facilities specified in Section 2 of this Authorization;

(iii) the ownership of the manufacturing facilities specified in Section 2 of this Authorization; or

(iv) the address of the Applicant specified in Section 1 of this Authorization;

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 20th day of September, 1996.

BUILDING MATERIALS EVALUATION COMMISSION

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per Scott Richardson, Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **September 20, 1996**
BMEC REFERENCE **BMEC 96-06-205**

Giles Enterprises Inc.
Electric Deep Fat Fryers with an Integral Ventless Hood
Models MGF-20VH, MGF-40VH, MGF-50VH, WOG-VH-MP, WOG-D-VH and WOG-20MP-VH

1. Applicant

Giles Enterprises Inc.
2750 Gunter Park Drive W.
Montgomery, Alabama
U.S.A., 36109

Tel: (334) 272-3528
FAX: (334) 272-3561

2. Manufacturing Facilities

Giles Enterprises Inc.
2750 Gunter Park Drive W.
Montgomery, Alabama
U.S.A., 36109

Tel: (334) 272-3528
FAX: (334) 272-3561

3. Description

Giles Enterprises Models MGF-20VH, MGF-40VH, MGF-50VH, WOG-VH-MP, WOG-D-VH and WOG-20MP-VH are electric deep fat fryers with an integral ventless hood. The hoods are designed to remove smoke and grease produced by specified commercial-type cooking equipment. Filtered air is circulated into the room after passing through a three-part filtering system consisting of a baffle filter, an electrostatic precipitator and a charcoal filter.

These models are movable and incorporate caster wheels. Fryers used with these hoods shall be electrically heated.

The hoods are fabricated from 18 gauge (1.22 mm) stainless steel. They have two fire suppression systems, one dry chemical agent and one wet. The nozzle of the dry chemical is located over the cooking surface and the wet system is for the plenum area of the hood. The fire suppression system is activated automatically or manually using a remote pull station.

The units are designed with interlocks that shut off the power to the appliance being used with the hood if the filters are dirty, missing, damaged, or if the capture rate is less than designed or if the fire suppression system is activated or discharged.

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4. Authorization Requested

The applicant sought authorization for the use of an innovative recirculation hood for the removal of grease and smoke produced by specified commercial cooking equipment as an equivalent to requirement that commercial cooking equipment be designed, constructed and installed to conform to NFPA 96-1991, "Installation of Equipment for the Removal of Smoke and Grease-Laden Vapours from Commercial Cooking Equipment" (i.e. exhaust to the outside) in Article 6.2.2.6. of Regulation 61 of Revised Regulations of Ontario 1990 (the "Ontario Building Code").

5. Assessment

Giles Enterprises Models MGF-20VH, MGF-40VH, MGF-50VH, WOG-VH-MP, WOG-D-VH and WOG-20MP-VH are tested, evaluated and listed, as follows:

(a) **ULC:** C710, Ductless Hood for Commercial and Institutional Cooking Equipment, Cooking Equipment (Self Contained)

(b) **UL:** UL 197, Standard for Commercial Electric Cooking Appliances

(c) **CSA:** Canadian Electrical Code

(d) **NFS:** Standard 4 - Commercial Cooking, Rethermalization and Powered Hot Food Holding and Transport Equipment

6. Authorization

The use of Models MGF-20VH, MGF-40VH, MGF-50VH, WOG-VH-MP, WOG-D-VH and WOG-20MP-VH are authorized in respect of the requirement that commercial cooking equipment be designed, constructed and installed to conform to NFPA 96-1991, "Installation of Equipment for the Removal of Smoke and Grease-Laden Vapours from Commercial Cooking Equipment" (i.e. exhaust to the outside) in Article 6.2.2.6. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. Specific Terms and Conditions:

1) The installation shall comply with this Authorization, the manufacturer's published instructions, NFPA 96-1994, and except where specifically provided in this Authorization the Ontario Building Code. Where a conflict exists between this Authorization, the manufacturer's published instructions and NFPA 96-1994, the most restrictive requirement shall apply.

2) This Authorization covers the hood only. Recognition of the cooking equipment used in conjunction with the hood is beyond the scope of this report.

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3) Every portion of the hood shall be installed with a clearance to combustible construction of 457 mm (18 inches) and the sides of the fryer shall be 76 mm (3 inches) from combustibles.

4) The Giles ventless hoods shall be used only with electrical appliances.

5) The Giles ventless hoods shall be used only with it's integral deep fat fryer.

6) The unit roller casters shall be locked so the unit remains in a fixed position while in the operation mode.

7) (a) Each unit shall be permanently labelled with the manufacturer's name or trademark, model number and current listing of Canadian Standard Association (CSA) and Underwriters Laboratories Canada (ULC); Underwriters Laboratories Inc. (UL) and, NSF International (NFS).

(b) Each unit shall be installed and maintained in compliance with those listing requirements of CSA, ULC, UL and NFS.

8) (a) Each unit shall be maintained on a minimum service contract of at least once every six months to include checking and testing all fail safe components and replacing as needed the filter unit.

(b) The fire extinguisher shall be inspected and recharged annually. Hydrostatic testing requirements for portable fire extinguishers shall apply, in accordance with NFPA 10.

(c) Evidence shall be recorded in a log book signed and dated by the owner (or agent) of the unit and service contractor, to witness the following requirements:

i) Satisfactory operation and maintenance as per this AUTHORIZATION of each such unit; and,

ii) Annual inspection and recharging of the fire extinguisher.

9) (a) This unit is limited to one installation within one space unless there is conformance to the NFPA 96-1991 Standard for exhaust to the outside and make-up air.

(b) This unit shall only be installed in areas where the surrounding walls, ceilings and floors are finished with durable materials suitable for cleaning by washing.

10) Each unit when operated shall be maintained in a clean working order used only by trained personnel. Cleaning of the unit shall be done daily.

4/...

11) (a) Adequate general exhaust and supply ventilation shall be provided to prevent a build-up of smoke, odours and all cooking fumes, and

b) A portable code conforming fire extinguisher of at least 40 BC, shall be installed adjacent to each unit.

12) This Authorization is valid only for Giles Enterprises Models MGF-20VH, MGF-40VH, MGF-50VH, WOG-VH-MP, WOG-D-VH and WOG-20MP-VH manufactured by the Applicant specified in Section 1 herein at the manufacturing facilities specified in Section 2 herein.

13) The use of Giles Enterprises Models MGF-20VH, MGF-40VH, MGF-50VH, WOG-VH-MP, WOG-D-VH and WOG-20MP-VH must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

B. GENERAL CONDITIONS

1) The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the manufacturing facilities specified in Section 2 of this Authorization;

(iii) the ownership of the manufacturing facilities specified in Section 2 of this Authorization; or

(iv) the address of the Applicant specified in Section 1 of this Authorization;

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 20th day of September, 1996.

BUILDING MATERIALS EVALUATION COMMISSION

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per Scott Richardson, Chair

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **June 20, 1996**
BMEC REFERENCE **BMEC 96-05-204**

NATURAL GAS EMERGENCY STANDBY POWER (ESP)

1. Applicant

Consumers Gas Company (CGC)
500 Consumers Road
North York, Ontario
M2J 1P8

2. Description

Natural Gas Emergency Standby Power (ESP) is provided by an automated interconnected system of a bank of Compressed Natural Gas (CNG) storage tanks which are fuelled by a Vehicle Refuelling Appliance (VRA). The purpose of the system is to provide an alternate fuel source to power a natural gas-fired generator used to supply Emergency Standby Power.

The emergency power generators are designed to operate exclusively on natural gas. The fuel supply is connected to both the building's natural gas supply line and the on-site compressed natural gas storage tanks. The storage tanks are sized to provide natural gas to operate the generators continuously under full load for two hours.

If the regular power supply is interrupted, the generators will automatically take over to supply power to the building. As long as the main gas supply to the building is available, the generators will draw fuel from this supply. The fuel switching system will automatically switch and supply fuel to the generators from the storage tanks when the main gas supply is cut off, for example, by fire department personnel, fire, explosions or earthquake. When the main gas supply is restored, the switching system will automatically switch the generators back to this main gas supply, and at the same time, the vehicle refuelling appliances may be manually operated to refill the storage tanks.

3. Authorization Requested

The applicant sought authorization for the use of an innovative system to provide an alternate fuel source to power a natural gas-fired generator used to supply Emergency Standby Power as an equivalent to the installation requirements for emergency power systems contained in CAN/CSA C282-M89, "Emergency Electrical Supply for Buildings" in accordance with Article 3.2.7.5. of the Ontario Building Code.

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4. Assessment

Reports and assessments provided by the applicant show that if the Natural Gas Emergency Standby Power (ESP) system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with CAN/CSA C282-M89, "Emergency Electrical Supply for Buildings" contained in Article 3.2.7.5. of the Ontario Building Code.

5. Authorization

The Natural Gas Emergency Standby Power (ESP) system is authorized in respect to the emergency power supply installation requirements contained in CAN/CSA C282-M89, "Emergency Electrical Supply for Buildings" forming part of Article 3.2.7.5. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1) The use of the Natural Gas Emergency Standby Power (ESP) system must comply with the Building Code Act, 1992, as amended or re-enacted from time to time and, except as specifically authorized herein with the Ontario Building Code as amended or remade from time to time.

2) A copy of this Authorization shall be included with an application for a permit and shall be kept and maintained on the site of the construction with the building permit.

3) The Natural Gas Emergency Standby Power (ESP) system shall not be used in hospitals.

4) Where located within a building, the emergency generators shall be located in service rooms separated in accordance with requirements of Sentence 3.5.2.1.(1) of the Ontario Building Code.

5) The Applicant (i.e. Consumers Gas Company) shall be responsible for ensuring that the installation, operation and maintenance of the Natural Gas Emergency Standby Power (ESP) system is in accordance with the "Manual of Installation and Operating Instructions for Emergency Standby Power" provided by Consumers Gas.

6) Piping and components from a customer's meter up to the Vehicle Refuelling Appliance (VRA) connection shall meet the Ontario Gas Utilization Code, Reg. 331. The installation of the VRA shall be in accordance with CAN/CGA B149.1-M95, Part 9 of the Natural Gas Code.

7) All components downstream of the Vehicle Refuelling Appliance (VRA) shall meet the Ontario Compressed Natural Gas Standard CNG#1, November 1990 or CAN/CGA B108-M95, considering that the installation is part of a refuelling station, up to the regulator that reduces the supply pressure to the engine to less than 413 kpa (60 psi).

8) The Vehicle Refuelling Appliance (VRA), the high pressure storage and any piping or tubing operating at a pressure over 413 kpa (60 psi) shall be installed outdoors.

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9) Downstream of the pressure regulator reducing the pressure to less than 413 kpa (60 psi), and up to the stationary engine (appliance) piping and components shall meet the Ontario Gas Utilization Code, O.Reg.331.

10) The ESP system installation shall also conform to the Ontario NGV Code, CSA B51-95 and CGA 12-6-M94.

11) The system installation shall comply with the requirements of Section 5.6 of the Ontario Fire Code, O.Reg. 454/90.

12) Excessive flow valves shall be installed to ensure that piping within the building is of the low pressure type.

13) The Natural Gas Emergency Standby Power (ESP), emergency generator and fuel supply may be installed at grade or on the roof of a building.

14) Protection shall be provided to prevent over pressurization of the systems fuel storage tanks due to temperature rise.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 20th day of June, 1996.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **June 20, 1996**
BMEC REFERENCE **BMEC 96-04-203**

WINDOW SPRINKLER SYSTEM

1. Applicant

Robert B. Williams, P.Eng.
Fire Protection Engineering
227 Tower Drive
Scarborough, Ontario
M1R 3P8

2. Description

A window sprinkler assembly system to provide a two-hour fire-resistance rated separation in a wall to consist of tempered or heat-strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick-response action.

3. Authorization Requested

The applicant sought authorization for the use of an innovative window sprinkler system designed for new buildings where fire resistant ratings are required, but glazing is preferred. The window sprinkler is not for use in exits or firewalls.

4. Assessment

Reports and assessments provided by the applicant show that if the window sprinkler system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The window sprinkler system is authorized for use within new buildings where fire resistant ratings are required, but glazing is preferred, except in exits or firewalls, subject to the following terms and conditions:

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A. SPECIFIC TERMS AND CONDITIONS:

1. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer licensed in Ontario under the Professional Engineers Act and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).

2. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.

3. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited Model FR-1/Q-60, 12.7 mm (1/2 in.) orifice, 74° C (165° F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.

4. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness maximum glazing shall be 2134 mm (7 ft. 0 in.) wide by 2844 mm (9 ft. 4 in.) high and minimum 6 mm (1/4 in.) thick.

5. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hour fire resistance rating provided,

   (a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

   (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

6. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.

7. This window sprinkler system shall not be used in exits nor firewalls as defined in the Ontario Building Code.

8. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.

9. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.

10. Where the water supply is from a standpipe system conforming to the Code, the fire department connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".

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11. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in.) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

WARNING

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 20th day of June, 1996.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **June 20, 1996**
BMEC REFERENCE **BMEC 96-03-202**

SHELF AND RACK STORAGE SYSTEM

1. Applicant

ALLTYPE Metal Stampings Ltd.
349 Arvin Avenue
Stoney Creek, Ontario
L8E 2M6

2. Description

The shelf and rack storage system is a self contained structural facility within a building, having one or more solid intermediate platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural facility for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

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2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. This Authorization is valid only for ALLTYPE Metal Stampings Ltd.

4. Deck and walkway levels shall be constructed of:

   (a) solid-closed surface steel planking;
   (b) steel roof decking with a top substrate that forms a serviceable floor area;
   (c) open steel grating; or,
   (d) open steel floor planking.

5. The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

6. The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

7. An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility including the top level and shall be in conformance with NFPA 13-1991 and NFPA 231C-1991 as amended or the appropriate NFPA Standard for the most severe hazard to which the storage facility is exposed. Additionally, sprinkler protection shall be provided under decks and walkways.

8. Except where the deck is of open steel grating, any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph A.7. of this Authorization.

9. A sprinkler systems located in a cold storage or freezer environment shall be designed to address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

10. The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building for each of the following:

    (a) movement of a control valve handle;
    (b) loss of excess water pressure required to prevent false alarms in a wetpipe system;
    (c) loss of air pressure in a dry pipe system;
    (d) loss of air pressure in a pressure tank;
    (e) a significant change in water level in any water storage container used for fire fighting purposes;
    (f) loss of electrical power to any automatically starting electrical fire pump; and,
    (g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

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11. The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

12. The notification to the person controlling the building and the fire department referred to in paragraphs A.10 and A.11 of this Authorization shall be provided by way of:

    (a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;
    (b) a proprietary control centre conforming to Chapter 9 of NFPA-72, Standard for the Installation, Maintenance, and Use of Protective Signaling Systems", as amended; or,
    (c) if the above mentioned facilities are not available in the municipality in which the self and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

13. The maximum height of the shelf and rack storage facility from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m.

14. Each deck, walkway or platform level shall be provided with not less than two **exit** stair shafts that conform to all requirements for exits as stated in the Ontario Building Code (i.e. fire separations having a fire resistance rating, etc.) as amended, except as follows:

    (a) access to exit may be provided from a platform level by means of open unenclosed stairs for shelf and rack storage facilities comprising not more than three platform levels, the highest of which may not be more than 9 m above the main floor; and,
    (b) any single platform, deck or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

        (i) platform, deck or walkway does not exceed 200 m² in area;
        (ii) travel distance on the platform, deck or walkway to the level below, including the travel distance along the single unenclosed egress stair does not exceed 25 m; and,
        (iii) the platform, deck or walkway below is provided with two separate egress stairs or **exits**.

15. The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs shall not exceed 45 m. The maximum travel distance from the bottom of an unenclosed stair to an exit on the main floor level shall not exceed 45 m. The maximum travel distance to an enclosed exit on an elevated platform shall not exceed 45 m.

16. Fire extinguishers shall be installed on every platform or walkway level of the shelf and rack storage system in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time. The maximum travel distance to a fire extinguisher shall not exceed 23 m.

17. Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated deck or walkway shall not exceed 9 m where the deck or walkway is required to be provided with at least 2 egress facilities.

18. The clear aisle width shall not be less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

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19. The shelf and rack storage facility is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

20. The shelf and rack storage facilities shall be used only for storage of Class I, II, III, and IV commodities as defined in NFPA 231C-1991, as amended and not for manufacturing, production, wrapping or assembly.

21. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and the sprinkler design criteria used for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the sprinkler control valve.

22. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code O. Reg. 454/90 as amended or remade from time to time.

23. A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage facility height is more than 14 m (45 ft.) in height or where there are more than 3 elevated platforms of walkway level.

24. Where a standpipe and hose system is required, 63.5 mm (2 1/2 in.) diameter hose connections shall be provided, except that 38.1 mm (1 1/2 in.) hose connections are permitted in the shelf and rack storage facilities which:

    (a) do not exceed 6 levels including the floor level; and,
    (b) do not exceed 3,716 m² (40,000 ft²) in the sum total of all levels of the shelf and rack storage facility.

25. Lighting levels of decks, walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

26. Emergency lighting shall be provided on walkways, decks, platforms, unenclosed egress stairs and exits providing means of egress to not less than the average level of illumination prescribed in Sentence 3.2.7.3.(2) of the Ontario Building Code, as amended or remade from time to time.

27. Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        (i) the material, system or building design that is the subject matter of this Authorization;

        (ii) the address of the applicant specified in Section 1 of this Authorization; or,

        (iii) the ownership of the applicant specified in Section 1 of this Authorization.

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(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 29th day of May, 1996.

BUILDING MATERIALS EVALUATION COMMISSION

_____

per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **June 20, 1996**
BMEC REFERENCE **BMEC 96-01-200**

WINDOW SPRINKLER SYSTEM

1. Applicant

MBECO Engineering Ltd.
1 Marsh Street
Richmond Hill, Ontario
L4C 7P5

2. Description

A window sprinkler assembly system to provide a two-hour fire-resistance rated separation in a wall to consist of tempered or heat-strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick-response action.

3. Authorization Requested

The applicant sought authorization for the use of an innovative window sprinkler system designed for new buildings where fire resistant ratings are required, but glazing is preferred. The window sprinkler is not for use in exits or firewalls.

4. Assessment

Reports and assessments provided by the applicant show that if the window sprinkler system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The window sprinkler system is authorized for use within new buildings where fire resistant ratings are required, but glazing is preferred, except in exits or firewalls, subject to the following terms and conditions:

2/...

A. SPECIFIC TERMS AND CONDITIONS:

1. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer licensed in Ontario under the Professional Engineers Act and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).

2. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.

3. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited Model FR-1/Q-60, 12.7 mm (1/2 in.) orifice, 74° C (165° F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.

4. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness maximum glazing shall be 2134 mm (7 ft. 0 in.) wide by 2844 mm (9 ft. 4 in.) high and minimum 6 mm (1/4 in.) thick.

5. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hour fire resistance rating provided,

   (a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

   (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

6. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.

7. This window sprinkler system shall not be used in exits nor firewalls as defined in the Ontario Building Code.

8. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.

9. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.

10. Where the water supply is from a standpipe system conforming to the Code, the fire department connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".

3/...

11. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in.) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

WARNING

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 29th day of May, 1996.

BUILDING MATERIALS EVALUATION COMMISSION

_____

per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **November 30, 1995**

BMEC REFERENCE **BMEC 95-14-199**

SHELF AND RACK STORAGE SYSTEM

1. Applicant

E-Z-Rect Manufacturing Ltd.
7025 Tomken Road, Units 9-12
Mississauga, Ontario
L5S 1R6

2. Description

The shelf and rack storage system is a self contained structural facility within a building, having one or more solid intermediate platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural facility for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

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3. This Authorization is valid only for E-Z-Rect Manufacturing Ltd.

4. Deck and walkway levels shall be constructed of:

   (a) solid-closed surface steel planking;
   (b) steel roof decking with a top substrate that forms a serviceable floor area;
   (c) open steel grating; or,
   (d) open steel floor planking.

5. The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

6. The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

7. An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility including the top level and shall be in conformance with NFPA 13-1991 and NFPA 231C-1991 as amended or the appropriate NFPA Standard for the most severe hazard to which the storage facility is exposed. Additionally, sprinkler protection shall be provided under decks and walkways.

8. Except where the deck is of open steel grating, any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph A.7. of this Authorization.

9. A sprinkler systems located in a cold storage or freezer environment shall be designed to address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

10. The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building for each of the following:

    (a) movement of a control valve handle;
    (b) loss of excess water pressure required to prevent false alarms in a wetpipe system;
    (c) loss of air pressure in a dry pipe system;
    (d) loss of air pressure in a pressure tank;
    (e) a significant change in water level in any water storage container used for fire fighting purposes;
    (f) loss of electrical power to any automatically starting electrical fire pump; and,
    (g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

11. The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

...3/

12. The notification to the person controlling the building and the fire department referred to in paragraphs A.10 and A.11 of this Authorization shall be provided by way of:

    (a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;
    (b) a proprietary control centre conforming to Chapter 9 of NFPA-72, Standard for the Installation, Maintenance, and Use of Protective Signaling Systems", as amended; or,
    (c) if the above mentioned facilities are not available in the municipality in which the self and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

13. The maximum height of the shelf and rack storage facility from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m.

14. Each deck, walkway or platform level shall be provided with not less than two **exit** stair shafts that conform to all requirements for exits as stated in the Ontario Building Code (i.e. fire separations having a fire resistance rating, etc.) as amended, except as follows:

    (a) access to exit may be provided from a platform level by means of open unenclosed stairs for shelf and rack storage facilities comprising not more than three platform levels, the highest of which may not be more than 9 m above the main floor; and,
    (b) any single platform, deck or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

        (i) platform, deck or walkway does not exceed 200 m² in area;
        (ii) travel distance on the platform, deck or walkway to the level below, including the travel distance along the single unenclosed egress stair does not exceed 25 m; and,
        (iii) the platform, deck or walkway below is provided with two separate egress stairs or **exits**.

15. The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs shall not exceed 45 m. The maximum travel distance from the bottom of an unenclosed stair to an exit on the main floor level shall not exceed 45 m. The maximum travel distance to an enclosed exit on an elevated platform shall not exceed 45 m.

16. Fire extinguishers shall be installed on every platform or walkway level of the shelf and rack storage system in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time. The maximum travel distance to a fire extinguisher shall not exceed 23 m.

17. Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated deck or walkway shall not exceed 9 m where the deck or walkway is required to be provided with at least 2 egress facilities.

18. The clear aisle width shall not be less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

19. The shelf and rack storage facility is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

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20. The shelf and rack storage facilities shall be used only for storage of Class I, II, III, and IV commodities as defined in NFPA 231C-1991, as amended and not for manufacturing, production, wrapping or assembly.

21. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and the sprinkler design criteria used for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the sprinkler control valve.

22. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code O. Reg. 454/90 as amended or remade from time to time.

23. A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage facility height is more than 14 m (45 ft.) in height or where there are more than 3 elevated platforms of walkway level.

24. Where a standpipe and hose system is required, 63.5 mm (2 1/2 in.) diameter hose connections shall be provided, except that 38.1 mm (1 1/2 in.) hose connections are permitted in the shelf and rack storage facilities which:

    (a) do not exceed 6 levels including the floor level; and,
    (b) do not exceed 3,716 m² (40,000 ft²) in the sum total of all levels of the shelf and rack storage facility.

25. Lighting levels of decks, walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

26. Emergency lighting shall be provided on walkways, decks, platforms, unenclosed egress stairs and exits providing means of egress to not less than the average level of illumination prescribed in Sentence 3.2.7.3.(2) of the Ontario Building Code, as amended or remade from time to time.

27. Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        (i) the material, system or building design that is the subject matter of this Authorization;

        (ii) the address of the applicant specified in Section 1 of this Authorization; or,

        (iii) the ownership of the applicant specified in Section 1 of this Authorization.

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(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 30th day of November, 1995.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **November 30, 1995**

BMEC REFERENCE **BMEC 95-13-198**

WINDOW SPRINKLER SYSTEM

1. Applicant

Life Safety Systems
Fire Protection Consultants
2490 Argentia Road
Mississauga, Ontario
L5N 2X6

2. Description

A window sprinkler assembly system to provide a two-hour fire-resistance rated separation in a wall to consist of tempered or heat-strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick-response action.

3. Authorization Requested

The applicant sought authorization for the use of an innovative window sprinkler system designed for new buildings where fire resistant ratings are required, but glazing is preferred. The window sprinkler is not for use in exits or firewalls.

4. Assessment

Reports and assessments provided by the applicant show that if the window sprinkler system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The window sprinkler system is authorized for use within new buildings where fire resistant ratings are required, but glazing is preferred, except in exits or firewalls, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer licensed in Ontario under the Professional Engineers Act and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).

2. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.

3. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited Model FR-1/Q-60, 12.7 mm (1/2 in.) orifice, 74°C (165°F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.

4. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness maximum glazing shall be 2134 mm (7 ft. 0 in.) wide by 2844 mm (9 ft. 4 in.) high and minimum 6 mm (1/4 in.) thick.

5. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hour fire resistance rating provided,

   (a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

   (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

6. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.

7. This window sprinkler system shall not be used in exits nor firewalls as defined in the Ontario Building Code.

8. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.

9. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.

10. Where the water supply is from a standpipe system conforming to the Code, the fire department connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".

11. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in.) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

WARNING

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Section 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 30th day of November, 1995.

BUILDING MATERIALS EVALUATION COMMISSION

_____
per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **November 30, 1995**
BMEC REFERENCE **BMEC 95-12-197**
● Amended January 25, 1996

Isowall Ltd. Thermosetting Foam Composite Panel for Interior Walls and Ceilings in Noncombustible Construction

1. Applicant

Isowall Ltd.
P.O. Box 433
Cobourg, Ontario
K9A 4L1

2. Manufacturing Facilities

Isowall Ltd.
Northham Industrial Park
Division Street
Cobourg, Ontario
K9A 4L1

3. Description

The Isowall panels consist of a thermosetting isocyanurate insulation core not greater than 100 mm thick (4 inch) faced with a minimum 0.38 mm thick (0.0179 inch or 26 gauge) galvanized or stainless steel facings. The facing sheets are bonded to both sides of the insulation core using a heat polymerizing, thermosetting adhesive. The edges of the steel panels are trimmed to accept a steel joiner during installation which is structurally independent of the foam core.

4. Authorization Requested

The applicant sought authorization for the use of an innovative interior non loadbearing wall and ceiling system containing thermosetting isocyanurate insulation in cold storage facilities, processing rooms and freezers required to be of noncombustible construction provided the building is sprinklered and the wall assembly satisfies the performance criteria for exterior walls in Clause 3.1.5.11.(6)(a) of Regulation 61 of Revised Regulations of Ontario 1990 (the "Ontario Building Code").

5. Assessment

The Isowall panels are tested, evaluated and listed for thicknesses up to 100 mm (4 inches), as follows:

2/...

(a) Surface Burning Characteristics:

The flame spread rating for the thermosetting foam panel was a maximum of 25

(b) CAN/ULC - S101 - M "Standard Methods of Fire Endurance Tests of Building Construction and Materials".

The Test results showed compliance with the performance criteria for exterior walls in Clause 3.1.5.11.(6)(a) of the Ontario Building Code.

(c) CAN/ULC - S126 "Standards Method of Test for Fire Spread under Roof-Deck Assemblies".

The test results showed that the thermosetting foam panel passed this test.

6. Authorization

The use of the Isowall thermosetting isocyanurate insulation panels for not more than 100 mm (4 inches) thick walls is authorized in respect of interior non loadbearing walls and ceiling in noncombustible construction described in Subsection 3.1.5. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. Specific Terms and Conditions:

1) A **monitored** automatic sprinkler system shall be installed throughout the building, including individual cold storage units, in accordance with the most current edition of NFPA - 13 "Installation of Sprinkler Systems". Additionally, the sprinkler system located inside the storage unit shall be designed to operate in a cold storage or freezer environment. The design shall address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

2) The flame spread rating of the wall panel, determined by subjecting a sample, including an assembled joint, to the appropriate test described in Subsection 3.1.12. of the Ontario Building Code, as amended or remade from time to time, shall be not more than the flame spread rating permitted for the room or space which it bounds.

3) The building shall contain only mercantile occupancy (E) or cold storage facilities of Medium Hazard Industrial Occupancy (F-2) or Low Hazard Industrial Occupancy (F-3) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

4) The building shall be not more than 18 m high, measured between grade and the floor level of the uppermost storey.

5) The ceiling panels shall be supported not more than 3050 mm. (10 feet) o.c.

3/...

6) The panels shall be listed, as defined in the Ontario Building Code as amended or remade from time to time, to show that the wall panel will remain in place for not less than 10 min when the wall panel is tested in conformance with CAN4-S101-M, "Standard Methods of Fire Endurance Tests of Building Construction and Materials".

7) This Authorization is valid only for Isowall Ltd. thermosetting foamed insulation panels manufactured by the Applicant specified in Section 1 herein at the manufacturing facilities specified in Section 2 herein.

8) The panels shall be installed in accordance with the manufacturers specifications and the installation shall be approved by the manufacturer.

9) The use of Isowall panels must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the manufacturing facilities specified in Section 2 of this Authorization;

      (iii) the ownership of the manufacturing facilities specified in Section 2 of this Authorization; or

      (iv) the address of the Applicant specified in Section 1 of this Authorization;

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ; or

   (c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 30th day of November, 1995.

BUILDING MATERIALS EVALUATION COMMISSION

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION October 18, 1995
BMEC REFERENCE BMEC 95-11-196

WINDOW SPRINKLER SYSTEM

1. Applicant

Larden Muniak Consulting Inc.
2490 Bloor Street West
Toronto, Ontario
M6S 1R4

2. Description

A window sprinkler assembly system to provide a two-hour fire-resistance rated separation in a wall to consist of tempered or heat-strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick-response action.

3. Authorization Requested

The applicant sought authorization for the use of an innovative window sprinkler system designed for new buildings where fire resistant ratings are required, but glazing is preferred. The window sprinkler is not for use in exits or firewalls.

4. Assessment

Reports and assessments provided by the applicant show that if the window sprinkler system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The window sprinkler system is authorized for use within new buildings where fire resistant ratings are required, but glazing is preferred, except in exits or firewalls, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer licensed in Ontario under the Professional Engineers Act and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).

2/...

2. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.

3. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited Model FR-1/Q-60, 12.7 mm (1/2 in.) orifice, 74°C (165°F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.

4. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness maximum glazing shall be 2134 mm (7 ft. 0 in.) wide by 2844 mm (9 ft. 4 in.) high and minimum 6 mm (1/4 in.) thick.

5. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hr. fire resistance rating provided,

   (a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

   (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

6. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.

7. This window sprinkler system shall not be used in exits nor firewalls as defined in the Ontario Building Code.

8. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.

9. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.

10. Where the water supply is from a standpipe system conforming to the Code, the fire department connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".

11. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in.) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

WARNING

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

3/...

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Section 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ; or

   (c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 18th day of October, 1995.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **October 18, 1995**
BMEC REFERENCE **BMEC 95-10-195**

SHELF AND RACK STORAGE SYSTEM

1. Applicant

Tripla-A Manufacturing Co. Ltd.
44 Milner Avenue
Scarborough, Ontario
M1S 3P8

2. Description

The shelf and rack storage system is a self contained structural facility within a building, having one or more solid intermediate platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural facility for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

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3. This Authorization is valid only for E-Z-Rect Manufacturing Ltd.

4. Deck and walkway levels shall be constructed of:

   (a) solid-closed surface steel planking;
   (b) steel roof decking with a top substrate that forms a serviceable floor area;
   (c) open steel grating; or,
   (d) open steel floor planking.

5. The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

6. The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

7. An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility including the top level and shall be in conformance with NFPA 13-1991 and NFPA 231C-1991 as amended or the appropriate NFPA Standard for the most severe hazard to which the storage facility is exposed. Additionally, sprinkler protection shall be provided under decks and walkways.

8. Except where the deck is of open steel grating, any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph A.7. of this Authorization.

9. A sprinkler systems located in a cold storage or freezer environment shall be designed to address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

10. The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building for each of the following:

    (a) movement of a control valve handle;
    (b) loss of excess water pressure required to prevent false alarms in a wetpipe system;
    (c) loss of air pressure in a dry pipe system;
    (d) loss of air pressure in a pressure tank;
    (e) a significant change in water level in any water storage container used for fire fighting purposes;
    (f) loss of electrical power to any automatically starting electrical fire pump; and,
    (g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

11. The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

...3/

12. The notification to the person controlling the building and the fire department referred to in paragraphs A.10 and A.11 of this Authorization shall be provided by way of:

    (a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;
    (b) a proprietary control centre conforming to Chapter 9 of NFPA-72, Standard for the Installation, Maintenance, and Use of Protective Signaling Systems", as amended; or,
    (c) if the above mentioned facilities are not available in the municipality in which the self and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

13. The maximum height of the shelf and rack storage facility from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m.

14. Each deck, walkway or platform level shall be provided with not less than two **exit** stair shafts that conform to all requirements for exits as stated in the Ontario Building Code (i.e. fire separations having a fire resistance rating, etc.) as amended, except as follows:

    (a) access to exit may be provided from a platform level by means of open unenclosed stairs for shelf and rack storage facilities comprising not more than three platform levels, the highest of which may not be more than 9 m above the main floor; and,
    (b) any single platform, deck or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

        (i) platform, deck or walkway does not exceed 200 m² in area;
        (ii) travel distance on the platform, deck or walkway to the level below, including the travel distance along the single unenclosed egress stair does not exceed 25 m; and,
        (iii) the platform, deck or walkway below is provided with two separate egress stairs or **exits**.

15. The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs shall not exceed 45 m. The maximum travel distance from the bottom of an unenclosed stair to an exit on the main floor level shall not exceed 45 m. The maximum travel distance to an enclosed exit on an elevated platform shall not exceed 45 m.

16. Fire extinguishers shall be installed on every platform or walkway level of the shelf and rack storage system in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time. The maximum travel distance to a fire extinguisher shall not exceed 23 m.

17. Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated deck or walkway shall not exceed 9 m where the deck or walkway is required to be provided with at least 2 egress facilities.

18. The clear aisle width shall not be less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

19. The shelf and rack storage facility is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

...4/

20. The shelf and rack storage facilities shall be used only for storage of Class I, II, III, and IV commodities as defined in NFPA 231C-1991, as amended and not for manufacturing, production, wrapping or assembly.

21. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and the sprinkler design criteria used for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the sprinkler control valve.

22. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code O. Reg. 454/90 as amended or remade from time to time.

23. A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage facility height is more than 14 m (45 ft.) in height or where there are more than 3 elevated platforms of walkway level.

24. Where a standpipe and hose system is required, 63.5 mm (2 1/2 in.) diameter hose connections shall be provided, except that 38.1 mm (1 1/2 in.) hose connections are permitted in the shelf and rack storage facilities which:

    (a) do not exceed 6 levels including the floor level; and,
    (b) do not exceed 3,716 m² (40,000 ft²) in the sum total of all levels of the shelf and rack storage facility.

25. Lighting levels of decks, walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

26. Emergency lighting shall be provided on walkways, decks, platforms, unenclosed egress stairs and exits providing means of egress to not less than the average level of illumination prescribed in Sentence 3.2.7.3.(2) of the Ontario Building Code, as amended or remade from time to time.

27. Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        (i) the material, system or building design that is the subject matter of this Authorization;

        (ii) the address of the applicant specified in Section 1 of this Authorization; or,

        (iii) the ownership of the applicant specified in Section 1 of this Authorization.

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(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 30th day of November, 1995.

BUILDING MATERIALS EVALUATION COMMISSION

_____
per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **August 24, 1995**
BMEC REFERENCE **BMEC 95-09-194**

SHELF AND RACK STORAGE SYSTEM

1. Applicant

Beaver Materials Handling Company Ltd.
507 Oakville Road
Downsview, Ontario
M3N 1W7

2. Description

The shelf and rack storage system is a self contained structural facility within a building, having one or more solid intermediate platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural facility for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

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3. This Authorization is valid only for Beaver Materials Handling Company Ltd.

4. Deck and walkway levels shall be constructed of:

   (a) solid-closed surface steel planking;
   (b) steel roof decking with minimum 16 mm (5/8 in) maximum 19 mm (3/4 in) thick tongue and groove solid wood or plywood; or,
   (c) open steel grating.

5. The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

6. The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

7. An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility including the top level and shall be in conformance with NFPA 13-1991 and NFPA 231C-1991 as amended or the appropriate NFPA Standard for the most severe hazard to which the storage facility is exposed. Additionally, sprinkler protection shall be provided under decks and walkways.

8. Except where the deck is of open steel grating, any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph A.7. of this Authorization.

9. A sprinkler systems located in a cold storage or freezer environment shall be designed to address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

10. The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building for each of the following:

    (a) movement of a control valve handle;
    (b) loss of excess water pressure required to prevent false alarms in a wetpipe system;
    (c) loss of air pressure in a dry pipe system;
    (d) loss of air pressure in a pressure tank;
    (e) a significant change in water level in any water storage container used for fire fighting purposes;
    (f) loss of electrical power to any automatically starting electrical fire pump; and,
    (g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

11. The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

...3/

12. The notification to the person controlling the building and the fire department referred to in paragraphs A.10 and A.11 of this Authorization shall be provided by way of:

    (a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;
    (b) a proprietary control centre conforming to Chapter 9 of NFPA-72, Standard for the Installation, Maintenance, and Use of Protective Signaling Systems", as amended; or,
    (c) if the above mentioned facilities are not available in the municipality in which the self and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

13. The maximum height of the shelf and rack storage facility from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m.

14. Each deck, walkway or platform level shall be provided with not less than two **exit** stair shafts that conform to all requirements for exits as stated in the Ontario Building Code (i.e. fire separations having a fire resistance rating, etc.) as amended, except as follows:

    (a) access to exit may be provided from a platform level by means of open unenclosed stairs for shelf and rack storage facilities comprising not more than three platform levels, the highest of which may not be more than 9 m above the main floor; and,
    (b) any single platform, deck or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

        (i) platform, deck or walkway does not exceed 200 m² in area;
        (ii) travel distance on the platform, deck or walkway to the level below, including the travel distance along the single unenclosed egress stair does not exceed 25 m; and,
        (iii) the platform, deck or walkway below is provided with two separate egress stairs or **exits**.

15. The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs shall not exceed 45 m. The maximum travel distance from the bottom of an unenclosed stair to an exit on the main floor level shall not exceed 45 m. The maximum travel distance to an enclosed exit on an elevated platform shall not exceed 45 m.

16. Fire extinguishers shall be installed on every platform or walkway level of the shelf and rack storage system in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time. The maximum travel distance to a fire extinguisher shall not exceed 23 m.

17. Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated deck or walkway shall not exceed 9 m where the deck or walkway is required to be provided with at least 2 egress facilities.

18. The clear aisle width shall not be less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

19. The shelf and rack storage facility is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

...4/

20. The shelf and rack storage facilities shall be used only for storage of Class I, II, III, and IV commodities as defined in NFPA 231C-1991, as amended and not for manufacturing, production, wrapping or assembly.

21. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and the sprinkler design criteria used for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the sprinkler control valve.

22. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code O. Reg. 454/90 as amended or remade from time to time.

23. A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage facility height is more than 14 m (45 ft.) in height or where there are more than 3 elevated platforms of walkway level.

24. Where a standpipe and hose system is required, 63.5 mm (2 1/2 in.) diameter hose connections shall be provided, except that 38.1 mm (1 1/2 in.) hose connections are permitted in the shelf and rack storage facilities which:

    (a) do not exceed 6 levels including the floor level; and,
    (b) do not exceed 3,716 m² (40,000 ft²) in the sum total of all levels of the shelf and rack storage facility.

25. Lighting levels of decks, walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

26. Emergency lighting shall be provided on walkways, decks, platforms, unenclosed egress stairs and exits providing means of egress to not less than the average level of illumination prescribed in Sentence 3.2.7.3.(2) of the Ontario Building Code, as amended or remade from time to time.

27. Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

    (a) any change has been made to:

        (i) the material, system or building design that is the subject matter of this Authorization;

        (ii) the address of the applicant specified in Section 1 of this Authorization; or,

        (iii) the ownership of the applicant specified in Section 1 of this Authorization.

...5/

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 24th day of August, 1995.

BUILDING MATERIALS EVALUATION COMMISSION

_____
per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **August 24, 1995**
BMEC REFERENCE **BMEC 95-08-193**

SHELF AND RACK STORAGE SYSTEM

1. Applicant

Pacific Westeel
Material Handling and Racking Systems
3191 Mainway
Burlington, Ontario
L7M 1A6

2. Description

The shelf and rack storage system is a self contained structural facility within a building, having one or more solid intermediate platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural facility for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. This Authorization is valid only for Pacific Westeel Racking.

4. Deck and walkway levels shall be constructed of:

   (a) solid-closed surface steel planking;
   (b) steel roof decking with minimum 16 mm (5/8 in) maximum 19 mm (3/4 in) thick tongue and groove solid wood or plywood; or,
   (c) open steel grating.

5. The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

6. The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

7. An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility including the top level and shall be in conformance with NFPA 13-1991 and NFPA 231C-1991 as amended or the appropriate NFPA Standard for the most severe hazard to which the storage facility is exposed. Additionally, sprinkler protection shall be provided under decks and walkways.

8. Except where the deck is of open steel grating, any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph A.7. of this Authorization.

9. A sprinkler systems located in a cold storage or freezer environment shall be designed to address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

10. The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building for each of the following:

    (a) movement of a control valve handle;
    (b) loss of excess water pressure required to prevent false alarms in a wetpipe system;
    (c) loss of air pressure in a dry pipe system;
    (d) loss of air pressure in a pressure tank;
    (e) a significant change in water level in any water storage container used for fire fighting purposes;
    (f) loss of electrical power to any automatically starting electrical fire pump; and,
    (g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

11. The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

12. The notification to the person controlling the building and the fire department referred to in paragraphs A.10 and A.11 of this Authorization shall be provided by way of:

    (a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;
    (b) a proprietary control centre conforming to Chapter 9 of NFPA-72, Standard for the Installation, Maintenance, and Use of Protective Signaling Systems", as amended; or,
    (c) if the above mentioned facilities are not available in the municipality in which the self and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

13. The maximum height of the shelf and rack storage facility from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m.

14. Each deck, walkway or platform level shall be provided with not less than two **exit** stair shafts that conform to all requirements for exits as stated in the Ontario Building Code (i.e. fire separations having a fire resistance rating, etc.) as amended, except as follows:

    (a) access to exit may be provided from a platform level by means of open unenclosed stairs for shelf and rack storage facilities comprising not more than three platform levels, the highest of which may not be more than 9 m above the main floor; and,
    (b) any single platform, deck or walkway may be served by a single unenclosed egress

stair leading to the platform or walkway level immediately below provided the:

(i) platform, deck or walkway does not exceed 200 m² in area;
(ii) travel distance on the platform, deck or walkway to the level below, including the travel distance along the single unenclosed egress stair does not exceed 25 m; and,
(iii) the platform, deck or walkway below is provided with two separate egress stairs or **exits**.

15. The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs shall not exceed 45 m. The maximum travel distance from the bottom of an unenclosed stair to an exit on the main floor level shall not exceed 45 m. The maximum travel distance to an enclosed exit on an elevated platform shall not exceed 45 m.

16. Fire extinguishers shall be installed on every platform or walkway level of the shelf and rack storage system in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time. The maximum travel distance to a fire extinguisher shall not exceed 23 m.

17. Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated deck or walkway shall not exceed 9 m where the deck or walkway is required to be provided with at least 2 egress facilities.

18. The clear aisle width shall not be less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

19. The shelf and rack storage facility is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

20. The shelf and rack storage facilities shall be used only for storage of Class I, II, III, and IV commodities as defined in NFPA 231C-1991, as amended and not for manufacturing, production, wrapping or assembly.

21. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and the sprinkler design criteria used for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the sprinkler control valve.

22. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code O. Reg. 454/90 as amended or remade from time to time.

23. A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage facility height is more than 14 m (45 ft.) in height or where there are more than 3 elevated platforms of walkway level.

24. Where a standpipe and hose system is required, 63.5 mm (2 1/2 in.) diameter hose connections shall be provided, except that 38.1 mm (1 1/2 in.) hose connections are permitted in the shelf and rack storage facilities which:

(a) do not exceed 6 levels including the floor level; and,
(b) do not exceed 3,716 m² (40,000 ft²) in the sum total of all levels of the shelf and rack storage facility.

25. Lighting levels of decks, walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

26. Emergency lighting shall be provided on walkways, decks, platforms, unenclosed egress stairs and exits providing means of egress to not less than the average level of illumination prescribed in Sentence 3.2.7.3.(2) of the Ontario Building Code, as amended or remade from time to time.

27. Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the applicant specified in Section 1 of this Authorization; or,

      (iii) the ownership of the applicant specified in Section 1 of this Authorization.

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ; or

   (c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 24th day of August, 1995.

BUILDING MATERIALS EVALUATION COMMISSION

_____
per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **August 24, 1995**
BMEC REFERENCE **BMEC 95-07-192**

ZER-O-LOC THERMOPLASTIC FOAM COMPOSITE WALL PANELS FOR NON-LOAD BEARING FACTORY-ASSEMBLED EXTERIOR WALLS, AS WELL AS A NON-LOAD BEARING INTERIOR WALL AND CEILING SYSTEM

1. Applicant

Zer-O-Loc Enterprises Ltd.
4740 Vanguard Road
Richmond, B.C.
V6X 2P8

2. Manufacturing Facilities

Zer-O-Loc Enterprises Ltd.
28 Plant Farm Blvd.
Brantford, Ontario
N3T 6H2

3. Description

Zer-O-Loc manufactures an insulated panel system to be used as non-load bearing, factory-assembled exterior walls, as well as a non-load bearing interior wall and ceiling system. Zer-O-Loc Panels are manufactured from an EXPANDED Polystyrene (EPS) core with metal skins. The core, meets or exceeds CAN/CGSB 51.20-M87 for Type 1 OR Type 2 Expanded Polystyrene Insulation. The metal skins are formed from a minimum of 0.38 mm (0.0179 in or 26 gauge) galvanized, galvalume or stainless steel either prepainted or plain and are roll formed to provide a fully aligned sleeve joint and then pressure heat-bonded to the EPS using a high quality adhesive. The thickness of the panels vary from 50 mm (2 in) to 250 mm (10 in) with a standard panel width of 1168 mm (46 inches). The ceiling panels shall not be less than 100 mm (4 inches) and not more than 200 mm (8 inches).

4. Authorization Requested

The applicant sought authorization for the use of an innovative exterior factory-assembled non-load bearing wall system and interior non-load bearing wall and ceiling system containing thermoplastic foam insulation for use in buildings required to be of non-combustible construction, provided the building, spaces or portions of the building are sprinklered and the foam panel system meets the performance requirements specified in ULC/ORD C376-1995 "Fire Growth of Foamed Plastic Insulated Building Panels in a Full Scale Room Configuration".

5. Assessment

The Zer-O-Loc panels are tested, evaluated and listed for thicknesses up to 250 mm as follows:

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(a) Test results showed that the wall and ceiling panels meet the performance requirements of ULC/ORD C376-1995 "Fire Growth of Foamed Plastic Insulated Building Panels in a Full Scale Room Configuration".

(b) Documentation showed that the Polystyrene Core material (styropor bead type BF 326) used in the wall and ceiling panels has a flame spread rating of 140 when tested in conformance with CAN/ULC-S102.2 "Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials and Assemblies".

6. Authorization

The use of the ZER-O-LOC building thermoplastic foamed insulation composite panels for walls not greater than 250 mm (10 inches) thick and ceilings not greater than 200 mm (8 inches) thick is authorized in respect of exterior or interior non-loadbearing walls and ceilings in non-combustible construction described in Subsection 3.1.5. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. Specific Terms and Conditions:

1) (A) An automatic sprinkler system shall be installed throughout the building, including all individual cold storage units, in accordance with the current edition of NFPA - 13 "Installation of Sprinkler Systems". Additionally, the sprinkler system located inside each storage unit shall be designed to operate in a cold storage or freezer environment. The design shall address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

(B) For wall panels used in a factory-assembled non-load bearing wall application, an automatic sprinkler shall be installed throughout the building in accordance with item (A).

(C) The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building for each of the following:

a) movement of a control valve handle;
b) loss of excess water pressure required to prevent false alarms in a wetpipe system;
c) loss of air pressure in a dry pipe system;
d) loss of air pressure in a pressure tank;
e) a significant change in water level in any water storage container used for fire fighting purposes;
f) loss of electrical power to any automatically starting electrical fire pump; and,
g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

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(D) The design and general review of the sprinkler system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario).

2) The flame spread rating of the wall and ceiling panel, determined by subjecting a sample, including an assembled joint, to the appropriate test described in Subsection 3.1.12. of the Ontario Building Code, as amended or remade from time to time, shall be not more than the flame spread rating permitted for the room or space which it bounds.

3) The building shall contain only mercantile occupancy (E) or cold storage facilities of Medium Hazard Industrial Occupancy (F-2) or Low Hazard Industrial Occupancy (F-3) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

4) The building shall be not more than 18 m high, measured between grade and the floor level of the uppermost storey.

5) The ceiling panels shall be supported not more than 3050 mm. (10 feet) o.c.

6) This Authorization is valid only for Zer-O-Loc foam plastic composite panels using an expanded polystyrene (EPS) core with metal skins which meets or exceeds CAN/CGSB 51.20-M87 for Type 1 or Type 2 Expanded Polystyrene Insulation, manufactured by the Applicant specified in Section 1 herein at the manufacturing facilities specified in Section 2 herein.

7) The panels shall be installed in accordance with the manufacturers specifications and the installation shall be approved by the manufacturer.

8) The use of Zer-O-Loc foam plastic composite panels must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

9) The panels shall be listed, as defined in the Ontario Building Code as amended or remade from time to time, to show that the wall and ceiling panels meet or exceed the performance requirements of ULC/ORD C376-1995 "Fire Growth of Foamed Plastic Insulated Building Panels in a Full Scale Room Configuration" and that the flame-spread classification of the foam core insulation is not more than 500, as per Subsection 3.1.12. of the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

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(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the manufacturing facilities specified in Section 2 of this Authorization;

(iii) the ownership of the manufacturing facilities specified in Section 2 of this Authorization; or

(iv) the address of the Applicant specified in Section 1 of this Authorization;

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 24th day of August, 1995.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **July 27, 1995**
BMEC REFERENCE **BMEC 95-06-191**

U-Haul Self-Storage Facility

1. Applicant

U-Haul International
2727 N. Central Avenue
Phoneix, Arizona
U.S.A., 85001-1026

2. Description

The U-Haul self-storage facility comprises self contained structural modules within a building. The modules contain storage lockers that are accessible by corridors provided on the ground floor and elevated level. The storage lockers are designed for storing personal items. They are locked and secured when not in use.

The storage lockers are made of non-combustible sheet metal veneers over a metal framing system. The locker units are served by metal swing or roll-up type doors.

3. Authorization Requested

The applicant sought authorization for the use of an innovative self-storage system to be contained in a building as an equivalent to the self service storage building provisions contained in Section 3.10 of Regulation 61 of Revised Regulations of Ontario 1990 (the "Ontario Building Code").

4. Assessment

Reports and assessments provided by the applicant show that if the self-storage system is used in accordance with the limitations and conditions stated in this authorization, it will provide equivalent performance with the following:

- Ontario Building Code; Articles 3.10.2.1., 3.10.2.3., 3.10.2.5., Sentences 3.10.2.4.(2) to (8) inclusive, and Subsections 3.10.3. and 3.10.4.

5. Authorization

The U-Haul self-storage facility, designed for use within a building as a self contained structural assembly of lockers designed for storing personal items is authorized in respect to the self service storage requirements contained in Articles 3.10.2.1., 3.10.2.3., 3.10.2.5., Sentences 3.10.2.4.(2) to (8), and Subsection 3.10.3. and 3.10.4. of the Ontario Building Code, subject to the following terms and conditions:

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A. SPECIFIC TERMS AND CONDITIONS:

1. The use of the self-storage facility must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3. This Authorization is valid only for self-storage systems marketed by U-Haul International.

4. Elevated corridor and storage lockers shall be a continuous horizontal construction membrane through the entire self-storage unit.

5. The structural design of the entire self-storage facility support system including posts, beams, corridors, lockers, connections, and their supports shall be in accordance with Part 4 of the Ontario Building Code.

6. The design and general review of the self-storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization.

7. The building shall contain an automatic sprinkler system designed and installed in conformance with NFPA 13-1991 for Ordinary Hazard, as amended. Additionally, sprinkler protection shall be provided within each of storage lockers.

8. The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building for each of the following:

   (a) movement of a control valve handle;
   (b) loss of excess water pressure required to prevent false alarms in a wetpipe system;
   (c) loss of air pressure in a dry pipe system;
   (d) loss of air pressure in a pressure tank;
   (e) a significant change in water level in any water storage container used for fire fighting purposes;
   (f) loss of electrical power to any automatically starting electrical fire pump; and,
   (g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

9. The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

10. The notification to the person controlling the building and the fire department referred to in paragraphs A.8 and A.9 of this Authorization shall be provided by way of:

    (a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;
    (b) a proprietary control centre conforming to Chapter 9 of NFPA-72, Standard for the Installation, Maintenance, and Use of Protective Signaling Systems", as amended; or,
    (c) if the above mentioned facilities are not available in the municipality in which the self storage facility is to be built, an independent system is permitted to be used to transmit signals to the fire department.

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11. The maximum height of the self-storage facility from the floor supporting the self-storage system to the topmost portion of the self-storage system shall not exceed 5 m.

12. Exits shall conform to Section 3.4 of the Ontario Building Code, as amended or remade from time to time, except that

    (a) egress from the second level may be provided by not less than two open unenclosed stairs;
    (b) the clear width of an egress stair shall be not less than 1100 mm (3 ft 11 in); and,
    (c) Exit or egress doors from rental spaces are not required to swing on a vertical axis provided,

        i) the area of the rental space is not more than 50 m² (538 ft²); and,
        ii) the travel distance within the rental space is not more than 10 m (32 ft 10 in).

13. The maximum travel distance measured from inside the rental space to the nearest exit shall not exceed 45 m.

14. Fire extinguishers shall be installed on every corridor in the self-storage facility in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time. The maximum travel distance to a fire extinguisher shall not exceed 23 m.

15. Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated corridor shall not exceed 3 m.

16. The corridor width shall not be less than 2.1 m (7 ft.) for the ground floor level and not less than 1.5 m (5 ft.) for the elevated corridors, and the locker doors shall be not more than 1.02 m (3ft 4 in).

17. The self-storage facility shall comply with the requirements for a Medium Hazard Industrial Occupancy (F2) and shall not be located in a building containing a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time. The following items shall not to be stored in the self-storage facility:

    - gasoline, oil, fuel, grease, paint, flammables, explosives, fireworks, or ammunition;
    - corrosive, toxic, or hazardous materials or waste;
    - tires, motor oil, or batteries; and,
    - controlled substances or alcoholic beverages.

18. The self-storage facility shall be used only for the storage of personal items and not for manufacturing, production, or fabricating.

19. The self-storage facility shall be accessible only to employees and customers. The building shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code O. Reg. 454/90 as amended or remade from time to time.

20. Lighting levels of corridors, stairs and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

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21. Emergency lighting shall be provided on corridors, unenclosed egress stairs and exits providing means of egress to not less than the average level of illumination prescribed in Sentence 3.2.7.3.(2) of the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the company specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 27th day of July, 1995.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G 2E5
Tel: 416: 585. 4234
Fax: 416. 585. 7531
www.obc.mah.gov.on.ca

Date of Authorization	June 29, 1995
BMEC Authorization	95-05-190
Date of Amendment	April 27, 2006
BMEC Application	A2006-04

Authorization Report - XPA PlumbBetter® System

1. Applicant

IPEX Inc.
2441 Royal Windsor Drive
Mississauga, Ontario
L5J 4C7

Tel: 905 403-0264
Fax: 905 403-1124
Web: www.ipexinc.com

2. Manufacturing Facilities

IPEX Inc.
4225 - 92nd
Edmonton, Alberta
T6B 3M7

3. Description

The PlumbBetter® XPA System consists of a composite polyethylene raised temperature / aluminium / polyethylene raised temperature (PE-RT/AL/PE-RT) pipes, and fittings (the "XPA PlumbBetter System"). The XPA pipes consist of layers of welded aluminium, melt adhesives, and layers of raised temperature polyethylene bonded together. The PlumbBetter® XPA System conforms to CAN/CSA B137.9-M "Polyethylene / Aluminium / Polyethylene Composite Pressure Pipe System", dated March 2004.

The XPA PlumbBetter® System is available in diameters of 13 mm (1/2"), 19 mm (3/4") and 25 mm (1"), nominal.

The XPA PlumbBetter® fitting and connectors shall conform and be certified to CAN/CSA B137.10-M "Cross-linked Polyethylene / Aluminium / Cross-linked Polyethylene Composite Pressure Pipe System", dated March 2004.

4. Authorization requested

The applicant sought a Building Materials Evaluation Commission (BMEC) authorization for use of the XPA PlumbBetter® System as innovative composite pressure piping system for the distribution of hot water, as restricted in Sentence 7.2.5.12.(2) “Polyethylene/Aluminium/Polyethylene Pipe and Fittings” of the Building Code.

5. Assessment

Reports and assessments provided by the applicant show that if the XPA PlumbBetter® System is designed, performance tested and installed in accordance with the manufacturer's instructions and limitations and the specific terms and conditions stated in this authorization, the level of performance required by the Building Code will be provided.

The following is a list of the documents submitted and reviewed, but not limited to:

1. NSF International, Approval NSF Project 69395, dated October 10, 2003.
2. Manufacturer’s Literature “XPA: Hot and Cold Water System”
3. IPEX: PlumbBetter® “Installation Guide - PlumbBetter® XPA Composite Pipe and Fitting”.
4. Variance, Alberta Municipal Affairs, File VAR-P05.01, dated June 14, 2005.
5. Approval Saskatchewan Environmental Health, File 70.98.2, February 24, 2005.
6. Approval, Quebec, Plumbing Sector, File Number 5556-2631 (RMD 8456), December 22, 2004.
7. Approval Correspondence, Province of Nova Scotia, February 1, 2005.
8. Approval, Chief Plumbing Inspector, New Brunswick, January 6, 2005 “Certification of PE-AL-PE Product”.
9. KITEC Quality Control Manual, issued November 156, 2004.
10. NSF Product and Service Listing, NSF/ANSI Standard 14 “Plastics Piping Systems Components and Related Materials”, dated February 23, 2006.

6. Authorization

The XPA PlumbBetter® System is authorized for use as a composite pressure piping system for the distribution of hot water as restricted in Sentence 7.2.5.12.(2) of the Building Code; all other requirements pertaining to the design, installation, and construction are subject to the regulations of the Building Code, and to the following terms and conditions:

Note: Although this authorization is specific to the use of the XPAPlumbBetter® System use in hot water systems, it does not preclude the use of the XPA PlumbBetter® System in cold water where an alternative approval is obtained, or where regulated by the Building Code.

A. Specific Terms & Conditions

1. This authorization is valid only for IPEX, Inc.

2. This authorization is valid only for the XPA PlumbBetter® System.

3. The XPA PlumbBetter® System shall bear the manufacturer's mark.

4. The XPA PlumbBetter® System shall be installed and conform to:

   (a) manufacturer's installation instructions, and
   (b) CAN/CSA B137.9-M "Polyethylene / Aluminium / Polyethylene Composite Pressure Pipe System" dated March 2004.

   Note: If a conflict arises between the provisions of the two documents listed above, the most restrictive provision shall apply.

5. Except as provided in Specific Term and Condition 6., the XPA PlumbBetter® System shall not be used in hot water systems.

6. XPA PlumbBetter® System having a pressure rating less than 690 kPa (100 psi) at 82^0C (180^0F), shall not be used in a hot water system.

7. The XPA PlumbBetter® System is permitted for use underground as a potable water service pipe, or above ground as a hot potable water distribution system.

8. When the XPA PlumbBetter® System is used underground for water service, the end of the pipe inside the building shall be brought above the ground for a distance not less than 300 mm (11-3\4") and not greater than 450 mm (17-3/4"), as required by Sentence 7.6.1.3.(6) of the Building Code.

9. The XPA PlumbBetter® System shall comply with the Building Code requirements for combustible pipe.

10. The XPA PlumbBetter® fittings and connectors shall conform and be certified to CAN/CSA B137.10-M “Cross-linked Polyethylene / Aluminium / Cross-linked Polyethylene Composite Pressure Pipe System”, dated March 2004.

B. General Conditions

1. The use of the XPA Plumbbetter® System as described in 6. A. Specific Terms and Conditions No. 1. shall comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and except as specifically authorized herein, with the Building Code as amended or remade from time to time.

2. A copy of this Authorization shall accompany each application for a building permit and shall be maintained on the site of the construction with the building permit.

3. The Applicant named in Part 1 hereof shall promptly notify the BMEC of:

   a. the failure of the Applicant, or of the material, system or building design that is the subject matter of this Authorization, to comply with any of the terms and conditions set out in 6. A. above; or

   b. the occurrence of any of the events described in Conditions 6. B. 4. (a) and (b) (ii) below.

4. The BMEC may amend or revoke this Authorization where it determines that:

   a. any change has been made to:

      i. the material, system or building design that is the subject matter of this Authorization;

      ii. the address of the applicant specified in Part 1 of this Authorization; or,

      iii. the ownership of the applicant specified in Part 1 of this Authorization.

   b. the use of the material, system or building design authorized herein;

      i. does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

      ii. provides an unsatisfactory level of performance, in situ.

c. the Applicant, or the material, system or building design that is the subject matter of this Authorization, has failed to comply with any of the terms and conditions set out in this Authorization; or

d. any Building Code provision relevant to this Authorization has been amended or remade.

5. Where the BMEC receives additional information concerning the material, system or building design authorized herein, the BMEC may review this Authorization and the BMEC may after the review amend or revoke this Authorization as in the opinion of the BMEC may be necessary.

Dated at Toronto this 27 day of April 2006.

BUILDING MATERIALS EVALUATION COMMISSION

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Edward Link, P. Eng.
Vice-Chair, BMEC

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **June 29, 1995**
BMEC REFERENCE **BMEC 95-04-189**

CertainTeed FORM-A-DRAIN™ permanent foundation footing form and foundation drain system

1. Applicant

Unique Building Systems
2617908 Ontario Ltd.
7024 Smith Industrial Drive
McGregor, Ontario
N0R 1J0

2. Manufacturing Facilities

CertainTeed Corporation
Pipe and Plastic Group
750 East Swedesford Road
P.O. Box 860
Valley Forge, Pennsylvania
19482, U.S.A.

3. Description

CertainTeed FORM-A-DRAIN™ functions as both a permanent foundation footing form and foundation drain system.

The system components are manufactured from polyvinyl chloride (PVC) compound. The FORM-A-DRAIN™ system consists of 12' (3.66 m) long extruded drainage channels, called "lineals", with sizes of 2.25" by 6" (55 mm by 150 mm) and 2.25" by 8" (55 mm by 205 mm). They are manufactured as hollow rectangular tubes with a solid intermediate web which stiffens the section and creates upper and lower chambers of equal size.

The lineals have slots in the exterior vertical face to allow the entrance of ground water. The water passes through the system to outlet fittings which provide the connection of the FORM-A-DRAIN™ to an approved drainage disposal area.

The FORM-A-DRAIN™ system components includes couplings, corners, drain outlets, spacer straps and grade stakes.

4. Authorization Requested

The applicant sought authorization for the use of an innovative permanent foundation footing form and foundation drain system as an equivalent to the drainage provisions contained in Sentence 9.14.3.1.(1) and Article 9.14.3.2. of Regulation 61 of Revised Regulations of Ontario 1990 (the "Ontario Building Code").

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5. Assessment

Test results and assessments provided by the Applicant show that if the CertainTeed FORM-A-DRAIN™ system is used in accordance with the limitations and conditions stated in this authorization, it will provide equivalent performance with the following:

* Ontario Building Code, Sentence 9.14.3.1.(1) and Article 9.14.3.2.

6. Authorization

The use of CertainTeed FORM-A-DRAIN™ permanent foundation footing form and foundation drain system is authorized in respect of the drainage material standards and minimum drain tile size contained in Sentence 9.14.3.1.(1) and Article 9.14.3.2. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1) The Applicant (i.e. Unique Building Systems) shall provide the user of this Authorization with complete instructions on the proper installation of the FORM-A-DRAIN™ system.

2) The FORM-A-DRAIN™ system shall be installed in accordance with this Authorization and the manufacturer's specifications (titled "Form-A-Drain Installation Guide", Code No. 40-95-04, dated 1994), which shall be available at the job site at all times. If a conflict arises between the manufacturer's installation instructions and this Authorization, the most restrictive provision shall apply.

3) A copy of this Authorization and the manufacturer's installation instructions shall be attached to an application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

4) The following information shall be provided on the drawings submitted with an application for a building permit:

   (a) a dimensioned plan of the foundation footings, indicating the position of the FORM-A-DRAIN™;

   (b) the location and size of all crossover piping and drainage outlet piping;

   (c) the maximum spacing of grade stakes; and,

   (d) a footing section indicating the size of footing, position of FORM-A-DRAIN™, and the size of stone cover. When a filter membrane is used the location of the filter membrane shall be indicated.

5) The FORM-A-DRAIN™ system shall be installed in accordance with Sentences 9.14.3.3.(1) and 9.14.3.3.(4) of the Ontario Building Code, as amended or remade from time to time.

6) The slotted vertical face of the FORM-A-DRAIN™ system lineals shall be installed facing away from the footings. The lineals shall be inserted firmly into the accessory couplings to obtain a snug fit. Where the ends of lineals are cut to fit the layout, they shall be cut square and all burrs removed.

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7) Drainage outlets shall be installed with the 4 inch (100 mm) diameter outlet located at the bottom. A 4 inch (100 mm) diameter PVC pipe shall be used to connect the outlets to each other or to the drainage pipe that discharges to an approved area.

8) The complete FORM-A-DRAIN™ system shall be levelled and reinforced with stakes spaced at a maximum distance of 5 ft.(1.5 m) on center, prior to the placing of concrete.

9) The maximum number of outlet fittings per side of any lineal shall be limited to one outlet per 3' 0" (0.9 m) length of lineal.

10) Filter membranes used in conjunction with the system shall not be installed in direct contact with FORM-A-DRAIN™.

11) The use of FORM-A-DRAIN™ as a permanent footing form is limited to applications where the required footing depth is not more than 6 or 8 inches (150 or 205 mm).

12) Any system components that are damaged during placement of backfill shall be removed and replaced with new components.

13) This Authorization is valid only for FORM-A-DRAIN™ marketed by the Applicant specified in Section 1 herein at the manufacturing facilities specified in Section 2 herein.

14) The use of FORM-A-DRAIN™ must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the manufacturing facilities specified in Section 2 of this Authorization;

(iii) the ownership of the manufacturing facilities specified in Section 2 of this Authorization; or

(iv) the address of the Applicant specified in Section 1 of this Authorization;

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(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **June 29, 1995**
BMEC REFERENCE **BMEC 95-03-188**

ProSet Stack Stub-in Coupling Combination Firestop and Support for Vertical Pipe

1. Applicant

ProSet Systems Incorporated
1355 Capital Circle
Lawrenceville, Georgia
U.S.A., 30243

2. Manufacturing Facilities

ProSet Systems Incorporated
1355 Capital Circle
Lawrenceville, Georgia
U.S.A., 30243

3. Description

The ProSet Stack Stub-in Coupling is an integral fire-rated pipe sleeve and vertical support for cast iron pipe.

The ProSet combination firestop and support penetrator consists of a cast-in-place PVC stack stub-in which features ribs around the perimeter to prevent loosening once the concrete has set. Into this part is solvent welded a PVC pipe section such that it rests on a stop built into the stack stub-in. On the other side of the assembly, a PVC E-Z Flex coupling is solvent welded into the stub-in, and a stainless steel band is used to compress the coupling and hence fasten the cast iron pipe that fits into it. As an alternative to the E-Z Flex coupling, a PVC pipe length may be solvent welded into the stub-in, and a mechanical joint (MJ) coupling used to connect the cast iron pipe. On the top side of the assembly a cast iron insert is placed into the stub-in such that it rests on the PVC insert. A thin wall PVC pipe length is then solvent welded into the stub-in such that it surrounds the iron insert and holds it in place, and fits flush with the insert on the top. The cast iron pipe is fastened to the top of the assembly using a mechanical (MJ) coupling.

4. Authorization Requested

The applicant sought authorization for the use of an innovative combination firestop and vertical system as an equivalent to the support for vertical piping provision contained in Article 7.3.4.4., and the firestopping and piping penetration provisions in Articles 3.1.9.1., 3.1.9.2. and 3.1.9.4. of Regulation 61 of the Revised Regulations of Ontario 1990 (the "Ontario Building Code").

5. Assessment

Reports and assessments provided by the applicant show that if the ProSet Stack Stub-in Coupling is used in accordance with the limitations and conditions stated in this authorization, it will provide equivalent performance with the following:

- Ontario Building Code; Articles 7.3.4.4., 3.1.9.1., 3.1.9.2. and 3.1.9.4.

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6. Authorization

The use of ProSet Stack Stub-in Coupling as a combination firestop and support for vertical cast iron pipe is authorized in respect of the provisions contained in Articles 7.3.4.4., 3.1.9.1., 3.1.9.2. and 3.1.9.4. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1) The use of the ProSet Stack Stub-in Coupling must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2) A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3) This Authorization is valid only for ProSet Stack Stub-in Coupling marketed and manufactured by ProSet Systems Incorporated.

4) The ProSet Stack Stub-in Coupling shall be installed in accordance with this authorization and the manufacturer's installation instructions. If a conflict arises between the manufacturer's installation instructions and this authorization, the most restrictive provision shall apply.

5) The ProSet Stack Stub-in Coupling shall be listed, as defined in the Ontario Building Code as amended or remade form time to time, to show that the firestop system has an F rating that may be used in horizontal fire separations requiring not more than a two hour fire resistance rating when the firestop system is tested in conformance with CAN4-S115-M "Standard Method of Fire Tests of Firestop Systems".

6) The use of the ProSet Stack Stub-in Coupling as a combination firestop and support for vertical pipe is limited to concrete floor slabs not less than 150 mm (6 inches) thick.

7) The use of the ProSet Stack Stub-in Coupling only as support for vertical cast iron pipe is limited to concrete floor slabs not less than 115 mm (4.5 inches) thick.

8) The maximum spacing of the ProSet Stack Stub-in Coupling shall be 7.5 m (24 ft 7 in). In addition, the vertical piping shall be supported at the floor level of alternate storeys by the ProSet Stack Stub-in Coupling.

9) The size of the cast iron pipe to be supported by the ProSet Stack Stub-in Coupling shall not exceed 150 mm (6 inches) in diameter.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

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(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the company specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **June 29, 1995**
BMEC REFERENCE **BMEC 95-02-187**

SHELF AND RACK STORAGE SYSTEM

1. Applicant

enRack Systems Inc.
606 Aberdeen Avenue
Hamilton, Ontario
L8P 2T1

International Storage
Systems Inc.
6720 Columbus Road
Mississauga, Ontario
L5T 2G1

Econo-Rack Storage
Equipment Limited
1250 Midway Boulevard
Mississauga, Ontario
L5T 2G8

2. Description

The shelf and rack storage system is a self contained structural facility within a building, having one or more solid intermediate platforms or walkway levels for personnel access. The walkways and platforms may also support conveyors and other distribution equipment.

3. Authorization Requested

The applicant sought authorization for the use of an innovative shelf and rack storage system designed for material handling, storage and distribution in warehouse facilities.

4. Assessment

Reports and assessments provided by the applicant show that if the shelf and rack system is used in accordance with the limitations and conditions stated in this authorization, it will provide the level of performance that would be achieved by conformance with the Ontario Building Code.

5. Authorization

The shelf and rack storage system is authorized for use within a building as a self contained structural facility for material handling, storage and distribution, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1. The use of the shelf and rack storage system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

2. A copy of this Authorization shall be included with an application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

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3. This Authorization is valid only for shelf and rack storage systems marketed by Enrack Systems Inc., Econo-rack Storage Equipment Limited or International Storage Systems Inc.

4. Deck and walkway levels shall be constructed of:

   (a) solid-closed surface steel planking;
   (b) steel roof decking with minimum 16 mm (5/8 in) maximum 19 mm (3/4 in) thick tongue

and groove solid wood or plywood; or,

(c) open steel grating.

5. The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Part 4 of the Ontario Building Code as amended or remade from time to time.

6. The design and general review of the rack and storage system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall provide the Chief Building Official with a document certifying that the installation conforms with this Authorization. The construction drawings shall require the provision of an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position.

7. An automatic sprinkler system shall be designed, constructed, installed and tested for the entire shelf and rack storage facility including the top level and shall be in conformance with NFPA 13-1991 and NFPA 231C-1991 as amended or the appropriate NFPA Standard for the most severe hazard to which the storage facility is exposed. Additionally, sprinkler protection shall be provided under decks and walkways.

8. Except where the deck is of open steel grating, any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph A.7. of this Authorization.

9. A sprinkler systems located in a cold storage or freezer environment shall be designed to address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

10. The automatic sprinkler system shall be electrically supervised to indicate a trouble signal on the building fire alarm system annunciator or where the building does not have a fire alarm system to notify the person controlling the operation of the building for each of the following:

(a) movement of a control valve handle;
(b) loss of excess water pressure required to prevent false alarms in a wetpipe system;
(c) loss of air pressure in a dry pipe system;
(d) loss of air pressure in a pressure tank;
(e) a significant change in water level in any water storage container used for fire fighting purposes;
(f) loss of electrical power to any automatically starting electrical fire pump; and,
(g) a temperature approaching the freezing point in any dry pipe valve enclosure or water storage container used for fire fighting purposes.

11. The automatic sprinkler system shall be designed to notify the fire department that a waterflow switch has been activated.

12. The notification to the person controlling the building and the fire department referred to in paragraphs A.10 and A.11 of this Authorization shall be provided by way of:

(a) an independent central station conforming to NFPA-71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", as amended;
(b) a proprietary control centre conforming to Chapter 9 of NFPA-72, Standard for the Installation, Maintenance, and Use of Protective Signaling Systems", as amended; or,
(c) if the above mentioned facilities are not available in the municipality in which the self and rack storage system is to be built, an independent system is permitted to be used to transmit signals to the fire department.

13. The maximum height of the shelf and rack storage facility from the floor supporting the shelf and rack system to the topmost portion of the shelf and rack system shall not exceed 18 m.

14. Each deck, walkway or platform level shall be provided with not less than two **exit** stair shafts that conform to all requirements for exits as stated in the Ontario Building Code (i.e. fire separations having a fire resistance rating, etc.) as amended, except as follows:

(a) access to exit may be provided from a platform level by means of open unenclosed

stairs for shelf and rack storage facilities comprising not more than three platform levels, the highest of which may not be more than 9 m above the main floor; and,

(b) any single platform, deck or walkway may be served by a single unenclosed egress stair leading to the platform or walkway level immediately below provided the:

(i) platform, deck or walkway does not exceed 200 m² in area;
(ii) travel distance on the platform, deck or walkway to the level below, including the travel distance along the single unenclosed egress stair does not exceed 25 m; and,
(iii) the platform, deck or walkway below is provided with two separate egress stairs or **exits**.

15. The maximum travel distance on an elevated platform to the ground floor level, including the travel distance along unenclosed stairs shall not exceed 45 m. The maximum travel distance from the bottom of an unenclosed stair to an exit on the main floor level shall not exceed 45 m. The maximum travel distance to an enclosed exit on an elevated platform shall not exceed 45 m.

16. Fire extinguishers shall be installed on every platform or walkway level of the shelf and rack storage system in accordance with the provisions of Part 6 of the Ontario Fire Code, as amended or remade from time to time. The maximum travel distance to a fire extinguisher shall not exceed 23 m.

17. Dead end travel distance to a point of choice of direction of horizontal travel to an egress facility from an elevated deck or walkway shall not exceed 9 m where the deck or walkway is required to be provided with at least 2 egress facilities.

18. The clear aisle width shall not be less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

19. The self and rack storage facility is not permitted in a High Hazard Industrial Occupancy (F1) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

20. The shelf and rack storage facilities shall be used only for storage of Class I, II, III, and IV commodities as defined in NFPA 231C-1991, as amended and not for manufacturing, production, wrapping or assembly.

21. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and the sprinkler design criteria used for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the sprinkler control valve.

22. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code O. Reg. 454/90 as amended or remade from time to time.

23. A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage facility height is more than 14 m (45 ft.) in height or where there are more than 3 elevated platforms of walkway level.

24. Where a standpipe and hose system is required, 63.5 mm (2 1/2 in.) diameter hose connections shall be provided, except that 38.1 mm (1 1/2 in.) hose connections are permitted in the shelf and rack storage facilities which:

(a) do not exceed 6 levels including the floor level; and,
(b) do not exceed 3,716 m² (40,000 ft²) in the sum total of all levels of the shelf and rack storage facility.

25. Lighting levels of decks, walkways and platforms shall conform to the Ontario Building Code, as amended or remade from time to time.

26. Emergency lighting shall be provided on walkways, decks, platforms, unenclosed egress stairs and exits providing means of egress to not less than the average level of illumination prescribed in Sentence 3.2.7.3.(2) of the Ontario Building Code, as amended or remade from time to time.

27. Guards and toe boards shall be installed in accordance with the Ontario Building Code, as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization; or,

(iii) the ownership of the applicant specified in Section 1 of this Authorization.

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **February 23, 1995**
BMEC REFERENCE **BMEC 95-01-186**

A window sprinkler assembly system to provide a two-hour fire separation in a wall to consist of tempered or heat strengthened glass fixed in a non openable hollow metal steel frame or extruded aluminium frame and a special sidewall window sprinkler with quick response action.

1. Applicant

Vipond Automatic Sprinkler
Company Limited
6380 Vipond Drive
Mississauga, Ontario
L5T 1A1

2. Description

A window sprinkler assembly system to provide a two-hour fire resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

4. Authorization Requested

The applicant sought authorization for the use of an innovative two hour fire resistance rated fire separation for walls as an equivalent to the performance criteria in Articles 3.1.7.1. and 9.10.3.1. of Regulation 61 of Revised Regulations of Ontario 1990 (the "Ontario Building Code").

5. Assessment

Test results and assessments show that if the window sprinkler system is used in accordance with the limitations and conditions stated in this authorization, it will provide equivalent performance with the following:

- Ontario Building Code, Articles 3.1.7.1. and 9.10.3.1.

6. Authorization

The use of the window sprinkler assembly for providing a two hour fire resistance rating in a fire separation in a wall is authorized in respect of the determination of fire resistance ratings contained in Articles 3.1.7.1. and 9.10.3.1. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. Specific Terms and Conditions:

1) The window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer as defined in the Professional Engineers Act (Ontario) and stamped document of certification by the Professional Engineer shall be forwarded to the Chief Building Official and the Building Owner.

2) The sprinkler system shall be installed and tested in accordance with the most current edition of NFPA-13 "Installation of Sprinkler Systems" as a wet pipe system and shall maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code, as amended or remade from time to time.

3) The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited Model FR-1/Q-60, 12.7 mm (1/2 inch) orifice, 74°C (165°F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.

4) The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness. The maximum size of the glazing shall be 2134 mm (7 ft. 0 in.) wide by 2844 mm (9 ft. 4 in.) high and minimum 6 mm (1/4 in.) thick.

5) The window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to maximum of 2 hour fire resistance rating provided,

   (a) in an exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

   (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

6) Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of the window sprinkler assembly system.

7) The window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

8) The horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.

9) Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.

10) Where the water supply is from a standpipe system conforming to the Ontario Building Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".

11) A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in.) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

WARNING

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the applicant specified in Section 1 of this Authorization;

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 23rd day of February, 1995.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **December 16, 1994**
BMEC REFERENCE **BMEC 94-06-185**

Coldmatic Building Systems Thermosetting Foam Composite Panel for Interior Walls and Ceilings in Noncombustible Construction

1. Applicant

Coldmatic Building Systems
8500 Keele Street
Concord, Ontario
L4K 2A6

2. Manufacturing Facilities

Coldmatic Building Systems
8500 Keele Street
Concord, Ontario
L4K 2A6

3. Description

The Coldmatic Building Systems HJF, LP and HP panels consist of a polyurethane foam core not greater than 152 mm thick (6 inch) faced with a minimum 0.38 mm thick (0.0179 inch or 26 gauge) galvanized, galvalume or stainless steel facings. The facing sheets are adhesively bonded to the foam plastic core. The panel edges have a roll-formed inter-locking geometry that allows either vertical or horizontal joints. Panel thicknesses range from 38 mm (1½ inches) to 152 mm (6 inches). Standard panel widths are 1067 mm (42 inches) or 1140 mm (44 7/8 inches).

4. Authorization Requested

The applicant sought authorization for the use of an innovative interior non loadbearing wall and ceiling system containing thermosetting foamed plastic insulation in Cold Storage Buildings required to be of noncombustible construction provided the building is sprinklered and the wall assembly satisfies the performance criteria for exterior walls in Clause 3.1.5.11.(6)(a) of Regulation 61 of Revised Regulations of Ontario 1990 (the "Ontario Building Code").

5. Assessment

The Coldmatic HJF, LP and HP panels are tested, evaluated and listed for thicknesses up to 152 mm, as follows:

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(a) Surface Burning Characteristics:

Model	CAN/ULC - S102/127 Flame Spread	Smoke Developed
HJF Panel	20	95
LP or HP Panels	25	95
Core Material Only	450	350

(b) CAN/ULC - S101 - M "Standard Methods of Fire Endurance Tests of Building Construction and Materials".

The Test results showed compliance with the performance criteria for exterior walls in Clause 3.1.5.11.(6)(a) of the Ontario Building Code.

(c) CAN/ULC - S126 "Standards Method of Test for Fire Spread under Roof-Deck Assemblies".

The assemblies are designated as roof deck construction No. C26 and is included in the series of roof deck construction using metallic decks contained in the listings published by Underwriters' Laboratories of Canada.

6. Authorization

The use of the Coldmatic Building Systems HJF, LP and HP thermosetting foamed plastic insulation panels for not more than 152 mm (6 inches) thick walls is authorized in respect of interior non loadbearing walls and ceiling in noncombustible construction described in Subsection 3.1.5. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. Specific Terms and Conditions:

1) An automatic sprinkler system shall be installed throughout the building, including individual cold storage units, in accordance with the most current edition of NFPA - 13 "Installation of Sprinkler Systems". Additionally, the sprinkler system located inside the storage unit shall be designed to operate in a cold storage or freezer environment. The design shall address any possibility of freeze-up resulting from condensation of water vapour internal to the system.

2) The flame spread rating of the wall panel, determined by subjecting a sample, including an assembled joint, to the appropriate test described in Subsection 3.1.12. of the Ontario Building Code, as amended or remade from time to time, shall be not more than the flame spread rating permitted for the room or space which it bounds.

3) The building shall contain only cold storage facilities of Medium Hazard Industrial Occupancy (F-2) or Low Hazard Industrial Occupancy (F-3) as defined in Article 1.1.3.2. of the Ontario Building Code, as amended or remade from time to time.

4) The building shall be not more than 18 m high, measured between grade and the floor level of the uppermost storey.

5) The ceiling panels shall be supported not more than 3050 mm. (10 feet) o.c.

6) The panels shall be listed, as defined in the Ontario Building Code as amended or remade from time to time, to show that the wall panel will remain in place for not less than 10 min when the wall panel is tested in conformance with CAN4-S101-M, "Standard Methods of Fire Endurance Tests of Building Construction and Materials".

7) This Authorization is valid only for Coldmatic Building Systems HJF, LP and HP thermosetting foamed insulation panels manufactured by the Applicant specified in Section 1 herein at the manufacturing facilities specified in Section 2 herein.

8) The panels shall be installed in accordance with the manufacturers specifications and the installation shall be approved by the manufacturer.

9) The use of Coldmatic Building Systems HJF, LP and HP panels must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the manufacturing facilities specified in Section 2 of this Authorization;

(iii) the ownership of the manufacturing facilities specified in Section 2 of this Authorization; or

(iv) the address of the Applicant specified in Section 1 of this Authorization;

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 16th day of December, 1994.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC) AUTHORIZATION REPORT

DATE OF AUTHORIZATION **December 16, 1994**
BMEC REFERENCE **BMEC 94-05-184**

CASTONE System, Composite Panel Cladding for Residential Occupancies under Part 9 of the Ontario Building Code

1. Applicant

Castone Industries Inc.
P.O. Box 10
Carleton Place, Ontario
K7C 3P3

2. Manufacturing Facilities

Castone Industries Inc.
38 Bruce Cres.
Carleton Place, Ontario
K7C 3V6

3. Description

CASTONE is a composite panel cladding system comprising a cementitious outer shell bonded to a high density polyurethane backing mounted on an aluminum tracking system attached to the structural elements of a wall.

4. Authorization Requested

The applicant sought authorization for the use of an innovative combustible cladding system as an equivalent to the Above-Grade Masonry, Siding and Stucco requirements contained in Sections 9.20, 9.27 and 9.28 respectively of Regulation 61 of Revised Regulations of Ontario 1990 (the "Ontario Building Code").

5. Assessment

Test results and assessments provided by the Applicant show that if the CASTONE System is used in accordance with the limitations and conditions stated in this authorization, it will provide equivalent performance with the following:

* Ontario Building Code Sections 9.20., 9.27 and 9.28.

6. Authorization

The use of CASTONE is authorized as a combustible cladding system for interior or exterior applications on residential buildings in respect of the Above-Grade Masonry, Siding and Stucco requirements contained in Sections 9.20, 9.27 and 9.28 respectively of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

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A. SPECIFIC TERMS AND CONDITIONS:

1) CASTONE Industries Inc. shall provide the user of this authorization with complete instructions on the proper installation of the CASTONE system.

2) The CASTONE System shall be installed in accordance with this authorization and the manufacturer's installation instructions. If a conflict arises between the manufacturer's installation instructions and this authorization, the most restrictive provision shall apply.

3) The aluminium tracking system shall be:

   a) fastened to the structural elements of the wall (i.e. wood studs, concrete, etc.) by fasteners spaced not more than 400 mm (16 inches) o.c. The fasteners shall provide protection against galvanic action between the fastener material and the aluminium tracking system. The fastener size, penetration depth and strength shall conform to manufacturer's specifications; or,

   b) the design and general review of the fastener system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall also certify the structural capacity of the wall to support the CASTONE System. The fasteners shall provide protection against galvanic action between the fastener material and the aluminium tracking system.

4) The exterior application of CASTONE System shall be installed over wall sheathing conforming to Subsection 9.23.16. of the Ontario Building Code, as amended or remade from time to time.

5) Not less than one layer of sheathing paper shall be applied beneath exterior application of the CASTONE System in accordance with the material standard and installation requirements in Subsection 9.23.17. of the Ontario Building Code, as amended or remade from time to time.

6) Flashing shall be provided for exterior application of the CASTONE System in accordance with Subsection 9.27.3. of the Ontario Building Code, as amended or remade from time to time. Where another siding material is used in conjunction with CASTONE, the joint shall be flashed to prevent the entry of water.

7) Caulking shall be provided for exterior application of the CASTONE System in accordance with Subsection 9.27.4. of the Ontario Building Code, as amended or remade from time to time. Caulking shall be used between CASTONE and adjacent doors, windows, trim and sills.

8) Installation of the Castone System shall be carried out by trained personnel certified and identified on a dated photo identification card issued by the Applicant.

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9) A copy of this Authorization and the manufacturers installation instructions shall be attached to an application for a building permit.

10) This Authorization is valid only for CASTONE System marketed by the Applicant specified in Section 1 herein at the manufacturing facilities specified in Section 2 herein.

11) The use of CASTONE System must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the manufacturing facilities specified in Section 2 of this Authorization;

(iii) the ownership of the manufacturing facilities specified in Section 2 of this Authorization; or

(iv) the address of the Applicant specified in Section 1 of this Authorization;

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 16th day of December, 1994.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
Consolidated - AUTHORIZATION REPORT

DATE OF AUTHORIZATION **December 16, 1994**
BMEC REFERENCE **BMEC 94-04-183**
*** Revised February 23, 1995**
**** Revised June 20, 1996**
*****Revised May 30, 2002**

** RUB-R-WALL™/CODE BLUE™ Waterproofing membrane for below grade exterior foundation walls of solid concrete or unit masonry

1. Applicant

*** RUB-R-WALL Canada Ltd.
15288 Hwy 12
PO Box 670
Midland, Ontario
L4R 4P4

Tel: (800) 787-8059
Fax: (705) 534-4125

2. Manufacturing Facilities

Rubber Polymer Corporation
1135 W. Portage Trail Ext.
Akron, OH
USA, 44313

3. Description

** RUB-R-WALL™/CODE BLUE™ Waterproofing membrane is a single component, liquid applied, solvent based rubber polymer membrane used to waterproof below grade exterior foundation walls of solid concrete or unit masonry. The membrane is applied to the foundation walls through the use of an airless spray pump.

4. Authorization Requested

The applicant sought authorization for the use of an innovative waterproofing system as an equivalent to waterproofing provisions contained in Article 9.13.1.3., and Subsections 9.13.2. and 9.13.3. of Regulation 61 of Revised Regulations of Ontario 1990 (the "Ontario Building Code").

5. Assessment

Test results and assessments provided by the Applicant show that if RUB-R-WALL™/CODE BLUE™ Waterproofing membrane is used in accordance with the limitations and conditions stated in this authorization, it will provide equivalent performance with the following:

* Ontario Building Code Article 9.13.1.3., and Subsections 9.13.2. and 9.13.3.

6. Authorization

** The use of RUB-R-WALL™/CODE BLUE™ Waterproofing membrane for below grade exterior foundation walls of solid concrete or unit masonry is authorized in respect of the waterproofing provisions contained in Article 9.13.1.3., and Subsections 9.13.2. and 9.13.3. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. SPECIFIC TERMS AND CONDITIONS:

1) Footings shall be clean and free of dirt, sand, soil or any other deleterious materials that would prevent full adhesion of the rubber membrane. Footings must be dry and free of any visible water. Any water present must be removed and the substrate dried.

2) Concrete walls shall be free of honeycombed areas, voids in mortar joints, cracks and tie holes. Any such area, if present, shall be repaired by using a non-shrinking grout before applying RUB-R-WALL™/CODE BLUE™.

* 3) Type $L_2$20 S concrete masonry unit walls shall be parged with not less than ¼ inch (6 mm) of portland cement mortar to prevent excessive absorption of RUB-R-WALL™/CODE BLUE™ coating. Types N or S concrete masonry units do not require parging. Cast-in-place concrete walls, masonry block cores filled with concrete and parged surfaces shall be cured for not less than 3 days before applying RUB-R-WALL™/CODE BLUE™.

4) RUB-R-WALL™/CODE BLUE™ shall not be applied over asphalt or tar based products. The surface of concrete walls shall be clean, sound, dry and free of frost, ice, or any contaminants which may affect the membrane during or after curing.

5) The temperature of the RUB-R-WALL™/CODE BLUE™ liquid shall be between 49-66 degrees Celsius (120-150 degrees Fahrenheit) when the liquid is applied to the area being waterproofed.

6) RUB-R-WALL™/CODE BLUE™ shall be applied so that wet film thickness is not less than 60 mil (1.53 mm) and cured film thickness is not less than 30 mil (0.77 mm).

7) RUB-R-WALL™/CODE BLUE™ shall not be applied when the ambient air temperature is below -9.5 degrees Celsius (15ºF) or the surface temperature of foundation walls that are not fully cured is below 1 degree Celsius (34ºF).

* 8) The installation of overlays (i.e. foamboard, insulation, drainage membranes, protection course, etc.) may be applied when RUB-R-WALL™/CODE BLUE™ has become firm (i.e. 5 - 20 minutes after application depending on air temperature and humidity). Backfilling shall not commence less than twenty-four hours after applying RUB-R-WALL™/CODE BLUE™.

9) Backfill shall be placed in lifts and in a manner which does not damage the foundation or the waterproofing material.

10) Installation of RUB-R-WALL™/CODE BLUE™ shall be carried out by trained personnel certified and identified on a dated photo identification card issued by the Applicant.

11) RUB-R-WALL Canada Ltd. shall provide the user of this authorization with complete instructions on the proper installation of RUB-R-WALL™/CODE BLUE™. These instructions shall include, but not be limited to the proper storage and handling of, the proper application of, and the health risks (i.e., the breathing of solvent vapours and the risks associated with eye and skin contact) and hazards associated with the use of RUB-R-WALL™/CODE BLUE™ and any other safety precautions needed for the proper installation of RUB-R-WALL™/CODE BLUE™.

12) RUB-R-WALL™/CODE BLUE™ shall be installed in accordance with this authorization and the manufacturer's installation instructions. If a conflict arises between the manufacturer's installation instructions and this authorization, the most restrictive provision shall apply.

13) A copy of this Authorization shall be attached to an application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

14) This Authorization is valid only for RUB-R-WALL™/CODE BLUE™ marketed by the Applicant specified in Section 1 herein at the manufacturing facilities specified in Section 2 herein.

15) The use of RUB-R-WALL™/CODE BLUE™ must comply with the *Building Code Act, 1992* as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

(a) any change has been made to:

(i) the material, system or building design that is the subject matter of this Authorization;

(ii) the address of the manufacturing facilities specified in Section 2 of this Authorization;

(iii) the ownership of the manufacturing facilities specified in Section 2 of this Authorization; or

(iv) the address of the Applicant specified in Section 1 of this Authorization;

(b) the use of the material, system or building design authorized herein;

(i) does not comply with the *Building Code Act, 1992* or any relevant legislation as they may be amended or re-enacted from time to time; or

(ii) provides an unsatisfactory level of performance, in situ; or

(c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 16th day of December, 1994.

BUILDING MATERIALS EVALUATION COMMISSION

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION November 16, 1994
BMEC REFERENCE BMEC 94-03-182

Murad Communications Inc.
Exterior Commercial Sign and Frame System

1. Applicant

Murad Communications Inc.
49 Wellington Street East
Suite 303
Toronto, Ontario
M5E 1C9

2. Description

Murad exterior commercial sign and frame system comprised of Forbo Stamoid F4452, a flexible material attached to an aluminum frame for use on the exterior wall of a building.

3. Authorization Requested

The applicant sought authorization for the use of an innovative sign and frame system as an equivalent to the Plastic Sign Facing Materials provisions contained in Subsection 3.8.4. of Regulation 61 of Revised Regulations of Ontario 1990 (the "Ontario Building Code").

4. Assessment

Test results and assessments provided by the Applicant show that if Murad exterior commercial sign and frame system is used in accordance with the limitations and conditions stated in this authorization, it will provide equivalent performance with the following:

* Ontario Building Code Subsection 3.8.4.

5. Authorization

The use of Murad exterior commercial sign and frame system is authorized for use on the exterior wall of buildings in respect of the requirements contained in Subsection 3.8.4. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

2/...

A. SPECIFIC TERMS AND CONDITIONS:

1) The design and general review of the sign frame and anchoring system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall also certify the structural capacity of the buildings substrate to support the sign material and frame system.

2) The maximum size of a sign on the exterior face of a building shall not exceed 92.9 square metres (1000 square feet).

3) The requirements of Sentence 3.8.4.1.(3) of the Ontario Building Code need not apply provided the sign is mounted on a noncombustible exterior wall where:

   (a) the building is sprinklered; or,

   (b) the building is not sprinklered; and,

      (i) the exterior face of the building where the sign is to be mounted does not contain any window or door openings; or,

      (ii) when located above a window or door opening is separated by a horizontal noncombustible canopy, extending the full width of, and projecting at least 900 mm (2 ft 11 in) beyond the exterior sign face.

4) A copy of this Authorization shall be attached to an application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

5) This Authorization is valid only for Murad exterior commercial sign and frame system marketed by the Applicant specified in Section 1 herein.

6) The use of Murad exterior commercial sign and frame system must comply with the Building Code Act, 1992 as amended or re-enacted from time to time and, except as specifically authorized herein, with the Ontario Building Code as amended or remade from time to time.

3/...

B. GENERAL CONDITIONS

1. The BMEC may amend or revoke this Authorization where it determines that:

   (a) any change has been made to:

      (i) the material, system or building design that is the subject matter of this Authorization;

      (ii) the address of the Applicant specified in Section 1 of this Authorization;

   (b) the use of the material, system or building design authorized herein;

      (i) does not comply with the Building Code Act, 1992 or any relevant legislation as they may be amended or re-enacted from time to time; or

      (ii) provides an unsatisfactory level of performance, in situ; or

   (c) any Ontario Building Code provision relevant to this Authorization has been amended or remade.

Dated at Toronto this 16th day of November, 1994.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **September 1, 1994**
BMEC REFERENCE **BMEC 94-02-181**

Canadian Cedar Log pre-fabricated houses with not less than nominal 100 mm (4 inch) thick solid cedar walls.

1. Applicant

Canadian Cedar Log Ltd.
3801 19th St. N.E.
Calgary, Alberta
T2E 6S8

Manufacturing Facilities

Canadian Cedar Log Ltd.
3801 19th St. N.E.
Calgary, Alberta
T2E 6S8

2. Description

Canadian Cedar Log pre-fabricated houses with not less than nominal 100 mm (4 inch) thick solid cedar walls which contain a combination of some or all of a heat recovery ventilator, energy rated windows and increased insulation levels to achieve an acceptable level of energy requirements and heat loss.

3. Authorization Requested

The applicant sought authorization for the use of an innovative system of thermal design in respect to the minimum thermal insulation requirements for log wall construction contained in Article 9.25.2.8. of the Ontario Building Code.

4. Assessment

Reports and assessments provided by the applicant establish that Canadian Cedar Log pre-fabricated houses with not less than nominal 100 mm (4 inch) thick solid cedar wall which are designed in accordance with the terms and conditions stated in this authorization will provide a performance level whereby the energy requirements and heat loss for the proposed house will be equivalent to those that would result in construction with the minimum thermal resistance values specified in Article 9.25.2.8. of the Ontario Building Code.

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5. Authorization

The use of the thermal design of Canadian Cedar Log pre-fabricated houses with not less than nominal 100 mm (4 inch) thick solid cedar walls is authorized in respect of the minimum thermal insulation requirements for log wall construction contained in Article 9.25.2.8. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. Specific Terms and Conditions:

1) An application for a building permit under s.8 of Building Code Act, 1992 in respect of the construction shall include:

(a) a HOT 2000 analysis and comparison that:

(i) is undertaken in respect of the house that is the subject of the permit application, in order to account for the effects of relevant factors particular to the proposed house, such as its location, orientation and exposure which may have a direct effect on the results of the HOT 2000 analysis;

(ii) takes into account all pertinent information as necessary to achieve the projected energy consumption, including without limiting the generality of the foregoing, air tightness and heat loss data in respect of the proposed house;

(iii) provides a comparison of the heat loss and energy consumption projected for the proposed house with the heat loss and energy consumption that would be achieved in construction with the minimum thermal resistance values specified in Article 9.25.2.8. of the Ontario Building Code, as amended or remade from time to time; and,

(iv) is undertaken by a professional engineer as defined in the Professional Engineers Act (Ontario) or an architect as defined in the Architects Act (Ontario) experienced in using this program; and

(b) a certification by the Professional Engineer or Architect that undertook the HOT 2000 analysis and comparison that the energy requirements and heatloss for the proposed house will be equivalent to those that would result in construction with the minimum thermal resistance values specified in Article 9.25.2.8. of the Ontario Building Code, as amended or remade from time to time.

Note: HOT 2000 is a computer program developed by CANMET division of National Resources Canada. It may be used to calculate heat loss and energy consumption for residential houses. This authorization applies to the most current version of the HOT 2000 program.

2) A copy of this Authorization shall be attached to the application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3/...

B. General Terms and Conditions:

1) Where in the opinion of the BMEC negative experience indicates that this Authorization should be amended and/or terminated, the BMEC may withdraw the Authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2) The BMEC does not assume or undertake to discharge any responsibility of the Applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3) This Authorization may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any material, system or building design which is described herein.

4) This Authorization is not transferable to any other party. If the Applicant makes any revision or change to the address or the material, system or building design of the same shall be cause for termination, unless prior approval is granted for such revision or change by the BMEC.

5) This Application may be terminated or modified in the event that a change is made to the Building Code Act, 1992, the Building Code or any other applicable law that may conflict with this Authorization or any part thereof.

6) Except as authorized herein, all applicable requirements of the Building Code Act, 1992, and the Ontario Building Code as amended or reenacted shall be met. Construction and installation shall be in conformance to all applicable governing legislation.

Dated at Toronto this 26th day of September, 1994.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **September 1, 1994**
BMEC REFERENCE **BMEC 94-01-180**

Pan-Abode pre-fabricated houses with not less than nominal 100 mm (4 inch) thick solid cedar walls.

1. Applicant

Pan-Abode International Ltd.
6311 Gray Bar Road
Richmond, British Columbia
V6W 1H8

Manufacturing Facilities

Pan-Abode International Ltd.
6311 Gray Bar Road
Richmond, British Columbia
V6W 1H8

2. Description

Pan-Abode pre-fabricated houses with not less than nominal 100 mm (4 inch) thick solid cedar walls which contain a combination of some or all of a heat recovery ventilator, energy rated windows and increased insulation levels to achieve an acceptable level of energy requirements and heat loss.

3. Authorization Requested

The applicant sought authorization for the use of an innovative system of thermal design in respect to the minimum thermal insulation requirements for log wall construction contained in Article 9.25.2.8. of the Ontario Building Code.

4. Assessment

Reports and assessments provided by the applicant establish that Pan-Abode pre-fabricated houses with not less than nominal 100 mm (4 inch) thick solid cedar wall which are designed in accordance with the terms and conditions stated in this authorization will provide a performance level whereby the energy requirements and heat loss for the proposed house will be equivalent to those that would result in construction with the minimum thermal resistance values specified in Article 9.25.2.8. of the Ontario Building Code.

2/...

5. Authorization

The use of the thermal design of Pan-Abode pre-fabricated houses with not less than nominal 100 mm (4 inch) thick solid cedar walls is authorized in respect of the minimum thermal insulation requirements for log wall construction contained in Article 9.25.2.8. of the Ontario Building Code, as amended or remade from time to time, subject to the following terms and conditions:

A. Specific Terms and Conditions:

1) An application for a building permit under s.8 of Building Code Act, 1992 in respect of the construction shall include:

(a) a HOT 2000 analysis and comparison that:

(i) is undertaken in respect of the house that is the subject of the permit application, in order to account for the effects of relevant factors particular to the proposed house, such as its location, orientation and exposure which may have a direct effect on the results of the HOT 2000 analysis;

(ii) takes into account all pertinent information necessary to achieve the projected energy consumption, including without limiting the generality of the foregoing, air tightness and heat loss data in respect of the proposed house;

(iii) provides a comparison of the heat loss and energy consumption projected for the proposed house with the heat loss and energy consumption that would be achieved in construction with the minimum thermal resistance values specified in Article 9.25.2.8. of the Ontario Building Code, as amended or remade from time to time; and,

(iv) is undertaken by a professional engineer as defined in the Professional Engineers Act (Ontario) or an architect as defined in the Architects Act (Ontario) experienced in using this program; and

(b) a certification by the Professional Engineer or Architect that undertook the HOT 2000 analysis and comparison that the energy requirements and heat loss for the proposed house will be equivalent to those that would result in construction with the minimum thermal resistance values specified in Article 9.25.2.8. of the Ontario Building Code, as amended or remade from time to time.

Note: HOT 2000 is a computer program developed by CANMET division of National Resources Canada. It may be used to calculate heat loss and energy consumption for residential houses. This authorization applies to the most current version of the HOT 2000 program.

2) A copy of this Authorization shall be attached to the application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

3/...

B. General Terms and Conditions:

1) Where in the opinion of the BMEC negative experience indicates that this Authorization should be amended and/or terminated, the BMEC may withdraw the Authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2) The BMEC does not assume or undertake to discharge any responsibility of the Applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3) This Authorization may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any material, system or building design which is described herein.

4) This Authorization is not transferable to any other party. If the Applicant makes any revision or change to the address or the material, system or building design of the same shall be cause for termination, unless prior approval is granted for such revision or change by the BMEC.

5) This Application may be terminated or modified in the event that a change is made to the Building Code Act, 1992, the Building Code or any other applicable law that may conflict with this Authorization or any part thereof.

6) Except as authorized herein, all applicable requirements of the Building Code Act, 1992, and the Ontario Building Code as amended or reenacted shall be met. Construction and installation shall be in conformance to all applicable governing legislation.

Dated at Toronto this 26th day of September, 1994.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

AUTHORIZATION #93-13-178
BY THE 1 DEC. 1993
BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 28(4) (b) of the Building Code Act, S.O., 1992, Chapter 23

AND IN THE MATTER OF the Applicant:

Arencon Inc.
Architects and Engineers
Consultants in Fire Safety and Codes
1401 Captain Court
Mississauga, Onatrio
LSJ 1A9

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two-hour fire resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the Applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this Authorization should be amended and/or terminated, the COMMISSION may by written notice to the Applicant or the Agent, at the above address, withdraw the Authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the Applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This Authorization may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This Authorization is not transferable to any other party. If the Applicant makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

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5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Ontario Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).

7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.

8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited Model FR-1/Q-60, 12.7 mm (1/2 in.) orifice, 74°C (165°F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.

9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness maximum glazing shall be 2134 mm (7 ft. 0 in.) wide by 2844 mm (9 ft. 4 in.) high and minimum 6 mm (1/4 in.) thick.

10. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hr. fire resistance rating provided,

    (a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

    (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

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11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.

12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.

14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.

15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".

16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in.) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

WARNING

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

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Dated at Toronto this 1st day in the month of December in the year 1993 for authorization **#93-13-178** on the behalf of the BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

BUILDING MATERIALS EVALUATION COMMISSION (BMEC)
AUTHORIZATION REPORT

DATE OF AUTHORIZATION **January 20, 1994**
BMEC REFERENCE **BMEC 93-12-177**

Honeywell Energy Recovery Ventilators, Models ER90 and ER100

1. Applicant

Honeywell Limited
740 Ellesmere Road
Scarborough, Ontario
M1P 2V9

Manufacturing Facilities

Airxchange, Inc.
401 V.F.W. Drive
Rockland, Ma
USA, 02370

2. Description

Honeywell Energy Recovery Ventilators, Models ER90 and ER100.

3. Authorization Requested

The applicant sought authorization for Energy Recovery Ventilators, Models ER90 and ER100 to substitute Total Energy Efficiency for Sensible Heat Efficiency described in Sentence 9.32.3.11.(2) of the Ontario Building Code.

4. Assessment

Test results and assessments provided by the applicant show that if Honeywell Energy Recovery Ventilators, Models ER90 and ER100 are used in accordance with the limitations and conditions stated in this authorization, it is deemed to comply with the following:

* Ontario Building Code, Sentence 9.32.3.11.(2)

5. Authorization

The applicant is authorized to use Honeywell Energy Recovery Ventilators, Models ER90 and ER100 subject to the following conditions and terms:

A. Specific Terms and Conditions:

1) Honeywell Energy Recovery Ventilators, Model ER90 and ER100 are authorized for use in locations of the Province where the January 2.5 percent design temperature, as identified in Section 2.5 of the Ontario Building Code, is not below minus 20 degrees celsius.

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2) A copy of this authorization shall be attached to the application for a building permit and shall be posted and maintained on the site of the construction with the building permit.

B. General Terms and Conditions:

1) Where in the opinion of the BMEC negative experience indicates that this Authorization should be amended and/or terminated, the BMEC may withdraw the Authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2) The BMEC does not assume or undertake to discharge any responsibility of the Applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3) This Authorization may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any material, system or building design which is described herein.

4) This Authorization is not transferable to any other party. If the Applicant makes any revision or change to the address or the material, system or building design of the same shall be cause for termination, unless prior approval is granted for such revision or change by the BMEC.

5) This application may be terminated or modified in the event that a change is made to the Building Code Act, 1992, the Building Code or any other applicable law that may conflict with this authorization or any part thereof.

6) Except as authorized herein, all applicable requirements of the Building Code Act, 1992, and the Ontario Building Code as amended or reenacted shall be met. Construction and installation shall be in conformance to all applicable governing legislation.

Dated at Toronto this 8th day of February, 1994.

BUILDING MATERIALS EVALUATION COMMISSION

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per: Scott Richardson, Chairman

AUTHORIZATION **BMEC #93-9-174**
BY THE
BUILDING MATERIALS EVALUATION COMMISSION

AMENDED NOVEMBER____, 1994

IN THE MATTER OF Section 28(4)(b) of the Building Code Act, S.O. 1992, Chapter 23

AND IN THE MATTER OF the Applicant:

Cieslok Outdoor Ltd.
81 Peters Street
2nd Floor
Toronto, Ontario
M5W 2G4

ON THE SUBJECT OF:

Forbo Stamoid F4452, a flexible material attached to an aluminum frame to be used for signage on the exterior wall of a building.

THE COMMISSION HEREBY AUTHORIZES to the Applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this Authorization should be amended and/or terminated, the COMMISSION may withdraw the Authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the Applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This Authorization may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This Authorization is not transferable to any other party. If the Applicant makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

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5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Ontario Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, S.O. 1992, Chapter 23 and Ontario Building Code R.R.O., 1992, Reg. 61 as amended or reenacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.

8. The design and general review of the sign frame and anchoring system shall be carried out by a Professional Engineer as defined in the Professional Engineers Act (Ontario). The Professional Engineer shall also certify the structural capacity of the buildings substrate to support the sign material and frame system.

9. The maximum size of a sign on the exterior face of a building shall not exceed 92.9 square metres (1000 square feet).

10. The requirements of Sentence 3.8.4.1.(3) of the Ontario Building Code need not apply provided the sign is mounted on a noncombustible exterior wall where:

    (a) the building is sprinklered; or,

    (b) the building is not sprinklered; and,

        (i) the exterior face of the building where the sign is to be mounted does not contain any window or door openings; or,

        (ii) when located above a window or door opening is separated by a horizontal noncombustible canopy, extending the full width of, and projecting at least 900 mm (2 ft 11 in) beyond the exterior sign face.

Dated at Toronto this 8th day in the month of February in the year 1994 for authorization **#93-09-174** on the behalf of the BUILDING MATERIALS EVALUATION COMMISSION

BMEC-93-07-172
BMEC-93-07-172

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

BLUE STUFF - WATERPROOFING MEMBRANE SEALER

Date of Authorization: December 1, 1993

BMEC REFERENCE: BMEC-93-07-172

IN THE MATTER OF Section 28(4)(b) of the Building Code Act, S.O. 1992, Chapter 23

AND IN THE MATTER OF an application by:

Pennkote Ltd.
251 Station Street
Ajax, Ontario
L1S 1S3

ON THE SUBJECT OF:

BLUE STUFF, a trademark of and manufactured by Pennkote Ltd. for a single component, elastomeric waterproofing membrane sealer of copolymer rubber.

THE COMMISSION HEREBY AUTHORIZES to the Applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this Authorization should be amended and/or terminated, the COMMISSION may by written notice to the Applicant or the Agent, at the above address, withdraw the Authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the Applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This Authorization may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This Authorization is not transferable to any other party. If the Applicant makes any revision or change to the address or the materials, technique, design, system

and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Ontario Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, S.O. 1992, Chapter 23 and Ontario Building Code R.R.O., 1992, Reg. 61 as amended or reenacted shall be met. A valid copy of this authorization shall be attached the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
8.
    a. BLUE STUFF may be trowelled or sprayed on foundation walls of unit masonry and poured concrete as a waterproofing membrane. Parging and bituminous material are not required when using this system on foundation walls; and,
    b. BLUE STUFF may be used to waterproof basement floors. The membrane shall be applied between two layers of concrete, each of which shall be not less than 75 mm (3 inches) thick. This membrane may be in sheet form under the foundation wall and shall be integral to the wall and floor membrane to form a complete seal of the floor and wall system.
9. Concrete and or unit masonry walls to be waterproofed shall be free of all holes and recesses resulting from concrete pouring or casting of unit masonry and or removal of forms, ties and honeycombing. All unit masonry joints shall be trowelled smooth with all excess mortar to be brushed clean of all debris. There shall be no ledging or corbelling of unit masonry or concrete walls.
10. BLUE STUFF shall only be applied to clean, sound and dry surfaces that are free of any contaminants which may affect the membrane during or after curing.
11. BLUE STUFF shall not be applied when the air temperature is below 5 degrees celsius or the surface temperature of the foundation wall or floor is below 1 degree celsius. It shall be protected from freezing or heavy rain for at least twenty-four hours after installation. BLUE STUFF shall not be applied when rain of severe drop in temperature (below 0 degrees celsius) is imminent."
12. BLUE STUFF shall be applied so that wet film thickness is not less than 60 mil (1.53 mm) and cured film thickness is not less than 30 mil (0.77 mm).
13. Backfilling or the installation of overlays against a foundation wall shall not commence less than twenty-four hours after applying BLUE STUFF.
14. Installation shall only be done by trained personnel certified and dated on a photo identification card issued by the applicant.

15. PENNKOTE LTD. shall produce a manufacturer's installation and health safety instruction booklet appropriately titled and dated for future reference. It shall also contain a copy of the warranty, B.M.E.C. authorization, Material Safety Data Sheet, inspection techniques, and cautionary instructions pertaining to possible membrane damage if backfilling occurs during the first seven days after application.

Dated at Toronto this 1st day in the month of December in the year 1993 for Authorization #93-07-172 on the behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

AUTHORIZATION
BY THE

BUILDING MATERIALS EVALUATION COMMISSION

DATE OF AUTHORIZATION 11 May 1993
BMEC REFERENCE #93-5-170

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1990, Chapter B.13

AND IN THE MATTER OF the Applicant:

Therm-O-Comfort Co. Ltd.
85 Forest Street
Aylmer, Ontario
N5H 1A5

ON THE SUBJECT OF:

Therm-O-Comfort Wall Insulation System
This is a cellulose-fibre thermal insulation tradename "Therm-O-Mat", which is made from clean paper treated with borax, boric acid and aluminium sulphate chemicals.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

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5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter B.13, R.S.O. 1990, Ontario Regulation 413/90 as amended or re-enacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.

8. This system may be used to insulate above grade conventional exterior vertical walls of new buildings which employ wood studs with plywood, waferboard or fibreboard sheathing on the exterior side and polyethylene vapour barrier on the interior wall surface side.

9. This system shall comprise of the following listed components:

   (a) THERM-O-MAT uses a porous polyester spunbonded membrane stapled to wood frame members to contain the;

   (b) THERM-O-LIGHT loose fill cellulose insulation material injected into each wall cavity; and

   (c) THERM-O-PAN a cardboard stop fastened to wood frame members to stop the flow of the loose fill cellulose insulation to other cavities.

10. a. Installers shall be trained and certified by the Applicant and they shall carry at all times a photo identification card and log book for each installation.

    b. A "Wall Insulation - House Card" for each installation, shall be securely fastened to a roof structural member beside the attic hatch or attic entrance or the wood panel of the main electrical service.

11. This system shall have a valid current listing and reports such as, but not limited to the following:

    a. Canadian General Standards Board (CGSB) No. 51-GP-60 and certified license agreement.

.../3

b. Canadian Construction Materials Centre (CCMC) No. 12307-R.

c. Each installation shall conform to the manufacturer's published materials and installation instructions as submitted to the BMEC, and

d. This BMEC AUTHORIZATION is subject to the terms and conditions of the above listings and reports. Any conflict between this authorization or the above listings and reports, the most restrictive matter as determined by the Chief Building Official shall reply.

12. This system shall be protected from but not limited to the following;

. Any and all heat producing apparatus or light fixtures, pot or recessed types, exhaust fans, gas vents or flues and chimneys.

BMEC-93-04-169
BMEC-93-04-169

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

WINDOW SPRINKLER ASSEMBLY

Date of Authorization: May 11, 1993

BMEC REFERENCE: BMEC-93-04-169

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1990, Chapter B.13

AND IN THE MATTER OF an application by:

Morrison Hershfield Limited
Consulting Engineers
4 Lansing Square
North York, Ontario
M2J 1T1

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two hour fire-resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the Applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this Authorization should be amended and/or terminated, the COMMISSION may by written notice to the Applicant or the Agent, at the above address, withdraw the Authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the Applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This Authorization may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This Authorization is not transferable to any other party. If the Applicant makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Ontario Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).
7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.
8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited Model FR-1/Q-60, 12.7 mm (1/2 in) orifice, 74C (165F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.
9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness maximum glazing shall be 2134 mm (7 ft) wide by 2844 mm (9 ft 4 in) high and minimum 6 mm (1/4 in) thick.
10. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hr. fire-resistance rating provided,

    (a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

    (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.
12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.
14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.
15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".
16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

    W A R N I N G

    SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

DATED at Toronto this 11th day in the month of May in the year 1993 for Authorization #93-04-169 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-93-03-168

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

WINDOW SPRINKLER ASSEMBLY

Date of Authorization: May 11, 1993

BMEC REFERENCE: BMEC-93-03-168

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1990, Chapter B.13

AND IN THE MATTER OF an application by:

Disano Sprinkler Design
Unit #12
161 Deerhide Crescent
Weston, Ontario
M9M 2Z2

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two hour fire-resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the Applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this Authorization should be amended and/or terminated, the COMMISSION may by written notice to the Applicant or the Agent, at the above address, withdraw the Authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the Applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This Authorization may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This Authorization is not transferable to any other party. If the Applicant makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Ontario Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).
7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.
8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited Model FR-1/Q-60, 12.7 mm (1/2 in) orifice, 74C (165F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.
9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness maximum glazing shall be 2134 mm (7 ft) wide by 2844 mm (9 ft 4 in) high and minimum 6 mm (1/4 in) thick.
10. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hr. fire-resistance rating provided,

    (a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

    (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.
12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.
14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.
15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".
16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

W A R N I N G

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

DATED at Toronto this 11th day in the month of May in the year 1993 for Authorization #93-03-168 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-93-02-167

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

WINDOW SPRINKLER ASSEMBLY

Date of Authorization: May 11, 1993

BMEC REFERENCE: BMEC-93-02-167

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1990, Chapter B.13

AND IN THE MATTER OF an application by:

United Fire Protection Systems Inc.
1025 Midway Boulevard
Mississauga, Ontario
L5T 2C1

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two hour fire-resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the Applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this Authorization should be amended and/or terminated, the COMMISSION may by written notice to the Applicant or the Agent, at the above address, withdraw the Authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the Applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This Authorization may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This Authorization is not transferable to any other party. If the Applicant makes any revision or change to the address or the materials, technique, design, system

and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Ontario Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).
7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.
8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited Model FR-1/Q-60, 12.7 mm (1/2 in) orifice, 74C (165F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.
9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness maximum glazing shall be 2134 mm (7 ft) wide by 2844 mm (9 ft 4 in) high and minimum 6 mm (1/4 in) thick.
10. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hr. fire-resistance rating provided,

    (a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

    (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.
12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.
13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.

14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.
15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".
16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in.) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

W A R N I N G

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

DATED at Toronto this 11th day in the month of May in the year 1993 for Authorization #93-02-167 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

AUTHORIZATION BY THE BUILDING MATERIALS EVALUATION COMMISSION

BMEC #93-1-166
Date: 11 May 1993

* Denotes a new or amended clause May 30, 2002

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1990, Chapter B.13

AND IN THE MATTER OF the Applicant:

* BENOLEC LTEE
1451, Nobel
Sainte-Julie, Quebec
J3E 1Z4

Tel: (450) 922-2000
Fax: (450) 922-4333

ON THE SUBJECT OF:

Benolec Wall Insulation System . This is a cellulose-fibre thermal insulation tradename "Ben-O-Mat", which is made from clean paper treated with borax, boric acid and aluminium sulphate chemicals.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter B.13, R.S.O. 1990, Ontario Regulation 413/90 as amended or re-enacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.

8. This system may be used to insulate above grade conventional exterior vertical walls of new buildings which employ wood studs with plywood, waferboard or fibreboard sheathing on the exterior side and polyethylene vapour barrier on the interior wall surface side.

9. This system shall comprise of the following listed components:

   (a) BENO-MAT uses a porous polyester spunloaded membrane stapled to wood frame members to contain the;

   (b) BENO-THERM Leger loose fill cellulose insulation material injected into each wall cavity; and

   (c) BENO-PAN a cardboard stop fastened to wood frame members to stop the flow of the loose fill cellulose insulation to other cavities.

10. (a) Installers shall be trained and certified by the Applicant and they shall carry at all times a photo identification card and log book for each installation.

    (b) A "Wall Insulation - House Card" for each installation, shall be securely fastened to a roof structural member beside the attic hatch or attic entrance or the wood panel of the main electrical service.

11. This system shall have a valid current listing and reports such as, but not limited to the following:

    (a) Canadian General Standards Board (CGSB) No. 51-GP-60M and certified license agreement.

    (b) Canadian Construction Materials Centre (CCMC) No. 12307-R, and

    (c) Each installation shall conform to the manufacturer's published materials and installation instructions as submitted to the BMEC, and

(d) This BMEC AUTHORIZATION is subject to the terms and conditions of the above listings and reports. Any conflict between this authorization or the above listings and reports, the most restrictive matter as determined by the Chief Building Official shall reply.

12. This system shall be protected from but not limited to the following:

(a) Any and all heat producing apparatus or light fixtures, pot or recessed types, exhaust fans, gas vents or flues and chimneys.

AUTHORIZATION
BY THE
BUILDING MATERIALS EVALUATION COMMISSION

#92-9-165
29 March 1993
*Amended October 30, 1997

IN THE MATTER OF Section 18(4) (b) of the Building Code Act, Revised Statutes of Ontario, 1990, Chapter B.13

AND IN THE MATTER OF the Applicant:

L. P. Engineering Inc.
11 Katerina Ave.
Thornhill, Ontario
L4J 8H5

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two hour fire-resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this Authorization should be amended and/or terminated, the COMMISSION may by written notice to the Applicant or the Agent, at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the Applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Ontario Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).

7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.

8. a) The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited Model FR-1/Q-60, 12.7 mm (1/2 in.) orifice, 74°C (165°F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.

* b) Central Model WS™ Window Sprinkler, horizonal sidewall & pendent vertical sidewall, 12.7 mm (1\2 in.) orifice with a 68º(155ºF) or 200º(93º) temperature rating. Installation of Model WS™ shall be in accordance with the data sheet provided by Central Sprinkler Company for Window Sprinkler™ applications.

9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in.) minimum thickness. The maximum glazing shall be 2134 mm (7 ft) wide by 2844 mm (9 ft 4 in) high and minimum 6 mm (1/4 in) thick.

10. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hr. fire-resistance rating provided,

    (a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

(b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.

12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.

14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.

15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".

16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

WARNING

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

Dated at Toronto this 30th day in the month of October in the year 1997 for authorization **#92-9-165** on the behalf of the BUILDING MATERIALS EVALUATION COMMISSION

_____
per: Oliver Drerup, Vice-Chair

BMEC-92-08-164

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

HOUSETITE FOAMED PLASTIC THERMAL INSULATION

Date of Authorization: March 29, 1993

BMEC REFERENCE: BMEC-92-08-164

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1990, Chapter B.13

AND IN THE MATTER OF an application by:

BASF Canada Inc.
345 Carlingview Drive
Toronto, Ontario
M9W 6N9

ON THE SUBJECT OF:

HousetiteTM, a two-component combustible spray in place semi-flexible, BASF EX-R2802 and ISO 17 isocyanurate, open and closed cellular, foamed plastic thermal insulation which may be applied on site or in a manufacturing facility.

THE COMMISSION HEREBY AUTHORIZES to the APPLICANT the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this AUTHORIZATION should be amended and/or terminated, the COMMISSION may by written notice to the APPLICANT at the above address, withdraw the AUTHORIZATION and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the APPLICANT to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Ontario Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This AUTHORIZATION is further limited to the continuance of a current valid C.C.M.C. Report #12376-R which shall be adhered to.
7. Since at the present time there are no available "Standards"; this AUTHORIZATION determined that the subject matter did satisfy appropriate requirements. However, when the appropriate "Standards"are published, the APPLICANT shall retest to those "Standards", at which time this AUTHORIZATION shall be required to be amended.
8. Follow-up inspection services shall be maintained at all times by the APPLICANT or by an Accredited Testing Organization.
9. Each installation shall conform to the manufacturer's published installation instructions and shall be reviewed in detail, stamped, dated and signed for construction as specified by the manufacturer's listed trained personnel. Identification cards for installers shall be issued only to qualified trained personnel listed by the manufacturer.
10. Only fixed ratio equipment and the employment of positive displacement pumps for metering shall be used by the trained applicator/installer.
11. Precautions shall be taken around recessed electrical fixtures and or any other heat sources to relieve any heat build up.
12. This sprayed-in-place foamed insulation as described in this subject AUTHORIZATION, shall be for the application only in open cavities where visual control and sampling are relatively easy for the trained applicator/installer.

DATED at Toronto this 29th day in the month of March in the year 1993 for Authorization #92-08-164 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

#92-7-163
20 July 1993

AUTHORIZATION
BY THE
BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 28(4) (b) of the Building Code Act, Revised Statutes of Ontario, 1992, Chapter 23

AND IN THE MATTER OF the Applicant:

Henny Penny Corporation
1219 US 35 West
Eaton, Ohio
USA 45320

ON THE SUBJECT OF:

Henny Penny^{R}, Models 500P and 500CP, these are self-contained electric deep fat pressure fryers with integral hood, air cleaning and automatic fixed fire suppression systems. Made of stainless steel, these units have lockable roller casters and a single electrical junction box for the entire unit. Used only in commercial cooking kitchens and does not require a direct exhaust duct or plumbing drain connections.

THE COMMISSION HEREBY AUTHORIZES to the Applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the APPLICANT or the Agent, at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the APPLICANT to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

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3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Ontario Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter B.13, R.S.O. 1990, Ontario Regulation 413/90 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

7. The APPLICANT shall be wholly responsible for the complete discharge of each paragraph of this authorization.

8.(a) Each installation shall conform to this AUTHORIZATION and to the manufacturer's published installation instructions and shall be reviewed in detail, stamped, dated and signed for construction as specified by the manufacturer's listed trained personnel.

(b) The design drawings and specifications of this unit shall be stamped and sealed by a professional engineer registered in Ontario.

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9.(a) The manufacturer's installation and maintenance literature shipped with each unit shall include copies of this AUTHORIZATION; and

(i) Installation and operation manual "Henny Penny Portable Venting System Model 500CP and product number C2333", and

(ii) Fire Butler maintenance and recharge service manual no. 32660, model no. 500W, and shall be a listed wet chemical extinguishing system installed to the listing and manufacturer's instructions.

(b) In case of conflicting requirements in any documents pertaining to this subject matter the most restrictive shall apply.

10.(a) Each unit shall be permanently labelled with the manufacturer's name or trademark, model number and current listing of Canadian Standard Association (CSA); Underwriters Laboratories Inc. (ULI); and Underwriters Laboratories Canada (ULC), and

(b) Each unit shall be installed and maintained in compliance with those listing requirements of CSA, ULI, and ULC.

11.(a) Each unit shall be maintained on a minimum service contract of at least once per month to include, check and test all the fail safe components, replacing the charcoal filter and as needed replacing the grease filter and fire extinguisher.

(b) Evidence shall be recorded in a log book signed and dated by the owner (or agent) of the unit, service contractor and the accredited testing agency, to witness the following;

(c) The satisfactory operation and maintenance as per this AUTHORIZATION of each such unit, and

(d) An annual follow-up inspection of each installation shall be made by an accredited testing agency.

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12.(a) This unit is limited to one unit installation within one space unless there is conformance to the NFPA-96 Standard for exhaust and make-up air to more than one unit.

(b) This unit shall only be installed in commercial kitchen areas where the surrounding walls, ceilings and floors are finished with durable materials suitable for cleaning by washing.

13. The unit roller casters shall be locked so the unit remains in a fixed position while in the operation mode.

14.(a) Each unit when operated shall be maintained in a clean working order used only by trained personnel. Cleaning of the unit shall be done daily, the baffle and mesh grease filter shall be done at least once a week, and

(b) The scrubber tank and drain pan waste liquid shall be cleaned and emptied daily into an approved grease separated drain.

15.(a) Adequate general exhaust and supply ventilation is provided to prevent a build-up of smoke, odours and all cooking fumes, and

(b) A portable code conforming extinguisher of at least 40 BC is installed adjacent to each unit not less than 2m (6 ft.) and not more than 9m (30 ft.) travel distance in the direction of exiting from each unit.

AUTHORIZATION #91-6-154
BY THE 13 November 1991
BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act,
Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

Isola AS, Platon Division
N-3670 Notodden, Norway
P.O. Box 68

AND AGENT:

Platon North America Inc. and
Drycelle Products Limited
461 North Service Road West, Unit 341
Oakville, Ontario
L6M 2V5

ON THE SUBJECT OF:

Platon Dampproofing Membrane System, this is a carbon compounded high density polyethylene sheet, "dimpled" design provides an air space that allows drainage or moisture, water seepage and/or soil gases through walls and/or floors to drain away to weeping tile, floor drain, sump and/or to ventilate to atmosphere where required.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

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4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 413/90 as amended or reenacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.

8. This Platon system may be used in lieu of the Ontario Building Code requirements for dampproofing and/or waterproofing of walls and/or floors.

9. This Authorization is subject the C.C.M.C. #12266-R evaluation report dated 91-07-26, any conflict between the Ontario Regulation, C.C.M.C. Report or this Authorization the most restricted matter shall apply.

10. Each installation shall also conform to the manufacturer's published installation instructions. Particular attention shall be addressed to the fastening of this system and the use of the integral tab, termination bar and/or moulding and sealing to cover the top edge and/or seams of the membrane.

11. When this system is used in conjunction with a floor drain, a backwater valve shall be installed with access for maintenance.

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12.(1) An Architect or Professional Egnineer registered in Ontario shall design, review, inspect, seal and sign drawings and a document of certification and forward these to the Chief Building Official and the building owner(s) when these systems are used for;

(2) waterproofing and/or

(3) for those areas where soil gases such as radon may be present, these systems shall be equipped with fail safe venting to the exterior atmosphere.

Building Materials Evaluation Commission
777 Bay Street, 2nd Floor
Toronto, Ontario, M5G2E5
Tel: 416: 585. 4234 / Fax: 416. 585. 7531
www.obc.mah.gov.on.ca

Date of Authorization	October 22, 1992
BMEC Authorization	# 92-06-162
Authorization Amended	July 28, 2005

* Denotes July 28, 2005 Amendments

AUTHORIZATION REPORT- Horizontal Cavity Shaft wall System

IN THE SUBJECT MATTER OF Clause 18 (4) (b) of the *Building Code Act*, Revised Statutes of Ontario, 1980, Chapter 51, (currently the *Building Code Act,* 1992, S.O. 1992, Ch 23, Section 28, as amended).

AND IN THE MATTER OF an application by :

* BPB North American Services Inc.
2424 Lakeshore Road West
Mississauga, Ontario
L5J 1K4

Tel: (905) 823-9881
Fax: (905) 823-4860
Web: www.bpb-na.com

* **ON THE SUBJECT OF** BPB Canada Inc. Gypsum Shaftwall Assembly for horizontal service space, this is a gypsum board with steel studs, channels and runners forming a two hour fire-resistance assembly for metal duct enclosures or ceiling membrane.

* **WHERE AS** the applicant BPB North American Services Inc. has requested a revision to the existing Building Materials Evaluation Commission Authorization 92-06-162, to change the name of the applicant from Westroc Industries Limited to BPB North American Services Inc.

THE COMMISSION HEREBY AUTHORIZES to the Applicant use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experiences indicate that this authorization should be amended and /or terminated, the COMMISSION may by written notice to the Applicant or Agent, at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and /or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and / or advertising material, however, it is not to be used expressly or implied as an endorsement of any product, material technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to address or the materials, technique, design, system and / or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be in contravention of the Ontario Building Code. Where application any change in the Act, Regulation or Code provision shall be grounds for re-evaluation by the Commission.

AND SPECIFIC REQUIREMENTS

* 6. Except as authorized herein all applicable requirements of the *Ontario Building Code Act*, Chapter 51 R.S.O. 1980, Ontario Regulation 419/86 as amended, (currently the *Building Code Act*, S.O. 1992, Ch 23, Ontario Regulation 403/97 as amended), shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

7. The Applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.

8. This system shall be constructed as non-load bearing only and the supporting assembly shall be of at least the required fire-resistance rating.

* 9. The maximum span for this system shall be 2.18 m (7 ft 2 in) and a maximum of two hour fire-resistance rating from either side as determined on the basis of test results with ASTM E1119 and ULC/CAN-S101 by Warnock Hersey, File no. WH1-495-PSH-0189 and 0190, Job No., 50611-CF-041390, date tested 14 & 15 February 1992.

* 10. This assembly consists of at least 19 mm (3/4 in) thick BPB Canada Inc. ProRoc Shaftliner and three layers of 12.7 mm (½ in) BPB Canada Inc. ProRoc Type C. The liner and panels shall be fitted and fastened with metal studs, channels, runners, screws, anchors, trim and sealant as per the manufacturer's recommendations.

* 11. The Manufacturer's detail is contained in a publication by BPB Canada Inc., titled "Gypsum Board Systems Manual: Fire Resistence and Sound Control Design Manual".

12 . Any and all of the above data, details and tests shall be made available to any and all parties responsible for the design, detail, construction, installation and inspection of each installation

Amended at Toronto this 28th Day of July 2005.

BUILDING MATERIALS EVALUATION COMMISSION

_____

Edward Link, Vice-Chair

BMEC-92-05-161

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

ENVIRO-SHIELD WALL INSULATION SYSTEM

Date of Authorization: October 22, 1992

BMEC REFERENCE: BMEC-92-05-161

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1990, Chapter B.13

AND IN THE MATTER OF an application by:

Thermo-cell Insulation (1983) Ltd.
2015 Lanthier Drive
RR #2
Orleans, Ontario
K4B 1M1

ON THE SUBJECT OF:

Enviro-Shield Wall Insulation System. This is a cellulose-fibre thermal insulation tradename "Weathershield Insulation", which is made from clean paper treated with borax, boric acid and aluminum sulphate chemicals.

THE COMMISSION HEREBY AUTHORIZES to the Applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Ontario Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter B.13, R.S.O. 1990, Ontario Regulation 413/90 as amended or re-enacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
8. This system may be used to insulate above grade conventional exterior vertical walls of new buildings which employ wood studs with plywood, waferboard or fibreboard sheathing on the exterior side and polyethylene vapour barrier on the interior wall surface side.
9. This system shall comprise of the following listed components:

   (a) Weathershield Insulation;

   (b) Enviro-Shield, UV treated 6 mil vapour barrier and

   (c) Enviro-Shield self adhesive polyethylene patches to be installed where the vapour barrier is pierced, cut or torn.

10. (a) Installers shall be trained and certified by the Applicant and they shall carry at all times a photo identification card and log book for each installation.

    (b) A "Wall Insulation - House Card" for each installation, shall be securely fastened to a roof structural member beside the attic hatch or attic entrance or the wood panel of the main electrical service.

11. This system shall have a valid current listing and reports such as, but not limited to the following:

    (a) Canadian General Standards Board (CGSB) No. 51.60-90 and certified license agreement No. 83007 and 83055;

    (b) Canadian Construction Materials Centre (CCMC) No. 08251-L and 12418-L;

(c) Each installation shall conform to the manufacturer's published materials and installation instructions as submitted to the BMEC, and

(d) This BMEC AUTHORIZATION is subject to the terms and conditions of the above listings and reports. Any conflict between this authorization or the above listings and reports, the most restrictive matter as determined by the Chief Building Official shall apply.

12. This system shall be protected from but not limited to the following;

    Any and all heat producing apparatus or light fixtures, pot or recessed types, exhaust fans, gas vents or flues and chimneys.

DATED at Toronto this 22nd day in the month of October in the year 1992 for Authorization #92-05-161 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

AUTHORIZATION
BY THE

#92-4-160

BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act,
Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

M.P. Sprinkler Systems Engineering Inc.
139 Charlton Avenue
Thornhill, Ontario
L4J 6C6

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two-hour fire resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

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4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).

7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.

8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited model FR-1/Q-60, 12.7 mm (1/2 in.) orifice, 74°C (165°F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.

9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in.) minimum thickness. The maximum glazing shall be 2134 mm (7 ft. 0 in.) wide by 2844 mm (9 ft. 4 in.) high and minimum 6 mm (1/4 in.) thick.

10. 1. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hr. fire resistance rating provided,

(a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

(b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.

12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.

14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.

15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".

16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in.) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

WARNING

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

AUTHORIZATION
BY THE
BUILDING MATERIALS EVALUATION COMMISSION

#92-1-157

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act,
Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

Civelec Consultants Inc.
5033 Belanger East
Montreal, Quebec
H1T 1C7

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two-hour fire resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

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4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).

7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.

8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited model FR-1/Q-60, 12.7 mm (1/2 in.) orifice, 74°C (165°F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.

9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in.) minimum thickness. The maximum glazing shall be 2134 mm (7 ft. 0 in.) wide by 2844 mm (9 ft. 4 in.) high and minimum 6 mm (1/4 in.) thick.

10. 1. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non openable window openings to a maximum of 2 hr. fire resistance rating provided,

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(a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

(b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.

12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.

14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.

15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".

16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in.) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

WARNING

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

SHELF AND STORAGE RACK **B.M.E.C. #91-8-156**
22 October 1992

M & P Tool Products Inc.
43 Regan Road
Brampton, Ontario
L7A 1B3

ON THE SUBJECT OF:

A self-contained structural shelf and rack storage facility within a building, having one or more solid intermediate deck or walkway levels for personnel access.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter B.13, R.S.O. 1990, Ontario Regulation 413/90 as amended or reenacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

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7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.

8. (1)(a) Deck level shall be a continuous horizontal construction membrane through the entire shelf rack facility, and

(b) Walkway level shall be the horizontal construction membrane between the solid shelving installed on the same plane, and

(c) Level area means the greatest horizontal area of the shelf and rack storage facility.

(2)(a) Deck or walkway levels shall be constructed of solid closed surface steel planking or,

(b) Steel roof decking with minimum 16 mm (5/8 in) maximum 19 mm (3/4 in) thick tongue and groove solid wood or plywood.

(3) The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Ontario Building Code Part 4 requirements.

(4) Detailed drawings for each installation shall be stamped by a member of the Association of Professional Engineers of Ontario Certifying conformity with this authorization. These drawings shall also detail an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position. These drawings shall be submitted for a building permit in the usual way.

9. An approved wet pipe sprinkler system shall be designed and installed for the entire shelf and rack storage facility including the top level and shall be in conformance with the current N.F.P.A. 13-1983 and N.F.P.A. 231C-1987 as amended or the appropriate N.F.P.A. Standard for the most severe hazard that it is exposed to. Sprinklers are not required where only Class I commodities as defined in the following paragraph 10.(2) are stored.

10. (1)(a) The entire shelf and rack storage dimension shall be limited to Table 10.A. based on the type of commodity stored as defined in paragraph 10.(2), (3), (4) and (5). Excerpts of N.F.P.A. 231C-1987 as amended are outlined in the attached Appendix "A" and these shall apply to this authorization.

(b) A firewall as defined in the Ontario Building Code may divide the confining building into two or more separate buildings, wherein, one of the following classes may be assigned to each of the separate buildings.

(2) Class I commodities are non-combustible products, as defined in the current N.F.P.A. 231C-1987; or

(3) Class II, III and IV commodities are combustible products, as defined in the current N.F.P.A. 231C-1987; or

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(4) Class SS commodities are special hazard products not covered in paragraph 10.(2), (3) or (5);

(5) Aerosol products composed of greater than 55% non-water miscible flammable products including lubricants; paints; oil-based anti-perspirants, furniture polish, insecticides and automotive products, are to be stored only:

(a) On the ground floor of the racking system, and

(b) In a designed area separated by,

(i) a vertical 1 hr. fire separation, or

(ii) a vertical chain link fencing not lighter than 9 ga. steel wire made into a 50 mm (2 in) diamond mesh, located not less than 2.5 m (8 ft) from all other storage where the adjacent storage is more hazardous than Class IV commodity, or

(iii) a method acceptable to the Chief Fire Official, and

(c) In the designed area protected by an in-rack sprinkler system. The sprinkler demand shall be a minimum of 1.9 L/s (30 g.p.m. (U.S.)) discharge per head with 74°C (165°F) heads or less and shall be 2.5 m (8 ft) apart maximum. This design shall be further based on the operation of the hydraulically most remote;

(i) 8 sprinklers if one level, or

(ii) 6 sprinklers on each level if only two levels, or

(iii) 6 sprinklers on each of the top three levels if three or more levels.

(d) Single row racks shall require only the in-rack sprinklers, whereas, double row racks shall require sprinklers in longitudinal flue as well as on face sprinklers which shall be staggered on opposite sides of racks.

TABLE 10.A.
Forming Part of Paragraph 10

Shelf and Rack Storage Facility

Commodity Classes	Maximum Height(1)		Maximum Area(2)	
	m	ft	m²	ft²
Class I	6	20	unlimited	unlimited
	12	40	20,070	216,000
	18	60	13,380	144,000
Class II, III and IV	6	20	8,920	96,000
	12	40	4,460	48,000
	18	60	2,230	24,000
Class SS	6	20	3,340	36,000
	12	40	1,670	18,000
	18	60	1,110	12,000
Column 1	2	3	4	5

NOTES: (1) The maximum height shall be from the floor supporting the shelf and rack system to the topmost portion of the racking system.

(2) The maximum area is the sum total of all levels of the shelf and rack system as well as the floor.

11. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and requirements for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the main water supply for the sprinkler system and shall be maintained at all times. For Class I commodities this "NOTICE" shall be permanently mounted, at or near the main entrance to this shelf and rack storage facility.

12. (1) Exits shall be separated from the rack storage facilities with fire separations, having a fire-resistance rating conforming to the Ontario Building Code; and

(2) the exit stairs shafts shall conform to all requirements for exits as stated in the Ontario Building Code; and

(3) no fewer than 2 exits are required from each deck or walkway level, except where there are not more than two levels above the building floor, and the level area does not exceed 139 m² (1500 ft²), two means of egress shall be required without the requirements of fire separation for exit, and

(4) any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph 9 of this authorization.

13. The maximum travel distance to exits shall not exceed 46 m (150 ft) and to a fire extinguisher shall not exceed 23 m (75 ft).

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14. (1) Where a shelf and rack storage facility contains two or more deck or walkway levels and where each level is greater than 239 m² (2,500 ft²), a smoke detection system shall be installed on the underside of each deck level on which a walkway or aisle is located, and

    (2) the number of system smoke detectors installed shall be in accordance to CAN4-S524-M1986.

15. The clear aisle width shall not be less than 760 mm (30 in). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

16. This shelf and rack storage facility is not permitted in F1 occupancy as defined in the Ontario Building Code.

17. The shelf and rack storage facilities shall be used only for storage and not for manufacturing, production, wrapping or assembly.

18. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the Ontario Fire Code O. Reg. 67/87 as amended.

19. (1) In building areas containing shelf and rack storage facilities exceeding 4,645 m² (50,000 ft²) and except for storage of Class I commodities as defined in paragraph 10 of this document, manually operated smoke vents shall be installed in accordance with the current N.F.P.A. 204, Section 230, and

    (2) The smoke vent opening shall be not less than 1.2 m by 1.8 m (4 ft by 6 ft) and the openings shall be located not more than 23 m (75 ft) from an exterior wall and not more than 46 m (150 ft) from each other.

20. (1) A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage facility height is more than 3 levels including floor level or 14 m (45 ft) in height.

    (2) Where a standpipe and hose system is required, 63.5 mm (2-1/2 in) diameter hose connections shall be provided, except that 38.1 mm (1-1/2 in) hose connections are permitted in the shelf and rack storage facilities which:

        (a) neither exceed 6 levels including the floor level, and

        (b) do not exceed 3,716 m² (40,000 ft²) in the sum total of all levels of the shelf and rack storage facility.

APPENDIX "A"
Forming Part of Paragraph 10. of this Authorization

Commodity Classifications:

The following guide for commodity classification applies specifically to rack storage and is not related to any other method of classifications of materials.

Class I commodity is defined as essentially non-combustible product on wood pallets, or in ordinary corrugated cartons with or without single thickness dividers or in ordinary paper wrappings, all on wood pallets. Such products may have a negligible amount of plastic trim, such as knobs or handles.

Examples or Class I products are:

Metal Products. Metal desks with plastic tops and trim, electrical coils, electrical devices in their metal enclosures, pots and pans, electrical motors, dry cell batteries, metal parts, empty cans, stoves, washers, dryers and metal cabinets.

Glass Products. Glass bottles, empty or filled with non-combustible liquids, mirrors.

Foods. Foods in non-combustible containers; frozen foods; meat, fresh fruits and vegetables in non-plastic trays or containers; dairy products in nonwax-coated paper containers, beer or wine up to 20 percent alcohol, in metal, ceramic or glass containers.

Others. Oil-filled and other types of distribution transformers, cement in bags, electrical insulators, gypsum board, inert pigments, dry insecticides.

Class II commodity is defined as Class I products in slatted wooden crates, solid wood boxed, multiple thickness paperboard cartons, or equivalent combustible packaging material on wood pallets.

Examples of Class II products are: thinly coated fine wire such as radio coil wire on reels or in cartons; incandescent or fluorescent light bulbs; beer or wine up to 20 percent alcohol in wood containers; and Class I products, if any small cartons or small packages placed in ordinary corrugated cartons.

Class III commodity is defined as wood, paper, natural fiber cloth, or products thereof, on wood pallets. Products may contain a limited amount of plastics. Wood dressers with plastic drawer guides, handles, and trim are examples of a commodity with limited amount of plastic.

Examples of Class III products are:

Paper Products. Books, magazines, newspapers, stationery, plastic coated paper food containers, paper or cardboard games, tissue products, rolled paper on side or steel banded on end, and regenerated cellulosics (cellophane).

Leather Products. Shoes, jackets, gloves, and luggage.

Wood Products. Doors, windows, door and window frames, combustible fiberboard, wood cabinets, furniture and other wood products.

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Textiles. Natural fiber upholstered non-plastic furniture, wood or metal furniture with plastic padded and covered arm rests, mattresses without expanded plastic or rubber, absorbent cotton in cartons, natural fiber and viscose yarn thread, and products, and natural fiber clothing or textile products.

Others. Tobacco products in paperboard cartons, non-flammable liquids such as soaps, detergent and bleaches, and non-flammable pharmaceuticals in plastic containers; combustible foods or cereal products, and non-negative producing film packs in sealed metal foil wrappers in paperboard packages.

Class IV commodity is defined in Class I, II and/or III products contained an appreciable amount of plastics in a paperboard carton or Class I, II and/or III products with plastic packaging in paperboard cartons on wood pallets.

Examples of Class IV products are small appliances, typewriters and cameras with plastic parts, plastic backed tapes and synthetic fabrics or clothing. An example of packing material is a metal product in a foamed plastic cocoon in a corrugated carton.

Class IV commodity also includes:

Textiles. Synthetic thread and yarn except viscose, and non-viscose synthetic fabrics or clothing.

Others. Telephone, vinyl floor tile, wood or metal frame upholstered furniture or mattresses with plastic covering and/or padding, and plastic padded metal dashboards or metal bumpers.

DATED at Toronto this 22nd day in the month of October in the year 1992 for authorization #91-8-156 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

AUTHORIZATION #91-7-155
BY THE 22 October 1992
BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1990, Chapter B.13

AND IN THE MATTER OF the Applicant:

Von Duprin, Inc.
2720 Tobey Drive
Indianapolis, IN
46219

AND AGENT:

Ingersoll Rand Door Hardware Canada Inc.
1076 Lakeshore Road East
Mississauga, Ontario
L5E 1E4

ON THE SUBJECT OF:

CHEXIT all series of CX98 and CX99, these are "controlled exit panic hardware devices" whose operation may be inhibited for a pre-set delay period by a self contained microprocessor based control module while monitoring the use of the door. These are not conventional electromagnetic locking devices however, the use of limitations have some similarities and as a "controlled exit panic hardware device" they have a special electronic locking device with fail safe life safety features.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

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2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter B.13, R.S.O. 1990, Ontario Regulation 413/90 as amended or reenacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.

8. CHEXIT shall be as reported by Underwriters Laboratories of Canada, File CMS 148, Application No. 7431, 30 September 1991. CHEXIT is similar to panic devices currently listed by Underwriters Laboratories of Canada, and are identical to controlled exit panic devices previously listed by Underwriters Laboratories Inc.

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9. CHEXIT is permitted to be installed on any exit or access to exit door, other than a Group F, Division 1 occupancy or a hotel or exits and access to exits which have combined use of a hotel and any other occupancies where;

   (a) the building is equipped with a fire alarm system conforming to the Code Subsection 3.2.4., and

   (b) the locking device(s) are installed as an ancillary device to the fire alarm system and releases immediately;

      (i) upon activation of the fire alarm signal, or
      (ii) upon activation of a manually operated switch accessible only to authorized personnel, and
      (iii) controls for remote immediate release of door locking devices are located in an area readily available only to authorized personnel, and
      (iv) a legible sign permanently mounted on the door and having the words;

      "EMERGENCY EXIT UNLOCKED BY FIRE ALARM OR BY SECURITY PERSONNEL. PUSH CONTROL BAR UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 SECONDS", and this lettering shall be at least 25 mm (1 in.) high with a 5 mm (3/16 in.) stroke.

10. CHEXIT is permitted to be installed when also released by a card identifier subject to the time delay of not more than 15 seconds.

11. CHEXIT is also permitted to be installed on doors required for emergency access to floor areas (cross over floors) from exit stair shafts provided there is conformance to all paragraphs of this authorization, and

   (a) in addition there shall be mechanical active trim installed on the exit stair side of the door(s) and be further identified by a permanently mounted legible sign on the stairway side of the door(s) to indicate that the door(s) are openable from the stair side, and

   (b) it shall be possible for a person(s) entering such floor area to have access through unlocked doors within the floor area to at least one other exit.

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12. CHEXIT is permitted to have power supplies from regular and or emergency sources with or without any interruption of those power sources. However, should the power source(s) be removed for whatever reason; these locking devices shall be capable of operating as panic hardware devices with mechanical active trim as/and where required by the Code.

13. Where CHEXIT is used the evacuation of any or part of a building shall be as set out in a posted written policy and procedure in the fire safety plan and shall be compatible to the occupancy of the building.

AUTHORIZATION #91-4-152
BY THE 13 November 1991
BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act,
Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Produits Sparbeton Ltee
Case Postale 89 N.D.G.
Montreal, Quebec
H4A 3P4

ON THE SUBJECT OF:

Sparlock, a dry-stacking concrete block system with positive interlocking shear keys in both horizontal and vertical directions. Surface bonding and/or grouting may be used for walls requiring barriers from rain, air and moisture flow penetration and further stabilization and strength. Reinforcement may be added to grouted walls requiring higher or lateral load carrying capacities.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

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4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. (a) The applicant of this authorization shall be wholly responsible for the complete discharge of each paragraph of this authorization, also at any time upon a request by any person, show proof with a signed receipt, that a copy of this authorization has been received by the architect or professional engineer responsible for the masonry design and the Chief Building Official and those persons in charge at the site of construction.

   (b) Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, and the Ontario Regulation 413/90 as amended shall be met. A valid copy of this Authorization shall be attached to the application for building permit and a similar copy shall be posted and maintained on the site of construction with the building permit.

7. Construction under the provisions of Part 9 of the Ontario Building Code may be permitted subject to this authorization and in particular to Paragraphs 9.(a), (b), and (c) but not 9.(d) and (e) of this authorization.

8. Except for construction in the above paragraph 7 which is under Part 9 of the Ontario Building Code, an architect or professional engineer shall be responsible for the masonry design, details and general review during construction of the Sparlock wall system and all construction documents shall be duly sealed, for each use of the system.

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9. The construction, design, details and general review where required shall also be subject to:

   (a) the current evaluation report by CCMC 12268-R, issued 91-07-02, revised 91-07-05, and

   (b) "Design and Construction Guide for Sparlock Concrete Block Masonry Walls", dated January 1991, prepared by Drysdale Engineering and Associates Limited, and

   (c) "Builders Guide to Construction of Sparlock Concrete Block Walls", dated February 1991, prepared by Drysdale Engineering and Associates Limited, and

   (d) Inspection of masonry construction shall be carried out to ensure that construction is consistent with design details and specifications and in compliance with this Authorization, and

   (e) Such inspection shall be carried out by the architect or professional engineer responsible for the masonry wall design or by another person qualified in the inspection of masonry construction and who is responsible to the masonry wall design architect or professional engineer.

10. Site control procedures for protection of climate conditions and installations shall be carefully followed as per manufacturer's recommendations and good construction practice.

RESOLUTION

AMENDMENT TO AUTHORIZATION **B.M.E.C. # 91-03-151**
June 28, 1991

AS AMENDED **July 31, 1997**

WHEREAS pursuant to s.18(4)(b) of the Building Code Act, 1980, the Building Materials Evaluation Commission (the "Commission) issued Authorization # 91-03-151 on June 28, 1991 and amended same on July 31, 1997 (the "Authorization");

AND WHEREAS the Authorization provided that the applicant Hubbert Novus Engineering Inc. be authorized to use a window sprinkler assembly system subject to specific terms and conditions;

AND WHEREAS the holder of the Authorization has requested that the company name and address be changed effective April 12, 2000:

NOW THEREFORE the Commission resolves as follows:

1. Authorization # 91-03-151 be amended by deleting the Applicant name and address and substituting the following:

   "Novus Fire Protection Consulting Ltd.
   60 Baywood Road,
   Rexdale, Ontario
   M9V 3Z3 "

2. Authorization # 91-03-151 as amended hereby, shall continue in full force and effect.

Dated at Toronto this 26th day of October, 2000.

BUILDING MATERIALS EVALUATION COMMISSION

_____
per: Rashmi Nathwani, Chairman

AUTHORIZATION #91-2-150
BY THE 7 May 1991
BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act,
Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

CGC Interiors, Division of CGC Inc.
735 Fourth Line Road
Oakville, Ontario
L6L 5B7

ON THE SUBJECT OF:

DONN Woodloc and/or Woodcor WL-1000 and/or WC-1000 access floor panels; this is a system of modular steel encased particleboard core raised floor panels. To be used in any buildings, generally but not limited to computer rooms and offices where noncombustible construction is required.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

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4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 413/90 as amended or reenacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization and the subject matter shall conform to the manufacturer's published installation instructions.

8. These access floor panels shall be currently U.L.C. listed as class A with a flame spread (GWL) of 5 or less and a smoke development of 15 or less, when tested to CAN4-S102.2M and ASTM-E84, floor coverings if any is not included.

9. These access floor panels shall be constructed of 25.4 mm (1 inch) thick premium grade solid core particleboard only and completely encased in not more than 24 gauge sheet steel on all sides, ends and/or cut edges of any kind. These may be used as a combustible finished flooring element in buildings required by the Code to be noncombustible construction.

10. The basic access floor panel is with the encased steel as a finished top whereupon the top is typically covered with carpet tile in the final application or a plastic laminate where static electricity needs to be minimized. Finished floor coverings shall comply to the Code.

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11. These access floor panels may be installed without firestopping and at any height recommended by the manufacturer. However the support shall be on a noncombustible structural floor and grid system of metal understructure with stringers and adjustable pedestals designed to meet or exceed the structural capacity for floor loading as per Code requirements.

12. The space below these access panels shall be used for the sole purpose of services and shall not be used for storage space or any kind of occupancy.

13. Where any access floor panel is cut during field installation the exposed edge(s) shall be installed only when the particleboard core is completely encapsulated by;

    (a) the metal which forms the bottom of the access floor panel is bent up at a right angle, or

    (b) an overlapping "U" shaped channel of the same gauge as the access floor panel is fitted and nailed over the exposed edge(s).

AUTHORIZATION # 91-1-149
BY THE 24 April 1991
BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

Superack
Cresswell Roll Forming Inc.
2575 Le Corbusier
Laval, Quebec
H7S 2E8

ON THE SUBJECT OF:

A self contained structural shelf and rack storage facility within a building, having one or more solid intermediate deck or walkway levels for personnel access.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

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4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 413/90 as amended or reenacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.

8. (1)(a) Deck level shall be a continuous horizontal construction membrane through the entire shelf rack facility, and

   (b) Walkway level shall be the horizontal construction membrane between the solid shelving installed on the same plane, and

   (c) Level area means the greatest horizontal area of the shelf and rack storage facility.

   (2)(a) Deck or walkway levels shall be constructed of solid closed surface steel planking or,

   (b) Steel roof decking with minimum 16 mm (5/8 in.) maximum 19 mm (3/4 in.) thick tongue and groove solid wood or plywood.

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(3) The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Ontario Building Code Part 4 requirements.

(4) Detailed drawings for each installation shall be stamped by a member of the Association of Professional Engineers of Ontario Certifying conformity with this authorization. These drawings shall also detail an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position. These drawings shall be submitted for a building permit in the usual way.

9. An approved wet pipe sprinkler system shall be designed and installed for the entire shelf and rack storage facility including the top level and shall be in conformance with the current N.F.P.A. 13-1989 and N.F.P.A. 231C-1987 as amended or the appropriate N.F.P.A. Standard for the most severe hazard that it is exposed too. Sprinklers are not required where only Class I commodities as defined in the following paragraph 10.(2) are stored.

10. (1)(a) The entire shelf and rack storage dimension shall be limited to Table 10.A. based on the type of commodity stored as defined in paragraph 10.(2), (3), (4) and (5). Excerpts of N.F.P.A.231C-1987 as amended are outlined in the attached appendix -"A" and these shall apply to this authorization.

(b) A firewall as defined in the Ontario Building Code may divide the confining building into two or more separate buildings, wherein, one of the following classes may be assigned to each of the separate buildings.

(2) Class I commodities are non-combustible products, as defined in the current N.F.P.A. 231C-1987 as amended; or

(3) Class II, III and IV commodities are combustible products, as defined in the current N.F.P.A. 231C-1987 as amended; or

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(4) Class SS commodities are special hazard products not covered in paragraph 10.(2), (3) or (5);

(5) Aerosol products composed of greater than 55% non-water miscible flammable products including lubricants; paints; oil-based anti-perspirants, furniture polish, insecticides and automotive products, are to be stored only:

(a) On the ground floor of the racking system, and

(b) In a designed area separated by,

(i) a vertical 1 hr. fire separation, or

(ii) a vertical chain link fencing not lighter than 9 ga. steel wire made into a 50 mm (2 in.) diamond mesh, located not less than 2.5 m (8 ft.) from all other storage where the adjacent storage is more hazardous than Class IV commodity, or

(iii) a method acceptable to the chief Fire Official, and

(c) In the designed area protected by an in-rack sprinkler system. The sprinkler demand shall be a minimum of 1.9 L/s (30 g.p.m. (U.S.) discharge per head with 74° (165°F) heads or less and shall be 2.5 m (8 ft.) apart maximum. This design shall be further based on the operation of the hydraulically most remote;

(i) 8 sprinklers if one level, or

(ii) 6 sprinklers on each level if only two levels, or

(iii) 6 sprinklers on each of the top three levels if three or more levels.

(d) Single row racks shall require only the inrack sprinklers, whereas, double row racks shall require sprinklers in longitudinal flue as well as on face sprinklers which shall be staggered on opposite sides of racks.

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11. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and requirements for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the main water supply for the sprinkler system and shall be maintained at all times. For Class I commodities this "NOTICE" shall be permanently mounted, at or near the main entrance to this shelf and rack storage facility.

12. (1) Exits shall be separated from the rack storage facilities with fire separations, having a fire resistance rating conforming to the current Subsection of the Ontario Building Code; and

    (2) the exit stairs shafts shall conform to all requirements for exits as stated in the current Section of the Ontario Building Code; and

    (3) no fewer than 2 exits are required from each deck or walkway level, except where there are not more than two levels above the building floor, and the level area does not exceed 139 m^2 (1500 sq. ft.), two means of egress shall be required without the requirements of fire separation for exit, and

    (4) any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph 9 of this authorization.

13. The maximum travel distance to exits shall not exceed 46 m (150 ft.) and to a fire extinguisher shall not exceed 23 m (75 ft.).

14. (1) Where a shelf and rack storage facility contains two or more deck or walkway levels and where each level is greater than 239 m^2 (2,500 sq. ft.), a smoke detection system shall be installed on the underside of each deck level on which a walkway or aisle is located, and

    (2) the number of system smoke detectors installed shall be in accordance to CAN4-S524-M1986 as amended.

15. The clear aisle width shall not be less than 760 mm (30 inches). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.

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16. This shelf and rack storage facility is not permitted in F-1 occupancy as defined in the Ontario Building Code.

17. The shelf and rack storage facilities shall be used only for storage and not for manufacturing, production, wrapping or assembly.

18. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the current Subsection of the Ontario Fire Code.

19. (1) In building areas containing shelf and rack storage facilities exceeding 4,645 m^2 (50,000 sq. ft.) and except for storage of Class I commodities as defined in paragraph 10 of this document, manually operated smoke vents shall be installed in accordance with the current N.F.P.A. 204, and

(2) The smoke vent opening shall be not less than 1.2 m by 1.8 m (4 ft. by 6 ft.) and the openings shall be located not more than 23 m (75 ft.) from an exterior wall and not more than 46 m (150 ft.) from each other.

20. (1) A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage facility height is more than 3 levels including floor level or 14 m (45 ft.) in height.

(2) Where a standpipe and hose system is required, 63.5 mm (2 1/2 in.) diameter hose connections shall be provided, except that 38.1 mm (1 1/2 in.) hose connections are permitted in the shelf and rack storage facilities which:

(a) neither exceed 6 levels including the floor level, and

(b) do not exceed 3,716 m^2 (40,000 sq. ft.) in the sum total of all levels of the shelf and rack storage facility.

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APPENDIX - "A"
Forming Part of Paragraph 10. of this Authorization

Commodity Classifications:

The following guide for commodity classification applies specifically to rack storage and is not related to any other method of classifications of materials.

Class I commodity is defined as essentially non-combustible product on wood pallets, or in ordinary corrugated cartons with or without single thickness dividers or in ordinary paper wrappings, all on wood pallets. Such products may have a negligible amount of plastic trim, such as knobs or handles.

Examples or Class I products are:

Metal Products. Metal desks with plastic tops and trim, electrical coils, electrical devices in their metal enclosures, pots and pans, electrical motors, dry cell batteries, metal parts, empty cans, stoves, washers, dryers and metal cabinets.

Glass Products. Glass bottles, empty or filled with non-combustible liquids, mirrors.

Foods. Foods in non-combustible containers; frozen foods; meat, fresh fruits and vegetables in non-plastic trays or containers; dairy products in nonwax-coated paper containers, beer or wine up to 20 percent alcohol, in metal, ceramic or glass containers.

Others. Oil-filled and other types of distribution transformers, cement in bags, electrical insulators, gypsum board, inert pigments, dry insecticides.

Class II commodity is defined as Class I products in slatted wooden crates, solid wood boxed, multiple thickness paperboard cartons, or equivalent combustible packaging material on wood pallets.

Examples of Class II products are: thinly coated fine wire such as radio coil wire on reels or in cartons; incandescent or fluorescent light bulbs; beer or wine up to 20 percent alcohol in wood containers; and class I products, if any small cartons or small packages placed in ordinary corrugated cartons.

Class III commodity is defined as wood, paper, natural fiber cloth, or products thereof, on wood pallets. Products may contain a limited amount of plastics. Wood dressers with plastic drawer guides, handles, and trim are examples of a commodity with limited amount of plastic.

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APPENDIX - "A" Continued

Examples of Class III products are:

Paper Products. Books, magazines, newspapers, stationery, plastic coated paper food containers, paper or cardboard games, tissue products, rolled paper on side or steel banded on end, and regenerated cellulosics (cellophane).

Leather Products. Shoes, jackets, gloves, and luggage.

Wood Products. Doors, windows, door and window frames, combustible fiberboard, wood cabinets, furniture and other wood products.

Textiles. Natural fiber upholstered non-plastic furniture, wood or metal furniture with plastic padded and covered arm rests, mattresses without expanded plastic or rubber, absorbent cotton in cartons, natural fiber and viscose yarn thread, and products, and natural fiber clothing or textile products.

Others. Tobacco products in paperboard cartons, non-flammable liquids such as soaps, detergent and bleaches, and non-flammable pharmaceuticals in plastic containers; combustible foods or cereal products, and non-negative producing film packs in sealed metal foil wrappers in paperboard packages.

Class IV commodity is defined in Class I, II and/or III products contained an appreciable amount of plastics in a paperboard carton or Class I, II and/or III products with plastic packaging in paperboard cartons on wood pallets.

Examples of Class IV products are small appliances, typewriters and cameras with plastic parts, plastic backed tapes and synthetic fabrics or clothing. An example of packing material is a metal product in a foamed plastic cocoon in a corrugated carton.

Class IV commodity also includes:

Textiles. Synthetic thread and yarn except viscose, and non-viscose synthetic fabrics or clothing.

Others. Telephone, vinyl floor tile, wood or metal frame upholstered furniture or mattresses with plastic covering and/or padding, and plastic padded metal dashboards or metal bumpers.

DATED at Toronto this day in the month of
in the year for authorization #
on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

_____

AUTHORIZATION #90-20-148
BY THE 20 February 1991
BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act,
Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

Tate Access Floors Inc.
960 Kamato Road
Mississauga, Ontario
L4W 2R6

ON THE SUBJECT OF:

Series 600 access floor panels; this is a system of modular steel encased particleboard core raised floor panels. To be used in any buildings, generally but not limited to computer rooms and offices where noncombustible construction is required.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

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4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 413/90 as amended or reenacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization and the subject matter shall conform to the manufacturer's published installation instructions.

8. These access floor panels shall be currently U.L.C. listed as class A with a flame spread (GWL) of 5 or less and a smoke development of 15 or less, when tested to CAN4-S102.2M and ASTM-E84, floor coverings if any is not included.

9. These access floor panels shall be constructed of 25.4 mm (1 inch) thick premium grade solid core particleboard only and completely encased in not more than 24 gauge sheet steel on all sides, ends and/or cut edges of any kind. These may be used as a combustible finished flooring element in buildings required by the Code to be noncombustible construction.

10. The basic access floor panel is with the encased steel as a finished top whereupon the top is typically covered with carpet tile in the final application or a plastic laminate where static electricity needs to be minimized. Finished floor coverings shall comply to the Code.

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11. These access floor panels may be installed without firestopping and at any height recommended by the manufacturer. However the support shall be on a noncombustible structural floor and grid system of metal understructure with stringers and adjustable pedestals designed to meet or exceed the structural capacity for floor loading as per Code requirements.

12. The space below these access panels shall be used for the sole purpose of services and shall not be used for storage space or any kind of occupancy.

13. Where any access floor panel is cut during field installation the exposed edge(s) shall be installed only when the particleboard core is completely encapsulated by;

    (a) the metal which forms the bottom of the access floor panel is bent up at a right angle, or

    (b) an overlapping "U" shaped channel of the same gauge as the access floor panel is fitted and nailed over the exposed edge(s).

AUTHORIZATION #90-19-147
BY THE 20 February 1991
BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

Pabco, A Division of Fibreboard Corp.
1110 - 16 Road
Fruita, Colorado, U.S.A.
81521

ON THE SUBJECT OF:

Pabco grease duct enclosures for insulation and fireproofing system; for commercial/institutional kitchen exhaust metal duct systems, to protect adjacent combustibles from ignition in the event of a grease fire within the duct.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

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4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 413/90 as amended or reenacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.

8. Pabco Super Firetemp "L" and/or "M" is an asbestos free inorganic mineral fiber press molded xonotlite calcium silicate insulation board and is noncombustible when tested in accordance with Standard CAN 4-S114. Each board or bundle of boards shall be labelled as listed by Underwriters Laboratories of Canada (ULC).

9. The maximum dimensions of the kitchen exhaust metal duct shall be 1220 mm x 1220 mm (48 in. x 48 in.) and the Firetemp board shall be the minimum thickness of 57 mm (2¼ in.) as per the ULC label/listing.

10. Where the Firetemp enclosure is constructed/installed and passes through combustible or noncombustible floors, walls or partitions the clearance may be;

    (a) zero between the kitchen exhaust duct and the inner face of the Firetemp, and

    (b) zero between the outer face of the Firetemp and the combustible or noncombustible construction, and

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(c) installed in conformance with this authorization, the manufacturer's recommended installation instructions, and where applicable the NFPA 96-1987 or latest amended version.

11. Where a building assembly is required to have a fire resistance rating the following may be used for grease duct enclosures;

(a) Firetemp "L" 57 mm (2¼ in.) thick for 1 hour rated assemblies and/or

(b) Firetemp "M" 76 mm (3 in.) thick for 2 hour rated assemblies.

12. (a) Horizontal duct Firetemp enclosures shall be continuous and adequately supported from a conventional trapeze hanger arrangement at a maximum of 1.22 m (4 ft.) centre to centre apart and anchored to the building structure, and

(b) vertical duct Firetemp enclosures shall be continuous and adequately supported at the bottom base of such runs and at each story with metal collars attached to each side of the duct, and

(c) provided that the building structure, hangers, anchors and collars are capable of supporting the weight of such a load and compliance is made to the manufacturer's recommended installation instructions.

13. All joints between the Firetemp board(s) shall be cemented by buttering both mating surfaces with a minimum of 3.15 mm (1/8 in.) thick Pabco Super Calstick adhesive immediately before joining the boards attached one to the other. In addition where Firetemp boards meet at right angles; fastening shall be provided with minimum of 127 mm (5 in.) type S dry wall screws at a maximum of 203 mm (8 in.) on centres. The adhesive shall be kept from freezing until after it dries.

14. Firetemp shall be in accordance with manufacturer's recommended installation instructions for;

(a) protection from high humidy areas and freeze\thaw conditions, and

(b) duct cleanout access covers, and

(c) clearance between the Firetemp and the metal duct and at the end of all straight runs to allow for expansion of the metal duct within the enclosure, and

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(d) protection of the enclosures when used in an exposed area that may be subject to impact to avoid incidental damage to the enclosure system.

15. Applicators shall be instructed by Pabco and/or their agent on the manufacturer's recommended installation instructions and Pabco shall issue identification cards to only those applicators who have been instructed.

BMEC-90-18-146

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

ACCESS FLOOR PANELS

Date of Authorization: February 20, 1991

BMEC REFERENCE: BMEC-90-18-146

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

C-Tec, Inc.
3433 Lousma Drive, S.E.
Grand Rapids, Michigan
49548-2299 U.S.A.

ON THE SUBJECT OF:

TEC-COR, access floor panels; this is a system of modular steel encased particleboard core raised floor panels. To be used in any buildings, generally but not limited to computer rooms and offices where noncombustible construction is required.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 413/90 as amended or re-enacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization and the subject matter shall conform to the manufacturer's published installation instructions.
8. These access floor panels shall be currently U.L.C. listed as Class A with a flame-spread (GWL) of 5 or less and a smoke development of 15 or less, when tested to CAN4-S102.2M and ASTM-E84, floor coverings if any is not included.
9. These access floor panels shall be constructed of 25.4 mm (1 inch) thick premium grade solid core particleboard only and completely encased in not more than 24 gauge sheet steel on all sides, ends and/or cut edges of any kind. These may be used as a combustible finished flooring element in buildings required by the Code to be noncombustible construction.
10. The basic access floor panel is with the encased steel as a finished top whereupon the top is typically covered with carpet tile in the final application or a plastic laminate where static electricity needs to be minimized. Finished floor coverings shall comply to the Code.
11. These access floor panels may be installed without firestopping and at any height recommended by the manufacturer. However the support shall be on a noncombustible structural floor and grid system of metal understructure with stringers and adjustable pedestals designed to meet or exceed the structural capacity for floor loading as per Code requirements.
12. The space below these access panels shall be used for the sole purpose of services and shall not be used for storage space or any kind of occupancy.

Where any access floor panel is cut during field installation the exposed edge(s) shall be installed only when the particleboard core is completely encapsulated by;

(a) the metal which forms the bottom of the access floor panel is bent up at a right angle, or

(b) an overlapping "U" shaped channel of the same gauge as the access floor panel is fitted and nailed over the exposed edge(s).

DATED at Toronto this 20th day in the month of FEBRUARY in the year 1991 for Authorization #90-18-146 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

AUTHORIZATION #90-17-145
BY THE 20 February 1991
BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act,
Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

Camino Systems Inc.
15 Oakland Avenue
Weston, Ontario
M9M 2H9

ON THE SUBJECT OF:

NAP, models 1000/CR and 600/GC access floor panels; this is a system of modular steel encased particleboard core raised floor panels. To be used in any buildings, generally but not limited to computer rooms and offices where noncombustible construction is required.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

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4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 413/90 as amended or reenacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization and the subject matter shall conform to the manufacturer's published installation instructions.

8. These access floor panels shall be currently U.L.C. listed as class A with a flame spread (GWL) of 5 or less and a smoke development of 15 or less, when tested to CAN4-S102.2M and ASTM-E84, floor coverings if any is not included.

9. These access floor panels shall be constructed of 25.4 mm (1 inch) thick premium grade solid core particleboard only and completely encased in not more than 24 gauge sheet steel on all sides, ends and/or cut edges of any kind. These may be used as a combustible finished flooring element in buildings required by the Code to be noncombustible construction.

10. The basic access floor panel is with the encased steel as a finished top whereupon the top is typically covered with carpet tile in the final application or a plastic laminate where static electricity needs to be minimized. Finished floor coverings shall comply to the Code.

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11. These access floor panels may be installed without firestopping and at any height recommended by the manufacturer. However the support shall be on a noncombustible structural floor and grid system of metal understructure with stringers and adjustable pedestals designed to meet or exceed the structural capacity for floor loading as per Code requirements.

12. The space below these access panels shall be used for the sole purpose of services and shall not be used for storage space or any kind of occupancy.

13. Where any access floor panel is cut during field installation the exposed edge(s) shall be installed only when the particleboard core is completely encapsulated by;

    (a) the metal which forms the bottom of the access floor panel is bent up at a right angle, or

    (b) an overlapping "U" shaped channel of the same gauge as the access floor panel is fitted and nailed over the exposed edge(s).

BMEC-90-16-144

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

CONCRETE ROOF TYLE SYSTEM

Date of Authorization: February 20, 1991

AMENDED: October 22, 1992

BMEC REFERENCE: BMEC-90-16-144

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Vande Hey-Raleigh Manufacturing, Inc.
1565 Bohn Drive
PO BOX 263
Little Chute, Wisconsin
USA 54140

ON THE SUBJECT OF:

Concrete Roof Tile System, in styles namely: Riviera, Spanish, Cotswold, Shalke and Slate to be used on pitched roofs of building structures.

THE COMMISSION HEREBY AUTHORIZES to the Applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the Applicant or the Agent, at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Ontario Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 413/90 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
8. (1) All aspects of the Ontario Building Code, as applicable, shall be complied with for; new and existing roof support framing, rafters, trusses, sheathing, 43 lb. felt or Typar 30 underlayment, flashings, and to the recommendations of the manufacturer and his agent. Should there be a conflict the most rigid requirement shall be met.

   (2) For Part 9 buildings where Ontario Building Code design tables are used, the roof design load shall be increased to allow for the weight of the various types of roof tiles.

9. For existing roofs the structural adequacy of the roof framing and the supporting walls shall be certified by a Professional Engineer registered in the Province of Ontario.

DATED at Toronto this 22nd day in the month of October in the year 1992 for amended Authorization #90-16-144 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-90-15-143

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

SHELF AND STORAGE RACK

Date of Authorization: February 20, 1991

BMEC REFERENCE: BMEC-90-15-143

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Metalware Corporation
5735 Place Turcot
Montreal, Quebec
H4C 1V9

ON THE SUBJECT OF:

A self-contained structural shelf and rack storage facility within a building, having one or more solid intermediate deck or walkway levels for personnel access.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 413/90 as amended or re-enacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
8. (1)(a) Deck level shall be a continuous horizontal construction membrane through the entire shelf rack facility, and

   (b) Walkway level shall be the horizontal construction membrane between the solid shelving installed on the same plane, and

   (c) Level area means the greatest horizontal area of the shelf and rack storage facility.

   (2)(a) Deck or walkway levels shall be constructed of solid closed surface steel planking or,

   (b) Steel roof decking with minimum 16 mm (5/8 in) maximum 19 mm (3/4 in) thick tongue and groove solid wood or plywood.

   (3) The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Ontario Building Code Part 4 requirements.

   (4) Detailed drawings for each installation shall be stamped by a member of the Association of Professional Engineers of Ontario certifying conformity with this authorization. These drawings shall also detail an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position. These drawings shall be submitted for a building permit in the usual way.

9. An approved wet pipe sprinkler system shall be designed and installed for the entire shelf and rack storage facility including the top level and shall be in conformance with the current N.F.P.A. 13-1989 and N.F.P.A. 231C-1980 as amended or the appropriate N.F.P.A. Standard for the most severe hazard that it is exposed to. Sprinklers are not required where only Class I commodities as defined in the following paragraph 10.(2) are stored.
10. (1)(a) The entire shelf and rack storage dimension shall be limited to Table 10.A. based on the type of commodity stored as defined in paragraph 10.(2), (3), (4) and (5). Excerpts of N.F.P.A. 231C-1980 as amended are outlined in the attached Appendix "A" and these shall apply to this authorization.

    (b) A firewall as defined in the Ontario Building Code may divide the confining building into two or more separate buildings, wherein, one of the following classes may be assigned to each of the separate buildings.

    (2) Class I commodities are non-combustible products, as defined in the current N.F.P.A. 231C-1980 as amended; or

    (3) Class II, III and IV commodities are combustible products, as defined in the current N.F.P.A. 231C-1980 as amended; or

    (4) Class SS commodities are special hazard products not covered in paragraph 10.(2), (3) or (5);

    (5) Aerosol products composed of greater than 55% non-water miscible flammable products including lubricants; paints; oil-based anti-perspirants, furniture polish, insecticides and automotive products, are to be stored only:

    (a) On the ground floor of the racking system, and

    (b) In a designed area separated by,

    (i) a vertical 1 hr. fire separation, or

    (ii) a vertical chain link fencing not lighter than 9 ga. steel wire made into a 50 mm (2 in) diamond mesh, located not less than 2.5 m (8 ft) from all other storage where the adjacent storage is more hazardous than Class IV commodity, or

    (iii) a method acceptable to the chief Fire Official, and

    (c) In the designed area protected by an in-rack sprinkler system. The sprinkler demand shall be a minimum of 1.9 L/s (30 g.p.m. (U.S.)) discharge per head with 74C (165F) heads or less and shall be 2.5 m (8 ft) apart maximum. This design shall be further based on the operation of the hydraulically most remote;

    (i) 8 sprinklers if one level, or

(ii) 6 sprinklers on each level if only two levels, or

(iii) 6 sprinklers on each of the top three levels if three or more levels.

(d) Single row racks shall require only the in-rack sprinklers, whereas, double row racks shall require sprinklers in longitudinal flue as well as on face sprinklers which shall be staggered on opposite sides of racks.

TABLE 10.A.

Forming Part of Paragraph 10

Shelf and Rack Storage Facility				
Commodity Classes	**Maximum Height (1)**		**Maximum Area (2)**	
	m	ft	m^2	ft^2
Class I	6 12 18	20 40 60	unlimited 20,070 13,380	unlimited 216,000 144,000
Class II, III, AND IV	6 12 18	20 40 60	8,920 4,460 2,230	96,000 48,000 24,000
Class SS	6 12 18	20 40 60	3,340 1,670 1,110	36,000 18,000 12,000
COLUMN 1	2	3	4	5

NOTES:

(1) The maximum height shall be from the floor supporting the shelf and rack system to the topmost portion of the racking system.

(2) The maximum area is the sum total of all levels of the shelf and rack system as well as the floor.

11. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and requirements for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the main water supply for the sprinkler system and shall be maintained at all times. For Class I commodities this "NOTICE" shall be permanently mounted, at or near the main entrance to this shelf and rack storage facility.
12. (1) Exits shall be separated from the rack storage facilities with fire separations, having a fire-resistance rating conforming to the current Subsection of the Ontario Building Code; and

(2) the exit stairs shafts shall conform to all requirements for exits as stated in the current Section of the Ontario Building Code; and

(3) no fewer than 2 exits are required from each deck or walkway level, except where there are not more than two levels above the building floor, and the level area does not exceed 139 m (1500 ft), two means of egress shall be required without the requirements of fire separation for exit, and

(4) any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph 9 of this authorization.

13. The maximum travel distance to exits shall not exceed 46 m (150 ft) and to a fire extinguisher shall not exceed 23 m (75 ft).
14. (1) Where a shelf and rack storage facility contains two or more deck or walkway levels and where each level is greater than 239 m (2,500 ft), a smoke detection system shall be installed on the underside of each deck level on which a walkway or aisle is located, and

    (2) the number of system smoke detectors installed shall be in accordance to CAN4-S524-M1982 as amended.

15. The clear aisle width shall not be less than 760 mm (30 inches). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.
16. This shelf and rack storage facility is not permitted in F-1 occupancy as defined in the Ontario Building Code.
17. The shelf and rack storage facilities shall be used only for storage and not for manufacturing, production, wrapping or assembly.
18. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to the current Subsection of the Ontario Fire Code.
19. (1) In building areas containing shelf and rack storage facilities exceeding 4,645 m (50,000 ft) and except for storage of Class I commodities as defined in paragraph 10 of this document, manually operated smoke vents shall be installed in accordance with the current N.F.P.A. 204, and

    (2) The smoke vent opening shall be not less than 1.2 m by 1.8 m (4 ft by 6 ft) and the openings shall be located not more than 23 m (75 ft) from an exterior wall and not more than 46 m (150 ft) from each other.

20. (1) A standpipe and hose system shall be installed in accordance with the Ontario Building Code where the shelf and rack storage facility height is more than 3 levels including floor level or 14 m (45 ft) in height.

(2) Where a standpipe and hose system is required, 63.5 mm (2-1/2 in) diameter hose connections shall be provided, except that 38.1 mm (1-1/2 in) hose connections are permitted in the shelf and rack storage facilities which:

(a) neither exceed 6 levels including the floor level, and

(b) do not exceed 3,716 m (40,000 ft) in the sum total of all levels of the shelf and rack storage facility.

APPENDIX "A"
Forming Part of Paragraph 10 of this Authorization

Commodity Classifications:

The following guide for commodity classification applies specifically to rack storage and is not related to any other method of classifications of materials.

Class I commodity is defined as essentially non-combustible product on wood pallets, or in ordinary corrugated cartons with or without single thickness dividers or in ordinary paper wrappings, all on wood pallets. Such products may have a negligible amount of plastic trim, such as knobs or handles.

Examples or Class I products are:

Metal Products. Metal desks with plastic tops and trim, electrical coils, electrical devices in their metal enclosures, pots and pans, electrical motors, dry cell batteries, metal parts, empty cans, stoves, washers, dryers and metal cabinets.

Glass Products. Glass bottles, empty or filled with non-combustible liquids, mirrors.

Foods. Foods in non-combustible containers; frozen foods; meat, fresh fruits and vegetables in non-plastic trays or containers; dairy products in nonwax-coated paper containers, beer or wine up to 20 percent alcohol, in metal, ceramic or glass containers.

Others. Oil-filled and other types of distribution transformers, cement in bags, electrical insulators, gypsum board, inert pigments, dry insecticides.

Class II commodity is defined as Class I products in slatted wooden crates, solid wood boxed, multiple thickness paperboard cartons, or equivalent combustible packaging material on wood pallets.

Examples of Class II products are: thinly coated fine wire such as radio coil wire on reels or in cartons; incandescent or fluorescent light bulbs; beer or wine up to 20 percent alcohol in wood containers; and Class I products, if any small cartons or small packages placed in ordinary corrugated cartons.

Class III commodity is defined as wood, paper, natural fiber cloth, or products thereof, on wood pallets. Products may contain a limited amount of plastics. Wood dressers with plastic drawer guides, handles, and trim are examples of a commodity with limited amount of plastic.

Examples of Class III products are:

Paper Products. Books, magazines, newspapers, stationery, plastic coated paper food containers, paper or cardboard games, tissue products, rolled paper on side or steel banded on end, and regenerated cellulosics (cellophane).

Leather Products. Shoes, jackets, gloves, and luggage.

Wood Products. Doors, windows, door and window frames, combustible fiberboard, wood cabinets, furniture and other wood products.

Textiles. Natural fiber upholstered non-plastic furniture, wood or metal furniture with plastic padded and covered arm rests, mattresses without expanded plastic or rubber, absorbent cotton in cartons, natural fiber and viscose yarn thread, and products, and natural fiber clothing or textile products.

Others. Tobacco products in paperboard cartons, non-flammable liquids such as soaps, detergent and bleaches, and non-flammable pharmaceuticals in plastic containers; combustible foods or cereal products, and non-negative producing film packs in sealed metal foil wrappers in paperboard packages.

Class IV commodity is defined in Class I, II and/or III products contained an appreciable amount of plastics in a paperboard carton or Class I, II and/or III products with plastic packaging in paperboard cartons on wood pallets.

Examples of Class IV products are small appliances, typewriters and cameras with plastic parts, plastic backed tapes and synthetic fabrics or clothing. An example of packing material is a metal product in a foamed plastic cocoon in a corrugated carton.

Class IV commodity also includes:

Textiles. Synthetic thread and yarn except viscose, and non-viscose synthetic fabrics or clothing.

Others. Telephone, vinyl floor tile, wood or metal frame upholstered furniture or mattresses with plastic covering and/or padding, and plastic padded metal dashboards or metal bumpers.

DATED at Toronto this 20th day in the month of FEBRUARY in the year 1991 for Authorization #90-15-143 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

AUTHORIZATION #90-14-142
BY THE 20 February 1991
BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

A.S.P. Access Floors Inc.
1081 South Service Road
Oakville, Ontario
L6L 6K3

ON THE SUBJECT OF:

A.S.P. #250 access floor panels; this is a system of modular steel encased particleboard core raised floor panels. To be used in any buildings, generally but not limited to computer rooms and offices where noncombustible construction is required.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

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4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 413/90 as amended or reenacted shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization and the subject matter shall conform to the manufacturer's published installation instructions.

8. These access floor panels shall be currently U.L.C. listed as class A with a flame spread (GWL) of 5 or less and a smoke development of 15 or less, when tested to CAN4-S102.2M and ASTM-E84, floor coverings if any is not included.

9. These access floor panels shall be constructed of 25.4 mm (1 inch) thick premium grade solid core particleboard only and completely encased in not more than 24 gauge sheet steel on all sides, ends and/or cut edges of any kind. These may be used as a combustible finished flooring element in buildings required by the Code to be noncombustible construction.

10. The basic access floor panel is with the encased steel as a finished top whereupon the top is typically covered with carpet tile in the final application or a plastic laminate where static electricity needs to be minimized. Finished floor coverings shall comply to the Code.

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11. These access floor panels may be installed without firestopping and at any height recommended by the manufacturer. However the support shall be on a noncombustible structural floor and grid system of metal understructure with stringers and adjustable pedestals designed to meet or exceed the structural capacity for floor loading as per Code requirements.

12. The space below these access panels shall be used for the sole purpose of services and shall not be used for storage space or any kind of occupancy.

13. Where any access floor panel is cut during field installation the exposed edge(s) shall be installed only when the particleboard core is completely encapsulated by;

    (a) the metal which forms the bottom of the access floor panel is bent up at a right angle, or

    (b) an overlapping "U" shaped channel of the same gauge as the access floor panel is fitted and nailed over the exposed edge(s).

BMEC-90-13-141

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

WINDOW SPRINKLER ASSEMBLY

Date of Authorization: October 29, 1990

BMEC REFERENCE: BMEC-90-13-141

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

H.H. Angus & Associates Ltd.
1127 Leslie Street
Don Mills, Ontario
M3C 2J6

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two hour fire-resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).
7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.
8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited model FR-1/Q-60, 12.7 mm (1/2 in) orifice, 74C (165F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.
9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in) minimum thickness. The maximum glazing shall be 2134 mm (7 ft) wide by 2844 mm (9 ft 4 in) high and minimum 6 mm (1/4 in) thick.
10. (1) This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non-openable window openings to a maximum of 2 hr. fire-resistance rating provided,

    (a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

    (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.
12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.
14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.
15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".
16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

W A R N I N G

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

DATED at Toronto this 29th day in the month of OCTOBER in the year 1990 for Authorization #90-13-141 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-90-12-140

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

SHELF AND RACK STORAGE

Date of Authorization: September 19, 1990

AMENDED:

BMEC REFERENCE: BMEC-90-12-140

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Store-Rite Systems Inc.
6908 Invader Crescent
Mississauga, Ontario
L5T 2B5

ON THE SUBJECT OF:

A self-contained structural shelf and rack storage facility within a building, having one or more solid intermediate deck or walkway levels for personnel access.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. (1)(a) Deck level shall be a continuous horizontal construction membrane through the entire shelf rack facility, and

   (b) Walkway level shall be the horizontal construction membrane between the solid shelving installed on the same plane, and

   (c) Level area means the greatest horizontal area of the shelf and rack storage facility.

   (2)(a) Deck or walkway levels shall be constructed of solid closed surface steel planking or,

   (b) Steel roof decking with minimum 16 mm (5/8 in) maximum 19 mm (3/4 in) thick tongue and groove solid wood or plywood.

   (3) The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Ontario Building Code Part 4 requirements.

   (4) Detailed drawings for each installation shall be stamped by a member of the Association of Professional Engineers of Ontario certifying conformity with this authorization. These drawings shall also detail an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position. These drawings shall be submitted for a building permit in the usual way.

7. An approved wet pipe sprinkler system shall be designed and installed for the entire shelf and rack storage facility including the top level and shall be in conformance with N.F.P.A. 13-1983, and N.F.P.A. 231C-1980 or the appropriate N.F.P.A. Standard for the most severe hazard that it is exposed to. Sprinklers are not required where only Class I commodities as defined in the following paragraph 8.(2) are stored.

8. (1)(a) The entire shelf and rack storage dimension shall be limited to Table 8.A. based on the type of commodity stored as defined in paragraph 8.(2), (3), (4) and (5). Excerpts of N.F.P.A. 231C-1980 are outlined in the attached appendix and these shall apply to this authorization.

   (b) A firewall as defined in the Ontario Building Code Regulation 419/86, may divide the confining building into two or more separate buildings, wherein, one of the following classes may be assigned to each of the separate buildings.

   (2) Class I commodities are non-combustible products, as defined in N.F.P.A. 231C-1980; or

   (3) Class II, III and IV commodities are combustible products, as defined in N.F.P.A. 231C-1980; or

   (4) Class SS commodities are special hazard products not covered in paragraph 8.(2), (3) or (5);

   (5) Aerosol products composed of greater than 55% non-water miscible flammable products including lubricants; paints; oil-based anti-perspirants, furniture polish, insecticides and automotive products, are to be stored only:

   (a) On the ground floor of the racking system, and

   (b) In a designed area separated by,

   (i) a vertical 1 hr. fire separation, or

   (ii) a vertical chain link fencing not lighter than 9 ga. steel wire made into a 50 mm (2 in) diamond mesh, located not less than 2.5 m (8 ft) from all other storage where the adjacent storage is more hazardous than Class IV commodity, or

   (iii) a method acceptable to the chief Fire Official, and

   (c) In the designed area protected by an in-rack sprinkler system. The sprinkler demand shall be a minimum of 1.9 L/s (30 g.p.m. (U.S.)) discharge per head with 74C (165F) heads or less and shall be 2.5 m (8 ft) apart maximum. This design shall be further based on the operation of the hydraulically most remote;

   (i) 8 sprinklers if one level, or

   (ii) 6 sprinklers on each level if only two levels, or

   (iii) 6 sprinklers on each of the top three levels if three or more levels.

(d) Single row racks shall require only the in-rack sprinklers, whereas, double row racks shall require sprinklers in longitudinal flue as well as on face sprinklers which shall be staggered on opposite sides of racks.

TABLE 8.A.

Forming Part of Paragraph 8

Shelf and Rack Storage Facility				
Commodity Classes	**Maximum Height (1)**		**Maximum Area (2)**	
	m	ft	m^2	ft^2
Class I	6 12 18	20 40 60	unlimited 20,070 13,380	unlimited 216,000 144,000
Class II, III, AND IV	6 12 18	20 40 60	8,920 4,460 2,230	96,000 48,000 24,000
Class SS	6 12 18	20 40 60	3,340 1,670 1,110	36,000 18,000 12,000
COLUMN 1	2	3	4	5

NOTES:

(1) The maximum height shall be from the floor supporting the shelf and rack system to the topmost portion of the racking system.

(2) The maximum area is the sum total of all levels of the shelf and rack system as well as the floor.

9. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and requirements for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the main water supply for the sprinkler system and shall be maintained at all times. For Class I commodities this "NOTICE" shall be permanently mounted, at or near the main entrance to this shelf and rack storage facility.
10. (1) Exits shall be separated from the rack storage facilities with fire separations, having a fire-resistance rating conforming to Subsection 3.4.4. of the Ontario Building Code; and

    (2) the exit stairs shafts shall conform to all requirements for exits as stated in Section 3.4 of the Ontario Building Code; and

(3) no fewer than 2 exits are required from each deck or walkway level, except where there are not more than two levels above the building floor, and the level area does not exceed 139 m (1500 ft), two means of egress shall be required without the requirements of fire separation for exit, and

(4) any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph 7 of this authorization.

11. The maximum travel distance to exits shall not exceed 46 m (150 ft) and to a fire extinguisher shall not exceed 23 m (75 ft).
12. (1) Where a shelf and rack storage facility contains two or more deck or walkway levels and where each level is greater than 239 m (2,500 ft), a smoke detection system shall be installed on the underside of each deck level on which a walkway or aisle is located, and

    (2) the number of system smoke detectors installed shall be in accordance to CAN4-S524-M1982.

13. The clear aisle width shall not be less than 760 mm (30 inches). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.
14. This shelf and rack storage facility is not permitted in F-1 occupancy as defined in the Ontario Building Code.
15. The shelf and rack storage facilities shall be used only for storage and not for manufacturing, production, wrapping or assembly.
16. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to Subsection 2.4.3. of the Ontario Fire Code.
17. (1) In building areas containing shelf and rack storage facilities exceeding 4,645 m (50,000 ft) and except for storage of Class I commodities as defined in paragraph 8 of this document, manually operated smoke vents shall be installed in accordance with N.F.P.A. 204, Section 230, and

    (2) The smoke vent opening shall be not less than 1.2 m by 1.8 m (4 ft by 6 ft) and the openings shall be located not more than 23 m (75 ft) from an exterior wall and not more than 46 m (150 ft) from each other.

18. (1) A standpipe and hose system shall be installed in accordance with Article 3.2.5.4. of the Ontario Building Code where the shelf and rack storage facility height is more than 3 levels including floor level or 14 m (45 ft) in height.

    (2) Where a standpipe and hose system is required, 63.5 mm (2-1/2 in) diameter hose connections shall be provided, except that 38.1 mm (1-1/2 in) hose connections are permitted in the shelf and rack storage facilities which:

(a) neither exceed 6 levels including the floor level, and

(b) do not exceed 3,716 m (40,000 ft) in the sum total of all levels of the shelf and rack storage facility.

APPENDIX

Commodity Classifications:

The following guide for commodity classification applies specifically to rack storage and is not related to any other method of classifications of materials.

Class I commodity is defined as essentially non-combustible product on wood pallets, or in ordinary corrugated cartons with or without single thickness dividers or in ordinary paper wrappings, all on wood pallets. Such products may have a negligible amount of plastic trim, such as knobs or handles.

Examples or Class I products are:

Metal Products. Metal desks with plastic tops and trim, electrical coils, electrical devices in their metal enclosures, pots and pans, electrical motors, dry cell batteries, metal parts, empty cans, stoves, washers, dryers and metal cabinets.

Glass Products. Glass bottles, empty or filled with non-combustible liquids, mirrors.

Foods. Foods in non-combustible containers; frozen foods; meat, fresh fruits and vegetables in non-plastic trays or containers; dairy products in nonwax-coated paper containers, beer or wine up to 20 percent alcohol, in metal, ceramic or glass containers.

Others. Oil-filled and other types of distribution transformers, cement in bags, electrical insulators, gypsum board, inert pigments, dry insecticides.

Class II commodity is defined as Class I products in slatted wooden crates, solid wood boxed, multiple thickness paperboard cartons, or equivalent combustible packaging material on wood pallets.

Examples of Class II products are: thinly coated fine wire such as radio coil wire on reels or in cartons; incandescent or fluorescent light bulbs; beer or wine up to 20 percent alcohol in wood containers; and Class I products, if any small cartons or small packages placed in ordinary corrugated cartons.

Class III commodity is defined as wood, paper, natural fiber cloth, or products thereof, on wood pallets. Products may contain a limited amount of plastics. Wood dressers with plastic drawer guides, handles, and trim are examples of a commodity with limited amount of plastic.

Examples of Class III products are:

Paper Products. Books, magazines, newspapers, stationery, plastic coated paper food containers, paper or cardboard games, tissue products, rolled paper on side or steel banded on end, and regenerated cellulosics (cellophane).

Leather Products. Shoes, jackets, gloves, and luggage.

Wood Products. Doors, windows, door and window frames, combustible fiberboard, wood cabinets, furniture and other wood products.

Textiles. Natural fiber upholstered non-plastic furniture, wood or metal furniture with plastic padded and covered arm rests, mattresses without expanded plastic or rubber, absorbent cotton in cartons, natural fiber and viscose yarn thread, and products, and natural fiber clothing or textile products.

Others. Tobacco products in paperboard cartons, non-flammable liquids such as soaps, detergent and bleaches, and non-flammable pharmaceuticals in plastic containers; combustible foods or cereal products, and non-negative producing film packs in sealed metal foil wrappers in paperboard packages.

Class IV commodity is defined in Class I, II and/or III products contained an appreciable amount of plastics in a paperboard carton or Class I, II and/or III products with plastic packaging in paperboard cartons on wood pallets.

Examples of Class IV products are small appliances, typewriters and cameras with plastic parts, plastic backed tapes and synthetic fabrics or clothing. An example of packing material is a metal product in a foamed plastic cocoon in a corrugated carton.

Class IV commodity also includes:

Textiles. Synthetic thread and yarn except viscose, and non-viscose synthetic fabrics or clothing.

Others. Telephone, vinyl floor tile, wood or metal frame upholstered furniture or mattresses with plastic covering and/or padding, and plastic padded metal dashboards or metal bumpers.

DATED at Toronto this 19th day in the month of SEPTEMBER in the year 1990 for Authorization #90-12-140 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-90-11-139

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

SHELF AND RACK STORAGE

Date of Authorization: September 19, 1990

BMEC REFERENCE: BMEC-90-11-139

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

enRack Systems Inc.
606 Aberdeen Avenue
Hamilton, Ontario
L8P 2T1

ON THE SUBJECT OF:

A self-contained structural shelf and rack storage facility within a building, having one or more solid intermediate deck or walkway levels for personnel access.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. (1)(a) Deck level shall be a continuous horizontal construction membrane through the entire shelf rack facility, and

   (b) Walkway level shall be the horizontal construction membrane between the solid shelving installed on the same plane, and

   (c) Level area means the greatest horizontal area of the shelf and rack storage facility.

   (2)(a) Deck or walkway levels shall be constructed of solid closed surface steel planking or,

   (b) Steel roof decking with minimum 16 mm (5/8 in) maximum 19 mm (3/4 in) thick tongue and groove solid wood or plywood.

   (3) The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Ontario Building Code Part 4 requirements.

   (4) Detailed drawings for each installation shall be stamped by a member of the Association of Professional Engineers of Ontario Certifying conformity with this authorization. These drawings shall also detail an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position. These drawings shall be submitted for a building permit in the usual way.

7. An approved wet pipe sprinkler system shall be designed and installed for the entire shelf and rack storage facility including the top level and shall be in conformance with N.F.P.A. 13-1983, and N.F.P.A. 231C-1980 or the appropriate N.F.P.A. Standard for the most severe hazard that it is exposed to. Sprinklers are not required where only Class I commodities as defined in the following paragraph 8.(2) are stored.
8. (1)(a) The entire shelf and rack storage dimension shall be limited to Table 8.A. based on the type of commodity stored as defined in paragraph 8.(2), (3), (4) and

(5). Excerpts of N.F.P.A. 231C-1980 are outlined in the attached appendix and these shall apply to this authorization.

(b) A firewall as defined in the Ontario Building Code Regulation 419/86, may divide the confining building into two or more separate buildings, wherein, one of the following classes may be assigned to each of the separate buildings.

(2) Class I commodities are non-combustible products, as defined in N.F.P.A. 231C-1980; or

(3) Class II, III and IV commodities are combustible products, as defined in N.F.P.A. 231C-1980; or

(4) Class SS commodities are special hazard products not covered in paragraph 8.(2), (3) or (5);

(5) Aerosol products composed of greater than 55% non-water miscible flammable products including lubricants; paints; oil-based anti-perspirants, furniture polish, insecticides and automotive products, are to be stored only:

(a) On the ground floor of the racking system, and

(b) In a designed area separated by,

(i) a vertical 1 hr. fire separation, or

(ii) a vertical chain link fencing not lighter than 9 ga. steel wire made into a 50 mm (2 in) diamond mesh, located not less than 2.5 m (8 ft) from all other storage where the adjacent storage is more hazardous than Class IV commodity, or

(iii) a method acceptable to the chief Fire Official, and

(c) In the designed area protected by an in-rack sprinkler system. The sprinkler demand shall be a minimum of 1.9 L/s (30 g.p.m. (U.S.)) discharge per head with 74C (165F) heads or less and shall be 2.5 m (8 ft) apart maximum. This design shall be further based on the operation of the hydraulically most remote;

(i) 8 sprinklers if one level, or

(ii) 6 sprinklers on each level if only two levels, or

(iii) 6 sprinklers on each of the top three levels if three or more levels.

(d) Single row racks shall require only the in-rack sprinklers, whereas, double row racks shall require sprinklers in longitudinal flue as well as on face sprinklers which shall be staggered on opposite sides of racks.

TABLE 8.A.

Forming Part of Paragraph 8

Shelf and Rack Storage Facility				
Commodity Classes	**Maximum Height (1)**		**Maximum Area (2)**	
	m	ft	m^2	ft^2
Class I	6 12 18	20 40 60	unlimited 20,070 13,380	unlimited 216,000 144,000
Class II, III, AND IV	6 12 18	20 40 60	8,920 4,460 2,230	96,000 48,000 24,000
Class SS	6 12 18	20 40 60	3,340 1,670 1,110	36,000 18,000 12,000
COLUMN 1	2	3	4	5

NOTES:

(1) The maximum height shall be from the floor supporting the shelf and rack system to the topmost portion of the racking system.

(2) The maximum area is the sum total of all levels of the shelf and rack system as well as the floor.

9. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and requirements for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the main water supply for the sprinkler system and shall be maintained at all times. For Class I commodities this "NOTICE" shall be permanently mounted, at or near the main entrance to this shelf and rack storage facility.
10. (1) Exits shall be separated from the rack storage facilities with fire separations, having a fire resistance rating conforming to Subsection 3.4.4. of the Ontario Building Code; and

    (2) the exit stairs shafts shall conform to all requirements for exits as stated in Section 3.4 of the Ontario Building Code; and

    (3) no fewer than 2 exits are required from each deck or walkway level, except where there are not more than two levels above the building floor, and the level area does not exceed 139 m (1500 ft), two means of egress shall be required without the requirements of fire separation for exit, and

(4) any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph 7 of this authorization.

11. The maximum travel distance to exits shall not exceed 46 m (150 ft) and to a fire extinguisher shall not exceed 23 m (75 ft).
12. (1) Where a shelf and rack storage facility contains two or more deck or walkway levels and where each level is greater than 239 m (2,500 ft), a smoke detection system shall be installed on the underside of each deck level on which a walkway or aisle is located, and

    (2) the number of system smoke detectors installed shall be in accordance to CAN4-S524-M1982.

13. The clear aisle width shall not be less than 760 mm (30 inches). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.
14. This shelf and rack storage facility is not permitted in F-1 occupancy as defined in the Ontario Building Code.
15. The shelf and rack storage facilities shall be used only for storage and not for manufacturing, production, wrapping or assembly.
16. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to Subsection 2.4.3. of the Ontario Fire Code.
17. (1) In building areas containing shelf and rack storage facilities exceeding 4,645 m (50,000 ft) and except for storage of Class I commodities as defined in paragraph 8 of this document, manually operated smoke vents shall be installed in accordance with N.F.P.A. 204, Section 230, and

    (2) The smoke vent opening shall be not less than 1.2 m by 1.8 m (4 ft by 6 ft) and the openings shall be located not more than 23 m (75 ft) from an exterior wall and not more than 46 m (150 ft) from each other.

18. (1) A standpipe and hose system shall be installed in accordance with Article 3.2.5.4. of the Ontario Building Code where the shelf and rack storage facility height is more than 3 levels including floor level or 14 m (45 ft) in height.

    (2) Where a standpipe and hose system is required, 63.5 mm (2-1/2 in) diameter hose connections shall be provided, except that 38.1 mm (1-1/2 in) hose connections are permitted in the shelf and rack storage facilities which:

    (a) neither exceed 6 levels including the floor level, and

    (b) do not exceed 3,716 m (40,000 ft) in the sum total of all levels of the shelf and rack storage facility.

APPENDIX

Commodity Classifications:

The following guide for commodity classification applies specifically to rack storage and is not related to any other method of classifications of materials.

Class I commodity is defined as essentially non-combustible product on wood pallets, or in ordinary corrugated cartons with or without single thickness dividers or in ordinary paper wrappings, all on wood pallets. Such products may have a negligible amount of plastic trim, such as knobs or handles.

Examples or Class I products are:

Metal Products. Metal desks with plastic tops and trim, electrical coils, electrical devices in their metal enclosures, pots and pans, electrical motors, dry cell batteries, metal parts, empty cans, stoves, washers, dryers and metal cabinets.

Glass Products. Glass bottles, empty or filled with non-combustible liquids, mirrors.

Foods. Foods in non-combustible containers; frozen foods; meat, fresh fruits and vegetables in non-plastic trays or containers; dairy products in nonwax-coated paper containers, beer or wine up to 20 percent alcohol, in metal, ceramic or glass containers.

Others. Oil-filled and other types of distribution transformers, cement in bags, electrical insulators, gypsum board, inert pigments, dry insecticides.

Class II commodity is defined as Class I products in slatted wooden crates, solid wood boxed, multiple thickness paperboard cartons, or equivalent combustible packaging material on wood pallets.

Examples of Class II products are: thinly coated fine wire such as radio coil wire on reels or in cartons; incandescent or fluorescent light bulbs; beer or wine up to 20 percent alcohol in wood containers; and Class I products, if any small cartons or small packages placed in ordinary corrugated cartons.

Class III commodity is defined as wood, paper, natural fiber cloth, or products thereof, on wood pallets. Products may contain a limited amount of plastics. Wood dressers with plastic drawer guides, handles, and trim are examples of a commodity with limited amount of plastic.

Examples of Class III products are:

Paper Products. Books, magazines, newspapers, stationery, plastic coated paper food containers, paper or cardboard games, tissue products, rolled paper on side or steel banded on end, and regenerated cellulosics (cellophane).

Leather Products. Shoes, jackets, gloves, and luggage.

Wood Products. Doors, windows, door and window frames, combustible fiberboard, wood cabinets, furniture and other wood products.

Textiles. Natural fiber upholstered non-plastic furniture, wood or metal furniture with plastic padded and covered arm rests, mattresses without expanded plastic or rubber, absorbent cotton in cartons, natural fiber and viscose yarn thread, and products, and natural fiber clothing or textile products.

Others. Tobacco products in paperboard cartons, non-flammable liquids such as soaps, detergent and bleaches, and non-flammable pharmaceuticals in plastic containers; combustible foods or cereal products, and non-negative producing film packs in sealed metal foil wrappers in paperboard packages.

Class IV commodity is defined in Class I, II and/or III products contained an appreciable amount of plastics in a paperboard carton or Class I, II and/or III products with plastic packaging in paperboard cartons on wood pallets.

Examples of Class IV products are small appliances, typewriters and cameras with plastic parts, plastic backed tapes and synthetic fabrics or clothing. An example of packing material is a metal product in a foamed plastic cocoon in a corrugated carton.

Class IV commodity also includes:

Textiles. Synthetic thread and yarn except viscose, and non-viscose synthetic fabrics or clothing.

Others. Telephone, vinyl floor tile, wood or metal frame upholstered furniture or mattresses with plastic covering and/or padding, and plastic padded metal dashboards or metal bumpers.

DATED at Toronto this 19th day in the month of SEPTEMBER in the year 1990 for Authorization #90-11-139 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-90-10-138

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

RADIANT HEATING PANELS

Date of Authorization: September 19, 1990

BMEC REFERENCE: BMEC-90-10-138

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Flexwatt Corporation
2380 Cranberry Highway
West Wareham, MA
02576 U.S.A.

AND AGENT:

Thermofilm Corporation
8241 Keele Street, Unit #7
Concord, Ontario
L4K 1Z5

ON THE SUBJECT OF:

FLEXWATT, a supplemental radiant heat warming system, these ceiling or floor radiant heating panels are comprised of conductive ink, imbedded between thin flexible mylar sheets and stored on a roll. These panels are installed within the ceiling structure above the finished ceiling, exact location depends on whether the end use is to radiate from the ceiling or to radiate to the floor above.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may be written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement or any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 419/86 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
8. The installation of this system shall conform to Flexwatt "Radiant Heating System Installation Manual C2.30" or latest version. This system shall not be used as the primary source of heating, this system is a supplementary warming system only.
9. Except for plenum spaces in noncombustible buildings, this system may be used in noncombustible or combustible construction as minor elements of such buildings.
10. Strict conformance shall be maintained to the "Warning and Cautions" section of "Flexwatt Installation Manual" in respect to thermal insulations, ceiling coverings and the warning label which shall be firmly attached to the main electrical panel box.
11. Each Flexwatt panel shall contain labels and be listed by Underwriters' Laboratories and Canadian Standards Association for either radiant ceiling heating or floorwarming panels.
12. This system shall only be installed by qualified applicators who shall carry an identification card with a statement by Flexwatt Corporation or Thermofilm Corporation that the installer has been trained and is qualified in the installation of this system.

DATED at Toronto this 19th day in the month of SEPTEMBER in the year 1990 for Authorization #90-10-138 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-90-09-137

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

TABLETOP COOKING APPLIANCE

Date of Authorization: September 17, 1990

BMEC REFERENCE: BMEC-90-09-137

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Horace Chiu
Asian Dining Corner Inc.
4810 Sheppard Avenue East, Unit 215-8
Scarborough, Ontario
M1S 4N6

ON THE SUBJECT OF:

A recessed tabletop cooking gas-fired appliance with an integral fixed exhaust collection device. The patrons may cook their own food on the recessed cast iron grille plate that is mounted over the gas burner. A stainless steel air ring with openings in the perimeter above the drip tray is connected to the exhaust outlets and collection device.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may be written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement or any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 419/86 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
8. The building or that portion of the building where these appliances are located shall be;

   (a) sprinklered as per N.F.P.A. 13-1989 or the latest amended version and

   (b) portable fire extinguishers shall be as required by the Ontario Building Code latest amended version.

9. Except as authorized herein all applicable requirements of the N.F.P.A. 96-1987 or the latest amended version shall apply to this installation.
10. This appliance shall bear the label of;

    (a) Canadian Gas Association and

    (b) be acceptable by the Fuel Safety Branch before any installation of this appliance takes place.

11. The gas burner and valve train assembly shall be modified to comply to the standards of the Canadian Gas Association.
12. In lieu of a hood over this appliance there shall be;

    (a) a collection device box to collect the smoke and grease-laden vapours from the cooking surface. This collection device shall be integrally fixed to the exhaust outlet of the cooking appliance, and

(b) shall be located below the tabletop but within the appliance outer metal casing and be exempt of any dampers, and

(c) shall contain a listed U.L.C. filter, grease drain valve, access door, automatic fire extinguishing system that upon activation shall shut off the source of fuel to this cooking appliance, and

(d) all construction of the collection device box and exhaust system shall be to the standards of N.F.P.A. 96-1987 or the latest version.

13. The cast iron grille plate which is the cooking surface shall be a minimum of 31.7 mm (1-1/4 in) from the top of the grille plate to the tabletop. The grille plate is mounted in a stainless steel air ring casing which forms the exhaust outlet of the cooking appliance.
14. The "Procedures for the Use and Maintenance of Equipment" as copied from the N.F.P.A. 96-1987 or the latest version, shall be framed under glass and posted in on appropriate full view of the staff who shall be instructed by the applicant and directed to so use and maintain such equipment and appliances.

DATED at Toronto this 19th day in the month of SEPTEMBER in the year 1990 for Authorization #90-09-137 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-90-08-136

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

SHELF AND STORAGE RACK

Date of Authorization: August 17, 1990

BMEC REFERENCE: BMEC-90-08-136

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Pacific Westeel
3191 Mainway
Burlington, Ontario
L7M 1A6

ON THE SUBJECT OF:

A self-contained structural shelf and rack shortage facility within a building, having one or more solid intermediate deck or walkway levels for personnel access.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. (1)(a) Deck level shall be a continuous horizontal construction membrane through the entire shelf rack facility, and

   (b) Walkway level shall be the horizontal construction membrane between the solid shelving installed on the same plane, and

   (c) Level area means the greatest horizontal area of the shelf and rack storage facility.

   (2)(a) Deck or walkway levels shall be constructed of solid closed surface steel planking or,

   (b) Steel roof decking with minimum 16 mm (5/8 in) maximum 19 mm (3/4 in) thick tongue and groove solid wood or plywood.

   (3) The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Ontario Building Code Part 4 requirements.

   (4) Detailed drawings for each installation shall be stamped by a member of the Association of Professional Engineers of Ontario Certifying conformity with this authorization. These drawings shall also detail an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position. These drawings shall be submitted for a building permit in the usual way.

7. An approved wet pipe sprinkler system shall be designed and installed for the entire shelf and rack storage facility including the top level and shall be in conformance with N.F.P.A. 13-1983, and N.F.P.A. 231C-1980 or the appropriate N.F.P.A. Standard for the most severe hazard that it is exposed to. Sprinklers are not required where only Class I commodities as defined in the following paragraph 8.(2) are stored.
8. (1)(a) The entire shelf and rack storage dimension shall be limited to Table 8.A. based on the type of commodity stored as defined in paragraph 8.(2), (3), (4) and

(5). Excerpts of N.F.P.A. 231C-1980 are outlined in the attached appendix and these shall apply to this authorization.

(b) A firewall as defined in the Ontario Building Code Regulation 419/86, may divide the confining building into two or more separate buildings, wherein, one of the following classes may be assigned to each of the separate buildings.

(2) Class I commodities are non-combustible products, as defined in N.F.P.A. 231C-1980; or

(3) Class II, III and IV commodities are combustible products, as defined in N.F.P.A. 231C-1980; or

(4) Class SS commodities are special hazard products not covered in paragraph 8.(2), (3) or (5);

(5) Aerosol products composed of greater than 55% non-water miscible flammable products including lubricants; paints; oil-based anti-perspirants, furniture polish, insecticides and automotive products, are to be stored only:

(a) On the ground floor of the racking system, and

(b) In a designed area separated by,

(i) a vertical 1 hr. fire separation, or

(ii) a vertical chain link fencing not lighter than 9 ga. steel wire made into a 50 mm (2 in) diamond mesh, located not less than 2.5 m (8 ft) from all other storage where the adjacent storage is more hazardous than Class IV commodity, or

(iii) a method acceptable to the chief Fire Official, and

(c) In the designed area protected by an in-rack sprinkler system. The sprinkler demand shall be a minimum of 1.9 L/s (30 g.p.m. (U.S.)) discharge per head with 74C (165F) heads or less and shall be 2.5 m (8 ft) apart maximum. This design shall be further based on the operation of the hydraulically most remote;

(i) 8 sprinklers if one level, or

(ii) 6 sprinklers on each level if only two levels, or

(iii) 6 sprinklers on each of the top three levels if three or more levels.

(d) Single row racks shall require only the in-rack sprinklers, whereas, double row racks shall require sprinklers in longitudinal flue as well as on face sprinklers which shall be staggered on opposite sides of racks.

TABLE 8.A.

Forming Part of Paragraph 8

Shelf and Rack Storage Facility				
Commodity Classes	**Maximum Height (1)**		**Maximum Area (2)**	
	m	ft	m2	ft2
Class I	6 12 18	20 40 60	unlimited 20,070 13,380	unlimited 216,000 144,000
Class II, III, AND IV	6 12 18	20 40 60	8,920 4,460 2,230	96,000 48,000 24,000
Class SS	6 12 18	20 40 60	3,340 1,670 1,110	36,000 18,000 12,000
COLUMN 1	2	3	4	5

NOTES:

(1) The maximum height shall be from the floor supporting the shelf and rack system to the topmost portion of the racking system.

(2) The maximum area is the sum total of all levels of the shelf and rack system as well as the floor.

9. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and requirements for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the main water supply for the sprinkler system and shall be maintained at all times. For Class I commodities this "NOTICE" shall be permanently mounted, at or near the main entrance to this shelf and rack storage facility.
10. (1) Exits shall be separated from the rack storage facilities with fire separations, having a fire resistance rating conforming to Subsection 3.4.4. of the Ontario Building Code; and

    (2) the exit stairs shafts shall conform to all requirements for exits as stated in Section 3.4 of the Ontario Building Code; and

    (3) no fewer than 2 exits are required from each deck or walkway level, except where there are not more than two levels above the building floor, and the level area does not exceed 139 m (1500 ft), two means of egress shall be required without the requirements of fire separation for exit, and

(4) any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph 7 of this authorization.

11. The maximum travel distance to exits shall not exceed 46 m (150 ft) and to a fire extinguisher shall not exceed 23 m (75 ft).
12. (1) Where a shelf and rack storage facility contains two or more deck or walkway levels and where each level is greater than 239 m (2,500 ft), a smoke detection system shall be installed on the underside of each deck level on which a walkway or aisle is located, and

    (2) the number of system smoke detectors installed shall be in accordance to CAN4-S524-M1982.

13. The clear aisle width shall not be less than 760 mm (30 inches). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.
14. This shelf and rack storage facility is not permitted in F-1 occupancy as defined in the Ontario Building Code.
15. The shelf and rack storage facilities shall be used only for storage and not for manufacturing, production, wrapping or assembly.
16. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to Subsection 2.4.3. of the Ontario Fire Code.
17. (1) In building areas containing shelf and rack storage facilities exceeding 4,645 m (50,000 ft) and except for storage of Class I commodities as defined in paragraph 8 of this document, manually operated smoke vents shall be installed in accordance with N.F.P.A. 204, Section 230, and

    (2) The smoke vent opening shall be not less than 1.2 m by 1.8 m (4 ft by 6 ft) and the openings shall be located not more than 23 m (75 ft) from an exterior wall and not more than 46 m (150 ft) from each other.

18. (1) A standpipe and hose system shall be installed in accordance with Article 3.2.5.4. of the Ontario Building Code where the shelf and rack storage facility height is more than 3 levels including floor level or 14 m (45 ft) in height.

    (2) Where a standpipe and hose system is required, 63.5 mm (2-1/2 in) diameter hose connections shall be provided, except that 38.1 mm (1-1/2 in) hose connections are permitted in the shelf and rack storage facilities which:

    (a) neither exceed 6 levels including the floor level, and

    (b) do not exceed 3,716 m (40,000 ft) in the sum total of all levels of the shelf and rack storage facility.

APPENDIX

Commodity Classifications:

The following guide for commodity classification applies specifically to rack storage and is not related to any other method of classifications of materials.

Class I commodity is defined as essentially non-combustible product on wood pallets, or in ordinary corrugated cartons with or without single thickness dividers or in ordinary paper wrappings, all on wood pallets. Such products may have a negligible amount of plastic trim, such as knobs or handles.

Examples or Class I products are:

Metal Products. Metal desks with plastic tops and trim, electrical coils, electrical devices in their metal enclosures, pots and pans, electrical motors, dry cell batteries, metal parts, empty cans, stoves, washers, dryers and metal cabinets.

Glass Products. Glass bottles, empty or filled with non-combustible liquids, mirrors.

Foods. Foods in non-combustible containers; frozen foods; meat, fresh fruits and vegetables in non-plastic trays or containers; dairy products in nonwax-coated paper containers, beer or wine up to 20 percent alcohol, in metal, ceramic or glass containers.

Others. Oil-filled and other types of distribution transformers, cement in bags, electrical insulators, gypsum board, inert pigments, dry insecticides.

Class II commodity is defined as Class I products in slatted wooden crates, solid wood boxed, multiple thickness paperboard cartons, or equivalent combustible packaging material on wood pallets.

Examples of Class II products are: thinly coated fine wire such as radio coil wire on reels or in cartons; incandescent or fluorescent light bulbs; beer or wine up to 20 percent alcohol in wood containers; and Class I products, if any small cartons or small packages placed in ordinary corrugated cartons.

Class III commodity is defined as wood, paper, natural fiber cloth, or products thereof, on wood pallets. Products may contain a limited amount of plastics. Wood dressers with plastic drawer guides, handles, and trim are examples of a commodity with limited amount of plastic.

Examples of Class III products are:

Paper Products. Books, magazines, newspapers, stationery, plastic coated paper food containers, paper or cardboard games, tissue products, rolled paper on side or steel banded on end, and regenerated cellulosics (cellophane).

Leather Products. Shoes, jackets, gloves, and luggage.

Wood Products. Doors, windows, door and window frames, combustible fiberboard, wood cabinets, furniture and other wood products.

Textiles. Natural fiber upholstered non-plastic furniture, wood or metal furniture with plastic padded and covered arm rests, mattresses without expanded plastic or rubber, absorbent cotton in cartons, natural fiber and viscose yarn thread, and products, and natural fiber clothing or textile products.

Others. Tobacco products in paperboard cartons, non-flammable liquids such as soaps, detergent and bleaches, and non-flammable pharmaceuticals in plastic containers; combustible foods or cereal products, and non-negative producing film packs in sealed metal foil wrappers in paperboard packages.

Class IV commodity is defined in Class I, II and/or III products contained an appreciable amount of plastics in a paperboard carton or Class I, II and/or III products with plastic packaging in paperboard cartons on wood pallets.

Examples of Class IV products are small appliances, typewriters and cameras with plastic parts, plastic backed tapes and synthetic fabrics or clothing.

An example of packing material is a metal product in a foamed plastic cocoon in a corrugated carton.

Class IV commodity also includes:

Textiles. Synthetic thread and yarn except viscose, and non-viscose synthetic fabrics or clothing.

Others. Telephone, vinyl floor tile, wood or metal frame upholstered furniture or mattresses with plastic covering and/or padding, and plastic padded metal dashboards or metal bumpers.

DATED at Toronto this 17th day in the month of AUGUST in the year 1990 for Authorization #90-08-136 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

AMENDED
AUTHORIZATION #90-7-135
BY THE 13 November 1991
BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act,
Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

Tectum Inc.
105 S. Sixth Street
Newark, OH
43055

ON THE SUBJECT OF:

TECTUM I, II and/or III; these are structural roof deck panels, factory formed by a continuous process under heat and pressure; using a cementitious aspen wood fibre impregnated with magnesium oxysulphide hydraulic cement and inorganic binder. Tectum may be used alone or in combination with factory applied polyurethane and Manniglas matting, styrofoam SM or TG polystyrene foam adhesively bonded together for insulation and/or to waferboard sheathing for exterior nailing surface.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may be written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement or any product, material, technique or design which is described herein.

2/...

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 413/90 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.

7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.

8. The subject matter shall conform to the manufacturer's published installation instructions and shall be designed, engineered, inspected and verified for each project by the architect or engineer (authorized in Ontario). All related documents and drawings shall bear the professional seal and signature of the architect or engineer.

9. Engineering inspection of the subject construction shall be carried out; to ensure that construction is consistent with the design, by the person responsible for its design details and general review during construction; or by another person qualified in the inspection of this construction and who is responsible to the design architect or engineer and all construction documents shall be duly sealed.

3/...

10. Tectum is combustible and shall be fire separated where that portion of roof supports an occupancy.

The Code requirements for noncombustible construction and/or 45 minute fire resistance rating are permitted to be waived provided;

(a) Tectum is constructed as a roof assembly for a roof deck, thermal roof barrier or roof insulation, and

(b) Tectum is installed at a minimum height of 4.57 m (15 ft.) above the finished floor, and

(1) Tectum roofed area shall be separated by a firewall or be a separate building as per Code requirements, or

(2) Tectum roofed area shall be separated by 2 hr. fire separation of concrete or masonry walls with parapets extending 150 mm (5.91 in.) above the roof, and

(a) located on the first storey, and

(b) the roof area shall not exceed;
(i) 1600 m^2 (17,223 sq. ft.) when the building is facing one street or
(ii) 2000 m^2 (21,529 sq. ft.) when the building is facing two streets or
(iii) 2400 m^2 (25,834 sq. ft.) when the building is facing three streets, or

(3) Tectum roofed area shall be sprinklered in conformance with the Code Sentence 3.2.5.13.(1), and

(a) the sprinkler system is electrically supervised in conformance with the Code Sentence 3.2.4.16.(5), and

(b) the operation of the sprinkler system will cause a signal to be transmitted to the fire department in conformance with the Code Sentence 3.2.4.7.(3), and

(c) the building is not regulated by the provisions of the Code Subsection 3.2.6. (See Appendix A of the Code).

BMEC-90-06-134

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

WINDOW SPRINKLER ASSEMBLY

Date of Authorization: July 25, 1990

BMEC REFERENCE: BMEC-90-06-134

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Applied Fire Technology Inc.
133 Applewood Crescent
Unit 4
Concord, Ontario
L4K 4E4

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two hour fire-resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).
7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.
8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited model FR-1/Q-60, 12.7 mm (1/2 in) orifice, 74C (165F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.
9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in) minimum thickness. The maximum glazing shall be 2134 mm (7 ft) wide by 2844 mm (9 ft 4 in) high and minimum 6 mm (1/4 in) thick.
10. (1) This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non-openable window openings to a maximum of 2 hr. fire-resistance rating provided,

    (a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

    (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.
12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.
14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.
15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".
16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

W A R N I N G

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

DATED at Toronto this 25th day in the month of JULY in the year 1990 for Authorization #90-06-134 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-90-05-133

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

SILL PLATE ANCHORS

Date of Authorization: July 25, 1990

BMEC REFERENCE: BMEC-90-05-133

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

TECO Canada
48 Dalkeith Drive
Brantford, Ontario
N3P 1N1

ON THE SUBJECT OF:

TECO Sill-Ty Sill Plate Anchors, ST1 and ST2 are hot-dipped galvanized steel anchor straps to be used for securing wood sill plates to concrete slab/wall or concrete block foundations in lieu of anchor bolts.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS:

6. Installation of the anchor straps shall conform to the manufacturer's installation instructions and recommendations. An instruction sheet with illustrations for placement of anchors in concrete or block core fill and fastening of the sill plate shall be packed with each anchor or package of anchors. These shall be available at all times on the jobsite to completion of the construction.
7. The anchor straps shall be constructed of a minimum of 32 mm (1-1/4 in) wide by 375 mm (14-3/4 in) or 578 mm (22-3/4 in) in length.
8. The exposed two arms of the anchor strap shall be of sufficient length to overlap the topside of the sill plate or a minimum of 101 mm (4 in) vertically on both sides of the sill plate and/or the stud.
9. The anchor strap shall be installed at 914 mm (3 ft) on centre with one anchor located within 305 mm (12 in) of each end, or a minimum of two anchor straps per sill plate length when less than 914 mm (3 ft) in overall length. Location of the anchor strap to be approximately the centre of the area where the sill plate is located.
10. A minimum of four galvanized nails with minimum gauge as 63 mm (2-1/2 in) common nails and with a minimum length of 38 mm (1-1/2 in) shall be used in the holes provided in the arms of the anchor straps.
11. Each anchor strap on the exposed end shall be stamped with the manufacturer's "TECO" and length of the anchor strap either 375 mm (14-3/4 in) or 578 mm (22-3/4 in).
12. The building official with reasonable cause may take away samples of the galvanized steel anchor strap at any time to be tested as specified in the above paragraphs of this authorization. This testing shall be done by an independent test agency at the expense of the applicant.
13. Each application for a building permit using these anchor straps shall be accompanied with a copy of the manufacturer's published installation instructions and structural calculations stamped by a professional engineer or architect registered in Ontario and who is experienced in the field of structural analysis.

DATED at Toronto this 25th day in the month of JULY in the year 1990 for Authorization #90-05-133 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-90-04-132

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

CONCRETE ROOF TILE SYSTEM

Date of Authorization: July 25, 1990

BMEC REFERENCE: BMEC-90-04-132

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Monier Roof Tile
750 The City Drive
Suite 200
Orange, California
92668 U.S.A.

ON THE SUBJECT OF:

Concrete Roof Tile System, in styles namely: Mission "S", Villa, Classic "100" Shake and Slate to be used on pitched roofs of building structures.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 419/86 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
8. (1)All aspects of the Ontario Building Code, as applicable, shall be complied with for; new and existing roof support framing, rafters, trusses, sheathing, underlay and flashings, and to the recommendations of the manufacturer and his agent. Should there be a conflict the most rigid requirement shall be met.

   (2) For Part 9 buildings where Ontario Building Code design tables are used, the roof design load shall be increased to allow for the weight of the various types of roof tiles.

9. For existing roofs the structural adequacy of the roof framing and the supporting walls shall be certified by a Professional Engineer registered in the Province of Ontario.

DATED at Toronto this 25th day in the month of JULY in the year 1990 for Authorization #90-04-132 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-90-03-131

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

WINDOW SPRINKLER ASSEMBLY

Date of Authorization: May 10, 1990

BMEC REFERENCE: BMEC-90-03-131

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Locke MacKinnon Domingo Gibson & Associates Ltd.
70 University Avenue
Suite 1400
Toronto, Ontario
M5J 2M4

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two hour fire-resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).
7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.
8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited model FR-1/Q-60, 12.7 mm (1/2 in) orifice, 74C (165F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.
9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in) minimum thickness. The maximum glazing shall be 2134 mm (7 ft) wide by 2844 mm (9 ft 4 in) high and minimum 6 mm (1/4 in) thick.
10. (1) This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non-openable window openings to a maximum of 2 hr. fire-resistance rating provided,

    (a) in a exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

    (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.
12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.
14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.
15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".
16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

W A R N I N G

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

DATED at Toronto this 10th day in the month of MAY in the year 1990 for Authorization #90-03-131 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-90-02-130

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

SHELF AND RACK STORAGE

Date of Authorization: May 10, 1990

AMENDED: September 19, 1990

BMEC REFERENCE: BMEC-90-02-130

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Alltype Metal Stampings Limited
349 Arvin Avenue
Stoney Creek, Ontario
L8E 2M6

ON THE SUBJECT OF:

A self-contained structural shelf and rack storage facility within a building, having one or more solid intermediate deck or walkway levels for personnel access.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. (1) (a) Deck level shall be a continuous horizontal construction membrane through the entire shelf rack facility, and

   (b) Walkway level shall be the horizontal construction membrane between the solid shelving installed on the same plane, and

   (c) Level area means the greatest horizontal area of the shelf and rack storage facility.

   (2) (a) Deck or walkway levels shall be constructed of solid closed surface steel planking or,

   (b) Steel roof decking with minimum 16 mm (5/8 in) maximum 19 mm (3/4 in) thick tongue and groove solid wood or plywood.

7. The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections,and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Ontario Building Code Part 4 requirements.
8. Detailed drawings for each installation shall be stamped by a member of the Association of Professional Engineers of Ontario certifying conformity with this authorization. These drawings shall also detail an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position. These drawings shall be submitted for a building permit in the usual way.
9. An approved wet pipe sprinkler system shall be designed and installed for the entire shelf and rack storage facility including the top level and shall be in conformance with N.F.P.A. 13-1983, and N.F.P.A. 231C-1980 or the appropriate N.F.P.A. Standard for the most severe hazard that it is exposed to. Sprinklers are not required where only Class I commodities as defined in the following paragraph 8.(2) are stored.
10. (1) (a) The entire shelf and rack storage dimension shall be limited to Table 10.A. based on the type of commodity stored as defined in paragraph 10.(2), (3), (4) and

(5). Excerpts of N.F.P.A. 231C-1980 are outlined in the attached appendix and these shall apply to this authorization.

(b) A firewall as defined in the Ontario Building Code Regulation 419/86, may divide the confining building into two or more separate buildings, wherein, one of the following classes may be assigned to each of the separate buildings.

(2) Class I commodities are non-combustible products, as defined in N.F.P.A. 231C-1980; or

(3) Class II, III and IV commodities are combustible products, as defined in N.F.P.A. 231C-1980; or

(4) Class SS commodities are special hazard products not covered in paragraph 8.(2), (3) or (5);

(5) Aerosol products composed of greater than 55% non-water miscible flammable products including lubricants; paints; oil-based anti-perspirants, furniture polish, insecticides and automotive products, are to be stored only:

(a) On the ground floor of the racking system, and

(b) In a designed area separated by,

(i) a vertical 1 hr. fire separation, or

(ii) a vertical chain link fencing not lighter than 9 ga. steel wire made into a 50 mm (2 in) diamond mesh, located not less than 2.5 m (8 ft) from all other storage where the adjacent storage is more hazardous than Class IV commodity, or

(iii) a method acceptable to the chief Fire Official, and

(c) In the designed area protected by an in-rack sprinkler system. The sprinkler demand shall be a minimum of 1.9 L/s (30 g.p.m. (U.S.)) discharge per head with 74C (165F) heads or less and shall be 2.5 m (8 ft) apart maximum. This design shall be further based on the operation of the hydraulically most remote;

(i) 8 sprinklers if one level, or

(ii) 6 sprinklers on each level if only two levels, or

(iii) 6 sprinklers on each of the top three levels if three or more levels.

(d) Single row racks shall require only the in-rack sprinklers, whereas, double row racks shall require sprinklers in longitudinal flue as well as on face sprinklers which shall be staggered on opposite sides of racks.

TABLE 10.A.

Forming Part of Paragraph 10

Shelf and Rack Storage Facility				
Commodity Classes	**Maximum Height (1)**		**Maximum Area (2)**	
	m	ft	m^2	ft^2
Class I	6 12 18	20 40 60	unlimited 20,070 13,380	unlimited 216,000 144,000
Class II, III, AND IV	6 12 18	20 40 60	8,920 4,460 2,230	96,000 48,000 24,000
Class SS	6 12 18	20 40 60	3,340 1,670 1,110	36,000 18,000 12,000
COLUMN 1	2	3	4	5

NOTES: (1) The maximum height shall be from the floor supporting the shelf and rack system to the topmost portion of the racking system.

(2) The maximum area is the sum total of all levels of the shelf and rack system as well as the floor.

11. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and requirements for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the main water supply for the sprinkler system and shall be maintained at all times. For Class I commodities this "NOTICE" shall be permanently mounted, at or near the main entrance to this shelf and rack storage facility.
12. (1) Exits shall be separated from the rack storage facilities with fire separations, having a fire-resistance rating conforming to Subsection 3.4.4. of the Ontario Building Code; and

    (2) the exit stairs shafts shall conform to all requirements for exits as stated in Section 3.4 of the Ontario Building Code; and

    (3) no fewer than 2 exits are required from each deck or walkway level, except where there are not more than two levels above the building floor, and the level area does not exceed 139 m (1500 ft), two means of egress shall be required without the requirements of fire separation for exit, and

(4) any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph 7 of this authorization.

13. The maximum travel distance to exits shall not exceed 46 m (150 ft) and to a fire extinguisher shall not exceed 23 m (75 ft).
14. (1) Where a shelf and rack storage facility contains two or more deck or walkway levels and where each level is greater than 239 m (2,500 ft), a smoke detection system shall be installed on the underside of each deck level on which a walkway or aisle is located, and

    (2) the number of system smoke detectors installed shall be in accordance to CAN4-S524-M1982.

15. The clear aisle width shall not be less than 760 mm (30 inches). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.
16. This shelf and rack storage facility is not permitted in F-1 occupancy as defined in the Ontario Building Code.
17. The shelf and rack storage facilities shall be used only for storage and not for manufacturing, production, wrapping or assembly.
18. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to Subsection 2.4.3. of the Ontario Fire Code.
19. (1) In building areas containing shelf and rack storage facilities exceeding 4,645 m (50,000 ft) and except for storage of Class I commodities as defined in paragraph 8 of this document, manually operated smoke vents shall be installed in accordance with N.F.P.A. 204, Section 230, and

    (2) The smoke vent opening shall be not less than 1.2 m by 1.8 m (4 ft by 6 ft) and the openings shall be located not more than 23 m (75 ft) from an exterior wall and not more than 46 m (150 ft) from each other.

20. (1) A standpipe and hose system shall be installed in accordance with Article 3.2.5.4. of the Ontario Building Code where the shelf and rack storage facility height is more than 3 levels including floor level or 14 m (45 ft) in height.

    (2) Where a standpipe and hose system is required, 63.5 mm (2-1/2 in) diameter hose connections shall be provided, except that 38.1 mm (1-1/2 in) hose connections are permitted in the shelf and rack storage facilities which:

    (a) neither exceed 6 levels including the floor level, and

    (b) do not exceed 3,716 m (40,000 ft) in the sum total of all levels of the shelf and rack storage facility.

APPENDIX

Commodity Classifications:

The following guide for commodity classification applies specifically to rack storage and is not related to any other method of classifications of materials.

Class I commodity is defined as essentially non-combustible product on wood pallets, or in ordinary corrugated cartons with or without single thickness dividers or in ordinary paper wrappings, all on wood pallets. Such products may have a negligible amount of plastic trim, such as knobs or handles.

Examples or Class I products are:

Metal Products. Metal desks with plastic tops and trim, electrical coils, electrical devices in their metal enclosures, pots and pans, electrical motors, dry cell batteries, metal parts, empty cans, stoves, washers, dryers and metal cabinets.

Glass Products. Glass bottles, empty or filled with non-combustible liquids, mirrors.

Foods. Foods in non-combustible containers; frozen foods; meat, fresh fruits and vegetables in non-plastic trays or containers; dairy products in nonwax-coated paper containers, beer or wine up to 20 percent alcohol, in metal, ceramic or glass containers.

Others. Oil-filled and other types of distribution transformers, cement in bags, electrical insulators, gypsum board, inert pigments, dry insecticides.

Class II commodity is defined as Class I products in slatted wooden crates, solid wood boxed, multiple thickness paperboard cartons, or equivalent combustible packaging material on wood pallets.

Examples of Class II products are: thinly coated fine wire such as radio coil wire on reels or in cartons; incandescent or fluorescent light bulbs; beer or wine up to 20 percent alcohol in wood containers; and Class I products, if any small cartons or small packages placed in ordinary corrugated cartons.

Class III commodity is defined as wood, paper, natural fiber cloth, or products thereof, on wood pallets. Products may contain a limited amount of plastics. Wood dressers with plastic drawer guides, handles, and trim are examples of a commodity with limited amount of plastic.

Examples of Class III products are:

Paper Products. Books, magazines, newspapers, stationery, plastic coated paper food containers, paper or cardboard games, tissue products, rolled paper on side or steel banded on end, and regenerated cellulosics (cellophane).

Leather Products. Shoes, jackets, gloves, and luggage.

Wood Products. Doors, windows, door and window frames, combustible fiberboard, wood cabinets, furniture and other wood products.

Textiles. Natural fiber upholstered non-plastic furniture, wood or metal furniture with plastic padded and covered arm rests, mattresses without expanded plastic or rubber, absorbent cotton in cartons, natural fiber and viscose yarn thread, and products, and natural fiber clothing or textile products.

Others. Tobacco products in paperboard cartons, non-flammable liquids such as soaps, detergent and bleaches, and non-flammable pharmaceuticals in plastic containers; combustible foods or cereal products, and non-negative producing film packs in sealed metal foil wrappers in paperboard packages.

Class IV commodity is defined in Class I, II and/or III products contained an appreciable amount of plastics in a paperboard carton or Class I, II and/or III products with plastic packaging in paperboard cartons on wood pallets.

Examples of Class IV products are small appliances, typewriters and cameras with plastic parts, plastic backed tapes and synthetic fabrics or clothing. An example of packing material is a metal product in a foamed plastic cocoon in a corrugated carton.

Class IV commodity also includes:

Textiles. Synthetic thread and yarn except viscose, and non-viscose synthetic fabrics or clothing.

Others. Telephone, vinyl floor tile, wood or metal frame upholstered furniture or mattresses with plastic covering and/or padding, and plastic padded metal dashboards or metal bumpers.

DATED at Toronto this 19th day in the month of SEPTEMBER in the year 1990 for Authorization #90-02-130 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-89-11-128

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

CLAY ROOF TILE SYSTEM

Date of Authorization: March 21, 1990

BMEC REFERENCE: BMEC-89-11-128

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Sereni Sergio
Laterizi Sereni S.P.A.
Via Codeferro n.100
Martignana Di Po (Cremona)
Italy

AGENT:

A. Baska
European Clay Roofing Ltd.
405 The West Mall, Ste. #700
Toronto, Ontario
M8V 2Z6

ON THE SUBJECT OF:

Clay Roof Tile System, in styles namely: Portuguese, Marscilles and Dutch, to be used on pitched roofs of building structures.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant

or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 419/86 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
8. (1) All aspects of the Ontario Building Code, as applicable, shall be complied with for new and existing roof support framing, rafters, trusses, sheathing, underlay and flashings, and to the recommendations of the manufacturer and his agent. Should there be a conflict the most rigid requirement shall be met.

   (2) For Part 9 buildings where Ontario Building Code design tables are used, the roof design load shall be increased to allow for the weight of the various types of roof tiles.

9. For existing roofs the structural adequacy of the roof framing and the supporting walls shall be certified by a Professional Engineer registered in the Province of Ontario,

DATED at Toronto this 21st day in the month of MARCH in the year 1990 for Authorization #89-11-128 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-89-10-127

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

CHIMNEY LINER

Date of Authorization: January 31, 1990

BMEC REFERENCE: BMEC-89-10-127

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Refratco Inc.
139, Route 249 South
St. Elie D'Orford, Quebec
J0B 2S0

ON THE SUBJECT OF:

Refratco (Flameguard) Flue Liner, a chimney liner to line or reline residential masonry chimneys. This liner is made from Refratco No. 110 mix which is a proprietary refractory aggregate concrete and refractory mortar composite. Varying sizes and shapes are used for solid fuel fireplaces and heating appliances.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any

manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This AUTHORIZATION is limited to the Ontario Building Code buildings where the flue is for the use of solid fuel only and where the chimney is in a good state of repair. (Note: Gas and liquid fuel appliances are regulated separately by the Fuels Safety Branch and a separate application may be made to them, and a copy of any approval shall be sent to B.M.E.C. by Refratco.)
7. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 419/86 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
8. Refratco shall enclose a copy of a manufacturer's recommendations with each on site installation complete with company name, address and telephone number and this shall be left with the building occupant.
9. This authorization has been evaluated by the COMMISSION on the basis of the Warnock Hersey Professional Services test reports No. 50192-C7-301200, DATED 21 March 1989 and No. 195/031800, DATED 15 May 1986, copies of which may be requested from the Refratco Inc. by any party related to the installation.
10. The lined chimney shall be capped by the use of a flue tile extending not more than 100 mm (4 in) above a precast waterproof concrete cap which has a sloping top and overhangs the chimney by at least 50 mm (2 in) with drip edges cast into the concrete cap not less than 25 mm (1 in) from the face of the chimney, or a stainless steel cap with formed drip edges.
11. Installation and materials shall be in accordance to the published instructions of the manufacturer as submitted to the COMMISSION to date of this AUTHORIZATION.
12. Since at the present time there is no available "Standard", this authorization determined that the Refratco Inc. liner did withstand the requirements of the draft ULC S640-M1988, standard for Liners for Masonry Chimneys, however, when the appropriate "Standard" is published and should it be different to the draft, then Refratco shall have the liner retested to that "Standard" at which

time this authorization shall be required to be amended. A copy of the retest shall be submitted to the COMMISSION by Refratco Inc.

13. Refracto shall enter a follow-up program of inspection with an accredited testing agency with copies to the COMMISSION and this authorization is subject to the continuance of such a program. However, when the present draft of ULC S640-M1988 becomes a Standard, Refracto shall enter into a certification program with an accredited testing agency.

LIMITATION

14. Subject to the above paragraph 1, this authorization shall be further limited to buildings for which a permit is applied for prior to 31 December 1993. However, the applicant may by written registered letter to the COMMISSION request an amendment to this limitation at least three months prior to that date.

DATED at Toronto this 24th day in the month of JANUARY in the year 1990 for Authorization #89-10-127 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-89-09-126

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

WINDOW SPRINKLER ASSEMBLY

Date of Authorization: December 21, 1989

BMEC REFERENCE: BMEC-89-09-126

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Merber Corporation Consulting Engineers
155 Gordon Baker Road
Toronto, Ontario
M2H 3N7

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two hour fire-resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).
7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.
8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited model FR-1/Q-60, 12.7 mm (1/2 in) orifice, 74C (165F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.
9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in) minimum thickness. The maximum glazing shall be 2134 mm (7 ft) wide by 2844 mm (9 ft 4 in) high and minimum 6 mm (1/4 in) thick.
10. (1) This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non-openable window openings to a maximum of 2 hr. fire-resistance rating provided.

    (a) in an exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

    (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.
12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.
14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.
15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".
16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

W A R N I N G

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

DATED at Toronto this 21st day in the month of DECEMBER in the year 1989 for Authorization #89-09-126 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-89-07-124

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

LAMINATED VENEER LUMBER PANELS

Date of Authorization: September 27, 1989

BMEC REFERENCE: BMEC-89-07-124

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Gang-Nail Systems Inc.
7525 N.W., 37th Avenue
Miami, Florida
33159-2037
U.S.A.

AGENT:

Gang-Nail Canada Inc.
725 Denison Street East
Markham, Ontario
L3R 1B8

ON THE SUBJECT OF:

"GANG-LAM LVL, 3,100f - 2.0E, & 3,400f - 2.1E", these are laminated veneer lumber panels used for structural beams, studs, headers, truss chords or I-Beam flanges.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant

or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O 1980, Ontario Regulation 419/86 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of construction with the building permit.
7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
8. This AUTHORIZATION is subject to the terms and conditions of a current valid C.M.H.C. Building Materials Evaluation Report. Any conflict between the Ontario Regulations, C.M.H.C. Report or this AUTHORIZATION the most restricted matter shall apply.
9. GANG-LAM LVL shall not be used where prevailing environmental and weather conditions and moisture content exceeds 19 percent, they shall be used under dry service conditions and stored or protected to prevent excessive weathering.
10. GANG-LAM LVL shall be handled during shipping, storage, installation and application in a manner to prevent bowing and damage. Damaged or defective GANG-LAM LVL shall not be used or repaired.
11. GANG-LAM LVL shall not support construction loads or support workmen during erection until the material is properly installed and laterally restrained.
12. The subject matter shall conform to manufacturer's published installation instructions and shall be designed, engineered, inspected and verified for each project by the architect or engineer (authorized in Ontario). All related documents and drawings shall bear the professional seal and signature of the architect or engineer skilled in wood design. The drawings shall show the applicable design loads and deflections.

DATED at Toronto this 27th day in the month of SEPTEMBER in the year 1989 for Authorization #89-07-124 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-89-06-123

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

LAMINATED WOOD I-BEAMS

Date of Authorization: September 27, 1989

BMEC REFERENCE: BMEC-89-06-123

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Gang-Nail Systems Inc.
7525 N.W., 37th Avenue
Miami, Florida
33159-2037 U.S.A.

AGENT:

Gang-Nail Canada Inc.
725 Denison Street East
Markham, Ontario
L3R 1B8

ON THE SUBJECT OF:

"GNI-Beam", these are I-shaped wood beams used for structural floor, ceiling or roof joists, beams, lintels, headers, blocking or rafters.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O 1980, Ontario Regulation 419/86 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of construction with the building permit.
7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
8. This AUTHORIZATION is subject to the terms and conditions of a current valid C.M.H.C. Building Materials Evaluation Report. Any conflict between the Ontario Regulations, C.M.H.C. Report or this AUTHORIZATION the most restricted matter shall apply.
9. GNI-BEAMS shall not be used where prevailing environmental and weather conditions and moisture content exceeds 19 percent, they shall be used under dry service conditions and stored or protected to prevent excessive weathering.
10. GNI-BEAMS shall be handled during shipping, storage, installation and application in a manner to prevent bowing and damage. Damaged or defective GNI-BEAMS shall not be used or repaired.
11. GNI-BEAMS shall not support construction loads or support workmen during erection until the material is properly installed and laterally restrained.
12. The subject matter shall conform to manufacturer's published installation instructions and shall be designed, engineered, inspected and verified for each project by the architect or engineer (authorized in Ontario). All related documents and drawings shall bear the professional seal and signature of the architect or engineer skilled in wood design. The drawings shall show the applicable design loads and deflections.

DATED at Toronto this 27th day in the month of SEPTEMBER in the year 1989 for Authorization #89-06-123 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

AMENDED
AUTHORIZATION #89-5-122
BY THE 13 November 1991
BUILDING MATERIALS EVALUATION COMMISSION

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the Applicant:

Ark-Seal Inc.
2185 South Jason
Denver, Colorado, U.S.A.
80223

ON THE SUBJECT OF:

Blow-In-Blanket System (BIBS), for insulating conventionally framed wood exterior or interior wall or ceiling construction, manufactured on site as custom spray in batt using Mineral Fibre Insulation or Cellulose Insulation and combined with a binder/adhesive pneumatically pumped into only exposed cavities while held in place by nylon netting attached to the construction cavity.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

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4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 419/86 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of construction with the building permit.

7. This applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.

8. This AUTHORIZATION is subject to the terms and conditions of a current valid C.C.M.C. Building Materials Evaluation Report. Any conflict between the Ontario Regulations or C.C.M.C. Report the most restricted matter shall apply.

9. The only two insulating materials used in this BIB System shall where applicable conform to the following standards:

   (a) Canadian Standards Association (CSA) A101-M1983, "Thermal Insulation, Mineral Fibre for Buildings", and

   (b) Canadian General Standard Board (CGSB) 51-GP-60M, "Thermal Insulation, Cellulose Fibre, Loose Fill", and

10. Insulating materials in the above paragraph 9 shall be combined with a water based adhesive by trade name "Insulbinder", via the mixing chamber nozzle of the Ark-Seal blowing machine for injecting into the construction cavity behind the nylon netting.

/3...

11. The subject Blow-In-Blanket System may be used either in vertical, horizontal or anywhere when open cavities are held in place by nylon netting trade name "Insulnet" which is left intact for the duration of the insulation life span.

12. The installation shall not be permitted at temperatures below freezing 0°C (32°F) on the interior side of the building and shall not be used where prevailing environmental and weather conditions and moisture content exceeds 20 percent of the dry weight of the installed material.

13. The Blow-In-Blanket and netting shall only be installed in cavities that are free of frost and shall be exposed to atmosphere for a minimum of 24 hours after installation to permit drying, no vapour barrier, drywall or other covering shall be applied during this time.

14. The Blow-In-Blanket System shall conform to manufacterer's published "Technical Manual For Blow-In-Blanket System (BIBS)", revision date 90-06-15, pages 1 to 9 inclusive.

15. (a) A copy of the "Technical Manual ..." in paragraph 14 and this B.M.E.C. Authorization shall be given to each prospective purchaser of the BIB System, and

(b) copies of same shall be permanently posted on each jobsite along with a copy of an installation record on an Ark-Seal letterhead (similar as shown in CSA-A101-M1983) also showing indoor air temperature, time insulation completed, time interior wall covering started, and

(c) signed witnessed by the person in charge of construction as well as the BIBS applicator. These copies as posted shall be informative for all future owner(s) and other vested parties.

16. This BIB System shall only be installed by qualified applicators who shall carry an identification card with their photograph and a statement by Ark-Seal Inc. that the installer has been trained and is qualified in the installation of this Blow-In-Blanket System.

17. The building official with reasonable cause may take away samples of the BIB System at any time to be tested as specified in the above paragraphs of this authorization. This testing shall be done by an independent test agency at the expense of the applicant after being notified in writing by the building official.

BMEC-89-01-118

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

HORIZONTAL CAVITY SHAFT WALL SYSTEM

Date of Authorization: May 10, 1989

BMEC REFERENCE: BMEC-89-01-118

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Canadian Gypsum Company
777 Bay Street
Suite 1800
Toronto, Ontario
M5W 1K3

ON THE SUBJECT OF:

Canadian Gypsum Company (CGC) horizontal cavity shaft wall system, a gypsum sheetrock with steel studs, channels and runners forming a two hour fire-resistance assembly for metal duct enclosures or ceiling membrane.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 419/86 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
8. This system shall be constructed as non-loadbearing only and the supporting assembly shall be of at least the required fire-resistance rating.
9. The maximum span for this system shall be 2.13 m (7 ft) and the maximum of two hour fire-resistance rating from either side as determined on the basis of test results with ASTM E119.
10. This assembly consists of at least 25.4 mm (1 in) thick CGC gypsum shaft wall liner and three layers of 12.7 mm (1/2 in) sheetrock firecode "C" panels. The liner and panels shall be fitted and fastened with metal studs, channels, runners, screw, anchors, trim and sealant as per manufacturer's recommendations.
11. The manufacturers detail is contained in the publication by CGC for Cavity Shaft Walls Systems, Folder 09260-2E, copyright 1988, on page 10, titled 2 hr. rated assembly horizontal metal duct enclosure (fire tested both sides).
12. Any and all the above data, details and tests shall be made available to any and all parties responsible for the design, detail, construction, installation and inspection of each installation.

DATED at Toronto this 10th day in the month of MAY in the year 1989 for Authorization #89-01-118 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-88-10-117

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

WINDOW SPRINKLER ASSEMBLY

Date of Authorization: May 10, 1989

BMEC REFERENCE: BMEC-88-10-117

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

F. Verri & Associates Inc.
7370 Bramalea Road, Unit #20
Mississauga, Ontario
L5S 1N6

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two hour fire-resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).
7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.
8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited model FR-1/Q-60, 12.7 mm (1/2 in) orifice, 74C (165F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.
9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in) minimum thickness. The maximum glazing shall be 2134 mm (7 ft) wide by 2844 mm (9 ft 4 in) high and minimum 6 mm (1/4 in) thick.
10. (1)This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non-openable window openings to a maximum of 2 hr. fire-resistance rating provided,

    (a) in an exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

    (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.
12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.
14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.
15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".
16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

WARNING

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

DATED at Toronto this 10th day in the month of MAY in the year 1989 for Authorization #88-10-117 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-88-09-116

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

SHELF AND RACK STORAGE

Date of Authorization: May 10, 1989

AMENDED: September 19, 1990

BMEC REFERENCE: BMEC-88-09-116

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

E-Z-RECT Manufacturing Ltd.
268 Rutherford Road South
Brampton, Ontario
L6W 3N3

ON THE SUBJECT OF:

A self-contained structural shelf and rack storage facility within a building, having one or more solid intermediate deck or walkway levels for personnel access.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. (1)(a) Deck level shall be a continuous horizontal construction membrane through the entire shelf rack facility, and

   (b) Walkway level shall be the horizontal construction membrane between the solid shelving installed on the same plane, and

   (c) Level area means the greatest horizontal area of the shelf and rack storage facility.

   (2)(a) Deck or walkway levels shall be constructed of solid closed surface steel planking or,

   (b) Steel roof decking with minimum 16 mm (5/8 in) maximum 19 mm (3/4 in) thick tongue and groove solid wood or plywood.

   (3) The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Ontario Building Code Part 4 requirements.

   (4) Detailed drawings for each installation shall be stamped by a member of the Association of Professional Engineers of Ontario Certifying conformity with this authorization. These drawings shall also detail an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position. These drawings shall be submitted for a building permit in the usual way.

7. An approved wet pipe sprinkler system shall be designed and installed for the entire shelf and rack storage facility including the top level and shall be in conformance with N.F.P.A. 13-1983, and N.F.P.A. 231C-1980 or the appropriate N.F.P.A. Standard for the most severe hazard that it is exposed to. Sprinklers are not required where only Class I commodities as defined in the following paragraph 8.(2) are stored.

8. (1)(a) The entire shelf and rack storage dimension shall be limited to Table 8.A. based on the type of commodity stored as defined in paragraph 8.(2), (3), (4) and (5). Excerpts of N.F.P.A. 231C-1980 are outlined in the attached appendix and these shall apply to this authorization.

   (b) A firewall as defined in the Ontario Building Code Regulation 419/86, may divide the confining building into two or more separate buildings, wherein, one of the following classes may be assigned to each of the separate buildings.

   (2) Class I commodities are non-combustible products, as defined in N.F.P.A. 231C-1980; or

   (3) Class II, III and IV commodities are combustible products, as defined in N.F.P.A. 231C-1980; or

   (4) Class SS commodities are special hazard products not covered in paragraph 8.(2), (3) or (5);

   (5) Aerosol products composed of greater than 55% non-water miscible flammable products including lubricants; paints; oil-based anti-perspirants, furniture polish, insecticides and automotive products, are to be stored only:

   (a) On the ground floor of the racking system, and

   (b) In a designed area separated by,

   (i) a vertical 1 hr. fire separation, or

   (ii) a vertical chain link fencing not lighter than 9 ga. steel wire made into a 50 mm (2 in) diamond mesh, located not less than 2.5 m (8 ft) from all other storage where the adjacent storage is more hazardous than Class IV commodity, or

   (iii) a method acceptable to the chief Fire Official, and

   (c) In the designated area protected by an in-rack sprinkler system. The sprinkler demand shall be a minimum of 1.9 L/s (30 g.p.m. (U.S.)) discharge per head with 74C (165F) heads or less and shall be 2.5 m (8 ft) apart maximum. This design shall be further based on the operation of the hydraulically most remote;

   (i) 8 sprinklers if one level, or

   (ii) 6 sprinklers on each level if only two levels, or

   (iii) 6 sprinklers on each of the top three levels if three or more levels.

(d) Single row racks shall require only the in-rack sprinklers, whereas, double row racks shall require sprinklers in longitudinal flue as well as on face sprinklers which shall be staggered on opposite sides of racks.

TABLE 8.A.

Forming Part of Paragraph 8

Shelf and Rack Storage Facility				
Commodity Classes	**Maximum Height (1)**		**Maximum Area (2)**	
	m	ft	m^2	ft^2
Class I	6 12 18	20 40 60	unlimited 20,070 13,380	unlimited 216,000 144,000
Class II, III, AND IV	6 12 18	20 40 60	8,920 4,460 2,230	96,000 48,000 24,000
Class SS	6 12 18	20 40 60	3,340 1,670 1,110	36,000 18,000 12,000
COLUMN 1	2	3	4	5

NOTE:

(1) The maximum height shall be from the floor supporting the shelf and rack system to the topmost portion of the racking system.

(2) The maximum area is the sum total of all levels of the shelf and rack system as well as the floor.

9. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and requirements for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the main water supply for the sprinkler system and shall be maintained at all times. For Class I commodities this "NOTICE" shall be permanently mounted, at or near the main entrance to this shelf and rack storage facility.
10. (1) Exits shall be separated from the rack storage facilities with fire separations, having a fire resistance rating conforming to Subsection 3.4.4. of the Ontario Building Code; and

    (2) the exit stair shafts shall conform to all requirements for exits as stated in Section 3.4 of the Ontario Building Code; and

(3) no fewer than 2 exits are required from each deck or walkway level, except where there are not more than two levels above the building floor, and the level area does not exceed 139 m (1500 ft), two means of egress shall be required without the requirements of fire separation for exit, and

(4) any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph 7 of this authorization.

11. The maximum travel distance to exits shall not exceed 46 m (150 ft) and to a fire extinguisher shall not exceed 23 m (75 ft).
12. (1) Where a shelf and rack storage facility contains two or more deck or walkway levels and where each level is greater than 239 m (2,500 ft), a smoke detection system shall be installed on the underside of each deck level on which a walkway or aisle is located, and

    (2) the number of system smoke detectors installed shall be in accordance to CAN4-S524-M1982.

13. The clear aisle width shall not be less than 760 mm (30 inches). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.
14. This shelf and rack storage facility is not permitted in F-1 occupancy as defined in the Ontario Building Code.
15. The shelf and rack storage facilities shall be used only for storage and not for manufacturing, production, wrapping or assembly.
16. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming to Subsection 2.4.3. of the Ontario Fire Code.
17. (1) In building areas containing shelf and rack storage facilities exceeding 4,645 m (50,000 ft) and except for storage of Class I commodities as defined in paragraph 8 of this document, manually operated smoke vents shall be installed in accordance with N.F.P.A. 204, Section 230, and

    (2) The smoke vent opening shall be not less than 1.2 m by 1.8 m (4 ft by 6 ft) and the openings shall be located not more than 23 m (75 ft) from an exterior wall and not more than 46 m (150 ft) from each other.

18. (1) A standpipe and hose system shall be installed in accordance with Article 3.2.5.4. of the Ontario Building Code where the shelf and rack storage facility height is more than 3 levels including floor level or 14 m (45 ft) in height.

    (2) Where a standpipe and hose system is required, 63.5 mm (2-1/2 in) diameter hose connections shall be provided, except that 38.1 mm (1-1/2 in) hose connections are permitted in the shelf and rack storage facilities which:

(a) neither exceed 6 levels including the floor level, and

(b) do not exceed 3,716 m (40,000 ft) in the sum total of all levels of the shelf and rack storage facility.

APPENDIX

Commodity Classifications:

The following guide for commodity classification applies specifically to rack storage and is not related to any other method of classification of materials.

Class I commodity is defined as essentially non-combustible product on wood pallets, or in ordinary corrugated cartons with or without single thickness dividers or in ordinary paper wrappings, all on wood pallets. Such products may have a negligible amount of plastic trim, such as knobs or handles.

Examples or Class I products are:

Metal Products. Metal desks with plastic tops and trim, electrical coils, electrical devices in their metal enclosures, pots and pans, electrical motors, dry cell batteries, metal parts, empty cans, stoves, washers, dryers and metal cabinets.

Glass Products. Glass bottles, empty or filled with non-combustible liquids, mirrors.

Foods. Foods in non-combustible containers; frozen foods; meat, fresh fruits and vegetables in non-plastic trays or containers; dairy products in nonwax-coated paper containers, beer or wine up to 20 percent alcohol, in metal, ceramic or glass containers.

Others. Oil-filled and other types of distribution transformers, cement in bags, electrical insulators, gypsum board, inert pigments, dry insecticides.

Class II commodity is defined as Class I products in slatted wooden crates, solid wooden boxed, multiple thickness paperboard cartons, or equivalent combustible packaging material on wood pallets.

Examples of Class II products are: thinly coated fine wire such as radio coil wire on reels or in cartons; incandescent or fluorescent light bulbs; beer or wine up to 20 percent alcohol in wood containers; and Class I products, if any small cartons or small packages placed in ordinary corrugated cartons.

Class III commodity is defined as wood, paper, natural fiber cloth, or products thereof, on wood pallets. Products may contain a limited amount of plastics. Wood dressers with plastic drawer guides, handles, and trim are examples of a commodity with limited amount of plastic.

Examples of Class III products are:

Paper Products. Books, magazines, newspapers, stationery, plastic coated paper food containers, paper or cardboard games, tissue products, rolled paper on side or steel banded on end, and regenerated cellulosics (cellophane).

Leather Products. Shoes, jackets, gloves, and luggage.

Wood Products. Doors, windows, door and window frames, combustible fiberboard, wood cabinets, furniture and other wood products.

Textiles. Natural fiber upholstered non-plastic furniture, wood or metal furniture with plastic padded and covered arm rests, mattresses without expanded plastic or rubber, absorbent cotton in cartons, natural fiber and viscose yarn thread, and products, and natural fiber clothing or textile products.

Others. Tobacco products in paperboard cartons, non-flammable liquids such as soaps, detergent and bleaches, and non-flammable pharmaceuticals in plastic containers; combustible foods or cereal products, and non-negative producing film packs in sealed metal foil wrappers in paperboard packages.

Class IV commodity is defined in Class I, II and/or III products contained an appreciable amount of plastics in a paperboard carton or Class I, II and/or III products with plastic packaging in paperboard cartons on wood pallets.

Examples of Class IV products are small appliances, typewriters and cameras with plastic parts, plastic backed tapes and synthetic fabrics or clothing. An example of packing material is a metal product in a foamed plastic cocoon in a corrugated carton.

Class IV commodity also includes:

Textiles. Synthetic thread and yarn except viscose, and non-viscose synthetic fabrics or clothing.

Others. Telephone, vinyl floor tile, wood or metal frame upholstered furniture or mattresses with plastic covering and/or padding, and plastic padded metal dashboards or metal bumpers.

DATED at Toronto this 19th day in the month SEPTEMBER of in the year 1990 for Authorization #88-09-116 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-88-08-115

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KITCHEN EXHAUST AND FILTRATION SYSTEM

Date of Authorization: May 10, 1989

BMEC REFERENCE: BMEC-88-08-115

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Spring Air Systems Inc.
3155 Grandby Drive
Oakville, Ontario
L6H 3Y9

ON THE SUBJECT OF:

Kitchen exhaust and filtration system with or without heat reclaim unit for supply return air make-up to kitchen area only.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

- The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
- This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
- This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

- Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

- The kitchen exhaust duct beyond the fire damper located on the exhaust side of the filtered unit may be installed in accordance with the Ontario Building Code 6.2.4. when it passes directly to atmosphere and not through any fire separation.
- Installation and maintenance shall comply with the application dated 3 March 1989, and proposal as submitted by the applicant titled, "Specifications Sheets for KES, KRS, KHR and KHR-EN for Commercial Kitchen Exhaust", dated 28 March 1989.
- The tempered supply air duct system shall be installed in accordance with the Ontario Building Code Subsection 6.2.4. and discharge only to the kitchen area. There shall be a fire damper in this supply return air duct at the reclaim unit.
- Where a heat reclaim unit is used with gas-fired kitchen cooking equipment, the heat reclaim unit shall have separate air streams for exhaust to outside of the building and the make-up air system to only the kitchen area.
- This authorization does not include any gas- or liquid-fired make-up air units, any such units may be separately approved by the Fuels Safety Branch.
- Except as noted above the entire system shall conform to NFPA 96-1984 as amended to 1 January 1986.

DATED at Toronto this 10th day in the month of MAY in the year 1989 for Authorization #88-08-115 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-88-06-113

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

CLAY TILE EXTERIOR WALL SYSTEM

Date of Authorization: December 7, 1988

BMEC REFERENCE: BMEC-88-06-113

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

NSP Inc.
P.O. Box 1800
Oakville, Ontario
L6J 5C7

ON THE SUBJECT OF:

"Bardeaubric, Bardatuil and Bardeaudal" this is an exterior wall covering to be used as siding, this system comprises of clay tile with integral hanging bracket and treated wood or galvanized iron purlins fastened to the wall framing members or existing masonry walls.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 419/86 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
8. Each installation shall conform to the manufacturer's published installation instructions and shall be reviewed in detail, stamped, dated and signed for construction as specified by the manufacturer's listed trained personnel.
9. Attachment of this siding to the integral hanging bracket shall be as per manufacturer's published installation instructions using treated wood or galvanized iron purlins securely fastened to the wall framing members or existing masonry walls.
10. This siding system may be considered noncombustible when used with the galvanized iron purlins.
11. The supporting structures shall be adequate to support the expected loads as per the manufacturer's published installation instructions.

DATED at Toronto this 7th day in the month of DECEMBER in the year 1988 for Authorization #88-06-113 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-88-05-112

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

WINDOW SPRINKLER ASSEMBLY

Date of Authorization: December 7, 1988

BMEC REFERENCE: BMEC-88-05-112

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Leber/Rubes Inc.
34 Ross St.
Toronto, Ontario
M5T 1Z9

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two hour fire-resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).
7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.
8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited model FR-1/Q-60, 12.7 mm (1/2 in) orifice, 74C (165F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council of Canada.
9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in) minimum thickness. The maximum glazing shall be 2134 mm (7 ft) wide by 2844 mm (9 ft 4 in) high and minimum 6 mm (1/4 in) thick.
10. (1) This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non-openable window openings to a maximum of 2 hr. fire-resistance rating provided,

    (a) in an exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

    (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.
12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.
14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.
15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".
16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

W A R N I N G !

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

DATED at Toronto this 7th day in the month of DECEMBER in the year 1988 for Authorization #88-05-112 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-88-02-109

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

WINDOW SPRINKLER ASSEMBLY

Date of Authorization: December 7, 1988

BMEC REFERENCE: BMEC-88-02-109

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Randal Brown & Associates Limited
6 Lansing Square
Suite 105
Willowdale, Ontario
M9Z 1T5

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two hour fire-resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).
7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.
8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited model FR-1/Q-60, 12.7 mm (1/2 in) orifice, 74C (165F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council of Canada.
9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in) minimum thickness. The maximum glazing shall be 2134 mm (7 ft) wide by 2844 mm (9 ft 4 in) high and minimum 6 mm (1/4 in) thick.
10. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non-openable window openings to a maximum of 2 hr. fire-resistance rating provided,

    (a) in an exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

    (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.
12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.
14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.
15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".
16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

W A R N I N G

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE

PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

DATED at Toronto this 7th day in the month of DECEMBER in the year 1988 for Authorization #88-02-109 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-88-01-108

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

PARALLEL STRAND LUMBER

Date of Authorization: December 7, 1988

BMEC REFERENCE: BMEC-88-01-108

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

MacMillan Bloedel Ltd.
1272 Derwent Way
Annacis Island, B.C.
V3M 5R1

ON THE SUBJECT OF:

"Parallam" parallel strand lumber (PSL) is manufactured by laminating long stands of Douglas fir with an exterior-type adhesive (phenol formaldehyde). The strands are oriented to the length of the member and then compressed under heat and pressure to the desired lay-up pattern to form a continuous billet. The billet may then be cross-cut to any length.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, Ontario Regulation 419/86 as amended shall be met. A valid copy of this authorization shall be attached to the application for a building permit and a similar copy shall be posted and maintained on the site of the construction with the building permit.
7. The applicant shall be wholly responsible for the complete discharge of each paragraph of this authorization.
8. This AUTHORIZATION is subject to the terms and conditions of a current valid C.M.H.C. Building Materials Evaluation Report. Any conflict between the Ontario Regulations, C.M.H.C. Report or this AUTHORIZATION the most restricted matter shall apply.
9. The subject matter shall conform to the manufacturer's published installation instructions and shall be designed, engineered, inspected and verified for each project by the architect or engineer (authorized in Ontario). All related documents and drawings shall bear the professional seal and signature of the architect or engineer skilled in wood design.

DATED at Toronto this 7th day in the month of DECEMBER in the year 1988 for Authorization #88-01-108 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-87-09-106

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

FIBRE CORRUGATED ROOF SHEATHING

Date of Authorization: December 9, 1987

BMEC REFERENCE: BMEC-87-09-106

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Dansk Eternit-Fabrik A/S.,
Sohgaardsholmsvej 2
P.O. Box 763
DK - 9100 Aalborg
Denmark

AGENT:

C. Pacenza Roofing Imports
365 Barton Street
Stoney Creek, Ontario
L8E 2K4

ON THE SUBJECT OF:

Cembonit B7 Fibre Corrugated Sheet Roofing, this is a Portland cement matrix reinforced with organic fibers and having an additional cement bonded coloured top layer and an acrylic-faced final surface coating.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant

or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein, all applicable requirements of the Ontario Building Code Act and Ontario Regulation 419/86 shall be met. A copy of this Authorization shall be kept and maintained on the site of construction.
7. When this roofing system is used for noncombustible construction all components and support members shall be of noncombustible materials.
8. Conformance shall be made to a current CMHC Evaluation Report, however, in case of conflict with this authorization the more stringent matter shall prevail.
9. Subject to paragraphs herein this roofing system shall be in accordance with the manufacturer's published instructions and installation shall be by the manufacturer's trained qualified tradespersons.
10. In lieu of wood roof sheathing for this roofing system, wood purlins (battens) may be used.
11. For existing roofs, the structural adequacy of the roof framing and the supporting members shall be examined by a qualified manufacturer's representative and a written, signed and dated certificate shall be attached to the manufacturer's warranty with copies to the building official and owner(s).
12. Voids between existing roofing systems and this new roofing system shall not be filled with insulation.

DATED in Toronto this 9th day in the month of DECEMBER in the year 1987 for Authorization #87-09-106 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-87-08-105

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

EXTERIOR COMBUSTIBLE VINYL CLADDING

Date of Authorization: July 14, 1988

BMEC REFERENCE: BMEC-87-08-105

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Vinyl Council of Canada
1262 Don Mills Road
Don Mills, Ontario
M3B 2W7

AGENTS:
Listed manufacturers by the Applicant to date of this Authorization are:

BPCO Inc.
Daymond Limited
Duchesne & Fils Ltee.
Mastic Inc.

Mitten Vinyl Inc.
Sauder Industries Ltd.
Vycan Building Products
And see paragraph 9 (a)(b).

ON THE SUBJECT OF:

Vinyl/Gypsum System, this is the use of combustible vinyl cladding over sheathing paper and gypsum board sheathing applied to the exterior of a building as an integral cladding system in lieu of noncombustible cladding within limitation.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the

authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. The gypsum shall be as per Code requirements for exterior grade gypsum board sheathing with a minimum of 12.7 mm (1/2 in) thickness, fastening to the building structure shall be as per Code requirements.
7. Sheathing paper shall be as per Code requirements.
8. The vinyl cladding shall conform to the requirements of CGSB 41-GP-24Ma, fastening to the building structure shall be as per Code requirements.
9. (a) Each manufacturer to date of this authorization has tested their vinyl cladding for a Flame-Spread Rating of not more than 25 using the CAN-4-S102.2-M83 "Standard Method of Test for Surface Burning Characteristics of Flooring and Miscellaneous Materials and Assemblies" and

   (b) Manufacturers listed after the date of this authorization shall test in conformance to the above paragraph 9.(a).

10. Vinyl/Gypsum System is acceptable in Part 9 of the Building Code where noncombustible cladding is required:

    (a) in buildings containing dwelling units only where there is no dwelling unit above another dwelling unit, or

    (b) in all other buildings where the limiting distance is not less than 0.6 m (2 ft)

11. (a) Vinyl/Gypsum System shall be allowed as a combustible element in noncombustible construction as cladding where an occupancy classification is

such as to permit an exposing building face to have unprotected openings of greater than 25 per cent in Part 3 of the Building Code.

(b) The requirements of the Building Code with respect to limiting distance shall apply to all installations under the authorization.

12. (a) Unprotected openings, limiting distance and exposing building face shall be as defined by the Building Code.

    (b) Each installation shall conform to the manufacturer's installation instructions and shall be installed by the manufacturer's listed trained personnel.

DATED at Toronto this 14th day in the month of JULY in the year 1988 for Authorization #87-08-105 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-87-06-103

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KATECH ROOFING PANEL SYSTEM

Date of Authorization: September 10, 1987

BMEC REFERENCE: BMEC-87-06-103

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Steel Tile Co. (Div. 621158 Ontario Limited)
R.R. #1
Thornton, Ontario
L0L 2N0

ON THE SUBJECT OF:

Katech Roofing Panel System, rolled formed and pressed pre-painted, galvalume or galvanized sheet steel shaped in various profiles of tile, coated on the exposed side with poly vinyl.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising materials, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein, all applicable requirements of the Ontario Building Code Act and Ontario Regulation 419/86 shall be met. A copy of this Authorization shall be kept and maintained on the site of construction.
7. When this roofing system is used for noncombustible construction all components and support members shall be of noncombustible materials.
8. Conformance shall be made to a current CMHC Evaluation Report, however, in case of conflict with this authorization the more stringent matter shall prevail.
9. Subject to paragraphs herein, this roofing system shall be in accordance with the manufacturer's published instructions and installation shall be by the manufacturer's trained qualified tradespersons.
10. In lieu of wood roof sheathing for this roofing system, wood purlins (battens) may be used.
11. For existing roofs, the structural adequacy of the roof framing and the supporting members shall be examined by a qualified manufacturer's representative and a written, signed and dated certificate shall be attached to the manufacturer's warranty with copies to the building official and owner(s).
12. Voids between existing roofing systems and this new roofing system shall not be filled with insulation.

DATED at Toronto this 10th day in the month of SEPTEMBER in the year 1987 for Authorization #87-06-103 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-87-03-100

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

MORTARLESS INTERLOCKING POLYURETHANE BLOCKS

Date of Authorization: August 12, 1987

BMEC REFERENCE: BMEC-87-03-100

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Canadian Insulock Corporation
475 Howe Street
Suite 504
Vancouver, B.C.
V6C 2B3

ON THE SUBJECT OF:

Insulock Building System, a mortarless, interlocking polyurethane block that serves as a permanent form for steel reinforced cast-in-place concrete. For use above or below grade as an exterior or interior insulated bearing wall of combustible construction.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising materials, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein, all applicable requirements of the Ontario Building Code Act and Regulations shall be met. A copy of this Authorization shall be attached to the application for a building permit and a copy shall be kept and maintained on the site of construction as per Code requirements.
7. This AUTHORIZATION is limited to use in buildings where the design is based on engineering analysis of the structural effects of the loads and forces acting on the structure. An architect or professional engineer shall be responsible for this matter.
8. Engineering inspection of the subject construction shall be carried out, to ensure that construction is consistent with the design, by the person responsible for its design details and general review during construction; or by another person qualified in the inspection of this construction and who is responsible to the design architect or engineer and all construction documents shall be duly sealed.
9. Each installation shall conform to the manufacturer's published installation instructions and shall be reviewed in detail, stamped, dated and signed for construction as specified by the manufacturer or by qualified trained personnel listed by the manufacturer.
10. Each building where the Insulock Building System is installed shall be provided with a mechanical means of air change to provide a minimum of 0.5 air changes per hour on a continuous basis throughout the year.
11. Precautions shall be taken to keep the Insulock Building System away from heat emitting devices, such as recessed light fixtures, chimneys and direct sun rays. Also, this system shall not be used in direct contact with the ground or water.
12. The Insulock Block shall be manufactured by equipment utilizing direct proportioning pumps, which use a positive displacement fixed ratio basis. This production shall be by qualified trained personnel listed by the manufacturer. Identification cards shall be carried by all personnel.

DATED at Toronto this 12th day in the month of AUGUST in the year 1987 for Authorization #87-03-100 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-87-02-099

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

ISOCYANURATE FOAMED-IN PLACE INSULATION

Date of Authorization: August 12, 1987

AMENDED: July 25, 1990

BMEC REFERENCE: BMEC-87-02-099

IN THE MATTER OF Section 18(4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Mr. Ragui Ghali
Uthane Research Limited
2400 14th Avenue
Unit 8
Unionville, Ontario
L3R 2L6

AGENT:

Icynene Inc.
376 Watline Road
Mississauga, Ontario
L4Z 1X2

ON THE SUBJECT OF:

Goldseal-Icynene 50 TM, a two-component combustible spray-in-place semi- flexible, isocyanurate, open and closed cellular, foamed plastic thermal insulation which may be applied on site or in a manufacturing facility.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision of change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the Commission.

AND SPECIFIC REQUIREMENTS

6. This AUTHORIZATION is further limited to the continuance of a current valid C.C.M.C. Report #12070-R which shall be adhered to.
7. Since at the present time there are not available "Standards"; this AUTHORIZATION determined that the subject matter did satisfy appropriate requirements. However, when the appropriate "Standards" are published, the applicant shall retest to those "Standards", at which time this AUTHORIZATION shall be required to be amended.
8. Follow-up inspection services shall be maintained at all times by the applicant or his agent by an Accredited Testing Organization.
9. Each installation shall conform to the manufacturer's published installation instructions and shall be reviewed in detail, stamped, dated and signed for construction as specified by the manufacturer's listed trained personnel. Identification cards for installers shall be issued only to qualified trained personnel listed by the manufacturer.
10. Only fixed ration equipment and the employment of positive displacement pumps for metering shall be used by the trained applicator/installer.
11. Precautions shall be taken around recessed electrical fixtures and or any other heat sources to relieve any heat build up.
12. This sprayed-in-place foamed insulation as described in this subject authorization, shall be for the application only in open cavities where visual control and sampling are relatively easy for the trained applicator/installer.

DATED at Toronto this 25th day in the month of JULY in the year 1990 for Authorization #87-02-099 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-87-01-098

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

INTERLOCKING BLOCKS

Date of Authorization: August 12, 1987

BMEC REFERENCE: BMEC-87-01-098

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Dr. Juan Haener
8215 Harton Place
San Diego, California
92123
U.S.A.

AGENT:

TCG Materials Limited
P.O. Box 5000
Burlington, Ontario
L7R 3Y8

ON THE SUBJECT OF:

Haener Stack-King (TM) Interlocking Blocks...

(a) dry stacking blocks with surface bonding mortar **or**

(b) dry stacking blocks utilizing the blocks as a permanent concrete forming system, which allows steel reinforcing bars to be located horizontally and vertically within the cast-in-place concrete.

INFORMATION:

This application has been examined by the Building Materials Evaluation Commission and the finding on the submission by the Applicant is that the subject matter conforms to the requirements for unit masonry in C.S.A. Standard CAN 3-A165 Series M85. The block may be used with any valid B.M.E.C. authorization for surface bonding mortar **or** used under

Part 4 of O.B.C. O. Reg. 419/86.

REASON:

Disposition of this application; and to cease current investigation and examination of the matter.

MOVED AND ADOPTED THIS 12TH DAY OF AUGUST, 1987 BY THE BUILDING MATERIALS EVALUATION COMMISSION.

DATED at Toronto this 12th day in the month of AUGUST in the year 1987 for position paper #87-01-098 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-86-05-095

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

NASCOR WALL SYSTEM

Date of Authorization: November 7, 1986

AMENDED: September 27, 1989

BMEC REFERENCE: BMEC-86-05-095

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Nascor Incorporated
7803 P - 35 Street SE
Calgary, Alberta
T2C 1V3

ON THE SUBJECT OF:

Nascor TM System, which is prefabricated components for loadbearing, above grade, combustible construction, exterior integrated wall assembly. Constructed from double studs used on the flat, fastened to sill and header plates and bonded to a rigid board expanded polystyrene core, mechanically fastened to each other with spiral nails.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein, all applicable requirements of the Ontario Building Code Act and Regulations shall be met. A copy of this Authorization shall be attached to the application for a building permit and a copy shall be kept and maintained on the site of construction as per Code requirements.
7. This AUTHORIZATION is further limited to the continuance of a valid C.M.H.C. Building Materials Evaluation Report.
8. Each installation shall conform to the manufacturer's published installation instructions and shall be reviewed in detail, stamped, dated and signed for construction as specified by the manufacturer's listed trained personnel. Identification cards for installers shall be issued only to qualified trained personnel listed by the manufacturer.
9. The subject matter shall be designed, engineered, inspected and verified by the architect or engineer as per Code requirements. A document of certification with an architect or engineer's (authorized in Ontario) stamp shall be forwarded to the Chief Building Official and the building owner(s).
10. Engineering inspection of the subject construction shall be carried out; to ensure that construction is consistent with the design, by the person responsible for its design details and general review during construction; or by another person qualified in the inspection of this construction and who is responsible to the design architect or engineer and all construction documents shall be duly sealed.
11. The manufacturer shall further produce a written guarantee on the Nascor Wall System for each building wherein this system has been constructed. Copies of this guarantee shall be forwarded to the Chief Building Official and the building owner(s).
12. Subject to the above paragraph 1 of this authorization shall be further limited to buildings using the subject matter for which a permit is applied for prior to 31 December 1992. However, the applicant may by written registered letter to this COMMISSION request an amendment to this paragraph at least three months before that date.

DATED at Toronto this 27th day in the month of SEPTEMBER in the year 1989 for Authorization #86-05-095 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-86-04-094

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

FORRER DRY BLOCK

Date of Authorization: April 23, 1987

BMEC REFERENCE: BMEC-86-04-094

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Forrer Chemical
7221 W. Parkland Court
P.O. Box 23432
Milwaukee, Wisconsin
53223 U.S.A.

AGENT:

TCG Materials Limited
P.O. Box 5000
Burlington, Ontario
L7R 3Y8

ON THE SUBJECT OF:

Dry Block (R) System, is an integral polymeric water repellent admixture as manufactured by Forrer Chemical for the manufacturing of concrete block and mortar. This admixture is used in above grade exterior masonry single wythe walls in lieu of subsequent externally applied water repellents and interior dampproofing.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising materials, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein, all applicable requirements of the Ontario Building Code Act and Ontario Regulation 419/86 shall be met. A copy of this Authorization shall be kept and maintained on the site of construction.
7. Subject to paragraphs herein, this system shall be in accordance with the manufacturer's published instructions and installation shall be by the manufacturer's trained qualified tradespersons.
8. In lieu of interior dampproofing, sheathing and membranes of breather type materials; concrete blocks and mortar with this FORRER DRY BLOCK (R) admixture may be used for above grade exterior masonry single wythe loadbearing and non-loadbearing walls.
9. This authorization number "BMEC #86-4-94" shall be legibly cast into each of these blocks at the time of manufacturing.
10. The building official shall confirm on the jobsite the quantity of dry block mortar additive to be used as noted in the instructions on the labels of the containers, then the building official shall obliterate the labels on the required containers.
11. The building official with reasonable cause may take away samples of the block and/or mortar at any time to be tested to the manufacturer's published specifications by an independent test agency at the expense of the block manufacturer or the mortar mixing contractor.
12. To confirm the validity of this authorization on ANY building, a document supplied by the block manufacturer shall be filed with the "chief official" for each building. The purpose of that document is to certify that the block and mortar as supplied and installed complies with this authorization. The document shall also reference the building name, address, date of construction and shall be signed and dated by an authorized representative of the block manufacturer, masonry installer and the chief official.

13. This Dry Block System shall be classified as a breather type membrane and not a vapour barrier, which does not allow the passage of water vapours. However, exterior surface wetness occurs and vapours are dissipated within the open cores and the mortar joints are broken between the front and rear of the block.

DATED at Toronto this 23rd day in the month of APRIL in the year 1987 for Authorization #86-04-094 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-86-02-092

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DECRABOND ROOFING SYSTEM

Date of Authorization: November 7, 1986

BMEC REFERENCE: BMEC-86-02-092

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

A.H.I. Roofing a Unit of A.H.I. Operations Ltd.
640 Great South Road
Manukau City
New Zealand

AND AGENT:

Carter Holt Harvey Roofing International - Canada
201-2160 Springer Avenue
Burnaby, B.C.
V5B 3M7

ON THE SUBJECT OF:

Decrabond Roofing System, a galvanized sheet steel shaped in various profiles of tile, coated on the exposed side with natural crushed stone chips bonded by a base coat of acrylic resin and clear acrylic overglaze.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant

or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein, all applicable requirements of the Ontario Building Code Act and Ontario Regulation 583/83 shall be met. A copy of this Authorization shall be kept and maintained on the site of construction.
7. When this roofing system is used for noncombustible construction all components and support members shall be of noncombustible materials.
8. Conformance shall be made to a current CMHC Evaluation Report, however, in case of conflict with this authorization the more stringent matter shall prevail.
9. Subject to paragraphs herein, this roofing system shall be in accordance with the manufacturer's published instructions and installation shall be by the manufacturer's trained qualified tradespersons.
10. In lieu of wood roof sheathing for this roofing system, wood purlins (battens) may be used.
11. Eave protection, except for over unheated garages, carports and porches, shall be laid beneath the starter strip extending from the edge of the roof to not less than 750 mm (30 in) inside the inner face of the exterior wall and shall consist of;

    (a) No. 15 asphalt-saturated felt laid in two plies lapped 480 mm (19 in) and cemented together with lap cement, or

    (b) Type S smooth surface roll roofing, or

    (c) Self-sealing composite membranes consisting of polyethylene and bituminous materials.

12. When underlay is provided beneath this roofing system it shall be in compliance with the Code for the materials and the installation shall be in accordance to the manufacturer's recommendations.

13. In addition to paragraphs 11 and 12, positive drainage of the eave protection and the underlay materials shall be made at the lower end.
14. For existing roofs, the structural adequacy of the roof framing and the supporting members shall be examined by a qualified manufacturer's representative and a written, signed and dated certificate shall be attached to the manufacturer's warranty with copies to the building official and owner(s).
15. Voids between existing roofing systems and this new roofing system shall not be filled with insulation.

DATED at Toronto this 7th day in the month of NOVEMBER in the year 1986 for Authorization #86-02-092 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-85-11-089

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

GERARD ROOFING SYSTEM

Date of Authorization: November 7, 1986

BMEC REFERENCE: BMEC-85-11-089

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Gerard Roofing Systems (N.Z.) Ltd.
35 Hunua Road
Papakura, Auckland
New Zealand

AND AGENT:

Gerard Canada
932 Mervin Avenue
Peterborough, Ontario
K9J 5P4

ON THE SUBJECT OF:

Gerard Roofing System, a galvanized sheet steel shaped in various profiles of tile, coated on the exposed side with natural crushed stone chips bonded by a base coat of acrylic resin and clear acrylic overglaze.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant

or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Except as authorized herein, all applicable requirements of the Ontario Building Code Act and Ontario Regulation 583/83 shall be met. A copy of this Authorization shall be kept and maintained on the site of construction.
7. When this roofing system is used for noncombustible construction all components and support members shall be of noncombustible materials.
8. Conformance shall be made to a current CMHC Evaluation Report, however, in case of conflict with this authorization the more stringent matter shall prevail.
9. Subject to paragraphs herein, this roofing system shall be in accordance with the manufacturer's published instructions and installation shall be by the manufacturer's trained qualified tradespersons.
10. In lieu of wood roof sheathing for this roofing system, wood purlins (battens) may be used.
11. Eave protection, except for over unheated garages, carports and porches, shall be laid beneath the starter strip extending from the edge of the roof to not less than 750 mm (30 in) inside the inner face of the exterior wall and shall consist of;

    (a) No. 15 asphalt-saturated felt laid in two plies lapped 480 mm (19 in) and cemented together with lap cement, or

    (b)Type S smooth surface roll roofing, or

    (c) Self-sealing composite membranes consisting of polyethylene and bituminous materials.

12. When underlay is provided beneath this roofing system, it shall be in compliance with the Code for the materials and the installation shall be in accordance to the manufacturer's recommendations.

13. In addition to paragraphs 11 and 12, positive drainage of the eave protection and the underlay materials shall be made at the lower end.
14. For existing roofs, the structural adequacy of the roof framing and the supporting members shall be examined by a qualified manufacturer's representative and a written, signed and dated certificate shall be attached to the manufacturer's warranty with copies to the building official and owner(s).
15. Voids between existing roofing systems and this new roofing system shall not be filled with insulation.

DATED at Toronto this 7th day in the month of NOVEMBER in the year 1986 for Authorization #85-11-089 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-85-07-085

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

WINDOW SPRINKLER ASSEMBLY

Date of Authorization: March 15, 1986

AMENDED: December 7, 1988

BMEC REFERENCE: BMEC-85-07-085

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Rolf Jensen & Associates Limited
4100 Yonge Street
Willowdale, Ontario
M2P 2B5

ON THE SUBJECT OF:

A window sprinkler assembly system to provide a two hour fire-resistance rated separation in a wall to consist of tempered or heat strengthened glass fixed in a non-openable hollow metal steel frame or extruded aluminum frame and a special sidewall window sprinkler with quick response action.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This window sprinkler assembly system shall be designed, engineered, inspected and verified by a fire protection Professional Engineer (authorized in Ontario) and a document of certification by the Professional Engineer with stamp shall be forwarded to the Chief Building Official and the Building Owner(s).
7. The sprinkler system shall be installed and tested in accordance with N.F.P.A. 13 as a wet pipe system and maintained in accordance with Section 6.5 (sprinkler) of the Ontario Fire Code.
8. The special designed sprinkler head shall be designated as a horizontal sidewall window nozzle, Grinnell Canada Fire Protection Company Limited model FR-1/Q-60, 12.7 mm (1/2 in) orifice, 74C (165F) activation temperature quick response link. The optimum position of the sprinkler head shall be as determined by the tests submitted by National Research Council Canada.
9. The interior glazing shall consist of one sheet of fixed non-operable tempered or heat strengthened glass installed in a hollow metal steel frame 1.35 mm (16 gauge) minimum thickness or extruded aluminum 1.8 mm (1/16 in) minimum thickness. The maximum glazing shall be 2134 mm (7 ft) wide by 2844 mm (9 ft 4 in) high and minimum 6 mm (1/4 in) thick.
10. This window sprinkler system may be used in either a sprinklered or unsprinklered building to protect non-openable window openings to a maximum of 2 hr. fire-resistance rating provided,

    (a) in an exposing building face or exterior spatial separation the window sprinkler is installed on the interior side of the window, or

    (b) in an interior fire separation the window sprinkler is installed on both sides of the window in the fire separation.

11. Interior or exterior installations may be made in all types of occupancies except Group F, Division 1 and shall not be used in a firewall. Should the system be located in a loadbearing wall, all loadbearing components shall be protected independently of this window sprinkler assembly system.
12. This window sprinkler system shall not be used in exits as defined in the Ontario Building Code.

13. This horizontal sidewall window sprinkler system shall be served by either a separate riser or separate cross main independent of any regular sprinkler or standpipe system serving the floor area.
14. Separate flow switches or alarm check valves and supervised control valves and each fire compartment on each system shall be electrically supervised and indicated separately at the fire/sprinkler alarm annunciator panel.
15. Where the water supply is from a standpipe system conforming to the Code, the siamese connection shall be labelled as per the standard except for this dual purpose which shall read "STANDPIPE AND WINDOW SPRINKLERS".
16. A noncombustible sign legibly printed in not less than 12.7 mm (1/2 in) block letters with contrasting white background and red letters shall be permanently mounted and maintained beside the main water supply source to this window sprinkler assembly system to indicate:

W A R N I N G !

SPECIAL SPRINKLER HEADS ON THIS SYSTEM ARE AN INTEGRAL PART OF WINDOW FIRE SEPARATION. THIS WATER SUPPLY MAY ONLY BE SHUT OFF AFTER ALL THE PROPER AUTHORITIES HAVE RECEIVED NOTICE IN WRITING.

DATED at Toronto this 7th day in the month of DECEMBER in the year 1988 for Authorization #85-07-085 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-85-05-083

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

STEEL ANCHOR STRAPS

Date of Authorization: November 7, 1986

AMENDED: August 17, 1990

BMEC REFERENCE: BMEC-85-05-083

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Cresent Engineering Ltd.
2489 - 123A Street
White Rock, B.C.
V4A 6M7

ON THE SUBJECT OF:

Galvanized steel anchor straps to be used for securing wood sill plates to concrete walls in lieu of anchor bolts.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the forementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Installation of the anchor straps shall conform to the manufacturer's installation instructions and recommendations.
7. The anchor straps shall be constructed of a minimum of 26 gauge (.020") galvanized steel with 114 mm (4-1/2 in) by 38 mm (1-1/2 in) corrugated section for embedding into the concrete, the zinc coating shall be a minimum thickness of 0.025 mm.
8. The exposed two tangs of the anchor strap shall be of sufficient length to overlap the topside of the sill plate or a minimum of 101 mm (4 in) vertically on both sides of the sill plate and or the stud.
9. The anchor strap shall be installed at 914 mm (3 ft) on centre, or a minimum of two anchor straps per sill plate length when less than 914 mm (3 ft) in overall length. Location of the anchor strap to be approximately centre of the area where the sill plate is located.
10. Four galvanized nails with minimum gauge as 63 mm (2-1/2 in) common nails and with a minimum length of 38 mm (1-1/2 in) shall be used in the holes provided in the tangs of the anchor straps.
11. Each anchor strap shall be stamped with the Canadian Patent number 950698 for identification by inspectors.
12. The building official with reasonable cause may take away samples of the galvanized steel anchor strap at any time to be tested as specified in the above paragraphs of this authorization. This testing shall be done by an independent test agency at the expense of the applicant.

DATED at Toronto this 17th day in the month of AUGUST in the year 1990 for Authorization #85-05-083 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-85-04-082

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

CHIMNEY LINER

Date of Authorization: October 16, 1985

BMEC REFERENCE: BMEC-85-04-082

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

American Chimney Lining Systems Inc.
9797 Clyde Park SW
Byron Centre, Michigan
49315 U.S.A.
ON THE SUBJECT OF:

SOLID/FLUE, a chimney liner to line/reline residential masonry chimneys with a lightweight, insulating material.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This authorization is limited to the Ontario Building Code, Part 9 buildings where the flue is for the use of solid fuel only and where the chimney is in a good state of repair. (Note: Gas and liquid fuel appliances are regulated separately by the Fuels Safety Branch and a separate application may be made to them.)
7. Protection from the elements shall conform to O.B.C. Subsection 9.20.17. Installation shall be done by the manufacturer's trained personnel only.
8. This chimney liner shall have a minimum thickness of 16 mm (5/8 inches) and shall not negate the Code requirements for flue sizes of chimney construction.
9. The lined chimney shall be capped by the use of a circular flue tile extending not more than 100 mm (4 in) above a precast waterproof concrete cap which has a sloping top and overhangs the chimney by a least 50 mm (2 in) with drip edges cast into the concrete cap not less than 25 mm (1 in) from the face of the chimney, or a stainless steel cap with formed drip edges.
10. Installation and materials shall be in accordance to the published instructions of the manufacturer as submitted to the COMMISSION to date of this AUTHORIZATION.

DATED at Toronto this 16th day in the month of OCTOBER in the year 1985 for Authorization #85-04-082 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-85-03-081

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KITCHEN EXHAUST HEAT RECLAIM SYSTEM

Date of Authorization: May 21, 1985

AMENDED: November 7, 1996

BMEC REFERENCE: BMEC-85-03-081

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Leslie Bros. (1966) Limited
35 Pullman Court
Scarborough, Ontario
M1X 1E4

ON THE SUBJECT OF:

Kitchen exhaust and filtration system with or without heat reclaim unit for supply return air make-up to kitchen area only.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. The kitchen exhaust duct beyond the fire damper located on the exhaust side of the filtered unit may be installed in accordance with the Ontario Building Code 6.2.3. when it passes directly to atmosphere and not through any fire separation.
7. Installation and maintenance shall comply with the application dated 2 May 1985, and proposal as submitted by the applicant titled, "Specifications Sheets for Series 85; Models 23, 24, 25 for Commercial Kitchen Exhaust," dated 8 April 1985 which include drawings #1 to #7 inclusive.
8. The tempered supply return air duct system shall be installed in accordance with the Ontario Building Code Subsection 6.2.3. and discharge only to the kitchen area. There shall be a fire damper in this supply return air duct at the reclaim unit.
9. Where a heat reclaim unit is used with gas-fired kitchen cooking equipment, the heat reclaim unit shall have separate air streams for exhaust to outside of the building and the make-up air system to only the kitchen area.
10. This authorization does not include any gas- or liquid-fired make-up air units, any such units may be separately approved by the Fuels Safety Branch.
11. Except as noted above the entire system shall conform to NFPA 96-1980. Where any reference to date has been made by the APPLICANT or the COMMISSION on any submission or authorization to the N.F.P.A. 96 regardless of the date it shall read as of the date proclaimed for amendments to the Ontario Building Code.

DATED at Toronto this 7th day in the month of NOVEMBER in the year 1986 for Authorization #85-03-081 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-85-02-080

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

EXTERIOR BASEMENT WALL INSULATION

Date of Authorization: October 16, 1985

BMEC REFERENCE: BMEC-85-02-080

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Fiberglas Canada Inc.
3080 Yonge Street
Toronto, Ontario
M4N 3N1

ON THE SUBJECT OF:

(a) BASECLAD EBWI, system of exterior above or below grade basement wall insulation.

(b) GLASCLAD, system of exterior above grade, non-structural, insulating wall sheathing.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. BASECLAD EBWI system shall be installed only so long as CMHC Evaluation Report No. 09860 dated 82-01-15, revised on 84-06-25 has not been withdrawn.
7. GLASCLAD system shall be installed only so long as CMHC Evaluation Report No. 08900 dated 82-03-17, revised on 84-06-10 has not been withdrawn.
8. GLASCLAD installed on the exterior in conformance to manufacturer's instructions with TYVEK facing and joints taped with Y-8086 Contractor Sheathing Tape CMHC Report No 10418, may be in lieu of the required building paper.
9. Installation and materials shall be in accordance to the published instructions of the manufacturer as submitted to the COMMISSION to date of this AUTHORIZATION.

DATED at Toronto this 16th day in the month of OCTOBER in the year 1985 for Authorization #85-02-080 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-85-01-079

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

CLAY ROOF TILE SYSTEM

Date of Authorization: May 21, 1985

BMEC REFERENCE: BMEC-85-01-079

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

A. Laumans
Kleiwarenfabrieken Gebr. Laumans B.V.
Steenweg 3
5932 AC Tegelen
The Netherlands

AGENT:

Great Lakes Brick & Stone Limited
P.O. Box 1232
602 Grand Avenue East
Chatham, Ontario
N7M 5R9

ON THE SUBJECT OF:

Laumans Clay Roof tile system used on pitched roofs of building structures.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant

or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. (1) All aspects of the Ontario Building Code Part 9 or Part 4 as applicable shall be complied with for new and existing roof support framing, rafters, trusses, sheathing, underlay and flashings, as designed to the recommendations of the manufacturer and his agent.

   (2) For Part 9 buildings where Ontario Building Code design tables are used the roof design load shall be increased by 0.5 KN/m (10 lbs/ft) to allow for the weight of the roof tiles.

7. For existing roofs the structural adequacy of the roof framing and the supporting walls shall be certified by a Professional Engineer registered in the Province of Ontario.
8. Construction of this clay tile roof system as noted above shall comply with the published literature of Laumans and Great Lakes Brick & Stone Limited as submitted with the application and entitled "Report to Building Code Evaluation Commission" for the use of Laumans Clay Roofing Tiles, by Thames Valley Engineering Inc. Professional Engineers, Project 84-44, dated March 1985.

DATED at Toronto this 21st day in the month of MAY in the year 1985 for Authorization #85-01-079 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-84-11-077

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

STYROFOAM FOUNDATION COATING

Date of Authorization: October 14, 1985

BMEC REFERENCE: BMEC-84-11-077

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Dow Chemical Canada Inc.
3035 Orlando Drive
Mississauga, Ontario
L4V 1L6

ON THE SUBJECT OF:

Styrofoam brand Foundation Coating, which is a latex modified, fibre-reinforced, portland cement parging applied to the Styrofoam SM brand insulation, used on exterior basement walls.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. Installation and materials of Styrofoam SM brand insulation and Styrofoam brand Foundation Coating, shall be in accordance with the published instruction of Dow Chemical as submitted to the COMMISSION to date of this authorization.
7. Maximum Coating coverage height above grade shall not exceed 1200 mm (4') and a minimum of 305 mm (1') below grade. Expansion joints in the Coating shall be placed over those required to be constructed in the wall and shall not exceed a coverage area of 14 m (150 ft). The Coating shall only be applied above 5C (40F) for a minimum of 48 hr. curing.
8. The Chief Building Official may request each installation to include the following verification procedure:

   (1) a visual examination of the whole area when the Styrofoam SM brand Insulation is in place.
   (a) to check mechanical anchoring of Styrofoam SM brand Insulation, and

   (b) to check minimum 3 mm (1/8") thick spacers in place or removed for screeding application, and

   (c) a determination of the quality of material used by count of the on site containers, and a comparison of this quantity with that required for the area covered as noted in the instructions on the labels regarding the amounts of application, and

   (d) the obliteration of the labels on the empty or to be used containers by the building official.

9. All installation literature by Dow Chemical shall include the above method of installation.

DATED at Toronto this 16th day in the month of OCTOBER in the year 1985 for Authorization #84-11-077 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-84-10-076

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

SHELF AND RACK STORAGE

Date of Authorization: October 16, 1985

AMENDED: September 19, 1990

BMEC REFERENCE: BMEC-84-10-076

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Redirack Industries Limited
114 Clayson Road
Weston, Ontario
M9M 2H3

ON THE SUBJECT OF:

A self-contained structural shelf and rack storage facility within a building, having one or more solid intermediate deck or walkway levels for personnel access.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. (1) (a) Deck level shall be a continuous horizontal construction membrane through the entire shelf rack facility, and

   (b) Walkway level shall be the horizontal construction membrane between the solid shelving installed on the same plane, and

   (c) Level area means the greatest horizontal area of the shelf and rack storage facility.

   (2) (a) Deck or walkway levels shall be constructed of solid closed surface steel planking or,

   (b) Steel roof decking with minimum 16 mm (5/8 in) maximum 19 mm (3/4 in) thick tongue and groove solid wood or plywood.

   (3) The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Ontario Building Code Part 4 requirements.

   (4) Detailed drawings for each installation shall be stamped by a member of the Association of Professional Engineers of Ontario certifying conformity with this authorization. These drawings shall also detail an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position. These drawings shall be submitted for a building permit in the usual way.

7. An approved wet pipe sprinkler system shall be designed and installed for the entire shelf and rack storage facility including the top level and shall be in conformance with NFPA 13-1983, and NFPA 231C-1980 or the appropriate NFPA Standard for the most severe hazard that it is exposed to. Sprinklers are not required where only Class 1 commodities as defined in the following paragraph 8.(2) are stored.

8. (1) (a) The entire shelf and rack storage dimension shall be limited to Table 8.A. based on the type of commodity stored as defined in paragraph 8.(2), (3), (4) and (5). Excerpts of NFPA 231C-1980 are outlined in the attached appendix and these shall apply to this authorization.

   (b) A firewall as defined in the Ontario Building Code Regulation 583/83, many divide the confining building into two or more separate buildings, herein, one of the following classes may be assigned to each of the separate buildings.

   (2) Class I commodities are non-combustible products, a defined in NFPA 231C-1980; or

   (3) Class II, III, and IV commodities are combustible products, as defined in NFPA 231C-1980; or

   (4) Class SS commodities are special hazard products not covered in paragraph 8.(2), (3) or (5);

   (5) Aerosol products composed of greater than 55% non-water miscible flammable products including lubricants; oil-based paints, anti-perspirants, furniture polish, insecticides and automotive products, are to be stored only:

   (a) On the ground floor of the racking system, and

   (b) In a designed areas separated by,

   (i) a vertical 1 hr. fire separation, or

   (ii) a vertical chain link fencing not lighter than 9 ga. steel wire made into a 50 mm (2 in) diamond mesh, located not less than 2.5 m (8 ft) from all other storage where the adjacent storage is more hazardous than Class IV commodity, or

   (iii) a method acceptable to the Chief Fire Official, and

   (c) In the designated area protected by an in-rack sprinkler system. The sprinkler demand shall be a minimum of 1.9 L/s (30 g.p.m. (U.S.)) discharge per head with 74C (165F) heads or less and shall be 2.5 m (8 ft) apart maximum. This design shall be further based on the operation of the hydraulically most remote;

   (i) 8 sprinklers if one level, or

   (ii) 6 sprinklers on each level if only two levels, or

   (iii) 6 sprinklers on each of the top three levels if three or more levels.

(d) Single row racks shall require only the in-rack sprinklers, whereas, double row racks shall require sprinklers in longitudinal flue as well as on face sprinklers which shall be staggered on opposite sides of racks.

TABLE 8.A.

Forming Part of Paragraph 8

Shelf and Rack Storage Facility				
Commodity Classes	**Maximum Height (1)**		**Maximum Area (2)**	
	m	ft	m^2	ft^2
Class I	6 12 18	20 40 60	unlimited 20,070 13,380	unlimited 216,000 144,000
Class II, III, AND IV	6 12 18	20 40 60	8,920 4,460 2,230	96,000 48,000 24,000
Class SS	6 12 18	20 40 60	3,340 1,670 1,110	36,000 18,000 12,000
COLUMN 1	2	3	4	5

NOTE:

(1) The maximum height shall be from the floor supporting the shelf and rack system to the topmost portion of the racking system.

(2) The maximum area is the sum total of all levels of the shelf and rack system as well as the floor.

9. A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and requirements for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the main water supply for the sprinkler system and shall be maintained at all times. For Class 1 commodities this "NOTICE" shall be permanently mounted, at or near the main entrance to this shelf and rack storage facility.
10. (1) Exits shall be separated from the rack storage facilities with fire separations, having a fire-resistance rating conforming to Subsection 3.4.4. of the Ontario Building Code; and

    (2) the exit stair shafts shall conform to all requirements for exits as stated in Section 3.4 of the Ontario Building Code; and

(3) no fewer than 2 exits are required from each deck or walkway level, except where there are not more than two levels above the building floor, and the level area does not exceed 139 m (1500 ft) two means of egress shall be required without the requirements of fire separation for exit, and

(4) any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph 7 of this authorization.

11. The maximum travel distance to exits shall not exceed 46 m (150 ft) and to a fire extinguisher shall not exceed 23 m (75 ft).
12. (1) Where a shelf and rack storage facility contains two or more deck or walkway levels and where each level is greater than 239 m (2,500 ft), a smoke detection system shall be installed on the underside of each deck level on which walkway or aisle is located, and

    (2) the number of system smoke detectors installed shall be in accordance to CAN4-S524-M1982.

13. The clear aisle width shall not be less than 760 mm (30 inches). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.
14. This shelf and rack storage facility is not permitted in F-1 occupancy as defined in the Ontario Building Code.
15. The shelf and rack storage facilities shall be used only for storage and not for manufacturing, production, wrapping or assembly.
16. The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming the Subsection 2.4.3. of the Ontario Fire Code.
17. (1) In building areas containing shelf and rack storage facilities exceeding 4,645 m (50,000 ft) and except for storage of Class I commodities as defined in paragraph 8 of this document, manually operated smoke vents shall be installed in accordance with NFPA 204, Section 230, and

    (2) The smoke vent opening shall be not less than 1.2 m by 1.8 m (4 ft by 6 ft) and the openings shall be located not more than 23 m (75 ft) from any exterior wall and not more than 46 m (150 ft) from each other.

18. (1) A standpipe and hose system shall be installed in accordance with Article 3.2.5.4. of the Ontario Building Code where the shelf and rack storage facility height is more than 3 levels including floor level or 14 m (45 ft) in height.

    (2) Where a standpipe and hose system is required, 63.5 mm (2-1/2 in) diameter hose connections shall be provided, except that 38.1 mm (1-1/2 in) hose connections are permitted in the shelf and rack storage facilities which;

(a) neither exceed 6 levels including the floor level.

(b) do not exceed 3,716 m (40,000 ft) in the sum total of all levels of the shelf and rack storage facility.

APPENDIX

Commodity Classifications:

The following guide for commodity classification applies specifically to rack storage and is not related to any other method of classification of materials.

Class I commodity is defined as essentially non-combustible product on wood pallets, or in ordinary corrugated cartons with or without single thickness dividers or in ordinary paper wrappings, all on wood pallets. Such products may have a negligible amount of plastic trim, such as knobs or handles.

Examples of Class I products are:

Metal Products. Metal desks with plastic tops and trim, electrical coils, electrical devices in their metal enclosures, pots and pans, electrical motors, dry cell batteries, metal pots and pans, electrical motors, dry cell batteries, metal parts, empty cans, stoves, washers, dryers and metal cabinets.

Glass Products. Glass bottles, empty or filled with non-combustible liquids, mirrors.

Foods. Foods in non-combustible containers; frozen foods; meat, fresh fruits and vegetables in non-plastic trays or containers; dairy products in nonwax-coated paper containers, beer or wine up to 20 percent alcohol, in metal, ceramic or glass containers.

Others. Oil-filled and other types of distribution transformers, cement in bags, electrical insulators, gypsum board, inert pigments, dry insecticides.

Class II commodity is defined as Class I products in slatted wooden crates, solid wooden boxes, multiple thickness paperboard cartons, or equivalent combustible packaging material on wood pallets.

Examples of Class II products are: thinly coated fine wire such as radio coil wire on reels or in cartons; incandescent or fluorescent light bulbs; beer or wine up to 20 percent alcohol in wood containers; and Class I products, if in small cartons or small packages placed in ordinary corrugated cartons.

Class III commodity is defined as wood, paper, natural fiber cloth, or products thereof, on wood pallets. Products may contain a limited amount of plastics. Wood dressers with plastic drawer guides, handles, and trim are examples of a commodity with limited amount of plastic.

Examples of Class III products are:

Paper Products. Books, magazines, newspapers, stationary, plastic coated paper food containers, paper or cardboard games, tissue products, rolled paper on side or steel banded on end, and regenerated cellulosics (cellophane).

Leather Products. Shoes, jackets, gloves, and luggage.

Wood Products. Doors, windows, door and window frames, combustible fiberboard, wood cabinets, furniture and other wood products.

Textiles. Natural fiber upholstered non-plastic furniture, wood or metal furniture with plastic padded and covered arm rests, mattresses without expanded plastic or rubber, absorbent cotton in cartons, natural fiber and viscose yarn thread, and products, and natural fiber clothing or textile products.

Others. Tobacco products in paperboard cartons, non-flammable liquids such as soaps, detergent and bleaches, and non-flammable pharmaceuticals in plastic containers; combustible foods or cereal products, and non-negative producing film packs in sealed metal foil wrappers in paperboard packages.

Class IV commodity is defined in Class I, II and/or III products containing an appreciable amount of plastics in a paperboard carton or Class I, II and/or III products with plastic packaging in paperboard cartons on wood pallets.

Examples of Class IV products are small appliances, typewriters and cameras with plastic parts, plastic backed tapes and synthetic fabrics or clothing. An example of packing material is a metal product in a foamed plastic cocoon in a corrugated carton.

Class IV commodity also includes:

Textiles. Synthetic thread and yarn except viscose, and non-viscose synthetic fabrics or clothing.

Others. Telephones, vinyl floor tile, wood or metal frame upholstered furniture or mattresses with plastic covering and/or padding, and plastic padded metal dashboards or metal bumpers.

DATED at Toronto this 19th day in the month of SEPTEMBER in the year 1990 for Authorization #84-10-076 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-84-09-075

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KITCHEN EXHAUST HEAT RECLAIM SYSTEM

Date of Authorization: May 21, 1985

AMENDED: November 7, 1986

BMEC REFERENCE: BMEC-84-09-075

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Engineered Air
1175 Twinney Cres.
Newmarket, Ontario
L3Y 5V7

ON THE SUBJECT OF:

Kitchen exhaust and filtration system with or without heat reclaim unit for supply return air make-up to kitchen area only.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. The kitchen exhaust duct beyond the fire damper located on the exhaust side of the filtered unit may be installed in accordance with the Ontario Building Code 6.2.3. when it passes directly to atmosphere and not through any fire separation.
7. Installation and maintenance shall comply with the application dated 24 February 1985, and proposal as submitted by the applicant titled, "Specifications for Application for Authorization to Manufacture and Install Heat Reclaim Systems for Kitchen Ventilation", dated 5 February 1985 which include drawings #1 to #6 inclusive.
8. The tempered supply return air duct system shall be installed in accordance with the Ontario Building Code Subsection 6.2.3. and discharge only to the kitchen area. There shall be a fire damper in this supply return air duct at the reclaim unit.
9. Where a heat reclaim unit is used with gas-fired kitchen cooking equipment, the heat reclaim unit shall have separate air stream for exhaust to outside of the building and the make-up air system to only the kitchen area.
10. This authorization does not include any gas- or liquid-fired make-up air units, any such units may be separately approved by the Fuels Safety Branch.
11. Except as noted above the entire system shall conform to NFPA 96-1980. Where any reference to date has been made by the APPLICANT or the COMMISSION on any submission or authorization to the N.F.P.A. 96 regardless of the date it shall read as of the date proclaimed for amendments to the Ontario Building Code.

DATED at Toronto this 7th day in the month of NOVEMBER in the year 1986 for Authorization #85-09-075 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-84-08-074

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

ORIENTED STRAND BOARD

Date of Authorization: October 16, 1985

BMEC REFERENCE: BMEC-84-08-074

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Pelican Spruce Mills Ltd.
1150 - 154 Street
Edmonton, Alberta
T5M 3N8

ON THE SUBJECT OF:

Sturdi-Wood (oriented strand board) as an equivalent to plywood or waferboard in certain circumstances.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system

and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. The applicable standards for this AUTHORIZATION shall be the CAN3-0437.0-M85 Waferboard and Strandboard and the CAN3-0437.1-M85 Testing Methods for Waferboard and Strandboard.

7. Sturdi-Wood may be used for fire stopping, subflooring, roof sheathing and wall sheathing, when it has a minimum thickness as shown in the appropriate Ontario Building Code Article or Table for minimum plywood thickness.

8. Sturdi-Wood may be used for siding, interior finish and underlay when it conforms the appropriate Ontario Building Code article for minimum waferboard thickness.

DATED at Toronto this 16th day in the month of OCTOBER in the year 1985 for Authorization #84-08-074 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-84-05-071

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

CLAY TILE ROOF SYSTEM

Date of Authorization: December 13, 1984

BMEC REFERENCE: BMEC-84-05-071

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Jeka Dakpannen B.V.
Postbus 3054
5930 AB Tegelen
Holland

AGENT:

Great Lakes Brick & Stone Limited
P.O. Box 1232
602 Grand Avenue East
Chatham, Ontario
N7M 5R9

ON THE SUBJECT OF:

Jeka Clay or Pantiles Roof tile system used on pitched roofs of building structures.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising materials, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. (1) All aspects of the Ontario Building Code Part 9 or Part 4 as applicable shall be complied with for new and existing roof support framing, rafters, trusses, sheathing, underlay and flashings, as designed to the recommendations of the manufacturer and his agent.

   (2) For Part 9 buildings where Ontario Building Code design tables are used the roof design load shall be increased by 0.5 KN/m (10 lbs/ft) to allow for the weight of the roof tiles.

7. For existing roofs the structural adequacy of the roof framing and the supporting walls shall be certified by a Professional Engineer registered in the Province of Ontario.
8. Construction of this clay tile roof system as noted above shall comply with the published literature of Jeka Dakpannen and by the Great Lakes Brick Stone Limited as submitted with the application and entitled "Report to Building Code Evaluation Commission" for the use of Jeka Clay Roofing Tiles, by Thames Valley Engineering Inc. Professional Engineers, Project 84-44, dated October 1984.

DATED at Toronto this 13th day in the month of DECEMBER in the year 1984 for Authorization #84-05-071 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-84-02-068

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

CHIMNEY LINER

Date of Authorization: May 3, 1984

BMEC REFERENCE: BMEC-84-02-068

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

James A. Ryder Manufacturing Limited
241 Arvin Avenue
Stoney Creek, Ontario
L8E 2L9

ON THE SUBJECT OF:

Model SC-liner a stainless steel liner for masonry chimney.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising materials, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This authorization is limited to Ontario Building Code Part 9 buildings where a building permit is required and where the existing masonry chimney is in a good state of repair and where the flue is for the use of solid fuel.
7. James A. Ryder shall enclose a copy of manufacturer's recommendations with each on site installation complete with company name, address and telephone number and this shall be left with the building occupant.
8. The stainless steel SC-liner shall extend not more than 152 mm (6 in) above the top of the masonry chimney and be attached to a stainless steel raincap and chimney flashing with sloping top and formed drip edges extending to minimum of 100 mm (4 in) below the top of the masonry chimney which shall be securely attached to the masonry chimney and this whole assembly shall be sealed against the weather.
9. This authorization has been evaluated by the COMMISSION on the basis of the U.L.C. File CMH1086 February 29, 1984, guide #60 13.17, which requires the U.L.C. label or listed marking on the product for identification under the Listing and Follow-Up Service.
10. Since at the present time there is no available "Standard", this authorization determined that the model SC-liner stainless steel did withstand the requirements of "ULC-S629-M1981 Standard for 650C Factory Built Chimneys", however, when the appropriate "Standard" is published James A. Ryder shall have SC-liner retested to that "Standard" at which time this authorization shall be required to be amended.

DATED at Toronto this 3rd day in the month of MAY in the year 1984 for Authorization #84-02-068 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-83-06-065

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

CHIMNEY LINER

Date of Authorization: March 22, 1984

BMEC REFERENCE: BMEC-83-06-065

IN THE MATTER OF an application by:

Z-Flex Inc.
Division of Flexmaster Canada Ltd.
36 Shelley Road
Richmond Hill, Ontario
L4C 5G3

ON THE SUBJECT OF:

"Z-Flex" a flexible stainless steel liner for masonry chimney.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising materials, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein

shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This authorization is limited to Ontario Building Code Part 9 buildings where a building permit is required and where the existing masonry chimney is in a good state of repair and the existing flue size is not less than 305 mm X 305 mm (12 in X 12 in) and where the flue is for the use of solid fuel.
7. Flexmaster shall enclose a copy of manufacturer's recommendations with each on site installation complete with company name, address and telephone number and this shall be left with the building occupant.
8. The stainless steel Z-flex liner shall extend not more than 152 mm (6 in) above the top of the masonry chimney and be attached to a stainless steel raincap and chimney flashing with sloping top and formed drip edges extending to minimum of 100 mm (4 in) below the top of the masonry chimney which shall be securely attached to the masonry chimney and this whole assembly shall be sealed against the weather.
9. This authorization has been evaluated by the COMMISSION on the basis of the Warnock Hersey Professional Services test report #1, file F1 200-290-0463 May 31, 1983 and #3951, file 490-0086-F86 March 4 to 9, 1983, copies of which many be requested from Flexmaster by any party related to the installation.
10. Since at the present time there is no available "Standard", this authorization determined that the Z-flex stainless steel liner did withstand the requirements of "ULC-S629-M1981 Standard for 650C Factory Built Chimneys", however, when the appropriate "Standard" is published Flexmaster shall have Z-flex retested to that "Standard" at which time this authorization shall be required to be amended.

DATED at Toronto this 22nd day in the month of MARCH in the year 1984 for Authorization #83-06-065 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-83-05-064

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

ISOREN THERMOSTUCCO SYSTEM

Date of Authorization: March 22, 1984

BMEC REFERENCE: BMEC-83-05-064

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Alvise de Buzzaccarini
Epsilon Building Materials Ltd.
385 Lynn Avenue
North Vancouver, B.C.
V7C 2C4

ON THE SUBJECT OF:

Isoren S4 Thermostucco (scratch coat) and Isoren F acrylic finishing coat to be used on the exterior or interior of buildings as an alternative to stucco.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising materials, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. The Applicant shall train and approve the necessary applicators who shall strictly follow the manufacturer's recommendations for site protection, substructure materials, mixes, curing, application and location and construction of control joints.
7. Isoren S4 and F may be used either separately or together and/or with other compatible masonry and stucco materials when the appropriate bonding agent for the substructure as recommended by the manufacturer is used.
8. The Isoren Thermostucco System shall not be used as a loadbearing material. The wall sheathing or masonry material to which the Isoren S4 Thermostucco System is applied must be capable of resisting all vertical, lateral and racking shear loads applied to the wall.
9. Isoren S4 in conjunction with Isoren F shall be considered as a 1 hr. fire-resistance cladding when the S4 is a minimum of 25.4 mm (1 in) thickness and the F is a minimum of 1.58 mm (1/16 in) thickness.
10. Permanent labelling on all containers and/or packages of Isoren S4 and F shall include but not be limited to the following information: manufacturer's name, product name, quality, storage procedure, shelf life, installation instructions and the name of the recognized independent test agency responsible for the quality control.
11. This AUTHORIZATION is limited to the continuance of a "Certification Program" by a recognized independent test agency providing reports describing ongoing inspections and tests for product quality control. Records shall be kept by the manufacturer on batching, production and site delivery.

DATED at Toronto this 22nd day in the month of MARCH in the year 1984 for Authorization #83-05-064 on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-83-02-061

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

SPARFIL WALL SYSTEM II

Date of Authorization: December 13, 1984

AMENDED: November 7, 1986

BMEC REFERENCE: BMEC-83-02-061

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Sparfil International Inc.

8241 Keele St., #15
Concord, Ontario
L4K 1Z5

ON THE SUBJECT OF:

Sparfil Wall System II, a building block manufactured from expanded polystyrene (EPS) beads, combined with portland cement, fine sand and chemical additives which, with Sparbond surface mortar and alkali resistant glass fibre fabric mesh applied to the surface of all exposed faces of the dry stacked "Sparfil Block" is in lieu of conventional cement mortar and block.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. (a) The applicant of this authorization shall be wholly responsible for the complete discharge of each paragraph of this authorization, also at any time upon a request by any person, show proof with a signed receipt, that a copy of this authorization has been **received** by the architect or professional engineer responsible for the masonry design and the Chief Building Official and those persons in charge at the site of construction.

   (b) Except as authorized herein all applicable requirements of the Ontario Building Code Act, Chapter 51, R.S.O. 1980, and the Ontario Regulation 419/86 as amended shall be met. A valid copy of this Authorization shall be attached to the application for building permit and a similar copy shall be posted and maintained on the site of construction with the building permit.

7. (a) Sparfil Wall System II is classified as a combustible MATERIAL. However, the Sparfil Wall System II may be used as a combustible element in a building required to be of noncombustible construction or in combustible construction as a fire separation providing not more than a 2 hour fire-resistance rating when using units of 200 mm (8 in) thick for non-loadbearing or loadbearing walls, except this system shall not be permitted for firewalls, cavity walls, columns, chimneys or as fire stopping in any type of construction, and

   (b) this system shall not be permitted as a fire separation when required to provide not more than a 2 hour fire-resistance rating where the wall is to be reinforced and cores grouted in solid for any type of construction.

8. An architect or professional engineer shall be responsible for the masonry design, details and general review during construction of the Sparfil Wall System II and all construction documents shall be duly sealed, for

   (a) each use of the system, and

(b) after exposure of any fire condition.

9. The design, details and general review shall also be subject to:

   (a) All previous issues of "Tech Sheets, Design and/or Construction Manuals" are superseded as of 10 May 1989, and

   (b) The new current "Design Manual for Sparfil Wall System II" submitted via Sparfil International Inc. and Robert G. Drysdale, Ph.D., P.Eng. of Drysdale Engineering and Associates Limited, Ancaster, Ontario, dated 10 May 1989, First Edition shall be the only valid data included in this authorization as of 10 May 1989, and

   (c) SPARFIL TECH SHEETS 1, 2, 3, 4 and 7 dated 10 May 1989, First Edition, shall be the only technical sheets included in this authorization and the "Design Manual for Sparfil Wall System II", and

   (d) All WARRANTY disclaimers on any data, tech sheets or literature shall be eliminated as a further condition of this authorization.

10. Site control procedures for protection and installation shall be carefully followed as per Sparfil TECH SHEETS 1, 2, 3, 4 and 7, dated 10 May 1989.
11. Inspection of masonry construction shall be carried out to ensure that construction is consistent with design details and specifications and in compliance with Design Manual for Sparfil Wall System II and TECH SHEETS 1, 2, 3, 4 and 7, all dated 10 May 1989. Such inspection shall be carried out by the architect or professional engineer responsible for the masonry wall design or by another person qualified in the inspection of masonry construction and who is responsible to the masonry wall design architect or professional engineer.
12. (a) Based on an average of 5 tests Sparfil Blocks shall have the following minimum unit compressive strength based on gross area...

Normal Block Size	MPA	psi
200 mm x 200 mm x 400 mm (8" x 8" x 16")	2.2	320
250 mm x 200 mm x 400 mm (10" x 8" x 16")	1.8	260
300 mm x 200 mm x 400 mm (12" x 8" x 16")	1.6	230

13. (b) Tolerances on Sparfil Block sizes shall be maintained and verified to be within 1/16" by an accredited testing agency at the manufacturing level at least every three months or more often as required by the agency. All discrepancies shall be reported by the agency to the Building Materials Evaluation Commission at once.
14. (c) Based on an average of five tests, Sparbond surface mortar with fibre glass mesh shall have a minimum unit tensile strength of 30.0 N/mm.

15. (d) The above tests and tolerances shall be made available to the Chief Building Official at the time of an application for building permit **and** the Building Materials Evaluation Commission at any time upon request and no later than within 10 days of such a request.
16. (a) Sparbond surface mortar shall conform to all the requirements of "ASTM C887-79a (Reapproved 1984)" except for any reference to glass fibers in a prepackaged form or chopped fibers for reinforcement in a cementitious matrix and flexural strength for which resistance is dependent on the addition of the Sparfil fibre glass mesh at the jobsite, and

    (b) Sparfil fibre glass mesh shall be as supplied by Sparfil International Inc. and shall use a 7 x 7 construction (6 strands per 25.4 mm) at a weight of 150 g/m 10%.

DATED at Toronto this 29th day in the month of OCTOBER in the year 1990 for Authorization #88-02-061 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-82-18-056

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

CHIMNEY LINER

Date of Authorization: April 14, 1983

BMEC REFERENCE: BMEC-82-18-056

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, R.S.O. 1980

AND IN THE MATTER OF an application by:

Doughty Concrete Products Limited
P.O. Box 501
Smith Township
Peterborough, Ontario
K9J 6Z6
ON THE SUBJECT OF:

The use of DCP High Temperature Flue liners to line/reline concrete or masonry chimneys with this concrete flue liner.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This authorization is limited to Ontario Building Code Part 9 buildings where the flue is for the use of solid fuel and where the chimney is in a good state of repair.
7. This DCP High Temp liner shall be installed with high temperature cement mortar conforming to CGSB Standard 10-GP-3M, "Mortar, Refractory Air Setting".
8. This chimney liner shall have an approximate wall thickness of 25 mm (1in) and shall not negate the Code requirements for flue sizes or chimney construction as in O.B.C. Section 9.21.
9. The DCP High Temp Flue lined chimney shall be capped by the use of the flue liner extending not more than 100 mm (4 in) above a precast waterproof concrete cap which has a sloping top and overhangs the chimney by at least 50 mm (2 in), with drip edges cast into the concrete cap not less than 25 mm (1 in) from the face of the chimney, or a stainless steel cap with formed drip edges.
10. This authorization is further limited to the continuance of C.M.H.C. Building Materials Evaluation Commission.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-82-17-055

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KITCHEN EXHAUST HEAT RECLAIM SYSTEMS

Date of Authorization: April 14, 1983

AMENDED: November 7, 1986

BMEC REFERENCE: BMEC-82-17-055

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, R.S.O. 1980.

AND IN THE MATTER OF an application by:

Temperite Industries Ltd.
5 Centennial Road
Orangeville, Ontario
L9W 1R1

ON THE SUBJECT OF:

Temprite HRK series Kitchen Heat Reclaim Systems via heat plate/pipe exchanger with separate air streams.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIAL REQUIREMENTS

6. The tempered supply return air duct system shall be for the kitchen area only with a fire damper at the recovery unit, and the duct beyond shall be installed in accordance with the Ontario Building Code 6.2.4.
7. Installation and maintenance shall comply with the Application and proposals dated 11 February or 22 and 25 April 1983, as submitted by the Applicant and including drawings X11664, X11663, X6700/W, X11549/P, X11621 and Installation and Instruction Manual for Heat Recovery Systems.
8. This authorization does not include any gas- or liquid-fired make-up air units. A separate approval must be made to the Fuels Safety Branch for the use of such units.
9. Except as noted above the entire system shall conform to NFPA 96-1980.
10. Where any reference to date has been made by the APPLICANT or the COMMISSION on any submission or authorization to the N.F.P.A. 96 regardless of the date it shall read as of the date proclaimed for amendments to the Ontario Building Code.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-82-16-054

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

SHELF AND RACK STORAGE

Date of Authorization: October 20, 1983

AMENDED:
October 16, 1985
September 19, 1990

BMEC REFERENCE: BMEC-82-16-054

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Triple-A Manufacturing Company Limited
44 Milner Avenue
Scarborough, Ontario
M1S 3P8

ON THE SUBJECT OF:

A self-contained structural shelf and rack storage facility within a building, having one or more solid intermediate deck or walkway levels for personnel access.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. (1) (a) Deck level shall be a continuous horizontal construction membrane through the entire shelf rack facility, and

   (b) Walkway level shall be the horizontal construction membrane between the solid shelving installed on the same plane, and

   (c) Level area means the greatest horizontal area of the shelf and rack storage facility.

   (2) (a) Deck or walkway levels shall be constructed of solid closed surface steel planking or,

   (b) Steel roof decking with minimum 16 mm (5/8 in) maximum 19 mm (3/4 in) thick tongue and groove solid wood or plywood.

   (3) The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Ontario Building Code Part 4 requirements.

   (4) Detailed drawings for each installation shall be stamped by a member of the Association of Professional Engineers of Ontario certifying conformity with this authorization. These drawings shall also detail an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position. These drawings shall be submitted for a building permit in the usual way.

7. An approved wet pipe sprinkler system shall be designed and installed for the entire shelf and rack storage facility including the top level and shall be in conformance with NFPA 13-1983, and NFPA 231C-1980 or the appropriate NFPA Standard for the most severe hazard that it is exposed to. Sprinklers are not

required where only Class 1 commodities as defined in the following paragraph 8.(2) are stored.

8. (1) (a) The entire shelf and rack storage dimension shall be limited to Table 8.A. based on the type of commodity stored as defined in paragraph 8.(2), (3), (4) and (5). Excerpts of NFPA 231C-1980 are outlined in the attached appendix and these shall apply to this authorization.

   (b) A firewall as defined in the Ontario Building Code Regulation 583/83, may divide the confining building into two or more separate buildings, wherein, one of the following classes may be assigned to each of the separate buildings.

   (2) Class I commodities are non-combustible products, as defined in NFPA 231C-1980; or

   (3) Class II, III, and IV commodities are combustible products, as defined in NFPA 231C-1980; or

   (4) Class SS commodities are special hazard products not covered in paragraph 8.(2), (3) or (5); (5) Aerosol products composed of greater than 55% non-water miscible flammable products including lubricants; oil-based paints, anti-perspirants, furniture polish, insecticides and automotive products, are to be stored only:

   (a) On the ground floor of the racking system, and

   (b) In a designed areas separated by,

   (i) a vertical 1 hr. fire separation, or

   (ii) a vertical chain link fencing not lighter than 9 ga. steel wire made into a 50 mm (2 in) diamond mesh, located not less than 2.5 m (8 ft) from all other storage where the adjacent storage is more hazardous than Class IV commodity, or

   (iii) a method acceptable to the chief Fire Official, and

   (c) In the designated area protected by an in-rack sprinkler system. The sprinkler demand shall be a minimum of 1.9 L/s (30 g.p.m. (U.S.)) discharge per head with 74C (165F) heads or less and shall be 2.5 m (8 ft) apart maximum. This design shall be further based on the operation of the hydraulically most remote;
   (i) 8 sprinklers if one level, or

   (ii) 6 sprinklers on each level if only two levels, or

   (iii) 6 sprinklers on each of the top three levels if three or more levels.

(d) Single row racks shall require only the in-rack sprinklers, whereas, double row racks shall require sprinklers in longitudinal flue as well as on face sprinklers which shall be staggered on opposite sides of racks.

TABLE 8.A.
Forming Part of Paragraph 8

Shelf and Rack Storage Facility				
Commodity Classes	**Maximum Height (1)**		**Maximum Area (2)**	
	m	ft	m^2	ft^2
Class I	6 12 18	20 40 60	unlimited 20,070 13,380	unlimited 216,000 144,000
Class II, III, AND IV	6 12 18	20 40 60	8,920 4,460 2,230	96,000 48,000 24,000
Class SS	6 12 18	20 40 60	3,340 1,670 1,110	36,000 18,000 12,000
COLUMN 1	2	3	4	5

NOTE:

(1) The maximum height shall be from the floor supporting the shelf and rack system to the topmost portion of the racking system.

(2) The maximum area is the sum total of all levels of the shelf and rack system as well as the floor.

- A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and requirements for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the main water supply for the sprinkler system and shall be maintained at all times. For Class 1 commodities this "NOTICE" shall be permanently mounted, at or near the main entrance to this shelf and rack storage facility.
- (1) Exits shall be separated from the rack storage facilities with fire separations, having a fire-resistance rating conforming to Subsection 3.4.4. of the Ontario Building Code; and

(2) the exit stair shafts shall conform to all requirements for exits as stated in Section 3.4 of the Ontario Building Code; and

(3) no fewer than 2 exits are required from each deck or walkway level, except where there are not more than two levels above the building floor, and the level area does not exceed 139 m (1500 ft), two means of egress shall be required without the requirements of fire separation for exit, and

(4) any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph 7 of this authorization.

- The maximum travel distance to exits shall not exceed 46 m (150 ft) and to a fire extinguisher shall not exceed 23 m (75 ft).
- (1) Where a shelf and rack storage facility contains two or more deck or walkway levels and where each level is greater than 239 m (2,500 ft), a smoke detection system shall be installed on the underside of each deck level on which walkway or aisle is located, and

(2) the number of system smoke detectors installed shall be in accordance to CAN4-S524-M1982.

- The clear aisle width shall not be less than 760 mm (30 inches). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.
- This shelf and rack storage facility is not permitted in F-1 occupancy as defined in the Ontario Building Code.
- The shelf and rack storage facilities shall be used only for storage and not for manufacturing, production, wrapping or assembly.
- The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming the Subsection 2.4.3. of the Ontario Fire Code.
- (1) In building areas containing shelf and rack storage facilities exceeding 4,645 m (50,000 ft) and except for storage of Class I commodities as defined in paragraph 8 of this document, manually operated smoke vents shall be installed in accordance with NFPA 204, Section 230, and

(2) The smoke vent opening shall be not less than 1.2 m by 1.8 m (4 ft by 6 ft) and the openings shall be located not more than 23 m (75 ft) from any exterior wall and not more than 46 m (150 ft) from each other.

- (1) A standpipe and hose system shall be installed in accordance with Article 3.2.5.4. of the Ontario Building Code where the shelf and rack storage facility height is more than 3 levels including floor level or 14 m (45 ft) in height.

(2) Where a standpipe and hose system is required, 63.5 mm (2-1/2 in) diameter hose connections shall be provided, except that 38.1 mm (1-1/2 in) hose connections are permitted in the shelf and rack storage facilities which;

(a) neither exceed 6 levels including the floor level.

(b) do not exceed 3,716 m (40,000 ft) in the sum total of all levels of the shelf and rack storage facility.

APPENDIX

Commodity Classifications:

The following guide for commodity classification applies specifically to rack storage and is not related to any other method of classification of materials.

Class I commodity is defined as essentially non-combustible product on wood pallets, or in ordinary corrugated cartons with or without single thickness dividers or in ordinary paper wrappings, all on wood pallets. Such products may have a negligible amount of plastic trim, such as knobs or handles.

Examples of Class I products are:

Metal Products. Metal desks with plastic tops and trim, electrical coils, electrical devices in their metal enclosures, pots and pans, electrical motors, dry cell batteries, metal pots and pans, electrical motors, dry cell batteries, metal parts, empty cans, stoves, washers, dryers and metal cabinets.

Glass Products. Glass bottles, empty or filled with non-combustible liquids, mirrors.

Foods. Foods in non-combustible containers; frozen foods; meat, fresh fruits and vegetables in non-plastic trays or containers; dairy products in nonwax-coated paper containers, beer or wine up to 20 percent alcohol, in metal, ceramic or glass containers.

Others. Oil-filled and other types of distribution transformers, cement in bags, electrical insulators, gypsum board, inert pigments, dry insecticides.

Class II commodity is defined as Class I products in slatted wooden crates, solid wooden boxes, multiple thickness paperboard cartons, or equivalent combustible packaging material on wood pallets.

Examples of Class II products are: thinly coated fine wire such as radio coil wire on reels or in cartons; incandescent or fluorescent light bulbs; beer or wine up to 20 percent alcohol in wood containers; and Class I products, if in small cartons or small packages placed in ordinary corrugated cartons.

Examples of Class III products are:

Paper Products. Books, magazines, newspapers, stationary, plastic coated paper food containers, paper or cardboard games, tissue products, rolled paper on side or steel banded on end, and regenerated cellulosics (cellophane).

Leather Products. Shoes, jackets, gloves, and luggage.

Wood Products. Doors, windows, door and window frames, combustible fiberboard, wood cabinets, furniture and other wood products.

Textiles. Natural fiber upholstered non-plastic furniture, wood or metal furniture with plastic padded and covered arm rests, mattresses without expanded plastic or rubber, absorbent cotton in cartons, natural fiber and viscose yarn thread, and products, and natural fiber clothing or textile products.

Others. Tobacco products in paperboard cartons, non-flammable liquids such as soaps, detergent and bleaches, and non-flammable pharmaceuticals in plastic containers; combustible foods or cereal products, and non-negative producing film packs in sealed metal foil wrappers in paperboard packages.

Class IV commodity is defined in Class I, II and/or III products containing an appreciable amount of plastics in a paperboard carton or Class I, II and/or III products with plastic packaging in paperboard cartons on wood pallets.

Examples of Class IV products are small appliances, typewriters and cameras with plastic parts, plastic backed tapes and synthetic fabrics or clothing. An example of packing material is a metal product in a foamed plastic cocoon in a corrugated carton.

Class IV commodity also includes:

Textiles. Synthetic thread and yarn except viscose, and non-viscose synthetic fabrics or clothing.

Others. Telephones, vinyl floor tile, wood or metal frame upholstered furniture or mattresses with plastic covering and/or padding, and plastic padded metal dashboards or metal bumpers.

DATED at Toronto this 19th day in the month of September in the year 1990 for Authorization #82-16-54 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-82-16-054

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

SHELF AND RACK STORAGE

Date of Authorization: October 20, 1983

AMENDED:
October 16, 1985
September 19, 1990

BMEC REFERENCE: BMEC-82-16-054

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Triple-A Manufacturing Company Limited
44 Milner Avenue
Scarborough, Ontario
M1S 3P8

ON THE SUBJECT OF:

A self-contained structural shelf and rack storage facility within a building, having one or more solid intermediate deck or walkway levels for personnel access.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
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AND SPECIFIC REQUIREMENTS

6. (1) (a) Deck level shall be a continuous horizontal construction membrane through the entire shelf rack facility, and

   (b) Walkway level shall be the horizontal construction membrane between the solid shelving installed on the same plane, and

   (c) Level area means the greatest horizontal area of the shelf and rack storage facility.

   (2) (a) Deck or walkway levels shall be constructed of solid closed surface steel planking or,

   (b) Steel roof decking with minimum 16 mm (5/8 in) maximum 19 mm (3/4 in) thick tongue and groove solid wood or plywood.

   (3) The structural design of the entire shelf and rack storage facility support system including posts, beams, decks, walkways, connections, and their supports such as concrete slabs, separate foundations or similar shall be in accordance with Ontario Building Code Part 4 requirements.

   (4) Detailed drawings for each installation shall be stamped by a member of the Association of Professional Engineers of Ontario certifying conformity with this authorization. These drawings shall also detail an appropriate sign to indicate the maximum permissible design loads for each rack storage system and such sign shall be permanently fixed to the building interior and displayed in a prominent unobstructed viewing position. These drawings shall be submitted for a building permit in the usual way.

7. An approved wet pipe sprinkler system shall be designed and installed for the entire shelf and rack storage facility including the top level and shall be in conformance with NFPA 13-1983, and NFPA 231C-1980 or the appropriate NFPA Standard for the most severe hazard that it is exposed to. Sprinklers are not required where only Class 1 commodities as defined in the following paragraph 8.(2) are stored.
8. (1) (a) The entire shelf and rack storage dimension shall be limited to Table 8.A. based on the type of commodity stored as defined in paragraph 8.(2), (3), (4) and (5). Excerpts of NFPA 231C-1980 are outlined in the attached appendix and these shall apply to this authorization.

   (b) A firewall as defined in the Ontario Building Code Regulation 583/83, may divide the confining building into two or more separate buildings, wherein, one of the following classes may be assigned to each of the separate buildings.

   (2) Class I commodities are non-combustible products, as defined in NFPA 231C-1980; or

(3) Class II, III, and IV commodities are combustible products, as defined in NFPA 231C-1980; or

(4) Class SS commodities are special hazard products not covered in paragraph 8.(2), (3) or (5); (5) Aerosol products composed of greater than 55% non-water miscible flammable products including lubricants; oil-based paints, anti-perspirants, furniture polish, insecticides and automotive products, are to be stored only:

(a) On the ground floor of the racking system, and

(b) In a designed areas separated by,

(i) a vertical 1 hr. fire separation, or

(ii) a vertical chain link fencing not lighter than 9 ga. steel wire made into a 50 mm (2 in) diamond mesh, located not less than 2.5 m (8 ft) from all other storage where the adjacent storage is more hazardous than Class IV commodity, or

(iii) a method acceptable to the chief Fire Official, and

(c) In the designated area protected by an in-rack sprinkler system. The sprinkler demand shall be a minimum of 1.9 L/s (30 g.p.m. (U.S.)) discharge per head with 74C (165F) heads or less and shall be 2.5 m (8 ft) apart maximum. This design shall be further based on the operation of the hydraulically most remote;
(i) 8 sprinklers if one level, or

(ii) 6 sprinklers on each level if only two levels, or

(iii) 6 sprinklers on each of the top three levels if three or more levels.

(d) Single row racks shall require only the in-rack sprinklers, whereas, double row racks shall require sprinklers in longitudinal flue as well as on face sprinklers which shall be staggered on opposite sides of racks.

TABLE 8.A.
Forming Part of Paragraph 8

Shelf and Rack Storage Facility				
Commodity Classes	**Maximum Height (1)**		**Maximum Area (2)**	
	m	ft	m^2	ft^2
Class I	6 12 18	20 40 60	unlimited 20,070 13,380	unlimited 216,000 144,000
Class II, III, AND IV	6 12	20 40	8,920 4,460	96,000 48,000

	18	60	2,230	24,000
Class SS	6 12 18	20 40 60	3,340 1,670 1,110	36,000 18,000 12,000
COLUMN 1	2	3	4	5

NOTE:

(1) The maximum height shall be from the floor supporting the shelf and rack system to the topmost portion of the racking system.

(2) The maximum area is the sum total of all levels of the shelf and rack system as well as the floor.

- A plain legible sign or signs, with contrasting letters and titled "NOTICE", shall describe the above Class and requirements for each shelf and rack storage facility. This sign or signs shall be permanently mounted, at or near the main water supply for the sprinkler system and shall be maintained at all times. For Class 1 commodities this "NOTICE" shall be permanently mounted, at or near the main entrance to this shelf and rack storage facility.
- (1) Exits shall be separated from the rack storage facilities with fire separations, having a fire-resistance rating conforming to Subsection 3.4.4. of the Ontario Building Code; and

(2) the exit stair shafts shall conform to all requirements for exits as stated in Section 3.4 of the Ontario Building Code; and

(3) no fewer than 2 exits are required from each deck or walkway level, except where there are not more than two levels above the building floor, and the level area does not exceed 139 m (1500 ft), two means of egress shall be required without the requirements of fire separation for exit, and

(4) any opening in a deck for egress, convenience stairs, ramps or chutes, shall be protected by smoke baffles and close spaced sprinklers as per paragraph 7 of this authorization.

- The maximum travel distance to exits shall not exceed 46 m (150 ft) and to a fire extinguisher shall not exceed 23 m (75 ft).
- (1) Where a shelf and rack storage facility contains two or more deck or walkway levels and where each level is greater than 239 m (2,500 ft), a smoke detection system shall be installed on the underside of each deck level on which walkway or aisle is located, and

(2) the number of system smoke detectors installed shall be in accordance to CAN4-S524-M1982.

- The clear aisle width shall not be less than 760 mm (30 inches). This clearance is for access to exits and shall not be used for conveyors, trolleys, tracks or any other similar mode of product transportation within an aisle or walkway.
- This shelf and rack storage facility is not permitted in F-1 occupancy as defined in the Ontario Building Code.
- The shelf and rack storage facilities shall be used only for storage and not for manufacturing, production, wrapping or assembly.
- The shelf and rack storage facilities shall be accessible to employees only and shall be designated, signed and posted as a "NO SMOKING" area conforming the Subsection 2.4.3. of the Ontario Fire Code.
- (1) In building areas containing shelf and rack storage facilities exceeding 4,645 m (50,000 ft) and except for storage of Class I commodities as defined in paragraph 8 of this document, manually operated smoke vents shall be installed in accordance with NFPA 204, Section 230, and

(2) The smoke vent opening shall be not less than 1.2 m by 1.8 m (4 ft by 6 ft) and the openings shall be located not more than 23 m (75 ft) from any exterior wall and not more than 46 m (150 ft) from each other.

- (1) A standpipe and hose system shall be installed in accordance with Article 3.2.5.4. of the Ontario Building Code where the shelf and rack storage facility height is more than 3 levels including floor level or 14 m (45 ft) in height.

(2) Where a standpipe and hose system is required, 63.5 mm (2-1/2 in) diameter hose connections shall be provided, except that 38.1 mm (1-1/2 in) hose connections are permitted in the shelf and rack storage facilities which;

(a) neither exceed 6 levels including the floor level.

(b) do not exceed 3,716 m (40,000 ft) in the sum total of all levels of the shelf and rack storage facility.

APPENDIX

Commodity Classifications:

The following guide for commodity classification applies specifically to rack storage and is not related to any other method of classification of materials.

Class I commodity is defined as essentially non-combustible product on wood pallets, or in ordinary corrugated cartons with or without single thickness dividers or in ordinary paper wrappings, all on wood pallets. Such products may have a negligible amount of plastic trim, such as knobs or handles.

Examples of Class I products are:

Metal Products. Metal desks with plastic tops and trim, electrical coils, electrical devices in their metal enclosures, pots and pans, electrical motors, dry cell batteries, metal pots and pans, electrical motors, dry cell batteries, metal parts, empty cans, stoves, washers, dryers and metal cabinets.

Glass Products. Glass bottles, empty or filled with non-combustible liquids, mirrors.

Foods. Foods in non-combustible containers; frozen foods; meat, fresh fruits and vegetables in non-plastic trays or containers; dairy products in nonwax-coated paper containers, beer or wine up to 20 percent alcohol, in metal, ceramic or glass containers.

Others. Oil-filled and other types of distribution transformers, cement in bags, electrical insulators, gypsum board, inert pigments, dry insecticides.

Class II commodity is defined as Class I products in slatted wooden crates, solid wooden boxes, multiple thickness paperboard cartons, or equivalent combustible packaging material on wood pallets.

Examples of Class II products are: thinly coated fine wire such as radio coil wire on reels or in cartons; incandescent or fluorescent light bulbs; beer or wine up to 20 percent alcohol in wood containers; and Class I products, if in small cartons or small packages placed in ordinary corrugated cartons.

Examples of Class III products are:

Paper Products. Books, magazines, newspapers, stationary, plastic coated paper food containers, paper or cardboard games, tissue products, rolled paper on side or steel banded on end, and regenerated cellulosics (cellophane).

Leather Products. Shoes, jackets, gloves, and luggage.

Wood Products. Doors, windows, door and window frames, combustible fiberboard, wood cabinets, furniture and other wood products.

Textiles. Natural fiber upholstered non-plastic furniture, wood or metal furniture with plastic padded and covered arm rests, mattresses without expanded plastic or rubber, absorbent cotton in cartons, natural fiber and viscose yarn thread, and products, and natural fiber clothing or textile products.

Others. Tobacco products in paperboard cartons, non-flammable liquids such as soaps, detergent and bleaches, and non-flammable pharmaceuticals in plastic containers; combustible foods or cereal products, and non-negative producing film packs in sealed metal foil wrappers in paperboard packages.

Class IV commodity is defined in Class I, II and/or III products containing an appreciable amount of plastics in a paperboard carton or Class I, II and/or III products with plastic packaging in paperboard cartons on wood pallets.

Examples of Class IV products are small appliances, typewriters and cameras with plastic parts, plastic backed tapes and synthetic fabrics or clothing. An example of packing material is a metal product in a foamed plastic cocoon in a corrugated carton.

Class IV commodity also includes:

Textiles. Synthetic thread and yarn except viscose, and non-viscose synthetic fabrics or clothing.

Others. Telephones, vinyl floor tile, wood or metal frame upholstered furniture or mattresses with plastic covering and/or padding, and plastic padded metal dashboards or metal bumpers.

DATED at Toronto this 19th day in the month of September in the year 1990 for Authorization #82-16-54 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-82-12-050

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

CHIMNEY LINER

Date of Authorization: November 17, 1982

BMEC REFERENCE: BMEC-82-12-050

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, R.S.O. 1980

AND IN THE MATTER OF an application by:

ISO-KAREN Aps
Industrivej
7470 Karup J.
Denmark

AGENT:

Norwegian Woodstoves
Division of Dahl Brothers (Canada) Ltd.
2600 South Sheridan Way
Mississauga, Ontario
L5J 3Y1

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This authorization is limited to Ontario Building Code Part 9 buildings for new self-contained chimneys and/or to line or reline existing masonry chimneys where such chimneys are in a good state of repair.

   (**NOTE:** Since this is listed to ULC-S629M and shall bear ULC labels it may be used with solid, gas or liquid fuels.)

7. Protection from the elements shall conform to O.B.C. Subsection 9.20.17. and installation shall be done by factory trained personnel only.
8. This chimney liner shall not negate the O.B.C. requirements for flue sizes.
9. The Iso-Karen chimney or liner shall be capped by extending the liner not more that 100 mm (4 in) above a precast waterproof concrete cap which has sloping top and overhangs the chimney by at least 50 mm (2 in) with drip edges cast into the concrete cap not less than 25 mm (1 in) from the face of the chimney, or a stainless steel cap with formed drip edges.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-82-11-049

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KITCHEN EXHAUST DUCT DAMPER

Date of Authorization: September 9, 1982

BMEC REFERENCE: BMEC-82-11-049

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, R.S.O. 1980

AND IN THE MATTER OF an application by:

Ministry of Government Services
Ontario Ministry of Revenue
33 King Street West
Oshawa, Ontario
L1H 1A1
ON THE SUBJECT OF:

The use of an automatic fire damper on the terminus of a kitchen exhaust duct, to reduce the exfiltration of air from this building AT THE ABOVE ADDRESS.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This authorization is for the installation of an automatic damper equal to Ruskin FD-35 and installed on the discharge outlet of the kitchen exhaust duct outside above the roof complete with a clear cut opening or openings through the approximate centre of the damper to equal 7 square inches to vent the gas pilots on the appliances served by this exhaust duct.
7. In lieu of a fusible link a limit switch mounted outside of the air stream to prove damper is fully open shall be activated by the **blade** of the damper.
8. Damper shall be driven open/closed with an electric motor mounted outside the air stream and in a weatherproof enclosure. Necessary wiring and control shall be provided not to allow the fan to start until the damper is in the fully open position and then only close when the fan is stopped.
9. Except as noted above the entire kitchen duct system shall conform to the NFPA 96-1980.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-82-10-048

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KITCHEN EXHAUST HEAT RECOVERY SYSTEM

Date of Authorization: September 9, 1982

AMENDED:
November 7, 1986
August 12, 1987

BMEC REFERENCE: BMEC-82-10-048

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Kilmer Environmental Inc.
208 Britannia Road East, Unit #1
Mississauga, Ontario
L4Z 1S6

AGENT:

McCarthy Robinson Inc.
321 Progress Avenue
Scarborough, Ontario
M1P 2Z7

ON THE SUBJECT OF:

The use of Kitchen Exhaust, Heat Recovery by means of a washable plate type heat exchanger or heat coil.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.

2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. The tempered supply return air duct system shall be for the kitchen area only with a fire damper at the reclaim unit and the air duct beyond shall be installed in accordance with the Ontario Building Code 6.2.4.
7. Installation and maintenance shall comply with the Application and submitted data dated 10 August 1982 entitled Specification Sheets for Indusco Kitchen Heat Reclaim System including Typical drawing for Coil or Plate Heat Exchanger.
8. Except as noted above the entire system shall conform to NFPA 96-1980.
9. Where any reference to date has been made by the APPLICANT or the COMMISSION on any submission or authorization to the N.F.P.A. 96 regardless of the date it shall read as of the date proclaimed for amendments to the Ontario Building Code.

DATED at Toronto this 12th day in the month of AUGUST in the year 1987 for Authorization #82-10-48 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-82-09-047

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

CHIMNEY LINER

Date of Authorization: September 9, 1982

AMENDED: October 15, 1985

BMEC REFERENCE: BMEC-82-09-047

WHEREAS pursuant to s.18(4)(b) of the Building Code Act, RSO 1980, Chap. 51, the Building Materials Evaluation Commission (the "Commission) issued Authorization #82-9-47 on September 9, 1982 (the "Authorization");

AND WHEREAS the Authorization provided that the Authorization shall automatically be cause for termination if the applicant makes any revision or change to the address without prior approval being granted for such change by the Commission;

AND WHEREAS the applicant for the Authorization has requested the approval of the BMEC for a change of its name and address to North American Supaflu Systems, Inc., 15 Holly St., Unit 203, Scarborough, ME, USA, 04074;

NOW THEREFORE the Commission resolves as follows:

1. The Authorization be amended by deleting "National Supra Systems Inc., Box 89, Walton Industrial Park, Walton, New York, 13856, U.S.A." from the identification of the Applicant and replacing it with "North American Supra Systems, Inc., 15 Holly St., Unit 203, Scarborough, ME, 04074, U.S.A."
2. The Authorization as amended hereby shall continue in full force and effect.

Dated at Toronto this 17th day of October, 1996.

BUILDING MATERIALS EVALUATION COMMISSION

Per: Scott Richardson, Chair

BMEC-82-08-046

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

CONCRETE ROOF TILE SYSTEM

Date of Authorization: July 8, 1982

AMENDED: April 14, 1983

BMEC REFERENCE: BMEC-82-08-046

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, R.S.O. 1980

AND IN THE MATTER OF an application by:

Marley Roof Tiles Limited
281 Alliance Road
Milton, Ontario
L9T 3M6

ON THE SUBJECT OF:

Marley Concrete Roof Tile system used on pitched roofs of building structures.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. All aspects of the Ontario Building Code Part 9 or Part 4 as applicable shall be complied with for new and existing roof support framing, rafters, trusses, sheathing, underlay and flashings. For Part 9 buildings the roof dead load shall be increased by 0.5 kN/m (10 lbs/ft) to allow for the weight of the roof tiles. In lieu of plywood sheathing, 19 mm x 38 mm (nominal 1" x 2") wood purlins (battens or strapping) at 338 mm (13-1/4 in) maximum spacing in conjunction with sheathing equivalent to Thermo-ply or Thermo-bar may be used.
7. For existing roofs the structural adequacy of the roof framing and supporting walls shall be certified by a Professional Engineer registered in the Province of Ontario.
8. Construction of this concrete tile roof system as noted above shall comply with the published literature of Marley Roof Tiles Limited as submitted and dated on 25 June, 1982 with the application and entitled Technical Requirements, Installation and Marketing Policy, Engineering Report (No. J1702), Warranty and Specifications Manual (07300 June 1982).

MOVED AND ADOPTED THIS 14th DAY OF APRIL, 1983 BY THE BUILDING MATERIALS EVALUATION COMMISSION

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-82-05-043

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KITCHEN EXHAUST HEAT RECLAIM SYSTEMS

Date of Authorization: May 13, 1982

AMENDED: November 7, 1986

BMEC REFERENCE: BMEC-82-05-043

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Longhill Combustion Products Limited
95 Newkirk Road South
Richmond Hill, Ontario
L4C 2C6

ON THE SUBJECT OF:

Kitchen Exhaust Heat Reclaim Systems

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. The kitchen exhaust duct beyond the fire damper located on the exhaust side of the ecology unit may be installed in accordance with the Ontario Building Code 6.2.4. when it passes directly to atmosphere and not through any fire separations.
7. The tempered supply return air duct system beyond the fire damper separating the supply and exhaust systems shall be installed in accordance with the Ontario Building Code 6.2.4.
8. Installation and maintenance shall comply with the published literature dated 12 April, 1982 as submitted by the Applicant entitled Specifications Sheets for Ecology and Heat Reclaim System for Commercial Kitchen Exhaust including Drawings #1 to #21 inclusive.
9. Reference to NFPA 96 in the above drawings and specification sheet shall be hereby amended to read NFPA 96-1980.
10. Where any reference to date has been made by the APPLICANT or the COMMISSION on any submission or authorization to the N.F.P.A. 96 regardless of the date it shall read as of the date proclaimed for amendments to the Ontario Building Code.

MOVED AND ADOPTED THIS 7th DAY OF NOVEMBER, 1986 BY THE BUILDING MATERIALS EVALUATION COMMISSION.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-82-04-042

BUILDING MATERIALS EVALUATION COMMISSION

(BMEC)

AUTHORIZATION REPORT

INTERIOR AND EXTERIOR CLADDING

Date of Authorization: July 8, 1982

BMEC REFERENCE: BMEC-82-04-042

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, R.S.O. 1980

AND IN THE MATTER OF an application by:

Consolidated Aluminum
11960 Westline Industrial Drive
St. Louis, Missouri
63141 U.S.A.

ON THE SUBJECT OF:

Alucobond Exterior/Interior Cladding

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. That the outer skin be attached to a structural element with methods and structural integrity conforming with the Ontario Building Code, no adhesives may be used.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-82-03-041

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KITCHEN EXHAUST HEAT RECLAIM SYSTEMS

Date of Authorization: May 13, 1982

AMENDED: November 7, 1986

BMEC REFERENCE: BMEC-82-03-041

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

K.D.H. Industries Ltd.
168A Oakdale Road
Downsview, Ontario
M3N 1W1

ON THE SUBJECT OF:

Kitchen Exhaust Heat Reclaim Systems

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. The tempered supply return air duct system shall be installed in accordance with the Ontario Building Code 6.2.4.
7. Installation and maintenance shall comply with the published literature dated 26 April, 1982 as submitted by the Applicant entitled Specification Sheets for KDH Heat Reclaim System for Commercial Kitchen Exhaust including Drawing No. P-4006 dated 26 April, 1982.
8. Reference to NFPA 96 in the above drawings and specification sheets shall be hereby amended to read NFPA 96-1980.
9. Where any reference to date has been made by the APPLICANT or the COMMISSION on any submission or authorization to the N.F.P.A. 96 regardless of the date it shall read as of the date proclaimed for amendments to the Ontario Building Code.

MOVED AND ADOPTED THIS 7th DAY OF NOVEMBER, 1986 BY THE BUILDING MATERIALS EVALUATION COMMISSION.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-82-02-040

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KITCHEN EXHAUST HEAT RECLAIM SYSTEMS

Date of Authorization: May 13, 1982

AMENDED: November 7, 1986

BMEC REFERENCE: BMEC-82-02-040

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Paterson Aire Systems
(Div. of Wayne Forge Ltd.)
5579 McAdam Road
Mississauga, Ontario
L4Z 1N4

ON THE SUBJECT OF:

Systems 111 Kitchen Exhaust and Heat Reclaim System

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. The kitchen exhaust duct beyond the fire damper located on the exhaust side of the Systems 111 unit may be installed in accordance with the Ontario Building Code 6.2.4. when it passes directly to atmosphere and not through any fire separations.
7. The tempered supply return air duct system beyond the fire damper separating the supply and exhaust systems shall be installed in accordance with the Ontario Building Code 6.2.4.
8. Installation and maintenance shall comply with the published literature dated 22 April, 1982 as submitted by the Applicant entitled Specification Sheets for Systems 111 and Heat Reclaim System for Commercial Kitchen Exhaust including Drawings #1 to #11 inclusive.
9. Reference to NFPA 96 in the above drawings and specification sheet shall be hereby amended to read NFPA 96-1980.
10. Where any reference to date has been made by the APPLICANT or the COMMISSION on any submission or authorization to the N.F.P.A. 96 regardless of the date it shall read as of the date proclaimed for amendments to the Ontario Building Code.

MOVED AND ADOPTED THIS 7th DAY OF NOVEMBER, 1986 BY THE BUILDING MATERIALS EVALUATION COMMISSION.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-81-08-038

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KITCHEN EXHAUST HEAT RECOVERY SYSTEM

Date of Authorization: February 11, 1982

AMENDED: May 13, 1982

BMEC REFERENCE: BMEC-81-08-038

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Garland Commercial Ranges Limited
1021 Brevik Place
Mississauga, Ontario
L4W 3R7

ON THE SUBJECT OF:

Kitchen Exhaust Heat Reclaim Systems

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. The kitchen exhaust duct system shall be installed in accordance with the Ontario Building Code in all respects except as authorized herein and shall conform to all other applicable governing legislation and local by-laws.
7. The kitchen exhaust duct beyond the fire damper located on the exhaust side of the ecology unit may be installed in accordance with the Ontario Building Code 6.2.4. when it passes directly to atmosphere and not through any fire separations.
8. The tempered supply return air duct system beyond the fire damper separating the supply and exhaust systems shall be installed in accordance with the Ontario Building Code 6.2.4.
9. Installation and maintenance shall comply with the published literature dated 1 October, 1981 as submitted by the Applicant entitled Specification Sheet for Ecology and Heat Reclaim System for Commercial Kitchen Exhaust including Drawings #1 to #15 inclusive.
10. Where any reference to date has been made by the APPLICANT or the COMMISSION on any submission or authorization to the N.F.P.A. 96 regardless of the date it shall read as of the date proclaimed for amendments to the Ontario Building Code.

MOVED AND ADOPTED THIS 7th DAY OF NOVEMBER, 1986 BY THE BUILDING MATERIALS EVALUATION COMMISSION.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-81-07-037

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

TECTONIC THERMAL INSULATION

Date of Authorization: September 10, 1981

BMEC REFERENCE: BMEC-81-07-037

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, 1974

AND IN THE MATTER OF an application by:

Condecor Products Ltd.
Unit #11
247 Armstrong Avenue
Halton Hills, Ontario
L7G 4X6

ON THE SUBJECT OF:

Tectonic Thermal Insulation

INFORMATION AND PRESENT POSITION:

This application has been examined by the Building Materials Evaluation Commission and its findings on the submission by the applicant is that the subject matter is not prohibited under the present Ontario Building Code Regulation 925/75 as amended to date for combustible construction, however, certain installations may not be made where noncombustible construction is required by the above Regulation.

MOVED AND ADOPTED THIS 10th DAY OF SEPTEMBER, 1981 BY THE BUILDING MATERIALS EVALUATION COMMISSION.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-81-01-031

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KITCHEN EXHAUST HEAT RECOVERY SYSTEM

Date of Authorization: June 11, 1981

AMENDED:
May 13, 1982
November 7, 1986

BMEC REFERENCE: BMEC-81-01-031

IN THE MATTER OF

Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51 **AND IN THE MATTER OF** an application by:

Circul-Aire (Eastern) Inc.
5885 Henri Bourassa Blvd. West
Montreal, Quebec
H4R 1B7
ON THE SUBJECT OF:

Kitchen Exhaust Pollution Abatement and Heat Reclaim **THE COMMISSION HEREBY AUTHORIZES** to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. The kitchen exhaust duct beyond the fire damper located on the exhaust side of the Odor Gobbler unit shall be installed in accordance with the Ontario Building Code 6.2.4. when it passes directly to atmosphere and not through any fire separations.
7. The tempered supply return air duct system beyond the fire damper separating the supply and exhaust systems shall be installed in accordance with the Ontario Building Code 6.2.4.
8. Installation and maintenance shall comply with the published literature, data and drawings as submitted by Circul-Aire and outlined in their letter dated 16 April 1981.
9. Where any reference to date has been made by the APPLICANT or the COMMISSION on any submission or authorization to the N.F.P.A. 96 regardless of the date it shall read as of the date proclaimed for amendments to the Ontario Building Code.

MOVED AND ADOPTED THIS 7th DAY OF NOVEMBER, 1986 BY THE BUILDING MATERIALS EVALUATION COMMISSION

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-80-04-026

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KITCHEN EXHAUST HEAT RECOVERY SYSTEM

Date of Authorization: November 13, 1980

AMENDED:
February 11, 1982
May 13, 192
November 7, 1986

BMEC REFERENCE: BMEC-80-04-026

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Garland Commercial Ranges Limited
1021 Brevik Place
Mississauga, Ontario
L4W 3R7

ON THE SUBJECT OF:

Kitchen Exhaust Heat Reclaim Systems

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. The kitchen exhaust duct system shall be installed in accordance with the Ontario Building Code in all respects except as authorized herein and shall conform to all other applicable governing legislation and local by-laws.
7. The kitchen exhaust duct beyond the fire damper located on the exhaust side of the ecology unit may be installed in accordance with the Ontario Building Code 6.2.4. when it passes directly to atmosphere and not through any fire separations.
8. Installation and maintenance shall comply with the published literature and drawings No. 1 to No. 14 inclusive dated 23 October 1980 and/or amended to 11 February, 1982. These have been submitted by the Applicant to form part of this Authorization and are entitled Specification Sheets for Ecology and Heat Reclaim System for Commercial Kitchen Exhaust.
9. Where any reference to date has been made by the APPLICANT or the COMMISSION on any submission or authorization to the N.F.P.A. 96 regardless of the date it shall read as of the date proclaimed for amendments to the Ontario Building Code.

MOVED AND ADOPTED THIS 7th DAY OF NOVEMBER, 1986 BY THE BUILDING MATERIALS EVALUATION COMMISSION.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-80-02-024

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

ROOF COVERING SPRAYED-IN-PLACE URETHANE FOAM

Date of Authorization: September 11, 1980

BMEC REFERENCE: BMEC-80-02-024

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, 1974

AND IN THE MATTER OF an application by:

Reichhold Limited
1919 Wilson Avenue
Weston, Ontario
M9M 1B1

ON THE SUBJECT OF:

New and re-roofing over existing built-up roofing systems with Spray-in-place Urethane Foam complete with Elastomeric Weather Proofing topcoat.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This authorization is limited to materials conforming to (a) C.G.S.B. standard for: Thermal Insulation, Urethane Spray in Place 51-GP-23M, November 1978. (b) U.L.C. Report on Built-up Roof Covering Materials (Coating) File CR1242, Application No. 79T351 dated November 12, 1979.
7. This authorization shall also be limited until further notice from the Commission, that the Applicant and/or his Agent shall notify the Commission in writing thirty (30) days of any confirmed installations, with all necessary information respecting this installation, owner, location. Also the "Daily Report" on page 27 and 28 in the designed Appendix "A" must be available at all times for each installation to the Commission upon request.
8. This authorization if proposed to be used in a "Fire-Rated Roof Assembly" shall be Listed by Underwriters Laboratories of Canada for that purpose.
9. All applicable aspects of the Ontario Building Code shall be complied with except as authorized above.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-80-01-023

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

THERMAL HOMES DOUBLE WALL CONSTRUCTION

Date of Authorization: September 11, 1980

BMEC REFERENCE: BMEC-80-01-023

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, 1974

AND IN THE MATTER OF an application by:

John Hix, Architect
207 Queen's Quay West
Toronto, Ontario
M5J 1A7

ON THE SUBJECT OF:

Thermal Homes and the use of double wall construction for heating energy saving.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. A continuous Fire Stop Flap on Fusible Link is positioned at the bottom of the north double wall space as per detailed sketch.
7. There is to be no combustible structural members, horizontal or vertical, in the north double wall space.
8. 3/8" gypsum board is applied to the outer surface of the inner wall.
9. The inner wall is filled with a minimum of 3-1/2" of fibreglass insulation with 1/2" gypsum board on the inside surface.
10. The normal Fire Stops are provided at the junction of the floors and ceiling and all inner walls as required by the Ontario Building Code.
11. Product of combustion detectors are placed, one in the crawl space, one in the attic space and the normal number required internally in the dwelling. These detectors, while giving alarm to the occupants, are also inter connected to shut down the fan in the attic space.
12. A back draft damper is installed on the fan to stop the convective flow should a fire occur.
13. There is an access panel to the attic space and an access panel in the gypsum board and stud partition that divides the attic space into two compartments.
14. The summer attic vents capable of venting each side of the attic stud partition and at each end of the cable are opened when the heating season is over. This allows air warmed in the sun room to flow to the outside by natural convection. The doors are opened to the outside during this period. At the end of the summer these attic vents are closed.
15. Insulation and Vapour Barrier. The outer envelope roof is filled with fibreglass insulation and fitted with four mil vapour barrier is lapped and taped. The vapour barrier and insulation are fully accessible for inspection. The house shall be fitted with exhaust ducts and fans for all kitchen and bathrooms.
16. All applicable aspects of the Ontario Building Code shall be complied with except as authorized above.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-79-06-021

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

BRUSH APPLIED FIRE RETARDANT COATINGS

Date of Authorization: December 13, 1979

BMEC REFERENCE: BMEC-79-06-021

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, 1974

AND IN THE MATTER OF an application by:

American Vamag Co. Inc.
1061 Linden Avenue
Ridgefield, New Jersey
U.S.A. 07657

ON THE SUBJECT OF:

Compliance with the requirements of OBC Clause 3.1.4.4.(13)(b) and Subclause 3.1.4.5.(3)(h)(ii) of interior wood finish materials, to which Flame Retardant Coating has been applied and for which the flame-spread rating is not more than 25, (as described and reported in ULC Report identified as File 886 Application No. 79T31 July 12, 1979).

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for

termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This authorization is limited to wood finish materials that are not more than 1 inch thick and which consist of sawn lumber, or plywood conforming with the requirements of CSA Standard 0121-1973, or 0151-1974, or 0153-1976, to which the FLAME RETARDANT COATING has been applied to all surfaces that may be exposed to ambient air. For the purpose of this authorization it is considered that, after having been given the Flame Retardant Coating described in this authorization, any species shown in Table 1 of CWC 1977 Datafile FP-6 as having a Flame-Spread Rating of not more than 118, will then have a Flame-Spread Rating of not more than 25.
7. To confirm the validity of this compliance on ANY project, a DOCUMENT - an inspection and testing report for THAT project - must be filed with the "Chief Official".

   (a) This DOCUMENT must have been produced and signed by an authorized representative of a testing organization accredited by the Standards Council of Canada, or otherwise acceptable to the "Chief Official".

   (b) The purpose of the DOCUMENT is to verify that the material used was that covered by the ULC Report identified as File CR886 Application No. 79T31, dated July 12, 1979; and that it was applied to all surfaces stipulated in para. 6 in accordance with the procedures described on the CARD issue by ULC, identified as Guide No. 40 UB.5.6, File CR886, dated April 23, 1976 (attached hereto) which shall be provided with the material.

8. The DOCUMENT referred to in para. 7 must show that the verification procedure included all of the following items, (a) to (e) inclusive, and that in each case the requirements were met:

   (a) a visual examination of the whole area and a comparison with whatever reference sample or samples may be required by the testing organization, for every species to which the material is to be applied for which acceptance is sought;

   (b) a determination of the quantity of material used, by a count of the empty containers, and a comparison of this quantity with that required for the area

covered, as noted on the CARD issued by ULC which is referred to in para. 7 and attached hereto;

(c) obliteration of all of the ULC labels on the empty containers;

(d) determination that the dry film thickness of the coating applied is not less than 7 mils, in accordance with the manufacturer's recommendations;

(e) a burn test when required by the "Chief Official". This burn test is the application of a gas flame to 3 or 4 square inches of the protected surface for 10 to 12 seconds and, for a satisfactory result, the intemescent mat or heat barrier developed must be not less than 1/4 inches thick.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-79-04-019

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KITCHEN EXHAUST HEAT RECOVERY SYSTEM

Date of Authorization: November 8, 1979

AMENDED:
June 11, 1981
February 11, 1982
May 13, 1982

BMEC REFERENCE: BMEC-79-04-019

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Gaylord Ventilators of Canada Inc.
2695 Drew Road
Mississauga, Ontario
L4T 3X1

ON THE SUBJECT OF:

Kitchen exhaust air heat reclaim system utilizing the same air stream for exhaust and make-up air, for use in the kitchen area, of new or existing buildings, and/or the discharge of same to outside atmosphere at various heights.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This authorization includes that the supply air system downstream from the unit shall be installed in conformance with the Ontario Building Code Subsection 6.2.4. Air Duct Systems.
7. This authorization is only prevalent when the system is installed and maintained in accordance with the latest NFPA 96 complete with the listed extraction equipment normally required to be installed by NFPA-96, except as noted in the above paragraphs 4 and 6.
8. This authorization shall include the use of either "Unisorb" or "Purifil" where the latter is now specified with the odour removable media filters.
9. Where any reference to date has been made by the APPLICANT or the COMMISSION on any submission or authorization to the NFPA 96 regardless of the date it shall read as of the date proclaimed for amendments to the Ontario Building Code.

MOVED AND ADOPTED THIS 7th DAY OF NOVEMBER, 1986 BY THE BUILDING MATERIALS EVALUATION COMMISSION.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-79-02-017

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

BRUSH APPLIED FIRE RETARDANT COATINGS

Date of Authorization: August 9, 1979

BMEC REFERENCE: BMEC-79-02-017

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, 1974

AND IN THE MATTER OF an application by:

Wood-Tek Limited
441 Esna Park Road
Unit 9
Markham, Ontario
L3R 1H7

ON THE SUBJECT OF:

Compliance with the requirements of OBC Clause 3.1.4.4.(13)(b) and Subclause 3.1.4.5.(3)(h)(ii) of interior Wood-Tek Flame Retardant Coating has been applied and for which the flame-spread rating is not more than 25, (as described and reported in ULC Report identified as File CR979 Application No. 77718 May 3, 1977).

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials,

technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.

5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This authorization is limited to wood finish materials that are not more than 1 inch thick and which consist of sawn lumber, or plywood conforming with the requirements of CSA Standard 0121-1973, or 0151-1974, or 0153-1976, to which the FLAME RETARDANT COATING has been applied to all surfaces that may be exposed to ambient air. For the purpose of this authorization it is considered that, after having been given the Flame Retardant Coating described in this authorization, any species shown in Table 1 of CWC 1977 Datafile FP-6 as having a Flame-Spread Rating of not more than 118, will then have a Flame-Spread Rating of not more than 25.
7. To confirm the validity of this compliance on ANY project, a DOCUMENT - an inspection and testing report for THAT project - must be filed with the "Chief Official". The purpose of that document is to verify that the material used was that covered by ULC Report identified as File CR979 Application No. 77718 May 3, 1977; and that it was applied to all surfaces outlined in para. 6 in accordance with the procedures described in the instructions on the ULC labels on the containers in conjunction with the instructions in the Wood-Tek APPLICATION DATA SHEET (attached hereto) provided with the material.
8. The DOCUMENT referred to in para. 7 must have been produced and signed by an authorized representative of a testing organization accredited by the Standards Council of Canada or otherwise acceptable to the "Chief Official".
9. The verification procedure used must include all of the following items:

   (a) a visual examination of the whole area and a comparison with whatever reference sample or samples may be required by the testing organization, for every species to which the material is to be applied for which acceptance is sought;

   (b) a determination of the quantity of material used, by a count of the empty containers, and a comparison of this quantity with that required for the area covered, as noted on the CARD issued by ULC which is referred to in para. 7 and attached hereto;

   (c) obliteration of all of the ULC labels on the empty containers;

(d) determination of the thickness of the coating applied and a comparison with the thickness called for in the APPLICATION DATA SHEET (attached hereto);

(e) a burn test when required by the "Chief Official".

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-78-07-015

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

SUREWALL SURFACE BONDING CEMENT

Date of Authorization: 1 May 1980

AMENDED: 12 August 1987

BMEC REFERENCE: BMEC-78-07-015

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act,

Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF the applicant:

W. R. Bonsal Company
8201 Arrowridge Blvd.
P.O. Box 241148
Charlotte, N.C.
28224 U.S.A.

ON THE SUBJECT OF:

Surewall(R) Surface Bonding Cement, a glass-fibered Portland cement. This system is applied to the surface of both interior and exterior sides of dry stacked concrete masonry unit construction in lieu of conventional mortar for below or above grade walls.

THE COMMISSION HEREBY AUTHORIZES to the applicant the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.
3. This AUTHORIZATION may be mentioned in promotional and/or advertising materials, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.

4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS

6. This authorization is limited to use in buildings where the design is based on engineering analysis of the structural effects of the loads and forces acting on the structure, by an architect or professional engineer.
7. Engineering inspection of masonry construction shall be carried out, to ensure that construction is consistent with the design, by the person responsible for its design or by another person qualified in the inspection of masonry construction and who is responsible to the design architect or engineer.
8. The maximum allowable design stresses shall be 15% of the ultimate stresses of the masonry as determined by tests performed in accordance with ASTM E72-68 "Conducting Strength Tests of Panels for Building Construction" as revised to 1 May 1975. Tests shall be carried out on panels using the same materials and the same thickness of blocks and coatings as proposed to be used in the building under consideration.
9. This authorization limits the use of this system to walls not greater in height than 7.62 m (25 ft), above the top of the foundation wall.
10. Surewall bonding mortar shall meet the Standard Specification ASTM C887-79.
11. The construction of Surewall surface bonded concrete block walls shall comply with the published literature of the W.R. Bonsal Company entitled, "Building with Surewall Surface Bonding Cement".
12. All applicable aspects of the Ontario Building Code shall be complied with except as authorized above.

DATED at Toronto this 12th day in the month of AUGUST in the year 1987 for Authorization #78-7-15 amended on behalf of:

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-78-05-013

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

KITCHEN EXHAUST HEAT RECOVERY SYSTEM

Date of Authorization: April 19, 1979

AMENDED:
June 11, 1981
February 11, 1982
May 13, 1982
November 7, 1986

BMEC REFERENCE: BMEC-78-05-013

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, Revised Statutes of Ontario, 1980, Chapter 51

AND IN THE MATTER OF an application by:

Gaylord Ventilators of Canada Inc.
2695 Drew Road
Mississauga, Ontario
L4T 3X1

ON THE SUBJECT OF:

Kitchen exhaust air heat reclaim system utilizing two separate air streams for exhaust and make-up buildings, and/or the discharge of same to outside atmosphere at various heights.

THE COMMISSION HEREBY AUTHORIZES the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.
6. This authorization shall include the use of either "Unisorb" or "Purifil" where the latter is now specified with the odour-removable media filters.
7. This authorization does not include the use of Canadian Chromalox Thermal Recovery Coils as Heat Recovery Coils. At this point in time they are only in a designed stage and cannot be accepted on that basis.
8. Where any reference to date has been made by the APPLICANT or the COMMISSION on any submission or authorization to the N.F.P.A. 96 regardless of the date it shall read as of the date proclaimed for amendments to the Ontario Building Code.

MOVED AND ADOPTED THIS 7th DAY OF NOVEMBER, 1986 BY THE BUILDING MATERIALS EVALUATION COMMISSION.

BUILDING MATERIALS EVALUATION COMMISSION

BMEC-78-04-012

BUILDING MATERIALS EVALUATION COMMISSION
(BMEC)
AUTHORIZATION REPORT

DUCTLESS WASHROOM EXHAUST

Date of Authorization: December 14, 1978

AMENDED: July 12, 1979

BMEC REFERENCE: BMEC-78-04-012

IN THE MATTER OF Section 18 (4) (b) of the Building Code Act, 1974

AND IN THE MATTER OF an application by:

Rush-Hampton Industries
3000 Industrial Park
Longwood, Florida, U.S.A.
32750

AGENT:

Wally Iwamoto
Downstream Components
64 Misthollow Sq.
Scarborough, Ontario
M1E 4P4

ON THE SUBJECT OF:

CA/90 Ductless Fan to be used as alternate to a window or mechanical ventilation in toilets and bathrooms of new construction.

THE COMMISSION HEREBY AUTHORIZES the use of the aforementioned matter subject to the following terms and conditions:

1. Where in the opinion of the COMMISSION negative experience indicates that this authorization should be amended and/or terminated, the COMMISSION may by written notice to the applicant or the agent at the above address, withdraw the authorization and no further installations shall be made subsequent to the effective date of the termination as set out in the written notice.
2. The COMMISSION does not assume or undertake to discharge any responsibility of the applicant to any other party or parties and does not in any manner warrant

or guarantee the correctness and/or the successful performance of the subject matter.

3. This AUTHORIZATION may be mentioned in promotional and/or advertising material, however, it is not to be used expressly or impliedly as an endorsement of any product, material, technique or design which is described herein.
4. This AUTHORIZATION is not transferable to any other party. If the APPLICANT makes any revision or change to the address or the materials, technique, design, system and/or use of the same shall automatically be cause for termination, unless prior approval is granted for such revision or change by the COMMISSION.
5. Construction and installation shall be in conformance to all applicable governing legislation except that compliance with the terms and conditions described herein shall be deemed not to be a contravention of the Building Code. Where applicable, any change in the Act, Regulation or Code provisions shall be grounds for re-evaluation by the COMMISSION.

AND SPECIFIC REQUIREMENTS:

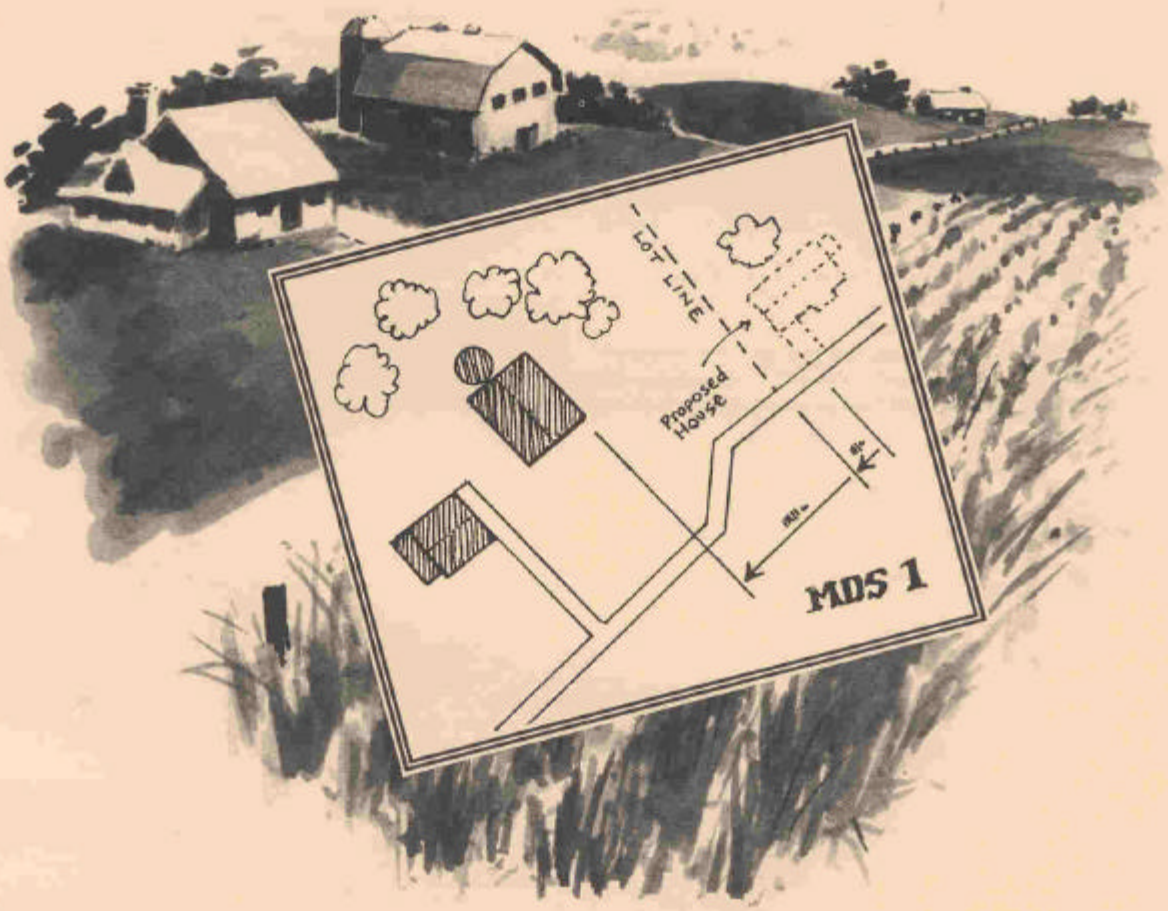
6. Until further written notice from the Commission the Applicant and/or his agent shall notify the Commission in writing within thirty days of completion of the installation of each system pursuant to this authorization with all the necessary information respecting the owner and location of the installation, also what type of follow up procedure is to be used in regard to replacing the filter, and what quantity of filter stock on hand is available locally.
7. The permitted use of this fan in paragraph 5 in two piece washrooms is only if neither of the two pieces are bathtub or shower.

BUILDING MATERIALS EVALUATION COMMISSION

MARCH 1995

MINIMUM DISTANCE SEPARATION I (MDS I)

(Replaces the Minimum Distance Formula I in the *Agricultural Code of Practice*, 1976)



ONTARIO MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS
ONTARIO MINISTRY OF ENVIRONMENT AND ENERGY

Ontario
Ministry of Agriculture,
Food and Rural Affairs

This document is to be used for the review of planning and development applications. It provides distance separation requirements between existing farm and new non-farm uses.

BACKGROUND

A principle of land use planning is the grouping together of compatible land uses and the separating of incompatible land uses. Industrial parks, residential subdivisions and commercial areas as separate parts of an urban area are a reflection of this principle.

The agricultural community generally acknowledges that even with the best management, noise and dust cannot be eliminated from certain agricultural operations and that odours are associated with livestock production. Not all rural residents, including some farmers, can accept these conditions particularly when the nuisance is perceived to exceed acceptable levels.

In rural areas, this principle of separating different and incompatible land uses has not always been applied. Where there has been sufficient separation distance between differing rural uses, however, there have been few complaints. The distance separation will vary with the source of the potential complaint and the sensitivity of the neighbouring land use.

The primary purpose and use of prime agricultural areas should be for agriculture. Non-farm residents who seek the advantages of country life must be aware of the noise, odour and dust associated with normal farm practices.

Should complaints about odours, noise or dust occur, the Ministry of the Environment and Energy will respond. If the complaint is valid, Ministry of the Environment and Energy staff in cooperation with the farm operator and in consultation with Ministry of Agriculture Food and Rural Affairs staff recommend measures to resolve the complaint. If the complainant still has concerns they may request a hearing by the Farm Practices Protection Board. This Board can only hold hearings in regard to odour, dust or noise concerns. The Board rules whether the occurrence is a normal farming practice.

The Minimum Distance Separation (MDS) is a tool to determine a recommended distance between a livestock facility and another land use. The objective is to prevent land use conflicts and minimize nuisance complaints from odour. MDS does not account for noise and dust.

Minimum Distance Separation will vary according to a number of variables including type of livestock, size of the farm operation, type of manure system and the form of development present or proposed.

MDS I provides minimum distance separation for new development from existing livestock facilities.

MDS II provides minimum distance separation for new or expanding livestock facilities from existing or approved development.

The *Guide To Agricultural Land Use* contains advice on avoiding or reducing the potential for conflict between neighbouring land uses through appropriate farm practices.

These three above documents replace the 1976 *Agricultural Code of Practice*.

Ultimately, land use planning decisions (including MDS) and good farm practices must go hand-in-hand to promote harmony in the rural community and to ensure agriculture as an ongoing activity.

IMPLEMENTATION GUIDELINES

General

1. MDS formulae and criteria are to be referenced in official plans and included in by-laws and are to be applied in designations and zones where livestock facilities are a permitted use and is to be implemented at the time of planning and/or development review.
2. MDS I applies when locating development in proximity to existing livestock facilities on an existing or proposed separate parcel of land.
3. MDS I calculates a separation distance based on either the actual housing capacity or potential capacity according to tillable hectares (maximum 150 Livestock Units), whichever is greater. Existing housing capacity can be based on Canada Plan Service data, available from any OMAFRA office.
4. MDS I is applied in any non-urban designation where agriculture and the keeping of livestock is a permitted use. The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) does not apply MDS I to proposed non-agricultural uses in an approved urban designation; however, individual municipalities may require the MDS I separation distances be met for livestock facilities located within an urban designation as stipulated in their Official Plan or Zoning By-law.
5. MDS I applies to empty livestock facilities if they are structurally sound and reasonably capable of housing livestock. In such cases, Animal Group (Table 1) will be based upon the most probable use.
6. MDS I is applied to urban expansions. In this instance only, the separation distance is based on the existing housing capacity and not tillable hectares.
7. MDS I only applies to livestock facilities. It is not used to calculate separation distances from uses such as abattoirs, apiaries, greenhouses, kennels and mushroom farms.
8. The direction of the prevailing winds, the presence of berms or other forms of screening do not affect MDS I.
9. The separation distances generated allow for some future expansion of adjacent livestock facilities.
10. MDS I is to be applied to new applications even though there may be existing non-farm uses that do not conform to the MDS I requirements. Where there are 4 or more non-farm uses closer to the subject livestock facility and in immediate proximity to the current application, MDS I will not be applied. The current application must not be located any closer to the livestock facility than the existing non-farm uses.

Official Plan Amendments

11. In addition to Guideline #1 above, MDS I is applied to lands being considered for a non-agricultural designation through the Official Plan Amendment process.

Zoning By-Law Amendments

12. In addition to Guideline #1 above, MDS I is be applied when new development is proposed by way of a re-zoning in a designation where agriculture is a permitted use.

Consent Applications

13. MDS I is applied to a proposed lot, vacant or with existing structures.
14. MDS I is not applied to a proposed lot with an existing building when that building is already located on a parcel of land separate from the subject livestock facility.

Lots of Record

15. Municipalities have the option, but are encouraged, to apply MDS I to building proposed for existing lots of record. The application of MDS I in such cases will take its direction from the municipal planning document.

Measurement

16. Applications to create an industrial, commercial, institutional, recreational or residential uses by consent or subdivision are measured as the shortest distance between the livestock facility and the area of land use change.
17. If the consent is for a residential lot (vacant or residence existing) and the lot is no greater than the size required to provide private septic services (generally no greater than 1 hectare in size), the measurement is taken as the shortest distance between the livestock facility and the lot line of the lot being created.
18. Where larger lots may be permitted, a suitable location must be identified for a building envelope of approximately one hectare outside of the minimum separation distance.

DEFINITIONS

Active Recreational Use:
Recreational use usually with buildings and/or with a concentration of uses such as golf courses, other playing fields, trailer parks, campgrounds and conservation areas with facilities.

Agriculturally Related Commercial/Industrial Uses:
Uses directly related to agriculture and necessary in close proximity to farm operations, such as animal husbandry services, produce or grain storage facilities, or farm machinery outlets.

Animal Group:
Livestock and poultry grouped according to their manure production.

Housing Capacity:
Total maximum livestock capacity for the facility at any one time.

Livestock Facilities:
Livestock barns where animals or poultry are housed, including beef feedlots, and the associated manure storage.

Livestock Unit:
Equivalent values for various types of animals and poultry based on manure production and production cycles.

Multiple Residential:
Three or more residential units in same building.

Passive Recreational Use:
Recreational use not requiring buildings and not altering the soil or topography, such as open space and environmental areas.

Rural Residential Cluster:
Four or more adjacent rural residential lots, generally 1 hectare or less in size, sharing a common boundary. Lots located directly across a road from one another shall be considered as having a common boundary.

Tillable Hectares:
Land including pasture that can be worked or cultivated.

Urban Expansion:
Outward expansion of cities, towns, villages, and hamlets for such uses as residential, recreational, institutional, and commercial and industrial.

MINIMUM DISTANCE SEPARATION I (MDS I)
CALCULATION SHEET FOR NON-AGRICULTURAL USES

USE: To determine the required Minimum Distance Separation (MDS I) for non-agricultural uses establishing or expanding in proximity to livestock facilities

PURPOSE: To reduce the potential for odour conflicts between existing livestock facilities and proposed neighbouring land uses

APPLICATION: MDS will be used for:

- assessing official plan amendments
- assessing zoning bylaw amendments
- evaluating consent applications
- other land use proposals

The following information is to be completed as it relates to the livestock operation. A separate calculation sheet is to be filled out for each livestock operation in proximity to the proposed non-agricultural use.

APPLICANT'S NAME _____ PHONE _____

ADDRESS _____ POSTAL CODE _____

FARMER'S NAME _____ PHONE _____

ADDRESS _____ POSTAL CODE _____

COUNTY/REGION _____ TOWNSHIP _____ LOT _____ CONC. _____

FILE # _____ EVALUATION DATE _____ EVALUATOR _____

Minimum Distance Separation required from Livestock Facility = _____ metres (from Table 2)

Actual distance as reported or estimated from Livestock Facility = _____ metres

Minimum Distance Separation required from Manure Storage = _____ metres (from Table 3)

Actual distance as reported or estimated from Manure Storage = _____ metres

This application MEETS ☐ DOES NOT MEET ☐ MDS requirements for the barn and manure storage.

MINIMUM DISTANCE SEPARATION I (MDS I)
CALCULATION SHEET FOR NON-AGRICULTURAL USES

USE: To determine the required Minimum Distance Separation (MDS I) for non-agricultural uses establishing or expanding in proximity to livestock facilities

PURPOSE: To reduce the potential for odour conflicts between existing livestock facilities and proposed neighbouring land uses

APPLICATION: MDS will be used for:

- assessing official plan amendments
- assessing zoning bylaw amendments
- evaluating consent applications
- other land use proposals

The following information is to be completed as it relates to the livestock operation. A separate calculation sheet is to be filled out for each livestock operation in proximity to the proposed non-agricultural use.

APPLICANT'S NAME _____ PHONE _____

ADDRESS _____ POSTAL CODE _____

FARMER'S NAME _____ PHONE _____

ADDRESS _____ POSTAL CODE _____

COUNTY/REGION _____ TOWNSHIP _____ LOT _____ CONC. _____

FILE # _____ EVALUATION DATE _____ EVALUATOR _____

Minimum Distance Separation required from Livestock Facility = _____ metres (from Table 2)

Actual distance as reported or estimated from Livestock Facility = _____ metres

Minimum Distance Separation required from Manure Storage = _____ metres (from Table 3)

Actual distance as reported or estimated from Manure Storage = _____ metres

This application MEETS ☐ DOES NOT MEET ☐ MDS requirements for the barn and manure storage.

MINIMUM DISTANCE SEPARATION I (MDS I)
CALCULATION SHEET FOR NON-AGRICULTURAL USES

USE: To determine the required Minimum Distance Separation (MDS I) for non-agricultural uses establishing or expanding in proximity to livestock facilities

PURPOSE: To reduce the potential for odour conflicts between existing livestock facilities and proposed neighbouring land uses

APPLICATION: MDS will be used for:

- assessing official plan amendments
- assessing zoning bylaw amendments
- evaluating consent applications
- other land use proposals

The following information is to be completed as it relates to the livestock operation. A separate calculation sheet is to be filled out for each livestock operation in proximity to the proposed non-agricultural use.

APPLICANT'S NAME _____ PHONE _____

ADDRESS _____ POSTAL CODE _____

FARMER'S NAME _____ PHONE _____

ADDRESS _____ POSTAL CODE _____

COUNTY/REGION _____ TOWNSHIP _____ LOT _____ CONC. _____

FILE # _____ EVALUATION DATE _____ EVALUATOR _____

Minimum Distance Separation required from Livestock Facility = _____ metres (from Table 2)

Actual distance as reported or estimated from Livestock Facility = _____ metres

Minimum Distance Separation required from Manure Storage = _____ metres (from Table 3)

Actual distance as reported or estimated from Manure Storage = _____ metres

This application MEETS ☐ DOES NOT MEET ☐ MDS requirements for the barn and manure storage.

ASSESSMENT OF THE LIVESTOCK FACILITY

To calculate Livestock Units, complete Step 1 based on information in Table 1 below.

STEP 1. TOTAL LIVESTOCK UNITS

Column 1 TYPE OF LIVESTOCK	Column 2 HOUSING CAPACITY	Column 3 NUMBER OF ANIMALS PER LIVESTOCK UNIT (From Table 1)	Column 4 NUMBER OF LIVESTOCK UNITS (Col. 2/Col.3)
	(A) = TOTAL LIVESTOCK UNITS (sum of Column 4)		**(A)**

If there are more than 300 livestock units, reference must be made to a full set of tables available from the Ontario Ministry of Agriculture, Food and Rural Affairs

TABLE 1. ANIMAL GROUPS

ANIMAL GROUP 1	ANIMAL GROUP 2	ANIMAL GROUP 3	ANIMAL GROUP 4	ANIMAL GROUP 5
1 Livestock Unit equals	**1 Livestock Unit equals**	**1 Livestock Unit equals**	**1 Livestock Unit equals**	**1 Livestock Unit equals**
200..Chicken Broilers 1.....Horse[3]	4.....Adult Sheep[3] 1....Beef Cow[1 Confinement] 10...Feeder Lambs 100..Ducks 5.....Emu 4.....Adult Goats[3] 10....Feeder Goats 3.....Ostrich 500..Pullets 50...Turkeys (>10kg) 75...Turkeys (5-10kg) 100..Turkeys (<5kg)	1....Beef Cow[1] Yard/Barn 2....Beef Feeder Yard/Barn 1....Dairy Cow[1,2] 2...Dairy HeiferYard/Barn 40...Adult Rabbits[4] 3....Red Veal <300kg 125..Chicken Breeder Layers 75...Turkey Breeder Layers	80.....Adult Mink[4] 40.....Adult Fox[4] 125....Caged Layers	4....Feeder Hogs 5....Sows/Boars 20..Weaners 4-30kg 6....White Veal

[1] Includes calf to 150 kg, [2] Multiply the number of milking cows by 1.5 to account for dry cows, heifers and calves on the same farm,
[3] Includes offspring until weaned, [4] Includes offspring to market size.

Select Animal Group **1 2 3 4 or 5**, depending on type of animals on farm. If there are animals from different groups, select the highest group number. The group number is used when referring to Table 2.

STEP 2. LAND BASE ASSESSMENT (B)

Number of tillable hectares* on site _____ x 5 = _____ (B) Potential Livestock Units

*Maximum (B) is 150 Livestock Units.

STEP 3.

Enter the GREATER OF (A) Total Livestock Units OR (B) Potential Livestock Units _____

Use this figure to enter Column 1 of Table 2.

STEP 4. TABLE 2. MINIMUM DISTANCE SEPARATION FROM LIVESTOCK FACILITY

Read across appropriate line from Column 1 to respective Animal Group and Land Use Type. This number is the Minimum Distance Separation requirement in metres from a livestock facility.

COLUMN 1	TYPE "A" LAND USE To permit: • Up to 3 rural residential lots, either by consent or by plan of subdivision • the severance of an existing dwelling • passive recreational • the building of a dwelling on an existing lot of record • agriculturally related commercial • industrial					TYPE "B" LAND USE To permit: • residential subdivision • active recreational • institutional • commercial • urban expansion • multiple residential • or result in a Rural Residential Cluster				
Greater of Livestock Units (A) or Potential Livestock Units (B)	Animal Group					Animal Group				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
1-5	39	42	48	60	85	73	78	90	112	160
10	55	60	68	85	98	104	112	128	160	183
15	65	70	80	100	115	122	132	151	188	215
20	72	78	89	111	127	135	146	167	208	238
25	78	84	95	119	136	146	157	179	224	256
30	82	88	101	126	144	154	166	189	237	271
35	86	92	106	132	151	161	173	198	247	283
40	89	96	110	137	157	167	180	206	257	294
45	92	99	113	142	162	173	186	213	266	304
50	95	102	117	146	167	178	192	219	274	313
55	98	105	120	150	172	183	197	225	282	322
60	100	108	123	154	176	188	202	231	289	330
65	102	110	126	158	180	192	207	236	295	338
70	105	113	129	161	184	196	211	241	302	345
75	107	115	131	164	188	200	215	246	308	352
80	109	117	134	167	191	204	219	251	313	358
85	111	119	136	170	194	207	223	255	319	364
90	112	121	138	173	198	211	227	259	324	370
95	114	123	140	176	201	214	230	263	329	376
100	116	125	143	178	204	217	234	267	334	382
110	119	128	146	183	209	223	240	275	343	392
120	122	131	150	188	214	229	246	281	352	402
130	125	134	154	192	219	234	252	288	360	411
140	127	137	157	196	224	239	257	294	368	420
150	130	140	160	200	228	244	262	300	375	428
160	133	143	164	205	234	250	269	307	384	439
170	136	147	168	210	240	256	275	314	393	449
180	139	150	172	214	245	262	282	322	402	460
190	143	154	175	219	251	268	288	329	411	470
200	146	157	179	224	256	273	294	336	420	480
210	149	160	183	229	262	279	301	344	429	491
220	152	164	187	234	267	285	307	351	439	501
230	155	167	194	239	273	291	313	358	448	512
240	158	171	195	244	278	297	320	365	457	522
250	162	174	199	248	284	303	326	373	466	532
260	165	177	203	253	290	309	332	380	475	543
270	168	181	207	258	295	315	339	387	484	553
280	171	184	210	263	301	321	345	395	493	564
290	174	188	214	268	306	327	352	402	502	574
300	177	191	218	273	312	333	358	409	511	584

Continue to TABLE 3 (next page).

STEP 5 TABLE 3. MINIMUM DISTANCE SEPARATION FROM MANURE STORAGE

The following table is used to calculate MDS requirements in metres from manure storages associated with livestock facilities.

Using the resulting MDS distance from Table 2, read across the appropriate line to Column 1, 2, 3 or 4. Select the distance under the appropriate Land Use Type.

This is the MINIMUM DISTANCE SEPARATION REQUIREMENT from the manure storage of a livestock facility for the establishment of a non-farm use.

Column 1: Roofed or covered storages for manure, runoff, and milkhouse washwater. Includes any covered or roofed concrete, steel or earthen storages, in-barn solid manure packs, and storages under fully slatted floors.

Column 2: Open solid manure pile on concrete slab. Includes the runoff storages (concrete or earthen) used for capturing seepage liquids from solid manure storage or runoff liquids from yards. If yards are scraped into runoff storage, use column 3 when runoff storage is a concrete or steel tank and column 4 when runoff storage is earthen. Milkhouse washwater may be added to runoff storage.

Column 3: Open concrete or steel tanks used for storing liquid manure, milkhouse washwater, or yard runoff where yard is scraped into storage.

Column 4: Open earth-sided or earth-sided storage with concrete floor to be used for storing liquid manure or yard runoff when yard is scraped into storage or milkhouse washwater.

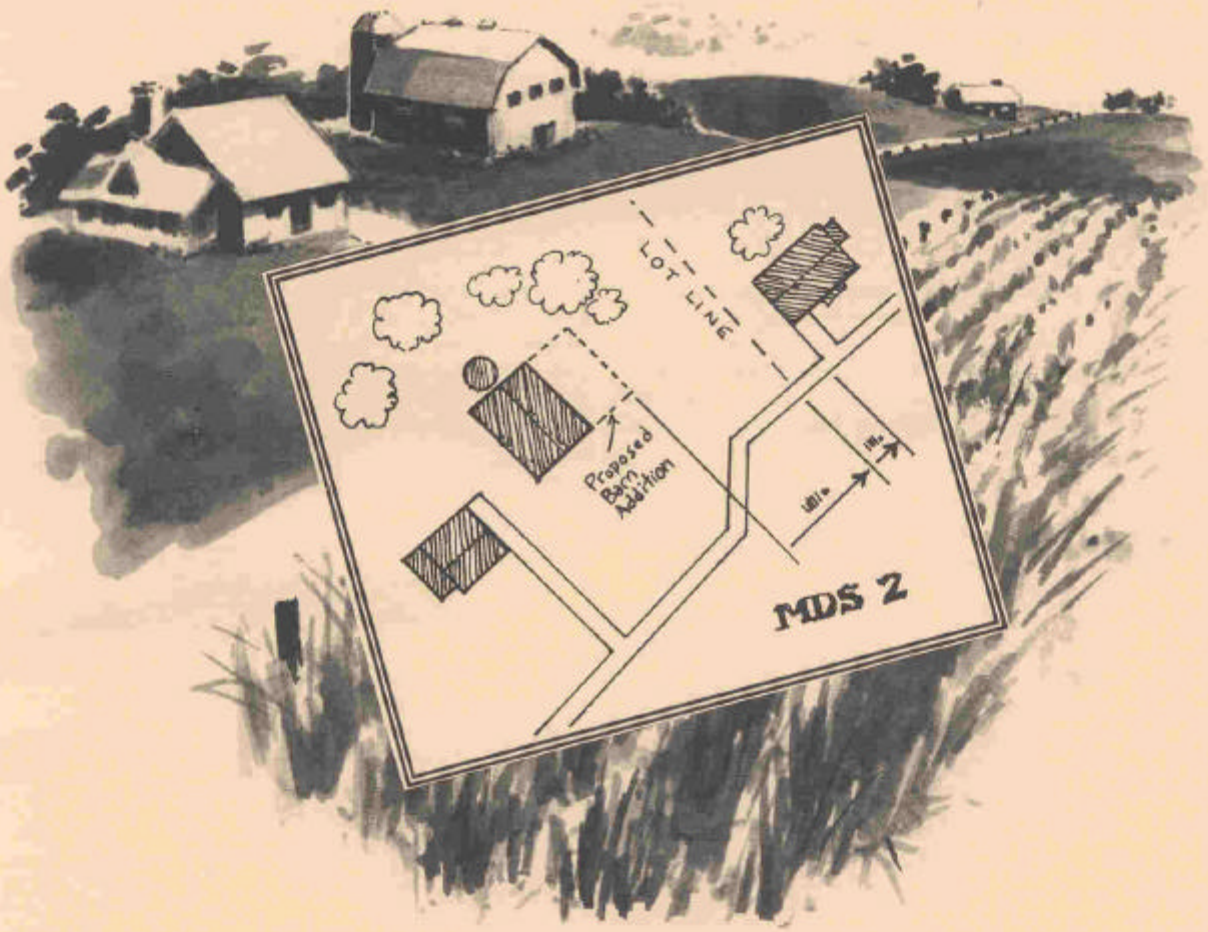
MANURE STORAGE DISTANCE

Distance for Livestock Facility from Table 2 (Step 4). (m)	Column 1 Covered Storage Systems (m)		Column 2 Open Solid and Runoff Storage Systems (m)		Column 3 Open Liquid Tank and Runoff Storage Systems (m)		Column 4 Earthen Liquid and Runoff Storage Systems (m)	
	Type "A" Land Use	Type "B" Land Use	Type "A" Land Use	Type "B" Land Use	Type "A" Land Use	Type "B" Land Use	Type "A" Land Use	Type "B" Land Use
40	40	—	55	—	119	—	324	—
45	45	—	60	—	123	—	326	—
50	50	—	65	—	127	—	328	—
55	55	—	70	—	132	—	331	—
60	60	—	74	—	136	—	333	—
65	65	—	79	—	140	—	335	—
70	70	70	84	103	144	241	337	686
75	75	75	89	107	149	246	339	689
80	80	80	94	112	153	250	342	691
85	85	85	99	117	157	254	344	693
90	90	90	103	122	161	258	346	695
95	95	95	108	127	165	263	348	698
100	100	100	113	132	170	267	351	700
110	110	110	123	141	178	275	355	704
120	120	120	133	151	187	284	359	709
130	130	130	142	161	195	292	364	713
140	140	140	152	171	203	301	368	717
150	150	150	162	180	212	309	373	722
160	160	160	172	190	220	318	377	726
170	170	170	181	200	229	326	382	731
180	180	180	191	209	237	335	386	735
190	190	190	201	219	246	343	390	740
200	200	200	210	229	254	351	395	744
210	210	210	220	239	263	360	399	749
220	220	220	230	248	271	368	404	753
230	230	230	239	258	280	377	408	757
240	240	240	249	268	288	385	413	762
260	260	260	268	287	305	402	421	771
280	280	280	288	307	322	419	430	780
300	300	300	307	326	339	436	439	788
320	320	320	327	346	356	453	448	797
340	340	340	346	365	372	470	457	806
360	360	360	366	385	389	487	466	815
380	380	380	385	404	406	504	475	825
400	400	400	404	423	423	521	483	833
450	450	450	453	472	465	563	506	855
500	500	500	501	520	508	605	528	877
550	550	550	550	569	550	648	550	899

MARCH 1995

MINIMUM DISTANCE SEPARATION II (MDS II)

(Replaces the Minimum Distance Formula II in the *Agricultural Code of Practice*, 1976)



ONTARIO MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS
ONTARIO MINISTRY OF ENVIRONMENT AND ENERGY

Ontario

Ministry of Agriculture, Food and Rural Affairs

This document provides minimum distance separation requirements for livestock facilities within agricultural areas.

BACKGROUND

A principle of land use planning is the grouping together of compatible land uses and the separating of incompatible land uses. Industrial parks, residential subdivisions and commercial areas as separate parts of an urban area are a reflection of this principle.

The agricultural community generally acknowledges that even with the best management, noise and dust cannot be eliminated from certain agricultural operations and that odours are associated with livestock production. Not all rural residents, including some farmers, can accept these conditions particularly when the nuisance is perceived to exceed acceptable levels.

In rural areas, this principle of separating different and incompatible land uses has not always been applied. Where there has been sufficient separation distance between differing rural uses, however, there have been few complaints. The distance separation will vary with the source of the potential complaint and the sensitivity of the neighbouring land use.

The primary purpose and use of prime agricultural areas should be for agriculture. Non-farm residents who seek the advantages of country life must be aware of the noise, odour and dust associated with normal farm practices.

Should complaints about odours, noise or dust occur, the Ministry of the Environment and Energy will respond. If the complaint is valid, Ministry of the Environment and Energy staff in cooperation with the farm operator and in consultation with Ministry of Agriculture, Food and Rural Affairs staff recommend measures to resolve the complaint. If the complainant still has concerns they may request a hearing by the Farm Practices Protection Board. This Board can only hold hearings in regard to odour, dust or noise concerns. The Board rules whether the occurrence is a normal farming practice.

The Minimum Distance Separation (MDS) is a tool to determine a recommended distance between a livestock facility and another land use. The objective is to prevent land use conflicts and minimize nuisance complaints from odour. MDS does not account for noise and dust.

Minimum Distance Separation will vary according to a number of variables including type of livestock, size of the farm operation, type of manure system and the form of development present or proposed.

MDS I provides minimum distance separation for new development from existing livestock facilities.

MDS II provides minimum distance separation for new or expanding livestock facilities from existing or approved development.

The *Guide To Agricultural Land Use* contains advice on avoiding or reducing the potential for conflict between neighbouring land uses through appropriate farm practices.

These three above documents replace the 1976 *Agricultural Code of Practice*.

Ultimately, land use planning decisions (including MDS) and good farm practices must go hand-in-hand to promote harmony in the rural community and to ensure agriculture as an ongoing activity.

IMPLEMENTATION GUIDELINES

The applicant completes the MDS II Data Sheet available from OMAFRA or municipal offices. The completed data sheet is submitted to the OMAFRA Agricultural Engineer, or, in some municipalities, directly to the municipal office for determination of separation distances.

General

1. MDS formulae and criteria are to be referenced in official plans and included in by-laws and are to be applied in designations and zones where livestock facilities are a permitted use and is to be implemented at the time of planning and/or development review.
2. MDS II applies when an application is made for a new, existing, modified or expanding livestock facility. The application may be for a building permit or an application under the Ontario Certificate of Compliance Program.
3. MDS II applies only to livestock and poultry facilities. It is not used to calculate separation distances from uses such as kennels, apiaries, greenhouses, mushroom farms, stockyards, assembly yards, or slaughterhouses.
4. MDS II is to be applied in any non-urban designation where agriculture and the keeping of livestock is a permitted use. MDS II is not applied where the livestock facility is within an approved urban designation.
5. The direction of the prevailing winds, the presence of berms or other forms of screening do not affect the calculated MDS II distance.
6. In cases of rebuilding such as after a fire, municipalities have the option of applying MDS II.
7. Minor variances to the MDS II distances can be considered based on site specific circumstances. Municipal officials must consult with Ontario Ministry of Agriculture, Food & Rural Affairs staff when considering a variance application. Conditions that meet the intent, if not the precise distance of MDS II or mitigate environmental impacts, will receive further consideration.

Measurement

8. Distances to the Nearest Neighbours Dwelling are measured as the shortest distance between the barn, or manure storage and the dwelling.
9. Distances to Residential Subdivisions, Urban Areas, areas zoned or designated Agriculturally Related Commercial Use, Passive Recreational, Institutional, Active Recreational or Commercial/Industrial are measured as the shortest distance between the barn or manure storage and the land uses noted above.
10. Distances to the Nearest Side Lot Line, Rear Lot Line, and Nearest Road Allowance are measured between the closest point of the barn or manure storage and the lot line or road allowance.
11. All distances are measured from the closest point of the barn used for animal housing.

DEFINITIONS

Active Recreational Use:
Recreational use usually with buildings or with a concentration of users such as golf courses, other playing fields, trailer parks, campgrounds and conservation areas with facilities.

Agriculturally Related Commercial Uses:
Uses directly related to agriculture and necessary in close proximity to farm operations, such as animal husbandry services, produce or grain storage facilities, or farm machinery outlets.

Housing Capacity:
Total maximum livestock/poultry capacity for the facility at any one time.

Institutional Use:
Uses such as schools, churches, hospitals, seniors complexes.

Livestock Facilities:
Livestock/poultry barns where agricultural animals are housed and the associated manure storage.

Livestock Unit:
Equivalent values for various types of animals including poultry, based on manure production and production cycles.

Passive Recreational Use:
Recreational use not requiring buildings and not altering the soil or topography, such as open space and environmental areas.

Residential Area:
Areas zoned or designated residential.

Tillable Hectares:
Land, including pasture, that can be worked or cultivated.

Urban Area:
Cities, towns, villages, and hamlets for such uses as residential, recreational, institutional, commercial and industrial.

MINIMUM DISTANCE SEPARATION II
DATA SHEET

USE: To determine the required minimum distance for livestock and poulty facilities within agricultural areas.

PURPOSE: To permit the orderly development of livestock operations within agricultural areas, and to reduce the potential for enviornmental conflicts between livestock or poultry operations and incompatible land uses.

APPLICATION:

- As a method of siting livestock and poultry housing and manure facilities by municipalities through incorporation into by-laws as authorized under the Planning Act.
- As a guideline for certification of new, proposed expansion of or modification of livestock facilities under the Ontario Certificate of Compliance Program.

The following information is to be completed as it relates to the livestock operation.

Farm Name/Owner _____

Farm Location: County/Region _____ Twp. _____ Lot _____ Con. _____

Address: _____ Postal Code: _____ Phone: (___) _____ - _____

Fax: (___) _____ - _____

This project consists of:

- ☐ Existing livestock or poultry facilities.
- ☐ Modifications to existing livestock or poultry facilities.
- ☐ Manure storage.
- ☐ New livestock or poultry facilities.
- ☐ Pollution abatement program.
- ☐ Rebuilding (ie. after fire).

Use the table below to list the type and number of livestock or poultry housed at any one time on the property:

Type of Animal Housed/Fenced	HOUSING CAPACITY	
	Existing Operation	Final Operation
e.g. chicken broilers	20000	22000

Manure Storage Information:

Dry Manure Collection
- ☐ Stable Cleaner/Belts
- ☐ Tractor Scraper
- ☐ Manure Pack in Barn
- ☐ _____

Dry Manure Storage
- ☐ Manure Pack
- ☐ Roofed Solid Storage
- ☐ Open Solid Storage with Concrete Runoff Tank
- ☐ Open Solid Storage with Earthen Runoff Tank
- ☐ Open Solid Storage
- ☐ _____

Liquid Manure Collection
- ☐ Stable Cleaner, Alley Scraper
- ☐ Flush System
- ☐ Flow Gutter, Fully-Slatted Floors
- ☐ Flow Gutter, Partially-Slatted Floors
- ☐ Full Storage Under Slats

_____

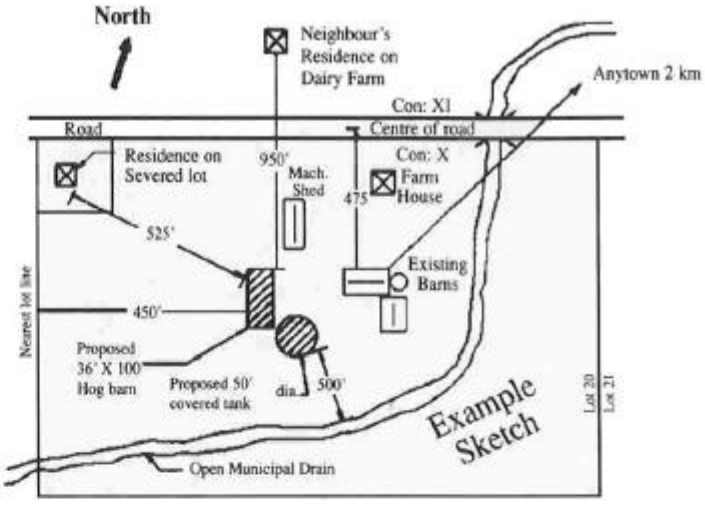
Liquid Manure Storage
- ☐ Full Storage under Slats
- ☐ Open Concrete or Steel Storage
- ☐ Open Earthen Storage
- Covered Concrete Storage

_____

SKETCH:

The following items must be shown on the property sketch (below):

- Location of all lot lines.
- North direction.
- Location and size of all existing and proposed buildings on the property.
- Distances in metres from proposed structures to public roads and neighbouring dwellings.
- Location and distance in metres of subject structures to all streams, ditches, municipal drains, severances, etc.
- Locations of all manure tanks, pads and earthen storages.
- Location and distances in metres from subject structures to nearest area zoned 'Residential'.
- Locate and Identify (drilled, dug) water wells
- Current use of lands/buildings adjacent to property.
- Any other unusual siting conditions.



Draw Sketch Below: (If necessary, please attach additional drawings for clarification)

MINIMUM DISTANCE SEPARATION II CALCULATION FORM

Farm Name/Owner

Type of Livestock/Poultry	Existing Barn Capacity	Livestock Units	Additional Barn Capacity	Livestock Units	Total Barn Capacity	Livestock Units
	Total 1		Total 2		Total 3	

Calculation of Percentage Increase:

$$\frac{\text{Total 2} \rightarrow [\quad]}{\text{Total 1} \rightarrow [\quad]} \times 100 = [\quad] \%$$

Factor A: Livestock/poultry to be added. Table 1 ..... Factor A: [_____]
Factor B: Total number of livestock units. Table 2 ..... Factor B: [_____]
Factor C: Percentage increase. Table 3 ..... Factor C: [_____]
Factor D: Type of manure system (Solid=0.7, Liquid=0.8) ..... Factor D: [_____]

Building Base distance (A x B x C x D) ..... Base Distance 'F': [_____]

Manure Storage Base Distance Table 4 ..... Base Distance 'S': [_____]

MINIMUM DISTANCE SEPARATION SUMMARY:

BUILDING: 'F' Base Distance [ ] metres

MANURE STORAGE: 'S' Base Distance [ ] metres

Column 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6
Neighbouring land use or boundary	Factor	Distance "F" x Col. 2 (m)	Actual Distance (m)	Distance "S" x Col. 2 (m)	Actual Distance (m)
Nearest Neighbour's Dwelling	1.0				
Areas zoned or designated Agriculturally Related Commercial Use Passive Recreational or Industrial	1.0				
Areas zoned or designated Residential, Institutional, Active Recreational, or Commercial. Urban Areas	2.0				
Nearest Side or Rear Lot Line	0.2				
Nearest Road Allowance (Side or Front Lot Line)	0.25				

TABLE 1: FACTOR 'A' (Barn Odour Potential).
and Animals per Livestock Unit (based on housing capacity).

	Animals per Livestock Unit		Factor A:
BEEF	1	Beef Cow[1] ..... (barn confinement)	0.7
	1	" " ..... (barn with yard)	0.8
	2	Beef Feeders ..... (barn confinement)	0.7
	2	" " ..... (barn with yard)	0.8
CHICKEN	125	Caged Layers ..... (manure stored in barn)	1.0
	125	Caged Layers ..... (daily manure removal)	0.8
	125	Chicken Breeder Layers	0.8
	200	Chicken Broilers/Roasters	0.65
	500	Pullets (replacement layers)	0.7
DAIRY	1	Milking Cow[1,2] ..... (tie-stall)	0.65
	1	" " ..... (free-stall)	0.7
	2	Dairy Heifers ..... (barn confinement)	0.7
	2	" " ..... (barn with yard)	0.8
DUCK	100	Ducks	0.7
EMU	5	Emu	0.7
FOX	40	Adult Fox[4]	1.1
GOAT	4	Adult Goats[3]	0.7
	10	Feeder Goats (>20 kg)	0.7
HORSE	1	Horse[3]	0.65
MINK	80	Adult Mink[4]	1.1
OSTRICH	3	Ostrich	0.7
RABBIT	40	Adult Rabbits[4]	0.8
SHEEP	4	Adult Sheep[3]	0.7
	10	Feeder Lambs (>20 kg)	0.7
SWINE	5	Sows/Boars	1.0
	20	Weaners (4-30 kg)[5]	1.0
	4	Feeder Hogs (30-120 kg)	1.0
TURKEY	50	Meat Turkeys (>10 kg)	0.7
	75	Meat Turkeys (5-10 kg)	0.7
	75	Turkey Breeder Layers	0.8
	100	Meat Turkeys (<5 kg)	0.7
	500	Pullets (replacement breeders)	0.7
VEAL	6	White Veal	1.0
	3	Red Veal (<300 kg)	0.8

Notes: For all other animals/poultry use 1 livestock unit per 450 kg housed at one time (A=0.8).

[1]Includes calf to 150 kg.
[2]A dairy farm usually has milking cows, dry cows, heifers and calves. Multiply the number of milking cows by 1.5 to account for the followers when they are all kept on the same farm.
[3]Includes offspring until weaned.
[4]Includes offspring to market size.
[5]Multiply number of sows by 2.4 to determine the number of weaners.

TABLE 2: FACTOR 'B' (Final Livestock Units).

Livestock Units		Factor B	Livestock Units		Factor B	Livestock Units		Factor B	Livestock Units		Factor B
5	—	107	95	—	313	500	—	578	1600	—	821
6	—	119	100	—	318	520	—	585	1650	—	829
7	—	129	110	—	327	540	—	592	1700	—	836
8	—	138	120	—	335	560	—	598	1750	—	844
9	—	145	130	—	343	580	—	605	1800	—	851
10	—	152	140	—	350	600	—	611	1850	—	858
12	—	164	150	—	357	620	—	617	1900	—	865
14	—	175	160	—	366	640	—	623	1950	—	872
16	—	183	170	—	374	660	—	629	2000	—	879
18	—	191	180	—	383	680	—	635	2100	—	892
20	—	198	190	—	392	700	—	640	2200	—	905
22	—	205	200	—	400	720	—	646	2300	—	917
24	—	210	210	—	409	740	—	651	2400	—	929
26	—	216	220	—	418	760	—	656	2500	—	941
28	—	221	230	—	426	780	—	661	2600	—	952
30	—	225	240	—	435	800	—	666	2700	—	963
32	—	230	250	—	444	850	—	679	2800	—	974
34	—	234	260	—	452	900	—	690	2900	—	985
38	—	241	280	—	470	1000	—	713	3200	—	1015
40	—	245	290	—	478	1050	—	723	3400	—	1034
45	—	253	300	—	487	1100	—	733	3600	—	1053
50	—	261	320	—	501	1150	—	743	3800	—	1071
60	—	275	360	—	522	1250	—	762	4200	—	1105
65	—	281	380	—	531	1300	—	771	4400	—	1121
70	—	287	400	—	540	1350	—	780	4600	—	1136
75	—	293	420	—	548	1400	—	789	4800	—	1152
80	—	298	440	—	556	1450	—	797	5000	—	1166
85	—	304	460	—	564	1500	—	805	7500	—	1326
90	—	309	480	—	571	1550	—	813	10000	—	1455

TABLE 3: FACTOR 'C' (Percentage Increase).

Percentage Increase		Factor C	Percentage Increase		Factor C	Percentage Increase		Factor C
0-50	—	0.70	120	—	0.86	280	—	1.03
55	—	0.72	130	—	0.88	300	—	1.04
60	—	0.73	140	—	0.90	325	—	1.05
65	—	0.75	150	—	0.91	350	—	1.06
70	—	0.76	160	—	0.92	375	—	1.07
75	—	0.77	170	—	0.94	400	—	1.08
80	—	0.78	180	—	0.95	425	—	1.09
85	—	0.79	190	—	0.96	450	—	1.10
90	—	0.81	200	—	0.97	500	—	1.11
95	—	0.82	220	—	0.99	550	—	1.12
100	—	0.83	240	—	1.00	650	—	1.13
110	—	0.85	260	—	1.02	700	—	1.14

Note: For new livestock farms or if the % increase is greater than 700 per-cent, use Factor C = 1.14

TABLE 4: SITING DISTANCES FOR MANURE STORAGES (metres).

Column 1: Roofed or covered storages for manure, runoff, and milkhouse washwater. Includes any covered or roofed concrete, steel or earthen storages, in-barn solid manure packs, and storages under fully slatted floors.

Column 2: Open solid manure pile on concrete slab. Includes the runoff storages (concrete or earthen) used for capturing seepage liquids from solid manure storage or runoff liquids from yards. If yards are scraped into runoff storage, use column 3 when runoff storage is a concrete or steel tank and column 4 when runoff storage is earthen. Milkhouse washwater may be added to runoff storage.

Column 3: Open concrete or steel tanks used for storing liquid manure, milkhouse washwater, or yard runoff where yard is scraped into storage.

Column 4: Open earth-sided or earth-sided storage with concrete floor to be used for storing liquid manure or yard runoff when yard is scraped into storage or milkhouse washwater.

	MANURE STORAGE BASIC DISTANCE 'S'			
	Column 1	Column 2	Column 3	Column 4
Minimum Base Distance 'F' for the Building (m)	Covered Storage Systems (m)	Open Solid and Runoff Storage Systems (m)	Open Liquid Tank and Runoff Storage Systems (m)	Earthen Liquid and Runoff Storage Systems (m)
40	40	55	119	324
45	45	60	123	326
50	50	65	128	328
55	55	70	132	331
60	60	74	136	333
65	65	79	140	335
70	70	84	144	337
75	75	89	149	340
80	80	94	153	342
85	85	99	157	344
90	90	104	161	346
95	95	108	166	348
100	100	113	170	351
105	105	118	174	353
110	110	123	178	355
115	115	128	182	357
120	120	133	187	360
125	125	138	191	362
130	130	142	195	364
135	135	147	199	366
140	140	152	204	368
145	145	157	208	371
150	150	162	212	373
160	160	172	220	377
170	170	181	229	382
180	180	191	237	386
190	190	201	246	391
200	200	210	254	395
210	210	220	263	399
220	220	230	271	404
230	230	239	280	408
240	240	249	288	413
260	260	269	305	422
280	280	288	322	430
300	300	307	339	439
320	320	327	356	448
360	360	366	389	466
380	380	385	406	475
400	400	404	423	484
420	420	424	440	492
440	440	443	457	501
480	480	482	491	519
500	500	502	508	528
550	550	550	550	550

FIRE PROTECTION AND PREVENTION ACT, 1997

S.O. 1997, CHAPTER 4

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PART I
DEFINITIONS

Definitions

1. (1) In this Act,

"community fire safety officer" means a community fire safety officer appointed under clause 2 (2) (a) or subsection 2 (4) or by an agreement under clause 3 (2) (a); ("agent local de la sécurité-incendie")

"community fire safety team" means a community fire safety team appointed under clause 2 (2) (a) or subsection 2 (4) or by an agreement under clause 3 (2) (a); ("équipe locale de la sécurité-incendie")

"fire chief" means a fire chief appointed under subsection 6 (1), (2) or (4); ("chef des pompiers")

"fire code" means the fire code established under Part IV; ("code de prévention des incendies")

"fire department" means a group of firefighters authorized to provide fire protection services by a municipality, group of municipalities or by an agreement made under section 3; ("service d'incendie")

"firefighter" means a fire chief and any other person employed in, or appointed to, a fire department and assigned to undertake fire protection services, and includes a volunteer firefighter; ("pompier")

"Fire Marshal" means the Fire Marshal appointed under subsection 8 (1); ("commissaire des incendies")

"fire protection services" includes,

(a) fire suppression, fire prevention and fire safety education,

(b) mitigation and prevention of the risk created by the presence of unsafe levels of carbon monoxide and safety education related to the presence of those levels,

(c) rescue and emergency services,

(d) communication in respect of anything described in clauses (a) to (c),

(e) training of persons involved in providing anything described in clauses (a) to (d), and

(f) the delivery of any service described in clauses (a) to (e); ("services de protection contre les incendies")

"Fire Safety Commission" means the Fire Safety Commission continued under Part X of this Act; ("Commission de la sécurité-incendie")

"Minister" means, in each Part of this Act, the member of the Executive Council to whom the administration of this Act, or of the Part of this Act, is assigned from time to time; ("ministre")

"municipality" means local municipality as defined in the *Municipal Act, 2001*; ("municipalité")

"prescribed" means prescribed by regulation; ("prescrit")

"regulation" means a regulation made under this Act; ("règlement")

"volunteer firefighter" means a firefighter who provides fire protection services either voluntarily or for a nominal consideration, honorarium, training or activity allowance. ("pompier volontaire") 1997, c. 4, s. 1 (1); 2001, c. 25, s. 475 (1).

Interpretation of land and premises

(2) For the purposes of this Act, a reference to land and premises or to land or premises includes any buildings, structures or things situated on or attached to the land or premises. 1997, c. 4, s. 1 (2).

Application of definition of firefighter

(3) The definition of firefighter in subsection (1) does not apply to Part IX. 1997, c. 4, s. 1 (3).

Automatic aid agreements

(4) For the purposes of this Act, an automatic aid agreement means any agreement under which,

(a) a municipality agrees to ensure the provision of an initial response to fires, rescues and emergencies that may occur in a part of another municipality where a fire department in the municipality is capable of responding more quickly than any fire department situated in the other municipality; or

(b) a municipality agrees to ensure the provision of a supplemental response to fires, rescues and emergencies that may occur in a part of another municipality where a fire department situated in the municipality is capable of providing the quickest supplemental response to fires, rescues and emergencies occurring in the part of the other municipality. 1997, c. 4, s. 1 (4).

Same

(5) A mutual aid plan established under section 7 does not constitute an automatic aid agreement for the purposes of subsection (4). 1997, c. 4, s. 1 (5).

PART II
RESPONSIBILITY FOR FIRE PROTECTION SERVICES

Municipal responsibilities

2. (1) Every municipality shall,

(a) establish a program in the municipality which must include public education with respect to fire safety and certain components of fire prevention; and

(b) provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstances.

Methods of providing services

(2) In discharging its responsibilities under subsection (1), a municipality shall,

(a) appoint a community fire safety officer or a community fire safety team; or

(b) establish a fire department.

Services to be provided

(3) In determining the form and content of the program that it must offer under clause (1) (a) and the other fire protection services that it may offer under clause (1) (b), a municipality may seek the advice of the Fire Marshal.

Shared responsibilities

(4) Two or more municipalities may appoint a community fire safety officer or a community fire safety team or establish a fire department for the purpose of providing fire protection services in those municipalities.

Services outside municipality

(5) A municipality may, under such conditions as may be specified in the agreement, enter into an agreement to,

(a) provide such fire protection services as may be specified in the agreement to lands or premises that are situated outside the territorial limits of the municipality; and

(b) receive such fire protection services as may be specified in the agreement from a fire department situated outside the territorial limits of the municipality.

Automatic aid agreements

(6) A municipality may enter into an automatic aid agreement to provide or receive the initial or supplemental response to fires, rescues and emergencies.

Review of municipal fire services

(7) The Fire Marshal may monitor and review the fire protection services provided by municipalities to ensure that municipalities have met their responsibilities under this section and, if the Fire Marshal is of the opinion that, as a result of a municipality failing to comply with its responsibilities under subsection (1), a serious threat to public safety exists in the municipality, he or she may make recommendations to the council of the municipality with respect to possible measures the municipality may take to remedy or reduce the threat to public safety.

Failure to provide services

(8) If a municipality fails to adhere to the recommendations made by the Fire Marshal under subsection (7) or to take any other measures that in the opinion of the Fire Marshal will remedy or reduce the threat to public safety, the Minister may recommend to the Lieutenant Governor in Council that a regulation be made under subsection (9).

Regulation

(9) Upon the recommendation of the Minister, the Lieutenant Governor in Council may make regulations establishing standards for fire protection services in municipalities and requiring municipalities to comply with the standards.

Same

(10) A regulation under this section may be general or specific in its application and may be restricted to those municipalities specified in the regulation. 1997, c. 4, s. 2.

Territory without municipal organization

3. (1) The Fire Marshal, a services board established to provide services in territory without municipal organization or a prescribed person or organization may enter into agreements to provide fire protection services in territory without municipal organization and to govern the provision of those services.

Same

(2) An agreement referred to in subsection (1) may provide for,

(a) the appointment of a community fire safety officer or a community fire safety team; or

(b) the establishment of a fire department. 1997, c. 4, s. 3.

Community fire safety officer or team

4. (1) A community fire safety officer or a community fire safety team appointed in a municipality or in a group of municipalities shall provide the program established under clause 2 (1) (a) in the municipality or in the group of municipalities, as the case may be.

Same

(2) A community fire safety officer or a community fire safety team appointed by agreement with the Fire Marshal, a services board or a prescribed person or organization to provide services in territory without municipal organization shall provide a program which includes public education with respect to fire safety and certain components of fire prevention in the territory in accordance with the agreement. 1997, c. 4, s. 4.

Municipalities may establish fire departments

5. (0.1) The council of a municipality may establish, maintain and operate a fire department for all or any part of the municipality. 2001, c. 25, s. 475 (2).

Fire departments

(1) A fire department shall provide fire suppression services and may provide other fire protection services in a municipality, group of municipalities or in territory without municipal organization. 1997, c. 4, s. 5 (1).

Same

(2) Subject to subsection (3), the council of a municipality may establish more than one fire department for the municipality. 1997, c. 4, s. 5 (2).

Exception

(3) The council of a municipality may not establish more than one fire department if, for a period of at least 12 months before the day this Act comes into force, fire protection services in the municipality were provided by a fire department composed exclusively of full-time firefighters. 1997, c. 4, s. 5 (3).

Same

(4) The councils of two or more municipalities may establish one or more fire departments for the municipalities. 1997, c. 4, s. 5 (4).

Fire chief, municipalities

6. (1) If a fire department is established for the whole or a part of a municipality or for more than one municipality, the council of the municipality or the councils of the municipalities, as the case may be, shall appoint a fire chief for the fire department.

Same

(2) The council of a municipality or the councils of two or more municipalities may appoint one fire chief for two or more fire departments.

Responsibility to council

(3) A fire chief is the person who is ultimately responsible to the council of a municipality that appointed him or her for the delivery of fire protection services.

Fire chief, territory without municipal organization

(4) If a fire department is established in territory without municipal organization under subsection 3 (2), the agreement shall provide for the appointment of a fire chief.

Powers of fire chief

(5) The fire chief may exercise all the powers assigned to him or her under this Act within the territorial limits of the municipality and within any other area in which the municipality has agreed to provide fire protection services, subject to any conditions specified in the agreement.

Delegation

(6) A fire chief may delegate his or her powers or duties under sections 14, 19 and 20 and such other powers and duties as may be prescribed to any firefighter or class of firefighters, subject to such limitations, restrictions or conditions as may be prescribed or set out in the delegation. 1997, c. 4, s. 6.

Fire co-ordinators

7. (1) The Fire Marshal may appoint fire co-ordinators for such areas as may be designated in the appointment. 1997, c. 4, s. 7 (1).

Duties

(2) A fire co-ordinator shall, subject to the instructions of the Fire Marshal,

(a) establish and maintain a mutual aid plan under which the fire departments that serve the designated area agree to assist each other in the event of an emergency; and

(b) perform such other duties as may be assigned by the Fire Marshal. 1997, c. 4, s. 7 (2); 2002, c. 18, Sched. N, s. 1.

Municipal by-laws

7.1 (1) A council of a municipality may pass by-laws,

(a) regulating fire prevention, including the prevention of the spreading of fires;

(b) regulating the setting of open air fires, including establishing the times during which open air fires may be set;

(c) designating private roads as fire routes along which no parking of vehicles shall be permitted and providing for the removal and impounding of any vehicle parked or left along any of the fire routes at the expense of the owner of the vehicle. 2001, c. 25, s. 475 (3).

Definition

(2) For the purpose of clause (1) (c),

"private road" means any private road, lane, ramp or other means of vehicular access to or from a building or structure and may include part of a parking lot. 2001, c. 25, s. 475 (3).

Scope

(3) A by-law under this section may deal with different areas of the municipality differently. 2001, c. 25, s. 475 (3).

Officer

(4) A municipality may appoint an officer to enter upon land and into structures at any reasonable time to inspect the land and structures to determine whether by-laws enacted in accordance with this section are being complied with. 2001, c. 25, s. 475 (3).

Exercise of power

(5) The exercise of powers by an officer appointed under this section shall be carried out in accordance with Part XIV of the *Municipal Act, 2001,* other than clause 431 (a) of that Act or with Part

XV of the *City of Toronto Act, 2006*, other than paragraph 4 of subsection 375 (1) of that Act, as the case may be. 2001, c. 25, s. 475 (3); 2006, c. 32, Sched. C, s. 20 (1).

PART III
FIRE MARSHAL

Appointment of Fire Marshal

8. (1) There shall be a Fire Marshal who shall be appointed by the Lieutenant Governor in Council.

Deputy Fire Marshal

(2) There shall be a Deputy Fire Marshal, who shall be appointed by the Lieutenant Governor in Council and who shall act in the stead of the Fire Marshal if he or she is absent or unable to act, and who, when so acting, has all the power and authority of the Fire Marshal. 1997, c. 4, s. 8.

Powers of Fire Marshal

9. (1) The Fire Marshal has the power,

(a) to monitor, review and advise municipalities respecting the provision of fire protection services and to make recommendations to municipal councils for improving the efficiency and effectiveness of those services;

(b) to issue directives to assistants to the Fire Marshal respecting matters relating to this Act and the regulations;

(c) to advise and assist ministries and agencies of government respecting fire protection services and related matters;

(d) to issue guidelines to municipalities respecting fire protection services and related matters;

(e) to co-operate with any body or person interested in developing and promoting the principles and practices of fire protection services;

(f) to issue long service awards to persons involved in the provision of fire protection services; and

(g) to exercise such other powers as may be assigned under this Act or as may be necessary to perform any duty assigned under this Act. 1997, c. 4, s. 9 (1).

Duties of Fire Marshal

(2) It is the duty of the Fire Marshal,

(a) to investigate the cause, origin and circumstances of any fire or of any explosion or condition that in the opinion of the Fire Marshal might have caused a fire, explosion, loss of life or damage to property;

(b) to advise municipalities in the interpretation and enforcement of this Act and the regulations;

(c) to provide information and advice on fire safety matters and fire protection matters by means of public meetings, newspaper articles, publications, electronic media and exhibitions and otherwise as the Fire Marshal considers advisable;

(d) to develop training programs and evaluation systems for persons involved in the provision of fire protection services and to provide programs to improve practices relating to fire protection services;

(e) to maintain and operate a central fire college;

(f) to keep a record of every fire reported to the Fire Marshal with the facts, statistics and circumstances that are required under this Act;

(g) to develop and maintain statistical records and conduct studies in respect of fire protection services; and

(h) to perform such other duties as may be assigned to the Fire Marshal under this Act. 1997, c. 4, s. 9 (2).

Application of *Public Inquiries Act, 2009*

(3) Section 33 of the *Public Inquiries Act, 2009* applies to any inquiry or investigation by the Fire Marshal under this Act. 2009, c. 33, Sched. 6, s. 59.

Employment of expert, etc.

(4) The Fire Marshal may employ legal, technical, scientific, clerical or other assistance that the Fire Marshal considers advisable or necessary in the conduct of any inquiry or investigation under this Act or in carrying out any of his or her powers or duties under this Act. 1997, c. 4, s. 9 (4).

Delegation

10. (1) The Fire Marshal may delegate any power or duty that is granted to or vested in the Fire Marshal under this Act to any person or class of persons, subject to such limitations, restrictions, conditions and requirements as may be set out in the delegation.

Same

(2) Subsection (1) applies with respect to any power or duty held by the Fire Marshal under this Act, including such statutory or discretionary powers as may be assigned to the Fire Marshal under this Act.

Certificate of appointment

(3) A certificate under the hand and seal of the Fire Marshal of the appointment of a person under this Act is proof in the absence of evidence to the contrary of the appointment in any court or elsewhere. 1997, c. 4, s. 10.

Assistants to the Fire Marshal

11. (1) The following persons are assistants to the Fire Marshal and shall follow the Fire Marshal's directives in carrying out this Act,

(a) the fire chief of every fire department;

(b) the clerk of every municipality that does not have a fire department;

(c) any member of a fire prevention bureau established by a municipality; and

(d) every person designated by the Fire Marshal as an assistant to the Fire Marshal. 1997, c. 4, s. 11 (1); 2002, c. 18, Sched. N, s. 2 (1).

Duty to report

(2) The assistants to the Fire Marshal shall report to the Fire Marshal all fires and other matters related to fire protection services as may be specified by the Fire Marshal. 1997, c. 4, s. 11 (2).

Submitting report

(3) A report under subsection (2) shall be made in the form and manner and within the time period specified by the Fire Marshal. 1997, c. 4, s. 11 (3).

Workers' compensation not affected

(4) The relationship between a person who is an assistant to the Fire Marshal under this section and the municipality or such other person by which he or she is employed continues for the purposes of the

Workplace Safety and Insurance Act, 1997 as if the person were not an assistant to the Fire Marshal. 1997, c. 4, s. 11 (4); 2002, c. 18, Sched. N, s. 2 (2).

PART IV
FIRE CODE

Fire Code

12. (1) The Minister may make regulations that are considered advisable or necessary for the purpose of establishing a fire code for Ontario governing standards for equipment, systems, buildings, structures, land and premises, as those standards relate to fire safety or the risk created by the presence of unsafe levels of carbon monoxide. 2013, c. 14, s. 3.

Same

(1.1) A regulation made under this section may,

(a) prescribe any method, matter or thing relating to fire protection;

(b) prescribe any method, matter or thing relating to protection against the presence of unsafe levels of carbon monoxide;

(c) govern standards for reducing the risk of, or consequences of, a fire that would seriously endanger the health or safety of any person or the quality of the natural environment for any use that can be made of it;

(d) govern standards for reducing the risk of, or consequences of, the presence of unsafe levels of carbon monoxide that would seriously endanger the health or safety of any person or the quality of the natural environment for any use that can be made of it;

(e) require and regulate fire protection equipment and systems and govern the maintenance of the equipment and systems;

(f) require and regulate protection equipment and systems related to the presence of unsafe levels of carbon monoxide and govern the maintenance of the equipment and systems;

(g) require and regulate means of egress, separations, finish materials, furnishings and decorations, standards of housekeeping and heating, ventilation, air conditioning and incinerating equipment and systems;

(h) control or prohibit any material, substance, equipment or system affecting fire safety;

(i) control or prohibit any material, substance, equipment or system affecting safety from the presence of unsafe levels of carbon monoxide;

(j) require and regulate procedures respecting fire safety and the keeping and furnishing of records and reports;

(k) require and regulate procedures respecting safety from the presence of unsafe levels of carbon monoxide and the keeping and furnishing of records and reports;

(l) require the approval of the Fire Marshal or of a prescribed person respecting any method, matter or thing;

(m) require notice to be given to the Fire Marshal or to a prescribed person respecting any change in use or occupancy;

(n) prescribe conditions for use, occupation or demolition;

(o) exempt any class of building, structure, lands or premises from compliance with the regulations or any provision of them and attach terms and conditions to the exemptions;

(p) govern the qualifications and training of persons servicing, maintaining, testing or repairing fire protection devices, equipment or systems and the licensing of those persons;

(q) govern the qualifications and training of persons servicing, maintaining, testing or repairing protection devices, equipment or systems related to the presence of carbon monoxide and the licensing of those persons;

(r) adopt by reference, in whole or in part, with the changes that the Minister considers necessary, any code or standard and require compliance with any code or standard that is so adopted. 2013, c. 14, s. 3.

Limitation of application

(2) Any regulation made under this section may be limited in its application territorially or to any class of building, structure, land or premises or to any building, structure, land or premises used for any specified purpose. 1997, c. 4, s. 12 (2).

Buildings under construction

(3) Subject to subsection (4), the fire code does not apply to the unoccupied parts of a building that is under construction within the meaning of the *Building Code Act, 1992* or of a predecessor to that Act. 1997, c. 4, s. 12 (3).

Same

(4) The fire code applies to the unoccupied parts of a building that is under construction within the meaning of the *Building Code Act, 1992*, or of a predecessor to that Act, if,

(a) there has been no substantial work related to the construction of the building for at least six months; or

(b) the conditions in the unoccupied portions threaten the safety of the occupied portions. 1997, c. 4, s. 12 (4).

Municipal by-law prevails

(5) If there is a conflict between a provision of the fire code and a provision of a municipal by-law respecting the keeping and manufacturing of explosives, the provision that is the most restrictive prevails. 1997, c. 4, s. 12 (5).

PART V
RIGHTS OF ENTRY IN EMERGENCIES AND FIRE INVESTIGATIONS

Entry on adjacent lands by firefighters, etc.

13. (1) A firefighter or such other person as may be authorized by the fire chief, the Fire Marshal or an assistant to the Fire Marshal may, without a warrant, enter on lands or premises,

(a) that are adjacent to the lands or premises on which a fire or emergency has occurred or is occurring, for the purposes of fighting the fire or of providing rescue or emergency services; or

(b) that are adjacent to the lands or premises on which there is a serious threat to the health and safety of any person or the quality of the natural environment, for the purpose of removing or reducing the threat. 1997, c. 4, s. 13 (1); 2001, c. 25, s. 475 (4).

Prevention of fire spreading

(1.1) A firefighter or such other person as may be authorized by the fire chief may, without a warrant, enter on lands or premises on which a fire is occurring, or that are adjacent to those lands or premises, for the purposes of pulling down or removing buildings, structures or things on or attached to the lands

or premises on which a fire is occurring or that are adjacent to those lands or premises if, in the opinion of the fire chief, it is necessary to do so to prevent the spread of the fire. 2001, c. 25, s. 475 (5).

Entry onto land outside municipality

(2) A firefighter or such other person as may be authorized by the fire chief may, without a warrant, enter on lands or premises that are outside the territorial limits of the municipality of the fire department that employs the firefighter or fire chief for the purposes of fighting a fire or of providing rescue or emergency services on such lands or premises if,

(a) in the opinion of the fire chief, the fire or emergency threatens persons, property or the environment within the territorial limits of the municipality served by the fire department; and

(b) there is no fire department or other emergency response capability for the area in which the lands or premises are situated. 1997, c. 4, s. 13 (2).

Automatic aid

(3) A firefighter or such other person as may be authorized by the fire chief may, without a warrant, enter on lands or premises that are outside the territorial limits of the municipality of the fire department that employs the firefighter or fire chief for the purposes of fighting a fire or of providing rescue or emergency services on such lands or premises if the council of the municipality has entered into an automatic aid agreement or any other agreement under which the entry is permitted. 1997, c. 4, s. 13 (3).

Common law right of entry preserved

(4) Nothing in this section derogates from a firefighter's right of entry at common law. 1997, c. 4, s. 13 (4).

Entry where fire has occurred or is likely to occur

14. (1) The Fire Marshal or a fire chief may, without a warrant, enter on land or premises if,

(a) a fire has occurred on the land or premises; or

(b) he or she has reason to believe that a substance or device that is likely to cause a fire may be situated on the land or premises.

Powers upon entry

(2) Upon entering on land or premises under subsection (1), the Fire Marshal or a fire chief may,

(a) close, and prevent entry to, the land or premises for the length of time necessary to complete the examination of the land or premises;

(b) in the case of an entry under clause (1) (a), remove from the land or premises, retain and examine any article or material, and take such samples or photographs, make videotapes and other images electronic or otherwise that in his or her opinion may be of assistance in determining the cause of the fire under investigation;

(c) make such excavations on the land or premises as he or she considers necessary;

(d) require that any machinery, equipment or device be operated, used or set in motion under specified conditions; and

(e) make any reasonable inquiry of any person, orally or in writing.

Entry to adjacent lands

(3) A person who enters on land or premises under subsection (1), may, without a warrant, enter on adjacent land or premises if the entry is necessary for the purposes of conducting an investigation into the cause of a fire or of determining whether a substance or device that is likely to cause fire is situated on the land or premises.

Same

(4) A person who enters on adjacent land or premises under subsection (3) may exercise any of the powers mentioned in subsection (2) on or with respect to the adjacent land or premises.

Use of force

(5) A person who enters land or premises under subsection (1) or (3) shall not use force to enter the land or premises.

Warrant authorizing entry

(6) A justice of the peace may issue a warrant authorizing the Fire Marshal or a fire chief named in the warrant to enter on land or premises and exercise any of the powers referred to in subsection (2) or (3) if the justice of the peace is satisfied on evidence under oath that there are reasonable grounds to believe that entry on the lands or premises is necessary for the purposes of conducting an investigation into the cause of a fire or of determining whether a substance or device that is likely to cause fire is situated on the land or premises and,

(a) the Fire Marshal or fire chief has been denied entry to the land or premises or has been obstructed in exercising any other of those powers with respect to the land or premises; or

(b) there are reasonable grounds to believe that the Fire Marshal or fire chief will be denied entry to the land or premises or obstructed in exercising any other of those powers with respect to the land or premises.

Execution and expiry of warrant

(7) A warrant issued under subsection (6) shall,

(a) specify the times, which may be at any time during the day or night, during which the warrant may be carried out; and

(b) state when the warrant expires.

Extension of time

(8) A justice of the peace may extend the date on which a warrant expires for such additional periods as the justice of the peace considers necessary.

Use of force

(9) A person authorized by a warrant issued under subsection (6) to enter land or premises for the purpose of doing a thing may call on police officers as necessary and may use force as necessary to make the entry and do the thing.

Application without notice

(10) A justice of the peace may receive and consider an application for a warrant or extension of a warrant under this section without notice to the owner or occupant of the land or premises. 1997, c. 4, s. 14.

Immediate threat to life

15. (1) If the Fire Marshal, an assistant to the Fire Marshal or a fire chief has reasonable grounds to believe that a risk of fire poses an immediate threat to life, he or she may, without a warrant, enter on any land or premises and, for the purpose of removing or reducing the threat, may,

(a) remove persons on the land or premises;

(b) post a fire watch;

(c) remove combustible or explosive material or anything that may constitute a fire menace;

(c.1) dispose of any material or thing that was removed under clause (c), in accordance with any directives issued by the Fire Marshal;

(d) eliminate ignition sources;

(e) install temporary safeguards, including fire extinguishers and smoke alarms;

(f) make minor repairs to existing fire safety systems;

(g) do any other thing that the Fire Marshal, an assistant to the Fire Marshal or a fire chief has reasonable grounds to believe is urgently required to remove or reduce the threat to life. 1997, c. 4, s. 15 (1); 2002, c. 18, Sched. N, s. 3.

Notice to owner

(2) A person who enters land or premises under subsection (1) shall promptly after exercising any powers under this section give notice thereof to the owner if the owner's whereabouts in Ontario are known. 1997, c. 4, s. 15 (2).

Notice to be posted

(3) The person who gives notice under subsection (2) shall post a copy of the notice on the land or premises. 1997, c. 4, s. 15 (3).

Contents of notice

(4) The notice shall,

(a) describe the location of the land or premises;

(b) state the reason for the entry; and

(c) state the things done under subsection (1) to remove or reduce the threat to life. 1997, c. 4, s. 15 (4).

Use of force

(5) A person who enters on land or premises under this section may call on police officers as necessary and may use force as necessary to make the entry. 1997, c. 4, s. 15 (5).

Assistance

16. A person who enters on land or premises under section 14 or 15 may call on any other persons he or she considers advisable to assist. 1997, c. 4, s. 16.

Identification

17. On the request of an owner or occupant of the land or premises, a person who enters on land or premises under section 14 or 15 shall identify himself or herself and shall explain the purpose of the entry. 1997, c. 4, s. 17.

PART VI
INSPECTIONS

Interpretation

18. For the purposes of this Part, fire safety includes the following:

1. Safety from the risk that a fire, if started, would seriously endanger the health and safety of any person or the quality of the natural environment for any use that can be made of it.
2. Safety from the risk that the presence of unsafe levels of carbon monoxide on premises would seriously endanger the health and safety of any person. 2013, c. 14, s. 4.

Inspectors

19. (1) The Fire Marshal, an assistant to the Fire Marshal or a fire chief is an inspector for the purposes of this Part.

Inspections

(2) An inspector may, without a warrant, enter and inspect land and premises for the purposes of assessing fire safety.

Time of entry

(3) The power to enter and inspect land and premises without a warrant may be exercised at all reasonable times.

Assistance

(4) An inspector who enters land or premises under this section may take with him or her a police officer or such other person as he or she considers advisable to assist.

Identification

(5) On the request of an owner or occupant of the land or premises, an inspector shall identify himself or herself and shall explain the purpose of the entry.

Powers during inspection

(6) An inspector conducting an inspection may,

(a) examine a document or other thing that is relevant to the inspection;

(b) demand the production for inspection of a document or other thing that is relevant to the inspection;

(c) remove any thing that is relevant to the inspection for review and examination and remove any document that is relevant to the inspection for review and copying;

(d) conduct tests, take and remove samples, take photographs and make videotapes and other images, electronic or otherwise, that are relevant to the inspection;

(e) in order to produce a document in readable form, use data storage, information processing or retrieval devices or systems that are normally used in the premises being inspected; and

(f) question a person on matters relevant to the inspection.

Obligation to produce and assist

(7) If an inspector demands that a document or other thing be produced for inspection, the person who has custody of the document or thing shall produce it and, in the case of a document, shall on request provide any assistance that is reasonably necessary to interpret the document or to produce it in a readable form.

Document and thing removed from place

(8) A document or other thing that has been removed from land or premises,

(a) shall be made available to the person from whom it was removed on request and at a time and place that are convenient for the person and for the inspector; and

(b) shall, if it is possible to return the document or thing to the person, be returned within a reasonable time.

Copy admissible in evidence

(9) A copy of a document that purports to be certified by an inspector as being a true copy of the original is admissible in evidence to the same extent as the original and has the same evidentiary value. 1997, c. 4, s. 19.

Warrant authorizing entry

20. (1) A justice of the peace may issue a warrant authorizing an inspector named in the warrant to enter on lands or premises and exercise any of the powers referred to in subsection 19 (6) if the justice of the peace is satisfied on evidence under oath that there are reasonable grounds to believe that entry on the lands or premises is necessary to assess fire safety and,

(a) the inspector has been denied entry to the lands or premises or has been obstructed in exercising any other of those powers with respect to the lands or premises; or

(b) there are reasonable grounds to believe that the inspector will be denied entry to the lands or premises or obstructed in exercising any other of those powers with respect to the lands or premises.

Execution and expiry of warrant

(2) A warrant issued under subsection (1) shall,

(a) specify the times, which may be at any time during the day or night, during which the warrant may be carried out; and

(b) state when the warrant expires.

Extension of time

(3) A justice of the peace may extend the date on which a warrant expires for such additional periods as the justice of the peace considers necessary.

Use of force

(4) A person authorized under subsection (1) to enter land or premises for the purpose of doing a thing may call on police officers as necessary and may use force as necessary to make the entry and do the thing.

Assistance

(5) A person named in a warrant issued under subsection (1) may call on any other persons he or she considers advisable to execute the warrant.

Application without notice

(6) A justice of the peace may receive and consider an application for a warrant or extension of a warrant under this section without notice to the owner or occupant of the land or premises.

Identification

(7) On the request of an owner or occupant of the land or premises, a person who exercises a power conferred under subsection (1) shall identify himself or herself and shall explain the purpose of the entry.

Application

(8) Subsections 19 (7), (8) and (9) apply with respect to an inspection carried out under a warrant issued under this section. 1997, c. 4, s. 20.

Inspection orders

21. (1) An inspector who has carried out an inspection of land or premises under section 19 or 20 may order the owner or occupant of the land or premises to take any measure necessary to ensure fire safety on the land and premises and may for that purpose order the owner or occupant,

(a) to remove buildings or structures from the land or premises;

(b) to make structural and other repairs or alterations, including material alterations, to the buildings or structures;

(c) to remove combustible or explosive material or any thing that may constitute a fire hazard;

(d) to install and use specified equipment or devices as may be necessary to contain hazardous material on the land or premises and, in the event of a fire, to remove or transport the material;

(e) to discontinue the manufacturing, production or fabrication of any material, device or other thing that creates or poses an undue risk of fire or explosion;

(f) to do anything respecting fire safety including anything relating to the containment of a possible fire, means of egress, fire alarms and detection, fire suppression and the preparation of a fire safety plan;

(g) to remedy any contravention of the fire code.

Same, closure of premises

(2) An inspector who has carried out an inspection of land or premises under section 19 or 20 may, with the approval of the Fire Marshal and upon such terms and conditions as the Fire Marshal considers proper,

(a) order that the owner or occupant of the land or premises close the land or premises and prevent persons from entering thereon until such time as the corrective actions ordered under subsection (1) have been completed; or

(b) if the inspector is of the opinion that it is necessary for the immediate protection of persons and property that the lands or premises be closed immediately, cause the land or premises to be closed immediately and persons on the premises to be removed and direct that the lands or premises remain closed and that the premises be vacated until such time as the corrective actions ordered under subsection (1) have been completed. 1997, c. 4, s. 21 (1, 2).

Same, electrical installations

(3) If, upon an inspection, it is determined that the electrical installations in a building or structure create or pose a risk of fire because of the inadequacy or want of repair of the installations and their wiring, the inspector may order that the electrical installations in the building or structure be inspected by a representative of the Electrical Safety Authority referred to in Part VIII of the *Electricity Act, 1998* and that the costs of the inspection be paid by the owner or occupant of the building or structure. 1997, c. 4, s. 21 (3); 1998, c. 15, Sched. E, s. 12.

Limitation on orders relating to structural repairs

22. (1) No inspector shall make an order under clause 21 (1) (b) requiring structural repairs or alterations to a building, structure or premises that was constructed in compliance with the building code established under the *Building Code Act, 1992* or under a predecessor to that Act and that continues to comply with that code as it existed at the time of construction, unless the order is necessary to ensure compliance with the provisions of the fire code relating to the retrofitting of existing buildings.

Repairs, etc., deemed not to contravene Building Code

(2) If repairs, alterations or installations are carried out in compliance with an order made under subsection 21 (1) or for the purposes of complying with the fire code, the repairs, alterations or installations shall be deemed not to contravene the building code established under the *Building Code Act, 1992*.

Copy of order

(3) An inspector who makes an order requiring repairs, alterations or installations to be made to a building, structure or premises shall furnish a copy of the order to the proper chief building official appointed under the *Building Code Act, 1992*. 1997, c. 4, s. 22.

Contents of order

23. An order made under subsection 21 (1) or (2) shall set out,

(a) the reasons for the order;

(b) an explanation of the action required by the order;

(c) the time within which the owner or occupant must comply with the order; and

(d) the right to request a review of the order by the Fire Marshal under section 25 or, in the case of an order made by the Fire Marshal, the right of appeal to the Fire Safety Commission under section 26. 1997, c. 4, s. 23.

Service of order

24. (1) A copy of an order made under section 21 shall be served upon the owner and any occupant of the land and premises.

Same, multi-unit building

(2) In the case of an order respecting a building that contains two or more units intended for separate occupancy, the order shall be deemed to be served upon the occupants of the building if a copy of the order is posted in a conspicuous place in or outside the building.

Posting and service of order to close premises

(3) If an order is made under subsection 21 (2) requiring the closing of land or premises, a copy of the order shall be posted on the land or premises and shall be served on the owner of the lands or premises if the owner is in Ontario and his or her whereabouts are known. 1997, c. 4, s. 24.

Review of inspection order by Fire Marshal

25. (1) A person who considers himself or herself aggrieved by an order made by an inspector, other than the Fire Marshal, under subsection 21 (1) or (2) may, within 15 days after the order is served, submit a written request to the Fire Marshal for a review of the order. 1997, c. 4, s. 25 (1).

Extension of time

(2) The Fire Marshal may, upon application by a person referred to in subsection (1), extend the time for making a request under this section if he or she is satisfied that there are apparent grounds for granting relief to the person and that there are reasonable grounds for applying for the extension and may give directions that the Fire Marshal considers proper consequent upon the extension. 1997, c. 4, s. 25 (2); 2002, c. 18, Sched. N, s. 4 (1).

Same

(3) An application for an extension of time may be made either before or after the expiration of the time fixed in subsection (1) but shall be made within 30 days after a copy of the order under subsection 21 (1) or (2) is served. 1997, c. 4, s. 25 (3).

Powers of Fire Marshal

(4) The Fire Marshal may,

(a) refuse to consider the substance of the request and refer the matter to the Fire Safety Commission for a hearing under section 26; or

(b) confirm, amend or rescind the order or make such other order as he or she deems appropriate. 1997, c. 4, s. 25 (4).

No hearing required

(5) The Fire Marshal is not required to hold a hearing when conducting a review of an order under this section. 1997, c. 4, s. 25 (5).

Order stayed by application for review

(6) An application made under subsection (1) for a review operates as a stay of the order pending the outcome of the review. 2002, c. 18, Sched. N, s. 4 (2).

Lifting of stay

(7) The Fire Marshal may, upon request therefor by an inspector, which may be made without notice, order that the stay of the order be lifted if, in his or her opinion, the action is necessary in the interest of public safety. 2002, c. 18, Sched. N, s. 4 (2).

Appeal to Fire Safety Commission

26. (1) Any person who considers himself or herself aggrieved by an order made by the Fire Marshal under subsection 21 (1) or (2) or section 25 may appeal the order to the Fire Safety Commission. 1997, c. 4, s. 26 (1).

Time for filing appeal

(2) A notice of appeal from an order referred to in subsection (1) shall be filed with the Fire Safety Commission within 15 days after the order is served. 1997, c. 4, s. 26 (2).

Extension of time

(3) The Fire Safety Commission may, upon application by a person referred to in subsection (1), extend the time for appealing an order if it is satisfied that there are apparent grounds for granting the

appeal and that there are reasonable grounds for applying for the extension and may give directions that it considers proper consequent upon the extension. 1997, c. 4, s. 26 (3); 2002, c. 18, Sched. N, s. 5 (1).

Same

(4) An application for an extension of time may be made either before or after expiration of the time fixed in subsection (2) but shall be made within 30 days after a copy of the order from which the appeal is made is served. 1997, c. 4, s. 26 (4).

Hearing by Commission

(5) If an application is made under subsection (1) or if a matter is referred to the Fire Safety Commission by the Fire Marshal under clause 25 (4) (a), the Commission shall appoint a time for and hold the hearing. 1997, c. 4, s. 26 (5).

Powers of Commission

(6) The Fire Safety Commission may confirm, amend or rescind the order of the Fire Marshal or make such other order as the Commission deems appropriate. 1997, c. 4, s. 26 (6).

Order stayed by appeal

(7) An appeal under subsection (1) operates as a stay of the order pending the outcome of the appeal. 2002, c. 18, Sched. N, s. 5 (2).

Lifting of stay

(8) The Fire Safety Commission may, upon application therefor by an inspector or the Fire Marshal, which may be made without notice, order that the stay of the order be lifted if, in its opinion, the action is necessary in the interest of public safety. 2002, c. 18, Sched. N, s. 5 (2).

Appeal to Divisional Court

27. (1) Any party to the hearing before the Fire Safety Commission under section 26 may appeal from the decision of the Commission to the Divisional Court in accordance with the rules of court on any question that is not a question of fact alone.

Minister to be heard

(2) The Minister is entitled to be heard at a hearing under this section.

Powers of court on appeal

(3) The judge who hears an appeal under this section may,

(a) refer the matter back to the Commission for reconsideration by the Commission;

(b) confirm or alter the decision of the Commission; or

(c) make such other order as he or she sees fit, including an order that the Fire Marshal or an inspector do any act he or she is authorized to do under this Act. 1997, c. 4, s. 27.

PART VII
OFFENCES AND ENFORCEMENT

Offences

28. (1) Every person is guilty of an offence if he or she,

(a) hinders, obstructs or interferes with the Fire Marshal, an assistant to the Fire Marshal or a fire chief in the exercise of his or her powers and duties;

(b) prevents an inspector from entering land or premises under section 19 or 20, refuses to answer questions on matters relevant to the inspection or provides the inspector with information, on matters relevant to the inspection, that the person knows, or ought reasonably to know, to be false or misleading;

(c) subject to subsection (2) contravenes any provisions of this Act or the regulations; or

(d) refuses or neglects to obey or carry out the directives of the Fire Marshal, an assistant to the Fire Marshal or a fire chief given under the authority of this Act. 1997, c. 4, s. 28 (1); 2002, c. 18, Sched. N, s. 6.

Same

(2) A person who contravenes a provision in Part IX of this Act is not guilty of an offence. 1997, c. 4, s. 28 (2).

Penalty

(3) An individual convicted of an offence under subsection (1) is liable to,

(a) in the case of an offence other than one described in clause (b), a fine of not more than $20,000 or imprisonment for a term of not more than one year, or both; and

(b) in the case of an offence for contravention of the fire code, a fine of not more than $50,000 or imprisonment for a term of not more than one year, or both. 2005, c. 33, s. 8.

Same

(4) A corporation convicted of an offence under subsection (1) is liable to a fine of not more than $100,000. 2005, c. 33, s. 8.

Offence, director or officer of corporation

(5) A director or officer of a corporation who knows that the corporation is violating or has violated a provision of the fire code is guilty of an offence and on conviction is liable to a fine of not more than $50,000 or to imprisonment for a term of not more than one year, or to both. 2005, c. 33, s. 8.

Liability of directors

(6) Despite subsections (1) and (3), every director or officer of a corporation who knowingly commits an offence under subsection (1) is guilty of an offence and on conviction is liable to a fine of not more than $50,000 or to imprisonment for a term of not more than one year, or to both. 2005, c. 33, s. 8.

Offence, removal of posted notice

29. Any person who removes a copy of an order or of a notice posted in accordance with subsection 15 (3), 24 (2), (3) or 31 (4) without the approval of the Fire Marshal, an assistant to the Fire Marshal or a fire chief is guilty of an offence and on conviction is liable to a fine of not more than $2,000 or to imprisonment for a term of not more than one year, or to both. 2005, c. 33, s. 9.

Offence, failure to comply with inspection order

30. Every person who fails to comply with an order made under section 21, 25 or 26 is guilty of an offence and on conviction is liable to a fine of not more than $20,000 for every day during which the default continues, and the imposition or payment of the fine does not relieve the person from complying with the order. 2005, c. 33, s. 10.

Order to close premises, etc.

31. (1) The Fire Marshal, an assistant to the Fire Marshal or a fire chief may apply to the Ontario Court of Justice for an order under this section if,

(a) a person who has been convicted of an offence under section 30 for failing to comply with an inspection order under section 21 or an order under section 25 or 26 has not complied with the order within 30 days of the conviction; or

(b) a person who has been convicted of an offence under clause 28 (1) (c) for contravening a provision of the fire code has not ceased to contravene the provision or remedied the contravention within 30 days of the conviction. 1997, c. 4, s. 31 (1); 2002, c. 18, Sched. N, s. 7 (1).

No notice required

(2) An application under subsection (1) may be made without notice to the person referred to in clause (1) (a) or (b). 1997, c. 4, s. 31 (2).

Order

(3) Upon an application under subsection (1), a judge may, if in his or her opinion it is necessary in the interest of public safety, order that the Fire Marshal, assistant to the Fire Marshal or fire chief,

(a) close access to, or remove, the building, structure or premises to which the order relates; or

(b) remove or remove and dispose of any substance, material or thing from the building, structure or premises. 1997, c. 4, s. 31 (3); 2002, c. 18, Sched. N, s. 7 (2).

Application

(4) If an order is made under clause (3) (a), subsection 24 (3) applies with necessary modifications to the service and posting of the order. 1997, c. 4, s. 31 (4).

Compliance order

32. (1) The Fire Marshal, an assistant to the Fire Marshal or a fire chief may, in addition to any other rights he or she may have under this Act, apply to a judge of the Superior Court of Justice for an order,

(a) requiring a person to comply with an inspection order made under section 21 or with an order made under section 25 or 26 if the person has failed to comply with the order; or

(b) requiring a person to remedy any contravention of a provision of the fire code. 1997, c. 4, s. 32 (1); 2002, c. 18, Sched. N, s. 8.

Powers of judge

(2) Upon an application being made under subsection (1), a judge may make the order requested or such other order as he or she sees fit. 1997, c. 4, s. 32 (2).

Appeal

(3) An appeal lies to the Divisional Court from the judge's order. 1997, c. 4, s. 32 (3).

Fire Marshal to carry out inspection order

33. (1) If an order made under subsection 21 (1) or (2) or section 25 or 26 requires a thing to be done, an inspector may apply to the Fire Safety Commission for an order authorizing him or her to cause the thing to be done. 1997, c. 4, s. 33 (1).

Hearing

(2) Upon receiving an application under subsection (1), the Fire Safety Commission shall appoint a time for and hold a hearing. 1997, c. 4, s. 33 (2).

Consolidation of hearings

(3) If an application is made under this section and an appeal is made under section 26 in respect of the same order, the Fire Safety Commission may, if it considers it practical to do so, consolidate the hearings. 1997, c. 4, s. 33 (3).

Grounds for decision

(4) The Fire Safety Commission may authorize the inspector to cause to be done any thing required to be done by an order made under subsection 21 (1) or (2) or section 25 or 26 if,

(a) the person required by the order to do the thing,

(i) has refused to comply with or is not complying with the order,

(ii) is not likely, in the Commission's opinion, to comply with the order promptly,

(iii) is not likely, in the Commission's opinion, to carry out the order competently, or

(iv) requests the assistance of the inspector in complying with the order; and

(b) in the Commission's opinion, failure to do the thing would seriously endanger the health or safety of any person or the quality of the natural environment for any use that can be made of it. 1997, c. 4, s. 33 (4).

Powers of Commission

(5) The Fire Safety Commission may, in addition to authorizing an inspector to cause to be done any thing required to be done by an order under subsection 21 (1) or (2) or section 25 or 26,

(a) rescind the order; or

(b) amend the order, or make such other order as the Commission deems should have been made under the relevant section, and order the inspector to do the thing in accordance with the amended order or the other order. 1997, c. 4, s. 33 (5).

Same

(6) If the order amended or made under clause (5) (b) provides for the removal of any combustible or explosive material or any thing that may constitute a fire hazard, the Fire Safety Commission may also authorize the inspector to dispose of the material or thing. 2002, c. 18, Sched. N, s. 9.

Warrant authorizing entry

34. (1) If a justice of the peace is satisfied on evidence under oath that there are reasonable grounds to believe that entry on certain land or premises is necessary for the purpose of doing a thing that the Fire Safety Commission has authorized to be done under section 33, the justice of the peace may issue a warrant authorizing the person named in the warrant to enter and do the thing on the land or premises including, where necessary, entering an adjacent property in order to access the property named in the warrant.

Execution and expiry of warrant

(2) A warrant issued under subsection (1) shall,

(a) specify the times, which may be at any time during the day or night, during which the warrant may be carried out; and

(b) state when the warrant expires.

Extension of time

(3) A justice of the peace may extend the date on which a warrant expires for such additional periods as the justice of the peace considers necessary.

Use of force

(4) A person authorized under subsection (1) to enter land or premises for the purpose of doing a thing may call on police officers as necessary and may use force as necessary to make the entry and do the thing.

Assistance

(5) A person named in a warrant issued under subsection (1) may call on any other persons he or she considers advisable to execute the warrant.

Application without notice

(6) A justice of the peace may receive and consider an application for a warrant or extension of a warrant under this section without notice to the owner or occupant of the land or premises.

Identification

(7) On the request of an owner or occupant of the land or premises, a person who exercises a power conferred under subsection (1) shall identify himself or herself and shall explain the purpose of the entry. 1997, c. 4, s. 34.

PART VIII
RECOVERY OF COSTS

Fire Marshal's order to pay costs

35. (1) The Fire Marshal, a fire chief or an assistant to the Fire Marshal may issue an order to pay the costs incurred by the Province of Ontario or a municipality,

(a) in doing any thing done in accordance with an authorization given under section 33, to any person required by an order made under subsection 21 (1) or (2) or section 25 or 26 to do the thing; or

(b) in entering land or premises and doing any thing under section 15, to the owner or the person having control of the land or premises. 1997, c. 4, s. 35 (1).

Idem

(2) An order under subsection (1) to pay costs shall include,

(a) a description of the things done for which the costs were incurred and a statement of the authority for doing the things;

(b) a detailed account of the costs incurred by the Province of Ontario or the municipality, as the case may be; and

(c) a direction that the person to whom the order is issued pay the costs to the Minister of Finance or the municipality, as the case may be. 1997, c. 4, s. 35 (2); 2002, c. 18, Sched. N, s. 10.

Appeal to Fire Safety Commission

36. (1) A person to whom an order to pay costs is issued may, by written notice served on the person who issued the order and on the Fire Safety Commission within 15 days after service on the person of a copy of the order, require a hearing by the Commission.

Costs specified in order to pay may be increased by Commission

(2) At a hearing by the Fire Safety Commission on an order to pay costs, the Fire Marshal or an assistant to the Fire Marshal or a fire chief may, on reasonable notice to all parties, ask the Commission to amend the order by adding new items of cost or by increasing the amounts set out in the order.

What Commission may consider at hearing

(3) At a hearing by the Fire Safety Commission on an order to pay costs, the Commission shall consider only whether any of the costs specified in the order,

(a) are unreasonable having regard to what was done; or

(b) do not relate to a thing,

(i) that the person to whom the order to pay costs was issued was required to do by an order made under subsection 21 (1) or (2) or section 25 or 26 or on any appeal from any such order, or

(ii) that the Fire Marshal, an assistant to the Fire Marshal or a fire chief was authorized to do under section 15.

Appeal to Divisional Court

(4) Any party to a hearing by the Fire Safety Commission on an order to pay costs may appeal from the decision of the Commission to the Divisional Court on any question that is not a question of fact alone.

Idem

(5) Subsections 27 (2) and (3) apply with necessary modification to an appeal under subsection (4). 1997, c. 4, s. 36.

Enforcement of order to pay costs

37. (1) An order to pay costs may be filed with the Superior Court of Justice and enforced as if it were an order of the court. 1997, c. 4, s. 37 (1); 2002, c. 18, Sched. N, s. 11.

Interest

(2) Section 129 of the *Courts of Justice Act* applies in respect of an order filed under subsection (1) and, for the purpose, the date of filing shall be deemed to be the date of the order. 1997, c. 4, s. 37 (2).

Instructions for municipality to recover costs

38. (1) The Fire Marshal, a fire chief or an assistant to the Fire Marshal may inform a municipality as to the amount of any of the following expenses incurred by the municipality or the Province of Ontario that relate to things done in connection with land or premises in the municipality and instruct the municipality to recover the amounts:

1. Expenses incurred in carrying out an order made under subsection 31 (3) that relates to the land or premises.
2. Where an order to pay costs has been issued under section 35 to a person who owns the lands or premises in the municipality,
   i. expenses incurred in doing anything done in accordance with an authorization given under section 33 to do things to the land or premises, or
   ii. expenses incurred in doing a thing under section 15 in order to remove or reduce an immediate threat to life on the land or premises. 1997, c. 4, s. 38 (1).

Municipal lien

(2) Upon receiving instructions under subsection (1), a municipality shall have a lien against the land or premises in respect of which expenses referred to in subsection (1) were incurred for the amount of the expenses. 1997, c. 4, s. 38 (2).

Lien

(3) The amount of any expenses referred to in subsection (1) shall have priority lien status, as described in section 1 of the *Municipal Act, 2001*, or section 3 of the *City of Toronto Act, 2006*, as the case may be, and shall be added by the treasurer of the municipality to the tax roll. 2002, c. 17, Sched. F, Table; 2006, c. 32, Sched. C, s. 20 (2).

Remitting costs to Province

(4) Subject to subsection (7), money collected in accordance with subsection (3) in order to recover expenses referred to in subsection (1) that were incurred by the Province of Ontario shall be paid by the municipality to the Minister of Finance; but the municipality may retain such amounts as may be reasonably attributable to the collection. 1997, c. 4, s. 38 (4).

Same

(5) A lien created under subsection (2) in favour of a municipality for amounts incurred by the Province of Ontario is not an estate or interest of the Crown within the meaning of clause 379 (7) (b) of the *Municipal Act, 2001* or clause 350 (7) (b) of the *City of Toronto Act, 2006*, as the case may be. 1997, c. 4, s. 38 (5); 2002, c. 17, Sched. F, Table; 2006, c. 32, Sched. C, s. 20 (3).

Interpretation

(6) In subsections (7) and (8),

"cancellation price" has the same meaning as in Part XI of the *Municipal Act, 2001* or Part XIV of the *City of Toronto Act, 2006*, as the case may be. 2006, c. 32, Sched. C, s. 20 (4).

Proceeds of tax sale

(7) If there is a sale of land under Part XI of the *Municipal Act, 2001* or Part XIV of the *City of Toronto Act, 2006*, as the case may be, and amounts are payable out of the proceeds to the Minister of Finance under this Act, the *Environmental Protection Act* or the *Ontario Water Resources Act*, those amounts shall not be paid until after payment of all other amounts payable out of the proceeds in respect of the cancellation price of the land. 1997, c. 4, s. 38 (7); 2002, c. 17, Sched. F, Table; 2006, c. 32, Sched. C, s. 20 (5).

Cancellation price

(8) Despite Part XI of the *Municipal Act, 2001* or Part XIV of the *City of Toronto Act, 2006*, the treasurer of a municipality may sell land under those Acts for less than the cancellation price, so long as the land is not sold for less than what the cancellation price would have been but for this Act, the *Environmental Protection Act* and the *Ontario Water Resources Act*, and the purchaser may be declared to be the successful purchaser under Part XI of the *Municipal Act, 2001* or Part XIV of the *City of Toronto Act, 2006*, as the case may be. 2006, c. 32, Sched. C, s. 20 (6).

Collection of costs

39. (1) The Fire Marshal, an assistant to the Fire Marshal or a fire chief may give written notice to the Minister of Finance of the amount of any of the following expenses incurred by the Province of Ontario that relate to things done in connection with the land and premises in territory without municipal organization, requesting the collection of the amount under the *Provincial Land Tax Act, 2006*:

1. Expenses incurred in carrying out an order made under subsection 31 (3) that relates to the land or premises.
2. Where an order to pay costs has been issued under section 35 to a person who owns the lands or premises in territory without municipal organization,

i. expenses incurred in doing anything done in accordance with an authorization given under section 33 to do things to the land or premises, or

ii. expenses incurred in doing a thing under section 15 in order to remove or reduce an immediate threat to life on the land or premises. 1997, c. 4, s. 39 (1); 2006, c. 33, Sched. Z.3, s. 12 (1).

Same

(2) When the Minister of Finance receives notice of an amount under subsection (1), the amount may be collected under the *Provincial Land Tax Act, 2006* as if the amount was a tax imposed under that Act. 2006, c. 33, Sched. Z.3, s. 12 (2).

(3) REPEALED: 2006, c. 33, Sched. Z.3, s. 12 (2).

Expenses related to work on other lands

40. The amount to be recovered by way of municipal taxes against land or premises under section 38 or 39 shall include all expenses incurred in doing any thing in connection with the land or premises that the Fire Marshal, an assistant to the Fire Marshal or a fire chief was authorized to do under an order or authorization referred to in subsection 38 (1), whether or not the thing was done on the land or premises. 1997, c. 4, s. 40.

PART IX
FIREFIGHTERS: EMPLOYMENT AND LABOUR RELATIONS

DEFINITIONS

Definitions

41. (1) In this Part,

"Board" means the Ontario Labour Relations Board; ("Commission")

"collective agreement" means an agreement in writing between an employer and a bargaining agent that represents firefighters employed by the employer containing provisions respecting terms or conditions of employment or the rights, privileges or duties of the employer, the bargaining agent or the firefighters; ("convention collective")

"employer" means a municipality, person or organization that employs firefighters; ("employeur")

"firefighter" means a person regularly employed on a salaried basis in a fire department and assigned to fire protection services and includes technicians but does not include a volunteer firefighter. ("pompier")

Managers not firefighters

(2) For the purposes of this Part, a person shall be deemed not to be a firefighter if,

(a) in the opinion of the Board, he or she exercises managerial functions or is employed in a confidential capacity in matters relating to labour relations; or

(b) he or she is a person designated under subsection 54 (4).

Application of *LRA, 1995*

(3) Sections 110 to 112, subsections 114 (1) and (3), sections 116 to 118 and 120 to 123 of the *Labour Relations Act, 1995* apply with necessary modifications to proceedings before the Board under this Act and the Board may exercise the powers under those provisions as if they were part of this Act.

Transition

(4) An agreement made under section 5 of the *Fire Departments Act*, or a decision or award made under section 6 of that Act, that is in effect immediately before the day this Part comes into force shall, on and after that day, remain in effect and be deemed to be a collective agreement to which this Part applies.

Same

(5) If a request to bargain was made under section 5 of the *Fire Departments Act* before the day this Part comes into force, this Part applies as if notice had been given under section 47 on that day. 1997, c. 4, s. 41.

WORKING CONDITIONS

Strike and lock outs

42. (1) No firefighter shall strike and no employer of firefighters shall lock them out.

Definitions

(2) In this section,

"lock-out" and "strike" have the same meaning as in the *Labour Relations Act, 1995*. 1997, c. 4, s. 42.

Hours of work

43. (1) In every municipality having a population of not less than 10,000, the firefighters assigned to firefighting duties shall work according to,

(a) the two-platoon system where the firefighters are divided into two platoons, the hours of work of which shall be,

(i) for each platoon 24 consecutive hours on duty followed immediately by 24 consecutive hours off duty, or

(ii) for one platoon in day-time ten consecutive hours on duty followed immediately by 14 consecutive hours off duty and for the other platoon in night-time 14 consecutive hours on duty followed immediately by 10 consecutive hours off duty,

and the platoons shall alternate at least every two weeks from night work to day work and vice versa;

(b) the three-platoon system where the firefighters are divided into three platoons, the hours of work of which shall be eight consecutive hours on duty followed immediately by 16 consecutive hours off duty, and the platoons shall rotate in their periods of duty and time off as may be arranged for the purpose of changing shifts at least every two weeks; or

(c) any other system of platoons or hours of work under which the maximum hours of work or hours on duty on average in any work week are not more than 48 hours.

Other personnel

(2) Firefighters assigned to duties other than fire-fighting duties shall work such hours as are determined, but in no case shall such hours of work exceed the average work week of the other full-time firefighters.

Maximum hours

(3) No firefighters shall be required to be on duty on average in any work week more than 48 hours.

Weekly day off duty

(4) Every firefighter shall be off duty for one full day of 24 hours in every calendar week, but where a two-platoon system or a three-platoon system is in operation, the 24 hours release at the change of platoons shall not be regarded as a day off duty for the purposes of this section.

Time off duty

(5) Nothing in this Part prohibits any municipality from granting the firefighters more than one day off duty in every calendar week.

Off duty

(6) The hours off duty of firefighters shall be free from fire department duties.

Exception for emergencies

(7) Despite subsections (1) to (6), the fire chief may call in off-duty firefighters if, as a result of a major emergency, the fire department needs the services of more firefighters than are on duty. 1997, c. 4, s. 43.

Termination of employment

44. (1) The employment of a firefighter may be terminated upon seven days' notice. The notice must be accompanied by written reasons for the termination.

Independent review

(2) A firefighter who has received a notice of termination of employment may require a review of the termination to be conducted, unless a collective agreement provides for another review mechanism.

Same

(3) If a review of a termination is required under subsection (2), the municipality in which the firefighter is employed shall appoint a person who is not employed in the fire department to conduct the review.

Review, no hearing

(4) A person appointed to conduct a review shall conduct the review within 10 days after the day the review is required. The person is not required to hold a hearing in conducting a review under this section.

Decision

(5) A person conducting a review of a termination under this section may uphold the termination, order that the firefighter be returned to duties under such conditions as may be specified in the order or make such other order as he or she considers proper.

Probationary period

(6) The employment of a firefighter may be terminated without cause at any time during the first 12 months, unless a collective agreement provides otherwise. Subsections (2) to (5) do not apply with respect to a termination during that period. 1997, c. 4, s. 44.

ESTABLISHMENT OF BARGAINING RIGHTS BY CERTIFICATION

Bargaining unit

45. (1) The firefighters employed in a fire department constitute a bargaining unit for the purposes of collective bargaining under this Act.

Exclusion

(2) The bargaining unit shall not include persons who are deemed not to be firefighters under subsection 41 (2). 1997, c. 4, s. 45.

Bargaining agent

46. (1) The majority of firefighters in a bargaining unit may request an association of firefighters to represent them and act as their bargaining agent for purposes of collective bargaining under this Part.

Transition

(2) An association of firefighters that, immediately before the day this Part comes into force, was a party to, or bound by, an agreement made under section 5 of the *Fire Departments Act* or was bound by the decision or award of a board of arbitration under section 6 of that Act shall, on and after the day this Part comes into force and until such time as a new bargaining agent is requested under subsection (1), be deemed to be the bargaining agent for the firefighters in the bargaining unit. 1997, c. 4, s. 46.

DUTY OF FAIR REPRESENTATION

Duty of fair representation by bargaining agent

46.1 (1) A bargaining agent entitled to represent firefighters in a bargaining unit shall not act in a manner that is arbitrary, discriminatory or in bad faith in the representation of any of the firefighters in the unit, whether or not they are members of the bargaining agent. 2011, c. 13, s. 1.

Transition

(2) This section does not apply in respect of any conduct or events that occurred before December 1, 2011. 2011, c. 13, s. 1.

Inquiry, alleged contravention

46.2 (1) The Board may authorize a labour relations officer to inquire into any complaint alleging a contravention of section 46.1. 2011, c. 13, s. 1.

Duties

(2) The labour relations officer shall promptly inquire into the complaint and endeavour to effect a settlement of the matter complained of. 2011, c. 13, s. 1.

Report

(3) The labour relations officer shall report the results of his or her inquiry and endeavours to the Board. 2011, c. 13, s. 1.

Inquiry by Board

(4) If the labour relations officer is unable to effect a settlement of the matter complained of or if the Board considers it advisable to dispense with an inquiry by a labour relations officer, the Board may inquire into the complaint. 2011, c. 13, s. 1.

Remedy for contravention

(5) If the Board inquires into the complaint and is satisfied that a bargaining agent has failed to comply with section 46.1, the Board shall determine what, if anything, the bargaining agent, the employer or any other person shall do or refrain from doing with respect to the contravention, including, despite the provisions of any collective agreement,

(a) ceasing to do the act or acts complained of;

(b) rectifying the act or acts complained of;

(c) in the case of the bargaining agent, compensating the firefighter for loss of earnings or other employment benefits in an amount that may be assessed by the Board against the bargaining agent; or

(d) in the case of the employer,

(i) reinstating the firefighter in employment with compensation for loss of earnings or other employment benefits in an amount that may be assessed by the Board against the employer,

(ii) reinstating the firefighter in employment, without compensation, or

(iii) compensating the firefighter for loss of earnings or other employment benefits in an amount that may be assessed by the Board against the employer, without reinstatement. 2011, c. 13, s. 1.

Filing in court

(6) A bargaining agent, employer, firefighter or other person affected by the Board's determination under subsection (5) may file the determination, excluding the reasons, in the prescribed form in the Superior Court of Justice and the determination shall be entered and is enforceable in the same way as an order of that court. 2011, c. 13, s. 1.

Effect of settlement

(7) If a complaint under this section has been settled, whether through the endeavours of the labour relations officer or otherwise, and the terms of the settlement have been put into writing and signed by the parties or their representatives, the settlement is binding upon the parties and the bargaining agent, employer, firefighter or other person who agreed to the settlement and shall be complied with according to its terms. 2011, c. 13, s. 1.

Failure to comply

(8) A complaint that the parties or the bargaining agent, employer, firefighter or other person who agreed to the settlement of a complaint under this section has not complied with the terms of the settlement shall be dealt with as a new complaint under this section. 2011, c. 13, s. 1.

Board power re interim orders

46.3 (1) Subject to subsection (2), on application by any party to a pending inquiry under section 46.2, the Board may make any interim order it considers appropriate concerning procedural matters. 2011, c. 13, s. 1.

No reinstatement

(2) The Board shall not make an interim order requiring an employer to reinstate a firefighter in employment. 2011, c. 13, s. 1.

No power under SPPA

(3) The Board's power to make interim orders under this section applies instead of the power under subsection 16.1 (1) of the *Statutory Powers Procedure Act*. 2011, c. 13, s. 1.

Expedited enforcement

46.4 (1) This section applies when the Board receives a complaint that a bargaining agent has failed to comply with its duty under section 46.1. 2011, c. 13, s. 1.

Withdrawal of complaint

(2) A complaint described in subsection (1) may be withdrawn by the complainant on conditions determined by the Board. 2011, c. 13, s. 1.

No hearing

(3) The Board is not required to hold a hearing to determine a complaint under this section. 2011, c. 13, s. 1.

Interim orders

(4) Subject to subsection (5), the Board may, after consulting with the parties, make any interim order it considers appropriate concerning procedural matters. 2011, c. 13, s. 1.

No reinstatement

(5) The Board shall not make an interim order requiring an employer to reinstate a firefighter in employment. 2011, c. 13, s. 1.

Cease and desist orders

(6) In an interim order or after making an interim order, the Board may order any bargaining agent, employer, firefighter or any other person to cease and desist from doing anything intended or likely to interfere with the terms of an interim order respecting the assignment of work. 2011, c. 13, s. 1.

Final orders

(7) The Board may, after consulting with the parties, make any final order it considers appropriate. 2011, c. 13, s. 1.

Filing in court

(8) A party to an interim or final order may file the order, excluding the reasons, in the prescribed form in the Superior Court of Justice and the order shall be entered and is enforceable in the same way as an order of that court. 2011, c. 13, s. 1.

Enforcement

(9) An order that has been filed with the court is enforceable by a firefighter affected by it on the day after the date fixed in the order for compliance. 2011, c. 13, s. 1.

Interim orders prevail

(10) A bargaining agent, employer, firefighter or any other person affected by an interim order made by the Board under this section shall comply with the order despite any provision of this Part or of any collective agreement. 2011, c. 13, s. 1.

Same

(11) A bargaining agent, employer, firefighter or any other person who is complying with an interim order made by the Board under this section is deemed not to have violated any provision of this Part or of any collective agreement. 2011, c. 13, s. 1.

Proceedings in Superior Court of Justice

46.5 If a bargaining agent, employer, firefighter or any other person is affected by a determination of the Board under section 46.2, an interim order of the Board under section 46.3 or an interim or final order of the Board under section 46.4, proceedings to enforce the determination or the interim or final order may be instituted in the Superior Court of Justice by or against the bargaining agent, employer, firefighter or any other person who is subject to the determination or order. 2011, c. 13, s. 1.

COLLECTIVE BARGAINING

Notice of desire to bargain

47. (1) If no collective agreement is in effect, a bargaining agent acting pursuant to subsection 46 (1), shall give written notice to the employer of its desire to bargain with a view to making a collective agreement.

Same

(2) The employer or the bargaining agent may give written notice of its desire to bargain with a view to making a collective agreement within the period of 90 days before the expiry date set out in the collective agreement or, if no expiry date is set out in the agreement, within the period of 90 days before the expiry date referred to in subsection 52 (1). 1997, c. 4, s. 47.

Obligation to bargain

48. (1) The employer and the bargaining agent shall meet within 15 days after the notice is given, or within such longer period as they may agree upon, and they shall bargain in good faith and make every reasonable effort to make a collective agreement.

Parties

(2) The employer and the bargaining agent are the parties to the bargaining. 1997, c. 4, s. 48.

Conciliation

49. (1) After notice is given under section 47 or after the parties have met and bargained, and upon the request of either party, a conciliation officer shall be appointed in accordance with the regulations to endeavour to effect a collective agreement. 1997, c. 4, s. 49 (1).

Duties

(2) The conciliation officer shall confer with the parties and endeavour to effect a collective agreement. 1997, c. 4, s. 49 (2).

Report to Minister

(3) Within 14 days after being appointed or within such longer period as the parties may agree upon, the conciliation officer shall report the results of his or her endeavour to the Minister. The Minister may also extend the 14-day period if the conciliation officer advises him or her that, with the extension, an agreement may be made within a reasonable period of time. 1997, c. 4, s. 49 (3).

Report to parties

(4) The Minister shall forthwith, by notice in writing, inform the parties of the conciliation officer's report. 1997, c. 4, s. 49 (4).

Application of the *Labour Relations Act, 1995*

(5) The following provisions of the *Labour Relations Act, 1995* apply for the purposes of this section in respect of the following matters:

1. Subsection 119 (2), in respect of information or material furnished to or received by a conciliation officer.
2. Subsection 119 (3), in respect of the report of a conciliation officer.
3. Section 120, in respect of any information or material furnished to or received by a conciliation officer. 2006, c. 19, Sched. M, s. 2.

Arbitration

50. Where the Minister has informed the parties that the conciliation officer has been unable to effect a collective agreement, the matters remaining in dispute between the parties shall be decided by arbitration in accordance with this Part. 1997, c. 21, Sched. A, s. 3 (1).

Appointment of single arbitrator

50.1 (1) Where the parties agree to have the matters in dispute between them decided by a single arbitrator, they shall, within the time set out in subsection 50.2 (1), jointly appoint a person who agreed to act.

Single arbitrator's powers

(2) The person appointed under subsection (1) shall constitute the board of arbitration for the purposes of this Part and he or she shall have the powers and duties of the chair of a board of arbitration.

Notice to Minister

(3) As soon as the parties appoint a person to act as a single arbitrator, they shall notify the Minister of the name and address of the person appointed. 1997, c. 21, Sched. A, s. 3 (1).

Appointment of board of arbitration

50.2 (1) Within seven days after the day upon which the Minister has informed the parties that the conciliation officer has been unable to effect a collective agreement, each of the parties shall appoint to a board of arbitration a member who has agreed to act.

Extension of time

(2) The parties by a mutual agreement in writing may extend the period of seven days mentioned in subsection (1) for one further period of seven days.

Failure to appoint member

(3) Where a party fails to appoint a member of a board of arbitration within the period or periods mentioned in subsection (1), the Minister, upon the written request of either of the parties, shall appoint such member.

Third member

(4) Within ten days after the day on which the second of the members was appointed, the two members appointed by or on behalf of the parties shall appoint a third member who has agreed to act, and such third member shall be the chair.

Failure to appoint third member

(5) Where the two members appointed by or on behalf of the parties fail within ten days after the appointment of the second of them to agree upon the third member, notice of such failure shall be given forthwith to the Minister by the parties, the two members or either of them and the Minister shall appoint as a third member a person who is, in the opinion of the Minister, qualified to act.

Notice of appointment by party

(6) As soon as one of the parties appoints a member to a board of arbitration, that party shall notify the other party and the Minister of the name and address of the member appointed.

Notice of appointment by members

(7) As soon as the two members appoint a third member, they shall notify the Minister of the name and address of the third member appointed.

Selection of method

(8) If the chair of the board of arbitration was appointed by the Minister, subject to subsections (9) to (11), the Minister shall select the method of arbitration and shall advise the chair of the board of arbitration of the selection.

Same, mediation-arbitration

(9) The method selected shall be mediation-arbitration unless the Minister is of the view that another method is more appropriate.

Same, final offer selection

(10) The method selected shall not be final offer selection without mediation.

Same, mediation-final offer selection

(11) The method selected shall not be mediation-final offer selection unless the Minister in his or her sole discretion selects that method because he or she is of the view that it is the most appropriate method having regard to the nature of the dispute.

Vacancies

(12) If a person ceases to be a member of a board of arbitration by reason of resignation, death or otherwise before it has completed its work, the Minister shall appoint a member in his or her place after consulting the party whose point of view was represented by such person.

Replacement of member

(13) If, in the opinion of the Minister, a member of a board of arbitration has failed to enter on or to carry on his or her duties so as to enable it to render a decision within the time set out in subsection 50.5 (5) or within the time extended under subsection 50.5 (6), the Minister may appoint a member in his or her place after consulting the party whose point of view was represented by such person.

Replacement of chair

(14) If the chair of a board of arbitration is unable to enter on or to carry on his or her duties so as to enable it to render a decision within the time set out in subsection 50.5 (5) or within the time extended under subsection 50.5 (6), the Minister may appoint a person to act as chair in his or her place.

Where single arbitrator unable to act

(15) If the person appointed jointly by the parties as a single arbitrator dies before completing his or her work or is unable to enter on or to carry on his or her duties so as to enable him or her to render a decision within the time set out in subsection 50.5 (5) or within the time extended under subsection 50.5 (6), the Minister may, upon notice or complaint to him or her by either of the parties and after consulting the parties, inform the parties in writing that the arbitrator is unable to enter on or to carry on his or her duties and the provisions of this section relating to the appointment of a board of arbitration shall thereupon apply with necessary modifications.

Time and place of hearings

(16) Subject to subsection (17), the chair of the board of arbitration shall fix the time and place of the first or any subsequent hearing and shall give notice thereof to the Minister and the Minister shall notify the parties and the members of the board of arbitration thereof.

When hearings commence

(17) The board of arbitration shall hold the first hearing within 30 days after the last (or only) member of the board is appointed.

Exception

(18) If the method of arbitration selected by the Minister under subsection (8) is mediation-arbitration or mediation-final offer selection, the time limit set out in subsection (18) does not apply in respect of the first hearing but applies instead, with necessary modifications, in respect of the commencement of mediation.

Failure of member to attend

(19) Where a member of a board of arbitration appointed by a party or by the Minister is unable to attend the first hearing at the time and place fixed by the chair, the party shall, upon the request in writing of the chair, appoint a new member in place of such member and where such appointment is not made within five days of the date of the request, the Minister shall, upon the written request of the chair, appoint a new member in place of such member.

Order to expedite proceedings

(20) Where a board of arbitration has been established, the chair shall keep the Minister advised of the progress of the arbitration and where the Minister is advised that the board has failed to render a decision within the time set out in subsection 50.5 (5) or within the time extended under subsection 50.5 (6), the Minister may, after consulting the parties and the board, issue whatever order he or she considers necessary in the circumstances to ensure that a decision will be rendered within a reasonable time.

Procedure

(21) Subject to the other provisions of this section, a board of arbitration shall determine its own procedure but shall give full opportunity to the parties to present their evidence and make their submissions.

Same

(22) If the members of a board of arbitration are unable to agree among themselves on matters of procedure or as to the admissibility of evidence, the decision of the chair governs.

Time for submission of information

(23) If the method of arbitration selected by the Minister under subsection (8) is mediation-arbitration or mediation-final offer selection, the chair of the board of arbitration may, after consulting with the parties, set a date after which a party may not submit information to the board unless,

(a) the information was not available prior to the date;

(b) the chair permits the submission of the information; and

(c) the other party is given an opportunity to make submissions concerning the information.

Decision

(24) The decision of a majority of the members of a board of arbitration is the decision of the board, but, if there is no majority, the decision of the chair is the decision of the board.

Notice of agreement to recommence

(25) If any member of the board of arbitration was appointed by the Minister, the parties may, at any time before the arbitrator or board renders a decision, jointly serve written notice on the Minister that they have agreed that the arbitration should be recommenced before a different board of arbitration.

Termination of appointments

(26) If notice is served on the Minister under subsection (25), the appointments of all the members of the board of arbitration are terminated.

Effective date of terminations

(27) The terminations are effective on the day the Minister is served with the notice.

Obligation to appoint

(28) Within seven days after the day the Minister is served with the notice, the parties shall jointly appoint, under subsection 50.1 (1), a person who agreed to act or shall each appoint, under subsection (1) of this section, a member who has agreed to act and section 50.1 and this section apply with respect to such appointments.

Powers

(29) The chair and the other members of a board of arbitration established under this Act have, respectively, all the powers of a chair and the members of a board of arbitration under the *Labour Relations Act, 1995*. 1997, c. 21, Sched. A, s. 3 (1).

Appointment or proceedings of board not subject to review

50.3 Where a person has been appointed as a single arbitrator or the three members have been appointed to a board of arbitration, it shall be presumed conclusively that the board has been established in accordance with this Part and no application shall be made, taken or heard for judicial review or to question the establishment of the board or the appointment of the member or members, or to review, prohibit or restrain any of its proceedings. 1997, c. 21, Sched. A, s. 3 (1).

Single arbitration of several disputes

50.4 (1) Where there are matters in dispute between parties to be decided by more than one arbitration in accordance with this Part, the parties may agree in writing that the matters in dispute shall be decided by one board of arbitration.

Parties

(2) For the purposes of section 50.2, the bargaining agents for or on behalf of any firefighters to whom this Part applies shall be one party and the employers of such firefighters shall be the other party.

Powers of board

(3) In an arbitration to which this section applies, the board may, in addition to the powers conferred upon a board of arbitration by this Part,

(a) make a decision on matters of common dispute between all of the parties; and

(b) refer matters of particular dispute to the parties concerned for further bargaining.

Same

(4) Where matters of particular dispute are not resolved by further collective bargaining under clause (3) (b), the board shall decide the matters. 1997, c. 21, Sched. A, s. 3 (1).

Duty of board

50.5 (1) The board of arbitration shall examine into and decide on matters that are in dispute and any other matters that appear to the board necessary to be decided in order to conclude a collective agreement between the parties. 1997, c. 21, Sched. A, s. 3 (1).

Criteria

(2) In making a decision, the board of arbitration shall take into consideration all factors the board considers relevant, including the following criteria:

1. The employer’s ability to pay in light of its fiscal situation.

2. The extent to which services may have to be reduced, in light of the decision, if current funding and taxation levels are not increased.
3. The economic situation in Ontario and in the municipality.
4. A comparison, as between the firefighters and other comparable employees in the public and private sectors, of the terms and conditions of employment and the nature of the work performed.
5. The employer's ability to attract and retain qualified firefighters. 1997, c. 21, Sched. A, s. 3 (1).

Restriction

(3) Nothing in subsection (2) affects the powers of the board of arbitration. 1997, c. 21, Sched. A, s. 3 (1).

Board to remain seized of matters

(4) The board of arbitration shall remain seized of and may deal with all matters in dispute between the parties until a collective agreement is in effect between the parties. 1997, c. 21, Sched. A, s. 3 (1).

Time for decision

(5) The board of arbitration shall give a decision within 90 days after the last (or only) member of the board is appointed. 1997, c. 21, Sched. A, s. 3 (1).

Extension

(6) The parties may agree to extend the time described in subsection (5), either before or after the time has passed. 1997, c. 21, Sched. A, s. 3 (1).

Remuneration and expenses

(7) The remuneration and expenses of the members of a board of arbitration shall be paid as follows:

1. A party shall pay the remuneration and expenses of a member appointed by or on behalf of the party.
2. Each party shall pay one-half of the chair's remuneration and expenses. 1997, c. 21, Sched. A, s. 3 (1).

Enforcement of arbitration decisions

(8) Where a party or firefighter has failed to comply with any of the terms of the decision of an arbitration board, any party or firefighter affected by the decision may file in the Superior Court of Justice a copy of the decision, exclusive of the reasons therefor, whereupon the decision shall be entered in the same way as a judgment or order of that court and is enforceable as such. 1997, c. 21, Sched. A, s. 3 (1); 2002, c. 18, Sched. N, s. 12.

Non-application

(9) The *Arbitration Act, 1991* and the *Statutory Powers Procedure Act* do not apply with respect to an arbitration under this Part. 1997, c. 21, Sched. A, s. 3 (1).

Where agreement reached

50.6 (1) Where, during the bargaining under this Part or during the proceedings before the board of arbitration, the parties agree on all the matters to be included in a collective agreement, they shall put them in writing and shall execute the document, and thereupon it constitutes a collective agreement.

Failure to make agreement

(2) If the parties fail to put the terms of all the matters agreed upon by them in writing or if having put the terms of their agreement in writing either of them fails to execute the document within seven days

after it was executed by the other of them, they shall be deemed not to have made a collective agreement and the provisions of sections 49 to 50.5 apply, with necessary modifications.

Decision of board

(3) Where, during the bargaining under this Part or during the proceedings before the board of arbitration, the parties have agreed upon some matters to be included in the collective agreement and have notified the board in writing of the matters agreed upon, the decision of the board shall be confined to the matters not agreed upon by the parties and to such other matters that appear to the board necessary to be decided to conclude a collective agreement between the parties.

Same

(4) Where the parties have not notified the board of arbitration in writing that, during the bargaining under this Part or during the proceedings before the board of arbitration, they have agreed upon some matters to be included in the collective agreement, the board shall decide all matters in dispute and such other matters that appear to the board necessary to be decided to conclude a collective agreement between the parties.

Execution of agreement

(5) Within five days of the date of the decision of the board of arbitration or such longer period as may be agreed upon in writing by the parties, the parties shall prepare and execute a document giving effect to the decision of the board and any agreement of the parties, and the document thereupon constitutes a collective agreement.

Preparation of agreement by board

(6) If the parties fail to prepare and execute a document in the form of a collective agreement giving effect to the decision of the board and any agreement of the parties within the period mentioned in subsection (5), the parties or either of them shall notify the chair of the board in writing forthwith, and the board shall prepare a document in the form of a collective agreement giving effect to the decision of the board and any agreement of the parties and submit the document to the parties for execution.

Failure to execute agreement

(7) If the parties or either of them fail to execute the document prepared by the board within a period of five days from the day of its submission by the board to them, the document shall come into effect as though it had been executed by the parties and the document thereupon constitutes a collective agreement. 1997, c. 21, Sched. A, s. 3 (1).

Delegation

50.7 (1) The Minister may delegate in writing to any person the Minister's power to make an appointment, order or direction under this Act. 1997, c. 21, Sched. A, s. 3 (1); 2002, c. 18, Sched. N, s. 13 (1).

Proof of appointment

(2) An appointment, an order or a direction made under this Act that purports to be signed by or on behalf of the Minister shall be received in evidence in any proceeding as proof, in the absence of evidence to the contrary, of the facts stated in it without proof of the signature or the position of the person appearing to have signed it. 1997, c. 21, Sched. A, s. 3 (1); 2002, c. 18, Sched. N, s. 13 (2).

Existing proceedings discontinued

50.8 (1) Proceedings before a board of arbitration under this Part or a predecessor to this Act in which a hearing was commenced before the date on which subsection 3 (1) of the *Public Sector Dispute Resolution Act, 1997* comes into force are terminated and any decision in such proceedings is void.

Exception, completed proceedings

(2) This section does not apply with respect to proceedings in which a hearing was commenced before June 3, 1997 if,

(a) a final decision is issued on or before June 3, 1997; or

(b) a final decision is issued after June 3, 1997 and the decision is served before the date on which subsection 3 (1) of the *Public Sector Dispute Resolution Act, 1997* comes into force.

Exception, by agreement

(3) This section does not apply if the parties agree in writing after the date on which subsection 3 (1) of the *Public Sector Dispute Resolution Act, 1997* comes into force to continue the proceedings. 1997, c. 21, Sched. A, s. 3 (1).

OPERATION OF COLLECTIVE AGREEMENTS

Collective agreement

51. (1) Every collective agreement must be set out in writing.

Binding effect

(2) A collective agreement is binding upon the employer, the bargaining agent and the members of the bargaining unit.

Commencement

(3) A collective agreement comes into effect according to its terms. If the agreement does not provide for its commencement date, it comes into effect at the beginning of the first fiscal period in respect of which the employer budgets for expenditures under the agreement.

Same

(4) Despite subsection (3), if a collective agreement provides that it comes into effect on a specified day and that day occurs before the beginning of the first fiscal period in respect of which the employer can budget for expenditures under the agreement, the agreement shall be deemed to provide that it comes into effect at the beginning of that first fiscal period. 1997, c. 4, s. 51.

Minimum term of collective agreements

52. (1) If a collective agreement does not provide for its term of operation or provides for its operation for an unspecified term or for a term of less than one year, it shall be deemed to provide for its operation for a term of one year from the date that it commenced to operate.

Extension of term of collective agreement

(2) Despite subsection (1), the parties may, in a collective agreement or otherwise and before or after the collective agreement has ceased to operate, agree to continue the operation of the collective agreement or any of its provisions for a period of less than one year while they are bargaining for its renewal with or without modifications or for a new agreement and the continuation of the collective agreement may be terminated by either party upon 30 days notice to the other party.

Early termination of collective agreements

(3) A collective agreement shall not be terminated by the parties before it ceases to operate in accordance with its provisions or this Act without the consent of the Board on the joint application of the parties.

Revision by mutual consent

(4) Nothing in this section prevents the revision by mutual consent of the parties at any time of any provision of a collective agreement other than a provision relating to its term of operation. 1997, c. 4, s. 52.

Arbitration provision required

53. (1) Every collective agreement shall provide for the final and binding settlement by arbitration of all differences between the parties arising from the interpretation, application, administration or alleged violation of the collective agreement, including any question as to whether a matter is arbitrable, by a single arbitrator.

Same

(2) If a collective agreement does not contain the provision mentioned in subsection (1), it shall be deemed to contain the following provision:

> If a difference arises between the parties relating to the interpretation, application, administration of this agreement, including any question as to whether a matter is arbitrable, or if an allegation is made that this agreement has been violated, either of the parties may, after exhausting any grievance procedure established in this agreement, notify the other party in writing of its desire to submit the difference or allegation to a single arbitrator.

Selection of single arbitrator

(3) If a matter is referred to arbitration, the arbitrator shall be selected in accordance with the regulations.

Commencement of proceedings

(4) The arbitrator shall begin the arbitration proceedings within 30 days after his or her appointment or within such longer period as the parties may agree upon or as the arbitrator may determine.

Time for decision

(5) An arbitrator shall give a decision within 30 days after hearings on the matter submitted to arbitration are concluded.

Same

(6) The time described in subsection (5) for giving a decision may be extended,

(a) with the consent of the parties to the arbitration; or

(b) in the discretion of the arbitrator so long as he or she states in the decision the reasons for extending the time.

Oral decision

(7) An arbitrator may give an oral decision and, if he or she does so, subsection (5) does not apply and the arbitrator,

(a) shall give the decision promptly after hearings on the matter are concluded;

(b) shall give a written decision, without reasons, promptly upon the request of either party; and

(c) shall give written reasons for the decision within a reasonable period of time upon the request of either party.

Orders re decisions

(8) If the arbitrator does not give a decision within the time described in subsection (5) or does not provide written reasons within the time described in subsection (7), the Minister may,

(a) make such orders as he or she considers necessary to ensure that the decision or reasons will be given without undue delay; and

(b) make such orders as he or she considers appropriate respecting the remuneration and expenses of the arbitrator.

Powers of arbitrators

(9) An arbitrator has power,

(a) to require any party to furnish particulars before or during a hearing;

(b) to require any party to produce documents or things that may be relevant to the matter and to do so before or during the hearing;

(c) to fix dates for the commencement and continuation of hearings;

(d) to summon and enforce the attendance of witnesses and to compel them to give oral or written evidence on oath in the same manner as a court of record in civil cases;

(e) to administer oaths and affirmations,

(f) to accept the oral or written evidence as the arbitrator in his or her discretion considers proper, whether admissible in a court of law or not;

(g) to enter any premises where work is being done or has been done by the firefighters or in which the employer carries on business or where anything is taking place or has taken place concerning any of the differences submitted to the arbitrator, and inspect and view any work, material, machinery, appliance or article therein, and interrogate any person respecting any such thing or any of such differences;

(h) to authorize any person to do anything that the arbitrator may do under clause (g) and to report to the arbitrator thereon;

(i) to make interim orders concerning procedural matters;

(j) to interpret and apply human rights and other employment-related statutes, despite any conflict between those statutes and the terms of the collective agreement.

Restriction re interim orders

(10) An arbitrator shall not make an interim order under clause (9) (i) requiring an employer to reinstate a firefighter in employment.

Extension of time

(11) Except where a collective agreement states that this subsection does not apply, an arbitrator may extend the time for the taking of any step in the grievance procedure under a collective agreement, despite the expiration of the time, where the arbitrator is satisfied that there are reasonable grounds for the extension and that the opposite party will not be substantially prejudiced by the extension.

Substitution of penalty

(12) Where an arbitrator determines that a firefighter has been discharged or otherwise disciplined by an employer for cause and the collective agreement does not contain a specific penalty for the infraction that is the subject-matter of the arbitration, the arbitrator may substitute such other penalty for the discharge or discipline as to the arbitrator seems just and reasonable in all the circumstances.

Effect of arbitrator's decision

(13) The decision of an arbitrator is binding upon the parties and the firefighters who are covered by the agreement and affected by the decision.

Costs of arbitration

(14) Each party shall assume its own costs in the arbitration proceedings and pay one-half of the costs of the arbitrator.

Non-application

(15) The *Arbitration Act, 1991* and the *Statutory Powers Procedure Act* do not apply with respect to an arbitration under this section. 1997, c. 4, s. 53.

Mandatory retirement

Application

53.1 (1) This section applies to a firefighter only if the firefighter is regularly assigned to fire suppression duties. 2011, c. 13, s. 2.

Mandatory retirement provision permitted

(2) A collective agreement may contain a provision requiring firefighters to retire at a specified age of 60 or over and, if it does, a firefighter subject to the agreement shall, subject to subsection (4), retire at the specified age. 2011, c. 13, s. 2.

Existing and new collective agreements

(3) Subsection (2) applies to collective agreements that are in operation on the day section 2 of the *Fire Protection and Prevention Amendment Act, 2011* comes into force and to collective agreements that come into force after that day. 2011, c. 13, s. 2.

Deemed mandatory retirement provision

(3.1) If a collective agreement does not contain a provision requiring firefighters to retire at a specified age or if it contains a provision requiring firefighters to retire at an age under 60, the agreement is deemed to contain a provision requiring firefighters to retire at the age of 60 and a firefighter subject to the agreement shall, subject to subsection (4), retire at that age. 2011, c. 13, s. 3.

Reasonable accommodation

(4) A firefighter shall not be required to retire if the firefighter can be accommodated without undue hardship, considering the cost, outside sources of funding, if any, and health and safety requirements, if any. 2011, c. 13, s. 2.

Human Rights Code

(5) This section applies despite the *Human Rights Code*. 2011, c. 13, s. 2.

Managers, etc.

54. (1) An employer may assign a person employed by it to a position which, in the opinion of the employer, involves the exercise of managerial functions or employment in a confidential capacity in

matters relating to labour relations, but, subject to subsection (4), the assignment is not conclusive of the question of whether the person does exercise such functions or is employed in such capacity.

Board to decide status

(2) Subject to subsection (4), the Board, on application of an employer, has exclusive jurisdiction to determine any question as to whether a person exercises managerial functions or is employed in a confidential capacity in matters relating to labour relations, and its decision is final and conclusive for all purposes.

Same

(3) Subject to subsection (4), a person shall remain in the bargaining unit until the Board makes a determination under subsection (2), unless the parties otherwise agree.

Designation

(4) Subject to subsections (5) and (8), an employer may, in its sole discretion, designate a person described in subsection (1) as a person who shall for purposes of this Act be conclusively deemed to be exercising managerial functions or acting in a confidential capacity in matters relating to labour relations.

Consent required

(5) An employer shall not designate a person under subsection (4) unless the person consents to the designation.

If no consent

(6) If a person does not consent to a designation under subsection (4), the employer shall assign the person to a position in the bargaining unit. If the position to which a person is assigned has a lower salary than the position held by the person before the assignment, he or she is entitled to be paid the same salary and to receive the same benefits after the assignment as he or she was paid and received before the assignment.

Revocation

(7) A designation under subsection (4) may be revoked by the employer at any time.

Restriction

(8) An employer shall not designate under subsection (4) more than,

(a) two persons, if the employer employs fewer than 25 persons;

(b) three persons, if the employer employs 25 or more but fewer than 150 persons;

(c) four persons, if the employer employs 150 or more but fewer than 300 persons; or

(d) five persons, if the employer employs 300 or more persons. 1997, c. 4, s. 54 (1-8).

Amalgamations

(8.1) If, after the day on which subsection 3 (2) of the *Public Sector Dispute Resolution Act, 1997* comes into force, two or more municipalities that are employers of firefighters amalgamate, the amalgamated municipality is entitled under subsection (4) to designate the number of persons that is equal to the sum of the numbers of persons that each of the amalgamating municipalities would have been able to designate immediately before the amalgamation.

Dissolutions and incorporations

(8.2) If, after the day on which subsection 3 (2) of the *Public Sector Dispute Resolution Act, 1997* comes into force, two or more municipalities that are employers of firefighters are dissolved and the inhabitants of the municipalities are incorporated in a new municipality, subsection (8.1) shall apply as if the dissolved municipalities were amalgamating municipalities and the new municipality was an amalgamated municipality. 1997, c. 21, Sched. A, s. 3 (2).

Calculating number of persons employed

(9) For the purposes of subsection (8), the number of persons employed by the employer is the sum of,

(a) the number of persons employed by the employer who are firefighters; and

(b) the number of persons who are performing or conclusively deemed to be performing managerial functions with respect to firefighters or acting in a confidential capacity in matters relating to labour relations with respect to firefighters. 1997, c. 4, s. 54 (9).

Enforcement of decisions

55. (1) If a person or bargaining agent fails to comply with a decision of an arbitrator under section 53, the person or bargaining agent affected by the decision may file a copy of the decision (excluding the reasons for the decision) with the Superior Court of Justice. 1997, c. 4, s. 55 (1); 2002, c. 18, Sched. N, s. 14.

Same

(2) The decision shall not be filed with the court until 30 days have elapsed after the date the decision was released or after the date specified in the decision for complying with it. 1997, c. 4, s. 55 (2).

Effect of filing

(3) When it is filed with the court, the decision shall be entered in the same way as a judgment or order of the court and is enforceable as such. 1997, c. 4, s. 55 (3).

Working conditions not to be altered

56. (1) If notice has been given under section 47 by a bargaining agent for a unit of firefighters or an employer and no collective agreement is in operation,

(a) the employer shall not, except with the consent of the bargaining agent, alter the rates of wages or any other term or condition of employment or any right, privilege or duty of the employer or the firefighters until the right of the bargaining agent to represent the firefighters has been terminated; and

(b) the bargaining agent shall not, except with the consent of the employer, alter any term or condition of employment or any right, privilege or duty of the employer, the bargaining agent or the firefighters until the right of the bargaining agent to represent the firefighters has been terminated.

Arbitration if no agreement

(2) If notice has been given under subsection 47 (2) and no collective agreement is in operation, any difference between the parties as to whether or not subsection (1) was complied with may be referred to arbitration by either of the parties as if the collective agreement was still in operation and the arbitration shall proceed in accordance with section 53. 1997, c. 4, s. 56.

REGULATIONS

Regulations

57. The Minister may make regulations,

(a) governing the appointment of conciliation officers under this Act;

(b) governing the selection of arbitrators under section 53;

(c) prescribing forms for the purposes of subsections 46.2 (6) and 46.4 (8). 1997, c. 21, Sched. A, s. 3 (3); 2011, c. 13, s. 4.

PART X
FIRE SAFETY COMMISSION

Fire Safety Commission

58. (1) The Fire Code Commission is continued under the name the Fire Safety Commission in English and Commission de la sécurité-incendie in French and is composed of such number of members as is determined by the Lieutenant Governor in Council. 1997, c. 4, s. 58 (1).

Appointment of members

(2) The Lieutenant Governor in Council shall appoint the members to the Commission, and may designate one of the members as chair and one or more of the members as vice-chair. 2006, c. 35, Sched. C, s. 44 (1).

Ineligibility

(2.1) A person is not eligible to be a member of the Commission if the person is,

(a) a deputy minister of a ministry;

(b) a public servant employed under Part III of the *Public Service of Ontario Act, 2006*; or

(c) an employee of a municipality. 2006, c. 35, Sched. C, s. 44 (1).

Remuneration

(3) The members of the Commission shall receive such remuneration and expenses as the Lieutenant Governor in Council may determine. 1997, c. 4, s. 58 (3).

Quorum

(4) Three members of the Commission constitute a quorum. 1997, c. 4, s. 58 (4).

PART XI
FIRE MARSHAL'S PUBLIC FIRE SAFETY COUNCIL

Definition: "Council"

59. In this Part,

"Council" means the Fire Marshal's Public Fire Safety Council. 1997, c. 4, s. 59.

Council established

60. (1) A corporation without share capital is hereby constituted to be known in English as the Fire Marshal's Public Fire Safety Council and in French as Conseil public du commissaire des incendies sur la sécurité-incendie. 1997, c. 4, s. 60 (1).

Membership

(2) The Council shall consist of its board of directors and such other persons who are appointed as members of the Council by the Fire Marshal. 1997, c. 4, s. 60 (2).

Non-application of corporate Acts

(3) The *Corporations Act* and *Corporations Information Act* do not apply to the Council. 1997, c. 4, s. 60 (3).

Note: On a day to be named by proclamation of the Lieutenant Governor, subsection (3) is amended by striking out "The *Corporations Act*" at the beginning and substituting "The *Not-for-Profit Corporations Act, 2010*". See: 2010, c. 15, ss. 227, 249.

Conflict of interest

(4) Section 132 of the *Business Corporations Act* applies to the Council and to its directors and officers. 1997, c. 4, s. 60 (4).

Objects

61. The objects of the Council are,

(a) to promote fire safety throughout the province;

(b) to produce and distribute materials for public education with respect to fire safety;

(c) to provide or endorse training, education and fire prevention activities;

(d) to facilitate and co-ordinate the public exchange of information and ideas on matters of fire safety;

(e) to solicit, receive, manage and distribute money and other property to support the objects described in clauses (a), (b), (c) and (d);

(f) to enter into partnerships and agreements with persons or organizations in the private sector or with public bodies or organizations to further the objects described in clauses (a), (b), (c), (d) and (e); and

(g) to advise the Fire Marshal on matters of fire safety. 1997, c. 4, s. 61.

Board

62. (1) The affairs of the Council shall be managed by its board of directors.

Composition

(2) The board shall be composed of the Fire Marshal, or if he or she is absent or unable to act, the Deputy Fire Marshal, and at least six directors appointed from among the members by the Minister on the recommendation of the Fire Marshal.

Term of office

(3) A director is appointed for a term not exceeding three years, and may be reappointed for successive terms not exceeding three years each.

Chair

(4) The Fire Marshal, or if he or she is absent or unable to act, the Deputy Fire Marshal, is chair of the board.

Vice-chairs

(5) The Fire Marshal shall designate one or more other directors to be vice-chairs.

Same

(6) If the Fire Marshal or Deputy Fire Marshal is absent from a meeting of the board or is unable to act, a vice-chair shall act as and have all the powers of the chair.

Quorum

(7) A majority of the directors constitutes a quorum.

Vacancies

(8) If a director's position becomes vacant, the Minister may appoint another person to the board for the remainder of his or her term.

Remuneration

(9) The appointed directors shall receive such remuneration and reimbursement for reasonable expenses as may be determined by the Council. 1997, c. 4, s. 62.

Powers of Council

63. (1) The Council has the capacity and the rights, powers and privileges of a natural person, subject to the limitations set out in this Act, for the purpose of carrying out its objects.

Same

(2) Without limiting the generality of subsection (1), the board of directors of the Council may,

(a) enter into agreements with any organization with objects similar to or consistent with those of the Council;

(b) authorize any person or organization to use the Council's logo to indicate the Council's endorsement of a product, service, training course, education course or activity;

(c) otherwise endorse any product, service, training course, education course or activity;

(d) solicit, receive, manage, invest, transfer, use and distribute money and other property to support the objects of the Council.

Logo

(3) The board of directors shall by by-law adopt a logo for the Council. 1997, c. 4, s. 63.

Borrowing powers

64. (1) The board of directors of the Council may borrow money on the credit of the Council for the purposes of the Council and may use any money or property of the Council as security for such borrowing.

Limitation on borrowing powers

(2) The amount that may be borrowed under subsection (1), together with the total of any previous borrowing that remains unpaid, shall not exceed $50,000 at any one time without the approval of the Minister, but no lender shall be required to inquire into the board's compliance with this section and all loans to the Council shall be deemed to have been lawfully made under the authority of this section despite any non-compliance of the board. 1997, c. 4, s. 64.

By-laws

65. The board of directors of the Council may pass by-laws,

(a) regulating its proceedings;

(b) establishing the fiscal year for the Council;

(c) specifying the powers, duties and remuneration of its officers and employees;

(d) establishing an executive committee and other committees and delegating powers of the board to such committees;

(e) providing for membership in the Council, establishing classes of membership and prescribing the qualifications, conditions and rights of membership, the fees, if any, to be paid for membership and providing for and regulating members' meetings;

(f) generally for the management of the Council. 1997, c. 4, s. 65.

Council's property to be dedicated to objects

66. (1) All the property of the Council and all its income, revenue and profits shall be devoted and applied solely to carrying out the objects of the Council.

Investment

(2) Any funds of the Council that are not immediately required for promoting and carrying out its objects, and the proceeds of any property of the Council, subject to any trust affecting them, not immediately required for such purpose, may be invested and reinvested as the board of directors considers proper.

Money vests in Council

(3) All amounts in the Consolidated Revenue Fund credited, immediately before this section comes into force, to an advisory committee that was established under the *Fire Marshals Act*, being chapter F.17 of the Revised Statutes of Ontario, 1990, are hereby vested in the Council. 1997, c. 4, s. 66.

Employees

67. (1) The board of directors of the Council may employ or contract for the services of such persons, including any persons who are appointed directors, as it considers necessary for the functioning of the Council. 1997, c. 4, s. 67 (1).

Not an employee of the Crown

(2) A person who is employed or whose services are contracted under subsection (1) is not and shall not be deemed to be an employee of the Crown. 2006, c. 35, Sched. C, s. 44 (2).

Ministry support

68. The Office of the Fire Marshal may, on request, provide administrative, technical or expert advice or assistance to the Council. 1997, c. 4, s. 68.

Protection from personal liability

69. (1) No action or other proceeding for damages may be instituted against a director or a member of the Council or any employee of the Council for any act done in good faith in the execution or intended execution of the person's power or duty or for any alleged neglect or default in the execution in good faith of the person's power or duty.

Same

(2) Despite subsections 5 (2) and (4) of the *Proceedings Against the Crown Act*, subsection (1) does not relieve the Crown of liability in respect of a tort committed by a person mentioned in subsection (1) to which it would otherwise be subject.

Indemnification for legal costs

(3) With the approval of the Minister, a person described in subsection (1) or a former director, member or employee of the Council shall be indemnified by the Crown in right of Ontario for his or her reasonable legal costs in respect of any proceeding in which the person's execution in good faith of his or her duties is in issue, if the person acted in good faith. 1997, c. 4, s. 69.

Auditors

70. The board of directors of the Council shall appoint one or more auditors licensed under the *Public Accounting Act, 2004* to audit the accounts and transactions of the Council for each fiscal year. 1997, c. 4, s. 70; 2004, c. 8, s. 46.

Annual and other reports

71. The board of directors of the Council shall submit an annual report to the Minister on the affairs and transactions of the Council in the preceding fiscal year and shall submit such other reports as the Minister may request. 1997, c. 4, s. 71.

Winding-up

72. Upon the winding-up or dissolution of the Council, all its assets, after discharging all outstanding liabilities, shall vest in the Crown. 1997, c. 4, s. 72.

Review

73. The Minister shall, five years after this Part comes into force, undertake a review of the activities of the Council and submit to the Lieutenant Governor in Council a report that recommends the continuation, amendment or repeal of this Part. 1997, c. 4, s. 73.

PART XII
MISCELLANEOUS

Protection from personal liability

74. (1) No action or other proceeding for damages shall be instituted against a firefighter, a fire co-ordinator, a community fire safety officer, a member or employee of the Fire Safety Commission, an assistant to the Fire Marshal, the Deputy Fire Marshal, the Fire Marshal, or a person acting under his or her authority, for any act done in good faith in the execution or intended execution of his or her power or duty or for any alleged neglect or default in the execution in good faith of his or her power or duty.

Crown, municipality not relieved of liability

(2) Despite subsections 5 (2) and (4) of the *Proceedings Against the Crown Act*, subsection (1) does not relieve the Crown or a municipal corporation of liability in respect of a tort committed by a person referred to in subsection (1) to which they would otherwise be subject. 1997, c. 4, s. 74.

Indemnification

75. (1) A firefighter, a fire co-ordinator, a community fire safety officer, a member or employee of the Fire Safety Commission, an assistant to the Fire Marshal, the Deputy Fire Marshal, the Fire Marshal or a person acting under his or her authority shall be indemnified for reasonable legal costs incurred,

(a) in the defence of a civil action, if the person is not found to be liable;

(b) in the defence of a criminal prosecution, if the person is found not guilty;

(c) in respect of any other proceeding in which the person's execution of his or her duties is an issue, if the person acted in good faith.

Same

(2) Indemnification under subsection (1) shall be made by,

(a) in the case of a firefighter, community fire safety officer or assistant to the Fire Marshal who is employed by a municipality, the municipal corporation;

(b) in the case of a firefighter, community fire safety officer or assistant to the Fire Marshal who is working under an agreement with the Crown or in the case of a fire co-ordinator, a member or employee of the Fire Safety Commission, the Deputy Fire Marshal, the Fire Marshal or a person acting under his or her authority, the Crown.

Effect of collective agreement

(3) A collective agreement made under Part IX or a decision under section 53 may provide for indemnification of the legal costs of firefighters, except the legal costs of a firefighter who is found guilty of a criminal offence, and if such an agreement exists, the municipal corporation shall indemnify the firefighters in accordance with the agreement and subsections (1) and (2) shall not apply. 1997, c. 4, s. 75.

No action for damages from accidental fire

76. No action shall be brought against any person in whose house or building or on whose land any fire accidentally begins, nor shall any recompense be made by that person for any damage suffered thereby; but no agreement between a landlord and tenant is defeated or made void by this Act. 1997, c. 4, s. 76.

Manner of service

77. (1) Where a copy of an order or notice is required to be given to, or served on, a person under this Act, the copy may be served personally, by regular letter mail, by electronic transmission, by telephone transmission of a facsimile or by some other method that allows proof of receipt.

Deemed receipt

(2) Service by regular letter mail under subsection (1) shall be deemed to be received by the person on the fifth day after mailing unless the person establishes that the person did not, acting in good faith, through absence, accident, illness or other cause beyond the person's control receive a copy until a later date than the deemed date of receipt.

Same

(3) Service by electronic transmission or by telephone transmission of a facsimile under subsection (1) shall be deemed to be received the day after it is sent or, if that day is a Saturday or holiday, on the next day that is not a Saturday or holiday, unless the person establishes that the person did not, acting in good faith, through absence, accident, illness or other cause beyond the person's control receive a copy until a later date than the deemed date of receipt. 1997, c. 4, s. 77.

Regulations

78. (1) The Minister may make regulations,

(a) respecting the operation and administration of fire departments and community fire safety teams established or appointed by an agreement made under section 3 and respecting the functions of community fire safety officers appointed by such an agreement;

(b) prescribing persons or organizations for the purposes of subsections 3 (1) and 4 (2);

(c) prescribing powers and duties that a fire chief may delegate in addition to those mentioned in subsection 6 (6);

(d) prescribing limitations, restrictions, or conditions that apply to a delegation of powers or duties of a fire chief under subsection 6 (6), including restricting the type of power or duty that may be delegated or the class of person to whom the power or duty may be delegated;

(e) respecting the records and returns to be used, kept and made by fire chiefs in respect of their inspections of any class of premises or premises used for any specified purpose;

(f) requiring any person to furnish such statistical and other information to the Fire Marshal as he or she considers necessary;

(g) requiring the following persons or entities to report to the Fire Marshal the particulars of any insurance loss or claim,

(i) a fire insurance company authorized to transact business in Ontario,

(ii) a person adjusting a claim against a fire insurance company, whether the insurance company is licensed to transact business in Ontario or not and whether the adjuster represents the company or the claimant, or

(iii) a person sustaining or claiming to have sustained a loss by fire on property in Ontario insured wholly or partially by an insurance company that is not licensed or registered under the Insurance Act;

(h) defining "regularly employed" for the purposes of the definition of "firefighter" in subsection 41 (1) and "activity allowance" for the purposes of the definition of "volunteer firefighter" in subsection 1 (1);

(i) respecting standards for fire protection devices, equipment and systems;

(j) providing for licensing and regulating the manufacture, sale, installation, servicing, maintenance, testing and repairing of fire protection devices, equipment and systems;

(k) respecting practices and standards for fire protection services and certification and training of firefighters, including full-time, volunteer and part-time firefighters;

(l) prescribing fees and allowances for services and training provided by or on behalf of the Province or municipalities and respecting the person or body to whom the fees or allowances shall be paid;

(m) governing the inspection of hotels;

(n) respecting any matter necessary or advisable to carry out effectively the intent and purpose of this Act.

Same

(2) A regulation made under this section may be general or specific in its application. 1997, c. 4, s. 78.

Municipal by-laws superseded

79. A regulation, including the fire code, supersedes all municipal by-laws respecting standards for land and premises, as those standards relate to fire safety or the risk created by the presence of unsafe levels of carbon monoxide. 2013, c. 14, s. 5.

80.**-93.** OMITTED (AMENDS OR REPEALS OTHER ACTS). 1997, c. 4, ss. 80-93.

94. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS ACT). 1997, c. 4, s. 94.

95. OMITTED (ENACTS SHORT TITLE OF THIS ACT). 1997, c. 4, s. 95.

Fire Protection and Prevention Act, 1997

Last amendment: O. Reg. 275/14.

ONTARIO REGULATION 213/07

FIRE CODE

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SECTION 1.1 ORGANIZATION OF THIS CODE

Subsection 1.1.1. General

Scope of Division A

1.1.1.1. Division A contains the compliance and application provisions, **objectives** and **functional statements** of this Code.

Scope of Division B

1.1.1.2. Division B contains the **acceptable solutions** of this Code.

Scope of Division C

1.1.1.3. Division C contains the administrative provisions of this Code.

Internal cross-references

1.1.1.4. If a provision of this Code contains a reference to another provision of this Code but no Division is specified, both provisions are in the same Division of this Code.

SECTION 1.2 COMPLIANCE

Subsection 1.2.1. Compliance with this Code

Owner's responsibility

1.2.1.1. Unless otherwise specified, the **owner** is responsible for carrying out the provisions of this Code.

Compliance with Parts 2 and 3

1.2.1.2. Compliance with Parts 2 and 3 is required only as it relates to the use of **alternative solutions** as set out in Subsection 1.2.2.

Subsection 1.2.2. Compliance with Division B

1.2.2.1. (1) Compliance with Division B shall be achieved

(a) by complying with the **acceptable solutions** in Division B, or

(b) by using **alternative solutions** that

(i) will achieve the level of performance required by the applicable **acceptable solutions** in respect of the **objectives** and **functional statements** attributed to the applicable **acceptable solutions** in OFMEM Fire Code Supplement FCS-1, "Objectives and Functional Statements Attributed to Acceptable Solutions",

(ii) do not contravene any other provision in Division B, and

(iii) have been **approved** and implemented in conformance with Subsection 1.3.2. of Division C.

(2) For the purpose of Clause (1)(b), the level of performance in respect of a **functional statement** refers to the performance required by the **functional statement** as it relates to the **objective** with which it is associated in OFMEM Fire Code Supplement FCS-1, "Objectives and Functional Statements Attributed to Acceptable Solutions".

(3) The use of **alternative solutions** as described in Clause (1) (b) is not applicable in respect of any **acceptable solutions** to which **objectives** and **functional statements** have not been attributed in OFMEM Fire Code Supplement FCS-1, "Objectives and Functional Statements Attributed to Acceptable Solutions".

Subsection 1.2.3. Compliance with Other Applicable Law

Compliance with other applicable law

1.2.3.1. Compliance with this Code does not relieve the **owner** from compliance with other applicable Acts and regulations, and, where a requirement of an applicable Act or regulation conflicts with a requirement of this Code, the more stringent requirement prevails, unless the more stringent requirement is in this Code and this Code says that the requirement of the other Act or regulation prevails.

SECTION 1.3 EXEMPTIONS

Subsection 1.3.1. Exemption for Farms

1.3.1.1. A **farm building** with an **occupant load** of not more than one person per 40 m^2 of floor area during normal use and other premises on a farm used for farming purposes are exempt from the requirements of this Code.

SECTION 1.4 TERMS AND ABBREVIATIONS

Subsection 1.4.1. Definitions of Words and Phrases

Non-defined terms

1.4.1.1. (1) Definitions of words and phrases used in this Code that are not included in the list of definitions in Article 1.4.1.2. have the meanings that are commonly assigned to them in the context in which they are used, taking into account the specialized use of terms with the various trades and professions to which the terminology applies.

(2) Despite Sentence (1), words and phrases may be assigned other meanings where specifically noted in another provision of this Code.

Defined terms

1.4.1.2. The words and terms used in this Code that are in bold face, and either in upper and lower case or in lower case, have the following meanings:

Acceptable solution means a requirement set out in Division B.

Access to exit means that part of a **means of egress** within a **floor area** that provides access to an **exit** serving the **floor area**.

Air-supported structure means a structure that consists of a pliable membrane that achieves and maintains its shape and support by internal air pressure.

Alarm signal means an audible signal transmitted throughout a zone or zones or throughout a **building** to advise occupants that a fire emergency exists.

Alert signal means an audible signal to advise designated persons of a fire emergency.

Alternative solution means a substitute for an **acceptable solution**.

Appliance means a device to convert fuel into energy, and includes all components, controls, wiring and piping required to be part of the device by the applicable standard referred to in this Code.

Approved means approved by the **Chief Fire Official**.

Architect means a member or licensee of the Ontario Association of Architects under the **Architects Act**.

Assembly occupancy means the **occupancy** or the use of a **building**, or part thereof, by a gathering of persons for civic, political, travel, religious, social, educational, recreational or like purposes or for the consumption of food or drink.

Atmospheric storage tank means a **storage tank** that is designed to operate at pressures from atmospheric to 3.5 kPa (gauge).

Attic space means the space between the roof and the ceiling of the top **storey** or between a dwarf wall and a sloping roof.

Basement means a **storey** or **storeys** of a **building** located below the **first storey**.

Boiler means an **appliance** intended to supply hot water or steam for **space heating**, processing or power purposes.

Building means any structure used or intended for supporting or sheltering any use or **occupancy**.

Building area means the greatest horizontal area of a **building** above **grade** within the outside surface of exterior walls or within the outside surface of exterior walls and the centre line of **firewalls**.

Building Code means any version of the **Ontario Building Code** that was in force at any time since it was made under **The Building Code Act, 1974**, the **Building Code Act** of the Revised Statutes of Ontario, 1980, the **Building Code Act** of the Revised Statutes of Ontario, 1990, the **Building Code Act, 1992** or a successor to the **Building Code Act, 1992**, and, where a specific version of the **Building Code** is referred to, that version of the **Building Code**.

Building height (in **storeys**) means the number of **storeys** contained between the roof and the floor of the **first storey**.

Business and personal services occupancy means the **occupancy** or use of a **building** or part thereof for the transaction of business or the rendering or receiving of professional or personal services.

Care and treatment occupancy means an **occupancy** in which persons receive special care and treatment.

Care occupancy means an **occupancy** in which special care is provided by a facility, directly through its staff or indirectly through another provider, to residents of the facility

(a) who require special care because of cognitive or physical limitations, and

(b) who, as a result of those limitations, would be incapable of evacuating the **occupancy**, if necessary, without the assistance of another person.

Care or detention occupancy REVOKED: O. Reg. 150/13, s. 1 (2).

Check means visual observation to ensure the device or system is in place and is not obviously damaged or obstructed.

Chief Fire Official means the assistant to the Fire Marshal who is the Municipal Fire Chief or a member or members of the **fire department** appointed by the Municipal Fire Chief under Article 1.1.1.2. of Division C or a person appointed by the Fire Marshal under Article 1.1.1.1. of Division C.

Chimney means a primarily vertical shaft enclosing at least 1 **flue** for conducting **flue** gases to the outdoors.

Class A fire means a fire involving combustible materials such as wood, cloth and paper.

Class B fire means a fire involving a **flammable** or **combustible liquid**, fat or grease.

Class C fire means a fire involving energized electrical equipment.

Class D fire means a fire involving a combustible metal.

Class K fire means a fire involving combustible cooking media such as vegetable oils, animal oils and animal fats.

Closed container means a container so sealed by means of a lid or other device that neither liquid nor vapour will escape from it at ordinary temperatures.

Closure means a device or assembly for closing an opening through a **fire separation** such as a door, a shutter, wired glass or glass block and includes all components, such as hardware, closing devices, frames and anchors.

Combustible construction means that type of construction that does not meet the requirements for **noncombustible construction**.

Combustible dust means dust and particles ignitable and liable to explode when mixed with air.

Combustible fibres means finely divided combustible vegetable or animal fibres and thin sheets or flakes of such materials that in a loose, unbaled condition present a flash fire hazard, and includes cotton, wool, hemp, sisal, jute, kapok, paper and cloth.

Combustible liquid means any liquid having a **flash point** at or above 37.8°C and below 93.3°C.

Compressed gas means any contained mixture or material with either an absolute pressure exceeding 275.8 kPa at 21°C or an absolute pressure exceeding 717 kPa at 54°C, or both, or any liquid having an absolute **vapour pressure** exceeding 275.8 kPa at 37.8°C.

Contained use area means a supervised area containing one or more rooms in which occupant movement is restricted to a single room by security measures not under the control of the occupant.

Dangerous goods means those products or substances which are regulated by the **Transportation of Dangerous Goods Act (Canada)** and its Regulations.

Demolition means the doing of anything in the removal of a **building** or any material part thereof.

Detention occupancy means an **occupancy** in which persons are under restraint or are incapable of self preservation because of security measures not under their control.

Distilled beverage alcohol means a beverage that is produced by fermentation and contains more than 20 per cent by volume of water-miscible alcohol.

Distillery means a **process plant** where **distilled beverage alcohols** are produced, concentrated or otherwise processed, and includes facilities on the same site where the concentrated products may be blended, mixed, stored or packaged.

Dwelling unit means a **suite** operated as a housekeeping unit, used or intended to be used by one or more persons and usually containing cooking, eating, living, sleeping and sanitary facilities, and includes a **residential unit**.

Exit means that part of a **means of egress**, including doorways, that leads from the **floor area** it serves to a separate **building**, an open public thoroughfare or an exterior open space protected from fire exposure from the **building** and having access to an open public thoroughfare.

Facility, for the purposes of Division A, means a property upon which a use regulated by this Code, including open air public assembly activities, open air industrial processing and outdoor storage, occurs, whether or not a **building** is located on the property.

Farm building means a **building** or part thereof associated with and located on land devoted to the practice of farming, and used primarily for the housing of equipment or livestock or the production, storage or processing of agricultural and horticultural produce or feeds, but is not used for **residential occupancy**.

Fire compartment means an enclosed space in a **building** that is separated from all other parts of the **building** by enclosing construction that provides a **fire separation** having a required **fire-resistance rating**.

Fire damper means a **closure** that consists of a damper installed in an air distribution system or in a wall or floor assembly that is normally held in the open position and that is designed to close automatically in the event of a fire in order to maintain the integrity of the **fire separation**.

Fire department means a group of firefighters authorized to provide fire protection services by a municipality, group of municipalities or by an agreement made under section 3 of the **Fire Protection and Prevention Act, 1997**.

Fire detector means a device which detects a fire condition and automatically initiates an electrical signal to actuate an **alert signal** or **alarm signal** and includes **heat detectors** and **smoke detectors**.

Fire-protection rating means the time in hours or fraction thereof that a **closure**, window assembly or glass block assembly will withstand the passage of flame when exposed to fire under specified conditions of **test** and performance criteria, or as otherwise prescribed in the **Building Code**.

Fire-resistance rating means the time in hours or fraction thereof that a material or assembly of materials will withstand the passage of flame and the transmission of heat when exposed to fire under specified conditions of **test** and performance criteria, or as determined by extension or interpretation of information derived therefrom as prescribed in the **Building Code**.

Fire separation means a construction assembly that acts as a barrier against the spread of fire and may or may not have a **fire-resistance rating** or a **fire-protection rating**.

Fire stop means a draft-tight barrier within or between construction assemblies that acts to retard the passage of smoke and flame.

Fire-stop flap means a device intended for use in horizontal assemblies that are required to have a **fire-resistance rating** and incorporate protective ceiling membranes and that operates to close off a duct opening through the membrane in the event of a fire.

Firewall means a **fire separation** of **noncombustible construction** that subdivides a **building** or separates adjoining **buildings** to resist the spread of fire that has a **fire-resistance rating** as prescribed in the **Building Code** and that has structural stability to remain intact under fire conditions for the required fire-rated time.

First storey means the **storey** with its floor closest to **grade** and having its ceiling more than 1.8 m above **grade**.

Flame-spread rating means an index or classification indicating the extent of spread of flame on the surface of a material or an assembly of materials as determined in the **Building Code**.

Flammable liquid means a liquid having a **flash point** below 37.8ºC and having a **vapour pressure** not more than 275.8 kPa (absolute) at 37.8ºC as determined by ASTM D 323, “Vapor Pressure of Petroleum Products (Reid Method)”.

Flash point means the minimum temperature at which a liquid within a container gives off vapour in sufficient concentration to form an ignitable mixture with air near the surface of the liquid.

Floor area means the space on any **storey** of a **building** between exterior walls and required **firewalls** and includes the space occupied by interior walls and **partitions**, but does not include **exits** and **vertical service spaces** that pierce the **storey**.

Flue means an enclosed passageway for conveying exhaust gases.

Flue pipe means the pipe connecting the **flue** collar of an **appliance** to a **chimney**.

Fuel dispensing station means any premises or part of premises at which **flammable liquids** or **combustible liquids** are dispensed from fixed equipment into the fuel tank of a motor vehicle, watercraft or floatplane.

Functional statement means a function set out in Part 3.

Furnace means a **space-heating appliance** that uses warm air as the heating medium and that usually has provision for the attachment of ducts.

Grade means the average level of finished ground adjoining a **building** at all exterior walls.

Guest suite means a single room or a series of rooms of complementary use providing sleeping accommodation for the travelling public or for recreational purposes in a **hotel establishment**.

Heat detector means a **fire detector** designed to operate at a predetermined temperature or rate of temperature rise.

Heavy timber construction means that type of **combustible construction** in which a degree of fire safety is attained by placing limitations on the sizes of wood structural members and on thickness and composition of wood floors and roofs, by avoidance of concealed spaces under floors and roofs and by use of **approved** fastenings, construction details and adhesives for structural members.

High hazard industrial occupancy means an **industrial occupancy** that contains sufficient quantities of highly combustible and flammable or explosive materials that, because of their inherent characteristics, constitute a special fire hazard.

Hotel means **floor areas**, a **floor area** or part of a **floor area** containing four or more **suites** that provide sleeping accommodation for the travelling public or for recreational purposes.

Hotel establishment means a **building** containing a **hotel** and all subsidiary **occupancies** that are operated in connection with the **hotel** and includes all connected or adjacent **buildings** that are operated in connection with the **hotel**.

Impeded egress zone means a supervised area in which occupants have free movement but require the release, by security personnel, of security doors at the boundary before they are able to leave the area, but does not include a **contained use area**.

Individual storage area means the area occupied by piles, bin boxes, **racks** or shelves, including subsidiary aisles providing access to the stored products, which is separated from the adjacent storage by aisles.

Industrial occupancy means the **occupancy** or use of a **building** or part thereof for assembling, fabricating, manufacturing, processing, repairing or storing of goods and materials.

Inspection means physical examination to determine that the device or system will apparently perform in accordance with its intended function.

Listed means equipment or materials included in a list published by a certification organization accredited by the Standards Council of Canada.

Low hazard industrial occupancy means an **industrial occupancy** in which the combustible content is not more than 50 kg/m^2 or 1200 MJ/m^2 of **floor area**.

Low pressure storage tank means a **storage tank** designed to operate at pressures greater than 3.5 kPa (gauge) to 100 kPa (gauge).

Lower explosive limit means the minimum concentration of vapour in air at which the propagation of flame occurs on contact with a source of ignition.

Major occupancy means the principal **occupancy** for which a **building** or part thereof is used or intended to be used, and includes the subsidiary **occupancies** that are an integral part of the principal **occupancy**.

Marine fuel dispensing station means a **fuel dispensing station** at which **flammable liquids** or **combustible liquids** are dispensed into the fuel tank of a watercraft or floatplane.

Means of egress means a continuous path of travel provided for the escape of persons from any point in a **building** or contained open space to a separate **building**, an open public thoroughfare or an exterior open space protected from fire exposure from the **building** and having access to an open public thoroughfare. **Means of egress** includes both **exits** and **access to exits**.

Medium hazard industrial occupancy means an **industrial occupancy** in which the combustible content is more than 50 kg/m^2 or 1200 MJ/m^2 of **floor area** and not classified as **high hazard industrial occupancy**.

Mercantile occupancy means the **occupancy** or use of a **building** or part thereof for the displaying or selling of retail goods, wares or merchandise.

Minimum explosible concentration (MEC) means the minimum concentration of **combustible dust** suspended in air, measured in mass per unit volume, that will support a deflagration as defined by the test procedure in ASTM E 1515, "Standard Test Method for Minimum Explosible Concentration of Combustible Dusts".

Noncombustible construction means that type of construction in which a degree of fire safety is attained by the use of noncombustible materials for structural members and other **building** assemblies.

Objective means an objective set out in Part 2.

Occupancy means the use or intended use of a **building** or part thereof for the shelter or support of persons, animals or property.

Occupant load means the number of persons for which a **building** or part thereof is designed.

Order means an order made under subsection 21(1) of the **Fire Protection and Prevention Act, 1997**.

Owner means any person, firm or corporation having control over any portion of the **building** or property under consideration and includes the persons in the **building** or property.

Partition means an interior wall, one **storey** or part of a **storey** in height, that is not load-bearing.

Plenum means a chamber forming part of an air duct system.

Pressure vessel means a **storage tank** that is designed to operate at pressures greater than 100 kPa (gauge).

Process plant means an **industrial occupancy** where materials, including **flammable liquids**, **combustible liquids** or Class 2 gases, are produced or used in a process.

Professional Engineer means a member or licensee of the Association of Professional Engineers of the Province of Ontario under the **Professional Engineers Act**.

Public amusement area means an area where the public is ordinarily invited or permitted access, either expressly or by implication, whether or not a fee is charged for entry, and includes entertainment displays or structures used on a temporary, seasonal or permanent basis.

Public corridor means a corridor that provides **access to exit** from more than one **suite**.

Rack means any combination of vertical, horizontal or diagonal members that support stored materials on solid or open shelves, including both fixed and portable units.

Rapid transit station means a **building** or part thereof used for the purpose of loading and unloading passengers of a rapid transit system but does not include open-air shelters at street level.

Refinery means any **process plant** in which **flammable** or **combustible liquids** are produced from crude petroleum, including areas on the same site where the resulting products are blended, packaged or stored on a commercial scale.

Refuse storage room means a room in a **building** that is used for the storage of combustible refuse, including waste materials and recyclables.

Residential occupancy means an **occupancy** in which sleeping accommodation is provided to residents who are not harboured for the purpose of receiving special care or treatment and are not involuntarily detained.

Residential unit means a **suite** operated as a housekeeping unit, used or intended to be used by one or more persons that contains cooking, eating, living, sleeping and sanitary facilities.

Retirement home means a retirement home regulated under the **Retirement Homes Act, 2010**, regardless of whether it is a **care occupancy** or a **residential occupancy**.

Retrofit means the minimum performance requirements for life safety for existing **buildings**.

Self-service outlet means a **fuel dispensing station**, other than a marine **fuel dispensing station**, where the public handles the dispenser.

Service room means a room in a **building** used to contain equipment associated with **building** services.

Service space means space in a **building** used to facilitate or conceal the installation of **building** service facilities such as chutes, ducts, pipes, shafts or wires.

Smoke alarm means a combined **smoke detector** and audible alarm device that is designed to sound an alarm within the room or **suite** in which it is located when there is smoke within the room or **suite**.

Smoke detector means a **fire detector** designed to operate when the concentration of airborne combustion products exceeds a predetermined level.

Space heater means a **space-heating appliance** that heats the room or space within which it is located without the use of ducts.

Space-heating appliance means an **appliance** that supplies heat to a room or space directly or indirectly or to rooms or spaces of a **building** through a heating system.

Spraying area means the area that is within 6 m of a **spray booth** or spraying operation and that is not separated therefrom by a vapour-tight separation.

Spray booth means a power-ventilated structure that encloses or accommodates a spraying operation so that spray vapour and residue can be controlled and exhausted.

Spray room means a **spraying area** on a **floor area** or part thereof in which an open spraying operation is confined and that is separated from the remainder of the **building** in which it is located by a noncombustible vapour-tight separation.

Sprinklered (as applying to a **building** or part thereof) means that the **building** or part thereof is equipped with a system of automatic sprinklers.

Storage garage means a building or part of a building that is intended for the storage or parking of motor vehicles and that contains no provision for the repair or servicing of motor vehicles.

Storage tank means a vessel for **flammable** or **combustible liquids** having a capacity of more than 230 L and designed to be installed in a fixed location.

Storey means that portion of a **building** that is situated between the top of any floor and the top of the floor next above it, and where there is no floor above it, that portion between the top of the floor and the ceiling above it.

Street means any highway, road, boulevard, square or other improved thoroughfare 9 m or more in width that has been dedicated or deeded for public use and is accessible to **fire department** vehicles and equipment.

Suite means a single room or series of rooms of complementary use, operated under a single tenancy, and includes **dwelling units**, individual guest rooms in motels, **hotels**, boarding houses, rooming houses and dormitories, as well as individual stores and individual or complementary rooms for **business and personal services occupancies**.

Supervisory staff means those occupants of a **building** who have some delegated responsibility for the fire safety of other occupants under the fire safety plan and may include the **fire department** where the **fire department** agrees to accept these responsibilities.

Tank vehicles means any vehicle, other than railroad tank cars and boats, with a cargo tank having a capacity of more than 450 L mounted or built as an integral part of the vehicle, used for the transportation of **flammable** or **combustible liquids**, and includes tank trucks, trailers and semi-trailers.

Tent means a shelter or structure with a covering that is made of pliable material.

Test means the operation of a device or system to ensure that it will perform in accordance with its intended operation or function.

Total area means the total area of all floors above and below **grade**, including mezzanines and penthouses, measured between the inside surfaces of exterior walls or between the inside surfaces of exterior walls and the inside surfaces of **firewalls**.

Travel distance means the distance from any point in a **floor area** to an exit measured along the path of **exit** travel, except that when **floor areas** are subdivided into rooms used singly or into **suites** of rooms and served by **public corridors** or exterior passageways, the distance is measured from the door of the rooms or **suites** to the nearest **exit**.

Unstable liquid means a liquid, including a **flammable** and **combustible liquid**, which is chemically reactive to the extent that it will vigorously react or decompose at or near normal temperature and pressure conditions or which is chemically unstable when subject to impact.

Vapour pressure means the pressure exerted by a liquid as determined by ASTM D 323, “Vapor Pressure of Petroleum Products (Reid Method)”.

Vertical service space means a shaft oriented essentially vertically that is provided in a **building** to facilitate the installation of **building** services, including elevators, refuse chutes, linen chutes and mechanical, electrical and plumbing installations.

Viscosity means the resistance that a liquid offers to flow.

Subsection 1.4.2. Symbols and Other Abbreviations

1.4.2.1. The symbols and abbreviations in this Code have the following meanings:

cm	centimetre(s)
cm/s	centimetre(s) per second
cm^2	square centimetre(s)
°C	degree(s) Celsius

h	hour(s)
kg	kilogram(s)
kN	kilonewton(s)
kPa	kilopascal(s)
L	litre(s)
L/h	litre(s) per hour
L/min	litre(s) per minute
$L/min/m^2$	litre(s) per minute per square metre
lx	lux
m	metre(s)
m^2	square metre(s)
m^3	cubic metre(s)
m/s	metre(s) per second
m/min	metre(s) per minute
m^3/h	cubic metre(s) per hour
m^3/min	cubic metre(s) per minute
min	minute(s)
MJ	megajoule(s)
mL	millilitre(s)
mm	millimetre(s)
mm^2/s	square millimetre(s) per second
N	newton(s)
ppm	part(s) per million
s	second(s)
t	tonne(s)
%	per cent

SECTION 1.5 REFERENCED DOCUMENTS

Subsection 1.5.1. Referenced Documents

Application of referenced documents

1.5.1.1. The provisions of documents referenced in this Code apply only to the extent that they are related to fire safety matters.

Conflicting requirements

1.5.1.2. In the case of a conflict between the provisions of this Code and those of a referenced document, the provisions of this Code prevail.

Secondary references

1.5.1.3. If a document in this Code refers to another document, only those portions of the second document that are specific to the subject matter are applicable.

O. Reg. 213/07, Division A, Part 1; O. Reg. 150/13, s. 1; O. Reg. 194/14, ss. 1, 2; O. Reg. 256/14, ss. 1-3.

SECTION 2.1 APPLICATION

Subsection 2.1.1. Scope and Application

Subsection 2.1.1. Application

2.1.1.1. (1) The **objectives** set out in Table 2.2.1.1. apply only to the extent that they relate to an **alternative solution** as provided in Article 1.2.2.1.

(2) The **objectives** described in this Part apply only as they relate to fire safety.

SECTION 2.2 OBJECTIVES

Subsection 2.2.1. Objectives

2.2.1.1. The **objectives** of this Code are those listed in Table 2.2.1.1.

TABLE 2.2.1.1.

Objectives
Forming Part of Article 2.2.1.1.

Column 1 Category	Column 2 Objective number	Column 3 Objective
SAFETY	OS	An **objective** of this Code is to limit the probability that, as a result of specific circumstances related to the **building** or **facility**, a person in or adjacent to the **building** or **facility** will be exposed to an unacceptable risk of injury.
Fire Safety	OS1	An **objective** of this Code is to limit the probability that, as a result of (a) activities related to the construction, use or **demolition** of the **building** or **facility**, (b) the condition of specific elements of the **building** or **facility**, (c) the design and construction of specific elements of the **facility** related to certain hazards, or (d) inadequate built-in protection measures for the current or intended use of the **building**, a person in or adjacent to the **building** or **facility** will be exposed to an unacceptable risk of injury due to fire. The risks of injury due to fire addressed in this Code are those caused by:
	OS1.1	fire or explosion occurring
	OS1.2	fire or explosion impacting areas beyond its point of origin
	OS1.3	collapse of physical elements due to a fire or explosion
	OS1.4	fire safety systems failing to function as expected
	OS1.5	persons being delayed in or impeded from moving to a safe place during a fire emergency
Safety in Use	OS3	An **objective** of this Code is to limit the probability that, as a result of (a) activities related to the construction, use or **demolition** of the **building** or **facility**, (b) of specific elements of the **building** or **facility**,

		(c) the design and construction of specific elements of the **facility** related to certain hazards, or (d) inadequate built-in protection measures for the current or intended use of the **building**, a person in or adjacent to the **building** or **facility** will be exposed to an unacceptable risk of injury due to hazards. The risks of injury due to hazards addressed in this Code are those caused by:
	OS3.1	tripping, slipping, falling, contact, drowning or collision
	OS3.2	contact with hot surfaces or substances
	OS3.3	contact with energized equipment
	OS3.4	exposure to hazardous substances
	OS3.7	persons being delayed in or impeded from moving to a safe place during an emergency
HEALTH	OH	An **objective** of this Code is to limit the probability that, as a result of specific circumstances related to the **building** or **facility**, a person will be exposed to an unacceptable risk of illness.
Indoor Conditions	OH1	An **objective** of this Code is to limit the probability that, as a result of an installation required by this Code, a person in the **building** or **facility** will be exposed to an unacceptable risk of illness due to indoor conditions. The risks of illness due to indoor conditions addressed in this Code are those caused by:
	OH1.1	inadequate indoor air quality
Hazardous Substances Containment	OH5	An **objective** of this Code is to limit the probability that, as a result of
		(a) activities related to the construction, use or **demolition** of the **building** or **facility**, (b) the condition of specific elements of the **building** or **facility**, (c) the design and construction of specific elements of the **facility** related to certain hazards, or (d) inadequate built-in protection measures for the current or intended use of the **building**, the public will be exposed to an unacceptable risk of illness due to the release of hazardous substances from the **building** or **facility**.
Fire Protection of **Buildings** and **Facilities**	OP	An **objective** of this Code is to limit the probability that, as a result of specific circumstances related to the **building** or **facility**, the **building** or **facility** will be exposed to an unacceptable risk of damage due to fire.
Fire Protection of the **Building** or **Facility**	OP1	An **objective** of this Code is to limit the probability that, as a result of (a) activities related to the construction, use or **demolition** of the **building** or **facility**, (b) the condition of specific elements of the **building** or **facility**, (c) the design and construction of specific elements of the **facility**

		related to certain hazards, or (d) inadequate built-in protection measures for the current or intended use of the **building**, the **building** or **facility** will be exposed to an unacceptable risk of damage to due to fire. The risks of damage due to fire addressed in this Code are those caused by:
	OP1.1	fire or explosion occurring
	OP1.2	fire or explosion impacting areas beyond its point of origin
	OP1.3	collapse of physical elements due to a fire or explosion
	OP1.4	fire safety systems failing to function as expected
Protection of Adjacent **Buildings** or **Facilities** from Fire	OP3	An **objective** of this Code is to limit the probability that, as a result of (a) activities related to the construction, use or **demolition** of the **building** or **facility**, (b) the condition of specific elements of the **building** or **facility**, (c) the design and construction of specific elements of the **facility** related to certain hazards, or (d) inadequate built-in protection measures for the current or intended use of the **building**, adjacent **buildings** or **facilities** will be exposed to an unacceptable risk of damage to due to fire. The risks of damage due to fire addressed in this Code are those caused by:
	OP3.1	fire or explosion impacting areas beyond the **building** or **facility** of origin

O. Reg. 213/07, Division A, Part 2.

SECTION 3.1 APPLICATION

Subsection 3.1.1. Application

3.1.1.1. The **functional statements** set out in Table 3.2.1.1. apply only to the extent that they relate to an **alternative solution** as provided in Article 1.2.1.1.

SECTION 3.2 FUNCTIONAL STATEMENTS

Subsection 3.2.1. Functional Statements

3.2.1.1. The **functional statements** of this Code are those set out in Table 3.2.1.1.

TABLE 3.2.1.1.

Functional Statements
Forming Part of Article 3.2.1.1.

Column 1 Function	Column 2 Functional Statement
F01	To minimize the risk of accidental ignition.
F02	To limit the severity and effects of a fire or explosion.
F03	To retard the effects of fire on areas beyond its point of origin.
F04	To retard failure or collapse due to the effects of fire.
F05	To retard the effects of fire on emergency egress **facilities**.
F06	To retard the effects of fire on **facilities** for notification, suppression and emergency response.
F10	To facilitate the timely movement of persons to a safe place in an emergency.
F11	To notify persons, in a timely manner, of the need to take action in an emergency.
F12	To facilitate emergency response.
F13	To notify emergency responders, in a timely manner, of the need to take action in an emergency.
F20	To support and withstand expected loads and forces.
F21	To limit or accommodate dimensional change.
F22	To limit movement under expected loads and forces.
F30	To minimize the risk of injury to persons as a result of tripping, slipping, falling, contact, drowning or collision.
F32	To minimize the risk of injury to persons as a result of contact with energized equipment.
F34	To resist or discourage unwanted access or entry.
F36	To minimize the risk that persons will be trapped in confined spaces.
F43	To minimize the risk of release of hazardous substances.
F44	To limit the spread of hazardous substances beyond their point of release.
F51	To maintain appropriate air and surface temperatures.
F80	To resist deterioration resulting from expected service conditions.
F81	To minimize the risk of malfunction, interference, damage, tampering, lack of use or misuse.
F82	To minimize the risk of inadequate performance due to improper maintenance or lack of maintenance.

O. Reg. 213/07, Division A, Part 3.

DIVISION B
ACCEPTABLE SOLUTIONS

PART 1
GENERAL

SECTION 1.1 GENERAL

Subsection 1.1.1. General

Notification

1.1.1.1. Where **tests**, repairs or alterations are made to fire protection installations, including sprinkler and standpipe systems, a procedure of notification shall be established, and the procedure shall include notifying the **fire department** and the **building** occupants where necessary for safety in the event of a fire emergency.

Check, inspect and test

1.1.1.2. (1) The **checking**, **inspection** and **testing** of fire safety devices shall be conducted in accordance with this Code.

(2) Where specific references to **checking**, **inspection** and **testing** of fire safety devices are not made in this Code, such devices shall be maintained to ensure they operate as per their design requirements.

(3) Any **appliance**, device or component of a device that does not operate or appear to operate as intended when **checked**, **inspected** or **tested** as required by this Code shall be repaired or replaced if the failure or malfunctioning of the **appliance**, device or component would adversely affect fire or life safety.

Subsection 1.1.2. Records of Tests and Inspections

Records to be prepared

1.1.2.1. (1) If a **test**, corrective measure or operational procedure required by this Code is conducted, a written record shall be prepared noting what was done and the date and time it was done.

(2) If an **inspection** required by this Code is conducted in a supported group living residence or an intensive support residence regulated under the **Services and Supports to Promote the Social Inclusion of Persons with Developmental Disabilities Act, 2008**, a written record shall be prepared noting what was **inspected** and the date and time of the **inspection**.

Retention of records

1.1.2.2. (1) Subject to Sentence (2), the original or a copy of any record required by this Code shall be retained at the **building** to which the record relates

(a) for a period of at least two years after being prepared, and

(b) so that at least the most recent and the immediately preceding record of a given **test** or **inspection** are retained.

(2) The initial verification or **test** reports for fire protection systems installed after November 21, 2007 shall be retained throughout the life of the systems, regardless of whether the systems are installed in accordance with this Code or the **Building Code**.

Records to be made available on request

1.1.2.3. The original or a copy of any record required by this Code shall be made available to the **Chief Fire Official** for examination on request.

SECTION 1.2 REFERENCED DOCUMENTS AND ORGANIZATIONS

Subsection 1.2.1. Referenced Documents

Applicable editions

1.2.1.1. (1) A reference in this Code to a document set out in Table 1.2.1.A. is to the edition designated in the table.

(2) If, on December 31, 2014, any **appliance**, equipment, system, installation or construction met the requirements of the edition that was designated in Table 1.2.1.A. of this Code as it read on December 31, 2014, the **appliance**, equipment, system, installation or construction is deemed to comply with the requirements of the edition referred to in Sentence (1).

Effective date

1.2.1.2. A reference in this Code to a document set out in Table 1.2.1.A. includes all amendments up to and including January 1, 2015.

Previous editions

1.2.1.3. Despite Articles 1.2.1.1. and 1.2.1.2., the **Chief Fire Official** may permit compliance with an edition of a document previous to that referred to in this Code if the **Chief Fire Official** is satisfied that compliance with the edition referred to in this Code is impractical.

TABLE 1.2.1.A.

Forming Part of Article 1.2.1.1.

Issuing Agency	Document Number	Title of Document	Code Reference
API	5L-2007	Line Pipe	4.4.2.1.(4)
API	12B-2008	Bolted Tanks for Storage of Production Liquids	4.3.1.2.(1)
API	12D-2008	Field Welded Tanks for Storage of Production Liquids	4.3.1.2.(1)
API	12F-2008	Shop Welded Tanks for Storage of Production Liquids	4.3.1.2.(1)
API	620-2008	Design and Construction of Large, Welded, Low-Pressure Storage Tanks	4.3.1.3.(1)
API	650-2007	Welded Tanks for Oil Storage	4.3.1.2.(1)
API	1104-2005	Welding of Pipelines and Related Facilities	4.4.5.2.(1)
API	2000-2009	Venting Atmospheric and Low-Pressure Storage Tanks	4.3.4.1.(1)
API	2200-2010	Repairing Crude Oil, Liquefied Petroleum Gas and Product Pipelines	4.4.11.7.(6)
API	RP 1107-1991	Recommended Pipeline Maintenance Welding Practices	4.4.5.2.(1) 4.4.11.7.(6)
API	RP 2201-2003	Safe Hot Tapping Practices in the Petroleum and Petrochemical Industries	4.4.11.7.(6)
ASME	B16.5-2003	Pipe Flanges and Flanged Fittings NPS ½ Through NPS 24 Metric/Inch	4.4.5.3.(1)

		Standard	
ASME	B31.3-2008	Process Piping	4.4.2.1.(5)
ASME	BPVC-2010	Boiler and Pressure Vessel Code	4.3.1.3.(1) 4.4.10.5.(2) 4.4.10.6.(1)
ASTM	A53/A53M-10	Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless	4.4.2.1.(4)
ASTM	A193/A193M-11A	Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications	4.4.5.4.
ASTM	D56-05	Flash Point by Tag Closed Cup Tester	4.1.3.1.(1)
ASTM	D93-11	Flash Point by Pensky-Martens Closed Cup Tester	4.1.3.1.(2)
ASTM	D323-08	Vapor Pressure of Petroleum Products (Reid Method)	1.4.1.2. of Division A (Vapour pressure)
ASTM	D3278-96E1	Flash Point of Liquids by Small Scale Closed-Cup Apparatus	4.1.3.1.(4)
ASTM	D3828-09	Flash Point by Small Scale Closed Cup Tester	4.1.3.1.(3)
ASTM	E1515–07	Standard Test Method for Minimum Explosible Concentration of Combustible Dusts	1.4.1.2. of Division A (Minimum explosible concentration)
CGA	P-1-2008	Safe Handling of Compressed Gases in Containers	5.6.1.1. (3)
CGSB	CAN2-4.2-M77	Textile Test Methods, Test Method 27.1	2.3.2.1.(2)
CGSB	CAN/CGSB-24.3-M92	Identification of Piping Systems	4.3.1.7. 4.4.4.1.(3) 4.4.8.6.(1)
CPPI		Using the CPPI Colour-Symbol System to Mark Equipment and Vehicles for Product Identification (1990)	4.3.1.7. 4.4.4.1.(3) 4.4.8.6.(1)
CSA	6.19-01	Residential Carbon Monoxide Alarming Devices	2.16.2.1.(5) 6.3.4.7.(4)
CSA	B51-09	Boiler, Pressure Vessel and Pressure Piping Code	4.3.1.3.(2)
CSA	B306-M1977	Portable Fuel Tanks for Marine Use	4.2.3.1.(1)
CSA	B365-10	Installation Code for Solid-Fuel-Burning Appliances and Equipment	2.6.2.1. 2.6.2.2.
CSA	B376-M1980	Portable Containers for Gasoline and Other Petroleum Fuels	4.2.3.1.(1)
CSA	B620-2009	Highway Tanks and Portable Tanks for the Transportation of Dangerous Goods	4.2.3.1.(1)
CSA	C22.2 No. 141-10	Emergency Lighting Equipment	9.9.5.5.(2)
CSA	C22.2 No.152-M1984 (R2011)	Combustible Gas Detection Instruments	5.17.3.3.(1)
CSA	C282-09	Emergency Electrical Power Supply for	6.7.1.1.(1)

		Buildings	6.7.1.3. 9.9.5.5.(1) and (2)
CSA	CAN/CSA-W117.2-09	Safety in Welding, Cutting and Allied Processes	5.17.1.2.
CSA	Z32-09	Electrical Safety and Essential Electrical Systems in Health Care Facilities	6.7.1.1.(2)
CSA	Z245.1-07	Steel Pipe	4.4.2.1.(4)
CSA	Z305.12-06	Safe Storage, Handling, and Use of Portable Oxygen Systems in Residential Buildings and Health Care Facilities	2.15.1.2.
MAH	Supplementary Standard SB-4, September 14, 2012	Measures for Fire Safety in High Buildings	7.3.1.3.(2)
NACE	RP0285-2011	Corrosion Control of Underground Storage Tank Systems by Cathodic Protection	4.3.9.1.(1)
NACE	SP0169-2007	Control of External Corrosion on Underground or Submerged Metallic Piping Systems	4.4.3.1.(2)
NFPA	10-2010	Portable Fire Extinguishers	6.2.7.1.
NFPA	11-2010	Standard for Low-, Medium-, and High-Expansion Foam	4.3.2.5.(2) 6.8.1.1.(3)
NFPA	12-2011	Standard on Carbon Dioxide Extinguishing Systems	6.8.1.1.(3)
NFPA	12A-2009	Standard on Halon 1301 Fire Extinguishing Systems	6.8.1.1.(3)
NFPA	12B-1990	Standard on Halon 1211 Fire Extinguishing Systems	6.8.1.1.(3)
NFPA	13-2013	Standard for the Installation of Sprinkler Systems	3.3.1.8.(1) 3.3.1.9. 3.3.2.2.(5) 3.3.2.10.(3) 3.3.3.6.(1) 3.3.4.3.(4) 4.8.4.3.(4) 4.9.4.1.(2) 5.4.2.3. 5.4.5.1. 5.12.8.2.(1) 5.13.6.1. 6.5.1.1.(1) 9.2.5.2.(4) Table 9.2.5.A. 9.4.5.5.(2) 9.5.5.3.(2) 9.6.5.5.(2)

			9.7.5.1.(1) and (4)
NFPA	13D-2010	Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes	6.5.1.1.(1) 9.7.5.1.(2) 9.8.5.1.
NFPA	13R-2010	Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height	6.5.1.1.(1) 9.4.5.5.(3) 9.5.5.3.(2) 9.7.5.1.(3)
NFPA	15-2012	Standard for Water Spray Fixed Systems for Fire Protection	4.3.2.5.(2) 6.8.1.1.(4)
NFPA	16-2011	Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems	6.8.1.1.(4)
NFPA	17-2009	Standard for Dry Chemical Extinguishing Systems	6.8.1.1.(3)
NFPA	17A-2009	Standard for Wet Chemical Extinguishing Systems	6.8.1.1.(3)
NFPA	18-2011	Standard on Wetting Agents	6.8.1.1.(5)
NFPA	20-2010	Installation of Stationary Pumps for Fire Protection	9.4.5.5.(5) 9.7.5.1.(6)
NFPA	24-2013	Standard for the Installation of Private Fire Service Mains and their Appurtenances	4.8.4.3.(4)
NFPA	25-2011	Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems	6.4.1.6. 6.5.1.1.(2) 6.6.1.5.(1) to (3)
NFPA	30-2012	Flammable and Combustible Liquids Code	4.2.7.7.(1) 4.2.10.5.(1)
NFPA	32-2011	Standard for Drycleaning Plants	5.14.10.1.(1)
NFPA	33-2011	Standard for Spray Application Using Flammable or Combustible Materials	5.12.1.1.(2) 5.12.3.5. 5.12.8.2.(2) 5.14.4.1.(2) 5.14.6.1.(3)
NFPA	37-2010	Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines	4.3.12.2.(2)
NFPA	40-1994	Standard for the Storage and Handling of Cellulose Nitrate Motion Picture Film	5.4.4.2.
NFPA	40E-1993	Code for the Storage of Pyroxylin Plastic	5.4.3.3.(1)
NFPA	51-2007	Standard for Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting and Allied Processes	5.17.2.1.
NFPA	55-2005	Standard for the Storage, Use and Handling of Compressed Gases and Cryogenic Fluids in Portable and	5.6.1.1.(3) and (8)

		Stationary Containers, Cylinders and Tanks	
NFPA	68-2007	Standard on Explosion Protection by Deflagration Venting	4.2.9.6.(1) and (2) 4.3.13.3. 4.8.3.1. 4.8.4.2.(1) 4.12.10.1.(1) 5.6.2.4.(1) 5.10.1.5.(2) 5.10.1.7.(2) 5.18.3.3.(2) and (3)
NFPA	69-2008	Standard on Explosion Prevention Systems	4.3.2.5.(2) 4.8.4.2.(1) 5.10.1.8.(2)
NFPA	71-1989	Standard for the Installation, Maintenance and Use of Signaling Systems for Central Station Service	6.3.1.2.(2)
NFPA	72-1993	Standard for the Installation, Maintenance, and Use of Protective Signaling Systems	6.3.1.2.(5)
NFPA	82-2009	Standard on Incinerators and Waste and Linen Handling Systems and Equipment	2.6.3.1.(2) 2.6.3.2.
NFPA	86-2011	Standard for Ovens and Furnaces	4.4.9.5.(2) 5.18.4.1.
NFPA	91-2010	Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids	4.1.7.2.(5) 4.12.8.4.(1) 5.10.2.1.
NFPA	96-2011	Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations	2.6.1.12.(1) 2.6.1.13.
NFPA	291-1995	Recommended Practice for Fire Flow Testing and Marking of Hydrants	6.6.6.1.
NFPA	505-2011	Fire Safety Standard for Powered Industrial Trucks Including Type Designations, Areas of Use, Conversions, Maintenance, and Operation	3.4.1.1.
NFPA	705-2009	Recommended Practice for a Field Flame Test for Textiles and Films	2.3.2.2. 2.9.2.1.
NFPA	1142-2001	Standard on Water Supplies for Suburban and Rural Fire Fighting	3.2.1.9.(4)
NFPA	2001-2008	Standard on Clean Agent Fire Extinguishing Systems	6.8.1.1.(3)
NRC	Ninth Edition 2010	National Fire Code of Canada	4.1.1.2.(2) 4.2.1.1.(2) 4.2.2.3.(1) and (2) 4.2.8.4.(1) and (2)

			4.5.1.1. 4.9.4.2. 4.11.3.8. 7.3.1.2.
NRC	User's Guide - NBC 1995	Fire Protection, Occupant Safety and Accessibility (Part 3)	7.3.1.2.
NRCan	April 2003, Edition 2	Pyrotechnics Special Effects Manual	5.2.1.4.
NRCan	March 2002, Draft Edition #2	Display Fireworks Manual	5.2.1.4.
OFMEM	Fire Code Supplement FCS-1, January 2015	Objectives and Functional Statements Attributed to the Acceptable Solutions	1.2.2.1.(1), (2) and (3) of Division A 4.1.1.4.(4) 1.3.2.2.(1) and (2) of Division C
TC	May 2001	Standards Respecting Pipeline Crossings Under Railways	4.4.7.4.(3)
UL	ANSI/UL 558-1998	Industrial Trucks, Internal Combustion Engine-Powered	3.4.2.1.(3)
UL	ULI 1275-1994	Flammable Liquid Storage Cabinets	4.2.10.5.(1)
UL	UL 2034-2008	Single and Multiple Station Carbon Monoxide Alarms	2.16.2.1.(5) 6.3.4.7.(4)
ULC	C842-M1984	Valves for Flammable and Combustible Liquids	4.4.8.1.(1)
ULC	CAN/ULC-S109-03	Flame Tests of Flame-Resistant Fabrics and Films	2.3.2.1.(1)
ULC	ULC-S505-1974	Standard for Fusible Links for Fire Protection Service	9.5.3.7.(5)
ULC	CAN/ULC-S508-02	Standard for the Rating and Testing of Fire Extinguishers	6.2.2.1.
ULC	CAN/ULC-S524-06	Standard for the Installation of Fire Alarm Systems	6.3.1.8. 9.9.4.12.(1)
ULC	CAN/ULC-S531-02	Standard for Smoke Alarms	2.13.2.1.(3) 9.5.4.5.(3) 9.6.4.10.(3) 9.7.4.3.(4) 9.8.4.2.(3) 9.9.4.13.(2)
ULC	CAN/ULC-S536-04	Inspection and Testing of Fire Alarm Systems	6.3.2.2.(1) to (3) 6.3.2.4.
ULC	CAN/ULC-S537-04	Verification of Fire Alarm Systems	9.9.4.12.(2)
ULC	CAN/ULC-S552-02	Standard for the Maintenance and Testing of Smoke-Alarms	6.3.2.6.(2)
ULC	CAN/ULC-S553-02	Standard for the Installation of Smoke-Alarms	9.5.4.5.(3) 9.6.4.10.(3) 9.7.4.3.(5)

			9.8.4.2.(3) 9.9.4.13.(2)
ULC	CAN/ULC-S561-03	Installation and Services for Fire Signal Receiving Centres and Systems	6.3.1.2.(2) 9.7.4.1.(2) 9.7.4.2.(2)
ULC	CAN/ULC-S601-07	Standard for Shop Fabricated Steel Aboveground Tanks for Flammable and Combustible Liquids	4.3.1.2.(1) 4.3.3.2.(1)
ULC	ULC-S601(A)-2001	Refurbishing of Steel Aboveground Horizontal Tanks for Flammable and Combustible Liquids	4.3.1.10.(2)
ULC	CAN/ULC-S602-07	Aboveground Steel Tanks for Fuel Oil and Lubricating Oil	4.3.1.2.(1)
ULC	ULC-S603-00	Standard for Steel Underground Tanks for Flammable and Combustible Liquids	4.3.1.2.(1) 4.3.15.4.(5)
ULC	ULC-S603(A)-2001	Refurbishing of Steel Underground Tanks for Flammable and Combustible Liquids	4.3.1.10.(3)
ULC	CAN/ULC-S603.1-11	External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids	4.3.1.2.(1) 4.3.8.5.(1) 4.3.9.1.(1) 4.4.3.1.(2)
ULC	ULC-S615-98	Standard for Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids	4.3.1.2.(1) 4.3.8.5.(2) 4.3.15.4.(5)
ULC	ULC-S615(A)-2002	Refurbishing of Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids	4.3.1.10.(3)
ULC	CAN/ULC-S620-07	Standard for Hose Nozzle Valves for Flammable and Combustible Liquids	4.4.8.1.(2)
ULC	ULC-S630(A)-2001	Refurbishing of Steel Aboveground Vertical Tanks for Flammable and Combustible Liquids	4.3.1.10.(2)
ULC	CAN/ULC-S633-99	Standard for Flexible Underground Hose Connectors for Flammable and Combustible Liquids	4.4.7.13.(2)
ULC	CAN/ULC-S642-07	Standard for Compounds and Tapes for Threaded Pipe Joints	4.4.5.1.
ULC	CAN/ULC-S651-07	Standard for Emergency Valves for Flammable and Combustible Liquids	4.4.8.1.(3) 4.6.3.2.(2)
ULC	CAN/ULC-S652-08	Standard for Tank Assemblies for the Collection, Storage and Removal of Used Oil	4.3.1.2.(1)
ULC	CAN/ULC-S653-06	Standard for Aboveground Steel Contained Tank Assemblies for Flammable and Combustible Liquids	4.3.1.2.(1)
ULC	ULC-S655-98	Aboveground Protected Tank	4.3.1.2.(1)

		Assemblies for Flammable and Combustible Liquids	4.3.2.1.(7)
ULC	CAN/ULC-S660-08	Standard for Nonmetallic Underground Piping for Flammable and Combustible Liquids	4.4.2.1.(3) 4.4.7.13.(2)
ULC	CAN/ULC-S661-10	Standard for Overfill Protection Devices for Flammable and Combustible Liquid Storage Tanks	4.3.1.8.(2)
ULC	ULC/ORD-C30-1995	Safety Containers	4.1.5.9.(4) 4.2.3.1.(1) 4.2.6.4. 4.12.3.1.(1)
ULC	ULC/ORD-C58.9-1997	Secondary Containment Liners for Underground and Aboveground Flammable and Combustible Liquid Tanks	4.3.7.2.(2)
ULC	ULC/ORD-C58.12-1992	Leak Detection Devices (Volumetric Type) for Underground Flammable Liquid Storage Tanks	4.3.15.1.(3) 4.3.16.2.(1)
ULC	ULC/ORD-C58.14-1992	Nonvolumetric Leak Detection Devices for Underground Flammable Liquid Storage Tanks	4.3.15.1.(3) 4.3.16.2.(1)
ULC	ULC/ORD-C58.15-1992	Overfill Protection Devices for Flammable Liquid Storage Tanks	4.3.1.8.(1)
ULC	ULC/ORD-C107.12-1992	Line Leak Detection Devices for Flammable Liquid Piping	4.4.6.7.
ULC	ULC/ORD-C142.5-1992	Concrete Encased Steel Aboveground Tank Assemblies for Flammable and Combustible Liquids	4.3.1.2.(1)
ULC	ULC/ORD-C142.16-1994	Protected Aboveground Tank Assemblies for Flammable and Combustible Liquids	4.3.1.2.(9)
ULC	ULC/ORD-C410A-1994	Absorbents for Flammable and Combustible Liquids	4.1.6.3.(3)
ULC	ULC/ORD-C536-1998	Flexible Metallic Hose	4.4.7.13.(2)
ULC	ULC/ORD-C1275-1984	Guide for the Investigation of Storage Cabinets for Flammable Liquid Containers	4.2.10.5.(1)

Subsection 1.2.2. Organizations

Abbreviations of proper names

1.2.2.1. The abbreviations in this Code for the names of organizations shall have the meanings assigned to them as follows:

ANSI American National Standards Institute
API American Petroleum Institute

ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
CAN	Standards Council of Canada designation identifying a national standard. The number or name following the CAN designation represents the agency under whose auspices the standard is issued. CAN1 designates CGA, CAN2 designates CGSB, CAN3 designates CSA, and CAN4 designates ULC.
CGA	Compressed Gas Association
CGSB	Canadian General Standards Board
CPPI	Canadian Petroleum Products Institute
CSA	Canadian Standards Association
MAH	Ontario Ministry of Municipal Affairs and Housing
NFPA	National Fire Protection Association
NRC	National Research Council of Canada
NRCan	Natural Resources Canada
OFM	Ontario Office of the Fire Marshal
OFMEM	Ontario Office of the Fire Marshal and Emergency Management
TC	Transport Canada
UL	Underwriters Laboratories Inc.
ULC	Underwriters' Laboratories of Canada

O. Reg. 213/07, Division B, Part 1; O. Reg. 150/13, ss. 2, 3; O. Reg. 194/14, ss. 3, 4; O. Reg. 256/14, ss. 4-7.

PART 2
FIRE SAFETY

SECTION 2.1 GENERAL

Subsection 2.1.1. Scope and Application

Scope

2.1.1.1. This Part provides measures for the fire safety of persons and **buildings**, including the elimination or control of fire hazards in and around **buildings**, the maintenance of certain life safety systems in **buildings**, the establishment of a fire safety plan in certain **buildings** and the installation of **smoke alarms** and carbon monoxide alarms.

Application

2.1.1.2. Subject to Article 2.1.1.3., this Part applies to **buildings**, premises, **tents**, **air-supported structures** and outdoor **public amusement areas**.

Exceptions

2.1.1.3. (1) Subject to Sentences (2) and (3), this Part does not apply to individual **dwelling units**.

(2) Section 2.2 (Fire Separations), Article 2.4.4.4. (Open-air burning), Subsection 2.4.7. (Vacant Buildings), Section 2.6 (Service Equipment), Section 2.11 (Insulation and Re-Insulation), Section 2.13 (Installation of Smoke Alarms), Section 2.15 (Portable Oxygen Systems) and Section 2.16 (Installation of Carbon Monoxide Alarms) apply to individual **dwelling units**.

(3) This Part applies to individual **dwelling units** in a supported group living residence or an intensive support residence regulated under the **Services and Supports to Promote the Social Inclusion of Persons with Developmental Disabilities Act, 2008**.

Subsection 2.1.2. Classification of Buildings or Parts of Buildings by Major Occupancy

Classification of buildings or parts thereof

2.1.2.1. For the purpose of applying this Code, a **building** or part thereof shall be classified according to its **major occupancy** by the **Chief Fire Official** in conformance with the **Building Code**.

Hazardous activities

2.1.2.2. Activities that create a hazard and that are not allowed for in the original design shall not be carried out in a **building** unless **approved** provisions are made to control the hazard.

2.1.2.3. REVOKED: O. Reg. 256/14, s. 9.

Subsection 2.1.3. Prohibited Combinations of Occupancies

Prohibited combinations of occupancies

2.1.3.1. A **building** containing a **major occupancy** that is classified as an **assembly occupancy**, a **care occupancy**, a **care and treatment occupancy**, a **detention occupancy** or a **residential occupancy** shall not contain a **major occupancy** that is classified as a **high hazard industrial occupancy**.

SECTION 2.2 FIRE SEPARATIONS

Subsection 2.2.1. Major Occupancies

Damaged fire separations

2.2.1.1. Where **fire separations** between **major occupancies** are damaged in a manner so as to affect the integrity of their **fire-resistance rating**, such damaged **fire separations** shall be repaired so that the integrity of the **fire separations** is maintained.

Subsection 2.2.2. Rooms and Spaces

Damaged fire separations

2.2.2.1. Where **fire separations** between rooms, corridors, shafts and other spaces are damaged so as to affect the integrity of their **fire-resistance rating**, the damaged **fire separations** shall be repaired so that the integrity of the **fire separations** is maintained.

Subsection 2.2.3. Closures

Damaged closures

2.2.3.1. Where **closures** are damaged so as to affect the integrity of their **fire-protection rating**, the damaged **closures** shall be repaired so that the integrity of the **closures** is maintained.

Maintenance of closures

2.2.3.2. (1) **Closures** in **fire separations** shall be maintained to ensure that they are operable at all times by

(a) keeping fusible links and heat or smoke-actuated devices undamaged and free of paint and dirt,

(b) keeping guides, bearings and stay rolls clean and lubricated,

(c) making necessary adjustments and repairs to door hardware and accessories to ensure proper closing and latching, and

(d) repairing or replacing inoperative parts of hold-open devices and automatic releasing devices.

Operation of closures

2.2.3.3. **Closures** in **fire separations** shall not be obstructed, blocked, wedged open, or altered in any way that would prevent the intended operation of the **closure**.

Door in a fire separation

2.2.3.4. (1) A door in a **fire separation** shall be kept closed when not in use.

(2) A door in a **fire separation** shall be **checked** as frequently as necessary to ensure that the door remains closed.

(3) Sentences (1) and (2) do not apply to

(a) a door designed to close automatically in the event of a fire emergency, or

(b) a door for which an **approved** fire safety plan contains provisions for closing in the event of a fire emergency.

(4) A door in a **fire separation** shall be **inspected** monthly.

(5) A door opening in a **fire separation** and the areas surrounding the door opening shall be kept clear of anything that would be likely to obstruct or interfere with the free operation of the door.

Inspection of fire dampers and fire-stop flaps

2.2.3.5. **Fire dampers** and **fire-stop flaps** shall be **inspected** annually or on an **approved** time schedule.

2.2.3.6.-2.2.3.8 REVOKED: O. Reg. 256/14, s. 13.

SECTION 2.3 INTERIOR FINISHING, FURNISHING AND DECORATIVE MATERIALS

Subsection 2.3.1. General

2.3.1.1. (1) Where a **building** is refurbished or redecorated, interior finish materials used shall be in conformance with the **Building Code**.

(2) Despite Sentence (1), other interior finish materials may be **approved**.

Moveable partitions and screens

2.3.1.2. Moveable **partitions** or screens, including acoustical screens, shall have a **flame-spread rating** equal to that required for the interior finish of the area in which they are located as determined in the **Building Code**.

Subsection 2.3.2. Textile Flammability

Flame resistance of textiles

2.3.2.1. (1) Drapes, curtains, netting, and other similar or decorative materials, including textiles and films used in **buildings**, shall meet the requirements of CAN/ULC-S109, "Flame Tests of Flame-Resistant Fabrics and Films", when these materials are used in any

(a) **care and treatment occupancy** and **detention occupancy**,

(b) lobby or **exit**,

(c) **access to exit** in **assembly occupancies**, and **assembly occupancies** with an **occupant load** of more than 100 persons, or

(d) an open **floor area** exceeding 1500 m^2 in a **business and personal services occupancy**, **mercantile occupancy** or **industrial occupancy**, unless the **floor area** is divided into **fire compartments** each not exceeding 1500 m^2 in area and each having a **fire-resistance rating** not less than 1 h.

(2) Existing drapes, curtains, netting, and other similar or decorative materials, including textiles and films used in **buildings** which meet the requirements for a high degree of flame resistance as described in NOTE 4 of Test Method 27.1 of CAN2-4.2, "Textile Test Methods" are deemed to be in compliance with Sentence (1).

(3) For the purposes of Sentence (2),

"existing" means in place on November 21, 2007.

Flameproofing treatments

2.3.2.2. Flame retardant treatments shall be renewed as often as required to ensure that the material will pass the match flame **test** in NFPA 705, "Recommended Practice for a Field Flame Test for Textiles and Films".

SECTION 2.4 FIRE HAZARDS

Subsection 2.4.1. Combustible Materials

Accumulation of combustible materials

2.4.1.1. (1) Combustible materials shall not be accumulated in or around a **building** in such quantity or such location as to create a fire hazard.

(2) Combustible materials shall not be accumulated in any part of an elevator shaft, ventilation shaft, **means of egress**, **service room** or **service space**, unless the location, room or space is designed for those materials.

(3) Horizontal concealed spaces, such as crawl spaces and ceiling spaces, shall not be used for the storage of combustible materials.

(4) Combustible materials shall not be stored on a roof or adjacent to any **building** so as to create a fire hazard to the **building** or its occupants.

(5) Abandoned optical fibre cables and electrical wires and cables, with combustible insulation, jackets or sheaths, and nonmetallic raceways shall be removed from a **plenum** unless

(a) they are permanently enclosed by the structure or finish of the **building**,

(b) their removal would disturb the structure or finish of the **building**,

(c) their removal could affect the performance of cables in use, or

(d) the **plenum** is **sprinklered**.

(6) Outdoor storage receptacles, such as dumpsters, used for combustible materials shall be located so that they do not create a fire hazard to **buildings**.

Furniture in corridors serving guest suites

2.4.1.2. Despite Sentence 2.4.1.1.(2), corridors serving as **access to exits** for **guest suites** may contain solid wood or other **approved** furniture, provided the furniture does not create an obstruction to the egress route.

Waste receptacles

2.4.1.3. (1) Materials subject to spontaneous ignition, such as greasy or oily rags, shall be deposited in a receptacle conforming to Sentence (3) or be removed from the premises.

(2) Ashes shall be stored in receptacles that conform to Sentence (3) and combustible materials shall not be stored with ashes in the same receptacle.

(3) A receptacle required in Sentences (1) and (2) shall

(a) be constructed of noncombustible materials,

(b) have a close-fitting, self-closing metal cover,

(c) if the flooring material upon which it is placed is combustible, have a flanged bottom or legs not less than 50 mm high, and

(d) not be placed closer than 1 m to combustible materials, except as permitted in Clause (c).

Waste containers in hotels

2.4.1.4. (1) Waste containers in public washrooms and in other public areas in a **hotel establishment** shall be

(a) **approved**, or

(b) constructed of noncombustible material and have self-closing covers.

Lint traps for laundry equipment

2.4.1.5. Lint traps in laundry equipment shall be cleaned to prevent the accumulation of lint that creates an undue fire hazard.

Flammable or combustible liquid spills

2.4.1.6. **Flammable liquid** or **combustible liquid** spills in a **building** shall be removed immediately with an absorbent material that will not increase the hazard and shall be disposed of in a safe manner.

Subsection 2.4.2. RESERVED

Subsection 2.4.3. Smoking

Smoking prohibited

2.4.3.1. (1) If conditions are such that smoking would create a fire or explosion hazard, smoking shall not take place except in **approved** smoking areas.

(2) In supported group living residences and intensive support residences regulated under the **Services and Supports to Promote the Social Inclusion of Persons with Developmental Disabilities Act, 2008**, suitable noncombustible ashtrays shall be provided where smoking is permitted.

Signs

2.4.3.2. The areas where smoking is not permitted shall be identified by signs having black lettering 50 mm high with a 12.5 mm stroke on a yellow background, except that symbols of 150 mm by 150 mm may be used in lieu of lettering, or covered by instructions established under a fire safety plan and available to all persons.

Subsection 2.4.4. Open Flames

Open flames prohibited

2.4.4.1. (1) In a **building** used for a public assembly, open flames shall not be used in such quantity or manner as to create a fire hazard unless the use has been **approved**.

(2) Open flames shall not be used in dining areas in **care and treatment occupancies** and **care occupancies**.

(3) Despite Sentence (1), decorative and lighting devices with open flames shall not be used unless they are

(a) securely supported in noncombustible holders and located and protected so that combustible materials will not come into contact with or be ignited by the flame, or

(b) **approved**.

2.4.4.2. (1) Flaming meals or drinks shall not be served in **care and treatment occupancies** and **care occupancies**.

(2) In **assembly occupancies**, flaming meals or drinks shall be ignited only at the location of serving.

(3) In **assembly occupancies**, the refuelling of equipment used to flame meals or drinks, or to warm food, shall be carried out

(a) outside the serving area, and

(b) away from ignition sources.

(4) A portable extinguisher with a minimum rating of 5B:C shall be located on the serving cart or table at locations referred to in Sentences (2) and (3).

Devices having open flames

2.4.4.3. Devices having open flames shall be securely supported in noncombustible holders and located or protected so as to prevent accidental contact of the flame with combustible materials.

Open-air burning

2.4.4.4. (1) Open-air burning shall not take place unless

(a) it has been **approved**, or

(b) the open-air burning consists of a small, confined fire that is

(i) used to cook food on a grill, barbecue or spit,

(ii) commensurate with the type and quantity of food being cooked, and

(iii) supervised at all times.

(2) Sentence (1) does not apply to the use of an **appliance** that

(a) meets the requirements of the **Technical Standards and Safety Act, 2000**,

(b) is for outdoor use,

(c) if assembled, has been assembled in accordance with the manufacturer's instructions, and

(d) if installed, has been installed in accordance with the manufacturer's instructions.

Subsection 2.4.5. Use of Hazardous Materials

2.4.5.1. **Flammable liquids** shall not be used for cleaning purposes except where the cleaning is an essential part of a process.

2.4.5.2. Flammable gases shall not be used to inflate balloons.

Subsection 2.4.6. Electrical Hazards

Electrical wiring

2.4.6.1. Temporary electrical wiring shall not be used where it presents a fire hazard.

Subsection 2.4.7. Vacant Buildings

2.4.7.1. Vacant **buildings** shall be secured against unauthorized entry.

SECTION 2.5 FIRE DEPARTMENT ACCESS TO BUILDINGS

Subsection 2.5.1. General

Application

2.5.1.1. (1) This Section applies to fire access routes

(a) required to be constructed under the **Building Code**,

(b) required by municipal by-law, or

(c) required by this Code.

Maintaining access free of obstructions

2.5.1.2. (1) Fire access routes and access panels or windows provided to facilitate access for fire fighting operations shall not be obstructed by vehicles, gates, fences, **building** materials, vegetation, signs or any other form of obstruction.

(2) **Fire department** sprinkler and standpipe connections shall be clearly identified and maintained free of obstructions for use at all times.

Maintenance

2.5.1.3. Fire access routes shall be maintained so as to be immediately ready for use at all times by **fire department** vehicles.

Signs

2.5.1.4. **Approved** signs shall be displayed to indicate fire access routes.

SECTION 2.6 SERVICE EQUIPMENT

Subsection 2.6.1. Heating, Ventilating and Air-Conditioning

Application

2.6.1.1. This Subsection applies to cooking, heating, ventilating, air-conditioning equipment and their associated **appliances**.

Solid fuel bins

2.6.1.2. Bins containing solid fuel shall be located at least 1.2 m from any **appliance**.

Hoods, filters and ducts

2.6.1.3. (1) Hoods, ducts and filters subject to accumulations of combustible deposits shall be **checked** at intervals not greater than seven days, and shall be cleaned if the accumulation of combustible deposits creates a fire hazard.

(2) Sentence (1) does not apply to hoods, ducts or filters in an exhaust or ventilating system that serves only a single **suite** of **residential occupancy**.

Chimneys, flues and flue pipes

2.6.1.4. (1) Every **chimney**, **flue** and **flue pipe** shall be **inspected** to identify any dangerous condition

(a) at intervals not greater than 12 months,

(b) at the time of addition of any **appliance**, and

(c) after any **chimney** fire.

(2) A **chimney**, **flue**, or **flue pipe** shall be replaced or repaired to eliminate

(a) any structural deficiency or decay, and

(b) all abandoned or unused openings which are not effectively sealed in a manner that would prevent the passage of fire or smoke.

(3) **Chimneys**, **flues** and **flue pipes** that constitute a fire hazard shall be repaired or replaced in accordance with the **Building Code**.

2.6.1.5. **Chimneys**, **flues** and **flue pipes** shall be cleaned as often as necessary to keep them free from accumulations of combustible deposits.

2.6.1.6. RESERVED

Operation of systems

2.6.1.7. Heating, ventilating and air-conditioning systems, including **appliances**, **chimneys** and **flue pipes**, shall be operated and maintained so as not to create a hazardous condition.

Disconnect switches

2.6.1.8. (1) Disconnect switches for mechanical air-conditioning and ventilating systems shall be **tested** at intervals not greater than 12 months to establish that the system can be shut down in an emergency.

(2) Sentence (1) does not apply to an exhaust or ventilating system that serves only a single **suite** of **residential occupancy**.

Ventilation shafts

2.6.1.9. Ventilation shafts shall be used only for ventilating purposes.

Precautions during repairs or renovations

2.6.1.10. (1) No work on ducts involving the use of hot work equipment shall be performed unless

(a) the system has been shut down,

(b) the duct has been cleaned of any accumulations of combustible deposits, and

(c) any combustible lining and covering material that could be ignited by the work has been removed.

2.6.1.11. Precautions shall be taken, where necessary, to ensure that there is no damage to fuel supply piping or equipment that would result in fuel leakage or a fire hazard during renovations or excavations.

Exhaust and fire protection systems in cooking operations

2.6.1.12. (1) A cooking operation producing smoke or grease-laden vapours shall be provided with an exhaust system and fire protection system in accordance with NFPA 96, "Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations".

(2) Despite Sentence (1), an existing exhaust or fire protection system may be **approved**.

(3) Sentence (1) does not apply to

(a) an individual **suite** of **residential occupancy**, or

(b) a cooking operation producing insignificant amounts of smoke or grease-laden vapours that are controlled by other **approved** measures.

(4) In a **hotel establishment** regulated by Section 9.9, a cooking operation that meets the requirements of Article 9.9.2.19. is deemed to be in compliance with Sentence (1).

Maintenance of exhaust and fire protection systems

2.6.1.13. Exhaust and fire protection systems required under Article 2.6.1.12. shall be maintained in accordance with NFPA 96, "Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations".

2.6.1.14. (1) Instructions for manually operating the fire protection systems required under Article 2.6.1.12. shall be posted conspicuously in the kitchen.

(2) The instructions required in Sentence (1) shall be included in the fire safety plan where such a plan is required.

Subsection 2.6.2 Solid-Fuel-Burning Appliances

Solid-fuel-burning appliances

2.6.2.1. The installation of solid-fuel-burning **appliances** and equipment shall be in accordance with CSA-B365, "Installation Code for Solid-Fuel-Burning Appliances and Equipment".

2.6.2.2. Solid-fuel-burning **appliances** and equipment shall be maintained in accordance with CSA-B365, "Installation Code for Solid-Fuel-Burning Appliances and Equipment".

Subsection 2.6.3. Incinerators

Design, construction, installation and alteration

2.6.3.1. (1) The design, construction, installation and alteration of indoor incinerators shall conform to the requirements of the **Building Code**.

(2) The design, construction, installation, alteration and maintenance of outdoor incinerators shall conform to NFPA 82, "Standard on Incinerators and Waste and Linen Handling Systems and

Equipment", except that the **flue** venting an incinerator shall not serve as the chute conveying waste material to the incinerator.

Maintenance

2.6.3.2. All indoor and outdoor incinerators shall be maintained in accordance with NFPA 82, "Standard on Incinerators and Waste and Linen Handling Systems and Equipment".

Spark arresters

2.6.3.3. (1) Spark arresters installed in conformance with Article 2.6.3.1. shall be **inspected** and cleaned at intervals not greater than 12 months or more frequently where accumulations of debris will adversely affect operations.

(2) Burnt-out spark arresters shall be repaired or replaced.

2.6.3.4. REVOKED: O. Reg. 256/14, s. 27.

Subsection 2.6.4. Electrical Equipment Vaults

2.6.4.1. Electrical equipment vaults shall not be used for storage purposes.

2.6.4.2. Electrical equipment vaults shall be kept locked so that unauthorized persons will not have access to them.

SECTION 2.7 SAFETY TO LIFE

Subsection 2.7.1. Means of Egress and Occupant Load

Mercantile, business and personal services occupancies

2.7.1.1. Individual work areas in **business and personal services occupancies** and **mercantile occupancies** shall be located adjacent to aisles described in Articles 2.7.1.2. and 2.7.1.3.

2.7.1.2. Where two **exits** are required from **floor areas** in **buildings** of **business and personal services occupancy** and **mercantile occupancy** that are not subdivided into rooms or **suites** of rooms served by corridors giving **access to exits**, at least one aisle with access to the two **exits** and having a minimum clear width of 1100 mm shall be provided to serve the individual work areas where necessary.

2.7.1.3. Subsidiary aisles with a minimum clear width of 900 mm may branch off for a distance not exceeding 7.5 m from the aisles described in Article 2.7.1.2.

Occupant load

2.7.1.4. (1) The number of persons occupying a room or floor space in an **assembly occupancy** shall not exceed the **occupant load** for the intended use as determined in Sentence (2).

(2) The **occupant load** for any room or floor space shall be the lower of

(a) the **occupant load** as calculated in accordance with Sentences (3) to (7), or

(b) the **occupant load** for which **means of egress** are provided as determined by the **Building Code**.

(3) The **occupant load** of a **floor area** or part of a **floor area** in an **assembly occupancy** shall be based on

(a) the number of fixed seats, or

(b) the number of persons

(i) for which the area is designed, or

(ii) determined from Table 2.7.1.A. for **occupancies** other than those described in Clause (a).

(4) For the purposes of this Article, **mezzanines**, tiers and balconies shall be regarded as part of the **floor area**.

(5) Where fixed bench-type seats without arms are provided, the **occupant load** shall be based on a seat width of 450 mm per person.

(6) The **occupant load** of a room in which a dance floor is situated shall be based on that portion of the room that is not occupied by the dance floor except where the **occupant load** is determined using Subclause (3)(b)(i).

(7) At no time shall the maximum **occupant load** determined in Sentences (2) to (6) exceed the **occupant load** calculated on the basis of

(a) 0.60 m^2 of floor space per person in dining, alcoholic beverage and cafeteria space, and

(b) 0.40 m^2 of floor space per person for all other uses.

TABLE 2.7.1.A.

Forming Part of Article 2.7.1.4.

Type of Use of **Building** or **Floor Area** or Part Thereof	Area per Person m^2
Space with fixed seats	See Clause (3) (a)
Space with nonfixed seats	0.75
Stages for theatrical performances	0.75
Space with nonfixed seats and tables	0.95
Standing space	0.40
Stadia and grandstands	0.60
Bowling alleys, pool and billiard rooms	9.30
Classrooms	1.85
School shops and vocational rooms	9.30
Reading or writing rooms or lounges	1.85
Dining, alcoholic beverage and cafeteria space	1.10
Laboratories in schools	4.60
Exhibition halls other than those classified in **mercantile occupancy**	2.80

Posting occupant load

2.7.1.5. (1) When the **occupant load** as determined in Article 2.7.1.4. is more than 60 persons, the **occupant load** shall be posted in a conspicuous location.

(2) When the **occupant load** has been determined using Subclause 2.7.1.4.(3)(b)(i), a permanent sign indicating the **occupant load** shall be posted in a conspicuous location.

Nonfixed seating

2.7.1.6. (1) Nonfixed row seating in an **assembly occupancy** shall be arranged as described in Sentences (2) to (8).

(2) Aisles leading to **exits** shall be provided so that there are not more than seven seats between any seat and the nearest aisle.

(3) The minimum clear width of aisles shall be at least 1100 mm, except as permitted by Sentence (4).

(4) Aisles required in Sentence (3) may be reduced in width to 750 mm when serving 60 seats or less, or 900 mm when serving seats on one side only.

(5) Aisles shall terminate in a cross aisle, foyer or **exit** and the width of such cross aisle, foyer or **exit** shall be at least the required width of the widest aisle plus 50% of the total required width of the remaining aisles that it serves.

(6) The distance of travel to an **exit** door by an aisle shall not be greater than 30 m, except in a **sprinklered floor area** where the distance of travel shall not be greater than 45 m.

(7) If non-fixed row seating is provided for more than 200 persons in an **assembly occupancy**, the seats shall be fastened in units of not less than 4 and not more than 12 seats, or each end seat abutting an aisle shall be securely fastened to the floor.

(8) Seats may be arranged in a manner that does not meet the requirements of Sentence (7) where the aisle widths are increased by 50% above the requirements set out in Sentences (2) to (6), and where the maximum **occupant load** of the space is based on not less than 1.2 m^2 of floor space per person.

Maintenance and lighting for exits

2.7.1.7. (1) **Means of egress** shall be maintained in good repair and free of obstructions.

(2) Lighting provided for illumination in **exits** and **access to exits**, including corridors used by the public, shall be maintained.

(3) Despite Sentence (2), the lighting provided for illumination may be controlled by motion sensors installed in accordance with the **Building Code**.

Fire escapes

2.7.1.8. (1) Exterior passageways, exterior stairways and fire escapes in occupied **buildings** shall be maintained in good repair and operational and kept free of snow and ice accumulations.

(2) Where equipment is provided to melt snow or ice on exterior passageways, exterior stairways and fire escapes in an occupied **building**, the equipment shall be maintained in working order or alternative measures shall be taken as specified in Sentence (1).

Turnstiles and checkout counters

2.7.1.9. (1) Except as provided in Sentences (2) and (3), turnstiles, checkout counters, railings or barriers shall not obstruct the **exits** or **access to exits** from any room, **floor area** or **storey**.

(2) Checkout counters or control posts in retail outlets may be used within **access to exits** if there is a clear width of at least 450 mm up to a height of 914 mm.

(3) If the checkout counters or control posts exceed 914 mm in height, there shall be a clear width of at least 550 mm.

(4) The clear width may be less than that required by Sentences (2) and (3) if an alternative **means of egress** is adjacent to and plainly visible from the restricted egress.

(5) Wheeled carts shall be stored after use so as not to obstruct **access to exits** in retail outlets where wheeled carts are used by customers.

(6) Despite Sentences (1) to (5), the aggregate width of **exits** and **access to exits** shall be provided.

Subsection 2.7.2. Door Hardware

Door release hardware

2.7.2.1. (1) Every **exit** door shall be designed and installed so that, when the latch is released, the door will open in the direction of **exit** travel under a force of not more than 90 N, applied at the knob or other latch releasing device.

(2) **Approved** hardware designed to release the latch and allow the door to open in the direction of **exit** travel when a force of not more than 90 N is applied to the hardware is required on

(a) every door in an **access to exit** from a room or **suite** of **assembly occupancy** having an **occupant load** of more than 100 persons,

(b) every **exit** door from a **floor area** containing an **assembly occupancy** having an **occupant load** of more than 100 persons,

(c) every door leading to an **exit** lobby from an **exit** stair shaft in **buildings** having an **occupant load** of more than 100 persons,

(d) every exterior door leading from an **exit** stair shaft in **buildings** having an **occupant load** of more than 100 persons, and

(e) every **exit** door from a **floor area** containing a **high hazard industrial occupancy**.

(3) Every door that opens into a corridor or other facility providing **access to exit** from a **suite** or room not located within a **suite** shall swing

(a) on its vertical axis, and

(b) in the direction of **exit** travel where the room or **suite** is used or intended to be used for an **occupant load** of more than 60 persons or is designed for a **high hazard industrial occupancy**.

(4) Sentences (1) and (3) do not apply if the existing door is **approved** and either does not endanger life safety or is modified to provide life safety.

(5) Sentences (1), (2) and (3) do not apply in **rapid transit stations** which comply with the **Building Code**.

Requirements for locking, latching and fastening devices

2.7.2.2. (1) Subject to Sentences (2) and (3), locking, latching and other fastening devices shall be such that a door can be readily opened from the inside with no more than one releasing operation and without requiring keys, special devices or specialized knowledge of the door opening mechanism on,

(a) every **exit** door required by this Code, and

(b) every door that is in an **access to exit** and that opens into or is located within

(i) a **public corridor**,

(ii) a facility that provides **access to exit** from a **suite**, or

(iii) a facility that provides **access to exit** from a room serving patients or residents in a **care occupancy** or **care and treatment occupancy**.

(2) A door in an **access to exit** or an **exit** door may be equipped with an electromagnetic locking device that is **approved** or complies with the **Building Code**, unless the door is located in an elementary or secondary school or is an egress or **exit** door that serves a **high hazard industrial occupancy**.

(3) An egress door that serves a **contained use area** or **impeded egress zone** may be equipped with a locking device that can be released either locally or remotely in accordance with Sentences (4) to (6).

(4) A locking device with a local release permitted by Sentence (3) shall be capable of being unlocked with a key from both sides of the door.

(5) The controls for the remote release of a locking device permitted by Sentence (3) shall be in an area that is readily accessible to **supervisory staff**.

(6) A locking device permitted by Sentence (3) that is electrically operated shall be

(a) designed to operate on emergency power, and

(b) capable of being manually unlocked by **supervisory staff**.

(7) Sentence (1) does not apply in **rapid transit stations** that comply with the **Building Code**.

Subsection 2.7.3. Exit Lighting and Emergency Lighting

Exit signs

2.7.3.1. Required **exit** signs shall be clearly visible and maintained in a clean and legible condition.

Same

2.7.3.2. (1) **Exit** signs shall be illuminated externally or internally, as appropriate for the sign's design, while the **building** is occupied.

(2) **Exit** signs that contain self-luminous or photoluminescent material shall be maintained in accordance with

(a) the sign manufacturer's maintenance instructions, if any, and

(b) the conditions outlined in the approval of the designated evaluation body under the **Building Code**, if any.

Emergency lighting

2.7.3.3. (1) Pilot lights on emergency lighting unit equipment shall be **checked** monthly for operation.

(2) Emergency lighting unit equipment shall be **inspected** monthly to ensure that

(a) the terminal connections are clean, free of corrosion and lubricated when necessary,

(b) the terminal clamps are clean and tight as per manufacturer's specifications,

(c) the electrolyte level and specific gravity are maintained as per manufacturer's specifications, and

(d) the battery surface is kept clean and dry.

(3) Emergency lighting unit equipment shall be **tested**

(a) monthly to ensure that the emergency lights will function upon failure of the primary power supply, and

(b) annually to ensure that the unit will provide emergency lighting for a duration equal to the design criteria under simulated power failure conditions.

(4) After completion of the **test** required in Clause (3)(b), the charging conditions for voltage and current and the recovery period shall be **tested** to ensure that the charging system is in accordance with the manufacturer's specifications.

(5) Except as provided in Sentences (1) to (4), emergency lights shall be **inspected** at intervals not greater than 12 months to ensure that they are functional.

(6) Where emergency power for the lights referred to in Sentence (5) is provided from a system of batteries, the batteries shall be **inspected** and **tested** in accordance with the procedures set out in Sentences (2) to (4).

Subsection 2.7.4. Indoor Public Amusement Areas

Fire hazards

2.7.4.1. (1) **Public amusement areas** located in **buildings** shall be designed so that they do not create a fire hazard to the public using the facility.

(2) Hay, straw, shavings, textiles, films or similar combustible materials shall not be used in the design and construction or as decorative features in **public amusement areas** located in **buildings** unless **approved** provisions are made to control the hazard.

Emergency egress

2.7.4.2. (1) Indoor **public amusement areas** that involve enclosed, confined or otherwise confusing configurations shall be provided with emergency egress points that

(a) have appropriate width, height and capacity for the anticipated **occupant load**,

(b) are not more than 15 m travel from any point within the **public amusement area** except as **approved**,

(c) are clearly identified with signs, and

(d) are equipped with emergency lighting providing a minimum lighting level of 10 lx at floor or pathway level for a duration of at least 30 min, where natural lighting is not sufficient in the circumstances.

SECTION 2.8 EMERGENCY PLANNING

Subsection 2.8.1. General

Application

2.8.1.1. (1) This Section applies to **buildings** containing

(a) an **assembly occupancy**,

(b) a **care occupancy**,

(c) a **care and treatment occupancy,**

(d) a **detention occupancy**,

(e) a **residential occupancy** where the **occupant load** exceeds 10,

(f) a **retirement home**,

(g) a **business and personal services occupancy** where the **occupant load** exceeds 300,

(h) a **mercantile occupancy** where the **occupant load** exceeds 300,

(i) a **high hazard industrial occupancy** where the **occupant load** exceeds 25,

(j) a **medium hazard industrial occupancy** where the **occupant load** exceeds 100, or

(k) a **low hazard industrial occupancy** where the **occupant load** exceeds 300.

(2) This Section also applies to **buildings** or premises

(a) containing 4 **storeys** or more, counting **storeys** below **grade**,

(b) to which Subsection 3.2.1. applies,

(c) to which Article 4.1.5.6. applies,

(d) to which Article 4.12.4.1. applies,

(e) to which Section 9.3 applies,

(f) to which Sentence 9.5.3.1.(3) applies,

(g) used as a convalescent home or children's custodial home providing sleeping accommodation for more than three persons, or

(h) that have a **contained use area** or an **impeded egress zone**.

(3) This Section also applies to recreational camps regulated under the **Health Protection and Promotion Act**.

(4) This Section also applies to supported group living residences and intensive support residences regulated under the **Services and Supports to Promote the Social Inclusion of Persons with Developmental Disabilities Act, 2008**.

Instructions in emergency procedures

2.8.1.2. (1) **Supervisory staff** shall be instructed in the fire emergency procedures as described in the fire safety plan before they are given any responsibility for fire safety.

(2) **Supervisory staff** shall be available on notification of a fire emergency to fulfil their obligation as described in the fire safety plan.

(3) Subject to Article 2.8.2.2., **supervisory staff** are not required to be in the **building** on a continual basis.

2.8.1.3. (1) Employees in a **hotel establishment** shall be instructed on

(a) the procedures outlined in Article 2.8.2.1., and

(b) the use of fire fighting equipment, including portable extinguishers and, where applicable, standpipe and hose systems.

Subsection 2.8.2. Fire Safety Plan

Measures in a fire safety plan

2.8.2.1. (1) A fire safety plan shall be prepared, **approved** and implemented in **buildings** and premises to which this Section applies.

(2) A fire safety plan shall

(a) provide for the emergency procedures to be followed in case of fire, including

(i) sounding the fire alarm,

(ii) notifying the **fire department**,

(iii) instructing occupants on procedures to be followed when the fire alarm sounds,

(iv) evacuating occupants, including special provisions for persons requiring assistance,

(v) procedures for use of elevators, and

(vi) confining, controlling and extinguishing the fire,

(b) provide for the appointment and organization of **supervisory staff** to carry out fire safety duties,

(c) provide for the training of **supervisory staff** and the instruction of other occupants in their responsibilities for fire safety,

(d) include documents and diagrams showing the type, location and operation of the **building** fire emergency systems,

(e) provide for the holding of fire drills and set out fire drill procedures,

(f) provide for the control of fire hazards in the **building**,

(g) provide for the maintenance of **building** facilities provided for the safety of occupants, and

(h) provide for alternative measures to be provided for the safety of occupants during a shutdown of any or all fire protection equipment or systems.

(3) The fire safety plan shall be kept in the **building** or premises in an **approved** location.

(4) The fire safety plan shall be reviewed as often as necessary, but at least every 12 months, and shall be revised as necessary so that it takes into account changes in the use or other characteristics of the **building** or premises.

(5) Before **demolition** or construction, including hot surface applications, commences in or on the **building** or premises, the fire safety plan shall be revised to incorporate

(a) temporary alternative measures for the fire safety of the occupants during the **demolition** or construction, and

(b) temporary procedures to control fire hazards associated with the **demolition** or construction, including procedures to mitigate risks to adjacent **buildings**.

(6) The revised fire safety plan prepared under Sentence (4) or (5) shall be implemented.

(7) In the case of a **care occupancy**, **care and treatment occupancy** and **retirement home**, any training of **supervisory staff** carried out under a fire safety plan shall be recorded.

(8) The original or a copy of at least the most recent and the immediately preceding record referred to in Sentence (7) shall be retained in the **building** for a period of at least two years after being prepared and shall be made available to the **Chief Fire Official** for examination on request.

Supervisory staff

2.8.2.2. (1) There shall be sufficient **supervisory staff** available in **care occupancies**, **care and treatment occupancies**, **detention occupancies** and **retirement homes** to carry out the duties required in the fire safety plan.

(2) In **hotel establishments**

(a) there shall be sufficient **supervisory staff** available to carry out the duties as required in the fire safety plan, and

(b) in **buildings** greater than 3 **storeys** in **building height** or having a **total area** greater than 4000 m^2, **supervisory staff** shall be on duty whenever the **building** is occupied.

High buildings

2.8.2.3. (1) The fire safety plan in **buildings** within the scope of Subsection 3.2.6. of Division B of the **Building Code** shall, in addition to the requirements of Sentence 2.8.2.1.(2), include

(a) the instruction of **supervisory staff** on the use of the voice communication system,

(b) the action to be taken by **supervisory staff** in initiating any smoke control or other fire emergency systems installed in a **building** in the event of fire until the **fire department** arrives,

(c) the procedures established to facilitate **fire department** access to the **building** and fire location within the **building**, and

(d) the instructions for the **supervisory staff** and **fire department** for the operation of the fire emergency systems.

2.8.2.4. A copy of the fire emergency procedures and other duties for **supervisory staff** as laid down in the fire safety plan shall be given to all **supervisory staff**.

Posting fire emergency procedures

2.8.2.5. (1) At least one copy of the fire emergency procedures shall be prominently posted and maintained on each **floor area**.

(2) In addition to Sentence (1), in a **hotel establishment**

(a) one copy of the **approved** fire safety plan shall be posted in the main reception area, and

(b) a copy of the emergency procedures, location of **exits** and the fire safety rules shall be posted on the inside of the egress doors of each **guest suite**.

(3) Where a fire alarm system has been installed with no provisions to transmit a signal to the **fire department**, a legible notice, that is not easily removed, shall be affixed to the wall near each manual pull station with wording that the **fire department** is to be notified in the event of a fire emergency and including the emergency telephone number for the municipality or the telephone number of the **fire department**.

Subsection 2.8.3. Fire Drills

Procedures

2.8.3.1. (1) The procedure for conducting fire drills described in Clause 2.8.2.1.(2)(e) shall be included in the fire safety plan, taking into consideration

(a) the **building occupancy** and its fire hazards,

(b) the safety features provided in the **building**,

(c) the desirable degree of participation of occupants other than **supervisory staff**,

(d) the number and degree of experience of participating **supervisory staff**, and

(e) the **testing** and operation of the emergency systems installed in **buildings** within the scope of Subsection 3.2.6. of Division B of the **Building Code**.

(2) The fire drill procedures required in Sentence (1) shall be prepared in consultation with the **Chief Fire Official**.

Frequency

2.8.3.2. (1) Subject to Sentences (2), (3), (4) and (5), a fire drill shall be held for the **supervisory staff** at least once during each 12-month period.

(2) A fire drill shall be held for the **supervisory staff** at least monthly in

(a) a supported group living residence or intensive support residence regulated under the **Services and Supports to Promote the Social Inclusion of Persons with Developmental Disabilities Act, 2008**,

(b) a **care occupancy**,

(c) a **care and treatment occupancy**,

(d) a **detention occupancy**, and

(e) a day care centre for children, including a day nursery, as defined in the **Day Nurseries Act**, but excluding

(i) private-home day care, as defined in the **Day Nurseries Act**,

(ii) an extended day program or third party program operated under section 259 of the **Education Act**, and

(iii) a day nursery or part of a day nursery, as defined in the **Day Nurseries Act**, that is operated in a school, as defined in the **Education Act**, and that provides services only to children who are pupils of a board, as defined in the **Education Act**.

(3) In a school, as defined in the **Education Act**, and a private school, as defined in the **Education Act**, a total evacuation fire drill shall be held

(a) if the school or private school is in session during the fall term, at least three times during that term,

(b) if the school or private school is in session during the spring term, at least three times during that term, and

(c) if the school or private school is in session during the summer, at least three times or at least once a month during the period it is in session, whichever is less.

(4) For an extended day program or third party program operated under section 259 of the **Education Act**, or for a day nursery or part of a day nursery described in Subclause (2)(e)(iii), a total evacuation fire drill shall be held

(a) if the program, day nursery or part of a day nursery is in operation during the fall term, at least three times during that term,

(b) if the program, day nursery or part of a day nursery is in operation during the spring term, at least three times during that term, and

(c) if the program, day nursery or part of a day nursery is in operation during the summer, at least three times or at least once a month during the period it is in operation, whichever is less.

(5) A fire drill for **supervisory staff** shall be held at least every three months in a **building** to which Subsection 3.2.6. of Division B of the **Building Code** applies.

(6) In addition to the requirements of Sentence (2), in a **care occupancy**, a **care and treatment occupancy** or a **retirement home**, a fire drill for **supervisory staff** shall be carried out at least once during each 12-month period for an **approved** scenario representing the lowest staffing level complement in the **occupancy** in order to confirm that the requirements of Sentence 2.8.2.2.(1) have been met.

Notification of Chief Fire Official

2.8.3.3. The **Chief Fire Official** shall be notified within an **approved** time period before every fire drill carried out under Sentence 2.8.3.2.(6).

Records

2.8.3.4. (1) A record shall be prepared of every fire drill conducted under Article 2.8.3.2.

(2) The record shall be kept for at least 12 months after the fire drill.

Hotel employees

2.8.3.5. Every employee in a **hotel establishment** shall take part in at least one fire drill during each 12-month period.

SECTION 2.9 TENTS AND AIR-SUPPORTED STRUCTURES

Subsection 2.9.1. General

2.9.1.1. **Tents** and **air-supported structures** shall be in conformance with the **Building Code**.

2.9.1.2. This Section does not apply to **tents** that have an area of 30 m^2 or less and that are used for camping, personal or other non-commercial uses.

Subsection 2.9.2. Materials

Flameproofing treatments

2.9.2.1. Flameproofing treatments shall be renewed as often as necessary to ensure that the material will pass the match flame **test** in NFPA 705, "Recommended Practice for a Field Flame Test for Textiles and Films".

Subsection 2.9.3. Fire Hazards and Control

Combustible materials

2.9.3.1. (1) Subject to Sentences (2) and (3), hay, straw, shavings or similar combustible materials shall not be used within a **tent** or **air-supported structure** used for an **assembly occupancy.**

(2) Hay, straw or similar combustible materials may be used if necessary for the daily feeding and care of animals.

(3) Sawdust and shavings may be used if kept damp.

Smoking and open flames prohibited

2.9.3.2. Smoking shall not take place and open flame devices shall not be used in a **tent** or **air-supported structure** unless provisions have been made for such activities under the fire safety plan.

Fire alarm system or firewatch

2.9.3.3. (1) Despite Article 2.9.1.1., if a **tent** or **air-supported structure** does not have a fire alarm system that conforms to the **Building Code**,

(a) it may have an **approved** fire alarm system that does not conform to the **Building Code** where the reliability and performance of the system will provide an adequate early warning level, or

(b) a person shall be employed for firewatch duty.

2.9.3.4. (1) A person employed for firewatch duty in accordance with Article 2.9.3.3. shall

(a) be familiarized with all fire safety features, including the fire safety plan as provided in conformance with Section 2.8 and the condition of **exits**, and

(b) patrol the area to ensure that the **means of egress** are kept clear and that regulations are enforced.

Communications systems

2.9.3.5. When the conditions of Article 2.9.3.3. apply, an **approved** communications system shall be provided.

SECTION 2.10 DAY CARE CENTRES

Subsection 2.10.1. Application

Application

2.10.1.1. (1) Subject to Sentence (2), this Section applies to day care centres for children, including day nurseries as defined in the **Day Nurseries Act**.

(2) This Section does not apply to

(a) private-home day care, as defined in the **Day Nurseries Act**,

(b) an extended day program or a third party program operated under section 259 of the **Education Act**, or

(c) a day nursery or part of a day nursery, as defined in the **Day Nurseries Act**, that is operated in a school, as defined in the **Education Act**, and that provides services only to children who are pupils of a board, as defined in the **Education Act**.

Subsection 2.10.2. Combustible Materials

Artwork and teaching materials on walls

2.10.2.1. Combustible artwork and teaching materials that are attached to walls shall not exceed 20% of the area of the walls.

Waste receptacles

2.10.2.2. Waste receptacles shall be made of noncombustible materials.

Flammable and combustible liquids

2.10.2.3. **Flammable liquids** and **combustible liquids** shall be stored in conformance with Part 4 and in areas inaccessible to children.

Subsection 2.10.3. Staffing

2.10.3.1. Where children with disabilities are cared for, sufficient staff shall be present at all times during the period the children are in the centre to escort them to safety in the event of a fire emergency.

SECTION 2.11 INSULATION AND RE-INSULATION

Subsection 2.11.1. General

2.11.1.1. The installation of insulation, including the replacement of insulation, shall be carried out in accordance with the **Building Code**.

2.11.1.2. Unless otherwise **approved**, combustible insulation shall be protected as prescribed in the **Building Code**.

2.11.1.3. Insulation shall not be placed in **building** roof-ceiling or floor-ceiling assemblies, as described in Parts 3 and 9 of Division B of the **Building Code**, where the assemblies are required to have a **fire-resistance rating** unless the insulation does not reduce the **fire-resistance rating** of the assemblies.

SECTION 2.12 COVERED MALLS

Subsection 2.12.1. General

2.12.1.1. (1) Covered malls designed for ornamental and pedestrian uses only shall not be used for merchandising or public activities, except that such activities may occur on a temporary basis where they do not create a fire hazard.

(2) Where a covered mall described in Sentence (1) is used for merchandising or public activities, the fire safety plan described in Section 2.8 shall include additional provisions to offset any hazard that may be created by such activities.

2.12.1.2. Merchandising or public activities in a **sprinklered** covered mall described in Article 2.12.1.1. shall not be carried out where such activity will create a hazard exceeding the design criteria for which the sprinkler system was designed.

2.12.1.3. (1) When a covered mall having a width of 9 m or more has been provided for the purpose of considering each portion of the **building** separated by the mall as a separate **building**, no merchandising or public activities shall be carried on within the 9 m width.

(2) Despite Sentence (1), merchandising or public activities or both may be carried on within the 9 m width where they are **approved** and they do not endanger life safety or alternative measures are taken to provide life safety.

2.12.1.4. **Access to exits** within a covered mall shall be provided and maintained in conformance with Subsection 2.7.1.

2.12.1.5. Where a covered mall is used for merchandising or public activities, the activities shall be arranged so that access to fire protection equipment, including sprinkler control valves, fire hose stations, portable extinguishers and fire alarm stations, is not restricted.

2.12.1.6. Decorative materials used for merchandising or public activities in a covered mall shall conform to Subsection 2.3.2.

2.12.1.7. Where a covered mall is used for the display of fueled equipment, batteries shall be disconnected and caps for fuel tanks shall be locked or secured against tampering.

SECTION 2.13 INSTALLATION OF SMOKE ALARMS

Subsection 2.13.1. Application and Responsibility

Application

2.13.1.1. (1) Subject to Sentences (2) and (3), this Section applies to **suites** of **residential occupancy** and sleeping rooms not within a **dwelling unit**.

(2) This Section does not apply to **buildings** that are subject to Part 9.

(3) This Section does not apply if **smoke alarms** have been installed in the **dwelling unit** or sleeping room not within a **dwelling unit** in accordance with the **Building Code** as it read on or after April 6, 1998.

Landlord is responsible

2.13.1.2. Despite the definition of **owner** in Article 1.4.1.2. of Division A, in the case of a rental **suite**, only the landlord shall be considered to be the **owner** for the purpose of applying Article 1.2.1.1. of Division A to this Section.

Subsection 2.13.2. Installation Requirements

Installation requirements

2.13.2.1. (1) A **smoke alarm** shall be installed

(a) if a sleeping area in a **dwelling unit** is served by a hallway, in the hallway,

(b) if a sleeping area in a **dwelling unit** is not served by a hallway, between the sleeping area and the remainder of the **dwelling unit**,

(c) if a sleeping room is not within a **dwelling unit**, in the sleeping room, and

(d) on each **storey** without a sleeping area in a **dwelling unit**.

(2) A **smoke alarm** shall

(a) be permanently connected to an electrical circuit with no disconnect switch between the overcurrent device and the **smoke alarm**, or

(b) be battery-operated.

(3) A **smoke alarm** shall meet the requirements of CAN/ULC-S531, "Standard for Smoke Alarms".

SECTION 2.14 OUTDOOR PUBLIC AMUSEMENT AREAS

Subsection 2.14.1. General

Application

2.14.1.1. This Section applies to **public amusement areas** located outdoors.

Fire hazards

2.14.1.2. (1) Outdoor **public amusement areas** shall be designed so that they do not create a fire hazard to the public using them.

(2) Hay, straw, shavings, textiles, films or similar combustible materials shall not be used in the design and construction or as decorative features in outdoor **public amusement areas** unless **approved** provisions are made to control the hazard.

Ignition sources

2.14.1.3. Smoking shall not take place and open flames, temporary wiring, heat-producing equipment and similar ignition sources shall not be used if they would create a fire hazard, except in **approved** areas.

Emergency egress

2.14.1.4. (1) Outdoor **public amusement areas** that involve enclosed, confined or otherwise confusing configurations shall be provided with emergency egress points that

(a) have appropriate width, height and capacity for the anticipated number of occupants,

(b) are not more than 15 m travel from any point within the **public amusement area** except as **approved**,

(c) are clearly identified with signs, and

(d) are equipped with lighting providing a minimum lighting level of 10 lx at floor or pathway level for a duration of at least 30 min, where natural lighting is not sufficient in the circumstances.

Fire safety procedures

2.14.1.5. (1) The operator of the outdoor **public amusement area** shall develop and implement written fire safety procedures that include

(a) a means of alerting the persons in the **public amusement area** of a fire emergency and notifying the **fire department**,

(b) evacuation of endangered persons,

(c) appointment and instruction of **supervisory staff** to carry out fire safety duties, and

(d) fire prevention and control of fire hazards.

(2) The procedures described in Sentence (1) shall be made available to the **Chief Fire Official** upon request.

SECTION 2.15 PORTABLE OXYGEN SYSTEMS

Subsection 2.15.1. General

2.15.1.1. This Section applies to portable oxygen systems used for medical purposes in **residential occupancies** and health care facilities.

2.15.1.2. Storage, handling and use of portable oxygen systems shall be in conformance with CSA-Z305.12, “Safe Storage, Handling, and Use of Portable Oxygen Systems in Residential Buildings and Health Care Facilities”.

SECTION 2.16 INSTALLATION OF CARBON MONOXIDE ALARMS

Subsection 2.16.1. Application and Responsibility

Application

2.16.1.1. (1) Subject to Sentence (2), this Section applies to every **building** that contains a **residential occupancy** and

(a) a fuel-burning **appliance**,

(b) a fireplace, or

(c) a **storage garage**.

(2) This Section applies

(a) as of April 15, 2015, in the case of **buildings** that contain no more than six **suites** of **residential occupancy**, and

(b) as of October 15, 2015, in the case of **buildings** that contain more than six **suites** of **residential occupancy**.

Landlord is responsible

2.16.1.2. Despite the definition of **owner** in Article 1.4.1.2. of Division A, in the case of a rental **suite** of **residential occupancy**, only the landlord shall be considered to be the **owner** for the purpose of applying Article 1.2.1.1. of Division A to this Section.

Subsection 2.16.2. Installation Requirements

Installation requirements

2.16.2.1. (1) If a fuel-burning **appliance** or a fireplace is installed in a **suite** of **residential occupancy**, a carbon monoxide alarm shall be installed adjacent to each sleeping area in the **suite**.

(2) If a fuel-burning **appliance** associated with **building** services is installed in a **building**, but not within a **suite** of **residential occupancy**, a carbon monoxide alarm shall be installed

(a) in the **service room** or area where the **appliance** is installed,

(b) adjacent to each sleeping area in each **suite** of **residential occupancy** that has a common wall or common floor/ceiling assembly with the **service room** or area where the **appliance** is installed, and

(c) adjacent to sleeping rooms that are not within a **dwelling unit**.

(3) If a **building** contains a **storage garage**, a carbon monoxide alarm shall be installed

(a) adjacent to each sleeping area in each **suite** of **residential occupancy** that has a common wall or common floor/ceiling assembly with the **storage garage**, and

(b) adjacent to sleeping rooms that are not within a **dwelling unit**.

(4) A carbon monoxide alarm shall

(a) be permanently connected to an electrical circuit with no disconnect switch between the overcurrent device and the carbon monoxide alarm,

(b) be battery-operated, or

(c) be plugged into an electrical receptacle.

(5) A carbon monoxide alarm shall meet the requirements of CSA-6.19, “Residential Carbon Monoxide Alarming Devices” or UL 2034, “Single and Multiple Station Carbon Monoxide Alarms”.

(6) A carbon monoxide alarm shall be mechanically fixed, attached, plugged in or placed at the manufacturer’s recommended height or, if the manufacturer has not recommended a height, on or near the ceiling.

(7) A carbon monoxide alarm that is installed adjacent to a sleeping area shall be equipped with an alarm that is audible throughout the sleeping area, even if any doors between the carbon monoxide alarm and any parts of the sleeping area are closed.

O. Reg. 213/07, Division B, Part 2; O. Reg. 150/13, ss. 4-12; O. Reg. 194/14, ss. 5, 6; O. Reg. 256/14, ss. 4-46; O. Reg. 275/14, ss. 1-4.

PART 3
OUTDOOR AND INDOOR STORAGE

SECTION 3.1 GENERAL

Subsection 3.1.1. Application

Application

3.1.1.1. This Part applies to the use, storage and handling of hazardous materials and combustible materials.

SECTION 3.2 OUTDOOR STORAGE

Subsection 3.2.1. Outdoor Storage of Tires

Application

3.2.1.1. (1) This Subsection applies to outdoor tire storage yards where tires or shredded tires are stored if the bulk volume of the stored product exceeds 300 m^3.

(2) This Subsection does not apply if the stored tires or shredded tires in the storage yard are covered by a minimum depth of 150 mm of noncombustible material.

Fire protection provisions

3.2.1.2. (1) Open-air burning of tires or shredded tires shall not take place in storage yards.

(2) Hot works or heating devices shall not be operated in storage yards.

(3) Smoking shall not take place in storage yards, except as provided in Subsection 2.4.3.

(4) Storage piles of tires or shredded tires in storage yards shall not be located beneath electrical power lines with a voltage in excess of 750 volts or that supply power to fire emergency systems.

Fire safety planning

3.2.1.3. (1) Storage yards shall comply with the requirements of Section 2.8.

(2) The fire safety plan shall include provisions respecting access within the **fire department** access routes for water supply systems or other measures that are **approved** under Article 3.2.1.10.

(3) At least one copy of the fire emergency procedures shall be prominently posted and maintained at the storage yard.

(4) The telephone number of the **fire department** and location of the nearest telephone shall be posted conspicuously in attended locations.

Pile dimensions, locations and clearance

3.2.1.4. (1) Individual storage piles of tires or shredded tires in a storage yard shall not be more than 3 m in height and 100 m^2 in area.

(2) Despite Article 3.5.2.1., storage piles of tires or shredded tires in a storage yard shall be located

(a) at least 15 m from property lines,

(b) at least 15 m from **buildings**,

(c) at least 4.5 m from combustible ground vegetation comprised of grass and weeds, and

(d) at least 30 m away from combustible ground vegetation comprised of brush and forested areas.

(3) Despite Article 3.5.2.2., individual storage piles of tires or shredded tires in a storage yard shall be separated

(a) from other individual storage piles of tires or shredded tires by a clear space of at least 6 m, and

(b) from other individual storage piles by a clear space of at least 6 m.

Clearance for bulk volume over 4800 m^3

3.2.1.5. (1) This Article applies if the bulk volume of stored tires and shredded tires in a storage yard is more than 4800 m^3.

(2) The tires and shredded tires shall be stored in a group of no more than 16 individual storage piles.

(3) A minimum clearance of 22 m shall be provided around the perimeter of each group of storage piles.

Alternative approved measures

3.2.1.6. Despite Articles 3.2.1.4. and 3.2.1.5., other **approved** storage pile arrangements may be used to prevent the spread of fire.

Fire department access

3.2.1.7. (1) Each storage yard shall be provided with fire access routes.

(2) The fire access routes shall

(a) have a clear width of at least 6 m,

(b) be designed to support the loads imposed by fire fighting equipment,

(c) be surfaced with material designed to permit accessibility under all climatic conditions,

(d) be connected with a public thoroughfare in at least two places that are located as remotely from each other as is possible in the circumstances,

(e) be located within all storage pile clearances identified in Clauses 3.2.1.4.(2)(a) and (b) and Article 3.2.1.5.,

(f) be at least 6 m away from any storage pile,

(g) be accessible and unobstructed at all times, and

(h) be located so that every point in the storage yard where storage piles are located is within 50 m of a fire access route.

(3) Despite Sentences (1) and (2), alternate fire access routes may be provided if

(a) the routes permit fire fighting vehicles and equipment access and permit the use of fire suppression techniques appropriate in the circumstances, and

(b) the routes are **approved**.

Fencing and gateways

3.2.1.8. (1) If the bulk volume of stored tires and shredded tires is more than 600 m^3, the storage yard shall be surrounded by a firmly anchored fence or other **approved** method of security that controls unauthorized access to the storage yard.

(2) If a fence is used, the fence shall be at least 1.8 m high and constructed to discourage climbing.

(3) The fence shall have gateways with a clear width of at least 3.5 m.

(4) The gateways shall be high enough to permit the entry of **fire department** vehicles.

(5) The gateways shall be kept clear of obstructions so that the gates may be fully opened at all times.

(6) The gateways shall be locked when the storage yard is not staffed.

Water supply

3.2.1.9. (1) A public or private water supply shall be provided so that any part of the storage yard can be reached by using not more than 150 m of hose.

(2) If the bulk volume of stored tires and shredded tires is between 300 m^3 and 1200 m^3, the water supply system shall be capable of supplying at least 1860 L/min for a minimum of 3 h.

(3) If the quantity of stored product is 1200 m^3 or more, the water supply system shall be capable of supplying at least 3780 L/min for a minimum of 3 h.

(4) If on-site reservoirs or other established water supplies are used as a **fire department** draft source to meet the requirements of Sentences (1), (2) and (3), they shall be equipped with dry hydrants in accordance with Chapter 9 of NFPA 1142, "Standard on Water Supplies for Suburban and Rural Fire Fighting".

Water supply alternative measures

3.2.1.10. Despite Article 3.2.1.9., other water supply systems or other measures may be used if the systems or measures will provide sufficient fire suppression capability in the circumstances and if the systems or measures are **approved**.

Portable extinguishers

3.2.1.11. A motorized vehicle operating in a storage yard shall be equipped with at least one portable extinguisher having a minimum rating of 2A:30B:C.

Subsection 3.2.2. Outdoor Storage of Lumber and Forest Products

Application

3.2.2.1. (1) Subject to Sentence (2), this Subsection applies to outdoor storage yards where lumber and forest products are stored.

(2) This Subsection does not apply if

(a) the storage yard is **approved** and does not create a fire hazard or endanger life safety, or

(b) the storage yard is **approved** and **approved** alternative measures to the requirements set out in this Subsection are taken to prevent the creation of a fire hazard and protect life safety.

Surface of ground

3.2.2.2. (1) Except as permitted in Sentence (2) and Article 3.2.2.3., storage sites for lumber and other forest products shall consist of level and solid ground that is paved or surfaced with noncombustible material.

(2) Soft storage beds may be used for logs where embedment of stones or cinders may cause damage to cutting knives.

Surface under piling

3.2.2.3. (1) Forest products shall not be piled on refuse-filled or sawdust-filled land except where the site is covered with a layer of compacted earth to a minimum depth of 150 mm.

(2) Peat and humus are not acceptable materials for compacted earth cover in Sentence (1).

Clearance for yard storage areas

3.2.2.4. (1) Fire exposure to the yard areas from the mill operations and other structures shall be limited by providing clear space.

(2) The width of clear space shall be based upon the severity of exposure that will vary with the area, height, **occupancy**, construction and protection of the exposing structure and the type of piling and height of adjacent lumber piles.

(3) To provide for fire fighting operations, the clear space permanently available shall not be less than 4.5 m.

Clearance for stickered lumber piles

3.2.2.5. (1) Stickered lumber piles in storage yards shall be located at least 15 m from property lines and **buildings**.

(2) Large size timbers and flat-piled stock may be stored or piled on the perimeter of the yard.

Clearance from vegetation

3.2.2.6. Storage yards shall be maintained free of combustible ground vegetation, including grass and weeds, for 4.5 m from the stored material and 30 m from brush and forested areas.

Wood waste accumulation prohibited

3.2.2.7. Sawdust, chips and other waste material shall not be accumulated in piling areas in storage yards.

Separation of treated lumber piles

3.2.2.8. Lumber and timber treated with **combustible liquids** shall be stored in piles that are separated from other stored material so that the distance between piles is at least twice the height of the treated pile, but not less than 4.5 m.

Storage beneath power lines

3.2.2.9. Stickered lumber piles, and piles of lumber and timber treated with **combustible liquids** shall not be stored beneath electrical power lines having a voltage in excess of 750 volts or that supply power to fire emergency systems.

Pile heights

3.2.2.10. Pile heights for stickered lumber piles shall not exceed 6 m.

3.2.2.11. Pile heights for randomly stacked or unranked piles shall not exceed 6 m unless special fire suppression equipment, such as portable turrets, deluge sets and monitor towers, is installed.

Fire department access

3.2.2.12. (1) Unless otherwise **approved**, each storage yard shall be provided with at least two fire access routes in conformance with Sentence (2).

(2) The fire access routes required in Sentence (1) shall

(a) have a clear width of at least 6 m, unless it can be shown that lesser widths are satisfactory,

(b) be designed to support the expected loads imposed by fire fighting equipment and be surfaced with concrete, asphalt or other material designed to permit accessibility under all climatic conditions,

(c) be connected with a public thoroughfare, and

(d) be located as remotely as is possible in the circumstances from each other.

3.2.2.13. (1) Where storage areas are fenced or otherwise enclosed, gateways having a clear width of at least 3.5 m shall be provided to permit entry of **fire department** vehicles.

(2) Gateways shall be kept clear of obstructions so that gates may be opened fully at all times.

3.2.2.14. Groups of lumber piles shall be arranged with a maximum width of 15 m and a maximum length of 45 m, with **fire department** access routes surrounding each group of piles.

3.2.2.15. Vehicle parking and equipment storage is permitted on one side of a fire access route provided the clear width of the access route, as required under Clause 3.2.2.12.(2)(a), is maintained.

3.2.2.16. RESERVED

Burning of wood waste materials

3.2.2.17. Shavings, sawdust and refuse materials shall be burned only in **boilers** or **furnaces**, or in incinerators or refuse burners conforming to Subsection 2.6.3.

3.2.2.18. Refuse burners or incinerators referred to in Article 3.2.2.17. shall be located at least 15 m from **buildings**, property lines or piles of logs or lumber.

3.2.2.19. Where the size and design of the burner or spark-arresting screen, the prevailing winds or the location and arrangement of yard storage creates a fire hazard by conforming to Article 3.2.2.18., an **approved** increase in clear space referred to in Article 3.2.2.18. shall be provided to alleviate the fire hazard.

3.2.2.20. A refuse bin conforming to Sentence 2.4.1.3.(3) shall be provided at each **boiler**, **furnace**, incinerator and refuse burner referred to in Article 3.2.2.17.

3.2.2.21. Salamanders, braziers or other open flames shall not be used in storage yards.

Smoking prohibited

3.2.2.22. Smoking shall not take place in storage yards, except as provided in Subsection 2.4.3.

3.2.2.23. The telephone number of the **fire department** and location of the nearest telephones shall be posted conspicuously in working locations in the open yard and in each **building**.

Fire extinguishing provisions

3.2.2.24. (1) Outdoor lumber storage shall have fire protection provisions consisting of

(a) 200 L vessels with lids, having an opening of 457 mm least dimensions, located so that no person will have to travel more than 25 m from any part of the storage yard to reach a vessel, and

(b) three 12 L standard fire pails at each vessel.

(2) The water stored in the vessels and pump tanks shall be protected from freezing.

(3) The vessels, pails and pump tanks shall be painted red with the word “FIRE” in black painted thereon.

(4) Portable extinguishers having a 2A or higher rating conforming to the requirements of Section 6.2 may be provided in lieu of the requirements of Sentence (1).

3.2.2.25. Portable extinguishers shall be provided in conformance with Section 6.2 in each **building** located in a storage yard.

Hydrant systems and water supply

3.2.2.26. The water supply available shall be adequate for hose streams and monitor towers, based on the provision of **approved** fire protection.

Hydrant system

3.2.2.27. A storage yard shall be provided with a hydrant system or mobile pumping equipment that can reach all parts of the storage yard with no more than 60 m of hose.

Subsection 3.2.3. Outdoor Storage of Wood Chips

Application

3.2.3.1. (1) Subject to Sentence (2), this Subsection applies to outdoor storage yards where wood chips are stored.

(2) This Subsection does not apply if

(a) the storage yard is **approved** and does not create a fire hazard or endanger life safety, or

(b) the storage yard is **approved** and **approved** alternative measures to the requirements set out in this Subsection are taken to prevent the creation of a fire hazard and protect life safety.

Surface of ground

3.2.3.2. The storage site shall be well drained and be level, solid ground or paved with asphalt, concrete or other hard surface material.

3.2.3.3. The ground surface between piles shall be kept free of combustible materials.

Vegetation removal

3.2.3.4. (1) Weeds, grass and similar vegetation shall be removed from the yard.

(2) Portable open-flame weed burners shall not be used in chip storage yards.

Pile dimensions

3.2.3.5. Piles shall not exceed 18 m in height, 90 m in width and 150 m in length unless temporary water pipes with hose connections are laid on the top surface of the pile.

Fire department access

3.2.3.6. (1) Space shall be maintained between chip piles and exposing structures, yard equipment or stock equal to

(a) twice the pile height for combustible stock or **buildings**, or

(b) the pile height for noncombustible **buildings** and equipment.

(2) Despite Sentence (1), space between chip piles and exposing structures, yard equipment or stock shall not be less than 9 m.

3.2.3.7. Where storage areas are fenced or otherwise enclosed, gates at least 3.5 m in width shall be provided to permit entry of **fire department** vehicles.

3.2.3.8. (1) Permanently installed access walkways at least 1.8 m wide and constructed of noncombustible material shall be provided so that hose streams may be directed on any part of the piles.

(2) Despite Sentence (1), other **approved** means may be used to ensure adequate **fire department** access to the piles.

3.2.3.9. Piles exceeding 150 m in length shall be surrounded by **fire department** access routes at least 9 m wide.

Smoking prohibited

3.2.3.10. Smoking shall not take place in storage yards, except as provided in Subsection 2.4.3.

Fire extinguishing provisions

3.2.3.11. Portable extinguishers for **Class A fires** shall be provided on vehicles operating on chip piles in addition to the units for **Class B fires** normally required for the vehicles.

3.2.3.12. (1) Hose houses or cabinets shall be provided around the perimeter of chip piles at intervals not exceeding 120 m.

(2) One 75 m length of 65 mm hose and two portable extinguishers having a 2A or higher rating and conforming to Section 6.2 shall be installed in each hose house or cabinet.

(3) Each hose required in Sentence (2) shall be connected to a water supply capable of supplying 1140 L/min of water to it at a pressure that will allow the hose stream to reach the top of the chip pile.

3.2.3.13. Portable extinguishers in conformance with Section 6.2 shall be provided in transfer houses.

SECTION 3.3 INDOOR STORAGE

Subsection 3.3.1. Indoor Tire Storage

Application

3.3.1.1. This Subsection applies to **buildings** used for the storage of tires in which the bulk volume of tires stored in one **fire compartment** exceeds 425 m^3.

Tire pile dimensions

3.3.1.2. A single pile of tires in a tire storage location shall occupy an area not greater than 500 m^2 with a maximum length of 30 m.

3.3.1.3. (1) The maximum piling height of tires shall not exceed the height used for the design of the fixed extinguishing system installed as required in Article 3.3.1.8.

(2) The maximum piling height allowed in Sentence (1) shall be posted in conspicuous locations.

Pile clearance

3.3.1.4. A clearance of at least 914 mm shall be maintained between the tops of piles and sprinkler head deflectors.

3.3.1.5. Aisles between individual piles shall be at least 1.8 m wide.

3.3.1.6. A clearance of at least 600 mm shall be maintained between piles of tires and columns and enclosing walls.

3.3.1.7. A tire storage location shall be classified as a **medium hazard industrial occupancy**.

Warehouse fire extinguishing systems

3.3.1.8. (1) If the **floor area** of a tire storage location exceeds 250 m^2, the **floor area** shall be provided with a sprinkler system installed in accordance with NFPA 13, “Standard for the Installation of Sprinkler Systems”.

(2) The design of the sprinkler system required in Sentence (1) shall be based on the maximum piling height available.

3.3.1.9. A standpipe and hose system shall be installed in conformance with NFPA 13, “Standard for the Installation of Sprinkler Systems”.

Portable extinguishers

3.3.1.10. (1) In addition to the requirements of Section 6.2, multi-purpose dry chemical portable extinguishers having a rating of 4A:80B shall be installed

(a) in every 500 m^2 of **floor area**, and

(b) so that the distance travelled to any extinguisher does not exceed 25 m.

Subsection 3.3.2 Indoor General Storage

Application

3.3.2.1. (1) Subject to Sentences (2) and (3), this Subsection applies to the indoor general storage of combustible solids, noncombustible solids with combustible packaging or storage aids, including storage in bin boxes, shelves or **racks**.

(2) This Subsection, except Article 3.3.2.6., does not apply to special hazard commodities covered elsewhere in this Code.

(3) This Subsection does not apply to the bulk storage of unpackaged grain, coal or similar commodities.

Storage dimensions

3.3.2.2. (1) An **individual storage area** shall not exceed 500 m^2 in **buildings** that are not **sprinklered**.

(2) An individual storage area shall not exceed 1000 m^2 in **sprinklered buildings**.

(3) Heights of storage in **buildings** that are not **sprinklered** shall not exceed 4.5 m.

(4) The maximum height of storage of any **individual storage area** shall be determined according to

(a) the stability of the stored products as it relates to the base area and shape, and

(b) the height limitations otherwise set in this Subsection.

(5) **Buildings** containing **individual storage areas** that exceed 6.4 m in height shall be protected with

(a) a sprinkler system designed and installed in accordance with NFPA 13, “Standard for the Installation of Sprinkler Systems”, or

(b) a sprinkler system installed before January 1, 2015 that has been **approved**.

Pile clearance

3.3.2.3. (1) The clearance between sprinkler head deflectors and the top of any storage shall not be less than 457 mm.

(2) Where the top of any storage is above the lower chords of floor or roof structural framing members, a horizontal clear space of at least 300 mm shall be maintained between the storage and the structural members.

Fire access aisles

3.3.2.4. At least one main aisle having a width equal to at least half the height of the highest adjacent pile and extending the length of the structure shall be provided but in no case shall the width of the aisle be less than 2.4 m.

3.3.2.5. Aisles separating **individual storage areas** described in Article 3.3.2.2. shall be at least 2.4 m wide.

3.3.2.6. (1) Adequate access for fire fighting purposes shall be provided and maintained to all portions of the premises, in conformance with Sentences (2) to (6).

(2) Access aisles not less than 1.0 m wide shall be provided to **exits**, to **fire department** access panels and to fire protection equipment.

(3) Aisles shall be maintained free of obstruction.

(4) Except as permitted by Sentence (5), at least one main access aisle shall extend the length of the **building** with a minimum width of

(a) 2.4 m for storage heights not more than 6 m, and

(b) 3.6 m for storage heights of more than 6 m.

(5) Narrower aisles may be **approved** where the **building** is **sprinklered** and the sprinkler design is based on aisle widths less than required by Sentence (4) but in no case shall the aisle width be less than the aisle width on which the sprinkler design is based.

(6) In storage areas that exceed 200 m^2, main access aisles referred to in Sentence (4) shall be accessible from at least two **fire department** access points, which shall be located such that, in the event one becomes unusable due to fire, the other will still allow emergency responders to access the **building**.

3.3.2.7. Wall clearances of at least 600 mm shall be maintained where stored commodities may swell or expand with the absorption of water.

Palletized storage arrangements

3.3.2.8. Palletized storage shall be arranged so that unobstructed horizontal channels formed by the top and bottom of pallets shall not exceed 15 m.

3.3.2.9. Except as permitted in Article 3.3.2.10., pallets and dunnage not in use shall be stored outdoors and be located so as to avoid an exposure hazard.

Pallet storage

3.3.2.10. (1) Except as permitted in Sentences (2) and (3), combustible pallets shall be stored outdoors in conformance with Section 2.4.

(2) Indoor storage of combustible pallets is permitted in a **building** that is not **sprinklered**, provided

(a) the height of storage of combustible pallets is not more than 1.2 m,

(b) the width of an **individual storage area** is not more than 7.5 m, and

(c) the aggregate area of storage is not more than

(i) 100 m^2 for wood or solid deck non-expanded polyethylene pallets, or

(ii) 50 m^2 for plastic pallets not described in Subclause (i).

(3) In a **sprinklered building**, the storage of combustible pallets is permitted to exceed the values in Sentence (2) provided such storage conforms to NFPA 13, “Standard for the Installation of Sprinkler Systems”.

Smoking prohibited

3.3.2.11. Smoking shall not take place in indoor storage areas, except as provided in Subsection 2.4.3.

Subsection 3.3.3. Indoor Storage of Ammonium Nitrate

Application

3.3.3.1. (1) This Subsection applies to the storage of ammonium nitrate in a pure form or in a mixture, if

(a) the storage exceeds 1000 kg, and

(b) the mixture contains 60% or more ammonium nitrate by weight.

(2) This Subsection does not apply to

(a) blasting agents, or

(b) ammonium nitrate and ammonium nitrate mixture storage on railways regulated by the Canadian Transport Commission.

Storage buildings

3.3.3.2. (1) A **building** used for the storage of ammonium nitrate shall not be more than 1 **storey** in **building height**.

(2) A **building** used for the storage of ammonium nitrate shall not

(a) have **basements** or crawl spaces, or

(b) contain open floor drains, tunnels, elevator pits or other pockets which might trap molten ammonium nitrate.

(3) A **building** used for the storage of ammonium nitrate shall have not less than 70 cm^2 in vent area for each square metre of storage area unless mechanical ventilation is provided.

(4) All flooring in storage areas shall be of noncombustible materials.

(5) A **building** used for the bulk storage of ammonium nitrate shall be designed to prevent contact with **building** material that

(a) will cause the ammonium nitrate to become unstable,

(b) may corrode or deteriorate by reason of contact with the ammonium nitrate, or

(c) will become impregnated by ammonium nitrate.

(6) The distance between an ammonium nitrate storage facility and the property line of another property shall be not less than

(a) 15 m where the other property contains a warehouse for **flammable liquids** storage or a facility for loading or unloading **flammable liquids**,

(b) 15 m where the other property contains a **building** classified as **medium hazard industrial occupancy** or **low hazard industrial occupancy** provided the ammonium nitrate storage facility does not exceed 200 t of ammonium nitrate,

(c) 30 m where the other property contains a **building** classified as **industrial occupancy** not covered in Clause (b), **flammable liquids storage tanks**, flammable gas **storage tanks** or other tanks containing a hazardous substance, or

(d) 90 m for all other **occupancies**.

(7) The distance in Clause (6)(b) may be reduced to 7.5 m if a **firewall** that has a **fire-resistance rating** not less than 2 h is provided between the storage facility and the **building** it exposes.

(8) The distance in Clause (6)(c) may be reduced to 15 m for a **medium hazard industrial occupancy** or a **low hazard industrial occupancy** if a **firewall** that has a **fire-resistance rating** not less than 2 h is provided between the storage facility and the **building** it exposes.

(9) The use of **buildings** or structures that do not conform with the provisions of Sentences (6) to (8) may be **approved** where the **buildings** or structures do not constitute a hazard to life or property from fire or explosion.

(10) Except where other forms of exposure protection are **approved**, the walls of the exposed side of a storage **building** shall be noncombustible where such walls are within 15 m of a

(a) combustible **building**,

(b) forest, or

(c) pile of combustible material.

Industrial trucks

3.3.3.3. (1) In addition to the requirements of Section 3.4, industrial trucks used or stored within the **building** shall be maintained so that fuels or hydraulic fluids do not contaminate the ammonium nitrate.

(2) Fuel-dispensing operations shall not be carried out in **buildings** where ammonium nitrate is stored.

(3) An internal combustion engine shall be continuously monitored at all times in a **building** where ammonium nitrate is stored unless the engine is located in an area that will prevent the spread of a fire originating in the engine.

(4) Industrial trucks used for the transportation of ammonium nitrate shall be cleaned of remaining material following use.

Portable extinguishers

3.3.3.4. In addition to the requirements of Section 6.2, pressurized-water portable extinguishers having a rating of 2A or larger shall be installed.

Storage

3.3.3.5. (1) **Individual storage areas** of bagged ammonium nitrate shall not exceed 1500 m^2 in area and 9 m in height.

(2) Bags of ammonium nitrate shall not be stored closer than 400 mm from walls and **partitions** and not closer than 900 mm from a roof, overhead supporting beam or a sprinkler head deflector.

(3) Ammonium nitrate shall not be stored in an area where the ambient temperature is such that it can become unstable or susceptible to undesirable reactions.

(4) Ammonium nitrate storage shall be identified by signs of contrasting colours indicating the contents with letters 50 mm high.

(5) Bulk storage of ammonium nitrate shall be located indoors or in enclosed bin-type structures.

(6) Bins used for the storage of ammonium nitrate shall not contain galvanized iron, copper, lead or zinc, or other materials that may contaminate or be corroded by ammonium nitrate.

Automatic sprinklers

3.3.3.6. (1) Ammonium nitrate shall be stored only in **buildings** equipped with an automatic sprinkler system installed in conformance with NFPA 13, “Standard for the Installation of Sprinkler Systems”.

(2) Sentence (1) does not apply where the existing situation is **approved** and does not endanger life safety or alternative measures to the requirements set out in Sentence (1) are taken to provide life safety.

Disposal

3.3.3.7. (1) Spilled ammonium nitrate material shall be disposed of in conformance with Sentences (2) to (5).

(2) Uncontaminated material may be rebagged in suitable slip-over bags and sealed to prevent spillage.

(3) Unsalvageable material shall be removed by sweeping and burial.

(4) After flushing and scrubbing contaminated areas very thoroughly to dissolve all material, the residue shall be washed away with hoses.

(5) Empty bags shall be disposed of by burning outdoors where permitted in a safe area, or by burial.

Explosives prohibited

3.3.3.8. Explosives shall not be used to break up caked ammonium nitrate.

Smoking and open flames prohibited

3.3.3.9. (1) Smoking shall not take place and open flames shall not be used in **buildings** used for the storage of ammonium nitrate.

(2) Signs with letters 50 mm high indicating that ammonium nitrate is being stored and that smoking is not permitted shall be prominently displayed near each entrance on the exterior of **buildings** identified in Sentence (1).

Heating equipment

3.3.3.10. Heating equipment shall be separated from any storage area in conformance with the requirements of the **Building Code**.

Subsection 3.3.4. Indoor Storage of Combustible Fibres

Application

3.3.4.1. This Subsection applies to the indoor storage of **combustible fibres**.

Building size for storage and handling of combustible fibres

3.3.4.2. **Buildings** used for the storage and handling of **combustible fibres** shall comply with the height and area limitations of the **Building Code** for **medium hazard industrial occupancies**.

Loose fibre storage

3.3.4.3. (1) Up to 3 m^3 of loose **combustible fibres** may be stored in a single **fire compartment** if they are kept in metal-lined bins equipped with self-closing metal-lined covers.

(2) Quantities of loose **combustible fibres** exceeding 3 m^3 but not exceeding 15 m^3 shall be stored in rooms separated from the remainder of the **building** by a **fire separation** that has a **fire-resistance rating** not less than 1 h.

(3) Quantities of loose **combustible fibres** exceeding 15 m^3 but not exceeding 30 m^3 shall be stored in rooms separated from the remainder of the **building** by a **fire separation** that has a **fire-resistance rating** not less than 2 h.

(4) Quantities of loose **combustible fibres** that exceed 30 m^3 shall be stored in an individual room

(a) that is **sprinklered** in accordance with NFPA 13, “Standard for the Installation of Sprinkler Systems”, and

(b) that is separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 2 h.

(5) Quantities of loose **combustible fibres** stored in an individual room referred to in Sentence (4) shall be arranged so that an individual pile does not exceed 250 m^2 in area and is separated from other piles by aisles that are at least 2.4 m wide.

(6) Clause (4)(a) does not apply to a sprinkler system that met the requirements of this Code on December 31, 2014, as it read on that day.

Baled fibre storage

3.3.4.4. (1) Baled **combustible fibres** shall be stored so that

(a) a single pile will not contain more than 700 m^3,

(b) the maximum height of any single pile will not exceed 4.5 m,

(c) piles are separated by aisles not less than 1.5 m wide, and

(d) the clearance between piles and **building** walls is not less than 1 m.

Baled storage piles

3.3.4.5. The sides of baled storage piles shall be inclined back from the base of the pile with a slope of not less than 1 m for each 10 m of height.

Clearance for sprinklers and structural framing

3.3.4.6. (1) The clearance between sprinkler head deflectors and the tops of storage piles shall not be less than 457 mm.

(2) If the storage piles are above the lower chords of floor or roof structural framing members, a horizontal clear space of 300 mm shall be maintained between the storage and the structural members.

Heating equipment

3.3.4.7. (1) Unless controlled in a manner that will not create a fire or explosion hazard, fuel-fired **appliances** and electrical heating elements shall not be used in a storage area for **combustible fibres**.

(2) Shields shall be provided that will prevent stored material from coming within 300 mm of any part of a heating system heat distribution network.

Standpipe and hose system installations

3.3.4.8. Standpipe and hose systems shall be installed in accordance with the **Building Code**.

Portable extinguishers

3.3.4.9. Portable extinguishers shall be provided in accordance with Section 6.2.

Smoke vents

3.3.4.10. If **combustible fibres** are stored in a **building**, automatic smoke venting hatches that are manually operable from remote locations and have a combined opening area of 64 cm^2 for each square metre of **floor area** shall be provided.

Subsection 3.3.5. Indoor Storage of Matches

Classification, labelling and packaging

3.3.5.1. Matches shall be classified, packaged and labelled in accordance with the **Transportation of Dangerous Goods Act (Canada)**.

Storage compartment

3.3.5.2. If the aggregate volume of piles of stored matches exceeds 3 m^3, storage compartments shall be constructed in accordance with the requirements of the **Building Code** for **high hazard industrial occupancies**.

Carton pile arrangements

3.3.5.3. In a storage area with an aggregate volume of piles of stored matches that exceeds 3 m^3, shipping cartons containing matches shall be arranged in piles not exceeding 3 m in height or 40 m^3 in volume, with each pile separated by aisles at least 2.4 m wide.

Mixed storage

3.3.5.4. In mixed storage areas, matches shall be stored in a specific area separated from the remainder of the storage by a clear space of at least 2.4 m.

Storage restrictions

3.3.5.5. Matches shall not be stored within 3 m of any elevator shaft opening, stairway or other vertical opening.

SECTION 3.4 INDUSTRIAL TRUCKS

Subsection 3.4.1. General

General

3.4.1.1. The designation, use, maintenance and operation of industrial trucks, including fork lifts, tractors, sweepers and motorized hand trucks, shall comply with NFPA 505, “Fire Safety Standard for Powered Industrial Trucks Including Type Designations, Areas of Use, Conversions, Maintenance, and Operation”.

Subsection 3.4.2. Industrial Trucks

Fuel-fired industrial trucks

3.4.2.1. (1) Fuel-fired industrial trucks shall be stored in

(a) detached **buildings**,

(b) areas separated from the remainder of the storage area by a **fire separation** having a **fire-resistance rating** of not less than 1 h, or

(c) areas where the vehicles do not create a fire hazard to the storage area.

(2) Except as provided in Sentence (3), industrial trucks shall be refuelled only at designated locations outside **buildings**.

(3) Industrial trucks that are fuelled by replaceable propane cylinders are permitted to have their cylinders replaced indoors provided

(a) cylinder replacement is done at a safe location that is at least 7.5 m from ignition sources, open pits and underground entrances,

(b) the cylinder valves are closed, and

(c) when an automatic quick-closing coupling that closes in both directions when uncoupled and **listed** to ANSI/UL 558, “Industrial Trucks, Internal Combustion Engine-Powered”, is not provided, the engine is operated until the fuel in the system is consumed.

(4) Each fuel-fired industrial truck shall be equipped with at least one portable extinguisher having a minimum rating of 2A:30B:C.

(5) Propane cylinders shall be stored in conformance with Section 5.6.

Battery-powered industrial trucks

3.4.2.2. (1) Battery charging installations for battery-powered industrial trucks shall be located

(a) at least 1.5 m from combustible materials,

(b) when serving more than two trucks, in well ventilated areas,

(c) in areas where flammable gases or vapours, **combustible dusts** or **combustible fibres** are not present in hazardous quantities, and

(d) in areas where precautions are taken to prevent ignition sources, such as open flames, sparks or electric arcs.

(2) Battery charging installations for battery-powered industrial trucks shall be equipped with at least one portable extinguisher having a minimum rating of 2A:30B:C.

(3) Facilities shall be provided at battery charging installations for flushing and neutralizing spilled electrolyte and for protecting charging apparatus from mechanical damage.

Training

3.4.2.3. (1) Only trained and authorized personnel shall

(a) operate industrial trucks,

(b) replace or refuel propane cylinders for fuel-fired industrial trucks,

(c) refuel fuel-fired industrial trucks, or

(d) change or charge batteries for battery-powered industrial trucks.

SECTION 3.5 SALVAGE SHOPS AND SALVAGE YARDS

Subsection 3.5.1. General

Roof storage prohibited

3.5.1.1. The roof of a **building** located in a salvage yard shall not be used for storage purposes.

Fires prohibited

3.5.1.2. Open flames shall not be used in a salvage yard, except for the purposes of heating, operating machinery or performing hot works.

3.5.1.3. Gas tanks on vehicles to be salvaged shall be drained and ventilated prior to salvage operations.

Fire access gates

3.5.1.4. Where storage areas are fenced or otherwise enclosed, gates having a clear width of 3.5 m shall be provided to permit the entry of **fire department** vehicles.

Fire extinguishing provisions

3.5.1.5. Except where all salvage and scrap material is noncombustible and free of combustibles, water barrels of 200 L capacity with three 12 L pails or portable extinguishers having a 2A or higher rating conforming to the requirements of Section 6.2 shall be provided, so that the maximum distance travelled from any part of the yard to a barrel or extinguisher is 25 m.

3.5.1.6. Portable extinguishers in conformance with Section 6.2 shall be provided in each **building** located in a salvage yard.

Hydrant systems and water supply

3.5.1.7. Except as required in Article 3.5.1.8., where a municipal hydrant system exists and is adjacent to the yard, the hydrant system shall be extended into the yard area so that all parts of the salvage yard can be reached by using not more than 60 m of hose.

3.5.1.8. Article 3.5.1.7. does not apply where the fire protection that is provided by the municipal hydrants and mobile pumping equipment is **approved** as being adequate in the circumstances.

Smoking prohibited

3.5.1.9. Smoking shall not take place in salvage yards, except as provided in Subsection 2.4.3.

3.5.1.10. The telephone number of the **fire department** and location of the nearest telephones shall be posted conspicuously in working locations in the open yard and in each **building**.

Subsection 3.5.2. Piling

Pile clearance and dimensions

3.5.2.1. Piles that include combustible salvage shall be 3 m from property lines, and not more than 3 m in height and 100 m^2 in area.

3.5.2.2. Piles of salvage material shall be separated by a clear space of 3 m that is kept clear of grass and weeds.

Piles of tanks or drums

3.5.2.3. Tanks or drums shall be stored in piles separate from piles of other materials.

Combustible metals

3.5.2.4. (1) Piles or containers with metal shavings, turnings and dusts shall be stored in an area separate from other salvage materials and identified with warning signs.

(2) Warning signs required in Sentence (1) shall

(a) be visible from all directions of approach, and

(b) have the name of the metal and the words “COMBUSTIBLE METAL — DO NOT USE WATER” displayed in plain legible letters as described in Sentence (3).

(3) Lettering on warning signs shall be red or white letters 114 mm high with a 19 mm stroke on a contrasting background.

Subsection 3.5.3. REVOKED: O. Reg. 256/14, s. 76.

SECTION 3.6, 3.7 REVOKED: O. Reg. 256/14, s. 77.

O. Reg. 213/07, Division B, Part 3; O. Reg. 256/14, ss. 48-77.

PART 4
FLAMMABLE LIQUIDS AND COMBUSTIBLE LIQUIDS

SECTION 4.1 GENERAL

Subsection 4.1.1. Application and Compliance

Application and interpretation

4.1.1.1. (1) This Part applies to the storage, handling, processing, dispensing and use, in **buildings**, structures and open areas, of

(a) **flammable liquids,**

(b) **combustible liquids**, and

(c) liquids with **flash points** greater than 93.3°C, when processed, stored, handled or used at temperatures above their **flash points**.

(2) For the purposes of this Part,

"existing" means in existence on November 21, 1997;

"in-service" means installed and in use.

Application

4.1.1.2. (1) Areas in **process plants** need not conform to this Part where specific hazards are addressed by design and operational procedures that meet recognized standards and equivalent protection is provided.

(2) Except as specifically provided elsewhere in this Part, this Part does not apply to

(a) the transportation of **flammable liquids** or **combustible liquids** to which the **Transportation of Dangerous Goods Act (Canada)** and its regulations, or the **Dangerous Goods Transportation Act** and its regulations apply,

(b) the storage, handling, transportation and use of **flammable liquids** or **combustible liquids** to which the **Technical Standards and Safety Act, 2000** and its regulations apply,

(c) the storage, handling and use of **flammable liquids** or **combustible liquids** at airports, piers and wharves regulated under federal law,

(d) underground areas to which the **Occupational Health and Safety Act** and its regulations apply,

(e) the storage of aerosol products that fall under the scope of Subsection 3.2.5. of Division B of NRC, "National Fire Code of Canada", and

(f) the storage of **flammable liquids** or **combustible liquids** on farms for individual farm use.

Compliance

4.1.1.3. Existing conditions are acceptable with respect to Articles 4.3.2.1., 4.3.2.2., 4.3.2.3. and 4.3.8.2. and Sentence 4.3.8.1.(4) until replacement or relocation of a tank is carried out, at which time these requirements shall apply.

Compliance equivalency

4.1.1.4. (1) The composition, design, size and arrangement of any material, object, device or thing is deemed to be in compliance with this Part where

(a) the material, object, device or thing provides a level of protection with respect to strength, health and safety that is equal to or greater than that prescribed in this Part,

(b) the compliance equivalency in Clause (a) has been **approved**, and

(c) the compliance equivalency has been implemented.

(2) A proposal for compliance equivalency described in Sentence (1) shall bear the signature and seal of a **Professional Engineer** or **Architect** or both.

(3) A copy of the **approved** compliance equivalency shall be kept on the premises to which it relates and made available to the **Chief Fire Official** upon request.

(4) The compliance equivalency described in this Article is not applicable in respect of any **acceptable solutions** to which **objectives** and **functional statements** have not been attributed in OFMEM Fire Code Supplement FCS-1, "Objectives and Functional Statements Attributed to Acceptable Solutions".

Subsection 4.1.2. Classification

Classification

4.1.2.1. (1) For the purposes of this Part, **flammable liquids** and **combustible liquids** shall be classified in conformance with Sentences (2) and (3).

(2) **Flammable liquids** shall be Class I liquids, and shall be subdivided into

(a) Class IA liquids, which are those having a **flash point** below 22.8°C and a boiling point below 37.8°C,

(b) Class IB liquids, which are those having a **flash point** below 22.8°C and a boiling point at or above 37.8°C, and

(c) Class IC liquids, which are those having a **flash point** at or above 22.8°C and below 37.8°C.

(3) **Combustible liquids** shall be Class II or Class IIIA liquids, and shall be subdivided into

(a) Class II liquids, which are those having a **flash point** at or above 37.8°C and below 60°C, and

(b) Class IIIA liquids, which are those having a **flash point** at or above 60°C and below 93.3°C.

Heated liquids

4.1.2.2. When a liquid having a **flash point** at or above 37.8°C is being processed, stored, handled or used at a temperature at or above its **flash point**, it shall be treated as a Class I liquid.

Used lubricating oil

4.1.2.3. (1) Except as provided in Sentence (2), used lubricating oil drained from motor vehicles shall be classified as a Class IIIA liquid.

(2) When Class I or II liquids are added to the used oils described to in Sentence (1), the resulting mixture shall be classified

(a) through **tests** conforming to Subsection 4.1.3., or

(b) in the absence of **tests** referred to in Clause (a),

(i) as a Class IC liquid if Class I liquids are added, or

(ii) as a Class II liquid if only Class II liquids are added.

Subsection 4.1.3. Flash Point

Determination of flash point

4.1.3.1. (1) Except as provided in Sentences (3) and (4), the **flash point** of liquids having a **viscosity** less than 6 mm^2/s at 37.8°C and a **flash point** below 93.3°C shall be determined in conformance with ASTM D56, "Flash Point by Tag Closed Cup Tester".

(2) Except as provided in Sentences (3) and (4), the **flash point** of liquids having a **viscosity** of 6 mm^2/s or more at 37.8°C or a **flash point** of 93.3°C or higher shall be determined in conformance with ASTM D93, "Flash Point by Pensky-Martens Closed Cup Tester".

(3) The **flash point** of aviation turbine fuels may be determined in conformance with ASTM D3828, "Flash Point by Small Scale Closed Cup Tester"

(4) The **flash point** for paints, enamels, lacquers, varnishes and related products and their components having **flash points** between 0°C and 110°C, and having a **viscosity** less than 15000 mm^2/s at 25°C may be determined in conformance with ASTM D3278, "Flash Point of Liquids by Small Scale Closed-Cup Apparatus".

Subsection 4.1.4. Electrical Installations

Hazardous locations

4.1.4.1. (1) Electrical equipment in a location where **flammable liquids** or **combustible liquids** are present shall conform to the **Electrical Safety Code** made under the **Electricity Act, 1998**.

(2) Where refrigerators are used to keep Class I liquids, they shall be designed so that

(a) electrical equipment located within the storage compartment, within the outer shell, on the door and on the door frame of the refrigerator is in conformance with the **Electrical Safety Code** made under the **Electricity Act, 1998**, for Class I, Zone 0 or 1 hazardous locations based on the frequency of occurrence and duration of an explosive gaseous atmosphere, and

(b) electrical equipment mounted on the outside surface of the refrigerator is

(i) in conformance with the **Electrical Safety Code** made under the **Electricity Act, 1998**, for Class I, Zone 2 hazardous locations, or

(ii) located above the top of the storage compartment.

Subsection 4.1.5. Fire Prevention and Protection

Portable extinguishers

4.1.5.1. Portable extinguishers required in this Part shall be in accordance with Section 6.2.

4.1.5.2. RESERVED

Ignition sources

4.1.5.3. Unless controlled in a manner that will not create a fire or explosion hazard, a device, operation or activity that produces open flames, sparks or heat shall not be used or carried out in an area described in Article 4.1.1.1.

Smoking prohibited

4.1.5.4. Smoking shall not take place in areas described in Article 4.1.1.1., except as provided in Subsection 2.4.3.

Removal of combustibles

4.1.5.5. (1) Areas described in Article 4.1.1.1. shall be kept clean and free of ground vegetation and accumulations of combustible materials not essential to operations.

(2) Cleaning rags shall be stored in receptacles conforming to Sentence 2.4.1.3.(3).

Fire safety plan

4.1.5.6. The requirements of Section 2.8 shall apply to **buildings** and open areas where the quantities of **flammable liquids** and **combustible liquids** exceeds 500 L in total or exceeds 250 L of Class I liquids.

Access for fire fighting

4.1.5.7. Aisles and other access paths shall be maintained to permit the unobstructed movement of personnel and **fire department** apparatus so that fire fighting operations can be carried out in any part of an area used for the storage, use or handling of **flammable liquids** or **combustible liquids**.

Hot works

4.1.5.8. Hot works shall be performed in conformance with Section 5.17.

Basement storage

4.1.5.9. (1) Subject to Sentences (2) to (4) and Subsection 4.12.10., Class I liquids shall not be stored, handled or used in **basements** or pits.

(2) Class I liquids may be stored in **dwelling units** in accordance with Article 4.2.4.5.

(3) Class I liquids may be stored in **mercantile occupancies** in accordance with Subsection 4.2.5.

(4) Up to 5 L of Class I liquids may be stored in **basements** if the liquids are stored in safety containers that comply with ULC/ORD-C30, “Safety Containers”.

Routine maintenance

4.1.5.10. Maintenance of any equipment involved in the storage, handling, processing and use of **flammable liquids** or **combustible liquids**, whose failure would significantly increase the fire or explosion hazard and whose maintenance requirements are not addressed in another Part of this Code shall be maintained in accordance with its **listed** requirements and if not **listed**, be maintained in accordance with the manufacturer’s recommendations or good engineering practice.

Subsection 4.1.6. Spill Control and Drainage Systems

Spill control

4.1.6.1. (1) Except as permitted in Sentence (3), a spill of **flammable liquids** or **combustible liquids** shall be prevented from flowing outside the spill area and from reaching waterways, sewer systems and potable water sources by

(a) constructing a noncombustible barrier capable of containing the spill, or

(b) grading the site or sloping the floor to divert the spill to a drainage system conforming to Article 4.1.6.2.

(2) Where barriers required in Sentence (1) are provided to contain accidental spillage from aboveground **storage tanks**, they shall conform to the requirements for secondary containment in Subsection 4.3.7.

(3) Water-miscible effluent from spills and fire fighting operations is permitted to be directed into a sewer system provided it does not create a fire hazard or any risk to public health or safety.

(4) The fire safety plan required in Article 4.1.5.6. shall include measures to be taken to direct overflow of spilled liquids and fire fighting water away from

(a) **buildings**,

(b) adjoining properties,

(c) **means of egress**,

(d) air intakes or openings that could permit vapour entry into the **building**,

(e) fire alarm control panels,

(f) **fire department** access routes,

(g) valves controlling the water supply for fire fighting, or fire protection systems,

(h) **fire department** pumper connections or wall hydrants,

(i) isolation valves controlling processes, and

(j) valves controlling the flow of **flammable liquids** or **combustible liquids**.

Drainage systems

4.1.6.2. (1) A drainage system referred to in Clause 4.1.6.1.(1)(b) shall

(a) terminate at a location where such a spill will not create a fire hazard or any risk to health or safety or the natural environment, and

(b) direct the spill away from the areas identified in Sentence 4.1.6.1.(4).

(2) Closed drainage systems shall be equipped with a trap.

Spills and leaks

4.1.6.3. (1) Maintenance and operating procedures shall be established to prevent the escape of **flammable liquids** or **combustible liquids** to areas where they could create a fire or explosion hazard.

(2) Except as provided in Sentence (3), all reasonable steps shall be taken to recover escaped liquid and to remove or treat contaminated soil, surface water, ground water or aquatic sediments.

(3) Spilled or leaked **flammable liquids** or **combustible liquids** shall be

(a) flushed to a location where they will not create a fire or explosion hazard, or any risk to public health or safety, or

(b) neutralized or absorbed and cleaned up with the aid of a product that conforms to ULC/ORD-C410A, “Absorbents for Flammable and Combustible Liquids”, or is compatible and non-reactive with the liquid being cleaned up, and

(i) deposited in a receptacle conforming to Sentence 2.4.1.3.(3), or

(ii) disposed of in a manner that does not create a fire or explosion hazard.

(4) Clean-up shall conform with Part X (Spills) of the **Environmental Protection Act**.

Spill procedure

4.1.6.4. (1) A spill control procedure shall be **approved** and implemented for any **occupancy** where **flammable liquids** or **combustible liquids** are stored, handled, processed or used.

(2) The spill control procedure referred to in Sentence (1) shall include

(a) suitable operating procedures to prevent leaks and spills from piping, pumps, **storage tanks** or process vessels,

(b) ventilation,

(c) control of ignition sources,

(d) spill containment and cleanup (such as dikes and spill control agents such as sand),

(e) personal protective clothing or equipment that should be used (such as rubber gloves, rubber boots and self-contained breathing apparatus),

(f) chain of command, including notification of affected agencies and management,

(g) a preventive maintenance program, and

(h) training for new staff within three months of their being hired and for experienced staff every six months.

(3) Spill control procedures shall be prominently posted and maintained where **flammable liquids** or **combustible liquids** are stored, handled, processed or used.

Subsection 4.1.7. Ventilation

Rooms or enclosed spaces

4.1.7.1. Where **flammable liquids** or **combustible liquids** are processed, handled, stored, dispensed or used within rooms or enclosed spaces, ventilation shall conform to this Part and the **Building Code**.

Ventilation measures

4.1.7.2. (1) Except as permitted in Sentence (2), a room or enclosed space referred to in Article 4.1.7.1. shall be provided with a ventilation system having

(a) continuous mechanical ventilation where Class I liquids are processed, dispensed or used in a manner that releases flammable vapours into the room or enclosed space, or

(b) either natural or continuous mechanical ventilation where

(i) Class I liquids are stored, processed, dispensed or used in a manner that does not release flammable vapours into the room or enclosed space, or

(ii) Class II liquids are processed, dispensed or used.

(2) Ventilation referred to in Clause (1)(b) need not be provided for the storage of Class I liquids if

(a) storage consists of only **closed containers**, and

(b) no dispensing operations are performed.

(3) Ventilation required in Sentence (1) shall be sufficient to ensure that flammable vapour concentrations outside the zone identified as Class I, Division I in conformance with Article 4.1.4.1. do not exceed 25% of the **lower explosive limit** of the flammable vapour.

(4) A mechanical ventilation system is deemed to meet the requirements of Sentence (3) if it is capable of exhausting at least 18 m^3/h per square metre of room area and not less than 250 m^3/h in total.

(5) Where continuous mechanical ventilation is installed in order to meet the conditions of Sentence (1), it shall

(a) be provided with automatic interlocks so that the activity generating flammable vapours cannot be performed when the ventilation system is not in operation,

(b) sound an audible alarm in an attended area upon shutdown of the ventilation system, and

(c) conform to NFPA 91, “Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids”.

(6) Despite Sentences (1) and (2), for those **occupancies** of facilities that are regulated under **Ontario Regulation 851 of the Revised Regulations of Ontario, 1990 (Industrial Establishments)** made

under the **Occupational Health and Safety Act** or **Ontario Regulation 67/93 (Health Care and Residential Facilities)** made under the **Occupational Health and Safety Act**, ventilation requirements for a room or enclosed space referred to in Article 4.1.7.1. shall be provided with

(a) continuous mechanical ventilation where Class I liquids are processed, dispensed or used in a manner that releases flammable vapours into the room or enclosed space, and

(b) continuous mechanical or natural ventilation to the outdoors by upper and lower vents where

(i) Class I liquids are stored, or

(ii) Class II liquids are processed, dispensed or used.

Location of air inlets and outlets

4.1.7.3. (1) Ventilation air inlets and outlets within a room or enclosed space referred to in Article 4.1.7.1. shall be arranged to provide air movement in all areas of the room or enclosed space.

(2) If the flammable vapour being removed is as dense as air or heavier than air

(a) at least one ventilation air inlet shall be located near a wall, no higher than 300 mm from the floor, and

(b) at least one ventilation air outlet shall be located near the opposite wall, no higher than 300 mm from the floor.

(3) If the flammable vapour being removed is lighter than air

(a) at least one ventilation air inlet shall be located near a wall, no lower than 300 mm from the ceiling, and

(b) at least one ventilation air outlet shall be located near the opposite wall, no lower than 300 mm from the ceiling.

Location of mechanical ventilation exhaust air outlets

4.1.7.4. (1) Except as provided in Article 4.1.7.6., the exhaust air outlet from a mechanical ventilation system required in Article 4.1.7.2. shall be

(a) located outdoors, not less than 3 m from any **building** opening, and

(b) arranged so that the exhaust air does not discharge toward any unprotected opening within 7.5 m of the discharge point.

Make-up air

4.1.7.5. (1) Where make-up air for a mechanical ventilation system is taken from within the **building**, the opening into the room or enclosed space shall be provided with a **fire damper**.

(2) Make-up air for a natural or mechanical ventilation system shall be taken from a point remote from any exhaust air discharge described in Article 4.1.7.4.

(3) Make-up air for a natural ventilation system shall be taken from a point outside the **building**.

Recirculating ventilation systems

4.1.7.6. (1) A mechanical ventilation system referred to in Article 4.1.7.2. that recirculates exhaust air shall be provided with a fail-safe vapour detection and alarm system to continuously monitor the flammable vapour concentration in the exhaust air.

(2) If the flammable vapour concentration in the exhaust air exceeds 25% of the **lower explosive limit** of the vapour, the vapour detection and alarm system shall

(a) sound an alarm in an attended area,

(b) stop the recirculation of air, and

(c) redirect the exhaust air to an outdoor location.

Exclusive use of ducts

4.1.7.7. Ducts used in a ventilation system as required in Article 4.1.7.2. shall not be used for any other ventilation or exhaust system.

Maintenance

4.1.7.8. All components of the ventilation system shall be kept free of obstructions that may interfere with its operation.

Subsection 4.1.8. Handling of Flammable and Combustible Liquids

Containers and storage tanks

4.1.8.1. (1) Except as provided in Sentence 4.1.8.4.(1), **flammable liquids** and **combustible liquids** shall be kept in containers conforming to Subsection 4.2.3. or in **storage tanks** conforming to Subsection 4.3.1.

(2) Containers and **storage tanks** for **flammable liquids** or **combustible liquids** shall be kept closed when not in use.

(3) Containers and **storage tanks** shall not be filled beyond their safe filling level.

Control of static electric charge

4.1.8.2. (1) When Class I liquids are dispensed into a container or **storage tank**,

(a) if the container or **storage tank** is made of metallic or electrically-conducting material, such container or **storage tank** shall be electrically connected to the fill stem, or rest on a conductive floor that is electrically connected to the fill stem, or

(b) if the container or **storage tank** is made of non-electrically-conducting material, measures shall be taken to minimize the potential for a static electric charge to develop.

(2) Except as provided in Sentence (3), when Class I liquids are transferred into a **storage tank** through the top of the tank, the fill pipe shall terminate within 150 mm of the bottom of the tank.

(3) Sentence (2) shall not apply when

(a) the **storage tank** vapour space cannot exceed 25% of the **lower explosive limit** or is filled with an inert gas that prevents the ignition of the vapour mixture, or

(b) the liquid being transferred has a minimum conductivity that prevents the accumulation of static electricity.

(4) Fill pipes referred to in Sentence (2) shall be installed in such a way as to minimize vibration of the pipe.

Transfer

4.1.8.3. (1) Class I liquids shall be drawn from or transferred into containers or **storage tanks** within a **building**

(a) through a piping or transfer system conforming to Section 4.4,

(b) by means of a pump designed in conformance with good engineering practice on top of the container or **storage tank**, or

(c) by gravity through a self-closing valve designed in conformance with good engineering practice.

(2) Subject to Subsection 4.4.10., **flammable liquids** and **combustible liquids** shall not be transferred by means of pressure applied to a container or **storage tank**.

Fuel tanks

4.1.8.4. (1) Moveable tanks may be used to dispense **flammable liquids** or **combustible liquids** into the fuel tanks of vehicles or other motorized equipment if the moveable tanks are used in accordance with the requirements of this Part for **storage tanks**.

(2) Enclosed pumping equipment designed in accordance with good engineering practice shall be used to transfer Class I liquids to or from the fuel tanks of vehicles inside **buildings**.

SECTION 4.2 CONTAINER STORAGE AND HANDLING

Subsection 4.2.1. Application

Application

4.2.1.1. (1) Except as provided in Sentence (2), this Section applies to the storage, handling and use of **flammable liquids** or **combustible liquids** in

(a) containers conforming to Clauses 4.2.3.1.(1)(a) to (d) having a capacity of not more than 230 L,

(b) portable tanks conforming to Clause 4.2.3.1.(1)(e) having an individual capacity of not more than 2500 L, or

(c) intermediate bulk containers conforming to Clause 4.2.3.1.(1)(a) having an individual capacity of not more than 3000 L.

(2) Except as otherwise stated in this Part, this Section does not apply to

(a) properties subject to Section 4.6, **refineries** subject to Section 4.8 and **distilleries** subject to Section 4.9,

(b) liquids in the fuel tank of motors or engines,

(c) **distilled beverage alcohol** in **closed containers** that are stored in accordance with Part 3 of Division B of NRC, “National Fire Code of Canada”,

(d) food and pharmaceutical products that are stored in **closed containers** with a capacity of not more than 5 L,

(e) alcohol-based hand sanitizer products that have a capacity of not more than 1.2 L and that are in use, or

(f) products that contain no more than 50% by volume of water-miscible **flammable liquids** or **combustible liquids,** with the remainder of the solution being non-flammable, that are stored in **closed containers** with a capacity of not more than 5 L.

(3) Portable tanks having a capacity greater than 2500 L shall be installed in conformance with Section 4.3.

(4) For the purpose of this Section, **unstable liquids** shall meet the requirements for Class IA liquids.

(5) Except as otherwise stated, requirements for containers in this Part shall also apply to portable tanks described in Sentence (1).

Subsection 4.2.2. General

Storage locations

4.2.2.1. (1) **Flammable liquids** or **combustible liquids** shall not be stored in or adjacent to **exits**, including outdoors, elevators or principal routes that provide **access to exits**.

(2) Where **flammable liquids** or **combustible liquids** are stored, storage shall be in conformance with Subsections 4.2.4. to 4.2.11.

Storage arrangement

4.2.2.2. In addition to the provisions of this Section, the method of storage of **flammable liquids** and **combustible liquids** shall be determined to ensure the physical and chemical stability of the stored products.

Separation from other dangerous goods

4.2.2.3. (1) Except as provided in Sentence (2), **flammable liquids** and **combustible liquids** shall be separated from other **dangerous goods** in conformance with Sections 3.2 and 3.3 of Division B of NRC, "National Fire Code of Canada".

(2) For the purposes of applying Table 3.2.7.6. of Division B of NRC, "National Fire Code of Canada", Class IIIA liquids shall be treated as Class 3 **dangerous goods**.

Subsection 4.2.3. Containers and Portable Tanks

Design and construction

4.2.3.1. (1) Except as permitted in Article 4.2.3.3., containers and portable tanks for **flammable liquids** or **combustible liquids** shall be built in conformance with

(a) the **Transportation of Dangerous Goods Regulations (Canada)**,

(b) CSA-B376, "Portable Containers for Gasoline and Other Petroleum Fuels",

(c) CSA-B306, "Portable Fuel Tanks for Marine Use",

(d) ULC/ORD-C30, "Safety Containers", or

(e) Section 6 of CSA-B620, "Highway Tanks and Portable Tanks for the Transportation of Dangerous Goods".

Markings or labels

4.2.3.2. (1) Except as provided in Sentence (2) and Article 4.2.3.1., containers for **flammable liquids** or **combustible liquids** shall be distinctly marked or labelled in easily legible type which is in contrast to any other printed matter on the label with a warning to indicate that

(a) the material in the container is flammable,

(b) it should be kept away from heat, sparks and open flames, and

(c) it should be kept closed when not in use.

(2) Markings referred to in Sentence (1) are not required when the container is labelled in conformance with

(a) the **Transportation of Dangerous Goods Act (Canada)** and its regulations,

(b) the **Hazardous Products Act (Canada)** and its regulations, and

(c) the **Pest Control Products Act (Canada)** and its regulations.

Other types of containers

4.2.3.3. (1) The storage, handling and use of **flammable liquids** or **combustible liquids** in a container other than one of those set out in Article 4.2.3.1. may be used only if

(a) the required purity of the liquid would be affected by containers of the types set out in Article 4.2.3.1. or if the liquid would cause the excessive corrosion of those types of containers,

(b) the container not conforming to Article 4.2.3.1. has a capacity of not more than 1 L if used for Class I liquids and not more than 5 L if used for Class II or IIIA liquids, or

(c) the container not conforming to Article 4.2.3.1. is a sample container used for quality control purposes or for **testing** by regulatory officials.

Subsection 4.2.4. Assembly and Residential Occupancies

Application

4.2.4.1. (1) This Subsection applies to the storage and handling of **flammable liquids** and **combustible liquids** in **buildings** classified as **assembly** or **residential occupancies**, except that it shall not apply to nonresidential schools, universities or colleges covered in Subsection 4.2.6.

Maximum quantities

4.2.4.2. (1) Subject to Sentence (4) and Articles 4.2.4.5. and 4.2.4.6., the maximum quantity of **flammable liquids** or **combustible liquids** stored in a **building** or in a single **fire compartment** having a **fire-resistance rating** not less than 1 h shall meet the requirements of Sentences (2) and (3).

(2) If a single class of liquid is stored in a **building** or in a single **fire compartment** having a **fire-resistance rating** not less than 1 h, the total quantity of liquid shall not exceed

(a) 30 L of Class I liquids,

(b) 150 L of Class II liquids, or

(c) 600 L of Class IIIA liquids.

(3) If two or more classes of liquid are stored in the same **building** or in a single **fire compartment** having a **fire-resistance rating** not less than 1 h, the total quantity of stored liquid shall meet the requirements of the following equation:

$$qI/30 + qII/150 + qIIIA/600 \leq 1$$

where

qI = the actual quantity of Class I liquid present, in litres,

qII = the actual quantity of Class II liquid present, in litres, and

qIIIA= the actual quantity of Class IIIA liquid present, in litres.

(4) Quantities of **flammable liquids** or **combustible liquids** exceeding those permitted by Sentence (1) are permitted if they are kept

(a) in cabinets that comply with Subsection 4.2.10., but only if the total quantity of **flammable liquids** and **combustible liquids** stored in the cabinets does not exceed the quantity permitted for one cabinet, or

(b) in a room that complies with Subsection 4.2.9. and has no openings that communicate directly with the public portions of the **building**.

Cabinet and room location

4.2.4.3. The cabinets and rooms referred to in Sentence 4.2.4.2.(4) shall not be located above or below the **first storey**.

Exterior balconies

4.2.4.4. **Flammable liquids** and **combustible liquids** shall not be stored on exterior balconies.

Storage in dwelling units

4.2.4.5. No more than 30 L of **flammable liquids** and **combustible liquids**, of which not more than 10 L may be Class I liquids, may be stored in a **dwelling unit**.

Storage in attached garages or sheds

4.2.4.6. No more than 50 L of **flammable liquids** and **combustible liquids**, of which not more than 30 L may be Class I liquids, shall be stored in a garage or shed attached to a **dwelling unit**.

Subsection 4.2.5. Mercantile Occupancies

Maximum quantities

4.2.5.1. (1) Except as provided in Sentence (5), the quantities of **flammable liquids** and **combustible liquids** stored in **mercantile occupancies** shall not exceed those in Sentences (2) to (4).

(2) In **mercantile occupancies** that are not **sprinklered**, the maximum quantity of **flammable liquids** and **combustible liquids** stored in a single **suite** shall be the lesser of

(a) 8 L for every 1 m^2 of the area of the **suite**, provided that not more than 2 L per m^2 is Class I liquid, of which not more than 0.3 L per m^2 shall be Class IA, Class IB, or any combination of these two classes, or

(b) 8000 L, provided that not more than 2000 L is Class I liquid, of which not more than 300 L shall be Class IA or Class IB or any combination of these two classes.

(3) In **sprinklered mercantile occupancies**, the maximum quantity of **flammable liquids** and **combustible liquids** stored in a single **suite** shall be the lesser of

(a) 24 L for every 1 m^2 of the area of the **suite**, provided that not more than 6 L per m^2 is Class I liquid, of which not more than 1 L per m^2 shall be Class IA or Class IB or any combination of these two classes, or

(b) 24000 L, provided that not more than 6000 L is Class I liquid, of which not more than 1000 L shall be Class IA or Class IB or any combination of these two classes.

(4) For the purposes of calculating permissible quantities in Sentences (2) and (3), **mercantile occupancies** of less than 250 m^2 **floor area** shall be assumed to be 250 m^2 in area.

(5) Quantities of **flammable liquids** and **combustible liquids** in excess of those permitted in Sentences (2) to (4) shall be kept in a storage area conforming to Subsection 4.2.7.

Containers

4.2.5.2. (1) **Flammable liquids** and **combustible liquids** in **mercantile occupancies** shall be kept in **closed containers**.

(2) **Closed containers** of Class I and II liquids shall not be stacked more than 1.5 m high on floors, or 1 m high on individual fixed shelves.

(3) Class I liquids in **closed containers** are permitted to be stored in **basements** of **mercantile occupancies**.

Transfer

4.2.5.3. (1) Subject to Sentence (2), the transfer of **flammable liquids** or **combustible liquids** from or into containers shall take place in a storage room that complies with Subsection 4.2.9.

(2) Sentence (1) does not apply to tinting operations for paints that involve containers of up to 25 L in capacity.

Subsection 4.2.6. Business and Personal Services, Detention, Educational, Care, and Care and Treatment Occupancies

Application

4.2.6.1. This Subsection applies to the storage, handling and use of **flammable liquids** and **combustible liquids** in **business and personal services occupancies**, **care occupancies**, **care and treatment occupancies**, **detention occupancies**, non-residential schools, universities and colleges.

Storage cabinets and storage rooms

4.2.6.2. (1) Except as permitted in Article 4.2.6.3., **flammable liquids** and **combustible liquids** shall be kept in **closed containers** and stored

(a) in cabinets conforming to Subsection 4.2.10., except that the total quantity of **flammable liquids** and **combustible liquids** stored in such cabinets shall not exceed the quantity permitted for one cabinet, or

(b) in a room having no openings communicating directly with the public portions of the **building** and conforming to Subsection 4.2.9.

Maximum quantities

4.2.6.3. (1) Except as provided in Sentence (2), the storage of **flammable liquids** and **combustible liquids** outside of a cabinet or room required in Article 4.2.6.2. is permitted, provided such storage does not exceed

(a) 10 L, including not more than 5 L of Class I liquid, in a single room, or

(b) 250 L, including no more than 60 L of Class II liquid, or 10 L of Class I liquid, in a single **fire compartment** having a **fire-resistance rating** not less than 45 min.

(2) In automotive shop or industrial arts areas of an educational facility, storage of up to 75 L of **flammable liquids** and **combustible liquids**, including not more than 25 L of Class I liquid, shall be permitted outside of a cabinet or room as specified in Article 4.2.6.2.

Containers

4.2.6.4. Where individual containers with a capacity of more than 5 L are required for storage of **flammable liquids** or **combustible liquids** in a **building**, safety containers conforming to ULC/ORD-C30, “Safety Containers”, and of not more than 25 L capacity, shall be used.

Separation of dangerous goods

4.2.6.5. **Flammable liquids** or **combustible liquids** stored in cabinets or rooms shall be separated from other **dangerous goods** in conformance with Article 4.2.2.3.

Subsection 4.2.7. Industrial Occupancies

Application

4.2.7.1. This Subsection applies to the storage, handling and use of **flammable liquids** and **combustible liquids** in **industrial occupancies**, where storage in **closed containers** is the principal activity.

Storage facilities

4.2.7.2. (1) **Flammable liquids** and **combustible liquids** shall be stored

(a) in accordance with Subsection 4.2.8.,

(b) in cabinets that comply with Subsection 4.2.10.,

(c) in rooms that comply with Subsection 4.2.9., or

(d) in storage areas that comply with Article 4.2.7.5.

Fire compartments

4.2.7.3. **Fire compartments** regulated by this Subsection shall have a **fire-resistance rating** not less than 2 h.

Dispensing and transfer

4.2.7.4. (1) Except as permitted in Subsection 4.2.8. and in Sentence (2), the dispensing or transfer of Class I or II liquids shall be conducted in rooms conforming to Subsection 4.2.9.

(2) It is permitted to dispense or transfer Class I or II liquids in a storage area conforming to Article 4.2.7.5. provided

(a) the storage area does not exceed 100 m^2, and

(b) the dispensing or transfer operations conform to the applicable requirements of Subsection 4.2.9.

Maximum quantities

4.2.7.5. (1) Except as provided in Sentence (2), the storage of **flammable liquids** and **combustible liquids** in storage areas specified in Clause 4.2.7.2.(1)(d) shall

(a) conform to Table 4.2.7.A.

(i) where it consists of palletized or solid piled storage, or

(ii) where stored in **racks** in **buildings** not protected in conformance with Article 4.2.7.7., or

(b) conform to Table 4.2.7.B. where stored in **racks** in **buildings** protected in conformance with Article 4.2.7.7.

(2) Where a **building** is designed for the storage of **flammable liquids** or **combustible liquids**, there is no limit on the total quantity of storage per **fire compartment** provided

(a) the **building** is separated from adjacent **buildings** by

(i) a **firewall** having a **fire-resistance rating** of at least 4 h, or

(ii) spatial separation in conformance with the **Building Code**, and

(b) in protected **rack** storage, the quantities in each **individual storage area** do not exceed those specified in Table 4.2.7.B.

(3) Where containers for two or more liquids having different **flash points** are stored together in a single **individual storage area**, the maximum quantity permitted in the **individual storage area** shall equal that permitted for the liquid with the lowest **flash point**.

(4) If two or more classes of liquids are stored in a single **fire compartment**, the total quantities of stored liquids shall meet the requirements of the following equation:

$$[qIA/QIA + qIB/QIB + qIC/QIC + qII/QII + qIIIA/QIIIA]_{rack} +$$

$$[qIA/QIA + qIB/QIB + qIC/QIC + qII/QII + qIIIA/QIIIA]_{solid\ pile\ or\ pallet} \leq 1$$

where

qIA, IB or IC = the actual quantity of Class IA, IB or IC liquid present in a **rack**, solid pile or on pallets,

qII = the actual quantity of Class II liquid present in a **rack**, solid pile or on pallets,

qIIIA = the actual quantity of Class IIIA liquid present in a **rack**, solid pile or on pallets,

QIA, IB or IC = the maximum quantity of Class IA, IB or IC liquid permitted in Table 4.2.7.A. or 4.2.7.B. for the arrangement,

QII = the maximum quantity of Class II liquid permitted in Table 4.2.7.A. or 4.2.7.B. for the arrangement, and

QIIIA = the maximum quantity of Class IIIA liquid permitted in Table 4.2.7.A. or 4.2.7.B. for the arrangement.

TABLE 4.2.7.A.

Indoor Container Storage (Palletized or Solid Piled Storage and Unprotected **Rack** Storage)
Forming Part of Article 4.2.7.5.

Class of Liquid	Storage Level	Protected Storage (1) - Maximum Quantity per **Individual Storage Area**, L	Protected Storage (1) - Maximum Storage Height, m	Protected Storage (1) - Maximum Quantity per **Fire Compartment,** L	Unprotected Storage - Maximum Quantity per **Individual Storage Area**, L	Unprotected Storage - Maximum Storage Height, m	Unprotected Storage - Maximum Quantity per **Fire Compartment,** L
Class IA	**First Storey**	10000	1.5	50000	2500	1.5	2500
Class IA	**Storeys** above the **first storey**	7500	1.5	30000	2500	1.5	2500
Class IA	**Basement**	Not permitted	Not permitted	Not permitted	Not permitted	Not permitted	Not permitted
Class IB or IC	**First Storey**	20000	2.0	60000	10000	1.5	10000
Class IB or IC	**Storeys** above the **first storey**	10000	2.0	50000	10000	1.5	10000
Class IB or IC	**Basement**	Not permitted	Not permitted	Not permitted	Not permitted	Not permitted	Not permitted
Class II	**First Storey** and **storeys** above the **first storey**	40000	3.0	100000	15000	3.0	30000

Class II	**Basement**	25000	1.5	25000	Not permitted	Not permitted	Not permitted
Class IIIA	**First Storey** and **storeys** above the **first storey**	60000	6.0	200000	50000	4.5	100000
Class IIIA	**Basement**	40000	3.0	100000	Not permitted	Not permitted	Not permitted

Notes to Table 4.2.7.A.:

(1) See Article 4.2.7.7.

TABLE 4.2.7.B.

Indoor Container Storage (Protected **Rack** Storage)(1) Forming Part of Article 4.2.7.5.

Class of Liquid	Storage Level	Maximum Height, m	Maximum Quantity per **Individual Storage Area** or per **Fire Compartment**, L
Class IA	**First Storey**	7.5	30000
Class IA	**Storeys** above the **first storey**	4.5	17000
Class IA	**Basement**	Not permitted	Not permitted
Class IB or IC	**First Storey**	7.5	60000
Class IB or IC	**Storeys** above the **first storey**	4.5	35000
Class IB or IC	**Basement**	Not permitted	Not permitted
Class II	**First Storey**	7.5	100000
Class II	**Storeys** above the **first storey**	7.5	100000
Class II	**Basement**	4.5	35000
Class IIIA	**First Storey**	12.0	200000
Class IIIA	**Storeys** above the **first storey**	6.0	200000
Class IIIA	**Basement**	6.0	100000

Notes to Table 4.2.7.B.:

(1) See Article 4.2.7.7.

Spill control

4.2.7.6. Measures to control spilled **flammable liquids** or **combustible liquids** shall be provided in conformance with Subsection 4.1.6.

Fire suppression systems

4.2.7.7. (1) Where protection is required by this Part, storage areas for **flammable liquids** and **combustible liquids** shall be

(a) **sprinklered** in conformance with NFPA 30, "Flammable and Combustible Liquids Code", or

(b) protected by an automatic special fire suppression system in conformance with an applicable standard set out in Article 6.8.1.1.

Clearances

4.2.7.8. (1) The clearance between the top of storage and the lowest structural members, sprinkler head deflectors or other overhead fire protection system components shall be not less than 450 mm.

(2) A clearance of not less than 400 mm shall be maintained between stored **flammable liquids** and **combustible liquids** and walls, except that where the width of storage adjacent to the wall is not more than 1.5 m, such wall clearance is not required.

Aisles

4.2.7.9. Except as provided in Article 4.2.7.10., main aisles, access aisles and aisles defining **individual storage areas** shall be in conformance with Articles 3.3.2.5. and 3.3.2.6.

Separation from other dangerous goods

4.2.7.10. **Flammable liquids** and **combustible liquids** shall not be stored with other **dangerous goods** unless in conformance with Article 4.2.2.3.

Separation from combustible products

4.2.7.11. Combustible materials, other than those used for the packaging of **flammable liquids** or **combustible liquids**, shall not be stored in the same **individual storage area** with such liquids.

Absorbents

4.2.7.12. Absorbent materials shall be available in the storage area for use in clean-up of spilled **flammable liquids** or **combustible liquids** in conformance with Article 4.1.6.3.

Ventilation

4.2.7.13. Storage areas described in Article 4.2.7.1. shall be ventilated in conformance with Subsection 4.1.7.

Subsection 4.2.8. Incidental Use

Application

4.2.8.1. Except as otherwise noted in this Part, this Subsection applies to **industrial occupancies** where the use, storage and handling of **flammable liquids** or **combustible liquids** is secondary to the principal activity.

Maximum quantities

4.2.8.2. (1) Except as provided in Sentences (2) and (3) and in Article 4.2.8.4., the quantity of **flammable liquids** and **combustible liquids** permitted to be located outside of storage rooms conforming to Subsection 4.2.7., 4.2.9. or 4.3.13. or cabinets conforming to Subsection 4.2.10. in any one **fire compartment** of a **building** shall not be more than

(a) 600 L of **flammable liquids** and **combustible liquids** in **closed containers**, of which not more than 100 L shall be Class IA liquids, and

(b) 5000 L of Class IB, IC, II and IIIA liquids in **storage tanks** or portable tanks.

(2) Where required for normal plant activity, quantities of **flammable liquids** and **combustible liquids** are permitted to exceed those specified in Sentence (1), but shall not be greater than the supply for one day of normal operation.

(3) Where larger quantities than are permitted by Sentence (1) are required, such quantities shall be in **storage tanks** installed in conformance with Sentence 4.3.12.4.(2).

Handling

4.2.8.3. (1) Areas in which **flammable liquids** or **combustible liquids** are transferred from one container or **storage tank** to another, or are used in such a way as to release potentially explosive concentrations of flammable vapours, shall be

(a) separated from possible sources of ignition by a spatial separation of not less than 6 m, or by a **fire separation**,

(b) provided with a drainage system to control spills in conformance with Subsection 4.1.6.,

(c) provided with absorbent materials to assist in clean-up of small liquid spills in conformance with Article 4.1.6.3.,

(d) provided with either natural or mechanical ventilation in conformance with Subsection 4.1.7., and

(e) separated from other **dangerous goods** in conformance with Article 4.2.2.3.

General storage areas

4.2.8.4. (1) In a general storage area covered in Subsection 3.2.3. of Division B of NRC, “National Fire Code of Canada”, quantities of **flammable liquids** and **combustible liquids** may exceed those in Sentence 4.2.8.2.(1) if the storage area complies with Sentences (2) to (6).

(2) The storage area referred to in Sentence (1) shall be **sprinklered** in conformance with Article 3.2.3.3. of Division B of NRC, “National Fire Code of Canada”, providing a level of protection not less than that required for Class IV commodities stored up to a height of 6 m.

(3) The height of storage of **flammable liquids** and **combustible liquids** shall be not more than those permitted for unprotected storage in Table 4.2.7.A.

(4) When a single class of liquid is stored, the total quantity in a single **fire compartment** shall be not more than

(a) 2500 L of Class IB and IC liquid,

(b) 5000 L of Class II liquid, or

(c) 10000 L of Class IIIA liquid.

(5) When two or more classes of liquid are stored in the same **fire compartment**, the total quantities of stored liquids shall meet the requirements of the following equation:

$$qI/2500 + qII/5000 + qIIIA/10000 \leq 1$$

where

qI = the actual quantity of Class IB and IC liquid present,

qII = the actual quantity of Class II liquid present, and

qIIIA= the actual quantity of Class IIIA liquid present.

(6) When two or more classes of liquid are stored in the same **individual storage area**, the maximum quantity permitted in the **individual storage area** shall be that permitted for the liquid with the lowest limit set out in Sentence (4).

Subsection 4.2.9. Rooms for Container Storage and Dispensing

Maximum quantities

4.2.9.1. (1) Except as provided in Sentences (2) and (3), where **flammable liquids** and **combustible liquids** are stored in a room required in this Part, the storage densities averaged over the total room area and the total quantities of such liquids shall conform to Table 4.2.9.A.

(2) The maximum quantities and densities of **flammable liquids** and **combustible liquids** shown in Table 4.2.9.A. are permitted to be doubled provided the storage room is protected by an automatic fire suppression system conforming to Article 4.2.7.7.

(3) The maximum quantities of Class I liquids in an unprotected storage room with a **fire separation** having a **fire-resistance rating** of not less than 2 h shall

(a) not exceed those specified for unprotected storage in Table 4.2.7.A., and

(b) comply with Sentences 4.2.7.5.(3) and (4).

TABLE 4.2.9.A.

Rooms for Container Storage and Dispensing Forming Part of Article 4.2.9.1.

Maximum Quantity, L	Minimum **Fire Separation** Around Room, h	Maximum Density, L/m^2
1500	1	100
10000	2	200

Spill control

4.2.9.2. (1) Storage rooms referred to in Article 4.2.9.1. shall be equipped with

(a) liquid-tight seals between interior walls and the floor and a liquid-tight ramped sill at any door opening in an interior wall, and

(b) a drain connected to a dry sump or holding tank for those **occupancies** that regulated under by **Regulation 851 of the Revised Regulations of Ontario, 1990 (Industrial Establishments)** made under the **Occupational Health and Safety Act** or **Ontario Regulation 67/93 (Health Care and Residential Facilities)** made under the **Occupational Health and Safety Act**.

(2) Storage rooms referred to in Sentence (1) shall be designed to accommodate possible spills of **flammable liquids** and **combustible liquids** in conformance with Subsection 4.1.6.

Ventilation

4.2.9.3. Storage rooms referred to in Article 4.2.9.1. shall be ventilated in conformance with Subsection 4.1.7.

Aisles

4.2.9.4. The contents of **flammable liquids** and **combustible liquids** storage rooms referred to in Article 4.2.9.1. shall be arranged to provide aisle widths of not less than 1 m.

Dispensing

4.2.9.5. Dispensing of **flammable liquids** or **combustible liquids** from containers having a capacity of more than 30 L shall be by pumps or through self-closing valves, designed in conformance with good engineering practice.

Explosion venting

4.2.9.6. (1) If Class IA or IB liquids are dispensed or stored in open containers within a storage room, the room shall be designed to prevent critical structural and mechanical damage from an internal explosion in accordance with NFPA 68, "Standard on Explosion Protection by Deflagration Venting".

(2) Despite Sentence (1), if Class IA liquids are stored in **closed containers** or Class I liquids are dispensed or stored in open containers for those **occupancies** or facilities that are regulated under **Regulation 851 of the Revised Regulations of Ontario, 1990 (Industrial Establishments)** made under the **Occupational Health and Safety Act** or **Ontario Regulation 67/93 (Health Care and Residential Facilities)** made under the **Occupational Health and Safety Act**, the room shall be designed to prevent critical structural and mechanical damage from an internal explosion in accordance with NFPA 68, "Standard on Explosion Protection by Deflagration Venting".

(3) Sentence (1) does not apply to the storage of **distilled beverage alcohol**.

Portable extinguishers

4.2.9.7. Portable extinguishers shall be provided for storage rooms described in Article 4.2.9.1. in conformance with Section 6.2.

Egress doors

4.2.9.8. (1) This Article applies to a dispensing room in **occupancies** regulated under **Regulation 851 of the Revised Regulations of Ontario, 1990 (Industrial Establishments)** made under the **Occupational Health and Safety Act** or **Ontario Regulation 67/93 (Health Care and Residential Facilities)** made under the **Occupational Health and Safety Act** where the room

(a) has an area greater than 15 m^2, or

(b) has a distance of travel greater than 4.5 metres from any point in the room to an egress doorway.

(2) A dispensing room shall be equipped with self-closing doors hinged to swing outward on their vertical axis.

(3) A dispensing room shall be located in a **floor area** that has at least two **exits**.

(4) A dispensing room shall have at least two egress doorways that are at least three-quarters of the maximum diagonal dimension of the room from each other.

(5) At least one egress doorway shall be located within 23 m from any point in the dispensing room.

Subsection 4.2.10. Cabinets for Container Storage

Containers

4.2.10.1. **Flammable liquids** and **combustible liquids** stored in cabinets required in this Part shall be in **closed containers** conforming to Article 4.2.3.1.

Maximum quantity per cabinet

4.2.10.2. No more than 500 L of **flammable liquids** or **combustible liquids** shall be stored in a cabinet.

Maximum quantity per fire compartment

4.2.10.3. (1) Except as provided in Sentences (2) and (3), the total quantity of **flammable liquids** and **combustible liquids** stored in cabinets in a single **fire compartment** shall not exceed the quantity permitted in Article 4.2.10.2. for three cabinets.

(2) In **industrial occupancies**, quantities of **flammable liquids** and **combustible liquids** greater than those specified in Sentence (1) are permitted in a single **fire compartment** where

(a) the total quantity stored in a group of cabinets is not more than the quantity permitted for three cabinets, and

(b) the distance between groups of cabinets described in Clause (a) is not less than 30 m.

(3) In **care occupancies**, **care and treatment occupancies** and **detention occupancies**, the total quantity of **flammable liquids** and **combustible liquids** stored in cabinets in a single **fire compartment** shall not exceed the quantity permitted for one cabinet.

Labelling

4.2.10.4. Cabinets for container storage shall be labelled in conspicuous lettering to indicate that the cabinet contains flammable materials and that open flames must be kept away.

Cabinets

4.2.10.5. (1) Cabinets required in this Part shall

(a) comply with ULC/ORD-C1275, “Guide for the Investigation of Storage Cabinets for Flammable Liquid Containers”,

(b) comply with ULI 1275, “Flammable Liquid Storage Cabinets”,

(c) be “FM APPROVED” by FM Global, or

(d) be **listed** as meeting NFPA 30, “Flammable and Combustible Liquids Code”.

Ventilation

4.2.10.6. (1) When a cabinet required in this Part is provided with ventilation openings,

(a) the ventilation openings shall be sealed with materials providing fire protection at least equivalent to that required for the construction of the cabinet, or

(b) the cabinet shall be vented outdoors using vent piping providing fire protection at least equivalent to that required in Clause (a) for seals.

Subsection 4.2.11. Outdoor Container Storage

Quantities and clearances

4.2.11.1. (1) Except as provided in Sentence (2), the quantities and clearances for **flammable liquids** and **combustible liquids** stored in containers in outdoor storage areas shall conform to Table 4.2.11.A.

(2) The clearances required in Sentence (1) do not apply where not more than 5000 L of **flammable liquids** or **combustible liquids** are stored adjacent to a **building** on the same property, and

(a) the **building** is 1 **storey** in **building height** and used primarily for the storage or handling of **flammable liquids** or **combustible liquids**, or

(b) the exposed wall has a **fire-resistance rating** not less than 2 h and has no openings within 3 m of such outdoor storage.

TABLE 4.2.11.A.

Outdoor Container Storage Forming Part of Article 4.2.11.1.

Class of Liquid	Maximum Total Quantity per Pile, L	Minimum Distance Between Piles, m	Minimum Distance to a Property Line or to a **Building** on the Same Property, m
Class IA	5000	1.5	6
Class IB or IC	15000	1.5	6
Class II	35000	1.5	6
Class IIIA	85000	1.5	6

Mixed storage

4.2.11.2. If two or more liquids with different **flash points** are stored outdoors in containers that form a single pile, the maximum total quantity in the pile shall be equal to the maximum quantity permitted for the liquid with the lowest **flash point**.

Fire department access

4.2.11.3. An access route not less than 6 m wide, constructed in conformance with Subsection 3.2.5. in Division B of the **Building Code**, shall be provided in outdoor storage areas to permit the approach of **fire department** vehicles to within 60 m of any part of a pile.

Spill control

4.2.11.4. Outdoor storage areas for **flammable liquids** or **combustible liquids** shall be designed to accommodate possible spillage in conformance with Subsection 4.1.6.

Fencing

4.2.11.5. (1) An outdoor area used for the container storage of **flammable liquids** or **combustible liquids** shall be surrounded by a firmly anchored fence that is

(a) substantially constructed to discourage climbing and unauthorized entry,

(b) not less than 1.8 m high, and

(c) provided with gates that shall be locked when the storage area is not staffed.

SECTION 4.3 STORAGE TANKS

Subsection 4.3.1. Application and Storage Tank Design, Construction and Use

Application

4.3.1.1. This Section applies to **storage tanks** for **flammable liquids** and **combustible liquids**.

Atmospheric storage tanks

4.3.1.2. (1) Subject to Sentences (2), (3), (4), (5), (6), (7) and (8) and Section 4.9, **atmospheric storage tanks** shall be built in accordance with

(a) API 12B, “Bolted Tanks for Storage of Production Liquids”,

(b) API 12D, “Field Welded Tanks for Storage of Production Liquids”,

(c) API 12F, “Shop Welded Tanks for Storage of Production Liquids”,

(d) API 650, “Welded Tanks for Oil Storage”,

(e) CAN/ULC-S601, “Standard for Shop Fabricated Steel Aboveground Tanks for Flammable and Combustible Liquids”,

(f) CAN/ULC-S602, “Aboveground Steel Tanks for Fuel Oil and Lubricating Oil”,

(g) ULC-S603, “Standard for Steel Underground Tanks for Flammable and Combustible Liquids”,

(h) CAN/ULC-S603.1, “External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids”,

(i) ULC-S615, “Standard for Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids”,

(j) CAN/ULC-S652, “Standard for Tank Assemblies for the Collection, Storage and Removal of Used Oil”,

(k) CAN/ULC-S653, “Standard for Aboveground Steel Contained Tank Assemblies for Flammable and Combustible Liquids”,

(l) ULC-S655, “Aboveground Protected Tank Assemblies for Flammable and Combustible Liquids”, or

(m) ULC/ORD-C142.5, “Concrete Encased Steel Aboveground Tank Assemblies for Flammable and Combustible Liquids”.

(2) Tanks built in conformance with Clauses (1)(a), (b) and (c) shall be used only for the storage of crude petroleum at oil fields.

(3) When necessitated by possible contamination of the liquid to be stored or possible rapid corrosion of the tank, **storage tanks** need not conform to Sentence (1), provided that they are designed and built in conformance with good engineering practice for the material being used.

(4) **Atmospheric storage tanks** shall not be used for the storage of **flammable liquids** or **combustible liquids** at temperatures at or above their boiling points.

(5) Existing in-service aboveground **atmospheric storage tanks** that do not comply with Sentence (1) may remain in-service if the tanks

(a) are not leaking,

(b) have no dents greater than 30 degrees or 35 mm in depth from the normal configuration,

(c) have no pitting in excess of 3 mm, and

(d) have metal thickness of at least 50% of the minimum permissible thickness specified in an applicable standard referred to in Sentence (1).

(6) Existing aboveground **atmospheric storage tanks** that do not comply with Sentence (1), (3), (5) or (9) shall be refurbished in conformance with Article 4.3.1.10. or be replaced.

(7) Existing in-service underground **storage tanks** that do not comply with Sentence (1) may remain in-service if the tanks are not leaking and steel **storage tanks** and associated piping are protected from external corrosion in accordance with Subsection 4.3.9.

(8) Existing underground **storage tanks** that do not comply with Sentence (1), (3) or (7) shall be refurbished in conformance with Article 4.3.1.10. or be replaced.

(9) Existing aboveground **atmospheric storage tanks** that comply with ULC/ORD-C142.16-1994, "Protected Aboveground Tank Assemblies for Flammable and Combustible Liquids", are deemed to comply with Clause (1)(l).

(10) In-service **atmospheric storage tanks** that were installed on or before December 31, 2014 and that do not comply with Sentence (1) may remain in-service if they do not leak and if the tanks met the requirements of this Code on December 31, 2014, as it read on that day.

Low pressure storage tanks and pressure vessels

4.3.1.3. (1) **Low pressure storage tanks** shall be constructed in conformance with

(a) API 620, "Design and Construction of Large, Welded, Low-Pressure Storage Tanks", or

(b) ASME BPVC, "Boiler and Pressure Vessel Code".

(2) **Pressure vessels** shall be constructed in conformance with CSA-B51, "Boiler, Pressure Vessel, and Pressure Piping Code".

(3) **Low pressure storage tanks** and **pressure vessels** are permitted to be used as **atmospheric storage tanks**.

Operating pressure

4.3.1.4. The normal operating pressure of a **storage tank** shall not exceed its design pressure.

Corrosion protection

4.3.1.5. The exposed surface of every aboveground **storage tank** for **flammable liquids** or **combustible liquids** which is fabricated of any ferrous substance shall be thoroughly coated with rust-resisting material compatible with the tank.

Floating roofs

4.3.1.6. Except for perimeter sealing material, floating roof assemblies or internal floating covers installed in **storage tanks** shall be constructed of metal, or other materials and design conforming to one of the tank construction standards set out in this Subsection.

Identification

4.3.1.7. A **storage tank** and its filling and emptying connections shall be identified in conformance with CPPI, "Using the CPPI Colour-Symbol System to Mark Equipment and Vehicles for Product Identification" or to CAN/CGSB-24.3, "Identification of Piping Systems".

Overfill protection

4.3.1.8. (1) A **storage tank** that is not a tight-filled **storage tank** shall be prevented from being overfilled by

(a) continuous supervision of the filling operations by personnel qualified to supervise the filling operations, or

(b) an overfill protection device that complies with ULC/ORD-C58.15, "Overfill Protection Devices for Flammable Liquid Storage Tanks".

(2) A tight-filled **storage tank** shall be prevented from being overfilled with a positive shut-off device that complies with CAN/ULC-S661, "Standard for Overfill Protection Devices for Flammable and Combustible Liquid Storage Tanks".

(3) Sentence (2) does not apply to tight-filled **storage tanks** that were installed on or before December 31, 2014 and that meet the requirements of this Code as it read on December 31, 2014.

Installation and use

4.3.1.9. Unless otherwise specified in this Code, a **storage tank** shall be installed and used in conformance with the applicable installation and use provisions of the design document to which the **storage tank** was built as required by this Section.

Reuse

4.3.1.10. (1) A **storage tank** that has been taken out of service shall not be reused for the storage of **flammable liquids** or **combustible liquids** unless it has been

(a) refurbished so as to conform to one of the standards set out in Sentence 4.3.1.2.(1), or

(b) refurbished in conformance with Sentence (2) or (3).

(2) A **storage tank** is permitted to be refurbished for aboveground use in conformance with one of the following standards:

(a) ULC-S601(A), "Refurbishing of Steel Aboveground Horizontal Tanks for Flammable and Combustible Liquids",

(b) ULC-S630(A), "Refurbishing of Steel Aboveground Vertical Tanks for Flammable and Combustible Liquids".

(3) A **storage tank** is permitted to be refurbished for underground use in conformance with one of the following standards:

(a) ULC-S603(A), "Refurbishing of Steel Underground Tanks for Flammable and Combustible Liquids",

(b) ULC-S615(A), "Refurbishing of Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids".

(4) A riveted **storage tank** shall not be relocated.

Subsection 4.3.2. Installation of Outside Aboveground Storage Tanks

Location

4.3.2.1. (1) Every outside aboveground **storage tank** for the storage of **flammable liquids** or **combustible liquids** shall be located in conformance with Sentences (2) to (5) with respect to the property line and any **building** on the same property.

(2) Except as provided in Sentences (6) and (7), every aboveground **storage tank** containing stable liquids and having a working pressure of not more than 17 kPa (gauge) shall be separated from a property line and any **building** on the same property by distances

(a) half those in Table 4.3.2.A. where protection is provided against fire or explosion in the tank in conformance with Sentence 4.3.2.5.(2), or

(b) equal to those in Table 4.3.2.A. where protection referred to in Clause (a) is not provided.

(3) Every aboveground **storage tank** containing **unstable liquids** and having a working pressure of not more than 17 kPa (gauge) shall be separated from a property line and any **building** on the same property by distances

(a) equal to those in Table 4.3.2.A., but not less than 7.5 m, where protection is provided against fire or explosion in the tank in conformance with Sentence 4.3.2.5.(2), or

(b) three times those in Table 4.3.2.A., but not less than 15 m, where protection referred to in Clause (a) is not provided.

(4) Every aboveground **storage tank** containing boil-over liquids shall be separated from a property line and any **building** on the same property by distances

(a) 0.75 times those in Table 4.3.2.A. where protection is provided against fire or explosion in the tank in conformance with Sentence 4.3.2.5.(2), or

(b) equal to those in Table 4.3.2.A. where protection referred to in Clause (a) is not provided.

(5) Where a **storage tank** containing stable liquids or **unstable liquids** has a working pressure greater than 17 kPa (gauge), the distances from a property line and any **building** on the same property shall be those specified in Sentences (2) and (3) multiplied by 1.5, but shall be not less than 7.5 m.

(6) The minimum distance required in Sentence (2) from a **storage tank** containing only Class II or IIIA liquids to a **building** on the same property is permitted to be reduced to

(a) 1.5 m provided the tank capacity is not more than 50000 L, or

(b) zero provided the tank capacity is not more than 2500 L.

(7) The minimum distance required in Sentence (2) is permitted to be waived provided the **storage tank**

(a) is in conformance with ULC-S655, “Aboveground Protected Tank Assemblies for Flammable and Combustible Liquids”, and

(b) has a capacity of not more than 50000 L.

(8) Where end failure of horizontal **storage tanks** may endanger adjacent property, the tanks shall be placed with the longitudinal axis parallel to such property.

TABLE 4.3.2.A.

Location of Aboveground Storage Tanks Forming Part of Article 4.3.2.1.

Maximum Tank Capacity, L	Minimum Distance to a Property Line or to a **Building** on the Same Property, m
250000	3
500000	4.5
2500000	9
5000000	12
over 5000000	15

Spacing between storage tanks

4.3.2.2. (1) Except as required in Sentences (2) and (3) and in Article 4.3.2.3., the minimum distance between every combination of two aboveground **storage tanks** shall be 0.25 times the sum of their diameters, but shall be not less than 1 m.

(2) The minimum distance between any two **storage tanks**, neither of which has a capacity of more than 250000 L, shall be 1 m.

(3) Where either of the two aboveground **storage tanks** contains **unstable liquids**, the distance required in Sentences (1) and (2) shall be doubled.

Clearances from liquefied petroleum gas cylinders and tanks

4.3.2.3. (1) The minimum separation between a **flammable liquid** or **combustible liquid storage tank** and a liquefied petroleum gas cylinder or tank shall be 6 m.

(2) Secondary containments for **flammable liquid** or **combustible liquid storage tanks** shall not contain any liquefied petroleum gas cylinder or tank, and the centre line of the secondary containment wall shall be not less than

(a) 3 m away from a liquefied petroleum gas cylinder, and

(b) 7 m away from a liquefied petroleum gas **storage tank**.

Fire department access

4.3.2.4. (1) Except as provided in Sentences (2) and (3), **storage tanks** for **flammable liquids** or **combustible liquids** shall be spaced so that each **storage tank** is accessible for fire fighting purposes.

(2) An access route constructed in conformance with Subsection 3.2.5. in Division B of the **Building Code** shall be provided in outdoor storage areas to permit the approach of **fire department** vehicles to within 60 m of any **storage tank**.

(3) Where fire fighting access to **storage tanks** containing Class I or II liquids is not provided, fire extinguishing measures conforming to Sentence 4.3.2.5.(2) shall be provided.

Fire protection systems

4.3.2.5. (1) Where the diameter of a **storage tank** exceeds 45 m, the **storage tank** shall be provided with protection against fire or explosion in conformance with Sentence (2).

(2) Protection against fire or explosion required for a **storage tank** shall consist of fixed protection systems designed in conformance with good engineering practice such as described in

(a) NFPA 11, “Standard for Low-, Medium-, and High-Expansion Foam”,

(b) NFPA 15, “Standard for Water Spray Fixed Systems for Fire Protection”, and

(c) NFPA 69, “Standard on Explosion Prevention Systems”.

Leakage testing

4.3.2.6. At the time of installation, aboveground **storage tanks** and associated piping shall be **tested** for leakage in conformance with Subsections 4.3.15. and 4.4.6.

Subsection 4.3.3. Supports, Foundations and Anchorage for Aboveground Storage Tanks

Foundations and supports

4.3.3.1. (1) **Storage tanks** shall rest on the ground or on foundations, supports or piling made of concrete, masonry or steel.

(2) Tank supports shall be installed on firm foundations designed to minimize uneven settling of the tank and to minimize corrosion of the part of the tank resting on the foundation.

(3) If the clearance below the base of a **storage tank** exceeds 300 mm, the supports for the **storage tank** shall have a **fire-resistance rating** not less than 2 h.

(4) Every aboveground **storage tank** shall be supported in a manner that will prevent the allowable design stress of the tank from being exceeded.

Earthquake protection

4.3.3.2. (1) In areas subject to earthquake forces, **storage tanks**, supports and connections shall be designed to resist such forces in conformance with

(a) Part 4 in Division B of the **Building Code**, and

(b) Appendix A2 of CAN/ULC-S601, "Standard for Shop Fabricated Steel Aboveground Tanks for Flammable and Combustible Liquids".

Protection against flooding

4.3.3.3. Aboveground **storage tanks** located in an area that may be subject to flooding shall be securely anchored.

Subsection 4.3.4. Normal and Emergency Venting for Aboveground Storage Tanks

Design and installation

4.3.4.1. (1) **Atmospheric** and **low pressure storage tanks** shall be provided with normal and emergency venting in conformance with

(a) API 2000, "Venting Atmospheric and Low-Pressure Storage Tanks", or

(b) the appropriate tank design standard set out in Sentence 4.3.1.2.(1).

Unstable liquids

4.3.4.2. When **unstable liquids** are stored, the effects of heat or gas resulting from polymerization, decomposition, condensation or self-reactivity shall be included in the determination of the total venting capacity.

Subsection 4.3.5. Vent Piping for Aboveground Storage Tanks

Materials and construction

4.3.5.1. Except at **distilleries** covered in Section 4.9., vent piping materials and construction shall conform to Subsections 4.4.2., 4.4.3. and 4.4.5.

Location of vent pipe outlets

4.3.5.2. (1) Normal vent pipe outlets for **storage tanks** of Class I liquids

(a) shall be located outside **buildings**, not less than

(i) 3.5 m above the adjacent ground level, and

(ii) 1.5 m from any **building** opening, and

(b) shall discharge so that flammable vapours will not enter the **building** or be trapped near any part of the **building**.

(2) Normal vent pipe outlets for **storage tanks** of Class II or IIIA liquids shall discharge outside **buildings**, not less than

(a) 2 m above the adjacent ground level, and

(b) 1.5 m from any **building** opening.

(3) Emergency vent outlets for **storage tanks** shall discharge outside **buildings** not less than 1.5 m from any **building** opening and from any combustible component of a **building** exterior wall.

Interconnection of vent piping

4.3.5.3. (1) Except as provided in Sentence (2), two or more **storage tanks** are permitted to be connected to a common vent pipe for normal relief venting provided the vent pipe size is designed to vent the combined vapours produced in the connected tanks without exceeding the allowable stresses of the tanks.

(2) Vent piping for **storage tanks** for Class I liquids shall not be connected to vent piping for **storage tanks** for Class II or IIIA liquids unless an effective arrangement is provided to prevent the vapours from the Class I liquids from entering the other tanks.

Subsection 4.3.6. Openings Other than Vents in Aboveground Storage Tanks

Provision of valves

4.3.6.1. (1) Each connection to an aboveground **storage tank** through which liquid can normally flow shall be provided with an internal or external shut-off valve located as close as practical to the shell of the tank.

(2) Each connection that is located below the liquid level of the aboveground **storage tank** and through which liquid does not normally flow shall be provided with a liquid-tight closing device.

Materials

4.3.6.2. (1) Valves and their connections to a **storage tank** shall be made of steel, except that when the chemical characteristics of the liquid stored are incompatible with steel, materials other than steel shall be used.

(2) Materials for valves and their connections to a **storage tank** shall be suitable for the pressures, stresses and temperatures that may be expected, including those of possible fire exposure.

Openings for liquid level measurements

4.3.6.3. Openings for measuring liquid levels in **storage tanks** for Class I liquids shall be equipped with caps or covers which shall be opened only when measuring the liquid level.

Connections for filling and emptying

4.3.6.4. (1) Except as provided in Sentence (3), connections used as part of normal operating conditions for filling or emptying **storage tanks** for **flammable liquids** and **combustible liquids** shall be located

(a) outside **buildings**,

(b) at a location free of sources of ignition, and

(c) not less than 1.5 m from **building** openings.

(2) Connections for filling or emptying **storage tanks** shall be kept closed to prevent leakage when not in use.

(3) A filling connection described in Sentence (1) is permitted to be located inside a **building** where

(a) made necessary

(i) by a process or activity located indoors and to which the tank is directly associated, or

(ii) for the collection of used liquids, and

(b) the fill piping is provided with means to prevent flammable vapours from returning to the **building**.

Subsection 4.3.7. Secondary Containment for Aboveground Storage Tanks

General

4.3.7.1. (1) The area surrounding a **storage tank** or group of **storage tanks** shall be designed to accommodate accidental spillage in conformance with Subsection 4.1.6.

(2) Where barriers described in Sentence 4.1.6.1.(1) are provided to contain accidental spillage from above-ground **storage tanks**, they shall conform to the requirements for secondary containment in this Subsection.

(3) A **storage tank** conforming to Sentence 4.3.7.4.(2) shall be considered as conforming to this Subsection provided it is used and maintained in conformance with Articles 4.3.7.8. and 4.3.7.9.

Construction

4.3.7.2. (1) Except as provided in Sentence (2), the base and walls of a secondary containment shall be made of noncombustible materials, and shall be designed, constructed and maintained to

(a) withstand full hydrostatic head, and

(b) provide a permeability of not more than 10^{-6} cm/s to the **flammable liquids** or **combustible liquids** contained in the **storage tanks**.

(2) Where a membrane provides the level of impermeability required in Sentence (1), the membrane shall

(a) conform to ULC/ORD-C58.9, "Secondary Containment Liners for Underground and Aboveground Flammable and Combustible Liquid Tanks", and

(b) if combustible, be covered with a noncombustible material of such nature and thickness that the membrane will not fail when the secondary containment is exposed to fire.

(3) Subject to Sentence (4), there shall be no openings in a secondary containment.

(4) Where piping passes through a secondary containment, such passages shall conform to Sentences (1) and (2).

Capacity

4.3.7.3. (1) Except as permitted in Sentence (3), a secondary containment for a single **storage tank** shall have a volumetric capacity of not less than 110% of the capacity of the tank.

(2) Except as permitted in Sentence (3), a secondary containment for more than one **storage tank** shall have a volumetric capacity of not less than the sum of

(a) the capacity of the largest **storage tank** located in the contained space, and

(b) 10% of the greater of

(i) the capacity specified in Clause (a), or

(ii) the aggregate capacity of all other **storage tanks** located in the contained space.

(3) When the secondary containment is designed to prevent the entry of precipitation and water used for fire fighting purposes into the contained space, it shall have a volumetric capacity of not less than the capacity of the largest **storage tank** located in the contained space.

Clearances

4.3.7.4. (1) Except as provided in Sentence (2), no part of a secondary containment wall shall be less than 1.5 m from a **storage tank** shell.

(2) It is permitted to waive the distance required in Sentence (1) provided the **storage tank**

(a) is constructed in accordance with

(i) Clause 4.3.1.2.(1)(j), (k), (l) or (m), incorporating secondary containment, or

(ii) Clause 4.3.1.2.(1)(e) for double-walled **storage tanks**,

(b) has a capacity of not more than 50000 L, and

(c) is protected by posts or guardrails when exposed to collision damage.

Access to storage tanks and ancillary equipment

4.3.7.5. (1) A secondary containment shall be constructed so that it does not interfere with

(a) access to **storage tanks**, valves and ancillary equipment,

(b) egress from the contained space, and

(c) access for fire fighting as specified in Article 4.3.2.4.

(2) Where a **storage tank** contains Class I liquids, provision shall be made for the normal operation of valves and for access to the **storage tank** roof without entering the contained space created by the secondary containment when

(a) the average height of the secondary containment exceeds 3.5 m, measured from the ground level of the interior of the contained area, or

(b) the distance between the tank shell and the top inside edge of the secondary containment wall is less than the height of this wall.

Emergency venting

4.3.7.6. Where the secondary containment is not open to the atmosphere, emergency venting shall be provided to relieve any buildup of internal pressure in the contained space when exposed to heat or fire.

Leak detection

4.3.7.7. (1) The secondary containment shall be equipped with a monitoring device that activates a visual or audible alarm in an attended area in the event of a loss of integrity of the secondary containment unless

(a) the contained space created by the secondary containment is accessible for an internal visual examination, and

(b) the secondary containment is sloped so that liquid would flow to a specific location that can be monitored.

Drainage

4.3.7.8. (1) Liquids, debris and precipitation shall not be accumulated in the contained space created by the secondary containment.

(2) Provisions shall be made for removing liquid from the secondary containment in conformance with Subsection 4.1.6.

(3) Controls for the liquid removal system required in Sentence (2) shall be

(a) normally closed,

(b) accessible under fire exposure conditions, and

(c) located so they can be operated from outside the contained space.

Use of secondary containment

4.3.7.9. The contained space created by a secondary containment shall not be used for storage purposes.

Subsection 4.3.8. Installation of Underground Storage Tanks

Location

4.3.8.1. (1) Subject to Sentence (2), underground **storage tanks** shall be double-walled and shall be built in accordance with the underground **storage tank** standards in Sentence 4.3.1.2.(1).

(2) In-service underground **storage tanks** that do not comply with Sentence (1) may remain in-service if the tanks are not leaking and if the tanks met the requirements of this Code on December 31, 2014, as it read on that day.

(3) Underground **storage tanks** shall be located so that

(a) the foundations of **buildings** will not be undermined during excavation, and

(b) loads from **building** foundations and supports are not transmitted to the tank.

(4) Underground **storage tanks** shall be separated by a horizontal distance of not less than

(a) 600 mm from adjacent underground tanks or structures,

(b) 1 m from a **building** foundation or a **street** line, and

(c) 1.5 m from other property lines.

Ground cover

4.3.8.2. (1) Subject to Sentences (2) to (4), underground **storage tanks** shall be installed with not less than 600 mm of ground cover over the tank.

(2) Subject to Sentence (3), underground **storage tanks** subject to vehicular traffic shall be installed not less than 1 m below finished ground level.

(3) An underground **storage tank** subject to vehicular traffic may be installed under a 150 mm reinforced concrete slab or a 200 mm unreinforced concrete slab over not less than 450 mm of sand if the slab extends at least 300 mm beyond the underground **storage tank**.

(4) If it is not practical to install an underground **storage tank** completely below adjacent ground level due to subsurface conditions, an underground **storage tank** shall be built so that at least

(a) 75% of its mass is below adjacent ground level, provided there is not less than 600 mm of ground cover over the portion of the tank above adjacent ground level, or

(b) 50% of its mass is below adjacent ground level, provided there is not less than 1 m of ground cover over the portion of the tank above adjacent ground level.

Damage repair

4.3.8.3. (1) Underground **storage tanks** that are in the process of being installed shall be **inspected**, and any damage to the tank shell, protective coating, fittings or anodes shall be repaired before they are lowered into the excavation.

(2) Damage to underground **storage tank** shells shall not be repaired on site.

Damage prevention

4.3.8.4. (1) Underground **storage tanks** shall be lowered into the excavation by the use of lifting lugs and hooks and, where necessary, spreader bars to prevent damage to the tank shell, protective coating, fittings or anodes.

(2) Any method of handling that may result in damage to the protective coating of the tank shall not be used.

Installation

4.3.8.5. (1) Underground steel **storage tanks** shall be installed in conformance with Appendix B of CAN/ULC-S603.1, "External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids".

(2) Underground reinforced plastic **storage tanks** shall be installed in conformance with Appendix A of ULC-S615, "Standard for Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids".

(3) Underground **storage tanks** shall not be placed in direct contact with reinforced concrete slabs but shall be separated by not less than 150 mm of sand or other suitable material to distribute evenly the weight of the tank on the supporting base.

Leakage testing

4.3.8.6. (1) At the time of installation, underground **storage tanks** and associated piping shall be **tested** for leakage in conformance with Subsections 4.3.15. and 4.4.6.

Filling

4.3.8.7. (1) **Flammable liquids** or **combustible liquids** shall not be placed in an underground **storage tank** until

(a) the fill pipe and vent line have been installed in the tank, and

(b) all other openings have been sealed.

Spillage

4.3.8.8. If a spillage occurs involving an underground **storage tank**, the escaped liquid and all soil contaminated by the spill shall be removed in accordance with Subsection 4.1.6.

Anchorage

4.3.8.9. (1) Underground **storage tanks** shall be protected against hydrostatic forces which can cause uplift of the tanks when they are empty.

(2) Where anchors and ground straps are used to resist the uplift forces referred to in Sentence (1), they shall be

(a) electrically isolated from the tank, and

(b) installed in such a manner that they do not damage the tank shell, protective coating, fittings or anodes.

Subsection 4.3.9. Corrosion Protection of Underground Steel Storage Tanks

Corrosion protection

4.3.9.1. (1) Underground steel **storage tanks** and integral fittings subject to corrosion shall be protected

(a) in accordance with CAN/ULC-S603.1, "External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids", or

(b) by impressed current in accordance with NACE RP0285, "Corrosion Control of Underground Storage Tank Systems by Cathodic Protection".

Subsection 4.3.10. Vents for Underground Storage Tanks

Vent design

4.3.10.1. Underground **storage tanks** shall be provided with vent openings and piping of sufficient cross-sectional area designed to vent the tanks during the maximum filling or withdrawal rate without causing the allowable stress for the tank to be exceeded.

Materials and construction

4.3.10.2. Except at **distilleries** as provided in Section 4.9., vent piping materials and construction shall conform to Subsections 4.4.2., 4.4.3. and 4.4.5.

Installation

4.3.10.3. (1) Vent pipe outlets from underground **storage tanks** for Class I liquids shall

(a) be located outside **buildings** higher than the fill pipe openings but not less than

(i) 3.5 m above the adjacent ground level,

(ii) 1.5 m from any **building** opening, and

(iii) 7.5 m from any dispenser, and

(b) discharge so that flammable vapours will not enter **building** openings or be trapped near any part of the **building**.

(2) Vent pipes from underground **storage tanks** for Class II or IIIA liquids shall be located outside **buildings** at a height that is above the fill pipe opening but not less than 2 m above finished ground level.

(3) Vent pipes from underground **storage tanks** for **flammable liquids** or **combustible liquids** shall not be obstructed by any device that may cause excessive back pressure, except that vent pipes from underground **storage tanks** for Class II or Class IIIA liquids may be fitted with return bends, coarse screens or other devices to minimize the entry of foreign material.

(4) Vent piping shall enter an underground **storage tank** through the top of the tank and shall not extend more than 25 mm into the tank.

(5) Vent piping shall be

(a) installed so that any nominally horizontal run shall slope towards the underground **storage tank**,

(b) constructed without traps,

(c) adequately supported to prevent sagging, and

(d) where necessary, protected against mechanical damage.

(6) The requirements of Sentence (4) do not apply to vent piping with an operational vent alarm if the vent piping met the requirements of this Code on December 31, 2014, as it read on that day.

Interconnection of vent pipes

4.3.10.4. (1) Subject to Sentence (2), if vent piping connects two or more underground **storage tanks**, pipe sizes shall be designed to vent the combined vapours produced in the connected underground **storage tanks** without exceeding the allowable stresses of the tanks when being filled simultaneously.

(2) If it is not possible to fill the connected underground **storage tanks** referred to in Sentence (1) simultaneously, or if the connected vents have a vapour recovery system, the vent piping shall be sized to accommodate the maximum vapour flow possible in the system.

(3) Vent piping for an underground **storage tank** containing a Class I liquid shall not be connected to the vent piping for an underground **storage tank** containing a Class II or IIIA liquid unless an effective

method is provided to prevent the vapours from the Class I liquid **storage tank** from entering the other tank.

Subsection 4.3.11. Openings Other than Vents in Underground Storage Tanks

Connections

4.3.11.1. Connections for all openings in underground **storage tanks** shall be liquid and vapour tight.

Openings for measuring liquid level

4.3.11.2. Openings for measuring liquid levels in underground **storage tanks** if independent of the fill pipe shall be equipped with a vapour-tight cap or cover which shall be opened only when measuring the liquid level.

Fill piping and discharge piping

4.3.11.3. (1) Fill piping and discharge piping shall enter underground **storage tanks** only through the top of the tank and discharge piping used in suction systems shall be sloped toward the **storage tanks**.

(2) The fill point of an underground **storage tank** shall not be located higher than the discharge point of the tank's vent.

(3) Subject to Sentence (5), connections used as part of normal operating conditions for filling or emptying underground **storage tanks** shall be located

(a) outside **buildings**,

(b) at a location free of sources of ignition, and

(c) not less than 1.5 m away from **building** openings.

(4) Connections for filling or emptying **storage tanks** described in Sentence (3) shall be kept closed to prevent leakage when not in use.

(5) A filling connection described in Sentence (3) may be located inside a **building** if

(a) made necessary

(i) by a process or activity located indoors and to which the tank is directly associated, or

(ii) for the collection of used liquids, and

(b) the fill piping is provided with means to prevent flammable vapours from returning to the **building**.

(6) If a fill piping system has an offset component from the fill point on the underground **storage tank**, fill pipes shall be

(a) double-walled,

(b) sloped to the **storage tank**, and

(c) electronically monitored for leak detection.

(7) If the fill point is below the normal liquid level in the underground **storage tank**,

(a) the fill line shall be equipped with a manual or automatic valve located at the fill point to prevent spillage when the fill cap is removed, and

(b) the fill line drop tube shall be equipped with a method to prevent siphoning of the tank's contents should a leak occur in the fill line.

(8) In-service fill piping systems that do not comply with Sentences (6) and (7) may remain in-service if the piping does not leak and if the fill piping system met the requirements of this Code on December 31, 2014, as it read on that day.

Subsection 4.3.12. Installation of Storage Tanks Inside Buildings

Application

4.3.12.1. This Subsection applies to the installation of **storage tanks** in **buildings**.

Occupancy

4.3.12.2. (1) Subject to Sentence (2), **storage tanks** in **buildings** shall only be located in **industrial occupancies**.

(2) A **storage tank** containing a Class I liquid fuel that is connected to a stationary engine may be installed in any **occupancy** of a **building** if the installation complies with NFPA 37, "Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines".

Maximum static head

4.3.12.3. The static head imposed on a **storage tank** inside a **building** shall not exceed 70 kPa (gauge) at the bottom of the tank when the vent or fill pipe is filled with liquid unless the tank is designed for greater pressures.

Maximum quantities and location

4.3.12.4. (1) Except as provided in Subsection 4.2.8. and in Sentence (2), **storage tanks** for **flammable liquids** or **combustible liquids** shall be

(a) located in dedicated rooms conforming to Subsection 4.3.13., and

(b) located in conformance with Table 4.3.12.A.

(2) When quantities greater than are permitted for incidental use in Subsection 4.2.8. are required for special process operations, **storage tanks** for **flammable liquids** or **combustible liquids** are permitted to be located outside of a storage room referred to in Sentence (1), provided that

(a) total quantities per **fire compartment** are not more than one-half the quantities permitted in Table 4.3.12.A.,

(b) they are located on the **first storey**, and

(c) the installation conforms to Articles 4.3.12.7. to 4.3.12.10. and Article 4.3.13.4.

(3) Table 4.3.12.A. does not apply to the storage of **distilled beverage alcohol**.

TABLE 4.3.12.A.

Indoor Tank Storage in **Industrial Occupancies** Forming Part of Article 4.3.12.4. and 4.3.12.6.

Class of Liquid	Storage Level	Maximum Quantity per Storage Room[1], L, One or More Tanks, Protected Storage[2]	Maximum Quantity per Storage Room[1], L, One or More Tanks, Unprotected Storage
Class I	**First Storey**	40000	25000
Class I	**Storeys** above the **first storey**	7500	Not permitted
Class I	**Basement**	Not permitted	Not permitted
Class II and IIIA	**First Storey**	200000	100000

Class II and IIIA	**Storeys** above the **first storey**	20000	Not permitted
Class II and IIIA	**Basement**	20000	Not permitted

Notes to Table 4.3.12.A.:

(1) See Subsection 4.3.13.

(2) See Article 4.2.7.7.

Fire compartments

4.3.12.5. **Fire compartments** referred to in this Subsection shall have a **fire-resistance rating** not less than 2 h.

Mixed storage

4.3.12.6. (1) When two or more classes of liquids are stored in a single storage room referred to in Sentence 4.3.12.4.(1), the total quantities of stored liquids shall meet the requirements of the following equation:

$$qI/QI + qII+IIIA/QII+IIIA \leq 1$$

where

qI = the actual quantity of Class I liquid present,

qII+IIIA = the actual quantity of Class II and IIIA liquid present,

QI = the maximum quantity of Class I liquid permitted in Table 4.3.12.A., and

QII+IIIA = the maximum quantity of Class II and IIIA liquid permitted in Table 4.3.12.A.

Storage tanks outside storage rooms

4.3.12.7. (1) Where **storage tanks** for **flammable liquids** or **combustible liquids** are located outside of storage rooms conforming to Subsection 4.3.13.,

(a) provision shall be made, in conformance with Subsection 4.1.6., to contain a spill equal to at least 100% of the volume of the largest **storage tank** or to drain away spilled **flammable liquids** or **combustible liquids**,

(b) all electrical equipment and wiring in the vicinity of the **storage tank** and the exterior vent shall be installed in conformance with Subsection 4.1.4., and

(c) the area in which the **storage tank** is located shall be ventilated in conformance with Subsection 4.1.7., where designated a Class 1, Zone 0, 1 or 2 hazardous location under the **Electrical Safety Code** made under the **Electricity Act, 1998**.

Vents

4.3.12.8. (1) Except as provided in Sentence (2), normal and emergency vents for **storage tanks** in **buildings** shall be provided in conformance with Subsections 4.3.4. and 4.3.5.

(2) Weak roof-to-side shell seams that are designed to rupture before the allowable design stress of the **storage tank** is reached shall not be used as a means of emergency venting of **storage tanks** inside **buildings**.

Supports, foundations and anchorage

4.3.12.9. (1) Except as provided in Sentence (2), where **storage tanks** for **flammable liquids** or **combustible liquids** are installed inside **buildings**, the supports, foundations and anchorage for such **storage tanks** shall be in conformance with Subsection 4.3.3.

(2) Where a **storage tank** is suspended, rather than supported on a foundation, supports shall be designed and installed in conformance with good engineering practice.

Bonding and grounding

4.3.12.10. (1) Where **storage tanks** for **flammable liquids** or **combustible liquids** are installed inside **buildings**, tanks, piping and discharge equipment shall be bonded and grounded.

Subsection 4.3.13. Rooms for Storage Tanks

Design and construction

4.3.13.1. (1) Rooms for **storage tanks** inside **buildings** shall be

(a) separated from the rest of the **building** by a **fire separation** having a **fire-resistance rating** of not less than 2 h,

(b) designed to contain a spill equal to at least 100% of the volume of the largest **storage tank**, or to drain away spilled **flammable liquids** or **combustible liquids** in conformance with Subsection 4.1.6.,

(c) made liquid-tight where the walls join the floor,

(d) provided with natural or mechanical ventilation in conformance with Subsection 4.1.7., and

(e) used for no other purposes than the storage and handling of **flammable liquids** or **combustible liquids**.

Clearances

4.3.13.2. A minimum clear space of 550 mm shall be maintained between the walls of a room described in Article 4.3.13.1. and the sides of any **storage tanks** within the room.

Explosion venting

4.3.13.3. Where Class IA or IB liquids are dispensed within a storage room, the room shall be designed to prevent critical structural and mechanical damage from an internal explosion in conformance with NFPA 68, “Standard on Explosion Protection by Deflagration Venting”.

Hose stations and portable extinguishers

4.3.13.4. (1) In **buildings** not required to be equipped with a standpipe system by the **Building Code**, hose stations conforming to Articles 3.2.9.2. to 3.2.9.7. of the **Building Code**, as it read on August 21, 2000, shall be provided in the vicinity of the storage room, such that all parts of the room are within reach of a hose stream.

(2) Portable extinguishers for **Class B fires** shall be provided in conformance with Section 6.2.

Placards

4.3.13.5. (1) Placards conforming to the **Transportation of Dangerous Goods Regulations** made under the **Transportation of Dangerous Goods Act, 1992 (Canada)** shall be posted in a conspicuous location outside the room containing **storage tanks**.

(2) Placards required in Sentence (1) shall identify the

(a) liquids stored as **flammable liquids** or **combustible liquids**, and

(b) capacities of the **storage tanks**.

(3) Despite Clause (2)(a), where storage consists of a single product, placards that identify the liquid using the UN Product Identification Number (PIN) shall be acceptable.

(4) Despite Clause (2)(a), where storage consists of multiple products within the same class, placards that identify the class of liquids shall be acceptable.

(5) Despite Clause 2(a), where storage consists of more than one class of liquid, placards that indicate the danger symbol or individual placards for each class of liquid shall be acceptable.

(6) Rooms for **storage tanks** and the information described in Sentence (2) shall be identified in the fire safety plan required in Article 4.1.5.6.

Subsection 4.3.14. Openings Other than Vents in Storage Tanks in Buildings

Connections

4.3.14.1. (1) Connections for all openings in **storage tanks** in **buildings** shall be liquid and vapour tight.

(2) Connections to **storage tanks** through which liquid can flow shall be provided with valves located as close as practical to the tank.

Openings for liquid level measurement

4.3.14.2. (1) Openings that are independent of the fill pipe and are used for measuring the liquid level in **storage tanks** containing Class I or II liquids shall be equipped with a vapour-tight cap which shall be opened only when measuring the liquid level.

(2) Openings referred to in Sentence (1) shall be protected against overflow and **vapour pressure** by means of a spring-loaded check valve.

Subsection 4.3.15. Leakage Testing of Storage Tanks

Leakage testing

4.3.15.1. (1) Every **storage tank** shall be **tested** for leakage in conformance with Sentences (2) to (4)

(a) whenever a leak is suspected, and

(b) at the time of installation

(i) before backfilling in the case of an underground tank, or

(ii) before filling or putting into service in the case of an aboveground tank.

(2) When a leakage **test** is required by Sentence (1) on an aboveground **storage tank**, it is permitted to determine the source of leakage

(a) by a visual examination of the tank shell, and

(b) where the bottom is not amenable to such examination, by **testing** the bottom of the tank in conformance with Sentence (3).

(3) Except as provided in Articles 4.3.15.4. and 4.3.15.5., when a leakage **test** is required by Sentence (1) on an underground **storage tank**, it shall be done by qualified personnel using equipment conforming to

(a) ULC/ORD-C58.12, “Leak Detection Devices or (Volumetric Type) for Underground Flammable Liquid Storage Tanks”, or

(b) ULC/ORD-C58.14, “Nonvolumetric Leak Detection Devices for Underground Flammable Liquid Storage Tanks”.

(4) Where field **test** methods are included in the tank construction standards referred to in Articles 4.3.1.2. and 4.3.1.3., such **tests** shall be permitted for **storage tanks** conforming to those standards.

Retention of records

4.3.15.2. Records of **tests** referred to in Article 4.3.15.1. shall be retained for examination by the **Chief Fire Official**, in conformance with Article 1.1.2.1.

Remedial action

4.3.15.3. (1) When a leak is detected in a **storage tank** by a leakage **test** required in this Subsection or by a leakage detection measure required in Subsection 4.3.16.,

(a) the **storage tank** shall

(i) be replaced, in the case of an underground tank, or

(ii) be repaired or replaced in the case of an aboveground tank, and

(b) the escaped liquid shall be removed in conformance with Article 4.1.6.3.

(2) The **Chief Fire Official** shall be notified within 24 h of detection of a leak referred to in Sentence (1).

Pneumatic leakage tests

4.3.15.4. (1) Pneumatic leakage **tests** shall not be performed on field-erected aboveground **storage tanks**.

(2) Pneumatic leakage **tests** shall not be performed on **storage tanks** with **flammable liquids** or **combustible liquids** in the tanks.

(3) Where a pneumatic leakage **test** is performed on an underground **storage tank**, the tank shall be considered to be leaking when the **test** indicates a pressure drop within a 2 h period after steady temperature conditions have been established and the source of pressure has been removed.

(4) Pneumatic **test** pressures applied to underground **storage tanks** shall be measured by an instrument calibrated in increments of not more than 1 kPa.

(5) If a pneumatic leakage **test** is conducted before an underground tank is backfilled in the case of a new tank, or after the tank is uncovered in the case of a previously installed tank, the **test** pressure shall comply with the production **testing** requirements of

(a) ULC-S603, “Standard for Steel Underground Tanks for Flammable and Combustible Liquids”, or

(b) ULC-S615, “Standard for Reinforced Plastic Underground Tanks for Flammable and Combustible Liquids”.

(6) Where a pneumatic leakage **test** is performed on a completely buried **storage tank**, the **test** pressure shall be not less than 35 and not more than 70 kPa (gauge).

(7) Measures shall be taken to guard against the hazards associated with pneumatic leakage **testing** where explosive mixtures of vapours from **flammable liquids** or **combustible liquids** and air may be present in the area of a tank that has been in use.

Liquid media leakage tests

4.3.15.5. (1) Where a leakage **test** incorporating a liquid **test** medium, including a **flammable liquid** or **combustible liquid**, is performed on an underground **storage tank**, the tank shall be considered to be

leaking when, with compensation for volume differentials caused by effects of temperature and tank shell distortion, the **test** indicates a liquid loss.

(2) The pressure at the bottom of a **storage tank** shall not exceed 70 kPa (gauge) during the leakage **test** referred to in Sentence (1).

Subsection 4.3.16. Leakage Detection of Storage Tanks

Liquid level measurements

4.3.16.1. (1) Except as provided in Article 4.3.16.2., the liquid level in any **storage tank** shall be measured at intervals not greater than seven days in conformance with Sentences (2) to (4), except that at **fuel dispensing stations**, the measurements shall be taken each day the station is in operation.

(2) The level of water at the bottom of an underground **storage tank** shall be measured at intervals not greater than seven days, except that at **fuel dispensing stations**, the measurement shall be taken each day the station is in operation.

(3) A comparison of the measurements described in Sentences (1) and (2) with meter readings and a computation of any gain or loss of liquid shall be done each time a required measurement is taken.

(4) A record for each **storage tank** showing the measurements and computations described in Sentence (3) shall be retained for examination by the **Chief Fire Official**, in conformance with Article 1.1.2.1.

Continuous leakage detection

4.3.16.2. (1) The measurements described in Article 4.3.16.1. are not required for an underground **storage tank** when

(a) it is provided with a continuous leakage detection device conforming to

(i) ULC/ORD-C58.12, “Leak Detection Devices (Volumetric Type) for Underground Flammable Liquid Storage Tanks”, or

(ii) ULC/ORD-C58.14, “Nonvolumetric Leak Detection Devices for Underground Flammable Liquid Storage Tanks”, and

(b) its associated underground piping is provided with continuous leakage detection conforming to Article 4.4.6.7.

Corrective action

4.3.16.3. (1) Immediate corrective action shall be taken in conformance with Subsection 4.3.15. when

(a) a loss of liquid or a gain of water is indicated by any of the leakage detection measures described in Articles 4.3.16.1. and 4.3.16.2., or

(b) the level of water at the bottom of an underground **storage tank** exceeds 50 mm.

Subsection 4.3.17. Out of Service

Underground storage tanks

4.3.17.1. (1) When underground **storage tanks** will be out of service for a period not exceeding 180 days,

(a) the liquid level in the **storage tank** shall be measured at intervals not greater than one month and a record of such measurements shall be retained for **inspection**,

(b) fill pipe covers and covers over openings to measure liquid levels, dispensers and power controls shall be kept locked when not in use, and

(c) vent piping shall be kept open.

(2) Except as provided in Sentence (3), when underground **storage tanks** will be out of service for a period exceeding 180 days,

(a) the **storage tanks**, connected piping and dispensers shall be emptied of Class I liquid,

(b) the **storage tanks**, piping and dispensers shall be refilled with a Class II or IIIA liquid, or not less than 1 kg of dry ice for each 500 L of tank capacity shall be added to the **storage tank**,

(c) measurements of the liquid level of each **storage tank** containing a Class II or IIIA liquid shall be made at intervals not greater than one month, and a record of such measurements shall be retained for **inspection**, and

(d) fill pipe covers and covers over openings to measure liquid levels, dispensers and power controls shall be locked.

(3) Where underground **storage tank** facilities are operated on a seasonal basis,

(a) at the close of each season of operation,

(i) the liquid level of each **storage tank** shall be measured,

(ii) a record of such measurements shall be retained for **inspection**, and

(iii) all fill pipe covers and covers over openings for measuring liquid levels, dispensers and power controls shall be locked, and

(b) prior to the start of an operating season,

(i) the liquid level in each **storage tank** shall be measured,

(ii) the measurements shall be compared with those recorded at the close of the previous season, and

(iii) when a loss of liquid or water intrusion is apparent, immediate action shall be taken to determine and correct the condition.

(4) Where a **storage tank** has been out of service for more than 12 months, the tank and piping shall be **tested** for leakage in conformance with Subsections 4.3.15. and 4.4.6.

Aboveground storage tanks

4.3.17.2. (1) When an aboveground **storage tank** will be out of service or unsupervised for a period not exceeding 180 days, the piping from the tank shall be capped or the valves necessary to achieve similar isolation of the tank shall be closed and securely locked.

(2) When a **storage tank** referred to in Sentence (1) contains **flammable liquids** or **combustible liquids**, the liquid level in the tank shall be measured and the readings compared at intervals not greater than one month.

(3) Where an aboveground **storage tank** will be out of service or unsupervised for a period exceeding 180 days,

(a) all liquid and vapours shall be removed from the **storage tank** and its connected piping, and

(b) the **storage tank** markings shall clearly indicate that the tank is empty.

Disposal

4.3.17.3. Where a **storage tank** is to be permanently disposed of, sufficient openings shall be cut in the tank to render it unfit for further use.

Removal

4.3.17.4. (1) When underground **storage tanks** have no further use or have been out of service for two years or longer, such tanks, together with connected piping and dispensers, shall

(a) have all **flammable liquids** and **combustible liquids** removed from them,

(b) be purged of vapours, and

(c) except as permitted in Article 4.3.17.5., be removed from the ground.

(2) If contaminated, soil surrounding the **storage tanks** described in Sentence (1) shall be replaced with clean fill.

Abandonment in place

4.3.17.5. (1) Where the **Chief Fire Official** determines that it is impractical to remove an underground **storage tank** described in Sentence 4.3.17.4.(1), such tank shall be filled with an inert material.

(2) Where the **Chief Fire Official** determines that it is impractical to remove underground piping described in Sentence 4.3.17.4.(1), such piping shall have the ends permanently sealed by capping or plugging.

Corrosion protection

4.3.17.6. Corrosion protection systems shall be maintained in operating condition when a **storage tank** is temporarily out of service and during seasonal shutdowns.

SECTION 4.4 PIPING AND TRANSFER SYSTEMS

Subsection 4.4.1. Application

Application

4.4.1.1. (1) This Section applies to piping and transfer systems for **flammable liquids** and **combustible liquids**.

(2) Except where otherwise stated in this Part, this Section shall not apply to the following:

(a) tubing or casings and piping for oil or gas wells,

(b) transmission pipelines,

(c) piping for vehicles, aircraft, watercraft and portable or stationary engines,

(d) piping systems in **fuel dispensing stations** and **distilleries**, and

(e) piping within the scope of the applicable provincial **boiler** and **pressure vessel** codes.

Subsection 4.4.2. Materials for Piping, Valves and Fittings

Materials

4.4.2.1. (1) Piping systems that contain **flammable liquids** or **combustible liquids** shall be made of materials that are suitable for the maximum anticipated working pressures and operating temperatures and for the chemical properties of the contained liquid.

(2) Subject to Sentence (3), piping systems shall not be made of materials that

(a) are subject to failure from internal stress or rupture by mechanical damage, or

(b) are subject to failure in fires because they are combustible or have a low melting point.

(3) Non-metallic piping systems may be used for underground installations if they comply with CAN/ULC-S660, "Standard for Nonmetallic Underground Piping for Flammable and Combustible Liquids".

(4) If steel piping is used, it shall comply with

(a) API 5L, "Line Pipe",

(b) ASTM A53/A53M, "Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless", or

(c) CSA Z245.1, "Steel Pipe".

(5) If service pressures exceeding 875 kPa (gauge) may occur, piping and fittings shall be designed in accordance with ASME B31.3, "Process Piping".

(6) Underground piping systems shall include piping in tank sumps, transition sumps and dispenser sumps.

Special materials

4.4.2.2. Where problems of corrosion, contamination or sanitation or standards of purity require special materials, it is permitted to use non-metallic materials for piping, valves and fittings in conformance with Article 4.1.1.4.

Underground piping system construction

4.4.2.3. (1) Underground piping systems shall be of double-walled construction.

(2) Sentence (1) does not apply to vent risers and vertical fill piping systems.

(3) In-service underground piping systems that do not comply with Sentence (1) may remain in-service if the piping does not leak and if the piping system met the requirements of this Code on December 31, 2014, as it read on that day.

Subsection 4.4.3. Corrosion Protection of Piping Systems

Corrosion protection

4.4.3.1. (1) Except as provided in Sentence (2), all exposed or underground piping, valves, couplings, flanges and bolts that are fabricated of any ferrous substance shall be thoroughly coated with a rust-resistant compatible material.

(2) Underground metallic piping systems in contact with the soil or groundwater shall be protected against corrosion in accordance with

(a) CAN/ULC-S603.1, "External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids", or

(b) NACE SP0169, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems".

Subsection 4.4.4. Identification of Piping Systems

Identification

4.4.4.1. (1) Pipelines for **flammable liquids** or **combustible liquids** shall be marked with the contents of the line, and these markings shall be maintained in a clearly legible form.

(2) Piping for **flammable liquids** or **combustible liquids** shall not be painted red.

(3) Transfer points in piping systems for **flammable liquids** and **combustible liquids** shall be identified in conformance with CPPI, "Using the CPPI Colour-Symbol System to Mark Equipment and Vehicles for Product Identification", or to CAN/CGSB-24.3, "Identification of Piping Systems".

Documentation

4.4.4.2. (1) Documentation on piping systems for **flammable liquids** or **combustible liquids**, including tank and pumping arrangements, shall be made available to the **fire department** upon request.

(2) Documents referred to in Sentence (1) shall be kept at two separate locations so that one copy remains readily available in the event the other is inaccessible due to fire.

Subsection 4.4.5. Joints in Piping Systems

Threaded joints

4.4.5.1. Threaded joints in piping systems for **flammable liquids** or **combustible liquids** shall be made using joint compound or polytetrafluoroethylene tape conforming to CAN/ULC-S642, "Standard for Compounds and Tapes for Threaded Pipe Joints".

Welded piping

4.4.5.2. (1) Welding of piping for **flammable liquids** or **combustible liquids** shall comply with Section 5.17 and

(a) API 1104, "Welding of Pipelines and Related Facilities", or

(b) API RP 1107, "Recommended Pipeline Maintenance Welding Practices".

(2) Flanged joints for piping shall be provided in welded systems at intervals that will facilitate dismantling and avoid subsequent in place hot work operations.

Flanged joints

4.4.5.3. (1) Subject to Sentence (2), flanged joints for piping shall be made with forged or cast steel flanges designed, constructed and installed in accordance with ASME B16.5, "Pipe Flanges and Flanged Fittings NPS ½ Through NPS 24 Metric/Inch Standard".

(2) Bronze flanges for 50 mm diameter or smaller size piping referred to in Article 4.4.5.2. are permitted to be used where copper and brass piping is permitted.

Bolting materials

4.4.5.4. Bolting materials for flanged connections in steel piping systems for **flammable liquids** or **combustible liquids** shall be of alloy steel equivalent to "ASTM A193/A193M, "Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications", Grade B-7.

Gaskets

4.4.5.5. Gaskets in flanged connections shall be of a material resistant to the liquid being carried and capable of withstanding temperatures of at least 650°C without damage that would impair its function.

Mechanical connections

4.4.5.6. (1) Where underground piping systems have no secondary containment, mechanical connections shall

(a) be readily accessible for **inspection** and maintenance, and

(b) not be in direct contact with the soil.

Subsection 4.4.6. Leakage Testing of Piping Systems

Leakage testing

4.4.6.1. (1) Piping systems including those at **fuel dispensing stations** shall be **tested** for leakage in conformance with Sentences (2) and (3)

(a) whenever a leak is suspected, and

(b) at the time of installation

(i) before backfilling in the case of underground piping, or

(ii) before putting into service in the case of exposed piping.

(2) In-service exposed piping systems may be visually **inspected** for leakage in accordance with Article 4.4.11.5.

(3) When exposed piping systems are subjected to a pneumatic leakage **test**,

(a) it shall be in conformance with Article 4.4.6.4., and

(b) the piping, including the joints, shall be soaped to assist in the detection of leaks.

Retention of records

4.4.6.2. Records of the pressure **tests** on piping systems shall be retained for examination by the **Chief Fire Official**, in conformance with Article 1.1.2.1.

Remedial action

4.4.6.3. If a leak is detected in a piping system during the leakage **test**, the piping system shall be repaired or replaced and the escaped liquid shall be removed in conformance with Subsection 4.1.6.

Pneumatic leakage tests

4.4.6.4. (1) Piping systems referred to in Sentence 4.4.6.1.(3) shall be considered to be leaking when the **test** indicates a pressure drop or a volume loss within a 2 h period after steady temperature conditions have been established and the source of pressure had been removed.

(2) Pressure measurements referred to in Sentence (1) shall be obtained by using instruments calibrated in increments of not more than

(a) 4 kPa for **test** pressures up to 700 kPa (gauge), and

(b) 1% of the **test** pressure where it exceeds 700 kPa (gauge).

Test pressures

4.4.6.5. (1) Except as provided in Sentences (2) and (3) and Article 4.4.6.6., piping systems shall be pressure **tested** at pressures of not less than 350 kPa (gauge) or 1.5 times the maximum operating pressure, whichever is greater.

(2) **Test** pressures exceeding 700 kPa (gauge) shall not be used except when the piping system is designed for such pressures.

(3) Where **test** pressures exceed the design pressures for pumps or similar components included in the piping system being **tested**, such pumps or components shall be isolated from the remainder of the system.

Class I liquids as a test medium

4.4.6.6. Class I liquids shall not be used for pressure **testing** of piping systems, except that piping normally containing Class I liquids under pressure is permitted to be **tested** with such liquids at pressures not exceeding their maximum operating pressures.

Leakage detection

4.4.6.7. When an underground piping system is provided with continuous leakage detection, it shall be in conformance with ULC/ORD-C107.12, “Line Leak Detection Devices for Flammable Liquid Piping”.

Subsection 4.4.7. Location and Arrangement of Piping

Location

4.4.7.1. (1) Piping shall be installed outdoors whenever possible and located so it will not create a hazard to **buildings** or equipment.

(2) Where piping for **flammable liquids** or **combustible liquids** is installed within a **building**, the length of piping shall be as direct and as short as practicable.

(3) No portion of a piping system shall be used in a manner that could cause damage to the piping system.

(4) Piping systems shall be used only for the transfer of products.

Supports for aboveground outdoor piping

4.4.7.2. (1) Aboveground outdoor piping shall be supported and arranged to prevent excessive vibration and stress on equipment connected to it.

(2) When vehicular impact or physical damage is possible, protective guarding devices shall be provided for piping referred to in Sentence (1) and for fill pipes for **storage tanks**.

(3) Aboveground piping systems shall be supported such that they are not in direct contact with the surface of the ground.

Arrangement of aboveground outdoor piping

4.4.7.3. (1) Aboveground outdoor piping shall not be located

(a) on the exterior of walls except on those of **noncombustible construction**, or

(b) above windows and doors.

(2) Aboveground outdoor piping shall not be located above roofs except above roofs of impermeable and **noncombustible construction**, with provision for accidental spillage provided in conformance with Subsection 4.1.6.

(3) Where aboveground piping crosses roadways or railway sidings, ample overhead clearance and warning signs indicating the clearance height shall be provided.

(4) Piping passing through secondary containment walls shall be designed to prevent excessive stress resulting from settlement or fire exposure.

Underground piping

4.4.7.4. (1) Underground piping shall be located so it will not be damaged as a result of vibrations or settling of an adjacent **building** or structure.

(2) Underground piping shall be located not less than 300 mm away from the foundations of any **building** or structure, except where such piping enters the **building** as permitted in Article 4.4.7.7.

(3) Piping passing under railway tracks shall be installed in conformance with TC, “Standards Respecting Pipeline Crossings Under Railways”.

(4) Piping adjacent to railway tracks shall be installed in conformance with **Flammable Liquids Bulk Storage Regulations** made under the **Canada Transportation Act**.

Installation of underground piping

4.4.7.5. (1) Underground piping shall be

(a) supported on undisturbed or compacted soil, and

(b) backfilled on the top and sides with not less than

(i) 300 mm of pea gravel or clean crushed stone, or

(ii) 300 mm of clean sand, free of cinders and stones and compacted in layers not more than 300 mm thick.

(2) Where it is not practicable to support piping as required in Sentence (1) on undisturbed soil, it shall be supported on not less than 150 mm of clean sand, pea gravel or washed, crushed stone.

Piping in service tunnels

4.4.7.6. Piping for **flammable liquids** or **combustible liquids** shall not be located in service tunnels that are used for pedestrian traffic other than for maintenance purposes.

Piping at entrances to buildings

4.4.7.7. (1) Piping for **flammable liquids** or **combustible liquids** shall be located aboveground where the piping enters a **building**.

(2) Piping referred to in Sentence (1) shall be provided with inside and outside shut-off valves.

(3) Where piping referred to in Sentence (1) passes through a wall which would restrict the expansion or contraction of the piping, pipe sleeves shall be provided at the wall penetration to facilitate such movement.

Indoor piping

4.4.7.8. (1) Indoor piping for **flammable liquids** or **combustible liquids** shall either be supported overhead or be located in trenches conforming to Article 4.4.7.9.

(2) Piping referred to in Sentence (1) shall not be installed under combustible flooring.

Piping in trenches

4.4.7.9. (1) Where indoor piping for **flammable liquids** or **combustible liquids** is installed in trenches, a trapped drainage system conforming to Subsection 4.1.6. shall be provided.

(2) When piping referred to in Sentence (1) contains Class I liquids, the trench shall be

(a) provided with positive ventilation to the outdoors, or

(b) designed to prevent the accumulation of flammable vapours.

(3) Noncombustible material shall be used to cover piping referred to in Sentence (1).

Overhead piping

4.4.7.10. (1) Overhead piping for **flammable liquids** or **combustible liquids** shall be installed close to the ceiling or beams or along walls not less than 1.8 m above the floor to protect it against mechanical damage.

(2) Where practical, overhead piping referred to in Sentence (1) shall be supported from **building** framing members.

(3) In **buildings** of steel frame construction, piping referred to in Sentence (1) shall be fastened to steel beams or columns by pipe hangers attached to the flanges.

(4) Piping under concrete ceilings shall be suspended with the use of through bolts or expansion shields.

Supports for overhead piping

4.4.7.11. (1) Piping shall be supported on pipe hangers or other supports so that allowable stresses in the pipe are not exceeded.

(2) Anchors of the expansion shield type used to suspend piping shall not be used to suspend piping from unsound or lightweight concrete or from gypsum assemblies.

Protection of pipe risers

4.4.7.12. (1) Exposed pipe risers shall be protected against mechanical damage by

(a) installing such risers

(i) adjacent to walls or pilasters,

(ii) between flanges of steel columns, or

(iii) within securely anchored larger perforated pipe, and

(b) providing mechanical guards where the risers are exposed to mobile equipment.

Provision for expansion and contraction

4.4.7.13. (1) In the design of piping systems for **flammable liquids** or **combustible liquids**, provision shall be made for the expansion and contraction of the piping system and of the product it conveys.

(2) To prevent excessive stresses resulting from vibration, settling or temperature changes

(a) flexible non-metallic hose connectors conforming to CAN/ULC-S633, "Standard for Flexible Underground Hose Connectors for Flammable and Combustible Liquids" are permitted to be used where necessary in underground piping systems carrying **flammable liquids** or **combustible liquids**,

(b) flexible non-metallic pipe and fittings conforming to CAN/ULC-S660, "Standard for Nonmetallic Underground Piping for Flammable and Combustible Liquids", are permitted to be used where necessary in underground piping systems carrying **flammable liquids** or **combustible liquids**, or

(c) flexible metallic hose connectors conforming to ULC/ORD-C536, "Flexible Metallic Hose", are permitted to be used where necessary in aboveground and underground piping systems carrying **flammable liquids** or **combustible liquids**.

Subsection 4.4.8. Valves in Piping Systems

Design

4.4.8.1. (1) Except as provided in Sentences (2), (3) and (4), valves in piping systems for **flammable liquids** or **combustible liquids** shall be designed to accommodate the temperatures and pressures of those systems and shall conform to ULC-C842, "Valves for Flammable and Combustible Liquids".

(2) Every hose nozzle valve shall conform to CAN/ULC-S620, "Standard for Hose Nozzle Valves for Flammable and Combustible Liquids".

(3) Every emergency valve shall conform to CAN/ULC-S651, "Standard for Emergency Valves for Flammable and Combustible Liquids".

(4) Existing valves are deemed to comply with Sentences (1), (2) and (3), provided they are

(a) not leaking, and

(b) constructed of material that is in conformance with Article 4.4.2.1.

Shut-off valves

4.4.8.2. (1) Shut-off valves shall be provided in all **flammable liquid** or **combustible liquid** piping and pumping systems.

(2) Where practical, valves referred to in Sentence (1) shall be located outdoors or be immediately accessible from outdoors.

(3) Except as permitted in Sentence (4), steel shut-off valves shall be provided

(a) at connections to all aboveground **storage tanks**,

(b) on supply piping where it enters **buildings** or structures,

(c) on branch lines from the main supply line,

(d) on supply lines at dispensing locations,

(e) to isolate one part of a piping system from another, and

(f) to isolate meters and air eliminators.

(4) Stainless steel, monel metal or lined steel bodied valves are permitted to be used when special conditions warrant their use.

Diaphragm valves

4.4.8.3. Diaphragm valves shall have no direct connections between the liquid and air sections that might permit leakage of the liquid past the packing into the air lines.

Globe valves

4.4.8.4. Globe valves shall be arranged so that the packing is on the low pressure side.

Indicating valves

4.4.8.5. Rising stem or other indicating valves shall be used where necessary to determine whether the valves are open or shut.

Identification

4.4.8.6. (1) All valves shall be identified in conformance with CPPI, “Using the CPPI Colour-Symbol System to Mark Equipment and Vehicles for Product Identification”, or to CAN/CGSB-24.3-92, “Identification of Piping Systems”.

(2) Every identification tag shall be kept clean so that its colour and inscription are easily recognizable.

Subsection 4.4.9. Heating of Piping Systems

Design

4.4.9.1. Heating equipment for piping systems containing **flammable liquids** or **combustible liquids** shall be designed not to overheat or create an ignition source for the liquids being heated.

Steam heating

4.4.9.2. (1) **Flammable liquids** and **combustible liquid** piping is permitted to be heated by steam lines provided the minimum steam temperature and pressure to make the liquid fluid are used and Sentences (2) and (3) are complied with.

(2) A pressure regulator shall be provided in the steam line with a relief valve on the downstream side of the regulator.

(3) Piping and steam lines shall be enclosed in insulation conforming to the **Building Code**.

Electrical heating cables

4.4.9.3. Electrical heating cables including electrical induction heating, shall conform to Subsection 4.1.4.

Thermal electrical conduction heating

4.4.9.4. (1) Thermal electrical conduction heating conforming to Sentence (2) is permitted to be used by passing a low-voltage alternating current through the pipe.

(2) Systems permitted in Sentence (1) shall be installed and **tested** as complete units and

(a) unheated sections of piping shall be isolated from heated sections by means of nonconductive fittings,

(b) thermostatic controls, high temperature limit controls and fuses shall have the lowest practical rating to ensure satisfactory operation,

(c) all parts of the piping and fittings shall be enclosed by insulated coverings of a type which will prevent accidental grounding of the systems, and

(d) switches, transformers, contactors and other spark-producing equipment shall be located in an area not subject to flammable vapours.

(3) Upon completion of the installation, systems permitted in Sentence (1) shall be **tested** to ensure that all components are functioning as intended.

Open flames

4.4.9.5. (1) Subject to Sentence (2), open flames shall not be used as a heat source to heat piping for **flammable liquids** or **combustible liquids**.

(2) Open flames may be used to heat piping for **flammable liquids** or **combustible liquids** if the heating is carried out in **furnaces** or ovens that comply with NFPA 86, "Standard for Ovens and Furnaces".

Subsection 4.4.10. Methods of Transfer in Piping Systems

Location of outdoor pumps

4.4.10.1. (1) Pumps for **flammable liquid** or **combustible liquid** piping systems installed aboveground and outside of **buildings** shall be located not less than

(a) 3 m from the property line, and

(b) 1.5 m from **building** openings.

Pump houses and pump rooms

4.4.10.2. (1) Pumps located indoors shall be in rooms built in conformance with Subsection 4.2.9.

(2) Pump houses and pump rooms shall not be used for any purpose other than to serve the pumping equipment.

Pits

4.4.10.3. (1) Pits for subsurface pumps for piping systems or for piping connected to submersible pumps shall be designed to withstand the forces to which they may be subjected without causing damage to the system.

(2) Pits provided in conformance with Sentence (1) shall not be larger than necessary for **inspection** and maintenance and shall be provided with a cover.

Control switches

4.4.10.4. Pumps for piping systems shall be provided with duplicate control switches to shut down the pumps in case of emergency, with one located in the operating area and the other at a remote location.

Hydraulic transfer systems

4.4.10.5. (1) Where **flammable liquids** or **combustible liquids** are transferred by water pressure as a result of displacement, such system shall not be used for liquids that are miscible in water.

(2) All **pressure vessels** for hydraulic transfer systems referred to in Sentence (1) shall be constructed, installed and **tested** in conformance with ASME BPVC, "Boiler and Pressure Vessel Code".

(3) Hydraulic transfer systems referred to in Sentence (1) shall be designed to prevent water pressure in excess of the design pressure of the tank or piping.

(4) Operating pressures shall be controlled by a constant-level float valve or a pressure-regulating valve on the water supply side of the hydraulic transfer system referred to in Sentence (1).

(5) Hydraulic transfer systems referred to in Sentence (1) shall be arranged so that there is no water pressure on the system except when liquid is being discharged.

(6) Check valves shall be provided for both water and **flammable liquid** or **combustible liquid** piping to prevent back-flow in hydraulic transfer systems referred to in Sentence (1).

Inert gas transfer systems

4.4.10.6. (1) Where **flammable liquids** or **combustible liquids** are transferred as a result of displacement by the expansion of nitrogen, carbon dioxide or other inert gases, all **pressure vessels** involved shall be constructed, installed and **tested** in conformance with ASME BPVC, "Boiler and Pressure Vessel Code".

(2) Pressure regulators for inert gas transfer systems referred to in Sentence (1) shall be provided in the gas line to control the pressure of the gas at the minimum pressure required to force the liquid through the piping system at the required rate.

(3) A relief valve with a slightly higher setting than the pressure required in Sentence (2) shall be provided on the downstream side of the regulator or on the tank.

(4) Means of automatically shutting off the gas supply and bleeding the gas pressure in the event of fire shall be provided on all inert gas transfer systems referred to in Sentence (1).

Non-inert gas transfer

4.4.10.7. (1) Subject to Sentence (2), compressed air or other non-inert gas pressure shall not be used in the transfer of **flammable liquids** or **combustible liquids** in a closed piping system.

(2) A non-inert gas pressure is permitted to be used in a closed piping system referred to in Sentence (1) provided

(a) it is the vapour or gas of the **flammable liquid** or **combustible liquid** being transferred, or

(b) it is a vapour or gas that will not support combustion reaction and is non-reactive with the **flammable liquid** or **combustible liquid** being transferred.

Subsection 4.4.11. Operating Procedures for Piping Systems

Procedures

4.4.11.1. Standard procedures for normal operations and for emergencies shall be given in printed form to all employees engaged in the operation of equipment for the transfer of **flammable liquids** and **combustible liquids** and shall be posted or readily available for convenient reference.

Training

4.4.11.2. (1) All employees participating in transfer operations involving **flammable liquids** or **combustible liquids** shall be trained in

(a) the procedures referred to in Article 4.4.11.1.,

(b) the importance of constant attendance during all loading or unloading operations,

(c) extinguishing procedures for fires involving **flammable liquids** and **combustible liquids**, and

(d) the **flammable liquids** and **combustible liquid** colour-coding and identification system required in Article 4.4.8.6.

(2) Employees engaged in the operation of equipment for the transfer of **flammable liquids** or **combustible liquids** shall be trained in the location, function and operation of valves used for the operation of fire protection equipment and manual emergency shut-off valves.

Emergency valves

4.4.11.3. Signs indicating the location of valves used for the operation of fire protection equipment and manual emergency shut-off valves shall be posted in conspicuous locations.

Portable extinguishers

4.4.11.4. At least one portable extinguisher having a rating of 80B:C shall be provided in the vicinity of pumps and ancillary equipment used for the transfer of **flammable liquids** or **combustible liquids**.

Visual inspections

4.4.11.5. (1) A visual **inspection** routine for the prompt detection of obviously abnormal conditions shall be established and shall be performed at least once each shift.

(2) A visual **inspection** shall be made at least once during each day of operation of all aboveground piping systems, pumps and other ancillary equipment, to detect leakage, and any such leakage shall be repaired as quickly as practical.

(3) Where necessary, flammable vapour indicators shall be used to detect leakage.

(4) Open flames and spark-producing devices shall not be used for leakage detection referred to in Sentence (2).

Operational tests

4.4.11.6. To ensure proper operation, frequent **inspections** and **tests** shall be made of all safety shut-off valves and other fire safety devices, with particular attention directed to normally open, fusible-link operated valves, float valves and automatic controls.

Maintenance

4.4.11.7. (1) Except as provided in Sentence (6), maintenance shall not be carried out on piping systems while they are under pressure.

(2) If connections or piping are to be opened, the system shall be drained of **flammable liquids** and **combustible liquids**.

(3) Where equipment for handling **flammable liquids** or **combustible liquids** has to be repaired, it shall be removed and taken to maintenance areas when possible.

(4) Tags shall be attached to all valves on piping systems that are shut off for maintenance purposes to indicate that such valves are not to be opened.

(5) Piping that has been used for the transfer of **flammable liquids** or **combustible liquids** shall be removed or capped when it is no longer intended to be used.

(6) Connections to pressurized piping systems shall be made in accordance with good engineering practice such as described in

(a) API RP 1107, "Recommended Pipeline Maintenance Welding Practices",

(b) API 2200, "Repairing Crude Oil, Liquefied Petroleum Gas and Product Pipelines", or

(c) API RP 2201, "Safe Hot Tapping Practices in the Petroleum and Petrochemical Industries".

Removal of piping

4.4.11.8. The removal, abandonment in place, disposal or temporary taking out of service of an underground piping system shall be performed in accordance with good engineering practice.

SECTION 4.5 FUEL DISPENSING STATIONS

Subsection 4.5.1. Storage, handling and use of flammable liquids and combustible liquids

Storage, handling and use

4.5.1.1. The storage, handling and use of **flammable liquids** and **combustible liquids** at **fuel dispensing stations** shall comply with Section 4.6 of Division B of NRC, "National Fire Code of Canada".

SECTION 4.6 BULK PLANTS

Subsection 4.6.1. Application

Application

4.6.1.1. This Section applies to that portion of a property where **flammable liquids** or **combustible liquids** are received in bulk quantities and are stored or handled for the purpose of being distributed.

Subsection 4.6.2. Storage

Storage

4.6.2.1. (1) **Flammable liquids** and **combustible liquids** shall be stored in

(a) **closed containers** in conformance with Article 4.6.2.4., or

(b) **storage tanks** in conformance with Section 4.3.

Storage tanks

4.6.2.2. At bulk plant rail loading and unloading facilities, the minimum distance from a **storage tank** to a railway line shall be in conformance with **Flammable Liquids Bulk Storage Regulations** made under the **Canada Transportation Act**.

Hydraulic pressure shock

4.6.2.3. Bulk **storage tanks**, piping, pumps, valves and associated components shall be designed, installed and maintained to accommodate hydraulic pressure shock on the system.

Container storage

4.6.2.4. (1) Containers for **flammable liquids** or **combustible liquids** stored indoors shall be stored in conformance with Subsection 4.2.7.

(2) Containers for **flammable liquids** or **combustible liquids** stored outdoors shall be stored in conformance with Subsection 4.2.11., except that the distance between the piles and property lines and the distance between piles need not apply when the containers are stored in an area that does not present a hazard to neighbouring property.

Spill control

4.6.2.5. An outdoor storage area shall be designed to accommodate accidental spillage in conformance with Subsection 4.1.6.

Fencing

4.6.2.6. (1) An outdoor area used for aboveground **storage tanks**, container storage, ancillary equipment and unloading facilities for **flammable liquids** or **combustible liquids** shall be surrounded by a firmly anchored fence that is

(a) substantially constructed to discourage climbing and unauthorized entry,

(b) not less than 1.8 m high, and

(c) provided with gates that shall be locked when the storage area is not staffed.

Subsection 4.6.3. Dispensing

Interconnection

4.6.3.1. Dispensing systems for Class I liquids shall not be interconnected with dispensing systems for Class II and IIIA liquids.

Dispensing into vehicles

4.6.3.2. (1) Dispensers serving the general public for dispensing **flammable liquids** or **combustible liquids** into fuel tanks of vehicles shall not be located at a bulk plant unless separated by a fence or equivalent barrier from the area in which the bulk storage operations are conducted.

(2) Where a dispenser referred to in Sentence (1) is supplied from an aboveground **storage tank**,

(a) an automatically operated valve, that is designed to open only when the dispenser is being operated, shall be provided at the tank outlet, and

(b) an emergency valve that complies with CAN/ULC-S651, “Standard for Emergency Valves for Flammable and Combustible Liquids” shall be installed in the supply line so that the shear point of the valve is not higher than the base of the dispenser and not lower than 25 mm below the base of the dispenser.

Dispensing and transfer inside buildings

4.6.3.3. Class I liquids shall be dispensed or transferred inside **buildings** only in conformance with Subsections 4.1.7. and 4.1.8.

Dispensing into metal containers or tanks

4.6.3.4. Class I liquids shall not be dispensed into a metal container or **storage tank** unless it is electrically connected in conformance with Article 4.1.8.2.

Subsection 4.6.4. Loading and Unloading Facilities

Clearances

4.6.4.1. (1) At a loading or unloading facility for **tank vehicles** or tank cars, the horizontal distance from the fill stem to an aboveground **storage tank**, a **building** or a property line shall be not less than

(a) 7.5 m for Class I liquids, and

(b) 4.5 m for Class II and IIIA liquids.

(2) At bulk plant rail loading and unloading facilities, the minimum distance from a loading structure to a railway line shall be in conformance with **Flammable Liquids Bulk Storage Regulations** made under the **Canada Transportation Act**.

(3) **Buildings** for the shelter of personnel or pumps shall be considered a part of the loading or unloading facility.

Multi-purpose facilities

4.6.4.2. When piping and pumping systems have been used for the transfer of either **flammable liquids** or **combustible liquids** at loading or unloading facilities, the system shall be cleaned of vapours before the other class of liquid is introduced.

Backflow preventers

4.6.4.3. (1) Systems through which tank cars or **tank vehicles** discharge into **storage tanks** by means of a pump shall be provided with backflow preventers located to prevent spills and inadvertent mixing of liquids.

(2) Systems referred to in Sentence (1) shall be designed, installed and maintained to prevent leakage or spillage.

Control valves

4.6.4.4. (1) Valves installed to control the filling of **tank vehicles** or tank cars shall be of the self-closing type.

(2) Control valves referred to in Sentence (1) shall be held open manually, except where automatic devices are provided for shutting off the flow in order to prevent the overfilling of **tank vehicle** or tank car compartments.

Bonding and grounding

4.6.4.5. (1) Bonding, grounding and isolation components for protection against static charges during the loading of **tank vehicles** or tank cars shall be provided when transferring **flammable liquids** or **combustible liquids**.

(2) Where **flammable liquids** or **combustible liquids** are transferred into railway tank cars, railway tracks shall be bonded throughout their length and permanently grounded in conformance with **Railway Prevention of Electric Sparks Regulations** made under the **Canada Transportation Act**.

(3) Bonding required in Sentence (1) shall consist of a metallic bond wire connected to the fill stem or to some part of the loading structure in electrical contact with the fill stem in conformance with Subsection 4.1.4.

(4) Bonding wires for **tank vehicles** shall be provided with a pull-off connector attached so as to be in electrical contact with the cargo tank of the **tank vehicle**.

(5) The bonding connection required in Sentence (1) shall be fixed to the **tank vehicle** or **storage tank** before dome covers are raised and shall remain in place until filling is completed and all dome covers have been closed and secured.

Downspouts

4.6.4.6. Except as provided in Sentence 4.1.8.2.(2), when **tank vehicles** or tank cars are filled with Class I or II liquids through the top of the tank, the fill pipe shall terminate within 150 mm of the bottom of the tank.

Subsection 4.6.5. Fire Protection

Portable extinguishers

4.6.5.1. At least two portable extinguishers, each having a rating of not less than 80B:C, shall be provided at hazardous locations in bulk storage plants for **flammable liquids** and **combustible liquids**.

Subsection 4.6.6. Spill Control

Spill control

4.6.6.1. Facilities to control possible spills of **flammable liquids** or **combustible liquids** shall be provided at loading and unloading points in conformance with Subsection 4.1.6.

SECTION 4.7 PIERS AND WHARVES

Subsection 4.7.1. Application

Application

4.7.1.1. This Section applies to **flammable liquid** and **combustible liquid** installations on piers and wharves, but does not include **marine fuel dispensing stations**.

Subsection 4.7.2. General

Clearances

4.7.2.1. (1) Piers and wharves where cargos of **flammable liquids** or **combustible liquids** are transferred in bulk quantities to or from tanks of marine vessels shall be not less than 30 m from

(a) any bridge over a navigable waterway, and

(b) an entrance to a superstructure of any vehicular or railroad tunnel under a waterway.

(2) The termination of fixed piping for loading and unloading **flammable liquids** or **combustible liquids** shall be not less than 60 m from a bridge or from an entrance to a tunnel.

Construction

4.7.2.2. The substructure and deck of a pier or wharf shall be designed for its intended use and shall be of **heavy timber construction** or other material that will provide adequate flexibility, resistance to shock, durability, strength and fire resistance.

Subsection 4.7.3. Storage Tanks

Installation

4.7.3.1. (1) Except as permitted in Sentences (2) and (3), **storage tanks** shall be installed on shore in conformance with Subsections 4.3.2. to 4.3.7.

(2) **Storage tanks** are permitted to be located in **buildings** on piers and wharves of solid-fill or **noncombustible construction** provided they conform to Subsections 4.3.12. to 4.3.14.

(3) **Storage tanks** are permitted to be buried in piers and wharves of the solid-fill type provided they conform to Subsections 4.3.8. to 4.3.11.

Subsection 4.7.4. Piping, Valves and Fittings

Installation and materials

4.7.4.1. The method of installation and materials used for piping, valves and fittings shall conform to Section 4.4.

Pipe supports

4.7.4.2. (1) Piping shall be properly supported and arranged to prevent excessive vibration or strain on equipment connected to it.

(2) Piping supports shall consist of

(a) wood having no dimension less than 150 mm,

(b) steel, or

(c) concrete.

(3) Where pipe is supported more than 1.2 m above the pier deck, piping supports shall have a **fire-resistance rating** not less than 2 h.

Guards

4.7.4.3. In areas where general cargo is handled or where piping might be subject to physical damage from vehicles, watercraft or floatplanes, the piping shall be protected by means of guarding devices.

Flexible connections

4.7.4.4. Piping between the shore and piers or wharves shall be provided with swing joints or flexible connections designed in conformance with good engineering practice to permit the independent movement of the pier or wharf and shore piping without strain on the pipe.

Shut-off valves

4.7.4.5. A readily accessible valve to shut off the supply from shore shall be provided in each pipeline within 7.5 m of piers and wharves.

Access openings for inspection

4.7.4.6. (1) Access openings for **inspection** purposes below deck shall be provided for valves required in Article 4.7.4.5. and for connections to pipelines, and suitable signs shall be posted indicating their locations.

(2) No freight or materials shall be placed on piers and wharves in such a manner as to obstruct the access openings required in Sentence (1).

Identification

4.7.4.7. Identification tags or labels of metal or other material impervious to water and to the **flammable liquids** or **combustible liquids** being transferred shall be attached to and maintained on all pipelines and control valves to designate their use.

Leakage testing

4.7.4.8. (1) Piping systems shall be **tested** for leakage in conformance with Subsection 4.4.6. before being put into service and before reactivation when used on a seasonal basis.

(2) Underground piping systems referred to in Sentence (1) shall be **tested** at intervals not greater than 12 months.

Subsection 4.7.5. Bonding and Grounding

Bonding and grounding

4.7.5.1. (1) Railway tracks on piers and wharves shall be bonded throughout their length and permanently grounded in conformance with **Railway Prevention of Electric Sparks Regulations** made under the **Canada Transportation Act**.

(2) Insulating joints shall be placed in all rails where entering upon the pier or wharf.

Subsection 4.7.6. Fire Protection

Portable extinguishers

4.7.6.1. (1) Portable extinguishers having a rating of 40B:C shall be provided in the vicinity of Class I liquid pumps and fuel dispensers in conformance with Section 6.2.

(2) Portable extinguishers shall be kept in the pump house or other suitable location where they will be accessible in the event of an emergency, but not accessible to the public.

(3) Where marine vessels are loading or unloading **flammable liquids** or **combustible liquids** or are being refuelled, portable extinguishers with a rating of not less than 40B:C shall be placed on the pier or wharf in the vicinity of loading or unloading operations, so that they are accessible in the event of a fire emergency.

(4) Portable extinguishers provided in conformance with Sentence (3) shall be in addition to those provided on board the marine vessels.

Training

4.7.6.2. Operating personnel shall be trained in how to summon the nearest **fire department** in the event of fire.

Subsection 4.7.7. Bulk Transfer Stations

Location

4.7.7.1. (1) Except as permitted in Sentence (2), the bulk transfer of **flammable liquids** or **combustible liquids** shall take place only on piers and wharves used exclusively for that purpose.

(2) Where it is not practical to locate bulk transfer stations on separate piers and wharves, such stations may be located on general purpose piers and wharves provided that guards or fences are installed around valves or pumping equipment to prevent entry of unauthorized personnel.

Leakage and spill control

4.7.7.2. (1) Measures to accommodate possible leakage or spillage from hose couplings shall be provided in conformance with Subsection 4.1.6.

(2) Provision shall be made to prevent spillage resulting from the disconnection of hoses.

Hose connections

4.7.7.3. (1) Except as provided in Sentence (2), hose connections on piping shall be of the bolted flange type, and all such connections shall be provided with shut-off valves.

(2) The use of cam-locking connections up to 100 mm in size shall be permitted.

(3) Hose connections shall not project beyond the face of piers and wharves.

Subsection 4.7.8. Cargo Hose

Cargo hose

4.7.8.1. (1) The transfer of **flammable liquids** or **combustible liquids** between tanks of marine vessels and piers or wharves shall be through

(a) flexible cargo hose designed in conformance with good engineering practice, or

(b) jointed tubing or piping

(i) suitable for the cargo to be transferred, and

(ii) designed to withstand the maximum design working pressure.

Maintenance and testing

4.7.8.2. Cargo hose shall be maintained in satisfactory operating condition and be pressure **tested**, at intervals not greater than 12 months, to 1.5 times the maximum working pressure but not less than 350 kPa (gauge).

Supports

4.7.8.3. Cargo hose shall be supported where it is not run on a solid foundation.

Subsection 4.7.9. Cargo Pumps

Design and installation

4.7.9.1. Cargo pumps shall be designed and installed in conformance with Subsection 4.4.10.

Pressure relief

4.7.9.2. Cargo pumps capable of producing pressures in excess of the safe working pressure of the cargo hose shall be provided with pressure relief devices such as return lines or relief valves.

Location

4.7.9.3. (1) Except as permitted in Sentence (2), cargo pumps shall be located

(a) on shore or on piers and wharves either of **noncombustible construction** or of the solid-fill type, and

(b) not less than 3 m from other **buildings** or structures.

(2) Where it is not practicable to install cargo pumps as required in Sentence (1), they are permitted to be installed on piers and wharves of **combustible construction** if located in pump houses

(a) conforming to Subsection 4.7.10., and

(b) located not less than 3 m from other **buildings**.

Subsection 4.7.10. Pump Houses

Construction

4.7.10.1. Pump houses shall be of **noncombustible construction** with floors that are chemically resistant to the liquid being handled, liquid-tight and equipped with curbs or flashings around the base of the wall not less than 100 mm in height to contain any spilled liquid.

Ventilation

4.7.10.2. Ventilation shall be provided in pump houses in conformance with Subsection 4.1.7.

Subsection 4.7.11. Transfer Operations

Supervision

4.7.11.1. (1) Transfer operations shall be carried out only under the continuous supervision of a person qualified to supervise such operations.

(2) Cargo shall not be transferred to or from the tank of a marine vessel unless sufficient personnel are on board to control the operation.

(3) The person responsible for directing the operations shall

(a) prior to the transfer of cargo, ascertain that no unauthorized repair work is being carried out on the pier or wharf and that there are no open flames in the vicinity,

(b) during the transfer of cargo, monitor the progress of the loading and unloading to prevent overflow, and

(c) **inspect** the hose and connections for leakage and, if leakage occurs, stop the operations.

Bonding and grounding

4.7.11.2. (1) Tanks of marine vessels shall be electrically connected to the shore piping prior to the connection of cargo hose, except when cathodic protection facilities are operating.

(2) Electrical connections to tanks of marine vessels shall be maintained until the cargo hose has been disconnected and any spillage has been removed.

Equipment

4.7.11.3. (1) Cargo hose shall be of adequate length to allow for the movement of the marine vessel.

(2) Gaskets shall be used in all hose joints and pipe couplings to prevent leakage.

(3) Flanged joints shall be tightly bolted to prevent leakage.

(4) Drip pans shall be placed under hose connections on piers and wharves, except where a sump pit or settling basin is provided.

Spill control

4.7.11.4. (1) When transfer operations are completed,

(a) the valves on the hose connections shall be closed, and

(b) unless the cargo hose is equipped with a device that automatically prevents liquid from draining from the hose upon disconnection of the hose, the hose shall be drained so as to not create a fire or explosion hazard.

(2) Care shall be taken that no liquid is discharged on a pier or wharf or overboard during draining and emptying operations.

SECTION 4.8 PROCESS PLANTS

Subsection 4.8.1. Application

Application

4.8.1.1. (1) Except as provided in Sentence (2), this Section applies to those **process plants**, including **refineries**, which contain industrial processes involving **flammable liquids** or **combustible liquids**.

(2) This Section does not apply to **distilleries** covered in Section 4.9.

Subsection 4.8.2. Outdoor Processing Equipment

Location

4.8.2.1. (1) The location of outdoor processing equipment in **process plants** shall be based on its **flammable liquid** and **combustible liquid** capacity as described in Sentences (2) to (4).

(2) Except as provided in Sentence (4), outdoor processing equipment having emergency relief venting and a working pressure of not more than 17 kPa (gauge) shall be separated from property lines and **buildings** on the same property by distances

(a) equal to those in Table 4.3.2.A. for stable liquids, and

(b) 2.5 times those in Table 4.3.2.A. for **unstable liquids**.

(3) Except as provided in Sentence (4), outdoor processing equipment having emergency relief venting and a working pressure more than 17 kPa (gauge) shall be separated from property lines and **buildings** on the same property by distances

(a) 1.5 times those in Table 4.3.2.A. for stable liquids, and

(b) four times those in Table 4.3.2.A. for **unstable liquids**.

(4) Where protection is not provided against fires or explosions in processing equipment, the distances in Sentences (2) and (3) shall be doubled.

Subsection 4.8.3. Processing Buildings

Explosion venting

4.8.3.1. Except as provided in Article 4.8.4.2., where Class IA liquids or **unstable liquids** are processed within a room or a **building**, the room or **building** shall be designed to prevent critical structural and mechanical damage from an internal explosion in conformance with NFPA 68, “Standard on Explosion Protection by Deflagration Venting”.

Fire separations

4.8.3.2. Areas where **unstable liquids** are handled or where small-scale unit chemical processes are carried out shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 2 h.

Basements and pits

4.8.3.3. (1) Except as permitted in Article 4.1.5.9., Class I liquids shall not be handled or used in **basements**.

(2) Where Class I liquids are handled or used above **grade** within existing **buildings** that have **basements** or covered pits into which flammable vapours can travel and accumulate, such below **grade** areas shall be provided with mechanical ventilation designed to prevent the accumulation of flammable vapours.

(3) The mechanical ventilation required in Sentence (2) shall be capable of exhausting at least 18 m^3/h per square metre of the room area.

Ventilation

4.8.3.4. (1) Enclosed processing **buildings** handling **flammable liquids** or **combustible liquids** shall be ventilated as specified in Subsection 4.1.7.

(2) Equipment used in a **building** and the ventilation of the **building** shall be designed so as to limit flammable vapour-air mixtures under normal operating conditions to the interior of equipment, and to not more than 1.5 m from such equipment.

Subsection 4.8.4. Fire Prevention and Protection

Spill and vapour control

4.8.4.1. (1) Processing equipment shall be designed and arranged to

(a) prevent the unintentional escape of liquids and vapours, and

(b) minimize the quantity escaping in the event of accidental release.

(2) Measures to control spilled **flammable liquids** and **combustible liquids** shall be provided in conformance with Subsection 4.1.6.

Explosion protection

4.8.4.2. (1) Processing equipment where an explosion hazard is present shall be

(a) designed to withstand the explosion pressure without damage to the equipment,

(b) provided with explosion venting in conformance with NFPA 68, "Standard on Explosion Protection by Deflagration Venting", or

(c) provided with an explosion prevention system in conformance with NFPA 69, "Standard on Explosion Prevention Systems".

Fire prevention and protection

4.8.4.3. (1) An evaluation of the fire and explosion risks shall be undertaken to consider the material properties, quantities, operating conditions, storage arrangement, transportation, process design, operating and maintenance procedures.

(2) The evaluation in Sentence (1) shall result in the identification of measures that will minimize fires and explosions from occurring and mitigate the effects of a fire or explosion should it occur.

(3) Measures identified in Sentence (2) shall be implemented in conformance with good engineering practices to prevent fires and explosions from occurring.

(4) Measures identified in Sentence (2) may include but are not limited to

(a) fire detection and alarm,

(b) special fire suppression systems conforming to the standards identified in Sentences 6.8.1.1.(3) and (4),

(c) sprinkler system conforming to NFPA 13, "Standard for Installation of Sprinkler Systems",

(d) a reliable water supply with pressure and flow rates capable of meeting the fire demands,

(e) standpipe and hose systems connected to a reliable water supply located such that vessels, pumps and other equipment containing **flammable liquids** or **combustible liquids** can be reached with at least one hose stream,

(f) combination nozzles capable of discharging a straight steam, water spray or fog,

(g) hydrants or monitor nozzles installed in accordance with NFPA 24, "Standard for the Installation of Private Fire Service Mains and their Appurtenances",

(h) fire-proofing to protect essential equipment and controls,

(i) methods to effect an emergency shutdown of systems, and

(j) methods to protect equipment and structures from fire exposure.

(5) The evaluation and measures shall be put in writing and kept in the **building** for review by the **Chief Fire Official**.

SECTION 4.9 DISTILLERIES

Subsection 4.9.1. Application

Application

4.9.1.1. (1) This Section applies to those areas or **buildings** in **distilleries** where **distilled beverage alcohols** are concentrated, blended, mixed, stored or packaged.

(2) The storage, handling and use of **flammable liquids** or **combustible liquids**, other than **distilled beverage alcohols**, in a **distillery** shall conform to this Part.

(3) If there is a conflict between the requirements of this Section and any other requirement in this Part, other than a requirement of Section 4.12, this Section shall prevail.

(4) Where there are conflicts between this Part and the regulations made under the **Excise Act (Canada)** with regard to security of the product and measurement methods, the **Excise Act (Canada)** shall prevail.

Subsection 4.9.2. General

Building classification

4.9.2.1. (1) Except as provided in Sentence (2), **buildings** or parts thereof in which **distilled beverage alcohol** is distilled, processed or stored in bulk shall be classified as **high hazard industrial occupancies**.

(2) **Buildings** or parts thereof used for storage of **closed containers** of **distilled beverage alcohols** shall be classified as **medium hazard industrial occupancies**.

Subsection 4.9.3. Storage Tanks and Containers

Design, fabrication and testing

4.9.3.1. **Storage tanks**, wooden vats, barrels, drums or containers used for the storage or processing of **distilled beverage alcohols** shall be designed, fabricated and **tested** for the anticipated maximum working pressure, operating temperature, internal corrosion conditions and structural stresses to which they could be subjected.

Supports, foundations and anchorage

4.9.3.2. (1) Supports, foundations and anchorage of **storage tanks** shall comply with Subsection 4.3.3., except that timber supports shall be permitted.

(2) **Storage tank** supports having less than a 2 h **fire-resistance rating** shall be protected by an automatic fire suppression system conforming to an applicable standard set out in Article 6.8.1.1.

(3) The area underneath any **storage tank** greater than 1.2 m in diameter shall be protected by an automatic special fire suppression system conforming to an applicable standard set out in Article 6.8.1.1.

Storage tank vents

4.9.3.3. Normal and emergency vents shall be provided on **storage tanks** in conformance with good engineering practice.

Subsection 4.9.4. Storage

Storage tanks, drums and barrels

4.9.4.1. (1) Where more than 25000 L of **distilled beverage alcohol** in **storage tanks**, drums or barrels are stored inside **buildings**, such **buildings** shall be **sprinklered**.

(2) For **storage tank buildings** protected by automatic sprinklers in conformance with NFPA 13, “Standard for the Installation of Sprinkler Systems”, storage capacities shall not be limited.

Closed containers and storage aids

4.9.4.2. Storage of **closed containers** of **distilled beverage alcohols**, packaging materials and empty bottles, drums, barrels and pallets shall be in conformance with Part 3 of Division B of NRC, "National Fire Code of Canada".

Subsection 4.9.5. Piping and Pumping Systems

Design and installation

4.9.5.1. The design, fabrication, assembly and **inspection** of piping and pumping systems containing **distilled beverage alcohols** shall be suitable for the anticipated maximum working pressures, operating temperatures, internal corrosion conditions and structural stresses to which they could be subjected.

Subsection 4.9.6. Ventilation

Ventilation

4.9.6.1. (1) Natural or mechanical ventilation shall be provided for all areas where alcohol vapours are released from **storage tanks** or process equipment under normal operating conditions, to prevent the concentration of vapours from exceeding 25% of the **lower explosive limit**, measured 1.5 m from any equipment or from any opening subject to vapour release.

(2) Explosion venting as outlined in Sentence 4.2.9.6.(1) is only required in the distillation areas of a **distillery**.

Subsection 4.9.7. Spill Control

Spill control

4.9.7.1. Emergency drainage systems shall be provided to direct any spilled or leaked **distilled beverage alcohol** to a safe location.

Subsection 4.9.8. Fire Protection

Portable extinguishers

4.9.8.1. (1) Except as provided in Sentences (2) to (4), portable extinguishers shall be provided in conformance with Section 6.2.

(2) Except as permitted in Sentence (3), in maturing warehouses, at least one 4A:30B:C rated portable extinguisher shall be located adjacent to each **exit**.

(3) Hose stations complying with Article 6.2.6.6. are permitted to be installed in lieu of portable extinguishers at locations required in Sentence (2), and spaced so that the distance travelled to the nearest hose is not greater than 25 m.

(4) At least one portable extinguisher having a rating of 30B:C shall be located on each industrial lift truck.

Standpipe and hose systems

4.9.8.2. (1) Except as provided in Sentence (2), standpipe and hose systems shall be provided and installed in **distilleries** in accordance with the **Building Code**.

(2) Where a **building** is **sprinklered** in conformance with the **Building Code**, small hose (38 mm) stations are permitted to be supplied from interior sprinkler piping.

SECTION 4.10 RESERVED

SECTION 4.11 TANK VEHICLES

Subsection 4.11.1. Application

Application

4.11.1.1. This Section applies to **tank vehicles** when located on a property to which this Code applies.

Subsection 4.11.2. General

Portable extinguishers

4.11.2.1. (1) A **tank vehicle** shall be provided with at least one portable extinguisher having a minimum rating of 80B:C.

(2) Portable extinguishers on a **tank vehicle** shall be readily accessible.

Hot works

4.11.2.2. Hot works performed on or in close proximity to a **tank vehicle** shall conform to Section 5.17.

Parking inside buildings

4.11.2.3. (1) A **tank vehicle** shall not be parked inside a **building** unless

(a) the **building** is specifically designed for that purpose,

(b) there is sufficient space in the **tank vehicle** compartment to accommodate the thermal expansion of the **flammable liquid** or **combustible liquid**, and

(c) the **tank vehicle** has no leaks of **flammable liquid** or **combustible liquid**.

Parking outside buildings

4.11.2.4. (1) Subject to Sentence (2), a **tank vehicle** shall not be left unattended by the vehicle operator outside a **building** for more than 1 h.

(2) A **tank vehicle** is permitted to be left unattended by the vehicle operator outside a **building** for more than 1 h, but only in a parking space

(a) that is located not less than 15 m from a **building**, and

(b) where the **tank vehicle** is not exposed to undue hazard from accident or collision.

Subsection 4.11.3. Loading, Unloading and Dispensing from Tank Vehicles

Loading and unloading

4.11.3.1. Unless otherwise stated in this Subsection, the loading and unloading of **tank vehicles** shall be conducted in conformance with the applicable provisions in Subsection 4.6.4.

Ignition sources

4.11.3.2. During loading and unloading operations, a **tank vehicle** and its delivery equipment shall be separated from other ignition sources by not less than 6 m.

Static electric charges

4.11.3.3. During loading and unloading of a **tank vehicle**, measures shall be taken against static electric charges in conformance with Articles 4.1.8.2. and 4.6.4.5.

Supervision

4.11.3.4. During loading and unloading of a **tank vehicle**, trained personnel shall be in a position to shut off the flow of liquid in an emergency.

Multi-use compartments

4.11.3.5. When a compartment of a **tank vehicle** has been used to carry a Class I liquid, the compartment, piping and accessory delivery equipment shall be drained of liquid before a Class II or IIIA liquid is loaded.

Engine

4.11.3.6. When loading or unloading of Class I liquids is done without the use of the engine of the **tank vehicle**, the engine ignition shall be shut off during the transfer operations.

Unloading

4.11.3.7. (1) Before a **tank vehicle** is unloaded, the volume of liquid in the receiving tank shall be measured to ensure that the tank can accept the volume to be unloaded.

(2) If the vents of the receiving or delivery tank are obstructed, the transfer of liquid shall be stopped.

(3) A **tank vehicle** shall not be parked on a **street**, shoulder or sidewalk while unloading at a **fuel dispensing station**.

Dispensing into vehicles

4.11.3.8. The dispensing of fuel from a **tank vehicle** directly into the fuel tank of a vehicle shall comply with Article 4.11.3.8. of Division B of NRC, “National Fire Code of Canada”.

SECTION 4.12 LABORATORIES

Subsection 4.12.1. Application

Application

4.12.1.1. This Section applies to laboratories where **flammable liquids** and **combustible liquids** are used or handled.

4.12.1.2. If there is a conflict between the requirements in this Section and other requirements in this Part, the requirements in this Section shall prevail.

Subsection 4.12.2. Separation

Separation

4.12.2.1. (1) A laboratory shall be separated from other parts of the **building** by a **fire separation** having a **fire-resistance rating** of not less than 1 h.

(2) Despite Sentence (1), an existing laboratory that has **fire separations** consisting of membranes of lath and plaster or gypsum board is deemed to be in compliance with Sentence (1).

Subsection 4.12.3. Maximum Quantities

Maximum quantities

4.12.3.1. (1) Containers used for the storage of **flammable liquids** or **combustible liquids** shall

(a) if not more than 5 L in capacity, comply with Subsection 4.2.3., or

(b) if more than 5 L in capacity,

(i) comply with the safety container standards of ULC/ORD-C30, “Safety Containers”, and

(ii) have a capacity of not more than 25 L.

(2) Subject to Sentence (3) and Subsection 4.12.10., no more than 300 L of **flammable liquids** and **combustible liquids**, of which no more than 50 L may be **flammable liquids**, shall be kept in the open area of a laboratory.

(3) Quantities in excess of those permitted in Sentence (2) shall be stored in cabinets conforming to Subsection 4.2.10. or in a room conforming to Subsection 4.2.9.

(4) Containers of **flammable liquids** or **combustible liquids** shall be kept closed when not in use.

Subsection 4.12.4. Emergency Planning

Fire safety plan

4.12.4.1. (1) Except as provided in Sentences (2) to (4), a laboratory shall conform with the requirements of Section 2.8.

(2) Fire drills required in Subsection 2.8.3. shall be held at intervals not greater than six months in laboratories.

(3) Personnel working in laboratories shall be trained in the safe handling of **flammable liquids** and **combustible liquids**.

(4) Measures shall be taken to prevent access to laboratories by unauthorized persons.

Subsection 4.12.5. Spill Control

Spill control

4.12.5.1. A written spill procedure shall be provided for laboratories in conformance with Article 4.1.6.4.

Subsection 4.12.6. Electrical Equipment

Electrical equipment

4.12.6.1. Electrical equipment shall conform with Subsection 4.1.4.

Subsection 4.12.7. Inspection and Maintenance

Inspection and maintenance

4.12.7.1. (1) Electrical equipment, mechanical systems, piping, valves and automatic and manual control and safety devices shall be **inspected** annually and maintained in good operating condition at all times.

(2) The ventilation systems serving a laboratory shall be **inspected** and cleaned as required to prevent the accumulation of combustible or reactive deposits, and the intervals between **inspections** shall be not greater than

(a) 12 months for the ventilation systems of the open laboratory areas, and

(b) six months for the ventilation system of a power-ventilated enclosure required in Article 4.12.8.2.

Subsection 4.12.8. Ventilation

Scope and application

4.12.8.1. (1) Ventilation systems shall conform to Subsection 4.1.7. and Articles 4.12.8.2. to 4.12.8.5.

(2) Despite Sentence (1), existing ventilation systems need not conform with Articles 4.1.7.3., 4.1.7.4. and 4.12.8.2. to 4.12.8.5.

(3) Existing ventilation systems where make-up air is provided are deemed to be in compliance with Article 4.1.7.5.

(4) Existing ventilation systems that maintain a negative pressure within the ventilation system with respect to the surroundings are deemed to be in compliance with Article 4.1.7.7.

Ventilation

4.12.8.2. (1) A laboratory shall be provided with continuous mechanical ventilation designed and maintained to ensure that flammable vapours

(a) do not accumulate in the laboratory,

(b) are prevented from migrating to other parts of the **building**,

(c) do not accumulate in the ventilation system,

(d) are exhausted to the outdoors, and

(e) are not returned to the **building**.

(2) A ventilation system required in Sentence (1) shall be provided with monitoring devices to

(a) indicate that the ventilation system is in operation, and

(b) sound an alarm if the ventilation system malfunctions.

Power-ventilated enclosure

4.12.8.3. (1) The use and handling of **flammable liquids** or **combustible liquids** in a laboratory shall be confined inside a power-ventilated enclosure conforming to Articles 4.12.8.4. and 4.12.8.5. when

(a) their use releases flammable vapours which could be potentially explosive,

(b) liquids are heated to a temperature equal to or greater than their **flash point**, or

(c) **unstable liquids** are used.

Enclosure exhaust ventilation

4.12.8.4. (1) The ventilation system for a power-ventilated enclosure required in Article 4.12.8.3. shall

(a) conform to NFPA 91, “Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids”,

(b) provide continuous exhaust ventilation at an air velocity sufficient to prevent the accumulation of explosive vapours or of combustible or reactive deposits in the power-ventilated enclosure and its exhaust duct system,

(c) confine flammable vapours to the area where they are generated and exhaust them to the outdoors,

(d) not return the exhausted air to the **building**, and

(e) be provided with well identified control switches that are

(i) located outside of the power-ventilated enclosure, and

(ii) readily accessible in case of an emergency.

(2) Where deposits referred to in Clause (1)(b) can accumulate in the power-ventilated exhaust duct system and create a fire or explosion hazard,

(a) provisions shall be made to remove such deposits so they do not create a fire or explosion hazard, or

(b) an automatic special fire suppression system shall be provided in conformance with an applicable standard set out in Article 6.8.1.1.

Enclosure construction

4.12.8.5. (1) The power-ventilated enclosure required in Article 4.12.8.3. and its exhaust system shall

(a) except as provided in Sentences (2) and (3), be constructed of noncombustible materials compatible with and chemically resistant to vapours being exhausted,

(b) be provided with access doors to permit **inspection** and maintenance of the fan assembly and exhaust ducts,

(c) be provided with instructions for its use and the operation of the ventilation system, and

(d) be provided with means to control accidental spillage in conformance with Subsection 4.1.6.

(2) Combustible materials are permitted in systems described in Clause (1)(a) where

(a) such materials are required by the corrosive or reactive properties of chemicals or liquids being used, and

(b) their **flame-spread rating** is not more than 25.

(3) The **flame-spread rating** required in Sentence (2) is permitted to be greater than 25 if an automatic special fire suppression system conforming to an applicable standard set out in Article 6.8.1.1. is provided inside the power-ventilated enclosure and its exhaust duct system.

Subsection 4.12.9. Refrigerated Storage

Refrigerated storage

4.12.9.1. (1) Refrigerators described in Sentence 4.1.4.1.(2) shall be identified as containing **flammable liquids** or **combustible liquids**.

(2) Class I liquids stored in refrigerators shall be kept in **closed containers**.

Subsection 4.12.10. Existing Laboratories in Basements

Existing laboratories in basements

4.12.10.1. (1) Existing laboratories in **basements** may store, handle or use **flammable liquids** and **combustible liquids** if

(a) the quantity of **flammable liquids** and **combustible liquids** that are stored, handled or used does not exceed 300 L, of which not more than 250 L are **flammable liquids**,

(b) continuous mechanical ventilation to the outdoors is provided to ensure that flammable vapour concentrations do not exceed 25% of the **lower explosive limit**,

(c) an audible alarm is provided that will be sounded in an attended area upon shutdown of the mechanical ventilation system,

(d) the **building** has a fire safety plan in accordance with Section 2.8,

(e) Class IA liquids are not stored in containers greater than 4 L in capacity,

(f) all sources of ignition within 0.9 m from the floor are eliminated or the room is equipped with a flammable vapour detection system that will alarm in an attended location upon detection of vapour concentrations exceeding 10% of the **lower explosive limit**, and

(g) the laboratory is designed to prevent critical structural and mechanical damage from an internal explosion in accordance with NFPA 68, “Standard on Explosion Protection by Deflagration Venting”, unless

(i) all dispensing of **flammable liquids** is carried out in a power-ventilated enclosure in accordance with Articles 4.12.8.3. to 4.12.8.5., and

(ii) Class IA liquids are stored in cabinets in accordance with Article 4.2.10.5.

O. Reg. 213/07, Division B, Part 4; O. Reg. 150/13, ss. 13-15; O. Reg. 194/14, s. 7; O. Reg. 256/14, ss. 78-195.

PART 5
HAZARDOUS MATERIALS, PROCESSES AND OPERATIONS

SECTION 5.1 GENERAL

Subsection 5.1.1. Application

Application

5.1.1.1. This Part applies to materials, processes and operations that involve a risk from explosion or high flammability, or otherwise create a hazard to life safety or health.

Subsection 5.1.2. Means of Egress

Means of egress

5.1.2.1. Hazardous materials, processes and operations shall be located and the premises maintained so that the **means of egress** will not be obstructed in any manner that would interfere with evacuation of the **floor area** in the event of a fire.

Subsection 5.1.3. Electrical Installations

Electrical installations

5.1.3.1. Electrical installations shall conform to the **Electrical Safety Code** made under the **Electricity Act, 1998**.

Subsection 5.1.4. Ventilation

Ventilation requirements

5.1.4.1. Ventilation shall be provided for hazardous locations and processes in conformance with the **Building Code** and the requirements of this Part.

SECTION 5.2 EXPLOSIVES, FIREWORKS AND PYROTECHNICS

Subsection 5.2.1. General

Interpretation

5.2.1.1. In this Subsection,

"**Act**" means the **Explosives Act (Canada)**;

"**Regulations**" means the **Explosives Regulations** made under the **Explosives Act (Canada)**.

Manufacture, storage, handling, transportation, sale and use

5.2.1.2. The manufacture, storage, handling, transportation, sale and use of explosives shall meet the requirements of the **Act** and the **Regulations**.

Fire emergency procedures

5.2.1.3. (1) Subject to Sentence (2), no explosives shall be manufactured, stored, handled, transported, sold or used unless fire emergency procedures are established in accordance with Section 2.8 and such procedures specify

(a) the location and identification of storage and handling areas,

(b) the methods to control a fire emergency safely and efficiently, and

(c) the names, addresses and telephone numbers of persons to be contacted in case of fire during non-operating hours.

(2) Sentence (1) does not apply to

(a) the use of consumer fireworks (type F.1, as designated by the **Act** and **Regulations)**,

(b) the use of small arms cartridges (type C.1, as designated by the **Act** and the **Regulations**),

(c) the storage of consumer fireworks (type F.1, as designated by the **Act** and the **Regulations**) in **dwelling units**, or

(d) the storage of small arms cartridges (type C.1, as designated by the **Act** and the **Regulations)** in **dwelling units**.

Handling and discharge of fireworks and pyrotechnics

5.2.1.4. The handling and discharge of fireworks and pyrotechnics shall comply with NRCan, "Display Fireworks Manual" and NRCan, "Pyrotechnics Special Effects Manual".

Subsection 5.2.2. REVOKED: O. Reg. 256/14, s. 196.

SECTION 5.3 RESERVED

SECTION 5.4 CELLULOSE NITRATE PLASTICS

Subsection 5.4.1. Displays

Advertising displays

5.4.1.1. Displays of cellulose nitrate plastic articles in stores that are not in showcases or show windows shall be displayed only when placed on tables or counters not more than 1 m wide and 3 m long, and the spaces underneath the tables or counters shall be kept free of combustible materials.

Lighting fixtures

5.4.1.2. Lighting fixtures shall not be located adjacent to any cellulose nitrate plastic material so as to create a possible ignition hazard.

Subsection 5.4.2. Manufacture

Storage of raw materials

5.4.2.1. Raw materials used in the manufacture of cellulose nitrate plastics shall be stored only in areas reserved for that purpose.

Storage in cabinets

5.4.2.2. Not more than 450 kg of raw material used for the manufacture of finished cellulose nitrate plastic goods shall be stored in cabinets in any one workroom, not more than 225 kg stored in any one cabinet and not more than 112 kg in any one compartment of the cabinet.

Storage in vented vaults

5.4.2.3. Raw material in excess of that permitted in Article 5.4.2.2. shall be kept in vented vaults not exceeding 40 m^3 capacity and protected with an automatic sprinkler system installed in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems".

Accumulation of materials in workrooms

5.4.2.4. In factories manufacturing articles of cellulose nitrate plastics, **sprinklered** and vented cabinets, vaults or storage rooms shall be provided to prevent the accumulation of excessive quantities of such material in workrooms.

Stationing of operators

5.4.2.5. In the workrooms of factories where cellulose nitrate plastics are being processed, operators shall be stationed not closer than 1 m apart.

Storage in work areas

5.4.2.6. Material for the manufacture of cellulose nitrate plastic articles that is not kept in containers may be placed on tables, workbenches or at machines provided the quantity does not exceed one day's supply.

Storage limitations in workrooms

5.4.2.7. The total amount of cellulose nitrate plastic materials, including the material in containers and on tables, in any one workroom shall not exceed 70 kg.

Waste material storage

5.4.2.8. Waste cellulose nitrate plastic materials such as shavings, chips, turnings, sawdust edgings and trimmings shall be kept under water in metal receptacles until removed from the premises.

Subsection 5.4.3. Storage of Finished Products

Ventilation

5.4.3.1. Areas where cellulose nitrate plastic finished products are stored shall be ventilated so that any decomposition gases produced by the plastics will be vented outdoors to an area where they will not re-enter the **building**.

Heating appliance restrictions

5.4.3.2. (1) Cellulose nitrate plastics shall not be stored

(a) in rooms containing fuel-burning **appliances** or electrical heating elements, or

(b) within 600 mm of any steam pipe, radiator or **chimney**.

Storage vaults

5.4.3.3. (1) Where cellulose nitrate plastics in excess of 11 kg are stored in any **fire compartment** in a **building**, a vented cabinet or vault constructed in conformance with NFPA 40E, "Code for the Storage of Pyroxylin Plastic", and Articles 5.4.3.4. and 5.4.3.5. shall be provided for its storage.

(2) Not more than 9000 kg of cellulose nitrate plastics shall be stored in any vault.

Storage up to 3400 kg

5.4.3.4. (1) Where quantities do not exceed 3400 kg, cellulose nitrate plastics shall be stored in a vault that

(a) has a **fire-resistance rating** not less than 1.5 h,

(b) is designed to resist an internal pressure of 3.5 kPa,

(c) is not greater than 40 m^3 in volume,

(d) has explosion venting of 0.1 m^2 of venting area to the exterior for every cubic metre of vault volume, and

(e) is ventilated to the exterior to provide 200 cm^2 of ventilating area for each cubic metre of vault volume.

Storage in excess of 3400 kg

5.4.3.5. (1) Where quantities exceed 3400 kg but do not exceed 9000 kg, cellulose nitrate plastics shall be stored in a vault that

(a) has a **fire-resistance rating** not less than 4 h,

(b) is designed to resist an internal pressure of 28 kPa,

(c) has explosion venting of 650 cm^2 of venting area to the exterior for every cubic metre of vault volume, and

(d) is ventilated to the exterior to provide 200 cm^2 of ventilating area for each cubic metre of vault volume.

Subsection 5.4.4. Cellulose Nitrate Motion Picture Film

Restricted use

5.4.4.1. Cellulose nitrate motion picture film shall not be used, stored or handled in a place of public assembly.

Storage and handling

5.4.4.2. Cellulose nitrate motion picture film shall be stored and handled in conformance with NFPA 40, "Standard for the Storage and Handling of Cellulose Nitrate Motion Picture Film".

Storage when not in use

5.4.4.3. When not in use, cellulose nitrate motion picture film shall be kept in closed, single-roll containers.

Subsection 5.4.5. Fire Protection

Sprinkler systems

5.4.5.1. The manufacture and storage of articles of cellulose nitrate plastic in quantities exceeding 45 kg shall be only in **buildings** equipped with a system of automatic sprinklers installed in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems".

SECTION 5.5 RESERVED

SECTION 5.6 COMPRESSED GAS CYLINDERS

Subsection 5.6.1. General

Alternative protection measures

5.6.1.1. (1) A requirement of this Section is deemed to be complied with if alternative protection measures are **approved** that, in the opinion of the **Chief Fire Official**, will provide protection for life safety and health similar to the protection provided by compliance with the requirement.

(2) A proposal for alternative protection measures referred to in Sentence (1) shall bear the signature and seal of a **Professional Engineer** or **Architect**, or both.

(3) This Section does not apply to facilities at which **compressed gases** are manufactured or cylinders are filled or distributed if the storage and handling of the **compressed gases** is in conformance with

(a) CGA P-1, "Safe Handling of Compressed Gases in Containers",

(b) NFPA 55, "Standard for the Storage, Use and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders and Tanks", or

(c) a procedure that bears the signature and seal of a **Professional Engineer**.

(4) Articles 5.6.2.1. to 5.6.2.4. do not apply to **compressed gas** stored outdoors or in a **fire compartment** if the amount stored in each outdoor location or **fire compartment** does not exceed

(a) 25 kg of flammable **compressed gas**, or

(b) 150 kg of non-flammable **compressed gas**.

(5) Despite Sentence (4), Articles 5.6.2.1. to 5.6.2.4. apply to any amount of poisonous or corrosive **compressed gas**.

(6) Subject to Sentence (7), **fire compartments** referred to in Sentence (4) shall have a **fire-resistance rating** not less than 45 min.

(7) Existing **fire compartments** that are **approved** may have a **fire-resistance rating** less than 45 min.

(8) **Compressed gas** stored in accordance with NFPA 55, "Standard for the Storage, Use and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders and Tanks", is deemed to comply with Subsection 5.6.2.

Protection against mechanical damage

5.6.1.2. (1) Cylinders containing **compressed gas** shall be protected against mechanical damage.

(2) Cylinders containing **compressed gas** shall be stored to hold them securely in place

(a) on **racks**,

(b) by nesting, or

(c) by **approved** methods or devices.

Acetylene cylinders

5.6.1.3. Except when being transported, acetylene cylinders shall be kept in an upright position.

Valve damage

5.6.1.4. Cylinders containing **compressed gas** which are in storage shall be protected against valve damage.

Temperature limitations

5.6.1.5. Cylinders containing **compressed gas** shall be stored in areas where the ambient air temperature does not exceed 52°C.

Indoor storage

5.6.1.6. If cylinders containing **compressed gas** are stored indoors, the cylinders shall be stored in a storage area or room that is dry and ventilated.

Oxygen cylinders

5.6.1.7. Oil or grease shall not be used for the lubrication of valves or fittings on oxygen cylinders.

Subsection 5.6.2. Storage

Outdoor storage of cylinders

5.6.2.1. (1) Cylinders containing **compressed gases** stored outdoors shall be

(a) supported on raised concrete or other noncombustible platforms,

(b) located in an enclosure used for the sole purpose of such storage, and

(c) surrounded by a fence in conformance with Sentence 5.6.2.2.(1).

(2) Where a canopy is provided to protect outdoor storage in Sentence (1), the canopy shall be of **noncombustible construction**.

Fencing

5.6.2.2. (1) Fencing required in Article 5.6.2.1. shall be

(a) firmly anchored and substantially constructed,

(b) designed to discourage climbing,

(c) not less than 1.8 m high,

(d) provided with gates that shall be locked when the storage area is not staffed, and

(e) kept clear of obstructions so that gates may be fully opened at all times.

(2) An outdoor storage area that exceeds 100 m^2 and is used for storage of cylinders containing **compressed gas** shall be arranged such that there is a clear space of not less than

(a) 30 m between stored products and brush or forested areas, and

(b) 6 m between stored products and uncontrolled grass or weeds.

Clearances from building openings

5.6.2.3. (1) Cylinders containing **compressed gas** and located outdoors shall be

(a) at least 1.5 m from any **building** opening if the aggregate capacity of expanded gas is not more than 170 m^3,

(b) at least 7.5 m from any **building** opening if the aggregate capacity of expanded gas is over 170 m^3 but not more than 500 m^3, or

(c) at least 15 m from any **building** opening if the aggregate capacity of expanded gas is over 500 m^3.

(2) Sentence (1) does not apply if the **building** opening is into a room that conforms to Sentence 5.6.2.4.(1).

Indoor storage of flammable compressed gases

5.6.2.4. (1) Except as provided in Sentences (2), (3) and (5), cylinders containing flammable **compressed gas** stored indoors shall be located in a room that

(a) is separated from the remainder of the **building** by a gas-tight **fire separation** having a **fire-resistance rating** not less than 2 h,

(b) is located on an exterior wall of the **building**,

(c) can be entered from the exterior,

(d) has all **closures** that lead into the interior of the **building**

(i) equipped with self-closing devices in such a manner that the **closures** are kept closed when not in use, and

(ii) constructed so as to prevent migration of gases from the room into other parts of the **building**,

(e) is constructed so that an exterior wall provides explosion venting

(i) in the ratio of 0.2 m^2 for each cubic metre of room volume, or

(ii) in the ratio computed in accordance with NFPA 68, "Standard on Explosion Protection by Deflagration Venting", except in no case less than 650 cm^2 of vent area for each cubic metre of room volume,

(f) has ventilation that complies with Sentence (4),

(g) does not contain fuel-fired equipment or high temperature heating elements, and

(h) is used for no purpose other than the storage of **compressed gas**.

(2) Cylinders of flammable, lighter than air **compressed gas** are permitted to be stored outside of a room described in Sentence (1) provided that the aggregate capacity per **fire compartment** of expanded gas outside of the room is not more than,

(a) 60 m^3 in a **building** of **combustible construction** that is not **sprinklered**, and

(b) 170 m^3 in a **sprinklered building** or in a **building** of **noncombustible construction**.

(3) Cylinders of flammable **compressed gas** which are heavier than air may be stored in rooms other than those described in Sentence (1) if they are stored in a **fire compartment** having a **fire-resistance rating** of at least 45 min and

(a) the aggregate capacity does not exceed 100 kg,

(b) the number of cylinders does not exceed three,

(c) the cylinders are not located in the **basement** or other areas below **grade**, and

(d) the **fire compartment** has ventilation conforming to Sentence (4).

(4) The ventilation required by Clauses (1)(f) and (3)(d) shall be

(a) mechanical ventilation to the outside that ensures at least one air change per hour, or

(b) natural ventilation to the outside through non-closeable louvred openings with

(i) at least one opening no more than 0.3 m from the ceiling and one opening no more than 0.3 m from the floor,

(ii) all openings at ceiling level having an aggregate free opening area of at least 0.2 m^2 per 100 m^2 of the **floor area**,

(iii) all openings at floor level having an aggregate free opening area of at least 0.2 m^2 per 100 m^2 of the **floor area**, and

(iv) the openings located to ensure cross ventilation.

(5) "Single trip" non-refillable cylinders with water capacities of more than 375 g and less than 1.13 kg located within **mercantile occupancies** shall conform to the provisions stipulated in **Ontario Regulation 211/01 (Propane Storage and Handling)** made under the **Technical Standards and Safety Act, 2000**.

5.6.2.5. RESERVED

Poisonous compressed gas

5.6.2.6. Cylinders containing poisonous **compressed gas** shall not be stored in a room containing combustible or flammable material.

Reactive gases

5.6.2.7. (1) Subject to Sentences (2) and (3), cylinders containing **compressed gases** that may react with one another shall be stored in separate **fire compartments** having a **fire-resistance rating** not less than 1 h.

(2) Cylinders containing **compressed gases** that are lighter than air and that may react with each other may be stored in the same **fire compartment** if they are separated

(a) by a distance of at least 7.5 m, or

(b) by a concrete or masonry wall having a height of at least 2.0 m and projecting at least 1.0 m beyond the cylinders.

(3) Cylinders containing **compressed gases** that may react with each other and are heavier than air may be stored in the same **fire compartment** if they are separated

(a) by a distance of at least 15 m, or

(b) by a concrete or masonry wall having a height of at least 1.5 m, and projecting such that the minimum distance that vapour can travel between two cylinders of gases that may react with each other is not less than 15 m, measured horizontally.

Signs

5.6.2.8. Storage rooms shall have exterior signs with minimum 50 mm high letters indicating the nature of the **compressed gases**.

SECTION 5.7 RESERVED

SECTION 5.8 RESERVED

SECTION 5.9 RESERVED

SECTION 5.10 COMBUSTIBLE DUST PRODUCING PROCESSES

Subsection 5.10.1. Dust Collection

Application

5.10.1.1. This Section applies to **buildings**, parts of **buildings** or equipment where **combustible dusts** are produced in quantities or concentrations that create an explosion or fire hazard.

Accumulations of combustible dusts

5.10.1.2. (1) **Building** and machinery surfaces shall be kept clean of accumulations of **combustible dusts** using cleaning equipment that

(a) is made of materials that will not create electrostatic charges or sparks,

(b) is electrically conductive and bonded to ground, and

(c) except as permitted in Sentence (3), removes the dust to a safe location by vacuum.

(2) When used in atmospheres containing **combustible dusts**, the cleaning equipment required in Sentence (1) shall be **listed** and labelled for use in atmospheres containing **combustible dusts**.

(3) Where it is not possible to effectively remove dust by vacuum, it is permitted to use compressed air or other means which cause dust to be suspended in air during removal if, in the dust removal area,

(a) all sources of ignition are eliminated, and

(b) all machinery and equipment is de-energized, unless such equipment is **listed** and labelled for use in atmospheres containing **combustible dusts**.

Dust containment

5.10.1.3. (1) Machinery that produces, agitates or conveys **combustible dusts** shall

(a) have dust-tight casings or enclosures, and

(b) be connected to a dust-collecting system that exhausts to the outside, subject to Sentence 5.10.1.5.(3).

Construction of dust-collecting equipment

5.10.1.4. (1) Dust-collecting systems shall be made of noncombustible material.

(2) Dust-collecting systems shall be of a design which will prevent sparks due to physical contact in the fan assembly.

Location

5.10.1.5. (1) Except as provided in Sentences (2) and (5), a dust collector shall be located outside of a **building**.

(2) A dust collector is permitted to be located inside a **building** if it is

(a) provided with explosion venting to the outdoors in conformance with NFPA 68, "Standard on Explosion Protection by Deflagration Venting",

(b) equipped with an automatic explosion prevention system, or

(c) located in a room

(i) with **fire separations** having a **fire-resistance rating** not less than 1 h,

(ii) provided with explosion venting to the outdoors, and

(iii) used solely for the housing of dust-collecting equipment.

(3) Except for dust collectors described in Sentence (5), when air exhausted by a dust collector is returned to a **building**, the dust-collecting system shall be designed so that

(a) returned air will not create an explosion hazard inside the **building**, and

(b) the exhaust fan and ancillary equipment are automatically shut down in the event of a fire or an explosion inside the dust collector.

(4) Explosion venting to the outdoors is deemed to comply with Clause (2)(a) if the venting

(a) was installed on or before November 21, 2007, and

(b) provides not less than 0.1 m^2 of vent area for each cubic metre of dust collector enclosure volume.

(5) Sentences (1) and (2) do not apply to dust collectors having a capacity of less than 0.47 m^3/s and used on wood working operations, except for wood flour manufacturing.

Grounding

5.10.1.6. Electrically-conducting parts of duct systems, dust collectors and the machines they serve shall be grounded.

Explosion venting

5.10.1.7. (1) Except as provided in Article 5.10.1.8., an activity that creates an explosive atmosphere of **combustible dusts** shall be located only in a **building** provided with explosion venting to the outdoors.

(2) When explosion venting is required in this Section, it shall be designed to prevent critical structural and mechanical damage to the **building** in conformance with NFPA 68, "Standard on Explosion Protection by Deflagration Venting".

Explosion prevention system

5.10.1.8. (1) In processes where an explosion hazard is present and conditions exist that prevent adequate explosion venting as required in this Section, an explosion prevention system shall be provided.

(2) When an explosion prevention system is required in this Section, it shall be designed in conformance with NFPA 69, "Standard on Explosion Prevention Systems".

Interlocks

5.10.1.9. Equipment required to have a dust-collecting system shall be interlocked to prevent it from operating if the dust-collecting system is not in operation.

Air velocity

5.10.1.10. Dust-collecting systems shall be designed for an air velocity in the ducts of at least 1068 m/min.

Vent stacks

5.10.1.11. (1) Permanently open vent stacks may be used to ventilate storage containers where mechanical dust-collecting systems are not practical, provided that the vent stacks

(a) have a cross-sectional area not less than twice that of spouts discharging into the container,

(b) are installed not more than 30 degrees from the vertical,

(c) extend from the top of the container to a point not less than 1.2 m above the roof, and

(d) are designed to prevent the entry of snow and rain.

Separators

5.10.1.12. Magnetic or pneumatic separators shall be installed to prevent the entrance of foreign materials that may cause sparks in equipment such as shellers, crackers, crushers, grinding machines, pulverizers or similar machines that produce **combustible dusts**.

Grounding

5.10.1.13. Machinery and metal parts of the equipment in Article 5.10.1.12. and related conveying systems shall be electrically grounded.

Ignition sources prohibited

5.10.1.14. Smoking shall not take place and open flame and spark-producing equipment shall not be used in areas containing **combustible dust** producing operations.

Subsection 5.10.2. Woodworking Operations

Exhaust systems

5.10.2.1. Every machine that produces sawdust, particles or shavings shall be provided with a blower and exhaust system installed in accordance with NFPA 91, "Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids".

Operations that produce sparks or combustible vapours

5.10.2.2. (1) A machine that produces sawdust, particles or shavings shall not be used in an operation that generates sparks or combustible vapours.

(2) An exhaust system shall not serve an operation that generates sparks or combustible vapours.

Disposal

5.10.2.3. Loose sawdust, particles or shavings shall be swept up at frequent intervals and deposited in receptacles described in Sentence 2.4.1.3.(3).

Portable extinguishers

5.10.2.4. A portable extinguisher that complies with Subsection 6.2.6. or a garden-type hose shall be provided within 7.5 m of any machine that produces sawdust, particles or shavings.

SECTION 5.11 HOT SURFACE APPLICATIONS

Subsection 5.11.1. Application

Application

5.11.1.1. This Section applies to hot surface applications, in or on **buildings**, that use open flame torches, bitumen kettles or other heat-producing devices.

Subsection 5.11.2. General

Exposed combustible materials

5.11.2.1. (1) If there is a possibility of sparks, flames or heat igniting combustible materials as a result of hot surface applications

(a) combustibles within 5 m of the hot surface application shall be protected against ignition, and

(b) openings in roofs, parapets or other **building** structures within 5 m of hot surface applications shall be covered or closed to prevent the passage of sparks or flames to adjacent areas.

(2) If it is not possible to cover or close openings described in Clause (1)(b), combustibles in the area exposed by the opening shall be protected against ignition.

Open flame torches

5.11.2.2. (1) An open flame torch shall only be applied to materials intended for hot surface applications and shall not directly expose

(a) combustible materials, such as wood roof decks, cant strips, insulation and flashing,

(b) voids, holes and skylights in the roof or roof deck, or

(c) gas lines and electrical cables.

Bitumen kettles

5.11.2.3. (1) Bitumen kettles shall

(a) not be located in a **building** or on a roof of a **building**,

(b) not be located in a fire access route,

(c) not be located within 3 m of a **building exit** or **means of egress**,

(d) be provided with metal lids that are close-fitting and constructed of steel having a thickness of not less than No. 14 sheet metal gauge (2 mm),

(e) be maintained free of excessive residue, and

(f) when in operation

(i) be level, with most of the weight off the tires and legs,

(ii) not be heated above 260ºC,

(iii) be kept clear of combustible debris or materials, and

(iv) be under constant supervision by a person who is knowledgeable of operations and hazards and trained in the use of portable extinguishers.

(2) Despite Sentence (1), bitumen kettles may be located on concrete roofs if roof openings within 15 m are diked to prevent spilled asphalt run-off.

5.11.2.4. (1) After each daily use, mops that have been used for spreading bitumen shall be kept in a safe location

(a) at least 3 m away from **buildings**, and

(b) isolated from other combustibles.

Firewatch

5.11.2.5. (1) A firewatch shall be provided whenever an open flame torch or other ignition source is used for hot surface applications in or on a **building** and shall include

(a) any area where combustible materials used in **building** construction or contents are located within 5 m of persons using an open flame torch or other ignition source,

(b) any area of the **building** exposed as a result of unprotected roof or wall openings located within 5 m of persons using an open flame torch or other ignition source, and

(c) any area where combustibles on the underside of roofs or the opposite side of walls might be ignited as a result of persons using an open flame torch or other ignition source.

(2) If a firewatch is required, the areas shall be toured by firewatch personnel at least once each hour.

(3) Facilities shall be provided to enable the firewatch personnel to

(a) ensure that a fire warning is sounded to notify occupants, and

(b) communicate with the **fire department**.

(4) The firewatch personnel shall be equipped with portable illumination and protective equipment.

(5) A firewatch shall be conducted from the beginning of a hot surface application until

(a) at least 3 hours after the application ceases, or

(b) at least 2 hours after the application ceases if a hand-held thermal scanner is used to assist in detecting hidden hot spots.

Portable extinguishers

5.11.2.6. (1) Portable extinguishers with a minimum rating of 4A:40B:C shall be

(a) located within 6 m of persons using an open flame torch or other ignition source, and

(b) readily available to all other persons in the area of hot surface applications and firewatch personnel.

(2) Portable extinguishers with a minimum rating of 4A:40B:C shall be located no further than 7.6 m and no closer than 1.5 m from a bitumen kettle.

SECTION 5.12 SPRAY APPLICATIONS USING FLAMMABLE AND COMBUSTIBLE MATERIALS

Subsection 5.12.1. Application and Separation

Application

5.12.1.1. (1) This Section applies to spray operations involving the use of **flammable liquids**, **combustible liquids** or combustible dry powders.

(2) Despite Sentence (1), this Section does not apply to spray operations that comply with Articles 5.1.3.1. and 5.12.1.2. and the design, operation and maintenance requirements in NFPA 33, "Standard for Spray Application Using Flammable or Combustible Materials".

Separation for spray operations

5.12.1.2. If a spray operation is a **major occupancy** in a **building**, the spray operation shall be separated from the remainder of the **building** in accordance with Article 3.1.3.1. of Division B of the **Building Code**.

Subsection 5.12.2. Construction

General

5.12.2.1. (1) **Spray booths** and **spray rooms** shall have walls and ceilings that consist of steel frames covered with sheet steel having a minimum thickness of 1.14 mm or be of equivalent **noncombustible construction**.

(2) Walls and ceilings of **spray rooms** that are susceptible to paint residue accumulations and interior surfaces of **spray booths** shall be smooth and continuous.

(3) Floors of **spray booths** and **spray rooms** and the operator's working area shall be of noncombustible materials.

Baffle plates

5.12.2.2. (1) **Spray booth** baffle plates shall be of noncombustible material and be removable or arranged to facilitate cleaning.

(2) **Spray booth** baffle plates shall not be located in exhaust ducts.

Overspray collection

5.12.2.3. (1) **Spray booths** and **spray rooms** shall be provided with overspray collection, such as filters or water wash, to prevent the build-up of combustible deposits on the exhaust fan and ductwork.

(2) Where filters are used as for overspray collection, supports and holders for the filters shall be constructed of noncombustible materials.

(3) Overspray collection filters shall be readily removable or accessible for cleaning or replacement.

(4) Filters shall not be alternately used for different types of coating materials if the combination of materials might result in spontaneous heating or ignition.

(5) Maintenance procedures shall be established to ensure that overspray collection filters are replaced before excessive restriction to airflow occurs.

(6) Overspray collectors shall be inspected after each period of use and clogged filters shall be discarded and replaced.

(7) A water-wash filtration system shall be used when applying materials known to be highly susceptible to spontaneous heating or spontaneous ignition.

Fan blades and casings

5.12.2.4. Fan blades and casings in exhaust blowers for **spray booths** and **spray rooms** shall be non-ferrous, or the fan shall be constructed so that a movement of the wheel or shaft will not cause two ferrous parts of the fan to rub or strike together.

Subsection 5.12.3. Ventilation

Ventilation

5.12.3.1. (1) Ventilation shall be provided in all **spraying areas** to maintain

(a) the concentration of flammable vapours at or below 25% of their **lower explosive limit**, and

(b) the concentration of **combustible dusts** at or below 50% of their **minimum explosible concentration** or 15g/m^3 when the **minimum explosible concentration** cannot be established.

Exhaust for spray booths

5.12.3.2. Subject to Article 5.12.3.3., the exhaust air velocity at any opening in a **spray booth** shall be at least 30 m/min.

Exhaust for electrostatic spraying

5.12.3.3. Electrostatic spraying shall have an exhaust air velocity of at least 18 m/min at any opening in a **spray booth**.

Combined ducting

5.12.3.4. A separate exhaust duct shall be provided for each **spray booth**, except that a common duct may be used if it serves **spray booths** having a combined open frontal area of not more than 1.8 m^2.

Exhaust air

5.12.3.5. Air exhausted from spray operations shall not be recirculated, except where recirculation is acceptable, as described in NFPA 33, “Standard for Spray Application Using Flammable or Combustible Materials”.

Monitoring air velocity

5.12.3.6. (1) Gauges or alarms that indicate when the air velocity is less than the air velocity required by Article 5.12.3.2. or 5.12.3.3. shall be installed for **spray booths**.

(2) When the gauge or alarm indicates that the air velocity is less than that required by Article 5.12.3.2. or 5.12.3.3., immediate corrective action shall be taken to remedy the condition that has resulted in the reduction of the ventilation.

Subsection 5.12.4. Exhaust Ducts

Duct support and construction

5.12.4.1. Exhaust ducts for **spray booths** and **spray rooms** shall be securely supported and constructed of sheet steel in accordance with Table 5.12.4.A.

TABLE 5.12.4.A.

Forming Part of Article 5.12.4.1.

Maximum Dimension of Duct	Minimum Thickness of Sheet Steel, mm
Up to 200 mm incl.	0.56
Over 200 mm to 450	0.69

mm incl.	
Over 450 mm to 750 mm incl.	0.86
Over 750 mm	1.14

Clearances

5.12.4.2. Subject to Article 5.12.4.3., a clearance of 457 mm shall be maintained between unprotected combustible materials and ducts venting **spray booths** and **spray rooms**.

Collars

5.12.4.3. (1) Where exhaust ducts pass through combustible roofs or **partitions**, metal collars shall provide not less than a 100 mm clearance between the duct and combustible material.

(2) The space between the duct and combustible material shall be sealed with noncombustible insulating material.

Access doors

5.12.4.4. Exhaust ducts for **spray booths** and **spray rooms** shall be provided with access doors for cleaning purposes.

Exhaust outlet locations

5.12.4.5. (1) Except for water-wash filtration systems, the exhaust outlet to atmosphere from **spray booths** and **spray rooms** shall

(a) be 1.8 m from any combustible exterior wall or roof, and

(b) be located so that the air does not discharge toward any combustible surface or unprotected opening within 7.5 m.

Subsection 5.12.5. Electrical Equipment

Electrical equipment

5.12.5.1. Electrical equipment within the **spraying area**, including lighting fixtures, shall conform to Part 1, Sections 18 and 20 of the **Electrical Safety Code** made under the **Electricity Act, 1998**.

Motors for exhaust fans

5.12.5.2. Electric motors for exhaust fans shall not be placed inside **spray booths**, **spray rooms** or ducts.

Grounding

5.12.5.3. Metal parts of **spray booths**, exhaust ducts and piping systems conveying **flammable liquids** or **combustible liquids** shall be electrically grounded.

Subsection 5.12.6. Flammable Liquids and Combustible Liquids

Storage and handling

5.12.6.1. **Flammable liquids** and **combustible liquids** for use in **spraying areas** shall be stored and handled in conformance with Part 4, and at no time shall the amount of **flammable liquids** and **combustible liquids** in the **spraying areas** exceed one day's supply.

Paint storage

5.12.6.2. **Flammable liquids** and **combustible liquids** shall be kept in **closed containers** when not in use.

Thinners and solvents

5.12.6.3. Thinners and solvents shall be dispensed only from **listed** and labelled safety cans.

Pump discharge relief valves

5.12.6.4. Where **flammable liquids** are supplied to spray nozzles by positive displacement pumps, the pump discharge line shall be provided with a suitable relief valve discharging to the pump suction or to a safe remote location.

Subsection 5.12.7. Control of Fire Hazards

Interlocks

5.12.7.1. (1) The spraying equipment for **spray booths** and **spray rooms** shall be interlocked to shut down in the event of

(a) a failure of the ventilation system,

(b) a failure of the circulating water pump of a water-wash filtration system, or

(c) a failure of the filter roll-down mechanism of an overspray collection system.

Cleaning and residue disposal

5.12.7.2. (1) The inner surfaces of **spray booths** and **spray rooms** shall be cleaned of combustible residue as often as necessary to prevent a fire hazard.

(2) Combustible residue from cleaning operations shall, on the same day as the cleaning operations, be removed from the premises or placed in receptacles conforming to Sentence 2.4.1.3.(3).

(3) Strippable coatings or removable combustible coverings, such as thin paper and static dissipative plastic sheets, may be used on walls and floors in **spray booths** and **spray rooms** to facilitate cleaning operations.

Filter pads and rolls

5.12.7.3. Discarded filter pads and filter rolls shall be removed to a safe location or placed in a water-filled metal container and disposed of after each day's operation.

5.12.7.4. RESERVED

Heating equipment

5.12.7.5. **Space-heating appliances**, steam pipes and other hot surfaces shall not be located in an area subject to accumulation of deposits of combustible residue from spray operations.

Ignition sources

5.12.7.6. Open flame or spark producing devices shall not be used within a **spraying area**, unless separated from the area by a vapour-tight **fire separation** having a **fire-resistance rating** not less than 1 h.

Subsection 5.12.8. Fire Protection Equipment

Portable extinguishers

5.12.8.1. Portable extinguishers shall be installed near **spraying areas** in conformance with Section 6.2.

Sprinkler installations

5.12.8.2. (1) Except as permitted in Sentences (2) and (3), automatic sprinkler protection shall be provided in each **spraying area**, **spray booth** and **spray room** in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems".

(2) Where spraying operations are confined within a **spray booth**, fire protection may be provided for the **spray booth** only, in conformance with NFPA 33, "Standard for Spray Application Using Flammable or Combustible Materials".

(3) This Article does not apply where the existing situation is **approved** and does not endanger life safety, or **approved** alternative measures to the requirements set out in this Article are taken to provide life safety.

Sprinkler head protection

5.12.8.3. (1) Sprinkler heads in **spray booths** and **spray rooms** shall be protected with lightweight paper bags or cellophane bags having a thickness of not more than 0.08 mm.

(2) Bags protecting sprinkler heads shall be replaced before they have accumulated deposits that impair the timely operation of the sprinkler head.

Subsection 5.12.9. Drying Operations

Spray booths used for drying

5.12.9.1. Except as permitted in Article 5.12.9.4., **spray booths**, **spray rooms** or other enclosures used for spraying operations shall not be used for drying by any arrangement that could cause an increase in the surface temperatures of the **spray booths**, **spray rooms** or other enclosures.

Location of equipment

5.12.9.2. Except as provided in Articles 5.12.9.3. and 5.12.9.4., drying or curing equipment that utilizes components capable of producing ignition, such as an open flame, a spark, or a hot surface, shall not be installed in or near a **spraying area**.

Location near spraying area

5.12.9.3. (1) Equipment described in Article 5.12.9.2. may be installed in an area adjacent to the **spraying area** provided the adjacent area is equipped with a ventilating system arranged to

(a) purge the drying space before the heating system can be started,

(b) maintain the atmosphere at any source of ignition at or below 25% of the **lower explosive limit** of any combustible or flammable materials in use, and

(c) automatically shut down the heating system in the event of failure of the ventilating system.

Spray booths used for drying

5.12.9.4. (1) **Spray booths** may be used for drying operations where

(a) the **spray booth** conforms to the appropriate requirements for drying ovens in Section 5.18,

(b) the interior of the enclosure is kept reasonably free of overspray deposits,

(c) portable drying apparatus, if used, is of the infrared type, and such apparatus, wiring and connections are removed from the enclosure during spraying operations, and

(d) interlocks are installed to

(i) prevent the use of spraying apparatus while the drying operation is taking place,

(ii) provide for the purging of the enclosure of spray vapours for a minimum of 3 min before the drying apparatus can be energized,

(iii) ensure that the ventilating system maintains the concentration of flammable vapours at or below 25% of the **lower explosive limit** within the enclosure during the drying process, and

(iv) ensure that the drying apparatus will automatically shut off in the event of failure of the ventilating system.

Subsection 5.12.10. Electrostatic Spraying

Application

5.12.10.1. This Subsection applies to electrostatic spray-coating processes involving the use of **flammable liquids** or **combustible liquids.**

Equipment location

5.12.10.2. (1) Electrical components, including transformers, power packs and control equipment for electrostatic spray applications, shall be located in an area where the vapour concentration of **flammable liquids** or **combustible liquids** cannot exceed 25% of the **lower explosive limit.**

(2) Sentence (1) does not apply to high voltage grids and their connections.

Interlocks

5.12.10.3 (1) Electrostatic spraying equipment shall be provided with automatic controls that will operate without a time delay to disconnect power to high voltage transformers and to signal the operator of the equipment if

(a) the air supply system, the ventilating fan or the conveyor system stops,

(b) a ground occurs at any point on the high voltage system, or

(c) any clearances are reduced below those required by Article 5.12.10.5.

Insulators

5.12.10.4. Insulators shall be kept clean and dry.

Clearances

5.12.10.5. A clearance space that is equivalent to twice the sparking distance shall be maintained between the articles being painted and any electrodes or conductors.

Drip plates and screens

5.12.10.6. Drip plates and screens subject to paint deposits shall be removable for cleaning.

Insulating and grounding

5.12.10.7. High voltage components, including atomizing heads, shall be insulated and protected against mechanical damage and accidental contact or grounding.

Automatic grounding

5.12.10.8. An automatic means shall be provided for grounding the electrode system when it is de-energized.

Operating distances

5.12.10.9. Items being electrostatically sprayed shall be neither held by hand nor suspended in such a manner as to reduce the proper operating distance from the atomizing heads.

Distance to processing areas

5.12.10.10. Electrostatic spraying equipment shall be located 1.5 m from processing equipment and isolated from other areas by grounded guards and fences of conducting material.

Surface temperatures

5.12.10.11. The surface temperature of equipment in a **spraying area** shall not exceed 66°C.

Precautions against shock

5.12.10.12. High voltage circuits shall be designed so that any discharge will not ignite vapour-air mixtures or create a shock hazard.

Spray gun energy supply

5.12.10.13. The energy supply to hand-held spray guns shall be controlled by a switch that also controls the coating material supply.

Spray gun operation

5.12.10.14. Spray gun handles shall be grounded and have a metallic connection that is in direct contact with the operator's hand during spraying.

Grounding

5.12.10.15. All electrically conductive objects in a **spraying area** shall be grounded.

Paint accumulations

5.12.10.16. Hooks and other supports for sprayed items shall be kept clean and free of paint.

Warning signs

5.12.10.17. (1) Signs shall be conspicuously posted near a **spraying area** that

(a) indicate the minimum clearance space required by Article 5.12.10.5.,

(b) indicate the need for grounding of all electrically conductive objects in the **spraying area**, and

(c) contain the phrase "DANGER - Electrostatic Spray Coating Area", or otherwise identify the **spraying area** as dangerous.

Fixed extinguishing equipment

5.12.10.18. **Spraying areas** shall be located in rooms protected by **listed** and labelled automatic fixed extinguishing equipment.

Subsection 5.12.11. Dry Powder-Coating Using Spray Guns

Application and location

5.12.11.1. (1) This Subsection applies to coating operations involving the use of combustible dry powders applied by powder spray guns or electrostatic powder spray guns.

(2) Coating operations referred to in Sentence (1) shall be performed in

(a) ventilated and enclosed powder-coating rooms of **noncombustible construction**, or

(b) **spray booths**.

Location of electrical equipment

5.12.11.2. With the exception of charging electrodes and their connections, transformers, power packs, control apparatus and all other electrical components shall be located outside the powder-coating area.

Working temperatures

5.12.11.3. If a part to be coated is preheated prior to the application of the powder, the temperature of the part shall not exceed the ignition temperature of the powder being used.

Grounding

5.12.11.4. (1) Powder transport, application and recovery equipment shall be grounded.

(2) A sign shall be conspicuously posted indicating the necessity of grounding the equipment and objects identified in Sentence (1).

Separators

5.12.11.5. Separators shall be used to prevent tramp iron or other spark-producing materials from being introduced into the powders being applied.

Recovery systems

5.12.11.6. Waste air-suspended powders shall be removed by exhaust ducts to a powder recovery system and shall not be released to the outside atmosphere.

Vacuum cleaning

5.12.11.7. Accumulations of waste dust from dry powder finishes shall be removed by vacuum cleaning equipment.

Contact points

5.12.11.8. Objects being coated shall be maintained in contact with the conveyor or other support.

Hangers

5.12.11.9. Hangers for objects being coated shall be kept clean and have sharp points or edges at areas of contact.

Smoking prohibited

5.12.11.10. (1) Smoking shall not take place in powder-coating areas and in powder storage rooms.

(2) Signs prohibiting smoking that meet the requirements of Article 2.4.3.2. shall be conspicuously posted in all powder-coating areas and powder storage rooms.

SECTION 5.13 DIP TANKS

Subsection 5.13.1. Location

Room design

5.13.1.1. (1) If a dip tank operation involves **flammable liquids** or **combustible liquids** and the quantity of liquids exceeds 45 L or the liquid surface area exceeds 0.42 m^2, the operation shall be

(a) conducted in a room designed for that purpose, and

(b) separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 2 h.

Prohibition for basements

5.13.1.2. Dip tanks shall not be located in **basements**.

Subsection 5.13.2. Construction

Floors

5.13.2.1. The floor of any room where dip tanks are located shall be made liquid-tight with material that is impervious to the liquid in the tank, have permanent curbs and be drained to a place of safe discharge.

Materials

5.13.2.2. (1) Dip tanks and drain boards shall be constructed of noncombustible material with steel, reinforced concrete or masonry supports.

(2) Drain boards shall be arranged to drain back to the dip tank.

Height above floor

5.13.2.3. The top of a dip tank shall not be less than 150 mm above the floor of the room in which it is located.

Cover construction

5.13.2.4. Dip tank covers as required in Articles 5.13.6.2. and 5.13.6.3. shall be of noncombustible materials.

Cover design

5.13.2.5. Dip tank covers shall overlap the sides of the tank by 25 mm and shall have a recess or flange extending down around the tank.

Cover maintenance

5.13.2.6. Dip tank covers shall be maintained in good operating condition.

Subsection 5.13.3. Overflow and Drain Pipes

Liquid levels

5.13.3.1. The liquid level in a dip tank shall be kept not less than 150 mm below the top of the tank.

Overflow pipes

5.13.3.2. Dip tanks having a capacity in excess of 550 L or having a liquid surface area in excess of 1 m^2 shall be equipped with a properly trapped overflow pipe that leads to a safe location outside the **building** or to a closed, vented salvage tank conforming to Subsection 5.13.4.

Location of overflow

5.13.3.3. The centre line of the overflow connection to a dip tank shall be 150 mm below the top of the tank.

Overflow size

5.13.3.4. Overflow pipe sizes for dip tanks shall conform to Table 5.13.3.A.

TABLE 5.13.3.A.

Forming Part of Article 5.13.3.4.

Size of Tank, L	Overflow Pipe Size Required, mm
0 - 46	50

47 - 160	65
161 - 350	75
351 - 700	100
701 - 1025	125
1026 - 1500	150
1501 and over	200

Overflow connection

5.13.3.5. Overflow pipes shall be connected to dip tanks by a flared outlet.

Piping connections

5.13.3.6. Piping connections for drains and overflow lines shall be designed so as to allow for easy access to their interiors for cleaning purposes.

Bottom drains

5.13.3.7. Dip tanks of over 2300 L liquid capacity shall be equipped with bottom drains capable of being operated both automatically and manually to drain the tank quickly in the event of fire.

Salvage tank

5.13.3.8. Bottom drains from dip tanks shall be trapped and shall discharge to a closed, vented salvage tank.

Drain size

5.13.3.9. Bottom drain sizes for dip tanks shall conform to Table 5.13.3.B.

TABLE 5.13.3.B.

Forming Part of Article 5.13.3.9.

Capacity of Dip Tank, L	Diameter of Bottom Drain Pipe, mm
2300 - 3425	75
3426 - 4550	100
4551 - 11500	125
11501 - 18250	150
18251 and over	200

Manual operation of bottom drains

5.13.3.10. Manual operation of bottom drains shall be from an accessible location not affected by a fire in or around the dip tank.

Automatic pumps

5.13.3.11. Where gravity flow is not practical, automatic pumps shall be installed on drain lines from dip tanks.

Pump for salvage tank

5.13.3.12. Where salvage tanks are used, pumping arrangements shall be provided for the transfer of their contents for disposal.

Subsection 5.13.4. Salvage Tanks

Use

5.13.4.1. Salvage tanks shall be used only for temporary storage purposes.

Capacity

5.13.4.2. The capacity of a salvage tank shall be 20% greater than the capacity of the dip tank or tanks to which it is connected.

Location

5.13.4.3. Salvage tanks shall be located underground outside the **building**, or inside a **building** in an enclosure separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** of not less than 2 h.

Vent pipes

5.13.4.4. Salvage tanks shall be provided with vent pipes that meet the requirements of Subsection 4.3.5. for aboveground **storage tanks** or Subsection 4.3.10. for underground **storage tanks**.

Subsection 5.13.5. Control of Fire Hazards

Ventilation

5.13.5.1. Ventilation shall be provided to confine all flammable vapour concentrations exceeding 25% of the **lower explosive limit** to within 600 mm of the dip tank, drain board and freshly coated work.

Interlock for dipping conveyor

5.13.5.2. Ventilating systems shall be arranged so that the failure of any ventilation fan as sensed by air flow will automatically stop the dipping conveyor systems and sound an alarm.

Interlock for heating

5.13.5.3. The heating system used in drying operations shall be interlocked so that it cannot be started until the associated ventilation system is in operation.

Conveyor systems

5.13.5.4. Conveyor systems utilized in conjunction with dip tanks shall be designed to stop automatically with the actuation of an automatic fixed extinguishing system or a manual fire alarm.

Purging interlocks

5.13.5.5. Where there is a possible source of ignition in a drying operation, interlocks shall be installed to provide for purging before the heating system can be started and for automatic shutdown if the ventilation system should fail.

Electrical installations

5.13.5.6. Where **flammable liquids** and **combustible liquids** contained in dip tanks are heated or have a **flash point** below 43°C, the electrical installation shall conform to the **Electrical Safety Code** made under the **Electricity Act, 1998**.

Flammable and combustible liquids

5.13.5.7. (1) The storage and handling of **flammable liquids** and **combustible liquids** shall be in conformance with Part 4.

(2) The total number of containers for **flammable liquids** and **combustible liquids** in a dip tank area shall not exceed that required for one day’s operations.

Smoking and ignition sources prohibited

5.13.5.8. Smoking shall not take place and open flames, spark-producing devices and heated surfaces having a temperature sufficient to ignite vapours shall not be used in the vapour area of a dip tank.

Signs prohibiting smoking

5.13.5.9. Signs that prohibit smoking and that conform to Article 2.4.3.2. shall be posted conspicuously in the vicinity of dip tanks.

Subsection 5.13.6. Fire Protection

Automatic sprinklers

5.13.6.1. Dip tanks shall be located only in rooms protected by an automatic sprinkler system installed in conformance with NFPA 13, "Standard for the Installation of Sprinkler Systems".

Tank covers and extinguishing systems

5.13.6.2. (1) Dip tanks with over 550 L capacity or with over 1 m^2 liquid surface area shall be protected by

(a) a cover actuated by a device that

(i) automatically closes the cover in the event of a fire, and

(ii) permits manual operation of the cover, or

(b) an **approved** automatic extinguishing system of a water spray, foam, carbon dioxide or dry chemical type.

Flammable liquids or combustible liquids

5.13.6.3. Dip tanks containing either a **flammable liquid** or **combustible liquid** with a **flash point** less than 43°C or a heated **combustible liquid** giving off flammable vapours shall conform to Article 5.13.6.2. when the capacity exceeds 45 L or when the liquid surface area exceeds 0.4 m^2.

Portable extinguishers

5.13.6.4. Areas in the vicinity of dip tanks shall be provided with portable extinguishers in conformance with Section 6.2.

SECTION 5.14 SPECIAL PROCESSES INVOLVING FLAMMABLE AND COMBUSTIBLE MATERIALS

Subsection 5.14.1. Quench Tanks

Location

5.14.1.1. (1) Quench tanks shall be located as far as practical from annealing, hardening and tempering **furnaces**.

(2) Quench tanks shall not be located on or near combustible floors.

Hoods and vents

5.14.1.2. Quench tanks shall be provided with a noncombustible hood and vent exhausting to the outside to prevent the accumulation and condensation of vapours from the process.

Vent design

5.14.1.3. Vents for quench tanks shall conform to the requirements for **flue pipes** in Section 2.6.

High temperature limit switches

5.14.1.4. (1) A high temperature limit switch shall be provided to sound an alarm, shut off heat and stop conveyors when a **flammable liquid** or **combustible liquid** reaches 28°C below its **flash point** in a quench tank.

(2) The temperature-sensing element for the high temperature limit switch in Sentence (1) shall be located close to the surface of the liquid and be protected from damage.

Electrical installations

5.14.1.5. Electrical installations conforming to the requirements for dip tanks in Article 5.13.5.6. shall be provided for quench tanks of over 1900 L capacity whose liquid surface area exceeds 2.5 m^2.

Air pressure

5.14.1.6. Air under pressure shall not be used to fill or agitate oil in quench tanks.

Working temperatures

5.14.1.7. A quench tank shall be designed so that the maximum workload is incapable of raising the working temperature of the cooling medium to within 28°C of its **flash point**.

Subsection 5.14.2. Flow-Coating Operations

Application

5.14.2.1. (1) This Subsection applies to flow-coating operations using **flammable liquids** or **combustible liquids**.

(2) The requirements in Section 5.13 for dip tanks shall also apply to flow-coating operations described in Sentence (1).

(3) The sump area and any area on which coating liquid flows shall be considered as the dip tank area.

Supply

5.14.2.2. (1) **Flammable liquids** and **combustible liquids** shall be supplied by

(a) direct low pressure pumping arranged to shut down automatically by means of **listed** and labelled devices in the event of fire, or

(b) a gravity tank not exceeding 45 L in capacity.

Subsection 5.14.3. Roll Coating Processes

Application

5.14.3.1. (1) This Subsection applies to roll-coating processes in which **flammable liquids** or **combustible liquids** are applied to products or materials by bringing them into contact with a roller that is coated with the coating liquid.

(2) The requirements in Section 5.13 for dip tanks shall also apply to roll-coating processes described in Sentence (1).

Grounding

5.14.3.2. (1) Rotating parts shall be grounded.

(2) Static collectors shall be installed where the material being coated leaves each rotating part.

Location

5.14.3.3. Operations involving materials that have been freshly coated with a liquid containing solvents having a **flash point** of less than 43°C shall be located in **sprinklered** rooms that are separated from other **occupancies** by **fire separations** having a **fire-resistance rating** not less than 2 h.

Subsection 5.14.4. Electrostatic Detearing Processes

Application

5.14.4.1. (1) This Subsection applies to electrostatic detearing processes involving the use of **flammable liquids** or **combustible liquids**.

(2) Protective finishing systems are deemed to satisfy the requirements of this Subsection if they comply with Article 5.1.3.1. and the design, operation and maintenance requirements in NFPA 33, "Standard for Spray Application Using Flammable or Combustible Materials".

Equipment location

5.14.4.2. (1) Electrical components, including transformers, power packs and control equipment for the electrostatic removal of excess coating material (detearing), shall be located in an area where the vapour concentration of **flammable liquids** or **combustible liquids** cannot exceed 25% of the **lower explosive limit**.

(2) Sentence (1) does not apply to high voltage grids and their connections.

Interlocks

5.14.4.3. (1) Electrostatic detearing equipment shall be provided with automatic controls that will operate without a time delay to disconnect power to high voltage transformers and to signal the operator of the equipment if

(a) the air supply system, the ventilating fan or the conveyor system stops,

(b) a ground occurs at any point on the high voltage system, or

(c) any clearances are reduced below those required by Article 5.14.4.5.

Insulators

5.14.4.4. Insulators shall be kept clean and dry.

Clearances

5.14.4.5. (1) A clearance space that is equivalent to twice the sparking distance shall be maintained between articles being deteared and electrodes or conductors.

(2) A sign shall be conspicuously posted near the detearing area indicating the minimum clearance space required.

Drip plates and screens

5.14.4.6. Drip plates and screens subject to paint deposits shall be removable for cleaning.

Insulating and grounding

5.14.4.7. High voltage components shall be insulated and protected against mechanical damage and accidental contact or grounding.

Automatic grounding

5.14.4.8. An automatic means shall be provided for grounding the electrode system when it is de-energized.

Precautions against shock

5.14.4.9. High voltage circuits shall be designed so that any discharge will not ignite vapour-air mixtures or create a shock hazard.

Subsection 5.14.5. Automobile Undercoating

Spray operations

5.14.5.1. Automobile undercoating spray operations shall conform to the requirements of Section 5.12 or to the requirements in this Subsection.

Undercoating materials

5.14.5.2. (1) Automobile undercoating materials shall have a **flash point** of not less than 37.8°C.

(2) Where the **flash point** of an automobile undercoating is less than 60°C, it shall be applied in a work area where

(a) there are no work pits,

(b) there is a fan, that provides mechanical ventilation during the application, cleaning and drying cycles,

(i) with nonferrous blades, or so constructed that a movement of the wheel or shaft will not permit two ferrous parts of the fan to rub or strike, and

(ii) that ensures that the concentration of vapour does not exceed 25% of the **lower explosive limit**,

(c) air movement from the air intake and exhaust system is along the length of the vehicle being undercoated, and

(d) air is exhausted at a level approximately 1 m above the floor.

Ignition sources

5.14.5.3. (1) Work stations in Article 5.14.5.2. shall have no source of ignition located within 6 m horizontally of the work area or in the area above it.

(2) Signs prohibiting smoking that conform to Article 2.4.3.2. shall be posted at the outer limits of the work area.

Electrical installations

5.14.5.4. Except for overhead lighting that is totally enclosed and sealed with gaskets, electrical wiring and equipment within the area of hazard described in Article 5.14.5.3. shall conform to Article 5.1.3.1.

Storage and handling

5.14.5.5. The storage and handling of **flammable liquids** and **combustible liquids** shall be in conformance with Part 4.

Portable extinguishers

5.14.5.6. Portable extinguishers shall be located so that there is one portable extinguisher having a 20B:C rating immediately accessible to each work station described in Article 5.14.5.2.

Refuse disposal

5.14.5.7. All areas where automobile undercoating is used shall be kept clean of undercoating deposits and refuse, which shall be placed in covered metal receptacles.

Subsection 5.14.6. Dry Powder-Coating Using Fluidized Beds

Application and location

5.14.6.1. (1) This Subsection applies to coating operations involving the use of combustible dry powders applied by fluidized beds or electrostatic fluidized beds.

(2) Coating operations referred to in Sentence (1) shall be performed in

(a) ventilated and enclosed powder-coating rooms of **noncombustible construction**, or

(b) ventilated and enclosed powder-coating enclosures of **noncombustible construction**.

(3) Protective finishing systems are deemed to satisfy the requirements of this Subsection if they comply with Article 5.1.3.1. and the design, operation and maintenance requirements in NFPA 33, "Standard for Spray Application Using Flammable or Combustible Materials".

Location of electrical equipment

5.14.6.2. With the exception of charging electrodes and their connections, transformers, power packs, control apparatus and all other electrical components shall be located outside the powder-coating area.

Working temperatures

5.14.6.3. (1) Where a part to be coated is preheated prior to the application of the powder, the temperature of the part shall not exceed the ignition temperature of the powder being used.

(2) The surface temperature of electrostatic fluidized bed coating areas shall not exceed 66°C.

Grounding

5.14.6.4. (1) Powder transport, application and recovery equipment shall be grounded.

(2) Electrically conductive objects within the charging influence of the electrodes of electrostatic fluidized beds shall be grounded.

(3) A sign shall be posted indicating the necessity of grounding equipment and objects identified in Sentences (1) and (2).

Electrical discharges

5.14.6.5. High voltage circuits in electrostatic fluidized beds shall be designed so that any discharge produced when the charging electrodes of the bed are approached or contacted by a grounded object will not be of sufficient intensity to ignite any powder-air mixture likely to be encountered or result in any appreciable shock hazard.

Handling of spark-producing materials

5.14.6.6. Means shall be provided to prevent tramp iron or other spark-producing materials from being introduced into the powders being applied.

Recovery systems

5.14.6.7. All waste air-suspended powders shall be removed by exhaust ducts to a powder recovery system and shall not be released to the outside atmosphere.

Waste dust removal

5.14.6.8. Accumulations of waste dust from dry powder finishes shall be removed using the methods set out in Article 5.5.1.2.

Contact points

5.14.6.9. Objects being coated shall be maintained in contact with the conveyor or other support.

Hangers

5.14.6.10. Hangers for objects being coated shall be kept clean and have sharp points or edges at areas of contact.

Smoking prohibited

5.14.6.11. (1) Smoking shall not take place in powder-coating areas and in powder storage rooms.

(2) Signs prohibiting smoking that conform to Article 2.4.3.2. shall be conspicuously posted at all powder-coating areas and powder storage rooms.

Subsection 5.14.7. Organic Peroxides and Dual Component Coatings

Location of spraying operations

5.14.7.1. Spraying operations involving the use of organic peroxides and other dual component coatings shall be conducted in **sprinklered spray booths** as described in Sentence 5.12.8.2.(1).

Initiator storage

5.14.7.2. Organic peroxide initiators shall be stored so that they will be kept away from contact with other stored materials.

Handling equipment

5.14.7.3. Handling equipment, including spray guns, which is specifically designed for use with organic peroxides shall be used to apply such coatings.

Containers

5.14.7.4. Separate containers shall be used exclusively for the storage of resin and organic peroxide.

Pressure tank inserts

5.14.7.5. Organic peroxide pressure tank inserts shall be constructed of stainless steel, polyethylene or a material that is equally inert to organic peroxide.

Elimination of foreign materials

5.14.7.6. Precautions shall be taken to prevent any mixing of foreign materials with dusts or overspray residues resulting from the sanding or spraying of finishing materials containing organic peroxides.

Subsection 5.14.8. Floor Finishing

Application

5.14.8.1. Floor finishing operations involving the use of **flammable liquids** or **combustible liquids** shall conform to Part 4 and this Subsection.

Operations below grade

5.14.8.2. Floor finishing operations involving the use of **flammable liquids** shall not be performed below **grade**.

Public access

5.14.8.3. Any part of a **building** where floor finishing operations are done shall not be open to the public.

Ventilation

5.14.8.4. (1) Ventilation shall be provided in areas where floor finishing operations are done to prevent the accumulation of flammable vapours.

(2) Ventilation required in Sentence (1) is permitted to be provided by mechanical systems if their use does not constitute a source of ignition.

Prohibited activities during flammable liquid application

5.14.8.5. (1) During the application of **flammable liquids** and for at least 1 h after such application

(a) all mechanical systems, electric motors, and other equipment that might be a source of ignition shall be shut down,

(b) smoking shall not take place, and

(c) open flames shall not be used.

Waste receptacles

5.14.8.6. A receptacle conforming to Sentence 2.4.1.3.(3) shall be provided for all waste rags and materials used in operations involving **flammable liquids** or **combustible liquids**, and the contents shall be removed daily and disposed of in a manner that will not create a fire hazard.

Subsection 5.14.9. Bowling Alleys

Application

5.14.9.1. This Subsection applies to bowling alleys.

Notification

5.14.9.2. The **Chief Fire Official** shall be notified when bowling alleys are to be resurfaced.

Floor finishing

5.14.9.3. Floor finishing operations shall be carried out in accordance with Subsection 5.14.8.

Pin refinishing

5.14.9.4. (1) Pin refinishing shall be carried out

(a) in a **building** provided for that purpose, or

(b) in a room at or above **grade** separated from the **building** it is located in by a **fire separation** having a **fire-resistance rating** not less than 1 h.

Smoking prohibited

5.14.9.5. (1) Smoking shall not take place in a room where pin refinishing occurs.

(2) Signs prohibiting smoking that meet the requirements of Article 2.4.3.2. shall be conspicuously posted in any place where pin refinishing occurs.

Flammable and combustible liquids

5.14.9.6. The storage, handling and use of **flammable liquids** and **combustible liquids** shall meet the requirements of Part 4.

5.14.9.7. (1) During the pin refinishing process, a receptacle that complies with Sentence 2.4.1.3.(3) shall be provided for waste rags and materials used in operations involving flammable finishes or solvents.

(2) The contents of each receptacle referred to in Sentence (1) shall be removed daily and disposed of in an **approved** manner.

Subsection 5.14.10. Drycleaning and Dyeing Plants

Application

5.14.10.1. (1) Drycleaning plants shall comply with NFPA 32, “Standard for Drycleaning Plants”.

(2) Despite Sentence (1) and subject to Article 5.14.10.2., **flammable liquids** shall not be used for any purpose in drycleaning and dyeing plants.

Use and storage of flammable liquids

5.14.10.2. (1) **Flammable liquids** may be used as a local application to remove spots and stains if the liquids

(a) are stored in containers that have a capacity of not more than 1 L,

(b) do not exceed more than 25 L in aggregate quantity, and

(c) are dispensed from plastic containers that have a capacity of not more than 0.5 L.

(2) Despite Sentence (1), existing drycleaning plants and dyeing plants may be **approved** if the **Chief Fire Official** is satisfied that the level of fire safety specified in Sentence (1) is provided.

SECTION 5.15 RADIOACTIVE NUCLEAR SUBSTANCES

Subsection 5.15.1. Application

Application

5.15.1.1. This Section applies to the storage and handling of any radioactive nuclear substance that is present in a quantity that exceeds the exemption quantity as defined in Section 1 of the **Nuclear Substances and Radiation Devices Regulations** made under the **Nuclear Safety and Control Act (Canada)**.

Subsection 5.15.2. Storage

5.15.2.1. Radioactive nuclear substances and equipment shall be returned to storage after use.

Storage

5.15.2.2. Radioactive nuclear substances shall be stored in accordance with the licence requirements and regulations of the Canadian Nuclear Safety Commission.

Prohibited combination

5.15.2.3. Radioactive nuclear substances and equipment shall not be stored with flammable or corrosive materials.

Subsection 5.15.3. Emergency Procedures

Fire emergency procedures

5.15.3.1. (1) Persons using or storing radioactive nuclear substances shall establish fire emergency procedures in consultation with the **fire department**, including

(a) the location and identification of storage and use areas,

(b) methods to control a fire emergency and to recover radioactive nuclear substances and equipment containing radioactive nuclear substances safely and efficiently,

(c) the names, addresses and telephone numbers of primary and alternative sources of expert radiation safety advice and assistance, and

(d) the location of primary and alternative sources of radiation survey instruments.

SECTION 5.16 FUMIGATION AND THERMAL INSECTICIDAL FOGGING

Subsection 5.16.1. Application

Application

5.16.1.1. (1) This Section applies to the fumigation or thermal fogging of **buildings** where this activity creates a fire or explosion hazard, including the fumigation of equipment or commodities within structures, tanks or bins or under tarpaulins.

(2) Articles 5.16.2.1. and 5.16.2.2. do not apply to industries that conduct frequent fumigation operations on a routine basis where **approved** prior to the conducting of the operations.

Subsection 5.16.2. Safety Precautions

Notification of fire department

5.16.2.1. (1) Except as permitted in Sentence 5.16.1.1.(2), the **fire department** shall

(a) be notified in writing at least 24 h before any **building** is to be closed for fumigation, and

(b) be advised of the chemicals to be used, the proposed date and time of use, the types of respiratory protective devices required and the degree of flammability of the fumigant or fog being used.

Notification of adjacent premises

5.16.2.2. Except as permitted in Sentence 5.16.1.1.(2), prior notice shall be given to the occupants of any premises adjacent to that in which fumigation or thermal insecticidal fogging is to take place.

Ignition sources

5.16.2.3. Flames and other sources of ignition shall be eliminated in a **building** undergoing fumigation or thermal insecticidal fogging.

Power supply

5.16.2.4. Electric power supply shall be shut off to the premises undergoing fumigation or thermal insecticidal fogging.

Air temperature

5.16.2.5. The air temperature in a **building** undergoing fumigation or thermal insecticidal fogging shall be kept sufficiently low to prevent the actuation of any sprinkler system.

Breathing apparatus

5.16.2.6. Protective breathing apparatus shall be made available at the premises undergoing fumigation or thermal insecticidal fogging for all persons in case of emergency.

Restricted entrance

5.16.2.7. (1) No unauthorized person shall be permitted to enter a premises undergoing fumigation or thermal insecticidal fogging until the premises has been ventilated and is safe.

(2) Warning signs shall be posted in a conspicuous location near every entrance to the premises being fumigated.

(3) One person shall be on duty at each entrance to the premises undergoing fumigation or thermal insecticidal fogging to prevent any unauthorized person from entering until such premises have been ventilated.

SECTION 5.17 HOT WORKS

Subsection 5.17.1. Application

Application

5.17.1.1. This Section applies to hot works that use open flames or produce heat or sparks, including cutting, welding, soldering, brazing, grinding, adhesive bonding, thermal spraying and thawing pipes.

Same

5.17.1.2. The installation, operation and maintenance of hot work equipment shall comply with CAN/CSA-W117.2, "Safety in Welding, Cutting and Allied Processes" and meet the requirements of this Section.

Subsection 5.17.2. Use and Maintenance of Equipment

Fuel gases

5.17.2.1. The operation of acetylene generating systems and the storage and generation of hot work fuel gases shall comply with NFPA 51, "Standard for Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting and Allied Processes".

Piping

5.17.2.2. Acetylene gas shall not be piped through copper or high copper content alloy, tubing, piping or fittings.

Cylinder storage

5.17.2.3. Cylinders stored inside **buildings** shall conform to the requirements in Section 5.6.

Cylinder caps and valves

5.17.2.4. Gas fuel cylinders, whether full or empty, whose valves are not in a recessed or protected location shall have their caps in place and their valves tightly closed when not in actual use.

Damaged equipment

5.17.2.5. Torches, regulators, hoses and other oxyacetylene hot work equipment which have been damaged shall not be used.

Equipment inspection

5.17.2.6. (1) Hot work equipment shall be **inspected** daily or prior to use for defects by personnel in charge of the equipment.

(2) Hot work equipment shall be **tested** monthly for leaks with a leak **test** solution.

(3) Leaks or defects found in hot work equipment shall be repaired prior to use.

Equipment not in use

5.17.2.7. Valves shall be closed and lines bled when equipment is not in actual use.

Lubrication

5.17.2.8. Oil or grease shall not be used for lubrication of hot work equipment.

Subsection 5.17.3. Prevention of Fires

Location of operations

5.17.3.1. (1) Hot work operations in **buildings** shall be carried out in areas that

(a) are free of combustible and flammable contents, and

(b) have walls, ceilings and floors of **noncombustible construction** or that are lined with noncombustible materials.

(2) When it is not practical to undertake hot work operations in areas described in Sentence (1), combustible and flammable materials shall either be kept at least 11 m from the work area or otherwise protected against ignition by sheet metal, asbestos blankets or other noncombustible material.

(3) Any process or activity that produces flammable gases or vapours, **combustible dusts** or **combustible fibres** in quantities sufficient to create a fire or explosion hazard shall be interrupted and the hazardous conditions shall be removed before any hot work is carried out.

Work adjacent to piping

5.17.3.2. When hot work is to be carried out near piping containing flammable gas, the section of the piping located within 1 m of the torch shall be covered with wet noncombustible insulating material 6 mm thick.

Work on containers

5.17.3.3. (1) Hot work shall not be performed on containers, equipment, or piping containing **flammable liquids**, **combustible liquids** or flammable gases unless

(a) they have been cleaned and **tested** with a **listed** gas detector, such as one conforming to CSA C22.2 No. 152, "Combustible Gas Detection Instruments", to ascertain that they are free of explosive vapours, or

(b) safety measures are taken in conformance with good engineering practice.

(2) Hot work operations shall not be undertaken on a totally enclosed container.

(3) At least one portable extinguisher conforming to Section 6.2 shall be provided in the hot work area.

SECTION 5.18 INDUSTRIAL OVENS FOR BAKING AND DRYING PROCESSES

Subsection 5.18.1. Application

Application

5.18.1.1. This Section applies to industrial baking and drying ovens which during operation contain flammable vapours given off by the products being baked or dried.

Subsection 5.18.2. Location

Prohibited location

5.18.2.1. Ovens shall not be located in any **storey** below **grade**.

Subsection 5.18.3. Construction

Oven materials

5.18.3.1. Industrial ovens shall be constructed of noncombustible materials with smooth interior surfaces to permit cleaning.

Limiting temperature on combustible construction

5.18.3.2. The roof and floor of ovens and heaters and associated ductwork shall have sufficient clearance or be insulated where necessary to prevent the temperature from exceeding 90°C at any combustible part of the **building** assembly.

Explosion vents

5.18.3.3. (1) Explosion vents shall be provided for ovens where fuel or vapour hazards are present.

(2) Explosion vents shall be designed in accordance with NFPA 68, "Standard on Explosion Protection by Deflagration Venting".

(3) Existing explosion vents that provide a vent ratio of 0.2 m^2 of vent area for each cubic metre of oven volume are deemed to satisfy the vent ratio for the purposes of NFPA 68 in Sentence (1).

(4) Openings or access doors equipped with explosion release hardware shall be acceptable as explosion vents.

Duct and stack restrictions

5.18.3.4. (1) Ducts, stacks and associated insulation in systems for the removal of flammable vapours shall

(a) be constructed of noncombustible materials,

(b) not pass through **firewalls**, and

(c) discharge outdoors not less than

(i) 1.5 m from unprotected **building** openings, and

(ii) 6 m from air intake openings.

Subsection 5.18.4. Ventilation

Oven ventilation

5.18.4.1. Ovens in which flammable vapours may be present or through which products of combustion are circulated shall be ventilated in accordance with NFPA 86, "Standard for Ovens and Furnaces".

Fan interlocks

5.18.4.2. (1) In ovens where flammable vapours may be present, interlocks shall be provided to ensure that energy sources and ignition devices are de-activated when

(a) the ventilating fans stop, or

(b) the excess temperature controls are activated.

Continuous-process oven interlocks

5.18.4.3. (1) In continuous-process ovens where flammable vapours may be present, interlocks shall be provided to ensure

(a) that ventilating fans are operating before conveyors can be started, and

(b) that the conveyors are stopped when

(i) the ventilating fans stop, or

(ii) the excess temperature controls are activated.

Subsection 5.18.5. Maintenance

Cleaning of ovens and ductwork

5.18.5.1. (1) Ovens and associated ductwork shall be **inspected**, cleaned and maintained internally and externally at intervals sufficient to prevent the accumulation of combustible deposits.

(2) Access doors or panels shall be provided to permit **inspection**, cleaning and maintenance of ovens and associated ductwork.

(3) Fixed noncombustible ladders, steps or grab rails shall be provided to permit access to the doors or panels required in Sentence (2).

Subsection 5.18.6. Fire Protection

Portable extinguishers

5.18.6.1. Portable extinguishers shall be provided in conformance with Section 6.2.

Standpipe and hose systems

5.18.6.2. A standpipe and hose system shall be installed in conformance with the **Building Code** and equipped with spray nozzles so that all parts of an oven structure can be reached by a hose stream.

Fire access doors

5.18.6.3. Doors or other means of access shall be provided in ovens and associated ductwork so that portable extinguishers or hose streams may be used in all parts of the equipment.

Automatic fire protection

5.18.6.4. Ovens containing or processing sufficient combustible materials to sustain a fire shall be protected by an automatic sprinkler system or other fixed extinguishing systems.

O. Reg. 213/07, Division B, Part 5; O. Reg. 256/14, ss. 196-255.

PART 6
FIRE PROTECTION EQUIPMENT

SECTION 6.1 GENERAL

Subsection 6.1.1. Application

Application

6.1.1.1. This Part applies to installation, **checking**, **inspection**, **testing**, maintenance and operation of fire protection equipment and life safety systems.

Exception

6.1.1.2. Section 6.2 does not apply to **dwelling units**.

SECTION 6.2 PORTABLE EXTINGUISHERS

Subsection 6.2.1. General

6.2.1.1. **Listed** portable extinguishers shall be installed when replacing or adding new extinguishers.

Maintenance

6.2.1.2. Portable extinguishers shall be kept operable and fully charged.

Location

6.2.1.3. (1) Portable extinguishers shall be located so that they are easily seen and shall be accessible at all times, except as permitted in Sentences (2) and (3).

(2) A lockable, break-front glazed cabinet may be used for security purposes to store portable extinguishers and where portable extinguishers are located in a fire hose cabinet, an **approved** lockable, scored glass break-front cabinet may be used.

(3) In a **detention occupancy**, portable extinguishers are permitted to be located in secure areas, or in lockable cabinets provided

(a) identical keys for all cabinets are located at all supervisory or security stations, or

(b) electrical remote release devices that are designed to open upon power failure are provided for the cabinets.

6.2.1.4. Portable extinguishers shall be located in or adjacent to corridors or aisles that provide **access to exits**.

Signs

6.2.1.5. The location of portable extinguishers shall be prominently indicated by signs or markings in large **floor areas** and in locations where visual obstructions cannot be avoided.

Proximity to fire hazards

6.2.1.6. Portable extinguishers in proximity to a fire hazard shall be located so as to be accessible without exposing the operator to undue risk.

Corrosive atmosphere

6.2.1.7. Portable extinguishers that are subject to corrosion shall not be installed in a corrosive environment unless they are provided with appropriate corrosion protection.

Temperature range requirements

6.2.1.8. (1) Where a portable extinguisher is to be located in an area subject to temperatures outside the range 4°C to 49°C, it shall be

(a) placed in an enclosure where the temperature is maintained within this range, or

(b) of a type labelled for the temperatures to which it will be exposed.

Mounting brackets

6.2.1.9. When portable extinguishers are located on vehicles or in areas where they are subject to jarring or vibration, brackets designed to accommodate these effects shall be used.

Subsection 6.2.2. Classification

Rating of portable extinguishers

6.2.2.1. Portable extinguishers shall be rated and identified in conformance with CAN/ULC-S508, "Standard for the Rating and Fire Testing of Fire Extinguishers".

Subsection 6.2.3. Selection Requirements

Multiple ratings

6.2.3.1. Where portable extinguishers have been **tested** and are rated as being acceptable for fighting more than one class of fire, each class of fire for which they are acceptable shall be designated on each extinguisher.

Subsection 6.2.4. Installation Requirements

Where portable extinguishers required

6.2.4.1. Portable extinguishers shall be provided to protect every **building**, each hazardous **occupancy** inside the **building** and each hazardous process or operation located outside.

Distance above floor

6.2.4.2. Portable extinguishers with a gross weight greater than 18 kg shall be installed so that the top of the extinguisher is not more than 1.1 m above the floor when the extinguisher is not equipped with wheels.

6.2.4.3. Portable extinguishers having a gross weight of 18 kg or less shall be installed so that the top of the extinguisher is not more than 1.5 m above the floor.

Operating instructions

6.2.4.4. The operating instructions of portable extinguishers shall face outward when the extinguishers are located in cabinets, in wall recesses or on shelves.

Subsection 6.2.5. Grading of Hazards

Light hazard occupancy

6.2.5.1. Where the quantity of combustible material present is such that fires of small size may be expected, such as in offices, schoolrooms, churches, assembly halls and telephone exchanges, the **occupancy** shall be graded as light hazard.

Ordinary hazard occupancy

6.2.5.2. Where the quantity of combustible material present is such that fires of moderate size may be expected, such as in **mercantile occupancies**, display rooms, auto showrooms, parking garages, light manufacturing, warehouses not classified as extra hazard and school shop areas, the **occupancy** shall be graded as ordinary hazard.

Extra hazard occupancy

6.2.5.3. Where the quantity of combustible material present is such that fires of severe magnitude may be expected, such as in woodworking, auto repair, aircraft servicing, mercantile storage areas, warehouses with high-piled combustibles and processes incorporating **flammable liquids** or **combustible liquids**, the **occupancy** shall be graded as extra hazard.

Subsection 6.2.6. Distribution

6.2.6.1. (1) Portable extinguishers required in Article 6.2.4.1. shall be located in conformance with this Subsection.

(2) Despite Sentence (1), in an unoccupied warehouse equipped with a fixed fire protection system, provision shall be made for portable extinguishers to be available for use by responding personnel.

(3) The location and number of portable extinguishers required under Sentence (2) shall be **approved**.

Building protection

6.2.6.2. Portable extinguishers that are provided to protect a **building** shall be suitable for fighting **Class A fires** and be available for use at all times.

Occupancy protection

6.2.6.3. Portable extinguishers that are provided to protect a hazardous **occupancy** shall be those required in this Section for fighting **Class A fires**, **Class B fires**, **Class C fires**, **Class D fires** or **Class K fires**.

Extinguishers for Class A fires

6.2.6.4. Except as required in Article 6.2.6.5., portable extinguishers for **Class A fires** shall be provided in conformance with Table 6.2.6.A.

6.2.6.5. Where a **floor area** is less than that shown in Table 6.2.6.A., one portable extinguisher not less than the minimum size permitted shall be provided.

TABLE 6.2.6.A.

Forming Part of Article 6.2.6.4.

Basic Minimum Extinguisher Rating for Area Specified	Maximum Travel Distance to Extinguisher, m	Maximum Area to be Protected per Extinguisher for **Class A Fires**, m^2		
		Light Hazard **Occupancy**	Ordinary Hazard **Occupancy**	Extra Hazard **Occupancy**
2A	25	600	300	Not Acceptable
3A	25	900	400	300
4A	25	1100	600	400
6A	25	1100	900	600
10A	25	1100	1100	900
20A	25	1100	1100	1100
40A	25	1100	1100	1100

Hose stations in lieu of extinguishers

6.2.6.6. Up to one half of the number of portable extinguishers required in Table 6.2.6.A. may be replaced by hose stations.

Extinguishers for Class B fires

6.2.6.7. Except as required by Article 6.2.6.9., portable extinguishers for **Class B fires** shall be provided as required in Table 6.2.6.B.

6.2.6.8. (1) Where up to three portable extinguishers rated for **Class B fires** are used to satisfy the extinguisher rating specified in Table 6.2.6.B., the sum of the basic extinguisher ratings shall satisfy the requirements in Table 6.2.6.B.

(2) No more than three portable extinguishers shall be used to satisfy the requirements of Table 6.2.6.B.

TABLE 6.2.6.B.

Forming Part of Article 6.2.6.7.

Grade of Hazard	Basic Minimum Extinguisher Rating per Unit	Maximum Travel Distance to Extinguishers, m
Light	5B 10B	9 15
Ordinary	10B 20B	9 15
Extra	20B 40B	9 15

Extinguishers for flammable and combustible liquids

6.2.6.9. (1) Portable extinguishers for **Class B fires** shall be provided for **flammable liquid** and **combustible liquid** hazards when **flammable liquids** or **combustible liquids** are stored in open containers to a depth greater than 6 mm.

(2) The portable extinguishers shall provide at least one numerical unit of extinguishing potential for **Class B fires** per 0.1 m^2 of surface area of the largest open container within the area, but in no case shall the extinguisher rating be less than that required by Table 6.2.6.B.

(3) The distance travelled to reach a portable extinguisher required by Sentence (1) shall not exceed 15 m.

6.2.6.10. (1) Where up to three foam-type portable extinguishers rated for **Class B fires** are used to satisfy the requirements of Article 6.2.6.9., the sum of the basic extinguisher ratings shall satisfy the requirements in Table 6.2.6.B.

(2) No more than three portable extinguishers shall be used to satisfy the requirements of Table 6.2.6.B.

Supplementary protection

6.2.6.11. Portable extinguishers shall supplement fixed fire protection in Part 5 in accordance with Article 6.2.6.9. where a **flammable liquid** or **combustible liquid** is stored in an open container and where the liquid surface area exceeds 0.4 m^2.

Extinguishers for commercial cooking equipment

6.2.6.12. (1) Portable extinguishers suitable for **Class K fires** shall be provided to protect cooking operations.

(2) Sentence (1) does not apply to cooking operations protected by wet chemical or dry chemical extinguishers not **listed** for **Class K fires** that met the requirements of this Code on December 31, 2014, as it read on that day, unless the extinguishers

(a) become due for an internal examination or hydrostatic **test** under Subsection 6.2.7.,

(b) require recharging due to use, or

(c) become damaged.

Extinguishers for Class C fires

6.2.6.13. Portable extinguishers suitable for **Class C fires** shall be provided in or near **service rooms** containing electrical equipment.

Distribution

6.2.6.14. Distribution of portable extinguishers for **Class C fires** shall conform to the applicable provisions for the distribution of extinguishers for **Class A fires** or **Class B fires** in the vicinity of the electrical equipment.

6.2.6.15. Reference shall be made to Parts 2, 3, 4 and 5 for requirements of portable extinguishers for **flammable liquids** and **combustible liquids**, hazardous materials, processes and operations.

Extinguishers for combustible metal fires

6.2.6.16. (1) For fires involving combustible metals, extinguishers or extinguishing agents with **Class D fire** ratings suitable for the combustible metal shall be provided.

(2) Extinguishing equipment shall be located not more than 25 m from the **Class D fire** hazard.

Subsection 6.2.7. Inspection, Testing and Maintenance

6.2.7.1. (1) Maintenance and **testing** of portable extinguishers shall be in conformance with NFPA 10, “Portable Fire Extinguishers”.

(2) Portable extinguishers that are **inspected** in conformance with NFPA 10, “Portable Fire Extinguishers”, are deemed to satisfy the **inspection** requirements of this Subsection.

Examination

6.2.7.2. Portable extinguishers shall be **inspected** monthly.

Defective extinguishers

6.2.7.3. Portable extinguishers having defects shall be repaired and, if necessary, recharged to ensure the extinguishers will operate effectively and safely.

Tags

6.2.7.4. (1) Each portable extinguisher shall have a tag securely attached to it showing the maintenance or recharge date, the servicing agency and the signature of the person who performed the service.

(2) Sentence (1) does not apply where other **approved** records are maintained that show the maintenance or recharge date, the servicing agency and the signature of the person who performed the service.

Maintenance records

6.2.7.5. A permanent record containing the maintenance date, the examiner's name and a description of any maintenance work or hydrostatic **testing** carried out shall be prepared and maintained for each portable extinguisher.

Maintenance after use

6.2.7.6. Portable extinguishers shall be replaced or recharged after use in conformance with instructions given on the extinguisher nameplate.

6.2.7.7. Extinguisher shells, cartridges or cylinders that show leakage or permanent distortion in excess of specified limits or that rupture shall be removed from service.

6.2.7.8. Hydrostatic pressure **tests** shall be conducted at the original **test** pressure as stated on the nameplate.

Test labels

6.2.7.9. (1) Where a portable extinguisher is **tested**, a label shall be fixed to the extinguisher after **testing** that indicates the month and year the hydrostatic pressure **test** was performed, the **test** pressure used and the name of the person or agency performing the **test**.

(2) Sentence (1) does not apply where a permanent record of the **test** is kept and is available to the **fire department**.

SECTION 6.3 ALARM AND VOICE COMMUNICATION SYSTEMS FOR LIFE SAFETY

Subsection 6.3.1. General

Access

6.3.1.1. Access to fire alarm and voice communication system components requiring **inspection** or servicing shall be kept unobstructed.

Monitoring

6.3.1.2. (1) Where the **Building Code** or this Code require a fire alarm system to be monitored to transmit a signal to the **fire department**, the building **owner** shall ensure the continuation of the monitoring.

(2) Where the fire alarm system monitoring referred to in Sentence (1) is provided by a central station, the **building owner** shall obtain written documentation from the central station operator that the monitoring service complies with

(a) NFPA 71, "Standard for the Installation, Maintenance, and Use of Signaling Systems for Central Station Service", or

(b) CAN/ULC-S561, "Installation and Services for Fire Signal Receiving Centres and Systems".

(3) Where a fire alarm system is monitored by a central station to meet the requirements of the **Building Code** or this Code, the operator of the central station shall provide, upon request by the **owner** or **Chief Fire Official**, a document attesting that the monitoring service is in compliance with one of the standards identified in Sentence (2).

(4) Despite Article 1.2.1.1. of Division A, where the **Building Code** or this Code requires a fire alarm system to be monitored and the monitoring is provided by a central station, the operator of the central station shall be responsible for maintaining the monitoring service and associated monitoring equipment in accordance with one of the standards identified in Sentence (2).

(5) Where the fire alarm system is monitored by a proprietary signalling system, such system shall be maintained in accordance with Chapter 4 of NFPA 72, "Standard for the Installation, Maintenance, and Use of Protective Signaling Systems".

6.3.1.3. (1) If a fire alarm or voice communication system or any part thereof is shut down

(a) the **fire department** and **building** occupants shall be notified in accordance with Article 1.1.1.1., and

(b) the **supervisory staff** shall be notified.

6.3.1.4. Fire alarm and voice communication systems shall be maintained in operating condition.

Signal silencing

6.3.1.5. (1) Once activated, a fire alarm system shall not be manually silenced unless it has been confirmed by **supervisory staff**, in accordance with **approved** procedures as detailed in the fire safety plan, that no fire emergency exists.

(2) Sentence (1) does not apply where a silencing switch is part of an **approved** integrated voice communication system and signal silencing takes place to allow fire emergency instructions to be heard.

Disconnect switches

6.3.1.6. Disconnect switches for power supplies which serve only fire alarm systems or interconnected **smoke alarms** shall be in a locked secure area or otherwise secured in an **approved** manner.

Relocating manual pull stations

6.3.1.7. (1) Where **approved**, manual pull stations for a fire alarm system in a **building** may be relocated if there is a high incidence of false alarms in the **building**.

(2) Where the manual pull stations are relocated, alternate **approved** measures shall be used to maintain the level of life safety.

Repairs and alterations to fire alarm systems

6.3.1.8. Repair, replacement and alterations of fire alarm system components shall be in accordance with CAN/ULC-S524, "Standard for the Installation of Fire Alarm Systems".

Subsection 6.3.2. Check, Inspect and Test

Obligation to ensure compliance

6.3.2.1. (1) The **owner** shall ensure that any person performing the annual **tests** or annual **inspections** required by this Subsection for fire alarm systems or performing the repairs, replacements or alterations of fire alarm systems referred to in Article 6.3.1.8. is in compliance with the requirements of

(a) Clause 1.2.1.2.(1)(a) of Division C, or

(b) Sentence 1.2.1.2.(2) of Division C.

(2) The **owner** shall ensure that any person performing the annual **tests** or annual **inspections** required by this Subsection for interconnected **smoke alarm** systems or performing the **tests** or maintenance for interconnected **smoke alarm** systems referred to in Article 6.3.2.6. is in compliance with the requirements of

(a) Clause 1.2.2.2.(1)(a) of Division C, or

(b) Sentence 1.2.2.2.(2) of Division C.

Fire alarm systems

6.3.2.2. (1) Except as provided in Sentence (2), a fire alarm system, with or without voice communication capability, shall be **inspected** and **tested** in conformance with CAN/ULC-S536, "Inspection and Testing of Fire Alarm Systems".

(2) Despite Clause 5.7.4.1.6. of CAN/ULC-S536, "Inspection and Testing of Fire Alarm Systems", a UL **listed smoke detector** sensitivity instrument may be used to conduct annual sensitivity **testing** of **smoke detectors**.

(3) A description of the fire alarm system as required in Clause 3.6 of CAN/ULC-S536, "Inspection and Testing of Fire Alarm Systems", shall be kept current and maintained in the **building** at an **approved** location.

(4) A record of each device, component and circuit of the fire alarm system that is **inspected** and **tested** in accordance with Sentence (1) shall

(a) indicate whether the device, component or circuit is in proper working order, and

(b) be kept in accordance with Article 1.1.2.1.

(5) Where a fire alarm system is monitored to transmit a signal to the **fire department**, the **owner** shall record whether all signals from the **tests** conducted in Sentence (1), or other events, are received by the monitoring station, and records shall be kept in accordance with Article 1.1.2.1.

Central alarm and control facilities

6.3.2.3. The central alarm and control facility shall be **checked** daily for indication of trouble in the system.

Voice communication systems

6.3.2.4. Voice communication systems that are integrated with a fire alarm system shall be **tested** in conformance with CAN/ULC-S536, "Inspection and Testing of Fire Alarm Systems".

6.3.2.5. (1) Voice communication systems that are not integrated with a fire alarm system shall be **tested** monthly in compliance with Sentences (2) and (3).

(2) Loudspeakers described in Sentence (1) shall be **tested** monthly as an all-call signal to ensure they function as intended.

(3) Communication from at least one remote firefighter emergency telephone location to the control unit shall be **tested** monthly on a rotational basis so that communication from all remote firefighter emergency telephone locations are **tested** at least once per year.

(4) Voice communication systems are not required to be **tested** in conformance with Sentences (1) and (2) where the systems are regularly used as part of a paging system.

Interconnected smoke alarms

6.3.2.6. (1) This Article applies to interconnected **smoke alarm** systems in all **residential occupancies** and **care occupancies**, except in individual **dwelling units** and in **buildings** regulated by Section 9.8.

(2) Interconnected **smoke alarms** shall be **tested** and maintained in operating condition in conformance with CAN/ULC-S552, "Standard for the Maintenance and Testing of Smoke Alarms", and as required by this Article.

(3) The power supply shall be **checked** weekly.

(4) The operability of the interconnected system shall be confirmed monthly, by **testing** at least one **smoke alarm** using its **test** function, on a rotational basis.

(5) Where installed, each manual pull station shall be **tested** to ensure activation of the interconnected **smoke alarms** on an annual basis.

(6) Written records shall be kept of weekly **checks** of the power supply for at least six months after they are made, and be available upon request to the **Chief Fire Official**.

(7) Monthly and annual **tests** shall be recorded and kept in accordance with Article 1.1.2.1.

Subsection 6.3.3. Smoke Alarms — Maintenance and Testing

Application

6.3.3.1. (1) This Subsection applies to **smoke alarms** in

(a) **suites** of **residential occupancy**,

(b) **guest suites**,

(c) sleeping rooms not within a **dwelling unit**, and

(d) other **occupancies** in which **smoke alarms** are required by the **Building Code**.

Landlord is responsible

6.3.3.2. Despite the definition of **owner** in Article 1.4.1.2. of Division A, in the case of a rental **suite**, only the landlord shall be considered to be the **owner** for the purpose of applying Article 1.2.1.1. of Division A to this Subsection.

Duty to maintain in operating condition

6.3.3.3. (1) **Smoke alarms** shall be maintained in operating condition.

(2) Primary and secondary power supplies that serve **smoke alarms** shall be maintained in operating condition.

(3) If the **Building Code** requires a visual signalling component that is integral with or connected to a **smoke alarm**, the visual signalling component shall be maintained in operating condition.

Maintenance instructions to be given to tenant

6.3.3.4. The landlord of each rental **suite** shall give the tenant a copy of the **smoke alarm** manufacturer's maintenance instructions or **approved** alternative maintenance instructions.

Tenant to notify landlord

6.3.3.5. (1) A tenant of a rental **suite** shall notify the landlord as soon as the tenant becomes aware that

(a) a **smoke alarm** in the unit is disconnected,

(b) a **smoke alarm** in the unit is not operating, or

(c) the operation of a **smoke alarm** in the unit is impaired.

Disabling prohibited

6.3.3.6. No person shall disable a **smoke alarm**.

Replacement

6.3.3.7. (1) A **smoke alarm** shall be replaced within the time frame indicated in the manufacturer's instructions.

(2) When a **smoke alarm** is replaced

(a) in the case of a **suite** subject to Part 9, the replacement shall not provide a lower level or type of protection than that required by Part 9,

(b) in the case of a **suite** not subject to Part 9 that was constructed on or after April 6, 1998, the replacement shall not provide a lower level or type of protection than that required by the **Building Code** in effect at the time of construction of the **suite**, and

(c) in the case of a **suite** not subject to Part 9 that was constructed before April 6, 1998, the replacement shall not provide a lower level or type of protection than that required by Article 2.13.2.1.

(3) The **Chief Fire Official** may **approve** an alternative to a requirement of Sentence (2) if, in the opinion of the **Chief Fire Official**, the alternative provides fire safety protection equivalent to or greater than the fire safety protection that would be provided by the requirement.

Testing

6.3.3.8. (1) This Article applies to rental **suites**.

(2) The landlord shall **test smoke alarms** annually and after every change in tenancy.

(3) The landlord shall **test** battery-operated **smoke alarms** after the battery is replaced.

(4) The landlord shall **test smoke alarms** that are connected to an electrical circuit after any change is made to the electrical circuit.

(5) For the purposes of Sentences (2), (3) and (4), **smoke alarms** shall be **tested** by activating the **smoke alarm** test feature.

(6) If the **Building Code** requires a visual signalling component that is integral with or connected to a **smoke alarm**, the landlord shall ensure that any **test** of the **smoke alarm** required by Sentences (2) to (4) activates the visible signalling component.

Subsection 6.3.4. Carbon Monoxide Alarms — Maintenance and Testing

Application

6.3.4.1. This Subsection applies to carbon monoxide alarms in **buildings** containing a **residential occupancy**.

Landlord is responsible

6.3.4.2. Despite the definition of **owner** in Article 1.4.1.2. of Division A, in the case of a rental **suite** of **residential occupancy**, only the landlord shall be considered to be the **owner** for the purpose of applying Article 1.2.1.1. of Division A to this Subsection.

Duty to maintain in operating condition

6.3.4.3. (1) Carbon monoxide alarms shall be maintained in operating condition.

(2) Primary and secondary power supplies that serve carbon monoxide alarms shall be maintained in operating condition.

Maintenance instructions to be given to tenant

6.3.4.4. The landlord of each rental **suite** of **residential occupancy** shall give the tenant a copy of the carbon monoxide alarm manufacturer's maintenance instructions or **approved** alternative maintenance instructions.

Tenant to notify landlord

6.3.4.5. (1) A tenant of a rental **suite** of **residential occupancy** shall notify the landlord as soon as the tenant becomes aware that

(a) a carbon monoxide alarm in the unit is disconnected,

(b) a carbon monoxide alarm in the unit is not operating, or

(c) the operation of a carbon monoxide alarm in the unit is impaired.

Disabling prohibited

6.3.4.6. No person shall disable a carbon monoxide alarm.

Replacement in certain buildings

6.3.4.7. (1) Subject to Sentence (2), this Article applies to every **building** that contains a **residential occupancy** and

(a) a fuel-burning **appliance**,

(b) a fireplace, or

(c) a **storage garage**.

(2) This Article applies

(a) as of April 15, 2015, in the case of **buildings** that contain no more than six **suites** of **residential occupancy**, and

(b) as of October 15, 2015, in the case of **buildings** that contain more than six **suites** of **residential occupancy**.

(3) A carbon monoxide alarm shall be replaced within the time frame indicated in the manufacturer's instructions.

(4) Despite Section 2.16, when a carbon monoxide alarm is replaced in a **suite** of **residential occupancy** constructed on or after August 6, 2001, the replacement

(a) shall not provide a lower level or type of carbon monoxide protection than that required by the **Building Code** as it read on the day the **suite** was constructed, and

(b) shall comply with CSA-6.19, "Residential Carbon Monoxide Alarming Devices" or UL 2034, "Single and Multiple Station Carbon Monoxide Alarms".

(5) When a carbon monoxide alarm is replaced in a **suite** of **residential occupancy** constructed before August 6, 2001, the replacement carbon monoxide alarm shall meet the requirements of Article 2.16.2.1.

(6) The **Chief Fire Official** may **approve** an alternative to a requirement of Sentence (4) or (5) if, in the opinion of the **Chief Fire Official**, the alternative provides life safety protection equivalent to or greater than the life safety protection that would be provided by the requirement.

Testing

6.3.4.8. (1) This Article applies to rental **suites** of **residential occupancy**.

(2) The landlord shall **test** carbon monoxide alarms annually and after every change in tenancy.

(3) The landlord shall **test** battery-operated carbon monoxide alarms after the battery is replaced.

(4) The landlord shall **test** carbon monoxide alarms that are connected to an electrical circuit after any change is made to the electrical circuit.

(5) For the purposes of Sentences (2), (3) and (4), carbon monoxide alarms shall be **tested** by activating the carbon monoxide alarm test feature.

SECTION 6.4 STANDPIPE AND HOSE SYSTEMS

Subsection 6.4.1. General

6.4.1.1. During alteration of a **building** required to have a standpipe and hose system, the system shall be installed or dismantled progressively so as to provide protection to all **floor areas**.

6.4.1.2. Standpipe and hose systems shall be maintained in operating condition.

Fire department connections

6.4.1.3. (1) Except when in use or being **inspected** in accordance with Sentence (2), **fire department** connections shall be equipped with plugs or caps that are secured wrench-tight.

(2) Plugs or caps shall be removed annually and the **fire department** connections **inspected** for wear, rust or obstruction and corrective action shall be taken as needed.

(3) If plugs or caps are missing, the **fire department** connections shall be examined for obstructions, back-flushed when conditions warrant and the plugs or caps replaced.

Out of service requirements

6.4.1.4. (1) If a standpipe system or any part thereof is shut down

(a) the **fire department** and **building** occupants shall be notified in accordance with Article 1.1.1.1., and

(b) the **supervisory staff** shall be notified.

Hotels

6.4.1.5. In **buildings** containing a **hotel**, a standpipe and hose system shall not be shut down, disconnected or otherwise impaired without notifying the **Chief Fire Official** in accordance with a schedule identified in the **approved** fire safety plan.

Inspection, testing and maintenance

6.4.1.6. Compliance with the **inspection**, **testing** and maintenance provisions of NFPA 25, “Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems”, for standpipe and hose systems is deemed to satisfy the requirements of Articles 6.4.2.1. to 6.4.2.5. and Subsection 6.4.3.

Subsection 6.4.2. Maintenance and Inspection of Hose Stations and Equipment

Hose stations

6.4.2.1. Hose stations shall be **inspected** monthly to ensure that the hose is in proper position and that all of the equipment is in place and in operable condition.

6.4.2.2. Standpipe and hose system equipment shall be used for fire protection only.

6.4.2.3. Standpipe hose stations shall be conspicuously identified and unobstructed.

Hose valves

6.4.2.4. Hose valves shall be **inspected** annually to ensure that they are tight so that there is no water leakage into the hose.

Hose

6.4.2.5. (1) Standpipe hose shall be unracked, unreeled or unrolled and **inspected** at least annually and after use, and any worn hose or gaskets in the couplings at the hose valves and at the nozzle replaced.

(2) If the hose is replaced on the rack, reel or storage area, it shall be reracked, rereeled or rerolled so that any folds do not occur at the same position they were previously on the hose.

Standpipe identification

6.4.2.6. (1) Except as required in Sentence (2), each hose connection in a standpipe system shall be provided with a legible sign reading: “FIRE HOSE FOR USE BY TRAINED PERSONS ONLY”.

(2) Each hose connection in a dry standpipe system with no permanent water supply shall be provided with a legible weatherproof sign reading: “DRY STANDPIPE FOR FIRE DEPARTMENT USE ONLY”.

Hose cabinets

6.4.2.7. (1) If a fire hose station is located in a cabinet, an **approved** lockable, scored glass break-front cabinet may be used.

(2) Hose stations in a **major occupancy** consisting of **detention occupancy** may be located in secure areas, or in lockable cabinets where

(a) identical keys for all cabinets are located at all guard stations, or

(b) electrical remote release devices are provided and are connected to an emergency power supply.

Subsection 6.4.3. Checking and Testing

Standpipe systems

6.4.3.1. (1) Standpipe systems that have been modified, extended or are being restored to service after a period of disuse exceeding one year shall be **tested** in conformance with Articles 6.4.3.2. to 6.4.3.5.

(2) Where standpipe connections are built in walls or **partitions**, the **tests** shall be made before the standpipes are concealed.

Hydrostatic test

6.4.3.2. Standpipe system piping shall be hydrostatically **tested** at a pressure of not less than 1400 kPa (gauge) for 2 h, or at 350 kPa (gauge) in excess of the normal hydrostatic pressure when the normal hydrostatic pressure is in excess of 1050 kPa (gauge).

Fire department connections

6.4.3.3. Piping between the **fire department** connection and the check valve in the inlet pipe to the standpipe shall be **tested** in the same manner as the remainder of the system.

Underground mains

6.4.3.4. (1) Underground mains and connections shall be **tested** for 2 h at a hydrostatic pressure of 350 kPa (gauge) in excess of the maximum hydrostatic pressure in service, but not less than 1400 kPa (gauge).

(2) Leakage during the **test** shall not exceed 2 L/h per 100 joints for pipe laid with rubber gasketted joints, and 30 mL/h per 25 mm of pipe diameter per joint for pipe laid with caulked lead or lead substitute joints.

Flow and pressure tests

6.4.3.5. Flow and pressure **tests** shall be conducted at the highest and most remote hose valve or hose connection to ensure that the water supply for standpipes is provided as originally designed.

Dry standpipes

6.4.3.6. (1) Standpipe system piping which normally remains dry shall be **tested** in accordance with Article 6.4.3.2. at intervals of not more than five years.

(2) Water supply pressure and system air pressure for automatic dry standpipe systems shall be **checked** weekly by using gauges to ensure that the system is maintained at the required operating pressure.

Hotels

6.4.3.7. In **buildings** containing a **hotel**, flow and pressure **tests** shall be conducted annually at the highest and most remote hose valve or hose connection to verify that the water supply for the standpipe system is provided as originally designed.

SECTION 6.5 SPRINKLER SYSTEMS

Subsection 6.5.1. General

Repair, replacement, alterations, inspection, testing and maintenance

6.5.1.1. (1) Repair, replacement and alterations of sprinkler system components shall be in accordance with NFPA 13, "Standard for the Installation of Sprinkler Systems", NFPA 13D, "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes" or NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height", as applicable.

(2) Compliance with the **inspection**, **testing** and maintenance provisions of NFPA 25, "Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems", for sprinkler systems is deemed to satisfy the requirements of Subsections 6.5.4. to 6.5.6.

6.5.1.2. Sprinkler systems shall be maintained in operating condition.

Closing sprinkler control valves

6.5.1.3. (1) Sprinkler control valves shall not be closed in the event of a fire until the fire is

(a) extinguished, or

(b) considered by the **fire department**, or by an industrial fire brigade established by the **owner** in consultation with the **fire department**, to be under control by other means.

Changes in equipment or occupancy

6.5.1.4. Changes in equipment or **occupancy** that might result in temperatures at sprinklers being more than 38°C or less than 4°C with wet pipe systems shall not be made without previously making provisions to alter the sprinkler system to prevent premature operation or freezing.

Obstructions

6.5.1.5. (1) No obstructions shall be placed so as to interfere with the effectiveness of water discharge from sprinklers.

(2) Sprinkler systems shall not be used to support anything that will interfere with effective sprinkler system performance.

6.5.1.6. (1) Where alterations or repairs are made to feed mains, cross mains, or risers in sprinkler systems, the systems shall be **tested** in conformance with Sentences (2) to (8).

(2) Except as permitted in Sentence (4), the sprinkler system shall be subjected to a hydrostatic pressure **test** of a minimum of 1400 kPa (gauge), or 350 kPa (gauge) in excess of the maximum static pressure to which the system may be subjected, for a period of 2 h without loss of pressure.

(3) For dry-pipe systems, the clapper of the differential type dry-pipe valve shall be held off its seat, and the ball drip in the intermediate chamber shall be replaced by a plug during the **test**.

(4) The **tests** described in Sentence (2) shall be performed when hydrostatic pressure **testing** can be performed without danger of freezing, and when there is danger of freezing, the sprinkler system shall be pressure **tested** with air at 350 kPa (gauge) for 2 h without loss of pressure.

(5) Sprinkler system water supply pressure shall be **tested** with the main drain valve fully open to ensure that there are no obstructions in the water supply piping to the sprinkler system.

(6) Drainage facilities shall be **tested** to ensure that the drains are capable of taking the full flow from the main drain pipe without overflowing.

(7) Dry-pipe valves shall be **tested** to ensure that they are in operating condition.

(8) Mechanical and electrical alarms shall be **tested** to ensure that they are in operating condition.

Testing of underground mains

6.5.1.7. (1) When alterations or additions are made to underground mains and lead-in connections of a sprinkler system, the mains and lead-in connections shall be **tested** by

(a) flushing for sufficient time to remove foreign material at a minimum water flow as specified in Table 6.5.1.A., and

(b) a 2 h hydrostatic pressure **test** of 350 kPa (gauge) in excess of the maximum static pressure, but not less than 1400 kPa (gauge) and leakage shall not exceed 2 L/h per 100 joints for pipe laid with rubber gasketted joints, and 30 mL/h per 25 mm of pipe diameter per joint for pipe laid with caulked lead or lead substitute joints.

TABLE 6.5.1.A.

Forming Part of Article 6.5.1.7.

Size of Pipe, mm	Minimum Flow, L/min
100	1500
150	3250
200	5800
250	9000
300	13000

(2) At seasons of the year that will not permit hydrostatic pressure **testing**, the procedure outlined in Sentence 6.5.1.6.(4) may be followed.

Records

6.5.1.8. (1) An **approved** record shall be kept of **inspections** of each system.

(2) The record required in Sentence (1) shall be available for examination by the **Chief Fire Official**.

Subsection 6.5.2. Sprinkler System Shutdowns

Notification

6.5.2.1. When any alterations, additions or repairs are to be made involving interruption to a sprinkler system or part thereof, the **Chief Fire Official** shall be notified.

Sprinkler control valves and water supplies

6.5.2.2. (1) Sprinkler control valves and sprinkler water supplies shall not be shut down, disconnected or otherwise impaired for more than 24 h without notifying the **Chief Fire Official**.

(2) In **buildings** containing a **hotel**, sprinkler control valves and sprinkler water supplies shall not be shut down, disconnected or otherwise impaired

(a) for 24 h or less without notifying the **Chief Fire Official** in accordance with a schedule identified in the **approved** fire safety plan, or

(b) for more than 24 h without notifying the **Chief Fire Official**.

Schedule of temporary shutdowns

6.5.2.3. Where it is required to temporarily shut down a sprinkler system or part thereof, the work shall be programmed by the contractor working on the system to enable the sprinkler system to be operational as quickly as possible in the circumstances.

Programmed repairs

6.5.2.4. (1) If a sprinkler system or any part thereof is shut down

(a) the **fire department** and **building** occupants shall be notified in accordance with Article 1.1.1.1., and

(b) the **supervisory staff** shall be notified.

Additional protection during shutdowns

6.5.2.5. Full sprinkler protection shall be restored or the provisions of Article 6.5.2.6. maintained when work on the system is discontinued.

Identification of closed valves

6.5.2.6. Closed sprinkler control valves and closed valves controlling fire protection water supplies for sprinkler systems shall be tagged or identified in an **approved** manner.

Subsection 6.5.3. Checking

Pipe hangers

6.5.3.1. Exposed sprinkler piping hangers shall be **checked** yearly to ensure that they are kept in good repair.

Pressure maintenance

6.5.3.2. Water supply pressure and system air or water pressure shall be **checked** weekly by using gauges to ensure that the system is maintained at the required operating pressure.

Protection against freezing

6.5.3.3. Dry-pipe valve rooms or enclosures in unheated **buildings** shall be **checked** as often as necessary when the outside temperature falls below 0°C to ensure that the system does not freeze.

Sprinkler heads

6.5.3.4. Sprinkler heads shall be **checked** at least once per year to ensure that they are free from damage, corrosion, grease, dust, paint or whitewash.

Subsection 6.5.4. Inspection

Winter damage

6.5.4.1. Auxiliary drains shall be **inspected** to prevent freezing.

Test flushing

6.5.4.2. Dry-pipe systems shall be **inspected** every 15 years for obstructions in the sprinkler piping and, if necessary, the entire system flushed of foreign material.

Priming water level

6.5.4.3. The priming water for dry-pipe systems shall be **inspected** at least every three months to ensure that the proper level above the dry-pipe valve is maintained.

Fire department connections

6.5.4.4. (1) Except when in use or being **inspected** in accordance with Sentence (2), **fire department** connections shall be equipped with plugs or caps that are secured wrench-tight.

(2) Plugs or caps shall be removed annually and the **fire department** connections **inspected** for wear, rust or obstruction and corrective action shall be taken as needed.

(3) If plugs or caps are missing, the **fire department** connections shall be examined for obstructions, back-flushed when conditions warrant and the plugs or caps replaced.

Sprinkler control valves

6.5.4.5. (1) Subject to Sentences (2) and (3), valves controlling sprinkler water supplies or alarms shall be sealed in the open position and **inspected** weekly.

(2) Valves which are locked open or valves which are electrically supervised shall be **inspected** monthly.

(3) After any alterations or repairs, valves shall be **inspected** to ensure they are in the fully open position and are sealed, locked or electrically supervised.

Subsection 6.5.5. Testing

Notification

6.5.5.1. Prior notification of water flow or other **tests** to be made to a sprinkler system shall be given to parties who could be affected by an alarm.

Alarm testing

6.5.5.2. (1) Except as provided in Article 6.5.5.7., the alarm on all sprinkler systems shall be **tested** monthly by flowing water through the **test** connection located at the sprinkler valve.

(2) An alarm line subject to freezing shall be cleared of all obstructions susceptible to freezing after the **test** specified in Sentence (1).

Water flow alarm tests

6.5.5.3. Water flow alarm **tests** using the most hydraulically remote **test** connection shall be performed annually on wet sprinkler systems.

Trip testing valves

6.5.5.4. (1) Dry-pipe valves shall be trip **tested** by means of the inspector's **test** valve in accordance with Sentences (2) and (3) to ensure that they operate satisfactorily and that the sprinkler alarms are in operating condition.

(2) Dry-pipe valves shall be trip **tested** annually.

(3) During the **test** referred to in Sentence (2), the control valve is not required to be in the fully open position.

(4) Dry-pipe valves shall be trip **tested** at least once every three years with the control valve fully open.

(5) The trip time for the **tests** described in Sentences (2) and (4) may exceed the acceptance trip time by not more than 10%.

Water supply

6.5.5.5. Sprinkler system water supply pressure shall be **tested** annually with the main drain valve fully open to ensure that there are no obstructions or deterioration of the main water supply.

6.5.5.6. The **test** prescribed in Article 6.5.5.5. shall be conducted after any sprinkler system control valve has been operated.

Electrical supervision signal testing

6.5.5.7. (1) If electrical supervision is provided for a sprinkler system, it shall be **tested** by operating the supervisory signal devices in conformance with Sentences (2) and (3).

(2) Transmitters and water-flow-actuated devices shall be **tested** every two months.

(3) Valve supervisory switches, tank water level devices, **building** and tank water temperature supervisory devices and other sprinkler system supervisory devices shall be **tested** at least every six months.

Subsection 6.5.6. Maintenance

Sprinkler guards

6.5.6.1. Sprinklers shall be protected by sprinkler guards where there is the possibility of mechanical damage.

Valve access

6.5.6.2. Sprinkler control valves shall be accessible and maintained in operable condition at all times.

Valve pits

6.5.6.3. Pits containing sprinkler control valves shall be kept free of water and protected against freezing.

Precautions against freezing

6.5.6.4. (1) Except as permitted in Sentence (2), sections of sprinkler systems subject to freezing shall be converted to a dry-pipe or antifreeze system with a separate control valve for that part of the system.

(2) Alternative methods to prevent freezing of sprinkler piping may be used where **approved**.

Spare sprinkler heads

6.5.6.5. (1) Where sprinkler systems are installed, a supply of spare sprinkler heads and equipment shall be maintained in conformance with Sentences (2) to (5).

(2) Spare sprinkler heads shall be kept in a cabinet where the temperature does not exceed 38°C.

(3) The minimum stock of spare sprinkler heads to be kept on hand shall be

(a) 6 sprinkler heads for installations containing not more than 300 sprinklers,

(b) 12 sprinkler heads for installations containing from 301 to 1000 sprinklers, and

(c) 24 sprinkler heads for installations containing more than 1000 sprinklers.

(4) Spare sprinkler heads shall correspond to the types and temperature ratings of the sprinklers installed on the system.

(5) A wrench suitable for replacing sprinkler heads shall be kept in the cabinet where the spare sprinkler heads are stored.

Protection for combustible sprinkler piping

6.5.6.6. Materials installed to protect combustible sprinkler piping, as required by the **Building Code** current at the time of installation, shall be maintained in accordance with the provisions of the same edition of the **Building Code** used for their installation.

SECTION 6.6 WATER SUPPLIES FOR FIRE PROTECTION

Subsection 6.6.1. General

6.6.1.1. Private and public water supplies for fire protection installations shall be maintained to provide the required flow under fire conditions.

Valve inspections

6.6.1.2. (1) Except as permitted in Sentences (2) and (3), valves controlling water supplies used exclusively for fire protection systems or combined domestic water supplies and fire protection systems shall be sealed in the open position and **inspected** weekly.

(2) Valves which are locked open or valves which are electrically supervised shall be **inspected** monthly.

(3) After any alterations or repairs, an **inspection** shall be made to ensure valves are returned to the fully open position and are sealed, locked or electrically supervised.

Ice accumulations

6.6.1.3. Water supply systems used for fire protection shall be kept free of ice accumulations that may interfere with flow.

Antifreeze pumping systems

6.6.1.4. Where antifreeze solutions are used to maintain pumping systems operable under freezing conditions, the specific gravity shall be such that the solution will remain unfrozen at a temperature of 8°C below the expected minimum temperature of the surrounding atmosphere.

Inspection, testing and maintenance

6.6.1.5. (1) Compliance with the **inspection**, **testing** and maintenance provisions of NFPA 25, “Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems”, for tanks is deemed to satisfy the requirements of Subsection 6.6.2.

(2) Compliance with the **inspection**, **testing** and maintenance provisions of NFPA 25, “Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems”, for fire pumps is deemed to satisfy the requirements of Subsection 6.6.3.

(3) Compliance with the **inspection**, **testing** and maintenance provisions of NFPA 25, “Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems”, for hydrants is deemed to satisfy the requirements of Subsection 6.6.5.

Subsection 6.6.2. Tanks

Tank inspections

6.6.2.1. An annual **inspection** shall be made of tanks for fire protection, tank supporting structures and water supply systems, including piping, control valves, check valves, heating systems, mercury gauges and expansion joints, to ensure that they are in operating condition.

Tank heating equipment

6.6.2.2. Tank heating equipment and accessories shall be **checked** daily during freezing weather to ensure that they are in operating condition and that heater valves are open.

Water temperature checks

6.6.2.3. A daily **check** of the temperature of the water contained in tanks shall be carried out during freezing weather to ensure that it does not fall below the freezing temperature.

Tank enclosure temperature checks

6.6.2.4. A daily **check** of the temperature of the tank enclosure for tanks in **buildings** shall be carried out during freezing weather to ensure that the temperature of the tank enclosure does not fall below 0°C.

Check for corrosion

6.6.2.5. Steel and iron work, including the inside and outside of steel tanks and hoops and grillages for wooden tanks, shall be **checked** for corrosion at intervals not exceeding two years and scraped and repainted as required.

Inspection for sediment

6.6.2.6. (1) Tanks, other than tanks supplied by a potable water supply, shall be **inspected** for accumulations of sediment at least every two years and cleaned as required.

(2) Tanks supplied by a potable water supply shall be **inspected** every five years and scraped and repainted as required.

Inspection of cathodic protection

6.6.2.7. Where cathodic protection equipment is installed to prevent corrosion of steel tanks, the equipment shall be **inspected** annually.

Water level in gravity tanks

6.6.2.8. The water level in gravity tanks shall be **inspected** monthly.

Gravity tanks

6.6.2.9. Gravity tanks shall be **inspected** annually to ensure that the tank roof is tight and in good repair, that hatches or doors are kept closed and properly secured and that the frost-proof casing of the tank riser makes a tight joint with the bottom of the tank.

6.6.2.10. The space between overflow pipes and the tops of gravity tanks, the valve pits at the bottoms of the risers and the entire area around the bases of the columns of tanks shall be kept free of rubbish and waste materials.

6.6.2.11. Gravity tank expansion joints shall be repacked and adjusted if binding or leaks develop.

Pressure tanks

6.6.2.12. (1) Pressure tanks shall be **checked** weekly during which the water level shall be observed and the air pressure shall be read.

(2) Corrective action shall be taken immediately if the observed water level or air pressure is outside the designed operating range for the tank.

6.6.2.13. Relief valves on the air and water supply lines of pressure tanks shall be **inspected** weekly.

Subsection 6.6.3. Fire Pumps and Reservoirs

Fire pump reservoirs

6.6.3.1. The water level in the fire pump reservoir shall be **checked** weekly.

Pump room temperature

6.6.3.2. The temperature of pump rooms shall be **checked** daily during freezing weather.

Inspection of fire pumps

6.6.3.3. (1) Fire pumps shall be operated at least once per week at rated speed.

(2) The fire pump discharge pressure, suction pressure, lubricating oil level, operative condition of relief valves, priming water level and general operating conditions shall be **inspected** during the weekly operation of fire pumps.

Internal combustion engine inspection

6.6.3.4. (1) Internal combustion engine fire pumps shall be operated once a week for a sufficient time to bring the engine up to normal operating temperature.

(2) The storage batteries, lubrication systems, oil and fuel supplies shall be **inspected** once a week.

Fire pump flow tests

6.6.3.5. Fire pumps shall be **tested** annually at full rated capacity to ensure that they are capable of delivering the rated flow.

Hotels

6.6.3.6. In **buildings** containing a **hotel**, the intervals referred to in Articles 6.6.3.3. and 6.6.3.4. are permitted to be once per month.

Subsection 6.6.4. Hydrants

Hydrants

6.6.4.1. Municipal and private hydrants shall be maintained in operating condition.

6.6.4.2. Hydrants shall be maintained free of snow and ice accumulations.

6.6.4.3. Hydrants shall be readily available and unobstructed for use at all times.

Subsection 6.6.5. Inspection of Hydrants

6.6.5.1. Hydrants shall be **inspected** annually and after each use in accordance with Articles 6.6.5.2. to 6.6.5.5.

6.6.5.2. (1) Except when in use or being **inspected** in accordance with Sentence (2), hydrants shall be equipped with port caps that are secured wrench-tight.

(2) The port caps shall be removed and the connections **inspected** for wear, rust or obstructions that in any way hamper easy removal and corrective action shall be taken as needed.

(3) If the caps are missing, the hydrant shall be examined for obstructions or accumulated refuse and flushed in accordance with Article 6.6.5.7. and the port caps shall be re-installed.

6.6.5.3. The hydrant barrel shall be **inspected** to ensure that no water has accumulated within the barrel when the main valve is in the closed position.

6.6.5.4. Where the hydrant barrel is found to contain water under Article 6.6.5.3., the drain valve shall be **inspected** for operation.

6.6.5.5. If the hydrant barrel is found to contain water because of poor drainage that is impractical to correct, **approved** measures shall be taken to prevent freezing during winter conditions.

Hydrant water flow

6.6.5.6. Hydrant water flow shall be **inspected** annually in accordance with Article 6.6.5.7.

6.6.5.7. The main valve of the hydrant shall be fully opened and the hydrant operated with one port open and the water flow **checked**.

6.6.5.8. A record of the hydrant operation as described in Article 6.6.5.7. shall be kept in conformance with Article 1.1.2.1.

Subsection 6.6.6. Uniform Marking of Hydrants

Hydrant marking

6.6.6.1. Hydrants shall be colour-coded in accordance with NFPA 291, "Recommended Practice for Fire Flow Testing and Marking of Hydrants".

SECTION 6.7 EMERGENCY POWER SYSTEMS

Subsection 6.7.1. General

6.7.1.1. (1) Except as provided in Sentence (2), and Articles 6.7.1.2. to 6.7.1.5., emergency power systems shall be **inspected**, **tested** and maintained in conformance with CSA-C282, "Emergency Electrical Power Supply for Buildings".

(2) An emergency electrical power supply system for emergency equipment in hospitals shall be **inspected**, **tested** and maintained in conformance with CSA-Z32, "Electrical Safety and Essential Electrical Systems in Health Care Facilities".

(3) If an emergency power system or any part thereof is shut down

(a) the **fire department** and **building** occupants shall be notified in accordance with Article 1.1.1.1., and

(b) the **supervisory staff** shall be notified.

Instructions for switching and starting

6.7.1.2. Where an emergency power system is installed, instructions shall be provided for switching on essential loads and for starting the generator when this is not done automatically.

Inspection and testing

6.7.1.3. Despite the requirements of Article 1.1.2.1., written records shall be maintained as required in CSA-C282, "Emergency Electrical Power Supply for Buildings".

Fuel supply

6.7.1.4. The amount of fuel stored and connected to the emergency power system shall be sufficient to operate the engine for at least 2 h.

6.7.1.5. (1) Liquid fuel **storage tanks** shall be drained and refilled with fresh fuel at intervals not greater than 12 months.

(2) The requirements of Sentence (1) may be achieved by replenishment as the result of the normal **test** program required in Article 6.7.1.1.

SECTION 6.8 SPECIAL FIRE SUPPRESSION SYSTEMS

Subsection 6.8.1. Installation

6.8.1.1. (1) Where a special fire suppression system is installed after November 21, 2007 to comply with this Code, the system shall conform to one of the standards set out in Sentences (3) and (4).

(2) If a water-based fire suppression system is not compatible with fire suppression for specific types of hazards, a special fire suppression system conforming to one of the standards set out in Sentence (3) is permitted to be installed in lieu of a water-based system.

(3) The design and installation of a special fire suppression system that is not water-based shall conform to one of the following standards:

(a) NFPA 11, “Standard for Low-, Medium-, and High-Expansion Foam”,

(b) NFPA 12, “Standard on Carbon Dioxide Extinguishing Systems”,

(c) NFPA 12A, “Standard on Halon 1301 Fire Extinguishing Systems”,

(d) NFPA 12B, “Standard on Halon 1211 Fire Extinguishing Systems”,

(e) NFPA 17, “Standard for Dry Chemical Extinguishing Systems”,

(f) NFPA 17A, “Standard for Wet Chemical Extinguishing Systems”, or

(g) NFPA 2001, “Standard on Clean Agent Fire Extinguishing Systems”.

(4) The design and installation of a water-based special fire suppression system shall conform to one of the following standards:

(a) NFPA 15, “Standard for Water Spray Fixed Systems for Fire Protection”, or

(b) NFPA 16, “Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems”.

(5) Wetting agents used in conjunction with water-based fire suppressions systems shall conform to NFPA 18, “Standard on Wetting Agents”.

(6) A hazard for which a fire suppression system has been designed shall not be increased unless the level of fire protection is also commensurately increased.

(7) Operating and maintenance instructions for a special fire suppression system shall be posted in proximity to the equipment and, if manual controls are provided, shall also be posted near the manual controls.

(8) Valves and controls for a special fire suppression system shall be clearly marked to indicate their function and shall be accessible at all times.

Subsection 6.8.2. Inspection and Maintenance

6.8.2.1. (1) Except as otherwise provided in this Section, where special fire suppression systems have been installed, **inspection** and maintenance shall be provided in conformance with the appropriate standards set out in Sentences 6.8.1.1. (3), (4) and (5).

(2) Where a special fire suppression system of a type has been installed in accordance with a standard not referred to in Article 6.8.1.1., **inspection** and maintenance shall be provided in conformance with the specified standard and in the absence of a standard, to the manufacturer’s recommended maintenance instructions.

(3) If a special fire suppression system or any part thereof is shut down

(a) the **fire department** and **building** occupants shall be notified in accordance with Article 1.1.1.1., and

(b) the **supervisory staff** shall be notified.

Test records

6.8.2.2. Written records shall be kept of **inspections**, maintenance and **testing** in conformance with Article 1.1.2.1.

Container maintenance

6.8.2.3. Extinguishing agent containers provided for special fire suppression systems shall be fully charged with the proper quantity of extinguishing agent and the necessary operating pressure maintained.

Discharge outlets

6.8.2.4. Discharge outlets for special fire suppression systems shall be kept free of dirt and residue.

Piping

6.8.2.5. Piping and equipment shall be mechanically secure and accessible for cleaning and maintenance.

Replacement equipment

6.8.2.6. No replacement equipment and devices provided for special fire suppression systems shall be used unless suitable for the installation in which they are to be placed.

SECTION 6.9 DECOMMISSIONING

Subsection 6.9.1. General

6.9.1.1. Except as otherwise provided in this Part, fire protection equipment and life safety systems shall not be decommissioned or permanently taken out of service without **approval**.

O. Reg. 213/07, Division B, Part 6; O. Reg. 194/14, ss. 8-10; O. Reg. 256/14, ss. 256-290.

PART 7
CHECKING, INSPECTION, TESTING AND MAINTENANCE OF FIRE EMERGENCY SYSTEMS IN HIGH BUILDINGS

SECTION 7.1 GENERAL

Subsection 7.1.1. General

Application

7.1.1.1. This Part applies to high **buildings** as described in Article 3.2.6.1. of Division B of the **Building Code**.

Requirements

7.1.1.2. The fire emergency systems required by this Code and the **Building Code** shall be **checked**, **inspected**, **tested** and maintained in accordance with Sections 7.2 and 7.3.

7.1.1.3. REVOKED: O. Reg. 256/14, s. 294.

SECTION 7.2 CHECKING, INSPECTION, TESTING AND MAINTENANCE OF CERTAIN FIRE EMERGENCY SYSTEMS

Subsection 7.2.1. Intervals Between Tests

Intervals between tests

7.2.1.1. Unless otherwise prescribed in this Part, **tests** shall be carried out at intervals of not more than three months.

Subsection 7.2.2. Elevators

Testing

7.2.2.1. (1) Elevator door-opening devices operated by means of photo-electric cells shall be **tested** to ensure that the devices become inoperative after the door has been held open for more than 20 s with the photo-electric cell covered.

(2) Key-operated switches located outside an elevator shaft shall be **tested** to ensure that actuation of the switch will render the emergency stop switch in each car inoperative and bring all cars to the **street** floor or transfer lobby by cancelling all other calls after the car has stopped at the next floor at which it can make a normal stop.

(3) Key-operated switches in each elevator car shall be **tested** to ensure that actuation of the switch will

(a) enable the elevator to operate independently of other elevators,

(b) allow operation of the elevator without interference from floor call buttons,

(c) render door protective devices inoperative, and

(d) control the opening of power-operated doors only by continuous pressure on the door-opening buttons or switches, to ensure that if the “OPEN” button or switch is released while the door is opening, the doors will automatically close.

Subsection 7.2.3. Venting to Aid Fire Fighting

Inspection

7.2.3.1. (1) **Closures** in vent openings into smoke shafts from each **floor area** shall be **inspected** sequentially over a period not to exceed five years.

(2) Every **closure** in an opening to the outdoors at the top of a smoke shaft shall be **inspected** annually to ensure that it will open

(a) manually from outside the **building**,

(b) on a signal from the smoke or heat actuated device in the smoke shaft, and

(c) when a **closure** in an opening between a **floor area** and the smoke shaft opens.

(3) In addition to the procedures described in Sentences (1) and (2), elevators in an elevator shaft that is intended for use as a smoke shaft shall be **inspected** semi-annually to ensure that on activation of the fire alarm system they will return to the **street** floor and remain inoperative.

(4) Where an air-handling system is used for venting **floor areas** in the event of a fire to comply with the requirements of the **Building Code**, the system shall be **inspected** annually to ensure that air is exhausted to the outdoors.

Subsection 7.2.4. Central Alarm and Control Facilities and Voice Communication Systems for Life Safety

7.2.4.1. The **checking**, **inspecting** and **testing** of central alarm and control facilities and voice communication systems for life safety shall be carried out in accordance with the requirements of Section 6.3.

Subsection 7.2.5. Maintenance

Maintenance of certain fire emergency systems

7.2.5.1. (1) In addition to the requirements of Part 6, components of fire emergency systems shall be maintained in accordance with Sentences (2) to (7).

(2) The keys required to recall elevators and to permit independent operation of each elevator shall be kept in the location required by the **Building Code**.

(3) Firefighters' elevators shall be maintained in operable condition.

(4) The firefighters' elevator symbol shall be maintained in identifiable condition.

(5) Access to windows and panels required to vent **floor areas** and vents to vestibules that are permitted to be manually openable shall be kept free of obstructions.

(6) Windows and panels provided for venting **floor areas** shall be maintained so as to be openable without the use of keys.

(7) Vents to vestibules that are permitted to be manually openable shall be maintained in operable condition.

SECTION 7.3 INSPECTION, TESTING AND MAINTENANCE OF SMOKE CONTROL EQUIPMENT

Subsection 7.3.1. General

7.3.1.1. Smoke control equipment shall be maintained in a manner that ensures that it is fully operational.

7.3.1.2. Where smoke control measures contained in Commentary C of NRC, User's Guide –NBC 1995, "Fire Protection, Occupant Safety and Accessibility (Part 3)" are used, the **inspections** and **tests** shall be carried out as outlined in Section 7.3 of Division B of NRC, "National Fire Code of Canada".

7.3.1.3. (1) Subject to Sentences (2) to (5), where a smoke control system is designed to meet the requirements of the **Building Code**, the **inspections** and **tests** for equipment shall be carried out in accordance with procedures established by the designer of the system.

(2) Where procedures described in Sentence (1) are not available, smoke control systems shall be assessed to ensure satisfactory operation using techniques described in MAH Supplementary Standard SB-4, “Measures for Fire Safety in High Buildings”.

(3) Upon completion of the assessment described in Sentence (2), written procedures for periodic **inspections** and **tests** shall be established.

(4) The procedures described in Sentence (3) shall bear the signature and seal of a **Professional Engineer** or **Architect**.

(5) The **inspections** and **tests** established under Sentence (3) shall be implemented.

(6) Despite Sentences (1) and (3), other **inspection** and **test** procedures may be **approved**.

O. Reg. 213/07, Division B, Part 7; O. Reg. 256/14, ss. 291-301.

PART 8
DEMOLITION

SECTION 8.1 GENERAL

Subsection 8.1.1. Application

Application

8.1.1.1. This Part applies to the prevention or control of fire during any **demolition** and the protection from fire of neighbouring occupied spaces and neighbouring properties.

Subsection 8.1.2. Requirements

Building services

8.1.2.1. (1) Subject to Sentence (2), before **demolition** of a **building** or part of a **building** is commenced, **building** services other than water supply for fire fighting shall be terminated at a point located outside the **building** or part under **demolition**.

(2) Instead of being terminated under Sentence (1), a service provider's connection shall be relocated and protected from damage if it is determined that

(a) terminating the service at a point outside the **building** or part under **demolition** would interfere with service to a part of the **building** that is not under **demolition** or service to another **building** that is not under **demolition**, or

(b) maintaining the service is necessary for **demolition** purposes.

(3) No steps shall be taken under Sentence (1) or (2) in respect of a service provider's connection unless that service provider and all other service providers whose connections will be affected by the termination or relocation of that connection have been notified.

Firewatch

8.1.2.2. (1) During periods when **demolition** operations create a fire hazard to parts of the **building** not under **demolition** or to neighbouring occupied spaces or neighbouring properties, a firewatch shall be conducted.

(2) If a firewatch is required, the **demolition** site shall be toured by firewatch personnel at least once each hour.

(3) Facilities shall be provided to enable firewatch personnel to

(a) ensure that a fire warning is sounded to notify occupants, and

(b) communicate with the **fire department**.

(4) Firewatch personnel shall be equipped with portable illumination and protective equipment.

(5) Before **demolition** of a **building** or part of a **building** is commenced, a safety plan for the **demolition** site shall be prepared and implemented.

(6) The **demolition** safety plan shall include

(a) the designation and organization of site personnel to carry out fire safety duties, including a firewatch when required,

(b) the emergency procedures to be followed in case of fire, including

(i) ensuring that a fire warning is sounded to notify occupants,

(ii) notifying the **fire department**, and

(iii) confining, controlling and extinguishing the fire,

(c) the requirement to train site personnel to carry out fire safety duties, including a firewatch and the emergency procedures referred to in Clause (b),

(d) the procedures to control fire hazards in and around the **demolition** site, including procedures to mitigate risks to parts of the **building** not under **demolition** or to neighbouring occupied spaces or neighbouring properties, and

(e) the maintenance of fire fighting facilities.

(7) If a **demolition** involves a **building** that is required to have a fire safety plan that complies with Section 2.8, the fire safety plan shall take into account changes to the **building** arising from the **demolition** in accordance with Sentences 2.8.2.1.(4) and (5).

Storage of combustibles

8.1.2.3. (1) Combustible salvage, waste material and rubbish shall not be accumulated on site in such quantity or such location as to cause a fire hazard.

(2) If temporary chutes are installed on the exterior of a **building**, the chutes shall

(a) be of noncombustible material, or

(b) be installed a distance of at least 3 m from any opening in the **building** face.

Burning of rubbish

8.1.2.4. Rubbish shall not be burned on the premises unless permitted in accordance with Article 2.4.4.4.

Hot work equipment

8.1.2.5. The installation, operation and maintenance of hot work equipment shall be carried out in accordance with Section 5.11.

Standpipe systems

8.1.2.6. (1) Where a **building** being **demolished** floor by floor is equipped with a standpipe system, the system, together with **fire department** connections, valves, couplings and hose, shall be maintained in operable condition on all **storeys** below the one being demolished, except for the **storey** immediately below it.

(2) If no **fire department** standpipe connection exists in a **building** under **demolition** that is 4 **storeys** or more in **building height**, a temporary standpipe connection shall be provided.

(3) If no standpipe system exists in a **building** under **demolition** that is 8 **storeys** or more in **building height**, a temporary standpipe shall be provided.

(4) Standpipe systems shall be kept in such condition that they may be connected near **street** level, to a **fire department** pump, so as to supply water to every outlet on each floor.

(5) In a **building** under **demolition** that is over 84 m in height, the primary water supply serving the standpipe system, including fire pumps, shall be maintained in operating condition.

Access for fire fighting

8.1.2.7. (1) During **demolition**, fire fighting access routes shall be maintained in accordance with Section 2.5.

(2) Unobstructed access to fire hydrants, portable extinguishers and **fire department** connections for standpipe and sprinkler systems shall be maintained during **demolition**.

(3) If a **demolition** site is fenced so as to prevent general entry, provision shall be made for access by **fire department** equipment and personnel.

(4) Elevating devices shall be accessible for the use of firefighters for **buildings** under **demolition** that are more than 36 m in **building height**, measured between **grade** and the floor level of the top **storey**.

Portable extinguishers

8.1.2.8. (1) Portable extinguishers shall be provided in **buildings** under **demolition** in accordance with Subsection 6.2.6. as if the **buildings** were graded for ordinary hazard under Subsection 6.2.5.

(2) In addition to the other requirements of this Code, if a **building** is under **demolition**, portable extinguishers shall be provided

(a) adjacent to hot work operations,

(b) in areas where combustibles are stored,

(c) near or on any internal combustion engines,

(d) adjacent to areas where **flammable liquids, combustible liquids** or gases are stored or handled,

(e) adjacent to temporary oil-fired or gas-fired equipment, and

(f) adjacent to bitumen heating equipment.

(3) The extinguishers required by Sentence (2) shall have a minimum rating of

(a) 2A:10B:C on moveable equipment, and

(b) 4A:40B:C in all other locations.

(4) Portable extinguishers required in Sentences (1), (2) and (3) shall be maintained in conformance with Section 6.2.

Smoking prohibited

8.1.2.9. Smoking shall not take place in, on or near a **building** under **demolition**, except as provided in Subsection 2.4.3.

Ignition sources

8.1.2.10. (1) Internal combustion engines, other devices capable of producing ignition and devices associated with either of the foregoing shall be kept at sufficient distance from combustible material so as to prevent ignition.

(2) The clearance between combustible material and temporary heating equipment, including **flues**, shall comply with

(a) the minimum clearance, if any, shown on certified heating equipment, or

(b) the minimum clearance specified in the **Building Code**, if no minimum clearance is shown on the heating equipment.

Temporary enclosures

8.1.2.11. Fabrics and films used to temporarily enclose **buildings** shall be securely fastened to prevent them from being blown against heaters or other ignition sources.

Provisions for egress

8.1.2.12. Unless otherwise **approved**, at least two **exits** shall be accessible and usable at all times.

Fire warning

8.1.2.13. A means shall be provided that is capable of alerting persons throughout a **building** under **demolition** and the property on which the **building** is located of a fire emergency.

Safety of tanks, piping and machinery reservoirs at demolition sites

8.1.2.14. (1) Tanks, piping and machinery reservoirs at a **demolition** site that contain **flammable liquids** or **combustible liquids** or that are likely to contain flammable vapours shall be drained, purged with inert materials and then removed before **demolition** is commenced.

(2) Despite Sentence (1), if it is impracticable to remove any tank, piping or machinery reservoir described in Sentence (1) from the **building** before **demolition** is commenced, such equipment shall be

(a) drained and purged with inert materials before **demolition** is commenced,

(b) clearly identified before **demolition** is commenced, and

(c) removed from the **building** as soon as conditions permit.

O. Reg. 213/07, Division B, Part 8; O. Reg. 256/14, ss. 302-313.

PART 9
RETROFIT

SECTION 9.1 GENERAL

Subsection 9.1.1. General

Scope

9.1.1.1. This Part provides for the upgrading of existing **buildings** through **retrofit**.

Compliance

9.1.1.2. (1) The requirements of this Part shall be satisfied

(a) by implementing the requirements of the applicable Section, or

(b) by implementing an **approved** Life Safety Study in accordance with Subsection 9.1.4.

Approved alternatives

9.1.1.3. A requirement of this Part is deemed to be complied with if materials, equipment or systems are **approved** that, in the opinion of the **Chief Fire Official**, will provide protection for life safety similar to the protection provided by compliance with the requirement.

Subsection 9.1.2. Application

Application

9.1.2.1. The requirements for **buildings** that are covered by this Part shall be determined by their **occupancies** as regulated in the appropriate Sections in this Part.

Exemptions

9.1.2.2. (1) This Part does not apply to a **building** that contains a **residential occupancy**, consisting of no more than one **dwelling unit**, and no other **major occupancy**.

(2) Except for Article 9.4.5.5. and Sections 9.7 and 9.9, this Part does not apply to a **building** or part of a **building** that satisfies the requirements of the **Building Code**.

(3) Section 9.7 does not apply to a **building** or part of a **building** that contains a **care occupancy**, if the **building** or part of the **building** satisfies the requirements for a **care occupancy** contained in the **Building Code** as it read at any time on or after April 6, 1998.

(4) Section 9.7 does not apply to a **building** or part of a **building** that contains a **retirement home**, if the **building** or part of the **building** satisfies the requirements for a **retirement home** contained in the **Building Code** as it read at any time on or after January 1, 2014.

(5) Section 9.9 does not apply to a **building** or part of a **building** that satisfies the requirements of the **Building Code** as it read at any time on or after July 1, 1993.

(6) Sections 9.2 to 9.9 do not apply to a **building** with respect to which the **Chief Fire Official** has granted an exemption under a predecessor of this Regulation during such period as the exemption is valid.

Subsection 9.1.3. Schedule of Compliance

Compliance time for health care facilities, care occupancies and retirement homes

9.1.3.1. (1) It is the responsibility of the **owner** of a **building** containing a home or hospital described in Section 9.4 to comply with Article 9.4.5.5. as of January 1, 2025.

(2) It is the responsibility of the **owner** of a **building** to which Section 9.7 applies to comply with

(a) Article 9.7.4.3. as of March 1, 2014,

(b) Articles 9.7.3.1., 9.7.4.1. and 9.7.4.2. as of January 1, 2015,

(c) Articles 9.7.2.1. and 9.7.4.4. as of January 1, 2016, and

(d) Article 9.7.5.1. as of January 1, 2019.

Extension of time

9.1.3.2. If compliance is not possible by the date required under Article 9.1.3.1. because of a strike, material shortage or other circumstances beyond an **owner's** control, the **Chief Fire Official** may grant an extension of the time for compliance.

Subsection 9.1.4. Life Safety Study

Life Safety Study

9.1.4.1. (1) A Life Safety Study is a proposal to the **Chief Fire Official** that consists of

(a) a detailed assessment of the life safety performance requirements, clearly identifying items not meeting the requirements of this Part,

(b) a detailed description of how an acceptable level of life safety can be achieved, and

(c) a detailed time schedule to implement the provisions of Clause (b).

Contents

9.1.4.2. (1) A Life Safety Study shall deal with, but is not limited to

(a) containment, including

(i) **fire separations**,

(ii) **firewalls**,

(iii) construction assemblies,

(iv) **occupancy** separations, and

(v) interior finishes,

(b) detection, including

(i) alarm and detection systems, and

(ii) voice communication systems,

(c) suppression, including

(i) **fire department** access,

(ii) standpipe and hose systems,

(iii) sprinkler or special fire suppression systems, and

(iv) firefighters' elevators, and

(d) egress, including

(i) the number, type, **access to**, direction to, lighting for and identification of **exits**,

(ii) fire escapes,

(iii) **occupant load**, and

(iv) emergency lighting.

Signature and seal

9.1.4.3. A Life Safety Study shall bear the signature and seal of a **Professional Engineer** or **Architect**, or both.

Time schedule

9.1.4.4. The time schedule referred to in Clause 9.1.4.1.(1)(c) may provide for a compliance date after the compliance date required by Article 9.1.3.1.

Extension of time

9.1.4.5. An **owner** or the **owner's** agent may apply to the **Chief Fire Official** for an extension of the compliance date to permit time for a Life Safety Study to be submitted.

Extension following Order

9.1.4.6. (1) Where an **owner** or the **owner's** agent has received an **Order** that requires compliance with this Part, the **owner** or the **owner's** agent may apply within five days of receipt of the **Order** to the **Chief Fire Official** to extend the time for compliance pending submission of a Life Safety Study.

(2) Upon receipt of the application referred to in Sentence (1), the **Chief Fire Official** shall, within 10 days, review the application and either grant or refuse an extension of the time for compliance to permit submission of a Life Safety Study.

(3) The **Chief Fire Official** shall notify the **owner** or the **owner's** agent of the **Chief Fire Official's** decision in writing.

(4) Notification shall be served either personally or by mail.

(5) Where notification is by mail, it is deemed to have been served on the fifth day after the date of mailing.

(6) An **owner** or the **owner's** agent, within five days of being notified of a refusal to grant an extension of the time to submit a Life Safety Study, may request the reasons for the refusal in writing.

(7) The **Chief Fire Official** shall comply with the request referred to in Sentence (6) within 10 days after receipt thereof.

(8) An **owner** or the **owner's** agent who feels aggrieved by a decision to refuse an extension of time to submit a Life Safety Study may, within 30 days of the refusal, appeal the refusal in the same manner as though it were an **Order**.

Review

9.1.4.7. (1) Despite any other **Order** that requires compliance with this Part, the **Chief Fire Official** shall, within 30 days after receiving a Life Safety Study, review the Life Safety Study for implementation.

(2) Where a Life Safety Study is **approved** for implementation, the **Chief Fire Official** shall notify the **owner** or the **owner's** agent of the decision in writing.

(3) Where a Life Safety Study is not **approved**, the **Chief Fire Official** shall advise the **owner** or the **owner's** agent of the decision and the reasons therefor in writing.

(4) Notification shall be served either personally or by mail.

(5) Where notification is by mail, it is deemed to have been served on the fifth day after the date of mailing.

(6) An **owner** or the **owner's** agent who feels aggrieved by a decision not to **approve** a Life Safety Study may, within 30 days of the refusal, appeal the decision in the same manner as though it were an **Order**.

(7) Despite any other provision of this Part, a Life Safety Study that has been **approved** and implemented is deemed to satisfy an **Order** requiring compliance with this Part and made with respect to the same premises before the Life Safety Study was accepted.

Records

9.1.4.8. A copy of an **approved** Life Safety Study shall be kept on the premises to which it relates and be made available to the **Chief Fire Official** upon request.

SECTION 9.2 ASSEMBLY OCCUPANCIES

Subsection 9.2.1. Application and General

Assembly occupancies

9.2.1.1. (1) This Section applies to

(a) art galleries,

(b) auditoria,

(c) beverage establishments,

(d) bingo halls,

(e) clubs,

(f) community halls,

(g) dance halls,

(h) enclosed arenas,

(i) exhibition halls,

(j) gymnasia,

(k) halls in religious establishments (excluding areas of worship),

(l) lecture halls,

(m) lodge rooms,

(n) movie theatres,

(o) museums,

(p) opera houses,

(q) restaurants,

(r) television studios, and

(s) theatres.

(2) Revoked: O. Reg. 256/14, s. 317.

Exemption for educational facilities and hotels

9.2.1.2. (1) This Section does not apply to **assembly occupancies** in **buildings** that are regulated under the **Education Act** or the **Ministry of Training, Colleges and Universities Act**.

(2) This Section does not apply to a **building** or part of a **building** regulated under Section 9.9.

Definitions

9.2.1.3. For the purposes of this Section,

"**1986 Building Code**" means Ontario Regulation 419/86, as it read on February 11, 1987;

"existing" means in existence on February 11, 1987.

Subsection 9.2.2. Containment

Fire separations between major occupancies

9.2.2.1. (1) **Fire separations** shall be provided between **assembly occupancies** described in Subsection 9.2.1. and other **major occupancies** in compliance with Article 3.1.3.2. of the **1986 Building Code**.

(2) If Sentence (1) requires a **fire separation** having a 2 h **fire-resistance rating**, a **fire separation** having a **fire-resistance rating** not less than 1 h is deemed to comply with Sentence (1) if

(a) the **building** is **sprinklered** with a sprinkler system that complies with Article 9.2.5.2., or

(b) the **building** has a detection system that is connected to the **building** fire alarm system.

(3) If Sentence (1) requires a **fire separation** having a 1 h **fire-resistance rating**, a **fire separation** having a **fire-resistance rating** not less than 30 minutes is deemed to comply with Sentence (1) if

(a) the **building** is **sprinklered** with a sprinkler system that complies with Article 9.2.5.2., or

(b) the **building** has a detection system that is connected to the **building** fire alarm system.

Protection of openings in fire separations

9.2.2.2. (1) **Closures** that are in compliance with Sentences 3.1.6.4.(2) and 3.1.6.7.(1) of the **1986 Building Code** shall be provided in **fire separations**.

(2) Where Sentence (1) requires

(a) a 1 h or a 45 min **fire-protection rating**, existing hollow metal or kalamein doors, with or without wired glass and equipped with self-closing devices, and existing hollow metal frames are deemed to be in compliance,

(b) a 1 h or a 45 min **fire-protection rating**, existing wired glass screens set in fixed steel frames are deemed to be in compliance, or

(c) a 20 min **fire-protection rating**, existing 45 mm solid core wood doors and existing solid wood frames are deemed to be in compliance.

(3) Despite the requirements referred to in Sentence (1), **fire dampers** or **fire-stop flaps** are not required to be installed in existing noncombustible ducts at penetrations of a **fire separation**.

Fire separations for hazardous areas

9.2.2.3. (1) In high **buildings** classified in the **1986 Building Code** under Subsection 3.2.6., **fire separations** that are in compliance with Subsection 3.5.2. of the **1986 Building Code** shall be provided between **service rooms** and **assembly occupancies**.

(2) In **buildings** not referred to in Sentence (1), **fire separations** that are in compliance with Subsection 3.5.2. of the **1986 Building Code** shall be provided between **service rooms** and **assembly occupancies**.

(3) A **fire separation** having a **fire-resistance rating** not less than 30 minutes is deemed to comply with Sentence (2) if

(a) the **service room** is **sprinklered**, or

(b) a detection system is provided and connected to the **building** fire alarm system.

(4) **Fire separations** shall be provided between theatrical stages and **assembly occupancies** in compliance with Sentences 3.3.2.14.(3) to (5) of the **1986 Building Code**.

(5) Despite Sentence (4), existing **fire separations** may be **approved**.

Interior finishes

9.2.2.4. (1) Interior finishes shall comply with the **flame-spread rating** requirements under Clauses 3.1.4.5.(3)(g) and (h) and Subsection 3.1.11. of the **1986 Building Code**.

(2) Where

(a) the finish is not an exposed expanded plastic, the assembly area is **sprinklered** and the sprinkler system complies with Article 9.2.5.2., the existing interior finish is deemed to be in compliance with Sentence (1), or

(b) the finish is treated with a fire retardant surface coating **listed** by a recognized **testing** laboratory and applied in accordance with the listing conditions, the finish is deemed to be in compliance with Sentence (1).

(3) Despite Sentence (1), existing interior finishes may be **approved**.

Subsection 9.2.3. Means of Egress

Occupant load determination

9.2.3.1. The **occupant load** for calculation of number and width of **exits** referred to in Articles 9.2.3.6. and 9.2.3.7. shall be in accordance with Article 2.7.1.4.

Access to exits; number and location

9.2.3.2. (1) Where the **occupant load** of a room exceeds 60 persons, at least two egress doorways shall be provided in such a manner that one doorway can provide egress if the other doorway becomes inaccessible to the occupants.

(2) An existing room with one doorway is deemed to be in compliance with Sentence (1) where

(a) the **occupant load** does not exceed 100 persons,

(b) the **floor area** is **sprinklered** and the sprinkler system complies with Article 9.2.5.2., and

(c) the **travel distance** does not exceed 23 m.

Access to exits

9.2.3.3. (1) **Access to exits** shall comply with Article 3.3.2.7. of the **1986 Building Code**.

(2) Existing **access to exits** through dead end corridors are deemed to be in compliance with Sentence (1) where

(a) the **occupant load** does not exceed 20 persons, and

(b) the travel distance does not exceed 6 m plus the width of the dead end corridor to a point where a choice of two directions of **exit** travel are available.

Minimum number of exits

9.2.3.4. (1) Each **floor area** shall be served by at least two **exits**.

(2) Despite Sentence (1), **floor areas** in **buildings** not exceeding 2 **storeys** in **building height** may be served by one **exit** where

(a) the **occupant load** for the **floor area** does not exceed 60 persons,

(b) the **floor area** does not exceed 200 m^2, and

(c) the **travel distance** from any point on the **floor area** does not exceed 15 m.

Door swing

9.2.3.5. Each door serving as an **access to exit** from a room serving more than 60 persons shall open in the direction of **exit** travel and shall swing on its vertical axis.

Number of exits

9.2.3.6. (1) The minimum number of **exits** from a **floor area** shall be,

(a) for an **occupant load** of 61 up to and including 600 persons, not less than two **exits**,

(b) for an **occupant load** of 601 up to and including 1000 persons, not less than three **exits**, or

(c) for an **occupant load** of more than 1000 persons, not less than four **exits**.

Total width

9.2.3.7. (1) The aggregate required width of **exits** shall be determined by multiplying the **occupant load** of the area served by

(a) 6.1 mm (1/4 in) per person for ramps with a gradient of not more than 1 in 8, doorways, corridors and passageways, or

(b) 9.2 mm (3/8 in) per person for ramps with a gradient of more than 1 in 8 and stairs.

9.2.3.8. The width of an **exit** stair or of a corridor used as an **access to exit** or as an **exit** shall not be less than 900 mm.

9.2.3.9. Where the total number of **exits** and the total width of **exits** comply with Articles 9.2.3.6. and 9.2.3.7., existing corridor and stair widths are deemed to be in compliance with Article 9.2.3.8.

Fire escapes permitted

9.2.3.10. A fire escape may be erected on an existing **building** to provide one or more of the **exit** facilities described in Article 3.4.1.2. of the **1986 Building Code**, provided that the fire escape does not serve **floor areas** above the fifth floor.

Fire escape construction

9.2.3.11. (1) Each fire escape shall be constructed to comply with Article 3.4.7.13. of the **1986 Building Code**, except as permitted in Article 9.2.3.18.

(2) Despite Sentence (1), an existing fire escape may be **approved**.

Emergency lighting

9.2.3.12. Emergency lighting shall comply with Article 3.2.7.3. of the **1986 Building Code**.

Exit signs

9.2.3.13. (1) Markings and signs for **exits** and **access to exits** shall comply with Subsection 3.4.5. of the **1986 Building Code**.

(2) Despite Sentence (1), existing markings and signs may be **approved**.

9.2.3.14. In **buildings** over 2 **storeys** in **building height**, any part of an **exit** ramp or stair that continues past the **exit** door at ground level to a **basement** shall be clearly marked by a sign indicating that it does not lead to an **exit**.

Separation of exits

9.2.3.15. (1) Where an **exit** stairway, an escalator or a moving walkway serves as a required **exit**, it shall be separated from the remainder of the **building** in accordance with Sentence 3.4.4.1.(1) of the **1986 Building Code**.

(2) Doors in **fire separations** required in Sentence (1) shall be equipped with self-closing devices.

(3) An existing **fire separation** having a **fire-resistance rating** not less than 45 min with **closures** having a **fire-protection rating** not less than 45 min is deemed to comply with Sentence (1).

(4) Existing wired glass screens set in fixed steel frames are acceptable in **fire separations** required by this Article.

Exits through lobbies

9.2.3.16. (1) **Exits** through a lobby area shall comply with the requirements of Clauses 3.4.4.1.(7)(c) to (f) of the **1986 Building Code**.

(2) Despite Sentence (1), there may be more than one **exit** through a lobby area if there is at least one alternate **exit** not through the lobby or an occupied space that is capable of serving at least 50% of the **occupant load** and that leads directly to the outside.

Ancillary rooms

9.2.3.17. (1) Storage rooms, **refuse storage rooms** and laundry rooms that open directly into an **exit** stairway shall be **sprinklered** and separated from the **exit** stairway by a **fire separation** having a **fire-resistance rating** not less than 45 min.

(2) Other rooms that open directly into an **exit** stairway shall be separated from the **exit** stairway by a **fire separation** having a **fire-resistance rating** not less than 45 min.

(3) Despite Sentences (1) and (2), existing rooms opening directly into an **exit** stairway may be **approved**.

9.2.3.18. (1) Openings adjacent to fire escapes shall comply with Sentence 3.4.7.13.(5) of the **1986 Building Code**.

(2) Existing openings are deemed to comply with Sentence (1) if each opening is **sprinklered** and the sprinkler system complies with Article 9.2.5.2.

(3) Despite Sentences (1) and (2), existing openings may be **approved**.

Subsection 9.2.4. Fire Alarm and Detection

Fire alarm systems

9.2.4.1. (1) Fire alarm and detection systems shall be installed in compliance with Subsection 3.2.4., excluding Article 3.2.4.7., of the **1986 Building Code**.

(2) Despite Sentence (1), existing fire alarm systems may be **approved** where the system reliability and performance will not increase the risk of life safety.

Subsection 9.2.5. Suppression

Access for fire fighting

9.2.5.1. (1) Access routes for fire fighting shall comply with Sentence 3.2.5.2.(1) of the **1986 Building Code**.

(2) Sentence (1) does not apply where the **building** is **sprinklered**.

(3) Access routes that do not comply with Sentence (1) may be **approved** where available **fire department** equipment has access to the **building** or alternative provisions are made under Subsection 2.8.2. for such access.

Sprinkler systems

9.2.5.2. (1) Except as permitted in Sentence (3), sprinkler systems shall comply with Article 3.2.5.5. of the **1986 Building Code**.

(2) An existing sprinkler system is deemed to be in compliance with Sentence (1) where the average sprinkler discharge density over the design area is at least equal to the minimum density corresponding to the area for the hazard classification as defined in Table 9.2.5.A.

(3) Where **buildings** with a ceiling height in excess of 9 m are required to be **sprinklered**, the design of the system shall be **approved** prior to installation.

(4) The water supply requirements for an existing sprinkler system shall be based on

(a) the hazard classification, as determined in Table 9.2.5.A., and

(b) the minimum sprinkler discharge density, area of application and sprinkler spacing, as determined in NFPA 13, “Standard for the Installation of Sprinkler Systems”, that corresponds to the hazard classification determined under Clause (a).

(5) Clause (4)(b) does not apply to the water supply requirements for an existing sprinkler system in an arena or an exhibition hall.

(6) The water supply requirements for an existing sprinkler system in an arena or an exhibition hall shall be based on the lesser area of

(a) 100% of the display area, or

(b) 280 m^2.

TABLE 9.2.5.A.

Forming Part of Article 9.2.5.2.

Hazard Classification*	**Occupancy**
Light Hazard	Art galleries Beverage establishments Gymnasia Halls in religious establishments (excluding areas of worship) Lecture halls Museums
Ordinary Hazard Group 1	Auditoria (excluding stages) Bingo halls

	Clubs Community halls Dance halls Lodge rooms Motion picture theatres Opera houses (excluding stages) Restaurants Television studios Theatres (excluding stages)
Ordinary Hazard Group 3	Enclosed arenas Exhibition halls Stages excluded in Ordinary Hazard Group 1

*Hazard Classification is defined as per NFPA 13, “Standard for the Installation of Sprinkler Systems”.

SECTION 9.3 BOARDING, LODGING AND ROOMING HOUSES

Subsection 9.3.1. Application and General

Application

9.3.1.1. (1) This Section applies to boarding houses, lodging houses, rooming houses and private rest homes in which residents do not require care or treatment because of age, mental or physical limitations, where

(a) the **building height** does not exceed 3 **storeys** and the **building area** does not exceed 600 m^2,

(b) lodging is provided for more than four persons in return for remuneration or the provision of services or both, and

(c) lodging rooms do not have both bathrooms and kitchen facilities for the exclusive use of individual occupants.

(2) This Section applies to homes for special care within the meaning of the **Homes for Special Care Act**, where

(a) the **building height** does not exceed 3 **storeys** and the **building area** does not exceed 600 m^2,

(b) sleeping accommodation is provided for more than three but not more than 10 residents, and

(c) residents do not require nursing care.

(3) REVOKED: O. Reg. 256/14, s. 327.

Exemption for MCSS residences and hotels

9.3.1.2. (1) Subject to Sentence 9.3.1.1.(2), this Section does not apply to **residential occupancies** that are regulated under the **Ministry of Community and Social Services Act**.

(2) This Section does not apply to a **building** or part of a **building** regulated under Section 9.9.

Definitions

9.3.1.3. For the purposes of this Section,

"**1986 Building Code**" means Ontario Regulation 419/86, as it read on February 11, 1987;

"existing" means in existence on February 11, 1987.

Subsection 9.3.2. Containment

9.3.2.1. **Fire separations** required by this Section to have a **fire-resistance rating** shall comply with Subsection 9.10.3. of the **1986 Building Code**.

Floor assemblies

9.3.2.2. (1) Floor assemblies shall

(a) be constructed as **fire separations**, and

(b) have a **fire-resistance rating** not less than 30 min.

(2) Existing floor assemblies with ceilings consisting of lath and plaster, gypsum board or noncombustible materials are deemed to be in compliance with Sentence (1).

Basement fire separations

9.3.2.3. Where a **basement** does not contain a bedroom, recreation room, meeting room or hobby room, a **fire separation** having no **fire-resistance rating** between the **basement** and **first storey** is deemed to be in compliance with Clause 9.3.2.2.(1)(b).

Walls separating bedrooms

9.3.2.4. (1) Each guest room or **suite** of rooms shall have interior walls having a **fire-resistance rating** not less than 30 min.

(2) Existing wall assemblies consisting of membranes of lath and plaster or gypsum wallboard are deemed to be in compliance with Sentence (1).

Furnace room separations

9.3.2.5. (1) In a **building** where the **building height** is greater than 2 **storeys** or the **building area** is greater than 400 m^2, a **furnace** room that is located on a **floor area** that contains a bedroom, recreation room, meeting room or hobby room shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 45 min.

(2) Existing **fire separations** consisting of membranes of lath and plaster or gypsum board are deemed to be in compliance with Sentence (1).

(3) Where the required vertical **fire separation** in a **furnace** room is maintained and it is not practical in the circumstances to construct the ceiling as a **fire separation** having a **fire-resistance rating** not less than 45 min, the **furnace** room area shall be **sprinklered** with a spacing that does not exceed 9.5 m^2 per sprinkler head.

(4) **Closures** in **fire separations** for a **furnace** room shall have a **fire-protection rating** not less than 45 min.

(5) A hollow metal or kalamein door and frame are deemed to be in compliance with Sentence (4).

(6) **Closures** referred to in Sentences (4) and (5) shall be equipped with latches and self-closing devices.

(7) Despite Sentence (1), **fire dampers** or **fire-stop flaps** are not required in ducts at penetrations of a **fire separation**.

Combustion air

9.3.2.6. Where a **furnace** room is separated to comply with the requirements of Article 9.3.2.5., sufficient combustion air shall be brought directly from the exterior for the proper combustion and safe operation of the **appliance**.

Subsection 9.3.3. Means of Egress

Number of exits

9.3.3.1. (1) Each **floor area** shall be served by at least two **exits**.

(2) Where sleeping accommodation is not provided for more than 10 persons, one **exit** from each of the first and second floor **floor areas** is deemed to be in compliance with Sentence (1).

(3) Where sleeping accommodation is not provided in the **basement**, one **exit** from the **basement** is deemed to be in compliance with Sentence (1).

Acceptable exits

9.3.3.2. (1) **Exits** required by Article 9.3.3.1. shall comply with the requirements of Articles 9.9.2.2. and 9.9.2.3. of the **1986 Building Code**.

(2) Despite Sentence 9.3.3.5.(1), not more than one required **exit** from the **basement** may lead through the first floor **floor area**.

(3) Where sleeping accommodation is not provided for more than 10 persons, corridors that are contiguous to a stairway may form part of the stairway enclosure.

(4) Only one stairway enclosure described in Sentence (3) may be used as an **exit**.

(5) Where a fire escape of the type referred to in Article 9.3.3.4. is used as an **exit**, it is deemed to comply with the requirements of Articles 9.9.2.2. and 9.9.2.3. of the **1986 Building Code**.

9.3.3.3. Despite Articles 9.3.3.1. and 9.3.3.2., alternative measures may be **approved** where, in the opinion of the **Chief Fire Official**, they will provide protection for life safety similar to the protection provided by compliance with Articles 9.3.3.1. and 9.3.3.2.

Fire escapes

9.3.3.4. (1) Each fire escape used as an **exit** shall be constructed in compliance with Article 3.4.7.13., excluding Sentences (4) and (5), of the **1986 Building Code**.

(2) Despite Sentence (1), existing fire escapes may be **approved**.

(3) Access to fire escapes shall be from corridors.

Protection of exits

9.3.3.5. (1) Each **exit** other than a doorway opening directly onto a fire escape or to the outdoors at ground level shall be separated from the remainder of the **building** or from another **exit** by a **fire separation** having a **fire-resistance rating** not less than 30 min.

(2) Existing **exit** stairways separated from the remainder of the **building** by walls consisting of lath and plaster or gypsum wallboard are deemed to be in compliance with Sentence (1).

(3) Despite Sentence (1), an existing separation of noncombustible material may be **approved**.

Interior stairways

9.3.3.6. (1) Floor separations shall be maintained at interior stairways that are not required **exits**.

(2) The floor separation shall be maintained at an **exit** permitted in Sentence 9.3.3.2.(2).

9.3.3.7. Floor separations required in Article 9.3.3.6. shall be rated in accordance with Articles 9.3.2.2. and 9.3.3.5.

Protection of openings in fire separations

9.3.3.8. (1) **Closures** in **fire separations** required under Article 9.3.3.5. and in floor separations required under Article 9.3.3.6. shall

(a) be constructed in accordance with Article 9.10.3.1. of the **1986 Building Code**,

(b) have a **fire-protection rating** not less than 20 min, and

(c) if the **closure** is openable, be equipped with self-closing and latching devices.

(2) **Closures** located along contiguous corridors permitted in Sentence 9.3.3.2.(3) shall comply with Sentence (1).

(3) A 45 mm solid core wood, hollow metal or kalamein door, equipped with self-closing and latching devices, is deemed to comply with Sentences (1) and (2).

(4) Despite Sentences (1) and (2), frames for doors described in Sentence (3) may be of wood, hollow metal or kalamein construction.

(5) Despite Sentences (1) and (2), **fire dampers** or **fire-stop flaps** are not required in ducts at penetrations of a **fire separation**.

9.3.3.9. Existing wired glass **closures** set in fixed steel frames in a **fire separation** are deemed to be in compliance with Article 9.3.3.8.

Exit signs

9.3.3.10. (1) **Exit** signs shall be located along a **means of egress** so that directions of **exit** travel are apparent to the occupants.

(2) **Exit** signs required by Sentence (1) shall have the word “EXIT” in block letters and such letters shall be

(a) internally or externally illuminated,

(b) coloured red on an opaque or contrasting field, and

(c) at least 115 mm high with a 19 mm stroke.

Interior finishes

9.3.3.11. The **flame-spread rating** of interior finishes on walls and ceilings within a **means of egress** shall not exceed 200.

Illumination of egress

9.3.3.12. Corridors and stairways shall be lighted to the intensity of 50 lx measured at the floor level, or 5 watts/m^2 of **floor area**.

Emergency lighting

9.3.3.13. Where sleeping accommodation is provided for more than 10 persons, emergency lighting shall be provided to corridors and stairways in accordance with Articles 9.9.11.4. and 9.9.11.5. of the **1986 Building Code**.

Subsection 9.3.4. Fire Alarm and Detection

Fire alarm requirements

9.3.4.1. (1) A **building** to which this Section applies that does not have floor assemblies having a minimum 45 min **fire-resistance rating** and **public corridors** or corridors serving sleeping rooms not within a **dwelling unit** that are not fire-separated from the remainder of the **building** by a minimum 30 min **fire-resistance rating** shall have a fire alarm system that complies with Articles 9.10.17.5. and 9.10.17.11. of the **1986 Building Code**, and shall have

(a) **smoke alarms** that comply with Sentence (2) and that are installed and interconnected so that the activation of any **smoke alarm** will sound a similar signal in each of the interconnected devices, or

(b) fire alarm system **smoke detectors** installed on the ceiling of each floor adjacent to each stairway, and on the ceiling in the **basement** adjacent to each stairway.

(2) **Smoke alarms** referred to in Clause (1)(a) shall

(a) be installed on the ceiling in the corridor of each floor adjacent to each stairway and on the ceiling in the **basement** adjacent to each stairway,

(b) be on a separate circuit with no disconnect switch between the overcurrent device and the **smoke alarms**, and

(c) employ devices and an interconnected installation that are **listed**.

9.3.4.2. (1) A fire alarm system complying with Articles 9.10.17.4., 9.10.17.5., 9.10.17.11. and Subsection 9.10.18. of the **1986 Building Code** shall be installed where

(a) sleeping accommodation is provided for more than 10 persons, and

(b) the floor assemblies have a **fire-resistance rating** not less than 45 min and **public corridors** or corridors serving sleeping rooms not within a **dwelling unit** are separated from the remainder of the **building** by **fire separations** having a **fire-resistance rating** not less than 30 min.

9.3.4.3. Where a fire alarm system is required and sleeping accommodation is not provided for more than 14 persons, an interconnected **smoke alarm** system in accordance with Clause 9.3.4.1.(1)(a) is deemed to be in compliance with Article 9.3.4.2.

9.3.4.4. Despite Articles 9.3.4.1. and 9.3.4.2., existing fire alarm systems may be **approved** where the system reliability and performance will not increase the risk of life safety.

Subsection 9.3.5. Suppression

Portable extinguishers

9.3.5.1. (1) Despite the provisions of Subsection 6.2.6., at least one 2A rated portable extinguisher shall be provided on each floor.

(2) At least one 5B:C rated portable extinguisher shall be installed in each kitchen where shared cooking facilities exist.

SECTION 9.4 HEALTH CARE FACILITIES

Subsection 9.4.1. Application and General

Application

9.4.1.1. (1) This Section applies to

(a) homes for special care regulated under the **Homes for Special Care Act** in which sleeping accommodation is provided for more than 10 residents,

(b) long-term care homes regulated under the **Long-Term Care Homes Act, 2007**,

(c) private hospitals regulated under the **Private Hospitals Act**, or

(d) public hospitals regulated under the **Public Hospitals Act**.

(2) REVOKED: O. Reg. 256/14, s. 337.

Definitions

9.4.1.2. For the purposes of this Section,

"**1986 Building Code**" means Ontario Regulation 419/86, as it read on February 11, 1987;

"existing" means in existence on February 11, 1987.

Subsection 9.4.2. Containment

Construction

9.4.2.1. (1) **Fire separations** required under this Section to have a **fire-resistance rating** shall comply with Subsection 3.1.5. and Articles 3.1.6.1., 3.1.6.2. and 3.1.6.3. of the **1986 Building Code**.

(2) If a **fire-resistance rating** of 1 h or less is required, existing wall assemblies, floor assemblies and ceilings and their supporting assemblies are deemed to comply with Sentence (1) if they consist of lath and plaster or gypsum board.

(3) **Heavy timber construction** that complies with Article 3.1.4.4. of the **1986 Building Code** is deemed to have a 45 min **fire-resistance rating**.

(4) **Buildings** with limited combustible components may be **approved** as **noncombustible construction**.

(5) Floor assemblies shall be constructed as **fire separations** with **fire-resistance ratings** in accordance with this Subsection.

Combustible construction up to 2 storeys

9.4.2.2. (1) **Buildings** of **combustible construction** shall comply with the provisions of Sentence (2) where the **building** is

(a) 1 **storey** in **building height** and not greater than 1000 m^2 in **building area**, or

(b) 2 **storeys** in **building height** and not greater than 500 m^2 in **building area**.

(2) Floor assemblies and walls, columns and arches supporting floor assemblies shall have a **fire-resistance rating** not less than 45 min.

(3) Despite Sentence (2), where the **building** is **sprinklered**, a **fire-resistance rating** is not required for floor assemblies or for walls, columns and arches supporting floor assemblies.

Combustible construction up to 4 storeys

9.4.2.3. (1) **Buildings** of **combustible construction** shall comply with the provisions of Sentences (2) and (3) where the **building** is

(a) not more than 1 **storey** in **building height** and not greater than 2400 m^2 in **building area**,

(b) not more than 2 **storeys** in **building height** and not greater than 1600 m^2 in **building area**, or

(c) not more than 4 **storeys** in **building height** and not greater than 500 m^2 in **building area**.

(2) Floor assemblies and walls, columns and arches supporting floor assemblies shall have a **fire-resistance rating** not less than 45 min.

(3) Despite Sentence 9.4.4.2.(2), **smoke detectors** shall be provided in bedrooms, corridors, lounges and sitting areas.

(4) A **building** that is **sprinklered** is deemed to be in compliance with Sentences (2) and (3).

All other buildings

9.4.2.4. (1) **Buildings** not described in Articles 9.4.2.2. and 9.4.2.3. shall

(a) have a **fire-resistance rating** not less than 45 min for floor assemblies and walls, columns and arches supporting floor assemblies, and

(b) be **sprinklered**, where the **building** is of **combustible construction**.

(2) If only the roof assembly of a **building** is of **combustible construction**, the **building** is deemed to comply with Clause (1)(b) if

(a) the top **storey** and **attic space** are **sprinklered**, or

(b) the ceiling membrane has a **fire-resistance rating** not less than 45 min and the **attic space** is **fire stopped** in accordance with Article 3.1.9.3. of the **1986 Building Code**.

Fire separations between occupancies

9.4.2.5. (1) **Fire separations** having a **fire-resistance rating** not less than 1 h shall be provided between **occupancies** regulated under this Section and other **major occupancies**.

(2) **Fire separations** having a **fire-resistance rating** not less than 30 min are deemed to comply with Sentence (1) if

(a) the **building** is **sprinklered** and the sprinkler system complies with Article 9.4.5.2., or

(b) the part of the **building** containing the other **major occupancy** is equipped with **heat detectors** and connecting corridors are equipped with **smoke detectors** as part of the fire alarm system of the **building**.

(3) Existing wall or floor assemblies consisting of masonry or membranes of lath and plaster or gypsum board are deemed to be in compliance with Sentence (1).

Fire separations between bedrooms and corridors

9.4.2.6. (1) Bedrooms or compartments containing related rooms shall be separated from adjacent rooms by **fire separations** having a **fire-resistance rating** not less than 45 min.

(2) Corridors serving bedrooms shall be separated from adjacent rooms, except sitting areas, lounges, nurses stations and washrooms, by **fire separations** having a **fire-resistance rating** not less than 45 min.

(3) Where the **floor area** is **sprinklered**, an existing **fire separation** is deemed to be in compliance with Sentences (1) and (2).

(4) A **fire separation** having a **fire-resistance rating** not less than 30 min is deemed to comply with Sentences (1) and (2) if

(a) **smoke detectors** are installed in bedrooms, sitting areas, lounges and corridors serving bedrooms on the **floor area**, and

(b) **heat detectors** are installed in other rooms opening onto corridors serving bedrooms.

Safe areas of refuge

9.4.2.7. (1) **Floor areas** containing rooms or areas used by the residents shall be separated into at least two zones by **fire separations** having a **fire-resistance rating** not less than 45 min.

(2) Each zone required in Sentence (1) shall

(a) contain at least one acceptable **exit**, and

(b) be able to accommodate, in addition to its own occupants, the occupants of the adjacent zone, based on the requirements of 0.5 m^2 of clear floor space per person, 1.6 m^2 per person in a wheelchair, and 2.4 m^2 for each bedridden patient as the **occupancy** requires.

(3) A **fire separation** is not required under Sentence (1) where

(a) the travel distance between **exits** does not exceed 9 m and the number of occupants on the **floor area** is not more than 10 persons, or

(b) the **floor area** is served by exterior **exit** doors leading directly to the outside.

Protection of openings in fire separations

9.4.2.8. (1) **Closures** in **fire separations** shall comply with the requirements of Sentences 3.1.6.4.(2), 3.1.6.7.(1) and 3.1.6.8.(1) and Article 3.1.6.9. of the **1986 Building Code**.

(2) Openings in a **fire separation** that is required to have a 30 min **fire-resistance rating** shall be protected with **closures** that have a **fire-protection rating** not less than 20 min.

(3) Where Sentences (1) and (2) require

(a) a 1.5 h **fire-protection rating**, existing hollow metal doors, with or without wired glass panels not exceeding 645 cm^2, equipped with self-closing devices and existing hollow metal frames are deemed to be in compliance,

(b) a 45 min **fire-protection rating**, existing hollow metal or kalamein doors, with or without wired glass, equipped with self-closing devices and existing hollow metal frames are deemed to be in compliance,

(c) a 45 min **fire-protection rating**, existing wired glass screens set in fixed steel frames are deemed to be in compliance, or

(d) a 20 min **fire-protection rating**, existing 45 mm solid core wood doors equipped with self-closing devices and existing solid wood frames are deemed to be in compliance.

(4) Existing doors to bedrooms not conforming to Sentences (1) to (3) may be **approved**.

(5) Despite Sentence (1), and except as permitted in Article 9.4.2.9., door assemblies required to have a 20 min **fire-protection rating** shall be equipped with self-closing devices.

(6) Despite Sentences (1) and (2), **fire dampers** or **fire-stop flaps** are not required in ducts at penetrations of an existing **fire separation**.

Latches on bedroom doors

9.4.2.9. Where a door to a bedroom is not equipped with a self-closing device, a latch that can hold the door in the closed position shall be installed.

Fuel-fired appliance service rooms

9.4.2.10. (1) Fuel-fired **appliances** shall be enclosed in a **service room** separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 45 min.

(2) Sentence (1) does not apply to a fuel-fired **appliance** that serves only one bedroom.

(3) Despite Sentence (1), if the required vertical **fire separation** to a **service room** is provided and it is not practical in the circumstances to install a **fire separation** having a **fire-resistance rating** not less than 45 min above the **service room**, the **service room** area shall be **sprinklered** with a spacing not exceeding 9.5 m^2 per sprinkler head.

Combustion air

9.4.2.11. Where a **furnace** room is separated to comply with the requirements of Article 9.4.2.10., sufficient combustion air shall be brought directly from the exterior for the proper combustion and safe operation of the **appliance**.

Transformer vaults

9.4.2.12. A transformer vault shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 2 h.

Vertical service spaces

9.4.2.13. (1) **Vertical service spaces** shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 45 min.

(2) Where openings in the **vertical service space**, including the top and bottom, are sealed with noncombustible materials having the same **fire-resistance rating** as the existing construction, the **vertical service space** is deemed to be in compliance with Sentence (1).

Refuse and linen chutes

9.4.2.14. (1) Automatic sprinklers shall be installed at the top and at alternate floor levels in each linen or refuse chute and in the room or bin into which the chute discharges.

(2) An existing linen chute installation is deemed to be in compliance with Sentence (1) where the room into which the linen chute discharges is **sprinklered** and at least one sprinkler head is installed at the top of the linen chute.

(3) Each room into which a linen or refuse chute discharges shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 1 h.

Incinerator rooms

9.4.2.15. Incinerators shall be enclosed in a **service room** separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 2 h.

Subsection 9.4.3. Means of Egress

Access to exits

9.4.3.1. (1) Bedrooms or compartments containing related rooms on a **floor area** shall have a doorway leading to an interior corridor where it shall be possible to go in opposite directions to each of two separate **exits**.

(2) **Access to exits** through a dead end corridor is deemed to be in compliance with Sentence (1) where

(a) the number of persons served does not exceed 10 persons, and

(b) the travel distance does not exceed 6 m plus the width of the dead end corridor, to a point where a choice of two directions of **exit** travel is available.

(3) Where a bedroom or a compartment containing related rooms is served by an **exit** door leading directly to the outside or to an exterior passageway, a doorway leading to an interior corridor served by one **exit** is deemed to be in compliance with Sentences (1) and (2).

(4) Where a dead end corridor does not satisfy the travel distance as described in Sentence (2), the existing corridor is deemed to be in compliance where additional fire protection measures are provided that are **approved**.

Number of exits

9.4.3.2. Each **floor area** used by patients or residents shall be served by not fewer than two **exits**.

Stairway separations

9.4.3.3. (1) Each **exit** stairway shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 45 min.

(2) **Closures** in stairway **fire separations** shall conform to Article 9.4.2.8.

Door swing

9.4.3.4. (1) Each **exit** door shall open in the direction of **exit** travel and swing on its vertical axis.

(2) Existing door swing arrangements not in conformance with Sentence (1) may be **approved**.

Exit signs

9.4.3.5. (1) Signs for **exits** and **access to exits** shall comply with the requirements of Article 3.4.5.1. of the **1986 Building Code**.

(2) Despite Sentence (1), existing signs may be **approved**.

Fire escapes

9.4.3.6. (1) A fire escape shall not be erected on an existing **building** unless it is not practical in the circumstances to provide one or more **exit** facilities, described under Article 3.4.1.2. of the **1986 Building Code**, and provided that the fire escape does not serve **floor areas** above the second floor.

(2) A fire escape permitted under Sentence (1) shall be constructed to comply with the requirements of Article 3.4.7.13. of the **1986 Building Code**, except that the fire escape shall not be less than 1100 mm in width when serving **floor areas** with non-ambulatory residents.

(3) Despite Sentences (1) and (2), an existing fire escape may be **approved**.

Emergency lighting

9.4.3.7. Emergency lighting shall be provided in accordance with the provisions of Article 3.2.7.3. of the **1986 Building Code**.

Subsection 9.4.4. Fire Alarm and Detection

Fire alarm requirements

9.4.4.1. A fire alarm and detection system shall be installed in each **building**.

9.4.4.2. (1) Fire alarm and detection systems shall comply with the requirements of Subsection 3.2.4. of the **1986 Building Code**.

(2) Despite Sentence (1), in **buildings** constructed prior to December 1, 1983, **heat detectors** may be installed in bedrooms, corridors and stair shafts to satisfy the **1986 Building Code**, except where other detection is required by Sentences 9.4.2.3.(3), 9.4.2.5.(2) or 9.4.2.6.(4).

(3) Despite Sentences (1) and (2), where the **Chief Fire Official** is satisfied that the performance and reliability of an existing fire alarm system will provide an adequate early warning level, the existing system may remain, be modified or be extended, provided compatibility of components is maintained.

Signals to fire department

9.4.4.3. (1) Each fire alarm system shall be connected to the **fire department** headquarters by

(a) a direct connection, provided the **fire department** has the necessary facilities to accept such a connection, or

(b) a central station or proprietary control station.

(2) Where the provisions required in Sentence (1) are not available, a procedure for notifying the **fire department** shall be **approved**.

Shutdown of air handling systems

9.4.4.4. (1) Recirculating air handling systems that serve more than 1 **storey** or more than one zone as described in Sentence 9.4.2.7.(1) shall be arranged to shut down upon actuation of the fire alarm system.

(2) In **buildings** greater than 6 **storeys** in **building height**, air handling systems serving more than 1 **storey** or more than one zone as described in Article 9.4.2.7. shall be arranged to shut down upon actuation of the fire alarm system, except where continued operation of the air handling system serves as part of a smoke control system.

Subsection 9.4.5. Suppression

Access for fire fighting

9.4.5.1. (1) Access routes for fire fighting shall be provided in accordance with the requirements of Article 3.2.5.2. of the **1986 Building Code**.

(2) Sentence (1) does not apply where the **building** is **sprinklered**.

(3) Access routes that do not comply with Sentence (1) may be **approved** where available **fire department** equipment has access to the **building** or alternative provisions are made under Subsection 2.8.2. for such access.

Sprinkler systems

9.4.5.2. (1) Sprinkler systems shall be designed in conformance with Article 3.2.5.5. of the **1986 Building Code**.

(2) Despite Sentence (1), water supply requirements for sprinkler systems required in this Section may be based on

(a) the operation of at least three sprinkler heads spaced not to exceed 14.4 m^2 per head, and

(b) a sprinkler discharge rate of not less than 100 L/min at any single operating sprinkler head for a duration of 30 min.

(3) Despite Sentences (1) and (2), existing sprinkler systems providing adequate protection may be **approved**.

Firefighters' elevators

9.4.5.3. (1) In **buildings** greater than 6 **storeys** in **building height**, at least one elevator shall be provided for use by firefighters.

(2) An elevator is deemed to be in compliance with Sentence (1) where

(a) the elevator is capable of providing transportation from the **street** floor to each floor normally served by the elevator system,

(b) the elevator is identified on the **street** floor as an elevator for use by firefighters,

(c) the elevator satisfies the requirements of Article 3.2.6.3. of the **1986 Building Code**, and

(d) other elevator cabs in the same shaft as the elevator for use by firefighters satisfy the requirements of Sentences 3.2.6.3.(1) and (2) of the **1986 Building Code**.

Voice communication systems

9.4.5.4. (1) In **buildings** greater than 6 **storeys** in **building height**, a voice communication system shall be provided in accordance with the requirements of Article 3.2.4.16. of the **1986 Building Code**.

(2) A public address system compatible with the fire safety plan required under Subsection 2.8.2. is deemed to be in compliance with Sentence (1).

Sprinkler systems

9.4.5.5. (1) **Buildings** containing a home described in Clause 9.4.1.1.(1)(a) or (b) that is a **care occupancy** or a **care and treatment occupancy** shall be **sprinklered** in conformance with Sentences (2) to (5).

(2) Except as permitted in Sentence (3), an automatic sprinkler system shall be installed in accordance with NFPA 13, "Standard for the Installation of Sprinkler Systems".

(3) In **buildings** not greater than 6 **storeys** in **building height**, sprinkler systems may be installed in accordance with NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height".

(4) Sprinkler systems shall be equipped with local electric waterflow alarms.

(5) If a fire pump is required by NFPA 13 or NFPA 13R, it shall be installed in accordance with NFPA 20, "Installation of Stationary Pumps for Fire Protection", if it has a rated net head pressure greater than 280 kPa.

(6) **Buildings** described in Sentence (1) that are **sprinklered** in conformance with Article 9.4.5.2. on January 1, 2014 are deemed to be in compliance with Sentence (1).

SECTION 9.5 BUILDINGS UP TO AND INCLUDING 6 STOREYS IN BUILDING HEIGHT WITH RESIDENTIAL OCCUPANCIES

Subsection 9.5.1. Application and General

Application

9.5.1.1. (1) This Section applies to **buildings** up to and including 6 **storeys** in **building height** with **residential occupancies** and containing

(a) more than two **dwelling units** where

(i) at least two **dwelling units** share common **exit** facilities and have interior access to one another,

(ii) there is at least one **dwelling unit** located above another with interior access to one another, or

(iii) there is at least one **dwelling unit** located above another and the **dwelling units** share common **exit** facilities,

(b) sleeping accommodation for more than 10 persons, in one or more dormitories,

(c) boarding, lodging or rooming accommodation for more than four persons where Sections 9.3 and 9.4. do not apply, or

(d) one or two **dwelling units** in combination with boarding, lodging or rooming accommodation for two, three or four persons, excluding the operator's residence.

(2) Despite Sentence (1), if a **building** that is governed by this Section contains, in addition to its **residential occupancies**, one or more other **occupancies** that are not governed by any other Section of this Part, this Section does not apply to the fire safety systems, devices and structural elements of the other **occupancies** that do not affect the life safety of the **residential occupancy**.

(3) If a **building** that is governed by this Section contains, in addition to its **residential occupancies**, one or more other **occupancies** that are governed by other Sections of this Part, the fire safety systems, devices and structural elements of the other **occupancies** governed by those Sections shall comply with the requirements of this Part that provide the greatest protection for life safety.

(4) REVOKED: O. Reg. 256/14, s. 354 (2).

Exemption for convents, monasteries and hotels

9.5.1.2. (1) This Section does not apply to convents and monasteries**.**

(2) This Section does not apply to a **building** or part of a **building** regulated under Section 9.9.

Definitions

9.5.1.3. For the purposes of this Section,

"**1990 Building Code**" means Ontario Regulation 413/90, as it read on October 9, 1992;

"existing" means in existence on October 9, 1992.

Subsection 9.5.2. Containment

Construction

9.5.2.1. (1) **Fire separations** required under this Section to have a **fire-resistance rating** shall comply with Subsection 3.1.7. and Articles 3.1.8.1., 3.1.8.2., 3.1.8.3. and 3.5.4.2. of the **1990 Building Code**.

(2) If a **fire-resistance rating** of 1 h or less is required, existing wall assemblies, floor assemblies, ceilings and their supporting assemblies, consisting of membranes of lath and plaster or gypsum board, are deemed to comply with Sentence (1).

(3) **Heavy timber construction** that complies with Article 3.1.4.6. of the **1990 Building Code** is deemed to have a 45 min **fire-resistance rating**.

(4) **Buildings** with limited combustible components may be **approved** as **noncombustible construction**.

(5) Floor assemblies shall be constructed as **fire separations** with **fire-resistance ratings** that comply with Articles 9.5.2.2. to 9.5.2.5.

(6) Sentence (5) does not apply to floor assemblies between different levels of the same multi-level **dwelling unit**.

Buildings up to 3 storeys

9.5.2.2. (1) **Buildings** shall comply with the requirements of Sentence (2) where the **building** is

(a) not more than 1 **storey** in **building height** and not greater than 1200 m^2 in **building area**,

(b) not more than 2 **storeys** in **building height** and not greater than 900 m^2 in **building area**, or

(c) not more than 3 **storeys** in **building height** and not greater than 600 m^2 in **building area**.

(2) Floor assemblies and walls, columns and arches supporting floor assemblies shall have a **fire-resistance rating** not less than 30 min.

(3) Where sleeping accommodation, recreation rooms, meeting rooms or hobby rooms are not provided in the **basement**, an existing **fire separation** between the **first storey** and **basement** is deemed to be in compliance with Sentence (2) where

(a) the **basement** is **sprinklered**, or

(b) the **building** contains not more than four **dwelling units** and provides sleeping accommodation for not more than 10 persons, and

(i) interconnected **smoke alarms** are installed in accordance with Article 9.5.4.4.,

(ii) doors connecting the **basement** and **first storey** are in compliance with Sentence 9.5.2.8.(4), and

(iii) **fire stopping** of the wall space at the **basement** level is in accordance with Article 9.10.15.3. of the **1990 Building Code**.

(4) The water supply for the sprinklers referred to in Clause (3)(a) may be taken from the domestic supply where the supply provides sufficient density for the largest **fire compartment** and where the supply is **approved**.

Deemed compliance

9.5.2.3. (1) **Buildings** are deemed to be in compliance with Sentence 9.5.2.2.(2) where

(a) the **building** is **sprinklered**, or

(b) the **building** is 1 **storey** in **building height** and is not greater than 600 m^2 in **building area**.

Buildings up to 4 storeys

9.5.2.4. (1) **Buildings** to which Sentence 9.5.2.2.(1) does not apply and which are not more than 4 **storeys** in **building height** shall comply with Sentences (2) and (3).

(2) Floor assemblies and walls, columns and arches supporting floor assemblies shall have a **fire-resistance rating** not less than 45 min.

(3) **Smoke detectors** shall be provided as **fire detectors** in **public corridors** serving **dwelling units** in **buildings** of **combustible construction**.

(4) A **building** that is **sprinklered** is deemed to be in compliance with Sentences (2) and (3).

Buildings over 4 storeys

9.5.2.5. (1) **Buildings** that are more than 4 **storeys** in **building height** shall

(a) have a **fire-resistance rating** not less than 45 min for floor assemblies and walls, columns and arches supporting floor assemblies, and

(b) be **sprinklered**, where the **building** is of **combustible construction**.

(2) Where only the roof assembly is of **combustible construction**, the **building** is deemed to be in compliance with Clause (1)(b) where

(a) the ceiling membrane has a **fire-resistance rating** not less than 45 min and the **attic space** is **fire stopped** in accordance with Article 3.1.11.5. of the **1990 Building Code**,

(b) the roof assembly is of **heavy timber construction** in accordance with Article 3.1.4.6. of the **1990 Building Code**, or

(c) the top **storey** and **attic space** are **sprinklered**.

(3) Where **smoke detectors** are provided in **public corridors**, a **building** of **heavy timber construction** conforming to Article 3.1.4.6. of the **1990 Building Code** is deemed to be in compliance with Sentence (1).

Fire separation between occupancies

9.5.2.6. (1) **Fire separations** having a **fire-resistance rating** not less than 1 h shall be provided between **residential occupancies** and other **major occupancies**.

(2) Existing **fire separations** having a **fire-resistance rating** not less than 30 min are deemed to comply with Sentence (1) if

(a) the **building** is **sprinklered** and the sprinkler system complies with Article 9.5.5.3., or

(b) the part of the **building** containing the other **major occupancy** is equipped with **heat detectors** and connecting corridors are equipped with **smoke detectors** as part of the fire alarm system of the **building**.

(3) Existing **fire separations** consisting of membranes of lath and plaster or gypsum board are deemed to be in compliance with Sentence (1).

Fire separations between dwelling units and corridors

9.5.2.7. (1) Each **dwelling unit** and sleeping room not within a **dwelling unit** shall be separated from adjacent rooms and areas by **fire separations** having a **fire-resistance rating** not less than 30 min.

(2) **Public corridors** shall be separated from adjacent rooms and areas by **fire separations** having a **fire-resistance rating** not less than 30 min.

(3) If the **floor area** is **sprinklered**, existing **fire separations** are deemed to comply with Sentences (1) and (2).

Protection of openings in fire separations

9.5.2.8. (1) **Closures** in **fire separations** shall be in accordance with Sentences 3.1.8.4.(2), 3.1.8.10.(1) and 3.1.8.11.(1) and Article 3.1.8.13. of the **1990 Building Code**.

(2) Openings in a **fire separation** that is required to have a 30 min **fire-resistance rating** shall be protected with **closures** having a 20 min **fire-protection rating**.

(3) If a 45 min **fire-protection rating** is required, existing **closures** are deemed to comply with Sentence (1) if they consist of

(a) hollow metal or kalamein doors in hollow metal frames, with openings, if any, protected by wired glass, and equipped with self-closing devices, or

(b) wired glass screens set in fixed steel frames.

(4) Where a 20 min **fire-protection rating** is required, existing **closures** consisting of 45 mm solid core wood doors installed in solid wood or hollow metal frames and equipped with self-closing devices are deemed to be in compliance with Sentences (1) and (2).

(5) Existing **closures** in **fire separations** to which Article 9.5.2.7. applies are deemed to be in compliance with Sentences (1) and (2) where

(a) the **floor area** is **sprinklered**, or

(b) interconnected **smoke alarms** are installed in accordance with Article 9.5.4.4., the **building** has not more than four **dwelling units** and the **building** provides sleeping accommodation for not more than 10 persons.

(6) Despite Sentence (1), **closures** in **fire separations** to which Article 9.5.2.7. applies do not require self-closing devices, except as required in Sentences 9.5.3.1.(2) and 9.5.3.3.(3).

(7) Existing operable transoms and glass lights shall be fixed shut and shall meet the **fire-protection rating** requirements of Sentences (1) and (2).

(8) Despite Sentences (1) and (2), **fire dampers** or **fire-stop flaps** are not required in existing noncombustible ducts at penetrations of **fire separations**.

Storage rooms

9.5.2.9. (1) Storage rooms for the use of occupants, not contained within a **dwelling unit** or **suite**,

(a) shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 45 min, and

(b) shall be

(i) **sprinklered**, or

(ii) subdivided into areas not exceeding 150 m^2 by **fire separations** having a **fire-resistance rating** not less than 45 min and equipped with **fire detectors** connected to the fire alarm system.

(2) Existing storage rooms are deemed to be in compliance with Clause (1)(b) where the **building** contains not more than four **dwelling units** and provides sleeping accommodation for not more than 10 persons.

(3) Existing storage rooms are deemed to be in compliance with Sentence (1) where

(a) the **building** contains not more than four **dwelling units** and provides sleeping accommodation for not more than 10 persons, and

(b) sleeping rooms are not located on the same floor as storage rooms.

Fuel-fired appliance service rooms

9.5.2.10. (1) Fuel-fired **appliances** shall be enclosed in a **service room** separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 45 min if the **building height** is greater than 2 **storeys** or the **building area** is greater than 400 m^2.

(2) Sentence (1) does not apply to a fuel-fired **appliance** that serves only one **dwelling unit** or **suite**.

(3) Despite Sentence (1), the **fire-resistance rating** of the **fire separation** above the **service room** is not required where

(a) the required vertical **fire separation** to a **service room** is provided, and

(b) the **service room** area is **sprinklered**, with a spacing not exceeding 9.5 m^2 per sprinkler head, or providing a minimum average density of 6.5 L/min/m^2 over the room area.

Combustion air

9.5.2.11. Where a **service room** is separated in accordance with Article 9.5.2.10., sufficient combustion air shall be brought directly from the outside for the proper combustion and safe operation of the **appliances**.

Incinerator and refuse storage rooms

9.5.2.12. (1) Incinerator rooms and **refuse storage rooms** shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 45 min.

(2) **Refuse storage rooms** shall be **sprinklered** with a spacing that does not exceed 9.5 m^2 per sprinkler head or that provides a minimum average density of 6.5 L/min/m^2 over the room area.

Vertical service spaces

9.5.2.13. (1) **Vertical service spaces** shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** equivalent to that required for the floor assemblies within the **building** in accordance with Articles 9.5.2.2. to 9.5.2.5.

(2) Where openings in the **vertical service space**, including the top and bottom, are sealed with noncombustible materials having the same **fire-resistance rating** as the existing construction, the **vertical service space** is deemed to be in compliance with Sentence (1).

Refuse and linen chutes

9.5.2.14. (1) Each room into which a linen or refuse chute discharges shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 1 h.

(2) Automatic sprinklers shall be installed in each linen or refuse chute

(a) at the top,

(b) at alternate floor levels, and

(c) in the room or bin into which the chute discharges.

(3) Where the room into which the linen or refuse chute discharges is **sprinklered** and at least one sprinkler head is installed at the top of the chute, an existing chute installation is deemed to be in compliance with Sentence (2).

(4) Despite Sentence 9.5.2.1.(1), a **closure** is not required at the opening between a linen or refuse chute and the room into which it discharges.

Storage garages

9.5.2.15. A **storage garage** shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 45 min.

Subsection 9.5.3. Means of Egress

Access to exits

9.5.3.1. (1) Each **dwelling unit** or **suite** in a **floor area** shall have a doorway leading to

(a) the outside at or near **grade**,

(b) an outside passageway where it is possible to go in opposite directions to separate **exits**, or

(c) a **public corridor** where it is possible to go in opposite directions to separate **exits**.

(2) **Access to exits** through a dead end **public corridor** is deemed to be in compliance with Clause (1)(c) where

(a) the distance along the dead end does not exceed 6 m plus the width of the corridor, measured from any door along the corridor to a point where a choice of two directions of **exit** travel is available, and

(b) self-closing devices are provided on **suite** entrance doors opening onto the dead end portion of the corridor.

(3) **Access to exits** through a dead end corridor in boarding, lodging or rooming accommodation is deemed to be in compliance with Clause (1)(c) where

(a) the **building** is not more than 3 **storeys** in **building height**,

(b) sleeping accommodation is provided for not more than 10 persons,

(c) not more than two persons require assistance to evacuate the **building** in a fire emergency,

(d) **smoke alarms** are installed in the **means of egress** in accordance with Sentence 9.5.4.1.(2), and

(e) the building complies with the requirements of Section 2.8.

(4) Existing dead end **public corridors** are deemed to be in compliance with Clause (2)(a) where additional fire protection measures are **approved** that, in the opinion of the **Chief Fire Official**, will provide protection for life safety similar to the protection provided by compliance with Clause (2)(a).

(5) Despite Sentence (1), if a **dwelling unit** or **suite** has access to a second and separate **exit** or the **building** complies with Sentence 9.5.3.2.(2) or (3), a doorway from the **dwelling unit** or **suite** may open onto

(a) an **exit** stairway,

(b) a fire escape,

(c) a **public corridor** served by a single **exit**, or

(d) an outside passageway served by a single **exit** stairway.

Number of exits

9.5.3.2. (1) Each **floor area** shall be served by a minimum of two **exits**.

(2) A single **exit** from a **basement**, first or second floor is deemed to be in compliance with Sentence (1) where the **exit** does not serve more than four **dwelling units**, the **exit** does not serve more than 10 persons and the **building** is not more than 3 **storeys** in **building height** and is not greater than 600 m^2 in **building area**.

(3) Where a **building** is not more than 3 **storeys** in **building height** and not greater than 600 m^2 in **building area**, alternative measures to Sentence (1) may be used if they are **approved**, and in the opinion of the **Chief Fire Official**, will provide protection for life safety similar to the protection provided by compliance with Sentence (1).

Stairway separations

9.5.3.3. (1) Each **exit** stairway shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 45 min.

(2) If the **building** is 3 **storeys** or less in **building height**, a **fire separation** having a **fire-resistance rating** not less than 30 min is deemed to comply with Sentence (1).

(3) **Closures** in stairway **fire separations** referred to in Sentences (1) and (2) shall be equipped with self-closing devices.

Door swing

9.5.3.4. Where the **occupant load** in a **building** exceeds 24 persons or there are more than 10 **dwelling units**, each **exit** door, except those serving a single **dwelling unit**, shall open in the direction of **exit** travel and swing on its vertical axis.

Exit signs

9.5.3.5. (1) Each **exit** door, except for the main entrance to a **building**, **dwelling unit** or **suite**, shall have an **exit** sign when the **exit** serves

(a) a **building** exceeding 2 **storeys** in **building height**,

(b) a **building** having an **occupant load** greater than 150 persons, or

(c) a **floor area** other than a single **dwelling unit** with a fire escape as part of a **means of egress**.

(2) Where **exit** signs are not visible throughout the corridors and passageways, additional **exit** signs shall be installed in **approved** locations to indicate the direction of egress.

(3) **Exit** signs required in Sentences (1) and (2) shall have

(a) the word "EXIT" or the words "EXIT/SORTIE" in red letters on a contrasting background or white letters on a red background,

(b) letters with strokes at least 19 mm wide,

(c) letters at least 150 mm high when the signs are externally illuminated, and

(d) letters at least 114 mm high when the signs are internally illuminated.

Interior finishes

9.5.3.6. (1) **Flame-spread ratings** of interior wall and ceiling finishes within a **means of egress** shall not exceed 150.

(2) Despite Sentence (1), existing interior wall and ceiling finishes within an **access to exit** may be **approved** if, in the opinion of the **Chief Fire Official**, they will provide protection for life safety similar to the protection provided by compliance with Sentence (1).

Fire escapes

9.5.3.7. (1) Each fire escape used as an **exit** shall comply with Articles 3.4.7.2., 3.4.7.3., 3.4.7.5. and 3.4.7.6. of the **1990 Building Code**.

(2) If a fire escape serves any **storey** above the second floor, doorway openings and window openings shall be protected in accordance with Sentences (3) and (4) if located

(a) within 3 m horizontally of any balcony, platform or stairway of the fire escape,

(b) within 3 **storeys** below or 10 m below any balcony, platform or stairway of the fire escape, or

(c) within 1.8 m above any balcony, platform or stairway of the fire escape.

(3) Doorway openings referred to in Sentence (2) shall be protected with **closures** having a **fire-protection rating** not less than 20 min and equipped with self-closing devices.

(4) Window openings referred to in Sentence (2) shall be protected with

(a) **closures** having a **fire-protection rating** not less than 20 min and that are fixed shut or arranged to close automatically upon the operation of a fusible link,

(b) wired glass screens set in fixed steel frames,

(c) glass block, or

(d) **listed** steel shutters arranged to close automatically upon the operation of a fusible link.

(5) The fusible link referred to in Clauses (4)(a) and (d) shall comply with ULC-S505, "Standard for Fusible Links for Fire Protection Service".

(6) The wired glass screens and glass block referred to in Clauses (4)(b) and (c) shall be installed in accordance with Article 3.1.8.14. of the **1990 Building Code**.

Lighting

9.5.3.8. **Public corridors** and stairways that form part of a **means of egress** shall be adequately illuminated to allow for the safe evacuation of occupants.

Emergency lighting

9.5.3.9. (1) Emergency lighting shall be provided in **exit** stairways, **public corridors** and other principal **access to exits** where the **occupant load** in a **building** exceeds 24 persons or there are more than 10 **dwelling units**.

(2) Emergency lighting required in Sentence (1) shall be

(a) designed to provide illumination for a duration of at least 30 min,

(b) supplied by a source of energy separate from the primary electrical supply for the **building**, and

(c) designed to be automatically actuated when the power to the **building** is interrupted.

(3) Illumination from emergency lighting shall be an average of at least 10 lx at floor or tread level, or 1 watt/m^2 of floor space.

Subsection 9.5.4. Fire Alarm and Detection

Fire alarm requirements

9.5.4.1. (1) A fire alarm system shall be installed in accordance with Articles 3.2.4.2. to 3.2.4.6., 3.2.4.8., 3.2.4.9. and 3.2.4.17. and Sentences 3.2.7.8.(1) to (4) of the **1990 Building Code**, where

(a) the **building** is greater than 3 **storeys** in **building height**, or

(b) sleeping accommodation is provided for more than 10 persons.

(2) A **building** not greater than 3 **storeys** in **building height** that contains not more than 10 **dwelling units** and provides sleeping accommodation for not more than 24 persons is deemed to be in compliance with Sentence (1) where the **building** is equipped with

(a) **smoke alarms** in accordance with Article 9.5.4.4., installed and interconnected so that the actuation of any **smoke alarm** will sound a similar signal in each of the interconnected devices, and

(b) a manual pull station at each exterior **exit** door for the actuation of the **smoke alarms** in Clause (a).

(3) A **building** is deemed to be in compliance with Sentence (1) where

(a) each **exit** and **public corridor** is shared by not more than four **dwelling units** or not more than 10 persons in boarding, lodging, rooming or dormitory accommodation, or

(b) each **dwelling unit** and **suite** has direct access to outdoors by a door near ground level.

Non-electric fire alarm systems

9.5.4.2. (1) Existing manually operated, non-electric alarm systems employing mechanical gongs are deemed to be in compliance with Sentence 9.5.4.1.(1), where

(a) the **building** is not more than 2 **storeys** in **building height**,

(b) not more than two manual fire alarm stations are required in the **building**, and

(c) each gong is audible in every location in the **building**.

Automatic detection

9.5.4.3. (1) Automatic detection devices referred to in Sentences (2) and (3) shall be installed and connected to the fire alarm system required in Sentence 9.5.4.1.(1).

(2) **Fire detectors** shall be installed in storage rooms, locker rooms, **service rooms**, machinery rooms, heating rooms, incinerator rooms, linen and refuse chute intake compartments, janitors' closets

and **refuse storage rooms**, at the tops of elevator shafts and **exit** stair shafts and in any room or area where hazardous or combustible materials may be used or stored.

(3) Rooms or areas that are **sprinklered** in accordance with Article 3.2.4.16. of the **1990 Building Code** are deemed to be in compliance with Sentence (2).

Interconnected smoke alarms

9.5.4.4. (1) Interconnected **smoke alarms** required in Sentence 9.5.4.1.(2), Subclause 9.5.2.2.(3)(b)(i) or Clause 9.5.2.8.(5)(b) shall be

(a) installed on or near the ceiling in **public corridors** of each **floor area**, adjacent to each stairway serving the **public corridor** and on or near the ceiling in the **basement**, adjacent to each stairway,

(b) audible throughout the **suites**,

(c) connected to an electrical circuit with no disconnect switch between the overcurrent device and the **smoke alarms**, and

(d) **listed** for use in an interconnected installation.

Smoke alarms

9.5.4.5. (1) **Smoke alarms** shall be installed in each **dwelling unit** and in each sleeping room not within a **dwelling unit** in accordance with Article 3.2.4.21. of the **1990 Building Code**.

(2) Battery-operated **smoke alarms** are deemed to be in compliance with Sentence 3.2.4.21.(4) of the **1990 Building Code**.

(3) **Smoke alarms** shall meet the requirements of

(a) CAN/ULC-S531, “Standard for Smoke Alarms”, and

(b) CAN/ULC-S553, “Standard for the Installation of Smoke-Alarms”.

(4) REVOKED: O. Reg. 256/14, s. 372 (2).

Existing fire alarm systems

9.5.4.6. Despite Articles 9.5.4.1. to 9.5.4.4., where the performance and reliability of an existing fire alarm system will provide an adequate early warning level, the existing system may remain, be modified or be extended, if compatibility of the components is maintained and the system is **approved**.

Subsection 9.5.5. Suppression

Access for fire fighting

9.5.5.1. (1) Access routes for fire fighting shall be provided in accordance with the requirements of Articles 3.2.5.5. to 3.2.5.7. of the **1990 Building Code**.

(2) Sentence (1) does not apply where the **building** is **sprinklered**.

Standpipe systems

9.5.5.2. (1) A standpipe and hose system in accordance with Articles 3.2.9.1. to 3.2.9.7. of the **1990 Building Code** shall be installed in **buildings** more than 4 **storeys** in **building height** where the fifth or sixth **storey** is used for a **residential occupancy**.

(2) A wet or dry standpipe system is deemed to be in compliance with Sentence (1) where it includes

(a) a 50 mm riser and 50 mm extensions,

(b) capped 38 mm hose valves located so that any point on the **floor area** may be reached by 30 m of hose plus 3 m of hose stream from at least one hose valve,

(c) a **fire department** connection in accordance with Sentences 3.2.9.5.(2) to (9) of the **1990 Building Code**, and

(d) a water supply in accordance with Sentences 3.2.9.3.(1) to (3) of the **1990 Building Code**.

(3) Despite Sentences (1) and (2), existing standpipe systems and water supplies may be used if the systems or measures will provide sufficient fire suppression capability in the circumstances and if the systems or measures are **approved**.

Sprinkler systems

9.5.5.3. (1) Where a **building** or portion thereof is required to be **sprinklered**, the sprinkler system shall be designed and constructed in accordance with Articles 3.2.5.13. to 3.2.5.16. of the **1990 Building Code**.

(2) Existing sprinkler systems are deemed to be in compliance with Sentence (1) if the average sprinkler discharge density over the design area is at least equal to the minimum density corresponding to the area for light hazard classification as defined in NFPA 13, "Standard for the Installation of Sprinkler Systems", or NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height", whichever is applicable.

(3) Despite Sentences (1) and (2), existing sprinkler systems providing adequate protection that will control or extinguish fire and that are **approved** may be used.

SECTION 9.6 BUILDINGS HIGHER THAN 6 STOREYS IN BUILDING HEIGHT WITH RESIDENTIAL OCCUPANCIES

Subsection 9.6.1. Application and General

Application

9.6.1.1. (1) This Section applies to **buildings** higher than 6 **storeys** in **building height** with **residential occupancies** and containing

(a) more than two **dwelling units**,

(b) sleeping accommodation for more than 10 persons in one or more dormitories, or

(c) boarding, lodging or rooming accommodation for more than 10 persons.

(2) Despite Sentence (1), if a **building** containing a **residential occupancy** that is governed by this Section contains, in addition to its **residential occupancies**, one or more other **occupancies** that are not governed by this Part, this Section does not apply to the fire safety systems, devices or structural elements of any of the other **occupancies** that do not affect the life safety of the **residential occupancy**.

(3) If a **building** that is governed by this Section contains, in addition to its **residential occupancies**, one or more other **occupancies** that are governed by other Sections of this Part, the fire safety systems, devices and structural elements of all of the **occupancies** governed by this Part shall comply with the requirements of this Part that provide the greatest protection for life safety.

(4) REVOKED: O. Reg. 256/14, s. 375.

Exemption for convents, monasteries and hotels

9.6.1.2. (1) This Section does not apply to convents and monasteries.

(2) This Section does not apply to a **building** or part of a **building** regulated under Section 9.9.

Definitions

9.6.1.3. For the purposes of this Section,

"**1990 Building Code**" means Ontario Regulation 413/90, as it read on October 9, 1992;

"existing" means in existence on October 9, 1992.

Subsection 9.6.2. Containment

Construction

9.6.2.1. (1) **Fire separations** required under this Section to have a **fire-resistance rating** shall comply with Subsection 3.1.7. and Articles 3.1.8.1., 3.1.8.3., and 3.5.4.2. of the **1990 Building Code**.

(2) If a **fire-resistance rating** of 1 h or less is required, existing wall assemblies, floor assemblies and their supporting assemblies are deemed to comply with Sentence (1) if they consist of

(a) reinforced concrete,

(b) masonry,

(c) clay tile with plaster or gypsum board finish on both sides, or

(d) membranes of lath and plaster or gypsum board.

Floor assemblies

9.6.2.2. (1) Floor assemblies shall be **fire separations** having a **fire-resistance rating** not less than 1 h.

(2) Walls, columns and arches supporting floor assemblies shall have a **fire-resistance rating** not less than 1 h.

(3) Sentences (1) and (2) do not apply to floor assemblies between different levels of the same multi-level **dwelling unit**.

Combustible construction

9.6.2.3. (1) **Buildings** of **combustible construction** shall be **sprinklered**.

(2) Where only the roof assembly is of **combustible construction**, the **building** is deemed to be in compliance with Sentence (1) where

(a) the ceiling membrane has a **fire-resistance rating** not less than 45 min and the **attic space** is **fire stopped** in accordance with Article 3.1.11.5. of the **1990 Building Code**,

(b) the roof assembly is of **heavy timber construction** in accordance with Article 3.1.4.6. of the **1990 Building Code**, or

(c) the top **storey** and **attic space** are **sprinklered**.

Fire separations between occupancies

9.6.2.4. (1) **Fire separations** having a **fire-resistance rating** not less than 1 h shall be provided between **residential occupancies** and other **major occupancies**.

(2) Existing **fire separations** having a **fire-resistance rating** not less than 30 min are deemed to comply with Sentence (1) if the other **major occupancy** is **sprinklered**.

Fire separations between dwelling units and corridors

9.6.2.5. (1) Each **dwelling unit** and sleeping room not within a **dwelling unit** shall be separated from adjacent rooms and areas by a **fire separation** having a **fire-resistance rating** not less than 45 min.

(2) **Public corridors** shall be separated from adjacent rooms and areas by a **fire separation** having a **fire-resistance rating** not less than 45 min.

(3) Existing **fire separations** having less than a 45 min **fire-resistance rating** are deemed to be in compliance with Sentences (1) and (2) where the **floor area** is **sprinklered**.

(4) Existing **fire separations** having a **fire-resistance rating** not less than 30 min are deemed to comply with Sentences (1) and (2) if **smoke detectors** are installed in **public corridors**.

Protection of openings in fire separations

9.6.2.6. (1) **Closures** in **fire separations** shall be in accordance with Sentences 3.1.8.4.(2), 3.1.8.10.(1) and 3.1.8.11.(1) and Articles 3.1.8.13. and 3.3.4.5. of the **1990 Building Code**.

(2) Openings in **fire separations** required to have a 30 min **fire-resistance rating** shall be protected with **closures** having a 20 min **fire-protection rating**.

(3) Where a 1.5 h **fire-protection rating** is required, existing **closures** consisting of hollow metal or kalamein doors in hollow metal frames, with openings, if any, protected by wired glass panels not exceeding 645 cm^2, and equipped with self-closing and latching devices are deemed to be in compliance with Sentence (1).

(4) Where a 1 h or 45 min **fire-protection rating** is required, existing **closures** are deemed to be in compliance with Sentence (1) where they consist of

(a) hollow metal or kalamein doors in hollow metal frames, with openings, if any, protected by wired glass, and equipped with self-closing and latching devices, or

(b) wired glass screens set in fixed steel frames.

(5) Where a 20 min **fire-protection rating** is required, or in a **fire separation** required under Article 9.6.2.5., existing **closures** consisting of 45 mm solid core wood doors installed in solid wood or hollow metal frames and equipped with self-closing and latching devices are deemed to be in compliance with Sentences (1) and (2).

(6) Where the **floor area** is **sprinklered**, existing **closures** in **fire separations** to which Article 9.6.2.5. applies are deemed to be in compliance with Sentence (2) and Sentences 3.1.8.4.(2) and 3.1.8.10.(1) of the **1990 Building Code**.

(7) Despite Sentence (1), garbage intake room doors that swing inward shall be acceptable without a latching device.

(8) Existing operable transoms and glass lights shall be fixed shut and shall meet the **fire-protection rating** requirements of Sentences (1) and (2).

(9) Despite Sentences (1) and (2), **fire dampers** or **fire-stop flaps** are not required in existing noncombustible ducts at penetrations of **fire separations**.

Storage rooms

9.6.2.7. (1) Storage rooms for the use of occupants, not contained within a **dwelling unit** or **suite**, shall be

(a) separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 1 h, and

(b) **sprinklered** in accordance with Article 9.6.5.5.

(2) Despite Clause (1)(b), existing sprinkler systems or alternate fire protection systems that will control or extinguish fire and that are **approved** may be used.

Fuel-fired appliance service rooms

9.6.2.8. (1) Fuel-fired **appliances** shall be enclosed in a **service room** separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 1 h.

(2) Sentence (1) does not apply to fuel-fired **appliances** that serve only one **dwelling unit** or **suite**.

Incinerator rooms

9.6.2.9. (1) Incinerator rooms shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 2 h.

(2) A **fire separation** having a **fire-resistance rating** not less than 1 h is deemed to comply with Sentence (1) if the incinerator room is **sprinklered**.

Combustion air

9.6.2.10. Where a **service room** is separated in accordance with Article 9.6.2.8., sufficient combustion air shall be brought directly from the outside for the proper combustion and safe operation of the **appliances**.

Refuse storage rooms

9.6.2.11. (1) **Refuse storage rooms** shall be

(a) separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 1 h, and

(b) **sprinklered** to provide a minimum average density of 6.5 L/m^2 over the room area.

Vertical service spaces

9.6.2.12. (1) **Vertical service spaces** shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 45 min.

(2) Where openings in the **vertical service space**, including the top and bottom, are sealed with noncombustible materials having the same **fire-resistance rating** as the existing construction, the **vertical service space** is deemed to be in compliance with Sentence (1).

Refuse and linen chutes

9.6.2.13. (1) Each room into which a linen or refuse chute discharges shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 1 h.

(2) Automatic sprinklers shall be installed in each linen or refuse chute

(a) at the top,

(b) at alternate floor levels, and

(c) in the room or bin into which the chute discharges.

(3) An existing chute installation is deemed to be in compliance with Sentence (2) where

(a) the chute outlet in the discharge room is protected by an automatic, self-latching **closure** held open by a fusible link,

(b) the room into which the chute discharges is **sprinklered**, and

(c) at least one sprinkler head with a minimum discharge rate of 66 L/min is located at the top of the chute.

Transformer vaults

9.6.2.14. Transformer vaults to which the **Electricity Act, 1998** applies shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 2 h and shall be provided with **heat detectors** connected to the fire alarm system.

Storage garages

9.6.2.15. (1) A **storage garage** shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 1.5 h.

(2) Underground **storage garages** shall be **sprinklered**.

(3) Sentence (2) does not apply to an underground **storage garage** that is equipped with **heat detectors** connected to the fire alarm system and that has vestibules located at points of access to the **residential occupancy**.

Smoke control measures

9.6.2.16. (1) **Buildings** where the vertical distance between the floor of the top **storey** and **grade** exceeds 18 m shall have smoke control measures in accordance with Article 3.2.6.2. of the **1990 Building Code**.

(2) **Buildings** are deemed to be in compliance with Sentence (1) where

(a) all **dwelling units** have access to an exterior balcony,

(b) the length of **public corridors** does not exceed 30 m between **exits**,

(c) **public corridors** on each **floor area** are equipped with **smoke detectors** connected to the fire alarm system,

(d) **public corridors** on each **floor area** are subdivided in accordance with Sentence (3), or

(e) the **building** is fully **sprinklered**.

(3) The **public corridor** subdivision referred to in Clause (2)(d) shall

(a) separate the corridor into at least two compartments by a **fire separation**,

(b) be located so that no more than one of the required **exit** stairs is located in any one compartment and the distance of travel from any **suite** entrance door to an **exit** or adjacent compartment does not exceed 25 m, and

(c) include smoke-tight doors equipped with self-closing devices that act as **closures** in the **fire separation**.

Subsection 9.6.3. Means of Egress

Access to exits

9.6.3.1. (1) Each **dwelling unit** or **suite** in a **floor area** shall have a doorway leading to

(a) the outside at or near **grade**,

(b) an outside passageway where it is possible to go in opposite directions to separate **exits**, or

(c) a **public corridor** where it is possible to go in opposite directions to separate **exits**.

(2) **Access to exits** through a dead end **public corridor** is deemed to be in compliance with Clause (1)(c) where the distance of travel, measured from any door along the corridor to a point where a choice of two directions of **exit** travel is available, does not exceed 6 m plus the width of the corridor.

(3) Existing dead end **public corridors** are deemed to be in compliance with Sentence (2) where additional fire protection measures are **approved** that, in the opinion of the **Chief Fire Official**, will provide protection for life safety similar to the protection provided by compliance with Sentence (2).

(4) Despite Sentence (1), if a **dwelling unit** or **suite** has access to a second and separate **exit**, a doorway from the **dwelling unit** or **suite** may open onto

(a) an **exit** stairway,

(b) a **public corridor** served by a single **exit**, or

(c) an outside passageway served by a single **exit** stairway.

Number of exits

9.6.3.2. (1) Each **floor area** shall be served by a minimum of two **exits**.

(2) The minimum distance between **exits** shall be 9 m or half the maximum diagonal dimension of the **floor area**, whichever is less.

Travel distance

9.6.3.3. (1) The **travel distance** to at least one **exit** shall not exceed

(a) 30 m in a **floor area** that is not **sprinklered**, or

(b) 45 m in a **sprinklered floor area**.

Stairway separations

9.6.3.4. (1) Each **exit** stairway shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 1h.

(2) **Closures** in stairway **fire separations** shall be in accordance with Article 9.6.2.6.

Door swing

9.6.3.5. Each **exit** door, except those serving a single **dwelling unit**, shall open in the direction of **exit** travel and swing on its vertical axis.

Exit signs

9.6.3.6. (1) **Exit** signs shall be installed in accordance with Subsection 3.4.5. of the **1990 Building Code**.

(2) Each door opening into an **exit** stairway from a **public corridor** shall be identified on the stairway side with the number assigned to that floor in accordance with Article 3.4.6.17. of the **1990 Building Code**.

Interior finishes

9.6.3.7. (1) **Flame-spread ratings** of interior wall and ceiling finishes within a **means of egress** shall be in accordance with Article 3.1.13.7. of the **1990 Building Code**.

(2) Despite Sentence (1), existing interior wall and ceiling finishes within an **access to exit** may be **approved** if, in the opinion of the **Chief Fire Official**, they will provide protection for life safety similar to the protection provided by compliance with Sentence (1).

Lighting

9.6.3.8. **Public corridors** and stairways that form part of a **means of egress** shall be adequately illuminated to allow for the safe evacuation of occupants.

Emergency lighting

9.6.3.9. (1) Emergency lighting shall be provided in **exit** stairways, **public corridors** and other principal **access to exits**.

(2) Emergency lighting required in Sentence (1) shall be

(a) designed to provide illumination for a duration of at least

(i) 2 h in **buildings** whose highest floor level is more than 18 m above **grade**, and

(ii) 30 min in **buildings** whose highest floor level is not more than 18 m above **grade**,

(b) supplied by a source of energy separate from the primary electrical supply for the **building**, and

(c) designed to be automatically actuated when the power to the **building** is interrupted.

(3) Illumination from emergency lighting shall be an average of at least 10 lx at floor or tread level, or 1 watt/m^2 of floor space.

Subsection 9.6.4. Fire Alarm and Detection

Fire alarm requirements

9.6.4.1. (1) A fire alarm and detection system shall be installed in each **building** in accordance with Articles 3.2.4.1. to 3.2.4.14., 3.2.4.16. to 3.2.4.20., 3.2.4.22. and 3.2.7.8. of the **1990 Building Code**.

(2) An existing fire alarm system is deemed to be in compliance with Sentence (1) where the system

(a) complies with Articles 9.6.4.2. to 9.6.4.9., and

(b) operates in accordance with Article 3.2.4.4. of the **1990 Building Code**.

Automatic detection

9.6.4.2. (1) Automatic detection devices referred to in Sentences (2) and (3) shall be installed and connected to the fire alarm system required in Sentence 9.6.4.1.(2).

(2) **Fire detectors** shall be installed in storage rooms, locker rooms, **service rooms**, machinery rooms, heating rooms, incinerator rooms, linen and refuse chute intake compartments, janitors' closets and **refuse storage rooms**, at the tops of elevator shafts and **exit** stair shafts and in any room or area where hazardous or combustible materials may be used or stored.

(3) Rooms or areas that are **sprinklered** in accordance with Article 3.2.4.16. of the **1990 Building Code** are deemed to be in compliance with Sentence (2).

Manual pull stations

9.6.4.3. Manual pull stations shall be provided in accordance with Article 3.2.4.17. of the **1990 Building Code**.

Electrical supervision

9.6.4.4. (1) The fire alarm system shall be electrically supervised.

(2) Despite Sentence (1), electrical supervision of the bell circuits is not required where bells operate on more than one circuit on each floor.

Annunciator panels

9.6.4.5. (1) An annunciator panel shall

(a) be located at the main **street** entrance to the **building** or a location that is accessible to the **fire department** and that is **approved**, and

(b) indicate all floors with not more than one floor per zone indicated.

(2) Despite Clause (1)(b), existing annunciator zone indication that is compatible with the fire safety plan required under Subsection 2.8.2. and that is **approved** may be used.

Signals to the fire department

9.6.4.6. Fire alarm systems in **buildings** where the vertical distance between the floor of the top **storey** and **grade** exceeds 18 m shall have provision for notifying the **fire department** in accordance with Sentences 3.2.4.7.(1) to (4) of the **1990 Building Code** that a fire **alarm signal** or **alert signal** has been initiated.

Voice communication systems

9.6.4.7. (1) A voice communication system shall be provided where the vertical distance between the floor of the top **storey** and **grade** exceeds 36 m.

(2) The voice communication system required by Sentence (1) shall

(a) consist of loudspeakers operated from the central alarm and control facility or other location that is accessible to the **fire department** and **supervisory staff** required under Subsection 2.8.2. and that is **approved**,

(b) provide a clear verbal signal throughout the **building**, except for within elevator cars, and

(c) provide for automatic silencing of the fire alarm devices when the loudspeakers are in use.

(3) **Approved** existing public address systems compatible with the fire safety plan required under Subsection 2.8.2. and capable of communicating instructions to the **building** occupants are deemed to be in compliance with Sentences (1) and (2).

Emergency power

9.6.4.8. Fire alarm and voice communication systems shall be provided with an electrically supervised emergency power supply in accordance with Article 3.2.7.8. of the **1990 Building Code**.

Shutdown of air handling systems

9.6.4.9. Recirculating air handling systems that serve more than one **dwelling unit**, **suite** or **storey** shall be equipped with a duct-type **smoke detector** that will automatically shut down the system upon actuation of the **smoke detector**.

Smoke alarms

9.6.4.10. (1) **Smoke alarms** shall be installed in each **dwelling unit** and in each sleeping room not within a **dwelling unit** in accordance with Article 3.2.4.21. of the **1990 Building Code**.

(2) Battery-operated **smoke alarms** are deemed to be in compliance with Sentence 3.2.4.21.(4) of the **1990 Building Code**.

(3) **Smoke alarms** shall meet the requirements of

(a) CAN/ULC-S531, “Standard for Smoke Alarms”, and

(b) CAN/ULC-S553, “Standard for the Installation of Smoke-Alarms”.

(4) REVOKED: O. Reg. 256/14, s. 393 (2).

Subsection 9.6.5. Suppression

Access for fire fighting

9.6.5.1. (1) Access routes for fire fighting shall be provided in accordance with Articles 3.2.5.5. to 3.2.5.7. of the **1990 Building Code**.

(2) Sentence (1) does not apply where the **building** is **sprinklered**.

Standpipe systems

9.6.5.2. (1) A standpipe and hose system in accordance with Subsection 3.2.9. of the **1990 Building Code** shall be installed in each **building**.

(2) A wet or dry standpipe system is deemed to be in compliance with Sentence (1) where the system includes

(a) a minimum 150 mm diameter riser located in each stairwell, with 38 mm and 65 mm capped fire hose valves at each **storey**,

(b) capped 38 mm fire hose valves located in the **public corridor** so that any point on a **floor area** may be reached by 30 m of hose plus 3 m of hose stream from at least one hose valve,

(c) flow rates as required by Clauses 3.2.9.3.(4)(b) and (c) of the **1990 Building Code** for **buildings** less than 84 m in height, measured between **grade** and the ceiling level of the top **storey**,

(d) flow rates as required by Clause 3.2.9.3.(5)(b) of the **1990 Building Code** for **buildings** 84 m or more in height, measured between **grade** and the ceiling level of the top **storey**, and

(e) a water supply in accordance with Sentences 3.2.9.3.(1) and (2) of the **1990 Building Code**.

(3) An existing standpipe and hose system capable of delivering a minimum flow rate of 265 L/min for at least 30 min at a minimum discharge pressure of 345 kPa (gauge) at the two highest and most remote hose valves is deemed to be in compliance with Clauses (2) (a), (c), (d) and (e) if not less than 132 L/min can be supplied from each of the two outlets simultaneously.

(4) Emergency power shall be provided for a standpipe system that is designed with at least one pressure zone located above another, such that the water supply for the booster pump in the upper zone must be supplied from the pump in the zone below.

Fire department connections

9.6.5.3. (1) A **fire department** connection in accordance with Sentences 3.2.9.5.(2) to (9) of the **1990 Building Code** shall be provided.

(2) Despite Sentence (1), a **fire department** connection is not required where a booster pump equipped with emergency power is provided.

(3) Despite Sentence (1), existing **fire department** connections that are visible and accessible to the **fire department** and that are **approved** may be used.

Hydrants

9.6.5.4. (1) Hydrants shall be located within 90 m of the **building** face on which the principal entrance is located.

(2) A hydrant located within 45 m of a **fire department** connection, as required by Sentence 9.6.5.3.(1), is deemed to be in compliance with Sentence (1).

(3) Despite Sentence (1), existing hydrant locations that provide sufficient fire suppression capability in the circumstances and that are **approved** may be used.

Sprinkler systems

9.6.5.5. (1) Where a **building** or portion thereof is required to be **sprinklered**, the sprinkler system shall be designed and constructed in accordance with Articles 3.2.5.13. to 3.2.5.16. of the **1990 Building Code**.

(2) Existing sprinkler systems in which the average sprinkler discharge density over the design area is at least equal to the minimum density corresponding to the area for light hazard classification as defined in NFPA 13, "Standard for the Installation of Sprinkler Systems", are deemed to be in compliance with Sentence (1).

Firefighters' elevators

9.6.5.6. (1) At least one elevator shall be provided for use by firefighters in accordance with Articles 3.2.6.8. and 3.2.6.9. of the **1990 Building Code** in **buildings** where the vertical distance between the floor of the top **storey** and **grade** exceeds 18 m.

(2) An elevator is deemed to be in compliance with Sentence (1) where

(a) the elevator is capable of providing transportation from the **street** floor to every floor served by the elevator system,

(b) the elevator is identified on the **street** floor as an elevator provided for use by firefighters,

(c) the elevator satisfies the requirements of Sentences 3.2.6.8.(1) to (4) of the **1990 Building Code**, and

(d) other elevator cabs in the same shaft as the elevator for use by firefighters satisfy the requirements of Sentences 3.2.6.8.(1) and (2) of the **1990 Building Code**.

(3) An elevator system that requires transfer from one elevator to another to reach all floors above **grade** is deemed to be in compliance with Sentence (1) where

(a) the elevators are identified on the **street** floor and the transfer floor as elevators provided for firefighters' use,

(b) the elevators satisfy the requirements of Sentences 3.2.6.8.(1) to (4) of the **1990 Building Code**,

(c) emergency power is provided capable of operating one elevator car at a time, in **buildings** where the vertical distance between the floor of the top **storey** and **grade** exceeds 36 m, and

(d) other elevator cabs in the same shaft as the elevator for use by firefighters satisfy the requirements of Sentences 3.2.6.8.(1) and (2) of the **1990 Building Code**.

Emergency power supply

9.6.5.7. (1) Emergency electric power shall be provided in accordance with Articles 3.2.7.5. and 3.2.7.8. of the **1990 Building Code** if the power is provided for

(a) fire alarm and detection systems referred to in Sentence 9.6.4.1.(1) and Article 9.6.4.8.,

(b) booster pumps serving standpipe systems referred to in Sentences 9.6.5.2.(4) and 9.6.5.3.(2), and

(c) elevators referred to in Clause 9.6.5.6.(3)(c).

(2) Despite Sentence (1), existing emergency electric power generators that will provide reliable and sufficient electric power and that are **approved** may be used.

SECTION 9.7 BUILDINGS WITH A CARE OCCUPANCY OR RETIREMENT HOME

Subsection 9.7.1. Application and General

Application

9.7.1.1. (1) This Section applies to **buildings** containing a **care occupancy** or **retirement home**.

(2) Despite Sentence (1), this Section does not apply to a **building** or part of a **building** that is a home or hospital regulated by Section 9.4.

(3) Despite Sentence (1), if a **building** containing a **care occupancy** or **retirement home** also contains one or more other **occupancies** that are not governed by this Part, this Section does not apply to the fire safety systems, devices and structural elements of any of the other **occupancies** that do not affect the life safety of the **care occupancy** or **retirement home**.

Conflict

9.7.1.2. (1) In the event of a conflict between this Section and any other Section of this Part that applies to a **care occupancy** or **retirement home**, this Section prevails.

(2) If a **building** containing a **care occupancy** or **retirement home** also contains one or more other **occupancies** that are governed by other Sections of this Part, the fire safety systems, devices and structural elements of all the **occupancies** governed by this Part shall comply with the requirements that provide the greatest protection for life safety.

Additional requirements

9.7.1.3. (1) In addition to the requirements of this Section,

(a) a **building** not greater than 6 **storeys** in **building height** shall comply with Subsections 9.5.2. to 9.5.5., and

(b) a **building** greater than 6 **storeys** in **building height** shall comply with Subsections 9.6.2. to 9.6.5.

(2) Clause (1) (a) does not apply to a **building** not greater than 3 **storeys** in **building height** that provides sleeping accommodation for not more than four persons.

Definitions

9.7.1.4. For the purposes of this Section,

"**1990 Building Code**" means Ontario Regulation 413/90, as it read on October 9, 1992;

"existing" means in existence on January 1, 2014.

Subsection 9.7.2. Containment

Self-closing devices

9.7.2.1. (1) Doors opening onto corridors that are **access to exits** and that serve resident **suites,** and resident sleeping rooms not within **suites**, in **care occupancies** and **retirement homes** shall be equipped with self-closing devices.

(2) Sentence (1) does not apply

(a) in **buildings** 3 **storeys** or less in **building height** that provide sleeping accommodation for 10 or fewer persons, and

(b) in **buildings** where all of the **corridors** referred to in Sentence (1) are subdivided in accordance with Sentence (3).

(3) The corridor subdivision referred to in Clause (2)(b) shall

(a) subdivide the corridor into at least two zones using **fire separations** that contain smoke-tight doors equipped with self-closing devices that act as **closures**,

(b) be arranged so that each subdivided corridor zone is able to accommodate, in addition to its own occupants, the occupants from any single adjacent zone, based on the requirements of 1.6 m^2 per person, unless otherwise **approved**, and

(c) be arranged so that the travel distance from any point in a subdivided corridor zone to an adjacent zone is no more than 15 m.

Subsection 9.7.3. Means of Egress

Emergency lighting

9.7.3.1. (1) Emergency lighting shall be provided in **exit** stairways, **public corridors** and other principal **access to exits**.

(2) The emergency lighting shall be

(a) designed to provide illumination for a duration of at least 30 min,

(b) supplied by a source of energy that is separate from the primary electrical supply for the **building**, and

(c) designed to be automatically activated when the power to the **building** is interrupted.

(3) The emergency lighting shall provide illumination that is at least an average of 10 1x at floor or tread level or at least 1 watt / m^2 of floor space.

(4) Sentence (1) does not apply in **buildings** 3 **storeys** or less in **building height** that provide sleeping accommodation for 10 or fewer persons.

Subsection 9.7.4. Fire Alarm and Detection

Fire signal to fire department

9.7.4.1. (1) Fire alarm systems shall have provision for notifying the **fire department** in accordance with Article 3.2.4.7. of the **1990 Building Code** that a fire **alarm signal** or **alert signal** has been activated.

(2) Fire alarm systems equipped with a monitoring service that complies with CAN/ULC-S561, “Installation and Services for Fire Signal Receiving Centres and Systems” are deemed to comply with Sentence (1).

(3) Sentence (1) does not apply to **buildings** equipped with an interconnected **smoke alarm** system.

Sprinkler signal to fire department

9.7.4.2. (1) Sprinkler systems required by this Section shall have provision for notifying the **fire department** in accordance with Article 3.2.4.7. of the **1990 Building Code** that the sprinkler system has been activated.

(2) Sprinkler systems equipped with a monitoring service that complies with CAN/ULC-S561, “Installation and Services for Fire Signal Receiving Centres and Systems” are deemed to comply with Sentence (1).

(3) Sentence (1) does not apply where the fire alarm system or interconnected **smoke alarm** system has provision for notifying the **fire department** in accordance with Article 3.2.4.7. of the **1990 Building Code** that a fire **alarm signal** or **alert signal** has been activated.

Smoke alarms

9.7.4.3. (1) A **smoke alarm** shall be installed in each **suite** and in each sleeping room not within a **suite**.

(2) **Smoke alarms** shall be installed with permanent connections to an electrical circuit and shall have no disconnect switch between the overcurrent device and the **smoke alarm**.

(3) Battery-operated **smoke alarms** are deemed to be in compliance with Sentence (2).

(4) **Smoke alarms** required in Sentence (1) shall conform to CAN/ULC-S531, "Standard for Smoke Alarms".

(5) **Smoke alarms** required in Sentence (1) shall be installed in accordance with CAN/ULC-S553, "Standard for the Installation of Smoke-Alarms".

(6) REVOKED: O. Reg. 256/14, s. 399 (2).

(7) A **smoke detector** that is installed in each **suite** and in each sleeping room not within a **suite** is deemed to be in compliance with Sentence (1) if it is connected to a fire alarm system.

Voice communication systems

9.7.4.4. (1) A voice communication system conforming to Article 3.2.4.22. of the **1990 Building Code** shall be provided in every **building** where a **floor area** that is more than 18 metres above **grade** contains a **care occupancy** or a **retirement home**.

(2) A voice communication system is deemed to be in compliance with Sentence (1) if it

(a) consists of loudspeakers operated from,

(i) the central alarm and control facility, or

(ii) another location that is accessible to the **fire department** and **supervisory staff** required under Subsection 2.8.2. and that is **approved**,

(b) provides a clear verbal signal throughout the **building**, except within elevator cars, and

(c) provides for automatic silencing of the fire alarm devices when the loudspeakers are in use.

(3) A public address system capable of providing a clear verbal signal throughout the **building**, though not within elevator cars, is deemed to be in compliance with Sentence (1).

Subsection 9.7.5. Suppression

Sprinkler systems

9.7.5.1. (1) An automatic sprinkler system shall be installed in each **building** in accordance with NFPA 13, "Standard for the Installation of Sprinkler Systems".

(2) Despite Sentence (1), in a **building** not greater than 3 **storeys** in **building height** that provides sleeping accommodation for not more than 10 persons, a sprinkler system may be installed in accordance with NFPA 13D, "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes", except that the minimum quantity of available water shall be adequate for a demand duration of at least 20 minutes if stored water is used as the sole water supply source.

(3) Despite Sentence (1), in a **building** not greater than 6 **storeys** in **building height**, a sprinkler system may be installed in accordance with NFPA 13R, "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height".

(4) An existing sprinkler system that provides an average sprinkler discharge density over a design area that is equal to the minimum density corresponding to the area for light hazard classification as defined in NFPA 13, "Standard for the Installation of Sprinkler Systems", is deemed to be in compliance with Sentence (1).

(5) Sprinkler systems shall be equipped with local electric waterflow alarms.

(6) If a fire pump is required by NFPA 13 or NFPA 13R, it shall be installed in accordance with NFPA 20, "Installation of Stationary Pumps for Fire Protection", if it has a rated net head pressure greater than 280 kPa.

(7) Sentences (1) to (6) do not apply to a **building** not greater than 3 **storeys** in **building height** that provides sleeping accommodation for not more than four persons, if the **building** is equipped with **smoke alarms** that comply with Article 9.5.4.4. and that are interconnected so that the activation of any **smoke alarm** will sound a similar signal in each of the interconnected **smoke alarms**.

SECTION 9.8 TWO UNIT RESIDENTIAL OCCUPANCIES

Subsection 9.8.1. Application and General

Application

9.8.1.1. (1) This Section applies to a detached house, semi-detached house or row house containing two existing **residential units**, if

(a) the **building** is 3 **storeys** or less in **building height**,

(b) the **building area** does not exceed 600 m^2, and

(c) one **residential unit** or a portion of a **residential unit** is situated above another **residential unit**, or two **residential units** side by side share a common interior means of escape.

Definitions

9.8.1.2. (1) For the purposes of this Section,

"**1994 Building Code**" means Regulation 61 of the Revised Regulations of Ontario, 1990, as it read on July 14, 1994;

"existing" means in existence on July 14, 1994;

"row house" means a residential structure which

(a) is one of a group of three or more horizontally attached residential structures, and

(b) is separated vertically from one or two of the other structures by common walls which do not provide for internal access from the living space in one structure to another;

"semi-detached house" means a residential structure which

(a) is one of two horizontally attached residential structures, and

(b) is separated vertically from the other residential structure by a common wall which does not provide for internal access from the living space in one structure to the other.

Subsection 9.8.2. Containment

General requirements for fire separations

9.8.2.1. (1) **Fire separations** required to have a **fire-resistance rating** by this Section shall comply with Article 9.10.3.1. of the **1994 Building Code** or the corresponding compliance alternatives in Part 11 of the **1994 Building Code**.

(2) Except as permitted in Article 9.8.2.5., a wall or floor assembly required to be a **fire separation** shall be constructed as a continuous barrier against the spread of fire.

(3) Where a 30 min **fire-resistance rating** is required, existing wall assemblies and floor assemblies consisting of membranes of lath and plaster or gypsum board are deemed to be in compliance with Sentence (1).

(4) Where a 15 min **fire-resistance rating** is required, existing wall assemblies and floor assemblies consisting of membranes of plaster board with a plaster skim coat are deemed to be in compliance with Sentence (1).

Fire separations between residential units

9.8.2.2. (1) Subject to Article 9.8.2.3., each **residential unit** shall be separated from other rooms and areas by a **fire separation** having a **fire-resistance rating** not less than 30 min or shall comply with Sentence (2) or (3).

(2) Subject to Article 9.8.2.3., each **residential unit** shall be separated from other rooms and areas by a **fire separation** having a **fire-resistance rating** not less than 15 min and be equipped with interconnected **smoke alarms** that comply with Article 9.8.4.1.

(3) Existing **fire separations** are deemed to be in compliance with Sentence (1) where the detached house, semi-detached house, or row house is **sprinklered** in accordance with Article 9.8.5.1.

Alternative protection for ceilings

9.8.2.3. The **fire-resistance rating** of the **fire separation** above a room containing a fuel-fired **appliance** is not required where the room is **sprinklered**, providing a minimum average density of 6.5 L/min/m^2 over the room area.

Combustion air

9.8.2.4. Where a room containing a fuel-fired **appliance** is enclosed to satisfy other provisions of this Section in a manner that restricts the supply of combustion air, sufficient combustion air shall be brought directly from the outside for the proper combustion and safe operation of the **appliance**.

Protection of openings in fire separations

9.8.2.5. (1) Openings in **fire separation**s required by Sentences 9.8.2.2.(1) and (2) and 9.8.3.3.(1) shall be protected with **closures** conforming to Articles 9.10.13.2. and 9.10.13.10. of the **1994 Building Code**.

(2) Despite Sentence (1), existing 45 mm solid core wood, hollow metal or kalamein doors equipped with self-closing devices, installed in hollow metal or solid wood frames, are acceptable.

(3) Despite Sentence (1), **fire dampers** or **fire-stop flaps** are not required in ducts at penetrations of a **fire separation**.

Subsection 9.8.3. Means of Egress

Requirements for means of escape

9.8.3.1. Each **residential unit** shall be provided with a means of escape conforming to Article 9.8.3.2., 9.8.3.3., 9.8.3.4. or 9.8.3.5.

One means of escape

9.8.3.2. (1) Each **residential unit** shall be served by at least one means of escape consisting of a door that

(a) serves only that **residential unit**,

(b) opens directly to the exterior from that **residential unit**, and

(c) has direct access to ground level.

9.8.3.3. (1) Each **residential unit** shall have direct access to at least one means of escape that may be shared if

(a) the means of escape is separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 30 min,

(b) the **flame-spread rating** of interior wall and ceiling finishes within the means of escape does not exceed 150, and

(c) the means of escape does not involve entering another **residential unit** or other **occupancy** and leads directly to the exterior with direct access to ground level.

(2) Where a means of escape provided by Sentence (1) serves a **residential unit** situated entirely on the third **storey**, the detached house, semi-detached house or row house shall be equipped with interconnected **smoke alarms** conforming to Article 9.8.4.1.

Two means of escape

9.8.3.4. (1) Each **residential unit** shall be served by at least two means of escape arranged in such a manner that

(a) one means of escape shall be through a door which may lead through another **residential unit**, and

(b) the second means of escape shall be through a window if

(i) the window conforms to Sentence (2) or (3), and

(ii) the detached house, semi-detached house or row house is equipped with interconnected **smoke alarms** conforming to Article 9.8.4.1.

(2) A window may serve as a second means of escape if

(a) the sill is not more than 1 m above or below the adjacent ground level,

(b) the window can be opened from the inside without the use of tools,

(c) the window has an individual, unobstructed open portion having a minimum area of 0.38 m^2 with no dimension less than 460 mm,

(d) the sill height does not exceed 900 mm above the floor or fixed steps,

(e) where the window has a window-well, a clearance of at least 1 m is provided in the window-well in front of the window, and

(f) where the window has a window-well, the window opens into the **residential unit** and does not interfere with escape.

(3) A window may serve as a second means of escape if

(a) the window is of a casement type,

(b) the window is not less than 1060 mm high and 560 mm wide,

(c) the sill of the window is not more than 900 mm above the inside floor, and

(d) the sill of the window is not less than 1 m and not more than 5 m above the adjacent ground level.

Existing means of escape with sprinklers

9.8.3.5. An existing means of escape, not conforming to Article 9.8.3.2., 9.8.3.3. or 9.8.3.4., is acceptable if the detached house, semi-detached house or row house is **sprinklered** in accordance with Article 9.8.5.1.

Subsection 9.8.4. Fire Alarm and Detection

Interconnected smoke alarms

9.8.4.1. (1) Interconnected **smoke alarms** required in Sentences 9.8.2.2.(2) and 9.8.3.3.(2) and Clause 9.8.3.4.(1)(b) shall be installed on or near the ceiling in each

(a) **storey** within a **residential unit**, including every **basement**, and

(b) shared means of escape.

(2) **Smoke alarms** referred to in Sentence (1) shall be

(a) electrically interconnected so that the activation of any **smoke alarm** will sound a similar signal in each of the interconnected devices,

(b) installed in accordance with the manufacturer's instructions, and on floor levels containing bedrooms or sleeping areas, the required **smoke alarms** shall be installed between such bedrooms and the remainder of the **residential unit**, such as in a hallway or corridor serving such rooms or areas,

(c) connected to an electrical circuit with no disconnect switch between the overcurrent device and the **smoke alarms**,

(d) **listed** for use in an interconnected installation, and

(e) audible in bedrooms when the intervening doors are closed.

Smoke alarms

9.8.4.2. (1) **Smoke alarms** shall be installed in each **residential unit** in accordance with Sentences 3.2.4.21.(1) to (4) of the **1994 Building Code**.

(2) Battery-operated **smoke alarms** are deemed to be in compliance with Sentence 3.2.4.21.(4) of the **1994 Building Code**.

(3) **Smoke alarms** shall meet the requirements of

(a) CAN/ULC-S531, "Standard for Smoke Alarms", and

(b) CAN/ULC-S553, "Standard for the Installation of Smoke-Alarms".

(4) REVOKED: O. Reg. 256/14, s. 405 (2).

(5) When interconnected **smoke alarms** are installed in accordance with Article 9.8.4.1., the **smoke alarms** referred to in Sentence (1) of this Article are not required.

Subsection 9.8.5. Suppression

Sprinkler systems

9.8.5.1. Sprinkler protection required in this Section shall be designed and installed in conformance with NFPA 13D, "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes".

Subsection 9.8.6. Electrical

Electrical inspections required

9.8.6.1. (1) Each detached house, semi-detached house and row house regulated by this Section shall be subjected to a general **inspection** by the Electrical Safety Authority, as defined in the **Electricity Act, 1998**, and **inspection** fees shall be paid by the **owner**.

(2) Electrical hazards identified during an **inspection** required by Sentence (1) shall be repaired in accordance with the **Electrical Safety Code** made under the **Electricity Act, 1998**.

(3) The letter of compliance from the Electrical Safety Authority, as defined in the **Electricity Act, 1998**, shall be made available to the **Chief Fire Official** upon request.

SECTION 9.9 HOTELS

Subsection 9.9.1. Application and General

Application

9.9.1.1. (1) Except as provided in Sentences (2), (3) and (4), this Section applies to every **hotel establishment**.

(2) Except as required in Sentence (5), this Section does not apply to a **hotel establishment** where every **building** that contains a **hotel**

(a) is not more than 1 **storey** in **building height**, and

(b) has a **building area** of 300 m^2 or less.

(3) Except as required in Sentences (5) and (6), this Section does not apply to a **building** or part of a **building** that was regulated under Section 9.2, 9.3, 9.5 or 9.6 on December 31, 2006 if the use of the **building** is unchanged since that date.

(4) Except as required in Sentence (6), if the **building** contains **major occupancies** that operate under independent control from the **hotel establishment**, this Section does not apply to fire safety systems, devices and structural elements of those **major occupancies** that do not affect the life safety of the **hotel** occupants.

(5) Article 9.9.4.13. applies to a **building** or part of a **building** described in Sentence (2) or (3).

(6) Articles 9.9.2.9. and 9.9.2.15. apply to a **building** or part of a **building** described in Sentence (3) or (4).

(7) REVOKED: O. Reg. 256/14, s. 407 (2).

Building audit

9.9.1.2. (1) A **building** audit shall be prepared and retained by the **owner**.

(2) The **building** audit referred to in Sentence (1) shall identify and describe the existing **building** features in relation to the requirements of this Section, including

(a) containment and control of a fire, including

(i) **fire separations**,

(ii) **firewalls**,

(iii) construction assemblies,

(iv) **occupancy** separations,

(v) interior finishes,

(vi) smoke control,

(vii) heating, ventilating and air-conditioning systems, and

(viii) cooking operations,

(b) detection, including

(i) alarm and detection systems,

(ii) **smoke alarms**, and

(iii) voice communication systems,

(c) suppression, including

(i) **fire department** access,

(ii) standpipe and hose systems,

(iii) sprinkler or special fire suppression systems, and

(iv) firefighters' elevators, and

(d) egress, including

(i) the number, type, **access to**, direction to, lighting for and identification of **exits**,

(ii) fire escapes,

(iii) **occupant load**, and

(iv) emergency lighting.

Definitions

9.9.1.3. For the purposes of this Section,

"**1994 Building Code**" means Regulation 61 of the Revised Regulations of Ontario, 1990, as it read on June 23, 1994;

"existing" means in existence on January 1, 2007.

Subsection 9.9.2. Containment

Construction

9.9.2.1. (1) **Fire separations** required by this Section to have a **fire-resistance rating** shall be in conformance with Subsection 3.1.7. and Articles 3.1.8.1., 3.1.8.2., 3.1.8.3. and 3.5.4.2. of the **1994 Building Code**.

(2) If a **fire-resistance rating** of 2 h or less is required, existing wall assemblies, floor assemblies and their supporting assemblies are deemed to comply with Sentence (1) if they consist of

(a) reinforced concrete,

(b) masonry, or

(c) clay tile with plaster or gypsum board finish on both sides

(3) If a **fire-resistance rating** of 1 h or less is required, existing wall assemblies, floor assemblies, ceilings and their supporting assemblies that consist of membranes of lath and plaster or gypsum board are deemed to be comply with Sentence (1).

(4) **Heavy timber construction** conforming to Article 3.1.4.6. of the **1994 Building Code** is deemed to have a 45 min **fire-resistance rating**.

(5) **Buildings** with limited combustible components may be **approved** as **noncombustible construction**.

(6) Except as permitted in Sentences (7) and (8), floor assemblies shall be **fire separations**.

(7) Sentence (6) does not apply to floor assemblies between different levels of the same multi-level **guest suite**.

(8) A floor assembly immediately above a crawl space is not required to be constructed as a **fire separation** and is not required to have a **fire-resistance rating** provided the crawl space is not considered as a **basement** in Sentence 3.2.2.5.(1) of the **1994 Building Code**.

Buildings up to 3 storeys

9.9.2.2. (1) **Buildings** shall comply with the requirements of Sentence (2), where the **building** is

(a) not more than 1 **storey** in **building height** and not greater than 1200 m^2 in **building area**,

(b) not more than 2 **storeys** in **building height** and not greater than 900 m^2 in **building area**, or

(c) not more than 3 **storeys** in **building height** and not greater than 600 m^2 in **building area**.

(2) Floor assemblies and walls, columns and arches supporting floor assemblies shall have a **fire-resistance rating** not less than 30 min.

(3) Where sleeping accommodation or meeting rooms are not provided in the **basement**, an existing **fire separation** between the **first storey** and **basement** is deemed to be in compliance with Sentence (2) where

(a) the **basement** is **sprinklered**,

(b) the **building** contains not more than four **guest suites** and provides sleeping accommodation for not more than 10 persons, and

(i) interconnected **smoke alarms** are installed in conformance with Clause 9.9.4.1.(3)(c),

(ii) doors connecting the **basement** and **first storey** have a **fire-protection rating** not less than 20 min and are equipped with self-closing and latching devices, and

(iii) **fire stopping** of the wall space at the **basement** level is in conformance with Article 9.10.15.3. of the **1994 Building Code**, or

(c) the **building** is 1 **storey** in **building height**, not more than 600 m^2 in **building area**, and

(i) each **guest suite** has direct access to the outdoors by a door near ground level,

(ii) doors connecting the **basement** and **first storey** have a **fire-protection rating** not less than 20 min and are equipped with self-closing and latching devices,

(iii) **fire stopping** of the wall space at the **basement** level is in accordance with Article 9.10.15.3. of the **1994 Building Code**, and

(iv) an **approved** early warning system is installed consisting of **fire detectors** in the **basement** interconnected with alarm signalling devices that are audible in all **guest suites**.

(4) The water supply for the sprinklers referred to in Clause (3)(a) may be taken from the domestic supply where the supply provides sufficient density for the largest **fire compartment** and where the supply is **approved**.

(5) A **building** that is **sprinklered** is deemed to be in compliance with Sentence (2).

Buildings up to 4 storeys

9.9.2.3. (1) **Buildings** to which Sentence 9.9.2.2.(1) does not apply and that are not more than 4 **storeys** in **building height** shall comply with Sentences (2) and (3).

(2) Floor assemblies and walls, columns and arches supporting floor assemblies shall have a **fire-resistance rating** not less than 45 min.

(3) **Smoke detectors** shall be provided in corridors serving **guest suites** in **buildings** of **combustible construction**.

(4) A **building** that is **sprinklered** is deemed to be in compliance with Sentences (2) and (3).

Buildings over 4 storeys but not more than 6 storeys

9.9.2.4. (1) **Buildings** to which Articles 9.9.2.2. and 9.9.2.3. do not apply and that are not more than 6 **storeys** in **building height** shall

(a) have a **fire-resistance rating** not less than 45 min for floor assemblies and walls, columns and arches supporting floor assemblies, and

(b) be **sprinklered**, where the **building** is of **combustible construction**.

(2) Where only the roof assembly is of **combustible construction**, the **building** is deemed to be in compliance with Clause (1)(b) where

(a) the ceiling membrane has a **fire-resistance rating** not less than 45 min and the **attic space** is **fire stopped** in accordance with Article 3.1.11.5. of the **1994 Building Code**,

(b) the roof assembly is of **heavy timber construction** in conformance with Article 3.1.4.6. of the **1994 Building Code**, or

(c) the top **storey** and attic space are **sprinklered**.

(3) Where **smoke detectors** are provided in corridors serving **guest suites**, a **building** of **heavy timber construction** conforming to Article 3.1.4.6. of the **1994 Building Code** is deemed to be in compliance with Sentence (1).

Buildings over 6 storeys

9.9.2.5. (1) **Buildings** that are more than 6 **storeys** in **building height** shall

(a) have a **fire-resistance rating** not less than 1 h for floor assemblies and walls, columns and arches supporting floor assemblies, and

(b) be **sprinklered**, where the **building** is of **combustible construction**.

(2) Where only the roof assembly is of **combustible construction**, the **building** is deemed to be in compliance with Clause (1)(b) where

(a) the ceiling membrane has a **fire-resistance rating** not less than 45 min and the **attic space** is **fire stopped** in accordance with Article 3.1.11.5. of the **1994 Building Code**,

(b) the roof assembly is of **heavy timber construction** in conformance with Article 3.1.4.6. of the **1994 Building Code**, or

(c) the top **storey** and attic space are **sprinklered**.

Adjacent buildings

9.9.2.6. (1) A **building** containing a **hotel** shall be separated from a directly connected adjacent **building** that does not contain a **hotel** by a noncombustible **fire separation** having a **fire-resistance rating** not less than 2 h.

(2) An existing wall having a **fire-resistance rating** not less than 2h and constructed as a **fire separation** is deemed to comply with Sentence (1).

(3) Where the connection consists of an aboveground or underground walkway in conformance with Articles 3.2.3.20. and 3.2.3.21. of the **1994 Building Code**, the **building** is deemed to be in compliance with Sentence (1).

Interconnected floor spaces

9.9.2.7. (1) Despite Sentence 9.9.2.1.(6), a floor assembly may be penetrated by an unprotected opening between 2 contiguous **storeys** up to the fifth **storey** where

(a) the **building** is of **noncombustible construction**,

(b) the interconnected floor space does not contain sleeping accommodation, and

(c) the required **fire-resistance rating** of the floor assembly is maintained.

(2) Despite Sentence 9.9.2.1.(6), in a **building** that is not more than 3 **storeys** in **building height** and not more than 600 m^2 in **building area**, a floor assembly is not required to be constructed as a **fire separation** between 2 contiguous **storeys** where

(a) the interconnected floor space consists of the **first storey** and the **storey** next above or below, but not both,

(b) the interconnected floor space is **sprinklered**, and

(c) the sprinkler system is equipped with a water flow device and electrical supervision in conformance with Sentence 3.2.8.7.(2) of the **1994 Building Code**.

(3) Despite Sentence 9.9.2.1.(6), a floor assembly in a **storage garage** does not need to be a **fire separation**.

(4) Interconnected floor spaces in conformance with Subsection 3.2.8. of the **1994 Building Code** are deemed to be in compliance with Sentence (1).

Fire separation of guest suites

9.9.2.8. (1) **Guest suites** shall be separated from adjacent rooms and areas on the same **floor area** by

(a) a **fire separation** having a **fire-resistance rating** not less than 30 min in **buildings** that are not more than 6 **storeys** in **building height**, and

(b) a **fire separation** having a **fire-resistance rating** not less than 45 min in **buildings** that are more than 6 **storeys** in **building height**.

Fire separation of corridors

(2) Corridors serving **guest suites** shall be separated from adjacent rooms and areas on the same **floor area** by

(a) a **fire separation** having a **fire-resistance rating** not less than 30 min in **buildings** that are not more than 6 **storeys** in **building height**, and

(b) a **fire separation** having a **fire-resistance rating** not less than 45 min in **buildings** that are more than 6 **storeys** in **building height**.

(3) Existing **fire separations** are deemed to comply with Sentences (1) and (2) if the **floor area** is **sprinklered**.

Fire separations between major occupancies

9.9.2.9. (1) **Fire separations** having a **fire-resistance rating** not less than 45 min shall be provided between **major occupancies**.

(2) Existing **fire separations** having a **fire-resistance rating** not less than 30 min are deemed to comply with Sentence (1) if

(a) the **floor area** is **sprinklered**, or

(b) the part of the **building** containing the **major occupancy** is equipped with **fire detectors** and connecting corridors are equipped with **smoke detectors** as part of the fire alarm system of the **building**.

Protection of openings in fire separations

9.9.2.10. (1) **Closures** in **fire separations** shall be in conformance with

(a) Sentences 3.1.8.4.(2) and 3.1.8.10.(1) of the **1994 Building Code**, and

(b) Articles 3.1.8.11. and 3.1.8.13. of the **1994 Building Code**.

(2) Despite Sentence (1), openings in **fire separations** to which Article 9.9.2.8. or 9.9.2.11. applies may be protected with **closures** having a **fire-protection rating** not less than 20 min.

(3) If a **fire-protection rating** of 1 h or less is required, existing **closures** are deemed to comply with Sentence (1) if they consist of

(a) hollow metal or kalamein doors in hollow metal frames, with openings, if any, protected by wired glass and equipped with self-closing and latching devices, or

(b) wired glass screens set in fixed steel frames.

(4) Where a 20 min **fire-protection rating** is required, existing **closures** consisting of door assemblies of 45 mm solid core wood doors installed in solid wood or hollow metal frames and equipped with self-closing and latching devices are deemed to be in compliance with Sentences (1) and (2).

(5) Despite Sentence (1), existing **closures** in **fire separations** to which Articles 9.9.2.8. and 9.9.3.6. apply need not be equipped with latching devices in **buildings** that are not more than 6 **storeys** in **building height**.

(6) Where the **floor area** is **sprinklered**, existing **closures** in **fire separations** to which Article 9.9.2.8. applies are deemed to be in compliance with Clause (1)(a) and Sentence (2).

(7) **Fire dampers** shall be installed in **fire separations** in conformance with Article 3.1.8.7. of the **1994 Building Code**.

(8) Despite Sentence (7), **fire dampers** are not required in existing noncombustible ducts at penetrations of **fire separations**.

Laundry rooms, storage rooms and maintenance shops

9.9.2.11. Laundry rooms, storage rooms exceeding 0.6 m^2 in area and maintenance shops shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 45 min.

Fuel-fired appliances

9.9.2.12. (1) Fuel-fired **appliances**, except for cooking **appliances**, shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 1 h.

(2) Sentence (1) does not apply to a gas or oil-fired **appliance** installed on the roof of a **building** of **noncombustible construction**.

(3) Sentence (1) does not apply to fireplaces and **space heaters** provided the **appliance** is not located in an **exit** or in a corridor serving as an **access to exit** for **guest suites**.

(4) Despite Sentence (1), the **fire-resistance rating** of the **fire separation** above the room is not required where

(a) the required vertical **fire separation** to the room is provided, and

(b) the room area is fully **sprinklered**, with a spacing not exceeding 9.5 m^2 per sprinkler head, or providing a minimum average density of 6.5 L/min/m^2 over the room area.

(5) Where an **appliance** is separated in conformance with this Article, sufficient combustion air shall be brought directly from the outside for the safe operation of the **appliance**.

(6) If it is not practical to provide combustion air directly from the outside as required in Sentence (5), alternative means for the safe operation of the **appliance** may be **approved**.

(7) Despite Sentence (1), a **fire separation** is not required for a fuel-fired **appliance** located within a **guest suite** and serving only that **guest suite**.

Vertical service spaces

9.9.2.13. (1) **Vertical service spaces** shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 45 min.

(2) Where the existing **vertical service space**, including the top and bottom, is sealed with gypsum board, lath and plaster or other similar noncombustible material, the **vertical service space** is deemed to be in compliance with Sentence (1).

Refuse and linen chutes

9.9.2.14. (1) Unless otherwise **approved**, linen and refuse chutes shall be located in a shaft separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 1 h.

(2) Linen and refuse chutes shall terminate or discharge directly into rooms that are separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 1 h.

(3) In **buildings** more than 2 **storeys** in **building height**, automatic sprinklers shall be installed in each linen or refuse chute

(a) at the top,

(b) at alternate floor levels, and

(c) in the room or bin into which the chute discharges.

(4) An existing chute installation is deemed to be in compliance with Sentence (3) where

(a) the chute outlet in the discharge room is protected by an automatic, self-latching **closure** held open by a fusible link in **buildings** greater than 6 storeys in **building height**,

(b) the room into which the chute discharges is **sprinklered**, and

(c) at least one sprinkler head with a minimum discharge rate of 66 L/min is located at the top of the chute.

Smoke control

9.9.2.15. (1) **Buildings** containing a **hotel** where the vertical distance between the floor of the top **storey** and **grade** exceeds 18 m shall have smoke control measures in conformance with Sentences (2) and (3).

(2) **Buildings** containing a **hotel** shall

(a) have smoke control measures that prevent smoke spread from **floor areas** containing other **occupancies** to upper **floor areas** that contain **guest suites**, or

(b) be **sprinklered** on all **floor areas** containing other **occupancies** that are located below floors that contain **guest suites**.

(3) **Buildings** containing a **hotel** shall have smoke control measures in conformance with Article 3.2.6.2. of the **1994 Building Code**.

(4) A **building** is deemed to be in compliance with Sentence (3) where

(a) all **guest suites** have access to an exterior balcony,

(b) the length of corridors serving **guest suites** does not exceed 30 m between **exits**,

(c) corridors serving **guest suites** are equipped with **smoke detectors** connected to the fire alarm system,

(d) corridors serving **guest suites** are subdivided in conformance with Sentence (5), or

(e) the **building** is **sprinklered**.

(5) The corridor subdivision referred to in Clause (4)(d) shall

(a) separate the corridor into at least two compartments by a **fire separation** that does not require a **fire-resistance rating**,

(b) be located so that not more than one of the required **exit** stairs is located in any one compartment and the distance of travel from any **guest suite** entrance door to an **exit** or adjacent compartment does not exceed 25 m, and

(c) include smoke-tight doors equipped with self-closing devices that act as **closures** in the **fire separation**.

Pipes, ducts and plenums

9.9.2.16. (1) Pipes, ducts, **plenums** and other equipment in heating and air handling systems shall be constructed of steel, **approved** noncombustible material or other **approved** material.

(2) Insulating materials and adhesives for pipes, ducts, **plenums** and other components of heating and air handling systems shall be noncombustible or shall have a **flame-spread rating** of 25 or less or shall be of some other **approved** composition.

(3) Where an **attic space**, a crawl space, a corridor ceiling space or any other concealed space is used as a **plenum**, the concealed space shall be lined with noncombustible material, material having a **flame-spread rating** of 25 or less or other **approved** material.

9.9.2.17. (1) A **fire separation** that separates an **exit** stairway from the remainder of the **building** shall not be breached by a duct or other part of an air handling system.

(2) Despite Sentence (1), an **exit** through a lobby or other entrance area that is within a stairway separation may be breached if the stairway is separated from the entrance area by a **fire separation** having a **fire-resistance rating** not less than 45 min.

9.9.2.18. No stairway enclosure or corridor shall be used as a **plenum** to exhaust air from other areas.

Cooking operations

9.9.2.19. (1) An existing cooking operation that complies with Sentences (2) to (6) is deemed to comply with Sentence 2.6.1.13.(1).

(2) Cooking operations shall have an existing exhaust system which, unless otherwise **approved**, shall be provided with

(a) a hood or other primary collection device to collect and confine all cooking vapours and residues emanating from the cooking equipment,

(b) a grease filter or other means of grease extraction,

(c) a duct from the hood or other primary collection device which

(i) leads as directly as possible to the outside,

(ii) is independent and not connected to any other ventilation system, and

(iii) has adequate openings for **inspection** and cleaning purposes that are equipped with tight fitting doors,

(d) a residue trap with provisions for cleanout at the base of each vertical riser, and

(e) mechanically induced air flow of sufficient velocity to confine cooking vapours and residues to the hood or other primary collection means installed at the cooking equipment.

(3) Pipes, ducts, **plenums** and other components of the exhaust system shall be constructed of steel, **approved** noncombustible material or other **approved** material.

(4) Insulating material and adhesive used in the exhaust system shall be noncombustible or shall have a **flame-spread rating** of 25 or less or shall have some other **approved** composition.

(5) The cooking operation shall be

(a) located in a kitchen that is separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 45 min, or

(b) protected by a fixed fire protection system.

(6) The **fire separation** referred to in Sentence (5) may contain an unprotected pass-through opening into the adjoining dining area if **approved** measures are provided to limit fire spread.

Subsection 9.9.3. Means of Egress

Occupant load

9.9.3.1. (1) The **occupant load** for calculation of the number and width of **access to exits** and **exits** referred to in this Section shall be determined in accordance with Subsection 3.1.16. of the **1994 Building Code**.

(2) The **occupant load** of a **floor area** may vary if it is used for different **occupancies** at different times, but the **exits** from the **floor area** shall provide the aggregate **exit** width prescribed in Article 9.9.3.2. for the greatest **occupant load**.

Access to exit

9.9.3.2. (1) Each room, **guest suite**, podium, terrace, platform, contained open space or other area intended for **occupancy** shall have egress facilities leading directly to

(a) a public thoroughfare,

(b) an **approved** open space that has access to a public thoroughfare, or

(c) a corridor where it is possible to go in opposite directions to separate **exits**, except as otherwise permitted by this Article or Article 9.9.3.3.

Dead end corridors

(2) Dead end corridors shall not be longer than 6 m plus the width of the corridor, unless otherwise **approved**.

(3) Unless otherwise **approved**, no area may be served by a dead end corridor where

(a) the area contains an **assembly occupancy** and its **occupant load** is greater than 20 persons,

(b) the area is intended for storage and exceeds 200 m^2, or

(c) the area is intended for a use other than that described in Clauses (a) and (b) and exceeds 100 m^2 in area or has an **occupant load** greater than 24 persons.

(4) If a **guest suite** has access to a second **exit** or if a **guest suite** is in a **building** that is permitted to be served by a single **exit** in compliance with Article 9.9.3.3., a doorway from the **guest suite** may open onto

(a) an **exit** stairway,

(b) a fire escape,

(c) a corridor served by a single **exit**, or

(d) an exterior passageway served by a single **exit** stairway.

Egress facilities

(5) Each room, **guest suite**, podium, terrace, platform, contained open space or other area intended for **occupancy** shall have two egress doorways placed in such a manner that one doorway could provide egress from the room or area if the other doorway becomes inaccessible to the occupants due to a fire which might originate in the room or area where

(a) the space is intended for **assembly occupancy**, and

(i) the distance of travel to an egress door from any point in the space exceeds 15 m, or

(ii) the **occupant load** exceeds 60 persons,

(b) the space is intended for storage, and

(i) exceeds 200 m^2 in area, or

(ii) the distance of travel to an egress door from any point in the space exceeds 23 m, or

(c) the space is intended for a use other than that described in Clauses (a) and (b), and

(i) exceeds 100 m^2 in area, or

(ii) the **occupant load** exceeds 60 persons.

(6) Despite Sentence (5), every room containing an **assembly occupancy** shall be provided with at least

(a) three independent well-separated egress doorways, where its **occupant load** is 600 persons or more, and

(b) four independent well-separated egress doorways where its **occupant load** is 1000 persons or more.

(7) Where a room or **floor area** is divided into individual spaces for **assembly occupancy**, egress through an adjacent **assembly occupancy** is permitted provided each space has at least one independent egress doorway in accordance with Sentence (1) and dividing walls or **partitions** are not more than 1.35 m in height.

(8) Dividing walls or **partitions** in Sentence (7) may exceed 1.35 m in height if alternative provisions are **approved** to provide safe egress.

Egress widths

(9) The aggregate width of required **means of egress** from a **floor area** or portion of a **floor area** shall be determined by multiplying the **occupant load** of the area served by

(a) 6.1 mm per person, for ramps with a gradient of not more than 1 in 8, doorways, corridors and passageways, or

(b) 9.2 mm per person, for ramps with a gradient of more than 1 in 8 and stairs.

(10) Where two or more egress doorways are required from a **floor area** or portion of a **floor area**, a sufficient aggregate width shall be provided so that the egress capacity is not reduced by more than half if any one doorway or opening is inaccessible in an emergency.

(11) Despite Sentences (9) and (10), the minimum clear width of a **means of egress** shall be not less than

(a) 1100 mm for corridors,

(b) 900 mm for stairs, and

(c) 750 mm for doorways, ramps and all other areas.

Number of exits

9.9.3.3. (1) Each **floor area** shall be served by a minimum of two **exits** where

(a) the **floor area** is intended for **assembly occupancy**, and

(i) the distance of travel to an **exit** from any point in the space exceeds 15 m, or

(ii) the **occupant load** exceeds 60 persons,

(b) the **floor area** is intended for storage, and

(i) exceeds 200 m^2 in area, or

(ii) the distance of travel to an **exit** from any point in the space exceeds 23 m,

(c) the **floor area** is a **basement**, and

(i) exceeds 200 m^2 in area, or

(ii) contains areas that are accessible to the public, or

(d) the **floor area** is intended for a use other than that described in Clauses (a), (b) and (c), and

(i) exceeds 100 m^2 in area, or

(ii) the **occupant load** exceeds 60 persons.

(2) Despite Sentence (1), each **floor area** shall be served by at least two **exits** in **buildings** that are more than 3 **storeys** in **building height**.

(3) Despite Sentence (1), where a **building** is 3 **storeys** in **building height**, the third **storey** shall be served by at least two **exits** unless **approved** alternative measures are used.

(4) Despite Sentence (3), there may be a single **exit** from the third **storey** used solely as the residence of the **hotel owner** or manager.

(5) The minimum distance between **exits** referred to in Sentences (1), (2) and (3) shall be 9 m or half the maximum diagonal dimension of the **floor area**, whichever is less.

(6) **Exits** are deemed to comply with Sentence (5) if the **floor area** is divided by a **fire separation** having a **fire-resistance rating** not less than 45 min so that it is necessary to pass through the **fire separation** to travel from one **exit** to another **exit**.

Exit widths

9.9.3.4. Except as provided in Sentence 9.9.3.7.(2), the width of **exits** shall be in conformance with Article 9.9.3.2.

Travel distance

9.9.3.5. (1) The **travel distance** to at least one **exit** shall not exceed

(a) 30 m in a **floor area** that is not **sprinklered**,

(b) 45 m in a **sprinklered floor area**, or

(c) 45 m in a **basement** that is not accessible to the public.

Stairway separations

9.9.3.6. (1) Each **exit** stairway shall be separated from the remainder of the **building** by a **fire separation** having a **fire-resistance rating** not less than 45 min.

(2) Each **exit** stairway shall lead directly to a public thoroughfare or to an **approved** open space from inside the **fire separation** described in Sentence (1).

(3) Despite Sentence (2), one **exit** from a **floor area** may lead through a lobby if

(a) the path of travel through the lobby to the outdoors at ground level is not more than 15 m,

(b) a **fire separation**, constructed in accordance with Sentence (1), is provided between the lobby and any **exit** permitted by this Sentence to lead through a lobby,

(c) the lobby is not located within an interconnected floor space described in Article 9.9.2.7.,

(d) from the interior of the **exit** stair that leads through the lobby, there is an unobstructed path of travel not leading through the lobby to an alternate **exit** such that

(i) it is not necessary to travel up or down more than 1 **storey** to reach the alternate **exit** by means of a protected **access to exit**, or

(ii) the path of travel is entirely within the same **storey** as the lobby and is separated from the lobby by a **fire separation** having a **fire-resistance rating** not less than 45 min**,** and

(e) **approved** provisions are made to direct occupants to the alternate **exit** described in Clause (d) in the event of a fire condition in the lobby.

(4) The lobby described in Sentence (3) may contain an **occupancy** if the required egress width is maintained and clearly delineated.

(5) Despite Sentence 9.9.2.12.(3), the lobby described in Sentence (3) may contain a fireplace or a **space heater**.

(6) Despite Sentence (2), an **exit** through a lobby is permitted in conformance with Article 3.4.4.2. or 9.9.8.5. of the **1994 Building Code**, as applicable for the size and height of the **building**.

Exterior stairways and fire escapes

9.9.3.7. (1) Exterior **exit** stairways and fire escapes shall not serve **floor areas** above the sixth **storey**.

(2) Unless otherwise **approved**, each fire escape used as an **exit** and each exterior **exit** stairway shall comply with Articles 3.4.7.2., 3.4.7.3., 3.4.7.5. and 3.4.7.6. of the **1994 Building Code**.

(3) Unless otherwise **approved**, exterior **exit** stairways, fire escapes and exterior **exit** passageways serving any **storey** above the second **storey** or any **basement** below the first **basement** shall be protected against fire exposure from the **building** in accordance with Sentences (4) and (5).

(4) For the purposes of Sentence (3), window openings, except **first storey** display windows, shall be protected by wired glass in fixed steel frames if located within 3 **storeys** below, within 10 m below, within 1.8 m above or within 3 m horizontally of an exterior **exit** stairway, fire escape or exterior **exit** passageway.

(5) For the purposes of Sentence (3), doorways and other openings shall be protected with **closures** having a **fire-protection rating** not less than 45 min if located within 3 **storeys** below, within 10 m below, within 1.8 m above or within 3 m horizontally of an exterior **exit** stairway, fire escape or exterior **exit** passageway.

(6) Exterior **exit** stairways leading across roofs shall be provided with handrails on both sides of the walkway leading to the stairway at the edge of the roof, unless otherwise **approved**.

(7) Exterior **exit** stairways and fire escapes below **grade** shall be

(a) enclosed by side walls and a roof, with a door to ground level at the upper landing,

(b) provided with a roof projecting horizontally for a distance of at least 1.8 m beyond any step or landing, or

(c) provided with some other **approved** construction or device to prevent snow from accumulating in the stairway or fire escape.

(8) Sentence (3) does not apply to an exterior passageway if

(a) 50% or more of the exterior side of the passageway is open to the outdoors,

(b) the exterior passageway floor assembly has a **fire-resistance rating** not less than 45 min or is of **noncombustible construction**, and

(c) an **exit** stairway is provided at each end of the passageway.

Door swing and hardware

9.9.3.8. Each **exit** door and door providing an **access to exit** shall be in conformance with Subsection 2.7.2.

Emergency access to floor areas

9.9.3.9. Doors providing access between **floor areas** and **exit** stairs shall comply with Article 3.4.6.16. of the **1994 Building Code**.

Signs

9.9.3.10. (1) **Exit** signs shall be installed in accordance with Subsection 3.4.5. of the **1994 Building Code**.

(2) Each door opening into an **exit** stairway shall be identified with the number assigned to that floor in accordance with Article 3.4.6.17. of the **1994 Building Code**.

(3) Existing doors that have the floor level identified in plain legible block letters or numbers at least 114 mm high with a 19 mm stroke on both sides of the door are deemed to be in compliance with Sentence (2).

Interior finishes

9.9.3.11. (1) Interior finish materials on the walls and ceilings of **exits** and **access to exits** shall be in accordance with Subsection 3.1.13. of the **1994 Building Code**, except as provided in Sentence (2) or otherwise **approved**.

(2) Sentence (1) does not apply to

(a) wood or other **approved** materials, treated with an **approved** fire retardant, used on the walls of lobbies, foyers, vestibules, entrance halls and other major entrance areas,

(b) combustible interior finishes, including paint, wallpaper and other interior finishes not more than 1.5 mm thick used on the walls of corridors, and

(c) combustible materials that have a **flame-spread rating** of 150 or less used on the walls and ceilings of **access to exits** if the **access to exits** are **sprinklered**.

9.9.3.12. The **flame-spread rating** of interior wall and ceiling finishes in rooms containing an **assembly occupancy** shall be not more than 150.

Lighting

9.9.3.13. Every **exit** and **access to exit** shall be equipped to provide illumination to an average level of at least 50 lx at floor level and at all points such as angles and intersections at changes of level where there are stairs and ramps.

Emergency lighting

9.9.3.14. (1) Emergency lighting shall be provided in

(a) **exits** and **access to exits** in **buildings** required to have a fire alarm system, and

(b) rooms containing an **assembly occupancy** with an **occupant load** of more than 60 persons.

(2) Emergency lighting required in Sentence (1) shall be

(a) designed to provide illumination for a duration of at least

(i) 2 h in **buildings** where the vertical distance between the floor of the top **storey** and **grade** exceeds 18 m, and

(ii) 30 min in **buildings** where the vertical distance between the floor of the top **storey** and **grade** is not more than 18 m,

(b) supplied by a source of energy separate from the primary electrical supply for the **building**, and

(c) designed to be automatically actuated when the power to the **building** is interrupted.

(3) Illumination from emergency lighting referred to in Sentence (2) shall be an average of at least 10 lx at floor or tread level, or 1 watt/m^2 of floor space.

Subsection 9.9.4. Fire Alarm and Detection

Fire alarm requirements

9.9.4.1. (1) A fire alarm system with **listed** components shall be installed in each **building** in accordance with Articles 9.9.4.2. to 9.9.4.12. where

(a) the **building area** is more than 600 m^2,

(b) the **building** is more than 1 **storey** in **building height**, or

(c) each **guest suite** is not served by an exterior **exit** facility leading to ground level.

(2) A **building** is deemed to be in compliance with Sentence (1) where

(a) the **building** is not more than 3 **storeys** in **building height**,

(b) each **guest suite** is served by an exterior **exit** facility leading to ground level,

(c) each **guest suite** is separated from adjacent rooms by a **fire separation** having a **fire-resistance rating** not less than 45 min, and

(d) each **guest suite** is equipped with a **smoke alarm**.

(3) A **building** is deemed to be in compliance with Sentence (1) where

(a) the **building** is not more than 3 **storeys** in **building height**,

(b) sleeping accommodation is provided for not more than 10 persons, and

(c) the **building** is equipped with

(i) **smoke alarms** on or near the ceiling in corridors serving **guest suites** on each **floor area**, adjacent to each stairway serving the corridors, and on or near the ceiling in the **basement**, adjacent to each stairway, and

(ii) one manual pull station in each **floor area** in an **approved** location, installed and interconnected so that the actuation of any manual pull station or **smoke alarm** will cause all **smoke alarms** to operate and be audible throughout the **building**.

Automatic detection

9.9.4.2. (1) Automatic detection devices referred to in Sentences (2), (3) and (4) shall be installed and connected to the fire alarm system required in Sentence 9.9.4.1.(1).

(2) **Fire detectors** shall be installed

(a) in every part of a **building** that requires a fire alarm system in Article 9.9.4.1., other than corridors, washrooms, closets in **guest suites**, saunas, refrigerated areas and swimming pools,

(b) at the tops of elevator shafts, and

(c) at the tops of **exit** stairs.

(3) Despite Sentence (2), **fire detectors** are not required in existing **guest suites** where **smoke detectors** are installed in every corridor serving the **guest suites**.

(4) Rooms or areas that are **sprinklered** in accordance with Article 3.2.4.16. of the **1994 Building Code** are deemed to be in compliance with Sentence (2).

Manual pull stations

9.9.4.3. (1) Unless otherwise **approved**, manual pull stations shall be installed at

(a) the main reception area, and

(b) near every **exit**.

(2) Despite Sentence (1), a manual pull station may serve two **exits** where

(a) the **exits** are not more than 9 m apart,

(b) the **exits** are located on the same **storey**, and

(c) the manual pull station is readily accessible and visible from each **exit**.

(3) A manual pull station shall be

(a) red in colour,

(b) readily accessible and unobstructed,

(c) readily visible, and

(d) unless otherwise **approved**, installed at a height not less than 1.2 m and not more than 1.5 m, measured vertically from the finished floor surface.

Alarm signalling devices

9.9.4.4. (1) Alarm signalling devices shall be

(a) installed on all **storeys**, unless otherwise **approved**,

(b) located so that the **alarm signal** and **alert signal** when sounded, may be heard throughout the **building** over all normal sounds at any time, and

(c) be distinctive in sound.

Annunciator panels

9.9.4.5. (1) In a **building** that is 4 or more **storeys** in **building height** or has a **total area** of 4000 m^2 or more, an annunciator panel shall

(a) be installed near the main entrance, in the main reception area or other **approved** location that is readily accessible to the **fire department**, and

(b) indicate all floors with not more than one floor per zone indicated.

(2) **Fire detectors** required in Clauses 9.9.4.2.(2)(b) and (c) may be considered as part of the adjoining floor for the purposes of Clause (1)(b) of this Article.

Shutdown of air handling systems

9.9.4.6. Recirculating air handling systems that serve more than one **guest suite** or **storey** shall be arranged to shut down upon actuation of the fire alarm system, except where continued operation of the air handling system serves as part of a smoke control system.

Trouble signals

9.9.4.7. (1) A trouble signal sounding device and, where the trouble signal sounding device has a silencing switch, a trouble light shall be installed in

(a) the main reception area, or

(b) a continuously supervised area.

Operation

9.9.4.8. Fire alarm systems shall operate in conformance with Article 3.2.4.4. of the **1994 Building Code**, unless otherwise **approved**.

Continuity

9.9.4.9. Each **building** shall not have more than one fire alarm system, unless otherwise **approved**.

Electrical supervision

9.9.4.10. Fire alarm systems shall be electrically supervised.

Emergency power

9.9.4.11. (1) Fire alarm systems shall be provided with an emergency power supply in conformance with Article 3.2.7.8. of the **1994 Building Code**.

(2) An existing emergency power supply that is capable of providing supervisory power for not less than 24 h and emergency power under full load for not less than 5 min at the end of the 24 h period is deemed to be in compliance with Sentence (1).

Primary power

(3) Fire alarm system connections to the primary source of power shall be on a separate circuit equipped with separate circuit breakers or fuse switches that are located in a secure area.

(4) When a **building** is not supplied with primary power from a public utility, two **approved** independent sources of power shall be provided to the fire alarm system.

Installation

9.9.4.12. (1) Where a fire alarm system is required to be installed, extended or modified by this Section, the installation, extension or modification shall be in conformance with CAN/ULC-S524, "Standard for the Installation of Fire Alarm Systems".

(2) Where a fire alarm system has been installed, extended or modified as required by this Section, the system or portion of the system shall be **tested** in conformance with CAN/ULC-S537, "Verification of Fire Alarm Systems".

(3) Sentences (1) and (2) do not apply to existing fire alarm system components.

Smoke alarms

9.9.4.13. (1) **Smoke alarms** shall be installed in each **guest suite**.

(2) **Smoke alarms** shall meet the requirements of

(a) CAN/ULC-S531, "Standard for Smoke Alarms", and

(b) CAN/ULC-S553, "Standard for the Installation of Smoke-Alarms".

(3) **Smoke alarms** shall be installed with permanent connections to an electrical circuit and shall have no disconnect switches between the overcurrent device and the **smoke alarm**.

(4) Despite Sentence (3), battery-operated **smoke alarms** may be used.

(5) Unless otherwise **approved**, at least one **smoke alarm** shall be installed on each floor of a multi-level **guest suite** and the **smoke alarms** shall be interconnected so that the actuation of one **smoke alarm** will cause all **smoke alarms** within the **guest suite** to sound.

Voice communication systems

9.9.4.14. (1) A voice communication system shall be provided in each **building** where the vertical distance between the floor of the top **storey** and **grade** exceeds 36 m.

(2) The voice communication system required by Sentence (1) shall

(a) consist of loudspeakers operated from the central alarm and control facility or other location that is accessible to the **fire department** and **supervisory staff** appointed under Section 2.8 and that is **approved**,

(b) provide a clear verbal signal throughout the **building**, except for elevator cars, and

(c) provide for automatic silencing of the fire **alarm signals** or **alert signals** when the loudspeakers are in use.

(3) **Approved** existing public address systems compatible with the fire safety plan required under Section 2.8 and capable of communicating instructions to the **building** occupants are deemed to be in compliance with Sentences (1) and (2).

Subsection 9.9.5. Suppression

Access for fire fighting

9.9.5.1. (1) Access routes for fire fighting shall be provided in conformance with the requirements of Articles 3.2.5.5. to 3.2.5.7. of the **1994 Building Code**.

(2) Sentence (1) does not apply where the **building** is **sprinklered**.

(3) In **buildings** not greater than 6 **storeys** in **building height**, existing access routes are deemed to comply with Sentence (1) if they

(a) have a clear width of at least 6 m,

(b) are capable of supporting the expected loads imposed by fire fighting equipment and surfaced with concrete, asphalt or other material that provides accessibility under all climatic conditions,

(c) are located not less than 3 m and not more than 15 m from the principal entrance, and

(d) are connected with a public thoroughfare.

(4) Despite Sentence (1), alternative methods may be **approved** where, in the opinion of the **Chief Fire Official**, they provide protection for life safety similar to the protection provided by compliance with Sentence (1).

Standpipe systems

9.9.5.2. (1) In **buildings** that are greater than 3 **storeys** in **building height**, a standpipe and hose system shall be installed in conformance with Subsection 3.2.9. of the **1994 Building Code**.

(2) A standpipe and hose system installed in conformance with Sentences (3) to (6) is deemed to be in compliance with Sentence (1).

(3) Hose stations shall

(a) be located so that all areas

(i) are protected by a hose station on the same **storey**, and

(ii) can be reached by a hose stream and are within 6 m of a hose nozzle when the hose is extended,

(b) be provided with a 38 mm hose valve, unless otherwise **approved**,

(c) be equipped with not more than 30 m of 38 mm hose on a hose **rack**, unless otherwise **approved**,

(d) have the hose attached, ready for use at all times and equipped with a shut-off combination fog and straight stream nozzle,

(e) be within easy reach of a person standing on the floor, with the hose valve connection located no more than 1.5 m from the floor, and

(f) be located

(i) in corridors where possible, and

(ii) in hose cabinets.

(4) Despite Subclause (3)(a)(i), a penthouse may be protected by a hose station located in the **storey** below.

(5) A standpipe and hose system shall

(a) have an adequate water supply capable of producing a hose stream of at least 6 m from the hose nozzle at the highest fire hose outlet, and

(b) be served by at least one **fire department** connection located on the outside of the **building** adjacent to a **street**, readily accessible to the **fire department**.

(6) Hose cabinets shall be

(a) of sufficient size to accommodate a hose, hose **rack**, hose valve and portable extinguisher,

(b) conspicuously identified, by lettering at least 50 mm high or by the provision of a sufficiently large glass panel in the door to ensure that the equipment in the cabinet is readily visible,

(c) equipped with a door without locks, constructed to open easily, unless otherwise **approved**, and

(d) so located that the door, when open, will not obstruct any doorway.

Firefighters' elevators

9.9.5.3. (1) At least one elevator shall be provided for use by firefighters in conformance with Articles 3.2.6.8. and 3.2.6.9. of the **1994 Building Code** in **buildings** where the vertical distance between the floor of the top **storey** and **grade** exceeds 18 m.

(2) An elevator is deemed to be in compliance with Sentence (1) where

(a) the elevator is capable of providing transportation from the **street** floor to every floor served by the elevator system,

(b) the elevator is identified on the **street** floor as an elevator provided for use by firefighters,

(c) the elevator satisfies the requirements of Sentences 3.2.6.8.(1) to (4) of the **1994 Building Code**, and

(d) other elevator cabs in the same shaft as the elevator for use by firefighters satisfy the requirements of Sentences 3.2.6.8.(1) and (2) of the **1994 Building Code**.

(3) An elevator system that requires transfer from one elevator to another to reach all floors above **grade** is deemed to be in compliance with Sentence (1) where

(a) the elevators are identified on the **street** floor and the transfer floor as elevators provided for firefighters' use,

(b) the elevators satisfy the requirements of Sentences 3.2.6.8.(1) to (4) of the **1994 Building Code**,

(c) emergency power is provided that is capable of operating one elevator car at a time, in **buildings** where the vertical distance between the floor of the top **storey** and **grade** exceeds 36 m, and

(d) other elevator cabs in the same shaft as the elevator for use by firefighters satisfy the requirements of Sentences 3.2.6.8.(1) and (2) of the **1994 Building Code**.

Sprinkler systems

9.9.5.4. Unless otherwise **approved**, where a **building** or portion thereof is required to be **sprinklered**, the sprinkler system shall be designed and constructed in conformance with Articles 3.2.5.13. to 3.2.5.16. of the **1994 Building Code**.

Emergency power supply

9.9.5.5. (1) Unless otherwise **approved**, emergency electric power provided by generators for fire alarm systems referred to in Sentence 9.9.4.1.(1) and for elevator cars referred to in Clause 9.9.5.3.(3)(c) shall be provided in accordance with CSA-C282, "Emergency Electrical Power Supply for Buildings".

(2) Unless otherwise **approved**, emergency electric power required for emergency lighting systems required in Sentence 9.9.3.14.(1) shall be installed in conformance with CSA-C282, "Emergency Electrical Power Supply for Buildings" or CSA-C22.2 No. 141, "Emergency Lighting Equipment", as applicable.

O. Reg. 213/07, Division B, Part 9; O. Reg. 150/13, ss. 16-21; O. Reg. 256/14, ss. 314-431.

DIVISION C
ADMINISTRATIVE PROVISIONS

SECTION 1.1 GENERAL

Subsection 1.1.1. Chief Fire Official

Appointment by Fire Marshal

1.1.1.1. (1) The Fire Marshal may appoint persons who are assistants to the Fire Marshal to be **Chief Fire Officials** for the purposes and subject to the limitations and conditions as are set out in the appointment.

(2) An appointment made under Sentence (1) may grant to the person appointed the exclusive authority to exercise all or any of the powers and perform all or any of the duties of a **Chief Fire Official** with respect to any class or classes of **building** or **occupancy** or within the territorial area specified in the appointment and, in such case, no other **Chief Fire Official** shall exercise such powers or perform such duties.

Appointment by Fire Chief

1.1.1.2. The Municipal Fire Chief may appoint a member or members of the **fire department** who are assistants to the Fire Marshal to be **Chief Fire Officials** for the purposes and subject to the limitations and conditions as are set out in the appointment.

SECTION 1.2 QUALIFICATIONS

Subsection 1.2.1. Qualifications and Responsibilities of Persons Performing Work on Fire Alarm Systems

Application

1.2.1.1. This subsection applies to every person who performs annual **tests** or annual **inspections** of a fire alarm system required under Article 6.3.2.2. of Division B and every person who repairs, replaces or alters components of a fire alarm system.

Qualifications and responsibilities

1.2.1.2. (1) A person who performs the work described in Article 1.2.1.1.

(a) must have successfully completed a program or course acceptable to the Fire Marshal,

(b) shall, at the request of the **owner** or the **Chief Fire Official**, produce for inspection a copy of a certificate or document attesting to the successful completion of a program or course referred to in Clause (a), and

(c) shall perform the **inspection**, **test**, repair, replacement and alteration in accordance with Article 6.3.1.8. and Subsection 6.3.2. of Division B.

(2) Despite Sentence (1), a person who has not successfully completed the required program or course may perform the work described in Clause (1)(c) provided that

(a) the work is done under the supervision of a person who has successfully completed a program or course required by Clause (1)(a),

(b) no more than two persons work under the supervision of the person referred to in Clause (a) at the same time, and

(c) the supervision is provided at the work site.

(3) A person supervising another under Sentence (2) shall advise the **owner** in writing that the work has been completed in accordance with Article 6.3.1.8. and Subsection 6.3.2. of Division B.

Responsibility

1.2.1.3. (1) Despite Article 1.2.1.1. of Division A, it is the person who performs the work described in Article 1.2.1.1. of this Division who is responsible for complying with Sentence 1.2.1.2.(1) of this Division; however, if Sentence 1.2.1.2.(2) of this Division applies, it is the person who supervises the work under Sentence 1.2.1.2.(2) of this Division who is responsible for complying with Sentence 1.2.1.2.(1) of this Division, as if he or she were the person performing the work.

(2) The **owner** shall ensure that the requirements of Article 1.2.1.2. are met.

Subsection 1.2.2. Qualifications and Responsibilities of Persons Performing Work on Interconnected Smoke Alarm Systems

Application

1.2.2.1. This Subsection applies to every person who performs annual **tests** of an interconnected **smoke alarm** system required under Article 6.3.2.6. of Division B and every person who maintains such an interconnected **smoke alarm** system.

Qualifications and responsibilities

1.2.2.2. (1) A person who performs the work described in Article 1.2.2.1.

(a) must have successfully completed a program or course acceptable to the Fire Marshal,

(b) shall, at the request of the **owner** or the **Chief Fire Official**, produce for inspection a copy of a certificate or document attesting to the successful completion of a program or course referred to in Clause (a), and

(c) shall perform the **test** and maintenance in accordance with Article 6.3.2.6. of Division B.

(2) Despite Sentence (1), a person who has not successfully completed the required program or course may perform the work described in Sentence (1) provided that

(a) the work is done under the supervision of a person who has successfully completed a program or course required in Clause (1)(a),

(b) no more than two persons work under the supervision of the person referred to in Clause (a) at the same time, and

(c) the supervision is provided at the work site.

(3) A person supervising another under Sentence (2) shall advise the **owner** in writing that the work has been completed in accordance with Article 6.3.2.6. of Division B.

Responsibility

1.2.2.3. (1) Despite Article 1.2.1.1. of Division A, it is the person who performs the work described in Article 1.2.2.1. of this Division who is responsible for complying with Sentence 1.2.2.2.(1) of this Division; however, if Sentence 1.2.2.2.(2) of this Division applies, it is the person who supervises the work under Sentence 1.2.2.2.(2) of this Division who is responsible for complying with Sentence 1.2.2.2.(1) of this Division, as if he or she were the person performing the work.

(2) The **owner** shall ensure that the requirements of Article 1.2.2.2. are met.

Subsection 1.2.3. Qualifications of the Person who Ensures Implementation of a Fire Safety Plan under Subsection 2.8.2. of Division B

Application

1.2.3.1. (1) Article 1.2.3.2. applies to

(a) a person designated by the **owner** of a **building** containing a **care occupancy**, a **care and treatment occupancy** or a **retirement home** to be responsible for ensuring that the fire safety plan required under Subsection 2.8.2. of Division B is implemented, or

(b) the **owner** of a **building** containing a **care occupancy**, a **care and treatment occupancy** or a **retirement home**, if the **owner** has not designated another person to be responsible for ensuring that the fire safety plan required under Subsection 2.8.2. of Division B is implemented.

Qualifications

1.2.3.2. (1) A person referred to in Sentence 1.2.3.1.(1)

(a) must have successfully completed a program or course acceptable to the Fire Marshal, and

(b) shall, at the request of the **Chief Fire Official**, produce for inspection a certificate or other document attesting to his or her successful completion of that program or course.

(2) This Article applies as of January 1, 2017.

Responsibility if person designated

1.2.3.3. (1) If an **owner** has designated a person to be responsible for ensuring that a fire safety plan is implemented

(a) the designated person is responsible for complying with Article 1.2.3.2. of this Division, despite Article 1.2.1.1. of Division A, and

(b) the **owner** is responsible for ensuring that the designated person complies with Article 1.2.3.2. of this Division.

Subsection 1.2.4. Qualifications of Chief Fire Officials

Application

1.2.4.1. This Subsection applies to every **Chief Fire Official** who is responsible for **approving** a fire safety plan for a **building** containing a **care occupancy**, a **care and treatment occupancy** or a **retirement home**.

Qualifications

1.2.4.2. (1) A person referred to in Article 1.2.4.1.

(a) must have successfully completed a program or course acceptable to the Fire Marshal, and

(b) shall, at the request of the **owner**, produce for inspection a certificate or other document attesting to his or her successful completion of that program or course.

(2) This Article applies as of January 1, 2017.

Responsibility

1.2.4.3. A person referred to in Article 1.2.4.1. of this Division is responsible for complying with Article 1.2.4.2. of this Division, despite Article 1.2.1.1. of Division A.

SECTION 1.3 ADMINISTRATIVE PROVISIONS

Subsection 1.3.1. Required Testing

Tests by owner

1.3.1.1. Where a **building** or its contents must be **tested** for compliance with this Code, the **tests** shall be carried out by the **owner** or the **owner's** agent within such reasonable time as the **Chief Fire Official** may determine.

Tests by Chief Fire Official

1.3.1.2. (1) The **tests** referred to in Article 1.3.1.1. may also be carried out by the **Chief Fire Official**.

(2) The **Chief Fire Official** shall only take such samples as are necessary in the circumstances in order to carry out the **tests** referred to in Article 1.3.1.1.

Subsection 1.3.2. Alternative Solutions

Approval

1.3.2.1. An **alternative solution** shall be submitted to the **Chief Fire Official** for review and **approval**.

Documentation

1.3.2.2. (1) An **alternative solution** submitted to the **Chief Fire Official** under Article 1.3.2.1. shall be accompanied by supporting documentation that demonstrates that the **alternative solution** meets the **objectives** and satisfies the **functional statements** attributed to the **acceptable solution** it is proposed to replace, as set out in Division A and OFMEM Fire Code Supplement FCS-1, "Objectives and Functional Statements Attributed to Acceptable Solutions".

(2) The documentation referred to in Sentence (1) shall include

(a) an analysis outlining the analytical methodology and rationale used to determine that a proposed **alternative solution** will achieve at least the minimum level of performance intended by the applicable **acceptable solution** in Division B in respect of the **objectives** and **functional statements** attributed to the **acceptable solution** as identified in Division A and OFMEM Fire Code Supplement FCS-1, "Objectives and Functional Statements Attributed to Acceptable Solutions", and

(b) information concerning any additional **check**, **inspection**, **test**, maintenance or operational requirements, including any commissioning requirements, and schedules not otherwise specifically addressed in Division B.

(3) The analysis referred to in Clause (2)(a) shall identify the **acceptable solution** that the **alternative solution** is proposed to replace, the **objectives** and **functional statements** attributed to that **acceptable solution**, and any assumptions, limiting or restricting factors, engineering studies or **building** performance parameters in order to allow for an assessment of compliance with this Code by the **Chief Fire Official**.

(4) The information provided under Sentence (3) shall be in sufficient detail to convey the design intent and to support the validity, accuracy, relevance and precision of the analysis.

(5) An **alternative solution** shall bear the signature and seal of a **Professional Engineer** or **Architect**, or both.

Review

1.3.2.3. (1) The **Chief Fire Official** shall, within 45 days after the receipt of an **alternative solution** submitted under Article 1.3.2.2., review the **alternative solution** for compliance with this Code and notify the **owner** or the **owner's** agent of the decision in writing.

(2) Where an **alternative solution** is not **approved**, the **Chief Fire Official** shall include the reasons in the decision.

(3) Notification shall be served either personally or by mail.

(4) Where notification is by mail, it is deemed to have been served on the fifth day after the date of mailing.

(5) An **owner** or an **owner's** agent who feels aggrieved by a decision not to **approve** an **alternative solution** may, within 30 days after receipt of the refusal, appeal the decision in the same manner as though it were an **Order**.

Implementation

1.3.2.4. **Approved alternative solutions** referred to in this Subsection and the requirements referred to in Clause 1.3.2.5.(3)(b) shall be implemented.

Records

1.3.2.5. (1) Documentation for every

(a) **approved alternative solution** to this Code, and

(b) alternative solution, as defined in the **Building Code**, with respect to fire safety

shall be kept on the premises to which it relates and be made available to the **Chief Fire Official** upon request.

(2) The documentation referred to in Sentence (1) shall be retained for as long as necessary to demonstrate compliance with this Code and the **Building Code**, as applicable.

(3) The **check**, **inspection**, **test**, maintenance and operational requirements

(a) referred to in Clause 1.3.2.2.(2)(b), or

(b) forming part of an alternative solution, as defined in the **Building Code**, with respect to fire safety, where such requirements are not otherwise specifically addressed in Division B

shall be included in the fire safety plan where such a plan is required under Section 2.8 of Division B.

2.1.1.1. OMITTED (REVOKES OTHER REGULATION).

2.1.2.1. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION).

O. Reg. 213/07, Division C; O. Reg. 150/13, s. 22; O. Reg. 194/14, s. 11; O. Reg. 256/14, ss. 432-439.

Planning Act
R.S.O. 1990, CHAPTER P.13

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Interpretation

1. (1) In this Act,

"area of employment" means an area of land designated in an official plan for clusters of business and economic uses including, without limitation, the uses listed in subsection (5), or as otherwise prescribed by regulation; ("zone d'emploi")

"area of settlement" means an area of land designated in an official plan for urban uses including urban areas, urban policy areas, towns, villages, hamlets, rural clusters, rural settlement areas, urban systems, rural service centres or future urban use areas, or as otherwise prescribed by regulation; ("zone de peuplement")

"committee of adjustment" means a committee of adjustment constituted under section 44; ("comité de dérogation")

"First Nation" means a band as defined in the *Indian Act* (Canada); ("Première Nation")

"land division committee" means a land division committee constituted under section 56; ("comité de morcellement des terres")

"local appeal body" means an appeal body for certain local land use planning matters, constituted under section 8.1; ("organisme d'appel local")

"local board" means any school board, public utility commission, transportation commission, public library board, board of park management, board of health, police services board, planning board or any other board, commission, committee, body or local authority established or exercising any power or authority under any general or special Act with respect to any of the affairs or purposes of a municipality or of two or more municipalities or portions thereof; ("conseil local")

"Minister" means the Minister of Municipal Affairs and Housing; ("ministre")

"Municipal Board" means the Ontario Municipal Board; ("Commission des affaires municipales")

"prescribed" means prescribed by the regulations; ("prescrit")

"provincial plan" means,

(a) the Greenbelt Plan established under section 3 of the *Greenbelt Act, 2005*,

(b) the Niagara Escarpment Plan established under section 3 of the *Niagara Escarpment Planning and Development Act*,

(c) the Oak Ridges Moraine Conservation Plan established under section 3 of the *Oak Ridges Moraine Conservation Act, 2001*,

(d) a development plan approved under the *Ontario Planning and Development Act, 1994*,

(e) a growth plan approved under the *Places to Grow Act, 2005*, or

(f) a prescribed plan or policy or a prescribed provision of a prescribed plan or policy made or approved by the Lieutenant Governor in Council, a minister of the Crown, a ministry or a board, commission or agency of the Government of Ontario; ("plan provincial")

"public body" means a municipality, a local board, a ministry, department, board, commission, agency or official of a provincial or federal government or a First Nation; ("organisme public")

"public work" means any improvement of a structural nature or other undertaking that is within the jurisdiction of the council of a municipality or a local board; ("travaux publics")

"regulations" means regulations made under this Act. ("règlements")

"renewable energy generation facility" has the same meaning as in the *Electricity Act, 1998*; ("installation de production d'énergie renouvelable")

"renewable energy project" has the same meaning as in the *Green Energy Act, 2009*; ("projet d'énergie renouvelable")

"renewable energy testing facility" has the same meaning as in the *Green Energy Act, 2009*; ("installation d'évaluation du potentiel en énergie renouvelable")

"renewable energy testing project" has the same meaning as in the *Green Energy Act, 2009*; ("projet d'évaluation du potentiel en énergie renouvelable")

"renewable energy undertaking" means a renewable energy generation facility, a renewable energy project, a renewable energy testing facility or a renewable energy testing project; ("entreprise d'énergie renouvelable")

"residential unit" means a unit that,

(a) consists of a self-contained set of rooms located in a building or structure,

(b) is used or intended for use as residential premises, and

(c) contains kitchen and bathroom facilities that are intended for the use of the unit only. ("unité d'habitation") R.S.O. 1990, c. P.13, s. 1; 1994, c. 23, s. 3 (2); 1996, c. 4, s. 1 (1-3); 2002, c. 17, Sched. B, s. 1; 2004, c. 18, s. 1; 2006, c. 23, s. 1 (1-4); 2009, c. 12, Sched. K, s. 1; 2009, c. 12, Sched. L, s. 19.

Limitation

(2) The term "public body" in subsection (1) excludes all ministries of the Province of Ontario except the Ministry of Municipal Affairs and Housing in respect of subsections 17 (24), (36) and (40), 22 (7.4), 34 (19), 38 (4), 45 (12), 51 (39), (43) and (48) and 53 (19) and (27). 1996, c. 4, s. 1 (4); 2006, c. 23, s. 1 (5).

Designation

(3) Despite subsection (2), the Minister may by regulation designate any other ministry of the Province of Ontario to be a public body for the purpose of the provisions referred to in subsection (2). 1996, c. 4, s. 1 (4).

Exclusion

(4) The Minister may by regulation exclude any board, commission, agency or official of the Province of Ontario from the definition of "public body" set out in subsection (1) in respect of the provisions referred to in subsection (2). 1996, c. 4, s. 1 (4).

Uses re "area of employment"

(5) The uses referred to in the definition of "area of employment" in subsection (1) are,

(a) manufacturing uses;

(b) warehousing uses;

(c) office uses;

(d) retail uses that are associated with uses mentioned in clauses (a) to (c); and

(e) facilities that are ancillary to uses mentioned in clauses (a) to (d). 2006, c. 23, s. 1 (6).

Information and material to be made available to public

1.0.1 Information and material that is required to be provided to a municipality or approval authority under this Act shall be made available to the public. 2006, c. 23, s. 2.

Purposes

1.1 The purposes of this Act are,

(a) to promote sustainable economic development in a healthy natural environment within the policy and by the means provided under this Act;

(b) to provide for a land use planning system led by provincial policy;

(c) to integrate matters of provincial interest in provincial and municipal planning decisions;

(d) to provide for planning processes that are fair by making them open, accessible, timely and efficient;

(e) to encourage co-operation and co-ordination among various interests;

(f) to recognize the decision-making authority and accountability of municipal councils in planning. 1994, c. 23, s. 4.

PART I
PROVINCIAL ADMINISTRATION

Provincial interest

2. The Minister, the council of a municipality, a local board, a planning board and the Municipal Board, in carrying out their responsibilities under this Act, shall have regard to, among other matters, matters of provincial interest such as,

(a) the protection of ecological systems, including natural areas, features and functions;

(b) the protection of the agricultural resources of the Province;

(c) the conservation and management of natural resources and the mineral resource base;

(d) the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest;

(e) the supply, efficient use and conservation of energy and water;

(f) the adequate provision and efficient use of communication, transportation, sewage and water services and waste management systems;

(g) the minimization of waste;

(h) the orderly development of safe and healthy communities;

(h.1) the accessibility for persons with disabilities to all facilities, services and matters to which this Act applies;

(i) the adequate provision and distribution of educational, health, social, cultural and recreational facilities;

(j) the adequate provision of a full range of housing, including affordable housing;

(k) the adequate provision of employment opportunities;

(l) the protection of the financial and economic well-being of the Province and its municipalities;

(m) the co-ordination of planning activities of public bodies;

(n) the resolution of planning conflicts involving public and private interests;

(o) the protection of public health and safety;

(p) the appropriate location of growth and development;

(q) the promotion of development that is designed to be sustainable, to support public transit and to be oriented to pedestrians. 1994, c. 23, s. 5; 1996, c. 4, s. 2; 2001, c. 32, s. 31 (1); 2006, c. 23, s. 3; 2011, c. 6, Sched. 2, s. 1.

Decisions of councils and approval authorities

2.1 When an approval authority or the Municipal Board makes a decision under this Act that relates to a planning matter, it shall have regard to,

(a) any decision that is made under this Act by a municipal council or by an approval authority and relates to the same planning matter; and

(b) any supporting information and material that the municipal council or approval authority considered in making the decision described in clause (a). 2006, c. 23, s. 4.

Policy statements

3. (1) The Minister, or the Minister together with any other minister of the Crown, may from time to time issue policy statements that have been approved by the Lieutenant Governor in Council on matters relating to municipal planning that in the opinion of the Minister are of provincial interest. R.S.O. 1990, c. P.13, s. 3 (1).

Minister to confer

(2) Before issuing a policy statement, the Minister shall confer with such persons or public bodies that the Minister considers have an interest in the proposed statement. 1994, c. 23, s. 6 (1).

Notice

(3) If a policy statement is issued under subsection (1), the Minister shall cause it to be published in *The Ontario Gazette* and shall give such further notice of it, in such manner as the Minister considers appropriate, to all members of the Assembly and to any other persons or public bodies that the Minister considers have an interest in the statement. 1994, c. 23, s. 6 (1).

Idem

(4) Each municipality that receives notice of a policy statement under subsection (3) shall in turn give notice of the statement to each local board of the municipality that it considers has an interest in the statement. R.S.O. 1990, c. P.13, s. 3 (4).

Policy statements and provincial plans

(5) A decision of the council of a municipality, a local board, a planning board, a minister of the Crown and a ministry, board, commission or agency of the government, including the Municipal Board, in respect of the exercise of any authority that affects a planning matter,

(a) shall be consistent with the policy statements issued under subsection (1) that are in effect on the date of the decision; and

(b) shall conform with the provincial plans that are in effect on that date, or shall not conflict with them, as the case may be. 2006, c. 23, s. 5.

Same

(6) Comments, submissions or advice affecting a planning matter that are provided by the council of a municipality, a local board, a planning board, a minister or ministry, board, commission or agency of the government,

(a) shall be consistent with the policy statements issued under subsection (1) that are in effect on the date the comments, submissions or advice are provided; and

(b) shall conform with the provincial plans that are in effect on that date, or shall not conflict with them, as the case may be. 2006, c. 23, s. 5.

Duties of Minister unaffected

(7) Except as provided in subsections (5) and (6), nothing in this section affects nor restricts the Minister in carrying out the Minister's duties and responsibilities under this Act. 1996, c. 4, s. 3.

(8), (9) REPEALED: 1996, c. 4, s. 3.

Review

(10) The Minister shall, at least every five years from the date that a policy statement is issued under subsection (1), ensure that a review of the policy statement is undertaken for the purpose of determining the need for a revision of the policy statement. 1994, c. 23, s. 6 (3).

Delegation of Minister's powers

4. (1) The Minister, on the request of the council of any municipality, may, by order, delegate to the council any of the Minister's authority under this Act, other than the authority to approve or the authority to exempt from approval the official plan or amendments to the official plan of the municipality of which it is the council and, where the Minister has delegated any such authority, the council has, in lieu of the Minister, all the powers and rights of the Minister in respect thereof and the council shall be responsible for all matters pertaining thereto, including, without limiting the generality of the foregoing, the referral of any matter to the Municipal Board. R.S.O. 1990, c. P.13, s. 4 (1); 1996, c. 4, s. 4 (1); 1999, c. 12, Sched. M, s. 21; 2006, c. 23, s. 6.

Same

(2) The Minister, on the request of the planning board of any planning area in a territorial district, may, by order, delegate to the planning board any of the Minister's authority under this Act, other than the authority to approve or the authority to exempt from approval an official plan or amendments to an official plan, and where the Minister has delegated any such authority the planning board has, in lieu of the Minister, all the powers and rights of the Minister in respect thereof and the planning board shall be responsible for all matters pertaining thereto, including, without limiting the generality of the foregoing, the referral of any matter to the Municipal Board. R.S.O. 1990, c. P.13, s. 4 (2); 1996, c. 4, s. 4 (2).

Delegation where no request is made

(2.1) The Minister may, after the prescribed notice is given, by order delegate to the council of an upper-tier municipality or a single-tier municipality any of the Minister's authority described in subsection (1) if the municipality has an official plan. 2002, c. 17, Sched. B, s. 2.

Delegation to planning board

(2.2) The Minister may, after the prescribed notice is given, by order delegate to a planning board any of the Minister's authority described in subsection (2) if the planning board has an official plan. 1996, c. 4, s. 4 (3).

(3) REPEALED: 1994, c. 23, s. 7.

Conditions

(4) A delegation made by the Minister under this section may be subject to such conditions as the Minister may by order provide. 1996, c. 4, s. 4 (4).

Withdrawal of delegation of powers

(5) The Minister may by order, accompanied by a written explanation therefor, withdraw any delegation made under this section and, without limiting the generality of the foregoing, such withdrawal may be either in respect of one or more applications for approval specified in the order or in respect of any or all applications for approval made subsequent to the withdrawal of the delegation, and immediately following any such withdrawal the council or the planning board, as the case may be, shall forward to the Minister all papers, plans, documents and other material in the possession of the municipal corporation or the planning board that relate to any matter in respect of which the authority was withdrawn and of which a final disposition was not made by the council or the planning board prior to such withdrawal. R.S.O. 1990, c. P.13, s. 4 (5); 1993, c. 26, s. 49 (4); 1996, c. 4, s. 4 (5).

Further delegation of powers

5. (1) Where the Minister has delegated any authority to a council under section 4, such council may, in turn, by by-law, and subject to such conditions as may have been imposed by the Minister, delegate any of such authority, other than the authority to approve official plans or the authority to exempt from approval plans as official plans or amendments to official plans, to a committee of council or to an appointed officer identified in the by-law either by name or position occupied and such committee or officer, as the case may be, has, in lieu of the Minister, all the powers and rights of the Minister in respect of such delegated authority and shall be responsible for all matters pertaining thereto including the referral of any matter to the Municipal Board. R.S.O. 1990, c. P.13, s. 5 (1); 1996, c. 4, s. 5 (1).

Limitation

(2) Despite subsection (1), a council may not delegate the authority to approve or the authority to exempt from approval amendments to official plans without the prior written approval of the Minister, which approval may be subject to such further conditions as the Minister considers appropriate. R.S.O. 1990, c. P.13, s. 5 (2); 1996, c. 4, s. 5 (2).

Further delegation of powers

(3) In addition to the authority of a council to, in turn, delegate any authority under subsection (1), where the Minister has delegated to a council his or her authority for the giving of consents under section 53, such council may, in turn, by by-law, and subject to such conditions as may have been imposed by the Minister, delegate the authority for the giving of consents to a committee of adjustment constituted under section 44.

Conditions

(4) A delegation made by a council under subsection (1) or (3) may be subject to such conditions as the council may by by-law provide and as are not in conflict with any conditions provided by order of the Minister under section 4.

Withdrawal of delegation of powers

(5) A council may by by-law withdraw any delegation made under subsection (1) or (3), whereupon subsection 4 (5) applies with necessary modifications. R.S.O. 1990, c. P.13, s. 5 (3-5).

Consultation

6. (1) In this section,

"ministry" means any ministry or secretariat of the Government of Ontario and includes a board, commission or agency of the Government. R.S.O. 1990, c. P.13, s. 6 (1); 1998, c. 15, Sched. E, s. 27 (3).

Planning policies

(2) A ministry, before carrying out or authorizing any undertaking that the ministry considers will directly affect any municipality, shall consult with, and have regard for, the established planning policies of the municipality. R.S.O. 1990, c. P.13, s. 6 (2).

Grants

7. The Minister may, out of the money appropriated therefor by the Legislature, make grants of money to assist in the performing of any duty or function of a planning nature. R.S.O. 1990, c. P.13, s. 7.

PART II
LOCAL PLANNING ADMINISTRATION

Planning advisory committee

8. (1) The council of a municipality may appoint a planning advisory committee composed of such persons as the council may determine.

Joint planning by agreement

(2) The councils of two or more municipalities may enter into agreement to provide for the joint undertaking of such matters of a planning nature as may be agreed upon and may appoint a joint planning advisory committee composed of such persons as they may determine.

Remuneration

(3) Persons appointed to a committee under this section may be paid such remuneration and expenses as the council or councils may determine, and where a joint committee is appointed, the councils may by agreement provide for apportioning to their respective municipalities the costs of the payments. R.S.O. 1990, c. P.13, s. 8.

Local appeal body

8.1 (1) If a municipality meets the prescribed conditions, the council may by by-law constitute and appoint one appeal body for certain local land use planning matters, composed of such persons as the council considers advisable, subject to subsections (3), (4) and (5). 2006, c. 23, s. 7.

Local and upper-tier municipalities

(2) For greater certainty, this section applies to both local and upper-tier municipalities. 2006, c. 23, s. 7.

Term and qualifications

(3) A person who is appointed to the local appeal body,

(a) shall serve for the prescribed term, or if no term is prescribed, for the term specified in the by-law; and

(b) shall have the prescribed qualifications, if any. 2006, c. 23, s. 7.

Eligibility criteria

(4) In appointing persons to the local appeal body, the council shall have regard to any prescribed eligibility criteria. 2006, c. 23, s. 7.

Restriction

(5) The council shall not appoint to the local appeal body a person who is,

(a) an employee of the municipality;

(b) a member of a municipal council, land division committee, committee of adjustment, planning board or planning advisory committee; or

(c) a member of a prescribed class. 2006, c. 23, s. 7.

Power to hear appeals

(6) The council may by by-law empower the local appeal body to hear appeals under,

(a) subsection 45 (12);

(b) subsections 53 (14), (19) and (27); or

(c) the provisions listed in both clauses (a) and (b). 2006, c. 23, s. 7.

Effect of by-law under subs. (6)

(7) If a by-law has been passed under subsection (6),

(a) the local appeal body has all the powers and duties of the Municipal Board under the relevant provisions of this Act;

(b) all references in this Act to the Municipal Board in connection with appeals shall be read as references to the local appeal body; and

(c) appeals under the relevant provisions shall be made to the local appeal body, not to the Municipal Board. 2006, c. 23, s. 7.

Prescribed requirements

(8) The local appeal body shall comply with any prescribed requirements including, without limitation, requirements for the rules governing the practice and procedure before the local appeal body. 2006, c. 23, s. 7.

Fee

(9) An appellant shall pay to the local appeal body any fee that the council establishes by by-law. 2006, c. 23, s. 7.

Appeal

(10) An appeal lies from the local appeal body to the Divisional Court, with leave of the Divisional Court, on a question of law. 2006, c. 23, s. 7.

Saving

(11) For greater certainty, the local appeal body does not have power to make determinations under subsection 53 (4.1). 2006, c. 23, s. 7.

Exception, related appeals

(12) Despite subsection (7), an appeal under a provision listed in subsection (6) shall be made to the Municipal Board, not to the local appeal body, if a related appeal,

(a) has previously been made to the Board and has not yet been finally disposed of; or

(b) is made to the Board together with the appeal under a provision listed in subsection (6). 2006, c. 23, s. 7.

Same

(13) For the purposes of subsections (12) and (16), an appeal is a related appeal with respect to an appeal under a provision listed in subsection (6) if it is made,

(a) under section 17, 22, 34, 36, 38, 41 or 51 or in relation to a development permit system; and

(b) in respect of the same matter as the appeal under a provision listed in subsection (6). 2006, c. 23, s. 7.

Dispute

(14) A person may make a motion for directions to have the Municipal Board determine a dispute about whether subsection (12) or (16) applies to an appeal. 2006, c. 23, s. 7.

Final determination

(15) The Municipal Board's determination under subsection (14) is not subject to appeal or review. 2006, c. 23, s. 7.

O.M.B. to assume jurisdiction

(16) If an appeal has been made to a local appeal body under a provision listed in subsection (6) but no hearing has begun, and a notice of appeal is filed in respect of a related appeal, the Municipal Board shall assume jurisdiction to hear the first-mentioned appeal. 2006, c. 23, s. 7.

Same

(17) When the Municipal Board assumes jurisdiction as described in subsection (16), the local appeal body,

(a) shall immediately forward to the Board all information and material in its possession that relates to the appeal; and

(b) shall not take any further action with respect to the appeal. 2006, c. 23, s. 7.

Withdrawal of power

(18) The Minister may by order, accompanied by a written explanation for it, withdraw the power given to a local appeal body under subsections (6) and (7), and the order may be in respect of the appeals specified in the order, subject to subsection (19), or in respect of any or all appeals made after the order is made. 2006, c. 23, s. 7.

Exception

(19) An order made under subsection (18) does not apply to an appeal if the hearing before the local appeal body has begun on or before the date of the order. 2006, c. 23, s. 7.

Effect of withdrawal

(20) If an order is made under subsection (18),

(a) the Municipal Board shall hear all appeals to which the order applies; and

(b) the local appeal body to which the order relates shall forward to the Board all information and material in its possession that relates to any appeal to which the order applies. 2006, c. 23, s. 7.

Revocation of withdrawal

(21) The Minister may by order, accompanied by a written explanation for it, revoke all or part of an order made under subsection (18). 2006, c. 23, s. 7.

Exception

(22) An order made under subsection (21) does not apply to an appeal if the hearing before the Municipal Board has begun on or before the date of the order. 2006, c. 23, s. 7.

Effect of revocation

(23) If an order is made under subsection (21),

(a) the local appeal body shall hear all appeals to which the order applies; and

(b) the Municipal Board shall forward to the local appeal body all information and material in its possession that relates to any appeal to which the order applies. 2006, c. 23, s. 7.

Restriction

(24) This section does not authorize a municipality to,

(a) establish a joint local appeal body together with one or more other municipalities; or

(b) empower a local appeal body that is established by another municipality to hear appeals. 2006, c. 23, s. 7.

City of Toronto

(25) This section does not apply with respect to the City of Toronto. 2006, c. 23, s. 7.

Transition

(26) This section does not apply with respect to an appeal that is made before the day a by-law passed under subsection (6) by the council of the relevant municipality comes into force. 2006, c. 23, s. 7.

Planning area defined by Minister

9. (1) The Minister may define and name a planning area consisting of the whole of two or more municipalities that are situate in a territorial district or consisting of the whole of one or more municipalities and territory without municipal organization.

Planning board for planning area

(2) Where a planning area is defined under subsection (1), the Minister shall establish the planning board for the planning area and specify the name of the board and the number of members to be appointed to it by the council of each municipality within the planning area and the number of members, if any, to be appointed by the Minister.

Appointments to board

(3) The council of each municipality shall appoint to the planning board the number of members specified by the Minister under subsection (2) and, after the initial appointments, the appointments shall be made by each successive council as soon as practicable after the council is organized.

Term of office

(4) The members,

(a) appointed by the council of each municipality shall hold office for the term of the council that appointed them; and

(b) appointed by the Minister shall hold office for the term specified by the Minister in their appointment,

and until their successors are appointed. R.S.O. 1990, c. P.13, s. 9.

Planning area in unorganized territory

10. The Minister may define and name a planning area consisting of territory without municipal organization and may establish and name a planning board for the planning area and appoint the members thereof. R.S.O. 1990, c. P.13, s. 10.

Body corporate

11. (1) A planning board is a body corporate and a majority of its members constitutes a quorum.

Chair

(2) A planning board shall annually elect a chair and a vice-chair who shall preside in the absence of the chair.

Secretary-treasurer, employees, consultants

(3) A planning board shall appoint a secretary-treasurer, who may be a member of the board, and may engage such employees and consultants as are considered appropriate.

Execution of documents

(4) The execution of documents by a planning board shall be evidenced by the signatures of the chair or the vice-chair and of the secretary-treasurer, and the corporate seal of the board. R.S.O. 1990, c. P.13, s. 11.

Estimates

12. (1) A planning board established by the Minister for a planning area consisting of one municipality and territory without municipal organization shall submit annually to the council of the municipality an estimate of its financial requirements for the year and the council may amend such estimate and shall pay to the secretary-treasurer of the planning board out of the money appropriated for the planning board such amounts as may be requisitioned from time to time.

Two or more municipalities

(2) In the case of a planning board established for a planning area consisting of two or more municipalities or consisting of two or more municipalities and territory without municipal organization, the planning board shall annually submit its estimates to the council of each of such municipalities together with a statement as to the proportion thereof to be chargeable to each municipality.

When estimates binding

(3) If the estimates submitted under subsection (2) are approved, or are amended and approved, by the councils of municipalities representing more than one-half of the population of the planning area for which the board was established, the estimates are binding on all the municipalities.

Notification

(4) After the estimates have been approved as provided in subsection (3), the planning board shall so notify each municipality involved and shall notify each such municipality of the total approved estimates and the amount thereof chargeable to it, based on the apportionment set out in the statement submitted under subsection (2).

Where apportionment not satisfactory

(5) If the council of any municipality is not satisfied with the apportionment, it may, within fifteen days after receiving the notice under subsection (4), notify the planning board and the secretary of the Municipal Board that it desires the apportionment to be made by the Board.

Power of O.M.B.

(6) The Municipal Board shall hold a hearing and determine the apportionment and its decision is final.

Payment

(7) Each municipality shall pay to the secretary-treasurer of the planning board such amounts as may be requisitioned from time to time up to the amount determined by the planning board under subsection (4) or by the Municipal Board under subsection (6), as the case may be. R.S.O. 1990, c. P.13, s. 12.

Municipal grants

13. Any municipality within a planning area may make grants of money to the planning board of the planning area. R.S.O. 1990, c. P.13, s. 13.

Duties of planning board

14. (1) A planning board shall provide advice and assistance in respect of such planning matters affecting the planning area as are referred to the board,

(a) by the councils to which the board submits its estimates under section 12, or by any of such councils; or

(b) by the Minister, in the case of a planning board appointed for a planning area consisting solely or partially of territory without municipal organization.

Preparation of official plan

(2) A planning board shall prepare a plan suitable for adoption as the official plan of the planning area, or at the request of any of the councils mentioned in subsection (1), prepare a plan suitable for adoption as the official plan of the municipality of which it is the council. R.S.O. 1990, c. P.13, s. 14.

Joint planning areas

14.1 (1) The councils of two or more local municipalities that are within one or more counties whether or not they form part of a county for municipal purposes may by by-law define a municipal planning area, establish a municipal planning authority for the area and specify the name of the authority.

Approval of by-law

(2) The council of a municipality shall not pass a by-law under subsection (1) unless the proposed by-law is approved by the Minister after consulting with the council of any affected county.

Body corporate

(3) A municipal planning authority is a body corporate.

Composition

(4) All the members of a municipal planning authority shall be members of council.

Number of members

(5) The council of each local municipality shall appoint to the municipal planning authority the number of members prescribed and, after the initial appointments, the appointments shall be made by each successive council as soon as possible after the council is organized.

Term

(6) The members of the municipal planning authority shall hold office for the term of the council that appointed them and until their successors are appointed.

Vacancies

(7) If a vacancy occurs from any cause, the council shall, as soon as possible, appoint a member of its council to the municipal planning authority who shall hold office for the remainder of the unexpired term. 1994, c. 23, s. 8.

Municipal planning authority

14.2 (1) Each member of a municipal planning authority is entitled to one vote. 1994, c. 23, s. 8.

Quorum

(2) A majority of the members of a municipal planning authority constitutes a quorum. 1994, c. 23, s. 8.

Chair

(3) A municipal planning authority shall annually elect a chair and a vice-chair who shall preside in the absence of the chair. 1994, c. 23, s. 8.

Secretary-treasurer

(4) A municipal planning authority shall appoint a secretary-treasurer who may be a member of the authority. 1994, c. 23, s. 8.

Documents

(5) The execution of documents by a municipal planning authority shall be evidenced by the signatures of the chair or the vice-chair and of the secretary-treasurer and the corporate seal of the authority. 1994, c. 23, s. 8.

Records, inspection

(6) The secretary-treasurer shall keep on file minutes and records of all applications and the decisions on them and of all other business of the authority, and section 253 of the *Municipal Act, 2001* applies with necessary modifications in respect of the documents kept. 1994, c. 23, s. 8; 2002, c. 17, Sched. B, s. 3.

Finance

14.3 (1) On or before March 31 of each year, a municipal planning authority shall determine its financial requirements and the proportion of it to be chargeable to each municipality and shall notify the council of each of the municipalities within the municipal planning area of its financial requirements together with a statement as to the proportion of it to be chargeable to each municipality.

Determination by O.M.B.

(2) If the council of any municipality is not satisfied with the apportionment, it may, within 15 days after receiving the notice, notify the municipal planning authority and the Municipal Board that it desires the apportionment to be made by the Board.

Hearing

(3) The Municipal Board shall hold a hearing and determine the apportionment and its decision is final.

Payments

(4) Each municipality shall pay to the secretary-treasurer of the municipal planning authority such amounts as may be requisitioned from time to time up to the amount determined by the municipal planning authority under subsection (1) or by the Municipal Board under subsection (3), as the case may be. 1994, c. 23, s. 8.

County levy

(5) If a municipal planning authority has been established, a county shall raise the amounts required for county land use planning purposes by levying a special rate on rateable property not in the municipal planning area. 1997, c. 29, s. 65.

Expansion

14.4 (1) A municipal planning authority may, upon the request of the council of a local municipality that is within a county, whether or not it forms part of the county for municipal purposes, by by-law redefine the municipal planning area to add the municipality to the planning area and rename the municipal planning authority.

Approval of by-law

(2) A municipal planning authority shall not pass a by-law under subsection (1) unless the proposed by-law is approved by the Minister after consulting with the council of any affected county.

Appointments

(3) The council of a municipality added to a municipal planning authority under subsection (1) shall, as soon as possible, appoint to the authority the number of members prescribed and, after the initial appointment, the appointments shall be made by each successive council, as soon as possible, after the council is organized. 1994, c. 23, s. 8.

Removal

14.5 (1) Upon the request of the council of a local municipality that is within a municipal planning area, the municipal planning authority shall by by-law redefine the municipal planning area to remove the municipality from the planning area and may rename the municipal planning authority.

Approval

(2) A municipal planning authority shall not pass a by-law under subsection (1) unless the proposed by-law is approved by the Minister.

Adjustment

(3) The members of a municipal planning authority appointed by a local municipality which is removed from the authority shall cease to be members of the authority on the date the by-law passed under subsection (1) comes into effect. 1994, c. 23, s. 8.

Dissolution

14.6 (1) A municipal planning authority may by by-law dissolve the municipal planning area and the municipal planning authority.

Approval

(2) A municipal planning authority shall not pass a by-law under subsection (1) unless the proposed by-law is approved by the Minister.

Dissolution by Minister

(3) The Minister may by order dissolve a municipal planning area and a municipal planning authority.

Assets, liabilities

(4) All the assets and liabilities of a municipal planning authority dissolved under this section are assets and liabilities of the municipalities that formed part of the municipal planning area and, if such municipalities cannot agree as to the disposition of the assets and liabilities, the Municipal Board, upon the application of one or more of the municipalities, shall direct a final disposition.

Same

(5) If assets or liabilities are transferred or assigned to a municipality under an agreement or an order of the Municipal Board under this section, the municipality stands in the place of the municipal planning authority for all purposes.

Transitional matters

(6) Despite this or any other Act, the Minister may by order provide for transitional matters which, in the opinion of the Minister, are necessary or expedient to establish, expand or dissolve a municipal planning authority or to remove a municipality from a municipal planning authority. 1994, c. 23, s. 8.

Official plan

14.7 (1) If land in a municipal planning area is covered by the official plan of a county, the parts of the official plan which affect the land in the municipal planning area shall be deemed for all purposes to be the official plan of the municipal planning authority on the day the municipal planning authority is established and the county shall forward to the municipal planning authority all papers, plans and documents and other material that relate to the parts of the official plan that are deemed to be the official plan of the municipal planning authority.

Restriction

(2) The council of a county shall not exercise any power under section 17 in respect of land in the county that is in a municipal planning area. 1994, c. 23, s. 8.

Preparation of plan

(3) A municipal planning authority shall prepare and adopt a plan and, unless exempt from approval, submit it for approval as an official plan in respect of the land in the municipal planning area that is not covered by an official plan deemed under subsection (1) to be the official plan of the municipal planning authority. 1994, c. 23, s. 8; 1996, c. 4, s. 6 (1).

Application

(4) Section 17 applies with necessary modification to the preparation and adoption of a plan by a municipal planning authority and, unless exempt from approval, the approval of the plan as an

official plan as though the planning authority were the council of the municipality and the secretary-treasurer were the clerk of the municipality. 1996, c. 4, s. 6 (2).

Deemed official plan

(5) If land that is in a local municipality that forms part of a county for municipal purposes is removed from a municipal planning area, the parts of the official plan of the municipal planning authority which affect the land removed from the municipal planning area shall be deemed for all purposes to be the official plan of the county on the day the by-law removing the land is passed and the municipal planning authority shall forward to the county all papers, plans and documents and other materials that relate to the parts of the plan that are deemed to be the official plan of the county.

Revocation

(6) If land that is in a local municipality that does not form part of a county for municipal purposes is removed from a municipal planning area, the parts of the official plan which affect the land removed from the municipal planning area are revoked.

Deemed plan

(7) If land that is in a local municipality that forms part of a county for municipal purposes is in a municipal planning area that is dissolved, the parts of the official plan of the municipal planning authority which affect land in the local municipality shall be deemed for all purposes to be the official plan of the county on the day the municipal planning authority is dissolved.

Revocation

(8) If land that is in a local municipality that does not form part of a county for municipal purposes is in a municipal planning area that is dissolved, the parts of the official plan of the municipal planning authority which affect land in the local municipality are revoked.

Conformity with upper tier plan

(9) Section 27 applies with necessary modifications to the official plan of a planning authority as though the official plan of the municipal planning authority were the official plan of a county and the municipal planning authority were the council of a county. 1994, c. 23, s. 8.

Deemed council, municipality

14.8 (1) Sections 2 and 3, subsections 4 (1), (4) and (5), 5 (1), (2), (4) and (5), 6 (2), 8 (1) and (3), sections 16, 16.1, 17, 20, 21, 22, 23 and 26, subsection 51 (37) and (45), sections 62.1, 65, 66, 68 and 69 apply to a municipal planning area or a municipal planning authority, as appropriate, and the municipal planning area and municipal planning authority shall be deemed to be a municipality or a council of a municipality, respectively, for those purposes. 1994, c. 23, s. 8.

(2) REPEALED: 1996, c. 4, s. 7.

Upper-tier municipalities, planning functions

15. The council of an upper-tier municipality, on such conditions as may be agreed upon with the council of a lower-tier municipality, may,

(a) assume any authority, responsibility, duty or function of a planning nature that the lower-tier municipality has under this or any other Act; or

(b) provide advice and assistance to the lower-tier municipality in respect of planning matters generally. 2002, c. 17, Sched. B, s. 4.

PART III
OFFICIAL PLANS

Contents of official plan

16. (1) An official plan shall contain,

(a) goals, objectives and policies established primarily to manage and direct physical change and the effects on the social, economic and natural environment of the municipality or part of it, or an area that is without municipal organization; and

(b) such other matters as may be prescribed. 2006, c. 23, s. 8.

Same

(2) An official plan may contain,

(a) a description of the measures and procedures proposed to attain the objectives of the plan;

(b) a description of the measures and procedures for informing and obtaining the views of the public in respect of a proposed amendment to the official plan or proposed revision of the plan or in respect of a proposed zoning by-law; and

(c) such other matters as may be prescribed. 2006, c. 23, s. 8.

Second unit policies

(3) Without limiting what an official plan is required to or may contain under subsection (1) or (2), an official plan shall contain policies that authorize the use of a second residential unit by authorizing,

(a) the use of two residential units in a detached house, semi-detached house or rowhouse if no building or structure ancillary to the detached house, semi-detached house or rowhouse contains a residential unit; and

(b) the use of a residential unit in a building or structure ancillary to a detached house, semi-detached house or rowhouse if the detached house, semi-detached house or rowhouse contains a single residential unit. 2011, c. 6, Sched. 2, s. 2.

(4) REPEALED: 1996, c. 4, s. 8 (2).

Prescribed process

16.1 The council of a municipality or a planning board may by by-law elect to follow the prescribed processes and develop the materials prescribed for the preparation of an official plan and any processes followed or materials developed in the preparation of the plan may be considered under the *Environmental Assessment Act* with respect to any requirement that it must meet under that Act. 1994, c. 23, s. 9.

Approvals

17. (1) Except as otherwise provided in this section, the Minister is the approval authority in respect of the approval of a plan as an official plan for the purposes of this section. 1996, c. 4, s. 9.

Approval by upper-tier municipality

(2) An upper-tier municipality is the approval authority in respect of an official plan of a lower-tier municipality for the purposes of this section if the upper-tier municipality has an approved official plan. 2002, c. 17, Sched. B, s. 5 (1).

(3) REPEALED: 2002, c. 17, Sched. B, s. 5 (2).

Upper-tier become approval authority

(4) On the day that all or part of a plan that covers an upper-tier municipality comes into effect as the official plan of a municipality, the upper-tier municipality is the approval authority in respect of the approval of a plan as an official plan of a lower-tier municipality. 2002, c. 17, Sched. B, s. 5 (3).

(5) REPEALED: 2002, c. 17, Sched. B, s. 5 (4).

Removal of power

(6) The Minister may by order, accompanied by a written explanation for it, remove the power given under subsection (2) or (4) and the order may be in respect of the plan or proposed official plan amendment specified in the order or in respect of any or all plans or proposed official plan amendments submitted for approval after the order is made. 1996, c. 4, s. 9; 2002, c. 17, Sched. B, s. 5 (5).

Transfer of approval authority

(7) If an order is made under subsection (6), the Minister becomes the approval authority in respect of the plans and proposed official plan amendments to which the order relates and the council of the former approval authority shall forward to the Minister all papers, plans, documents and other material that relate to any matter in respect of which the power was removed and of which a final disposition was not made by the approval authority. 1996, c. 4, s. 9.

Revocation

(8) If the Minister revokes the order or part of the order made under subsection (6), the council reverts back to being the approval authority in respect of all plans or proposed official plan amendments to which the revoked order or revoked part of the order applied. 1996, c. 4, s. 9.

Exemption

(9) Subject to subsection 26 (6), the Minister may by order exempt a plan or proposed official plan amendment from his or her approval under this section and the order may be in respect of the plan or proposed official plan amendment specified in the order or in respect of any or all plans or proposed official plan amendments. 1996, c. 4, s. 9; 2006, c. 23, s. 9 (1).

Authority to exempt

(10) The Minister may by order authorize an approval authority to pass a by-law,

(a) exempting any or all plans or proposed official plan amendments from its approval under this section; and

(b) exempting a plan or proposed official plan amendment from its approval under this section. 1996, c. 4, s. 9.

Conditions

(11) An exemption under subsection (9) or (10) or an authorization under subsection (10) may be subject to such conditions as the Minister or the approval authority may provide in the order or by-law. 1996, c. 4, s. 9.

Removal of exemption or authorization

(12) The Minister may by order or an approval authority may by by-law, accompanied by a written explanation for it, remove any exemption made under subsection (9) or (10) or any authorization made under subsection (10). 1996, c. 4, s. 9.

Mandatory adoption

(13) A plan shall be prepared and adopted and, unless exempt from approval, submitted for approval by the council of a prescribed municipality. 2002, c. 17, Sched. B, s. 5 (6).

Discretionary adoption

(14) The council of a municipality not prescribed under subsection (13) may prepare and adopt a plan and, unless the plan is exempt from approval, submit it for approval. 2002, c. 17, Sched. B, s. 5 (7).

Consultation and public meeting

(15) In the course of the preparation of a plan, the council shall ensure that,

(a) the appropriate approval authority is consulted on the preparation of the plan and given an opportunity to review all supporting information and material and any other prescribed information and material, even if the plan is exempt from approval;

(b) the prescribed public bodies are consulted on the preparation of the plan and given an opportunity to review all supporting information and material and any other prescribed information and material;

(c) adequate information and material, including a copy of the current proposed plan, is made available to the public, in the prescribed manner, if any; and

(d) at least one public meeting is held for the purpose of giving the public an opportunity to make representations in respect of the current proposed plan. 2006, c. 23, s. 9 (2).

Open house

(16) If the plan is being revised under section 26 or amended in relation to a development permit system, the council shall ensure that at least one open house is held for the purpose of giving the public an opportunity to review and ask questions about the information and material made available under clause (15) (c). 2006, c. 23, s. 9 (2).

Notice

(17) Notice of the public meeting required under clause (15) (d) and of the open house, if any, required under subsection (16) shall,

(a) be given to the prescribed persons and public bodies, in the prescribed manner; and

(b) be accompanied by the prescribed information. 2006, c. 23, s. 9 (2).

Timing of open house

(18) If an open house is required under subsection (16), it shall be held no later than seven days before the public meeting required under clause (15) (d) is held. 2006, c. 23, s. 9 (2).

Timing of public meeting

(19) The public meeting required under clause (15) (d) shall be held no earlier than 20 days after the requirements for giving notice have been complied with. 2006, c. 23, s. 9 (2).

Information and material

(19.1) The information and material referred to in clause (15) (c), including a copy of the current proposed plan, shall be made available to the public at least 20 days before the public meeting required under clause (15) (d) is held. 2006, c. 23, s. 9 (2).

Participation in public meeting

(19.2) Every person who attends a public meeting required under clause (15) (d) shall be given an opportunity to make representations in respect of the current proposed plan. 2006, c. 23, s. 9 (2).

Alternative procedure

(19.3) If an official plan sets out alternative measures for informing and obtaining the views of the public in respect of amendments that may be proposed for the plan and if the measures are complied with, subsections (15) to (19.2) do not apply to the proposed amendments, but subsections (19.4) and (19.6) do apply. 2006, c. 23, s. 9 (2).

Open house

(19.4) If subsection (19.3) applies and the plan is being revised under section 26 or amended in relation to a development permit system,

(a) the council shall ensure that at least one open house is held for the purpose of giving the public an opportunity to review and ask questions about the proposed amendments; and

(b) if a public meeting is also held, the open house shall be held no later than seven days before the public meeting. 2006, c. 23, s. 9 (2).

Information

(19.5) At a public meeting under clause (15) (d), the council shall ensure that information is made available to the public regarding who is entitled to appeal under subsections (24) and (36). 2006, c. 23, s. 9 (2).

Where alternative procedures followed

(19.6) If subsection (19.3) applies, the information required under subsection (19.5) shall be made available to the public at a public meeting or in the manner set out in the official plan for informing and obtaining the views of the public in respect of the proposed amendments. 2006, c. 23, s. 9 (2).

Submissions

(20) Any person or public body may make written submissions to the council before a plan is adopted. 1996, c. 4, s. 9.

Comments

(21) The council shall provide to any person or public body that the council considers may have an interest in the plan adequate information and material, including a copy of the plan and, before adopting the plan, shall give them an opportunity to submit comments on it up to the time specified by the council. 1996, c. 4, s. 9; 2006, c. 23, s. 9 (3).

Adoption of plan

(22) When the requirements of subsections (15) to (21), as appropriate, have been met and the council is satisfied that the plan as finally prepared is suitable for adoption, the council may by by-law adopt all or part of the plan and, unless the plan is exempt from approval, submit it for approval. 1996, c. 4, s. 9.

Notice

(23) The council shall, not later than 15 days after the day the plan was adopted, ensure that written notice is given of its adoption containing the prescribed information to,

(a) the appropriate approval authority, whether or not the plan is exempt from approval, unless the approval authority has notified the municipality that it does not wish to receive copies of the notices of adoption;

(b) each person or public body that filed with the clerk of the municipality a written request to be notified if the plan is adopted; and

(c) any other person or public body prescribed. 1996, c. 4, s. 9.

Right to appeal

(24) If the plan is exempt from approval, any of the following may, not later than 20 days after the day that the giving of notice under subsection (23) is completed, appeal all or part of the decision of council to adopt all or part of the plan to the Municipal Board by filing a notice of appeal with the clerk of the municipality:

1. A person or public body who, before the plan was adopted, made oral submissions at a public meeting or written submissions to the council.
2. The Minister.
3. The appropriate approval authority.
4. In the case of a request to amend the plan, the person or public body that made the request. 2006, c. 23, s. 9 (4).

No appeal re second unit policies

(24.1) Despite subsection (24), there is no appeal in respect of the policies described in subsection 16 (3), including, for greater certainty, any requirements or standards that are part of such policies. 2011, c. 6, Sched. 2, s. 3 (1).

Exception

(24.2) Subsection (24.1) does not apply to an official plan or official plan amendment adopted in accordance with subsection 26 (1). 2006, c. 23, s. 9 (4).

Notice of appeal

(25) The notice of appeal filed under subsection (24) must,

(a) set out the specific part of the plan to which the notice applies, if the notice does not apply to all of the plan;

(b) set out the reasons for the appeal; and

(c) be accompanied by the fee prescribed under the *Ontario Municipal Board Act*. 1996, c. 4, s. 9.

Timing

(26) For the purposes of subsections (24) and (36), the giving of written notice shall be deemed to be completed,

(a) where notice is given by personal service, on the day that the serving of all required notices is completed;

(b) where notice is given by mail, on the day that the mailing of all required notices is completed; and

(c) where notice is given by telephone transmission of a facsimile of the notice, on the day that the transmission of all required notices is completed. 1996, c. 4, s. 9.

Decision final

(27) If no notice of appeal is filed under subsection (24) in respect of all or part of the decision of council and the time for filing appeals has expired,

(a) the decision of council or the part of the decision that is not the subject of an appeal is final; and

(b) the plan or part of the plan that was adopted and that is not the subject of an appeal comes into effect as an official plan or part of an official plan on the day after the last day for filing a notice of appeal. 1996, c. 4, s. 9.

Declaration

(28) A sworn declaration of an employee of the municipality or of the approval authority that notice was given as required by subsection (23) or (35) or that no notice of appeal was filed under subsection (24) or (36) within the time allowed for appeal is conclusive evidence of the facts stated in it. 1996, c. 4, s. 9.

Forwarding of record, etc.

(29) If a notice of appeal under subsection (24) is filed, the clerk of the municipality shall ensure that,

(a) a record is compiled which includes the prescribed information and material;

(b) the record, the notice of appeal and the fee prescribed under the *Ontario Municipal Board Act* are forwarded to the Municipal Board within 15 days after the last day for filing a notice of appeal;

(c) the notice of appeal and the record are forwarded to the appropriate approval authority within 15 days after the last day for filing a notice of appeal, whether or not the plan is exempt from the requirement for an approval, unless the approval authority has notified the municipality that it does not wish to receive copies of the notices of appeal and the records; and

(d) such other information or material as the Municipal Board may require in respect of the appeal is forwarded to the Board. 1996, c. 4, s. 9; 1999, c. 12, Sched. M, s. 22 (2).

Exception

(29.1) Despite clause (29) (b), if all appeals under subsection (24) in respect of all or part of the decision of council are withdrawn within 15 days after the last day for filing a notice of appeal, the municipality is not required to forward the materials described under clauses (29) (b) and (d) to the Municipal Board and under clause (29) (c) to the appropriate approval authority. 1999, c. 12, Sched. M, s. 22 (3).

Where appeals withdrawn

(29.2) If all appeals under subsection (24) in respect of all or part of the decision of council are withdrawn within 15 days after the last day for filing a notice of appeal, clauses (30) (a) and (b) apply. 1999, c. 12, Sched. M, s. 22 (3).

Withdrawal of appeals

(30) If all appeals under subsection (24) in respect of all or part of the decision of council are withdrawn and the time for filing appeals has expired, the secretary of the Municipal Board shall notify the clerk of the municipality that made the decision and,

(a) the decision or the part of the decision that was the subject of an appeal is final; and

(b) the plan or part of the plan that was adopted and in respect of which all appeals have been withdrawn comes into effect as an official plan or part of an official plan on the day the last outstanding appeal has been withdrawn. 1996, c. 4, s. 9.

Same

(30.1) Subsection (30) also applies, with necessary modifications, when there is no longer any appeal with respect to a particular part of the decision of council as the result of a partial withdrawal of one or more appeals. 2006, c. 23, s. 9 (5).

Record

(31) If the plan is not exempt from approval, the council shall cause to be compiled and forwarded to the approval authority, not later than 15 days after the day the plan was adopted, a record which shall include the prescribed information and material and any fee under section 69 or 69.1. 1996, c. 4, s. 9.

Other information

(32) An approval authority may require that a council provide such other information or material that the approval authority considers it may need. 1996, c. 4, s. 9.

Refusal to consider

(33) Until the approval authority has received the information, material and fee referred to in subsection (31),

(a) the approval authority may refuse to accept or further consider the plan; and

(b) the time period referred to in subsection (40) does not begin. 1996, c. 4, s. 9.

Action by approval authority

(34) The approval authority may confer with any person or public body that it considers may have an interest in the plan and may,

(a) approve, modify and approve as modified or refuse to approve a plan; or

(b) approve, modify and approve as modified or refuse to approve part or parts of the plan. 1996, c. 4, s. 9.

Notice

(35) If the approval authority makes a decision under subsection (34) it shall ensure that written notice of its decision containing the prescribed information is given to,

(a) the council or planning board that adopted the plan;

(b) each person or public body that made a written request to be notified of the decision;

(c) each municipality or planning board to which the plan would apply if approved; and

(d) any other person or public body prescribed. 1996, c. 4, s. 9.

Appeal to O.M.B.

(36) Any of the following may, not later than 20 days after the day that the giving of notice under subsection (35) is completed, appeal all or part of the decision of the approval authority to the Municipal Board by filing a notice of appeal with the approval authority:

1. A person or public body who, before the plan was adopted, made oral submissions at a public meeting or written submissions to the council.
2. The Minister.
3. In the case of a request to amend the plan, the person or public body that made the request. 2006, c. 23, s. 9 (6).

No appeal re second unit policies

(36.1) Despite subsection (36), there is no appeal in respect of the policies described in subsection 16 (3), including, for greater certainty, any requirements or standards that are part of such policies. 2011, c. 6, Sched. 2, s. 3 (2).

Exception

(36.2) Subsection (36.1) does not apply to an official plan or official plan amendment adopted in accordance with subsection 26 (1). 2006, c. 23, s. 9 (6).

Contents of notice

(37) The notice of appeal under subsection (36) must,

(a) set out the specific part or parts of the plan to which the notice of appeal applies unless the notice applies to all of the plan;

(b) set out the reasons for the appeal; and

(c) be accompanied by the fee prescribed under the *Ontario Municipal Board Act*. 1996, c. 4, s. 9.

Decision final

(38) If no notice of appeal is filed under subsection (36) in respect of all or part of the decision of the approval authority and the time for filing appeals has expired,

(a) the decision of the approval authority or the part of the decision that is not the subject of an appeal is final; and

(b) the plan or part of the plan that was approved and that is not the subject of an appeal comes into effect as an official plan or part of an official plan on the day after the last day for filing a notice of appeal. 1996, c. 4, s. 9.

Withdrawal of appeals

(39) If all appeals made under subsection (36) in respect of all or part of the decision of the approval authority are withdrawn and if the time for filing notice of appeal has expired, the secretary of the Municipal Board shall notify the approval authority that made the decision and,

(a) the decision or that part of the decision that was the subject of the appeal is final; and

(b) the plan or part of the plan that was approved and in respect of which all the appeals have been withdrawn comes into effect as an official plan or part of an official plan on the day the last outstanding appeal has been withdrawn. 1996, c. 4, s. 9.

Appeal to O.M.B.

(40) If the approval authority fails to give notice of a decision in respect of all or part of a plan within 180 days after the day the plan is received by the approval authority, any person or public body may appeal to the Municipal Board with respect to all or any part of the plan in respect of which no notice of a decision was given by filing a notice of appeal with the approval authority. 1996, c. 4, s. 9; 2004, c. 18, s. 3 (1).

Notice of appeal

(41) A notice of appeal filed under subsection (40) must,

(a) set out the specific part of the plan to which the appeal applies, if the notice does not apply to all of the plan; and

(b) be accompanied by the fee prescribed under the *Ontario Municipal Board Act*. 1996, c. 4, s. 9.

Documents to O.M.B.

(42) If an approval authority receives a notice of appeal under subsection (36) or (40), it shall ensure that,

(a) a record is compiled which includes the prescribed information and material;

(b) the record, notice of appeal and the fee prescribed under the *Ontario Municipal Board Act* are forwarded to the Municipal Board within 15 days after the last day for filing a notice of appeal under subsection (36) or within 15 days after the notice of appeal under subsection (40) was filed, as the case may be; and

(c) such other information or material as the Municipal Board may require in respect of the appeal is forwarded to the Board. 1996, c. 4, s. 9.

Exception

(42.1) Despite clause (42) (b), if all appeals in respect of all or part of the plan are withdrawn within 15 days after the last day for filing a notice of appeal under subsection (36) or within 15 days after the notice of appeal under subsection (40) was filed, the approval authority is not required to forward the materials described under clauses (42) (b) and (c) to the Municipal Board. 1999, c. 12, Sched. M, s. 22 (3).

Appeals withdrawn, decision

(42.2) If all appeals made under subsection (36) in respect of all or part of the decision of the approval authority are withdrawn within 15 days after the last day for filing a notice of appeal, clauses (39) (a) and (b) apply. 1999, c. 12, Sched. M, s. 22 (3).

Appeals withdrawn, plan

(42.3) If all appeals under subsection (40) with respect to all or part of a plan are withdrawn within 15 days after the last day for filing a notice of appeal, the approval authority may proceed to make a decision under subsection (34) in respect of all or part of the plan, as the case may be. 1999, c. 12, Sched. M, s. 22 (3).

Appeals withdrawn

(43) If all appeals under subsection (40) with respect to all or part of a plan are withdrawn, the Municipal Board shall notify the approval authority and the approval authority may proceed to make a decision under subsection (34) in respect of all or part of the plan, as the case may be. 1996, c. 4, s. 9.

Hearing

(44) On an appeal to the Municipal Board, the Board shall hold a hearing of which notice shall be given to such persons or such public bodies and in such manner as the Board may determine. 1996, c. 4, s. 9.

Restriction re adding parties

(44.1) Despite subsection (44), in the case of an appeal under subsection (24) or (36), only the following may be added as parties:

1. A person or public body who satisfies one of the conditions set out in subsection (44.2).
2. The Minister.
3. The appropriate approval authority. 2006, c. 23, s. 9 (7).

Same

(44.2) The conditions mentioned in paragraph 1 of subsection (44.1) are:

1. Before the plan was adopted, the person or public body made oral submissions at a public meeting or written submissions to the council.
2. The Municipal Board is of the opinion that there are reasonable grounds to add the person or public body as a party. 2006, c. 23, s. 9 (7).

New evidence at hearing

(44.3) This subsection applies if information and material that is presented at the hearing of an appeal under subsection (24) or (36) was not provided to the municipality before the council made the decision that is the subject of the appeal. 2006, c. 23, s. 9 (7).

Same

(44.4) When subsection (44.3) applies, the Municipal Board may, on its own initiative or on a motion by the municipality or any party, consider whether the information and material could have materially affected the council's decision and, if the Board determines that it could have done so, it shall not be admitted into evidence until subsection (44.5) has been complied with and the prescribed time period has elapsed. 2006, c. 23, s. 9 (7).

Notice to council

(44.5) The Municipal Board shall notify the council that it is being given an opportunity to,

(a) reconsider its decision in light of the information and material; and

(b) make a written recommendation to the Board. 2006, c. 23, s. 9 (7).

Council's recommendation

(44.6) The Municipal Board shall have regard to the council's recommendation if it is received within the time period referred to in subsection (44.4), and may but is not required to do so if it is received afterwards. 2006, c. 23, s. 9 (7).

Conflict with *SPPA*

(44.7) Subsections (44.1) to (44.6) apply despite the *Statutory Powers Procedure Act*. 2006, c. 23, s. 9 (7).

Dismissal without hearing

(45) Despite the *Statutory Powers Procedure Act* and subsection (44), the Municipal Board may dismiss all or part of an appeal without holding a hearing on its own initiative or on the motion of any party if,

(a) it is of the opinion that,

(i) the reasons set out in the notice of appeal do not disclose any apparent land use planning ground upon which the plan or part of the plan that is the subject of the appeal could be approved or refused by the Board,

(ii) the appeal is not made in good faith or is frivolous or vexatious,

(iii) the appeal is made only for the purpose of delay, or

(iv) the appellant has persistently and without reasonable grounds commenced before the Board proceedings that constitute an abuse of process;

(b) REPEALED: 2006, c. 23, s. 9 (10).

(c) the appellant has not provided written reasons with respect to an appeal under subsection (24) or (36);

(d) the appellant has not paid the fee prescribed under the *Ontario Municipal Board Act*; or

(e) the appellant has not responded to a request by the Municipal Board for further information within the time specified by the Board. 1996, c. 4, s. 9; 2006, c. 23, s. 9 (8-10).

Same

(45.1) Despite the *Statutory Powers Procedure Act* and subsection (44), the Municipal Board may, on its own initiative or on the motion of the municipality, the appropriate approval authority or the Minister, dismiss all or part of an appeal without holding a hearing if, in the Board's opinion, the application to which the appeal relates is substantially different from the application that was before council at the time of its decision. 2006, c. 23, s. 9 (11).

Representation

(46) Before dismissing all or part of an appeal, the Municipal Board shall notify the appellant and give the appellant the opportunity to make representation on the proposed dismissal but this subsection does not apply if the appellant has not complied with a request made under clause (45) (e). 2000, c. 26, Sched. K, s. 5 (1).

Dismissal

(46.1) Despite the *Statutory Powers Procedure Act*, the Municipal Board may dismiss all or part of an appeal after holding a hearing or without holding a hearing on the motion under subsection (45) or (45.1), as it considers appropriate. 2006, c. 23, s. 9 (12).

Dismissal

(47) If the Municipal Board dismisses all appeals made under subsection (24) or (36) in respect of all or part of a decision without holding a hearing and if the time for filing notices of appeal has expired, the secretary of the Municipal Board shall notify the clerk of the municipality or the approval authority and,

(a) the decision or that part of the decision that was the subject of the appeal is final; and

(b) any plan or part of the plan that was adopted or approved and in respect of which all the appeals have been dismissed comes into effect as an official plan or part of an official plan on the day after the day the last outstanding appeal has been dismissed. 1996, c. 4, s. 9.

Same

(48) If the Municipal Board dismisses an appeal under subsection (40) without holding a hearing and if there is no other appeal in respect of the same matter, the secretary of the Board shall notify the approval authority and the approval authority may then proceed to make a decision under subsection (34) in respect of all or part of the plan, as the case may be. 1996, c. 4, s. 9.

Transfer

(49) If a notice of appeal under subsection (24), (36) or (40) is received by the Municipal Board, the Board may require that a municipality or approval authority transfer to the Board any other part of the plan that is not in effect and to which the notice of appeal does not apply. 1996, c. 4, s. 9.

Powers of O.M.B.

(50) On an appeal or a transfer, the Municipal Board may approve all or part of the plan as all or part of an official plan, make modifications to all or part of the plan and approve all or part of the plan as modified as an official plan or refuse to approve all or part of the plan. 1996, c. 4, s. 9.

Same

(50.1) For greater certainty, subsection (50) does not give the Municipal Board power to approve or modify any part of the plan that,

(a) is in effect; and

(b) was not dealt with in the decision of council to which the notice of appeal relates. 2006, c. 23, s. 9 (13).

Matters of provincial interest

(51) Where an appeal is made to the Municipal Board under this section, the Minister, if he or she is of the opinion that a matter of provincial interest is, or is likely to be, adversely affected by the plan or the parts of the plan in respect of which the appeal is made, may so advise the Board in writing not later than 30 days before the day fixed by the Board for the hearing of the appeal and the Minister shall identify,

(a) the provisions of the plan by which the provincial interest is, or is likely to be, adversely affected; and

(b) the general basis for the opinion that a matter of provincial interest is, or is likely to be, adversely affected. 2004, c. 18, s. 3 (2).

No hearing or notice required

(52) The Minister is not required to give notice or to hold a hearing before taking any action under subsection (51). 2004, c. 18, s. 3 (2).

Confirmation by L.G. in C.

(53) If the Municipal Board has received notice from the Minister under subsection (51), the decision of the Board is not final and binding in respect of the provisions identified in the notice unless the Lieutenant Governor in Council has confirmed the decision in respect of the provisions. 2004, c. 18, s. 3 (2).

Action of L.G. in C.

(54) The Lieutenant Governor in council may confirm, vary or rescind the decision of the Municipal Board in respect of the provisions of the plan identified in the notice and in doing so may direct the Minister to modify the provisions of the plan. 2004, c. 18, s. 3 (2).

Delegation of approval authority

17.1 (1) If an upper-tier municipality is the approval authority under section 17 in respect of the approval of official plans of lower-tier municipalities, the council may by by-law delegate all or any of the authority to approve amendments to official plans to a committee of council or to an appointed officer identified in the by-law by name or position occupied. 2002, c. 17, Sched. B, s. 6.

Conditions

(2) A delegation of authority made by a council under subsection (1) may be subject to such conditions as the council by by-law provides. 1994, c. 23, s. 10.

Withdrawal of delegation

(3) A council may by by-law withdraw a delegation of authority made by it under subsection (1) and the withdrawal may be in respect of one or more requests for approval specified in the by-law or any or all requests for approval in respect of which a final disposition was not made by the committee or officer before the withdrawal. 1994, c. 23, s. 10.

Recommendation of plan

18. (1) Where a plan is prepared by a planning board, the plan shall not be recommended to any council for adoption as an official plan unless it is approved by a vote of the majority of all the members of the planning board. R.S.O. 1990, c. P.13, s. 18 (1).

Submission of plan to council

(2) When the plan is approved by the planning board, the board shall submit a copy thereof, certified by the secretary-treasurer of the board to be a true copy,

(a) in the case of a plan prepared for a planning area, to the council of each municipality that is within the planning area; and

(b) in the case of a plan prepared at the request of a single municipality, to the council of that municipality,

together with a recommendation that it be adopted by the council. R.S.O. 1990, c. P.13, s. 18 (2).

Adoption of plan

(3) Each council to which the plan is submitted may, subject to subsections 17 (15) to (22), by by-law adopt the plan and the clerk of each municipality, the council of which adopted the plan, shall provide the secretary-treasurer of the planning board with a certified copy of the adopting by-law and shall comply with subsections 17 (23), (32), (33) and (34). R.S.O. 1990, c. P.13, s. 18 (3); 1994, c. 23, s. 11 (1); 1996, c. 4, s. 11 (1).

Submission of plan

(4) When the secretary-treasurer of the planning board has received a certified copy of an adopting by-law from a majority of the councils to which the plan was submitted, he or she shall, unless it is exempt from an approval, submit the plan for approval together with each certified copy of the adopting by-law and subsections 17 (31) to (50.1) apply with necessary modifications in respect of the plan as if the planning board were the council of a municipality and the secretary-treasurer of the planning board were the clerk of the municipality. 1996, c. 4, s. 11 (2); 2006, c. 23, s. 10 (1).

Application of subss. 17 (15-50)

(5) Where a planning area consists of the whole of one or more municipalities and territory without municipal organization subsections 17 (15) to (50.1) apply, with necessary modifications, in respect of the part of the planning area that consists of territory without municipal organization as though the planning board were the council of a municipality and the secretary-treasurer of the planning board were the clerk of the municipality. R.S.O. 1990, c. P.13, s. 18 (5); 1994, c. 23, s. 11 (3); 1996, c. 4, s. 11 (3); 2006, c. 23, s. 10 (2).

Unorganized territory

19. In a planning area consisting solely of territory without municipal organization, section 17 applies with necessary modifications to a plan being prepared and adopted by a planning board and that is to come into effect as the official plan of the planning board as if the planning board were a council of a municipality and the secretary-treasurer were the clerk. 1996, c. 4, s. 12.

Deemed council

19.1 Sections 34 to 39 and 45 apply in respect of land within the planning area consisting of territory without municipal organization and the planning board shall be deemed to be a council of a local municipality and the secretary-treasurer of the planning board shall be deemed to be the clerk of the municipality for those purposes. 1994, c. 23, s. 12.

Lodging of plan

20. (1) A certified copy of the official plan shall be lodged in the office of the clerk of each municipality to which the plan or any part of the plan applies.

Who to lodge plan

(2) The lodging required by subsection (1) shall be carried out,

(a) in the case of an official plan that applies to only one municipality or part thereof or to only one municipality and territory without municipal organization, by the clerk of the municipality; and

(b) in the case of an official plan that applies to more than one municipality or parts thereof, by the clerk of the municipality that has the largest population.

Public inspection

(3) All copies lodged under subsection (1) shall be available for public inspection during office hours. R.S.O. 1990, c. P.13, s. 20.

Amendment or repeal of plan

21. (1) Except as hereinafter provided, the provisions of this Act with respect to an official plan apply, with necessary modifications, to amendments thereto or the repeal thereof, and the council of a municipality that is within a planning area may initiate an amendment to or the repeal of any official plan that applies to the municipality, and section 17 applies to any such amendment or repeal. R.S.O. 1990, c. P.13, s. 21 (1).

(2) REPEALED: 1994, c. 23, s. 13.

Request for amendment

22. (1) If a person or public body requests a council to amend its official plan, the council shall,

(a) forward a copy of the request and the information and material required under subsections (4) and (5), if any to the appropriate approval authority, whether or not the requested amendment is exempt from approval; and

(b) hold a public meeting under subsection 17 (15) or comply with the alternative measures set out in the official plan. 1996, c. 4, s. 13; 2004, c. 18, s. 4 (1); 2006, c. 23, s. 11 (1).

Request to planning board

(2) If a person or public body requests a planning board to amend its official plan and the plan applies in whole or in part to territory without municipal organization, the planning board or council of the municipality having jurisdiction over the land to which the proposed amendment applies shall,

(a) forward a copy of the request and the information and material required under subsections (4) and (5), if any to the appropriate approval authority, whether or not the requested amendment is exempt from approval; and

(b) hold a public meeting under subsection 17 (15) or comply with the alternative measures set out in the official plan. 1996, c. 4, s. 13; 2004, c. 18, s. 4 (2); 2006, c. 23, s. 11 (2).

No open house or public meeting

(3) Despite subsections (1) and (2), the requirement to hold a public meeting under subsection 17 (15) does not apply if the council or the planning board refuses to adopt an amendment to its official plan requested by a person or public body. 2006, c. 23, s. 11 (3).

Consultation

(3.1) The council or planning board,

(a) shall permit applicants to consult with the municipality or planning board, as the case may be, before submitting requests under subsection (1) or (2); and

(b) may, by by-law, require applicants to consult with the municipality or planning board as described in clause (a). 2006, c. 23, s. 11 (3).

Prescribed information

(4) A person or public body that requests an amendment to the official plan of a municipality or planning board shall provide the prescribed information and material to the council or planning board. 1996, c. 4, s. 13.

Other information

(5) A council or a planning board may require that a person or public body that requests an amendment to its official plan provide any other information or material that the council or planning board considers it may need, but only if the official plan contains provisions relating to requirements under this subsection. 2006, c. 23, s. 11 (4).

Refusal and timing

(6) Until the council or planning board has received the information and material required under subsections (4) and (5), if any, and any fee under section 69,

(a) the council or planning board may refuse to accept or further consider the request for an amendment to its official plan; and

(b) the time periods referred to in paragraphs 1 and 2 of subsection (7.0.2) do not begin. 2006, c. 23, s. 11 (4).

Response re completeness of request

(6.1) Within 30 days after the person or public body that requests the amendment pays any fee under section 69, the council or planning board shall notify the person or public body that the information and material required under subsections (4) and (5), if any, have been provided, or that they have not been provided, as the case may be. 2006, c. 23, s. 11 (4).

Motion re dispute

(6.2) Within 30 days after a negative notice is given under subsection (6.1), the person or public body or the council or planning board may make a motion for directions to have the Municipal Board determine,

(a) whether the information and material have in fact been provided; or

(b) whether a requirement made under subsection (5) is reasonable. 2006, c. 23, s. 11 (4).

Same

(6.3) If the council or planning board does not give any notice under subsection (6.1), the person or public body may make a motion under subsection (6.2) at any time after the 30-day period described in subsection (6.1) has elapsed. 2006, c. 23, s. 11 (4).

Notice of particulars and public access

(6.4) Within 15 days after the council or planning board gives an affirmative notice under subsection (6.1), or within 15 days after the Municipal Board advises the clerk of its affirmative decision under subsection (6.2), as the case may be, the council or planning board shall,

(a) give the prescribed persons and public bodies, in the prescribed manner, notice of the request for amendment, accompanied by the prescribed information; and

(b) make the information and material provided under subsections (4) and (5) available to the public. 2006, c. 23, s. 11 (4).

Final determination

(6.5) The Municipal Board's determination under subsection (6.2) is not subject to appeal or review. 2006, c. 23, s. 11 (4).

Notice of refusal

(6.6) A council or planning board that refuses a request to amend its official plan shall, not later than 15 days after the day of the refusal, ensure that written notice of the refusal, containing the prescribed information, is given to,

(a) the person or public body that made the request;

(b) each person or public body that filed a written request to be notified of a refusal;

(c) the appropriate approval authority; and

(d) any prescribed person or public body. 2006, c. 23, s. 11 (4).

Appeal to O.M.B.

(7) When a person or public body requests an amendment to the official plan of a municipality or planning board, any of the following may appeal to the Municipal Board in respect of all or any part of the requested amendment, by filing a notice of appeal with the clerk of the municipality or the secretary-treasurer of the planning board, if one of the conditions set out in subsection (7.0.2) is met:

1. The person or public body that requested the amendment.

2. The Minister.

3. The appropriate approval authority. 2006, c. 23, s. 11 (5).

Consolidated Hearings Act

(7.0.1) Despite the *Consolidated Hearings Act*, the proponent of an undertaking shall not give notice to the Hearings Registrar under subsection 3 (1) of that Act in respect of an amendment requested under subsection (1) or (2) unless,

(a) one of the conditions set out in subsection (7.0.2) is met;

(b) if the plan is exempt from approval, the requested amendment has been adopted under subsection 17 (22);

(c) the approval authority makes a decision under subsection 17 (34); or

(d) the time period referred to in subsection 17 (40) has expired. 2006, c. 23, s. 11 (5).

Conditions

(7.0.2) The conditions referred to in subsections (7) and (7.0.1) are:

1. The council or the planning board fails to adopt the requested amendment within 180 days after the day the request is received.

2. A planning board recommends a requested amendment for adoption and the council or the majority of the councils fails to adopt the requested amendment within 180 days after the day the request is received.

3. A council, a majority of the councils or a planning board refuses to adopt the requested amendment.

4. A planning board refuses to approve a requested amendment under subsection 18 (1). 2006, c. 23, s. 11 (5).

Time for appeal

(7.0.3) A notice of appeal under paragraph 3 or 4 of subsection (7.0.2) shall be filed no later than 20 days after the day that the giving of notice under subsection (6.6) is completed. 2006, c. 23, s. 11 (5).

Appeals restricted re certain amendments

(7.1) Despite subsection (7) and subsections 17 (36) and (40), there is no appeal in respect of,

(a) a refusal or failure to adopt an amendment described in subsection (7.2); or

(b) a refusal or failure to approve an amendment described in subsection (7.2). 2006, c. 23, s. 11 (6).

Application of subs. (7.1)

(7.2) Subsection (7.1) applies in respect of amendments requested under subsection (1) or (2) that propose to,

(a) alter all or any part of the boundary of an area of settlement in a municipality;

(b) establish a new area of settlement in a municipality; or

(c) amend or revoke the policies described in subsection 16 (3), including, for greater certainty, any requirements or standards that are part of such policies. 2006, c. 23, s. 11 (6); 2011, c. 6, Sched. 2, s. 4.

Same

(7.3) If the official plan contains policies dealing with the removal of land from areas of employment, subsection (7.1) also applies in respect of amendments requested under subsection (1) or (2) that propose to remove any land from an area of employment, even if other land is proposed to be added. 2006, c. 23, s. 11 (6).

Exception

(7.4) Despite subsection (7.1), a person or public body may appeal to the Municipal Board in respect of all or any part of a requested amendment described in clause (7.2) (a) or (b) if the requested amendment,

(a) is in respect of the official plan of a lower-tier municipality; and

(b) conforms with the official plan of the upper-tier municipality. 2006, c. 23, s. 11 (6).

Contents

(8) A notice of appeal under subsection (7) shall,

(a) set out the specific part of the requested official plan amendment to which the appeal applies, if the notice of appeal does not apply to all of the requested amendment; and

(b) be accompanied by the fee prescribed under the *Ontario Municipal Board Act*. 1996, c. 4, s. 13.

Record and forwarding material

(9) The clerk of a municipality or the secretary-treasurer of a planning board who receives a notice of appeal under subsection (7) shall ensure that,

(a) a record is compiled which includes the prescribed information and material;

(b) the notice of appeal, the record and the fee are forwarded to the Municipal Board within 15 days after the notice is received;

(c) the notice of appeal and the record are forwarded to the appropriate approval authority within 15 days after the notice is received, whether or not the plan is exempt from approval, unless the approval authority has notified the municipality or the planning board that it does not wish to receive copies of the notices of appeal and the records; and

(d) such other information or material as the Municipal Board may require in respect of the appeal is forwarded to the Board. 1996, c. 4, s. 13; 1999, c. 12, Sched. M, s. 23 (1).

Exception

(9.1) Despite clause (9) (b), if all appeals under subsection (7) are withdrawn within 15 days after the notice of appeal is filed, the municipality or planning board is not required to forward the materials described under clauses (9) (b) and (d) to the Municipal Board or under clause (9) (c) to the appropriate approval authority. 1999, c. 12, Sched. M, s. 23 (2).

Appeals withdrawn, amendment

(9.2) If all appeals under subsection (7) brought in accordance with paragraph 1 or 2 of subsection (7.0.2) in respect of all or any part of the requested amendment are withdrawn within 15 days after the date that the most recent notice of appeal was filed, the council or planning board may, unless there are any outstanding appeals, proceed to give notice of the public meeting to be held under subsection 17 (15) or adopt or refuse to adopt the requested amendment, as the case may be. 2006, c. 23, s. 11 (7).

Decision final

(9.3) If all appeals under subsection (7) brought in accordance with paragraph 3 or 4 of subsection (7.0.2) in respect of all or any part of the requested amendment are withdrawn within 15 days after the last day for filing a notice of appeal, the decision of the council or planning board is final on the day that the last outstanding appeal has been withdrawn. 2006, c. 23, s. 11 (7).

Other information

(10) A person or public body that files a notice of appeal under subsection (7) shall provide to the Municipal Board the prescribed information or material and such other information as the Board may require. 1996, c. 4, s. 13.

Application

(11) Subsections 17 (44) to (44.7), (45), (45.1), (46), (46.1), (49), (50) and (50.1) apply with necessary modifications to a requested official plan amendment under this section, except that subsections 17 (44.1) to (44.7) and (45.1) do not apply to an appeal under subsection (7) of this section, brought in accordance with paragraph 1 or 2 of subsection (7.0.2). 2006, c. 23, s. 11 (8).

Matters of provincial interest

(11.1) Where an appeal is made to the Municipal Board under this section, the Minister, if he or she is of the opinion that a matter of provincial interest is, or is likely to be, adversely affected by the amendment or any part of the amendment in respect of which the appeal is made, may so advise the Board in writing not later than 30 days before the day fixed by the Board for the hearing of the appeal and the Minister shall identify,

(a) the provisions of the amendment or any part of the amendment by which the provincial interest is, or is likely to be, adversely affected; and

(b) the general basis for the opinion that a matter of provincial interest is, or is likely to be, adversely affected. 2004, c. 18, s. 4 (9).

No hearing or notice required

(11.2) The Minister is not required to give notice or to hold a hearing before taking any action under subsection (11.1). 2004, c. 18, s. 4 (9).

Confirmation by L.G. in C.

(11.3) If the Municipal Board has received notice from the Minister under subsection (11.1), the decision of the Board is not final and binding in respect of the provisions of the amendment or the provisions of any part of the amendment identified in the notice unless the Lieutenant Governor in Council has confirmed the decision in respect of those provisions. 2004, c. 18, s. 4 (9).

Action of L.G. in C.

(11.4) The Lieutenant Governor in Council may confirm, vary or rescind the decision of the Municipal Board in respect of the provisions of the amendment or the provisions of any part of the amendment identified in the notice and in doing so may direct the Minister to modify the amendment to the plan. 2004, c. 18, s. 4 (9).

Withdrawal of appeal

(12) If all appeals under subsection (7) brought in accordance with paragraph 1 or 2 of subsection (7.0.2) are dismissed by the Municipal Board without holding a hearing or are withdrawn, the secretary of the Board shall notify the council or the planning board and the council

or the planning board may proceed to give notice of the public meeting or adopt or refuse to adopt the requested amendment, as the case may be. 1996, c. 4, s. 13; 2004, c. 18, s. 4 (10); 2006, c. 23, s. 11 (9).

Same

(13) If all appeals under subsection (7) brought in accordance with paragraph 3 or 4 of subsection (7.0.2) are dismissed by the Municipal Board without holding a hearing or are withdrawn, the secretary of the Board shall notify the council or the planning board and the decision of the council or the planning board is final on the day that the last outstanding appeal has been withdrawn or dismissed. 1996, c. 4, s. 13; 2006, c. 23, s. 11 (10).

Request by Minister to amend plan

23. (1) Where the Minister is of the opinion that a matter of provincial interest as set out in a policy statement issued under section 3 is, or is likely to be, affected by an official plan, the Minister may request the council of a municipality to adopt such amendment as the Minister specifies to an official plan and, where the council refuses the request or fails to adopt the amendment within such time as is specified by the Minister in his or her request, the Minister may make the amendment. R.S.O. 1990, c. P.13, s. 23 (1).

Hearing by O.M.B.

(2) Where the Minister proposes to make an amendment to an official plan under subsection (1), the Minister may, and on the request of any person or municipality shall, request the Municipal Board to hold a hearing on the proposed amendment and the Board shall thereupon hold a hearing as to whether the amendment should be made. R.S.O. 1990, c. P.13, s. 23 (2).

Refusal to refer to O.M.B.

(3) Despite subsection (2), where the Minister is of the opinion that a request of any person or municipality made under subsection (2) is not made in good faith or is frivolous or vexatious or is made only for the purpose of delay, the Minister may refuse the request. R.S.O. 1990, c. P.13, s. 23 (3).

Notice

(4) Where the Minister has requested the Municipal Board to hold a hearing as provided for in subsection (2), notice of the hearing shall be given in such manner and to such persons as the Board may direct, and the Board shall hear any submissions that any person may desire to bring to the attention of the Board. R.S.O. 1990, c. P.13, s. 23 (4).

Decision of O.M.B.

(5) The Municipal Board, after the conclusion of the hearing, shall make a decision as to whether the proposed amendment, or an alternative form of amendment, should be made but the decision is not final and binding unless the Lieutenant Governor in Council has confirmed it. R.S.O. 1990, c. P.13, s. 23 (5); 1994, c. 23, s. 15 (1); 2004, c. 18, s. 5 (1).

Powers of L.G. in C.

(6) The Lieutenant Governor in Council may confirm, vary or rescind the decision of the Municipal Board made under subsection (5) and in doing so may direct the Minister to amend the plan in such manner as the Lieutenant Governor in Council may determine. 2004, c. 18, s. 5 (2).

Public works and by-laws to conform with plan

24. (1) Despite any other general or special Act, where an official plan is in effect, no public work shall be undertaken and, except as provided in subsections (2) and (4), no by-law shall be passed for any purpose that does not conform therewith. R.S.O. 1990, c. P.13, s. 24 (1); 1999, c. 12, Sched. M, s. 24.

Pending amendments

(2) If a council or a planning board has adopted an amendment to an official plan, the council of any municipality or the planning board of any planning area to which the plan or any part of the plan applies may, before the amendment to the official plan comes into effect, pass a by-law that does not conform with the official plan but will conform with it if the amendment comes into effect. 2006, c. 23, s. 12.

Same

(2.1) A by-law referred to in subsection (2),

(a) shall be conclusively deemed to have conformed with the official plan on and after the day the by-law was passed, if the amendment to the official plan comes into effect; and

(b) is of no force and effect, if the amendment to the official plan does not come into effect. 2006, c. 23, s. 12.

Preliminary steps that may be taken where proposed public work would not conform with official plan

(3) Despite subsections (1) and (2), the council of a municipality may take into consideration the undertaking of a public work that does not conform with the official plan and for that purpose the council may apply for any approval that may be required for the work, carry out any investigations, obtain any reports or take other preliminary steps incidental to and reasonably necessary for the undertaking of the work, but nothing in this subsection authorizes the actual undertaking of any public work that does not conform with an official plan. R.S.O. 1990, c. P.13, s. 24 (3).

Deemed conformity

(4) If a by-law is passed under section 34 by the council of a municipality or a planning board in a planning area in which an official plan is in effect and, within the time limited for appeal no appeal is taken or an appeal is taken and the appeal is withdrawn or dismissed or the by-law is amended by the Municipal Board or as directed by the Board, the by-law shall be conclusively deemed to be in conformity with the official plan, except, if the by-law is passed in the circumstances mentioned in subsection (2), the by-law shall be conclusively deemed to be in conformity with the official plan on and after the day the by-law was passed, if the amendment to the official plan comes into effect. 1994, c. 23, s. 16 (2); 1996, c. 4, s. 14 (2).

Acquisition of lands in accordance with provisions of plan

25. (1) If there is an official plan in effect in a municipality that includes provisions relating to the acquisition of land, which provisions have come into effect after the 28th day of June, 1974, the council may, in accordance with such provisions, acquire and hold land within the municipality for the purpose of developing any feature of the official plan, and any land so acquired or held may be sold, leased or otherwise disposed of when no longer required. R.S.O. 1990, c. P.13, s. 25 (1); 1994, c. 23, s. 17; 1996, c. 4, s. 15.

Contribution towards cost

(2) Any municipality may contribute towards the cost of acquiring land under this section. R.S.O. 1990, c. P.13, s. 25 (2).

Updating official plan

26. (1) If an official plan is in effect in a municipality, the council of the municipality that adopted the official plan shall, not less frequently than every five years after the plan comes into effect as an official plan or after that part of a plan comes into effect as a part of an official plan, if the only outstanding appeals relate to those parts of the plan that propose to specifically designate land uses,

(a) revise the official plan as required to ensure that it,

(i) conforms with provincial plans or does not conflict with them, as the case may be,

(ii) has regard to the matters of provincial interest listed in section 2, and

(iii) is consistent with policy statements issued under subsection 3 (1); and

(b) revise the official plan, if it contains policies dealing with areas of employment, including, without limitation, the designation of areas of employment in the official plan and policies dealing with the removal of land from areas of employment, to ensure that those policies are confirmed or amended. 2006, c. 23, s. 13.

Effect of provincial plan conformity exercise

(2) For greater certainty, the council revises the official plan under subsection (1) if it,

(a) amends the official plan, in accordance with another Act, to conform with a provincial plan; and

(b) in the course of making amendments under clause (a), complies with clauses (1) (a) and (b) and with all the procedural requirements of this section. 2006, c. 23, s. 13.

Consultation and special meeting

(3) Before revising the official plan under subsection (1), the council shall,

(a) consult with the approval authority and with the prescribed public bodies with respect to the revisions that may be required; and

(b) hold a special meeting of council, open to the public, to discuss the revisions that may be required. 2006, c. 23, s. 13.

Notice

(4) Notice of every special meeting to be held under clause (3) (b) shall be published at least once a week in each of two separate weeks, and the last publication shall take place at least 30 days before the date of the meeting. 2006, c. 23, s. 13.

Public participation

(5) The council shall have regard to any written submissions about what revisions may be required and shall give any person who attends the special meeting an opportunity to be heard on that subject. 2006, c. 23, s. 13.

No exemption from approval

(6) An order under subsection 17 (9) does not apply to an amendment made under subsection (1). 2006, c. 23, s. 13.

Declaration

(7) Each time it revises the official plan under subsection (1), the council shall, by resolution, declare to the approval authority that the official plan meets the requirements of subclauses (1) (a) (i), (ii) and (iii). 2006, c. 23, s. 13.

Direction by approval authority

(8) Despite subsection (1), the approval authority may, at any time, direct the council of a municipality to undertake a revision of all or part of any official plan in effect in the municipality and when so directed the council shall cause the revision to be undertaken without undue delay. 2006, c. 23, s. 13.

Updating zoning by-laws

(9) No later than three years after a revision under subsection (1) or (8) comes into effect, the council of the municipality shall amend all zoning by-laws that are in effect in the municipality to ensure that they conform with the official plan. 2006, c. 23, s. 13.

Minister may request amendment to zoning by-law

(10) The Minister may, if he or she is of the opinion that a zoning by-law in effect in the municipality does not conform with the official plan as revised under subsection (1) or (8), request the council of the municipality to pass an amendment to the zoning by-law to achieve conformity. 2006, c. 23, s. 13.

Amendments to conform to official plan

27. (1) The council of a lower-tier municipality shall amend every official plan and every by-law passed under section 34, or a predecessor of it, to conform with a plan that comes into effect as the official plan of the upper-tier municipality. 2002, c. 17, Sched. B, s. 7.

Failure to make amendments

(2) If the official plan of an upper-tier municipality comes into effect as mentioned in subsection (1) and any official plan or zoning by-law is not amended as required by that subsection within one year from the day the plan comes into effect as the official plan, the council of the upper-tier municipality may amend the official plan of the lower-tier municipality or zoning by-law, as the case may be, in the like manner and subject to the same requirements and procedures as the council that failed to make the amendment within the one-year period as required. 2002, c. 17, Sched. B, s. 7.

Deemed by-law

(3) An amending by-law passed under subsection (2) by the council of an upper-tier municipality shall be deemed for all purposes to be a by-law passed by the council of the municipality that passed the by-law that was amended. 2002, c. 17, Sched. B, s. 7.

Conflicts

(4) In the event of a conflict between the official plan of an upper-tier municipality and the official plan of a lower-tier municipality, the plan of the upper-tier municipality prevails to the extent of the conflict but in all other respects the official plan of the lower-tier municipality remains in effect. 2002, c. 17, Sched. B, s. 7.

PART IV
COMMUNITY IMPROVEMENT

Community improvement project area

28. (1) In this section,

"community improvement" means the planning or replanning, design or redesign, resubdivision, clearance, development or redevelopment, construction, reconstruction and rehabilitation, improvement of energy efficiency, or any of them, of a community improvement project area, and the provision of such residential, commercial, industrial, public, recreational, institutional, religious, charitable or other uses, buildings, structures, works, improvements or facilities, or spaces therefor, as may be appropriate or necessary; ("améliorations communautaires")

"community improvement plan" means a plan for the community improvement of a community improvement project area; ("plan d'améliorations communautaires")

"community improvement project area" means a municipality or an area within a municipality, the community improvement of which in the opinion of the council is desirable because of age, dilapidation, overcrowding, faulty arrangement, unsuitability of buildings or for any other environmental, social or community economic development reason. ("zone d'améliorations communautaires") R.S.O. 1990, c. P.13, s. 28 (1); 2001, c. 17, s. 7 (1, 2); 2006, c. 23, s. 14 (1).

Affordable housing

(1.1) Without limiting the generality of the definition of "community improvement" in subsection (1), for greater certainty, it includes the provision of affordable housing. 2006, c. 23, s. 14 (2).

Designation of community improvement project area

(2) Where there is an official plan in effect in a local municipality or in a prescribed upper-tier municipality that contains provisions relating to community improvement in the municipality, the council may, by by-law, designate the whole or any part of an area covered by such an official plan as a community improvement project area. R.S.O. 1990, c. P.13, s. 28 (2); 2006, c. 23, s. 14 (3).

Acquisition and clearance of land

(3) When a by-law has been passed under subsection (2), the municipality may,

(a) acquire land within the community improvement project area with the approval of the Minister if the land is acquired before a community improvement plan mentioned in subsection (4) comes into effect and without the approval of the Minister if the land is acquired after the community improvement plan comes into effect;

(b) hold land acquired before or after the passing of the by-law within the community improvement project area; and

(c) clear, grade or otherwise prepare the land for community improvement. R.S.O. 1990, c. P.13, s. 28 (3); 2001, c. 17, s. 7 (3).

Community improvement plan

(4) When a by-law has been passed under subsection (2), the council may provide for the preparation of a plan suitable for adoption as a community improvement plan for the community improvement project area and the plan may be adopted and come into effect in accordance with subsections (5) and (5.1). 2006, c. 32, Sched. C, s. 47 (1).

Restriction re upper-tier municipality

(4.0.1) The community improvement plan of an upper-tier municipality may deal only with prescribed matters. 2006, c. 23, s. 14 (4).

(4.1)-(4.4) REPEALED: 2006, c. 32, Sched. C, s. 47 (1).

Same

(5) Subsections 17 (15), (17), (19) to (19.3), (19.5) to (24), (25) to (30.1), (44) to (47) and (49) to (50.1) apply, with necessary modifications, in respect of a community improvement plan and any amendments to it. 2006, c. 32, Sched. C, s. 47 (1).

Same

(5.1) The Minister is deemed to be the approval authority for the purpose of subsection (5). 2006, c. 32, Sched. C, s. 47 (1).

Same

(5.2) Despite subsection (5), if an official plan contains provisions describing the alternative measures mentioned in subsection 17 (19.3), subsections 17 (15), (17) and (19) to (19.2) do not apply in respect of the community improvement plan and any amendments to it, if the measures are complied with. 2006, c. 32, Sched. C, s. 47 (1).

Powers of council re land

(6) For the purpose of carrying out a community improvement plan that has come into effect, the municipality may,

(a) construct, repair, rehabilitate or improve buildings on land acquired or held by it in the community improvement project area in conformity with the community improvement plan, and sell, lease or otherwise dispose of any such buildings and the land appurtenant thereto;

(b) sell, lease or otherwise dispose of any land acquired or held by it in the community improvement project area to any person or governmental authority for use in conformity with the community improvement plan. R.S.O. 1990, c. P.13, s. 28 (6); 2001, c. 17, s. 7 (6).

Grants or loans re eligible costs

(7) For the purpose of carrying out a municipality's community improvement plan that has come into effect, the municipality may make grants or loans, in conformity with the community improvement plan, to registered owners, assessed owners and tenants of lands and buildings within the community improvement project area, and to any person to whom such an owner or tenant has assigned the right to receive a grant or loan, to pay for the whole or any part of the eligible costs of the community improvement plan. 2006, c. 23, s. 14 (8).

Eligible costs

(7.1) For the purposes of subsection (7), the eligible costs of a community improvement plan may include costs related to environmental site assessment, environmental remediation, development, redevelopment, construction and reconstruction of lands and buildings for rehabilitation purposes or for the provision of energy efficient uses, buildings, structures, works, improvements or facilities. 2006, c. 23, s. 14 (8).

Grants or loans between upper and lower-tier municipalities

(7.2) The council of an upper-tier municipality may make grants or loans to the council of a lower-tier municipality and the council of a lower-tier municipality may make grants or loans to the council of the upper-tier municipality, for the purpose of carrying out a community improvement plan that has come into effect, on such terms as to security and otherwise as the council considers appropriate, but only if the official plan of the municipality making the grant or loan contains provisions relating to the making of such grants or loans. 2006, c. 23, s. 14 (8).

Maximum amount

(7.3) The total of the grants and loans made in respect of particular lands and buildings under subsections (7) and (7.2) and the tax assistance as defined in section 365.1 of the *Municipal Act, 2001* or section 333 of the *City of Toronto Act, 2006*, as the case may be, that is provided in respect of the lands and buildings shall not exceed the eligible cost of the community improvement plan with respect to those lands and buildings. 2006, c. 23, s. 14 (8); 2006, c. 32, Sched. C, s. 48 (3).

(8) REPEALED: 2006, c. 32, Sched. C, s. 47 (3).

Application of s. 32 (2, 3)

(9) Subsections 32 (2) and (3) apply with necessary modifications to any loan made under subsection (7) of this section. R.S.O. 1990, c. P.13, s. 28 (9).

Conditions of sale, etc.

(10) Until a by-law or amending by-law passed under section 34 after the adoption of the community improvement plan is in force in the community improvement project area, no land acquired, and no building constructed, by the municipality in the community improvement project area shall be sold, leased or otherwise disposed of unless the person or authority to whom it is disposed of enters into a written agreement with the municipality that the person or authority will keep and maintain the land and building and the use thereof in conformity with the community improvement plan until such a by-law or amending by-law is in force, but the municipality may, during the period of the development of the plan, lease any land or any building or part thereof in the area for any purpose, whether or not in conformity with the community improvement plan, for a term of not more than three years at any one time. R.S.O. 1990, c. P.13, s. 28 (10).

Registration of agreement

(11) An agreement concerning a grant or loan made under subsection (7) or an agreement entered into under subsection (10), may be registered against the land to which it applies and the municipality shall be entitled to enforce the provisions thereof against any party to the agreement and, subject to the provisions of the *Registry Act* and the *Land Titles Act*, against any and all subsequent owners or tenants of the land. R.S.O. 1990, c. P.13, s. 28 (11); 2006, c. 23, s. 14 (10).

Debentures

(12) Despite subsection 408 (3) of the *Municipal Act, 2001* or any regulation under section 256 of the *City of Toronto Act, 2006*, debentures issued by the municipality for the purpose of this section may be for such term of years as the debenture by-law, with the approval of the Municipal Board, provides. 2002, c. 17, Sched. B, s. 9; 2006, c. 32, Sched. C, s. 47 (4).

Dissolution of area

(13) When the council is satisfied that the community improvement plan has been carried out, the council may, by by-law, dissolve the community improvement project area. R.S.O. 1990, c. P.13, s. 28 (13).

Agreement re studies and development

29. (1) A municipality, with the approval of the Minister, may enter into agreement with any governmental authority or any agency thereof created by statute, for the carrying out of studies and the preparation and implementation of plans and programs for the development or improvement of the municipality.

Where approval of Minister not required

(2) Despite subsection (1), a municipality may enter into agreement with one or more other municipalities under subsection (1) without the approval of the Minister. R.S.O. 1990, c. P.13, s. 29.

Agreements for grants in aid of community improvement

30. The Minister, with the approval of the Lieutenant Governor in Council, and a municipality may enter into agreement providing for payment to the municipality on such terms and conditions and in such amounts as may be approved by the Lieutenant Governor in Council to assist in the community improvement of a community improvement project area as defined in section 28, including the carrying out of studies for the purpose of selecting areas for community improvement. R.S.O. 1990, c. P.13, s. 30.

31. REPEALED: 1997, c. 24, s. 226 (1).

Note: Despite the repeal of section 31, an order made under that section is continued as an order made under the corresponding provision of the *Building Code Act, 1992*. See: 1997, c. 24, ss. 226 (2), 228.

Grants or loans for repairs

32. (1) When a by-law under section 15.1 of the *Building Code Act, 1992* is in force in a municipality, the council of the municipality may pass a by-law for providing for the making of grants or loans to the registered owners or assessed owners of lands in respect of which an order has been made under subsection 15.2 (2) of that Act to pay for the whole or any part of the cost of the repairs required to be done, or of the clearing, grading and levelling of the lands, on such terms and conditions as the council may prescribe. R.S.O. 1990, c. P.13, s. 32 (1); 1997, c. 24, s. 226 (3).

Loans collected as taxes, lien on land

(2) The amount of any loan made under a by-law passed under this section, together with interest at a rate to be determined by the council, may be added by the clerk of the municipality to the collector's roll and collected in like manner as municipal taxes over a period fixed by the council, and such amount and interest shall, until payment thereof, be a lien or charge upon the land in respect of which the loan has been made.

Registration of certificate

(3) A certificate signed by the clerk of the municipality setting out the amount loaned to any owner under a by-law passed under this section, including the rate of interest thereon, together with a description of the land in respect of which the loan has been made, sufficient for registration, shall be registered in the proper land registry office against the land, and, upon repayment in full to the municipality of the amount loaned and interest thereon, a certificate signed by the clerk of the municipality showing such repayment shall be similarly registered, and thereupon the lien or charge upon the land in respect of which the loan was made is discharged. R.S.O. 1990, c. P.13, s. 32 (2, 3).

Demolition control area

33. (1) In this section,

"dwelling unit" means any property that is used or designed for use as a domestic establishment in which one or more persons may sleep and prepare and serve meals; ("logement")

"residential property" means a building that contains one or more dwelling units, but does not include subordinate or accessory buildings the use of which is incidental to the use of the main building. ("immeuble d'habitation") R.S.O. 1990, c. P.13, s. 33 (1).

Establishment of demolition control area by by-law

(2) When a by-law under section 15.1 of the *Building Code Act, 1992* or a predecessor thereof is in force in a municipality or when a by-law prescribing standards for the maintenance and occupancy of property under any special Act is in force in a municipality, the council of the local municipality may by by-law designate any area within the municipality to which the standards of maintenance and occupancy by-law applies as an area of demolition control and thereafter no person shall demolish the whole or any part of any residential property in the area of demolition control unless the person is the holder of a demolition permit issued by the council under this section. R.S.O. 1990, c. P.13, s. 33 (2); 1997, c. 24, s. 226 (4).

Council may issue or refuse to issue permit

(3) Subject to subsection (6), where application is made to the council for a permit to demolish residential property, the council may issue the permit or refuse to issue the permit.

Appeal to O.M.B.

(4) Where the council refuses to issue the permit or neglects to make a decision thereon within thirty days after the receipt by the clerk of the municipality of the application, the applicant may appeal to the Municipal Board and the Board shall hear the appeal and either dismiss the same or direct that the demolition permit be issued, and the decision of the Board shall be final.

Notice of appeal

(5) The person appealing to the Municipal Board under subsection (4) shall, in such manner and to such persons as the Board may direct, give notice of the appeal to the Board.

Application for demolition permit where building permit issued

(6) Subject to subsection (7), the council shall, on application therefor, issue a demolition permit where a building permit has been issued to erect a new building on the site of the residential property sought to be demolished.

Conditions of demolition permit

(7) A demolition permit under subsection (6) may be issued on the condition that the applicant for the permit construct and substantially complete the new building to be erected on the site of the residential property proposed to be demolished by not later than such date as the permit specifies, such date being not less than two years from the day demolition of the existing residential property is commenced, and on the condition that on failure to complete the new building within the time specified in the permit, the clerk of the municipality shall be entitled to enter on the collector's roll, to be collected in like manner as municipal taxes, such sum of money as the permit specifies, but not in any case to exceed the sum of $20,000 for each dwelling unit contained in the residential property in respect of which the demolition permit is issued and such sum shall, until payment thereof, be a lien or charge upon the land in respect of which the permit to demolish the residential property is issued.

Registration of notice

(8) Notice of any condition imposed under subsection (7) may be registered in the proper land registry office against the land to which it applies.

Registration of certificate

(9) Where the clerk of the municipality adds a sum of money to the collector's roll under subsection (7), a certificate signed by the clerk setting out the sum added to the roll, together with a

description of the land in respect of which the sum has been added to the roll, sufficient for registration, shall be registered in the proper land registry office against the land, and upon payment in full to the municipality of the sum added to the roll, a certificate signed by the clerk of the municipality showing such payment shall be similarly registered, and thereupon the lien or charge upon the land in respect of which the sum was added to the roll is discharged.

Appeal to O.M.B.

(10) Where an applicant for a demolition permit under subsection (6) is not satisfied as to the conditions on which the demolition permit is proposed to be issued, the applicant may appeal to the Municipal Board for a variation of the conditions and, where an appeal is brought, the Board shall hear the appeal and may dismiss the same or may direct that the conditions upon which the permit shall be issued be varied in such manner as the Board considers appropriate, and the decision of the Board shall be final.

Application to council for relief from conditions of demolition permit

(11) Where a condition has been imposed under subsection (7) and the holder of the demolition permit considers that it is not possible to complete the new building within the time specified in the permit or where the holder of the permit is of the opinion that the construction of the new building has become not feasible on economic or other grounds, the permit holder may apply to the council of the municipality for relief from the conditions on which the permit was issued.

Notice of application

(12) Notice of application under subsection (11) shall be sent by registered mail to the clerk of the municipality not less than sixty days before the time specified in the permit for the completion of the new building and, where the council under subsection (14) extends the time for completion of the new building, application may similarly be made for relief by sending notice of application not less than sixty days before the expiry of the extended completion time.

Extension of time

(13) Despite subsection (12), the council may, at any time, extend the date specified in that subsection for the making of an application for relief from the conditions on which the permit was issued.

Powers of council on application

(14) Where an application is made under subsection (11), the council shall consider the application and may grant the same or may extend the time for completion of the new building for such period of time and on such terms and conditions as the council considers appropriate or the council may relieve the person applying from the requirement of constructing the new building.

Appeal to O.M.B.

(15) Any person who has made application to the council under subsection (11) may appeal from the decision of the council to the Municipal Board within twenty days of the mailing of the notice of the decision, or where the council refuses or neglects to make a decision thereon within thirty days after the receipt by the clerk of the application, the applicant may appeal to the Municipal Board and the Board shall hear the appeal and the Board on the appeal has the same powers as the council has under subsection (14) and the decision of the Board shall be final.

Offence

(16) Every person who demolishes a residential property, or any portion thereof, in contravention of subsection (2) is guilty of an offence and on conviction is liable to a fine of not

more than $50,000 for each dwelling unit contained in the residential property, the whole or any portion of which residential property has been demolished.

Standards for health and safety remain in force

(17) The provisions of any general or special Act and any by-law passed thereunder respecting standards relating to the health or safety of the occupants of buildings and structures remain in full force and effect in respect of residential property situate within an area of demolition control. R.S.O. 1990, c. P.13, s. 33 (3-17).

Certain proceedings stayed

(18) Subject to subsection (17), an application to the council for a permit to demolish any residential property operates as a stay to any proceedings that may have been initiated under any by-law under section 15.1 of the *Building Code Act, 1992* or a predecessor thereof or under any special Act respecting maintenance or occupancy standards in respect of the residential property sought to be demolished, until the council disposes of the application, or where an appeal is taken under subsection (4), until the Municipal Board has heard the appeal and issued its order thereon. R.S.O. 1990, c. P.13, s. 33 (18); 1997, c. 24, s. 226 (5).

Exemption re Building Code

(19) Where a permit to demolish residential property is obtained under this section, it is not necessary for the holder thereof to obtain the permit mentioned in subsection 8 (1) of the *Building Code Act, 1992*. R.S.O. 1990, c. P.13, s. 33 (19); 1997, c. 24, s. 226 (6).

PART V
LAND USE CONTROLS AND RELATED ADMINISTRATION

Zoning by-laws

34. (1) Zoning by-laws may be passed by the councils of local municipalities:

Restricting use of land

1. For prohibiting the use of land, for or except for such purposes as may be set out in the by-law within the municipality or within any defined area or areas or abutting on any defined highway or part of a highway.

Restricting erecting, locating or using of buildings

2. For prohibiting the erecting, locating or using of buildings or structures for or except for such purposes as may be set out in the by-law within the municipality or within any defined area or areas or upon land abutting on any defined highway or part of a highway.

Marshy lands, etc.

3. For prohibiting the erection of any class or classes of buildings or structures on land that is subject to flooding or on land with steep slopes, or that is rocky, low-lying, marshy, unstable, hazardous, subject to erosion or to natural or artificial perils.

Contaminated lands; sensitive or vulnerable areas

3.1 For prohibiting any use of land and the erecting, locating or using of any class or classes of buildings or structures on land,

i. that is contaminated,

ii. that contains a sensitive groundwater feature or a sensitive surface water feature, or

iii. that is within an area identified as a vulnerable area in a drinking water source protection plan that has taken effect under the *Clean Water Act, 2006*.

Natural features and areas

3.2 For prohibiting any use of land and the erecting, locating or using of any class or classes of buildings or structures within any defined area or areas,

i. that is a significant wildlife habitat, wetland, woodland, ravine, valley or area of natural and scientific interest,

ii. that is a significant corridor or shoreline of a lake, river or stream, or

iii. that is a significant natural corridor, feature or area.

Significant archaeological resources

3.3 For prohibiting any use of land and the erecting, locating or using of any class or classes of buildings or structures on land that is the site of a significant archaeological resource.

Construction of buildings or structures

4. For regulating the type of construction and the height, bulk, location, size, floor area, spacing, character and use of buildings or structures to be erected or located within the municipality or within any defined area or areas or upon land abutting on any defined highway or part of a highway, and the minimum frontage and depth of the parcel of land and the proportion of the area thereof that any building or structure may occupy.

Minimum elevation of doors, etc.

5. For regulating the minimum elevation of doors, windows or other openings in buildings or structures or in any class or classes of buildings or structures to be erected or located within the municipality or within any defined area or areas of the municipality.

Loading or parking facilities

6. For requiring the owners or occupants of buildings or structures to be erected or used for a purpose named in the by-law to provide and maintain loading or parking facilities on land that is not part of a highway. R.S.O. 1990, c. P.13, s. 34 (1); 1994, c. 23, s. 21 (1, 2); 1996, c. 4, s. 20 (1-3); 2006, c. 22, s. 115.

Pits and quarries

(2) The making, establishment or operation of a pit or quarry shall be deemed to be a use of land for the purposes of paragraph 1 of subsection (1). R.S.O. 1990, c. P.13, s. 34 (2).

Area, density and height

(3) The authority to regulate provided in paragraph 4 of subsection (1) includes and, despite the decision of any court, shall be deemed always to have included the authority to regulate the minimum area of the parcel of land mentioned therein and to regulate the minimum and maximum density and the minimum and maximum height of development in the municipality or in the area or areas defined in the by-law. 2006, c. 23, s. 15 (1).

City of Toronto

(3.1) Subsection (3) does not apply with respect to the City of Toronto. 2006, c. 23, s. 15 (2).

Interpretation

(4) A trailer as defined in subsection 164 (4) of the *Municipal Act, 2001* or subsection 3 (1) of the *City of Toronto Act, 2006*, as the case may be, and a mobile home as defined in subsection 46 (1) of this Act are deemed to be buildings or structures for the purpose of this section. 2006, c. 32, Sched. C, s. 47 (5).

Prohibition of use of land, etc., availability of municipal services

(5) A by-law passed under paragraph 1 or 2 of subsection (1) or a predecessor of that paragraph may prohibit the use of land or the erection or use of buildings or structures unless such municipal services as may be set out in the by-law are available to service the land, buildings or structures, as the case may be. R.S.O. 1990, c. P.13, s. 34 (5).

Certificates of occupancy

(6) A by-law passed under this section may provide for the issue of certificates of occupancy without which no change may be made in the type of use of any land covered by the by-law or of any building or structure on any such land, but no such certificate shall be refused if the proposed use is not prohibited by the by-law. R.S.O. 1990, c. P.13, s. 34 (6).

Use of maps

(7) Land within any area or areas or abutting on any highway or part of a highway may be defined by the use of maps to be attached to the by-law and the information shown on such maps shall form part of the by-law to the same extent as if included therein. R.S.O. 1990, c. P.13, s. 34 (7).

Acquisition and disposition of non-conforming lands

(8) The council may acquire any land, building or structure used or erected for a purpose that does not conform with a by-law passed under this section and any vacant land having a frontage or depth less than the minimum established for the erection of a building or structure in the defined area in which such land is situate, and the council may dispose of any of such land, building or structure or may exchange any of such land for other land within the municipality. R.S.O. 1990, c. P.13, s. 34 (8); 1996, c. 4, s. 20 (4).

Excepted lands and buildings

(9) No by-law passed under this section applies,

(a) to prevent the use of any land, building or structure for any purpose prohibited by the by-law if such land, building or structure was lawfully used for such purpose on the day of the passing of the by-law, so long as it continues to be used for that purpose; or

(b) to prevent the erection or use for a purpose prohibited by the by-law of any building or structure for which a permit has been issued under subsection 8 (1) of the *Building Code Act, 1992*, prior to the day of the passing of the by-law, so long as the building or structure when erected is used and continues to be used for the purpose for which it was erected and provided the permit has not been revoked under subsection 8 (10) of that Act. R.S.O. 1990, c. P.13, s. 34 (9); 2009, c. 33, Sched. 21, s. 10 (1).

By-law may be amended

(10) Despite any other provision of this section, any by-law passed under this section or a predecessor of this section may be amended so as to permit the extension or enlargement of any land, building or structure used for any purpose prohibited by the by-law if such land, building or structure continues to be used in the same manner and for the same purpose as it was used on the day such by-law was passed. R.S.O. 1990, c. P.13, s. 34 (10).

Consultation

(10.0.1) The council,

(a) shall permit applicants to consult with the municipality before submitting applications to amend by-laws passed under this section; and

(b) may, by by-law, require applicants to consult with the municipality as described in clause (a). 2006, c. 23, s. 15 (3).

Prescribed information

(10.1) A person or public body that applies for an amendment to a by-law passed under this section or a predecessor of this section shall provide the prescribed information and material to the council. 1996, c. 4, s. 20 (5).

Other information

(10.2) A council may require that a person or public body that applies for an amendment to a by-law passed under this section or a predecessor of this section provide any other information or material that the council considers it may need, but only if the official plan contains provisions relating to requirements under this subsection. 2006, c. 23, s. 15 (4).

Refusal and timing

(10.3) Until the council has received the information and material required under subsections (10.1) and (10.2), if any, and any fee under section 69,

(a) the council may refuse to accept or further consider the application for an amendment to the by-law; and

(b) the time period referred to in subsection (11) does not begin. 2006, c. 23, s. 15 (4).

Response re completeness of application

(10.4) Within 30 days after the person or public body that makes the application for an amendment to a by-law pays any fee under section 69, the council shall notify the person or public body that the information and material required under subsections (10.1) and (10.2), if any, have been provided, or that they have not been provided, as the case may be. 2006, c. 23, s. 15 (4).

Motion re dispute

(10.5) Within 30 days after a negative notice is given under subsection (10.4), the person or public body or the council may make a motion for directions to have the Municipal Board determine,

(a) whether the information and material have in fact been provided; or

(b) whether a requirement made under subsection (10.2) is reasonable. 2006, c. 23, s. 15 (4).

Same

(10.6) If the council does not give any notice under subsection (10.4), the person or public body may make a motion under subsection (10.5) at any time after the 30-day period described in subsection (10.4) has elapsed. 2006, c. 23, s. 15 (4).

Notice of particulars and public access

(10.7) Within 15 days after the council gives an affirmative notice under subsection (10.4), or within 15 days after the Municipal Board advises the clerk of its affirmative decision under subsection (10.5), as the case may be, the council shall,

(a) give the prescribed persons and public bodies, in the prescribed manner, notice of the application for an amendment to a by-law, accompanied by the prescribed information; and

(b) make the information and material provided under subsections (10.1) and (10.2) available to the public. 2006, c. 23, s. 15 (4).

Final determination

(10.8) The Municipal Board's determination under subsection (10.5) is not subject to appeal or review. 2006, c. 23, s. 15 (4).

Notice of refusal

(10.9) When a council refuses an application to amend its by-law, it shall, not later than 15 days after the day of the refusal, ensure that written notice of the refusal, containing the prescribed information, is given to,

(a) the person or public body that made the application;

(b) each person and public body that filed a written request to be notified of a refusal; and

(c) any prescribed person or public body. 2006, c. 23, s. 15 (4).

Appeal to O.M.B.

(11) Where an application to the council for an amendment to a by-law passed under this section or a predecessor of this section is refused or the council refuses or neglects to make a decision on it within 120 days after the receipt by the clerk of the application, any of the following may appeal to the Municipal Board by filing a notice of appeal with the clerk of the municipality:

1. The applicant.

2. The Minister. 2006, c. 23, s. 15 (5).

Consolidated Hearings Act

(11.0.1) Despite the *Consolidated Hearings Act*, the proponent of an undertaking shall not give notice to the Hearings Registrar under subsection 3 (1) of that Act in respect of an application for an amendment to a by-law unless the council has made a decision on the application or the time period referred to in subsection (11) has expired. 2006, c. 23, s. 15 (5).

Appeal to O.M.B.

(11.0.2) The Municipal Board shall hear the appeal under subsection (11) and shall,

(a) dismiss it;

(b) amend the by-law in such manner as the Board may determine; or

(c) direct that the by-law be amended in accordance with the Board's order. 2006, c. 23, s. 15 (5).

Time for filing certain appeals

(11.0.3) A notice of appeal under subsection (11) with respect to the refusal of an application shall be filed no later than 20 days after the day that the giving of notice under subsection (10.9) is completed. 2006, c. 23, s. 15 (5).

Appeals restricted re certain amendments

(11.0.4) Despite subsection (11), there is no appeal in respect of all or any part of an application for an amendment to a by-law if the amendment or part of the amendment proposes to implement,

(a) an alteration to all or any part of the boundary of an area of settlement; or

(b) a new area of settlement. 2006, c. 23, s. 15 (5).

Same

(11.0.5) Despite subsection (11), if the official plan contains policies dealing with the removal of land from areas of employment, there is no appeal in respect of all or any part of an application for an amendment to a by-law if the amendment or part of the amendment proposes to remove any land from an area of employment, even if other land is proposed to be added. 2006, c. 23, s. 15 (5).

Withdrawal of appeal

(11.1) If all appeals under subsection (11) are withdrawn, the secretary of the Municipal Board shall notify the clerk of the municipality and the decision of the council is final and binding or the council may proceed to give notice of the public meeting or pass or refuse to pass the by-law, as the case may be. 1999, c. 12, Sched. M, s. 25 (1).

Information and public meeting; open house in certain circumstances

(12) Before passing a by-law under this section, except a by-law passed pursuant to an order of the Municipal Board made under subsection (11.0.2) or (26),

(a) the council shall ensure that,

(i) sufficient information and material is made available to enable the public to understand generally the zoning proposal that is being considered by the council, and

(ii) at least one public meeting is held for the purpose of giving the public an opportunity to make representations in respect of the proposed by-law; and

(b) in the case of a by-law that is required by subsection 26 (9) or is related to a development permit system, the council shall ensure that at least one open house is held for the purpose of giving the public an opportunity to review and ask questions about the information and material made available under subclause (a) (i). 2006, c. 23, s. 15 (6); 2009, c. 33, Sched. 21, s. 10 (2).

Notice

(13) Notice of the public meeting required under subclause (12) (a) (ii) and of the open house, if any, required by clause (12) (b),

(a) shall be given to the prescribed persons and public bodies, in the prescribed manner; and

(b) shall be accompanied by the prescribed information. 2006, c. 23, s. 15 (6).

Timing of open house

(14) The open house required by clause (12) (b) shall be held no later than seven days before the public meeting required under subclause (12) (a) (ii) is held. 2006, c. 23, s. 15 (6).

Timing of public meeting

(14.1) The public meeting required under subclause (12) (a) (ii) shall be held no earlier than 20 days after the requirements for giving notice have been complied with. 2006, c. 23, s. 15 (6).

Participation in public meeting

(14.2) Every person who attends a public meeting required under subclause (12) (a) (ii) shall be given an opportunity to make representations in respect of the proposed by-law. 2006, c. 23, s. 15 (6).

Alternative procedure

(14.3) If an official plan sets out alternative measures for informing and securing the views of the public in respect of proposed zoning by-laws, and if those measures are complied with, subsections (12) to (14.2) do not apply to the proposed by-laws, but subsections (14.4) and (14.6) do apply. 2006, c. 23, s. 15 (6).

Open house

(14.4) If subsection (14.3) applies and the proposed by-law is required by subsection 26 (9) or is related to a development permit system,

(a) the council shall ensure that at least one open house is held for the purpose of giving the public an opportunity to review and ask questions about the proposed by-law; and

(b) if a public meeting is also held, the open house shall be held no later than seven days before the public meeting. 2006, c. 23, s. 15 (6).

Information

(14.5) At a public meeting under subclause (12) (a) (ii), the council shall ensure that information is made available to the public regarding who is entitled to appeal under subsections (11) and (19). 2006, c. 23, s. 15 (6).

Where alternative procedures followed

(14.6) If subsection (14.3) applies, the information required under subsection (14.5) shall be made available to the public at a public meeting or in the manner set out in the official plan for informing and securing the views of the public in respect of proposed zoning by-laws. 2006, c. 23, s. 15 (6).

Information to public bodies

(15) The council shall forward to such public bodies as the council considers may have an interest in the zoning proposal sufficient information to enable them to understand it generally and such information shall be forwarded not less than twenty days before passing a by-law implementing the proposal. R.S.O. 1990, c. P.13, s. 34 (15); 1994, c. 23, s. 21 (5).

Conditions

(16) If the official plan in effect in a municipality contains policies relating to zoning with conditions, the council of the municipality may, in a by-law passed under this section, permit a use of land or the erection, location or use of buildings or structures and impose one or more prescribed conditions on the use, erection or location. 2006, c. 23, s. 15 (7).

Same

(16.1) The prescribed conditions referred to in subsection (16) may be made subject to such limitations as may be prescribed. 2006, c. 23, s. 15 (7).

Same

(16.2) When a prescribed condition is imposed under subsection (16),

(a) the municipality may require an owner of land to which the by-law applies to enter into an agreement with the municipality relating to the condition;

(b) the agreement may be registered against the land to which it applies; and

(c) the municipality may enforce the agreement against the owner and, subject to the *Registry Act* and the *Land Titles Act*, any and all subsequent owners of the land. 2006, c. 23, s. 15 (7).

City of Toronto

(16.3) Subsections (16), (16.1) and (16.2) do not apply with respect to the City of Toronto. 2006, c. 23, s. 15 (8).

Further notice

(17) Where a change is made in a proposed by-law after the holding of the public meeting mentioned in subclause (12) (a) (ii), the council shall determine whether any further notice is to be given in respect of the proposed by-law and the determination of the council as to the giving of further notice is final and not subject to review in any court irrespective of the extent of the change made in the proposed by-law. R.S.O. 1990, c. P.13, s. 34 (17); 2006, c. 23, s. 15 (9).

Notice of passing of by-law

(18) If the council passes a by-law under this section, except a by-law passed pursuant to an order of the Municipal Board made under subsection (11.0.2) or (26), the clerk of the municipality shall give written notice of the passing of the by-law not later than 15 days after the day the by-law is passed in the manner and in the form and to the persons or public bodies prescribed and the notice shall contain the prescribed information. 1994, c. 23, s. 21 (7); 1996, c. 4, s. 20 (7); 2009, c. 33, Sched. 21, s. 10 (3).

Appeal to O.M.B.

(19) Not later than 20 days after the day that the giving of notice as required by subsection (18) is completed, any of the following may appeal to the Municipal Board by filing with the clerk of the municipality a notice of appeal setting out the objection to the by-law and the reasons in support of the objection, accompanied by the fee prescribed under the *Ontario Municipal Board Act*:

1. The applicant.
2. A person or public body who, before the by-law was passed, made oral submissions at a public meeting or written submissions to the council.
3. The Minister. 2006, c. 23, s. 15 (10).

No appeal re second unit policies

(19.1) Despite subsection (19), there is no appeal in respect of a by-law that gives effect to the policies described in subsection 16 (3), including, for greater certainty, no appeal in respect of any requirement or standard in such a by-law. 2011, c. 6, Sched. 2, s. 5.

When giving of notice deemed completed

(20) For the purposes of subsection (19), the giving of written notice shall be deemed to be completed,

(a) where notice is given by publication in a newspaper, on the day that such publication occurs;

(b) where notice is given by personal service, on the day that the serving of all required notices is completed;

(c) where notice is given by mail, on the day that the mailing of all required notices is completed; and

(d) where notice is given by telephone transmission of a facsimile of the notice, on the day that the transmission of all required notices is completed. R.S.O. 1990, c. P.13, s. 34 (20); 1994, c. 23, s. 21 (9).

When by-law deemed to have come into force

(21) When no notice of appeal is filed under subsection (19), the by-law shall be deemed to have come into force on the day it was passed except that where the by-law is passed under circumstances mentioned in subsection 24 (2) the by-law shall not be deemed to have come into force on the day it was passed until the amendment to the official plan comes into effect. R.S.O. 1990, c. P.13, s. 34 (21); 1994, c. 23, s. 21 (10); 1996, c. 4, s. 20 (8).

Affidavit re no appeal, etc.

(22) An affidavit or declaration of an employee of the municipality that notice was given as required by subsection (18) or that no notice of appeal was filed under subsection (19) within the time allowed for appeal shall be conclusive evidence of the facts stated therein. R.S.O. 1990, c. P.13, s. 34 (22); 1996, c. 4, s. 20 (9).

Record

(23) The clerk of a municipality who receives a notice of appeal under subsection (11) or (19) shall ensure that,

(a) a record that includes the prescribed information and material is compiled;

(b) the notice of appeal, record and fee are forwarded to the Municipal Board within 15 days after the last day for filing a notice of appeal under subsection (11.0.3) or (19), as the case may be; and

(c) such other information or material as the Municipal Board may require in respect of the appeal is forwarded to the Board. 2006, c. 23, s. 15 (11).

Withdrawal of appeals

(23.1) If all appeals to the Municipal Board under subsection (19) are withdrawn and the time for appealing has expired, the secretary of the Board shall notify the clerk of the municipality and the decision of the council is final and binding. 1993, c. 26, s. 53 (3).

Exception

(23.2) Despite clause (23) (b), if all appeals under subsection (19) are withdrawn within 15 days after the last day for filing a notice of appeal, the municipality is not required to forward the materials described under clauses (23) (b) and (c) to the Municipal Board. 1999, c. 12, Sched. M, s. 25 (2).

Decision final

(23.3) If all appeals to the Municipal Board under subsection (19) are withdrawn within 15 days after the last day for filing a notice of appeal, the decision of the council is final and binding. 1999, c. 12, Sched. M, s. 25 (2).

Hearing and notice thereof

(24) On an appeal to the Municipal Board, the Board shall hold a hearing of which notice shall be given to such persons or bodies and in such manner as the Board may determine. R.S.O. 1990, c. P.13, s. 34 (24).

Restriction re adding parties

(24.1) Despite subsection (24), in the case of an appeal under subsection (11) that relates to all or part of an application for an amendment to a by-law that is refused, or in the case of an appeal under subsection (19), only the following may be added as parties:

1. A person or public body who satisfies one of the conditions set out in subsection (24.2).
2. The Minister. 2006, c. 23, s. 15 (12).

Same

(24.2) The conditions mentioned in paragraph 1 of subsection (24.1) are:

1. Before the by-law was passed, the person or public body made oral submissions at a public meeting or written submissions to the council.
2. The Municipal Board is of the opinion that there are reasonable grounds to add the person or public body as a party. 2006, c. 23, s. 15 (12).

New information and material at hearing

(24.3) This subsection applies if information and material that is presented at the hearing of an appeal described in subsection (24.1) was not provided to the municipality before the council made the decision that is the subject of the appeal. 2006, c. 23, s. 15 (12).

Same

(24.4) When subsection (24.3) applies, the Municipal Board may, on its own initiative or on a motion by the municipality or any party, consider whether the information and material could have materially affected the council's decision, and if the Board determines that it could have done so, it shall not be admitted into evidence until subsection (24.5) has been complied with and the prescribed time period has elapsed. 2006, c. 23, s. 15 (12).

Notice to council

(24.5) The Municipal Board shall notify the council that it is being given an opportunity to,

(a) reconsider its decision in light of the information and material; and

(b) make a written recommendation to the Board. 2006, c. 23, s. 15 (12).

Council's recommendation

(24.6) The Municipal Board shall have regard to the council's recommendation if it is received within the time period mentioned in subsection (24.4), and may but is not required to do so if it is received afterwards. 2006, c. 23, s. 15 (12).

Conflict with *SPPA*

(24.7) Subsections (24.1) to (24.6) apply despite the *Statutory Powers Procedure Act*. 2006, c. 23, s. 15 (12).

Dismissal without hearing

(25) Despite the *Statutory Powers Procedure Act* and subsections (11.0.2) and (24), the Municipal Board may dismiss all or part of an appeal without holding a hearing, on its own initiative or on the motion of any party, if,

(a) it is of the opinion that,

(i) the reasons set out in the notice of appeal do not disclose any apparent land use planning ground upon which the Board could allow all or part of the appeal,

(ii) the appeal is not made in good faith or is frivolous or vexatious,

(iii) the appeal is made only for the purpose of delay, or

(iv) the appellant has persistently and without reasonable grounds commenced before the Board proceedings that constitute an abuse of process;

(a.1) REPEALED: 2006, c. 23, s. 15 (15).

(b) the appellant has not provided written reasons for the appeal;

(c) the appellant has not paid the fee prescribed under the *Ontario Municipal Board Act*; or

(d) the appellant has not responded to a request by the Municipal Board for further information within the time specified by the Board. 1994, c. 23, s. 21 (11); 1996, c. 4, s. 20 (11, 12); 2006, c. 23, s. 15 (13-15); 2009, c. 33, Sched. 21, s. 10 (4).

Representation

(25.1) Before dismissing all or part of an appeal, the Municipal Board shall notify the appellant and give the appellant the opportunity to make representation on the proposed dismissal but this subsection does not apply if the appellant has not complied with a request made under clause (25) (d). 2000, c. 26, Sched. K, s. 5 (2).

Same

(25.1.1) Despite the *Statutory Powers Procedure Act* and subsections (11.0.2) and (24), the Municipal Board may, on its own initiative or on the motion of the municipality or the Minister, dismiss all or part of an appeal without holding a hearing if, in the Board's opinion, the application to which the appeal relates is substantially different from the application that was before council at the time of its decision. 2006, c. 23, s. 15 (16).

Dismissal

(25.2) Despite the *Statutory Powers Procedure Act*, the Municipal Board may dismiss all or part of an appeal after holding a hearing or without holding a hearing on the motion under subsection (25) or (25.1.1), as it considers appropriate. 2006, c. 23, s. 15 (17).

Powers of O.M.B.

(26) The Municipal Board may,

(a) dismiss the appeal; or

(b) allow the appeal in whole or in part and repeal the by-law in whole or in part or amend the by-law in such manner as the Board may determine or direct the council of the municipality to repeal the by-law in whole or in part or to amend the by-law in accordance with the Board's order. R.S.O. 1990, c. P.13, s. 34 (26).

Matters of provincial interest

(27) Where an appeal is made to the Municipal Board under subsection (11) or (19), the Minister, if he or she is of the opinion that a matter of provincial interest is, or is likely to be, adversely affected by the by-law, may so advise the Board in writing not later than 30 days before the day fixed by the Board for the hearing of the appeal and the Minister shall identify,

(a) the part or parts of the by-law by which the provincial interest is, or is likely to be, adversely affected; and

(b) the general basis for the opinion that a matter of provincial interest is, or is likely to be, adversely affected. 2004, c. 18, s. 6 (3).

No hearing or notice required

(28) The Minister is not required to give notice or to hold a hearing before taking any action under subsection (27). 2004, c. 18, s. 6 (3).

No order to be made

(29) If the Municipal Board has received notice from the Minister under subsection (27) and has made a decision on the by-law, the Board shall not make an order under subsection (11.0.2) or (26) in respect of the part or parts of the by-law identified in the notice. 2004, c. 18, s. 6 (3); 2009, c. 33, Sched. 21, s. 10 (5).

Action of L.G. in C.

(29.1) The Lieutenant Governor in Council may confirm, vary or rescind the decision of the Municipal Board in respect of the part or parts of the by-law identified in the notice and in doing so may repeal the by-law in whole or in part or amend the by-law in such a manner as the Lieutenant Governor in Council may determine. 2004, c. 18, s. 6 (3).

Coming into force

(30) If one or more appeals have been filed under subsection (19), the by-law does not come into force until all of such appeals have been withdrawn or finally disposed of, whereupon the by-law, except for those parts of it repealed or amended under subsection (26) or as are repealed or amended by the Lieutenant Governor in Council under subsection (29.1), shall be deemed to have come into force on the day it was passed. 1996, c. 4, s. 20 (13); 2004, c. 18, s. 6 (4).

Unappealed portions

(31) Despite subsection (30), before all of the appeals have been finally disposed of, the Municipal Board may make an order providing that any part of the by-law not in issue in the appeal shall be deemed to have come into force on the day the by-law was passed. 1993, c. 26, s. 53 (5).

Method

(32) The Municipal Board may make an order under subsection (31) on its own initiative or on the motion of any person or public body. 1993, c. 26, s. 53 (5); 1996, c. 4, s. 20 (14); 2006, c. 23, s. 15 (18).

Notice and hearing

(33) The Municipal Board may,

(a) dispense with giving notice of a motion under subsection (32) or require the giving of such notice of the motion as it considers appropriate; and

(b) make an order under subsection (31) after holding a hearing or without holding a hearing on the motion, as it considers appropriate. 1993, c. 26, s. 53 (5).

Notice

(34) Despite clause (33) (a), the Municipal Board shall give notice of a motion under subsection (32) to any person or public body who filed with the Board a written request to be notified if a motion is made. 1993, c. 26, s. 53 (5); 1994, c. 23, s. 21 (14).

No distinction on the basis of relationship

35. (1) REPEALED: 1996, c. 4, s. 21 (1).

No distinction on the basis of relationship

(2) The authority to pass a by-law under section 34, subsection 38 (1) or section 41 does not include the authority to pass a by-law that has the effect of distinguishing between persons who are related and persons who are unrelated in respect of the occupancy or use of a building or structure or a part of a building or structure, including the occupancy or use as a single housekeeping unit. 1994, c. 2, s. 43.

Provision of no effect

(3) A provision in a by-law passed under section 34, subsection 38 (1) or section 41 or in an order made under subsection 47 (1) is of no effect to the extent that it contravenes the restrictions described in subsection (2). 1994, c. 2, s. 43; 1996, c. 4, s. 21 (2).

(4) REPEALED: 1996, c. 4, s. 21 (3).

By-laws to give effect to second unit policies

35.1 (1) The council of each local municipality shall ensure that the by-laws passed under section 34 give effect to the policies described in subsection 16 (3). 2011, c. 6, Sched. 2, s. 6.

Regulations

(2) The Minister may make regulations,

(a) authorizing the use of residential units referred to in subsection 16 (3);

(b) establishing requirements and standards with respect to residential units referred to in subsection 16 (3). 2011, c. 6, Sched. 2, s. 6.

Regulation applies as zoning by-law

(3) A regulation under subsection (2) applies as though it is a by-law passed under section 34. 2011, c. 6, Sched. 2, s. 6.

Regulation prevails

(4) A regulation under subsection (2) prevails over a by-law passed under section 34 to the extent of any inconsistency, unless the regulation provides otherwise. 2011, c. 6, Sched. 2, s. 6.

Exception

(5) A regulation under subsection (2) may provide that a by-law passed under section 34 prevails over the regulation. 2011, c. 6, Sched. 2, s. 6.

Regulation may be general or particular

(6) A regulation under subsection (2) may be general or particular in its application and may be restricted to those municipalities or parts of municipalities set out in the regulation. 2011, c. 6, Sched. 2, s. 6.

Holding provision by-law

36. (1) The council of a local municipality may, in a by-law passed under section 34, by the use of the holding symbol “H” (or “h”) in conjunction with any use designation, specify the use to which lands, buildings or structures may be put at such time in the future as the holding symbol is removed by amendment to the by-law. R.S.O. 1990, c. P.13, s. 36 (1).

Condition

(2) A by-law shall not contain the provisions mentioned in subsection (1) unless there is an official plan in effect in the local municipality that contains provisions relating to the use of the holding symbol mentioned in subsection (1). R.S.O. 1990, c. P.13, s. 36 (2).

Appeal to O.M.B.

(3) Where an application to the council for an amendment to the by-law to remove the holding symbol is refused or the council refuses or neglects to make a decision thereon within 120 days after receipt by the clerk of the application, the applicant may appeal to the Municipal Board and the Board shall hear the appeal and dismiss the same or amend the by-law to remove the holding symbol or direct that the by-law be amended in accordance with its order. R.S.O. 1990, c. P.13, s. 36 (3); 1994, c. 23, s. 22 (1); 2004, c. 18, s. 7 (1).

Matters of provincial interest

(3.1) Where an appeal is made to the Municipal Board under subsection (3), the Minister, if he or she is of the opinion that a matter of provincial interest is, or is likely to be, adversely affected by the by-law, may so advise the Board in writing not later than 30 days before the day fixed by the Board for the hearing of the appeal and the Minister shall identify,

(a) the part or parts of the by-law by which the provincial interest is, or is likely to be, adversely affected; and

(b) the general basis for the opinion that a matter of provincial interest is, or is likely to be, adversely affected. 2004, c. 18, s. 7 (2).

No hearing or notice required

(3.2) The Minister is not required to give notice or to hold a hearing before taking any action under subsection (3.1). 2004, c. 18, s. 7 (2).

No order to be made

(3.3) If the Municipal Board has received notice from the Minister under subsection (3.1) and has made a decision on the by-law, the Board shall not make an order under subsection (3) in respect of the part or parts of the by-law identified in the notice. 2004, c. 18, s. 7 (2).

Action of L.G. in C.

(3.4) The Lieutenant Governor in Council may confirm, vary or rescind the decision of the Municipal Board in respect of the part or parts of the by-law identified in the notice and in doing so may repeal the by-law in whole or in part or amend the by-law in such a manner as the Lieutenant Governor in Council may determine. 2004, c. 18, s. 7 (2).

Application of subss. 34 (10.7, 10.9-25.1)

(4) Subsections 34 (10.7) and (10.9) to (25.1) do not apply to an amending by-law passed by the council to remove the holding symbol, but the council shall, in the manner and to the persons and public bodies and containing the information prescribed, give notice of its intention to pass the amending by-law. R.S.O. 1990, c. P.13, s. 36 (4); 1994, c. 23, s. 22 (2); 1996, c. 4, s. 22; 2009, c. 33, Sched. 21, s. 10 (6).

Increased density, etc., provision by-law

37. (1) The council of a local municipality may, in a by-law passed under section 34, authorize increases in the height and density of development otherwise permitted by the by-law that will be permitted in return for the provision of such facilities, services or matters as are set out in the by-law.

Condition

(2) A by-law shall not contain the provisions mentioned in subsection (1) unless there is an official plan in effect in the local municipality that contains provisions relating to the authorization of increases in height and density of development.

Agreements

(3) Where an owner of land elects to provide facilities, services or matters in return for an increase in the height or density of development, the municipality may require the owner to enter into one or more agreements with the municipality dealing with the facilities, services or matters.

Registration of agreement

(4) Any agreement entered into under subsection (3) may be registered against the land to which it applies and the municipality is entitled to enforce the provisions thereof against the owner and, subject to the provisions of the *Registry Act* and the *Land Titles Act*, any and all subsequent owners of the land. R.S.O. 1990, c. P.13, s. 37.

Interim control by-law

38. (1) Where the council of a local municipality has, by by-law or resolution, directed that a review or study be undertaken in respect of land use planning policies in the municipality or in any defined area or areas thereof, the council of the municipality may pass a by-law (hereinafter referred to as an interim control by-law) to be in effect for a period of time specified in the by-law, which period shall not exceed one year from the date of the passing thereof, prohibiting the use of land, buildings or structures within the municipality or within the defined area or areas thereof for, or except for, such purposes as are set out in the by-law.

Extension of period by-law in effect

(2) The council of the municipality may amend an interim control by-law to extend the period of time during which it will be in effect, provided the total period of time does not exceed two years from the date of the passing of the interim control by-law. R.S.O. 1990, c. P.13, s. 38 (1, 2).

Notice of passing of by-law

(3) No notice or hearing is required prior to the passing of a by-law under subsection (1) or (2) but the clerk of the municipality shall, in the manner and to the persons and public bodies and containing the information prescribed, give notice of a by-law passed under subsection (1) or (2) within thirty days of the passing thereof. R.S.O. 1990, c. P.13, s. 38 (3); 1994, c. 23, s. 23 (1).

Appeal to O.M.B.

(4) Any person or public body to whom notice of a by-law was given under subsection (3) may, within sixty days from the date of the passing of the by-law, appeal to the Municipal Board by filing with the clerk of the municipality a notice of appeal setting out the objection to the by-law and the reasons in support of the objection. R.S.O. 1990, c. P.13, s. 38 (4); 1994, c. 23, s. 23 (2).

Application

(5) If a notice of appeal is filed under subsection (4), subsections 34 (23) to (26) apply with necessary modifications to the appeal. 1996, c. 4, s. 23.

When prior zoning by-law again has effect

(6) Where the period of time during which an interim control by-law is in effect has expired and the council has not passed a by-law under section 34 consequent on the completion of the review or

study within the period of time specified in the interim control by-law, or where an interim control by-law is repealed or the extent of the area covered thereby is reduced, the provisions of any by-law passed under section 34 that applied immediately prior to the coming into force of the interim control by-law again come into force and have effect in respect of all lands, buildings or structures formerly subject to the interim control by-law. R.S.O. 1990, c. P.13, s. 38 (6).

Where by-law appealed

(6.1) If the period of time during which an interim control by-law is in effect has expired and the council has passed a by-law under section 34 consequent on the completion of the review or study within the period of time specified in the interim control by-law, but there is an appeal of the by-law under subsection 34 (19), the interim control by-law continues in effect as if it had not expired until the date of the order of the Municipal Board or until the date of a notice issued by the secretary of the Board under subsection 34 (23.1) unless the interim control by-law is repealed. 1994, c. 23, s. 23 (3).

Prohibition

(7) Where an interim control by-law ceases to be in effect, the council of the municipality may not for a period of three years pass a further interim control by-law that applies to any lands to which the original interim control by-law applied.

Application of s. 34 (9)

(8) Subsection 34 (9) applies with necessary modifications to a by-law passed under subsection (1) or (2). R.S.O. 1990, c. P.13, s. 38 (7, 8).

Temporary use provisions

39. (1) The council of a local municipality may, in a by-law passed under section 34, authorize the temporary use of land, buildings or structures for any purpose set out therein that is otherwise prohibited by the by-law. R.S.O. 1990, c. P.13, s. 39 (1).

(1.1), (1.2) REPEALED: 2002, c. 17, Sched. B, s. 11 (1).

Area and time in effect

(2) A by-law authorizing a temporary use under subsection (1) shall define the area to which it applies and specify the period of time for which the authorization shall be in effect, which shall not exceed three years from the day of the passing of the by-law. 2002, c. 17, Sched. B, s. 11 (2).

Extension

(3) Despite subsection (2), the council may by by-law grant further periods of not more than three years each during which the temporary use is authorized. R.S.O. 1990, c. P.13, s. 39 (3).

Non-application of cl. 34 (9) (a)

(4) Upon the expiry of the period or periods of time mentioned in subsections (2) and (3), clause 34 (9) (a) does not apply so as to permit the continued use of the land, buildings or structures for the purpose temporarily authorized. R.S.O. 1990, c. P.13, s. 39 (4).

Garden suites

39.1 (1) As a condition to passing a by-law authorizing the temporary use of a garden suite under subsection 39 (1), the council may require the owner of the suite or any other person to enter into an agreement with the municipality dealing with such matters related to the temporary use of the garden suite as the council considers necessary or advisable, including,

(a) the installation, maintenance and removal of the garden suite;

(b) the period of occupancy of the garden suite by any of the persons named in the agreement; and

(c) the monetary or other form of security that the council may require for actual or potential costs to the municipality related to the garden suite. 2002, c. 17, Sched. B, s. 12; 2009, c. 33, Sched. 21, s. 10 (7).

Definition

(2) In this section,

"garden suite" means a one-unit detached residential structure containing bathroom and kitchen facilities that is ancillary to an existing residential structure and that is designed to be portable. 2002, c. 17, Sched. B, s. 12.

Area and time in effect

(3) Despite subsection 39 (2), a by-law authorizing the temporary use of a garden suite shall define the area to which it applies and specify the period of time for which the authorization shall be in effect, which shall not exceed 20 years from the day of the passing of the by-law. 2011, c. 6, Sched. 2, s. 7.

Extension

(4) Despite subsection (3), the council may by by-law grant further periods of not more than three years each during which the temporary use is authorized. 2002, c. 17, Sched. B, s. 12.

Non-application

(5) Upon the expiry of the period or periods of time mentioned in subsections (3) and (4), clause 34 (9) (a) does not apply so as to permit the continued use of the garden suite. 2002, c. 17, Sched. B, s. 12.

Agreement exempting owner from requirement to provide parking

40. (1) Where an owner or occupant of a building is required under a by-law of a local municipality to provide and maintain parking facilities on land that is not part of a highway, the council of the municipality and such owner or occupant may enter into an agreement exempting the owner or occupant, to the extent specified in the agreement, from the requirement of providing or maintaining the parking facilities. R.S.O. 1990, c. P.13, s. 40 (1).

Payment of money

(2) An agreement entered into under subsection (1) shall provide for the making of one or more payments of money to the municipality as consideration for the granting of the exemption and shall set forth the basis upon which such payment is calculated. R.S.O. 1990, c. P.13, s. 40 (2).

Special account

(3) All money received by a municipality under an agreement entered into under this section shall be paid into a special account and,

(a) the money in that account shall be applied for the same purposes as a reserve fund established under the *Municipal Act, 2001* or the *City of Toronto Act, 2006*, as the case may be;

(b) the money in that account may be invested in securities in which the municipality is permitted to invest under the *Municipal Act, 2001* or the *City of Toronto Act, 2006*, as the case may be;

(c) earnings derived from the investment of the money in the special account shall be paid into that account; and

(d) the auditor of the municipality, in the auditor's annual report, shall report on the activities and position of the account. 2002, c. 17, Sched. B, s. 13 (1); 2006, c. 32, Sched. C, s. 47 (6).

Registration of agreement

(4) An agreement entered into under this section may be registered in the proper land registry office against the land to which it applies and, when so registered, any money payable to the municipality under the agreement that has become due for payment shall have priority lien status as described in section 1 of the *Municipal Act, 2001* or section 3 of the *City of Toronto Act, 2006*, as the case may be. 2002, c. 17, Sched. B, s. 13 (2); 2006, c. 32, Sched. C, s. 47 (7).

Certificate

(5) When all money payable to the municipality under an agreement registered under subsection (4) has been paid, or such agreement has been terminated, the clerk of the municipality shall, at the request of the owner of the land, provide a certificate in a form registrable in the proper land registry office, certifying that the money has been paid or that the agreement has been terminated. R.S.O. 1990, c. P.13, s. 40 (5).

Site plan control area

41. (1) In this section,

"development" means the construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of substantially increasing the size or usability thereof, or the laying out and establishment of a commercial parking lot or of sites for the location of three or more trailers as defined in subsection 164 (4) of the *Municipal Act, 2001* or subsection 3 (1) of the *City of Toronto Act, 2006*, as the case may be, or of sites for the location of three or more mobile homes as defined in subsection 46 (1) of this Act or of sites for the construction, erection or location of three or more land lease community homes as defined in subsection 46 (1) of this Act. R.S.O. 1990, c. P.13, s. 41 (1); 1994, c. 4, s. 14; 2002, c. 17, Sched. B, s. 14 (1); 2006, c. 32, Sched. C, s. 47 (8).

Exception

(1.1) The definition of "development" in subsection (1) does not include the placement of a portable classroom on a school site of a district school board if the school site was in existence on January 1, 2007. 2006, c. 23, s. 16 (1).

Establishment of site plan control area

(2) Where in an official plan an area is shown or described as a proposed site plan control area, the council of the local municipality in which the proposed area is situate may, by by-law, designate the whole or any part of such area as a site plan control area. R.S.O. 1990, c. P.13, s. 41 (2).

Designation of site plan control area

(3) A by-law passed under subsection (2) may designate a site plan control area by reference to one or more land use designations contained in a by-law passed under section 34. R.S.O. 1990, c. P.13, s. 41 (3).

Consultation

(3.1) The council,

(a) shall permit applicants to consult with the municipality before submitting plans and drawings for approval under subsection (4); and

(b) may, by by-law, require applicants to consult with the municipality as described in clause (a). 2006, c. 23, s. 16 (2).

Approval of plans or drawings

(4) No person shall undertake any development in an area designated under subsection (2) unless the council of the municipality or, where a referral has been made under subsection (12), the Municipal Board has approved one or both, as the council may determine, of the following:

1. Plans showing the location of all buildings and structures to be erected and showing the location of all facilities and works to be provided in conjunction therewith and of all facilities and works required under clause (7) (a), including facilities designed to have regard for accessibility for persons with disabilities.
2. Drawings showing plan, elevation and cross-section views for each building to be erected, except a building to be used for residential purposes containing less than twenty-five dwelling units, which drawings are sufficient to display,
   (a) the massing and conceptual design of the proposed building;
   (b) the relationship of the proposed building to adjacent buildings, streets, and exterior areas to which members of the public have access;
   (c) the provision of interior walkways, stairs, elevators and escalators to which members of the public have access from streets, open spaces and interior walkways in adjacent buildings;
   (d) matters relating to exterior design, including without limitation the character, scale, appearance and design features of buildings, and their sustainable design, but only to the extent that it is a matter of exterior design, if an official plan and a by-law passed under subsection (2) that both contain provisions relating to such matters are in effect in the municipality;
   (e) the sustainable design elements on any adjoining highway under a municipality's jurisdiction, including without limitation trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers and bicycle parking facilities, if an official plan and a by-law passed under subsection (2) that both contain provisions relating to such matters are in effect in the municipality; and
   (f) facilities designed to have regard for accessibility for persons with disabilities. R.S.O. 1990, c. P.13, s. 41 (4); 2002, c. 9, s. 56 (1); 2006, c. 23, s. 16 (3, 4); 2009, c. 33, Sched. 21, s. 10 (9).

Exclusions from site plan control

(4.1) The following matters relating to buildings described in paragraph 2 of subsection (4) are not subject to site plan control:

1. Interior design.
2. The layout of interior areas, excluding interior walkways, stairs, elevators and escalators referred to in subparagraph 2 (c) of subsection (4).
3. The manner of construction and standards for construction. 2006, c. 23, s. 16 (5).

Dispute about scope of site plan control

(4.2) The owner of land or the municipality may make a motion for directions to have the Municipal Board determine a dispute about whether a matter referred to in paragraph 1 or 2 of subsection (4) is subject to site plan control. 2006, c. 23, s. 16 (5).

Final determination

(4.3) The Municipal Board's determination under subsection (4.2) is not subject to appeal or review. 2006, c. 23, s. 16 (5).

Drawings for residential buildings

(5) Despite the exception provided in paragraph 2 of subsection (4), the council of the municipality may require the drawings mentioned therein for a building to be used for residential purposes containing less than twenty-five dwelling units if the proposed building is to be located in an area specifically designated in the official plan mentioned in subsection (2) as an area wherein such drawings may be required. R.S.O. 1990, c. P.13, s. 41 (5).

Proviso

(6) Nothing in this section shall be deemed to confer on the council of the municipality power to limit the height or density of buildings to be erected on the land. R.S.O. 1990, c. P.13, s. 41 (6).

Conditions to approval of plans

(7) As a condition to the approval of the plans and drawings referred to in subsection (4), a municipality may require the owner of the land to,

(a) provide to the satisfaction of and at no expense to the municipality any or all of the following:

1. Subject to the provisions of subsections (8) and (9), widenings of highways that abut on the land.
2. Subject to the *Public Transportation and Highway Improvement Act*, facilities to provide access to and from the land such as access ramps and curbings and traffic direction signs.
3. Off-street vehicular loading and parking facilities, either covered or uncovered, access driveways, including driveways for emergency vehicles, and the surfacing of such areas and driveways.
4. Walkways and walkway ramps, including the surfacing thereof, and all other means of pedestrian access.

4.1 Facilities designed to have regard for accessibility for persons with disabilities.

5. Facilities for the lighting, including floodlighting, of the land or of any buildings or structures thereon.
6. Walls, fences, hedges, trees, shrubs or other groundcover or facilities for the landscaping of the lands or the protection of adjoining lands.
7. Vaults, central storage and collection areas and other facilities and enclosures for the storage of garbage and other waste material.
8. Easements conveyed to the municipality for the construction, maintenance or improvement of watercourses, ditches, land drainage works, sanitary sewage facilities and other public utilities of the municipality or local board thereof on the land.

9. Grading or alteration in elevation or contour of the land and provision for the disposal of storm, surface and waste water from the land and from any buildings or structures thereon;

(b) maintain to the satisfaction of the municipality and at the sole risk and expense of the owner any or all of the facilities or works mentioned in paragraphs 2, 3, 4, 5, 6, 7, 8 and 9 of clause (a), including the removal of snow from access ramps and driveways, parking and loading areas and walkways;

(c) enter into one or more agreements with the municipality dealing with and ensuring the provision of any or all of the facilities, works or matters mentioned in clause (a) or (d) and the maintenance thereof as mentioned in clause (b) or with the provision and approval of the plans and drawings referred to in subsection (4);

(c.1) enter into one or more agreements with the municipality ensuring that development proceeds in accordance with the plans and drawings approved under subsection (4);

(d) subject to subsection (9.1), convey part of the land to the municipality to the satisfaction of and at no expense to the municipality for a public transit right of way. R.S.O. 1990, c. P.13, s. 41 (7); 1996, c. 4, s. 24 (1, 2); 2006, c. 23, s. 16 (6, 7).

Where area is in upper-tier municipality

(8) If an area designated under subsection (2) is within an upper-tier municipality, plans and drawings in respect of any development proposed to be undertaken in the area shall not be approved until the upper-tier municipality has been advised of the proposed development and afforded a reasonable opportunity to require the owner of the land to,

(a) provide to the satisfaction of and at no expense to the upper-tier municipality any or all of the following:

(i) subject to subsection (9), widenings of highways that are under the jurisdiction of the upper-tier municipality and that abut on the land,

(ii) subject to the *Public Transportation and Highway Improvement Act*, where the land abuts a highway under the jurisdiction of the upper-tier municipality, facilities to provide access to and from the land such as access ramps and curbings and traffic direction signs,

(iii) where the land abuts a highway under the jurisdiction of the upper-tier municipality, offstreet vehicular loading and parking facilities, either covered or uncovered, access driveways, including driveways for emergency vehicles, and the surfacing of such areas and driveways,

(iv) where the land abuts a highway under the jurisdiction of the upper-tier municipality, grading or alteration in elevation or contour of the land in relation to the elevation of the highway and provision for the disposal of storm and surface water from the land,

(v) where the land abuts a highway under the jurisdiction of the upper-tier municipality, facilities designed to have regard for accessibility for persons with disabilities;

(b) enter into one or more agreements with the upper-tier municipality dealing with and ensuring the provision of any or all of the facilities, works or matters mentioned in clause (a) or (c) and the maintenance thereof at the sole risk and expense of the owner, including the removal of snow from access ramps and driveways and parking and loading areas;

(c) subject to subsection (9.1), convey part of the land to the upper-tier municipality to the satisfaction of and at no expense to the municipality for a public transit right of way. 2002, c. 17, Sched. B, s. 14 (2); 2006, c. 23, s. 16 (8).

Widening must be described in official plan

(9) An owner may not be required to provide a highway widening under paragraph 1 of clause (7) (a) or under paragraph 1 of clause (8) (a) unless the highway to be widened is shown on or described in an official plan as a highway to be widened and the extent of the proposed widening is likewise shown or described. R.S.O. 1990, c. P.13, s. 41 (9).

Limitation

(9.1) An owner of land may not be required to convey land under clause (7) (d) or (8) (c) unless the public transit right of way to be provided is shown on or described in an official plan. 1994, c. 23, s. 24 (3); 1996, c. 4, s. 24 (3).

Registration of agreements

(10) Any agreement entered into under clause (7) (c) or (c.1) or under clause (8) (b) may be registered against the land to which it applies and the municipality is entitled to enforce the provisions thereof against the owner and, subject to the provisions of the *Registry Act* and the *Land Titles Act*, any and all subsequent owners of the land. R.S.O. 1990, c. P.13, s. 41 (10); 2002, c. 17, Sched. B, s. 14 (3); 2006, c. 23, s. 16 (9).

Application of *Municipal Act, 2001* or *City of Toronto Act, 2006*

(11) Section 446 of the *Municipal Act, 2001* or section 386 of the *City of Toronto Act, 2006*, as the case may be, applies to any requirements made under clauses (7) (a) and (b) and to any requirements made under an agreement entered into under clause (7) (c) or (c.1). R.S.O. 1990, c. P.13, s. 41 (11); 2002, c. 17, Sched. B, s. 14 (4); 2006, c. 23, s. 16 (10); 2006, c. 32, Sched. C, s. 47 (9).

Appeal to O.M.B.

(12) If the municipality fails to approve the plans or drawings referred to in subsection (4) within 30 days after they are submitted to the municipality or if the owner of the land is not satisfied with any requirement made by the municipality under subsection (7) or by the upper-tier municipality under subsection (8) or with any part thereof, including the terms of any agreement required, the owner may require the plans or drawings or the unsatisfactory requirements, or parts thereof, including the terms of any agreement required, to be referred to the Municipal Board by written notice to the secretary of the Board and to the clerk of the municipality or upper-tier municipality, as appropriate. 2002, c. 17, Sched. B, s. 14 (5).

Hearing

(12.1) The Municipal Board shall hear and determine the matter in issue and determine the details of the plans or drawings and determine the requirements, including the provisions of any agreement required, and the decision of the Board is final. 2002, c. 17, Sched. B, s. 14 (5).

Classes of development, delegation

(13) Where the council of a municipality has designated a site plan control area under this section, the council may, by by-law,

(a) define any class or classes of development that may be undertaken without the approval of plans and drawings otherwise required under subsection (4) or (5); and

(b) delegate to either a committee of the council or to an appointed officer of the municipality identified in the by-law either by name or position occupied, any of the council's powers or authority under this section, except the authority to define any class or classes of development as mentioned in clause (a). R.S.O. 1990, c. P.13, s. 41 (13).

Proviso

(14) Section 35a of *The Planning Act*, being chapter 349 of the Revised Statutes of Ontario, 1970, as it existed on the 21st day of June, 1979, shall be deemed to continue in force in respect of any by-law passed under that section on or before that day. R.S.O. 1990, c. P.13, s. 41 (14).

Certain agreements declared valid and binding

(15) Every agreement entered into by a municipality after the 16th day of December, 1973 and before the 22nd day of June, 1979, to the extent that the agreement deals with facilities and matters mentioned in subsection 35a (2) of *The Planning Act*, being chapter 349 of the Revised Statutes of Ontario, 1970, as it existed on the 21st day of June, 1979, is hereby declared to be valid and binding. R.S.O. 1990, c. P.13, s. 41 (15).

City of Toronto

(16) This section does not apply to the City of Toronto, except for subsection (1.1), paragraph 1 of subsection (4), subparagraph 2 (f) of subsection (4) and paragraph 4.1 of clause (7) (a), which provisions apply with necessary modifications. 2006, c. 23, s. 16 (11).

Conveyance of land for park purposes

42. (1) As a condition of development or redevelopment of land, the council of a local municipality may, by by-law applicable to the whole municipality or to any defined area or areas thereof, require that land in an amount not exceeding, in the case of land proposed for development or redevelopment for commercial or industrial purposes, 2 per cent and in all other cases 5 per cent of the land be conveyed to the municipality for park or other public recreational purposes. R.S.O. 1990, c. P.13, s. 42 (1).

Definition

(2) For the purposes of subsection (3),

"dwelling unit" means any property that is used or designed for use as a domestic establishment in which one or more persons may sleep and prepare and serve meals. R.S.O. 1990, c. P.13, s. 42 (2).

Alternative requirement

(3) Subject to subsection (4), as an alternative to requiring the conveyance provided for in subsection (1), in the case of land proposed for development or redevelopment for residential purposes, the by-law may require that land be conveyed to the municipality for park or other public recreational purposes at a rate of one hectare for each 300 dwelling units proposed or at such lesser rate as may be specified in the by-law. R.S.O. 1990, c. P.13, s. 42 (3).

Official plan requirement

(4) The alternative requirement authorized by subsection (3) may not be provided for in a by-law passed under this section unless there is an official plan in effect in the local municipality that contains specific policies dealing with the provision of lands for park or other public recreational purposes and the use of the alternative requirement. R.S.O. 1990, c. P.13, s. 42 (4).

Use and sale of land

(5) Land conveyed to a municipality under this section shall be used for park or other public recreational purposes, but may be sold at any time. R.S.O. 1990, c. P.13, s. 42 (5).

Payment instead of conveyance

(6) The council of a local municipality may require the payment of money to the value of the land otherwise required to be conveyed under this section in lieu of the conveyance. 2006, c. 23, s. 17 (1).

No building without payment

(6.1) If a payment is required under subsection (6), no person shall construct a building on the land proposed for development or redevelopment unless the payment has been made or arrangements for the payment that are satisfactory to the council have been made. 2006, c. 23, s. 17 (1).

Redevelopment, reduction of payment

(6.2) If land in a local municipality is proposed for redevelopment, a part of the land meets sustainability criteria set out in the official plan and the conditions set out in subsection (6.3) are met, the council shall reduce the amount of any payment required under subsection (6) by the value of that part. 2006, c. 23, s. 17 (1).

Same

(6.3) The conditions mentioned in subsection (6.2) are:

1. The official plan contains policies relating to the reduction of payments required under subsection (6).
2. No land is available to be conveyed for park or other public recreational purposes under this section. 2006, c. 23, s. 17 (1).

Determination of value

(6.4) For the purposes of subsections (6) and (6.2), the value of the land shall be determined as of the day before the day the building permit is issued in respect of the development or redevelopment or, if more than one building permit is required for the development or redevelopment, as of the day before the day the first permit is issued. 2006, c. 23, s. 17 (1).

Where land conveyed

(7) If land has been conveyed or is required to be conveyed to a municipality for park or other public purposes or a payment of money in lieu of such conveyance has been received by the municipality or is owing to it under this section or a condition imposed under section 51.1 or 53, no additional conveyance or payment in respect of the land subject to the earlier conveyance or payment may be required by a municipality in respect of subsequent development or redevelopment unless,

(a) there is a change in the proposed development or redevelopment which would increase the density of development; or

(b) land originally proposed for development or redevelopment for commercial or industrial purposes is now proposed for development or redevelopment for other purposes. 1994, c. 23, s. 25.

Non-application

(8) Despite clauses 74.1 (2) (h) and (i), subsection (7) does not apply to land proposed for development or redevelopment if, before this subsection comes into force, the land was subject to a condition that land be conveyed to a municipality for park or other public purposes or that a payment of money in lieu of such conveyance be made under this section or under section 51 or 53. 1994, c. 23, s. 25.

Changes

(9) If there is a change under clause (7) (a) or (b), the land that has been conveyed or is required to be conveyed or the payment of money that has been received or that is owing, as the case may be, shall be included in determining the amount of land or payment of money in lieu of it that may subsequently be required under this section on the development, further development or redevelopment of the lands or part of them in respect of which the original conveyance or payment was made. 1994, c. 23, s. 25.

Disputes

(10) In the event of a dispute between a municipality and an owner of land on the value of land determined under subsection (6.4), either party may apply to the Municipal Board to have the value determined and the Board shall, in accordance as nearly as may be with the *Expropriations Act*, determine the value of the land and, if a payment has been made under protest under subsection (12), the Board may order that a refund be made to the owner. 1994, c. 23, s. 25; 2006, c. 23, s. 17 (2).

Same

(11) In the event of a dispute between a municipality and an owner of land as to the amount of land or payment of money that may be required under subsection (9), either party may apply to the Municipal Board and the Board shall make a final determination of the matter. 1994, c. 23, s. 25.

Payment under protest

(12) If there is a dispute between a municipality and the owner of land under subsection (10), the owner may pay the amount required by the municipality under protest and shall make an application to the Municipal Board under subsection (10) within 30 days of the payment of the amount. 1994, c. 23, s. 25.

Notice

(13) If an owner of land makes a payment under protest and an application to the Municipal Board under subsection (12), the owner shall give notice of the application to the municipality within 15 days after the application is made. 1994, c. 23, s. 25.

Park purposes

(14) The council of a municipality may include in its estimates an amount to be used for the acquisition of land to be used for park or other public recreational purposes and may pay into the fund provided for in subsection (15) that amount, and any person may pay any sum into the same fund. 1994, c. 23, s. 25.

Special account

(15) All money received by the municipality under subsections (6) and (14) and all money received on the sale of land under subsection (5), less any amount spent by the municipality out of its general funds in respect of the land, shall be paid into a special account and spent only for the acquisition of land to be used for park or other public recreational purposes, including the erection,

improvement or repair of buildings and the acquisition of machinery for park or other public recreational purposes. 1994, c. 23, s. 25; 2009, c. 33, Sched. 21, s. 10 (10).

Investments

(16) The money in the special account may be invested in securities in which the municipality is permitted to invest under the *Municipal Act, 2001* or the *City of Toronto Act, 2006*, as the case may be, and the earnings derived from the investment of the money shall be paid into the special account, and the auditor in the auditor's annual report shall report on the activities and status of the account. 1994, c. 23, s. 25; 1996, c. 32, s. 82 (5); 2002, c. 17, Sched. B, s. 15; 2006, c. 32, Sched. C, s. 47 (10).

Application of subss. 34 (12-34)

43. (1) Subsections 34 (12) to (34) do not apply to a by-law that amends a by-law only to express a word, term or measurement in the by-law in a unit of measurement set out in Schedule I of the *Weights and Measures Act* (Canada) in accordance with the definitions set out in Schedule II of that Act and that,

(a) does not round any measurement so expressed further than to the next higher or lower multiple of 0.5 metres or 0.5 square metres, as the case may be; or

(b) does not vary by more than 5 per cent any measurement so expressed. R.S.O. 1990, c. P.13, s. 43 (1); 1993, c. 26, s. 55.

Effect of amendment that conforms with subs. (1)

(2) Any land, building or structure that otherwise conforms with a by-law passed under section 34 or a predecessor thereof or an order made by the Minister under section 47 or a predecessor thereof does not cease to conform with the by-law or order by reason only of an amendment to the by-law or order that conforms with subsection (1). R.S.O. 1990, c. P.13, s. 43 (2).

Committee of adjustment

44. (1) If a municipality has passed a by-law under section 34 or a predecessor of such section, the council of the municipality may by by-law constitute and appoint a committee of adjustment for the municipality composed of such persons, not fewer than three, as the council considers advisable. R.S.O. 1990, c. P.13, s. 44 (1).

Copy of by-law to Minister

(2) Where a by-law is passed under subsection (1), a certified copy of the by-law shall be sent to the Minister by registered mail by the clerk of the municipality within thirty days of the passing thereof. R.S.O. 1990, c. P.13, s. 44 (2).

Term of office

(3) The members of the committee who are not members of a municipal council shall hold office for the term of the council that appointed them and the members of the committee who are members of a municipal council shall be appointed annually. R.S.O. 1990, c. P.13, s. 44 (3).

Idem

(4) Members of the committee shall hold office until their successors are appointed, and are eligible for reappointment, and, where a member ceases to be a member before the expiration of his or her term, the council shall appoint another eligible person for the unexpired portion of the term. R.S.O. 1990, c. P.13, s. 44 (4).

Quorum

(5) Where a committee is composed of three members, two members constitute a quorum, and where a committee is composed of more than three members, three members constitute a quorum. R.S.O. 1990, c. P.13, s. 44 (5).

Vacancy not to impair powers

(6) Subject to subsection (5), a vacancy in the membership or the absence or inability of a member to act does not impair the powers of the committee or of the remaining members. R.S.O. 1990, c. P.13, s. 44 (6).

Chair

(7) The members of the committee shall elect one of themselves as chair, and, when the chair is absent through illness or otherwise, the committee may appoint another member to act as acting chair. R.S.O. 1990, c. P.13, s. 44 (7).

Secretary-treasurer, employees

(8) The committee shall appoint a secretary-treasurer, who may be a member of the committee, and may engage such employees and consultants as is considered expedient, within the limits of the money appropriated for the purpose. R.S.O. 1990, c. P.13, s. 44 (8).

Remuneration

(9) The members of the committee shall be paid such compensation as the council may provide. R.S.O. 1990, c. P.13, s. 44 (9).

Filing of documents, etc.

(10) The secretary-treasurer shall keep on file minutes and records of all applications and the decisions thereon and of all other official business of the committee, and section 253 of the *Municipal Act, 2001* or section 199 of the *City of Toronto Act, 2006*, as the case may be, applies with necessary modifications to such documents. R.S.O. 1990, c. P.13, s. 44 (10); 2002, c. 17, Sched. B, s. 16; 2006, c. 32, Sched. C, s. 47 (11).

Rules of procedure

(11) In addition to complying with the requirements of this Act, the committee shall comply with such rules of procedure as are prescribed. R.S.O. 1990, c. P.13, s. 44 (11).

Powers of committee

45. (1) The committee of adjustment, upon the application of the owner of any land, building or structure affected by any by-law that is passed under section 34 or 38, or a predecessor of such sections, or any person authorized in writing by the owner, may, despite any other Act, authorize such minor variance from the provisions of the by-law, in respect of the land, building or structure or the use thereof, as in its opinion is desirable for the appropriate development or use of the land, building or structure, if in the opinion of the committee the general intent and purpose of the by-law and of the official plan, if any, are maintained. R.S.O. 1990, c. P.13, s. 45 (1); 2006, c. 23, s. 18 (1); 2009, c. 33, Sched. 21, s. 10 (11).

Restriction

(1.1) Subsection (1) does not allow the committee to authorize a minor variance from conditions imposed under subsection 34 (16) of this Act or under subsection 113 (2) of the *City of Toronto Act, 2006*. 2006, c. 23, s. 18 (2).

Other powers

(2) In addition to its powers under subsection (1), the committee, upon any such application,

(a) where any land, building or structure, on the day the by-law was passed, was lawfully used for a purpose prohibited by the by-law, may permit,

(i) the enlargement or extension of the building or structure, if the use that was made of the building or structure on the day the by-law was passed, or a use permitted under subclause (ii) continued until the date of the application to the committee, but no permission may be given to enlarge or extend the building or structure beyond the limits of the land owned and used in connection therewith on the day the by-law was passed, or

(ii) the use of such land, building or structure for a purpose that, in the opinion of the committee, is similar to the purpose for which it was used on the day the by-law was passed or is more compatible with the uses permitted by the by-law than the purpose for which it was used on the day the by-law was passed, if the use for a purpose prohibited by the by-law or another use for a purpose previously permitted by the committee continued until the date of the application to the committee; or

(b) where the uses of land, buildings or structures permitted in the by-law are defined in general terms, may permit the use of any land, building or structure for any purpose that, in the opinion of the committee, conforms with the uses permitted in the by-law. R.S.O. 1990, c. P.13, s. 45 (2).

Power of committee to grant minor variances

(3) A council that has constituted a committee of adjustment may by by-law empower the committee of adjustment to grant minor variances from the provisions of any by-law of the municipality that implements an official plan, or from such by-laws of the municipality as are specified and that implement an official plan, and when a committee of adjustment is so empowered subsection (1) applies with necessary modifications. R.S.O. 1990, c. P.13, s. 45 (3).

Time for hearing

(4) The hearing on any application shall be held within thirty days after the application is received by the secretary-treasurer. R.S.O. 1990, c. P.13, s. 45 (4).

Notice of hearing

(5) The committee, before hearing an application, shall in the manner and to the persons and public bodies and containing the information prescribed, give notice of the application. R.S.O. 1990, c. P.13, s. 45 (5); 1994, c. 23, s. 26 (1).

Hearing

(6) The hearing of every application shall be held in public, and the committee shall hear the applicant and every other person who desires to be heard in favour of or against the application, and the committee may adjourn the hearing or reserve its decision. R.S.O. 1990, c. P.13, s. 45 (6).

Oaths

(7) The chair, or in his or her absence the acting chair, may administer oaths. R.S.O. 1990, c. P.13, s. 45 (7).

Decision

(8) No decision of the committee on an application is valid unless it is concurred in by the majority of the members of the committee that heard the application, and the decision of the committee, whether granting or refusing an application, shall be in writing and shall set out the reasons for the decision, and shall be signed by the members who concur in the decision. R.S.O. 1990, c. P.13, s. 45 (8).

Conditions in decision

(9) Any authority or permission granted by the committee under subsections (1), (2) and (3) may be for such time and subject to such terms and conditions as the committee considers advisable and as are set out in the decision. R.S.O. 1990, c. P.13, s. 45 (9).

Agreement re terms and conditions

(9.1) If the committee imposes terms and conditions under subsection (9), it may also require the owner of the land to enter into one or more agreements with the municipality dealing with some or all of the terms and conditions, and in that case the requirement shall be set out in the decision. 2006, c. 23, s. 18 (3).

Registration of agreement

(9.2) An agreement entered into under subsection (9.1) may be registered against the land to which it applies and the municipality is entitled to enforce the agreement against the owner and, subject to the *Registry Act* and the *Land Titles Act*, against any and all subsequent owners of the land. 2006, c. 23, s. 18 (3).

Notice of decision

(10) The secretary-treasurer shall not later than ten days from the making of the decision send one copy of the decision, certified by him or her,

(a) to the Minister, if the Minister has notified the committee by registered mail that he or she wishes to receive a copy of all decisions of the committee;

(b) to the applicant; and

(c) to each person who appeared in person or by counsel at the hearing and who filed with the secretary-treasurer a written request for notice of the decision,

together with a notice of the last day for appealing to the Municipal Board. R.S.O. 1990, c. P.13, s. 45 (10).

Additional material

(11) Where the secretary-treasurer is required to send a copy of the decision to the Minister under subsection (10), he or she shall also send to the Minister such other information and material as may be prescribed. R.S.O. 1990, c. P.13, s. 45 (11).

Appeal to O.M.B.

(12) The applicant, the Minister or any other person or public body who has an interest in the matter may within 20 days of the making of the decision appeal to the Municipal Board against the decision of the committee by filing with the secretary-treasurer of the committee a notice of appeal setting out the objection to the decision and the reasons in support of the objection accompanied by payment to the secretary-treasurer of the fee prescribed by the Municipal Board under the *Ontario Municipal Board Act* as payable on an appeal from a committee of adjustment to the Board. 1994, c. 23, s. 26 (2).

Idem

(13) The secretary-treasurer of a committee, upon receipt of a notice of appeal filed under subsection (12), shall forthwith forward the notice of appeal and the amount of the fee mentioned in subsection (12) to the Municipal Board by registered mail together with all papers and documents filed with the committee of adjustment relating to the matter appealed from and such other documents and papers as may be required by the Board. R.S.O. 1990, c. P.13, s. 45 (13).

Exception

(13.1) Despite subsection (13), if all appeals under subsection (12) are withdrawn within 15 days after the last day for filing a notice of appeal, the secretary-treasurer is not required to forward the materials described under subsection (13) to the Municipal Board. 1999, c. 12, Sched. M, s. 26.

Decision final

(13.2) If all appeals under subsection (12) are withdrawn within 15 days after the last day for filing a notice of appeal, the decision of the committee is final and binding and the secretary-treasurer of the committee shall notify the applicant and file a certified copy of the decision with the clerk of the municipality. 1999, c. 12, Sched. M, s. 26.

Where no appeal

(14) If within such 20 days no notice of appeal is given, the decision of the committee is final and binding, and the secretary-treasurer shall notify the applicant and shall file a certified copy of the decision with the clerk of the municipality. R.S.O. 1990, c. P.13, s. 45 (14); 1994, c. 23, s. 26 (3).

Where appeals withdrawn

(15) Where all appeals to the Municipal Board are withdrawn, the decision of the committee is final and binding and the secretary of the Board shall notify the secretary-treasurer of the committee who in turn shall notify the applicant and file a certified copy of the decision with the clerk of the municipality. R.S.O. 1990, c. P.13, s. 45 (15); 1994, c. 23, s. 26 (4).

Hearing

(16) On an appeal to the Municipal Board, the Board shall, except as provided in subsections (15) and (17), hold a hearing of which notice shall be given to the applicant, the appellant, the secretary-treasurer of the committee and to such other persons or public bodies and in such manner as the Board may determine. R.S.O. 1990, c. P.13, s. 45 (16); 1994, c. 23, s. 26 (5).

Dismissal without hearing

(17) Despite the *Statutory Powers Procedure Act* and subsection (16), the Municipal Board may dismiss all or part of an appeal without holding a hearing, on its own initiative or on the motion of any party, if,

(a) it is of the opinion that,

(i) the reasons set out in the notice of appeal do not disclose any apparent land use planning ground upon which the Board could allow all or part of the appeal,

(ii) the appeal is not made in good faith or is frivolous or vexatious,

(iii) the appeal is made only for the purpose of delay, or

(iv) the appellant has persistently and without reasonable grounds commenced before the Board proceedings that constitute an abuse of process;

(b) the appellant has not provided written reasons for the appeal;

(c) the appellant has not paid the fee prescribed under the *Ontario Municipal Board Act*; or

(d) the appellant has not responded to a request by the Municipal Board for further information within the time specified by the Board. 1994, c. 23, s. 26 (6); 2006, c. 23, s. 18 (4, 5).

Representation

(17.1) Before dismissing all or part of an appeal, the Municipal Board shall notify the appellant and give the appellant the opportunity to make representation on the proposed dismissal but this subsection does not apply if the appellant has not complied with a request made under clause (17) (d). 2000, c. 26, Sched. K, s. 5 (3).

Dismissal

(17.2) The Municipal Board may dismiss all or part of an appeal after holding a hearing or without holding a hearing on the motion under subsection (17), as it considers appropriate. 2000, c. 26, Sched. K, s. 5 (3).

Powers of O.M.B.

(18) The Municipal Board may dismiss the appeal and may make any decision that the committee could have made on the original application. R.S.O. 1990, c. P.13, s. 45 (18).

Amended application

(18.1) On an appeal, the Municipal Board may make a decision on an application which has been amended from the original application if, before issuing its order, written notice is given to the persons and public bodies who received notice of the original application under subsection (5) and to other persons and agencies prescribed under that subsection. 1993, c. 26, s. 56; 1994, c. 23, s. 26 (7).

Exception

(18.1.1) The Municipal Board is not required to give notice under subsection (18.1) if, in its opinion, the amendment to the original application is minor. 1996, c. 4, s. 25 (1).

Notice of intent

(18.2) Any person or public body who receives notice under subsection (18.1) may, not later than thirty days after the day that written notice was given, notify the Board of an intention to appear at the hearing or the resumption of the hearing, as the case may be. 1993, c. 26, s. 56; 1994, c. 23, s. 26 (8).

Order

(18.3) If, after the expiry of the time period in subsection (18.2), no notice of intent has been received, the Board may issue its order. 1993, c. 26, s. 56.

Hearing

(18.4) If a notice of intent is received, the Board may hold a hearing or resume the hearing on the amended application or it may issue its order without holding a hearing or resuming the hearing. 1996, c. 4, s. 25 (2).

Notice of decision

(19) When the Municipal Board makes an order on an appeal, the secretary of the Board shall send a copy thereof to the applicant, the appellant and the secretary-treasurer of the committee. R.S.O. 1990, c. P.13, s. 45 (19).

Idem

(20) The secretary-treasurer shall file a copy of the order of the Municipal Board with the clerk of the municipality. R.S.O. 1990, c. P.13, s. 45 (20).

Mobile homes, land lease community homes

46. (1) In this section,

"land lease community home" means any dwelling that is a permanent structure where the owner of the dwelling leases the land used or intended for use as the site for the dwelling, but does not include a mobile home; ("maison de communauté de terrains à bail")

"mobile home" means any dwelling that is designed to be made mobile, and constructed or manufactured to provide a permanent residence for one or more persons, but does not include a travel trailer or tent trailer or trailer otherwise designed; ("maison mobile")

"parcel of land" means a lot or block within a registered plan of subdivision or any land that may be legally conveyed under the exemption provided in clause 50 (3) (b) or clause 50 (5) (a). ("parcelle de terrain") R.S.O. 1990, c. P.13, s. 46 (1); 1994, c. 4, s. 15 (1).

One mobile home per parcel of land

(2) Unless otherwise authorized by a by-law in force under section 34 or an order of the Minister made under clause 47 (1) (a), or a permit issued under section 13 of the *Public Lands Act*, no person shall erect or locate or use or cause to be erected, located or used, a mobile home except on a parcel of land as defined in subsection (1), and in no case except as otherwise so authorized shall any person erect, locate or use or cause to be erected, located or used more than one mobile home on any such parcel of land. R.S.O. 1990, c. P.13, s. 46 (2).

One land lease community home per parcel of land

(2.1) Unless otherwise authorized by a by-law in force under section 34 or an order of the Minister made under clause 47 (1) (a), or a permit issued under section 13 of the *Public Lands Act*, no person shall construct or erect or locate or use or cause to be constructed, erected, located or used a land lease community home except on a parcel of land as defined in subsection (1), and in no case except as otherwise so authorized shall any person construct, erect, locate or use or cause to be constructed, erected, located or used more than one land lease community home on any such parcel of land. 1994, c. 4, s. 15 (2).

Saving

(3) This section does not apply to prevent the continued use in the same location of any mobile home that,

(a) was erected or located and in use prior to the 1st day of June, 1977; or

(b) was erected or located in accordance with a building permit issued prior to the 1st day of June, 1977. R.S.O. 1990, c. P.13, s. 46 (3).

Same

(4) This section does not apply to prevent the continued use in the same location of any land lease community home that,

(a) was constructed, erected or located and in use prior to the day the *Land Lease Statute Law Amendment Act, 1994* receives Royal Assent; or

(b) was constructed, erected or located in accordance with a building permit issued prior to the day the *Land Lease Statute Law Amendment Act, 1994* receives Royal Assent. 1994, c. 4, s. 15 (3).

Power of Minister re zoning and subdivision control

47. (1) The Minister may by order,

(a) in respect of any land in Ontario, exercise any of the powers conferred upon councils by section 34, 38 or 39, but subsections 34 (11) to (34) do not apply to the exercise of such powers; and

(b) in respect of any land in Ontario, exercise the powers conferred upon councils by subsection 50 (4). R.S.O. 1990, c. P.13, s. 47 (1); 1994, c. 23, s. 27 (1).

Power of Minister to allow minor variances

(2) Where an order has been made under clause (1) (a), the Minister, in respect of the lands affected by the order, has all the powers in respect of such order as a committee of adjustment has under subsections 45 (1) and (2) in respect of a by-law passed under section 34, but subsections 45 (4) to (8) and (10) to (20) do not apply to the exercise by the Minister of such powers. R.S.O. 1990, c. P.13, s. 47 (2).

Order prevails over by-law in event of conflict

(3) In the event of a conflict between an order made under clause (1) (a) and a by-law that is in effect under section 34 or 38, or a predecessor thereof, the order prevails to the extent of such conflict, but in all other respects the by-law remains in full force and effect. R.S.O. 1990, c. P.13, s. 47 (3).

Deemed by-law of municipality

(4) The Minister may, in the order or by separate order, provide that all or part of an order made under clause (1) (a) and any amendments to it in respect of land in a municipality, the council of which has the powers conferred by section 34, shall be deemed for all purposes, except the purposes of section 24, to be and to always have been a by-law passed by the council of the municipality in which the land is situate. 2001, c. 9, Sched. J, s. 2 (1).

Notice

(5) No notice or hearing is required prior to the making of an order under subsection (1) but the Minister shall give notice of any such order within thirty days of the making thereof in such manner as the Minister considers proper and shall set out in the notice the provisions of subsections (8), (9) and (10). R.S.O. 1990, c. P.13, s. 47 (5).

Idem

(6) The Minister shall cause a duplicate or certified copy of an order made under clause (1) (a),

(a) where the land affected is situate in a local municipality, to be lodged in the office of the clerk of the municipality, or where the land affected is situate in two or more local municipalities, in the office of the clerk of each of such municipalities; and

(b) where the land affected is situate in territory without municipal organization, to be lodged in the proper land registry office, where it shall be made available to the public as a production. R.S.O. 1990, c. P.13, s. 47 (6); 2002, c. 17, Sched. B, s. 17.

Registration

(7) The Minister shall cause a certified copy or duplicate of an order made under clause (1) (b) to be registered in the proper land registry office. R.S.O. 1990, c. P.13, s. 47 (7).

Revocation or amendment

(8) The Minister may, on his or her own initiative or at the request of any person or public body, by order, amend or revoke in whole or in part any order made under subsection (1). R.S.O. 1990, c. P.13, s. 47 (8); 1994, c. 23, s. 27 (2).

Information

(8.1) A request under subsection (8) shall include the prescribed information and material and such other information or material as the Minister may require. 1993, c. 26, s. 57 (2).

Refusal to consider

(8.2) The Minister may refuse to accept or further consider a request under subsection (8) until the prescribed information and material and the required fee are received. 1994, c. 23, s. 27 (3).

Notice

(9) Except as provided in subsection (10), the Minister before amending or revoking in whole or in part an order made under subsection (1) shall give notice or cause to be given notice thereof in such manner as the Minister considers proper and shall allow such period of time as he or she considers appropriate for the submission of representations in respect thereof. R.S.O. 1990, c. P.13, s. 47 (9).

Hearing by O.M.B.

(10) Where an application is made to the Minister to amend or revoke in whole or in part any order made under subsection (1), the Minister may, and on the request of any person or public body shall, request the Municipal Board to hold a hearing on the application and thereupon the Board shall hold a hearing as to whether the order should be amended or revoked in whole or in part. R.S.O. 1990, c. P.13, s. 47 (10); 1994, c. 23, s. 27 (4).

Reasons

(10.1) A request for a hearing must set out the reasons for the request and be accompanied by the fee prescribed under the *Ontario Municipal Board Act*. 1994, c. 23, s. 27 (5).

Refusal to refer

(11) The Minister may refuse to refer a request under subsection (10) to the Municipal Board if,

(a) the Minister is of the opinion that,

(i) the reasons set out in the request do not disclose any apparent land use planning ground upon which the Municipal Board could amend or revoke or refuse to revoke all or part of the order,

(ii) the request is not made in good faith or is frivolous or vexatious, or

(iii) the request is made only for the purpose of delay;

(b) the person or public body requesting the hearing has not provided written reasons for the request. 1994, c. 23, s. 27 (6); 1996, c. 4, s. 26 (1).

Notice of hearing

(12) Where the Minister has requested the Municipal Board to hold a hearing as provided for in subsection (10), notice of the hearing shall be given in such manner and to such persons as the Board may direct, and the Board shall hear any submissions that any person may desire to bring to the attention of the Board. R.S.O. 1990, c. P.13, s. 47 (12).

Dismissal without hearing

(12.1) Despite the *Statutory Powers Procedure Act* and subsection (10), the Municipal Board may dismiss a request to hold a hearing without holding a hearing, on its own initiative or on the motion of any party, if,

(a) it is of the opinion that,

(i) the reasons set out in the request do not disclose any apparent land use planning ground upon which the Board could amend or revoke or refuse to amend or revoke all or part of the order,

(ii) the request is not made in good faith or is frivolous or vexatious,

(iii) the request is made only for the purpose of delay, or

(iv) the person or public body requesting the hearing has persistently and without reasonable grounds commenced before the Board proceedings that constitute an abuse of process;

(b) the person or public body requesting the hearing has not provided written reasons for the request;

(c) the person or public body requesting the hearing has not paid the fee prescribed under the *Ontario Municipal Board Act*; or

(d) the person or public body requesting the hearing has not responded to a request by the Municipal Board for further information within the time specified by the Board. 1994, c. 23, s. 27 (7); 1996, c. 4, s. 26 (2); 2006, c. 23, s. 19 (1, 2).

Representation

(12.2) Before dismissing a request to hold a hearing, the Municipal Board shall notify the person or public body requesting the hearing and give the person or public body the opportunity to make representation on the proposed dismissal but this subsection does not apply if the person or public body has not complied with a request made under clause (12.1) (d). 2000, c. 26, Sched. K, s. 5 (4).

Dismissal

(12.3) The Municipal Board may dismiss a request after holding a hearing or without holding a hearing on the motion under subsection (12.1), as it considers appropriate. 2000, c. 26, Sched. K, s. 5 (4).

Decision of O.M.B.

(13) The Municipal Board after the conclusion of the hearing shall make a decision to either amend or revoke the order in whole or in part or refuse to amend or revoke the order in whole or in part and the Minister shall give effect to the decision of the Board. R.S.O. 1990, c. P.13, s. 47 (13); 1996, c. 4, s. 26 (3).

Minister's notice re matters of provincial interest

(13.1) If the Municipal Board has been requested to hold a hearing as provided for in subsection (10) and the Minister is of the opinion that a matter of provincial interest is, or is likely to be, adversely affected by the requested amendment or revocation, the Minister may so notify the Board in writing, not later than 30 days before the day fixed by the Board for the hearing. 2006, c. 23, s. 19 (3).

Same

(13.2) The Minister's notice shall identify,

(a) the provisions of the order by whose amendment or revocation the provincial interest is, or is likely to be, adversely affected; and

(b) the general basis for the opinion that a matter of provincial interest is, or is likely to be, adversely affected. 2006, c. 23, s. 19 (3).

Same

(13.3) The Minister is not required to give notice or to hold a hearing before giving notice under subsection (13.1). 2006, c. 23, s. 19 (3).

Effect of notice

(13.4) If the Municipal Board receives notice from the Minister under subsection (13.1), the decision of the Board is not final and binding with respect to the amendment or revocation of provisions identified in the notice, until the Lieutenant Governor in Council confirms the decision in that respect. 2006, c. 23, s. 19 (3).

Power of Lieutenant Governor in Council

(13.5) The Lieutenant Governor in Council may confirm, vary or rescind the Municipal Board's decision with respect to the amendment or revocation of provisions identified in the notice, and may direct the Minister to amend or revoke the order, in whole or in part. 2006, c. 23, s. 19 (3).

Notification of decision

(14) A copy of the decision of the Municipal Board shall be sent to each person who appeared at the hearing and made representations and to any person who in writing requests a copy of the decision. R.S.O. 1990, c. P.13, s. 47 (14).

(15)-(17) REPEALED: 1994, c. 23, s. 27 (8).

Effect of land use order

(18) An order of the Minister made under clause (1) (b) has the same effect as a by-law passed under subsection 50 (4). R.S.O. 1990, c. P.13, s. 47 (18).

Deemed by-law

(19) The Minister may, in the order or by separate order, provide that all or part of an order made under clause (1) (a) and any amendments to it in respect of land in the planning area of a planning board shall be deemed to be and to always have been a by-law passed under section 34 by the planning board in which the land is situate. 2001, c. 9, Sched. J, s. 2 (2).

Where licence, etc., not to issue

48. Despite the provisions of any other general or special Act, a licence, permit, approval or permission shall not be issued or granted nor any utility or service provided by a utilities distributor or a public or Crown agency in respect of any land, building or structure where the proposed use of the land or the erection or proposed use of the building or structure would be in contravention of

section 46 or of an order made under section 47 or of a by-law passed by a planning board under section 34 or 38. R.S.O. 1990, c. P.13, s. 48; 1994, c. 23, s. 28; 2006, c. 23, s. 20.

Power of entry

49. (1) In this section,

"officer" means an officer who has been assigned the responsibility of enforcing section 46, orders of the Minister made under clause 47 (1) (a) or zoning by-laws passed under section 34.

Entry and inspection

(2) Subject to subsection (3), where an officer believes on reasonable grounds that section 46, an order of the Minister made under clause 47 (1) (a) or a by-law passed under section 34 or 38 is being contravened, the officer or any person acting under his or her instructions may, at all reasonable times and upon producing proper identification, enter and inspect any property on or in respect of which he or she believes the contravention is occurring. R.S.O. 1990, c. P.13, s. 49 (1, 2).

Where warrant required

(3) Except under the authority of a search warrant issued under section 49.1, an officer or any person acting under his or her instructions shall not enter any room or place actually used as a dwelling without requesting and obtaining the consent of the occupier, first having informed the occupier that the right of entry may be refused and entry made only under the authority of a search warrant. R.S.O. 1990, c. P.13, s. 49 (3); 1994, c. 2, s. 45 (1).

Obstruction

(4) No person shall obstruct or attempt to obstruct an officer or a person acting under the officer's instructions in the exercise of a power under this section. 1994, c. 2, s. 45 (2).

Search warrant

49.1 (1) A provincial judge or justice of the peace may at any time issue a warrant in the prescribed form authorizing a person named in the warrant to enter and search a building, receptacle or place if the provincial judge or justice of the peace is satisfied by information on oath that there are reasonable grounds to believe that,

(a) an offence under section 67 has been committed; and

(b) the entry and search will afford evidence relevant to the commission of the offence. 1994, c. 2, s. 46; 1997, c. 24, s. 226 (7).

Seizure

(2) In a search warrant, the provincial judge or justice of the peace may authorize the person named in the warrant to seize anything that, based on reasonable grounds, will afford evidence relevant to the commission of the offence.

Receipt and removal

(3) Anyone who seizes something under a search warrant shall,

(a) give a receipt for the thing seized to the person from whom it was seized; and

(b) bring the thing seized before the provincial judge or justice of the peace issuing the warrant or another provincial judge or justice to be dealt with according to law.

Expiry

(4) A search warrant shall name the date upon which it expires, which shall be not later than fifteen days after the warrant is issued.

Time of execution

(5) A search warrant shall be executed between 6 a.m. and 9 p.m. unless it provides otherwise.

Other matters

(6) Sections 159 and 160 of the *Provincial Offences Act* apply with necessary modifications in respect of any thing seized under this section. 1994, c. 2, s. 46.

PART VI
SUBDIVISION OF LAND

Interpretation

50. (1) In this section and in section 53,

"consent" means,

(a) where land is situate in a lower-tier municipality, a consent given by the council of the upper-tier municipality,

(b) where land is situate in a single-tier municipality that is not in a territorial district, a consent given by the council of the single-tier municipality,

(c) where land is situate in a prescribed single-tier municipality that is in a territorial district, a consent given by the council of the single-tier municipality, and

(d) except as otherwise provided in clauses (a), (b) and (c), a consent given by the Minister. 2002, c. 17, Sched. B, s. 18.

References include delegates

(1.0.1) A reference in subsection (1) and in section 53 to the Minister includes a delegate of the Minister under sections 4 and 55 and a reference to a council includes a delegate of a council under section 54. 2002, c. 17, Sched. B, s. 18.

Removal of power

(1.1) The Minister may by order, accompanied by a written explanation for it, remove the powers of the council of a municipality under this section and sections 53 and 57 and the order may be in respect of one or more applications for a consent, an approval under subsection (18) or for a certificate of validation specified in the order or in respect of any or all applications for consents, approvals under subsection (18) or for certificates of validation made after the order is made. 1994, c. 23, s. 29 (2).

Minister to grant consents, etc.

(1.2) If an order is made under subsection (1.1), the Minister has the power of the council to grant consents, to give approvals under subsection (18) or to issue a certificate of validation in respect of applications to which the order relates and the council shall forward to the Minister all papers, plans, documents and other materials that relate to any matter in respect of which the powers were removed and of which a final disposition was not made by the council before the power was removed. 1994, c. 23, s. 29 (2).

Effect of revocation

(1.3) If the Minister revokes the order or part of the order made under subsection (1.1), the power to grant consents, give approvals under subsection (18) or issue certificates of validation reverts back to the council in respect of all applications to which the revoked order or revoked part of the order applied. 1994, c. 23, s. 29 (2).

Delegation

(1.4) If an order is made under subsection (1.1) in respect of land that is located in a municipal planning area, the Minister may by order delegate to the municipal planning authority the power which was removed from the council to grant consents, to give approvals under subsection (18) or to issue certificates of validation and the delegation may be subject to such conditions as the order provides. 1994, c. 23, s. 29 (2).

Effect of revocation

(1.5) If the Minister revokes the order or part of the order made under subsection (1.4), the power of the municipal planning authority to grant consents, to give approvals under subsection (18) or to issue certificates of validation reverts back to the Minister in respect of all applications to which the revoked order or revoked part of the order applies and the municipal planning authority shall forward to the Minister all papers, plans, documents and other materials that relate to any matter to which the revoked order or part of the order applies and of which a final disposition was not made by the municipal planning authority before the order or part of the order was revoked. 1994, c. 23, s. 29 (2).

Proviso

(2) For the purposes of this section, land shall be deemed and shall always have been deemed not to abut land that is being conveyed or otherwise dealt with if it abuts such land on a horizontal plane only. R.S.O. 1990, c. P.13, s. 50 (2).

Mining rights

(2.1) For the purposes of this section, land shall be deemed and shall always have been deemed to exclude mining rights in or under land but not mining rights on the land. 1994, c. 23, s. 29 (2).

Subdivision control

(3) No person shall convey land by way of a deed or transfer, or grant, assign or exercise a power of appointment with respect to land, or mortgage or charge land, or enter into an agreement of sale and purchase of land or enter into any agreement that has the effect of granting the use of or right in land directly or by entitlement to renewal for a period of twenty-one years or more unless,

(a) the land is described in accordance with and is within a registered plan of subdivision;

(b) the grantor by deed or transfer, the person granting, assigning or exercising a power of appointment, the mortgagor or chargor, the vendor under an agreement of purchase and sale or the grantor of a use of or right in land, as the case may be, does not retain the fee or the equity of redemption in, or a power or right to grant, assign or exercise a power of appointment in respect of, any land abutting the land that is being conveyed or otherwise dealt with other than land that is the whole of one or more lots or blocks within one or more registered plans of subdivision;

(c) the land or any use of or right therein is being acquired or disposed of by Her Majesty in right of Canada, Her Majesty in right of Ontario or by any municipality;

(d) the land or any use of or right therein is being acquired for the purpose of an electricity distribution line, electricity transmission line, hydrocarbon distribution line or hydrocarbon

transmission line within the meaning of Part VI of the *Ontario Energy Board Act, 1998* and in respect of which the person acquiring the land or any use of or right therein has made a declaration that it is being acquired for such purpose, which shall be conclusive evidence that it is being acquired for such purpose;

(d.1) the land or any use of or right therein is being acquired, directly or by entitlement to renewal for a period of 21 or more years but not more than 50 years, for the purpose of a renewable energy generation facility or renewable energy project, and in respect of which the person acquiring the land or any use of or right therein has made a declaration that it is being acquired for such purpose, which shall be conclusive evidence that it is being acquired for such purpose;

(e) the land or any use of or right therein is being acquired for the purposes of flood control, erosion control, bank stabilization, shoreline management works or the preservation of environmentally sensitive lands under a project approved by the Minister of Natural Resources under section 24 of the *Conservation Authorities Act* and in respect of which an officer of the conservation authority acquiring the land or any use of or right therein has made a declaration that it is being acquired for any of such purposes, which shall be conclusive evidence that it is being acquired for such purpose;

(f) a consent is given to convey, mortgage or charge the land, or grant, assign or exercise a power of appointment in respect of the land or enter into an agreement in respect of the land;

(g) the land or any use of or right therein was acquired for the purpose of an electricity distribution line, electricity transmission line, hydrocarbon distribution line or hydrocarbon transmission line within the meaning of Part VI of the *Ontario Energy Board Act, 1998* and is being disposed of to the person from whom it was acquired; or

(h) the only use of or right in land that is granted is an easement or covenant under the *Conservation Land Act*. R.S.O. 1990, c. P.13, s. 50 (3); 1998, c. 15, Sched. E, s. 27 (4-6); 2006, c. 23, s. 21 (1); 2009, c. 12, Sched. K, s. 2 (1).

Designation of plans of subdivision not deemed registered

(4) The council of a local municipality may by by-law designate any plan of subdivision, or part thereof, that has been registered for eight years or more, which shall be deemed not to be a registered plan of subdivision for the purposes of subsection (3). R.S.O. 1990, c. P.13, s. 50 (4).

Part-lot control

(5) Where land is within a plan of subdivision registered before or after the coming into force of this section, no person shall convey a part of any lot or block of the land by way of a deed, or transfer, or grant, assign or exercise a power of appointment in respect of a part of any lot or block of the land, or mortgage or charge a part of any lot or block of the land, or enter into an agreement of sale and purchase of a part of any lot or block of the land or enter into any agreement that has the effect of granting the use of or right in a part of any lot or block of the land directly or by entitlement to renewal for a period of twenty-one years or more unless,

(a) the grantor by deed or transfer, the person granting, assigning or exercising a power of appointment, the mortgagor or chargor, the vendor under an agreement of purchase and sale or the grantor of a use of or right in land, as the case may be, does not retain the fee or the equity of redemption in, or a power or right to grant, assign or exercise a power of appointment in respect of, any land abutting the land that is being conveyed or otherwise

dealt with other than land that is the whole of one or more lots or blocks within one or more registered plans of subdivision;

(b) the land or any use of or right therein is being acquired or disposed of by Her Majesty in right of Canada, Her Majesty in right of Ontario or by any municipality;

(c) the land or any use of or right therein is being acquired for the purpose of a utility line within the meaning of the *Ontario Energy Board Act, 1998* and in respect of which the person acquiring the land or any use of or right therein has made a declaration that it is being acquired for such purpose, which shall be conclusive evidence that it is being acquired for such purpose;

(c.1) the land or any use of or right therein is being acquired, directly or by entitlement to renewal for a period of 21 or more years but not more than 50 years, for the purpose of a renewable energy generation facility or renewable energy project, and in respect of which the person acquiring the land or any use of or right therein has made a declaration that it is being acquired for such purpose, which shall be conclusive evidence that it is being acquired for such purpose;

(d) the land or any use of or right therein is being acquired for the purposes of flood control, erosion control, bank stabilization, shoreline management works or the preservation of environmentally sensitive lands under a project approved by the Minister of Natural Resources under section 24 of the *Conservation Authorities Act* and in respect of which an officer of the conservation authority acquiring the land or any use of or right therein has made a declaration that it is being acquired for any of such purposes, which shall be conclusive evidence that it is being acquired for such purpose;

(e) the land that is being conveyed, or otherwise dealt with is the remaining part of a lot or block, the other part of which was acquired by a body that has vested in it the right to acquire land by expropriation;

(f) a consent is given to convey, mortgage or charge the land or grant, assign or exercise a power of appointment in respect of the land or enter into an agreement in respect of the land;

(g) the land or any use of or right therein was acquired for the purpose of a utility line within the meaning of the *Ontario Energy Board Act, 1998* and is being disposed of to the person from whom it was acquired; or

(h) the only use of or right in land that is granted is an easement or covenant under the *Conservation Land Act*. R.S.O. 1990, c. P.13, s. 50 (5); 1998, c. 15, Sched. E, s. 27 (7-9); 2006, c. 23, s. 21 (2); 2009, c. 12, Sched. K, s. 2 (2).

Conveyance of remaining part

(6) Despite subsections (3) and (5), where land is the remaining part of a parcel of land, the other part or parts of which parcel have been the subject of a consent given under clause (3) (f) or (5) (f), the whole of the remaining part may be conveyed or otherwise dealt with before the other part or parts are conveyed or otherwise dealt with, provided that the remaining part is conveyed or otherwise dealt with before the consent mentioned above lapses under subsection 53 (43). R.S.O. 1990, c. P.13, s. 50 (6); 1994, c. 23, s. 29 (3).

Designation of lands not subject to part-lot control

(7) Despite subsection (5), the council of a local municipality may by by-law provide that subsection (5) does not apply to land that is within such registered plan or plans of subdivision or parts of them as are designated in the by-law. 1996, c. 4, s. 27 (3).

Requirement for approval of by-law

(7.1) A by-law passed under subsection (7) does not take effect until it has been approved by the appropriate approval authority for the purpose of sections 51 and 51.1 in respect of the land covered by the by-law. 1996, c. 4, s. 27 (3).

Exemption from approval

(7.2) An approval under subsection (7.1) is not required if the council that passes a by-law under subsection (7) is authorized to approve plans of subdivision under section 51. 1996, c. 4, s. 27 (3).

Expiration of by-law

(7.3) A by-law passed under subsection (7) may provide that the by-law expires at the expiration of the time period specified in the by-law and the by-law expires at that time. 1996, c. 4, s. 27 (3).

Extension of time period

(7.4) The council of a local municipality may, at any time before the expiration of a by-law under subsection (7), amend the by-law to extend the time period specified for the expiration of the by-law and an approval under subsection (7.1) is not required. 1996, c. 4, s. 27 (3).

Amendment or repeal

(7.5) The council of a local municipality may, without an approval under subsection (7.1), repeal or amend a by-law passed under subsection (7) to delete part of the land described in it and, when the requirements of subsection (28) have been complied with, subsection (5) applies to the land affected by the repeal or amendment. 1996, c. 4, s. 27 (3).

Exception

(8) Nothing in subsections (3) and (5) prohibits, and subsections (3) and (5) shall be deemed never to have prohibited, the giving back of a mortgage or charge by a purchaser of land to the vendor of the land as part or all of the consideration for the conveyance of the land, provided that the mortgage or charge applies to all of the land described in the conveyance. R.S.O. 1990, c. P.13, s. 50 (8).

Part of building or structure

(9) Nothing in subsections (3) and (5) prohibits the entering into of an agreement that has the effect of granting the use of or right in a part of a building or structure for any period of years. R.S.O. 1990, c. P.13, s. 50 (9).

Exception

(10) This section does not apply to an agreement entered into under section 2 of the *Drainage Act*. R.S.O. 1990, c. P.13, s. 50 (10).

Application to ARDD

(11) This section does not apply so as to prevent the Agricultural Rehabilitation and Development Directorate of Ontario from conveying or leasing land where the land that is being conveyed or leased comprises all of the land that was acquired by the Directorate under one registered deed or transfer. R.S.O. 1990, c. P.13, s. 50 (11).

Exception to application of subss. (3, 5)

(12) Where a parcel of land is conveyed by way of a deed or transfer with a consent given under section 53, subsections (3) and (5) of this section do not apply to a subsequent conveyance of, or other transaction involving, the identical parcel of land unless the council or the Minister, as the case may be, in giving the consent, stipulates either that subsection (3) or subsection (5) shall apply to any such subsequent conveyance or transaction. R.S.O. 1990, c. P.13, s. 50 (12).

Reference to stipulation

(13) Where the council or the Minister stipulates in accordance with subsection (12), the certificate provided for under subsection 53 (42) shall contain a reference to the stipulation, and if not so contained the consent shall be conclusively deemed to have been given without the stipulation. R.S.O. 1990, c. P.13, s. 50 (13); 1994, c. 23, s. 29 (5).

Effect of contravention

(14) Where land is within a registered plan of subdivision or within a registered description under the *Condominium Act* or where land is conveyed, mortgaged or charged with a consent given under section 53 or a predecessor thereof, any contravention of this section or a predecessor thereof or of a by-law passed under a predecessor of this section or of an order made under clause 27 (1) (b), as it existed on June 25, 1970, of *The Planning Act*, being chapter 296 of the Revised Statutes of Ontario, 1960, or a predecessor thereof, that occurred before the registration of the plan of subdivision or description or before the giving of a certificate under subsection 53(42) stating that a consent has been given, as the case may be, does not and shall be deemed never to have had the effect of preventing the conveyance of or creation of any interest in the land, but this subsection does not affect the rights acquired by any person from a judgment or order of any court given or made on or before December 15, 1978. 1994, c. 23, s. 29 (6).

Simultaneous conveyances, etc., of abutting lands

(15) Where a person conveys land or grants, assigns or exercises a power of appointment in respect of land, or mortgages or charges land, or enters into an agreement of sale and purchase of land, or enters into any agreement that has the effect of granting the use of or right in land directly or by entitlement to renewal for a period of twenty-one years or more by way of simultaneous conveyances of abutting lands or by way of other simultaneous dealings with abutting lands, the person so conveying or otherwise dealing with the lands shall be deemed for the purposes of subsections (3) and (5) to retain, as the case may be, the fee or the equity of redemption in, or the power or right to grant, assign or exercise a power of appointment in respect of, land abutting the land that is being conveyed or otherwise dealt with but this subsection does not apply to simultaneous conveyances or other simultaneous dealings involving the same parties acting in their same respective capacities. R.S.O. 1990, c. P.13, s. 50 (15).

Partial discharges, etc., effect of

(16) Where a person gives a partial discharge of a mortgage on land or gives a partial cessation of a charge on land, the person giving the partial discharge or partial cessation shall be deemed to hold the fee in the lands mentioned in the mortgage or charge and to retain, after the giving of the partial discharge or partial cessation, the fee in the balance of the lands, and for the purposes of this section shall be deemed to convey by way of deed or transfer the land mentioned in the partial discharge or partial cessation. R.S.O. 1990, c. P.13, s. 50 (16).

Saving

(17) Subsection (16) does not apply to a partial discharge of mortgage or partial cessation of charge where the land described in the partial discharge or partial cessation,

(a) is the same land in respect of which a consent to convey has previously been given;

(b) includes only the whole of one or more lots or blocks within a registered plan of subdivision, unless such plan of subdivision has been designated under subsection (4);

(c) is owned by Her Majesty in right of Canada or Her Majesty in right of Ontario or by any municipality; or

(d) is land to which clause (3) (g) or (5) (g) applies. R.S.O. 1990, c. P.13, s. 50 (17); 1998, c. 15, Sched. E, s. 27 (10).

Foreclosure or exercise of power of sale

(18) No foreclosure of or exercise of a power of sale in a mortgage or charge shall have any effect in law without the approval of the Minister or of the council authorized to give a consent under section 53, as the case may be, other than a council authorized to give a consent pursuant to an order under section 4, unless all of the land subject to such mortgage or charge is included in the foreclosure or exercise of the power of sale, but this subsection does not apply where the land foreclosed or in respect of where the power of sale is exercised comprises only,

(a) the whole of one or more lots or blocks within one or more registered plans of subdivision;

(b) one or more parcels of land that do not abut any other parcel of land that is subject to the same mortgage or charge;

(c) the identical parcel of land that has been the subject of a consent to convey given under section 53 and the consent did not stipulate that subsection (3) or (5) applies to any subsequent conveyance or transaction; or

(d) the whole of the remaining part of a parcel of land, the other part or parts of which parcel have been the subject of a consent to convey given under section 53 and the consent did not stipulate that subsection (3) or (5) applies to any subsequent conveyance or transaction. R.S.O. 1990, c. P.13, s. 50 (18); 1993, c. 26, s. 58 (1); 1994, c. 23, s. 29 (7); 1996, c. 4, s. 27 (4).

Criteria

(18.1) No approval shall be given by a council under subsection (18) unless the approval conforms with the prescribed criteria. 1993, c. 26, s. 58 (2).

Release of interest by joint tenant or tenant in common

(19) Where a joint tenant or tenant in common of land releases or conveys the tenant's interest in such land to one or more other joint tenants or tenants in common of the same land while holding the fee in any abutting land, either alone or together with any other person, the tenant shall be deemed, for the purposes of subsections (3) and (5), to convey such land by way of deed or transfer and to retain the fee in the abutting land. R.S.O. 1990, c. P.13, s. 50 (19).

Partition orders

(20) No order made under the *Partition Act* for the partition of land shall have any effect in law unless,

(a) irrespective of the order, each part of the land described in the order could be conveyed without contravening this section; or

(b) a consent is given to the order. R.S.O. 1990, c. P.13, s. 50 (20).

Conveyance, etc., contrary to section not to create or convey interest in land

(21) An agreement, conveyance, mortgage or charge made, or a power of appointment granted, assigned or exercised in contravention of this section or a predecessor thereof does not create or convey any interest in land, but this section does not affect an agreement entered into subject to the express condition contained therein that such agreement is to be effective only if the provisions of this section are complied with. R.S.O. 1990, c. P.13, s. 50 (21).

Exception re prescribed statements

(22) Where a deed or transfer,

(a) contains a statement by the grantor, verifying that to the best of the grantor's knowledge and belief the deed or transfer does not contravene this section;

(b) contains a statement by the grantor's solicitor, verifying that,

(i) he or she has explained the effect of this section to the grantor,

(ii) he or she has made inquiries of the grantor to determine that the deed or transfer does not contravene this section,

(iii) based on the information supplied by the grantor, to the best of the solicitor's knowledge and belief, the deed or transfer does not contravene this section, and

(iv) he or she is an Ontario solicitor in good standing; and

(c) contains a statement by the grantee's solicitor, verifying that,

(i) he or she has investigated the title to the land and, where relevant, to abutting land,

(ii) he or she is satisfied that the record of title to the land and, where relevant, to abutting land, reveals no existing contravention of this section or a predecessor thereof or of a by-law passed under a predecessor of this section or of an order made under clause 27 (1) (b), as it existed on the 25th day of June, 1970, of *The Planning Act*, being chapter 296 of the Revised Statutes of Ontario, 1960, or a predecessor thereof, that has the effect of preventing the conveyance of any interest in the land,

(iii) to the best of his or her knowledge and belief, the deed or transfer does not contravene this section, and

(iv) he or she acts independently of the grantor's solicitor and is an Ontario solicitor in good standing; and

(d) is registered under the *Land Titles Act* or the *Registry Act*,

any contravention of this section or a predecessor thereof or of a by-law passed under a predecessor of this section or of an order made under clause 27 (1) (b), as it existed on the 25th day of June, 1970, of *The Planning Act*, being chapter 296 of the Revised Statutes of Ontario, 1960, or a predecessor thereof, does not and shall be deemed never to have had the effect of preventing the conveyance of any interest in the land, but this subsection does not affect the rights acquired by any person from a judgment or order of any court given or made on or before the day the deed or transfer is registered. R.S.O. 1990, c. P.13, s. 50 (22).

Search period re *Planning Act*

(23) For the purposes of the statement referred to in subclause (22) (c) (ii), a solicitor is not required to investigate the registered title to the land except with respect to the time since the registration of the most recent deed or transfer affecting the same land and containing the statements referred to in clauses (22) (a), (b) and (c). R.S.O. 1990, c. P.13, s. 50 (23).

Exempting orders

(24) The Minister may by order designate any part of Ontario as land to which subsection (22) shall not apply after the day a certified copy or duplicate of the order is registered in the proper land registry office in a manner approved by the Director of Land Registration appointed under the *Registry Act*. R.S.O. 1990, c. P.13, s. 50 (24).

Offence

(25) Every person who knowingly makes a false statement under subsection (22) is guilty of an offence and on conviction is liable to a fine not exceeding the aggregate of the value of,

(a) the land in respect of which the statement is made; and

(b) the relevant abutting land,

determined as of the day of registration of the deed or transfer containing the false statement. R.S.O. 1990, c. P.13, s. 50 (25).

Copy of by-law to be lodged with approval authority

(26) A certified copy or duplicate of every by-law passed under subsection (4) shall be lodged by the clerk of the municipality in the office of the approval authority. 2006, c. 23, s. 21 (3).

When by-law effective

(27) A by-law passed under subsection (4) is not effective until the requirements of subsection (28) have been complied with. R.S.O. 1990, c. P.13, s. 50 (27).

Registration of by-law

(28) A certified copy or duplicate of every by-law passed under this section shall be registered by the clerk of the municipality in the proper land registry office. R.S.O. 1990, c. P.13, s. 50 (28).

Notice

(29) No notice or hearing is required prior to the passing of a by-law under subsection (4), but the council shall give notice of the passing of any such by-law within thirty days of the passing thereof to each person appearing on the last revised assessment roll to be the owner of land to which the by-law applies, which notice shall be sent to the last known address of each such person. R.S.O. 1990, c. P.13, s. 50 (29).

Hearing by council

(30) The council shall hear in person or by an agent any person to whom a notice was sent under subsection (29), who within twenty days of the mailing of the notice gives notice to the clerk of the municipality that the person desires to make representations respecting the amendment or repeal of the by-law. R.S.O. 1990, c. P.13, s. 50 (30).

Division of land by will

50.1 (1) No provision in a will that purports to subdivide land is of any effect to subdivide that land unless, irrespective of that provision, each part of the land divided could be conveyed without contravening section 50.

Retroactive effect

(2) Subsection (1) applies even though the will was made before the 26th day of July, 1990 unless the person who made the will died on or before that date.

Tenants in common

(3) If a provision in a will is of no effect to subdivide land under subsection (1), the beneficiaries that would have been entitled to the land if the provision had been effective shall hold the undivided land as tenants in common. 1991, c. 9, s. 1.

(4) REPEALED: 1991, c. 9, s. 1.

(5) REPEALED: 1991, c. 9, s. 1.

(6) REPEALED: 1991, c. 9, s. 1.

Plan of subdivision approvals

51. (1), (2) REPEALED: 2002, c. 17, Sched. B, s. 19 (1).

Minister is approval authority

(3) Except as otherwise provided in this section, the Minister is the approval authority for the purposes of this section and section 51.1. 1999, c. 12, Sched. M, s. 28 (1).

Deemed approval authority

(3.1) If the Minister has delegated any authority under this section to a council or planning board, in accordance with section 4, the council or planning board is deemed to be the approval authority in respect of the land to which the delegation applies for the purposes of this section and section 51.1. 2009, c. 33, Sched. 21, s. 10 (12).

Single-tier municipality

(4) If land is in a single-tier municipality that is not in a territorial district, the single-tier municipality is the approval authority for the purposes of this section and section 51.1, except as otherwise prescribed. 2002, c. 17, Sched. B, s. 19 (2).

Upper-tier municipality

(5) Subject to subsection (6), if land is in an upper-tier municipality with an approved official plan, the upper-tier municipality is the approval authority for the purposes of this section and section 51.1. 2002, c. 17, Sched. B, s. 19 (3).

Timing, upper-tier as approval authority

(5.1) On the day that all or part of a plan that covers all of an upper-tier municipality comes into effect as the official plan of the municipality, the upper-tier municipality is the approval authority under subsection (5). 2002, c. 17, Sched. B, s. 19 (3).

Prescribed lower-tier municipality

(6) If land is in a prescribed lower-tier municipality, the lower-tier municipality is the approval authority for the purposes of this section and section 51.1. 2002, c. 17, Sched. B, s. 19 (3).

Prescribed single-tier municipality in a territorial district

(7) If land is in a prescribed single-tier municipality that is in a territorial district, the municipality is the approval authority for the purposes of this section and section 51.1. 2002, c. 17, Sched. B, s. 19 (3).

(8)-(10) REPEALED: 2002, c. 17, Sched. B, s. 19 (4).

Removal of power

(11) The Minister may by order, accompanied by a written explanation for it, remove the power given under subsection (3.1), (4), (5), (6) or (7) and the order may be in respect of the applications

specified in the order or in respect of any or all applications made after the order is made. 1994, c. 23, s. 30; 1996, c. 4, s. 28 (2); 2002, c. 17, Sched. B, s. 19 (5); 2009, c. 33, Sched. 21, s. 10 (13).

Minister to be approval authority

(12) If an order is made under subsection (11), the Minister becomes the approval authority in respect of the applications to which the order relates and the council of the former approval authority shall forward to the Minister all papers, plans, documents and other material that relate to any matter in respect of which the power was removed and of which a final disposition was not made by the council before the power was removed. 1994, c. 23, s. 30.

Revocation

(13) If the Minister revokes the order or part of the order made under subsection (11), the council reverts back to being the approval authority in respect of all applications to which the revoked order or revoked part of the order applies. 1994, c. 23, s. 30.

Delegation

(14) If an order is made under subsection (11) in respect of land that is located in a municipal planning area, the Minister may by order delegate to the municipal planning authority the power to approve proposed plans of subdivision which was removed from the council and the municipal planning authority becomes the approval authority in respect of the applications to which the order made under this subsection relates and the delegation may be subject to such conditions as the order provides. 1994, c. 23, s. 30.

Effect of revocation

(15) If the Minister revokes the order or part of the order made under subsection (14), the Minister reverts back to being the approval authority in respect of all applications to which the revoked order or revoked part of the order applies and the municipal planning authority shall forward to the Minister all papers, plans, documents and other material that relate to any matter to which the revoked order or part of the order applies and of which a final disposition was not made by the municipal planning authority before the order or part of the order was revoked. 1994, c. 23, s. 30.

Application

(16) An owner of land or the owner's agent duly authorized in writing may apply to the approval authority for approval of a plan of subdivision of the land or part of it. 1994, c. 23, s. 30.

Consultation

(16.1) The approval authority,

(a) shall permit applicants to consult with it before submitting applications under subsection (16); and

(b) in the case of an approval authority that is a municipality, may, by by-law, require applicants to consult with it as described in clause (a). 2006, c. 23, s. 22 (1).

Contents

(17) The applicant shall provide the approval authority with the prescribed information and material and as many copies as may be required by the approval authority of a draft plan of the proposed subdivision drawn to scale and showing,

(a) the boundaries of the land proposed to be subdivided, certified by an Ontario land surveyor;

(b) the locations, widths and names of the proposed highways within the proposed subdivision and of existing highways on which the proposed subdivision abuts;

(c) on a small key plan, on a scale of not less than one centimetre to 100 metres, all of the land adjacent to the proposed subdivision that is owned by the applicant or in which the applicant has an interest, every subdivision adjacent to the proposed subdivision and the relationship of the boundaries of the land to be subdivided to the boundaries of the township lot or other original grant of which the land forms the whole or part;

(d) the purpose for which the proposed lots are to be used;

(e) the existing uses of all adjoining lands;

(f) the approximate dimensions and layout of the proposed lots;

(g) natural and artificial features such as buildings or other structures or installations, railways, highways, watercourses, drainage ditches, wetlands and wooded areas within or adjacent to the land proposed to be subdivided;

(h) the availability and nature of domestic water supplies;

(i) the nature and porosity of the soil;

(j) existing contours or elevations as may be required to determine the grade of the highways and the drainage of the land proposed to be subdivided;

(k) the municipal services available or to be available to the land proposed to be subdivided; and

(l) the nature and extent of any restrictions affecting the land proposed to be subdivided, including restrictive covenants or easements. 1994, c. 23, s. 30; 1996, c. 4, s. 28 (3).

Other information

(18) An approval authority may require that an applicant provide any other information or material that the approval authority considers it may need, but only if the official plan contains provisions relating to requirements under this subsection. 2006, c. 23, s. 22 (2).

Refusal and timing

(19) Until the approval authority has received the information and material required under subsections (17) and (18), if any, and any fee under section 69 or 69.1,

(a) the approval authority may refuse to accept or further consider the application; and

(b) the time period referred to in subsection (34) does not begin. 2006, c. 23, s. 22 (2).

Response re completeness of application

(19.1) Within 30 days after the applicant pays any fee under section 69 or 69.1, the approval authority shall notify the applicant and the clerk of the municipality in which the land is located or the secretary-treasurer of the planning board in whose planning area the land is located that the information and material required under subsections (17) and (18), if any, have been provided, or that they have not been provided, as the case may be. 2006, c. 23, s. 22 (2).

Motion re dispute

(19.2) Within 30 days after a negative notice is given under subsection (19.1), the applicant or the approval authority may make a motion for directions to have the Municipal Board determine,

(a) whether the information and material have in fact been provided; or

(b) whether a requirement made under subsection (18) is reasonable. 2006, c. 23, s. 22 (2).

Same

(19.3) If the approval authority does not give any notice under subsection (19.1), the applicant may make a motion under subsection (19.2) at any time after the 30-day period described in subsection (19.1) has elapsed. 2006, c. 23, s. 22 (2).

Notice of particulars and public access

(19.4) Within 15 days after the approval authority gives an affirmative notice under subsection (19.1), or within 15 days after the Municipal Board advises the approval authority and the clerk or secretary-treasurer of its affirmative decision under subsection (19.2), as the case may be, the council or planning board shall,

(a) give the prescribed persons and public bodies, in the prescribed manner, notice of the application, accompanied by the prescribed information; and

(b) make the information and material provided under subsections (17) and (18) available to the public. 2006, c. 23, s. 22 (2).

Final determination

(19.5) The Municipal Board's determination under subsection (19.2) is not subject to appeal or review. 2006, c. 23, s. 22 (2).

Notice

(20) At least 14 days before a decision is made by an approval authority under subsection (31), the approval authority shall ensure that,

(a) notice of the application is given, if required by regulation, in the manner and to the persons and public bodies and containing the information prescribed; and

(b) a public meeting is held, if required by regulation, notice of which shall be given in the manner and to the persons and public bodies and containing the information prescribed. 1996, c. 4, s. 28 (4).

Request

(21) An approval authority may request that a local municipality or a planning board having jurisdiction over the land that is proposed to be subdivided give notice of the application or hold the public meeting referred to in subsection (20) or do both. 1996, c. 4, s. 28 (4).

Responsibilities

(21.1) A local municipality or planning board that is requested to give the notice referred to in clause (20) (a) shall ensure that,

(a) the notice is given in accordance with the regulation made under clause (20) (a); and

(b) the prescribed information and material are submitted to the approval authority within 15 days after the notice is given. 1996, c. 4, s. 28 (4).

Same

(21.2) A local municipality or planning board that is requested to hold the public meeting referred to in clause (20) (b) shall ensure that,

(a) notice of the meeting is given in accordance with the regulation made under clause (20) (b);

(b) the public meeting is held; and

(c) the prescribed information and material are submitted to the approval authority within 15 days after the meeting is held. 1996, c. 4, s. 28 (4).

Written submissions

(22) Any person or public body may make written submissions to the approval authority before the approval authority makes its decision under subsection (31). 1994, c. 23, s. 30.

Consultation

(23) The approval authority may confer with the persons or public bodies that the approval authority considers may have an interest in the approval of the proposed subdivision. 1994, c. 23, s. 30.

Criteria

(24) In considering a draft plan of subdivision, regard shall be had, among other matters, to the health, safety, convenience, accessibility for persons with disabilities and welfare of the present and future inhabitants of the municipality and to,

(a) the effect of development of the proposed subdivision on matters of provincial interest as referred to in section 2;

(b) whether the proposed subdivision is premature or in the public interest;

(c) whether the plan conforms to the official plan and adjacent plans of subdivision, if any;

(d) the suitability of the land for the purposes for which it is to be subdivided;

(e) the number, width, location and proposed grades and elevations of highways, and the adequacy of them, and the highways linking the highways in the proposed subdivision with the established highway system in the vicinity and the adequacy of them;

(f) the dimensions and shapes of the proposed lots;

(g) the restrictions or proposed restrictions, if any, on the land proposed to be subdivided or the buildings and structures proposed to be erected on it and the restrictions, if any, on adjoining land;

(h) conservation of natural resources and flood control;

(i) the adequacy of utilities and municipal services;

(j) the adequacy of school sites;

(k) the area of land, if any, within the proposed subdivision that, exclusive of highways, is to be conveyed or dedicated for public purposes;

(l) the extent to which the plan's design optimizes the available supply, means of supplying, efficient use and conservation of energy; and

(m) the interrelationship between the design of the proposed plan of subdivision and site plan control matters relating to any development on the land, if the land is also located within a site plan control area designated under subsection 41 (2) of this Act or subsection 114 (2) of the *City of Toronto Act, 2006*. 1994, c. 23, s. 30; 2001, c. 32, s. 31 (2); 2006, c. 23, s. 22 (3, 4).

Conditions

(25) The approval authority may impose such conditions to the approval of a plan of subdivision as in the opinion of the approval authority are reasonable, having regard to the nature of the development proposed for the subdivision, including a requirement,

(a) that land be dedicated or other requirements met for park or other public recreational purposes under section 51.1;

(b) that such highways, including pedestrian pathways, bicycle pathways and public transit rights of way, be dedicated as the approval authority considers necessary;

(b.1) that such land be dedicated for commuter parking lots, transit stations and related infrastructure for the use of the general public using highways, as the approval authority considers necessary;

(c) when the proposed subdivision abuts on an existing highway, that sufficient land, other than land occupied by buildings or structures, be dedicated to provide for the widening of the highway to such width as the approval authority considers necessary; and

(d) that the owner of the land proposed to be subdivided enter into one or more agreements with a municipality, or where the land is in territory without municipal organization, with any minister of the Crown in right of Ontario or planning board dealing with such matters as the approval authority may consider necessary, including the provision of municipal or other services. 1994, c. 23, s. 30; 2005, c. 26, Sched. B, s. 1; 2006, c. 23, s. 22 (5).

Agreements

(26) A municipality or approval authority, or both, may enter into agreements imposed as a condition to the approval of a plan of subdivision and the agreements may be registered against the land to which it applies and the municipality or the approval authority, as the case may be, is entitled to enforce the provisions of it against the owner and, subject to the *Registry Act* and the *Land Titles Act*, any and all subsequent owners of the land. 1994, c. 23, s. 30.

Land outside municipalities

(27) If the land proposed to be subdivided is located in territory without municipal organization, any minister of the Crown in right of Ontario or planning board may enter into agreements imposed as a condition to the approval of a plan of subdivision and the agreement may be registered against the land to which it applies and the minister or the planning board is entitled to enforce the provisions of it against the owner and, subject to the *Registry Act* and the *Land Titles Act*, any and all subsequent owners of land. 1994, c. 23, s. 30.

(28)-(30) REPEALED: 1996, c. 4, s. 28 (5).

Decision

(31) The approval authority may give or refuse to give approval to a draft plan of subdivision. 1994, c. 23, s. 30.

Lapse of approval

(32) In giving approval to a draft plan of subdivision, the approval authority may provide that the approval lapses at the expiration of the time period specified by the approval authority, being not less than three years, and the approval shall lapse at the expiration of the time period, but if there is an appeal under subsection (39) the time period specified for the lapsing of approval does not begin until the date the Municipal Board's decision is issued in respect of the appeal or from the date of a notice issued by the Board under subsection (51). 1994, c. 23, s. 30; 2006, c. 23, s. 22 (6).

Extension

(33) The approval authority may extend the approval for a time period specified by the approval authority and may further extend it but no extension is permissible if the approval lapses before the extension is given. 1994, c. 23, s. 30.

Appeal to O.M.B.

(34) If an application is made for approval of a plan of subdivision and the approval authority fails to make a decision under subsection (31) on it within 180 days after the day the application is received by the approval authority, the applicant may appeal to the Municipal Board with respect to the proposed subdivision by filing a notice with the approval authority, accompanied by the fee prescribed under the *Ontario Municipal Board Act*. 1994, c. 23, s. 30; 1996, c. 4, s. 28 (6); 2004, c. 18, s. 8.

Consolidated Hearings Act

(34.1) Despite the *Consolidated Hearings Act*, the proponent of an undertaking shall not give notice to the Hearings Registrar under subsection 3 (1) of that Act in respect of an application for approval of a draft plan of subdivision unless the approval authority has given or refused to give approval to the draft plan of subdivision or the time period referred to in subsection (34) has expired. 2006, c. 23, s. 22 (7).

Record

(35) An approval authority that receives a notice of appeal under subsection (34) shall ensure that,

(a) a record is compiled which includes the prescribed information and material; and

(b) the record, the notice of appeal and the fee are forwarded to the Municipal Board within 15 days after the notice is filed. 1994, c. 23, s. 30; 1996, c. 4, s. 28 (7).

Exception

(35.1) Despite clause (35) (b), if all appeals under subsection (34) are withdrawn within 15 days after the last day for filing a notice of appeal, the approval authority is not required to forward the materials described under clause (35) (b) to the Municipal Board. 1999, c. 12, Sched. M, s. 28 (3).

Where all appeals withdrawn

(35.2) If all appeals under subsection (34) are withdrawn within 15 days after the last day for filing a notice of appeal, the approval authority may proceed to make a decision under subsection (31). 1999, c. 12, Sched. M, s. 28 (3).

Withdrawal

(36) If an appeal under subsection (34) is withdrawn, the Municipal Board shall notify the approval authority and the approval authority may proceed to make a decision under subsection (31). 1994, c. 23, s. 30.

Notice

(37) If the approval authority gives or refuses to give approval to a draft plan of subdivision, the approval authority shall, within 15 days of its decision, give written notice of it, containing the prescribed information, to,

(a) the applicant;

(b) each person or public body that made a written request to be notified of the decision;

(c) REPEALED: 1996, c. 4, s. 28 (8).

(d) a municipality or a planning board for a planning area in which the land to be subdivided is situate; and

(e) any other person or public body prescribed. 1994, c. 23, s. 30; 1996, c. 4, s. 28 (8).

(38) REPEALED: 1996, c. 4, s. 28 (9).

Appeal

(39) Subject to subsection (43), not later than 20 days after the day that the giving of notice under subsection (37) is completed, any of the following may appeal the decision, the lapsing provision or any of the conditions to the Municipal Board by filing with the approval authority a notice of appeal that must set out the reasons for the appeal, accompanied by the fee prescribed under the *Ontario Municipal Board Act*:

1. The applicant.
2. A person or public body who, before the approval authority made its decision, made oral submissions at a public meeting or written submissions to the approval authority.
3. The Minister.
4. The municipality in which the land is located or the planning board in whose planning area the land is located.
5. If the land is not located in a municipality or in the planning area of a planning board, any person or public body. 2006, c. 23, s. 22 (8).

Notice completed

(40) For the purpose of subsections (39) and (49), the giving of written notice shall be deemed to be completed,

(a) where notice is given by personal service, on the day that the serving of all required notices is completed;

(b) where notice is given by mail, on the day that the mailing of all required notices is completed; and

(c) where notice is given by telephone transmission of a facsimile of the notice, on the day that the transmission of all required notices is completed. 1994, c. 23, s. 30.

No appeal

(41) If no appeal is filed under subsection (39) or (48), subject to any other right of appeal that may be exercised under this section and subject to subsection (44), the decision of the approval authority to give or to refuse to give approval to a draft plan of subdivision shall be deemed to have been made on the day after the last day for appealing the decision. 1994, c. 23, s. 30.

Declaration

(42) A sworn declaration by an employee of the approval authority that notice was given as required by subsection (37) or (45) or that no notice of appeal was filed under subsection (39) or (48) within the time allowed for appeal is conclusive evidence of the facts stated in it. 1994, c. 23, s. 30.

Appeal

(43) At any time before the approval of the final plan of subdivision under subsection (58), any of the following may appeal any of the conditions to the Municipal Board by filing with the approval authority a notice of appeal that must set out the reasons for the appeal, accompanied by the fee prescribed under the *Ontario Municipal Board Act*:

1. The applicant.
2. A public body that, before the approval authority made its decision, made oral submissions at a public meeting or written submissions to the approval authority.
3. The Minister.
4. The municipality in which the land is located or the planning board in whose planning area the land is located.
5. If the land is not located in a municipality or in the planning area of a planning board, any public body. 2006, c. 23, s. 22 (9).

Withdrawal of approval

(44) The approval authority may, in its discretion, withdraw the approval of a draft plan of subdivision or change the conditions of such approval at any time before the approval of the final plan of subdivision under subsection (58). 1994, c. 23, s. 30.

Notice

(45) If the approval authority changes the conditions to the approval of a plan of subdivision under subsection (44) after notice has been given under subsection (37), the approval authority shall, within 15 days of its decision, give written notice of the changes containing the information prescribed to,

(a) the applicant;

(b) REPEALED: 1996, c. 4, s. 28 (11).

(c) each person or public body that made a written request to be notified of changes to the conditions;

(d) a municipality or a planning board for a planning area in which the land to be subdivided is situate; and

(e) any other person or public body prescribed. 1994, c. 23, s. 30; 1996, c. 4, s. 28 (11); 2000, c. 26, Sched. K, s. 5 (5).

(46) REPEALED: 1996, c. 4, s. 28 (12).

No notice

(47) An approval authority is not required to give written notice under subsection (45) if, in the opinion of the approval authority, the change to conditions is minor. 1994, c. 23, s. 30.

Appeal

(48) Any of the following may appeal any of the changed conditions imposed by the approval authority to the Municipal Board by filing with the approval authority a notice of appeal that must set out the reasons for the appeal, accompanied by the fee prescribed under the *Ontario Municipal Board Act*:

1. The applicant.

2. A person or public body who, before the approval authority gave approval to the draft plan of subdivision, made oral submissions at a public meeting or written submissions to the approval authority or made a written request to be notified of changes to the conditions.
3. The Minister.
4. The municipality in which the land is located or the planning board in whose planning area the land is located.
5. If the land is not located in a municipality or in the planning area of a planning board, any person or public body. 2006, c. 23, s. 22 (10).

Restriction

(49) If the person appealing the changed conditions is other than the applicant or a public body, the appeal must be filed not later than 20 days after the day that the giving of written notice under subsection (45) is completed. 1994, c. 23, s. 30; 1996, c. 4, s. 28 (13).

Record

(50) An approval authority that receives a notice of appeal under subsection (39), (43) or (48) shall ensure that,

(a) a record is compiled which includes the prescribed information and material; and

(b) the record, notice of appeal and the fee are forwarded to the Municipal Board within 15 days after the last day for filing a notice of appeal under subsection (39) or (49) or within 15 days after the notice of appeal under subsection (43) or (48) was received by the approval authority. 1994, c. 23, s. 30.

Exception

(50.1) Despite clause (50) (b), if all appeals are withdrawn within 15 days after the last day for filing a notice of appeal under subsection (39) or (49) or within 15 days after the notice of appeal under subsection (43) or (48) was received by the approval authority, the approval authority is not required to forward the materials described under clause (50) (b) to the Municipal Board. 1999, c. 12, Sched. M, s. 28 (3).

Deemed decision

(50.2) If all appeals are withdrawn within 15 days after the last day for filing a notice of appeal under subsection (39) or (49) or within 15 days after the notice of appeal under subsection (43) or (48) was received by the approval authority, the decision of the approval authority shall be deemed to have been made on the day after the day all appeals have been withdrawn, subject to any other right of appeal that may be exercised under this section and subject to subsection (44). 1999, c. 12, Sched. M, s. 28 (3).

Appeals withdrawn

(51) If all appeals under subsection (39) or (48) are withdrawn and the time for appealing has expired or if all appeals under subsection (43) are withdrawn, the secretary of the Municipal Board shall notify the approval authority and the decision of the approval authority shall be deemed to have been made on the day after the day all appeals have been withdrawn, subject to any other right of appeal that may be exercised under this section and subject to subsection (44). 1994, c. 23, s. 30.

Hearing

(52) On an appeal, the Municipal Board shall hold a hearing, notice of which shall be given to such persons or public bodies and in such manner as the Board may determine. 1994, c. 23, s. 30.

Restriction re adding parties

(52.1) Despite subsection (52), in the case of an appeal under subsection (39), (43) or (48), only the following may be added as parties:

1. A person or public body who satisfies one of the conditions set out in subsection (52.2).
2. The Minister.
3. The appropriate approval authority.
4. The municipality in which the land is located or the planning board in whose planning area the land is located.
5. If the land is not located in a municipality or in the planning area of a planning board, any person or public body. 2006, c. 23, s. 22 (11).

Same

(52.2) The conditions mentioned in paragraph 1 of subsection (52.1) are:

1. Before the approval authority made its decision with respect to the plan of subdivision, the person or public body made oral submissions at a public meeting or written submissions to the approval authority, or made a written request to be notified of changes to the conditions.
2. The Municipal Board is of the opinion that there are reasonable grounds to add the person or public body as a party. 2006, c. 23, s. 22 (11).

New evidence at hearing

(52.3) This subsection applies if information and material that is presented at the hearing of an appeal under subsection (39), (43) or (48) was not provided to the approval authority before it made the decision that is the subject of the appeal. 2006, c. 23, s. 22 (11).

Same

(52.4) When subsection (52.3) applies, the Municipal Board may, on its own initiative or on a motion by the approval authority or any party, consider whether the information and material could have materially affected the approval authority's decision and, if the Board determined that it could have done so, it shall not be admitted into evidence until subsection (52.5) has been complied with and the prescribed time period has elapsed. 2006, c. 23, s. 22 (11).

Notice to approval authority

(52.5) The Municipal Board shall notify the approval authority that it is being given an opportunity to,

(a) reconsider its decision in light of the information and material; and

(b) make a written recommendation to the Board. 2006, c. 23, s. 22 (11).

Approval authority's recommendation

(52.6) The Municipal Board shall have regard to the approval authority's recommendation if it is received within the time period mentioned in subsection (52.4), and may but is not required to do so if it is received afterwards. 2006, c. 23, s. 22 (11).

Conflict with *SPPA*

(52.7) Subsections (52.1) to (52.6) apply despite the *Statutory Powers Procedure Act*. 2006, c. 23, s. 22 (11).

Dismissal without hearing

(53) Despite the *Statutory Powers Procedure Act* and subsection (52), the Municipal Board may dismiss an appeal without holding a hearing on its own initiative or on the motion of any party, if,

(a) it is of the opinion that,

(i) the reasons set out in the notice of appeal do not disclose any apparent land use planning ground upon which the Board could give or refuse to give approval to the draft plan of subdivision or determine the question as to the condition appealed to it,

(ii) the appeal is not made in good faith or is frivolous or vexatious,

(iii) the appeal is made only for the purpose of delay, or

(iv) the appellant has persistently and without reasonable grounds commenced before the Board proceedings that constitute an abuse of process;

(b) REPEALED: 2006, c. 23, s. 22 (14).

(c) the appellant has not provided written reasons for the appeal;

(d) the appellant has not paid the fee prescribed under the *Ontario Municipal Board Act*; or

(e) the appellant has not responded to a request by the Municipal Board for further information within the time specified by the Board. 1994, c. 23, s. 30; 1996, c. 4, s. 28 (14, 15); 2006, c. 23, s. 22 (12-14).

Same

(53.1) Despite the *Statutory Powers Procedure Act* and subsection (52), the Municipal Board may, on its own initiative or on the motion of the municipality, the appropriate approval authority or the Minister, dismiss all or part of an appeal without holding a hearing if, in the Board's opinion, the application to which the appeal relates is substantially different from the application that was before council at the time of its decision. 2006, c. 23, s. 22 (15).

Representation

(54) Before dismissing an appeal, the Municipal Board shall notify the appellant and give the appellant the opportunity to make representation on the proposed dismissal but this subsection does not apply if the appellant has not complied with a request made under clause (53) (e). 2000, c. 26, Sched. K, s. 5 (6).

Dismissal

(54.1) Despite the *Statutory Powers Procedure Act*, the Municipal Board may dismiss all or part of an appeal after holding a hearing or without holding a hearing on the motion under subsection (53) or (53.1), as it considers appropriate. 2006, c. 23, s. 22 (16).

Decision

(55) If all appeals under subsection (39), (43) or (48) are dismissed or withdrawn, the secretary of the Municipal Board shall notify the approval authority and the decision of the approval authority shall be deemed to have been made on the day after the day the last outstanding appeal has been dismissed or withdrawn, subject to any other right of appeal that may be exercised under this section and subject to subsection (44). 1994, c. 23, s. 30.

Powers

(56) On an appeal under subsection (34) or (39), the Municipal Board may make any decision that the approval authority could have made on the application and on an appeal under subsection (43) or (48) shall determine the question as to the conditions appealed to it. 1994, c. 23, s. 30.

Final approval

(56.1) If, on an appeal under subsection (34) or (39), the Municipal Board has given approval to a draft plan of subdivision, the Board may, by order, provide that the final approval of the plan of subdivision for the purposes of subsection (58) is to be given by the approval authority in which the land is situate. 1999, c. 12, Sched. M, s. 28 (3).

Change of conditions

(56.2) If the final approval of a plan of subdivision is to be given under subsection (56.1), the Municipal Board may change the conditions of the approval of the draft plan of subdivision under subsection (44) at any time before the approval of the final plan of subdivision by the approval authority. 1999, c. 12, Sched. M, s. 28 (3).

When draft plan approved

(57) When the draft plan is approved, the person seeking to subdivide may proceed to lay down the highways and lots upon the ground in accordance with the *Surveys Act* and with the *Registry Act* or the *Land Titles Act*, as the case may be, and to prepare a plan accordingly certified by an Ontario land surveyor. 1994, c. 23, s. 30.

Final approval of plan

(58) Upon presentation by the person seeking to subdivide, the approval authority may, if satisfied that the plan is in conformity with the approved draft plan and that the conditions of approval have been or will be fulfilled, approve the plan of subdivision and, once approved, the final plan of subdivision may be tendered for registration. 1994, c. 23, s. 30.

Withdrawal of approval

(59) If a final plan of subdivision is approved under subsection (58), but is not registered within 30 days of the date of approval, the approval authority may withdraw its approval. 1994, c. 23, s. 30.

Duplicates

(60) In addition to any requirement under the *Registry Act* or the *Land Titles Act*, the person tendering the plan of subdivision for registration shall deposit with the land registrar a duplicate, or when required by the approval authority two duplicates, of the plan of a type approved by the approval authority, and the land registrar shall endorse on it a certificate showing the number of the plan and the date when the plan was registered and shall deliver the duplicate or duplicates to the approval authority. 1994, c. 23, s. 30.

Saving

(61) The approval of a plan of subdivision does not operate to release any person from doing anything that the person may be required to do by or under the authority of any other Act. 1994, c. 23, s. 30.

Parkland

51.1 (1) The approval authority may impose as a condition to the approval of a plan of subdivision that land in an amount not exceeding, in the case of a subdivision proposed for commercial or industrial purposes, 2 per cent and in all other cases 5 per cent of the land included in the plan shall be conveyed to the local municipality for park or other public recreational purposes or, if the land is not in a municipality, shall be dedicated for park or other public recreational purposes.

Other criteria

(2) If the approval authority has imposed a condition under subsection (1) requiring land to be conveyed to the municipality and if the municipality has an official plan that contains specific policies relating to the provision of lands for park or other public recreational purposes, the municipality, in the case of a subdivision proposed for residential purposes, may, in lieu of such conveyance, require that land included in the plan be conveyed to the municipality for park or other public recreational purposes at a rate of one hectare for each 300 dwelling units proposed or at such lesser rate as may be determined by the municipality.

Payment in lieu

(3) If the approval authority has imposed a condition under subsection (1) requiring land to be conveyed to the municipality, the municipality may, in lieu of accepting the conveyance, require the payment of money by the owner of the land,

(a) to the value of the land otherwise required to be conveyed; or

(b) where the municipality would be entitled to require a conveyance under subsection (2), to the value of the land that would otherwise be required to be so conveyed.

Determination of value

(4) For the purpose of determining the amount of any payment required under subsection (3), the value of the land shall be determined as of the day before the day of the approval of the draft plan of subdivision.

Application

(5) Subsections 42 (2), (5) and (12) to (16) apply with necessary modifications to a conveyance of land or a payment of money under this section. 1994, c. 23, s. 31.

Delegation to committee or officer

51.2 (1) If a council of a municipality is the approval authority under section 51 in respect of the approval of plans of subdivision, the council may by by-law delegate all or any part of the authority to approve plans of subdivision to a committee of council or to an appointed officer identified in the by-law by name or position occupied. 1994, c. 23, s. 31; 2002, c. 17, Sched. B, s. 20 (1).

Delegation to lower-tier municipality

(2) If an upper-tier council is the approval authority under section 51 in respect of the approval of plans of subdivision, the council may, after the prescribed notice is given, by by-law delegate all or any part of the authority to approve plans of subdivision to a lower-tier municipality in respect of land situate in the lower-tier municipality. 2002, c. 17, Sched. B, s. 20 (2).

Delegation

(2.1) Despite subsections 74 (2) and 74.1 (1), an upper-tier council may delegate the authority to approve plans of subdivision under subsection (2) with respect to applications made before March 28, 1995. 2002, c. 17, Sched. B, s. 20 (3).

Delegation to planning authority

(3) If a council is the approval authority under section 51 in respect of the approval of plans of subdivision, the council may, after the prescribed notice is given, by by-law delegate all or any part of the authority to approve plans of subdivision to a municipal planning authority in respect of land situate in the municipal planning area. 1994, c. 23, s. 31; 2002, c. 17, Sched. B, s. 20 (4).

Further delegation

(4) If authority is delegated to a council under subsection (2), the council may in turn by by-law delegate all or any part of the authority to a committee of council or to an appointed officer identified in the by-law by name or position occupied. 1994, c. 23, s. 31.

Same

(5) If authority is delegated to a municipal planning authority under subsection (3) or subsection 51 (14), the municipal planning authority may in turn by by-law delegate all or any part of the authority to a committee of the municipal planning authority or to an appointed officer identified in the by-law by name or position occupied. 1994, c. 23, s. 31.

Conditions

(6) A delegation of authority made by a council or municipal planning authority under this section may be subject to such conditions as the council or municipal planning authority by by-law provides. 1994, c. 23, s. 31.

Withdrawal of delegation

(7) A council or a municipal planning authority may by by-law withdraw a delegation of authority made by a council or a municipal planning authority under this section and such withdrawal may be either in respect of one or more plans of subdivision specified in the by-law or any or all plans of subdivision in respect of which a final disposition was not made before the withdrawal. 1994, c. 23, s. 31.

Sale of lands in accordance with unregistered plan prohibited

52. (1) No person shall subdivide and offer for sale, agree to sell or sell land by a description in accordance with an unregistered plan of subdivision, but this subsection does not prohibit any person from offering for sale or agreeing to sell land by a description in accordance with a plan of subdivision in respect of which draft approval has been given under section 51.

Definition

(2) In subsection (1),

"unregistered plan of subdivision" does not include a reference plan of survey under section 150 of the *Land Titles Act* that complies with the regulations under that Act or a plan deposited under Part II of the *Registry Act* in accordance with the regulations under that Act. R.S.O. 1990, c. P.13, s. 52.

Consents

53. (1) An owner of land or the owner's agent duly authorized in writing may apply for a consent as defined in subsection 50 (1) and the council or the Minister, as the case may be, may, subject to this section, give a consent if satisfied that a plan of subdivision of the land is not necessary for the proper and orderly development of the municipality. 1994, c. 23, s. 32.

Prescribed information

(2) The applicant for a consent shall provide the council or the Minister with the prescribed information or material. 1996, c. 4, s. 29 (1).

Other information

(3) A council or the Minister may require that a person or public body that makes an application for a consent provide any other information or material that the council or the Minister considers it or he or she may need, but only if the official plan contains provisions relating to requirements under this subsection. 2006, c. 23, s. 23 (1).

Refusal and timing

(4) Until the council or the Minister has received the information and material required under subsections (2) and (3), if any, and any fee under section 69 or 69.1,

(a) the council or the Minister may refuse to accept or further consider the application for a consent; and

(b) the time period referred to in subsection (14) does not begin. 2006, c. 23, s. 23 (1).

Motion re dispute

(4.1) The applicant, the council or the Minister may make a motion for directions to have the Municipal Board determine,

(a) whether the information and material required under subsections (2) and (3), if any, have in fact been provided; or

(b) whether a requirement made under subsection (3) is reasonable. 2006, c. 23, s. 23 (1).

Final determination

(4.2) The Municipal Board's determination under subsection (4.1) is not subject to appeal or review. 2006, c. 23, s. 23 (1).

Notice

(5) At least 14 days before a decision is made by the council or the Minister, the council or the Minister shall ensure that,

(a) notice of the application is given, if required by regulation, in the manner and to the persons and public bodies and containing the information prescribed; and

(b) a public meeting is held, if required by regulation, notice of which shall be given in the manner and to the persons and public bodies and containing the information prescribed. 1996, c. 4, s. 29 (1).

Request by council

(6) A council may request that a local municipality having jurisdiction over the land that is the subject of the application for consent give notice of the application or hold the public meeting referred to in subsection (5) or do both. 1996, c. 4, s. 29 (1).

Request by Minister

(7) The Minister may request that a local municipality or planning board having jurisdiction over the land that is the subject of the application for consent give notice of the application or hold the public meeting referred to in subsection (5) or do both. 1996, c. 4, s. 29 (1).

Responsibilities

(7.1) A local municipality or planning board that is requested under subsection (6) or (7) to give notice shall ensure that,

(a) the notice is given in accordance with the regulation made under clause (5) (a); and

(b) the prescribed information and material are submitted to the council or the Minister, as the case may be, within 15 days after the notice is given. 1996, c. 4, s. 29 (1).

Same

(7.2) A local municipality or planning board that is requested under subsection (6) or (7) to hold a public meeting shall ensure that,

(a) notice of the meeting is given in accordance with the regulation made under clause (5) (b);

(b) the public meeting is held; and

(c) the prescribed information and material are submitted to the council or the Minister, as the case may be, within 15 days after the meeting is held. 1996, c. 4, s. 29 (1).

Written submissions

(8) Any person or public body may make written submissions to the council or the Minister before the council or the Minister gives or refuses to give a provisional consent. 1994, c. 23, s. 32.

Procedure

(9) A council in dealing with applications for consent shall comply with such rules of procedure as are prescribed. 1994, c. 23, s. 32.

Council to confer

(10) A council, in determining whether a provisional consent is to be given, shall confer with the persons or public bodies prescribed. 1994, c. 23, s. 32.

Minister may confer

(11) The Minister in determining whether a provisional consent is to be given may confer with the persons or public bodies that the Minister considers may have an interest in the application. 1994, c. 23, s. 32.

Powers

(12) A council or the Minister in determining whether a provisional consent is to be given shall have regard to the matters under subsection 51 (24) and has the same powers as the approval authority has under subsection 51 (25) with respect to the approval of a plan of subdivision and subsections 51 (26) and (27) and section 51.1 apply with necessary modifications to the granting of a provisional consent. 1994, c. 23, s. 32.

Parks

(13) If, on the giving of a provisional consent, land is required to be conveyed to a municipality for park or other public recreational purposes and the council of the municipality requires the payment of money to the value of the land in lieu of the conveyance, for the purpose of determining the amount of the payment, the value of the land shall be determined as of the day before the day the provisional consent was given. 1994, c. 23, s. 32.

Appeal to O.M.B.

(14) If an application is made for a consent and the council or the Minister fails to make a decision under subsection (1) on the application within 90 days after the day the application is

received by the clerk of the municipality or the Minister, the applicant may appeal to the Municipal Board with respect to the consent application by filing a notice with the clerk of the municipality or the Minister, accompanied by the fee prescribed under the *Ontario Municipal Board Act*. 1994, c. 23, s. 32; 1996, c. 4, s. 29 (2); 2004, c. 18, s. 9.

Consolidated Hearings Act

(14.1) Despite the *Consolidated Hearings Act*, the proponent of an undertaking shall not give notice to the Hearings Registrar under subsection 3 (1) of that Act in respect of an application requested under subsection (1) unless the council or the Minister has given or refused to give a provisional consent or the time period referred to in subsection (14) has expired. 2006, c. 23, s. 23 (2).

Record

(15) If the clerk of the municipality or the Minister receives a notice of appeal under subsection (14), the clerk of the municipality or the Minister shall ensure that,

(a) a record is compiled which includes the prescribed information and material; and

(b) the record, the notice of appeal and the fee are forwarded to the Municipal Board within 15 days after the notice is filed. 1994, c. 23, s. 32; 1996, c. 4, s. 29 (3).

Appeal withdrawn

(16) If an appeal under subsection (14) is withdrawn, the Municipal Board shall notify the council or Minister and the council or the Minister may proceed to make a decision under subsection (1). 1994, c. 23, s. 32.

Exception

(16.1) Despite clause (15) (b), if all appeals under subsection (14) are withdrawn within 15 days after the last day for filing a notice of appeal, the clerk of the municipality or the Minister is not required to forward the materials described under clause (15) (b) to the Municipal Board. 1999, c. 12, Sched. M, s. 29.

Where all appeals withdrawn

(16.2) If all appeals under subsection (14) are withdrawn within 15 days after the last day for filing a notice of appeal, the council or the Minister may proceed to make a decision under subsection (1). 1999, c. 12, Sched. M, s. 29.

Notice of decision

(17) If the council or the Minister gives or refuses to give a provisional consent, the council or the Minister shall ensure that written notice of it is given within 15 days, containing the information prescribed to,

(a) the applicant;

(b) each person or public body that made a written request to be notified of the decision or conditions;

(c) REPEALED: 1996, c. 4, s. 29 (4).

(d) the Minister, with respect to a decision by a council to give a provisional consent, if the Minister has notified the council that he or she wishes to receive a copy of all decisions made to give a provisional consent; and

(e) any other person or public body prescribed. 1994, c. 23, s. 32; 1996, c. 4, s. 29 (4).

(18) REPEALED: 1996, c. 4, s. 29 (5).

Appeal

(19) Any person or public body may, not later than 20 days after the giving of notice under subsection (17) is completed, appeal the decision or any condition imposed by the council or the Minister or appeal both the decision and any condition to the Municipal Board by filing with the clerk of the municipality or the Minister a notice of appeal setting out the reasons for the appeal, accompanied by the fee prescribed under the *Ontario Municipal Board Act*. 1994, c. 23, s. 32; 1996, c. 4, s. 29 (6).

Notice completed

(20) For the purpose of subsections (19) and (27), the giving of written notice shall be deemed to be completed,

(a) where notice is given by personal service, on the day that the serving of all required notices is completed;

(b) where notice is given by mail, on the day that the mailing of all required notices is completed; and

(c) where notice is given by telephone transmission of a facsimile of the notice, on the day that the transmission of all required notices is completed. 1994, c. 23, s. 32.

No appeal

(21) If no appeal is filed under subsection (19) or (27), subject to subsection (23), the decision of the council or the Minister, as the case may be, to give or refuse to give a provisional consent is final. 1994, c. 23, s. 32.

Declaration

(22) A sworn declaration by an employee of the municipality or the Ministry of Municipal Affairs and Housing that notice was given under subsection (17) or (24) or that no notice of appeal was filed under subsection (19) or (27) within the time allowed for appeal is conclusive evidence of the facts stated in it. 1994, c. 23, s. 32; 1996, c. 4, s. 29 (7).

Change of conditions

(23) The council or the Minister, as the case may be, may change the conditions of a provisional consent at any time before a consent is given. 1994, c. 23, s. 32.

Notice

(24) If the council or the Minister changes conditions of a provisional consent under subsection (23) after notice has been given under subsection (17), the council or the Minister shall ensure that written notice of the changes containing the information prescribed is given within 15 days to,

(a) the applicant;

(b) each person or public body that made a written request to be notified of changes to the conditions;

(c) the Minister, with respect to a change of conditions by council, if the Minister has notified the council that he or she wishes to receive a copy of the changes of conditions; and

(d) any other person or public body prescribed. 1994, c. 23, s. 32; 1996, c. 4, s. 29 (8).

(25) REPEALED: 1996, c. 4, s. 29 (9).

No notice required

(26) The council or the Minister, as the case may be, is not required to give written notice under subsection (24) if, in the council's or the Minister's opinion, the change to conditions is minor. 2009, c. 33, Sched. 21, s. 10 (14).

Appeal

(27) Any person or public body may, not later than 20 days after the giving of notice under subsection (24) is completed, appeal any of the changed conditions imposed by the council or the Minister by filing with the clerk of the municipality or the Minister a notice of appeal setting out the reasons for the appeal, accompanied by the fee prescribed under the *Ontario Municipal Board Act*. 1994, c. 23, s. 32; 1996, c. 4, s. 29 (10).

Record

(28) If the clerk or the Minister, as the case may be, receives a notice of appeal under subsection (19) or (27), the clerk or the Minister shall ensure that,

(a) a record is compiled which includes the information and material prescribed; and

(b) the record, the notice of appeal and the fee are forwarded to the Municipal Board within 15 days after the last day for filing a notice of appeal under subsection (19) or (27). 1994, c. 23, s. 32.

Appeals withdrawn

(29) If all appeals under subsection (19) or (27) are withdrawn and the time for appealing has expired, the Municipal Board shall notify the council or the Minister, as the case may be, and subject to subsection (23), the decision of the council or the Minister to give or refuse to give a provisional consent is final. 1994, c. 23, s. 32.

Exception

(29.1) Despite clause (28) (b), if all appeals under subsection (19) or (27) are withdrawn within 15 days after the last day for filing a notice of appeal, the clerk of the municipality or the Minister is not required to forward the materials described under clause (28) (b) to the Municipal Board. 1999, c. 12, Sched. M, s. 29.

Decision final

(29.2) If all appeals under subsection (19) or (27) are withdrawn within 15 days after the last day for filing a notice of appeal, the decision of the council or the Minister, subject to subsection (23), to give or refuse to give a provisional consent is final. 1999, c. 12, Sched. M, s. 29.

Hearing

(30) On an appeal, the Municipal Board shall hold a hearing, of which notice shall be given to such persons or public bodies and in such manner as the Board may determine. 1994, c. 23, s. 32; 1996, c. 4, s. 29 (11).

Dismissal without hearing

(31) Despite the *Statutory Powers Procedure Act* and subsection (30), the Municipal Board may dismiss an appeal without holding a hearing, on its own initiative or on the motion of any party, if,

(a) it is of the opinion that,

(i) the reasons set out in the notice of appeal do not disclose any apparent land use planning ground upon which the Board could give or refuse to give the provisional consent or could determine the question as to the condition appealed to it,

(ii) the appeal is not made in good faith or is frivolous or vexatious,

(iii) the appeal is made only for the purpose of delay, or

(iv) the appellant has persistently and without reasonable grounds commenced before the Board proceedings that constitute an abuse of process;

(b) the appellant did not make oral submissions at a public meeting or did not make written submissions to the council or the Minister before a provisional consent was given or refused and, in the opinion of the Board, the appellant does not provide a reasonable explanation for having failed to make a submission;

(c) the appellant has not provided written reasons for the appeal;

(d) the appellant has not paid the fee prescribed under the *Ontario Municipal Board Act*; or

(e) the appellant has not responded to a request by the Municipal Board for further information within the time specified by the Board. 1994, c. 23, s. 32; 1996, c. 4, s. 29 (12); 2006, c. 23, s. 23 (3, 4).

Representation

(32) Before dismissing an appeal, the Municipal Board shall notify the appellant and give the appellant the opportunity to make representation on the proposed dismissal but this subsection does not apply if the appellant has not complied with a request made under clause (31) (e). 2000, c. 26, Sched. K, s. 5 (7).

Dismissal

(32.1) The Municipal Board may dismiss an appeal after holding a hearing or without holding a hearing on the motion under subsection (31), as it considers appropriate. 2000, c. 26, Sched. K, s. 5 (7).

Decision final

(33) If all appeals under subsection (19) or (27) are dismissed or withdrawn, the Municipal Board shall notify the council or the Minister and, subject to subsection (23), the decision of the council or the Minister to give or refuse to give a provisional consent is final. 1994, c. 23, s. 32.

Powers

(34) On an appeal under subsection (14) or (19), the Municipal Board may make any decision that the council or the Minister, as the case may be, could have made on the original application and on an appeal of the conditions under subsection (27), the Board shall determine the question as to the condition or conditions appealed to it. 1994, c. 23, s. 32.

Amended application

(35) On an appeal, the Municipal Board may make a decision on an application which has been amended from the original application if, at any time before issuing its order, written notice is given to the persons and public bodies prescribed under subsection (10) and to any person or public body conferred with under subsection (11) on the original application. 1994, c. 23, s. 32.

No written notice

(35.1) The Municipal Board is not required to give written notice under subsection (35) if, in the opinion of the Board, the amendment to the original application is minor. 1996, c. 4, s. 29 (13).

Notice

(36) Any person or public body that receives notice under subsection (35) may, not later than 30 days after the day that written notice was given, notify the Municipal Board of an intention to appear at the hearing or the resumption of the hearing, as the case may be. 1994, c. 23, s. 32.

Order

(37) If, after the expiry of the time period in subsection (36), no notice of intent has been received, the Municipal Board may issue its order. 1994, c. 23, s. 32.

Notice received

(38) If a notice of intent under subsection (36) is received, the Municipal Board may hold a hearing or resume the hearing on the amended application or issue its order without holding a hearing or resuming the hearing. 1994, c. 23, s. 32; 1996, c. 4, s. 29 (14).

Consent

(39) If the decision of the Municipal Board under subsection (34) is that a provisional consent be given, the council or the Minister shall give the consent, but if conditions have been imposed, the consent shall not be given until the council or the Minister is satisfied that the conditions have been fulfilled. 1994, c. 23, s. 32.

Same

(40) If the decision of the council or the Minister on an application is that provisional consent be given and there has been no appeal under subsection (19) or (27), subject to subsection (23), the consent shall be given, but if conditions have been imposed the consent shall not be given until the council or the Minister is satisfied that the conditions have been fulfilled. 1994, c. 23, s. 32.

Conditions not fulfilled

(41) If conditions have been imposed and the applicant has not, within a period of one year after notice was given under subsection (17) or (24), whichever is later, fulfilled the conditions, the application for consent shall be deemed to be refused but, if there is an appeal under subsection (14), (19) or (27), the application for consent shall not be deemed to be refused for failure to fulfil the conditions until the expiry of one year from the date of the order of the Municipal Board issued in respect of the appeal or from the date of a notice issued by the Board under subsection (29) or (33). 1994, c. 23, s. 32.

Certificate

(42) When a consent has been given under this section, the clerk of the municipality or the Minister, as the case may be, shall give a certificate to the applicant stating that the consent has been given and the certificate is conclusive evidence that the consent was given and that the provisions of this Act leading to the consent have been complied with and that, despite any other provision of this Act, the council or the Minister had jurisdiction to grant the consent and after the certificate has been given no action may be maintained to question the validity of the consent. 1994, c. 23, s. 32.

Lapse of consent

(43) A consent given under this section lapses at the expiration of two years from the date of the certificate given under subsection (42) if the transaction in respect of which the consent was given

is not carried out within the two-year period, but the council or the Minister in giving the consent may provide for an earlier lapsing of the consent. 1994, c. 23, s. 32.

Where delegation

(44) If a land division committee or a committee of adjustment has had delegated to it the authority for the giving of consents, any reference in this section to the clerk of the municipality shall be deemed to be a reference to the secretary-treasurer of the land division committee or committee of adjustment. 1994, c. 23, s. 32.

Delegation of authority to give consents

54. (1) The council of an upper-tier municipality may by by-law delegate to the council of a lower-tier municipality the authority for the giving of consents under section 53 in respect of land situate in the lower-tier municipality. 2002, c. 17, Sched. B, s. 21 (1).

Delegation

(1.1) The council of a county may by by-law delegate to a municipal planning authority the authority for the giving of consents under section 53 in respect of land in a municipal planning area. 1994, c. 23, s. 33 (2).

Further delegation

(2) Where authority is delegated to a council under subsection (1), such council may, in turn, by by-law, delegate the authority or any part of such authority, to a committee of council, to an appointed officer identified in the by-law by name or position occupied or to a committee of adjustment. R.S.O. 1990, c. P.13, s. 54 (2).

Included powers

(2.1) If council has delegated its authority to give consents under subsection (1), (1.1), (2), (2.3), (4) or (5), that delegation shall be deemed to include the authority to give approvals under subsection 50 (18) and to issue certificates of validation under section 57 in respect of land situate in the lower-tier municipality. 1993, c. 26, s. 61 (1); 1994, c. 23, s. 33 (3); 2002, c. 17, Sched. B, s. 21 (2).

Limitation

(2.2) Section 53 does not apply in the exercise of authority under subsection (2.1) to give approvals under subsection 50 (18) or to issue certificates of validation. 1994, c. 23, s. 33 (4).

Further delegation

(2.3) If authority is delegated to a municipal planning authority under subsection (1.1) or (5) or subsection 50 (1.4), the municipal planning authority may, in turn, by by-law delegate the authority or any part of the authority to a committee of the municipal planning authority or to an appointed officer identified in the by-law by name or position occupied. 1994, c. 23, s. 33 (5).

(3) REPEALED: 1994, c. 23, s. 33 (6).

Delegation to committee of council, etc.

(4) Except as delegated under subsection (1) or (1.1), the authority or any part of such authority of the council of an upper-tier municipality may be delegated by the council to a committee of council, to an appointed officer identified in the by-law by name or position occupied or to a land division committee. R.S.O. 1990, c. P.13, s. 54 (4); 1994, c. 23, s. 33 (7); 2002, c. 17, Sched. B, s. 21 (3).

Delegation, single-tier municipalities

(5) The council of a single-tier municipality authorized to give a consent under section 53 may by by-law delegate the authority of the council under section 53 or any part of that authority to a committee of council, to an appointed officer identified in the by-law by name or position occupied, to a municipal planning authority or to the committee of adjustment. 2002, c. 17, Sched. B, s. 21 (4).

Committee of adjustment

(6) Where, under subsection (2) or (5), a committee of adjustment has had delegated to it the authority to give a consent, section 53 applies with necessary modifications and subsections 45 (4) to (20) do not apply in the exercise of that authority. 1994, c. 23, s. 33 (9).

Same

(6.1) Where, under subsection (2) or (5), a committee of adjustment has the authority to give approvals under subsection 50 (18) and the authority to issue certificates of validation under section 57, subsection 45 (8) applies in the exercise of that authority, but subsections 45 (4) to (7) and (9) to (20) do not apply. 1993, c. 26, s. 61 (3).

Conditions

(7) A delegation of authority made by a council or a municipal planning authority under this section may be subject to such conditions as the council or the municipal planning authority by by-law provides and the council or the municipal planning authority may by by-law withdraw the delegation of authority but, where authority delegated under subsection (1) or (1.1) is withdrawn, all applications for consent, for approval under subsection 50 (18) or for the issuance of a certificate of validation under section 57 made prior to the withdrawal shall continue to be dealt with as if the delegation had not been withdrawn. 1994, c. 23, s. 33 (10).

District land division committee, delegation

55. (1) The Minister by order may constitute and appoint one or more district land division committees composed of such persons as he or she considers advisable and may by order delegate thereto the authority of the Minister to give consents under section 53, the authority to give approvals under subsection 50 (18) or the authority to issue certificates of validation under section 57 in respect of such lands situate in a territorial district as are defined in the order. R.S.O. 1990, c. P.13, s. 55 (1); 1993, c. 26, s. 62 (1).

Conditions and withdrawal of delegation

(2) A delegation made by the Minister under subsection (1) may be subject to such conditions as the Minister may by order provide and the Minister may by order withdraw any delegation. R.S.O. 1990, c. P.13, s. 55 (2).

Body corporate

(2.1) A district land division committee is a body corporate. 1994, c. 23, s. 34 (1).

Application of s. 44

(3) Where the Minister has delegated his or her authority to a district land division committee under subsection (1), subsections 44 (5), (6), (7), (8), (10) and (11) apply with necessary modifications. R.S.O. 1990, c. P.13, s. 55 (3).

Agreements

(4) A district land division committee may enter into agreements imposed as a condition to the giving of a consent in respect of land situate in territory without municipal organization and subsection 51 (26) applies with necessary modifications to any such agreement. R.S.O. 1990, c. P.13, s. 55 (4); 1994, c. 23, s. 34 (2).

Remuneration

(5) The members of a district land division committee appointed under this section shall be paid such remuneration as is provided for by the order appointing them. R.S.O. 1990, c. P.13, s. 55 (5).

Fees

(6) A district land division committee may prescribe a tariff of fees for the processing of applications, which shall be designed to meet only the anticipated cost to the committee in respect of the processing of applications. 1993, c. 26, s. 62 (2).

Land division committee

56. (1) The council of an upper-tier municipality may by by-law constitute and appoint a land division committee composed of such persons, not fewer than three, as the council considers advisable. R.S.O. 1990, c. P.13, s. 56 (1); 2002, c. 17, Sched. B, s. 22.

Application of subss. 44 (2-11)

(2) Subsections 44 (2) to (11) apply, with necessary modifications, where a land division committee is constituted under subsection (1) of this section. R.S.O. 1990, c. P.13, s. 56 (2).

Validation certificate

57. (1) A council authorized to give a consent under section 53, other than a council authorized to give a consent pursuant to an order under section 4, may issue a certificate of validation in respect of land described in the certificate, providing that the contravention of section 50 or a predecessor of it or of a by-law passed under a predecessor of section 50 or of an order made under clause 27 (1) (b), as it read on the 25th day of June, 1970, of *The Planning Act*, being chapter 296 of the Revised Statutes of Ontario, 1960, or a predecessor of it does not have and shall be deemed never to have had the effect of preventing the conveyance of or creation of any interest in such land. 1993, c. 26, s. 63; 1996, c. 4, s. 30 (1).

Limitation

(2) A certificate of validation under subsection (1) or an order of the Minister under subsection (3) does not affect the rights acquired by any person from a judgment or order of any court given or made on or before the day on which the certificate is issued or order is made. 1993, c. 26, s. 63.

Territorial district

(3) If the Minister has authority to give consents under section 53, the Minister may by order exercise the powers conferred upon a council by subsection (1) in respect of land in a territorial district. 2002, c. 17, Sched. B, s. 23.

Proviso

(4) No order shall be made by the Minister under subsection (3) in respect of land situate in a local municipality unless the council of the local municipality in which the land is situate has by by-law requested the Minister to make such order, and the council has the power to pass that by-law. 1993, c. 26, s. 63; 2009, c. 33, Sched. 21, s. 10 (15).

Conditions

(5) A council may, as a condition to the passage of a by-law under subsection (4), impose such conditions in respect of any land described in the by-law as it considers appropriate. 1993, c. 26, s. 63.

Criteria for consideration

(6) In considering whether to issue a certificate under subsection (1), regard shall be had to the prescribed criteria. 1993, c. 26, s. 63.

Criteria for certificate

(7) No certificate shall be issued by a council under subsection (1) unless,

(a) the land described in the certificate conforms with the prescribed criteria; or

(b) the Minister, by order, has exempted that land from the criteria. 1993, c. 26, s. 63.

Conditions

(8) A council or the Minister may, as a condition to issuing a certificate of validation or order, impose such conditions in respect of any land described in the certificate or order as it considers appropriate. 1993, c. 26, s. 63.

Proviso

(9) Nothing in this section derogates from the power a council or the Minister has to grant consents referred to in section 53. 1993, c. 26, s. 63.

PART VII
GENERAL

Acquisition of land

58. The *Municipal Act, 2001* or the *City of Toronto Act, 2006*, as the case may be, applies to the acquisition of land under this Act. 2006, c. 32, Sched. C, s. 47 (12).

Power to clear, grade, etc., lands acquired

59. When a municipality has acquired or holds lands for any purpose authorized by this Act, the municipality may clear, grade or otherwise prepare the land for the purpose for which it has been acquired or is held. R.S.O. 1990, c. P.13, s. 59.

Exchange of lands

60. When a municipality acquires land for any purpose authorized by this Act, the whole or partial consideration therefor may be land then owned by the municipality. R.S.O. 1990, c. P.13, s. 60.

Fair hearing

61. Where, in passing a by-law under this Act, a council is required by this Act, by the provisions of an official plan or otherwise by law, to afford any person an opportunity to make representation in respect of the subject-matter of the by-law, the council shall afford such person a fair opportunity to make representation but throughout the course of passing the by-law the council shall be deemed to be performing a legislative and not a judicial function. R.S.O. 1990, c. P.13, s. 61.

Not subject to Act

62. (1) An undertaking of Hydro One Inc. (as defined in subsection 2 (1) of the *Electricity Act, 1998*) or Ontario Power Generation Inc. (as defined in subsection 2 (1) of that Act) that has been

approved under the *Environmental Assessment Act* is not subject to this Act. 1998, c. 15, Sched. E, s. 27 (11); 2002, c. 1, Sched. C, s. 4.

Subsidiaries included

(2) For the purposes of subsection (1), a reference to a corporation is deemed to include a subsidiary of that corporation. 1998, c. 15, Sched. E, s. 27 (11).

Exempt undertakings

62.0.1 (1) An undertaking or class of undertakings within the meaning of the *Environmental Assessment Act* that relates to energy is not subject to this Act or to section 113 or 114 of the *City of Toronto Act, 2006* if,

(a) it has been approved under Part II or Part II.1 of the *Environmental Assessment Act* or is the subject of,

(i) an order under section 3.1 or a declaration under section 3.2 of that Act, or

(ii) an exempting regulation made under that Act; and

(b) a regulation under clause 70 (h) prescribing the undertaking or class of undertakings is in effect. 2006, c. 23, s. 24.

Same

(2) An undertaking referred to in subsection 62 (1) that has been approved under the Environmental Assessment Act is not subject to section 113 or 114 of the *City of Toronto Act, 2006*. 2006, c. 23, s. 24.

Renewable energy undertakings

Policy statements and provincial plans

62.0.2 (1) Despite any Act or regulation, the following do not apply to a renewable energy undertaking, except in relation to a decision under section 28 or Part VI:

1. A policy statement issued under subsection 3 (1).
2. A provincial plan, subject to subsection (2). 2009, c. 12, Sched. K, s. 3.

Exception

(2) Subsection (1) does not apply in respect of,

(a) the Niagara Escarpment Plan;

(b) another provincial plan, if the provincial plan is prescribed for the purposes of this subsection; or

(c) a provision of another provincial plan, if the provision is prescribed for the purposes of this subsection. 2009, c. 12, Sched. K, s. 3.

Official plans

(3) For greater certainty, an official plan does not affect a renewable energy undertaking. 2009, c. 12, Sched. K, s. 3.

Same

(4) Section 24 does not apply to,

(a) the undertaking of a public work that is a renewable energy undertaking or is intended to facilitate or support a renewable energy undertaking;

(b) the passing of a by-law with respect to a public work described in clause (a); or

(c) the passing of a by-law that is intended to facilitate or support a renewable energy undertaking. 2009, c. 12, Sched. K, s. 3.

Demolition control area

(5) A by-law passed under section 33 does not apply to a renewable energy undertaking. 2009, c. 12, Sched. K, s. 3.

By-laws and orders under Part V

(6) A by-law or order passed or made under Part V does not apply to a renewable energy undertaking. 2009, c. 12, Sched. K, s. 3.

Transition, existing agreements

(7) An agreement that is entered into under Part V before the day subsection 4 (1) of Schedule G to the *Green Energy and Green Economy Act, 2009* comes into force applies to a renewable energy project, and to any related renewable energy testing facility and renewable energy testing project, until the day a renewable energy approval is issued under section 47.5 of the *Environmental Protection Act* in relation to the renewable energy project. 2009, c. 12, Sched. K, s. 3.

Development permit system

(8) A regulation or by-law made or passed under section 70.2 does not apply to a renewable energy undertaking. 2009, c. 12, Sched. K, s. 3.

***City of Toronto Act, 2006*, ss. 113, 114**

(9) A by-law passed under section 113 or 114 of the *City of Toronto Act, 2006* does not apply to a renewable energy undertaking. 2009, c. 12, Sched. K, s. 3.

***Ontario Planning and Development Act, 1994*, s. 17**

(10) An order made under section 17 of the *Ontario Planning and Development Act, 1994* does not apply to a renewable energy undertaking. 2009, c. 12, Sched. K, s. 3.

Variation of notice requirements

62.1 The Minister, the council of a municipality or a planning board may by agreement with a First Nation vary or waive the prescribed notice requirements to a band in respect of an official plan, a zoning by-law or any application under this Act. 1994, c. 23, s. 37.

Deemed compliance

63. If the Minister, the council of a municipality, a planning board or the Municipal Board exercises any authority under this Act, including giving an approval, an exemption from an approval or a consent, the provisions of this Act that relate to or are requirements for the exercise of the authority shall be deemed to have been complied with upon the decision becoming final. 1996, c. 4, s. 32; 1999, c. 12, Sched. M, s. 30.

64. REPEALED: 2009, c. 33, Sched. 2, s. 59 (1).

Discretionary dispute resolution techniques

65. The Minister, the council of a municipality, a local board, a planning board or the Municipal Board or their agents shall, if they consider it appropriate, at any time before a decision is made

under this Act, use mediation, conciliation or other dispute resolution techniques to attempt to resolve concerns or disputes in respect of any planning application or matter. 1994, c. 23, s. 39.

Effect where authority delegated

66. If the Minister or the council delegates an authority under this Act, including the authority to give an approval, an exemption from an approval or a consent, the exercise of the authority and the decision of the delegate has the same force and effect as if it were the exercise of authority or the decision of the Minister or the council, as the case may be. 1996, c. 4, s. 33.

Penalty

67. (1) Every person who contravenes section 41, section 46, subsection 49 (4) or section 52 or who contravenes a by-law passed under section 34 or 38 or an order made under section 47 and, if the person is a corporation, every director or officer of the corporation who knowingly concurs in the contravention, is guilty of an offence and on conviction is liable,

(a) on a first conviction to a fine of not more than $25,000; and

(b) on a subsequent conviction to a fine of not more than $10,000 for each day or part thereof upon which the contravention has continued after the day on which the person was first convicted. 1994, c. 2, s. 48.

Corporation

(2) Where a corporation is convicted under subsection (1), the maximum penalty that may be imposed is,

(a) on a first conviction a fine of not more than $50,000; and

(b) on a subsequent conviction a fine of not more than $25,000 for each day or part thereof upon which the contravention has continued after the day on which the corporation was first convicted,

and not as provided in subsection (1).

Order of prohibition

(3) Where a conviction is entered under subsection (1), in addition to any other remedy or any penalty provided by law, the court in which the conviction has been entered, and any court of competent jurisdiction thereafter, may make an order prohibiting the continuation or repetition of the offence by the person convicted. R.S.O. 1990, c. P.13, s. 67 (2, 3).

Proceeds of fines

67.1 If an offence has been committed under section 41, 52 or 67 or under a by-law passed under section 34 or 38, and a proceeding in respect of the offence is undertaken by the municipality or planning board and a conviction has been entered, the proceeds of any fine in relation to the offence shall be paid to the treasurer of the municipality or secretary-treasurer of the planning board and section 2 of the *Administration of Justice Act* and section 4 of the *Fines and Forfeitures Act* do not apply in respect of the fine. 1996, c. 4, s. 34; 1997, c. 24, s. 226 (8).

Exception

68. (1) Despite section 53 of the *Assessment Act*, it is not an offence to disclose the information referred to therein to any employee of a municipality or of a planning board who declares that such information is required in the course of his or her planning duties. R.S.O. 1990, c. P.13, s. 68 (1); 1994, c. 23, s. 41 (1).

Offence

(2) An employee of a municipality or of a planning board who wilfully discloses or permits to be disclosed the information referred to in subsection (1) to any other person not likewise entitled in the course of his or her duties to acquire or have access to the information is guilty of an offence and on conviction is liable to a fine of not more than $5,000. R.S.O. 1990, c. P.13, s. 68 (2); 1994, c. 23, s. 41 (2).

Exception

(3) This section does not prevent disclosure of such information by any person when being examined as a witness in an action or other proceeding in a court or in an arbitration. R.S.O. 1990, c. P.13, s. 68 (3).

Tariff of fees

69. (1) The council of a municipality, by by-law, and a planning board, by resolution, may establish a tariff of fees for the processing of applications made in respect of planning matters, which tariff shall be designed to meet only the anticipated cost to the municipality or to a committee of adjustment or land division committee constituted by the council of the municipality or to the planning board in respect of the processing of each type of application provided for in the tariff. R.S.O. 1990, c. P.13, s. 69 (1); 1996, c. 4, s. 35 (1).

Reduction or waiver of fees

(2) Despite a tariff of fees established under subsection (1), the council of a municipality, a planning board, a committee of adjustment or a land division committee in processing an application may reduce the amount of or waive the requirement for the payment of a fee in respect of the application where the council, planning board or committee is satisfied that it would be unreasonable to require payment in accordance with the tariff. R.S.O. 1990, c. P.13, s. 69 (2); 1996, c. 4, s. 35 (2).

Payment under protest: appeal to O.M.B.

(3) Any person who is required to pay a fee under subsection (1) for the processing of an application in respect of a planning matter may pay the amount of the fee under protest and thereafter appeal to the Municipal Board against the levying of the fee or the amount of the fee by giving written notice of appeal to the Municipal Board within thirty days of payment of the fee. R.S.O. 1990, c. P.13, s. 69 (3); 1996, c. 4, s. 35 (3).

Hearing

(4) The Municipal Board shall hear an appeal made under subsection (3) and shall dismiss the appeal or direct that a refund payment be made to the appellant in such amount as the Board determines. R.S.O. 1990, c. P.13, s. 69 (4).

Fees

69.1 (1) The Minister may charge fees for the processing of applications to the Minister in respect of planning matters including the approval of an official plan or official plan amendment. 1993, c. 26, s. 64 ; 1994, c. 23, s. 42.

Same

(2) The Minister may reduce the amount of or waive the payment of a fee described under subsection (1). 1993, c. 26, s. 64.

Fees

69.2 (1) If a prescribed municipality fails to adopt a plan and submit it for approval as an official plan, the Minister may charge fees to the municipality for the processing of planning applications by the Minister in respect of land situate in the municipality, including the approval of an official plan or official plan amendment. 1994, c. 23, s. 43; 2002, c. 17, Sched. B, s. 25.

Reduction

(2) The Minister may reduce the amount of or waive the payment of a fee described under subsection (1). 1994, c. 23, s. 43.

Proviso

(3) Nothing in this section prevents the Minister from charging a fee under section 69.1 in addition to a fee under this section. 1994, c. 23, s. 43.

Regulations

70. The Lieutenant Governor in Council may make regulations,

(a)-(f) REPEALED: 1996, c. 4, s. 36.

(g) prescribing the form of a warrant and the form in which the information on oath will be taken under section 49.1;

(h) for the purposes of section 62.0.1, prescribing an undertaking or class of undertakings that relates to energy. 1994, c. 23, s. 44; 1996, c. 4, s. 36; 2006, c. 23, s. 25.

Regulations

70.1 (1) The Minister may make regulations,

1. prescribing forms for the purposes of this Act and providing for their use;
2. prescribing information and material that are to be provided under this Act and the manner in which they are to be provided;
3. prescribing the manner in which any notice is to be given under this Act, including the persons or public bodies to whom it shall be given, the person or public bodies who shall give the notice and the contents of the notice;
4. prescribing the timing requirements for any notice given under any provision of this Act;
5. prescribing information and material that must be included in any record;
6. prescribing plans or policies and provisions of those plans or policies for the purposes of clause (f) of the definition of “provincial plan” in subsection 1 (1);
7. prescribing any ministry of the Province of Ontario to be a public body under subsection 1 (3);
8. excluding any board, commission, agency or official from the definition of “public body” under subsection 1 (4);
9. prescribing conditions for the purpose of subsection 8.1 (1);
10. prescribing a term for the purpose of clause 8.1 (3) (a) and qualifications for the purpose of clause 8.1 (3) (b);
11. prescribing eligibility criteria for the purpose of subsection 8.1 (4);
12. prescribing classes for the purpose of clause 8.1 (5) (c);
13. prescribing requirements for the purpose of subsection 8.1 (8);

14. prescribing the methods for determining the number of members from each municipality to be appointed to a municipal planning authority under subsection 14.1 (5);
15. prescribing matters for the purpose of clause 16 (1) (b) and for the purpose of clause 16 (2) (c);
16. prescribing the processes to be followed and the materials to be developed under section 16.1;
17. prescribing municipalities for the purposes of subsection 17 (13) and section 69.2;
18. prescribing information and material for the purposes of clauses 17 (15) (a) and (b), public bodies for the purposes of clause 17 (15) (b) and the manner of making information and material available for the purposes of clause 17 (15) (c);
19. prescribing, for the purposes of clauses 17 (17) (a) and (b), clause 22 (6.4) (a), clause 34 (10.7) (a), clauses 34 (13) (a) and (b) and clause 51 (19.4) (a),
    i. persons and public bodies,
    ii. the manner of giving notice, and
    iii. information;
20. prescribing time periods for the purpose of subsections 17 (44.4), 34 (24.4) and 51 (52.4);
21. prescribing public bodies for the purpose of clause 26 (3) (a);
22. prescribing upper-tier municipalities for the purpose of subsection 28 (2);
23. prescribing matters for the purpose of subsection 28 (4.0.1);
24. prescribing conditions for the purpose of subsection 34 (16) and limitations for the purpose of subsection 34 (16.1);
25. prescribing rules of procedure for committees of adjustment;
26. prescribing criteria for the purposes of subsection 50 (18.1) and subsection 57 (6);
27. requiring that notice be given under subsections 51 (20) and 53 (5);
28. prescribing rules of procedure under subsection 53 (9) for councils and their delegates;
29. prescribing persons or public bodies for the purposes of subsection 53 (10);
30. prescribing rules of procedure for district land division committees constituted under section 55;
31. prescribing any other matter that is referred to in this Act as prescribed, other than matters that are prescribed under sections 70, 70.2 and 70.3. 2006, c. 23, s. 26.

Same

(2) A regulation made under this section or section 70 may be general or particular in its application. 1994, c. 23, s. 45.

Development permit system

70.2 (1) The Lieutenant Governor in Council may, by regulation,

(a) establish a development permit system that local municipalities may by by-law adopt to control land use development in the municipality; or

(b) delegate to local municipalities the power to establish a development permit system upon such conditions as may be set out in the regulation. 1994, c. 23, s. 46.

Contents

(2) A regulation under subsection (1) may,

(a) vary, supplement or override any provision in Part V or any municipal by-law passed under Part V as necessary to establish a development permit system;

(b) authorize or require a local municipality to pass a by-law to vary, supplement or override a by-law passed under Part V as necessary to establish a development permit system;

(c) exempt a municipality which has adopted or established a development permit system from any provision of Part V set out in the regulation;

(d) prohibit a municipality which has adopted or established a development permit system from passing a by-law under those provisions of Part V that are specified in the regulation;

(e) set out procedures for appealing to the Municipal Board in respect of a development permit or a condition in a permit, including prescribing persons or public bodies that may appeal to the Board in that regard;

(f) prescribe policies that must be contained in an official plan before a development permit system may be adopted or established;

(g) prescribe conditions or criteria that must be met before a municipality passes a by-law adopting or establishing a development permit system;

(h) prescribe conditions or criteria that must be met before a development permit may be issued or that must be included in a development permit;

(i) prescribe powers that the municipality may exercise in administering a development permit system;

(j) limit or restrict the manner in which municipalities may exercise the power to issue development permits or pass by-laws adopting or establishing a development permit system;

(k) establish different standards or procedures for different municipalities or classes of municipalities;

(l) authorize the municipalities to appoint employees to carry out the duties required under the development permit system and delegate to them the powers necessary to carry out these duties;

(m) require any owner of land, upon the request of the municipality, to enter into agreements with the municipality as a condition to obtaining a development permit;

(n) revoke any provision in a development permit by-law or any condition in a development permit in respect of any defined area and set out other provisions or conditions that apply in respect of that area;

(o) prescribe provisions that must be contained in a development permit system;

(p) exempt any development or class of development, any municipality or class of municipality or any areas from a development permit area or a development permit by-law;

(q) provide for transitional matters that may be necessary to implement a development permit system or to cease using a development permit system. 1994, c. 23, s. 46.

Same

(3) A regulation under this section may be general or particular in its application and may be restricted to those municipalities set out in the regulation. 1994, c. 23, s. 46.

Conflicts

(4) A regulation made under this section prevails over the provisions of any other Act that are specified in the regulation. 1994, c. 23, s. 46.

Registration of agreement

(5) An agreement entered into under clause (2) (m) may be registered against the land to which it applies and the municipality may enforce its provisions against the owner and, subject to the *Registry Act* and the *Land Titles Act*, any and all subsequent owners of the land. 1994, c. 23, s. 46; 2006, c. 23, s. 27.

Deemed conformity with official plan

(6) If a development permit by-law is passed under this section by the council of a municipality in which an official plan is in effect, subsection 24 (4) applies to the by-law in the same manner as if it were a by-law passed under section 34. 1994, c. 23, s. 46.

Conformity with upper tier plans

(7) If an approval authority has approved an official plan adopted by an upper-tier municipality, every development permit by-law that is then in effect in the area affected by the plan shall be amended to conform with the plan and subsections 27 (2) to (4) apply, with necessary modifications, to the amendment. 1994, c. 23, s. 46; 2002, c. 17, Sched. B, s. 27.

Offence

(8) Every person who contravenes a development permit by-law passed under this section or the conditions of a development permit is guilty of an offence and on conviction is liable to the fines set out in section 67 and section 67 applies to the offence. 1994, c. 23, s. 46.

Regulations

70.3 (1) The Lieutenant Governor in Council may by regulation authorize municipalities to pass by-laws establishing a system for allocating sewage and water services to land that is the subject of an application under section 51 upon such conditions as may be set out in the regulation.

Contents of regulations

(2) A regulation under subsection (1) may,

(a) prescribe conditions or criteria that must be met before a municipality passes a by-law establishing a system;

(b) prescribe powers that the municipality may exercise in administering the system including the power to issue permits or collect fees;

(c) prescribe policies that must be contained in an official plan before a system may be established;

(d) require that the official plan of the municipality contain policies regarding the allocation of services;

(e) authorize the by-law to apply to any class of plan of subdivision or description under the *Condominium Act* in respect of which draft approval was given before or after the by-law was passed; and

(f) provide for transitional matters that may be necessary to implement a system.

Same

(3) A regulation under this section may be general or particular in its application and may be restricted to those municipalities set out in the regulation. 1994, c. 23, s. 47.

Applications

(3.1) Despite sections 74 and 74.1, a regulation under this section may apply to any application for approval of a plan of subdivision or an application for approval of a condominium description under the *Condominium Act* in respect of which draft approval was given before or after this subsection came into force. 1996, c. 4, s. 38.

Conflicts

(4) A regulation made under this section prevails over the provisions of any other Act that are specified in the regulation. 1994, c. 23, s. 47.

Regulations

70.4 (1) The Minister may make regulations,

(a) providing for transitional matters respecting matters and proceedings that were commenced before or after the *Strong Communities (Planning Amendment) Act, 2004* came into force;

(b) modifying or replacing all or any part of the definition of "area of settlement" in subsection 1 (1). 2004, c. 18, s. 10.

Same

(2) Without limiting clause (1) (a), a regulation under that clause may,

(a) determine which matters and proceedings may be continued and disposed of under this Act, as it read on the day immediately before the *Strong Communities (Planning Amendment) Act, 2004* came into force and which matters and proceedings must be continued and disposed of under this Act as it read on the day the *Strong Communities (Planning Amendment) Act, 2004* came into force;

(b) for the purpose of clause (1) (a), deem a matter or proceeding to have been commenced on the date or in the circumstances prescribed in the regulation. 2004, c. 18, s. 10.

Retroactive

(3) A regulation under this section may be retroactive to December 15, 2003. 2004, c. 18, s. 10.

Scope

(4) A regulation under this section may be general or particular in its application. 2004, c. 18, s. 10.

Conflict

(5) A regulation under clause (1) (a) prevails over any provision of this Act specifically mentioned in the regulation. 2004, c. 18, s. 10.

Regulations

70.5 (1) The Minister may make regulations,

(a) providing for transitional matters respecting matters and proceedings that were commenced before or after the effective date;

(b) modifying or replacing all or any part of the definition of "area of employment" in subsection 1 (1). 2006, c. 23, s. 28.

Same

(2) A regulation under clause (1) (a) may, without limitation,

(a) determine which matters and proceedings may be continued and disposed of under this Act, as it read on the day before the effective date, and which matters and proceedings must be continued and disposed of under this Act as it read on the effective date;

(b) for the purpose of clause (1) (a), deem a matter or proceeding to have been commenced on the date or in the circumstances prescribed in the regulation. 2006, c. 23, s. 28.

Retroactive

(3) A regulation under clause (1) (a) may be retroactive to December 12, 2005. 2006, c. 23, s. 28.

Scope

(4) A regulation under this section may be general or particular in its application. 2006, c. 23, s. 28.

Conflict

(5) A regulation under clause (1) (a) prevails over any provision of this Act specifically mentioned in the regulation. 2006, c. 23, s. 28.

Definition

(6) In this section,

"effective date" means the date on which section 28 of the *Planning and Conservation Land Statute Law Amendment Act, 2006* comes into force. 2006, c. 23, s. 28.

Conflict

71. In the event of conflict between the provisions of this and any other general or special Act, the provisions of this Act prevail. R.S.O. 1990, c. P.13, s. 71.

Repeal of joint official plans

72. (1) REPEALED: 1994, c. 23, s. 48.

Repeal of joint official plans

(2) Unless continued in force by an order made by the Minister under subsection (3), every official plan of a joint planning area, other than an official plan that was adopted by the council of a county and other than an official plan of a joint planning area in a territorial district, that was in effect immediately before the 1st day of August, 1983, shall be deemed to have been repealed two years from that day, if not sooner repealed.

Continuation of joint official plans

(3) The Minister may by order provide for the remaining in force of any joint official plan or part or parts thereof that would otherwise be deemed to be repealed under subsection (2) and in such order may make such provision for the effectual continuation of such plan or the part or parts thereof as the Minister considers necessary, including provision for the allocation of the plan or part or parts thereof to any local municipality or county situate wholly or partly within the area to which the plan applies.

Amendment or repeal

(4) The Minister may approve any amendment or repeal of an official plan of a joint planning area that may be proposed by the council of any municipality affected by the official plan. R.S.O. 1990, c. P.13, s. 72 (2-4).

Continuation

72.1 Even though this Act may be amended after an official plan came into effect, the official plan remains in effect but may be amended or repealed in accordance with this Act as amended. 1996, c. 4, s. 39.

Planning areas and boards dissolved

73. (1) Except as provided in subsection (3), on the 1st day of August, 1983, all planning areas including joint planning areas and subsidiary planning areas together with the planning boards thereof were dissolved.

Assets and liabilities

(2) All the assets and liabilities of a planning board dissolved by this section are, in the case of a planning board of a planning area consisting of part or all of one municipality, assets and liabilities of such municipality and in the case of a planning board of a joint planning area, assets and liabilities of the municipalities that form part of the joint planning area and if such municipalities cannot agree as to the disposition of the assets and liabilities, the Municipal Board, upon the application of one or more of the municipalities, shall direct a final disposition thereof.

Planning areas that are continued

(3) Each planning area that immediately before the 1st day of August, 1983, consisted of the whole of two or more municipalities that are situate in a territorial district or consisted of the whole of one or more municipalities and territory without municipal organization or consisted solely of territory without municipal organization shall continue as a planning area under this Act without any change in name until altered or dissolved by the Minister.

Planning boards that are continued

(4) Each planning board of a planning area mentioned in subsection (3) shall continue as a planning board under this Act without any change in name or constitution until the planning area is dissolved or the name or constitution of the planning board is changed by the Minister. R.S.O. 1990, c. P.13, s. 73.

Transition

74. (1) In this section,

"former Act" means *The Planning Act*, being chapter 379 of the Revised Statutes of Ontario, 1980. R.S.O. 1990, c. P.13, s. 74 (1).

Matters, etc., continued

(2) Despite the repeal of the former Act by section 73 of the *Planning Act, 1983*, being chapter 1, any matter or proceeding mentioned in subsection (3) that was commenced under the former Act before the 1st day of August, 1983, shall be continued and finally disposed of under the former Act. R.S.O. 1990, c. P.13, s. 74 (2).

When matters, etc., deemed commenced

(3) For the purposes of subsection (2), a matter or proceeding shall be deemed to have been commenced, in the case of,

(a) an official plan or an amendment thereto or a repeal thereof, on the day the by-law adopting the plan or adopting or proposing the amendment or repeal of the plan is passed;

(b) redevelopment under section 22 of the former Act, on the day the by-law designating the redevelopment area is passed;

(c) subdivision of land under section 36 of the former Act, on the day the application is made under subsection (1) of that section;

(d) a zoning by-law or an amendment thereto, on the day the by-law is passed;

(e) development in a site plan control area, on the day the application is made under subsection 40 (4) of the former Act;

(f) an application made to a committee of adjustment, a land division committee or planning board for a planning area in a territorial district, on the day the application is made; and

(g) an application to the Minister for a consent under section 29 of the former Act, on the day the application is made. R.S.O. 1990, c. P.13, s. 74 (3).

Request to amend official plan

(4) Despite clause (3) (a), where a request to initiate an amendment to an official plan was received by a council before the 1st day of August, 1983,

(a) if the council refuses to propose the amendment or fails to propose it within thirty days from the receipt of the request and the person who made the request requests the Minister to refer the proposal to the Municipal Board, the matter shall be continued and finally disposed of under the former Act; or

(b) if the council accedes to the request, the matter shall be continued and finally disposed of under either the former Act or under this Act as determined by the council. R.S.O. 1990, c. P.13, s. 74 (4); 2009, c. 33, Sched. 2, s. 59 (2).

Report of planning board

(5) In the case of a request to initiate an amendment to an official plan that is continued and finally disposed of under the former Act as mentioned in subsection (4), section 17 of the former Act pertaining to the obtaining of a planning board report do not apply. R.S.O. 1990, c. P.13, s. 74 (5).

Request to amend zoning by-law

(6) Despite clause (3) (d), where an application to amend a zoning by-law was received by a council before the 1st day of August, 1983,

(a) if the council refuses the application or refuses or neglects to make a decision thereon within one month after the receipt of the application and the applicant appeals to the Municipal Board, the matter shall be continued and finally disposed of under the former Act;

(b) if the council accedes to the request, the matter shall be continued and finally disposed of under either the former Act or under this Act as determined by the council. R.S.O. 1990, c. P.13, s. 74 (6); 2009, c. 33, Sched. 2, s. 59 (3).

Transition

74.1 (1) Any matter or proceeding mentioned in subsection (2) that was commenced before March 28, 1995 shall be continued and finally disposed of under this Act as it read on March 27, 1995. 1996, c. 4, s. 40 (1).

Same

(2) For the purposes of subsection (1), a matter or proceeding shall be deemed to have been commenced, in the case of,

(a) an official plan or an amendment to it or a repeal of it, on the day the by-law adopting the plan or adopting the amendment or repeal of the plan is passed;

(b) a request for an official plan amendment by any person or public body, on the day the request was received, whether or not the official plan amendment is adopted;

(c) a zoning by-law or an amendment to it, on the day the by-law is passed;

(d) an application for an amendment to a zoning by-law that has been refused or has not been decided before the day this section comes into force, on the day the application is made;

(e) development in a site plan control area, on the day the application under subsection 41 (4) is made;

(f) an application for a minor variance under section 45, on the day the application is made;

(g) an application to amend or revoke an order under section 47, on the day the application is made;

(h) an application for the approval of a plan of subdivision under section 51, on the day the application is made; and

(i) an application for a consent under section 53, on the day the application is made. 1994, c. 23, s. 50; 1996, c. 4, s. 40 (2).

Transition

75. (1) Any matter or proceeding that was commenced on or after March 28, 1995 but before this section came into force shall be continued and finally disposed of under this Act as it read on the day before this section came into force.

Determination of date

(2) For the purposes of subsection (1), a matter or proceeding shall be deemed to have been commenced on the day determined under subsection 74.1 (2).

Exception

(3) Despite subsection (1), in exercising any authority in respect of a matter or proceeding referred to in subsection (5), the council of a municipality, a local board, a planning board, the Minister and the Municipal Board, shall have regard to the policy statements issued under subsection 3 (1) if,

(a) the matter or proceeding was commenced on or after March 28, 1995; and

(b) no decision has been made in respect of the matter or proceeding. 1996, c. 4, s. 41.

Exception, comments, etc.

(4) Despite subsection (1), in providing any comments, submissions or advice with respect to any matter or proceeding referred to in subsection (5), a minister or a ministry, board, commission

or agency of the government shall have regard to the policy statements issued under subsection 3 (1), if,

(a) the matter or proceeding was commenced on or after March 28, 1995; and

(b) no decision has been made in respect of the matter or proceeding. 1996, c. 4, s. 41; 1998, c. 15, Sched. E, s. 27 (12).

Deemed commencement

(5) For the purposes of clauses (3) (a) and (4) (a), a matter or proceeding shall be deemed to have been commenced,

(a) in the case of a request for an official plan amendment by any person or public body, on the day the request was received, whether or not the official plan amendment is adopted;

(b) in the case of an application for an amendment to a zoning by-law under section 34 that has been refused or has not been decided before the day this section comes into force, on the day the application is made;

(c) in the case of an application for a minor variance under section 45, on the day the application is made;

(d) in the case of an application for the approval of a plan of subdivision under section 51, on the day the application is made; and

(e) in the case of an application for a consent under section 53, on the day the application is made.

Determination of date of decision

(6) For the purposes of clauses (3) (b) and (4) (b), a decision shall be deemed to have been made,

(a) in the case of a request for an amendment to an official plan by any person or public body, on the day that,

(i) the council or planning board adopts all or part of the amendment,

(ii) the council or planning board refuses to adopt all or part of the amendment, or

(iii) the approval authority proposes to approve, modifies and approves or refuses to approve all or part of the amendment;

(b) in the case of an application for an amendment to a zoning by-law under section 34, on the day that,

(i) the council passes the amending by-law, or

(ii) the council refuses the application to amend the by-law;

(c) in the case of an application for a minor variance under section 45, on the day a decision is made by the committee of adjustment;

(d) in the case of an application for the approval of a plan of subdivision under section 51, on the day that the approval authority decides to give or refuses to give approval to the draft plan under subsection 51 (31); and

(e) in the case of an application for a consent under section 53, on the day the council or the Minister gives or refuses to give a provisional consent.

Transition

(7) If subsection (3) applies to all or part of an official plan, subsection 3 (8) of this Act, as it read before the coming into force of section 3 of the *Land Use Planning and Protection Act, 1996*, does not apply to the plan. 1996, c. 4, s. 41.

Transition – residential units

76. (1) If on November 16, 1995, a detached house, semi-detached house or row house was used or occupied as two residential units, section 1, subsections 16 (2), (3) and (4), 31 (3.1) and (3.2), 35 (1), (3) and (4) and 51 (28), (29) and (30) of this Act and Ontario Regulation 384/94, as they read on November 15, 1995, continue to apply to that house.

Same

(2) Section 1, subsections 16 (2), (3) and (4), 31 (3.1) and (3.2), 35 (1), (3) and (4) and 51 (28), (29) and (30) of this Act and Ontario Regulation 384/94, as they read on November 15, 1995, continue to apply to a detached house, a semi-detached house or a row house if on or before the day on which subsection 20 (1) of the *Land Use Planning and Protection Act, 1996* comes into force,

(a) a permit has been issued under section 8 or 10 of the *Building Code Act* permitting the erection, alteration, occupancy or use of the house for two residential units; and

(b) the building permit has not been revoked under section 8 of the *Building Code Act*. 1996, c. 4, s. 42.

County of Oxford

77. (1) The County of Oxford may exercise all the powers of a lower-tier municipality under this Act, and no lower-tier municipality in the County of Oxford shall, except as provided in this section, exercise any powers under this Act. 2002, c. 17, Sched. B, s. 28.

Committee of adjustment

(2) The council of each lower-tier municipality in the County of Oxford shall be deemed to be a committee of adjustment. 2002, c. 17, Sched. B, s. 28.

Powers of lower-tier municipality

(3) A lower-tier municipality in the County of Oxford may exercise the powers provided in section 28, except under subsection 28 (12), and in sections 29, 30, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46 and 69. 2002, c. 17, Sched. B, s. 28; 2006, c. 23, s. 29 (1).

Non-application of subs. (2)

(3.1) If a lower-tier municipality passes a by-law constituting and appointing a committee of adjustment under subsection 44 (1), subsection (2) of this section ceases to apply to the council of the lower-tier municipality on the day the by-law comes into force, except with respect to matters that, on that day, are before the council and have not been finally disposed of. 2006, c. 23, s. 29 (2).

Conflicts

(4) Despite subsection (3), if there is a conflict between a by-law passed by the County of Oxford and a by-law passed by a lower-tier municipality in the exercise of a power under subsection (3), the by-law of the County of Oxford prevails. 2002, c. 17, Sched. B, s. 28.

Land division committee

(5) Subsection 54 (1) does not apply to the County of Oxford and the County of Oxford may be or may constitute and appoint a land division committee for the purpose of giving consents under this Act. 2002, c. 17, Sched. B, s. 28.

Planning Act

ONTARIO REGULATION 197/96
CONSENT APPLICATIONS

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PART I

CONSENT APPLICATIONS TO A MUNICIPAL COUNCIL

1. In this Part,

"approval authority" means,

(a) the municipal council that has the authority to grant a consent in respect of the land that is the subject of an application for a consent, and includes a delegate of the municipal council, or

(b) a municipal planning authority that has been delegated the authority to grant a consent in respect of the land that is the subject of an application for a consent, and includes a delegate of the municipal planning authority; ("autorité approbatrice")

"hazard distance" means the distance established as the hazard distance applicable to the propane operation referenced in a risk and safety management plan required under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("distance de danger")

"propane operation" means an operation in respect of which a person is required to prepare a risk and safety management plan under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("installation de propane")

"propane operator" means a person who is required to prepare a risk and safety management plan under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("exploitant d'une installation de propane")

"reserve" means a tract of land, the legal title of which is vested in the Crown in right of Canada, that has been set apart by the Crown for the use and benefit of a First Nation; ("réserve")

"subject land" means the land to be severed and the land to be retained. ("terrain visé") O. Reg. 197/96, s. 1; O. Reg. 547/06, s. 1; O. Reg. 469/09, s. 1.

2. The information and material to be provided to the approval authority by an applicant under subsection 53 (2) of the Act are set out in Schedule 1. O. Reg. 547/06, s. 2.

3. (1) This section applies to notice of an application for a consent under clause 53 (5) (a) of the Act. O. Reg. 547/06, s. 2.

(2) Notice shall be given in the manner described in the following subsections of this section:

1. Subsection (3) or (6).
2. Subsection (8).
3. Subsection (9).
4. Subsection (10). O. Reg. 547/06, s. 2.

(3) Notice shall be given,

(a) by personal service or ordinary mail, to every owner of land within 60 metres of the subject land, subject to subsections (4) and (5); and

(b) by posting a notice, clearly visible and legible from a public highway or other place to which the public has access, at every separately assessed property within the subject land, or, if posting on the property is impractical, at a nearby location chosen by the official described in subsection (7). O. Reg. 547/06, s. 2.

(4) For the purposes of clause (3) (a), the owner of land is deemed to be the person shown on the last revised assessment roll of the municipality or on the current provincial land tax roll at the address shown on the roll, but if the approval authority is a municipality and the clerk of the municipality has received written notice of a change of ownership, the notice shall be given to the new owner instead, at the address set out in the notice of change of ownership. O. Reg. 547/06, s. 2.

(5) For the purposes of clause (3) (a), if a condominium development is located within 60 metres of the subject land, notice may be given to the condominium corporation, according to its most recent address for service or mailing address as registered under section 7 of the *Condominium Act, 1998*, instead of being given to all owners assessed in respect of the condominium development. O. Reg. 547/06, s. 2.

(6) Notice shall be given by publishing a notice in a newspaper that, in the opinion of the official described in subsection (7), is of sufficiently general circulation in the area adjoining the subject land that it would give the public in the area reasonable notice of the application. O. Reg. 547/06, s. 2.

(7) The official for the purposes of subsections (3) and (6) is,

(a) the clerk of the municipality, if the approval authority is,

(i) the council of the municipality or a committee of the council, or

(ii) an appointed officer;

(b) the secretary-treasurer of the land division committee or committee of adjustment, if the approval authority is the land division committee or committee of adjustment; and

(c) the secretary-treasurer of the municipal planning authority, if the approval authority is,

(i) a municipal planning authority or a committee of the authority, or

(ii) an appointed officer. O. Reg. 547/06, s. 2.

(8) Every person and public body that has given the approval authority a written request for a notice to which this section applies (including the person's or public body's address) shall be given notice by personal service, ordinary mail or fax. O. Reg. 547/06, s. 2.

(9) Notice shall be given, by personal service, ordinary mail or fax, to all the following persons and public bodies, except those who have notified the approval authority that they do not wish to receive notice:

1. The clerk of every local municipality in which the subject land is located, or the secretary-treasurer of every municipal planning authority or planning board in whose planning area the subject land is located.

2. The clerk of every upper-tier municipality in which the subject land is located.

3. The secretary-treasurer of a conservation authority, if the subject land is within an area that is under the jurisdiction of the conservation authority.

3.1 Every propane operator of a propane operation, if,

i. any part of the propane operation's hazard distance is within the subject land, and

ii. the approval authority has been notified of the propane operation's hazard distance by a director appointed under section 4 of the *Technical Standards and Safety Act, 2000*.

4. TransCanada PipeLines Limited, if any of the subject land is within 200 metres of a pipeline owned and operated by TransCanada PipeLines Limited.

5. If any of the subject land is within 300 metres of a railway line, the secretary of the company operating the railway line.
6. If any of the subject land is within or abuts the area covered by the Niagara Escarpment Plan, the senior planner of the district office of the Niagara Escarpment Commission having jurisdiction over that land or the area that it abuts, as the case may be.
7. The Niagara Parks Commission, if any of the subject land adjoins the Niagara Parkway or is in the jurisdiction of the Niagara Parks Commission.
8. The St. Lawrence Parks Commission, if any of the subject land adjoins the 1000 Islands Parkway and is within the jurisdiction of the St. Lawrence Parks Commission under section 9 of the *St. Lawrence Parks Commission Act*.
9. Parks Canada, if any of the subject land adjoins a historic site, park or historic canal under the jurisdiction of Parks Canada.
10. The chief of every First Nation council, if the First Nation is located on a reserve any part of which is within one kilometre of the subject land. O. Reg. 547/06, s. 2; O. Reg. 469/09, ss. 2, 3.

(10) Notice of an application for consent under clause 53 (5) (a) of the Act shall be given, by personal service, ordinary mail or fax, to the regional director of the Ministry of Municipal Affairs and Housing Municipal Services Office responsible for the region that includes the municipality or planning area where the subject land is located, if the regional director has given the approval authority a written request to be given such notices. O. Reg. 547/06, s. 2.

(11) A notice given to the persons and public bodies set out in subsections (9) and (10) shall also include a copy of the application. O. Reg. 547/06, s. 2.

(12) A notice under subsection (9) that is given by a local municipality on the request of the approval authority under subsection 53 (7.1) of the Act shall include, if the approval authority so directs, a request that written comments be submitted to the approval authority. O. Reg. 547/06, s. 2.

(13) A notice, other than a notice that is given by posting as described in clause (3) (b), shall include the following:

1. An explanation of the purpose and effect of the application.
2. A description of the subject land, a key map showing the subject land, or an explanation why no description or key map is provided.
3. Where and when additional information and material regarding the application will be available to the public for inspection.
4. The following statement:

   If a person or public body that files an appeal of a decision of (*name of the approval authority*) in respect of the proposed consent does not make written submissions to (*name of the approval authority*) before it gives or refuses to give a provisional consent, the Ontario Municipal Board may dismiss the appeal.

5. The following statement:

   If you wish to be notified of the decision of (*name of the approval authority*) in respect of the proposed consent, you must make a written request to (*name and address of the approval authority*).

6. If it is known that the subject land is the subject of an application under the Act for a minor variance or for an amendment to an official plan, a zoning by-law or a Minister's zoning order, a statement of that fact and the file number of the application. O. Reg. 547/06, s. 2.

(14) A notice that is given by posting as described in clause (3) (b) shall include the following:

1. An explanation of the purpose and effect of the application.
2. Where and when additional information and material regarding the application will be available to the public for inspection.
3. How to obtain a copy of the notice described in subsection (13). O. Reg. 547/06, s. 2.

4. Where a local municipality gives notice of an application for consent pursuant to a request by an approval authority under subsection 53 (7.1) of the Act, it shall submit to the approval authority both of the following:

1. A certified copy of the written notice of the application.
2. An affidavit or sworn declaration by an employee of the local municipality certifying that the requirements for the giving of notice under clause 53 (5) (a) of the Act have been complied with. O. Reg. 197/96, s. 4.

5. A record to be compiled by the approval authority and forwarded to the Municipal Board under clause 53 (15) (a) of the Act shall include the following:

1. The original or a certified copy of the application received by the approval authority.

1.1 The original or a certified copy of the prescribed information and material received by the approval authority under subsection 53 (2) of the Act.

1.2 If applicable, the original or a certified copy of any other information and material that is required to be provided by the official plan of the municipality or planning board.

2. The original or a certified copy of the notice of appeal and the date it was received.
3. The original or a copy of all written submissions and comments received.
4. If a public meeting is held, a copy of the minutes of the public meeting, if any, and a list of all persons and public bodies that made oral submissions at the public meeting.
5. A copy of any planning report considered by the approval authority. O. Reg. 197/96, s. 5; O. Reg. 547/06, s. 3.

6. (1) Notice of the decision of the approval authority under subsection 53 (17) of the Act shall include the following:

1. A copy of the decision of the approval authority including the conditions, if any.
2. The last date for filing a notice of appeal of the decision of the approval authority and a statement that the notice of appeal must be filed with the approval authority, must set out the reasons for the appeal and must be accompanied by the fee required by the Ontario Municipal Board.
3. If applicable, the following statement:

   You will be entitled to receive notice of any changes to the conditions of the provisional consent if you have made a written request to be notified of changes to the conditions of the provisional consent.

4. The following statement:

Only individuals, corporations and public bodies may appeal decisions in respect of applications for consent to the Ontario Municipal Board. A notice of appeal may not be filed by an unincorporated association or group. However, a notice of appeal may be filed in the name of an individual who is a member of the association or group on its behalf.

5. If it is known that the land that is the subject of the application for consent is the subject of an application under the Act for a minor variance or for an amendment to an official plan, a zoning by-law or a Minister's zoning order, a statement of that fact and the file number of the application. O. Reg. 197/96, s. 6 (1); O. Reg. 547/06, s. 4 (1).

(2) Notice of the decision of the approval authority under subsection 53 (17) of the Act shall be given, by personal service, ordinary mail or fax, to the regional director of the Ministry of Municipal Affairs and Housing Municipal Services Office responsible for the region that includes the municipality or planning area where the subject land is located, if the regional director has given the approval authority a written request to be given notice of such decisions. O. Reg. 547/06, s. 4 (2).

7. (1) Notice of changes to the conditions of a provisional consent under subsection 53 (24) of the Act shall include the following:

1. The proposed changes.
2. The last date for filing a notice of appeal of the conditions of the provisional consent and a statement that the notice of appeal must be filed with the approval authority, must set out the reasons for the appeal and must be accompanied by the fee required by the Ontario Municipal Board.
3. The following statement:

   Only individuals, corporations and public bodies may appeal decisions in respect of applications for consent to the Ontario Municipal Board. A notice of appeal may not be filed by an unincorporated association or group. However, a notice of appeal may be filed in the name of an individual who is a member of the association or group on its behalf. O. Reg. 197/96, s. 7 (1).

(2) Notice of changes to the conditions of a provisional consent under subsection 53 (24) of the Act shall be given, by personal service, ordinary mail or fax, to the regional director of the Ministry of Municipal Affairs and Housing Municipal Services Office responsible for the region that includes the municipality or planning area where the subject land is located, if the regional director has given the approval authority a written request to be given notice of such changes. O. Reg. 547/06, s. 5.

8. A record to be compiled by the approval authority and forwarded to the Municipal Board under clause 53 (28) (a) of the Act shall include the following:

1. The original or a certified copy of the application received by the approval authority.

1.1 The original or a certified copy of the prescribed information and material received by the approval authority under subsection 53 (2) of the Act.

1.2 If applicable, the original or a certified copy of any other information and material that is required to be provided by the official plan of the municipality or planning board.

2. A copy of the decision of the approval authority.
3. The original or a certified copy of the notice of appeal and the date it was received.
4. The original or a copy of all written submissions and comments received.
5. If notice of an application for consent is given by the local municipality, the affidavit or sworn declaration submitted to the approval authority under paragraph 2 of section 4.

5.1 A statement by an employee of the approval authority as to whether the decision of the approval authority,

i. is consistent with the policy statements issued under subsection 3 (1) of the Act,

ii. conforms to or does not conflict with any applicable provincial plan or plans, and

iii. conforms to the official plan of the municipality or planning board.

6. If notice of an application for consent is given by the approval authority, an affidavit or sworn declaration of an employee of the approval authority certifying that the requirements for the giving of notice under subsections 53 (17) and (24) of the Act have been complied with.

7. If a public meeting was held, a copy of the minutes of the public meeting, if any, and a list of all persons and public bodies that made oral submissions at the public meeting.

8. A copy of any planning report considered by the approval authority. O. Reg. 197/96, s. 8; O. Reg. 547/06, s. 6.

9. (1) If the approval authority, in granting a consent, has not stipulated that subsection 50 (3) or (5) of the Act shall apply to any subsequent conveyance of or transaction involving the same parcel, the certificate required under subsection 53 (42) of the Act shall be one of the following:

1. A stamp in Form 1, if the certificate is affixed to a deed or other document relating to the transaction in respect of which the consent has been given.

2. A Certificate in Form 2 in all other cases. O. Reg. 197/96, s. 9 (1).

(2) If the approval authority, in granting a consent, has stipulated that subsection 50 (3) or (5) of the Act shall apply to any subsequent conveyance of or transaction involving the same parcel, the certificate required under subsection 53 (42) of the Act shall be one of the following:

1. A stamp in Form 3, if it is affixed to a deed or other document relating to the transaction in respect of which the consent has been given.

2. A Certificate in Form 4 in all other cases. O. Reg. 197/96, s. 9 (2).

PART II
CONSENT APPLICATIONS TO THE MINISTER

10. The information and material to be provided to the Minister by an applicant under subsection 53 (2) of the Act are set out in Schedule 1. O. Reg. 547/06, s. 7.

11. (1) Notice of an application for consent under clause 53 (5) (a) of the Act shall be given in the manner described in the following subsections of this section:

1. Subsection (2) or (3).

2. Subsection (6). O. Reg. 547/06, s. 7.

(2) Notice shall be given by publishing a notice in a newspaper that, in the Minister's opinion, is of sufficiently general circulation in the area adjoining the subject land that it would give the public in the area reasonable notice of the application. O. Reg. 547/06, s. 7.

(3) Notice shall be given by personal service or ordinary mail to every owner of land within 60 metres of the subject land, subject to subsections (4) and (5). O. Reg. 547/06, s. 7.

(4) For the purposes of subsection (3), the owner of land is deemed to be the person shown on the last revised assessment roll of the municipality or on the current provincial land tax roll at the address shown on the roll. O. Reg. 547/06, s. 7.

(5) For the purposes of subsection (3), if a condominium development is located within 60 metres of the subject land, notice may be given to the condominium corporation, according to its most recent address for service or mailing address as registered under section 7 of the *Condominium Act, 1998*, instead of being given to all owners assessed in respect of the condominium development. O. Reg. 547/06, s. 7.

(6) Every person and public body that has given the Minister a written request for a notice to which this section applies (including the person's or public body's address) shall be given notice by personal service, ordinary mail or fax. O. Reg. 547/06, s. 7.

12. Where a local municipality or planning board gives notice of an application for consent pursuant to a request by the Minister under subsection 53 (7.1) of the Act, it shall submit to the Minister both of the following:

1. A certified copy of the written notice of the application.
2. An affidavit or sworn declaration by an employee of the local municipality or planning board certifying that the requirements for the giving of notice under clause 53 (5) (a) of the Act have been complied with. O. Reg. 197/96, s. 12.

13. Sections 5 to 9 apply, with necessary modifications, to applications for consent to the Minister. O. Reg. 547/06, s. 8.

14. OMITTED (REVOKES OTHER REGULATIONS AND PROVIDES FOR TRANSITION). O. Reg. 197/96, s. 14; O. Reg. 547/06, s. 9.

15. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THE ENGLISH VERSION OF THIS REGULATION). O. Reg. 197/96, s. 15.

SCHEDULE 1
INFORMATION AND MATERIAL TO BE INCLUDED IN AN APPLICATION FOR CONSENT UNDER SUBSECTION 53 (2) OF THE ACT

1. The name, address, telephone number and, if applicable, the e-mail address of the owner of the subject land, and of the agent if the applicant is the owner's authorized agent.

2. The date of the application.

3. The type and purpose of the proposed transaction (*for example, a transfer for the creation of a new lot, a lot addition, an easement, a charge, a lease or a correction of title*).

4. If known, the name of the person to whom the land or an interest in the land is to be transferred, charged or leased.

5. A description of the subject land, including such information as the municipality, or the geographic township in unorganized territory, concession and lot numbers, registered plan and lot numbers, reference plan and part numbers, and street names and numbers.

6. Whether there are any easements or restrictive covenants affecting the subject land.

7. If the answer to section 6 is yes, a description of each easement or covenant and its effect.

8. The following information, with respect to the land intended to be severed and the land intended to be retained:

(a) the frontage, depth and area, in metric units;

(b) the existing and proposed uses of the land;

(c) the existing and proposed buildings and structures on the land;

(d) whether access to the land will be,

(i) by a provincial highway, a municipal road that is maintained all year or seasonally, another public road or a right of way, or

(ii) by water;

(e) if access to the land will be by water only, the parking and docking facilities to be used and the approximate distance of these facilities from the land and the nearest public road;

(f) whether water will be provided by a publicly owned and operated piped water system, a privately owned and operated individual or communal well, a lake or other water body or other means; and

(g) whether sewage disposal will be provided by a publicly owned and operated sanitary sewage system, a privately owned and operated individual or communal septic system, a privy or other means.

9. The current designation of the subject land in the applicable official plan.

10. If known,

(a) whether the subject land has ever been the subject of an application for approval of a plan of subdivision under section 51 of the Act or a consent under section 53 of the Act; and

(b) if the answer to clause (a) is yes, the file number of the application and the status of the application.

11. Whether any land has been severed from the parcel originally acquired by the owner of the subject land.

12. If the answer to section 11 is yes, the date of the transfer, the name of the transferee and the uses of the severed land.

13. If known,

(a) whether the subject land is the subject of any other application under the Act, such as an application for an amendment to an official plan, a zoning by-law or a Minister's zoning order, an application for a minor variance or an application for an approval of a plan of subdivision or a consent; and

(b) if the answer to clause (a) is yes, the file number of the application and the status of the application.

14. A sketch showing the following, in metric units:

(a) the boundaries and dimensions of any land abutting the subject land that is owned by the owner of the subject land;

(b) the approximate distance between the subject land and the nearest township lot line or landmark such as a bridge or railway crossing;

(c) the boundaries and dimensions of the subject land, the part that is intended to be severed and the part that is intended to be retained;

(d) the location of all land previously severed from the parcel originally acquired by the current owner of the subject land;

(e) the approximate location of all natural and artificial features (*for example, buildings, railways, roads, watercourses, drainage ditches, banks of rivers or streams, wetlands, wooded areas, wells and septic tanks*) that,

(i) are located on the subject land and on land that is adjacent to it, and

(ii) in the applicant's opinion, may affect the application;

(f) the current uses of land that is adjacent to the subject land (*for example, residential, agricultural or commercial*);

(g) the location, width and name of any roads within or abutting the subject land, indicating whether it is an unopened road allowance, a public travelled road, a private road or a right of way;

(h) if access to the subject land will be by water only, the location of the parking and boat docking facilities to be used; and

(i) the location and nature of any easement affecting the subject land.

15. Whether the application is consistent with policy statements issued under subsection 3 (1) of the Act.

16. Whether the subject land is within an area of land designated under any provincial plan or plans.

17. If the answer to section 16 is yes, whether the application conforms to or does not conflict with the applicable provincial plan or plans.

18. If the applicant is not the owner of the subject land, the owner's written authorization to the applicant to make the application.

19. An affidavit or sworn declaration by the applicant that the information required under this Schedule and provided by the applicant is accurate.

O. Reg. 547/06, s. 10.

FORM 1
CERTIFICATE OF OFFICIAL

Planning Act

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FORM 1
CERTIFICATE OF OFFICIAL

Planning Act

Under subsection 53 (42) of the *Planning Act*, I certify that the consent of the .....
(approval authority)
of the ..... of ..... was given on …….. , 20 ….. to the transaction to which this instrument relates.

.....
(official)

Dated this..... day of ..... , 20 .....

O. Reg. 197/96, Form 1.

FORM 2
CERTIFICATE OF OFFICIAL

Planning Act

Insert regs\graphics\1996\197\197002ae.tif

FORM 2
CERTIFICATE OF OFFICIAL

Planning Act

Under subsection 53 (42) of the *Planning Act*, I certify that the consent of the .....
(approval authority)
of the ..... of ..... was given on ..... 20 .....
to a .....
(enter type of transaction above, i.e. conveyance, mortgage, etc.)
of the following land (set out full description of land that is the subject of the consent): .....
.....

.....
(official)
Dated this ..... day of ..... , 20 ....

O. Reg. 197/96, Form 2.

FORM 3
CERTIFICATE OF OFFICIAL

Planning Act

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FORM 3
CERTIFICATE OF OFFICIAL

Planning Act

Under subsection 53 (42) of the *Planning Act*, I certify that the consent of the .....
(approval authority)
of the ..... of ..... was given on ....., 20 ..... to the transaction to which this instrument relates.

Subsection ..... of the *Planning Act* applies to any subsequent conveyance of or transaction
(50 (3) or (5), as the case may be)
involving the parcel of land that is the subject of this consent.

.....
(official)
Dated this ..... day of ..... , 20 .....

O. Reg. 197/96, Form 3.

FORM 4
CERTIFICATE OF OFFICIAL

Planning Act

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FORM 4
CERTIFICATE OF OFFICIAL

Planning Act

Under subsection 53 (42) of the *Planning Act*, I certify that the consent of the .....
(approval authority)
of the ..... of ..... was given on ....., 20 .....
to a .....
(enter type of transaction above, i.e. conveyance, mortgage, etc.)
of the following land (set out full description of land that is the subject of the consent): .....
.....
Subsection ..... of the *Planning Act* applies to any subsequent conveyance of or transaction
(50 (3) or (5), as the case may be)
involving the parcel of land that is the subject of this consent.

.....
(official)

Dated this ..... day of ..... , 20 .....

O. Reg. 197/96, Form 4.

Planning Act

ONTARIO REGULATION 200/96
MINOR VARIANCE APPLICATIONS

1. In this Regulation,

"committee" means the committee of adjustment having jurisdiction in the area in which the subject land is situate; ("comité")

"hazard distance" means the distance established as the hazard distance applicable to the propane operation referenced in a risk and safety management plan required under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("distance de danger")

"propane operation" means an operation in respect of which a person is required to prepare a risk and safety management plan under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("installation de propane")

"propane operator" means a person who is required to prepare a risk and safety management plan under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("exploitant d'une installation de propane")

"reserve" means a tract of land, the legal title of which is vested in the Crown in Right of Canada, that has been set apart by the Crown for the use and benefit of a First Nation; ("réserve")

"secretary-treasurer" means the secretary-treasurer of a committee; ("secrétaire-trésorier")

"subject land" means the land that is the subject of the application for a minor variance or permission under section 45 of the Act. ("terrain visé") O. Reg. 200/96, s. 1; O. Reg. 471/09, s. 1.

2. The information and material to be provided by an applicant under section 45 of the Act are set out in the Schedule. O. Reg. 200/96, s. 2.

3. (1) At least 10 days before the day of the hearing on an application for a minor variance or permission under subsection 45 (5) of the Act, notice shall be given in compliance with subsection (2) or (4) but need not be given in compliance with more than one of those subsections. O. Reg. 200/96, s. 3 (1); O. Reg. 508/98, s. 1 (1).

(2) Notice under subsection (1) may be given by doing both of the following:

1. Giving notice by personal service or prepaid first class mail to every owner of land within 60 metres of the area to which the application applies. However, if a condominium development is located within 60 metres of the area, notice may be given to the condominium corporation, according to its most recent address for service or mailing address as registered under section 7 of the *Condominium Act, 1998*, instead of being given to all owners assessed in respect of the condominium development.
2. Posting a notice, clearly visible and legible from a public highway or other place to which the public has access, at every separately assessed property in the area to which the application applies or, where posting on the property is impractical, at a nearby location chosen by the secretary-treasurer. O. Reg. 200/96, s. 3 (2); O. Reg. 471/09, s. 2.

(3) REVOKED: O. Reg. 508/98, s. 1 (2).

(4) Notice under subsection (1) may be given by publication in a newspaper that, in the opinion of the secretary-treasurer, is of sufficiently general circulation in the area to which the application applies to give the public reasonable notice of the hearing. O. Reg. 200/96, s. 3 (4).

(5) For the purposes of subsection (2), the owner of land shall be deemed to be the person shown on the last revised assessment roll of the municipality or on the current provincial land tax roll at the address shown on the roll. However, if the approval authority is a municipality and the clerk of the municipality has received written notice of a change of ownership, the notice shall be given instead to the new owner at the address set out in the notice. O. Reg. 508/98, s. 1 (3).

(6) Despite subsections (2) and (3), where a zoning by-law restricts the use of the land which is the subject of an application to detached, semi-detached or duplex housing and the application is for a minor variance under subsection 45 (1) of the Act, the committee of adjustment may direct that the area of notification set out in those subsections be reduced to 30 metres. O. Reg. 200/96, s. 3 (6); O. Reg. 432/96, s. 1 (1).

(7) Every person and public body that has given the secretary-treasurer a written request for notice of a hearing on an application for a minor variance or permission under subsection 45 (1) or (2) of the Act shall be given notice of the hearing by personal service, prepaid first class mail or telephone transmission of a facsimile of the notice. O. Reg. 200/96, s. 3 (7); O. Reg. 432/96, s. 1 (2).

(8) A written request given under subsection (7) shall show the address of the person or public body. O. Reg. 200/96, s. 3 (8).

(9) Notice of a hearing on an application for a minor variance or permission under subsection 45 (5) of the Act shall be given by personal service, prepaid first class mail or telephone transmission of a facsimile of the notice to all of the following persons and public bodies except those who have notified the committee that they do not wish to receive notice:

1. The clerk of every local municipality having jurisdiction in the area to which the application applies.
2. The clerk of every county and every regional or district municipality having jurisdiction in the area to which the application applies.
3. The clerk of the area municipality in the area to which the application applies, if the notice is given by The Regional Municipality of Haldimand-Norfolk, The Regional Municipality of Sudbury or the County of Oxford.
4. The secretary-treasurer of every planning board or municipal planning authority having jurisdiction in the area to which the application applies.
5. The secretary-treasurer of every conservation authority having jurisdiction in the area to which the application applies.

5.1 Every propane operator of a propane operation, if,

   i. any part of the propane operation's hazard distance is within the area to which the application applies, and

   ii. the secretary-treasurer has been notified of the propane operation's hazard distance by a director appointed under section 4 of the *Technical Standards and Safety Act, 2000*.

6. If the subject land is within or abuts the area covered by the Niagara Escarpment Plan,

   i. the senior planner of the district office of the Niagara Escarpment Commission having jurisdiction over that land, and

   ii. the senior planner of the district office of the Niagara Escarpment Commission having jurisdiction over the area that abuts that land.

7. The chief of every First Nation council, if the First Nation is located on a reserve any part of which is within one kilometre of the subject land. O. Reg. 200/96, s. 3 (9); O. Reg. 508/98, s. 1 (4); O. Reg. 471/09, ss. 3, 4.

(10) Notice of a hearing on an application for a minor variance or permission under section 45 of the Act shall be given by personal service, prepaid first class mail or telephone transmission of a facsimile of the notice to the director of the Provincial Planning Services Branch of the Ministry of Municipal Affairs

and Housing, if the director has given the secretary-treasurer a written request to be given notice of hearings on applications for a minor variance or permission. O. Reg. 200/96, s. 3 (10); O. Reg. 508/98, s. 1 (5).

(11) Notice of a hearing shall include the following:

1. The date, time and location of the hearing.
2. An explanation of the purpose and effect of the proposed minor variance or permission.
3. A description of the subject land or a key map showing the location of the subject land.
4. Where and when additional information regarding the application will be available to the public for inspection.
5. If it is known that the subject land is the subject of an application under the Act or for approval of a plan of subdivision or a consent, a statement of that fact and the file number of the application.

(12) Despite subsection (11), if notice of a hearing is given by posting on the subject land, the notice shall include the following:

1. The date, time and location of the hearing.
2. An explanation of the purpose and effect of the proposed minor variance or permission.
3. Where and when additional information regarding the application will be available to the public for inspection.
4. How to obtain a copy of the written notice of the hearing. O. Reg. 200/96, s. 3 (11, 12).

4. OMITTED (REVOKES OTHER REGULATIONS AND PROVIDES FOR TRANSITION). O. Reg. 200/96, s. 4.

5. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THE ENGLISH VERSION OF THIS REGULATION). O. Reg. 200/96, s. 5.

SCHEDULE
INFORMATION AND MATERIAL TO BE PROVIDED IN AN APPLICATION UNDER SECTION 45 OF THE ACT

1. The name, address and telephone number of the owner of the subject land and of the agent if the applicant is an agent authorized by the owner.
2. The current designation of the subject land in any applicable official plan.
3. The current zoning of the subject land.
4. The nature and extent of the relief from the zoning by-law.
5. The reason why the proposed use cannot comply with the provisions of the zoning by-law.
6. The description of the subject land, such as the municipality, concession and lot numbers, registered plan and lot numbers, reference plan and part numbers and name of street and number.
7. The frontage, depth and area of the subject land.
8. Whether access to the subject land is by a provincial highway, a municipal road that is maintained all year or seasonally, another public road or a right of way or by water.
9. If access to the subject land is by water only, the parking and docking facilities used or to be used and the approximate distance of these facilities from the subject land and the nearest public road.
10. The existing uses of the subject land.
11. Whether there are any buildings or structures on the subject land.
12. If the answer to item 11 is yes, for each building or structure the type of building or structure, the setback from the front lot line, rear lot line and side lot lines, the height in metres of the building or structure and the dimensions or floor area of the building or structure.

13. The proposed uses of the subject land.
14. Whether any buildings or structures are proposed to be built on the subject land.
15. If the answer to item 14 is yes, for each building or structure the type of building or structure, the setback from the front lot line, rear lot line, and side lot lines, the height in metres of the building or structure and the dimensions or floor area of the building or structure.
16. The date the subject land was acquired by the current owner.
17. The date the existing buildings or structures on the subject land were constructed.
18. The length of time that the existing uses of the subject land have continued.
19. Whether water is provided to the subject land by a publicly owned and operated piped water system, a privately owned and operated individual or communal well, a lake or other water body or other means.
20. Whether sewage disposal is provided to the subject land by a publicly owned and operated sanitary sewage system, a privately owned and operated individual or communal septic system, a privy or other means.
21. Whether storm drainage is provided by sewers, ditches, swales or other means.
22. If known, whether the subject land is the subject of an application under the Act for approval of a plan of subdivision or a consent.
23. If the answer to item 22 is yes, and if known, the file number of the application and the status of the application.
24. If known, whether the subject land has ever been the subject of an application under section 45 of the Act.
25. A sketch showing the following:
    i. The boundaries and dimensions of the subject land.
    ii. The location, size and type of all existing and proposed buildings and structures on the subject land, indicating the distance of the buildings or structures from the front yard lot line, rear yard lot line and the side yard lot lines.
    iii. The approximate location of all natural and artificial features on the subject land and on land that is adjacent to the subject land that, in the opinion of the applicant, may affect the application. Examples include buildings, railways, roads, watercourses, drainage ditches, river or stream banks, wetlands, wooded areas, wells and septic tanks.
    iv. The current uses on land that is adjacent to the subject land.
    v. The location, width and name of any roads within or abutting the subject land, indicating whether it is an unopened road allowance, a public travelled road, a private road or a right of way.
    vi. If access to the subject land is by water only, the location of the parking and docking facilities to be used.
    vii. the location and nature of any easement affecting the subject land.
26. An affidavit or sworn declaration by the applicant that the information required under this Schedule and provided by the applicant is true.

Planning Act

ONTARIO REGULATION 543/06
OFFICIAL PLANS AND PLAN AMENDMENTS

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Definitions

1. In this Regulation,

"hazard distance" means the distance established as the hazard distance applicable to the propane operation referenced in a risk and safety management plan required under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("distance de danger")

"propane operation" means an operation in respect of which a person is required to prepare a risk and safety management plan under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("installation de propane")

"propane operator" means a person who is required to prepare a risk and safety management plan under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("exploitant d'une installation de propane")

"reserve" means a tract of land, the legal title of which is vested in the Crown in right of Canada, that has been set apart by the Crown for the use and benefit of a First Nation; ("réserve")

"subject land" means the land to which a proposed official plan or plan amendment applies. ("terrain visé") O. Reg. 543/06, s. 1; O. Reg. 467/09, s. 1.

Information and material for review (s. 17 (15) of Act)

2. For the purposes of clauses 17 (15) (a) and (b) of the Act, the council shall ensure that the appropriate approval authority and the prescribed public bodies are given an opportunity to review the following information and material in the course of the preparation of a plan:

1. A description of the subject land, including such information as the municipality, or the geographic township in unorganized territory, concession and lot numbers, reference plan and part numbers, and street names and numbers.
2. If known, the approximate area of the subject land, in metric units.
3. Whether the proposed amendment changes, replaces or deletes a policy in the official plan.
4. If the answer to paragraph 3 is yes, the policy to be changed, replaced or deleted.
5. Whether the proposed amendment adds a policy to the official plan.
6. The purpose of the proposed official plan amendment.
7. The current designation of the subject land in the official plan and the land uses that the designation authorizes.
8. Whether the proposed amendment changes or replaces a designation in the official plan.
9. If the proposed amendment changes or replaces a designation in the official plan, the designation to be changed or replaced.
10. The land uses that the proposed amendment would authorize.
11. Whether water will be provided to the subject land by a publicly owned and operated piped water system, a privately owned and operated individual or communal well, a lake or other water body, or other means.

12. Whether sewage disposal will be provided to the subject land by a publicly owned and operated sanitary sewage system, a privately owned and operated individual or communal septic system, a privy or other means.
13. If the proposed amendment would permit development on a privately owned and operated individual or communal septic system and more than 4500 litres of effluent would be produced per day as a result of the development being completed,
    i. a servicing options report, and
    ii. a hydrogeological report.
14. Whether the subject land or land within 120 metres of it is the subject of an application under the Act for,
    i. a minor variance or a consent,
    ii. an amendment to an official plan, a zoning by-law or a Minister's zoning order, or
    iii. approval of a plan of subdivision or a site plan.
15. If the answer to paragraph 14 is yes, the following information about each application:
    i. its file number,
    ii. the name of the approval authority considering it,
    iii. the land it affects,
    iv. its purpose,
    v. its status, and
    vi. its effect on the proposed amendment.
16. Whether the proposed amendment is consistent with the policy statements issued under subsection 3 (1) of the Act.
17. Whether the subject land is within an area of land designated under any provincial plan or plans.
18. If the answer to paragraph 17 is yes, whether the proposed amendment conforms to or does not conflict with the provincial plan or plans.
19. The original or a certified copy of any other information and material that is required to be provided by the official plan of the municipality or planning board. O. Reg. 543/06, s. 2.

Notice of public meeting and open house (s. 17 (17) of Act)

3. (1) This section applies to notice of a public meeting and to notice of an open house, if any, for the purposes of subsection 17 (17) of the Act. O. Reg. 543/06, s. 3 (1).

(2) Notice of a public meeting and notice of an open house may be given together or separately. O. Reg. 543/06, s. 3 (2).

(3) Notice shall be given in the manner described in the following subsections of this section:

1. Subsection (4) or (7).
2. Subsection (8).
3. Subsection (9).

4. Subsection (11) or (12). O. Reg. 543/06, s. 3 (3).

(4) Notice shall be given,

(a) by personal service or ordinary mail, to every owner of land within 120 metres of the subject land, subject to subsections (5) and (6); and

(b) by posting a notice, clearly visible and legible from a public highway or other place to which the public has access, at every separately assessed property within the subject land or, if posting on the property is impractical, at a nearby location chosen by the clerk of the municipality or the secretary-treasurer of the planning board. O. Reg. 543/06, s. 3 (4).

(5) For the purposes of clause (4) (a), the owner of land is deemed to be the person shown on the last revised assessment roll of the municipality or on the current provincial land tax roll at the address shown on the roll, but if the approval authority is a municipality and the clerk of the municipality has received written notice of a change of ownership, the notice shall be given to the new owner instead, at the address set out in the notice of change of ownership. O. Reg. 543/06, s. 3 (5).

(6) For the purposes of clause (4) (a), if a condominium development is located within 120 metres of the subject land, notice may be given to the condominium corporation, according to its most recent address for service or mailing address as registered under section 7 of the *Condominium Act, 1998*, instead of being given to all owners assessed in respect of the condominium development. O. Reg. 543/06, s. 3 (6).

(7) Notice shall be given by publishing a notice in a newspaper that, in the opinion of the clerk of the municipality or the secretary-treasurer of the planning board, is of sufficiently general circulation in the area to which the proposed official plan or plan amendment would apply that it would give the public reasonable notice of the public meeting or open house, as the case may be. O. Reg. 543/06, s. 3 (7).

(8) Every person and public body that has given the clerk of the municipality or the secretary-treasurer of the planning board a written request for a notice to which this section applies (including the person's or public body's address) shall be given notice by personal service, ordinary mail or fax. O. Reg. 543/06, s. 3 (8).

(9) Notice shall be given, by personal service, ordinary mail or fax, to all the following persons and public bodies, except those who have notified the clerk of the municipality or the secretary-treasurer of the planning board that they do not wish to receive notice:

1. The clerk of the approval authority of the proposed official plan or plan amendment, if the approval authority is not the Minister.
2. The clerk of every municipality or the secretary-treasurer of every municipal planning authority having jurisdiction in the area to which the proposed official plan or plan amendment would apply.
3. The secretary of every school board having jurisdiction in the area to which the proposed official plan or plan amendment would apply.
4. The secretary-treasurer of every conservation authority having jurisdiction in the area to which the proposed official plan or plan amendment would apply.
5. The secretary of every company operating a natural gas utility in the local municipality or planning area to which the proposed official plan or plan amendment would apply.

6. The secretary of every company operating an oil or natural gas pipeline in the local municipality or planning area to which the proposed official plan or plan amendment would apply.

6.1 Every propane operator of a propane operation, if,

   i. any part of the propane operation's hazard distance is within the area to which the proposed official plan or plan amendment would apply, and

   ii. the clerk of the municipality or the secretary-treasurer of the planning board has been notified of the propane operation's hazard distance by a director appointed under section 4 of the *Technical Standards and Safety Act, 2000*.

7. If any of the land to which the proposed official plan or plan amendment would apply is within 300 metres of a railway line, the secretary of the company operating the railway line.

8. The Executive Vice-President, Law and Development, of Ontario Power Generation Inc.

9. The secretary of Hydro One Inc.

10. If any of the land to which the proposed official plan or plan amendment would apply is within or abuts the area covered by the Niagara Escarpment Plan, the senior planner of the district office of the Niagara Escarpment Commission having jurisdiction over that land or the area that it abuts, as the case may be.

11. Parks Canada, if any of the land to which the proposed official plan or plan amendment would apply adjoins a historic site, park or historic canal under the jurisdiction of Parks Canada.

12. The Niagara Parks Commission, if any of the land to which the proposed official plan or plan amendment would apply adjoins the Niagara Parkway or is in the jurisdiction of the Niagara Parks Commission.

13. The St. Lawrence Parks Commission, if any part of the land to which the proposed official plan or plan amendment would apply adjoins the 1000 Islands Parkway and is within the jurisdiction of the St. Lawrence Parks Commission under section 9 of the *St. Lawrence Parks Commission Act*.

14. The clerk of every municipality or the secretary-treasurer of every municipal planning authority or planning board, if any part of the municipality, municipal planning area or planning area is within one kilometre of the land to which the proposed official plan or plan amendment would apply.

15. The chief of every First Nation council, if the First Nation is located on a reserve any part of which is within one kilometre of the area to which the proposed official plan or plan amendment would apply. O. Reg. 543/06, s. 3 (9); O. Reg. 467/09, ss. 2, 3.

(10) A notice given under paragraph 1 of subsection (9) shall also include a copy of the proposed official plan or plan amendment. O. Reg. 543/06, s. 3 (10).

(11) If the approval authority of a proposed official plan or plan amendment is the Minister, notice shall be given, by personal service, ordinary mail or fax, to the regional director of the Ministry of Municipal Affairs and Housing Municipal Services Office responsible for the region that includes the municipality or planning area where the subject land is located**,** unless the regional director has notified the clerk of the municipality or the secretary-treasurer of the planning board that he or she does not wish to receive such notices. O. Reg. 543/06, s. 3 (11).

(12) If the approval authority of a proposed official plan or plan amendment is not the Minister, notice shall be given, by personal service, ordinary mail or fax, to the regional director of the Ministry of Municipal Affairs and Housing Municipal Services Office responsible for the region that includes the municipality or planning area where the subject land is located**,** if the regional director has given the clerk of the municipality or the secretary-treasurer of the planning board a written request to be given such notices. O. Reg. 543/06, s. 3 (12).

(13) Subsections (11) and (12) apply whether or not the proposed official plan or plan amendment is exempt from approval under subsection 17 (9) or (10) of the Act. O. Reg. 543/06, s. 3 (13).

(14) A notice given under subsection (11) or (12) shall also include a copy of the proposed official plan or plan amendment. O. Reg. 543/06, s. 3 (14).

(15) A notice, other than a notice that is given by posting as described in clause (4) (b), shall include the following:

1. The date, time and location of the public meeting or open house.
2. An explanation of the purpose and effect of the proposed official plan or plan amendment.
3. A description of the subject land, a key map showing the subject land, or an explanation why no description or key map is provided.
4. Where and when a copy of the proposed official plan or plan amendment and information and material will be available to the public for inspection.
5. The following statement:

   If you wish to be notified of the adoption of the proposed official plan (*or official plan amendment*), or of the refusal of a request to amend the official plan, you must make a written request to (*name and address of municipality or planning board*).
6. The following statements:
   i. If a person or public body does not make oral submissions at a public meeting or make written submissions to (*name of municipality or planning board*) before the proposed official plan (*or official plan amendment*) is adopted, the person or public body is not entitled to appeal the decision of (*reference to council and name of municipality, or name of planning board or approval authority, as the case may be*) to the Ontario Municipal Board.
   ii. If a person or public body does not make oral submissions at a public meeting or make written submissions to (*name of municipality or planning board*) before the proposed official plan (*or official plan amendment*) is adopted, the person or public body may not be added as a party to the hearing of an appeal before the Ontario Municipal Board unless, in the opinion of the Board, there are reasonable grounds to add the person or public body as a party.
7. If it is known that the subject land is the subject of an application under the Act for a minor variance or a consent, for an amendment to a zoning by-law or a Minister's zoning order or for approval of a plan of subdivision, a statement of that fact and the file number of the application. O. Reg. 543/06, s. 3 (15).

(16) A notice that is given by posting as described in clause (4) (b) shall include the following:

1. The date, time and location of the public meeting or open house.

2. An explanation of the purpose and effect of the proposed official plan or plan amendment.
3. Where and when a copy of the proposed official plan or plan amendment and information and material will be available to the public for inspection.
4. How to obtain a copy of the notice described in subsection (15). O. Reg. 543/06, s. 3 (16).

Notice of adoption of proposed plan or amendment (s. 17 (23) of Act)

4. Notice of the adoption of a proposed official plan or plan amendment under subsection 17 (23) of the Act shall include the following:

1. The date that the by-law adopting the proposed official plan or plan amendment was passed.
2. The purpose and effect of the proposed official plan or plan amendment.
3. Where and when information in respect of the proposed official plan or plan amendment will be available to the public for inspection.
4. If the proposed official plan or plan amendment requires approval from the approval authority under subsection 17 (22) of the Act,
   i. a statement that any person or public body will be entitled to receive notice of the decision of the approval authority if a written request to be notified of the decision (including the person's or public body's address) is made to the approval authority, and
   ii. the name and address of the approval authority to which the proposed official plan or plan amendment will be submitted for approval.
5. If the proposed official plan or plan amendment is exempt from approval under subsection 17 (9) or (10) of the Act,
   i. the last date for filing a notice of appeal, and a statement that the notice of appeal,
      A. must be filed with the clerk of the municipality or the secretary-treasurer of the planning board,
      B. must set out the reasons for the appeal, and the specific part of the proposed official plan or plan amendment to which the appeal applies, and
      C. must be accompanied by the fee required by the Municipal Board, and
   ii. the following statements:
      A. The proposed official plan (*or official plan amendment*) is exempt from approval by the (*name of approval authority*). The decision of the council is final if a notice of appeal is not received on or before the last day for filing a notice of appeal.
      B. Only individuals, corporations or public bodies may appeal a decision of the municipality or planning board to the Ontario Municipal Board. A notice of appeal may not be filed by an unincorporated association or group. However, a notice of appeal may be filed in the name of an individual who is a member of the association or the group on its behalf.
      C. No person or public body shall be added as a party to the hearing of the appeal unless, before the plan was adopted, the person or public body made oral submissions at a public meeting or written submissions to the council or, in the opinion of the Ontario Municipal Board, there are reasonable grounds to add the person or public body as a party.

6. If it is known that the subject land is the subject of an application under the Act for a minor variance or a consent, for an amendment to a zoning by-law or a Minister's zoning order or for approval of a plan of subdivision, a statement of that fact and the file number of the application. O. Reg. 543/06, s. 4.

Details of notice (s. 17 (23) of Act)

5. (1) If a proposed official plan or plan amendment is adopted by the council of a municipality and its approval authority is the Minister, notice of its adoption shall be given, by personal service, ordinary mail or fax, to the regional director of the Ministry of Municipal Affairs and Housing Municipal Services Office responsible for the region that includes the municipality or planning area where the subject land is located, unless the regional director has notified the clerk of the municipality or the secretary-treasurer of the planning board that he or she does not wish to receive such notices. O. Reg. 543/06, s. 5 (1).

(2) If a proposed official plan or plan amendment is adopted by the council of a municipality and its approval authority is not the Minister, notice of its adoption shall be given, by personal service, ordinary mail or fax, to the regional director of the Ministry of Municipal Affairs and Housing Municipal Services Office responsible for the region that includes the municipality or planning area where the subject land is located, if the regional director has given the clerk of the municipality or the secretary-treasurer of the planning board a written request to be given such notices. O. Reg. 543/06, s. 5 (2).

(3) Subsections (1) and (2) apply whether or not the proposed official plan or plan amendment is exempt from approval under subsection 17 (9) or (10) of the Act. O. Reg. 543/06, s. 5 (3).

(4) A notice given under this section shall also include a copy of the proposed official plan or plan amendment. O. Reg. 543/06, s. 5 (4).

Record compiled by clerk for O.M.B. (s. 17 (29) of Act)

6. A record compiled by the clerk of the municipality or secretary-treasurer of the planning board and forwarded to the Municipal Board under subsection 17 (29) of the Act shall include the following:

1. A certified copy of the by-law adopting the proposed official plan or plan amendment.
2. A certified copy of the proposed official plan or plan amendment.
3. The original or a certified copy of the notice of appeal and the date it was received by the municipality or planning board.
4. The original or a copy of all written submissions and comments and the dates they were received.
5. An affidavit or sworn declaration in accordance with subsection 14 (1).
6. A statement from an employee of the municipality or planning board as to whether the decision of the council or planning board,
   i. is consistent with the policy statements issued under subsection 3 (1) of the Act, and
   ii. conforms to or does not conflict with any applicable provincial plan or plans.
7. If a public meeting was held, a copy of the minutes.
8. A copy of any planning report considered by the council or planning board.

9. If applicable, the original or a certified copy of the prescribed information and material received by the council or planning board under clauses 17 (15) (a) and (b) and subsection 22 (4) of the Act.
10. The original or a certified copy of any other information and material that is required to be provided by the official plan of the municipality or planning board. O. Reg. 543/06, s. 6.

Record compiled by clerk for approval authority (s. 17 (31) of Act)

7. A record compiled by the clerk of the municipality or secretary-treasurer of the planning board and forwarded to the approval authority under subsection 17 (31) of the Act shall include the following:

1. A certified copy of the by-law adopting the proposed official plan or plan amendment.
2. A certified copy of the proposed official plan or plan amendment.
3. In the case of a proposed official plan, a statement as to whether it replaces an existing official plan.
4. The original or a copy of all written submissions and comments and the dates they were received.
5. An affidavit or sworn declaration in accordance with subsection 14 (1).
6. An affidavit or sworn declaration in accordance with subsection 14 (2).
7. A statement from an employee of the municipality or planning board as to whether the decision of the council or planning board,
   i. is consistent with the policy statements issued under subsection 3 (1) of the Act, and
   ii. conforms to or does not conflict with any applicable provincial plan or plans.
8. If a public meeting was held, a copy of the minutes.
9. A copy of any planning report considered by the council or planning board.
10. If applicable, the prescribed information and material under clauses 17 (15) (a) and (b) of the Act.
11. If applicable, the original or a certified copy of,
    i. the supporting information and material under clauses 17 (15) (a) and (b) of the Act,
    ii. the prescribed information and material under subsection 22 (4) of the Act, and
    iii. any other information and material that is required to be provided by the official plan of the municipality or planning board. O. Reg. 543/06, s. 7.

Notice of approval authority's decision (s. 17 (35) of Act)

8. (1) Notice of the approval authority's decision in respect of a proposed official plan or plan amendment under subsection 17 (35) of the Act shall include the following:

1. An explanation of the purpose and effect of the proposed official plan or plan amendment.
2. A statement that the approval authority has made a decision to approve, modify and approve or refuse the proposed official plan or plan amendment, as the case may be.
3. If the approval authority has made a decision to refuse the proposed official plan or plan amendment, a written explanation for the refusal.

4. Where and when information in respect of the proposed official plan or plan amendment and the decision will be available to the public for inspection.
5. The last date for filing a notice of appeal, and a statement that the notice of appeal,
   i. must be filed with the approval authority,
   ii. must set out the reasons for the appeal and the specific part of the proposed official plan or plan amendment to which the appeal applies, and
   iii. must be accompanied by the fee required by the Municipal Board.
6. The following statement:

   The decision of (*name of approval authority*) is final if a notice of appeal is not received on or before the last day for filing a notice of appeal.
7. The following statements:
   i. Only individuals, corporations or public bodies may appeal a decision of the approval authority to the Ontario Municipal Board. A notice of appeal may not be filed by an unincorporated association or group. However, a notice of appeal may be filed in the name of an individual who is a member of the association or the group on its behalf.
   ii. No person or public body shall be added as a party to the hearing of the appeal unless, before the plan was adopted, the person or public body made oral submissions at a public meeting or written submissions to the council or, in the opinion of the Ontario Municipal Board, there are reasonable grounds to add the person or public body as a party.
8. If it is known that the subject land is the subject of an application under the Act for a minor variance or a consent, for an amendment to a zoning by-law or a Minister's zoning order or for approval of a plan of subdivision, a statement of that fact and the file number of the application. O. Reg. 543/06, s. 8 (1).

(2) If the approval authority of a proposed official plan or plan amendment is not the Minister, notice of a decision by the approval authority in respect of a proposed official plan or plan amendment adopted by the council of a local municipality shall be given, by personal service, ordinary mail or fax, to the regional director of the Ministry of Municipal Affairs and Housing Municipal Services Office responsible for the region that includes the municipality or planning area where the subject land is located, if the regional director has given the clerk of the municipality or the secretary-treasurer of the planning board a written request to be given notice of such decisions. O. Reg. 543/06, s. 8 (2).

(3) A notice given under subsection (2) shall also include a copy of the proposed official plan or plan amendment. O. Reg. 543/06, s. 8 (3).

Record compiled by approval authority for O.M.B. (s. 17 (42) of Act)

9. A record compiled by the approval authority and forwarded to the Municipal Board under subsection 17 (42) of the Act shall include the following:

1. If applicable, a copy of the approval authority's decision.
2. The original or a certified copy of the notice of appeal and the date it was received.
3. The original or a certified copy of the record received by the approval authority under section 7.

4. If applicable, an affidavit or sworn declaration in accordance with subsection 14 (3).
5. A statement from an employee of the approval authority as to whether the decision of the approval authority,
   i. is consistent with the policy statements issued under subsection 3 (1) of the Act, and
   ii. conforms to or does not conflict with any applicable provincial plan or plans.
6. The original or a copy of all written submissions and comments received.
7. If applicable, a copy of any planning report considered by the approval authority. O. Reg. 543/06, s. 9.

Information and material — request for amendment to official plan (s. 22 (4) of Act)

10. The information and material to be provided by an applicant under subsection 22 (4) of the Act are set out in Schedule 1. O. Reg. 543/06, s. 10.

Notice ("complete application") (s. 22 (6.4) (a) of Act)

11. (1) Section 3 applies, with necessary modifications, to a notice given under clause 22 (6.4) (a) of the Act. O. Reg. 543/06, s. 11 (1).

(2) The notice referred to in subsection (1) may be given together with notice of a public meeting, notice of an open house or both, for the purposes of subsection 17 (17) of the Act, or may be given separately. O. Reg. 543/06, s. 11 (2).

Notice of refusal of request (s. 22 (6.6) of Act)

12. Notice of the refusal of a request to amend an official plan under subsection 22 (6.6) of the Act shall include the following:

1. An explanation of the purpose and effect of the requested official plan amendment.
2. A statement that the council or planning board has made a decision to refuse the requested amendment, including the date of the refusal.
3. A written explanation for the refusal.
4. The last date for filing a notice of appeal, and a statement that the notice of appeal,
   i. must be filed with the clerk of the municipality or the secretary-treasurer of the planning board, as the case may be,
   ii. must be accompanied by the fee required by the Municipal Board, and
   iii. must set out the reasons for the appeal and the specific part of the requested amendment to which the appeal applies.
5. The following statement:

   The decision of the (*reference to council and name of municipality, or name of planning board*) is final if a notice of appeal is not received on or before the last day for filing a notice of appeal.

6. The following statements:
   i. A person or public body that requested an amendment to the official plan of (*name of municipality or* planning board) may appeal the refusal of the requested amendment to the Ontario Municipal Board in respect of all or any part of the requested amendment

by filing a notice of appeal with the clerk of the (*name of municipality*) or the secretary-treasurer of the (*name of planning board*).

ii. No person or public body shall be added as a party to the hearing of the appeal unless, before the requested official plan amendment was refused, the person or public body made oral submissions at a public meeting, if any, or written submissions to the council or, in the opinion of the Ontario Municipal Board, there are reasonable grounds to add the person or public body as a party. O. Reg. 543/06, s. 12.

Record compiled by clerk for O.M.B. (s. 22 (9) of Act)

13. A record compiled by the clerk of the municipality or secretary-treasurer of the planning board and forwarded to the Municipal Board under subsection 22 (9) of the Act shall include the following:

1. The original or a certified copy of the request for an amendment to the official plan.
2. The original or a certified copy of the prescribed information and material received by the council or planning board under subsection 22 (4) of the Act.
3. The original or a certified copy of any other information and material that is required to be provided by the official plan of the municipality or planning board.
4. The original or a copy of all written submissions and comments received by the council or planning board, and the dates they were received.
5. An affidavit or sworn declaration in accordance with subsection 14 (1).
6. A statement from an employee of the municipality or planning board as to whether the decision of the council or planning board,
   i. is consistent with the policy statements issued under subsection 3 (1) of the Act, and
   ii. conforms to or does not conflict with any applicable provincial plan or plans.
7. If a public meeting was held, a copy of the minutes.
8. A copy of any planning report considered by the council or planning board.
9. If applicable, a copy of the resolution of the council or planning board refusing to adopt the requested amendment.
10. If applicable, a copy of the written explanation for the refusal. O. Reg. 543/06, s. 13.

Affidavit or sworn declaration

14. (1) An affidavit or sworn declaration for the purposes of paragraph 5 of section 6, paragraph 5 of section 7 or paragraph 5 of section 13,

(a) shall be made by an employee of the municipality or planning board; and

(b) shall contain,

(i) a certificate that the requirements for giving notice and holding public meetings and open houses, if required, or the alternative measures for informing and obtaining the views of the public set out in the official plan have been complied with,

(ii) a certificate that any requirements for giving notice of adoption have been complied with,

(iii) if a public meeting was held, a list of all persons and public bodies that made oral submissions at the public meeting, and

(iv) if subsection 22 (6.4) of the Act applies, a certificate that the requirements of clause 22 (6.4) (a) of the Act have been complied with. O. Reg. 543/06, s. 14 (1).

(2) An affidavit or sworn declaration for the purposes of paragraph 6 of section 7,

(a) shall be made by,

(i) the clerk, commissioner or director of planning of the municipality or the secretary-treasurer of the planning board, or

(ii) another employee of the municipality or planning board who is designated by a resolution of the municipality or planning board; and

(b) shall certify that the information and material provided as required by paragraph 10 of section 7 is accurate. O. Reg. 543/06, s. 14 (2).

(3) An affidavit or sworn declaration for the purposes of paragraph 4 of section 9,

(a) shall be made by an employee of the approval authority; and

(b) shall certify that the requirement for giving notice of the decision under subsection 17 (35) of the Act has been complied with. O. Reg. 543/06, s. 14 (3).

Transition

15. Despite the revocation of Ontario Regulation 198/96 (Official Plans and Plan Amendments) made under the Act, the following shall be continued and disposed of as if Ontario Regulation 198/96 had not been revoked:

1. Any matter or proceeding that is deemed to have been commenced before May 22, 1996, under section 75 of the Act.

2. Any matter or proceeding that is commenced on or after May 22, 1996 but before the day this Regulation comes into force. O. Reg. 543/06, s. 15.

16. OMITTED (REVOKES OTHER REGULATIONS). O. Reg. 543/06, s. 16.

17. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 543/06, s. 17.

SCHEDULE 1
INFORMATION AND MATERIAL TO BE PROVIDED WITH A REQUEST UNDER SUBSECTION 22 (4) OF THE ACT

1. The name, address, telephone number and, if applicable, the e-mail address of the applicant.

2. The name of the municipality or planning board that is being requested to initiate the amendment to its official plan.

3. The date of the request to the municipality or planning board.

4. The name of the official plan requested to be amended.

5. A description of the subject land, including such information as the municipality, or the geographic township in unorganized territory, concession and lot numbers, reference plan and part numbers, and street names and numbers.

6. If known, the approximate area of the subject land, in metric units.

7. Whether the requested amendment changes, replaces or deletes a policy in the official plan.

8. If the answer to section 7 is yes, the policy to be changed, replaced or deleted.

9. Whether the requested amendment adds a policy to the official plan.

10. The purpose of the requested amendment.

11. The current designation of the subject land in the official plan and the land uses that the designation authorizes.

12. Whether the requested amendment changes or replaces a designation in the official plan.

13. If the requested amendment changes or replaces a designation in the official plan, the designation to be changed or replaced.

14. The land uses that the requested official plan amendment would authorize.

15. Whether water will be provided to the subject land by a publicly owned and operated piped water system, a privately owned and operated individual or communal well, a lake or other water body, or other means.

16. Whether sewage disposal will be provided to the subject land by a publicly owned and operated sanitary sewage system, a privately owned and operated individual or communal septic system, a privy or other means.

17. If the requested amendment would permit development on a privately owned and operated individual or communal septic system and more than 4500 litres of effluent would be produced per day as a result of the development being completed,

(a) a servicing options report; and

(b) a hydrogeological report.

18. Whether the subject land or land within 120 metres of it is the subject of an application by the applicant under the Act for,

(a) a minor variance or a consent;

(b) an amendment to an official plan, a zoning by-law or a Minister's zoning order; or

(c) approval of a plan of subdivision or a site plan.

19. If the answer to section 18 is yes, the following information about each application:

(a) its file number;

(b) the name of the approval authority considering it;

(c) the land it affects;

(d) its purpose;

(e) its status; and

(f) its effect on the requested amendment.

20. If a policy in the official plan is being changed, replaced or deleted or if a policy is being added, the text of the requested amendment.

21. If the requested amendment changes or replaces a schedule in the official plan, the requested schedule and the text that accompanies it.

22. If the requested amendment alters all or any part of the boundary of an area of settlement in a municipality or establishes a new area of settlement in a municipality, the current official plan policies, if any, dealing with the alteration or establishment of an area of settlement.

23. If the requested amendment removes the subject land from an area of employment, the current official plan policies, if any, dealing with the removal of land from an area of employment.

24. Whether the requested amendment is consistent with the policy statements issued under subsection 3 (1) of the Act.

25. Whether the subject land is within an area of land designated under any provincial plan or plans.

26. If the answer to section 25 is yes, whether the requested amendment conforms to or does not conflict with the provincial plan or plans.

27. An affidavit or sworn declaration by the applicant certifying that the information required under this Schedule and provided by the applicant is accurate.

Planning Act

ONTARIO REGULATION 544/06
PLANS OF SUBDIVISION

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Definitions

1. In this Regulation,

"hazard distance" means the distance established as the hazard distance applicable to the propane operation referenced in a risk and safety management plan required under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("distance de danger")

"propane operation" means an operation in respect of which a person is required to prepare a risk and safety management plan under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("installation de propane")

"propane operator" means a person who is required to prepare a risk and safety management plan under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("exploitant d'une installation de propane")

"reserve" means a tract of land, the legal title of which is vested in the Crown in right of Canada, that has been set apart by the Crown for the use and benefit of a First Nation; ("réserve")

"subject land" means the land to which a proposed plan of subdivision applies. ("terrain visé") O. Reg. 544/06, s. 1; O. Reg. 468/09, s. 1.

Information and material to be provided by applicant (s. 51 (17) of Act)

2. The information and material to be provided by an applicant for approval of a plan of subdivision, for the purposes of subsection 51 (17) of the Act, are set out in Schedule 1. O. Reg. 544/06, s. 2.

Notice ("complete application") (s. 51 (19.4) of Act)

3. (1) Section 4 applies, with necessary modifications, to a notice given under subsection 51 (19.4) of the Act. O. Reg. 544/06, s. 3 (1).

(2) The notice referred to in subsection (1) may be given together with notice of an application, notice of a public meeting or both, for the purposes of subsection 51 (20) of the Act, or may be given separately. O. Reg. 544/06, s. 3 (2).

Notice of application for approval of plan of subdivision (s. 51 (20) (a) of Act)

4. (1) Notice of an application for approval of a plan of subdivision under clause 51 (20) (a) of the Act shall be given in the manner described in the following subsections of this section:

1. Subsection (2) or (5).
2. Subsection (7).
3. Subsection (8).
4. Subsection (9). O. Reg. 544/06, s. 4 (1).

(2) Notice shall be given,

(a) by personal service or ordinary mail, to every owner of land within 120 metres of the subject land and every owner of land within 120 metres of land that abuts the subject land and is owned by the same person that owns the subject land; and

(b) by posting a notice, clearly visible and legible from a public highway or other place to which the public has access, at every separately assessed property within the subject land or, if

posting on the property is impractical, at a nearby location chosen by the official described in subsection (6). O. Reg. 544/06, s. 4 (2).

(3) For the purposes of clause (2) (a), the owner of land is deemed to be the person shown on the last revised assessment roll of the municipality or on the current provincial land tax roll at the address shown on the roll but, if the approval authority is a municipality and the clerk of the municipality has received written notice of a change of ownership, the notice shall be given to the new owner instead, at the address set out in the notice. O. Reg. 544/06, s. 4 (3).

(4) For the purposes of clause (2) (a), if a condominium development is located within 120 metres of the subject land, notice may be given to the condominium corporation, according to its most recent address for service or mailing address as registered under section 7 of the *Condominium Act, 1998*, instead of being given to all owners assessed in respect of the condominium development. O. Reg. 544/06, s. 4 (4).

(5) Notice shall be given by publishing it in a newspaper that, in the opinion of the official described in subsection (6), is of sufficiently general circulation in the area adjoining the subject land that it would give the public reasonable notice of the application. O. Reg. 544/06, s. 4 (5).

(6) The official for the purposes of subsections (2) and (5) is,

(a) the clerk of the municipality, if the approval authority is,

(i) the council of the municipality or a committee of the council, or

(ii) an appointed officer;

(b) the secretary-treasurer of the municipal planning authority, if the approval authority is,

(i) a municipal planning authority or a committee of the authority, or

(ii) an appointed officer;

(c) the secretary-treasurer of the planning board, if the approval authority is a planning board; and

(d) an employee of the Ministry of Municipal Affairs and Housing, if the approval authority is the Minister. O. Reg. 544/06, s. 4 (6).

(7) Every person and public body that has given the approval authority a written request for a notice to which this section applies (including the person's or public body's address) shall be given notice by personal service, ordinary mail or fax. O. Reg. 544/06, s. 4 (7).

(8) Notice shall be given, by personal service, ordinary mail or fax, to all the following persons and public bodies except those who have notified the approval authority that they do not wish to receive notice:

1. The clerk of every local municipality or the secretary-treasurer of every municipal planning authority or planning board having jurisdiction in the area to which the plan of subdivision would apply.
2. The clerk of every upper-tier municipality having jurisdiction in the area to which the plan of subdivision would apply.
3. The secretary of every school board having jurisdiction in the area to which the plan of subdivision would apply.
4. The secretary-treasurer of every conservation authority having jurisdiction in the area to which the plan of subdivision would apply.

5. The secretary of every municipal or other corporation operating an electric utility in the local municipality or planning area to which the plan of subdivision would apply.
6. The Executive Vice-President, Law and Development, of Ontario Power Generation Inc.
7. The secretary of Hydro One Inc.
8. The secretary of every company operating a natural gas utility in the local municipality or planning area to which the plan of subdivision would apply.
9. The secretary of every company operating an oil or natural gas pipeline in the local municipality or planning area to which the plan of subdivision would apply.

9.1 Every propane operator of a propane operation, if,

   i. any part of the propane operation's hazard distance is within the area to which the plan of subdivision would apply, and

   ii. the approval authority has been notified of the propane operation's hazard distance by a director appointed under section 4 of the *Technical Standards and Safety Act, 2000*.

10. If any of the subject land is within 300 metres of a railway line, the secretary of the company operating the railway line.
11. The secretary of every company operating as a telecommunication infrastructure provider in the area to which the plan of subdivision would apply.
12. The chair or secretary of the municipal heritage committee of the municipality, if any, if the land to which the plan of subdivision would apply includes or adjoins a property or district designated under Part IV or V of the *Ontario Heritage Act*.
13. If any of the subject land is within or abuts the area covered by the Niagara Escarpment Plan, the senior planner of the district office of the Niagara Escarpment Commission having jurisdiction over that land or the area that it abuts, as the case may be.
14. The Niagara Parks Commission, if any of the subject land adjoins the Niagara Parkway and is in the jurisdiction of the Niagara Parks Commission.
15. The St. Lawrence Parks Commission, if any of the subject land adjoins the 1000 Islands Parkway and is within the jurisdiction of the St. Lawrence Parks Commission under section 9 of the *St. Lawrence Parks Commission Act*.
16. Parks Canada, if any of the subject land adjoins a historic site, park or historic canal under the jurisdiction of Parks Canada.
17. The clerk of every municipality and the secretary-treasurer of every municipal planning authority or planning board, if any part of the municipality, municipal planning area or planning area is within one kilometre of the area to which the plan of subdivision would apply.
18. The chief of every First Nation council, if the First Nation is located on a reserve any part of which is within one kilometre of the area covered by the proposed plan of subdivision. O. Reg. 544/06, s. 4 (8); O. Reg. 468/09, ss. 2, 3.

(9) If the approval authority of a proposed plan of subdivision is not the Minister, notice shall be given, by personal service, ordinary mail or fax, to the regional director of the Ministry of Municipal Affairs and Housing Municipal Services Office responsible for the region that includes the municipality or planning area where the subject land is located, if the regional director has

given the approval authority a written request to be given notice of applications for approval of plans of subdivision. O. Reg. 544/06, s. 4 (9).

(10) A notice, other than a notice that is given by posting as described in clause (2) (b), shall include the following:

1. A description of the proposed plan of subdivision.
2. A description of the land or a key map showing the location of the land proposed to be subdivided.
3. Where and when additional information regarding the proposed plan of subdivision will be available to the public for inspection.
4. The following statements:
   i. If a person or public body does not make oral submissions at a public meeting, if one is held, or make written submissions to (*name of the approval authority*) in respect of the proposed plan of subdivision before the approval authority gives or refuses to give approval to the draft plan of subdivision, the person or public body is not entitled to appeal the decision of (*name of the approval authority*) to the Ontario Municipal Board.
   ii. If a person or public body does not make oral submissions at a public meeting, if one is held, or make written submissions to (*name of the approval authority*) in respect of the proposed plan of subdivision before the approval authority gives or refuses to give approval to the draft plan of subdivision, the person or public body may not be added as a party to the hearing of an appeal before the Ontario Municipal Board unless, in the opinion of the Board, there are reasonable grounds to do so.
5. The following statement:
   i. If you wish to be notified of the decision of (*name of the approval authority*) in respect of the proposed plan of subdivision, you must make a written request to (*name and address of the approval authority*).
6. If it is known that the land proposed to be subdivided is the subject of an application under the Act for a minor variance or for an amendment to an official plan, a zoning by-law or a Minister's zoning order, a statement of that fact and the file number of the application. O. Reg. 544/06, s. 4 (10).

(11) A notice given to the persons and public bodies set out in subsections (8) and (9) shall also include a copy of the application. O. Reg. 544/06, s. 4 (11).

(12) A notice that is given by posting as described in clause (2) (b) shall include the following:

1. A description of the proposed plan of subdivision.
2. Where and when additional information and material regarding the proposed plan of subdivision will be available to the public for inspection.
3. How to obtain a copy of the notice described in subsection (10). O. Reg. 544/06, s. 4 (12).

Public meeting (s. 51 (20) (b) of Act)

5. (1) If the land that is the subject of an application for approval of a plan of subdivision under subsection 51 (16) of the Act is located in a municipality or in the planning area of a planning board, the approval authority shall ensure that a public meeting is held under clause 51 (20) (b) of the Act. O. Reg. 544/06, s. 5 (1).

(2) The public meeting shall be held no sooner than 14 days after the requirements for giving notice of the meeting have been complied with. O. Reg. 544/06, s. 5 (2).

(3) Subsections 4 (1) to (9) apply, with necessary modifications, to giving notice of a public meeting under subsection (1). O. Reg. 544/06, s. 5 (3).

(4) A notice, other than a notice that is given by posting as described in clause 4 (2) (b), shall include the following:

1. The date, time and location of the public meeting.
2. A description of the proposed plan of subdivision.
3. A description of the land or a key map showing the location of the land proposed to be subdivided.
4. The following statements:
   i. If a person or public body does not make oral submissions at the public meeting or make written submissions to (*name of the approval authority*) in respect of the proposed plan of subdivision before the approval authority gives or refuses to give approval to the draft plan of subdivision, the person or public body is not entitled to appeal the decision of (*name of the approval authority*) to the Ontario Municipal Board.
   ii. If a person or public body does not make oral submissions at the public meeting or make written submissions to (*name of the approval authority*) in respect of the proposed plan of subdivision before the approval authority gives or refuses to give approval to the draft plan of subdivision, the person or public body may not be added as a party to the hearing of an appeal before the Ontario Municipal Board unless, in the opinion of the Board, there are reasonable grounds to do so. O. Reg. 544/06, s. 5 (4).

(5) A notice that is given by posting as described in clause 4 (2) (b) shall include the following:

1. The date, time and location of the public meeting.
2. A description of the proposed plan of subdivision.
3. Where and when additional information and material regarding the proposed plan of subdivision will be available to the public for inspection.
4. How to obtain a copy of the notice described in subsection (4). O. Reg. 544/06, s. 5 (5).

Request by approval authority (s. 51 (21) of Act)

6. (1) This section applies if an approval authority makes a request to a local municipality or planning board under subsection 51 (21) of the Act. O. Reg. 544/06, s. 6 (1).

(2) If the approval authority requests that the local municipality or planning board give notice of an application for approval of a plan of subdivision,

(a) the notice shall include, if the approval authority so directs, a request to submit any written comments to the approval authority; and

(b) the local municipality or planning board shall submit to the approval authority,

(i) a certified copy of the notice described in subsection 5 (4), and

(ii) an affidavit or sworn declaration by an employee of the local municipality or planning board certifying that the notice requirements under clause 51 (20) (a) of the Act have been complied with. O. Reg. 544/06, s. 6 (2).

(3) If the approval authority requests that the local municipality or planning board hold a public meeting, the local municipality or planning board shall submit to the approval authority,

(a) the original or a copy of all written submissions and comments received by the local municipality or the planning board on or before the day the public meeting was held;

(b) an affidavit or sworn declaration by an employee of the local municipality or planning board certifying that the notice requirements and the requirement for holding a public meeting under clause 51 (20) (b) of the Act have been complied with;

(c) an affidavit or sworn declaration by an employee of the local municipality or planning board listing all persons and public bodies that made oral submissions at the public meeting; and

(d) a copy of the minutes of the public meeting. O. Reg. 544/06, s. 6 (3).

Condominiums

7. Sections 3 to 6 do not apply to an application for approval of a condominium description, other than an application for approval of a vacant land condominium description or a common elements condominium description. O. Reg. 544/06, s. 7; O. Reg. 468/09, s. 4.

Record compiled by approval authority for O.M.B. (s. 51 (35) (a) of Act)

8. A record compiled by the approval authority and forwarded to the Municipal Board under clause 51 (35) (a) of the Act shall include the following:

1. The original or a certified copy of the application received by the approval authority.
2. The original or a certified copy of the prescribed information and material received by the approval authority under subsection 51 (17) of the Act.
3. If applicable, the original or certified copy of any other information and material that the applicant was required to provide to the approval authority.
4. The original or a certified copy of the notice of appeal and the date it was received.
5. The original or a copy of all written submissions and comments received, and the date they were received.
6. If the local municipality or planning board gave notice of the application, the original or a certified copy of the affidavit or sworn declaration described in subclause 6 (2) (b) (ii).
7. If the approval authority gave notice of the application, an affidavit or sworn declaration of an employee of the approval authority certifying that the notice requirements under clause 51 (20) (a) of the Act have been complied with.
8. If the local municipality or planning board held the public meeting, the affidavits or sworn declarations described in clauses 6 (3) (b) and (c).
9. If the approval authority held the public meeting,
    i. an affidavit or sworn declaration of an employee of the approval authority certifying that the notice requirements and the requirement for holding a public meeting under clause 51 (20) (b) of the Act have been complied with, and
    ii. an affidavit or sworn declaration of an employee of the approval authority listing all persons and public bodies that made oral submissions at the public meeting.
10. A copy of the minutes of the public meeting.

11. A copy of any planning report considered by the approval authority. O. Reg. 544/06, s. 8.

Notice of approval authority's decision (s. 51 (37) of Act)

9. (1) Notice of the approval authority's decision under subsection 51 (37) of the Act shall include the following:

1. A copy of the decision, including the conditions and the lapsing provision, if any.
2. The last date for filing a notice of appeal, and a statement that the notice of appeal,
   i. must be filed with the approval authority,
   ii. must set out the reasons for the appeal, and
   iii. must be accompanied by the fee required by the Municipal Board.
3. A statement that any of the following may, at any time before the approval of the final plan of subdivision, appeal any of the conditions imposed by the approval authority to the Municipal Board by filing a notice of appeal with the approval authority:
   i. the applicant,
   ii. any public body that, before the approval authority made its decision, made oral submissions at a public meeting or written submissions to the approval authority,
   iii. the Minister,
   iv. the municipality in which the subject land is located, or the planning board in whose planning area it is located,
   v. if the subject land is not located in a municipality or planning area, any public body.
4. If applicable, the following statements:
   i. You will be entitled to receive notice of any changes to the conditions of approval of the proposed plan of subdivision if you have made a written request to be notified of changes to the conditions.
   ii. No person or public body shall be added as a party to the hearing of an appeal regarding any changes to the conditions of approval unless the person or public body, before the approval authority made its decision, made oral submissions at a public meeting or written submissions to the approval authority, or made a written request to be notified of the changes to the conditions.
5. The following statements:
   i. Only individuals, corporations or public bodies may appeal decisions in respect of a proposed plan of subdivision to the Ontario Municipal Board. A notice of appeal may not be filed by an unincorporated association or group. However, a notice of appeal may be filed in the name of an individual who is a member of the association or group on its behalf.
   ii. No person or public body shall be added as a party to the hearing of the appeal of the decision of the approval authority, including the lapsing provisions or the conditions, unless the person or public body, before the decision of the approval authority, made oral submissions at a public meeting or written submissions to the council or, in the Ontario Municipal Board's opinion, there are reasonable grounds to add the person or public body as a party.

6. If it is known that the subject land is the subject of an application under the Act for a minor variance or for an amendment to an official plan, a zoning by-law or a Minister's zoning order, a statement of that fact and the file number of the application. O. Reg. 544/06, s. 9 (1).

(2) If the approval authority of a proposed plan of subdivision is not the Minister, notice of the decision of the approval authority under subsection 51 (37) of the Act shall be given, by personal service, ordinary mail or fax, to the regional director of the Ministry of Municipal Affairs and Housing Municipal Services Office responsible for the region that includes the municipality or planning area where the subject land is located, if the regional director has given the approval authority a written request to be given notice of its decisions on applications for approval of plans of subdivision. O. Reg. 544/06, s. 9 (2).

Notice of changes to conditions of draft approval (s. 51 (45) of Act)

10. (1) Notice of changes to the conditions of draft approval of a plan of subdivision under subsection 51 (45) of the Act shall include the following:

1. A copy of the proposed changes to the conditions of draft approval.
2. A statement that any of the following may, at any time before the approval of the final plan of subdivision, appeal any of the conditions of draft approval to the Municipal Board by filing a notice of appeal with the approval authority:
   i. the applicant,
   ii. any public body that, before the approval authority made its decision, made oral submissions at a public meeting or written submissions to the approval authority,
   iii. the Minister,
   iv. the municipality in which the subject land is located, or the planning board in whose planning area it is located,
   v. if the subject land is not located in a municipality or planning area, any public body.
3. The last date for filing a notice of appeal, and a statement that the notice of appeal,
   i. must be filed with the approval authority,
   ii. must set out the reasons for the appeal, and
   iii. must be accompanied by the fee required by the Municipal Board.
4. The following statements:
   i. Only individuals, corporations or public bodies may appeal decisions in respect of a proposed plan of subdivision to the Ontario Municipal Board. A notice of appeal may not be filed by an unincorporated association or group. However, a notice of appeal may be filed in the name of an individual who is a member of the association or group on its behalf.
   ii. No person or public body shall be added as a party to the hearing of an appeal regarding any changed conditions imposed by the approval authority, unless the person or public body, before the approval authority made its decision, made oral submissions at a public meeting or written submissions to the approval authority, or made a written request to be notified of the changes to the conditions. O. Reg. 544/06, s. 10 (1).

(2) If the approval authority of a proposed plan of subdivision is not the Minister, notice of changes to the conditions of approval of a plan of subdivision under subsection 51 (45) of the Act

shall be given, by personal service, ordinary mail or fax, to the regional director of the Ministry of Municipal Affairs and Housing Municipal Services Office responsible for the region that includes the municipality or planning area where the subject land is located, if the regional director has given the approval authority a written request to be given notice of changes to the conditions of approval of plans of subdivision. O. Reg. 544/06, s. 10 (2).

Record compiled by approval authority for O.M.B. (s. 51 (50) (a) of Act)

11. A record compiled by the approval authority and forwarded to the Municipal Board under clause 51 (50) (a) of the Act shall include the following:

1. The information and material set out in section 8.
2. A copy of the decision of the approval authority, including the conditions and the lapsing provision, if any.
3. A statement by an employee of the approval authority as to whether the decision of the approval authority,
   i. is consistent with the policy statements issued under subsection 3 (1) of the Act,
   ii. conforms to or does not conflict with any applicable provincial plan or plans, and
   iii. conforms to the official plan of the municipality or planning board.
4. If applicable, an affidavit or sworn declaration by an employee of the approval authority certifying that the notice requirements under subsection 51 (37) of the Act have been complied with.
5. If applicable, a copy of the proposed changes to the conditions of draft approval.
6. If applicable, an affidavit or sworn declaration by an employee of the approval authority certifying that the notice requirements under subsection 51 (45) of the Act have been complied with. O. Reg. 544/06, s. 11.

Transition

12. Despite the revocation of Ontario Regulation 196/96 (Plans of Subdivision) made under the Act, the following shall be continued and disposed of as if Ontario Regulation 196/96 had not been revoked:

1. Any matter or proceeding that is deemed to have been commenced before May 22, 1996, under section 75 of the Act.
2. Any matter or proceeding that is commenced on or after May 22, 1996 but before the day this Regulation comes into force. O. Reg. 544/06, s. 12.

13. OMITTED (REVOKES OTHER REGULATIONS). O. Reg. 544/06, s. 13.

14. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 544/06, s. 14.

SCHEDULE 1
INFORMATION AND MATERIAL TO BE PROVIDED WITH AN APPLICATION UNDER SUBSECTION 51 (17) OF THE ACT

1. The name, address, telephone number and, if applicable, the e-mail address of the owner of the subject land, and of the agent if the applicant is the owner's authorized agent.

2. The date of the application.

3. A description of the subject land, including such information as the municipality, or the geographic township in unorganized territory, concession and lot numbers, reference plan and part numbers, and street names and numbers.

4. Whether there are any easements or restrictive covenants affecting the subject land.

5. If the answer to section 4 is yes, a description of each easement or covenant and its effect.

6. If known,

(a) whether the subject land was ever the subject of an application for approval of a plan of subdivision under section 51 of the Act, for a consent under section 53 of the Act, for a minor variance, for approval of a site plan, or for an amendment to an official plan, a zoning by-law or a Minister's zoning order; and

(b) if the answer to clause (a) is yes, the file number and status of the application.

7. The total number of lots or blocks shown on the draft plan, and the number of lots or blocks shown on the draft plan for each of the following uses:

1. Detached residential.
2. Semi-detached residential.
3. Multiple attached residential.
4. Apartment residential.
5. Seasonal residential.
6. Mobile home.
7. Other residential.
8. Commercial.
9. Industrial.
10. Institutional.
11. Park or open space.
12. Roads.
13. Other.

8. The total number of units or dwellings shown on the draft plan, and the number of units or dwellings shown on the draft plan for each of the uses listed in section 7, except the uses described in paragraphs 11 and 12 of that section.

9. In hectares, the total area of land shown on the draft plan, and the area of land shown on the draft plan for each of the uses listed in section 7.

10. The total number of units or dwellings shown on the draft plan per hectare, and the number of units or dwellings shown on the draft plan per hectare for each of the uses listed in section 7, except the uses described in paragraphs 11 and 12 of that section.

11. The total number of parking spaces shown on the draft plan, and the number of parking spaces shown on the draft plan for each of the uses listed in section 7, except the uses described in paragraphs 1, 2, 11 and 12 of that section.

12. If the application is for approval of a condominium description, the number of parking spaces shown on the draft plan for detached and semi-detached residential use.

13. If one of the uses referred to under section 7, 8, 9, 10 or 11 is identified as "other residential", "institutional" or "other", a description of the use.

14. The current designation of the subject land in the applicable official plan.

15. Whether access to the subject land will be,

(a) by a provincial highway, a municipal road that is maintained all year or seasonally, another public road or a right of way; or

(b) by water.

16. If access to the subject land will be by water only, the parking and docking facilities to be used and the approximate distance of these facilities from the subject land and the nearest public road.

17. Whether water will be provided to the subject land by a publicly owned and operated piped water system, a privately owned and operated individual or communal well, a lake or other water body or other means.

18. If the plan would permit development of more than five lots or units on privately owned and operated individual or communal wells,

(a) a servicing options report; and

(b) a hydrogeological report.

19. Whether sewage disposal will be provided to the subject land by a publicly owned and operated sanitary sewage system, a privately owned and operated individual or communal septic system or other means.

20. If the plan would permit development of five or more lots or units on privately owned and operated individual or communal septic systems,

(a) a servicing options report; and

(b) a hydrogeological report.

21. If the plan would permit development of fewer than five lots or units on privately owned and operated individual or communal septic systems, and more than 4500 litres of effluent would be produced per day as a result of the development being completed,

(a) a servicing options report; and

(b) a hydrogeological report.

22. If the plan would permit development of fewer than five lots or units on privately owned and operated individual or communal septic systems, and 4500 litres of effluent or less would be produced per day as a result of the development being completed, a hydrogeological report.

23. Whether the subject land contains any areas of archaeological potential.

24. If the plan would permit development on land that contains known archaeological resources or areas of archaeological potential,

(a) an archaeological assessment prepared by a person who holds a licence that is effective with respect to the subject land, issued under Part VI (Conservation of Resources of Archaeological Value) of the *Ontario Heritage Act*; and

(b) a conservation plan for any archaeological resources identified in the assessment.

25. Whether storm drainage will be provided by sewers, ditches, swales or other means.

26. If the application is for approval of a condominium description,

(a) whether a site plan for the proposed condominium has been approved and whether a site plan agreement has been entered into;

(b) whether a building permit for the proposed condominium has been issued;

(c) whether the proposed condominium is under construction or has been completed;

(d) if construction has been completed, the date of completion; and

(e) whether the proposed condominium is a conversion of a building containing residential rental units, and in that case the number of units to be converted.

27. Whether the plan is consistent with policy statements issued under subsection 3 (1) of the Act.

28. Whether the subject land is within an area of land designated under any provincial plan or plans.

29. If the answer to section 28 is yes, whether the plan conforms to or does not conflict with the applicable provincial plan or plans.

30. If the applicant is not the owner of the subject land, the owner's written authorization to the applicant to make the application.

31. An affidavit or sworn declaration by the applicant that the information required under this Schedule and provided by the applicant is accurate.

O. Reg. 544/06, Sched. 1.

Français

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PLANNING ACT

ONTARIO REGULATION 545/06
ZONING BY-LAWS, HOLDING BY-LAWS AND INTERIM CONTROL BY-LAWS

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Definitions

1. In this Regulation,

"hazard distance" means the distance established as the hazard distance applicable to the propane operation referenced in a risk and safety management plan required under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("distance de danger")

"propane operation" means an operation in respect of which a person is required to prepare a risk and safety management plan under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("installation de propane")

"propane operator" means a person who is required to prepare a risk and safety management plan under Ontario Regulation 211/01 (Propane Storage and Handling) made under the *Technical Standards and Safety Act, 2000*; ("exploitant d'une installation de propane")

"reserve" means a tract of land, the legal title of which is vested in the Crown in right of Canada, that has been set apart by the Crown for the use and benefit of a First Nation; ("réserve")

"subject land" means the land to which a by-law, proposed by-law or proposed by-law amendment applies. ("terrain visé") O. Reg. 545/06, s. 1; O. Reg. 470/09, s. 1.

Information and material — application to amend zoning by-law (s. 34 (10.1) of Act)

2. The information and material to be provided by an applicant under subsection 34 (10.1) of the Act are set out in Schedule 1. O. Reg. 545/06, s. 2.

Notice ("complete application") (s. 34 (10.7) (a) of Act)

3. (1) Section 5 applies, with necessary modifications, to a notice given under clause 34 (10.7) (a) of the Act. O. Reg. 545/06, s. 3 (1).

(2) The notice referred to in subsection (1) may be given together with notice of a public meeting, notice of an open house or both, for the purposes of subsection 34 (13) of the Act, or may be given separately. O. Reg. 545/06, s. 3 (2).

Notice of refusal of application to amend zoning by-law (s. 34 (10.9) of Act)

4. Notice of the refusal of an application to amend a zoning by-law under subsection 34 (10.9) of the Act shall include the following:

1. An explanation of the purpose and effect of the application.
2. A statement that the council or planning board has made a decision to refuse the application, including the date of the refusal.
3. A written explanation for the refusal.
4. The last date for filing a notice of appeal, and a statement that the notice of appeal,
   i. must be filed with the clerk of the municipality or the secretary-treasurer of the planning board, as the case may be,
   ii. must be accompanied by the fee required by the Municipal Board, and
   iii. must set out the reasons for the appeal.
5. The following statement:

The decision of the (*reference to council and name of municipality, or name of planning board*) is final if a notice of appeal is not received before or on the last day for filing a notice of appeal. O. Reg. 545/06, s. 4.

Notice of public meeting and open house re proposed zoning by-law (s. 34 (13) of Act)

5. (1) This section applies to notice of a public meeting and to notice of an open house, if any, for the purposes of subsection 34 (13) of the Act. O. Reg. 545/06, s. 5 (1).

(2) Notice of a public meeting and notice of an open house may be given together or separately. O. Reg. 545/06, s. 5 (2).

(3) Notice shall be given in the manner described in the following subsections of this section:

1. Subsection (4) or (7).
2. Subsection (8).
3. Subsection (9).
4. Subsection (10). O. Reg. 545/06, s. 5 (3).

(4) Notice shall be given,

(a) by personal service or ordinary mail, to every owner of land within 120 metres of the subject land, subject to subsections (5) and (6); and

(b) by posting a notice, clearly visible and legible from a public highway or other place to which the public has access, at every separately assessed property within the subject land or, if posting on the property is impractical, at a nearby location chosen by the clerk of the municipality or the secretary-treasurer of the planning board. O. Reg. 545/06, s. 5 (4).

(5) For the purposes of clause (4) (a), the owner of land is deemed to be the person shown on the last revised assessment roll of the municipality or on the current provincial land tax roll at the address shown on the roll, but if the land is in a municipality and the clerk of the municipality has received written notice of a change of ownership, the notice shall be given to the new owner instead, at the address set out in the notice of change of ownership. O. Reg. 545/06, s. 5 (5).

(6) For the purposes of clause (4) (a), if a condominium development is located within 120 metres of the subject land, notice may be given to the condominium corporation, according to its most recent address for service or mailing address as registered under section 7 of the *Condominium Act, 1998*, instead of being given to all owners assessed in respect of the condominium development. O. Reg. 545/06, s. 5 (6).

(7) Notice shall be given by publishing a notice in a newspaper that, in the opinion of the clerk of the municipality or the secretary-treasurer of the planning board, is of sufficiently general circulation in the area to which the proposed by-law would apply that it would give the public reasonable notice of the public meeting or open house, as the case may be. O. Reg. 545/06, s. 5 (7).

(8) Every person and public body that has given the clerk of the municipality or the secretary-treasurer of the planning board a written request for a notice to which this section applies (including the person's or public body's address) shall be given notice by personal service, ordinary mail or fax. O. Reg. 545/06, s. 5 (8).

(9) Notice shall be given, by personal service, ordinary mail or fax, to all the following persons and public bodies, except those who have notified the clerk of the municipality or the secretary-treasurer of the planning board that they do not wish to receive notice:

1. The clerk of every upper-tier municipality having jurisdiction in the area to which the proposed by-law would apply.
2. The clerk of the lower-tier municipality to which the proposed by-law would apply, if the notice is given by the County of Oxford.
3. The secretary-treasurer of every planning board or municipal planning authority having jurisdiction in the area to which the proposed by-law would apply.
4. The secretary of every school board having jurisdiction in the area to which the proposed by-law would apply.
5. The secretary-treasurer of every conservation authority having jurisdiction in the area to which the proposed by-law would apply.
6. The secretary of every municipal or other corporation operating an electric utility in the local municipality or planning area to which the proposed by-law would apply.
7. The secretary of every company operating a natural gas utility in the local municipality or the planning area to which the proposed by-law would apply.
8. The Executive Vice-President, Law and Development, of Ontario Power Generation Inc.
9. The secretary of Hydro One Inc.
10. The secretary of every company operating an oil or natural gas pipeline in the local municipality or the planning area to which the proposed by-law would apply.

10.1 Every propane operator of a propane operation, if,

   i. any part of the propane operation's hazard distance is within the area to which the proposed by-law would apply, and

   ii. the clerk of the municipality or the secretary-treasurer of the planning board has been notified of the propane operation's hazard distance by a director appointed under section 4 of the *Technical Standards and Safety Act, 2000*.

11. If any of the land to which the proposed by-law would apply is within 300 metres of a railway line, the secretary of the company operating the railway line.
12. The chair or secretary of the municipal heritage committee of the municipality, if any, if the land to which the proposed by-law would apply includes or adjoins a property or district designated under Part IV or V of the *Ontario Heritage Act*.
13. If any of the land to which the proposed by-law would apply is within or abuts the area covered by the Niagara Escarpment Plan, the senior planner of the district office of the Niagara Escarpment Commission having jurisdiction over that land or the abutted area, as the case may be.
14. Parks Canada, if any of the land to which the proposed by-law would apply adjoins a historic site, park or historic canal under the jurisdiction of Parks Canada.
15. The Niagara Parks Commission, if any of the land to which the proposed by-law would apply adjoins the Niagara Parkway or is in the jurisdiction of the Niagara Parks Commission.
16. The St. Lawrence Parks Commission, if any part of the land to which the proposed by-law would apply adjoins the 1000 Islands Parkway and is in the jurisdiction of the St. Lawrence Parks Commission under section 9 of the *St. Lawrence Parks Commission Act*.

17. The clerk of every municipality and the secretary-treasurer of every municipal planning authority or planning board if any part of the municipality, municipal planning area or planning area is within one kilometre of the land to which the proposed by-law would apply.

18. The chief of every First Nation council, if the First Nation is located on a reserve any part of which is within one kilometre of the area to which the proposed by-law would apply. O. Reg. 545/06, s. 5 (9); O. Reg. 470/09, ss. 2, 3.

(10) Notice shall be given, by personal service, ordinary mail or fax, to the regional director of the Ministry of Municipal Affairs and Housing Municipal Services Office responsible for the region that includes the municipality or planning area where the subject land is located, if the regional director has given the clerk of the municipality or the secretary-treasurer of the planning board a written request to be given notice of open houses and public meetings. O. Reg. 545/06, s. 5 (10).

(11) A notice, other than a notice that is given by posting as described in clause (4) (b), shall include the following:

1. The date, time and location of the public meeting or open house.
2. An explanation of the purpose and effect of the proposed by-law.
3. A description of the subject land, a key map showing the subject land, or an explanation why no description or key map is provided.
4. Where and when additional information and material about the proposed by-law will be available to the public for inspection.
5. The following statements:
   i. If a person or public body does not make oral submissions at a public meeting or make written submissions to (*name of municipality or planning board*) before the by-law is passed, the person or public body is not entitled to appeal the decision of (*reference to council and name of municipality, or name of planning board*) to the Ontario Municipal Board.
   ii. If a person or public body does not make oral submissions at a public meeting, or make written submissions to (*name of municipality or planning board*) before the by-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Ontario Municipal Board unless, in the opinion of the Board, there are reasonable grounds to do so.
6. If it is known that the subject land is the subject of an application under the Act for a minor variance or a consent, for an amendment to an official plan or a Minister's zoning order, or for approval of a plan of subdivision, a statement of that fact and the file number of the application. O. Reg. 545/06, s. 5 (11).

(12) A notice that is given by posting as described in clause (4) (b) shall include the following:

1. The date, time and location of the public meeting or open house.
2. An explanation of the purpose and effect of the proposed by-law.
3. Where and when additional information and material about the proposed by-law will be available to the public for inspection.
4. How to obtain a copy of the notice described in subsection (11). O. Reg. 545/06, s. 5 (12).

Notice of passing of zoning by-law (s. 34 (18) of Act)

6. (1) Notice of the passing of a zoning by-law under subsection 34 (18) of the Act shall be given in the manner described in the following subsections of this section:

1. Subsection (2) or (3).
2. Subsection (6).
3. Subsection (7).
4. Subsection (8). O. Reg. 545/06, s. 6 (1).

(2) Notice shall be given by publishing a notice in a newspaper that, in the opinion of the clerk of the municipality or the secretary-treasurer of the planning board, is of sufficiently general circulation in the area where the subject land is located that it would give the public reasonable notice of the passing of the by-law. O. Reg. 545/06, s. 6 (2).

(3) Notice shall be given by personal service or ordinary mail to every owner of land within 120 metres of the subject land, subject to subsections (4) and (5). O. Reg. 545/06, s. 6 (3).

(4) For the purposes of subsection (3), the owner of land is deemed to be the person shown on the last revised assessment roll of the municipality or on the current provincial land tax roll at the address shown on the roll but, if the land is in a municipality and the clerk of the municipality has received written notice of a change of ownership, the notice shall be given instead to the new owner at the address set out in the notice of change of ownership. O. Reg. 545/06, s. 6 (4).

(5) For the purposes of subsection (3), if a condominium development is located within 120 metres of the subject land, notice may be given to the condominium corporation, according to its most recent address for service or mailing address as registered under section 7 of the *Condominium Act*, *1998*, instead of being given to all owners assessed in respect of the condominium development. O. Reg. 545/06, s. 6 (5).

(6) Every person and public body that has given the clerk of the municipality or the secretary-treasurer of the planning board a written request for a notice to which this section applies (including the person's or public body's address) shall be given notice by personal service, ordinary mail or fax. O. Reg. 545/06, s. 6 (6).

(7) Notice shall be given, by personal service, ordinary mail or fax, to all the following persons and public bodies except those who have notified the clerk of the municipality or the secretary-treasurer of the planning board that they do not wish to receive notice:

1. The clerk of the upper-tier municipality, if the by-law is passed by the council of a local municipality that forms part of an upper-tier municipality.
2. The clerk of the lower-tier municipality to which the by-law applies, if it is passed by the County of Oxford.
3. The secretary-treasurer of every planning board or municipal planning authority having jurisdiction in the area where the subject land is located. O. Reg. 545/06, s. 6 (7).

(8) Notice shall be given, by personal service, ordinary mail or fax, to the regional director of the Ministry of Municipal Affairs and Housing Municipal Services Office responsible for the region that includes the municipality or planning area where the subject land is located, if the regional director has given the clerk of the municipality or the secretary-treasurer of the planning board a written request to be given notice of the passing of by-laws under section 34 of the Act. O. Reg. 545/06, s. 6 (8).

(9) A notice shall include the following:

1. An explanation of the purpose and effect of the by-law.

2. The number of the by-law and the date it was passed.
3. A description of the subject land, a key map showing the subject land, or an explanation why no description or key map is provided.
4. The last date for filing a notice of appeal, and a statement that the notice of appeal,
   i. must be filed with the clerk of the municipality or the secretary-treasurer of the planning board,
   ii. must set out the reasons for the appeal, and
   iii. must be accompanied by the fee required by the Municipal Board.
5. The following statements:
   i. Only individuals, corporations and public bodies may appeal a by-law to the Ontario Municipal Board. A notice of appeal may not be filed by an unincorporated association or group. However, a notice of appeal may be filed in the name of an individual who is a member of the association or the group on its behalf.
   ii. No person or public body shall be added as a party to the hearing of the appeal unless, before the by-law was passed, the person or public body made oral submissions at a public meeting or written submissions to the council or, in the opinion of the Ontario Municipal Board, there are reasonable grounds to add the person or public body as a party.
6. If it is known that the subject land is the subject of an application under the Act for a consent, for an amendment to an official plan or a Minister's zoning order, or for approval of a plan of subdivision, a statement of that fact and the file number of the application. O. Reg. 545/06, s. 6 (9).

(10) A notice given under subsection (7) or (8) shall also include a copy of the by-law. O. Reg. 545/06, s. 6 (10).

Record compiled by clerk for O.M.B. (s. 34 (23) of Act)

7. (1) A record compiled by the clerk of the municipality or secretary-treasurer of the planning board and forwarded to the Municipal Board under subsection 34 (23) of the Act shall include the following:

1. If applicable, a certified copy of the by-law.
2. If applicable, a certified copy of the notice of the refusal to amend the by-law.
3. The original or a certified copy of the notice of appeal and the date it was received by the municipality or planning board.
4. The original or a copy of all written submissions and comments and the dates they were received.
5. An affidavit or sworn declaration in accordance with subsection (2).
6. A statement by an employee of the municipality or planning board as to whether the decision of the council or planning board,
   i. is consistent with the policy statements issued under subsection 3 (1) of the Act,
   ii. conforms to or does not conflict with any applicable provincial plan or plans, and
   iii. conforms to the official plan of the municipality or planning board.
7. If a public meeting was held, a copy of the minutes.

8. A copy of any planning report considered by the council or planning board.

9. The original or a certified copy of the prescribed information and material received by the council or planning board under subsection 34 (10.1) of the Act.

10. The original or a certified copy of any other information and material that is required to be provided by the official plan of the municipality or planning board. O. Reg. 545/06, s. 7 (1).

(2) The affidavit or sworn declaration for the purposes of paragraph 5 of subsection (1),

(a) shall be made by an employee of the municipality or planning board; and

(b) shall contain,

(i) a certificate that the requirements for giving notice and holding public meetings and open houses, if required, or the alternative measures for informing and obtaining the views of the public set out in the official plan have been complied with,

(ii) a certificate that any requirements for giving notice of the passing of the by-law have been complied with,

(iii) if a public meeting was held, a list of all persons and public bodies that made oral submissions at a public meeting, and

(iv) if subsection 34 (10.7) of the Act applies, a certificate that the requirements of clause 34 (10.7) (a) of the Act have been complied with. O. Reg. 545/06, s. 7 (2).

Notice of intention to pass amending by-law to remove holding symbol (s. 36 (4) of Act)

8. (1) Notice of an intention to pass an amending by-law to remove a holding symbol from a zoning by-law under subsection 36 (4) of the Act shall be given in the manner described in the following subsections of this section:

1. Subsection (2) or (3).

2. Subsection (6). O. Reg. 545/06, s. 8 (1).

(2) Notice shall be given by publishing a notice in a newspaper that, in the opinion of the clerk of the municipality or the secretary-treasurer of the planning board, is of sufficiently general circulation in the area where the subject land is located to give the public reasonable notice of the intention of the council or planning board. O. Reg. 545/06, s. 8 (2).

(3) Notice shall be given by personal service or ordinary mail to every owner of land in the area where the subject land is located, subject to subsections (4) and (5). O. Reg. 545/06, s. 8 (3).

(4) For the purposes of subsection (3), the owner of land is deemed to be the person shown on the last revised assessment roll of the municipality or on the current provincial land tax roll at the address shown on the roll but, if the land is in a municipality and the clerk of the municipality has received written notice of a change of ownership, the notice shall be given instead to the new owner at the address set out in the notice of change of ownership. O. Reg. 545/06, s. 8 (4).

(5) For the purposes of subsection (3), if a condominium development is located within the area where the subject land is located, notice may be given to the condominium corporation, according to its most recent address for service or mailing address as registered under section 7 of the *Condominium Act, 1998*, instead of being given to all owners assessed in respect of the condominium development. O. Reg. 545/06, s. 8 (5).

(6) Every person and public body that has given the clerk of the municipality or the secretary-treasurer of the planning board a written request for a notice to which this section applies (including the

person's or public body's address) shall be given notice by personal service, ordinary mail or fax. O. Reg. 545/06, s. 8 (6).

(7) The notice shall include the following:

1. An explanation of the effect of the removal of the holding symbol.
2. A description of the subject land, a key map showing the subject land, or an explanation why no description or key map is provided.
3. A statement of the earliest date on which the council or the planning board proposes to meet to pass the amending by-law. O. Reg. 545/06, s. 8 (7).

Notice of passing of interim control by-law or extension (s. 38 (3) of Act)

9. (1) Notice of the passing of an interim control by-law or of a by-law extending the period during which an interim control by-law will be in effect under subsection 38 (3) of the Act shall be given in the manner described in the following subsections of this section:

1. Subsection (2) or (3).
2. Subsection (6).
3. Subsection (7). O. Reg. 545/06, s. 9 (1).

(2) Notice shall be given by publishing a notice in a newspaper that, in the opinion of the clerk of the municipality or the secretary-treasurer of the planning board, is of sufficiently general circulation in the area where the subject land is located to give the public reasonable notice of the passing of the by-law. O. Reg. 545/06, s. 9 (2).

(3) Notice shall be given by personal service or ordinary mail to every owner of land within 120 metres of the subject land, subject to subsections (4) and (5). O. Reg. 545/06, s. 9 (3).

(4) For the purposes of subsection (3), the owner of land is deemed to be the person shown on the last revised assessment roll of the municipality or on the current provincial land tax roll at the address shown on the roll but, if the land is in a municipality and the clerk of the municipality has received written notice of a change of ownership, the notice shall be given instead to the new owner at the address set out in the notice of change of ownership. O. Reg. 545/06, s. 9 (4).

(5) For the purposes of subsection (3), if a condominium development is located within 120 metres of the subject land, notice may be given to the condominium corporation, according to its most recent address for service or mailing address as registered under section 7 of the *Condominium Act, 1998*, instead of being given to all owners assessed in respect of the condominium development. O. Reg. 545/06, s. 9 (5).

(6) Notice shall be given, by personal service, ordinary mail or fax, to all the following persons and public bodies except those who have notified the clerk of the municipality or the secretary-treasurer of the planning board that they do not wish to receive notice:

1. The clerk of the upper-tier municipality, if the by-law is passed by the council of a local municipality that forms part of an upper-tier municipality.
2. The clerk of the lower-tier municipality to which the by-law applies, if it is passed by the County of Oxford. O. Reg. 545/06, s. 9 (6).

(7) Notice shall be given, by personal service, ordinary mail or fax, to the regional director of the Ministry of Municipal Affairs and Housing Municipal Services Office responsible for the region that includes the municipality or planning area where the subject land is located, if the regional director has

given the clerk of the municipality or the secretary-treasurer of the planning board a written request to be given notice of the passing of by-laws under subsection 38 (3) of the Act. O. Reg. 545/06, s. 9 (7).

(8) The notice shall include the following:

1. A copy of the by-law and an explanation of its purpose and effect.
2. A description of the subject land, a key map showing the subject land, or an explanation why no description or key map is provided.
3. A statement that the council or the planning board has authority to extend the period during which the by-law will be in effect to a total period not exceeding two years.
4. The last date for filing a notice of appeal, and a statement that the notice of appeal,
   i. must be filed with the clerk of the municipality or the secretary-treasurer of the planning board, as the case may be,
   ii. must set out the reasons for the appeal, and
   iii. must be accompanied by the fee required by the Municipal Board.
5. The following statement:

   Only individuals, corporations and public bodies may appeal an interim control by-law to the Ontario Municipal Board. A notice of appeal may not be filed by an unincorporated association or group. However, a notice of appeal may be filed in the name of an individual who is a member of the association or the group on its behalf. O. Reg. 545/06, s. 9 (8).

Transition

10. Despite the revocation of Ontario Regulation 199/96 (Zoning By-laws, Holding By-laws and Interim Control By-laws) made under the Act, the following shall be continued and disposed of as if Ontario Regulation 199/96 had not been revoked:

1. Any matter or proceeding that is deemed to have been commenced before May 22, 1996, under section 75 of the Act.
2. Any matter or proceeding that is commenced on or after May 22, 1996, but before the day this Regulation comes into force. O. Reg. 545/06, s. 10.

11. OMITTED (REVOKES OTHER REGULATIONS). O. Reg. 545/06, s. 11.

12. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 545/06, s. 12.

SCHEDULE 1
INFORMATION AND MATERIAL TO BE PROVIDED IN AN APPLICATION UNDER SUBSECTION 34 (10.1) OF THE ACT

1. The name, address, telephone number and, if applicable, the e-mail address of the applicant.
2. The date of the application to the municipality or planning board.
3. If known, the names and addresses of the holders of any mortgages, charges or other encumbrances in respect of the subject land.
4. The current designation of the subject land in the applicable official plan, and an explanation of how the application conforms to the official plan.
5. The current zoning of the subject land.

6. The nature and extent of the rezoning requested.

7. The reason why the rezoning is requested.

8. If the subject land is within an area where the municipality has pre-determined the minimum and maximum density requirements or the minimum and maximum height requirements, a statement of these requirements.

9. A description of the subject land, including such information as the municipality, concession and lot numbers, registered plan and lot numbers, reference plan and part numbers and street names and numbers.

10. The frontage, depth and area of the subject land, in metric units.

11. If the application is to implement an alteration to the boundary of an area of settlement or to implement a new area of settlement, details of the official plan or official plan amendment that deals with the matter.

12. If the application is to remove land from an area of employment, details of the official plan or official plan amendment that deals with the matter.

13. If the subject land is within an area where zoning with conditions may apply, an explanation of how the application conforms to the official plan policies relating to zoning with conditions.

14. Whether access to the subject land will be,

(a) by a provincial highway, a municipal road that is maintained all year or seasonally, another public road or a right of way; or

(b) by water.

15. If access to the subject land will be by water only, the parking and docking facilities used or to be used and the approximate distance of these facilities from the subject land and the nearest public road.

16. The existing uses of the subject land.

17. Whether there are any buildings or structures on the subject land.

18. If the answer to section 17 is yes, the following information for each building or structure:

(a) the type of building or structure; and

(b) in metric units, the setback from the front lot line, rear lot line and side lot lines, the height of the building or structure and its dimensions or floor area.

19. The proposed uses of the subject land.

20. Whether any buildings or structures are proposed to be built on the subject land.

21. If the answer to section 20 is yes, the following information for each building or structure:

(a) the type of building or structure; and

(b) in metric units, the setback from the front lot line, rear lot line and side lot lines, the height of the building or structure and its dimensions or floor area.

22. If known,

(a) the date the subject land was acquired by the current owner;

(b) the date any existing buildings or structures on the subject land were constructed; and

(c) the length of time that the existing uses of the subject land have continued.

23. Whether water will be provided to the subject land by a publicly owned and operated piped water system, a privately owned and operated individual or communal well, a lake or other water body or other means.

24. Whether sewage disposal will be provided to the subject land by a publicly owned and operated sanitary sewage system, a privately owned and operated individual or communal septic system, a privy or other means.

25. If the application would permit development on privately owned and operated individual or communal septic systems, and more than 4500 litres of effluent would be produced per day as a result of the development being completed,

(a) a servicing options report; and

(b) a hydrogeological report.

26. Whether storm drainage will be provided by sewers, ditches, swales or other means.

27. If known,

(a) whether the subject land has ever been the subject of an application under the Act for approval of a plan of subdivision or for a consent;

(b) if the answer to clause (a) is yes, the file number and status of the application;

(c) whether the subject land has ever been the subject of an application under section 34 of the Act; and

(d) whether the subject land has ever been the subject of a Minister's Zoning Order and, if known, the Ontario Regulation number of that order.

28. A sketch showing, in metric units,

(a) the boundaries and dimensions of the subject land;

(b) the location, size and type of all existing and proposed buildings and structures on the subject land, indicating their distance from the front lot line, rear lot line and side lot lines;

(c) the approximate location of all natural and artificial features (*for example, buildings, railways, roads, watercourses, drainage ditches, banks of rivers or streams, wetlands, wooded areas, wells and septic tanks*) that,

(i) are located on the subject land and on land that is adjacent to it, and

(ii) in the applicant's opinion, may affect the application;

(d) the current uses of land that is adjacent to the subject land;

(e) the location, width and name of any roads within or abutting the subject land, indicating whether it is an unopened road allowance, a public travelled road, a private road or a right of way;

(f) if access to the subject land will be by water only, the location of the parking and docking facilities to be used; and

(g) the location and nature of any easement affecting the subject land.

29. Whether the application for an amendment to the zoning by-law is consistent with policy statements issued under subsection 3 (1) of the Act.

30. Whether the subject land is within an area of land designated under any provincial plan or plans.

31. If the answer to section 30 is yes, whether the application conforms to or does not conflict with the applicable provincial plan or plans.

32. An affidavit or sworn declaration by the applicant that the information required under this Schedule and provided by the applicant is accurate.

O. Reg. 545/06, Sched. 1.

Planning Act

ONTARIO REGULATION 608/06
DEVELOPMENT PERMITS

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Schedule 1	Information and material to be provided in an application for approval of a development permit

Definition

1. (1) In this Regulation,

"development" means,

(a) the construction, erection or placing of one or more buildings or structures on land,

(b) the making of an addition or alteration to a building or structure that has the effect of substantially increasing its size or usability,

(c) the laying out and establishment of,

(i) a commercial parking lot,

(ii) sites for the location of three or more mobile homes as defined in subsection 46 (1) of the Act,

(iii) sites for the construction, erection or location of three or more land lease community homes as defined in subsection 46 (1) of the Act, or

(iv) sites for the location of three or more trailers as defined in subsection 164 (4) of the *Municipal Act, 2001*,

(d) site alteration, including but not limited to,

(i) alteration of the grade of land, and

(ii) placing or dumping fill, or

(e) the removal of vegetation. O. Reg. 608/06, s. 1 (1).

(2) Subsection (1) applies instead of the definition of "development" in subsection 41 (1) of the Act or subsection 114 (1) of the *City of Toronto Act, 2006*. O. Reg. 608/06, s. 1 (2); O. Reg. 448/07, s. 1.

Development permit system

2. The council of a local municipality may by by-law establish a development permit system within the municipality for any area or areas set out in the by-law. O. Reg. 608/06, s. 2.

Conditions re official plan

3. (1) The council shall not pass a development permit by-law for any area in the municipality unless, before the passing of the by-law, the official plan in effect in the municipality,

(a) identifies the area as a proposed development permit area;

(b) sets out the scope of the authority that may be delegated and any limitations on the delegation, if the council intends to delegate any authority under the development permit by-law; and

(c) for each proposed development permit area identified under clause (a),

(i) contains a statement of the municipality's goals, objectives and policies in proposing a development permit system for the area,

(ii) sets out the types of criteria that may be included in the development permit by-law for determining whether any class of development or any use of land may be permitted by development permit, and

(iii) sets out the types of conditions that may be included in the development permit by-law in accordance with clause 4 (2) (i) and subsections 4 (4), (5) and (6). O. Reg. 608/06, s. 3 (1).

(2) The types of criteria described in subclause (1) (c) (ii) and the types of conditions described in subclause (1) (c) (iii) shall be in accordance with the goals, objectives and policies described in subclause (1) (c) (i). O. Reg. 608/06, s. 3 (2).

(3) For greater certainty, subsection (1) is subject to subsection 24 (2) of the Act. O. Reg. 608/06, s. 3 (3).

(4) The official plan may,

(a) set out information and materials that are required, in addition to those set out in Schedule 1, in an application for a development permit; and

(b) exempt any class of development or any use of land from any of the requirements of Schedule 1, but only if the official plan sets out what information and materials are to be provided in an application that falls within that class or use. O. Reg. 608/06, s. 3 (4).

(5) The official plan may contain policies relating to the application of paragraph 5 of subsection 4 (5), respecting conditions requiring the provision of specified facilities, services and matters in exchange for a specified height or density of development, which may be within the ranges set out under clause 4 (2) (c) or outside those ranges as set out under clause 4 (3) (f). O. Reg. 608/06, s. 3 (5).

Development permit by-law

4. (1) Section 34 of the Act, section 113 of the *City of Toronto Act, 2006* and the regulations made under those sections apply, with necessary modifications, to the making of a development permit by-law, and the by-law is deemed to be a by-law passed under section 34 of the Act, except as set out in this Regulation. O. Reg. 608/06, s. 4 (1).

(2) A development permit by-law shall,

(a) contain a description of the area to which the by-law applies, which shall be within the boundaries of an area identified in the official plan as a proposed development permit area;

(b) set out and define the permitted uses of land;

(c) set out a list of minimum and maximum standards for development;

(d) set out any internal review procedures regarding decisions made under subsection 10 (8);

(e) set out the manner in which notice shall be given, under subsection 10 (12), of decisions made under subsection 10 (8);

(f) provide that a development permit may be amended as described in the by-law;

(g) provide that an agreement referred to in paragraph 7 of subsection (5) may be amended as described in the by-law;

(h) provide that an agreement referred to in section 6 may be amended in the same way as an agreement referred to in paragraph 7 of subsection (5);

(i) if the council wishes to impose conditions in making decisions under subsection 10 (8), outline the conditions;

(j) if the council is delegating any authority under the by-law, set out the scope of the authority that is delegated and any limitations on the delegation; and

(k) state that the placement of a portable classroom on a school site of a district school board is exempt from the requirement for a development permit if the school site was in existence on January 1, 2007, in accordance with section 16. O. Reg. 608/06, s. 4 (2).

(3) A development permit by-law may, in addition to the matters set out in subsection 34 (1) of the Act,

(a) prohibit any development or change of use of land unless a development permit is obtained;

(b) set out and define classes of development;

(c) exempt any defined class of development or use of land from the requirement for a development permit;

(d) set out a list of classes of development or uses of land that may be permitted if the criteria set out in the official plan and in the by-law have been met;

(e) set out criteria that the council shall use in making decisions under subsection 10 (8); and

(f) set out a range of possible variations from the standards referred to in clause (2) (c) that may be authorized in connection with the issuing of a development permit. O. Reg. 608/06, s. 4 (3).

(4) A condition that is outlined for the purposes of clause (2) (i),

(a) shall be of a type that is permitted by the official plan;

(b) shall be reasonable for and related to the appropriate use of the land; and

(c) shall not conflict with federal and provincial statutes and regulations. O. Reg. 608/06, s. 4 (4).

(5) Some examples of conditions that may be outlined for the purposes of clause (2) (i) are:

1. A condition that is permitted by section 34, 40, 41 or 42 of the Act or by section 113 or 114 of the *City of Toronto Act, 2006*.
2. A condition that is related to the removal or restoration of vegetation.
3. A condition that is related to site alteration, including but not limited to,
   i. alteration or restoration of the grade of land, and
   ii. placing or dumping fill.
4. A condition that is related to ongoing monitoring requirements that are considered necessary for the protection of,
   i. public health and safety, or
   ii. the natural environment.
5. A condition that requires the provision of specified facilities, services and matters in exchange for a specified height or density of development, which may be within the ranges set out under clause (2) (c) or outside those ranges as set out under clause (3) (f).
6. With respect to land described in paragraph 3, 3.1 or 3.2 of subsection 34 (1) of the Act, a condition that is related to the matters that would otherwise be prohibited under those paragraphs.
7. A condition requiring the owner of the land to enter into one or more agreements with the municipality respecting one or more other conditions imposed under clause 10 (8) (c), (d) or (e). O. Reg. 608/06, s. 4 (5).

(6) A condition described in paragraph 5 of subsection (5) may be imposed only if,

(a) the official plan sets out policies relating to the application of that paragraph;

(b) the by-law specifically identifies the area of the municipality in respect of which a condition described in that paragraph may be imposed; and

(c) the by-law establishes a proportional relationship between the quantity or monetary value of the facilities, services and matters that may be required and the height or density of development that may be allowed. O. Reg. 608/06, s. 4 (6).

Agreement between municipality and owner

5. (1) An agreement referred to in paragraph 7 of subsection 4 (5) may be registered against the land to which it applies, and the municipality is entitled to enforce it against the owner and, subject to the *Registry Act* and the *Land Titles Act*, against any and all subsequent owners of the land. O. Reg. 608/06, s. 5 (1).

(2) The ability to impose a condition referred to in paragraph 7 of subsection 4 (5) is in addition to the powers set out in clauses 41 (7) (c) and (c.1) of the Act and in clauses 114 (11) (c) and (d) of the *City of Toronto Act, 2006*. O. Reg. 608/06, s. 5 (2).

Pre-existing agreements under s. 41 of Act or s. 114 of *City of Toronto Act, 2006*

6. When an agreement has been entered into by a municipality under section 41 of the Act or section 114 of the *City of Toronto Act, 2006*, and afterwards a development permit by-law that applies to the same land as the agreement comes into force under this Regulation,

(a) the agreement continues to be valid and binding; and

(b) the agreement may be amended as if it were an agreement referred to in paragraph 7 of subsection 4 (5). O. Reg. 608/06, s. 6.

Notice of proposed by-law

7. In addition to the requirements set out in section 6 of Ontario Regulation 545/06 (Zoning By-laws, Holding By-laws and Interim Control By-laws) made under the Act, written notice of a proposed development permit by-law shall contain,

(a) a description of the purpose and effect of the development permit system in the municipality;

(b) a description of the proposed development permit area or areas;

(c) a statement that an appeal to the Municipal Board against a decision on a development permit application may be made only by the owner of the land to which the application relates; and

(d) a description of any internal review procedures contained in the by-law. O. Reg. 608/06, s. 7.

Non-application of certain provisions of Act and *City of Toronto Act, 2006*

8. (1) Subsection 34 (21) and section 45 of the Act do not apply to a development permit by-law. O. Reg. 608/06, s. 8 (1).

(2) Section 37 and subsections 41 (2), (3) and (13) of the Act and subsections 114 (2), (3) and (17) of the *City of Toronto Act, 2006* do not apply to land subject to a development permit by-law. O. Reg. 608/06, s. 8 (2).

Commencement of by-law

9. (1) A development permit by-law comes into force on,

(a) the day after the last day for filing a notice of appeal, if there are no appeals; or

(b) the day after the day on which all the appeals are disposed of by the Municipal Board, or such later date as the Board may otherwise order, subject to subsection (2). O. Reg. 608/06, s. 9 (1).

(2) If there are appeals that have not yet been disposed of, the Municipal Board may, on its own initiative or on the motion of any person or public body, make an order providing that any part of the development permit by-law that is not in issue in such an appeal is deemed to have come into force on,

(a) the day after the last day for filing a notice of appeal; or

(b) such later date as the Board may otherwise order. O. Reg. 608/06, s. 9 (2).

(3) On the day the development permit by-law comes into force, all by-laws passed under section 34 of the Act are deemed to be repealed with respect to the area covered by the development permit by-law. O. Reg. 608/06, s. 9 (3).

(4) If subsection (2) applies, the relevant parts of by-laws passed under section 34 of the Act are deemed to be repealed with respect to the area covered by the part of the development permit by-law that is deemed to have come into force early. O. Reg. 608/06, s. 9 (4).

Application for development permit

10. (1) An owner of land or the owner's authorized agent may apply to the council of the municipality for a development permit with respect to land subject to a development permit by-law. O. Reg. 608/06, s. 10 (1).

(2) An application for a development permit shall contain the information and material set out in Schedule 1, except as provided in subsection 3 (4). O. Reg. 608/06, s. 10 (2).

(3) The council may require that additional information and materials be included in an application for a development permit, as described in clause 3 (4) (a). O. Reg. 608/06, s. 10 (3).

(4) Until the council has received the information and material referred to in subsections (2) and (3), if any, and any fee under section 69 of the Act,

(a) the council may refuse to accept or further consider the application; and

(b) the 45-day period referred to in subsection 12 (1) does not begin. O. Reg. 608/06, s. 10 (4).

(5) When an applicant applies for a development permit, the applicant or the municipality may make a motion for directions to have the Municipal Board determine,

(a) whether the information and material required under subsections (2) and (3) have in fact been provided; or

(b) whether a requirement made under subsection (3) is reasonable. O. Reg. 608/06, s. 10 (5).

(6) The council shall consider the application for a development permit,

(a) when the information and material and fee have been received as described in subsection (4); or

(b) when the Municipal Board makes a determination to that effect under subsection (5). O. Reg. 608/06, s. 10 (6).

(7) If the Municipal Board makes the determination described in clause (6) (b), the 45-day period referred to in subsection 12 (1) is counted from the day on which the information, material and fee referred to in subsection (4) had all been received. O. Reg. 608/06, s. 10 (7).

(8) On considering the application, the council may,

(a) refuse the application;

(b) approve the application and issue a development permit with no conditions attached;

(c) approve the application and require that conditions be met before issuing a development permit;

(d) approve the application and issue a development permit with conditions attached; or

(e) approve the application, require that conditions be met before issuing a development permit and, when the conditions have been met, issue a development permit with conditions attached. O. Reg. 608/06, s. 10 (8).

(9) A condition that is imposed under clause (8) (c), (d) or (e) shall meet the following requirements:

1. The condition shall be clear, precise and quantifiable.
2. The condition shall include a clear statement of whether it must be complied with before construction, renovation or change of use of a building.
3. The condition shall not deal with the following aspects of buildings and structures:
   i. interior design,
   ii. the layout of interior areas, other than interior walkways, stairs, elevators and escalators to which members of the public have access from streets, open spaces and interior walkways in adjacent buildings,
   iii. the manner of construction and construction standards. O. Reg. 608/06, s. 10 (9).

(10) When the council attaches a condition to a development permit under clause (8) (d) or (e), it may require that the fulfilment of the condition be secured in a way that is satisfactory to the council. O. Reg. 608/06, s. 10 (10).

(11) The council, in considering an application for a development permit, may confer with any persons or public bodies that the council considers to have an interest in the application. O. Reg. 608/06, s. 10 (11).

(12) Within 15 days after the council makes a decision under subsection (8), written notice of the decision, including reasons and any conditions imposed, shall be given to the applicant and to each person or public body that filed a written request to be informed of the decision with the clerk of the municipality. O. Reg. 608/06, s. 10 (12).

(13) Section 41 of the Act or section 114 of the *City of Toronto Act, 2006* applies, with necessary modifications, to an application for a development permit, except as otherwise provided in this Regulation. O. Reg. 608/06, s. 10 (13).

(14) Subsections 41 (6), (12) and (12.1) of the Act and subsections 114 (10), (15) and (16) of the *City of Toronto Act, 2006* do not apply to an application for a development permit. O. Reg. 608/06, s. 10 (14).

Motion for directions re fulfillment of condition

11. In the case of a decision under clause 10 (8) (c), (d) or (e) the applicant may, at any time, make a motion for directions to have the Municipal Board determine whether a specified condition has been fulfilled. O. Reg. 608/06, s. 11.

Appeal to O.M.B.

12. (1) If the council fails to make a decision under subsection 10 (8) within 45 days after the date on which the information and material and fee are received as described in subsection 10 (4) or (7), the applicant may appeal to the Municipal Board against the failure to make a decision. O. Reg. 608/06, s. 12 (1).

(2) The applicant may appeal any decision made under subsection 10 (8) to the Municipal Board no later than 20 days after the day notice of the decision is given. O. Reg. 608/06, s. 12 (2).

(3) The appeal may be made by filing with the clerk of the municipality a notice of appeal setting out the reasons for the appeal, accompanied by the fee prescribed under the *Ontario Municipal Board Act*. O. Reg. 608/06, s. 12 (3).

Duties of clerk

13. On receiving a notice of appeal under section 12, the clerk of the municipality shall ensure that,

(a) a record is compiled that includes,

(i) the original or a true copy of the application,

(ii) a copy of the development permit by-law, certified by the clerk,

(iii) a copy of any decision of council relating to the application, certified by the clerk, and

(iv) an affidavit or sworn declaration by an employee of the municipality that the notice requirements of subsection 10 (12) have been complied with; and

(b) the notice of appeal, the record and the fee are forwarded to the Municipal Board within 15 days after the notice of appeal is received under section 12. O. Reg. 608/06, s. 13.

Decision of O.M.B.

14. (1) On an appeal under section 12, the Municipal Board,

(a) shall hold a hearing and determine the matter in issue; and

(b) may make any decision that the council could have made under subsection 10 (8). O. Reg. 608/06, s. 14 (1).

(2) The Municipal Board's decision is final. O. Reg. 608/06, s. 14 (2).

(3) If the Municipal Board orders that a development permit be issued, the council shall issue it, except that if the Municipal Board imposes conditions, the development permit shall not be issued until,

(a) in the case of conditions that are required to be met before the development permit is issued, the council is satisfied that the conditions have been met;

(b) in the case of conditions that are attached to the development permit, their fulfillment has been secured in a way that is satisfactory to the council. O. Reg. 608/06, s. 14 (3).

(4) Subsection 10 (12) applies to orders of the Municipal Board, with necessary modifications. O. Reg. 608/06, s. 14 (4).

Delegation by council

15. (1) If clauses 3 (1) (b) and 4 (2) (j) have been complied with, the council may delegate the authority described in subsection (2) to,

(a) a committee appointed by the council, including a committee of the council; or

(b) an employee of the municipality, identified by name or position. O. Reg. 608/06, s. 15 (1).

(2) The authority that may be delegated is authority to,

(a) make any decision that the council is authorized to make under subsection 10 (8); and

(b) enter into agreements referred to in paragraph 7 of subsection 4 (5). O. Reg. 608/06, s. 15 (2).

(3) The authority delegated as described in clause (2) (a) or (b) or as described in both clauses may be made subject to any limitations that are set out in the delegation. O. Reg. 608/06, s. 15 (3).

Exemption

16. The placement of a portable classroom on a school site of a district school board is exempt from the requirement for a development permit if the school site was in existence on January 1, 2007. O. Reg. 608/06, s. 16.

Transition

17. (1) In this section,

"development permit by-law" means By-law 2004-180 of the Township of Lake of Bays, including any amendments made before the day this Regulation comes into force. O. Reg. 608/06, s. 17 (1).

(2) Until the council of the Township of Lake of Bays revokes the development permit by-law and replaces it in accordance with this Regulation,

(a) despite the revocation of Ontario Regulation 246/01, the development permit by-law continues to be in force, shall be interpreted and may be amended as if that regulation were still in force;

(b) the council may amend the development permit by-law to extend its application to any area within the Township of Lake of Bays in addition to the land described in section 3 of Schedule 1 to Ontario Regulation 246/01. O. Reg. 608/06, s. 17 (2).

18. OMITTED (REVOKES OTHER REGULATIONS). O. Reg. 608/06, s. 18.

19. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 608/06, s. 19.

SCHEDULE 1
INFORMATION AND MATERIAL TO BE PROVIDED IN AN APPLICATION FOR APPROVAL OF A DEVELOPMENT PERMIT

1. The name, address, telephone number and, if applicable, the e-mail address of the owner of the subject land, and of the agent if the applicant is an authorized agent.

2. The current designation of the subject land in the applicable official plan and the land uses that the designation authorizes.

3. Whether a variation is requested within the provisions set out in the development permit by-law.

4. Whether the proposed use is,

(a) a permitted use; or

(b) a use that may be permitted subject to criteria as set out in the development permit by-law.

5. If the answer to section 3 or clause 4 (b) is yes, a statement regarding how the applicable criteria have been addressed.

6. A description of the subject land, including such information as the municipality, concession and lot numbers, registered plan and lot numbers, reference plan and part numbers and street names and numbers.

7. The frontage, depth and area of the subject land, in metric units.

8. Whether access to the subject land is,

(a) by a provincial highway, a municipal road that is maintained all year or seasonally, another public road or a right of way; or

(b) by water.

9. If access to the subject land is by water only, the parking and docking facilities used or to be used and the approximate distance of these facilities from the subject land and the nearest public road.

10. The existing uses of the subject land.

11. Whether there are any buildings or structures on the subject land.

12. If the answer to section 11 is yes, the following information for each building or structure:

(a) the type of building or structure; and

(b) in metric units, the setback from the front lot line, rear lot line and side lot lines, the height of the building or structure and its dimensions or floor area.

13. The proposed uses of the subject land.

14. Whether any buildings or structures are proposed to be built on the subject land.

15. If the answer to section 14 is yes, the following information for each proposed building or structure:

(a) the type of building or structure; and

(b) in metric units, the setback from the front lot line, rear lot line and side lot lines, the height of the building or structure and its dimensions or floor area.

16. Whether the proposed building or structure is within an area described in the official plan and development permit by-law as an area within which plans and drawings under subsection 41 (4) or (5) of the Act or subsection 114 (5) or (9) of the *City of Toronto Act, 2006* may be required.

17. One or both of the following, as required by the development permit by-law:

1. Plans that show the location of all buildings and structures to be erected, the location of all facilities and works to be provided in conjunction with the buildings and structures, and the location of all facilities and works required under clause 41 (7) (a) of the Act or clause 114 (11) (a) of the *City of Toronto Act, 2006*, including facilities designed to have regard for accessibility for persons with disabilities.

2. Drawings that show plan, elevation and cross-section views for each building to be erected and are sufficient to display,

   i. the massing and conceptual design of the proposed building,

   ii. the relationship of the proposed building to adjacent buildings, streets, and exterior areas to which members of the public have access,

   iii. the provision of interior walkways, stairs, elevators and escalators to which members of the public have access from streets, open spaces and interior walkways in adjacent buildings,

   iv. matters relating to exterior design, including without limitation the character, scale, appearance and design features of the proposed building, and its sustainable design, but only

to the extent that it is a matter of exterior design, if the official plan contains provisions relating to such matters,

v. the sustainable design elements on any adjoining highway under a municipality's jurisdiction, including without limitation trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers and bicycle parking facilities, and

vi. facilities designed to have regard for accessibility for persons with disabilities.

18. Plans and drawings referred to in section 17 shall not include the following:

1. Interior design.

2. The layout of interior areas, other than the interior walkways, stairs, elevators and escalators referred to in subparagraph 2 iii of section 17.

3. The manner of construction and standards for construction.

19. If known,

(a) the date the subject land was acquired by the current owner;

(b) the date any existing buildings or structures on the subject land were constructed; and

(c) the length of time that the existing uses of the subject land have continued.

20. Whether water is provided to the subject land by a publicly owned and operated piped water system, a privately owned and operated individual or communal well, a lake or other water body or other means.

21. Whether sewage disposal is provided to the subject land by a publicly owned and operated sanitary sewage system, a privately owned and operated individual or communal septic system, a privy or other means.

22. Whether storm drainage is provided by sewers, ditches, swales or other means.

23. If known,

(a) whether the subject land has ever been the subject of an application under the Act for approval of a plan of subdivision or a consent;

(b) if the answer to clause (a) is yes, the file number and status of the application;

(c) whether the subject land has ever been the subject of an application under section 34 or 45 of the Act; and

(d) if the answer to clause (c) is yes, the file number and status of the application.

24. A sketch showing, in metric units,

(a) the boundaries and dimensions of the subject land;

(b) the location, size and type of all existing and proposed buildings and structures on the subject land, indicating their distance from the front yard lot line, rear yard lot line and side yard lot lines;

(c) the approximate location of all natural and artificial features (for example, buildings, railways, roads, watercourses, drainage ditches, banks of rivers or streams, wetlands, wooded areas, wells and septic tanks) that,

(i) are located on the subject land and on land that is adjacent to it, and

(ii) in the applicant's opinion, may affect the application;

(d) the current uses of land that is adjacent to the subject land;

(e) the location, width and name of any roads within or abutting the subject land, indicating whether it is an unopened road allowance, a public travelled road, a private road or a right of way;

(f) if access to the subject land is by water only, the location of the parking and docking facilities to be used; and

(g) the location and nature of any easement or restrictive covenant affecting the subject land.

25. An affidavit or sworn declaration by the applicant that the information required under this Schedule and provided by the applicant is accurate.

Construction Lien Act

R.S.O. 1990, Chapter C.30

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Interpretation

Definitions

1. (1) In this Act,

"action" means an action under Part VIII; ("action")

"construction trade newspaper" means a newspaper having circulation generally throughout Ontario, that is published no less frequently than on all days except Saturdays and holidays, and in which calls for tender on construction contracts are customarily published, and that is primarily devoted to the publication of matters of concern to the construction industry; ("journal de l'industrie de la construction")

"contract" means the contract between the owner and the contractor, and includes any amendment to that contract; ("contrat")

"contractor" means a person contracting with or employed directly by the owner or an agent of the owner to supply services or materials to an improvement; ("entrepreneur")

"court" means the Superior Court of Justice; ("tribunal")

"Crown" includes a Crown agency to which the *Crown Agency Act* applies; ("Couronne")

"holdback" means the 10 per cent of the value of the services or materials supplied under a contract or subcontract required to be withheld from payment by Part IV; ("retenue")

"home" means,

(a) a self-contained one-family dwelling, detached or attached to one or more others by a common wall,

(b) a building composed of two self-contained, one-family dwellings under one ownership, or

(c) a condominium one-family dwelling unit, including the common interests appurtenant thereto,

and includes any structure or works used in conjunction therewith; ("logement")

"home buyer" means a person who buys the interest of an owner in a premises that is a home, whether built or not at the time the agreement of purchase and sale in respect thereof is entered into, provided,

(a) not more than 30 per cent of the purchase price, excluding money held in trust under section 81 of the *Condominium Act, 1998*, is paid prior to the conveyance, and

(b) the home is not conveyed until it is ready for occupancy, evidenced in the case of a new home by the issuance of a municipal permit authorizing occupancy or the issuance under the *Ontario New Home Warranties Plan Act* of a certificate of completion and possession; ("acquéreur d'un logement")

"improvement" means, in respect of any land,

(a) any alteration, addition or repair to the land,

(b) any construction, erection or installation on the land, including the installation of industrial, mechanical, electrical or other equipment on the land or on any building, structure

or works on the land that is essential to the normal or intended use of the land, building, structure or works, or

(c) the complete or partial demolition or removal of any building, structure or works on the land; ("améliorations")

"interest in the premises" means an estate or interest of any nature, and includes a statutory right given or reserved to the Crown to enter any lands or premises belonging to any person or public authority for the purpose of doing any work, construction, repair or maintenance in, upon, through, over or under any lands or premises; ("intérêt sur le local")

"land" includes any building, structure or works affixed to the land, or an appurtenance to any of them, but does not include the improvement; ("bien-fonds")

"lien claimant" means a person having a preserved or perfected lien; ("créancier privilégié")

"materials" means every kind of movable property,

(a) that becomes, or is intended to become, part of the improvement, or that is used directly in the making of the improvement, or that is used to facilitate directly the making of the improvement,

(b) that is equipment rented without an operator for use in the making of the improvement; ("matériaux")

"mortgage" includes a charge and "mortgagee" includes a chargee; ("hypothèque", "créancier hypothécaire")

"municipality" means a municipality or local board, both as defined in the *Municipal Affairs Act*; ("municipalité")

"owner" means any person, including the Crown, having an interest in a premises at whose request and,

(a) upon whose credit, or

(b) on whose behalf, or

(c) with whose privity or consent, or

(d) for whose direct benefit,

an improvement is made to the premises but does not include a home buyer; ("propriétaire")

"payer" means the owner, contractor or subcontractor who is liable to pay for the materials or services supplied to an improvement under a contract or subcontract; ("responsable du paiement")

"payment certifier" means an architect, engineer or any other person upon whose certificate payments are made under a contract or subcontract; ("personne qui autorise le paiement")

"person having a lien" includes both a lien claimant and a person with an unpreserved lien; ("titulaire d'un privilège")

"premises" includes,

(a) the improvement,

(b) all materials supplied to the improvement, and

(c) the land occupied by the improvement, or enjoyed therewith, or the land upon or in respect of which the improvement was done or made; ("local")

"price" means the contract or subcontract price,

(a) agreed upon between the parties, or

(b) where no specific price has been agreed upon between them, the actual value of the services or materials that have been supplied to the improvement under the contract or subcontract; ("prix")

"services or materials" includes both services and materials; ("services ou matériaux")

"subcontract" means any agreement between the contractor and a subcontractor, or between two or more subcontractors, relating to the supply of services or materials to the improvement and includes any amendment to that agreement; ("contrat de sous-traitance")

"subcontractor" means a person not contracting with or employed directly by the owner or an agent of the owner but who supplies services or materials to the improvement under an agreement with the contractor or under the contractor with another subcontractor; ("sous-traitant")

"suffers damages as a result" means suffers damages that could be reasonably foreseen to result; ("subir des dommages en conséquence")

"supply of services" means any work done or service performed upon or in respect of an improvement, and includes,

(a) the rental of equipment with an operator, and

(b) where the making of the planned improvement is not commenced, the supply of a design, plan, drawing or specification that in itself enhances the value of the owner's interest in the land,

and a corresponding expression has a corresponding meaning; ("prestation de services")

"wages" means the money earned by a worker for work done by time or as piece work, and includes all monetary supplementary benefits, whether provided for by statute, contract or collective bargaining agreement; ("salaire")

"worker" means a person employed for wages in any kind of labour; ("ouvrier")

"workers' trust fund" means any trust fund maintained in whole or in part on behalf of any worker on an improvement and into which any monetary supplementary benefit is payable as wages for work done by the worker in respect of the improvement; ("fonds en fiducie des ouvriers")

"written notice of a lien" includes a claim for lien and any written notice given by a person having a lien that,

(a) identifies the payer and identifies the premises, and

(b) states the amount that the person has not been paid and is owed to the person by the payer. ("avis écrit d'un privilège") R.S.O. 1990, c. C.30, s. 1 (1); 2002, c. 17, Sched. F, Table; 2006, c. 19, Sched. C, s. 1 (1); 2010, c. 16, Sched. 2, s. 2 (1, 2).

When materials supplied

(2) For the purposes of this Act, materials are supplied to an improvement when they are,

(a) placed on the land on which the improvement is being made;

(b) placed upon land designated by the owner or an agent of the owner that is in the immediate vicinity of the premises, but placing materials on the land so designated does not, of itself, make that land subject to a lien; or

(c) in any event, incorporated into or used in making or facilitating directly the making of the improvement. R.S.O. 1990, c. C.30, s. 1 (2).

Idem

(3) A contractor or subcontractor to whom materials are supplied and who designates land under clause (2) (b) is deemed to be the owner's agent for that purpose, unless the person supplying the materials has actual notice to the contrary. R.S.O. 1990, c. C.30, s. 1 (3).

Contracts, substantial performance and completion

When contract substantially performed

2. (1) For the purposes of this Act, a contract is substantially performed,

(a) when the improvement to be made under that contract or a substantial part thereof is ready for use or is being used for the purposes intended; and

(b) when the improvement to be made under that contract is capable of completion or, where there is a known defect, correction, at a cost of not more than,

(i) 3 per cent of the first $500,000 of the contract price,

(ii) 2 per cent of the next $500,000 of the contract price, and

(iii) 1 per cent of the balance of the contract price. R.S.O. 1990, c. C.30, s. 2 (1).

Idem

(2) For the purposes of this Act, where the improvement or a substantial part thereof is ready for use or is being used for the purposes intended and the remainder of the improvement cannot be completed expeditiously for reasons beyond the control of the contractor or, where the owner and the contractor agree not to complete the improvement expeditiously, the price of the services or materials remaining to be supplied and required to complete the improvement shall be deducted from the contract price in determining substantial performance. R.S.O. 1990, c. C.30, s. 2 (2).

When contract deemed completed

(3) For the purposes of this Act, a contract shall be deemed to be completed and services or materials shall be deemed to be last supplied to the improvement when the price of completion, correction of a known defect or last supply is not more than the lesser of,

(a) 1 per cent of the contract price; and

(b) $1,000. R.S.O. 1990, c. C.30, s. 2 (3).

PART I
GENERAL

Act binds Crown

3. (1) Subject to section 16 (where lien does not attach to the premises), this Act binds the Crown. R.S.O. 1990, c. C.30, s. 3 (1).

Exception re certain payments

(2) This Act does not apply in respect of labour, material or services supplied as a result of a contract, as defined in the *Ministry of Transportation and Communications Creditors Payment Act*, being chapter 290 of the Revised Statutes of Ontario, 1980, made before the 1st day of April, 1990. R.S.O. 1990, c. C.30, s. 3 (2).

Exception re notice of claim

(3) Section 7 of the *Proceedings Against the Crown Act* does not apply in respect of an action against the Crown under this Act. R.S.O. 1990, c. C.30, s. 3 (3).

(4) REPEALED: 1997, c. 23, s. 4 (1).

No waiver of rights

4. An agreement by any person who supplies services or materials to an improvement that this Act does not apply to the person or that the remedies provided by it are not available for the benefit of the person is void. R.S.O. 1990, c. C.30, s. 4.

Contracts to conform

5. (1) Every contract or subcontract related to an improvement is deemed to be amended in so far as is necessary to be in conformity with this Act. R.S.O. 1990, c. C.30, s. 5 (1).

Retention of holdbacks authorized

(2) Without restricting the generality of subsection (1), where the purchaser is an owner, an agreement of purchase and sale that provides for the making or completion of an improvement shall be deemed to provide for the retention of holdbacks by the purchaser, and tender by the purchaser on closing is not defective by reason only that the purchaser does not tender the amount of the holdbacks. R.S.O. 1990, c. C.30, s. 5 (2).

Minor irregularities

6. No certificate, declaration or claim for lien is invalidated by reason only of a failure to comply strictly with subsection 32 (2) or (5), subsection 33 (1) or subsection 34 (5), unless in the opinion of the court a person has been prejudiced thereby, and then only to the extent of the prejudice suffered. R.S.O. 1990, c. C.30, s. 6.

PART II
TRUST PROVISIONS

Owner's trust

Amounts received for financing a trust

7. (1) All amounts received by an owner, other than the Crown or a municipality, that are to be used in the financing of the improvement, including any amount that is to be used in the payment of the purchase price of the land and the payment of prior encumbrances, constitute, subject to the payment of the purchase price of the land and prior encumbrances, a trust fund for the benefit of the contractor. R.S.O. 1990, c. C.30, s. 7 (1).

Amounts certified as payable

(2) Where amounts become payable under a contract to a contractor by the owner on a certificate of a payment certifier, an amount that is equal to an amount so certified that is in the owner's hands or received by the owner at any time thereafter constitutes a trust fund for the benefit of the contractor. R.S.O. 1990, c. C.30, s. 7 (2).

Where substantial performance certified

(3) Where the substantial performance of a contract has been certified, or has been declared by the court, an amount that is equal to the unpaid price of the substantially performed portion of the contract that is in the owner's hands or is received by the owner at any time thereafter constitutes a trust fund for the benefit of the contractor. R.S.O. 1990, c. C.30, s. 7 (3).

Obligations as trustee

(4) The owner is the trustee of the trust fund created by subsection (1), (2) or (3), and the owner shall not appropriate or convert any part of a fund to the owner's own use or to any use inconsistent with the trust until the contractor is paid all amounts related to the improvement owed to the contractor by the owner. R.S.O. 1990, c. C.30, s. 7 (4).

Contractor's and subcontractor's trust

Amounts received a trust

8. (1) All amounts,

(a) owing to a contractor or subcontractor, whether or not due or payable; or

(b) received by a contractor or subcontractor,

on account of the contract or subcontract price of an improvement constitute a trust fund for the benefit of the subcontractors and other persons who have supplied services or materials to the improvement who are owed amounts by the contractor or subcontractor. R.S.O. 1990, c. C.30, s. 8 (1).

Obligations as trustee

(2) The contractor or subcontractor is the trustee of the trust fund created by subsection (1) and the contractor or subcontractor shall not appropriate or convert any part of the fund to the contractor's or subcontractor's own use or to any use inconsistent with the trust until all subcontractors and other persons who supply services or materials to the improvement are paid all amounts related to the improvement owed to them by the contractor or subcontractor. R.S.O. 1990, c. C.30, s. 8 (2).

Vendor's trust

Amounts received a trust

9. (1) Where the owner's interest in a premises is sold by the owner, an amount equal to,

(a) the value of the consideration received by the owner as a result of the sale,

less,

(b) the reasonable expenses arising from the sale and the amount, if any, paid by the vendor to discharge any existing mortgage indebtedness on the premises,

constitutes a trust fund for the benefit of the contractor. R.S.O. 1990, c. C.30, s. 9 (1).

Obligations as trustee

(2) The former owner is the trustee of the trust created by subsection (1), and shall not appropriate or convert any part of the trust property to the former owner's own use or to any use inconsistent with the trust until the contractor is paid all amounts owed to the contractor that relate to the improvement. R.S.O. 1990, c. C.30, s. 9 (2).

Payment discharging trust

10. Subject to Part IV (holdbacks), every payment by a trustee to a person the trustee is liable to pay for services or materials supplied to the improvement discharges the trust of the trustee making the payment and the trustee's obligations and liability as trustee to all beneficiaries of the trust to the extent of the payment made by the trustee. R.S.O. 1990, c. C.30, s. 10.

Where trust funds may be reduced

11. (1) Subject to Part IV, a trustee who pays in whole or in part for the supply of services or materials to an improvement out of money that is not subject to a trust under this Part may retain from trust funds an amount equal to that paid by the trustee without being in breach of the trust. R.S.O. 1990, c. C.30, s. 11 (1).

Application of trust funds to discharge loan

(2) Subject to Part IV, where a trustee pays in whole or in part for the supply of services or materials to an improvement out of money that is loaned to the trustee, trust funds may be applied to discharge the loan to the extent that the lender's money was so used by the trustee, and the application of trust money does not constitute a breach of the trust. R.S.O. 1990, c. C.30, s. 11 (2).

Set-off by trustee

12. Subject to Part IV, a trustee may, without being in breach of trust, retain from trust funds an amount that, as between the trustee and the person the trustee is liable to pay under a contract or subcontract related to the improvement, is equal to the balance in the trustee's favour of all outstanding debts, claims or damages, whether or not related to the improvement. R.S.O. 1990, c. C.30, s. 12.

Liability for breach of trust

By corporation

13. (1) In addition to the persons who are otherwise liable in an action for breach of trust under this Part,

(a) every director or officer of a corporation; and

(b) any person, including an employee or agent of the corporation, who has effective control of a corporation or its relevant activities,

who assents to, or acquiesces in, conduct that he or she knows or reasonably ought to know amounts to breach of trust by the corporation is liable for the breach of trust. R.S.O. 1990, c. C.30, s. 13 (1).

Effective control of corporation

(2) The question of whether a person has effective control of a corporation or its relevant activities is one of fact and in determining this the court may disregard the form of any transaction and the separate corporate existence of any participant. R.S.O. 1990, c. C.30, s. 13 (2).

Joint and several liability

(3) Where more than one person is found liable or has admitted liability for a particular breach of trust under this Part, those persons are jointly and severally liable. R.S.O. 1990, c. C.30, s. 13 (3).

Contribution

(4) A person who is found liable, or who has admitted liability, for a particular breach of a trust under this Part is entitled to recover contribution from any other person also liable for the breach in such amount as will result in equal contribution by all parties liable for the breach unless the court considers such apportionment would not be fair and, in that case, the court may direct such contribution or indemnity as the court considers appropriate in the circumstances. R.S.O. 1990, c. C.30, s. 13 (4).

PART III
THE LIEN

Creation of lien

14. (1) A person who supplies services or materials to an improvement for an owner, contractor or subcontractor, has a lien upon the interest of the owner in the premises improved for the price of those services or materials. R.S.O. 1990, c. C.30, s. 14 (1).

Note: Subsection (1) applies to services and materials supplied by architects, holders of certificates of practice under the *Architects Act* and their employees under contracts made on or after November 28, 1997, and under subcontracts made under such contracts. See: 1997, c. 23, s. 4 (2).

No lien for interest

(2) No person is entitled to a lien for any interest on the amount owed to the person in respect of the services or materials that have been supplied by the person, but nothing in this subsection affects any right that the person may otherwise have to recover that interest. R.S.O. 1990, c. C.30, s. 14 (2).

When lien arises

15. A person's lien arises and takes effect when the person first supplies services or materials to the improvement. R.S.O. 1990, c. C.30, s. 15.

Interest of Crown

16. (1) A lien does not attach to the interest of the Crown in a premises. R.S.O. 1990, c. C.30, s. 16 (1).

Interest of person other than Crown

(2) Where an improvement is made to a premises in which the Crown has an interest, but the Crown is not an owner within the meaning of this Act, the lien may attach to the interest of any other person in that premises. R.S.O. 1990, c. C.30, s. 16 (2).

Where lien does not attach to premises

(3) Where the Crown is the owner of a premises within the meaning of this Act, or where the premises is,

(a) a public street or highway owned by a municipality; or

(b) a railway right-of-way,

the lien does not attach to the premises but constitutes a charge as provided in section 21, and the provisions of this Act shall have effect without requiring the registration of a claim for lien against the premises. R.S.O. 1990, c. C.30, s. 16 (3).

Limitation on value of lien

17. (1) The lien of a person is limited to the amount owing to the person in relation to the improvement and, subject to Part IV (holdbacks), it is further limited to the least amount owed in relation to the improvement by a payer to the contractor or to any subcontractor whose contract or subcontract was in whole or in part performed by the supply of services or materials giving rise to the lien. R.S.O. 1990, c. C.30, s. 17 (1).

Idem

(2) Subject to Part IV, the total value of the liens of all members of a class, as defined in section 79, is limited to the least amount owed in relation to the improvement by a payer to the contractor or to any subcontractor whose contract or subcontract was in whole or in part performed by the supply of services or materials made by the members of the class. R.S.O. 1990, c. C.30, s. 17 (2).

Set-off

(3) Subject to Part IV, in determining the amount of a lien under subsection (1) or (2), there may be taken into account the amount that is, as between a payer and the person the payer is liable to pay, equal to the balance in the payer's favour of all outstanding debts, claims or damages, whether or not related to the improvement. R.S.O. 1990, c. C.30, s. 17 (3).

Public highway, liability of municipality re

(4) Despite subsection (1), where land is dedicated to a municipality as a public street or highway and an improvement is made to the land at the written request of, or under an agreement with, the municipality, but not at its expense, the municipality shall nevertheless, on default of payment by the proper payer, be liable to the value of the holdbacks under Part IV that would have been required were the improvement made at the expense of the municipality, and the procedure for making a claim under this subsection shall be the same as for enforcing a claim for lien against a municipality in respect of a public street or highway. R.S.O. 1990, c. C.30, s. 17 (4).

Joint or common interests

18. Where the interest of the owner in the premises is held jointly or in common with another person who knew or ought reasonably to have known of the making of the improvement, the joint or common interest in the premises of that person is also subject to the lien unless the contractor receives actual notice, before the supply of services or materials to the improvement is commenced, that the person having the joint or common interest assumes no responsibility for the improvement to be made. R.S.O. 1990, c. C.30, s. 18.

Where owner's interest leasehold

19. (1) Where the interest of the owner to which the lien attaches is leasehold, the interest of the landlord shall also be subject to the lien to the same extent as the interest of the owner if the contractor gives the landlord written notice of the improvement to be made, unless the landlord, within fifteen days of receiving the notice from the contractor, gives the contractor written notice that the landlord assumes no responsibility for the improvement to be made. R.S.O. 1990, c. C.30, s. 19 (1).

Forfeiture or termination of lease, effect of

(2) No forfeiture of a lease to, or termination of a lease by, a landlord, except for non-payment of rent, deprives any person having a lien against the leasehold of the benefit of the person's lien. R.S.O. 1990, c. C.30, s. 19 (2).

Notice to lien claimants

(3) Where a landlord intends to enforce forfeiture or terminate a lease of the premises because of non-payment of rent, and there is a claim for lien registered against the premises in the proper land registry office, the landlord shall give notice in writing of the intention to enforce forfeiture or terminate the lease and of the amount of the unpaid rent to each person who has registered a claim for lien against the premises. R.S.O. 1990, c. C.30, s. 19 (3).

Payment of unpaid rent

(4) A person receiving notice under subsection (3) may, within ten days thereafter, pay to the landlord the amount of the unpaid rent, and the amount so paid may be added by that person to the person's claim for lien. R.S.O. 1990, c. C.30, s. 19 (4).

General lien, more than one premises

20. (1) Where an owner enters into a single contract for improvements on more than one premises of the owner, any person supplying services or materials under that contract, or under a subcontract under that contract, may choose to have the person's lien follow the form of the contract and be a general lien against each of those premises for the price of all services and materials the person supplied to all the premises. R.S.O. 1990, c. C.30, s. 20 (1).

Where subs. (1) does not apply

(2) Subsection (1) does not apply and no general lien arises under or in respect of a contract that provides in writing that liens shall arise and expire on a lot-by-lot basis. R.S.O. 1990, c. C.30, s. 20 (2).

Lien a charge

21. The lien of a person is a charge upon the holdbacks required to be retained by Part IV, and subject to subsection 17 (3), any additional amount owed in relation to the improvement by a payer to the contractor or to any subcontractor whose contract or subcontract was in whole or in part performed by the supply of services or materials giving rise to the lien. R.S.O. 1990, c. C.30, s. 21.

PART IV
HOLDBACKS

Holdbacks

Basic holdback

22. (1) Each payer upon a contract or subcontract under which a lien may arise shall retain a holdback equal to 10 per cent of the price of the services or materials as they are actually supplied under the contract or subcontract until all liens that may be claimed against the holdback have expired as provided in Part V, or have been satisfied, discharged or provided for under section 44 (payment into court). R.S.O. 1990, c. C.30, s. 22 (1).

Separate holdback for finishing work

(2) Where the contract has been certified or declared to be substantially performed but services or materials remain to be supplied to complete the contract, the payer upon the contract, or a subcontract, under which a lien may arise shall retain, from the date certified or declared to be the date of substantial performance of the contract, a separate holdback equal to 10 per cent of the price of the remaining services or materials as they are actually supplied under the contract or subcontract, until all liens that may be claimed against the holdback have expired as provided in Part V, or have been satisfied, discharged or provided for under section 44. R.S.O. 1990, c. C.30, s. 22 (2).

When obligation to retain applies

(3) The obligation to retain the holdbacks under subsections (1) and (2) applies irrespective of whether the contract or subcontract provides for partial payments or payment on completion. R.S.O. 1990, c. C.30, s. 22 (3).

Personal liability of owner

23. (1) Subject to subsections (2), (3) and (4), an owner is personally liable for holdbacks that the owner is required to retain under this Part to those lien claimants who have valid liens against the owner's interest in the premises. R.S.O. 1990, c. C.30, s. 23 (1).

Limitation

(2) Where the defaulting payer is the contractor, the owner's personal liability to a lien claimant or to a class of lien claimants as defined by section 79 does not exceed the holdbacks the owner is required to retain. R.S.O. 1990, c. C.30, s. 23 (2).

Idem

(3) Where the defaulting payer is a subcontractor, the owner's personal liability to a lien claimant or to a class of lien claimants as defined by section 79 does not exceed the lesser of,

(a) the holdbacks the owner is required to retain; and

(b) the holdbacks required to be retained by the contractor or a subcontractor from the lien claimant's defaulting payer. R.S.O. 1990, c. C.30, s. 23 (3).

How determined

(4) The personal liability of an owner under this section may only be determined by an action under this Act. R.S.O. 1990, c. C.30, s. 23 (4).

Transition

(5) This section does not affect the rights acquired by any person from a judgment or order of any court before the 28th day of June, 1990. R.S.O. 1990, c. C.30, s. 23 (5).

Payments that may be made

24. (1) A payer may, without jeopardy, make payments on a contract or subcontract up to 90 per cent of the price of the services or materials that have been supplied under that contract or subcontract unless, prior to making payment, the payer has received written notice of a lien. R.S.O. 1990, c. C.30, s. 24 (1).

Idem

(2) Where a payer has received written notice of a lien and has retained, in addition to the holdbacks required by this Part, an amount sufficient to satisfy the lien, the payer may, without jeopardy, make

payment on a contract or subcontract up to 90 per cent of the price of the services and materials that have been supplied under that contract or subcontract, less the amount retained. R.S.O. 1990, c. C.30, s. 24 (2).

Payment where subcontract certified complete

25. Where a subcontract has been certified complete under section 33, each payer upon the contract and any subcontract may, without jeopardy, make payment reducing the holdbacks required by this Part to the extent of the amount of holdback the payer has retained in respect of the completed subcontract, where all liens in respect of the completed subcontract have expired as provided in Part V, or have been satisfied, discharged or provided for under section 44 (payment into court). R.S.O. 1990, c. C.30, s. 25.

Payment of basic holdback

26. Each payer upon the contract or a subcontract may, without jeopardy, make payment of the holdback the payer is required to retain by subsection 22 (1) (basic holdback), so as to discharge all claims in respect of that holdback, where all liens that may be claimed against that holdback have expired as provided in Part V, or have been satisfied, discharged or provided for under section 44. R.S.O. 1990, c. C.30, s. 26.

Payment of holdback for finishing work

27. Each payer upon the contract or a subcontract may, without jeopardy, make payment of the holdback the payer is required to retain by subsection 22 (2) (holdback for finishing work), so as to discharge all claims in respect of that holdback, where all liens that may be claimed against that holdback have expired as provided in Part V, or have been satisfied, discharged or provided for under section 44. R.S.O. 1990, c. C.30, s. 27.

Direct payment to person having lien

28. Where an owner, contractor or subcontractor makes a payment without obligation to do so to any person having a lien for or on account of any amount owing to that person for services or materials supplied to the improvement and gives written notice of the payment or the intention to pay to the proper payer of that person, the payment shall be deemed to be a payment by the owner, contractor or subcontractor to the proper payer of that person, but no such payment reduces the amount of the holdback required to be retained under this Part or reduces the amount that must be retained in response to a written notice of lien given by a person other than the person to whom payment is made. R.S.O. 1990, c. C.30, s. 28.

Discharge of lien

29. Payments made in accordance with this Part operate as a discharge of the lien to the extent of the amount paid. R.S.O. 1990, c. C.30, s. 29.

How holdback not to be applied

30. Where the contractor or a subcontractor defaults in the performance of a contract or subcontract, a holdback shall not be applied by any payer toward obtaining services or materials in substitution for those that were to have been supplied by the person in default, nor in payment or satisfaction of any claim against the person in default, until all liens that may be claimed against that holdback have expired as provided in Part V, or have been satisfied, discharged or provided for under section 44 (payment into court). R.S.O. 1990, c. C.30, s. 30.

PART V
EXPIRY, PRESERVATION AND PERFECTION OF LIENS

Expiry of liens

31. (1) Unless preserved under section 34, the liens arising from the supply of services or materials to an improvement expire as provided in this section. R.S.O. 1990, c. C.30, s. 31 (1).

Contractor's liens

(2) Subject to subsection (4), the lien of a contractor,

(a) for services or materials supplied to an improvement on or before the date certified or declared to be the date of the substantial performance of the contract, expires at the conclusion of the forty-five-day period next following the occurrence of the earlier of,

(i) the date on which a copy of the certificate or declaration of the substantial performance of the contract is published as provided in section 32, and

(ii) the date the contract is completed or abandoned; and

(b) for services or materials supplied to the improvement where there is no certification or declaration of the substantial performance of the contract, or for services or materials supplied to the improvement after the date certified or declared to be the date of substantial performance, expires at the conclusion of the forty-five-day period next following the occurrence of the earlier of,

(i) the date the contract is completed, and

(ii) the date the contract is abandoned. R.S.O. 1990, c. C.30, s. 31 (2).

Liens of other persons

(3) Subject to subsection (4), the lien of any other person,

(a) for services or materials supplied to an improvement on or before the date certified or declared to be the date of the substantial performance of the contract, expires at the conclusion of the forty-five-day period next following the occurrence of the earliest of,

(i) the date on which a copy of the certificate or declaration of the substantial performance of the contract is published, as provided in section 32, and

(ii) the date on which the person last supplies services or materials to the improvement, and

(iii) the date a subcontract is certified to be completed under section 33, where the services or materials were supplied under or in respect of that subcontract; and

(b) for services or materials supplied to the improvement where there is no certification or declaration of the substantial performance of the contract, or for services or materials supplied to the improvement after the date certified or declared to be the date of the substantial performance of the contract, expires at the conclusion of the forty-five-day period next following the occurrence of the earlier of,

(i) the date on which the person last supplied services or materials to the improvement, and

(ii) the date a subcontract is certified to be completed under section 33, where the services or materials were supplied under or in respect of that subcontract. R.S.O. 1990, c. C.30, s. 31 (3).

Separate liens when ongoing supply

(4) Where a person has supplied services or materials to an improvement on or before the date certified or declared to be the date of the substantial performance of the contract and has also supplied, or is to supply, services or materials after that date, the person's lien in respect of the services or materials supplied on or before the date of substantial performance expires without affecting any lien that the person may have for the supply of services or materials after that date. R.S.O. 1990, c. C.30, s. 31 (4).

Declaration of last supply

(5) Where a person who has supplied services or materials under a contract or subcontract makes a declaration in the prescribed form declaring,

(a) the date on which the person last supplied services or materials under that contract or subcontract; and

(b) that the person will not supply any further services or materials under that contract or subcontract,

then the facts so stated shall be deemed to be true against the person making the declaration. R.S.O. 1990, c. C.30, s. 31 (5).

Rules governing certification or declaration of substantial performance

32. (1) The following rules govern the certification and declaration of the substantial performance of a contract:

1. On the application of the contractor, the payment certifier shall determine whether the contract has been substantially performed in accordance with section 2, and, if the payment certifier so determines, shall certify the substantial performance of the contract by signing a certificate in the prescribed form. If there is no payment certifier, the owner and contractor shall make the determination jointly and shall both sign the certificate.
2. The payment certifier or the owner and the contractor jointly, as the case may be, shall set out in the certificate the date on which the contract was substantially performed.
3. The date set out in the certificate as the date on which the contract was substantially performed is deemed for the purpose of this Act to be the date on which that event occurred.
4. Where the payment certifier certifies the substantial performance of a contract the payment certifier shall within seven days of the day the certificate is signed give a copy of the certificate to the owner and to the contractor.
5. The contractor shall publish a copy of the certificate once in a construction trade newspaper.
6. Where the contractor does not publish a copy of the certificate within seven days of receiving a copy of the certificate signed by the payment certifier or, where there is no payment certifier, signed by the owner, any person may publish a copy of the certificate.
7. Where there is a failure or refusal to certify substantial performance of the contract within a reasonable time, any person may apply to the court, and the court, upon being satisfied that the contract is substantially performed, and upon such terms as to costs or otherwise as it considers fit, may declare that the contract has been substantially performed, and the declaration has the same force and effect as a certificate of substantial performance of the contract.

8. Unless the court otherwise orders, the day the declaration is made shall be deemed to be the date the contract was substantially performed.
9. The person who applied to the court shall publish a copy of the declaration of substantial performance once in a construction trade newspaper.
10. For the purposes of this Part, a certificate or declaration of the substantial performance of a contract has no effect until a copy of the certificate or declaration is published. R.S.O. 1990, c. C.30, s. 32 (1).

Contents of certificate

(2) Every certificate or declaration made or given under this section shall include,

(a) the name and address for service of the owner and of the contractor;

(b) the name and address of the payment certifier, where there is one;

(c) a short description of the improvement;

(d) the date on which the contract was substantially performed;

(e) where the lien attaches to the premises, a concise description containing a reference to lot and plan or instrument registration number sufficient to identify the premises; and

(f) the street address, if any, of the premises. R.S.O. 1990, c. C.30, s. 32 (2); 2010, c. 16, Sched. 2, s. 2 (3).

Liability for refusal to certify

(3) Any person who is required by this section to make a determination of the substantial performance of a contract, and who after receiving an application fails or refuses within a reasonable time to certify the substantial performance of the contract, even though there is no reasonable doubt that the contract has, in fact, been substantially performed, is liable to anyone who suffers damages as a result. R.S.O. 1990, c. C.30, s. 32 (3).

Liability for failure to furnish copy of certificate

(4) A payment certifier who fails to comply with paragraph 4 of subsection (1) is liable to anyone who suffers damages as a result. R.S.O. 1990, c. C.30, s. 32 (4).

Manner of publication

(5) A construction trade newspaper shall publish upon commercially reasonable terms copies of certificates or declarations of substantial performance in the prescribed form and manner. R.S.O. 1990, c. C.30, s. 32 (5).

Certificate re subcontract

33. (1) Upon the request of the contractor, the payment certifier on the contract may determine whether a subcontract has been completed, and, if the payment certifier so determines, shall certify the completion of the subcontract in the prescribed form; alternatively, the owner and the contractor may jointly make the declaration and certify completion in the prescribed form. R.S.O. 1990, c. C.30, s. 33 (1).

Date subcontract deemed completed

(2) Where a subcontract is certified to be completed, the subcontract shall be deemed to have been completed on the date of certification. R.S.O. 1990, c. C.30, s. 33 (2).

Services or materials supplied after subcontract certified completed

(3) If services or materials are supplied to the improvement under or in respect of a subcontract after the date the subcontract is certified to be completed, those services or materials shall be deemed to have been last supplied on the date of certification. R.S.O. 1990, c. C.30, s. 33 (3).

Copy of certificate

(4) Within seven days of the date the subcontract is certified to be completed, the payment certifier or the owner and the contractor, as the case may be, shall give a copy of the certificate,

(a) to the subcontractor whose subcontract has been certified as complete; and

(b) to the owner and the contractor, where certification is by the payment certifier. R.S.O. 1990, c. C.30, s. 33 (4).

Notice of intention to register in accordance with the *Condominium Act, 1998*

Definitions

33.1 (1) In this section,

"declaration" means a declaration as defined in the *Condominium Act, 1998*; ("déclaration")

"description" means a description as defined in the *Condominium Act, 1998*; ("description")

"registered" means registered as defined in the *Condominium Act, 1998*. ("enregistré") 2010, c. 16, Sched. 2, s. 2 (4).

Notice required

(2) An owner of land described in a description that is intended to be registered together with a declaration in accordance with the *Condominium Act, 1998* shall publish notice of the intended registration in a construction trade newspaper at least five and not more than 15 days, excluding Saturdays and holidays, before the description is submitted for approval under subsection 9 (3) of the *Condominium Act, 1998*. 2010, c. 16, Sched. 2, s. 2 (4).

Contents

(3) The notice shall be in the prescribed form and shall include,

(a) the owner's name and address for service;

(b) a concise overview of the land described in the description, including reference to the lot and plan number and the parcel number or numbers of the land; and

(c) if, to the best of the owner's knowledge, information and belief, a contractor supplied services or materials to an improvement in respect of the land during the 90-day period preceding the day on which the description is to be submitted for approval under subsection 9 (3) of the *Condominium Act, 1998*, the contractor's name, address and, if known, address for service. 2010, c. 16, Sched. 2, s. 2 (4).

Liability for failure to comply

(4) An owner who fails to comply with this section is liable to any person entitled to a lien who suffers damages as a result. 2010, c. 16, Sched. 2, s. 2 (4).

How lien preserved

34. (1) A lien may be preserved during the supplying of services or materials or at any time before it expires,

(a) where the lien attaches to the premises, by the registration in the proper land registry office of a claim for lien on the title of the premises in accordance with this Part; and

(b) where the lien does not attach to the premises, by giving to the owner a copy of the claim for lien. R.S.O. 1990, c. C.30, s. 34 (1); 2010, c. 16, Sched. 2, s. 2 (5).

Public highway

(2) Where a claim for lien is in respect of a public street or highway owned by a municipality, the copy of the claim for lien shall be given to the clerk of the municipality. R.S.O. 1990, c. C.30, s. 34 (2); 2010, c. 16, Sched. 2, s. 2 (6).

Premises owned by Crown

(3) Where the owner of the premises is the Crown, the copy of the claim for lien shall be given to the office prescribed by regulation, or, where no office has been prescribed, to the ministry or Crown agency for whom the improvement is made. R.S.O. 1990, c. C.30, s. 34 (3); 2010, c. 16, Sched. 2, s. 2 (7).

Railway right-of-way

(4) Where the premises is a railway right-of-way, the copy of the claim for lien shall be given to the manager or any person apparently in charge of any office of the railway in Ontario. R.S.O. 1990, c. C.30, s. 34 (4); 2010, c. 16, Sched. 2, s. 2 (7).

Contents of claim for lien

(5) Every claim for lien shall set out,

(a) the name and address for service of the person claiming the lien and the name and address of the owner of the premises and of the person for whom the services or materials were supplied and the time within which those services or materials were supplied;

(b) a short description of the services or materials that were supplied;

(c) the contract price or subcontract price;

(d) the amount claimed in respect of services or materials that have been supplied; and

(e) a description of the premises,

(i) where the lien attaches to the premises, sufficient for registration under the *Land Titles Act* or the *Registry Act*, as the case may be, or

(ii) where the lien does not attach to the premises, being the address or other identification of the location of the premises. R.S.O. 1990, c. C.30, s. 34 (5); 2010, c. 16, Sched. 2, s. 2 (8).

(6) REPEALED: 2010, c. 16, Sched. 2, s. 2 (9).

Preservation of general lien

(7) Subject to subsection 44 (4) (apportionment), a general lien shall be preserved against each of the premises that the person having the lien desires the lien to continue to apply against, and the claim against each premises may be for the price of the services or materials that have been supplied to all the premises. R.S.O. 1990, c. C.30, s. 34 (7).

Who may join in claim

(8) Any number of persons having liens upon the same premises may unite in a claim for lien. R.S.O. 1990, c. C.30, s. 34 (8); 2010, c. 16, Sched. 2, s. 2 (10).

Liability for exaggerated claim, etc.

35. In addition to any other ground on which the person may be liable, any person who preserves a claim for lien or who gives written notice of a lien,

(a) for an amount which the person knows or ought to know is grossly in excess of the amount which the person is owed; or

(b) where the person knows or ought to know that the person does not have a lien,

is liable to any person who suffers damages as a result. R.S.O. 1990, c. C.30, s. 35.

What liens may be perfected

36. (1) A lien may not be perfected unless it is preserved. R.S.O. 1990, c. C.30, s. 36 (1).

Expiry of preserved lien

(2) A lien that has been preserved expires unless it is perfected prior to the end of the forty-five-day period next following the last day, under section 31, on which the lien could have been preserved. R.S.O. 1990, c. C.30, s. 36 (2).

How lien perfected

(3) A lien claimant perfects the lien claimant's preserved lien,

(a) where the lien attaches to the premises, when the lien claimant commences an action to enforce the lien and, except where an order to vacate the registration of the lien is made, the lien claimant registers a certificate of action in the prescribed form on the title of the premises; or

(b) where the lien does not attach to the premises, when the lien claimant commences an action to enforce the lien. R.S.O. 1990, c. C.30, s. 36 (3).

Rules re sheltering

(4) A preserved lien becomes perfected by sheltering under a lien perfected by another lien claimant in respect of the same improvement in accordance with the following rules:

1. The preserved lien of a lien claimant is perfected by sheltering under the perfected lien of another lien claimant in respect of the same improvement where,

    i. the lien of that other lien claimant was a subsisting perfected lien at the time when the lien of the lien claimant was preserved, or

ii. the lien of that other lien claimant is perfected in accordance with clause (3) (a) or (b) between the time when the lien of the lien claimant was preserved and the time that the lien of the lien claimant would have expired under subsection (2).

2. The validity of the perfection of a sheltered lien does not depend upon the validity, proper preservation or perfection of the lien under which it is sheltered.

3. A sheltered claim for lien is perfected only as to the defendants and the nature of the relief claimed in the statement of claim under which it is sheltered.

4. Upon notice given by a defendant named in a statement of claim, any lien claimant whose lien is sheltered under that statement of claim shall provide the defendant with further particulars of the claim for lien or of any fact alleged in the claim for lien. R.S.O. 1990, c. C.30, s. 36 (4).

General lien

(5) Subject to subsection 44 (4) (apportionment), a preserved general lien that attaches to the premises shall be perfected against each premises to which the person having the lien desires the lien to continue to apply. R.S.O. 1990, c. C.30, s. 36 (5).

Where period of credit extended

(6) A person who has preserved a lien, but who has extended a period of credit for the payment of the amount to which the lien relates, may commence an action for the purpose of perfecting the lien even though the period of credit has not at the time expired. R.S.O. 1990, c. C.30, s. 36 (6).

Expiry of perfected lien

37. (1) A perfected lien expires immediately after the second anniversary of the commencement of the action that perfected the lien, unless one of the following occurs on or before that anniversary:

1. An order is made for the trial of an action in which the lien may be enforced.

2. An action in which the lien may be enforced is set down for trial. 1994, c. 27, s. 42 (1).

Note: Subsection 37 (1), as re-enacted by the Statutes of Ontario, 1994, chapter 27, subsection 42 (1), does not affect any rights acquired by a person under a judgment or court order before December 9th, 1994. See: 1994, c. 27, s. 42 (3).

Motion under s. 46

(2) Where a lien has expired under subsection (1), a motion may be made under section 46. R.S.O. 1990, c. C.30, s. 37 (2).

Saving other rights

38. The expiration of a lien under this Act shall not affect any other legal or equitable right or remedy otherwise available to the person whose lien has expired. R.S.O. 1990, c. C.30, s. 38.

PART VI
RIGHT TO INFORMATION

Right to information;

39. (1) Any person having a lien or who is the beneficiary of a trust under Part II or who is a mortgagee may, at any time, by written request, require information to be provided within a reasonable time, not to exceed twenty-one days, as follows:

from owner or contractor

1. By the owner or contractor, with,
   i. the names of the parties to the contract,
   ii. the contract price,
   iii. the state of accounts between the owner and the contractor,
   iv. a copy of any labour and material payment bond in respect of the contract posted by the contractor with the owner, and
   v. a statement of whether the contract provides in writing that liens shall arise and expire on a lot-by-lot basis.

from contractor or subcontractor

2. By the contractor or a subcontractor, with,
   i. the names of the parties to a subcontract,
   ii. the state of accounts between the contractor and a subcontractor or between a subcontractor and another subcontractor,
   iii. a statement of whether there is a provision in a subcontract providing for certification of the subcontract,
   iv. a statement of whether a subcontract has been certified as complete, and
   v. a copy of any labour and material payment bond posted by a subcontractor with the contractor or by a subcontractor with another subcontractor.

from owner

3. By an owner who is selling the owner's interest in a premises that is a home, with,
   i. the name and address of the purchaser, the sale price, the amount of the purchase price paid or to be paid prior to the conveyance, the scheduled date of the conveyance and the lot and plan number or other legal description of the premises as contained in the agreement of purchase and sale, and
   ii. the date on which a permit authorizing occupancy or a certificate of completion and possession has been issued. R.S.O. 1990, c. C.30, s. 39 (1).

from mortgagee or unpaid vendor

(2) Any person having a lien or any beneficiary of a trust under Part II may, at any time, by written request, require a mortgagee or unpaid vendor to provide the person within a reasonable time, not to exceed twenty-one days, with,

(a) sufficient details concerning any mortgage on the premises to enable the person who requests the information to determine whether the mortgage was taken by the mortgagee for the purposes of financing the making of the improvement;

(b) a statement showing the amount advanced under the mortgage, the dates of those advances, and any arrears in payment including any arrears in the payment of interest; or

(c) a statement showing the amount secured under the agreement of purchase and sale and any arrears in payment including any arrears in the payment of interest. R.S.O. 1990, c. C.30, s. 39 (2).

by trustee or workers' trust fund

(3) The trustee of a workers' trust fund may at any time by written request require any contractor or subcontractor to permit the trustee, within a reasonable time after making the request, not to exceed twenty-one days, to inspect the payroll records of all workers who are beneficiaries of the fund, and who have supplied labour to the making of the improvement, and who are employed by the contractor or the subcontractor. R.S.O. 1990, c. C.30, s. 39 (3).

respecting publication of certificate of substantial performance

(4) A contractor shall, upon written request whenever made to the contractor by any person, within a reasonable time furnish in writing to the person the date of publication and the name of the construction trade newspaper in which a copy of a certificate of substantial performance has been published under subsection 32 (1). R.S.O. 1990, c. C.30, s. 39 (4).

Liability for failure to provide information

(5) Where a person, who is required under subsection (1), (2), (3) or (4) to provide information or access to information, does not provide the information or access to information as required or knowingly or negligently mis-states that information, the person is liable to the person who made the request for any damages sustained by reason thereof. R.S.O. 1990, c. C.30, s. 39 (5).

Order by court to comply with request

(6) Upon motion, the court may at any time, whether or not an action has been commenced, order a person to comply with a request that has been made to the person under this section and, when making the order, the court may make any order as to costs as it considers appropriate in the circumstances, including an order for the payment of costs on a substantial indemnity basis. R.S.O. 1990, c. C.30, s. 39 (6); 2006, c. 21, Sched. C, s. 102 (1).

Cross-examination on claim for lien

40. (1) Any of the following persons is liable to be cross-examined without an order on a claim for lien at any time, regardless of whether an action has been commenced:

1. The lien claimant.
2. An agent or assignee of the lien claimant.
3. A trustee of the workers' trust fund, where subsection 81 (2) applies. 2010, c. 16, Sched. 2, s. 2 (11).

Who may participate

(2) There shall be only one examination under subsection (1), but the contractor, the payer of the lien claimant, and every person named in the claim for lien who has an interest in the premises are entitled to participate therein. R.S.O. 1990, c. C.30, s. 40 (2).

Notice

(3) Any person intending to examine a person under subsection (1) shall give at least seven days notice of the examination specifying the time and place for the examination to,

(a) the person to be examined or the person's solicitor;

(b) every other person named in the claim for lien as having an interest in the premises;

(c) the contractor; and

(d) the payer of the lien claimant. R.S.O. 1990, c. C.30, s. 40 (3).

Application of rules of court

(4) The rules of court pertaining to examinations apply, with necessary modifications, to cross-examinations under this section. R.S.O. 1990, c. C.30, s. 40 (4).

PART VII
DISCHARGE OF PRESERVED OR PERFECTED LIENS

Discharge of lien and withdrawal of written notice of lien

Discharge of lien claim by release

41. (1) A preserved or perfected lien may be discharged,

(a) where the lien attaches to the premises, by the registration of a release in the prescribed form on the title to the premises and the release shall, except where the lien claimant is a corporation, be supported by an affidavit of execution; or

(b) where the lien does not attach to the premises, by giving a release in the prescribed form to the owner, in the manner set out in section 34 for the giving of copies of the claim for lien. R.S.O. 1990, c. C.30, s. 41 (1).

Withdrawal of written notice of lien

(2) A written notice of a lien may be withdrawn by giving a withdrawal in writing to the person to whom the written notice of a lien was given, and a payer given the withdrawal shall, in respect of the operation of subsection 24 (2), be in the same position as if the written notice of a lien had never been given. R.S.O. 1990, c. C.30, s. 41 (2).

Discharge of general lien

42. A preserved or perfected general lien may be discharged against any one or more of the premises that are subject to it, without affecting its application to any other premises to which it applies, by the registration of a release in the prescribed form on the title to the premises released. R.S.O. 1990, c. C.30, s. 42.

Postponement of lien claim

43. A preserved or perfected lien may be postponed in favour of the interest of another person in the premises by the registration on the title to the premises of a notice of postponement in the prescribed

form, and, in that case, subsection 78 (8) applies (priorities in event of postponement). R.S.O. 1990, c. C.30, s. 43.

Vacating lien by payment into court

Without notice

44. (1) Upon the motion of any person, without notice to any other person, the court shall make an order vacating,

(a) where the lien attaches to the premises, the registration of a claim for lien and any certificate of action in respect of that lien; or

(b) where the lien does not attach to the premises, the claim for lien,

where the person bringing the motion pays into court, or posts security in an amount equal to, the total of,

(c) the full amount claimed as owing in the claim for lien; and

(d) the lesser of $50,000 or 25 per cent of the amount described in clause (c), as security for costs. R.S.O. 1990, c. C.30, s. 44 (1).

On payment in of reasonable amount

(2) Upon the motion of any person, the court may make an order vacating the registration of a claim for lien, and any certificate of action in respect of that lien, upon the payment into court or the posting of security of an amount that the court determines to be reasonable in the circumstances to satisfy the lien. R.S.O. 1990, c. C.30, s. 44 (2).

Where lien does not attach to premises

(3) Where the lien does not attach to the premises, the court may make an order, upon the motion of any person, vacating a claim for lien given to the owner, upon the payment into court or the posting of security of an amount that the court determines to be reasonable in the circumstances to satisfy the lien. R.S.O. 1990, c. C.30, s. 44 (3).

Where general lien

(4) Where a motion is made to vacate the registration of a general lien against one or more of the premises subject to that lien, the court may apportion the general lien between the premises in respect of which the motion is made and all other premises that are subject to the lien. R.S.O. 1990, c. C.30, s. 44 (4).

Reduction of amount paid into court

(5) Where an amount has been paid into court or security has been posted with the court under this section, the court, upon notice to such persons as it may require, may order where it is appropriate to do so,

(a) the reduction of the amount paid into court, and the payment of any part of the amount paid into court to the person entitled; or

(b) the reduction of the amount of security posted with the court, and the delivery up of the security posted with the court for cancellation or substitution, as the case may be. R.S.O. 1990, c. C.30, s. 44 (5).

Lien a charge upon amount paid into court

(6) Where an order is made under clause (1) (a) or subsection (2), the lien ceases to attach to the premises and ceases to attach to the holdbacks and other amounts subject to a charge under section 21, and becomes instead a charge upon the amount paid into court or security posted, and the owner or payer shall, in respect of the operation of sections 21, 23 and 24, be in the same position as if the lien had not been preserved or written notice of the lien had not been given. R.S.O. 1990, c. C.30, s. 44 (6).

Idem

(7) Where an order is made under clause (1) (b) or subsection (3), the lien ceases to attach to the holdbacks and other amounts subject to a charge under section 21 and becomes instead a charge upon the amount paid into court or security posted and the owner or payer shall, in respect of the operation of sections 21, 23 and 24, be in the same position as if the lien had not been preserved or written notice of the lien had not been given. R.S.O. 1990, c. C.30, s. 44 (7).

Consolidation of motions

(8) Where more than one motion is made under subsection (1), (2) or (3) for the payment into court or posting of security to obtain an order vacating the registration of one or more preserved or perfected liens arising from the same improvement, the court may consolidate the motions and require that the amount paid into court or security posted be adequate to satisfy all the liens that are the subject of each of the motions, or make any other order that it considers appropriate. R.S.O. 1990, c. C.30, s. 44 (8).

Rules

(9) Where an order is made under subsection (1), (2) or (3), the following rules apply:

1. The lien claimant whose lien was the subject of the order may proceed with an action to enforce the claim against the amount paid into court or security posted in accordance with the procedures set out in Part VIII, but no certificate of action shall be registered against the premises.
2. The amount paid into court or security posted is subject to the claims of all persons having a lien to the same extent as if the amount paid into court or security posted was realized by the sale of the premises in an action to enforce the lien and shall be distributed among all lien claimants in accordance with the priorities provided for in section 80.
3. Where any amount is realized in a lien action by the sale of the premises or otherwise, it shall be pooled into a common fund with the amount paid into court or security posted under this section, and shall be distributed among all lien claimants in accordance with the priorities provided for in section 80.
4. A lien claimant whose lien is sheltered, in accordance with subsection 36 (4), under the lien that was the subject of the order may proceed with an action to enforce the sheltered lien as if the order had not been made. R.S.O. 1990, c. C.30, s. 44 (9); 2010, c. 16, Sched. 2, s. 2 (12).

Declaration by court that preserved lien has expired

45. (1) Where a lien that attaches to the premises is not preserved or is not perfected within the time allowed for doing so under section 31 or 36, the court upon,

(a) the motion of any person without notice to any other person;

(b) proof that the lien has not been preserved or perfected within the time allowed; and

(c) production of,

(i) a certificate of search under the *Land Titles Act*, or

(ii) a registrar's abstract under the *Registry Act*,

together with a certified copy of the claim for lien,

shall declare that the lien has expired and order that the registration of the claim for lien be vacated. R.S.O. 1990, c. C.30, s. 45 (1).

Idem

(2) Where the court is satisfied that a lien that does not attach to the premises has not been preserved or perfected within the time allowed for doing so under section 31 or 36, the court upon the motion of any person without notice to any other person shall declare that the lien has expired. R.S.O. 1990, c. C.30, s. 45 (2).

Order returning amount paid into court or cancelling security

(3) Where a declaration is made under subsection (1) or (2), the court shall order that,

(a) any amount that has been paid into court under section 44 in respect of that lien be returned to the person who paid the amount into court; and

(b) any security that has been posted under section 44 in respect of that lien be cancelled. R.S.O. 1990, c. C.30, s. 45 (3).

Order dismissing action, etc.

46. (1) Where a perfected lien that attaches to the premises has expired under section 37, the court, upon the motion of any person, shall declare that the lien has expired and shall make an order dismissing the action to enforce that lien and vacating the registration of a claim for lien and the certificate of action in respect of that action. R.S.O. 1990, c. C.30, s. 46 (1).

Idem

(2) Where a perfected lien that does not attach to the premises has expired under section 37, the court, upon the motion of any person, shall declare that the lien has expired and shall make an order dismissing the action to realize upon that lien. R.S.O. 1990, c. C.30, s. 46 (2).

Costs

(3) A motion under subsection (1) or (2) may be brought without notice, but no order as to costs in the action may be made upon the motion unless notice of that motion was given to the person against whom the order for costs is sought. R.S.O. 1990, c. C.30, s. 46 (3).

Order returning money paid into court or cancelling security

(4) Where an action is dismissed under subsection (1) or (2), the court shall order that,

(a) any amount that has been paid into court under section 44 in respect of that action be returned to the person who paid the amount into court; and

(b) any security that has been posted under section 44 in respect of that action be cancelled. R.S.O. 1990, c. C.30, s. 46 (4).

General power to discharge lien

47. (1) Upon motion, the court may,

(a) order the discharge of a lien;

(b) order that the registration of,

(i) a claim for lien, or

(ii) a certificate of action,

or both, be vacated;

(c) declare, where written notice of a lien has been given, that the lien has expired, or that the written notice of the lien shall no longer bind the person to whom it was given; or

(d) dismiss an action,

upon any proper ground and subject to any terms and conditions that the court considers appropriate in the circumstances. R.S.O. 1990, c. C.30, s. 47 (1).

Direction by court

(2) Where a certificate of action is vacated under subsection (1), and there remain liens which may be enforced in the action to which that certificate relates, the court shall give any directions that are necessary in the circumstances in respect of the continuation of that action subject to paragraph 4 of subsection 44 (9). R.S.O. 1990, c. C.30, s. 47 (2); 2010, c. 16, Sched. 2, s. 2 (13).

Discharge irrevocable

48. A discharge of a lien under this Part is irrevocable and the discharged lien cannot be revived, but no discharge affects the right of the person whose lien was discharged to claim a lien in respect of services or materials supplied by the person subsequent to the preservation of the discharged lien. R.S.O. 1990, c. C.30, s. 48.

Registration of orders

49. Where the lien attaches to the premises, an order declaring that a lien has expired, or discharging a lien, or vacating the registration of a claim for lien or a certificate of action, may be registered by registering on the title to the premises a certified copy of the order that includes a description of the premises sufficient for registration under the *Registry Act* or the *Land Titles Act*, as the case may be, and a reference to the registration number of every preserved or perfected claim for lien and certificate of action thereby affected. R.S.O. 1990, c. C.30, s. 49.

PART VIII
JURISDICTION AND PROCEDURE

Lien claims and trust claims

Lien claim enforceable in action

50. (1) A lien claim is enforceable in an action in the Superior Court of Justice in accordance with the procedure set out in this Part. R.S.O. 1990, c. C.30, s. 50 (1); 2006, c. 19, Sched. C, s. 1 (1).

Trust claim and lien claim not to be joined

(2) A trust claim shall not be joined with a lien claim but may be brought in any court of competent jurisdiction. R.S.O. 1990, c. C.30, s. 50 (2).

Joinder in action

(3) Any number of lien claimants whose liens are in respect of the same owner and the same premises may join in the same action. R.S.O. 1990, c. C.30, s. 50 (3).

Court to dispose completely of action

51. The court, whether the action is being tried by a judge or on a reference by a master, a case management master or a person agreed on by the parties,

(a) shall try the action, including any set-off, crossclaim, counterclaim and, subject to section 56, third party claim, and all questions that arise therein or that are necessary to be tried in order to dispose completely of the action and to adjust the rights and liabilities of the persons appearing before it or upon whom notice of trial has been served; and

(b) shall take all accounts, make all inquiries, give all directions and do all things necessary to dispose finally of the action and all matters, questions and accounts arising therein or at the trial and to adjust the rights and liabilities of, and give all necessary relief to, all parties to the action. R.S.O. 1990, c. C.30, s. 51; 1994, c. 27, s. 42 (4); 1996, c. 25, s. 4 (1).

Where exclusive jurisdiction not acquired

52. A judge, master or case management master does not acquire exclusive jurisdiction over the trial of an action or reference by reason only of appointing the time and place for the trial of the action or reference, or for holding a settlement meeting. R.S.O. 1990, c. C.30, s. 52; 1996, c. 25, s. 4 (2).

Statement of claim and defence

How action commenced

53. (1) An action shall be commenced by issuing a statement of claim in the office of the local registrar of the court for the area in which the premises or a part thereof are situate. R.S.O. 1990, c. C.30, s. 53 (1).

Service of statement of claim

(2) The statement of claim shall be served within ninety days after it is issued, but the court may, upon a motion made before or after the expiration of that period of time, extend the time for service. R.S.O. 1990, c. C.30, s. 53 (2).

Crossclaim or counterclaim

(3) A crossclaim or counterclaim by any person shall accompany the person's statement of defence, but on motion the court may grant leave to deliver a crossclaim or counterclaim after this time where it is appropriate to do so, and where leave is granted, the court may,

(a) make any order as to costs that it considers appropriate; and

(b) give directions as to the conduct of the action. R.S.O. 1990, c. C.30, s. 53 (3).

Time for delivery of pleadings

54. (1) The time for delivering a statement of defence to a lien claim, crossclaim, counterclaim or third party claim shall be twenty days. R.S.O. 1990, c. C.30, s. 54 (1).

Noting in default

(2) Where a person against whom a claim is made in a statement of claim, counterclaim, crossclaim or third party claim defaults in the delivery of a defence to that claim, the person against whom the claim is made may be noted in default. R.S.O. 1990, c. C.30, s. 54 (2).

Effect of default in defence

(3) Where a defendant or third party has been noted in default under subsection (2), the defendant or third party shall not be permitted to contest the claim of the person who named the defendant or third party as a defendant or third party, or to file a statement of defence, except with leave of the court, to be given only where the court is satisfied that there is evidence to support a defence, and where leave is granted, the court,

(a) may make any order as to costs that it considers appropriate; and

(b) may give directions as to the conduct of the action. R.S.O. 1990, c. C.30, s. 54 (3).

Allegations of fact deemed admitted

(4) Except where leave has been granted under subsection (3), a defendant or third party who has been noted in default under subsection (2) shall be deemed to admit all allegations of fact made in the statement of claim, counterclaim, crossclaim or third party claim, as the case may be, and shall not be entitled to notice of or to participate in the trial of the action or any step in the action and judgment may be given against the defendant or third party. R.S.O. 1990, c. C.30, s. 54 (4).

Accommodating multiple claims

Joinder of claims

55. (1) A plaintiff in an action may join with a lien claim a claim for breach of contract or subcontract. R.S.O. 1990, c. C.30, s. 55 (1).

Counterclaims and crossclaims

(2) A defendant in an action may,

(a) counterclaim against the person who named the defendant as a defendant in respect of any claim that the defendant may be entitled to make against that person, whether or not that claim is related to the making of the improvement;

(b) crossclaim against a co-defendant in respect of any claim that the defendant may be entitled to make against that person related to the making of the improvement. R.S.O. 1990, c. C.30, s. 55 (2).

Rules re third party claims

56. The following rules govern third party claims:

1. Subject to paragraph 2, a person against whom a claim is made in a statement of claim, crossclaim, counterclaim or third party claim may join a person who is not a party to the action as a third party for the purpose of claiming contribution or indemnity from the third party in respect of that claim.

2. A person may only be joined as a third party with leave of the court upon a motion made with notice to the owner and all persons having subsisting preserved or perfected liens at the time of the motion, but such leave shall not be given unless the court is satisfied that the trial of the third party claim will not,

   i. unduly prejudice the ability of the third party or of any lien claimant or defendant to prosecute a claim or conduct a defence, or

   ii. unduly delay or complicate the resolution of the lien action.

3. The court may give such directions as it considers appropriate in the circumstances in respect of the conduct of third party claims. R.S.O. 1990, c. C.30, s. 56.

Parties

57. (1) The person serving the notice of trial and all persons served with notice of trial are parties to the action. R.S.O. 1990, c. C.30, s. 57 (1).

Adding parties

(2) Subject to section 54, the court may at any time add or join any person as a party to the action. R.S.O. 1990, c. C.30, s. 57 (2).

Reference to master, etc.

58. (1) On motion made after the delivery of all statements of defence, or the statement of defence to all crossclaims, counterclaims or third party claims, if any, or after the time for their delivery has expired, a judge may refer the whole action or any part of it for trial,

(a) to a master assigned to the area in which the premises or part of the premises are situate;

(a.1) to a case management master; or

(b) to a person agreed on by the parties. 1994, c. 27, s. 42 (5); 1996, c. 25, s. 4 (3).

Notice

(1.1) Notice of a motion for a reference under clause (1) (b) shall be given to every person who is or would be entitled to a notice of settlement meeting under subsection 60 (2). 1994, c. 27, s. 42 (5).

Requirement for consent

(1.2) A reference under clause (1) (b) shall not be made unless the persons entitled to notice under subsection (1.1) consent to the reference. 1994, c. 27, s. 42 (5).

Deemed consent

(1.3) A person given notice under subsection (1.1) who does not oppose the motion or does not appear at the hearing of the motion shall be deemed to consent to the reference under clause (1) (b). 1994, c. 27, s. 42 (5).

Master not to hear motion

(2) A master or a case management master shall not hear or dispose of a motion made under subsection (1). R.S.O. 1990, c. C.30, s. 58 (2); 1996, c. 25, s. 4 (4).

Reference directed

(3) At the trial, a judge may direct a reference to a master assigned to the area in which the premises or part of the premises are situate, to a case management master or to a person agreed on by the parties. 1996, c. 25, s. 4 (5).

Powers of master on reference

(4) A master or case management master to whom a reference has been directed has all the jurisdiction, powers and authority of the court to try and completely dispose of the action and all matters and questions arising in connection with the action, including the giving of leave to amend any pleading and the giving of directions to a receiver or trustee appointed by the court. R.S.O. 1990, c. C.30, s. 58 (4); 1996, c. 25, s. 4 (6).

Powers of person agreed on by parties

(4.1) Subsection (4) also applies to a person who is agreed on by the parties and to whom a reference has been directed. 1994, c. 27, s. 42 (7).

Application to set aside order of reference

(5) Where under subsection (1) the action has been referred to a master, to a case management master or to a person agreed on by the parties for trial, any person who subsequently becomes a party to the action may, within seven days after becoming a party to the action, make a motion to a judge of the court that directed the reference to set aside the judgment directing the reference. 1996, c. 25, s. 4 (7).

Effect on subsequent party to action

(6) Where no motion is made under subsection (5), or where the motion is refused, the person who subsequently became a party to the action is bound by the judgment directing the reference as if the person had been a party to the action at the time the reference was directed. R.S.O. 1990, c. C.30, s. 58 (6).

Carriage of action

59. (1) The court may at any time make an order awarding carriage of the action to any person who has a perfected lien. R.S.O. 1990, c. C.30, s. 59 (1).

Consolidation of actions

(2) Where more than one action is brought to enforce liens in respect of the same improvement, the court may,

(a) consolidate all the actions into one action; and

(b) award carriage of the action to any person who has a perfected lien. R.S.O. 1990, c. C.30, s. 59 (2).

Application to fix date for trial or settlement meeting

60. (1) Any party may make a motion to the court without notice to any other person at any time after,

(a) the delivery of the statements of defence, or the statements of defence to all crossclaims, counterclaims or third party claims, if any, where the plaintiff's claim is disputed; or

(b) the expiry of the time for the delivery of these statements of defence in all other cases,

to have a day, time and place fixed for the trial of the action, or for the holding of a settlement meeting under section 61, or both. R.S.O. 1990, c. C.30, s. 60 (1).

Notice of settlement meeting

(2) Where the court orders the holding of a settlement meeting, then at least ten days before the date appointed for the holding of the meeting, the party who obtained the appointment shall serve a notice of settlement meeting upon any person who was, on the twelfth day before the date appointed,

(a) subject to section 54 (default in filing defence), the owner and every other person named as a defendant in every statement of claim in respect of the action;

(b) where the lien attaches to the premises, a person with a registered interest in the premises;

(c) where the lien attaches to the premises, an execution creditor of the owner;

(d) any other person having a preserved or perfected lien against the premises; and

(e) a person joined as a third party under section 56. R.S.O. 1990, c. C.30, s. 60 (2).

Request to identify other persons having lien

(3) Where the lien does not attach to the premises, the party who obtained the appointment for the holding of the settlement meeting shall request the owner to inform the party who obtained the appointment of the identity of every person described in clause (2) (d). R.S.O. 1990, c. C.30, s. 60 (3).

Service of notice of trial

(4) Subject to section 54, where the court fixes a date for trial, the party who obtained the appointment shall serve a notice of trial, at least ten days before the date appointed for trial, upon any person who is or would be entitled to a notice of a settlement meeting under subsection (2). R.S.O. 1990, c. C.30, s. 60 (4).

Conduct of settlement meeting

61. (1) Where a settlement meeting is ordered by the court, it shall be conducted in accordance with this section. R.S.O. 1990, c. C.30, s. 61 (1).

Idem

(2) The settlement meeting shall be conducted by,

(a) a person selected by a majority of the persons present at the meeting; or

(b) where no person is selected, by the person who took out the appointment,

and shall be for the purpose of resolving or narrowing any issues to be tried in the action. R.S.O. 1990, c. C.30, s. 61 (2).

Idem

(3) The results of the settlement meeting shall be embodied in a statement of settlement which shall summarize those issues of fact and law which have been settled by the parties. R.S.O. 1990, c. C.30, s. 61 (3).

Statement of settlement

(4) The statement of settlement shall be filed with the court and shall be attached to and form part of the record, and the settlement shall be binding upon all persons served with notice of the settlement meeting, and upon all defendants against whom pleadings have been noted closed under section 54, but subject to subsection 54 (3), the court may vary or set aside the statement of settlement upon such order as to costs or otherwise as it considers appropriate. R.S.O. 1990, c. C.30, s. 61 (4).

Power of court

(5) Upon the filing of the statement of settlement with the court, the court may,

(a) if there was no dispute at the meeting to a claim for lien, declare the lien valid and give such further judgment as it considers appropriate;

(b) enter a judgment or make a report upon consent on those issues which have been settled by the parties;

(c) make any order that is necessary in order to give effect to any judgment or report of the court under clause (a) or (b); and

(d) make any order that is necessary for, or will expedite the conduct of, the trial. R.S.O. 1990, c. C.30, s. 61 (5).

Non-application of Rule 50

(6) Rule 50 of the Rules of Civil Procedure does not apply to an action under this Act. R.S.O. 1990, c. C.30, s. 61 (6).

Judgment or report

62. (1) The results of the trial shall be embodied,

(a) in a judgment in the prescribed form, where the trial is conducted by a judge of the court; or

(b) in a report in the prescribed form, where the trial is conducted on a reference by a master, by a case management master, or by a person agreed on by the parties. R.S.O. 1990, c. C.30, s. 62 (1); 1994, c. 27, s. 42 (9); 1996, c. 25, s. 4 (8).

Varying form

(2) The prescribed form of judgment or report may be varied by the court in order to meet the circumstances of the case so as to afford to any party to the action any right or remedy in the judgment or report to which the party is entitled. R.S.O. 1990, c. C.30, s. 62 (2).

(3) REPEALED: 1999, c. 12, Sched. B, s. 3.

Issue of execution

(4) The judgment or report may direct any party found liable to make a payment, to make such payment forthwith, and execution may be issued,

(a) immediately, in the case of a judgment; or

(b) after confirmation, in the case of a report. R.S.O. 1990, c. C.30, s. 62 (4).

Order for sale

(5) The court may order that the interest in the premises be sold and may direct the sale to take place at any time after the judgment or confirmation of the report, allowing a reasonable time for advertising the sale. R.S.O. 1990, c. C.30, s. 62 (5).

Persons who may be let in

(6) The court may allow any person with a perfected lien,

(a) who was not served with a notice of trial; or

(b) whose action was stayed by reason of an order under the *Arbitrations Act*,

to be let in to prove the claim at any time before the amount realized in the action for the satisfaction of the lien has been distributed, and where the claim is allowed, the judgment or report shall be amended to include the claim. R.S.O. 1990, c. C.30, s. 62 (6).

Personal judgment

63. Subject to paragraph 3 of subsection 36 (4) (sheltering), the court may award any lien claimant a personal judgment, whether the claimant proves the lien or not, upon any ground relating to the claim that is disclosed by the evidence against any party to the action for any amount that may be due to the claimant and that the claimant might have recovered in a proceeding against that party. R.S.O. 1990, c. C.30, s. 63.

Right to share in proceeds

64. Where an interest in the premises is sold under court order, or by a trustee appointed under Part IX, a person with a perfected lien is entitled to share in the proceeds of sale in respect of the amount owing to the person, although that amount or part thereof was not payable at the time of the commencement of the action or at the time of the distribution of the proceeds. R.S.O. 1990, c. C.30, s. 64.

Orders for completion of sale

65. (1) The court may make all orders necessary for the completion of a sale and for vesting an interest in the premises in the purchaser. R.S.O. 1990, c. C.30, s. 65 (1).

Payment into court of proceeds

(2) Where an interest in the premises is sold under court order, or by a trustee appointed under Part IX, the proceeds of the sale shall be paid into court to the credit of the action. R.S.O. 1990, c. C.30, s. 65 (2).

Fees and disbursements

(3) The court may add to the claim of the party having carriage of the action the fees and actual disbursements of the party in connection with the sale. R.S.O. 1990, c. C.30, s. 65 (3).

To whom proceeds paid

(4) The court shall direct to whom the proceeds shall be paid in accordance with the priorities established by this Act. R.S.O. 1990, c. C.30, s. 65 (4).

Where proceeds insufficient to satisfy judgment

(5) Where the proceeds of the sale are not sufficient to satisfy the judgment and costs, the court shall certify the amount of the deficiency and give personal judgment in the appropriate amount to each party whose judgment is not satisfied out of the proceeds against each person who has been found liable to the party. R.S.O. 1990, c. C.30, s. 65 (5).

Application to court for directions

66. Where a person is in possession of an amount that may be subject to a trust under Part II, the person may apply to the court for direction and the court may give any direction or make any order that the court considers appropriate in the circumstances. R.S.O. 1990, c. C.30, s. 66.

Procedure generally

Summary procedure

67. (1) The procedure in an action shall be as far as possible of a summary character, having regard to the amount and nature of the liens in question. R.S.O. 1990, c. C.30, s. 67 (1).

Interlocutory steps

(2) Interlocutory steps, other than those provided for in this Act, shall not be taken without the consent of the court obtained upon proof that the steps are necessary or would expedite the resolution of the issues in dispute. R.S.O. 1990, c. C.30, s. 67 (2).

Application of rules of court

(3) Except where inconsistent with this Act, and subject to subsection (2), the *Courts of Justice Act* and the rules of court apply to pleadings and proceedings under this Act. R.S.O. 1990, c. C.30, s. 67 (3).

Technical assistance

(4) The court may obtain the assistance of any merchant, accountant, actuary, building contractor, architect, engineer or other person in such a way as it considers fit, to enable it to determine better any matter of fact in question, and may fix the remuneration of such person and direct the payment thereof by any of the parties. R.S.O. 1990, c. C.30, s. 67 (4).

Representation

(5) A lien claimant whose claim is for an amount within the monetary jurisdiction of the Small Claims Court may be represented by a person authorized under the *Law Society Act* to represent the claimant. 2006, c. 21, Sched. C, s. 102 (2).

Manner of making motion

(6) Where in this Act the court is empowered to do anything upon motion, the motion may be made in the manner provided for in the rules of court for the making of motions, regardless of whether any action has been commenced at the time the motion is made. R.S.O. 1990, c. C.30, s. 67 (6).

PART IX
EXTRAORDINARY REMEDIES

Application for appointment of trustee

68. (1) Any person having a lien, or any other person having an interest in the premises, may apply to the court for the appointment of a trustee and the court may appoint a trustee upon such terms as to the giving of security or otherwise as the court considers appropriate. R.S.O. 1990, c. C.30, s. 68 (1).

Powers of trustee

(2) Subject to the supervision and direction of the court, a trustee appointed under subsection (1) may,

(a) act as a receiver and manager and, subject to the *Planning Act* and the approval of the court, mortgage, sell or lease the premises or any part thereof;

(b) complete or partially complete the improvement;

(c) take appropriate steps for the preservation of the premises; and

(d) subject to the approval of the court, take such other steps as are appropriate in the circumstances. R.S.O. 1990, c. C.30, s. 68 (2).

Liens a charge on amounts recovered

(3) Subject to subsection 78 (7), all liens shall be a charge upon any amount recovered by the trustee after payment of the reasonable business expenses and management costs incurred by the trustee in the exercise of any power under subsection (2). R.S.O. 1990, c. C.30, s. 68 (3).

Sale subject to encumbrances

(4) Any interest in the premises that is to be sold may be offered for sale subject to any mortgage, charge, interest or other encumbrance that the court directs. R.S.O. 1990, c. C.30, s. 68 (4).

Orders for completion of sale, etc.

(5) The court may make all orders necessary for the completion of any mortgage, lease or sale by a trustee under this section. R.S.O. 1990, c. C.30, s. 68 (5).

Labour and material payment bonds

69. (1) Where a labour and material payment bond is in effect in respect of an improvement, any person whose payment is guaranteed by that bond has a right of action to recover the amount of the person's claim, in accordance with the terms and conditions of the bond, against the surety on the bond, where the principal on the bond defaults in making the payment guaranteed by the bond. R.S.O. 1990, c. C.30, s. 69 (1).

Saving

(2) Nothing in this section makes the surety liable for an amount in excess of the amount that the surety undertakes to pay under the bond and the surety's liability under the bond shall be reduced by and to the extent of any payment made in good faith by the surety either before or after judgment is obtained against the surety. R.S.O. 1990, c. C.30, s. 69 (2).

Subrogation

(3) The surety, upon satisfaction of its obligation to any person whose payment is guaranteed by the bond, shall be subrogated to all the rights of that person. R.S.O. 1990, c. C.30, s. 69 (3).

PART X
APPEALS

Stated case

70. (1) Where in the course of an action a question of law arises, the court may state the question in the form of a stated case for the opinion of the Divisional Court, and the stated case shall thereupon be set down to be heard before the Divisional Court and notice of hearing shall be served by the party setting down the matter upon all parties concerned. R.S.O. 1990, c. C.30, s. 70 (1).

Facts to be set out

(2) The stated case shall set forth those facts material to the determination of the question raised. R.S.O. 1990, c. C.30, s. 70 (2).

Appeal to Divisional Court

71. (1) Subject to subsection (3), an appeal lies to the Divisional Court from a judgment or an order on a motion to oppose confirmation of a report under this Act. R.S.O. 1990, c. C.30, s. 71 (1).

Notice of appeal

(2) A party wishing to appeal shall file and serve a notice of appeal within fifteen days of the date of the judgment or order, but the time for filing or serving the notice of appeal may be extended by the written consent of all parties, or by a single judge of the Divisional Court where an appropriate case is made out for doing so. R.S.O. 1990, c. C.30, s. 71 (2).

Where no appeal lies

(3) No appeal lies from,

(a) a judgment or an order on a motion to oppose confirmation of a report under this Act, where the amount claimed is $1,000 or less; or

(b) an interlocutory order made by the court. R.S.O. 1990, c. C.30, s. 71 (3).

PART XI
PRIORITIES

Enforcement of lien despite default

72. A person who has supplied services or materials in respect of an improvement may enforce a lien despite the non-completion or abandonment of the contract or a subcontract by any other person. R.S.O. 1990, c. C.30, s. 72.

Assignment of lien rights

73. The rights of a person having a lien may be assigned by an instrument in writing and, if not assigned, upon the death of the person pass to the person's personal representative. R.S.O. 1990, c. C.30, s. 73.

Continuation of general lien

74. (1) Subject to section 82, where one or more premises that are subject to an unpreserved general lien are sold, the general lien continues for the full amount of the lien against those premises that are subject to the lien, that were not sold. R.S.O. 1990, c. C.30, s. 74 (1).

Idem

(2) Where a person having a preserved or perfected general lien releases the lien against one or more of the premises subject to the lien, the lien continues for the full amount of the lien against those premises that were not released. R.S.O. 1990, c. C.30, s. 74 (2).

Effect of taking security

75. (1) The taking of any security for, or the acceptance of any promissory note or bill of exchange for, or the taking of any acknowledgment of, or the giving of time for the payment of, or the taking of proceedings for the recovery of, or the obtaining of a personal judgment for, the claim, does not in itself merge, waive, pay, satisfy, prejudice or destroy a lien. R.S.O. 1990, c. C.30, s. 75 (1).

Where note or bill negotiated

(2) Where any promissory note or bill of exchange has been negotiated, the person having the lien may still enforce the lien if the person is the holder of the promissory note or bill of exchange at the time when the person proves the claim for lien. R.S.O. 1990, c. C.30, s. 75 (2).

Time not extended

(3) Nothing in this section extends the time for, or dispenses with the requirement for, the preservation or perfection of a lien. R.S.O. 1990, c. C.30, s. 75 (3).

Lien claimant deemed purchaser

76. Where a claim for lien is preserved by registration, the lien claimant shall be deemed to be a purchaser to the extent of his lien within the provisions of the *Registry Act* and *Land Titles Act*, but except as otherwise provided in this Act, those Acts do not apply to any lien arising under this Act. R.S.O. 1990, c. C.30, s. 76.

Priority of liens over executions, etc.

77. The liens arising from an improvement have priority over all judgments, executions, assignments, attachments, garnishments and receiving orders except those executed or recovered upon before the time when the first lien arose in respect of the improvement. R.S.O. 1990, c. C.30, s. 77.

Priority over mortgages, etc.

78. (1) Except as provided in this section, the liens arising from an improvement have priority over all conveyances, mortgages or other agreements affecting the owner's interest in the premises. R.S.O. 1990, c. C.30, s. 78 (1).

Building mortgage

(2) Where a mortgagee takes a mortgage with the intention to secure the financing of an improvement, the liens arising from the improvement have priority over that mortgage, and any mortgage taken out to repay that mortgage, to the extent of any deficiency in the holdbacks required to be retained by the owner under Part IV, irrespective of when that mortgage, or the mortgage taken out to repay it, is registered. R.S.O. 1990, c. C.30, s. 78 (2).

Prior mortgages, prior advances

(3) Subject to subsection (2), and without limiting the effect of subsection (4), all conveyances, mortgages or other agreements affecting the owner's interest in the premises that were registered prior to

the time when the first lien arose in respect of an improvement have priority over the liens arising from the improvement to the extent of the lesser of,

(a) the actual value of the premises at the time when the first lien arose; and

(b) the total of all amounts that prior to that time were,

(i) advanced in the case of a mortgage, and

(ii) advanced or secured in the case of a conveyance or other agreement. R.S.O. 1990, c. C.30, s. 78 (3).

Prior mortgages, subsequent advances

(4) Subject to subsection (2), a conveyance, mortgage or other agreement affecting the owner's interest in the premises that was registered prior to the time when the first lien arose in respect of an improvement, has priority, in addition to the priority to which it is entitled under subsection (3), over the liens arising from the improvement, to the extent of any advance made in respect of that conveyance, mortgage or other agreement after the time when the first lien arose, unless,

(a) at the time when the advance was made, there was a preserved or perfected lien against the premises; or

(b) prior to the time when the advance was made, the person making the advance had received written notice of a lien. R.S.O. 1990, c. C.30, s. 78 (4).

Special priority against subsequent mortgages

(5) Where a mortgage affecting the owner's interest in the premises is registered after the time when the first lien arose in respect of an improvement, the liens arising from the improvement have priority over the mortgage to the extent of any deficiency in the holdbacks required to be retained by the owner under Part IV. R.S.O. 1990, c. C.30, s. 78 (5).

General priority against subsequent mortgages

(6) Subject to subsections (2) and (5), a conveyance, mortgage or other agreement affecting the owner's interest in the premises that is registered after the time when the first lien arose in respect to the improvement, has priority over the liens arising from the improvement to the extent of any advance made in respect of that conveyance, mortgage or other agreement, unless,

(a) at the time when the advance was made, there was a preserved or perfected lien against the premises; or

(b) prior to the time when the advance was made, the person making the advance had received written notice of a lien. R.S.O. 1990, c. C.30, s. 78 (6).

Advances to trustee under Part IX

(7) Despite anything in this Act, where an amount is advanced to a trustee appointed under Part IX as a result of the exercise of any powers conferred upon the trustee under that Part,

(a) the interest in the premises acquired by the person making the advance takes priority, to the extent of the advance, over every lien existing at the date of the trustee's appointment; and

(b) the amount received is not subject to any lien existing at the date of the trustee's appointment. R.S.O. 1990, c. C.30, s. 78 (7).

Where postponement

(8) Despite subsections (4) and (6), where a preserved or perfected lien is postponed in favour of the interest of some other person in the premises, that person shall enjoy priority in accordance with the postponement over,

(a) the postponed lien; and

(b) where an advance is made, any unpreserved lien in respect of which no written notice has been received by the person in whose favour the postponement is made at the time of the advance,

but nothing in this subsection affects the priority of the liens under subsections (2) and (5). R.S.O. 1990, c. C.30, s. 78 (8).

Saving

(9) Subsections (2) and (5) do not apply in respect of a mortgage that was registered prior to the 2nd day of April, 1983. R.S.O. 1990, c. C.30, s. 78 (9).

Financial guarantee bond

(10) A purchaser who takes title from a mortgagee takes title to the premises free of the priority of the liens created by subsections (2) and (5) where,

(a) a bond of an insurer licensed under the *Insurance Act* to write surety and fidelity insurance; or

(b) a letter of credit or a guarantee from a bank listed in Schedule I or II to the *Bank Act* (Canada),

in a form prescribed is registered on the title to the premises, and, upon registration, the security of the bond, letter of credit or the guarantee takes the place of the priority created by those subsections, and persons who have proved liens have a right of action against the surety on the bond or guarantee or the issuer of the letter of credit. R.S.O. 1990, c. C.30, s. 78 (10); 1997, c. 19, s. 30.

Home buyer's mortgage

(11) Subsections (2) and (5) do not apply to a mortgage given or assumed by a home buyer. R.S.O. 1990, c. C.30, s. 78 (11).

Persons who comprise class

79. All persons having a lien who have supplied services or materials to the same payer comprise a class, and a person who has supplied services or materials to more than one payer is a member of every class to the extent to which the person's lien relates to that class. R.S.O. 1990, c. C.30, s. 79.

Priority between and within class

80. (1) Except where it is otherwise provided by this Act,

(a) no person having a lien is entitled to any priority over another member of the same class;

(b) all amounts available to satisfy the liens in respect of an improvement shall be distributed rateably among the members of each class according to their respective rights; and

(c) the lien of every member of a class has priority over the lien of the payer of that class. R.S.O. 1990, c. C.30, s. 80 (1).

Where conveyance or mortgage void

(2) Any conveyance or mortgage in respect of the premises to any person entitled to a lien on the premises, in payment of or as security for that claim, whether given before or after that lien arises, is void against all other persons entitled to a lien on the premises. R.S.O. 1990, c. C.30, s. 80 (2).

Worker's priority

81. (1) The lien of a worker has priority over the lien of any other person belonging to the same class to the extent of the amount of forty regular-time working days' wages. R.S.O. 1990, c. C.30, s. 81 (1).

Workers' trust fund

(2) Where monetary supplementary benefits are payable to a workers' trust fund instead of to a worker, the trustee of the workers' trust fund is subrogated to the rights of the worker under this Act with respect to those benefits. R.S.O. 1990, c. C.30, s. 81 (2).

Device to defeat workers' priority void

(3) Every device to defeat the priority given to workers by this section is void. R.S.O. 1990, c. C.30, s. 81 (3).

Subordination of general lien claims

82. Where a general lien is realized against a premises in an action in which other liens are also realized against the premises,

(a) the general lien shall rank with the other liens according to the rules of priority set out in section 80 only to the extent of,

(i) the total value of the general lien,

divided by,

(ii) the total number of premises to which the person having the general lien supplied services or materials under contract or subcontract; and

(b) in respect of the balance of the general lien, it shall rank next in priority to all other liens against the premises, whether or not of the same class. R.S.O. 1990, c. C.30, s. 82.

Application of insurance proceeds

83. Where a premises that is subject to a lien is destroyed in whole or in part, any amount received by the owner or a mortgagee by reason of any insurance on the premises shall take the place of the premises so destroyed and shall be distributed in accordance with the priorities set out in this Part. R.S.O. 1990, c. C.30, s. 83.

Distribution of proceeds of sale

84. Where an interest in the premises is sold or leased under an order of the court or by a trustee appointed under Part IX, the proceeds received as a result of that disposition, together with any amount paid into court under subsection 65 (2), shall be distributed in accordance with the priorities set out in this Part. R.S.O. 1990, c. C.30, s. 84.

Priorities on insolvency

85. (1) Where a payer becomes insolvent, the trust fund of which that payer is trustee shall be distributed so that priority over all others is given to a beneficiary of that trust who has proved a lien and

a beneficiary of a trust created by section 8 that is derived from that trust, who has proved a lien. R.S.O. 1990, c. C.30, s. 85 (1).

Idem

(2) Priority in the distribution of trust funds among those who have proved liens shall be in accordance with the respective priorities of their liens as set out in this Part. R.S.O. 1990, c. C.30, s. 85 (2).

Idem

(3) The remaining trust funds shall be distributed among the beneficiaries of that trust and the beneficiaries of trusts created by section 8 that are derived from that trust, whose liens have not been proved, in accordance with the respective priorities to which those liens would have been entitled as set out in this Part, had those liens been proved. R.S.O. 1990, c. C.30, s. 85 (3).

PART XII
MISCELLANEOUS RULES

Costs

86. (1) Subject to subsection (2), any order as to the costs in an action, application, motion or settlement meeting is in the discretion of the court, and an order as to costs may be made against,

(a) a party to the action or motion; or

(b) a person who represented a party to the action, application or motion, where the person,

(i) knowingly participated in the preservation or perfection of a lien, or represented a party at the trial of an action, where it is clear that the claim for a lien is without foundation or is for a grossly excessive amount, or that the lien has expired, or

(ii) prejudiced or delayed the conduct of the action,

and the order may be made on a substantial indemnity basis, including where the motion is heard by, or the action has been referred under section 58 to, a master, case management master or commissioner. 2006, c. 21, Sched. C, s. 102 (3).

Where least expensive course not taken

(2) Where the least expensive course is not taken by a party, the costs allowed to the party shall not exceed what would have been incurred had the least expensive course been taken. R.S.O. 1990, c. C.30, s. 86 (2).

How documents may be given

87. (1) Except where otherwise ordered by the court, all documents and notices required to be given or that may be given under this Act, may be served in any manner permitted under the rules of court or, in the alternative, may be sent by certified or registered mail addressed to the intended recipient at the recipient's last known mailing address,

(a) according to the records of the person sending the document; or

(b) as stated on the most recently registered instrument identifying the recipient as a person having an interest in the premises. R.S.O. 1990, c. C.30, s. 87 (1).

When document deemed received

(2) In the absence of evidence to the contrary, a document or notice sent to a person by certified or registered mail shall be deemed to have been received by the person on the fifth day following the date on which it was mailed, exclusive of Saturdays and holidays. R.S.O. 1990, c. C.30, s. 87 (2).

Date of mailing

(3) Where a document or notice is sent by registered mail, the date appearing on the postal registration receipt shall be deemed conclusively to be the date of mailing. R.S.O. 1990, c. C.30, s. 87 (3).

Regulations

88. The Lieutenant Governor in Council may make regulations,

(a) prescribing forms and providing for their use;

(b) prescribing the appropriate offices of the Crown to which claims for lien must be sent;

(c) prescribing the form and manner of publication of copies of certificates and declarations of substantial performance under section 32. R.S.O. 1990, c. C.30, s. 88.

Note: Despite Schedules A and B to the Revised Statutes of Ontario, 1990, section 92 of the *Construction Lien Act, 1983*, being chapter 6, shall be deemed to continue in force. See: 1993, c. 27, s. 8, par. 1 and s. 9.

Construction Lien Act

R.R.O. 1990, REGULATION 175

GENERAL

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Form 24	Notice of intention to register a condominum in accordance with the condominium act, 1998 under section 33.1 of the act

1. The office of the Crown to which a copy of a claim for lien must be given under subsection 34 (3) of the Act is as follows:

1. Where the contract is with a Ministry of the Crown, the office of the Director of Legal Services of that Ministry.
2. Where the contract is with the Ontario Mortgage and Housing Corporation, the office of the Director of Legal Services of the Ministry of Housing.
3. Where the contract is with a college of applied arts and technology, the office of the president of the college.
4. Where the contract is with any other office of the Crown, the chief executive officer of that office. R.R.O. 1990, Reg. 175, s. 1.

2. (1) A notice to a contractor under section 18 of the Act may be in Form 1. R.R.O. 1990, Reg. 175, s. 2 (1).

(2) A notice to a landlord under subsection 19 (1) of the Act may be in Form 2. R.R.O. 1990, Reg. 175, s. 2 (2).

(3) A notice to a contractor under subsection 19 (1) of the Act may be in Form 3. R.R.O. 1990, Reg. 175, s. 2 (3).

(4) A notice to a lien claimant under subsection 19 (3) of the Act may be in Form 4. R.R.O. 1990, Reg. 175, s. 2 (4).

(5) A declaration of last supply under subsection 31 (5) of the Act shall be in Form 5. R.R.O. 1990, Reg. 175, s. 2 (5).

(6) A certificate of the substantial performance of a contract under section 32 of the Act shall be in Form 6. R.R.O. 1990, Reg. 175, s. 2 (6).

(7) A certificate of completion of a subcontract under subsection 33 (1) of the Act shall be in Form 7. R.R.O. 1990, Reg. 175, s. 2 (7).

(8) A claim for lien under section 34 of the Act shall be in Form 8. R.R.O. 1990, Reg. 175, s. 2 (8).

(9) REVOKED: O. Reg. 174/11, s. 1.

(10) A certificate of action under section 36 of the Act shall be in Form 10. R.R.O. 1990, Reg. 175, s. 2 (10).

(11) A notice requiring a lien claimant whose lien is sheltered under the statement of claim of some other person to provide further particulars of the claim or of any fact alleged in the claim under paragraph 4 of subsection 36 (4) of the Act may be in Form 11. R.R.O. 1990, Reg. 175, s. 2 (11).

(12) A notice under clause 40 (3) (b), (c) or (d) of the Act may be in Form 12. R.R.O. 1990, Reg. 175, s. 2 (12).

(13) A notice under clause 40 (3) (a) of the Act may be in Form 13. R.R.O. 1990, Reg. 175, s. 2 (13).

(14) A release of lien under section 41 of the Act shall be in Form 14. R.R.O. 1990, Reg. 175, s. 2 (14).

(15) A notice of postponement under section 43 of the Act shall be in Form 15. R.R.O. 1990, Reg. 175, s. 2 (15).

(15.1) A bond posted as security under section 44 of the Act shall be in Form 15.1. O. Reg. 416/93, s. 1.

(16) A judgement under section 58 of the Act directing a reference of the whole action to a master or appointed local master for trial shall be in Form 16. R.R.O. 1990, Reg. 175, s. 2 (16).

(17) A notice of trial under section 60 of the Act may be in Form 17. R.R.O. 1990, Reg. 175, s. 2 (17).

(18) A notice of settlement meeting under section 60 of the Act may be in Form 18. R.R.O. 1990, Reg. 175, s. 2 (18).

(19) A judgement under section 62 of the Act shall be,

(a) in Form 19, where the lien attaches to the premises; or

(b) in Form 20, where the lien does not attach to the premises. R.R.O. 1990, Reg. 175, s. 2 (19).

(20) A report under section 62 of the Act shall be,

(a) in Form 21, where the lien attaches to the premises; or

(b) in Form 22, where the lien does not attach to the premises. R.R.O. 1990, Reg. 175, s. 2 (20).

(21) A financial guarantee bond under subsection 78 (10) of the Act shall be in Form 23. R.R.O. 1990, Reg. 175, s. 2 (21).

(21.1) A notice of intention to register a condominium under section 33.1 of the Act shall be in Form 24. O. Reg. 174/11, s. 2.

(22) Where an affidavit provided for in this Regulation is sworn or affirmed by an illiterate person, the jurat to the affidavit shall be in the form prescribed in the Superior Court of Justice rules of court. R.R.O. 1990, Reg. 175, s. 2 (22); O. Reg. 366/02, s. 1.

3. (1) Copies of certificates of the substantial performance of a contract shall be published in a construction trade newspaper in the following form and manner:

1. In each issue, all certificates shall appear on a single page or consecutive pages, and shall be arranged alphabetically by the upper-tier municipality or single-tier municipality in which the premises are situated.
2. The contents of each certificate of the substantial performance of a contract published in a construction trade newspaper shall be the same as in the original of the certificate, except that the signature of the payment certifier or other persons certifying substantial performance shall be deleted. R.R.O. 1990, Reg. 175, s. 3 (1); O. Reg. 366/02, s. 2.

(2) Declarations of the substantial performance of a contract shall be published in the same form and manner as certificates of the substantial performance of a contract. R.R.O. 1990, Reg. 175, s. 3 (2).

FORM 1
NOTICE TO CONTRACTOR UNDER SECTION 18 OF THE ACT

Construction Lien Act

Insert regs\graphics\1990\175\175001au.tif

TO: . . . . . , contractor.

FROM: . . . . . , a joint owner or owner in common with . . . . . of the following premises:

. . . . . .
(*give address of premises*)

The joint owner or owner in common assumes no responsibility for the improvements to the premises, to be made by you under a contract between you and . . . . . .
(*name of owner*)

Date: . . . . .

FORM 2
NOTICE TO LANDLORD UNDER SUBSECTION 19 (1) OF THE ACT

Construction Lien Act

Insert regs\graphics\1990\175\175002au.tif

TO: .....

the landlord of .....
(*address of premises*)

FROM: ....., a contractor, who has entered into

a contract with your tenant, ... to supply services or materials to make the following improvement to the above named premises:

(*describe improvement to be made*)

This contract was entered into on .....
(*date*)

(*Use A, B or C as appropriate*)

A. A copy of the contract is enclosed.

B. The contract is oral and the following are the details of the contract:

C. You may inspect a copy of this contract at .....
(*place*)

..... between the hours of ..... and

every .....
(*days of week*)

Date: ....
(*contractor or agent*)

.....
(*address for service of contractor*)

WARNING: Subsection 19 (1) of the *Construction Lien Act* provides as follows:

19.—(1) Where the interest of the owner to which the lien attaches is leasehold, the interest of the landlord shall also be subject to the lien to the same extent as the interest of the owner if the contractor gives the landlord written notice of the improvement to be made, unless the landlord, within fifteen days of receiving the notice from the contractor, gives the contractor written notice that the landlord assumes no responsibility for the improvement to be made.

R.R.O. 1990, Reg. 175, Form 2.

FORM 3
NOTICE TO CONTRACTOR UNDER SUBSECTION 19 (1) OF THE ACT

Construction Lien Act

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TO: . . . . . , contractor.

FROM: . . . . . ,

the landlord of: . . . . . .
(*give address of premises*)

The landlord of the premises assumes no responsibility for the improvement to be made by you under a contract dated . . . . . .

between you and . . . . . , a tenant.
(*name of tenant*)

Date: . . . . .

FORM 4
NOTICE TO LIEN CLAIMANT UNDER SUBSECTION 19 (3) OF THE ACT

Construction Lien Act

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TO: . . . . . , lien claimant.

FROM: . . . . . the landlord of

the following premises: . . . . . .
(*give address of premises*)

The landlord intends to (*use A or B, whichever is applicable*)

A. enforce forfeiture against the lease of the premises;

B. terminate the lease of the premises

for non-payment of rent.

In order to protect your lien rights against the interest of the tenant, the amount of the unpaid rent as stated below must be paid to the landlord within ten days of your receiving this notice. If you pay this amount, you may add it to your claim for lien.

Amount of unpaid rent: $ . . . . . .

Payment of this amount may be made on . . . . . .
(*days*)

between the hours of . . . . . and . . . . . , at . . . . . .

. . . . . .
(*address for payment*)

Date: . . . . .

FORM 5
DECLARATION OF LAST SUPPLY UNDER SUBSECTION 31 (5) OF THE ACT

Construction Lien Act

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.....
(*name of supplier*)

a supplier of services or materials to an improvement being made to:

.....
(*address of premises*)

declares that:

1. The following services or materials were supplied: .....
(*description of services or materials*)

2. These services or materials were supplied under a contract (*or subcontract*) with .....
(*name of payer*)

dated the ..... day of ..... , 19 .....

3. The last supply of services or materials made by the supplier to the improvement under the contract (*or subcontract*), was made on

.....
(*date of last supply*)

4. No further services or materials will be supplied under the contract (*or subcontract*).

Declared before me at the ..... of)
)
..... in the ..... of)
)
.....)
)
on the ..... day of ..... ,)
)
19.....)
)
.....)
A Commissioner, etc.)

.....
(*supplier*)

R.R.O. 1990, Reg. 175, Form 5.

FORM 6
CERTIFICATE OF SUBSTANTIAL PERFORMANCE OF THE CONTRACT UNDER SECTION 32 OF THE ACT

Construction Lien Act

.....
(County/District or Regional Municipality/City or Borough of Municipality of Metropolitan Toronto in which premises are situate)

.....
(street address and city, town, etc., or, if there is no street address, the location of the premises)

This is to certify that the contract for the following improvement:

.....
(short description of the improvement)

to the above premises was substantially performed on ……..…
(date substantially performed)

Date certificate signed: …….....

.....
(payment certifier where there is one)

.....
(owner and contractor, where there is no payment certifier)

Name of owner: ……..

Address for service: ……....

Name of contractor: ……

Address for service: ……

Name of payment certifier:
…….
(where applicable)

Address: ……..

(Use A or B whichever is appropriate)

A. Identification of premises for preservation of liens:

……...
(where liens attach to premises, reference to lot and plan number or instrument registration number)

B. Office to which claim for lien must be given to preserve lien:

……..…
(where liens do not attach to premises)

O. Reg. 174/11, s. 3.

FORM 7
CERTIFICATE OF COMPLETION OF SUBCONTRACT UNDER SUBSECTION 33 (1) OF THE ACT

Construction Lien Act

This is to certify the completion of a subcontract for the supply of services or materials between .....

.....
(name of subcontractor)

and ……..…… dated the ……..…..day of ……..…… , 20……..

The subcontract provided for the supply of the following services or materials .....

….....

to the following improvement:

…….....……..... *(short description of the improvement)*

of premises at

…….....……..... *(street address, or if there is none, the location of the premises)*

Date of certification …….....……..

..... *(payment certifier where there is one)*

..... *(owner and contractor)*

Name of owner: ……..

Address for service: ……

Name of contractor: ……

Address for service: ……

Name of payment certifier *(where applicable)*: …….

Address: …….

(Use A or B whichever is appropriate)

A. Identification of premises for preservation of liens:

……...

(where liens attach to premises, reference to lot and plan number or instrument registration number)

B. Office to which claim for lien must be given to preserve lien:

……..…

(where liens do not attach to premises)

O. Reg. 174/11, s. 4.

FORM 8
CLAIM FOR LIEN UNDER SECTION 34 OF THE ACT

Construction Lien Act

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Name of lien claimant: .....

Address for service: .....

Name of owner: .....

Address: .....

Name of person to whom lien claimant supplied services or materials: .....

.....

Address: .....

Time within which services or materials were supplied:

from ..... to .....
(*date supply commenced*) (*date of most recent supply*)

Short description of services or materials that have been supplied:

.....

Contract price or subcontract price: $.....

Amount claimed as owing in respect of services or materials that have been supplied: $.....

(*Use A where the lien attaches to the premises; use B where the lien does not attach to the premises*).

A. The lien claimant (*if claimant is personal representative or assignee this must be stated*) claims a lien against the interest of every person identified above as an owner of the premises described in Schedule A to this claim for lien.

B. The lien claimant (*if claimant is personal representative or assignee this must be stated*) claims a charge against the holdbacks required to be retained under the Act and any additional amount owed by a payer to the contractor or to any subcontractor whose contract or subcontract was in whole or in part performed by the services or materials that have been supplied by the lien claimant in relation to the premises at:

.....
(*address or other identification of the location of the premises*)

Date: ....
(*signature of claimant or agent*)

SCHEDULE A

To the claim for lien of .....

Description of premises:

(*Where the lien attaches to the premises, provide a description of the premises sufficient for registration under the Land Titles Act or the Registry Act, as the case may be*).

R.R.O. 1990, Reg. 175, Form 8.

FORM 9 REVOKED: O. Reg. 174/11, s. 5.

FORM 10
CERTIFICATE OF ACTION UNDER SECTION 36 OF THE ACT

Construction Lien Act

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Court File No.

.....

ONTARIO COURT (GENERAL DIVISION)

BETWEEN

..... Plaintiff(s)

(*court seal*) and

..... Defendant(s)

CERTIFICATE OF ACTION

I certify that an action has been commenced in the Ontario Court (General Division) under the *Construction Lien Act* between the above parties in respect of the premises described in Schedule A to this certificate, and relating to the claim(s) for lien bearing the following registration numbers:

.....

Date: ....
(*registrar or local registrar*)

SCHEDULE A

Description of Premises:

(*The description of the premises must be the same as in the statement of claim, and must be sufficient for registration under the Land Titles Act or Registry Act, as the case may be.*)

R.R.O. 1990, Reg. 175, Form 10.

FORM 11
NOTICE REQUIRING PARTICULARS OF SHELTERED CLAIM FOR LIEN UNDER PARAGRAPH 4 OF SUBSECTION 36 (4) OF THE ACT

Construction Lien Act

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Court File No.

.....

ONTARIO COURT (GENERAL DIVISION)

BETWEEN

..... Plaintiff(s)

(*court seal*) and

..... Defendant(s)

TO: ....., lien claimant

FROM: ....., a defendant

in the above-named action.

This action has been commenced to realize a claim for lien in respect of an improvement to the following premises:

.....
(*address*)

and you may be entitled to realize your lien in this action.

You are required to furnish the above-named defendant with particulars of your claim and, specifically, the following facts alleged in your claim for lien:

.....
(*set out facts*)

Date: ....
(*defendant, counsel or agent*)

Address for service:

.....

R.R.O. 1990, Reg. 175, Form 11.

FORM 12
NOTICE OF CROSS-EXAMINATION ON CLAIM FOR LIEN UNDER SECTION 40 OF THE ACT

Construction Lien Act

TO: .....
(a person named in the claim for lien as having an interest in the premises, the contractor or the payer of the lien claimant or the solicitor of any of the foregoing.)

This is notice that ..... ,
(name of lien claimant, agent or assignee of lien claimant or trustee of the workers' trust fund)

a person who is liable to be cross-examined on the claim for lien in respect of an improvement to the

following
premises:

…….

…….
(street address of premises)

will be cross-examined regarding that claim on ..…….…….. , …… , at ……
,
(date) *(time)*

at the office of .....
(name, address and telephone number of examiner)

You are entitled to be present at the cross-examination either personally or by counsel and to participate in the cross-examination. Only one cross-examination may be held in respect of this claim for lien.

Date:
…….....…….....

…….....

…….....
(name, address and telephone number of person or solicitor requiring cross-examination)

O. Reg. 174/11, s. 6.

FORM 13
NOTICE OF CROSS-EXAMINATION UNDER SECTION 40 OF THE ACT

Construction Lien Act

TO: …….....…… ,
(name of lien claimant, agent or assignee of lien claimant or trustee of the workers' trust fund)

a person who is liable to be cross-examined on a claim for lien dated …….....
with respect to the following premises:

…….....
(street address of premises)

YOU ARE REQUIRED TO ATTEND TO BE CROSS-EXAMINED ON OATH respecting the claim for lien on

…….…….. , …… , at …… , at the office of .....
(date) *(time)*

.....
(name, address and telephone number of examiner)

and to bring with you all documents relating to the claim.

If you fail, without due cause, to attend your lien may be discharged or you may be liable for any legal costs arising from your non-attendance.

Date: .....

.....

.....

(name, address and telephone number of person or solicitor requiring cross-examination)

O. Reg. 174/11, s. 7.

FORM 14
RELEASE OF LIEN UNDER SECTION 41 OF THE ACT

Construction Lien Act

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Name of lien claimant: .....

Address: .....

1. The lien claimant releases the lien claimed in the claim for lien dated ....., in respect of an improvement to the premises owned by..... and described in Schedule A to this release.
2. (*complete where lien attaches to the premises*)
   The registration number of the claim for lien is .....

Date: .....

....
(*witness*) (*lien claimant*)

NOTE:

Where the lien claimant is not a corporation, the release must be verified by an affidavit of a subscribing witness.

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SCHEDULE A

(*Where the lien attaches to the premises, provide a description of the premises sufficent for registration under the Land Titles Act, or the Registry Act, as the case may be.*)

(*Where the lien does not attach to the premises, provide the street address, or, where there is none, the location of the premises.*)

R.R.O. 1990, Reg. 175, Form 14.

FORM 15
NOTICE OF POSTPONEMENT OF LIEN UNDER SECTION 43 OF THE ACT

Construction Lien Act

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Name of lien claimant .....

Address .....

The lien claimant postpones the lien claimed in the claim for lien dated ..... , 19 ... , registered as Instrument No. ..... to Instrument No. ..... , in respect of the lands described in Schedule A upon the following terms and conditions: .....

.....

.....

Date: .....

....
(*witness*) (*signature of lien claimant*)

NOTE:

Where the lien claimant is not a corporation, the postponement must be verified by the affidavit of a subscribing witness.

SCHEDULE A

(*Where the lien attaches to the premises, provide a description of the premises sufficient for registration under the Land Titles Act, or the Registry Act, as the case may be.*)

(*Where the lien does not attach to the premises, provide the street address, or, where there is none, the location of the premises.*)

R.R.O. 1990, Reg. 175, Form 15.

FORM 15.1
FINANCIAL GUARANTEE BOND UNDER SECTION 44 OF THE ACT

Construction Lien Act

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Bond No. ..... Amount $ .....

The surety of this bond is ....., an insurer licensed under the *Insurance Act* to write surety and fidelity insurance.

The principal of this bond is .....

The obligee of this bond is the Accountant of the Ontario Court.

WHEREAS .....has registered (or where the lien does not attach to the premises, has preserved the lien by giving to the appropriate office) a claim for lien with respect to an improvement to the premises described in Schedule A to this bond.

AND WHEREAS .....and others may prove liens with respect to the improvement to the premises.

AND WHEREAS this bond is being posted pursuant to section 44 of the *Construction Lien Act*.

THEREFORE, subject to the conditions contained in this bond, the surety and the principal bind themselves, their heirs, executors, successors and assigns, jointly and severally, to the obligee as follows:

1. The principal shall on or before the date specified in the judgment, order or report of the court, in any action to enforce lien claims arising from the improvement, pay to the obligee the amounts for lien(s) and costs as is directed by the court, unless in the meantime an appeal has been taken from the judgment, order or report in which case payment is not required until the final disposition of the appeal.

2. The surety, in default of payment by the principal, shall pay to the obligee within such further time as is specified by the court, the amount of any deficiency in the payment by the principal but the surety is not liable to pay more than a total maximum amount of $ ..... . The surety shall make the payment upon the written demand of the obligee without the right to question the merit of the demand and despite any objection by the principal.

This bond is subject to the following conditions:

1. The total amount of this bond shall be reduced by and to the extent of any payment made under the bond pursuant to an order, report or judgment of the court.

2. The surety shall be entitled to an assignment of the rights of any person who receives a payment or benefit from the proceeds of this bond, to the extent of the payment or benefit received.

Signed and sealed by the principal and the surety on the ..... day of ....., 19.....

SIGNED AND SEALED in the presence of: ..... (seal)
(principal)

..... (seal)
(surety)

NOTE: If the principal is not a corporation, the principal's signature must be verified by an affidavit of a subscribing witness.

O. Reg. 416/93, s. 2; O. Reg. 450/98, s. 1.

FORM 16
JUDGMENT DIRECTING A REFERENCE FOR TRIAL UNDER SECTION 58 OF THE ACT

Construction Lien Act

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Court File No.

. . . . . .

ONTARIO COURT (GENERAL DIVISION)

(*name of judge*) (*day and date*)

BETWEEN

. . . . . Plaintiff(s)

(*court seal*) and

. . . . . Defendant(s)

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JUDGMENT

On motion of the plaintiff made under subsection 58 (1) of the *Construction Lien Act* in the presence of counsel for the plaintiff(s) and the defendant(s), and on reading the pleadings in this action and on hearing what was alleged by counsel for the parties (*or the parties by their counsel consenting to judgment, or as the case may be*),

1. THIS COURT ORDERS AND ADJUDGES that this action be referred to the master at Toronto (*or other place*) for trial.
2. AND THIS COURT ORDERS AND ADJUDGES that the parties found liable forthwith after confirmation of the report of the master pay to the parties the respective amounts due them.
3. AND THIS COURT ORDERS AND ADJUDGES that the master determine all questions arising in this action and on the reference and all questions arising under the *Construction Lien Act* and that the findings of the master be effective on the confirmation of the report.
4. AND THIS COURT ORDERS AND ADJUDGES that the master determine the question of costs in this action and of the reference, and the costs be taxed and paid as the master shall direct.

Date: . . . . . Signed by: . . . . . (*judge*) (*registrar or local registrar*)

R.R.O. 1990, Reg. 175, Form 16.

FORM 17
NOTICE OF TRIAL UNDER SECTION 60 OF THE ACT

Construction Lien Act

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Court File No.

.....

ONTARIO COURT (GENERAL DIVISION)

BETWEEN

..... Plaintiff(s)

and

..... Defendant(s)

NOTICE

(*Use A or B, whichever is applicable*)

A. The Ontario Court (General Division) has directed that this action shall be tried on ..... , ...
(*day*) (*date*)

at ..... , at .....
(*time*) (*place*)

B. This action has been set down for trial by the Ontario Court (General Division), at the non-jury sittings commencing on ..... ,
(*day*)

..... at ..... , at .....
(*date*) (*time*) (*place*)

If you do not appear at the trial, proceedings may be taken in your absence and you may be deprived of all benefit of the action and your rights may be disposed of in your absence.

All parties are required to be prepared to proceed with the trial, and to bring with them on the trial day all evidence and witnesses necessary to prove their respective claims or defences. If any person fails to comply with these directions, the costs of the day may be given against that party should it be necessary to adjourn the trial of this action.

This is an action to enforce a construction lien arising from an improvement of the following premises:

.....
(*concise description sufficient to identify premises*)

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This notice is served by .....

Date: .....

To: .....

R.R.O. 1990, Reg. 175, Form 17.

FORM 18
NOTICE OF SETTLEMENT MEETING UNDER SECTION 60 OF THE ACT

Construction Lien Act

Insert regs\graphics\1990\175\175018au.tif

Court File No.

.....

ONTARIO COURT (GENERAL DIVISION)

BETWEEN

..... Plaintiff(s)

and

..... Defendant(s)

NOTICE

The Ontario Court (General Division) has directed that the settlement meeting in respect of the above action shall be held on .....
(*day*)

..... at ..... , at .....
(*date*) (*time*) (*place*)

(*Use A or B, whichever is applicable*)

A. The Ontario Court (General Division) has also directed that this action shall be tried on .....
(*day*)

..... , at ..... , at .....
(*date*) (*time*) (*place*)

B. In addition, this action has been set down for trial by the Ontario Court (General Division), at the non-jury sittings commencing on .....
(*day*)

..... , at ..... , at .....
(*date*) (*time*) (*place*)

Any settlement reached at a settlement meeting is binding upon every person served with notice of the settlement meeting, regardless of whether the person attends the settlement meeting, and orders may be made by the court affecting your rights.

(*Use where applicable*)

If you do not appear at the trial, proceedings may be taken in your absence and you may be deprived of all benefit of the action and your rights may be disposed of in your absence.

All parties are required to be prepared to proceed with the trial, and to bring with them on the trial day all evidence and witnesses necessary to prove their respective claims or defences. If any person fails to comply with these directions, the costs of the day may be given against that party should it be necessary to adjourn the trial of this action.

This is an action to enforce a construction lien arising from an improvement of the following premises:

.....
(*concise description sufficient to identify premises*)

This notice is served by .....

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Date: .....

To: .....

R.R.O. 1990, Reg. 175, Form 18.

FORM 19
JUDGMENT AT TRIAL UNDER SECTION 62 OF THE ACT WHERE LIEN ATTACHES TO PREMISES

Construction Lien Act

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Court File No.

.....

ONTARIO COURT (GENERAL DIVISION)

(*name of judge*) (*day and date*)

BETWEEN

.....

Plaintiff(s)

(*court seal*) and

.....

Defendant(s)

JUDGMENT

THIS ACTION was heard on ..... (*date*), at ..... (*place*), in the presence of all parties (*or the solicitors for identified parties,* ..... *appearing in person, no one appearing for* ..... *, or as the case may be*).

ON READING THE PLEADINGS AND HEARINGS THE EVIDENCE and the submissions of the solicitors for the parties (*or* ..... appearing in person, or as the case may be).

(*Use the appropriate paragraphs*)

1. THIS COURT DECLARES AND ADJUDGES that the persons named in Column 1 of Schedule A to this judgment are respectively entitled to a lien under the *Construction Lien Act*, upon the interest of the owner, ... (*name of owner*) in the premises described in Schedule B of this judgment for the amounts set opposite their respective names in Column 5 of Schedule A, and the primary debtors of those persons respectively are as set out in Column 6 of Schedule A.

2. AND THIS COURT DECLARES AND ADJUDGES that the persons mentioned in Column 1 of Schedule C to this judgment are entitled to some charge or encumbrance other than a lien under this Act on the interest of the owner in the premises for the amounts set opposite their respective names in Column 4 of Schedule C.

3. AND THIS COURT ORDERS AND ADJUDGES that the personal liability of the owner ..... to the persons named in Column 1 of Schedule E in respect of the holdbacks the owner was required to retain is $....., and writs of execution may be issued forthwith for the amounts set out opposite their respective names in Column 2 of Schedule E.

4. AND THIS COURT ORDERS AND ADJUDGES that upon the defendant ..... (*the owner*) paying into court to the credit of this action the amount of $ ..... on or before the ..... day of ....., 19....., the liens mentioned in Schedule A are discharged and the registration of those liens and the certificates of action in relation to those liens are vacated and the money paid into court is to be paid in payment of the persons entitled to a lien.

5. AND THIS COURT ORDERS AND ADJUDGES that if the defendant ..... (*owner*)

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makes default in payment of the money into Court that the owner's interest in the premises be sold under the supervision of the master of this court and that the purchase money be paid into court to the credit of this action.

6. AND THIS COURT ORDERS AND ADJUDGES that the purchase money be applied in or towards payment of the claims mentioned in Schedule(s) A (*and C*) as the master directs, with subsequent interest and subsequent costs to be computed and taxed by the master.

7. AND THIS COURT ORDERS AND ADJUDGES that if the purchase money paid into court is insufficient to pay in full the proven claims of the persons mentioned in Column 1 of Schedule A, the primary debtor of each of those persons, as set out in Column 6 of Schedule A, shall pay the amount remaining due to those persons forthwith after the amount has been ascertained by the master.

8. AND THIS COURT ORDERS AND ADJUDGES that the persons named in Column 1 of Schedule F have not proved any lien under the *Construction Lien Act*, and orders and adjudges that the claims for lien registered by them and the certificates of action related to those claims as set out in Column 2 of Schedule F are vacated against the premises described in Schedule B.

9. AND THIS COURT ORDERS AND ADJUDGES that the persons whose names are set out in Column 1 of Schedule D to this judgment, although they have not proven their claims for lien, are entitled to personal judgment for the amounts set opposite their respective names in Column 4 of Schedule D against their respective debtors as set out in Column 5 opposite their names and the respective debtors shall forthwith pay to their respective judgment creditors the amount found due.

10. AND THIS COURT ORDERS AND ADJUDGES, that since the owner's interest in the premises has been sold by . . . . . , a mortgagee, and it has been determined by this court that the liens were entitled to priority over the mortgage under subsection 78 (2) [*or subsection 78 (5) as the case may be*] of the Act, therefore the mortgagee shall pay to the persons named in Schedule E the amount set out opposite each of their respective names on or before the . . . . . day of . . . . . , 19 . . . .

. . . . . (*signature of judge*)

Schedule A

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5	COLUMN 6
Names of persons entitled to construction lien	Registration numbers of claims for lien and certificates of action	Amount of debt and interest (if any)	Costs	Total	Names of primary debtors

. . . . . (*signature of judge*)

Schedule B

The premises in respect of which this action is brought is as follows:

. . . . . (*Set out a description sufficient for registration purposes*)

. . . . . (*signature of judge*)

Schedule C

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4
Names of persons entitled to encumbrances other than construction liens	Amount of debt and interest (if any)	Costs	Total

. . . . . (*signature of judge*)

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Schedule D

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Judgment creditors not entitled to liens	Amount of debt and interest (if any)	Costs	Total	Names of Debtors

. . . . . .
(*signature of judge*)

Schedule E

COLUMN 1	COLUMN 2
Names of persons entitled to share in holdback	Amount to be paid

. . . . . .
(*signature of judge*)

Schedule F

COLUMN 1	COLUMN 2
Names of persons not entitled to lien	Registration numbers of claims for lien and certificates of action

. . . . . .
(*signature of judge*)

R.R.O. 1990, Reg. 175, Form 19.

FORM 20
JUDGMENT AT TRIAL UNDER SECTION 62 OF THE ACT WHERE LIEN DOES NOT ATTACH TO PREMISES

Construction Lien Act

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Court File No.

.....

ONTARIO COURT (GENERAL DIVISION)

(*name of judge*) (*day and date*)

BETWEEN

..... Plaintiff(s)

and

..... Defendant(s)

JUDGMENT

THIS ACTION was heard on ..... (*date*), at ..... (*place*), in the presence of the solicitors for all parties (*or the solicitors for identified parties,* .....

appearing in person, no one appearing for ..... *, or as the case may be*).

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ON READING THE PLEADINGS AND HEARING THE EVIDENCE and the submissions of the solicitors for the parties (*or as the case may be*),

(*Use the appropriate paragraphs*)

1. THIS COURT DECLARES AND ADJUDGES that the amount for which the defendant-owner ..... (*owner*)

   is liable under section 21 [*or subsection 17 (4)*] of the *Construction Lien Act* is $ .....

2. AND THIS COURT DECLARES AND ADJUDGES that the persons named in Column 1 of Schedule A to this judgment are respectively entitled to a lien under the *Construction Lien Act* which lien is a charge under section 21 upon the amount for which the defendant-owner is liable; for the amounts set opposite their respective names in Column 4 and the primary debtors of those persons are set out in Column 5 of Schedule A.

3. AND THIS COURT ORDERS AND ADJUDGES that upon the defendant-owner ..... (*owner*)

   paying into court to the credit of this action the amount of $ ..... for which the owner is liable on or before the ....., (*day*)

   ..... (*date*) that the liens mentioned in Schedule A are discharged, that the money paid into court is to be paid in payment of the persons entitled to a lien.

4. AND THIS COURT ORDERS AND ADJUDGES that if the money paid into court is insufficient to pay in full the proven claims of the persons mentioned in Column 1 of Schedule A, the primary debtor of each of those persons as set out in Column 5 of Schedule A shall pay the amount remaining due to those persons forthwith after this amount has been ascertained by the master.

5. AND THIS COURT DECLARES AND ADJUDGES that the following persons have not proved any lien under the *Construction Lien Act*:

   ..... (*names of persons*)

   and are not entitled to a personal judgment against any of the parties to this action.

6. AND THIS COURT ADJUDGES that the persons whose names are set out in Column 1 of Schedule B to this judgment, although they have not proven their claims for lien are entitled to personal judgment for the amounts set opposite their respective name in Column 4 of Schedule B against their respective debtors as set out in Column 5 opposite their names and the respective debtors shall forthwith pay to their respective judgment creditors the amount found due.

..... (*signature of judge*)

Schedule A

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Names of persons entitled to construction lien	Amount of debt and interest (if any)	Costs	Total	Names of primary debtors

..... (*signature of judge*)

Schedule B

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Judgment creditors not entitled to liens	Amount of debt and interest (if any)	Costs	Total	Names of Debtors

..... (*signature of judge*)

R.R.O. 1990, Reg. 175, Form 20.

FORM 21
REPORT UNDER SECTION 62 OF THE ACT WHERE LIEN ATTACHES TO PREMISES

Construction Lien Act

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Court File No.

.....

ONTARIO COURT (GENERAL DIVISION)

(*name of master*) (*day and date*)

BETWEEN

..... Plaintiff(s)

(*court seal*) and

..... Defendant(s)

REPORT

In accordance with a judgment of reference dated ..... ,

trial of this action was heard on ..... (*date*) , at ..... (*place*) in the presence

of all parties (*or the solicitors for identified parties,* ..... *appearing in person, no one appearing for* ..... , *or as the case may be).*

ON READING THE PLEADINGS AND HEARING THE EVIDENCE and the submissions of the solicitors for the parties (*or as the case may be*).

(*Use the appropriate paragraphs*)

1. I FIND AND DECLARE THAT the persons named in Column 1 of Schedule A to this report are respectively entitled to a lien under the *Construction Lien Act*, upon the interest of the owner, ... (*name of owner*), in the premises described in Schedule B of this report for the amounts set opposite their respective names in Column 5 of Schedule A, and the primary debtors of those persons respectively are as set out in Column 6 of Schedule A.

2. I FIND AND DECLARE THAT the persons mentioned in Column 1 of Schedule C to this report are entitled to some charge or encumbrance other than a lien under this Act on the interest of the owner in the premises for the amounts set opposite their respective names in Column 4 of Schedule C.

3. AND I FIND, DECLARE AND DIRECT that the personal liability of the owner ..... to the persons named in Column 1 of Schedule E in respect of the holdbacks the owner was required to retain is $ ..... and writs of execution may be issued forthwith after confirmation of this order for the amounts set opposite their respective names in Column 2 of Schedule E.

4. AND I DIRECT that upon the defendant ..... (*the owner*) paying into court to the credit of this action the amount of $ ..... on or before the ..... day of ..... , 19..... , the liens mentioned in Schedule A are discharged and the registration of those liens and the certificates of action in relation to those liens are vacated and the money paid into court is to be paid in payment of the persons entitled to a lien.

5. AND I DIRECT that if the defendant ..... (*owner*) makes default in payment of the money into court that the owner's interest in the premises be sold under the supervision of the master of this court and that the purchase money be paid into court to the credit of this action.

6. AND I DIRECT that the purchase money be applied in or towards payment of the claims mentioned in Schedule(s) A (*and C*) as the master directs, with subsequent interest and subsequent costs to be computed and taxed by the master.

7. AND I DIRECT that if the purchase money paid into court is insufficient to pay in full the proven claims of the persons mentioned in Column 1 of Schedule A, the primary debtor of each of those persons, as set out in Column 6 of Schedule A, shall pay the amount remaining due to those persons forthwith after the amount has been ascertained by the master.

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8. AND I FIND AND DECLARE THAT the persons named in Column 1 of Schedule F have not proved any lien under the *Construction Lien Act*, and I direct that the claims for lien registered by them and the certificates of action related to those claims as set out in Column 2 of Schedule F be vacated against the premises described in Schedule B.

9. AND I FIND AND DECLARE THAT the persons whose names are set out in Column 1 of Schedule D to this report, although they have not proven their claims for lien, are entitled to personal judgment for the amounts set opposite their respective names in Column 4 of Schedule D against their respective debtors as set out in Column 5 opposite their names and the respective debtors shall forthwith after confirmation of this report pay to their respective judgment creditors the amount found due.

10. AND I DIRECT that since the owner's interest in the premises has been sold by .....

..... , a mortgagee, and it has been determined by this court that the lien claimants were entitled to priority over the mortgagee under subsection 78 (2) [*or subsection 78 (5) as the case may be*] of the Act, therefore the mortgagee shall pay to the persons named in Schedule E the amount set out opposite each of their respective names on or before the ..... day of ..... , 19 ....

.....
(*signature of master*)

Schedule A

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5	COLUMN 6
Names of persons entitled to construction lien	Registration numbers of claims for lien and certificates of action	Amount of debt and interest (if any)	Costs	Total	Names of primary debtors

.....
(*signature of master*)

Schedule B

The premises in respect of which this action is brought is as follows:

.....
(*Set out a description sufficient for registration purposes*)

.....
(*signature of master*)

Schedule C

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4
Names of persons entitled to encumbrances other than construction liens	Amount of debt and interest (if any)	Costs	Total

.....
(*signature of master*)

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Schedule D

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Judgment creditors not entitled to liens	Amount of debt and interest (if any)	Costs	Total	Names of Debtors

. . . . . .
(*signature of master*)

Schedule E

COLUMN 1	COLUMN 2
Name of persons entitled to share in holdback	Amount to be paid

. . . . . .
(*signature of master*)

Schedule F

COLUMN 1	COLUMN 2
Names of persons not entitled to lien	Registration numbers of claims for lien and certificates of action

. . . . . .
(*signature of master*)

R.R.O. 1990, Reg. 175, Form 21.

FORM 22

REPORT UNDER SECTION 62 OF THE ACT WHERE LIEN DOES NOT ATTACH TO PREMISES

Construction Lien Act

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Court File No.

. . . . . .

ONTARIO COURT (GENERAL DIVISION)

(*master*) (day and date)

BETWEEN

. . . . . Plaintiff(s)

and

. . . . . Defendant(s)

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REPORT

In accordance with a judgment of reference dated .....

trial of this action was heard on ..... (*date*), at ..... (*place*), in the presence

of the solicitors for all parties (*or the solicitors for identified parties,* ..... *appearing in person, no one appearing for* ..... *, or as the case may be).*

ON READING THE PLEADINGS AND HEARING THE EVIDENCE and the submissions of the solicitors for the parties (*or as the case may be*).

(*Use the appropriate paragraphs*)

1. I FIND AND DECLARE that the amount for which the defendant-owner ..... (*owner*)

   is liable under section 21 [*or subsection 17 (4)*] of the *Construction Lien Act* is $ .....

2. I FIND AND DECLARE that the persons named in Column 1 of Schedule A to this report are respectively entitled to a lien under the *Construction Lien Act* which lien is a charge under section 21 of the Act upon the amount for which the defendant-owner is liable; for the amounts set opposite their respective names in Column 4 and the primary debtors of those persons are set out in Column 5 of Schedule A.

3. AND I DIRECT that upon the defendant-owner ..... (*owner*)

   paying into court to the credit of this action the amount of $ ..... for which the owner is liable on or before the ..... (*day*),

   ..... (*date*) the liens mentioned in Schedule A are discharged, and that the money paid into court is to be paid in payment of the persons entitled to a lien.

4. AND I DIRECT that if the money paid into court is insufficient to pay in full the proven claims of the persons mentioned in Column 1 of Schedule A, the primary debtor of each of those persons as set out in Column 5 of Schedule A shall pay the amount remaining due to those persons forthwith after this amount has been ascertained by the master.

5. AND I FIND AND DECLARE that the following persons have not proved any lien under the *Construction Lien Act*:

   ..... (*names of persons*)

   and are not entitled to a personal judgment against any of the parties to this action.

6. AND I FIND AND DECLARE that the persons whose names are set out in Column 1 of Schedule B to this report, although they have not proved their claims for lien are entitled to personal judgment for the amounts set opposite their respective names in Column 5 after confirmation of this report and the respective debtors shall forthwith after confirmation of this report pay to their respective judgment creditors the amount found due.

..... (*master*)

Schedule A

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Names of persons entitled to construction lien	Amount of debt and interest (if any)	Costs	Total	Names of primary debtors

..... (*signature of master*)

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Schedule B

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Judgment creditors not entitled to liens	Amount of debt and interest (if any)	Costs	Total	Names of Debtors

.....
(*signature of master*)

R.R.O. 1990, Reg. 175, Form 22.

FORM 23
FINANCIAL GUARANTEE BOND UNDER SUBSECTION 78 (10) OF THE ACT

Construction Lien Act

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The surety of this bond is ..... , an insurer licensed under the *Insurance Act* to write surety and fidelity insurance.

The principal of this bond is ..... ,

a mortgagee of the interest of the owner .....

in the premises described in Schedule A to this bond.

The obligees of this bond are all persons having liens whose liens are entitled to priority over the interest of the principal under subsection 78 (2) or (5) of the Act.

WHEREAS it is the intention of the principal to sell the interest of the owner under a power of sale.

THEREFORE, subject to the conditions contained in this bond, the surety and the principal bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally to the obligees as follows:

1. The principal shall, on or before the date set out in the judgment or report for payment, pay to each obligee who has proved a lien the amount determined by the court to be owing to that obligee under subsection 78 (2) or (5) of the Act by the principal as mortgagee, unless in the meantime an appeal has been taken from the judgment or report in which case payment is not required until the final disposition of all appeals.

2. The surety, in default of payment by the principal shall pay to each obligee the amount owing to him by the principal, but the surety is not liable to pay more than a total maximum amount of $ ..... (*an amount equal to 20 per cent of the amount stated to be the contract price in the affidavit attached as Schedule B to this bond*).

This bond is subject to the following conditions:

1. An obligee shall not make a claim against the surety unless the principal is in default of the principal's obligations under this bond.

2. An obligee shall give the surety thirty days written notice of the claim prior to commencing an action against the surety.

3. The surety is released from its obligation to an obligee unless the obligee has given written notice of the claim to the surety within one year after the default by the principal.

4. The total amount of this bond is reduced by and to the extent of any payment made under the bond.

5. The surety is entitled to an assignment of the rights of an obligee against the principal to the extent of the payment made by the surety.

Signed and sealed by the principal and the surety on the ..... day of ..... 19 ... and registration of this bond on the title to the premises constitutes delivery of this bond to each obligee.

SIGNED AND SEALED
in the presence of: ..... (*seal*)
(*principal*)

in the presence of: ..... (*seal*)
(*surety*)

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NOTE:

Where the principal is not a corporation, the principal's signature must be verified by an affidavit of a subscribing witness.

Schedule A

FINANCIAL GUARANTEE BOND

(*provide a description of the premises sufficient for registration under the Land Titles Act or the Registry Act, as the case may be*)

Schedule B

FINANCIAL GUARANTEE BOND

AFFIDAVIT OF GOOD FAITH BY MORTGAGEE

I, ..., make oath and say (*or affirm*) as follows:

1. I am a mortgagee of the interest of .....
(*name of owner*)

   described in Schedule A to the attached bond.

2. Under the terms of the mortgage, or under the *Mortgages Act*, I am entitled to exercise a power of sale with respect to that interest.

3. It is my intention to exercise that power of sale, even though there are claims for lien registered against the interest of the owner under the *Construction Lien Act* that may have priority to the mortgage under the Act.

4. I have inquired of the contractor and the owner with respect to the contract price of the contract to which that improvement relates, and to the best of my information and belief the amount of the contract price (*including the price of all services and materials supplied under all amendments to that contract*) is .....

5. The attached bond has been obtained by me in good faith, without any intention of depriving any lien claimant of their rights under the *Construction Lien Act*.

Sworn (*or affirmed*) before me at the
..... of .....
in the ..... of .....
this ..... day of ....., 19....
.....
A Commissioner, etc.

.....
(*deponent*)

R.R.O. 1990, Reg. 175, Form 23; O. Reg. 450/98, s. 2.

FORM 24

NOTICE OF INTENTION TO REGISTER A CONDOMINUM IN ACCORDANCE WITH THE *CONDOMINIUM ACT, 1998* UNDER SECTION 33.1 OF THE ACT

Construction Lien Act

Name of declarant:
.....

Address for service:
.....

Concise overview of the land (include reference to the lot and plan number and the parcel number(s)):

…….....

……

……
(Complete for each contractor who supplied services or materials to an improvement during the 90-day period
preceding the date on which the description is to be submitted for approval under subsection 9 (3) of the Condominium Act, 1998)

Name of contractor:
…….....

Address:
…….....

Address for service (if known):
…….....

(Add the name, address and address for service of other contractors if applicable)

O. Reg. 174/11, s. 8.

Environmental Protection Act

R.S.O. 1990, CHAPTER E.19

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Interpretation

1. (1) In this Act,

"administrative penalty" means a penalty imposed under section 182.3; (pénalité administrative")

"adverse effect" means one or more of,

(a) impairment of the quality of the natural environment for any use that can be made of it,

(b) injury or damage to property or to plant or animal life,

(c) harm or material discomfort to any person,

(d) an adverse effect on the health of any person,

(e) impairment of the safety of any person,

(f) rendering any property or plant or animal life unfit for human use,

(g) loss of enjoyment of normal use of property, and

(h) interference with the normal conduct of business; ("conséquence préjudiciable")

"air" means open air not enclosed in a building, structure, machine, chimney, stack or flue; ("air")

"analyst" means an analyst appointed under this Act; ("analyste")

"certificate of property use" means a certificate of property use issued under section 168.6; ("certificat d'usage d'un bien")

"certification date" means, in respect of a record of site condition, a date determined in accordance with the regulations that is not later than the date the record of site condition is filed in the Environmental Site Registry; ("date d'attestation")

"contaminant" means any solid, liquid, gas, odour, heat, sound, vibration, radiation or combination of any of them resulting directly or indirectly from human activities that causes or may cause an adverse effect; ("contaminant")

"discharge", when used as a verb, includes add, deposit, leak or emit and, when used as a noun, includes addition, deposit, emission or leak; ("rejet", "rejeter")

"document" includes a sound recording, videotape, film, photograph, chart, graph, map, plan, survey, book of account and information recorded or stored by means of any device; ("document")

"environmental compliance approval" means an approval issued under Part II.1; ("autorisation environnementale")

"environmental penalty" means a penalty imposed under section 182.1; ("pénalité environnementale")

"fiduciary" means an executor, administrator, administrator with the will annexed, trustee, guardian of property or attorney for property, but does not include a trustee in bankruptcy or trustee in bankruptcy representative; ("représentant fiduciaire")

"fiduciary representative" means, with respect to a fiduciary, an officer, director, employee or agent of the fiduciary, or a lawyer, consultant or other advisor of the fiduciary who is acting on behalf of the fiduciary; ("représentant d'un représentant fiduciaire")

Note: On a day to be named by proclamation of the Lieutenant Governor, subsection (1) is amended by adding the following definition:

"greenhouse gas" means,

(a) carbon dioxide,

(b) methane,

(c) nitrous oxide,

(d) hydrofluorocarbons,

(e) perfluorocarbons,

(f) sulphur hexafluoride, or

(g) any other contaminant prescribed as a greenhouse gas by the regulations; ("gaz à effet de serre")

See: 2009, c. 27, ss. 1, 3 (2).

"inspection" includes an audit, examination, survey, test and inquiry; ("inspection")

"justice" means a provincial judge or a justice of the peace; ("juge")

"land" means surface land not enclosed in a building, land covered by water and all subsoil, or any combination or part thereof; ("terrain")

"Minister" means the Minister of the Environment; ("ministre")

"Ministry" means the Ministry of the Environment; ("ministère")

"municipal representative" means, with respect to a municipality, an officer, employee or agent of the municipality, or a lawyer, consultant or other advisor of the municipality who is acting on behalf of the municipality; ("représentant municipal")

"municipality" includes a local board, as defined in the *Municipal Affairs Act*, and a board, commission or other local authority exercising any power with respect to municipal affairs or purposes, including school purposes, in an unorganized township or unsurveyed territory; ("municipalité")

"natural environment" means the air, land and water, or any combination or part thereof, of the Province of Ontario; ("environnement naturel")

"person" includes a municipality as defined in this subsection; ("personne")

"person responsible" means the owner, or the person in occupation or having the charge, management or control of a source of contaminant; ("personne responsable")

"place" includes a building, structure, machine, vehicle or vessel; ("lieu")

"provincial officer" means a person who is designated by the Minister as a provincial officer for the purposes of this Act and the regulations; ("agent provincial")

"receiver" means a person who has been appointed to take or who has taken possession or control of property pursuant to a mortgage, hypothec, pledge, charge, lien, security interest, encumbrance or privilege or pursuant to an order of a court, and includes a receiver-manager and an interim receiver; ("séquestre")

"receiver representative" means, with respect to a receiver, an officer, director, employee or agent of the receiver, or a lawyer, consultant or other advisor of the receiver who is acting on behalf of the receiver; ("représentant d'un séquestre")

"regulated person" means,

(a) a person who belongs to a class of persons prescribed by the regulations and who holds or is required to hold,

(i) an environmental compliance approval, certificate of property use, renewable energy approval, licence or permit under this Act, or

(ii) an approval, licence or permit under the *Ontario Water Resources Act*,

(b) a person who has registered or is required to register an activity under subsection 20.21 (1), or

(c) a corporation that belongs to a class of corporations prescribed by the regulations; ("personne réglementée")

"regulations" means the regulations made under this Act; ("règlements")

"renewable energy generation facility" has the same meaning as in the *Electricity Act, 1998*; ("installation de production d'énergie renouvelable")

"renewable energy project" has the same meaning as in the *Green Energy Act, 2009*; ("projet d'énergie renouvelable")

"secured creditor" means a person who holds a mortgage, hypothec, pledge, charge, lien, security interest, encumbrance or privilege on or against property, but does not include a person who has taken possession or control of the property; ("créancier garanti")

"secured creditor representative" means, with respect to a secured creditor, an officer, director, employee or agent of the secured creditor, or a lawyer, consultant or other advisor of the secured creditor who is acting on behalf of the secured creditor; ("représentant d'un créancier garanti")

"source of contaminant" means anything that discharges into the natural environment any contaminant; ("source de contamination")

"Tribunal" means the Environmental Review Tribunal; ("Tribunal")

"trustee in bankruptcy representative" means, with respect to a trustee in bankruptcy, an officer, director, employee or agent of the trustee in bankruptcy, or a lawyer, consultant or other advisor of the trustee in bankruptcy who is acting on behalf of the trustee in bankruptcy; ("représentant d'un syndic de faillite")

"water" means surface water and ground water, or either of them. ("eau") R.S.O. 1990, c. E.19, s. 1 (1); 1992, c. 1, s. 22; 1998, c. 35, s. 1; 2000, c. 26, Sched. F, s. 12 (1-3); 2001, c. 9, Sched. G, s. 5 (1); 2001, c. 17, s. 2 (1); 2002, c. 17, Sched. F, Table; 2005, c. 12, s. 1 (1-3); 2009, c. 12, Sched. G, s. 1; 2009, c. 19, s. 67 (1); 2010, c. 16, Sched. 7, s. 2 (1, 2).

Idem, Director

(2) In this Act,

"the Director" means a Director appointed under section 5. R.S.O. 1990, c. E.19, s. 1 (2).

Idem, penalties

(3) A municipality that is convicted of an offence under this Act is liable to the penalty provided for a corporation convicted of the offence. R.S.O. 1990, c. E.19, s. 1 (3).

Health or safety

(4) For the purposes of this Act, a danger to existing water supplies that are used for human consumption shall be deemed to be a danger to the health or safety of persons. 2001, c. 17, s. 2 (2).

Secondary discharge within building

2. A contaminant that is discharged into the air within a building or structure as a result of the discharge of the same or another contaminant in another building or structure shall be deemed to be

discharged into the natural environment by the owner or the person who has the charge, management or control of the contaminant discharged in the other building or structure. R.S.O. 1990, c. E.19, s. 2.

Interpretation, environmental compliance approval

2.1 For the purposes of this Act and the regulations made under it and any other Act and the regulations made under any other Act,

(a) any reference to an environmental compliance approval includes,

(i) a certificate of approval or provisional certificate of approval issued under section 9 or 39 before the day this section comes into force, and

(ii) an approval granted under section 53 of the *Ontario Water Resources Act* before the day this section comes into force; and

(b) any certificate of approval, provisional certificate of approval or approval mentioned in subclause (a) (i) or (ii) may be amended, reviewed, suspended and revoked as if it were an environmental compliance approval. 2010, c. 16, Sched. 7, s. 2 (3).

PART I
ADMINISTRATION

Purpose of Act

3. (1) The purpose of this Act is to provide for the protection and conservation of the natural environment. R.S.O. 1990, c. E.19, s. 3.

Extra-provincial environment

(2) No action taken under this Act is invalid by reason only that the action was taken for the purpose of the protection, conservation or management of the environment outside Ontario's borders.

Idem

(3) Subsection (2) applies even if the action was taken before the coming into force of that subsection. 1992, c. 1, s. 23.

Powers and duties of Minister

4. (1) The Minister, for the purposes of the administration and enforcement of this Act and the regulations, may,

(a) investigate problems of pollution, waste management, waste disposal, litter management and litter disposal;

(b) conduct research related to contaminants, pollution, waste management, waste disposal, litter management and litter disposal;

(c) conduct studies of the quality of the natural environment, meteorological studies, and monitoring programs;

(d) conduct studies of environmental planning designed to lead to the wise use of the natural environment;

(e) convene conferences and conduct seminars and educational and training programs relating to contaminants, pollution, waste and litter;

(f) gather, publish and disseminate information relating to contaminants, pollution, waste and litter;

(g) make grants and loans in such amounts and upon such terms as the Minister considers advisable for,

(i) research and training in relation to contaminants, pollution, waste, litter and the reduction of waste and the reuse and recycling of materials that are or could become waste,

(ii) planning, operating, developing, improving and enlarging waste management systems, waste disposal sites and programs to encourage the reduction of waste or the reuse or recycling of materials that are or could become waste, and

(iii) discontinuing waste management systems or reduction, reuse or recycling programs or closing waste disposal sites;

(h) establish and operate demonstration and experimental sewage systems under Part VIII, waste management systems, waste disposal sites and programs concerning the reduction of waste or the reuse or recycling of materials that are or could become waste;

(i) appoint committees to perform such advisory functions as the Minister considers advisable;

(j) with the approval of the Lieutenant Governor in Council, enter into an agreement with any government or person relating to the protection or conservation of the natural environment;

(k) establish and operate, use, alter, enlarge and extend waste management systems or waste disposal sites; and

(l) discontinue systems and close sites referred to in clause (k). R.S.O. 1990, c. E.19, s. 4; 1992, c. 1, s. 24 (1, 2).

Limitation

(2) A waste disposal site or waste management system shall not be established under clause (1) (k) in a municipality for any function relating to waste from a source within the municipality or to existing waste located within the municipality unless,

(a) the municipality does not have a waste disposal site or waste management system that is adequate and available to perform that function for the waste; or

(b) the municipality consents to the establishment of the site or system. 1992, c. 1, s. 24 (3).

Delegation

(3) The Minister may delegate any of his or her powers under subsection (1) to the Director. 1992, c. 1, s. 24 (4).

Appointments

Directors

5. (1) The Minister may in writing appoint as Directors any of the following persons as the Minister considers necessary in respect of the sections of this Act or of the regulations that are set out in the appointments:

1. Public servants employed under Part III of the *Public Service of Ontario Act, 2006* who work in the Ministry or the members of classes of such public servants.
2. Subject to the approval of the Lieutenant Governor in Council, any other persons or the members of any other classes of persons. 2006, c. 35, Sched. C, s. 36 (1).

Analysts and provincial officers

(2) The Minister may in writing appoint as analysts or designate as provincial officers any of the following persons as the Minister considers necessary in respect of the sections of any Act administered by the Minister or of the regulations under such Act that are set out in the appointments or designations:

1. Public servants employed under Part III of the *Public Service of Ontario Act, 2006* who work in the Ministry or the members of classes of such public servants.

2. Any other persons or the members of any other classes of persons. 2006, c. 35, Sched. C, s. 36 (1).

Limitation of authority

(3) The Minister, in an appointment or designation under subsection (1) or (2), may limit the authority of a Director, analyst or provincial officer in such manner as the Minister considers necessary or advisable. R.S.O. 1990, c. E.19, s. 5 (3).

Provincial officers

(4) A provincial officer is a peace officer for the purpose of enforcing this Act. 1998, c. 35, s. 2.

Investigation and prosecution

(5) A provincial officer may investigate offences under this Act and may prosecute any person whom the provincial officer reasonably believes is guilty of an offence under this Act. 1998, c. 35, s. 2.

PART II
GENERAL PROVISIONS

Prohibition, contamination generally

6. (1) No person shall discharge into the natural environment any contaminant, and no person responsible for a source of contaminant shall permit the discharge into the natural environment of any contaminant from the source of contaminant, in an amount, concentration or level in excess of that prescribed by the regulations. R.S.O. 1990, c. E.19, s. 6 (1).

Exception

(2) Subsection (1) does not apply to animal wastes disposed of in accordance with both normal farming practices and the regulations made under the *Nutrient Management Act, 2002*. 2002, c. 4, s. 62 (1).

Control orders

7. (1) When the report of a provincial officer contains a finding that a contaminant discharged into the natural environment is a contaminant the use of which is prohibited by the regulations or is being discharged in contravention of section 14 or the regulations, the Director may issue a control order directed to,

(a) an owner or previous owner of the source of contaminant;

(b) a person who is or was in occupation of the source of contaminant; or

(c) a person who has or had the charge, management or control of the source of contaminant.

Contravention of s. 14

(1.1) No order shall be issued under subsection (1) as a result of a finding that a contaminant is being discharged in contravention of section 14 unless the contravention causes or is likely to cause an adverse effect. 2005, c. 12, s. 1 (4).

Public notice

(2) The Director shall give notice of the control order to every municipality in which the contaminant is discharged and to the public in such manner as the Director considers appropriate. R.S.O. 1990, c. E.19, s. 7.

Stop orders

8. (1) When the Director, upon reasonable and probable grounds, is of the opinion that a source of contaminant is discharging into the natural environment any contaminant that constitutes, or the amount, concentration or level of which constitutes, an immediate danger to human life, the health of any persons, or to property, the Director may issue a stop order directed to,

(a) an owner or previous owner of the source of contaminant;

(b) a person who is or was in occupation of the source of contaminant; or

(c) a person who has or had the charge, management or control of the source of contaminant.

Public notice

(2) The Director shall give notice of the stop order to every municipality in which the contaminant is discharged and to the public in such manner as the Director considers appropriate. R.S.O. 1990, c. E.19, s. 8.

Approval, plant or production process

9. (1) No person shall, except under and in accordance with an environmental compliance approval,

(a) use, operate, construct, alter, extend or replace any plant, structure, equipment, apparatus, mechanism or thing that may discharge or from which may be discharged a contaminant into any part of the natural environment other than water; or

(b) alter a process or rate of production with the result that a contaminant may be discharged into any part of the natural environment other than water or the rate or manner of discharge of a contaminant into any part of the natural environment other than water may be altered. R.S.O. 1990, c. E.19, s. 9 (1); 2010, c. 16, Sched. 7, s. 2 (4).

(2) REPEALED: 2010, c. 16, Sched. 7, s. 2 (5).

Exceptions

(3) Subsection (1) does not apply to,

(a) routine maintenance carried out on any plant, structure, equipment, apparatus, mechanism or thing;

(b) equipment for the combustion of fuel, other than waste incinerators, in buildings or structures designed for the housing of not more than three families;

(c) any equipment, apparatus, mechanism or thing in or used in connection with a building or structure designed for the housing of not more than three families where the only contaminant produced by such equipment, apparatus, mechanism or thing is sound or vibration;

(d) any plant, structure, equipment, apparatus, mechanism or thing that may be a source of contaminant of a class exempted therefrom by the regulations;

(e) any plant, structure, equipment, apparatus, mechanism or thing used in agriculture;

(f) any motor or motor vehicle that is subject to Part III. R.S.O. 1990, c. E.19, s. 9 (3).

Exception, prescribed activities

(4) Subsection (1) does not apply to a person who is engaging in an activity at a site if the activity has been prescribed by the regulations for the purposes of subsection 20.21 (1), unless one of the following circumstances applies:

1. An environmental compliance approval in respect of the activity engaged in at the site has been issued before the day when a regulation prescribing the activity for the purposes of subsection

20.21 (1) comes into force, and the approval has not ceased to have effect as determined under section 20.17.

2. Subject to subsection (5), the Director has issued an order under section 20.18 in respect of the activity at the site. 2010, c. 16, Sched. 7, s. 2 (6).

Same

(5) If a registration under Part II.2 is in effect in respect of an activity engaged in at a site when the Director issues an order under section 20.18 in respect of the activity, subsection (1) applies only once the Director has removed the registration from the Environmental Activity and Sector Registry established under Part II.2. 2010, c. 16, Sched. 7, s. 2 (6).

(6), (7) REPEALED: 2010, c. 16, Sched. 7, s. 2 (6).

(8)-(11) REPEALED: 2010, c. 16, Sched. 7, s. 2 (8).

Program for dealing with contamination

10. (1) A person responsible for a source of contaminant may submit to the Director a program to prevent or to reduce and control the discharge into the natural environment of any contaminant from the source of contaminant.

Referral of program

(2) When a program referred to in subsection (1) is submitted to the Director, the Director may, with the consent of the Minister, refer the program to the Environmental Council for its consideration and advice.

Approval of program

(3) The Director may issue a program approval, directed to the person who submitted the program. R.S.O. 1990, c. E.19, s. 10.

Program approvals

11. (1) The Director shall, in a program approval,

(a) set out the name of the person to whom the approval is directed;

(b) set out the location and nature of the source of contaminant;

(c) set out the details of the program; and

(d) approve the program.

Amendment or revocation

(2) The Director may, by order, amend or revoke a program approval that was issued in error or that no longer adequately provides for the protection and conservation of the natural environment.

Amendment or revocation on consent

(3) The Director may, by order, amend or revoke a program approval with the consent of the person to whom the program approval is directed.

No hearing for amendment or revocation on consent

(4) Subsection 140 (1) does not entitle any person to a hearing in respect of an amendment or revocation of a program approval in accordance with a consent mentioned in subsection (3). R.S.O. 1990, c. E.19, s. 11.

Program approvals, order not to prevent control or stop order

12. Despite the issue of a program approval or order, when the Director is of the opinion, based upon reasonable and probable grounds, that it is necessary or advisable for the protection or conservation of the natural environment, the prevention or control of an immediate danger to human life, the health of any persons or to property, the Director may issue a stop order or a control order directed to the person responsible. R.S.O. 1990, c. E.19, s. 12.

Ministry to be notified when contamination exceeds permitted level

13. (1) Every person,

(a) who discharges into the natural environment; or

(b) who is the person responsible for a source of contaminant that discharges into the natural environment,

any contaminant in an amount, concentration or level in excess of that prescribed by the regulations shall forthwith notify the Ministry of the discharge.

Exception

(2) Subsection (1) does not apply to animal wastes disposed of in accordance with normal farming practices. R.S.O. 1990, c. E.19, s. 13.

Prohibition, discharge of contaminant

14. (1) Subject to subsection (2) but despite any other provision of this Act or the regulations, a person shall not discharge a contaminant or cause or permit the discharge of a contaminant into the natural environment, if the discharge causes or may cause an adverse effect. 2005, c. 12, s. 1 (5).

Exceptions

(2) Subsection (1) does not apply to,

(a) a discharge that is authorized under this Act or the *Ontario Water Resources Act*, if the discharge does not cause and is not likely to cause an adverse effect; or

(b) a discharge of a contaminant that arises when animal wastes are disposed of in accordance with normal farming practices, if the only adverse effect that is caused or that may be caused by the discharge is an adverse effect referred to in clause (a) of the definition of "adverse effect" in subsection 1 (1). 2005, c. 12, s. 1 (5).

When Ministry to be notified, adverse effect

15. (1) Every person who discharges a contaminant or causes or permits the discharge of a contaminant into the natural environment shall forthwith notify the Ministry if the discharge is out of the normal course of events, the discharge causes or is likely to cause an adverse effect and the person is not otherwise required to notify the Ministry under section 92. 2005, c. 12, s. 1 (6).

Same

(1.1) The notice required by subsection (1) shall be given in accordance with any requirements prescribed by the regulations. 2005, c. 12, s. 1 (6).

Exception

(2) Subsection (1) does not apply to animal wastes disposed of in accordance with normal farming practices. R.S.O. 1990, c. E.19, s. 15.

Application of Part not restricted

16. Unless otherwise required by the context, the provisions of this Part also apply to the subject-matter of the individual Parts of this Act. R.S.O. 1990, c. E.19, s. 16.

Remedial orders

17. Where any person causes or permits the discharge of a contaminant into the natural environment, so that land, water, property, animal life, plant life, or human health or safety is injured, damaged or endangered, or is likely to be injured, damaged or endangered, the Director may order the person to,

(a) repair the injury or damage;

(b) prevent the injury or damage; or

(c) where the discharge has damaged or endangered or is likely to damage or endanger existing water supplies, provide temporary or permanent alternate water supplies. R.S.O. 1990, c. E.19, s. 17; 2005, c. 12, s. 1 (7).

Order by Director re preventive measures

18. (1) The Director, in the circumstances mentioned in subsection (2), by a written order may require a person who owns or owned or who has or had management or control of an undertaking or property to do any one or more of the following:

1. To have available at all times, or during such periods of time as are specified in the order, the equipment, material and personnel specified in the order at the locations specified in the order.
2. To obtain, construct and install or modify the devices, equipment and facilities specified in the order at the locations and in the manner specified in the order.
3. To implement procedures specified in the order.
4. To take all steps necessary so that procedures specified in the order will be implemented in the event that a contaminant is discharged into the natural environment from the undertaking or property.
5. To monitor and record the presence or discharge of a contaminant specified in the order and to report thereon to the Director.
6. To study and to report to the Director on,
    i. the presence or discharge of a contaminant specified in the order,
    ii. the effects of the presence or discharge of a contaminant specified in the order,
    iii. measures to control the presence or discharge of a contaminant specified in the order,
    iv. the natural environment into which a contaminant specified in the order may be discharged.
7. To develop and implement plans to,
    i. reduce the amount of a contaminant that is discharged into the natural environment,
    ii. prevent or reduce the risk of a spill of a pollutant within the meaning of Part X, or
    iii. prevent, decrease or eliminate any adverse effects that result or may result from a spill of a pollutant within the meaning of Part X or from any other discharge of a contaminant into the natural environment, including,
        A. plans to notify the Ministry, other public authorities and members of the public who may be affected by a discharge, and

B. plans to ensure that appropriate equipment, material and personnel are available to respond to a discharge.

8. To amend a plan developed under paragraph 7 or section 91.1 in the manner specified in the order. R.S.O. 1990, c. E.19, s. 18 (1); 2005, c. 12, s. 1 (8, 9).

Grounds for order

(2) The Director may make an order under this section if the Director is of the opinion, on reasonable and probable grounds, that the requirements specified in the order are necessary or advisable so as,

(a) to prevent or reduce the risk of a discharge of a contaminant into the natural environment from the undertaking or property; or

(b) to prevent, decrease or eliminate an adverse effect that may result from,

(i) the discharge of a contaminant from the undertaking, or

(ii) the presence or discharge of a contaminant in, on or under the property. 2005, c. 12, s. 1 (10).

Instruments under Act, who is bound

Successors and assigns

19. (1) A certificate of property use, an order or approval of a court, the Minister, the Director or a provincial officer under this Act or a notice of the Director or a provincial officer under section 157.4 is binding on the executor, administrator, administrator with the will annexed, guardian of property or attorney for property of the person to whom it was directed, and on any other successor or assignee of the person to whom it was directed. 2001, c. 17, s. 2 (4); 2010, c. 16, Sched. 7, s. 2 (9).

Limitation

(2) If, pursuant to subsection (1), an order is binding on an executor, administrator, administrator with the will annexed, guardian of property or attorney for property, their obligation to incur costs to comply with the order is limited to the value of the assets they hold or administer, less their reasonable costs of holding or administering the assets. 2001, c. 17, s. 2 (4).

Receivers and trustees

(3) A certificate of property use, an order or approval of a court, the Minister, the Director or a provincial officer under this Act or a notice of the Director or a provincial officer under section 157.4 that relates to property is binding on a receiver or trustee that holds or administers the property. 2001, c. 17, s. 2 (4); 2010, c. 16, Sched. 7, s. 2 (10).

Limitation

(4) If, pursuant to subsection (3), an order or a notice of the Director or a provincial officer under section 157.4 is binding on a trustee, other than a trustee in bankruptcy, the trustee's obligation to incur costs to comply with the order is limited to the value of the assets held or administered by the trustee, less the trustee's reasonable costs of holding or administering the assets. 2001, c. 17, s. 2 (4); 2010, c. 16, Sched. 7, s. 2 (11).

Exception

(5) Subsection (3) does not apply to an order that relates to property held or administered by a receiver or trustee in bankruptcy if,

(a) within 10 days after taking or being appointed to take possession or control of the property, or within 10 days after the issuance of the order, the receiver or trustee in bankruptcy notifies the

Director that they have abandoned, disposed of or otherwise released their interest in the property; or

(b) the order was stayed under Part I of the *Bankruptcy and Insolvency Act* (Canada) and the receiver or trustee in bankruptcy notified the Director, before the stay expired, that they abandoned, disposed of or otherwise released their interest in the property. 2001, c. 17, s. 2 (4).

Extension of period

(6) The Director may extend the 10-day period for giving notice under clause (5) (a), before or after it expires, on such terms and conditions as he or she considers appropriate. 2001, c. 17, s. 2 (4).

Notice under subs. (5)

(7) Notice under clause (5) (a) or (b) must be given in the manner prescribed by the regulations. 2001, c. 17, s. 2 (4).

Holder

(8) For the purposes of this Act, a person who is bound by a certificate of property use or approval under this section shall be deemed to be the holder of the certificate or approval. 2001, c. 17, s. 2 (4).

(9)-(11) REPEALED: 2010, c. 16, Sched. 7, s. 2 (12).

Minister to publish information

(12) The Minister shall publish, by electronic or other means, the following information for the purpose of making it available to the public:

1. Information in respect of environmental compliance approvals issued after this subsection comes into force.
2. Other information that relates to any other instrument created or issued under this Act or the *Ontario Water Resources Act* and that is specified in a regulation made by the Minister. 2010, c. 16, Sched. 7, s. 2 (13).

(13) REPEALED: 2010, c. 16, Sched. 7, s. 2 (14).

Crown bound

20. This Act is binding upon the Crown. R.S.O. 1990, c. E.19, s. 20.

PART II.1
ENVIRONMENTAL COMPLIANCE APPROVALS

Definitions

20.1 In this Part,

"sewage works" has the same meaning as in the *Ontario Water Resources Act*; ("station d'épuration des eaux d'égout")

"waste disposal site" has the same meaning as in section 25; ("lieu d'élimination des déchets")

"waste management system" has the same meaning as in section 25. ("système de gestion des déchets") 2010, c. 16, Sched. 7, s. 2 (15).

APPLICATION FOR APPROVAL

Application for approval

20.2 (1) A person may apply to the Director for approval to engage in an activity mentioned in subsection 9 (1) or 27 (1) of this Act or subsection 53 (1) of the *Ontario Water Resources Act* if the

activity has not been prescribed by the regulations for the purposes of subsection 20.21 (1). 2010, c. 16, Sched. 7, s. 2 (15).

Director's order

(2) Despite subsection (1), a person may apply to the Director for approval to engage at a site in an activity that has been prescribed by the regulations for the purposes of subsection 20.21 (1) if the Director issues an order under section 20.18 in respect of the activity at the site. 2010, c. 16, Sched. 7, s. 2 (15).

Discontinuation of application, Part II.2 activity

(3) If an application for approval to engage in an activity is submitted to the Director and no decision has been made in respect of the application before the day on which a regulation prescribing the activity for the purposes of subsection 20.21 (1) comes into force, the part of the application relating to the activity is discontinued on the day that the regulation comes into force, unless the Director has issued an order under section 20.18 in respect of the activity. 2010, c. 16, Sched. 7, s. 2 (15).

Form

(4) The application shall be prepared and submitted to the Director in accordance with any requirements prescribed by the regulations. 2010, c. 16, Sched. 7, s. 2 (15).

Multiple activities at site

(5) If a person engages in or proposes to engage in more than one activity mentioned in subsection 9 (1) or 27 (1) of this Act or subsection 53 (1) of the *Ontario Water Resources Act* at a site and no environmental compliance approval has previously been issued in respect of any activity at the site, the application may be in respect of all of the activities unless the Director requires otherwise. 2010, c. 16, Sched. 7, s. 2 (15).

Note: On a day to be named by proclamation of the Lieutenant Governor, subsection (5) is repealed and the following substituted:

Multiple activities at site

(5) If a person engages in or proposes to engage in more than one activity mentioned in subsection 9 (1) or 27 (1) of this Act or subsection 53 (1) of the *Ontario Water Resources Act* at a site and no environmental compliance approval has previously been issued in respect of any activity at the site, the application shall be in respect of all of the activities unless the Director permits otherwise. 2010, c. 16, Sched. 7, s. 2 (16).

See: 2010, c. 16, Sched. 7, ss. 2 (16), 9 (2).

Multiple sites

(6) If a person applies for approval to engage in an activity that is to be engaged in at more than one site, the application may be in respect of the activity at more than one site unless the Director requires otherwise. 2010, c. 16, Sched. 7, s. 2 (15).

Sewage works

(7) If a person applies for approval to use, operate, establish, alter, extend or replace a sewage works, the application may also be for approval to engage in any activity that is mentioned in subsection 9 (1) or 27 (1) that is related to the sewage works unless the Director requires otherwise. 2010, c. 16, Sched. 7, s. 2 (15).

Note: On a day to be named by proclamation of the Lieutenant Governor, subsection (7) is repealed and the following substituted:

Sewage works

(7) If a person applies for approval to use, operate, establish, alter, extend or replace a sewage works, the application shall also be for approval to engage in any activity that is mentioned in subsection 9 (1) or 27 (1) that is related to the sewage works unless the Director permits otherwise. 2010, c. 16, Sched. 7, s. 2 (17).

See: 2010, c. 16, Sched. 7, ss. 2 (17), 9 (2).

Waste management systems

(8) If a person applies for approval to use, operate, establish, alter, enlarge or extend a waste management system, the application may also be for approval to engage in any activity that is mentioned in subsection 9 (1) of this Act or subsection 53 (1) of the *Ontario Water Resources Act* that is related to the waste management system unless the Director requires otherwise. 2010, c. 16, Sched. 7, s. 2 (15).

Note: On a day to be named by proclamation of the Lieutenant Governor, subsection (8) is repealed and the following substituted:

Waste management systems

(8) If a person applies for approval to use, operate, establish, alter, enlarge or extend a waste management system, the application shall also be for approval to engage in any activity that is mentioned in subsection 9 (1) of this Act or subsection 53 (1) of the *Ontario Water Resources Act* that is related to the waste management system unless the Director permits otherwise. 2010, c. 16, Sched. 7, s. 2 (18).

See: 2010, c. 16, Sched. 7, ss. 2 (18), 9 (2).

Transition

(9) An application submitted to the Director for approval to engage in activities mentioned in section 9 or 27 of this Act or section 53 of the *Ontario Water Resources Act* before the day this section comes into force is,

(a) continued as an application for approval under subsection (1) if the application complies with any requirements prescribed by the regulations for the purposes of this subsection, unless the Director permits otherwise; or

(b) discontinued. 2010, c. 16, Sched. 7, s. 2 (15).

Powers of Director

20.3 (1) After consideration of an application for approval under section 20.2 in respect of one or more activities, the Director may,

(a) issue or refuse to issue an environmental compliance approval in respect of one or more of the activities;

(b) if the Director issues an environmental compliance approval,

(i) impose terms and conditions in the approval, and

(ii) incorporate any environmental compliance approvals that are in effect into the new approval and revoke the approvals that have been incorporated;

(c) amend an environmental compliance approval that is in effect and impose, alter or revoke terms and conditions or expand the scope of the approval to other activities or sites;

(d) revoke an environmental compliance approval in whole or in part, with or without issuing a new approval; and

(e) suspend an environmental compliance approval in whole or in part. 2010, c. 16, Sched. 7, s. 2 (15).

Limitation

(2) No amendment to an environmental compliance approval may be made if the activity in respect of which the approval has been issued has been prescribed by the regulations for the purposes of subsection 20.21 (1), unless an order under section 20.18 has been issued in respect of the activity and the order includes the information set out in clause 20.18 (2) (b). 2010, c. 16, Sched. 7, s. 2 (15).

APPLICATION FOR REVIEW

Application for review

20.4 (1) A holder of an environmental compliance approval may apply for a review of the approval. 2010, c. 16, Sched. 7, s. 2 (15).

Mandatory review

(2) A holder of an environmental compliance approval shall apply for a review of the approval,

(a) on or before the date specified by the Director, if the Director has specified a date under section 20.12; or

(b) if no date has been specified by the Director, on or before the date prescribed under subsection 176 (2.3). 2010, c. 16, Sched. 7, s. 2 (15).

Form

(3) An application for review shall be prepared and submitted to the Director in accordance with any requirements prescribed by the regulations. 2010, c. 16, Sched. 7, s. 2 (15).

Approval remains in effect

(4) Despite subsections (1) and (2), an environmental compliance approval remains in effect unless it is suspended or revoked by the Director. 2010, c. 16, Sched. 7, s. 2 (15).

Powers of Director

20.5 After consideration of an application for a review of an environmental compliance approval, the Director may,

(a) amend the approval and impose, alter or revoke terms and conditions or expand the scope of the approval to other activities or sites;

(b) revoke the approval in whole or in part, with or without issuing a new approval;

(c) issue a new environmental compliance approval and exercise the powers mentioned in clause 20.3 (1) (b);

(d) suspend the approval in whole or in part; or

(e) give notice that no changes have been made to the approval as a result of the review. 2010, c. 16, Sched. 7, s. 2 (15).

TERMS AND CONDITIONS

Terms and conditions

20.6 (1) In imposing terms and conditions in an environmental compliance approval, the Director may include terms and conditions in respect of, but not limited to,

(a) future specified alterations, extensions, enlargements or replacements, including future specified alterations, extensions, enlargements or replacements to be carried out by persons prescribed by the regulations;

(b) operational parameters, including maximum rates of production, process limits, performance limits and parameters relating to equipment and infrastructure; and

(c) alterations, extensions, enlargements or replacements to be carried out within the operational parameters mentioned in clause (b), including alterations, extensions, enlargements or replacements to be carried out within the operational parameters by persons prescribed by the regulations. 2010, c. 16, Sched. 7, s. 2 (15).

Same

(2) If the Director imposes terms and conditions mentioned in clause (1) (a), (b) or (c) in respect of alterations, extensions, enlargements or replacements to be carried out by persons prescribed by the regulations, the environmental compliance approval shall be deemed to include a condition that the holder of the approval must give the persons notice of the terms and conditions in the approval. 2010, c. 16, Sched. 7, s. 2 (15).

Application of *Environmental Assessment Act*

(3) Subsection 12.2 (2) of the *Environmental Assessment Act* does not prohibit a Director from imposing terms and conditions mentioned in clause (1) (a), (b) or (c) in an environmental compliance approval, but the other applicable provisions of that Act continue to apply to any future alterations, extensions, enlargements or replacements that the Director may approve in an approval. 2010, c. 16, Sched. 7, s. 2 (15).

Prescribed terms and conditions

(4) An environmental compliance approval is subject to any terms and conditions prescribed by the regulations. 2010, c. 16, Sched. 7, s. 2 (15).

Associated works

(5) The Director may, in an environmental compliance approval in respect of any plant, structure, equipment, apparatus, mechanism, thing, waste management system, waste disposal site or sewage works that was established before the day this section comes into force, impose terms and conditions in respect of any associated structure, equipment, apparatus, mechanism, thing or works. 2010, c. 16, Sched. 7, s. 2 (15).

GENERAL POWERS AND DUTIES OF DIRECTOR

Powers of Director, general

20.7 (1) In exercising any of his or her powers under this Part, whether on his or her own initiative or on application, the Director may exercise the power if he or she considers it to be necessary for the purposes of,

(a) this Act, if the power is exercised in respect of an activity for which an environmental compliance approval is required under section 9 or 27; or

(b) the *Ontario Water Resources Act*, if the power is exercised in respect of an activity for which an environmental compliance approval is required under section 53 of that Act. 2010, c. 16, Sched. 7, s. 2 (15).

Past conduct

(2) The Director may suspend, revoke or refuse to issue an environmental compliance approval if the past conduct of the holder of the approval or the applicant, or, if the holder or applicant is a corporation, of its officers and directors, affords reasonable grounds to believe that the person will not engage in the activity in accordance with this Act, the *Ontario Water Resources Act* or the regulations made under either of those Acts. 2010, c. 16, Sched. 7, s. 2 (15).

Director may require information

20.8 The Director may require a person who submits an application under this Part to submit any plans, specifications, technical reports or other information and to carry out and report on any tests or experiments relating to any activity in respect of which the application is made. 2010, c. 16, Sched. 7, s. 2 (15).

Director may require consultation

20.9 The Director may require a person who submits an application under this Part to consult with the persons specified by the Director in a manner specified by the Director before the Director makes a decision in respect of the application. 2010, c. 16, Sched. 7, s. 2 (15).

Combined approval

20.10 The Director may issue an environmental compliance approval in respect of one or more activities at one or more sites. 2010, c. 16, Sched. 7, s. 2 (15).

Sewage works, revocation

20.11 If the Director issues an environmental compliance approval to use, operate, establish, alter, extend or replace a sewage works at a site, the Director may, in issuing the approval, provide in the approval that some or all of the approvals previously issued in respect of the sewage works are revoked on the day when the new environmental compliance approval is issued, and if the Director so provides, those approvals are revoked on that day. 2010, c. 16, Sched. 7, s. 2 (15).

Director may specify review date

20.12 (1) In issuing, amending or reviewing an environmental compliance approval, the Director may specify a date in the approval by which an application for review of the approval must be submitted. 2010, c. 16, Sched. 7, s. 2 (15).

Combined review

(2) The Director may, by written notice, require a person who submits an application under this Part in respect of an activity at a site to submit an application for a review by a date specified by the Director of one or more environmental compliance approvals in respect of the same site that have been issued and the person shall comply with the requirement. 2010, c. 16, Sched. 7, s. 2 (15).

Same

(3) In the event of a conflict between dates mentioned in subsections (1) and (2), the date specified under subsection (2) applies. 2010, c. 16, Sched. 7, s. 2 (15).

Exercise of powers on Director's initiative

20.13 The Director may, on his or her own initiative,

(a) alter or revoke terms and conditions of an environmental compliance approval after it has been issued;

(b) impose new terms and conditions in an environmental compliance approval; or

(c) suspend or revoke all or part of an environmental compliance approval. 2010, c. 16, Sched. 7, s. 2 (15).

Consideration of applications

20.14 (1) Subject to subsection (2), the Director shall consider an application submitted to him or her under this Part. 2010, c. 16, Sched. 7, s. 2 (15).

Exception

(2) The Director is not required to consider an application that has not been prepared and submitted in accordance with any requirements prescribed by the regulations. 2010, c. 16, Sched. 7, s. 2 (15).

HEARINGS

Hearings required by Director

20.15 (1) The Director may, before making a decision on an application under this Part, require the Tribunal, by written notice, to hold a hearing with respect to the application or a matter that relates to the application. 2010, c. 16, Sched. 7, s. 2 (15).

Notice of hearing

(2) If a hearing is required under subsection (1), at least 15 days notice shall be given to any persons specified by the Tribunal and in such manner as the Tribunal may direct. 2010, c. 16, Sched. 7, s. 2 (15).

Same

(3) Upon receipt of a notice from the Director under subsection (1), the Tribunal shall hold a hearing. 2010, c. 16, Sched. 7, s. 2 (15).

Proposed decision

(4) If the Director requires the Tribunal to hold a hearing in respect of a matter that relates to the application, the Director shall inform the Tribunal of decisions that the Director proposes to make on matters not referred to the Tribunal in connection with the application. 2010, c. 16, Sched. 7, s. 2 (15).

Parties

(5) The applicant for approval under this Part, the Director and any other persons specified by the Tribunal shall be parties to the hearing. 2010, c. 16, Sched. 7, s. 2 (15).

Notice of decision

(6) The Tribunal shall serve notice of its decision, together with reasons, on the parties to the hearing, and the Director shall implement the decision. 2010, c. 16, Sched. 7, s. 2 (15).

Costs

(7) The Tribunal may award the costs of a proceeding under this section. 2010, c. 16, Sched. 7, s. 2 (15).

Payment

(8) The Tribunal may order to whom and by whom the costs are to be paid. 2010, c. 16, Sched. 7, s. 2 (15).

Assessment

(9) The Tribunal may fix the amount of the costs or direct that the amount be assessed and it may direct the scale according to which they are to be assessed and by whom they are to be assessed. 2010, c. 16, Sched. 7, s. 2 (15).

Considerations not limited

(10) In awarding costs, the Tribunal is not limited to the considerations that govern awards of costs in any court. 2010, c. 16, Sched. 7, s. 2 (15).

Application

(11) Subsections (7) to (10) apply despite sections 17.1 and 32 of the *Statutory Powers Procedure Act*. 2010, c. 16, Sched. 7, s. 2 (15).

Transition

(12) If, before the day subsection 2 (23) of Schedule 7 to the *Open for Business Act, 2010* comes into force, a hearing has been required by the Director under subsection 30 (1) or 32 (1) of this Act, as those provisions read immediately before that subsection came into force, the Director's notice shall be deemed to have been given under subsection (1) and the hearing shall be held under this section. 2010, c. 16, Sched. 7, s. 2 (15).

Appeal from decision of Tribunal

20.16 (1) A party to a proceeding under this Part before the Tribunal may appeal from its decision,

(a) on a question of law, to the Divisional Court; and

(b) on a question other than a question of law, to the Minister. 2010, c. 16, Sched. 7, s. 2 (15).

Same

(2) An appeal under clause (1) (b) shall be made in writing within 30 days after the party appealing the decision receives the decision of the Tribunal. 2010, c. 16, Sched. 7, s. 2 (15).

Powers of Minister on appeal

(3) In an appeal under clause (1) (b), the Minister shall confirm, alter or revoke the decision of the Tribunal, substitute for the decision of the Tribunal such decision as he or she considers appropriate or, by notice in writing to the Tribunal, require it to hold a new hearing with respect to all or any part of the subject matter of the decision. 2010, c. 16, Sched. 7, s. 2 (15).

APPROVALS RELATING TO ACTIVITIES PRESCRIBED FOR THE PURPOSES OF PART II.2

When approval ceases to have effect

20.17 An environmental compliance approval ceases to apply in respect of an activity at a site on the earlier of,

(a) the date, as set out in a confirmation of registration provided by the Director under Part II.2, on which a registration is in effect in respect of the activity at the site; and

(b) the date prescribed by the regulations in respect of the activity for the purposes of this section. 2010, c. 16, Sched. 7, s. 2 (15).

Director's order

20.18 (1) The Director may issue an order to a person who is engaging in or who proposes to engage in an activity at a site, stating that Part II.2 of the Act does not apply in respect of the activity at the site. 2010, c. 16, Sched. 7, s. 2 (15).

Continuation of approval

(2) If an environmental compliance approval is in effect when the Director issues an order under subsection (1), the Director may specify in the order that,

(a) the approval continues to apply; and

(b) the approval may be amended on application under subsection 20.2 (1). 2010, c. 16, Sched. 7, s. 2 (15).

PART II.2
REGISTRATIONS

Interpretation

20.19 In this Part,

"registration" means a registration in the Registry; ("enregistrement")

"Registry" means the registry established under subsection 20.20 (1). ("Registre") 2010, c. 16, Sched. 7, s. 2 (19).

Registry

20.20 (1) The Director shall establish, maintain and operate a public registry known in English as the Environmental Activity and Sector Registry and in French as Registre environnemental des activités et des secteurs. 2010, c. 16, Sched. 7, s. 2 (19).

Purposes

(2) The purposes of the Registry are the following:

1. To allow persons to register activities prescribed by the regulations for the purposes of subsection 20.21 (1).
2. To provide public access to information contained in the registrations and other information filed in the Registry.
3. Such other purposes as may be prescribed by the regulations. 2010, c. 16, Sched. 7, s. 2 (19).

Delegation agreement

(3) Section 168.9 applies, with necessary modifications, in respect of the Registry and despite subsection 180 (2), no action or other proceeding shall be commenced against the Crown in right of Ontario, a public servant employed under Part III of the *Public Service of Ontario Act, 2006*, a person or body to whom powers and duties of the Director are delegated under section 168.9 or an employee of a person or body to whom powers and duties of the Director are delegated under section 168.9 arising from any inaccuracy contained in a registration. 2010, c. 16, Sched. 7, s. 2 (19).

Prohibition, prescribed activities

20.21 (1) Subject to subsections (2), (3) and (4), no person shall engage in an activity at a site if the activity has been prescribed by the regulations for the purposes of this subsection unless,

(a) the person has registered the activity in the Registry in accordance with the regulations;

(b) the Director has provided the person with a confirmation of registration in respect of the activity;

(c) the person engages in the activity in accordance with the regulations; and

(d) the registration is not suspended and has not been removed from the Registry. 2010, c. 16, Sched. 7, s. 2 (19).

Exception, order under s. 20.18

(2) Subject to subsection (3), subsection (1) does not apply if the Director has issued an order under section 20.18 in respect of the activity and the order has not been revoked. 2010, c. 16, Sched. 7, s. 2 (19).

Same, transition

(3) If a registration is in effect in respect of the activity when the Director issues an order under section 20.18 in respect of the activity, subsection (1) applies until the Director removes the registration from the Registry in accordance with clause 20.23 (1) (e). 2010, c. 16, Sched. 7, s. 2 (19).

Transition

(4) If an environmental compliance approval has been issued in respect of an activity before the day when a regulation prescribing the activity for the purposes of subsection (1) comes into force, subsection (1) does not apply to the holder of the approval until the day the approval ceases to apply to the activity, as determined in accordance with section 20.17. 2010, c. 16, Sched. 7, s. 2 (19).

Mobile activity

(5) If the activity engaged in has been prescribed by the regulations for the purposes of this subsection, a person is not required to register the activity in respect of a specific site, subject to any conditions prescribed by the regulations. 2010, c. 16, Sched. 7, s. 2 (19).

Director to provide confirmation

20.22 (1) If a person registers an activity in the Registry and pays the required fee and provides the required financial assurance, if any, the Director shall provide the person with a confirmation of registration, which may be provided electronically. 2010, c. 16, Sched. 7, s. 2 (19).

Retention of confirmation and maintenance of registration

(2) A person who engages in a registered activity shall ensure that the confirmation of registration is retained and that,

(a) the registration is maintained and updated in accordance with the regulations; and

(b) the registration includes any information, reports, records or documents as may be required by the Director or as may be prescribed by the regulations. 2010, c. 16, Sched. 7, s. 2 (19).

Complete and accurate information, etc.

(3) If the Director is not satisfied that any information, reports, records or documents included in or filed with a registration are complete or accurate, the Director may require the person engaging in the registered activity to file information, reports, records or documents that are complete and accurate and the person shall comply with the requirement. 2010, c. 16, Sched. 7, s. 2 (19).

Suspension or removal of registration

20.23 (1) The Director may suspend a registration in respect of an activity or remove the registration from the Registry if,

(a) the person who is engaging in the activity is in contravention of this Act, the *Ontario Water Resources Act* or the regulations made under either of those Acts;

(b) the confirmation of registration was provided on the basis of mistaken, false or inaccurate information;

(c) the person who is engaging in the activity requests that its registration be removed;

(d) the person who was engaging in the activity is no longer doing so;

(e) the Director has issued an order under section 20.18 to the person who is engaging in the activity and,

(i) if no application for approval has been made under Part II.1,

(A) the period during which a hearing may be required in respect of the order has lapsed, or

(B) if a hearing has been required, the decision of the Tribunal has been issued, all rights of appeal have been exhausted and the order of the Director has not been revoked, or

(ii) if an application for approval under Part II.1 has been made, the decision by the Director in respect of the application has been made; or

(f) the registration is obsolete. 2010, c. 16, Sched. 7, s. 2 (19).

Order

(2) If the Director suspends or removes a registration on the grounds set out in clause (1) (a), (b) or (d), the Director shall do so by order and shall serve the order together with written reasons on the person who is or was engaging in the activity. 2010, c. 16, Sched. 7, s. 2 (19).

End of suspension

(3) The Director may end a suspension of a registration if the Director is satisfied that the reasons for the suspension no longer exist. 2010, c. 16, Sched. 7, s. 2 (19).

Filing of notice or order in Registry

20.24 Any person who gives a notice or issues an order under this Part or a notice under section 157.4 shall file a copy of the notice or order in the Registry. 2010, c. 16, Sched. 7, s. 2 (19).

PART III
MOTORS AND MOTOR VEHICLES

Definitions, Part III

21. In this Part,

"motor" means an internal combustion engine used in a vehicle; ("moteur")

"motor vehicle" means a vehicle that uses or incorporates a motor as a source of power. ("véhicule automobile") R.S.O. 1990, c. E.19, s. 21.

Motors and motor vehicles, environmental controls

Sale of motor vehicle that does not comply with regulations

22. (1) No person shall sell, or offer, expose or advertise for sale, a motor or motor vehicle that does not comply with the regulations.

Where system or device installed on motor vehicle

(2) Where a manufacturer installs on, attaches to or incorporates in any motor or motor vehicle, a system or device to prevent or lessen the discharge of any contaminant, no person shall sell, or offer, expose or advertise for sale, such motor or motor vehicle unless the motor or motor vehicle has such system or device so installed, attached or incorporated and such system or device, when the motor or motor vehicle is operating, complies with the regulations. R.S.O. 1990, c. E.19, s. 22 (1, 2).

Repair or replacement of system or device

(3) Where a manufacturer installs on, attaches to or incorporates in any motor or motor vehicle, a system or device to prevent or lessen the discharge of any contaminant, no person shall remove or cause

or permit the removal of the system or device from the motor or motor vehicle, except as permitted by subsection (4).

Same

(4) A person may repair the system or device or replace the system or device by a system or device of the same type or of a type prescribed by the regulations. 1998, c. 35, s. 3.

Operation of motor or motor vehicle

23. (1) Except where necessary for test or repair purposes, no person shall operate or cause or permit the operation of a motor or motor vehicle or any class or type thereof that does not comply with the regulations.

Where system or device required

(2) Where a manufacturer installs on, attaches to or incorporates in any motor or motor vehicle a system or device to prevent or lessen the discharge of any contaminant, the owner of such motor or motor vehicle shall not operate or cause or permit the operation of such motor or motor vehicle nor shall any person knowingly operate or cause or permit its operation unless such motor or motor vehicle has installed on, attached to or incorporated in it such system or device, and such system or device operates in accordance with the regulations when the motor or motor vehicle is in operation. R.S.O. 1990, c. E.19, s. 23.

PART IV
WATER

Ice shelters

24. (1) In this section,

"ice shelter" means any structure that is located on or over ice over any water for more than one day and that is or may be used for shelter, privacy or the storage or sale of any thing; ("abri sur glace")

"owner", when used in relation to an ice shelter, includes a person who has the right to use or occupy the ice shelter; ("propriétaire")

"waste" means human excrement or any refuse that is discharged or deposited in or from an ice shelter. ("déchets") R.S.O. 1990, c. E.19, s. 24 (1).

Discharge of waste prohibited

(2) No person shall discharge or cause or permit the discharge of any waste on ice over any water except in accordance with the regulations. R.S.O. 1990, c. E.19, s. 24 (2).

Removal of ice shelter by provincial officer

(3) Except as provided in subsection (4), where an ice shelter is placed or allowed to remain on ice over any water in contravention of the regulations, a provincial officer may remove the ice shelter or cause it to be removed,

(a) where the provincial officer is able to determine the name and address of the owner, after service of notice upon the owner at least seven days before the date of the removal; or

(b) where the provincial officer is unable to determine the name and address of the owner, forthwith. R.S.O. 1990, c. E.19, s. 24 (3).

Idem, out of season

(4) Where an ice shelter is placed or allowed to remain on ice over any water beyond the dates prescribed by the regulations within which ice shelters may be placed, allowed to remain or used on or

over ice over any water, a provincial officer may remove the ice shelter or cause it to be removed without serving prior notice upon the owner, but where the provincial officer is able to determine the name and address of the owner, notice of the removal shall be served upon the owner forthwith after the removal. R.S.O. 1990, c. E.19, s. 24 (4).

Where owner may retake possession of ice shelter

(5) Except where an ice shelter has been destroyed in the course of removal, the owner of an ice shelter that has been removed pursuant to subsection (3) or (4) may take possession of the ice shelter within thirty days of the removal or of service of the notice mentioned in subsection (3), whichever is later, or within thirty days after service of the notice mentioned in subsection (4), as the case requires, upon payment to the Minister of Finance of the costs and charges for removal and storage of the ice shelter. R.S.O. 1990, c. E.19, s. 24 (5); 2001, c. 9, Sched. G, s. 5 (22).

Where provincial officer may dispose of ice shelter

(6) Where the owner of an ice shelter that has been removed pursuant to subsection (3) or (4) does not take possession of the ice shelter pursuant to subsection (5),

(a) a provincial officer may dispose of the ice shelter without compensation therefor; and

(b) the owner is divested of ownership of the ice shelter and, where the ice shelter is disposed of to any person, such person shall acquire ownership of the ice shelter free from any right, title or interest of any other person. R.S.O. 1990, c. E.19, s. 24 (6).

Notice

(7) A notice under subsection (3) or (4) shall be in such form as the regulations may prescribe and shall state that the owner may take possession of the ice shelter pursuant to subsection (5) and that, if such owner does not so take possession, the ice shelter may be disposed of without compensation therefor and, where the ice shelter has been removed or caused to be removed pursuant to subsection (4) and has been damaged or destroyed in the course of the removal, the notice shall state the condition of the ice shelter. R.S.O. 1990, c. E.19, s. 24 (7).

Means of removal

(8) A provincial officer shall use due care in removing an ice shelter pursuant to subsection (3) or (4) but may use a means of removal that causes damage to or the destruction of the ice shelter if the use of the means of removal is necessary in order to carry out the removal. R.S.O. 1990, c. E.19, s. 24 (8).

Damage or destruction during removal

(9) Where an ice shelter is removed pursuant to subsection (3) or (4) and the means of removal that is necessary in the circumstances results in damage to or the destruction of the ice shelter, the owner of the ice shelter is not entitled to compensation for the damage or destruction. R.S.O. 1990, c. E.19, s. 24 (9).

PART V
WASTE MANAGEMENT

Definitions, Part V

25. In this Part,

"operator" means the person in occupation or having the charge, management, or control of a waste management system or a waste disposal site; ("exploitant")

"owner" includes,

(a) a person that is responsible for the establishment or operation of a waste management system or waste disposal site, or

(b) the person that owns the land in or on which a waste disposal site is located; ("propriétaire")

"owner", in section 47, means a person that is responsible for the operation of a well that is a waste disposal site; ("propriétaire")

"waste" includes ashes, garbage, refuse, domestic waste, industrial waste, or municipal refuse and such other materials as are designated in the regulations; ("déchets")

"waste disposal site" means,

(a) any land upon, into, in or through which, or building or structure in which, waste is deposited, disposed of, handled, stored, transferred, treated or processed, and

(b) any operation carried out or machinery or equipment used in connection with the depositing, disposal, handling, storage, transfer, treatment or processing referred to in clause (a); ("lieu d'élimination des déchets")

"waste management system" means any facilities or equipment used in, and any operations carried out for, the management of waste including the collection, handling, transportation, storage, processing or disposal of waste, and may include one or more waste disposal sites. ("système de gestion des déchets") R.S.O. 1990, c. E.19, s. 25; 1992, c. 1, s. 25.

Application of Part, domestic waste

26. This Part does not apply to the storage or disposal by any person of the person's domestic wastes on the person's own property unless the Director is of the opinion, based upon reasonable and probable grounds, that such storage or disposal is or is likely to create a nuisance, or to any sewage or other works to which the *Ontario Water Resources Act* or the regulations thereunder apply. R.S.O. 1990, c. E.19, s. 26; 2005, c. 12, s. 1 (11).

Approval, waste management system or waste disposal site

27. (1) No person shall use, operate, establish, alter, enlarge or extend a waste management system or a waste disposal site except under and in accordance with an environmental compliance approval. 2010, c. 16, Sched. 7, s. 2 (20).

Exception, prescribed activities

(1.1) Subsection (1) does not apply to a person who is engaging in an activity at a site if the activity has been prescribed by the regulations for the purposes of subsection 20.21 (1), unless one of the following circumstances applies:

1. An environmental compliance approval in respect of the activity engaged in at the site has been issued before the day when a regulation prescribing the activity for the purposes of subsection 20.21 (1) comes into force, and the approval has not ceased to have effect as determined under section 20.17.

2. Subject to subsection (1.2), the Director has issued an order under section 20.18 in respect of the activity at the site. 2010, c. 16, Sched. 7, s. 2 (20).

Same

(1.2) If a registration under Part II.2 is in effect in respect of an activity engaged in at a site when the Director issues an order under section 20.18 in respect of the activity, subsection (1) applies only once the Director has removed the registration from the Environmental Activity and Sector Registry established under Part II.2. 2010, c. 16, Sched. 7, s. 2 (20).

Exception, routine maintenance

(1.3) Subsection (1) does not apply to routine maintenance carried out on any waste management system or waste disposal site. 2010, c. 16, Sched. 7, s. 2 (21).

Niagara Escarpment Plan Area

(2) Despite subsection (1), no person shall use, operate, establish, alter, enlarge or extend a waste disposal site in the Niagara Escarpment Plan Area as set out in the Niagara Escarpment Plan, unless the Director has issued a certificate of approval or a provisional certificate of approval before this subsection comes into force. 1994, c. 5, s. 1; 2009, c. 12, Sched. L, s. 4.

Exceptions

(3) Subsection (2) does not apply with respect to,

(a) a transfer station or recycling facility, including a composting site, which receives waste only from the local municipality in which it is located; or

(b) in the case of a site approved before this subsection comes into force, a proposed use, operation, alteration, enlargement or extension of a waste disposal site which will not result in a greater area at a waste disposal site being covered with waste than permitted under the existing approval. 1994, c. 5, s. 1.

Lakes

(3.1) Despite subsection (1), no person shall use, operate, establish, alter, enlarge or extend a waste disposal site where waste is deposited in a lake. 2004, c. 6, s. 7 (1).

Same

(3.2) In subsection (3.1),

"lake" includes,

(a) a body of surface water that,

(i) results from human activities, and

(ii) directly influences or is directly influenced by ground water, and

(b) an area of land that was covered by a body of water described in clause (a) or a lake on the day this subsection came into force,

but does not include,

(c) a body of water described in clause (a) or a lake, if the body of water or lake is less than one hectare in area, or

(d) an area of land described in clause (b), if the body of water described in clause (a) or lake that covered the area of land on the day this subsection came into force was, in total, less than one hectare in area on that day. 2004, c. 6, s. 7 (1).

No proceeding

(4) No proceeding directly or indirectly based upon the prohibition in subsection (2) or (3.1) may be brought against the Crown in right of Ontario, the Government of Ontario, any member of the Executive Council or any employee of the Crown or Government. 1994, c. 5, s. 1; 2004, c. 6, s. 7 (2).

Transition, repeal of Part VIII

28. (1) If, except for the operation of Part VIII, a site would have been a waste disposal site under this Part or facilities would have been a waste management system under this Part, those sites and

facilities are, on the day that Part VIII is repealed, continued as a waste disposal site or waste management system under this Part if a certificate of approval under section 77 or a permit under section 78 or both were issued and remain in force in respect of such works. 1997, c. 30, Sched. B, s. 21.

Same

(2) The certificate of approval or permit or both are continued in force as if they were a certificate of approval under section 39, with such changes as necessary. 1997, c. 30, Sched. B, s. 21.

Continuation, orders

(3) An order issued and continuing in force under section 79 in respect of a sewage system which except for the operation of Part VIII would have been a waste disposal site or a waste management system under this Part is, upon the repeal of Part VIII, continued as if it were an order under section 44, with such changes as necessary. 1997, c. 30, Sched. B, s. 21.

(4) REPEALED: 2010, c. 16, Sched. 7, s. 2 (22).

Records

(5) If an agreement under section 81 was in force immediately before the repeal of Part VIII, the party which was administering Part VIII under the agreement shall,

(a) keep all records in their possession or under their control with respect to matters continued under this section for a period of six years from the date of the repeal or as otherwise prescribed under subsection (9);

(b) on the written request of the Director, deliver to the Director a record or certified copy of a record relating to Part VIII as specified in the request;

(c) on the written request of the Director, deliver to the Director a certificate as to the service of any document relating to Part VIII as specified in the request;

(d) on the written request of the Director, deliver to the Director a certificate as to the custody of any document relating to Part VIII as specified in the request; and

(e) on the written request of the Director, deliver to the Director a certificate as to whether or not any document relating to Part VIII as specified in the request was received or issued. 1997, c. 30, Sched. B, s. 21.

Deemed official document

(6) A record, certified copy of a record or a certificate delivered under clause (5) (b) or (c) that is or relates to an approval, certificate, consent, licence, notice, permit, order or return under Part VIII shall be deemed to be an official document signed by an employee in the Ministry for the purpose of section 175. 1997, c. 30, Sched. B, s. 21.

Same

(7) A certificate delivered under clause (5) (d) or (e) shall be deemed to be an official document signed by an employee in the Ministry for the purpose of section 175. 1997, c. 30, Sched. B, s. 21.

References

(8) The references to sections 77, 78, 79 and 81 in this section are references to those provisions as they read immediately before the repeal of Part VIII under Schedule B of the *Services Improvement Act, 1997*. 1997, c. 30, Sched. B, s. 21.

Regulations

(9) The Lieutenant Governor in Council may make regulations prescribing transitional matters necessary to deal with issues arising out of the repeal of Part VIII, which regulations may be general or specific in their application and may be retroactive to the date this section comes into force. 1997, c. 30, Sched. B, s. 21.

Limitation

(10) This section applies only to sewage systems which, except for the operation of Part VIII, would have been waste disposal sites or waste management systems under this Part and to matters and documents related to such sewage systems. 1997, c. 30, Sched. B, s. 21.

Report by Minister

29. (1) Where the Minister reports in writing to the clerk of a municipality that the Minister is of the opinion that it is necessary in the public interest that waste be collected or a waste management system or any part thereof be established, maintained, operated, improved, extended, enlarged, altered, repaired or replaced, it is not necessary to obtain the assent of the electors to any by-law for incurring a debt for any such purpose, and the municipality shall forthwith do every possible act and thing in its power to implement the report of the Minister within the time specified. R.S.O. 1990, c. E.19, s. 29.

Reasons

(2) A report mentioned in subsection (1) must include a statement of the reasons for the Minister's opinion.

What report may require

(3) A report may require a municipality,

(a) to collect or transport such waste as is specified in the report, including such waste from such source outside the boundaries of the municipality as is specified in the report;

(b) to accept, process or otherwise deal with such waste as is specified in the report, including such waste from such source outside the boundaries of the municipality as is specified in the report, in a waste management system or at a waste disposal site located in or owned, operated or controlled by the municipality.

Compensation by persons benefiting

(4) If a report requires a municipality to do anything that will benefit a person, the report may specify compensation to be provided to the municipality by that person for the benefit and the following apply:

1. The person shall provide the compensation if the person has been served with a copy of the report unless the person, within fifteen days after service, gives a written notice to the municipality and the Minister that the person renounces the benefit.

2. If the person renounces the benefit, the municipality is, with respect to the benefit, relieved from its obligation to implement the report.

Waste from outside municipality

(5) Requirements in a report relating to waste from a source outside the boundaries of a municipality are binding on the municipality only during the five-year period following the making of the report or during such shorter period as the report may specify.

Report is an order

(6) A report is an order for the purposes of Part XIV. 1992, c. 1, s. 27.

30.-32. REPEALED: 2010, c. 16, Sched. 7, s. 2 (23).

Hearing before Tribunal

33. (1) Upon receipt of a notice from the Director under section 36, the Tribunal shall hold a hearing with respect to the subject-matter of the notice. R.S.O. 1990, c. E.19, s. 33 (1); 2000, c. 26, Sched. F, s. 12 (12); 2010, c. 16, Sched. 7, s. 2 (24).

Parties

(2) The applicant, the Director and any other persons specified by the Tribunal shall be parties to the hearing. R.S.O. 1990, c. E.19, s. 33 (2); 2000, c. 26, Sched. F, s. 12 (12).

(3) REPEALED: 2000, c. 26, Sched. F, s. 12 (4).

Decision

(4) The Tribunal shall serve notice of its decision, together with reasons therefor, on the parties to the hearing, and the Director shall implement the decision. R.S.O. 1990, c. E.19, s. 33 (4); 2000, c. 26, Sched. F, s. 12 (12).

Costs

(5) The Tribunal may award the costs of a proceeding under this section. 2000, c. 26, Sched. F, s. 12 (5).

Payment

(6) The Tribunal may order to whom and by whom the costs are to be paid. 2000, c. 26, Sched. F, s. 12 (5).

Assessment

(7) The Tribunal may fix the amount of the costs or direct that the amount be assessed and it may direct the scale according to which they are to be assessed and by whom they are to be assessed. 2000, c. 26, Sched. F, s. 12 (5).

Considerations not limited

(8) In awarding costs, the Tribunal is not limited to the considerations that govern awards of costs in any court. 2000, c. 26, Sched. F, s. 12 (5).

Application

(9) Subsections (5) to (8) apply despite sections 17.1 and 32 of the *Statutory Powers Procedure Act*. 2000, c. 26, Sched. F, s. 12 (5).

Appeal from decision of Tribunal

34. A party to a proceeding under this Part before the Tribunal may appeal from its decision on a question of law to the Divisional Court. 2009, c. 33, Sched. 2, s. 28 (1).

34.1, 35. REPEALED: 2010, c. 16, Sched. 7, s. 2 (25).

Hearing as to by-law

36. (1) Where a by-law of a municipality affects the location or operation of a proposed waste disposal site, the Director, upon the application of the person applying for approval under Part II.1 for the waste disposal site, may, by a notice in writing, and on such terms and conditions as he or she may direct, require the Tribunal to hold a public hearing to consider whether or not the by-law should apply to the proposed waste disposal site. R.S.O. 1990, c. E.19, s. 36 (1); 2000, c. 26, Sched. F, s. 12 (12); 2010, c. 16, Sched. 7, s. 2 (26).

When Tribunal to hold public hearing

(2) Upon receipt of notice from the Director, the Tribunal shall hold a public hearing with respect to the subject-matter of the notice. R.S.O. 1990, c. E.19, s. 36 (2); 2000, c. 26, Sched. F, s. 12 (12).

(3) REPEALED: 2000, c. 26, Sched. F, s. 12 (7).

Parties and procedure

(4) Where the Director requires a public hearing under subsection (1),

(a) the applicant, the municipality and any other person specified by the Tribunal shall be given notice of the hearing in such manner as the Tribunal directs; and

(b) the Tribunal shall hold the public hearing within the municipality within which it is proposed to locate the waste disposal site. R.S.O. 1990, c. E.19, s. 36 (4); 2000, c. 26, Sched. F, s. 12 (12).

Order

(5) The Tribunal may order that the by-law referred to in subsection (1) does not apply to the proposed waste disposal site and the by-law shall thereupon be deemed not to apply thereto. R.S.O. 1990, c. E.19, s. 36 (5); 2000, c. 26, Sched. F, s. 12 (12).

37., 38. REPEALED: 2010, c. 16, Sched. 7, s. 2 (27).

39. REPEALED: 2010, c. 16, Sched. 7, s. 2 (29).

Prohibition as to deposit of waste

40. No person shall deposit, or cause, permit or arrange for the deposit of, waste upon, in, into or through any land or land covered by water or in any building that is not a waste disposal site for which an environmental compliance approval or renewable energy approval has been issued or a registration under Part II.2 is in effect and except in accordance with the terms and conditions of the approval or the regulations made for the purposes of Part II.2. 2010, c. 16, Sched. 7, s. 2 (30).

Prohibition as to use of facilities, etc.

41. No person shall use, or cause, permit or arrange for the use of, any facilities or equipment for the storage, handling, treatment, collection, transportation, processing or disposal of waste that is not part of a waste management system for which an environmental compliance approval or renewable energy approval has been issued or a registration under Part II.2 is in effect and except in accordance with the terms and conditions of the approval or the regulations made for the purposes of Part II.2. 2010, c. 16, Sched. 7, s. 2 (30).

Ownership of waste

42. (1) The ownership of waste that is accepted at a waste disposal site by the operator of the site is transferred to the operator upon acceptance. R.S.O. 1990, c. E.19, s. 42 (1).

Where waste not accepted

(2) Where waste is deposited but not accepted at a waste disposal site, the ownership of the waste shall be deemed to be transferred to the operator of the site immediately before the waste is deposited. R.S.O. 1990, c. E.19, s. 42 (2).

Approval

(3) Subsections (1) and (2) apply only in respect of a waste disposal site for which an environmental compliance approval, renewable energy approval or registration under Part II.2 is in effect. 2010, c. 16, Sched. 7, s. 2 (31).

Effect of contract

(4) Subsection (1) applies only in the absence of a contract to the contrary. R.S.O. 1990, c. E.19, s. 42 (4).

Liability

(5) Subsections (1) to (4) do not relieve any person from liability except liability as owner of waste that is delivered to and accepted by the operator of a waste disposal site in accordance with law including an applicable environmental compliance approval, applicable renewable energy approval or applicable regulation made under clause 176 (2.4) (e). 2009, c. 12, Sched. G, s. 3 (2); 2010, c. 16, Sched. 7, s. 2 (32).

Owner of land

(6) Where the operator of a waste disposal site is not the owner of the land on which the site is located, subsections (1) and (2) do not prevent the ownership of waste that is accepted or deposited at the site from being transferred to the owner of the land. R.S.O. 1990, c. E.19, s. 42 (6).

Order for removal of waste

43. Where waste has been deposited upon, in, into or through any land or land covered by water or in any building that has not been approved as a waste disposal site or in respect of which no registration under Part II.2 is in effect, the Director may issue an order to remove the waste and to restore the site to a condition satisfactory to the Director to,

(a) an owner or previous owner or a person who otherwise has or had charge and control of the land or building or waste;

(b) an occupant or previous occupant of the land or building; or

(c) a person that the Director reasonably believes engaged in an activity prohibited by section 40 or 41 that resulted in the deposit of the waste. 1998, c. 35, s. 6; 2010, c. 16, Sched. 7, s. 2 (33).

Order by Director

44. Where a waste management system or a waste disposal site is not in conformity with this Part or the regulations, the Director may order an owner or previous owner to take such action as is required to bring the system or the site into conformity with this Part or the regulations within the time specified in the order. R.S.O. 1990, c. E.19, s. 44.

Right to compensation

45. (1) Within thirty days after the receipt of notice that the Director has refused to renew or has suspended or revoked an environmental compliance approval, any owner who has suffered pecuniary loss as a result of such decision affecting the owner's waste disposal site or waste management system may apply to the Director for compensation for such loss where such owner,

(a) has received an environmental compliance approval for the waste disposal site or waste management system affected by the Director's decision; and

(b) since receiving the environmental compliance approval, has strictly complied with this Act and the regulations. R.S.O. 1990, c. E.19, s. 45 (1); 2010, c. 16, Sched. 7, s. 2 (34-36).

Same

(1.1) Within 30 days after the receipt of notice or an order that the Director has suspended a registration under Part II.2 or removed a registration under Part II.2 from the registry established under that Part, any owner who has suffered pecuniary loss as a result of such decision affecting the owner's waste disposal site or waste management system may apply to the Director for compensation for such loss where such owner,

(a) has received a confirmation of registration under Part II.2 in respect of the waste disposal site or waste management system affected by the Director's decision; and

(b) since registering the activity, has strictly complied with this Act and the regulations. 2010, c. 16, Sched. 7, s. 2 (37).

Exception

(1.2) Subsection (1.1) does not apply if the Director removes the registration from the registry as a result of issuing an order under section 20.18, unless the Director refuses to issue an environmental compliance approval in respect of the waste disposal site or waste management system. 2010, c. 16, Sched. 7, s. 2 (38).

Notice of decision and right to appeal

(2) A notice of the decision of the Director in disposing of the application and a notice stating the right to an appeal under this section shall be served on the owner either personally or by registered mail addressed to the owner at the owner's last known address. R.S.O. 1990, c. E.19, s. 45 (2).

Right to appeal

(3) Within fifteen days after receipt of the notices referred to in subsection (2), the owner may by written notice received by the Ministry and the Tribunal, appeal the amount of compensation, if any, to the Tribunal, and such appeal shall be a new hearing and the Tribunal may dismiss the appeal or alter the decision of the Director establishing the amount of the compensation, if any, and the decision of the Tribunal shall be final. R.S.O. 1990, c. E.19, s. 45 (3); 2000, c. 26, Sched. F, s. 12 (12).

Payment of compensation

(4) Where the Director or the Tribunal, as the case may be, has established the amount of the compensation, if any, the Minister of the Environment shall certify the amount thereof to the Minister of Finance and the Minister of Finance shall pay such amount to the person entitled thereto out of the Consolidated Revenue Fund. R.S.O. 1990, c. E.19, s. 45 (4); 2000, c. 26, Sched. F, s. 12 (12); 2001, c. 9, Sched. G, s. 5 (2).

Former disposal sites

46. No use shall be made of land or land covered by water which has been used for the disposal of waste within a period of twenty-five years from the year in which such land ceased to be so used unless the approval of the Minister for the proposed use has been given. R.S.O. 1990, c. E.19, s. 46.

Security Fund

47. (1) There shall be an account in the Consolidated Revenue Fund to be known in English as "The Waste Well Disposal Security Fund" and in French as "Caisse de garantie des propriétaires de puits d'élimination des déchets", referred to in this section as the "Fund", into which shall be paid the prescribed fees received under this Act. R.S.O. 1990, c. E.19, s. 47 (1).

Interest

(2) Interest shall be credited to the Fund out of the Consolidated Revenue Fund at a rate to be determined from time to time by the Lieutenant Governor in Council, and such interest shall be made up at the close of each fiscal year upon the balance in the Fund at the end of the previous calendar year. R.S.O. 1990, c. E.19, s. 47 (2).

Owner of waste disposal well to pay fee

(3) The owner of every well that is a waste disposal site shall pay a fee calculated upon the amount and type of waste disposed of in the well. R.S.O. 1990, c. E.19, s. 47 (3).

Fee paid to Minister of Finance

(4) The fee shall be paid to the Minister of Finance for payment into the Fund. R.S.O. 1990, c. E.19, s. 47 (4); 2001, c. 9, Sched. G, s. 5 (22).

Calculation and payment of fee

(5) The fee shall be at the rate or rates prescribed by the regulations, shall be paid upon the amount and type of waste disposed of in the well in each calendar year and shall be paid in advance in each calendar year. R.S.O. 1990, c. E.19, s. 47 (5).

Estimate by Director

(6) The Director shall estimate the amount of the fee for each calendar year based upon the amount and type of waste disposed of in the well in the previous calendar year and where waste was not disposed of in the well in the previous calendar year the Director shall estimate the fee on the basis of the amount and type of waste that in the Director's opinion will be disposed of in the well in the current calendar year and may revise such estimate at any time before payment of the estimated fee as required by subsection (7). R.S.O. 1990, c. E.19, s. 47 (6).

Payment of estimated fee

(7) The estimated fee for each calendar year shall be paid within thirty days after receipt of the notice or revised notice by the owner of the well of the amount of the fee estimated by the Director. R.S.O. 1990, c. E.19, s. 47 (7).

Adjustment of fee

(8) At the end of each calendar year, the Director shall calculate the amount of the fee for the year and,

(a) where the fee estimated and paid for the year is less than the calculated fee, the Director shall add the difference to the estimated fee for the next calendar year or may, by a notice in writing, require the owner of the well to pay the difference forthwith to the Minister of Finance; and

(b) where the fee estimated and paid for the year is greater than the calculated fee, the Director shall deduct the difference from the estimated fee for the next calendar year or may certify to the Minister of Finance the amount of such difference and the Minister of Finance shall pay such amount to the owner of the well. R.S.O. 1990, c. E.19, s. 47 (8); 2001, c. 9, Sched. G, s. 5 (22).

Person suffering damage to be compensated

(9) Where the water in any well, lake, river, pond, spring, stream, reservoir or other water or watercourse that any person takes for ordinary household purposes or for the watering of livestock, poultry, home gardens or lawns, or for the watering or irrigation of crops grown for sale, is rendered unfit for such use by reason of the operation of any well that is a waste disposal site, the person is entitled to be compensated out of the Fund so far as the Fund is sufficient for that purpose, having regard to any other charges thereon, if the person gives notice to the Director forthwith after becoming aware that the water has been rendered unfit and makes a claim therefor under subsection (10) within six months, or such longer period of time as may be determined by the Director, from the date that the Director received the notice that the water has been rendered unfit. R.S.O. 1990, c. E.19, s. 47 (9).

Claim for compensation

(10) A person claiming to be entitled to compensation out of the Fund shall make application therefor to the Director in writing, setting out therein the person's full name and address and the particulars of the person's claim and shall furnish to the Director such additional information with respect to the

subject-matter of the claim that the Director may require and that is within the person's knowledge. R.S.O. 1990, c. E.19, s. 47 (10).

Determination by Director

(11) The Director shall investigate or cause an investigation to be made and shall determine whether there are reasonable grounds for believing that the water referred to in subsection (9) has been rendered unfit for any of the purposes set out therein and for which it was used and that it has been rendered unfit by the disposal of waste in any well that is a waste disposal site and in such case shall determine the amount of the claimant's reasonable and necessary expenses incurred in obtaining a temporary or permanent alternate supply of water substantially equivalent in quantity and quality to such water. R.S.O. 1990, c. E.19, s. 47 (11); 2005, c. 12, s. 1 (12).

Director's certificate

(12) The Director shall set out his or her determination in a certificate together with written reasons therefor and send a copy thereof to the claimant by registered mail at the address set out in the application. R.S.O. 1990, c. E.19, s. 47 (12).

When certificate final

(13) The certificate of the Director is final at the end of thirty days from the date of mailing it to the claimant unless notice of appeal is served within that time. R.S.O. 1990, c. E.19, s. 47 (13).

Appeal

(14) The claimant may appeal to the Tribunal at any time before the certificate of the Director becomes final and the procedure thereon shall be the same as upon an appeal from an order of the Director under Part XIII. R.S.O. 1990, c. E.19, s. 47 (14); 2000, c. 26, Sched. F, s. 12 (12).

Payment out of Fund

(15) Where the Director has sent the certificate by registered mail to the claimant and the time for any appeal has expired or, where an appeal is taken, it is disposed of, and it is finally determined that the claimant is entitled to payment of compensation out of the Fund, the Director shall certify to the Minister of Finance the sum found to be payable and the Minister of Finance shall pay such sum to the claimant out of the Fund. R.S.O. 1990, c. E.19, s. 47 (15); 2001, c. 9, Sched. G, s. 5 (22).

Recovery of money

(16) Where a claimant who has received any payment out of the Fund recovers any money directly or indirectly from the owner of a well that is a waste disposal site, in respect of the expenses for which the payment was made out of the Fund, the claimant shall repay to the Minister of Finance for credit to the Fund an amount equal to the payment out of the Fund or the money received from the owner of the well, whichever is the lesser, and such amount may be recovered with costs in any court of competent jurisdiction as a debt due to the Crown. R.S.O. 1990, c. E.19, s. 47 (16); 2001, c. 9, Sched. G, s. 5 (22).

Recovery of fees owing

(17) Any fee or any difference between the estimated fee and the calculated fee referred to in clause (8) (a) that is payable under this section may be recovered in any court of competent jurisdiction as a debt due to the Crown. R.S.O. 1990, c. E.19, s. 47 (17).

PART V.0.1
RENEWABLE ENERGY

Definition

47.1 In this Part,

"environment" has the same meaning as in the *Environmental Assessment Act*. 2009, c. 12, Sched. G, s. 4 (1).

Purpose

47.2 (1) The purpose of this Part is to provide for the protection and conservation of the environment. 2009, c. 12, Sched. G, s. 4 (1).

Application of s. 3 (1)

(2) Subsection 3 (1) does not apply to this Part. 2009, c. 12, Sched. G, s. 4 (1).

Requirement for renewable energy approval

47.3 (1) A person shall not engage in a renewable energy project except under the authority of and in accordance with a renewable energy approval issued by the Director if engaging in the project involves engaging in any of the following activities:

1. An activity for which, in the absence of subsection (2), subsection 9 (1) of this Act would require an environmental compliance approval.
2. An activity for which, in the absence of subsection (2), subsection 27 (1) of this Act would require an environmental compliance approval.
3. An activity for which, in the absence of subsection (2), subsection 34 (3) of the *Ontario Water Resources Act* would require a permit.

Note: On the later of the day subsection 4 (1) of Schedule G to the *Green Energy and Green Economy Act, 2009* comes into force and the day subsection 1 (8) of the *Safeguarding and Sustaining Ontario's Water Act, 2007* comes into force, paragraph 3 is repealed and the following substituted:

3. An activity for which, in the absence of subsection (2), subsection 34 (1) of the *Ontario Water Resources Act* would require a permit, if the activity would not involve a transfer as defined in subsection 34.5 (1) of that Act.

See: 2009, c. 12, Sched. G, ss. 4 (2), 26 (2).

4. An activity for which, in the absence of subsection (2), section 36 of the *Ontario Water Resources Act* would require a well construction permit.
5. An activity for which, in the absence of subsection (2), subsection 53 (1) of the *Ontario Water Resources Act* would require an environmental compliance approval.
6. An activity for which, in the absence of subsection (2), a provision prescribed by the regulations would require an approval, permit or other instrument.
7. Any other activity prescribed by the regulations. 2009, c. 12, Sched. G, s. 4 (1); 2010, c. 16, Sched. 7, s. 2 (39-41).

Exemptions

(2) The following provisions do not apply to a person who is engaging in a renewable energy project:

1. Subsection 9 (1) of this Act.
2. Subsection 27 (1) of this Act.
3. Subsection 34 (3) of the *Ontario Water Resources Act*.

Note: On the later of the day subsection 4 (1) of Schedule G to the *Green Energy and Green Economy Act, 2009* comes into force and the day subsection 1 (8) of the *Safeguarding and*

***Sustaining Ontario's Water Act, 2007* comes into force, paragraph 3 is repealed and the following substituted:**

3. Subsection 34 (1) of the *Ontario Water Resources Act*, if the person engaging in the renewable energy project is not engaged in a taking of water that involves a transfer as defined in subsection 34.5 (1) of that Act.

See: 2009, c. 12, Sched. G, ss. 4 (3), 26 (2).

4. Section 36 of the *Ontario Water Resources Act*.

5. Section 53 of the *Ontario Water Resources Act*.

6. A provision prescribed by the regulations for the purpose of paragraph 6 of subsection (1). 2009, c. 12, Sched. G, s. 4 (1); 2010, c. 16, Sched. 7, s. 2 (42).

Application

47.4 (1) An application for the issue or renewal of a renewable energy approval shall be prepared in accordance with the regulations and submitted to the Director. 2009, c. 12, Sched. G, s. 4 (1).

Director may require information

(2) The Director may require an applicant under subsection (1) to submit any plans, specifications, engineers' reports or other information and to carry out and report on any tests or experiments relating to the renewable energy project. 2009, c. 12, Sched. G, s. 4 (1).

Director's powers

47.5 (1) After considering an application for the issue or renewal of a renewable energy approval, the Director may, if in his or her opinion it is in the public interest to do so,

(a) issue or renew a renewable energy approval; or

(b) refuse to issue or renew a renewable energy approval. 2009, c. 12, Sched. G, s. 4 (1).

Terms and conditions

(2) In issuing or renewing a renewable energy approval, the Director may impose terms and conditions if in his or her opinion it is in the public interest to do so. 2009, c. 12, Sched. G, s. 4 (1).

Other powers

(3) On application or on his or her own initiative, the Director may, if in his or her opinion it is in the public interest to do so,

(a) alter the terms and conditions of a renewable energy approval after it is issued;

(b) impose new terms and conditions on a renewable energy approval; or

(c) suspend or revoke a renewable energy approval. 2009, c. 12, Sched. G, s. 4 (1).

Same

(4) A renewable energy approval is subject to any terms and conditions prescribed by the regulations. 2009, c. 12, Sched. G, s. 4 (1).

Water transfers: Great Lakes-St. Lawrence River, Nelson and Hudson Bay Basins

47.6 A renewable energy approval shall not authorize a person to take water contrary to subsection 34.3 (2) of the *Ontario Water Resources Act*. 2009, c. 12, Sched. G, s. 4 (1).

Policies, renewable energy approvals

47.7 (1) The Minister may, in writing, issue, amend or revoke policies in respect of renewable energy approvals. 2009, c. 12, Sched. G, s. 4 (1).

Same

(2) A policy or the amendment or revocation of a policy takes effect on the later of the following days:

1. The day that notice of the policy, amendment or revocation, as the case may be, is given in the environmental registry established under the *Environmental Bill of Rights, 1993*.
2. The effective day specified in the policy, amendment or revocation, as the case may be. 2009, c. 12, Sched. G, s. 4 (1).

Same

(3) Subject to section 145.2.2, decisions made under this Act in respect of renewable energy approvals shall be consistent with any policies issued under subsection (1) that are in effect on the date of the decision. 2009, c. 12, Sched. G, s. 4 (1).

PART V.1
VEHICLE PERMITS AND NUMBER PLATES

Seizure of permits and number plates

Definitions, ss. 48 to 55

48. (1) In this section and in sections 49 to 55,

"number plates" means number plates issued under the *Highway Traffic Act*; ("plaques d'immatriculation")

"offence" means offence under this Act, the *Nutrient Management Act, 2002*, the *Ontario Water Resources Act*, the *Pesticides Act*, the *Safe Drinking Water Act, 2002* or the *Toxics Reduction Act, 2009*; ("infraction")

"permit" means permit issued under section 7 of the *Highway Traffic Act*; ("certificat d'immatriculation")

"Registrar" means Registrar of Motor Vehicles under the *Highway Traffic Act*. ("registrateur") R.S.O. 1990, c. E.19, s. 48 (1); 1998, c. 35, s. 8 (1, 2); 2002, c. 4, s. 62 (2); 2009, c. 19, s. 67 (2).

Seizure of permit and number plates

(2) A police officer or a provincial officer may seize the permit and the number plates for a vehicle where he or she reasonably believes that the vehicle was used or is being used in connection with the commission of an offence and the seizure is necessary to prevent the continuation or repetition of the offence. 1998, c. 35, s. 8 (3).

Safekeeping

(3) The police officer or provincial officer,

(a) shall deliver the permit and the number plates into the custody of the Registrar pending disposition as provided in sections 49 to 55; and

(b) shall give notice to the Registrar of the date when the permit and the number plates were seized. R.S.O. 1990, c. E.19, s. 48 (3).

Notice by Registrar

(4) The Registrar shall give notice of the delivery into custody and of the date of the seizure to the person to whom the permit and the number plates were issued. R.S.O. 1990, c. E.19, s. 48 (4).

Suspension of permit and detention of number plates

49. (1) Where a person is convicted of an offence, the court may order the suspension of the permit and the detention of the number plates for any vehicle that the court is satisfied was used in connection with the commission of the offence. 1998, c. 35, s. 9 (1).

Term of suspension and detention

(2) The court may fix such period of time, not exceeding five years, for the suspension of the permit and the detention of the number plates as the court considers proper.

Idem

(3) Where the permit and the number plates were seized under section 48, the period of the suspension and detention shall be calculated from the day of the seizure.

Order for seizure

(4) Where the permit and the number plates have not been seized, the court may order that the permit and the number plates shall be seized and delivered to the Registrar.

Out-of-province permit and number plates

(5) Where the permit to drive the vehicle on a highway and the number plates were issued by an authority outside Ontario and not under the *Highway Traffic Act*, the court shall not act under subsection (1) but may order the Registrar to return the permit and the number plates to the authority that issued them.

Order is additional to any other penalty

(6) The court may issue an order under this section in addition to any other penalty imposed.

Notice of commencement of proceeding

(7) The prosecutor shall give to the Registrar and to the person to whom the permit and the number plates were issued notice of the commencement of the proceeding in respect of the offence mentioned in subsection (1).

Notice of intention to seek order

(8) Subsections (1) and (5) do not apply unless the court is satisfied that the person to whom the permit and the number plates were issued was notified, before the defendant entered a plea, that an order would be sought under this section. R.S.O. 1990, c. E.19, s. 49 (2-8).

Right to be added as a party

(9) A person given notice under subsection (8) has the right to be added as a party to the proceeding in respect of the offence for one or both of the following purposes:

1. Satisfying the court that the vehicle was not used in connection with the commission of the offence.
2. Making submissions to the court with respect to the issuance of an order under this section. 1998, c. 35, s. 9 (2).

Duty to give notice

(10) A prosecutor who intends not to seek a penalty under this section shall give notice of that fact to the court, to the Registrar and to the person to whom the permit and the number plates were issued.

Notice of intention not to seek penalty

(11) Subsections (1), (4) and (5) do not apply where the prosecutor gives notice to the person to whom the permit and the number plates were issued that a penalty will not be sought under this section. R.S.O. 1990, c. E.19, s. 49 (10, 11).

Order to detain permit and number plates pending payment of penalty

50. (1) Where,

(a) a person is convicted of an offence; and

(b) the court is satisfied,

(i) that the permit and the number plates for a vehicle used in connection with the commission of the offence are in the possession of the Registrar or are the subject of an order for seizure and delivery to the Registrar, and

(ii) that the person to whom the permit and the number plates were issued was notified that a penalty would be sought under section 49,

the court may order the Registrar to detain the permit and the number plates until any fine imposed upon the conviction mentioned in clause (a) is paid. R.S.O. 1990, c. E.19, s. 50 (1); 1998, c. 35, s. 10.

Duty of court clerk

(2) The clerk of the court shall transmit to the Registrar,

(a) a copy of the order made under subsection (1) together with a certificate as to the issuance of the order; and

(b) upon payment of the fine, a certificate by the clerk as to the payment. R.S.O. 1990, c. E.19, s. 50 (2).

Appeal, order under ss. 49 and 50

51. An appeal lies from an order or a refusal to issue an order under section 49 or 50 in the same manner as an appeal from a conviction or acquittal in respect of an offence mentioned in such section. R.S.O. 1990, c. E.19, s. 51.

Return of permit and number plates

52. (1) Where the Registrar is satisfied as to the circumstances set out in subsection (2), the Registrar upon application by the person to whom the permit and the number plates were issued shall return the permit and the number plates or, upon payment of any fees prescribed therefor under the *Highway Traffic Act*,

(a) shall renew the permit and return or issue new number plates; or

(b) shall issue a new permit and new number plates,

as the case requires. R.S.O. 1990, c. E.19, s. 52 (1).

When return to be made

(2) The circumstances referred to in subsection (1) are that,

(a) the prosecutor has given notice to the Registrar that an order will not be sought,

(i) for the suspension of the permit and the detention of the number plates, or

(ii) for the return of the permit and the number plates to the authority outside Ontario that issued them;

(b) at the conclusion of an investigation, no proceeding is commenced in respect of the offence mentioned in subsection 49 (1);

(c) notice of the commencement of the proceeding in respect of the offence mentioned in subsection 49 (1) is not given to the Registrar or to the person to whom the permit and the number plates were issued within thirty days of the seizure of the permit and the number plates;

(d) every charge that has been laid is withdrawn;

(e) any proceeding that has been commenced is finally disposed of without the issuance of an order,

(i) for the suspension of the permit and the detention of the number plates,

(ii) for the return of the permit and the number plates to the authority outside Ontario that issued them, or

(iii) for the detention of the permit and the number plates pending payment of a fine;

(f) where an order has been issued for the suspension of the permit and the detention of the number plates, the period of the suspension and detention has been completed and, if an order has been issued for the detention of the permit and the number plates pending payment of a fine, the fine has been paid;

(g) where an order has been issued for the detention of the permit and the number plates pending payment of a fine, the fine has been paid; or

(h) except where the permit and number plates are in the custody of the Registrar under a court order, a provincial officer has given notice to the Registrar that the suspension of the permit and number plates is no longer necessary to prevent the continuation or repetition of the offence. R.S.O. 1990, c. E.19, s. 52 (2); 1998, c. 35, s. 11.

Prohibition, applications for permits and number plates

Permits

53. (1) No person whose permit or number plates for a vehicle,

(a) have been seized and are held in custody under section 48;

(b) are under suspension or detention under section 49 or 51; or

(c) are detained under section 50,

shall apply for, procure the issue or renewal of or have possession of a permit for the vehicle.

Number plates

(2) No person whose permit or number plates for a vehicle,

(a) have been seized and are held in custody under section 48;

(b) are under suspension or detention under section 49 or 51; or

(c) are detained under section 50,

shall apply for, procure the issue of or have in the person's possession or on the vehicle number plates for the vehicle. R.S.O. 1990, c. E.19, s. 53.

Transmittal of copy of order

54. Where, under section 49 or 51, an order is made or a charge is dismissed, the clerk or registrar of the court shall transmit to the Registrar a copy of the order or the minute of dismissal certified by the clerk or registrar. R.S.O. 1990, c. E.19, s. 54.

Substituted service

55. (1) On application without notice, a justice who is satisfied that reasonable efforts have been made without success to give a notice, in accordance with section 182, under section 48 or 49, or that such reasonable efforts would not be successful, may order substituted service of the notice in such manner as the justice may direct. 1998, c. 35, s. 12.

Effect

(2) A notice given by substituted service in the manner directed under subsection (1) shall be deemed to be given on the day on which the substituted service is carried out. R.S.O. 1990, c. E.19, s. 55 (2).

PART VI
OZONE DEPLETING SUBSTANCES

Definitions, Part VI

56. In this Part,

"designated" means designated by the regulations; ("désigné")

"ozone depleting substance" means a chlorofluorocarbon, a halon or any other substance that has the potential to destroy ozone in the stratosphere. ("substance appauvrissant la couche d'ozone") R.S.O. 1990, c. E.19, s. 56.

Application

57. Sections 58 and 59 apply only in respect of the following ozone depleting substances:

1. CFC-11, also known as fluorotrichloromethane.
2. CFC-12, also known as dichlorodifluoromethane.
3. CFC-113, also known as 1,1,2-trichloro-1,2,2-trifluoroethane.
4. CFC-114, also known as 1,2-dichloro-1,1,2,2-tetrafluoroethane.
5. CFC-115, also known as 1-chloro-1,1,2,2,2-pentafluoroethane.
6. Halon-1211, also known as bromochlorodifluoromethane.
7. Halon-1301, also known as bromotrifluoromethane.
8. Halon-2402, also known as dibromotetrafluoroethane.
9. Such other ozone depleting substances as may be designated. R.S.O. 1990, c. E.19, s. 57.

Prohibition, ozone depleting substances

58. No person shall make, use, transfer, display, transport, store or dispose of,

(a) any thing, other than a prescription drug, containing an ozone depleting substance that acts as a propellant; or

(b) any designated thing or any thing of a designated class if that thing contains an ozone depleting substance. R.S.O. 1990, c. E.19, s. 58.

Prohibition, manufacture using ozone depleting substances

59. No person shall make, use, transfer, display, transport, store or dispose of,

(a) any packaging, wrapping or container that is made in a manner that uses an ozone depleting substance; or

(b) any designated thing or any thing of a designated class if that thing is made in a manner that uses an ozone depleting substance. R.S.O. 1990, c. E.19, s. 59.

PART VII
ABANDONED MOTOR VEHICLES

Definitions, Part VII

60. In this Part,

"abandoned motor vehicle" means a vehicle that has been left unattended without lawful authority and that appears to an officer, by reason of its age, appearance, mechanical condition or lack of number plates, to be abandoned; ("véhicule automobile abandonné")

"abandoned motor vehicle site" means,

(a) a waste disposal site,

(i) that is classified by the regulations as a derelict motor vehicle site,

(ii) that is not exempt under the regulations relating to Part V or this Part, and

(iii) for which an environmental compliance approval has been issued or a registration under Part II.2 is in effect, or

(b) any place that is approved in writing by the Director for the purpose of receiving and storing abandoned motor vehicles; ("emplacement de véhicules automobiles abandonnés")

"officer" means a provincial officer or a member of the Ontario Provincial Police Force or the police force in the area where an abandoned motor vehicle is found. ("agent") R.S.O. 1990, c. E.19, s. 60; 2010, c. 16, Sched. 7, s. 2 (43).

Removal of abandoned motor vehicle

61. An officer may remove or cause to be removed an abandoned motor vehicle to an abandoned motor vehicle site. R.S.O. 1990, c. E.19, s. 61.

Notice to owner, removal

62. Where an officer has removed an abandoned motor vehicle to an abandoned motor vehicle site, the officer shall forthwith serve notice in writing of the removal on the owner of the vehicle at the latest address shown on the records of the Ministry of Transportation when the officer causes the records to be examined or on the records, if any, on or in the vehicle unless the name and address of the owner cannot be determined. R.S.O. 1990, c. E.19, s. 62.

Contents of notice

63. A notice under section 62 shall,

(a) contain a description of,

(i) the abandoned motor vehicle,

(ii) the place from which and the abandoned motor vehicle site to which the abandoned motor vehicle was removed,

(iii) the date of removal, and

(iv) the identification of the officer who removed or caused the removal of the abandoned motor vehicle; and

(b) state,

(i) that if the abandoned motor vehicle is not claimed by the owner or any other person having a right or interest in the vehicle within thirty days from the date of service of the notice, the abandoned motor vehicle will be sold or otherwise disposed of by the person having the charge and control of the abandoned motor vehicle site, and

(ii) that the owner shall forthwith upon receipt of the notice notify any person having a right or interest in the abandoned motor vehicle, of whom the owner has knowledge, of the receipt and contents of the notice of removal. R.S.O. 1990, c. E.19, s. 63.

Where owner may retake possession

64. The owner or any person having a right or interest in an abandoned motor vehicle may take possession of the abandoned motor vehicle within thirty days after the date of service of the notice referred to in section 62 or, where notice of removal has not been served, within thirty days after the date of removal of the vehicle on payment to the person having the charge and control of the abandoned motor vehicle site of all costs and charges, if any, for removal of the vehicle to and all costs and charges, if any, for storage of the vehicle at the abandoned motor vehicle site. R.S.O. 1990, c. E.19, s. 64.

Disposal of vehicle

65. Where an abandoned motor vehicle has not been claimed by the owner or any person having a right or interest in the abandoned motor vehicle pursuant to section 64, the person having the charge and control of the abandoned motor vehicle site shall sell or otherwise dispose of the vehicle and shall apply the proceeds of the sale or other disposition firstly, in payment of all costs and charges, if any, for removal of the vehicle to the abandoned motor vehicle site, and secondly, in payment of all costs and charges, if any, for storage of the vehicle at the site, and any surplus shall be paid to the Minister of Finance. R.S.O. 1990, c. E.19, s. 65; 2001, c. 9, Sched. G, s. 5 (22).

Ownership of vehicle

66. Where an abandoned motor vehicle is sold or otherwise disposed of pursuant to section 65, the owner or any person having a right or interest in the vehicle is divested of the ownership of or other right or interest in the vehicle and the person who has acquired the vehicle on a disposition pursuant to section 65 acquires the ownership of the vehicle free from any right or interest of any other person in the vehicle. R.S.O. 1990, c. E.19, s. 66.

Compensation, disposal of vehicles

67. Where an owner or other person having a right or interest in an abandoned motor vehicle that is disposed of pursuant to section 65 does not, acting in good faith through any cause beyond the owner or other person's control, receive notice of removal of the vehicle or does not otherwise acquire knowledge of such removal before the disposition and such owner or other person suffers loss as a result of such disposition, such owner or other person may apply to the Director for compensation upon giving notice to the Director forthwith after becoming aware of the disposition and upon applying therefor pursuant to section 68 within six months from the date the notice of removal, if any, is served or, where no notice of removal is served, from the date of removal of the vehicle to an abandoned motor vehicle site. R.S.O. 1990, c. E.19, s. 67.

Claim for compensation

68. A person applying for compensation pursuant to section 67 shall make application therefor to the Director in writing, setting out therein the person's full name and address and the particulars of the person's claim and shall furnish to the Director such additional information with respect to the subject-matter of the claim that the Director may require and that is within the person's knowledge. R.S.O. 1990, c. E.19, s. 68.

Director's certificate, compensation

69. The Director may award compensation under section 67 in such amount and on such terms and conditions as appear just under the circumstances and shall set out the award in a certificate together with written reasons therefor and send a copy thereof to the applicant by registered mail at the address set out in the application. R.S.O. 1990, c. E.19, s. 69.

When certificate final

70. The certificate of the Director is final at the end of thirty days from the date of mailing it to the applicant unless notice of appeal is served within that time. R.S.O. 1990, c. E.19, s. 70.

Appeal, certificate of compensation

71. The applicant may appeal to the Tribunal at any time before the certificate of the Director becomes final and the procedure thereon shall be the same as upon an appeal from an order of the Director under Part XIII. R.S.O. 1990, c. E.19, s. 71; 2000, c. 26, Sched. F, s. 12 (12).

Payment of compensation

72. Where the Director has sent the certificate by registered mail to the applicant and the time for any appeal has expired or, where an appeal is taken, it is disposed of, and it is finally determined that the applicant is entitled to payment of compensation, the Director shall certify to the Minister of Finance the sum found to be payable and the Minister of Finance shall pay such sum to the applicant out of the Consolidated Revenue Fund. R.S.O. 1990, c. E.19, s. 72; 2001, c. 9, Sched. G, s. 5 (22).

Reimbursement of compensation payment

73. Where an applicant who has received any payment out of the Consolidated Revenue Fund pursuant to section 72 recovers any money directly or indirectly from any person in respect of the loss for which the payment was made out of the Consolidated Revenue Fund, the applicant shall repay to the Minister of Finance for credit to the Consolidated Revenue Fund an amount equal to the payment out of the Consolidated Revenue Fund or the money received from such person, whichever is the lesser, and such amount may be recovered with costs in any court of competent jurisdiction as a debt due to the Crown. R.S.O. 1990, c. E.19, s. 73; 2001, c. 9, Sched. G, s. 5 (22).

PART VIII (ss. 74-83) REPEALED: 1997, c. 30, Sched. B, s. 22.

PART IX
LITTER, PACKAGING, CONTAINERS, DISPOSABLE PRODUCTS AND PRODUCTS THAT POSE WASTE MANAGEMENT PROBLEMS

Meaning of "litter", Part IX

84. In this Part,

"litter" includes any material left or abandoned in a place other than a receptacle or place intended or approved for receiving such material and "littering" has a corresponding meaning. R.S.O. 1990, c. E.19, s. 84.

Research and studies, litter, packaging, etc.

85. The Minister, for the purposes of administering and enforcing this Part and the regulations related to it, may conduct research and studies concerning,

(a) the management and disposal of litter;

(b) the reduction of waste from packaging, containers and disposable products and the reuse or recycling of packaging, containers and disposable products;

(c) the degradability of packaging, containers and disposable products;

(d) the environmental appropriateness of packaging, containers and disposable products;

(e) the environmental appropriateness of materials used in packaging, containers and disposable products;

(f) products that pose or that may pose waste management problems. 1992, c. 1, s. 29.

Littering prohibited

86. No person shall abandon any material in a place, manner, receptacle or wrapping such that it is reasonably likely that the material will become litter. R.S.O. 1990, c. E.19, s. 86.

Subsidies and grants

87. The Minister may make grants to persons to assist in the provision of receptacles to receive litter in such amounts and upon such terms and conditions as the regulations may prescribe. R.S.O. 1990, c. E.19, s. 87.

Prohibition, use or sale of packaging, etc.

88. (1) No person shall use, offer for sale or sell any packaging, container or disposable product or any material for use in packaging, containers or disposable products contrary to this Act or the regulations.

Idem

(2) No person shall use, offer for sale or sell any product that is declared in the regulations to be a product that poses waste management problems contrary to this Act or the regulations. 1992, c. 1, s. 30.

Offence, litter

89. (1) Every person who fails to comply with a provision of this Part or a provision of a regulation relating to this Part that relates to litter is guilty of an offence and is liable on conviction to a fine of not more than $1,000 on a first conviction and not more than $2,000 on each subsequent conviction.

Idem, corporation

(2) Where a corporation is convicted of an offence under subsection (1), the maximum fine that may be imposed is $2,000 on a first conviction and $5,000 on each subsequent conviction and not as provided in subsection (1). R.S.O. 1990, c. E.19, s. 89.

90. REPEALED: 2005, c. 12, s. 1 (13).

PART X
SPILLS

Interpretation and application, Part X

91. (1) In this Part,

"municipality" means an upper-tier municipality, a lower-tier municipality or a single-tier municipality; ("municipalité")

"owner of the pollutant" means the owner of the pollutant immediately before the first discharge of the pollutant, whether into the natural environment or not, in a quantity or with a quality abnormal at the location where the discharge occurs, and "owner of a pollutant" has a corresponding meaning; ("propriétaire du polluant", "propriétaire d'un polluant")

"person having control of a pollutant" means the person and the person's employee or agent, if any, having the charge, management or control of a pollutant immediately before the first discharge of the

pollutant, whether into the natural environment or not, in a quantity or with a quality abnormal at the location where the discharge occurs, and "person having control of the pollutant" has a corresponding meaning; ("personne qui exerce un contrôle sur un polluant", "personne qui exerce un contrôle sur le polluant")

"pollutant" means a contaminant other than heat, sound, vibration or radiation, and includes any substance from which a pollutant is derived; ("polluant")

"practicable" means capable of being effected or accomplished; ("réalisable")

"restore the natural environment", when used with reference to a spill of a pollutant, means restore all forms of life, physical conditions, the natural environment and things existing immediately before the spill of the pollutant that are affected or that may reasonably be expected to be affected by the pollutant, and "restoration of the natural environment", when used with reference to a spill of a pollutant, has a corresponding meaning; ("reconstituer l'environnement naturel", "reconstitution de l'environnement naturel")

"spill", when used with reference to a pollutant, means a discharge,

(a) into the natural environment,

(b) from or out of a structure, vehicle or other container, and

(c) that is abnormal in quality or quantity in light of all the circumstances of the discharge,

and when used as a verb has a corresponding meaning; ("déversement", "déverser")

"substance" means any solid, liquid or gas, or any combination of any of them. ("substance") R.S.O. 1990, c. E.19, s. 91 (1); 2001, c. 9, Sched. G, s. 5 (5, 6); 2002, c. 17, Sched. F, Table.

Abnormal discharge

(2) A discharge of a pollutant designated by the regulations at a location designated by the regulations shall be deemed to be in a quantity or with a quality abnormal at the location. R.S.O. 1990, c. E.19, s. 91 (2).

Practicable

(3) In determining what is practicable for the purposes of this Part, regard shall be had to the technical, physical and financial resources that are or can reasonably be made available. R.S.O. 1990, c. E.19, s. 91 (3).

Exception re farming

(4) This Part does not apply to the disposal of animal wastes in accordance with normal farming practices. R.S.O. 1990, c. E.19, s. 91 (4).

Successors, etc.

(5) A reference in this Part, other than in section 92, to an owner of a pollutant or a person having control of a pollutant includes a successor, assignee, executor or administrator of the owner of the pollutant or the person having control of the pollutant. R.S.O. 1990, c. E.19, s. 91 (5).

Spill prevention and spill contingency plans

91.1 Every person who belongs to a class of persons prescribed by the regulations shall, in accordance with the regulations, develop and implement plans to,

(a) prevent or reduce the risk of spills of pollutants; and

(b) prevent, eliminate or ameliorate any adverse effects that result or may result from spills of pollutants, including,

(i) plans to notify the Ministry, other public authorities and members of the public who may be affected by a spill, and

(ii) plans to ensure that appropriate equipment, material and personnel are available to respond to a spill. 2005, c. 12, s. 1 (14).

Notice of spills

92. (1) Every person having control of a pollutant that is spilled and every person who spills or causes or permits a spill of a pollutant shall forthwith notify the following persons of the spill, of the circumstances thereof, and of the action that the person has taken or intends to take with respect thereto,

(a) the Ministry;

(b) any municipality within the boundaries of which the spill occurred or, if the spill occurred within the boundaries of a regional municipality, the regional municipality;

(c) where the person is not the owner of the pollutant and knows or is able to ascertain readily the identity of the owner of the pollutant, the owner of the pollutant; and

(d) where the person is not the person having control of the pollutant and knows or is able to ascertain readily the identity of the person having control of the pollutant, the person having control of the pollutant. R.S.O. 1990, c. E.19, s. 92 (1); 2002, c. 17, Sched. F, Table; 2005, c. 12, s. 1 (15).

When duty effective

(2) The duty imposed by subsection (1) comes into force in respect of each of the persons having control of the pollutant and the person who spills or causes or permits the spill of the pollutant immediately when the person knows or ought to know that the pollutant is spilled. R.S.O. 1990, c. E.19, s. 92 (2); 2005, c. 12, s. 1 (16).

Additional information to Director

(3) The person required by subsection (1) to give notice and the owner of the pollutant shall give to the Director such additional information in respect of the pollutant, the source of the pollutant and the spill of the pollutant as may be required by the Director. R.S.O. 1990, c. E.19, s. 92 (3).

Notice to Ministry by person investigating

(4) A member of a police force or an employee of a municipality or other public authority who is informed of or who investigates the spill of a pollutant shall forthwith notify the Ministry of the spill of the pollutant unless he or she has reasonable grounds for believing that such notice has been given to the Ministry by another person. R.S.O. 1990, c. E.19, s. 92 (4).

Same

(5) The notices required by subsections (1) and (4) shall be given in accordance with any requirements prescribed by the regulations. 2005, c. 12, s. 1 (17).

Duty to mitigate and restore

93. (1) The owner of a pollutant and the person having control of a pollutant that is spilled and that causes or is likely to cause an adverse effect shall forthwith do everything practicable to prevent, eliminate and ameliorate the adverse effect and to restore the natural environment.

When duty effective

(2) The duty imposed by subsection (1) comes into force in respect of each of the owner of the pollutant and the person having control of the pollutant immediately when the owner or person, as the case may be, knows or ought to know that the pollutant is spilled and is causing or is likely to cause an adverse effect. R.S.O. 1990, c. E.19, s. 93.

Directions by Minister, spills

94. (1) Where a pollutant is spilled and the Minister is of the opinion that there is or is likely to be an adverse effect as a result of the spill, the Minister, in the circumstances specified in subsection (2), may give directions in accordance with subsection (3) to the employees in and agents of the Ministry. R.S.O. 1990, c. E.19, s. 94 (1); 2006, c. 35, Sched. C, s. 36 (2).

Where Minister may give directions

(2) The Minister may give directions in accordance with subsection (3) where the Minister is of the opinion that it is in the best interest of the public to do so and,

(a) the Minister is of the opinion that neither the person having control of the pollutant nor the owner of the pollutant will carry out promptly the duty imposed by section 93;

(b) the Minister is of the opinion that the person having control of the pollutant or the owner of the pollutant cannot be readily identified or located and that as a result the duty imposed by section 93 will not be carried out promptly; or

(c) the person having control of the pollutant or the owner of the pollutant requests the assistance of the Minister in order to carry out the duty imposed by section 93. R.S.O. 1990, c. E.19, s. 94 (2).

Contents of directions

(3) Under this section, the Minister may direct the employees in and agents of the Ministry to do everything practicable or to take such action as may be specified in the directions in respect of the prevention, elimination and amelioration of the adverse effect and the restoration of the natural environment. R.S.O. 1990, c. E.19, s. 94 (3); 2006, c. 35, Sched. C, s. 36 (3).

Further directions

(4) The Minister may give directions amending or revoking directions given under this section. R.S.O. 1990, c. E.19, s. 94 (4).

Employees and agents

(5) No Act, regulation, by-law, order, permit, approval or licence bars the employees in and agents of the Ministry from acting in accordance with directions given by the Minister under this section. R.S.O. 1990, c. E.19, s. 94 (5); 2006, c. 35, Sched. C, s. 36 (4).

Hearing

(6) The Minister need not hold or afford to any person an opportunity for a hearing before giving directions under this section. R.S.O. 1990, c. E.19, s. 94 (6); 2006, c. 19, Sched. K, s. 2 (1).

Entry and removal

95. (1) For the purpose of carrying out the duty imposed by section 93 or an order or direction made or given under this Part, any person subject to the duty or to whom the order or direction is made or given and that person’s employees and agents may,

(a) enter any place;

(b) construct structures and use machinery, structures, materials and equipment therein or thereon; and

(c) remove therefrom the pollutant or any matter, thing, plant or animal or any part of the natural environment that is affected or that may reasonably be expected to be affected by the pollutant. R.S.O. 1990, c. E.19, s. 95 (1); 2005, c. 12, s. 1 (18).

Enforcement of right of entry, etc.

(2) The rights set out in subsection (1) may be enforced by application without notice to a judge of the Superior Court of Justice by a person, employee or agent referred to in subsection (1). R.S.O. 1990, c. E.19, s. 95 (2); 2001, c. 9, Sched. G, s. 5 (21).

Order by judge

(3) Where the judge is satisfied that there is reasonable ground for believing that it is necessary to do anything mentioned in subsection (1), the judge may issue an order authorizing the person and the person's employees and agents or any one or more of them to do anything mentioned in subsection (1) and specified in the order. R.S.O. 1990, c. E.19, s. 95 (3).

When to be executed

(4) An order under subsection (3) shall be carried out between 6 a.m. and 9 p.m. standard time, unless the order otherwise authorizes. R.S.O. 1990, c. E.19, s. 95 (4).

Disposal of pollutant, etc.

96. (1) No person, employee or agent exercising any authority under subsection 100 (1) or carrying out any duty imposed or order or direction made or given under this Part shall dispose of or use any pollutant, or any matter, thing, plant or animal or any part of the natural environment that is affected or that may reasonably be expected to be affected by the pollutant except,

(a) in accordance with an order of or direction by the Minister under this or any other Act;

(b) in accordance with a direction by or the approval of the Director, but such a direction or approval shall not be contrary to the regulations; or

(c) in accordance with an approval, order, certificate of property use, requirement or direction by the Director under any other Part of this Act or by a Director or provincial officer under any other Act administered by the Minister, but such an approval, order, certificate of property use, requirement or direction shall not be contrary to the regulations. R.S.O. 1990, c. E.19, s. 96 (1); 2001, c. 17, s. 2 (5).

Direction or approval by Director

(2) The Director may give to any person, employee or agent mentioned in subsection (1), and may amend or revoke, a direction or approval mentioned in clause (1) (b) and may do so despite the terms of or conditions in,

(a) an environmental compliance approval in respect of a waste disposal site; or

(b) a renewable energy approval issued under Part V.0.1 in respect of a waste disposal site. 2009, c. 12, Sched. G, s. 5; 2010, c. 16, Sched. 7, s. 2 (44).

Conditions

(3) The Director may attach such conditions as the Director considers necessary to an approval mentioned in clause (1) (b). R.S.O. 1990, c. E.19, s. 96 (3).

Hearing

(4) The Director need not hold or afford to any person an opportunity for a hearing before giving, amending or revoking a direction or approval referred to in clause (1) (b). R.S.O. 1990, c. E.19, s. 96 (4); 2006, c. 19, Sched. K, s. 2 (2).

Orders by Minister, spills

97. (1) Where a pollutant is spilled and the Minister is of the opinion that there is or is likely to be an adverse effect and that it is in the best interest of the public to make an order under this section, the Minister may make an order directed to one or more of the following:

1. The owner of the pollutant.
2. The person having control of the pollutant.
3. The owner or the person having the charge, management or control of any real property or personal property that is affected or that may reasonably be expected to be affected by the pollutant.
4. The municipality within whose boundaries the spill occurred.
5. Any municipality contiguous to the municipality within whose boundaries the spill occurred.
6. Any municipality that is affected or that may reasonably be expected to be affected by the spill of the pollutant.
7. Any public authority.
8. Any person who is or may be adversely affected by the pollutant or whose assistance is necessary, in the opinion of the Minister, to prevent, eliminate or ameliorate the adverse effects or to restore the natural environment. R.S.O. 1990, c. E.19, s. 97 (1); 2002, c. 17, Sched. F, Table.

Content of orders

(2) In an order under this section, the Minister may require the doing of everything practicable or the taking of such action as may be specified in the order in respect of the prevention, elimination and amelioration of the adverse effects and the restoration of the natural environment within such period or periods of time as may be specified in the order. R.S.O. 1990, c. E.19, s. 97 (2).

Idem

(3) In an order under this section, the Minister may require the doing of everything practicable or the taking of such action as may be specified in the order in respect of the use or disposal of,

(a) the pollutant; or

(b) any matter, thing, plant or animal or any part of the natural environment affected or that may reasonably be expected to be affected by the pollutant,

within such period or periods of time as may be specified in the order. R.S.O. 1990, c. E.19, s. 97 (3).

Amendment or revocation of order

(4) The Minister by an order may amend or revoke an order made under this section. R.S.O. 1990, c. E.19, s. 97 (4).

Effect of any Act, regulation, etc.

(5) The Minister may make an order under this section despite any Act, regulation, by-law, order, permit, approval or licence. R.S.O. 1990, c. E.19, s. 97 (5).

Hearing

(6) The Minister need not hold or afford to any person an opportunity for a hearing before making an order under this section. R.S.O. 1990, c. E.19, s. 97 (6); 2006, c. 19, Sched. K, s. 2 (3).

Notice of order

(7) The Minister may direct, orally or in writing, a representative of the Ministry to give a written notice setting out an order of the Minister made orally or in writing under this section. R.S.O. 1990, c. E.19, s. 97 (7).

Effect of notice

(8) An order of the Minister set out in a notice under subsection (7) is for all purposes an order of the Minister made under this section. R.S.O. 1990, c. E.19, s. 97 (8).

Service of order or notice

(9) Where an order under this section or a notice under subsection (7) that sets out an order is given to an employee or agent of an employer or principal named in the order, the order shall be deemed to be given to the employer or principal. R.S.O. 1990, c. E.19, s. 97 (9).

Writing required

(10) An order under this section is not effective unless it is set out in writing or is set out in a notice referred to in subsection (7). R.S.O. 1990, c. E.19, s. 97 (10).

Effect of compliance with duty, or order, etc.

98. A person who in good faith and in a reasonable manner, in carrying out or attempting to carry out,

(a) a duty imposed by this Part; or

(b) an order or direction by the Minister or a direction or approval by the Director under this Part,

takes or refrains from taking any action shall not be convicted of an offence in respect of such taking or refraining from taking of action. R.S.O. 1990, c. E.19, s. 98.

Compensation, spills

99. (1) In this section,

"loss or damage" includes personal injury, loss of life, loss of use or enjoyment of property and pecuniary loss, including loss of income. R.S.O. 1990, c. E.19, s. 99 (1).

Right to compensation

(2) Her Majesty in right of Ontario or in right of Canada or any other person has the right to compensation,

(a) for loss or damage incurred as a direct result of,

(i) the spill of a pollutant that causes or is likely to cause an adverse effect,

(ii) the exercise of any authority under subsection 100 (1) or the carrying out of or attempting to carry out a duty imposed or an order or direction made under this Part, or

(iii) neglect or default in carrying out a duty imposed or an order or direction made under this Part;

(b) for all reasonable cost and expense incurred in respect of carrying out or attempting to carry out an order or direction under this Part,

from the owner of the pollutant and the person having control of the pollutant. R.S.O. 1990, c. E.19, s. 99 (2).

Exception

(3) An owner of a pollutant or a person having control of a pollutant is not liable under subsection (2) if they establish that they took all reasonable steps to prevent the spill of the pollutant or if they establish that the spill of the pollutant was wholly caused by,

(a) an act of war, civil war, insurrection, an act of terrorism or an act of hostility by the government of a foreign country;

(b) a natural phenomenon of an exceptional, inevitable and irresistible character; or

(c) an act or omission with intent to cause harm by a person other than a person for whose wrongful act or omission the owner of the pollutant or the person having control of the pollutant is by law responsible,

or any combination thereof. R.S.O. 1990, c. E.19, s. 99 (3).

Qualification

(4) Subsection (3) does not relieve the owner of the pollutant or the person having control of the pollutant,

(a) from liability for loss or damage that is a direct result of neglect or default of the owner of the pollutant or the person having control of the pollutant in carrying out a duty imposed or an order or direction made under this Part; or

(b) from liability, under clause (2) (a), for cost and expense incurred or, under clause (2) (b), for all reasonable cost and expense incurred,

(i) to do everything practicable to prevent, eliminate and ameliorate the adverse effect, or

(ii) to do everything practicable to restore the natural environment,

or both. R.S.O. 1990, c. E.19, s. 99 (4).

Enforcement of right

(5) The right to compensation under subsection (2) may be enforced by action in a court of competent jurisdiction. R.S.O. 1990, c. E.19, s. 99 (5).

Liability

(6) Liability under subsection (2) does not depend upon fault or negligence. R.S.O. 1990, c. E.19, s. 99 (6).

Contribution

(7) In an action under this section,

(a) where the plaintiff is an owner of the pollutant or a person having control of the pollutant, the court shall determine the degree, if any, in which the plaintiff would be liable to make contribution or indemnification under subsection (8) if the plaintiff were a defendant; and

(b) where the plaintiff is not an owner or a person having control referred to in clause (a), the court shall determine the degree, if any, in which the plaintiff caused or contributed to the loss, damage, cost or expense by fault or negligence,

and the court shall reduce the compensation by the degree, if any, so determined. R.S.O. 1990, c. E.19, s. 99 (7).

Extent of liability

(8) Where two or more persons are liable to pay compensation under this section, they are jointly and severally liable to the person suffering the loss, damage, cost or expense but as between themselves, in

the absence of an express or implied contract, each is liable to make contribution to and indemnify the other in accordance with the following principles:

1. Where two or more persons are liable to pay compensation under this section and one or more of them caused or contributed to the loss, damage, cost or expense by fault or negligence, such one or more of them shall make contribution to and indemnify,
   i. where one person is found at fault or negligent, any other person liable to pay compensation under this section, and
   ii. where two or more persons are found at fault or negligent, each other and any other person liable to pay compensation under this section in the degree in which each of such two or more persons caused or contributed to the loss, damage, cost or expense by fault or negligence.
2. For the purpose of subparagraph ii of paragraph 1, if it is not practicable to determine the respective degrees in which the fault or negligence of two or more persons liable to pay compensation under this section caused or contributed to the loss, damage, cost or expense, such two or more persons shall be deemed to be equally at fault or negligent.
3. Where no person liable to pay compensation under this section caused or contributed to the loss, damage, cost or expense by fault or negligence, each of the persons liable to pay compensation is liable to make contribution to and indemnify each other in such degree as is determined to be just and equitable in the circumstances. R.S.O. 1990, c. E.19, s. 99 (8).

Enforcement of contribution

(9) The right to contribution or indemnification under subsection (8) may be enforced by action in a court of competent jurisdiction. R.S.O. 1990, c. E.19, s. 99 (9).

Adding parties

(10) Wherever it appears that a person not already a party to an action under this section may be liable in respect of the loss, damage, cost or expense for which compensation is claimed, the person may be added as a party defendant to the action upon such terms as are considered just or may be made a third party to the action in the manner prescribed by the rules of practice for adding third parties. R.S.O. 1990, c. E.19, s. 99 (10).

Settlement and recovery between persons liable

(11) A person liable to pay compensation under this section may recover contribution or indemnity from any other person liable to pay compensation under this section in respect of the loss, damage, cost or expense for which the compensation is claimed by settling with the person suffering the loss, damage, cost or expense and continuing the action or commencing an action against such other person. R.S.O. 1990, c. E.19, s. 99 (11).

Amount of settlement

(12) A person who has settled a claim and continued or commenced an action as mentioned in subsection (11) must satisfy the court that the amount of the settlement was reasonable, and, if the court finds the amount was excessive, the court may fix the amount at which the claim should have been settled. R.S.O. 1990, c. E.19, s. 99 (12).

(13) REPEALED: 2002, c. 24, Sched. B, s. 25.

(14) REPEALED: 2002, c. 24, Sched. B, s. 25.

Director's order for costs and expenses

99.1 (1) If a pollutant is spilled, the Director may issue an order requiring the owner of the pollutant or the person having control of the pollutant to pay to the Minister of Finance any reasonable costs or expenses incurred by Her Majesty in right of Ontario for the following purposes:

1. To prevent, eliminate or ameliorate any adverse effects or to restore the natural environment.
2. To prevent or reduce the risk of future discharges into the natural environment of any pollutant owned by or under the charge, management or control of the person against whom the order is made. 2005, c. 12, s. 1 (19).

Same

(2) If an order to pay costs or expenses is issued under subsection (1) to a receiver or trustee in bankruptcy, the receiver or trustee in bankruptcy is not personally liable for those costs or expenses unless the spill arose from the gross negligence or wilful misconduct of the receiver or trustee in bankruptcy or of a receiver representative or trustee in bankruptcy representative. 2005, c. 12, s. 1 (19).

Contents

(3) An order under subsection (1) shall include,

(a) a statement identifying the spill to which the order relates;

(b) a description of things for which Her Majesty in right of Ontario incurred costs or expenses for a purpose referred to in subsection (1);

(c) a detailed account of the costs and expenses incurred in doing the things; and

(d) a direction that the person to whom the order is issued pay the costs and expenses to the Minister of Finance. 2005, c. 12, s. 1 (19).

Application of ss. 153 and 155

(4) Sections 153 and 155 apply, with necessary modifications, in respect of an order under subsection (1). 2005, c. 12, s. 1 (19).

Joint and several liability

(5) Where two or more persons are liable to pay costs or expenses pursuant to an order under subsection (1), they are jointly and severally liable to Her Majesty in right of Ontario. 2005, c. 12, s. 1 (19).

Contribution and indemnity

(6) Where the Director is entitled to issue an order to two or more persons under subsection (1) in respect of costs or expenses, as between themselves, in the absence of an express or implied contract, each of those persons is liable to make contribution to and indemnify the other in accordance with the following principles:

1. Where the Director is entitled to issue an order to two or more persons under subsection (1) in respect of costs or expenses and one or more of them caused or contributed to the costs or expenses by fault or negligence, such one or more of them shall make contribution to and indemnify,
   i. where one person is found at fault or negligent, any other person to whom the Director is entitled to issue an order under subsection (1), and
   ii. where two or more persons are found at fault or negligent, each other and any other person to whom the Director is entitled to issue an order under subsection (1) in the degree in which

each of such two or more persons caused or contributed to the costs or expenses by fault or negligence.

2. For the purpose of subparagraph 1 ii, if it is not practicable to determine the respective degrees in which the fault or negligence of two or more persons to whom the Director is entitled to issue an order under subsection (1) caused or contributed to the costs or expenses, such two or more persons shall be deemed to be equally at fault or negligent.

3. Where no person to whom the Director is entitled to issue an order under subsection (1) caused or contributed to the costs or expenses by fault or negligence, each of the persons to whom the Director is entitled to issue an order under subsection (1) is liable to make contribution to and indemnify each other in such degree as is determined to be just and equitable in the circumstances. 2005, c. 12, s. 1 (19).

Enforcement of contribution

(7) The right to contribution or indemnification under subsection (6) may be enforced by action in a court of competent jurisdiction. 2005, c. 12, s. 1 (19).

Adding parties

(8) Wherever it appears that a person not already a party to an action under subsection (7) may be a person to whom the Director is entitled to issue an order under subsection (1) in respect of the costs or expenses, the person may be added as a party defendant to the action on such terms as are considered just or may be made a third party to the action in the manner prescribed by the rules of court for adding third parties. 2005, c. 12, s. 1 (19).

Action by municipality or designated persons, spills

100. (1) Where a pollutant is spilled,

(a) a municipality; and

(b) REPEALED: 2002, c. 17, Sched. F, Table.

(c) a person or a member of a class of persons designated by the regulations,

or any one or more of them, may do everything practicable to prevent, eliminate and ameliorate any adverse effects and to restore the natural environment. R.S.O. 1990, c. E.19, s. 100 (1); 2002, c. 17, Sched. F, Table; 2005, c. 12, s. 1 (20).

Right of entry and immunity from prosecution

(2) A municipality or a person or member of a class of persons designated by the regulations acting under subsection (1) or an employee or agent of any of them so acting has the rights of a person under section 95 and, if acting in good faith and in a reasonable manner, the immunity conferred on a person by section 98. R.S.O. 1990, c. E.19, s. 100 (2); 2002, c. 17, Sched. F, Table.

Co-operation with others

(3) A municipality or a person or a member of a class of persons designated by the regulations acting under subsection (1) must,

(a) co-ordinate efforts with;

(b) make use of the expertise of; and

(c) not impede,

a person carrying out a duty, order or direction under this Part. R.S.O. 1990, c. E.19, s. 100 (3); 2002, c. 17, Sched. F, Table.

Right to compensation

(4) A municipality or a person or member of a class of persons designated by the regulations has the right to compensation from the owner of the pollutant and the person having control of the pollutant for all reasonable cost and expense incurred in acting under subsection (1). R.S.O. 1990, c. E.19, s. 100 (4); 2002, c. 17, Sched. F, Table.

Enforcement

(5) The right to compensation under subsection (4) may be enforced by action in a court of competent jurisdiction. R.S.O. 1990, c. E.19, s. 100 (5).

Application of subss. 99 (6) to (12)

(6) Where the right to compensation under subsection (4) arises, subsections 99 (6) to (12) apply with necessary modifications. R.S.O. 1990, c. E.19, s. 100 (6); 2002, c. 24, Sched. B, s. 35.

Municipality's order for costs and expenses

100.1 (1) If a pollutant is spilled, a municipality may issue an order requiring the owner of the pollutant or the person having control of the pollutant to pay to the municipality any reasonable costs or expenses incurred by the municipality, or a local board of the municipality within the meaning of the *Municipal Affairs Act*, to prevent, eliminate or ameliorate any adverse effects or to restore the natural environment. 2005, c. 12, s. 1 (21).

Same

(2) If an order to pay costs or expenses is issued under subsection (1) to a receiver or trustee in bankruptcy, the receiver or trustee in bankruptcy is not personally liable for those costs unless the spill arose from the gross negligence or wilful misconduct of the receiver or trustee in bankruptcy or of a receiver representative or trustee in bankruptcy representative. 2005, c. 12, s. 1 (21).

Contents

(3) An order under subsection (1) shall include,

(a) a statement identifying the spill to which the order relates;

(b) a description of things for which the municipality or local board incurred costs or expenses for a purpose referred to in subsection (1);

(c) a detailed account of the costs and expenses incurred in doing the things; and

(d) a direction that the person to whom the order is issued pay the costs and expenses to the municipality. 2005, c. 12, s. 1 (21).

Application of s. 153

(4) Section 153 applies, with necessary modifications, in respect of an order under subsection (1). 2005, c. 12, s. 1 (21).

Lien

(5) If a municipality issues an order under subsection (1) against a person who owns real property in the municipality and the pollutant was spilled on that property, the municipality shall have a lien on the property for the amount specified in the order and that amount shall have priority lien status, as described in section 1 of the *Municipal Act, 2001* or section 3 of the *City of Toronto Act, 2006*, as the case may be. 2005, c. 12, s. 1 (21); 2006, c. 32, Sched. C, s. 19 (1).

Contribution and indemnity

(6) Subsections 99.1 (5) to (8) apply, with necessary modifications, in respect of orders issued by a municipality under subsection (1) and, for that purpose, a reference in those subsections to Her Majesty in right of Ontario shall be deemed to be a reference to the municipality. 2005, c. 12, s. 1 (21).

Appeals

(7) A person to whom an order of a municipality is directed under subsection (1) may, by written notice served on the municipality and the Tribunal within 15 days after service on the person of a copy of the order, require a hearing by the Tribunal. 2005, c. 12, s. 1 (21).

Extension of time for requiring hearing

(8) The Tribunal shall extend the time in which a person may give a notice under subsection (7) requiring a hearing if, in the Tribunal's opinion, it is just to do so because service of the order on the person did not give the person notice of the order. 2005, c. 12, s. 1 (21).

Contents of notice requiring hearing

(9) A person who gives a notice under subsection (7) shall state in the notice,

(a) the portions of the order in respect of which the hearing is required; and

(b) the grounds on which the person intends to rely at the hearing. 2005, c. 12, s. 1 (21).

Effect of contents of notice

(10) Except with leave of the Tribunal, at a hearing by the Tribunal, the person who required the hearing under subsection (7) is not entitled to appeal a portion of the order, or to rely on a ground, that is not stated in the person's notice requiring the hearing. 2005, c. 12, s. 1 (21).

Leave by Tribunal

(11) The Tribunal may grant the leave referred to in subsection (10) if the Tribunal is of the opinion that to do so is proper in the circumstances, and the Tribunal may give such directions as the Tribunal considers proper consequent on the granting of the leave. 2005, c. 12, s. 1 (21).

Automatic stay on appeal

(12) The commencement of a proceeding before the Tribunal stays the operation of the order made under subsection (1). 2005, c. 12, s. 1 (21).

Parties to hearing

(13) The person requiring the hearing, the municipality and any other person specified by the Tribunal are parties to the hearing. 2005, c. 12, s. 1 (21).

Costs may be increased

(14) At a hearing by the Tribunal under this section, the municipality may, on reasonable notice to all parties, ask the Tribunal to amend the order by adding new costs or expenses or by increasing the amounts set out in the order. 2005, c. 12, s. 1 (21).

What Tribunal may consider

(15) At a hearing by the Tribunal under this section, the Tribunal shall consider only,

(a) whether the person to whom the order was directed was, immediately before the discharge into the natural environment,

(i) the owner of the thing that was discharged,

(ii) the person having charge, management or control of the thing that was discharged, or

(iii) the employee or agent of the person having charge, management or control of the thing that was discharged; or

(b) whether any of the costs or expenses specified in the order,

(i) do not relate to things for which the municipality or local board incurred costs or expenses for a purpose referred to in subsection (1), or

(ii) are unreasonable having regard to what was done. 2005, c. 12, s. 1 (21).

Appeals from Tribunal

(16) Any party to a hearing before the Tribunal under this section may appeal from its decision or order on a question of law to the Divisional Court in accordance with the rules of court. 2005, c. 12, s. 1 (21).

Appeal to Minister

(17) A party to a hearing before the Tribunal under this section may, within 30 days after receipt of the decision of the Tribunal or within 30 days after final disposition of an appeal, if any, under subsection (16), appeal in writing to the Minister on any matter other than a question of law and the Minister shall confirm, alter or revoke the decision of the Tribunal as to the matter in appeal as the Minister considers in the public interest. 2005, c. 12, s. 1 (21).

Decision of Tribunal not automatically stayed on appeal

(18) An appeal of a decision of the Tribunal to the Divisional Court or to the Minister under this section does not stay the operation of the decision, unless the Tribunal orders otherwise. 2005, c. 12, s. 1 (21).

Divisional Court or Minister may grant or set aside stay

(19) If a decision of the Tribunal is appealed to the Divisional Court or to the Minister under this section, the Divisional Court or the Minister may,

(a) stay the operation of the decision; or

(b) set aside a stay ordered by the Tribunal under subsection (18). 2005, c. 12, s. 1 (21).

Right to compensation from Crown

101. (1) A person, other than a person referred to in subsection (2), entitled under clause 99 (2) (b) to compensation for reasonable cost and expense has the right, subject to the conditions prescribed by the regulations, to payment of such compensation from Her Majesty in right of Ontario.

Application of subs. (1)

(2) Subsection (1) does not give a right to payment of compensation to,

(a) the owner of the pollutant;

(b) the person having control of the pollutant;

(c) a person liable at law other than under this Part for loss, damage, cost or expense arising from the spill of the pollutant;

(d) a person that has a right under a contract to payment of the reasonable cost and expense referred to in subsection (1),

or an employee or agent of any of them.

Enforcement of right

(3) The right to payment of compensation under subsection (1) may be enforced by action in a court of competent jurisdiction.

Recovery by Crown

(4) Where compensation has been paid under subsection (1), Her Majesty in right of Ontario has the right to recover in the place of the person to whom the compensation was paid to the extent of the amount of the payment of compensation by and any costs of Her Majesty.

Idem

(5) Her Majesty in right of Ontario is entitled under subsection (4) to all rights of recovery whether under this Part or otherwise that the person has against any other person.

Idem

(6) For the purposes of subsection (4), the payment of compensation by Her Majesty in right of Ontario under subsection (1) shall not be construed to affect the right of the person under subsection 99 (2) to compensation for reasonable cost and expense so paid by Her Majesty.

Enforcement

(7) The right to compensation under subsection (4) may be enforced in a court of competent jurisdiction by Her Majesty in right of Ontario in Her Majesty's name or in the name of the person to whom the compensation has been paid.

Disentitlement

(8) A person that fails to comply with or contravenes a condition prescribed by the regulations that must be complied with before payment of compensation under subsection (1) is disentitled to the payment.

Repayment

(9) Where a person fails to comply with or contravenes a condition prescribed by the regulations that attaches to the payment of compensation under subsection (1), Her Majesty in right of Ontario has the right to recover the amount of the compensation paid and the right may be enforced in a court of competent jurisdiction.

Right of insurer

(10) An insurer as defined in the *Insurance Act* only acquires its subrogated right of recovery under any law, including sections 152 and 278 of the *Insurance Act*, or the provisions of any contract of insurance in respect of a person to whom a payment of compensation has been made under subsection (1) when Her Majesty in right of Ontario consents in writing to a settlement in accordance with which the right of recovery is released or to the bringing of an action to enforce the right of recovery.

Where consent not obtained

(11) If an insurer referred to in subsection (10) purports to make a settlement or brings an action without the consent of Her Majesty, the insurer is liable to Her Majesty in right of Ontario in an amount equal to the amount of the payment of compensation under subsection (1) to the extent of the recovery under the judgment with respect to which the action was brought or the amount paid to the insurer in accordance with the settlement.

Effect of release

(12) A release in furtherance of or in accordance with a purported settlement made without the consent of Her Majesty in right of Ontario is a nullity.

Withholding of consent

(13) Her Majesty shall not unreasonably withhold the consent referred to in subsections (10), (11) and (12), but Her Majesty may attach conditions to the consent and may revoke the consent for breach of such a condition.

Conflict

(14) This section applies despite any other law or any contract of insurance. R.S.O. 1990, c. E.19, s. 101.

Transfer of rights

102. (1) All rights of recovery of compensation of the Environmental Compensation Corporation are transferred to Her Majesty in right of Ontario. 1997, c. 7, s. 2.

Same

(2) All assets, other than rights of recovery of compensation, and liabilities of the Environmental Compensation Corporation are transferred to and assumed by Her Majesty in right of Ontario as represented by the Minister of the Environment. 1997, c. 7, s. 2; 2000, c. 26, Sched. E, s. 3 (1).

Note: No application for payment of a claim that is made to the Environmental Compensation Corporation after June 3, 1996 shall be processed and no payment shall be made pursuant to such an application. See: 1997, c. 7, s. 11.

Right of action preserved

103. (1) Despite the repeal of section 110 by the *Environmental Approvals Improvement Act, 1997*, Her Majesty in right of Ontario may start or continue a proceeding for the recovery of compensation or pursue any action under that section, as if it had not been repealed, in the place of the Environmental Compensation Corporation. 1997, c. 7, s. 2.

Repayment

(2) A person who received payment, pursuant to a certificate of the Environmental Compensation Corporation, from the Minister of Finance of Ontario for loss or damage as a result of a spill and recovers compensation from another person for the same loss or damage shall repay to the Minister of Finance an amount equal to the total amount recovered from the Minister of Finance and the other person less the financial value of the loss or damage suffered, but the amount repayable does not exceed the payment received from the Minister of Finance. 1997, c. 7, s. 2.

Note: No application for payment of a claim that is made to the Environmental Compensation Corporation after June 3, 1996 shall be processed and no payment shall be made pursuant to such an application. See: 1997, c. 7, s. 11.

Testimony

104. Except in a proceeding under this Act or the regulations, no person who obtained information in the course of his or her duties or employment with the Environmental Compensation Corporation in connection with the administration of, or a proceeding under, this Act or the regulations is required to give testimony, other than testimony about a spill of a pollutant, in a civil suit or proceeding with regard to that information. 1997, c. 7, s. 2.

Note: No application for payment of a claim that is made to the Environmental Compensation Corporation after June 3, 1996 shall be processed and no payment shall be made pursuant to such an application. See: 1997, c. 7, s. 11.

Corporation dissolved

105. The Environmental Compensation Corporation is dissolved. 1997, c. 7, s. 2.

Note: No application for payment of a claim that is made to the Environmental Compensation Corporation after June 3, 1996 shall be processed and no payment shall be made pursuant to such an application. See: 1997, c. 7, s. 11.

106.-121. REPEALED: 1997, c. 7, s. 2.

Right of recourse

122. Except as expressly provided in this Part, nothing in this Part limits or restricts any right or remedy that any person may have against another person. R.S.O. 1990, c. E.19, s. 122.

Limitation of farmers' liability

123. The liability under this Part of farmers who are owners of pollutants or persons having control of pollutants and who are members of a class prescribed by the regulations is limited to the amount prescribed by the regulations or the amount calculated in the manner prescribed by the regulations in respect of such farmers. R.S.O. 1990, c. E.19, s. 123.

PART XI
CONTROL ORDERS AND STOP ORDERS

Control orders

124. (1) The Director may, where he or she is authorized by this Act to issue a control order, order the person to whom it is directed to do any one or more of the following, namely,

(a) to limit or control the rate of discharge of the contaminant into the natural environment in accordance with the directions set out in the order;

(b) to stop the discharge of the contaminant into the natural environment,

(i) permanently,

(ii) for a specified period, or

(iii) in the circumstances set out in the order;

(c) to comply with any directions set out in the order relating to the manner in which the contaminant may be discharged into the natural environment;

(d) to comply with any directions set out in the order relating to the procedures to be followed in the control or elimination of the discharge of the contaminant into the natural environment;

(e) to install, replace or alter any equipment or thing designed to control or eliminate the addition, emission or discharge of the contaminant into the natural environment;

(f) to monitor and record, both in the manner specified in the order, the discharge into the natural environment of the contaminant specified in the order and to report thereon to the Director;

(g) to study and to report to the Director upon,

(i) measures to control the discharge into the natural environment of the contaminant specified in the order,

(ii) the effects of the discharge into the natural environment of the contaminant specified in the order,

(iii) the natural environment into which the contaminant specified in the order is being or is likely to be discharged; and

(h) to report to the Director in respect of fuel, materials and methods of production used and intended to be used, and the wastes that will or are likely to be generated.

Report to Director

(2) A person required under subsection (1) to study and to report to the Director on a matter shall report to the Director in the manner, at the times and with the information specified by the Director in the order. R.S.O. 1990, c. E.19, s. 124.

Compliance with control order

125. Subject to section 140, when a copy of a control order is served upon the person to whom it is directed, that person,

(a) shall comply with the order forthwith; or

(b) shall, if the order sets out a future date by which it is to be complied with, comply with the order on or not later than such future date. R.S.O. 1990, c. E.19, s. 125.

Further order

126. The Director may, by a further order, amend, vary or revoke a control order made under this Act and in each case shall cause a copy of the order to be served on the person to whom the order so amended, replaced or revoked was directed. R.S.O. 1990, c. E.19, s. 126.

Where Director proposes to issue control order

127. (1) Where the Director proposes to issue a control order, the Director shall serve notice of his or her intention, together with written reasons therefor and a copy of the report of the provincial officer or other person designated under this Act upon which the reasons are based, and shall not issue the control order until fifteen days after the service thereof.

Submissions to Director

(2) The person to whom the Director intends to issue the control order may make submissions to the Director at any time before the control order is issued. R.S.O. 1990, c. E.19, s. 127.

Content of stop order

128. The Director may, where he or she is authorized by this Act to issue a stop order, order the person to whom it is directed to immediately stop or cause the source of contaminant to stop discharging into the natural environment any contaminant either permanently or for a specific period of time. R.S.O. 1990, c. E.19, s. 128.

Form of stop order

129. A stop order shall be in writing and shall include written reasons for the order. R.S.O. 1990, c. E.19, s. 129.

Stop orders, compliance and revocation

Compliance

130. (1) When a copy of a stop order is served upon the person to whom it is directed, that person shall comply with the order immediately.

Revocation

(2) The Director may by a further order revoke a stop order and in such case shall cause a copy of the order to be served on the person to whom the stop order was directed. R.S.O. 1990, c. E.19, s. 130.

PART XII
FINANCIAL ASSURANCE

Definitions, Part XII

131. In this Part,

"approval" means program approval, environmental compliance approval or renewable energy approval, and includes a permit or approval issued by a Director under the *Ontario Water Resources Act*, but does not include an approval under Part X of this Act; ("autorisation")

"bank" means a bank named in Schedule I or Schedule II to the *Bank Act* (Canada); ("banque")

"environmental measures" means,

(a) one or more of the measures set out in clauses 132 (1) (a) to (c) or 132 (1.1) (a) to (c), or

(b) one or more of the measures prescribed by the regulations under clause 176 (2.4) (i); ("mesures d'ordre environnemental")

"financial assurance" means one or more of,

(a) cash, in the amount specified in the approval, order, certificate of property use or a regulation made under clause 176 (2.4) (i),

(b) a letter of credit from a bank, in the amount and terms specified in the approval, order, certificate of property use or a regulation made under clause 176 (2.4) (i),

(c) negotiable securities issued or guaranteed by the Government of Ontario or the Government of Canada in the amount specified in the approval, order, certificate of property use or a regulation made under clause 176 (2.4) (i),

(d) a personal bond accompanied by collateral security, each in the form, terms and amount specified in the approval, order, certificate of property use or a regulation made under clause 176 (2.4) (i),

(e) the bond of an insurer licensed under the *Insurance Act* to write surety and fidelity insurance in the form, terms and amount specified in the approval, order, certificate of property use or a regulation made under clause 176 (2.4) (i),

(f) a bond of a guarantor, other than an insurer referred to in clause (e), accompanied by collateral security, each in the form, terms and amount specified in the approval, order, certificate of property use or a regulation made under clause 176 (2.4) (i),

(g) an agreement, in the form and terms specified in the approval, order or certificate of property use, and

(h) an agreement, in the form and terms prescribed by the regulations; ("garantie financière")

"order" means an order by the Director under this Act, and includes an order, notice, direction, requirement or report made by a Director under the *Ontario Water Resources Act*, but does not include an order under section 136 (order for performance of environmental measures) of this Act; ("arrêté")

"works" means an activity, facility, thing, undertaking or site in respect of which an approval or order is issued or a registration under Part II.2 is in effect. ("travaux") R.S.O. 1990, c. E.19, s. 131; 1993, c. 27, Sched.; 1997, c. 19, s. 34; 2001, c. 17, s. 2 (6, 7); 2009, c. 12, Sched. G, s. 6; 2010, c. 16, Sched. 7, s. 2 (45-47).

Financial assurance

Approval or order

132. (1) The Director may include in an approval or order in respect of a works a requirement that the person to whom the approval is issued or the order is directed provide financial assurance to the Crown in right of Ontario for any one or more of,

(a) the performance of any action specified in the approval or order;

(b) the provision of temporary or permanent alternate water supplies to replace those that the Director has reasonable and probable grounds to believe are or are likely to be contaminated or otherwise interfered with by the works to which the approval or order is related; and

(c) measures appropriate to prevent adverse effects upon and following the cessation or closing of the works. R.S.O. 1990, c. E.19, s. 132 (1); 2005, c. 12, s. 1 (22).

Certificate of property use

(1.1) The Director may include in a certificate of property use a requirement that the person to whom the certificate is issued provide financial assurance to the Crown in right of Ontario for any one or more of,

(a) the performance of any action specified in the certificate of property use;

(b) the provision of temporary or permanent alternate water supplies to replace those that the Director has reasonable and probable grounds to believe are or are likely to be contaminated or otherwise interfered with by a contaminant on, in or under the property to which the certificate of property use relates; and

(c) measures appropriate to prevent adverse effects in respect of the property to which the certificate of property use relates. 2001, c. 17, s. 2 (8); 2005, c. 12, s. 1 (23).

Changes in amount of financial assurance

(2) A requirement under subsection (1) or (1.1) may provide that the financial assurance may be provided, reduced or released in stages specified in the approval, order or certificate of property use. 2001, c. 17, s. 2 (9).

Amendment of approval, order or certificate of property use

(3) The Director may amend an approval, order or certificate of property use to change a requirement as to financial assurance contained in the approval, order or certificate of property use. 2001, c. 17, s. 2 (9).

Failure to provide financial assurance

133. (1) Failure to provide financial assurance specified in an approval or in accordance with a stage specified in an approval is grounds for revocation of the approval and for an order in writing by the Director prohibiting or restricting the carrying on, operation or use of the works in respect of which the financial assurance is required. R.S.O. 1990, c. E.19, s. 133 (1).

Idem, order

(2) Failure to provide financial assurance specified in an order or in accordance with a stage specified in an order is grounds for an order in writing by the Director prohibiting or restricting the carrying on, operation or use of the works in respect of which the financial assurance is required. R.S.O. 1990, c. E.19, s. 133 (2).

Same, certificate of property use

(3) Failure to provide financial assurance specified in a certificate of property use or in accordance with a stage specified in a certificate of property use is grounds for an order in writing by the Director

prohibiting or restricting the use of the property to which the certificate of property use relates. 2001, c. 17, s. 2 (10).

Return or release of financial assurance

134. (1) Upon request, part or all of the financial assurance given in respect of a works or certificate of property use may be returned or released pursuant to an order in writing by the Director. R.S.O. 1990, c. E.19, s. 134 (1); 2001, c. 17, s. 2 (11).

Grounds for order

(2) The Director may make an order mentioned in subsection (1) if satisfied that the financial assurance returned or released is not required in respect of the works or certificate of property use. R.S.O. 1990, c. E.19, s. 134 (2); 2001, c. 17, s. 2 (12).

Continuation of financial assurance

135. The Director may convert a financial assurance to cash to be held by the Crown to the same purposes as the financial assurance or otherwise realize the financial assurance unless the financial assurance is renewed at least thirty days before it would otherwise expire. R.S.O. 1990, c. E.19, s. 135.

Order for use of financial assurance

136. (1) In the circumstances set out in subsection (2), the Director by order may require the performance of environmental measures for which the Crown holds financial assurance and may require the use of the financial assurance for the performance of the environmental measures. R.S.O. 1990, c. E.19, s. 136 (1).

Basis for order

(2) The Director may make an order mentioned in subsection (1) if the Director has reasonable and probable grounds to believe that any environmental measure required by the approval, order, certificate of property use or a regulation made under clause 176 (2.4) (i) in respect of which the financial assurance was given has not been or will not be carried out in accordance with the requirement. 2010, c. 16, Sched. 7, s. 2 (48).

Parties affected

(3) An order under this section shall be directed to,

(a) the person,

(i) to whom the approval, order or certificate of property use was issued or any other person who is bound by the approval, order or certificate of property use, or

(ii) who registered the activity prescribed by the regulations for the purposes of subsection 20.21 (1), if the financial assurance has been provided pursuant to a regulation made under clause 176 (2.4) (i); and

(b) any person that to the knowledge of the Director has provided the financial assurance for or on behalf of a person referred to in clause (a), or any successor or assignee of a person that to the knowledge of the Director has provided the financial assurance for or on behalf of a person referred to in clause (a). 2001, c. 17, s. 2 (14); 2010, c. 16, Sched. 7, s. 2 (49).

Performance

(4) Upon the issuance of an order by the Director under subsection (1), the Crown may,

(a) use any cash;

(b) realize any bond or other form of security, and use the money derived therefrom; and

(c) enforce any agreement,

provided or obtained as the financial assurance for the performance of the environmental measures and may carry out the environmental measures. R.S.O. 1990, c. E.19, s. 136 (4).

PART XIII
APPEALS TO TRIBUNAL

137. REPEALED: 2000, c. 26, Sched. F, s. 12 (8).

Notice to municipalities, certain orders and decisions

138. When the Director makes an order or decision under this Act of a class prescribed by the regulations, the Director shall serve notice of the order or decision, together with written reasons therefor, on the clerk of any local municipality in which there is land on which the order or decision requires something to be done, permits something to be done or prohibits something from being done. R.S.O. 1990, c. E.19, s. 138.

Notice of decisions, general

When Director refuses approval, etc.

139. (1) When the Director,

(a) refuses to give his or her approval of plans and specifications;

(b) requires a condition precedent to the giving of his or her approval;

(c) refuses to issue an environmental compliance approval or renewable energy approval;

(d) refuses to renew a renewable energy approval;

(e) suspends or revokes an environmental compliance approval or renewable energy approval; or

(f) issues a certificate of property use,

the Director shall serve notice upon the applicant or holder, as the case may be, together with written reasons therefor, and the applicant or holder may, by written notice served upon the Director and the Tribunal within fifteen days after the service of the notice, require a hearing by the Tribunal. R.S.O. 1990, c. E.19, s. 139 (1); 2000, c. 26, Sched. F, s. 12 (12); 2001, c. 17, s. 2 (15); 2009, c. 12, Sched. G, s. 7 (1); 2010, c. 16, Sched. 7, s. 2 (50).

When Director refuses licence, permit or approval

(2) When the Director,

(a) refuses to issue or renew or revokes or suspends a licence, permit or approval;

(b) imposes terms and conditions in issuing an environmental compliance approval;

(c) imposes terms and conditions in issuing or renewing a renewable energy approval, licence, permit or approval;

(d) alters the terms and conditions in an environmental compliance approval, renewable energy approval, certificate of property use, licence or permit or approval after it is issued; or

(e) imposes new terms and conditions in an environmental compliance approval, renewable energy approval or certificate of property use,

the Director shall serve notice together with written reasons therefor upon the applicant or the person to whom the licence, permit, approval, environmental compliance approval, renewable energy approval or certificate of property use is issued, as the case may be, and the applicant or person may, by written notice served upon the Director and the Tribunal within 15 days after the service of the notice, require a

hearing by the Tribunal. 2007, c. 7, Sched. 13, s. 1; 2009, c. 12, Sched. G, s. 7 (2, 3); 2010, c. 16, Sched. 7, s. 2 (51, 52).

Exception

(3) Subsections (1) and (2) do not apply with respect to,

(a) a decision of the Tribunal that is implemented by the Director in accordance with subsection 20.15 (6) or 33 (4); or

(b) terms and conditions in an environmental compliance approval as a result of an application under Part II.1, if the terms and conditions are substantially the same as those contained in an approval that was previously issued and is still in effect at the time that the decision is made in respect of the application. 2010, c. 16, Sched. 7, s. 2 (53).

No hearing, Part II.2 activity

(4) Any hearing required under this section in respect of an environmental compliance approval is discontinued if the activity in respect of which the approval or the part of the approval that is in question is prescribed by the regulations for the purposes of subsection 20.21 (1), unless the Director has issued an order under section 20.18 in respect of the activity. 2010, c. 16, Sched. 7, s. 2 (53).

Appeal of order

140. (1) A person to whom an order of the Director is directed may, by written notice served upon the Director and the Tribunal within fifteen days after service upon the person of a copy of the order, require a hearing by the Tribunal. R.S.O. 1990, c. E.19, s. 140 (1); 2000, c. 26, Sched. F, s. 12 (12).

Failure or refusal to issue, etc., order

(2) No failure or refusal to issue, amend, vary or revoke an order is an order. R.S.O. 1990, c. E.19, s. 140 (2).

Extension of time for requiring hearing

141. The Tribunal shall extend the time in which a person may give a notice under section 139 or 140 requiring a hearing on an order or decision where, in the Tribunal's opinion, it is just to do so because service of the order or decision on the person did not give the person notice of the order or decision. R.S.O. 1990, c. E.19, s. 141; 2000, c. 26, Sched. F, s. 12 (12).

Contents of notice requiring hearing

142. (1) An applicant for a hearing by the Tribunal shall state in the notice requiring the hearing,

(a) the portions of the order, certificate of property use, direction, term, condition, suspension, revocation or licence or other form of permission in respect of which the hearing is required; and

(b) the grounds on which the applicant for the hearing intends to rely at the hearing. R.S.O. 1990, c. E.19, s. 142 (1); 2000, c. 26, Sched. F, s. 12 (12); 2001, c. 17, s. 2 (18).

Effect of contents of notice

(2) Except with leave of the Tribunal, at a hearing by the Tribunal an applicant is not entitled to appeal a portion of the order, certificate of property use, direction, term, condition, suspension, revocation or licence or other form of permission, or to rely on a ground, that is not stated in the applicant's notice requiring the hearing. R.S.O. 1990, c. E.19, s. 142 (2); 2000, c. 26, Sched. F, s. 12 (12); 2001, c. 17, s. 2 (19).

Leave by Tribunal

(3) The Tribunal may grant the leave referred to in subsection (2) where the Tribunal is of the opinion that to do so is proper in the circumstances, and the Tribunal may give such directions as the Tribunal considers proper consequent upon the granting of the leave. R.S.O. 1990, c. E.19, s. 142 (3); 2000, c. 26, Sched. F, s. 12 (12).

Non-application, s. 142.1 hearing

(4) This section does not apply in the case of a hearing required under section 142.1. 2009, c. 12, Sched. G, s. 8.

Hearing re renewable energy approval

142.1 (1) This section applies to a person resident in Ontario who is not entitled under section 139 to require a hearing by the Tribunal in respect of a decision made by the Director under section 47.5. 2009, c. 12, Sched. G, s. 9.

Same

(2) A person mentioned in subsection (1) may, by written notice served upon the Director and the Tribunal within 15 days after a day prescribed by the regulations, require a hearing by the Tribunal in respect of a decision made by the Director under clause 47.5 (1) (a) or subsection 47.5 (2) or (3). 2009, c. 12, Sched. G, s. 9.

Grounds for hearing

(3) A person may require a hearing under subsection (2) only on the grounds that engaging in the renewable energy project in accordance with the renewable energy approval will cause,

(a) serious harm to human health; or

(b) serious and irreversible harm to plant life, animal life or the natural environment. 2009, c. 12, Sched. G, s. 9.

Contents of notice requiring hearing, s. 142.1 hearing

142.2 (1) An applicant for a hearing required under section 142.1 shall state in the notice requiring the hearing,

(a) a description of how engaging in the renewable energy project in accordance with the renewable energy approval will cause,

(i) serious harm to human health, or

(ii) serious and irreversible harm to plant life, animal life or the natural environment;

(b) the portion of the renewable energy approval in respect of which the hearing is required; and

(c) the relief sought. 2009, c. 12, Sched. G, s. 10.

Effect of contents of notice, s. 142.1 hearing

(2) Except with leave of the Tribunal, at a hearing by the Tribunal an applicant mentioned in subsection (1) is not entitled to appeal a portion of the renewable energy approval that is not stated in the applicant's notice requiring the hearing. 2009, c. 12, Sched. G, s. 10.

Leave by Tribunal, s. 142.1 hearing

(3) The Tribunal may grant the leave referred to in subsection (2) where the Tribunal is of the opinion that to do so is proper in the circumstances, and the Tribunal may give such directions as the Tribunal considers proper consequent upon the granting of the leave. 2009, c. 12, Sched. G, s. 10.

No automatic stay on appeal

143. (1) The commencement of a proceeding before the Tribunal under this Part does not stay the operation of a decision or order made under this Act, other than,

(a) an order to pay costs and expenses under section 99.1;

(b) an order to pay the costs of work made under section 150;

(c) an order to pay an environmental penalty; or

(d) an order to pay an administrative penalty. 2005, c. 12, s. 1 (24); 2010, c. 16, Sched. 7, s. 2 (54).

Tribunal may grant stay

(2) The Tribunal may, on the application of a party to a proceeding before it, stay the operation of a decision or order, other than,

(a) an order to monitor, record and report; or

(b) an order issued under section 168.8, 168.14 or 168.20. 2001, c. 17, s. 2 (20).

When stay may not be granted

(3) The Tribunal shall not stay the operation of a decision or order if doing so would result in,

(a) danger to the health or safety of any person;

(b) impairment or serious risk of impairment of the quality of the natural environment for any use that can be made of it; or

(c) injury or damage or serious risk of injury or damage to any property or to any plant or animal life. R.S.O. 1990, c. E.19, s. 143 (3); 2000, c. 26, Sched. F, s. 12 (12).

Right to apply to remove stay: new circumstances

(4) A party to a proceeding may apply for the removal of a stay if relevant circumstances have changed or have become known to the party since the stay was granted, and the Tribunal may grant the application. R.S.O. 1990, c. E.19, s. 143 (4); 2000, c. 26, Sched. F, s. 12 (12).

Right to apply to remove stay: new party

(5) A person who is made a party to a proceeding after a stay is granted may, at the time the person is made a party, apply for the removal of the stay, and the Tribunal may grant the application. R.S.O. 1990, c. E.19, s. 143 (5); 2000, c. 26, Sched. F, s. 12 (12); 2009, c. 19, s. 67 (3).

Removal of stay by Tribunal

(6) The Tribunal, on the application of a party under subsection (4) or (5), shall remove a stay if failure to do so would have one or more of the results mentioned in clauses (3) (a) to (c). R.S.O. 1990, c. E.19, s. 143 (6); 2000, c. 26, Sched. F, s. 12 (12).

144. REPEALED: 2005, c. 12, s. 1 (25).

Parties to hearing

145. (1) The person requiring the hearing, the Director and any other person specified by the Tribunal are parties to the hearing. R.S.O. 1990, c. E.19, s. 145 (1); 2000, c. 26, Sched. F, s. 12 (12).

Same, s. 142.1 hearing

(2) In the case of a hearing required under section 142.1, the holder of the renewable energy approval is a party to the hearing. 2009, c. 12, Sched. G, s. 11.

Costs specified in order to pay may be increased by Tribunal

145.1 At a hearing by the Tribunal under this Part on an order to pay costs or expenses under section 99.1 or 150, the Director may, on reasonable notice to all parties, ask the Tribunal to amend the order by adding new costs or expenses or by increasing the amounts set out in the order. 2005, c. 12, s. 1 (26).

Powers of Tribunal

145.2 (1) Subject to sections 145.3 and 145.4, a hearing by the Tribunal under this Part shall be a new hearing and the Tribunal may confirm, alter or revoke the action of the Director that is the subject-matter of the hearing and may by order direct the Director to take such action as the Tribunal considers the Director should take in accordance with this Act and the regulations, and, for such purposes, the Tribunal may substitute its opinion for that of the Director. 2005, c. 12, s. 1 (26).

Non-application of subs. (1)

(2) Subsection (1) does not apply in respect of a hearing required under section 142.1. 2009, c. 12, Sched. G, s. 12.

Hearing required under s. 142.1

145.2.1 (1) This section applies to a hearing required under section 142.1. 2009, c. 12, Sched. G, s. 13.

What Tribunal must consider

(2) The Tribunal shall review the decision of the Director and shall consider only whether engaging in the renewable energy project in accordance with the renewable energy approval will cause,

(a) serious harm to human health; or

(b) serious and irreversible harm to plant life, animal life or the natural environment. 2009, c. 12, Sched. G, s. 13.

Onus of proof

(3) The person who required the hearing has the onus of proving that engaging in the renewable energy project in accordance with the renewable energy approval will cause harm referred to in clause (2) (a) or (b). 2009, c. 12, Sched. G, s. 13.

Powers of Tribunal

(4) If the Tribunal determines that engaging in the renewable energy project in accordance with the renewable energy approval will cause harm referred to in clause (2) (a) or (b), the Tribunal may,

(a) revoke the decision of the Director;

(b) by order direct the Director to take such action as the Tribunal considers the Director should take in accordance with this Act and the regulations; or

(c) alter the decision of the Director, and, for that purpose, the Tribunal may substitute its opinion for that of the Director. 2009, c. 12, Sched. G, s. 13.

Same

(5) The Tribunal shall confirm the decision of the Director if the Tribunal determines that engaging in the renewable energy project in accordance with the renewable energy approval will not cause harm described in clause (2) (a) or (b). 2009, c. 12, Sched. G, s. 13.

Deemed confirmation of decision

(6) The decision of the Director shall be deemed to be confirmed by the Tribunal if the Tribunal has not disposed of the hearing in respect of the decision within the period of time prescribed by the regulations. 2009, c. 12, Sched. G, s. 13.

Consistency with policies

145.2.2 A decision or order of the Tribunal under this Part in respect of a renewable energy approval shall be consistent with any policies issued by the Minister under section 47.7 that are in effect on the date of the Director's decision. 2009, c. 12, Sched. G, s. 13.

What Tribunal may consider at hearing to pay costs

145.3 (1) At a hearing by the Tribunal on an order under subsection 99.1 (1) to a person to pay the costs and expenses of doing things, the Tribunal shall consider only,

(a) whether the person to whom the order was directed was, immediately before the discharge into the natural environment,

(i) the owner of the thing that was discharged,

(ii) the person having charge, management or control of the thing that was discharged, or

(iii) the employee or agent of the person having charge, management or control of the thing that was discharged; or

(b) whether any of the costs or expenses specified in the order,

(i) do not relate to things for which Her Majesty in right of Ontario incurred costs or expenses for a purpose referred to in subsection 99.1 (1), or

(ii) are unreasonable having regard to what was done. 2005, c. 12, s. 1 (26).

Same

(2) At a hearing by the Tribunal on an order under subsection 150 (1) or (2.1) to a person to pay the costs of doing things, the Tribunal shall consider only whether any of the costs specified in the order,

(a) do not relate to a thing that the person was required to do by an order or decision made under this Act, as amended by any Tribunal decision or on any appeal from a Tribunal decision; or

(b) are unreasonable having regard to what was done. 2005, c. 12, s. 1 (26).

Same, receiver or trustee in bankruptcy

(3) For the purpose of subsection (2), if the order under subsection 150 (1) or (2.1) was issued to a receiver or trustee in bankruptcy,

(a) the receiver or trustee in bankruptcy shall be deemed to have been required to do any thing that was required to be done by the person whose property the receiver or trustee in bankruptcy holds or administers; and

(b) the receiver or trustee in bankruptcy shall be deemed to have been required to do a thing that, pursuant to subsection 19 (5) or 168.20 (7), the receiver or trustee in bankruptcy was not required to do. 2005, c. 12, s. 1 (26).

Amount of environmental penalties

145.4 (1) For greater certainty, if a hearing by the Tribunal is required under section 140 in respect of an order to pay an environmental penalty, the regulations made under clause 182.1 (15) (d) governing the determination of the amounts of environmental penalties apply to the Tribunal. 2005, c. 12, s. 1 (27).

Amount of administrative penalties

(1.1) For greater certainty, if a hearing by the Tribunal is required under section 140 in respect of an order to pay an administrative penalty, the regulations made under clause 182.3 (13) (b) governing the determination of the amounts of administrative penalties apply to the Tribunal. 2010, c. 16, Sched. 7, s. 2 (55).

Same

(2) Subject to subsection (1), if a hearing by the Tribunal is required under section 140 in respect of an order to pay an environmental penalty or an administrative penalty, the Tribunal shall not substitute its opinion for that of the Director with respect to the amount of the penalty unless the Tribunal considers the amount to be unreasonable. 2005, c. 12, s. 1 (27); 2010, c. 16, Sched. 7, s. 2 (56).

Onus for certain proceedings that relate to discharges

145.5 (1) This section applies to a hearing by the Tribunal under this Part if,

(a) the hearing was required by a regulated person;

(b) the order that is the subject of the hearing is,

(i) an order made under subsection 182.1 (1), or

(ii) an order made under section 157, an order made under section 157.2 that amends an order made under section 157, or an order made under section 157.3 that confirms or alters an order made under section 157, unless the contravention in respect of which the order is made is prescribed by the regulations made under section 182.1 as a contravention in respect of which an order may not be issued under subsection 182.1 (1); and

(c) the order that is the subject of the hearing relates to a contravention described in clause 182.1 (1) (a). 2005, c. 12, s. 1 (27).

Contraventions of s. 14

(2) If this section applies to a hearing and the order that is the subject of the hearing relates to a contravention of section 14, the person who required the hearing has the onus of proving that the discharge of the contaminant into the natural environment did not cause and could not have caused an adverse effect. 2005, c. 12, s. 1 (27).

Contraventions of s. 93

(3) If this section applies to a hearing and the order that is the subject of the hearing relates to a contravention of section 93, the person who required the hearing has the onus of proving that,

(a) the discharge of the pollutant was not abnormal in quality or quantity in light of all the circumstances of the discharge;

(b) the pollutant that was spilled did not cause and was not likely to cause an adverse effect; or

(c) forthwith after the pollutant was spilled, the person did everything practicable to prevent, eliminate and ameliorate the adverse effect and to restore the natural environment. 2005, c. 12, s. 1 (27).

Contraventions of other discharge provisions

(4) If this section applies to a hearing and the order that is the subject of the hearing relates to a discharge into the natural environment in contravention of a provision referred to in subclause 182.1 (1) (a) (iii), (iv) or (v), the person who required the hearing has the onus of proving that the person did not contravene the provision. 2005, c. 12, s. 1 (27).

Appeals from Tribunal

145.6 (1) Any party to a hearing before the Tribunal under this Part may appeal from its decision or order on a question of law to the Divisional Court in accordance with the rules of court. 2005, c. 12, s. 1 (28).

Appeal to Minister

(2) A party to a hearing before the Tribunal under this Part may, within 30 days after receipt of the decision of the Tribunal or within 30 days after final disposition of an appeal, if any, under subsection (1), appeal in writing to the Minister on any matter other than a question of law and the Minister shall confirm, alter or revoke the decision of the Tribunal as to the matter in appeal as the Minister considers in the public interest. 2005, c. 12, s. 1 (28).

Decision of Tribunal not automatically stayed on appeal

(3) An appeal of a decision of the Tribunal to the Divisional Court or to the Minister under this section does not stay the operation of the decision, unless the Tribunal orders otherwise. 2005, c. 12, s. 1 (28).

Divisional Court or Minister may grant or set aside stay

(4) If a decision of the Tribunal is appealed to the Divisional Court or to the Minister under this section, the Divisional Court or the Minister may,

(a) stay the operation of the decision; or

(b) set aside a stay ordered by the Tribunal under subsection (3). 2005, c. 12, s. 1 (28).

PART XIV
WORK DONE BY MINISTRY

Minister may cause things to be done

146. Where an order or decision made under this Act is stayed, the Minister may cause to be done any thing required by the order or decision. R.S.O. 1990, c. E.19, s. 146.

Director may cause things to be done

147. (1) Where an order or decision made under this Act is not stayed, the Director may cause to be done any thing required by it if,

(a) a person required by the order or decision to do the thing,

(i) has refused to comply with or is not complying with the order or decision,

(ii) is not likely, in the Director's opinion, to comply with the order or decision promptly,

(iii) is not likely, in the Director's opinion, to carry out the order or decision competently, or

(iv) requests the assistance of the Director in complying with the order or decision;

(a.1) a receiver or trustee in bankruptcy is not required to do the thing because of subsection 19 (5) or 168.20 (7); or

(b) in the Director's opinion, it would be in the public interest to do so. R.S.O. 1990, c. E.19, s. 147 (1); 2001, c. 17, s. 2 (21).

Notice of intent to cause things to be done

(2) The Director shall give notice of an intention to cause a thing to be done under subsection (1),

(a) to each person required by an order or decision made under this Act to do the thing; and

(b) if a receiver or trustee in bankruptcy is not required to do the thing because of subsection 19 (5) or 168.20 (7), to the receiver or trustee in bankruptcy. 2001, c. 17, s. 2 (22).

Idem

(3) A person who receives a notice under subsection (2) shall not do the thing referred to in the notice without the permission of the Director. R.S.O. 1990, c. E.19, s. 147 (3).

Person liable unknown: Director may cause things to be done

148. Where the Director is authorized by this Act to make a decision or order requiring a person to do a thing and the identity of the person cannot be ascertained, the Director may cause the thing to be done. R.S.O. 1990, c. E.19, s. 148.

Parts XV.1 and XV.2: Director may cause things to be done

148.1 (1) If, but for Part XV.1 or XV.2, the Minister, the Director or a provincial officer would be authorized by this Act to make an order requiring a person to do a thing, the Director may cause the thing to be done. 2001, c. 17, s. 2 (23).

Same

(2) Subsection (1) applies even if the Director is authorized to make an order requiring another person to do the thing. 2001, c. 17, s. 2 (23).

Powers of entry for ss. 146 to 148.1

Entry without judicial order

149. (1) A person who is responsible for doing a thing under section 146, 147, 148 or 148.1 may, for the purpose, enter on or into any land or place on or in which the thing is to be done and any adjacent land or place without an order if,

(a) the entry is made with the consent of an occupier or owner of the land or place; or

(b) the delay necessary to obtain an order under subsection (2) would result in,

(i) danger to the health or safety of any person,

(ii) impairment or serious risk of impairment of the quality of the natural environment for any use that can be made of it, or

(iii) injury or damage or serious risk of injury or damage to any property or to any plant or animal life. 1998, c. 35, s. 13 (1); 2001, c. 17, s. 2 (24).

Order authorizing entry

(2) A justice who is satisfied on evidence under oath that there is reasonable ground to believe that entry on land or into or on a place is necessary for the purpose of doing a thing under section 146, 147, 148 or 148.1, may issue an order authorizing the person named in the order to make the entry and do the thing. 1998, c. 35, s. 13 (1); 2001, c. 17, s. 2 (25).

Execution and expiry of order

(3) An order issued under subsection (2) shall,

(a) specify the times, which may be 24 hours each day, during which the order may be carried out; and

(b) state when the order expires. 1998, c. 35, s. 13 (1).

Renewal

(4) Before or after the order expires, a justice may renew the order, for such additional periods as the justice considers necessary. 1998, c. 35, s. 13 (1).

Use of force

(5) A person authorized under clause (1) (b) or subsection (2) to enter land or a place for the purpose of doing a thing may call on police officers as necessary and may use force as necessary to make the entry and do the thing. R.S.O. 1990, c. E.19, s. 149 (5); 1998, c. 35, s. 13 (2).

Assistance

(6) A person named in an order issued under subsection (2) may call on any other persons he or she considers advisable to execute the order. R.S.O. 1990, c. E.19, s. 149 (6); 1998, c. 35, s. 13 (3).

Application without notice

(7) A justice may receive and consider an application for an order or renewal of an order under this section without notice to the owner or occupier of the land or place. 1998, c. 35, s. 13 (4).

Identification

(8) On the request of an owner or occupier of the land or place, a person who exercises a power conferred under subsection (1) or (2) shall identify himself or herself and shall explain the purpose of the entry. R.S.O. 1990, c. E.19, s. 149 (8); 1998, c. 35, s. 13 (5).

Order to pay

150. (1) The Director may issue an order to pay the costs of doing any thing caused to be done by the Minister or Director under this Act to any person required by an order or decision made under this Act to do the thing. R.S.O. 1990, c. E.19, s. 150 (1).

Idem

(2) If, after the Minister or Director causes any thing to be done under this Act, the Director ascertains the identity of a person to whom a decision or order requiring the thing to be done could have been issued under this Act, the Director may issue an order to pay the costs of doing the thing to that person. R.S.O. 1990, c. E.19, s. 150 (2).

Same

(2.1) If the Minister or Director has caused any thing to be done under this Act in circumstances where, pursuant to subsection 19 (5) or 168.20 (7) or a stay granted under Part I of the *Bankruptcy and Insolvency Act* (Canada), a receiver or trustee in bankruptcy was not required to do the thing, the Director may issue an order to the receiver or trustee in bankruptcy to pay the costs of doing the thing. 2001, c. 17, s. 2 (26).

Same

(2.2) If an order to pay the costs of doing a thing is issued under subsection (1), (2) or (2.1) to a receiver or trustee in bankruptcy, the receiver or trustee in bankruptcy is not personally liable for those costs unless the order or decision that required the thing to be done arose from the gross negligence or wilful misconduct of the receiver or trustee in bankruptcy or of a receiver representative or trustee in bankruptcy representative. 2001, c. 17, s. 2 (26).

Order to pay: contents

(3) An order under subsection (1), (2) or (2.1) to pay costs shall include,

(a) a description of things that the Minister or Director caused to be done under this Act;

(b) a detailed account of the costs incurred in doing the things; and

(c) a direction that the person to whom the order is issued pay the costs to the Minister of Finance. R.S.O. 1990, c. E.19, s. 150 (3); 2001, c. 9, Sched. G, s. 5 (22); 2001, c. 17, s. 2 (27).

Idem

(4) An order under subsection (2) to pay costs shall also include a brief statement of the circumstances giving rise to the decision to cause the things to be done. R.S.O. 1990, c. E.19, s. 150 (4).

Joint and several liability

(5) Where two or more persons are liable to pay costs pursuant to an order under subsection (1), (2) or (2.1), they are jointly and severally liable to Her Majesty in right of Ontario. 2005, c. 12, s. 1 (29).

Contribution and indemnity

(6) Where the Director is entitled to issue an order to two or more persons under subsection (1), (2) or (2.1) in respect of costs, as between themselves, in the absence of an express or implied contract, each of those persons is liable to make contribution to and indemnify the other in accordance with the following principles:

1. Where the Director is entitled to issue an order to two or more persons under subsection (1), (2) or (2.1) in respect of costs and one or more of them caused or contributed to the costs by fault or negligence, such one or more of them shall make contribution to and indemnify,
   i. where one person is found at fault or negligent, any other person to whom the Director is entitled to issue an order under subsection (1), (2) or (2.1), and
   ii. where two or more persons are found at fault or negligent, each other and any other person to whom the Director is entitled to issue an order under subsection (1), (2) or (2.1) in the degree in which each of such two or more persons caused or contributed to the costs by fault or negligence.
2. For the purpose of subparagraph 1 ii, if it is not practicable to determine the respective degrees in which the fault or negligence of two or more persons to whom the Director is entitled to issue an order under subsection (1), (2) or (2.1) caused or contributed to the costs, such two or more persons shall be deemed to be equally at fault or negligent.
3. Where no person to whom the Director is entitled to issue an order under subsection (1), (2) or (2.1) caused or contributed to the costs by fault or negligence, each of the persons to whom the Director is entitled to issue an order under subsection (1), (2) or (2.1) is liable to make contribution to and indemnify each other in such degree as is determined to be just and equitable in the circumstances. 2005, c. 12, s. 1 (29).

Enforcement of contribution

(7) The right to contribution or indemnification under subsection (6) may be enforced by action in a court of competent jurisdiction. 2005, c. 12, s. 1 (29).

Adding parties

(8) Wherever it appears that a person not already a party to an action under subsection (7) may be a person to whom the Director is entitled to issue an order under subsection (1), (2) or (2.1) in respect of the costs, the person may be added as a party defendant to the action on such terms as are considered just or may be made a third party to the action in the manner prescribed by the rules of court for adding third parties. 2005, c. 12, s. 1 (29).

151. REPEALED: 2005, c. 12, s. 1 (30).

152. REPEALED: 2005, c. 12, s. 1 (31).

Order to pay may be enforced as judgment of the Superior Court of Justice

153. (1) An order to pay costs may be filed with a local registrar of the Superior Court of Justice and enforced as if it were an order of the court. R.S.O. 1990, c. E.19, s. 153 (1); 2001, c. 9, Sched. G, s. 5 (21).

Interest

(2) Section 129 of the *Courts of Justice Act*, applies in respect of an order filed with the Superior Court of Justice under subsection (1) and, for the purpose, the date of filing shall be deemed to be the date of the order. R.S.O. 1990, c. E.19, s. 153 (2); 2001, c. 9, Sched. G, s. 5 (21).

Collection of costs as tax lien

154. (1) For the purposes of subsections (2) and (8), a thing done as a result of activities or conditions on real property is a thing done in connection with that property, whether or not the work is done on that property. R.S.O. 1990, c. E.19, s. 154 (1).

Lien

(2) If an order to pay costs is directed to a person who owns real property in a local municipality, and the Director instructs the municipality to recover amounts specified in the order that relate to things done in connection with that property, the municipality shall have a lien on the property for those amounts and they shall have priority lien status, as described in section 1 of the *Municipal Act, 2001* or section 3 of the *City of Toronto Act, 2006*, as the case may be, in respect of the property and shall be added by the treasurer of the municipality to the tax roll. 2002, c. 17, Sched. F, Table; 2006, c. 32, Sched. C, s. 19 (2).

Same

(3) A lien created under subsection (2) in favour of a municipality is not an estate or interest of the Crown within the meaning of clause 379 (7) (b) of the *Municipal Act, 2001* or clause 350 (7) (b) of the *City of Toronto Act, 2006*, as the case may be. 2002, c. 17, Sched. F, Table; 2006, c. 32, Sched. C, s. 19 (3).

Idem

(4) Subject to subsection (6), money collected in accordance with subsection (2), less the costs reasonably attributable to the collection, shall be paid by the municipality to the Minister of Finance. R.S.O. 1990, c. E.19, s. 154 (4); 2001, c. 9, Sched. G, s. 5 (22).

Interpretation

(5) In subsections (6) and (7),

"cancellation price" has the same meaning as in Part XI of the *Municipal Act, 2001* or Part XIV of the *City of Toronto Act, 2006*, as the case may be. 2006, c. 32, Sched. C, s. 19 (4).

Proceeds of tax sale

(6) Where there is a sale of land under Part XI of the *Municipal Act, 2001* or Part XIV of the *City of Toronto Act, 2006* and amounts are payable out of the proceeds to the Minister of Finance under this Act, the *Fire Protection and Prevention Act, 1997* or the *Ontario Water Resources Act*, those amounts shall not be paid until after payment of all other amounts payable out of the proceeds in respect of the cancellation price of the land. R.S.O. 1990, c. E.19, s. 154 (6); 2001, c. 9, Sched. G, s. 5 (7); 2002, c. 17, Sched. F, Table; 2006, c. 32, Sched. C, s. 19 (5).

Cancellation price

(7) Despite Part XI of the *Municipal Act, 2001* or Part XIV of the *City of Toronto Act, 2006*, the treasurer of a municipality may sell land under those Parts for less than the cancellation price, so long as the land is not sold for less than what the cancellation price would have been but for this Act, the *Fire Protection and Prevention Act, 1997* and the *Ontario Water Resources Act*, and the purchaser may be declared to be the successful purchaser under Part XI of the *Municipal Act, 2001* or Part XIV of the *City of Toronto Act, 2006*, as the case may be. 2006, c. 32, Sched. C, s. 19 (6).

Collection, territory without municipal organization

(8) If an order to pay costs is directed to a person who owns real property in territory without municipal organization and if the Director gives written notice to the Minister of Finance of the amounts specified in the order that relate to things done in connection with the property and requests that the amounts be collected under the *Provincial Land Tax Act, 2006*, the amounts may be collected under that Act as if they were taxes imposed under it. 2006, c. 33, Sched. Z.3, s. 10.

Identification of amounts

(9) An instruction under subsection (2) or a notice under subsection (8) shall state which of the amounts specified in the applicable order relate to things done in connection with the property. 2006, c. 33, Sched. Z.3, s. 10.

Costs may be recovered from deposit or financial assurance

155. Where an order to pay costs is directed to a person who has given a deposit under a regulation or is in respect of works or property for which financial assurance is required under Part XII or a regulation made under clause 176 (2.4) (i), the deposit or financial assurance may be used to recover amounts specified in the order to pay costs. 2010, c. 16, Sched. 7, s. 2 (57).

PART XV
PROVINCIAL OFFICERS

Inspection by provincial officer

156. (1) For the administration of this Act or the regulations, a provincial officer may, without a warrant or court order, at any reasonable time and with any reasonable assistance, make inspections, including,

(a) entering any part of the natural environment to ascertain the extent, if any, to which contaminants have caused an adverse effect, the causes for any adverse effect, and how any adverse effect may be prevented, eliminated or ameliorated and the natural environment restored;

(b) entering any place in which the provincial officer reasonably believes can be found anything that is governed or regulated under this Act or anything the dealing with which is governed or regulated under this Act;

(c) entering any place in or from which the provincial officer reasonably believes a contaminant is being, has been or may be discharged into the natural environment;

(d) entering any place that the provincial officer reasonably believes is likely to contain documents related to,

(i) an activity or undertaking that is, or is required to be the subject of a permit, licence, approval, environmental compliance approval, certificate of property use, renewable energy approval, program approval, agreement or order under this Act,

(ii) an activity that is or is required to be registered under Part II.2,

(ii.1) an activity or undertaking that is exempted by a regulation from any requirement to have a permit, licence, environmental compliance approval or renewable energy approval under this Act that is regulated by the provisions of the regulation, or

(iii) the discharge of a contaminant into the natural environment;

(e) entering any place that the provincial officer reasonably believes,

(i) is, or is required to be, subject to or referred to in a permit, licence, approval, environmental compliance approval, certificate of property use, renewable energy approval, program approval, agreement or order under this Act,

(ii) is or is required to be subject to or referred to in a registration under Part II.2, or

(iii) is subject to or referred to in a regulation that provides for an exemption from any requirement to have a permit, licence, environmental compliance approval or renewable energy approval under this Act where the regulation includes provisions that regulate the place;

(e.1) entering any property for which a record of site condition has been submitted for filing or has been filed in the Environmental Site Registry established under section 168.3 for the purpose of sampling, testing or examining anything referred to in the record of site condition;

(f) entering any place where a motor, motor vehicle or beverage container regulated under this Act is stocked, displayed, sold or offered for sale, to carry out his or her duties under Part III or IX, as the case may be;

(g) entering any establishment for the repair of motors or motor vehicles, to carry out his or her duties under Part III;

(h) entering any ice shelter to carry out his or her duties under Part IV;

(i) entering any abandoned motor vehicle to carry out his or her duties under Part VII;

(j) entering any place where the provincial officer reasonably believes the permit and plates of a vehicle may be found, in order to seize them in accordance with section 48 or 49; and

(k) entering any place where a pollutant as defined in Part X is spilled. 1998, c. 35, s. 14 (1); 2001, c. 17, s. 2 (30-32); 2005, c. 12, s. 1 (32, 33); 2007, c. 7, Sched. 13, s. 2; 2009, c. 12, Sched. G, s. 14; 2010, c. 16, Sched. 7, s. 2 (58, 59).

Same

(2) During an inspection under subsection (1), the provincial officer may,

(a) make necessary excavations;

(b) require that any thing be operated, used or set in motion under conditions specified by the provincial officer;

(c) take samples for analysis;

(d) conduct tests or take measurements;

(e) examine, record or copy any document or data, in any form, by any method;

(f) record the condition of a place or the natural environment by means of photograph, video recording or other visual recording;

(g) require the production of any document or data, in any form, required to be kept under this Act and of any other document or data, in any form, related to the purposes of the inspection;

(h) remove from a place documents or data, in any form, produced under clause (g) for the purpose of making copies; and

(i) make reasonable inquiries of any person, orally or in writing. 1998, c. 35, s. 14 (2).

Limitation re records

(3) A record made under clause (2) (f) must be made in a manner that does not intercept any private communication and that accords with reasonable expectations of privacy. 1998, c. 35, s. 14 (2).

Limitation re removal of documents, data

(3.1) A provincial officer shall not remove documents or data under clause (2) (h) without giving a receipt for them and shall promptly return the documents or data to the person who produced them. 1998, c. 35, s. 14 (2).

Power to exclude persons

(4) A provincial officer who exercises the power set out in clause (2) (i) may exclude from the questioning any person except counsel for the individual being questioned. R.S.O. 1990, c. E.19, s. 156 (4); 1998, c. 35, s. 14 (3); 2009, c. 33, Sched. 15, s. 5 (1).

Entry to dwellings

(5) A person shall not exercise a power conferred by this Act to enter a room actually used as a dwelling without the consent of the occupier except under the authority of an order under section 158. R.S.O. 1990, c. E.19, s. 156 (5).

(6) REPEALED: 1998, c. 35, s. 14 (4).

Power to inspect vehicle or vessel

156.1 (1) In this section,

"vehicle" includes a trailer or other equipment attached to the vehicle. 1998, c. 35, s. 15.

Requirement to stop

(2) For the administration of this Act or the regulations, a provincial officer may signal a vehicle or vessel to stop. 1998, c. 35, s. 15.

Same

(3) On the provincial officer's signal to stop, the operator of the vehicle or vessel shall immediately come to a safe stop. 1998, c. 35, s. 15.

Same

(4) For the purposes of this section, a signal to stop includes,

(a) intermittent flashes of red light, in the case of a vehicle;

(b) intermittent flashes of blue light, in the case of a vessel; and

(c) a hand signal to stop by a provincial officer who is readily identifiable as a provincial officer. 1998, c. 35, s. 15.

Sign to report

(5) Where a clearly marked sign is posted indicating that a class of vehicles or vessels should report to a certain place in the vicinity of the sign, the operator of a vehicle or vessel that passes the sign and that falls within the class of vehicles or vessels indicated shall report forthwith to the place the sign directs. 1998, c. 35, s. 15.

Same

(6) Where the operator of a vehicle or vessel stops under subsection (3) or reports under subsection (5), the provincial officer may make any reasonable inquiries of the operator and the operator shall produce for inspection any documents related to the operation or ownership of the vehicle or vessel, including licenses, permits and any documents that are required to be kept by the law of any jurisdiction in relation to the carriage of any cargo or container. 1998, c. 35, s. 15.

Inspection powers

(7) Based on questioning or examination of documents conducted under subsection (6), the provincial officer may, without warrant or court order, inspect any means of containment that the provincial officer reasonably believes is being used for the handling or transportation of a thing the handling or transportation of which is governed or regulated under this Act, the *Dangerous Goods Transportation Act* or the *Transportation of Dangerous Goods Act, 1992*, (Canada). 1998, c. 35, s. 15; 2009, c. 19, s. 67 (4).

Same

(8) As part of an inspection under subsection (7), the provincial officer may open or require the operator to open any cargo hold, container or other means of containment. 1998, c. 35, s. 15.

Same

(9) During an inspection conducted under subsection (6) or (7), the provincial officer may exercise such powers under subsection 156 (2) as are reasonably required for the administration of this Act or the regulations. 1998, c. 35, s. 15.

Same

(10) Subsections 156 (3), (3.1), (4) and (5) apply to the exercise of a power under subsection (9). 1998, c. 35, s. 15.

Power to administer other Acts

156.2 A provincial officer who exercises any power set out in section 156, 156.1, 160, 161 or 161.1 may, if the provincial officer is designated as such under the *Nutrient Management Act, 2002*, the *Ontario Water Resources Act* or the *Pesticides Act*, as the case may be, do anything authorized by,

(a) section 13, 14 or 23 of the *Nutrient Management Act, 2002*;

(b) section 15, 15.1, 19, 20 or 20.1 of the *Ontario Water Resources Act*;

(c) section 19, 19.1, 22, 23 or 23.1 of the *Pesticides Act*;

(d) section 81, 82, 91, 92 or 93 of the *Safe Drinking Water Act, 2002*; or

(e) section 15, 20 or 21 of the *Toxics Reduction Act, 2009*. 2002, c. 4, s. 62 (3); 2009, c. 19, s. 67 (5).

Note: On the day the Statutes of Ontario, 2009, chapter 19, section 65 comes into force, clause (e) is amended by striking out "section 15, 20 or 21" at the beginning and substituting "section 15, 20, 20.1 or 21". See: 2009, c. 19, ss. 67 (6), 73 (2).

Identification

156.3 On request, a provincial officer who exercises a power under this Act shall identify himself or herself as a provincial officer either by the production of a copy of his or her designation or in some other manner and shall explain the purpose of the exercise of the power. 1998, c. 35, s. 15.

Entry, etc., may be prohibited

156.4 (1) A provincial officer may by order prohibit entry into all or part of any land or place or prohibit the use of, interference with, disruption of, or destruction of any thing in any of the following circumstances:

1. During an inspection under section 156, 156.1 or 158.
2. During a search under section 161.
3. During the time required for the provincial officer to obtain an order under section 158 of this Act or a warrant under section 158 of the *Provincial Offences Act*.
4. During a search carried out under a warrant issued under section 158 of the *Provincial Offences Act*.

Requirements for order

(2) An order under subsection (1) shall not be issued unless the provincial officer reasonably believes that,

(a) in the case of an order prohibiting entry, there is on the land or in the place a thing that will afford evidence of an offence under this Act;

(b) in the case of an order prohibiting the use of, interference with, disruption of, or destruction of a thing, the thing will afford evidence of an offence under this Act; or

(c) in the case of an order prohibiting entry or an order prohibiting the use of, interference with, disruption of, or destruction of a thing, there is a discharge or a likelihood of discharge of a contaminant into the natural environment from the land, place or thing and an adverse effect has resulted or is likely to result from the discharge.

Notice of order

(3) The provincial officer shall give notice of the order in the manner that he or she considers appropriate in the circumstances.

Contents of notice

(4) Notice of the order shall include an explanation of the rights provided by subsections (6) and (7).

Order not effective where no notice

(5) An order under subsection (1) is not effective in any court proceeding against a person where the person satisfies the court that the person neither knew nor should have known of the order.

Request for rescission

(6) A person aggrieved by the order may make an oral or written request to the Director to rescind it and may make oral or written submissions to the Director in support of the request.

Powers of Director

(7) The Director shall give prompt consideration to any request or submissions made under subsection (6) and may rescind the order.

Same

(8) For the purposes of subsection (7), the Director may substitute his or her own opinion for that of the provincial officer.

Same

(9) A Director who rescinds an order under subsection (7) shall give such directions to a provincial officer as the Director considers appropriate to bring the rescission to the attention of persons affected.

No stay

(10) A request for rescission of an order under subsection (1) does not stay the order, unless the Director orders otherwise in writing.

Duration of order

(11) An order under subsection (1) shall,

(a) subject to clause (b), be effective for the shorter of the length of time necessary to complete the inspection or search referred to in that subsection or a period not exceeding two days excluding holidays; or

(b) where the inspection or search referred to in subsection (1) is under an order under section 158 of this Act or under a warrant issued under section 158 of the *Provincial Offences Act* and a time limit for the inspection or search is specified in the order or warrant, be effective until the expiration of that time. 1998, c. 35, s. 15.

Order of justice prohibiting entry

156.5 (1) Where a justice is satisfied, on evidence under oath by a provincial officer, that there is reasonable ground for believing that it is appropriate for the administration of this Act or the regulations or necessary to protect human health or safety or to protect property, the justice may issue an order prohibiting entry into all or part of any land or place or prohibiting the use of, interference with, disruption of, or destruction of any thing. 1998, c. 35, s. 15.

Same

(2) The prohibition under the justice's order shall, subject to subsection (3), be for such period of time as is set out in the order. 1998, c. 35, s. 15.

Expiry

(3) Unless renewed, an order under this section expires on the earlier of the day specified for the purpose in the order or the day that is 30 days after the date on which the order is made. 1998, c. 35, s. 15; 2009, c. 33, Sched. 15, s. 5 (2).

Renewal

(4) An order under this section may be renewed for any reason set out in subsection (1), before or after expiry, for one or more periods each of which is not more than 30 days. 1998, c. 35, s. 15.

Notice of application

(5) An initial order under subsection (1) may be issued on application without notice. 1998, c. 35, s. 15.

Same

(6) A renewal order under subsection (4) may be issued on application made with such notice, if any, as is specified for the purpose under subsection (7). 1998, c. 35, s. 15.

Same

(7) In an order under subsection (1) or (4), a justice may specify notice requirements that must be met by a person applying for a renewal of the order or for a further renewal of the order, as the case may be. 1998, c. 35, s. 15.

Notice of order

(8) A provincial officer may give notice of an order under subsection (1) or (4) in the manner that he or she considers appropriate in the circumstances. 1998, c. 35, s. 15.

Order not effective where no notice

(9) An order under subsection (1) or (4) is not effective in any court proceeding against a person where the person satisfies the court that the person neither knew nor should have known of the order. 1998, c. 35, s. 15.

Securing of place, thing

156.6 Where an order under section 156.4 or 156.5 is in effect, a provincial officer may take measures to secure the land, place or thing to which the order relates by means of locks, gates, fences, security guards or such other means as the provincial officer deems necessary to prevent entry into the land or place or to prevent the use of, interference with, disruption of, or destruction of the thing. 1998, c. 35, s. 15.

Order by provincial officer: contraventions

157. (1) A provincial officer may issue an order to any person that the provincial officer reasonably believes is contravening or has contravened,

(a) a provision of this Act or the regulations;

(b) a provision of an order under this Act, other than an order under section 99.1, 100.1, 150 or 182.1 or an order of a court; or

(c) a term or condition of an environmental compliance approval, certificate of property use, renewable energy approval, licence or permit under this Act. 1998, c. 35, s. 16; 2001, c. 17, s. 2 (33); 2005, c. 12, s. 1 (34); 2009, c. 12, Sched. G, s. 15 (1); 2009, c. 33, Sched. 15, s. 5 (3); 2010, c. 16, Sched. 7, s. 2 (60).

Contravention of s. 14

(1.1) Subsection (1) does not apply to a contravention of section 14 unless,

(a) an order to pay an environmental penalty could be issued in respect of the contravention; or

(b) the contravention involves a discharge that causes or is likely to cause an adverse effect. 2005, c. 12, s. 1 (35).

Information to be included in order

(2) The order shall,

(a) specify the provision, term or condition that the provincial officer believes is being or has been contravened;

(b) briefly describe the nature and, where applicable, the location of the contravention;

(b.1) in the case of a contravention of section 14 for which an order to pay an environmental penalty could be issued, describe the adverse effects that were caused by or that may be caused by the contravention; and

(c) state that a review of the order may be requested in accordance with section 157.3. 1998, c. 35, s. 16; 2005, c. 12, s. 1 (36).

What order may require

(3) The order may require the person to whom it is directed to comply with any directions set out in the order within the time specified relating to,

(a) achieving compliance with the provision, term or condition;

(b) preventing the continuation or repetition of the contravention;

(c) securing, whether through locks, gates, fences, security guards or other means, any land, place or thing;

(d) where the contravention is related to the deposit of waste, removing the waste;

(e) where the contravention has injured, damaged or endangered animal life, plant life, human health or safety, or the natural environment or is likely to injure, damage or endanger animal life, plant life, human health or safety, or the natural environment,

(i) repairing the injury or damage,

(ii) preventing the injury or damage,

(iii) decreasing, eliminating or ameliorating the effects of the damage, and

(iv) restoring the natural environment;

(f) where the contravention has caused damage to or endangered or is likely to cause damage to or endanger existing water supplies, providing temporary or permanent alternate water supplies;

(g) submitting a plan for achieving compliance with the provision, term or condition, including the engagement of contractors or consultants satisfactory to a provincial officer;

(h) submitting an application for an environmental compliance approval, renewable energy approval, licence or permit;

(h.1) registering an activity under Part II.2;

(i) monitoring and recording in relation to the natural environment and reporting on the monitoring and recording;

(j) posting notice of the order; and

(k) if the provincial officer reasonably believes that a term or condition of a renewable energy approval is being or has been contravened, doing any other thing referred to in subsection 16 (3) of the *Ontario Water Resources Act*. 1998, c. 35, s. 16; 2005, c. 12, s. 1 (37); 2009, c. 12, Sched. G, s. 15 (2, 3); 2010, c. 16, Sched. 7, s. 2 (61, 62).

Power to require response to inquiries

157.0.1 (1) For the purposes of determining compliance of a person with this Act or the regulations, a provincial officer may, at any reasonable time and with any reasonable assistance, require the person, or any person employed by or providing services to the person, to respond to reasonable inquiries. 2010, c. 16, Sched. 7, s. 2 (63).

Same

(2) For the purposes of subsection (1), a provincial officer may make inquiries by telephone or by any other means of communication. 2010, c. 16, Sched. 7, s. 2 (63).

Order by provincial officer re preventive measures

157.1 (1) A provincial officer may issue an order to any person who owns or who has management or control of an undertaking or property if the provincial officer reasonably believes that the requirements specified in the order are necessary or advisable so as,

(a) to prevent or reduce the risk of a discharge of a contaminant into the natural environment from the undertaking or property; or

(b) to prevent, decrease or eliminate an adverse effect that may result from,

(i) the discharge of a contaminant from the undertaking, or

(ii) the presence or discharge of a contaminant in, on or under the property. 2005, c. 12, s. 1 (38).

Information to be included in order

(2) The order shall,

(a) briefly describe the reasons for the order and the circumstances on which the reasons are based; and

(b) state that a review of the order may be requested in accordance with section 157.3. 1998, c. 35, s. 16.

What the order may require

(3) The order may require the person to whom it is directed to comply with any directions specified under subsection (4), within the time specified. 1998, c. 35, s. 16.

Same

(4) The following directions may be specified in the order:

1. Any direction listed in subsection 18 (1).
2. A direction to secure, by means of locks, gates, fences, security guards or other means, any land, place or thing. 1998, c. 35, s. 16.

Where order requires report

(5) Where the order requires a person to make a report, the report shall be made to a provincial officer. 1998, c. 35, s. 16.

Amendment or revocation of orders under ss. 157 and 157.1

157.2 (1) An order issued under section 157 or 157.1 may, by order, be amended or revoked by the provincial officer who issued it or by the Director.

Same

(2) A provincial officer or Director who amends or revokes an order shall give written notice of the amendment or revocation to the person to whom the order is directed. 1998, c. 35, s. 16.

Request for review, orders under ss. 157 to 157.2

157.3 (1) A person to whom an order under section 157, 157.1 or 157.2 is directed may, within seven days after being served with a copy of the order, request that the Director review the order. 1998, c. 35, s. 16.

Manner of making request

(2) The request may be made orally, with written confirmation served on the Director within the time specified in subsection (1), or in writing. 1998, c. 35, s. 16.

Contents of request for review

(3) A written request for review under subsection (1) or a written confirmation of an oral request under subsection (2) shall include,

(a) the portions of the order in respect of which the review is requested;

(b) any submissions that the applicant for the review wishes the Director to consider; and

(c) for the purpose of subsection (7), an address for service by mail or by electronic facsimile transmission or by such other means of service as the regulations may prescribe. 1998, c. 35, s. 16.

No automatic stay

(4) The request for review does not stay the order, unless the Director orders otherwise in writing. 1998, c. 35, s. 16.

Decision of Director

(5) A Director who receives a request for review may,

(a) revoke the order of the provincial officer; or

(b) by order directed to the person requesting the review, confirm or alter the order of the provincial officer. 1998, c. 35, s. 16.

Same

(6) For the purposes of subsection (5), the Director may substitute his or her own opinion for that of the provincial officer. 1998, c. 35, s. 16.

Notice of decision

(7) The Director shall serve the person requesting the review with a copy of,

(a) a decision to revoke the order of the provincial officer; or

(b) an order to confirm or amend the order of the provincial officer, together with reasons. 1998, c. 35, s. 16.

Automatic confirmation of order

(8) If, within seven days of receiving a written request for review or a written confirmation of an oral request for review, the Director does not make a decision under subsection (5) and give oral or written notice of the decision to the person requesting the review, the order in respect of which the review is sought shall be deemed to have been confirmed by order of the Director. 1998, c. 35, s. 16.

Same

(9) For the purpose of section 140 and a hearing required under that section, a confirming order deemed to have been made by the Director under subsection (8),

(a) shall be deemed to be directed to each person to whom the order of the provincial officer was directed; and

(b) shall be deemed to have been served, on each person to whom the order of the provincial officer was directed, at the expiry of the time period referred to in subsection (8). 1998, c. 35, s. 16; 2000, c. 26, Sched. F, s. 12 (12); 2005, c. 12, s. 1 (39).

Same

(10) Subsections (8) and (9) do not apply if, within seven days of receiving the request for review, the Director stays the order under subsection (4) and gives written notice to the person requesting the review that the Director requires additional time to make a decision under subsection (5). 2005, c. 12, s. 1 (40).

Notice by provincial officer re Part II.2

157.4 (1) A provincial officer may give a notice in writing to a person who is engaging in an activity prescribed by the regulations for the purposes of subsection 20.21 (1) stating that the provincial officer reasonably believes that the person is contravening or has contravened a provision of a regulation made for the purposes of Part II.2 in respect of the activity. 2010, c. 16, Sched. 7, s. 2 (64).

Contents of notice

(2) A notice given under subsection (1) may set out one or more measures that have been prescribed by the regulations for the purposes of this section and require the person to carry out the measures within a time specified in the notice. 2010, c. 16, Sched. 7, s. 2 (64).

Amendment or revocation of notice

(3) A notice given under subsection (1) may be amended or revoked by the provincial officer who gave it or by the Director by giving written notice of the amendment or revocation to the person to whom the notice given under subsection (1) is directed. 2010, c. 16, Sched. 7, s. 2 (64).

Review of notice

(4) A person to whom a notice is given under subsection (1) may, within seven days after being served with a copy of the notice, request that the Director review the notice. 2010, c. 16, Sched. 7, s. 2 (64).

Same

(5) Subsections 157.3 (2) to (8) and (10) apply, with necessary modifications, in respect of a review of a notice under this section. 2010, c. 16, Sched. 7, s. 2 (64).

Entry or inspection order

158. (1) A justice may issue an order authorizing a provincial officer to do anything set out in subsection 156 (1) or (2) or section 156.1 if the justice is satisfied, on evidence under oath by a provincial officer, that there is reasonable ground to believe that it is appropriate for the administration of this Act or the regulations for the provincial officer to do anything set out in subsection 156 (1) or (2) or section 156.1 and that the provincial officer may not be able to effectively carry out his or her duties without an order under this section because,

(a) no occupier is present to grant access to a place that is locked or otherwise inaccessible;

(b) a person has prevented the provincial officer from doing anything set out in subsection 156 (1) or (2) or section 156.1;

(c) there is reasonable ground to believe that a person may prevent a provincial officer from doing anything set out in subsection 156 (1) or (2) or section 156.1;

(d) it is impractical, because of the remoteness of the place to be inspected or because of any other reason, for the provincial officer to obtain an order under this section without delay if access is denied; or

(e) there is reasonable ground to believe that an attempt by the provincial officer to do anything set out in subsection 156 (1) or (2) or section 156.1 without the order,

(i) might not achieve its purpose, or

(ii) might endanger human health or safety, property or the natural environment. 1998, c. 35, s. 17.

Same

(2) Subsections 156 (3), (3.1), (4) and (5) apply to an inspection under an order under this section. 1998, c. 35, s. 17.

Expiry

(3) Unless renewed, an order under this section expires on the earlier of the day specified for the purpose in the order and the day that is 30 days after the date on which the order is made. 1998, c. 35, s. 17; 2009, c. 33, Sched 15, s. 5 (4).

Renewal

(4) An order under this section may be renewed in the circumstances in which an order may be made under subsection (1), before or after expiry, for one or more periods each of which is not more than 30 days. 1998, c. 35, s. 17.

When to be executed

(5) An order under this section shall be carried out between 6 a.m. and 9 p.m., unless the order otherwise authorizes. 1998, c. 35, s. 17.

Application without notice

(6) An order under this section may be issued or renewed on application without notice. 1998, c. 35, s. 17.

Samples and copies

159. A provincial officer may detain samples and copies obtained under section 156, 156.1 or 158 for any period and for any of the purposes of this Act and the regulations. R.S.O. 1990, c. E.19, s. 159; 1998, c. 35, s. 18.

Seizure during inspection

160. During an inspection under section 156, 156.1 or 158, a provincial officer may, without a warrant or court order, seize any thing that is produced to the provincial officer or that is in plain view, if,

(a) the provincial officer reasonably believes that the thing will afford evidence of an offence under this Act;

(b) the provincial officer reasonably believes that the thing was used or is being used in connection with the commission of an offence under this Act and that the seizure is necessary to prevent the continuation or repetition of the offence; or

(c) the thing is discharging or is likely to discharge a contaminant into the natural environment and an adverse effect has resulted or is likely to result from the discharge. 1998, c. 35, s. 19.

Warrantless search, exigent circumstances

161. (1) In this section,

"offence" means an offence under this Act related to,

(a) the discharge of a contaminant into the natural environment that causes or is likely to cause an adverse effect, or

(b) hazardous waste or hauled liquid industrial waste.

Search by provincial officer re actual pollution

(2) A provincial officer may, without a search warrant, search any place other than a room actually used as a dwelling if the provincial officer has reasonable ground to believe,

(a) that an offence has been committed;

(b) that there is in such place any thing that will afford evidence as to the commission of the offence; and

(c) that there are exigent circumstances that make it impractical to obtain a search warrant. R.S.O. 1990, c. E.19, s. 161 (1, 2).

Seizure during search

(3) During a search under subsection (2), a provincial officer may, without warrant or court order, seize any thing if,

(a) the provincial officer reasonably believes that the thing will afford evidence of an offence; or

(b) the provincial officer reasonably believes that the thing was used or is being used in connection with the commission of an offence and that the seizure is necessary to prevent the continuation or repetition of the offence. 1998, c. 35, s. 20.

(4) REPEALED: 1998, c. 35, s. 20.

Detention or removal, things seized

161.1 (1) A provincial officer who seizes any thing under section 160 or 161 may remove the thing or may detain it in the place where it is seized.

Receipt

(2) Where possible, the provincial officer shall inform the person from whom a thing is seized under section 160 or 161 as to the reason for the seizure and shall give the person a receipt for the thing seized. 1998, c. 35, s. 21.

Report to justice, things seized

162. (1) A provincial officer who seizes any thing during an inspection or search under section 160 or 161 shall bring the thing seized before a justice or, if that is not reasonably possible, shall report the seizure to a justice. 1998, c. 35, s. 22.

Application of *Provincial Offences Act*

(2) Sections 159 and 160 of the *Provincial Offences Act* apply with necessary modifications in respect of a thing seized by a provincial officer during an inspection or search under section 160 or 161. R.S.O. 1990, c. E.19, s. 162 (2).

Disposition of things seized

162.1 (1) Where the Director believes that, given the nature of a thing seized under section 160 or 161, the thing may pose a risk to human health or safety or to property, the Director may direct the person having custody of the thing, to dispose of the thing in a manner satisfactory to the Director.

Disposition of seized perishables

(2) Where the person having custody of any thing seized under section 160 or 161 believes that the thing will rot, spoil or otherwise perish, the person may dispose of the thing.

Non-application of provision

(3) Section 162 does not apply to a thing disposed of in accordance with this section.

Forfeiture

(4) A thing disposed of in accordance with this section is forfeited to the Crown. 1998, c. 35, s. 23.

Notice of disposal of things seized

162.2 (1) Where a thing has been disposed of in accordance with section 162.1, the Director shall ensure that a provincial officer gives written notice of the seizure and disposal, within 15 days of the disposal,

(a) to every person whom the provincial officer knows or has reason to believe is an owner of the thing seized; and

(b) to every person who has a security interest in the thing that is perfected by registration under the *Personal Property Security Act* against the name of any person whom the provincial officer knows or has reason to believe is the owner. 1998, c. 35, s. 23.

Contents of notice

(2) Notice under subsection (1) shall include,

(a) a description of the thing seized sufficient to enable it to be identified;

(b) the location at which the thing was seized;

(c) the date of the seizure and disposal;

(d) the name and telephone number of the provincial officer who seized the thing or of his or her delegate;

(e) a statement of the reason for the seizure and disposal;

(f) a reference to the statutory provision authorizing the seizure and disposal; and

(g) a reference to the statutory provision permitting the person to apply to the Superior Court of Justice for relief against the forfeiture. 1998, c. 35, s. 23; 2001, c. 9, Sched. G, s. 5 (21).

Forfeiture may be ordered

162.3 (1) On the application of the Director, the Superior Court of Justice may order that a thing seized under section 160 or 161 or under a warrant issued under the *Provincial Offences Act* in connection with the commission or suspected commission of an offence under this Act be forfeited to the Crown. 1998, c. 35, s. 23; 2001, c. 9, Sched. G, s. 5 (21).

Where no order to be made

(2) No order shall be made under subsection (1) unless the court is satisfied that,

(a) the seizure was lawful; and

(b) no later than seven days before the hearing of the application, written notice was provided by a provincial officer,

(i) to every person whom the provincial officer knows or has reason to believe is an owner of the thing seized,

(ii) to every person who has a security interest in the thing that is perfected by registration under the *Personal Property Security Act* against the name of any person whom the provincial officer knows or has reason to believe is the owner,

(iii) where the thing seized is a vehicle, to every person who has a security interest in the vehicle that is perfected by registration under the *Personal Property Security Act* against the vehicle identification number of the vehicle, and

(iv) where the thing seized is a vehicle and the vehicle is registered under the *Highway Traffic Act*, to the registered owner. 1998, c. 35, s. 23.

Contents of notice

(3) Notice under subsection (2) shall include,

(a) a description of the thing seized sufficient to enable it to be identified;

(b) the location at which the thing was seized;

(c) the date of the seizure;

(d) the name and telephone number of the provincial officer who seized the thing or of his or her delegate;

(e) a statement of the reason for the seizure;

(f) a reference to the statutory provision authorizing the seizure;

(g) a statement that an order for forfeiture of the thing is being sought under this section; and

(h) a statement that the person to whom the notice is provided may make submissions to the Superior Court of Justice with respect to the issuance of an order under this section. 1998, c. 35, s. 23; 2001, c. 9, Sched. G, s. 5 (21).

Disposition of things forfeited

(4) A thing forfeited under this section may be disposed of as the Director directs. 1998, c. 35, s. 23.

Relief against forfeiture

(5) A person who had an interest in a thing forfeited under section 162.1 or this section may apply to the Superior Court of Justice for relief against the forfeiture and the court may make an order providing for any relief that it considers appropriate, including, but not limited to, one or more of the following orders:

1. An order directing that the thing or any part of the thing be returned to the applicant.
2. An order directing that any interest in the thing be vested in the applicant.
3. An order directing that an amount be paid by the Crown to the applicant by way of compensation for the forfeiture. 1998, c. 35, s. 23; 2001, c. 9, Sched. G, s. 5 (21).

When relief not to be ordered

(6) The court shall not make an order for relief under subsection (5) in respect of a thing forfeited where the person applying for the relief,

(a) has been served with an order requiring the person to pay an environmental penalty in connection with a matter that was associated with the seizure of the thing, unless the order has been revoked; or

(b) has been charged with an offence that was associated with the seizure of the thing, unless the charge has been withdrawn or dismissed. 1998, c. 35, s. 23; 2005, c. 12, s. 1 (41).

Use of force

163. A provincial officer may use such force as is reasonably necessary,

(a) to carry out an order or direction issued under Part X;

(b) to carry out a court order issued under this Part;

(c) to execute a warrant issued under the *Provincial Offences Act*; or

(d) to prevent the destruction of any thing that the provincial officer reasonably believes may afford evidence of an offence under this Act. 1998, c. 35, s. 24.

Order by justice, use of devices, etc.

163.1 (1) In this section,

"device" means a substance or tracking device that, when placed or installed in or on any place, land or thing, may be used to help ascertain, by electronic or other means, the origin, identity or location of anything.

Order may be issued

(2) On application without notice, a justice may issue an order in writing authorizing a provincial officer, subject to this section, to use any device, investigative technique or procedure or to do any thing described in the order if the justice is satisfied by evidence under oath that there are reasonable grounds to believe that an offence against this Act has been or will be committed and that information concerning the offence will be obtained through the use of the device, technique or procedure or the doing of the thing.

Limitation

(3) An order under this section shall not authorize the interception of any private communication.

Same

(4) No device, technique or procedure shall be used to intercept any private communication under an order issued under this section.

Terms and conditions of order

(5) An order issued under this section shall contain such terms and conditions as the justice considers advisable in the circumstances.

Activities under order

(6) An order issued under this section may authorize a provincial officer,

(a) to place, install, maintain or remove a device in or on any land, place or thing; and

(b) to monitor, or to have monitored, a device or information from a device placed or installed in or on any land, place or thing.

Duration of order

(7) An order issued under this section is valid for a period of 60 days or for such shorter period as may be specified in the order.

Further orders

(8) A justice may issue further orders under subsection (2). 1998, c. 35, s. 24.

Restoration of property

164. A provincial officer who makes or causes the making of an excavation in the course of his or her duties under this Act shall restore the property, so far as is reasonably possible, to the condition it was in before the excavation was made. R.S.O. 1990, c. E.19, s. 164; 2005, c. 12, s. 1 (42).

Licence, etc., condition, permission to inspect

165. It is a condition of every licence, permit, environmental compliance approval, certificate of property use or renewable energy approval under this Act that the holder must forthwith on request permit provincial officers to carry out inspections authorized by the following provisions of any place, other than any room actually used as a dwelling, to which the licence, permit, environmental compliance approval, certificate of property use or renewable energy approval relates:

1. Section 156, 156.1 or 158 of this Act.

2. Section 13, 14 or 16 of the *Nutrient Management Act, 2002*.

3. Section 15, 15.1 or 17 of the *Ontario Water Resources Act*.
4. Section 19, 19.1 or 20 of the *Pesticides Act*.
5. Section 81, 82 or 89 of the *Safe Drinking Water Act, 2002*.
6. Section 15 or 18 of the *Toxics Reduction Act, 2009*. 2009, c. 19, s. 67 (15); 2010, c. 16, Sched. 7, s. 2 (65).

Note: On the later of the day the Statutes of Ontario, 2009, chapter 19, section 65 comes into force and the day the Statutes of Ontario, 2009, chapter 19, subsection 67 (15) comes into force, paragraph 6 is amended by striking out "Section 15 or 18" at the beginning and substituting "Section 15, 15.1 or 18". See: 2009, c. 19, ss. 67 (16), 73 (3).

Records

165.1 (1) Every person required by this Act or the regulations to retain a record shall make it available to a provincial officer for inspection upon his or her request. 1992, c. 1, s. 33; 2009, c. 33, Sched. 15, s. 5 (5).

Copies or extracts

(2) The provincial officer may, on giving a receipt, remove any record referred to in subsection (1) for the purpose of making copies or extracts and shall promptly return the record. 2001, c. 17, s. 2 (35).

Records in electronic form

(3) If a record is retained in electronic form, the provincial officer may require that a copy of it be provided to him or her on paper or in a machine-readable medium or both. 2001, c. 17, s. 2 (35).

Police assistance and motor vehicle inspections

Calling for assistance of member of police force

166. (1) Whenever a provincial officer is required or empowered by this Act or the regulations to do or direct the doing of anything, such provincial officer may take such steps and employ such assistance as is necessary to accomplish what is required, and may, when obstructed in so doing, call for the assistance of any member of the Ontario Provincial Police Force or the police force in the area where the assistance is required and it is the duty of every member of a police force to render such assistance. R.S.O. 1990, c. E.19, s. 166 (1).

Stop and inspect powers: motor vehicle emissions

(2) For the purpose of ascertaining whether a system or device installed on, attached to or incorporated in any motor vehicle to prevent or lessen the discharge of any emission is operating in compliance with this Act and the regulations, a provincial officer or a police officer may stop and inspect the motor vehicle.

Same

(3) An inspection under subsection (2) shall be limited to what is reasonably required to ascertain whether the system or device is operating in compliance with this Act and the regulations.

Same

(4) In an inspection under subsection (2), the provincial officer or police officer may,

(a) require the driver of the motor vehicle to submit the motor vehicle to such tests at such places and times as the provincial officer or police officer considers reasonable;

(b) require the driver of the motor vehicle to produce any documents, including licenses and permits, related to the operation or ownership of the motor vehicle; and

(c) require the driver of the motor vehicle to operate, use or set in motion the vehicle or any part of the vehicle, under the conditions specified by the provincial officer or police officer.

Police assistance

(5) Where a provincial officer considers it necessary or expedient to do so, he or she may call for the assistance of any member of the Ontario Provincial Police Force or the police force in the area where the assistance is required for an inspection under subsection (2), and it is the duty of every member of a police force to render the assistance. 1998, c. 35, s. 26.

167. REPEALED: 1998, c. 35, s. 27.

Matters confidential

168. (1) Except as to information in respect of the deposit, addition, emission or discharge of a contaminant into the natural environment, every provincial officer shall preserve secrecy in respect of all matters that come to his or her knowledge in the course of any survey, examination, test or inquiry under this Act or the regulations and shall not communicate any such matters to any person except,

(a) as may be required in connection with the administration of this Act and the regulations or any proceeding under this Act or the regulations;

(a.1) as authorized under the *Regulatory Modernization Act, 2007*;

(b) to the provincial officer's counsel; or

(c) with the consent of the person to whom the information relates. R.S.O. 1990, c. E.19, s. 168 (1); 2007, c. 4, s. 30 (2); 2009, c. 19, s. 67 (9).

Testimony in civil suit

(2) Except in a proceeding under this Act or the regulations, no provincial officer shall be required to give testimony, other than testimony in respect of the deposit, addition, emission or discharge of a contaminant into the natural environment, in any civil suit or proceeding with regard to information obtained by him or her in the course of any survey, examination, test or inquiry under this Act or the regulations. R.S.O. 1990, c. E.19, s. 168 (2); 2009, c. 19, s. 67 (9).

PART XV.1
RECORDS OF SITE CONDITION

Definitions, Part XV.I

168.1 In this Part,

"building" has the same meaning as in the *Building Code Act, 1992*; ("bâtiment")

"construct" has the same meaning as in the *Building Code Act, 1992*; ("construire")

"owner" includes a person prescribed by the regulations; ("propriétaire")

"phase one environmental site assessment" means an assessment of property conducted in accordance with the regulations by or under the supervision of a qualified person to determine the likelihood that one or more contaminants have affected any land or water on, in or under the property; ("évaluation environnementale de site de phase I")

"phase two environmental site assessment" means an assessment of property conducted in accordance with the regulations by or under the supervision of a qualified person to determine the location and

concentration of one or more contaminants in the land or water on, in or under the property; ("évaluation environnementale de site de phase II")

"qualified person" means a person who meets the qualifications prescribed by the regulations; ("personne compétente")

"Registry" means the Environmental Site Registry; ("Registre")

"risk assessment" means an assessment of risks prepared in accordance with the regulations by or under the supervision of a qualified person. ("évaluation des risques") 2001, c. 17, s. 2 (36); 2007, c. 7, Sched. 13, s. 3.

Interpretation, effect on cause of action

168.2 (1) Except as provided in subsections 168.3 (3) and (4) and 168.9 (12), this Part shall not be construed as affecting any cause of action that a person would have in the absence of this Part. 2001, c. 17, s. 2 (36); 2006, c. 19, Sched. K, s. 2 (4); 2007, c. 7, Sched. 13, s. 4 (1).

Interpretation, meeting standards

(2) For purposes of this Part, a property meets the applicable site condition standards prescribed by the regulations for all contaminants prescribed by the regulations or the standards specified in a risk assessment for a contaminant if the concentration of the contaminants in the land and water on, in or under the property does not exceed the standards. 2007, c. 7, Sched. 13, s. 4 (2).

Environmental Site Registry

168.3 (1) The Director shall establish, maintain and operate a registry known in English as the Environmental Site Registry and in French as Registre environnemental des sites. 2001, c. 17, s. 2 (36).

Purposes

(2) The purposes of the Registry are:

1. To allow the filing of records of site condition for the purposes of this Part.
2. To facilitate public access to information contained in records of site condition that have been filed under this Part and to other information filed in accordance with this Act and the regulations.
3. Such other purposes as are prescribed. 2001, c. 17, s. 2 (36); 2007, c. 7, Sched. 13, s. 5 (1).

Protection from liability

(3) Despite subsection 180 (2), no action or other proceeding shall be commenced against the Crown in right of Ontario, a public servant employed under Part III of the *Public Service of Ontario Act, 2006*, a person or body to whom powers and duties of the Director are delegated under section 168.9 or an employee of a person or body to whom powers and duties of the Director are delegated under section 168.9 arising from any inaccuracy contained in a record of site condition that is filed in the Registry under this Act. 2001, c. 17, s. 2 (36); 2006, c. 35, Sched. C, s. 36 (6).

Same

(4) No action or other proceeding shall be commenced against a municipality or a conservation authority or against an officer, employee or agent of a municipality or conservation authority in relation to the following, if the action or proceeding arises from any inaccuracy contained in a record of site condition that is filed in the Registry under this Act:

1. The issuance of a permit under section 8 or 10 of the *Building Code Act, 1992*.
2. Any act done in the execution or intended execution of any power or duty under the *Planning Act* or any alleged neglect or default in the execution of any such power or duty.

3. Any act done in the execution or intended execution of any power or duty under any other prescribed Act or any prescribed provisions under a prescribed Act or any alleged neglect or default in the execution of any such power or duty. 2007, c. 7, Sched. 13, s. 5 (2).

Prohibition on certain changes of use

168.3.1 (1) Subject to subsection (2), a person shall not,

(a) change the use of a property from industrial or commercial use to residential or parkland use;

(b) change the use of a property in a manner prescribed by the regulations; or

(c) construct a building if the building will be used in connection with a change of use that is prohibited by clause (a) or (b). 2001, c. 17, s. 2 (37).

Exception

(2) Subsection (1) does not apply if,

(a) a record of site condition has been filed in the Registry in respect of the property under section 168.4; and

(b) the use specified under paragraph 3 of subsection 168.4 (2) in the record of site condition is the use to which the property is changed under clause (1) (a) or (b). 2001, c. 17, s. 2 (37).

Submission for filing, record of site condition

168.4 (1) An owner of a property may submit for filing in the Registry a record of site condition in respect of the property if all of the following criteria are satisfied:

1. A qualified person has certified in the record of site condition that a phase one environmental site assessment of the property has been conducted.
2. A qualified person has certified in the record of site condition that,
   i. a phase two environmental site assessment of all or part of the property was conducted with respect to one or more contaminants, or
   ii. as of the certification date, no phase two environmental site assessment is required by the regulations for any part of the property and, in the opinion of the qualified person, it is not necessary for any other reason to conduct a phase two environmental site assessment for any part of the property.
3. If a phase two environmental site assessment was conducted but for only part of the property, a qualified person has certified in the record of site condition that, as of the certification date,
   i. no phase two environmental site assessment was required by the regulations for any other part of the property, and
   ii. in the opinion of the qualified person, it was not necessary for any other reason to conduct a phase two environmental site assessment for any other part of the property.
4. If a phase two environmental site assessment was conducted for all or part of the property, a qualified person has certified in the record of site condition that,
   i. as of the certification date, the property for which the phase two environmental site assessment was conducted meets,
      A. the applicable full depth background site condition standards prescribed by the regulations for all contaminants prescribed by the regulations, except for those contaminants specified by the qualified person,

B. the applicable full depth generic site condition standards prescribed by the regulations for all contaminants prescribed by the regulations, except for those contaminants specified by the qualified person, or

C. the applicable stratified site condition standards prescribed by the regulations for all contaminants prescribed by the regulations, except for those contaminants specified by the qualified person, and

ii. for each contaminant excepted by the qualified person from the certification under subparagraph i,

A. a risk assessment was prepared for the contaminant with respect to the property for which the phase two environmental site assessment was conducted,

B. the Director has accepted the risk assessment under clause 168.5 (1) (a), and

C. as of the certification date, the property for which the phase two environmental site assessment was conducted meets the standards specified in the risk assessment for the contaminant.

5. The record of site condition contains everything required by subsection (2) and has been completed in accordance with the regulations. 2001, c. 17, s. 2 (36); 2007, c. 7, Sched. 13, s. 6 (1).

Contents of record of site condition

(2) The person who submits for filing a record of site condition in respect of a property shall ensure that, in accordance with the regulations, the record of site condition contains the following:

1. A description of the property.
2. The name of the person submitting the record of site condition for filing and the names of any other owners of the property.
3. The type of property use to which the property for which the record of site condition is submitted for filing is to be put.
4. Which standards prescribed by the regulations were applied for the purpose of the record of site condition.
5. A description of any soil removals or other action taken to reduce the concentration of contaminants on, in or under the property.
6. For each contaminant for which sampling and analysis has been performed, the maximum known concentration of the contaminant on, in or under the property as of the certification date.
7. A statement indicating whether a certificate of property use has been issued in respect of the property.
8. A list of all reports relied on by qualified persons in making the certifications referred to in subsection (1).
9. Such other certifications, information and documents as are prescribed by the regulations. 2001, c. 17, s. 2 (36); 2007, c. 7, Sched. 13, s. 6 (2-5).

Submitting a record of site condition

(3) If a record of site condition is submitted for filing under this section in respect of a property, the Director shall,

(a) give a notice of receipt to the owner who submitted the record of site condition, once the Director is satisfied that everything required by subsection (2) has been submitted for filing; and

(b) within the time prescribed by the regulations from the date set out in the notice of receipt given under clause (a), give a notice or acknowledgement under subsection (3.1) to the owner who submitted the record of site condition. 2007, c. 7, Sched. 13, s. 6 (6).

Same

(3.1) The Director shall give one of the following to the person to whom the Director has given a notice of receipt under clause (3) (a):

1. Written notice that the record of site condition cannot be filed because it has not been completed in accordance with the regulations.
2. Written notice stating that the Director intends to conduct a review in relation to the record of site condition before the record of site condition can be filed in the Registry.
3. Written acknowledgement, specifying the date, that the record of site condition has been filed in the Registry. 2007, c. 7, Sched. 13, s. 6 (6).

Notice that a record of site condition cannot be filed

(3.2) A notice given under paragraph 1 of subsection (3.1) shall identify the manner in which the record of site condition has not been completed in accordance with the regulations. 2007, c. 7, Sched. 13, s. 6 (6).

Notice after review relating to record of site condition

(3.3) If a notice is given under paragraph 2 of subsection (3.1), after conducting the review, the Director shall,

(a) give a notice to the owner indicating that a defect prescribed by the regulations has been found in relation to the record of site condition; or

(b) give a written acknowledgment to the owner, specifying the date, that the record of site condition has been filed in the Registry. 2007, c. 7, Sched. 13, s. 6 (6).

Correction of defect

(3.4) If an owner to whom notice has been given under clause (3.3) (a),

(a) submits for filing a new record of site condition in respect of the property under subsection (1); or

(b) submits further information or documents to the Director in relation to the original record of site condition that was submitted under subsection (1),

and the Director is satisfied that, as a result of the submission, there is no defect prescribed by the regulations in relation to the record of site condition, the Director shall give a written acknowledgment to the owner, specifying the date, that the record of site condition has been filed in the Registry. 2007, c. 7, Sched. 13, s. 6 (6).

Date of filing

(4) A record of site condition is deemed to have been filed in the Registry under this section on the date specified in the acknowledgement given by the Director under this section. 2007, c. 7, Sched. 13, s. 6 (7).

Retention of reports

(5) If a qualified person has relied on a report in making a certification referred to in subsection (1) or (2) in a record of site condition that has been filed under this section, the following persons shall retain a copy of the report for the period prescribed by the regulations:

1. The owner of the property who submitted the record of site condition for filing or who filed the record of site condition.
2. The qualified person who made the certification. 2007, c. 7, Sched. 13, s. 6 (8, 9).

Transition

(6) If, pursuant to the Ministry publication entitled "Guideline for Use at Contaminated Sites in Ontario", originally dated June 1996 and later revised, a record of site condition in respect of a property was submitted to the Ministry before this section came into force, the owner of the property may, despite subsections (1) and (2), file the record of site condition in the Registry if both of the following criteria are satisfied:

1. The Ministry has acknowledged in writing receipt of the record of site condition.
2. The owner of the property files a notice in the Registry certifying that the requirements prescribed by the regulations have been complied with. 2001, c. 17, s. 2 (36).

Same

(7) If a record of site condition is filed in the Registry under subsection (6),

(a) the notice referred to in paragraph 2 of subsection (6) shall be deemed to be part of the record of site condition;

(b) the land use specified in the record of site condition shall be deemed to have been specified as the type of property use under paragraph 3 of subsection (2); and

(c) the record of site condition shall be deemed to contain,

(i) a certification under sub-subparagraph 4 i A of subsection (1), if the record of site condition indicates that a background assessment or restoration approach was used,

(ii) a certification under sub-subparagraph 4 i B of subsection (1), if the record of site condition indicates that a generic full depth assessment or restoration approach was used,

(iii) a certification under sub-subparagraph 4 i C of subsection (1), if the record of site condition indicates that a generic stratified assessment or restoration approach was used, or

(iv) a certification under subparagraph 4 ii of subsection (1), if the record of site condition indicates that a site specific risk assessment approach was used. 2001, c. 17, s. 2 (36).

Acknowledgment of filing

(8) If a record of site condition is filed in the Registry under subsection (6), the Director shall promptly give the person who filed the record of site condition a written acknowledgment. 2007, c. 7, Sched. 13, s. 6 (10).

Date of filing

(9) A record of site condition that is filed in the Registry under subsection (6) shall be deemed to have been filed in the Registry on the date specified in the acknowledgment given under subsection (8). 2007, c. 7, Sched. 13, s. 6 (10).

Note: On a day to be named by proclamation of the Lieutenant Governor, section 168.4 is amended by the Statutes of Ontario, 2007, chapter 7, Schedule 13, subsection 6 (11) by adding the following subsection:

Correction of errors

(10) If an owner of property for which a record of site condition has been filed in the Registry under this section requests the Director to correct an error in the record of site condition, the Director shall correct the error in the record of site condition if the error is of a prescribed type and if the correction is made in the circumstances that satisfy the criteria, if any, prescribed by the regulations and does not contravene any prohibition, if any, prescribed by the regulations. 2007, c. 7, Sched. 13, s. 6 (11).

See: 2007, c. 7, Sched. 13, ss. 6 (11), 14 (2).

Director's response to risk assessment

168.5 (1) If an owner of property submits a risk assessment relating to a contaminant and the property to the Director, the Director shall, within the time prescribed by the regulations,

(a) give the person notice in writing that the Director accepts the risk assessment; or

(b) give the person notice in writing that the Director does not accept the risk assessment for reasons specified by the Director in the notice. 2001, c. 17, s. 2 (36).

Validity of decision

(2) A decision of the Director to accept or not accept a risk assessment is not invalid solely on the ground that the decision was not made within the time prescribed by the regulations. 2001, c. 17, s. 2 (36).

Certificate of property use

168.6 (1) If a risk assessment relating to a property has been accepted under clause 168.5 (1) (a), the Director may issue a certificate of property use to the owner of the property, requiring the owner to do any of the following things:

1. Take any action that is specified in the certificate and that, in the Director's opinion, is necessary to prevent, eliminate or ameliorate any adverse effect that has been identified in the risk assessment, including installing any equipment, monitoring any contaminant or recording or reporting information for that purpose.
2. Refrain from using the property for any use specified in the certificate or from constructing any building specified in the certificate on the property. 2001, c. 17, s. 2 (36); 2006, c. 19, Sched. K, s. 2 (5, 6); 2007, c. 7, Sched. 13, s 7.

Restriction

(2) A certificate of property use shall not require an owner of property to take any action that would have the effect of reducing the concentration of a contaminant on, in or under the property to a level below the level that is required to meet the standards specified for the contaminant in the risk assessment. 2001, c. 17, s. 2 (36).

Revocation or amendment

(3) The Director may, on his or her own initiative or on application by the owner of the property in respect of which a certificate has been issued under subsection (1),

(a) alter any terms and conditions in the certificate or impose new terms and conditions; or

(b) revoke the certificate. 2001, c. 17, s. 2 (36).

Occupants

(4) If a certificate of property use contains a provision requiring the owner of property to refrain from using the property for a specified use or from constructing a specified building on the property,

(a) the owner of the property shall ensure that a copy of the provision is given to every occupant of the property;

(b) the provision applies, with necessary modifications, to every occupant of the property who receives a copy of the provision; and

(c) the owner of the property shall ensure that every occupant of the property complies with the provision. 2001, c. 17, s. 2 (36).

Notice to prescribed persons

(5) If a certificate of property use is issued, altered or revoked under this section, the Director shall give notice of the certificate, alteration or revocation to the persons prescribed by the regulations. 2001, c. 17, s. 2 (38).

Prohibition on construction or use

(6) Despite any other Act, if a certificate of property use contains a provision requiring the owner of property to refrain from using the property for a specified use or from constructing a specified building on the property, no permit, licence, approval or other instrument shall be issued to any person, under any provision prescribed by the regulations, that would authorize the person to use the property for the specified use, to construct the specified building or to construct a building that will be used for the specified use. 2001, c. 17, s. 2 (38).

Consequences of filing record of site condition

168.7 (1) If a record of site condition is filed in the Registry in accordance with section 168.4 with respect to a property, no order shall be issued to any of the following persons under section 7, 8, 12, 17, 18, 97, 157 or 157.1 in respect of a contaminant that was discharged into the natural environment before the certification date and was on, in or under the property as of the certification date:

1. The person who filed or who submitted for filing the record of site condition or a subsequent owner of the property.
2. A person who is in occupation of the property or who was in occupation of the property at any time after the record of site condition was filed.
3. A person who has charge, management or control of the property or who had charge, management or control of the property at any time after the record of site condition was filed.
4. A person who meets the requirements prescribed by the regulations and who, before the certification date,
   i. owned the property,
   ii. was in occupation of the property, or
   iii. had charge, management or control of the property. 2001, c. 17, s. 2 (36); 2007, c. 7, Sched. 13, s. 8 (1, 2).

False or misleading information, etc.

(2) Subsection (1) does not apply if the record of site condition contains false or misleading information or false or misleading certifications. 2007, c. 7, Sched. 13, s. 8 (3).

Contaminants that move to other property

(3) Subsection (1) does not apply if, after the certification date, any of the contaminant moved from the property to which the record of site condition relates to another property. 2001, c. 17, s. 2 (36).

Note: On a day to be named by proclamation of the Lieutenant Governor, subsection (3) is repealed by the Statutes of Ontario, 2007, chapter 7, Schedule 13, subsection 8 (4) and the following substituted:

Contaminants that move to other property

(3) Subject to section 168.7.1, subsection (1) does not apply if, after the certification date, any of the contaminant moved from the land or water on, in or under the property for which a record of site condition has been filed to another property. 2007, c. 7, Sched. 13, s. 8 (4).

See: 2007, c. 7, Sched. 13, ss. 8 (4), 14 (2).

Different use

(4) If the actual use of the property is different from the use specified under paragraph 3 of subsection 168.4 (2) in the record of site condition, subsection (1) does not apply to a person who causes or permits the change in use and who owns, occupies or has charge, management or control of the property at the time of the change unless,

(a) the record of site condition did not contain any certification under subparagraph 4 ii of subsection 168.4 (1);

(b) all of the full depth background site condition standards that are applicable under the regulations to the actual use are the same as or less stringent than the full depth background site condition standards that are applicable to the use specified in the record of site condition, if the record of site condition contained a certification under sub-subparagraph 4 i A of subsection 168.4 (1);

(c) all of the full depth generic site condition standards that are applicable under the regulations to the actual use are the same as or less stringent than the full depth generic site condition standards that are applicable to the use specified in the record of site condition, if the record of site condition contained a certification under sub-subparagraph 4 i B of subsection 168.4 (1); and

(d) all of the stratified site condition standards that are applicable under the regulations to the actual use are the same as or less stringent than the stratified site condition standards that are applicable to the use specified in the record of site condition, if the record of site condition contained a certification under sub-subparagraph 4 i C of subsection 168.4 (1). 2007, c. 7, Sched. 13, s. 8 (5).

Contravention of certificate of property use, etc.

(5) Despite subsection (1), an order may be issued under section 157 against a person who contravenes a term or condition of,

(a) a certificate of property use; or

(b) an order made under this Act in respect of risk management measures described in a record of site condition filed in the Registry under subsection 168.4 (6). 2001, c. 17, s. 2 (36).

Contravention of soil management or disposal regulations

(6) Despite subsection (1), an order may be issued under section 157 against a person who contravenes a provision of a regulation made under clause 176 (1) (g) or 176 (10) (m). 2001, c. 17, s. 2 (36).

Order if contaminant moves

(6.1) Despite subsection (3), if, after the certification date, any of the contaminant moved from the land or water on, in or under the property for which a record of site condition has been filed to another property as a result of a person contravening,

(a) a term or condition of a certificate of property use or of an order referred to in clause (5) (b); or

(b) a provision of a regulation referred to in subsection (6),

subsection (1) does not apply, but solely in respect of that person. 2007, c. 7, Sched. 13, s. 8 (6).

Consent order

(7) Subsection (1) does not apply if the person to whom the order is issued consents in writing to the order. 2001, c. 17, s. 2 (36).

Note: On a day to be named by proclamation of the Lieutenant Governor, the Act is amended by the Statutes of Ontario, 2007, chapter 7, Schedule 13, section 9 by adding the following section:

Contaminants moving to other property

Application

168.7.1 (1) This section applies to a property for which a record of site condition has been filed in the Registry in accordance with section 168.4 when, after the certification date, a contaminant has moved from the land or water on, in or under the property to another property, and the certifications described in this section, if applicable, are made. 2007, c. 7, Sched. 13, s. 9.

Assessment, all property

(2) This section applies if a qualified person has, in accordance with the regulations, certified in the record of site condition that an assessment of the contaminants that were discharged into the natural environment and that were on, in or under the property for which the record of site condition has been filed, as of the certification date, has been conducted by or under the supervision of a qualified person in accordance with the regulations. 2007, c. 7, Sched. 13, s. 9.

Assessment of ground water

(3) The assessment of contaminants referred to subsection (2) must include an assessment of contaminants in the ground water in or under the property. 2007, c. 7, Sched. 13, s. 9.

Exception, full depth background site condition standards

(4) Subsection 168.7 (3) does not apply to a contaminant that has moved from the land or water on, in or under the property for which a record of site condition has been filed to another property at a concentration that does not exceed the applicable full depth background site condition standard for that contaminant, if the record of site condition contains a certification under sub-subparagraph 4 i A of subsection 168.4 (1). 2007, c. 7, Sched. 13, s. 9.

Exception, sensitive property use

(5) Subsection 168.7 (3) does not apply to a contaminant that has moved from the land or water on, in or under the property for which a record of site condition has been filed to another property at a concentration that does not exceed the applicable site condition standard for that contaminant if the record of site condition contains a certification under sub-subparagraph 4 i B or 4 i C of subsection 168.4 (1) and the type of property use specified under paragraph 3 of subsection 168.4 (2) in the record of site condition is a sensitive property use. 2007, c. 7, Sched. 13, s. 9.

Application, not a sensitive property use

(6) If the record of site condition contains a certification under sub-subparagraph 4 i B or 4 i C of subsection 168.4 (1) and the type of property use specified under paragraph 3 of subsection 168.4 (2) in the record of site condition is not a sensitive property use, this section applies if a qualified person has, in accordance with the regulations, made the following certifications in the record of site condition, in addition to the certification referred to in subsection (2):

1. The phase one environmental site assessment of the property referred to in paragraph 1 of subsection 168.4 (1) included an investigation of the existing and permitted land uses within the vicinity of the property in accordance with the regulations to determine whether a sensitive property use is located or permitted within the vicinity of the property.
2. A certification that, as of the date prescribed by the regulations, there is no sensitive property use located or permitted within the vicinity of the property or a certification that, as of the date prescribed by the regulations, there is a sensitive property use located or permitted within the vicinity of the property. 2007, c. 7, Sched. 13, s. 9.

Exception, not a sensitive property use

(7) If a record of site condition contains a certification under sub-subparagraph 4 i B or 4 i C of subsection 168.4 (1) and the type of property use specified under paragraph 3 of subsection 168.4 (2) in the record of site condition is not a sensitive property use, subsection 168.7 (3) does not apply to a contaminant that has moved from the land or water on, in or under the property for which a record of site condition has been filed to another property at a concentration that,

(a) does not exceed the applicable site condition standard for that contaminant if the record of site condition contains a certification that, as of the date prescribed by the regulations, there is no sensitive property use located or permitted within the vicinity of the property; or

(b) does not exceed the applicable site condition standard for that contaminant that would have applied to the property if the type of property use specified under paragraph 3 of subsection 168.4 (2) in the record of site condition were a sensitive property use, if the record of site condition contains a certification that, as of the date prescribed by the regulations, there is a sensitive property use located or permitted within the vicinity of the property. 2007, c. 7, Sched. 13, s. 9.

Prescribed date

(8) A date prescribed by the regulations for the purposes of paragraph 2 of subsection (6) and clauses (7) (a) and (b) shall not be a date that is after the certification date that applies to the record of site condition. 2007, c. 7, Sched. 13, s. 9.

Reference to site condition standard

(9) A reference in this section to an applicable site condition standard for a contaminant means the site condition standard that applied to the contaminant as of the certification date set out in the record of site condition or, in the case of a reference in clause (7) (b), means the site condition standard that would have applied to the contaminant as of the certification date set out in the record of site condition. 2007, c. 7, Sched. 13, s. 9.

Non-application to person who causes or permits discharge

(10) This section does not apply to a person who, before the certification date, caused or permitted the discharge into the natural environment of the contaminant referred to in subsection (1). 2007, c. 7, Sched. 13, s. 9.

Definition

(11) In this section,

"sensitive property use" means one or more types of property uses prescribed by the regulations for the purposes of this section. 2007, c. 7, Sched. 13, s. 9.

See: 2007, c. 7, Sched. 13, ss. 9, 14 (2).

Notice of order to be filed in Registry

168.7.2 (1) The Director shall file notice of the order in the Registry in accordance with the regulations if an order is issued under section 7, 8, 12, 17, 18, 97, 157 or 157.1 with respect to a property for which a record of site condition has been filed in accordance with section 168.4 and if,

(a) pursuant to subsection 168.7 (2), (3), (4) or (6.1), subsection 168.7 (1) does not apply; or

(b) subsection 168.7 (5) or (6) applies. 2007, c. 7, Sched. 13, s. 10.

Notice of compliance with order

(2) If the Director is satisfied that an order referred to in subsection (1) has been complied with, the Director shall file notice of the compliance in the Registry in accordance with the regulations. 2007, c. 7, Sched. 13, s. 10.

Filing of new record of site condition

(3) If the Director is satisfied that an order referred to in subsection (1) has been complied with, but the Director is of the opinion that a certification contained in the record of site condition filed in the Registry does not accurately reflect the current state of the property, subsection (2) does not apply until a new record of site condition is filed in accordance with section 168.4. 2007, c. 7, Sched. 13, s. 10.

Emergencies relating to old contaminants

168.8 (1) If a record of site condition is filed in the Registry in accordance with section 168.4 with respect to a property, the Director may issue an order described in subsection (2) to the person who owns the property if the Director has reasonable grounds to believe that, as a result of the presence of a contaminant that was on, in or under the property as of the certification date, there is danger to the health or safety of any person. 2001, c. 17, s. 2 (36); 2007, c. 7, Sched. 13, s. 11.

Scope of order

(2) An order under subsection (1) may only require the owner, within such times as are specified in the order, to comply with such directions specified in the order as are reasonably necessary to ensure that there is no danger to the health or safety of any person. 2001, c. 17, s. 2 (36).

Same

(3) The directions referred to in subsection (2) may include the following:

1. A direction requiring the doing of anything mentioned in section 124.
2. A direction requiring the removal or disposal of the contaminant or anything affected by the contaminant.
3. A direction to secure, by means of locks, gates, fences, security guards or other means, any land, place or thing.
4. If the presence or discharge of the contaminant has damaged or endangered or is likely to damage or endanger existing water supplies, a direction to provide temporary or permanent alternate water supplies. 2001, c. 17, s. 2 (36); 2005, c. 12, s. 1 (43).

Information to be included in order

(4) An order under subsection (1) shall briefly describe the reasons for the order and the circumstances on which the reasons are based. 2001, c. 17, s. 2 (36).

Notice of order to be filed in Registry

(5) The Director shall file notice of an order under subsection (1) in the Registry in accordance with the regulations. 2001, c. 17, s. 2 (36).

Notice of compliance with order

(6) If the Director is satisfied that an order under subsection (1) has been complied with, the Director shall file notice of the compliance in the Registry in accordance with the regulations. 2001, c. 17, s. 2 (36).

Filing of new record of site condition

(7) If the Director is satisfied that an order under subsection (1) has been complied with but the Director is of the opinion that a certification contained in the record of site condition filed in the Registry does not accurately reflect the current state of the property, subsection (6) does not apply until a new record of site condition is filed in accordance with section 168.4. 2001, c. 17, s. 2 (36).

Delegation agreement

168.9 (1) The Minister may enter into an agreement with an individual, partnership or corporation, delegating to the individual, partnership or corporation any of the Director's powers and duties relating to the establishment, maintenance and operation of the Registry, including the Director's duties under subsection 168.4 (3). 2001, c. 17, s. 2 (36).

Contents of agreement

(2) A delegation agreement shall contain any limitations, conditions and requirements applicable to the delegation and such other provisions as the Minister considers advisable in the public interest, including provisions,

(a) requiring that the delegate comply with applicable Ministry standards and policies, including standards and policies relating to quality assurance and audits;

(b) setting the financial terms of the delegation;

(c) requiring the delegate to obtain and maintain specified kinds and amounts of insurance;

(d) providing that the Minister may appoint persons to the board of directors of the delegate, if the delegate is a corporation without share capital;

(e) authorizing the delegate to carry on other activities unrelated to the delegated powers and duties. 2001, c. 17, s. 2 (36).

Regulation

(3) A delegation under a delegation agreement is not effective unless the Minister makes a regulation,

(a) prescribing the powers and duties that are to be delegated by the agreement; and

(b) specifying the individual, partnership or corporation to which the powers and duties are to be delegated. 2001, c. 17, s. 2 (36).

Revocation of delegation

(4) The Minister may by regulation revoke a delegation if, in the opinion of the Minister,

(a) the delegate has contravened or failed to comply with this Act or the regulations;

(b) the delegate has contravened or failed to comply with the delegation agreement; or

(c) it is in the public interest to do so. 2001, c. 17, s. 2 (36).

Effect of regulation

(5) The delegation is revoked by a regulation made under subsection (4) on the day specified in the regulation or, if no day is specified in the regulation, on the day the regulation comes into force. 2001, c. 17, s. 2 (36).

Notice

(6) The Minister may give the delegate such notice of the intention to make a regulation under subsection (4) as the Minister considers reasonable in the circumstances. 2001, c. 17, s. 2 (36).

Other remedies not affected

(7) The power to revoke a delegation is in addition to and does not bar or affect the Minister's right to exercise any other remedy under the delegation agreement or at law. 2001, c. 17, s. 2 (36).

Obligations of delegate

(8) The delegate shall exercise and perform the powers and duties delegated to the delegate in accordance with the law and, in particular, in accordance with this Act, the regulation prescribing the delegated powers and duties and the delegation agreement. 2001, c. 17, s. 2 (36).

Minister may appoint directors

(9) If a delegation agreement with a corporation without share capital so provides, the Minister may appoint one or more persons to the board of directors of the delegate, as specified in the agreement, for such terms of office as the Minister considers appropriate. 2001, c. 17, s. 2 (36).

Remuneration, expenses of Ministerial appointees

(10) The remuneration and expenses of the directors appointed by the Minister shall be the responsibility of the delegate. 2001, c. 17, s. 2 (36).

Delegate not a Crown agency

(11) A delegate is not an agent of Her Majesty for any purpose, despite the *Crown Agency Act*, and shall not hold itself out as such. 2001, c. 17, s. 2 (36).

Crown not liable for delegate's acts

(12) No action or other proceeding shall be instituted against the Crown, the Minister or any employee in the Ministry,

(a) for any act done in the execution or intended execution of a power or duty delegated under this section or for an alleged neglect or default in the execution of a power or duty delegated under this section; or

(b) for any tort committed by a delegate or an employee or agent of a delegate in relation to a power or duty delegated under this section. 2001, c. 17, s. 2 (36); 2006, c. 35, Sched. C, s. 36 (7).

Annual report

(13) A delegate shall report annually to the Minister on its activities over the previous year with respect to the delegated powers and duties. 2001, c. 17, s. 2 (36).

Additional reports

(14) A delegate shall provide additional reports to the Minister as may be required by the delegation agreement or requested by the Minister. 2001, c. 17, s. 2 (36).

Regulations

(15) The Minister may make regulations,

(a) prescribing the powers and duties of the Director that are to be delegated under a delegation agreement;

(b) specifying the individual, partnership or corporation to whom such powers and duties are to be delegated;

(c) respecting any matter that the Minister considers advisable to carry out effectively the intent and purpose of this section. 2001, c. 17, s. 2 (36).

General or particular

(16) A regulation made under subsection (15) may be general or particular in its application. 2001, c. 17, s. 2 (36).

Definition

(17) In this section,

"delegation agreement" means an agreement under subsection (1). 2001, c. 17, s. 2 (36).

PART XV.2
SPECIAL PROVISIONS APPLICABLE TO MUNICIPALITIES, SECURED CREDITORS, RECEIVERS, TRUSTEES IN BANKRUPTCY, FIDUCIARIES AND PROPERTY INVESTIGATORS

INTERPRETATION

Definitions, Part XV.2

168.10 In this Part,

"contaminant" means,

(a) a contaminant as defined in section 1, or

(b) waste as defined in Part V; ("contaminant")

"fiduciary property" means property held or administered by a fiduciary in the capacity of fiduciary, or property in respect of which a fiduciary has powers or duties in the capacity of fiduciary; ("bien fiduciaire")

"non-municipal property" means, with respect to a municipality, property that is not owned, leased or occupied by the municipality. ("bien non municipal") 2001, c. 17, s. 2 (39).

Interpretation, effect on cause of action

168.11 This Part shall not be construed as affecting any cause of action that a person would have in the absence of this Part. 2001, c. 17, s. 2 (39).

MUNICIPALITIES

Actions taken by municipalities

168.12 (1) A municipality or a municipal representative who takes an action described in subsection (2) is not, for that reason alone,

(a) a person who is or was in occupation of a source of contaminant for the purpose of subsection 7 (1) or 8 (1);

(b) a person who has or had the charge, management or control of a source of contaminant for the purpose of subsection 7 (1) or 8 (1);

(c) a person responsible for the purpose of section 12;

(d) a person who has or had management or control of an undertaking or property for the purpose of subsection 18 (1);

(e) a person who has or had charge and control of land, a building or waste for the purpose of section 43;

(f) an occupant or previous occupant of land or a building for the purpose of section 43;

(g) a person having control of a pollutant for the purpose of subsection 97 (1);

(h) a person having the charge, management or control of any real property or personal property for the purpose of subsection 97 (1); or

(i) a person who has management or control of an undertaking or property for the purpose of subsection 157.1 (1). 2001, c. 17, s. 2 (39); 2005, c. 12, s. 1 (44).

Actions

(2) The actions referred to in subsection (1) are the following:

1. Any action taken for the purpose of conducting, completing or confirming an investigation relating to non-municipal property.
2. Any action taken for the purpose of preserving or protecting non-municipal property, including action to,
   i. ensure the supply of water, sewage services, electricity, artificial or natural gas, steam, hot water, heat or maintenance,
   ii. secure the property by means of locks, gates, fences, security guards or other means, or
   iii. ensure that the property is insured under a contract of insurance.
3. Any action taken on non-municipal property for the purpose of responding to,
   i. any danger to the health or safety of any person that results from the presence or discharge of a contaminant on, in or under the property,
   ii. any impairment or serious risk of impairment of the quality of the natural environment for any use that can be made of it that results from the presence or discharge of a contaminant on, in or under the property, or
   iii. any injury or damage or serious risk of injury or damage to any property or to any plant or animal life that results from the presence or discharge of a contaminant on, in or under the property.
4. Any action taken with respect to non-municipal property to exercise a right under any Act to collect rent or levy by distress in relation to an unpaid amount.
5. Any action taken on non-municipal property under or for the purpose of Part XI of the *Municipal Act, 2001* or Part XIV of the *City of Toronto Act, 2006*.
6. Any action taken on non-municipal property under or for the purpose of the *Building Code Act, 1992*, the *Fire Protection and Prevention Act, 1997* or an Act prescribed by the regulations.
7. Any other action prescribed by the regulations. 2001, c. 17, s. 2 (39); 2002, c. 17, Sched. C, s. 11 (1); 2006, c. 32, Sched. C, s. 19 (7).

Ownership by vesting

168.13 (1) If a municipality becomes the owner of property by virtue of the registration of a notice of vesting under Part XI of the *Municipal Act, 2001* or Part XIV of the *City of Toronto Act, 2006*, the Minister, the Director or a provincial officer shall not, in respect of the period described in subsection (4), issue any order under this Act to the municipality or a municipal representative with respect to the property unless the order arises from,

(a) the gross negligence or wilful misconduct of the municipality or municipal representative; or

(b) circumstances prescribed by the regulations. 2006, c. 32, Sched. C, s. 19 (8).

Exception

(2) Subsection (1) does not apply to an order under paragraph 4, 5 or 6 of subsection 97 (1). 2001, c. 17, s. 2 (39).

Consent order

(3) Subsection (1) does not apply to an order issued with the written consent of the municipality or municipal representative. 2001, c. 17, s. 2 (39).

Time period

(4) Subsection (1) only applies to the municipality or municipal representative in respect of the period that begins on the day the municipality became the owner of the property by virtue of the registration of the notice of vesting and ends on the earlier of the following days:

1. The fifth anniversary of the day the municipality became the owner of the property by virtue of the registration of the notice of vesting.
2. The day the municipality ceases to be the owner of the property. 2006, c. 19, Sched. K, s. 2 (7).

Extension of period

(5) The Director may extend the period referred to in subsection (4), before or after it expires, on such terms and conditions as he or she considers appropriate, but the period may not be extended beyond the day the municipality ceases to be the owner of the property. 2006, c. 19, Sched. K, s. 2 (7).

Exceptional circumstances, municipalities

168.14 (1) Despite section 168.13, the Director may issue an order described in subsection (3) to a municipality if the municipality has become the owner of property by virtue of the registration of a notice of vesting under Part XI of the *Municipal Act, 2001* or Part XIV of the *City of Toronto Act, 2006* and the Director has reasonable grounds to believe that, as a result of the presence or discharge of a contaminant on, in or under the property, any of the following circumstances exist:

1. There is danger to the health or safety of any person.
2. There is impairment or serious risk of impairment of the quality of the natural environment for any use that can be made of it.
3. There is injury or damage or serious risk of injury or damage to any property or to any plant or animal life. 2001, c. 17, s. 2 (39); 2002, c. 17, Sched. C, s. 11 (3); 2006, c. 32, Sched. C, s. 19 (9).

Restriction if record of site condition

(2) If a record of site condition has been filed in the Environmental Site Registry under section 168.4 with respect to the property, no order shall be issued under subsection (1) unless the Director has reasonable grounds to believe that, as a result of the presence of a contaminant that was on, in or under the property as of the certification date, there is danger to the health or safety of any person. 2001, c. 17, s. 2 (39).

Scope of order

(3) An order under subsection (1) may only require the municipality, within such times as are specified in the order, to comply with such directions specified in the order as are reasonably necessary to ensure that,

(a) none of the circumstances listed in subsection (1) exist, if no record of site condition has been filed in the Environmental Site Registry under section 168.4 with respect to the property; or

(b) there is no danger to the health or safety of any person, if a record of site condition has been filed in the Environmental Site Registry under section 168.4 with respect to the property. 2001, c. 17, s. 2 (39).

Same

(4) The directions referred to in subsection (3) may include the following:

1. A direction requiring the doing of anything mentioned in section 124.
2. A direction requiring the removal or disposal of the contaminant or anything affected by the contaminant.
3. A direction to secure, by means of locks, gates, fences, security guards or other means, any land, place or thing.
4. If the presence or discharge of the contaminant has damaged or endangered or is likely to damage or endanger existing water supplies, a direction to provide temporary or permanent alternate water supplies. 2001, c. 17, s. 2 (39); 2005, c. 12, s. 1 (45).

Information to be included in order

(5) An order under subsection (1) shall briefly describe the reasons for the order and the circumstances on which the reasons are based, including the circumstances listed in subsection (1) that exist. 2001, c. 17, s. 2 (39).

When notice of order filed in Registry

(6) The Director shall file notice of an order under subsection (1) in the Environmental Site Registry in accordance with the regulations if a record of site condition has been filed in the Registry under section 168.4 with respect to the property. 2001, c. 17, s. 2 (39).

Notice of compliance with order

(7) If notice of an order has been filed in the Registry under subsection (6) and the Director is satisfied that the order has been complied with, the Director shall file notice of the compliance in the Registry in accordance with the regulations. 2001, c. 17, s. 2 (39).

Filing of new record of site condition

(8) If notice of an order has been filed in the Registry under subsection (6) and the Director is satisfied that the order has been complied with but the Director is of the opinion that a certification contained in the record of site condition filed in the Registry does not accurately reflect the current state of the property, subsection (7) does not apply until a new record of site condition is filed in accordance with section 168.4. 2001, c. 17, s. 2 (39).

Notice of prescribed circumstances, municipalities

168.15 (1) If, in the course of or as a result of taking any action described in subsection 168.12 (2), a municipality or municipal representative becomes aware of circumstances prescribed by the regulations, the municipality shall give notice to a provincial officer in the manner prescribed by the regulations. 2001, c. 17, s. 2 (39).

Same

(2) If a municipality became the owner of property by virtue of the registration of a notice of vesting under Part XI of the *Municipal Act, 2001* or Part XIV of the *City of Toronto Act, 2006* and, during the period described in subsection 168.13 (4), the municipality or a municipal representative becomes aware of circumstances prescribed by the regulations, the municipality shall give notice to a provincial officer

in the manner prescribed by the regulations. 2001, c. 17, s. 2 (39); 2002, c. 17, Sched. C, s. 11 (4); 2006, c. 32, Sched. C, s. 19 (10).

Reports of investigations of contaminants, municipalities

168.16 On the written request of the Director, a municipality shall, within the time specified in the request, provide the Director with a copy of any report that is in the possession or control of the municipality and that was prepared in the course of or as a result of an investigation to determine whether a contaminant is present or is being discharged on, in or under property. 2001, c. 17, s. 2 (39).

SECURED CREDITORS, RECEIVERS AND TRUSTEES IN BANKRUPTCY

Actions taken by secured creditors

168.17 (1) A secured creditor or a secured creditor representative who takes an action described in subsection (2) is not, for that reason alone,

(a) a person who is or was in occupation of a source of contaminant for the purpose of subsection 7 (1) or 8 (1);

(b) a person who has or had the charge, management or control of a source of contaminant for the purpose of subsection 7 (1) or 8 (1);

(c) a person responsible for the purpose of section 12;

(d) a person who has or had management or control of an undertaking or property for the purpose of subsection 18 (1);

(e) a person who has or had charge and control of land, a building or waste for the purpose of section 43;

(f) an occupant or previous occupant of land or a building for the purpose of section 43;

(g) a person having control of a pollutant for the purpose of subsection 97 (1);

(h) a person having the charge, management or control of any real property or personal property for the purpose of subsection 97 (1); or

(i) a person who has management or control of an undertaking or property for the purpose of subsection 157.1 (1). 2001, c. 17, s. 2 (39); 2005, c. 12, s. 1 (46).

Actions

(2) The actions referred to in subsection (1) are the following:

1. Any action taken for the purpose of conducting, completing or confirming an investigation relating to the secured property.
2. Any action taken for the purpose of preserving or protecting the secured property, including action to,
   i. ensure the supply of water, sewage services, electricity, artificial or natural gas, steam, hot water, heat or maintenance,
   ii. secure the property by means of locks, gates, fences, security guards or other means,
   iii. ensure that the property is insured under a contract of insurance, or
   iv. pay taxes due or collect rents owing with respect to the property.
3. Any action taken on the secured property for the purpose of responding to,

i. any danger to the health or safety of any person that results from the presence or discharge of a contaminant on, in or under the property,

ii. any impairment or serious risk of impairment of the quality of the natural environment for any use that can be made of it that results from the presence or discharge of a contaminant on, in or under the property, or

iii. any injury or damage or serious risk of injury or damage to any property or to any plant or animal life that results from the presence or discharge of a contaminant on, in or under the property.

4. Any other action prescribed by the regulations. 2001, c. 17, s. 2 (39).

Secured creditor becoming owner by foreclosure

168.18 (1) If a secured creditor becomes the owner of the secured property by virtue of a foreclosure, the Minister, the Director or a provincial officer shall not, in respect of the period described in subsection (3), issue any order under any provision of this Act to the secured creditor or a secured creditor representative with respect to the property unless the order arises from,

(a) the gross negligence or wilful misconduct of the secured creditor or secured creditor representative; or

(b) circumstances prescribed by the regulations. 2001, c. 17, s. 2 (39).

Consent order

(2) Subsection (1) does not apply to an order issued with the written consent of the secured creditor or secured creditor representative. 2001, c. 17, s. 2 (39).

Time period

(3) Subsection (1) only applies to the secured creditor or secured creditor representative in respect of the period that begins on the day the secured creditor became the owner of the property by virtue of a foreclosure and ends on the earlier of the following days:

1. The fifth anniversary of the day the secured creditor became the owner of the property by virtue of a foreclosure.

2. The day the secured creditor ceases to be the owner of the property. 2006, c. 19, Sched. K, s. 2 (8).

Extension of period

(4) The Director may extend the period referred to in subsection (3), before or after it expires, on such terms and conditions as he or she considers appropriate, but the period may not be extended beyond the day the secured creditor ceases to be the owner of the property. 2006, c. 19, Sched. K, s. 2 (8).

Receivers and trustees in bankruptcy

168.19 (1) The Minister, the Director or a provincial officer shall not issue any order under any provision of this Act to a receiver, receiver representative, trustee in bankruptcy or trustee in bankruptcy representative with respect to the property held or administered by the receiver or trustee in bankruptcy unless the order arises from,

(a) the gross negligence or wilful misconduct of the receiver, receiver representative, trustee in bankruptcy or trustee in bankruptcy representative; or

(b) circumstances prescribed by the regulations. 2001, c. 17, s. 2 (39).

Consent order

(2) Subsection (1) does not apply to an order issued with the written consent of the receiver, receiver representative, trustee in bankruptcy or trustee in bankruptcy representative. 2001, c. 17, s. 2 (39).

Exceptional circumstances, secured creditors, receivers and trustees in bankruptcy

Secured creditors

168.20 (1) Despite section 168.18, the Director may issue an order described in subsection (4) to a secured creditor who has become the owner of the secured property by virtue of a foreclosure if the Director has reasonable grounds to believe that, as a result of the presence or discharge of a contaminant on, in or under the property, any of the following circumstances exist:

1. There is danger to the health or safety of any person.
2. There is impairment or serious risk of impairment of the quality of the natural environment for any use that can be made of it.
3. There is injury or damage or serious risk of injury or damage to any property or to any plant or animal life. 2001, c. 17, s. 2 (39).

Receivers and trustees in bankruptcy

(2) Despite section 168.19, the Director may issue an order described in subsection (4) to a receiver or trustee in bankruptcy if the Director has reasonable grounds to believe that, as a result of the presence or discharge of a contaminant on, in or under the property held or administered by the receiver or trustee in bankruptcy, any of the circumstances listed in subsection (1) exist. 2001, c. 17, s. 2 (39).

Restriction if record of site condition

(3) If a record of site condition has been filed in the Environmental Site Registry under section 168.4 with respect to the property, no order shall be issued under subsection (1) or (2) unless the Director has reasonable grounds to believe that, as a result of the presence of a contaminant that was on, in or under the property as of the certification date, there is danger to the health or safety of any person. 2001, c. 17, s. 2 (39).

Scope of order

(4) An order under subsection (1) or (2) may only require the secured creditor, receiver or trustee in bankruptcy, within such times as are specified in the order, to comply with such directions specified in the order as are reasonably necessary to ensure that,

(a) none of the circumstances listed in subsection (1) exist, if no record of site condition has been filed in the Environmental Site Registry under section 168.4 with respect to the property; or

(b) there is no danger to the health or safety of any person, if a record of site condition has been filed in the Environmental Site Registry under section 168.4 with respect to the property. 2001, c. 17, s. 2 (39).

Same

(5) The directions referred to in subsection (4) may include the following:

1. A direction requiring the doing of anything mentioned in section 124.
2. A direction requiring the removal or disposal of the contaminant or anything affected by the contaminant.
3. A direction to secure, by means of locks, gates, fences, security guards or other means, any land, place or thing.

4. If the presence or discharge of the contaminant has damaged or endangered or is likely to damage or endanger existing water supplies, a direction to provide temporary or permanent alternate water supplies. 2001, c. 17, s. 2 (39); 2005, c. 12, s. 1 (47).

Information to be included in order

(6) An order under subsection (1) or (2) shall briefly describe the reasons for the order and the circumstances on which the reasons are based, including the circumstances listed in subsection (1) that exist. 2001, c. 17, s. 2 (39).

Exception

(7) A receiver or trustee in bankruptcy is not required to comply with an order under subsection (2) if the order did not arise from the gross negligence or wilful misconduct of the receiver or trustee in bankruptcy, or of a receiver representative or trustee in bankruptcy representative, and,

(a) not later than 10 days after being served with the order, or within such longer period as may be specified by the Director in the order, the receiver or trustee in bankruptcy notifies the Director that they have abandoned, disposed of or otherwise released their interest in the property to which the order relates; or

(b) the order was stayed under Part I of the *Bankruptcy and Insolvency Act* (Canada) and the receiver or trustee in bankruptcy notified the Director, before the stay expired, that they abandoned, disposed of or otherwise released their interest in the property. 2001, c. 17, s. 2 (39).

Notice under subs. (7)

(8) Notice under clause (7) (a) or (b) must be given in the manner prescribed by the regulations. 2001, c. 17, s. 2 (39).

When notice of order filed in Registry

(9) The Director shall file notice of an order under subsection (1) or (2) in the Environmental Site Registry in accordance with the regulations if a record of site condition has been filed in the Registry under section 168.4 with respect to the property. 2001, c. 17, s. 2 (39).

Notice of compliance with order

(10) If notice of an order has been filed in the Registry under subsection (9) and the Director is satisfied that the order has been complied with, the Director shall file notice of the compliance in the Registry in accordance with the regulations. 2001, c. 17, s. 2 (39).

Filing of new record of site condition

(11) If notice of an order has been filed in the Registry under subsection (9) and the Director is satisfied that the order has been complied with but the Director is of the opinion that a certification contained in the record of site condition filed in the Registry does not accurately reflect the current state of the property, subsection (10) does not apply until a new record of site condition is filed in accordance with section 168.4. 2001, c. 17, s. 2 (39).

Notice of prescribed circumstances, secured creditors, receivers and trustees in bankruptcy

Secured creditors

168.21 (1) If, in the course of or as a result of taking any action described in subsection 168.17 (2), a secured creditor or secured creditor representative becomes aware of circumstances prescribed by the regulations, the secured creditor shall give notice to a provincial officer in the manner prescribed by the regulations. 2001, c. 17, s. 2 (39).

Same

(2) If a secured creditor became the owner of the secured property by virtue of a foreclosure and, during the period described in subsection 168.18 (3), the secured creditor or a secured creditor representative becomes aware of circumstances prescribed by the regulations, the secured creditor shall give notice to a provincial officer in the manner prescribed by the regulations. 2001, c. 17, s. 2 (39).

Receivers and trustees in bankruptcy

(3) If a receiver, trustee in bankruptcy, receiver representative or trustee in bankruptcy representative becomes aware, during the period that the receiver or trustee in bankruptcy holds or administers property, of circumstances prescribed by the regulations, the receiver or trustee in bankruptcy shall give notice to a provincial officer in the manner prescribed by the regulations. 2001, c. 17, s. 2 (39).

Reports of investigations of contaminants, secured creditors, etc.

168.22 On the written request of the Director, a secured creditor, receiver or trustee in bankruptcy shall, within the time specified in the request, provide the Director with a copy of any report that is in the possession or control of the secured creditor, receiver or trustee in bankruptcy and that was prepared in the course of or as a result of an investigation to determine whether a contaminant is present or is being discharged on, in or under property. 2001, c. 17, s. 2 (39).

FIDUCIARIES

Obligations of fiduciaries

168.23 If the Minister, the Director or a provincial officer issues an order under any provision of this Act to a fiduciary or fiduciary representative with respect to fiduciary property, the obligation of the fiduciary or fiduciary representative to incur costs to comply with the order is limited to the value of the assets they hold or administer on the date they are served with the order, less their reasonable costs of holding or administering the assets, unless the order arose from the gross negligence or wilful misconduct of the fiduciary or fiduciary representative. 2001, c. 17, s. 2 (39).

Notice of prescribed circumstances, fiduciaries

168.24 If, in the course of or as a result of exercising or performing the fiduciary's powers or duties with respect to fiduciary property, a fiduciary or fiduciary representative becomes aware of circumstances prescribed by the regulations, the fiduciary shall give notice to a provincial officer in the manner prescribed by the regulations. 2001, c. 17, s. 2 (39).

Reports of investigations of contaminants, fiduciaries

168.25 On the written request of the Director, a fiduciary shall, within the time specified in the request, provide the Director with a copy of any report that is in the possession or control of the fiduciary and that was prepared in the course of or as a result of an investigation to determine whether a contaminant is present or is being discharged on, in or under property. 2001, c. 17, s. 2 (39).

INVESTIGATIONS OF PROPERTY AND ACTIONS TO REDUCE CONCENTRATION OF CONTAMINANTS

Investigations of property, etc.

168.26 A person who conducts, completes or confirms an investigation in relation to property or a person who takes any action to reduce the concentration of contaminants on, in or under a property is not, for that reason alone,

(a) a person who is or was in occupation of a source of contaminant for the purpose of subsection 7 (1) or 8 (1);

(b) a person who has or had the charge, management or control of a source of contaminant for the purpose of subsection 7 (1) or 8 (1);

(c) a person responsible for the purpose of section 12;

(d) a person who has or had management or control of an undertaking or property for the purpose of subsection 18 (1);

(e) a person who has or had charge and control of land, a building or waste for the purpose of section 43;

(f) an occupant or previous occupant of land or a building for the purpose of section 43;

(g) a person having control of a pollutant for the purpose of subsection 97 (1);

(h) a person having the charge, management or control of any real property or personal property for the purpose of subsection 97 (1); or

(i) a person who has management or control of an undertaking or property for the purpose of subsection 157.1 (1). 2001, c. 17, s. 2 (39); 2005; c. 12, s. 1 (48); 2007, c. 7, Sched. 13, s. 12 (2).

PART XVI
ENVIRONMENTAL COUNCIL

Meaning of "Council", Part XVI

169. In this Part,

"Council" means the Environmental Council. R.S.O. 1990, c. E.19, s. 169.

Environmental Council established

170. (1) A council to be known in English as the Environmental Council and in French as Conseil de l'environnement may be established and shall consist of not fewer than seven and not more than eleven persons appointed by the Lieutenant Governor in Council, each to hold office for a term of not more than three years.

Chair and vice-chair

(2) The Lieutenant Governor in Council may appoint one of the members of the Council as chair and another of the members as vice-chair.

Members

(3) The composition of the Council shall be such as to provide for competent and knowledgeable persons in matters relating to the natural environment.

Vacancies

(4) Vacancies in the membership of the Council may be filled by the Lieutenant Governor in Council.

Remuneration

(5) The members of the Council shall be paid such remuneration and expenses as the Lieutenant Governor in Council from time to time may determine. R.S.O. 1990, c. E.19, s. 170.

Duties of Council

171. The Council, through its chair, shall,

(a) advise the Minister as to the results of current research related to,

(i) pollution, and

(ii) the natural environment; and

(b) consider any matter affecting the quality of the environment which the Council or the Minister deems advisable and advise the Minister thereon through its chair. R.S.O. 1990, c. E.19, s. 171.

PART XVII
MISCELLANEOUS

Where contaminant causes damage to crops or livestock

172. (1) Where a person complains that a contaminant is causing or has caused injury or damage to livestock or to crops, trees or other vegetation which may result in economic loss to such person, the person may, within fourteen days after the injury or damage becomes apparent, request the Minister to conduct an investigation.

Request for investigation

(2) Upon receipt of a request, the Minister may cause an investigation to be made and a report prepared of the findings of the investigation.

Report of investigation

(3) A copy of the report shall be given to the claimant and to the person responsible for the source of contaminant alleged to be the cause of the injury or damage.

Right of person responsible to view damage, etc.

(4) The claimant shall permit the person responsible for such source of contaminant or the person's agent to view the injury or damage and to remove samples and conduct tests and examinations as may be reasonably necessary to establish the cause of the injury or damage.

Board of negotiation

(5) A board of negotiation shall be established consisting of two or more members appointed by the Lieutenant Governor in Council, one of whom may be designated as chair.

Quorum

(6) Any two members of the board of negotiation constitutes a quorum and are sufficient to perform all the functions of the board on behalf of the board.

Place of sitting

(7) The board of negotiation may sit at any place in Ontario.

Notice of amount of claim

(8) If a claimant who has requested an investigation under subsection (1) desires to have his or her claim for injury or damage negotiated by the board of negotiation, the claimant shall notify the Minister and the person responsible for the source of contaminant alleged to be the cause of the injury or damage of the amount of the claimant's claim within a reasonable time after the amount can be determined.

Notice of negotiation

(9) If the claimant and the person responsible are not able to settle the claim within thirty days after notice of the claim is given to the Minister under subsection (8), the claimant or the person responsible may serve notice of negotiation upon the other of them and upon the board of negotiation stating that he or she requires a settlement of the claim to be negotiated by the board of negotiation.

Negotiation procedures

(10) Upon receipt of a notice of negotiation, the board of negotiation shall assess the injury or damage in respect of which the claim is made and, upon reasonable notice to the claimant and to the person

responsible, shall meet with them and, without prejudice to any subsequent procedure, proceed in a summary and informal manner to negotiate a settlement of the claim. R.S.O. 1990, c. E.19, s. 172.

Agreement by municipality

173. A municipality may enter into an agreement with the Minister under clause 4 (1) (j) and a municipality that enters into such an agreement has all the powers necessary to carry out the agreement. 1998, c. 35, s. 28.

Unjust dismissal, compliance with Act, etc.

174. (1) In this section,

"Board" means the Ontario Labour Relations Board. R.S.O. 1990, c. E.19, s. 174 (1).

Unjust dismissal

(2) No employer shall,

(a) dismiss an employee;

(b) discipline an employee;

(c) penalize an employee; or

(d) coerce or intimidate or attempt to coerce or intimidate an employee,

because the employee has complied or may comply with,

(e) the *Environmental Assessment Act*;

(f) the *Environmental Protection Act*;

(g) the *Fisheries Act* (Canada);

(g.1) the *Nutrient Management Act, 2002*;

(h) the *Ontario Water Resources Act*;

(i) the *Pesticides Act*;

(j) the *Safe Drinking Water Act, 2002*; or

(k) the *Toxics Reduction Act, 2009*,

or a regulation under one of those Acts or an order, term or condition, environmental compliance approval, certificate of property use, renewable energy approval, licence, permit or direction under one of those Acts or because the employee has sought or may seek the enforcement of one of those Acts or a regulation under one of those Acts or has given or may give information to the Ministry or a provincial officer or has been or may be called upon to testify in a proceeding related to one of those Acts or a regulation under one of those Acts. R.S.O. 1990, c. E.19, s. 174 (2); 2001, c. 17, s. 2 (40); 2002, c. 4, s. 62 (5); 2009, c. 12, Sched. G, s. 17; 2009, c. 19, s. 67 (10); 2010, c. 16, Sched. 7, s. 2 (66).

Complaint

(3) A person complaining of a contravention of subsection (2) may file the complaint in writing with the Board. R.S.O. 1990, c. E.19, s. 174 (3).

Where complaint referred to O.L.R.B.

(4) Where a complaint is filed in writing with the Board,

(a) the Board may authorize a labour relations officer to inquire into the complaint; or

(b) the Board may inquire into the complaint. R.S.O. 1990, c. E.19, s. 174 (4).

Labour relations officer

(5) A labour relations officer who is authorized to inquire into the complaint shall make an inquiry forthwith and shall endeavour to effect a settlement of the matter complained of and shall report the results of the inquiry and endeavours to the Board. R.S.O. 1990, c. E.19, s. 174 (5).

Where settlement not reached

(6) Where the labour relations officer is unable to effect a settlement of the matter complained of, the Board may inquire into the complaint. R.S.O. 1990, c. E.19, s. 174 (6).

Inquiry by O.L.R.B.

(7) Where the Board inquires into the complaint and is satisfied that an employer has contravened subsection (2), the Board shall determine what, if anything, the employer shall do or refrain from doing with respect thereto. R.S.O. 1990, c. E.19, s. 174 (7).

Determination

(8) A determination under subsection (7) may include, but is not limited to, one or more of,

(a) an order directing the employer to cease doing the act or acts complained of;

(b) an order directing the employer to rectify the act or acts complained of; or

(c) an order directing the employer to reinstate in employment the complainant, with or without compensation, or to compensate in lieu of hiring or reinstatement for loss of earnings or other employment benefits in an amount that may be assessed by the Board against the employer. R.S.O. 1990, c. E.19, s. 174 (8).

Application

(9) A determination by the Board under subsection (7) applies despite a provision of an agreement. R.S.O. 1990, c. E.19, s. 174 (9).

Burden of proof

(10) On an inquiry under this section, the burden of proof that an employer did not contravene subsection (2) lies upon the employer. R.S.O. 1990, c. E.19, s. 174 (10).

Failure to comply

(11) Where there is a failure to comply with a term of the determination made under subsection (7), the complainant, after the expiration of fourteen days from the date of the release of the determination by the Board or from the date provided in the determination for compliance, whichever is later, may notify the Board in writing of the failure. R.S.O. 1990, c. E.19, s. 174 (11).

Filing of determination

(12) Where the Board receives notice in accordance with subsection (11), the Board shall file in the office of the local registrar of the Superior Court of Justice a copy of the determination, exclusive of the reasons therefor, if any, and the determination shall be entered in the same way as a judgment or order of the court and is enforceable as such. R.S.O. 1990, c. E.19, s. 174 (12); 2001, c. 9, Sched. G, s. 5 (21).

Compliance with settlement

(13) Where the matter complained of has been settled, whether through the endeavours of the labour relations officer or otherwise, and the terms of the settlement have been put in writing and signed, the settlement is binding and shall be complied with according to its terms, and a complaint that a settlement has not been complied with shall be deemed to be a complaint under subsection (3). R.S.O. 1990, c. E.19, s. 174 (13).

Application of *Labour Relations Act, 1995*

(14) The *Labour Relations Act, 1995* and the regulations under that Act apply with necessary modifications in respect of a proceeding under subsections (2) to (13). R.S.O. 1990, c. E.19, s. 174 (14); 2006, c. 19, Sched. K, s. 2 (9).

Act performed on behalf of employer

(15) For the purposes of subsections (2) to (14), an act mentioned in subsection (2) that is performed on behalf of an employer shall be deemed to be the act of the employer. R.S.O. 1990, c. E.19, s. 174 (15).

Evidence of documents

175. (1) In this section,

"official document" means,

(a) an approval, consent, licence, notice, permit, order, return, certificate of property use or other certificate, environmental compliance approval or renewable energy approval under this Act or the regulations or a confirmation of registration under Part II.2,

(b) a certificate as to service of a document mentioned in clause (a),

(c) a certificate or report as to the analysis, description, ingredients, quality, quantity or temperature of any solid, liquid or gas or any combination of any of them,

(d) a certificate or report as to the analysis, description, quality or quantity of any odour, heat, sound, vibration, radiation or any combination of any of them,

(e) a certificate or report as to the custody of any solid, liquid or gas or any combination of any of them,

(f) a certificate as to the custody of any book, record or report or as to the custody of any other document, or

(g) a certificate as to whether or not any document or notification was received or issued by the Minister or the Ministry under this Act or the regulations. R.S.O. 1990, c. E.19, s. 175 (1); 2001, c. 17, s. 2 (41); 2009, c. 12, Sched. G, s. 18; 2010, c. 16, Sched. 7, s. 2 (67).

Official documents as evidence

(2) An official document, other than an official document mentioned in clause (1) (c) or (d), that purports to be signed by the Minister, the Director or an employee in the Ministry shall be received in evidence in any proceeding as proof, in the absence of evidence to the contrary, of the facts stated in the official document without proof of the signature or position of the person appearing to have signed the official document. R.S.O. 1990, c. E.19, s. 175 (2).

Idem

(3) An official document mentioned in clause (1) (c), (d) or (e) that purports to be signed by an analyst shall be received in evidence in any proceeding as proof, in the absence of evidence to the contrary, of the facts stated in the official document without proof of the signature or position of the person appearing to have signed the official document. R.S.O. 1990, c. E.19, s. 175 (3).

Regulations, general

175.1 (1) The Lieutenant Governor in Council may make regulations,

(a) exempting any person, licence holder, insurer, industry, contaminant, source of contaminant, motor vehicle, motor, waste, waste disposal site, waste management system, activity, area, location,

matter, substance, sewage system, product, material, beverage, packaging, container, discharge, spill, pollutant or thing from any provision of this Act and the regulations and prescribing conditions for the exemptions from this Act and the regulations;

(b) prohibiting, regulating or controlling, (including prescribing conditions for the prohibition, regulation or control) the making, use, sale, display, advertising, transfer, transportation, operation, maintenance, storage, recycling, disposal, or discharge, or manner thereof, of any contaminant, source of contaminant, motor vehicle, motor, waste, waste disposal site, waste management system, activity, area, location, matter, substance, sewage system, product, material, beverage, packaging, container, discharge, spill, pollutant or thing;

(c) governing and requiring the payment of fees to the Crown or to any other person or body specified by the regulations, including prescribing the amounts or the method of calculating the amounts of the fees, and governing the procedure for the payment,

(i) in respect of a certificate of approval, provisional certificate of approval, permit, licence or renewal of licence, examination, inspection or certification,

(ii) in respect of any registration or record required by this Act or the regulations,

(iii) in respect of an activity pursuant to a provision of a regulation that exempts a person from the requirement to obtain a certificate of approval, provisional certificate of approval or permit, or

(iv) in respect of the supply of information, services, or copies of documents, maps, plans, recordings or drawings;

(d) providing for the retention by a person or body specified by the regulations of all or part of the fees paid, under this Act, to the person or body;

(e) providing for refunds of fees paid under this Act to the Crown or to a person or body specified by the regulations;

(f) providing for the issue, review, suspension and revocation of environmental compliance approvals and prescribing conditions for the issuing, reviewing, suspending and revoking;

(f.1) subject to subsection (3), governing applications for the issue, review and revocation of environmental compliance approvals;

(f.2) providing for the issue, renewal, suspension and revocation of certificates of property use, renewable energy approvals, permits and licences, and prescribing conditions for the issuing, renewing, suspending and revoking;

(f.3) governing applications for the issue, renewal and revocation of certificates of property use, renewable energy approvals, permits and licences;

(f.4) requiring persons with qualifications specified in the regulations to provide certifications as part of applications mentioned in clauses (f.1) and (f.3);

(f.5) governing certifications mentioned in clause (f.4);

(f.6) governing the inclusion of terms and conditions in environmental compliance approvals, certificates of property use, renewable energy approvals, permits and licences;

(g) defining the desirable quality criteria of the natural environment;

(h) prescribing documents or data required to be created, stored and submitted by any person and the methods of creating, storing and submitting the documents and data;

(h.1) prescribing the location at which documents or data must be created or stored;

(h.2) providing for the inspection and examination of documents and data;

(h.3) providing for the preparation and signing of documents by electronic means, the filing of documents by direct electronic transmission and the printing of documents filed by direct electronic transmission;

(i) providing for forms and their use;

(j) providing for the method of service of any document given or served under this Act;

(j.1) deeming a person to be a person involved in carrying out a program of the Ministry for the purpose of subsection 184 (2);

(k) designating any matter required to be designated or authorized by or referred to in this Act as designated;

(l) subject to subsection (5), prescribing or respecting any matter that this Act refers to as a matter prescribed by the regulations or as otherwise dealt with by the regulations. 1997, c. 7, s. 3; 1998, c. 35, s. 30; 2001, c. 9, Sched. G, s. 5 (10); 2001, c. 17, s. 2 (42); 2009, c. 12, Sched. G, s. 19; 2009, c. 33, Sched. 15, s. 5 (6); 2010, c. 16, Sched. 7, s. 2 (68, 69).

Regulation under cl. (1) (f)

(2) For the purposes of clause (1) (f), a regulation prescribing conditions for the issuing of an environmental compliance approval may include conditions that specify that a person other than a municipality who submits an application for approval under Part II.1 in respect of an activity mentioned in subsection 27 (1) must deposit a sum of money or furnish a surety bond or personal sureties for the purposes of assuring satisfactory maintenance of the waste management system or the waste disposal site or the removal of waste from the site. 2010, c. 16, Sched. 7, s. 2 (70).

Regulation under cl. (1) (f.1)

(3) The power to make regulations under clause (1) (f.1) does not include the power to make regulations specifying the date on or before which an application for review of an environmental compliance approval in respect of an activity must be submitted. 2010, c. 16, Sched. 7, s. 2 (70).

Same

(4) A regulation mentioned in subsection (2) may prescribe terms and conditions upon which a deposit mentioned in subsection (2) may be returned to the depositor. 2010, c. 16, Sched. 7, s. 2 (70).

Minister's regulations

(5) The Minister may make regulations specifying anything that this Act describes as being specified in a regulation made by the Minister. 2010, c. 16, Sched. 7, s. 2 (70).

Regulations, additional

176. (1) The Lieutenant Governor in Council may make regulations,

(a) REPEALED: 1997, c. 7, s. 4 (1).

(b) requiring the persons responsible for sources of contaminants in a class of sources of contaminants to monitor, record and report to the Ministry or to the persons specified in the regulations on the sources of contaminants including, but not limited to, fuel, materials and methods of production used and intended to be used, the wastes and contaminants that will or are likely to be generated, the natural environment that may be affected by the discharge of the contaminants and the effects of the discharge of the contaminants, and to perform and report to the Ministry on research respecting methods of reducing or preventing the generation of wastes and contaminants from the sources of contaminants;

(c), (d) REPEALED: 1997, c. 7, s. 4 (1).

(e) prescribing maximum permissible amounts, concentrations or levels of any contaminant or combination of contaminants and any class of either of them;

(f) prescribing methods or standards, or both, for determining the amount, concentration or level of any contaminant, combination of contaminants or any class of either of them;

(g) governing the disposal of soil, rock or related material from property;

(h) governing the discharge of any contaminant and prescribing requirements for any plant, structure, equipment, apparatus, mechanism or thing that may discharge a contaminant or from which a contaminant may be discharged in relation to,

(i) planning, design, siting, public notification and consultation, establishment, insurance, facilities, staffing, operation, maintenance, monitoring, record-keeping, submission of reports to the Director and improvement, and

(ii) the discontinuance of the operation of any plant, structure, equipment, apparatus, mechanism or thing;

(h.1) governing the alteration or cessation of a process, rate of production or a rate or manner of discharge of contaminants into the natural environment;

(h.2) deeming an environmental compliance approval to exist in respect of any plant, structure, equipment, apparatus, mechanism, thing, process, rate of production or rate or manner of discharge of a contaminant to which subsection 9 (1) would apply but for an exemption from the requirement to obtain an environmental compliance approval set out in a regulation;

(h.3) deeming a renewable energy approval to exist in respect of a renewable energy project to which subsection 47.3 (1) would apply but for an exemption from the requirement to obtain a renewable energy approval set out in a regulation;

(i) classifying plants, structures and things, prescribing classes thereof that shall not be constructed, altered or modified unless the plans and specifications thereof are approved by the Director, and prescribing classes thereof for which the approval of the Director as to the plans and specifications is not required;

(j) prescribing the details that shall be set out in plans and specifications submitted to the Director for approval;

(k) prescribing the amounts of grants and loans and the terms and conditions of such grants and loans;

(l) prescribing the maximum permissible concentration or level in water of any contaminant either generally or with respect to any part of the water of Ontario specified in the regulations;

(m) prescribing methods for determining the concentration or level in water of any contaminant, either generally or with respect to any part of the water of Ontario specified in the regulations, for the purposes of the regulations;

(n) prescribing maximum permissible changes in temperatures of water, either generally or with respect to any part of the water of Ontario specified in the regulations;

(o)-(r) REPEALED: 1997, c. 7, s. 4 (1).

(s) regulating the quality of fuels that may be used for heating, generating steam or electricity, industrial processes or incineration;

(t) requiring and regulating the storage, treatment and disposal of sewage in vessels and the equipment therefor, and prohibiting the use and installation of equipment for the storage, treatment

or disposal of sewage in vessels unless the equipment and installation thereof conform to the regulations, and providing for and requiring the approval of the Director for any such equipment and prohibiting and regulating the discharge of sewage from such vessels;

(u) regulating and controlling, for the purpose of preventing or reducing the pollution of any water or places located on or adjacent to any water where moorings are provided for vessels or where any services are provided for vessels or the occupants thereof, and regulating and governing persons providing such moorings or services;

(v) defining sewage for the purposes of regulations made under clauses (t) and (u);

(w) governing payments out of the account referred to in section 182.2, including governing the circumstances in which payments may be made, governing the amounts of payments and governing procedures for determining what payments are made;

(x) governing the development and implementation of plans required under paragraph 7 of subsection 18 (1) or section 91.1, including,

(i) regulations requiring procedures to be followed, including procedures involving public consultation,

(ii) regulations establishing time limits related to the development and implementation of the plans,

(iii) regulations governing the contents of the plans, including requirements for provisions relating to updating the plans and testing compliance with the plans. R.S.O. 1990, c. E.19, s. 176 (1); 1997, c. 7, s. 4 (1); 2001, c. 17, s. 2 (43); 2005, c. 12, s. 1 (49, 50); 2009, c. 12, Sched. G, s. 20 (1); 2010, c. 16, Sched. 7, s. 2 (71).

Regulations relating to Part III

(2) The Lieutenant Governor in Council may make regulations relating to Part III,

(a), (b) REPEALED: 1997, c. 7, s. 4 (2).

(c) requiring motors or motor vehicles or any class or type of motor or motor vehicle to have installed thereon or incorporated therein one or more systems or devices to prevent or lessen the discharge of any contaminant into the natural environment, prescribing the standards and specifications of any such system or device, prescribing the standards of discharge of any contaminant into the natural environment with which any such system or device shall comply and providing for testing and inspection of any such system or device;

(d) prescribing the standards of emission into the natural environment of any contaminant or any by-product or product of combustion with which any motor or motor vehicle or any class or type of motor or motor vehicle shall comply and providing for the testing and inspection of any such motor, motor vehicle, class or type;

(e) regulating the quality of motor fuels and additives used or intended for use in motor fuels in Ontario;

(f) prescribing types of systems and types of devices for the purposes of subsections 22 (3) and (4). R.S.O. 1990, c. E.19, s. 176 (2); 1997, c. 7, s. 4 (2); 1998, c. 35, s. 31 (1, 2).

Regulations under clause (2) (d)

(2.1) A regulation under clause (2) (d) may prescribe standards of emission with reference to any criteria that the Lieutenant Governor in Council considers appropriate, including but not limited to standards prescribed with reference to the visibility or opacity of emissions. 1998, c. 35, s. 31 (3).

Regulations relating to Part II.1

(2.2) The Lieutenant Governor in Council may make regulations relating to Part II.1 requiring persons prescribed by the regulations to carry insurance, specifying the insurance that is required to be carried and specifying limits and conditions respecting insurance coverage. 2010, c. 16, Sched. 7, s. 2 (72).

Same, Minister's regulations

(2.3) The Minister may make regulations relating to Part II.1 specifying the date on or before which an application for review of an environmental compliance approval in respect of an activity must be submitted. 2010, c. 16, Sched. 7, s. 2 (72).

Regulations relating to Part II.2

(2.4) The Lieutenant Governor in Council may make regulations relating to Part II.2,

(a) governing the establishment, operation and maintenance of the Registry, including requiring electronic registrations;

(b) governing registrations and procedures for registering, which may include designating a person responsible for establishing procedures;

(c) governing the maintenance of registrations and prescribing any information, reports, records or documents to be included in registrations;

(d) prescribing the timing and requirements relating to periodic updating of registrations;

(e) governing activities prescribed by the regulations for the purposes of subsection 20.21 (1);

(f) prescribing measures that a provincial officer may require in a notice issued under section 157.4;

(g) requiring persons with qualifications specified in the regulations to provide certifications as part of registrations;

(h) governing certifications mentioned in clause (g);

(i) governing requirements for financial assurance and methods of calculating financial assurance in respect of activities prescribed by the regulations for the purposes of subsection 20.21 (1) and prescribing environmental measures for which financial assurance may be required;

(j) requiring persons prescribed by the regulations to carry insurance, specifying the insurance that is required to be carried and specifying limits and conditions respecting insurance coverage. 2010, c. 16, Sched. 7, s. 2 (72).

Regulations relating to Part IV

(3) The Lieutenant Governor in Council may make regulations relating to Part IV,

(a) REPEALED: 1997, c. 7, s. 4 (3).

(b) providing for the issue of permits and identification plates for ice shelters and requiring and governing their use;

(c) regulating the placing, construction and standard of repair of ice shelters and requiring and regulating the storage, treatment and disposal of waste and requiring the approval of the Director for any equipment and things related thereto by any person or class of persons and prohibiting the placing, allowing to remain or use of an ice shelter contrary to or in a condition that is contrary to the regulations or without any equipment or facilities required by the regulations;

(d) prescribing the dates within which ice shelters may be placed, allowed to remain or used on or over the ice over any water. R.S.O. 1990, c. E.19, s. 176 (3); 1997, c. 7, s. 4 (3).

Regulations relating to Part V

(4) The Lieutenant Governor in Council may make regulations relating to Part V,

(a)-(c) REPEALED: 1997, c. 7, s. 4 (4).

(d) governing the management of waste and prescribing requirements for waste management systems and waste disposal sites in relation to,

(i) planning, design, siting, buffer zones, public notification and consultation, establishment, insurance, facilities, staffing, operation, maintenance, monitoring, record-keeping, submission of reports to the Director and improvement,

(ii) the discontinuance of systems,

(iii) the closure of sites;

(e) governing the location of waste disposal sites and designating parts of Ontario in which no waste disposal sites shall be established or operated;

(f) REPEALED: 2010, c. 16, Sched. 7, s. 2 (73).

(g) REPEALED: 1997, c. 7, s. 4 (6).

(h) prescribing the form of application and the procedure to be followed in applying for any compensation under Part V;

(i) prescribing the rates of the fees for the disposal of any type of waste in a well that is a waste disposal site that shall be paid into the fund known in English as The Waste Well Disposal Security Fund and in French as Caisse de garantie des propriétaires de puits d'élimination des déchets;

(j) for the purpose of furthering the diversion of waste from final disposal, requiring municipalities and such other persons as may be specified in the regulation to establish such waste disposal sites or waste management systems as may be specified in the regulation;

(k) requiring the persons referred to in clause (j) to maintain, operate, improve, enlarge, alter, repair or replace the waste disposal sites or waste management systems in such manner as may be specified in the regulation;

(l) requiring municipalities and waste generators to conduct such studies in relation to waste management as may be specified in the regulation and requiring them to submit reports concerning the studies to the Director;

(m) requiring municipalities and waste generators to submit to the Director plans concerning waste management;

(n) prescribing plans concerning waste management;

(o) requiring municipalities and waste generators to seek any approval required for the plans referred to in clause (m) or (n) or required for the implementation of those plans and to implement the plans;

(p) requiring waste generators to achieve such objectives relating to waste management as are specified in the regulation;

(q) regulating, with respect to the diversion of waste from final disposal, the waste management activities of such owners of premises housing generators of waste or persons responsible for the management of those premises as are specified in the regulation;

(r) requiring persons referred to in clause (q) to prepare, implement and maintain a program under which such classes of waste as are specified in the regulation are kept separate in the manner specified in the regulation;

(s) deeming an environmental compliance approval to exist in respect of a waste management system or waste disposal site. R.S.O. 1990, c. E.19, s. 176 (4); 1992, c. 1, s. 34 (1, 2); 1997, c. 7, s. 4 (4-6); 2010, c. 16, Sched. 7, s. 2 (73, 74).

Regulations relating to Part V.0.1

(4.1) The Lieutenant Governor in Council may make regulations relating to Part V.0.1,

(a) governing the preparation and submission of applications for the issue, renewal or revocation of renewable energy approvals and applications to alter the terms and conditions of renewable energy approvals or to impose conditions on renewable energy approvals;

(b) governing eligibility requirements relating to applications for the issue, renewal or revocation of renewable energy approvals, applications to alter the terms and conditions of renewable energy approvals or to impose conditions on renewable energy approvals, including requirements for consultation;

(c) governing renewable energy generation facilities in relation to,

(i) planning, design, siting, buffer zones, notification and consultation, establishment, insurance, facilities, staffing, operation, maintenance, monitoring, record-keeping, submission of reports to the Director and improvement,

(ii) the discontinuance of the operation of any plant, structure, equipment, apparatus, mechanism or thing at a renewable energy generation facility,

(iii) the closure of renewable energy generation facilities;

(d) governing the location of renewable energy generation facilities, including prohibiting or regulating the construction, installation, use, operation or changing of renewable energy generation facilities in parts of Ontario;

(e) prohibiting the transfer of a renewable energy approval or prescribing requirements for transferring a renewable energy approval, including requiring the written consent of the Director;

(f) providing for transitional matters that, in the opinion of the Lieutenant Governor in Council, are necessary or desirable to facilitate the implementation of Part V.0.1. 2009, c. 12, Sched. G, s. 20 (2).

Regulations relating to Part VI

(5) The Lieutenant Governor in Council may make regulations relating to Part VI,

(a)-(c) REPEALED: 1997, c. 7, s. 4 (7).

(d) prescribing that designated industries devote a designated percentage of their budget to undertake research and development to develop substitutes for ozone depleting substances. R.S.O. 1990, c. E.19, s. 176 (5); 1997, c. 7, s. 4 (7).

(6) REPEALED: 1997, c. 30, Sched. B, s. 23.

Regulations relating to Part IX

(7) The Lieutenant Governor in Council may make regulations relating to Part IX,

(a) defining standard, refillable, returnable, non-refillable or non-returnable in respect of containers and returnable or non-returnable in respect of packaging or defining any product for the purposes of the regulations;

(b) requiring payment of a deposit at the time of purchase of any material or any beverage packaged or contained in any class of packaging or container and regulating the amount, terms and conditions of deposits;

(b.1) requiring the payment of a deposit at the time of purchase of any material or any product, including any beverage, and regulating the amount, terms and conditions of deposits;

(c) requiring and regulating the stocking, display, sale, advertising or offering for sale of any product,

(i) in any class of container in relation to the stocking, display, sale, advertising or offering for sale of the product in any other class of container, or

(ii) only in a class of container that may be prescribed;

(d) prohibiting the sale, stocking, display, advertising or offering for sale in Ontario of any product in any class of container or in or by means of a vending machine;

(e) requiring and regulating the advertising or display of,

(i) the price of a product that is sold or offered for sale exclusive of the amount of any deposit payable on the purchase of the product,

(ii) the amount of any deposit payable on the purchase of a product,

(iii) the amount payable in return for any container,

(iii.1) the amount payable in return for any packaging or product,

(iv) copies of the regulations or portions of the regulations or a summary thereof in such form as may be prescribed by the regulations;

(f) requiring or authorizing the placement of a notice or mark on products, containers, packaging or labels on products, containers or packaging to indicate such matters of waste management or environmental concern as are specified in the regulation;

(f.1) requiring the placement of a notice or mark on products, containers, packaging or labels on products, containers or packaging respecting any payment to be made for their return;

(f.2) governing the size, form, content and position of the notice or mark referred to in clause (f) or (f.1);

(f.3) prohibiting the unauthorized use of a notice or mark referred to in clause (f);

(g) requiring and regulating the payment of an amount in return for any packaging or container, prescribing the amount to be paid and requiring and regulating the acceptance and collection of any packaging or container by such classes of persons as may be designated by the regulations;

(g.1) requiring and regulating the payment of an amount in return for any product, prescribing the amount to be paid and requiring and regulating the acceptance and collection of any product by such classes of persons as may be designated by the regulations;

(h), (i) REPEALED: 1997, c. 7, s. 4 (13).

(j) requiring, regulating and prohibiting the use, advertising, offering for sale or sale in Ontario of any packaging or container, or any material or combination of materials used as packaging or a container;

(k) providing a schedule for the regulation and the prohibition within five years of the use, offering for sale or sale in Ontario of non-refillable or non-returnable containers for any beverage;

(l) regulating or prohibiting the sale and use of disposable products and of products that pose waste management problems;

(l.1) requiring that disposable products and products that pose waste management problems be capable of being reused or recycled;

(m) requiring and governing the placing of receptacles to receive litter and governing the capacity, design and construction of such receptacles;

(n) prescribing the amounts of grants to persons to assist in the provision of receptacles to receive litter, and the terms and conditions of such grants;

(o) requiring persons who manufacture, package, offer for sale or sell a packaged product to examine the impact of the packaging on the waste management needs, activities and opportunities of other persons and governments and requiring them to submit reports concerning the examination to the Director;

(p) requiring persons who manufacture, package, offer for sale or sell a packaged product to conduct such examinations in relation to the packaging and waste management as may be specified in the regulation and requiring them to submit reports concerning the examinations to the Director;

(q) requiring persons who manufacture, package, offer for sale or sell a packaged product to submit to the Director waste management plans in relation to the packaging of the products they manufacture, package, offer for sale or sell or any waste generated by their activities;

(r) prescribing plans concerning waste management in relation to the packaging of packaged products;

(s) requiring persons who manufacture, package, offer for sale, sell or purchase a packaged product to implement the plans referred to in clauses (q) and (r);

(t) requiring persons who manufacture, package, offer for sale or sell a packaged product to achieve such waste management objectives in relation to the packaging of the products they manufacture, package, offer for sale or sell or any waste generated by their activities as are specified in the regulation;

(u) declaring a product to be a product that poses waste management problems. R.S.O. 1990, c. E.19, s. 176 (7); 1992, c. 1, s. 34 (3-16); 1997, c. 7, s. 4 (13).

Regulations relating to Part X

(8) The Lieutenant Governor in Council may make regulations relating to Part X,

(a) designating persons for the purposes of subsection 100 (1) and prescribing limitations that shall attach to any such designation;

(b) prescribing conditions that must be complied with by applicants for payment of compensation under subsection 101 (1) before payment of the compensation;

(c) prescribing conditions that shall attach to the payment of compensation under subsection 101 (1);

(d) designating discharges of pollutants and locations of discharges for the purposes of subsection 91 (2), but no discharge of pollutant shall be designated that is in accordance with an approval, licence, permit, order, certificate of property use or regulation under this Act or an approval, direction, notice, order, regulation or report under the *Ontario Water Resources Act* or a licence, order, permit or regulation under the *Pesticides Act*. R.S.O. 1990, c. E.19, s. 176 (8); 1997, c. 7, s. 4 (14, 15); 2001, c. 17, s. 2 (44); 2005, c. 12, s. 1 (51).

Regulations relating to Part XII

(9) The Lieutenant Governor in Council may make regulations relating to Part XII prescribing requirements for financial assurance in respect of the classes of approvals, orders or certificates of property use specified in the regulations. R.S.O. 1990, c. E.19, s. 176 (9); 2001, c. 17, s. 2 (45).

Regulations relating to Part XIII

(9.1) The Lieutenant Governor in Council may make regulations relating to Part XIII,

(a) governing procedures for hearings required under section 142.1 and for applications to stay the operation of a decision made in respect of a renewable energy approval;

(b) providing that section 142.1 does not apply in respect of a renewable energy approval, or prescribing circumstances in which section 142.1 does not apply in respect of a renewable energy approval, if,

(i) under Part II or II.1 of the *Environmental Assessment Act*, the holder of the renewable energy approval is authorized to proceed with the renewable energy project or was authorized, immediately before Part V.0.1 of this Act came into force, to proceed with the project,

(ii) pursuant to an exempting regulation made under the *Environmental Assessment Act*, a statement of completion in respect of the renewable energy project was filed with the Director appointed under that Act before Part V.0.1 of this Act came into force, or

(iii) all the approvals, permits and other instruments required under this Act and the *Ontario Water Resources Act* to engage in the renewable energy project were obtained before Part V.0.1 of this Act came into force. 2009, c. 12, Sched. G, s. 20 (3).

Same

(9.2) A regulation made under clause (9.1) (a) may provide that it prevails over a provision of the *Statutory Powers Procedure Act*, despite anything in that Act. 2009, c. 12, Sched. G, s. 20 (3).

Regulations relating to Part XV.1

(10) The Lieutenant Governor in Council may make regulations relating to Part XV.1,

(a) governing the establishment, operation and maintenance of the Registry, including the information that may be submitted for filing or filed in the Registry and the Director's powers and duties relating to the establishment, operation and maintenance of the Registry;

(b) governing the conduct of phase one environmental site assessments, including in respect of the conduct of an investigation of the existing and permitted land uses within the vicinity of a property for which a record of site condition is to be filed and in respect of what constitutes an existing or permitted land use and of what is within the vicinity of the property;

(c) prescribing circumstances in which phase two environmental site assessments are required;

(d) governing the conduct of phase two environmental site assessments;

(e) prescribing the qualifications of qualified persons, including requiring approval of qualified persons by a person or body specified in the regulations, and governing the approval process and the terms and conditions that may be imposed when issuing or amending an approval;

(e.1) governing the payment of fees in respect of any approval required by a regulation made under clause (e);

(e.2) providing for and governing the revocation or suspension, by a person or body specified in the regulations, of any approval required by a regulation made under clause (e), and providing for and

governing appeals to a person or body specified in the regulations of decisions to revoke or suspend an approval;

(e.3) requiring qualified persons to carry insurance specified in the regulations;

(e.4) delegating to a person or body specified in the regulations any power to make regulations under clauses (e), (e.1), (e.2) and (e.3);

(f) governing the form, content and completion of records of site condition;

(g) governing the determination of the certification date applicable to a record of site condition;

(h) prescribing full depth background site condition standards, full depth generic site condition standards and stratified site condition standards for property, including standards related to maximum contaminant amounts, concentrations or levels;

(i) governing the determination of which full depth background site condition standards, full depth generic site condition standards or stratified site condition standards are applicable to a property;

(i.1) governing the circumstances in which full depth background site condition standards, full depth generic site condition standards or stratified site condition standards must be applied to a property;

(j) prescribing the methods to be used in determining whether property meets standards prescribed by the regulations or standards specified in a risk assessment;

(k) governing the preparation of risk assessments, the form and content of risk assessments, and procedures relating to the submission of risk assessments to the Director under subsection 168.5 (1);

(l) prescribing a dispute resolution system, including mediation and conciliation, that may be used in connection with risk assessments that are submitted to, but not accepted by, the Director under subsection 168.5 (1);

(m) governing the management of soil on, in or under property for which a record of site condition has been filed in the Registry;

(m.1) governing the assessment of contaminants that were discharged into the natural environment and that are on, in or under a property for which a record of site condition is to be filed;

(n) governing the filing in the Registry of notices under sections 168.7.2 and 168.8;

(o) defining any word or expression used in Part XV.1 that is not already defined;

(p) respecting any matter that the Lieutenant Governor in Council considers advisable to carry out effectively the intent and purpose of Part XV.1. 2001, c. 17, s. 2 (46); 2007, c. 7, Sched. 13, s. 13.

Regulations, market-based approaches, etc.

176.1 (1) The Lieutenant Governor in Council may make regulations establishing programs and other measures for the use of economic and financial instruments and market-based approaches, including without being limited to emissions trading, for the purposes of maintaining or improving existing environmental standards, protecting the environment and achieving environmental quality goals in a cost effective manner. 2009, c. 27, s. 2 (1).

Same, included powers

(2) Without limiting the generality of subsection (1), the power to make regulations under subsection (1) includes the power to make regulations,

(a) prescribing the persons, entities and facilities to which programs and other measures established under subsection (1) apply;

(b) governing the economic and financial instruments to be used in programs and other measures established under subsection (1), including,

(i) providing for the instruments to be created by or in accordance with the regulations and governing the creation of those instruments,

(ii) providing for instruments created by the regulations under subclause (i) to be distributed free of charge, and governing the distribution of those instruments,

(iii) governing the use, trading and retirement of instruments created by or in accordance with the regulations under subclause (i),

(iv) governing the use and trading, for the purpose of programs and other measures established under subsection (1), of instruments created in other jurisdictions, and

(v) requiring notice to be given to other jurisdictions of the use or trading, for the purpose of programs and other measures established under subsection (1), of instruments created in those jurisdictions;

(c) prescribing requirements that must be met by persons, entities and facilities to which programs and other measures established under subsection (1) apply, including requirements related to the emission, monitoring and reporting of contaminants;

(d) attributing emissions to a person, entity or facility for the purpose of programs and other measures established under subsection (1);

(e) providing for or designating a person or body to administer programs and other measures established under subsection (1). 2009, c. 27, s. 2 (1).

Same, powers under ss. 175.1 and 176 (1)

(3) Without limiting the generality of subsection (1), with respect to programs and other measures established by regulations made under that subsection, the power to make regulations under subsection (1) includes the power to make any regulation that may be made under section 175.1 or subsection 176 (1). 2009, c. 27, s. 2 (1).

Note: On a day to be named by proclamation of the Lieutenant Governor, section 176.1 is amended by adding the following subsections:

Same, greenhouse gases

(4) A regulation under this section that relates to greenhouse gases may,

(a) provide for instruments created by the regulations under subclause (2) (b) (i) to be distributed free of charge, or by auction, sale or other means that are not free of charge, and governing the distribution of those instruments;

(b) authorize a person or body to prescribe, govern or otherwise determine any matter that may be prescribed, governed or otherwise determined by the Lieutenant Governor in Council under this section. 2009, c. 27, s. 2 (2).

Same

(5) Without limiting the generality of clause (4) (a), a regulation under that clause may,

(a) prescribe objectives and other matters that must be considered in setting the percentages of instruments to be distributed by any of the means referred to in clause (4) (a);

(b) prescribe objectives and other matters that must be considered in setting reserve bids for instruments distributed by auction or sale prices for instruments distributed by sale. 2009, c. 27, s. 2 (2).

Greenhouse Gas Reduction Account

(6) Any amount paid to the Minister of Finance from the distribution of instruments under the regulations made under clause (4) (a) shall be deposited in a separate account in the Consolidated Revenue Fund to be known in English as the Greenhouse Gas Reduction Account and in French as Compte de réduction des gaz à effet de serre. 2009, c. 27, s. 2 (2).

Same

(7) For the purpose of the *Financial Administration Act*, money deposited in the Greenhouse Gas Reduction Account shall be deemed to be money paid to Ontario for the special purpose described in subsection (8). 2009, c. 27, s. 2 (2).

Payments out of account

(8) Money may be paid out of the Greenhouse Gas Reduction Account for the purpose of reimbursing the Crown in right of Ontario for costs incurred by the Crown in administering the regulations under this section that relate to greenhouse gases and in carrying out or supporting greenhouse gas reduction initiatives, particularly initiatives that relate to the sectors of the Ontario economy to which the regulations apply. 2009, c. 27, s. 2 (2).

Same

(9) Without limiting the generality of subsection (8), money may be paid out of the account under that subsection with respect to the following costs:

1. The costs of research into or the development or deployment of lower greenhouse gas emitting technologies in a sector of the Ontario economy to which the regulations under clause (4) (a) apply.
2. The costs of programs to reduce greenhouse gas emissions in a sector of the Ontario economy to which the regulations under clause (4) (a) apply.
3. The costs of infrastructure or equipment to reduce greenhouse gas emissions in a sector of the Ontario economy to which the regulations under clause (4) (a) apply.
4. If the regulations made under clause (4) (a) apply to the electricity sector of the Ontario economy, costs of any greenhouse gas reduction initiative that would otherwise be borne by electricity consumers. 2009, c. 27, s. 2 (2).

See: 2009, c. 27, ss. 2 (2), 3 (2).

Regulations, general rules

177. (1) A regulation may be general or particular in its application, may be limited as to time or place or both and may exclude any place from the application of the regulation. 1997, c. 7, s. 5.

Classes

(2) A regulation may apply in respect of any class of activity, matter, person or thing. 1997, c. 7, s. 5.

Same

(3) A class under this Act or the regulations may be defined with respect to any attribute, quality or characteristic or combination thereof and may be defined to consist of or to include or exclude any specified member whether or not with the same attributes, qualities or characteristics. 1997, c. 7, s. 5.

Adoption of documents in regulations

(4) A regulation may adopt by reference, in whole or in part, with such changes as the Lieutenant Governor in Council considers necessary, any document, including a code, formula, standard, protocol or procedure, and may require compliance with any document so adopted. 2010, c. 16, Sched. 7, s. 2 (75).

Rolling incorporation by reference

(5) The power to adopt by reference and require compliance with a document in subsection (4) includes the power to adopt a document as it may be amended from time to time. 2010, c. 16, Sched. 7, s. 2 (76).

When effective

(6) The adoption of an amendment to a document that has been adopted by reference comes into effect upon the Ministry publishing notice of the amendment in *The Ontario Gazette* or in the registry under the *Environmental Bill of Rights, 1993*. 1997, c. 7, s. 5; 2010, c. 16, Sched. 7, s. 2 (77).

Bar of action

177.1 No action or other proceeding shall be brought against the Crown, the Minister or an employee or agent of the Crown because of anything arising out of or in relation to a matter carried on or purported to be carried on pursuant to a regulation that exempts a person from the requirement to obtain a licence, environmental compliance approval, renewable energy approval or permit. 1997, c. 7, s. 5; 2009, c. 12, Sched. G, s. 21; 2010, c. 16, Sched. 7, s. 2 (78).

178. REPEALED: 2001, c. 25, s. 484 (2).

Conflict with other legislation

179. (1) Where a conflict appears between any provision of this Act or the regulations and any other Act or regulation in a matter related to the natural environment or a matter specifically dealt with in this Act or the regulations, the provision of this Act or the regulations shall prevail.

Idem

(2) Subsection (1) does not apply in respect of section 178 and the enactment of section 178 or a by-law pursuant to section 178 does not affect the validity of an Act that was in force immediately before the 8th day of October, 1975. R.S.O. 1990, c. E.19, s. 179.

Fees

179.1 The Minister may establish and require the payment of fees in respect of any matter under this Act, specify to whom the fees are paid, provide for the retention of all or part of the fees by the person to whom they are paid and provide for the refund of fees. 2001, c. 9, Sched. G, s. 5 (12).

Protection from personal liability

180. (1) No action or other proceeding may be instituted against the following persons for any act done in good faith in the execution or intended execution of any duty or authority under this Act or for any alleged neglect or default in the execution in good faith of such a duty or authority:

1. REPEALED: 2009, c. 33, Sched. 2, s. 28 (2).
2. An employee in the Ministry.
3. A provincial officer employed under Part III of the *Public Service of Ontario Act, 2006*.

4. A public servant employed under Part III of the *Public Service of Ontario Act, 2006* who is acting under the direction of a person described in paragraph 2 or 3. 2006, c. 35, Sched. C, s. 36 (8); 2009, c. 33, Sched. 2, ss. 28 (2, 3).

Exception

(1.1) Subsection (1) does not apply in the case of an application for judicial review or an action or proceeding that is specifically provided for under this or any other Act with respect to a person referred to in that subsection. 2006, c. 35, Sched. C, s. 36 (8).

Crown not relieved of liability

(2) Subsection (1) does not, by reason of subsections 5 (2) and (4) of the *Proceedings Against the Crown Act*, relieve the Crown of liability in respect of a tort committed by an agent or servant of the Crown to which it would otherwise be subject and the Crown is liable under that Act for any such tort in a like manner as if subsection (1) had not been enacted. R.S.O. 1990, c. E.19, s. 180 (2); 2009, c. 33, Sched. 15, s. 5 (7).

Service on commercial drivers of offence notice or summons

181. (1) In this section,

"commercial motor vehicle" and "motor vehicle" have the same meanings as in the *Highway Traffic Act*; ("véhicule utilitaire", "véhicule automobile")

"offence notice or summons" means,

(a) an offence notice or summons under Part I of the *Provincial Offences Act*, or

(b) a summons under Part III of the *Provincial Offences Act*. ("avis d'infraction ou assignation") R.S.O. 1990, c. E.19, s. 181 (1); 1998, c. 35, s. 32 (1).

Same

(2) Delivery of an offence notice or summons to the operator of a commercial motor vehicle in respect of an offence under this Act related to the use of the vehicle shall be deemed to be personal service of the offence notice or summons on the owner or lessee of the vehicle who is named in the offence notice or summons.

Employer

(3) Delivery of an offence notice or summons to the operator of a motor vehicle in respect of an offence under this Act related to the use of the vehicle in the course of the operator's employment shall be deemed to be personal service of the offence notice or summons on the employer of the operator of the vehicle. R.S.O. 1990, c. E.19, s. 181 (2, 3).

(4) REPEALED: 1998, c. 35, s. 32 (2).

Exception

(5) Subsection (2) does not apply if, at the time of the offence, the vehicle was in the possession of the operator without the consent of the owner or lessee of the vehicle, as the case may be, but the burden of proof of that shall be on the owner or lessee of the vehicle.

Permit holder deemed owner

(6) For the purposes of this section, the holder of a permit under Part II of the *Highway Traffic Act* shall be deemed to be the owner of the vehicle referred to in the permit if a number plate under that Part bearing a number that corresponds to the permit was displayed on the vehicle at the time the offence was committed.

Application of subs. (6)

(7) Subsection (6) does not apply if the number plate was displayed on the vehicle without the consent of the holder of the permit, but the burden of proof of that shall be on the holder of the permit. R.S.O. 1990, c. E.19, s. 181 (5-7).

Service on various entities of offence notice or summons

Municipal corporations

181.1 (1) Service of an offence notice or summons on a municipal corporation may be effected by delivering it personally to the mayor, warden, reeve or other chief officer of the municipal corporation or to the clerk of the municipal corporation.

Other corporations

(2) Service of an offence notice or summons on a corporation other than a municipal corporation may be effected by delivering it personally to the manager, secretary or other officer of the corporation or to a person apparently in charge of a branch office of the corporation.

Partnership

(3) Service of an offence notice or summons on a partnership may be effected by delivering it personally to a partner or to a person apparently in charge of an office of the partnership.

Sole proprietorship

(4) Service of an offence notice or summons on a sole proprietorship may be effected by delivering it personally to the sole proprietor or to a person apparently in charge of an office of the sole proprietorship.

Substituted service

(5) On application without notice, a justice, on being satisfied that service cannot be made effectively in accordance with subsections (1) to (4), may by order authorize another method of service that has a reasonable likelihood of coming to the attention of the municipal corporation, other corporation, partnership or sole proprietorship. 1998, c. 35, s. 33.

Service generally

182. (1) Any document given or served under this Act or the regulations is sufficiently given or served if it is,

(a) delivered personally;

(b) sent by mail addressed to the person to whom delivery or service is required to be made at the latest address for the person appearing on the records of the Ministry; or

(c) given or served in accordance with regulations respecting service.

When service deemed made

(2) Where service is made by mail, the service shall be deemed to be made on the fifth day after the day of mailing unless the person on whom service is being made establishes that the person did not, acting in good faith, through absence, accident, illness or other cause beyond the person's control receive the notice or order until a later date. R.S.O. 1990, c. E.19, s. 182.

Environmental penalties

182.1 (1) Subject to the regulations, the Director may issue an order requiring a regulated person to pay a penalty if,

(a) the regulated person contravenes,

(i) section 14,

(ii) section 93,

(iii) a provision of the regulations that establishes or has the effect of establishing a numerical limit, including a limit of zero, on the amount, concentration or level of anything that may be discharged to the natural environment,

(iv) a provision of an order under this Act that establishes or has the effect of establishing a numerical limit, including a limit of zero, on the amount, concentration or level of anything that may be discharged to the natural environment, or

(v) a provision of an environmental compliance approval, certificate of property use, renewable energy approval, licence or permit under this Act that establishes or has the effect of establishing a numerical limit, including a limit of zero, on the amount, concentration or level of anything that may be discharged to the natural environment; or

(b) the regulated person contravenes a provision, other than a provision referred to in clause (a), of,

(i) this Act or the regulations,

(ii) an order under this Act, other than an order under section 99.1, 100.1 or 150 or an order of a court,

(iii) an environmental compliance approval, certificate of property use, renewable energy approval, licence or permit under this Act,

(iv) a report under section 29, or

(v) an agreement under subsection (9). 2005, c. 12, s. 1 (52); 2009, c. 12, Sched. G, s. 22 (1, 2); 2010, c. 16, Sched. 7, s. 2 (79, 80).

Exceptions

(2) Subsection (1) does not apply to,

(a) a contravention of section 14, if,

(i) neither this Act nor the *Ontario Water Resources Act* requires the regulated person to notify the Ministry of the discharge to which the contravention relates, or

(ii) the discharge to which the contravention relates was authorized under this Act or the *Ontario Water Resources Act*; or

(b) a contravention of section 184. 2005, c. 12, s. 1 (52).

Contents of order

(3) The order shall be served on the person who is required to pay the penalty and shall,

(a) contain a description of the contravention to which the order relates, including, where appropriate, the date and location of the contravention;

(b) in the case of a contravention of section 14, contain a description of the adverse effects that were caused by or that may be caused by the contravention;

(c) specify the amount of the penalty;

(d) give particulars respecting the time for paying the penalty and the manner of payment; and

(e) provide information to the person as to the person's rights under section 140. 2005, c. 12, s. 1 (52).

Amount

(4) The amount of the penalty shall be determined in accordance with the regulations. 2005, c. 12, s. 1 (52).

Maximum penalty

(5) The amount of the penalty shall not exceed $100,000 for each day or part of a day on which the contravention occurred or continued. 2005, c. 12, s. 1 (52).

Absolute liability

(6) A requirement that a person pay an environmental penalty applies even if,

(a) the person took all reasonable steps to prevent the contravention; or

(b) at the time of the contravention, the person had an honest and reasonable belief in a mistaken set of facts that, if true, would have rendered the contravention innocent. 2005, c. 12, s. 1 (52).

Same

(7) For greater certainty, nothing in subsection (6) affects the prosecution of an offence. 2005, c. 12, s. 1 (52).

Limitation

(8) An order requiring payment of an environmental penalty shall be served not later than the first anniversary of the later of the following dates:

1. The date the contravention occurred.
2. The date on which the evidence of the contravention first came to the attention of the Director or a provincial officer. 2005, c. 12, s. 1 (52).

Agreements

(9) The Director and a person against whom an order may be or has been made under subsection (1) may enter into an agreement that,

(a) identifies the contravention in respect of which the order may be or has been made;

(b) requires the person against whom the order may be or has been made to take steps specified in the agreement within the time specified in the agreement; and

(c) provides that the obligation to pay the penalty may be cancelled in accordance with the regulations or the amount of the penalty may be reduced in accordance with the regulations. 2005, c. 12, s. 1 (52).

Publication of agreements

(10) The Ministry shall publish every agreement entered into under subsection (9) in the environmental registry established under section 5 of the *Environmental Bill of Rights, 1993*. 2005, c. 12, s. 1 (52).

Penalty does not prevent prosecution

(11) A person may be charged, prosecuted and convicted of an offence under this Act in respect of a contravention referred to in subsection (1) even if an environmental penalty has been imposed on or paid by the person or another person in respect of the contravention. 2005, c. 12, s. 1 (52).

No admission

(12) If a person pays a penalty imposed under subsection (1) in respect of a contravention or enters into an agreement under subsection (9) in respect of a contravention, the payment or entering into of the agreement is not, for the purposes of any prosecution in respect of the contravention, an admission that the person committed the contravention. 2005, c. 12, s. 1 (52).

Failure to pay when required

(13) If a person who is required to pay an environmental penalty fails to comply with the requirement,

(a) the order or decision that requires the payment may be filed with a local registrar of the Superior Court of Justice and may be enforced as if it were an order of the court;

(b) the Director may by order suspend any environmental compliance approval, renewable energy approval, licence or permit that has been issued to the person under this Act until the environmental penalty is paid; and

(c) the Director may refuse to issue any environmental compliance approval, renewable energy approval, licence or permit to the person under this Act until the environmental penalty is paid. 2005, c. 12, s. 1 (52); 2009, c. 12, Sched. G, s. 22 (3, 4); 2010, c. 16, Sched. 7, s. 2 (81, 82).

Same

(14) Section 129 of the *Courts of Justice Act* applies in respect of an order or decision filed with the Superior Court of Justice under subsection (13) and, for that purpose, the date on which the order or decision is filed under subsection (13) shall be deemed to be the date of the order that is referred to in section 129 of the *Courts of Justice Act*. 2005, c. 12, s. 1 (52).

Regulations

(15) The Lieutenant Governor in Council may make regulations,

(a) specifying the form and content of orders under subsection (1);

(b) specifying types of contraventions or circumstances in respect of which an order may not be issued under subsection (1);

(c) requiring and governing public consultation before an agreement is entered into under subsection (9) and, subject to that subsection and to any regulations made under subclause (d) (iv), governing the contents of agreements under that subsection;

(d) governing the determination of the amounts of environmental penalties, including,

(i) prescribing criteria to be considered in the exercise of any discretion,

(ii) providing that the total amount of the penalty for a contravention that occurs or continues for more than one day not exceed a maximum prescribed by the regulations,

(iii) providing for different amounts depending on when an environmental penalty is paid,

(iv) with respect to agreements under subsection (9), governing the cancellation of the obligation to pay an environmental penalty or the reduction of the amount of an environmental penalty;

(e) prescribing circumstances in which a person is not required to pay an environmental penalty;

(f) prescribing procedures related to environmental penalties;

(g) respecting any other matter necessary for the administration of a system of penalties provided for by this section. 2005, c. 12, s. 1 (52).

General or particular

(16) A regulation under subsection (15) may be general or particular in its application. 2005, c. 12, s. 1 (52).

Regulations governing determination of amounts

(17) The regulations made under clause (15) (d) must, with respect to a contravention referred to in clause (1) (a), provide for the following matters:

1. The person who is required to pay the penalty must be entitled,
   i. to seek and obtain a reduction in the amount of the penalty if the person took steps prescribed by the regulations to prevent the contravention in respect of which the penalty is imposed, and
   ii. to seek and obtain a reduction in the amount of the penalty if the person took steps prescribed by the regulations to mitigate the effects of the contravention in respect of which the penalty is imposed.
2. The determination of the amount of the penalty must take into account factors prescribed by the regulations that relate to the seriousness of the contravention in respect of which the penalty is imposed.
3. If the Director is of the opinion that, as a result of the contravention in respect of which the penalty is imposed, a monetary benefit prescribed by the regulations was acquired by the person who is required to pay the penalty, the amount of the benefit must be considered in determining the amount of the penalty. 2005, c. 12, s. 1 (52).

Environmental management systems

(18) The regulations made under clause (15) (d) must provide for a reduction in the amount of an environmental penalty if, at the time the contravention to which the penalty relates occurred, the person who is required to pay the penalty had in place an environmental management system specified by the regulations. 2005, c. 12, s. 1 (52).

Annual report

(19) The Minister shall, not later than March 31 in each year, publish a report that sets out the following information for each contravention in respect of which an order was made under this section during the previous year:

1. The name of the person against whom the order was made.
2. The amount of the penalty.
3. A description of the contravention.
4. An indication of whether an agreement was entered into under subsection (9) in respect of the order and, if an agreement was entered into, the effect of the agreement on the obligation to pay the penalty or on the amount of the penalty. 2005, c. 12, s. 1 (52).

Five-year review

(20) At least once every five years, the Minister shall cause a report to be prepared and published on the operation of this section, including the effect of this section on prosecutions under this Act and including recommendations on the contraventions to which and circumstances in which orders should be issued under subsection (1). 2005, c. 12, s. 1 (52).

Application

(21) This section does not apply to contraventions that occurred before this section came into force. 2005, c. 12, s. 1 (52).

Special purpose account

182.2 (1) Environmental penalties paid under this Act shall be deposited in a separate account in the Consolidated Revenue Fund. 2005, c. 12, s. 1 (53).

Same

(2) For the purpose of the *Financial Administration Act*, money deposited in the account referred to in subsection (1) shall be deemed to be money paid to Ontario for a special purpose. 2005, c. 12, s. 1 (53).

Payments out of account

(3) Subject to the regulations, if money is deposited in the account referred to in subsection (1), the Minister of the Environment may direct that money be paid out of the account for the following purposes:

1. To compensate persons or bodies who incurred costs or expenses or suffered other losses as a result of a spill of a pollutant within the meaning of Part X, including providing funds for making compensation payments under section 101.
2. To provide financial assistance to persons or bodies who undertake environmental remediation projects.
3. Such other purposes as are prescribed by the regulations. 2005, c. 12, s. 1 (53).

Administrative penalties

182.3 (1) The purpose of an administrative penalty issued under this section is,

(a) to ensure compliance with,

(i) the requirement to apply for a review under subsection 20.4 (2),

(ii) the requirement to register an activity under subsection 20.21 (1),

(iii) the requirement to maintain and update a registration under subsection 20.22 (2), or

(iv) the requirement to carry out measures set out in a notice under section 157.4; or

(b) to prevent a person or entity from deriving, directly or indirectly, any economic benefit as a result of contravening the requirements mentioned in clause (a). 2010, c. 16, Sched. 7, s. 2 (83).

Order by provincial officer

(2) A provincial officer may, subject to the regulations, issue an order requiring a person to pay an administrative penalty if,

(a) the provincial officer is of the opinion that the person has contravened any of the requirements mentioned in clause (1) (a); and

(b) the regulations authorize the issue of the order by a provincial officer. 2010, c. 16, Sched. 7, s. 2 (83).

Order by Director

(3) The Director may, subject to the regulations, issue an order requiring a person to pay an administrative penalty if the Director is of the opinion that the person has contravened any of the requirements mentioned in clause (1) (a). 2010, c. 16, Sched. 7, s. 2 (83).

Limitation

(4) An order mentioned in subsection (2) or (3) shall be served not later than one year after the day on which evidence of the contravention first came to the attention of a provincial officer or the Director. 2010, c. 16, Sched. 7, s. 2 (83).

Orders not to be issued to employees, officers, directors or agents

(5) If a person who is required to comply with a requirement mentioned in subsection (1) is a corporation, an order under subsection (2) or (3) shall not be issued to an employee, officer, director or agent of the corporation. 2010, c. 16, Sched. 7, s. 2 (83).

Amount of penalty

(6) The amount of the administrative penalty for each day or part of a day on which a contravention occurred or continues to occur shall be determined by the provincial officer or the Director in accordance with the regulations. 2010, c. 16, Sched. 7, s. 2 (83).

Total penalty

(7) Subject to subsection (8), the amount of the administrative penalty shall not exceed $100,000 for each contravention. 2010, c. 16, Sched. 7, s. 2 (83).

Same, provincial officer

(8) The amount of the administrative penalty specified in an order issued by a provincial officer shall not exceed $5,000 for each contravention. 2010, c. 16, Sched. 7, s. 2 (83).

Contents of notice

(9) An order mentioned in subsection (2) or (3) shall be served on the person who is required to pay the administrative penalty and shall,

(a) contain a description of the contravention to which the order relates, including, if appropriate, the date of the contravention;

(b) specify the amount of the penalty;

(c) give particulars respecting the time for paying the penalty and the manner of payment; and

(d) provide information to the person as to the person's right to require,

(i) a hearing under section 140, if the order is issued by the Director, or

(ii) a review under section 182.4, if the order is issued by a provincial officer. 2010, c. 16, Sched. 7, s. 2 (83).

Absolute liability

(10) A requirement that a person pay an administrative penalty applies even if,

(a) the person took all reasonable steps to prevent the contravention; or

(b) at the time of the contravention, the person had an honest and reasonable belief in a mistaken set of facts that, if true, would have rendered the contravention innocent. 2010, c. 16, Sched. 7, s. 2 (83).

Same

(11) For greater certainty, nothing in subsection (10) affects the prosecution of an offence. 2010, c. 16, Sched. 7, s. 2 (83).

Payment prevents conviction

(12) A person who pays an administrative penalty in respect of a contravention and has remedied the contravention shall not be convicted of an offence under this Act in respect of the same contravention. 2010, c. 16, Sched. 7, s. 2 (83).

Regulations

(13) The Lieutenant Governor in Council may make regulations,

(a) specifying the form and content of orders under this section;

(b) governing the determination of the amount of administrative penalties;

(c) respecting any matter necessary for the administration of the system of administrative penalties. 2010, c. 16, Sched. 7, s. 2 (83).

Review of administrative penalty imposed by provincial officer

182.4 (1) A person who is required by an order issued by a provincial officer to pay an administrative penalty may, within seven days after being served with the order, request that the Director review the order. 2010, c. 16, Sched. 7, s. 2 (83).

Request for review

(2) A request for a review shall be made in writing and shall include,

(a) a statement of whether the review applies to the liability to pay the penalty, the amount of the penalty or both;

(b) any submissions that the person requesting the review wishes the Director to consider; and

(c) for the purposes of subsection (7), an address for service by mail, fax or such other means of service as the regulations may prescribe. 2010, c. 16, Sched. 7, s. 2 (83).

Stay

(3) If a person requests a review, the requirement to pay the administrative penalty is stayed until the disposition of the matter. 2010, c. 16, Sched. 7, s. 2 (83).

Decision of Director

(4) A Director who receives a request for a review may,

(a) revoke the order of the provincial officer; or

(b) by order directed to the person who requested the review, confirm or alter the order of the provincial officer. 2010, c. 16, Sched. 7, s. 2 (83).

Same

(5) For the purposes of subsection (4), the Director may substitute his or her opinion for that of the provincial officer. 2010, c. 16, Sched. 7, s. 2 (83).

Amount of penalty

(6) For greater certainty, if the review applies to the amount of the penalty, the regulations made under clause 182.3 (13) (b) apply for the purposes of the review. 2010, c. 16, Sched. 7, s. 2 (83).

Notice of decision

(7) The Director shall serve a person requesting a review with a copy of,

(a) the Director’s decision or order under subsection (4); and

(b) if the Director issues an order under clause (4) (b), the reasons for the order. 2010, c. 16, Sched. 7, s. 2 (83).

Automatic confirmation of order

(8) If the Director does not comply with subsection (7) within seven days after receiving a request for a review, the order in respect of which the review was requested shall be deemed to have been confirmed by order of the Director. 2010, c. 16, Sched. 7, s. 2 (83).

Same

(9) For the purposes of section 140, a deemed confirmation by order of the Director under subsection (8) shall be,

(a) deemed to be directed to the person to whom the order of the provincial officer was directed; and

(b) deemed to have been served on the person mentioned in clause (a) on the last day of the time period mentioned in subsection (8). 2010, c. 16, Sched. 7, s. 2 (83).

Exception

(10) Subsections (8) and (9) do not apply if, within seven days after receiving the request for a review, the Director gives written notice to the person requesting the review stating that the Director requires additional time to make a decision. 2010, c. 16, Sched. 7, s. 2 (83).

Regulations

(11) The Lieutenant Governor in Council may make regulations specifying the form and content of orders under this section. 2010, c. 16, Sched. 7, s. 2 (83).

Failure to pay administrative penalty when required

182.5 (1) If a person who is required to pay an administrative penalty fails to comply with the requirement,

(a) the order that requires payment may be filed with a local registrar of the Superior Court of Justice and the order may be enforced as if it were an order of the court;

(b) the Director may, by order, suspend any registration filed under Part II.2 or any permit, licence or environmental compliance approval issued to the person under this Act until the administrative penalty is paid; and

(c) the Director may refuse to issue any permit, licence or environmental compliance approval to the person or refuse to amend any permit, licence or environmental compliance approval issued to the person under this Act until the administrative penalty is paid. 2010, c. 16, Sched. 7, s. 2 (83).

Same

(2) Section 129 of the *Courts of Justice Act* applies in respect of an order filed under clause (1) (a) and, for that purpose, the date on which the order is filed under clause (1) (a) shall be deemed to be the date of the order that is referred to in section 129 of the *Courts of Justice Act*. 2010, c. 16, Sched. 7, s. 2 (83).

Power to restrain

By action

183. (1) Where this Act or the regulations or any direction, order, certificate of property use, approval, notice or permit, made, granted, given, served or issued by the Minister, the Director or a provincial officer under this Act is contravened, in addition to any other remedy and to any penalty

imposed by law, such contravention may be restrained by action at the instance of the Minister. R.S.O. 1990, c. E.19, s. 183 (1); 2001, c. 17, s. 2 (48).

By order upon conviction

(2) On its own initiative or on application by counsel for the prosecutor, the court that convicts a person of an offence under this Act, in addition to any other remedy and to any other penalty imposed by law, may make an order prohibiting the continuation or repetition by the person of the act or omission for which the person is convicted. R.S.O. 1990, c. E.19, s. 183 (2).

Compliance with investigations, etc.

Obstruction

184. (1) No person shall hinder or obstruct any provincial officer or any employee in or agent of the Ministry in the performance of his or her duties under this Act. 1998, c. 35, s. 35; 2006, c. 35, Sched. C, s. 36 (9); 2009, c. 33, Sched. 15, s. 5 (8).

False information

(2) No person shall orally, in writing or electronically, give or submit false or misleading information in any statement, document or data, to any provincial officer, the Minister, the Ministry, any employee in or agent of the Ministry or any person involved in carrying out a program of the Ministry in respect of any matter related to this Act or the regulations. 1998, c. 35, s. 35; 2001, c. 9, Sched. G, s. 5 (15); 2006, c. 35, Sched. C, s. 36 (10); 2009, c. 33, Sched. 15, s. 5 (9).

Same

(3) No person shall include false or misleading information in any document or data required to be created, stored or submitted under this Act. 1998, c. 35, s. 35.

Refusal to furnish information

(4) No person shall refuse to furnish any provincial officer, the Minister, the Ministry or any employee in or agent of the Ministry with information required for the purposes of this Act and the regulations. 1998, c. 35, s. 35; 2006, c. 35, Sched. C, s. 36 (11); 2009, c. 33, Sched. 15, s. 5 (10).

Presiding judge

185. The Crown, by notice to the clerk of the Ontario Court of Justice, may require that a provincial judge preside over a proceeding in respect of an offence under this Act. R.S.O. 1990, c. E.19, s. 185; 2001, c. 9, Sched. G, s. 5 (16); 2006, c. 21, Sched. C, s. 108 (1).

Offences

General

186. (1) Every person who contravenes this Act or the regulations is guilty of an offence. R.S.O. 1990, c. E.19, s. 186 (1).

Exception

(1.1) Subsection (1) does not apply to a contravention of section 14 unless the contravention causes or is likely to cause an adverse effect. 2005, c. 12, s. 1 (54).

Offence re order

(2) Every person who fails to comply with an order under this Act, other than an order under section 99.1, 100.1, 150 or 182.1, is guilty of an offence. R.S.O. 1990, c. E.19, s. 186 (2); 2005, c. 12, s. 1 (55).

Offence re approval, licence or permit, etc.

(3) Every person who fails to comply with the terms and conditions of an environmental compliance approval, certificate of property use or renewable energy approval or of a licence or permit under this Act or who fails to comply with the terms of a report under section 29 is guilty of an offence. 2010, c. 16, Sched. 7, s. 2 (84).

Offence re fees

(3.1) Every person who fails to pay a fee that the person is required to pay under section 179.1 is guilty of an offence. 2001, c. 9, Sched. G, s. 5 (17).

Exception when order or program approval complied with

(4) Despite subsections (1), (2) and (3), a person to whom an order of the Minister, the Director or a provincial officer or a program approval of the Director is directed who complies fully with the order or approval shall not be prosecuted for or convicted of an offence in respect of the matter or matters dealt with in the order or approval that occurs during the period within which the order or program approval is applicable. 1998, c. 35, s. 36.

Same

(5) The protection from prosecution under subsection (4) does not include protection from the imposition of an environmental penalty. 1998, c. 35, s. 36; 2005, c. 12, s. 1 (56).

(6) REPEALED: 1998, c. 35, s. 36.

Penalties

187. (1) Every individual convicted of an offence under section 186, other than an offence described in subsection (3), is liable,

(a) on a first conviction, for each day or part of a day on which the offence occurs or continues, to a fine of not more than $50,000; and

(b) on each subsequent conviction,

(i) for each day or part of a day on which the offence occurs or continues, to a fine of not more than $100,000,

(ii) to imprisonment for a term of not more than one year, or

(iii) to both such fine and imprisonment. 2005, c. 12, s. 1 (57).

Same: corporations

(2) Every corporation convicted of an offence under section 186, other than an offence described in subsection (3), is liable,

(a) on a first conviction, for each day or part of a day on which the offence occurs or continues, to a fine of not more than $250,000; and

(b) on each subsequent conviction, for each day or part of a day on which the offence occurs or continues, to a fine of not more than $500,000. 2005, c. 12, s. 1 (57).

Application of subss. (4) and (5)

(3) Subsections (4) and (5) apply to the following offences:

1. An offence under subsection 186 (1) of,

i. contravening section 14 or 15,

ii. contravening section 27, 40, 41 or 47.3 in respect of hauled liquid industrial waste or hazardous waste as designated in the regulations relating to Part V,

iii. contravening section 92 or 184, or

iv. contravening a provision of the regulations that establishes or has the effect of establishing a numerical limit, including a limit of zero, on the amount, concentration or level of anything that may be discharged to the natural environment.

2. An offence under subsection 186 (2) of failing to comply with an order under this Act that establishes or has the effect of establishing a numerical limit, including a limit of zero, on the amount, concentration or level of anything that may be discharged to the natural environment.

3. An offence under subsection 186 (3) of failing to comply with a term or condition of an environmental compliance approval, certificate of property use, renewable energy approval, licence or permit under this Act, or a report under section 29, that establishes or has the effect of establishing a numerical limit, including a limit of zero, on the amount, concentration or level of anything that may be discharged to the natural environment.

4. An offence under subsection 194 (2) that relates to a contravention or failure to comply referred to in paragraph 1, 2 or 3. 2005, c. 12, s. 1 (57); 2009, c. 12, Sched. G, s. 24; 2010, c. 16, Sched. 7, s. 2 (85).

Certain offences: corporations

(4) Every corporation convicted of an offence described in subsection (3) is liable, for each day or part of a day on which the offence occurs or continues, to a fine of,

(a) not less than $25,000 and not more than $6,000,000 on a first conviction;

(b) not less than $50,000 and not more than $10,000,000 on a second conviction; and

(c) not less than $100,000 and not more than $10,000,000 on each subsequent conviction. 2005, c. 12, s. 1 (57).

Certain offences: individuals

(5) Every individual convicted of an offence described in subsection (3) is liable,

(a) for each day or part of a day on which the offence occurs or continues, to a fine of,

(i) not less than $5,000 and not more than $4,000,000 on a first conviction,

(ii) not less than $10,000 and not more than $6,000,000 on a second conviction, and

(iii) not less than $20,000 and not more than $6,000,000 on each subsequent conviction;

(b) to imprisonment for a term of not more than five years less one day; or

(c) to both such fine and imprisonment. 2005, c. 12, s. 1 (57).

Number of convictions

188. In determining the number of a person's previous convictions for the purpose of section 187, the court shall include previous convictions of the person under,

(a) this Act, other than for an offence related to Part IX;

(a.1) the *Nutrient Management Act, 2002*;

(b) the *Ontario Water Resources Act*;

(c) the *Pesticides Act*;

(d) the *Safe Drinking Water Act, 2002*; or

(e) the *Toxics Reduction Act, 2009*. 1998, c. 35, s. 38; 2002, c. 4, s. 62 (6); 2005, c. 12, s. 1 (58); 2009, c. 19, s. 67 (11).

Sentencing considerations

188.1 (1) Subject to subsection (3), in determining a penalty under section 187, the court shall consider each of the following circumstances to be aggravating factors:

1. The offence caused an adverse effect.
2. The defendant committed the offence intentionally or recklessly.
3. In committing the offence, the defendant was motivated by a desire to increase revenue or decrease costs.
4. The defendant committed the offence despite having been warned by the Ministry of circumstances that subsequently became the subject of the offence.
5. After the commission of the offence, the defendant,
   i. attempted to conceal the commission of the offence from the Ministry or other public authorities,
   ii. failed to co-operate with the Ministry or other public authorities,
   iii. failed to take prompt action to mitigate the effects of the offence, including action to compensate persons for loss or damage that resulted from the commission of the offence, or
   iv. failed to take prompt action to reduce the risk of similar offences being committed in the future.
6. The defendant previously contravened legislation of Ontario or another jurisdiction that is intended to prevent or minimize harm to the natural environment.
7. Any other circumstance that is prescribed by the regulations as an aggravating factor. 2005, c. 12, s. 1 (59).

Severity of penalty

(2) Subject to subsection (3), the severity of a penalty under section 187 shall reflect the number of aggravating factors that apply under subsection (1) and the seriousness of the particular circumstances of each of those aggravating factors. 2005, c. 12, s. 1 (59).

Reasons

(3) If the court decides that an aggravating factor that applies under subsection (1) does not warrant a more severe penalty, the court shall give reasons for that decision. 2005, c. 12, s. 1 (59).

Compliance with order not a mitigating factor

(4) Subject to subsection (5), in determining a penalty under section 187, the court shall not consider compliance with an order issued under this Act in response to the offence to be a mitigating factor. 2005, c. 12, s. 1 (59).

Reasons

(5) If the court decides that compliance with an order issued under this Act in response to the offence warrants a less severe penalty, the court shall give reasons for that decision. 2005, c. 12, s. 1 (59).

Environmental penalty

(6) If an order is made requiring a person to pay an environmental penalty in respect of a contravention and the person is also convicted of an offence in respect of the same contravention, the

court, in determining a penalty under section 187, shall consider the order to pay the environmental penalty to be a mitigating factor and, if subsection 187 (4) or (5) applies, may impose a fine of less than the minimum fine provided for in that subsection. 2005, c. 12, s. 1 (59).

Penalty re monetary benefit

189. The court that convicts a person of an offence under this Act, in addition to any other penalty imposed by the court, may increase a fine imposed upon the person by an amount equal to the amount of the monetary benefit acquired by or that accrued to the person as a result of the commission of the offence, despite any maximum fine elsewhere provided. R.S.O. 1990, c. E.19, s. 189.

Order to prevent damage, etc.

190. (1) On its own initiative or on the request of the prosecutor, the court that convicts a person of an offence under this Act, in addition to any other penalty imposed by the court, may order the person,

(a) to take such action, including but not limited to providing a temporary or permanent alternate water supply, as the court directs within the time specified in the order to prevent, eliminate or ameliorate damage that results from or is in any way connected to the commission of the offence;

(b) where the offence is in relation to a waste management system or waste disposal site, to take such action as is required to bring the system or site into conformity with Part V or the regulations within the time specified in the order; and

(c) to comply with any order issued under this Act to the person in relation to damage that results from or is in any way connected to the commission of the offence. 1998, c. 35, s. 39 (1); 2005, c. 12, s. 1 (60, 61).

Other conditions

(2) An order under subsection (1) may contain such other conditions relating to the circumstances of the offence and of the person that contributed to the commission of the offence as the court considers appropriate to prevent similar unlawful conduct or to contribute to rehabilitation. R.S.O. 1990, c. E.19, s. 190 (2); 2006, c. 19, Sched. K, s. 2 (10).

Variation of order

(3) The court that made an order under subsection (1) may make any changes in or additions to the conditions prescribed in the order that in the opinion of the court are rendered desirable by a change in circumstances,

(a) on its own initiative at any time; or

(b) on application by counsel for the prosecutor, by the person convicted or by the person authorized under the *Law Society Act* to represent the person convicted, with notice to the other party, after a hearing or, with the consent of the parties, without a hearing. 2006, c. 21, Sched. C, s. 108 (2).

Conflict

(4) Nothing in subsection (1) authorizes the making of an order that conflicts with an order previously made under this Act by the Minister or the Director, but an order may be made under subsection (1) supplementing the provisions of an order in respect of the prevention, decrease or elimination of harm to the natural environment and the restoration of the natural environment. R.S.O. 1990, c. E.19, s. 190 (4).

(5) REPEALED: 1998, c. 35, s. 39 (2).

Continuation in force

(6) Where a person bound by an order under subsection (1) is imprisoned, the order continues in force except in so far as the imprisonment renders it impossible for the person to comply for the time being with the order. R.S.O. 1990, c. E.19, s. 190 (6).

Restitution orders

190.1 (1) On its own initiative or on the request of the prosecutor, the court that convicts a person of an offence under this Act, in addition to any other penalty imposed by the court, may make an order for restitution against the person convicted of the offence, requiring the person to pay another person for reasonable expenses actually incurred by the other person on account of damage to property in which the other person has an interest that results from or is in any way connected to the commission of the offence, in such amount and on such terms and conditions as the court considers just. 1998, c. 35, s. 40.

Expenses incurred, interpretation

(2) For the purposes of subsection (1), expenses are incurred on account of damage to property if they are incurred,

(a) to prevent, eliminate or ameliorate the damage;

(b) to replace the property that suffered the damage; or

(c) to restore the property to the state that it was in before the damage. 1998, c. 35, s. 40.

Same

(3) For greater certainty, for the purposes of clause (2) (a), expenses incurred to provide a temporary or permanent alternate water supply may be expenses incurred to prevent, eliminate or ameliorate damage. 1998, c. 35, s. 40; 2005, c. 12, s. 1 (62).

Amount of order

(4) The amount of the order for restitution shall not exceed the replacement value of the property as of the date the order is issued. 1998, c. 35, s. 40.

No restitution to person who committed offence

(5) The court shall not make an order for restitution in favour of any person on account of damage that is the result of,

(a) the commission of an offence by the person; or

(b) a contravention in respect of which an order has been served on the person requiring the person to pay an environmental penalty, unless the order has been revoked. 1998, c. 35, s. 40; 2005, c. 12, s. 1 (63).

Notification of order

(6) Where a court makes an order for restitution, it shall cause a copy of the order or a notice of the content of the order to be given to the person to whom the restitution is ordered to be paid. 1998, c. 35, s. 40.

Filing of order in court

(7) An order for restitution may be filed with a local registrar of the Superior Court of Justice and the responsibility for filing shall be on the person to whom the restitution is ordered to be paid. 1998, c. 35, s. 40; 2001, c. 9, Sched. G, s. 5 (21).

Enforcement of order

(8) An order for restitution filed under subsection (7) may be enforced as if it were an order of the court. 1998, c. 35, s. 40.

Same

(9) Section 129 of the *Courts of Justice Act* applies in respect of an order for restitution filed under subsection (7) and, for the purpose, the date of filing shall be deemed to be the date of the order. 1998, c. 35, s. 40.

Civil remedy

(10) A civil remedy for an act or omission is not affected by reason only that an order for restitution under this section has been made in respect of that act or omission. 1998, c. 35, s. 40.

Forfeiture on conviction

190.2 (1) On its own initiative or on the request of the prosecutor, the court that convicts a person of an offence under this Act, in addition to any other penalty imposed by the court, may, if conviction is in relation to an offence in connection with which a thing has been seized under section 160 or 161 or under a warrant issued under the *Provincial Offences Act*, order that the thing be forfeited to the Crown. 1998, c. 35, s. 40.

Same

(2) The court shall not make an order under subsection (1) unless the court is satisfied that,

(a) the seizure of the thing was lawful; and

(b) no later than seven days before the hearing of the request, written notice was provided by a provincial officer,

(i) to every person whom the provincial officer knows or has reason to believe is an owner of the thing seized,

(ii) to every person who has a security interest in the thing that is perfected by registration under the *Personal Property Security Act* against the name of any person whom the provincial officer knows or has reason to believe is the owner,

(iii) where the thing seized is a vehicle, to every person who has a security interest in the vehicle that is perfected by registration under the *Personal Property Security Act* against the vehicle identification number of the vehicle, and

(iv) where the thing seized is a vehicle and the vehicle is registered under the *Highway Traffic Act*, to the registered owner. 1998, c. 35, s. 40.

Contents of notice

(3) Notice under subsection (2) shall include,

(a) a description of the thing seized sufficient to enable it to be identified;

(b) the location at which the thing was seized;

(c) the date of the seizure;

(d) the name and telephone number of the provincial officer who seized the thing or of his or her delegate;

(e) a statement of the reason for the seizure;

(f) a reference to the statutory provision authorizing the seizure;

(g) a statement that an order for forfeiture of the thing is being sought under this section; and

(h) a statement that the person to whom the notice is provided may make submissions to the court with respect to the issuance of an order under this section. 1998, c. 35, s. 40.

Disposition of things forfeited

(4) A thing forfeited under this section may be disposed of as the Director directs. 1998, c. 35, s. 40.

Relief against forfeiture

(5) A person who had an interest in a thing forfeited under this section may apply to the Superior Court of Justice for relief against the forfeiture and the court may make an order providing for any relief that it considers appropriate, including, but not limited to, one or more of the following orders:

1. An order directing that the thing or any part of the thing be returned to the applicant.
2. An order directing that any interest in the thing be vested in the applicant.
3. An order directing that an amount be paid by the Crown to the applicant by way of compensation for the forfeiture. 1998, c. 35, s. 40; 2001, c. 9, Sched. G, s. 5 (21).

When relief not to be ordered

(6) The court shall not make an order for relief under subsection (5) in respect of a thing forfeited where the person applying for the relief,

(a) has been served with an order requiring the person to pay an environmental penalty in connection with a matter that was associated with the seizure of the thing, unless the order has been revoked; or

(b) has been charged with an offence that was associated with the seizure of the thing, unless the charge has been withdrawn or dismissed. 1998, c. 35, s. 40; 2005, c. 12, s. 1 (64).

Where fine not paid

190.3 (1) Where a person is convicted of an offence under this Act and a fine is imposed,

(a) a thing seized in connection with the offence and not forfeited to the Crown under section 162.1, 162.3 or 190.2 shall not be returned until the fine has been paid; and

(b) if payment of the fine is in default within the meaning of section 69 of the *Provincial Offences Act*, a justice may order that the thing be forfeited to the Crown.

Application of subss. 190.2 (2) to (6)

(2) Subsections 190.2 (2) to (6) apply with necessary modifications in relation to an order under clause (1) (b). 1998, c. 35, s. 40.

Costs of seizure, etc.

190.4 If a person is convicted of an offence under this Act, the justice may, in addition to any other penalty, order the person to pay all or part of the expenses incurred by the Ministry with respect to the seizure, storage or disposition of any thing seized in connection with the offence. 1998, c. 35, s. 40.

Suspension of default in payment of fine

191. (1) Where a person is in default of payment of a fine imposed upon conviction for an offence against this Act, the *Nutrient Management Act, 2002*, the *Ontario Water Resources Act*, the *Pesticides Act*, the *Safe Drinking Water Act, 2002*, the *Toxics Reduction Act, 2009* or the regulations made under any of them, on the application of the Director, an order may be made under subsection 69 (2) of the *Provincial Offences Act* directing that, until the fine is paid,

(a) one or more of the person's licences be suspended;

(b) no licence be issued to the person, or

(c) the person's registration under Part II.2 be suspended. 2010, c. 16, Sched. 7, s. 2 (86).

Duty of Director

(2) The Director shall,

(a) on being informed of an outstanding order referred to in subsection (1), suspend the person's licence or registration, if it is not already suspended under another order referred to in subsection (1); and

(b) on being informed that the fine and any applicable administrative fee for the reinstatement of the licence or registration are paid, reinstate the licence or registration, unless the Director has been informed that,

(i) there is another outstanding order referred to in subsection (1) directing that the licence or registration be suspended, or

(ii) the licence or registration is suspended under any other order or under another statute. 2010, c. 16, Sched. 7, s. 2 (87).

Regulations

(3) The Lieutenant Governor in Council may make regulations prescribing forms and procedures and respecting any matter considered necessary or advisable to carry out effectively the intent and purpose of this section. R.S.O. 1990, c. E.19, s. 191 (3).

Definition

(4) In this section,

"licence" means an environmental compliance approval or a licence issued under this Act. 1998, c. 35, s. 41; 2010, c. 16, Sched. 7, s. 2 (88).

Act of officer, etc.

192. For the purposes of this Act and the regulations, an act or thing done or omitted to be done by an officer, official, employee or agent of a corporation in the course of his or her employment or in the exercise of his or her powers or the performance of his or her duties shall be deemed to be also an act or thing done or omitted to be done by the corporation. R.S.O. 1990, c. E.19, s. 192.

193. REPEALED: 1998, c. 35, s. 42.

Duty of director or officer

194. (1) Every director or officer of a corporation has a duty to take all reasonable care to prevent the corporation from,

(a) discharging or causing or permitting the discharge of a contaminant, in contravention of,

(i) this Act or the regulations, or

(ii) an environmental compliance approval, certificate of property use, renewable energy approval, licence or permit under this Act;

(b) failing to notify the Ministry of a discharge of a contaminant, in contravention of,

(i) this Act or the regulations, or

(ii) an environmental compliance approval, certificate of property use, renewable energy approval, licence or permit under this Act;

(c) contravening section 27, 40, 41 or 47.3 in respect of hauled liquid industrial waste or hazardous waste as designated in the regulations relating to Part V;

(d) contravening section 93 or 184;

(e) failing to install, maintain, operate, replace or alter any equipment or other thing, in contravention of an environmental compliance approval, certificate of property use, renewable energy approval, licence or permit under this Act; or

(f) contravening an order under this Act, other than an order under section 99.1, 100.1, 150 or 182.1. 2005, c. 12, s. 1 (65); 2009, c. 12, Sched. G, s. 25; 2010, c. 16, Sched. 7, s. 2 (89-91).

Contraventions of s. 14

(1.1) Clause (1) (a) does not apply to a contravention of section 14 unless the contravention causes or is likely to cause an adverse effect. 2005, c. 12, s. 1 (65).

Offence

(2) Every person who has a duty under subsection (1) and who fails to carry out that duty is guilty of an offence. R.S.O. 1990, c. E.19, s. 194 (2).

Onus

(2.1) If a director or officer of a corporation is charged with an offence under subsection (2) in connection with a specific contravention of the corporation, the director or officer has the onus, in the trial of the offence, of proving that he or she carried out the duty under subsection (1) in connection with that contravention. 2005, c. 12, s. 1 (66).

Liability to conviction

(3) A director or officer of a corporation is liable to conviction under this section whether or not the corporation has been prosecuted or convicted. R.S.O. 1990, c. E.19, s. 194 (3).

Limitation on proceedings

195. (1) Proceedings for an offence under this Act or the regulations shall not be commenced later than two years after the later of,

(a) the day on which the offence was committed; and

(b) the day on which evidence of the offence first came to the attention of a person appointed under section 5.

Idem

(2) Clause (1) (b) does not apply in respect of offences committed before the 28th day of June, 1988. R.S.O. 1990, c. E.19, s. 195.

Orders, consequential authority

196. (1) The authority to make an order under this Act includes the authority to require the person or body to whom the order is directed to take such intermediate action or such procedural steps or both as are related to the action required or prohibited by the order and as are specified in the order.

Same, authority to order access

(2) A person who has authority under this Act to order that a thing be done on or in any place also has authority to order any person who owns, occupies or has the charge, management or control of the place to permit access to the place for the purpose of doing the thing.

Application

(3) Subsection (1) applies in respect of every order made under this Act whether or not the order was made before the 1st day of January, 1984. R.S.O. 1990, c. E.19, s. 196.

Administrative changes to environmental compliance approval, etc.

196.1 The Director may revoke an environmental compliance approval, alter the terms and conditions of an environmental compliance approval or make an order revoking or amending a program approval or order issued by the Director under this Act if the Director is satisfied that the revocation, alteration or amendment is in the public interest and is desirable for administrative reasons to,

(a) reflect changes that have occurred with respect to the identity or description of any person or place; or

(b) eliminate provisions that are spent or obsolete. 2010, c. 16, Sched. 7, s. 2 (92).

Disclosure of orders and decisions

197. (1) A person who has authority under this Act to make an order or decision affecting real property also has authority to make an order requiring any person with an interest in the property, before dealing with the property in any way, to give a copy of the order or decision affecting the property to every person who will acquire an interest in the property as a result of the dealing. 2001, c. 17, s. 2 (50).

Registration of requirement

(2) A certificate setting out a requirement imposed under subsection (1) may be registered in the proper land registry office on the title of the real property to which the requirement relates, if the certificate is in a form approved by the Minister, is signed or authorized by a person who has authority to make orders imposing requirements under subsection (1) and is accompanied by a registrable description of the property. 2001, c. 17, s. 2 (50).

Same

(3) A requirement imposed under subsection (1) that is set out in a certificate registered under subsection (2) is, from the time of registration, deemed to be directed to each person who subsequently acquires an interest in the real property. 2001, c. 17, s. 2 (50).

Dealings voidable

(4) A dealing with real property by a person who is subject to a requirement imposed under subsection (1) or (3) is voidable at the instance of a person who was not given the copy of the order or decision in accordance with the requirement. 2001, c. 17, s. 2 (50).

Registration of withdrawal of requirement

(5) A certificate of withdrawal of a requirement imposed under subsection (1) or (3) may be registered in the proper land registry office on the title of the real property to which the requirement relates, if the certificate is in a form approved by the Minister, is signed or authorized by a person who has authority to make orders imposing requirements under subsection (1) and is accompanied by a registrable description of the property. 2001, c. 17, s. 2 (50).

Same

(6) On the registration under the *Registry Act* of a certificate of withdrawal of a requirement in accordance with subsection (5), the land registrar may delete the entries in the abstract index of the certificate setting out the requirement and the certificate of withdrawal of the requirement. 2001, c. 17, s. 2 (50).

Same

(7) Registration of a certificate of withdrawal of a requirement in accordance with subsection (5) has the effect of revoking the requirement. 2001, c. 17, s. 2 (50).

Transition

(8) This section, as it read immediately before the day subsection 2 (50) of the *Brownfields Statute Law Amendment Act, 2001* came into force, continues to apply in respect of prohibitions issued under this section before that day. 2001, c. 17, s. 2 (50).

ENVIRONMENTAL PROTECTION ACT

ONTARIO REGULATION 298/02

MUNICIPALITIES, SECURED CREDITORS, RECEIVERS, TRUSTEES IN BANKRUPTCY AND FIDUCIARIES — PART XV.2 OF THE ACT

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PART I
MUNICIPALITIES

Protected actions by municipalities etc.

1. (1) The following Acts are prescribed for paragraph 6 of subsection 168.12 (2) of the Act:

1. *Drainage Act*.
2. *Health Protection and Promotion Act*.
3. *Snow Roads and Fences Act*.
4. *Weed Control Act*.

(2) The following actions are prescribed for the purposes of paragraph 7 of subsection 168.12 (2) of the Act:

1. An action under or for the purpose of a by-law of a municipality in relation to either or both of the following:
   i. The suppression or prevention of fire, or the preservation of property threatened or affected by fire.
   ii. The removal, repair or renewal of any building or other structure.
2. For the purposes of any Act, causing work (including installation, construction or maintenance) to be done on non-municipal property in relation to a public utility as defined in subsection 1 (1) of the *Municipal Act, 2001*.
3. Causing work to be done on non-municipal property because of a person's failure to comply with any of the following:
   i. An Act, regulation or by-law.
   ii. An approval or order made under an Act, regulation or by-law.
   iii. An agreement made by the municipality under an Act, regulation or by-law.

Ownership by vesting under municipal tax law

2. The circumstances prescribed for the purposes of clause 168.13 (1) (b) of the Act are that the municipality or municipal representative has contravened section 27, 40 or 41 of the Act.

Notices of danger to health and safety (municipalities)

3. (1) The circumstances prescribed for giving notice under subsection 168.15 (1) or 168.15 (2) of the Act are that the municipality or municipal representative becomes aware that as a result of the presence or discharge of a contaminant on, in or under the property, there is a danger to the health or safety of any person.

(2) The notice must be given by speaking directly or by telephone with a provincial officer on duty at the Ministry's Spills Action Centre about the danger.

(3) The notice must be given within 24 hours after the municipality or municipal representative becomes aware of the danger.

PART II
SECURED CREDITORS

Secured creditor becoming owner by foreclosure

4. (1) The contravention by a secured creditor or secured creditor representative of a provision of the Act, a regulation under the Act, an approval, a certificate of property use, a licence or a permit is prescribed as a circumstance for the purposes of clause 168.18 (1) (b) of the Act, if the contravention occurred more than 90 days after the secured creditor became the owner of the property.

(2) In this section,

"approval" means a program approval, certificate of approval or provisional certificate of approval, or an approval under Part X of the Act;

"provision", in relation to an approval, licence or permit, includes a condition of the approval, licence or permit.

Notice of danger to health or safety (secured creditors)

5. (1) The circumstances prescribed for giving notice under subsection 168.21 (1) or 168.21 (2) of the Act are that the secured creditor or secured creditor representative becomes aware that as a result of the presence or discharge of a contaminant on, in or under the property, there is a danger to the health or safety of any person.

(2) The notice must be given by speaking directly or by telephone with a provincial officer on duty at the Ministry's Spills Action Centre about the danger.

(3) The notice must be given within 24 hours after the secured creditor or secured creditor representative becomes aware of the danger.

Reports of investigations of contaminants (secured creditors)

6. A secured creditor is exempt from the application of section 168.22 of the Act if,

(a) the request relates to a report that was not prepared by a secured creditor representative for the secured creditor;

(b) the secured creditor has not become the owner of the property to which the report relates by virtue of a foreclosure; and

(c) the secured creditor has not become a receiver in respect of the property to which the report relates.

PART III
RECEIVERS AND TRUSTEES IN BANKRUPTCY

Prescribed contraventions by receivers and trustees

7. (1) The contravention by a receiver, receiver representative, trustee in bankruptcy or trustee in bankruptcy representative of a provision of the Act, a regulation under the Act, an approval, a certificate of property use, a licence or a permit is prescribed as a circumstance for the purposes of clause 168.19 (1) (b) of the Act if,

(a) the contravention occurred more than 90 days after the receiver or trustee was appointed to take possession or control of the property or (if no appointment was made) actually took possession or control of the property; and

(b) the provision contravened does not relate to any of the following:

(i) the quantity, type or quality of any discharge of a contaminant (as defined in subsection 1 (1) of the Act) into the natural environment,

(ii) financial assurance (as defined in Part XII of the Act),

(iii) the decommissioning of works (as defined in Part XII of the Act) and associated environmental restoration.

(2) Without limiting subsection (1), the contravention by a receiver, receiver representative, trustee in bankruptcy or trustee in bankruptcy representative of a provision of an approval, a certificate of property use, a licence or a permit is prescribed as a circumstance for the purposes of clause 168.19 (1) (b) of the Act if,

(a) the approval, certificate, licence or permit was applied for by or on behalf of the receiver or trustee in bankruptcy; or

(b) the provision was included in the approval, certificate, licence or permit as a result of an amendment applied for by or on behalf of the receiver or trustee in bankruptcy.

(3) In this section,

"approval" means a program approval, certificate of approval or provisional certificate of approval, or an approval under Part X of the Act;

"provision", in relation to an approval, licence or permit, includes a condition of the approval, licence or permit.

Notice of abandonment etc. by receivers and trustees

8. (1) A notice under clause 19 (5) (a) or (b) or 168.20 (7) (a) or (b) of the Act must set out the following:

1. The name of the receiver or trustee in bankruptcy.
2. The date the receiver or trustee abandoned or disposed of the property, or released their interest in the property.
3. The municipal address of the property to which the notice relates or, if there is no such address, a legally sufficient description of the property.

(2) The notice must be given by fax or by a method described in subsection 182 (1) of the Act.

Notice of danger to health and safety (receivers and trustees)

9. (1) The circumstances prescribed for giving notice under subsection 168.21 (3) of the Act are that the receiver, trustee in bankruptcy, receiver representative or trustee in bankruptcy representative becomes aware that as a result of the presence or discharge of a contaminant on, in or under the property, there is a danger to the health or safety of any person.

(2) The notice must be given by speaking directly or by telephone with a provincial officer on duty at the Ministry's Spills Action Centre about the danger.

(3) The notice must be given within 24 hours after the receiver, trustee in bankruptcy, receiver representative or trustee in bankruptcy representative becomes aware of the danger.

PART IV
FIDUCIARIES

Notice of danger to health and safety (fiduciaries)

10. (1) The circumstances prescribed for giving notice under section 168.24 of the Act are that the fiduciary or fiduciary representative becomes aware that as a result of the presence or discharge of a contaminant on, in or under the property, there is a danger to the health or safety of any person.

(2) The notice must be given by speaking directly or by telephone with a provincial officer on duty at the Ministry's Spills Action Centre about the danger.

(3) The notice must be given within 24 hours after the fiduciary or representative becomes aware of the danger.

ENVIRONMENTAL PROTECTION ACT

ONTARIO REGULATION 153/04

RECORDS OF SITE CONDITION — PART XV.1 OF THE ACT

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Part I Definitions, Interpretation and Application

Definitions and application

1. (1) In this Regulation, and in any document or provision of a document adopted by reference by this Regulation,

"area of natural significance" means any of the following:

1. An area reserved or set apart as a provincial park or conservation reserve under the *Provincial Parks and Conservation Reserves Act, 2006*.
2. An area of natural and scientific interest (life science or earth science) identified by the Ministry of Natural Resources as having provincial significance.
3. A wetland identified by the Ministry of Natural Resources as having provincial significance.
4. An area designated by a municipality in its official plan as environmentally significant, however expressed, including designations of areas as environmentally sensitive, as being of environmental concern and as being ecologically significant.
5. An area designated as an escarpment natural area or an escarpment protection area by the Niagara Escarpment Plan under the *Niagara Escarpment Planning and Development Act*.
6. An area identified by the Ministry of Natural Resources as significant habitat of a threatened or endangered species.
7. An area which is habitat of a species that is classified under section 7 of the *Endangered Species Act, 2007* as a threatened or endangered species.
8. Property within an area designated as a natural core area or natural linkage area within the area to which the Oak Ridges Moraine Conservation Plan under the *Oak Ridges Moraine Conservation Act, 2001* applies.
9. An area set apart as a wilderness area under the *Wilderness Areas Act*;

"areas of potential environmental concern" means the area on, in or under a phase one property where one or more contaminants are potentially present, as determined through the phase one environmental site assessment, including through,

(a) identification of past or present uses on, in or under the phase one property, and

(b) identification of potentially contaminating activity;

"associated product" means any product of petroleum or any other liquid product used as a fuel, other than gasoline, wax and asphalt;

"bulk liquid dispensing facility" means premises at which solvents, gasoline or associated products are stored in one or more storage tanks and dispensed for sale;

"Cleanup Guideline 1996" means the Ministry publication entitled "Guideline for Use at Contaminated Sites in Ontario" originally dated June 1996 and later revised;

"contaminants of concern" means,

(a) one or more contaminants found on, in or under a property at a concentration that exceeds the applicable site condition standards for the property, or

(b) one or more contaminants found on, in or under a property for which no applicable site condition standard is prescribed under Part IX (Site Condition Standards and Risk Assessment) and which are associated with potentially contaminating activity;

"description", in reference to a description approved by the Surveyor General, means a plan of survey prepared, signed and sealed by a surveyor or a descriptive map of a property;

"dry cleaning equipment" means dry cleaning equipment as defined in Ontario Regulation 323/94 made under the Act;

"garage" means a place or premises where motor vehicles are received for maintenance or repairs for compensation;

"gasoline" means a product of petroleum that may include oxygenates and gasoline additives that has a flash point below 37.8°C, that is a liquid at standard temperature and pressure and that is designed for use in an engine;

"gasoline outlet" means any premises to which the public is invited, at which gasoline or an associated product is sold and is put into the fuel tanks of motor vehicles or floating motorized watercraft, or into portable containers;

"lawyer" means a person authorized under the *Law Society Act* to practise law in Ontario;

"medium" means soil, ground water or sediment;

"phase one property" means the property that is the subject of a phase one environmental site assessment;

"phase one study area" means the area that includes a phase one property, any other property that is located, wholly or partly, within 250 metres from the nearest point on a boundary of the phase one property and any property that the qualified person determines should be included as a part of the phase one study area under clause 3 (1) (a) of Schedule D;

"phase two property" means the property that is the subject of a phase two environmental site assessment;

"potentially contaminating activity" means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a phase one study area;

"RA property" means a property that is the subject of a risk assessment;

"road" means the part of a common or public highway, street, avenue, parkway, square, place, bridge, viaduct or trestle that is improved, designed or ordinarily used for regular traffic and includes the shoulder;

"rock" means a naturally occurring aggregation of one or more naturally occurring minerals that is 2 millimetres or larger in size or that does not pass the US #10 sieve;

"RSC property", in relation to a record of site condition, means the property in respect of which the record of site condition is submitted for filing or is filed;

"sediment" means the soil, to a maximum depth of 0.15 metres, located at the base of a water body;

"sewage treatment facility" means that part of a sewage works as defined in the *Ontario Water Resources Act* that treats or disposes of sewage but does not include the part of the sewage works that collects or transmits sewage;

"site condition standards" means the full depth background site condition standards, full depth generic site condition standards and stratified site condition standards;

"soil" means, except for the purposes of shallow soil property as defined in section 43.1, unconsolidated naturally occurring mineral particles and other naturally occurring material resulting from the natural breakdown of rock or organic matter by physical, chemical or biological processes that are smaller than 2 millimetres in size or that pass the US #10 sieve;

"Soil, Ground Water and Sediment Standards" means the "Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the *Environmental Protection Act*" published by the Ministry and dated April 15, 2011;

"solvent" means any volatile organic compound that is used as a cleaning agent, diluent, dissolver, thinner, or viscosity reducer, or for a similar purpose;

"subsurface soil" means soil that is more than 1.5 metres beneath the soil surface, including the bottom .5 metres of any non-soil surface treatment such as asphalt, concrete or aggregate above the soil surface, but excluding the thickness of any such non-soil surface treatment that is greater than .5 metres;

"surface soil" means soil that is no more than 1.5 metres beneath the soil surface, including the bottom .5 metres of any non-soil surface treatment such as asphalt, concrete or aggregate above the soil surface, but excluding the thickness of any such non-soil surface treatment that is greater than .5 metres;

"surveyor" means a person licensed under the *Surveyors Act* to practice cadastral surveying in Ontario;

"transition notice" means the notice referred to in paragraph 2 of subsection 168.4 (6) of the Act;

"waste disposal site", as used in this Regulation, means a waste disposal site as defined in section 25 of the Act;

"water body" means a permanent stream, river or similar watercourse or a pond or lake, but does not include a pond constructed on the property for the purpose of controlling surface water drainage;

"water treatment facility" means, in respect of a drinking water system that is a large municipal residential system or a small municipal residential system as defined in subsection 1 (1) of Ontario Regulation 170/03 made under the *Safe Drinking Water Act, 2002*, a facility that is used in relation to the treatment of water and includes any equipment related to the management of residue from the treatment process or the management of a substance into the natural environment from the system. O. Reg. 153/04, s. 1 (1); O. Reg. 366/05, s. 1; O. Reg. 511/09, s. 1 (1-3), (5, 6); O. Reg. 179/11, s. 1 (1).

(2) For the purposes of this Regulation, the following are the types of property uses:

1. Agricultural or other use.
2. Commercial use.
3. Community use.
4. Industrial use.
5. Institutional use.
6. Parkland use.
7. Residential use. O. Reg. 153/04, s. 1 (2).

(3) In this Regulation, in relation to a use of property,

"agricultural or other use" means,

(a) the use of land, or a building on the property for an agricultural purpose, including, but not limited to, animal husbandry, aquaculture, beekeeping, dairying, field crops, forestry, fruit farming, horticulture, market gardening, poultry raising and the operation of glass- or plastic-covered greenhouses, or

(b) any other use of land or a building on the property, other than a commercial use, community use, industrial use, institutional use, parkland use or residential use;

"commercial use" means any use of land or a building on the property for an enterprise or activity involving the exchange of goods or services, including the following uses:

1. Use as a hotel, motel, hostel or similar accommodation.
2. Use as an office building.
3. In respect of the classification of occupancies in Table 3.1.2.1. of Division B of Ontario Regulation 332/12 (Building Code) made under the *Building Code Act, 1992*, use that falls within,
   i. Group D, business and personal services occupancies, or
   ii. Group E, mercantile occupancies.

"community use" means use of land for a road or any of the following uses in a building on the property:

1. Use of a building for,
   i. indoor recreational activities,
   ii. travel purposes, such as use for a railway station or an airport passenger terminal, or like purposes,
   iii. an indoor gathering of people for civic, religious or social purposes.
2. In respect of the classification of occupancies in Table 3.1.2.1. of Division B of Ontario Regulation 332/12 (Building Code) made under the *Building Code Act, 1992*, use that falls within,
   i. Group A, Division 1, assembly occupancies intended for the production and viewing of the performing arts,
   ii. Group A, Division 3, assembly occupancies of the arena type, or
   iii. Group A, Division 4, assembly occupancies in which occupants are gathered in the open air and that is used for a stadium.
3. Use of a classroom in a building by a,
   i. a university that is authorized to operate pursuant to section 3 of the *Post-secondary Education Choice and Excellence Act, 2000*,
   ii. a college established under the *Ontario Colleges of Applied Arts and Technology Act, 2002*,
   iii. any other institution with authority to grant a degree or part of a degree under the *Post-secondary Education Choice and Excellence Act, 2000*,
   iv. a private career college as defined and approved under the *Private Career Colleges Act*;

"industrial use" means any of the following uses of land or of a building on the property:

1. Use for an enterprise or activity involving assembling, fabricating, manufacturing, processing, producing, storing, warehousing or distributing goods or raw materials.
2. In respect of the classification of occupancies in Table 3.1.2.1. of Division B of Ontario Regulation 332/12 (Building Code), use that falls within,
   i. Group F, Division 1, high hazard industrial occupancies,
   ii. Group F, Division 2, medium hazard industrial occupancies, or
   iii. Group F, Division 3, low hazard industrial occupancies.

3. Use for research or development in association with an enterprise or activity described in paragraph 1.
4. Use for the transportation of goods or people by railway or by airplane, but not including use for a gathering of people for travel purposes, such as use as a railway station or an airport passenger terminal.
5. Use as a waste disposal site as defined in section 25 of the Act, except a site for organic soil conditioning as defined in Regulation 347 of the Revised Regulations of Ontario, 1990 made under the Act.
6. Use in connection with sewage works described in subsection 53 (6.1) of the *Ontario Water Resources Act*.
7. Use for the production of oil or gas, or for mining or quarrying.
8. Use in connection with a water treatment facility.
9. Use in connection with a sewage treatment facility.
10. Use for the generation or transformation of electricity.
11. Use for the storage, maintenance, fuelling or repair of equipment, vehicles or material used to maintain transportation systems.
12. Use as a salvage yard, including an automobile wrecking yard or premises;

"institutional use" means any of the following uses of land or a building on the property:

1. Use as a day-care centre.
2. Use as a school as defined in the *Education Act*.
3. Use as a private school as defined in the *Education Act*;

"parkland use" means the use of land or a building on the property for,

(a) outdoor recreational activities, including use for a playground or a playing field,

(b) a day camp, an overnight camp or an overnight camping facility,

(c) an outdoor gathering of people for civic or social purposes, or

(d) in respect of the classification of occupancies in Table 3.1.2.1. of Division B of Ontario Regulation 332/12 (Building Code), use that falls within Group A, Division 4, assembly occupancies in which occupants are gathered in the open air other than use for a stadium;

"residential use" means any of the following uses of land or a building on the property:

1. Use as a home or mobile home, or as a residence not otherwise described in this definition, but not including use as a hotel, motel, hostel or similar accommodation.
2. In respect of the classification of occupancies in Table 3.1.2.1. of Division B of Ontario Regulation 332/12 (Building Code), use that falls within,
   i. Group B, Division 1, detention occupancies,
   ii. Group B, Division 2, care and treatment occupancies, or
   iii. Group B, Division 3, care occupancies.
3. Use as a health care facility as defined in Ontario Regulation 170/03 made under the *Safe Drinking Water Act, 2002*.

4. Use as a place of custody or detention for the purposes of the *Youth Criminal Justice Act* (Canada) or a correctional institution established or continued under section 14 of the *Ministry of Correctional Services Act*, whether the institution is operated or maintained by the Crown or any other person.
5. Use as a penitentiary as defined in the *Corrections and Conditional Release Act* (Canada) or as a prison as defined in the *Prisons and Reformatories Act* (Canada).
6. Use as a residence associated with any of the following:
   i. A university that is authorized to operate pursuant to section 3 of the *Post-secondary Education Choice and Excellence Act, 2000.*
   ii. A college established under the *Ontario Colleges of Applied Arts and Technology Act, 2002*.
   iii. Any other institution with authority to grant a degree or part of a degree under the *Post-secondary Education Choice and Excellence Act, 2000.*
   iv. A private career college as defined and approved under the *Private Career Colleges Act*. O. Reg. 153/04, s. 1 (3); O. Reg. 511/09, s. 1 (7, 10, 11, 13); O. Reg. 179/11, s. 1 (2, 3); O. Reg. 333/13, s. 1.

Unused property, most recent use

2. For the purposes of this Regulation, if property is unused, the property is deemed to have the type of property use to which the property was most recently put. O. Reg. 153/04, s. 2.

Mixed use property, most sensitive use

3. (1) If a property is used for more than one type of property use, the site condition standards that are applicable to the property are the standards that are applicable to the most sensitive type of property use. O. Reg. 153/04, s. 3 (1).

(2) The following rules apply in determining which type of property use is the most sensitive type of property use:

1. An agricultural or other use is the most sensitive of any type of property use.
2. A residential use, parkland use or institutional use is more sensitive than an industrial use, commercial use or community use. O. Reg. 153/04, s. 3 (2).

PART II
DEFINED PERSONS

Owner of property

4. For the purposes of Part XV.1 of the Act,

"owner", in relation to a record of site condition or risk assessment, includes a beneficial owner of or receiver in respect of the property for which the record of site condition is submitted for filing, is to be submitted for filing or is filed or for which the risk assessment is submitted. O. Reg. 511/09, s. 2.

Qualified persons, other than risk assessment

5. (1) A person referred to in subsection (2) meets the qualifications to be a qualified person for the purposes of,

(a) conducting or supervising a phase one environmental site assessment;

(b) conducting or supervising a phase two environmental site assessment; and

(c) completing the certifications that must be completed by a qualified person in a record of site condition in respect of a property. O. Reg. 66/08, s. 2.

(2) A person meets the qualifications to be a qualified person for the purposes of subsection (1) if,

(a) the person holds a licence, limited licence or temporary licence under the *Professional Engineers Act*; or

(b) the person holds a certificate of registration under the *Professional Geoscientists Act, 2000* and is a practising member, temporary member or limited member of the Association of Professional Geoscientists of Ontario. O. Reg. 66/08, s. 2.

Qualified persons, risk assessment

6. (1) A person meets the qualifications to be a qualified person for the purposes of section 168.1 of the Act in relation to the preparation or supervision of a risk assessment if,

(a) the person holds a bachelor's degree in science, engineering or applied technology from a post-secondary institution;

(b) the person has experience in the conduct or supervision of environmental site assessments, or in the conduct, supervision or review of assessment of risk described in clause (c), or in any combination of both, as follows:

(i) if the person holds a doctoral degree in science or engineering from a university, five years' experience,

(ii) if the person holds a master's degree in science or engineering from a university, seven years' experience,

(iii) in any other case, eight years' experience; and

(c) within the period of experience required by clause (b), the person has two years' experience,

(i) in the conduct or supervision of an assessment of risk, or

(ii) in the technical or scientific review of an assessment of risk on behalf of a public authority. O. Reg. 153/04, s. 6 (1).

(2) In this section,

"assessment of risk" means an assessment of human health risks and ecological risks associated with the presence or discharge of contaminants on, in or under property, and includes the preparation of a risk assessment or a site specific risk assessment under the Cleanup Guideline 1996;

"environmental site assessment" means an investigation in relation to land to determine the environmental condition of property, and includes a phase one environmental site assessment and a phase two environmental site assessment;

"university" means a university within or outside of Ontario. O. Reg. 153/04, s. 6 (2); O. Reg. 366/05, s. 2.

Qualified persons, conflict of interest

6.1 (1) No qualified person mentioned in section 5 or 6 shall, in respect of a RSC property or RA property in which the qualified person or his or her employer holds a direct or indirect interest,

(a) conduct or supervise a phase one or phase two environmental site assessment;

(b) complete the certifications that must be completed by a qualified person in a record of site condition in respect of a property; or

(c) prepare or supervise a risk assessment. O. Reg. 511/09, s. 3.

(2) Nothing in subsection (1) shall be construed so as to derogate from any obligations imposed on the qualified person under the *Professional Engineers Act* or the *Professional Geoscientists Act, 2000*. O. Reg. 511/09, s. 3.

Qualified persons as employee

6.2 (1) A qualified person mentioned in section 5 or 6 who is the employee, shareholder, director, partner or principal of a firm, company or partnership and who wishes to submit a record of site condition or risk assessment,

(a) shall file with the Director the document referred to in subsection (2), if the qualified person has not previously filed the document with the Director; and

(b) shall, within 12 months after filing the document with the Director under clause (a) and annually thereafter for as long as the qualified person remains an employee, shareholder, director, partner or principal of the firm, company or partnership, file the document referred to in subsection (2) with the Director. O. Reg. 511/09, s. 3.

(2) The document the qualified person who is the employee, shareholder, director, partner or principal of a firm, company or partnership shall file with the Director is,

(a) a copy of the Certificate of Status, in the case of a corporation incorporated under the *Business Corporations Act*; or

(b) an equivalent document in the case of any other type of corporation or of a firm or partnership. O. Reg. 511/09, s. 3.

(3) The document referred to in subsection (2),

(a) shall be dated no earlier than one month before the date on which the qualified person first submits a record of site condition or risk assessment, where the qualified person is submitting the document for the first time; and

(b) shall be dated no earlier than one month before the date on which the qualified person first submits a record of site condition or risk assessment during the 12-month period applicable to the qualified person submitting the document. O. Reg. 511/09, s. 3.

Qualified persons, insurance

7. (1) Subject to subsection (3), every qualified person mentioned in sections 5 and 6 shall maintain insurance coverage under an insurance policy that satisfies the requirements in subsection (2),

(a) at all times when the person,

(i) undertakes or supervises any work in their capacity as a qualified person, including any work associated with a phase one environmental site assessment, a phase two environmental site assessment or a risk assessment that is completed for the purposes of filing a record of site condition under section 168.4 of the Act, or

(ii) makes a statement required by this Regulation; and

(b) for a period of two years after the date the qualified person ceases to act in his or her capacity as a qualified person, including doing anything described in clause (a). O. Reg. 153/04, s. 7 (1).

(2) The insurance policy must satisfy the following criteria:

1. The policy shall indemnify the qualified person against liability imposed by law arising out of the performance of or the failure to perform any activity described in subsection (1) for claims whenever occurring that are first made and reported to the insurer during the period of insurance coverage.

2. The insurance policy shall, at a minimum, specify an indemnity limit of $1,000,000 per claim and $1,000,000 in the aggregate during the period of the insurance.

3. The insurance policy shall provide for the continuation of coverage if the insured is adjudged as bankrupt, insolvent, incompetent or dies during the period of insurance. O. Reg. 153/04, s. 7 (2); O. Reg. 366/05, s. 3 (1).

(3) This section does not apply to a qualified person who undertakes the work described in section 5 or 6 on behalf of his or her employer. O. Reg. 153/04, s. 7 (3); O. Reg. 511/09, s. 4.

(4) A qualified person shall be deemed to be maintaining the insurance coverage required by this section if his or her employer maintains an insurance policy that covers the activities of the qualified person in accordance with subsection (1) and the policy satisfies the requirements in subsection (2). O. Reg. 366/05, s. 3 (2).

PART III
ENVIRONMENTAL SITE REGISTRY

Additional purpose of Registry

7.1 For the purpose of paragraph 3 of subsection 168.3 (2) of the Act, the Registry has the purpose of facilitating public access to information respecting qualified persons. O. Reg. 66/08, s. 3.

Contents public

8. (1) The Director shall ensure that records of site condition, notices and other documents that are filed in the Registry are available for examination by the public. O. Reg. 153/04, s. 8 (1).

(2) If the Director becomes aware of a clerical, grammatical or typographical error in a record of site condition, notice or other document that has been filed in the Registry, the Director may cause the error to be corrected and the correction shall not require a new filing. O. Reg. 153/04, s. 8 (2).

(3) The Director may cause a record of site condition, notice, certificate of property use or other document that has been filed in the Registry to be updated to add new information and remove previous information and the change shall not require a new filing, if the Director becomes aware of, and the update relates to, a change to,

(a) a mailing address, fax number, postal code or e-mail address or a change in the mailing address, fax number, postal code or e-mail address of the owner of an RSC property who has submitted the record of site condition for filing or on whose behalf the record of site condition was submitted for filing;

(b) a municipal address or a change in the municipal address of an RSC property;

(c) a notice of a certificate of property use or an altered or revoked certificate of property use related to an RSC property; or

(d) the mailing address for an owner of the RSC property at the time the record of site condition was filed, other than an owner referenced in clause (a). O. Reg. 511/09, s. 5.

Notice to users

9. The Director shall ensure that the Registry contains a notice advising users of the Registry who have dealings with any property to consider conducting their own due diligence with respect to the environmental condition of the property, in addition to reviewing information in the Registry. O. Reg. 153/04, s. 9.

Notice of order in Registry

10. (1) The Director may require that the Registry contain notice of a certificate of property use issued, altered or revoked pursuant to section 168.6 of the Act, with respect to a property for which a record of site condition has been filed. O. Reg. 511/09, s. 6.

(2) REVOKED: O. Reg. 511/09, s. 6.

(3) The Director may require that the Registry contain notice of a proceeding commenced under the *Provincial Offences Act*, if the proceeding relates to a false or misleading statement made in a record of site condition or a risk assessment. O. Reg. 153/04, s. 10 (3).

(4) If the Director requires that a notice be contained in the Registry under this section and the circumstances giving rise to the notice no longer exist, the Director may require that the notice be withdrawn from the Registry. O. Reg. 153/04, s. 10 (4).

PART IV
CHANGE OF PROPERTY USE

Definitions for the Act, industrial, commercial, residential and parkland use

11. (1) For the purposes of section 168.3.1 of the Act, "industrial use", "commercial use", "residential use" and "parkland use", in relation to the use of property, have the meanings given by subsection 1 (3) of this Regulation. O. Reg. 153/04, s. 11 (1).

(2) For the purposes of the Act and this Regulation, a reference to a change in the use of a property does not include a reference to a change in the zoning of the property under a municipal by-law. O. Reg. 153/04, s. 11 (2).

Exemption, construction, s. 168.3.1 of the Act

12. Despite clause 168.3.1 (1) (c) of the Act, subsection 168.3.1 (1) of the Act does not apply to the issuance of a building permit under section 8 of the *Building Code Act, 1992* if the only construction authorized by the permit is,

(a) the removal of soil, rock or fill for the purpose of making an excavation; or

(b) the erection of a retaining structure or other structure,

(i) to support the sides of the excavation,

(ii) that are erected to assist in the conduct of an investigation in relation to property, or

(iii) for any other activity necessary for the purpose of filing a record of site condition. O. Reg. 153/04, s. 12.

Exemptions, change of use, s. 168.3.1 (1) (a) of the Act

13. (1) Despite clause 168.3.1 (1) (a) of the Act, a person may change the use of a property from a railway line to a trail used for recreational activities, subject to subsection (2). O. Reg. 153/04, s. 13 (1).

(2) Clause 168.3.1 (1) (a) of the Act applies to a change of use of a portion of a property described in subsection (1), if the use of the portion is changed to a playground, a playing field, a day camp, an overnight camp or an overnight camping facility, whether the use of the portion is for the use of trail users only or for the general public. O. Reg. 153/04, s. 13 (2).

(3) Despite clause 168.3.1 (1) (a) of the Act, a person may change the use of a property from a landfilling site that is subject to an environmental compliance approval to any property use. O. Reg. 153/04, s. 13 (3); O. Reg. 269/11, s. 1.

Changes of use, s. 168.3.1 (1) (b) of the Act

14. A person shall not change the use of property for the purposes of clause 168.3.1 (1) (b) of the Act in any of the following manners:

1. A change from an industrial use to an agricultural or other use or to an institutional use.
2. A change from an industrial use to more than one type of property use, including any or all of the following:
    i. Agricultural or other use.
    ii. Institutional use.
    iii. Parkland use.
    iv. Residential use.
3. If the property is used for an industrial use as well as any other type or types of property use, a change in the use of part or all of the property used for industrial use to any or all of the following types of property uses:
    i. Agricultural or other use.
    ii. Institutional use.
    iii. Parkland use.
    iv. Residential use.
4. A change from a commercial use to an agricultural or other use or to an institutional use.
5. A change from a commercial use to more than one type of property use including any or all of the following types of property use:
    i. Agricultural or other use.
    ii. Institutional use.
    iii. Parkland use.
    iv. Residential use.
6. If the property is used for a commercial use as well as any other type or types of property use, a change in the use of part or all of the property used for commercial use to any or all of the following types of property uses:
    i. Agricultural or other use.
    ii. Institutional use.
    iii. Parkland use.
    iv. Residential use.
7. A change from a community use to an agricultural or other use or to an institutional use, a parkland use or a residential use.
8. A change from a community use to more than one type of property use, including any or all of the following types of property use:
    i. Agricultural or other use.
    ii. Institutional use.
    iii. Parkland use.
    iv. Residential use.

9. If the property is used for a community use as well as any other type or types of property use, a change in the use of part or all of the property used for community use to any or all of the following types of property uses:
   i. Agricultural or other use.
   ii. Institutional use.
   iii. Parkland use.
   iv. Residential use.
10. A change from an industrial use, a commercial use or a community use, other than a community use described in subparagraphs i and ii, to a community use,
   i. that falls within the classification of occupancies in Group A of Table 3.1.2.1. of Division B of Ontario Regulation 332/12 (Building Code) made under the *Building Code Act, 1992*, and
   ii. that is an indoor swimming pool, an indoor ice rink, an indoor arena, an enclosed stadium, an indoor sports field or an indoor gymnasium. O. Reg. 153/04, s. 14; O. Reg. 179/11, s. 2; O. Reg. 333/13, s. 2.

Exemption, change in use

15. If a part of a building on a property is used for a residential use or institutional use and another part of the building is used for a commercial use, a community use or an industrial use, section 168.3.1 of the Act and section 14 do not apply to,

(a) a change in the use of the property that is substantially restricted to the part of the property where the building is located; or

(b) the construction of a building, if the building will be used in connection with a change in use described in clause (a). O. Reg. 153/04, s. 15.

PART V
RECORDS OF SITE CONDITION

Records of site condition, requirements

16. (1) A record of site condition shall be completed and submitted for filing in accordance with the requirements set out in Schedule A. O. Reg. 153/04, s. 16 (1); O. Reg. 511/09, s. 7 (1).

(2) Paragraph 4 of subsection 168.4 (2) of the Act does not apply to a record of site condition filed in respect of a property if a phase two environmental site assessment has not been conducted for the property. O. Reg. 153/04, s. 16 (2); O. Reg. 511/09, s. 7 (2).

(3) A transition notice shall be completed and filed in accordance with the requirements set out in Schedule B. O. Reg. 153/04, s. 16 (3).

Prescribed time for notice or acknowledgement

16.1 Thirty days, excluding holidays and Saturdays, is the time prescribed for the purposes of clause 168.4 (3) (b) of the Act. O. Reg. 511/09, s. 8.

Prescribed defects

16.2 (1) The following are prescribed defects for the purposes of clause 168.4 (3.3) (a) of the Act:

1. Failure to comply with a requirement of this Regulation for a phase one environmental site assessment or a phase two environmental site assessment.

2. Failure to comply with any requirement referred to in paragraph 1 because the manner in which the requirement is addressed fails to achieve the general or specific objectives of the assessment.

3. Failure to complete a record of site condition in accordance with the Act or this Regulation. O. Reg. 511/09, s. 8.

(2) The notice of a defect provided by the Director shall be of sufficient detail so as to alert the owner to the nature of the defect. O. Reg. 511/09, s. 8.

Certification date

17. (1) This section applies to the certification date of a record of site condition filed in the Registry under section 168.4 of the Act in relation to a property. O. Reg. 153/04, s. 17 (1).

(2) If a phase two environmental site assessment is not conducted for the property, the certification date is the day on which the qualified person forms the conclusion that the certifications made in the record of site condition are true. O. Reg. 153/04, s. 17 (2); O. Reg. 511/09, s. 9 (1).

(3) If a phase two environmental site assessment is conducted for the property, the certification date is the last day on which sampling was done that confirms that the property meets any applicable site condition standards, or any standard specified in a risk assessment, in relation to a contaminant. O. Reg. 153/04, s. 17 (3); O. Reg. 511/09, s. 9 (2).

(4) For the purposes of a record of site condition filed in the Registry under subsection 168.4 (6) of the Act, the certification date is the date set out in Part 5 (Affidavit of Principal Consultant) of the record of site condition that was acknowledged by the Ministry under the Cleanup Guideline 1996. O. Reg. 153/04, s. 17 (4).

Retention and storage of reports

18. (1) For the purposes of subsection 168.4 (5) of the Act, the prescribed period for the retention of a report is seven years after the date the record of site condition listing the report is filed in the Registry. O. Reg. 511/09, s. 10.

(2) Subsection (1) and subsection 168.4 (5) of the Act do not apply in respect of a qualified person if a qualified person takes all reasonable steps to ensure that a copy of the report is stored for the period referred to in subsection (1) in the offices of the firm, company or partnership where the qualified person was employed at the time when the record of site condition was completed. O. Reg. 511/09, s. 10.

Transition, requirements for filing old records of site condition

19. (1) The following are the requirements that an owner shall certify as having been complied with in the notice filed in the Registry for the purposes of paragraph 2 of subsection 168.4 (6) of the Act:

1. The property in respect of which the notice is to be filed is the same property or entirely within the property in respect of which the record of site condition was submitted to the Ministry.

2. A qualified person has certified to the owner that he or she has reviewed the following:

   i. A copy of the record of site condition that has been acknowledged as received by the Ministry under the Cleanup Guideline 1996.

   ii. The environmental reports listed in Part 2 of the record of site condition that was acknowledged by the Ministry under the Cleanup Guideline 1996.

3. The qualified person has made the following certifications to the owner on the basis of that review:

   i. The information in the record of site condition that was acknowledged by the Ministry under the Cleanup Guideline 1996 is consistent with the environmental reports listed in Part 2 of the record of site condition.

ii. The record of site condition was properly completed in accordance with the Cleanup Guideline 1996.

iii. At the time of the certification date, the record of site condition indicates that the property met the appropriate environmental site conditions for the land use specified in Part 3 of the record of site condition that was acknowledged by the Ministry under the Cleanup Guideline 1996. O. Reg. 153/04, s. 19 (1).

(2) This section and subsection 168.4 (6) of the Act do not apply if a detailed site assessment as referred to in section 8.2 of the Cleanup Guideline 1996, was not completed and, before the record of site condition was submitted to the Ministry, the property to which the record of site condition relates was,

(a) used at any time, in whole or in part, for an industrial use; or

(b) used at any time, in whole or in part, for any of the following commercial uses:

(i) As a garage.

(ii) As a bulk liquid dispensing facility, including a gasoline outlet.

(iii) For the operation of dry cleaning equipment. O. Reg. 153/04, s. 19 (2).

Past owners, immunity

20. (1) This section applies to a person who, before the certification date of a record of site condition filed in the Registry, owned the property for which the record of site condition was filed. O. Reg. 153/04, s. 20 (1).

(2) A person meets the requirements for the purposes of paragraph 4 of subsection 168.7 (1) of the Act if the person satisfies one of the following requirements:

1. The person sold the property to a purchaser pursuant to an agreement for the purchase and sale of land that included a condition, covenant or term that the purchaser would file a record of site condition for the property in the Registry under section 168.4 of the Act and the purchaser has filed a record of site condition for the property in the Registry.

1.1 The person sold the property to a purchaser pursuant to an agreement for the purchase and sale of land that included a condition, covenant or term that the purchaser would submit a record of site condition for filing in the Registry under section 168.4 of the Act and the filing of a record of site condition by the purchaser in respect of the property has been acknowledged by the Director under section 168.4 of the Act.

2. The person was the owner of the property at the time that a record of site condition in respect of the property was submitted to the Ministry pursuant to the Cleanup Guideline 1996, if the record of site condition was filed pursuant to subsection 168.4 (6) of the Act. O. Reg. 153/04, s. 20 (2); O. Reg. 511/09, s. 11 (1, 2).

(3) If an agreement mentioned in paragraph 1 of subsection (2) is made before the day subsection 6 (1) of Schedule 13 to the *Budget Measures and Interim Appropriation Act, 2007* comes into force, it is sufficient for the purpose of satisfying the requirement in that paragraph if the purchaser has submitted for filing a record of site condition in respect of the property that was the subject of the agreement and the filing of the record of site condition by the purchaser in respect of the property has been acknowledged by the Director under section 168.4 of the Act. O. Reg. 511/09, s. 11 (3).

Soil Management

21. (1) This section applies in relation to a property if a record of site condition has been filed in the Registry containing a certification under sub-subparagraph 4 i C of subsection 168.4 (1) of the Act by a

qualified person that the property meets the applicable stratified site condition standards for all prescribed contaminants subject to any exceptions specified by the qualified person. O. Reg. 511/09, s. 12.

(2) A person who owns or occupies the property, or a person who has charge, management or control of the property, shall ensure that surface soil and subsurface soil on, in or under the property meets the applicable stratified site condition standards for all prescribed contaminants subject to any exceptions specified by the qualified person in the certification referred to in subsection (1). O. Reg. 511/09, s. 12.

Transition

21.1 (1) This section applies to a record of site condition if,

(a) the record of site condition, together with the acknowledgment referred to in clause (d), is submitted for filing on a day that is later than the latest of the days referred to in subsections 32 (2) and (3) of Ontario Regulation 511/09, but is before January 1, 2013;

(b) a notice of receipt has been given pursuant to clause 168.4 (3) (a) of the Act with respect of the record of site condition before January 1, 2013;

(c) the owner of the property in respect of which the record of site condition is being submitted for filing has, before January 1, 2011, submitted a notice in the form approved by the Director; and

(d) the owner has received from the Ministry a written acknowledgment in the form approved by the Director of the notice referred to in clause (c). O. Reg. 511/09, s. 13; O. Reg. 245/10, s. 1 (1).

(2) The notice under clause (1) (c) shall,

(a) contain, in the language specified in the form of notice approved by the Director, either or both of, as applicable,

(i) a certification by the owner that a risk assessment with respect to a contaminant at the property has been submitted, together with the date of the submission and the number of the risk assessment, or

(ii) a certification by the owner that action to reduce the concentration of a contaminant on, in or under the property in order to meet a standard specified in a risk assessment accepted by the Director for the contaminant with respect to the property or, where none exists, the applicable site condition standard for the contaminant, has begun; and

(b) contain a certification by a qualified person with respect to the property in the following language:

A phase one environmental site assessment of the property, which includes the evaluation of the information gathered from a records review, site visit and interviews, has been conducted in accordance with the regulation by or under the supervision of a qualified person as required by the regulation. O. Reg. 245/10, s. 1 (2).

(3) This section applies to a risk assessment if,

(a) notice has been given under subclause (2) (a) (i) in respect of the risk assessment;

(b) a record of site condition to which this section applies contains a certification mentioned in subparagraph 4 ii of subsection 168.4 (1) of the Act in respect of the risk assessment; and

(c) the risk assessment has been accepted by the Director on or after July 1, 2011. O. Reg. 245/10, s. 1 (2).

(4) Where this section applies to a record of site condition or a risk assessment,

(a) the definition of "Soil, Ground Water and Sediment Standards" in subsection 1 (1), as it read immediately before the date on which subsection 1 (4) of Ontario Regulation 511/09 came into force, applies;

(b) sections 36, 37, and 41, as they read immediately before the date on which sections 16, 17 and 18 of Ontario Regulation 511/09 came into force, apply;

(c) section 43.1 and all references to section 43.1 do not apply; and

(d) all references to sections 36, 37 and 41 of the regulation are deemed to be references to sections 36, 37 and 41 as they read immediately before the date on which sections 16, 17 and 18 of Ontario Regulation 511/09 came into force. O. Reg. 245/10, s. 1 (2).

PART VI
DEFINITIONS FOR AND INTERPRETATION OF PHASE ONE AND PHASE TWO ENVIRONMENTAL SITE ASSESSMENTS

Definitions and interpretation

22. (1) In Parts VII and VIII and Schedules D and E,

"all reasonable inquiries" means review of current and historical sources of reasonably accessible information about a property to determine uses and occupancies of the property since the property's first developed use;

"building" means a building as defined in subsection 1 (1) of the *Building Code Act, 1992*;

"contaminant of potential concern" includes a contaminant identified as potentially present on, in or under a phase one property in a phase one environmental site assessment report;

"enhanced investigation property" means a property that is being used or has been used, in whole or in part, in a manner described in clause 32 (1) (b) to which subsection 32 (2) does not apply;

"first developed use" means the earlier of,

(a) the first use of a phase one property in or after 1875 that resulted in the development of a building or structure on the property, and

(b) the first potentially contaminating use or activity on the phase one property;

"monitoring well" means a well that is a test hole as defined in Regulation 903 of the Revised Regulations of Ontario 1990 (Wells) made under the *Ontario Water Resources Act*;

"PCB" means PCB as defined in Regulation 362 of the Revised Regulations of Ontario, 1990 (Waste Management — PCB's) made under the Act;

"PCB waste" means PCB waste as defined in Regulation 362 of the Revised Regulations of Ontario, 1990 (Waste Management — PCB's) made under the Act;

"record", when used as a noun, has the same meaning as "document" in subsection 1 (1) of the Act;

"site", when used in the phrase "site reconnaissance" means phase one study area;

"spill" means spill as defined in subsection 91 (1) of the Act, other than a spill of a pollutant comprised solely of odour;

"test hole" means a test hole as defined in Regulation 903 of the Revised Regulations of Ontario 1990 (Wells) made under the *Ontario Water Resources Act*;

"waste" means waste as defined in section 25 of the Act;

"waste generator" means a generator as defined in Regulation 347 of the Revised Regulations of Ontario, 1990 (General — Waste Management) made under the Act;

"waste receiver" means a receiver as defined in Regulation 347 of the Revised Regulations of Ontario, 1990 (General — Waste Management) made under the Act. O. Reg. 511/09, s. 14.

(2) For purposes of Parts VII and VIII and Schedules D and E, information is reasonably accessible if,

(a) the information is provided by an owner of a phase one property or other person to a qualified person or someone supervised by a qualified person;

(b) subject to subsection (3), the information is relevant to the environmental condition of a phase one property, including the objectives and requirements of a phase one environmental site assessment or phase two environmental site assessment of the property, and the information is within the possession or control of any of the owners of the property or any other person funding the phase one environmental site assessment;

(c) the information is publicly available; or

(d) the information is available from government sources through access to information legislation. O. Reg. 511/09, s. 14.

(3) For the purposes of clause (2) (b), it is sufficient if an owner of the phase one property or any person funding the phase one environmental assessment provides a written statement to the qualified person,

(a) stating that the information referred to in clause (2) (b) has been provided to the qualified person or someone supervised by the qualified person in respect of the phase one environmental site assessment;

(b) detailing the information provided;

(c) providing details of any other information of which the owner or person is aware; and

(d) stating that all the information referred to in clause (c) of which the owner or person is aware has been included in the statement. O. Reg. 511/09, s. 14.

(4) The provisions of the *Ontario Water Resources Act* and of Regulation 903 of the Revised Regulations of Ontario, 1990 (Wells) made under that Act, that would apply to a test hole but for section 1.1, and subsections 13 (2), 14.1 (2), 14.2 (3), 14.3 (2), 14.4 (4) and 14.5 (3) of that regulation, apply to a monitoring well installed for the purpose of,

(a) a phase one environmental site assessment; and

(b) a phase two environmental site assessment. O. Reg. 511/09, s. 14.

PART VII
PHASE ONE ENVIRONMENTAL SITE ASSESSMENTS

Phase one environmental site assessment, requirements

23. A phase one environmental site assessment shall be conducted in accordance with this Part and shall meet the requirements set out in Schedule D. O. Reg. 511/09, s. 14.

Phase one environmental site assessment, general objectives

24. The general objectives of a phase one environmental site assessment are to do the following:

1. To develop a preliminary determination of the likelihood that one or more contaminants have affected any land or water on, in or under the phase one property.
2. To determine the need for a phase two environmental site assessment.

3. To provide a basis for carrying out any phase two environmental site assessment required.
4. To provide adequate preliminary information about environmental conditions in the land or water on, in or under the phase one property for the conduct of a risk assessment following completion of a phase two environmental site assessment. O. Reg. 511/09, s. 14.

Phase one environmental site assessment, components

25. Subject to section 31, a phase one environmental site assessment of a property shall include the following components:

1. A records review.
2. Interviews.
3. Site reconnaissance.
4. An evaluation of the information gathered from the records review, interviews and site reconnaissance.
5. A phase one environmental site assessment report.
6. The submission of the phase one environmental site assessment report to the owner of the phase one property. O. Reg. 511/09, s. 14.

Responsibilities of qualified persons, general

26. (1) A qualified person shall conduct or supervise a phase one environmental site assessment. O. Reg. 511/09, s. 14.

(2) Where this Regulation or Schedule D specifies that an aspect of a phase one environmental site assessment is to be conducted by a qualified person, a qualified person shall conduct that aspect of the assessment. O. Reg. 511/09, s. 14.

(3) In all cases, the qualified person shall ensure that the phase one environmental site assessment is conducted in accordance with this Part and meets the requirements of Schedule D. O. Reg. 511/09, s. 14.

Responsibilities of qualified person, impediments

27. (1) The qualified person shall identify physical impediments that interfere with or may limit the ability to conduct investigations or to meet any general or specific objectives, components or requirements of a phase one environmental site assessment. O. Reg. 511/09, s. 14.

(2) The qualified person shall ensure that no impediment precludes meeting the general or specific objectives, components or requirements of a phase one environmental site assessment. O. Reg. 511/09, s. 14.

(3) Denial of access to a qualified person, or someone supervised by a qualified person, to a structure or building or to any other part of the phase one property or any area under the phase one property, for any reason other than safety or inaccessibility, is an impediment that precludes meeting the general or specific objectives, components or requirements of a phase one environmental site assessment. O. Reg. 511/09, s. 14.

(4) The qualified person shall document the denial of access, where access to a structure or building or to any other part of the phase one property or any area under the phase one property is denied to the qualified person, or someone supervised by a qualified person, because of safety or inaccessibility. O. Reg. 511/09, s. 14.

Requirement that phase one site assessment report be based on current work

28. (1) A report may be used by a qualified person as a phase one environmental site assessment report in a record of site condition or used as a phase one environmental site assessment report in planning, conducting or supervising a phase two environmental site assessment, for the phase one property that is the subject of the report or an RSC property within it, if,

(a) the date the last work on all of the records review, interviews and site reconnaissance required for the phase one environmental site assessment that is the subject of the report was done is no later than 18 months before the submission of the record of site condition or the commencement of the phase two environmental site assessment;

(b) in the professional opinion of the qualified person, there is no new or materially changed area of potential environmental concern at the property;

(c) the phase one environmental site assessment meets all other requirements of this Part and Schedule D for a phase one environmental site assessment, including the requirements for a phase one environmental site assessment report;

(d) the report is a single document; and

(e) the report is the most recent document that meets the requirements of this Part and Schedule D for a phase one environmental site assessment report. O. Reg. 511/09, s. 14.

(2) If subsection (1) does not apply, the qualified person shall, before submitting the record of site condition or commencing the phase two environmental site assessment, update the phase one environmental site assessment by conducting or supervising such further portions of a phase one environmental site assessment as may be necessary to achieve,

(a) the general objectives in section 24; and

(b) the specific objectives and requirements for the components of the assessment set out in Schedule D. O. Reg. 511/09, s. 14.

(3) Subsection (1) applies to a report of an update undertaken pursuant to subsection (2), except clause (1) (d) does not apply and clauses (1) (c) and (e) apply with necessary modifications. O. Reg. 511/09, s. 14.

Responsibilities of qualified person re reports and data

29. The qualified person who is conducting or supervising the phase one environmental site assessment shall,

(a) use all reasonably accessible environmental site assessment reports and other reports and data, as appropriate, to conduct a phase one environmental site assessment; and

(b) document all reports and data consulted, and indicate what was used and how it was used in the phase one environmental site assessment. O. Reg. 511/09, s. 14.

Responsibilities of newly retained qualified person

30. (1) Where a qualified person retained by or on behalf of an owner who wishes to submit a record of site condition for filing is not the same qualified person who conducted or supervised the phase one environmental site assessment, the qualified person who has been retained with respect to the submission of the record of site condition for filing shall review the phase one environmental site assessment and any other material necessary to determine whether,

(a) the phase one environmental site assessment meets the requirements of this Part and Schedule D for a phase one environmental site assessment, including the requirements for a phase one environmental site assessment report;

(b) the phase one conceptual site model accurately reflects the environmental condition of the phase one property and any need for a phase two environmental site assessment; and

(c) there is no new or materially changed area of potential environmental concern at the phase one property. O. Reg. 511/09, s. 14.

(2) The qualified person referred to in subsection (1) shall, before submitting the record of site condition or commencing the phase two environmental site assessment, conduct or supervise such work on a phase one environmental site assessment as may be necessary, to achieve the general objectives in section 24 and the specific objectives and requirements for the components of the assessment set out in Schedule D, if the qualified person determines that,

(a) the phase one environmental site assessment conducted or supervised by another qualified person does not meet the requirements referred to in clause (1) (a);

(b) the phase one conceptual site model does not accurately reflect the environmental condition of the phase one property and any need for a phase two environmental site assessment; or

(c) there is a new or materially changed area of potential environmental concern at the phase one property. O. Reg. 511/09, s. 14.

(3) The work referred to in subsection (2) includes the conduct and supervision of all or part of a phase one environmental site assessment, the preparation of all or part of a phase one environmental site assessment report or update to the report and the preparation of any documentary components of the report, such as a phase one conceptual site model. O. Reg. 511/09, s. 14.

(4) Nothing in this section shall be construed so as to derogate from any obligations imposed on the qualified person under the *Professional Engineers Ac*t or the *Professional Geoscientists Act, 2000*. O. Reg. 511/09, s. 14.

Transition

31. (1) If, before October 1, 2004, a report was completed for the purposes of an initial site assessment as referred to in section 8.1 of the Cleanup Guideline 1996, the initial site assessment is deemed to be a phase one environmental site assessment for the purpose of section 168.1 of the Act if a qualified person reviews the report and certifies that the initial site assessment was completed in accordance with this Part, except clause 28 (1) (a). O. Reg. 511/09, s. 14.

(2) If, before October 1, 2004, an initial site assessment, as referred to in section 8.1 of the Cleanup Guideline 1996, was commenced, but not completed, the initial site assessment satisfies the requirements of this Regulation for a phase one environmental site assessment if,

(a) a qualified person certifies in writing in the phase one environmental assessment report required under section 25 that the components of the initial site assessment completed before this Regulation came into force meet the requirements of this Regulation, except clause 28 (1) (a), with respect to a phase one environmental site assessment, except that they were not conducted or supervised by a qualified person; and

(b) a phase one environmental site assessment is completed that consists of,

(i) a review by a qualified person of those components of the initial site assessment completed before October 1, 2004, and

(ii) the completion of those components required under this Part that were not completed before October 1, 2004. O. Reg. 511/09, s. 14.

PART VIII
PHASE TWO ENVIRONMENTAL SITE ASSESSMENTS

When phase two assessment required to file record of site condition

32. (1) For the purposes of submitting a record of site condition for filing under subsection 168.4 (1) of the Act in respect of a property, a phase two environmental site assessment is required,

(a) if during a phase one environmental site assessment of the property, a potentially contaminating activity is identified on, in or under the property; or

(b) if the property is used, or has ever been used, in whole or in part for an industrial use or for any of the following commercial uses,

(i) as a garage,

(ii) as a bulk liquid dispensing facility, including a gasoline outlet, or

(iii) for the operation of dry cleaning equipment. O. Reg. 511/09, s. 14.

(1.1) Clause (1) (a) does not apply if,

(a) a record of site condition has been filed in the Registry under section 168.4 of the Act with respect to the property;

(b) during the phase one environmental site assessment of the property referred to in clause (1) (a), there was no potentially contaminating activity on, in or under the property identified other than potentially contaminating activity identified in the phase one environmental site assessment report of the property which was listed in support of the record of site condition referred to in clause (a); and

(c) the qualified person conducting or supervising the phase one environmental site assessment referred to in clause (1) (a) determines there is no area of potential environmental concern. O. Reg. 179/11, s. 3.

(2) Clause (1) (b) does not apply if,

(a) the property is currently used for an agricultural or other use, or a community use, an institutional use, a parkland use or a residential use; and

(b) since the latest date on which the property stopped being used for any of the types of property uses described in clause (1) (b), a record of site condition has been filed in the Registry under section 168.4 of the Act for the use described in clause (a). O. Reg. 511/09, s. 14.

(3) Clause (1) (b) does not apply with respect to the part of a property that is being used or has ever been used,

(a) for quarrying to excavate consolidated or unconsolidated aggregate; or

(b) for that aspect of the production of oil and gas consisting of the presence of an oil well or gas well on, in or under the property. O. Reg. 511/09, s. 14.

Phase two environmental site assessments, requirements

33. A phase two environmental site assessment shall be conducted in accordance with this Part and shall meet the requirements set out in Schedule E. O. Reg. 511/09, s. 14.

Phase two environmental site assessments, general objectives

33.1 (1) The general objectives of a phase two environmental site assessment are to do the following:

1. To determine the location and concentration of contaminants in the land or water on, in or under the phase two property.

2. To obtain information about environmental conditions in the land or water on, in or under the phase two property necessary to undertake a risk assessment, in accordance with this Regulation, with respect to one or more contaminants of concern.

3. To determine if applicable site condition standards and standards specified in a risk assessment for contaminants on, in or under the phase two property were met as of the certification date. O. Reg. 511/09, s. 14.

(2) The qualified person shall ensure that the general objectives of a phase two environmental site assessment are achieved by,

(a) developing an understanding of the geological and hydrogeological conditions at the phase two property; and

(b) conducting one or more rounds of field sampling for all contaminants associated with any area of potential environmental concern identified in the phase two sampling and analysis plan and for any such contaminants identified during subsequent phase two activities and analyses of environmental conditions at the phase two property. O. Reg. 511/09, s. 14.

Phase two environmental site assessment, components

33.2 Subject to section 33.8, a phase two environmental site assessment shall include the following components:

1. The planning of a site investigation.

2. A site investigation.

3. A review and evaluation of the information gathered through the site investigation.

4. A phase two environmental site assessment report.

5. The submission of the phase two environmental site assessment report to the owner of the phase two property. O. Reg. 511/09, s. 14.

Responsibilities of qualified persons, general

33.3 (1) A qualified person shall conduct or supervise a phase two environmental site assessment. O. Reg. 511/09, s. 14.

(2) Where this Regulation or Schedule E specifies that an aspect of a phase two environmental site assessment is to be conducted by a qualified person, a qualified person shall conduct that aspect of the assessment. O. Reg. 511/09, s. 14.

(3) In all cases, the qualified person shall ensure that the phase two environmental site assessment is conducted in accordance with this Part and meets the requirements of Schedule E. O. Reg. 511/09, s. 14.

Responsibilities of a qualified person, impediments

33.4 (1) The qualified person shall identify physical impediments that interfere with or may limit the ability to conduct investigations, sampling or analyses or to meet any general or specific objectives, components or requirements of a phase two environmental site assessment. O. Reg. 511/09, s. 14.

(2) The qualified person shall ensure that no impediment precludes meeting the general or specific objectives, components or requirements of a phase two environmental site assessment. O. Reg. 511/09, s. 14.

(3) Denial of access to a qualified person, or someone supervised by a qualified person, to a structure or building or to any other part of the phase two property or any area under the phase two property, for any reason other than safety or inaccessibility, is an impediment that precludes meeting the general or

specific objectives, components or requirements of a phase two environmental site assessment. O. Reg. 511/09, s. 14.

(4) The qualified person shall document the denial of access, where access to a structure or building or to any other part of the phase two property or any area under the phase two property is denied to the qualified person, or someone supervised by a qualified person, because of safety or inaccessibility. O. Reg. 511/09, s. 14.

Requirement that phase two environmental site assessment report be based on current work

33.5 (1) A report may be used by a qualified person as a phase two environmental site assessment report in a record of site condition or used as a phase two environmental site assessment report in planning, conducting or supervising a risk assessment, for the phase two property that is the subject of the report or an RSC property within it, if,

(a) the date the last work on all of the planning the site investigation, conducting the site investigation and reviewing and evaluating the information gathered through the site investigation required for the phase two environmental site assessment that is the subject of the report was done is no later than 18 months before the submission of the record of site condition or the commencement of the risk assessment;

(b) in the professional opinion of the qualified person, there is no new or materially changed area of potential environmental concern at the property;

(c) the phase two environmental site assessment meets all other requirements of this Part and Schedule E for a phase two environmental site assessment, including the requirements for a phase two environmental site assessment report;

(d) the report is a single document; and

(e) the report is the most recent document that meets the requirements of this Part and Schedule E for a phase two environmental site assessment report. O. Reg. 511/09, s. 14.

(2) If subsection (1) does not apply, the qualified person shall, before submitting the record of site condition or commencing the risk assessment, update the phase two environmental site assessment by conducting or supervising such further portions of a phase two environmental site assessment as may be necessary to achieve,

(a) the general objectives in subsection 33.1 (1); and

(b) the specific objectives and requirements for the components of the assessment set out in Schedule E. O. Reg. 511/09, s. 14.

(3) Subsection (1) applies to a report of an update undertaken pursuant to subsection (2) except clause (1) (d) does not apply and clauses (1) (c) and (e) apply with necessary modifications. O. Reg. 511/09, s. 14.

Responsibilities of qualified person re reports and data

33.6 The qualified person who is conducting or supervising the phase two environmental site assessment shall,

(a) use all reasonably accessible environmental site assessment reports and other reports and data, as appropriate, to conduct a phase two environmental site assessment; and

(b) document all reports and data consulted, and indicate what was used and how it was used in the phase two environmental site assessment. O. Reg. 511/09, s. 14.

Responsibilities of newly retained qualified person

33.7 (1) Where a qualified person retained by or on behalf of an owner who wishes to submit a record of site condition for filing is not the same qualified person who conducted or supervised the phase two environmental site assessment, the qualified person who has been retained with respect to submission of the record of site condition for filing shall review the phase two environmental site assessment and any other material necessary to determine whether,

(a) the phase two environmental site assessment meets the requirements of this Part and Schedule E for a phase two environmental site assessment, including the requirements for a phase two environmental site assessment report;

(b) the phase two conceptual site model accurately reflects the environmental condition of the phase two property prior to any actions taken to reduce the concentration of contaminants; and

(c) there is no new or materially changed area of potential environmental concern at the phase two property. O. Reg. 511/09, s. 14.

(2) The qualified person referred to in subsection (1) shall, before submitting the record of site condition or commencing a risk assessment, conduct or supervise such work on a phase two environmental site assessment as may be necessary to achieve the general objectives in subsection 33.1 (1) and the specific objectives and requirements for the components of the assessment set out in Schedule E, if the qualified person determines that,

(a) the phase two environmental site assessment conducted or supervised by another qualified person does not meet the requirements referred to in clause (1) (a);

(b) the phase two conceptual site model does not accurately represent the environmental condition of the phase two property prior to any actions taken to reduce the concentration of contaminants; or

(c) there is a new or materially changed area of potential environmental concern at the phase one property. O. Reg. 511/09, s. 14.

(3) The work referred to in subsection (2) includes the conduct and supervision of all or part of a phase two environmental site assessment, the preparation of all or part of a phase two environmental site assessment report or update to the report and the preparation of any documentary components of the report, such as a phase two conceptual site model. O. Reg. 511/09, s. 14.

(4) Nothing in this section shall be construed so as to derogate from any obligations imposed on the qualified person under the *Professional Engineers Act* or the *Professional Geoscientists Act, 2000*. O. Reg. 511/09, s. 14.

Transition

33.8 (1) If, before October 1, 2004, a report was completed for the purposes of a detailed site assessment as referred to in section 8.2 of the Cleanup Guideline 1996, the detailed site assessment is deemed to be a phase two environmental site assessment for the purpose of section 168.1 of the Act if a qualified person reviews the report and certifies that the detailed site assessment was completed in accordance with this Part, except clause 33.5 (1) (a). O. Reg. 511/09, s. 14.

(2) If, before October 1, 2004, a detailed site assessment as referred to in section 8.2 of the Cleanup Guideline 1996 in respect of a property was commenced, but not completed, the detailed site assessment satisfies the requirements of this Regulation for a phase two environmental site assessment if,

(a) a qualified person certifies in writing in the phase two environmental assessment report required under section 33 that the components of the detailed site assessment completed before October 1, 2004 meet the requirements of this Regulation, except clause 33.5 (1) (a), with respect to a phase two environmental site assessment, except that they were not conducted or supervised by a qualified person; and

(b) a phase two environmental site assessment is completed that consists of,

(i) a review by a qualified person of those components of the detailed site assessment completed before October 1, 2004, and

(ii) the completion of those components required under this Part that were not completed by October 1, 2004. O. Reg. 511/09, s. 14.

PART IX
SITE CONDITION STANDARDS AND RISK ASSESSMENTS

SITE CONDITION STANDARDS

Full depth background site condition standards

34. (1) For the purpose of sub-subparagraph 4 i A of subsection 168.4 (1) of the Act, the prescribed contaminants and the full depth background site condition standards for those contaminants are those set out in Table 1 of the Soil, Ground Water and Sediment Standards. O. Reg. 153/04, s. 34 (1).

(2) The property meets the applicable full depth background site condition standards for the prescribed contaminants, in relation to the type of property use for which the record of site condition is filed, if the following criteria are satisfied:

1. In each of the following media that exist at the property, the concentration of the contaminants does not exceed the standards in relation to the medium for that type of property use set out in Table 1 of the Soil, Ground Water and Sediment Standards:
   i. Soil, not including sediment (if any).
   ii. Sediment.
2. If ground water sampling was carried out at the property as part of the phase two environmental site assessment, the concentration of the contaminants in the ground water does not exceed the standards in relation to ground water for that type of property use set out in Table 1 of the Soil, Ground Water and Sediment Standards. O. Reg. 153/04, s. 34 (2).

Non-potable and potable ground water conditions

35. (1) In this section,

"non-potable ground water site condition standards" means,

(a) the full depth generic site condition standards prescribed under section 37 in relation to the contaminants prescribed under that section, or

(b) the stratified site condition standards prescribed under section 39 in relation to the contaminants prescribed under that section;

"owner", in relation to a notice in respect of a property, includes a person authorized by the owner of the property to give or receive such a notice;

"potable ground water site condition standards" means,

(a) the full depth generic site condition standards prescribed under section 36 in relation to the contaminants prescribed under that section, or

(b) the stratified site condition standards prescribed under section 38 in relation to the contaminants prescribed under that section;

"well" means a hole made in the ground to locate or to obtain ground water which is used or intended for use as a source of water and includes a spring around or in which works are made or equipment is

installed for collection or transmission of water, but does not include a hole not used or intended for use as a source of water for agriculture or human consumption, such as,

(a) a hole solely intended to test or to obtain information in respect of ground water or an aquifer, or

(b) a hole solely made to lower or control the level of ground water in the area of the hole or to remove material that may be in the ground water. O. Reg. 153/04, s. 35 (1); O. Reg. 179/11, s. 4 (1).

(2) For the purposes of sub-subparagraphs 4 i B and C of subsection 168.4 (1) of the Act,

(a) the non-potable ground water site condition standards may be applied only if the circumstances described in subsection (3) exist; and

(b) the potable ground water site condition standards may be applied whether or not those circumstances exist. O. Reg. 153/04, s. 35 (2).

(3) The circumstances mentioned in subsection (2) are that,

(a) the property, and all other properties located, in whole or in part, within 250 metres of the boundaries of the property, are supplied by a municipal drinking water system, as defined in the *Safe Drinking Water Act, 2002*, and have no wells installed;

(b) the property is either,

(i) not located in an area designated in a municipal official plan as a well-head protection area or other designation identified by the municipality for the protection of ground water, or

(ii) if it is located in such a designated area, the municipality has consented in writing to the application of the non-potable ground water site condition standards in preparing a record of site condition for the property;

(c) the record of site condition does not specify agricultural or other use as the type of property use for which the record of site condition is filed;

(d) the owner has given the clerk of the local municipality, and of any upper-tier municipality, in which the property is located written notice of intention to apply the non-potable ground water site condition standards in preparing a record of site condition for the property; and

(e) within 30 days after receiving the notice described in clause (d),

(i) neither the local municipality nor the upper-tier municipality (if any) has given written notice (in this clause called a "notice of objection") to the owner that it objects to that application of the non-potable ground water site condition standards, or

(ii) a local or upper-tier municipality has given a notice of objection to the owner, and the municipality, at any time after giving the notice of objection, has withdrawn the objection and given written consent to the owner for the application of the non-potable ground water site condition standards. O. Reg. 153/04, s. 35 (3); O. Reg. 511/09, s. 15 (2); O. Reg. 179/11, s. 4 (2).

Full depth generic site condition standards, potable ground water

36. (1) This section prescribes the full depth generic site condition standards that may be applied by virtue of clause 35 (2) (b). O. Reg. 153/04, s. 36 (1).

(2) Subject to subsection (2.1), for the purpose of sub-subparagraph 4 i B of subsection 168.4 (1) of the Act, the prescribed contaminants and the applicable prescribed full depth generic site condition standards for those contaminants are those set out in Table 2 of the Soil, Ground Water and Sediment Standards. O. Reg. 153/04, s. 36 (2); O. Reg. 511/09, s. 16 (1).

(2.1) Subject to subsection (4), for the purposes of sub-subparagraph 4 i B of subsection 168.4 (1) of the Act, the prescribed contaminants and the applicable prescribed full depth generic site condition standards for those contaminants are,

(a) in the case of a property described in clause 43.1 (1) (a), those set out in Table 6 of the Soil, Ground Water and Sediment Standards; and

(b) in the case of a property described in clause 43.1 (1) (b), those set out in Table 8 of the Soil, Ground Water and Sediment Standards. O. Reg. 511/09, s. 16 (2).

(3) The property meets the applicable full depth generic site condition standards for the prescribed contaminants, in relation to the type of property use for which the record of site condition is filed, if the following criteria are satisfied:

1. In each of the following media that exist at the property, the concentration of the contaminants does not exceed the standards in relation to the medium for that type of property use set out in Table 2, Table 6 or Table 8, as the case may be, of the Soil, Ground Water and Sediment Standards:

   i. In the case of standards set out in Table 2 or Table 6, soil, not including sediment (if any).

   ii. In the case of standards set out in Table 8,

      A. soil, not including sediment (if any), and

      B. sediment.

2. If ground water sampling was carried out at the property as part of the phase two environmental site assessment, the concentration of the contaminants in the ground water does not exceed the standards in relation to ground water for that type of property use set out in Table 2, Table 6 or Table 8, as the case may be, of the Soil, Ground Water and Sediment Standards. O. Reg. 153/04, s. 36 (3); O. Reg. 511/09, s. 16 (3, 4).

(4) If each of clauses 43.1 (1) (a) and (b) apply to a property and the applicable full depth generic standard for a contaminant that is set out in Table 6 is different from the applicable full depth generic standard that is set out in Table 8, the applicable full depth generic standard for the contaminant is the standard that prescribes the lower concentration for the contaminant. O. Reg. 511/09, s. 16 (5).

Full depth generic site condition standards, non-potable ground water

37. (1) This section prescribes the full depth generic site condition standards that may be applied by virtue of clause 35 (2) (a). O. Reg. 153/04, s. 37 (1).

(2) Subject to subsection (2.1), for the purpose of sub-subparagraph 4 i B of subsection 168.4 (1) of the Act, the prescribed contaminants and the applicable full depth generic site condition standards for those contaminants are those set out in Table 3 of the Soil, Ground Water and Sediment Standards. O. Reg. 153/04, s. 37 (2); O. Reg. 511/09, s. 17 (1).

(2.1) Subject to subsection (4), for the purposes of sub-subparagraph 4 i B of subsection 168.4 (1) of the Act, the prescribed contaminants and the applicable full depth generic site condition standards for those contaminants are,

(a) in the case of a property described in clause 43.1 (1) (a), those set out in Table 7 of the Soil, Ground Water and Sediment Standards; and

(b) in the case of a property described in clause 43.1 (1) (b), those set out in Table 9 of the Soil, Ground Water and Sediment Standards. O. Reg. 511/09, s. 17 (2).

(3) The property meets the applicable full depth generic site condition standards for the prescribed contaminants, in relation to the type of property use for which the record of site condition is filed, if the following criteria are satisfied:

1. In each of the following media that exist at the property, the concentration of the contaminants does not exceed the standards in relation to the medium for that type of property use set out in Table 3, Table 7 or Table 9, as the case may be, of the Soil, Ground Water and Sediment Standards:
   i. In the case of standards set out in Table 3 or Table 7, soil, not including sediment (if any).
   ii. In the case of standards set out in Table 9,
      A. soil, not including sediment (if any), and
      B. sediment.
2. If ground water sampling was carried out at the property as part of the phase two environmental site assessment, the concentration of the contaminants in the ground water does not exceed the standards in relation to ground water for that type of property use set out in Table 3, Table 7 or Table 9, as the case may be, of the Soil, Ground Water and Sediment Standards. O. Reg. 153/04, s. 37 (3); O. Reg. 511/09, s. 17 (3, 4).

(4) If each of clauses 43.1 (1) (a) and (b) apply to a property and the applicable full depth generic standard for a contaminant that is set out in Table 7 is different from the applicable full depth generic standard that is set out in Table 9, the applicable full depth generic standard for the contaminant is the standard that prescribes the lower concentration for the contaminant. O. Reg. 511/09, s. 17 (5).

Stratified site condition standards, potable ground water

38. (1) This section prescribes the stratified site condition standards that may be applied by virtue of clause 35 (2) (b). O. Reg. 153/04, s. 38 (1).

(2) For the purpose of sub-subparagraph 4 i C of subsection 168.4 (1) of the Act, the prescribed contaminants and the applicable stratified site condition standards for those contaminants are as set out in Table 4 of the Soil, Ground Water and Sediment Standards. O. Reg. 153/04, s. 38 (2).

(3) The property meets the applicable stratified site condition standards for the prescribed contaminants, in relation to the type of property use for which the record of site condition is filed, if the following criteria are satisfied:

1. In each of the following media that exist at the property, the concentration of the contaminants does not exceed the standards in relation to the medium for that type of property use set out in Table 4 of the Soil, Ground Water and Sediment Standards:
   i. Surface soil, not including sediment (if any).
   ii. Subsurface soil, not including sediment (if any).
   iii. Sediment.
2. If ground water sampling was carried out at the property as part of the phase two environmental site assessment, the concentration of the contaminants in the ground water does not exceed the standards in relation to ground water for that type of property use set out in Table 4 of the Soil, Ground Water and Sediment Standards. O. Reg. 153/04, s. 38 (3).

Stratified site condition standards, non-potable ground water

39. (1) This section prescribes the stratified site condition standards that may be applied by virtue of clause 35 (2) (a). O. Reg. 153/04, s. 39 (1).

(2) For the purpose of sub-subparagraph 4 i C of subsection 168.4 (1) of the Act, the prescribed contaminants and the applicable stratified site condition standards for those contaminants are as set out in Table 5 of the Soil, Ground Water and Sediment Standards. O. Reg. 153/04, s. 39 (2).

(3) The property meets the applicable stratified site condition standards for the prescribed contaminants, in relation to the type of property use for which the record of site condition is filed, if the following criteria are satisfied:

1. In each of the following media that exist at the property, the concentration of the contaminants does not exceed the standards in relation to the medium for that type of property use set out in Table 5 of the Soil, Ground Water and Sediment Standards:
   i. Surface soil, not including sediment (if any).
   ii. Subsurface soil, not including sediment (if any).
   iii. Sediment.
2. If ground water sampling was carried out at the property as part of the phase two environmental site assessment, the concentration of the contaminants in the ground water does not exceed the standards in relation to ground water for that type of property use set out in Table 5 of the Soil, Ground Water and Sediment Standards. O. Reg. 153/04, s. 39 (3).

Stratified site condition standards not applicable to certain uses

40. The qualified person shall not use the applicable stratified site conditions standards pursuant to sub-subparagraph 4 i C of subsection 168.4 (1) of the Act in certifying the record of site condition for the purposes of paragraph 4 of subsection 168.4 (1) of the Act if agricultural or other use is specified under paragraph 3 of subsection 168.4 (2) of the Act as the type of property use for which the record of site condition is filed. O. Reg. 153/04, s. 40.

Site condition standards, environmentally sensitive areas

41. (1) This section applies in relation to a property if,

(a) the property is,
   (i) within an area of natural significance,
   (ii) includes or is adjacent to an area of natural significance or part of such an area, or
   (iii) includes land that is within 30 metres of an area of natural significance or part of such an area;

(b) the soil at the property has a pH value as follows:
   (i) for surface soil, less than 5 or greater than 9,
   (ii) for sub-surface soil, less than 5 or greater than 11; or

(c), (d) REVOKED: O. Reg. 511/09, s. 18 (3).

(e) a qualified person is of the opinion that, given the characteristics of the property and the certifications the qualified person would be required to make in a record of site condition in relation to the property as specified in Schedule A, it is appropriate to apply this section to the property. O. Reg. 153/04, s. 41 (1); O. Reg. 511/09, s. 18 (1-3).

(2) If this section applies, the qualified person shall not use the following standards in certifying the record of site condition for the purposes of paragraph 4 of subsection 168.4 (1) of the Act:

1. The applicable full-depth generic site condition standards pursuant to sub-subparagraph 4 i B of subsection 168.4 (1) of the Act.

2. The applicable stratified site condition standards pursuant to sub-subparagraph 4 i C of subsection 168.4 (1) of the Act. O. Reg. 153/04, s. 41 (2).

(3) REVOKED: O. Reg. 511/09, s. 18 (4).

Soil textures, applicable standards

42. (1) If, in respect of a contaminant, a cell in a table in the Soil, Ground Water and Sediment Standards sets one standard for coarse textured soil and another standard for medium and fine textured soil for the contaminant, the qualified person shall apply the following rules in determining which standard applies to a property for that contaminant:

1. If the qualified person determines that at least 1/3 of the soil at the property, measured by volume, consists of coarse textured soil, the qualified person shall apply the standard for coarse textured soil.

2. In any other case, the qualified person may apply the standard for medium and fine textured soil. O. Reg. 153/04, s. 42 (1).

(2) In this section,

"coarse textured soil" means soil that contains more than 50 per cent by mass of particles that are 75 micrometres or larger in mean diameter;

"medium and fine textured soil" means soil that contains 50 per cent or more by mass of particles that are smaller than 75 micrometres in mean diameter. O. Reg. 153/04, s. 42 (2); O. Reg. 511/09, s. 19.

Applicable site condition standard: "N/A", "N/V" or not listed

43. (1) If a cell in a table in the Soil, Ground Water and Sediment Standards indicates "N/A" or "N/V" in respect of a contaminant found in an environmental medium in relation to a type of property use, no applicable site condition standard is prescribed for that contaminant found in that environmental medium in relation to that type of property use. O. Reg. 153/04, s. 43 (1).

(2) In cases where a cell in a table in the Soil, Ground Water and Sediment Standards indicates "N/V" as referenced in subsection (1), if the contaminant is detected in the environmental medium on, in or under a property and is associated with potentially contaminating activity, the owner of the property may submit to the Director a new science risk assessment described in section 9 of Schedule C, if the owner or qualified person is of the opinion that a risk assessment is necessary in order to complete the certifications in a record of site condition prescribed by Schedule A. O. Reg. 511/09, s. 20.

(3) In cases where a contaminant is detected on, in or under a property and the contaminant is not listed in the table that sets out the applicable site conditions standards in the Soil, Ground Water and Sediment Standards and is associated with potentially contaminating activity, the owner of the property may submit to the Director a new science risk assessment described in section 9 of Schedule C, if the owner or qualified person is of the opinion that a risk assessment is necessary in order to complete the certifications in a record of site condition prescribed by Schedule A. O. Reg. 511/09, s. 20.

Site condition standards, shallow soil property or water body

43.1 (1) This section applies in relation to a property if,

(a) the property is a shallow soil property; or

(b) the property includes all or part of a water body or is adjacent to a water body or includes land that is within 30 metres of a water body. O. Reg. 511/09, s. 21.

(2) If this section applies, the qualified person shall not use the applicable stratified site condition standards pursuant to sub-subparagraph 4 i C of subsection 168.4 (1) of the Act in certifying the record

of site condition for the purposes of paragraph 4 of subsection 168.4 (1) of the Act. O. Reg. 511/09, s. 21.

(3) In this section,

"shallow soil property" means a property of which 1/3 or more of the area consists of soil equal to or less than 2 metres in depth beneath the soil surface, excluding any non-soil surface treatment such as asphalt, concrete or aggregate;

"soil" means, for the purposes of the definition of shallow soil property, unconsolidated naturally occurring mineral particles and other naturally occurring material resulting from the natural breakdown of rock or organic matter by physical, chemical or biological processes that are smaller than 2 millimetres in size or that pass the US #10 sieve, and includes a mixture of soil and rock if less than 50 per cent by mass of the mixture is rock. O. Reg. 511/09, s. 21.

RISK ASSESSMENTS

Risk assessment form

44. (1) Subject to subsection (2) and section 45, a risk assessment shall be prepared and submitted in accordance with Schedule C. O. Reg. 153/04, s. 44 (1).

(2) A site specific risk assessment of a property as referred to in the Cleanup Guideline 1996 that was commenced, but not completed, before this Regulation came into force satisfies the requirements of this Regulation if,

(a) in an appendix to the risk assessment report prepared and submitted in accordance with Schedule C, a qualified person certifies in writing that the components of the site specific risk assessment completed before this Regulation came into force meet the requirements of this Regulation with respect to a risk assessment, except that they were not completed by a qualified person; and

(b) a risk assessment is completed that consists of,

(i) a review by a qualified person of those components of the site specific risk assessment completed before this Regulation came into force, and

(ii) the completion of those components required under Schedule C that were not completed at the time this Regulation came into force. O. Reg. 153/04, s. 44 (2).

(3) A site specific risk assessment of a property as referred to in the Cleanup Guideline 1996 that was submitted to Ministry, but not approved by the Ministry under the Guideline before this Regulation came into force, satisfies the requirements of this Regulation, if the Director determines that the site specific risk assessment complies with the requirements specified in section 4 of Schedule C, except that the site specific risk assessment was not completed by a qualified person. O. Reg. 153/04, s. 44 (3).

Transition

45. (1) If a site specific risk assessment in respect of a property was completed and submitted to the Ministry under the Cleanup Guideline 1996 before this Regulation came into force and was approved by the Ministry under the Guideline, the approved site specific assessment is deemed to be a risk assessment that has been accepted by the Director under section 168.5 of the Act for the purposes of the Act and this Regulation. O. Reg. 153/04, s. 45 (1).

(2) The following provisions do not apply to a site specific risk assessment that is deemed to be a risk assessment under subsection (1), if the site specific risk assessment does not specify a standard with respect to a contaminant:

1. Sub-subparagraph 4 (ii) C of subsection 168.4 (1) of the Act.

2. Paragraph 3 of subsection 21 (2) of Schedule A.
3. Paragraph 3 of subsection 22 (2) of Schedule A.
4. Paragraph 3 of subsection 23 (2) of Schedule A.
5. Paragraph 3 of subsection 24 (2) of Schedule A.
6. Paragraph 3 of subsection 25 (2) of Schedule A. O. Reg. 153/04, s. 45 (2).

Time to respond to risk assessment

46. (1) The period of time prescribed for the purposes of subsection 168.5 (1) of the Act for notice to be given in relation to a risk assessment submitted by the owner to the Director is as follows:

1. In the case of a limited scope risk assessment described in section 7 of Schedule C or an estimation of natural local background concentration risk assessment described in section 8 of Schedule C, eight weeks after the date of submission.
2. In the case of a new science risk assessment described in section 9 of Schedule C or a wider area of abatement risk assessment described in section 10 of Schedule C, 22 weeks after the date of submission.
3. In any other case, 16 weeks after the date of submission. O. Reg. 153/04, s. 46 (1).

(2) If, at any time after the submission of a risk assessment report and before the Director has made a decision on the risk assessment under section 168.5 of the Act, the Director becomes aware of one of the following circumstances, the Director may notify the owner in writing of the circumstance:

1. The type of approach taken by the risk assessment is not appropriate given the circumstances of the contaminant and the property to which the risk assessment relates.
2. The content of the risk assessment report does not comply with a requirement specified in section 4 or 5 of Schedule C.
3. The risk assessment report does not contain sufficient data or information to support the conclusions reached in the report. O. Reg. 153/04, s. 46 (2).

(3) A notice under subsection (2) may request that the owner,

(a) revise and resubmit the risk assessment to the Director in accordance with the directions specified in the notice; or

(b) provide specified additional information for the risk assessment report by the date and time specified in the notice. O. Reg. 153/04, s. 46 (3).

(4) If the Director gives notice under clause (3) (a), the period of time for the purposes of subsection (1) shall commence on the date that the qualified person submits the revised risk assessment in accordance with the Director's notice. O. Reg. 153/04, s. 46 (4).

(5) If the Director gives notice under clause (3) (b), the period of time for the purposes of subsection (1) stops on the date the notice is issued and resumes on the date the information specified in the notice is provided to the Director. O. Reg. 153/04, s. 46 (5).

(6) At any time after an owner submits a risk assessment under subsection 168.5 of the Act to the Director, the owner may withdraw the risk assessment by giving written notice to the Director. O. Reg. 153/04, s. 46 (6).

MEETING SITE CONDITION AND RISK ASSESSMENT STANDARDS

Analytical procedures

47. (1) Where a qualified person takes a sample of sediment, soil or ground water from the land or water in, on or under a property for the purpose of analysing the sample for a contaminant as part of a phase one or phase two environmental site assessment or a risk assessment or for the purpose of indicating the maximum concentration of a contaminant in, on or under the property in a record of site condition, the qualified person shall ensure that,

(a) the samples are handled and stored in accordance with the Analytical Protocol;

(b) the collection and chain of custody of samples is carried out in accordance with the requirements in Part VIII and Schedule E;

(c) the analyses of the samples mentioned in clause (a) are carried out by a laboratory that,

(i) has been accredited in accordance with the International Standard ISO/IEC 17025 – General Requirement for the Competence of Testing and Calibration Laboratories, dated May 5, 2005, as amended from time to time, and

(ii) has been accredited in accordance with the standards, if standards for proficiency testing have been developed by the Standards Council of Canada, the Canadian Association for Laboratory Accreditation or another accreditation body accepted by the Director for a parameter set out in the Soil, Ground Water and Sediment Standards;

(d) the laboratory provides the certificate of analysis or analytical report referred to in subsection (2) prepared in accordance with the Analytical Protocol and the requirements of subsection (3); and

(e) the laboratory is not instructed to exclude, from an analytical report or certificate of analysis, any of the parameters which were analyzed. O. Reg. 511/09, s. 22.

(2) If a sample mentioned in subsection (1) is submitted by a qualified person to a laboratory for analysis for a contaminant, the laboratory shall,

(a) conduct the analysis for the contaminant in accordance with the Analytical Protocol; and

(b) give a certificate of analysis or analytical report to the qualified person that specifies the analytical method used for conducting the analysis for the contaminant. O. Reg. 511/09, s. 22.

(3) The certificate of analysis or analytical report referenced in clause (2) (b) shall contain a complete record of the submission and analysis, including all correspondence between the laboratory and the qualified person or anyone under the supervision and control of the qualified person with respect to the sample collection, chain of custody, handling and analysis including,

(a) the laboratory name, address, contact and phone number;

(b) client name, client contact, address and phone number;

(c) sample identification number for tracking purposes;

(d) sample type and location;

(e) sampling date;

(f) date the sample was received;

(g) date the sample was analyzed;

(h) method identification and method reference as specified in the Analytical Protocol;

(i) chemical parameter measured;

(j) reporting limits, including adjustment for sample size, moisture content or dilution factor;

(k) method specific quality assurance and quality control requirements as specified in the Analytical Protocol;

(l) authorization to release the certificate including,

(i) the name, function, and signature or equivalent of any person authorizing the release, and

(ii) a statement that the results relate only to the items tested and to all the items tested;

(m) certification that the data met all analytical requirements in the Analytical Protocol with, if applicable, a detailed description of and rationale for qualification for required exceptions; and

(n) all information recorded by the laboratory with respect to the condition of samples brought to the laboratory, including information recorded with respect to,

(i) sample quality, holding time, preservation and storage, and

(ii) sample containers. O. Reg. 511/09, s. 22.

(4) Despite subsection (2), the analysis of a sample for a contaminant may be conducted by a laboratory using a method other than a method specified in the Analytical Protocol if the laboratory obtains the written permission of the Director to use that analytical method for that contaminant. O. Reg. 511/09, s. 22.

(5) The qualified person mentioned in subsection (2) shall obtain from the laboratory mentioned in subsection (2) written confirmation that the laboratory has,

(a) conducted its analysis for a contaminant,

(i) in accordance with the Analytical Protocol, or

(ii) in accordance with an analytical method for which the laboratory has obtained the written permission of the Director under subsection (4); and

(b) provided an analytical report or certificate of analysis referred to in subsection (2) that has been prepared in accordance with the Analytical Protocol and the requirements of subsection (3). O. Reg. 511/09, s. 22.

(6) If an analysis has been undertaken pursuant to subsection (4), the provisions of clause (2) (b) and subsection (3) apply with necessary modifications to the reporting of the results of the analysis. O. Reg. 511/09, s. 22.

(7) In this section,

"Analytical Protocol", means the "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the *Environmental Protection Act*" published by the Ministry and dated March 9, 2004, as it may be amended from time to time. O. Reg. 511/09, s. 22.

Meeting standards

48. (1) For the purposes of section 168.4 of the Act and this Regulation, a property meets an applicable site condition standard or a standard specified for a contaminant in a risk assessment, if, subject to subsection (2), the standard is met at each sampling point from which a sample is taken in, on or under the property and in no other circumstances. O. Reg. 153/04, s. 48 (1).

(2) If two or more samples of soil or sediment are taken from sampling points at the same sampling location that are at the same depth in, on or under the property, the property meets a standard mentioned in subsection (1) if the average of the sampling results meets the standard and in no other circumstances. O. Reg. 153/04, s. 48 (2).

(2.1) Subsection (2) does not apply to allow, in the circumstances outlined in that subsection, compositing of samples of soil or sediment to be analysed for volatile contaminants, including volatile organic compounds. O. Reg. 511/09, s. 23.

(3) If, having regard to any phase one and phase two environmental site assessments for a property, a qualified person determines that an applicable site condition standard is exceeded at the property solely because a substance has been used on a highway for the purpose of keeping the highway safe for traffic under conditions of snow or ice or both, as provided for under section 2 of Regulation 339 of the Revised Regulations of Ontario, 1990 (Classes of Contaminants — Exemptions), the applicable site condition standard is deemed not to be exceeded for the purpose of Part XV.1 of the Act. O. Reg. 153/04, s. 48 (3).

(4) In this section,

"sampling location", means an area of the property that does not have a radius larger than two metres. O. Reg. 153/04, s. 48 (4).

Meeting petroleum hydrocarbon standards

49. (1) A property does not meet an applicable site condition standard in relation to a petroleum hydrocarbon unless the qualified person has determined that there is no evidence of free product, including but not limited to, any visible petroleum hydrocarbon film or sheen present in the ground water or surface water or in any ground water or surface water samples. O. Reg. 153/04, s. 49 (1).

(2) A property does not meet an applicable potable ground water site condition standard unless the qualified person has determined that there is no indication of objectionable petroleum hydrocarbon odour and taste associated with the ground water. O. Reg. 511/09, s. 24.

PART X
CERTIFICATES OF PROPERTY USE

Certificate of property use, notice

50. For the purposes of subsection 168.6 (5) of the Act, the following persons are prescribed to receive notice in relation to a certificate of property use:

1. A chief building official as defined in the *Building Code Act, 1992* of the municipality in which the property is located.
2. The clerk of the local municipality in which the property is located.
3. The clerk of any upper-tier municipality in which the property is located.
4. If the property is located in an area in which a board of health, planning board or conservation authority has jurisdiction under section 3.1 of the *Building Code Act, 1992*, in each of the following:
    i. The inspector appointed under that section who has the same powers and duties in relation to sewage systems as does the chief building official in respect of buildings.
    ii. The medical officer of health of the board of health, or the secretary-treasurer of the planning board or conservation authority. O. Reg. 153/04, s. 50.

Certificate of property use, prohibition on construction or use

51. Sections 8 and 10 of the *Building Code Act, 1992* are prescribed for the purposes of subsection 168.6 (6) of the Act. O. Reg. 153/04, s. 51.

PART XI
NOTICES OF ORDERS

Notice of an order

51.1 (1) For the purposes of subsection 168.7.2 (1) of the Act, a notice of an order shall set out the number and date of issue of the order. O. Reg. 511/09, s. 25 (2).

(2) For the purposes of subsection 168.7.2 (2) of the Act, notice of compliance shall set out the number and date of issue of the order and the date on which the Director was satisfied that the order had been complied with. O. Reg. 511/09, s. 25 (2).

Emergencies relating to old contaminants

52. (1) For the purpose of subsection 168.8 (5) of the Act, notice of an order shall set out the number and date of issue of the order. O. Reg. 153/04, s. 52 (1).

(2) For the purpose of subsection 168.8 (6) of the Act, notice of compliance with an order shall set out the number and date of issue of the order, and the date on which the Director became satisfied that the order has been complied with. O. Reg. 153/04, s. 52 (2).

Exceptional circumstances, municipalities

53. (1) For the purpose of subsection 168.14 (6) of the Act, notice of an order shall set out the number and date of issue of the order. O. Reg. 153/04, s. 53 (1).

(2) For the purpose of subsection 168.14 (7) of the Act, notice of compliance with an order shall set out the number and date of issue of the order, and the date on which the Director became satisfied that the order has been complied with. O. Reg. 153/04, s. 53 (2).

Exceptional circumstances, secured creditors, receivers and trustees in bankruptcy

54. (1) For the purpose of subsection 168.20 (9) of the Act, notice of an order shall set out the number and date of issue of the order. O. Reg. 153/04, s. 54 (1).

(2) For the purpose of subsection 168.20 (10) of the Act, notice of compliance with an order shall set out the number and date of issue of the order, and the date on which the Director became satisfied that the order has been complied with. O. Reg. 153/04, s. 54 (2).

PART XII
SOIL

Soil brought from another property

55. (1) Soil that did not originate at a RSC property may be brought from another property to a RSC property to remain there following the filing of a record of site condition only where the RSC property,

(a) is being used or has been used, in whole or in part, for one of the uses described in clause 32 (1) (b);

(b) is a property with respect to which a potentially contaminating activity on, in or under the property has been identified as occurring or having occurred;

(c) is not a property described in subsection 32 (2); and

(d) is a property with respect to which one or more contaminants of concern have been identified as present. O. Reg. 511/09, s. 27.

(2) Soil referred to in subsection (1) may only be brought to an RSC property referred to in subsection (1) where a qualified person has ensured in the course of the phase two environmental site assessment with respect to the RSC property that the requirements of Schedule E regarding soil brought to the phase two property have been met and the RSC property is the same as or within the phase two property. O. Reg. 511/09, s. 27.

(3) Despite subsection (1), soil that did not originate at a RSC property may be brought from another property to the RSC property to remain there following the filing of a record of site condition if either of the following circumstances apply:

1. A qualified person conducting or supervising the phase two environmental site assessment has determined that the soil meets the standards set out in Table 1 of the Soil, Ground Water and Sediment Standards with respect to all contaminants in the soil to be brought from the other property to the RSC property and the determination was made during the course of a phase two environmental site assessment and, with necessary modifications, in accordance with the provisions in Schedule E that apply to soil brought to the phase two property with respect to a RSC property described in subsection (1).
2. A qualified person has determined that a record of site condition may be submitted without a phase two environmental site assessment, the record of site condition is to be submitted or has been submitted and the qualified person who is conducting or supervising or has conducted or supervised the phase one environmental site assessment has determined in accordance with Schedule F that soil intended to be brought from the other property to the RSC property meets the standards set out in Table 1 of the Soil, Ground Water and Sediment Standards with respect to all contaminants in the soil to be brought from the other property to the RSC property. O. Reg. 511/09, s. 27.

(4) Soil that did not originate at a RSC property and that is brought from another property to a RSC property to remain at the RSC property following the filing of a record of site condition shall be used at the RSC property solely to backfill an excavation or for final grading. O. Reg. 511/09, s. 27.

SCHEDULE A
RECORD OF SITE CONDITION

PART I
INTERPRETATION AND APPLICATION

1. (1) In this Schedule,

"certification date", in relation to a record of site condition, means the certification date applicable to the record of site condition;

"RSC" means a record of site condition under Part XV.1 of the Act;

"RSC property", in relation to a record of site condition, means the property in respect of which the record of site condition is filed.

(2) The certifications, information and documents required by this Schedule are in addition to the information required under section 168.4 of the Act.

(3) For the purposes of this Schedule, when reference is made to information relevant to this RSC it includes reports prepared by or on behalf of any person, including a current or former owner of the property, containing information in respect of the environmental condition of all or part of a phase one or phase two property.

(4) Without limiting the generality of subsection (3), information relevant to this RSC includes the following:

1. Environmental site assessment reports.
2. Remediation reports.
3. Reports prepared in response to an order or request of the Ministry.

4. Any other reports relating to the presence of a contaminant on, in or under the phase one property or the existence of an area of potential environmental concern.

2. The RSC and documents included in the RSC shall be submitted for filing in a form acceptable to the Director and the Director may require that the RSC and documents be submitted for filing in an acceptable electronic form.

PART II
OWNER'S OBLIGATIONS

3. This Part applies to every RSC that is submitted for filing in respect of a property.

4. (1) The person who is submitting the RSC for filing in respect of the property shall ensure that the RSC contains the following information:

1. The name, mailing address, postal code and telephone number of the owner of the RSC property who is submitting the RSC for filing or is authorizing the submission of the RSC for filing.
2. The e-mail address and fax number, if any, of the owner of the RSC property who is submitting the RSC for filing or who is authorizing that another person submit the RSC for filing.
3. If the owner is a firm, company or partnership, the name of the person who is authorizing the filing on behalf of the firm, company or partnership.
4. The name and mailing address of any other current owner of the RSC property and, if the other owner is a firm, company or partnership, the name of a contact person for the other owner.

4.1 For the RSC property,

i. a legal description of the property and a list of its owners and a description of the nature of their interest and any municipal address, assessment roll number and property identifier number applicable to the property, prepared by a lawyer after reviewing a current plan of survey of the property that has been prepared, signed and sealed by a surveyor and all other necessary documents, and

ii. geographic coordinates of the centroid of the property measured using a Global Positioning System receiver and projected on the UTM grid coordinate system identifying easting, northing and zone based on NAD 83 datum.

5. The current type of use of the property and, if the owner intends to change the type of use of the property, the proposed type of use.
6. An indication of whether a certificate of property use has been issued under section 168.6 of the Act for the RSC property and if so, the certificate of property use number.

(2) Despite paragraph 4.1 of subsection (1), where the RSC property consists of land that is administered by the Ministry of Natural Resources under the *Public Lands Act*, a description approved by the Surveyor General may be used instead of a plan of survey.

5. (1) The person who is submitting the RSC for filing in respect of the property shall ensure that the following documents are contained in the RSC:

1. If the owner is a corporation, other than a municipal corporation that is a beneficial owner, a copy of the Certificate of Status in the case of a corporation incorporated or continued under the *Business Corporations Act* or an equivalent document in the case of any other corporation. The Certificate of Status or other document must be dated no earlier than one month before the RSC is submitted for filing.

2. If the owner is an entity other than a corporation or an individual, a copy of a document that is equivalent to the documents referred to in paragraph 1, dated no earlier than one month before the date on which the RSC is submitted for filing.
3. If the owner has authorized an agent to make the statements required under subsection 6 (1) on their behalf, proof in a form approved by the Director of the owner's authorization to make the statements and to sign the RSC on the owner's behalf.
4. REVOKED: O. Reg. 511/09, s. 28 (8).
5. If the owner is a receiver, proof of appointment as receiver, including any order, or proof that the receiver has taken possession or control of the property.
6. If the owner is not a receiver, a copy of any deed, transfer or other document by which the RSC property was in whole or part acquired by the owner, as determined by the lawyer providing the legal description required by paragraph 4.1 of subsection 4 (1), even if the deed, transfer or other document includes other property in addition to the RSC property.
7. A copy of a current plan of survey, prepared, signed and sealed by a surveyor showing,
   i. the RSC property,
   ii. any RA property within which the RSC property is located, and
   iii. the phase one property and any phase two property within which the RSC property is located.
8. REVOKED: O. Reg. 511/09, s. 28 (9).

(2) Where section 21.1 of the regulation applies to allow the use of the standards referred to in subsection 21.1 (4) of the regulation in the record of site condition and the owner of the property wishes to use such standards, the person who is submitting the RSC for filing in respect of the property shall ensure that the following documents are contained in the RSC:

1. A copy of the notice referred to in section 21.1 of the regulation.
2. A copy of the acknowledgment referred to in section 21.1 of the regulation.

(3) Paragraphs 1 and 2 of subsection (1) do not apply if the beneficial owner of the RSC property is the Queen in right of Ontario or in right of Canada.

(4) Paragraph 7 of subsection (1) does not apply where the RSC property consists of land that is administered by the Ministry of Natural Resources under the *Public Lands Act*, but a description approved by the Surveyor General showing the RSC property, any RA property within which the RSC property is located and the phase one property and any phase two property within which the RSC property is located shall be contained in the RSC.

6. (1) The person who is submitting the RSC for filing shall ensure that the owner of the RSC property or their agent signs and dates the RSC and makes the following statements in the RSC, in the language set out in this section, in relation to the part of the RSC that includes the information and statements required by this Part:

1. I acknowledge that the RSC will be submitted for filing in the Environmental Site Registry, that records of site condition that are filed in the Registry are available for examination by the public and that the Registry contains a notice advising users of the Registry who have dealings with any property to consider conducting their own due diligence with respect to the environmental condition of the property, in addition to reviewing information in the Registry.
2. I have conducted reasonable inquiries to obtain all information relevant to this RSC, including information from the other current owners of the RSC property named in this part of the RSC and I [*insert have or have not*] obtained all information relevant to this RSC of which I am aware.

3. I have disclosed all information referred to in paragraph 2 to any qualified person named in this RSC.

4. To my knowledge, the statements made in this part of the RSC are true as of [*insert date on which the owner or the owner's agent signs the RSC*].

5. I have ensured that access to the entire property, including the phase one property, any phase two property and the RSC property, has been afforded to the qualified person and to persons supervised by the qualified person, for purposes of conducting the site reconnaissance.

(2) If an agent makes the certifications on behalf of the owner under subsections (1), the agent shall make the following statement, using the language set out in this subsection:

I certify that I have been authorized by the owner of the RSC property to make the statements prescribed by this section on their behalf and that the owner of the RSC property has read and understands the statements being made on their behalf.

PART III
NO PHASE TWO ESA CONDUCTED

7. This Part applies to a RSC submitted for filing in respect of a property if a phase two environmental site assessment was not conducted for the property.

8. A qualified person shall complete, sign and date the part of the RSC that includes the information, certifications and statements required by this Part.

9. The qualified person shall provide in the RSC the following information:

1. Their name, mailing address, telephone number, e-mail address and fax number.

2. The name of the local municipality and of any upper-tier municipality in which the property is located.

10. The qualified person shall certify, in the language set out in this section, the following in the RSC:

1. A phase one environmental site assessment of the RSC property, which includes the evaluation of the information gathered from a records review, site reconnaissance, interviews, a report and any updates as required, has been conducted in accordance with the regulation by or under the supervision of a qualified person as required by the regulation.

2. As of [*insert the certification date*], no phase two environmental site assessment is required by the regulation for the RSC property and based on the phase one environmental site assessment for the RSC property, in my opinion, it is not necessary for any other reason to conduct a phase two environmental site assessment for the RSC property.

3. As of [*insert the certification date*], in my opinion, based on the phase one environmental site assessment, there is no evidence of any contaminants in the soil, ground water or sediment on, in or under the RSC property that, if the RSC property were put to any of the types of property uses listed in subsection 1 (2) of the regulation, are likely to interfere with any of those types of property uses.

11. The qualified person shall provide in the RSC the following information and documents:

1. The total area of the RSC property in hectares.

2. The title, author and date of the document used as the phase one environmental site assessment report in submitting the record of site condition for filing.

3. The RSC number of any previous RSC that has been filed in the Registry, if the previous RSC applies to any part of the RSC property.

4. The transition notice number of any previous transition notice that has been filed in the Registry, if the previous transition notice applies to any part of the RSC property.
5. A list of reports or other documents, other than the documents referred to in paragraph 2, setting out title, author and date, relied upon in certifying the information set out in section 10 or otherwise used in conducting the phase one environmental site assessment.
6. The table of current and past uses of the phase one property prepared during the phase one environmental site assessment.
7. The phase one conceptual site model prepared during the phase one environmental site assessment.
8. The date the last work on the records review, interviews and site reconnaissance components of the phase one environmental site assessment was done.
9. The document prepared pursuant to subsection 3 (3) of Schedule F, where Schedule F and paragraph 2 of subsection 55 (3) of the regulation apply to the RSC.

12. The qualified person shall, in the RSC, make, using the language set out in this section, the following statements in relation to the part of the RSC that includes the information, certifications and statements required by this Part:

1. I am a qualified person and have the qualifications required by section 5 of the regulation.
2. I have in place an insurance policy that satisfies the requirements of section 7 of the regulation.
3. I acknowledge that the RSC will be submitted for filing in the Environmental Site Registry, that records of site condition that are filed in the Registry are available for examination by the public and that the Registry contains a notice advising users of the Registry who have dealings with any property to consider conducting their own due diligence with respect to the environmental condition of the property, in addition to reviewing information in the Registry.
4. The opinions expressed in this RSC are engineering or scientific opinions made in accordance with generally accepted principles and practices as recognized by members of the environmental engineering or science profession or discipline practising at the same time and in the same or similar location.

4.1 I do not hold and have not held [*add, where the qualified person is employed – and my employer does not hold and has not held*] a direct or indirect interest in the RSC property or any property which includes the RSC property and was the subject of a phase one or two environmental site assessment or risk assessment upon which this record of site condition is based.

5. To the best of my knowledge, the certifications and statements in this part of the RSC are true as of [*insert certification date*].
6. By signing this RSC, I make no express or implied warranties or guarantees.

PART IV
PHASE TWO ESA CONDUCTED

General

13. This Part applies to a RSC submitted for filing in respect of a property if a phase two environmental site assessment was conducted for the property.

14. A qualified person shall complete, sign and date the part of the RSC that includes the information, certifications and statements required by this Part.

15. The qualified person shall provide in the RSC the following information and documents:

1. The name, mailing address, telephone number, e-mail address and fax number of the qualified person.
2. The date the last work on the planning of the site investigation and conducting the site investigation components of the phase two environmental site assessment was done.
3. The table of current and past uses of the phase one property prepared during the phase one environmental site assessment.
4. The phase two conceptual site model prepared during the phase two environmental site assessment.
5. The name of the laboratory used to analyze any samples collected of soil, ground water or sediment on, in or under the RSC property.

ENVIRONMENTAL SITE ASSESSMENTS AND RISK ASSESSMENTS

16. (1) The qualified person shall certify, in the language set out in paragraph 1, the following in the RSC:

1. A phase one environmental site assessment of the RSC property, which includes the evaluation of the information gathered from a records review, site reconnaissance, interviews, a report and any updates required, has been conducted in accordance with the regulation by or under the supervision of a qualified person as required by the regulation.

(2) REVOKED: O. Reg. 511/09, s. 28 (24).

17. The qualified person shall certify, in the language set out in this subsection, the following in the RSC:

1. A phase two environmental site assessment of the RSC property, which includes the evaluation of the information gathered from planning and conducting a site investigation, a report, and any updates required, has been conducted in accordance with the regulation by or under the supervision of a qualified person as required by the regulation.
2. The information represents the site conditions at the sampling points at the time of sampling only and the conditions between and beyond the sampling points may vary.
3. As of [*insert certification date*], in my opinion, based on the phase one environmental site assessment and the phase two environmental site assessment, and any confirmatory sampling, there is no evidence of any contaminants in the soil, ground water or sediment on, in or under the RSC property that would interfere with the type of property use to which the RSC property will be put, as specified in the RSC.

18. The qualified person shall provide in the RSC information and documents in respect of,

(a) the total area of the RSC property in hectares;

(b) REVOKED: O. Reg. 511/09, s. 28 (27).

(c) the RSC number of any previous RSC that has been filed in the Registry, if the previous RSC applies to any part of the RSC property;

(d) the transition notice number of any previous transition notice that has been filed in the Registry, if the previous transition notice applies to any part of the RSC property;

(e) if a risk assessment has been accepted by the Director in relation to the RSC property under section 168.5 of the Act, the identification number of the risk assessment;

(f) if a risk assessment has been conducted in relation to the RSC property, an indication of whether the risk assessment was a site specific risk assessment completed and approved in accordance with the Cleanup Guideline 1996.

SITE CONDITION STANDARDS

19. (1) The qualified person shall make a statement in the RSC as to which of the site condition standards has been applied to the RSC property and shall specify in the statement whether potable ground water site condition standards or non-potable site condition standards were applied to the RSC property.

(2) If non-potable ground water standards prescribed under section 37 or 39 of the regulation have been applied, the qualified person shall certify, in the language set out in this subsection, the following:

1. One of the following certifications:

   i. The owner of the property or a person authorized by the owner of the property has informed me that the owner of the property has, within the six months immediately before the submission of this record of site condition, given written notice of intention to apply non-potable ground water site condition standards to the clerk of the local municipality in which the property is located and the clerk of any upper-tier municipality in which the property is located.

   ii. I have, within the six months immediately before the submission of this record of site condition, given written notice of intention to apply non-potable ground water site condition standards to the clerk of the local municipality in which the property is located and the clerk of any upper-tier municipality in which the property is located.

2. The owner of the property has informed me that either,

   i. the owner did not receive a notice of objection from either the local municipality or the upper-tier municipality within 30 days of the local municipality or upper-tier municipality receiving the notice described in paragraph 1, or

   ii. after receiving a notice of objection from the municipality, the municipality has withdrawn its objection and given written consent to the application of non-potable ground water standards.

3. I did not receive a notice of objection from either the local municipality or the upper-tier municipality within 30 days of the municipality receiving the notice described in paragraph 1, or, after I received a notice of objection from the municipality, the municipality gave written consent to the application of non-potable ground water standards.

GROUND WATER SAMPLING

20. (1) Where ground water sampling at the RSC property is required, the qualified person shall certify in the RSC, in the language set out in this subsection, the following in relation to the RSC property:

1. Ground water sampling has been conducted in accordance with the regulation by or under the supervision of a qualified person as required by the regulation.

(2) Where ground water sampling at the RSC property is not required, the qualified person shall make a statement in the RSC as to whether ground water sampling has been carried out at the RSC property and, if not, the qualified person shall certify, in the language set out in this subsection, the following:

1. As of [*insert certification date*], in my opinion, based on the phase one and phase two environmental site assessments, and any confirmatory sampling, which included the sampling and

analysis of soil, it is not necessary to conduct sampling and analysis of ground water quality for the RSC property to make the certified statement set out in paragraph 3 of section 17 of Schedule A.

FULL DEPTH BACKGROUND SITE CONDITION STANDARDS

21. (1) The qualified person shall certify in the RSC, in the language set out in this subsection, the following in relation to the RSC property, if the full depth background site condition standards prescribed by section 34 of the regulation were applied to the RSC property:

1. As of [*insert certification date*], in my opinion, based on the phase one and phase two environmental site assessments and any confirmatory sampling, the RSC property meets the applicable full depth background site condition standards prescribed by section 34 of the regulation for all contaminants prescribed by the regulation in relation to the type of property use for which this RSC is filed, except for those contaminants (if any) specified in this RSC at [*insert Table number*].
2. As of [*insert certification date*], the maximum known concentration of each contaminant in soil, sediment and ground water at the RSC property for which sampling and analysis has been performed is specified in this RSC at [*insert Table number*].

(2) In addition to the information certified under subsection (1), the qualified person shall certify, in the language set out in this subsection, the following in the RSC, if there is any contaminant excepted from the certification mentioned in paragraph 1 of subsection (1) or if there is any other contaminant that in the opinion of the qualified person is likely to cause an adverse effect:

1. A risk assessment was prepared for the contaminant with respect to the property for which the phase two environmental site assessment was conducted.
2. The Director has accepted the risk assessment under clause 168.5 (1) (a) of the Act.
3. As of [*insert certification date*], the property for which the phase two environmental site assessment was conducted meets the standards specified in the risk assessment for the contaminant.

FULL DEPTH GENERIC SITE CONDITION STANDARDS, POTABLE GROUND WATER

22. (1) If the full depth generic site condition standards prescribed by section 36 of the regulation were applied to the RSC property, the qualified person shall certify in the RSC, in the language set out in this subsection, the following in relation to the RSC property:

1. As of [*insert certification date*], in my opinion, based on the phase one and phase two environmental site assessments and any confirmatory sampling, the RSC property meets the applicable full depth generic site condition standards prescribed by section 36 of the regulation for all contaminants prescribed by the regulation in relation to the type of property use for which this RSC is filed, except for those contaminants (if any) specified in this RSC at [*insert Table number*].
2. As of [*insert certification date*], the maximum known concentration of each contaminant in soil, sediment and ground water at the RSC property for which sampling and analysis has been performed is specified in this RSC at [*insert Table number*].

(2) In addition to the information certified under subsection (1), the qualified person shall certify, in the language set out in this subsection, the following in the RSC, if there is any contaminant excepted from the certification mentioned in paragraph 1 of subsection (1) or if there is any other contaminant that in the opinion of the qualified person is likely to cause an adverse effect:

1. A risk assessment was prepared for the contaminant with respect to the property for which the phase two environmental site assessment was conducted.

2. The Director has accepted the risk assessment under clause 168.5 (1) (a) of the Act.
3. As of [*insert certification date*], the property for which the phase two environmental site assessment was conducted meets the standards specified in the risk assessment for the contaminant.

FULL DEPTH GENERIC SITE CONDITION STANDARDS, NON-POTABLE GROUND WATER

23. (1) If the full depth generic site condition standards prescribed by section 37 of the regulation were applied to the RSC property, the qualified person shall certify in the RSC, in the language set out in this subsection, the following in relation to the RSC property:

1. As of [*insert certification date*], in my opinion, based on the phase one and phase two environmental site assessments and any confirmatory sampling, the RSC property meets the applicable full depth generic site condition standards prescribed by section 37 of the regulation for all contaminants prescribed by the regulation in relation to the type of property use for which this RSC is filed, except for those contaminants (if any) specified in this RSC at [*insert Table number*].
2. As of [*insert certification date*], the maximum known concentration of each contaminant in soil, sediment and ground water at the RSC property for which sampling and analysis has been performed is specified in this RSC at [*insert Table number*].

(2) In addition to the information certified under subsection (1), the qualified person shall certify, in the language set out in this subsection, the following in the RSC, if there is any contaminant excepted from the certification mentioned in paragraph 1 of subsection (1) or if there is any other contaminant that in the opinion of the qualified person is likely to cause an adverse effect:

1. A risk assessment was prepared for the contaminant with respect to the property for which the phase two environmental site assessment was conducted.
2. The Director has accepted the risk assessment under clause 168.5 (1) (a) of the Act.
3. As of [*insert certification date*], the property for which the phase two environmental site assessment was conducted meets the standards specified in the risk assessment for the contaminant.

STRATIFIED SITE CONDITION STANDARDS, POTABLE GROUND WATER

24. (1) If the stratified site condition standards prescribed by section 38 of the regulation were applied to the RSC property, the qualified person shall certify in the RSC, in the language set out in this subsection, the following in relation to the RSC property:

1. As of [*insert certification date*], in my opinion, based on the phase one and phase two environmental site assessments and any confirmatory sampling, the RSC property meets the applicable stratified site condition standards prescribed by section 38 of the regulation for all contaminants prescribed by the regulation in relation to the type of property use for which this RSC is filed, except for those contaminants (if any) specified in this RSC at [*insert Table number*].
2. As of [*insert certification date*], the maximum known concentration of each contaminant in soil, sediment and ground water at the RSC property for which sampling and analysis has been performed is specified in this RSC at [*insert Table number*].

(2) In addition to the information certified under subsection (1), the qualified person shall certify, in the language set out in this subsection, the following in the RSC, if there is any contaminant excepted from the certification mentioned in paragraph 1 of subsection (1) or if there is any other contaminant that in the opinion of the qualified person is likely to cause an adverse effect:

1. A risk assessment was prepared for the contaminant with respect to the property for which the phase two environmental site assessment was conducted.
2. The Director has accepted the risk assessment under clause 168.5 (1) (a) of the Act.
3. As of [*insert certification date*], the property for which the phase two environmental site assessment was conducted meets the standards specified in the risk assessment for the contaminant.

STRATIFIED SITE CONDITION STANDARDS, NON-POTABLE GROUND WATER

25. (1) If the stratified site condition standards prescribed by section 39 of the regulation were applied to the RSC property, the qualified person shall certify in the RSC, in the language set out in this subsection, the following in relation to the RSC property:

1. As of [*insert certification date*], in my opinion, based on the phase one and phase two environmental site assessments and any confirmatory sampling, the RSC property meets the applicable stratified site condition standards prescribed by section 39 of the regulation for all contaminants prescribed by the regulation in relation to the type of property use for which this RSC is filed, except for those contaminants (if any) specified in this RSC at [*insert Table number*].
2. As of [*insert certification date*], the maximum known concentration of each contaminant in soil, sediment and ground water at the RSC property for which sampling and analysis has been performed is specified in this RSC at [*insert Table number*].

(2) In addition to the information certified under subsection (1), the qualified person shall certify, in the language set out in this subsection, the following in the RSC, if there is any contaminant excepted from the certification mentioned in paragraph 1 of subsection (1) or if there is any other contaminant that in the opinion of the qualified person is likely to cause an adverse effect:

1. A risk assessment was prepared for the contaminant with respect to the property for which the phase two environmental site assessment was conducted.
2. The Director has accepted the risk assessment under clause 168.5 (1) (a) of the Act.
3. As of [*insert certification date*], the property for which the phase two environmental site assessment was conducted meets the standards specified in the risk assessment for the contaminant.

REPORTS AND OTHER DOCUMENTS

26. The qualified person shall provide the following:

1. The title, author and date of the document used as the phase two environmental site assessment report in submitting the record of site condition for filing.
2. A list of reports or other documents, other than the document referred to in paragraph 1, setting out title, author and date, relied upon in making any certifications in the RSC for the purposes of this Part or otherwise used in conducting the phase two environmental site assessment.

REMEDIAL ACTION AND MITIGATION

27. The qualified person shall provide a description of any soil removals or other action taken to reduce the concentration of contaminants on, in or under the RSC property for the purposes of submitting the RSC for filing, in accordance with sections 28 to 34.2.

28. (1) The qualified person shall identify the estimated quantities of the soil, if any, originating at and remaining on the RSC property that have been remediated, at a location either on or off the property, to reduce the concentration of contaminants in the soil.

(2) The qualified person shall report estimated soil quantities as measured in, or equivalent to, in-ground volume in cubic metres.

(3) In identifying the quantities of any soil for the purposes of subsection (1), the qualified person shall indicate the remediation process or processes used and the estimated amount of soil remediated by each identified process.

29. (1) The qualified person shall identify the estimated quantities of soil or sediment, if any, removed from and not returned to the RSC property.

(2) The qualified person shall report the estimated soil and sediment quantities as measured in, or equivalent to, the in-ground volume in cubic metres.

30. (1) The qualified person shall identify the estimated quantity of the soil, if any, being brought from another property to and deposited at the RSC property, not including any soil that may have originated at but been remediated off the RSC property and that is identified in section 28.

(2) The qualified person shall report the estimated soil quantity as measured in, or equivalent to, the in-ground volume in cubic metres.

31. The qualified person shall identify and describe any ground water control or treatment measures that,

(a) were required for the RSC property prior to the certification date for the purpose of submitting the RSC for filing; or

(b) are or will be required for the RSC property after the certification date.

32. The qualified person shall identify the estimated volume in litres of ground water, if any, removed from and not returned to the RSC property.

33. REVOKED: O. Reg. 179/11, s. 5.

34. Other than the activities identified in sections 28 to 33, the qualified person shall identify any constructed works that,

(a) prior to the certification date for the purpose of submitting the RSC for filing, were required to control or otherwise mitigate the release or movement of known existing contaminants at the RSC property; or

(b) after the certification date, are required to control or otherwise mitigate the release or movement of known existing contaminants at the RSC property.

34.1 (1) The qualified person shall indicate whether there are any monitoring requirements or any requirements for care, maintenance or replacement of any monitoring or control works for known existing contaminants, if any, on the RSC property, after the certification date.

(2) A qualified person who indicates that there are monitoring requirements or requirements for care, maintenance or replacement of any monitoring or control works shall indicate whether those requirements are ground water management measures or soil management measures.

34.2 The qualified person shall indicate if any soil, sediment or ground water at the RSC property that is or was located within 3 metres of the RSC property boundary has been remediated or removed for the purpose of remediation.

COVERING STATEMENTS

35. The qualified person shall make the following statements in the RSC, using the language set out in this section, in relation to the part of the RSC that includes the information, certifications and statements required by this Part:

1. I am a qualified person, as defined in section 168.1 of the Act and have the qualifications required by section 5 of the regulation.
2. I have in place an insurance policy that satisfies the requirements of section 7 of the regulation
3. I acknowledge the RSC will be submitted for filing in the Environmental Site Registry, that records of site condition that are filed in the Registry are available for examination by the public and that the Registry contains a notice advising users of the Registry who have dealings with any property to consider conducting their own due diligence with respect to the environmental condition of the property, in addition to reviewing information in the Registry.
4. The opinions expressed in this RSC are engineering or scientific opinions made in accordance with generally accepted principles and practices as recognized by members of the environmental engineering or science profession or discipline practising at the same time and in the same or similar location.

4.1 I do not hold and have not held [*add, where the qualified person is employed – and my employer does not hold and has not held*] a direct or indirect interest in the RSC property or any property which includes the RSC property and was the subject of a phase one or two environmental site assessment or risk assessment upon which this record of site condition is based.

5. To the best of my knowledge, the certifications and statements in this part of the RSC are true as of [*insert certification date*].
6. By signing this RSC, I make no express or implied warranties or guarantees.

O. Reg. 153/04, Sched. A; O. Reg. 366/05, s. 4; O. Reg. 511/09, s. 28; O. Reg. 245/10, s. 2; O. Reg. 179/11, s. 5.

SCHEDULE B
TRANSITION NOTICE

1. In this Schedule,

"RSC" means record of site condition referred to in subsection 168.4 (6) of the Act; and

"RSC property", in relation to a record of site condition, means the property in respect of which the record of site condition is filed.

2. The transition notice, the RSC and the documents specified in section 4 shall be filed in a form acceptable to the Director and the Director may require that the RSC and the documents be filed in an acceptable electronic form.

3. (1) The person who is filing the transition notice and the RSC shall provide the following information in the transition notice:

1. The name, mailing address, postal code and telephone number of the owner of the RSC property who is filing the RSC or who is authorizing the filing of the RSC.
2. The e-mail address and fax number, if any, of the owner of the RSC property who is filing the RSC or who is authorizing the filing of the RSC.
3. If the owner is a firm, company or partnership, the name of the person who is authorizing the filing on behalf of the firm, company or partnership.
4. The name and mailing address of any other current owner of the RSC property and, if the other owner is a firm, company or partnership, the name of a contact person for the other owner.

4.1 For the RSC property,

i. a legal description of the property, and a list of its owners and a description of the nature of their interest and any municipal address, assessment roll number and property identifier number applicable to the property, prepared by a lawyer after reviewing a current plan of survey of the property that has been prepared, signed and sealed by a surveyor and all other necessary documents, and

ii. geographic coordinates of the centroid of the property measured using a Global Positioning System receiver and projected on the UTM grid coordinate system identifying easting, northing and zone based on a NAD 83 datum.

5. The following information from Part 3 of the RSC that was submitted to the Ministry under the Cleanup Guideline 1996:

i. an indication of whether a Phase 2 ESA has been completed,

ii. an indication of the assessment or restoration approach used in relation to the RSC property,

iii. an indication of the type of land use for the RSC property, and

iv. an indication of the ground water condition for the RSC property.

6. The name, mailing address, telephone number, e-mail address and fax number of the qualified person on whom the owner relied in making the certification below.

7. If the qualified person is an employee of a corporation, the name of the corporation.

8. If the qualified person is an employee of a partnership or a member of a partnership, the name of the partnership.

9. The name of the local municipality and of any upper-tier municipality in which the property is located.

10. REVOKED: O. Reg. 511/09, s. 29 (2).

(2) Despite subparagraph 4.1 i of subsection (1), where the RSC property consists of land that is administered by the Ministry of Natural Resources under the *Public Lands Act*, a description approved by the Surveyor General may be provided instead of a plan of survey.

4. (1) The person who is filing the RSC in respect of the property shall provide the following documents:

1. If the owner is a corporation, other than a municipal corporation that is the beneficial owner, a copy of the Certificate of Status in the case of a corporation incorporated or continued under the *Business Corporations Act* or an equivalent document in the case of any other corporation. The Certificate of Status or other document must be dated no earlier than one month before the RSC is filed.

2. If the owner is an entity other than a corporation or an individual, a copy of a document that is equivalent to the documents referred to in paragraph 1, dated no earlier than one month before the date on which the RSC is filed.

3., 4. REVOKED: O. Reg. 511/09, s. 29 (4).

5. If the owner is a receiver, proof of appointment as receiver, including any order or proof that the receiver has taken possession or control of the property.

6. If the owner is not a receiver, a copy of any deed, transfer or other document by which the RSC property was in whole or part acquired by the owner, as determined by the lawyer providing the legal description required by subparagraph 4.1 i of subsection 3 (1), even if the deed, transfer or other document includes other property in addition to the RSC property.

7. A copy of a current plan of survey, prepared, signed and sealed by a surveyor showing and outlining,

i. the RSC property,

ii. any RA property within which the RSC property is located, and

iii. the phase one property and any phase two property within which the RSC property is located.

8., 9. REVOKED: O. Reg. 511/09, s. 29 (7)

(2) Paragraphs 1 and 2 of subsection (1) do not apply if the beneficial owner of the RSC property is the Queen in right of Ontario or in right of Canada.

(3) Paragraph 7 of subsection (1) does not apply where the RSC property consists of land that is administered by the Ministry of Natural Resources under the *Public Lands Act*, but a description approved by the Surveyor General showing the RSC property, any RA property within which the RSC property is located and the phase one property and any phase two property within which the RSC property is located shall be contained in the RSC.

5. The person who is filing the transition notice and the RSC shall make a statement in the transition notice either that,

(a) an order has been issued under the Act in respect of the property as a result of the approval by the Ministry of a site specific risk assessment completed in accordance with the Cleanup Guideline 1996; or

(b) an order has not been issued under the Act in respect of the property as a result of the approval by the Ministry of a site specific risk assessment completed in accordance with the Cleanup Guideline 1996.

6. (1) The person who is filing the transition notice and the RSC shall ensure that the owner of the RSC property or their agent signs and dates the transition notice and makes the following statements in the transition notice, using the language set out in this section:

1. I acknowledge that the RSC and the transition notice will be filed in the Environmental Site Registry, that the transition notices and records of site condition that are filed in the Registry are available for examination by the public and that the Registry contains a notice advising users of the Registry who have dealings with any property to consider conducting their own due diligence with respect to the environmental condition of the property, in addition to reviewing information in the Registry.

2. I certify that the property for which the transition notice and the record of site condition is being filed is the same property or is entirely within the property in respect of which the record of site condition was submitted to the Ministry pursuant to the Cleanup Guideline 1996 before subsection 168.4 (6) of the Act came into force.

3. I certify that I retained a qualified person, whose name appears in the transition notice, who made the following written certifications to me:

i. The qualified person has the qualification required by section 5 of the regulation.

ii. The qualified person has in place an insurance policy that satisfies the requirements of section 7 of the regulation.

iii. The qualified person reviewed all of the following:

A. A copy of the record of site condition that was submitted to the Ministry pursuant to the Cleanup Guideline 1996 before subsection 168.4 (6) of the Act came into force and that was acknowledged as received by the Ministry.

B. The environmental reports listed in Part 2 of that record of site condition.

iv. On the basis of the review described in subparagraph iii:

A. The information set out in the record of site condition is consistent with the environmental reports listed in Part 2 of the record of site condition.

B. The land use specified in Part 3 of the record of site condition is identified as one of agricultural, residential/parkland or industrial/commercial as set out in the Cleanup Guideline 1996.

C. The record of site condition was properly completed in accordance with the Cleanup Guideline 1996 and indicates that, as of the certification date, the property met the appropriate environmental site conditions for the land use specified in Part 3 of the record of site condition.

v. The opinions expressed by the qualified person to the owner or the owner's agent, as set out in the transition notice, are engineering or scientific opinions made in accordance with generally accepted principles and practices as recognized by members of the environmental engineering or science profession or discipline practising at the same time and in the same or similar location.

vi. The qualified person has acknowledged that the RSC and the transition notice will be filed in the Environmental Site Registry, that transition notices and records of site condition that are filed in the Registry are available for examination by the public and that the Registry contains a notice advising users of the Registry who have dealings with any property to consider conducting their own due diligence with respect to the environmental condition of the property, in addition to reviewing information in the Registry.

vii. In making the written certifications for the purposes of this transition notice, the qualified person makes no express or implied warranties or guarantees.

4. I certify that, to the best of my knowledge, the statements and certifications in this notice are true as of the date below.

(2) If the RSC is filed electronically, the owner or their agent shall certify that the RSC is an accurate representation of the record of site condition that was submitted to the Ministry pursuant to the Cleanup Guideline 1996.

(3) If an agent makes the certifications on behalf of the owner under subsections (1) and (2), the agent shall make the following statements, using the language set out in this subsection:

I certify that I have been authorized by the owner of the RSC property to make the statements prescribed by this section on their behalf and that the owner of the RSC property has read and understands the statements being made on their behalf.

O. Reg. 153/04, Sched. B; O. Reg. 366/05, s. 5; O. Reg. 511/09, s. 29; O. Reg. 245/10, s. 3.

SCHEDULE C
RISK ASSESSMENTS

PART I
MANDATORY REQUIREMENTS

Definitions

1. (1) In this Schedule,

"approved model" means the data file entitled "Modified Generic Risk Assessment Model" and dated October 19, 2009, as amended from time to time, that is maintained by the Ministry as part of its Brownfield initiative and is available on the Internet and may be available in such other manner as the Minister of the Environment considers appropriate;

"community assessment report" means a report that,

(a) has been prepared by a person referred to in section 6 of the regulation based on an assessment by such a person,

(b) is a report on the assessment of contaminants of concern on one or more properties,

(c) uses assumptions and models in order to propose intervention values for one or more of the contaminants referred to in clause (b),

(d) proposes intervention values in respect of one or more properties which were not the source of the contaminant,

(e) identifies the area within which properties to which the intervention values apply are located, and

(f) has been submitted to a Director pursuant to an order or a draft order under legislation administered by the Ministry;

Components of a risk assessment

2. (1) A risk assessment must include the following components:

1. The preparation and submission of a pre-submission form.

2. The conduct of an assessment of human health risk and of ecological risk.

3. The preparation of a written risk assessment report that includes a description of the assessments of risk described in paragraph 2.

(2) Paragraph 2 of subsection (1) does not apply to an estimation of natural local background concentration risk assessment that is described in section 8.

(3) The Director may require that the pre-submission form or the risk assessment report be in whole or in part submitted in an acceptable electronic form.

Mandatory requirements of a pre-submission form

3. (1) Before completing the written risk assessment report referred to in paragraph 3 of subsection 2 (1), the property owner shall submit a pre-submission form to the Ministry for comment on the proposed risk assessment approach.

(1.1) Despite subsection (1), in respect of a modified generic risk assessment that is described in section 7, the property owner shall submit the pre-submission form to the Ministry with the written risk assessment report referred to in paragraph 3 of subsection 2 (1).

(2) The pre-submission form shall be prepared by a qualified person in accordance with this section using the form approved by the Director.

(3) The qualified person shall prepare the pre-submission form based on the results of the phase one environmental site assessment, the phase two environmental site assessment and on any other information that the qualified person considers relevant.

(4) The pre-submission form must contain the information specified in subsections (5) to (11) and any other information required by the Director.

(5) The pre-submission form must include the following:

1. The name, mailing address, postal code and telephone number of the owner of the RA property who is responsible for the submission of the risk assessment.

1.1 The e-mail address and fax number, if any, of the owner of the RA property who is responsible for the submission of the risk assessment.

2. The name of a contact person for the owner, if the owner is a corporation or a partnership.

3. The name and mailing address of any other current owner of the RA property and, if the other owner is a corporation or partnership, the name of a contact person for the other owner.

4. For the RA property,

   i. a legal description of the property and a list of its owners and a description of the nature of their interest and any municipal address, assessment roll number and property identifier number applicable to the property, prepared by a lawyer after reviewing a current plan of survey of the property that has been prepared, signed and sealed by a surveyor and all other necessary documents, and

   ii. municipal address, assessment roll number and property identifier number, if any, applicable to the property.

5. The current type of use of the RA property and, if the owner intends to change the type of use of the property, the proposed type of use.

(5.1) Despite subparagraph 4 i of subsection (5), where the RA property consists of land that is administered by the Ministry of Natural Resources under the *Public Lands Act*, a description approved by the Surveyor General may be provided instead of a plan of survey.

(6) The pre-submission form must identify which of the following types of risk assessment approaches the qualified person intends to use for the risk assessment:

1. A limited scope risk assessment described in section 7.

2. An estimation of natural local background concentration risk assessment described in section 8.

3. A new science risk assessment described in section 9.

4. A wider area of abatement risk assessment described in section 10.

5. A standard risk assessment, which is a risk assessment that satisfies the requirements of section 4, but is not a risk assessment described in paragraphs 1 to 4.

(7) If the risk assessment will use one or more computer models in its preparation, the pre-submission form must identify which models.

(8) The pre-submission form must include information on the proposed conceptual site model that the qualified person intends to rely upon in the preparation of the parts of the risk assessment report described in Report Section 3 (Property Information, Site Plan and Geological Interpretation), Report Section 4 (Human Health Risk Assessment (HHRA)) and Report Section 5 (Ecological Risk Assessment (ERA)) of Table 1 of this Schedule including,

(a) a description and assessment of,

   (i) areas of potential environmental concern, and

   (ii) any subsurface structures and utilities on, in or under the RA property that may affect contaminant distribution and transport;

(a.1) a description of and, as appropriate, figures illustrating, the physical setting of a RA property and any areas under it including,

(i) stratigraphy from ground surface to the deepest aquifer or aquitard investigated,

(ii) hydrogeological characteristics, including aquifers, aquitards and, in each hydrostratigraphic unit where one or more contaminants is present at concentrations above the applicable site condition standards, lateral and vertical hydraulic gradients,

(iii) approximate depth to bedrock,

(iv) approximate depth to water table,

(v) any respect in which section 41 or 43.1 of the regulation applies to the property,

(vi) areas where soil has been brought from another property and placed on, in or under the RA property, and

(vii) approximate locations, if known, of any proposed buildings and other structures;

(a.2) where a contaminant is present on, in or under a RA property at a concentration greater than the applicable site condition standard, identification of,

(i) each area where a contaminant is present on, in or under a RA property at a concentration greater than the applicable site condition standard,

(ii) the contaminants associated with each of the areas referred to in subclause (i), and

(iii) each medium in which a contaminant associated with an area referred to in subclause (i) above is present;

(a.3) where a contaminant is present on, in or under a RA property at a concentration greater than the applicable site condition standard, a description of,

(i) what is known about each of the areas referred to in subclause (a.2) (i),

(ii) the distribution, in each of the areas referred to in subclause (a.2) (i), of each contaminant present in the area at a concentration greater than the applicable site condition standard, for each medium in which the contaminant is present, together with figures showing the distribution,

(iii) anything known about the reason for the discharge into the natural environment of the contaminants present on, in or under the RA property at a concentration greater than the applicable site condition standard,

(iv) anything known about migration away from any area of potential environmental concern of the contaminants present on, in or under the RA property at a concentration greater than the applicable site condition standard, including the identification of any preferential pathways,

(v) climatic or meteorological conditions that may have influenced distribution and migration of the contaminants, such as temporal fluctuations in ground water levels, and

(vi) if applicable, information concerning soil vapour intrusion of the contaminants into buildings including,

(A) relevant construction features of a building, such as a basement or crawl space,

(B) building heating, ventilating and air conditioning design and operation, and

(C) subsurface utilities;

(a.4) where contaminants on, in or under the RA property are present at concentrations greater than the applicable site condition standard, one or more cross-sections showing,

(i) the lateral and vertical distribution of a contaminant in each area where the contaminant is present at a concentration greater than the applicable site condition standard in soil, ground water and sediment,

(ii) approximate depth to water table in each area referred to in subclause (i),

(iii) stratigraphy from ground surface to the deepest aquifer or aquitard investigated, and

(iv) any subsurface structures and utilities that may affect contaminant distribution and transport in each area referred to in subclause (i);

(b) for each area where a contaminant is present on, in or under the RA property at a concentration greater than the applicable site condition standard for the contaminant, a diagram identifying, with narrative explanatory notes,

(i) the release mechanisms,

(ii) contaminant transport pathway,

(iii) the human and ecological receptors located on, in, under and off the RA property,

(iv) receptor exposure points, and

(v) routes of exposure;

(c) one or more diagrams, with explanatory notes, showing the biota and food web relationships on and off the RA property which may be affected by contaminants on, in or under the RA property.

(9) The diagrams that are part of the conceptual site model mentioned in clauses (8) (b) and (c), must be prepared,

(a) taking into consideration the specific property use to which the RA property will be put and that no measure has been taken or will be taken at the RA property which has the effect of reducing the risk from a contaminant on, in or under the RA property, including any non-soil surface treatment such as asphalt, concrete or aggregate which may have been or will be applied to the RA property; and

(b) identifying any measures that have been taken or may be proposed at the RA property which have the effect of reducing the risk from a contaminant of concern on, in or under the RA property, including any non-soil surface treatment such as asphalt, concrete or aggregate which may have been or will be applied to the RA property.

(10) In respect of an estimation of natural local background concentration risk assessment described in section 8,

(a) clauses (8) (b) and (c) and subsection (9) do not apply; and

(b) in addition to the information specified in clause (8) (a), the pre-submission form must also include information on the methods described in subsections 8 (4) to (9) that will be used to support the natural local background concentration soil standard that will be proposed under subsection 8 (1).

(11) The pre-submission form must include information about proposed public communication plans, if applicable.

(12) Except in respect of a modified generic risk assessment, the Director shall review the pre-submission form and may provide comments with respect to it to the owner of the property.

(13) If, at any time after submitting the pre-submission form,

(a) the qualified person who is identified in the pre-submission form as being responsible for the preparation of the risk assessment changes; or

(b) the owner mentioned who is identified in the pre-submission form changes,

the property owner shall give notice to the Director of the change in circumstance.

Mandatory requirements of risk assessment reports

4. (1) A risk assessment report shall be prepared by a qualified person and,

(a) must be divided into the report sections as specified in Table 1 of this Schedule; and

(b) must include the headings and sub-headings set out in Table1.

(2) A risk assessment report must address the minimum requirements set out in Table 1 of this Schedule.

(3) A qualified person may include report sections, headings and sub-headings in addition to those set out in Table 1 of this Schedule and other information in the risk assessment report.

(4) Report section 4 (Human Health Risk Assessment (HHRA)) and Report Section 5 (Ecological Risk Assessment (ERA)) of Table 1 of this Schedule do not apply to an estimation of natural local background concentration risk assessment described in section 8.

(5) If a risk assessment assumes that the ground water under the RA property does not or will not serve as a raw water supply for a drinking water system, as defined in the *Safe Drinking Water Act, 2002*, the owner shall give written notice to the clerk of the local municipality and of any upper-tier municipality where the property is located that,

(a) identifies the location of the RA property and the use to which it will be put;

(b) notifies the municipality that the qualified person intends to prepare a risk assessment in a manner that assumes that the ground water under the RA property does not or will not serve as a raw water supply for a drinking water system; and

(c) requests the municipality to respond to the notice and to indicate whether the municipality objects to the assumption being made under clause (b) and, if there is an objection, the reasons for it.

(6) A risk assessment report must have the following attached as appendices to the report:

1. The pre-submission form submitted under section 3, including all attached documents, the Ministry response and how Ministry concerns, if any, were addressed.
2. The resumes for the qualified person who prepared the risk assessment report and for the team technical leads.
3. A list of the documents relied upon in the preparation of the risk assessment report.
4. A summary of the phase one environmental site assessment and phase two environmental site assessment reports, including,
    i. justification for the sampling program used in undertaking the phase two environmental site assessment,
    ii. a summary of quality assurance and quality controls used for the sampling program and analysis of the samples,
    iii. an assessment of whether the sampling program is sufficient for the purposes of the risk assessment and if not, a description of what further site investigations were conducted to support the risk assessment, and
    iv. a rationale for and description of any hydrogeological and geological interpretations which differ from assumptions on which the Soil, Ground Water and Sediment Standards are based.

4.1 The appendix to the phase two environmental site assessment report that reports on requirements in a phase two environmental site assessment in support of a modified generic risk assessment.

4.2 The portion of the review and evaluation section of the phase two environmental site assessment report headed “phase two conceptual site model”.

5. A copy of any reports documenting further site investigations conducted to support the risk assessment, if applicable.

6. A copy of the written notice of intention to conduct a risk assessment that assumes a non-potable ground water condition in preparing a risk assessment for the property given under subsection (5), if applicable and a copy of any response the municipality has given to the notice.

7. If the risk assessment recommends a risk management measure that involves engineering or hydrogeological controls, an engineering or hydrogeological report prepared by a qualified person mentioned in clause 5 (2) (a) or (b) of the regulation that includes detailed plans and specifications of the engineering or hydrogeological controls or both.

(7) Paragraphs 1 and 7 of subsection (6) do not apply with respect to a risk assessment report prepared as part of a modified generic risk assessment described in section 7.

(8) Paragraph 7 of subsection (6) does not apply with respect to a risk assessment report prepared as part of a risk assessment based on a community assessment report described in section 7.

Mandatory certifications

5. (1) In an appendix to the risk assessment report, the qualified person shall certify the following, using the language set out in this section:

1. I have conducted or supervised a risk assessment report in accordance with the regulation.

2. I am a qualified person, as defined in section 168.1 of the Act, and have the qualifications required by section 6 of the regulation.

3. I have in place an insurance policy that satisfies the requirements of section 7 of the regulation.

4. The risk assessment team included members with expertise in all of the disciplines required to complete the risk assessment in accordance with the regulation.

5. The opinions expressed in the risk assessment are engineering or scientific opinions made in accordance with generally accepted principles and practices as recognized by members of the environmental engineering or science profession or discipline practising at the same time and in the same or similar location.

6. To the best of my knowledge, the certifications and statements in this risk assessment are true as of [*insert date of completion of risk assessment report*].

7. By making these certifications in this risk assessment report, I make no express or implied warranties or guarantees.

(2) In an appendix to the risk assessment report, the qualified person shall certify, in the language set out in this section, the following in relation to the RA property:

1. As of [*insert date of completion of risk assessment report*], it is my opinion that based on the phase one environmental site assessment and the phase two environmental site assessment and other relevant property information, the approach taken in the conduct of the risk assessment,

   i. is appropriate to evaluate human health and ecological risks from the contaminants of concern at the concentrations proposed as the standards specified in the risk assessment and assuming

no measures have been taken at the RA property which have the effect of reducing the risk from the contaminants, and

ii. is consistent with the approach set out in the pre-submission form with the exception of those deviations listed in Report Section 1 (Summary of Recommendations/Findings) of the report under the heading "Deviations from Pre-Submission Form".

2. As of [*insert date of completion of risk assessment report*], it is my opinion that, taking into consideration the assumptions specified in the risk assessment report, including the use of the property specified in Report Section 3 (Property Information, Site Plan and Geological Interpretation) of the risk assessment, and any risk management measures recommended in the report, as long as the RA property satisfies those assumptions and meets the standards specified in the risk assessment report, the contaminants of concern are unlikely to pose a human health or ecological risk greater than the level of risk that was intended in the development of the applicable full-depth site condition standards for those contaminants.

3. As of [*insert date of completion of risk assessment report*], it is my opinion that, (pick the applicable statement below),

i. no risk management plan is necessary for a contaminant of concern addressed in the risk assessment report to prevent, eliminate or ameliorate any adverse effect from that contaminant to the human or ecological receptors addressed in the report and located on the RA property, or

ii. the implementation of the risk management plan described in Report Section 7 (Risk Management Plan) of the risk assessment report is necessary for a contaminant of concern addressed in the risk assessment report to prevent, eliminate or ameliorate any adverse effect from that contaminant to the human or ecological receptors addressed in the report and located on the RA property and is sufficient to address the current and potential future transport and exposure pathways.

4. As of [*insert date of completion of risk assessment report*], the risk assessment report completely and accurately reflects the risk assessment assumptions and conclusions and all pertinent information has been included in the report and the appendices to the report.

(3) If, under the heading "Risk Characterization" in each of Report Section 4 (Human Health Risk Assessment (HHRA)) and Report Section 5 (Ecological Risk Assessment (ERA)) of the risk assessment report, the report concludes that the standards that are being proposed for the RA property are not likely to result in a concentration greater than the applicable full depth site condition standard for any of the human or ecological receptors that are addressed in the report and are located off the RA property, the qualified person shall certify, in the language set out in this subsection, the following in relation to the RA property and its impact on those receptors:

As of the submission date, it is my opinion that, taking into consideration the assumptions specified in the risk assessment report including any risk management measures recommended in the report, as long as the RA property satisfies those assumptions and meets the standards specified in the report, the applicable full depth site condition standards will likely be met at the nearest off-site ecological and human receptors identified in the report.

PART II
ALTERNATIVE RISK ASSESSMENT PROCEDURES

Alternative risk assessment procedures

6. Risk assessment procedures may be modified in accordance with this Part.

Limited scope risk assessment

7. (1) A risk assessment is a limited scope risk assessment in respect of a property if,

(a) it is either a risk assessment based on a community assessment report or a modified generic risk assessment; and

(b) sections 9 and 10 do not apply to the risk assessment.

(2) A risk assessment is a risk assessment based on a community assessment report if,

(a) the owner of the RA property, with respect to a contaminant that was assessed as part of and reported on in the community assessment report,

(i) relies on the models and assumptions used in the community assessment with respect to the contaminant, and

(ii) proposes one or more intervention values for contaminants set out in the community assessment report as a standard to be specified in the risk assessment;

(b) the RA property is within the study area of the assessment described in the community assessment report;

(c) the risk assessment uses the community assessment report in a manner that is appropriate to the characteristics of the RA property; and

(d) the District Office of the Ministry for the area in which the RA property is located has been consulted on the appropriateness of using a limited scope risk assessment based on the community assessment report.

(3) A risk assessment is a modified generic risk assessment if the risk assessment,

(a) uses the approved model in a manner that is appropriate to the characteristics of the RA property;

(b) is submitted in a template provided by the Ministry for use in submitting a modified generic risk assessment; and

(c) modifies an assumed value for an assumption, based on and in a manner consistent with the results of an assessment which meets the minimum requirements and objective for the assumption category associated with the assumption in each case where the risk assessment is to modify an assumed value for an assumption associated with an assumption category in Table 4 of Schedule E from the assumed value for the assumption used by the Ministry to develop the full depth generic site condition standards.

(4) A modified generic risk assessment shall not be submitted in respect of,

(a) a property to which section 41 of the regulation applies; or

(b) a property for which any risk management measure, other than any risk management measure designed and published by the Ministry for use in a modified generic risk assessment, is proposed in the risk assessment.

Estimation of natural local background concentrations

8. (1) Where full depth background site condition standards provided in Table 1 of the Soil Ground Water and Sediment Standards are not technologically achievable on a property because of naturally elevated local background concentrations or are not provided by Table 1, a property owner may propose a natural local background concentration soil standard for a contaminant of concern by undertaking a soil sampling and analysis program in accordance with this section.

(2) A natural local background concentration for a contaminant of concern proposed under subsection (1) is a standard specified in a risk assessment.

(3) A risk assessment is an estimation of natural local background concentration risk assessment if the natural local background concentration soil standard proposed under subsection (1) for a contaminant of concern,

(a) does not exceed the applicable full depth generic potable site condition standard provided in Table 2 of the Soil Ground Water and Sediment Standards; and

(b) was estimated using the method described in subsections (4) to (9).

(4) The property owner shall ensure that samples are collected in accordance with the following procedures:

1. Samples must be collected from not less than 30 separate sampling locations, distributed over at least 10 physically separate geographical settings, as described in paragraph 3, that are representative of the local geology.
2. From at least one sampling location in each geographical setting, a minimum of two samples must be taken from sampling points at that same sampling location.
3. The sampling locations must be in areas that have not been affected by local point sources of air or land pollution, by local roads or highways or by other known sources of contaminant. The sampling locations may be in rural (agricultural property use) or urban (all other property uses) settings in Ontario. Suitable geographical settings include parks, cemeteries, forests, wood lots or large undeveloped tracks of land.
4. Subsections 48 (2) and (4) of the regulation apply with necessary modifications to samples collected under this subsection.

(5) Despite subsection (4), in areas of known, widespread soil contamination, where it is not possible to avoid the influence of historical industrial emissions to soil surfaces, the sampling program may still be undertaken if,

(a) it is designed to determine the change in contaminant of concern concentration as it varies with increased depth from the surface; and

(b) the use of this sampling program approach can be justified.

(6) The sampling and analysis program shall be used to establish the 90th percentile of the concentration of the contaminants of concern present in the soil.

(7) The value established in accordance with subsection (6) is the natural local background concentration soil standard for that contaminant of concern at that property that shall be proposed under subsection (1).

(8) If the concentration of contaminants of concern show large variability, increased replicate sampling (that is, more than two replicate samples) and averaging the analytical results from the replicate sampling may be used to establish the 90th percentile.

(9) Despite subsections (4) to (8), existing geological summary data may also be used to estimate the natural local background concentrations in place of sampling data to support the soil standard proposal under subsection (1), if, in the opinion of the Director, the sampling method used to obtain the data provides data at least as accurate as the estimates that would be provided by the sampling method set out in subsection (4).

New science risk assessment

9. (1) A risk assessment is a new science risk assessment if the risk assessment satisfies one or more of the conditions set out in this section.

(2) A risk assessment is a new science risk assessment if a contaminant of concern is identified during a phase two environmental site assessment for which there is no applicable site condition standard, as described in subsections 43 (2) and (3) of the regulation, and the property owner,

(a) chooses to develop a standard specified in the risk assessment by undertaking a risk assessment using quantitative analysis for both human health and the natural environment as described in this Schedule; or

(b) adopts a standard from a credible agency.

(3) For the purposes of subsection (2), an agency is a credible agency if it incorporates one or more of the following in developing contaminant standards:

1. Rigorous peer review of the standards by regulatory bodies, public organizations or academic institutions or any combination of them.

2. A process to ensure the ongoing review and updating of the standards.

3. The standards and the rationale for setting the standards are publicly available.

(4) A risk assessment is a new science risk assessment if the risk assessment uses a computer model that,

(a) is not available to the public; or

(b) is available to risk assessment practitioners for a fee but has not been used by the Ministry.

(5) If a risk assessment uses a computer model referred to in subsection (4), the qualified person shall, upon the request of the Director, include an electronic copy of the computer model in the risk assessment report in a manner that does not violate any person's copyright or other intellectual property rights.

(6) If a risk assessment uses a computer model referred to in subsection (4), the following information shall be provided in the risk assessment report to support the selection and use of the computer model:

1. A list of assumptions used in the development of the model and a discussion of the validity of the assumptions for the RA property, including the effect invalid assumptions will have on the model results.

2. Any information used to generate the computer model inputs.

(7) A risk assessment is a new science risk assessment if there is use of a probabilistic model and may be used if it meets the criteria set out in subsection (8) and in no other circumstances.

(8) A risk assessment that uses a probabilistic model may be used if the model is used for the exposure assessments described in Report Section 4 (Human Health Risk Assessment (HHRA)) and Report Section 5 (Ecological Risk Assessment (ERA)) of Table 1 of this Schedule and for no other purposes and shall be sufficiently supported by data.

Wider area of abatement risk assessment

10. (1) A risk assessment is a wider area of abatement risk assessment if the Ministry has identified the RA property to be within a wider area of abatement in its comments on the pre-submission form or in a notice issued under subsection 46 (2) of the regulation.

(2) If the Ministry has identified the property to be within a wider area of abatement, the wider area of abatement risk assessment must include,

(a) consultation with the applicable Ministry of the Environment District or Regional Office regarding the implications of the risk assessment report recommendations; and

(b) development and implementation of a public communication plan.

Exemption

11. Despite sections 4 and 5, if the Director considers it appropriate in the circumstances and in the public interest after having regard to the RA property, the contaminants of concern and the human and ecological receptors to be addressed in a risk assessment report, the Director in the course of providing comments on a pre-submission form submitted under subsection 3 (1) or in a notice issued under subsection 46 (2) of the regulation, may exempt the risk assessment report from,

(a) a requirement in relation to the preparation of a risk assessment report specified in section 4;

(b) a requirement to make a certification in an appendix to the risk assessment report as specified in section 5.

TABLE 1
MANDATORY REQUIREMENTS FOR RISK ASSESSMENT REPORTS

Report Section	Heading	Sub-Heading	Minimum Requirements
1. Summary of Recommendations and Findings	(a) Risk Assessment Objectives and Approach		Summarize the risk assessment objectives, including those specified in Report Section 4 (Human Health Risk Assessment (HHRA)) and Report Section 5 (Ecological Risk Assessment (ERA)).
			Summarize the type or types of risk assessment approaches taken to meet the objectives.
	(b) Deviations from Pre-submission Form		Describe in detail any deviations from the information provided in the pre-submission form including,
			(a) any changes to the conceptual site model that was submitted as part of the form;
			(b) whether there has been a change in the type of risk assessment approach identified in the form; and,
			(c) whether another computer model was used other than the model specified in the form.
	(c) Risk Assessment Standards		State the proposed standard specified in the risk assessment for each contaminant of concern.
	(d) Risk Assessment Assumptions		State the assumptions used in determining each standard specified in the risk assessment, including property use assumptions.

	(e) Risk Management Requirements		State the risk management measures and on-going monitoring, maintenance and contingency plan requirements, if applicable.
2. Risk Assessment Team Membership			State the expertise required to complete this risk assessment and design of any risk management measures specified in Report Section 7 (Risk Management Plan) and justify the omission of areas of expertise normally associated with the completion of a risk assessment.
			Identify each team member with the expertise necessary to complete the risk assessment and state how their qualifications relate to the given role and expertise required for this risk assessment.
3. Property Information, Site Plan and Geological Interpretation	(a) Property Information		State the property location and ownership.
			Describe the general physical characteristics of the property including size of the property and size of contaminated area.
			Provide sufficient detail on the property to support the conceptual site model used in the preparation of the risk assessment report, including,
			(a) a summary of past and current use of property;
			(b) a summary of past and current use of any relevant property that is adjacent to the property;
			(c) a description of off-site sources of contaminants of concern and off-site receptors; and,
			(d) an indication of the proposed use of property.
	(b) Site Plan and Hydrogeological Interpretation of RA Property		Provide the site plans, cross-sections and a hydrogeological interpretation of the RA property that satisfies the requirements of clause 3 (8) (a) and that was relied upon in the preparation of the risk assessment and all documentation used to support this interpretation.

	(c) Contaminants of Concern		List all of the contaminants of concern.
			The contaminants of concern must include the following:
			1. Any contaminants detected on, in or under the RA property that exceed the applicable site condition standards.
			2. Any contaminants detected on, in or under the RA property and for which no applicable site condition standard is prescribed under Part IX (Site Condition Standards and Risk Assessment) of the regulation.
		(i) Sampling Programs	With reference to the sampling programs summarized in the appendices to the risk assessment report, describe how the program is adequate for the risk assessment objectives and approach specified in Report Section 1 (Summary of Recommendations and Findings).
			In the case of an estimation of natural local background concentration risk assessment, specify the methods that were used to estimate the local background concentrations in soil, including details of,
			(a) any sampling programs undertaken in accordance with subsections 8 (4) to (8);
			(b) any existing geological data, as described in subsection 8 (9) that were used to estimate the natural local background concentrations in place of sampling data.
4. Human Health Risk Assessment (HHRA)	(a) Problem Formulation	(i) Human Health Conceptual Site Model	Provide a human health conceptual site model that,
			(a) satisfies the requirements of clause 3 (8) (b) and is consistent with the information upon which the diagrams referred to in that clause are based;
			(b) explains how the information provided under Report Section 3

			(Property Information, Site Plan and Geological Interpretation) was incorporated into and is consistent with the human health conceptual site model; and
			(c) was relied upon in the preparation of the risk assessment.
		(ii) Risk Assessment Objectives	State the objectives of the human health risk assessment and include an indication of,
			(a) the proposed use of the RA property;
			(b) the receptors and exposure pathways to be assessed by the human health risk assessment;
			(c) whether a qualitative or quantitative assessment of risk or both will be used in the human health risk assessment; and
			(d) the type of approach used for the human health risk assessment.
			Demonstrate that the data used for the human health risk assessment is sufficient to meet the objectives of the assessment, having regard to,
			(a) the data quality objectives specified in the reports on the sampling program summarized in the appendices to the risk assessment report; and
			(b) any other relevant information the qualified person has gathered or obtained in conducting the assessment.
			State how any uncertainty resulting from variable data, poor data quality or gaps in data in relation to the RA property affected,
			(a) the setting of objectives for the human health risk assessment; and
			(b) the ability to meet those objectives.
	(b) Exposure Assessment	(i) Receptor Characteristics	Describe in detail the characteristics of every human receptor, both on and off the RA property, identified in the human health conceptual site model.
		(ii) Pathway	Describe in detail every exposure

		Analysis	pathway identified in the human health conceptual site model. Justify which exposure pathways are incomplete.
		(iii)Exposure Estimates	For every complete exposure pathway state,
			(a) the relative frequency and duration of actual or potential exposures;
			(b) the relative magnitude of exposure to the human receptors, using measured contaminant exposure concentrations or concentrations predicted through fate and transport modelling; and
			(c) given the uncertainty described under Heading (a) (Problem Formulation), how does this uncertainty affect the outcomes of the exposure assessments conducted under clauses (a) and (b).
	(c) Toxicity Assessment	(i) Nature of Toxicity (Hazard Assessment)	For each contaminant of concern,
			(a) state the potential adverse health effects on the human receptors associated with their exposure to those contaminants; and
			(b) indicate whether the contaminants are carcinogenic or exhibit threshold or non-threshold characteristics.
		(ii) Dose Response Assessment	For each contaminant of concern,
			(a) describe the relationship between the magnitude of exposure to the contaminant from each route of exposure and the probability of the occurrence of the adverse health effects identified in the hazard assessment;
			(b) if the data permits, identify the appropriate toxicity limit, from published limits available from a credible agency as described in

			subsection 9 (3) for each of the routes of exposure identified in clause (a); and
			(c) analyze the sources of uncertainty in the data used to conduct the hazard assessment and the dose response assessment, including any gaps or variability in the data and state how such uncertainty could affect these assessments.
	(d) Risk Characterization	(i) Interpretation of Health Risks	For each contaminant of concern, having regard to the exposure assessment and the toxicity assessment, state the risk attributable in respect of that contaminant to each exposure route for human receptors on the RA property, using either a quantitative or qualitative analysis.
		(ii) Quantitative Interpretation of Health Risks	A quantitative analysis undertaken for a contaminant of concern must include the following:
			1. Provide a comparison of the dose response assessment to the exposure estimate to derive the risk level or hazard quotient at the RA property in the absence of any measures that have been taken or are being proposed at the RA property which have the effect of reducing the risk from the contaminant of concern.
			2. For each contaminant of concern with non-threshold toxic effects and taking into consideration any risk management measures that are being proposed in the risk assessment, propose and justify a human health standard for the contaminant, ensuring that the standard meets a target risk level of 1×10^{-6} for each environmental medium.
			3. For each contaminant of concern with threshold toxic effects and taking into consideration any risk management measures that are being proposed in the risk assessment, propose and justify a

			human health standard for the contaminant, ensuring that each human receptor does not receive an estimated dose exceeding 0.2 × the limit dose (TDI, RfD or RfC) for each environmental medium. In this paragraph, "TDI" means tolerable daily intake, "RfD" means the reference dose, "RfC" means the reference concentration. The units used to measure the TDI, the RfD and the RfC must be specified and conform to acceptable conventions.
			4. If, under paragraph 3, given the circumstances of the human receptors and the characteristics of the contaminant, it is unreasonable to apply a hazard quotient of less than or equal to 0.2 for each environmental medium, a higher hazard quotient may be proposed, if the proposed quotient is accompanied with a detailed site specific multi-media exposure assessment that considers the transport of the contaminant across all environmental media to the human receptors by all exposure pathways and ensures that the standard achieves the same level of protection for each human receptor as is intended to be achieved by the applicable full depth generic site condition standard for that contaminant.
		(iii) Qualitative Interpretation of Health Risks	A qualitative analysis undertaken for a contaminant of concern must include the following:
			1. Provide a justification for why a quantitative analysis was not undertaken.
			2. Describe the justification process being used as part of the qualitative analysis. The justification process includes a

			non-numeric characterization of risk and may include a numeric assessment of exposure or toxicity for screening purposes and risk prioritization.
			3. Taking into consideration any risk management measures that are being proposed for the RA property, propose and justify a human health standard for the contaminant.
		(iv) Special Considerations	If section 41 or 43.1 of the regulation applies to a RA property, the justification for the health standard being proposed for the RA property must take into account the site conditions that make section 41 or 43.1 of the regulation apply to the RA property.
		(v) Interpretation of Off-Site Health Risks	For each contaminant of concern, assess whether the human health standard being proposed for the RA property is likely to result in a concentration greater than the applicable full depth site condition standard at the nearest human receptor located off the RA property and, if this is the case for any contaminant, specify the contaminant, the applicable site condition for that contaminant and the property where the human receptor is located and describe the human receptors that may be impacted.
		(vi) Discussion of Uncertainty	Having regard to the discussions of uncertainty under Heading (b) (Exposure Assessment) and Heading (c) (Toxicity Assessment), state how such uncertainty could affect the interpretation of risk in this report section and the need to manage such risks.
5. Ecological Risk Assessment (ERA)	(a) Problem Formulation	(i) Ecological Conceptual Site Model	Provide an ecological conceptual site model that,
			(a) satisfies the requirements of clauses 3 (8) (b) and (c) and is consistent with the information

			upon which the diagrams referred to in that clause are based;
			(b) explains how the information provided under Report Section 3 (Property Information Site Plan and Geological Interpretation) was incorporated into and is consistent with the ecological conceptual site model; and
			(c) was relied upon in the preparation of the risk assessment.
		(ii) Risk Assessment Objectives	State the objectives of the ecological risk assessment and include an indication of,
			(a) the proposed use of the RA property;
			(b) which ecological receptors on the RA property are considered to be valued ecosystem components, the degree to which they must be protected and a justification to support such decisions;
			(c) the exposure pathways to be assessed in the ecological risk assessment;
			(d) whether a qualitative or quantitative assessment of risk or both will be used in the ecological risk assessment;
			(e) the type of approach used for the ecological risk assessment.
			Demonstrate that the data used for the ecological risk assessment are sufficient to meet the objectives of the assessment, having regard to,
			(a) the data quality objectives specified in the reports on the sampling program summarized in the appendices to the risk assessment report; and
			(b) any other relevant information that the qualified person has gathered or obtained in conducting the assessment.
			State how any uncertainty resulting from variable data, poor data quality or gaps in data in relation to the RA property affected,

			(a) the setting of objectives for the ecological risk assessment; and
			(b) the ability to meet those objectives.
	(b) Receptor Characterization		Describe in detail the characteristics of every valued ecosystem component, both on and off the RA property, identified in the ecological conceptual site model.
	(c) Exposure Assessment	(i) Pathway Analysis	Describe in detail every exposure pathway identified in the ecological conceptual site model. Justify which exposure pathways are incomplete.
		(ii) Exposure Estimates	For every complete exposure pathway, state,
			(a) the relative frequency and duration of actual or potential exposures;
			(b) the relative magnitude of exposure to the valued ecosystem components, using measured contaminant exposure concentrations or concentrations predicted through fate and transport modelling in a manner compatible with that used in the human health risk assessment; and
			(c) given the uncertainty described under the heading of “Problem Formulation”, how does this uncertainty affect the outcomes of the exposure assessments conducted under clauses (a) and (b).
	(d) Hazard Assessment		State the potential adverse effects on the valued ecosystem components associated with their exposure to each contaminant of concern.
			For each contaminant of concern,
			(a) describe the relationship between the magnitude of exposure to the contaminant from each route of exposure and the probability of the occurrence of the adverse ecological effect identified in the hazard assessment;
			(b) if the data permits, propose a

			toxicity reference value for each of the routes of exposure identified in clause (a); and
			(c) analyze the sources of uncertainty in the data used to conduct the hazard assessment, including any gaps or variability in the data and state how such uncertainty could affect the assessment.
	(e) Risk Characterization	(i) Interpretation of Ecological Risks	For each contaminant of concern, having regard to the exposure assessment and the hazard assessment, state the risk attributable in respect of that contaminant to each exposure route for the valued ecological components on the RA property, using either a quantitative or qualitative analysis.
		(ii) Quantitative Interpretation of Ecological Risks	A quantitative analysis that has been undertaken for a contaminant of concern must include the following:
			1. For each valued ecosystem component, provide a comparison of the toxicity reference value proposed in the “Hazard Assessment” to the exposure estimate proposed in the “Exposure Assessment” to derive an estimate of the degree of risk at the RA property in the absence of any measures that have been taken or are being proposed at the RA property which have the effect of reducing the risk from the contaminant of concern.
			2. Provide narrative to describe all magnitudes, comparisons and limitations relied upon to derive the risk under paragraph 1.
			3. Taking into consideration any risk management measures being proposed in the risk assessment, propose and justify an ecological standard for the contaminant, ensuring that the standard achieves the same level of protection for each valued ecosystem component that is

			intended to be achieved by the applicable full-depth generic site condition standard for that contaminant.
		(iii) Qualitative Interpretation of Ecological Risks	A qualitative analysis that has been undertaken for a contaminant of concern must include the following:
			1. Provide a justification for why a quantitative analysis was not undertaken.
			2. Describe the justification process being used as part of the qualitative analysis. The justification process includes a non-numeric characterization of risk and may include a numeric assessment of exposure or toxicity for screening purposes and risk prioritization.
			3. Taking into consideration any risk management measures being proposed for the RA property, propose and justify an ecological standard for the contaminant, ensuring that the standard achieves the same level of protection for each valued ecosystem component that is intended to be achieved by the applicable full-depth generic site condition standard for that contaminant.
		(iv) Special Considerations	If a RA property is,
			(a) located within 30 metres of an “area of natural significance”, includes such an area, is adjacent to such an area or part of such an area, the justification for the ecological standard being proposed for the RA property must ensure that the standard is protective of the conditions that causes the area to be an area of natural significance; and
			(b) subject to section 41 or 43.1 of the regulation, the justification

			for the ecological standard being proposed for the RA property must take into account the site conditions that make section 41 or 43.1 of the regulation apply to the RA property.
		(v) Interpretation of Off-Site Ecological Risks	For each contaminant of concern, assess whether the ecological standard being proposed for the RA property is likely to result in a concentration greater than the applicable full depth site condition standard at the nearest ecological receptor located off the RA property and, if this is the case for any contaminant, specify the contaminant, the applicable site condition standard for that contaminant and the property where the ecological receptor is located and describe the ecological receptors that may be impacted.
		(vi) Discussion of Uncertainty	Having regard to the discussions of uncertainty under headings "Exposure Assessment" and "Hazard Assessment", state how such uncertainty could affect the interpretation of risk advanced in this report section and the need to manage such risks.
6. Conclusions and Recommendations		(i) Recommended Standards	A standard must be specific in the risk assessment for each contaminant of concern. The specified standard shall be, at a minimum, the more stringent of the human health standard and the ecological standard being proposed for the RA property.
			In the case of an estimation of natural local background concentration risk assessment, the specified standard shall be the local background concentration soil standard proposed under subsection 8 (1).
			State critical assumptions on which the standards specified in the risk assessment rely, having regard to the discussion of uncertainty under Heading (d) (Risk Characterization) in Report Section 4 (Human Health

			Risk Assessment (HHRA)) and under Heading (e) (Risk Characterization) in Report Section 5 (Ecological Risk Assessment (ERA)).
		(ii) Special Considerations for Ground Water Standards	If a standard being proposed in the risk assessment for ground water in or under the RA property is greater than 50% of the solubility limit, demonstrate the risk of free product formation and propose any risk management measures necessary in order to mitigate the formation of free product.
7. Risk Management Plan (if applicable)	(a) Risk Management Plan	(i) Risk Management Performance Objectives	State the exposure pathways and environmental media that risk management measures are intended to address.
			State the required reduction in exposure concentration that the risk management measures are intended to achieve.
		(ii) Risk Management Measures	To achieve the specified performance objectives,
			(a) propose risk management measures on the RA property that are designed to prevent, eliminate or ameliorate any adverse effects on or off the RA property;
			(b) propose restrictions on the use of the RA property, including any restriction that apply to the construction of a building on the property; or
			(c) propose a combination of measures specified in clauses (a) and (b).
			State the implications of the risk management plan for off-site health and ecological receptors.
		(iii) Duration of Risk Management Measures	Specify the duration the proposed risk management measures are required to remain in place to ensure the specified performance objectives are achieved.
		(iv) Requirements for Monitoring	Specify the designed lifespan of the measure, if applicable.

		and Maintenance	
			Propose a program for one or more of the following activities, if the program is necessary to achieve the specified risk management performance objectives:
			1. A program which includes procedures for the ongoing maintenance, monitoring and replacement of the risk management measures to ensure they remain operable for the period identified in this report under the sub-heading “Duration of Risk Management Measures”.
			2. A program which includes procedures for the ongoing monitoring of contaminants of concern.
			3. A contingency plan for meeting the Risk Management Performance Objectives if the Risk Management Measures fail.
8. Public Communication Plan (if applicable)	(a) Public Communication Plan	(i) Optional Communication Plans	If owner has implemented a plan to consult the public as part of the development of the risk assessment, provide,
			(a) a description of the plan, including any opportunities given to the public to comment on the proposed risk assessment;
			(b) a summary of the comments received during the consultation; and
			(c) a description of how the public comments were considered as part of the risk assessment process.
		(ii) Required Communication Plans For RA Properties in Wider Area of Abatement	If the risk assessment has been identified by the Ministry as relating to a property located within a wider area of abatement under section 10, the risk assessment shall include,
			(a) a description of the public communication plan required by

			clause 10 (2) (b) including any opportunities given to the public to comment on the proposed risk assessment;
			(b) a summary of the comments received during consultation under the plan;
			(c) a description of how the public comments were considered as part of the risk assessment process; and
			(d) a copy of all the written comments received from the Ministry under clause 10 (2) (a).

O. Reg. 153/04, Sched. C; O. Reg. 511/09, s. 30; O. Reg. 245/10, s. 4; O. Reg. 179/11, s. 6.

SCHEDULE D
PHASE ONE ENVIRONMENTAL SITE ASSESSMENTS

PART I
APPLICATION

Application and definitions

1. (1) The requirements in this Schedule apply to phase one environmental site assessments.

(2) Each section in this Schedule is deemed to be a requirement, whether it is described as such or not.

(3) In this Schedule,

"sewage" means,

(a) a waste of domestic origin that is human body waste, toilet or other bathroom waste, waste from showers and tubs, liquid or water borne culinary and sink waste and laundry waste, and

(b) drainage, storm water, commercial wastes and industrial wastes;

"sewage works" means any works for the collection, transmission, treatment and disposal of sewage or any part of such works.

PART II
RECORDS REVIEW

Records review, specific objectives

2. The following are the specific objectives of a records review:

1. To obtain and review records that relate to the phase one property and to the current and past uses of and activities at or affecting the phase one property in order to determine if an area of potential environmental concern exists and to interpret any area of potential environmental concern.

2. To obtain and review records that relate to properties in the phase one study area, other than the phase one property, in order to determine if an area of potential environmental concern exists and to interpret any area of potential environmental concern.

Records review, requirements

3. (1) The qualified person shall, as part of a preliminary records review,

(a) consider and determine, with a rationale for the determination, whether the phase one study area should include a property that is not located, wholly or partly, within 250 metres from the nearest point on a boundary of the phase one property; and

(b) determine, with a rationale for the determination, the date of the first developed use of the phase one property.

(2) The qualified person shall ensure that the following additional requirements are met as part of the records review:

General

1. Make all reasonable inquiries to obtain reasonably accessible records pertaining to the current use or uses and all past uses of the phase one property.
2. Make all reasonable inquiries, including reference to the *Catalogue of Canadian Fire Insurance Plans 1875-1975*, to obtain the fire insurance plans for all parts of the phase one property.
3. Prepare an up-to-date chronological chain of title that shows the owners' names and dates of ownership for the phase one property based on a search of the title of the phase one property that goes back to the date of the first developed use of the phase one property, unless other information from the records review satisfies the objectives of the records review and a title search back to the date of the first developed use would not contribute to obtaining information about the environmental condition of the phase one property.
4. Make all reasonable inquiries to obtain copies of reports prepared in respect of all or part of the phase one property by or on behalf of a current or former owner respecting environmental conditions at the phase one property including,
   i. environmental site assessment reports,
   ii. remediation reports,
   iii. reports prepared in response to an order or request of the Ministry, and
   iv. any other reports relating to the presence of a contaminant on, in or under the phase one property or the existence of an area of potential environmental concern.
5. Make all reasonable inquiries to obtain records concerning the matters referred to in sections 13 and 14 of this Schedule.
6. Review the documents obtained pursuant to paragraphs 1, 2, 4 and 5.

Environmental Source Information

7. Make all reasonable inquiries to obtain such of the following as are reasonably accessible and pertain, unless otherwise specified, to the phase one study area:
   i. National Pollutant Release Inventory information maintained by Environment Canada,
   ii. PCB information maintained by the Ministry,
   iii. environmental compliance approvals, permits to take water, certificates of property use or similar instruments related to the environmental condition of the phase one property and any property on, under or adjacent to the phase one property and issued pursuant to an Act administered by the Ministry, whether in force or not,
   iv. the inventory of coal gasification plants that is maintained by the Ministry,
   v. records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the Ministry where the incident, order, offence,

spill, discharge or inspection affects the phase one property and any property on, under or adjacent to the phase one property,

vi. waste management records, including current and historical waste storage locations and waste generator and waste receiver information maintained pursuant to Regulation 347 of the Revised Regulations of Ontario, 1990 (General — Waste Management) made under the Act, or its predecessors with respect to the phase one property and any property on, under or adjacent to the phase one property,

vii. reports submitted to the Ministry related to the environmental conditions of the phase one property and any property on, under or adjacent to the phase one property,

viii. retail fuel storage tanks information maintained by the Technical Standards and Safety Authority,

ix. notices and instruments, including records of site condition, posted in the Registry,

x. identification of areas of natural significance maintained by the Ministry of Natural Resources, and

xi. landfill information maintained by the Ministry.

8. Review the documents obtained pursuant to paragraph 7.

Physical Setting Sources

9. Make all reasonable inquiries to obtain a series of aerial photographs of the phase one study area that, as a whole,

i. illustrate as much as possible of the period from the phase one property's first developed use to the time of the phase one environmental site assessment,

ii. identify the buildings and structures that were present on the phase one property from time to time throughout this period,

iii. identify potentially contaminating activities within the phase one study area from time to time throughout this period, and

iv. identify areas of potential environmental concern.

10. Obtain one or more topographic maps (Ontario Base Map series), which illustrate the location of the phase one property in relation to any water bodies in the phase one study area and document regional topography.

11. Make all reasonable inquiries to obtain one or more physiographic maps or other similar documents in order to define regional physiography in the phase one study area and to obtain information about the surficial soil and bedrock in the phase one study area.

12. Make all reasonable inquiries to obtain one or more geological maps or other similar document in order to define the regional geology in the phase one study area and to obtain information about the stratigraphy of the overburden, from ground surface to bedrock, including approximate depth to bedrock and type of bedrock.

13. Make all reasonable inquiries to obtain well records and other relevant data for any operating or abandoned wells, including all wells described or defined under the *Ontario Water Resources Act*, in the phase one study area in order to identify the presence of such wells and to make appropriate use of the records and data to help determine the hydrogeological and geological characteristics of the phase one study area and describe,

i. the location of any such wells,

ii. the stratigraphy of the overburden, from ground surface to bedrock,

iii. approximate depth to bedrock, and

iv. approximate depth to the water table.

Site Operating Records

14. Where the phase one property is an enhanced investigation property that is currently being used, in whole or in part, for one of the uses described in clause 32 (1) (b) of the regulation, review all of the following, as are applicable and reasonably accessible otherwise than as described in clause 22 (2) (c) or (d) of the regulation, in respect of the property,

i. regulatory permits and records related to areas of potential environmental concern,

ii. material safety data sheets,

iii. underground utility drawings,

iv. inventories of chemicals, chemical usage and chemical storage areas,

v. inventory of above ground storage tanks and underground storage tanks,

vi. environmental monitoring data, including data created in response to an order or request of the Ministry,

vii. waste management records, including current and historical waste storage locations and waste generator and waste receiver information maintained pursuant to Regulation 347 of the Revised Regulations of Ontario, 1990 (General — Waste Management) made under the Act, or its predecessors,

viii. process, production and maintenance documents related to areas of potential environmental concern,

ix. records of spills and records of discharges of contaminants, including records of spills and records of discharges of contaminants of which notice is required to be given to the Ministry under the Act and records of such spills and discharges required to be kept pursuant to Ontario Regulation 675/98 (Classification and Exemption of Spills and Reporting of Discharges) made under the Act,

x. emergency response and contingency plans, including spill prevention and contingency plans prepared pursuant to section 91.1 of the Act, and Ontario Regulation 224/07 (Spill Prevention and Contingency Plans) made under the Act,

xi. environmental audit reports, and

xii. site plan of facility showing areas of production and manufacturing.

15. Where the phase one property is an enhanced investigation property, in whole or in part, because the property had been put to a use that is no longer being carried on, all reasonable inquiries shall be made to obtain and review the material referred to in paragraph 14 with respect to the former use.

(3) If a document required by the records review is obtained from one source, it need not be obtained again from another source.

PART III
INTERVIEWS

Interviews, specific objectives

4. The following are the specific objectives of conducting the phase one environmental site assessment interviews:

1. To obtain information to assist in determining if an area of potential environmental concern exists.
2. To identify details of potentially contaminating activities or potential contaminant pathways in, on or under the phase one property.

Interviews, role of qualified person

5. Subject to section 6, the qualified person shall select persons to be interviewed, determine the timing and method of the interviews, and select the topics for each interview.

Persons to be interviewed

6. (1) The qualified person shall ensure that the following persons are interviewed:

1. A current owner or a current occupant of the phase one property, where one can be identified, or an individual with control of or authority over the owner or occupant, where the owner or occupant is not an individual.
2. The key site manager for each use, where the phase one property is an enhanced investigation property currently being used, in whole or in part, as an industrial property or a commercial property described in clause 32 (1) (b) of the regulation.

(2) The qualified person shall make all reasonable efforts to ensure that the following persons are interviewed:

1. All persons relevant to meeting the general and specific objectives of the phase one environmental site assessment as determined by the qualified person.
2. Where the phase one property is an enhanced investigation property, at least one person with detailed knowledge of site activities identified by the qualified person and referred to as the key site manager, for each use included among the uses referred to in clause 32 (1) (b) of the regulation that is no longer being carried out at the phase one property but that has been carried on at the phase one property.
3. Where no owner or occupant of the phase one property can be identified, at least one owner or occupant of a property in the phase one study area and one provincial or municipal government official, each of whom is familiar with the phase one property and its history, as determined by the qualified person having regard to the objectives of a phase one environmental site assessment.

Persons with specific knowledge

7. (1) Where the phase one property is an enhanced investigation property, the owner of the property shall provide to the qualified person the information in the owner's possession or control concerning persons with detailed knowledge of site activities with respect to any use or activity described in subsection 32 (1) of the regulation which is currently or was formerly being carried on at the phase one property.

(2) The qualified person shall make all reasonable efforts to ensure that at least one person with detailed knowledge of site activities identified under subsection (1) is present during the site reconnaissance component of the phase one environmental site assessment.

Conduct of the interviews

8. The phase one environmental site assessment interviews shall be conducted as follows:

1. The qualified person shall design all interviews. Interviews shall, to the degree practicable, include questions about all matters referred to in sections 13 and 14, including questions about the former

uses of the property, and such questions shall, unless no one is accompanying the person conducting the site reconnaissance, be asked during the site reconnaissance in addition to being asked of any other person being interviewed who may be able to answer them.

2. The date, place and method of the interview and the name of the person being interviewed, the reason why the person was identified as an interview subject and all relevant information concerning potentially contaminating activity and areas of potential environmental concern shall be noted in writing by the interviewer.

3. Information gleaned through interviews shall be compared to other information sources in order to assess the validity of the information from the interview, and such comparisons shall be documented by the interviewer or other person conducting the comparison.

4. A written summary of each interview shall be prepared, which shall include consideration of the interviewer's notes and the assessment of the validity of information from each interview.

PART IV
SITE RECONNAISSANCE

Site reconnaissance, specific objectives

9. The following are the specific objectives of the site reconnaissance component of a phase one environmental site assessment:

1. To determine if areas of potential environmental concern exist through observations about current and past uses and potentially contaminating activity on, in or under the phase one property and, as practicable, current and past uses and activities and potentially contaminating activity in the phase one study area.

2. To identify details of potential contaminant pathways on, in or under the phase one property and areas of potential environmental concern and contaminants of potential concern.

Obligation of owner

10. The owner of the phase one property shall grant access and ensure that access is granted by any occupant of the phase one property who is not the owner to the qualified person and to persons supervised by the qualified person for purposes of conducting the site reconnaissance, to enable them to investigate the entire phase one property.

Timing of site reconnaissance

11. The site reconnaissance shall occur after the preliminary records review and shall consist of an investigation of the phase one study area, including the phase one property, on one or more occasions.

Site reconnaissance, general requirements

12. The following are the general requirements for the site reconnaissance:

1. The qualified person or a person supervised by the qualified person shall physically attend at the phase one property and investigate it.

2. The qualified person or a person supervised by the qualified person shall conduct investigation of the remaining properties within the phase one study area from publicly accessible areas.

3. The following shall be noted during each investigation,

   i. date and time of the investigation,

   ii. weather conditions,

   iii. the length of time of the investigation,

iv. whether the facility was operating at the time of the investigation, where the phase one property is an enhanced investigation property that is currently being used for one of the uses described in clause 32 (1) (b) of the regulation, and

v. the name and qualifications of the person conducting the investigation.

4. The qualified person or a person supervised by the qualified person shall,

i. take photographs of the phase one property, including of the exterior and interior portions of buildings or structures on the property, in order to document any areas of potential environmental concern and illustrate any relevant structures and areas of disturbed soils such as fill areas,

ii. take photographs of the phase one study area, as practicable, in order to document any potentially contaminating activity which may be contributing to or causing an area of potential environmental concern and illustrate any relevant structures and areas of disturbed soils such as fill areas, and

iii. prepare a written description and explanation of the photographs taken pursuant to subparagraphs i and ii, including an orientation by compass of the photograph and a description of the photograph with respect to other photographs, records and figures.

Specific observations at phase one property

13. (1) At the phase one property, the following shall be carried out:

1. Investigations of structures sufficient to obtain and document the following,

i. a general description of structures and other improvements, including the number and age of buildings,

ii. a general description of the number, age and depth of below-ground structures,

iii. details of all tanks, above and below ground, at the phase one property, including the material and method of construction of the tank, tank age, tank contents and tank volume, whether the tank is in use or not, and

iv. any potable and non-potable water sources.

2. Inquiries about the type and approximate location of underground utility and service corridors, such as sewer, water, electrical or gas lines, located on, in or under the phase one property.

3. Inquiries about, and as practicable, investigations of the interior of any buildings or structures at the phase one property so as to identify and document the following:

i. exit and entry points,

ii. details of existing and former heating systems, including type and fuel source,

iii. details of cooling systems, including type and fuel source, if any,

iv. details of any drains, pits and sumps, including their current use, if any, and former use,

v. details of any unidentified substances, and

vi. details of stains or corrosion on floors other than from water, where located near a drain, pit, sump, crack or other potential discharge location.

4. Inquires about, and as practicable, investigations sufficient to obtain and document the following:

i. details and locations of wells described or defined under the *Ontario Water Resources Act* and the *Oil, Gas and Salt Resources Act*,

ii. details of sewage works, including their location,

iii. details of ground surface, including type of ground cover, such as grass, gravel, soil or pavement, and

iv. details of current or former railway lines or spurs and their locations.

(2) At the parts of the phase one property not covered by buildings or other structures, investigations shall be carried out to identify, locate and document,

(a) areas of stained soil, vegetation or pavement;

(b) stressed vegetation;

(c) areas where fill and debris materials appear to have been placed or graded;

(d) potentially contaminating activity; and

(e) details of any unidentified substances found at the property.

(3) Where the phase one property is an enhanced investigation property that is currently being used for one of the uses described in clause 32 (1) (b) of the regulation, investigations shall be carried out to identify, locate and document,

(a) operations at the property, including processing or manufacturing;

(b) hazardous materials used or stored at the phase one property;

(c) products manufactured at the phase one property;

(d) by-products and wastes at the phase one property;

(e) raw materials handling and storage locations at the phase one property;

(f) location and contents of drums, totes and bins at the phase one property;

(g) details of all oil/water separators at the phase one property including for each separator the location, installation date, source of incoming liquid and effluent discharge location;

(h) all vehicle and equipment maintenance areas, including the locations of maintenance, fluid storage, and waste storage areas;

(i) details of all spills including the dates, locations, materials involved, and volumes of material spilled;

(j) details of liquid discharge points such as water and French drains, including their locations; and

(k) details of all hydraulic lift equipment at the property, including elevators, in-ground hoists and loading docks.

(4) Where the phase one property is an enhanced investigation property that has been used, in whole or in part, in a manner described in clause 32 (1) (b) of the regulation, the qualified person or someone supervised by the qualified person,

(a) shall conduct an investigation to identify and document such of the things specified in subsection (3) as it may be practicable to do during the site reconnaissance, with respect to those uses set out in clause 32 (1) (b) of the regulation that the property has been used for; and

(b) shall consider and use information available from the records review and interviews in conducting this investigation.

Investigation of phase one study area, other than phase one property

14. In the part of the phase one study area that is outside of the phase one property and that is not covered by buildings or other structures, investigations shall be carried out to identify, locate and document,

(a) potentially contaminating activity;

(b) water bodies; and

(c) areas of natural significance.

Written description of investigation

15. (1) The qualified person shall ensure that a written description of the investigations carried out pursuant to sections 13 and 14 is prepared.

(2) The written description shall include details of each of the investigations and any findings that are relevant to the existence of an area of potential environmental concern.

PART V
REVIEW AND EVALUATION OF INFORMATION

Review and evaluation of information

16. (1) The qualified person shall review, evaluate and interpret the information obtained from the records review, the interviews and the site reconnaissance components of the phase one environmental site assessment so as to achieve the general and specific objectives of a phase one environmental site assessment.

(2) Without limiting the generality of subsection (1), and based on the review, evaluation and interpretation, the qualified person shall prepare,

(a) a table of areas of potential environmental concern in a form approved by the Director;

(b) a table of current and past uses of the phase one property in a form approved by the Director; and

(c) a phase one conceptual site model.

(3) To assist with meeting the requirements of subsection (2) and the objectives of a phase one environmental site assessment, the qualified person shall reach a conclusion on, based on a review of the available information and the exercise of professional judgment,

(a) the existence and location of any areas of potential environmental concern on, in or under the phase one property;

(b) the current and past uses of the phase one property;

(c) the likelihood that one or more contaminants have affected any land or water on, in or under the phase one property; and

(d) whether a phase two environmental site assessment is required before a record of site condition may be submitted with respect to all or part of the phase one property.

(4) For each of the matters referred to in subsections (2) and (3), the qualified person shall include the logic and reasoning used to evaluate the available information.

(5) For each of the matters referred to in subsections (2) and (3), except clause (2) (c), the qualified person shall in the review and evaluation document the data sources, with reference to the specific data and source used, including,

(a) whether the source was from a record, an interview or a site investigation or a combination of them or another source; and

(b) what aspect of each record, interview or observation during a site investigation or a combination of them or other source was relied upon and how it was relied upon.

(6) The qualified person shall consider and document how any uncertainty or absence of information obtained in each of the components of the phase one environmental site assessment could affect the validity of the conclusions, tables and model described in subsections (2) and (3).

(7) The phase one conceptual site model shall consist of the figures and narrative descriptions and assessments set out in Sub-Heading (iv) (Phase One Conceptual Site Model) in Report Section 7 (Review and Evaluation of Information) of Table 1 of this Schedule.

(8) The phase one conceptual site model shall be prepared taking into consideration,

(a) any property use to which the phase one property could be put where a record of site condition is to be filed based on the phase one environmental site assessment; and

(b) the proposed property use to which the phase one property will be put, where it is known, in any other case.

(9) During the course of the phase one environmental site assessment or any subsequent phase one or phase two environmental site assessment of the phase one property, the qualified person shall update the review, evaluation and interpretation as further information becomes available.

PART VI
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT REPORT

Preparation of report

17. Subject to subsection 16 (1), the qualified person shall prepare or supervise the preparation of a phase one environmental site assessment report.

Phase one environmental site assessment report, specific objectives

18. The following are the specific objectives of a phase one environmental site assessment report:

1. To document the presence or absence of areas of potential environmental concern.
2. To provide a record of a phase one environmental site assessment of a phase one property that demonstrates, in a manner that is clear and can be assessed, tested and reconstructed, how the phase one environmental site assessment of the property was carried out, and, in particular, to document and demonstrate,
   i. how the general and specific objectives of a phase one environmental site assessment were achieved and how each of the minimum requirements for such objectives were met,
   ii. whether further investigation is required in order to submit a record of site condition for filing,
   iii. that there exists an adequate basis for any further investigation that may be needed, and
   iv. that there is a basis for any required certifications.

Sections of report

19. (1) The phase one environmental site assessment report shall,

(a) be divided into the report sections as specified in Table 1 of this Schedule; and

(b) include the headings and sub-headings set out in Table 1.

(2) The phase one environmental site assessment report shall meet the requirements set out in Table 1 of this Schedule.

(3) The qualified person may include,

(a) report sections, headings and sub-headings in addition to those set out in Table 1 of this Schedule; and

(b) other information in the phase one environmental site assessment report.

(4) The phase one environmental site assessment report shall have the appendices, references and figures specified in Table 1 of this Schedule attached to the report.

(5) Figures, maps, site plans and cross-sections in the phase one environmental site assessment report shall contain a scale, north arrow and a title block that includes,

(a) a descriptive title;

(b) the address, if any, of the phase one property;

(c) the name of the qualified person's firm, company or partnership, if any; and

(d) the date the figure, map, site plan or cross-section was created.

TABLE 1
MANDATORY REQUIREMENTS FOR PHASE ONE ENVIRONMENTAL SITE ASSESSMENT REPORTS

Report Section	Heading	Sub-Heading	Minimum Requirements
1. Executive Summary			Provide a brief summary of the contents of the Report.
2. Introduction	(a) Phase One Property Information		Include the following and any other relevant introductory material concerning the phase one property and the phase one environmental site assessment:
			1. The municipal address and property identifier number, if any, of the phase one property.
			2. The name and address and other contact information for the owner of the phase one property and the name, status and other contact information for any other person who has engaged the qualified person to conduct the phase one environmental site assessment.
3. Scope of Investigation			Provide an overview of the phase one environmental site assessment conducted with respect to the phase one property.
4. Records Review	(a) General	(i) Phase One Study Area Determination	Document, with reference to details of the relevant property, the rationale for the determination that the phase one study area should or should not include a property that is not located, wholly or partly, within 250 metres

			from the nearest point on a boundary of the phase one property.
		(ii) First Developed Use Determination	Document, with reference to details of the phase one property, the rationale for the determination of the date of the first developed use of the phase one property.
		(iii)Fire Insurance Plans	Make a summary of each fire insurance plan reviewed including,
			i. date and description of the area covered with reference to the phase one property,
			ii. lot and address numbers,
			iii. lot sizes and description of structures and other improvements, and
			iv. relevant information gleaned from the plan concerning potentially contaminating activity and areas of potential environmental concern.
		(iv)Chain of Title	Prepare an up-to-date chronological chain of title that shows the owners' names and dates of ownership for the phase one property based on a search of the title of the phase one property that goes back to the date of the first developed use of the phase one property, unless other information from the records review satisfies the objectives of the records review and a title search back to the date of the first developed use would not contribute to obtaining information about the environmental condition of the phase one property.
			Document and provide a rationale for the period chosen for the search of title of the phase one property, with details of any information relied on in lieu of conducting a title search back to the date of the first developed use of the phase one property, where a title search of the phase one property has not been conducted back to the date of the first developed use of the phase one property.
		(v)	Provide a list and summary of

		Environmental Reports	reports referred to in paragraph 4 of subsection 3 (2), if any, including,
			i. the title, date, name of the property owner or other person funding the work and the report,
			ii. the author of the report, and
			iii. a description of data, analysis and findings relevant to the phase one environmental site assessment, such as the existence of an area of potential environmental concern.
	(b) Environmental Source Information		Provide the list and summary of information or documents referred to in paragraph 7 of subsection 3 (2) including,
			i. the title of the information or document, and
			ii. a detailed description of data, analysis or findings relevant to the phase one environmental site assessment, such as the existence of an area of potential environmental concern.
	(c) Physical Setting Sources	(i) Aerial Photographs	Where possible, provide the series of aerial photographs of the phase one study area referred to in paragraph 9 of subsection 3 (2).
			Where there is a series of aerial photographs,
			i. provide a list of the aerial photographs of the phase one study area,
			ii. provide a rationale for the time period between aerial photographs used,
			iii. identify the date of the earliest aerial photographs available and their source, and
			iv. summarize the information gleaned from the series of aerial photographs.
		(ii) Topography, Hydrology, Geology	Provide topographic maps (Ontario Base Map series) referred to in paragraph 10 of subsection 3 (2) which illustrate the location of the phase one property in relation to any water bodies in the phase one study

			area and provide a description of regional topography.
			Describe regional physiography, including surficial soil and bedrock characteristics of the phase one study area based on physiographic maps or other similar documents referred to in paragraph 11 of subsection 3 (2).
			Describe the geology, including the stratigraphy of the overburden from ground surface to bedrock, the approximate depth to bedrock and type of bedrock of the phase one study area based on geological maps or other similar documents referred to in paragraph 12 of subsection 3 (2) and well records and other relevant data referred to in paragraph 13 of subsection 3 (2).
		(iii)Fill Materials	Describe any areas of disturbed soil or fill areas on the phase one property.
		(iv)Water Bodies and Areas of Natural Significance	Describe any water bodies and any areas of natural significance in the phase one study area.
		(v) Well Records	Provide well records and other relevant data referred to in paragraph 13 of subsection 3 (2), and a description of them, which identifies the presence of wells, helps determine the hydrogeological and geological characteristics of the phase one study area and describes,
			i. the location of any such wells,
			ii. the stratigraphy of the overburden, from ground surface to bedrock,
			iii. approximate depth to bedrock, and
			iv. approximate depth to the water table.
	(d) Site Operating Records		Where applicable, provide a list and summary of the information and documents referred to in paragraph 14 of subsection 3 (2) including,
			i. the title of the information or document, and

			ii. a detailed description of data, analysis or findings relevant to the phase one environmental site assessment such as the existence of an area of potential environmental concern.
5. Interviews			Provide the information referred to in paragraph 2 of section 8 including,
			i. the date, place, and method of the interviews and the name of person being interviewed,
			ii. the reason why the person was identified as an interview subject, and
			iii. relevant information concerning potentially contaminating activity and areas of potential environmental concern noted by the interviewer.
			Provide the comparison and assessment, referred to in paragraph 3 of section 8, of information gleaned through interviews with other information sources and of the validity of the information gleaned from the interviews.
			Provide the summary of the interviews referred to in paragraph 4 of section 8.
			Identify and evaluate relevant information from the interviews concerning potentially contaminating activity and areas of potential environmental concern.
6. Site Reconnaissance	(a) General Requirements		Provides notes of the following for each investigation,
			i. date and time of the investigation,
			ii. weather conditions,
			iii. the length of time of the investigation,
			iv. whether the facility was operating at the time of the investigation, where the phase one property is an enhanced investigation property that is currently being used for one of

			the uses described in clause 32 (1) (b) of the regulation, and
			v. the name and qualifications of the person conducting the investigation.
			Provide the following information and analysis based on paragraph 4 of section 12,
			i. photographs of the exterior and interior portions of the phase one property,
			a. documenting any areas of potential environmental concern, and
			b. illustrating any relevant structures and areas of disturbed soils, including fill areas, and
			ii. a written description and explanation of the photographs including,
			a. an orientation by compass of the photograph, and
			b. a description of the photograph with respect to other photographs, records and figures.
	(b) Specific Observations at Phase One Property		Provide the following, based on the investigation referred to in paragraph 1 of subsection 13 (1),
			i. a general description of structures and other improvements, including the number and age of buildings,
			ii. a general description of the number, age and depth of below-ground structures,
			iii. details of all tanks, above and below ground, at the phase one property, including the material and method of construction of the tank, tank age, tank contents and tank volume, whether in use or not, and
			iv. any potable and non-potable water sources.
			Based on the inquiries referred to in

			paragraph 2 of subsection 13 (1), provide the type and approximate location of underground utility and service corridors, such as sewer, water, electrical or gas lines, located on, in or under the phase one property.
			Based on the investigations referred to in paragraph 3 of subsection 13 (1), identify and document the following features of structures and buildings at the phase one property,
			i. exit and entry points,
			ii. details of existing and former heating systems, including type and fuel source,
			iii. details of cooling systems, including type and fuel source, if any,
			iv. details of any drains, pits and sumps, including their current use, if any, and former use,
			v. details of any unidentified substances, and
			vi. details, including locations, of stains or corrosion on floors other than from water, where located near a drain, pit, sump, crack or other potential discharge location.
			Provide the documentation referred to in paragraph 4 of subsection 13 (1) of,
			i. details, including locations, of current and former wells, including all wells described or defined in or under the *Ontario Water Resources Act* and the *Oil, Gas and Salt Resources Act*,
			ii. details of sewage works, including their location,
			iii. details of ground surface, including type of ground cover, such as grass, gravel, soil or pavement, and
			iv. details of current or former railway lines or spurs and their locations.

			Provide the documentation, referred to in subsection 13 (2), of the following,
			i. areas of stained soil, vegetation or pavement,
			ii. stressed vegetation,
			iii. areas where fill and debris materials appear to have been placed or graded,
			iv. potentially contaminating activity, and
			v. details of any unidentified substances found at the property.
		(i) Enhanced Investigation Property	Where subsection 13 (3) applies to the phase one property, provide the documentation referred to in subsection 13 (3) of,
			i. the operations at the property, including processing or manufacturing,
			ii. hazardous materials used or stored at the phase one property,
			iii. products manufactured at the phase one property,
			iv. by-products and wastes at the phase one property,
			v. raw materials handling and storage locations at the phase one property, whether in use or not,
			vi. details of drums, totes and bins at the phase one property,
			vii. details of all oil/water separators at the phase one property, including for each separator the location, installation date, source of incoming liquid and effluent discharge location,
			viii. all vehicle and equipment maintenance areas, including the locations of maintenance, fluid storage, and waste storage areas, whether in use or not,
			ix. details of all spills including the dates, locations, materials involved, and volumes of material spilled,
			x. details of liquid discharge points such as water and French drains,

			including their locations,
			xi. details of operations at the property, including processing or manufacturing and equipment used in processing or manufacturing, and
			xii. details of all hydraulic lift equipment at the property, including elevators, in-ground hoists and loading docks.
			Where subsection 13 (4) applies to a phase one property, provide the documentation referred to in subsection 13 (4).
	(c) Written Description of Investigation		Provide a written description of the investigations carried out pursuant to sections 13 and 14 including,
			i. details of each of the investigations, and
			ii. any findings that are relevant to the existence of an area of potential environmental concern such as the presence on, in or under the phase one property of any of the things to be identified in section 13 or 14 which may be relevant to the existence of an area of potential environmental concern.
7. Review and Evaluation of Information.		(i) Current and Past Uses	Provide a table of current and past uses of the phase one property in a form approved by the Director.
			Provide a description of the current and past uses of the phase one property to its first developed use.
		(ii) Potentially Contaminating Activity	Provide a list and description of each potentially contaminating activity on, in or under the phase one property.
			Provide a list and description of each potentially contaminating activity in the phase one study area that may be contributing to an area of potential environmental concern.
		(iii)Areas of Potential Environmental Concern	Provide a table of areas of potential environmental concern in a form approved by the Director.

			Provide documentation and rationale for the conclusion referred to in clause 16 (3) (a) as to the existence of areas of potential environmental concern including,
			i. a discussion of the logic and reasoning used by the qualified person to evaluate the available information,
			ii. a summary and description of any areas of potential environmental concern determined to exist,
			iii. a summary, description and rationale for contaminants of potential concern identified with respect to each area of potential environmental concern determined to exist, and
			iv. a discussion and description of how any uncertainty or absence of information obtained in each of the components of the phase one environmental site assessment could affect the conclusion.
		(iv) Phase One Conceptual Site Model	Provide one or more figures of the phase one study area that,
			i. show any existing buildings and structures,
			ii. identify and locate water bodies located in whole or in part on the phase one study area,
			iii. identify and locate any areas of natural significance located in whole or in part on the phase one study area,
			iv. locate any drinking water wells at the phase one property,
			v. show roads, including names, within the phase one study area,
			vi. show uses of properties adjacent to the phase one property,
			vii. identify and locate areas where any potentially contaminating activity has occurred, and show tanks in such areas, and

			viii. identify and locate any areas of potential environmental concern.
			Provide a description and assessment of,
			i. any areas where potentially contaminating activity on or potentially affecting the phase one property has occurred,
			ii. any contaminants of potential concern,
			iii. the potential for underground utilities, if any present, to affect contaminant distribution and transport,
			iv. available regional or site specific geological and hydrogeological information, and
			v. how any uncertainty or absence of information obtained in each of the components of the phase one environmental site assessment could affect the validity of the model.
8. Conclusions		(i) Whether Phase Two Environmental Site Assessment Required Before Record of Site Condition Submitted	Provide documentation and rationale for the conclusion referred to in clause 16 (3) (d) as to whether a phase two environmental site assessment is required before a record of site condition may be submitted with respect to all or part of the phase one property including,
			i. a discussion of the logic and reasoning used by the qualified person to evaluate the available information, and
			ii. identification and reporting of data sources for the conclusion, with reference to the specific data and source used in reaching the conclusion.
		(ii) Record of Site Condition Based on Phase One Environmenta	Provide a rationale, where a record of site condition is to be filed based on the phase one environmental site assessment, for why the phase one property is suitable for any of the

		l Site Assessment Alone	types of property use listed in subsection 1 (2) of the regulation.
		(iii)Signatures	Provide original signatures of the qualified person who conducted or supervised the phase one environmental site assessment.
			Provide a statement by the qualified person confirming the carrying out of the phase one environmental site assessment and the findings and conclusions of the report.
9. References			The phase one environmental site assessment report shall include a list of all documents or data cited in the report.
10. Appendices			Provide a current plan of survey of the phase one property that has been prepared, signed and sealed by a surveyor or, where the phase one property consists of land that is administered by the Ministry of Natural Resources under the *Public Lands Act*, a description of the phase one property approved by the Surveyor General.
			Provide a topographic map (Ontario Base Map series) that includes the phase one study area.

TABLE 2
POTENTIALLY CONTAMINATING ACTIVITIES

Item	Column A
	Potentially Contaminating Activity
1.	Acid and Alkali Manufacturing, Processing and Bulk Storage
2.	Adhesives and Resins Manufacturing, Processing and Bulk Storage
3.	Airstrips and Hangars Operation
4.	Antifreeze and De-icing Manufacturing and Bulk Storage
5.	Asphalt and Bitumen Manufacturing
6.	Battery Manufacturing, Recycling and Bulk Storage
7.	Boat Manufacturing
8.	Chemical Manufacturing, Processing and Bulk Storage

9.	Coal Gasification
10.	Commercial Autobody Shops
11.	Commercial Trucking and Container Terminals
12.	Concrete, Cement and Lime Manufacturing
13.	Cosmetics Manufacturing, Processing and Bulk Storage
14.	Crude Oil Refining, Processing and Bulk Storage
15.	Discharge of Brine related to oil and gas production
16.	Drum and Barrel and Tank Reconditioning and Recycling
17.	Dye Manufacturing, Processing and Bulk Storage
18.	Electricity Generation, Transformation and Power Stations
19.	Electronic and Computer Equipment Manufacturing
20.	Explosives and Ammunition Manufacturing, Production and Bulk Storage
21.	Explosives and Firing Range
22.	Fertilizer Manufacturing, Processing and Bulk Storage
23.	Fire Retardant Manufacturing, Processing and Bulk Storage
24.	Fire Training
25.	Flocculants Manufacturing, Processing and Bulk Storage
26.	Foam and Expanded Foam Manufacturing and Processing
27.	Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles
28.	Gasoline and Associated Products Storage in Fixed Tanks
29.	Glass Manufacturing
30.	Importation of Fill Material of Unknown Quality
31.	Ink Manufacturing, Processing and Bulk Storage
32.	Iron and Steel Manufacturing and Processing
33.	Metal Treatment, Coating, Plating and Finishing

34.	Metal Fabrication
35.	Mining, Smelting and Refining; Ore Processing; Tailings Storage
36.	Oil Production
37.	Operation of Dry Cleaning Equipment (where chemicals are used)
38.	Ordnance Use
39.	Paints Manufacturing, Processing and Bulk Storage
40.	Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications
41.	Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage
42.	Pharmaceutical Manufacturing and Processing
43.	Plastics (including Fibreglass) Manufacturing and Processing
44.	Port Activities, including Operation and Maintenance of Wharves and Docks
45.	Pulp, Paper and Paperboard Manufacturing and Processing
46.	Rail Yards, Tracks and Spurs
47.	Rubber Manufacturing and Processing
48.	Salt Manufacturing, Processing and Bulk Storage
49.	Salvage Yard, including automobile wrecking
50.	Soap and Detergent Manufacturing, Processing and Bulk Storage
51.	Solvent Manufacturing, Processing and Bulk Storage
52.	Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems
53.	Tannery
54.	Textile Manufacturing and Processing
55.	Transformer Manufacturing, Processing and Use
56.	Treatment of Sewage equal to or greater than 10,000 litres per day
57.	Vehicles and Associated Parts Manufacturing
58.	Waste Disposal and Waste

	Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners
59.	Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products

O. Reg. 511/09, s. 31; O. Reg. 245/10, s. 5 (1, 2); O. Reg. 179/11, s. 7; O. Reg. 269/11, s. 2.

SCHEDULE E
PHASE TWO ENVIRONMENTAL SITE ASSESSMENTS

PART I
APPLICATION

Application and definitions

1. (1) The requirements in this Schedule apply to phase two environmental site assessments.

(2) Each section in this Schedule is deemed to be a requirement, whether it is described as such or not.

(3) In this Schedule,

"in situ" means in place;

"site investigation" means a site investigation that includes both a field investigation and a non-field investigation;

"soil type" means soil texture class as determined pursuant to Figure 3.16 and Chapter 3 of the Soil Survey Manual, United States Department of Agriculture, Natural Resources Conservation Service, published at its website.

PART II
PLANNING SITE INVESTIGATION

Planning site investigation, specific objectives

2. The following are the specific objectives of the planning of the site investigation component of a phase two environmental site assessment:

1. To plan an investigation that will achieve the general objectives of a phase two environmental site assessment,
   i. through the use of an appropriate and complete information base concerning the phase two property, and
   ii. through the conduct of an investigation based both on information obtained before the phase two environmental site assessment begins and on the incorporation of information obtained during the phase two environmental site assessment.
2. To develop a sampling and analysis plan that will adequately assess all areas of the phase two property where contaminants may be present in land or water on, in or under the property.
3. To develop a quality assurance program that is designed to effectively limit errors and bias in sampling and analysis through implementation of assessment and control measures that will ensure data are useful, appropriate and accurate in the determination of whether the phase two property, or any RSC property within it, meets applicable site condition standards and any standards specified in a risk assessment.

Planning site investigation, specific requirements

3. (1) The qualified person shall ensure the following requirements are met in planning a site investigation:

1. The phase one conceptual site model for the phase one environmental site assessment report shall be used in conjunction with other information in determining,
   i. media for investigation,
   ii. locations and depths for sampling, and
   iii. parameters for laboratory analysis.
2. Information obtained after the completion of the phase one environmental site assessment shall be used to modify the investigation, as appropriate.

(2) The qualified person shall ensure that there is a sampling and analysis plan that includes a quality assurance and quality control program, data quality objectives, standard operating procedures and a description of any physical impediments that interfere with or limit the ability to conduct sampling and analysis.

(3) The quality assurance and quality control program shall include the following requirements:

1. All non-dedicated sampling and monitoring equipment must be cleaned following each use.
2. Where ground water samples are to be analyzed for volatile organic compounds, one trip blank sample shall be submitted for laboratory analysis with each laboratory submission.
3. Specification of the minimum requirements for the number, type and frequency of field quality control measures including,
   i. trip blanks,
   ii. field duplicates, and
   iii. calibration checks on field instruments.
4. Sufficient field duplicate samples shall be collected in each medium being sampled, so that at least one field duplicate sample can be submitted for laboratory analysis for every ten samples submitted for laboratory analysis.
5. At least one field duplicate sample shall be submitted for laboratory analysis for every ten samples submitted for laboratory analysis.

(4) The data quality objectives for all types of field data collected during the phase two environmental site assessment field investigation that set the level of uncertainty in environmental data shall be such that,

(a) the decision-making is not affected; and

(b) the overall objectives of the investigation are met.

(5) Standard operating procedures shall be developed for all of the following field investigation methods used in the field investigation,

(a) borehole drilling;

(b) excavating;

(c) soil sampling;

(d) field screening measurements, including calibration procedures;

(e) monitoring well installation;

(f) monitoring well development;

(g) field measurement of water quality indicators, including calibration procedures;

(h) sediment sampling; and

(i) ground water sampling.

(6) The sampling and analysis plan shall include identification of and rationale and procedures for,

(a) the choice of sampling system, such as a judgmental, random or grid sampling system;

(b) the sampling media;

(c) the number of samples;

(d) sampling frequency;

(e) sampling points;

(f) sampling depth intervals, including the screened intervals of the monitoring wells;

(g) other field information to be obtained, including water levels, field measurements and elevation surveying; and

(h) samples to be submitted for laboratory analysis.

(7) The sampling and analysis plan shall meet the following criteria:

1. The qualified person shall consider,
   i. findings as to potentially contaminating activity,
   ii. all contaminants of potential concern or appropriate subsets of such contaminants, and
   iii. any other information and matters relating to the environmental condition of the property which are relevant to an informed professional judgment.
2. After considering the matters referred to in paragraph 1, the qualified person shall determine,
   i. sampling and analysis for all contaminants of potential concern, or appropriate subsets of such contaminants, and
   ii. appropriate sampling and analysis for any other relevant contaminants.

Soil vapour investigations

4. (1) Where a site investigation is to include a soil vapour investigation, the requirements of this Part apply, with necessary modifications.

(2) Without limiting the generality of subsection (1),

(a) when soil vapour samples are to be analyzed for volatile contaminants, including volatile organic compounds, one trip blank sample shall be submitted for laboratory analysis with each laboratory submission;

(b) sufficient field duplicate samples of soil vapour shall be collected so that at least one field duplicate sample can be submitted for laboratory analysis for every ten samples submitted for laboratory analysis;

(c) at least one field duplicate sample of soil vapour shall be submitted for laboratory analysis for every ten samples submitted for laboratory analysis; and

(d) in addition to the standard operating procedures referred to in subsection 3 (5), standard operating procedures shall be developed for soil vapour probe installation and soil vapour probe development, performance, leak testing and purging and sampling.

PART III
CONDUCTING THE SITE INVESTIGATION

GENERAL

Site investigation, specific objectives

5. The following are the specific objectives of the site investigation component of a phase two environmental site assessment:

1. To determine what applicable site condition standards apply to the phase two property.
2. To confirm whether contaminants are present on, in or under the phase two property, and, if so, what the contaminants are, where they are located on, in or under the phase two property and at what concentrations.
3. To determine whether any contaminants on, in or under the phase two property are present at concentrations higher than applicable site condition standards by,
   i. investigating and characterizing soil, ground water and sediment on, in or under the phase two property, and
   ii. taking measures to further investigate and characterize the soil, ground water and sediment following any actions taken to reduce the concentration of contaminants on, in or under the phase two property.
4. To determine whether any contaminants on, in or under the phase two property are present at concentrations higher than the standards specified in the risk assessment for the contaminants, where a risk assessment has been accepted with respect to contaminants on, in or under the phase two property, by,
   i. investigating and characterizing soil, ground water and sediment on, in or under the phase two property, and
   ii. taking measures to further investigate and characterize the soil, ground water and sediment following any actions taken to reduce the concentration of contaminants on, in or under the phase two property.

Sampling and analysis of ground water

6. (1) The qualified person shall ensure that the site investigation includes investigation, sampling and analysis of ground water on, in or under the phase two property where it is required or advisable to do so to achieve any of the objectives of,

(a) a phase two environmental site assessment or its components; or

(b) any of the other provisions of the regulation, this Schedule or any other Schedule to the regulation.

(2) The qualified person shall ensure that the site investigation includes investigation, sampling and analysis of ground water on, in or under the phase two property where the phase two property is an enhanced investigation property.

(3) The qualified person shall ensure that the site investigation includes investigation, sampling and analysis of ground water on, in or under the phase two property where there is no soil on, in or under the property and either,

(a) an investigation, sampling and analysis of soil on, in or under the property already undertaken,

(i) is not, or cannot be used as part of the phase two environmental site assessment, or

(ii) does not meet the requirements and objectives of a phase two environmental site assessment with respect to soil; or

(b) no investigation, sampling and analysis of soil on, in or under the property has been undertaken.

(4) For the purposes of clause (3) (a), there is no soil on, in or under the property when the soil present is not sufficient to investigate, sample and analyze in a manner which will meet the requirements and objectives of a phase two environmental site assessment.

DELINEATION, GENERAL

Site investigation, delineation

7. (1) The qualified person shall ensure that all areas on, in or under the phase two property where a contaminant is present at a concentration greater than the applicable site condition standard for the contaminant shall be delineated laterally and vertically for each contaminant present in soil, ground water or sediment on, in or under the phase two property.

(2) The qualified person shall ensure that all areas on, in or under the phase two property where a contaminant is present at a concentration greater than the standard specified in the risk assessment for the contaminant shall be delineated laterally and vertically for each contaminant present in soil, ground water or sediment on, in or under the phase two property for which a standard has been specified in a risk assessment that has been accepted by the Director.

(3) The qualified person shall ensure the lateral and vertical delineations referred to in subsections (1) and (2) are undertaken, as appropriate in the circumstances,

(a) during the investigation and characterization of contaminants on, in or under the phase two property; or

(b) following any actions taken to reduce the concentration of contaminants on, in or under the phase two property.

(4) The qualified person shall ensure that during the delineations referred to in subsections (1) and (2),

(a) samples of each medium being investigated are collected from depths and locations on, in or under the phase two property and analyzed for contaminants, until it is determined that samples have been collected from the areas of highest concentration of contaminants on, in or under the phase two property;

(b) areas of highest concentration of each contaminant in each medium being investigated on, in or under the phase two property are identified and located; and

(c) the delineation is conducted by assuming the lateral and vertical extent of the area in which a contaminant is present at a concentration greater than the applicable site condition standard for that contaminant extends laterally or vertically, as the case may be, from a sampling location at which the contaminant is present at a concentration greater than the applicable site condition standard for the contaminant to the next sampling location at which the concentration of the contaminant is equal to or below the applicable site condition standard for the contaminant.

(5) The qualified person shall ensure that the depth and thickness of sediments on, in or under the phase two property where a contaminant is present at concentrations greater than the applicable site condition standard or standard specified in a risk assessment, as the case may be, is determined for the contaminant while the presence of contaminants in sediment is being considered during the delineations referred to in subsections (1) and (2).

FIELD INVESTIGATION EQUIPMENT, METHODS AND REQUIREMENTS

Ground water sampling methods, general requirements

8. For a ground water sampling method to be used to characterize contamination or determine if the concentration of a contaminant is above, at or below an applicable site condition standard or standard specified in a risk assessment for the contaminant, the following requirements shall be met:

1. Sampling depth intervals, including the screened intervals of monitoring wells shall be positioned,
   i. within the geologic formation in which a contaminant may be present,
   ii. so as to isolate the zones where contaminants may be present, and
   iii. so as to delineate both dissolved and separate phase contaminants.
2. Where petroleum hydrocarbons or light non-aqueous phase liquids may be present on, in or under the phase two property, sampling depth intervals, including screened intervals of monitoring wells, shall be positioned to intersect the water table.
3. Where a monitoring well is being used, monitoring well screens shall not exceed 3.1 metres in length, based on the saturated length of the screen.
4. REVOKED: O. Reg. 179/11, s. 8 (3).

Requirements where sampling re meeting standards

9. (1) Where sampling of ground water is being undertaken to demonstrate if the applicable site condition standard for a contaminant has been met or not, the following requirements shall be followed:

1. Samples shall be collected from a monitoring well or equivalent professionally acceptable ground water collection method, and not from a test pit, excavation, borehole, undeveloped monitoring well, or any other similar source.
2. A monitoring well from which a sample is to be collected shall have been developed to remove any fluids that may have been introduced into the well during drilling and to remove particulates that may have become entrained in the well and filter pack.
3. A monitoring well from which a sample is to be collected shall have been appropriately purged immediately prior to sampling.
4. Precautions shall be taken to minimize the potential for cross-contamination or contamination through preferential pathways.

(2) The qualified person shall ensure that the well development and purging referred to in paragraphs 2 and 3 of subsection (1) shall be documented by,

(a) recording,
   (i) the date of the development or purging,
   (ii) the time the development or purging started and stopped, and
   (iii) the volume of fluid removed from the well during development or purging;
(b) recording a rationale for concluding the development or purging was complete; and
(c) recording a description of the measures taken to minimize cross contamination between wells when using non-dedicated equipment.

Limitation on use of measurements taken by field screening equipment

10. Measurements taken by field screening equipment shall not be used to demonstrate that the applicable site condition standard or standard specified in a risk assessment for a contaminant have been met on, in or under the phase two property.

Following standard operating procedures

11. (1) The standard operating procedures referred to in subsection 3 (5) shall be followed during the field investigation.

(2) A qualified person or person supervised by a qualified person may deviate from standard operating procedures as appropriate, but the qualified person shall ensure that there is a professional rationale for any deviation.

(3) The qualified person shall ensure that the standard operating procedures and any deviations from them, with a rationale for any deviation, used during the phase two environmental site assessment field investigation are documented in a manner that is sufficient to allow a third party to review the adequacy of the methods used.

Identification and investigation of aquifers and aquitards

12. The qualified person shall ensure that all aquifers and aquitards on, in or under a phase two property which are relevant for determining the location and concentration of contaminants are identified and investigated.

SAMPLING LOCATION AND SAMPLING POINT REQUIREMENTS

Sampling points, soil and ground water

13. The qualified person shall ensure the following is taken into account when sampling points are being determined for soil and ground water during the field investigation:

1. The sampling and analysis plan.
2. Any new information about areas of potential environmental concern, contaminants and geologic and hydrogeologic conditions identified during the investigation up to the time of sampling.
3. The phase one conceptual site model from the phase one environmental site assessment.
4. The objectives and requirements of the site investigation.

Sampling points, sediment

14. The qualified person shall ensure, in addition to the matters outlined in section 13, that the following is taken into account when sampling points for sediment are being determined during the course of the field investigation:

1. The size of the sampling area.
2. The location of depositional areas.
3. New information about areas of potential environmental concern, contaminants and geologic and hydrologeological conditions identified during the field investigation.

Sampling locations, sediment

15. (1) The qualified person shall ensure that sediment samples are collected for all contaminants expected to be present on, in or under the phase two property and from locations on, in or under the phase two property that are most likely to have the contaminants present at concentrations above the applicable site condition standards.

(2) The sampling done under subsection (1) shall be based on the applicable criteria set out in section 14.

Sampling requirements where contaminant present above applicable standards

16. If at any time during the phase two field investigation a ground water sample is collected and analyzed for a contaminant and the analysis shows the contaminant is present at a concentration greater than the applicable site condition standard for the contaminant, the qualified person shall ensure that,

(a) ground water samples are collected cross-gradient and down-gradient from the sampling point from which the ground water sample showing the concentration was collected;

(b) the sample collected from each of the additional cross-gradient and down-gradient sampling points are submitted for laboratory analysis; and

(c) the samples are analyzed for each contaminant that was shown to be present at a concentration greater than the applicable site condition standard for the contaminant, and for any other associated or related contaminants.

COLLECTING, HANDLING AND ANALYZING SAMPLES

Soil samples, requirements

17. The qualified person shall ensure that the following requirements concerning soil sampling are met:

1. Soil samples for characterization or delineation shall be collected from undisturbed soils on, in or under the phase two property and not from soil which has been excavated, unless delineation is being undertaken after completion of actions to reduce the concentration of contaminants in which case soil samples shall be collected both from undisturbed soils on, in or under the phase two property and from stockpiles of soil which is intended to remain on the property permanently.
2. Soil samples shall be collected using professionally acceptable soil collection methods.
3. Precautions shall be taken to minimize the potential for cross-contamination or contamination through preferential pathways.
4. Grain size analysis shall be undertaken by a laboratory whenever a standard for fine-medium textured soil is to be applied.

Soil sampling and analysis

18. The qualified person shall ensure that the number of samples of soil collected and analyzed is sufficient to determine the subsurface stratigraphy at or under the phase two property and the location of contaminants in soil, on, in or under the phase two property.

Sediment samples

19. The qualified person shall ensure that for sediment samples a record is made of the depth at which each sample was collected and of the depth interval each sample is intended to represent.

Contaminant not listed

20. Where a contaminant is identified on, in or under the phase two property during the site investigation and the contaminant is one for which there is no standard listed in the Soil, Ground Water and Sediment Standards, samples of the contaminant shall be collected and analyzed if the contaminant is a contaminant of concern.

SELECTING SAMPLES FOR ANALYSIS

Selecting soil samples for analysis

21. The qualified person shall ensure the following are considered when soil samples to be analyzed are being selected in order to ensure the samples analyzed are representative of the maximum concentration of a contaminant in each area of the phase two property to be investigated:

1. Any evidence of the presence of a contaminant.
2. The maximum concentrations of a contaminant,
   i. measured using field screening equipment, and
   ii. any other field screening means which may be necessary to ensure the analysis includes such maximum concentrations.

MEASURING GROUND WATER LEVELS AND DETERMINING GROUND WATER FLOW DIRECTION

Variation in ground water level

22. (1) The qualified person shall ensure that measuring ground water levels and determining ground water flow direction is undertaken during the site investigation and that this includes consideration of,

(a) temporal ground water level variations on, in or under the phase two property; and

(b) whether and how such variations may affect the distribution and concentration of contaminants in the ground water.

(2) The measurement and determination referred to in subsection (1) shall be carried out at the times and places needed, but shall be included whenever ground water sampling is undertaken.

Ground water flow directions

23. (1) When ground water flow directions are being determined pursuant to section 22, the qualified person shall ensure this is done through an assessment that includes,

(a) measuring water levels to interpret ground water flow directions in any aquifer that is on, in or under a phase two property and in which a contaminant may be present at a concentration above the applicable site condition standard for the contaminant;

(b) using water level measurements that are representative of static and actual conditions;

(c) taking into account all water level measurements made when ground water samples have been collected;

(d) determining the direction of interpreted ground water flow in each aquifer investigated;

(e) assessing the potential for temporal variability in ground water flow direction;

(f) determining a reference elevation for each monitoring well reported to the nearest centimetre relative to a geodetic or permanent and recoverable benchmark;

(g) measuring water levels in a monitoring well at least 24 hours after the development of the well;

(h) determining the ground water elevation of each aquifer in which water level measurements were taken;

(i) installing a minimum of three monitoring wells, not placed in a straight line, in each aquifer to be investigated, at locations and in a manner appropriate to interpret horizontal flow directions;

(j) determining horizontal hydraulic gradients for each aquifer; and

(k) taking water level measurements whenever ground water samples are collected from a monitoring well, and at such other times as may be necessary to determine ground water flow direction and temporal ground water level variations.

(2) The qualified person shall ensure that the following measures are undertaken where a phase two property is one at which petroleum hydrocarbons, light non-aqueous phase liquids, volatile contaminants, including volatile organic compounds, or dense non-aqueous phase liquids may be present on, in or under the property:

1. Testing each monitoring well with an interface probe to determine if light or dense non-aqueous phase liquids are present in the well.
2. Where light or dense non-aqueous liquids are present, measuring the thickness of such free product and including the measurement in determining water levels and measuring and interpreting ground water flow directions.

DOCUMENTING THE FIELD INVESTIGATION

Finalized field logs, soil

24. (1) The qualified person shall ensure that field logs are recorded and finalized for all intrusive investigation points and test holes in the field investigation to document the soil conditions on, in or under the phase two property.

(2) A finalized field log shall include,

(a) a unique identification number;

(b) the date;

(c) a description of type and condition of geologic material encountered;

(d) a description of type and condition of other material encountered;

(e) the soil colour;

(f) the soil vapour measurement from field screening for volatile contaminants, including volatile organic compounds;

(g) the soil moisture content, using a qualitative description;

(h) the observations concerning the soil;

(i) the identification of soil samples sent for laboratory analysis;

(j) the soil sample depths;

(k) the soil sampling methods;

(l) evidence of free flowing product;

(m) the total depth drilled; and

(n) any drilling refusal.

Monitoring wells and test holes, finalized field logs

25. (1) The qualified person shall ensure that field logs are recorded and finalized for all monitoring wells and test holes constructed during the field investigation to document the ground water conditions on, in or under the phase two property.

(2) A finalized field log for a monitoring well shall include,

(a) the surveyed location and elevation of the well;

(b) the monitoring well identification number;

(c) the details of the well construction, including screened interval, sand pack, seal location and thickness, well diameter and screen slot size;

(d) the date;

(e) the total depth drilled; and

(f) any drilling refusal.

Sediment sampling, finalized field logs

26. (1) The qualified person shall ensure that field logs are recorded and finalized for all sediment sampling during the field investigation to document the presence of contaminants on, in or under the phase two property that may be present at concentrations above the applicable site condition standards.

(2) A finalized field log for sediment shall include,

(a) a unique sample identification number;

(b) the date;

(c) the sediment type, for example gravel, sand, silt, clay or organic, or types, if different sediment types appear at different depths;

(d) the sediment colour or colours, if different sediment colours appear at different depths;

(e) the mixing layer depth;

(f) a description of bottom dynamics where samples are collected;

(g) the sediment moisture content, using a qualitative description;

(h) any significant observations concerning the sediment;

(i) the identification of sediment samples sent for laboratory analysis;

(j) the sediment sample depths;

(k) the sediment sampling methods;

(l) evidence of free flowing product or strong chemical odour; and

(m) the presence or absence of aquatic biota in the sediment.

SOIL VAPOUR INVESTIGATION REQUIREMENTS

Soil vapour investigation requirements, general

27. (1) The qualified person shall ensure that the requirements that apply to an investigation of soil vapour that is being undertaken as part of a site investigation at a phase two property are met.

(2) The requirements of this Schedule apply, with necessary modifications and subject to sections 28 and 29 to the conduct of a soil vapour investigation at a phase two property.

Limitation on use of measurements taken by field screening equipment

28. Measurements taken by field screening equipment shall not be used to determine the soil vapour concentration of a contaminant on, in or under the phase two property.

Soil vapour probes, finalized field logs

29. (1) The qualified person shall ensure that field logs are recorded and finalized for all soil vapour probes constructed during the field investigation to document the subsurface conditions on, in or under the phase two property.

(2) In addition to the information entered into the field log with respect to soil samples under section 24, a finalized field log for a soil vapour probe shall include,

(a) the location and elevation of the well or probe;

(b) the identification number; and

(c) the details of the soil vapour probe construction, including screened interval, sand pack, seal location and thickness, soil vapour probe diameter and screen slot size.

SOIL EXCAVATED AT OR BROUGHT TO THE PHASE TWO PROPERTY

Specific objectives

30. The specific objective of the requirements concerning soil excavated at the phase two property for possible reuse there or that does not originate at the phase two property but is brought from another property to the phase two property to remain at the phase two property after the phase two environmental site assessment is to determine reliably whether,

(a) the applicable site condition standards or any standard specified in a risk assessment with respect to the property, for all contaminants in the soil have been met; and

(b) when the soil is used or reused at the phase two property, the property meets the applicable site condition standards or any standard specified in a risk assessment.

Requirements for soil to be brought to phase two property

31. Where soil is excavated at or brought from another property to a phase two property the provisions of this Schedule and sections 47 and 48 of the regulation applicable to the collection and recording of samples of soil and the methods of sampling, analysis of samples, and reporting of analytical results, including requirements for sampling and analysis in order to determine whether soil meets the applicable site condition standards for the contaminants in the soil or any standard for a contaminant specified in a risk assessment with respect to the phase two property, apply, with necessary modifications, in addition to the requirements of sections 32 to 36.

Requirements for soil to be brought to phase two property

32. The qualified person shall ensure that where soil that does not originate at the phase two property but is to be brought from another property to a phase two property and remain at the phase two property after the filing of a record of site condition, the following requirements are met:

1. Subject to paragraph 2, the concentration of each contaminant in the soil must be equal to or lesser than the standard that would be the applicable site condition standards for the contaminant assuming it was already in, on or under the phase two property.
2. Where there has been a risk assessment with respect to one or more contaminants in, on or under the phase two property that included a soil management plan and the risk assessment has been accepted by the Director, the concentration of a contaminant in the soil may be equal to or lesser than a standard specified in the risk assessment for the contaminant.
3. Samples shall be collected from the soil to be brought to the phase two property and shall be analyzed and the concentrations of contaminants known, before any soil is brought to the phase two property in order to determine what contaminants are in the soil, and whether the standards for each such contaminant referred to in paragraph 1, and any standard for a contaminant which may have been specified pursuant to paragraph 2 are met.
4. The samples collected and analyzed under paragraph 3 must be,
    i. representative samples collected for the purpose of determining the concentration of any contaminant in the soil to be brought to the phase two property and at locations and frequencies which will be adequate to allow the concentrations of any contaminants in the soil to be known,

ii. collected by or under the supervision of a qualified person by an individual qualified to take samples for such purpose following a plan determined by the qualified person to collect samples at locations and frequencies which will be adequate to allow the concentrations of any contaminants in the soil to be known, and

iii. collected for the purpose of determining if contaminants are present in the soil as a result of any potentially contaminating activity or other environmental condition,

A. at the property from which the soil originated while the soil was there,

B. at any property at which the soil has subsequently been stored while the soil was being stored at that property, and

C. while the soil was being handled, stored or transported at any time before its final placement on, in or under the phase two property.

Analysis of soil to be brought to the phase two property

33. The samples referred to in section 32 shall be analyzed for contaminants that may reasonably be expected to be present in the soil, having regard to,

(a) the property from which the soil was taken before being brought to the phase two property;

(b) the handling of the soil, including its storage and transport, following its original excavation; and

(c) any other relevant factors, including potentially contaminating activity.

Sampling of soil to be brought to the phase two property

34. (1) Samples of the soil referred to in section 32 shall be collected and selected for analysis so as to obtain representative results that locate any areas in the soil being sampled where a contaminant may be present at concentrations greater than the applicable site condition standard for the contaminant.

(2) At least one soil sample shall be analyzed for each 160 cubic metres of soil for the first 5,000 cubic metres to be assessed at each source from which soil is being brought to the phase two property, following which at least one sample for each additional 300 cubic metres of soil which is to remain on, in or under the phase two property shall be analyzed.

Segregation of soil excavated from or under the phase two property

35. (1) The qualified person shall ensure that soil excavated from or under the phase two property during the phase two field investigation or in the course of remediation, and not removed from the phase two property as part of the excavating but placed in stockpiles for possible reuse on, in or under the phase two property, shall be segregated in separate stockpiles on or above the phase two property according to contaminant and concentration of contaminant.

(2) Decisions on how to segregate excavated soil referred to in subsection (1) shall be based on the results of any one or more of,

(a) in situ characterization;

(b) field screening;

(c) sample collection and analysis; and

(d) indications of contamination.

Sampling and analysis of soil in stockpiles

36. The qualified person shall ensure that where excavated soil referred to in subsection 35 (1) is intended for reuse on, in or under the property, the soil shall be sampled and analyzed as follows, before it is reused:

1. Samples of the excavated soil from each stockpile to be reused shall be collected and analyzed so as to characterize the contaminants present in the excavated soil.
2. Samples must be selected for analysis and contaminants chosen for analysis on the basis of all available information, including the phase one environmental site assessment and subsequently obtained information and must include analysis for any contaminants which may have been introduced to, brought onto, released to or created in land and water on, in or under the phase two property during actions taken to reduce the concentration of contaminants.
3. Sampling locations must be chosen so as to ensure uniformly distributed and representative sampling collection throughout the stockpile.
4. Samples must not be collected from the surface of a stockpile.
5. Samples of soil from stockpiles must be collected and analyzed by an accredited laboratory, at or above the applicable minimum frequencies set out in Table 2 of this Schedule.

ACTIONS TAKEN TO REDUCE THE CONCENTRATION OF CONTAMINANTS

Required precautionary measures during remediation

37. The qualified person shall ensure that the following precautionary measures are undertaken before and during remediation of the phase two property:

1. Before remediation is undertaken, the steps necessary to establish baseline and background conditions relevant to the proposed remediation method are taken to a degree that is adequate to detect any increases of contaminants on, in or under the phase two property following remediation, including contaminants created or introduced to the property during remediation.
2. Sampling of appropriate monitoring wells and analysis of ground water samples occurs for appropriate contaminants, including contaminants created or introduced to the property during remediation.

Free flowing product

38. The qualified person shall ensure that the volume of any free flowing product removed from ground water on, in or under the phase two property is monitored and recorded.

CONFIRMATION SAMPLING AND ANALYSIS

Objectives of confirmation sampling and analysis

39. The specific objectives of confirmation sampling and analysis are the following:

1. To confirm the effect and effectiveness, if any, of remediation undertaken to reduce the concentration of contaminants on, in or under the phase two property.
2. To provide a reliable basis for conclusions as to whether the applicable site condition standards or standards specified in a risk assessment have or have not been met for each contaminant.
3. To identify and demonstrate the location and concentration of contaminants on, in or under the phase two property following the completion of remediation undertaken to reduce the concentration of contaminants on, in or under the phase two property.

Requirements for confirmation sampling and analysis

40. The following requirements apply to confirmation sampling and analysis:

1. Confirmation sampling and analysis shall be undertaken during and following actions taken to reduce the concentration of contaminants on, in or under the phase two property.

2. The requirements of this Schedule and sections 47 and 48 of the regulation applicable to the collection and recording of samples of soil, ground water or sediment and the methods of sampling, analysis of samples and reporting of analytical results apply to confirmation samples.
3. When actions intended to reduce the concentration of contaminants on, in or under the phase two property are to be taken, the qualified person shall,
    i. design and implement a sampling and analysis program to collect samples and analyze them from all locations where remediation was undertaken,
    ii. ensure samples are collected and analyzed for each contaminant in any area and medium where the contaminant was present at a concentration greater than the applicable site condition standard or standard specified in a risk assessment for the contaminant before remediation, where the soil, ground water or sediment remains on, in or under the phase two property after remediation, and
    iii. ensure samples are collected and analyzed for each contaminant where soil, ground water or sediment has been returned to the phase two property after remediation at a location away from the phase two property.
4. The confirmation sampling and analysis program shall be designed and conducted so as to demonstrate whether the phase two property and any property under it meets or does not meet the applicable site condition standards or any standard specified in a risk assessment for all contaminants of concern.
5. Confirmation sampling shall be conducted at locations and depths which include those areas on, in or under the phase two property, where a contaminant was present, before remediation, at a concentration greater than the applicable site condition standard or any standard specified in a risk assessment for the contaminant and the maximum concentration of the contaminant in the area was located.
6. Samples taken from monitoring wells into which material was introduced into the monitoring well for purposes of remediation shall not be used to meet the objectives of confirmation sampling, including being used as evidence to demonstrate that the phase two property meets the applicable site condition standard or any standard specified in a risk assessment for a contaminant.
7. Where part of the soil on, in or under a phase two property has been excavated the qualified person shall ensure that,
    i. confirmation samples of soil are collected from each wall and floor of the excavation and analyzed in order to demonstrate that the limits of the excavation are appropriate and that the excavation has included all areas where a contaminant may be present at a concentration greater than the applicable site condition standard or any standard specified in a risk assessment, and
    ii. the number and location of samples at each excavation is equal to or greater than the minimum requirements set out in Table 3 of this Schedule or, where the floor area of the excavation is greater than 1,000 square metres, is adequate to meet the requirements of subparagraph i, is greater than the number and location requirements in Table 3 for a floor area of between 750 to 1,000 square metres, and follows the guidance in Note 1 to Table 3.
8. Where a contaminant is present in ground water on, in or under a phase two property at a concentration greater than the applicable site condition standard for the contaminant or any standard specified in a risk assessment for the contaminant which has been accepted under clause 168.5 (1) (a) of the Act, and actions have been taken on, in or under the phase two property to

reduce the concentration of the contaminant to meet the standard which applies to the contaminant in the circumstances, the qualified person shall ensure that,

i. confirmation sampling of ground water is conducted, in each area where the actions occurred or to which material was returned following remediation at a location away from the property as follows:

A. where the remediation is in situ remediation, until the results from analysis of samples collected from four consecutive quarterly sampling events, the first of which is conducted a minimum of 90 days after the last remedial action, are for all contaminants analyzed below the applicable site condition standards or, where applicable, any standards specified in a risk assessment, and

B. where the remediation is not remediation described in sub-subparagraph A but is excavation on, in or under the phase two property, until the results from analysis of samples collected from two consecutive quarterly sampling events, the first of which is conducted a minimum of 90 days after the last remedial action, are for all contaminants analyzed below the applicable site condition standards or, where applicable, any standards specified in a risk assessment, and

ii. the contaminants sampled and analyzed include all contaminants for which remediation was undertaken and any contaminants which may have been introduced to, created in or brought onto the land or water in, on or under the phase two property or released during remediation.

9. Where confirmation sampling is being undertaken pursuant to paragraph 8, the qualified person shall ensure that water level measurements are also taken in the monitoring wells from which the confirmation samples are being taken.

SITE ASSESSMENT REQUIREMENTS FOR RISK ASSESSMENT

Requirements for risk assessment

41. Where the owner of a phase two property wishes to submit a modified generic risk assessment, the qualified person shall ensure that in any case where in the risk assessment an assumed value for any assumption set out under an assumption category in Table 4 of this Schedule to be modified from the assumed value for the assumption used by the Ministry to develop the full depth generic site condition standards, an assessment is carried out which satisfies the minimum requirements and meets the objective set out in Table 4 with respect to that assumption category.

Requirements of this Schedule

42. The requirements of this Schedule that are relevant to an objective or minimum requirement in Table 4 of this Schedule which must be met pursuant to section 41 apply, with necessary modifications, to the minimum requirement.

PART IV
REVIEW AND EVALUATION OF INFORMATION

Review and evaluation of information

43. (1) The qualified person shall review, interpret and evaluate the information used in the planning of the site investigation and obtained from conducting the site investigation.

(2) Based on the review, interpretation and evaluation, the qualified person shall prepare a phase two conceptual site model of the phase two property that demonstrates the current condition of the phase two property or, where remedial actions have been undertaken, the condition of the phase two property before the remedial actions were undertaken.

(3) The format of the phase two conceptual site model shall consist of,

(a) diagrams, cross-sections and figures; and

(b) narrative, including explanation of the contents of the diagrams, cross-sections and figures and the logical bases for the interpretations and the scientific processes that account for the contaminant distribution.

(4) The phase two conceptual site model shall include a narrative description and assessment of,

(a) areas of potential environmental concern; and

(b) any subsurface structures and utilities on, in or under the phase two property that may affect contaminant distribution and transport.

(5) The phase two conceptual site model shall include a narrative description of, and, as appropriate, figures illustrating, the physical setting of the phase two property and any areas under it including,

(a) stratigraphy from ground surface to the deepest aquifer or aquitard investigated;

(b) hydrogeological characteristics, including aquifers, aquitards and, in each hydrostratigraphic unit where one or more contaminants are present at concentrations above the applicable site condition standards, lateral and vertical hydraulic gradients;

(c) approximate depth to bedrock;

(d) approximate depth to water table;

(e) any respect in which section 41 or 43.1 of the regulation applies to the property;

(f) areas where soil has been brought from another property and placed on, in or under the phase two property; and

(g) approximate locations, if known, of any proposed buildings and other structures.

(6) Where a contaminant is present on, in or under the phase two property at a concentration greater than the applicable site condition standard, the phase two conceptual site model shall identify,

(a) each area where a contaminant is present on, in or under the phase two property at a concentration greater than the applicable site condition standard;

(b) the contaminants associated with each of the areas referred in clause (a); and

(c) each medium in which a contaminant associated with an area referred to in clause (a) is present.

(7) Where a contaminant is present on, in or under the phase two property at a concentration greater than the applicable site condition standard, the phase two conceptual site model shall include a narrative description of,

(a) what is known about each of the areas referred to in clause (6) (a);

(b) the distribution, in each of the areas referred to in clause (6) (a), of each contaminant present in the area at a concentration greater than the applicable site condition standard, for each medium in which the contaminant is present, together with figures showing the distribution;

(c) anything known about the reason for the discharge into the natural environment of the contaminants present on, in or under the phase two property at a concentration greater than the applicable site condition standard;

(d) anything known about migration away from any area of potential environmental concern of the contaminants present on, in or under the phase two property at a concentration greater than the applicable site condition standard, including the identification of any preferential pathways;

(e) climatic or meteorological conditions that may have influenced distribution and migration of the contaminants, such as temporal fluctuations in ground water levels; and

(f) if applicable, information concerning soil vapour intrusion of the contaminants into buildings including,

(i) relevant construction features of a building, such as a basement or crawl space,

(ii) building heating, ventilating and air conditioning design and operation, and

(iii) subsurface utilities.

(8) Where contaminants on, in or under the phase two property are present at concentrations greater than the applicable site condition standard, the phase two conceptual site model shall include one or more cross-sections showing,

(a) the lateral and vertical distribution of a contaminant in each area where the contaminants is present at concentrations greater than the applicable site condition standard in soil, ground water and sediment;

(b) approximate depth to water table in each area referred to in clause (a);

(c) stratigraphy from ground surface to the deepest aquifer or aquitard investigated; and

(d) any subsurface structures and utilities that may affect contaminant distribution and transport in each area referred to in clause (a).

(9) For each areas where a contaminant is present on, in or under the property at a concentration greater than the applicable site condition standard for the contaminant, the phase two conceptual site model shall include a diagram identifying, with narrative explanatory notes,

(a) the release mechanisms;

(b) contaminant transport pathway;

(c) the human and ecological receptors located on, in or under the phase two property;

(d) receptor exposure points; and

(e) routes of exposure.

(10) During the course of the phase two environmental site assessment or any subsequent phase one or phase two environmental site assessment of the phase two property or other site assessment work with respect to the phase two property, the qualified person shall update the review, evaluation and interpretation as further information becomes available.

PART V
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT REPORT

Preparation of report

44. The qualified person shall ensure that a phase two environmental site assessment report which meets the requirements of this Part is prepared.

Phase two environmental site assessment report, specific objectives

45. The following are the specific objectives of a phase two environmental site assessment report:

1. To document the presence or absence of contaminants in the land or water on, in or under the phase two property.

2. To document the determination of the location of one or more contaminants in the land or water on, in or under the phase two property.

3. To provide a record of a phase two environmental site assessment of the phase two property that demonstrates, in a manner that is clear and can be assessed and reconstructed, how the phase two environmental site assessment of the property was carried out, and, in particular, to document and demonstrate,

   i. how the general and specific objectives of a phase two environmental site assessment, including each of its components, were achieved and how the minimum requirements for the objectives were met,

   ii. to document the basis for certifications in a record of site condition as to whether all or that part of the phase two property that may comprise the RSC property meets the applicable site condition standards or standards specified in a risk assessment for one or more contaminants, and

   iii. to document information needed to undertake a risk assessment of the phase two property with respect to one or more contaminants.

Phase two environmental site assessment report, general requirements

46. The phase two environmental site assessment report shall be based on the following:

1. Information obtained from planning and conducting the phase two environmental site assessment.
2. Interpretation and evaluation of the information from planning and conducting the phase two environmental site assessment.
3. Any additional information that the qualified person considers relevant.

Phase two environmental site assessment report, general requirements

47. (1) The phase two environmental site assessment report shall,

(a) be divided into the report sections as specified in Table 1 of this Schedule; and

(b) include the headings and sub-headings set out in Table 1.

(2) The phase two environmental site assessment report shall address the requirements set out in Table 1 of this Schedule.

(3) The qualified person may include report sections, headings and sub-headings in addition to those set out in Table 1 of this Schedule and other information in the phase two environmental site assessment report.

(4) The following sub-headings in Report Section 5 (Investigation Method) of Table 1 of this Schedule and the requirements associated with the sub-headings do not apply unless there has been sampling of ground water during the phase two environmental site assessment:

1. Ground Water: Monitoring Well Installation.
2. Ground Water: Field Measurement of Water Quality Parameters.
3. Ground Water: Sampling.

(4.1) Sub-Heading (iii) (Soil: Sampling) in Report Section 5 (Investigation Method) of Table 1 of this Schedule and the requirements associated with the sub-heading do not apply unless there has been sampling of soil during the phase two environmental site assessment.

(5) Sub-Heading (viii) (Sediment: Sampling) in Report Section 5 (Investigation Method) of Table 1 of this Schedule and the requirements associated with it do not apply unless there has been sampling of sediment during the phase two environmental site assessment.

(6) The following sub-headings in Report Section 6 (Review and Evaluation) of Table 1 of this Schedule and the requirements associated with the sub-headings do not apply unless there has been sampling of ground water during the phase two environmental site assessment:

1. Ground Water: Elevations and Flow Direction.
2. Ground Water: Hydraulic Gradients.
3. Ground Water: Quality.

(6.1) The following sub-headings in Report Section 6 (Review and Evaluation) of Table 1 of this Schedule and the requirements associated with the sub-headings do not apply unless there has been sampling of soil during the phase two environmental site assessment:

(iv) Fine-Medium Soil Texture.

(v) Soil: Field Screening.

(vi) Soil Quality.

(7) Sub-Heading (viii) (Sediment Quality) in Report Section 6 (Review and Evaluation) of Table 1 of this Schedule and the requirements associated with it do not apply unless there has been sampling of sediment during the phase two environmental site assessment.

(8) The requirements in Report Section 9 (Figures and Tables) of Table 1 of this Schedule which refer to monitoring wells, ground water, ground water elevations or analytical results of ground water sampling do not apply unless there has been sampling of ground water during the phase two environmental site assessment.

(9) The requirements in Report Section 9 (Figures and Tables) of Table 1 of this Schedule which refer to analytical results of sediment sampling do not apply unless there has been sampling of sediment during the phase two environmental site assessment.

(9.1) The requirements in Report Section 9 (Figures and Tables) of Table 1 of this Schedule which refer to soil data or analytical results of soil sampling do not apply unless there has been sampling of soil during the phase two environmental site assessment.

(10) The following requirements associated with Heading (c) (Soil Excavated at or Brought to the Phase Two Property) in Report Section 10 (Appendices) of Table 1 of this Schedule do not apply, unless the conditions in the paragraph are met:

1. Sub-Heading (i) (Soil Brought to the Phase Two Property) does not apply unless soil which did not originate at the phase two property has been brought from another property to the phase two property to remain there after the phase two environmental site assessment.
2. Sub-Heading (ii) (Segregation of Soil) does not apply unless soil has been excavated at the phase two property and placed in a stockpile for possible reuse at the phase two property.
3. Sub-Heading (iii) (Stockpiles) does not apply unless the soil in stockpiles is to be reused at the phase two property.

(11) Heading (b) (Remediation) in Report Section 10 (Appendices) of Table 1 of this Schedule and the requirements associated with it do not apply where no remediation has been conducted.

(12) The requirements under Heading (b) (Remediation) in Report Section 10 (Appendices) of Table 1 of this Schedule which refer to remediation of ground water do not apply unless there has been remediation of ground water during the phase two environmental site assessment.

(13) Heading (d) (Modified Generic Risk Assessment) in Report Section 10 (Appendices) of Table 1 of this Schedule and the requirements associated with it do not apply where the owner does not intend to submit such a risk assessment.

(14) The phase two environmental site assessment report must have the appendices, references and figures specified in Table 1 of this Schedule attached to the report.

(15) Figures, maps, site plans and cross-sections in the phase two environmental site assessment report shall contain a scale, north arrow and a title block that includes,

(a) a descriptive title;

(b) the address, if any, of the phase two property;

(c) the name of the qualified person's firm, company or partnership, if any; and

(d) the date the figure, map, site plan or cross-section was created.

TABLE 1
MANDATORY REQUIREMENTS FOR PHASE TWO ENVIRONMENTAL SITE ASSESSMENT REPORTS

Report Section	Heading	Sub-Heading	Minimum Requirements
1. Executive Summary			Provide a brief summary of the report.
2. Introduction		(i) Site Description	Provide the following,
			i. municipal address and property identifier number if any, of the phase two property, and
			ii. size and boundaries of the phase two property.
		(ii) Property Ownership	Provide the name and address and other contact information for the owner of the phase two property and the name, status and other contact information for any other person who has engaged the qualified person to conduct the phase two environmental site assessment.
		(iii) Current and Proposed Future Uses	Provide the identification of the current and proposed uses of the phase two property, and whether, if the proposed use is undertaken, section 168.3.1 of the Act would prohibit the new use unless a record of site condition is filed.
		(iv) Applicable Site Condition Standard	Provide identification of and rationale for the choice of the applicable site condition standard for the phase two property, based on consideration of matters relevant to the choice, including sections 35, 41 and 43.1 of the regulation, the

			current and proposed use of the property, soil texture of the property and proposed grading of the property following adoption of the proposed use.
3. Background Information		(i) Physical Setting	Provide a description of the general physical setting of the phase two property including,
			i. water bodies and areas of natural significance within the phase one study area, and
			ii. the topography and surface water drainage features on the phase two property.
		(ii) Past Investigations	Provide,
			i. a summary of any relevant past investigations of the phase two property, and
			ii. documentation of the steps taken to confirm that information or data which are to be used from previous investigations are of adequate quality such that it can be relied upon.
4. Scope of the Investigation		(i) Overview of Site Investigation	Provide an overview of the site investigation conducted with respect to the phase two property.
		(ii) Media Investigated	Provide,
			i. the rationale for whether to include in the field investigation sampling and analysis of each of ground water and sediment on, in or under the phase two property, and
			ii. an overview of the field investigation of each medium for which sampling and analysis were done.
		(iii) Phase One Conceptual Site Model	Provide a description of the phase one conceptual site model prepared as part of the phase one environmental site assessment report and of relevant subsequently acquired information.
		(iv) Deviations From Sampling	Provide a description of any deviations from the sampling and

		and Analysis Plan	analysis plan.
		(v) Impediments	Provide a description of any physical impediments and documentation of any denial of access.
5. Investigation Method		(i) General	Provide a brief description of all methods as specified in the following sections. Where the method differs from the associated standard operating procedure, provide a detailed description of the method used, and a rationale for the change in method.
		(ii) Drilling and Excavating	Provide for each borehole drilled or test pit excavated,
			i. the name of the contractor,
			ii. a description of the equipment used,
			iii. a description of the measures taken to minimize the potential for cross-contamination, and
			iv. the frequency of sample collection.
		(iii)Soil: Sampling	Provide,
			i. a description of all equipment used to collect soil samples, and
			ii. a geological description of soil and sediment cores and samples, based on the finalized field logs for each monitoring well, test hole or intrusive investigation point.
		(iv)Field Screening Measurements	Provide a description of any equipment used to perform field screening measurements including,
			i. make and model number,
			ii. chemicals the equipment can detect and associated detection limits,
			iii. precision of the measurements,
			iv. accuracy of the measurements,
			v. calibration reference standards such as span gas, and
			vi. procedures for checking calibration of the equipment.
			Provide a description of how field screening measurements were used to select samples for laboratory

			analysis, if applicable.
			Where a field screening method was different from what was proposed as a standard operating procedure in the sampling and analysis plan, provide a description of, and rationale for, the difference.
		(v) Ground Water: Monitoring Well Installation	For each monitoring well installed provide,
			i. the name of the contractor,
			ii. a description of the equipment used,
			iii. a description of the measures taken to minimize the potential for cross-contamination, and
			iv. the frequency of sample collection during drilling, if any.
			Provide a description of the methods used to develop monitoring wells.
		(vi) Ground Water: Field Measurement of Water Quality Parameters	Provide a description of the methods used to measure water quality parameters such as pH, specific conductance and temperature.
		(vii) Ground Water: Sampling	Provide a description of the methods used to conduct ground water samples.
		(viii) Sediment: Sampling	Provide a description of the methods used to collect sediment samples.
		(ix) Analytical Testing	Provide the names of all laboratories used for analysis of soil, sediment or ground water samples.
		(x) Residue Management Procedures	Provide detailed documentation of procedures used for the management of residues from the field investigation including,
			i. soil cuttings from drilling and excavations,
			ii. water from well development and purging, and
			iii. fluids from equipment cleaning.
		(xi) Elevation Surveying	Provide an accurate specification of the location of any benchmark used in surveying of elevations.
		(xii) Quality Assurance and	Provide,

		Quality Control Measures	
			i. a description of sample containers, preservation, labelling, handling and custody for samples submitted for laboratory analysis, including any deviations from the sampling and analysis plan,
			ii. a description of equipment cleaning procedures followed during all sampling,
			iii. a description of how the field quality control measures referred to in subsection 3 (3) were carried out, and
			iv. a description of, and rationale for, any deviations from the procedures set out in the quality assurance and quality control program set out in the sampling and analysis plan.
6. Review and Evaluation		(i) Geology	Provide a description and analysis of each aquifer and aquitard investigated pursuant to section 12 including,
			i. estimated thickness of each geologic unit,
			ii. elevations, relative to a geodetic benchmark or other permanent and recoverable benchmark, of the top and bottom of each geologic unit,
			iii. geological and other material in each geological unit,
			iv. the properties of each aquifer and aquitard, and
			v. the rationale for the choice of aquifers and aquitards investigated as it relates to identification of the location, presence, release, concentration, migration or retention of a contaminant.
		(ii) Ground Water: Elevations and Flow Direction	Provide,
			i. a discussion of, and rationale for,

			locations and screened intervals of monitoring wells used for interpretations of ground water flow direction,
			ii. results of any measurements taken using an interface probe during water level measurements, and
			iii. measurements of the thickness of any free flowing product present in monitoring wells.
			A description of the method used to calculate ground water elevation in the monitoring well,
			i. a description of the ground water elevations from all monitoring events in any aquifer investigated,
			ii. a description of the interpreted direction of ground water flow at the phase two property,
			iii. assessment of the potential for temporal variability in ground water flow direction, and
			iv. an evaluation and description of the potential interaction between any buried utilities in or under the phase two property and the water table.
		(iii)Ground Water: Hydraulic Gradients	Provide,
			i. a description of the horizontal hydraulic gradient for each aquifer investigated, including minimum, maximum and average horizontal hydraulic gradients, and
			ii. a description of vertical hydraulic gradients in aquifers where a contaminant is present at a concentration greater than the applicable site condition standard for the contaminant, including minimum, maximum and average vertical hydraulic gradients.
		(iv)Fine-Medium	Where fine-medium soil texture is to

		Soil Texture	be used in determining the applicable site condition standards provide,
			i. a rationale for the use of the fine-medium soil texture category,
			ii. a description of the results of the required grain size analysis, and
			iii. a description and rationale for the number of samples collected and analyzed.
		(v) Soil: Field Screening	Provide a discussion of soil field screening results.
		(vi) Soil Quality	Provide a discussion and analysis of the laboratory analytical results for all soil samples analyzed including,
			i. locations and depths of samples,
			ii. comparison of analytical results to applicable site conditions standards,
			iii. contaminants of concern,
			iv. contaminants related to chemical and biological transformations that have or may have occurred,
			v. whether the results indicate soil serves as a source of contaminant mass contributing to ground water or sediment, and
			vi. whether the results indicate the presence of light or dense non-aqueous phase liquids
		(vii) Ground Water Quality	Provide a discussion and analysis of the laboratory analytical results for all ground water samples analyzed including,
			i. locations and sample depth interval of samples,
			ii. documentation of any field filtering,
			iii. comparison of analytical results to applicable site conditions standards,
			iv. contaminants of concern,
			v. contaminants related to chemical and biological transformations that have or may have occurred,
			vi. whether the results indicate soil serves as a source of contaminant mass contributing to

			ground water or sediment, and
			vii. whether the results indicate the presence of light or dense non-aqueous phase liquids.
		(viii) Sediment Quality	Provide a discussion and analysis of the laboratory analytical results for any sediment samples analyzed including,
			i. locations and depths of samples,
			ii. comparison of analytical results to applicable site conditions standards,
			iii. contaminants of concern,
			iv. contaminants related to chemical and biological transformations that have or may have occurred, and
			v. whether the results indicate the presence of light or dense non-aqueous phase liquids.
		(ix) Quality Assurance and Quality Control Results	Provide,
			i. a description of the types of quality control samples collected and results of any other quality assurance and quality control measures taken during the field investigation, including the types of quality control sample, the media sampled, and the importance of the results with respect to ensuring the data are useful, appropriate and accurate in the determination of whether the phase two property, or any RSC property within it, meets the applicable site condition standards and any standards specified in a risk assessment,
			ii. a description of each instance where a sample was not handled in accordance with the Analytical Protocol with respect to,
			A. holding time,
			B. preservation method

			C. storage requirement; or
			D. container type,
			iii. a statement, with respect to subsection 47 (3) of the regulation that,
			A. all certificates of analysis or analytical reports received pursuant to clause 47 (2) (b) of the regulation comply with subsection 47(3),
			B. a certificate of analysis or analytical report has been received for each sample submitted for analysis, and
			C. all certificates of analysis or analytical reports received have been included in full in an appendix to the phase two environmental site assessment report,
			iv. a description of each instance where a laboratory qualified any results or made remarks in a certificate of analysis or analytical report about a sample, including, a discussion of the validity of any results qualified, and
			v. a discussion of the overall quality of the field data from the investigation with respect to the data quality objectives, to demonstrate that,
			A. decision-making was not affected, and
			B. the overall objectives of the investigation and the assessment were met.
		(x) Phase Two Conceptual Site Model	Provide,
			i. a description and assessment of,
			A. areas where potentially contaminating activity has occurred,
			B. areas of potential environmental concern, and
			C. any subsurface structures and

			utilities on, in or under the phase two property that may affect contaminant distribution and transport,
			ii. a description of and, as appropriate, figures illustrating, the physical setting of the phase two property and any areas under it including,
			A. stratigraphy from ground surface to the deepest aquifer or aquitard investigated,
			B. hydrogeological characteristics, including aquifers, aquitards and, in each hydrostratigraphic unit where one or more contaminants is present at concentrations above the applicable site condition standards, lateral and vertical gradients,
			C. approximate depth to bedrock,
			D. approximate depth to water table,
			E. any respect in which section 41 or 43.1 of the regulation applies to the property,
			F. areas where soil has been brought from another property and placed on, in or under the phase two property, and
			G. approximate locations, if known, of any proposed buildings and other structures,
			iii. where a contaminant is present on, in or under the phase two property at a concentration greater than the applicable site condition standard, identification of,
			A. each area where a contaminant is present on, in or under the phase two property at a concentration greater than the applicable site condition standard,
			B. the contaminants associated

			with each of the areas referred to in subparagraph A,
			C. each medium in which a contaminant associated with an area referred to in subparagraph is present,
			D. a description and assessment of What is known about each of the areas referred to in subparagraph A,
			E. the distribution, in each of the areas referred to in subparagraph A, of each contaminant present in the area at a concentration greater than the applicable site condition standard, for each medium in which the contaminant is present, together with figures showing the distribution,
			F. anything known about the reason for the discharge of the contaminants present on, in or under the phase two property at a concentration greater than the applicable site condition standard into the natural environment,
			G. anything known about migration of the contaminants present on, in or under the phase two property at a concentration greater than the applicable site condition standard away from any area of potential environmental concern, including the identification of any preferential pathways,
			H. climatic or meteorological conditions that may have influenced distribution and migration of the contaminants, such as temporal fluctuations in ground water levels, and
			I. if applicable, information concerning soil vapour intrusion of the contaminants

			into buildings including,
			1. relevant construction features of a building, such as a basement or crawl space,
			2. building heating, ventilating and air conditioning design and operation, and
			3. subsurface utilities,
			iv. where contaminants on, in or under the phase two property are present at concentrations greater than the applicable site condition standard, one or more cross-sections showing,
			A. the lateral and vertical distribution of a contaminant in each area where the contaminants is present at concentrations greater than the applicable site condition standard in soil, ground water and sediment,
			B. approximate depth to water table in each area referred to in subparagraph A,
			C. stratigraphy from ground surface to the deepest aquifer or aquitard investigated, and
			D. any subsurface structures and utilities that may affect contaminant distribution and transport in each area referred to in subparagraph A, and
			v. for each areas where a contaminant is present on, in or under the property at a concentration greater than the applicable site condition standard for the contaminant, a diagram identifying, with narrative explanatory notes,
			A. the release mechanisms,
			B. contaminant transport pathway,
			C. the human and ecological receptors located on, in or under the phase two property,

			D. receptor exposure points, and
			E. routes of exposure.
7. Conclusions			Provide a summary of the information about the following:
			i. the location and concentration of contaminants in the land or water on, in or under the phase two property,
			ii. environmental conditions in the land or water on, in or under the phase two property where it is necessary to undertake a risk assessment with respect to one or more contaminants of concern, and
			iii. whether applicable site condition standards and standards specified in a risk assessment for contaminants on, in or under the phase two property were met as of the certification date.
		(i) Signatures	Provide,
			i. original signatures of the qualified person who conducted or supervised the phase two environmental site assessment, and
			ii. a statement by the qualified person confirming the carrying out of the phase two environmental site assessment and the findings and conclusions of the report.
8. References			Ensure that the phase two environmental site assessment report includes a list of all documents or data cited in the report.
9. Figures and Tables	(a) Tables	(i) Monitoring Well Installation	Provide a table showing construction details and elevations for all monitoring wells installed during the field investigation.
		(ii) Water Levels	Provide a table showing all water level measurements for all monitoring events at or under the phase two property, including depth to water reported as elevations to the nearest centimetre relative to a geodetic or permanent and

			recoverable benchmark and reference elevations.
		(iii)LNAPLs and DNAPLs	Provide a table showing all light or dense non-aqueous phase liquid measurements at or under the phase two property, reported as elevations to the nearest centimetre relative to a geodetic or permanent and recoverable benchmark and reference elevations.
		(iv)Soil Data	Provide one or more tables that,
			i. show soil quality data contained in laboratory certificates of analysis of samples taken at or under the phase two property,
			ii. include the borehole, test hole, test pit or monitoring well identification number, sample depths, sample identification number, date of sample collection, date of analysis and laboratory certificate of analysis or analytical report reference number, and
			iii. include a comparison of the data to applicable site condition standards.
		(v) Ground Water Data	Provide one or more tables that,
			i. show any ground water quality data contained in laboratory certificates of analysis of samples taken at or under the phase two property,
			ii. include the test hole or monitoring well identification number, sample identification number, sampling depth intervals, date of sample collection, date of analysis and laboratory certificate of analysis or analytical report reference number, and
			iii. include a comparison of the data to applicable site condition standards.
		(vi)Sediment Data	Provide one or more tables that,
			i. summarize all sediment quality

			data contained in laboratory certificates of analysis of samples taken at or under the phase two property,
			ii. include the sample identification number, sampling depths, date of sample collection, date of analysis and laboratory certificate of analysis or analytical report reference number, and
			iii. include a comparison of the data to applicable site condition standards.
		(vii) Ground Water, Sediment and Soil Maximum Concentration Data	Provide a table showing, for each contaminant for which sampling and analysis has been performed, the maximum known concentration of each contaminant on, in or under the phase two property as of the certification date including,
			i. the location and unique identification number of each borehole, test pit, test hole or monitoring well from which the sample showing the maximum concentration was collected, and
			ii. the relevant soil sampling depths, sediment sampling depths, and ground water sampling depth intervals.
	(b) Figures	(i) Areas of Natural Significance and Water Bodies	Provide a figure that illustrates the location of any,
			i. area of natural significance that includes the phase two property, that is adjacent to the phase two property or that is located, wholly or partly, on the phase two property or within 30 metres of the phase two property or part of the phase two property, and
			ii. water body located adjacent to the phase two property or, wholly or partly, on the phase two property or within 30 metres of the phase two property or part

			of the phase two property.
		(ii) Property Before Actions Taken to Reduce the Concentration of Contaminants	Provide a figure showing, in a plan view, all features relevant to the phase two environmental site assessment prior to any actions being taken to reduce the concentration of contaminants including,
			i. areas where a contaminant is present at a concentrations greater than the applicable site condition standards for the contaminant, and
			ii. the locations of buildings, storage tanks, drainage features and fill areas on or under the phase two property.
		(iii)Interpreted Contours of Ground Water Elevations	Provide a figure showing the phase two property that shows interpreted contours of the ground water elevations for each hydrostratigraphic unit where at least three monitoring wells have been installed to permit contouring and includes,
			i. monitoring well identification numbers,
			ii. water elevation at each monitoring well used for contouring,
			iii. labelling of the elevation contour,
			iv. ground water elevations contoured, which shall obey and not extend outside the dataset, and
			v. arrows indicating the qualified person's interpretation of lateral ground water flow direction at the phase two property.
		(iv)Contaminants in Soil Before Actions Taken to Reduce the Concentration of Contaminants	Where one or more contaminants in soil at or under the phase two property are present at a concentration greater than the applicable site condition standard for the contaminant prior to any actions taken to reduce concentration of contaminants, provide one or more

			figures in plan view of the phase two property that show the concentration of contaminants as analyzed in an accredited laboratory, in all boreholes, test holes, test pits and any other soil sampling locations.
		(v) Contaminants in Ground Water Before Actions Taken to Reduce the Concentration of Contaminants	Where one or more contaminants in ground water at or under the phase two property are greater than the applicable site condition standard prior to any actions taken to reduce concentration of contaminants, provide one or more figures in plan view of the phase two property that show the concentration of contaminants, as analyzed in an accredited laboratory, in all monitoring wells and test holes.
		(vi) Contaminants in Sediment Before Actions Taken to Reduce the Concentration of Contaminants	Where one or more contaminants in sediment at or under the phase two property are greater than the applicable site condition standard prior to any actions taken to reduce concentration of contaminants, provide one or more figures in plan view of the phase two property that show the concentration of contaminants, as analyzed in an accredited laboratory, in all sediment sample locations.
		(vii) Delineation	Provide figures showing the phase two property in a plan view and illustrating the delineation of the lateral and vertical extent of contaminants of concern in soil, ground water or sediment for each area contaminants of concern including,
			i. sampling locations,
			ii. sample identification number,
			iii. sampling point,
			iv. sampling depths,
			v. sampling depth intervals,
			vi. concentrations of contaminants as analyzed in an accredited laboratory, and
			vii. the applicable site condition standard or standard specified in

			a risk assessment for each contaminant analyzed.
		(viii) Contaminants of Concern in Areas of Potential Environmental Concern	Provide cross-sections that are oriented parallel and perpendicular to the direction of ground water flow at the phase two property illustrating,
			i. the delineation of the lateral and vertical extent of contaminants of concern in soil, ground water or sediment for each area of potential environmental concern and showing sample locations, sampling identification numbers, sampling points and sampling depths,
			ii. concentration of contaminants analyzed in an accredited laboratory,
			iii. in highlighting, all concentrations of contaminants in excess of the applicable site condition standard or standard specified in a risk assessment, and
			iv. the stratigraphy from ground surface to the deepest aquifer or aquitard investigated.
10. Appendices	(a) General	(i) Sampling and Analysis Plan	Provide the sampling and analysis plan for the site investigation.
		(ii) Finalized Field Logs	Provide all finalized field logs.
		(iii)Certificates of Analysis or Analytical Reports from Laboratories	Provide laboratory certificates of analysis or analytical reports for all samples analyzed.
		(iv)Residue Management	Provide copies of all permits, approvals and the like obtained from municipal, provincial or federal governments or agencies for handling, treating, discharging and disposing of soil, sediment and ground water.
		(v) Survey of Phase Two Property	Provide a survey of the phase two property which has been prepared,

			signed and sealed by a surveyor or, where the phase two property consists of land that is administered by the Ministry of Natural Resources under the *Public Lands Act*, a description of the phase two property approved by the Surveyor General.
	(b) Remediation	(i) Where any Action has been Taken to Reduce the Concentration of Contaminants on, in or under a Phase Two Property	Provide a remediation appendix that includes the following sections,
			i. remedial actions,
			ii. free flowing product,
			iii. results of confirmation sampling and analysis, and
			iv. conclusions.
		(ii) Remedial Actions	Provide,
			i. a description of any soil excavation and soil treatment activities at the phase two property that includes,
			A. the rationale for each method used,
			B. the quantities and types of compounds used to treat contaminants of concern, and
			C. the location of the remedial action,
			ii. an estimate of the quantity of soil treated on the property and removed from the property, in tonnes,
			iii. a description of any ground water removal or ground water treatment activities at the phase two property, including,
			A. the rationale for each method used,
			B. the quantities and types of compounds used to treat

			contaminants of concern, and
			C. the location of the remedial action,
			iv. an estimate, in litres, of the volume of any ground water removed from the phase two property,
			v. a description of any actions taken to reduce contaminant concentrations in sediment at the phase two property, including,
			A. the rationale for each method used,
			B. the quantities and types of compounds used to treat contaminants of concern, and
			C. the location of the remedial action in relation to any areas of potential environmental concern,
			vi. an estimate of the quantity of sediment treated or removed from the property,
			vii. copies of all permits from local, provincial and federal agencies for handling, treating, discharging and disposing of soil, ground water or sediment,
			viii. a description of the steps taken to ensure that contaminants created or introduced to the property during remediation do not exceed the applicable site condition standard, if the remediation method involved the creation or introduction of contaminants or substances to the subsurface of the property,
			ix. a description of the steps taken to establish baseline and background conditions relevant to the proposed remediation method to a degree adequate to detect any increases of contaminants on, in or under the phase two property following remediation, including contaminants created or

			introduced to the property during remediation, and
			x. a rationale for the selection of monitoring wells and contaminants to be analyzed for the purpose of monitoring concentrations of contaminants in, on or under the phase two property, including contaminants created or introduced to the property during remediation.
		(iii) Free Flowing Product	Provide,
			i. a discussion of the types and quantities of any free flowing product observed during remediation,
			ii. an estimate of the volume of free flowing product, in litres, removed from ground water on, in or under the phase two property, where free flowing product is present, and
			iii. a description of any free flowing product recovery system or other activity undertaken to remove the free flowing product.
		(iv) Confirmation Sampling and Analysis	Provide,
			i. a description of all confirmation sampling activities conducted during and after remedial actions for the purpose of demonstrating that the phase two property meets the applicable site condition standards and any standards specified in a risk assessment,
			ii. a description and rationale for all confirmation sampling locations, depths and contaminants analyzed,
			iii. a description of the lateral and vertical dimensions of the excavations and the number and types of confirmation samples taken at each excavation, where part or all of the land on, in or

			under a phase two property has been excavated,
			iv. one or more figures of the phase two property, identifying the locations and dimensions of any excavations on, in or under the phase two property,
			v. one or more cross-sections that show the vertical dimensions of any excavations on, in or under the phase two property,
			vi. one or more figures of the phase two property, identifying the locations of any ground water removal or treatment activities, including the locations of any injection wells and extraction wells,
			vii. one or more figures of the phase two property, identifying the locations of any sediment removal or treatment activities,
			viii. a description of the results of quarterly sampling events, including water level measurements and ground water sampling and analysis, where *in situ* treatment has been undertaken on, in or under the phase two property,
			ix. a description of the results of quarterly sampling events, including water level measurements and ground water sampling and analysis, where excavation has been undertaken on, in or under the phase two property,
			x. tables showing all soil, ground water and sediment quality data contained in laboratory certificates of analysis or analytical reports for confirmation samples, including,
			A. comparison of the data to applicable site condition standards or standards specified in a risk assessment as the case may be for each

			contaminant analyzed,
			B. the borehole, test hole, test pit or monitoring well identification number,
			C. the sample identification number,
			D. soil or sediment sample depth,
			E. ground water sampling depth interval,
			F. date of sample collection,
			G. date of sample analysis, and
			H. laboratory certificate of analysis or analytical report reference number,
			xi. provide one or more figures that show the results of analyses for all confirmation samples of soil, ground water and sediment, including the delineation of the lateral and vertical extent of contaminants in soil, ground water or sediment following actions taken to reduce the concentration of contaminants, and illustrating,
			A. sampling points,
			B. sample identification number,
			C. sampling depth intervals, and
			D. concentrations of contaminants as analyzed in an accredited laboratory,
			xii. provide cross-sections that are oriented parallel and perpendicular to the direction of ground water flow that show the results of analyses for all confirmation samples of soil, ground water and sediment, including the delineation of the lateral and vertical extent of contaminants in soil, ground water or sediment following actions taken to reduce the concentration of contaminants, and illustrating,
			A. sampling points,
			B. sample identification number,
			C. sampling depth intervals,

			D. concentrations of contaminants as analyzed in an accredited laboratory, and
			E. the stratigraphy from ground surface to the deepest aquifer or aquitard where actions were taken to reduce the concentration of contaminants,
			xiii. a table showing construction details and elevations for all monitoring wells used in demonstrating that contaminant concentrations in ground water are below the applicable site condition standards following actions taken to reduce concentration of contaminants, and
			xiv. a table showing all water level measurements for all monitoring events used in demonstrating that contaminant concentrations in ground water are below the applicable site condition standards following actions taken to reduce concentration of contaminants, including depth to water reported as elevations to the nearest centimetre relative to a geodetic or permanent and recoverable benchmark and reference elevations.
	(c) Soil Excavated at or Brought to the Phase Two Property	(i) Soil Brought to the Phase Two Property	Provide,
			i. a rationale for the selection of chemical parameters analyzed by a laboratory in accordance with section 32 of this Schedule,
			ii. a description of the soil sampling activities conducted, including,
			A. the number of samples analyzed,
			B. the soil sampling program, including methods used to ensure that the samples are representative of any areas

			where a contaminant may be present at a concentration greater than the applicable site condition standard for the contaminant,
			C. the address of the source property and any property where the soil was stored prior to being deposited on, in or under the phase two property,
			D. the former and current uses of the source property, including identification of any potentially contaminating activity,
			E. total volume of soil brought to the phase two property,
			F. the results of analyses of soil samples, including a comparison of the results to the applicable site condition standard for each contaminant analyzed,
			G. a figure showing the locations on the phase two property where soil was deposited,
			H. tables,
			1. showing all soil quality data contained in laboratory certificates of analysis of soil, samples analyzed, and
			2. comparing the analytical results to the applicable site condition standard for each contaminant analyzed, and
			iii. a description of the purposes for which the soil was brought to the phase two property.
		(ii) Segregation of Soil	Provide,
			i. a rationale for the choice of contaminants to be analyzed,
			ii. a description of the methods used to ensure uniform and representative sample collection,
			iii. the number of soil samples collected and the volume of each stockpile, and

			iv. a comparison of the results of analysis to the applicable site condition standards and standards specified in a risk assessment for all contaminants analyzed.
		(iii)Stockpiles	Provide,
			i. a rationale for the choice,
			ii. a description of the stockpile sampling program, including methods used to ensure uniform and representative sample collection, the number of soil samples collected and the volume of each stockpile, and
			iii. a table showing all soil quality data contained in certificates of analysis or analytical reports for stockpiled soil samples analyzed and a comparison of the analytical results to the applicable site condition standards and standards specified in a risk assessment.
	(d) Modified Generic Risk Assessment	(i) Property Information	Provide,
			i. property location and ownership,
			ii. municipal address and property identification number, if any,
			iii. size and boundaries of the property, and
			iv. identification of the current and proposed uses of the property.
		(ii) Fraction of Organic Carbon (FOC)	Whenever an assumed value for FOC (for the water table to soil surface, in the upper 0.5 m, or the aquifer) is to be modified in a modified generic risk assessment, the report shall include,
			i. a description of the rationale for determining sampling locations,
			ii. a table with the sampling results,
			iii. a figure showing the sampling points,
			iv. finalized field logs, indicating the depth of the soil samples, and
			v. the new value to be used in the

			modified generic risk assessment.
		(iii)Distance to Water Body	Whenever an assumed value for distance to water body is to be modified in a modified generic risk assessment, the report shall include a figure showing,
			i. the location of the property,
			ii. areas where a contaminant is present at a concentration greater than the applicable site condition standard for the contaminant,
			iii. location of monitoring wells, ground water flow direction, interpreted flow pathways from each area to the nearest water body, estimated distance from each area to the nearest water body,
			iv. nearest water body down gradient of each area noted in ii, and
			v. the new value to be used in the modified generic risk assessment.
		(iv)Depth to Water Table	Whenever an assumed value for depth to water table is to be modified in a modified generic risk assessment, the report shall include,
			i. a description of, and rationale for, the method used to estimate the depth from soil surface to the highest water table,
			ii. a figure showing the soil surface elevation contours, monitoring well locations, and measured depths to the highest water table from soil surface,
			iii. a table with all the water level data used to determine the highest water table, and
			iv. the new value to be used in the modified generic risk assessment.
		(v) Aquifer Horizontal Hydraulic Gradient	Whenever an assumed value for aquifer horizontal hydraulic gradient is to be modified in a modified generic risk assessment, the report

			shall include,
			i. a figure showing the location of monitoring wells, water level information, and ground water elevation contours,
			ii. gradient calculations, and
			iii. the new value to be used in the modified generic risk assessment.
		(vi) Aquifer Horizontal Hydraulic Conductivity	Whenever an assumed value for aquifer horizontal hydraulic conductivity is to be modified in a modified generic risk assessment, the report shall include,
			i. a description of field test methods, and interpretation of the field data,
			ii. a rationale for the decision to use or not use a multiplier, and for the particular choice and use of any multiplier chosen and used in adjusting hydraulic conductivity values,
			iii. all field data, calculations, and hydraulic conductivity values, and
			iv. the new value to be used in the modified generic risk assessment.
		(vii) Soil Type in the Vadose Zone and Capillary Fringe	Whenever an assumed value for soil type in the vadose zone and capillary fringe is to be modified in a modified generic risk assessment, the report shall include,
			i. for each area where a contaminant is present on, in or under the property at a concentration greater than the applicable site condition standard for the contaminant, the following information related to soil type in the vadose zone and capillary fringe, if applicable,
			A. a description of grain size analysis undertaken by an accredited laboratory and the process and rationale for the selection of the soil type,

			B. grain size distribution curves,
			C. a figure showing all the sampling points, and
			D. related finalized field logs, indicating the depth of the soil samples, and
			ii. soil type selected as property soil type (for each of the vadose zone and capillary fringe), and the area soil type (in each of the vadose zone and capillary fringe) for each of the areas investigated.
		(viii) Soil Vapour Investigation - Depth to Soil Vapour Measurements	Whenever an assumed value for depth below soil surface to soil vapour is to be entered in a modified generic risk assessment, the report shall include,
			i. a description of the rationale for the selection of the soil vapour sampling locations and depths,
			ii. a discussion on soil vapour preferential pathways present or anticipated on the property, and whether and how they may affect vapour intrusion into existing and any known future buildings,
			iii. a figure showing the locations of,
			A. existing and, if known, future buildings,
			B. all soil vapour points,
			C. areas where volatile contaminants are present at a concentration greater than the applicable site condition standards,
			D. known or inferred volatile contaminant release areas, and
			E. ground water flow direction,
			iv. a minimum of one cross section for each area at which a contaminant is present at a concentration above the applicable site condition standards for the contaminant, which illustrates,
			A. variations in the soil surface elevation at the property,

			B. soil and ground water sampling points,
			C. soil vapour probe locations and depths,
			D. interpreted distribution of the soil types present in the area,
			E. depth to water table, and
			F. soil and ground water concentrations for the volatile contaminants referred to above, and
			v. a table summarizing the rationale for the location and depth of each soil vapour probe used in the soil vapour investigation, construction details of the probes, including materials, diameter, length of the screen interval, and depth from soil surface to the top of the probe screening interval.
		(ix) Soil Vapour Investigations - Soil Vapour Concentrations	Whenever a value for soil vapour concentration is to be entered in a modified generic risk assessment, the report shall include,
			i. a description of the soil vapour analytical methods, data quality objectives, rationale for the selected sampling method, devices and sampling duration,
			ii. a description of the standard operating procedures for soil vapour probe installation and soil vapour probe development, performance testing, leak testing, purging and sampling used in the field investigation,
			iii. a description of the quality assurance and quality control measures implemented,
			iv. soil vapour field data, including leak test data, purge volumes and sample rates,
			v. soil vapour laboratory results presented in a tabular format by soil vapour sampling location and probe, including in the table depth to measurement (from soil

			surface to the top of the probe screening interval) and approved model calculated soil vapour screening level for each volatile contaminant,
			vi. soil vapour probe finalized field logs, including depths and installation details, and
			vii. certificates of analysis or analytical reports for all soil vapour samples.
		(x) Number of Frozen Ground Days per Year	Whenever an assumed value for frozen days is to be modified in a modified generic risk assessment, the report shall include,
			i. the name and location of the meteorological station, and
			ii. the new value to be used in the modified generic risk assessment.
		(xi) Aquifer Soil Dry Bulk Density	Whenever an assumed value for aquifer soil dry bulk density is to be modified in a modified generic risk assessment, the report shall include,
			i. a description of the test method used to determine the aquifer soil bulk density along with the data used for the determination of the test results and a site map showing the sampling points, and
			ii. the new value to be used in the modified generic risk assessment.
		(xii) References	Include a list of all documents or data cited in the report.

TABLE 2
MINIMUM STOCKPILE SAMPLING FREQUENCY

Sample Frequency		
Pile Volume	Field Screening Samples	Samples for Laboratory Analysis
Less than 50 m^3	A minimum of 5 samples	A minimum of one sample
>50m^3 to 150 m^3	A minimum of 15 samples	A minimum of three samples
>150m^3 to 500 m^3	A minimum of 30 samples	A minimum of five samples
>500m^3 to 1500 m^3	A minimum of 50 samples	A minimum of 10 samples
>1500 m^3	A minimum of 75 samples	A minimum of 15 samples

TABLE 3
MINIMUM CONFIRMATION SAMPLING REQUIREMENTS FOR EXCAVATION

Floor Area (m^2)	Floor Samples	Sidewall Samples[1]
<25	2	2
>25-50	2	3
>50-100	3	3
>100-250	3	5
>250-500	4	6
>500-750	4	7
>750-1000	5	8
Note 1	Sidewall samples should not all be taken from the same wall, and should represent worst-case.	

TABLE 4
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT REQUIREMENTS FOR MODIFIED GENERIC RISK ASSESSMENTS

Assumption Category	Objective	Minimum Requirements
1. Fraction of Organic Carbon (FOC) – Water Table to Soil Surface	(a) Determine the FOC in the area between the water table and the soil surface.	1. Soil samples from at least four continuous borehole cores but not necessarily undisturbed soil samples must be collected at the phase two property for the purpose of defining FOC.
		2. The samples must be taken from soil between the soil surface and the top of the water table.
		3. The four sample locations must be chosen so as to provide results for natural (non-anthropogenic) FOC at the property.
		4. The samples must be taken from soil of the same soil type present in an area where a contaminant is present at a concentration greater than the applicable site condition standard for the contaminant.
		5. A minimum of one composite soil sample for each sampling location is required for FOC determination.
		6. Each soil sample for FOC determination shall be analyzed in triplicate.
		7. The FOC for the phase two property shall be the mean of all the soil samples analyzed for FOC determination.

		8. At least one soil sample shall be taken at each of the four sampling locations and analyzed for the contaminants of concern or contaminants of potential concern which are organic chemicals and for any other organic chemical detected.
2. Fraction of Organic Carbon (FOC) – in Upper 0.5 m	(a) Determine the FOC in the upper 0.5 m of soil immediately below soil surface.	1. Soil samples shall be collected, from at least four locations at the property, each of which is in the upper 0.5 m of soil below soil surface at the time of sampling.
		2. The sample locations must be chosen so as to provide results for natural (non-anthropogenic) FOC at the phase two property.
		3. The samples must be taken from soil of the same soil type present in an area where a contaminant is present at a concentration greater than the applicable site condition standard for the contaminant.
		4. A minimum of one composite soil sample for each sampling location is required for FOC determination.
		5. The FOC for the phase two property shall be the mean of all the soil samples analyzed for FOC determination.
		6. At least one soil sample shall be taken at each of the four sampling locations and analyzed for the contaminants of concern or contaminants of potential concern which are organic chemicals and for any other organic chemical detected.
3. Minimum Distance From Areas Where Contaminants Present Above Applicable Site Condition Standards to Nearest Down Gradient Water Body	(a) Determine the minimum distance from the centre of areas on, in or under the phase two property at which a contaminant is present at a concentration greater than the applicable site condition standard for the contaminant to the nearest water body that is down gradient of the area.	1. Using hydrogeological expertise and all relevant information from the phase two environmental site assessment, determine the distance from the centre of each area on, in or under the phase two property at which a contaminant is present at a concentration greater than the applicable site condition standard for the contaminant to the nearest water body that is down gradient of

		the area.
		2. Determine the shortest of these distances.
4. Minimum Depth Below Soil Surface to the Highest Annual Water Table	(a) Determine the minimum depth below soil surface to the highest water table in areas where volatile contaminants are present at concentrations greater than the applicable site condition standards in ground water.	1. Where at least two years of water table level monitoring done at intervals no less frequent than quarterly has been undertaken for the water table at or within 250 metres from the boundary of the phase two property, water table level monitoring shall be conducted monthly for three months in order to determine the minimum depth of the high water table below soil surface. Such monitoring shall be conducted during the three months at which the highest water table can reasonably be expected to be at its highest elevation ASL based on historical data.
		2. If the historical water level information referred to in paragraph 1 is not available then either,
		a. water table level monitoring shall be conducted monthly for 12 months in order to determine the minimum depth of the highest water table below soil surface, or
		b. water table level fluctuations reasonably to be anticipated at the phase two property shall be identified and documented by the qualified person, water table level monitoring shall be conducted once and the greater of the anticipated fluctuation as identified by the qualified person or one metre shall be subtracted from the measurement taken during the water table level monitoring in order to determine the minimum depth of the highest water table below soil surface.
5. Aquifer horizontal hydraulic conductivity	(a) Determine the horizontal hydraulic conductivity for each aquifer that carries contaminants of concern to a water body.	1. A representative horizontal hydraulic conductivity for each aquifer that carries contaminants of concern to a water body shall be determined, which shall be done as follows:

		i. Field testing shall be conducted within the coarsest geological material in the aquifer for the purpose of determining horizontal hydraulic conductivity for each aquifer that carries the contaminants of concern from the aquifer to a water body.
		ii. The hydraulic conductivity values from field testing shall be compared with published values associated with the geological material which was tested.
		iii. If the field testing values are not consistent with published values associated with the geological material in the aquifer which was tested, or if there are any other reasons to believe the field testing quality is subject to uncertainty, an appropriately conservative multiplier shall be applied to the field testing values.
6. Aquifer Horizontal Hydraulic Gradient	(a) Determine the average horizontal hydraulic gradient across the phase two property to the nearest down gradient water body.	1. The average horizontal hydraulic gradient between aquifers on, in or under the phase two property and the nearest water body to which ground water at the property discharges shall be determined, which determination shall be done as follows:
		i. Water level measurements shall be taken from at least three monitoring wells at the property from the same hydrostratigrapic unit during at least one monitoring event.
		ii. The monitoring wells must not be placed in a straight line.
		iii. In selecting the monitoring wells from which to collect water level information and determining when to collect it the qualified person shall take into consideration fluctuations of ground water flow direction, so that water level measurements from these wells are representative of ground water

		flows from the aquifer to the nearest water body.
		2. For all aquifers where a contaminant of concern is present at a concentration greater than the applicable site condition standard for the contaminant, the qualified person shall ensure the following information is prepared:
		i. Contours of the interpreted ground water surface based on the water level measurements.
		ii. A determination of the approximate water level elevation of the nearest water body.
		iii. A calculation of the horizontal hydraulic gradient between the phase two property and the nearest water body, using the minimum distance from areas where a contaminant is present at a concentration greater than the applicable site condition standard for the contaminant to the nearest water body calculated as indicated above.
		3. Using the calculations referred to in subparagraph 2 iii, the qualified person shall ensure that the average horizontal hydraulic gradient between the phase two property and the nearest water body is calculated.
7. Aquifer Fraction of Organic Carbon (FOC)	(a) Determine the FOC in the aquifer that carries the contaminants of concern to a water body.	1. Samples of geological material in the aquifer that carries contaminants of concern to a water body must be collected from at least two sampling points.
		2. Each sample must be analyzed in triplicate.
		3. The FOC for the aquifer is the mean of all the samples.
8. Property Soil Type – Vadose Zone	(a) Determine the predominant soil type for the areas at the phase two property where a contaminant is present in soil or in ground water a concentrations greater than	1. In areas at the phase two property where a contaminant is present at concentrations greater than the applicable site condition standard for the contaminant, the predominant soil type in the vadose zone shall be determined as

	the applicable site condition standard for the contaminant.	follows:
		i. For each area where a contaminant is present in soil only at a concentration greater than the applicable site condition standard for the contaminant, one or more boreholes must be advanced to the bottom of the area.
		ii. In any other case, one or more boreholes must be advanced to the top of the saturated zone.
		iii. The determination of the predominant soil type among all the areas shall be done through soil sampling and analysis as follows:
		a. an appropriate number and distribution of samples, but at least four samples, of soil from each area must be collected and analyzed in order to determine grain size distribution of the soil,
		b. grain size analysis shall be undertaken by an accredited laboratory,
		c. the predominant soil type from among all the areas must be determined based on analysis of the samples chosen in subparagraph a, and on borehole information, and
		d. where two or more soil types exist in approximately equal amounts, taking into account all the areas, the predominant soil type shall be the coarsest soil type from amongst those present in approximately equal amounts.
9. Property Soil Type – Capillary Fringe	(a) Determine the predominant soil type directly above the water table in the capillary fringe for the areas at the phase two property where a	1. In areas at the phase two property where a contaminant is present at concentrations greater than the applicable site condition standard for the contaminant, the predominant soil type in the

	contaminant is present in ground water in concentrations greater than the applicable site condition standard for the contaminant.	capillary fringe shall be determined through soil sampling and analysis as follows:
		i. One or more boreholes must be advanced to the top of the saturated zone.
		ii. The determination of the predominant soil type among all the areas shall be done as follows:
		a. an appropriate number and distribution of samples, but at least two samples, of soil from each area must be collected and analyzed in order to determine grain size distribution of the soil,
		b. samples must be taken from the stratum directly above the water table in the capillary fringe,
		c. grain size analysis shall be undertaken by an accredited laboratory,
		d. the predominant soil type from among all the areas must be determined based on the samples chosen in clause a, and on borehole information, and
		e. where two or more soil types exist in approximately equal amounts taking into account all the areas, the predominant soil type shall be the coarsest soil type from amongst those present in approximately equal amounts.
10. Area Soil Type - Vadose Zone	(a) Determine the coarsest soil type in the vadose zone in each area in which a volatile contaminant is present at a concentration greater than the applicable site condition standard for the contaminant.	1. In each area where a volatile contaminant is present in soil, or in ground water, at a concentration greater than the applicable site condition standard for the contaminant, determine the soil type in the area.

		2. For each area where a contaminant is present in soil only at a concentration greater than the applicable site condition standard for the contaminant, one or more boreholes must be advanced to the bottom of the area.
		3. In any other case, one or more boreholes must be advanced to the top of the saturated zone.
		4. The determination of the coarsest soil type for each area shall be done as follows:
		i. An appropriate number and distribution of samples, but at least four samples, of soil from each area must be collected and analyzed in order to determine grain size distribution of the soil.
		ii. Grain size analysis shall be undertaken by an accredited laboratory.
		iii. The coarsest soil type from among these samples for each are shall be identified.
11. Area Soil Type – Capillary Fringe	(a) Determine the coarsest soil type directly above the water table in the capillary fringe in each area of the phase two property where a volatile contaminant is present in ground water at a concentration greater than the applicable site condition standard for the contaminant.	1. In each area where a volatile contaminant is present at a concentration greater than the applicable site condition standard for the contaminant the coarsest soil type directly above the water table must be determined.
		2. One or more boreholes must be advanced to the top of the saturated zone.
		3. The determination of the coarsest soil type among all the area shall be done as follows:
		i. An appropriate number and distribution of samples, but at least two samples, of soil from each area must be collected and analyzed in order to determine grain size distribution of the soil.

		ii. Grain size analysis shall be undertaken by an accredited laboratory.
		iii. Samples must be taken from the stratum directly above the water table in the capillary fringe.
		iv. The coarsest soil type from among these samples for each area where a volatile contaminant is present in ground water at a concentration greater than the applicable site condition standard for the contaminant-shall be identified.
12. Soil Vapour Concentrations and Depth to Soil Vapour Measurements	(a) Determine soil vapour concentrations in each area at the phase two property in which a volatile contaminant is present in soil, and in each area of the phase two property in which a volatile contaminant is present in ground water, at a concentration greater than the applicable site condition standard for the contaminant.	1. Soil vapour concentrations shall be determined in each area at the phase two property in which a volatile contaminant is present at a concentration greater than the applicable site condition standard for the contaminant, which determination shall be done as follows:
		i. The qualified person shall ensure a sampling and analysis plan for soil vapour characterization is prepared.
		ii. In this plan the qualified person shall determine the appropriate sampling locations for sampling soil vapour, including the appropriate depth for each location, which locations shall include the areas,
		a. where known or inferred releases of volatile contaminants have occurred,
		b. where the highest concentration of contaminants in soil and ground waters are present, and
		c. where the qualified person considers vapour intrusion related exposures may be of

		potential concern.
		iii. The soil vapour samples must be collected,
		a. from within the sampling location and at the depth that is approximately the same as the depth at which the highest concentration of the volatile contaminant in soil has been measured, and
		b. as close as possible to, but not more than 0.5 metres above the top of the capillary fringe in the area where the highest concentration of the volatile contaminant in ground water has been measured.
		iv. The soil vapour samples shall be collected and analyzed.
		v. The qualified person shall document the rationale for the selection of the soil vapour sampling locations and depths.
		vi. At least two soil vapour probes must be installed in each sampling location and depth. Multiple probes installed in a single borehole are not acceptable.
		vii. Samples shall be collected from the probes in each sampling location during at least two sampling events separated by at least three months.
		viii. Samples shall be collected from at least 1.5 metres below the soil surface.
		ix. Screen intervals in soil vapour probes used for the sampling shall not exceed 0.5 metres.
		x. The depth to soil vapour measurement is the distance from soil surface to the top of the probe screening interval for each soil vapour probe from which samples are collected.
		2. The qualified person shall ensure that the soil vapour samples are

		collected using soil vapour probes that have been designed, constructed and operated within specifications for adequate measurement and in a manner that minimizes adsorption, desorption and leaks.
13. Number of Frozen Ground Days per Year	(a) Determine the number of days per year with a maximum temperature of less than 0 degrees Celsius.	1. Determine the number of frozen days reported by Environment Canada, based on the Canadian Climate Normals, from the nearest meteorological station for which climate norms are reported.
14. Aquifer Soil Dry Bulk Density	(a) Determine the aquifer soil dry bulk density for each aquifer that carries the contaminants of concern to a water body.	1. Samples of geological materials in the aquifer that carries the contaminants of concern to a water body must be collected from at least two sampling points.
		2. Each sample must be analyzed by an appropriate field testing method or by a laboratory.
		3. The aquifer soil dry bulk density is the mean of all analytical results.

O. Reg. 511/09, s. 31; O. Reg. 245/10, s. 6 (1); O. Reg. 179/11, s. 8.

SCHEDULE F
REQUIREMENTS FOR SOIL RE PARAGRAPH 2 OF SUBSECTION 55 (3) OF THE REGULATION

APPLICATION

Application

1. (1) This Schedule sets out the requirements for the purposes of paragraph 2 of subsection 55 (3) of the regulation of the regulation for determining whether soil described in subsection (2) meets the standards set out in Table 1 of the Soil, Ground Water and Sediment Standards with respect to all contaminants in the soil.

(2) Subsection (1) applies to soil that,

(a) originated at a property other than the one to which it is to be brought;

(b) is intended to be brought to a RSC property that is a RSC property for which a record of site condition may be submitted solely based on a phase one environmental site assessment; and

(c) is intended to remain at the RSC property after a record of site condition has been filed.

REQUIREMENTS

Requirements

2. A qualified person shall ensure that the following requirements are met:

1. The concentration of each contaminant in the soil to be brought to the RSC must be equal to or lesser than the standard for the contaminant set out in Table 1 of the Soil, Ground Water and Sediment Standards.
2. Samples must be collected from the soil to be brought to the RSC property.
3. The samples must be analyzed in accordance with this section, and the concentrations of contaminants in the soil when it is to be brought to the RSC property known, before any soil is brought to the RSC property in order to determine what contaminants are in the soil, and whether the standards referred to in paragraph 1 are met for each contaminant in the soil.
4. The samples that are collected and analyzed must be,
    i. representative samples collected for the purpose of determining the concentration of contaminants in the soil to be brought to the RSC property and at locations and frequencies which will be adequate to allow the concentrations of contaminants in the soil to be known,
    ii. collected by the qualified person, or under the supervision of the qualified person by an individual qualified to take samples for such purpose, following a plan determined by the qualified person to collect samples at locations and frequencies which will be adequate to allow the concentrations of contaminants in the soil to be known, and
    iii. collected for the purpose of determining if contaminants are present in the soil as a result of any potentially contaminating activity or other environmental condition,
        A. at the property from which the soil originated while the soil was there,
        B. at any property at which the soil has subsequently been stored while the soil was being stored at that property, and
        C. while the soil was being handled, stored or transported at any time before its final placement on, in or under the phase two property.
5. The samples must be analyzed for contaminants that may reasonably be expected to be present in the soil, having regard to,
    i. the property from which the soil was taken before being brought to the RSC property,
    ii. the handling of the soil, including its storage and transport, following its original excavation, and
    iii. any other relevant factors, including potentially contaminating activity.
6. The samples of the soil must be collected and selected for analysis so as to obtain representative results that locate any areas in the soil being sampled where a contaminant may be present at a concentration greater than the standard in Table 1 of the Soil, Ground Water and Sediment Standards for the contaminant and at least one soil sample must be analyzed for each 160 cubic metres of soil for the first 5,000 cubic metres to be assessed at each source from which soil is being brought to the RSC property, following which at least one sample for each additional 300 cubic metres of soil which is to remain on, in or under the RSC property must be analyzed.
7. Analysis of the samples referred in paragraph 6 is carried out at an accredited laboratory.

Application of Schedule E etc.

3. (1) The provisions of Schedule E and sections 47 and 48 of the regulation applicable to the collection and recording of samples of soil and the methods of sampling, analysis of samples and reporting of analytical results apply with necessary modifications to the determination of whether soil to

be brought to the RSC property meets standards in Table 1 of the Soil, Ground Water and Sediment Standards for the contaminants in the soil.

(2) For purposes of subsection (1), the applicable provisions include the requirements for sampling and analysis for the purpose of determining whether a standard for a contaminant set out in the Soil, Ground Water and Sediment Standards has been met.

(3) The qualified person shall ensure that a document which meets the requirements of Sub-Heading (i) (Soil Brought to the Phase Two Property) in Heading (c) (Soil Excavated at or Brought to the Phase Two Property) in Report Section 10 (Appendices) of Table 1 of Schedule E is prepared with respect to the sampling and analysis of soil brought to the RSC property.

(4) For the purposes of subsection (3), the sub-heading described in that subsection shall be read as follows:

1. References to section 32 are deemed to be references to section 2 of this Schedule.
2. References to “phase two property” are deemed to be references to the “RSC property”.
3. References to “applicable site condition standard” are deemed to be references to “standard in Table 1 of the Soil, Ground Water and Sediment Standards”.

O. Reg. 511/09, s. 31.

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PART I
GENERAL

INTERPRETATION AND APPLICATION

1. (1) In this Regulation,

"adequate", in relation to a procedure, material, device, object or thing, means,

(a) sufficient for both its intended and its actual use, and

(b) sufficient to protect a worker from occupational illness or occupational injury,

and "adequately" has a corresponding meaning;

"allowable unit stress", in relation to a material, means,

(a) the allowable unit stress assigned to a material by the standards required under the *Building Code*, or

(b) if no allowable unit stress is assigned under clause (a), the allowable unit stress for the material as determined by a professional engineer in accordance with good engineering practice;

"approved", in relation to a form, means approved by the Minister;

"blocker truck" means a truck that weighs at least 6,800 kilograms and has four-way flashers and a mounted flashing arrowboard sign;

"boom" means the projecting part of a backhoe, shovel, crane or similar lifting device from which a load is likely to be supported;

"*Building Code*" means Ontario Regulation 403/97 made under the *Building Code Act, 1992*;

"caisson" means,

(a) a casing below ground or water level whether or not it is designed to contain air at a pressure greater than atmospheric pressure,

(b) an excavation, including a waterwell but not a well within the meaning of the *Petroleum Resources Act*, drilled by an auger and into which a person may enter;

"cofferdam" means a structure constructed entirely or partially below water level or below the level of the groundwater table and intended to provide a work place that is free of water;

"competent worker", in relation to specific work, means a worker who,

(a) is qualified because of knowledge, training and experience to perform the work,

(b) is familiar with the *Occupational Health and Safety Act* and with the provisions of the regulations that apply to the work, and

(c) has knowledge of all potential or actual danger to health or safety in the work;

"conduit" means a sewer, a water main, a duct or cable for a telegraphic, telephonic, television or electrical service, a pipe or duct for the transportation of any solid, liquid or gas or any combination of these items and includes a service connection made or intended to be made thereto;

"crash truck" means a blocker truck that is equipped with a crash-attenuating device;

"excavation" means the hole that is left in the ground, as a result of removing material;

"excavation depth" means the vertical dimension from the highest point of the excavation wall to a point level with the lowest point of the excavation;

"excavation width" means the least horizontal dimension between the two opposite walls of the excavation;

"fall arrest system" means an assembly of components joined together so that when the assembly is connected to a fixed support, it is capable of arresting a worker's fall;

"fall restricting system" means a type of fall arrest system that has been designed to limit a worker's fall to a specified distance;

"falsework", in relation to a form or structure, means the structural supports and bracing used to support all or part of the form or structure;

"fixed support" means a permanent or temporary structure or a component of such a structure that can withstand all loads and forces the structure or component is intended to support or resist and is sufficient to protect a worker's health and safety, and includes equipment or devices that are securely fastened to the structure or component;

"flammable liquid" means a liquid with a flash point below 37.8 degrees celsius and a vapour pressure not exceeding 275 kilopascals absolute at 37.8 degrees celsius;

"form" means the mould into which concrete or another material is to be placed;

"formwork" means a system of forms connected together;

"freeway" means a controlled-access highway that has a continuous dividing median and a normal posted speed limit of 90 kilometres per hour or more;

"full body harness" means a device that can arrest an accidental vertical or near vertical fall of a worker and which can guide and distribute the impact forces of the fall by means of leg and shoulder strap supports and an upper dorsal suspension assembly which, after the arrest, will not by itself permit the release or further lowering of the worker;

"guardrail system" means an assembly of components joined together to provide a barrier to prevent a worker from falling from the edge of a surface;

"highway" means a common and public highway, street, avenue, parkway, driveway, square, place, bridge, viaduct or trestle, any part of which is intended for or used by the general public for the passage of vehicles;

"longitudinal buffer area" means the area of a project between the end of a lane closure taper and the start of a work area;

"magazine" means a place in which explosives are stored or kept, whether above or below ground;

"multi-point suspended scaffold" means a suspended scaffold or suspended work platform or a system of suspended scaffolds or suspended work platforms, each scaffold or platform being more than 750 millimetres in width, that is supported from an overhead support system by at least three primary load-carrying means of suspension to maintain the system's stability;

"professional engineer" means a person who is a professional engineer within the meaning of the *Professional Engineers Act*;

"public way" means a highway or other street, avenue, parkway, driveway, square, place, bridge, viaduct, or other open space to which the public has access, as of right or by expressed or implied invitation;

"roadway" means the travelled portion of a highway;

"safety belt" means a belt worn around the waist of a worker and all the fittings for the belt appropriate for the use being made of it;

"safety factor" means the ratio of the failure load to the specified load or rated load;

"safety net" means a safety net that complies with section 26.8, and is located and supported in such a way that it arrests the fall of a worker who may fall into it without endangering the worker;

"service shaft" means a shaft by which people or materials are passed into or out of a tunnel under construction;

"shaft" means an excavation with a longitudinal axis at an angle greater than 45 degrees from the horizontal that is used to pass people or materials into or out of a tunnel or that leads to a tunnel or that is used as an access to a boring or augering operation;

"sheathing" means the members of shoring that are placed up against the walls of an excavation to directly resist the pressure exerted from the walls of the excavation;

"sign truck" means a vehicle that has,

(a) four-way flashers and a mounted flashing arrowboard sign, or

(b) a portable trailer with a mounted flashing arrowboard sign;

"strut" means a transverse member of shoring that directly resists pressure from a wale;

"suitable", in relation to a procedure, material, device, object or thing, means sufficient to protect a worker from damage to the worker's body or health;

"tower crane" means a travelling, fixed or climbing mechanical device or structure that has,

(a) a boom, a jib or both,

(b) a power-driven drum and wire rope to raise, lower or move material, and

(c) a vertical mast;

"travel restraint system" means an assembly of components capable of restricting a worker's movement on a work surface and preventing the worker from reaching a location from which he or she could fall;

"traverse", when used in relation to a multi-point suspended scaffold, means to move the scaffold horizontally, in a controlled manner, along the building or structure to which it is attached;

"trench" means an excavation where the excavation depth exceeds the excavation width;

"tunnel" means a subterranean passage into which a person may enter that is made by excavating beneath the overburden;

"underground", in relation to work, means inside a shaft, tunnel or caisson;

"vehicle" means a vehicle propelled by mechanical power and includes a trailer, a traction engine and a road-building machine;

"wale" means a longitudinal member of the shoring that is placed against the sheathing to directly resist the pressure from the sheathing;

"work belt" means a belt that has a back support pad and a connecting hook at the front and that is capable of supporting a worker. O. Reg. 213/91, s. 1 (1); O. Reg. 631/94, s. 1; O. Reg. 145/00, s. 1 (1-13); O. Reg. 85/04, s. 1; O. Reg. 628/05, s. 1.

(2) In this Regulation, a short form listed in Column 1 of the Table to this subsection has the same meaning as the term set out opposite to it in Column 2.

TABLE

Column 1	Column 2
Short forms	Corresponding terms
ANSI	American National Standards Institute
CSA	Canadian Standards Association
CAN	National Standards of Canada
DIN	Deutsche Industrie Norm
Ga	Gauge

O. Reg. 213/91, s. 1 (2); O. Reg. 145/00, s. 1 (4).

1.1 In this Regulation, a requirement that something be done in accordance with good engineering practice includes a requirement that it be done in a manner that protects the health and safety of all workers. O. Reg. 85/04, s. 2.

1.2 In this Regulation, a requirement that a design, drawing, instruction, report, specification, opinion or other document be prepared by a professional engineer includes a requirement that he or she sign and seal it. O. Reg. 85/04, s. 2.

2. This Part applies with respect to all projects. O. Reg. 213/91, s. 2.

ALTERNATIVE METHODS AND MATERIALS

3. An employer, owner or constructor may vary a procedure required by this Regulation or the composition, design, size or arrangement of a material, object, device or thing as required by this Regulation,

(a) if the procedure, composition, design, size or arrangement as varied affords protection for the health and safety of workers that is at least equal to the protection that would otherwise be given; and

(b) if the employer, owner or constructor gives written notice of the varied procedure, composition, design, size or arrangement to the joint health and safety committee or the health and safety representative, if any, for the work place. O. Reg. 213/91, s. 3.

DESIGNATION OF A PROJECT

4. A Director may designate in writing a part of a project as a project and the designated project is considered to be a project for the purposes of the Act and this Regulation. O. Reg. 213/91, s. 4; O. Reg. 145/00, s. 2.

REGISTRATION AND NOTICES

5. (1) Before beginning work at a project, each constructor and employer engaged in construction shall complete an approved registration form. O. Reg. 145/00, s. 3.

(2) The constructor shall ensure that,

(a) each employer at the project provides to the constructor a completed approved registration form; and

(b) a copy of the employer's completed form is kept at the project while the employer is working there. O. Reg. 145/00, s. 3.

6. (1) This section applies with respect to a project if,

(a) the total cost of labour and materials for the project is expected to exceed $50,000;

(b) the work is the erection or structural alteration of a building more than two storeys or more than 7.5 metres high;

(c) the work is the demolition of a building at least four metres high with a floor area of at least thirty square metres;

(d) the work is the erection, structural alteration or structural repair of a bridge, an earth-retaining structure or a water-retaining structure more than three metres high or of a silo, chimney or a similar structure more than 7.5 metres high;

(e) work in compressed air is to be done at the project;

(f) a tunnel, caisson, cofferdam or well into which a person may enter is to be constructed at the project;

(g) a trench into which a person may enter is to be excavated at the project and the trench is more than 300 metres long or more than 1.2 metres deep and over thirty metres long; or

(h) a part of the permanent or temporary work is required by this Regulation to be designed by a professional engineer. O. Reg. 213/91, s. 6 (1).

(2) The constructor shall comply with subsection (3) or (4) before beginning work at the project. O. Reg. 145/00, s. 4.

(3) The constructor shall complete an approved notification form and file it at the Ministry office located nearest to the project. O. Reg. 145/00, s. 4.

(4) If the constructor believes that the work at the project will not take more than 14 days, the constructor may provide the relevant information to an inspector at the Ministry office located nearest to the project,

(a) by faxing the completed form to the inspector; or

(b) by providing the information that would be required to complete the form to the inspector by telephone. O. Reg. 145/00, s. 4.

(5) Despite subsection (2), the constructor may begin work at a project before complying with subsection (3) or (4) if the following conditions are met:

1. It is necessary to do the work immediately to prevent injury to people or damage to property.
2. Before beginning the work, the constructor gives an inspector notice of the information required in the form by telephone or fax. O. Reg. 145/00, s. 4.

(6) The constructor shall keep the completed notification form posted in a conspicuous place at the project or available at the project for review by an inspector. O. Reg. 145/00, s. 4.

(7) REVOKED: O. Reg. 145/00, s. 4.

7. If section 6 does not apply to a project but the project includes work on a trench more than 1.2 metres deep into which a worker may enter, the constructor shall, before any work at the project is begun, give notice in person, by telephone or by fax to the Ministry office located nearest to the project. O. Reg. 145/00, s. 5.

ACCIDENT NOTICES AND REPORTS UNDER SECTIONS 51-53 OF THE ACT

8. A written report under subsection 51 (1) of the Act respecting an occurrence in which a person is killed or critically injured shall set out,

(a) the name and address of the constructor and the employer, if the person involved is a worker;

(b) the nature and the circumstances of the occurrence and the bodily injury sustained by the person;

(c) a description of the machinery or equipment involved;

(d) the time and place of the occurrence;

(e) the name and address of the person involved;

(f) the names and addresses of all witnesses to the occurrence;

(g) the name and address of the any legally qualified medical practitioner by whom the person was or is being attended for the injury; and

(h) the steps taken to prevent a recurrence. O. Reg. 213/91, s. 8; O. Reg. 145/00, s. 6.

9. (1) A notice under subsection 52 (1) of the Act respecting an occurrence involving a worker shall set out,

(a) the name, address and type of business of the employer;

(b) the nature and the circumstances of the occurrence and the bodily injury or illness sustained by the worker;

(c) a description of the machinery or equipment involved;

(d) the time and place of the occurrence;

(e) the name and address of the worker involved;

(f) the names and addresses of all witnesses to the occurrence;

(g) the name and address of any legally qualified medical practitioner by whom the worker was or is being attended for the injury or illness;

(g.1) the name and address of each medical facility, if any, where the worker was or is being attended for the injury or illness; and

(h) the steps taken to prevent a recurrence. O. Reg. 213/91, s. 9 (1); O. Reg. 145/00, s. 7 (1).

(2) A notice under subsection 52 (2) of the Act (information and particulars respecting a worker's occupational illness) shall contain the following information:

1. The employer's name, address and type of business.
2. The nature of the illness.
3. The worker's name and address.
4. The name and address of any legally qualified medical practitioner by whom the worker was or is being attended for the illness.
5. The name and address of each medical facility, if any, where the worker was or is being attended for the illness.
6. A description of the steps taken to prevent a recurrence. O. Reg. 145/00, s. 7 (2).

10. (1) An employer shall keep in the employer's permanent records a record of any accident, explosion or fire involving a worker that causes injury requiring medical attention but does not disable the worker from performing his or her usual work. O. Reg. 213/91, s. 10 (1).

(2) The record shall include particulars of,

(a) the nature and circumstances of the occurrence and the injury sustained by the worker;

(b) the time and place of the occurrence;

(c) the name and address of the injured worker; and

(d) the steps taken to prevent a recurrence. O. Reg. 213/91, s. 10 (2).

(3) An employer to whom subsection (1) applies shall make the record available to an inspector upon request. O. Reg. 213/91, s. 10 (3).

11. (1) The following incidents are prescribed for the purpose of section 53 of the Act:

1. A worker falling a vertical distance of three metres or more.
2. A worker falling and having the fall arrested by a fall arrest system other than a fall restricting system.
3. A worker becoming unconscious for any reason.
4. Accidental contact by a worker or by a worker's tool or equipment with energized electrical equipment, installations or conductors.
5. Accidental contact by a crane, similar hoisting device, backhoe, power shovel or other vehicle or equipment or its load with an energized electrical conductor rated at more than 750 volts.
6. Structural failure of all or part of falsework designed by, or required by this Regulation to be designed by, a professional engineer.
7. Structural failure of a principal supporting member, including a column, beam, wall or truss, of a structure.
8. Failure of all or part of the structural supports of a scaffold.
9. Structural failure of all or part of an earth- or water-retaining structure, including a failure of the temporary or permanent supports for a shaft, tunnel, caisson, cofferdam or trench.
10. Failure of a wall of an excavation or of similar earthwork with respect to which a professional engineer has given a written opinion that the stability of the wall is such that no worker will be endangered by it.
11. Overturning or the structural failure of all or part of a crane or similar hoisting device. O. Reg. 213/91, s. 11 (1); O. Reg. 85/04, s. 3; O. Reg. 627/05, s. 1.

(2) A notice under section 53 of the Act shall set out the circumstances of the occurrence and the steps taken to prevent a recurrence. O. Reg. 213/91, s. 11 (2).

12. (1) This section applies with respect to an occurrence for which a report under subsection 51 (1) of the Act or a notice under section 52 or 53 of the Act is given, if the occurrence involves a failure of all or part of,

(a) temporary or permanent works;

(b) a structure;

(c) an excavation wall or similar earthwork for which a professional engineer has given a written opinion that the stability of the wall is such that no worker will be endangered by it; or

(d) a crane or similar hoisting device. O. Reg. 213/91, s. 12 (1).

(2) A constructor or employer who submits a report under subsection 51 (1) of the Act (notice of death or injury) or gives a notice under section 52 or 53 of the Act (notice of accident, etc.) shall also provide, within 14 days after the occurrence, a professional engineer's written opinion stating the cause of the occurrence. O. Reg. 145/00, s. 8.

GENERAL REQUIREMENTS

13. (1) A constructor shall post in a conspicuous place at a project and keep posted while work is done at the project a notice setting out,

(a) the constructor's name and if the constructor carries on business in a different name, the business name;

(b) the address and telephone number of the constructor's head office or principal place of business in Ontario; and

(c) the address and telephone number of the nearest office of the Ministry. O. Reg. 213/91, s. 13 (1); O. Reg. 145/00, s. 9.

(2) Within forty-eight hours after a health and safety representative or joint health and safety committee members are selected for a project, a constructor shall add to the notice the name, trade and employer of the health and safety representative or of each of the committee members. O. Reg. 213/91, s. 13 (2).

14. (1) A constructor shall appoint a supervisor for every project at which five or more workers will work at the same time. O. Reg. 213/91, s. 14 (1).

(2) The supervisor shall supervise the work at all times either personally or by having an assistant, who is a competent person, do so personally. O. Reg. 213/91, s. 14 (2).

(3) A supervisor or a competent person appointed by the supervisor shall inspect all machinery and equipment, including fire extinguishing equipment, magazines, electrical installations, communication systems, sanitation and medical facilities, buildings and other structures, temporary supports and means of access and egress at the project to ensure that they do not endanger any worker. O. Reg. 213/91, s. 14 (3).

(4) An inspection shall be made at least once a week or more frequently as the supervisor determines is necessary in order to ensure that the machinery and equipment referred to in subsection (3) do not endanger any worker. O. Reg. 213/91, s. 14 (4).

(5) A competent person shall perform tests and observations necessary for the detection of hazardous conditions on a project. O. Reg. 213/91, s. 14 (5).

15. (1) An employer of five or more workers on a project shall appoint a supervisor for the workers. O. Reg. 213/91, s. 15.

(2) The supervisor shall supervise the work at all times either personally or by having an assistant, who is a competent person, do so personally. O. Reg. 145/00, s. 10.

16. At a project, no person younger than 16 years of age shall,

(a) be employed in or about the workplace; or

(b) be permitted to be present in or about the workplace while work is being performed. O. Reg. 145/00, s. 11.

17. (1) A constructor shall establish for a project written procedures to be followed in the event of an emergency and shall ensure that the procedures are followed at the project. O. Reg. 145/00, s. 11.

(2) The constructor shall review the emergency procedures with the joint health and safety committee or the health and safety representative for the project, if any. O. Reg. 145/00, s. 11.

(3) The constructor shall ensure that the emergency procedures are posted in a conspicuous place at the project. O. Reg. 145/00, s. 11.

18. The constructor shall ensure that every worker at the project has ready access to a telephone, two-way radio or other system of two-way communication in the event of an emergency. O. Reg. 145/00, s. 11.

19. If, under this Regulation, a record is required to be kept available for inspection at a project, the constructor or employer, as the case may be, shall keep the record for at least one year after the project is finished. O. Reg. 213/91, s. 19.

PART II
GENERAL CONSTRUCTION

Application

20. This Part applies with respect to all projects. O. Reg. 213/91, s. 20.

Protective Clothing, Equipment and Devices

21. (1) A worker shall wear such protective clothing and use such personal protective equipment or devices as are necessary to protect the worker against the hazards to which the worker may be exposed. O. Reg. 213/91, s. 21 (1).

(2) A worker's employer shall require the worker to comply with subsection (1). O. Reg. 213/91, s. 21 (2).

(3) A worker required to wear protective clothing or use personal protective equipment or devices shall be adequately instructed and trained in the care and use of the clothing, equipment or device before wearing or using it. O. Reg. 213/91, s. 21 (3).

22. (1) Every worker shall wear protective headwear at all times when on a project. O. Reg. 213/91, s. 22 (1).

(2) Protective headwear shall be a safety hat that,

(a) consists of a shell and suspension that is adequate to protect a person's head against impact and against flying or falling small objects; and

(b) has a shell which can withstand a dielectric strength test at 20,000 volts phase to ground. O. Reg. 213/91, s. 22 (2).

23. (1) Every worker shall wear protective footwear at all times when on a project. O. Reg. 213/91, s. 23 (1).

(2) Protective footwear shall be a safety shoe or safety boot,

(a) with a box toe that is adequate to protect the wearer's toes against injury due to impact and is capable of resisting at least 125 joules impact; and

(b) with a sole or insole that is adequate to protect the wearer's feet against injury due to puncture and is capable of resisting a penetration load of 1.2 kilonewtons when tested with a DIN standard pin. O. Reg. 213/91, s. 23 (2).

24. A worker shall use protection appropriate in the circumstances when there is a risk of eye injury to the worker. O. Reg. 213/91, s. 24.

25. A worker shall use protection appropriate in the circumstances when there is a risk of injury on a project from contact between the worker's skin and,

(a) a noxious gas, liquid, fume or dust;

(b) an object that may puncture, cut or abrade the skin;

(c) a hot object, hot liquid or molten metal; or

(d) radiant heat. O. Reg. 213/91, s. 25.

26. Sections 26.1 to 26.9 apply where a worker is exposed to any of the following hazards:

1. Falling more than 3 metres.
2. Falling more than 1.2 metres, if the work area is used as a path for a wheelbarrow or similar equipment.
3. Falling into operating machinery.
4. Falling into water or another liquid.
5. Falling into or onto a hazardous substance or object.
6. Falling through an opening on a work surface. O. Reg. 145/00, s. 12; O. Reg. 85/04, s. 4.

26.1 (1) A worker shall be adequately protected by a guardrail system that meets the requirements of subsections 26.3 (2) to (8). O. Reg. 145/00, s. 12.

(2) Despite subsection (1), if it is not reasonably possible to install a guardrail system as that subsection requires, a worker shall be adequately protected by at least one of the following methods of fall protection:

1. A travel restraint system that meets the requirements of section 26.4.
2. A fall restricting system that meets the requirements of section 26.5.
3. A fall arrest system, other than a fall restricting system designed for use in wood pole climbing, that meets the requirements of section 26.6.
4. A safety net that meets the requirements of section 26.8. O. Reg. 145/00, s. 12; O. Reg. 85/04, s. 5 (1).

(3) The components of any system listed in subsection (2) shall be designed by a professional engineer in accordance with good engineering practice, and shall meet the requirements of any of the following National Standards of Canada standards that are applicable:

1. CAN/CSA-Z259.1-05: Body Belts and Saddles for Work Positioning and Travel Restraint.
2. CAN/CSA-Z259.2.1-98 (R2008): Fall Arresters, Vertical Lifelines and Rails.
3. CAN/CSA-Z259.2.2-98 (R2004): Self-Retracting Devices for Personal Fall-Arrest Systems.
4. CAN/CSA-Z259.2.3-99 (R2004): Descent Control Devices.
5. CAN/CSA-Z259.10-06: Full Body Harnesses.
6. CAN/CSA-Z259.11-05: Energy Absorbers and Lanyards.
7. CAN/CSA-Z259.12-01 (R2006): Connecting Components for Personal Fall Arrest Systems (PFAS).
8. CAN/CSA-Z259.14-01 (R2007): Fall Restrict Equipment for Wood Pole Climbing. O. Reg. 85/04, s. 5 (2); O. Reg. 443/09, s. 1.

(4) Before any use of a fall arrest system or a safety net by a worker at a project, the worker's employer shall develop written procedures for rescuing the worker after his or her fall has been arrested. O. Reg. 145/00, s. 12.

26.2 (1) An employer shall ensure that a worker who may use a fall protection system is adequately trained in its use and given adequate oral and written instructions by a competent person. O. Reg. 145/00, s. 13.

(2) The employer shall ensure that the person who provides the training and instruction referred to in subsection (1) prepares a written training and instruction record for each worker and signs the record. O. Reg. 145/00, s. 13.

(3) The training and instruction record shall include the worker's name and the dates on which training and instruction took place. O. Reg. 145/00, s. 13.

(4) The employer shall make the training and instruction record for each worker available to an inspector on request. O. Reg. 145/00, s. 13.

26.3 (1) Despite paragraph 1 of section 26, a guardrail system that meets the requirements of this section shall be used if a worker has access to the perimeter or an open side of any of the following work surfaces and is exposed to a fall of 2.4 metres or more:

1. A floor, including the floor of a mezzanine or balcony.
2. The surface of a bridge.
3. A roof while formwork is in place.
4. A scaffold platform or other work platform, runway or ramp. O. Reg. 145/00, s. 14.

(2) One of the following precautions shall be used to prevent a worker from falling through an opening on a work surface:

1. A guardrail system that meets the requirements of this section.
2. A protective covering that,
   i. completely covers the opening,
   ii. is securely fastened,
   iii. is adequately identified as covering an opening,
   iv. is made from material adequate to support all loads to which the covering may be subjected, and
   v. is capable of supporting a live load of at least 2.4 kilonewtons per square metre without exceeding the allowable unit stresses for the material used. O. Reg. 145/00, s. 14.

(3) The guardrail system or protective covering required under subsection (1) or (2) may be removed temporarily to perform work in or around the opening if a worker is adequately protected and signs are posted in accordance with subsections 44 (1) and (2). O. Reg. 145/00, s. 14.

(4) The following are the specifications for a guardrail system:

1. It shall have a top rail, an intermediate rail and a toe board.
2. The intermediate rail may be replaced by material that can withstand a point load of 450 newtons applied in a lateral or vertical downward direction.
3. Subject to subsection 116 (8), the top of the guardrail system shall be located at least 0.9 metres but not more than 1.1 metres above the surface on which the system is installed.
4. The intermediate rail shall be located midway between the top rail and the toe board.

4.1 The toe board shall extend from the surface to which the guardrail system is attached to a height of at least 89 millimetres.

5. If the guardrail system is located at the perimeter of a work surface, the distance between the edge of the surface and the guardrail system shall not be greater than 300 millimetres. O. Reg. 145/00, s. 14; O. Reg. 443/09, s. 2 (1).

(5) A guardrail system shall be capable of resisting anywhere along the length of the system the following loads when applied separately, without exceeding the allowable unit stress for each material used:

1. A point load of 675 newtons applied in a lateral direction to the top rail.
2. A point load of 450 newtons applied in a vertical downward direction to the top rail.
3. A point load of 450 newtons applied in a lateral or vertical downward direction to the intermediate rail, or midway between the top rail and the toe board.
4. A point load of 225 newtons applied in a lateral direction to the toe board. O. Reg. 145/00, s. 14.

(6) The distance between any two adjacent posts of the guardrail system may be greater than 2.4 metres only if the system is capable of resisting the loads specified in subsection (5) increased in proportion to the greater distance between the posts. O. Reg. 443/09, s. 2 (2).

(7) The following additional requirements apply to a guardrail system that is made of wood:

1. The wood shall be spruce, pine or fir (S-P-F) timber of construction grade quality or better and shall not have any visible defect affecting its load-carrying capacity.
2. The wood shall be free of sharp objects such as splinters and protruding nails.
3. The system shall have posts that are at least 38 millimetres by 89 millimetres, are securely fastened to the surface and are spaced at intervals of not more than 2.4 metres.
4. The top rail and the intermediate rail shall each be at least 38 millimetres by 89 millimetres. O. Reg. 145/00, s. 14; O. Reg. 443/09, s. 2 (3).

(7.1) If a guardrail system that is made of wood is constructed and installed so that it is capable of resisting all loads that it may be subjected to by a worker, the following do not apply:

1. The requirement in paragraph 2 of subsection (4) that the replacement material can withstand a point load of 450 newtons.
2. Subsections (5) and (6). O. Reg. 443/09, s. 2 (4).

(8) The following additional requirements apply to a guardrail system that is made of wire rope:

1. The top rail and intermediate rail shall be made of wire rope that is at least 10 millimetres in diameter, and the rope shall be kept taut by a turnbuckle or other device.
2. The outward deflection of the top rail and intermediate rail resulting from the loads specified in subsection (5) shall not extend beyond the edge of a work surface.
3. The system shall have vertical separators at intervals of not more than 2.4 metres and horizontal supports at intervals of not more than 9 metres.
4. REVOKED: O. Reg. 443/09, s. 2 (6).

O. Reg. 145/00, s. 14; O. Reg. 443/09, s. 2 (5, 6).

26.4 (1) A travel restraint system shall consist of a full body harness with adequate attachment points or a safety belt. O. Reg. 145/00, s. 14.

(2) The full body harness or safety belt shall be attached by a lifeline or lanyard to a fixed support that meets the requirements of section 26.7. O. Reg. 145/00, s. 14.

(3) The travel restraint system shall be inspected by a competent worker before each use. O. Reg. 145/00, s. 14.

(4) If a component of the travel restraint system is found to be defective on inspection, the defective component shall immediately be taken out of service. O. Reg. 145/00, s. 14.

26.5 (1) A fall restricting system that is not designed for use in wood pole climbing shall consist of an assembly of components that is,

(a) attached to an independent fixed support that meets the requirements of section 26.7; and

(b) designed and arranged in accordance with the manufacturer's instructions and so that a worker's free fall distance does not exceed 0.6 metres. O. Reg. 85/04, s. 6.

(2) A fall restricting system that is designed for use in wood pole climbing,

(a) shall consist of an assembly of components that is designed and arranged in accordance with the manufacturer's instructions; and

(b) shall not allow pole slippage in excess of the distances set out in the applicable National Standards of Canada standard referred to in subsection 26.1 (3). O. Reg. 85/04, s. 6.

(3) A fall restricting system shall be inspected by a competent worker before each use. O. Reg. 85/04, s. 6.

(4) If a component of the fall restricting system is found to be defective on inspection, the component shall be taken out of service immediately. O. Reg. 85/04, s. 6.

(5) If a worker who is using the fall restricting system falls or slips more than the distance determined under clause (1) (b) or (2) (b), as the case may be, the system shall be taken out of service immediately and shall not be used again by a worker unless all components of the system have been certified by the manufacturer as being safe for reuse. O. Reg. 85/04, s. 6.

26.6 (1) A fall arrest system shall consist of a full body harness with adequate attachment points and a lanyard equipped with a shock absorber or similar device. O. Reg. 145/00, s. 14.

(2) The fall arrest system shall be attached by a lifeline or by the lanyard to an independent fixed support that meets the requirements of section 26.7. O. Reg. 145/00, s. 14.

(3) The fall arrest system shall be arranged so that a worker cannot hit the ground or an object or level below the work. O. Reg. 145/00, s. 14.

(4) Despite subsection (1), the fall arrest system shall not include a shock absorber if wearing or using one could cause a worker to hit the ground or an object or level below the work. O. Reg. 145/00, s. 14.

(5) The fall arrest system shall not subject a worker who falls to a peak fall arrest force greater than 8 kilonewtons. O. Reg. 145/00, s. 14.

(6) The fall arrest system shall be inspected by a competent worker before each use. O. Reg. 145/00, s. 14.

(7) If a component of the fall arrest system is found to be defective on inspection, the defective component shall immediately be taken out of service. O. Reg. 145/00, s. 14.

(8) If a worker who is using the fall arrest system falls, the system shall be immediately removed from service and shall not be used again by a worker unless all components of the system have been certified by the manufacturer as being safe for re-use. O. Reg. 145/00, s. 14.

(9) Subsections (1) to (8) do not apply to fall restricting systems designed for use in wood pole climbing. O. Reg. 85/04, s. 7.

26.7 (1) A permanent anchor system shall be used as the fixed support in a fall arrest system, fall restricting system or travel restraint system if the following conditions are met:

1. The anchor system has been installed according to the *Building Code*.

2. It is safe and practical to use the anchor system as the fixed support. O. Reg. 145/00, s. 14.

(2) If the conditions set out in subsection (1) are not met, a temporary fixed support shall be used that meets the following requirements:

1. Subject to paragraph 2, a support used in a fall arrest system shall be capable of supporting a static force of at least 8 kilonewtons without exceeding the allowable unit stress for each material used.
2. If a shock absorber is also used in the fall arrest system, the support shall be capable of supporting a static force of at least 6 kilonewtons without exceeding the allowable unit stress for each material used.
3. Subject to paragraph 4, a support used in a fall restricting system must be capable of supporting a static force of at least 6 kilonewtons without exceeding the allowable unit stress for each material used.
4. Paragraph 3 does not apply to a support that is used in accordance with the manufacturer's written instructions and is adequate to protect a worker.
5. A support used in a travel restraint system shall be capable of supporting a static force of at least 2 kilonewtons without exceeding the allowable unit stress for each material used. O. Reg. 145/00, s. 14.

(3) Despite the requirements listed in subsection (2), the support capacity of a temporary fixed support used in a fall protection system may be determined by dynamic testing in accordance with good engineering practice to ensure that the temporary fixed support has adequate capacity to arrest a worker's fall. O. Reg. 145/00, s. 14.

(4) A fixed support shall not have any sharp edges that could cut, chafe or abrade the connection between it and another component of the system. O. Reg. 145/00, s. 14.

(5) Subsections (1) to (4) do not apply to fall restricting systems designed for use in wood pole climbing. O. Reg. 85/04, s. 8.

26.8 (1) A safety net shall be designed, tested and installed in accordance with ANSI Standard 10.11-1989, Personnel and Debris Nets for Construction and Demolition Operations. O. Reg. 145/00, s. 14.

(2) The safety net shall be installed by a competent worker. O. Reg. 145/00, s. 14.

(3) A professional engineer or a competent person under the engineer's supervision shall inspect and test the installation of the safety net before it is put in service. O. Reg. 145/00, s. 14.

(4) The engineer shall document the inspection and testing of the safety net. O. Reg. 145/00, s. 14; O. Reg. 85/04, s. 9.

(5) A copy of the document shall be kept at the project while the safety net is in service. O. Reg. 145/00, s. 14.

26.9 (1) This section applies to a lanyard or lifeline that is part of a travel restraint system or a fall arrest system. O. Reg. 145/00, s. 14.

(2) The following requirements apply to a lanyard or a lifeline:

1. It shall not be used in such a way that it is likely to be cut, chafed or abraded.
2. It shall not be subjected to extreme temperature, flame, abrasive or corrosive materials or other hazards that may damage it.
3. The free end of the lanyard or lifeline shall be kept clear of equipment and machinery. O. Reg. 145/00, s. 14.

(3) Only one person at a time may use a lanyard. O. Reg. 145/00, s. 14.

(4) The connecting ends of a lanyard shall be wrapped around a protective thimble and securely fastened with a swaged fitting or eye splice supplied by the manufacturer of the lanyard. O. Reg. 145/00, s. 14.

(5) A horizontal or vertical lifeline shall be kept free from splices or knots, except knots used to connect it to a fixed support. O. Reg. 145/00, s. 14.

(6) Only one person at a time may use a vertical lifeline. O. Reg. 145/00, s. 14.

(7) A vertical lifeline shall,

(a) extend to the ground; or

(b) have a positive stop that prevents the rope grab or other similar device from running off the end of the lifeline. O. Reg. 145/00, s. 14.

(8) The following requirements apply to a horizontal lifeline system:

1. It shall be designed by a professional engineer in accordance with good engineering practice.
2. The design may be a standard design or a custom design.
3. The design shall,
   i. show the arrangement of the system including the anchorage or fixed support system,
   ii. indicate the components used,
   iii. state the number of workers that can safely be attached to it,
   iv. set out instructions for installation or erection, and
   v. show the design loads for the system.
4. The system shall be installed or erected, and maintained, in accordance with the professional engineer's design.
5. Before each use, the system shall be inspected by a professional engineer or a competent worker designated by a supervisor.
6. The constructor shall keep the design at the project while the system is in use. O. Reg. 145/00, s. 14.

26.10, 26.11 REVOKED: O. Reg. 85/04, s. 10.

27. (1) Despite subsections 26.1 (1) and (2), if the following conditions are met, a worker shall wear a lifejacket or other personal flotation device that is adequate:

1. The worker is exposed to a risk of drowning on a project.
2. It is not reasonably possible to install a guardrail system as subsection 26.1 (1) requires.
3. It is not reasonably possible to protect the worker adequately by means of a fall protection method as subsection 26.1 (2) requires. O. Reg. 443/09, s. 3 (1).

(2) If a worker may drown at a project,

(a) at least two workers trained to perform rescue operations shall be available to perform rescue operations;

(b) rescue equipment shall be provided in a suitable location on or near the project; and

(c) all workers on the project shall be advised of the rescue procedures to be followed and their role, if any, in carrying out a rescue. O. Reg. 213/91, s. 27 (2).

(3) The rescue equipment shall include,

(a) a seaworthy boat equipped with a lifebuoy attached to a buoyant heaving line not less than 15 metres in length and a boat hook; and

(b) REVOKED: O. Reg. 443/09, s. 3 (2).

(c) an alarm system capable of warning a worker of the necessity of carrying out a rescue operation. O. Reg. 213/91, s. 27 (3); O. Reg. 443/09, s. 3 (2).

(4) The boat shall be power-driven if the water is likely to be rough or swift. O. Reg. 213/91, s. 27 (4).

(5) The alarm system shall be activated when a rescue operation is necessary. O. Reg. 213/91, s. 27 (5).

(6) REVOKED: O. Reg. 443/09, s. 3 (3).

HYGIENE

28. (1) A reasonable supply of potable drinking water shall be kept readily accessible at a project for the use of workers. O. Reg. 213/91, s. 28 (1).

(2) Drinking water shall be supplied from a piping system or from a clean, covered container with a drain faucet. O. Reg. 213/91, s. 28 (2).

(3) Workers shall be given a sanitary means of drinking the drinking water. O. Reg. 213/91, s. 28 (3).

(4) Workers shall not be required to share a common drinking cup to drink water. O. Reg. 213/91, s. 28 (4).

29. (1) In this section,

"facilities" means toilet, urinal and clean-up facilities;

"service", when used as a verb, means to have waste pumped out and to have the facilities replenished where necessary. O. Reg. 527/00, s. 1.

(2) REVOKED: O. Reg. 527/00, s. 1.

(3) The constructor shall ensure,

(a) that facilities are provided or arranged for workers before work has started at a project; and

(b) that workers at the project have reasonable access to these facilities. O. Reg. 145/00, s. 15.

(4) Subject to subsections (5) and (6), the facilities shall be located within 180 metres horizontally of the work area of the project. O. Reg. 145/00, s. 15.

(5) If work is being performed in a tunnel, the facilities shall be located within 180 metres horizontally from the entrance to the tunnel. O. Reg. 145/00, s. 15.

(6) The facilities may be located within 3 kilometres of the work area if transportation to the facilities is provided for workers where reasonably required. O. Reg. 145/00, s. 15.

(7) If the project is the construction of a building, then in addition to the requirement of subsection (4), the facilities must also be located within 9 metres vertically of the level at which work is being performed. O. Reg. 145/00, s. 15.

(8) The location of the facilities under subsection (7) may be varied if the arrangement affords reasonable accessibility for workers. O. Reg. 145/00, s. 15.

(9) If the location of the facilities is varied under subsection (8), the constructor shall document in writing the location and the reasons for the variance, and shall provide the document to,

(a) the joint health and safety committee or the health and safety representative, if any, for the workplace; or

(b) the workers, if there is no committee or representative for the workers. O. Reg. 145/00, s. 15.

(10) The constructor shall,

(a) inform workers of the location of the facilities; and

(b) post the location of the facilities in a conspicuous place at the project if it is practical to do so. O. Reg. 145/00, s. 15.

(11) The facilities shall be serviced, cleaned and sanitized as frequently as necessary to maintain them in a clean and sanitary condition. O. Reg. 145/00, s. 15.

(12) The constructor shall keep at the project for the duration of the project,

(a) a record of the servicing, cleaning and sanitizing of the facilities; and

(b) a copy of the document required under subsection (9), if any. O. Reg. 145/00, s. 15.

(13) Facilities that are not under the constructor's control satisfy the requirements of this section only if the constructor has received permission from the facilities' owner for workers to use the facilities. O. Reg. 145/00, s. 15.

29.1 (0.1) In this section,

"non-sewered flush toilet facilities" means water flush toilets or chemical flush toilets that have the features listed in subsection (0.2);

"sewered toilet facilities" means water flush toilets that are connected to a sanitary sewer system and equipped with a trap in accordance with Part 7 of the *Building Code*. O. Reg. 527/00, s. 2 (1).

(0.2) The features referred to in the definition of "non-sewered flush toilet facilities" in subsection (0.1) are:

1. The toilets are not connected to a sanitary sewer system.
2. They are equipped with a trap or a positive seal separating stored waste from the bowl.
3. The waste is first flushed from the bowl with water or with water containing chemical additives. Then the waste is deposited into a container and chemically treated sufficiently for the container's maximum capacity. O. Reg. 527/00, s. 2 (1).

(1) Each toilet facility shall meet the following requirements:

1. There shall be a toilet with an open-front toilet seat.
2. There shall be a toilet paper holder and an adequate supply of toilet paper. If the facility is intended for use by female workers, there shall be a disposal receptacle for sanitary napkins.
3. The facility shall afford the user privacy and protection from weather and from falling objects. There shall be a self-closing door that can be locked from inside the facility.
4. The facility shall be,
   i. illuminated by natural or artificial light,
   ii. adequately heated, if that is possible, and
   iii. adequately ventilated.
5. If the facility is intended for use by males only or by females only, it shall have a sign indicating that fact.

6. The facility shall be kept in good repair at all times. O. Reg. 145/00, s. 15; O. Reg. 527/00, s. 2 (2, 3).

(2) Separate toilet facilities shall be provided for male and female workers, unless the facilities are intended to be used by only one worker at a time. O. Reg. 145/00, s. 15.

(3) Sewered toilet facilities or non-sewered flush toilet facilities shall be provided at a project, subject to subsection (4). O. Reg. 145/00, s. 15.

(4) If a project is being carried out in a remote unpopulated area and it is not reasonably possible to provide the toilet facilities required under subsection (3), other types of toilet facilities that come as close as possible to having the features of non-sewered flush toilet facilities shall be provided instead. O. Reg. 527/00, s. 2 (4).

(5) When water flush toilets or non-recirculating chemical flush toilets are provided, the minimum number of toilets required at the project is as follows:

TABLE 1

Minimum number of toilets	Number of workers regularly employed at the project
1	1-15
2	16-30
3	31-45
4	46-60
4, plus 1 additional toilet for each additional group of 15 or fewer workers	61 or more

O. Reg. 145/00, s. 15; O. Reg. 527/00, s. 2 (5).

(6) If the toilets are located in a multiple water flush toilet facility and are intended to be used by male workers, water flush urinals may be substituted for a maximum of two-thirds of the number of toilets required by subsection (5). O. Reg. 145/00, s. 15.

(7) When toilets other than water flush toilets or non-recirculating chemical flush toilets are provided, the minimum number of toilets required at the project is as follows:

TABLE 2

Minimum number of toilets	Number of workers regularly employed at the project
1	1-10
2	11-20
3	21-30
4	31-40
4, plus 1 additional toilet for each additional group of 15 or fewer workers	41 or more

O. Reg. 145/00, s. 15; O. Reg. 527/00, s. 2 (6).

(8) If the toilets are located in a portable single-unit toilet facility intended for use by male workers, there shall be at least one urinal for each toilet. O. Reg. 145/00, s. 15.

(9) Portable urinals equipped with clean-up facilities are permitted in addition to the requirements of this section. O. Reg. 145/00, s. 15.

29.2 (1) Each single-toilet facility shall be provided with its own clean-up facility. O. Reg. 527/00, s. 3.

(1.1) In a multiple-toilet facility at a project, one clean-up facility shall be provided for every two toilets. O. Reg. 527/00, s. 3.

(2) Each clean-up facility shall meet the following requirements:

1. Subject to subsection (3), the facility shall have a wash basin with running water. Both hot and cold running water shall be available if reasonably possible.
2. Soap or hand cleanser shall be provided.
3. Paper towels or a hand dryer shall be provided. If paper towels are provided, there shall be a waste disposal receptacle nearby. O. Reg. 145/00, s. 15.

(3) If it is not reasonably possible to have a wash basin with running water at a clean-up facility, hand cleanser that can be used without water shall be provided instead. O. Reg. 145/00, s. 15.

30. Workers who handle or use corrosive, poisonous or other substances likely to endanger their health shall be provided with washing facilities with clean water, soap and individual towels. O. Reg. 213/91, s. 30.

GENERAL REQUIREMENTS

31. (1) Every part of a project, including a temporary structure,

(a) shall be designed and constructed to support or resist all loads and forces to which it is likely to be subjected without exceeding the allowable unit stress for each material used; and

(b) shall be adequately braced to prevent any movement that may affect its stability or cause its failure or collapse. O. Reg. 213/91, s. 31 (1).

(2) If two structural steel columns or structural steel beams are connected to a common column or common beam,

(a) the connection shall be made using a clipped double connection; or

(b) the first column or beam shall be secured in a seated connection. O. Reg. 213/91, s. 31 (2).

(3) No part of a project, including a temporary structure, shall be subjected to a load in excess of the load it is designed and constructed to bear. O. Reg. 213/91, s. 31 (3).

32. (1) During the construction of a building, temporary or permanent flooring shall be installed progressively as the building is erected. O. Reg. 213/91, s. 32 (1).

(2) Temporary flooring,

(a) shall consist of material that, without exceeding the allowable unit stress for the material used, is capable of supporting,

(i) any load to which it is likely to be subjected, and

(ii) a load of at least 2.4 kilonewtons per square metre;

(b) shall be securely fastened to and supported on girders, beams or other structural members that are capable of supporting any load likely to be applied to the flooring without exceeding the allowable unit stress for the structural members; and

(c) shall extend over the whole area of the surface on or above which work is being carried out. O. Reg. 213/91, s. 32 (2).

(3) Temporary flooring shall not be subjected to a load in excess of the load that it is designed and constructed to bear. O. Reg. 213/91, s. 32 (3).

33. (1) Subject to subsection (2), work on a building shall not be carried out at a distance higher than the higher of two storeys or the first column splice above the temporary or permanent flooring. O. Reg. 213/91, s. 33 (1).

(2) If the vertical distance between the tiers of column splices on a building exceeds two storeys, work shall not be carried out higher than three storeys above the temporary or permanent flooring. O. Reg. 213/91, s. 33 (2).

(3) This section does not apply to work carried out by a worker,

(a) who is working from a scaffold;

(b) whose fall would be arrested by means of a safety net without endangering the worker; or

(c) who is using a fall arrest system attached to the project. O. Reg. 213/91, s. 33 (3).

34. (1) If material may fall on a worker, overhead protection shall be provided,

(a) at every means of access to and egress from a building or other structure under construction; and

(b) above every area where work is being carried out. O. Reg. 213/91, s. 34 (1).

(2) Overhead protection shall consist of material capable of supporting 2.4 kilonewtons per square metre without exceeding the allowable unit stress for the material used. O. Reg. 213/91, s. 34 (2).

HOUSEKEEPING

35. (1) Waste material and debris shall be removed to a disposal area and reusable material shall be removed to a storage area as often as is necessary to prevent a hazardous condition arising and, in any event, at least once daily. O. Reg. 213/91, s. 35 (1).

(2) Rubbish, debris and other materials shall not be permitted to fall freely from one level to another but shall be lowered by a chute, in a container or by a crane or hoist. O. Reg. 213/91, s. 35 (2).

(3) Despite subsection (2), rubbish, debris and other materials from demolition on a project may be permitted to fall or may be dropped into an enclosed designated area to which people do not have access. O. Reg. 213/91, s. 35 (3).

(4) A chute,

(a) shall be adequately constructed and rigidly fastened in place;

(b) if it has a slope exceeding a gradient of one in one, shall be enclosed on its four sides;

(c) shall have a gate at the bottom end if one is necessary to control the flow of material; and

(d) shall discharge into a container or an enclosed area surrounded by barriers. O. Reg. 213/91, s. 35 (4).

(5) The entrance to a chute,

(a) shall be constructed to prevent spilling over when rubbish, debris and other materials are being deposited into the chute;

(b) if it is at or below floor level, shall have a curb that is at least 100 millimetres high;

(c) shall not be more than 1.2 metres high;

(d) shall be kept closed when the chute is not in use; and

(e) shall be designed so that any person will be discouraged from entering it. O. Reg. 213/91, s. 35 (5).

36. If a formwork tie, reinforcing steel, a nail or another object protruding from concrete or another surface may endanger a worker, the protrusion shall be removed, cut off at the surface or otherwise protected as soon as practicable. O. Reg. 213/91, s. 36.

37. (1) Material or equipment at a project shall be stored and moved in a manner that does not endanger a worker. O. Reg. 213/91, s. 37 (1).

(2) No material or equipment to be moved by a crane or similar hoisting device shall be stored under or in close proximity to an energized outdoor overhead electrical conductor. O. Reg. 213/91, s. 37 (2).

38. Blocking, support chains, metal bands, wire rope and rigging components shall be removed from material or equipment in a manner that does not endanger a worker. O. Reg. 213/91, s. 38.

39. Material and equipment at a project shall be piled or stacked in a manner that prevents it from tipping, collapsing or rolling. O. Reg. 213/91, s. 39.

40. (1) No material shall be stored, stacked or piled within 1.8 metres of,

(a) an opening in a floor or roof;

(b) the open edge of a floor, roof or balcony; or

(c) an excavation. O. Reg. 213/91, s. 40 (1).

(2) Subsection (1) does not apply with respect to material in a building or a completely enclosed part of a building that is used solely for storing and distributing materials. O. Reg. 213/91, s. 40 (2).

(3) Subsection (1) does not apply with respect to small masonry units including bricks, blocks and similar objects,

(a) that can be handled by one worker;

(b) that are to be used at the edge of a floor, a roof, an excavation or an opening in a floor or roof; and

(c) that are stacked in a pile whose height is less than the distance from the face of the pile to the edge of the floor, roof, excavation or opening in a floor or roof. O. Reg. 213/91, s. 40 (3).

41. A combustible, corrosive or toxic substance shall be stored in a suitable container. O. Reg. 213/91, s. 41.

42. (1) A storage cylinder for compressed gas shall be secured in an upright position. O. Reg. 213/91, s. 42 (1).

(2) The control valve of a storage cylinder for compressed gas, other than a cylinder connected to a regulator, supply line or hose, shall be covered by a protective cap that is secured in its proper position. O. Reg. 213/91, s. 42 (2).

(3) A spent storage cylinder shall not be stored inside a building. O. Reg. 213/91, s. 42 (3).

(4) No storage cylinder for propane shall be placed closer than three metres to a source of ignition or fire. O. Reg. 213/91, s. 42 (4).

(5) Subsection (4) does not apply to a storage cylinder,

(a) that forms part of hand-held propane equipment;

(b) that forms part of a lead pot used in plumbing or electrical work;

(c) that forms part of a propane-powered or propane-heated vehicle; or

(d) that is protected from a source of ignition by a barrier, wall or other means of separation. O. Reg. 213/91, s. 42 (5).

43. (1) A flammable liquid or gas shall be stored in a building or storage tank that is suitable for the purpose and, if practicable, not less than 100 metres from a magazine for explosives. O. Reg. 213/91, s. 43 (1).

(2) No more than one work day's normal supply of a flammable liquid shall be stored in a building or structure on a project unless it is stored,

(a) in a container that is suitable for the particular hazards of the liquid; and

(b) in a controlled access area or a room,

(i) that has sufficient window area to provide explosion relief to the outside, and

(ii) that is remote from the means of egress from the building or structure. O. Reg. 213/91, s. 43 (2).

(3) A portable container used to store or transport flammable liquids,

(a) shall be approved for use for that liquid by a recognized testing laboratory; and

(b) shall have a label stating the use for which the container is approved and the name of the testing laboratory which gave the approval required by clause (a). O. Reg. 213/91, s. 43 (3).

44. (1) Signs meeting the requirements of subsection (2) shall be posted in prominent locations and in sufficient numbers to warn workers of a hazard on a project. O. Reg. 213/91, s. 44 (1).

(2) A sign shall contain the word "DANGER" written in legible letters that are at least 150 millimetres in height and shall state that entry by any unauthorized person to the area where the hazard exists is forbidden. O. Reg. 213/91, s. 44 (2).

(3) Without limiting the generality of subsection (1), a sign shall be posted,

(a) adjacent to a hoisting area;

(b) under a boatswain's chair, a suspended scaffold or a suspended platform;

(c) at the outlet from a chute;

(d) at a means of access to a place where there may be a noxious gas, vapour dust or fume, noxious substance or a lack of oxygen; and

(e) where there is a potential hazard from an energized overhead electrical conductor at more than 750 volts. O. Reg. 213/91, s. 44 (3).

(4) No person shall enter an area in which a sign is posted other than a worker authorized to work in the area. O. Reg. 213/91, s. 44 (4).

45. (1) The areas in which a worker is present and the means of access to and egress from those areas shall be adequately lit. O. Reg. 213/91, s. 45 (1).

(2) A light bulb used in a temporary lighting system shall be enclosed by a mechanical protection device. O. Reg. 213/91, s. 45 (2).

46. (1) A project shall be adequately ventilated by natural or mechanical means,

(a) if a worker may be injured by inhaling a noxious gas, vapour, dust or fume or from a lack of oxygen; or

(b) if a gas, vapour, dust or fume may be capable of forming an explosive mixture with air. O. Reg. 213/91, s. 46 (1).

(2) If it is not practicable to provide natural or mechanical ventilation in the circumstances described in clause (1) (a), respiratory protective equipment suitable for the hazard shall be provided to and used by the workers. O. Reg. 213/91, s. 46 (2).

47. No internal combustion engine shall be operated,

(a) in an excavation unless provision is made to ensure that exhaust gases and fumes will not accumulate in the excavation; or

(b) in a building or other enclosed structure,

(i) unless the exhaust gases and fumes from the engine are discharged directly outside the building or structure to a point sufficiently remote to prevent the return of the gases and fumes, or

(ii) unless there is an adequate supply of air for combustion and adequate natural or mechanical ventilation to ensure exhaust gases and fumes will not accumulate. O. Reg. 213/91, s. 47.

48. (1) When a drum, tank, pipeline or other container is to be repaired or altered,

(a) its internal pressures shall be adjusted to atmospheric pressure before any fastening is removed;

(b) it shall be drained, cleaned and ventilated or otherwise rendered free from any explosive, flammable or harmful substance; and

(c) it shall not be refilled during repair or alteration if the substance which is to be placed in it may vaporize or ignite. O. Reg. 213/91, s. 48 (1).

(2) Clauses (1) (a) and (b) do not apply with respect to a pipeline if hot-tapping and boxing-in are carried out by a competent worker under controlled conditions that provide for the protection of all persons. O. Reg. 213/91, s. 48 (2).

TEMPORARY HEAT

49. (1) A fuel-fired heating device shall be located, protected and used in such a way that there is no risk of igniting a tarpaulin or similar temporary enclosure or combustible materials adjacent to it. O. Reg. 213/91, s. 49 (1).

(2) No fuel-fired heating device shall be used in a confined or enclosed space unless there is an adequate supply of air for combustion and adequate general ventilation. O. Reg. 213/91, s. 49 (2).

(3) A fuel-fired heating device shall be protected from damage and from overturning. O. Reg. 213/91, s. 49 (3).

(4) No fuel-fired heating device shall be located so as to restrict any means of egress. O. Reg. 213/91, s. 49 (4).

(5) A fuel-fired heating device that generates noxious products of combustion shall discharge the products of combustion outside the building or structure in which it is located. O. Reg. 213/91, s. 49 (5).

50. All fuel supply lines shall be constructed, guarded or placed in such a way as to be protected from damage. O. Reg. 213/91, s. 50.

51. (1) Temporary steam-piping shall be installed and supported so as not to endanger a worker. O. Reg. 213/91, s. 51 (1).

(2) Temporary steam-piping shall be insulated or otherwise protected if a worker is likely to come into contact with it. O. Reg. 213/91, s. 51 (2).

FIRE SAFETY

52. (1) Fire extinguishing equipment shall be provided at readily accessible and adequately marked locations at a project. O. Reg. 213/91, s. 52 (1).

(1.1) Every worker who may be required to use fire extinguishing equipment shall be trained in its use. O. Reg. 145/00, s. 16.

(2) Without limiting subsection (1), at least one fire extinguisher shall be provided,

(a) where flammable liquids or combustible materials are stored, handled or used;

(b) where oil-fired or gas-fired equipment, other than permanent furnace equipment in a building, is used;

(c) where welding or open-flame operations are carried on; and

(d) on each storey of an enclosed building being constructed or altered. O. Reg. 213/91, s. 52 (2).

(3) At least one fire extinguisher shall be provided in a workshop for each 300 or fewer square metres of floor area. O. Reg. 213/91, s. 52 (3).

(4) Clause (2) (d) and subsection (3) do not apply to a building,

(a) that is to be used as a detached or semi-detached single-family dwelling;

(b) that has two storeys or less and is to be used as a multiple family dwelling; or

(c) that has one storey with no basement or cellar. O. Reg. 213/91, s. 52 (4).

53. (1) Fire extinguishing equipment shall be of a suitable type and size to permit the evacuation of workers during a fire. O. Reg. 213/91, s. 53 (1).

(2) Every fire extinguisher,

(a) shall be a type whose contents are discharged under pressure; and

(b) shall have an Underwriters' Laboratories of Canada 4A40BC rating. O. Reg. 213/91, s. 53 (2).

54. (1) Fire extinguishing equipment shall be protected from physical damage and from freezing. O. Reg. 213/91, s. 54 (1).

(2) After a fire extinguisher is used, it shall be refilled or replaced immediately. O. Reg. 213/91, s. 54 (2).

55. Every fire extinguisher shall be inspected for defects or deterioration at least once a month by a competent worker who shall record the date of the inspection on a tag attached to it. O. Reg. 213/91, s. 55.

56. No work shall be carried out at a height of 84 metres or more in a building unless the building has temporary or permanent fire pumps that provide a minimum water flow of 1,890 litres per minute at a discharge pressure of at least 450 kilopascals at and above the 84-metre height. O. Reg. 145/00, s. 17.

57. (1) As construction proceeds in a building with two or more storeys, a permanent or temporary standpipe shall be installed to within two storeys of the uppermost work level. O. Reg. 145/00, s. 18 (1).

(2) Subsection (1) does not apply to work carried out in a building which is not required by the *Building Code* to have a permanent standpipe. O. Reg. 213/91, s. 57 (2).

(3) A permanent standpipe,

(a) shall have sufficient hose outlets to permit every part of the building to be protected by a hose not longer than twenty-three metres;

(b) shall have a connection for the use of the local fire department located on the street side of the building not more than 900 millimetres and not less than 300 millimetres above ground level and to which there is clear access at all times; and

(c) shall be maintained so as to be readily operable if required to be used. O. Reg. 213/91, s. 57 (3).

(4) Every hose outlet in a permanent standpipe shall have a valve. O. Reg. 213/91, s. 57 (4).

(5) Every hose used with a permanent standpipe,

(a) shall be at least thirty-eight millimetres in diameter;

(b) shall have a combination straight stream and fog nozzle; and

(c) shall be stored on a rack in such a way as to protect it from damage and keep it available for immediate use. O. Reg. 213/91, s. 57 (5).

(6) If a temporary standpipe has been installed, it shall not be disconnected until the permanent standpipe is connected, so that there is always a standpipe in service. O. Reg. 145/00, s. 18 (2).

(7) A temporary standpipe shall be maintained so that it is readily operable. O. Reg. 145/00, s. 18 (2).

(8) A temporary standpipe shall have at least one hose outlet per floor, with a valve and a hose attached to each hose outlet and a nozzle attached to each hose. O. Reg. 145/00, s. 18 (2).

(9) In addition to the requirements of subsection (8), there shall be a connection to which there is clear access at all times, located between 30 and 90 centimetres above ground level on a side of the building that faces the street. O. Reg. 145/00, s. 18 (2).

(10) A hose outlet on a temporary standpipe,

(a) shall have a valve; and

(b) shall be capable of accepting a hose that is 38 millimetres in diameter. O. Reg. 145/00, s. 18 (2).

(11) If a temporary standpipe is installed in a building under construction, the constructor shall post at the project, or have available for review, a floor plan of the building indicating,

(a) the location of the hose outlets on each floor;

(b) the location of the point on the perimeter of each floor that is furthest from the hose outlet on that floor; and

(c) the location of each exit on each floor. O. Reg. 145/00, s. 18 (2).

(12) The constructor shall give a copy of the floor plan to the fire department located nearest to the project. O. Reg. 145/00, s. 18 (2).

58. No flammable liquid shall be transferred from one container to another by the direct application of air under pressure. O. Reg. 213/91, s. 58.

Dust Control

59. If the dissemination of dust is a hazard to a worker, the dust shall be adequately controlled or each worker who may be exposed to the hazard shall be provided with adequate personal protective equipment. O. Reg. 145/00, s. 19.

60.-63. Revoked: O. Reg. 628/05, s. 2.

Public Way Protection

64. (1) No work shall be carried out on a building or structure located within 4.5 metres of a public way unless a covered way is constructed over the part of the public way that is adjacent to the project. O. Reg. 213/91, s. 64 (1).

(2) Subsection (1) does not apply with respect to a building or structure if the work being done is enclosed. O. Reg. 213/91, s. 64 (2).

(3) A covered way,

(a) shall have an unobstructed height of not less than 2.4 metres;

(b) shall have an unobstructed width of not less than 1.1 metres or, if it is over a sidewalk that is less than 1.1 metres wide, have a width equal to the width of the sidewalk;

(c) shall be capable of supporting any load likely to be applied to it and capable of supporting a load of at least 2.4 kilonewtons per square metre;

(d) shall have a weather-tight roof;

(e) shall have the side adjacent to the project covered with a partition that has a smooth surface on the public way side;

(f) shall have a railing one metre high from ground level on the street side; and

(g) shall have adequate lighting within the public way. O. Reg. 213/91, s. 64 (3).

65. If work on a project may endanger a person using a public way, a sturdy fence at least 1.8 metres in height shall be constructed between the public way and the project. O. Reg. 213/91, s. 65.

66. Machinery, equipment and material that is being used, left or stored where it may be a hazard to traffic on a public way shall be marked by flashing devices. O. Reg. 213/91, s. 66; O. Reg. 145/00, s. 20.

TRAFFIC CONTROL

67. (1) In this section,

"barricade" means a device that provides a visual indicator of the path a motorist is supposed to take;

"barrier" means a device that provides a physical limitation through which a vehicle would not normally pass, and includes a concrete barrier;

"mobile operation" means work, including a paving operation, that is done on a highway or the shoulder of a highway and moves along at speeds of less than 30 kilometres per hour. O. Reg. 145/00, s. 21.

(2) If a worker at a project on a highway may be endangered by vehicular traffic unrelated to the project, the project shall make use of as many of the following measures as is necessary to adequately protect the worker:

1. Barriers.
2. Barricades.
3. Delineators.
4. Lane control devices.
5. Warning signs.
6. Flashing lights.
7. Flares.
8. Traffic control devices.
9. Blocker trucks.
10. Crash trucks.

11. Sign trucks.

12. Speed control devices.

13. Longitudinal buffer areas. O. Reg. 145/00, s. 21.

(3) In addition to the measures listed in subsection (2) but subject to section 68, a worker may be used to direct traffic. O. Reg. 145/00, s. 21.

(4) Every employer shall develop in writing and implement a traffic protection plan for the employers' workers at a project if any of them may be exposed to a hazard from vehicular traffic. O. Reg. 145/00, s. 21.

(5) The traffic protection plan,

(a) shall specify the vehicular traffic hazards and the measures described in subsection (2) to be used to protect workers; and

(b) shall be kept at the project and made available to an inspector or a worker on request. O. Reg. 145/00, s. 21.

(6) A worker who is required to set up or remove measures described in subsection (2) on a roadway or a shoulder of a roadway,

(a) shall be a competent worker;

(b) shall not perform any other work while setting up or removing the measures; and

(c) shall be given adequate written and oral instructions, in a language that he or she understands, with respect to setting up or removing the measures. O. Reg. 145/00, s. 21.

(7) Subject to subsection (8), adequate barriers shall be installed to protect workers at a project from vehicular traffic if the project,

(a) is on a freeway;

(b) is not a mobile operation; and

(c) is expected to require more than five days to complete. O. Reg. 145/00, s. 21.

(8) Until January 1, 2003, if a project to which subsection (7) would otherwise apply is expected to require five days or less to complete, or if it is not practical to install barriers as that subsection requires, the following measures shall be taken to protect workers at the project:

1. An adequate longitudinal buffer area shall be provided if physically possible.

2. If information about the annual average daily travel rate of vehicular traffic on the freeway is available and the rate is less than 25,000, blocker trucks shall be adequately positioned between vehicular traffic and workers.

3. If the annual average daily travel rate of vehicular traffic on the freeway is 25,000 or more or if information about the rate is unavailable, crash trucks shall be adequately positioned between vehicular traffic and workers. O. Reg. 145/00, s. 21.

(9) If subsection (8) applies and information about the annual average daily travel rate of vehicular traffic on the freeway is available, a record of the rate shall be maintained at the project and be made available to an inspector upon request. O. Reg. 145/00, s. 21.

(10) On and after January 1, 2003, if it is not practical to install barriers as subsection (7) requires, or if the project is expected to require five days or less to complete, crash trucks shall be adequately positioned to protect workers. O. Reg. 145/00, s. 21.

(11) If work on a shoulder of a freeway is expected to take less than 30 minutes to complete, a vehicle with four-way flashers and a 360-degree beacon light shall be provided. O. Reg. 145/00, s. 21.

(12) The following measures shall be taken to protect a worker at a project if the project is on a freeway and involves a mobile operation:

1. Until January 1, 2003, an adequate number of blocker trucks shall be adequately positioned between vehicular traffic and the worker.
2. On and after January 1, 2003, an adequate number of crash trucks shall be adequately positioned between vehicular traffic and the worker.
3. If the operation involves intermittent stops averaging 30 minutes or less, an adequate number of barricades or delineators shall be adequately positioned between vehicular traffic and the worker.
4. If the operation involves intermittent stops averaging more than 30 minutes,
   i. an adequate longitudinal buffer area shall be provided if physically possible,
   ii. the lane on which work is being done shall be adequately identified with lane closure signs and a lane closure taper, and
   iii. an adequate number of barricades or delineators shall be adequately positioned between vehicular traffic and the work area. O. Reg. 145/00, s. 21.

68. The following requirements apply with respect to a sign used by a worker to direct vehicular traffic:

1. It shall be octagonal in shape, measure 450 millimetres between opposite sides, and be mounted on a pole that is 1.2 metres long.
2. It shall be made of material with at least the rigidity of plywood that is six millimetres thick.
3. On one side it shall be high-intensity retro-reflective grade red in colour, with the word “STOP” written in legible high-intensity retro-reflective grade white letters 150 millimetres high in a central position on the sign.
4. On the other side it shall be high retro-reflective micro-prismatic fluorescent chartreuse in colour, with a black diamond-shaped border that is at least 317 millimetres by 317 millimetres, and with the word “SLOW” written in legible black letters 120 millimetres high in a central position on the sign.
5. It shall be maintained in a clean and legible condition. O. Reg. 145/00, s. 22.

69. (1) This section applies with respect to directing vehicular traffic that may be a hazard to workers on a public way. O. Reg. 145/00, s. 23.

(2) A worker shall not direct vehicular traffic for more than one lane in the same direction. O. Reg. 145/00, s. 23.

(3) A worker shall not direct vehicular traffic if the normal posted speed limit of the public way is more than 90 kilometres per hour. O. Reg. 145/00, s. 23.

(4) A worker who is required to direct vehicular traffic,

(a) shall be a competent worker;

(b) shall not perform any other work while directing vehicular traffic;

(c) shall be positioned in such a way that he or she is endangered as little as possible by vehicular traffic; and

(d) shall be given adequate written and oral instructions, in a language that he or she understands, with respect to directing vehicular traffic, and those instructions shall include a description of the signals that are to be used. O. Reg. 145/00, s. 23.

(5) The written instructions referred to in clause (4) (d) shall be kept at the project. O. Reg. 145/00, s. 23.

69.1 (1) A worker who may be endangered by vehicular traffic shall wear a garment that covers at least his or her upper body and has the following features:

1. The garment shall be fluorescent blaze or international orange in colour.
2. On the front and the back, there shall be two yellow stripes that are 5 centimetres wide. The yellow area shall total at least 500 square centimetres on the front and at least 570 square centimetres on the back.
3. On the front, the stripes shall be arranged vertically and centred and shall be approximately 225 millimetres apart, measured from the centre of each stripe. On the back, they shall be arranged in a diagonal "X" pattern.
4. The stripes shall be retro-reflective and fluorescent. O. Reg. 145/00, s. 23.

(2) If the garment is a vest, it shall have adjustable fit. O. Reg. 145/00, s. 23.

(3) On and after January 1, 2001, a nylon vest to which this section applies shall also have a side and front tear-away feature. O. Reg. 145/00, s. 23.

(4) In addition, a worker who may be endangered by vehicular traffic during night-time hours shall wear retro-reflective silver stripes encircling each arm and leg, or equivalent side visibility-enhancing stripes with a minimum area of 50 square centimetres per side. O. Reg. 145/00, s. 23.

ACCESS TO AND EGRESS FROM WORK AREAS

70. (1) Access to and egress from a work area located above or below ground level shall be by stairs, runway, ramp or ladder. O. Reg. 213/91, s. 70 (1).

(2) Subsection (1) does not apply to a work area that is a suspended scaffold able to be moved to give access to a floor, roof or platform or to ground level. O. Reg. 213/91, s. 70 (2).

71. Adequate means of egress shall be provided from a work area to permit the evacuation of workers during an emergency. O. Reg. 213/91, s. 71.

72. A work area, a route to and from a work area and a scaffold platform on which work is being performed shall be maintained at all times in a condition that does not endanger workers and, without limiting the generality of the foregoing,

(a) shall be kept clear of obstructions;

(b) shall be kept clear of snow, ice or other slippery material; and

(c) shall be treated with sand or similar material when necessary to ensure a firm footing. O. Reg. 213/91, s. 72.

PLATFORMS, RUNWAYS AND RAMPS

73. (1) Runways, ramps and platforms other than scaffold platforms shall meet the requirements of this section. O. Reg. 213/91, s. 73 (1).

(2) A runway, ramp or platform shall be designed, constructed and maintained to support or resist, without exceeding the allowable unit stresses for the materials of which it is made,

(a) all loads and forces to which it is likely to be subjected; and

(b) at least 2.4 kilonewtons per square metre. O. Reg. 213/91, s. 73 (2).

(3) No runway, ramp or platform shall be loaded in excess of the load that it is designed and constructed to bear. O. Reg. 213/91, s. 73 (3).

(4) A runway, ramp or platform shall be at least 460 millimetres wide and shall be securely fastened in place. O. Reg. 213/91, s. 73 (4).

74. (1) A ramp shall have,

(a) a slope not exceeding a gradient of 1 in 3; and

(b) if its slope exceeds a gradient of 1 in 8, cross cleats made from nineteen millimetres by thirty-eight millimetres boards that are securely nailed to the ramp and spaced at regular intervals not exceeding 500 millimetres. O. Reg. 213/91, s. 74 (1).

(2) Subsection (1) does not apply to a ramp installed in the stairwell of a building not exceeding two storeys in height if the ramp,

(a) has a slope not exceeding a gradient of 1 in 1; and

(b) has cross cleats made from thirty-eight millimetres by thirty-eight millimetres boards that are securely nailed to the ramp and spaced at regular intervals not exceeding 300 millimetres. O. Reg. 213/91, s. 74 (2).

STAIRS AND LANDINGS

75. (1) No work shall be performed in a building or structure that will be at least two storeys high when it is finished unless stairs are installed in accordance with this section. O. Reg. 213/91, s. 75 (1).

(2) As the construction of a building or structure progresses, permanent or temporary stairs shall be installed up to,

(a) the uppermost work level; or

(b) if stairs would interfere with work on the uppermost work level, to within the lesser of two storeys or nine metres below the uppermost work level. O. Reg. 213/91, s. 75 (2).

(3) Subsection (2) does not apply with respect to,

(a) a part of a building or structure in which only the structural steel beams or columns are erected; or

(b) a structure to which a permanent ladder is attached before the structure is raised into position. O. Reg. 213/91, s. 75 (3).

76. (1) Temporary stairs and landings shall be designed, constructed and maintained to support a live load of 4.8 kilonewtons per square metre without exceeding the allowable unit stresses for each material used. O. Reg. 213/91, s. 76 (1).

(2) No temporary stair or landing shall be loaded in excess of the load it is designed and constructed to bear. O. Reg. 213/91, s. 76 (2).

77. (1) No work shall be performed in a building or structure with stairs unless the stairs meet the requirements of this section. O. Reg. 213/91, s. 77 (1).

(2) Stairs shall have,

(a) a clear width of at least 500 millimetres;

(b) treads and risers of uniform width, length and height;

(c) subject to subsection (3), stringers with a maximum slope of 50 degrees from the horizontal;

(d) landings that are less than 4.5 metres apart measured vertically;

(e) a securely fastened and supported wooden handrail on the open sides of each flight; and

(f) a guardrail on the open side of each landing. O. Reg. 213/91, s. 77 (2).

(3) The stringers of prefabricated stairs erected inside a tower formed by scaffold frame sections shall have a maximum slope of 60 degrees from the horizontal. O. Reg. 213/91, s. 77 (3).

(4) A wooden handrail shall measure thirty-eight millimetres by eighty-nine millimetres and shall be free of loose knots, sharp edges, splinters and shakes. O. Reg. 213/91, s. 77 (4).

(5) Skeleton steel stairs shall have temporary wooden treads securely fastened in place that are made of suitable planking extending the full width and breadth of the stairs and landings. O. Reg. 213/91, s. 77 (5).

LADDERS

78. (1) A ladder shall be designed, constructed and maintained so as not to endanger a worker and shall be capable of withstanding all loads to which it may be subjected. O. Reg. 213/91, s. 78 (1).

(2) A ladder,

(a) shall be free from defective or loose rungs;

(b) shall have rungs spaced at 300 millimetres on centres;

(c) shall have side rails at least 300 millimetres apart;

(d) shall be placed on a firm footing; and

(e) shall be situated so that its base is not less than one-quarter, and not more than one-third, of the length of the ladder from a point directly below the top of the ladder and at the same level as the base of the ladder, if the ladder is not securely fastened. O. Reg. 213/91, s. 78 (2).

(3) The maximum length of a ladder measured along its side rail shall not be more than,

(a) five metres for a trestle ladder or for each of the base and extension sections of an extension trestle ladder;

(b) six metres for a step-ladder;

(c) nine metres for a single ladder or an individual section of a ladder;

(d) fifteen metres for an extension ladder with two sections; and

(e) twenty metres for an extension ladder with more than two sections. O. Reg. 213/91, s. 78 (3).

(4) No ladder shall be lashed to another ladder to increase its length. O. Reg. 213/91, s. 78 (4).

(5) In this section,

"extension trestle ladder" means a combination of a trestle ladder and a vertically-adjustable single ladder with a suitable means of securely locking the ladders together. O. Reg. 213/91, s. 78 (5).

79. No ladder shall be present in an elevator shaft or a similar hoisting area when the shaft or area is being used for hoisting. O. Reg. 213/91, s. 79.

80. A ladder used as a regular means of access between levels of a structure,

(a) shall extend at the upper level at least 900 millimetres above the landing or floor;

(b) shall have a clear space of at least 150 millimetres behind every rung;

(c) shall be located so that an adequate landing surface that is clear of obstructions is available at the top and bottom of the ladder; and

(d) shall be secured at the top and bottom to prevent movement. O. Reg. 213/91, s. 80.

81. (1) A wooden ladder,

(a) shall be made of wood that is straight-grained and free of loose knots, sharp edges, splinters and shakes; and

(b) shall not be painted or coated with an opaque material. O. Reg. 213/91, s. 81 (1).

(2) The side rails of a wooden ladder of the cleat type,

(a) shall be not less than 400 millimetres and not more than 610 millimetres apart; and

(b) shall measure not less than,

(i) thirty-eight millimetres by eighty-nine millimetres if the ladder is 5.8 metres or less long, or

(ii) thirty-eight millimetres by 140 millimetres if the ladder is more than 5.8 metres long. O. Reg. 213/91, s. 81 (2).

(3) The rungs of a wooden ladder of the cleat type,

(a) shall measure not less than,

(i) nineteen millimetres by sixty-four millimetres if the side rails are 400 millimetres apart, or

(ii) nineteen millimetres by eighty-nine millimetres if the side rails are more than 400 millimetres and not more than 610 millimetres apart; and

(b) shall be braced by filler blocks that are nineteen millimetres thick and are located between the rungs. O. Reg. 213/91, s. 81 (3).

82. A double-width wooden ladder,

(a) shall have three evenly-spaced rails that measure at least thirty-eight millimetres by 140 millimetres;

(b) shall have rungs that,

(i) measure at least thirty-eight millimetres by eighty-nine millimetres,

(ii) extend the full width of the ladder, and

(iii) are braced by filler blocks that are at least 19 millimetres thick; and

(c) shall not be less than 1.5 metres wide and not more than two metres wide. O. Reg. 213/91, s. 82.

83. (1) When a step-ladder is being used as a self-supporting unit, its legs shall be fully-spread and its spreader shall be locked. O. Reg. 213/91, s. 83 (1).

(2) No worker shall stand on the top of or the pail shelf of a step-ladder. O. Reg. 213/91, s. 83 (2).

84. (1) Subject to subsection (2), an access ladder fixed in position,

(a) shall be vertical;

(b) shall have rest platforms at not more than nine metre intervals;

(c) shall be offset at each rest platform;

(d) where the ladder extends over three metres above grade, floor or landing, shall have a safety cage commencing not more than 2.2 metres above grade, floor or landing and continuing at least 90 centimetres above the top landing with openings to permit access by a worker to rest platforms or to the top landing;

(e) shall have side rails that extend 90 centimetres above the landing; and

(f) shall have rungs that are at least 15 centimetres from the wall and spaced at regular intervals. O. Reg. 631/94, s. 2.

(2) Subsection (1) does not apply to an access ladder on a tower, water tank, chimney or similar structure that has a safety device that will provide protection should a worker using the ladder fall. O. Reg. 631/94, s. 2.

85., 86. REVOKED: O. Reg. 145/00, s. 24.

FORMS, FORMWORK, FALSEWORK AND RE-SHORING

87. (1) Formwork, falsework and re-shoring shall be designed, constructed, supported and braced so that they are capable of withstanding all loads and forces likely to be applied to them,

(a) without exceeding the allowable working loads established for any component of the structure; and

(b) without causing uplift, sliding, overturning or lateral displacement of the system. O. Reg. 213/91, s. 87 (1).

(2) No formwork, falsework or re-shoring shall be loaded in excess of the load that it is designed and constructed to bear. O. Reg. 213/91, s. 87 (2).

(3) The allowable working load of the formwork, falsework or re-shoring shall be established,

(a) by a professional engineer in accordance with good engineering practice; or

(b) by testing the principal components to their ultimate strength in a manner that simulates the actual loading conditions to which the formwork, falsework or re-shoring is likely to be subjected and by applying a reduction factor, in accordance with good engineering practice, to the values of ultimate strength. O. Reg. 213/91, s. 87 (3).

(4) The results of the testing in clause (3) (b) shall be verified and certified by a professional engineer and made available to an inspector upon request. O. Reg. 213/91, s. 87 (4).

(5) If single post shores are placed more than one tier high, the junction of each tier shall be braced against a fixed support in at least two directions in order to prevent any lateral movement. O. Reg. 213/91, s. 87 (5).

88. Formwork and falsework shall not be removed unless,

(a) the concrete is strong enough to support itself and any loads that may be applied to the structure; or

(b) the concrete and the structure are adequately re-shored. O. Reg. 213/91, s. 88.

89. (1) This section applies with respect to formwork, falsework and re-shoring that includes,

(a) a tubular metal frame;

(b) a column whose effective length is dependent upon lateral restraints between the ends of the column;

(c) shores placed one upon another to form a supporting system that is more than one tier in height;

(d) shores which are three metres or more in height;

(e) a truss;

(f) members so connected to one another that a load applied to one member may alter or induce stress in another member; or

(g) a unitized modular formwork or falsework structure intended to be moved as a unit. O. Reg. 213/91, s. 89 (1).

(2) Formwork and falsework shall be designed by a professional engineer in accordance with good engineering practice and be installed or erected in accordance with the design drawings. O. Reg. 213/91, s. 89 (2).

(3) Formwork and falsework shall, before the placement of concrete, be inspected by a professional engineer or by a competent worker designated in writing by the professional engineer. O. Reg. 213/91, s. 89 (3).

(4) The person carrying out the inspection shall state in writing whether the formwork and falsework is installed or erected in accordance with the design drawings for it. O. Reg. 213/91, s. 89 (4).

(5) The constructor shall keep the design drawings and the statements on the project while the formwork or the falsework is in use. O. Reg. 213/91, s. 89 (5).

90. Re-shoring shall be designed by a professional engineer in accordance with good engineering practice and be erected in accordance with the design drawings. O. Reg. 213/91, s. 90.

91. Falsework and re-shoring,

(a) shall have sound and rigid footings capable of carrying the maximum load to which the footings may be subjected without settlement or deformation of the soil or structure below the footings; and

(b) shall be adequately protected to prevent deformation caused by frost heave. O. Reg. 213/91, s. 91.

92. (1) Design drawings by a professional engineer for the formwork, falsework or re-shoring,

(a) if a manufactured system is used, shall identify the components;

(b) if non-manufactured system components are used, shall show the size, grade and specifications of the non-manufactured system components;

(c) shall show the design loads for the structure and shall detail the bracing and external ties required to adequately support the design loads;

(d) if the structure is a unitized modular formwork or falsework structure intended to be lifted or moved as a unit, shall show the attachment points for rigging and hoisting; and

(e) shall set out the erection instructions that are specified by the manufacturer or by the professional engineer.

(f) REVOKED: O. Reg. 85/04, s. 11.

O. Reg. 213/91, s. 92 (1); O. Reg. 85/04, s. 11.

(2) The constructor shall keep the design drawings on the project while the formwork, falsework or re-shoring is in use. O. Reg. 213/91, s. 92 (2).

EQUIPMENT, GENERAL

93. (1) All vehicles, machinery, tools and equipment shall be maintained in a condition that does not endanger a worker. O. Reg. 213/91, s. 93 (1).

(2) No vehicle, machine, tool or equipment shall be used,

(a) while it is defective or hazardous;

(b) when the weather or other conditions are such that its use is likely to endanger a worker; or

(c) while it is being repaired or serviced, unless the repair or servicing requires that it be operated. O. Reg. 213/91, s. 93 (2); O. Reg. 145/00, s. 25 (1).

(3) All vehicles, machines, tools and equipment shall be used in accordance with any operating manuals issued by the manufacturers. O. Reg. 145/00, s. 25 (2).

(4) For vehicles, machines, tools and equipment rated at greater than 10 horsepower, copies of any operating manuals issued by the manufacturers shall be kept readily available at the project. O. Reg. 145/00, s. 25 (2).

94. (1) All mechanically-powered vehicles, machines, tools and equipment rated at greater than 10 horsepower shall be inspected by a competent worker to determine whether they can handle their rated capacity and to identify any defects or hazardous conditions. O. Reg. 145/00, s. 26.

(2) The inspections shall be performed before the vehicles, machines, tools or equipment are first used at the project and thereafter at least once a year or more frequently as recommended by the manufacturer. O. Reg. 145/00, s. 26.

95. (1) Every replacement part for a vehicle, machine, tool or equipment shall have at least the same safety factor as the part it is replacing. O. Reg. 213/91, s. 95 (1).

(2) No modification to, extension to, repair to or replacement of a part of a vehicle, machine, tool or equipment shall result in a reduction of the safety factor of the vehicle, machine, tool or equipment. O. Reg. 213/91, s. 95 (2).

96. (1) No worker shall operate a vehicle at a project unless he or she is competent to do so. O. Reg. 145/00, s. 26.

(2) However, a worker being trained in the operation of a vehicle may operate it while being instructed and supervised by a competent person. O. Reg. 145/00, s. 26.

97. (1) Every vehicle other than a trailer shall be equipped with brakes and a seat or other place for the vehicle operator. O. Reg. 213/91, s. 97 (1).

(2) No person other than the operator shall ride on a vehicle unless a seat is provided for the use of, and is used by, the person. O. Reg. 213/91, s. 97 (2).

98. The means of access to any operator's station in a vehicle, machine or equipment shall not endanger the operator and shall have skid-resistant walking, climbing and work surfaces. O. Reg. 213/91, s. 98.

99. A cab or screen shall be provided to protect a worker who is exposed to an overhead hazard while operating a vehicle. O. Reg. 213/91, s. 99.

100. (1) No vehicle, machine or equipment shall be drawn or towed by another vehicle on a project unless there are two separate means of attachment to the vehicle drawing or towing it. O. Reg. 213/91, s. 100 (1).

(2) Subsection (1) does not apply with respect to a vehicle being drawn or towed in which there is an operator and that has brakes that are able to stop the vehicle with its load, if any. O. Reg. 213/91, s. 100 (2).

(3) Each means of attachment referred to in subsection (1) shall be constructed and attached in such a way that the failure of one means of attachment does not permit the vehicle, machine or equipment being drawn or towed to become detached from the other vehicle. O. Reg. 213/91, s. 100 (3).

101. (1) No worker shall remain on or in a vehicle, machine or equipment while it is being loaded or unloaded if the worker might be endangered by remaining there. O. Reg. 213/91, s. 101 (1).

(2) Such action as may be necessary to prevent an unattended vehicle, machine or equipment from being started or set in motion by an unauthorized person shall be taken. O. Reg. 213/91, s. 101 (2).

(3) An unattended vehicle, machine or equipment shall have its brakes applied and its wheels blocked to prevent movement when the vehicle, machine or equipment is on sloping ground or is adjacent to an excavation. O. Reg. 213/91, s. 101 (3).

102. No operator shall leave unattended the controls of,

(a) a front-end loader, backhoe or other excavating machine with its bucket raised;

(b) a bulldozer with its blade raised;

(c) a fork-lift truck with its forks raised; or

(d) a crane or other similar hoisting device with its load raised. O. Reg. 213/91, s. 102.

103. (1) No worker shall operate a shovel, backhoe or similar excavating machine in such a way that it or part of its load passes over a worker. O. Reg. 213/91, s. 103 (1).

(2) No worker shall operate a crane or similar hoisting device in such a way that part of its load passes over another worker unless the other worker is receiving the load or is engaged in sinking a shaft. O. Reg. 213/91, s. 103 (2).

(3) If practicable, a worker who is receiving a load or is engaged in sinking a shaft shall be positioned so that no load or part of a load carried by a crane or similar hoisting device passes over the worker. O. Reg. 213/91, s. 103 (3).

(4) Subsections (2) and (3) do not apply in respect of a multi-tiered load as defined in section 103.1 if written procedures have been developed and implemented for the particular project in accordance with that section. O. Reg. 627/05, s. 2.

103.1 (1) In this section,

"move" includes raise and lower;

"multi-tiered load" means two or three individually rigged structural steel pieces that are,

(a) suspended so that they remain horizontal,

(b) aligned vertically, and

(c) moved simultaneously by a crane;

"multi-tiered load hoisting operation" means the moving of one or more multi-tiered loads by one crane at a project;

"procedures" means the procedures prepared under subsection (7). O. Reg. 627/05, s. 3.

(2) A multi-tiered load,

(a) shall not contain structural steel pieces that are bundled together;

(b) shall not contain more than three structural steel pieces;

(c) shall not use one structural steel piece to support another;

(d) shall have each structural steel piece independently slung back to the main load hook or master link;

(e) shall be lowered only by a crane using power-controlled lowering. O. Reg. 627/05, s. 3.

(3) A crane shall be used to move only one multi-tiered load at a time. O. Reg. 627/05, s. 3.

(4) A crane shall not be used for a multi-tiered load if it is contrary to the crane manufacturer's specifications or limitations to do so. O. Reg. 627/05, s. 3.

(5) No worker shall be in an area where a multi-tiered load hoisting operation is taking place unless he or she is directly engaged in the operation. O. Reg. 627/05, s. 3.

(6) Before a multi-tiered load hoisting operation is begun at a project, written procedures to ensure the safety of workers engaged in the operation shall be developed and implemented. O. Reg. 627/05, s. 3.

(7) The procedures shall be prepared by a professional engineer in accordance with good engineering practice and shall,

(a) include design drawings that illustrate the arrangement and dimensions of the structural steel pieces, the assembly of rigging components and devices, and all attachment points;

(b) identify the crane and its rated load-carrying capacity, and identify and specify its limitations and restrictions, if any;

(c) describe the method of determining the weight of the structural steel pieces;

(d) specify the maximum load per lift and the maximum reach of the crane per lift;

(e) identify all factors that could affect the safety of the multi-tiered load hoisting operation, such as wind speed, weather conditions, potential overlapping of cranes and other restrictions;

(f) state the measures to be taken to control and secure multi-tiered loads while they are being moved;

(g) specify any circumstances that would require additional work, including inspections, to be performed by a professional engineer to ensure the safety of any worker engaged in the multi-tiered load hoisting operation; and

(h) identify all critical parts of the rigging and the rigged structural steel pieces that are to be inspected before each lift, and set out the inspection criteria to be followed. O. Reg. 627/05, s. 3.

(8) The employer responsible for a multi-tiered load hoisting operation shall,

(a) create a document that identifies the workers engaged in the multi-tiered load hoisting operation by name and job title and states their respective duties;

(b) ensure that, before the multi-tiered load hoisting operation is begun, a copy of the procedures is provided to and reviewed with each worker engaged in the operation;

(c) ensure that the procedures are implemented, and are followed throughout the multi-tiered load hoisting operation;

(d) ensure that any deviations from the procedures are approved by a professional engineer, in writing, before any multi-tiered load is moved; and

(e) unless the professional engineer who prepared the procedures specifies otherwise, appoint a competent worker to ensure that the procedures, including the inspections described in clause (7) (h), are followed before any multi-tiered load is moved. O. Reg. 627/05, s. 3.

(9) The employer responsible for a multi-tiered load hoisting operation shall keep a copy of the following available for inspection at the project until the operation is completed:

1. The procedures.
2. The document described in clause (8) (a).
3. Any approvals given under clause (8) (d). O. Reg. 627/05, s. 3.

(10) Before the first multi-tiered load hoisting operation is started at a project, the constructor shall give notice to the Ministry office located nearest the project, in person, by telephone, by fax or by electronic means. O. Reg. 627/05, s. 3.

104. (1) Every project shall be planned and organized so that vehicles, machines and equipment are not operated in reverse or are operated in reverse as little as possible. O. Reg. 145/00, s. 27.

(2) Vehicles, machines and equipment at a project shall not be operated in reverse unless there is no practical alternative to doing so. O. Reg. 145/00, s. 27.

(3) Operators of vehicles, machines and equipment shall be assisted by signallers if either of the following applies:

1. The operator's view of the intended path of travel is obstructed.
2. A person could be endangered by the vehicle, machine or equipment or by its load. O. Reg. 145/00, s. 27.

(4) Subsection (3) also applies to shovels, backhoes and similar excavating machines and to cranes and similar hoisting devices. O. Reg. 145/00, s. 27.

(5) The operator and the signaller shall,

(a) jointly establish the procedures by which the signaller assists the operator; and

(b) follow those procedures. O. Reg. 145/00, s. 27.

(6) If subsection (3) applies to the project and it is not possible to carry out the project without some operation of vehicles and equipment in reverse, signs shall be posted at the project in conspicuous places warning workers of the danger. O. Reg. 145/00, s. 27.

105. A dump truck shall be equipped with an automatic audible alarm that signals when the truck is being operated in reverse. O. Reg. 145/00, s. 27.

106. (1) A signaller shall be a competent worker and shall not perform other work while acting as a signaller. O. Reg. 213/91, s. 106 (1).

(1.1) The signaller shall wear a garment that covers at least his or her upper body and has the following features:

1. The garment shall be fluorescent blaze or international orange in colour.
2. On the front and the back, there shall be two yellow stripes that are 5 centimetres wide. The yellow area shall total at least 500 square centimetres on the front and at least 570 square centimetres on the back.
3. On the front, the stripes shall be arranged vertically and centred and shall be approximately 225 millimetres apart, measured from the centre of each stripe. On the back, they shall be arranged in a diagonal "X" pattern.
4. The stripes shall be retro-reflective and fluorescent. O. Reg. 145/00, s. 28.

(1.2) If the garment is a vest, it shall have adjustable fit. O. Reg. 145/00, s. 28.

(1.3) On and after January 1, 2001, a nylon vest to which this section applies shall also have a side and front tear-away feature. O. Reg. 145/00, s. 28.

(1.4) In addition, a signaller who may be endangered during night-time hours shall wear retro-reflective silver stripes encircling each arm and leg, or equivalent side visibility-enhancing stripes with a minimum area of 50 square centimetres per side. O. Reg. 145/00, s. 28.

(1.5) The employer shall,

(a) ensure that the signaller has received adequate oral training in his or her duties and has received adequate oral and written instructions in a language that he or she understands; and

(b) keep the written instructions at the project. O. Reg. 145/00, s. 28.

(2) A signaller,

(a) shall be clear of the intended path of travel of the vehicle, machine or equipment, crane or similar hoisting device, shovel, backhoe or similar excavating machine or its load;

(b) shall be in full view of the operator of the vehicle, machine or equipment, crane or similar hoisting device, shovel, backhoe or similar excavating machine;

(c) shall have a clear view of the intended path of travel of the vehicle, machine or equipment, crane or similar hoisting device, shovel, backhoe or similar excavating machine or its load; and

(d) shall watch the part of the vehicle, machine or equipment or crane or similar hoisting device, shovel, backhoe or similar excavating machine or its load whose path of travel the operator cannot see. O. Reg. 213/91, s. 106 (2).

(3) The signaller shall communicate with the operator by means of a telecommunication system or, where visual signals are clearly visible to the operator, by means of prearranged visual signals. O. Reg. 213/91, s. 106 (3).

107. No worker shall use as a work place a platform, bucket, basket, load, hook or sling that is capable of moving and that is supported by a fork-lift truck, front-end loader or similar machine. O. Reg. 213/91, s. 107.

108. Blocking shall be installed to prevent the collapse or movement of part or all of a piece of equipment that is being dismantled, altered or repaired if its collapse or movement may endanger a worker. O. Reg. 213/91, s. 108.

109. Every gear, pulley, belt, chain, shaft, flywheel, saw and other mechanically-operated part of a machine to which a worker has access shall be guarded or fenced so that it will not endanger a worker. O. Reg. 213/91, s. 109.

110. (1) Safety chains, cages or other protection against blown-off side or lock rings shall be used when inflating a tire mounted on a rim. O. Reg. 213/91, s. 110 (1).

(2) If a cage is used, the tire shall be inflated by remote means. O. Reg. 213/91, s. 110 (2).

111. (1) A lifting jack shall have its rated capacity legibly cast or stamped on it in a place where it can be readily seen. O. Reg. 213/91, s. 111 (1).

(2) A lifting jack shall be equipped with a positive stop to prevent overtravel or, if a positive stop is not practicable, with an overtravel indicator. O. Reg. 213/91, s. 111 (2).

112. (1) Every chain-saw shall have a chain that minimizes kickback and a device to stop the chain in the event of a kickback. O. Reg. 213/91, s. 112 (1).

(1.1) No worker shall use a chain-saw unless he or she has been adequately trained in its use. O. Reg. 145/00, s. 29.

(1.2) No worker shall use a chain-saw unless he or she is wearing,

(a) adequate personal protective equipment and clothing, including gloves; and

(b) adequate eye protection and hearing protection. O. Reg. 145/00, s. 29.

(2) A worker shall hold a chain-saw firmly when starting it and firmly in both hands when using it. O. Reg. 213/91, s. 112 (2).

(3) The chain of a chain-saw shall be stopped when not cutting. O. Reg. 213/91, s. 112 (3).

113. No object or material shall be placed, left or stored in a location or manner that may endanger a worker. O. Reg. 213/91, s. 113.

114. A hose that may whip shall be attached to a rope or chain in order to prevent whipping. O. Reg. 213/91, s. 114.

115. No barrel, box or other loose object shall be used as a work place or as a support for a ladder, scaffold or work platform. O. Reg. 213/91, s. 115.

116. (1) No stilts shall be present at or used on a project except in accordance with this section. O. Reg. 443/09, s. 4.

(2) No leg extensions, other than stilts, shall be present at or used on a project. O. Reg. 443/09, s. 4.

(3) Subject to subsection (4), stilts may be used on a project for work in residential units and residential common areas only if they are used for the following purposes:

1. Drywall finishing work.
2. Installation of insulation.
3. Installation of vapour barriers. O. Reg. 443/09, s. 4.

(4) Stilts shall not be used on a scaffold or to climb up or down stairs. O. Reg. 443/09, s. 4.

(5) Stilts used in accordance with this section shall,

(a) be commercially manufactured;

(b) be made of unpainted metal;

(c) have a non-slip surface on the bottom of each base plate;

(d) be in good working condition; and

(e) be suitable for their intended use. O. Reg. 443/09, s. 4.

(6) Stilts may be used to a maximum height of 76 centimetres as measured from the work surface that the user of the stilts would otherwise stand on to the top of the foot plate. O. Reg. 443/09, s. 4.

(7) Stilts may be used on a work surface only if the work surface satisfies the following conditions:

1. It is made of rigid material.
2. It is either level or does not have a slope of more than three per cent.
3. All openings on the work surface are adequately covered or guarded.
4. All open sides of the work surface are adequately guarded.
5. It is free of debris or anything else that may be a hazard to a worker on stilts.
6. All obstructions that cannot be removed are adequately guarded, placed or secured to prevent a worker on stilts from being injured. O. Reg. 443/09, s. 4.

(8) If stilts are used in a work area for which sections 26.1 and 26.3 require a guardrail system, the guardrail system shall be modified by adding,

(a) an additional top rail,

(i) 76 centimetres above the existing top rail, or

(ii) at a height above the existing top rail equal to the height of the stilts being used in the work area; and

(b) an intermediate rail that is located midway between the additional top rail and the existing top rail. O. Reg. 443/09, s. 4.

(9) A modified guardrail system described in subsection (8) shall be capable of resisting any load it could be subjected to by a worker on stilts. O. Reg. 443/09, s. 4.

(10) An employer shall ensure that a worker who uses stilts is trained in their use by completing an adequate training program that,

(a) enables the worker to demonstrate proficiency in the safe and proper use of stilts; and

(b) provides instruction on the relevant requirements of this Regulation; and

(c) provides instruction on,

(i) mounting and dismounting,

(ii) adjusting stilts to suit the individual worker and the work,

(iii) walking on and working with stilts while maintaining balance and stability,

(iv) inspecting stilts for damage and defects,

(v) maintaining, servicing and storing stilts,

(vi) conducting an inspection of the work area before commencing work to identify hazards for stilts use,

(vii) correcting any hazardous conditions identified under subclause (vi), and

(viii) setting up tools and materials to ensure they are adequately accessible when using stilts. O. Reg. 443/09, s. 4.

(11) No worker shall use stilts at a project unless he or she has successfully completed a program described in subsection (10) and carries proof of completing the program at all times when using the stilts. O. Reg. 443/09, s. 4.

(12) A worker using stilts at a project shall inspect the stilts for damage, wear, corrosion and other defects the first time each day that the worker uses the stilts. O. Reg. 443/09, s. 4.

(13) An employer shall ensure that a worker does not use stilts that are damaged, worn, corroded or defective and no worker shall use such stilts. O. Reg. 443/09, s. 4.

(14) Stilts shall be stored, serviced and maintained in accordance with the manufacturer's instructions. O. Reg. 443/09, s. 4.

EXPLOSIVE ACTUATED FASTENING TOOL

117. (1) No worker shall use an explosive actuated fastening tool unless he or she has been adequately trained in its use. O. Reg. 145/00, s. 30.

(2) When using an explosive actuated fastening tool, the worker shall carry proof of his or her training in its use. O. Reg. 145/00, s. 30.

(3) No worker shall use an explosive actuated fastening tool unless he or she is wearing,

(a) adequate personal protective equipment; and

(b) adequate eye protection. O. Reg. 145/00, s. 30.

118. A worker using an explosive actuated fastening tool shall inspect it before using it to ensure,

(a) that it is clean;

(b) that all moving parts operate freely;

(c) that its barrel is free from obstruction; and

(d) that it is not defective. O. Reg. 213/91, s. 118.

119. (1) No worker shall use an explosive actuated fastening tool unless it has a suitable protective guard,

(a) that is at least seventy-five millimetres in diameter;

(b) that is mounted at right angles to the barrel of the tool; and

(c) that is centred on the muzzle end of the tool, if practicable. O. Reg. 213/91, s. 119 (1).

(2) An explosive actuated fastening tool shall be inoperable unless,

(a) its muzzle end is held against a surface using a force at least 22 newtons greater than the force equivalent of the weight of the tool measured in newtons; and

(b) when a protective guard is centred on the muzzle end of the tool, the bearing surface of the guard is not tilted more than eight degrees from the work surface. O. Reg. 145/00, s. 31.

(3) Subsection (1) and clause (2) (b) do not apply with respect to an explosive actuated fastening tool if the velocity of a fastener fired from it does not exceed 90 metres per second measured at a distance of two metres from its muzzle end when propelled by the maximum commercially-available explosive load it is chambered to accept. O. Reg. 213/91, s. 119 (3).

(4) An explosive actuated fastening tool that is designed to require dismantling into separate parts for loading shall be inoperable unless the separate parts are locked together. O. Reg. 145/00, s. 31.

(5) An explosive actuated fastening tool shall have a firing mechanism that prevents the tool from being fired if it is dropped or while it is being loaded and prepared for firing. O. Reg. 213/91, s. 119 (5).

(6) The firing movement for an explosive actuated fastening tool shall be a separate action from the operation of bringing the tool into firing position. O. Reg. 145/00, s. 31.

(7) An explosive actuated fastening tool shall not be capable of being fired until the operator performs the two separate actions described in subsection (6). O. Reg. 145/00, s. 31.

120. (1) Every explosive actuated fastening tool shall be stored in a locked container when not in use. O. Reg. 213/91, s. 120 (1).

(2) No explosive actuated fastening tool shall be left unattended when out of its container. O. Reg. 213/91, s. 120 (2).

(3) No explosive actuated fastening tool shall be loaded unless it is being prepared for immediate use. O. Reg. 213/91, s. 120 (3).

(4) No explosive actuated fastening tool, whether or not it is loaded, shall be pointed at a person. O. Reg. 213/91, s. 120 (4).

121. (1) Every explosive load for an explosive actuated fastening tool,

(a) shall be marked or labelled so that a worker can easily identify its strength; and

(b) shall be stored in a locked container unless it is required for immediate use. O. Reg. 213/91, s. 121 (1).

(2) No explosive load for an explosive actuated fastening tool,

(a) shall be stored in a container with explosive loads of other strengths; or

(b) shall be left unattended where it may be available to a worker who is not qualified to operate an explosive actuated fastening tool. O. Reg. 213/91, s. 121 (2).

(3) A misfired explosive load removed from an explosive actuated fastening tool shall be placed in a water-filled container on the project until the misfired explosive load is removed from the project. O. Reg. 213/91, s. 121 (3).

WELDING AND CUTTING

122. (1) Cylinders, piping and fittings used in welding and cutting shall be protected against damage. O. Reg. 213/91, s. 122 (1).

(2) No cylinder of compressed gas used in welding and cutting shall be dropped, hoisted by slings or magnets or transported or stored in a horizontal position. O. Reg. 213/91, s. 122 (2).

(3) The valve of a cylinder shall be closed when the cylinder is spent or is not being used. O. Reg. 213/91, s. 122 (3).

123. Precautions to prevent a fire shall be taken when using a blow torch or welding or cutting equipment or a similar piece of equipment. O. Reg. 213/91, s. 123.

124. (1) No arc welding electrode or ground lead shall be hung over a compressed gas cylinder. O. Reg. 213/91, s. 124 (1).

(2) An area where electric welding is carried on shall be kept free of electrode stubs and metal scrap. O. Reg. 213/91, s. 124 (2).

(3) Receptacles for electrode stubs shall be provided and used. O. Reg. 213/91, s. 124 (3).

SCAFFOLDS AND WORK PLATFORMS

125. (1) A scaffold which meets the requirements of sections 126, 128, 129, 130, 134, 135, 137, 138, 139, 140, 141 and 142 shall be provided for workers where work cannot be done on or from the ground or from a building or other permanent structure without hazard to the workers. O. Reg. 213/91, s. 125 (1).

(2) A worker who is on or under a scaffold while it is being erected, altered or dismantled shall be on a part of the scaffold or scaffold platform that meets the requirements of sections 126, 128, 129, 130, 134, 135, 137, 138, 139, 140, 141 and 142. O. Reg. 213/91, s. 125 (2).

126. (1) Every scaffold shall be designed and constructed to support or resist,

(a) two times the maximum load or force to which it is likely to be subjected, without exceeding the allowable unit stresses for the materials of which it is made; and

(b) four times the maximum load or force to which it is likely to be subjected without overturning. O. Reg. 213/91, s. 126 (1).

(2) Despite clause (1) (a), a scaffold with structural components whose capacity can only be determined by testing shall be designed and constructed to support or resist three times the maximum load or force to which it is likely to be subjected without causing the failure of any component. O. Reg. 213/91, s. 126 (2).

(3) No scaffold shall be loaded in excess of the load that it is designed and constructed to bear. O. Reg. 213/91, s. 126 (3).

127. (1) The failure load of a scaffold which consists of structural components whose capacity cannot be determined by testing shall be established by testing the components in a manner that simulates the actual loading conditions for which each of the components is fabricated. O. Reg. 213/91, s. 127 (1).

(2) A professional engineer shall verify and certify the results of a test and the corresponding rated load of the scaffold. O. Reg. 213/91, s. 127 (2).

(3) The constructor shall make available to an inspector upon request a copy of the certification by the professional engineer. O. Reg. 213/91, s. 127 (3).

128. (1) Every scaffold,

(a) shall have uprights braced diagonally in the horizontal and vertical planes to prevent lateral movement;

(b) shall have horizontal members that are adequately secured to prevent lateral movement and that do not have splices between the points of support;

(c) shall have footings, sills or supports that are sound, rigid and capable of supporting at least two times the maximum load to which the scaffold may be subjected without settlement or deformation that may affect the stability of the scaffold;

(d) shall have all fittings and gear, including base plates or wheels, installed in accordance with the manufacturer's instructions;

(e) shall have connecting devices between frames that provide positive engagement in tension and compression;

(f) shall have safety catches on all hooks; and

(g) shall be adequately secured at vertical intervals not exceeding three times the least lateral dimension of the scaffold, measured at the base, to prevent lateral movement. O. Reg. 213/91, s. 128 (1).

(2) A scaffold shall be constructed of suitable structural materials and, if lumber is used, it shall be construction grade or Number 1 Grade spruce. O. Reg. 213/91, s. 128 (2).

(3) A scaffold mounted on pneumatic tires shall not be supported by the pneumatic tires while the scaffold is being erected, used or dismantled. O. Reg. 213/91, s. 128 (3).

(4) If tubular metal frames are used to support masonry units on a scaffold platform, each frame leg shall have a minimum working load of,

(a) twenty-two kilonewtons for standard frames; and

(b) 16.7 kilonewtons for walk-through frames. O. Reg. 213/91, s. 128 (4).

129. (1) A scaffold mounted on castors or wheels,

(a) shall be equipped with a suitable braking device on each castor or wheel; and

(b) shall have the brakes applied when a worker is on the scaffold. O. Reg. 213/91, s. 129 (1).

(2) A scaffold mounted on castors or wheels shall be equipped with guy wires or outriggers to prevent its overturning if the height of the scaffold platform exceeds three times the least lateral dimension of the scaffold,

(a) measured at the base of the scaffold; or

(b) if outriggers are used, measured between the outriggers. O. Reg. 213/91, s. 129 (2).

(3) No scaffold mounted on castors or wheels that has a scaffold platform more than 2.4 metres above the base shall be moved when a worker is on it unless,

(a) the worker is wearing a full body harness as part of a fall arrest system attached to a fixed support; and

(b) the scaffold is being moved on a firm level surface. O. Reg. 213/91, s. 129 (3).

130. (1) A scaffold shall be designed by a professional engineer and shall be erected in accordance with the design if the scaffold exceeds,

(a) fifteen metres in height above its base support; or

(b) ten metres in height above its base support if the scaffold is constructed of a tube and clamp system. O. Reg. 213/91, s. 130 (1).

(2) Design drawings for a scaffold shall set out erection instructions and the rated loads for the scaffold. O. Reg. 85/04, s. 12.

(3) A professional engineer or a competent worker designated by the supervisor of the project shall inspect the scaffold before it is used to ensure that it is erected in accordance with the design drawings. O. Reg. 213/91, s. 130 (3).

(4) The person carrying out an inspection shall state in writing whether the scaffold is erected in accordance with the design drawings. O. Reg. 213/91, s. 130 (4).

(5) The constructor shall keep at a project the design drawings and the written statement for a scaffold while the scaffold is erected. O. Reg. 213/91, s. 130 (5).

131. Only a competent worker shall supervise the erection, alteration and dismantling of a scaffold. O. Reg. 213/91, s. 131.

132. (1) A professional engineer shall inspect and give a written opinion as to the structural adequacy of a centre pole scaffold used in silo construction when required by subsection (2). O. Reg. 213/91, s. 132 (1).

(2) An inspection shall be performed on the earlier of,

(a) the twenty-fourth time the scaffold is erected following the most recent inspection; or

(b) for a scaffold used in the construction of,

(i) a monolithic silo, two years after the scaffold is erected or after the most recent inspection, and

(ii) a stave silo, one year after the scaffold is erected or after the most recent inspection. O. Reg. 213/91, s. 132 (2).

(3) The employer responsible for constructing the silo shall keep with a scaffold every written opinion by a professional engineer concerning the scaffold while it is in use on a project. O. Reg. 213/91, s. 132 (3).

(4) The employer responsible for constructing the silo shall record information about the frequency of use of the scaffold in a log book which shall be kept with the scaffold while it is in use on a project. O. Reg. 213/91, s. 132 (4).

133. (1) This section applies with respect to a worker who is installing reinforcing steel on a vertical surface consisting of horizontal reinforcing steel bars. O. Reg. 213/91, s. 133 (1).

(2) A scaffold shall be provided for a worker who is working more than 3.7 metres above the ground or a floor. O. Reg. 213/91, s. 133 (2).

(3) If a scaffold cannot be erected, a worker shall use and wear a work belt. O. Reg. 213/91, s. 133 (3).

(4) No worker who is climbing the vertical surface shall carry reinforcing steel bars. O. Reg. 213/91, s. 133 (4).

134. (1) Every scaffold platform and other work platform shall be designed, constructed and maintained to support or resist, without exceeding the allowable unit stresses for the materials of which it is constructed,

(a) all loads and forces to which it is likely to be subjected; and

(b) at least 2.4 kilonewtons per square metre. O. Reg. 213/91, s. 134 (1).

(2) Each component of a scaffold platform or other work platform shall be capable of supporting a load of at least 2.2 kilonewtons without exceeding the allowable unit stress for each material used. O. Reg. 213/91, s. 134 (2).

(3) No scaffold platform or other work platform shall be loaded in excess of the load that it is designed and constructed to bear. O. Reg. 213/91, s. 134 (3).

135. (1) A scaffold platform or other work platform,

(a) shall be at least 460 millimetres wide;

(b) if it is 2.4 metres or more above a floor, roof or other surface, consist of planks laid tightly side by side for the full width of the scaffold;

(c) shall be provided with a guardrail as required by section 26.3;

(d) shall be provided with a means of access as required by section 70;

(e) shall not have any unguarded openings; and

(f) shall have each component secured against slipping from its supports. O. Reg. 213/91, s. 135 (1); O. Reg. 527/00, s. 4.

(2) A scaffold platform or other work platform made of sawn lumber planks shall have planks of number 1 grade spruce that do not have any defect affecting their load-carrying capacity and,

(a) that bear a legible grade identification stamp or are permanently identified as being number 1 grade spruce;

(b) that are at least forty-eight millimetres thick by 248 millimetres wide;

(c) that are arranged so that their span does not exceed 2.1 metres;

(d) that overhang their supports by not less than 150 millimetres and not more than 300 millimetres; and

(e) that are cleated or otherwise secured against slipping. O. Reg. 213/91, s. 135 (2).

136. (1) Cubes of masonry units on a scaffold platform shall be placed directly over the scaffold frame. O. Reg. 213/91, s. 136 (1).

(2) If it is not practicable to comply with subsection (1), the masonry units shall be placed on the scaffold platform in a manner that conforms with the load capability provisions of the scaffold platform as set out in section 134. O. Reg. 213/91, s. 136 (2).

(3) The surface of an outrigger bracket platform used by a masonry worker shall be not more than one metre below the associated material storage platform. O. Reg. 213/91, s. 136 (3).

(4) Masonry units to be installed in a building or structure shall be distributed along the scaffold platform before being used. O. Reg. 213/91, s. 136 (4).

SUSPENDED PLATFORMS AND SCAFFOLDS AND BOATSWAIN'S CHAIRS

136.1 Sections 137 to 142 do not apply to multi-point suspended scaffolds. O. Reg. 85/04, s. 13.

137. (1) Every suspended platform, suspended scaffold and boatswain's chair shall meet the requirements of this section. O. Reg. 213/91, s. 137 (1).

(2) A suspended platform, suspended scaffold or boatswain's chair shall be attached to a fixed support or outrigger beam in accordance with the manufacturer's instructions. O. Reg. 213/91, s. 137 (2).

(3) A fixed support or outrigger beam shall be capable of supporting at least four times the maximum load to which it may be subjected without exceeding the allowable unit stresses for the materials of which it is constructed and without overturning. O. Reg. 213/91, s. 137 (3).

(4) An outrigger beam shall be tied back to a fixed support with a secondary line, each of which is capable of supporting the weight of the suspended load and the supporting system. O. Reg. 213/91, s. 137 (4).

(5) An outrigger beam shall be secured against horizontal and vertical movement. O. Reg. 213/91, s. 137 (5).

(6) An outrigger beam shall have securely attached counterweights that are designed and manufactured for the purpose. O. Reg. 213/91, s. 137 (6).

(7) Adequate legible instructions for the use of the counterweights shall be affixed to the outrigger beam. O. Reg. 213/91, s. 137 (7).

(8) Every part of the hoisting and rigging system for a suspended platform, suspended scaffold or boatswain's chair shall be capable of supporting at least ten times the maximum load to which the part is likely to be subjected. O. Reg. 213/91, s. 137 (8).

(9) A suspended platform, suspended scaffold or boatswain's chair that is capable of moving either horizontally or vertically shall have,

(a) supporting cables,

(i) that are vertical from the fixed support or outrigger beam,

(ii) that are parallel if there is more than one supporting cable, and

(iii) that extend to the ground or have a positive stop that prevents the suspended platform, suspended scaffold or boatswain's chair from running off the end of the supporting cables; and

(b) rope falls equipped with suitable pulley blocks or a mechanical hoisting device that,

(i) has legible operating and safety instructions affixed to it in a conspicuous location, and

(ii) is equipped with a positive device to prevent the platform, scaffold or boatswain's chair from falling freely. O. Reg. 213/91, s. 137 (9).

(10) A suspended platform, suspended scaffold or boatswain's chair shall have steel wire rope support cables,

(a) if the distance between the platform, scaffold or boatswain's chair and the fixed support exceeds 90 metres;

(b) if a corrosive substance is in the vicinity of the support rope; or

(c) if mechanical grinding or flame-cutting equipment is used in the vicinity of the support rope. O. Reg. 213/91, s. 137 (10).

(11) A competent worker shall inspect a suspended platform, suspended scaffold or boatswain's chair before each day's use if it is operated by mechanical power. O. Reg. 213/91, s. 137 (11).

138. (1) Every suspended platform and suspended scaffold shall meet the requirements of this section. O. Reg. 213/91, s. 138 (1).

(2) A suspended platform or suspended scaffold shall have hangers located at least 150 millimetres but not more than 450 millimetres from the ends of the platform or scaffold that are securely attached to it. O. Reg. 213/91, s. 138 (2).

(3) A suspended platform or suspended scaffold shall be firmly anchored to the building or structure if practicable unless the platform or scaffold is being raised or lowered. O. Reg. 213/91, s. 138 (3).

(4) Wire mesh at least 1.6 millimetres in diameter and capable of rejecting a ball thirty-eight millimetres in diameter shall be securely fastened in place from the toe-board to the top rail of the guardrails of a suspended platform or suspended scaffold. O. Reg. 213/91, s. 138 (4).

139. (1) Every suspended scaffold that consists of more than one platform and every suspended platform that, together with its components, weighs more than 525 kilograms shall meet the requirements of this section. O. Reg. 213/91, s. 139 (1).

(2) A professional engineer shall design a suspended scaffold or suspended platform in accordance with good engineering practice. O. Reg. 213/91, s. 139 (2).

(3) There shall be design drawings for a suspended scaffold or suspended platform that,

(a) set out the size and specification of all components of the scaffold or platform including the type and grade of all materials to be used;

(b) state the maximum live load of the scaffold or platform; and

(c) state that, in the opinion of the professional engineer who designed the scaffold or platform, the design meets the requirements of this section.

(d) REVOKED: O. Reg. 85/04, s. 14.

O. Reg. 213/91, s. 139 (3); O. Reg. 85/04, s. 14.

(4) A suspended scaffold or suspended platform shall be erected in accordance with the design drawings. O. Reg. 213/91, s. 139 (4).

(5) Before a suspended scaffold or suspended platform is used, a professional engineer shall inspect it and state in writing that it has been erected in accordance with the design drawings. O. Reg. 213/91, s. 139 (5).

(6) No person shall use a suspended scaffold or suspended platform until the statement required by subsection (5) has been given. O. Reg. 213/91, s. 139 (6).

(7) The constructor shall keep a copy of the design drawings and the statement required by subsection (5) on a project while the suspended scaffold or suspended platform is on the project. O. Reg. 213/91, s. 139 (7).

(8) If it is stacked or tiered a suspended platform or suspended scaffold shall have at least two independent means of support which shall be so arranged that the failure of one support will not result in the failure of the suspended platform or suspended scaffold. O. Reg. 213/91, s. 139 (8).

140. (1) A boatswain's chair shall be at least 600 millimetres long and 250 millimetres wide. O. Reg. 213/91, s. 140 (1).

(2) A boatswain's chair which is or is to be used by a worker who is using a corrosive substance or mechanical-grinding or flame-cutting equipment shall be supported by a sling consisting of wire rope at least nine millimetres in diameter. O. Reg. 213/91, s. 140 (2).

141. (1) A worker who is on or is getting on or off a suspended platform, suspended scaffold or boatswain's chair shall wear a full body harness connected to a fall arrest system. O. Reg. 213/91, s. 141 (1).

(2) Every lifeline used with a suspended platform, suspended scaffold or boatswain's chair,

(a) shall be suspended independently from the platform, scaffold or boatswain's chair; and

(b) shall be securely attached to a fixed support so that the failure of the platform, scaffold or boatswain's chair or its supporting system will not cause the lifeline to fail. O. Reg. 213/91, s. 141 (2).

(3) Despite clause (2) (a), the fall arrest system shall be securely fastened to the suspended platform or suspended scaffold if,

(a) all or part of the platform or scaffold has more than one means of support or suspension; and

(b) the platform or scaffold is so designed, constructed and maintained that the failure of one means of support or suspension will not cause the collapse of all or part of the platform or scaffold. O. Reg. 213/91, s. 141 (3).

142. (1) The distance between the platform of an outrigger scaffold and the wall beyond which the scaffold extends shall not exceed 75 millimetres. O. Reg. 213/91, s. 142 (1).

(2) The outrigger beams of an outrigger scaffold shall be secured against horizontal and vertical movement. O. Reg. 213/91, s. 142 (2).

MULTI-POINT SUSPENDED SCAFFOLDS

142.1 Sections 142.2 to 142.8 apply to every multi-point suspended scaffold. O. Reg. 85/04, s. 15.

142.2 (1) A multi-point suspended scaffold and all its components shall be designed by a professional engineer in accordance with good engineering practice and with this section. O. Reg. 85/04, s. 15.

(2) A multi-point suspended scaffold shall be designed to support, in addition to its dead load, live loads uniformly distributed over the platform surface of at least,

(a) 2.4 kilonewtons per square metre if the platform is to be used for masonry work;

(b) 3.6 kilonewtons per square metre if the platform is to be used for demolition work or for storage of masonry units or other related material or equipment; or

(c) 1.2 kilonewtons per square metre in any other case. O. Reg. 85/04, s. 15.

(3) In addition to the loads specified in subsection (2), a multi-point suspended scaffold shall be able to support or resist,

(a) 1.1 kilonewtons concentrated on an area measuring 0.3 metres by 0.3 metres that is located on the platform at the position having the most adverse effect on the component under consideration;

(b) the wind load determined in accordance with Table 2.5.1.1. (Design Data for Selected Locations in Ontario) of the Building Code, assuming a probability factor of at least one in ten; and

(c) any other loads likely to be applied to it. O. Reg. 85/04, s. 15.

(4) The wind load referred to in clause (3) (b) may be reduced by 30 per cent if the professional engineer who designs the scaffold determines that it is appropriate to do so and indicates in writing that he or she has made the determination. O. Reg. 85/04, s. 15.

(5) Subject to clause (2) (c) and subsections (3) and (4), the professional engineer who designs the scaffold shall determine the minimum specified loads for erecting, dismantling, traversing, or otherwise moving multi-point suspended scaffolds. O. Reg. 85/04, s. 15.

(6) If a multi-point suspended scaffold is to be used for abrasive blasting operations, there shall be an additional load allowance for the accumulation of grit on the platform to a depth of at least 25 millimetres. O. Reg. 85/04, s. 15.

(7) Subject to subsection (8), in designing a multi-point suspended scaffold and its structural members, the following values of load factors, as described in Section 4.1.3. (Limit States Design) of the Building Code, shall be applied to the load requirements referred to in subsections (2) to (6):

1. Live load factor $\alpha_L = 3.0$.
2. Dead load factor $\alpha_D = 1.5$.
3. Wind load factor $\alpha_W = 1.5$. O. Reg. 85/04, s. 15.

(8) In designing the suspension and anchorage system of a multi-point suspended scaffold,

(a) the value of the live load factor α_L shall be 4.0;

(b) the value of the dead load factor α_D shall be 2.0; and

(c) the value of the wind load factor α_W shall be 2.0. O. Reg. 85/04, s. 15.

(9) Despite subsections (7) and (8), a multi-point suspended scaffold and its components may be designed by working stress design if the safety factors for the scaffold and the structural members are at least equal to what would otherwise be provided under those subsections. O. Reg. 85/04, s. 15.

(10) Despite subsections (7) and (8), if the failure load of a component has been determined by testing, the minimum safety factors shall be,

(a) 3.0 for components of the multi-point suspended scaffold;

(b) 4.0 for components of the suspension and anchorage system; and

(c) 10.0 for wire ropes, cables or chains used for hoisting, traversing or otherwise moving the multi-point suspended scaffold. O. Reg. 85/04, s. 15.

(11) The failure load of a component referred to in subsection (10) shall be verified in writing by a professional engineer. O. Reg. 85/04, s. 15.

(12) A multi-point suspended scaffold shall be designed, constructed and maintained in such a way that,

(a) the failure of one means of support or suspension will not cause any part of the scaffold to collapse or fail, under the most adverse loading condition as determined by the professional engineer who designs the scaffold; and

(b) compliance with subsections (7), (8), (9) and (10) is maintained in all fixed and moving conditions. O. Reg. 85/04, s. 15.

(13) The design of a multi-point suspended scaffold shall include adequate movement-limiting devices to be used when traversing or otherwise moving it. O. Reg. 85/04, s. 15.

(14) Before a multi-point suspended scaffold is erected, the constructor shall ensure that the professional engineer responsible for the structural integrity of the permanent building or structure from which the scaffold is suspended provides a written report approving the design loads imposed on the building or structure by the scaffold. O. Reg. 85/04, s. 15.

(15) Design drawings for a multi-point suspended scaffold shall include,

(a) a statement by the professional engineer that the design meets the requirements of this Regulation;

(b) the size and specifications of all components, including the type and grade of all materials to be used;

(c) the load factors and safety factors for the scaffold and all its components;

(d) all the specified loads, including the loads during erection, dismantling, traversing and otherwise moving; and

(e) the procedures for erection, dismantling, traversing and otherwise moving. O. Reg. 85/04, s. 15.

(16) The design drawings shall be followed, subject to subsection (17). O. Reg. 85/04, s. 15.

(17) A deviation from the design drawings is permitted if the deviation,

(a) is approved, in advance and in writing, by a professional engineer; and

(b) complies with this Regulation. O. Reg. 85/04, s. 15.

142.3 (1) Before erecting or dismantling a multi-point suspended scaffold, the constructor shall give notice, in person, by telephone, by fax or by electronic means, to the Ministry office located nearest the project. O. Reg. 85/04, s. 15.

(2) A multi-point suspended scaffold shall be inspected by a professional engineer to determine whether it complies with the design drawings, or the design drawings subject to any deviations approved under subsection 142.2 (17), as the case may be,

(a) after it is erected but before it is first used; and

(b) if the scaffold is moved to another anchorage position, before it is used there. O. Reg. 85/04, s. 15.

(3) The inspection under subsection (2) shall include a determination of whether all components are in adequate condition. O. Reg. 85/04, s. 15.

(4) The professional engineer who conducts the inspection under subsection (2) shall prepare a written report of the inspection. O. Reg. 85/04, s. 15.

(5) The written report is a positive report if it indicates that,

(a) the multi-point suspended scaffold complies with the design drawings, or the design drawings subject to any deviations approved under subsection 142.2 (17), as the case may be; and

(b) all components are in adequate condition. O. Reg. 85/04, s. 15.

(6) Subsections (1), (2), (3), (4) and (5) do not apply to a multi-point suspended scaffold whose platform area is six square metres or less. O. Reg. 85/04, s. 15.

(7) A competent worker shall inspect a multi-point suspended scaffold each day before it is used. O. Reg. 85/04, s. 15.

142.4 The constructor shall keep at the project a copy of,

(a) the written report under subsection 142.2 (14);

(b) the design drawings under subsection 142.2 (15);

(c) any written approvals under subsection 142.2 (17); and

(d) the written reports under subsection 142.3 (4). O. Reg. 85/04, s. 15.

142.5 (1) A multi-point suspended scaffold shall be erected, dismantled, traversed or otherwise moved only by a competent worker under the supervision of a competent person and in accordance with the design drawings, or the design drawings subject to any deviations approved under subsection 142.2 (17), as the case may be. O. Reg. 85/04, s. 15.

(2) Before a worker is on a multi-point suspended scaffold for the first time, the employer shall provide the worker with adequate oral and written instructions for using the scaffold, including,

(a) the manufacturer's instructions or a professional engineer's instructions;

(b) instructions on the load limitations;

(c) instructions in, and a hands-on demonstration of, the proper operation of the scaffold. O. Reg. 85/04, s. 15.

(3) A worker who is to erect, dismantle, traverse or otherwise move a multi-point suspended scaffold shall, in addition to the instructions set out in subsection (2), be given instructions in the procedures described in clause 142.2 (15) (e). O. Reg. 85/04, s. 15.

(4) No person shall use a multi-point suspended scaffold until the design drawings described in subsection 142.2 (15) have been given to the constructor and the following documents have been prepared and given to the constructor:

1. The report described in subsection 142.2 (14).

2. A positive report described in subsections 142.3 (4) and (5), if applicable.

3. Any approval described in subsection 142.2 (17), if applicable. O. Reg. 85/04, s. 15.

142.6 (1) A multi-point suspended scaffold shall not be loaded in excess of the specified loads indicated on the design drawings for the scaffold. O. Reg. 85/04, s. 15.

(2) Signs indicating the specified live loads shall be posted in conspicuous places on the scaffold. O. Reg. 85/04, s. 15.

142.7 (1) A worker who is on a multi-point suspended scaffold while it is being erected, dismantled, traversed or otherwise moved shall use a fall arrest system that is,

(a) connected to a fixed support independent from the scaffold; and

(b) designed, constructed and maintained in accordance with this Regulation. O. Reg. 85/04, s. 15.

(2) Despite subsection (1), a worker is not required to use a fall arrest system while the scaffold is stationary if guardrails are installed in accordance with section 26.3. O. Reg. 85/04, s. 15.

142.8 (1) The constructor of a project where a multi-point suspended scaffold is used shall keep a written record of all inspections, tests, repairs, modifications and maintenance performed on the scaffold and make copies of the record available to an inspector upon request. O. Reg. 85/04, s. 15.

(2) The record referred to in subsection (1) shall,

(a) be kept up to date;

(b) include the signature, name and business address of each person who performs an inspection, test, repair, modification or maintenance; and

(c) be kept at the project while the scaffold is there. O. Reg. 85/04, s. 15.

ELEVATING WORK PLATFORMS

143. (1) Subject to subsection (2), every elevating work platform, including elevating rolling work platforms, self-propelled elevating work platforms, boom-type elevating work platforms and vehicle-mounted aerial devices shall comply with section 144. O. Reg. 213/91, s. 143 (1).

(2) Subsection (1) does not apply to,

(a) suspended scaffolds or suspended work platforms; and

(b) buckets or baskets suspended from or attached to the boom of a crane. O. Reg. 213/91, s. 143 (2).

144. (1) An elevating work platform shall be designed by a professional engineer in accordance with good engineering practice,

(a) to meet the requirements of the applicable National Standards of Canada standard, set out in the Table to subsection (6); and

(b) to support a minimum of 1.3 kilonewtons rated working load as determined in accordance with the applicable National Standards of Canada standard set out in the Table to subsection (6). O. Reg. 213/91, s. 144 (1).

(2) An elevating work platform shall be manufactured in accordance with the design referred to in subsection (1). O. Reg. 213/91, s. 144 (2).

(3) An elevating work platform,

(a) shall be tested in accordance with the National Standards of Canada standard set out in the Table to subsection (6); and

(b) shall be inspected each day before use, in accordance with the manufacturer's instructions by a worker trained in accordance with section 147. O. Reg. 213/91, s. 144 (3).

(4) An elevating work platform shall only be used if a professional engineer has certified in writing that it complies with the National Standards of Canada standard set out in the Table to subsection (6). O. Reg. 213/91, s. 144 (4).

(5) The certification required by subsection (4) shall include the details of testing. O. Reg. 213/91, s. 144 (5).

(6) The National Standards of Canada standard applicable to the type of elevating work platform listed in Column 1 of the Table to this subsection are the standards set out opposite it in Column 2:

TABLE

Column 1	Column 2
Elevating Work Platform	National Standards of Canada standard
Elevating Rolling Work Platform	CAN3-B354.1-M82
Self-Propelled Elevating Work Platform	CAN3-B354.2-M82 and CAN3-B354.3-M82
Boom-Type Elevating Work Platform	CAN3-B354.4-M82
Vehicle-Mounted Aerial Device	CAN-CSA-C225-M88

O. Reg. 213/91, s. 144 (6).

(7) An elevating work platform shall be equipped with guardrails. O. Reg. 213/91, s. 144 (7).

(8) An elevating work platform shall have signs that are clearly visible to an operator at its controls indicating,

(a) the rated working load;

(b) all limiting operating conditions including the use of outriggers, stabilizers and extendable axles;

(c) the specific firm level surface conditions required for use in the elevated position;

(d) such warnings as may be specified by the manufacturer;

(e) other than for a boom-type elevating work platform, the direction of machine movement for each operating control;

(f) the name and number of the National Standards of Canada standard to which it was designed; and

(g) the name and address of the owner. O. Reg. 213/91, s. 144 (8).

145. (1) The owner of an elevating work platform shall maintain it such that the safety factors of the original design are maintained. O. Reg. 213/91, s. 145 (1).

(2) The owner of an elevating work platform shall keep a permanent record of all inspections, tests, repairs, modifications and maintenance performed on it. O. Reg. 213/91, s. 145 (2).

(3) The permanent record required by subsection (2),

(a) shall be kept up-to-date;

(b) shall include complete records from the more recent of,

(i) the date of purchase, or

(ii) the date this Regulation is filed; and

(c) shall include the signature and name of the person who performed the inspection, test, repair, modification or maintenance. O. Reg. 213/91, s. 145 (3).

146. A maintenance and inspection record tag,

(a) shall be provided and attached to the elevating work platform near the operator's station; and

(b) shall include,

(i) the date of the last maintenance and inspection,

(ii) the signature and name of the person who performed the maintenance and inspection, and

(iii) an indication that the maintenance has been carried out in accordance with the manufacturer's recommendations. O. Reg. 213/91, s. 146.

147. (1) A worker who operates an elevating work platform shall, before using it for the first time, be given oral and written instruction on the operation and be trained to operate that class of elevating work platform. O. Reg. 213/91, s. 147 (1).

(2) The instruction and training required by subsection (1) shall include,

(a) the manufacturer's instruction;

(b) instruction in the load limitations;

(c) instruction in and a hands-on demonstration of the proper use of all controls; and

(d) instruction in the limitations on the kinds of surfaces on which it is designed to be used. O. Reg. 213/91, s. 147 (2).

148. An elevating work platform,

(a) shall not be loaded in excess of its rated working load;

(b) shall be used only on a firm level surface;

(c) shall be used only in accordance with the written instructions of the manufacturer;

(d) shall not be loaded and used in such a manner as to affect its stability or endanger a worker; and

(e) shall not be moved unless all workers on it are protected against falling by a safety belt attached to the platform. O. Reg. 213/91, s. 148.

149. An operator's manual for an elevating work platform shall be kept with it while it is on a project. O. Reg. 213/91, s. 149.

CRANES, HOISTING AND RIGGING

150. (1) Subject to subsection (2), no worker shall operate a crane or similar hoisting device unless the worker holds a certificate of qualification issued under the *Ontario College of Trades and Apprenticeship Act, 2009*, that is not suspended, or the worker is an apprentice and is working pursuant to a training agreement registered under that Act, that is not suspended, in the trade of,

(a) hoisting engineer — mobile crane operator 1, if the worker is operating a crane or similar hoisting device capable of raising, lowering or moving any material that weighs more than 30,000 pounds;

(b) hoisting engineer — mobile crane operator 1 or hoisting engineer — mobile crane operator 2, if the worker is operating a crane or similar hoisting device capable of raising, lowering or moving only material that weighs more than 16,000 pounds but no more than 30,000 pounds; or

(c) hoisting engineer — tower crane operator, if the worker is operating a tower crane. O. Reg. 88/13, s. 1.

(1.1) Subsection (1) does not apply when a worker is using excavation equipment to place pipes into a trench. O. Reg. 631/94, s. 3.

(2) No worker shall operate a crane or similar hoisting device, other than one described in subsection (1), unless,

(a) the worker has written proof of training indicating that he or she is trained in the safe operation of the crane or similar hoisting device; or

(b) the worker is being instructed in the operation of the crane or similar hoisting device and is accompanied by a person who meets the requirements of clause (a). O. Reg. 213/91, s. 150 (2).

(3) A worker shall carry his or her proof of training while operating a crane or similar hoisting device. O. Reg. 213/91, s. 150 (3).

151. (1) No crane or similar hoisting device shall be subjected to a load greater than its rated load-carrying capacity. O. Reg. 213/91, s. 151 (1).

(2) The manufacturer of a crane or similar hoisting device or a professional engineer shall determine its rated load-carrying capacity in accordance with,

(a) for a mobile crane, Canadian Standards Association Standard Z150-1974 Safety Code for Mobile Cranes; and

(b) for a tower crane, Canadian Standards Association Standard Z248-1976 Code for Tower Cranes. O. Reg. 213/91, s. 151 (2).

(3) Every crane or similar hoisting device shall have affixed to it a load rating plate,

(a) that the operator can read while at the controls; and

(b) that contains enough information for the operator to determine the load that can be lifted for each configuration of the crane. O. Reg. 213/91, s. 151 (3).

(4) A luffing boom crane, other than a tower crane, shall have affixed to it a boom angle indicator that the operator can read while at the controls. O. Reg. 213/91, s. 151 (4).

152. (1) The owner of a crane or similar hoisting device shall keep a permanent record of all inspections of, tests of, repairs to, modifications to and maintenance of the crane or similar hoisting device. O. Reg. 213/91, s. 152 (1).

(2) The owner of a crane or similar hoisting device shall prepare a log book for it for use at a project that shall include the record referred to in subsection (1) covering the period that is the greater of,

(a) the immediately preceding twelve months; and

(b) the period the crane or similar hoisting device is on the project. O. Reg. 213/91, s. 152 (2).

(3) The log book shall be kept with the crane or similar hoisting device. O. Reg. 213/91, s. 152 (3).

(4) The owner of a crane or similar hoisting device shall retain and make available to the constructor on request copies of all log books and records for the crane or similar hoisting device. O. Reg. 213/91, s. 152 (4).

153. (1) No worker shall use as a workplace a platform, bucket, basket, load, hook, sling or similar device that is capable of moving and is supported by a cable attached to the boom of a crane or similar hoisting device, except in accordance with this section. O. Reg. 631/94, s. 4.

(2) A crane may be used to raise, support or lower a worker only if,

(a) conventional access equipment cannot be used;

(b) the platform that the worker is on,

(i) is designed by a professional engineer in accordance with good engineering practice,

(ii) is constructed in accordance with the design drawings,

(iii) is equipped with more than one means of suspension or support,

(iv) is equipped with anchor points for the attachment of the worker's fall arrest systems,

(v) is equipped with a guardrail in accordance with section 26.3,

(vi) is suspended from, or supported by, a direct attachment to the boom of the crane,

(vii) is designed, constructed and maintained so that the failure of one means of support or suspension will not cause the collapse of all or part of the platform, and

(viii) has its maximum rated load capacity legibly and permanently marked in a conspicuous place on it; and

(c) the crane,

(i) is equipped with fail-safe mechanisms that will prevent the boom and the suspended platform from free falling in the event of a power source or system failure or the inadvertent release of any operating controls,

(ii) is not used to hoist material while the platform is being used to support a worker,

(iii) is not loaded in excess of 25 per cent of its maximum rated load,

(iv) has a revised load rating chart prepared by a professional engineer in accordance with good engineering practice and affixed in a conspicuous place on the crane,

(v) has, on its hoist line, hooks equipped with self-closing safety catches at the point where the platform is suspended, and

(vi) is equipped with an automatic limit switch that prevents the platform and load from reaching beyond the highest permissible position specified by the crane manufacturer. O. Reg. 631/94, s. 4; O. Reg. 527/00, s. 5.

(3) Any modifications or repairs to the boom of the crane shall be made in accordance with the instructions of the crane manufacturer or a professional engineer. O. Reg. 631/94, s. 4.

(4) Every worker on the platform shall wear a full body harness connected independently to anchor points on the platform and used in conjunction with a lanyard fitted with a shock absorber. O. Reg. 631/94, s. 4.

(5) The design drawings of the platform shall,

(a) set out the size and specifications of all components of the platform, including the type and grade of materials used for it;

(b) state the maximum live load of the platform;

(c) specify the model and type of crane to be used in conjunction with the platform; and

(d) include a statement that, in the opinion of the professional engineer who designed the platform, the design meets the requirements of clauses (a), (b) and (c).

(e) REVOKED: O. Reg. 85/04, s. 16.

O. Reg. 631/94, s. 4; O. Reg. 85/04, s. 16.

(6) Before the platform is used, a competent worker shall inspect it and verify in writing that it has been constructed in accordance with the design drawings. O. Reg. 631/94, s. 4.

(7) No person shall use the platform until the verification required under subsection (6) is given. O. Reg. 631/94, s. 4.

(8) A professional engineer or a competent worker designated by the professional engineer shall inspect the crane to ensure its structural integrity using non-destructive testing methods approved by the Canadian General Standards Board before the crane is used to lift persons and then at least once every 12 months after that. O. Reg. 631/94, s. 4.

(9) A competent worker shall visually inspect the crane's structural elements and the rigging equipment for defects before each use of the crane. O. Reg. 631/94, s. 4.

(10) The employer shall ensure that an adequate means of communication between the worker on the platform and the crane operator is established, maintained and used. O. Reg. 631/94, s. 4.

(11) Before beginning any hoisting operation under this section, the constructor shall notify by telephone an inspector in the office of the Ministry of Labour nearest to the project. O. Reg. 631/94, s. 4.

(12) The employer shall ensure that every worker involved with the hoisting operation receives adequate instructions about the requirements, restrictions and hazards associated with the hoisting operation. O. Reg. 631/94, s. 4.

(13) The employer shall develop adequate emergency rescue procedures and communicate these in writing to all workers involved with the hoisting operation. O. Reg. 631/94, s. 4.

(14) The constructor shall keep all design drawings, test reports, written statements and certification documents required under this section with the crane at all times during the hoisting operation. O. Reg. 631/94, s. 4.

(15) On request, the constructor shall provide an inspector with copies of any document described in subsection (14). O. Reg. 631/94, s. 4.

154. (1) A crane or similar hoisting device shall be set up, assembled, extended and dismantled only by a competent worker acting in accordance with the written instructions of the manufacturer and in such a manner as to not endanger any person or property. O. Reg. 213/91, s. 154 (1).

(2) No crane or similar hoisting device shall include sections that are not designed for it or that are damaged. O. Reg. 213/91, s. 154 (2).

(3) No crane or similar hoisting device shall include nuts, bolts, pins or fastenings that are not the size and quality specified by the manufacturer. O. Reg. 213/91, s. 154 (3).

155. Unless otherwise specified by its manufacturer, a crane or similar hoisting device,

(a) shall be equipped with a device to indicate whether its turntable is level; and

(b) shall be operated with its turntable level. O. Reg. 213/91, s. 155.

156. An outrigger or stabilizing device used on a crane or similar hoisting device,

(a) shall be extended to meet load capacity chart requirements; and

(b) shall rest on blocking able to support the crane or similar hoisting device and its maximum load without failure or without deformation or settlement which affects its stability. O. Reg. 213/91, s. 156.

TOWER CRANES

157. (1) No tower crane shall be erected at a project except in accordance with this section. O. Reg. 213/91, s. 157 (1).

(2) The foundations supporting a tower crane shall be designed by a professional engineer in accordance with the crane manufacturer's specifications and shall be constructed in accordance with the design. O. Reg. 213/91, s. 157 (2).

(3) The shoring and bracing that support a tower crane or tie it in place shall be designed by a professional engineer in accordance with the crane manufacturer's specifications and shall be installed in accordance with the design. O. Reg. 213/91, s. 157 (3).

(4) The structural engineer responsible for the structural integrity of the building or structure shall review the design drawings for the foundation, shoring and bracing for a tower crane before the crane is erected at a project to ensure the structural integrity of the building or structure. O. Reg. 213/91, s. 157 (4).

(5) The structural engineer who reviews the design drawings shall sign the drawings upon approving them. O. Reg. 213/91, s. 157 (5).

(6) The constructor shall keep at the project while a tower crane is erected a copy of the signed design drawings for its foundation, shoring and bracing and any written opinion about the drawings by a structural engineer. O. Reg. 213/91, s. 157 (6).

158. (1) Before a tower crane is erected at a project, a professional engineer or a competent worker designated by a professional engineer shall inspect its structural elements and components using methods of non-destructive testing approved by the Canadian General Standards Board to determine their structural integrity. O. Reg. 213/91, s. 158 (1); O. Reg. 631/94, s. 5.

(2) The professional engineer conducting an inspection or under whose direction an inspection is done shall prepare a written report of the test results. O. Reg. 213/91, s. 158 (2); O. Reg. 85/04, s. 17.

(3) The constructor shall keep the report at the project while the crane is erected. O. Reg. 213/91, s. 158 (3).

159. (1) A professional engineer or a competent worker designated by a professional engineer shall visually inspect for defects the structural elements and components of a tower crane,

(a) after the crane is erected and before it is used; and

(b) after the inspection under clause (a), at intervals not greater than twelve months. O. Reg. 213/91, s. 159 (1).

(2) No tower crane shall be used until any defects found during an inspection are repaired in accordance with the instructions of the crane's manufacturer or a professional engineer. O. Reg. 213/91, s. 159 (2).

(3) A professional engineer or a competent worker designated by a professional engineer shall inspect a tower crane that has been repaired to ensure that the defects are corrected. O. Reg. 213/91, s. 159 (3).

(4) The professional engineer conducting an inspection or under whose direction the inspection is done shall prepare a written report of the test results. O. Reg. 213/91, s. 159 (4); O. Reg. 85/04, s. 18.

(5) The constructor shall keep the report at a project while the crane is erected. O. Reg. 213/91, s. 159 (5).

160. (1) A tower crane shall have automatic limit switches and automatic overload limit devices that prevent,

(a) overloading at relative radii;

(b) a load on the crane from reaching beyond the highest permissible position specified by the manufacturer; and

(c) the trolley from reaching beyond the permissible travel limit specified by the manufacturer. O. Reg. 213/91, s. 160 (1).

(2) In addition to automatic limit switches and overload limit devices, a tower crane shall have such other switches and devices as the manufacturer specifies. O. Reg. 213/91, s. 160 (2).

161. (1) A competent worker shall perform operational tests on a tower crane to ensure that its automatic limit switches and overload limit devices are installed and functioning in accordance with the manufacturer's specifications, if any. O. Reg. 213/91, s. 161 (1).

(2) Operational tests shall be done,

(a) after the tower crane is erected on the project and before it is used; and

(b) at one-week intervals after the test under clause (a) while the crane is erected on the project. O. Reg. 213/91, s. 161 (2).

(3) Overload limit devices for a tower crane shall be tested using test blocks designed for the purpose that have their weight clearly marked on them. O. Reg. 213/91, s. 161 (3).

(4) The test blocks shall be kept on the project while the crane is erected. O. Reg. 213/91, s. 161 (4).

162. (1) A tower crane boom shall be able to slew freely when the crane is unattended except when,

(a) the boom may collide with another crane, a structure or another object; or

(b) to slew freely would be contrary to the written procedures of the crane's manufacturer. O. Reg. 213/91, s. 162 (1).

(2) When a tower crane boom is not permitted to slew freely it shall be secured in accordance with the written procedures of the crane's manufacturer. O. Reg. 213/91, s. 162 (2).

163. (1) Subject to subsection (2), the operator's cabin of a tower crane shall be located on and attached to or positioned on the crane in accordance with the instructions of the crane's manufacturer for the specific model and configuration of the crane and in such a manner that in the event of a failure of the boom, the cabin will not be crushed against the mast. O. Reg. 213/91, s. 163 (1).

(2) The operator's cabin shall not be located on or attached to the boom unless,

(a) the cabin and its attachments have been specifically designed and fabricated for that purpose by the original manufacturer of the crane in accordance with good engineering practice;

(b) the boom of the crane cannot affect or be affected by the operation of another crane or make contact with a structure or equipment;

(c) the crane is not overlapped by any part of another crane;

(d) because of specific site conditions, the location of the cabin on the boom provides greater visibility for the operator than does the manufacturer's standard cabin location;

(e) the means of access to the cabin or other locations on the boom is by a catwalk constructed of skid resistant expanded metal or similar material and fitted with solidly constructed guardrails and devices which provide fall protection for the operator;

(f) the structural, environmental and ergonomic design of the cabin is equal to or greater than that of the crane's manufacturer's standard cabin design; and

(g) the proposed location and attachment method provide a structural and mechanical safety factor equal to or greater than that of a cabin located on the crane mast or attached to the slewing ring. O. Reg. 213/91, s. 163 (2).

(3) If the crane manufacturer specifies the location of the operator's cabin to be on the boom of a tower crane, the crane manufacturer shall provide to the owner of the crane a report for the specific model and specific configuration of crane on a project. O. Reg. 213/91, s. 163 (3).

(4) The crane manufacturer's report shall include,

(a) the crane load restrictions, reductions or modifications resulting from the effect of the cabin weight and its offset from the boom centreline;

(b) the crane configuration and operating restrictions resulting from the effect of the cabin location and attachment method; and

(c) engineering design drawings that include,

(i) the structural and ergonomic design of the cabin,

(ii) the location of the cabin on the boom,

(iii) the attachment method including all fittings and hardware, and

(iv) all means of access. O. Reg. 213/91, s. 163 (4).

164. A load block of an unattended tower crane shall be left empty, at the top position and located at minimum radius. O. Reg. 213/91, s. 164.

165. (1) The track bed of a rail-mounted tower crane shall have a sound and rigid base capable of carrying all loads to which it is likely to be subjected without deformation or settlement which affects the stability of the crane. O. Reg. 213/91, s. 165 (1).

(2) The undercarriage of a rail-mounted tower crane shall be fitted with rail clamps that can be firmly attached to the rails to lock the crane in position. O. Reg. 213/91, s. 165 (2).

(3) A rail-mounted tower crane shall be locked in position on the rails when not in use. O. Reg. 213/91, s. 165 (3).

(4) A rail-mounted tower crane shall have rail stops or bumpers that extend at least as high as the centre of the undercarriage wheels and that are securely attached to the rail at both ends. O. Reg. 213/91, s. 165 (4).

Derricks, Stiff-Leg Derricks and Similar Hoisting Devices

166. (1) No derrick, stiff-leg derrick or similar hoisting device shall be attached to a building or structure unless this section is complied with. O. Reg. 213/91, s. 166 (1).

(2) A professional engineer shall prepare design drawings and specifications for the attachment of a derrick, stiff-leg derrick or similar hoisting device to a building or structure. O. Reg. 213/91, s. 166 (2).

(3) The design drawings and specifications shall include,

(a) the location of the derrick, stiff-leg derrick or similar hoisting device on the building or structure;

(b) the location of anchor bolts, guy wires, supports and shoring for it;

(c) particulars of the weight of the loads and the radius at which the loads are to be lifted; and

(d) particulars of the loads and forces on the building or structure imposed by the derrick, stiff-leg derrick or similar hoisting device. O. Reg. 213/91, s. 166 (3).

(4) The constructor shall ensure that the structural engineer responsible for the structural integrity of a building or structure reviews and approves in writing the design drawings and specifications for a derrick, stiff-leg derrick or similar hoisting device before it is installed. O. Reg. 213/91, s. 166 (4).

(5) A professional engineer shall inspect a derrick, stiff-leg derrick or similar hoisting device before it is first used on a building or structure to ensure that it is installed in accordance with the design drawings and specifications. O. Reg. 213/91, s. 166 (5).

(6) The professional engineer conducting the inspection shall prepare a written report of the inspection. O. Reg. 213/91, s. 166 (6); O. Reg. 85/04, s. 19.

(7) The constructor shall keep a copy of the design drawings and specifications for a derrick, stiff-leg derrick or similar hoisting device and the report prepared under subsection (6) at a project while the derrick, stiff-leg derrick or similar hoisting device is on the project. O. Reg. 213/91, s. 166 (7).

167. (1) The pilot of a helicopter that is hoisting materials shall be competent to fly an externally-loaded helicopter. O. Reg. 213/91, s. 167 (1).

(2) The pilot shall be in charge of the hoisting operation and shall determine the size and weight of loads to be hoisted and the method by which they are attached to the helicopter. O. Reg. 213/91, s. 167 (2).

(3) Ground personnel including signallers for a helicopter being used to hoist materials shall be competent workers. O. Reg. 213/91, s. 167 (3).

(4) The constructor shall take precautions against hazards caused by helicopter rotor downwash. O. Reg. 213/91, s. 167 (4).

CABLES, SLINGS, RIGGING

168. (1) A cable used by a crane or similar hoisting device,

(a) shall be steel wire rope of the type, size, grade and construction recommended by the manufacturer of the crane or similar hoisting device;

(b) shall be compatible with the sheaves and the drum of the crane or similar hoisting device;

(c) shall be lubricated to prevent corrosion and wear;

(d) shall not be spliced; and

(e) shall have its end connections securely fastened and shall be kept with at least three full turns on the drum. O. Reg. 213/91, s. 168 (1).

(2) No cable used by a crane or similar hoisting device,

(a) subject to subsection (3), shall contain six randomly-distributed wires that are broken in one rope lay or three or more wires that are broken in one strand in a rope lay;

(b) shall be smaller than its nominal rope diameter by more than,

(i) one millimetre for a diameter up to and including nineteen millimetres,

(ii) two millimetres for a diameter greater than nineteen millimetres up to and including twenty-nine millimetres, and

(iii) three millimetres for a diameter greater than twenty-nine millimetres;

(c) shall be worn by more than one-third of the original diameter of its outside individual wires;

(d) shall show evidence of kinking, bird-caging, corrosion or other damage resulting in distortion of the rope structure; or

(e) shall show evidence of possible rope failure including rope damage caused by contact with electricity. O. Reg. 213/91, s. 168 (2).

(3) No cable that is static or is used for pendants,

(a) shall contain three or more broken wires in one lay or in a section between end connectors; or

(b) shall have more than one broken wire at an end connector. O. Reg. 213/91, s. 168 (3).

(4) Rotation-resistant wire rope shall not be used for a cable for boom hoist reeving and pendants. O. Reg. 213/91, s. 168 (4).

(5) Rotation-resistant wire rope shall not be used where an inner wire or strand for a cable is damaged or broken. O. Reg. 213/91, s. 168 (5).

169. A cable used by a crane or similar hoisting device shall be capable of supporting at least,

(a) three and one-half times the maximum load to which it is likely to be subjected if it is used on a device other than a tower crane and it winds on a drum or passes over a sheave;

(b) five times the maximum load to which it is likely to be subjected if it is used on a tower crane and it winds on a drum or passes over a sheave;

(c) three times the maximum load to which it is likely to be subjected if it is a pendant or is not subject to winding or bending; and

(d) ten times the maximum load to which it is likely to be subjected if the crane or similar hoisting device is used for supporting persons. O. Reg. 213/91, s. 169.

170. (1) All cable used by a crane or similar hoisting device shall be visually inspected by a competent worker at least once a week when the crane or similar hoisting device is being used. O. Reg. 213/91, s. 170 (1).

(2) The worker performing an inspection shall record the condition of the rope or cable inspected in the log book for the crane or similar hoisting device. O. Reg. 213/91, s. 170 (2).

171. (1) A cable used by a crane or similar hoisting device shall be securely attached,

(a) by binding and fastening the cable around an oval thimble in a way that is strong enough to prevent the cable thimble from separating; or

(b) by fastening the cable within either a tapered socket by means of virgin zinc or a wedge-type socket fitted with a wire rope clip at the dead end to prevent the accidental release or loosening of the wedge. O. Reg. 213/91, s. 171 (1).

(2) The dead end cable of a wedge socket assembly on a hoisting line shall extend between 100 millimetres and 300 millimetres out of the socket. O. Reg. 213/91, s. 171 (2).

172. (1) A container, sling or similar device for rigging or hoisting an object, including its fittings and attachments,

(a) shall be suitable for its intended use;

(b) shall be suitable for and capable of supporting the object being rigged or hoisted;

(c) shall be so arranged as to prevent the object or any part of the object from slipping or falling;

(d) shall be capable of supporting at least five times the maximum load to which it may be subjected; and

(e) shall be capable of supporting at least ten times the load to which it may be subjected if it is to be used to support a person. O. Reg. 213/91, s. 172 (1).

(2) A sling or similar device made of web-type fabric or nylon shall be labelled to indicate its load rating capacity. O. Reg. 213/91, s. 172 (2).

(3) No sling or similar device for rigging or hoisting made of web-type fabric or nylon shall be used if it may be cut. O. Reg. 213/91, s. 172 (3).

173. (1) Every hoisting hook shall be equipped with a safety catch. O. Reg. 213/91, s. 173 (1).

(2) No safety catch is required on a hoisting hook used in placing structural members if the method of placing protects workers to the same standard as a safety catch does. O. Reg. 213/91, s. 173 (2).

(3) A hoisting hook shall have its load rating legibly cast or stamped on it in a location where the person using the hook can readily see it. O. Reg. 213/91, s. 173 (3).

(4) A hoisting hook shall not be used if it is cracked, has a throat opening that is greater than as manufactured or is twisted from the plane of the unbent hook. O. Reg. 213/91, s. 173 (4).

174. A hook block shall have its load rating and weight legibly cast or stamped on it in a conspicuous location. O. Reg. 213/91, s. 174.

175. (1) An overhauling weight used on the cable of a crane or similar hoisting device,

(a) shall be prevented from sliding up or down the cable; and

(b) shall be securely attached to the load hook and the cable. O. Reg. 213/91, s. 175 (1).

(2) No overhauling weight used on the cable of a crane or similar hoisting device shall be split. O. Reg. 213/91, s. 175 (2).

176. Only an alloy steel chain or a chain manufactured for the purpose shall be used for hoisting. O. Reg. 213/91, s. 176.

177. (1) No alloy chain shall be annealed or welded. O. Reg. 213/91, s. 177 (1).

(2) A chain used for hoisting shall be selected, annealed, normalized and repaired in accordance with the specifications of its manufacturer. O. Reg. 213/91, s. 177 (2).

178. A friction-type clamp used in hoisting materials shall be constructed so that an accidental slackening of the hoisting cable does not release the clamp. O. Reg. 213/91, s. 178.

179. (1) If a worker may be endangered by the rotation or uncontrolled motion of a load being hoisted by a crane or similar hoisting device, one or more guide ropes or tag lines shall be used to prevent the rotation or uncontrolled motion. O. Reg. 213/91, s. 179 (1).

(2) No guide rope or tag line shall be removed from a load referred to in subsection (1) until the load is landed and there is no danger of it tipping, collapsing or rolling. O. Reg. 213/91, s. 179 (2).

180. (1) Piles and sheet-piling shall be adequately supported to prevent their uncontrolled movement while they are being hoisted, placed, removed or withdrawn. O. Reg. 213/91, s. 180 (1).

(2) No worker shall be in an area where piles or sheet-piling are being hoisted, placed, removed or withdrawn unless the worker is directly engaged in the operation. O. Reg. 213/91, s. 180 (2).

ELECTRICAL HAZARDS

181. (1) Except where otherwise required by this Regulation, electrical work performed on or near electrical transmission or distribution systems shall be performed in accordance with the document entitled “Electrical Utility Safety Rules” published by the Electrical and Utilities Safety Association of Ontario Incorporated and revised January, 2009. O. Reg. 627/05, s. 4; O. Reg. 443/09, s. 5.

(2) Sections 182, 187, 188, 189, 190, 191 and 193 do not apply to electrical work that is performed on or near electrical transmission or distribution systems if the work is performed in accordance with the document referred to in subsection (1). O. Reg. 627/05, s. 4.

182. (1) No worker shall connect, maintain or modify electrical equipment or installations unless,

(a) the worker holds a certificate of qualification issued under the *Ontario College of Trades and Apprenticeship Act, 2009*, that is not suspended, in the trade of,

(i) electrician — construction and maintenance, or

(ii) electrician — domestic and rural, if the worker is performing work that is limited to the scope of practice for that trade; or

(b) the worker is otherwise permitted to connect, maintain or modify electrical equipment or installations under the *Ontario College of Trades and Apprenticeship Act, 2009* or the *Technical Standards and Safety Act, 2000*. O. Reg. 627/05, s. 4; O. Reg. 88/13, s. 2.

(2) A worker who does not meet the requirements of clause (1) (a) or (b) may insert an attachment plug cap on the cord of electrical equipment or an electrical tool into, or remove it from, a convenience receptacle. O. Reg. 627/05, s. 4.

183. Every reasonable precaution shall be taken to prevent hazards to workers from energized electrical equipment, installations and conductors. O. Reg. 627/05, s. 6.

184. (1) No person, other than a person authorized to do so by the supervisor in charge of the project, shall enter or be permitted to enter a room or other enclosure containing exposed energized electrical parts. O. Reg. 627/05, s. 7.

(2) The entrance to a room or other enclosure containing exposed energized electrical parts shall be marked by conspicuous warning signs stating that entry by unauthorized persons is prohibited. O. Reg. 627/05, s. 7.

185. (1) Electrical equipment, installations, conductors and insulating materials shall be suitable for their intended use and shall be installed, maintained, modified and operated so as not to pose a hazard to a worker. O. Reg. 627/05, s. 7.

(2) For greater certainty, the regulations made under section 113 of the *Electricity Act, 1998* apply to electrical equipment, installations, conductors and insulating materials and to temporary wiring installations on projects. O. Reg. 627/05, s. 7.

186. Electrical equipment, installations and conductors that are not to be used for the purpose for which they were designed shall be,

(a) removed; or

(b) left in an electrically non-hazardous condition by being disconnected, de-energized, tagged and,

(i) grounded, in the case of power lines,

(ii) locked out, in the case of electrical equipment. O. Reg. 627/05, s. 7.

187. Tools, ladders, scaffolding and other equipment or materials capable of conducting electricity shall not be stored or used so close to energized electrical equipment, installations or conductors that they can make electrical contact. O. Reg. 627/05, s. 7.

188. (1) This section applies unless the conditions set out in clauses 189 (a) and (b) are satisfied. O. Reg. 627/05, s. 7.

(2) No object shall be brought closer to an energized overhead electrical conductor with a nominal phase-to-phase voltage rating set out in Column 1 of the Table to this subsection than the distance specified opposite to it in Column 2.

TABLE

Column 1	Column 2
Nominal phase-to-phase voltage rating	Minimum distance
750 or more volts, but no more than 150,000 volts	3 metres
more than 150,000 volts, but no more than 250,000 volts	4.5 metres
more than 250,000 volts	6 metres

O. Reg. 627/05, s. 7.

(3) Subsections (4) to (9) apply if a crane, similar hoisting device, backhoe, power shovel or other vehicle or equipment is operated near an energized overhead electrical conductor and it is possible for a part of the vehicle or equipment or its load to encroach on the minimum distance permitted under subsection (2). O. Reg. 627/05, s. 7.

(4) A constructor shall,

(a) establish and implement written measures and procedures adequate to ensure that no part of a vehicle or equipment or its load encroaches on the minimum distance permitted by subsection (2); and

(b) make a copy of the written measures and procedures available to every employer on the project. O. Reg. 627/05, s. 7.

(5) The written measures and procedures shall include taking the following precautions to protect workers:

1. Adequate warning devices, visible to the operator and warning of the electrical hazard, shall be positioned in the vicinity of the hazard.
2. The operator shall be provided with written notification of the electrical hazard before beginning the work.
3. A legible sign, visible to the operator and warning of the potential electrical hazard, shall be posted at the operator's station. O. Reg. 627/05, s. 7.

(6) Before a worker begins work that includes an activity described in subsection (3), the employer shall provide a copy of the written measures and procedures to the worker and explain them to him or her. O. Reg. 627/05, s. 7.

(7) The worker shall follow the written measures and procedures. O. Reg. 627/05, s. 7.

(8) A competent worker, designated as a signaller, shall be stationed so that he or she is in full view of the operator and has a clear view of the electrical conductor and of the vehicle or equipment, and shall warn the operator each time any part of the vehicle or equipment or its load may approach the minimum distance. O. Reg. 627/05, s. 7.

(9) Section 106 also applies with respect to the signaller designated under subsection (8). O. Reg. 627/05, s. 7.

189. Section 188 does not apply if,

(a) under the authority of the owner of the electrical conductor, protective devices and equipment are installed, and written measures and procedures are established and implemented, that are adequate to protect workers from electrical shock and burn; and

(b) the workers involved in the work use protective devices and equipment, including personal protective equipment, and follow written measures and procedures that are adequate to protect workers from electrical shock and burn. O. Reg. 627/05, s. 7.

190. (1) This section applies if work is to be done on or near energized exposed parts of electrical equipment or of an electrical installation or conductor. O. Reg. 627/05, s. 7.

(2) An employer shall,

(a) establish and implement written measures and procedures for complying with this section to ensure that workers are adequately protected from electrical shock and burn; and

(b) make a copy of the written measures and procedures available to every worker on the project. O. Reg. 627/05, s. 7.

(3) The worker shall follow the written measures and procedures. O. Reg. 627/05, s. 7.

(4) Subject to subsection (9), the power supply to the electrical equipment, installation or conductor shall be disconnected, locked out of service and tagged in accordance with subsection (6) before the work begins, and kept disconnected, locked out of service and tagged while the work continues. O. Reg. 627/05, s. 7.

(5) Hazardous stored electrical energy shall be adequately discharged or contained before the work begins and shall be kept discharged or contained while the work continues. O. Reg. 627/05, s. 7.

(6) The following rules apply to the tagging of the power supply under subsection (4):

1. The tag shall be made of non-conducting material and shall be installed so as not to become energized.
2. The tag shall be placed in a conspicuous location and shall be secured to prevent its inadvertent removal.
3. The tag shall indicate,
   i. why the equipment, installation or conductor is disconnected,
   ii. the name of the person who disconnected the equipment, installation or conductor,
   iii. the name of the person's employer, and
   iv. the date on which the equipment, installation or conductor was disconnected.
4. The tag shall not be removed unless it is safe to do so. O. Reg. 627/05, s. 7.

(7) A worker, before beginning work to which this section applies, shall verify that subsections (4) and (5) have been complied with. O. Reg. 627/05, s. 7.

(8) If more than one worker is involved in work to which this section applies, a means shall be provided to communicate the purpose and status of,

(a) the disconnecting, locking out and tagging of the electrical equipment, installation or conductor; and

(b) the discharging and containment of any hazardous stored electrical energy. O. Reg. 627/05, s. 7.

(9) Locking out is not required under subsection (4) if,

(a) in the case of a conductor, it is adequately grounded with a visible grounding mechanism;

(b) in the case of equipment or an installation,

(i) the power supply is less than 300 volts, the equipment or installation was not manufactured with provision for a locking device for the circuit breakers or fuses, and a written procedure has been implemented that is adequate to ensure that the circuit is not inadvertently energized, or

(ii) the power supply is 300 or more volts but not more than 600 volts, the equipment or installation was not manufactured with provision for a locking device for the circuit breakers or fuses, a written procedure as to how work is to be done has been implemented and the work is supervised by a competent worker to ensure that the circuit is not inadvertently energized. O. Reg. 627/05, s. 7.

191. (1) This section applies instead of section 190 if work is to be done on or near energized exposed parts of electrical equipment or of an electrical installation or conductor and,

(a) it is not reasonably possible to disconnect the equipment, installation or conductor from the power supply before working on or near the energized exposed parts;

(b) the equipment, installation or conductor is rated at a nominal voltage of 600 volts or less, and disconnecting the equipment, installation or conductor would create a greater hazard to a worker than proceeding without disconnecting it; or

(c) the work consists only of diagnostic testing of the equipment, installation or conductor. O. Reg. 627/05, s. 7.

(2) Subsection (10) applies, in addition to subsections (3) to (9), if the equipment, installation or conductor is nominally rated at,

(a) greater than 400 amperes and greater than 200 volts; or

(b) greater than 200 amperes and greater than 300 volts. O. Reg. 627/05, s. 7.

(3) Only a worker who meets the requirements of clause 182 (1) (a) or (b) shall perform the work. O. Reg. 627/05, s. 7.

(4) The constructor shall,

(a) ensure that written measures and procedures for complying with this section are established and implemented, so that workers are adequately protected from electrical shock and burn; and

(b) make a copy of the written measures and procedures available to every employer on the project. O. Reg. 627/05, s. 7.

(5) Before a worker begins work to which this section applies, the employer shall provide a copy of the written measures and procedures to the worker and explain them to him or her. O. Reg. 627/05, s. 7.

(6) The worker shall follow the written procedures. O. Reg. 627/05, s. 7.

(7) A worker shall use mats, shields or other protective devices or equipment, including personal protective equipment, adequate to protect the worker from electrical shock and burn. O. Reg. 627/05, s. 7.

(8) If the electrical equipment, installation or conductor is rated at a nominal voltage of 300 volts or more, an adequately equipped competent worker who can perform rescue operations, including cardiopulmonary resuscitation, shall be stationed so that he or she can see the worker who is performing the work. O. Reg. 627/05, s. 7.

(9) Subsection (8) does not apply if the work consists only of diagnostic testing of the equipment, installation or conductors. O. Reg. 627/05, s. 7.

(10) In the case of equipment or of an installation or conductor described in subsection (2), a worker shall not perform the work unless the following additional conditions are satisfied:

1. The owner of the equipment, installation or conductor has provided the employer and the constructor with a record showing that it has been maintained according to the manufacturer's specifications.
2. A copy of the maintenance record is readily available at the project.
3. The employer has determined from the maintenance record that the work on the equipment, installation or conductor can be performed safely without disconnecting it.
4. Before beginning the work, the worker has verified that paragraphs 1, 2 and 3 have been complied with. O. Reg. 627/05, s. 7.

192. All tools, devices and equipment, including personal protective equipment, that are used for working on or near energized exposed parts of electrical equipment, installations or conductors shall be designed, tested, maintained and used so as to provide adequate protection to workers. O. Reg. 627/05, s. 7.

193. (1) A worker who may be exposed to the hazard of electrical shock or burn while performing work shall use rubber gloves,

(a) that are adequate to protect him or her against electrical shock and burn;

(b) that have been tested and certified in accordance with subsection (2), if applicable; and

(c) that have been air tested and visually inspected for damage and adequacy immediately before each use. O. Reg. 627/05, s. 7.

(2) Rubber gloves rated for use with voltages above 5,000 volts AC shall be tested and certified to ensure that they can withstand the voltages for which they are rated,

(a) at least once every three months, if they are in service;

(b) at least once every six months, if they are not in service. O. Reg. 627/05, s. 7.

(3) Rubber gloves shall be worn with adequate leather protectors and shall not be worn inside out. O. Reg. 627/05, s. 7.

(4) Leather protectors shall be visually inspected for damage and adequacy immediately before each use. O. Reg. 627/05, s. 7.

(5) Rubber gloves or leather protectors that are damaged or not adequate to protect workers from electrical shock and burn shall not be used. O. Reg. 627/05, s. 7.

(6) Workers shall be trained in the proper use, care and storage of rubber gloves and leather protectors. O. Reg. 627/05, s. 7.

194. (1) A switch and panel board controlling a service entrance, service feeder or branch circuit shall meet the requirements of this section. O. Reg. 627/05, s. 7.

(2) A switch and panel board shall be securely mounted on a soundly constructed vertical surface and shall have a cover over uninsulated parts carrying current. O. Reg. 627/05, s. 7.

(3) A switch and panel board shall be located,

(a) in an area where water will not accumulate; and

(b) within easy reach of workers and readily accessible to them. O. Reg. 627/05, s. 7.

(4) The area in front of a panel board shall be kept clear of obstructions. O. Reg. 627/05, s. 7.

(5) A switch that controls a service entrance, service feeder or branch circuit providing temporary power,

(a) shall not be locked in the energized position; and

(b) shall be housed in an enclosure that can be locked and is provided with a locking device. O. Reg. 627/05, s. 7.

195. All electrical extension cords used at a project shall have a grounding conductor and at least two other conductors. O. Reg. 627/05, s. 7.

195.1 (1) Cord-connected electrical equipment or tools shall have a casing that is adequately grounded. O. Reg. 627/05, s. 7.

(2) All cord connections to electrical equipment or tools shall be polarized. O. Reg. 627/05, s. 7.

(3) Subsections (1) and (2) do not apply to cord-connected electrical equipment or tools that are adequately double-insulated and whose insulated casing shows no evidence of cracks or defects. O. Reg. 627/05, s. 7.

(4) Subsection (1) does not apply to a portable electrical generator in which the electrical equipment or tools are not exposed to an external electric power source if the casing of portable electrical equipment or tools connected to the generator is bonded to a non-current-carrying part of the generator. O. Reg. 627/05, s. 7.

195.2 When a portable electrical tool is used outdoors or in a wet location,

(a) if the source of power is an ungrounded portable generator having a maximum output of 1.8 kilowatts or less, a ground fault circuit interrupter of the Class A type shall be located in the cord feeding the tool, as close to the tool as possible;

(b) in all other cases, the tool shall be plugged into a receptacle protected by a ground fault circuit interrupter of the Class A type. O. Reg. 627/05, s. 7.

195.3 (1) Defective electrical equipment and tools that may pose a hazard shall be immediately disconnected, removed from service and tagged as being defective. O. Reg. 627/05, s. 7.

(2) The cause of a ground fault or the tripping of a ground fault circuit interrupter shall be immediately investigated to determine the hazard and corrective action shall be taken immediately. O. Reg. 627/05, s. 7.

EXPLOSIVES

196. (1) If explosives are to be used on a project, the employer responsible for blasting shall designate a competent worker to be in charge of blasting operations. O. Reg. 213/91, s. 196 (1).

(2) The employer shall post the name of the worker in charge of blasting operations for a project in a conspicuous place on the project and in every magazine. O. Reg. 213/91, s. 196 (2).

(3) The worker in charge of blasting operations for a project shall personally supervise blasting operations at the project, including the loading, priming and initiating of all charges. O. Reg. 213/91, s. 196 (3).

(4) The worker in charge of blasting operations for a project,

(a) shall inspect for hazardous conditions explosives and the magazines in which they are stored,

(i) at least once a month, and

(ii) on the day they are to be used;

(b) shall promptly report the results of inspections under clause (a) to the supervisor in charge of the project;

(c) shall take immediate steps to correct any hazardous condition; and

(d) shall dispose of all deteriorated explosives. O. Reg. 213/91, s. 196 (4).

(5) If an act of careless placing or handling of explosives on the project is discovered by, or reported to the worker in charge of blasting operations, the worker shall promptly investigate the circumstances and report the results of the investigation to the supervisor in charge of the project. O. Reg. 213/91, s. 196 (5).

197. Only a competent worker or a worker who is working under the direct personal supervision of a competent worker shall handle, transport, prepare and use explosives on a project. O. Reg. 213/91, s. 197.

198. (1) A magazine containing an explosive shall be securely locked at all times when the competent worker described in section 197 is not present. O. Reg. 213/91, s. 198 (1).

(2) No explosive shall be outside a magazine unless the explosive is required for immediate use. O. Reg. 213/91, s. 198 (2).

(3) An explosive outside a magazine shall be attended at all times. O. Reg. 213/91, s. 198 (3).

199. An explosive shall remain in its original wrapper unless it is manufactured and intended for use other than in its original wrapper. O. Reg. 213/91, s. 199.

200. (1) No fire or other naked flame shall be located in a magazine or within eight metres of any explosive. O. Reg. 213/91, s. 200 (1).

(2) No person shall smoke in a magazine or within eight metres of any explosive. O. Reg. 213/91, s. 200 (2).

201. Blasting mats shall be used to prevent flying objects caused by blasting operations from endangering persons and property located on or adjacent to a project. O. Reg. 213/91, s. 201.

202. (1) This section applies if electric blasting caps are used on a project. O. Reg. 213/91, s. 202 (1).

(2) The protective shunt shall not be removed from the leg wire until connections are made. O. Reg. 213/91, s. 202 (2).

(3) The firing circuit shall be short-circuited while the leads from the blasting caps are being connected to each other and to the firing cables. O. Reg. 213/91, s. 202 (3).

(4) The short circuit shall not be removed until immediately before blasting and until all workers have left the area affected by the blasting operations. O. Reg. 213/91, s. 202 (4).

(5) The source of energy for a blasting operation shall be disconnected from the firing circuit immediately after firing. O. Reg. 213/91, s. 202 (5).

203. (1) Before blasting begins, the worker in charge of blasting operations shall post workers at the approaches to the affected area in order to prevent access to it. O. Reg. 213/91, s. 203 (1).

(2) Before blasting begins, the worker in charge of blasting operations shall ensure,

(a) that only workers required to carry out the blasting are located in the affected area;

(b) that no workers remain in an area whose means of egress passes the affected area; and

(c) that a warning that is clearly audible within a radius of one kilometre of the blast is given by siren. O. Reg. 213/91, s. 203 (2).

204. (1) Before a drill hole for loading explosives is drilled, the exposed surface shall be examined for drill holes or remnants of drill holes that may contain explosives and any explosive found shall be removed if practicable. O. Reg. 213/91, s. 204 (1).

(2) No drill hole shall be drilled,

(a) within 7.5 metres of another hole that is being loaded with or contains explosives; and

(b) within 150 millimetres of another hole or remnant of a hole that has been charged or blasted unless adequate precautions have been taken to ensure that the other hole is free from explosives. O. Reg. 213/91, s. 204 (2).

(3) Clause (2) (a) does not apply to a hole being drilled adjacent to another hole that is being loaded with explosives,

(a) if a professional engineer prepares a specification showing the location of the drill hole and the adjacent hole and describing the precautions to be taken to prevent the accidental detonation by the drilling operation of the explosives in the adjacent hole; and

(b) if the drilling is done as described in the specification referred to in clause (a). O. Reg. 213/91, s. 204 (3).

(4) No drill hole permitted under subsection (3) shall be drilled within one metre of another hole containing explosives. O. Reg. 213/91, s. 204 (4).

(5) The professional engineer's specification shall be in writing. O. Reg. 213/91, s. 204 (5); O. Reg. 85/04, s. 20.

(6) The employer responsible for blasting shall keep a copy of the specification at the project until the blasting to which the specification refers is completed. O. Reg. 213/91, s. 204 (6).

205. (1) If cartridges of explosives are to be used in a drill hole, the hole shall be made large enough that a cartridge can be inserted easily to the bottom of the hole. O. Reg. 213/91, s. 205 (1).

(2) No drill hole shall be charged with explosives unless a properly prepared detonation agent is placed in the charge. O. Reg. 213/91, s. 205 (2).

(3) Drill holes charged with explosives in one loading operation shall be fired in one operation. O. Reg. 213/91, s. 205 (3).

(4) No drill hole that is charged with explosives shall be left unfired for any longer than is required in a continuing operation to complete the charging and blasting of adjacent holes. O. Reg. 213/91, s. 205 (4).

206. Only a non-sparking tool or rod shall be used in the charging of a drill hole or in a drill hole containing explosives. O. Reg. 213/91, s. 206.

ROOFING

207. (1) If a built-up roof is being constructed, repaired or resurfaced, a barrier shall be placed in the immediate work area at least two metres from the perimeter of the roof. O. Reg. 213/91, s. 207 (1).

(2) The barrier shall consist of portable weighted posts supporting a taut chain, cable or rope that is located 1.1 metres above the roof level. O. Reg. 213/91, s. 207 (2).

208. (1) A pipe that supplies hot tar or bitumen to a roof shall be securely fixed and supported to prevent its deflection. O. Reg. 213/91, s. 208 (1).

(2) If a pipe discharges hot tar or bitumen within two metres of the edge of a roof, a guardrail shall be provided at the edge of the roof. O. Reg. 213/91, s. 208 (2).

209. (1) A hoist used on a roof,

(a) shall have a guardrail installed on both sides of the frame at the edge of the roof; and

(b) shall be positioned in such a way that the hoist cable is vertical at all times while a load is being hoisted. O. Reg. 213/91, s. 209 (1).

(2) Only a competent worker shall operate a hoist used on a roof. O. Reg. 213/91, s. 209 (2).

210. The counterweights on a roofer's hoist,

(a) shall be suitable for the purpose;

(b) shall not consist of roofing or other construction material;

(c) shall be securely attached to the hoist; and

(d) shall provide a safety factor against overturning of not less than three. O. Reg. 213/91, s. 210.

HOT TAR OR BITUMEN ROADTANKERS

211. (1) Only a competent worker shall operate a hot tar or bitumen roadtanker or kettle. O. Reg. 213/91, s. 211 (1).

(2) If a hot tar or bitumen roadtanker or kettle is fitted with a propane-fuelled heater,

(a) the storage cylinder for propane shall not be placed closer than three metres to a source of fire or ignition;

(b) the lines connecting the storage cylinder for propane to the heating device shall be located so that they do not come into contact with the hot tar or bitumen in the case of a spill or a failure of a component of the system; and

(c) a fire extinguisher with an Underwriters' Laboratories of Canada rating of at least 4A40BC shall be provided with the roadtanker or kettle. O. Reg. 213/91, s. 211 (2).

(3) A propane burner used on a bitumen roadtanker or kettle,

(a) shall have a thermal rating no greater than that recommended by the manufacturer of the roadtanker or kettle; and

(b) shall consist of components that are adequate for their intended use. O. Reg. 213/91, s. 211 (3).

(4) Hot tar or bitumen shall be transferred from a roadtanker to a kettle through enclosed piping. O. Reg. 213/91, s. 211 (4).

DEMOLITION AND DAMAGED STRUCTURES

212. (1) If a structure is so damaged that a worker is likely to be endangered by its partial or complete collapse,

(a) the structure shall be braced and shored; and

(b) safeguards appropriate in the circumstances shall be provided to prevent injury to a worker. O. Reg. 213/91, s. 212 (1).

(2) Safeguards shall be installed progressively from a safe area towards the hazard so that the workers installing the safeguards are not endangered. O. Reg. 213/91, s. 212 (2).

213. (1) Only a worker who is directly engaged in the demolition, dismantling or moving of a building or structure shall be in, on or near it. O. Reg. 213/91, s. 213 (1).

(2) If the demolition or dismantling of a building or structure is discontinued, barriers shall be erected to prevent access by people to the remaining part of the building or structure. O. Reg. 213/91, s. 213 (2).

(3) A worker shall enter only the part of a building or structure being demolished that will safely support the worker. O. Reg. 213/91, s. 213 (3).

214. (1) No building or structure shall be demolished, dismantled or moved until this section is complied with. O. Reg. 213/91, s. 214 (1).

(2) Precautions shall be taken to prevent injury to a person on or near the project or the adjoining property that may result from the demolition, dismantling or moving of a building or structure. O. Reg. 213/91, s. 214 (2).

(3) All gas, electrical and other services that may endanger persons who have access to a building or structure shall be shut off and disconnected before, and shall remain shut off and disconnected during, the demolition, dismantling or moving of the building or structure. O. Reg. 213/91, s. 214 (3).

(4) All toxic, flammable or explosive substances shall be removed from a building or structure that is to be demolished, dismantled or moved. O. Reg. 213/91, s. 214 (4).

215. (1) Sections 216, 217, 218 and 220 do not apply with respect to a building or structure that is being demolished by,

(a) a heavy weight suspended by cable from a crane or similar hoisting device;

(b) a power shovel, bulldozer or other vehicle;

(c) the use of explosives; or

(d) a combination of methods described in clauses (a) to (c). O. Reg. 213/91, s. 215 (1).

(2) The controls of a mechanical device used to demolish a building or structure shall be operated from a location that is as remote as is practicable from the building or structure. O. Reg. 213/91, s. 215 (2).

(3) If a swinging weight is used to demolish a building or structure, the supporting cable of the weight shall be short enough or shall be so restrained that the weight does not swing against another building or structure. O. Reg. 213/91, s. 215 (3).

216. (1) Demolition and dismantling of a building or structure shall proceed systematically and continuously from the highest to the lowest point unless a worker is endangered by this procedure. O. Reg. 213/91, s. 216 (1).

(2) Despite subsection (1), the skeleton structural frame in a skeleton structural frame building may be left in place during the demolition or dismantling of the masonry if the masonry and any loose material are removed from the frame systematically and continuously from the highest to the lowest point. O. Reg. 213/91, s. 216 (2).

(3) The work above a tier or floor of a building or structure shall be completed before the support of the tier or floor is affected by demolition or dismantling operations. O. Reg. 213/91, s. 216 (3).

217. No exterior wall of a building or structure shall be demolished until all glass is removed from windows, doors, interior partitions and components containing glass or is protected to prevent the glass from breaking during the demolition. O. Reg. 213/91, s. 217.

218. (1) Masonry walls of a building or structure being demolished or dismantled shall be removed in reasonably level courses. O. Reg. 213/91, s. 218 (1).

(2) No materials in a masonry wall of a building or structure being demolished or dismantled shall be loosened or permitted to fall in masses that are likely to endanger,

(a) a person; or

(b) the structural stability of a scaffold or of a floor or other support of the building or structure. O. Reg. 213/91, s. 218 (2).

219. No worker shall stand on top of a wall, pier or chimney to remove material from it unless flooring, scaffolding or staging is provided on all sides of it not more than 2.4 metres below the place where the worker is working. O. Reg. 213/91, s. 219.

220. No truss, girder or other structural member of a building or structure being demolished or dismantled shall be disconnected until,

(a) it is relieved of all loads other than its own weight; and

(b) it has temporary support. O. Reg. 213/91, s. 220.

221. (1) A basement, cellar or excavation left after a building or structure is demolished, dismantled or moved,

(a) shall be backfilled to grade level; or

(b) shall have fencing along its open sides. O. Reg. 213/91, s. 221 (1).

(2) Subsection (1) does not apply to a basement or cellar that is enclosed by a roof, floor or other solid covering if all openings in the roof, floor or covering are covered with securely fastened planks. O. Reg. 213/91, s. 221 (2).

PART II.1 (ss. 221.1-221.19) REVOKED: O. Reg. 96/11, s. 1.

PART III
EXCAVATIONS

INTERPRETATION AND APPLICATION

222. In this Part,

"engineered support system" means an excavation or trench shoring system, designed for a specific project or location, assembled in place and which cannot be moved as a unit;

"hydraulic support system" means a system capable of being moved as a unit, designed to resist the earth pressure from the walls of an excavation by applying a hydraulic counterpressure through the struts;

"prefabricated support system" means a trench box, trench shield or similar structure, composed of members connected to each other and capable of being moved as a unit, and designed to resist the pressure from the walls of an excavation but does not include a hydraulic support system;

"pressure", in relation to a wall of an excavation, means the lateral pressure of the earth on the wall calculated in accordance with generally accepted engineering principles and includes hydrostatic pressure and pressure due to surcharge. O. Reg. 213/91, s. 222.

223. This Part applies to all excavating and trenching operations. O. Reg. 213/91, s. 223.

ENTRY AND WORKING ALONE

224. No person shall enter or be permitted to enter an excavation that does not comply with this Part. O. Reg. 213/91, s. 224.

225. Work shall not be performed in a trench unless another worker is working above ground in close proximity to the trench or to the means of access to it. O. Reg. 213/91, s. 225.

SOIL TYPES

226. (1) For the purposes of this Part, soil shall be classified as Type 1, 2, 3 or 4 in accordance with the descriptions set out in this section. O. Reg. 213/91, s. 226 (1).

(2) Type 1 soil,

(a) is hard, very dense and only able to be penetrated with difficulty by a small sharp object;

(b) has a low natural moisture content and a high degree of internal strength;

(c) has no signs of water seepage; and

(d) can be excavated only by mechanical equipment. O. Reg. 213/91, s. 226 (2).

(3) Type 2 soil,

(a) is very stiff, dense and can be penetrated with moderate difficulty by a small sharp object;

(b) has a low to medium natural moisture content and a medium degree of internal strength; and

(c) has a damp appearance after it is excavated. O. Reg. 213/91, s. 226 (3).

(4) Type 3 soil,

(a) is stiff to firm and compact to loose in consistency or is previously-excavated soil;

(b) exhibits signs of surface cracking;

(c) exhibits signs of water seepage;

(d) if it is dry, may run easily into a well-defined conical pile; and

(e) has a low degree of internal strength. O. Reg. 213/91, s. 226 (4).

(5) Type 4 soil,

(a) is soft to very soft and very loose in consistency, very sensitive and upon disturbance is significantly reduced in natural strength;

(b) runs easily or flows, unless it is completely supported before excavating procedures;

(c) has almost no internal strength;

(d) is wet or muddy; and

(e) exerts substantial fluid pressure on its supporting system. O. Reg. 213/91, s. 226 (5).

227. (1) The type of soil in which an excavation is made shall be determined by visual and physical examination of the soil,

(a) at the walls of the excavation; and

(b) within a horizontal distance from each wall equal to the depth of the excavation measured away from the excavation. O. Reg. 213/91, s. 227 (1).

(2) The soil in which an excavation is made shall be classified as the type described in section 226 that the soil most closely resembles. O. Reg. 213/91, s. 227 (2).

(3) If an excavation contains more than one type of soil, the soil shall be classified as the type with the highest number as described in section 226 among the types present. O. Reg. 213/91, s. 227 (3).

PRECAUTIONS CONCERNING SERVICES

228. (1) Before an excavation is begun,

(a) the employer excavating shall ensure that all gas, electrical and other services in and near the area to be excavated are located and marked;

(b) the employer and worker locating and marking the services described in clause (a) shall ensure that they are accurately located and marked; and

(c) if a service may pose a hazard, the service shall be shut off and disconnected. O. Reg. 443/09, s. 6.

(2) If a service may pose a hazard and it cannot be shut off or disconnected, the owner of the service shall be requested to supervise the uncovering of the service during the excavation. O. Reg. 443/09, s. 6.

(3) Pipes, conduits and cables for gas, electrical and other services in an excavation shall be supported to prevent their failure or breakage. O. Reg. 443/09, s. 6.

PROTECTION OF ADJACENT STRUCTURES

229. (1) If an excavation may affect the stability of an adjacent building or structure, the constructor shall take precautions to prevent damage to the adjacent building or structure. O. Reg. 213/91, s. 229 (1).

(2) A professional engineer shall specify in writing the precautions required under subsection (1). O. Reg. 213/91, s. 229 (2).

(3) Such precautions as the professional engineer specifies shall be taken. O. Reg. 213/91, s. 229 (3).

GENERAL REQUIREMENTS

230. Every excavation that a worker may be required to enter shall be kept reasonably free of water. O. Reg. 213/91, s. 230.

231. An excavation in which a worker may work shall have a clear work space of at least 450 millimetres between the wall of the excavation and any formwork or masonry or similar wall. O. Reg. 213/91, s. 231.

232. (1) The walls of an excavation shall be stripped of loose rock or other material that may slide, roll or fall upon a worker. O. Reg. 213/91, s. 232 (1).

(2) The walls of an excavation cut in rock shall be supported by rock anchors or wire mesh if support is necessary to prevent the spalling of loose rock. O. Reg. 213/91, s. 232 (2).

233. (1) A level area extending at least one metre from the upper edge of each wall of an excavation shall be kept clear of equipment, excavated soil, rock and construction material. O. Reg. 213/91, s. 233 (1).

(2) The stability of a wall of an excavation shall be maintained where it may be affected by stockpiling excavated soil or rock or construction materials. O. Reg. 213/91, s. 233 (2).

(3) No person shall operate a vehicle or other machine and no vehicle or other machine shall be located in such a way as to affect the stability of a wall of an excavation. O. Reg. 213/91, s. 233 (3).

(4) If a person could fall into an excavation that is more than 2.4 metres deep, a barrier at least 1.1 metres high shall be provided at the top of every wall of the excavation that is not sloped as described in clauses 234 (2) (e), (f) and (g). O. Reg. 213/91, s. 233 (4).

SUPPORT SYSTEMS

234. (1) The walls of an excavation shall be supported by a support system that complies with sections 235, 236, 237, 238, 239 and 241. O. Reg. 213/91, s. 234 (1).

(2) Subsection (1) does not apply with respect to an excavation,

(a) that is less than 1.2 metres deep;

(b) that no worker is required to enter;

(c) that is not a trench and with respect to which no worker is required to be closer to a wall than the height of the wall;

(d) that is cut in sound and stable rock;

(e) made in Type 1 or Type 2 soil and whose walls are sloped to within 1.2 metres of its bottom with a slope having a minimum gradient of one horizontal to one vertical;

(f) made in Type 3 soil and whose walls are sloped from its bottom with a slope having a minimum gradient of one horizontal to one vertical;

(g) made in Type 4 soil and whose walls are sloped from its bottom with a slope having a minimum gradient of three horizontal to one vertical; or

(h) that is not a trench and is not made in Type 4 soil and with respect to which a professional engineer has given a written opinion that the walls of the excavation are sufficiently stable that no worker will be endangered if no support system is used. O. Reg. 213/91, s. 234 (2).

(3) The opinion in clause (2) (h) shall include details of,

(a) the specific project and the location thereon;

(b) any specific condition for which the opinion applies; and

(c) the frequency of inspections. O. Reg. 213/91, s. 234 (3).

(4) The constructor shall keep on the project a copy of every opinion given by a professional engineer for the purpose of clause (2) (h) while the project is in progress. O. Reg. 213/91, s. 234 (4).

(5) The professional engineer who gives an opinion described in clause (2) (h), or a competent worker designated by him or her, shall inspect the excavation to which the opinion relates as frequently as the opinion specifies. O. Reg. 213/91, s. 234 (5).

235. (1) Subject to subsection (2), a support system shall consist of,

(a) timbering and shoring that meets the requirements of subsection 238 (2), if no hydrostatic pressure is present in the soil, and if the width and depth of the excavation are equal to or less than the width and depth indicated in the Table to section 238;

(b) a prefabricated support system that complies with sections 236 and 237;

(c) a hydraulic support system that complies with sections 236 and 237; or

(d) an engineered support system that complies with section 236. O. Reg. 213/91, s. 235 (1).

(2) Where the excavation is a trench and the depth exceeds six metres or the width exceeds 3.6 metres, the support system shall consist of an engineered support system designed for the specific location and project. O. Reg. 213/91, s. 235 (2); O. Reg. 631/94, s. 7.

236. (1) Every prefabricated, hydraulic or engineered support system shall be designed by a professional engineer. O. Reg. 213/91, s. 236 (1).

(2) Every prefabricated, hydraulic or engineered support system shall be constructed, installed, used and maintained in accordance with its design drawings and specifications. O. Reg. 213/91, s. 236 (2).

(3) The design drawings and specifications for a prefabricated, hydraulic or an engineered support system,

(a) shall indicate the size of the system and the type and grade of materials of which it is to be made;

(b) shall indicate the maximum depth and the types of soil for which it is designed;

(c) shall indicate the proper positioning of the system in the excavation, including the maximum allowable clearance between the walls of the support system and the walls of the excavation; and

(d) shall indicate how to install and remove the system.

(e) REVOKED: O. Reg. 85/04, s. 21.

O. Reg. 213/91, s. 236 (3); O. Reg. 85/04, s. 21.

(4) In addition to the requirements of subsection (3), the design drawings and specifications for a hydraulic support system,

(a) shall indicate the minimum working pressure required for the system; and

(b) shall require the use of a device to ensure the protection of workers if a loss of hydraulic pressure occurs in the system. O. Reg. 213/91, s. 236 (4).

(5) Before a variation from the design drawings and specifications for a prefabricated, hydraulic or an engineered support system is permitted, the variation shall be approved in writing by a professional engineer. O. Reg. 213/91, s. 236 (5).

(6) If the soil conditions on a project differ from those assumed by the professional engineer in designing a prefabricated, hydraulic or an engineered support system, a professional engineer shall modify the design drawings and specifications for the actual soil conditions or shall approve the support system for use in the actual soil conditions. O. Reg. 213/91, s. 236 (6).

(7) The constructor shall keep the design drawings and specifications for a prefabricated, hydraulic or an engineered support system at a project while the system is on the project. O. Reg. 213/91, s. 236 (7).

(8) REVOKED: O. Reg. 443/09, s. 7.

237. (1) Subject to subsection (2),

(a) no prefabricated or hydraulic support system shall be used in type 4 soil;

(b) the space between the walls of a prefabricated support system and the walls of the excavation shall be restricted to the minimum clearance required for the forward progression of the support system; and

(c) the walls of a hydraulic support system shall touch the walls of the excavation. O. Reg. 631/94, s. 8.

(2) A prefabricated or hydraulic support system may be used for repairing underground pipe breaks if the system,

(a) meets the requirements of section 236;

(b) has four side walls;

(c) is designed for a maximum depth of 3.6 metres;

(d) is not used at a greater depth than 3.6 metres;

(e) is designed to resist all hydrostatic and earth pressures found in type 3 and type 4 soils;

(f) is installed so as to extend to the bottom of the excavation;

(g) is installed so that the walls of the system touch the walls of the excavation; and

(h) is not pulled forward after being installed in the excavation. O. Reg. 631/94, s. 8.

(3) Before a support system is used as described in subsection (2), the constructor shall submit two copies of its design drawings and specifications to the office of the Ministry of Labour nearest to the project. O. Reg. 631/94, s. 8.

238. (1) In this section,

"cleat" means a member of shoring that directly resists the downward movement of a wale or strut;

"o/c" means the maximum distance measured from the centre of one member of sheathing, wale or strut to the centre of the adjacent member of sheathing, wale or strut;

"post" means a vertical member of shoring that acts as a spacer between the wales;

"10 millimetres gap" means that the space between two adjacent members of sheathing is a maximum of ten millimetres. O. Reg. 213/91, s. 238 (1).

(2) Timbering and shoring referred to in clause 235 (1) (a) for the walls of an excavation with a depth and located in a soil type described in Column 1 of the Table to this section shall meet the corresponding specifications set out in Columns 2 to 4 of the Table. O. Reg. 213/91, s. 238 (2).

(3) Every piece of sheathing referred to in the Table to this section shall be made of sound Number 1 Grade spruce and,

(a) shall be placed against the side of the excavation so that it is vertical;

(b) shall be secured in place by wales; and

(c) shall be driven into the soil and firmly secured in place if the excavation is made in Type 3 or 4 soil. O. Reg. 213/91, s. 238 (3).

(4) Every strut referred to in the Table to this section shall be made of sound number 1 structural grade spruce and,

(a) shall be placed in the excavation so that it is horizontal and at right angles to the wales;

(b) shall be cut to the proper length and held in place by at least two wedges driven between the strut and the wales; and

(c) shall be cleated with cleats that extend over the top of the strut and rest on the wales or that are attached securely to the wales by spikes or bolts. O. Reg. 213/91, s. 238 (4).

(5) Every wale referred to in the Table to this section shall be made of sound number 1 structural grade spruce and,

(a) shall be placed in the excavation so that it is parallel to the bottom, or proposed bottom, of the excavation; and

(b) shall be supported by either cleats secured to the sheathing or posts set on the wale next below it or, if it is the lowest wale, on the bottom of the excavation. O. Reg. 213/91, s. 238 (5).

TABLE
EXCAVATION SHORING AND TIMBERING (METRIC SIZES)

Column 1		Column 2	Column 3				Column 4
Excavation Depth	Soil Type	Sheathing	Struts				
			Width of Excavation at Strut Location		Strut Spacing		Wales
			1.8 m to 3.6 m	Up to 1.8 m	Vertical	Horizontal	
3.0 m or less	1	50 mm × 200 mm at 1.2 m o/c	200 mm × 200 mm	150 mm × 150 mm	1.2 m	* 2.4 m	*200 mm × 200 mm

	2	50 mm × 200 mm at 1.2 m o/c	200 mm × 200 mm	150 mm × 150 mm	1.2 m	* 2.4 m	*200 mm × 200 mm
	3	50 mm × 200 mm at 10 mm gap	200 mm × 200 mm	200 mm × 200 mm	1.2 m	2.4 m	250 mm × 250 mm
	4	75 mm × 200 mm at 10 mm gap	250 mm × 250 mm	200 mm × 200 mm	1.2 m	2.4 m	300 mm × 300 mm
Over 3.0 m to 4.5 m	1	50 mm × 200 mm with 10 mm gap	200 mm × 200 mm	150 mm × 150 mm	1.2 m	2.4 m	200 mm × 200 mm
	2	50 mm × 200 mm with 10 mm gap	200 mm × 200 mm	200 mm × 200 mm	1.2 m	2.4 m	250 mm × 250 mm
	3	50 mm × 200 mm with 10 mm gap	250 mm × 250 mm	250 mm × 250 mm	1.2 m	2.4 m	250 mm × 250 mm
Over 3.0 m to 4.0 m	4	75 mm × 200 mm with 10 mm gap	300 mm × 300 mm	300 mm × 300 mm	1.2 m	2.4 m	300 mm × 300 mm
Over 4.5 m to 6.0 m	1	50 mm × 200 mm with 10 mm gap	200 mm × 200 mm	200 mm × 200 mm	1.2 m	2.4 m	200 mm × 200 mm
	2	50 mm × 200 mm with 10 mm gap	250 mm × 250 mm	250 mm × 250 mm	1.2 m	2.4 m	250 mm × 250 mm
	3	50 mm × 200 mm with 10 mm gap	300 mm × 300 mm	300 mm × 300 mm	1.2 m	2.4 m	300 mm × 300 mm

* Note: For excavations to 3 m deep in soil types 1 and 2, the wales can be omitted if the struts are used at 1.2 m horizontal spacings.

O. Reg. 213/91, s. 238, Table; O. Reg. 631/94, s. 9.

239. (1) A support system for the walls of an excavation shall be installed,

(a) progressively in an excavation in Type 1, 2 or 3 soil; and

(b) in advance of an excavation in Type 4 soil, if practicable. O. Reg. 213/91, s. 239 (1).

(2) A support system for the walls of an excavation shall provide continuous support for it. O. Reg. 213/91, s. 239 (2).

(3) No support system for the walls of an excavation shall be removed until immediately before the excavation is backfilled. O. Reg. 213/91, s. 239 (3).

(4) A competent person shall supervise the removal of a support system for the walls of an excavation. O. Reg. 213/91, s. 239 (4).

240. If a support system is used for the walls of an excavation, a ladder for access to or egress from the excavation shall be placed within the area protected by the support system. O. Reg. 213/91, s. 240.

241. (1) A support system for the walls of an excavation shall extend at least 0.3 metres above the top of the excavation unless otherwise permitted or required by this section. O. Reg. 213/91, s. 241 (1).

(2) If an excavation is located where there is vehicular or pedestrian traffic and if the excavation will be covered when work on or in it is not in progress, the support system for the walls of the excavation shall extend at least to the top of the excavation. O. Reg. 213/91, s. 241 (2).

(3) If the upper portion of the walls of an excavation are sloped for the soil types as described in clauses 234 (2) (e), (f) and (g) and the lower portion of the walls are vertical or near vertical, the walls shall be supported by a support system which extends at least 0.5 metres above the vertical walls. O. Reg. 213/91, s. 241 (3).

242. (1) A metal trench-jack or trench-brace may be used in place of a timber strut,

(a) if the allowable working load of the trench-jack or trench-brace is equal to or greater than that of the timber strut; and

(b) if the size of the replaced timber strut is shown on the trench-jack or trench-brace. O. Reg. 213/91, s. 242 (1).

(2) The allowable working load of a metal trench-jack or trench-brace shall be determined by a professional engineer in accordance with good engineering practice and shall be legibly cast or stamped on the trench-jack or trench-brace. O. Reg. 213/91, s. 242 (2).

(3) No metal trench-jack or trench-brace shall be extended beyond the length used to establish its maximum allowable working load. O. Reg. 213/91, s. 242 (3).

(4) Every metal trench-jack or trench-brace, when it is used,

(a) shall be placed against the wales in such a way that the load from the wales is applied axially to the trench-jack or trench-brace; and

(b) shall be adequately supported so that it does not move out of position. O. Reg. 213/91, s. 242 (4).

PART IV
TUNNELS, SHAFTS, CAISSONS AND COFFERDAMS

APPLICATION

243. This Part applies with respect to,

(a) tunnels and shafts other than those located at or used in connection with a mine; and

(b) caissons and cofferdams. O. Reg. 213/91, s. 243.

LAND REQUIREMENTS

244. A tunnel or shaft shall be commenced or started only where sufficient land space is available to permit compliance with Parts IV and V. O. Reg. 213/91, s. 244.

NOTICE

245. (1) An employer who will be constructing a tunnel, shaft, caisson or cofferdam shall file a notice with a Director before beginning work on a tunnel, shaft, caisson or cofferdam. O. Reg. 213/91, s. 245 (1); O. Reg. 145/00, s. 33 (1).

(2) The notice shall,

(a) describe the work;

(b) provide specifications and drawings showing profiles, transverse sections and plans for the tunnel, shaft, caisson or cofferdam signed and sealed by the professional engineer who designed the support system for the tunnel, shaft, caisson or cofferdam;

(c) provide complete details of all temporary and permanent ground support;

(d) state the name, mailing address, address for service and telephone number of the constructor, of the owner and of the employer in charge of the work;

(e) state the name of the supervisor in charge of the work and the supervisor's mailing address, address for service and telephone number;

(f) provide the municipal address of the work or include a description of its location relative to the nearest highway such that the Director is able to locate the work;

(g) state the starting date and the anticipated duration of the work;

(h) state the estimated total cost for labour and materials for the work; and

(i) list all designated substances that may be used, handled or disturbed by the work. O. Reg. 213/91, s. 245 (2); O. Reg. 145/00, s. 33 (2).

WORKING ALONE AND ENTRY

246. Work shall not be performed in a shaft, tunnel, caisson or cofferdam unless another worker is working above ground in close proximity to the shaft, tunnel, caisson or cofferdam or to the means of access to it. O. Reg. 213/91, s. 246.

247. (1) No worker shall enter a well or augured caisson where the excavation is deeper than 1.2 metres unless,

(a) a steel liner of adequate capacity is installed in the well or caisson;

(b) the requirements of Ontario Regulation 632/05 (Confined Spaces) made under the Act are complied with; and

(c) the worker is inside the steel liner and is wearing a fall arrest system with a full body harness secured to a fixed support. O. Reg. 213/91, s. 247 (1); O. Reg. 628/05, s. 4; O. Reg. 96/11, s. 2.

(2) A steel liner,

(a) shall extend sixty centimetres above ground level and to within 1.2 metres of the point in the well or caisson where work is being done;

(b) shall be supported on two sides by steel wire rope and steel beams; and

(c) shall have a diameter which is not less than 100 millimetres less than the diameter of the excavation. O. Reg. 213/91, s. 247 (2).

FIRE PROTECTION

248. Notices describing how to sound a fire alarm shall be posted in conspicuous places on a project to which this Part applies. O. Reg. 213/91, s. 248.

249. (1) A means of extinguishing fire shall be provided,

(a) at the top and bottom of every shaft;

(b) if a project consists of or includes a tunnel, at each panel board for electricity, on each electric-powered locomotive and at each battery charging station; and

(c) within thirty metres of each work face of a tunnel and of each location where a fire hazard exists. O. Reg. 213/91, s. 249 (1).

(2) The means of extinguishing fire shall be inspected at least once a week to ensure that it is in working order. O. Reg. 213/91, s. 249 (2).

250. (1) A fire suppression system for equipment that contains flammable hydraulic fluids shall be provided while the equipment is underground. O. Reg. 213/91, s. 250 (1).

(2) A fire suppression system shall include a dry chemical fire extinguisher with an Underwriters' Laboratories of Canada 4A40BC rating. O. Reg. 213/91, s. 250 (2).

251. (1) If the diameter of a tunnel will be equal to or greater than 1.5 metres when it is completed, a standpipe, a fire line and a hose shall be provided in the tunnel. O. Reg. 213/91, s. 251 (1).

(2) A siamese connection shall be provided on the fire line at the surface of the shaft. O. Reg. 213/91, s. 251 (2).

252. (1) Every standpipe in a tunnel,

(a) shall be made of metal pipe that has at least a fifty-one millimetres inside diameter; and

(b) shall have a connection for the use of the local fire department outside the shaft or tunnel to which there is clear and ready access at all times. O. Reg. 213/91, s. 252 (1).

(2) Every standpipe in a shaft shall be installed progressively as the shaft is excavated. O. Reg. 213/91, s. 252 (2).

253. (1) Every fire line in a tunnel,

(a) shall be made of metal pipe that has at least a fifty-one millimetres inside diameter; and

(b) shall have, at intervals of not more than forty-five metres along it, an outlet with a valve. O. Reg. 213/91, s. 253 (1).

(2) Every fire line in a tunnel shall be installed progressively as the tunnel is excavated. O. Reg. 213/91, s. 253 (2).

254. (1) Every hose in a tunnel,

(a) shall have at least a thirty millimetres inside diameter;

(b) shall have a combination straight stream and fog nozzle; and

(c) shall be at least twenty-three metres long. O. Reg. 213/91, s. 254 (1).

(2) A hose shall be provided in a tunnel at forty-six metre intervals horizontally along it. O. Reg. 213/91, s. 254 (2).

(3) Every hose shall be stored on a rack when it is not in use so as to be readily available. O. Reg. 213/91, s. 254 (3).

255. (1) No flammable liquid or gas shall be brought underground except as permitted by this section. O. Reg. 213/91, s. 255 (1).

(2) A compressed gas storage cylinder to which gas welding or flame-cutting equipment is attached may be brought underground. O. Reg. 213/91, s. 255 (2).

(3) Fuel may be brought underground if,

(a) it is in a tank that is supplied with and that forms a part of an engine or heating device; or

(b) it is in a container and is intended for transfer into a tank described in clause (a). O. Reg. 213/91, s. 255 (3).

(4) The maximum amount of fuel that may be brought underground in a container referred to in clause (3) (b) is the amount required for eight hours use of the engine or heating device. O. Reg. 213/91, s. 255 (4).

256. (1) A flammable liquid or gas shall be stored,

(a) as far as is practicable from a shaft; and

(b) in a place from which it is impossible for spilled liquid to flow underground. O. Reg. 213/91, s. 256 (1).

(2) Lubricating oil shall be stored in a suitable building or storage tank located in a place from which spilled liquid cannot run toward any shaft or tunnel. O. Reg. 213/91, s. 256 (2).

257. Oil for use in hydraulic-powered equipment underground shall be of the type that,

(a) is not readily flammable; and

(b) does not readily support combustion. O. Reg. 213/91, s. 257.

258. (1) No combustible equipment, including welding cable and air-hoses, shall be stored underground unless the equipment is required for immediate use. O. Reg. 213/91, s. 258 (1).

(2) No electrical cable or gas hose shall be taken or used underground unless,

(a) it has an armoured casing or jacket made of a material that is not readily flammable and that does not readily support combustion; and

(b) it is marked to indicate that it has the casing or jacket required by clause (a). O. Reg. 213/91, s. 258 (2).

259. (1) No combustible rubbish, used or decayed timber, scrap wood or paper shall be accumulated underground. O. Reg. 213/91, s. 259 (1).

(2) Material described in subsection (1) shall be promptly removed from underground. O. Reg. 213/91, s. 259 (2).

FACILITIES FOR WORKERS

260. (1) A heated room shall be provided for the use of underground workers. O. Reg. 213/91, s. 260 (1).

(2) The wet clothes of workers employed underground shall be dried using sanitary means in a change room on the project. O. Reg. 213/91, s. 260 (2).

(3) A change room,

(a) shall have an open floor area no smaller than the greater of,

(i) ten square metres, and

(ii) one square metre per worker on a shift;

(b) shall be equipped with mechanical ventilation that provides no less than six air changes per hour;

(c) shall have suitable drainage facilities;

(d) shall be kept at a temperature of at least 27 degrees celsius; and

(e) shall have, for every worker employed underground, a locker that locks. O. Reg. 213/91, s. 260 (3).

(4) Every change room shall be scrubbed once every twenty-four hours. O. Reg. 213/91, s. 260 (4).

(5) If workers are employed underground, a change room shall be provided with one shower and one washbasin for each group of ten or fewer workers. O. Reg. 213/91, s. 260 (5).

(6) Showers and washbasins provided in a change room shall be supplied with hot and cold water, soap or hand cleaner and paper towels or individual hand towels. O. Reg. 213/91, s. 260 (6).

FIRST AID

261. The supervisor in charge of a project shall appoint at least one competent worker to be available to give first aid at a shaft or tunnel. O. Reg. 213/91, s. 261.

262. (1) A first aid kit shall be kept in the immediate vicinity of the above-ground entrance to every shaft, tunnel, caisson or cofferdam. O. Reg. 213/91, s. 262 (1).

(2) At least one first aid kit shall be kept underground in every shaft and tunnel. O. Reg. 213/91, s. 262 (2).

263. (1) At least one stretcher for each group of twenty-five or fewer workers who are underground shall be kept at every tunnel, shaft or cofferdam. O. Reg. 213/91, s. 263 (1).

(2) Every stretcher shall be a wire-basket type and shall be designed and equipped to permit the safe hoisting and transport of a worker. O. Reg. 213/91, s. 263 (2).

RESCUE OF WORKERS

264. (1) Before a project begins, an employer shall establish in writing emergency procedures for the rescue of underground workers. O. Reg. 213/91, s. 264 (1).

(2) Copies of the rescue procedures signed by the employer and supervisor of the underground workers shall be posted in conspicuous places on the project. O. Reg. 213/91, s. 264 (2).

(3) The emergency procedures shall be practised in preparation for an emergency and shall be followed in an emergency. O. Reg. 213/91, s. 264 (3).

265. (1) At least four workers at a project or, if fewer than four workers work at the project, all workers shall be trained in and readily available to perform rescues of underground workers. O. Reg. 213/91, s. 265 (1).

(2) Rescue workers shall be provided with suitable equipment to perform rescues. O. Reg. 213/91, s. 265 (2).

(3) Rescue workers shall be trained by a competent person appointed by a Director. O. Reg. 213/91, s. 265 (3); O. Reg. 145/00, s. 34 (1).

(4) A Director who makes an appointment described in subsection (3) shall, in doing so, consider any recommendations of the representatives of labour and of management. O. Reg. 145/00, s. 34 (2).

(5) Rescue workers shall be trained within thirty days before tunnelling operations begin and retrained at least every thirty days after the initial training. O. Reg. 213/91, s. 265 (5).

(6) Before a project begins, the supervisor of the construction of a tunnel shall designate a rescue worker who shall inspect and test all rescue equipment every thirty days. O. Reg. 213/91, s. 265 (6).

266. (1) This section applies if, on a project, there is a tunnel and shaft whose combined length exceeds forty-five metres. O. Reg. 213/91, s. 266 (1).

(2) Every rescue worker shall be provided with a self-contained breathing apparatus that meets the requirements of subsection (5) and subsection (6), (7) or (8), as is appropriate to the length of the underground work place. O. Reg. 213/91, s. 266 (2).

(3) A competent person referred to in subsection 265 (3) shall train rescue workers in the proper operation of the self-contained breathing apparatus. O. Reg. 213/91, s. 266 (3).

(4) The training required by subsection (3) shall be repeated at least every thirty days. O. Reg. 213/91, s. 266 (4).

(5) The self-contained breathing apparatus shall have a full face mask. O. Reg. 213/91, s. 266 (5).

(6) For use in an underground work place that is less than 100 metres long, the minimum rated duration of use for a self-contained breathing apparatus shall be one-half hour. O. Reg. 213/91, s. 266 (6).

(7) For use in an underground work place that is 100 metres or more but less than 150 metres long, the minimum rated duration of use for a self-contained breathing apparatus shall be one hour. O. Reg. 213/91, s. 266 (7).

(8) For use in an underground work place that is 150 metres or more long, the minimum rated duration of use for a self-contained breathing apparatus shall be one and one-half hours. O. Reg. 213/91, s. 266 (8).

(9) All self-contained breathing apparatuses intended for rescue work on a project shall be the same model and made by the same manufacturer. O. Reg. 213/91, s. 266 (9).

(10) All self-contained breathing apparatuses shall be kept in close proximity to the means of access to an underground work place and shall be readily available. O. Reg. 213/91, s. 266 (10).

(11) A sufficient number, four as a minimum, of self-contained breathing apparatuses shall be available on the project to provide for all rescue work that may be required. O. Reg. 213/91, s. 266 (11).

(12) A competent person shall inspect every self-contained breathing apparatus at least once a month or as often as is required by the manufacturer to ensure it is in proper condition. O. Reg. 213/91, s. 266 (12).

267. Every worker who is in, or may be required to enter, a tunnel or a shaft leading to it shall be provided with a self-rescue respirator for the worker's exclusive use which is suitable for protection against hazardous gases. O. Reg. 631/94, s. 10.

268. (1) A worker's self-rescue respirator shall be kept in the vicinity of the worker while he or she is in a tunnel or shaft. O. Reg. 213/91, s. 268 (1).

(2) All workers on a tunnel project shall be instructed in the proper use, care, maintenance and limitations of the self-rescue respirator in accordance with the manufacturer's specifications. O. Reg. 213/91, s. 268 (2).

COMMUNICATIONS

269. (1) Subject to subsection (2), a telephone connected to a public telephone system shall be installed at a project that is to be over fourteen days duration. O. Reg. 213/91, s. 269 (1).

(2) If it is not practicable to install at a project a telephone connected to a public telephone system, a radio telephone shall be available that permits communication with an office of the constructor that has a telephone connected to a public telephone system. O. Reg. 213/91, s. 269 (2).

(3) At a project of fourteen or fewer days duration, before work is begun, a public telephone or a radio telephone shall be installed or shall be arranged for nearby if,

(a) the services of a police or fire department or ambulance are reasonably available; and

(b) prompt direct telephone communication is possible with the police or fire department or ambulance. O. Reg. 213/91, s. 269 (3).

270. (1) A telephone system shall be provided at a tunnel if the work at the face of the tunnel is or will be done twenty-three metres or more from,

(a) the top of the service shaft; or

(b) the opening into the tunnel, if the tunnel is not constructed from a service shaft. O. Reg. 213/91, s. 270 (1).

(2) A telephone system shall be installed before work on the tunnel is begun. O. Reg. 213/91, s. 270 (2).

(3) A telephone system shall consist of telephones that are located,

(a) in the office of the supervisor in charge of the project;

(b) at the top and bottom of the service shaft or at the opening into the tunnel, if the tunnel is not constructed from a service shaft;

(c) at all other means of access to the service shaft, if any; and

(d) at intervals not exceeding thirty metres in every area of the tunnel where work is being performed. O. Reg. 213/91, s. 270 (3).

(4) A notice shall be posted by each telephone,

(a) indicating how to call every other telephone in the system;

(b) describing the emergency signal to be used; and

(c) stating that a worker who hears the emergency signal shall answer the telephone. O. Reg. 213/91, s. 270 (4).

(5) A telephone system shall be installed in such a way that a conversation can be carried on between any two telephones in the system. O. Reg. 213/91, s. 270 (5).

(6) The voice communication circuits used in a telephone system shall be independent from the circuits used to signal from one telephone to another. O. Reg. 213/91, s. 270 (6).

271. During the construction of a shaft, an effective means of communicating between the lowest point of the shaft and the surface shall be provided. O. Reg. 213/91, s. 271.

272. A completed service shaft more than six metres deep shall have a means, other than a telephone, of exchanging distinct and definite signals between the top and bottom of the shaft. O. Reg. 213/91, s. 272.

273. (1) If a person is about to be conveyed by a hoist in a shaft, the pit bottom worker shall notify the hoist operator before the person enters the conveyance. O. Reg. 213/91, s. 273 (1).

(2) A hoist operator shall acknowledge every signal received by repeating the signal. O. Reg. 213/91, s. 273 (2).

(3) A signal to a hoist operator to move a conveyance shall be given only from the landing from which the conveyance is being moved. O. Reg. 213/91, s. 273 (3).

(4) The following signals shall be used to give signals between a hoist operator, the top or bottom of a shaft and all landings in the shaft:

CODE OF SIGNALS

Where the conveyance is in motion – 1 signal	STOP
Where the conveyance is stationary –	

1 signal	HOIST
2 signals together	LOWER
3 signals together (to be given before any person enters the conveyance)	Person will be on conveyance. OPERATE CAREFULLY.

O. Reg. 213/91, s. 273 (4).

(5) The supervisor in charge of a project may establish signals in addition to those set out in subsection (4) if required for the operation of a hoist on the project. O. Reg. 213/91, s. 273 (5).

(6) A notice setting out the signals used for a hoist shall be securely posted,

(a) where it is readily visible to the hoist operator; and

(b) at each landing of the hoistway. O. Reg. 213/91, s. 273 (6).

(7) The notice shall be on a board or a metal plate that is not less than 450 millimetres by 450 millimetres and shall be written in letters that are at least thirteen millimetres high. O. Reg. 213/91, s. 273 (7).

LIGHTING AND ELECTRICITY SUPPLY

274. All electrical circuits of 100 volts or more shall be in an insulated cable that consists of at least two conductors and a grounding conductor. O. Reg. 627/05, s. 8.

275. All electrical pumps and electrical tools shall be either adequately grounded or double-insulated. O. Reg. 213/91, s. 275.

276. (1) An area of a tunnel or shaft that is not adequately lit by natural light shall be electrically illuminated. O. Reg. 213/91, s. 276 (1).

(2) Flashlights shall be readily available at the top and bottom of every shaft and near the work face of a tunnel. O. Reg. 213/91, s. 276 (2).

(3) If electric lighting is used in a tunnel or shaft, an emergency lighting system shall be installed in the tunnel or shaft. O. Reg. 213/91, s. 276 (3).

(4) An emergency lighting system,

(a) shall be connected to the electrical supply so that in the event of the failure of the electrical supply, the system will automatically turn on;

(b) shall be provided with a testing switch, if the system is battery-powered; and

(c) shall be tested at least as frequently as is recommended by its manufacturer to ensure that the system will function in an emergency. O. Reg. 213/91, s. 276 (4).

277. REVOKED: O. Reg. 627/05, s. 9.

SHAFTS

278. (1) Every shaft shall be large enough that its walls can be adequately shored and shall have enough clear space for work to be done. O. Reg. 213/91, s. 278 (1).

(2) In a service shaft that is more than six metres deep or that serves a tunnel more than fifteen metres long,

(a) the minimum inside dimension of the shaft, measured between the wales or other wall supports, shall be 2.4 metres for a cylindrical shaft and 1.5 metres for a shaft that is not cylindrical; and

(b) the minimum transverse cross-sectional area of a shaft that is not cylindrical shall be 5.7 square metres. O. Reg. 213/91, s. 278 (2).

279. (1) The walls of a shaft shall be supported by shoring and bracing adequate to prevent their collapse. O. Reg. 213/91, s. 279 (1).

(2) Subsection (1) does not apply to the walls of a shaft that is less than 1.2 metres deep or is cut in sound rock. O. Reg. 213/91, s. 279 (2).

(3) If a shaft is to be cut in sound rock, the constructor shall obtain a written opinion from a professional engineer as to whether the walls of the shaft need to be supported by rock bolts or wire mesh to prevent the spalling of loose rock. O. Reg. 213/91, s. 279 (3).

(4) The walls of a shaft cut in sound rock shall be supported by rock bolts or wire mesh where necessary in the opinion of the professional engineer. O. Reg. 213/91, s. 279 (4).

280. (1) Shoring and bracing for a shaft that is more than 1.2 metres deep shall be capable of withstanding all loads likely to be applied to them. O. Reg. 213/91, s. 280 (1).

(2) The shoring and bracing,

(a) shall be designed by a professional engineer in accordance with good engineering practice; and

(b) shall be constructed in accordance with the professional engineer's design. O. Reg. 213/91, s. 280 (2).

(3) Design drawings by a professional engineer for the shoring and bracing shall show the size and specifications of the shoring and bracing including the type and grade of all materials to be used in their construction. O. Reg. 213/91, s. 280 (3).

(4) REVOKED: O. Reg. 443/09, s. 8.

(5) The constructor shall keep a copy of design drawings for the shoring and bracing at the project while the shoring and bracing are in use. O. Reg. 213/91, s. 280 (5).

281. (1) If a square or rectangular shaft is not more than six metres deep and has walls that are not more than 3.6 metres wide, the walls,

(a) shall be fully sheathed with Number 1 Grade spruce planks that are at least fifty-one millimetres thick by 152 millimetres wide and are placed side by side; and

(b) shall be supported by wales and struts. O. Reg. 213/91, s. 281 (1); O. Reg. 631/94, s. 11.

(2) Wales and struts,

(a) shall be made of number 1 structural grade spruce planks that are,

(i) at least 152 millimetres by 152 millimetres, for a shaft that is not more than 2.7 metres deep,

(ii) at least 203 millimetres by 203 millimetres, for a shaft that is more than 2.7 metres but not more than 4.3 metres deep, and

(iii) at least 254 millimetres by 254 millimetres, for a shaft that is more than 4.3 metres but not more than six metres deep;

(b) shall be spaced not more than 1.2 metres apart vertically; and

(c) shall be adequately supported by vertical posts that extend to the bottom of the shaft. O. Reg. 213/91, s. 281 (2).

282. (1) An adequate barrier that is at least 1.1 metres high shall be provided around the top of an uncovered shaft. O. Reg. 213/91, s. 282 (1).

(2) A barrier around the top of an uncovered shaft that is more than 2.4 metres deep,

(a) shall consist of a top rail, an intermediate rail and a toe-board; and

(b) shall be made of thirty-eight by 140 millimetres lumber securely fastened to vertical supports that are spaced at intervals of not more than 2.4 metres. O. Reg. 213/91, s. 282 (2).

(3) A barrier shall be kept free of splinters and protruding nails. O. Reg. 213/91, s. 282 (3).

(4) A gate in a barrier around the top of an uncovered shaft shall be kept closed and latched. O. Reg. 213/91, s. 282 (4).

(5) The ground adjacent to a barrier around the top of a shaft shall be sloped away from the barrier. O. Reg. 213/91, s. 282 (5).

283. A shaft shall be kept clear of ice and loose objects that may endanger a worker. O. Reg. 213/91, s. 283.

284. A shaft shall be kept reasonably free of water when a worker is required to be in the shaft. O. Reg. 213/91, s. 284.

285. Every shaft shall have a means of access and egress by stairway, ladder or ladderway for its full depth during its construction and when it is completed. O. Reg. 213/91, s. 285.

286. (1) A stairway, ladder or ladderway for a shaft that is more than six metres deep,

(a) shall have landings or rest platforms spaced at intervals not greater than 4.5 metres;

(b) shall be off-set at each landing or rest platform; and

(c) shall be located in a sheathed compartment that is constructed in such a way that a worker who falls while on the stairway, ladder or ladderway will land on the landing or rest platform below. O. Reg. 213/91, s. 286 (1).

(2) Every landing and rest platform shall be wide enough to permit at least two workers to pass on it safely. O. Reg. 213/91, s. 286 (2).

(3) Every opening and ladderway shall be wide enough to permit the passage of a worker wearing rescue equipment and shall be at least 750 cm by 750 cm. O. Reg. 631/94, s. 12.

287. (1) Every conveyance located in a service shaft that is more than six metres deep shall be separated from a stairway, ladder or ladderway in the shaft by a lining described in subsection (3). O. Reg. 213/91, s. 287 (1).

(2) Subsection (1) does not apply with respect to a conveyance located in a service shaft if the hoisting area is so remote from the stairway, ladder or ladderway that it is not possible for a load, bucket or device being hoisted or lowered to come into contact with the stairway, ladder or ladderway. O. Reg. 213/91, s. 287 (2).

(3) A lining shall consist of solid planks at least fifty-one millimetres thick and spaced not more than ten millimetres apart. O. Reg. 213/91, s. 287 (3).

HOISTWAYS

288. (1) This section applies with respect to a hoistway that is more than six metres deep in which hoisting is carried out by mechanical power. O. Reg. 213/91, s. 288 (1).

(2) Every landing on a hoistway shall have a gate located within 200 millimetres of the hoistway that,

(a) extends the full width of the hoistway from within fifty millimetres of the floor level to a height of at least 1.8 metres;

(b) is constructed without any gaps that would permit the entry of a ball thirty-eight millimetres in diameter; and

(c) is equipped with a light readily visible to the hoist operator indicating when the gate is closed. O. Reg. 213/91, s. 288 (2).

(3) Subsection (2) does not apply to a landing at the bottom of a hoistway if the landing has one or more red lights that,

(a) are located where a person approaching the hoistway from a tunnel or from the lower end of a stair or ladder can see at least one of them; and

(b) are controlled by a switch readily accessible to a shaft attendant. O. Reg. 213/91, s. 288 (3).

(4) A gate required by subsection (2) shall be kept closed unless a conveyance is stopped at the landing. O. Reg. 213/91, s. 288 (4).

(5) The red lights referred to in subsection (3) shall be continuously flashed off and on during a hoisting operation. O. Reg. 213/91, s. 288 (5).

289. (1) All parts of a hoisting apparatus used in a hoistway or shaft shall be able to be conveniently inspected. O. Reg. 213/91, s. 289 (1).

(2) Every hoist drum shall have a flange at each end to keep the hoist rope on the drum. O. Reg. 213/91, s. 289 (2).

290. (1) A hoist operator shall operate and watch over a hoist and all machinery associated with the hoist to detect any hazardous conditions. O. Reg. 213/91, s. 290 (1).

(2) A hoist operator shall report immediately to the supervisor in charge of the project any defects in the hoisting machinery and safety appliances. O. Reg. 213/91, s. 290 (2).

(3) The hoist operator shall test all safety devices on a hoisting apparatus to ensure that they function and shall perform the tests,

(a) before a conveyance is first put into service on a project;

(b) at least once every three months after being put into service on the project; and

(c) daily, if the hoisting apparatus is used to hoist persons. O. Reg. 213/91, s. 290 (3).

(4) The hoist operator shall make a record of tests performed under subsection (3). O. Reg. 213/91, s. 290 (4).

(5) The hoist operator shall keep available for inspection at the project the record of tests performed under subsection (3). O. Reg. 213/91, s. 290 (5).

291. (1) No person other than a competent worker appointed by the supervisor in charge of a project shall operate a hoist in a hoistway or shaft. O. Reg. 213/91, s. 291 (1).

(2) No person, other than a worker required to do so as a part of the worker's job, shall enter or attend the machine room of a hoist. O. Reg. 213/91, s. 291 (2).

292. A hoist operator shall inspect the hoisting machinery and safety appliances connected to it at least once a day and shall make a record of the inspection in a log book. O. Reg. 213/91, s. 292.

293. (1) A hoist operator and all shaft attendants shall understand the signal code established for the hoist. O. Reg. 213/91, s. 293 (1).

(2) No hoist operator shall converse with another person while the hoist is in motion or signals are being given. O. Reg. 213/91, s. 293 (2).

(3) No hoist operator shall turn over the controls of a hoist to another person while a conveyance is in motion. O. Reg. 213/91, s. 293 (3).

(4) No hoist operator shall operate a hoist,

(a) unless it is equipped with,

(i) indicators showing the position of the conveyance on the hoist, and

(ii) brakes and distance markers on the hoisting ropes and cables;

(b) in a compartment of a shaft in which work is being done unless the hoist is being operated for the purpose of work in the compartment. O. Reg. 213/91, s. 293 (4).

(5) After a hoist has been stopped for repairs, a hoist operator shall run an empty conveyance up and down the shaft at least once and shall determine that the hoist is in good working order before carrying a load in it. O. Reg. 213/91, s. 293 (5).

294. (1) The supervisor in charge of a project,

(a) shall establish the maximum speed for a conveyance transporting persons in a hoistway; and

(b) shall determine the maximum number of persons and the maximum weight of material that may be carried safely on a conveyance in a hoistway. O. Reg. 213/91, s. 294 (1).

(2) A notice setting out the maximums referred to in subsection (1) shall be conspicuously posted near each hoistway entrance. O. Reg. 213/91, s. 294 (2).

(3) No person shall load a conveyance in a hoistway beyond the maximum limits established under clause (1) (b). O. Reg. 213/91, s. 294 (3).

(4) A hoist operator shall operate a hoist in accordance with the notice posted under subsection (2). O. Reg. 213/91, s. 294 (4).

295. (1) The supervisor in charge of a project shall appoint shaft attendants for a shaft where a hoist is being used. O. Reg. 213/91, s. 295 (1).

(2) No shaft attendant shall be less than nineteen years of age. O. Reg. 213/91, s. 295 (2).

(3) At least one shaft attendant shall be on duty at the top of a shaft if a hoist, crane or similar hoisting device is being used or if a worker is present in the shaft or in a tunnel connected to the shaft. O. Reg. 213/91, s. 295 (3).

(4) A shaft attendant,

(a) shall give the hoist operator the signals for starting and stopping the hoist;

(b) shall warn workers of hazards in or near the shaft; and

(c) as far as is practicable, shall remove known hazards. O. Reg. 213/91, s. 295 (4).

296. (1) The supervisor in charge of a project shall, before a hoist is used on the project, establish a communication system of signals to be used between a hoist operator, shaft attendants and any other attendants working at a hoist. O. Reg. 213/91, s. 296 (1).

(2) The supervisor in charge of a project shall ensure that all hoist operators, shaft attendants and other attendants working at a hoist know and understand the signals. O. Reg. 213/91, s. 296 (2).

297. (1) The supervisor in charge of a project shall appoint workers to control the movement of materials to and from a conveyance on a hoist at every landing and at the bottom of a shaft. O. Reg. 213/91, s. 297 (1).

(2) A worker appointed under subsection (1) shall control and direct the movement of materials to and from a conveyance. O. Reg. 213/91, s. 297 (2).

298. No worker shall be transported in a conveyance or a hoist while it is being used to carry materials or equipment other than hand tools or similar small objects. O. Reg. 213/91, s. 298.

299. The path of travel of an object being hoisted from or lowered into a shaft by a crane shall not pass over a manway unless the manway has adequate overhead protection. O. Reg. 213/91, s. 299.

300. (1) A service shaft that will be over thirty metres deep when completed shall have a hoist with a conveyance consisting of a cage or car suitable for transporting workers. O. Reg. 213/91, s. 300 (1).

(2) A hoist shall be installed in the service shaft as soon as is practicable. O. Reg. 213/91, s. 300 (2).

(3) A hoist,

(a) shall have a headframe that is grounded for protection against lightning and is designed by a professional engineer;

(b) shall have guides to control the movement of the conveyance;

(c) shall have a device that automatically stops the conveyance when it runs beyond the limit of its normal travel; and

(d) shall have a brake on the hoisting machine that automatically stops and holds the conveyance if the hoist fails or the power to the hoist is interrupted. O. Reg. 213/91, s. 300 (3).

(4) A shaft in sound rock may be excavated to a depth of not more than thirty metres before the headframe and guides are installed on the hoist. O. Reg. 213/91, s. 300 (4).

301. (1) Every conveyance on a hoist used for transporting workers in a shaft shall have a suitable device that, if the cable breaks or becomes slack,

(a) automatically prevents the conveyance from falling; and

(b) is capable of holding the conveyance stationary when it contains the maximum number of passengers it is permitted to carry. O. Reg. 213/91, s. 301 (1).

(2) Subsection (1) does not apply with respect to a bucket or a skip operated in accordance with sections 303 and 305. O. Reg. 213/91, s. 301 (2).

(3) A device shall be installed to warn the hoist operator when a conveyance transporting workers in a shaft has reached the normal limit of its travel. O. Reg. 213/91, s. 301 (3).

302. (1) A cage or car on a hoist used for transporting workers in a shaft,

(a) shall be at least 1.8 metres high;

(b) shall be solidly enclosed, except for openings for access and egress;

(c) shall have a maximum of two openings for access and egress;

(d) shall have a gate at each opening for access and egress; and

(e) shall have a protective cover suitable to protect passengers from falling objects. O. Reg. 213/91, s. 302 (1).

(2) A gate for access and egress,

(a) shall be constructed without any gaps that would permit the entry of a ball thirty-eight millimetres in diameter;

(b) shall extend the full width of the opening and from within fifty millimetres of the floor of the cage or car to a height of at least 1.8 metres; and

(c) shall not open outward. O. Reg. 213/91, s. 302 (2).

(3) A protective cover referred to in clause (1) (e) shall have a trap door for emergency access which measures not less than 600 millimetres by 600 millimetres. O. Reg. 213/91, s. 302 (3).

303. (1) Subject to subsection (2), a bucket or similar conveyance shall not be used to transport a worker in a shaft. O. Reg. 213/91, s. 303 (1).

(2) A bucket or similar conveyance may be used to transport a worker in a shaft for the purpose of inspecting the hoistway if no other method of access to the parts of the hoistway is available. O. Reg. 213/91, s. 303 (2).

(3) A bucket referred to in subsection (2),

(a) shall be at least 1.2 metres deep;

(b) shall have smoothly-contoured outer surfaces to prevent it from tipping or becoming snagged by an obstacle during hoisting or lowering; and

(c) shall not be self-opening. O. Reg. 213/91, s. 303 (3).

(4) If a pivoted bucket that is manually-dumped and is not self-guided is being used to transport a worker, the bucket,

(a) shall be equipped with a lock to prevent tipping; and

(b) shall be pivoted in such a way that it does not automatically invert when the lock is released. O. Reg. 213/91, s. 303 (4).

(5) A bucket that is not controlled by a cross head running in vertical guides shall not be hoisted or lowered at a speed greater than 0.5 metres per second when it is transporting a worker. O. Reg. 213/91, s. 303 (5).

304. (1) A hinged door that opens upward shall be provided over the opening at the top of a shaft. O. Reg. 213/91, s. 304 (1).

(2) The door shall be closed while a worker is entering or leaving a bucket over the opening at the top of the shaft. O. Reg. 213/91, s. 304 (2).

305. A skip shall not be used to transport a worker unless,

(a) the worker is inspecting guiderails or shaft supports; and

(b) the skip is protected by an overwind device to prevent the skip from being hoisted to the dump position. O. Reg. 213/91, s. 305.

TUNNELS

306. (1) A tunnel shall have enough clear space for the passage of vehicles and the movement of workers. O. Reg. 213/91, s. 306 (1).

(2) The diameter of a circular or elliptical tunnel and the width and height of a square or rectangular tunnel shall be at least 760 millimetres. O. Reg. 213/91, s. 306 (2).

(3) A clear space of at least 450 millimetres shall be left between the side of a tunnel and the nearer side of,

(a) all trackless haulage equipment being used; and

(b) all locomotives, haulage cars and machines operating on a track. O. Reg. 213/91, s. 306 (3).

(4) A circular or elliptical tunnel shall have safety platforms at sixty metre intervals along it. O. Reg. 213/91, s. 306 (4).

(5) A safety platform shall be long enough for a crew of workers to stand on, shall be constructed above the tunnel invert and shall be clear of passing equipment. O. Reg. 213/91, s. 306 (5).

307. (1) Except for a tunnel cut in sound rock, the sides and roof of a tunnel shall be supported by timbers set on ribs or beams or by an equivalent system of lining. O. Reg. 213/91, s. 307 (1).

(2) If a tunnel is to be cut in sound rock, the constructor shall obtain a written opinion from a professional engineer as to whether the sides and roof of the tunnel need to be supported by rock bolts or wire mesh to prevent the spalling of loose rock. O. Reg. 213/91, s. 307 (2).

(3) The sides and roof of a tunnel cut in sound rock,

(a) shall be supported, where necessary in the opinion of the professional engineer, by rock bolts or wire mesh;

(b) shall be inspected daily by a competent worker; and

(c) shall have all loose pieces of rock removed. O. Reg. 213/91, s. 307 (3).

(4) If the permanent lining of a tunnel will, when completed, consist of a primary lining and a secondary lining, the primary lining shall be strong enough to support the sides and roof of the tunnel until the secondary lining is installed. O. Reg. 213/91, s. 307 (4).

(5) If the permanent lining of a tunnel consists only of a concrete cast-in-place lining, the tunnel shall not be excavated beyond the leading edge of the permanent lining unless adequate temporary shoring is installed as soon as is practicable. O. Reg. 213/91, s. 307 (5).

(6) The primary supports of a tunnel,

(a) shall be designed by a professional engineer in accordance with good engineering practice to withstand all loads likely to be applied to them; and

(b) shall be constructed in accordance with the design. O. Reg. 213/91, s. 307 (6).

(7) The constructor shall keep available for inspection at a project the design drawings for the primary supports. O. Reg. 213/91, s. 307 (7); O. Reg. 85/04, s. 23.

308. A tunnel shall be kept reasonably free of water when a worker is required to be in the tunnel. O. Reg. 213/91, s. 308.

TUNNEL EQUIPMENT

309. When a haulage locomotive, trackless haulage equipment or a hoist in a shaft or tunnel is left unattended,

(a) its controls shall be left in the neutral position; and

(b) its brakes shall be set or other measures, such as blocking, shall be taken to prevent its moving. O. Reg. 213/91, s. 309.

310. (1) A haulage locomotive shall have suitable brakes, an audible bell and controls that can be operated only by a worker at the driver's station. O. Reg. 213/91, s. 310 (1).

(2) A haulage locomotive shall be designed so that power for its driving mechanism is cut off unless the control regulating the power is continuously operated by a worker at the driver's station. O. Reg. 213/91, s. 310 (2).

(3) The driver of a haulage locomotive shall sound the bell when the locomotive is set in motion or is approaching someone. O. Reg. 213/91, s. 310 (3).

(4) No person other than the driver shall ride on a haulage locomotive. O. Reg. 213/91, s. 310 (4).

311. No worker shall ride on a haulage train except in a car provided to carry passengers. O. Reg. 213/91, s. 311.

312. A haulage car shall have a device to prevent uncontrolled travel by the car. O. Reg. 213/91, s. 312.

313. (1) Track for haulage equipment shall be securely fastened to the ties on which it is laid. O. Reg. 213/91, s. 313 (1).

(2) If the ties interfere with the use of the bottom of the tunnel as a walkway, a solid walkway that is at least 300 millimetres wide shall be provided. O. Reg. 213/91, s. 313 (2).

314. (1) The air inlet to an air compressor shall be located in such a position that fumes or noxious contaminants are not drawn in with the air to be compressed. O. Reg. 213/91, s. 314 (1).

(2) A valve connected to a vessel used for storing compressed air,

(a) shall be connected at the lowest point of the vessel to permit the discharge of the compressed air; and

(b) shall be opened at least once each shift for the purpose of ejecting oil, water and other matter from the vessel. O. Reg. 213/91, s. 314 (2).

315. (1) A project shall have pumping equipment of sufficient capacity to handle the pumping requirements of the project. O. Reg. 213/91, s. 315 (1).

(2) Pumping equipment shall be connected to an adequate source of energy. O. Reg. 213/91, s. 315 (2).

(3) Sufficient spare pumping equipment and an alternative source of energy for it shall be readily available at the project in case of emergency. O. Reg. 213/91, s. 315 (3).

316. No internal combustion engine shall be used in a tunnel on a project without the prior written consent of a Director. O. Reg. 213/91, s. 316; O. Reg. 145/00, s. 36.

EXPLOSIVES

317. Before blasting begins in a shaft, tunnel, caisson or cofferdam that is located within the greater of 4.5 metres and twice the length of the longest drill rod used away from another shaft, tunnel, caisson or cofferdam, the worker in charge of the blasting operations shall determine whether work in the adjacent shaft, tunnel, caisson or cofferdam can safely continue during blasting operations. O. Reg. 213/91, s. 317.

318. (1) No vehicle or conveyance being used to transport explosives or blasting agents shall carry any other cargo or any person other than the vehicle operator. O. Reg. 213/91, s. 318 (1).

(2) No detonator shall be transported in a vehicle or conveyance while it is carrying explosives or other blasting agents. O. Reg. 213/91, s. 318 (2).

(3) Where mechanical track haulage is used in a tunnel, explosives or blasting agents shall not be transported on the locomotive or in the same car as the detonators. O. Reg. 213/91, s. 318 (3).

319. (1) A vehicle or conveyance, including trackless equipment, that is transporting explosives or blasting agents in a tunnel by mechanical haulage,

(a) shall be given an uninterrupted and a clear passage of travel;

(b) shall be conspicuously marked by signs or red flags that are easily visible from the front and the rear;

(c) shall not travel at a speed greater than six kilometres per hour; and

(d) shall not be left unattended. O. Reg. 213/91, s. 319 (1).

(2) Explosives and blasting agents referred to in subsection (1),

(a) shall be in a box made of wood or be separated from every metal part of the vehicle or conveyance in which they are being transported by a lining made of wood; and

(b) shall be arranged or secured so as to prevent any part of an explosive or blasting agent from being dislodged. O. Reg. 213/91, s. 319 (2).

320. If explosives or blasting agents are to be transported in a shaft, the worker in charge of blasting operations shall notify the hoist operator and shaft attendants before the explosives or blasting agents are put in the conveyance. O. Reg. 213/91, s. 320.

321. A flashlight shall be provided to every worker who is engaged in blasting operations in a tunnel or is in an area from which the means of egress passes a place where blasting is to be done. O. Reg. 213/91, s. 321.

322. Drilling or charging operations in a shaft or tunnel shall not be done simultaneously,

(a) above or below one another on the same face; or

(b) within a 7.5 metre horizontal distance from one another. O. Reg. 213/91, s. 322.

323. (1) Explosives and blasting agents shall be fired electrically. O. Reg. 213/91, s. 323 (1).

(2) Despite subsection (1), tape fuse may be used to fire explosives and blasting agents if block holing is to be done. O. Reg. 213/91, s. 323 (2).

324. (1) If a portable direct current battery or a blasting machine is the source of current for blasting, the firing cables or wires,

(a) shall not be connected to the source of current until immediately before the charges are fired; and

(b) shall be disconnected immediately after the charges are fired. O. Reg. 213/91, s. 324 (1).

(2) All firing cables or wires leading to a face shall be short-circuited while the leads from the blasting caps are being connected to one another and to the firing cables. O. Reg. 213/91, s. 324 (2).

(3) No short-circuit of a firing cable or wire shall be removed until all workers have retreated from the face and are so located that, should a premature explosion occur, the workers are not endangered. O. Reg. 213/91, s. 324 (3).

(4) A short-circuit shall be replaced immediately after the firing cables or wires are disconnected from the blasting machine or the blasting switch is opened. O. Reg. 213/91, s. 324 (4).

(5) Separate firing cables or wires for firing charges shall be used for each work location. O. Reg. 213/91, s. 324 (5).

(6) Firing cables or wires,

(a) shall be located as far as is practicable from every other electrical circuit; and

(b) shall not be permitted to come in contact with power, lighting or communication cables, or pipes, rails or other continuous metal grounded surfaces. O. Reg. 213/91, s. 324 (6).

325. (1) Every device, other than a portable hand-operated device, used for firing a charge shall meet the requirements of this section. O. Reg. 213/91, s. 325 (1).

(2) No person other than a competent worker shall use a device used for firing a charge. O. Reg. 213/91, s. 325 (2).

(3) A device used for firing a charge shall have a switch mechanism that automatically returns by gravity to the open position. O. Reg. 213/91, s. 325 (3).

(4) The live side of a device used for firing a charge shall be installed in a fixed locked box which is accessible only to the worker doing the blasting. O. Reg. 213/91, s. 325 (4).

(5) The lock on the box referred to in subsection (4) shall be able to be closed only when the contacts of the device are open and a short-circuiting device is in place. O. Reg. 213/91, s. 325 (5).

(6) The leads to the face shall be short-circuited when the contacts of the device are in the open position. O. Reg. 213/91, s. 325 (6).

326. (1) A circuit used for blasting shall originate from an isolated ungrounded power source and shall be used only for blasting. O. Reg. 213/91, s. 326 (1).

(2) Subsection (1) does not apply with respect to blasting done with a portable hand-operated device. O. Reg. 213/91, s. 326 (2).

327. (1) When a charge is fired and after a shot is heard, every worker in a place of refuge from a blast shall remain there and not return to the blast area for at least ten minutes. O. Reg. 213/91, s. 327 (1).

(2) If a charge is fired and no shot is heard, before the circuit is repaired,

(a) the blasting circuit shall be locked in the open position; and

(b) the lead wires shall be short-circuited. O. Reg. 213/91, s. 327 (2).

(3) A worker who suspects a misfire of an explosive or a blasting agent shall report it to the supervisor in charge of the project. O. Reg. 213/91, s. 327 (3).

(4) A charge of an explosive or a blasting agent that has misfired shall be left in place and blasted as soon as it is discovered. O. Reg. 213/91, s. 327 (4).

328. When a blasting operation is completed, the blasting switch shall be locked in the open position, the lead wires short-circuited and the blasting box locked. O. Reg. 213/91, s. 328.

VENTILATION

329. An adequate supply of fresh air shall be provided and circulated throughout an underground work place. O. Reg. 213/91, s. 329.

330. (1) An underground work place shall be tested regularly for noxious or toxic gases, fumes or dust. O. Reg. 213/91, s. 330 (1).

(2) A competent worker shall regularly test the air and the mechanical ventilation for an underground work place to ensure that the mechanical ventilation is adequate. O. Reg. 213/91, s. 330 (2).

(3) When the results of the tests referred to in subsection (2) indicate there is a need for respiratory protective equipment, the employer shall provide respiratory protective equipment. O. Reg. 213/91, s. 330 (3).

331. (1) Mechanical ventilation shall be provided in a shaft in which an internal combustion engine or other device which emits a noxious gas or fume operates. O. Reg. 213/91, s. 331 (1).

(2) Subsection (1) does not apply if the noxious gas or fume is discharged outside the shaft in such a way that its return to the shaft is prevented. O. Reg. 213/91, s. 331 (2).

PART V
WORK IN COMPRESSED AIR

INTERPRETATION AND APPLICATION

332. In this Part,

"air lock" means a chamber designed for the passage of persons or materials from one place to another place that has a different air pressure from the first;

"compressed air" means air whose pressure is mechanically raised to more than atmospheric pressure;

"decompression sickness", in relation to a worker, means a condition of bodily malfunction caused by a change from a higher to a lower air pressure and includes the condition commonly known as "the bends";

"kilopascals", except in section 376, means kilopascals relative to atmospheric pressure;

"maximum air pressure", in relation to a worker, means the greatest level of air pressure to which a worker is subjected for a period of more than five minutes;

"medical lock" means a chamber in which workers may be subjected to changes in air pressure for medical purposes;

"superintendent" means the person appointed by a constructor to be supervisor over and in charge of work done in compressed air;

"work chamber" means a part of a project that is used for work in compressed air but does not include an air lock or a medical lock. O. Reg. 213/91, s. 332.

333. This Part applies with respect to work done in compressed air, other than work done in diving bells or work done by divers. O. Reg. 213/91, s. 333.

GENERAL REQUIREMENTS

334. (1) No constructor or employer shall begin work at a project where a worker may be subjected to compressed air until the requirements of this section are met. O. Reg. 213/91, s. 334 (1).

(2) The employer of workers who may be subjected to compressed air at a project shall give a Director written notice of the intended use of compressed air on the project at least fourteen days before beginning work on the project. O. Reg. 213/91, s. 334 (2); O. Reg. 145/00, s. 37 (1).

(3) Before work is begun in compressed air, the employer shall obtain written permission from a Director. O. Reg. 213/91, s. 334 (3); O. Reg. 145/00, s. 37 (2).

335. (1) Before work is begun in compressed air at a project, a constructor shall give written notice,

(a) to the local police department and the fire department and public hospital nearest to the project; and

(b) to a Director, together with the names and addresses of those to whom notice is given under clause (a). O. Reg. 213/91, s. 335 (1); O. Reg. 145/00, s. 38.

(2) A notice shall set out,

(a) the location of the project;

(b) the name, address and telephone number of the project physician and the superintendent; and

(c) the location of a medical lock for the project and of every other readily-available medical lock. O. Reg. 213/91, s. 335 (2).

(3) The employer shall give notice of the completion of work in compressed air at the project to those who were given notice under clause (1) (a). O. Reg. 213/91, s. 335 (3).

336. (1) The employer shall appoint a competent person as superintendent of all work in compressed air at a project. O. Reg. 213/91, s. 336 (1).

(2) The superintendent, before a worker is first subjected to compressed air,

(a) shall ensure that the worker is fully instructed,

(i) in the hazards of working in compressed air, and

(ii) in the measures to be taken to safeguard the health and safety of the worker and other workers on the project; and

(b) shall obtain an acknowledgement signed by the worker who is receiving the instruction stating that the worker has been so instructed. O. Reg. 213/91, s. 336 (2).

337. (1) A superintendent at a project shall designate for each shift at least one competent worker as lock tender who shall attend to the controls of an air lock. O. Reg. 213/91, s. 337 (1).

(2) A lock tender must be able to speak, read and write English competently. O. Reg. 213/91, s. 337 (2).

(3) A superintendent at a project shall ensure that at least one competent worker in addition to the lock tender is available in an emergency to perform the duties of the lock tender while a worker is working in compressed air. O. Reg. 213/91, s. 337 (3).

338. (1) The superintendent shall keep available at a project for inspection by an inspector,

(a) all Form 1 reports by a project physician;

(b) all records required under section 373 of air pressure in air locks on the project; and

(c) all records required under section 394 to be kept by a lock tender. O. Reg. 213/91, s. 338 (1).

(2) The superintendent shall send all Form 1 reports to a Director promptly when work in compressed air at the project is finished. O. Reg. 213/91, s. 338 (2); O. Reg. 145/00, s. 39.

339. (1) A worker who works in compressed air shall wear for at least twenty-four hours after working in compressed air a sturdy metal or plastic badge that meets the requirements of subsection (2). O. Reg. 213/91, s. 339 (1).

(2) A badge shall measure at least fifty millimetres in diameter and shall set out,

(a) the name of the constructor of the project;

(b) the name and telephone number of the project physician;

(c) the location of a medical lock at the project; and

(d) the words, “compressed air worker – in case of decompression sickness take immediately to a medical lock”. O. Reg. 213/91, s. 339 (2).

(3) The constructor at a project shall provide workers with the badge required under subsection (1). O. Reg. 213/91, s. 339 (3).

COMMUNICATIONS

340. (1) A telephone system for work in compressed air shall be provided at a project. O. Reg. 213/91, s. 340 (1).

(2) A telephone system shall consist of telephones located,

(a) at a location as close as is practicable to the work face;

(b) in every work chamber near a door that leads to an air lock;

(c) in every air lock;

(d) near every lock tender’s work position;

(e) adjacent to every compressor plant; and

(f) in the superintendent’s office. O. Reg. 213/91, s. 340 (2).

341. (1) An electric buzzer or bell system for work in compressed air shall be provided at a project. O. Reg. 213/91, s. 341 (1).

(2) An electric buzzer or bell system shall consist of a switch and a buzzer or bell located,

(a) in every work chamber near a door that leads to an air lock;

(b) in every air lock; and

(c) near every lock tender's work position. O. Reg. 213/91, s. 341 (2).

(3) The following code shall be used to give signals between a work chamber, an air lock and the lock tender's work position:

1 signal	When no people are in the air lock, MATERIAL IS COMING OUT. When people are in the air lock, STOP COMPRESSING.
3 signals	PEOPLE ARE COMING OUT OF THE AIR LOCK.

O. Reg. 213/91, s. 341 (3).

(4) A copy of the signal code shall be posted near every switch of an electric buzzer or bell system. O. Reg. 213/91, s. 341 (4).

(5) A lock tender shall acknowledge every signal received on an electric buzzer or bell system by returning the same signal. O. Reg. 213/91, s. 341 (5).

FIRE PREVENTION

342. (1) No person shall use acetylene while working in compressed air. O. Reg. 213/91, s. 342 (1).

(2) No person shall smoke or be permitted to smoke in an air lock or work chamber, other than in an area designated as a smoking area by the superintendent. O. Reg. 213/91, s. 342 (2).

343. Before a flame-cutting, gas-welding or similar source of ignition is introduced into a work chamber that is in the vicinity of a combustible material,

(a) a firewatch shall be established and maintained;

(b) a fire hose shall be prepared for use;

(c) the fire hose shall be tested to ensure there is an adequate supply of water and water pressure to extinguish a fire; and

(d) a fire extinguisher suitable for the hazard shall be provided nearby. O. Reg. 213/91, s. 343.

344. As far as practicable, no combustible material shall be installed in or stored in an air lock or work chamber. O. Reg. 213/91, s. 344.

345. (1) A standpipe connected to a source of water or connected to other pipes above ground shall be installed in every air lock and work chamber at a project. O. Reg. 213/91, s. 345 (1).

(2) A standpipe shall have,

(a) valves that isolate the standpipe from the rest of the fire prevention system;

(b) a fitting that is controlled by a valve installed on the standpipe on the work chamber side of the bulkhead and by a valve inside the material lock;

(c) a fitting and valve similar to that described in clause (b) installed at the end of the standpipe nearest to the work face; and

(d) the location of the fittings and valves clearly marked. O. Reg. 213/91, s. 345 (2).

(3) A fitting described in clause (2) (b) shall be such that a fire hose of the local fire department can be connected to it. O. Reg. 213/91, s. 345 (3).

LIGHTING AND ELECTRICAL SUPPLY

346. Electrical wiring passing through an air lock or the bulkheads adjacent to an air lock, other than telephone and signal system wiring, shall be installed in a rigid metal conduit. O. Reg. 213/91, s. 346.

347. (1) A lighting system shall be provided in each work chamber. O. Reg. 213/91, s. 347 (1).

(2) Electric light bulbs used in an air lock shall be enclosed in a glass and metal protective screen cover. O. Reg. 213/91, s. 347 (2).

(3) Flashlights shall be readily available at the entrance to an air lock, on the atmospheric side in an air lock and at every telephone required by section 340. O. Reg. 213/91, s. 347 (3).

348. An auxiliary source of supply of electricity that is not a portable emergency source of supply shall be provided for the lighting system. O. Reg. 213/91, s. 348.

349. (1) An emergency electrical lighting system shall be provided and maintained in each air lock or work chamber. O. Reg. 213/91, s. 349 (1).

(2) An emergency electrical lighting system,

(a) shall be connected to the electrical supply so that it automatically turns on in the event of the failure of the electrical supply; and

(b) shall have a testing switch, if the system is battery-powered. O. Reg. 213/91, s. 349 (2).

(3) An emergency electrical lighting system shall be tested at intervals that are at least as frequent as recommended by the manufacturer and that are adequate to ensure that it will function in an emergency. O. Reg. 213/91, s. 349 (3).

SANITATION

350. A work chamber shall be provided with a reasonable supply of drinking water and at least one chemical toilet. O. Reg. 213/91, s. 350.

MEDICAL REQUIREMENTS

351. (1) An employer who is constructing a tunnel or caisson in which a worker works or will work in compressed air shall employ as project physician at least one legally qualified medical practitioner. O. Reg. 213/91, s. 351 (1).

(2) The project physician shall conduct such medical examinations of workers as in his or her opinion are necessary and shall establish a medical treatment program for the workers. O. Reg. 213/91, s. 351 (2).

(3) A project physician shall be reasonably available to render medical treatment or advice on the treatment of decompression sickness while a worker is working in compressed air. O. Reg. 213/91, s. 351 (3).

(4) The employer shall ensure that the project physician instruct workers on the hazards of working in compressed air and the necessary precautions to be taken to avoid decompression sickness. O. Reg. 213/91, s. 351 (4).

(5) If the pressure in a work chamber at a project may exceed 350 kilopascals for a period of more than five minutes, a project physician shall establish procedures to control decompression sickness including,

(a) the maximum length of work periods for the workers in the chamber;

(b) the minimum length of rest periods for workers in the chamber; and

(c) compression and decompression procedures. O. Reg. 213/91, s. 351 (5).

352. (1) No worker shall work or be permitted to work in compressed air on a project unless,

(a) the project physician has complied with subsection (4); and

(b) the project physician indicates on Form 1 that the worker is physically fit to work in compressed air. O. Reg. 213/91, s. 352 (1).

(2) Subsection (1) does not apply with respect to an inspector or with respect to a worker accompanying an inspector at the inspector's request. O. Reg. 213/91, s. 352 (2).

(3) Every worker working in compressed air at a project shall have a medical examination performed by the project physician before beginning work in compressed air and every two months thereafter while the worker is working in compressed air to determine the worker's fitness for working in compressed air. O. Reg. 213/91, s. 352 (3).

(4) The project physician shall complete Form 1 for the worker, stating whether the worker is physically fit to work in compressed air and ensure that the superintendent receives a copy. O. Reg. 213/91, s. 352 (4).

(5) The medical examination shall include,

(a) a physical examination;

(b) a test under compressed air, if the worker has not previously worked in compressed air; and

(c) such clinical tests as the project physician may require. O. Reg. 213/91, s. 352 (5).

(6) The clinical tests referred to in clause (5) (c) shall include x-rays of the chest and shoulders, and hip and knee joints taken at least once every five years. O. Reg. 213/91, s. 352 (6).

(7) If a worker undergoes a medical examination, the employer shall pay,

(a) the worker's costs for any medical examinations and tests; and

(b) the worker's reasonable travel costs respecting any medical examinations and tests. O. Reg. 213/91, s. 352 (7).

(8) The time the worker spends to undergo medical examinations and tests, including travel time, shall be deemed to be work time for which the worker shall be paid by the employer at the worker's regular or premium rate, as may be proper. O. Reg. 213/91, s. 352 (8).

(9) The project physician conducting the physical examination or clinical tests or under whose supervision the examination or tests are made shall advise the employer whether the worker is fit or is fit with limitations or unfit for work in compressed air, without giving or disclosing to the employer the records or results of the examination or tests. O. Reg. 213/91, s. 352 (9).

(10) The employer shall act on the advice given by the physician under subsection (9). O. Reg. 213/91, s. 352 (10).

(11) Where a project physician advises the employer that a worker, because of a condition resulting from work in compressed air, is fit with limitations or is unfit, the project physician shall forthwith

communicate such advice to the Chief Physician, Occupational Health Medical Service of the Ministry. O. Reg. 213/91, s. 352 (11).

(12) The records of medical examinations, tests, medical treatment and worker exposure to compressed air made or obtained by the project physician under sections 351 and this section shall be kept in a secure place by the project physician who has conducted the examinations and tests or under whose supervision the examinations and tests have been made, for at least six years. O. Reg. 213/91, s. 352 (12).

(13) After six years, the project physician may forward the records to the Chief Physician, Occupational Health Medical Service of the Ministry, or a physician designated by the Chief Physician, and, in any event, the records shall not be destroyed for a period the greater of forty years from the time such records were first made or twenty years from the time the last of such records were made. O. Reg. 213/91, s. 352 (13).

353. (1) A worker who is about to work in compressed air and who does not feel well for any reason shall report the fact as soon as is practicable to the superintendent or a project physician before working in compressed air. O. Reg. 213/91, s. 353 (1).

(2) A worker who is working in compressed air and who does not feel well for any reason shall report the fact as soon as practicable to the superintendent or a project physician. O. Reg. 213/91, s. 353 (2).

354. A worker who is absent for a period of ten or more days from working in compressed air shall not resume work in compressed air until a project physician indicates on Form 1 that the worker is physically fit to resume work in compressed air. O. Reg. 213/91, s. 354.

MEDICAL LOCKS

355. (1) A first aid room shall be provided in close proximity to each medical lock at a project. O. Reg. 213/91, s. 355 (1).

(2) A first aid room shall contain all equipment necessary for first aid for workers working in compressed air and facilities adequate for conducting medical examinations. O. Reg. 213/91, s. 355 (2).

356. (1) A constructor shall supply at least one medical lock at a project where work in compressed air is done and shall maintain it ready for operation while work in compressed air is being done. O. Reg. 213/91, s. 356 (1).

(2) A certificate of inspection issued under the *Boilers and Pressure Vessels Act* for a working pressure of at least 520 kilopascals is required for every medical lock on a project. O. Reg. 213/91, s. 356 (2).

357. (1) A medical lock shall be not less than 1.8 metres high at its centre line. O. Reg. 213/91, s. 357 (1).

(2) A medical lock shall be divided into two pressure compartments. O. Reg. 213/91, s. 357 (2).

(3) Each compartment of a medical lock shall have air valves that are arranged so that the compartment can be pressurized and depressurized from inside and outside the lock. O. Reg. 213/91, s. 357 (3).

(4) An observation window shall be installed in each door and in the rear wall of a medical lock. O. Reg. 213/91, s. 357 (4).

(5) A medical lock shall be equipped with,

(a) a pressure release valve which will automatically blow-off at a pressure not greater than seventy kilopascals more than the operating pressure of the work chamber;

(b) a pressure gauge, a thermometer, a telephone, a cot, seating and a radiant heater; and

(c) a cot mattress, mattress cover and blankets all of which are made of material that is not readily flammable. O. Reg. 213/91, s. 357 (5).

(6) The pressure release valve shall be tested and calibrated before the medical lock is used. O. Reg. 213/91, s. 357 (6).

(7) A medical lock shall be maintained at a temperature of at least 18 degrees celsius, well-lit and well-ventilated and kept clean and sanitary. O. Reg. 213/91, s. 357 (7).

358. (1) A project physician shall control the medical treatment of workers in a medical lock at a project. O. Reg. 213/91, s. 358 (1).

(2) While a worker is working in compressed air and for twenty-four hours afterwards, at least one worker experienced in the decompression of persons suffering from decompression sickness,

(a) shall be present on the project, if the work in compressed air was done at a pressure greater than 100 kilopascals; or

(b) shall be readily available, if the work in compressed air was done at a pressure of 100 kilopascals or less. O. Reg. 213/91, s. 358 (2).

AIR COMPRESSORS

359. (1) The superintendent shall designate at least one competent worker to be in charge of the compressors compressing air for a work chamber and air lock. O. Reg. 213/91, s. 359 (1).

(2) REVOKED: O. Reg. 88/13, s. 3.

(3) A competent worker designated under subsection (1) shall attend to the compressors,

(a) while a person is in compressed air in the work chamber or air lock; and

(b) for twenty-four hours after a person has been in compressed air with a pressure exceeding 100 kilopascals in the work chamber or air lock. O. Reg. 213/91, s. 359 (3).

(4) REVOKED: O. Reg. 88/13, s. 3.

360. (1) At least two air compressors shall be provided for every work chamber and air lock at a project. O. Reg. 213/91, s. 360 (1).

(2) The air compressors for a work chamber or an air lock shall have capacity enough to ensure that, if one compressor is not operating, the remaining compressors are capable of supplying the air required for the work chamber or air lock. O. Reg. 213/91, s. 360 (2).

361. (1) The energy required to furnish compressed air to a work chamber or an air lock shall be readily available at a project from at least two independent sources. O. Reg. 213/91, s. 361 (1).

(2) The two sources of energy shall be arranged so that, should the principal energy source fail, an auxiliary source automatically energizes the compressor. O. Reg. 213/91, s. 361 (2).

(3) An auxiliary source of energy shall be inspected and tested by being operated at regular intervals of not more than seven days to ensure that it works. O. Reg. 213/91, s. 361 (3).

362. (1) A compressor for a work chamber or an air lock shall be constructed so as to ensure that lubricating oil is not discharged with the air that the compressor supplies. O. Reg. 213/91, s. 362 (1).

(2) The air intake for a compressor shall be located so as to prevent the entry of exhaust gases from internal combustion engines or other contaminants. O. Reg. 213/91, s. 362 (2).

363. Air supplied for use in a work chamber or an air lock,

(a) shall be clean and free from excessive moisture, oil or other contaminants; and

(b) shall be kept between 10 degrees and 27 degrees celsius, as far as is practicable. O. Reg. 213/91, s. 363.

AIR LOCKS AND WORK CHAMBERS

364. One air lock shall be provided for each work chamber at a project. O. Reg. 213/91, s. 364.

365. (1) An air lock, including the bulkheads and doors, shall be designed by a professional engineer in accordance with good engineering practice to withstand the pressures to be used in the work chamber and in the air lock. O. Reg. 213/91, s. 365 (1).

(2) An air lock shall be constructed in accordance with the professional engineer's design drawings for it. O. Reg. 213/91, s. 365 (2).

(3) An air lock used for people,

(a) shall measure at least two metres laterally and vertically;

(b) shall be large enough to accommodate the maximum number of people expected to be in the work chamber without them being in cramped positions;

(c) other than an ancillary air lock that complies with section 367, shall contain a functional and accurate electric time piece, thermometer and pressure gauge. O. Reg. 213/91, s. 365 (3).

(4) The constructor shall send to a Director before construction of an air lock begins a copy of the design drawings for the air lock. O. Reg. 213/91, s. 365 (4); O. Reg. 145/00, s. 40; O. Reg. 85/04, s. 24.

(5) The constructor shall keep at a project a copy of the design drawings for an air lock while the air lock is at the project. O. Reg. 213/91, s. 365 (5).

366. Separate air locks shall be used for people and for materials,

(a) if the air lock is in a shaft; or

(b) where practicable, if the air locks are installed in a tunnel and if the air pressure is likely to exceed 100 kilopascals. O. Reg. 213/91, s. 366.

367. (1) Every air lock shall have an ancillary air lock that,

(a) can be pressurized independently of the primary air lock;

(b) has a door into the primary air lock or into the work chamber; and

(c) has a door into air at atmospheric pressure. O. Reg. 213/91, s. 367 (1).

(2) Except in an emergency, a door in an ancillary air lock into air at atmospheric pressure shall be kept open. O. Reg. 213/91, s. 367 (2).

(3) A vertical air lock in a shaft or pneumatic caisson shall not be used to decompress workers unless a separate worker-lock with its own controls for compression and decompression is provided. O. Reg. 213/91, s. 367 (3).

(4) An ancillary air lock shall be used to enter the work chamber only,

(a) when the door between the chamber and the primary air lock is open; and

(b) when it is impossible or impracticable for the door to be closed. O. Reg. 213/91, s. 367 (4).

(5) Except in an emergency, an ancillary air lock shall not be used to decompress people. O. Reg. 213/91, s. 367 (5).

368. (1) At least two pipes shall supply air to each work chamber and each air lock. O. Reg. 213/91, s. 368 (1).

(2) Each of the pipes shall have a valve installed in the vicinity of the compressors to enable one pipe to be disconnected while another pipe remains in service at the work chamber or air lock. O. Reg. 213/91, s. 368 (2).

(3) The outlet end of a pipe supplying air to a work chamber or an air lock shall have a hinged flap valve. O. Reg. 213/91, s. 368 (3).

369. (1) Each work chamber and each air lock, including an ancillary air lock, shall have a means of controlling and of automatically limiting the maximum air pressure in it. O. Reg. 213/91, s. 369 (1).

(2) The air pressure control mechanism shall be set at a level not greater than,

(a) for an air lock, the pressure for which the air lock, bulkheads and doors are designed; and

(b) for a work chamber, seventy kilopascals more than the maximum air pressure to be used in the chamber. O. Reg. 213/91, s. 369 (2).

370. At each set of valves controlling the air supply to and discharge from an air lock, there shall be,

(a) a pressure gauge showing the air pressure in the air lock;

(b) a pressure gauge showing the air pressure in the work chamber;

(c) an electric time piece;

(d) a thermometer showing the temperature in the air lock; and

(e) a legible copy of the procedures governing maximum work periods and minimum decompression times for the air lock. O. Reg. 213/91, s. 370.

371. (1) Separate valves controlling the air supply to and discharge from an air lock shall be provided inside and outside the lock. O. Reg. 213/91, s. 371 (1).

(2) The valves shall be arranged so that a person can enter or leave the air lock or work chamber if no lock tender is attending the air lock. O. Reg. 213/91, s. 371 (2).

372. If an automatic compression and decompression device is installed in an air lock used for people, the air lock shall have a manual means of controlling the air pressure in the lock. O. Reg. 213/91, s. 372.

373. (1) An air lock, other than an ancillary air lock, used for people shall have an automatic recording gauge to permanently record the air pressure in the lock. O. Reg. 213/91, s. 373 (1).

(2) The gauge shall be a rotating dial or strip-chart rectilinear type. O. Reg. 213/91, s. 373 (2).

(3) The gauge,

(a) shall be installed so that the lock tender cannot see it when at the controls of the air lock;

(b) shall indicate the change in air pressure at intervals of not more than five minutes; and

(c) shall be kept locked except when the recording paper is being changed. O. Reg. 213/91, s. 373 (3).

(4) Despite subsection (2) and clause (3) (b), the gauge for an air lock at a work chamber whose air pressure exceeds 100 kilopascals shall be the strip-chart rectilinear type and shall indicate the change in air pressure at intervals of not more than one minute. O. Reg. 213/91, s. 373 (4).

(5) The recording paper used in a gauge shall be changed every seven days and shall be marked to identify the period of time to which it relates. O. Reg. 213/91, s. 373 (5).

374. (1) An air lock shall have a pressure gauge that can be read from the work chamber and that shows the air pressure in the lock. O. Reg. 213/91, s. 374 (1).

(2) A pressure gauge, other than a portable pressure gauge, shall have fittings for attaching test gauges to it and shall be tested daily for accuracy. O. Reg. 213/91, s. 374 (2).

375. A work chamber shall contain, in a protective container within fifteen metres of the work face, a portable pressure gauge and a thermometer. O. Reg. 213/91, s. 375.

376. (1) Only one unit of measuring pressure (either kilopascals or pounds per square inch) shall be used on a project. O. Reg. 213/91, s. 376 (1).

(2) Pressure gauges for decompression equipment and decompression procedures established for a project shall be calibrated using the unit of pressure for the project. O. Reg. 213/91, s. 376 (2).

377. (1) The door between an air lock and a work chamber shall be kept open,

(a) unless the air lock is being used to compress or decompress people or to move materials; or

(b) when people are in the work chamber. O. Reg. 213/91, s. 377 (1).

(2) Clause (1) (a) does not apply with respect to an ancillary air lock. O. Reg. 213/91, s. 377 (2).

378. Every air lock door shall have a transparent observation window. O. Reg. 213/91, s. 378.

379. If practicable, an air lock used for people, other than an ancillary air lock, shall have one seat for each person being decompressed at one time. O. Reg. 213/91, s. 379.

380. (1) An air lock in which people are decompressed shall have a means of radiant heat if the air pressure in the lock exceeds 100 kilopascals. O. Reg. 213/91, s. 380 (1).

(2) The temperature in an air lock used for people shall not exceed 27 degrees celsius. O. Reg. 213/91, s. 380 (2).

381. (1) A smoke line shall be provided from each work face of a work chamber if an air lock or bulkhead is located between the chamber and the surface. O. Reg. 213/91, s. 381 (1).

(2) Each smoke line shall extend to within fifteen metres of a work face. O. Reg. 213/91, s. 381 (2).

(3) Each smoke line shall have two quick opening valves at least 100 millimetres in diameter,

(a) one located within seventeen metres of the work face; and

(b) one located between the air lock closest to the work chamber and the work chamber and within two metres of the air lock. O. Reg. 213/91, s. 381 (3).

(4) Each smoke line shall be at least 100 millimetres in diameter and shall have a readily-accessible outlet above ground,

(a) that has a quick opening valve at least 100 millimetres in diameter;

(b) that is clearly marked with a sign stating “SMOKE LINE – TO BE USED ONLY IN CASE OF EMERGENCY”; and

(c) that is sealed to prevent the inadvertent opening of the valve. O. Reg. 213/91, s. 381 (4).

(5) Each smoke line shall extend from inside the work chamber to above ground and shall pass vertically through either the air lock or the bulkhead between the work chamber and air at atmospheric pressure. O. Reg. 213/91, s. 381 (5).

382. (1) No bulkhead in a work chamber shall interfere with the free passage from the work face to an air lock of people in a tunnel or shaft. O. Reg. 213/91, s. 382 (1).

(2) Subsection (1) does not apply with respect to a partial bulkhead in a sub-aqueous tunnel if the bulkhead is designed and placed to trap air so that workers can escape from the tunnel if it is flooded. O. Reg. 213/91, s. 382 (2).

383. (1) Except when it is necessary to protect people during an emergency, the pressure in a work chamber shall not exceed 350 kilopascals for more than five minutes. O. Reg. 213/91, s. 383 (1).

(2) If the pressure in a work chamber exceeds 350 kilopascals for more than five minutes,

(a) the superintendent shall promptly notify an inspector by telephone, two-way radio or in person; and

(b) the pressure maintained in the work chamber shall be the least possible pressure required to meet the emergency. O. Reg. 213/91, s. 383 (2).

384. (1) Subject to subsection (2), no worker shall work or be permitted to work in a work chamber in which the temperature exceeds the greater of,

(a) 27 degrees celsius; and

(b) the temperature at the entrance to the service shaft above ground. O. Reg. 213/91, s. 384 (1).

(2) No worker shall work or be permitted to work in a work chamber in which the temperature exceeds 38 degrees celsius. O. Reg. 213/91, s. 384 (2).

385. (1) Water on the floor of a work chamber or an air lock shall be drained by a pipe or mop line and, if necessary, a pump. O. Reg. 213/91, s. 385 (1).

(2) A pipe or mop line shall have an inside diameter of at least fifty-one millimetres. O. Reg. 213/91, s. 385 (2).

(3) At least one inlet with a valve to a pipe or mop line for an air lock and work chamber shall be located,

(a) in the air lock;

(b) within fifteen metres of the work face; and

(c) at intervals of not more than thirty metres along the length of the work chamber. O. Reg. 213/91, s. 385 (3).

(4) An inlet shall be diverted downward. O. Reg. 213/91, s. 385 (4).

(5) An outlet from an air lock shall discharge downward under atmospheric air pressure. O. Reg. 213/91, s. 385 (5).

WORK PERIODS AND REST PERIODS

386. (1) Subject to subsection (2), no worker shall,

(a) work for more than two working periods in any consecutive twenty-four hour period where the maximum air pressure is not greater than 100 kilopascals; or

(b) work for more than one working period in any consecutive twenty-four hour period where the maximum air pressure is more than 100 kilopascals. O. Reg. 213/91, s. 386 (1).

(2) No worker shall work or be permitted to work more than eight hours in a period of twenty-four hours. O. Reg. 213/91, s. 386 (2).

(3) No lock tender shall work or be permitted to work more than nine hours in a period of twenty-four hours. O. Reg. 213/91, s. 386 (3).

(4) The period between the end of one work period and the beginning of the next for a worker doing manual work under compressed air where the maximum air pressure exceeds 100 kilopascals shall be at least twelve hours. O. Reg. 213/91, s. 386 (4).

387. (1) A worker who is working in compressed air shall have a rest period of at least,

(a) ¼ hour, if the worker was working in pressure of 100 kilopascals or less;

(b) ¾ hour, if the worker was working in pressure greater than 100 kilopascals up to and including 140 kilopascals;

(c) 1½ hours, if the worker was working in pressure greater than 140 kilopascals up to and including 220 kilopascals; or

(d) two hours, if the worker was working in pressure greater than 220 kilopascals. O. Reg. 213/91, s. 387 (1).

(2) No worker shall be permitted to perform manual work or engage in physical exertion during a rest period. O. Reg. 213/91, s. 387 (2).

(3) No worker shall be permitted to leave a project during a rest period. O. Reg. 213/91, s. 387 (3).

388. (1) The employer shall provide, free of charge, sugar and hot beverages for workers working in compressed air to consume during their rest periods. O. Reg. 213/91, s. 388 (1).

(2) An employer shall keep containers and cups for beverages in a sanitary condition and shall store them in a closed container. O. Reg. 213/91, s. 388 (2).

LOCK TENDERS

389. (1) A lock tender shall supervise the controls of an air lock when a worker is about to be, or is being, subjected to compressed air in the air lock or work chamber. O. Reg. 213/91, s. 389 (1).

(2) Subject to subsection (3), a lock tender shall tend only one air lock at a time. O. Reg. 213/91, s. 389 (2).

(3) A lock tender may tend two locks if,

(a) they are in close proximity;

(b) the pressure in each work chamber does not exceed 100 kilopascals; and

(c) only one of the locks is being used to compress or decompress a worker. O. Reg. 213/91, s. 389 (3).

390. (1) A lock tender shall ensure that the requirements of this section are met before a worker enters an air lock. O. Reg. 213/91, s. 390 (1).

(2) A worker shall be examined by a project physician before the worker enters an air lock in preparation for working in compressed air. O. Reg. 213/91, s. 390 (2).

(3) A lock tender shall ensure that any worker who enters the air lock in preparation for working in compressed air has been examined by a physician in accordance with subsection (2). O. Reg. 213/91, s. 390 (3).

(4) The means of air supply, air pressure gauges and controls, lock equipment and other devices necessary for the safe operation of an air lock and the protection of workers shall be in working order. O. Reg. 213/91, s. 390 (4).

391. (1) A lock tender shall increase the air pressure on a worker in an air lock in accordance with this section. O. Reg. 213/91, s. 391 (1).

(2) Air pressure shall be increased uniformly and to no more than thirty-five kilopascals in the first two minutes of application of compressed air. O. Reg. 213/91, s. 391 (2).

(3) Air pressure shall not be increased to more than thirty-five kilopascals until the lock tender ensures that every worker in the air lock is free from discomfort due to air pressure. O. Reg. 213/91, s. 391 (3).

(4) Air pressure shall be increased above thirty-five kilopascals at a uniform rate of not greater than thirty-five kilopascals per minute. O. Reg. 213/91, s. 391 (4).

(5) A lock tender shall observe a worker in an air lock while increasing the air pressure on the worker and, if the worker shows signs of discomfort and the discomfort does not quickly disappear, the lock tender shall gradually decrease the air pressure until the worker reports that the discomfort has ceased or until the air pressure reaches atmospheric pressure. O. Reg. 213/91, s. 391 (5).

392. (1) A lock tender shall decrease the air pressure on a worker in an air lock in accordance with this section and section 395. O. Reg. 213/91, s. 392 (1).

(2) Air pressure shall be decreased uniformly in each of the stages of decompression referred to in section 395. O. Reg. 213/91, s. 392 (2).

(3) A lock tender shall constantly observe a worker in an air lock while decreasing the air pressure on the worker and, if the worker shows signs of discomfort and the discomfort does not quickly disappear, the lock tender shall gradually increase the air pressure until the worker reports that the discomfort has ceased or until the air pressure equals the pressure in the work chamber. O. Reg. 213/91, s. 392 (3).

393. (1) If a worker in an air lock appears to be suffering from decompression sickness, a lock tender shall notify, and follow the instructions of, a project physician, the superintendent or a person designated by the superintendent. O. Reg. 213/91, s. 393 (1).

(2) If a worker in an air lock appears to be injured or to be unwell from a cause unrelated to air pressure, a lock tender shall notify, and follow the instructions of, a project physician. O. Reg. 213/91, s. 393 (2).

(3) In the circumstances described in subsection (2), a lock tender shall decompress the worker unless otherwise instructed by the project physician. O. Reg. 213/91, s. 393 (3).

394. (1) A lock tender shall record information about the compression and decompression of a worker in an air lock. O. Reg. 213/91, s. 394 (1).

(2) A separate record shall be kept for each air lock and each compression and decompression of a worker. O. Reg. 213/91, s. 394 (2).

(3) The information to be recorded is,

(a) the description of the air lock;

(b) the worker's name;

(c) the time of the beginning and end of each compression or decompression to which the worker is subjected;

(d) the pressure and temperature in the air lock before and after each compression or decompression to which the worker is subjected; and

(e) a description of any unusual occurrence respecting the worker, the air lock or any related matter. O. Reg. 213/91, s. 394 (3).

(4) A lock tender shall give the record to the superintendent. O. Reg. 213/91, s. 394 (4).

DECOMPRESSION PROCEDURES

395. (1) A worker who has been in air pressure greater than atmospheric air pressure for more than five minutes shall be decompressed down to atmospheric pressure in accordance with this section. O. Reg. 213/91, s. 395 (1).

(2) Subject to subsection (3), decompression shall be done in accordance with the Tables to this Regulation. O. Reg. 213/91, s. 395 (2).

(3) The rate of decompression required by subsection (2) may be doubled with respect to a worker if, while performing the work in compressed air, the worker,

(a) has not been exposed to air pressure greater than 220 kilopascals;

(b) has remained under compressed air for a maximum of thirty minutes; and

(c) has not done manual work. O. Reg. 213/91, s. 395 (3).

(4) Subsection (3) applies only if every worker who is in the air lock,

(a) meets the requirements of clauses 3 (a), (b) and (c); and

(b) has previously experienced decompression. O. Reg. 213/91, s. 395 (4).

(5) A copy of the Tables to this Regulation shall be kept posted at a project,

(a) in each air lock;

(b) at the controls outside each air lock; and

(c) in each change room. O. Reg. 213/91, s. 395 (5).

396. A worker who believes he or she has decompression sickness shall promptly notify,

(a) the superintendent or a project physician; or

(b) the lock tender, if the worker is under compressed air. O. Reg. 213/91, s. 396.

397. (1) The superintendent shall make a report at least once a week to a Director concerning every case of decompression sickness at a project occurring since the previous report, if any. O. Reg. 213/91, s. 397 (1); O. Reg. 145/00, s. 41 (1).

(2) The superintendent shall promptly make a report by telephone, two-way radio or other direct means to a Director concerning a case of decompression sickness that does not respond to first-aid treatment. O. Reg. 213/91, s. 397 (2); O. Reg. 145/00, s. 41 (2).

(3) A report under this section shall indicate, for each case of decompression sickness,

(a) the air pressure to which the worker was subjected;

(b) the length of time the worker was subjected to the air pressure;

(c) the nature of the medical treatment given to the worker; and

(d) the extent of the worker's recovery. O. Reg. 213/91, s. 397 (3).

398. OMITTED (REVOKES OTHER REGULATIONS). O. Reg. 213/91, s. 398.

399. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION). O. Reg. 213/91, s. 399.

TABLE 1

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Working pressure, kPa	Total decompression time, min Working period, h									
	0.5	1	1.5	2	3	4	5	6	7	8
10						1	1	1	1	1
20						1	1	1	1	1
30						1	1	1	1	1
40						2	2	2	2	2
50						2	2	2	2	2
60						2	2	2	2	2
70						2	2	2	2	2
80						8	8	8	8	8
90						10	10	10	15	20
100						10	10	20	30	40
110					12	13	30	44		
120					16	28	47	73		
130					25	46	73	108		
140					37	65	105	140		
150				27	61	103				
160				36	77	131				
170				45	93	152				
180			34	55	110	175				
190		28	42	65	132					
200		29	47	77	154					
210		33	56	88	175					
220		36	64	101	197					
230		39	72	114						
240		44	80	131						
250	30	51	90	148						
260	32	56	101	164						
270	34	62	111							
280	35	67	125							
290	37	73	139							
300	40	78	155							
310	42	90								
320	43	95								
330	46	103								
340	48	113								
350	50	122								

O. Reg. 213/91, Table 1.

TABLE 2

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Working pressure, kPa	Working period, h	Stage No.	Pressure reduction, kPa From	Pressure reduction, kPa To	Time in stage, min	Pressure reduction rate, min/10 kPa	Total time decompress., min
10	4-8	1	10	0	1.0		1.0
20	4-8	1	20	0	1.0		1.0
30	4-8	1	30	0	1.0		1.0
40	4-8	1	40	0	2.0		2.0
50	4-8	1	50	0	2.0		2.0
60	4-8	1	60	0	2.0		2.0
70	4-8	1	70	0	2.0		2.0
80	4-8	1	80	40	1.0	0.33	
		2	40	30	1.0	1	
		3	30	30	5.0		
		4	30	0	1.0		8.0
90	5	1	90	45	1.5	0.33	
		2	45	30	1.5	1	
		3	30	30	6.0		
		4	30	0	1.0		10
	6	1	90	45	1.5	0.33	
		2	45	30	1.5	1	
		3	30	30	6.0		
		4	30	0	1.0		10
	7	1	90	45	1.5	0.33	
		2	45	30	1.5	1	
		3	30	30	11.0		
		4	30	0	1.0		15
	8	1	90	45	1.5	0.33	
		2	45	30	1.5	1	
		3	30	30	16.0		
		4	30	0	1.0		20
100	4	1	100	50	2	0.33	
		2	50	30	2	1	
		3	30	30	5		
		4	30	0	1		10
	5	1	100	50	2	0.33	
		2	50	30	2	1	
		3	30	30	5		
		4	30	0	1		10
	6	1	100	50	2	0.33	
		2	50	30	2	1	
		3	30	30	15		
		4	30	0	1		20

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Working pressure, kPa	Working period, h	Stage No.	Pressure reduction, kPa From	To	Time in stage, min	Pressure reduction rate, min/10 kPa	Total time decompress., min
100	7	1	100	50	2	0.33	
		2	50	30	2	1	
		3	30	30	25		
		4	30	0	1		30
	8	1	100	50	2	0.33	
		2	50	30	2	1	
		3	30	30	35		
		4	30	0	1		40
110	3	1	110	55	2	0.33	
		2	55	30	3	1	
		3	30	30	6		
		4	30	0	1		12
	4	1	110	55	2	0.33	
		2	55	30	3	1	
		3	30	30	7		
		4	30	0	1		13
	5	1	110	55	2	0.33	
		2	55	30	3	1	
		3	30	30	24		
		4	30	0	1		30
	6	1	110	55	2	0.33	
		2	55	30	3	1	
		3	30	30	38		
		4	30	0	1		44
120	3	1	120	60	2	0.33	
		2	60	30	3	1	
		3	30	30	10		
		4	30	0	1		16
	4	1	120	60	2	0.33	
		2	60	30	3	1	
		3	30	30	22		
		4	30	0	1		28
	5	1	120	60	2	0.33	
		2	60	30	3	1	
		3	30	30	41		
		4	30	0	1		47
	6	1	120	60	2	0.33	
		2	60	30	6	2	
		3	30	30	64		
		4	30	0	1		73

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Working pressure, kPa	Working period, h	Stage No.	Pressure reduction, kPa From	To	Time in stage, min	Pressure reduction rate, min/10 kPa	Total time decompress., min
130	3	1	130	65	3	0.33	
		2	65	30	4	1	
		3	30	30	17		
		4	30	0	1		25
	4	1	130	65	3	0.33	
		2	65	30	4	1	
		3	30	30	38		
		4	30	0	1		46
	5	1	130	65	3	0.33	
		2	65	30	7	2	
		3	30	30	62		
		4	30	0	1		73
	6	1	130	65	3	0.33	
		2	65	30	14	4	
		3	30	30	90		
		4	30	0	1		108
140	3	1	140	70	3	0.33	
		2	70	30	4	1	
		3	30	30	29		
		4	30	0	1		37
	4	1	140	70	3	0.33	
		2	70	30	6	1.5	
		3	30	30	55		
		4	30	0	1		65
	5	1	140	70	3	0.33	
		2	70	30	12	3	
		3	30	30	89		
		4	30	0	1		105
	6	1	140	70	3	0.33	
		2	70	30	20	5	
		3	30	30	116		
		4	30	0	1		140
150	2	1	150	75	3	0.33	
		2	75	30	5	1	
		3	30	30	18		
		4	30	0	1		27
	3	1	150	75	3	0.33	
		2	75	30	7	1.5	
		3	30	30	50		
		4	30	0	1		61
	4	1	150	75	3	0.33	
		2	75	30	9	2	
		3	30	30	90		
		4	30	0	1		103

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Working pressure, kPa	Working period, h	Stage No.	Pressure reduction, kPa From	To	Time in stage, min	Pressure reduction rate, min/10 kPa	Total time decompress., min
160	2	1	160	80	3	0.33	
		2	80	30	5	1	
		3	30	30	27		
		4	30	0	1		36
	3	1	160	80	3	0.33	
		2	80	30	10	2	
		3	30	30	63		
		4	30	0	1		77
	4	1	160	80	3	0.33	
		2	80	30	25	5	
		3	30	30	102		
		4	30	0	1		131
170	2	1	170	85	3	0.33	
		2	85	45	4	1	
		3	45	30	5	3	
		4	30	30	32		
		5	30	0	1		45
	3	1	170	85	3	0.33	
		2	85	45	6	1.5	
		3	45	30	6	4	
		4	30	30	77		
		5	30	0	1		93
	4	1	170	85	3	0.33	
		2	85	45	12	3	
		3	45	30	18	12	
		4	30	30	118		
		5	30	0	1		152
180	1.5	1	180	90	3	0.33	
		2	90	45	5	1	
		3	45	30	5	3	
		4	30	30	20		
		5	30	0	1		34
	2	1	180	90	3	0.33	
		2	90	45	5	1	
		3	45	30	5	3	
		4	30	30	41		
		5	30	0	1		55
	3	1	180	90	3	0.33	
		2	90	45	7	1.5	
		3	45	30	9	6	
		4	30	30	90		
		5	30	0	1		110

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Working pressure, kPa	Working period, h	Stage No.	Pressure reduction, kPa From	To	Time in stage, min	Pressure reduction rate, min/10 kPa	Total time decompress., min
180	4	1	180	90	3	0.33	
		2	90	45	14	3	
		3	45	30	23	15	
		4	30	30	134		
		5	30	0	1		175
190	1	1	190	95	4	0.33	
		2	95	50	5	1	
		3	50	30	6	3	
		4	30	30	12		
		5	30	0	1		28
	1.5	1	190	95	4	0.33	
		2	95	50	5	1	
		3	50	30	6	3	
		4	30	30	26		
		5	30	0	1		42
	2	1	190	95	4	0.33	
		2	95	50	7	1.5	
		3	50	30	6	3	
		4	30	30	47		
		5	30	0	1		65
	3	1	190	95	4	0.33	
		2	95	50	9	2	
		3	50	30	16	8	
		4	30	30	102		
		5	30	0	1		132
200	1	1	200	100	4	0.33	
		2	100	50	5	1	
		3	50	30	6	3	
		4	30	30	13		
		5	30	0	1		29
	1.5	1	200	100	4	0.33	
		2	100	50	5	1	
		3	50	30	6	3	
		4	30	30	31		
		5	30	0	1		47
	2	1	200	100	4	0.33	
		2	100	50	8	1.5	
		3	50	30	8	4	
		4	30	30	56		
		5	30	0	1		77
	3	1	200	100	4	0.33	
		2	100	50	15	3	
		3	50	30	20	10	
		4	30	30	114		
		5	30	0	1		154

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Working pressure, kPa	Working period, h	Stage No.	Pressure reduction, kPa From	Pressure reduction, kPa To	Time in stage, min	Pressure reduction rate, min/10 kPa	Total time decompress., min
210	1	1	210	105	4	0.33	
		2	105	55	5	1	
		3	55	30	8	3	
		4	30	30	15		
		5	30	0	1		33
	1.5	1	210	105	4	0.33	
		2	105	55	5	1	
		3	55	30	8	3	
		4	30	30	38		
		5	30	0	1		56
	2	1	210	105	4	0.33	
		2	105	55	8	1.5	
		3	55	30	10	4	
		4	30	30	65		
		5	30	0	1		88
	3	1	210	105	4	0.33	
		2	105	55	15	3	
		3	55	30	30	12	
		4	30	30	125		
		5	30	0	1		175
220	1	1	220	110	4	0.33	
		2	110	55	6	1	
		3	55	30	8	3	
		4	30	30	17		
		5	30	0	1		36
	1.5	1	220	110	4	0.33	
		2	110	55	9	1.5	
		3	55	30	10	4	
		4	30	30	40		
		5	30	0	1		64
	2	1	220	110	4	0.33	
		2	110	55	9	1.5	
		3	55	30	13	5	
		4	30	30	74		
		5	30	0	1		101
	3	1	220	110	4	0.33	
		2	110	55	17	3	
		3	55	30	38	15	
		4	30	30	137		
		5	30	0	1		197
230	1	1	230	115	4	0.33	
		2	115	60	6	1	
		3	60	30	9	3	
		4	30	30	19		
		5	30	0	1		39

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Working pressure, kPa	Working period, h	Stage No.	Pressure reduction, kPa From	Pressure reduction, kPa To	Time in stage, min	Pressure reduction rate, min/10 kPa	Total time decompress., min
230	1.5	1	230	115	4	0.33	
		2	115	60	9	1.5	
		3	60	30	9	3	
		4	30	30	49		
		5	30	0	1		72
	2	1	230	115	4	0.33	
		2	115	60	9	1.5	
		3	60	30	18	6	
		4	30	30	82		
		5	30	0	1		114
240	1	1	240	120	4	0.33	
		2	120	60	6	1	
		3	60	30	9	3	
		4	30	30	24		
		5	30	0	1		44
	1.5	1	240	120	4	0.33	
		2	120	60	9	1.5	
		3	60	30	12	4	
		4	30	30	54		
		5	30	0	1		80
	2	1	240	120	4	0.33	
		2	120	60	12	2	
		3	60	30	24	8	
		4	30	30	90		
		5	30	0	1		131
250	0.5	1	250	125	5	0.33	
		2	125	65	6	1	
		3	65	30	11	3	
		4	30	30	7		
		5	30	0	1		30
	1	1	250	125	5	0.33	
		2	125	65	6	1	
		3	65	30	11	3	
		4	30	30	28		
		5	30	0	1		51
	1.5	1	250	125	5	0.33	
		2	125	65	9	1.5	
		3	65	30	14	4	
		4	30	30	61		
		5	30	0	1		90
	2	1	250	125	5	0.33	
		2	125	65	12	2	
		3	65	30	28	8	
		4	30	30	102		
		5	30	0	1		148

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Working pressure, kPa	Working period, h	Stage No.	Pressure reduction, kPa From	To	Time in stage, min	Pressure reduction rate, min/10 kPa	Total time decompress., min
260	0.5	1	260	130	5	0.33	
		2	130	65	7	1	
		3	65	30	11	3	
		4	30	30	8		
		5	30	0	1		32
	1	1	260	130	5	0.33	
		2	130	65	7	1	
		3	65	30	11	3	
		4	30	30	32		
		5	30	0	1		56
	1.5	1	260	130	5	0.33	
		2	130	65	10	1.5	
		3	65	30	18	5	
		4	30	30	67		
		5	30	0	1		101
	2	1	260	130	5	0.33	
		2	130	65	13	2	
		3	65	30	35	10	
		4	30	30	110		
		5	30	0	1		164
270	0.5	1	270	135	5	0.33	
		2	135	70	7	1	
		3	70	30	12	3	
		4	30	30	9		
		5	30	0	1		34
	1	1	270	135	5	0.33	
		2	135	70	7	1	
		3	70	30	16	4	
		4	30	30	33		
		5	30	0	1		62
	1.5	1	270	135	5	0.33	
		2	135	70	10	1.5	
		3	70	30	20	5	
		4	30	30	75		
		5	30	0	1		111
280	0.5	1	280	140	5	0.33	
		2	140	70	7	1	
		3	70	30	12	3	
		4	30	30	10		
		5	30	0	1		35
	1	1	280	140	5	0.33	
		2	140	70	7	1	
		3	70	30	16	4	
		4	30	30	38		
		5	30	0	1		67

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Working pressure, kPa	Working period, h	Stage No.	Pressure reduction, kPa From	To	Time in stage, min	Pressure reduction rate, min/10 kPa	Total time decompress., min
280	1.5	1	280	140	5	0.33	
		2	140	70	11	1.5	
		3	70	30	32	8	
		4	30	30	76		
		5	30	0	1		125
290	0.5	1	290	145	5	0.33	
		2	145	75	7	1	
		3	75	30	14	3	
		4	30	30	10		
		5	30	0	1		37
	1	1	290	145	5	0.33	
		2	145	75	7	1	
		3	75	30	18	4	
		4	30	30	42		
		5	30	0	1		73
	1.5	1	290	145	5	0.33	
		2	145	75	11	1.5	
		3	75	30	36	8	
		4	30	30	86		
		5	30	0	1		139
300	0.5	1	300	150	5	0.33	
		2	150	75	8	1	
		3	75	30	14	3	
		4	30	30	12		
		5	30	0	1		40
	1	1	300	150	5	0.33	
		2	150	75	8	1	
		3	75	30	18	4	
		4	30	30	46		
		5	30	0	1		78
	1.5	1	300	150	5	0.33	
		2	150	75	15	2	
		3	75	30	36	8	
		4	30	30	98		
		5	30	0	1		155
310	0.5	1	310	155	6	0.33	
		2	155	80	8	1	
		3	80	30	15	3	
		4	30	30	12		
		5	30	0	1		42
	1	1	310	155	6	0.33	
		2	155	80	12	1.5	
		3	80	30	20	4	
		4	30	30	51		
		5	30	0	1		90

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Working pressure, kPa	Working period, h	Stage No.	Pressure reduction, kPa From	To	Time in stage, min	Pressure reduction rate, min/10 kPa	Total time decompress., min
320	0.5	1	320	160	6	0.33	
		2	160	80	8	1	
		3	80	30	15	3	
		4	30	30	13		
		5	30	0	1		43
	1	1	320	160	6	0.33	
		2	160	80	12	1.5	
		3	80	30	20	4	
		4	30	30	56		
		5	30	0	1		95
330	0.5	1	330	165	6	0.33	
		2	165	85	8	1	
		3	85	30	17	3	
		4	30	30	14		
		5	30	0	1		46
	1	1	330	165	6	0.33	
		2	165	85	12	1.5	
		3	85	30	22	4	
		4	30	30	62		
		5	30	0	1		103
340	0.5	1	340	170	6	0.33	
		2	170	85	9	1	
		3	85	30	17	3	
		4	30	30	15		
		5	30	0	1		48
	1	1	340	170	6	0.33	
		2	170	85	13	1.5	
		3	85	30	28	5	
		4	30	30	65		
		5	30	0	1		113
350	0.5	1	350	175	6	0.33	
		2	175	90	9	1	
		3	90	30	18	3	
		4	30	30	16		
		5	30	0	1		50
	1	1	350	175	6	0.33	
		2	175	90	13	1.5	
		3	90	30	30	5	
		4	30	30	72		
		5	30	0	1		122

O. Reg. 213/91, Table 2.

FORM 1
RECORD OF COMPRESSED AIR WORKER

Occupational Health and Safety Act

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Name . . . . . Age . . . . . .

Address . . . . . .

Social Insurance Number | | | | | | | | | |

File No. . . . . Location (Municipality) . . . . . .

Project . . . . . .

Constructor . . . . . .

Employer . . . . . .

Previous Compressed Air Experience . . . . . .

Pre-Employment Medical Examination . . . . . .

Date . . . . . Accept . . . . . Reject . . . . . Signature . . . . . M.D.

SUBSEQUENT MEDICAL EXAMINATIONS

	Date	Accept	Reject	Signature	Date		Accept	Reject	Signature
1				M.D.		7			M.D.
2				M.D.		8			M.D.
3				M.D.		9			M.D.
4				M.D.		10			M.D.
5				M.D.		11			M.D.
6				M.D.		12			M.D.

O. Reg. 213/91, Form 1.